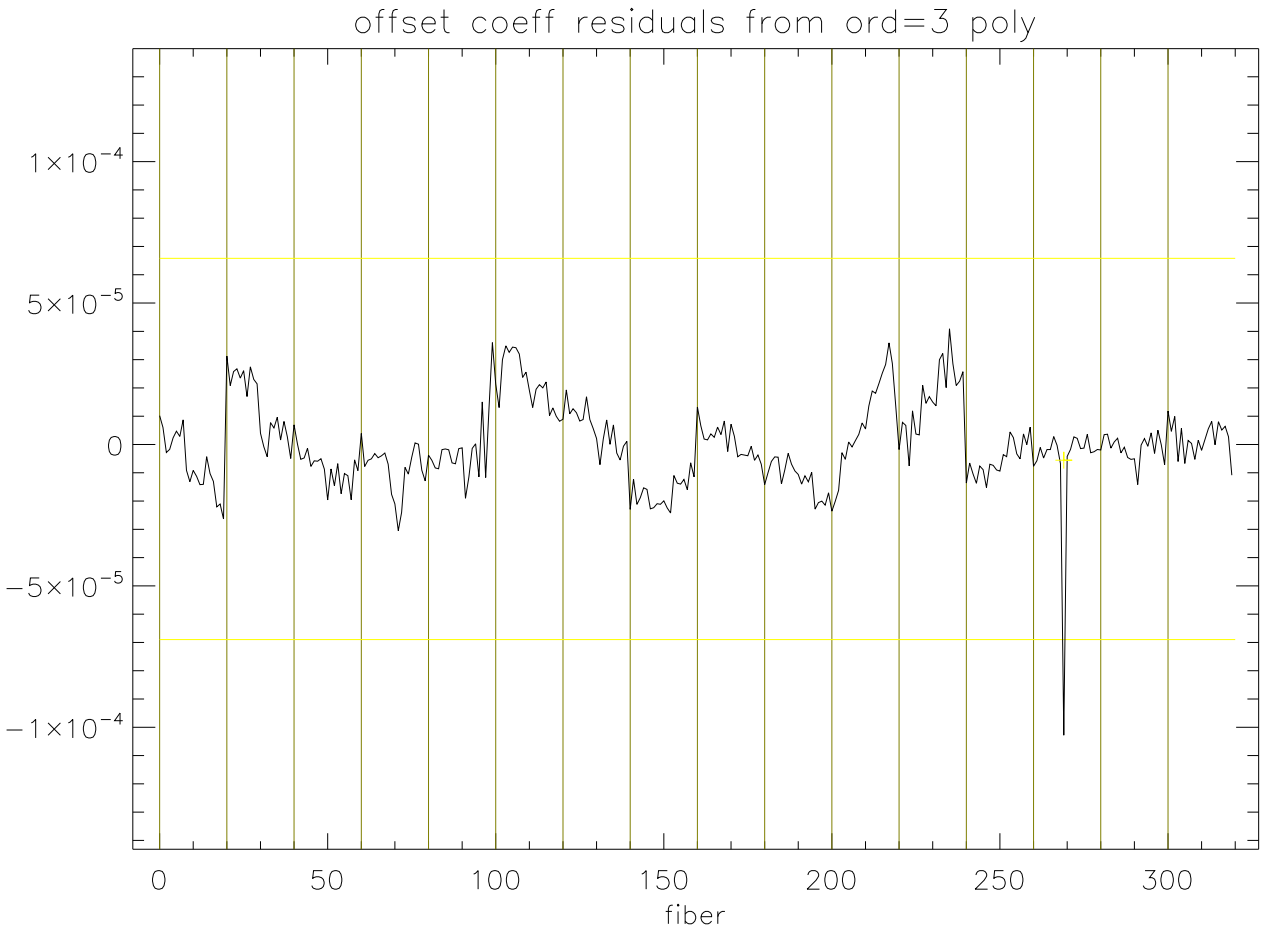
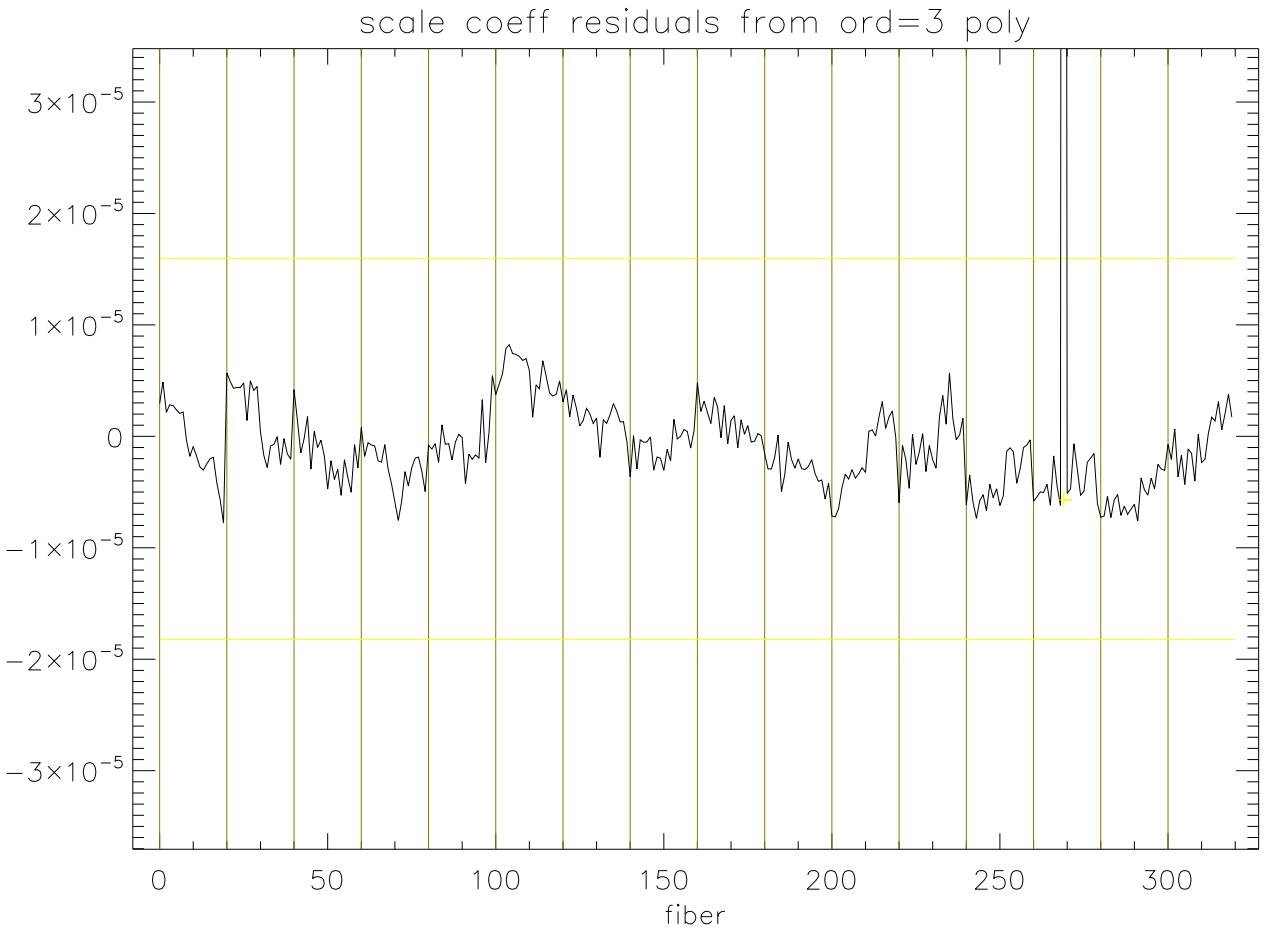
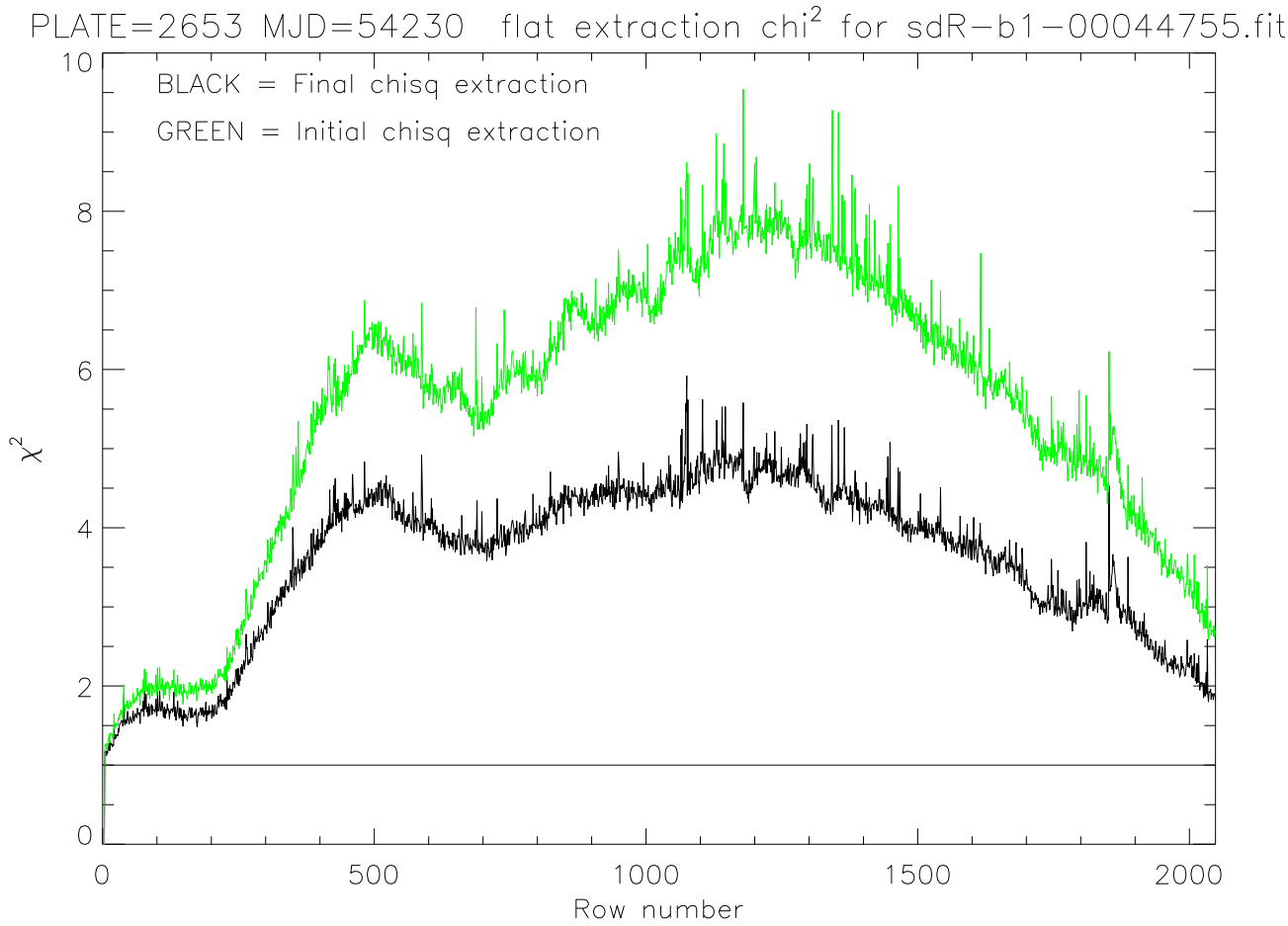
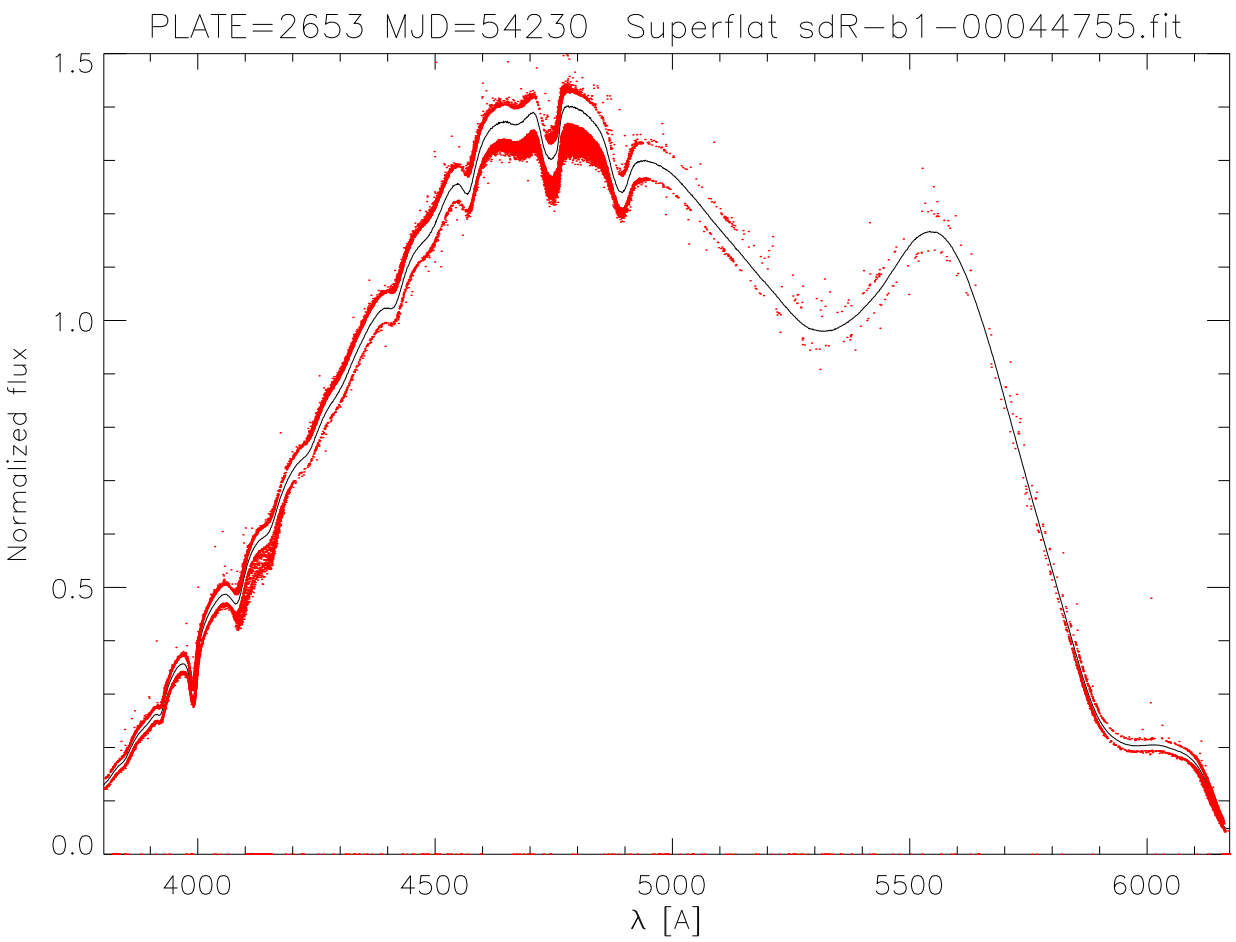
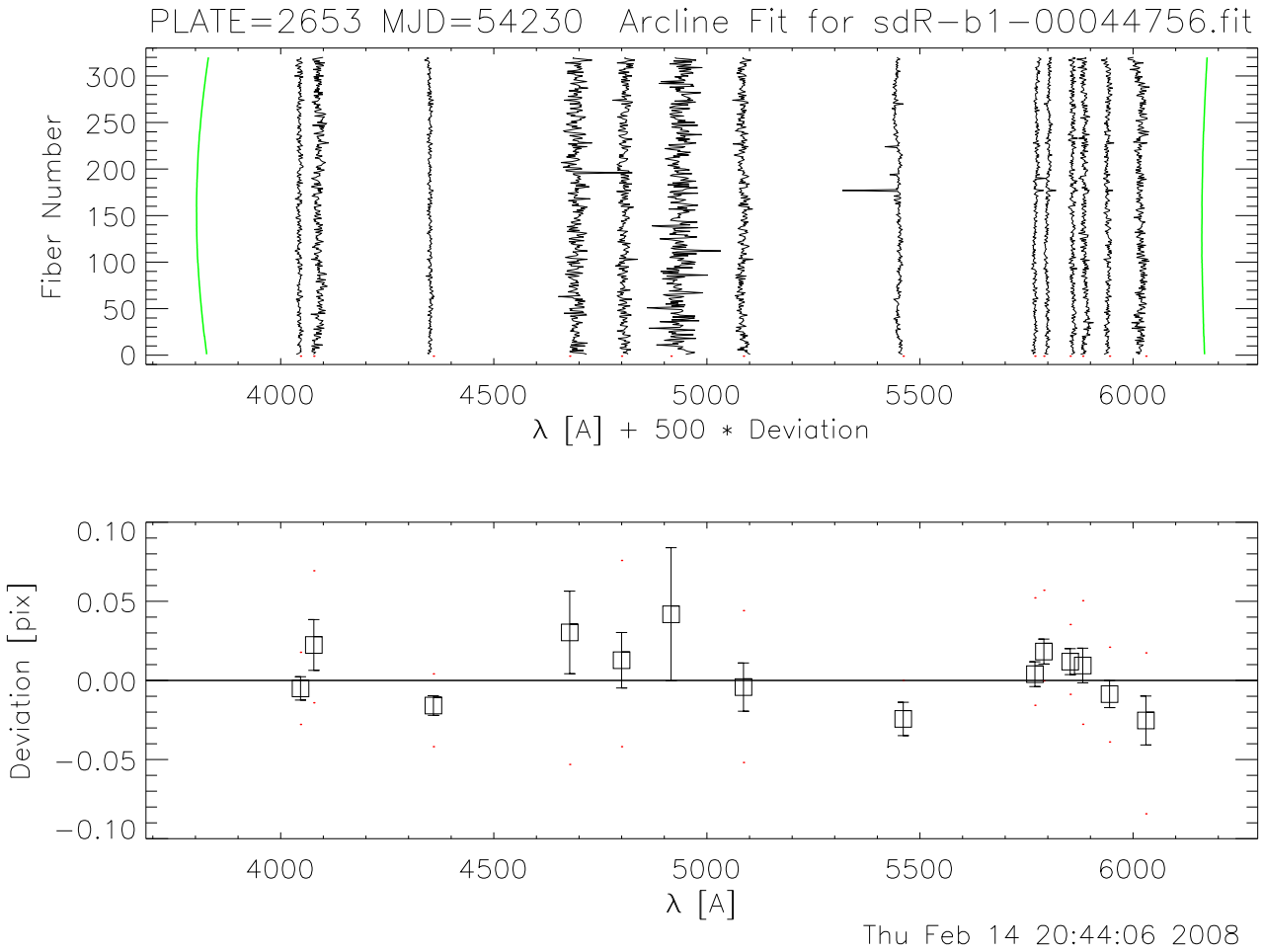
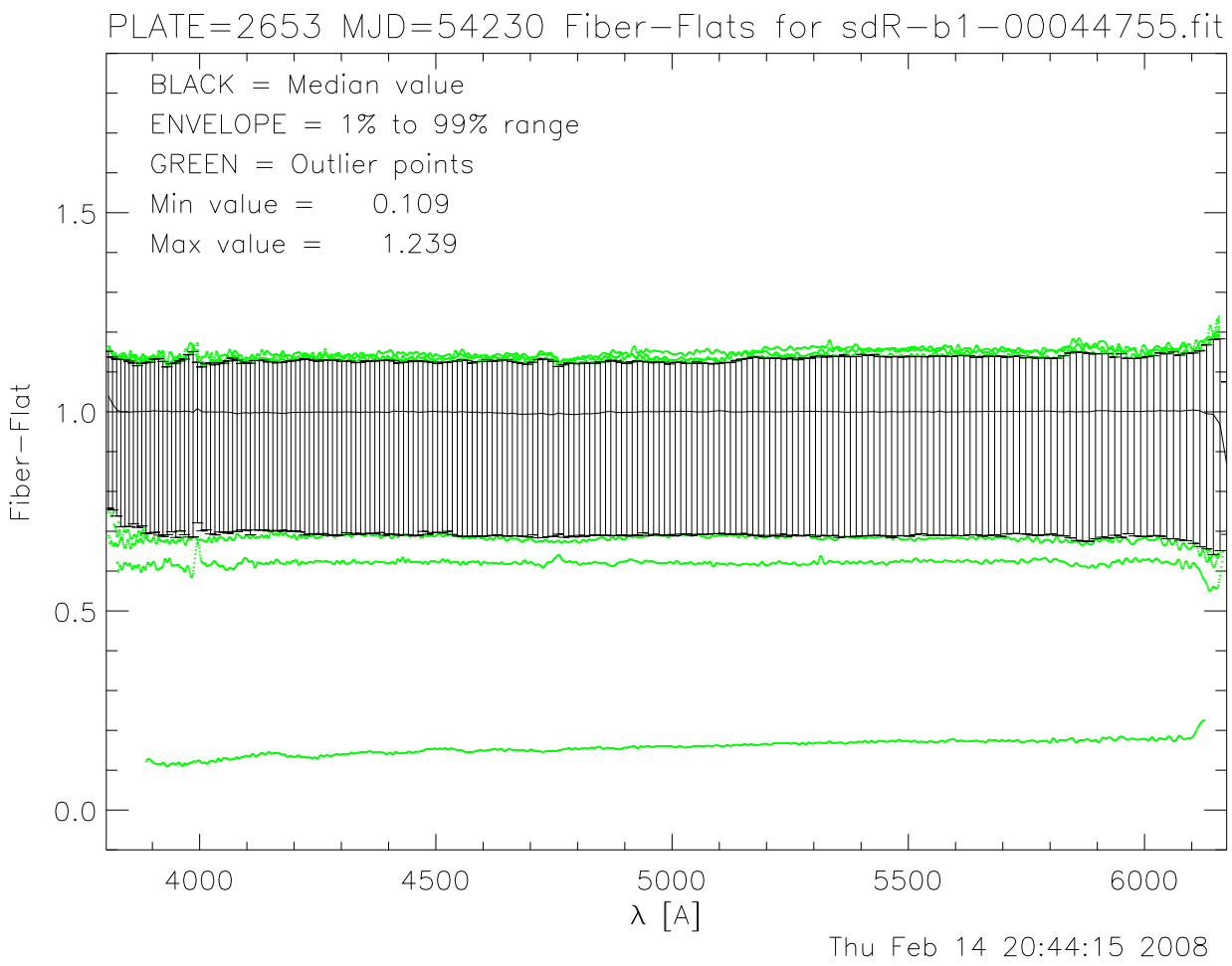

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

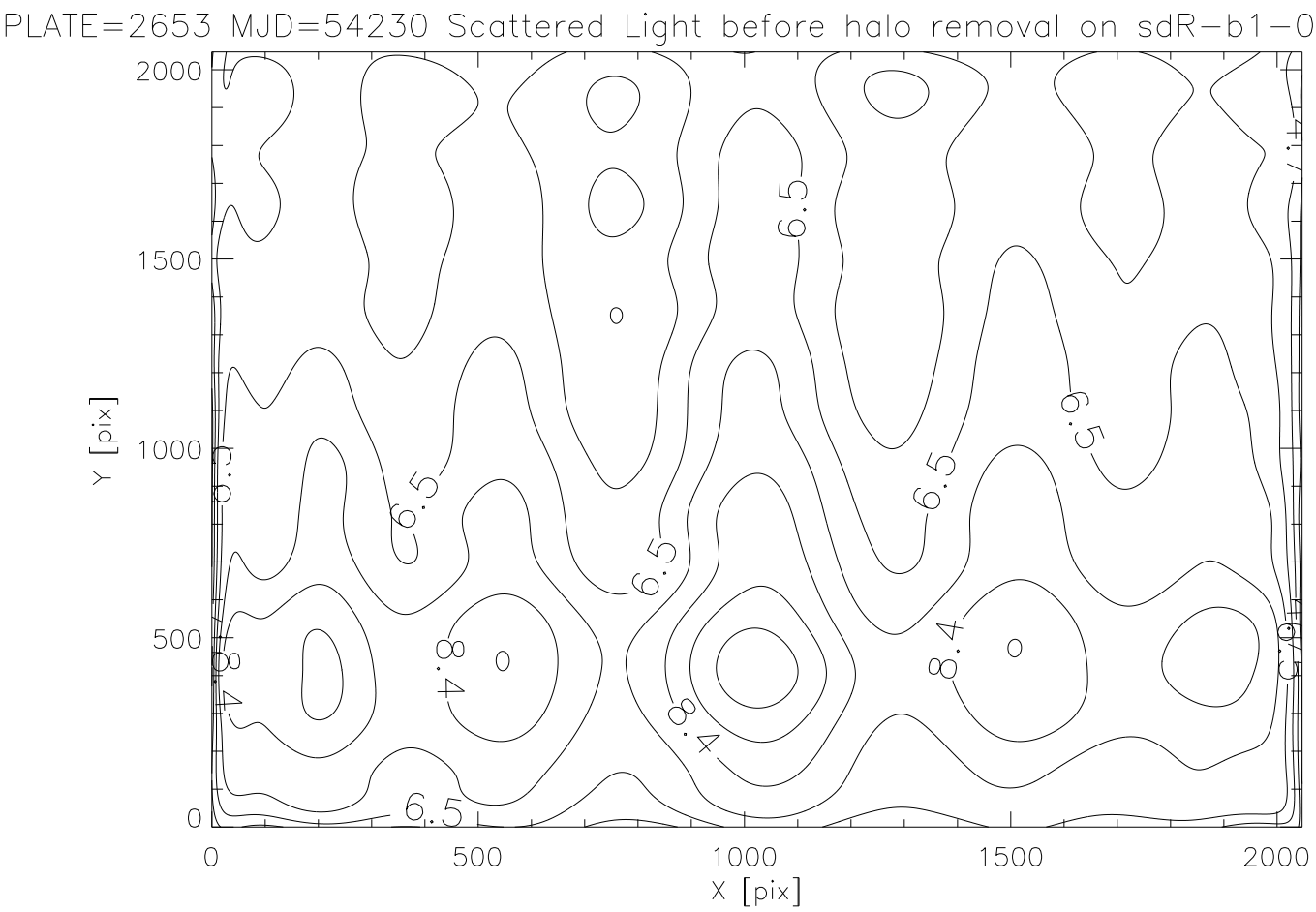

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

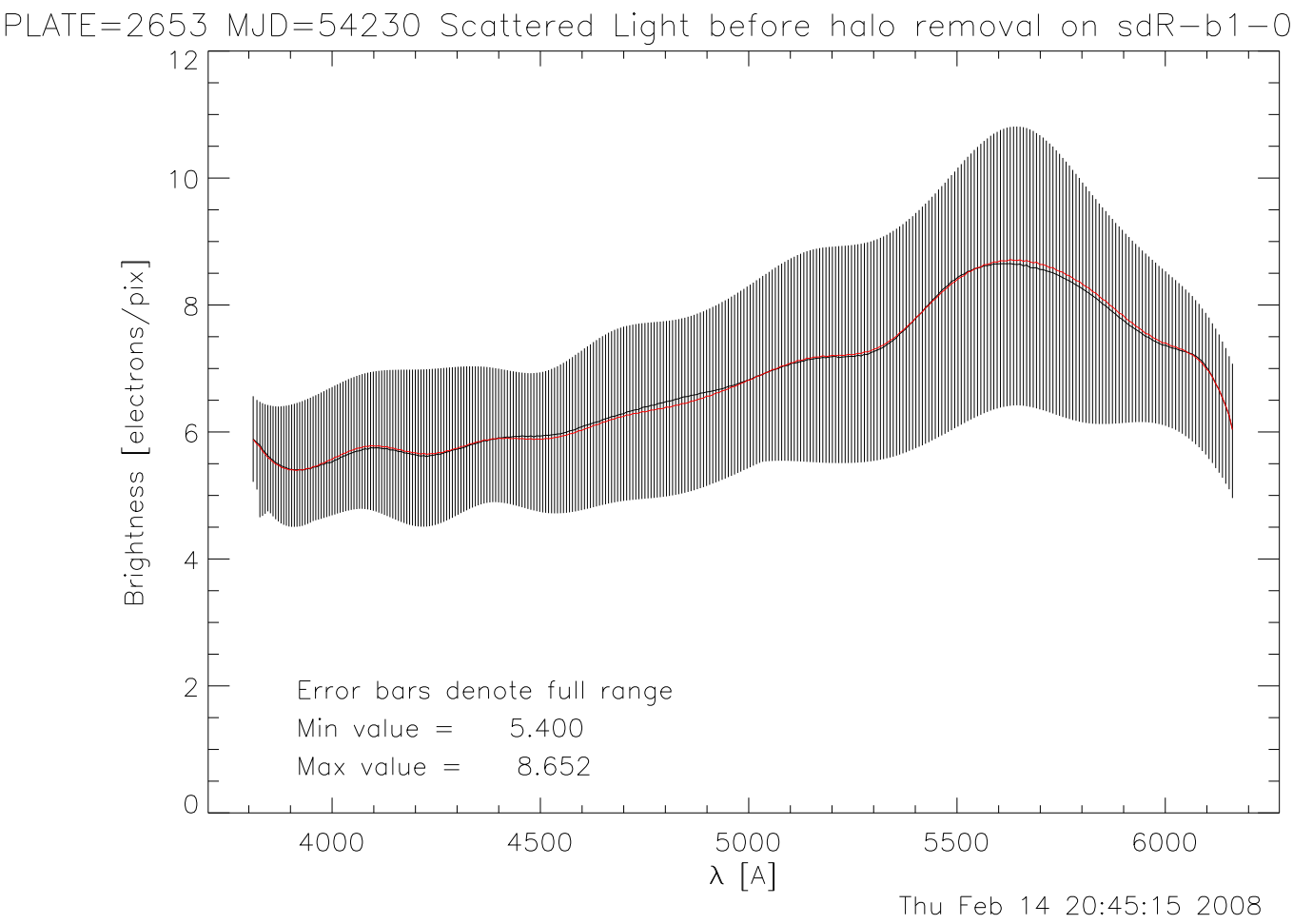

PLATE=2653 MJD=54230 flat extraction chi^2 for sdR-b1-00044755.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

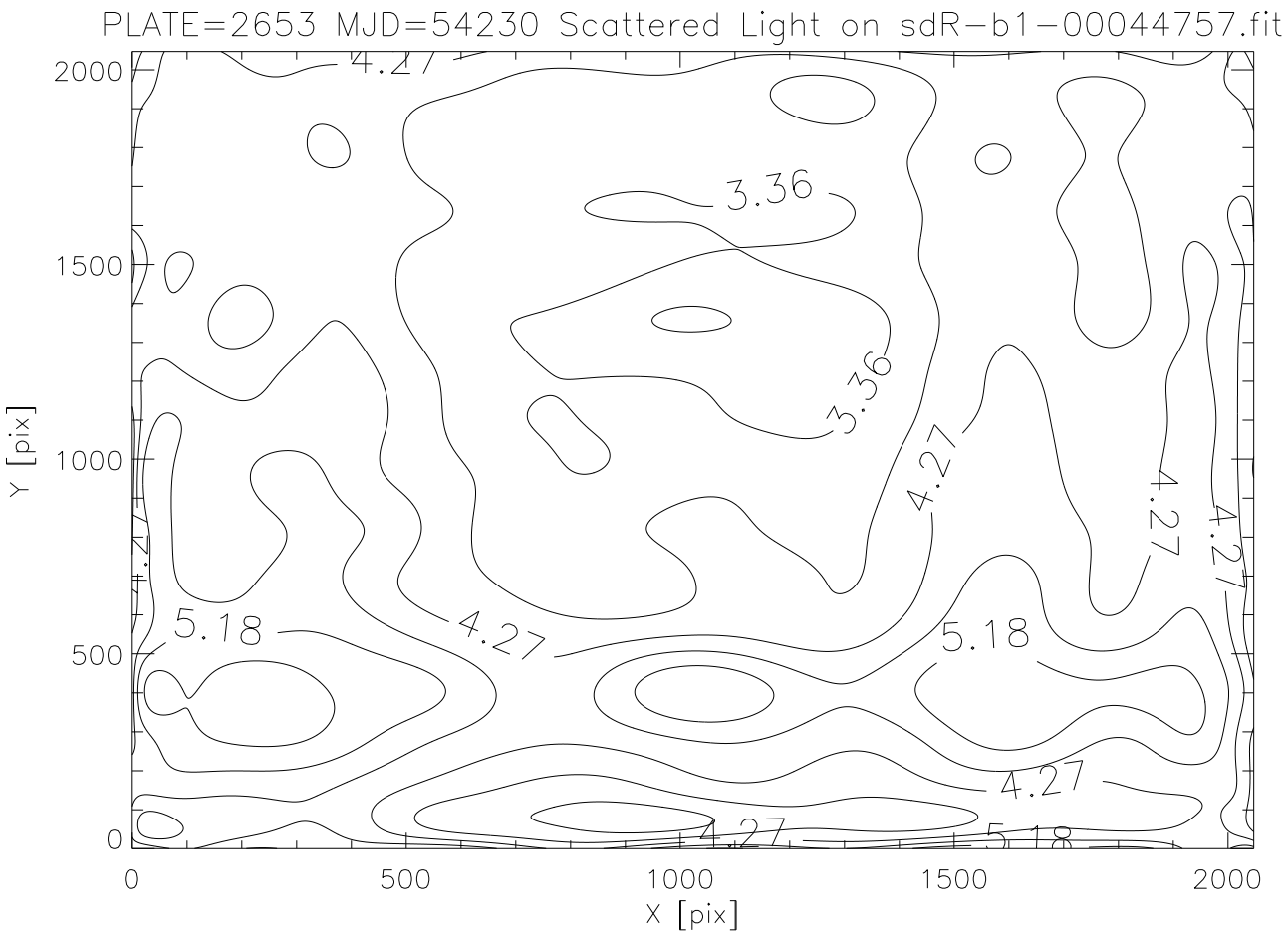

PLATE=2653 MJD=54230 Superflat sdR-b1-00044755.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

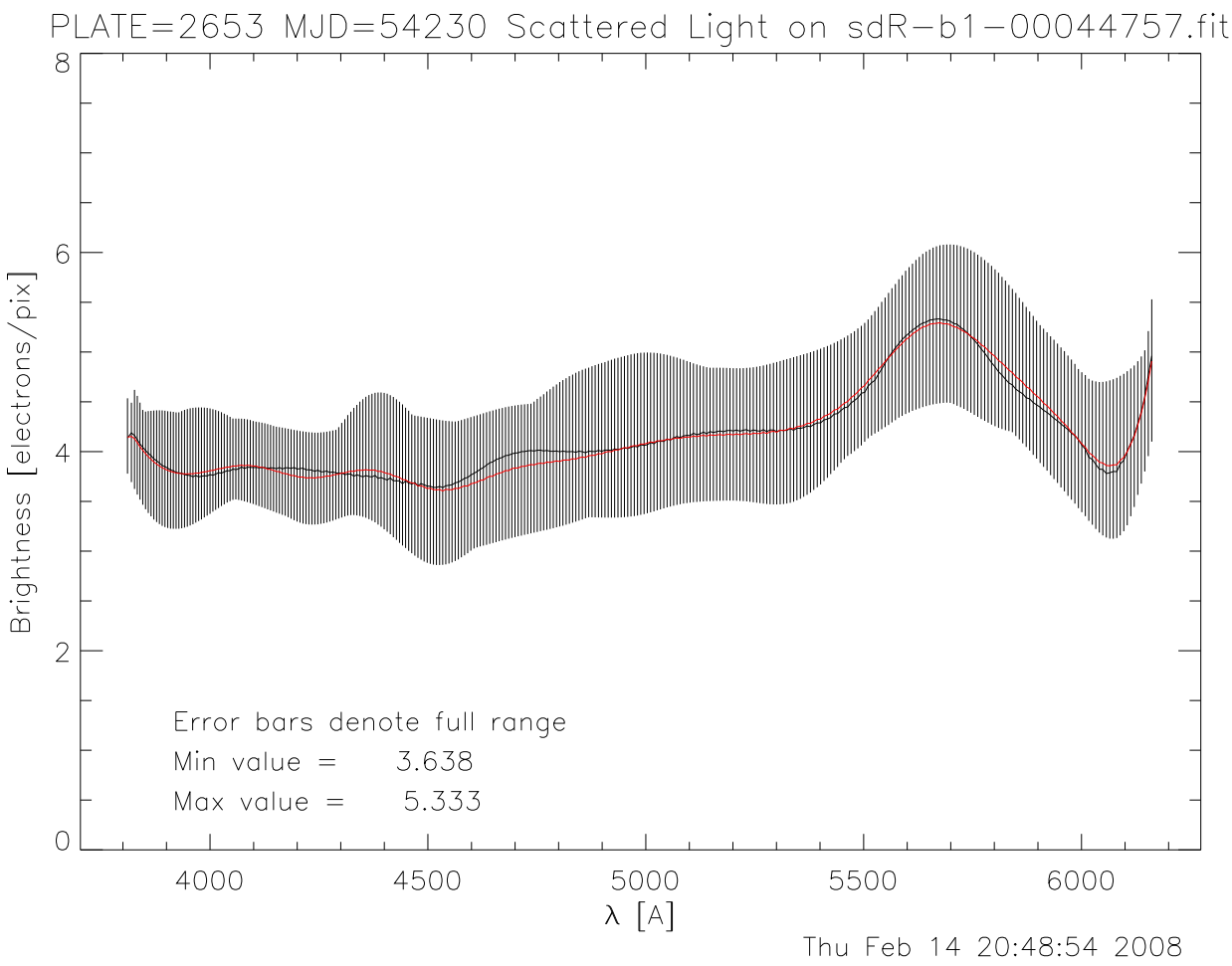

PLATE=2653 MJD=54230 Arcline Fit for sdR-b1-00044756.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Thu Feb 14 20:44:06 2008

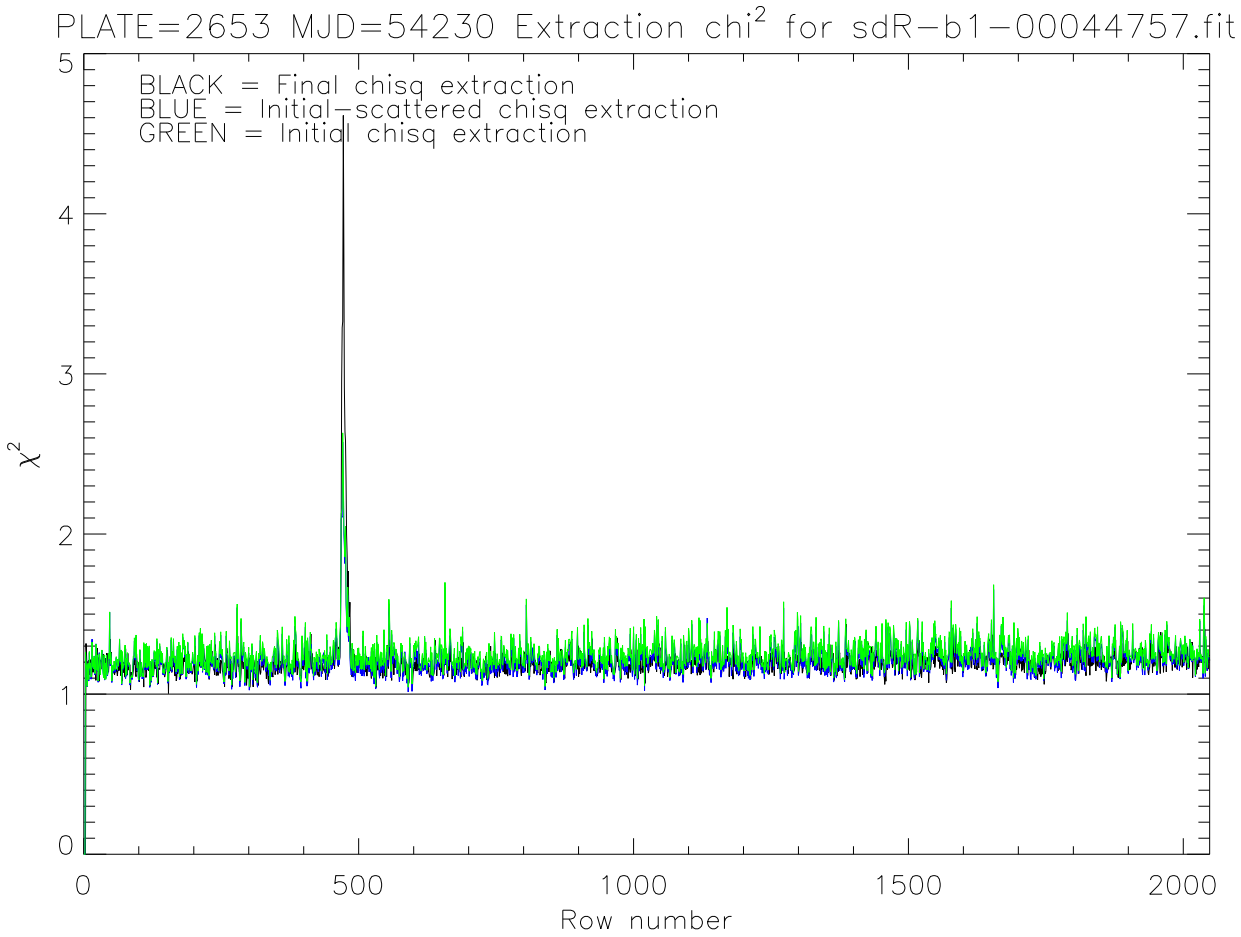

PLATE=2653 MJD=54230 Fiber-Flats for sdR-b1-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.109
Max value = 1.239
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 14 20:44:15 2008

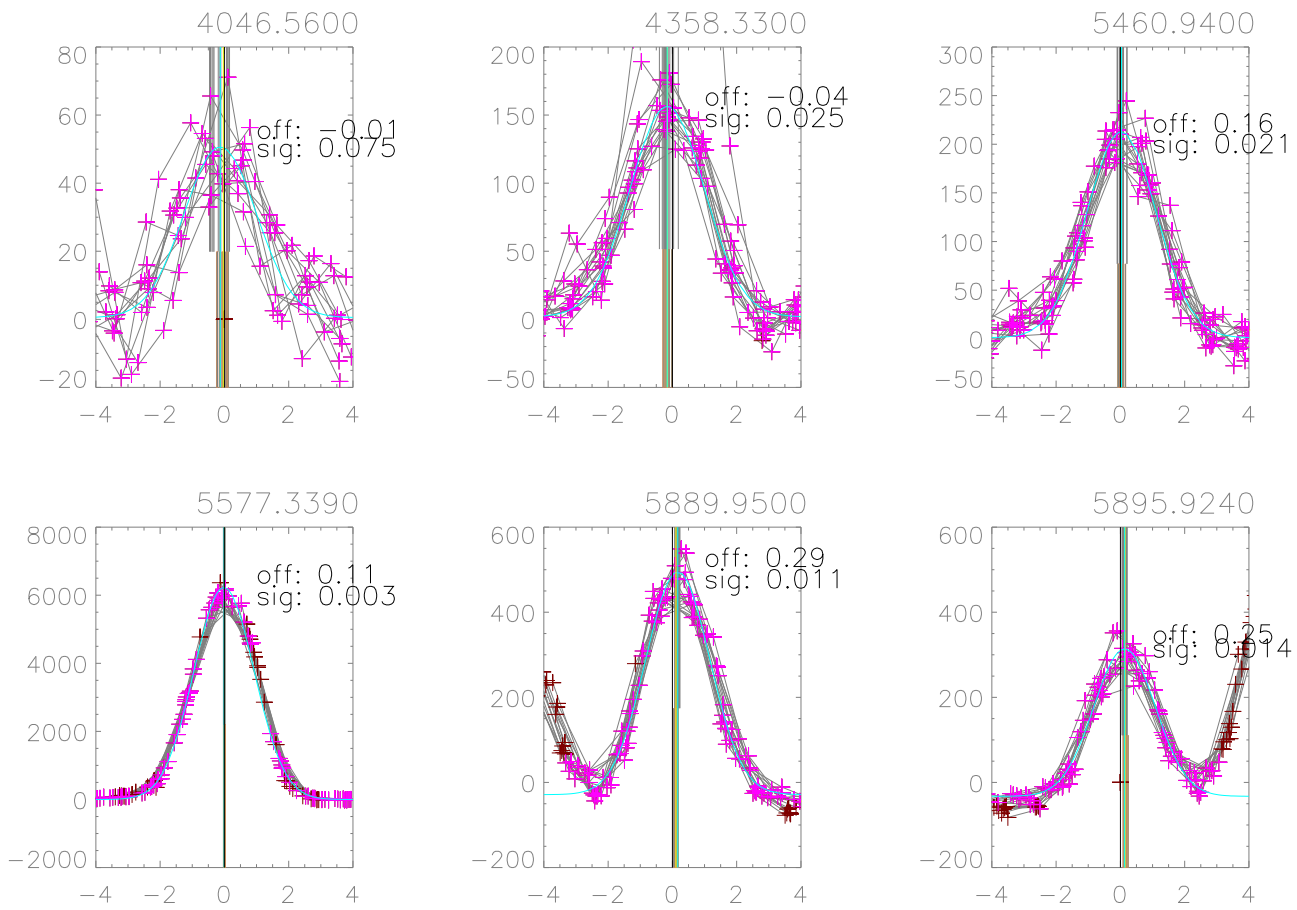

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-b1-00044757.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4
0

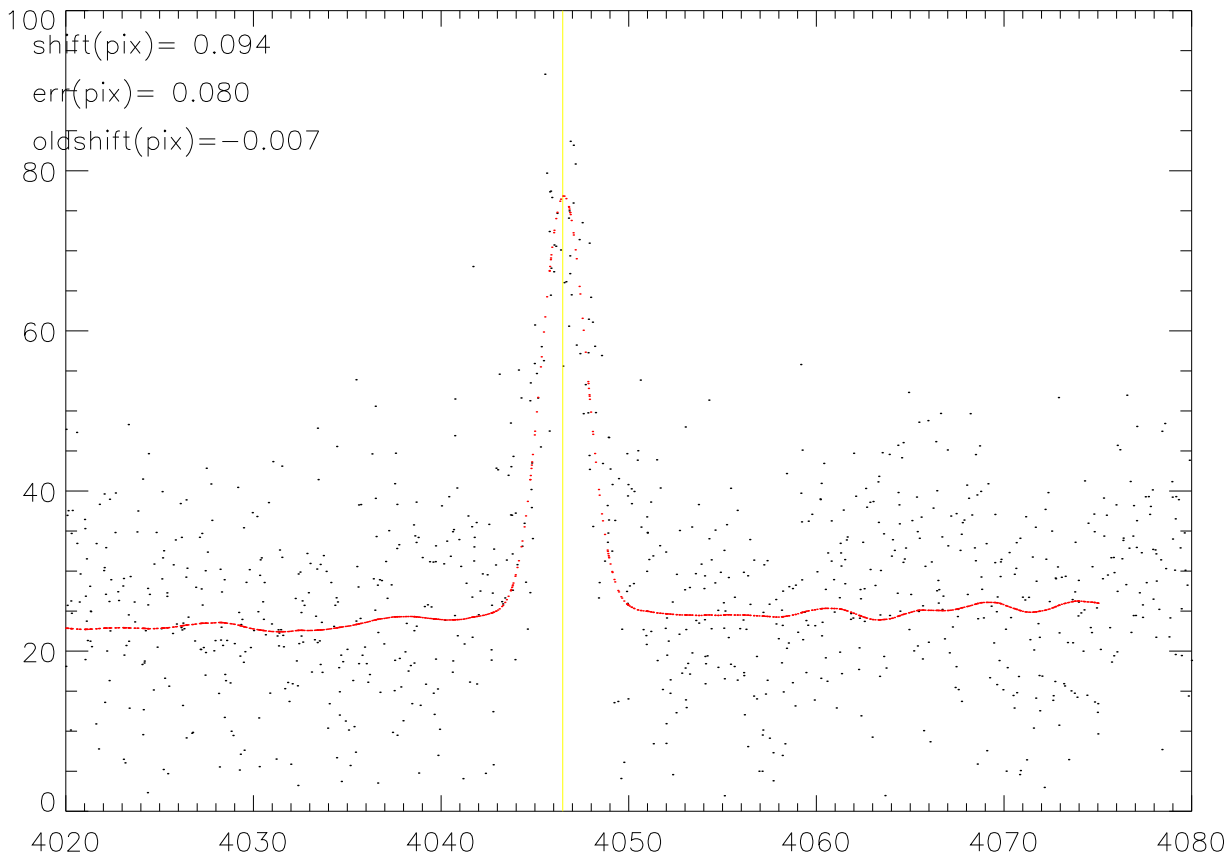

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-b1-00044757.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.400
Max value = 8.652
Thu Feb 14 20:45:15 2008

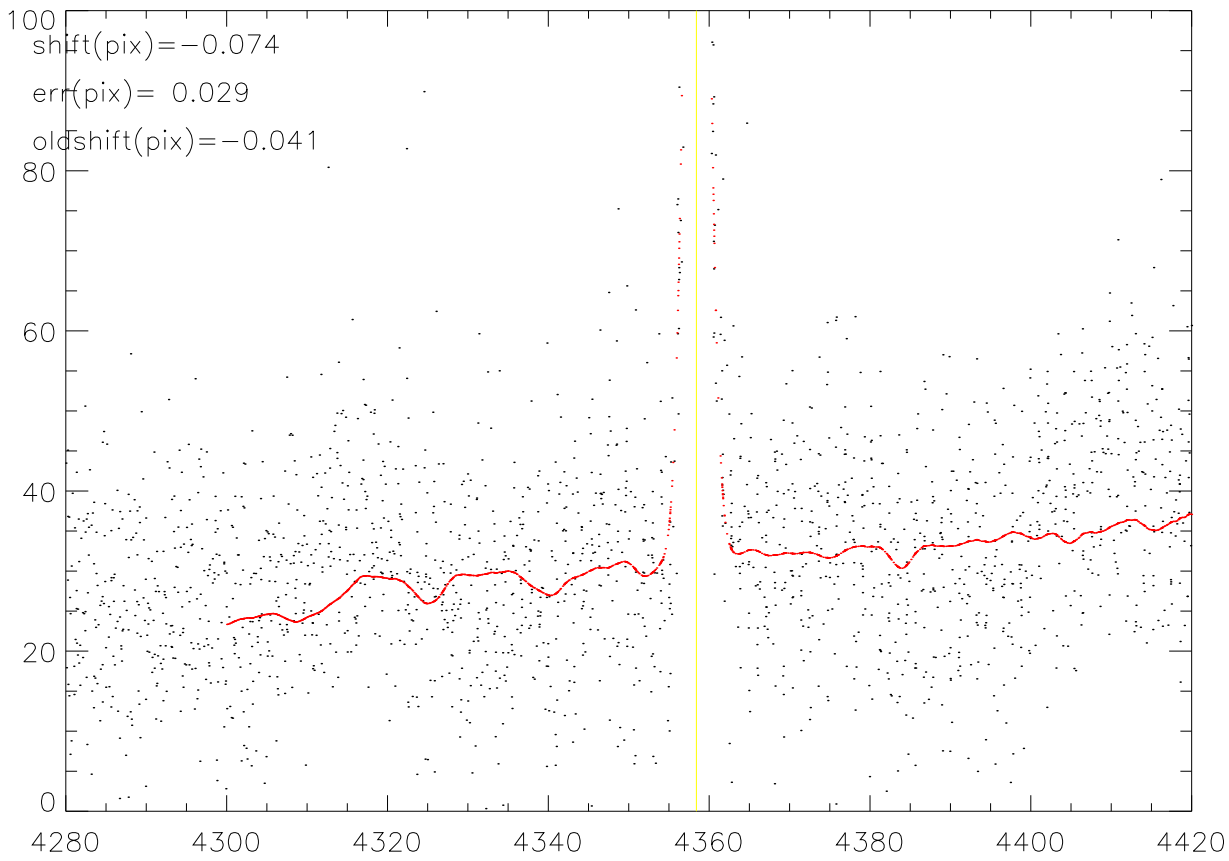

PLATE=2653 MJD=54230 Scattered Light on sdR-b1-00044757.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.27
3.36
5.18

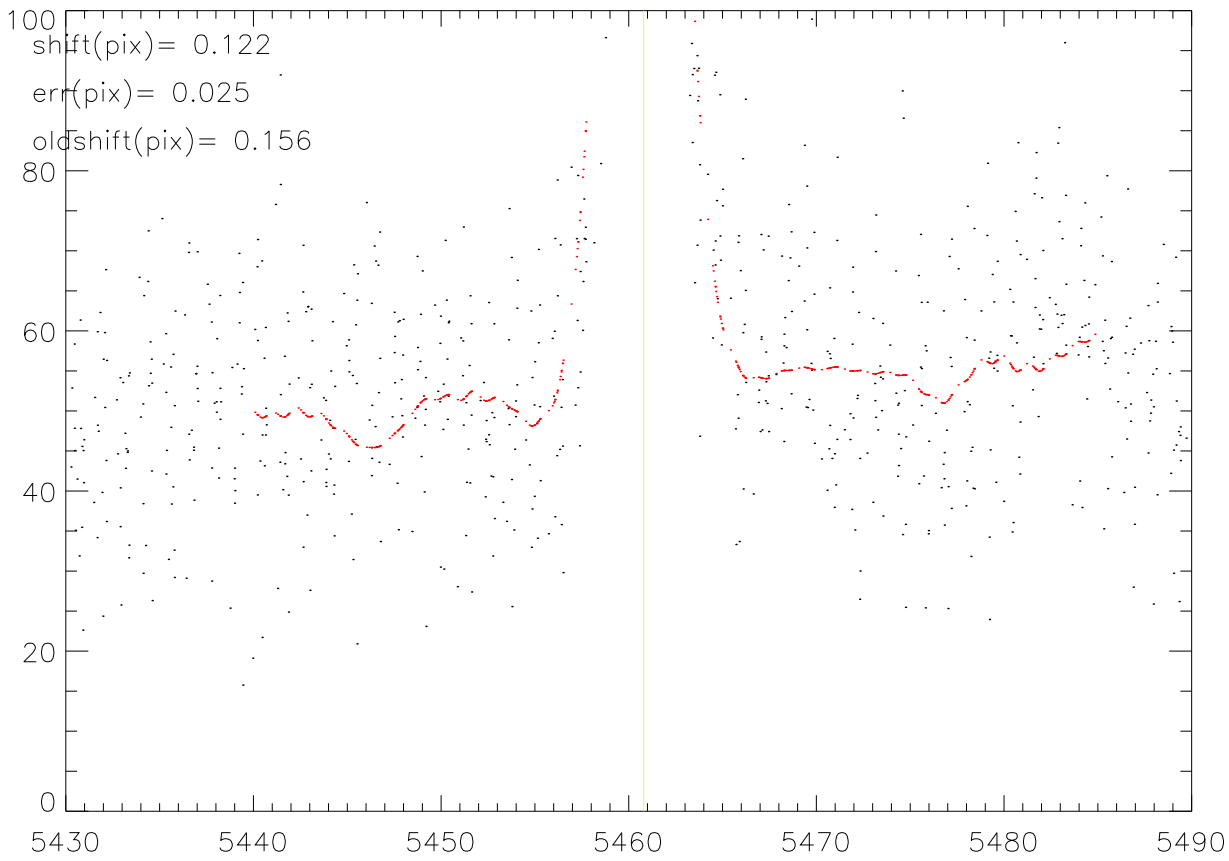

PLATE=2653 MJD=54230 Scattered Light on sdR-b1-00044757.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.638
Max value = 5.333
Thu Feb 14 20:48:54 2008

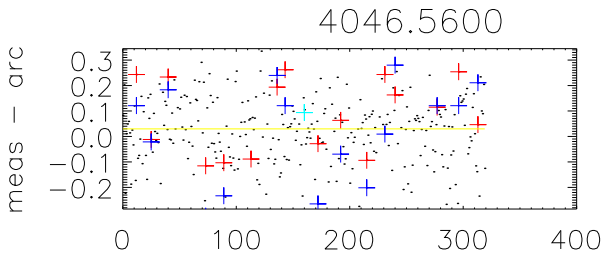

PLATE=2653 MJD=54230 Extraction chi^2 for sdR-b1-00044757.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

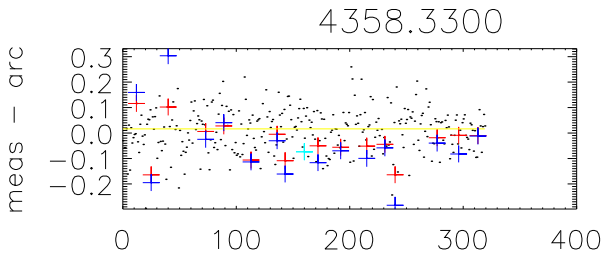

4046.5600
off: −0.01
sig: 0.075
4358.3300
off: −0.04
sig: 0.025
5460.9400
off: 0.16
sig: 0.021
5577.3390
off: 0.11
sig: 0.003
5889.9500
off: 0.29
sig: 0.011
5895.9240
off: 0.25
sig: 0.014

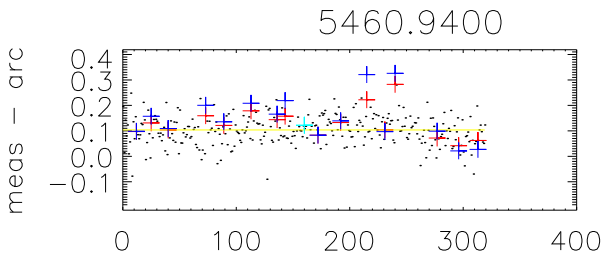

shift(pix)= 0.094
err(pix)= 0.080
oldshift(pix)=−0.007
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

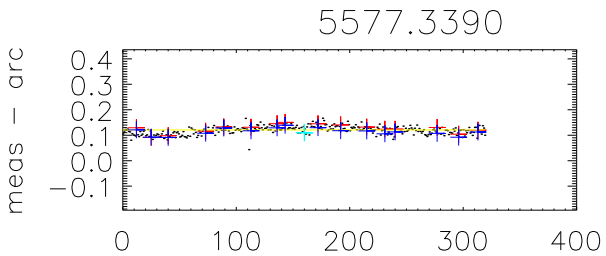

shift(pix)=−0.074
err(pix)= 0.029
oldshift(pix)=−0.041
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

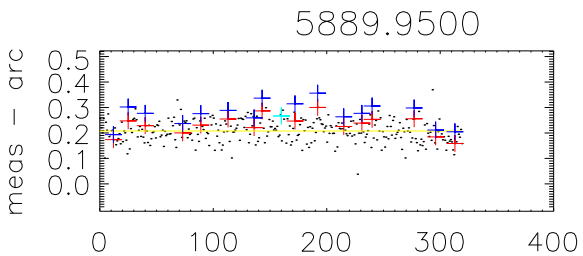

shift(pix)= 0.122
err(pix)= 0.025
oldshift(pix)= 0.156
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

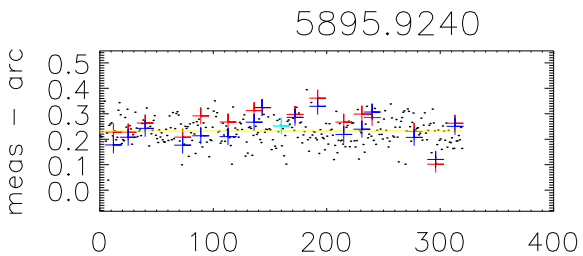

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

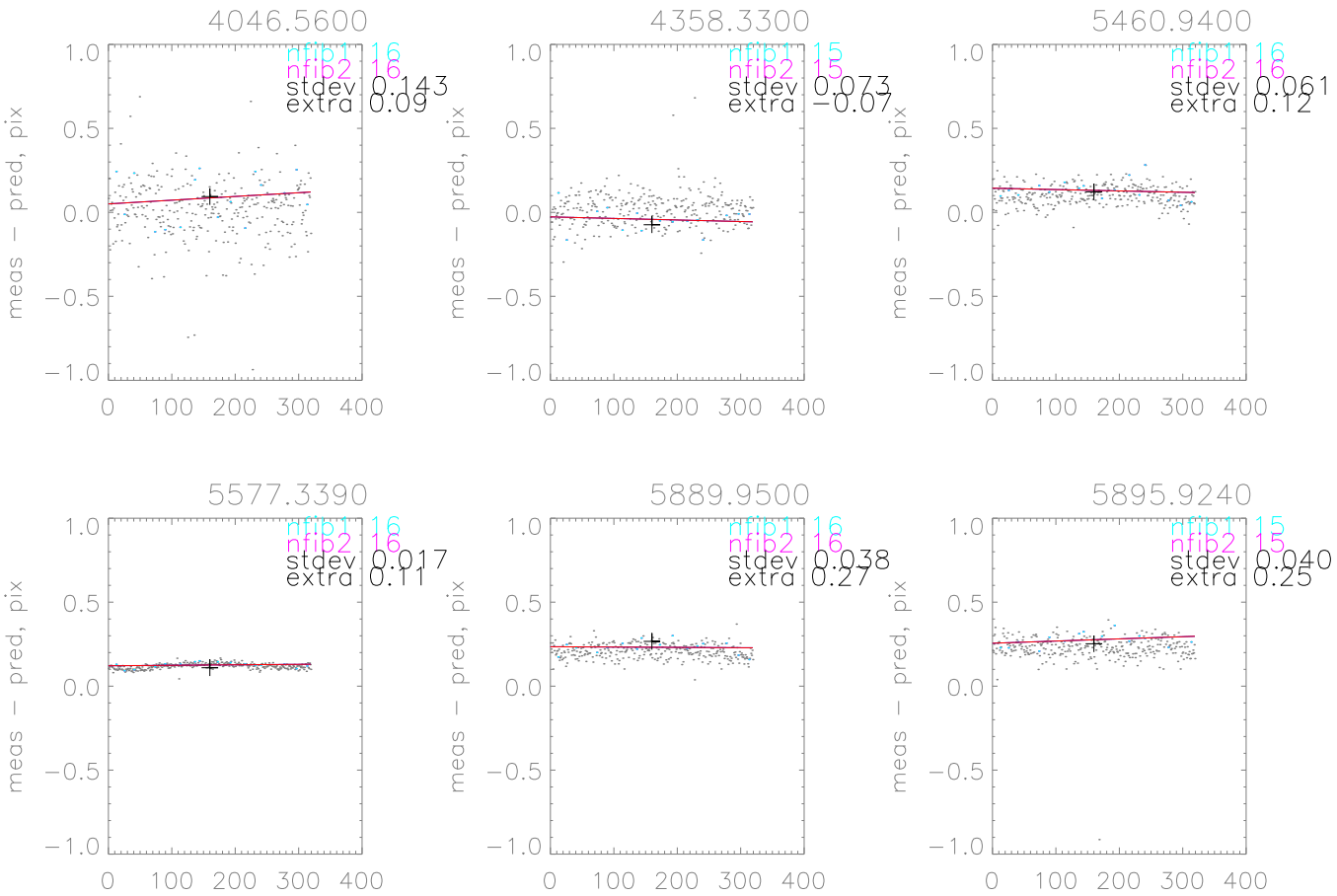

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

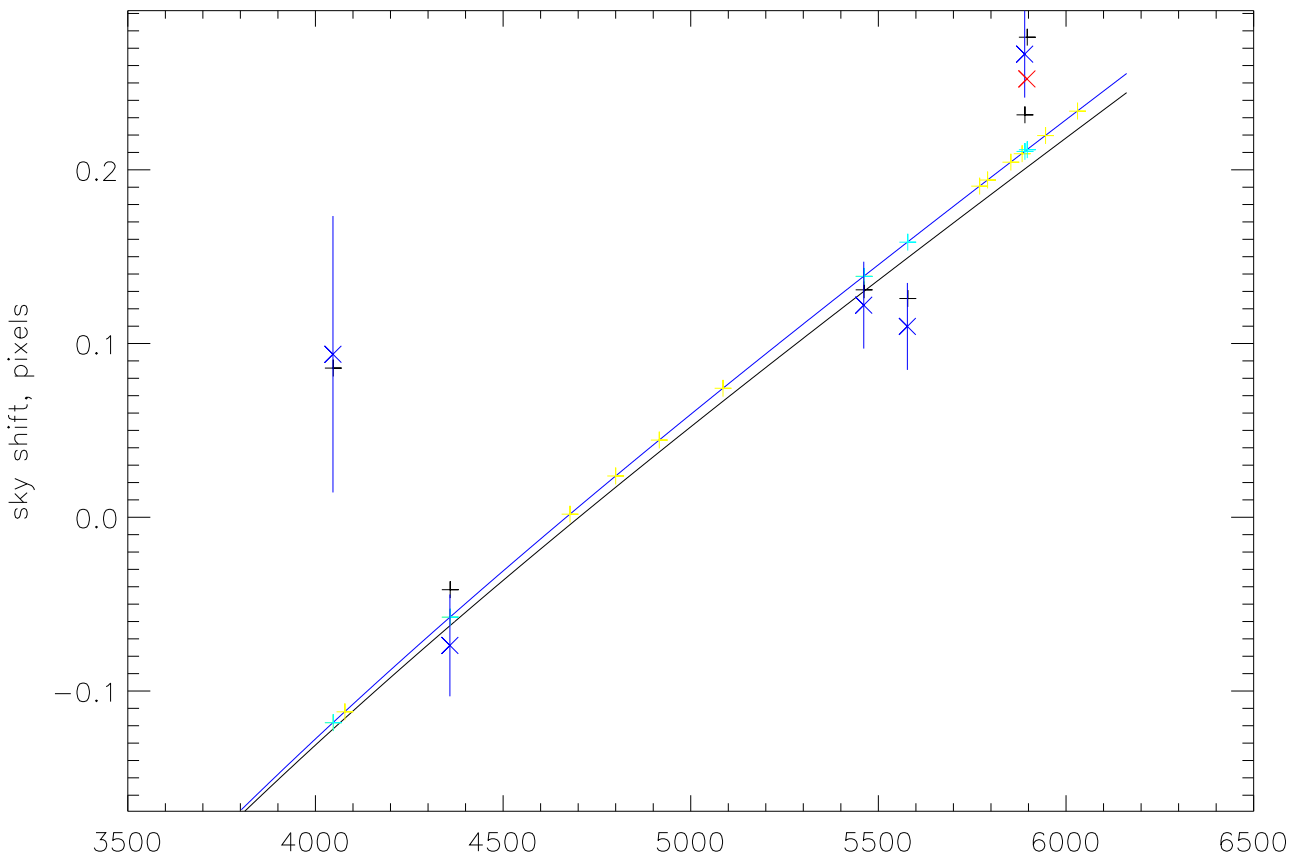

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

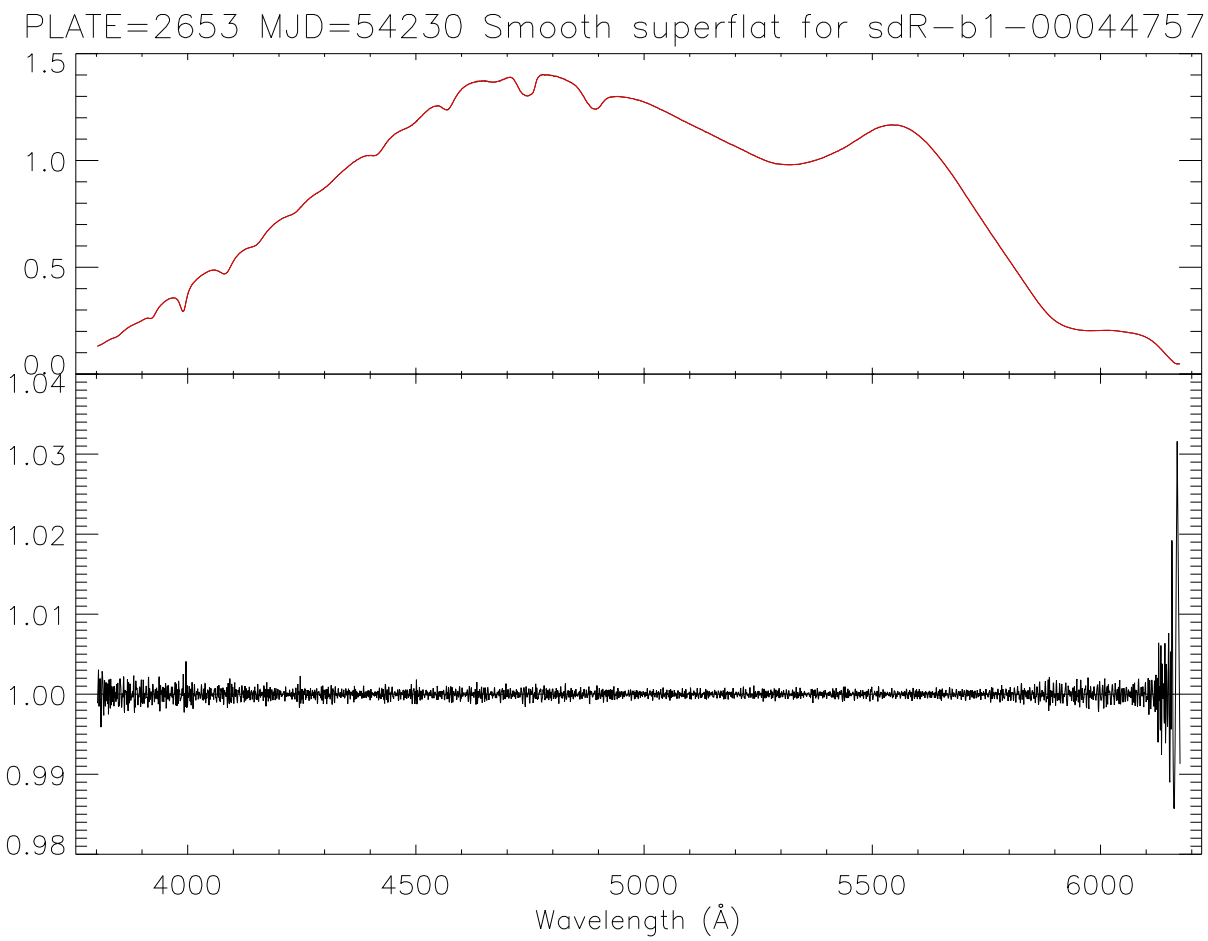

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

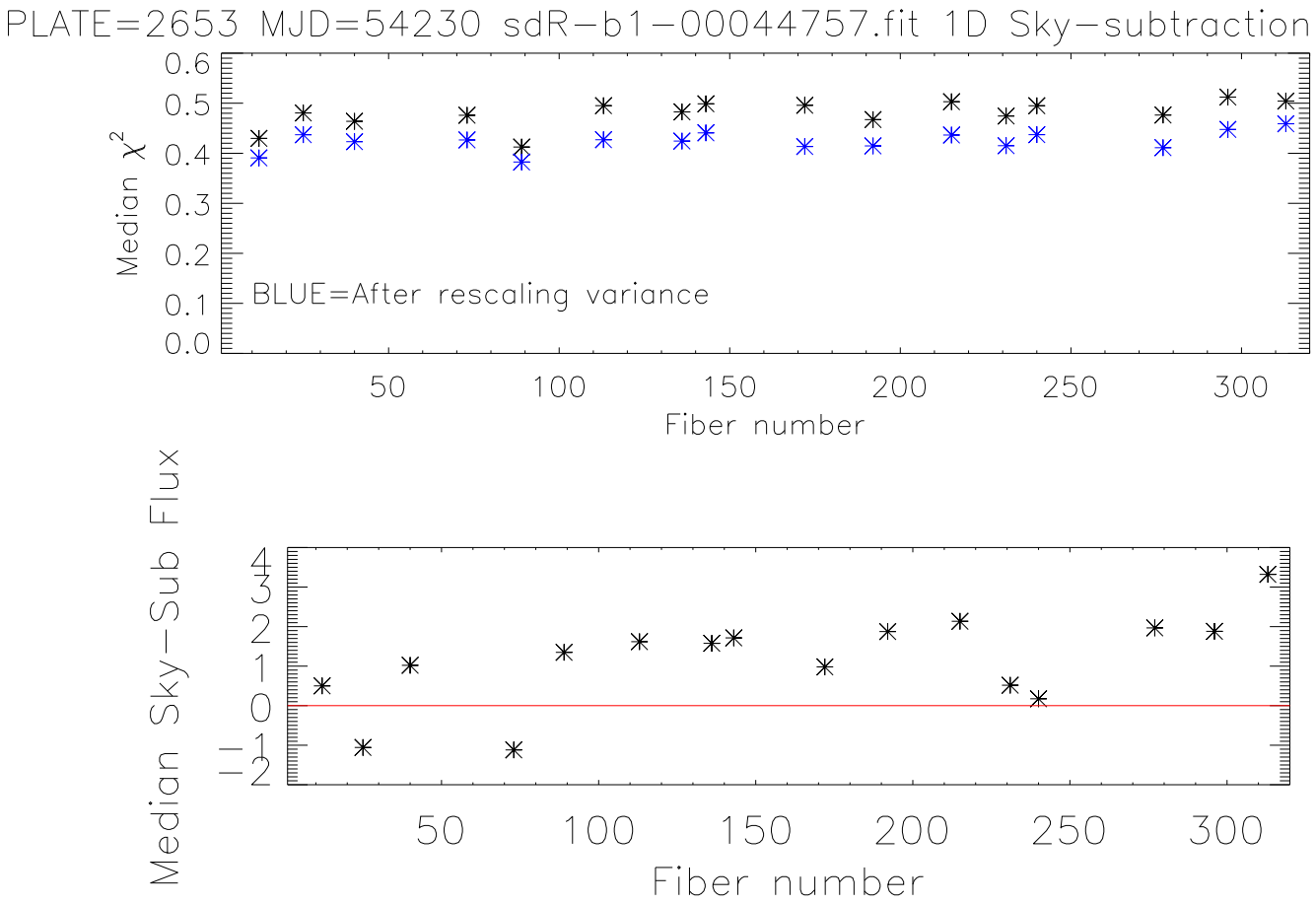

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

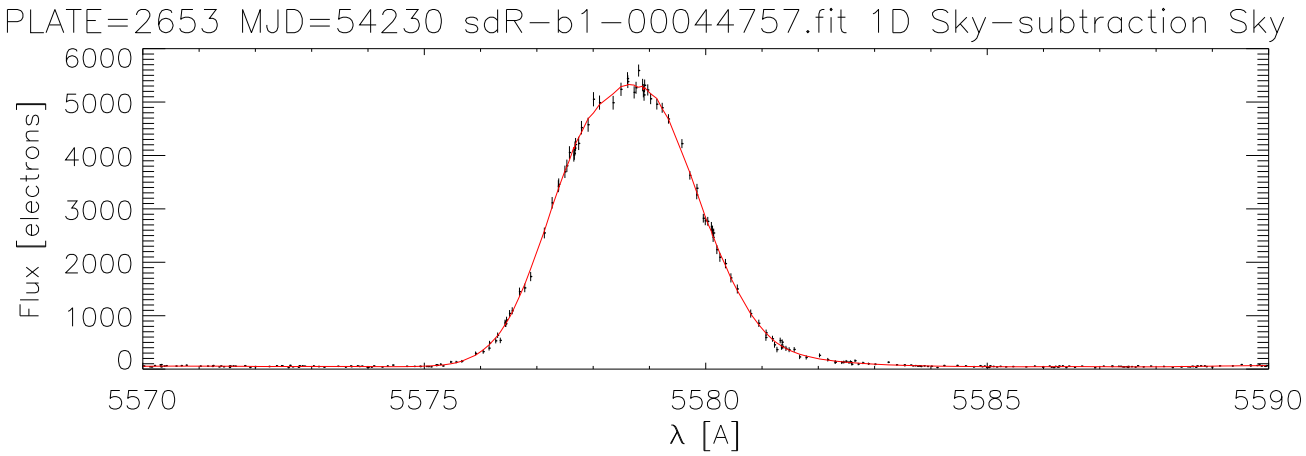

4046.5600
nfib1 16
nfib2 16
stdev 0.143
extra 0.09
4358.3300
nfib1 15
nfib2 15
stdev 0.073
extra −0.07
5460.9400
nfib1 16
nfib2 16
stdev 0.061
extra 0.12
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.038
extra 0.27
5895.9240
nfib1 15
nfib2 15
stdev 0.040
extra 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

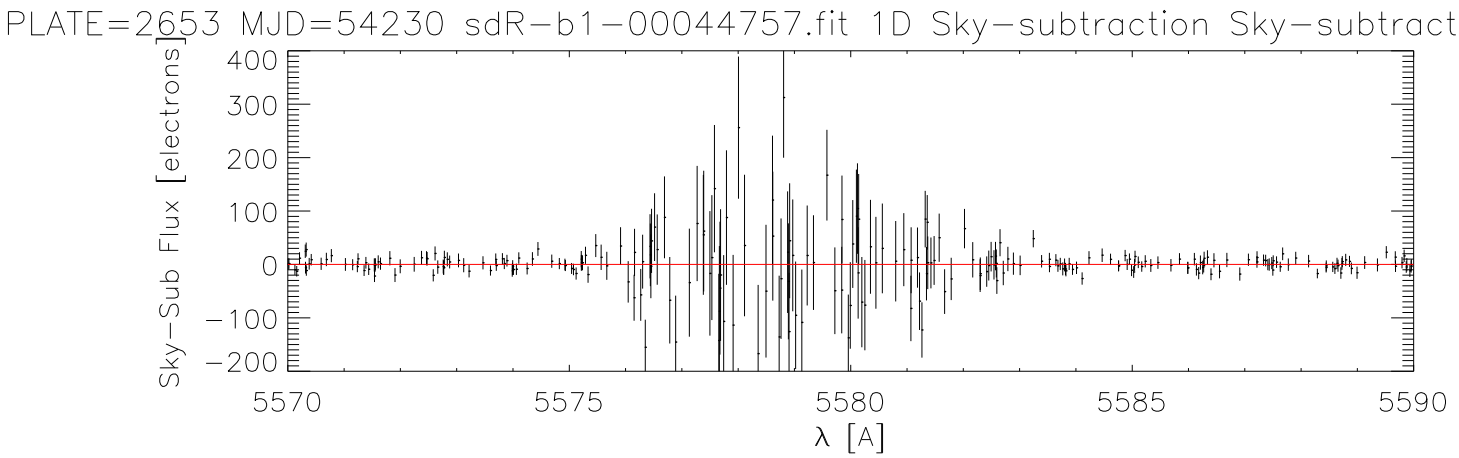

sky shift, pixels
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

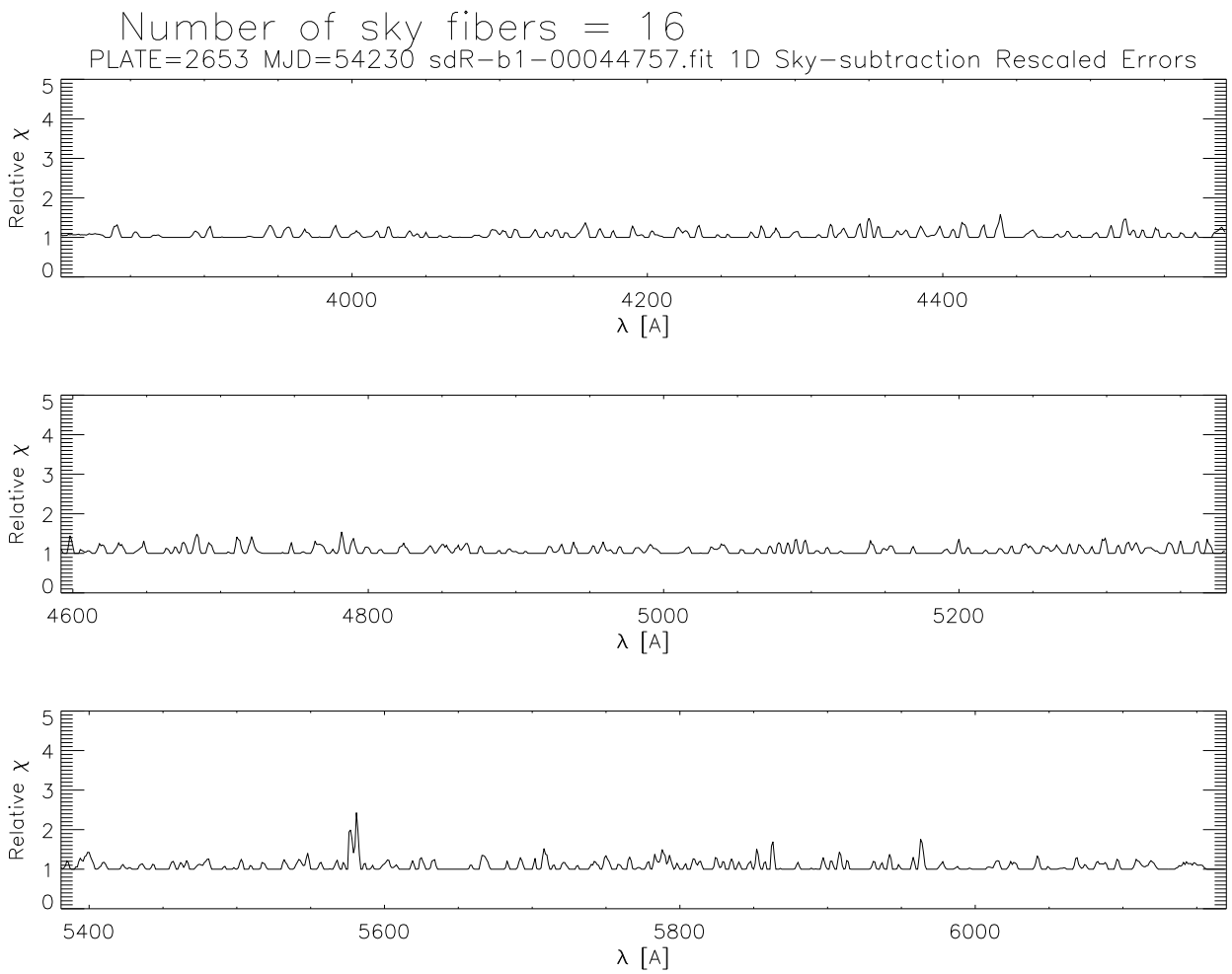
es= −0.0001

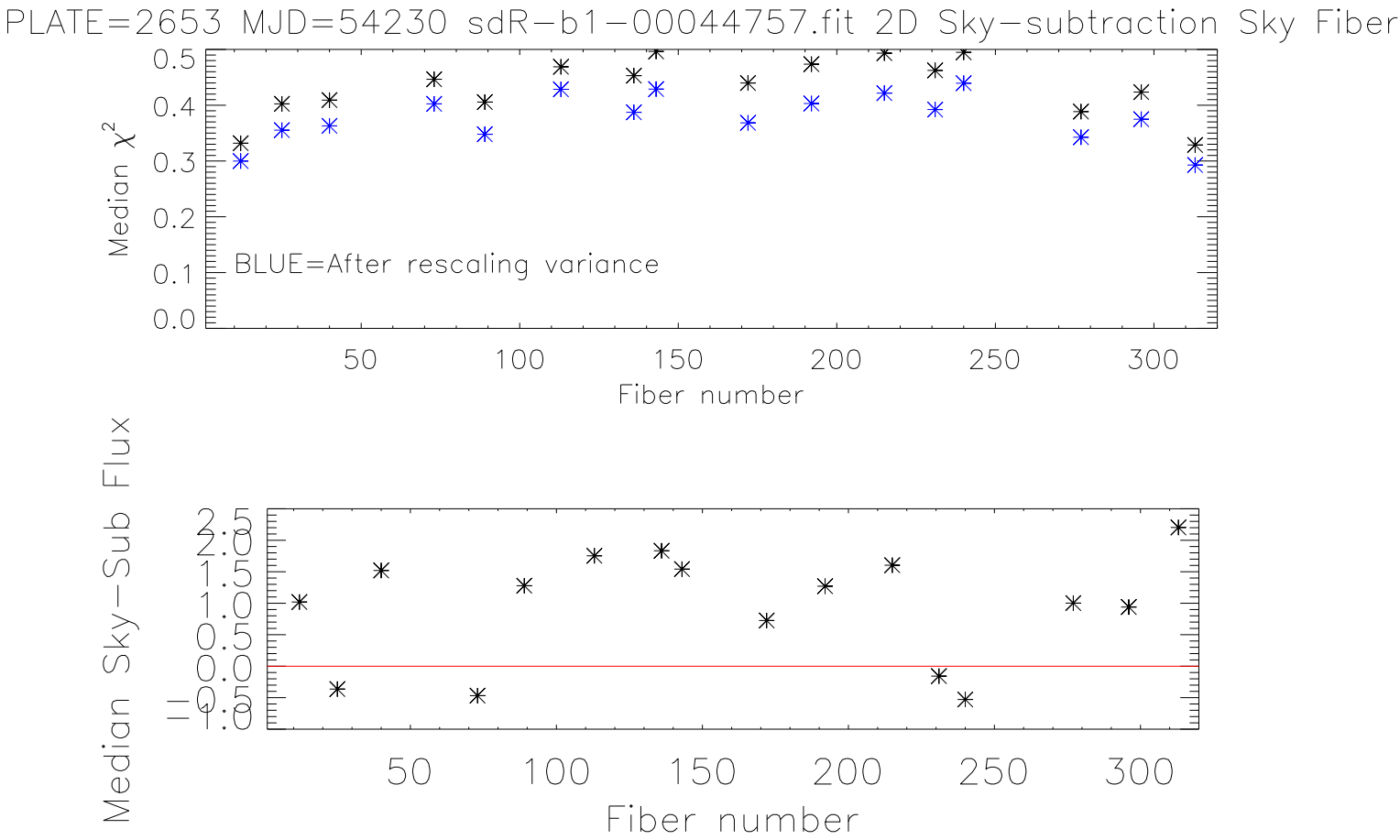

PLATE=2653 MJD=54230 Smooth superflat for sdR−b1−00044757.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

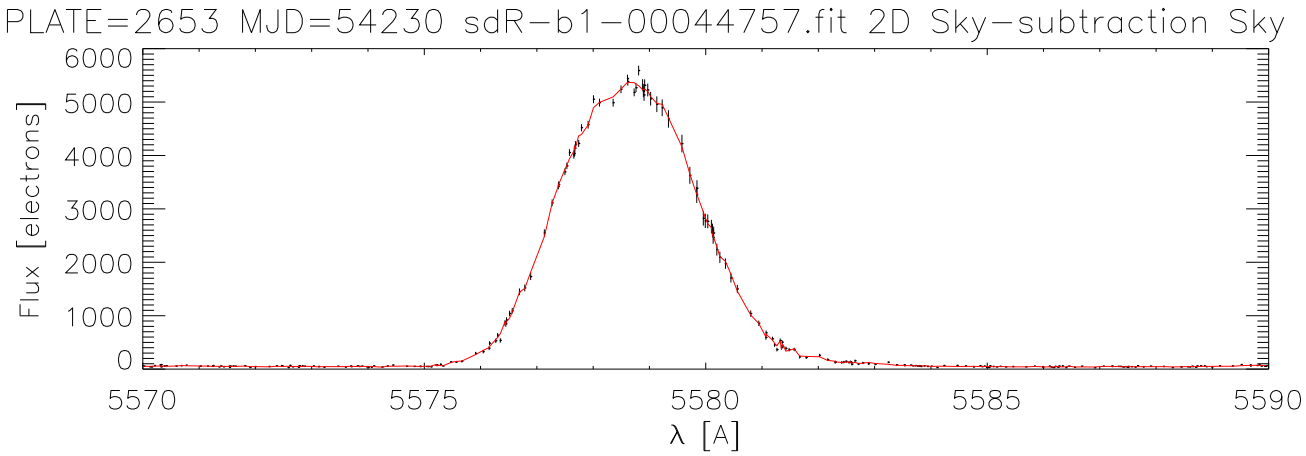

PLATE=2653 MJD=54230 sdR-b1-00044757.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

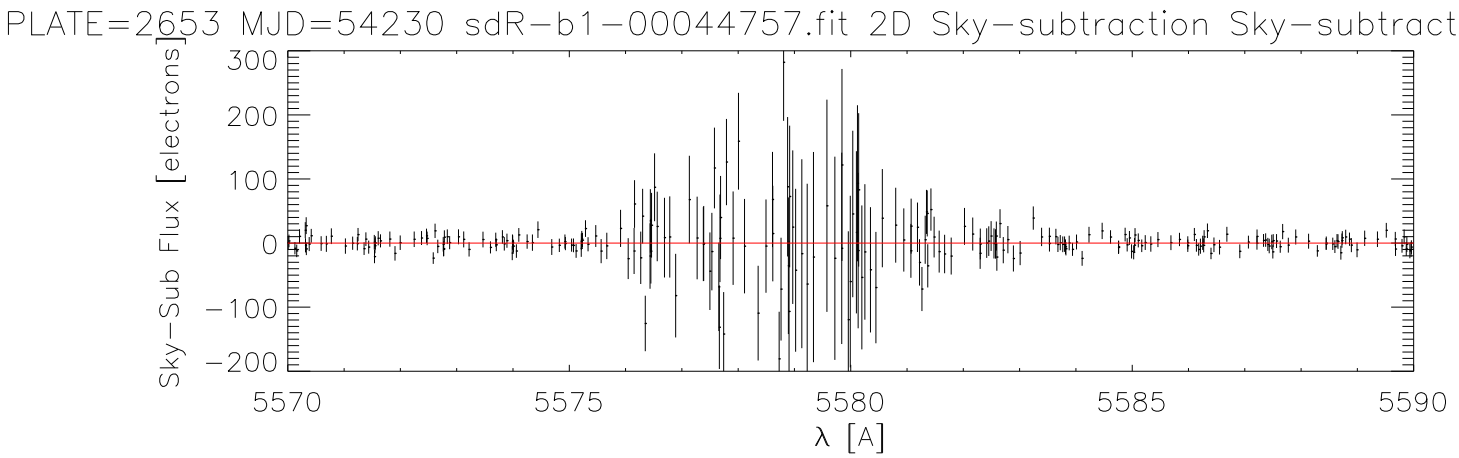

PLATE=2653 MJD=54230 sdR-b1-00044757.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

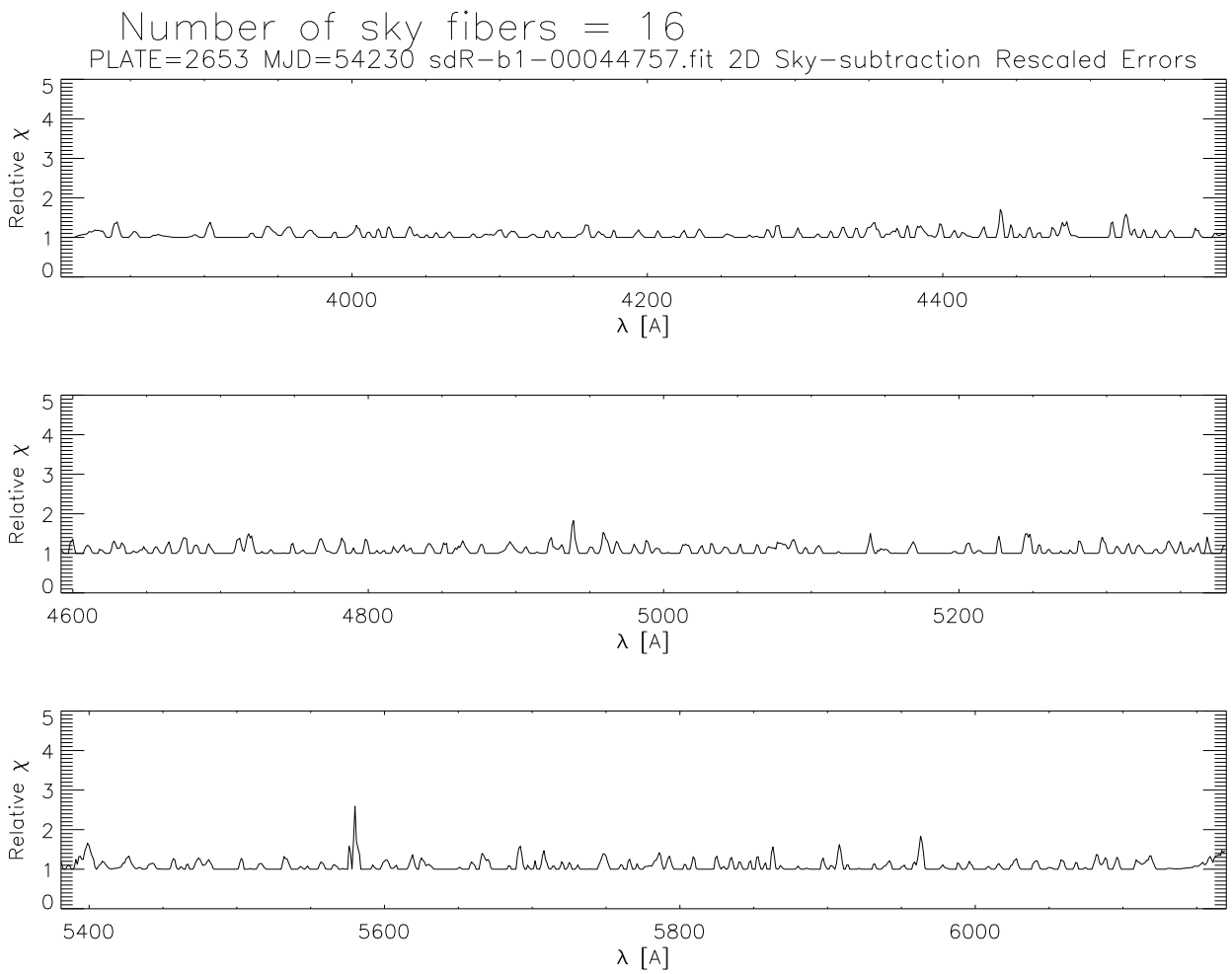

PLATE=2653 MJD=54230 sdR-b1-00044757.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

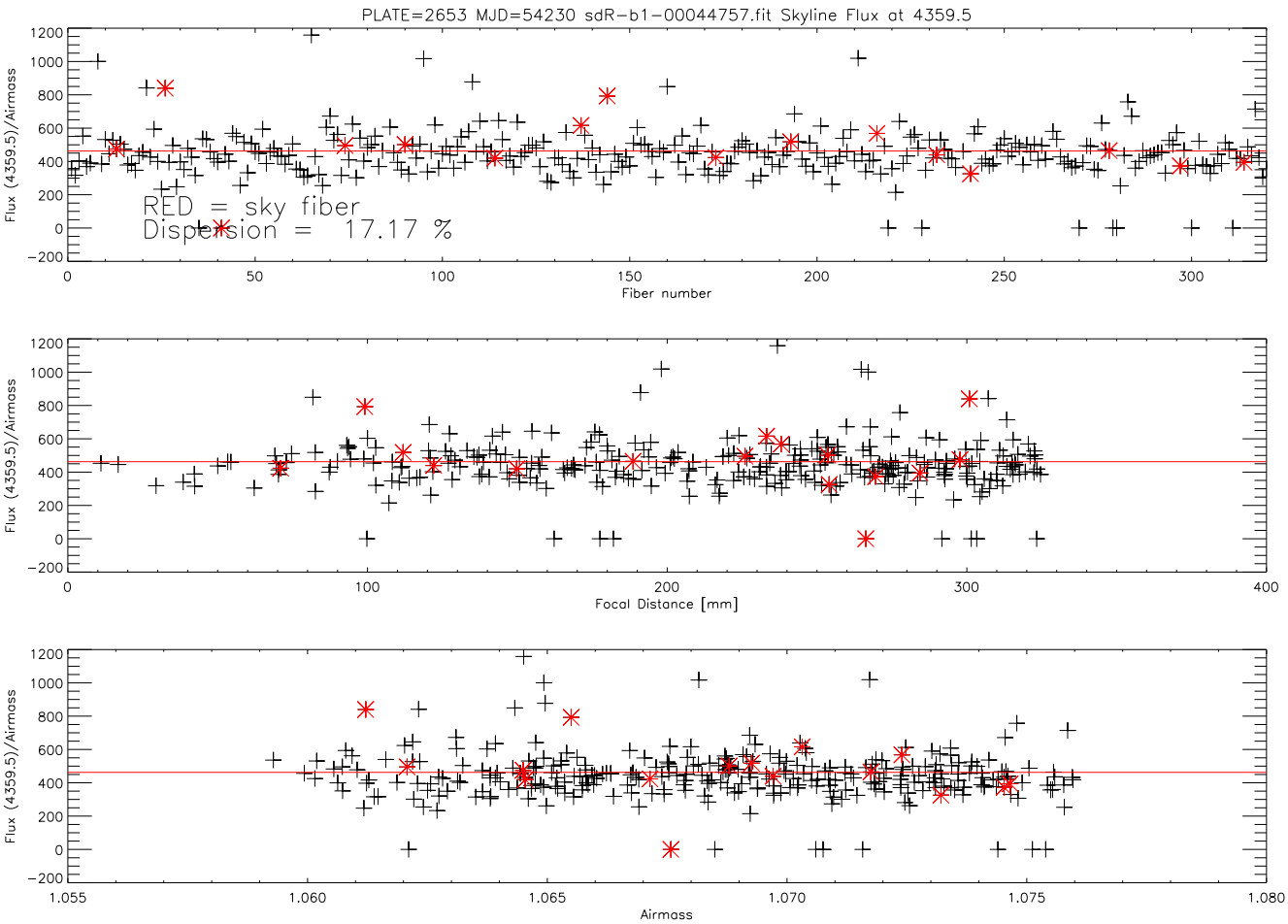

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b1-00044757.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

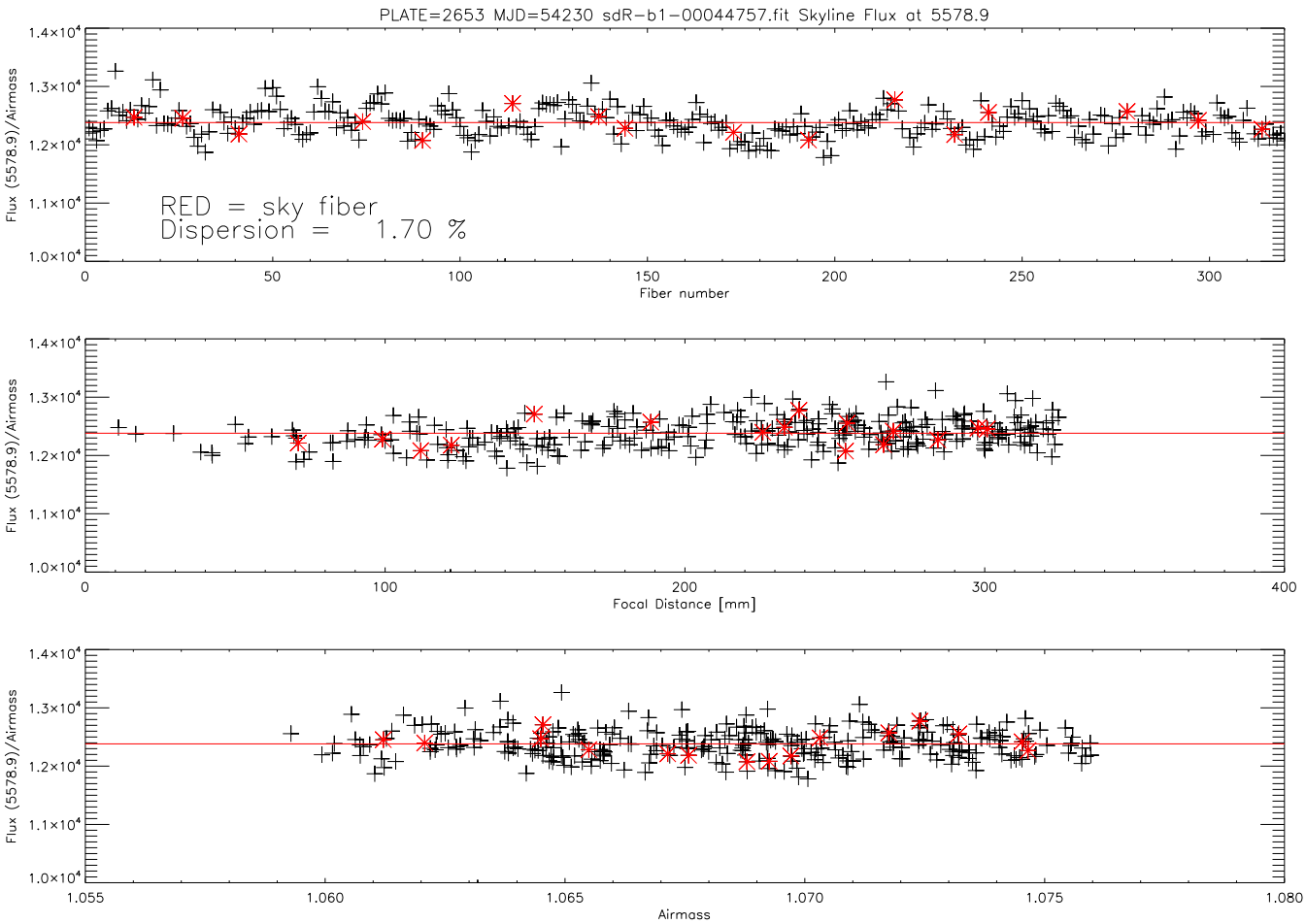

PLATE=2653 MJD=54230 sdR-b1-00044757.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

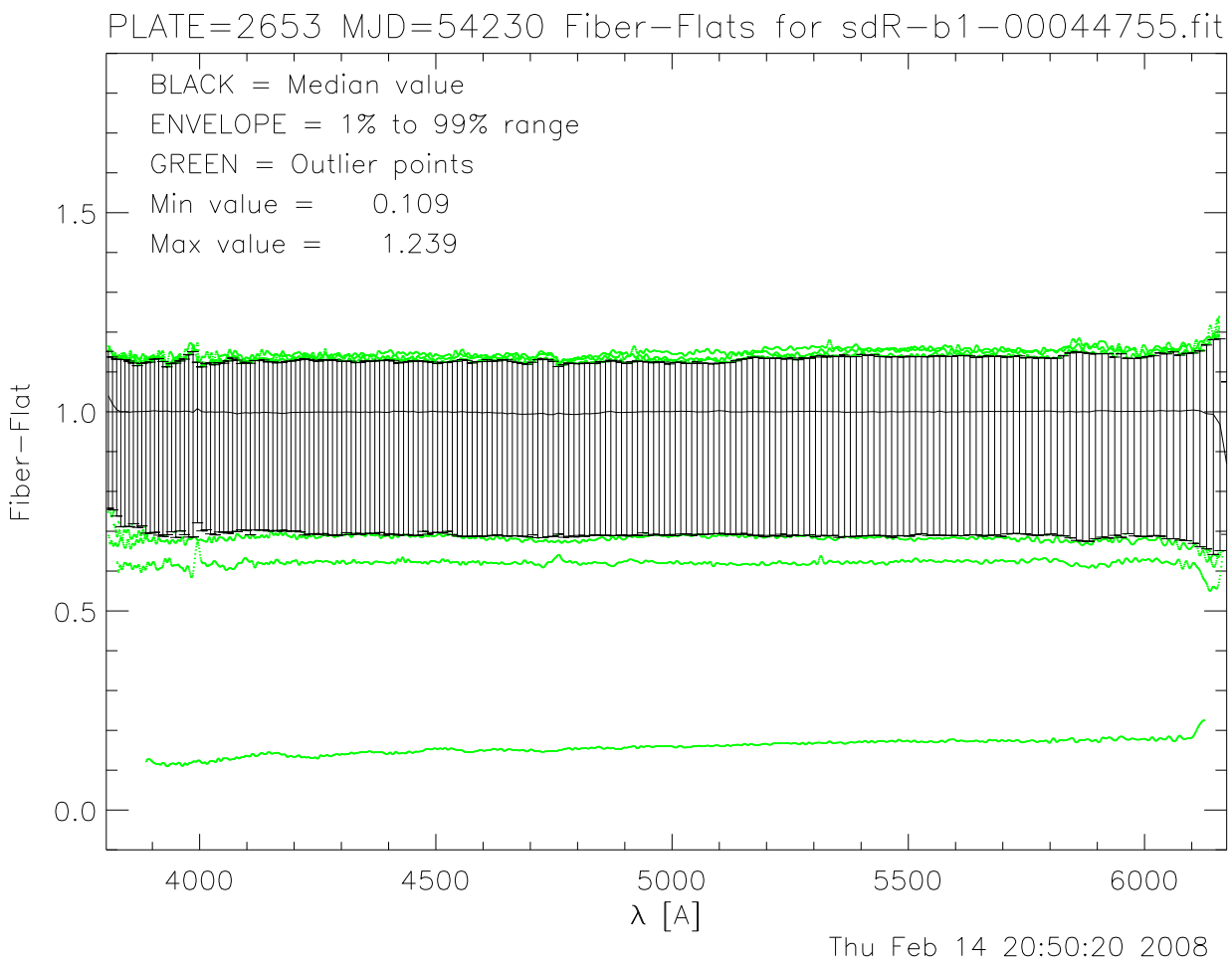

PLATE=2653 MJD=54230 sdR-b1-00044757.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2653 MJD=54230 sdR-b1-00044757.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b1-00044757.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000


PLATE=2653 MJD=54230 sdR-b1-00044757.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 17.17 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=2653 MJD=54230 sdR-b1-00044757.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.70 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass


PLATE=2653 MJD=54230 Fiber-Flats for sdR-b1-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.109
Max value = 1.239
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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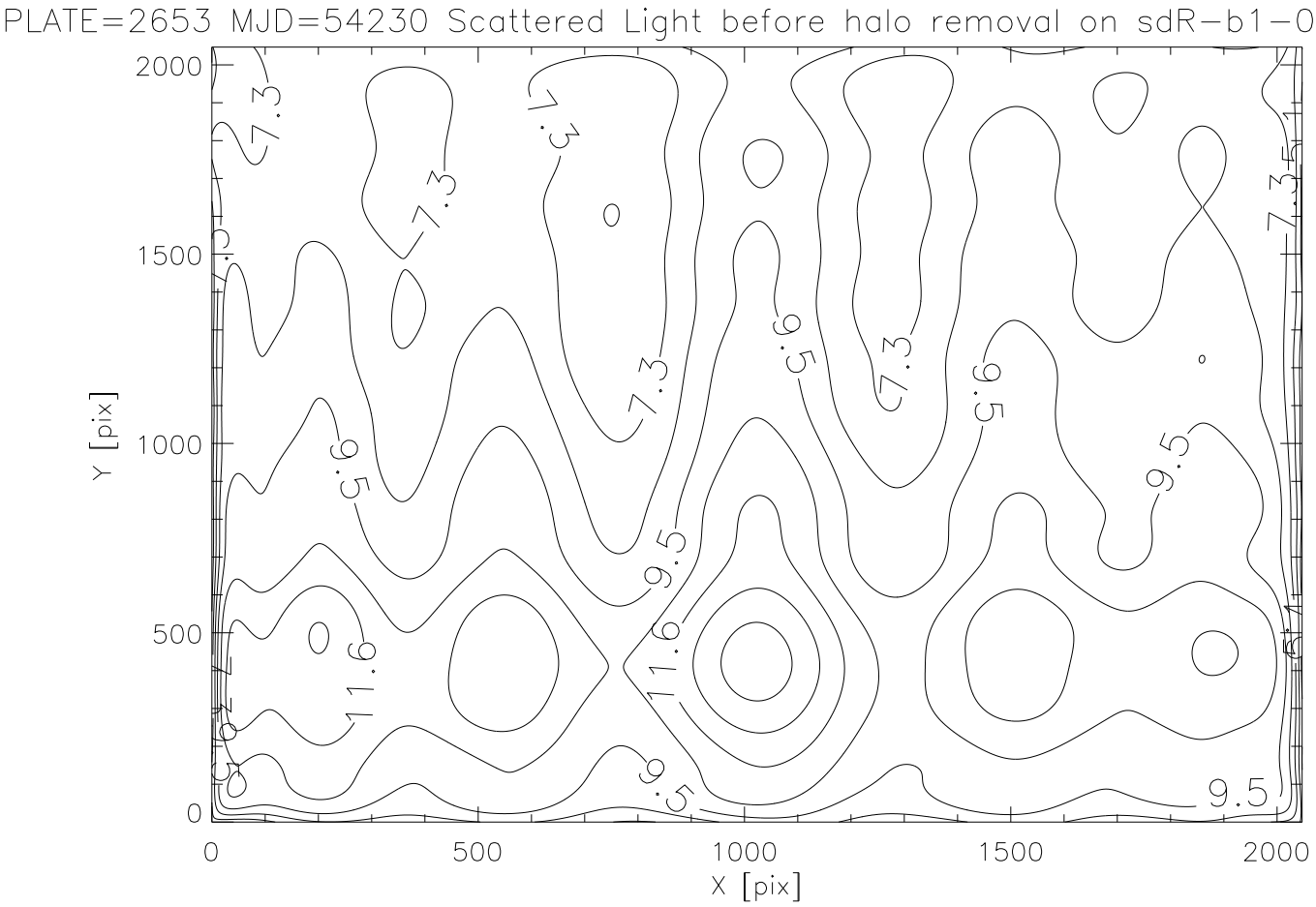
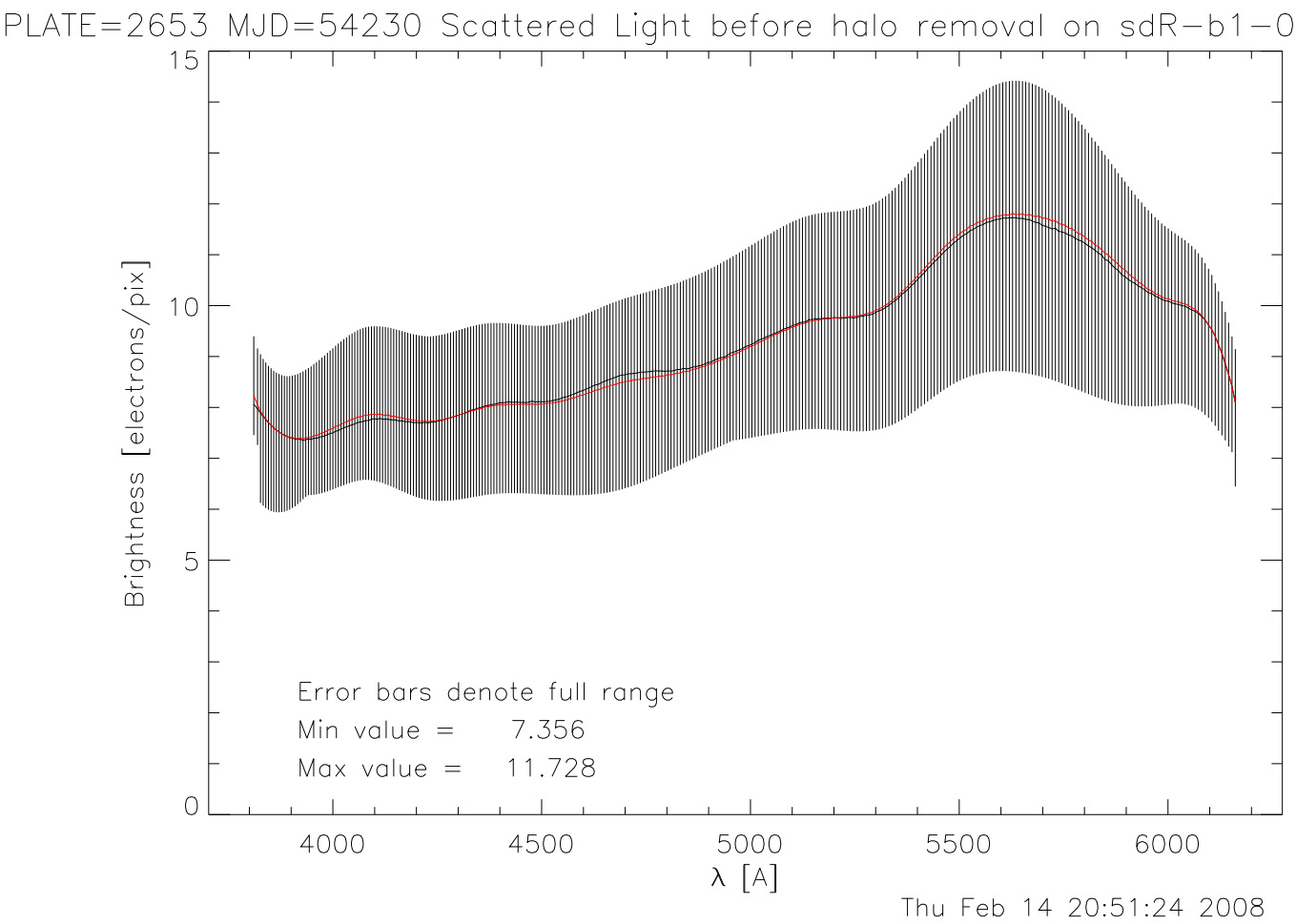
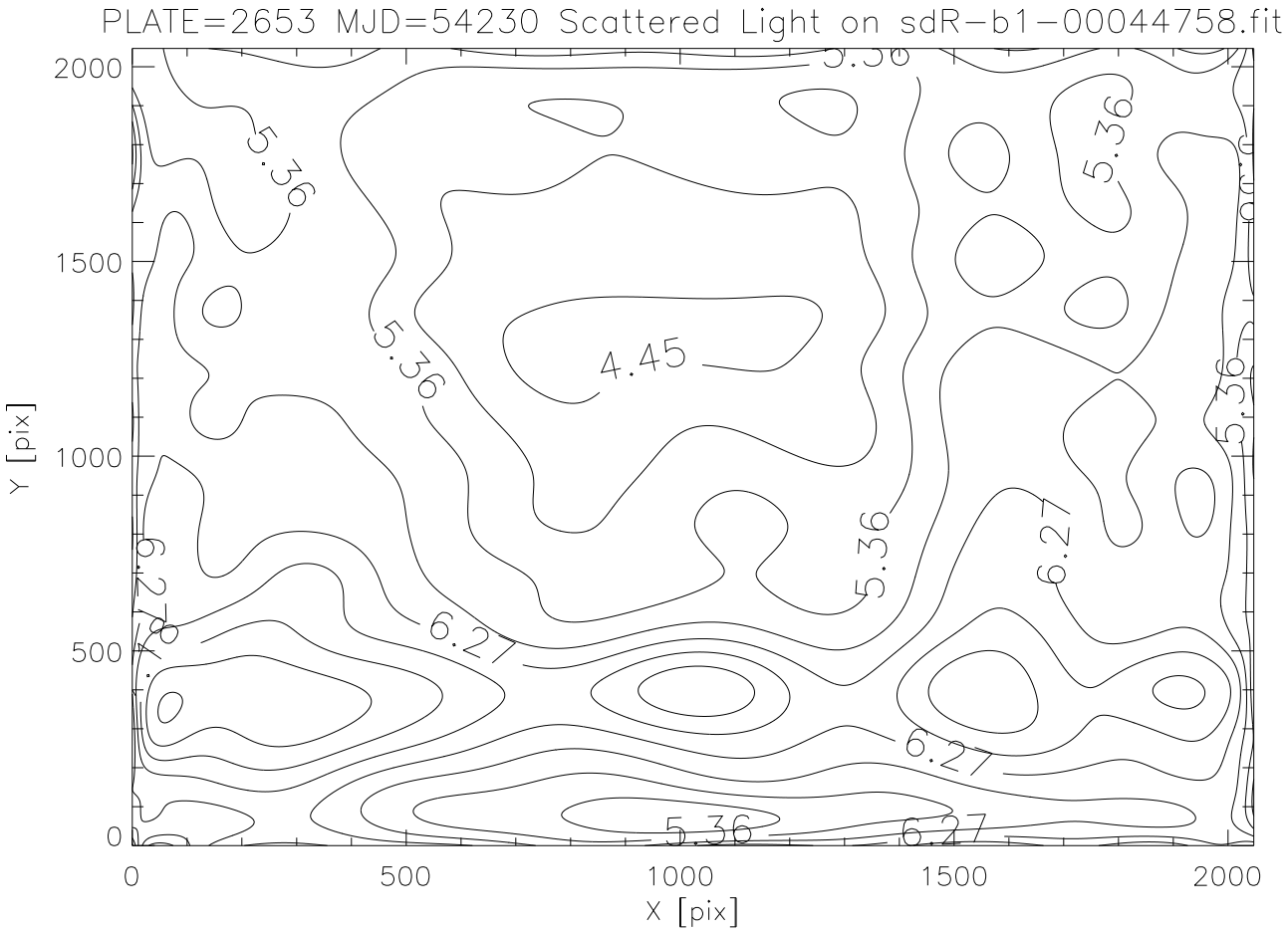
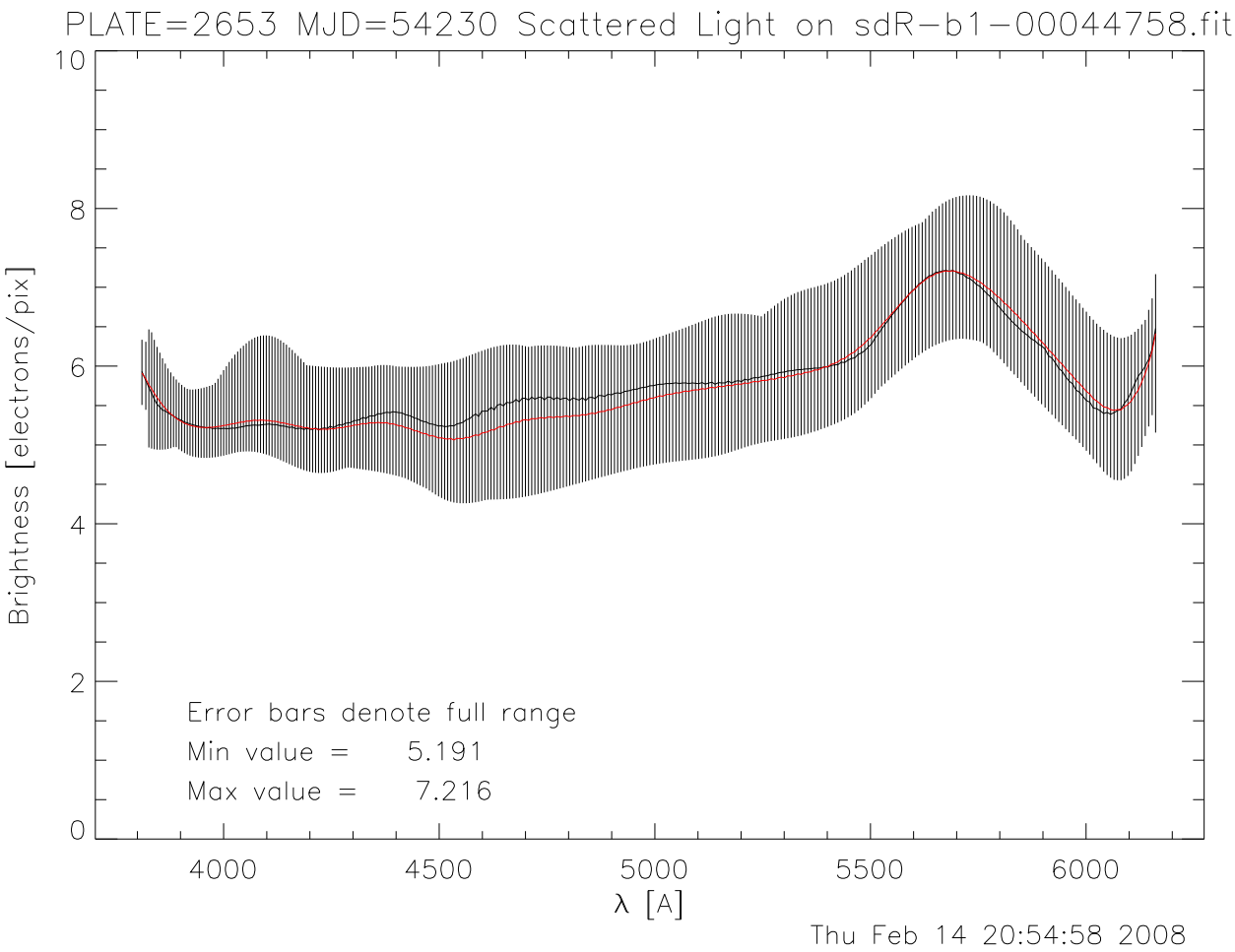
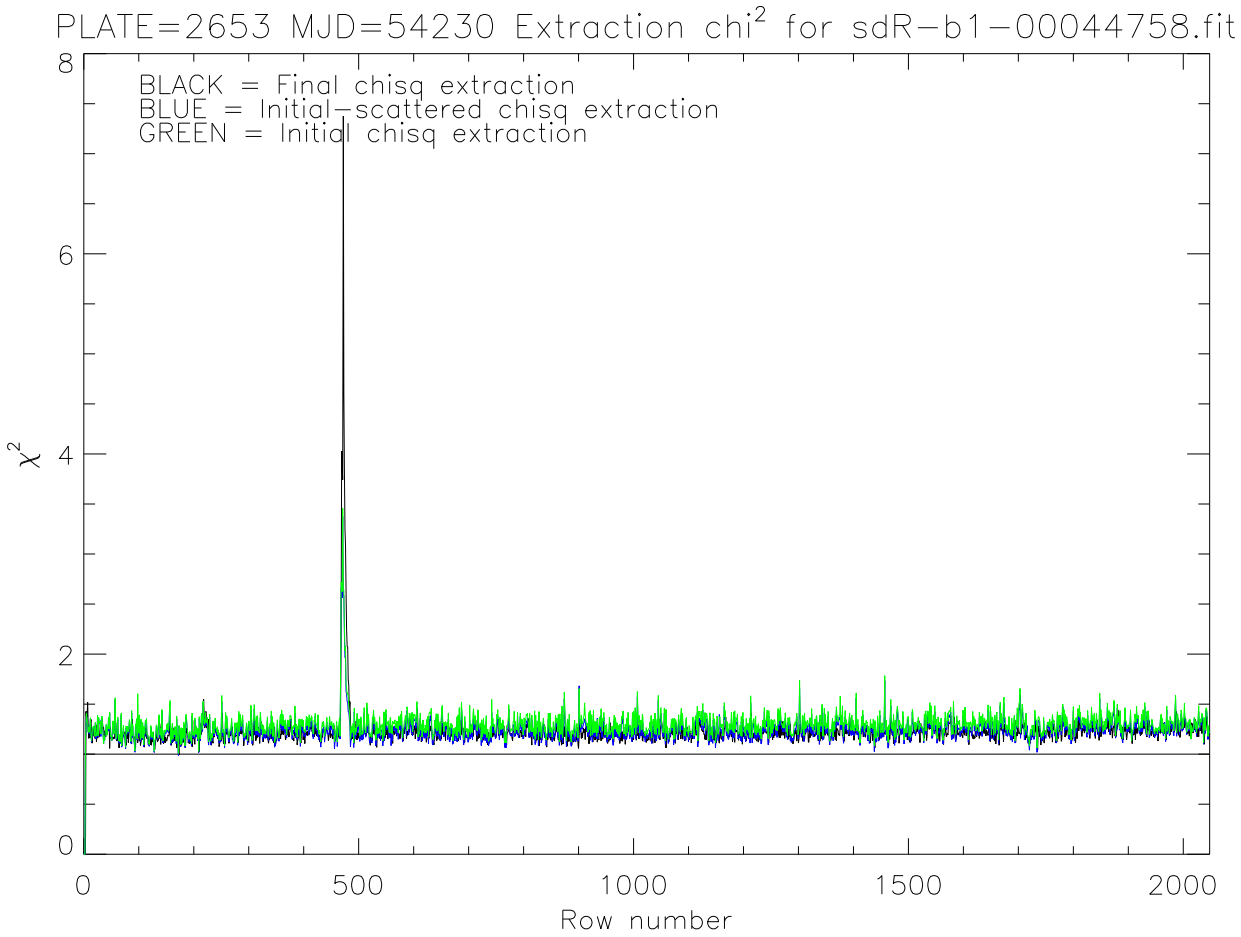
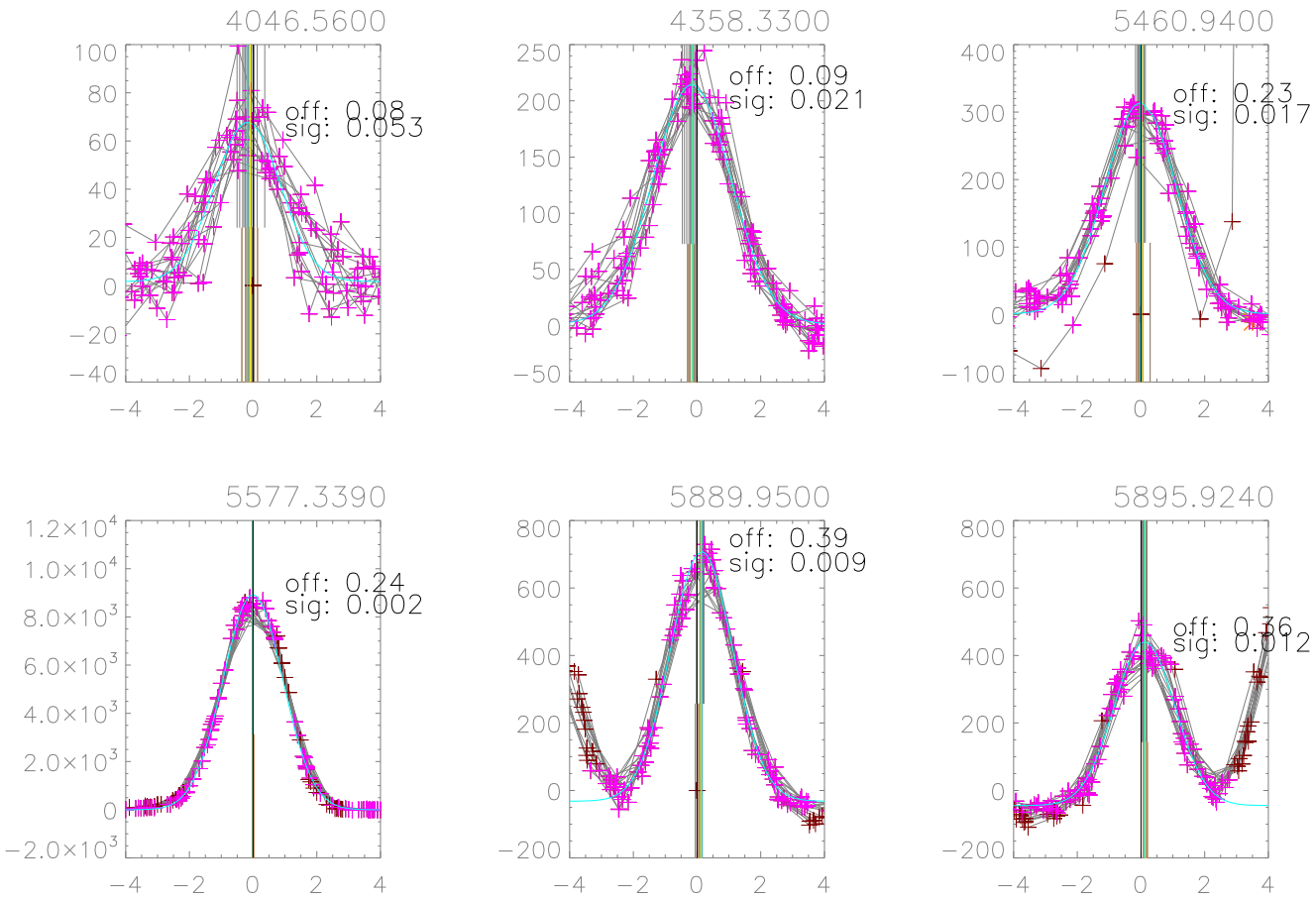

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR−b1−00044758.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.3
9.5
11.6

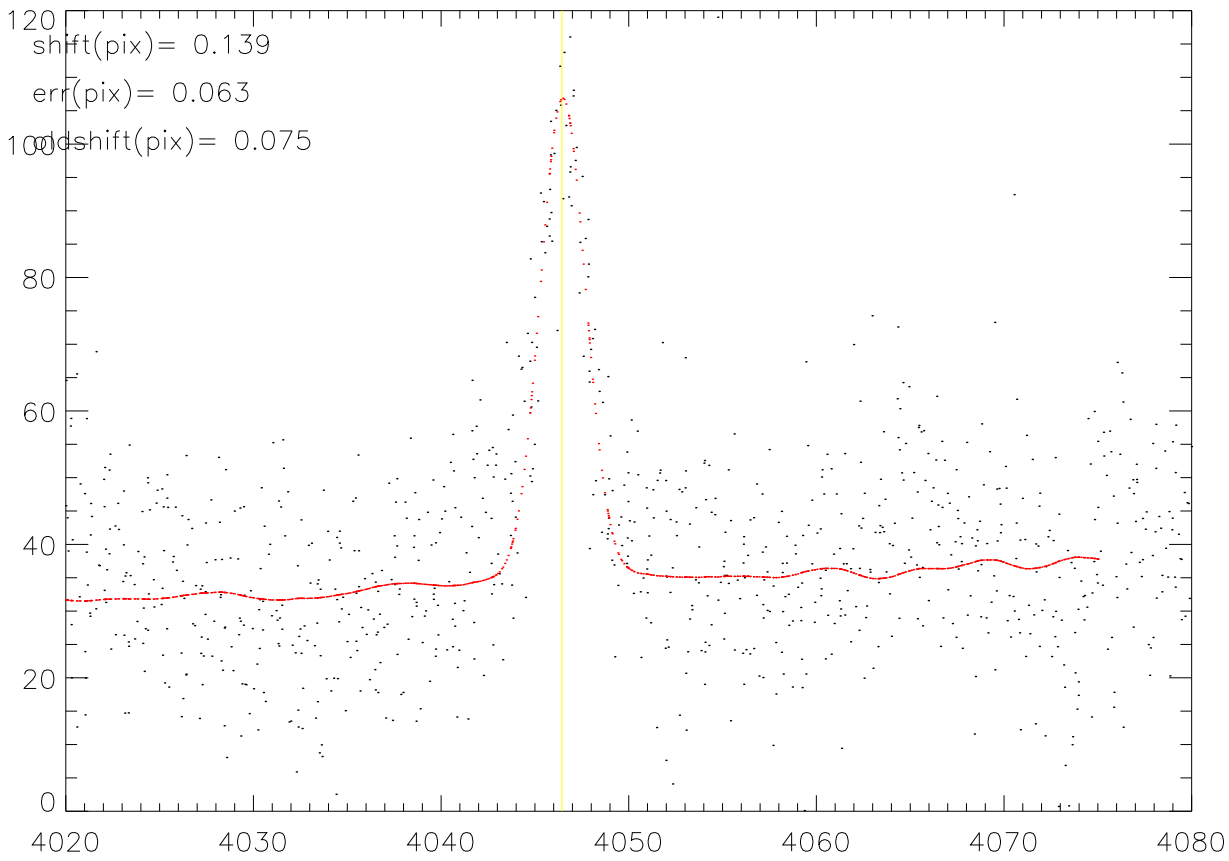

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-b1-00044758.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.356
Max value = 11.728
Thu Feb 14 20:51:24 2008

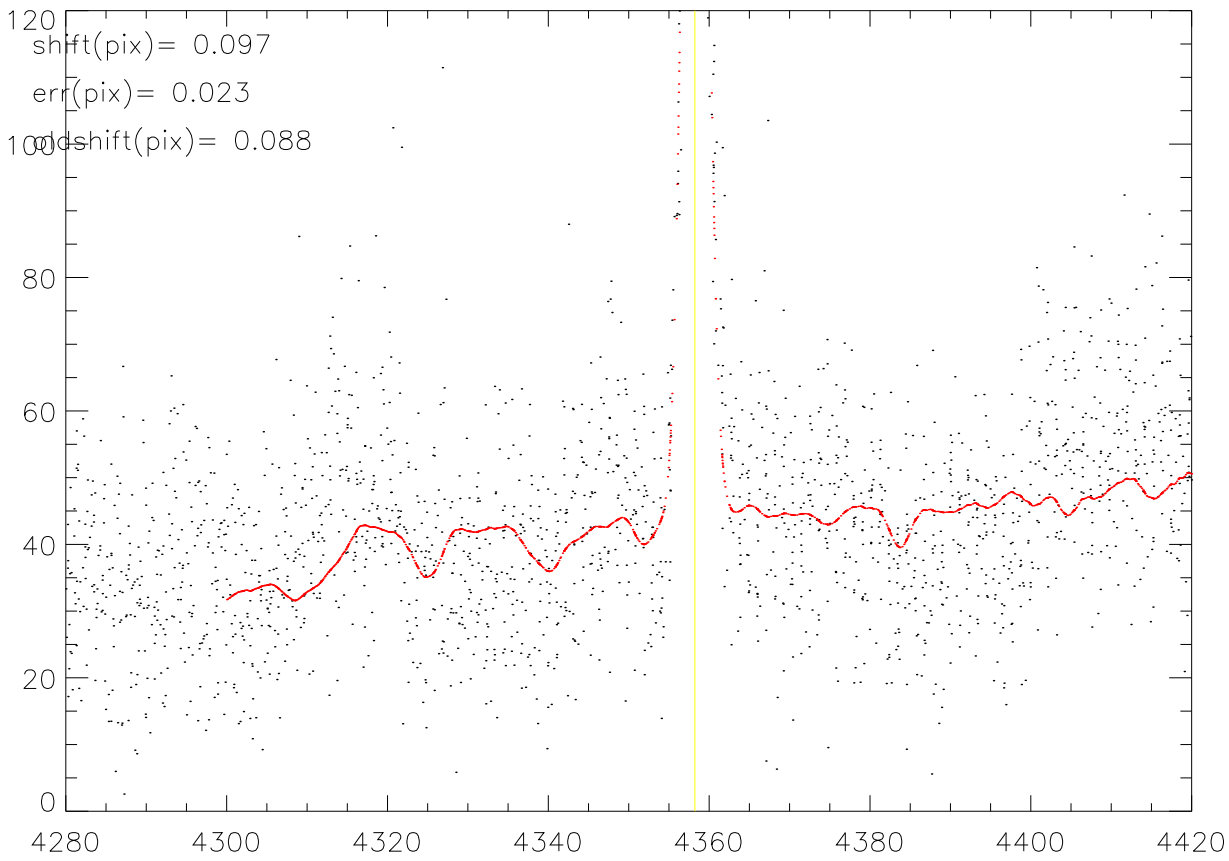

PLATE=2653 MJD=54230 Scattered Light on sdR-b1-00044758.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.36
4.45
6.27

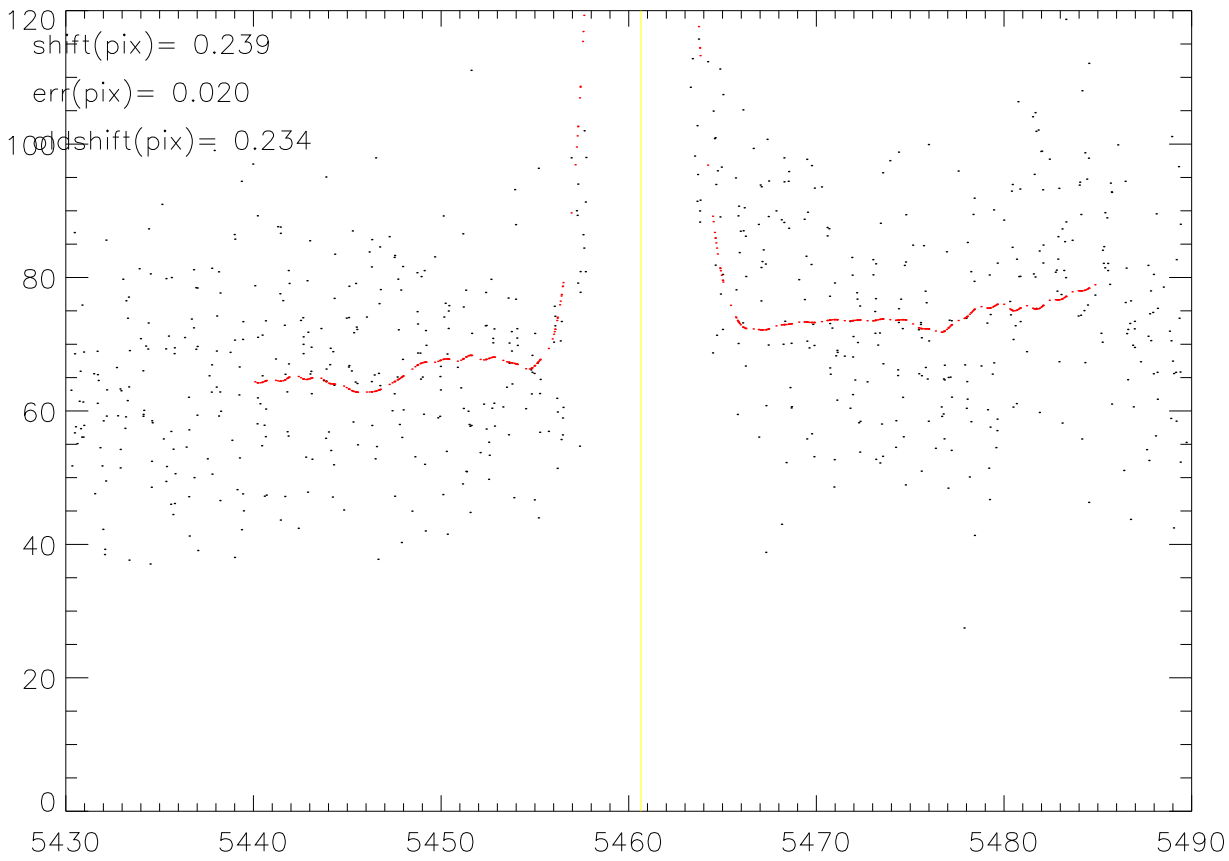

PLATE=2653 MJD=54230 Scattered Light on sdR-b1-00044758.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.191
Max value = 7.216
Thu Feb 14 20:54:58 2008

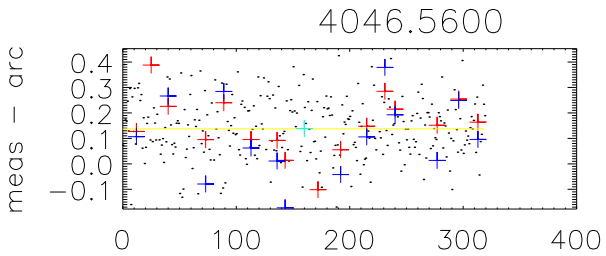

PLATE=2653 MJD=54230 Extraction chi^2 for sdR−b1−00044758.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

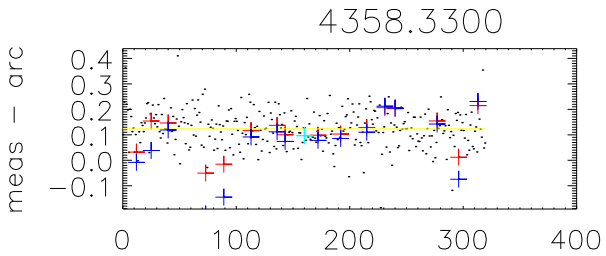

4046.5600
off: 0.08
sig: 0.053
4358.3300
off: 0.09
sig: 0.021
5460.9400
off: 0.23
sig: 0.017
5577.3390
off: 0.24
sig: 0.002
5889.9500
off: 0.39
sig: 0.009
5895.9240
off: 0.36
sig: 0.012

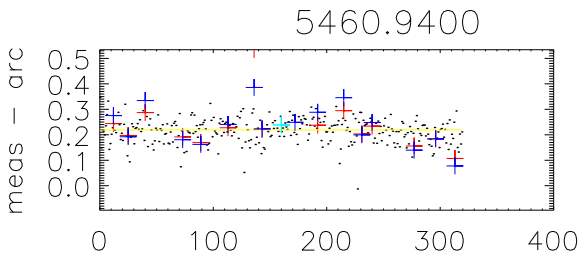

shift(pix)= 0.139
err(pix)= 0.063
oldshift(pix)= 0.075
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

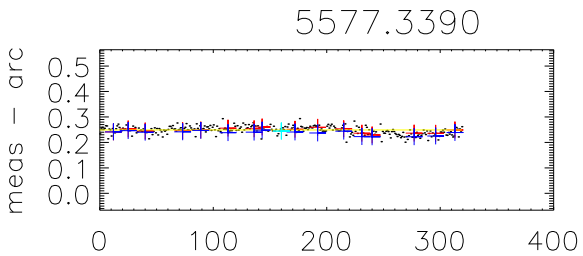

shift(pix)= 0.097
err(pix)= 0.023
oldshift(pix)= 0.088
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

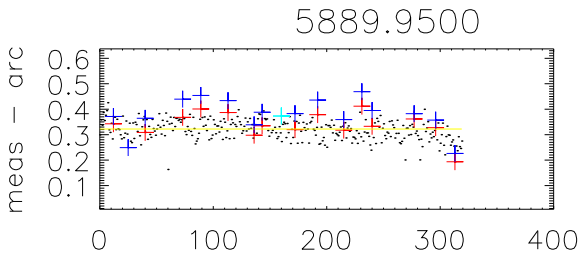

shift(pix)= 0.239
err(pix)= 0.020
oldshift(pix)= 0.234
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

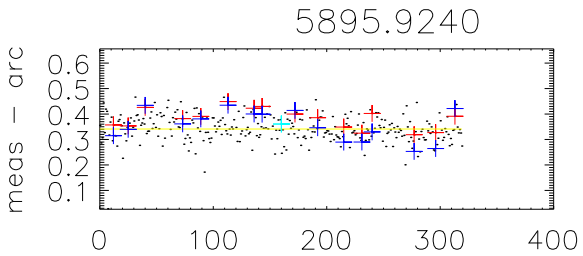

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

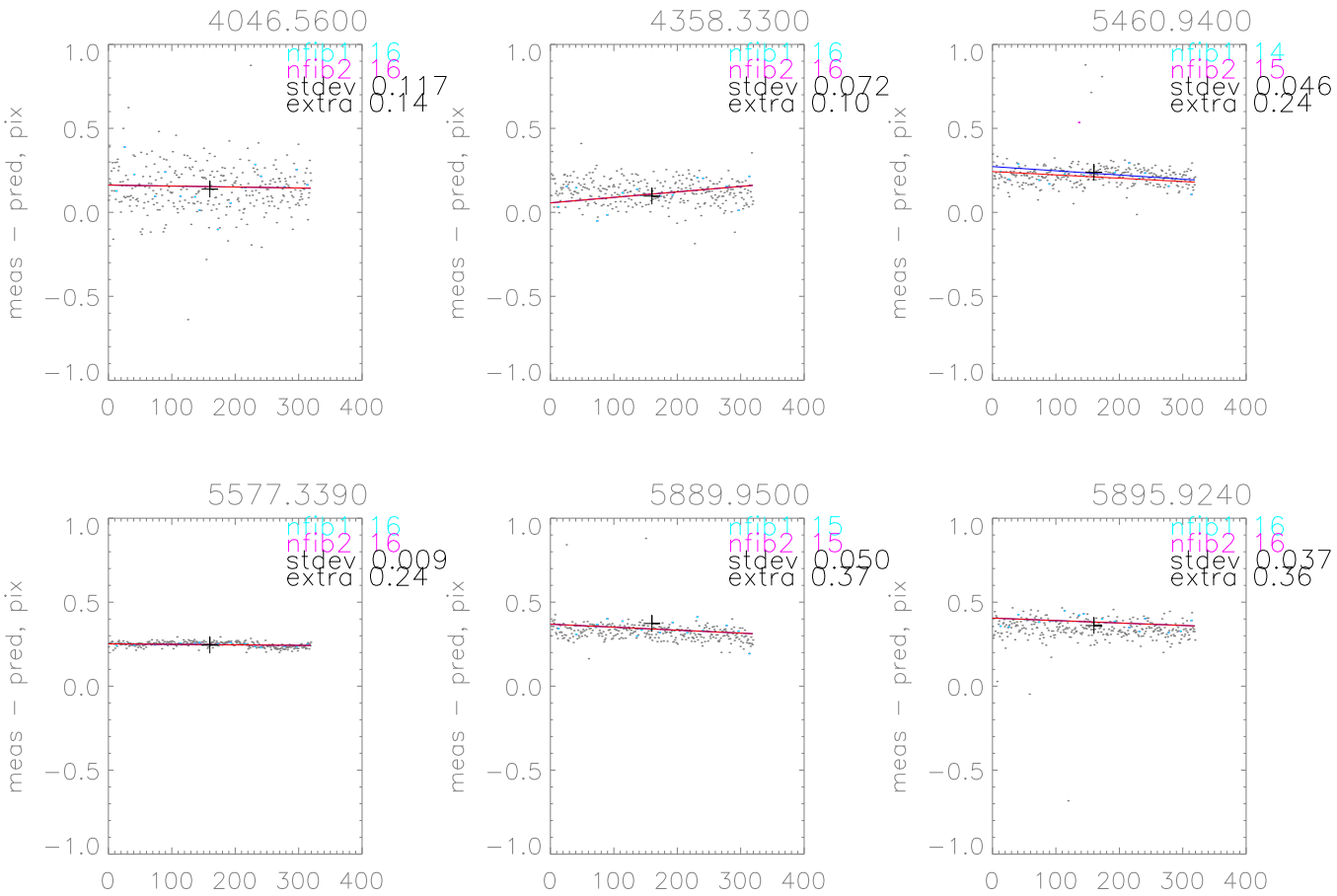

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

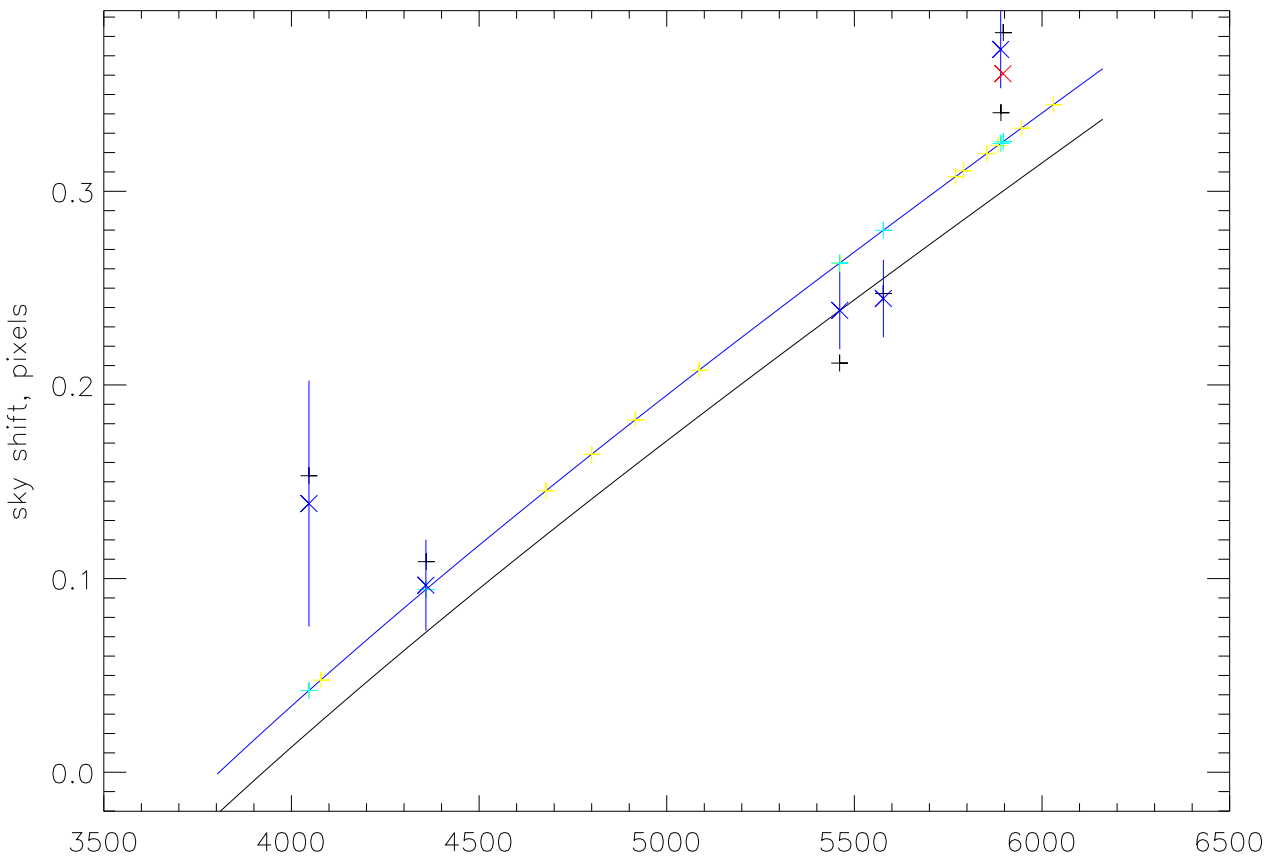

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

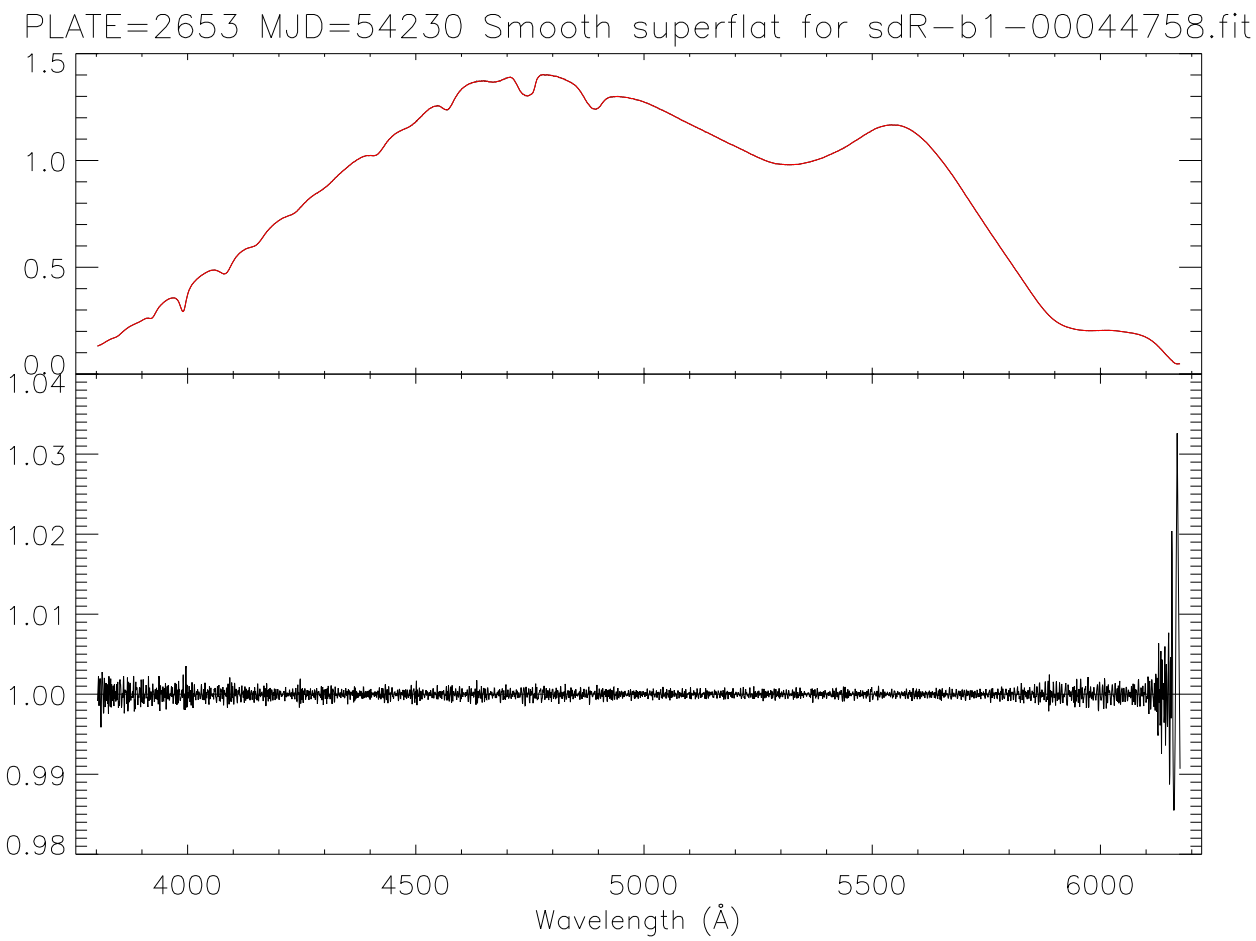

5889.9500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

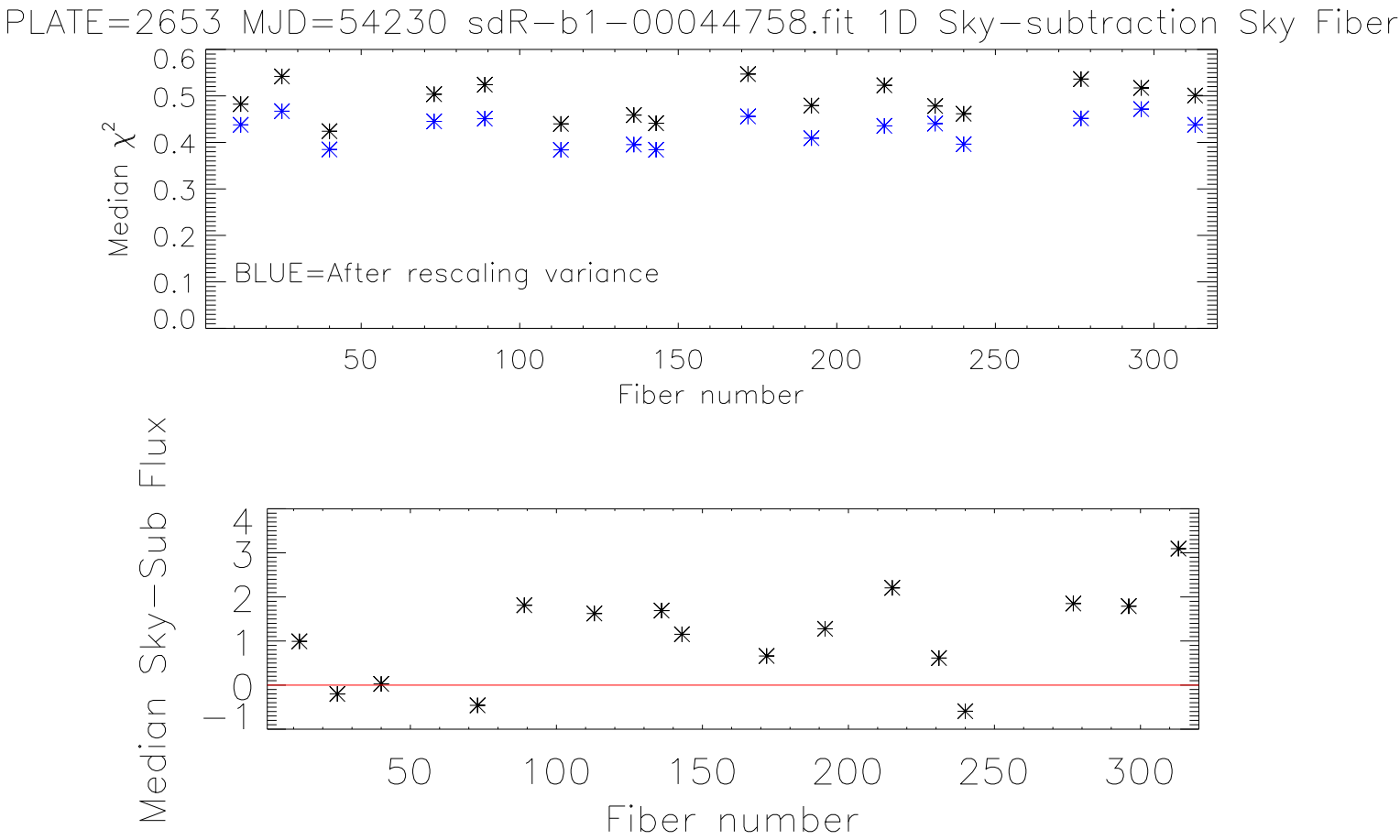

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

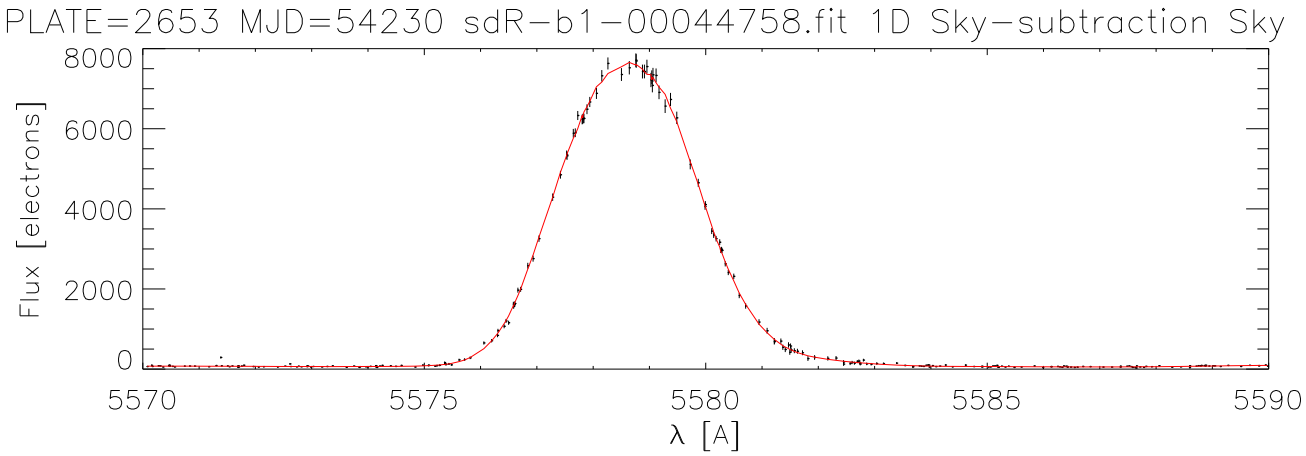

4046.5600
nfib1 16
nfib2 16
stdev 0.117
extra 0.14
4358.3300
nfib1 16
nfib2 16
stdev 0.072
extra 0.10
5460.9400
nfib1 14
nfib2 15
stdev 0.046
extra 0.24
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra 0.24
5889.9500
nfib1 15
nfib2 15
stdev 0.050
extra 0.37
5895.9240
nfib1 16
nfib2 16
stdev 0.037
extra 0.36
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

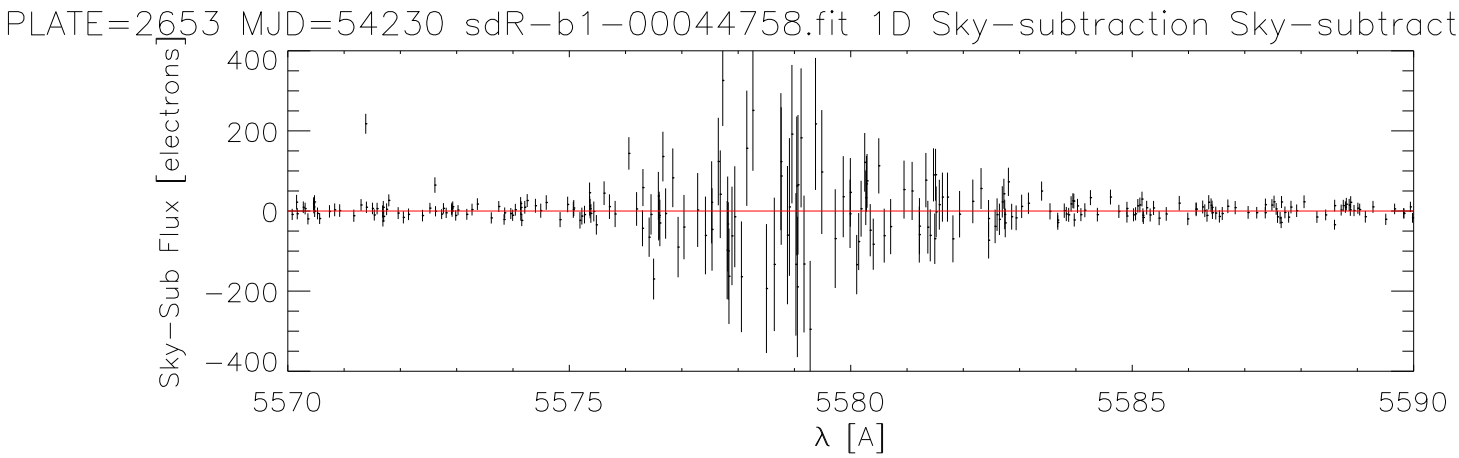

sky shift, pixels
0.0
0.1
0.2
0.3
3500
4000
4500
5000
5500
6000
6500

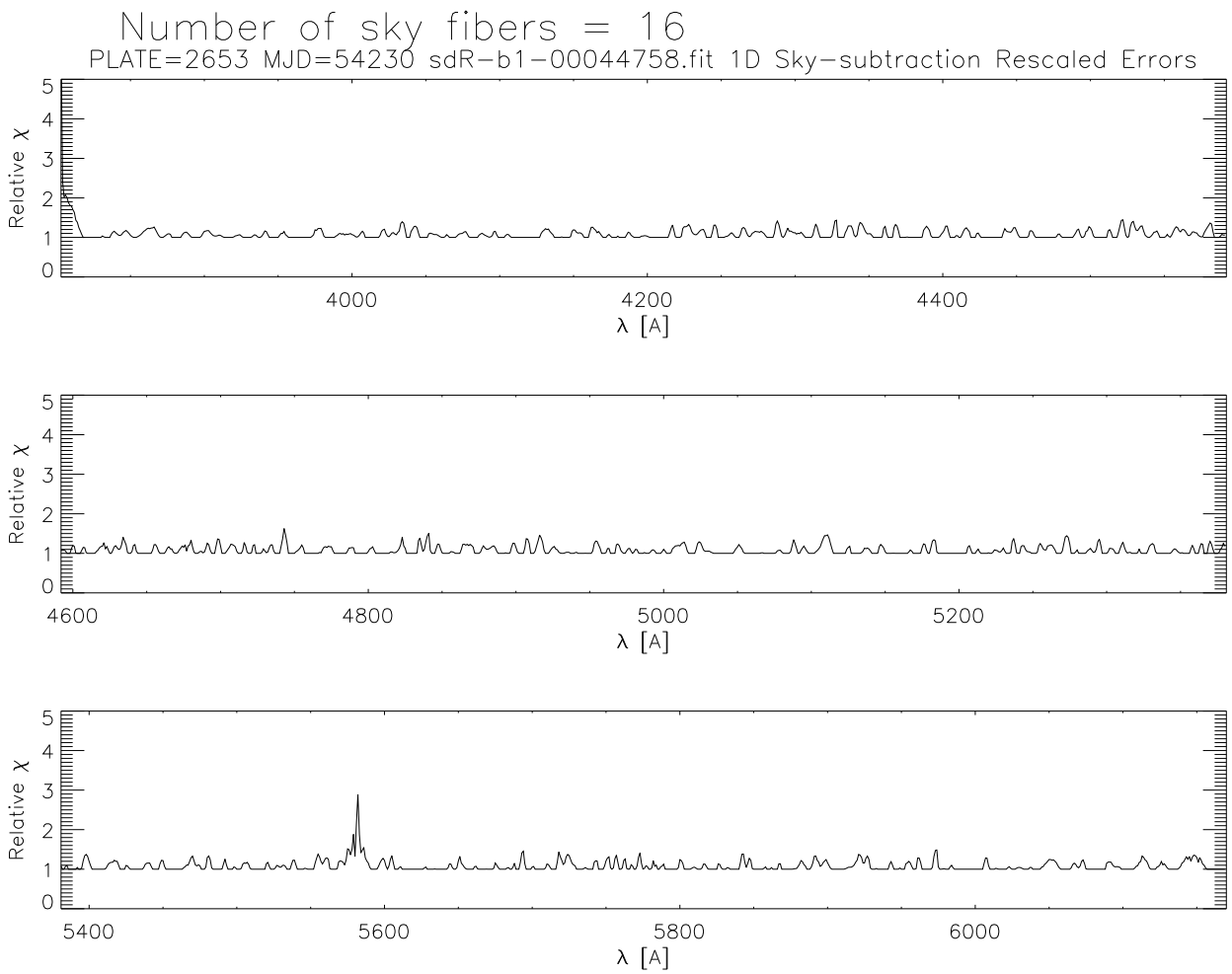
es= −0.0001

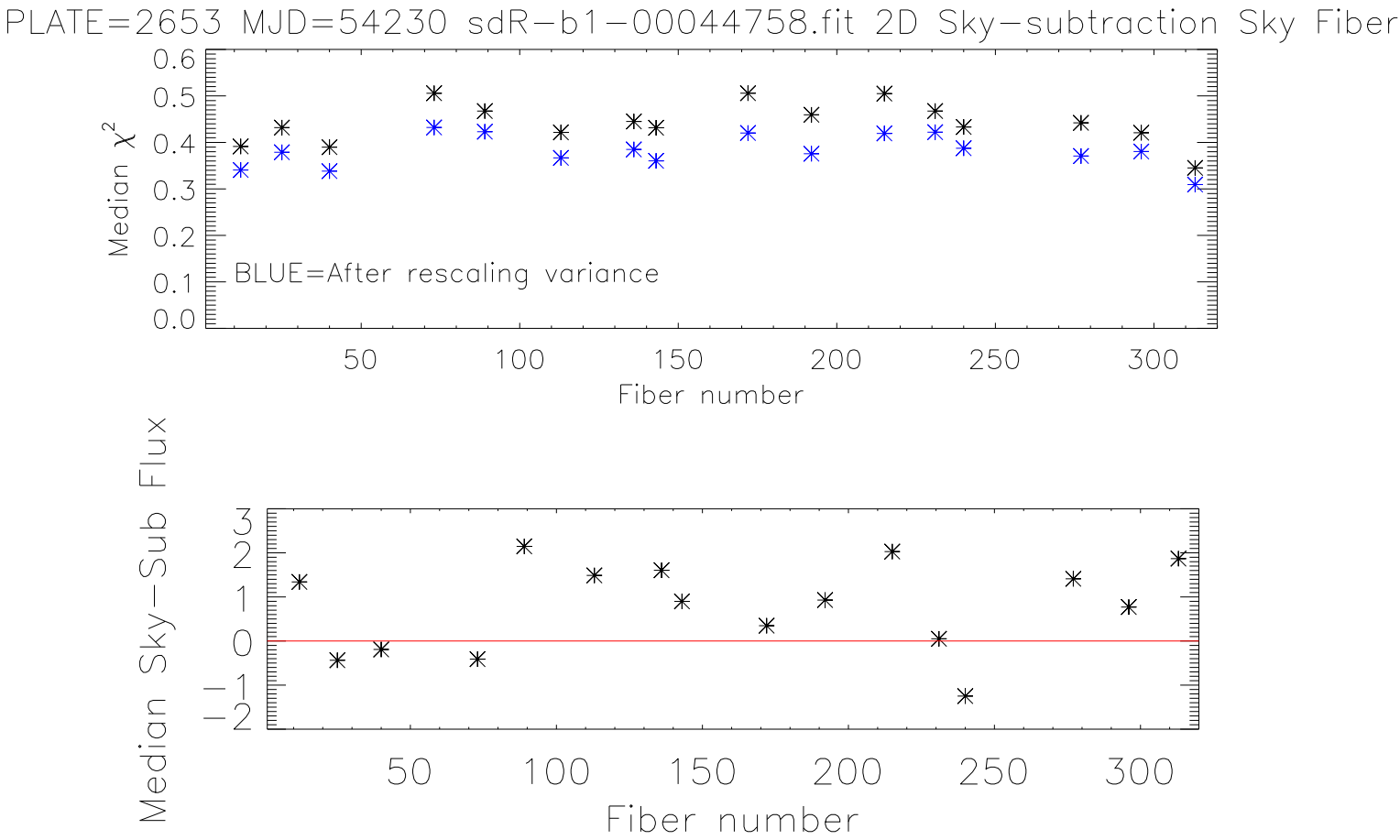

PLATE=2653 MJD=54230 Smooth superflat for sdR−b1−00044758.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

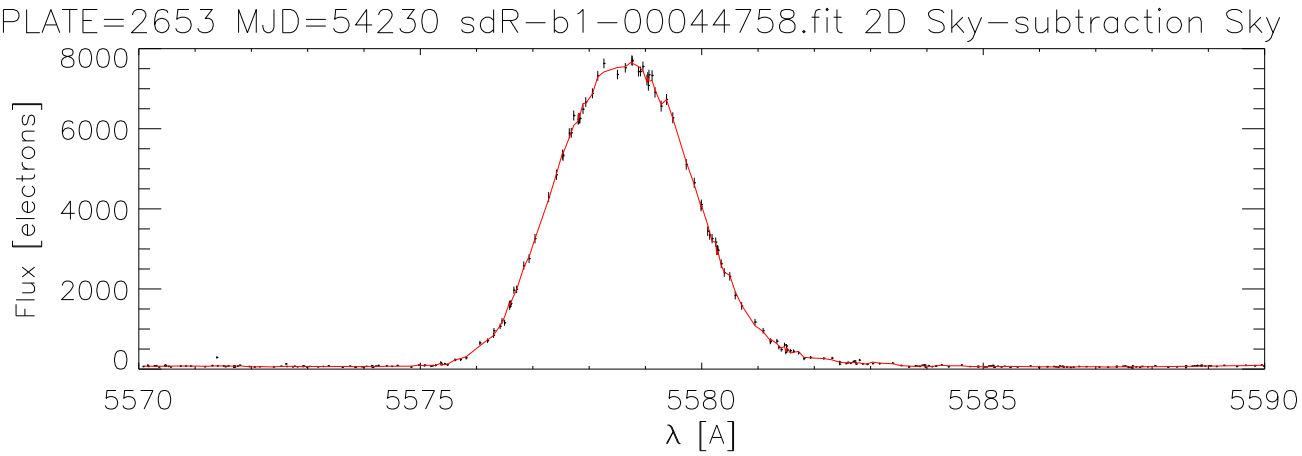

PLATE=2653 MJD=54230 sdR-b1-00044758.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

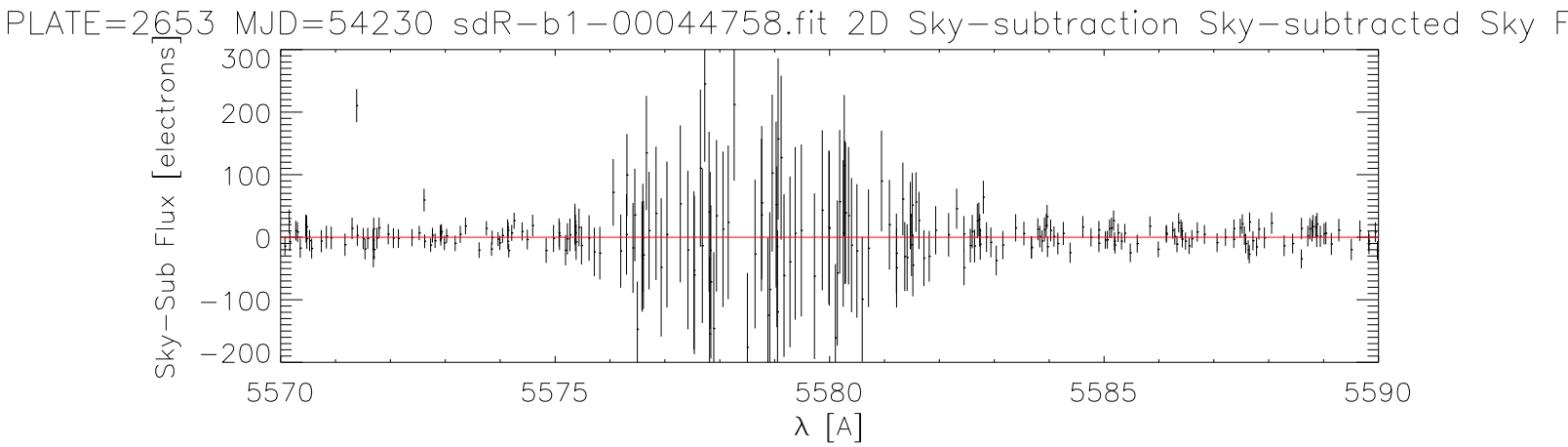

PLATE=2653 MJD=54230 sdR-b1-00044758.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

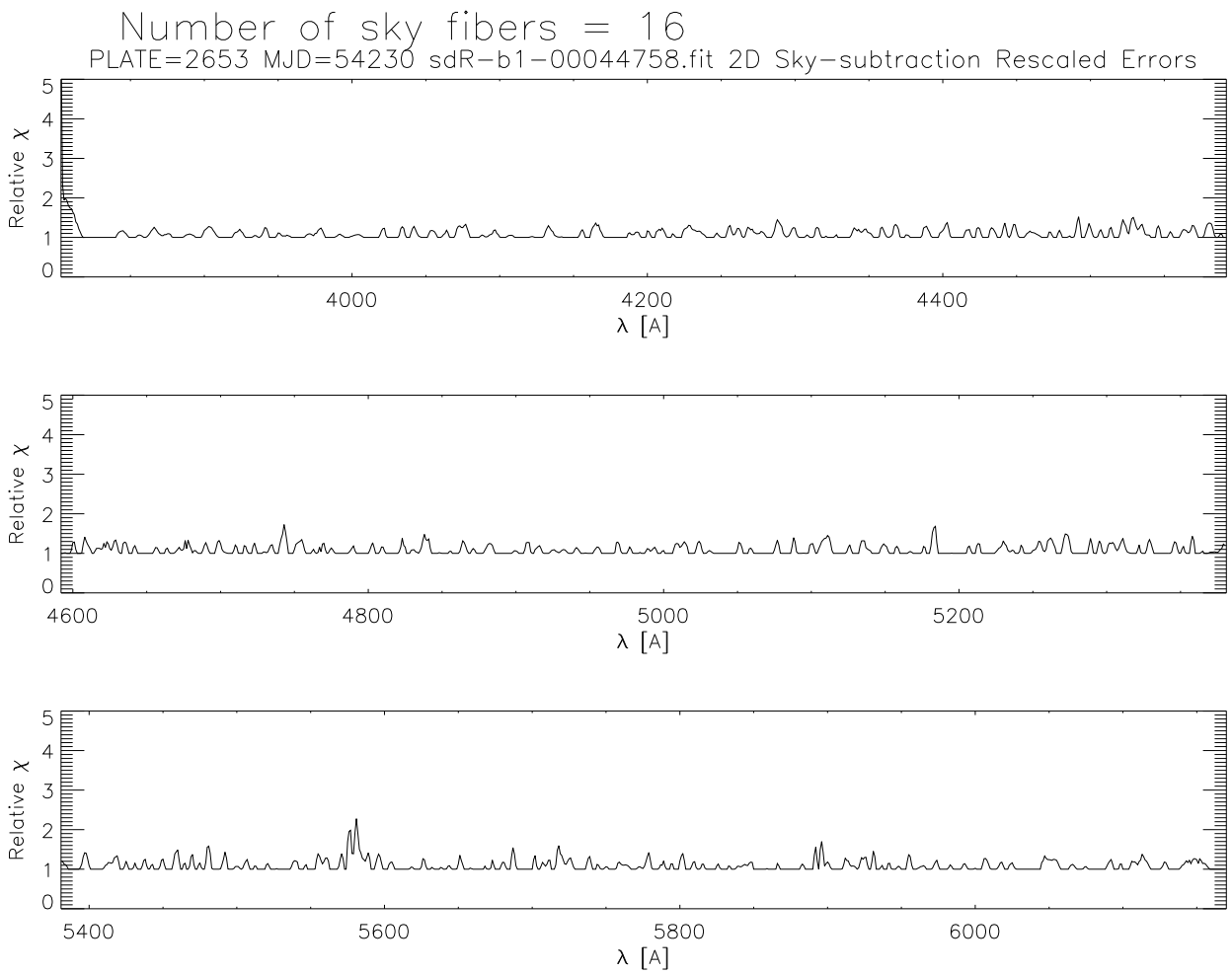

PLATE=2653 MJD=54230 sdR-b1-00044758.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

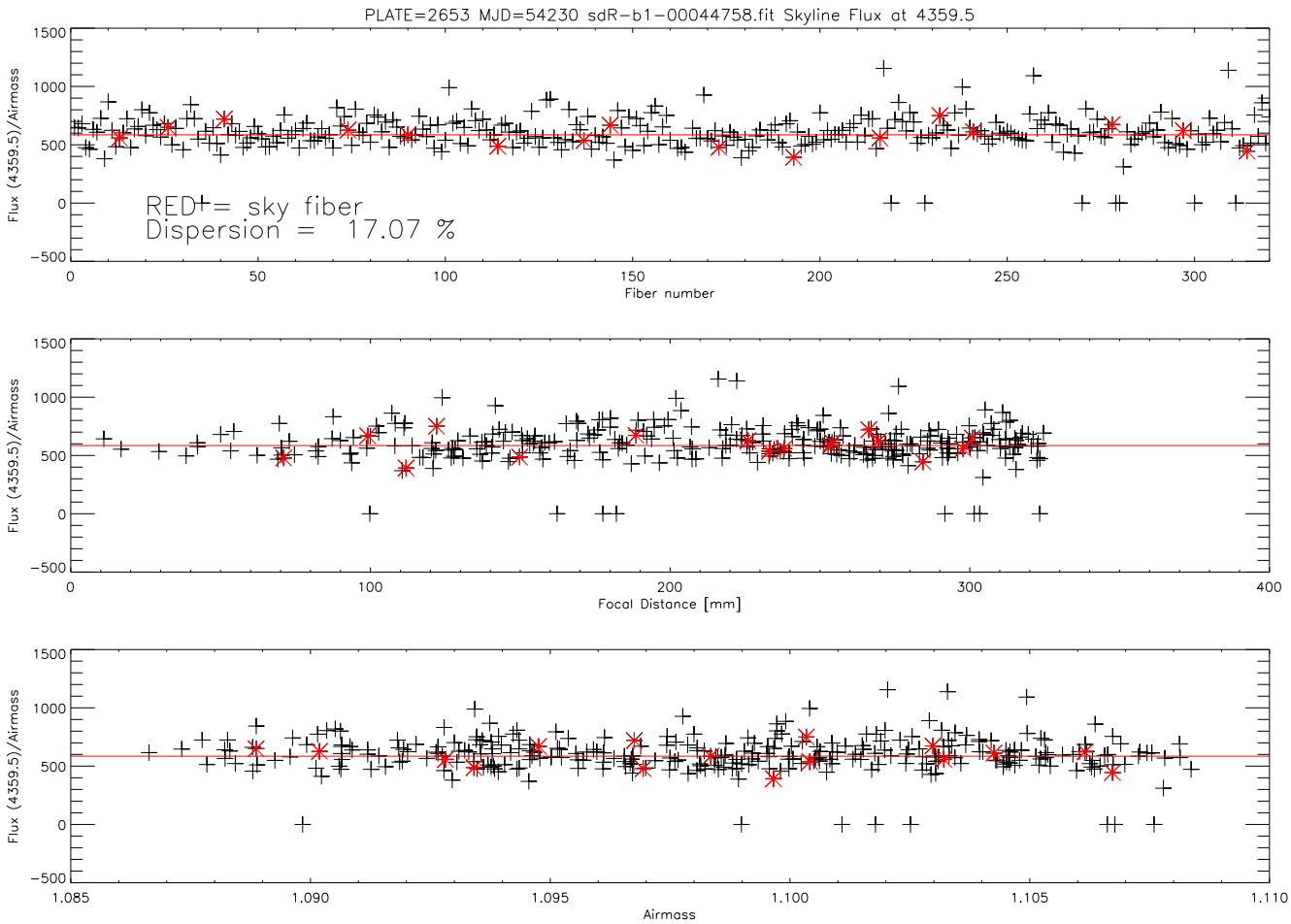

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b1-00044758.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

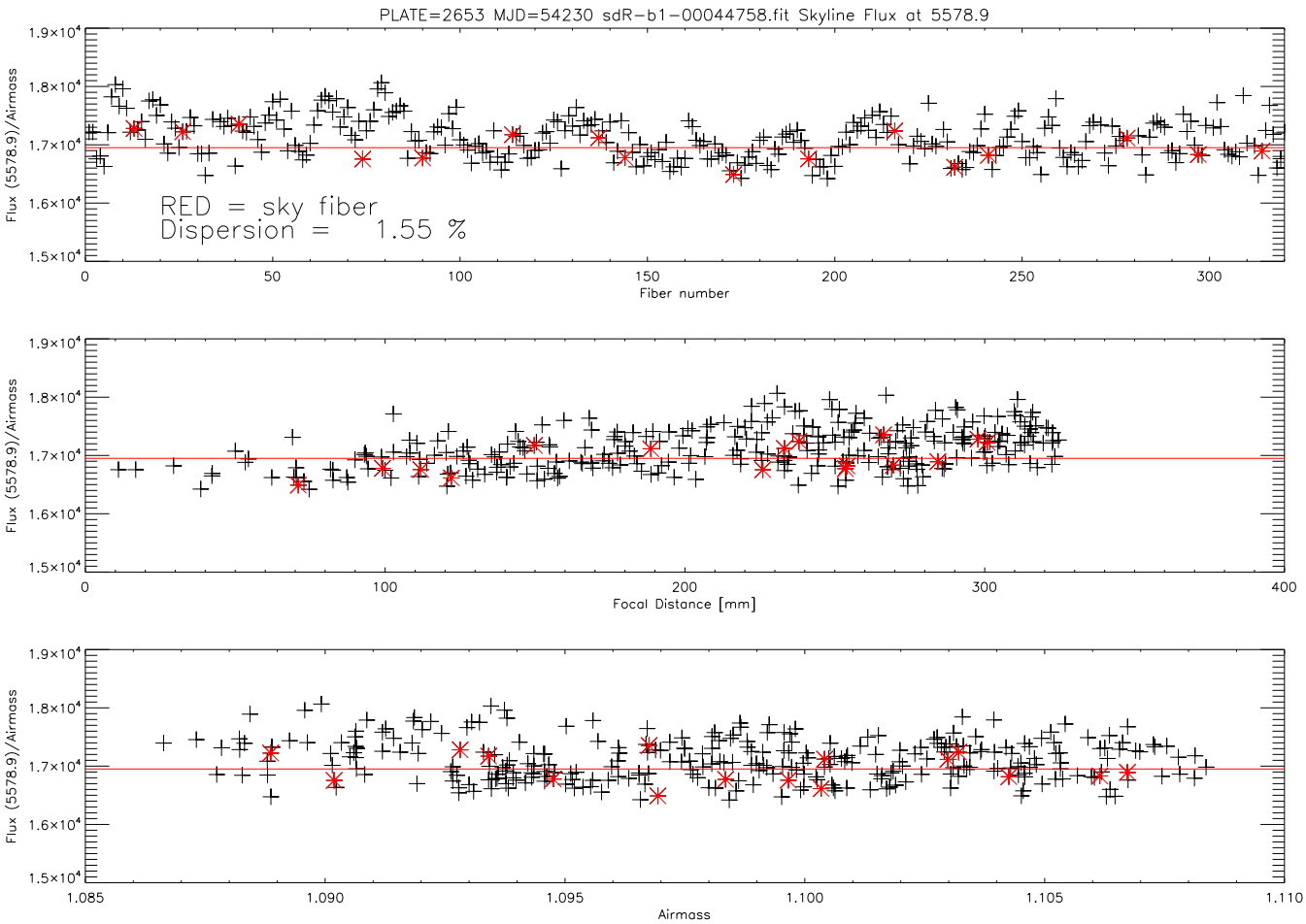

PLATE=2653 MJD=54230 sdR-b1-00044758.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

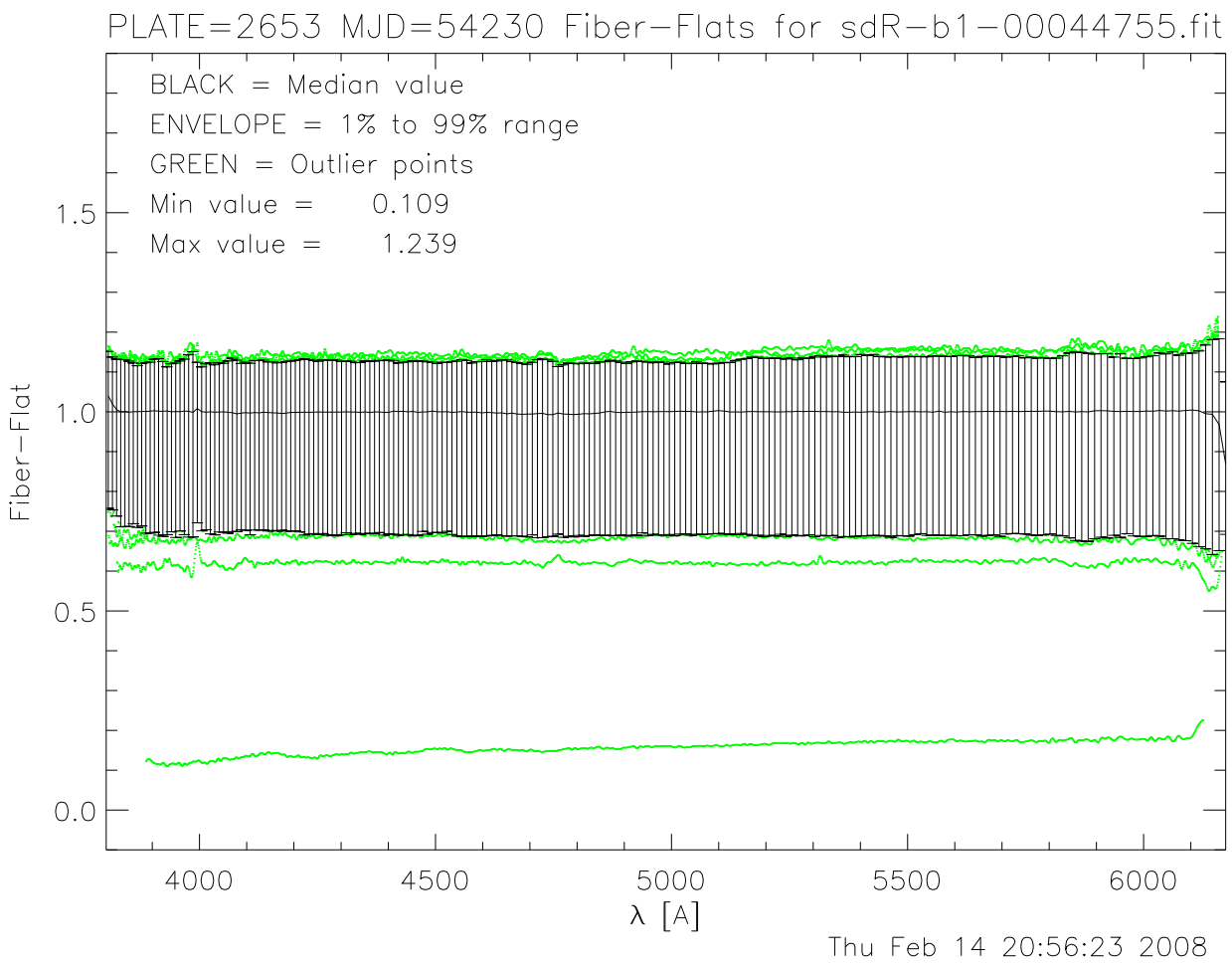

PLATE=2653 MJD=54230 sdR-b1-00044758.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

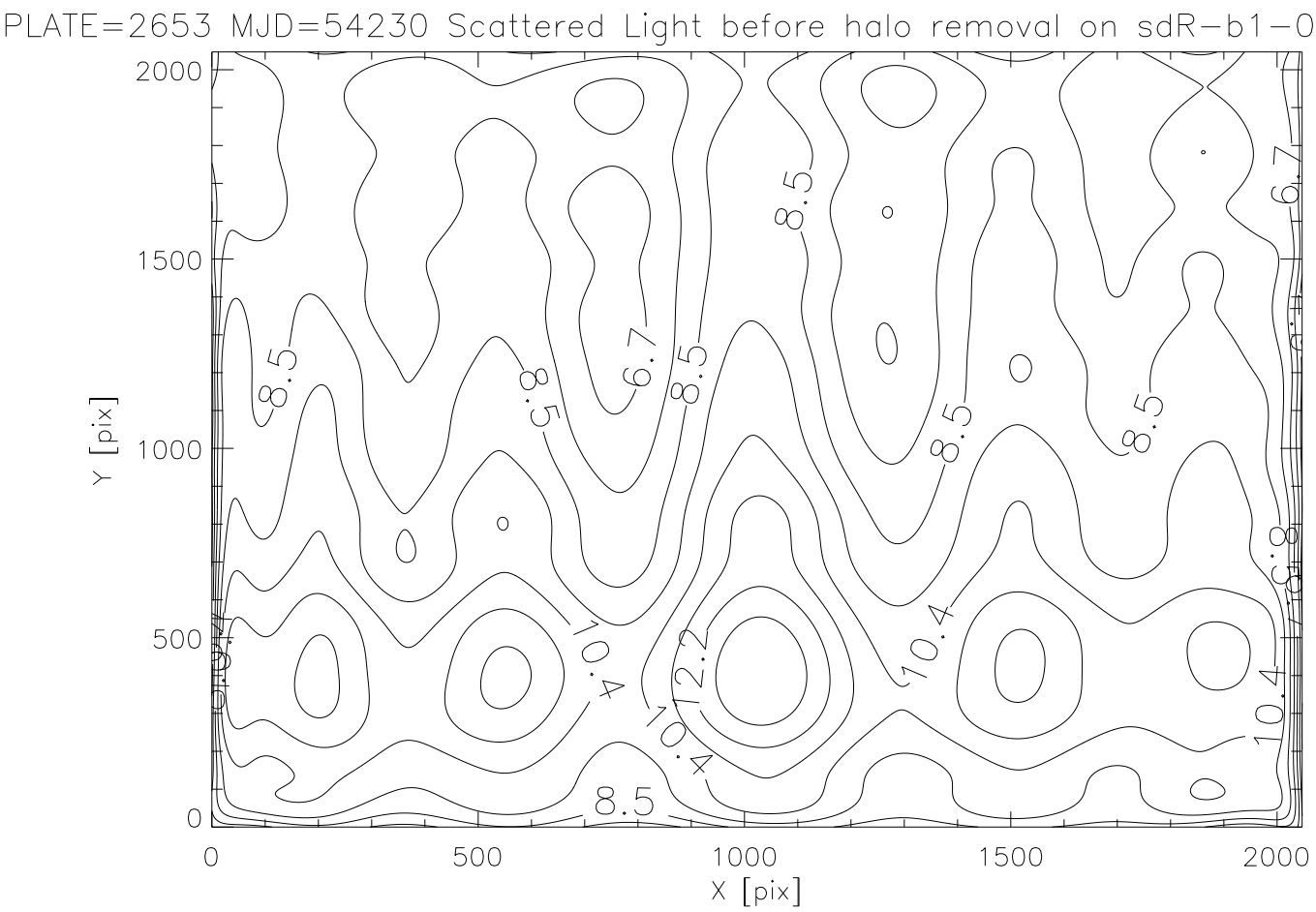

PLATE=2653 MJD=54230 sdR-b1-00044758.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

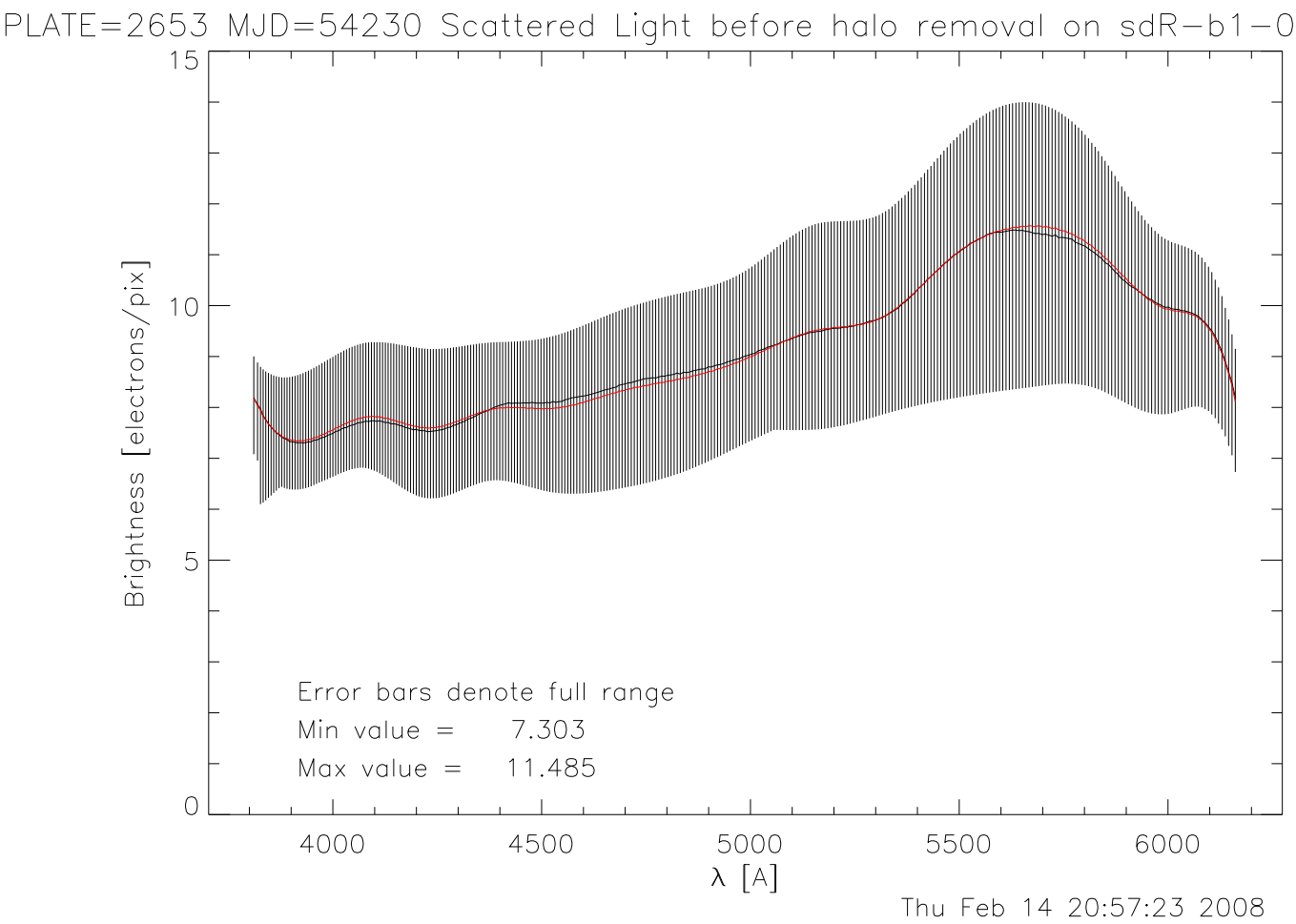

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b1-00044758.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

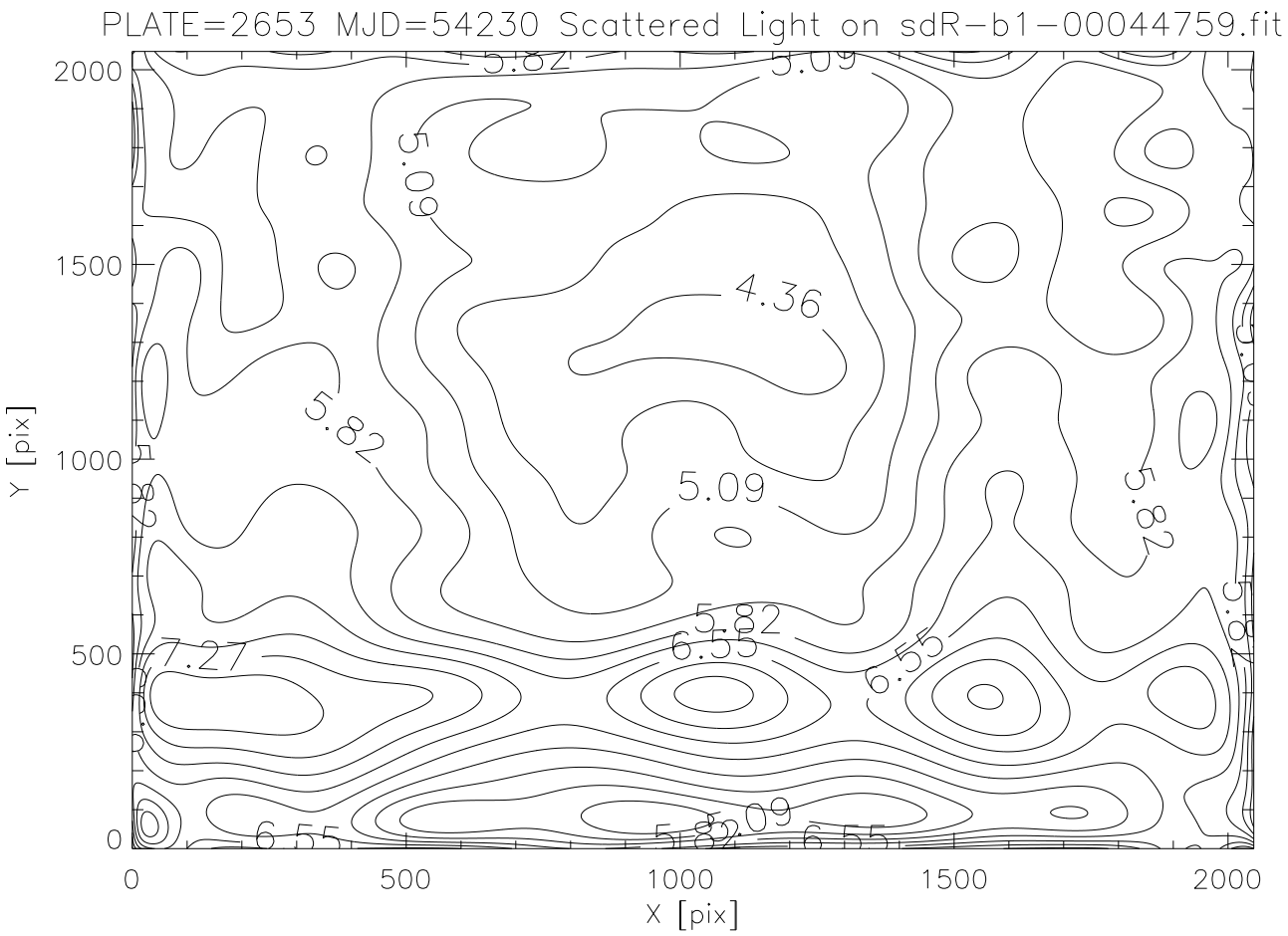

PLATE=2653 MJD=54230 sdR-b1-00044758.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED+= sky fiber
Dispersion = 17.07 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

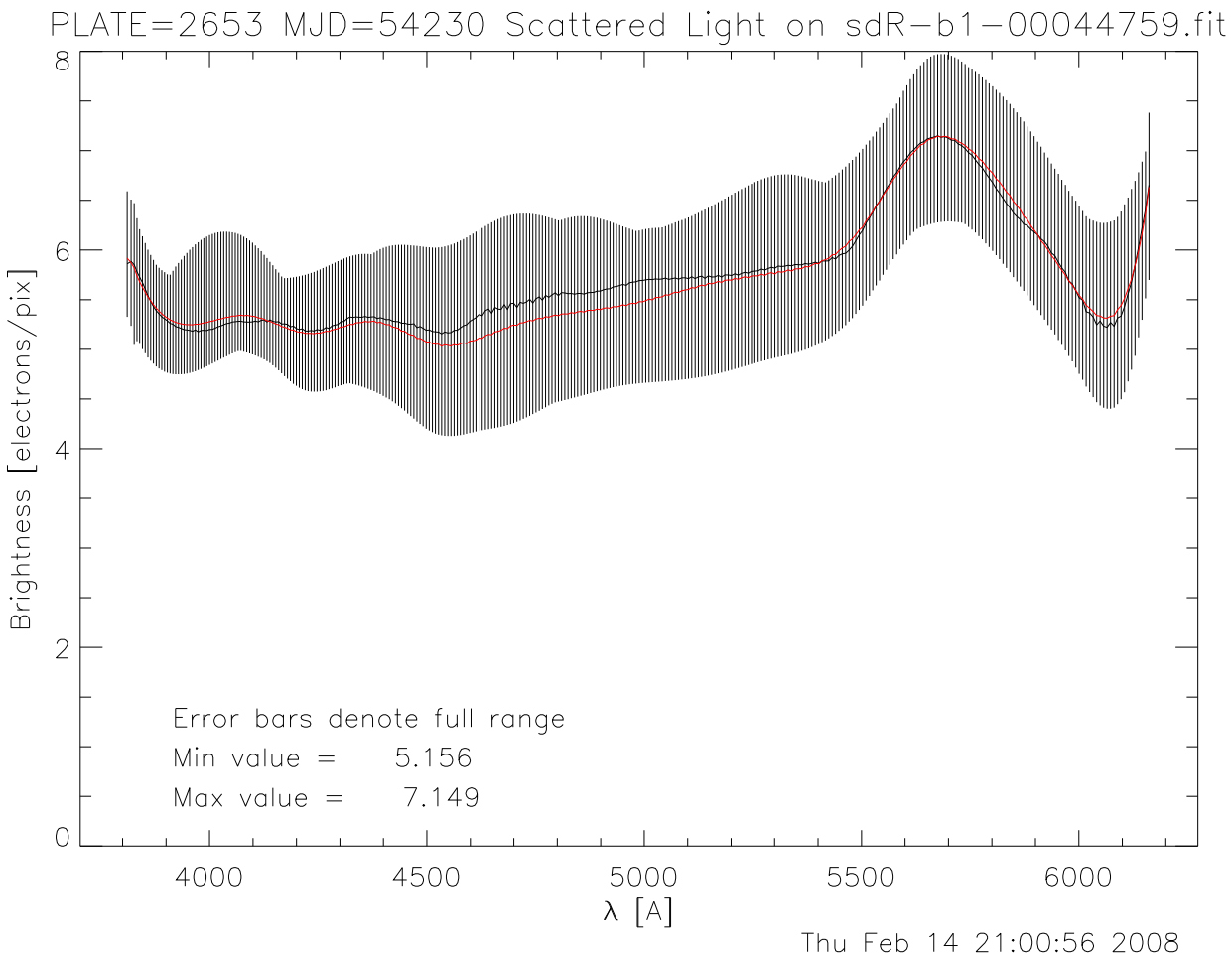

PLATE=2653 MJD=54230 sdR-b1-00044758.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.55 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

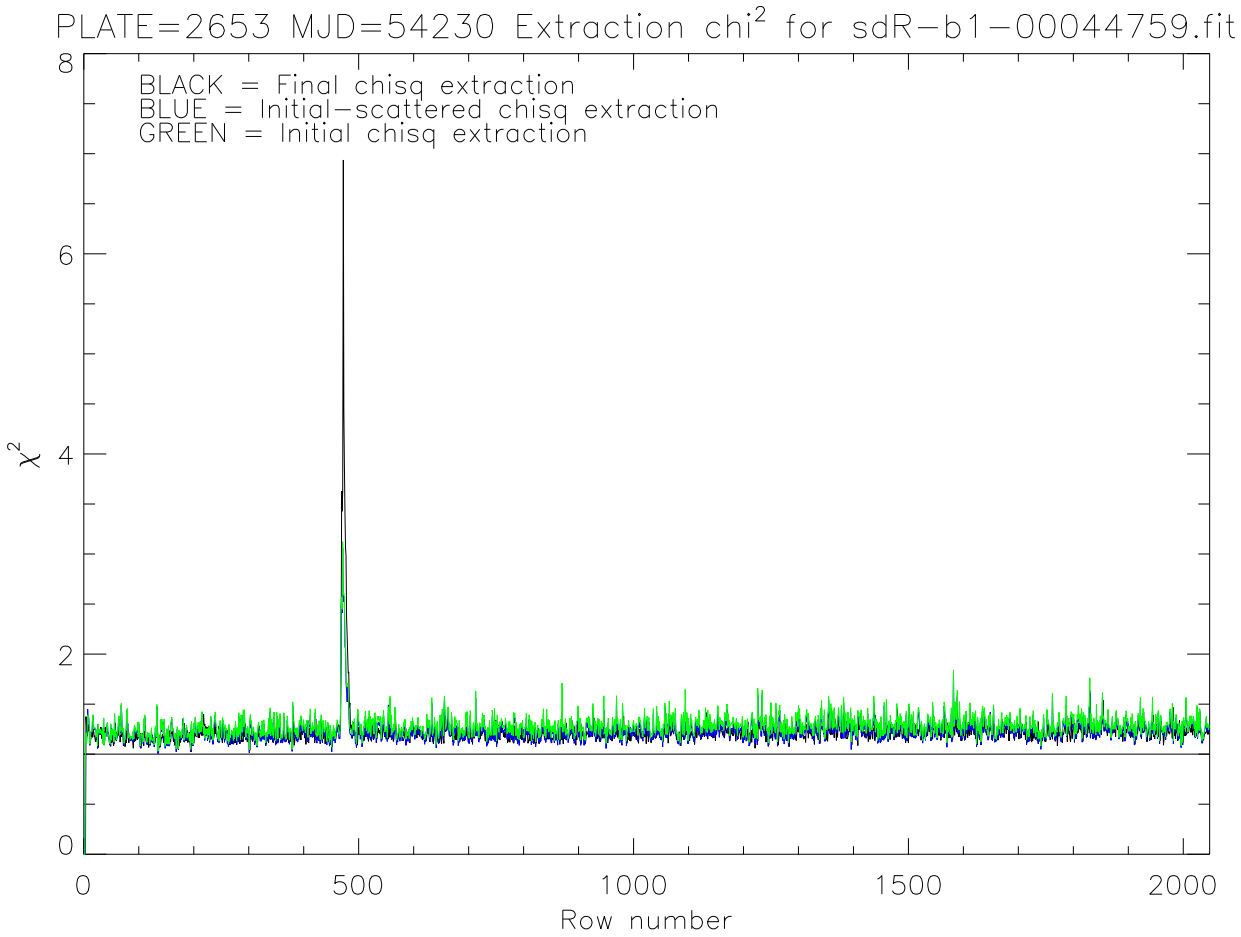

PLATE=2653 MJD=54230 Fiber−Flats for sdR−b1−00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.109
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 14 20:56:23 2008

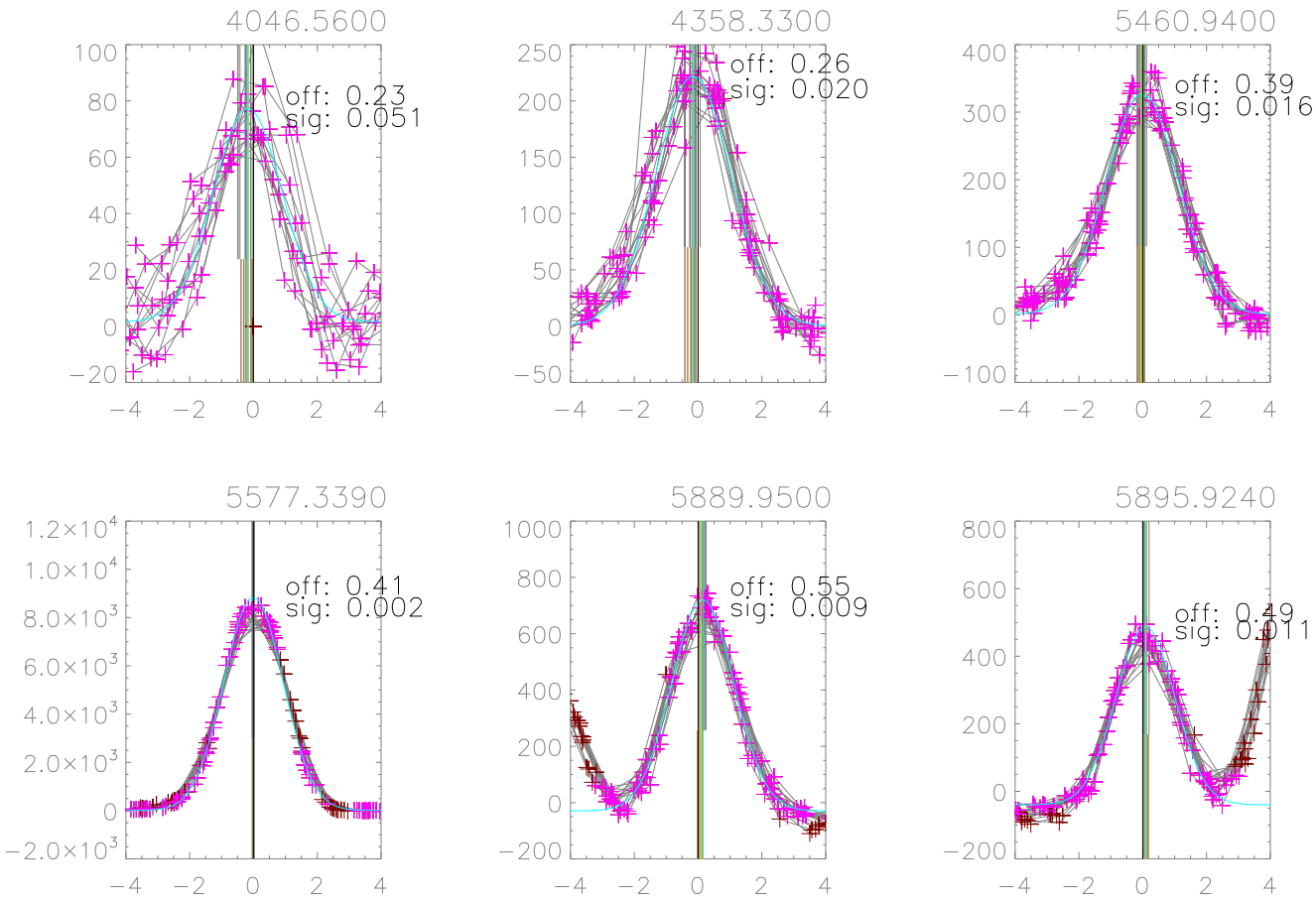

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR−b1−00044759.f
Y [pix]
X [pix]
0
500
1000
1500
2000
8.5
6.7
10.4
12.2

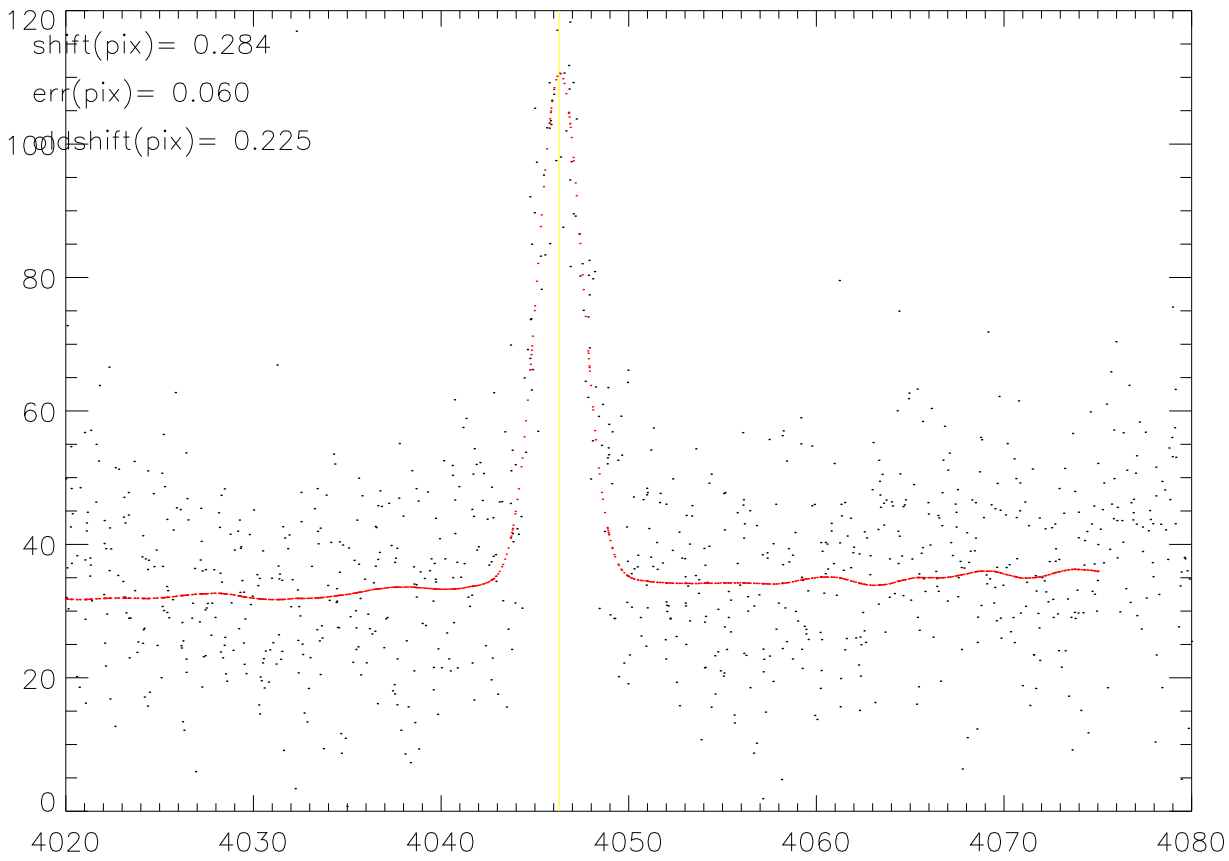

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-b1-00044759.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.303
Max value = 11.485
Thu Feb 14 20:57:23 2008

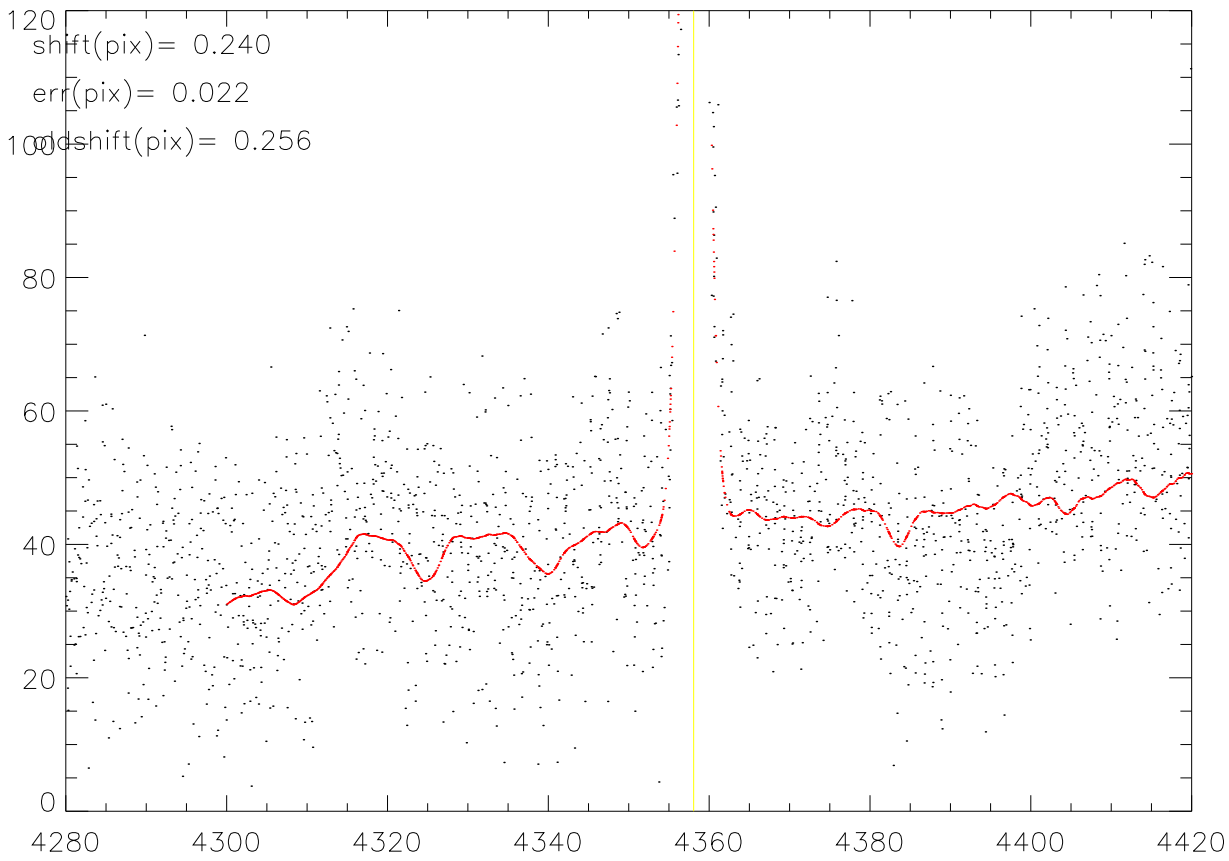

PLATE=2653 MJD=54230 Scattered Light on sdR-b1-00044759.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.82
5.09
4.36
6.55
7.27

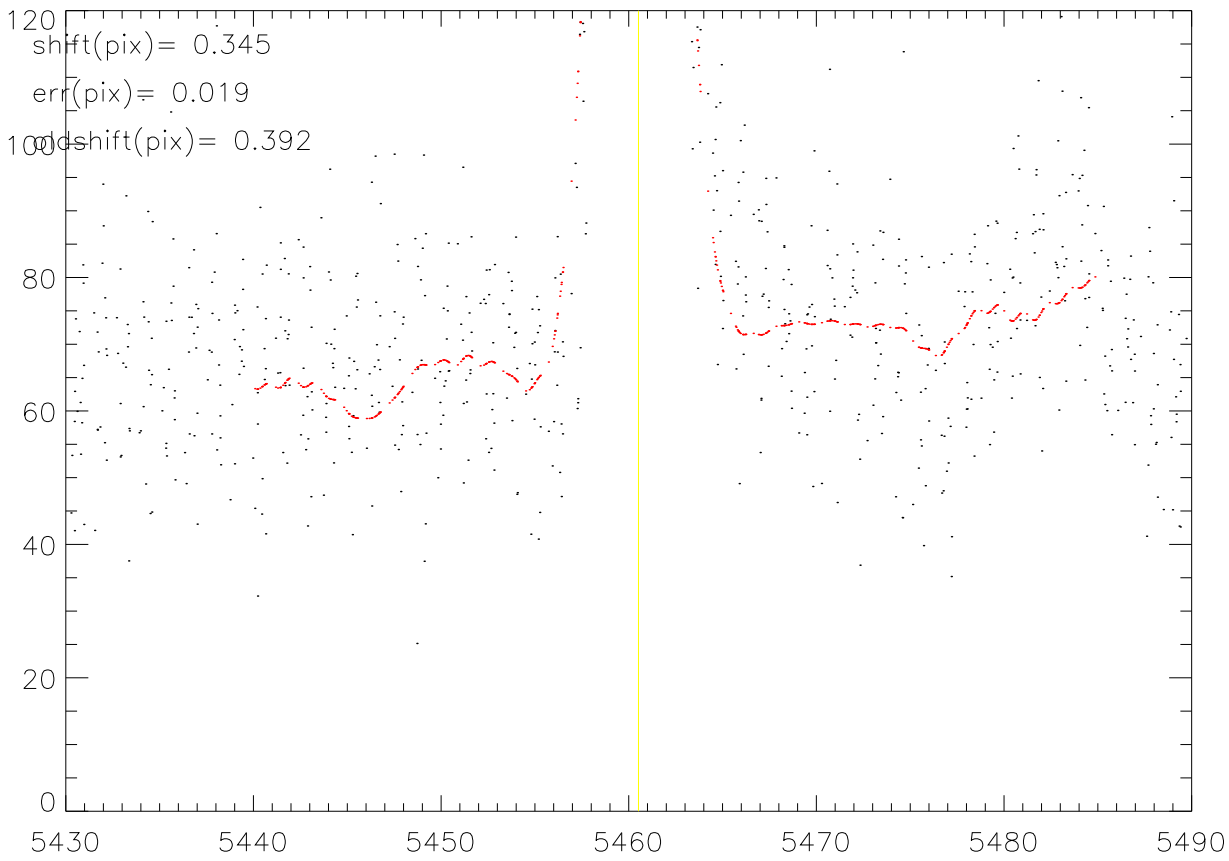

PLATE=2653 MJD=54230 Scattered Light on sdR-b1-00044759.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.156
Max value = 7.149
Thu Feb 14 21:00:56 2008

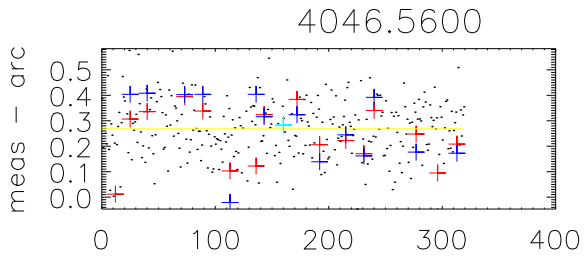

PLATE=2653 MJD=54230 Extraction chi^2 for sdR−b1−00044759.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

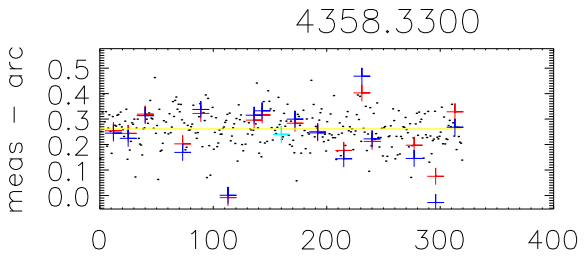

4046.5600
off: 0.23
sig: 0.051
4358.3300
off: 0.26
sig: 0.020
5460.9400
off: 0.39
sig: 0.016
5577.3390
off: 0.41
sig: 0.002
5889.9500
off: 0.55
sig: 0.009
5895.9240
off: 0.49
sig: 0.011

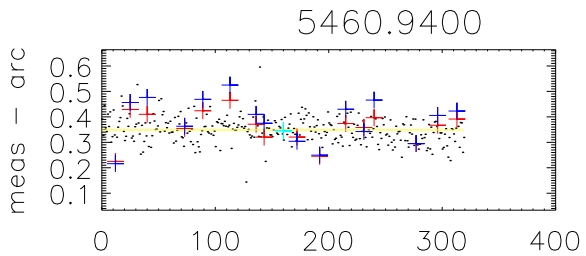

shift(pix)= 0.284
err(pix)= 0.060
oldshift(pix)= 0.225
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

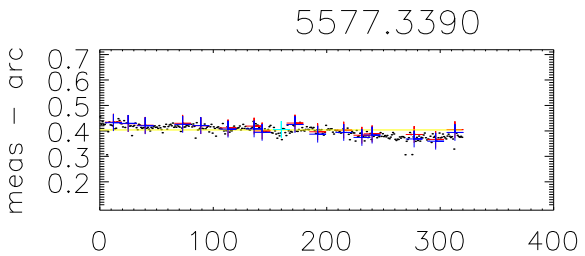

shift(pix)= 0.240
err(pix)= 0.022
oldshift(pix)= 0.256
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

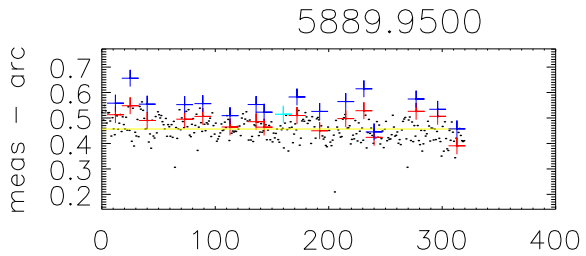

shift(pix)= 0.345
err(pix)= 0.019
oldshift(pix)= 0.392
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

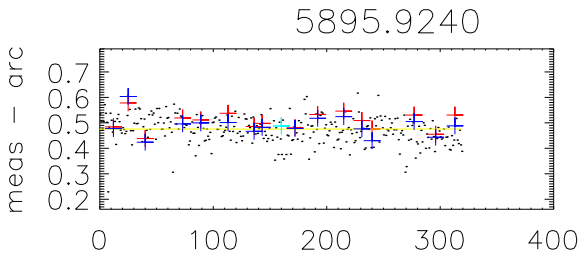

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

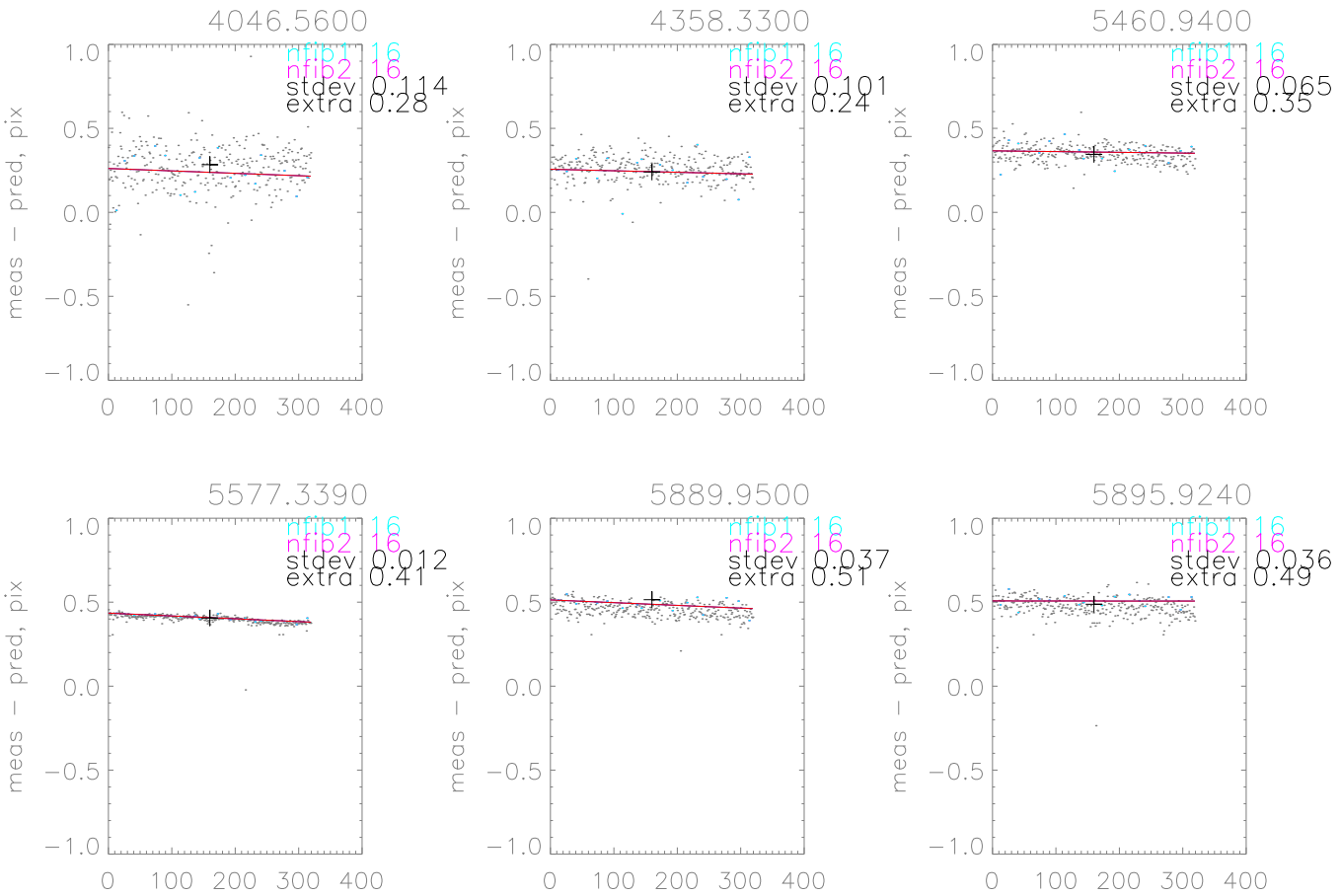

4358.3300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

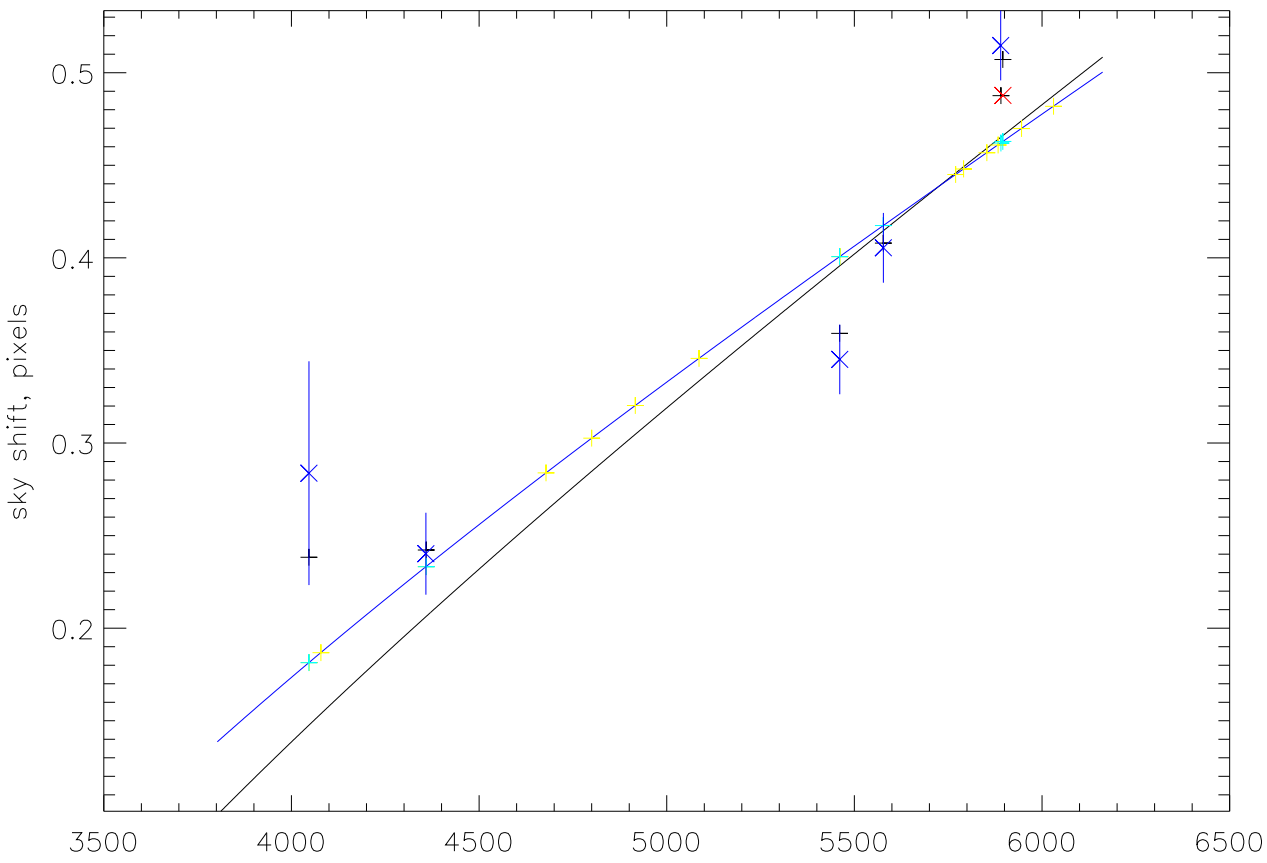

5460.9400
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


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

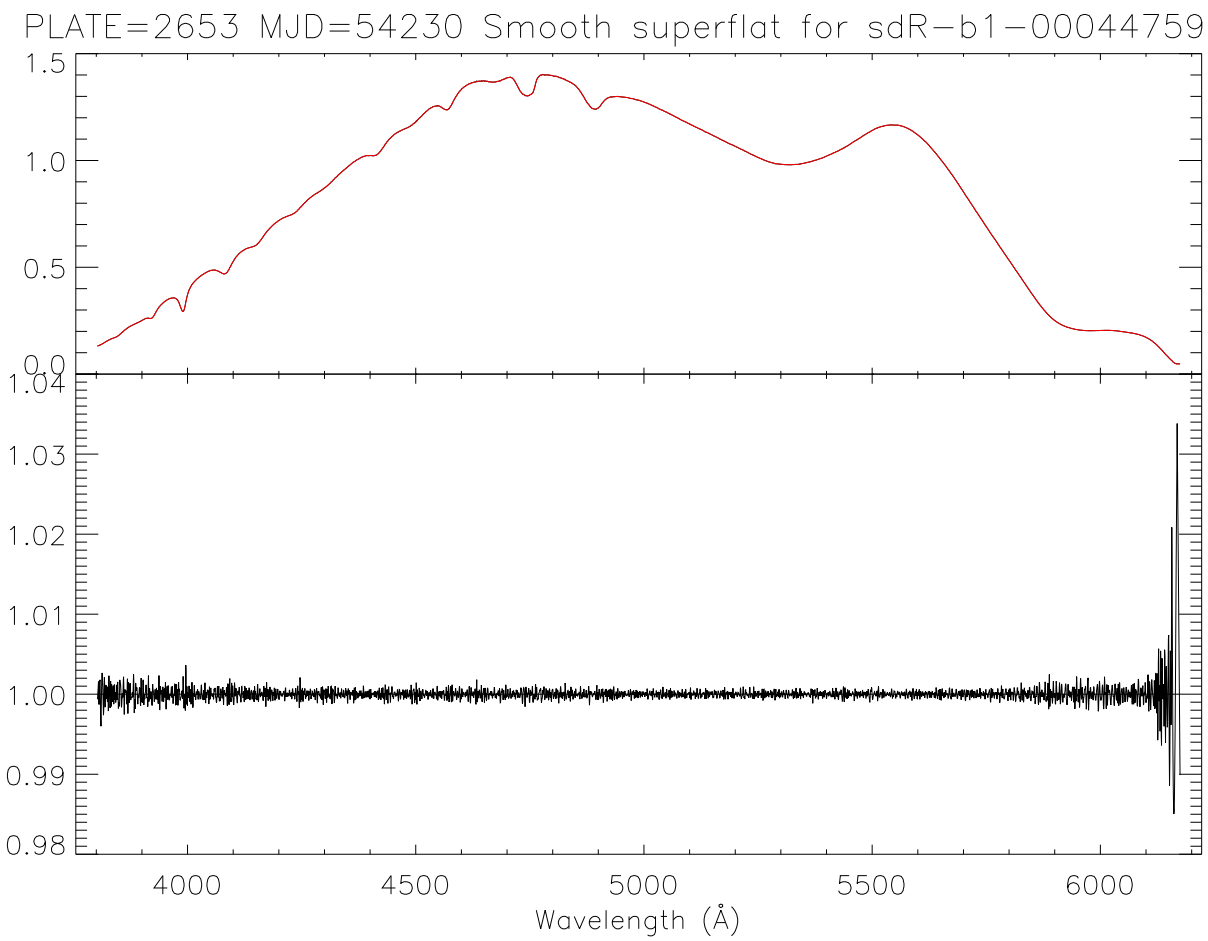

5889.9500
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

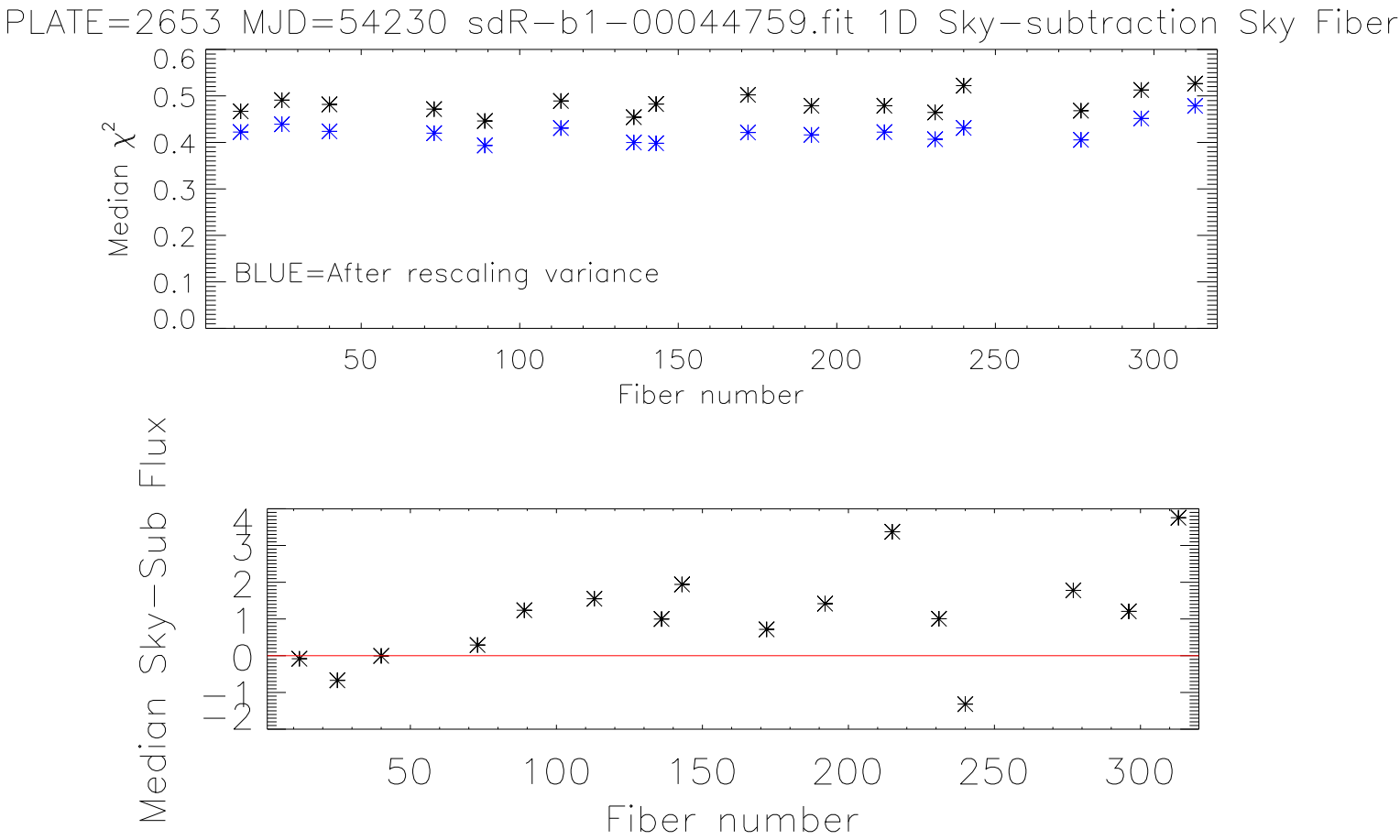

5895.9240
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

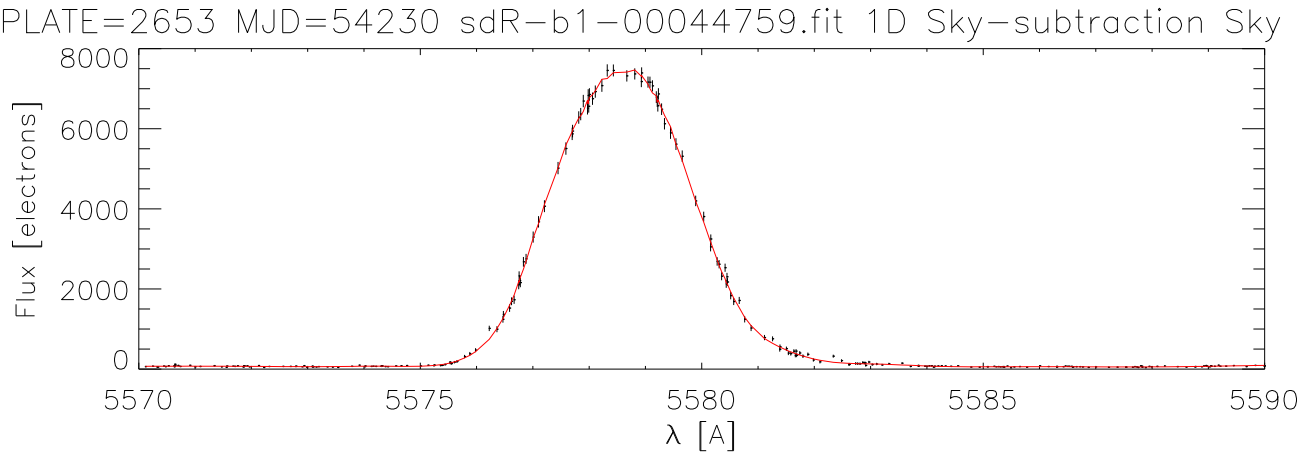

4046.5600
nfib1 16
nfib2 16
stdev 0.114
extra 0.28
4358.3300
nfib1 16
nfib2 16
stdev 0.101
extra 0.24
5460.9400
nfib1 16
nfib2 16
stdev 0.065
extra 0.35
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.41
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra 0.51
5895.9240
nfib1 16
nfib2 16
stdev 0.036
extra 0.49
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

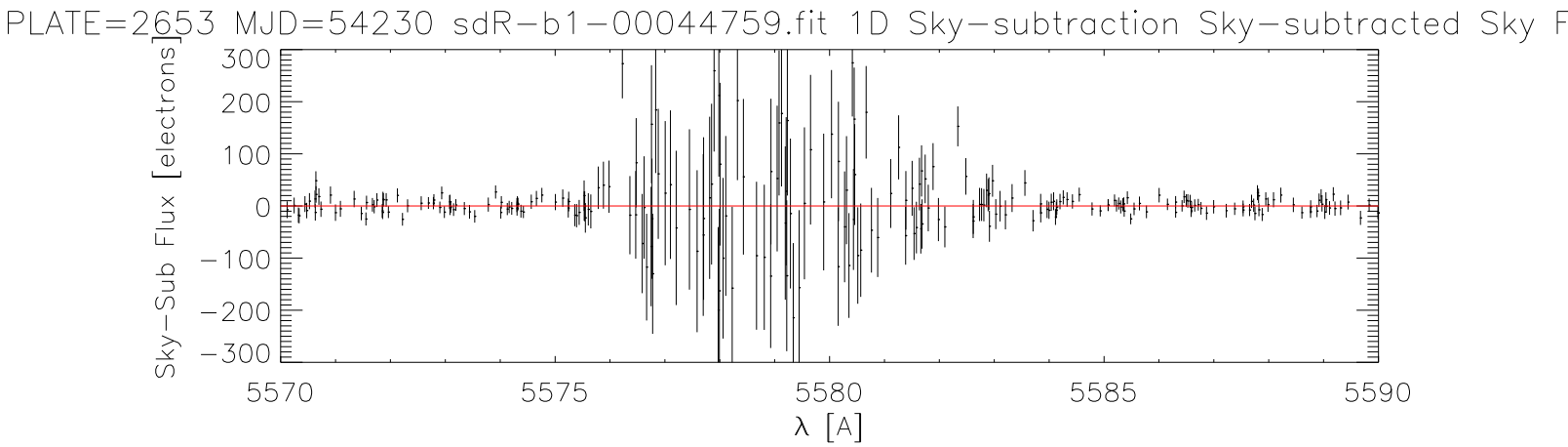

sky shift, pixels
0.5
0.4
0.3
0.2
3500
4000
4500
5000
5500
6000
6500

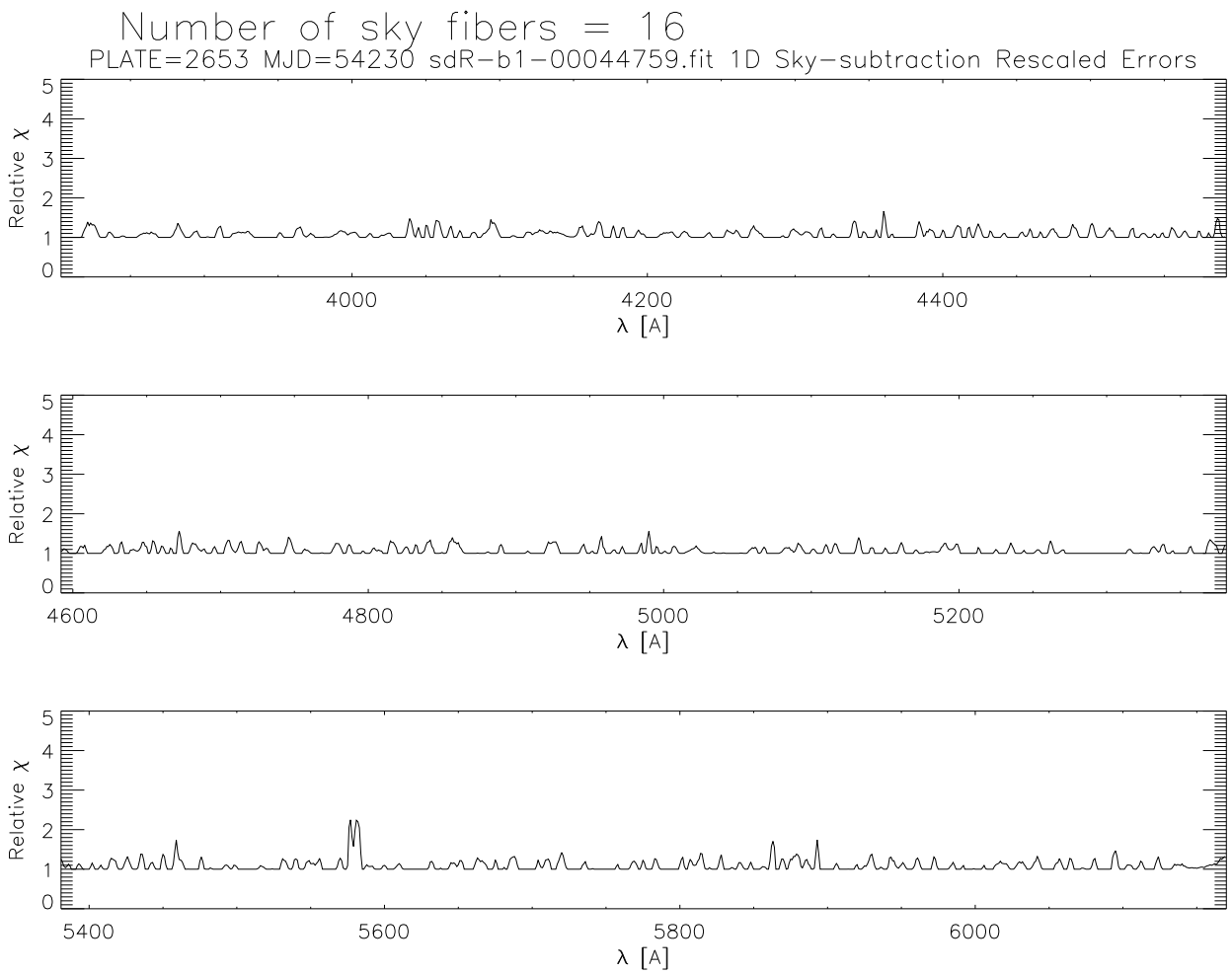
es= −0.0001

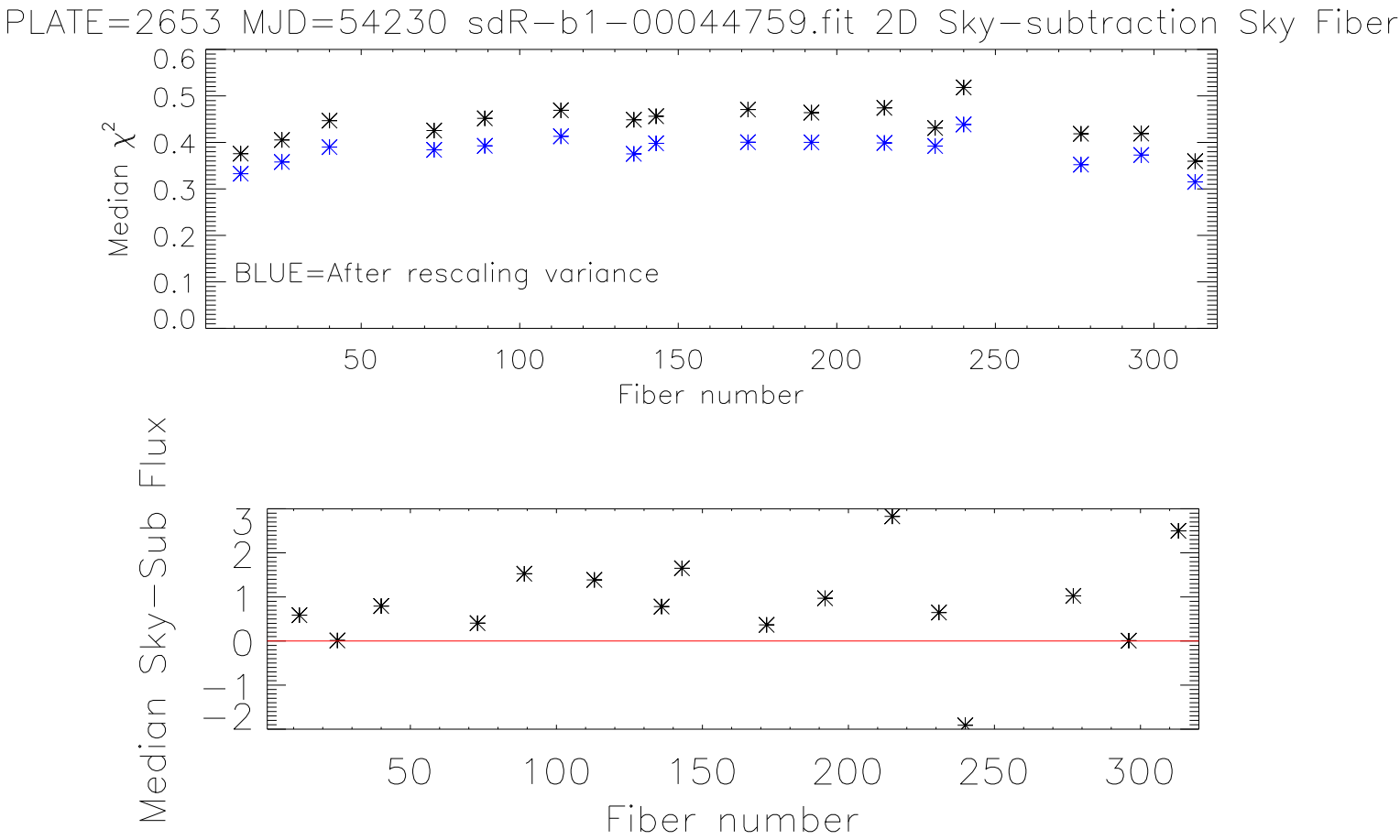

PLATE=2653 MJD=54230 Smooth superflat for sdR−b1−00044759.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

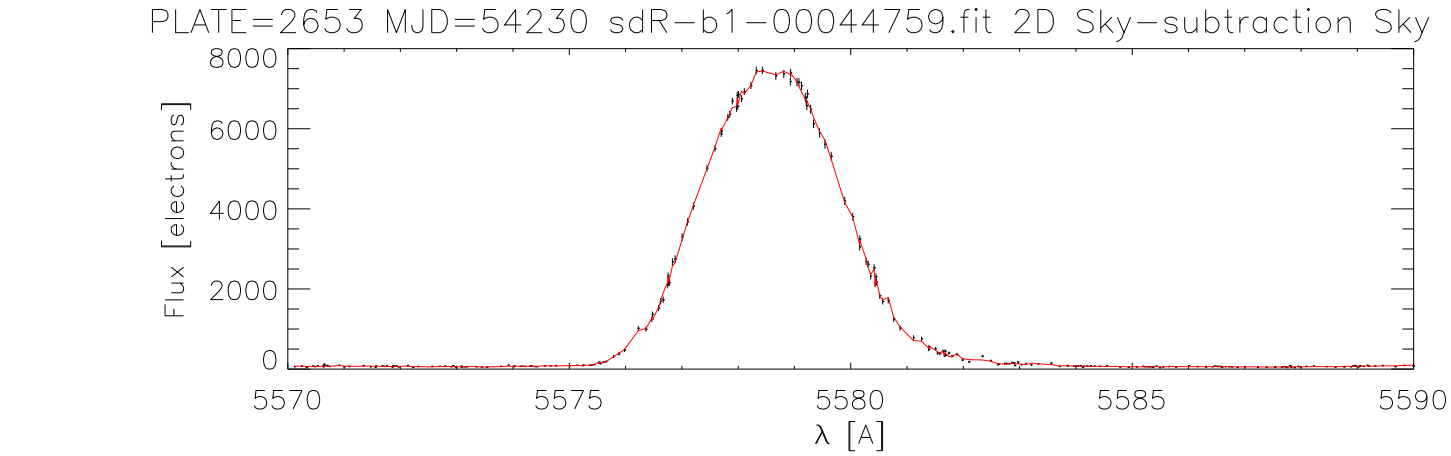

PLATE=2653 MJD=54230 sdR-b1-00044759.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

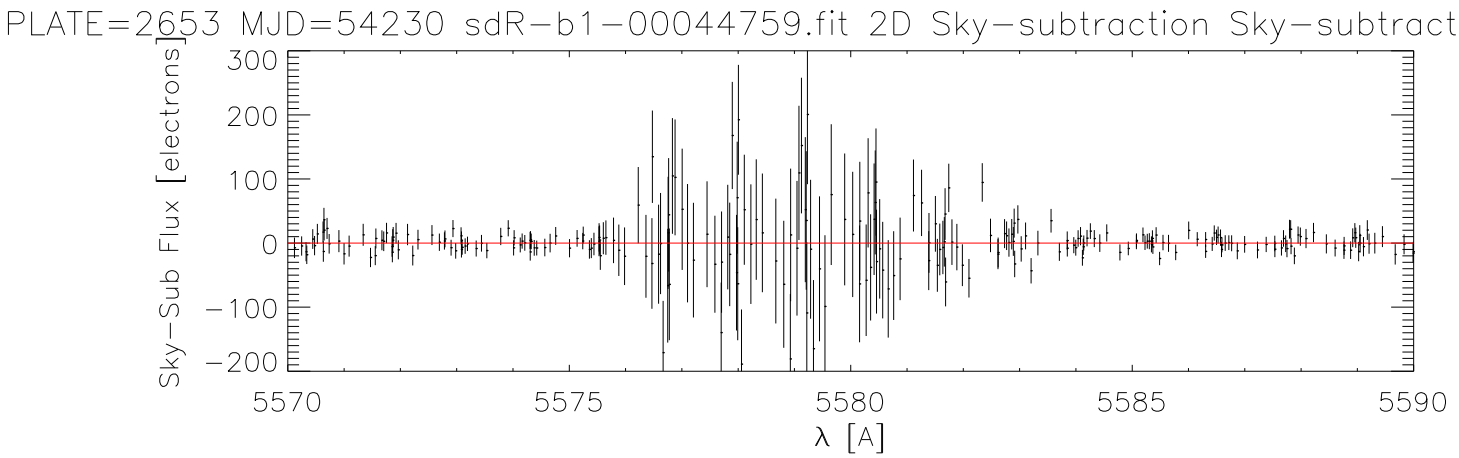

PLATE=2653 MJD=54230 sdR-b1-00044759.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

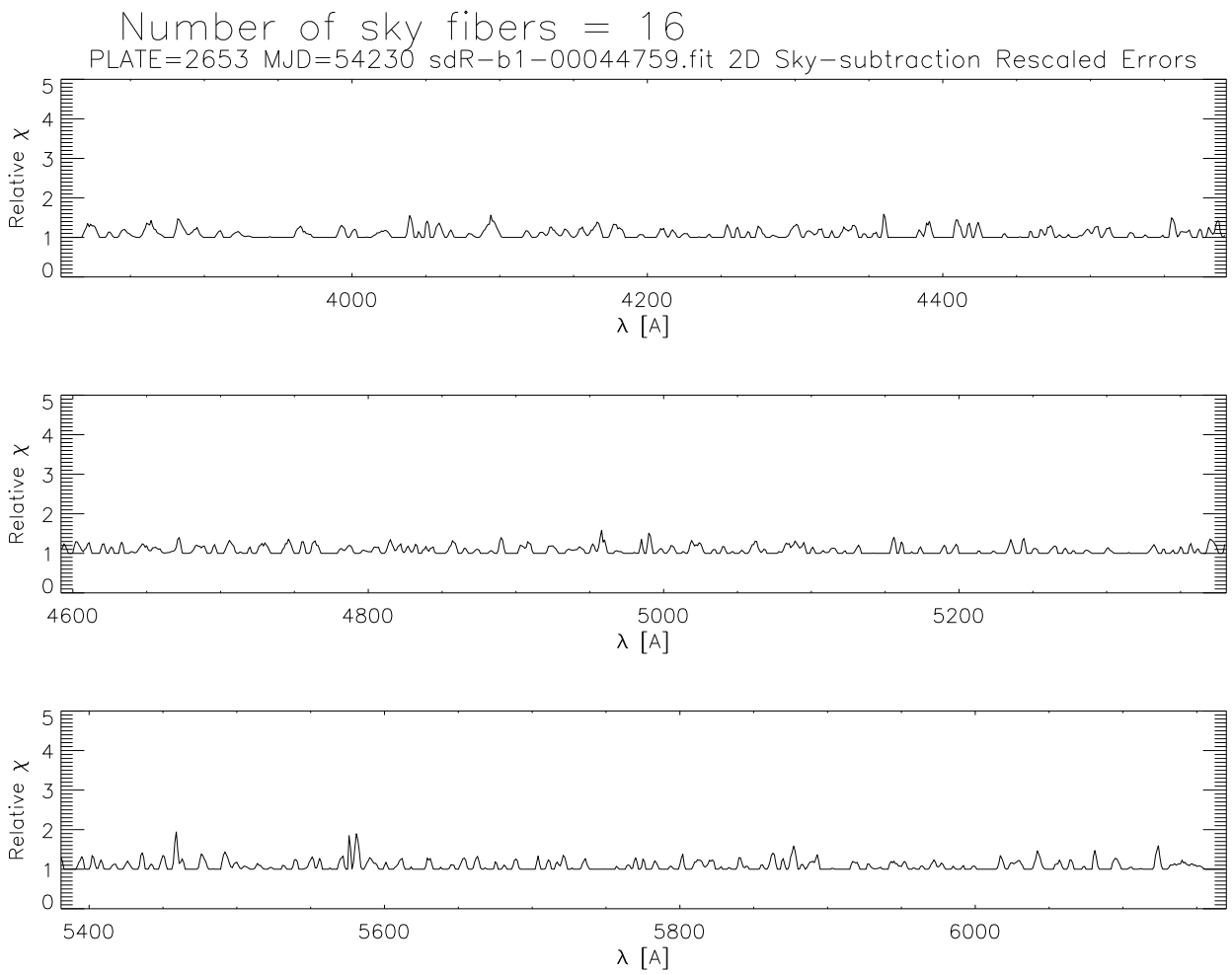

PLATE=2653 MJD=54230 sdR-b1-00044759.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

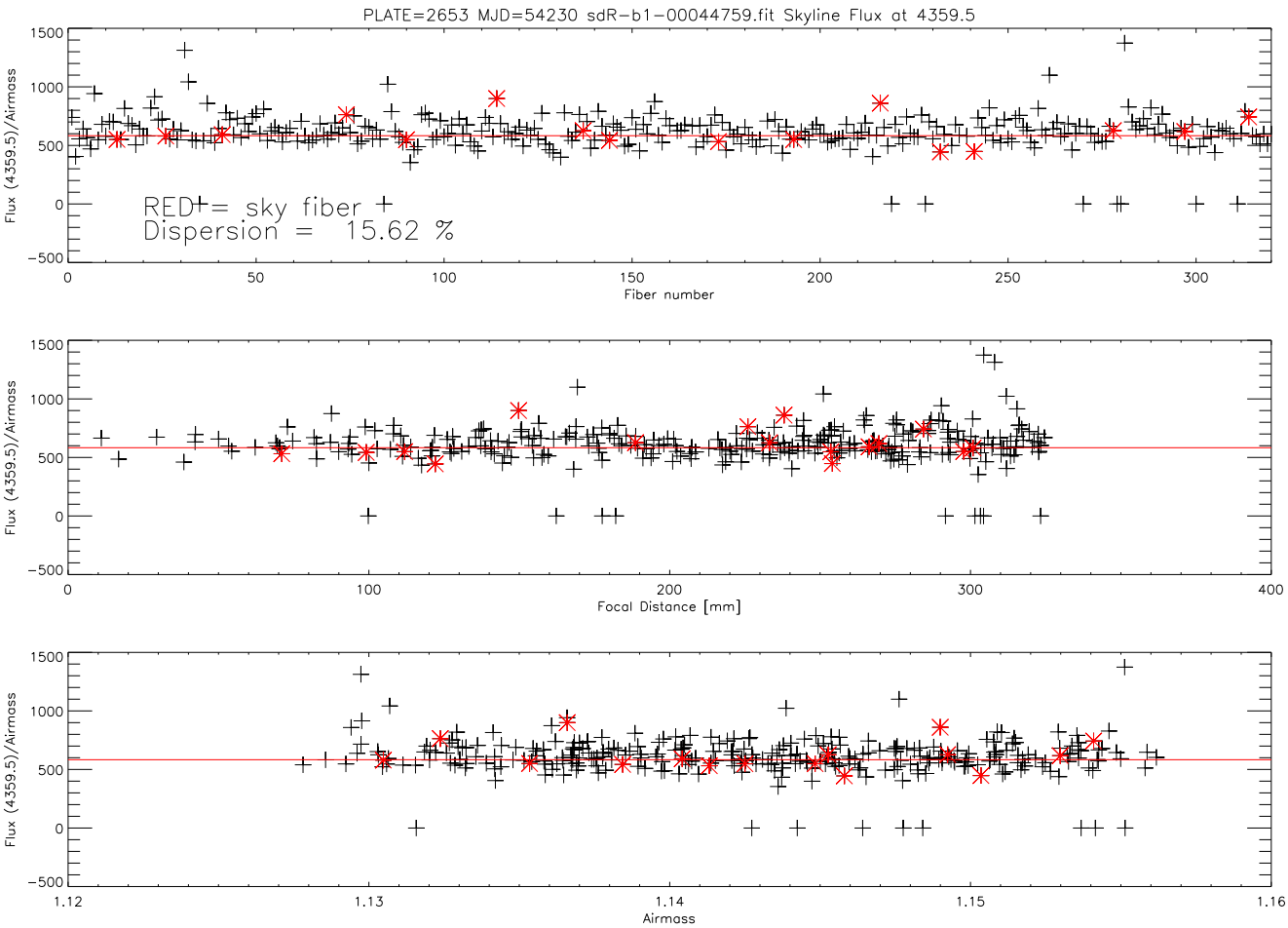

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b1-00044759.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

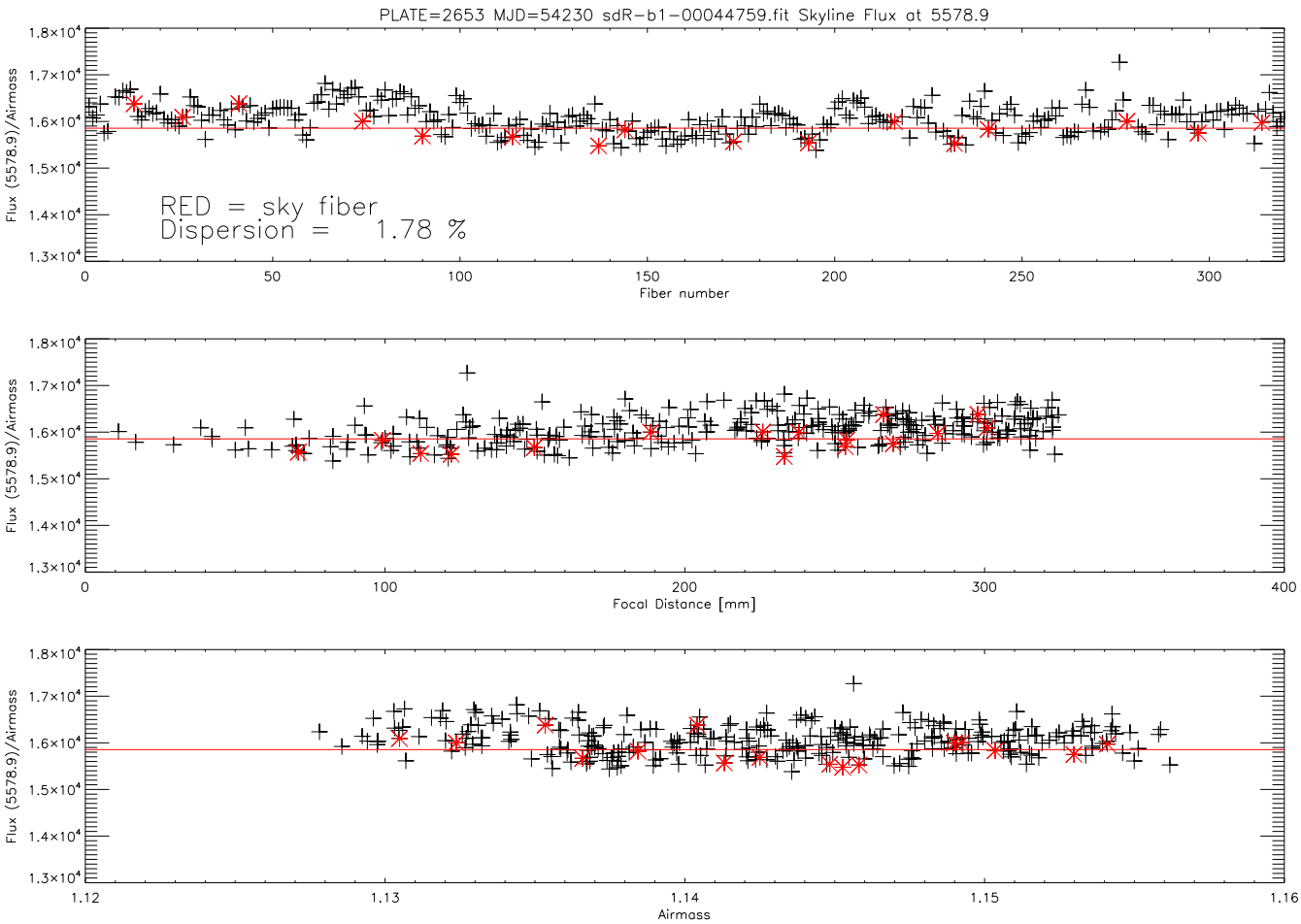

PLATE=2653 MJD=54230 sdR-b1-00044759.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

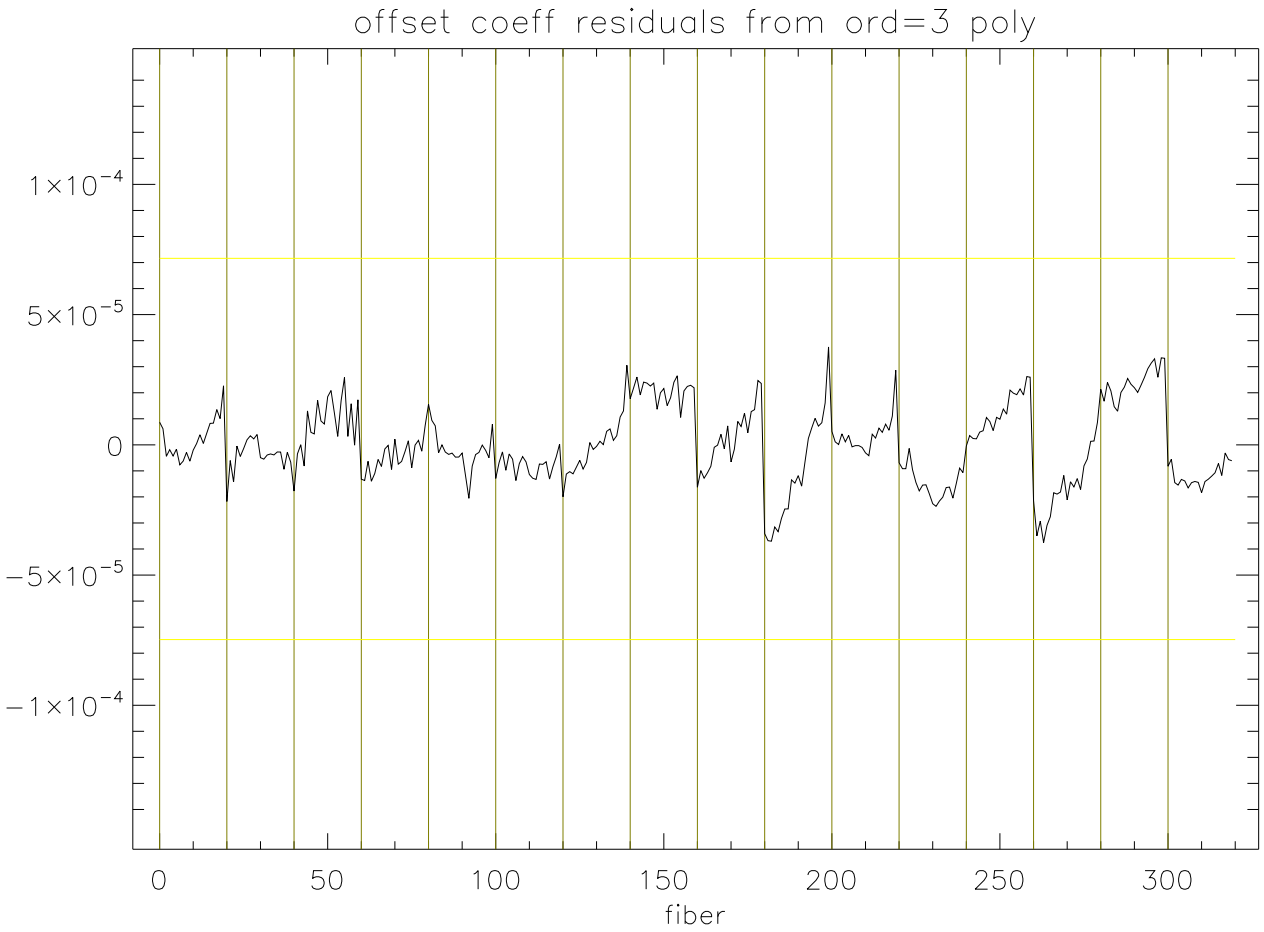

PLATE=2653 MJD=54230 sdR-b1-00044759.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

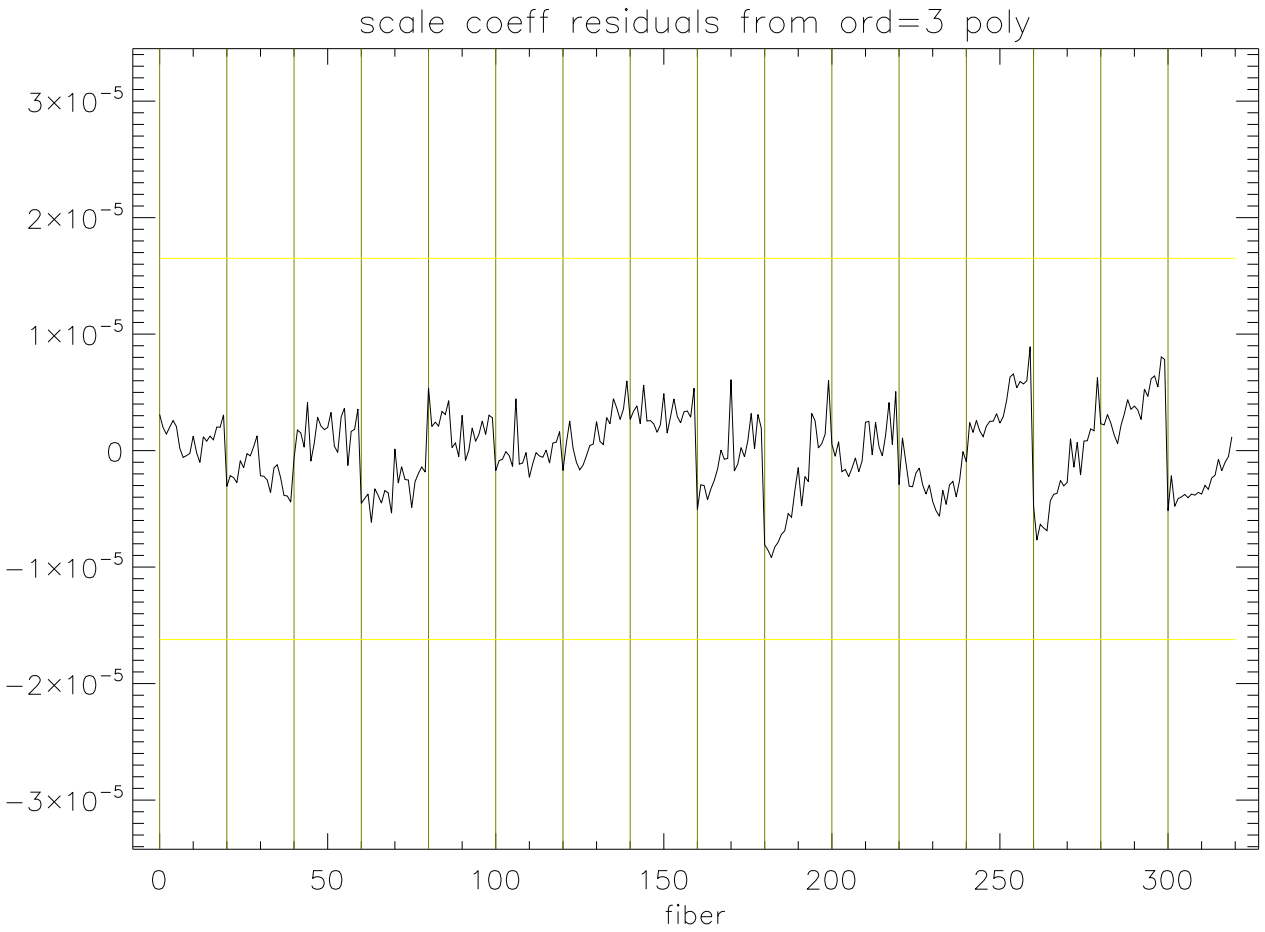

PLATE=2653 MJD=54230 sdR-b1-00044759.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

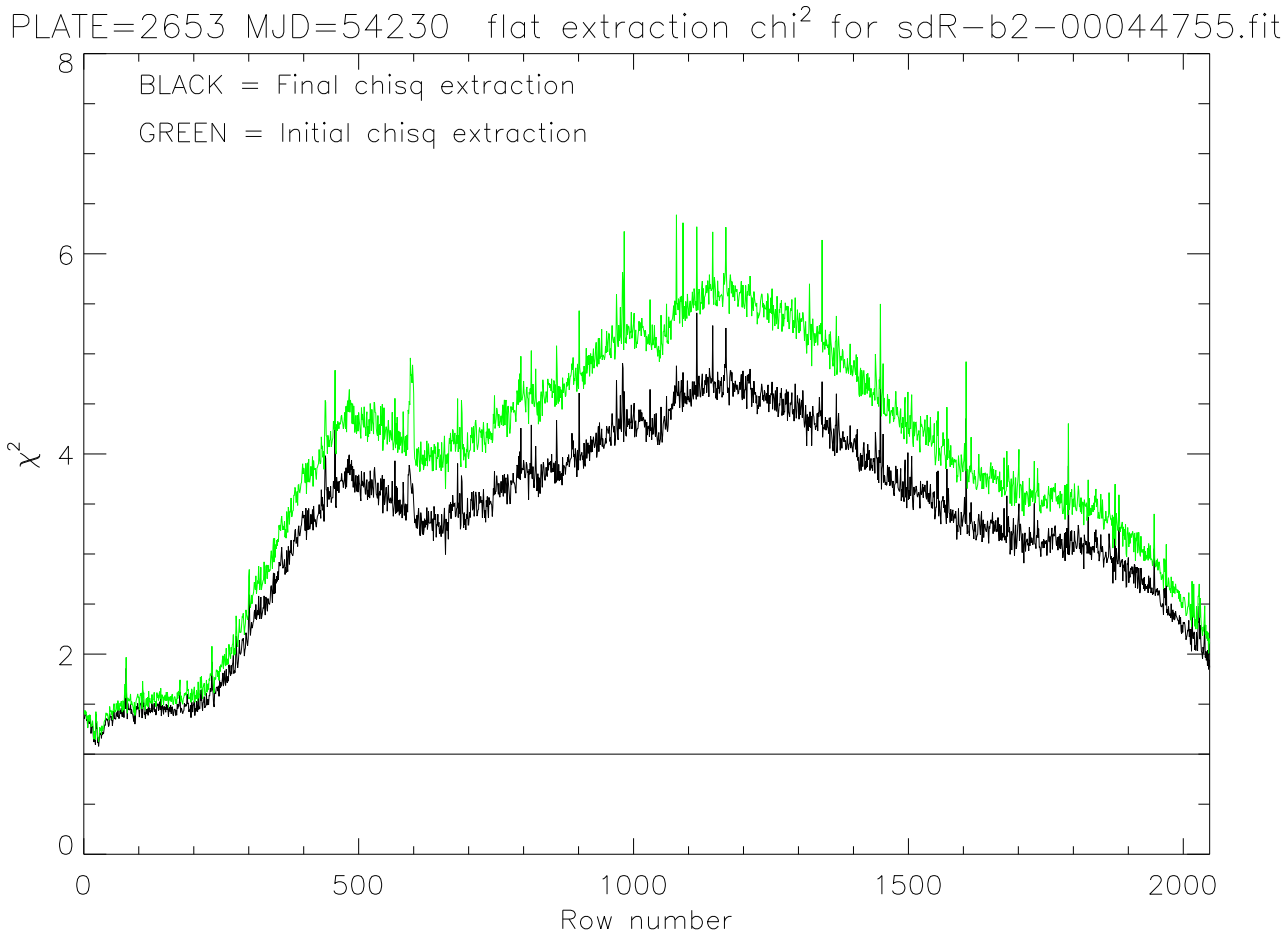

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b1-00044759.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

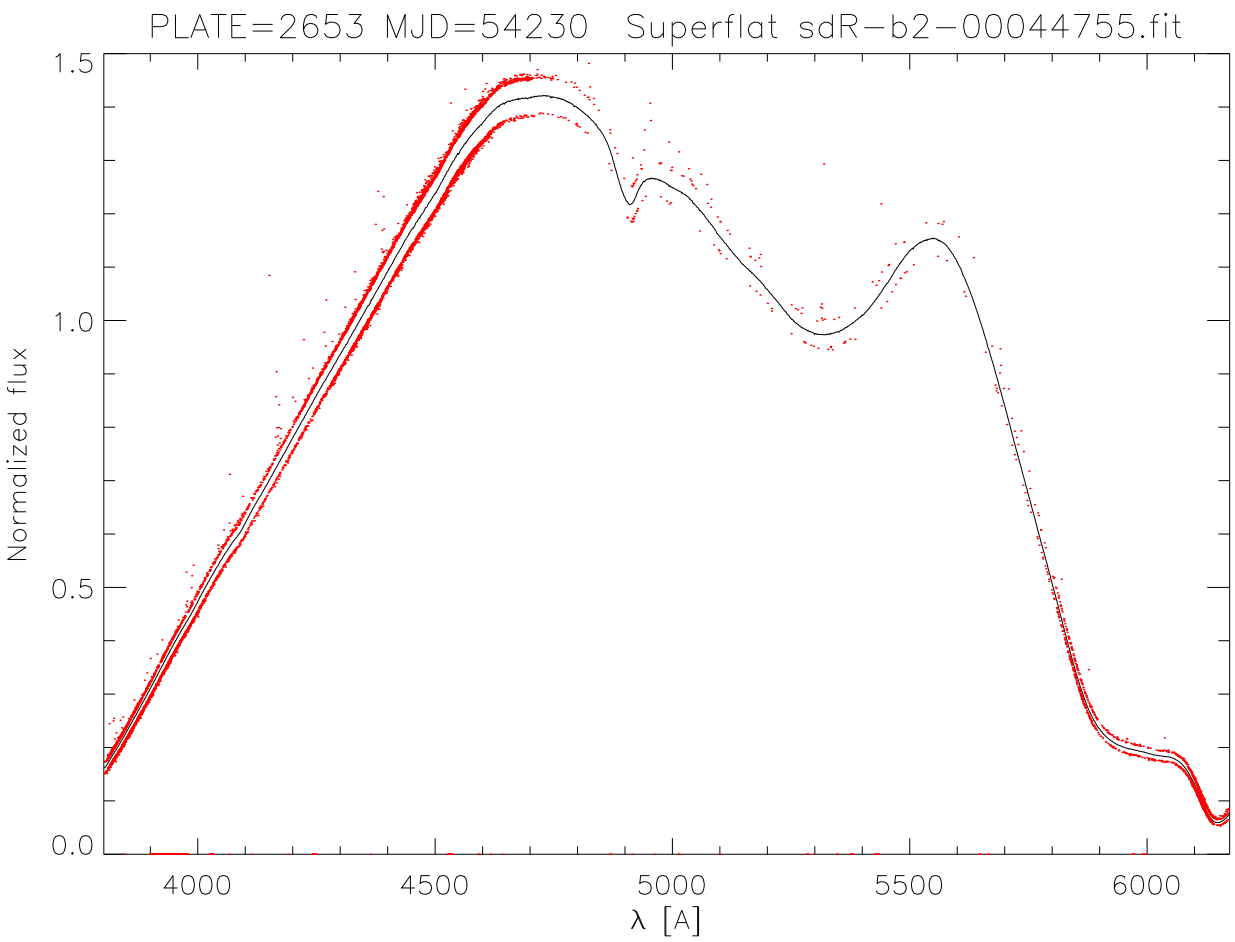

PLATE=2653 MJD=54230 sdR-b1-00044759.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED+= sky fiber +
Dispersion = 15.62 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

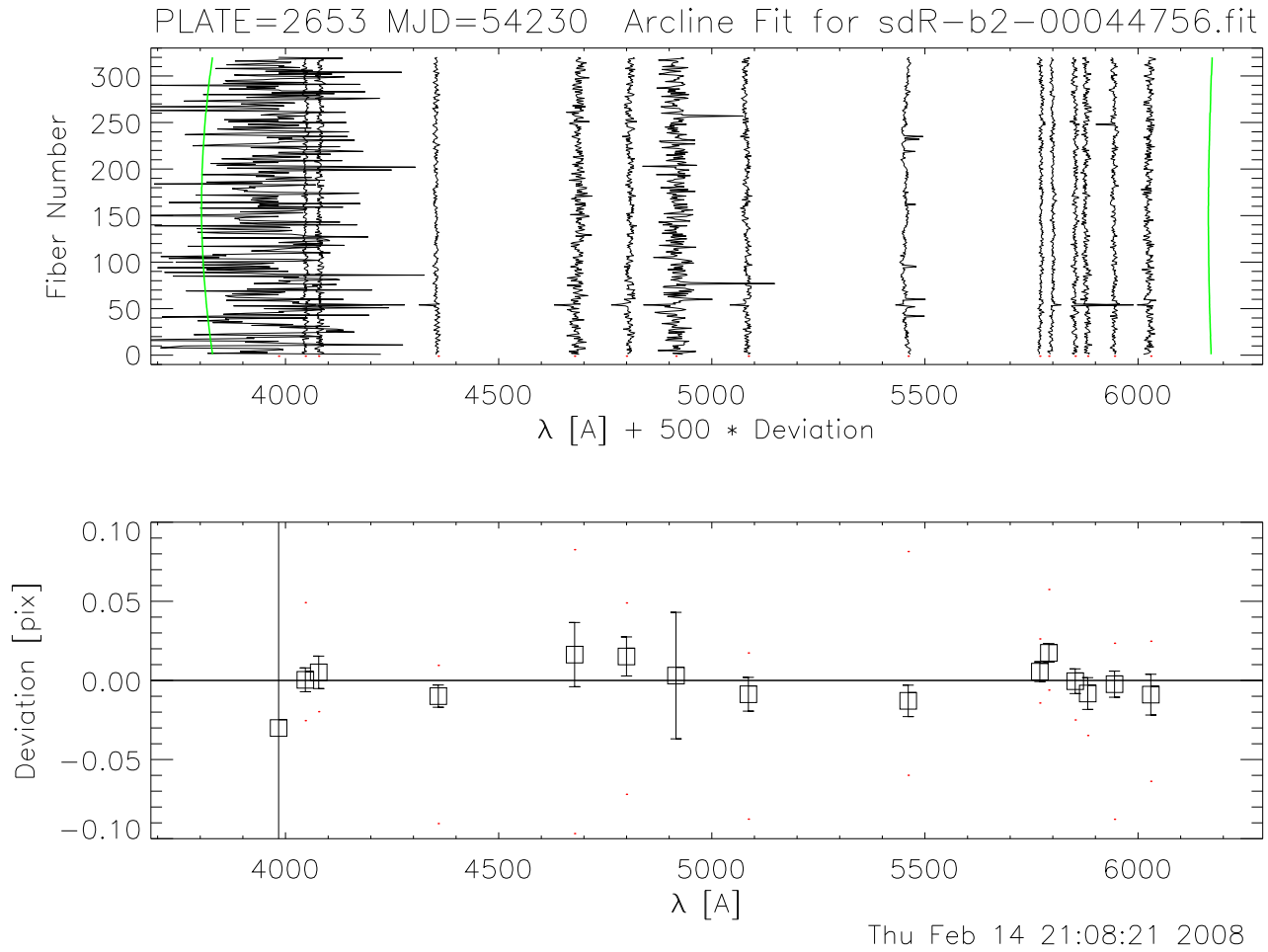

PLATE=2653 MJD=54230 sdR-b1-00044759.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.78 %
Fiber number
Focal Distance [mm]
Airmass

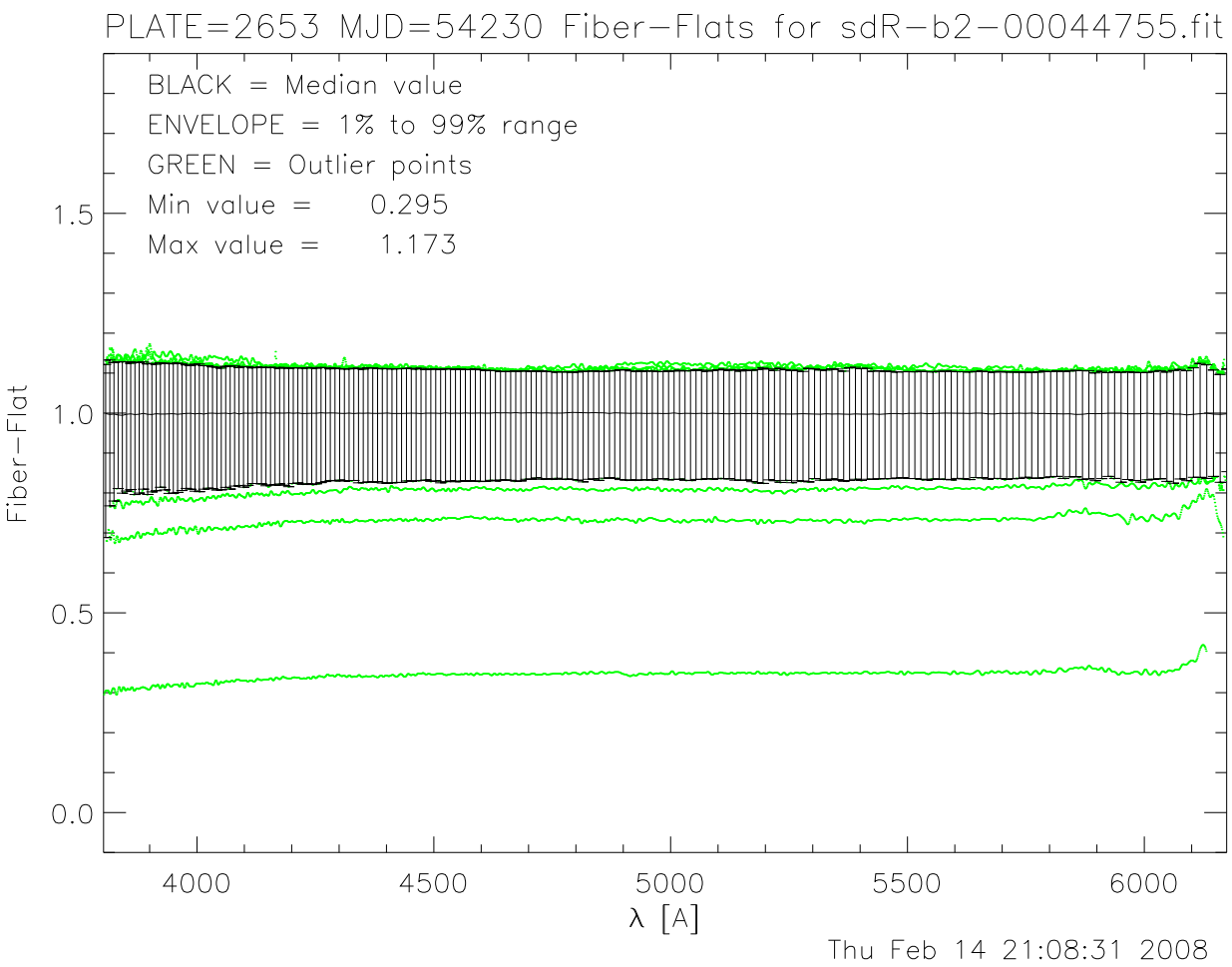

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

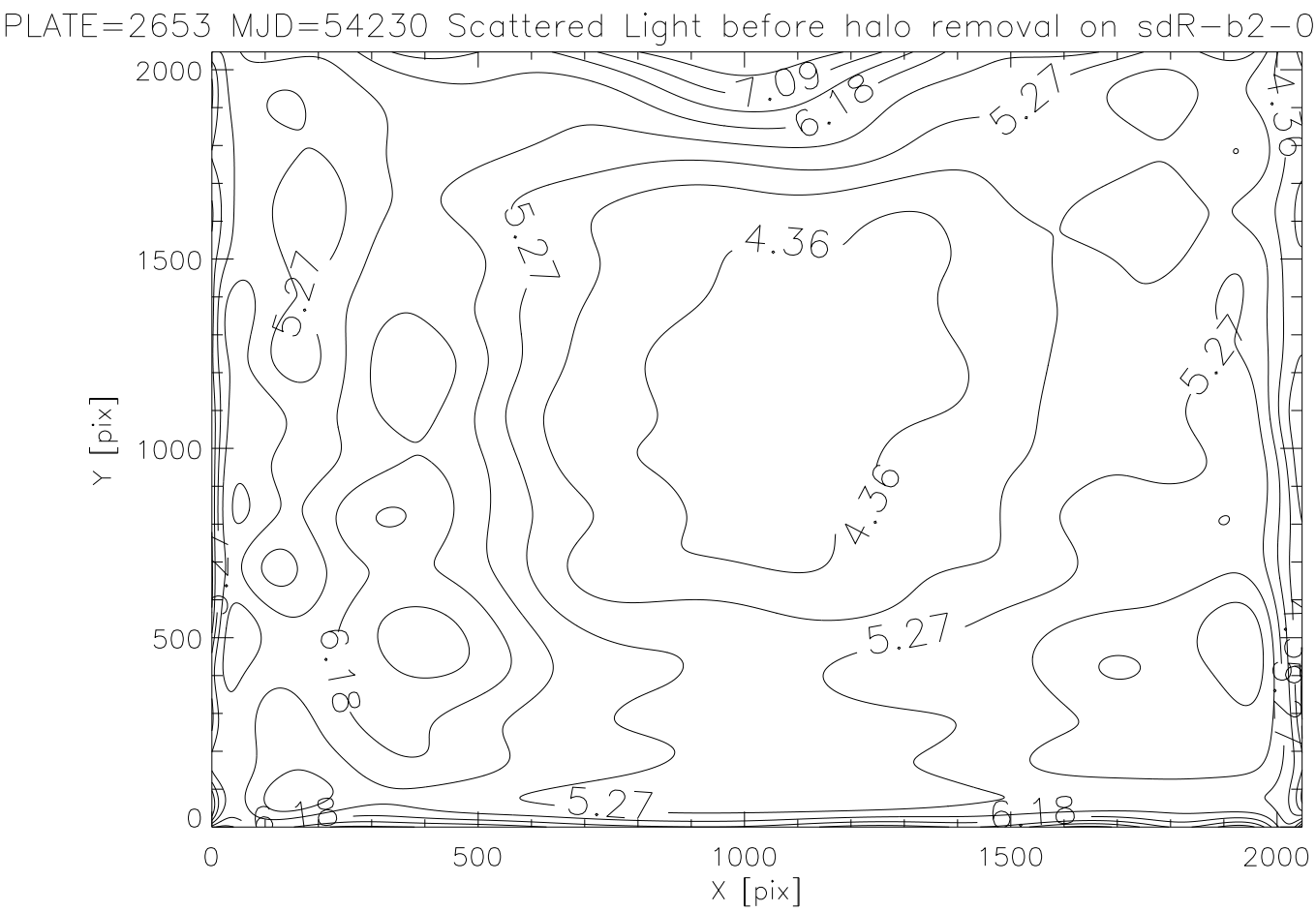

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

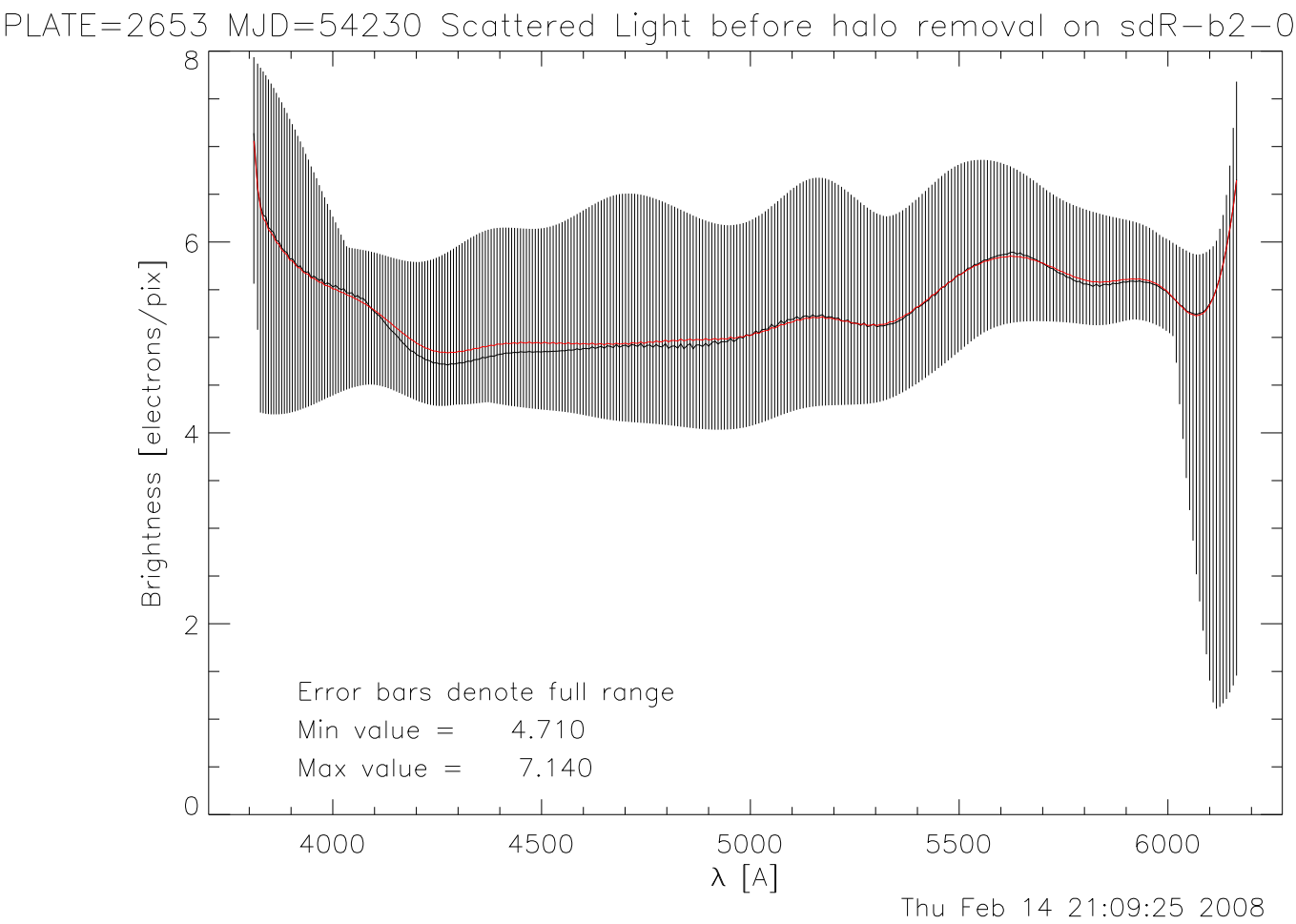

PLATE=2653 MJD=54230 flat extraction chi^2 for sdR−b2−00044755.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

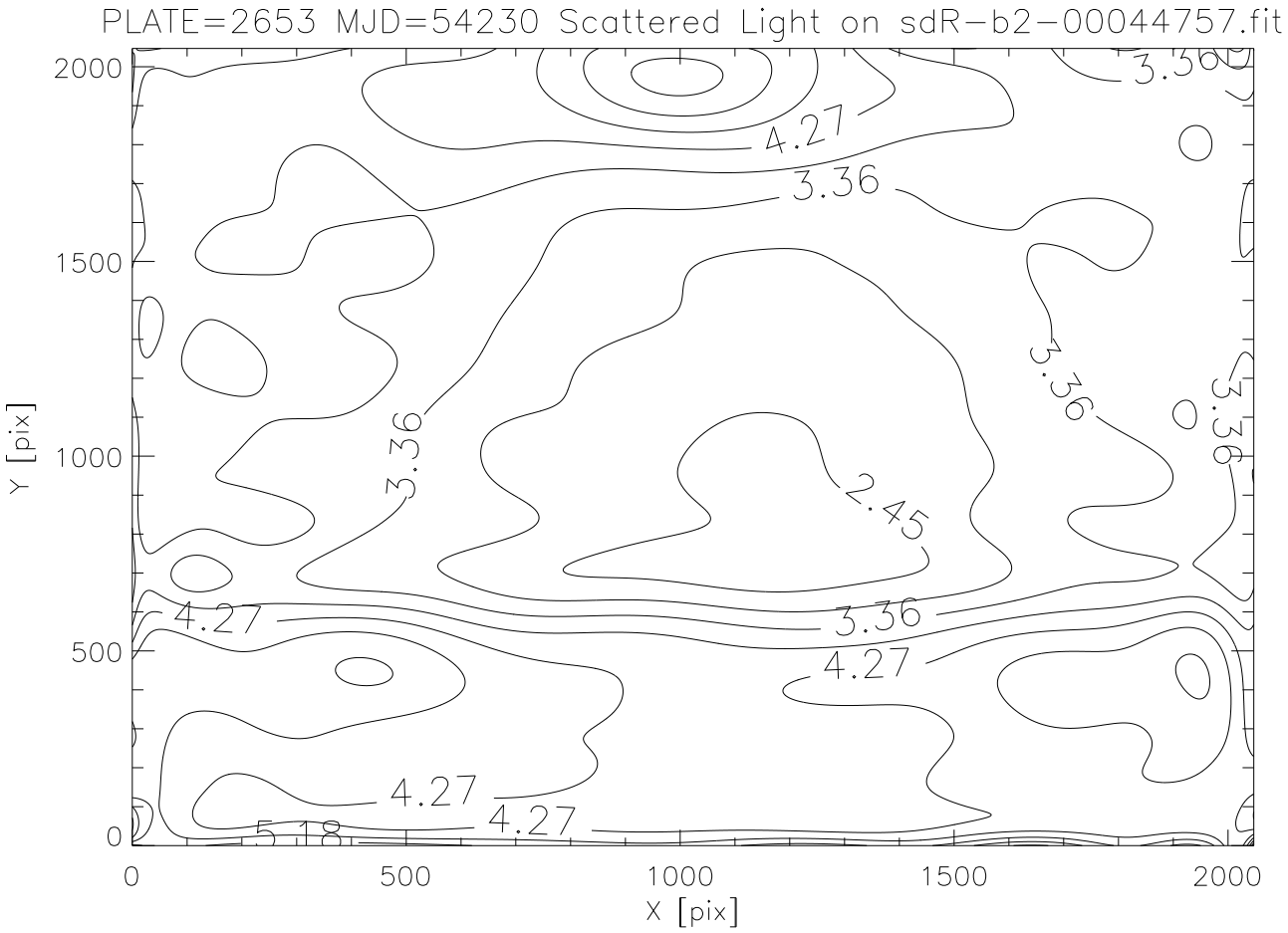

PLATE=2653 MJD=54230 Superflat sdR-b2-00044755.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

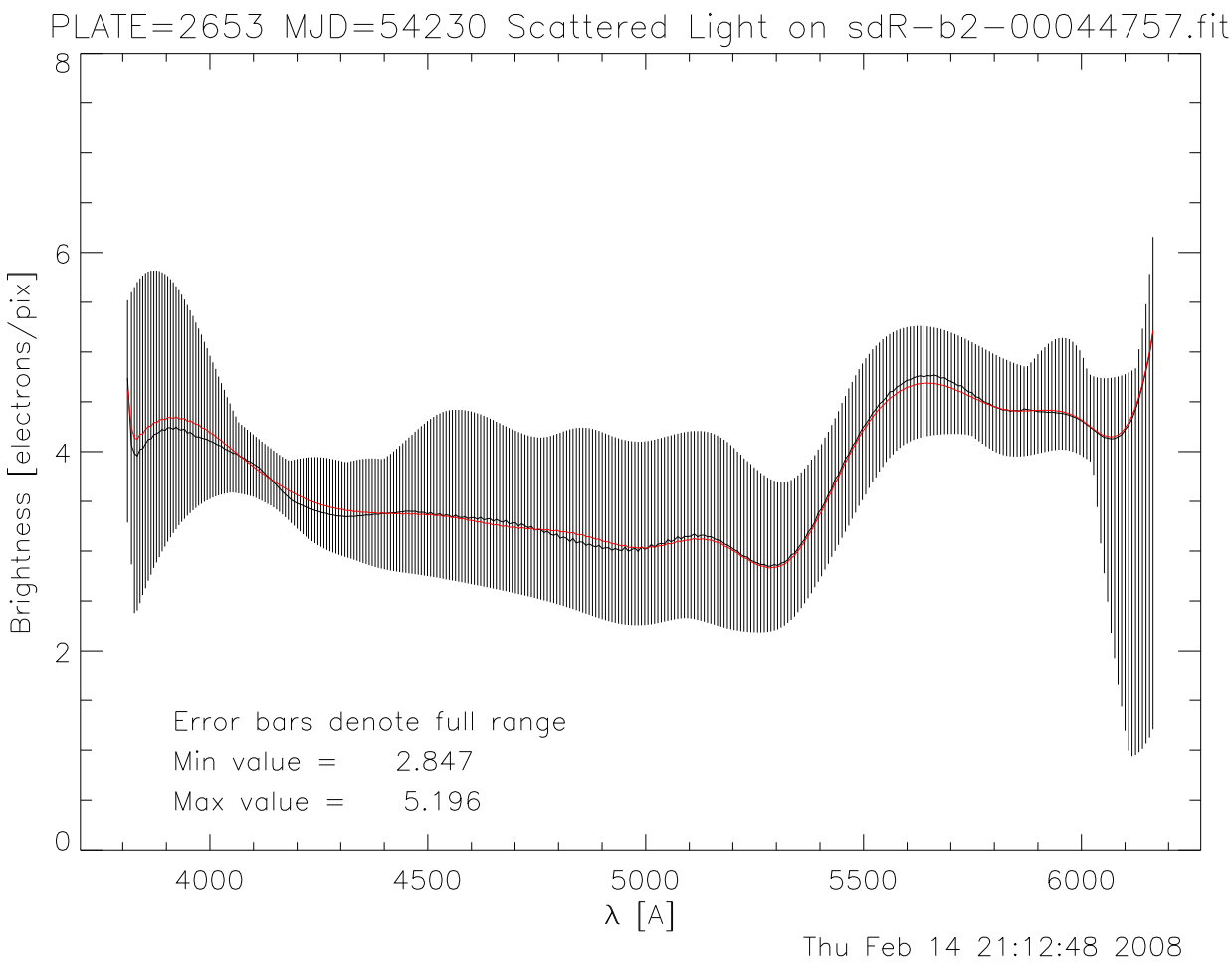

PLATE=2653 MJD=54230 Arcline Fit for sdR-b2-00044756.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Thu Feb 14 21:08:21 2008

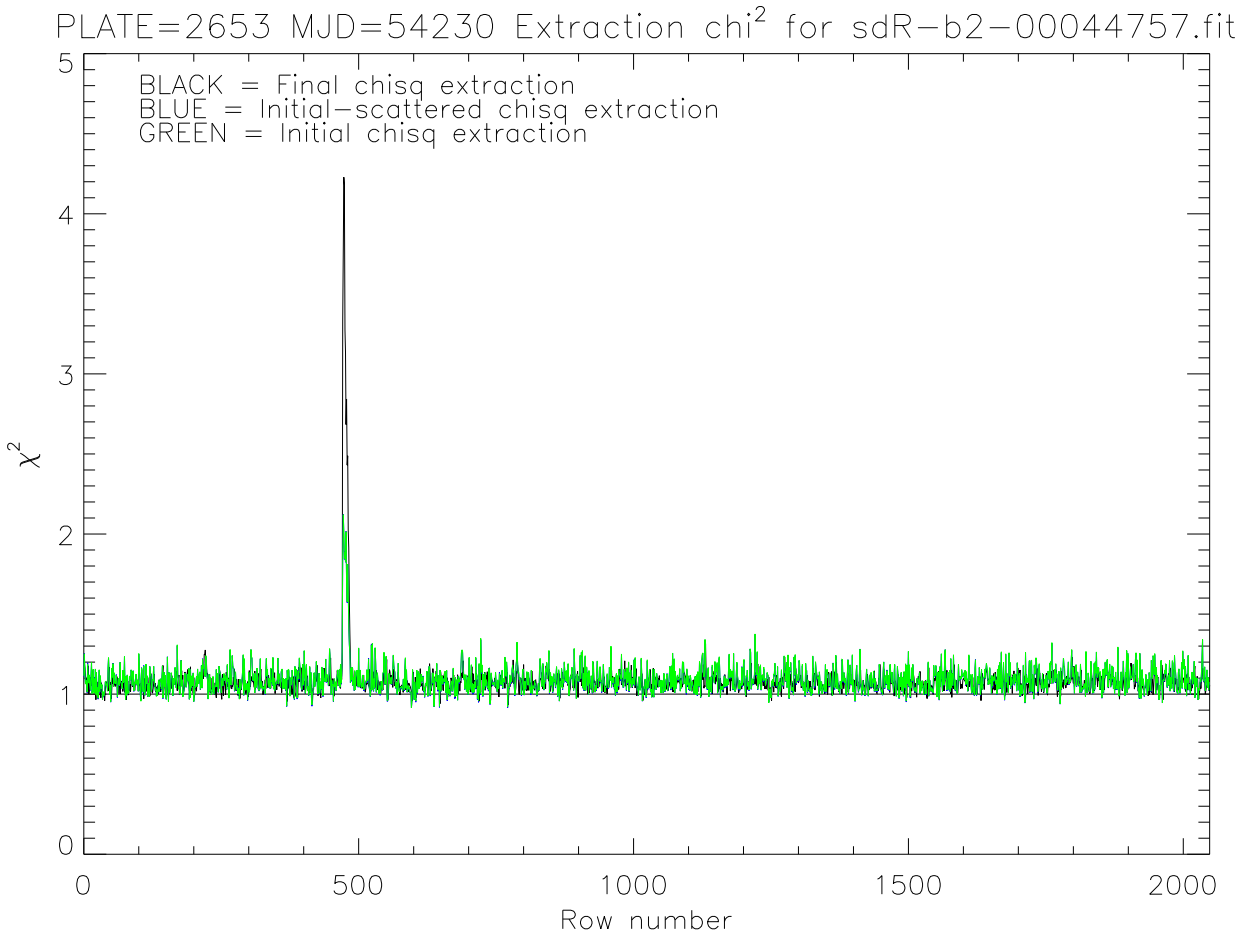

PLATE=2653 MJD=54230 Fiber-Flats for sdR-b2-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.295
Max value = 1.173
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 14 21:08:31 2008

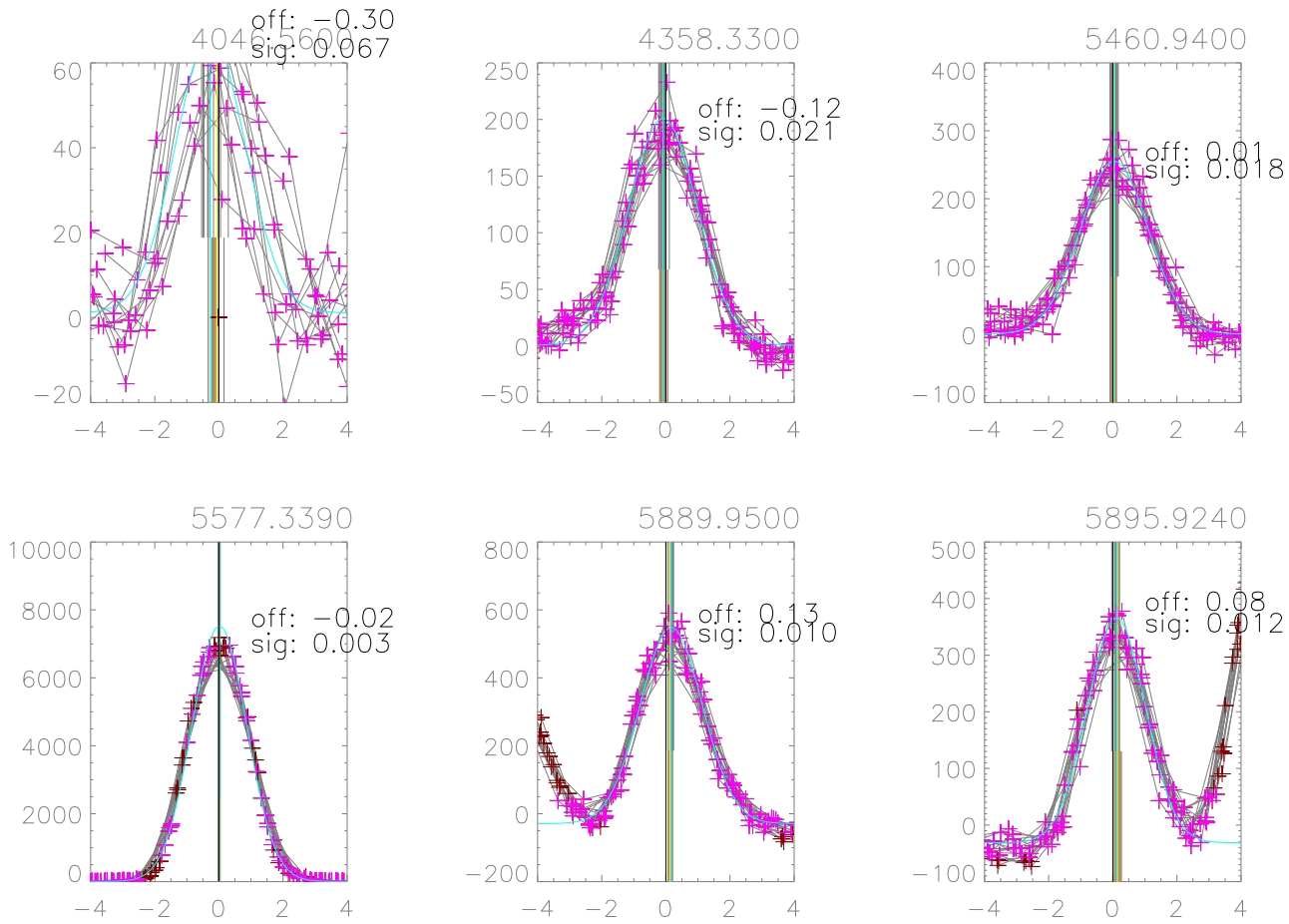

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-b2-00044757.f
7.09
6.18
5.27
4.36
5.27
4.36
5.27
6.18
5.27
6.18
Y [pix]
X [pix]
0
500
1000
1500
2000

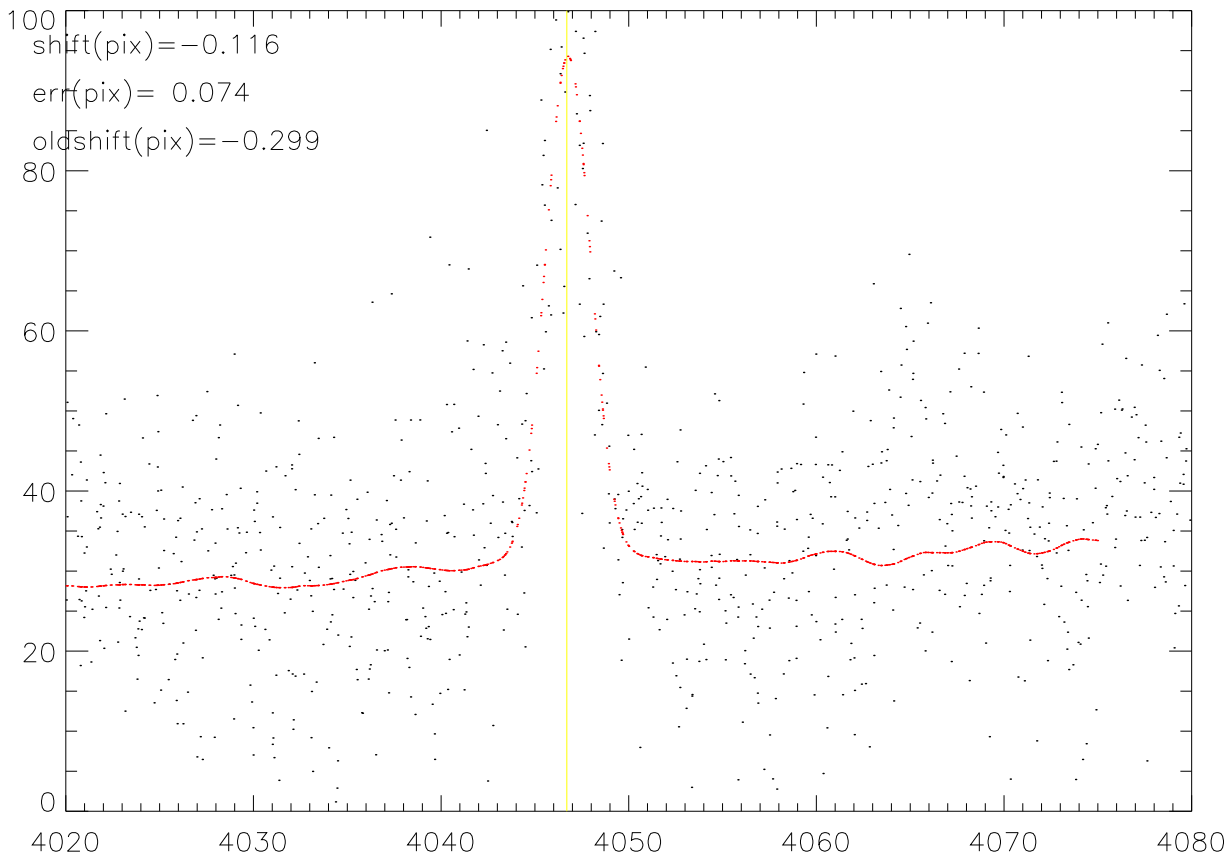

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-b2-00044757.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.710
Max value = 7.140
Thu Feb 14 21:09:25 2008

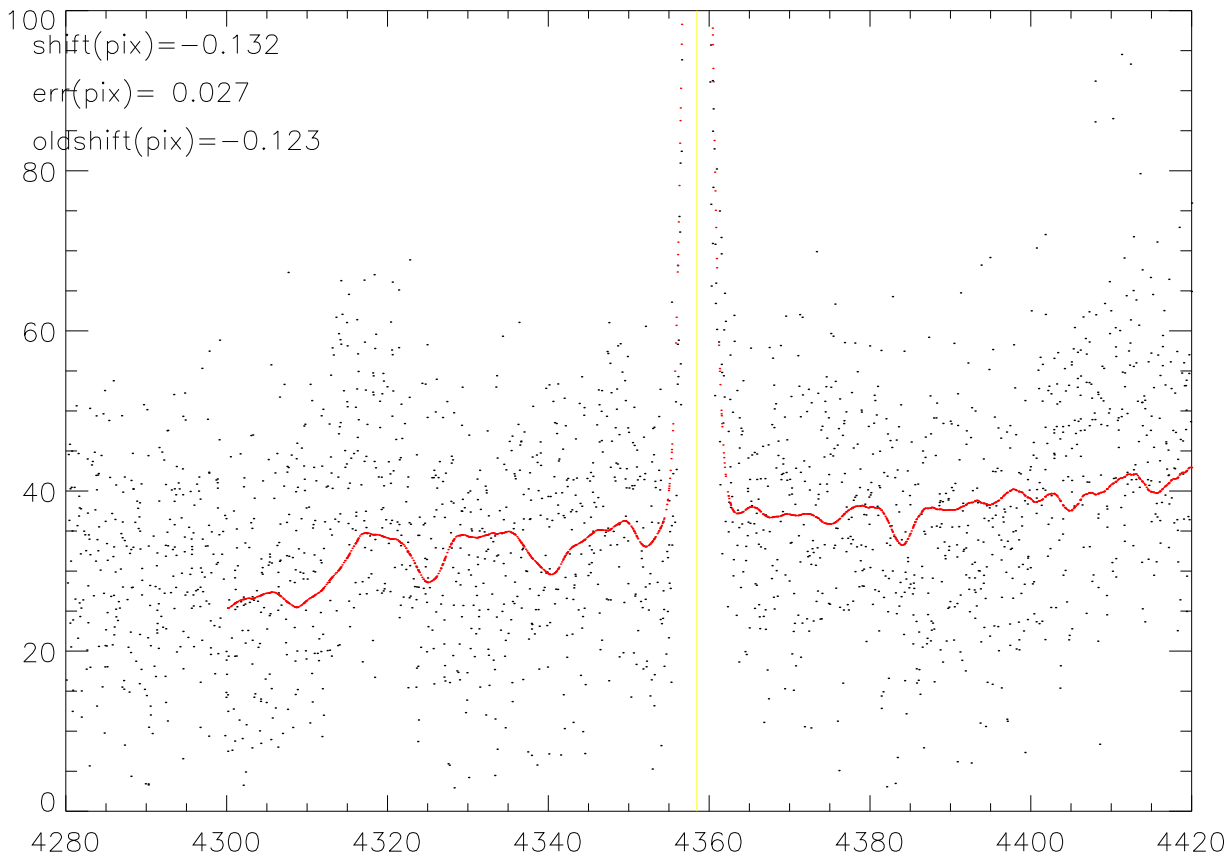

PLATE=2653 MJD=54230 Scattered Light on sdR-b2-00044757.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.27
3.36
2.45
5.18

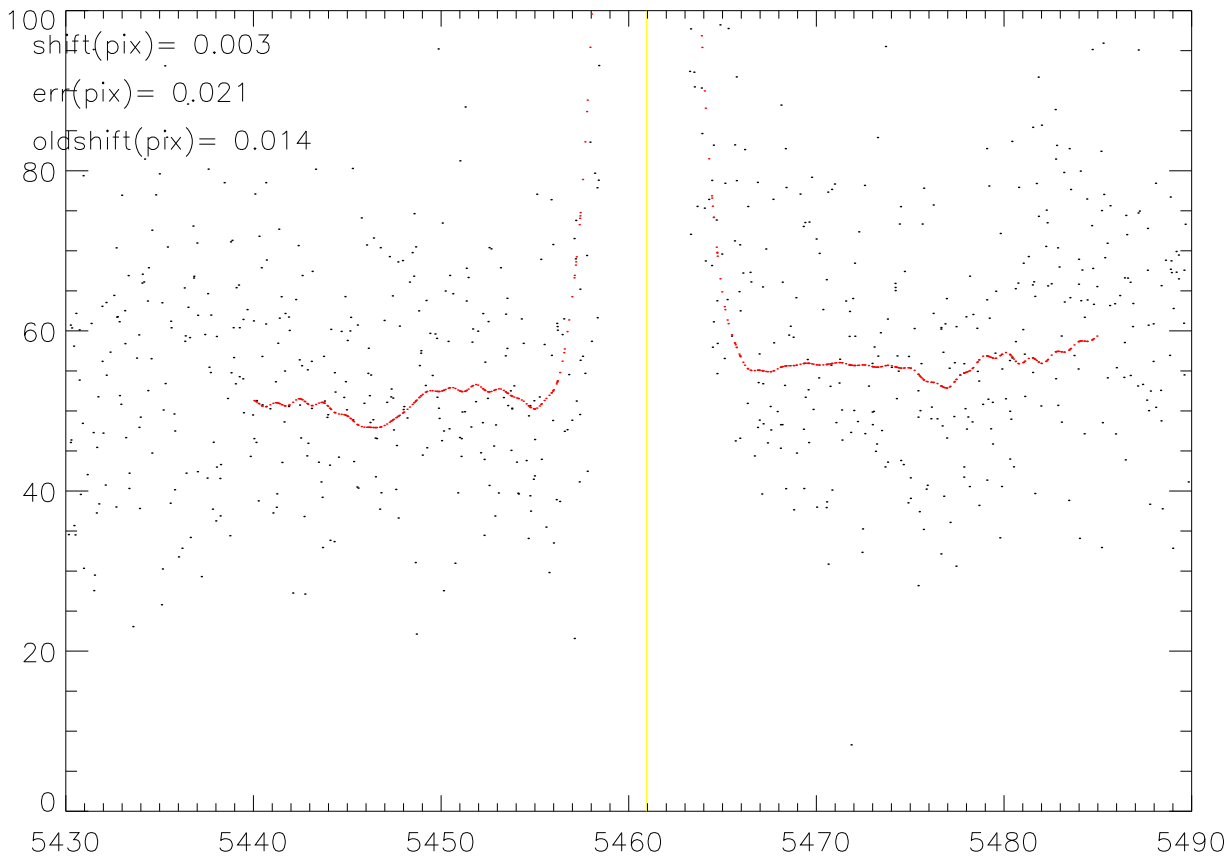

PLATE=2653 MJD=54230 Scattered Light on sdR-b2-00044757.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.847
Max value = 5.196
Thu Feb 14 21:12:48 2008

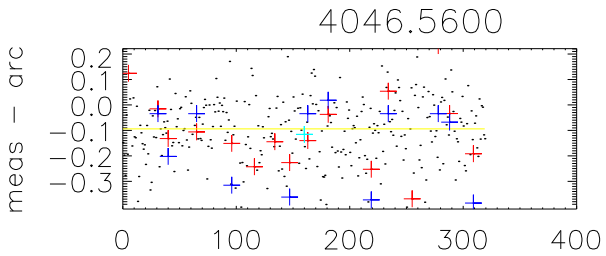

PLATE=2653 MJD=54230 Extraction chi^2 for sdR-b2-00044757.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

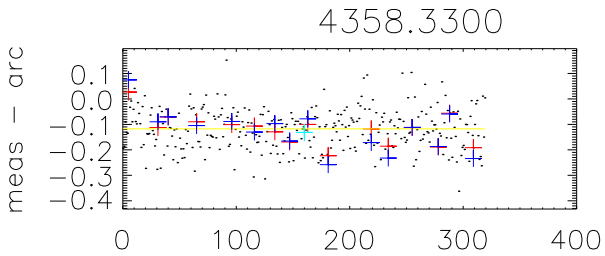

4046.5600
off: −0.30
sig: 0.067
4358.3300
off: −0.12
sig: 0.021
5460.9400
off: 0.01
sig: 0.018
5577.3390
off: −0.02
sig: 0.003
5889.9500
off: 0.13
sig: 0.010
5895.9240
off: 0.08
sig: 0.012

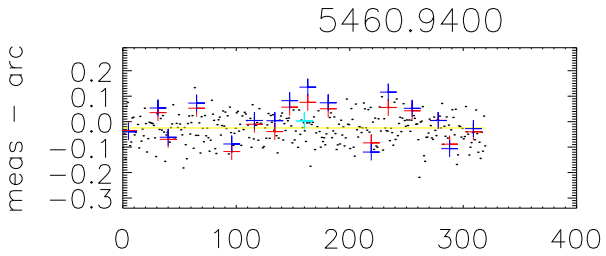

shift(pix)=−0.116
err(pix)= 0.074
oldshift(pix)=−0.299
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

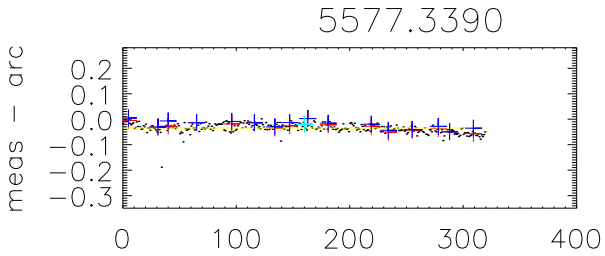

shift(pix)=−0.132
err(pix)= 0.027
oldshift(pix)=−0.123
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

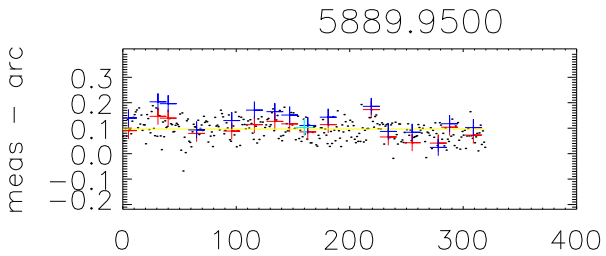

shift(pix)= 0.003
err(pix)= 0.021
oldshift(pix)= 0.014
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

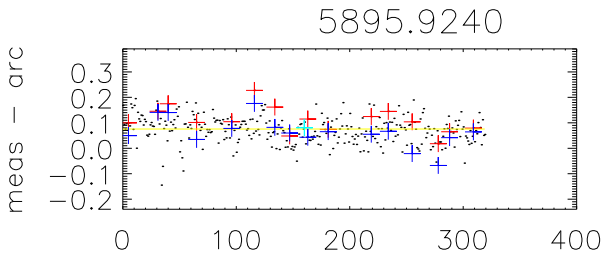

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

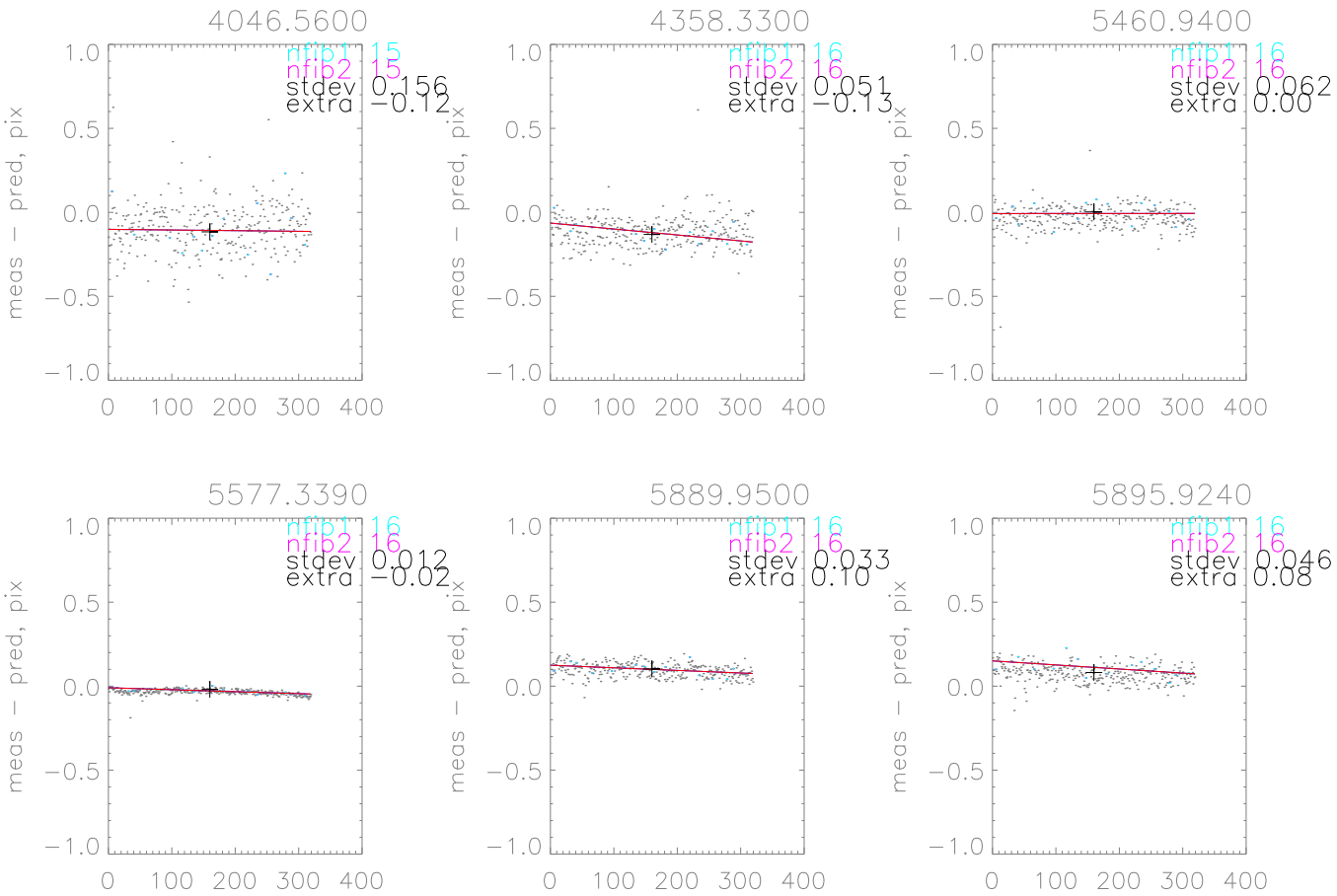

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

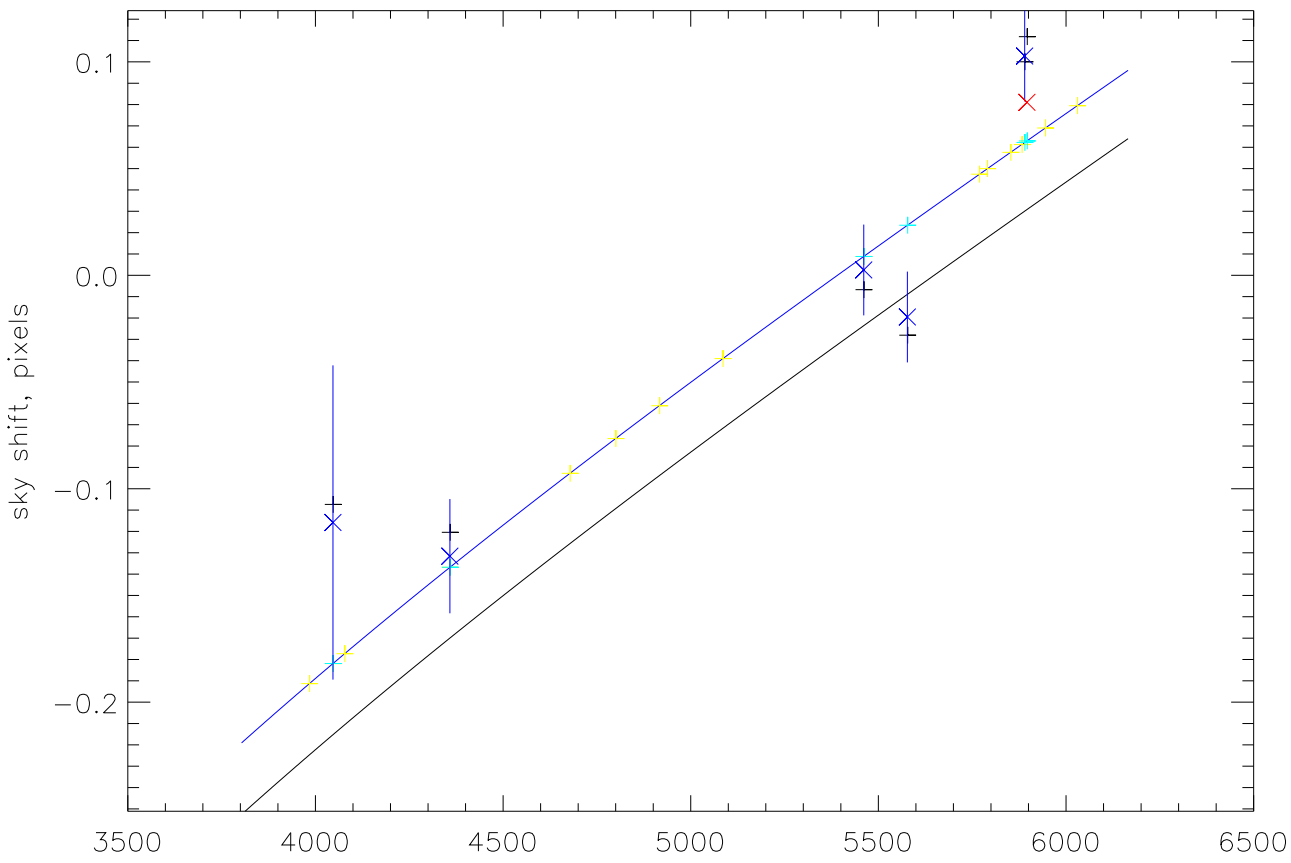

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

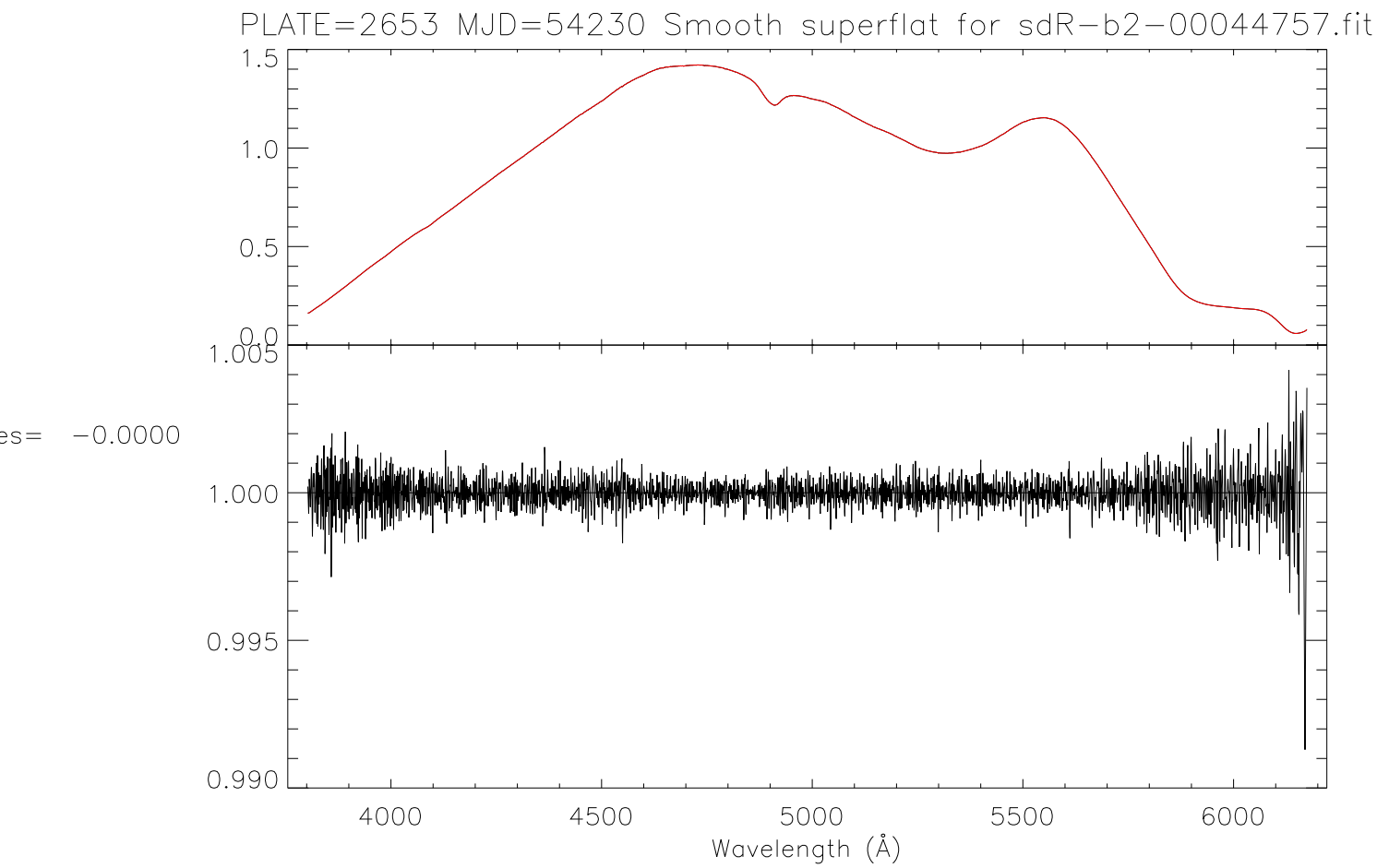

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

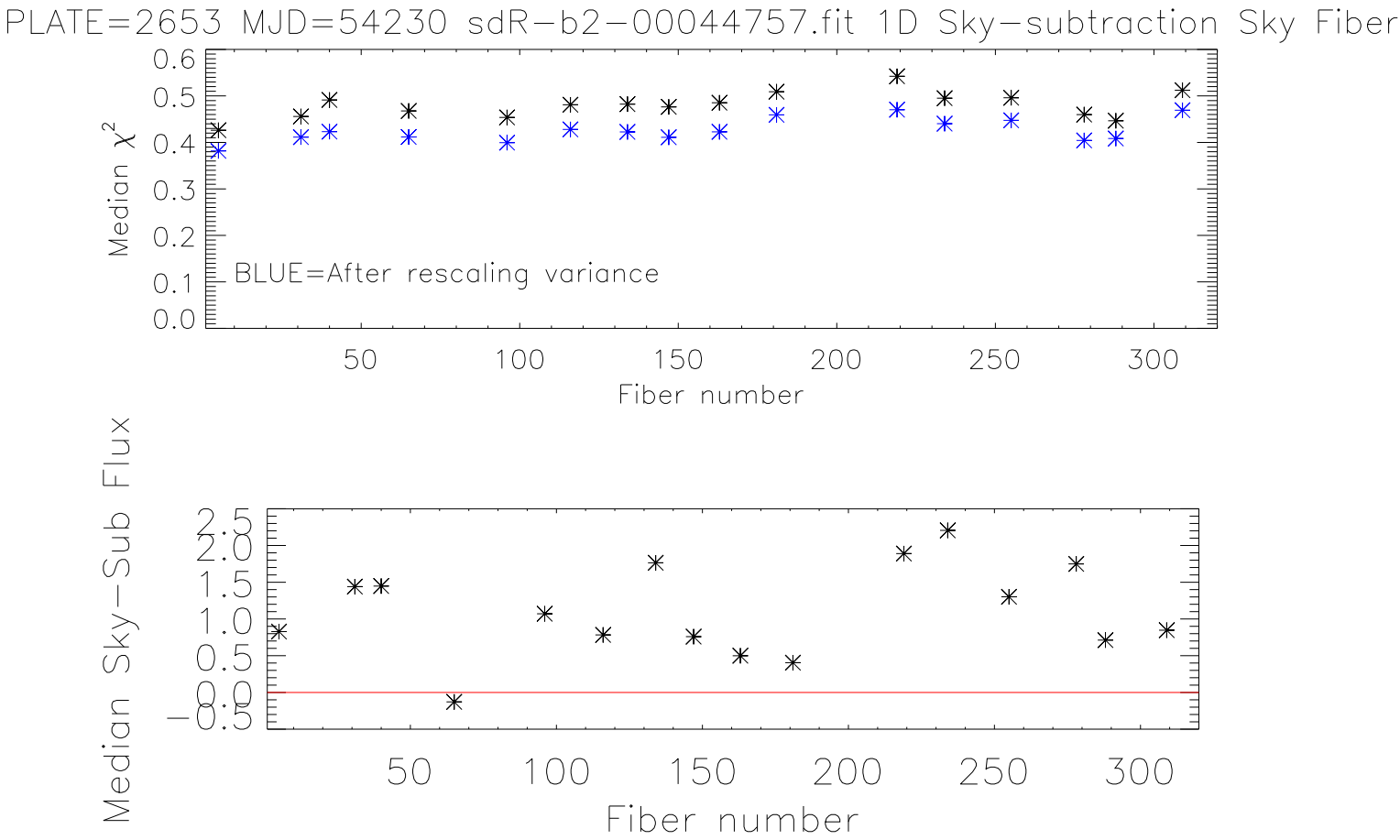

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

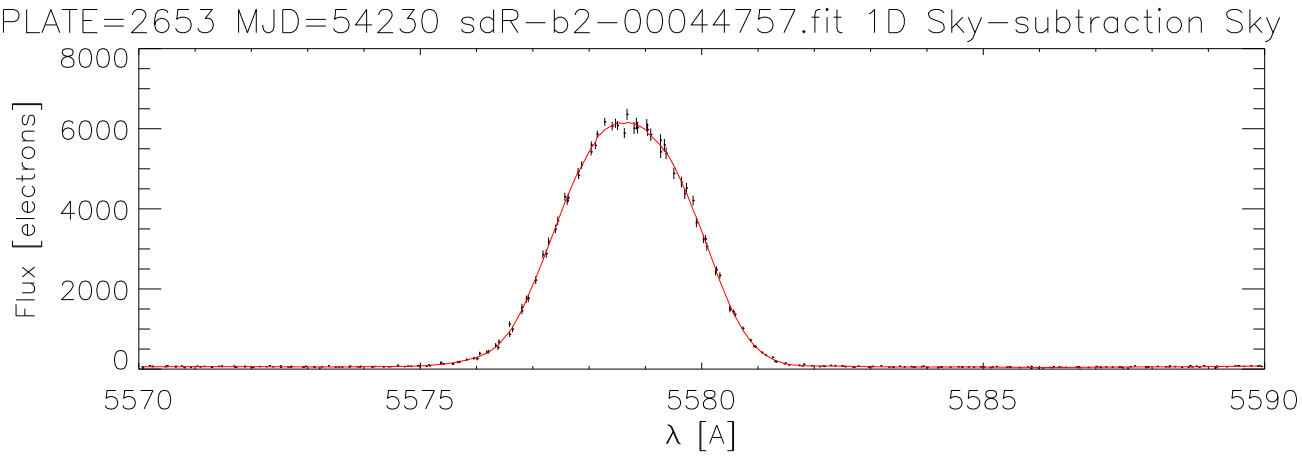

4046.5600
nfib1 15
nfib2 15
stdev 0.156
extra −0.12
4358.3300
nfib1 16
nfib2 16
stdev 0.051
extra −0.13
5460.9400
nfib1 16
nfib2 16
stdev 0.062
extra 0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra −0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra 0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.046
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

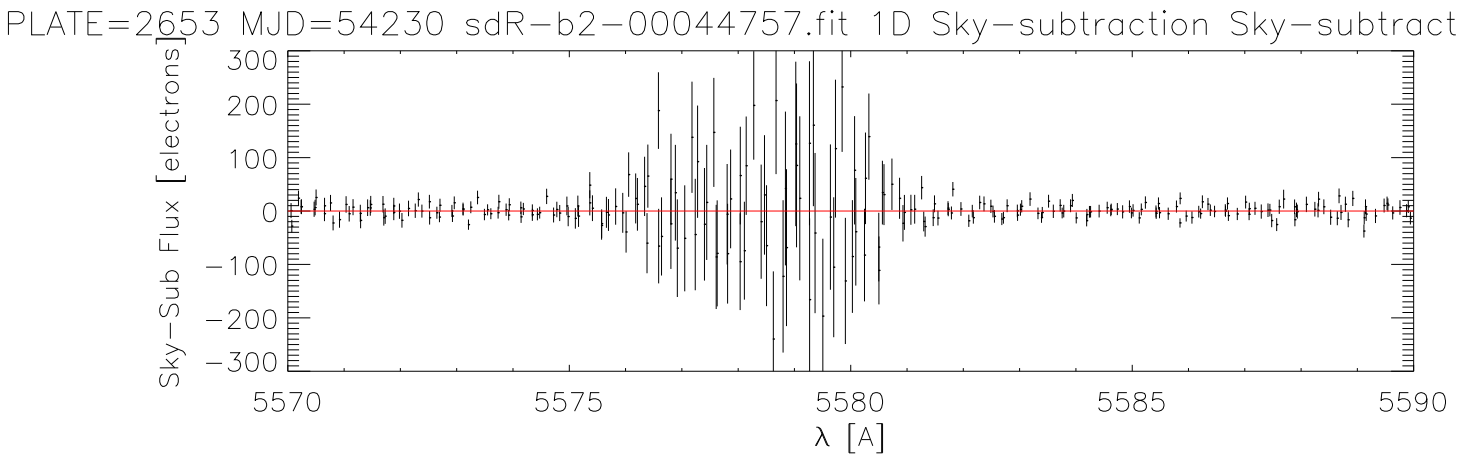

0.1
0.0
−0.1
−0.2
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

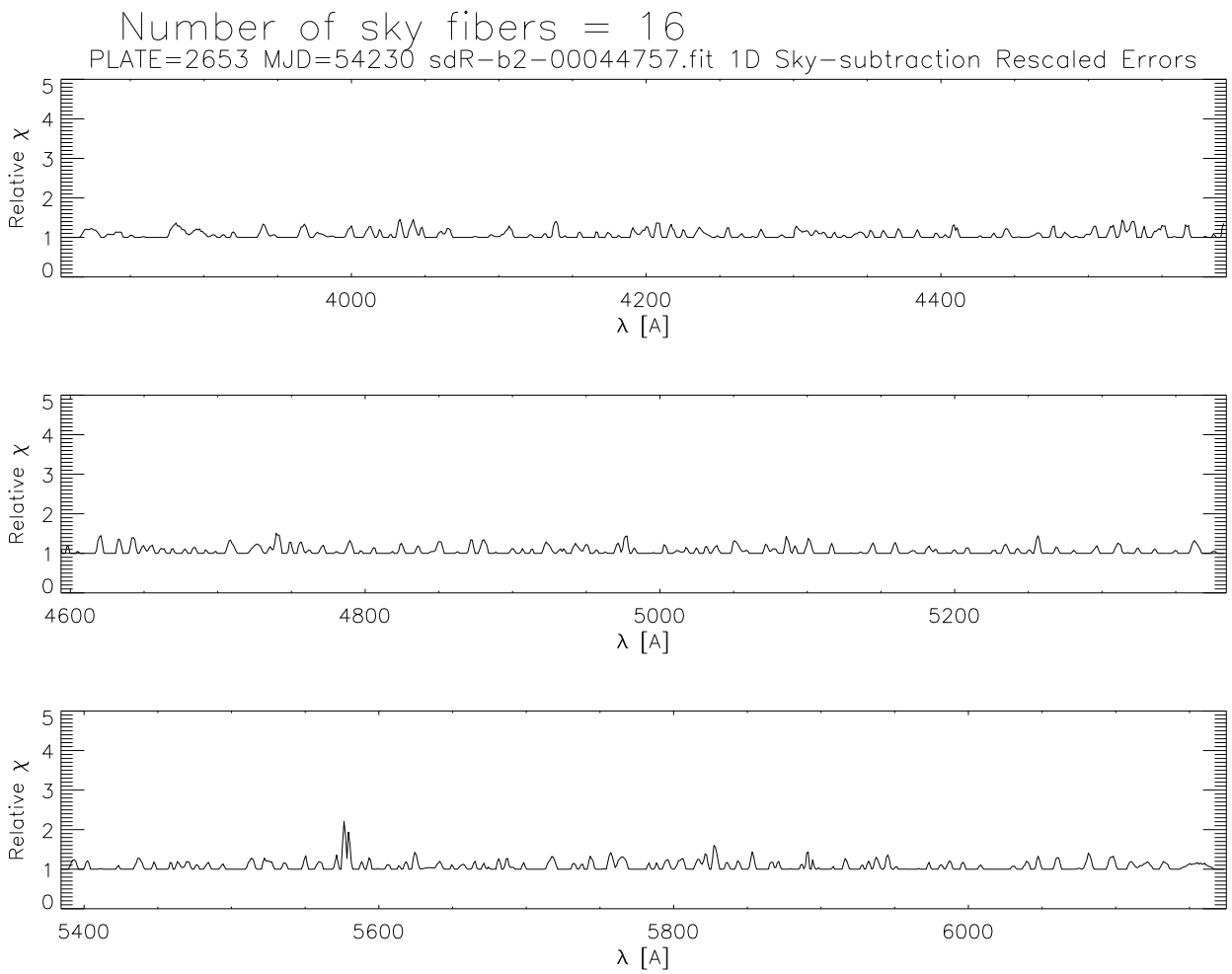

PLATE=2653 MJD=54230 Smooth superflat for sdR-b2-00044757.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

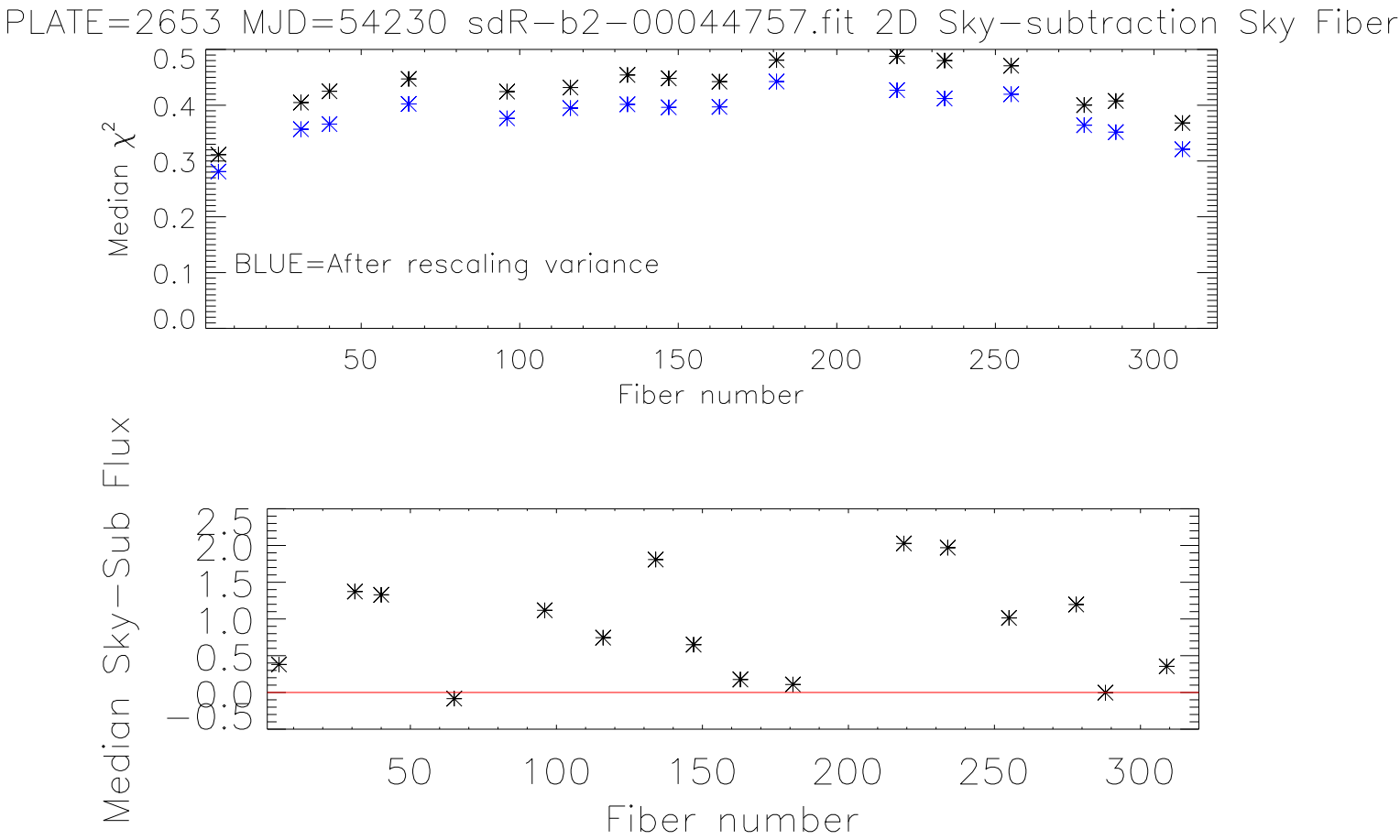
es= −0.0000

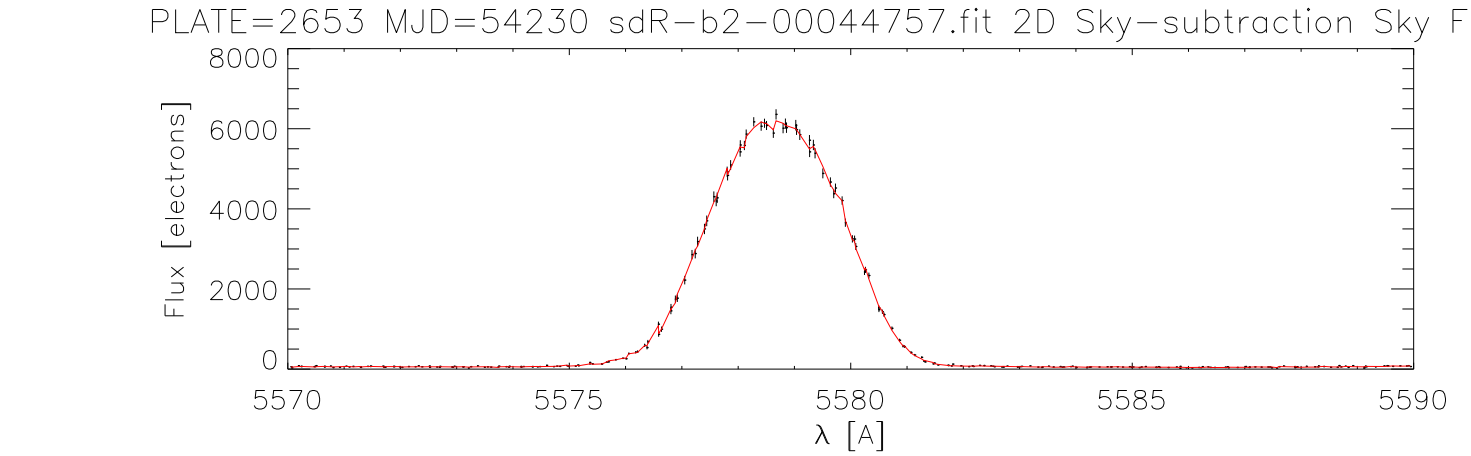

PLATE=2653 MJD=54230 sdR-b2-00044757.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

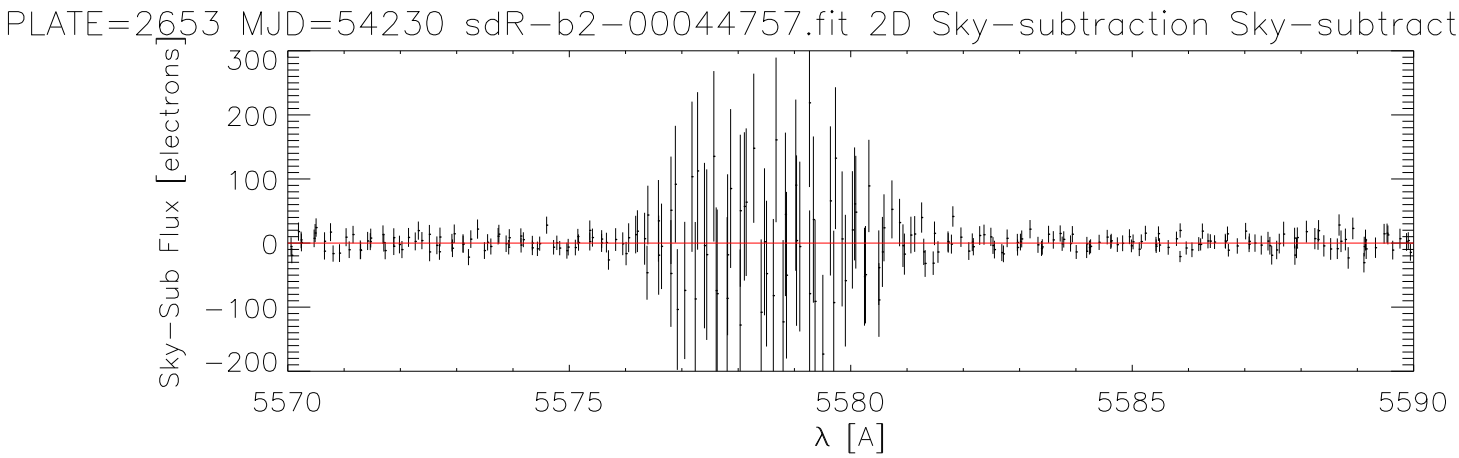

PLATE=2653 MJD=54230 sdR-b2-00044757.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

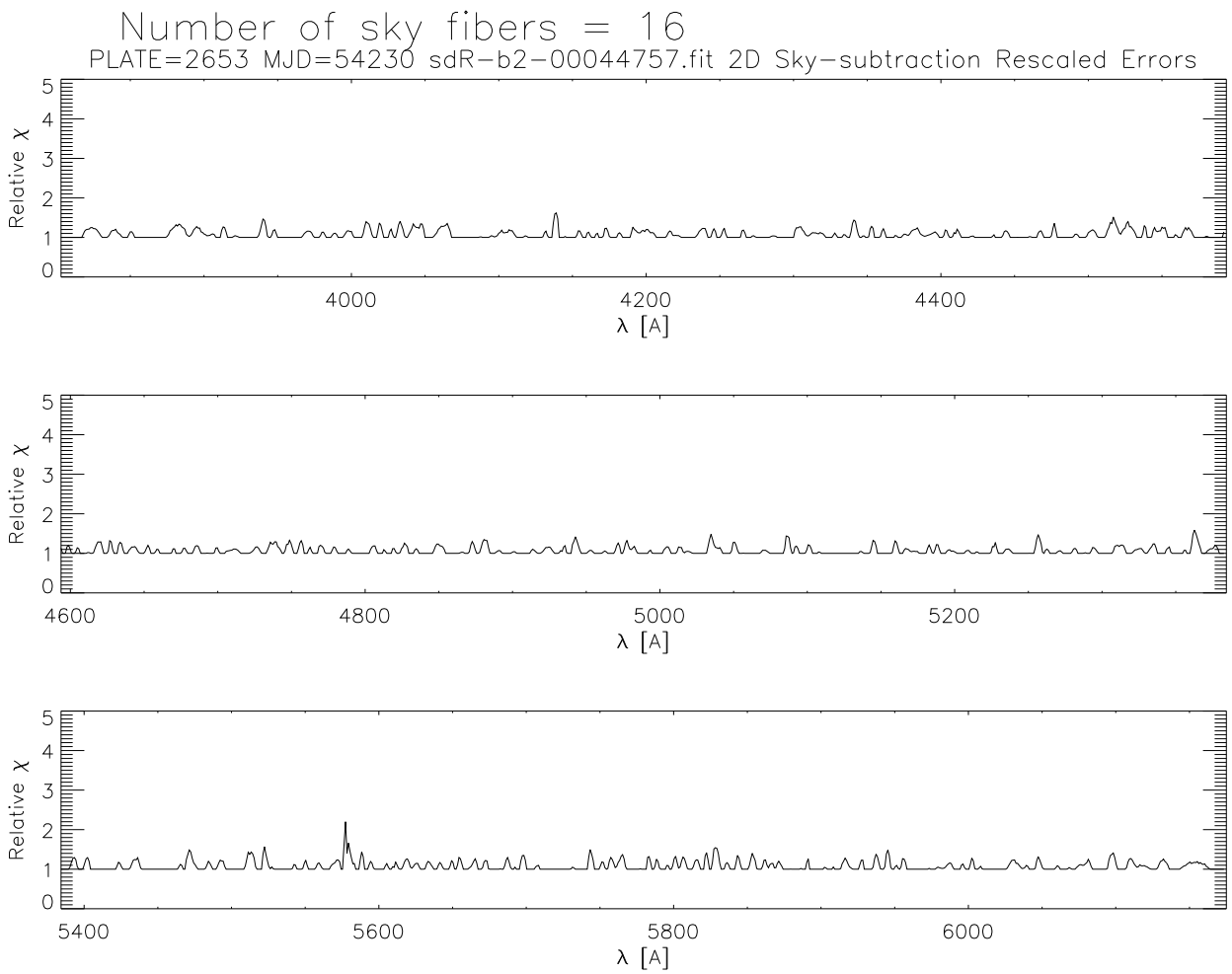

PLATE=2653 MJD=54230 sdR-b2-00044757.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

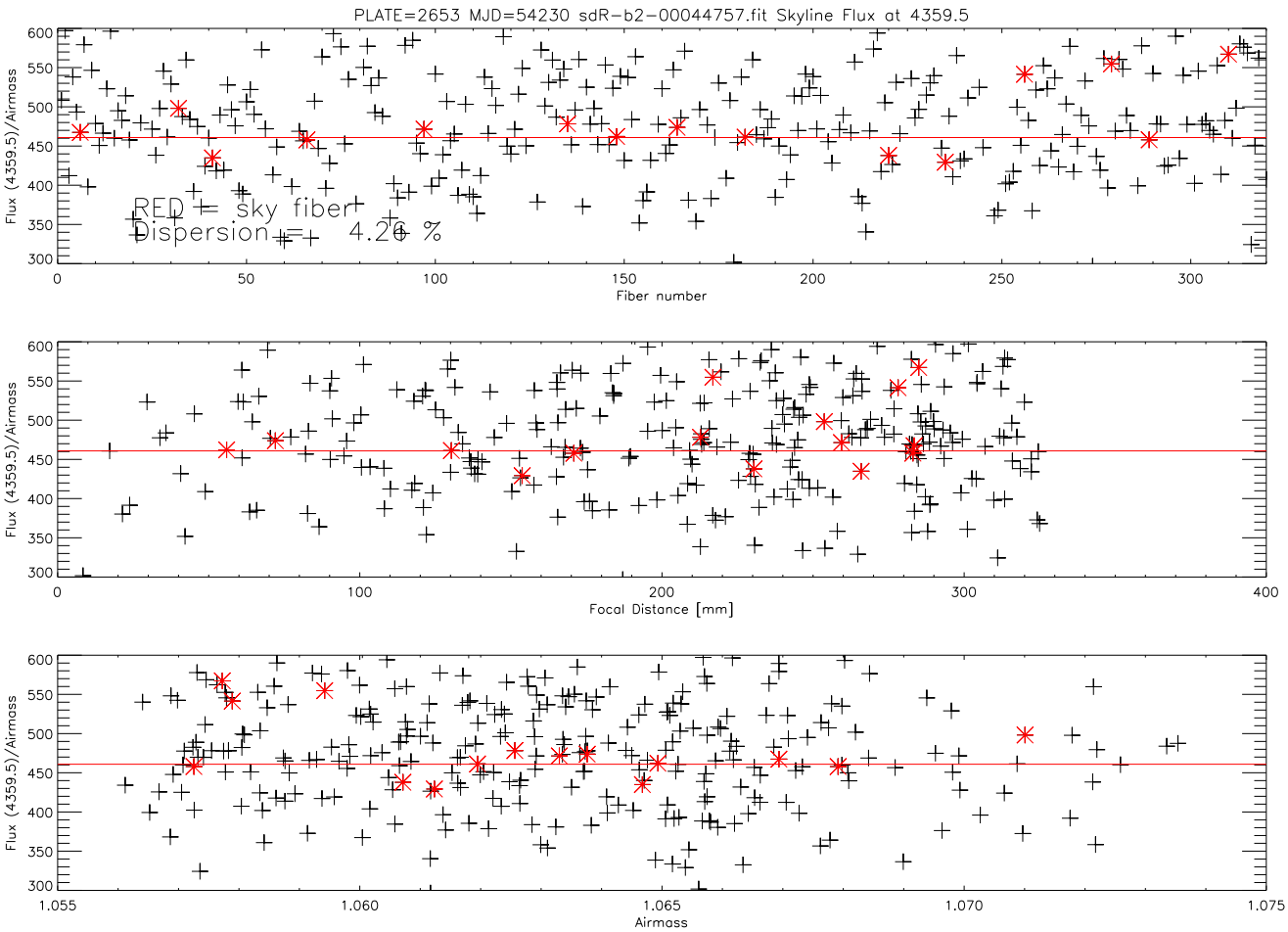

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b2-00044757.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

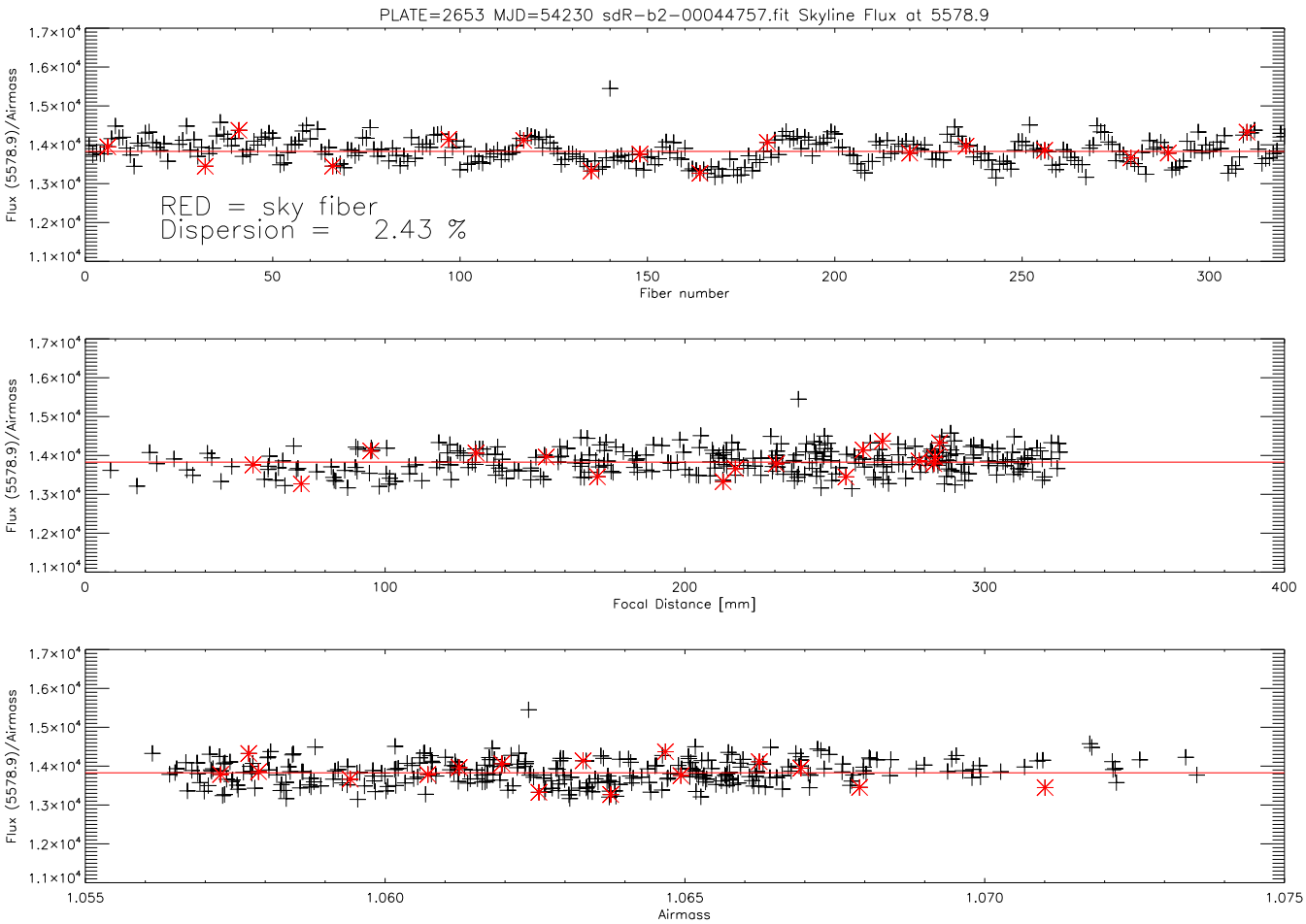

PLATE=2653 MJD=54230 sdR-b2-00044757.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

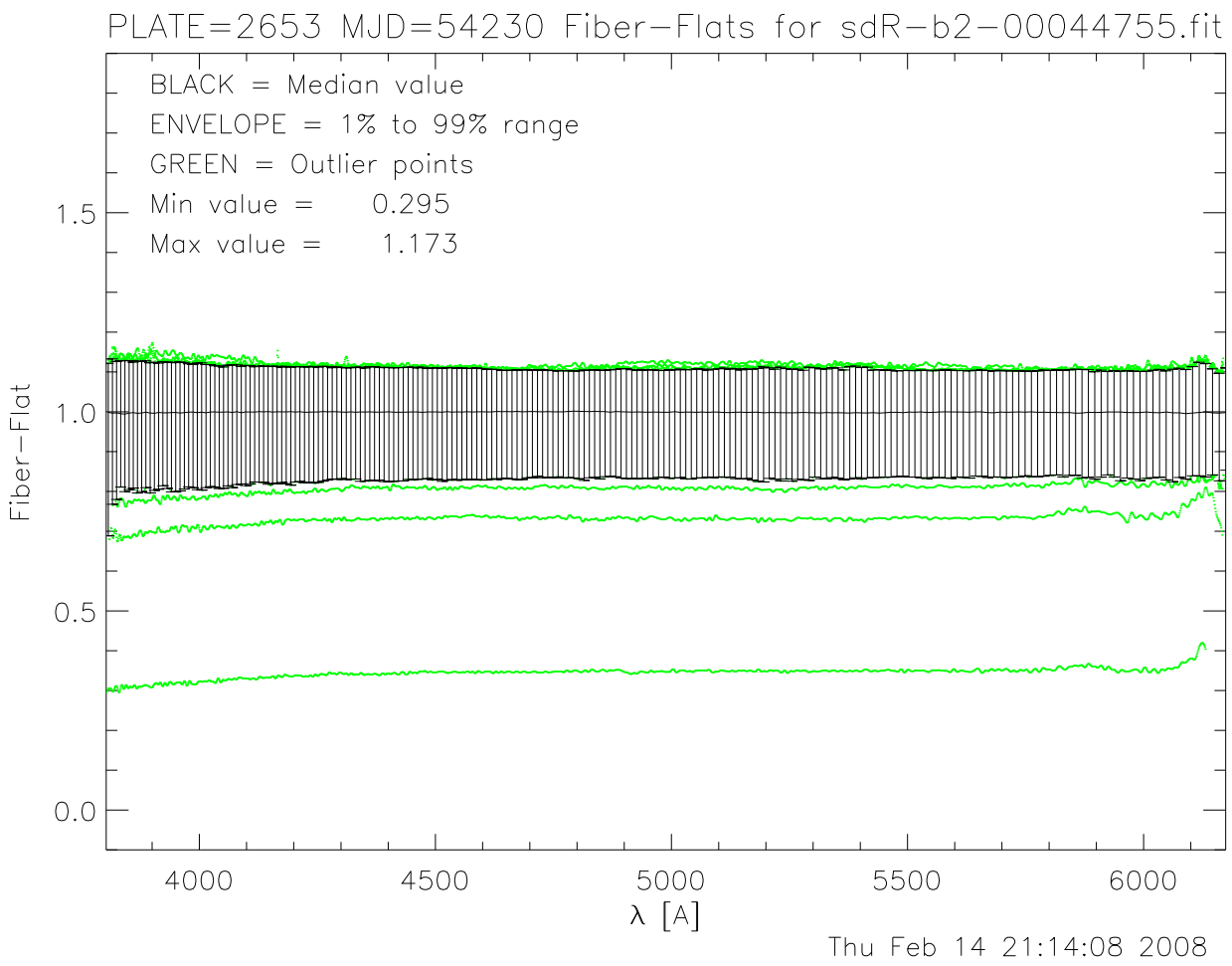

PLATE=2653 MJD=54230 sdR-b2-00044757.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

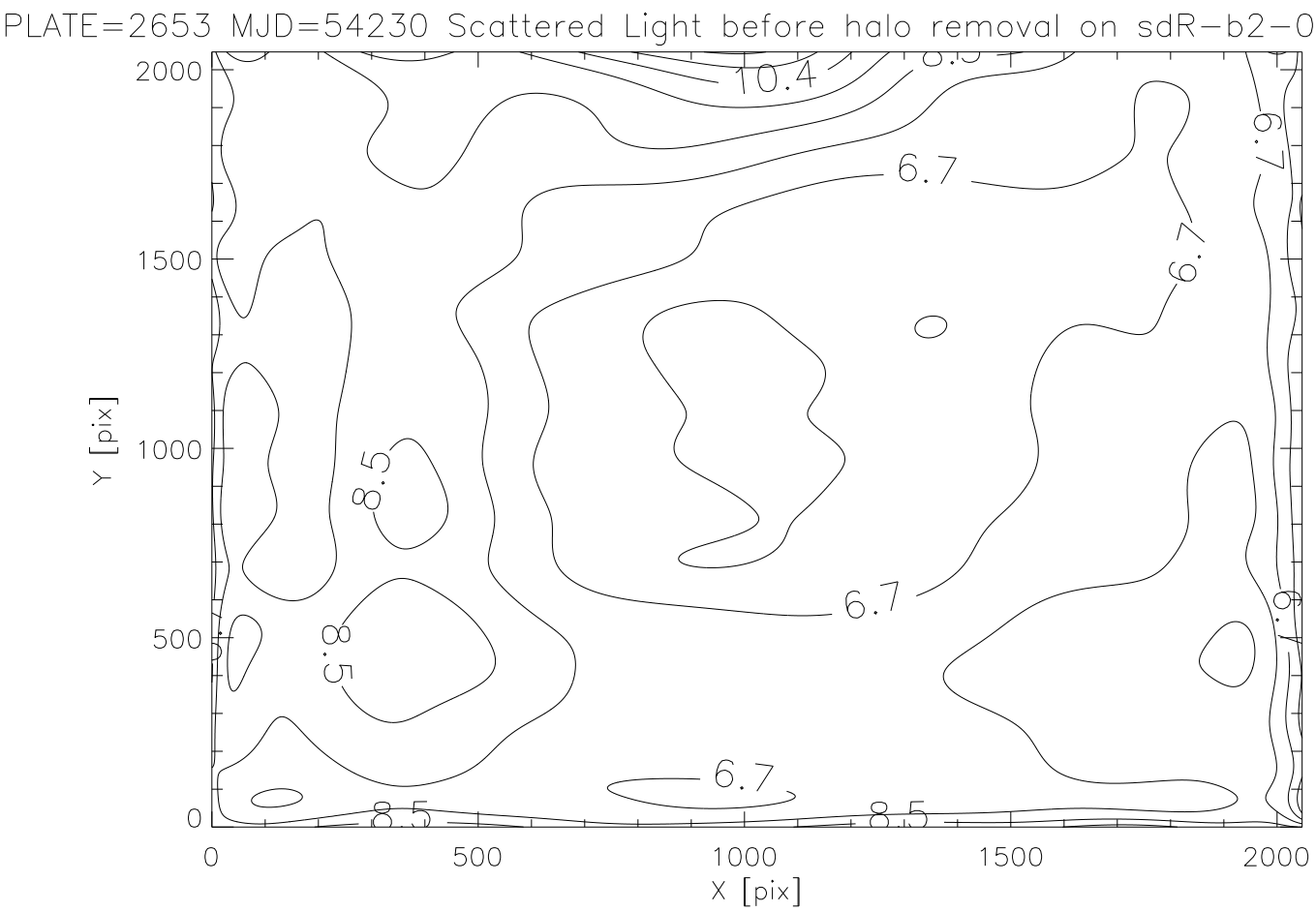

PLATE=2653 MJD=54230 sdR-b2-00044757.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

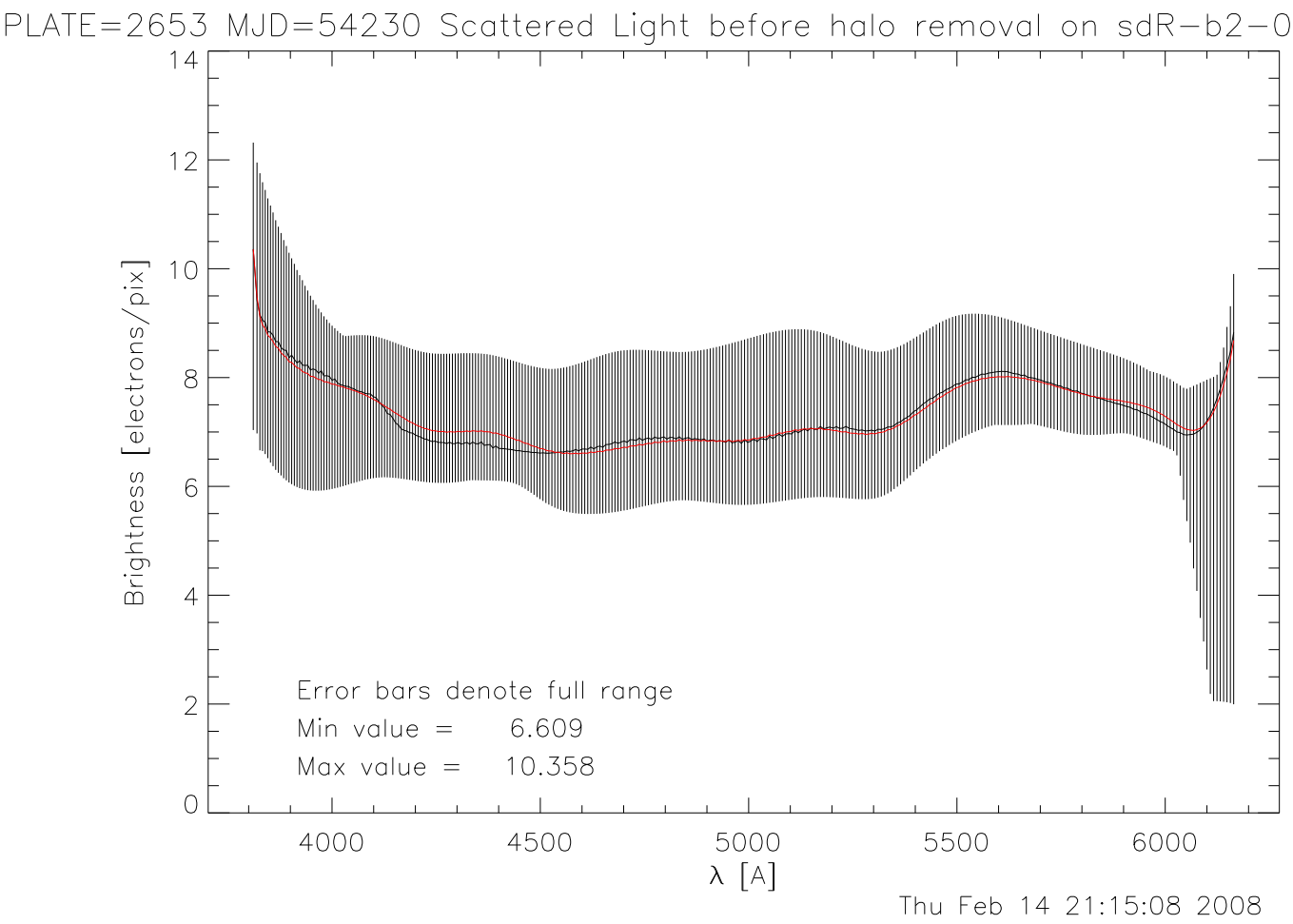

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b2-00044757.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

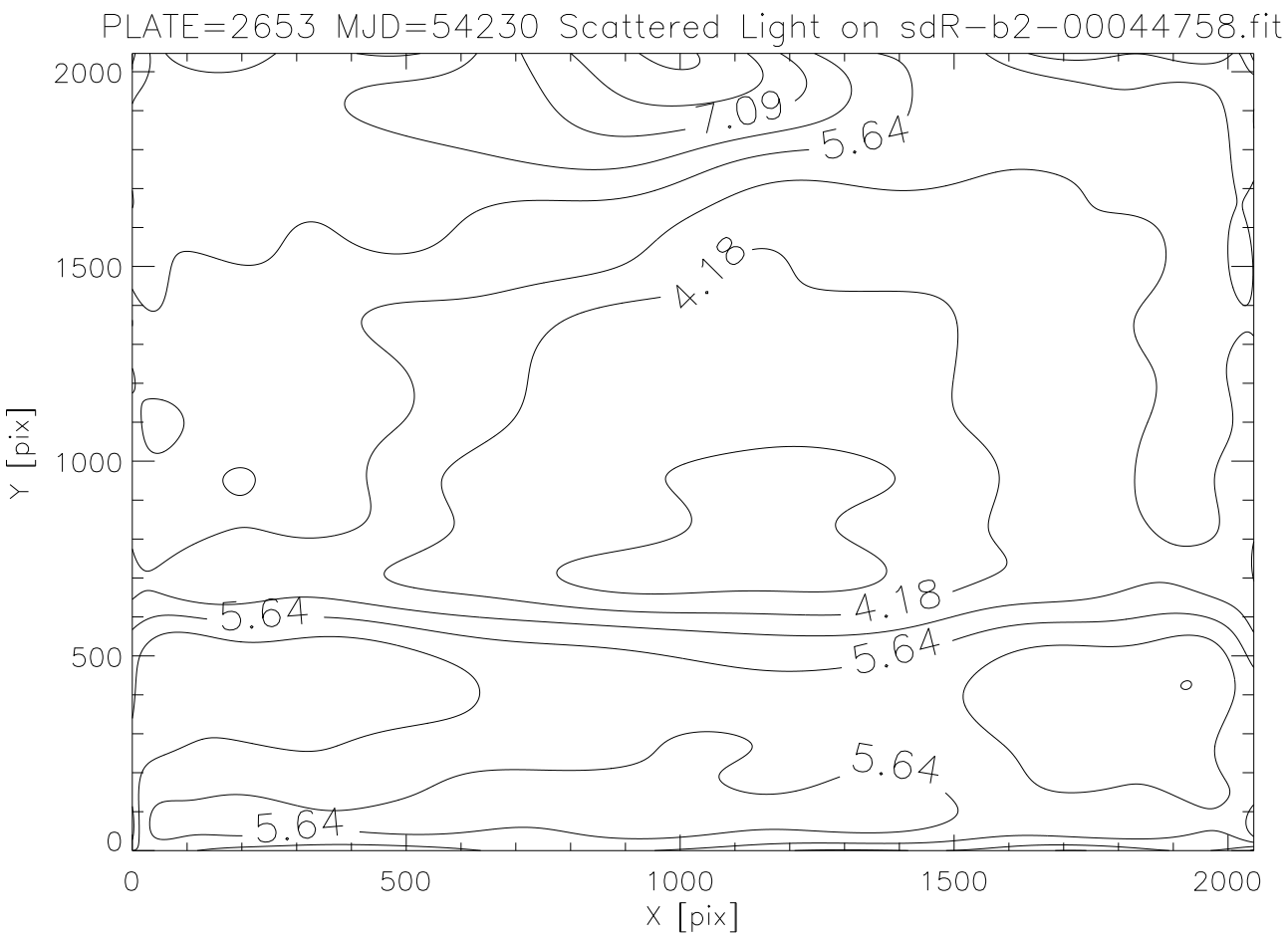

PLATE=2653 MJD=54230 sdR-b2-00044757.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.26 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

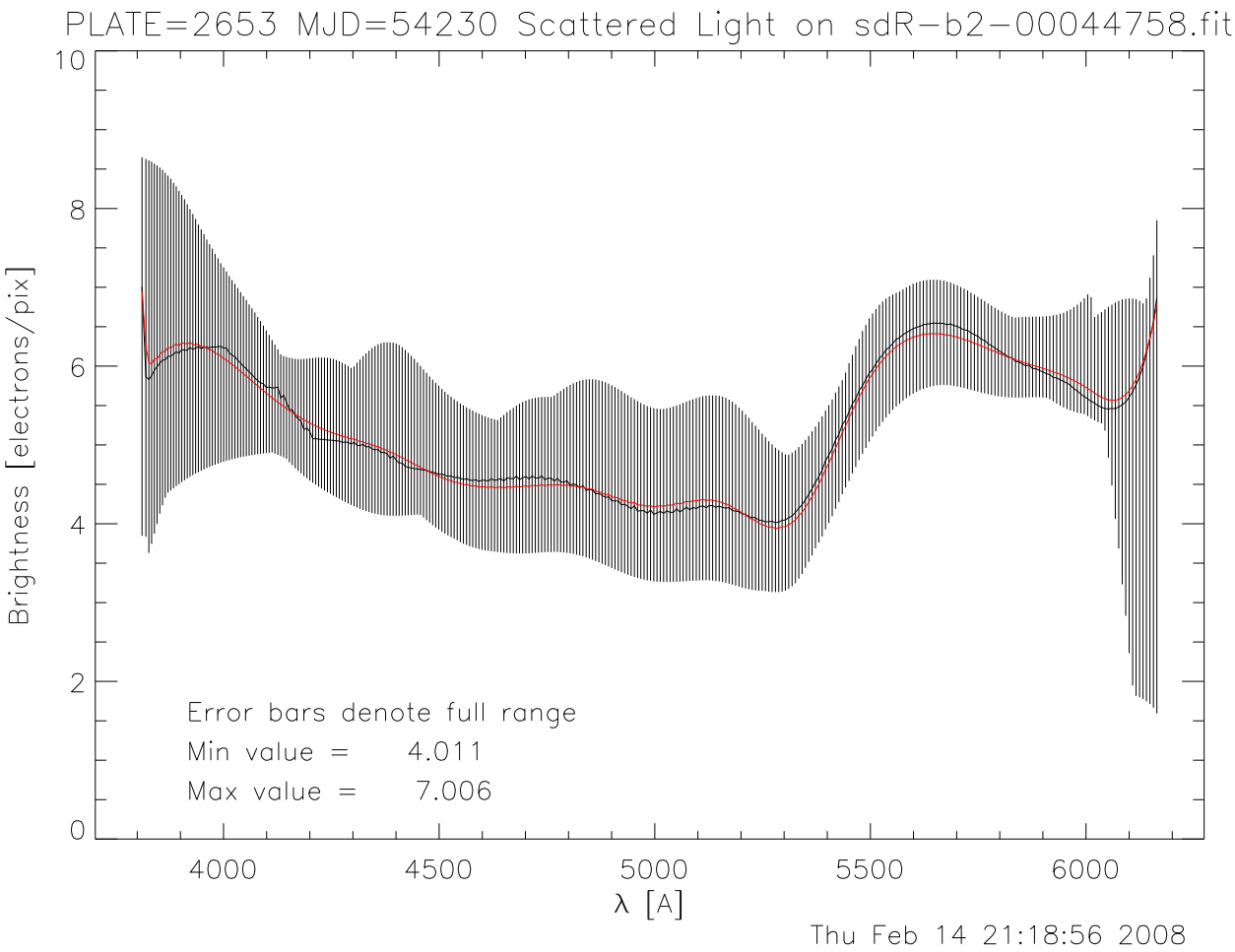

PLATE=2653 MJD=54230 sdR-b2-00044757.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.43 %
Fiber number
Focal Distance [mm]
Airmass

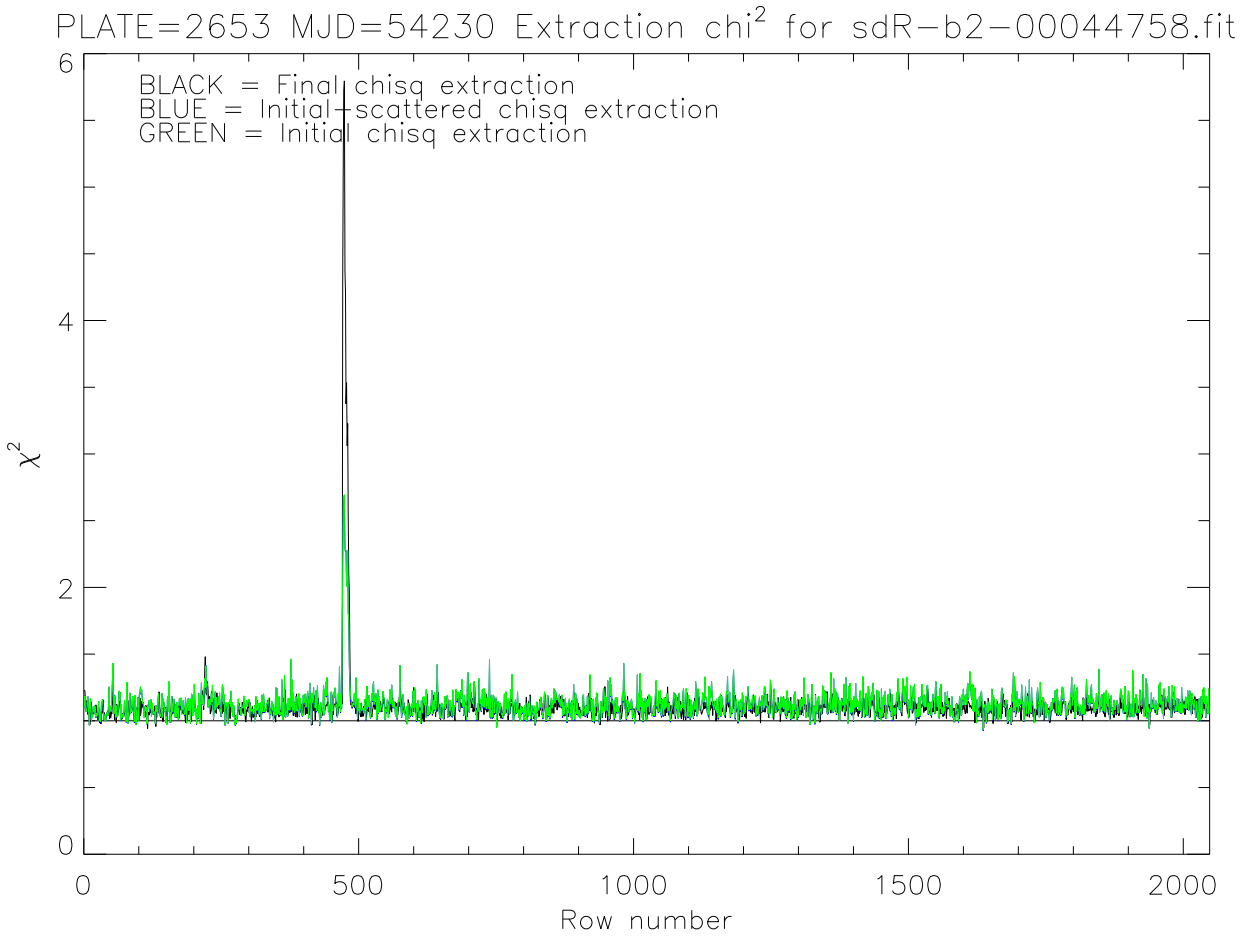

PLATE=2653 MJD=54230 Fiber-Flats for sdR-b2-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.295
Max value = 1.173
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 14 21:14:08 2008

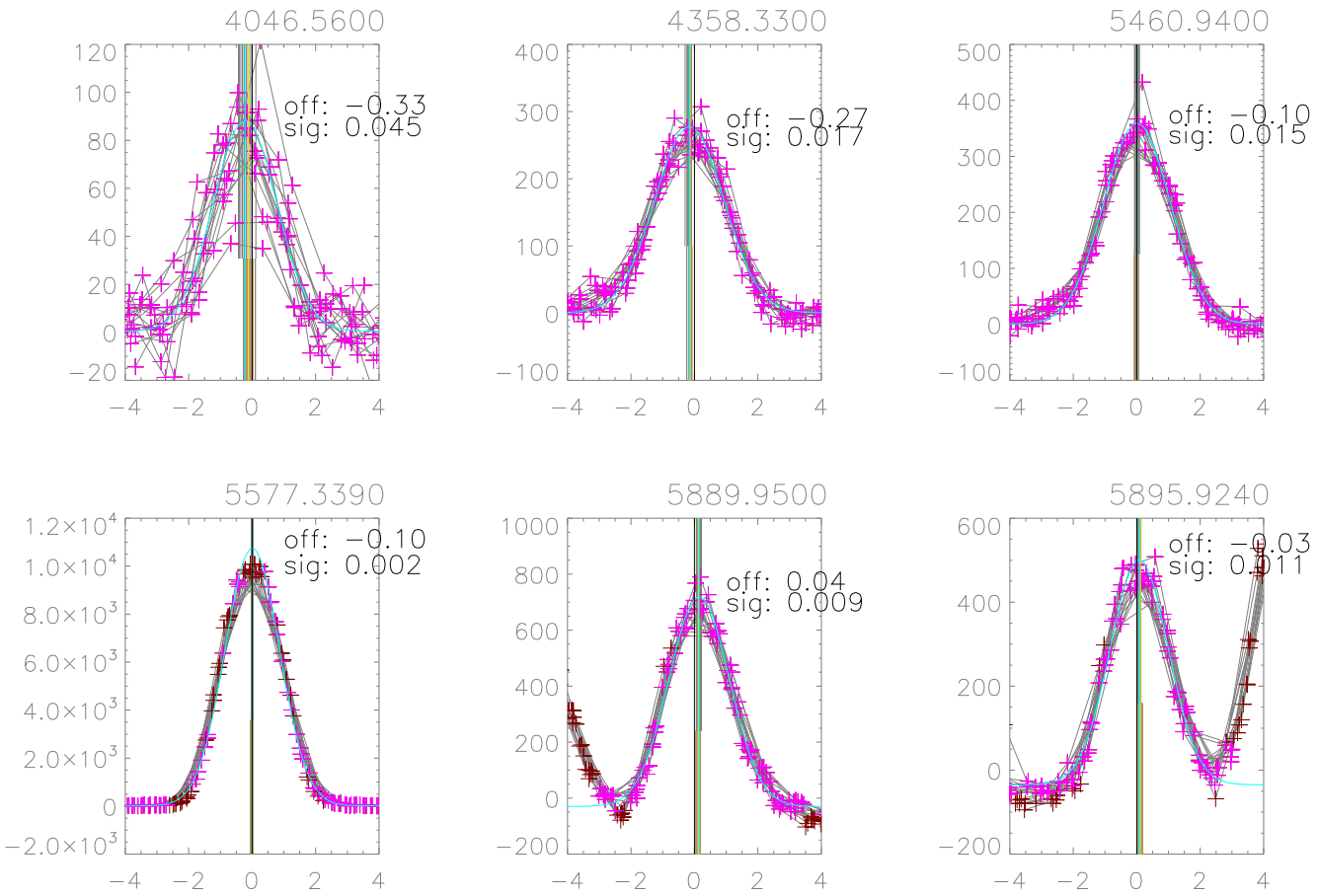

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR−b2−00044758.f
10.4
6.7
6.7
6.7
6.7
8.5
8.5
8.5
8.5
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

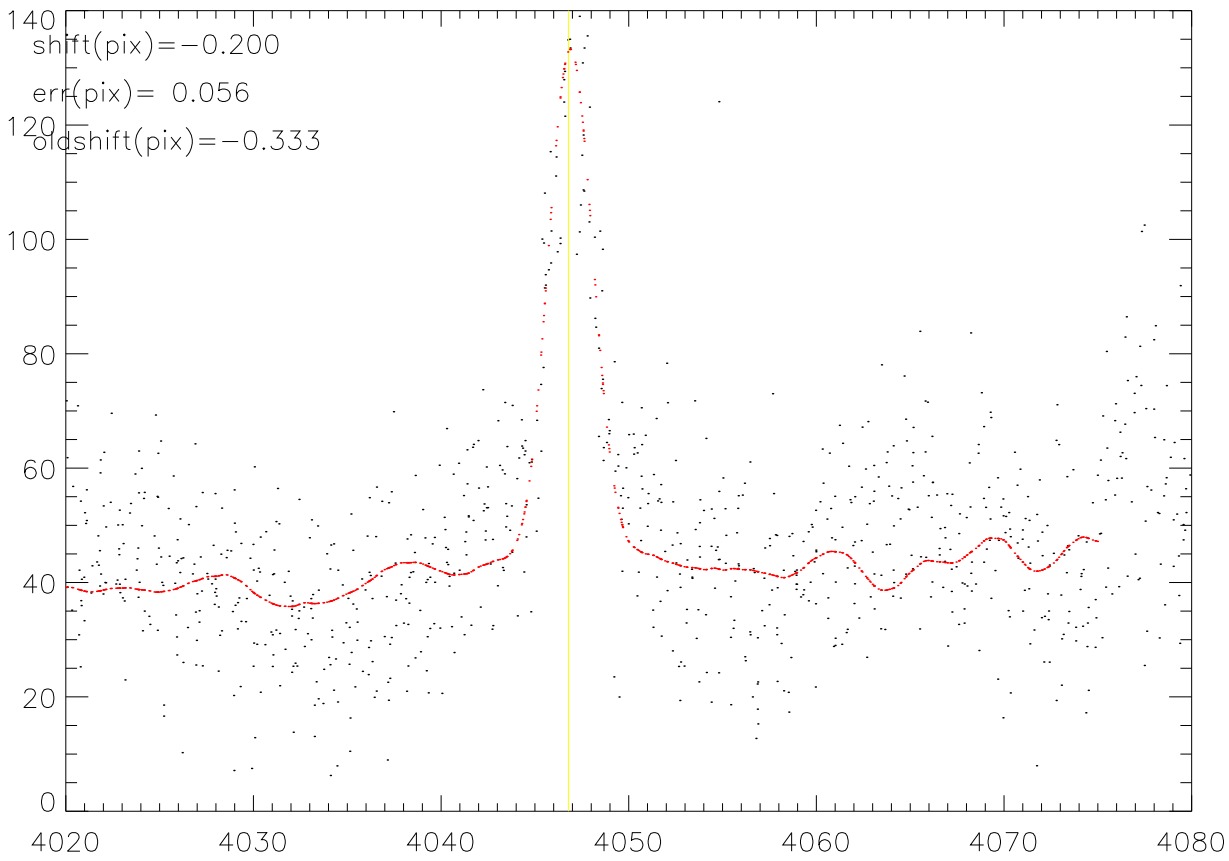

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-b2-00044758.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.609
Max value = 10.358
Thu Feb 14 21:15:08 2008

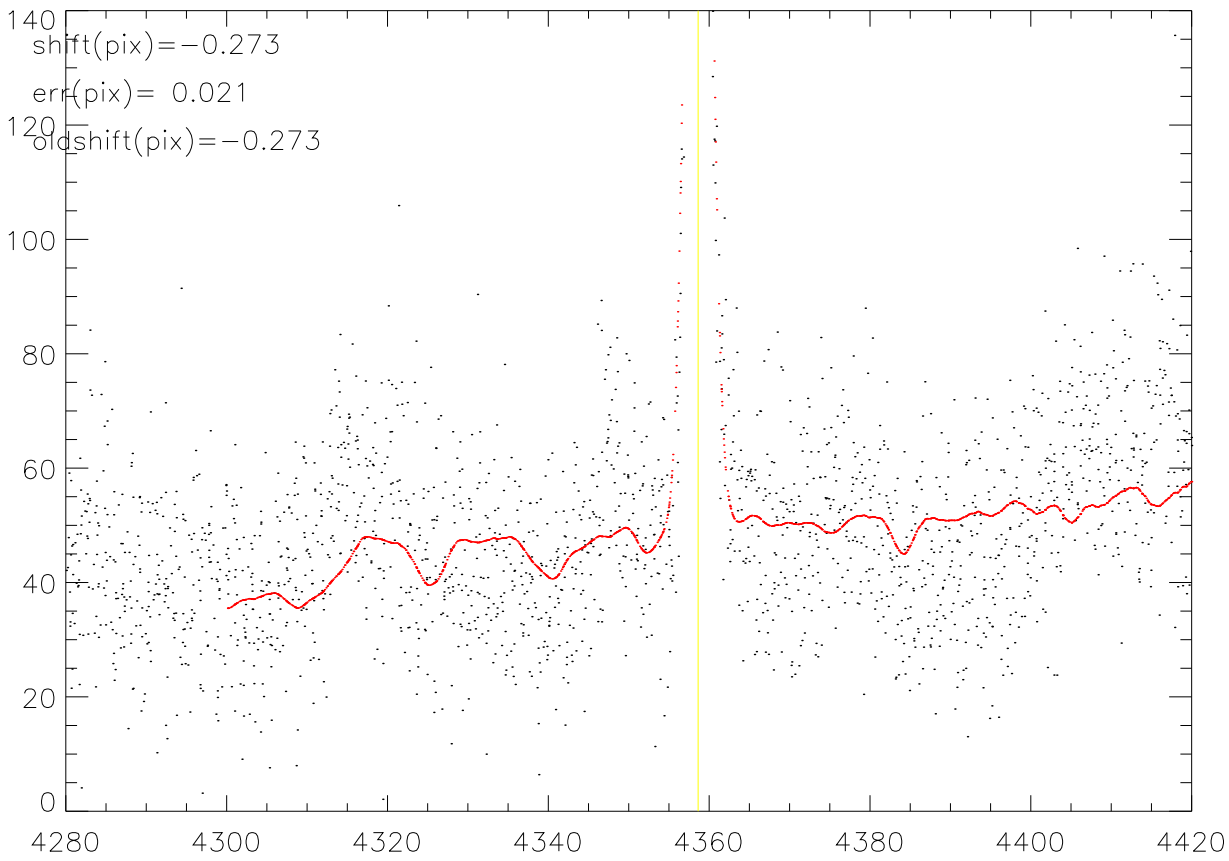

PLATE=2653 MJD=54230 Scattered Light on sdR-b2-00044758.fit
7.09
5.64
4.18
4.18
5.64
5.64
5.64
5.64
Y [pix]
X [pix]
0
500
1000
1500
2000

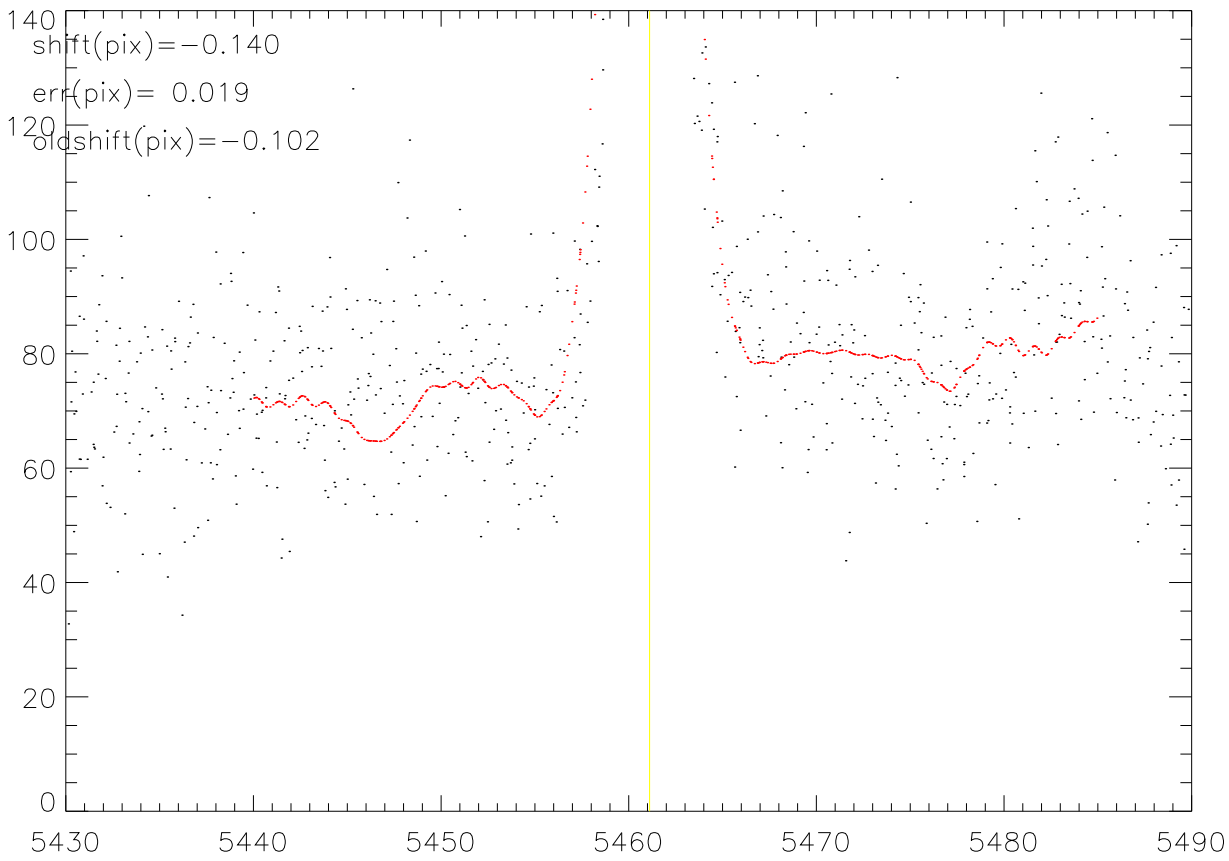

PLATE=2653 MJD=54230 Scattered Light on sdR-b2-00044758.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.011
Max value = 7.006
Thu Feb 14 21:18:56 2008

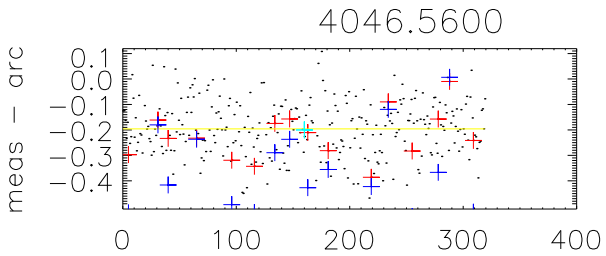

PLATE=2653 MJD=54230 Extraction chi^2 for sdR-b2-00044758.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

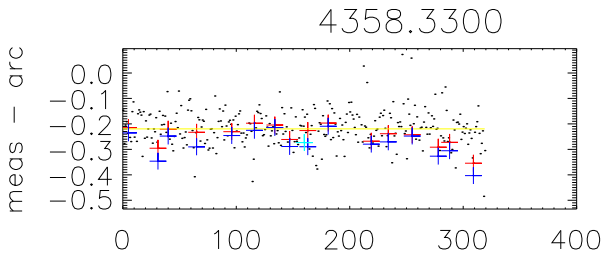

4046.5600
off: −0.33
sig: 0.045
4358.3300
off: −0.27
sig: 0.017
5460.9400
off: −0.10
sig: 0.015
5577.3390
off: −0.10
sig: 0.002
5889.9500
off: 0.04
sig: 0.009
5895.9240
off: −0.03
sig: 0.011

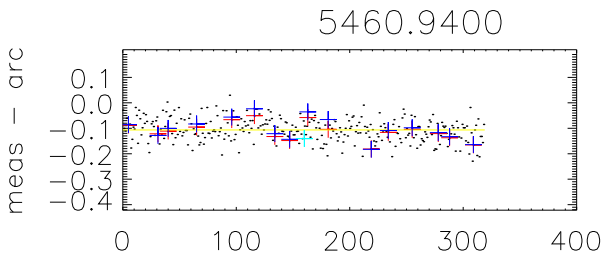

shift(pix)=−0.200
err(pix)= 0.056
oldshift(pix)=−0.333
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

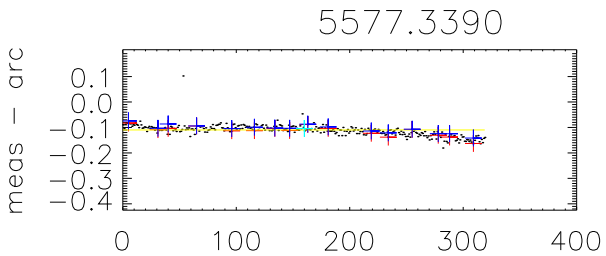

shift(pix)=−0.273
err(pix)= 0.021
oldshift(pix)=−0.273
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

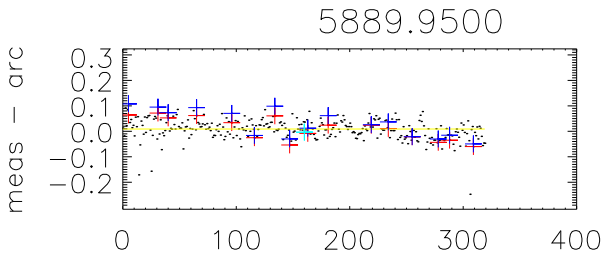

shift(pix)=−0.140
err(pix)= 0.019
oldshift(pix)=−0.102
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

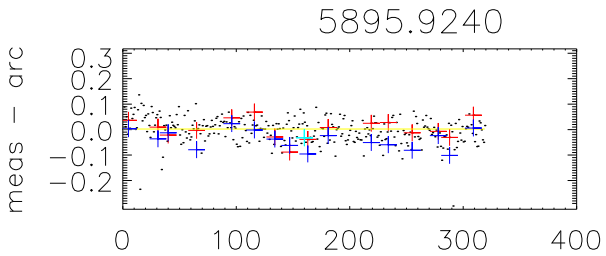

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

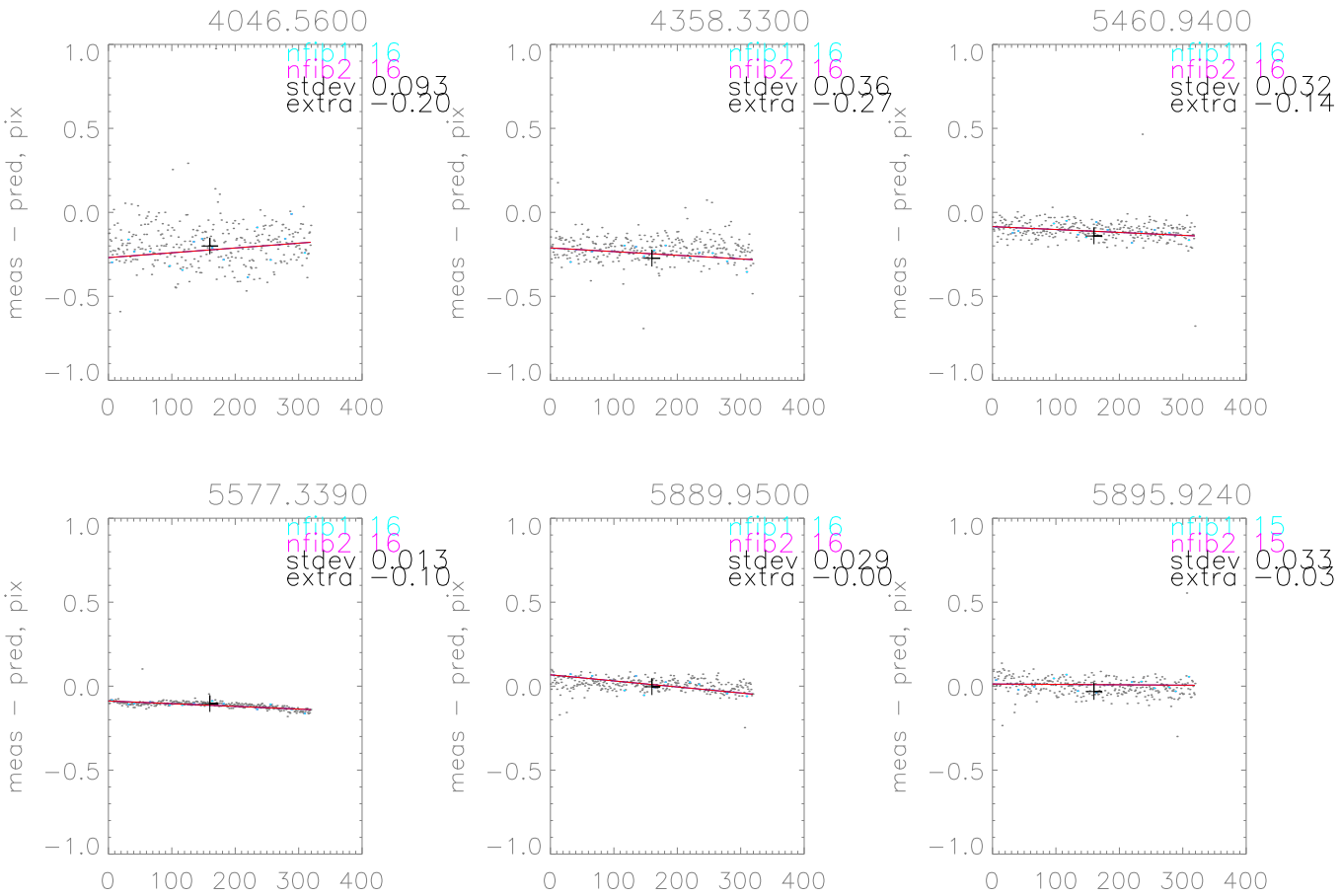

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

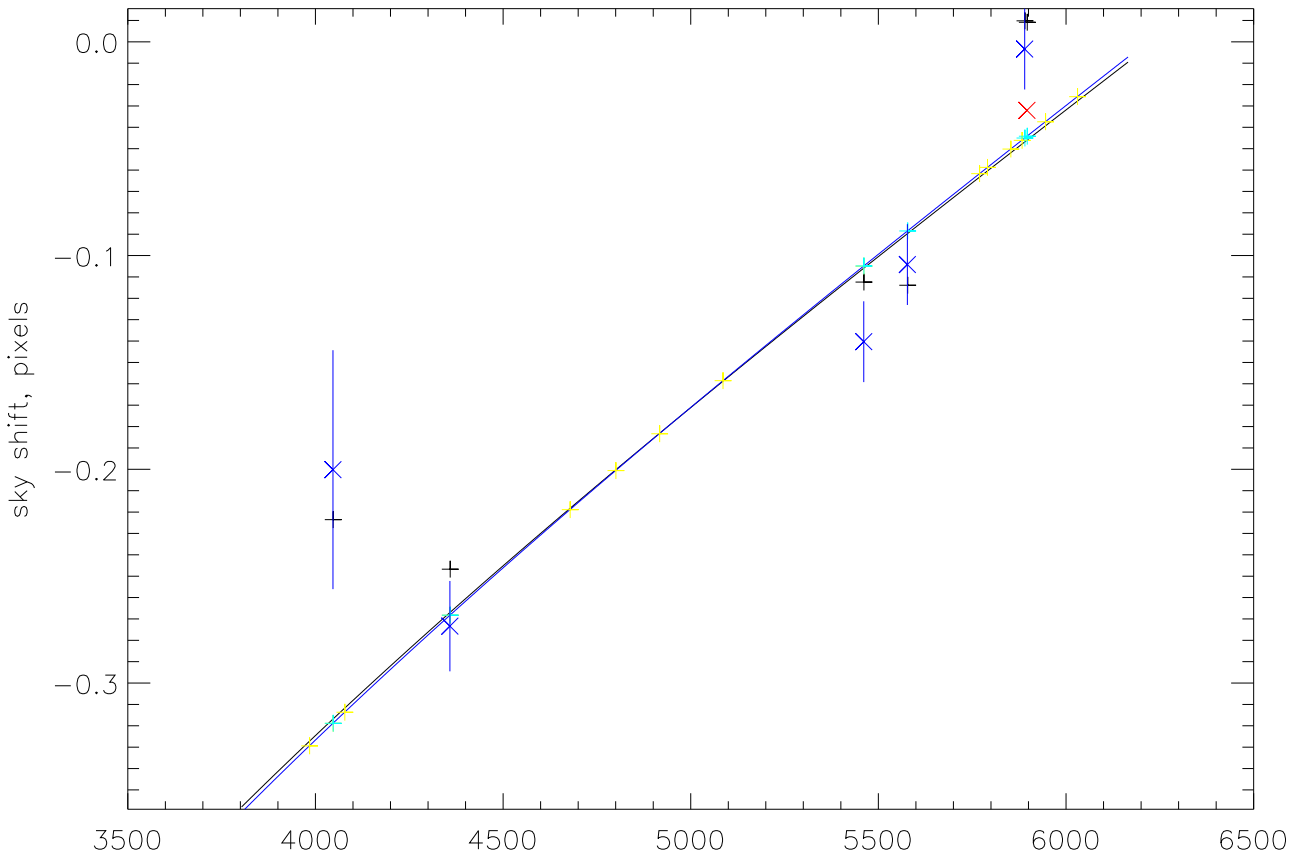

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

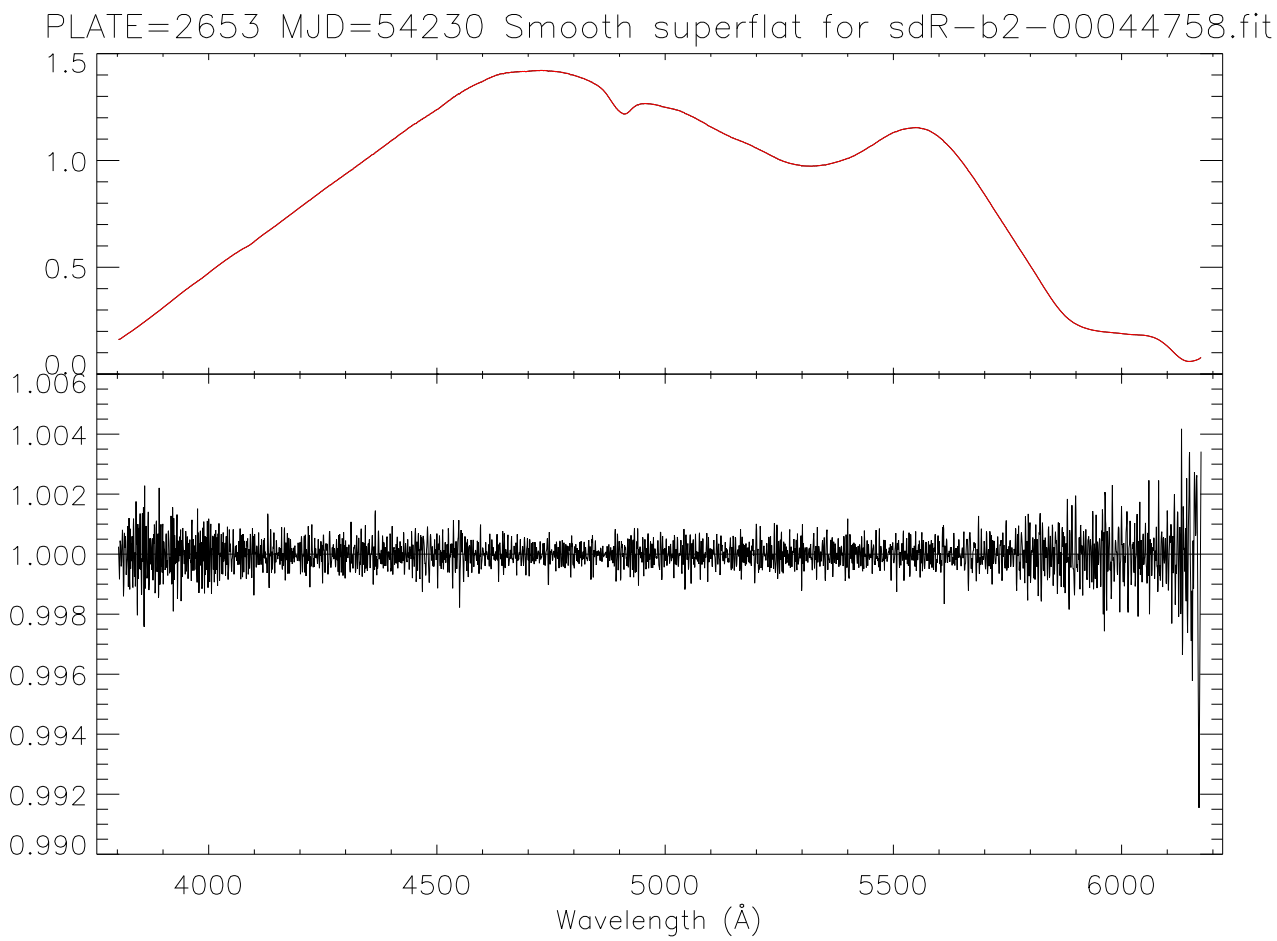

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

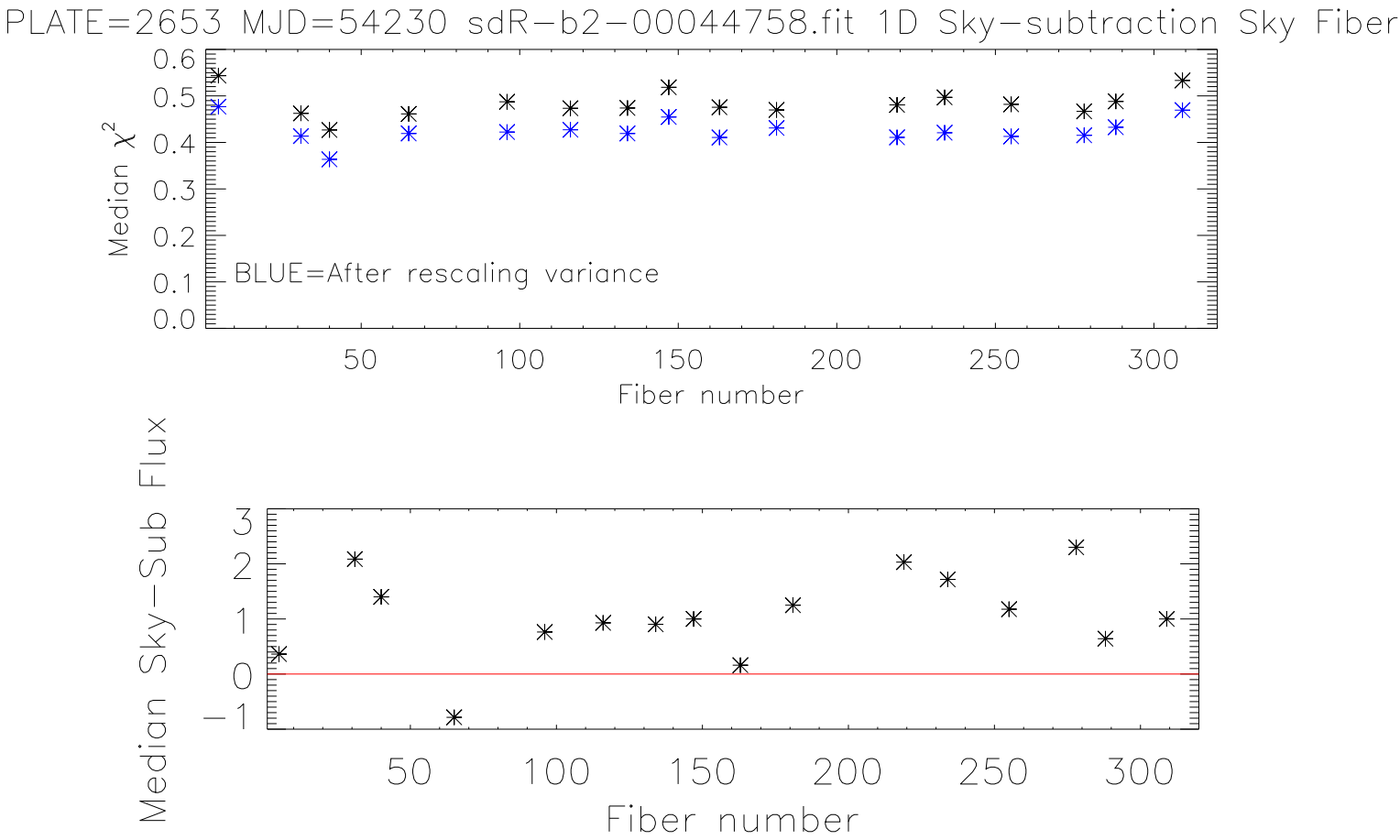

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

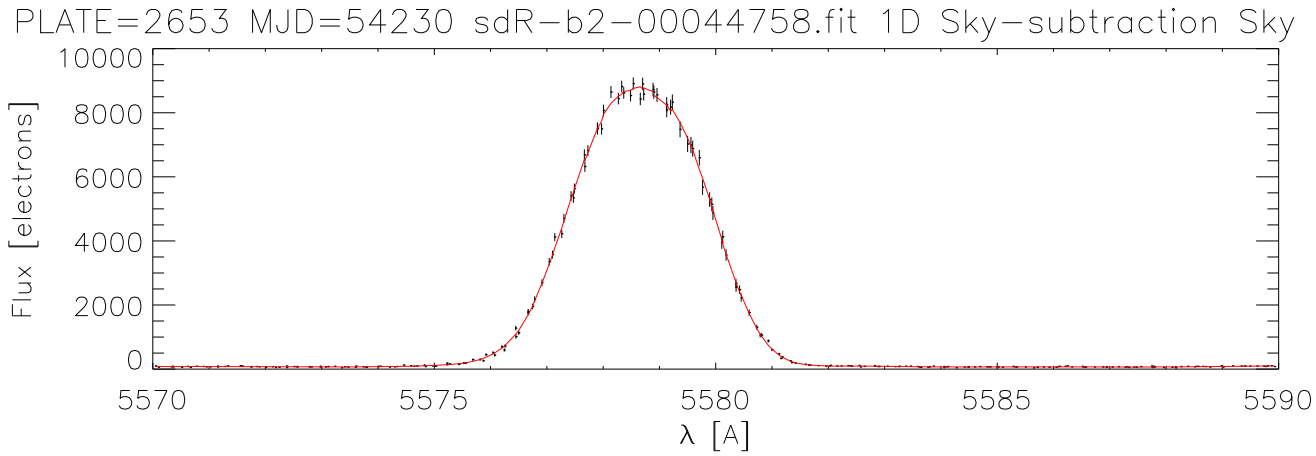

4046.5600
nfib1 16
nfib2 16
stdev 0.093
extra −0.20
4358.3300
nfib1 16
nfib2 16
stdev 0.036
extra −0.27
5460.9400
nfib1 16
nfib2 16
stdev 0.032
extra −0.14
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra −0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra −0.00
5895.9240
nfib1 15
nfib2 15
stdev 0.033
extra −0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

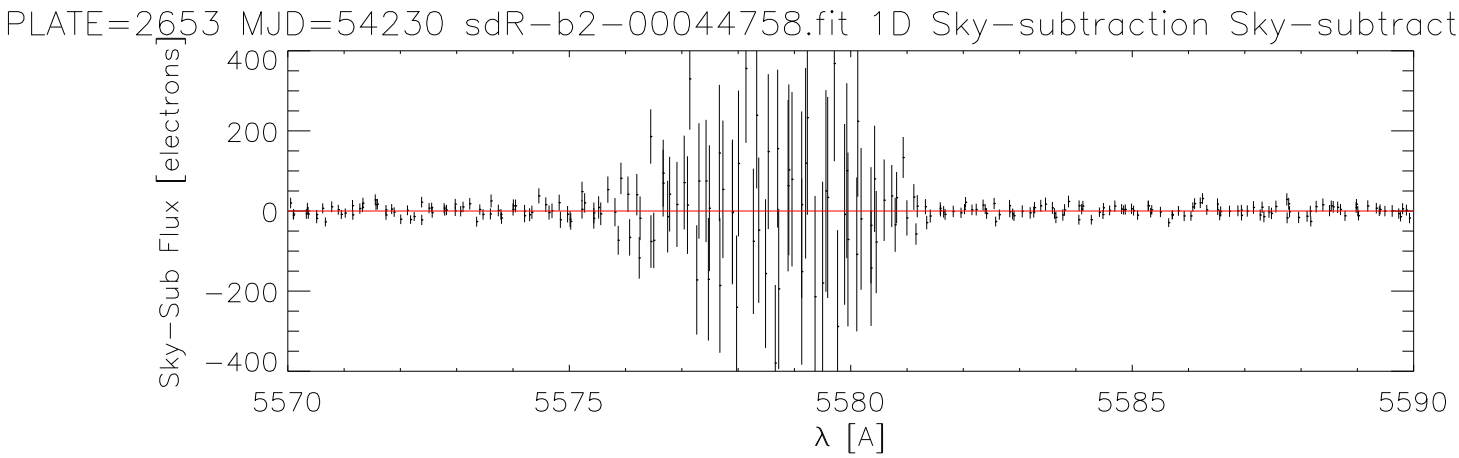

0.0
−0.1
−0.2
−0.3
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

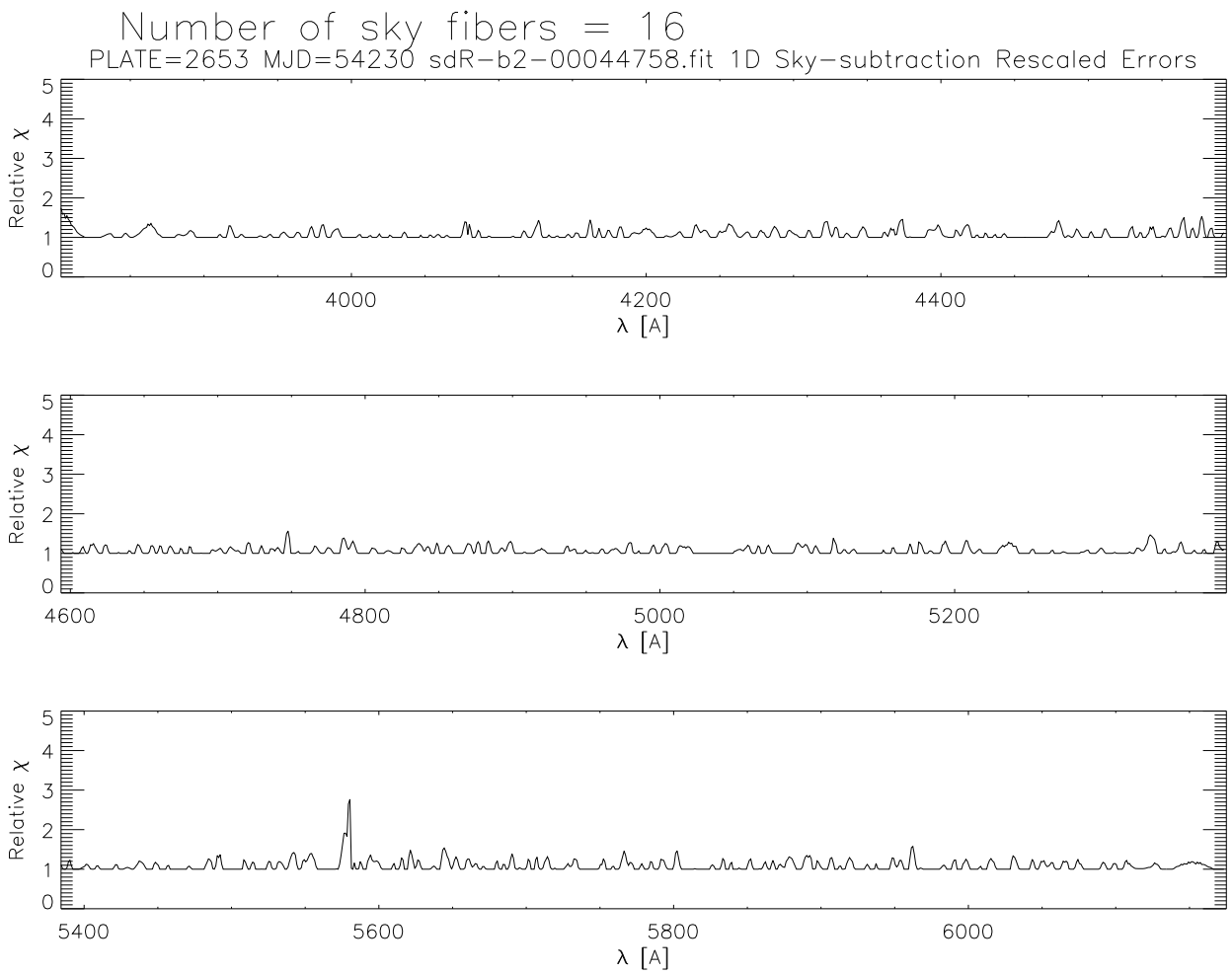
es= −0.0000

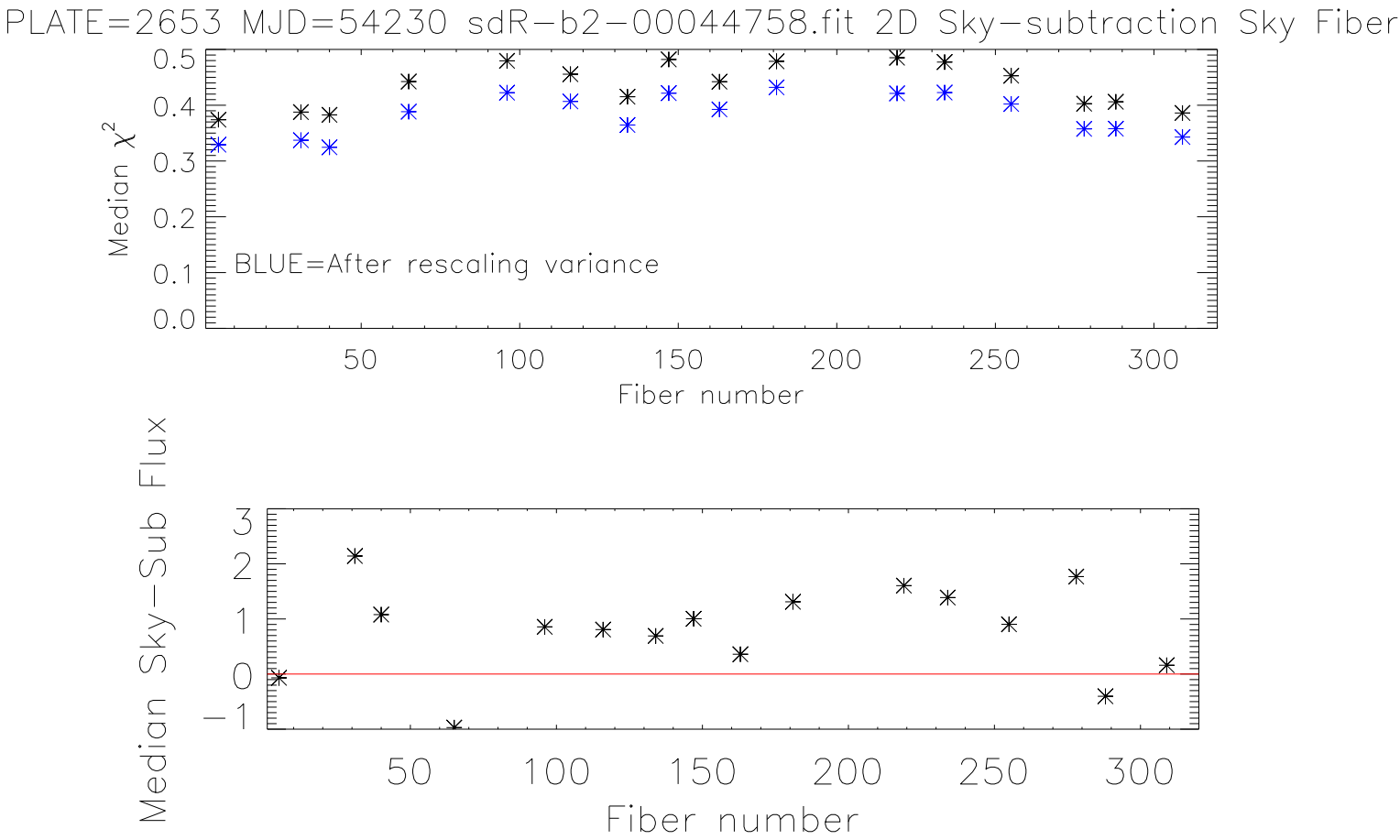

PLATE=2653 MJD=54230 Smooth superflat for sdR−b2−00044758.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

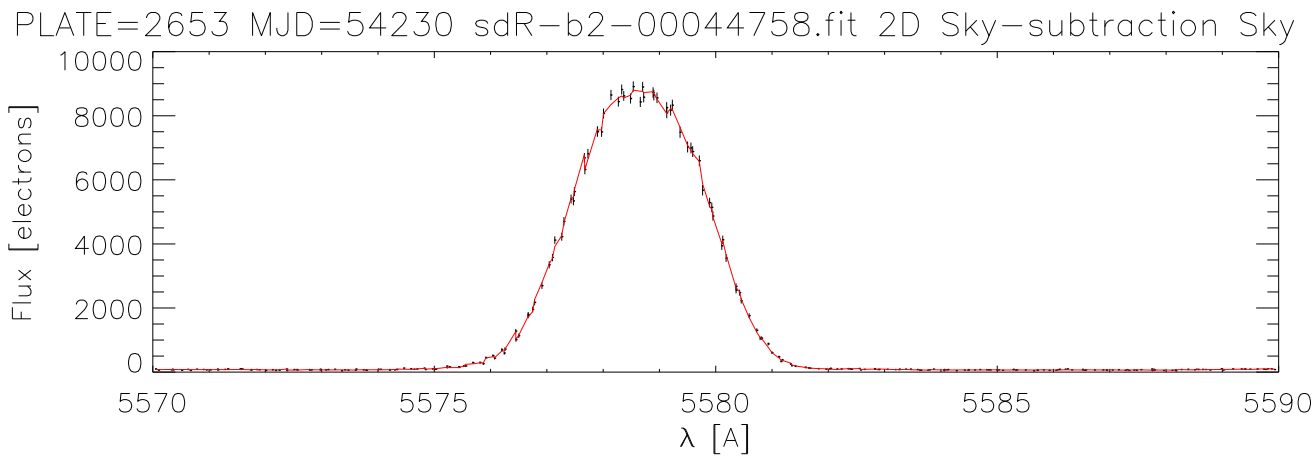

PLATE=2653 MJD=54230 sdR-b2-00044758.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

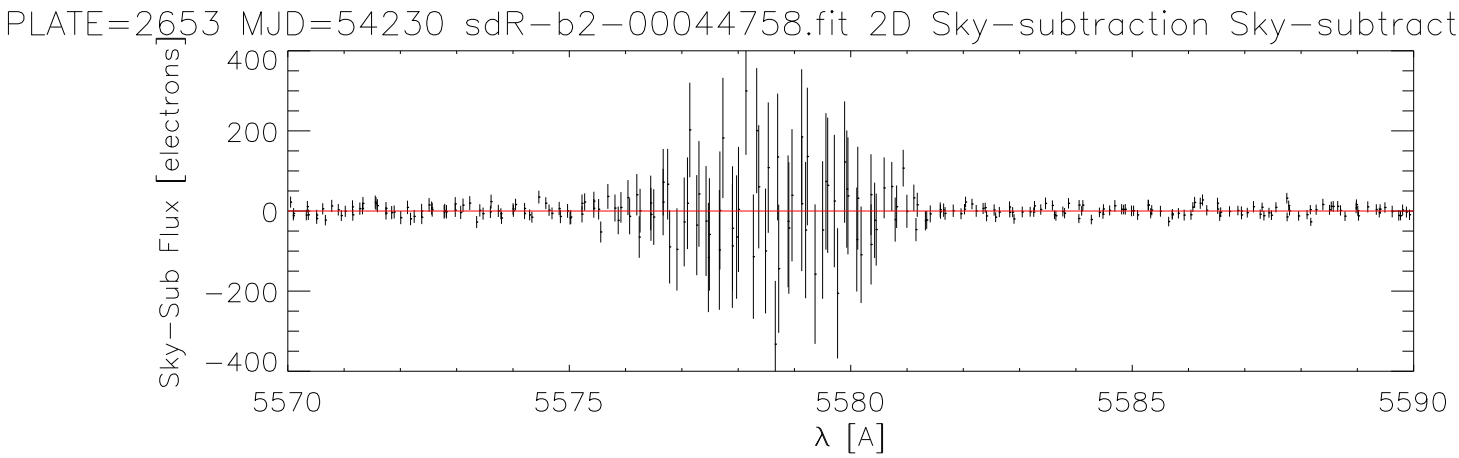

PLATE=2653 MJD=54230 sdR-b2-00044758.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

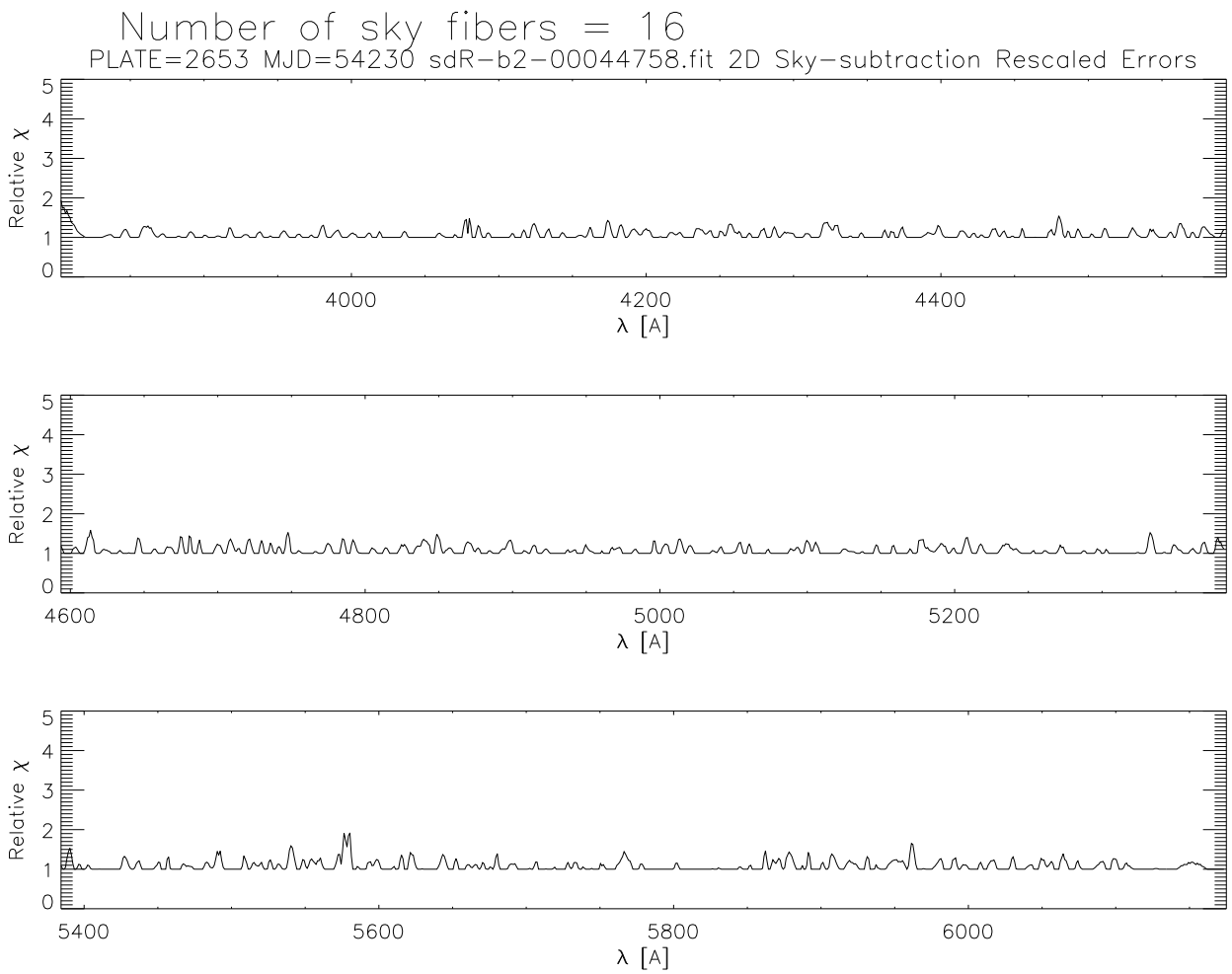

PLATE=2653 MJD=54230 sdR-b2-00044758.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

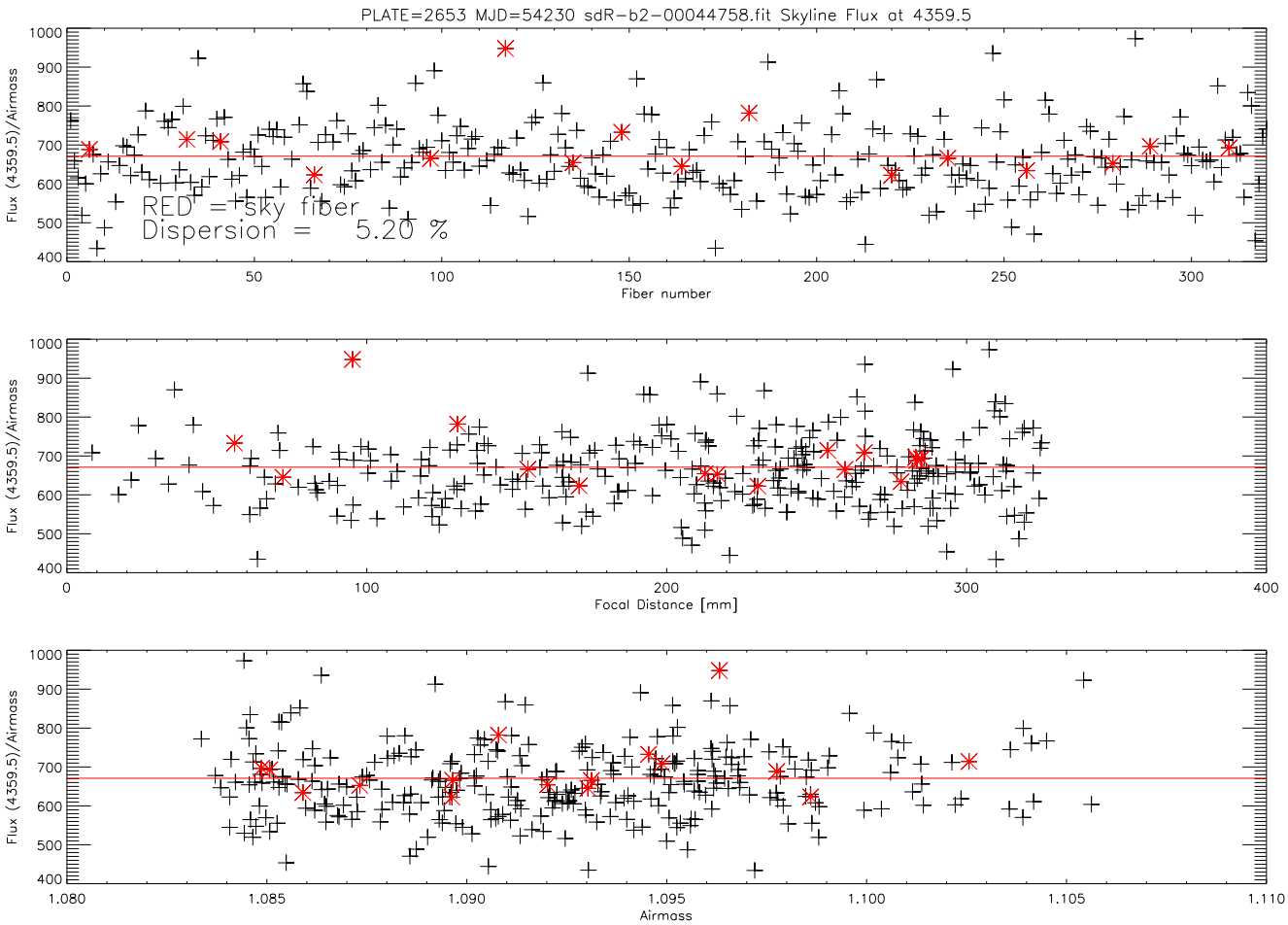

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b2-00044758.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

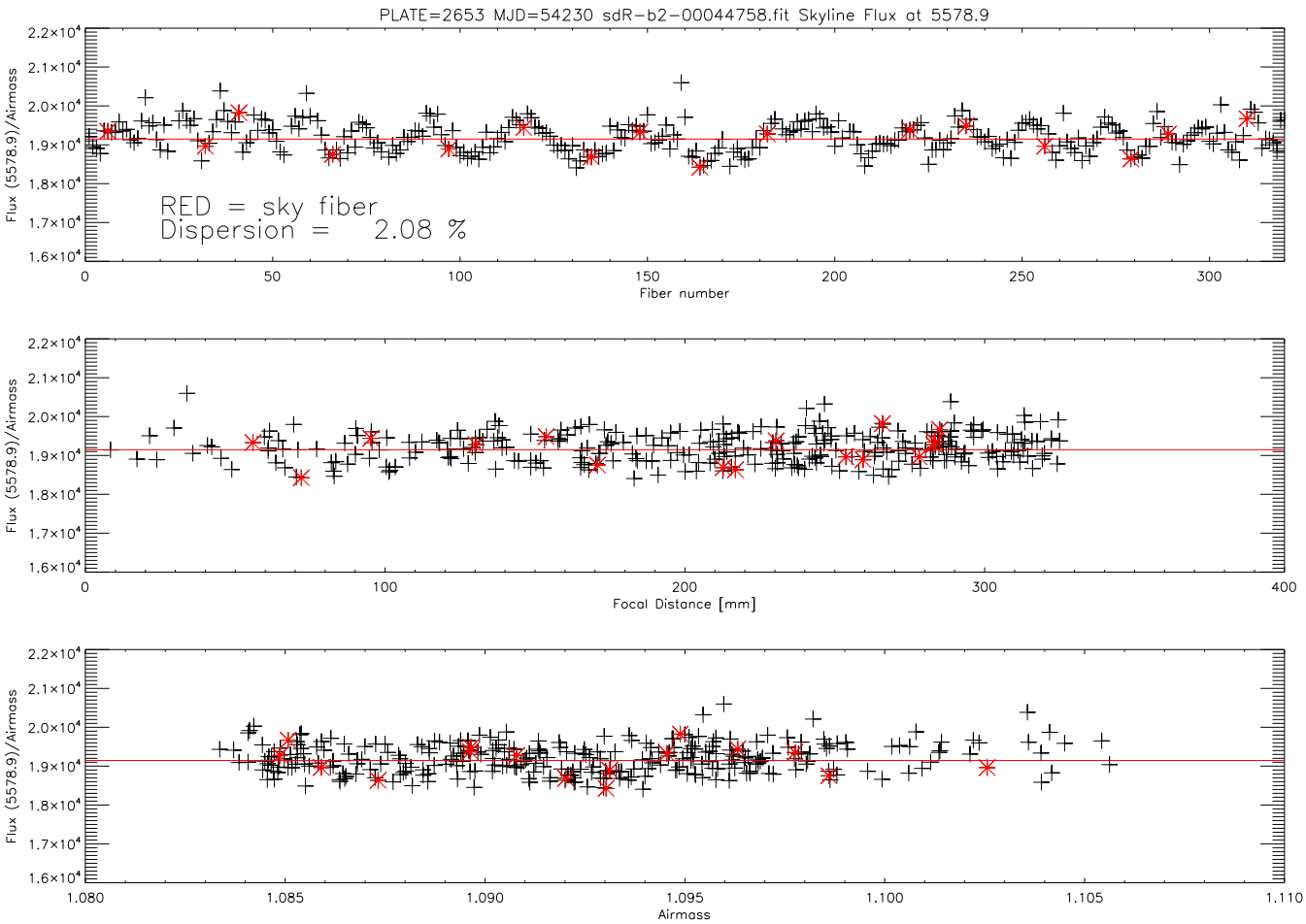

PLATE=2653 MJD=54230 sdR-b2-00044758.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

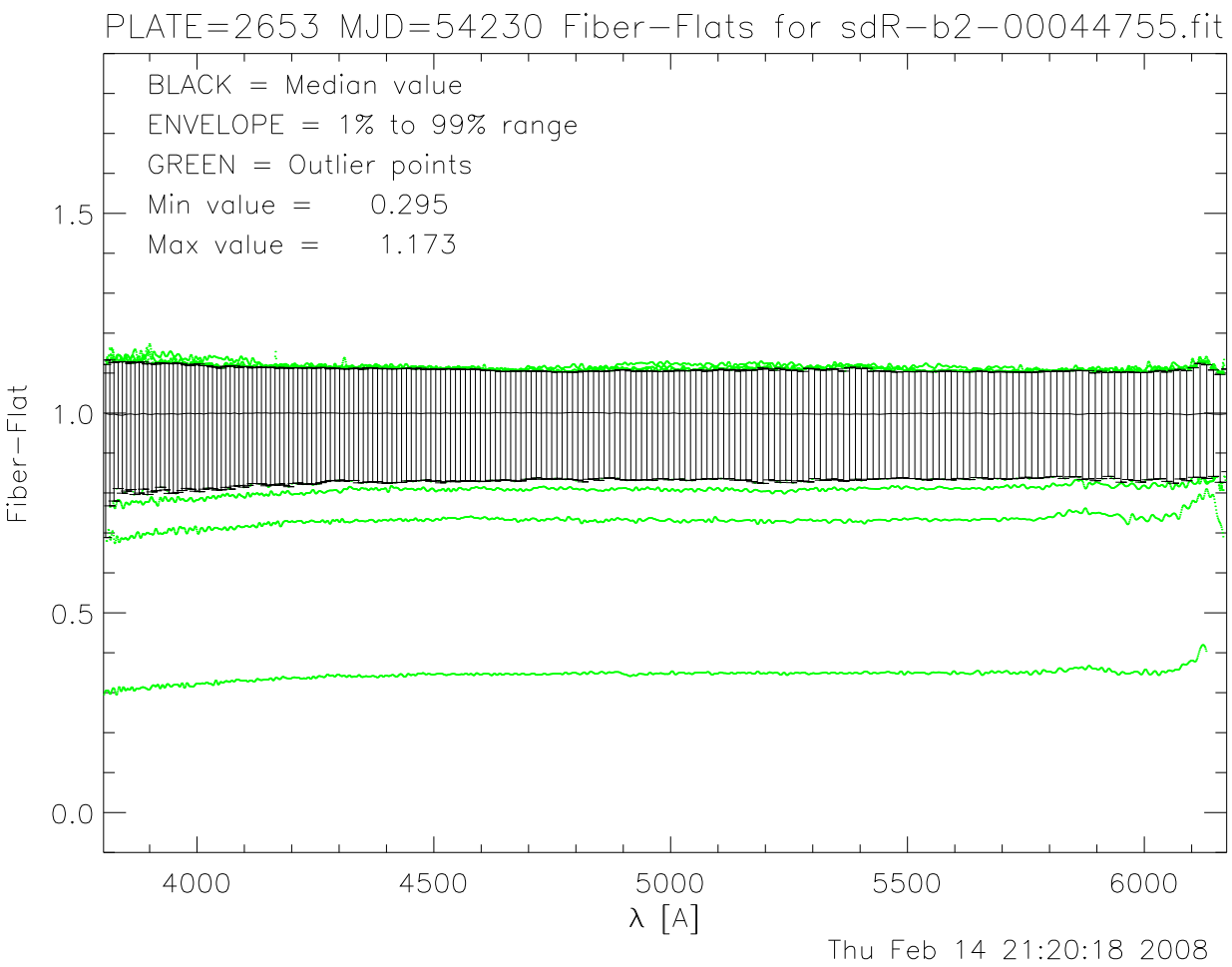

PLATE=2653 MJD=54230 sdR-b2-00044758.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

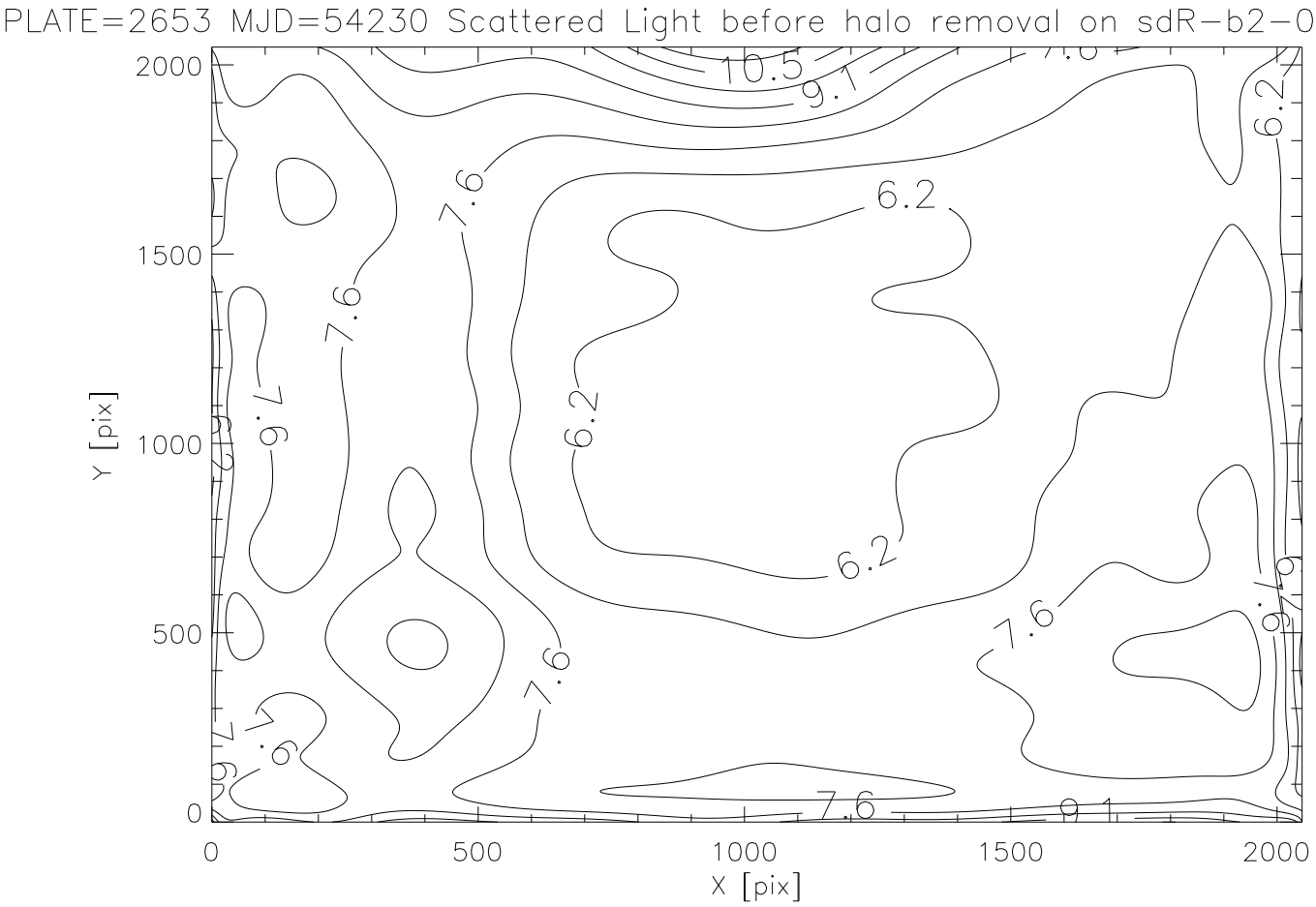

PLATE=2653 MJD=54230 sdR-b2-00044758.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

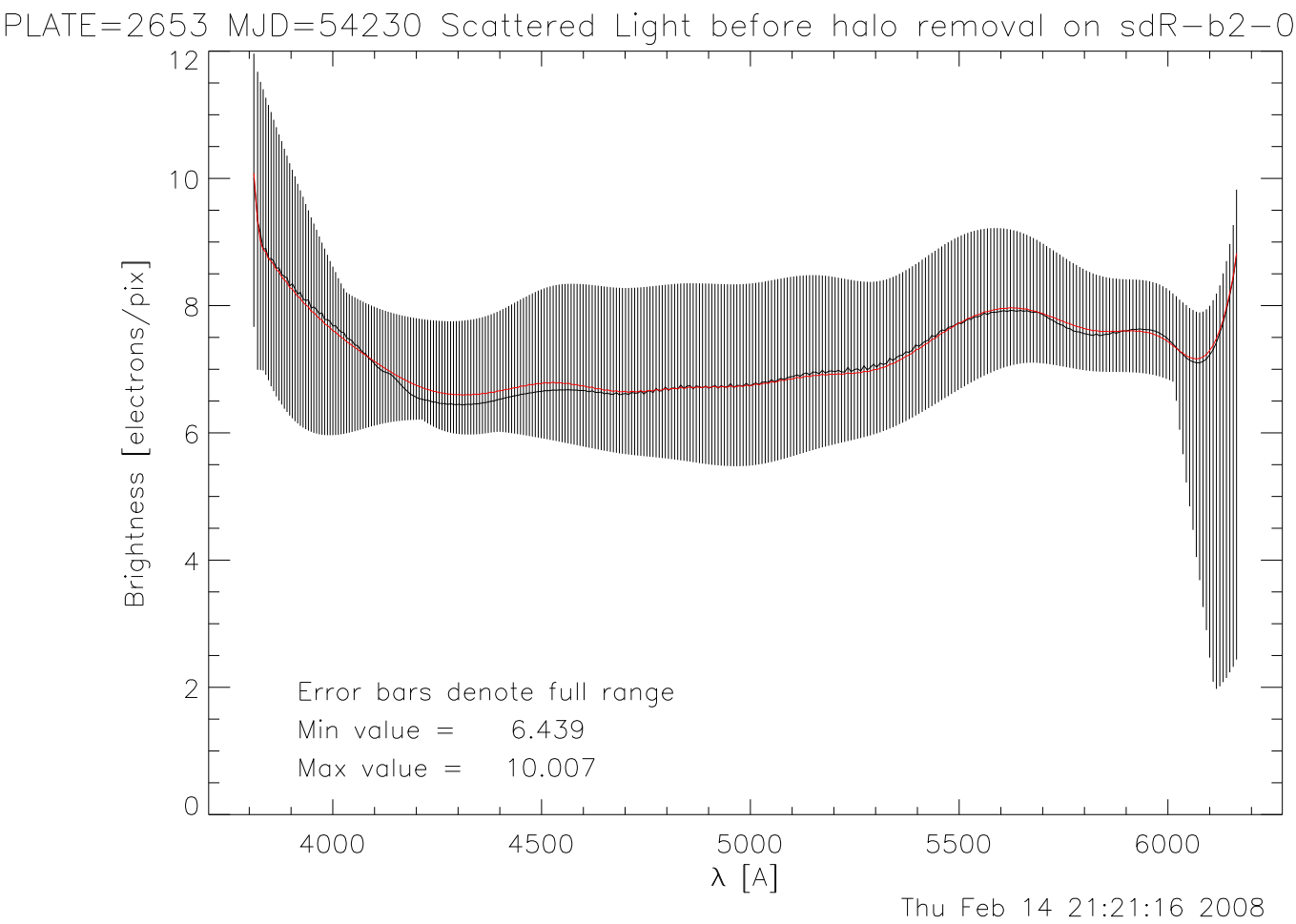

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b2-00044758.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

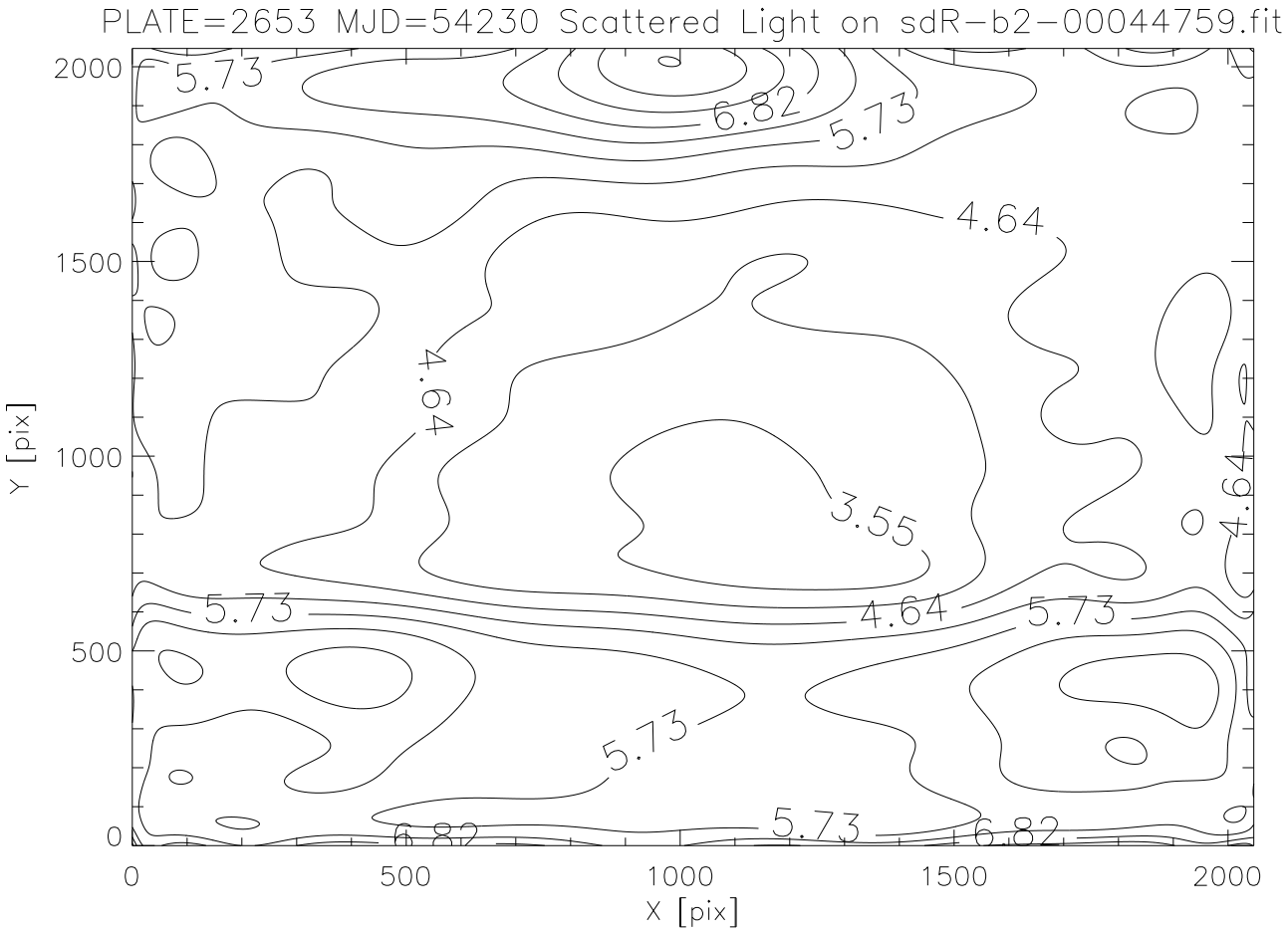

PLATE=2653 MJD=54230 sdR-b2-00044758.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.20 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

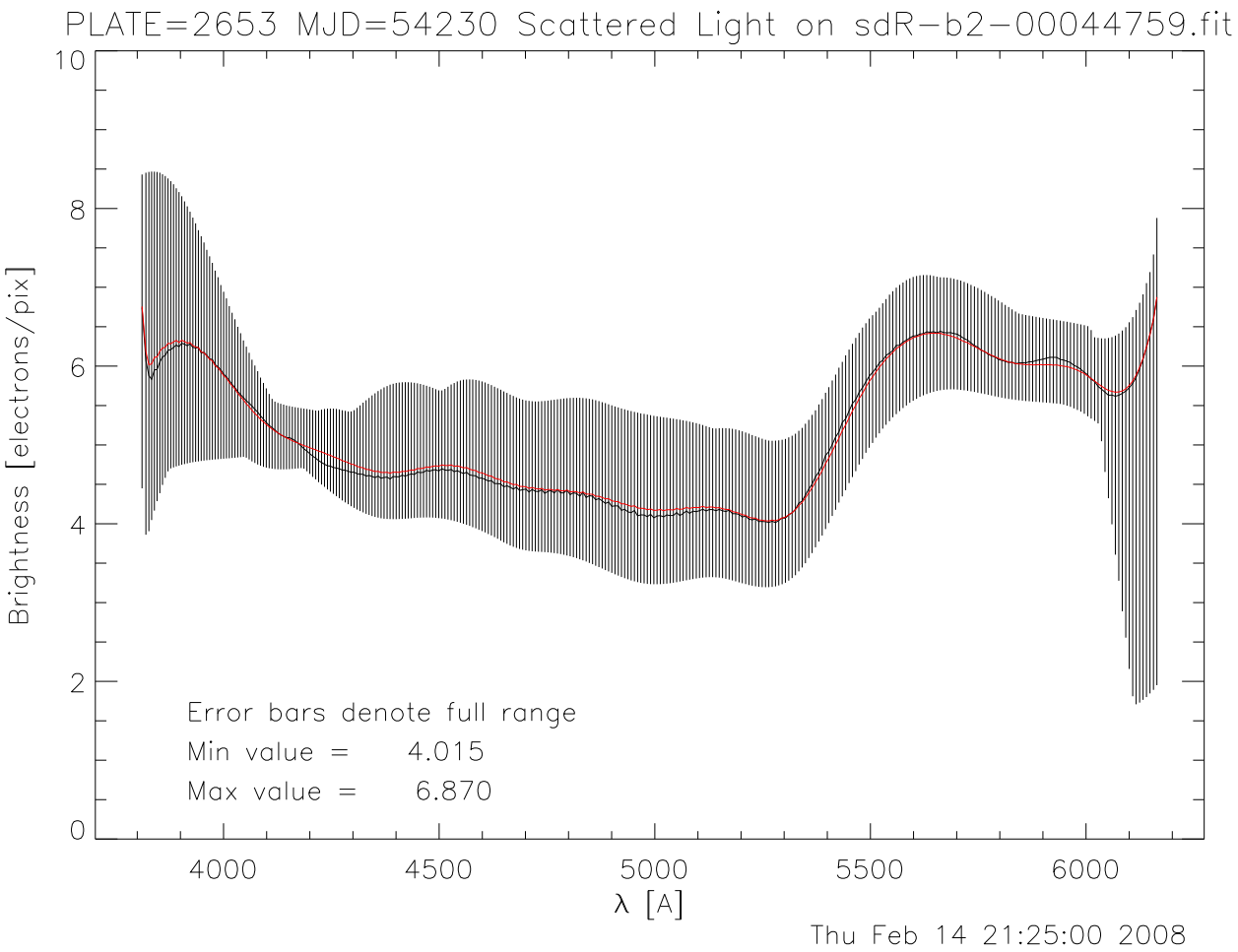

PLATE=2653 MJD=54230 sdR-b2-00044758.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.08 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

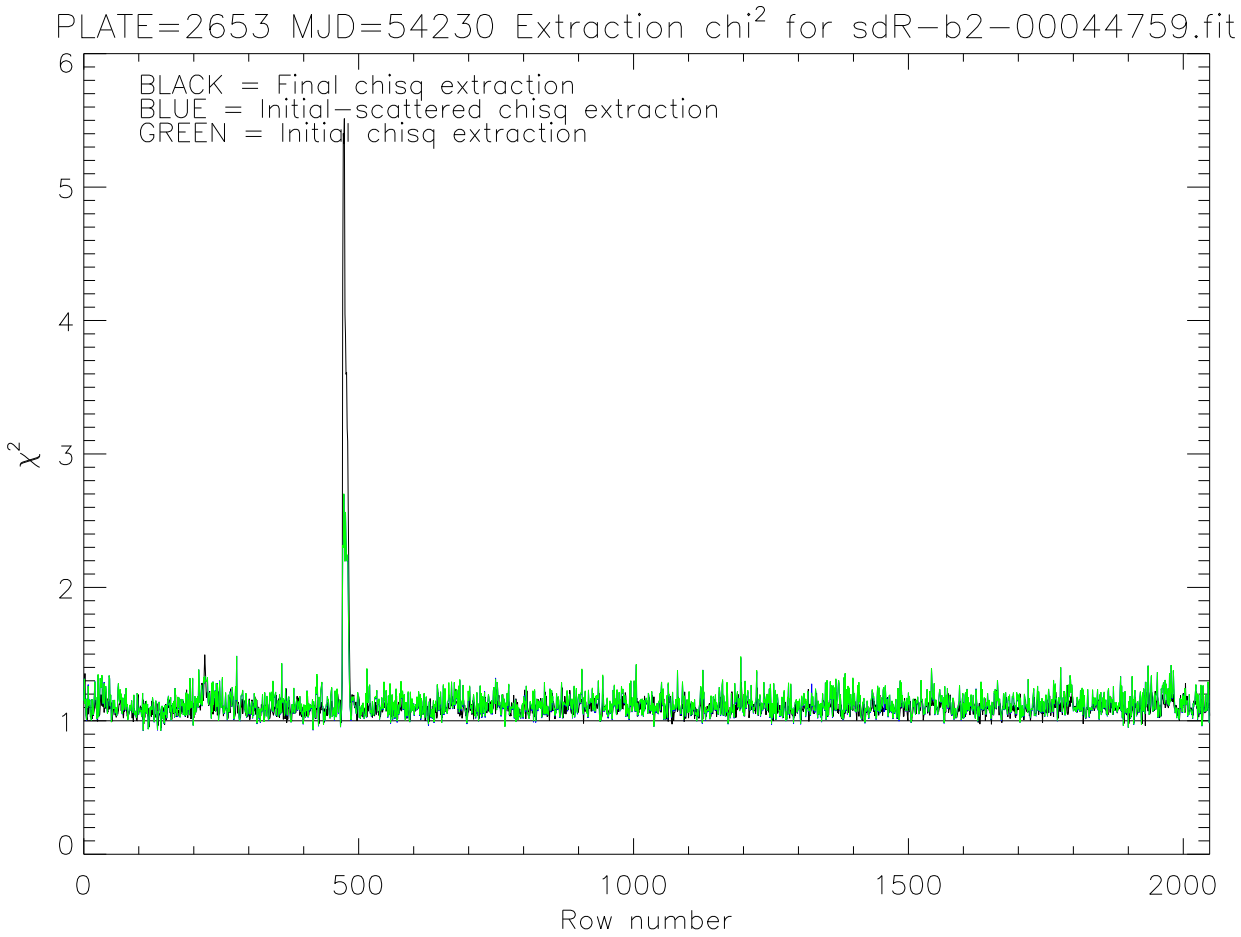

PLATE=2653 MJD=54230 Fiber-Flats for sdR-b2-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.295
Max value = 1.173
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 14 21:20:18 2008

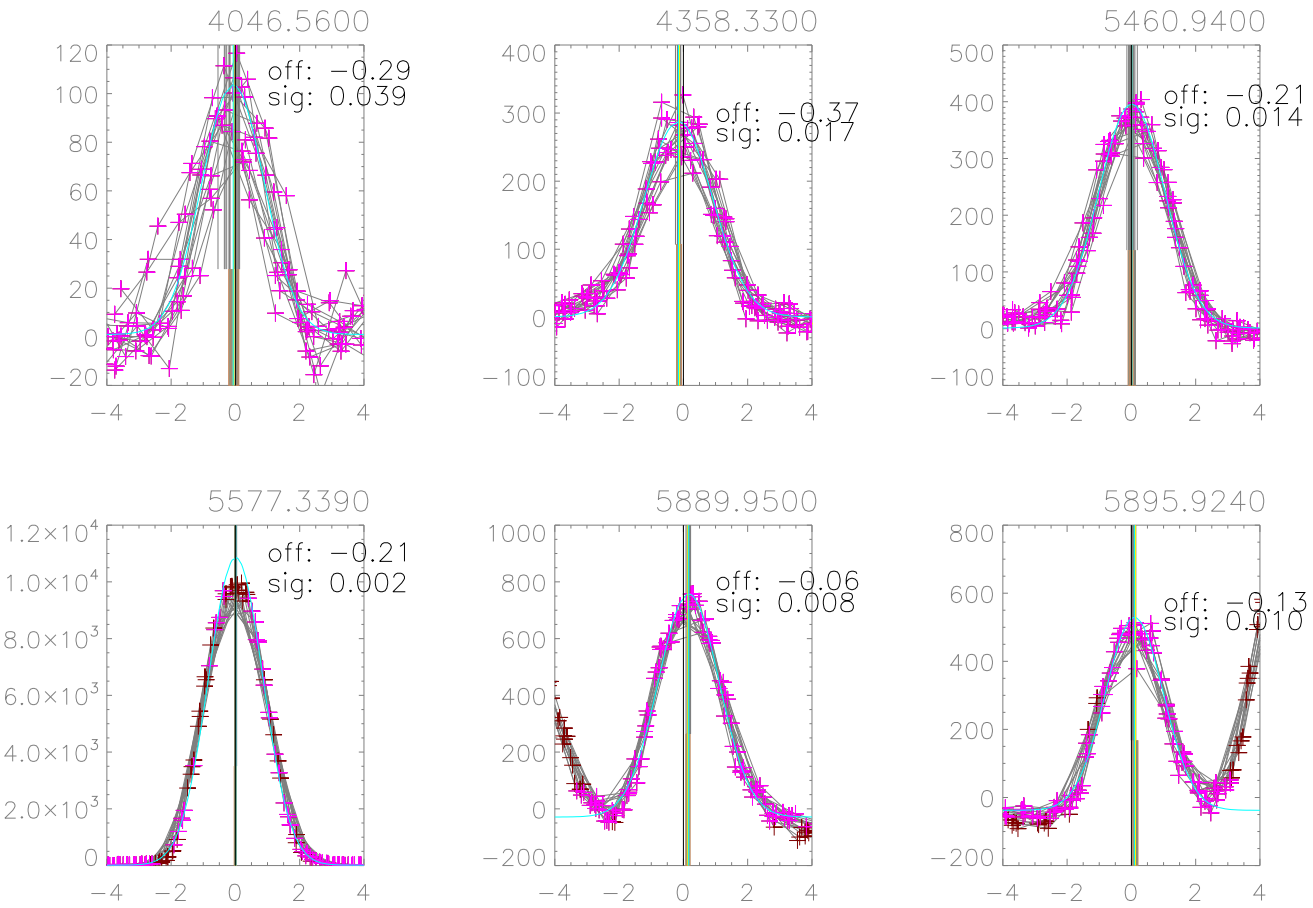

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR−b2−00044759.f
10.5
9.1
7.6
6.2
Y [pix]
X [pix]
0
500
1000
1500
2000

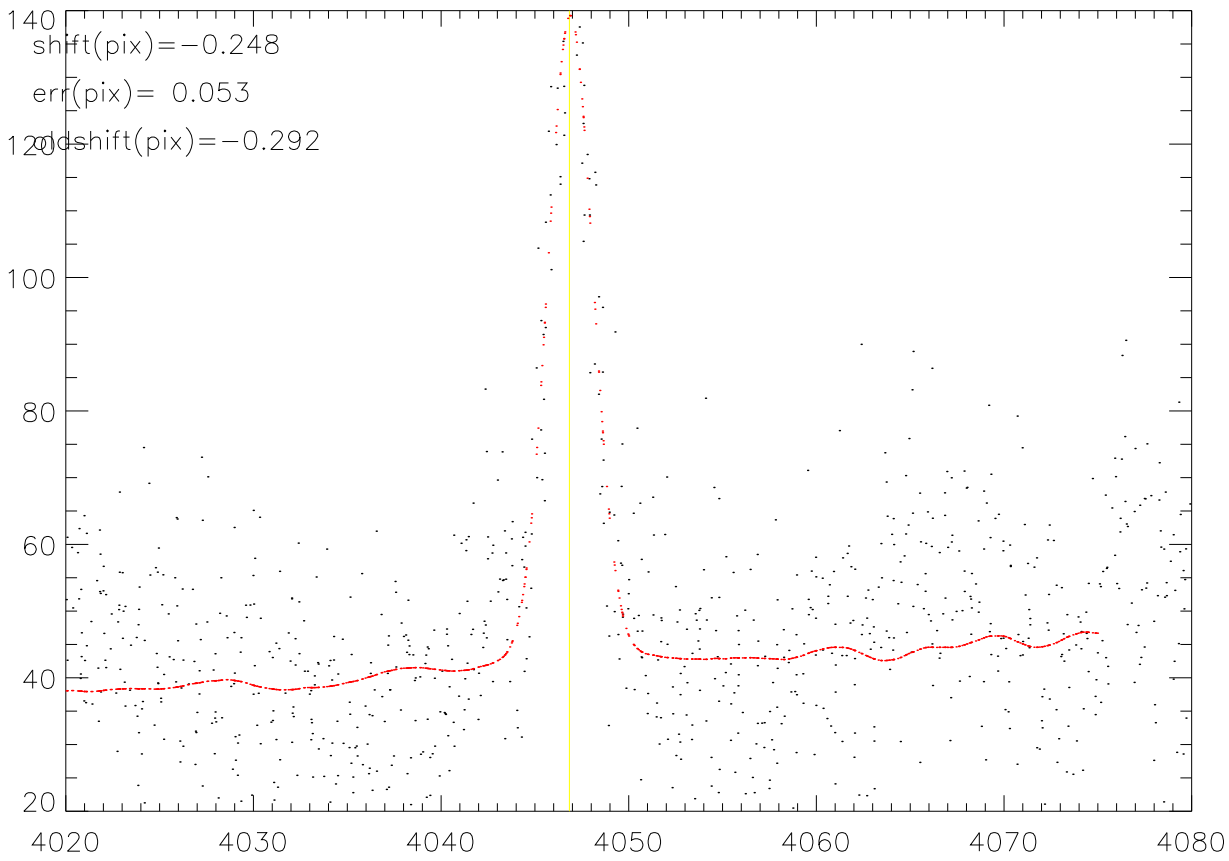

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-b2-00044759.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.439
Max value = 10.007
Thu Feb 14 21:21:16 2008

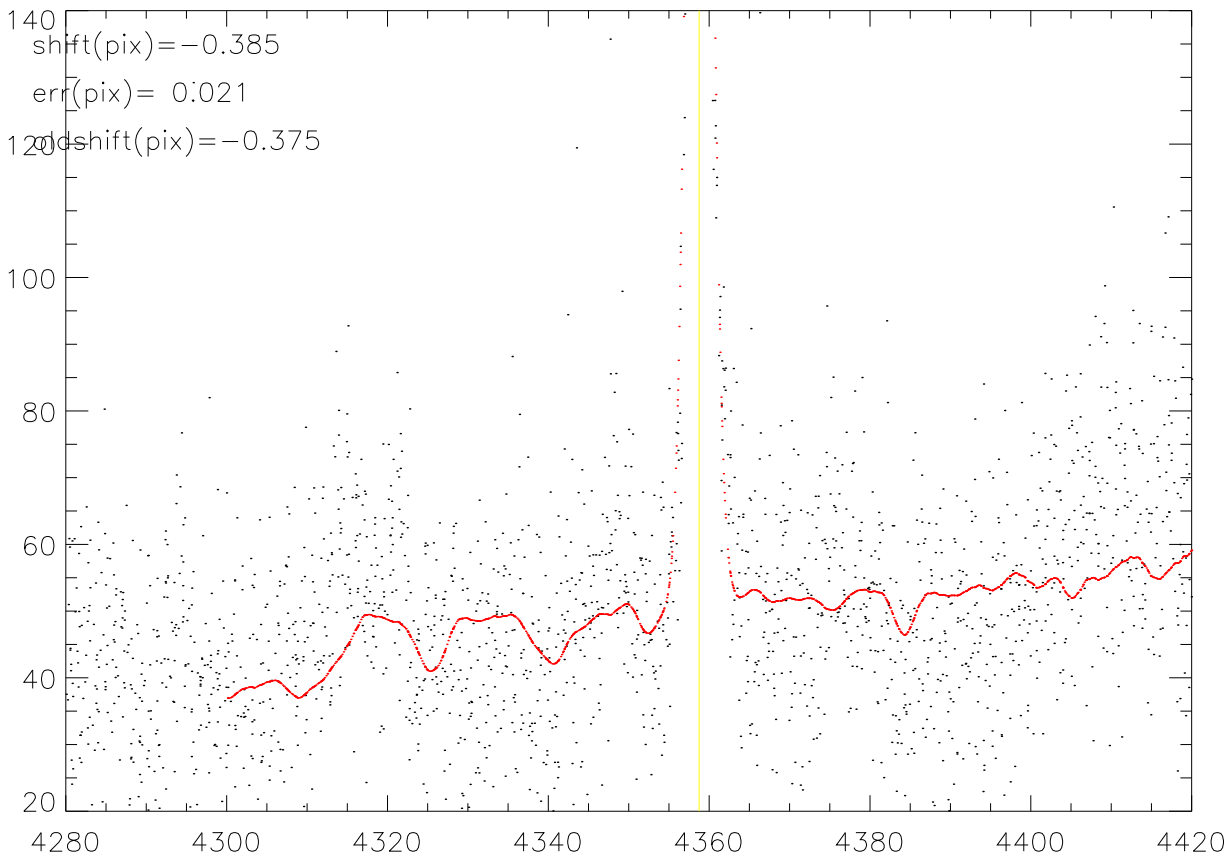

PLATE=2653 MJD=54230 Scattered Light on sdR-b2-00044759.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.73
6.82
4.64
3.55
0

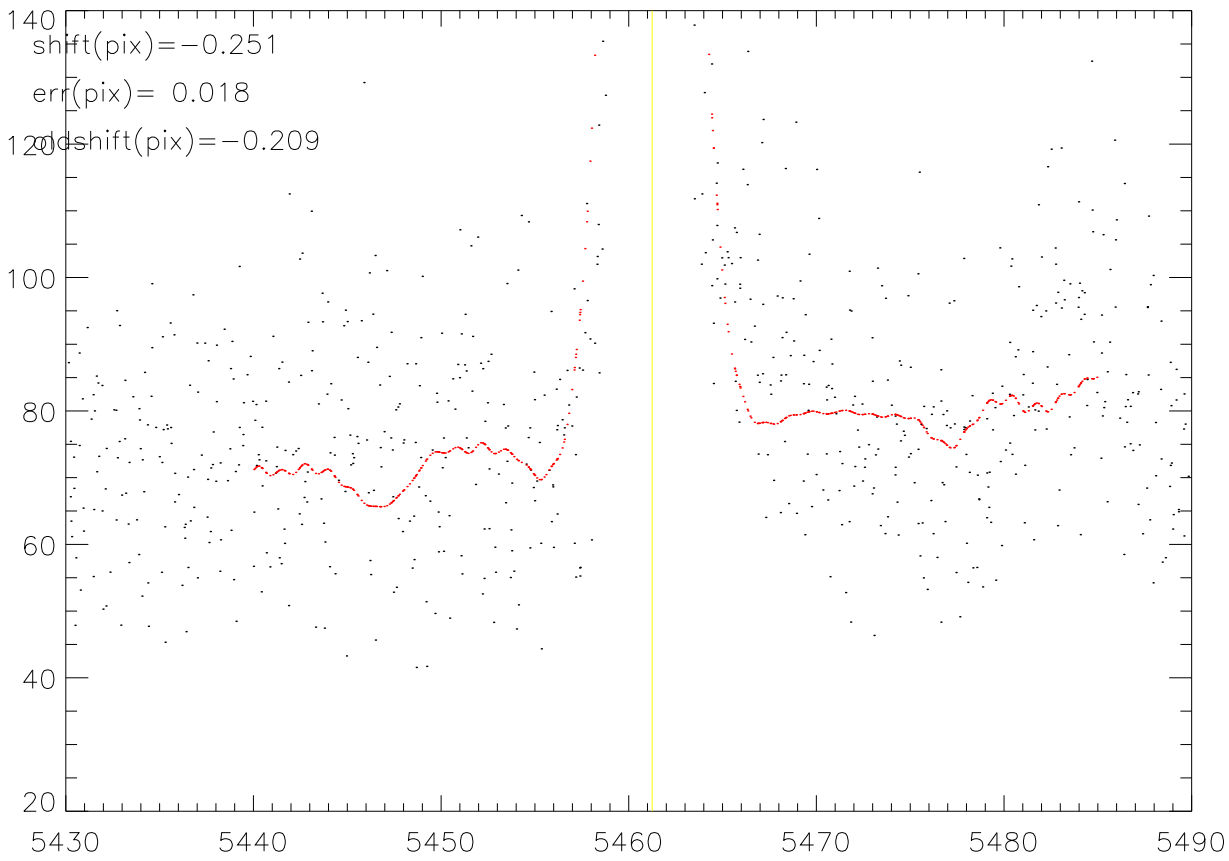

PLATE=2653 MJD=54230 Scattered Light on sdR-b2-00044759.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.015
Max value = 6.870
Thu Feb 14 21:25:00 2008

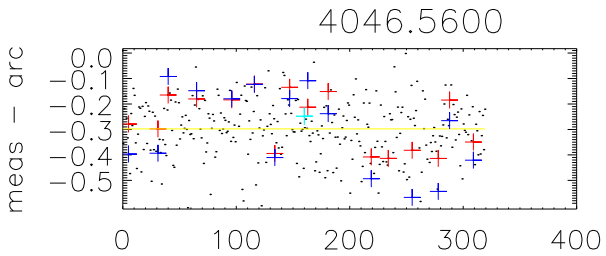

PLATE=2653 MJD=54230 Extraction chi^2 for sdR-b2-00044759.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

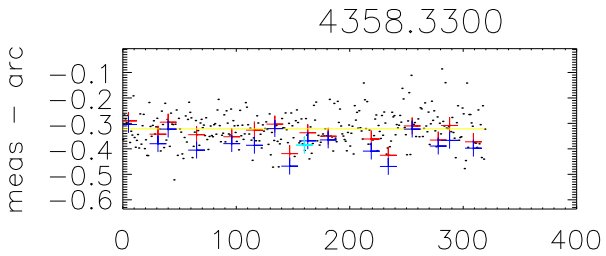

4046.5600
off: −0.29
sig: 0.039
4358.3300
off: −0.37
sig: 0.017
5460.9400
off: −0.21
sig: 0.014
5577.3390
off: −0.21
sig: 0.002
5889.9500
off: −0.06
sig: 0.008
5895.9240
off: −0.13
sig: 0.010

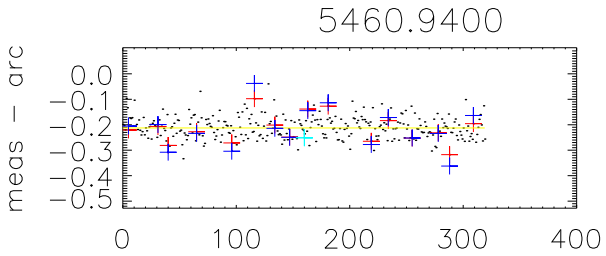

shift(pix)=−0.248
err(pix)= 0.053
oldshift(pix)=−0.292
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

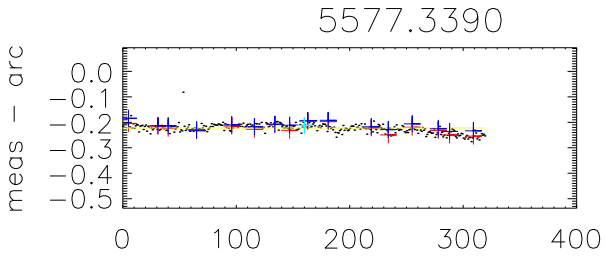

shift(pix)=−0.385
err(pix)= 0.021
oldshift(pix)=−0.375
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

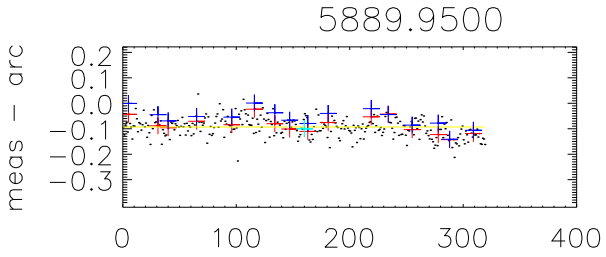

shift(pix)=−0.251
err(pix)= 0.018
oldshift(pix)=−0.209
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

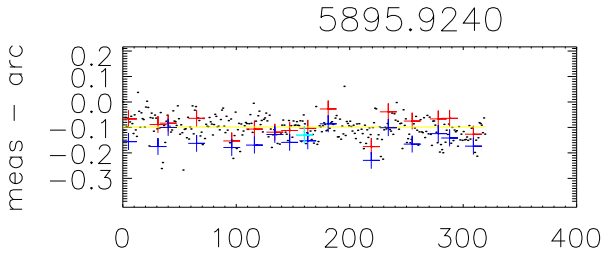

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

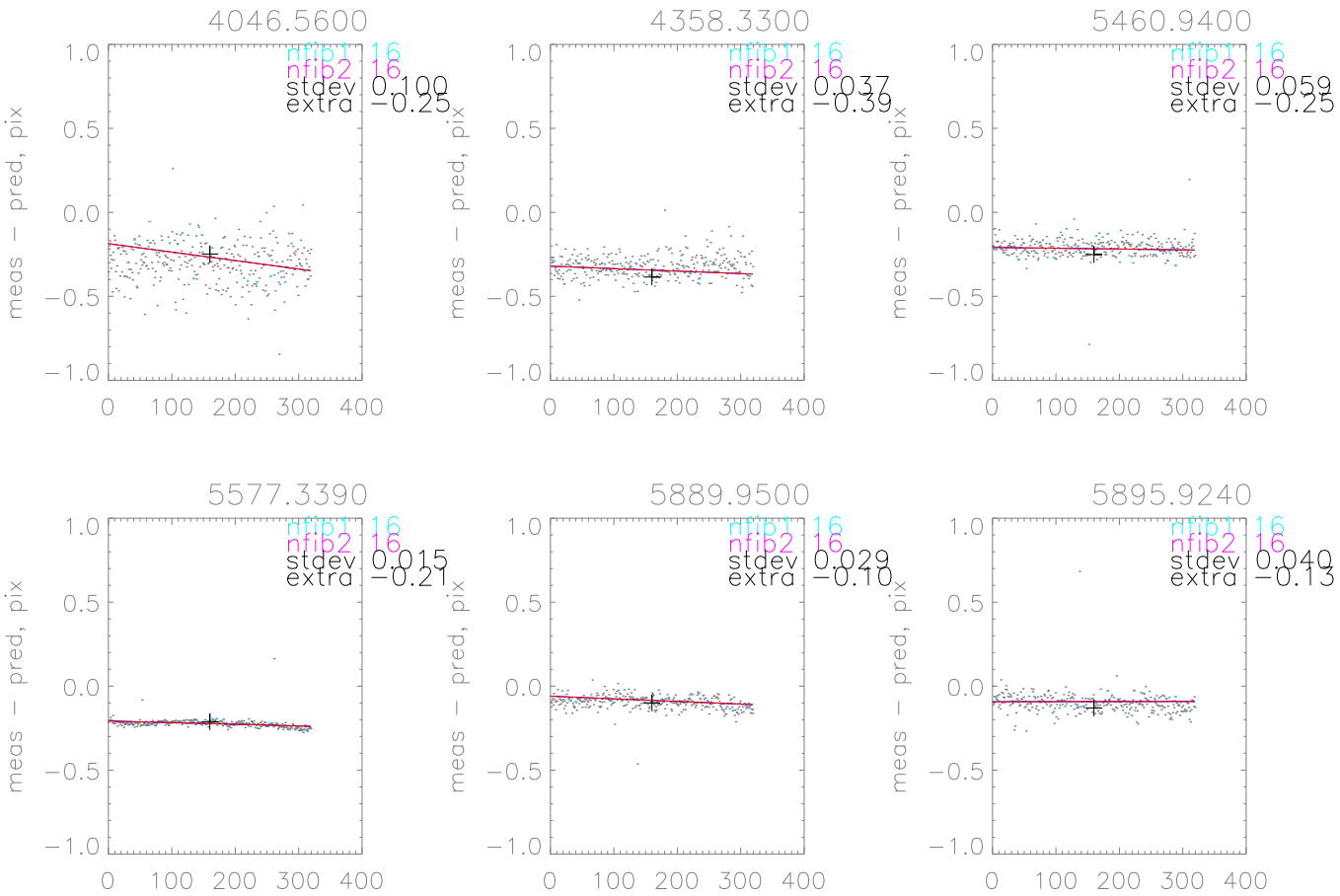

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

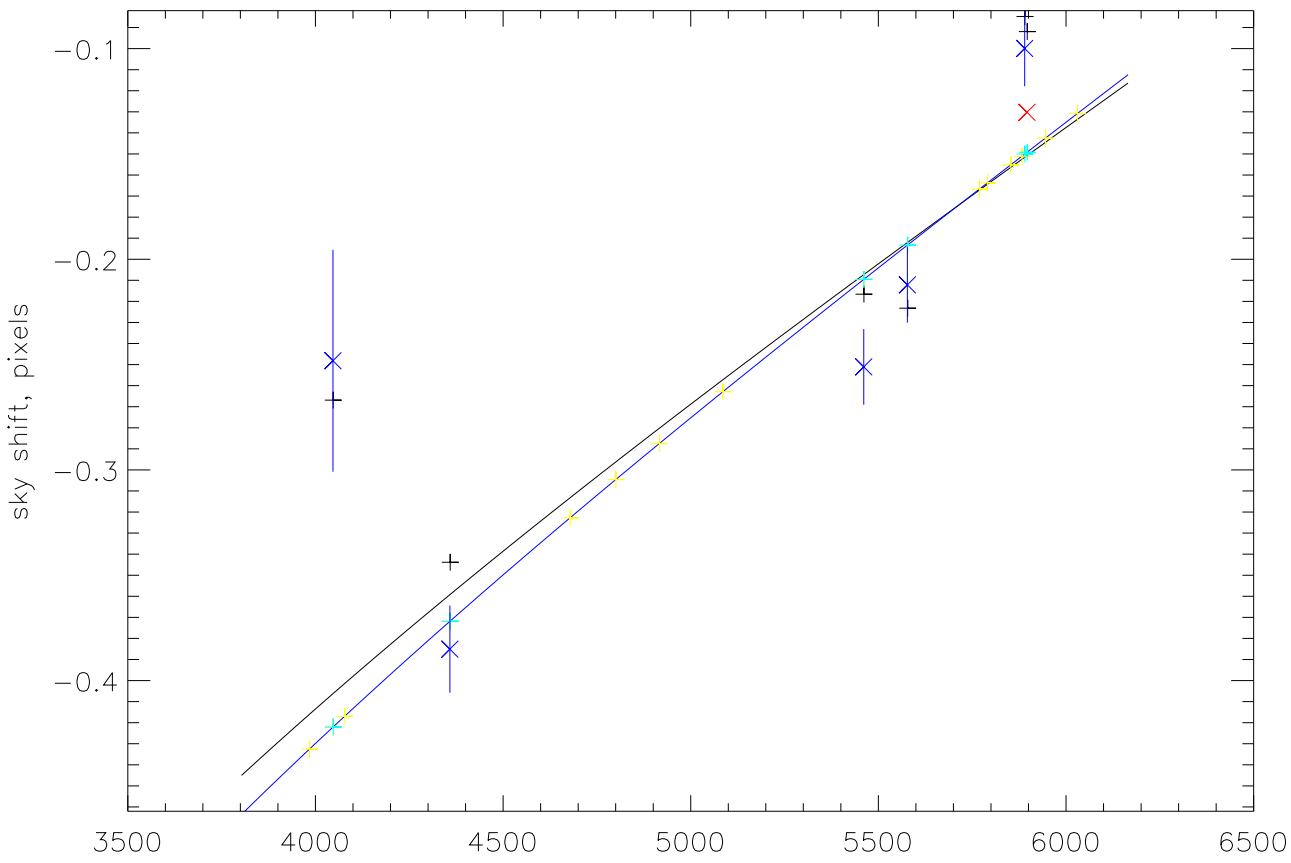

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

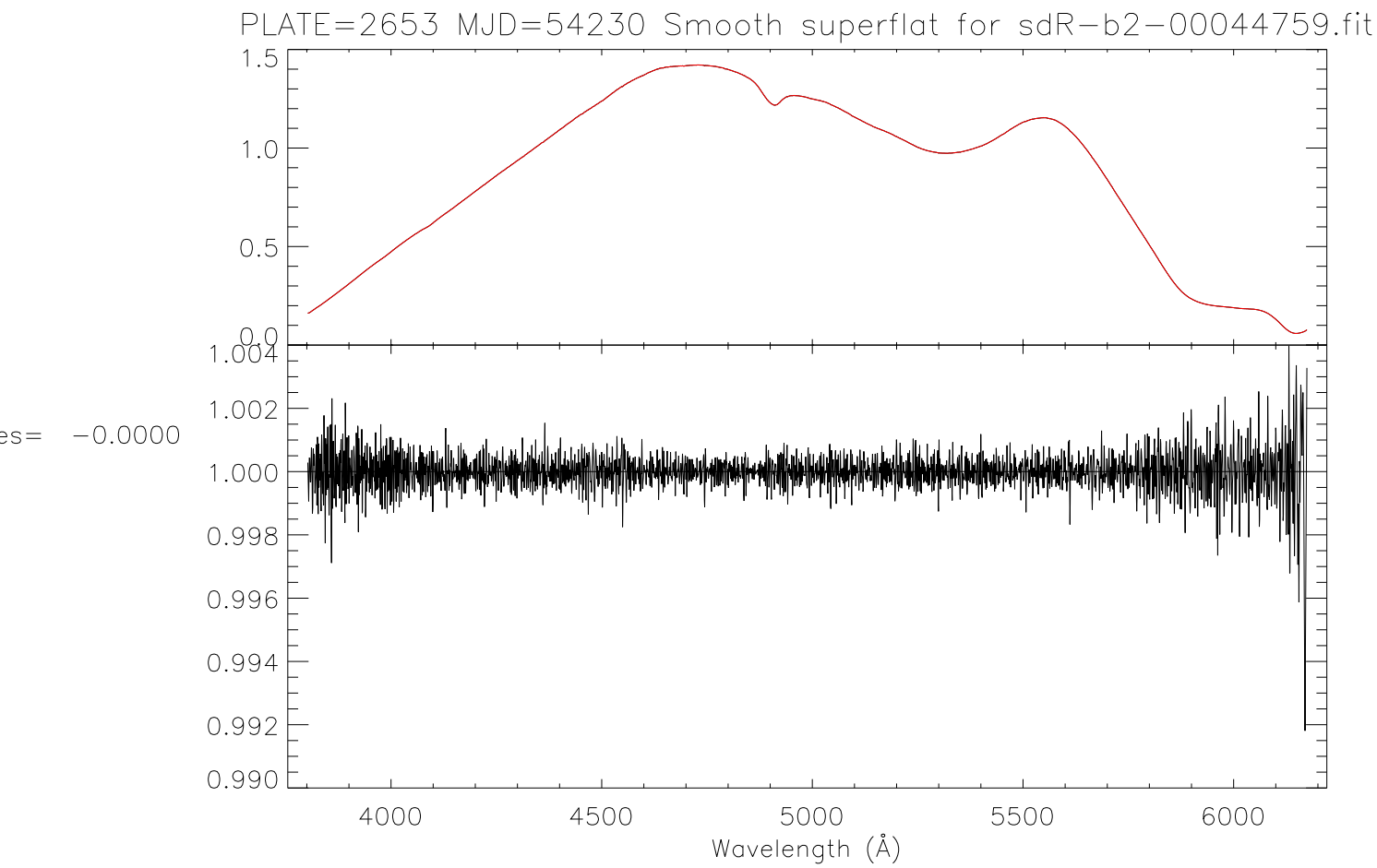

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

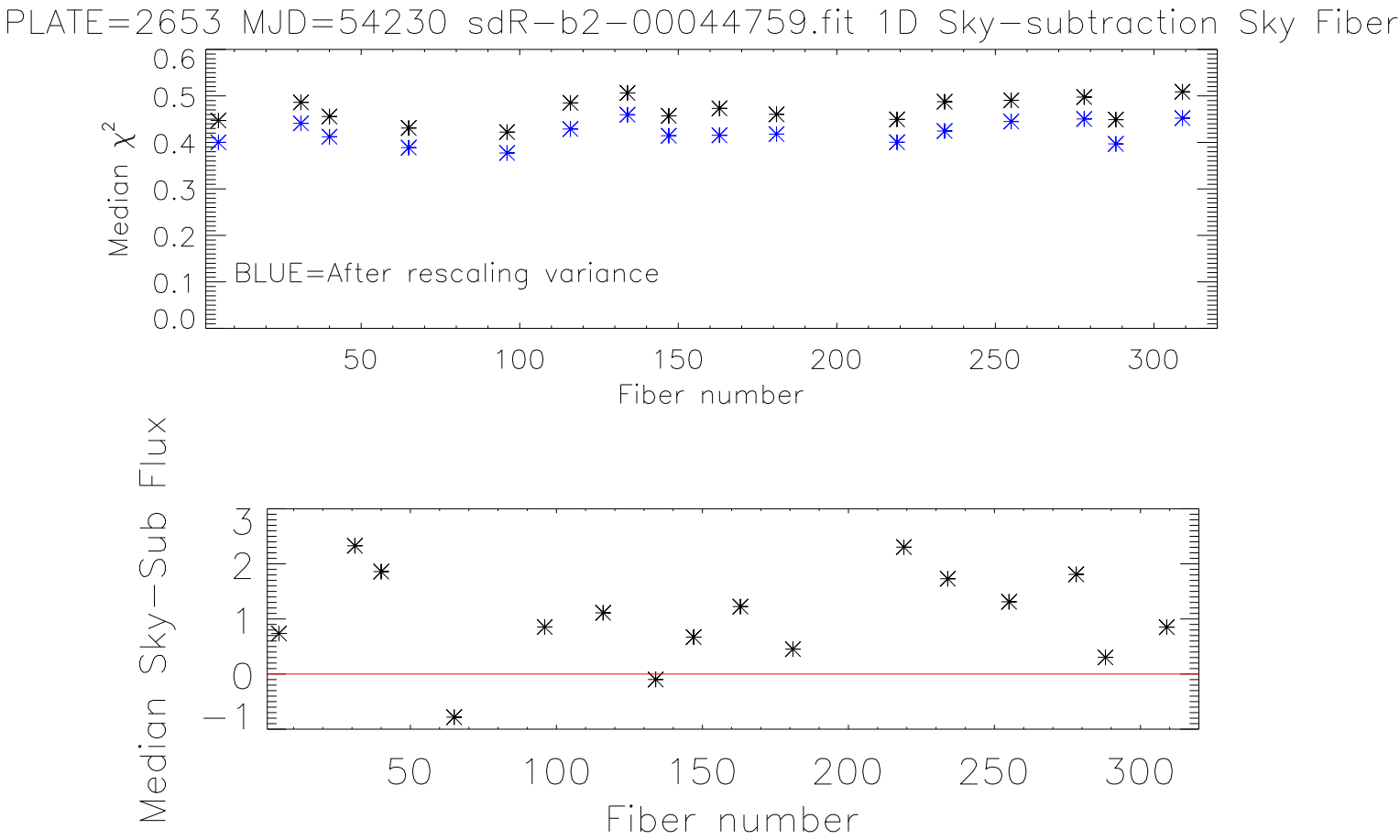

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

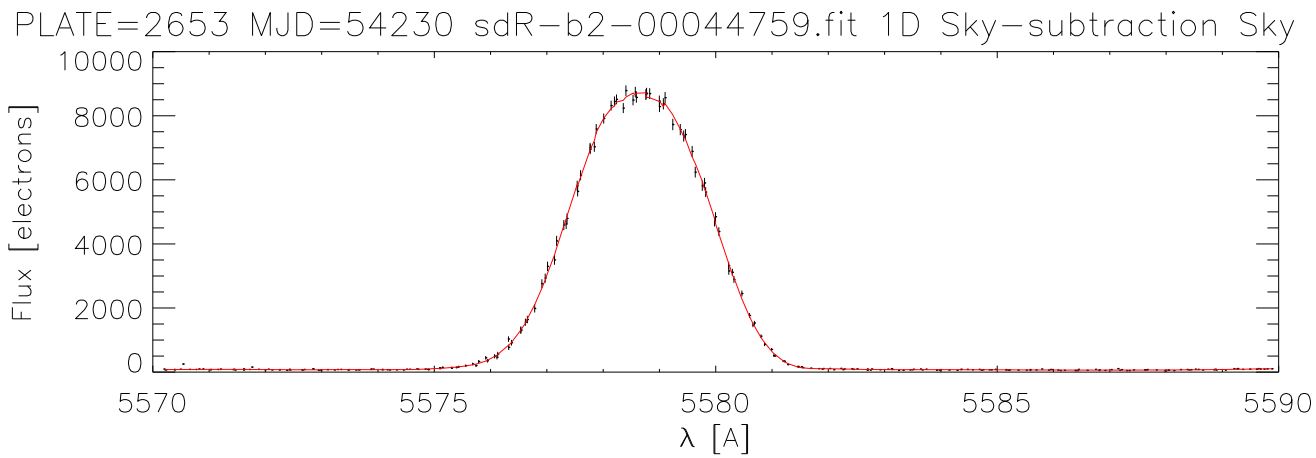

4046.5600
nfib1 16
nfib2 16
stdev 0.100
extra −0.25
4358.3300
nfib1 16
nfib2 16
stdev 0.037
extra −0.39
5460.9400
nfib1 16
nfib2 16
stdev 0.059
extra −0.25
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.21
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra −0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.040
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

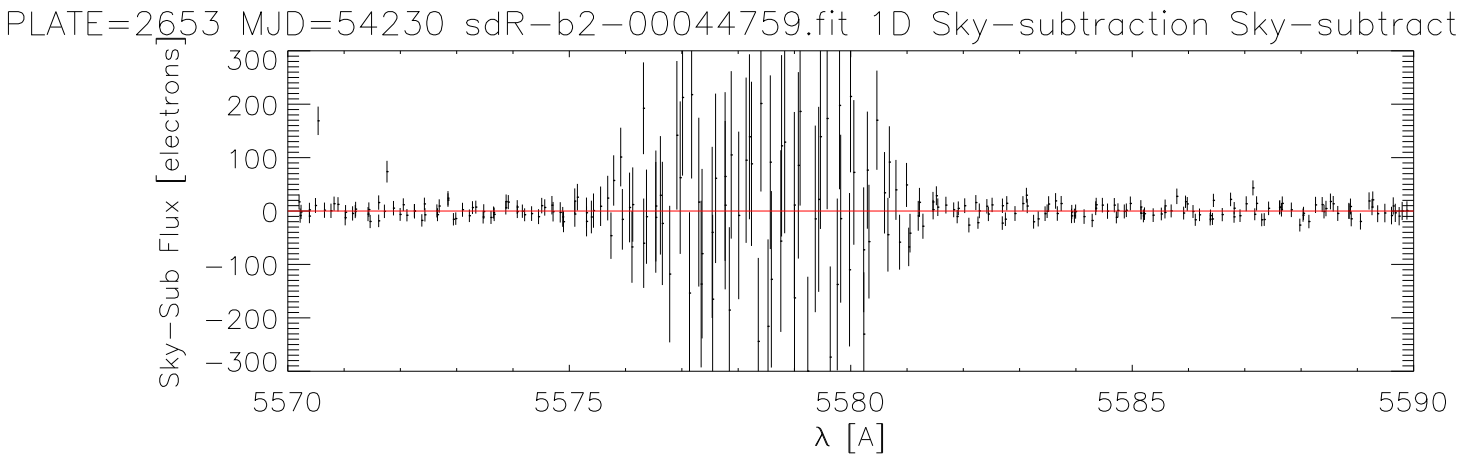

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

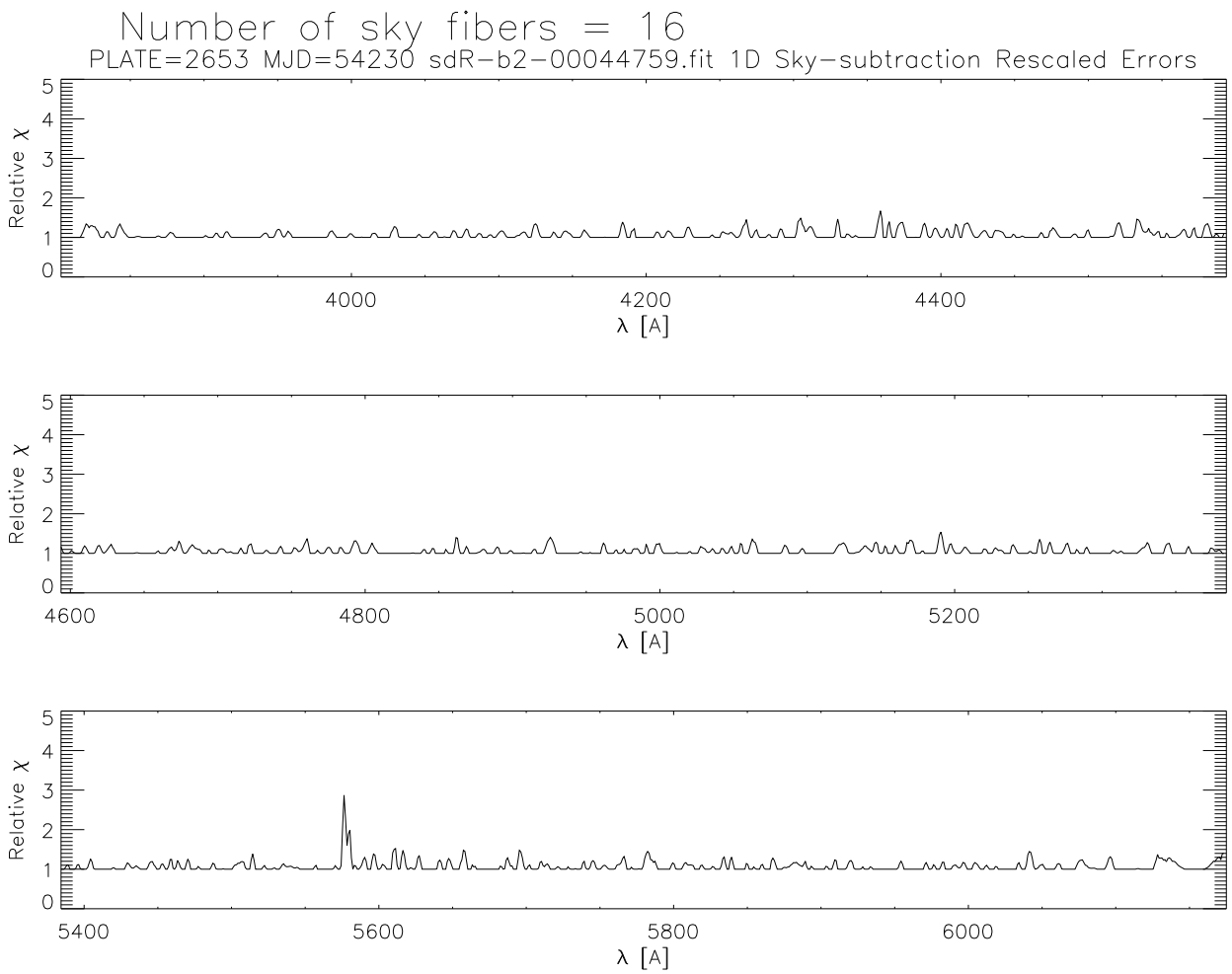

PLATE=2653 MJD=54230 Smooth superflat for sdR-b2-00044759.fit
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
0.992
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

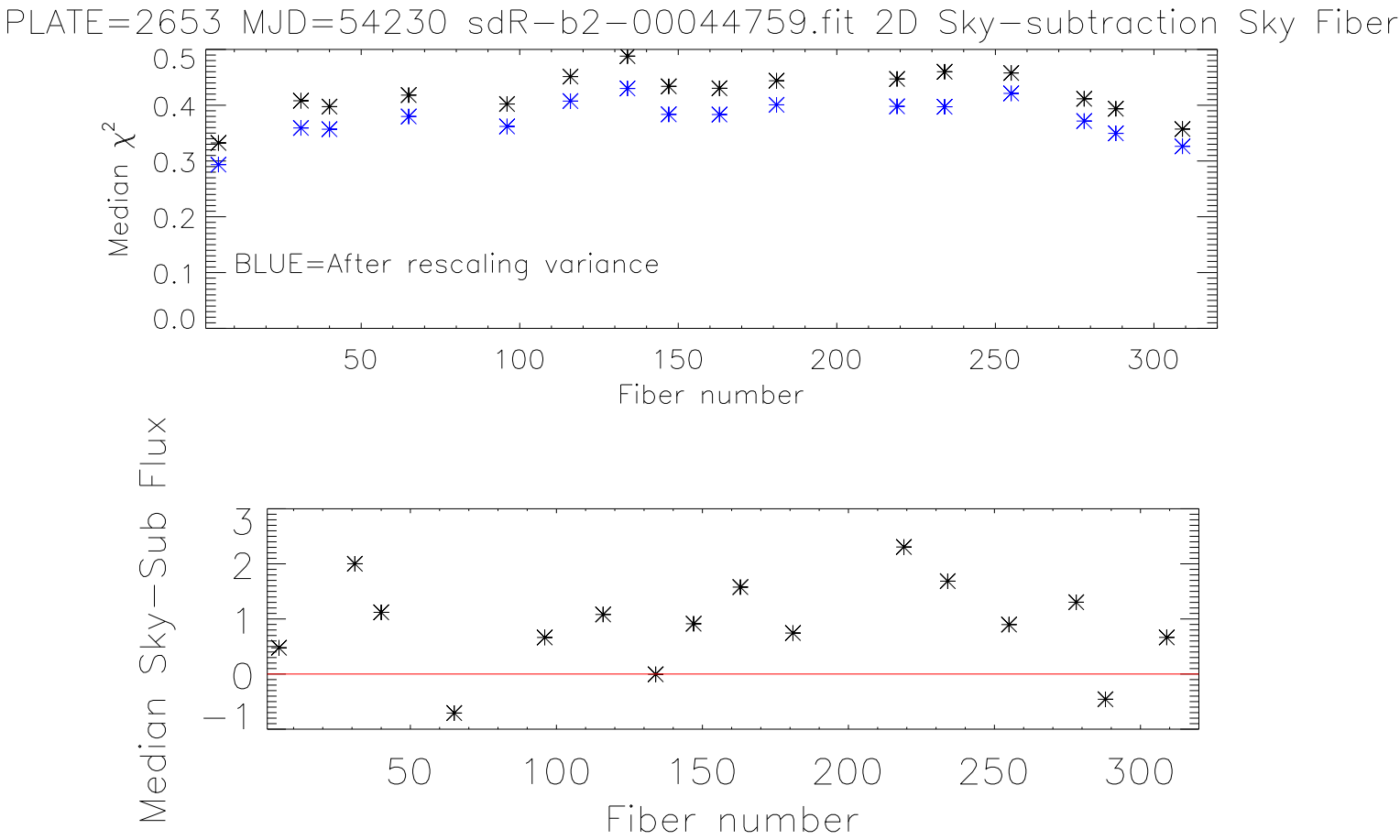
es= −0.0000

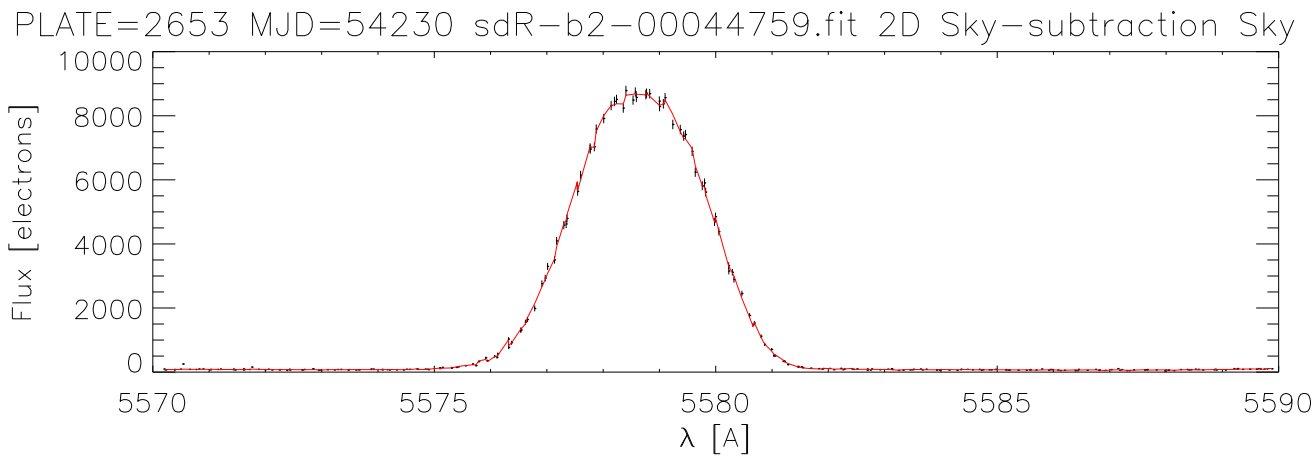

PLATE=2653 MJD=54230 sdR-b2-00044759.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

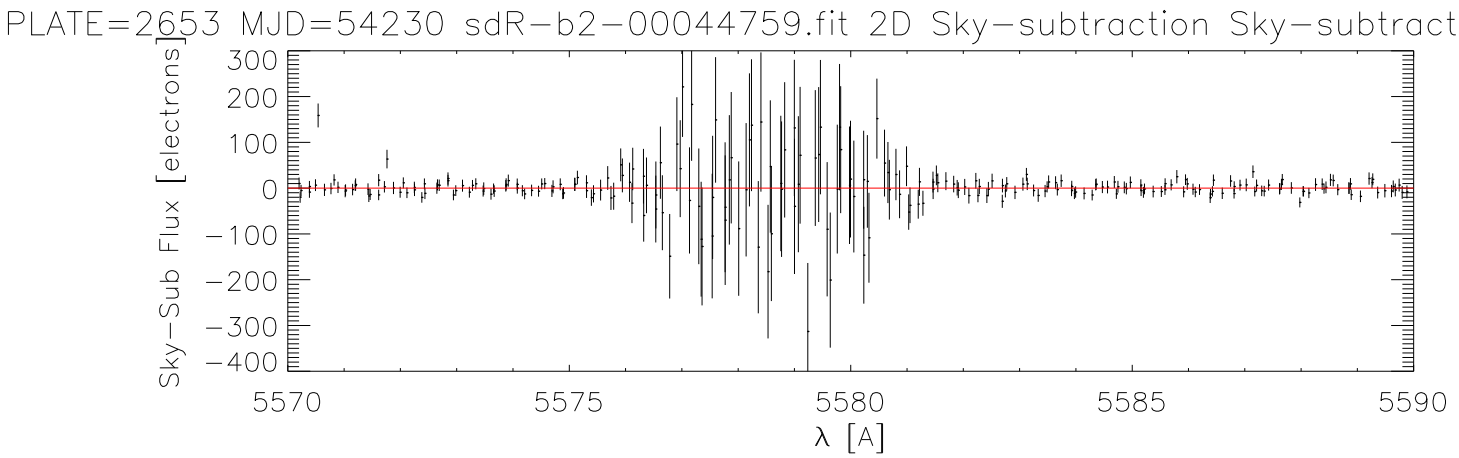

PLATE=2653 MJD=54230 sdR-b2-00044759.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

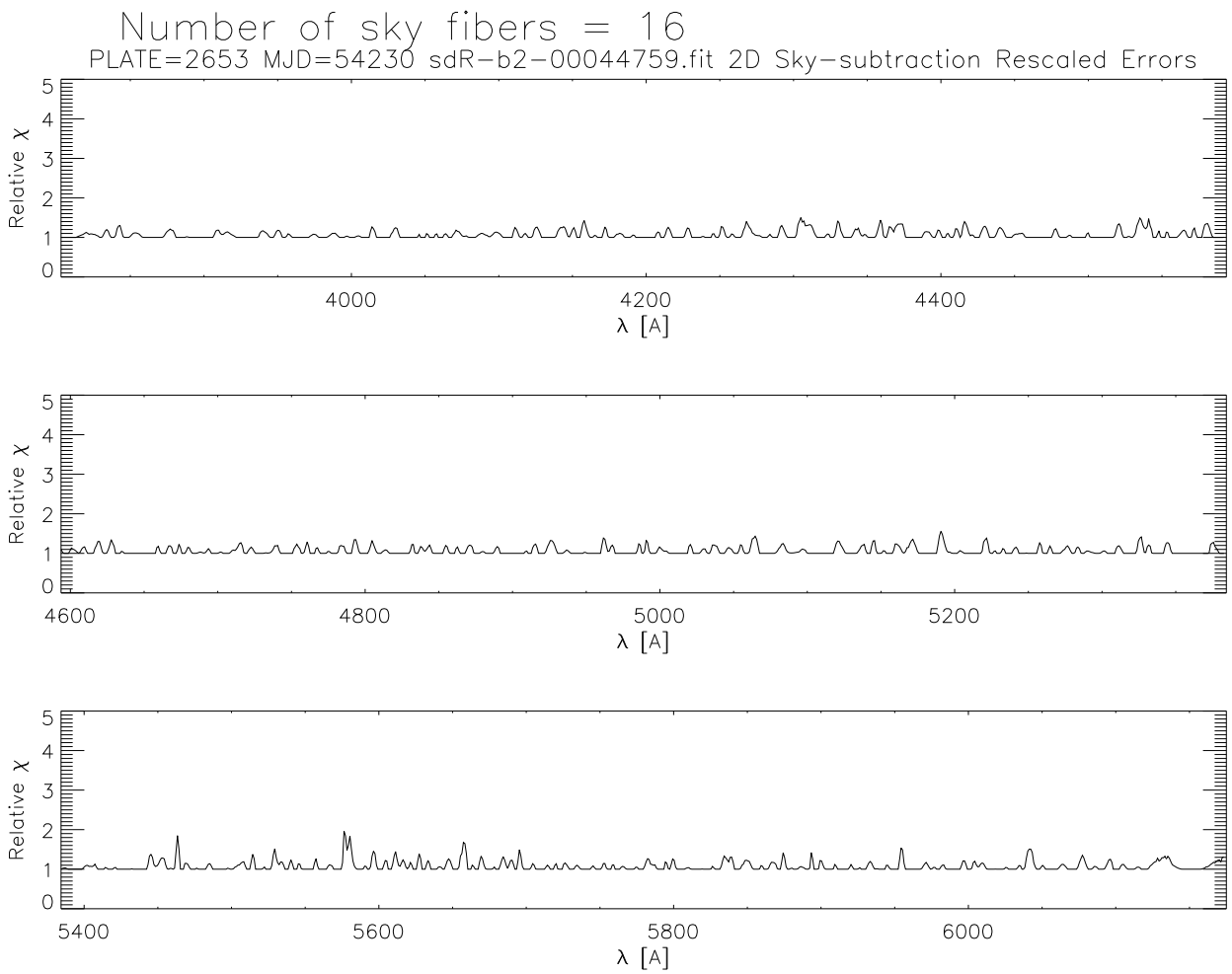

PLATE=2653 MJD=54230 sdR-b2-00044759.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

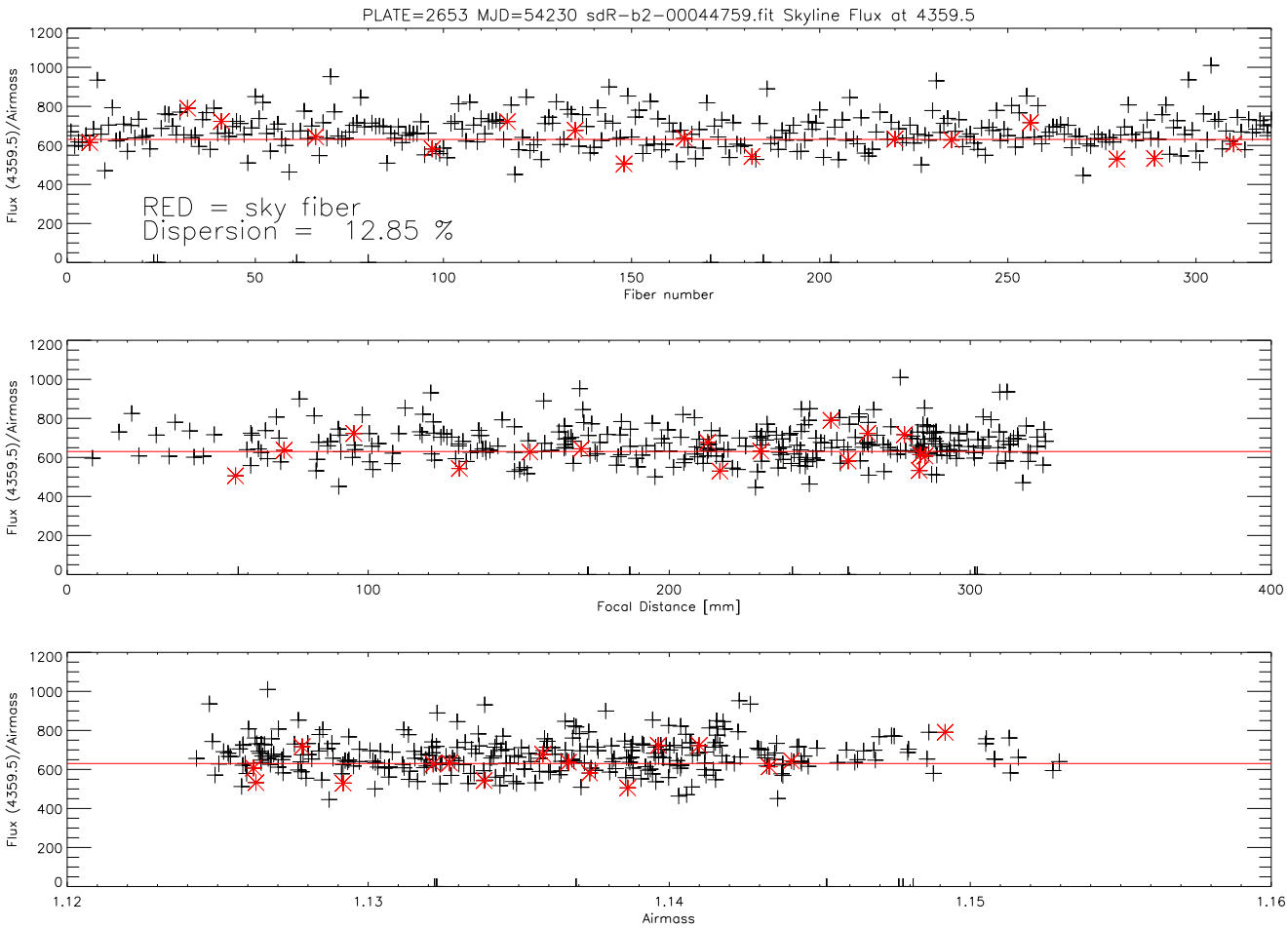

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b2-00044759.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

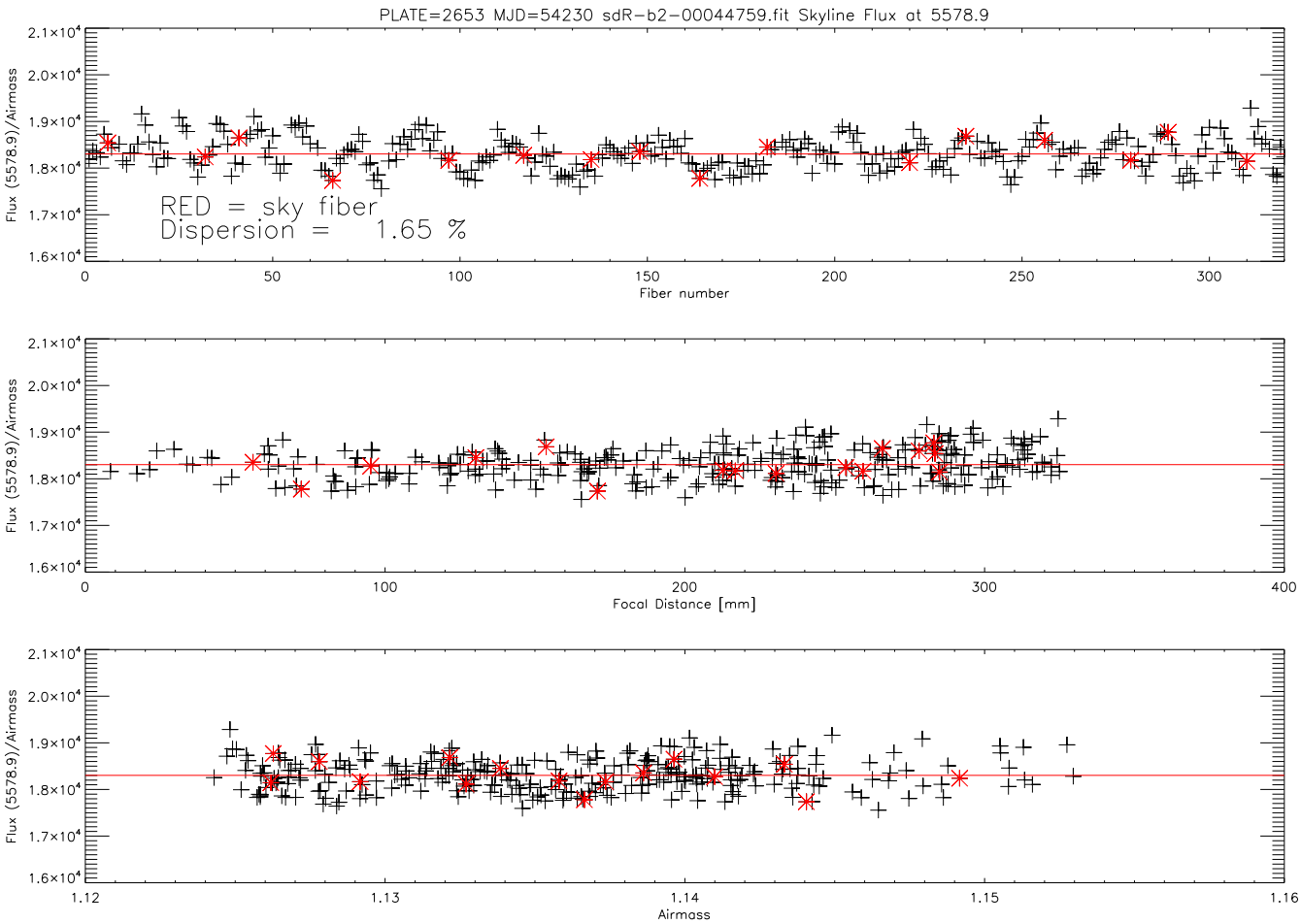

PLATE=2653 MJD=54230 sdR-b2-00044759.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

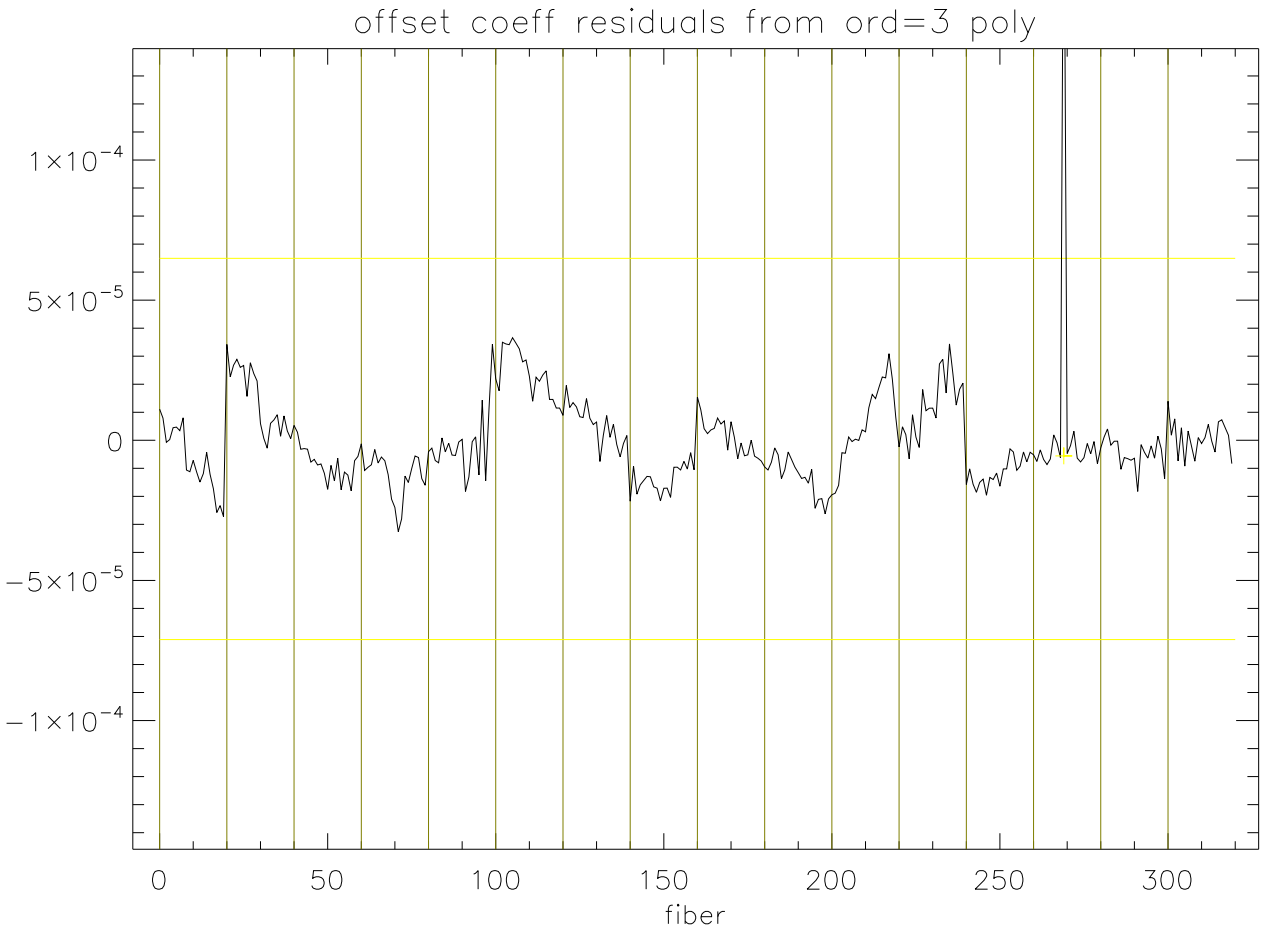

PLATE=2653 MJD=54230 sdR-b2-00044759.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

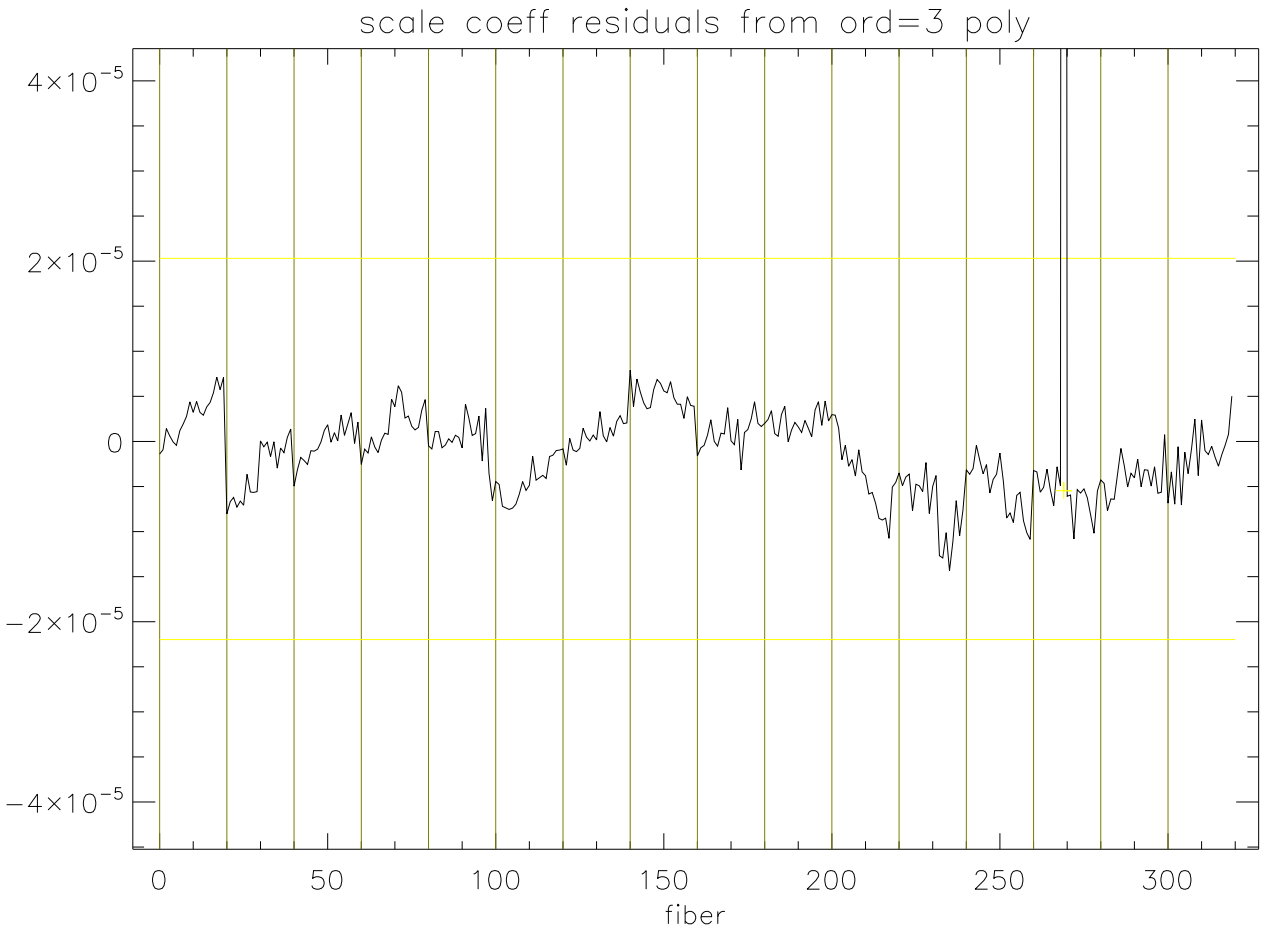

PLATE=2653 MJD=54230 sdR-b2-00044759.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
-400
5570
5575
5580
5585
5590
λ [A]

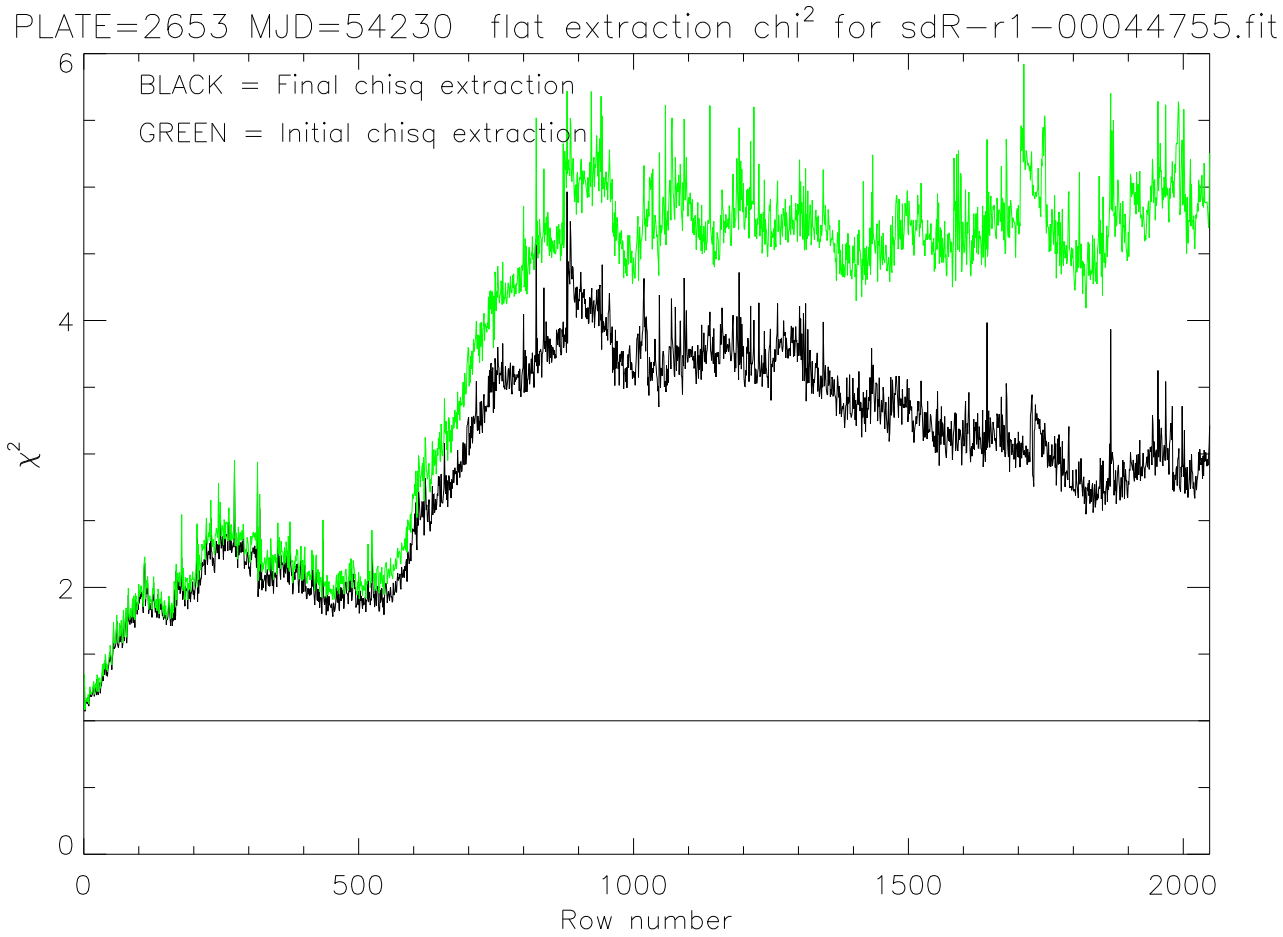

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-b2-00044759.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

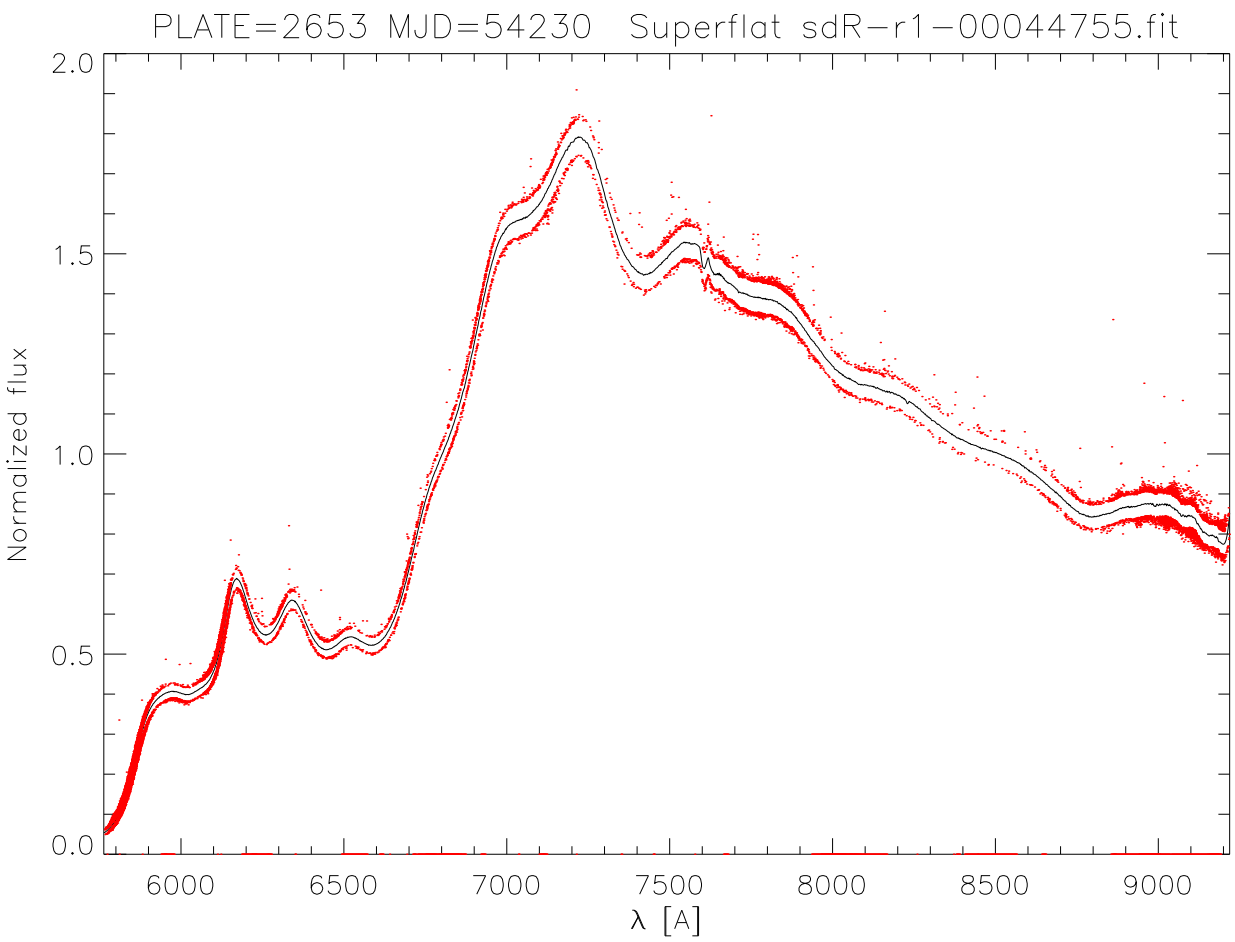

PLATE=2653 MJD=54230 sdR-b2-00044759.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.85 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

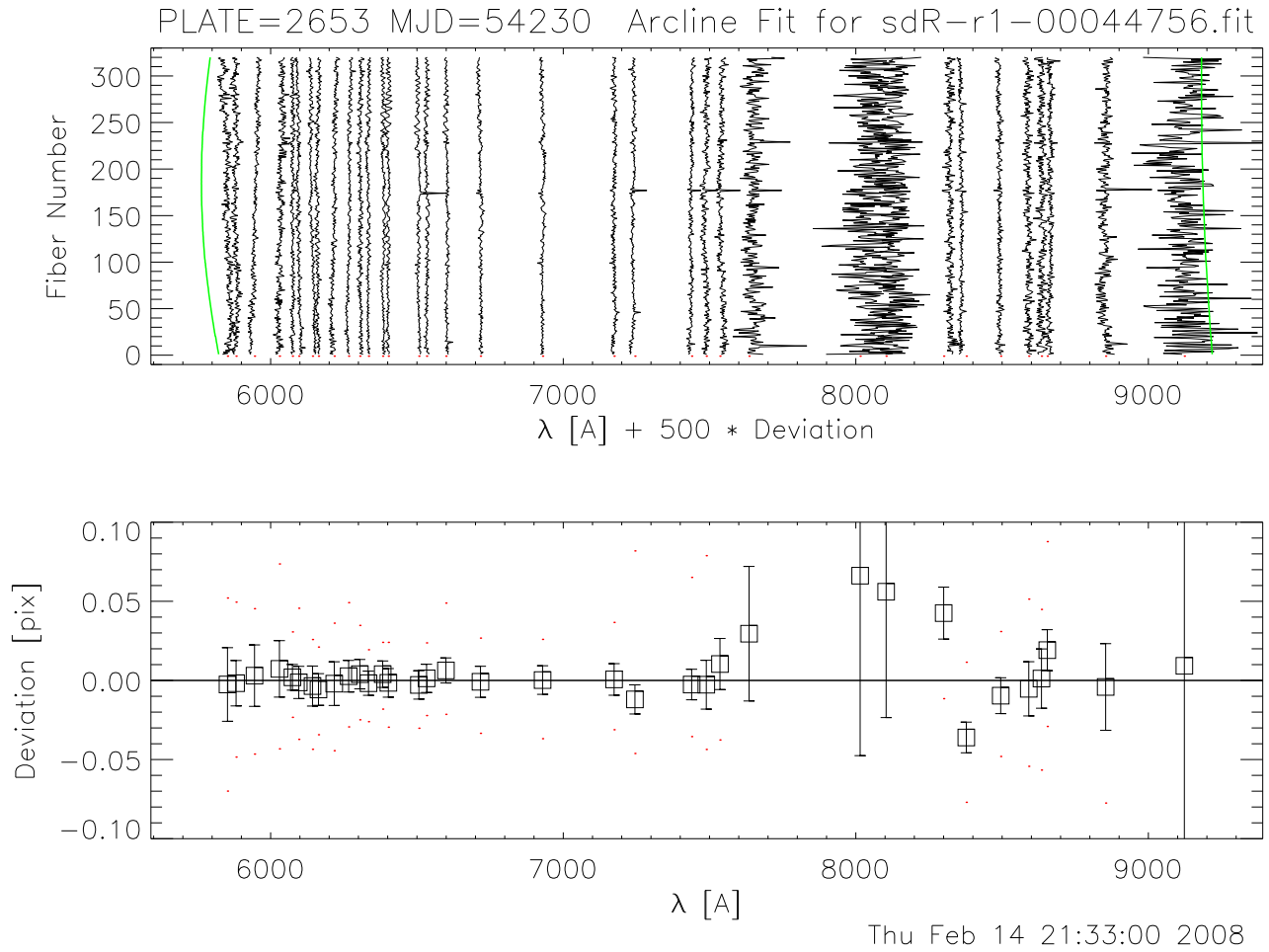

PLATE=2653 MJD=54230 sdR-b2-00044759.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.65 %
Fiber number
Focal Distance [mm]
Airmass

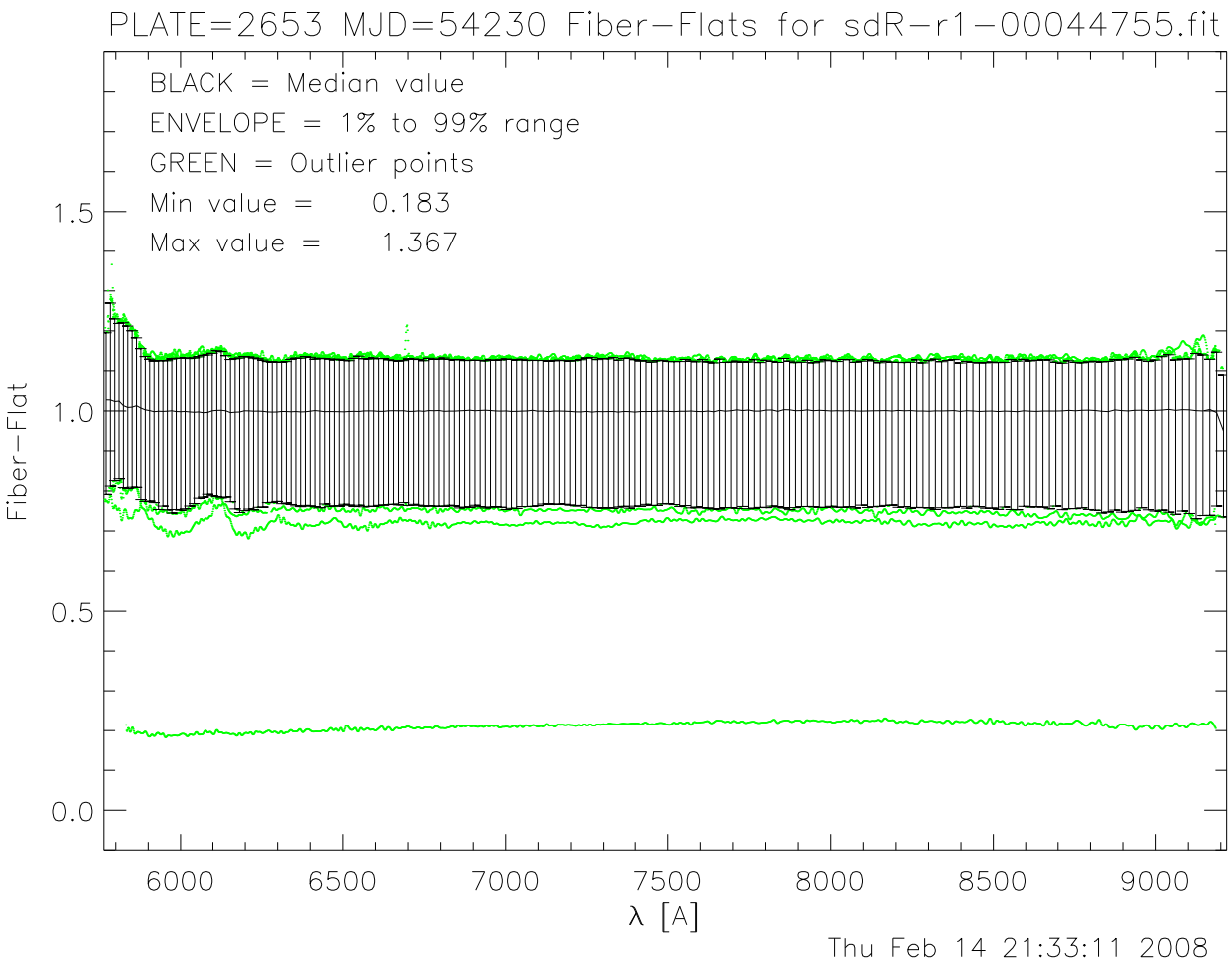

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

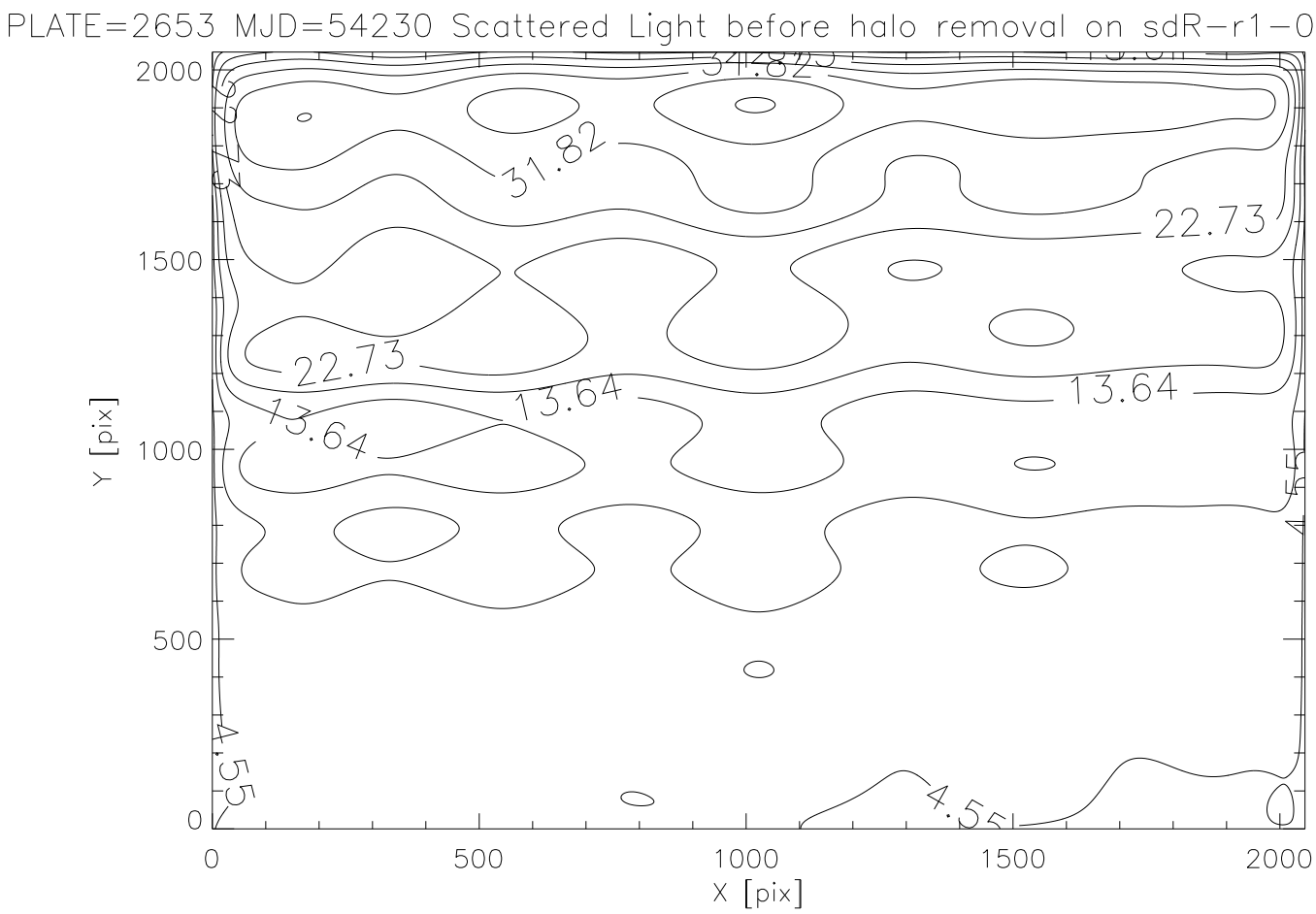

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

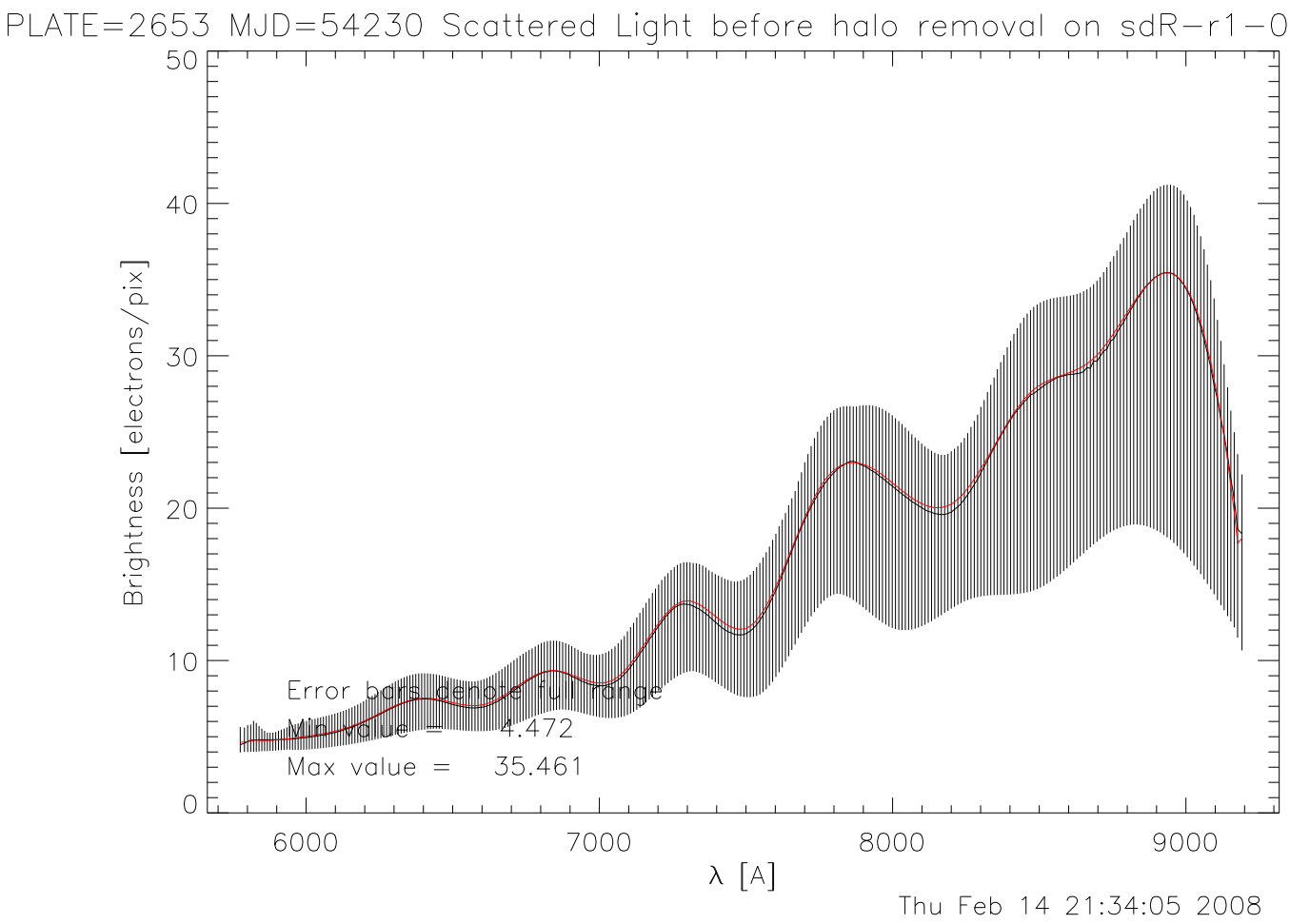

PLATE=2653 MJD=54230 flat extraction chi^2 for sdR−r1−00044755.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

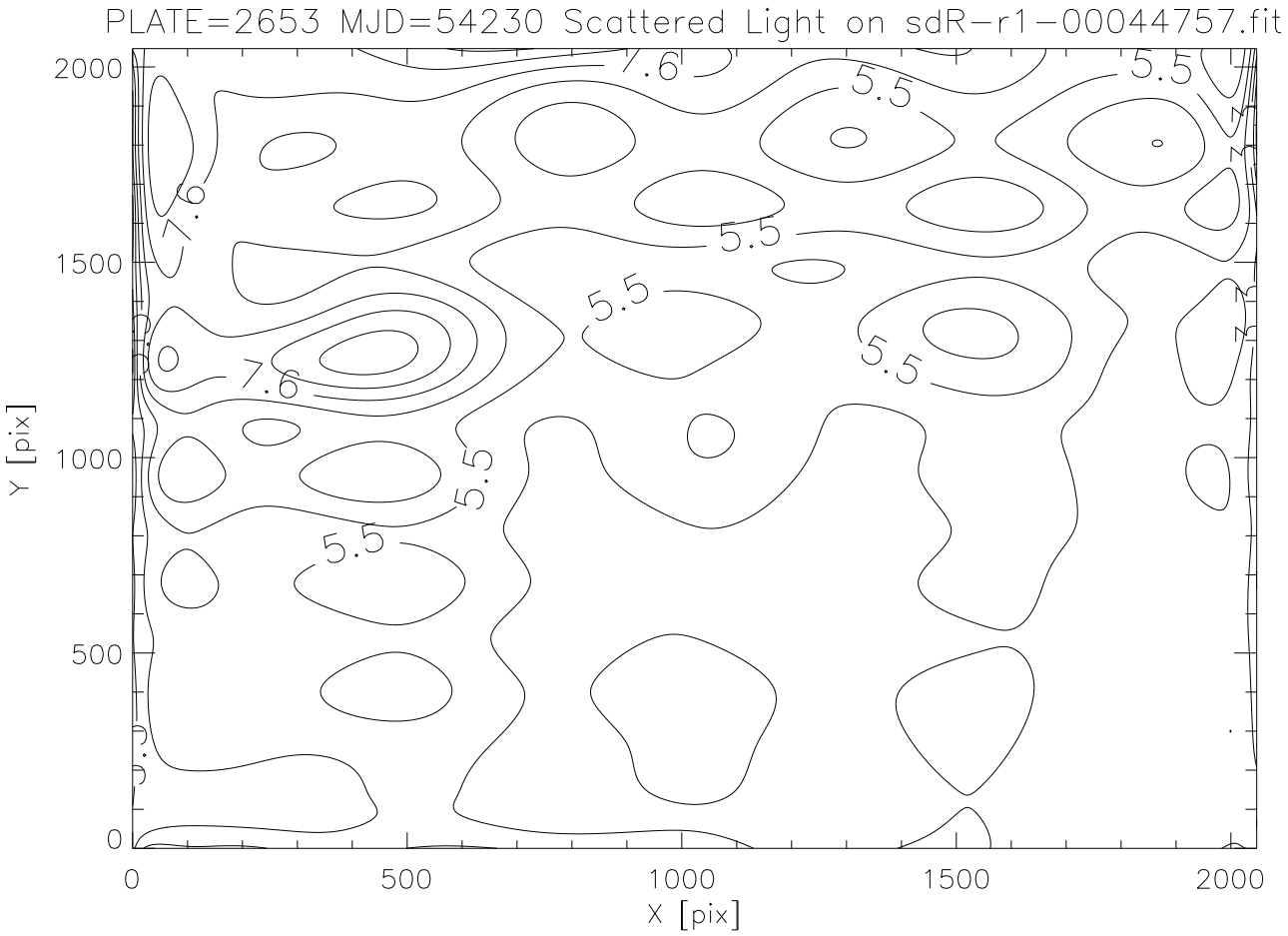

PLATE=2653 MJD=54230 Superflat sdR-r1-00044755.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

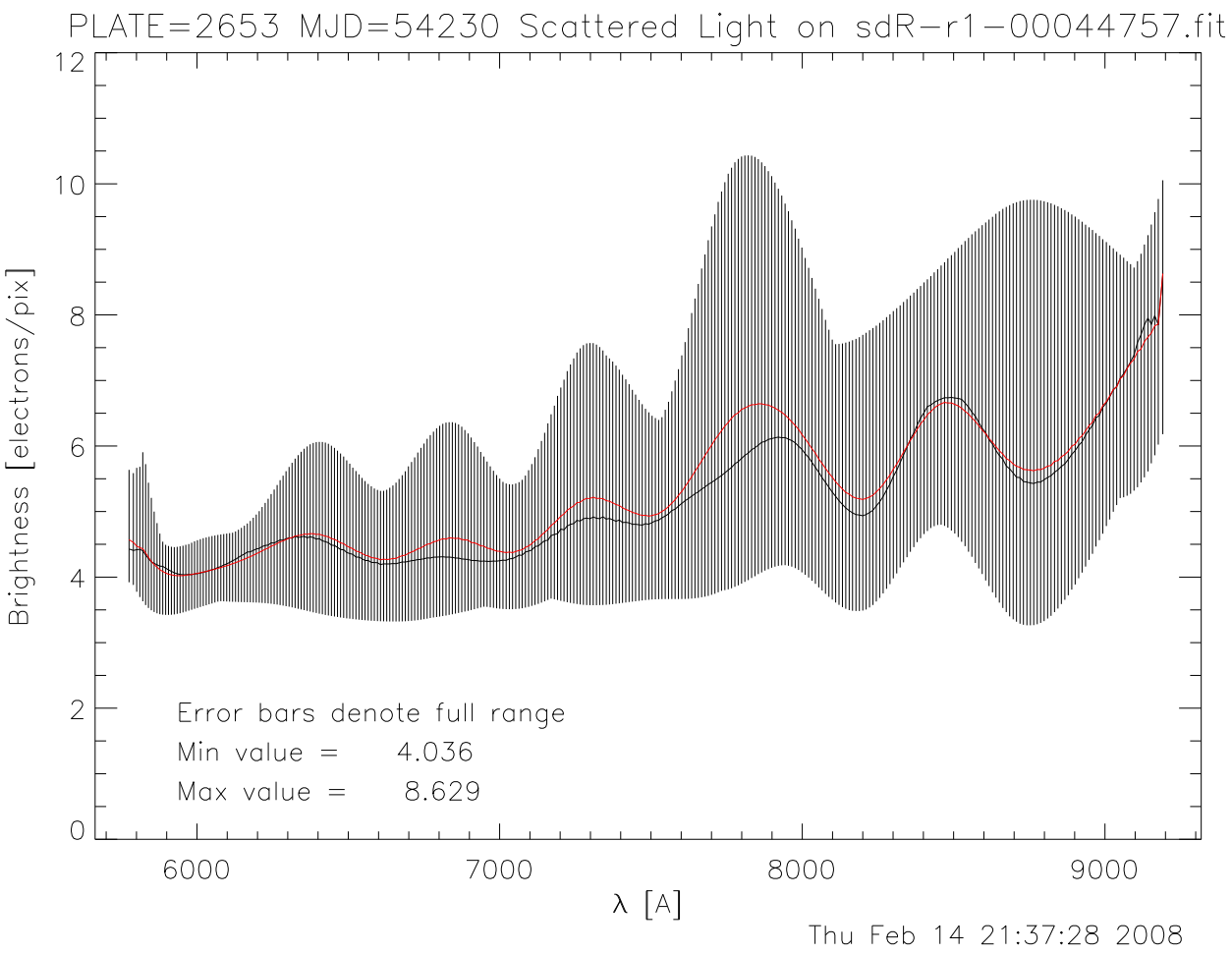

PLATE=2653 MJD=54230 Arcline Fit for sdR-r1-00044756.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu Feb 14 21:33:00 2008

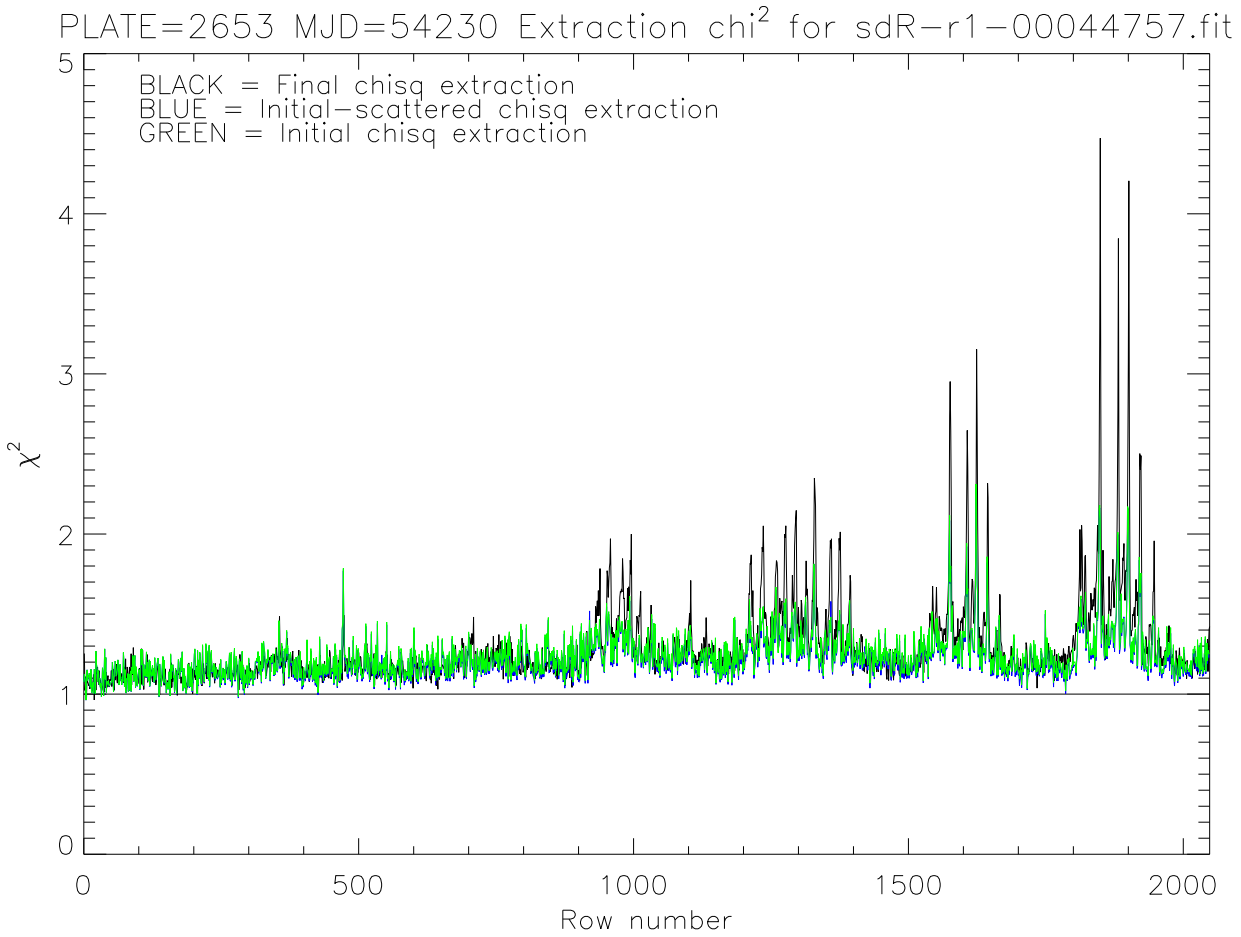

PLATE=2653 MJD=54230 Fiber-Flats for sdR-r1-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.183
Max value = 1.367
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 14 21:33:11 2008

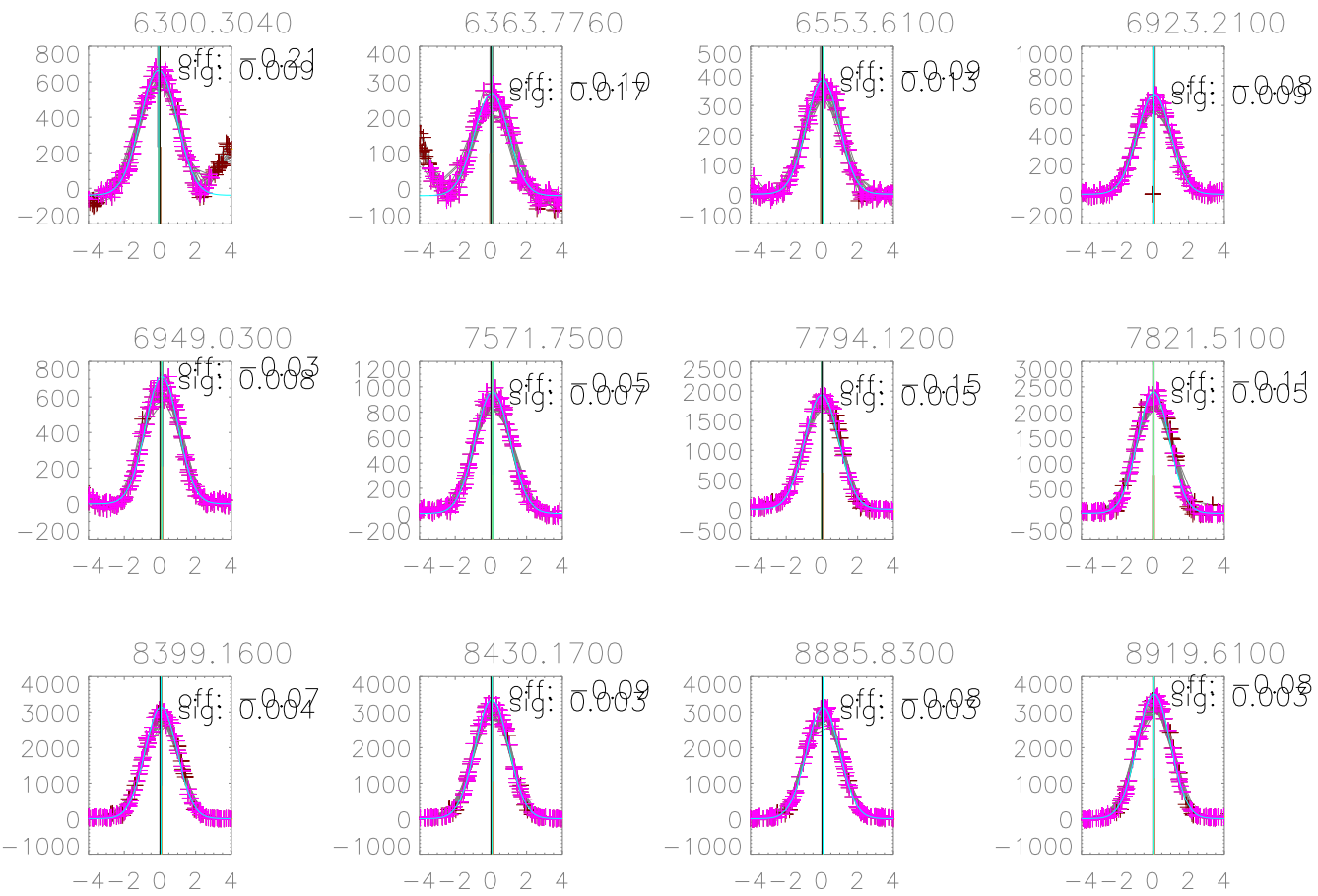

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r1-00044757.fi
31.82
22.73
13.64
4.55
0
Y [pix]
X [pix]
0
500
1000
1500
2000

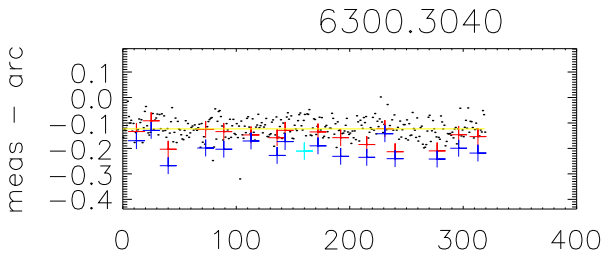

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r1-00044757.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.472
Max value = 35.461
Thu Feb 14 21:34:05 2008

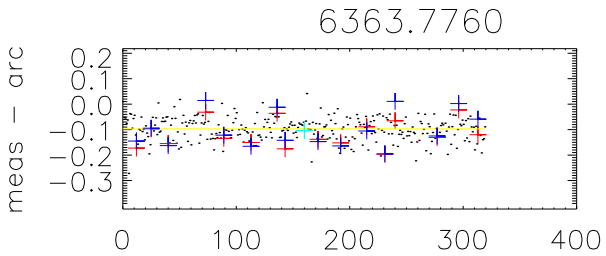

PLATE=2653 MJD=54230 Scattered Light on sdR−r1−00044757.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.6
5.5

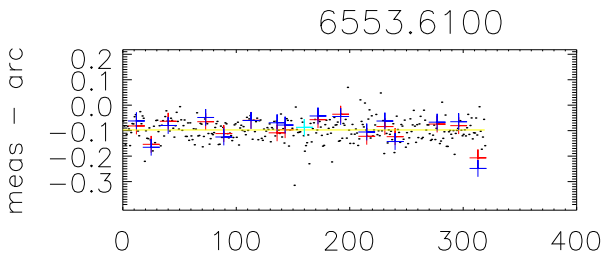

PLATE=2653 MJD=54230 Scattered Light on sdR-r1-00044757.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.036
Max value = 8.629
Thu Feb 14 21:37:28 2008

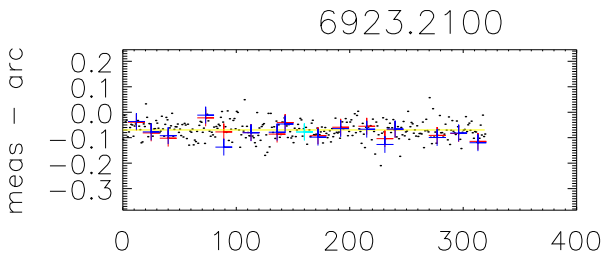

PLATE=2653 MJD=54230 Extraction chi^2 for sdR−r1−00044757.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

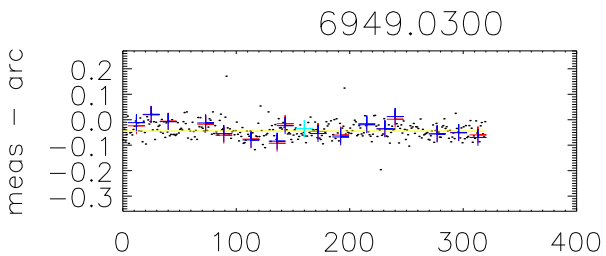

6300.3040
off: −0.21
sig: 0.009
6363.7760
off: −0.10
sig: 0.017
6553.6100
off: −0.09
sig: 0.013
6923.2100
off: −0.08
sig: 0.009
6949.0300
off: −0.03
sig: 0.008
7571.7500
off: −0.05
sig: 0.007
7794.1200
off: −0.15
sig: 0.005
7821.5100
off: −0.11
sig: 0.005
8399.1600
off: −0.07
sig: 0.004
8430.1700
off: −0.09
sig: 0.003
8885.8300
off: −0.08
sig: 0.003
8919.6100
off: −0.08
sig: 0.003

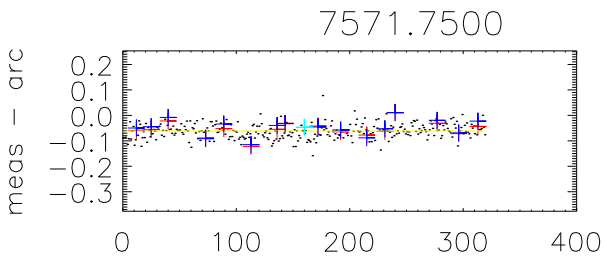

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

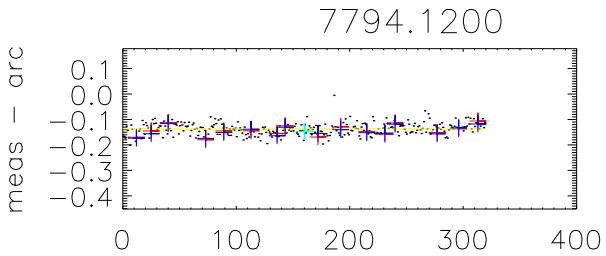

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

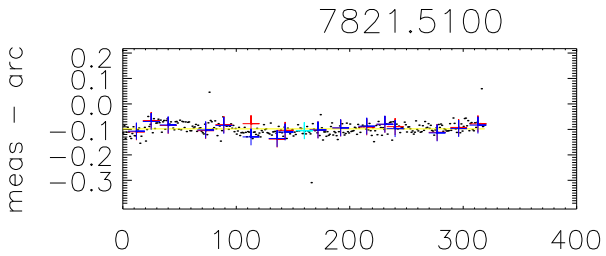

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

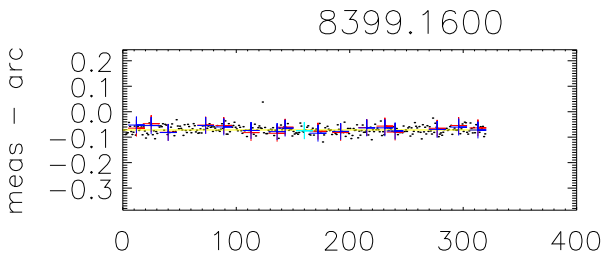

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

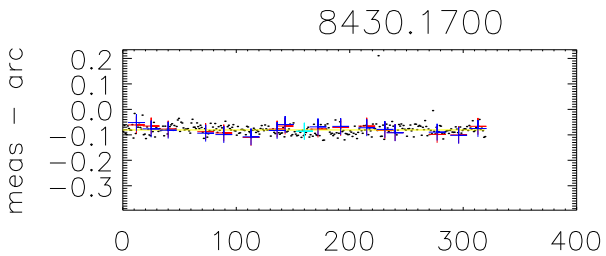

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

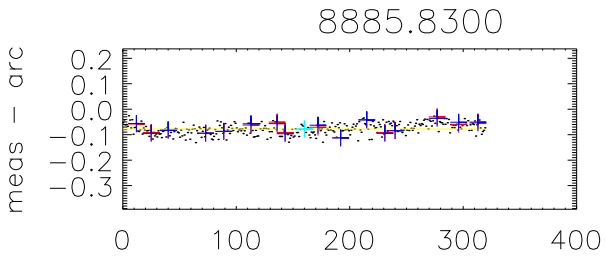

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

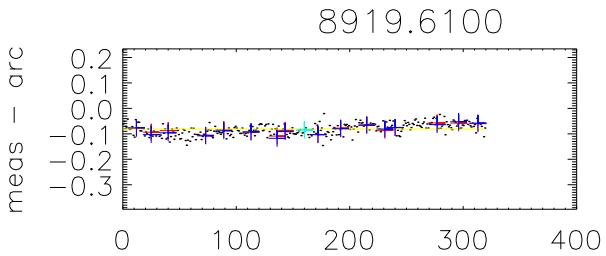

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

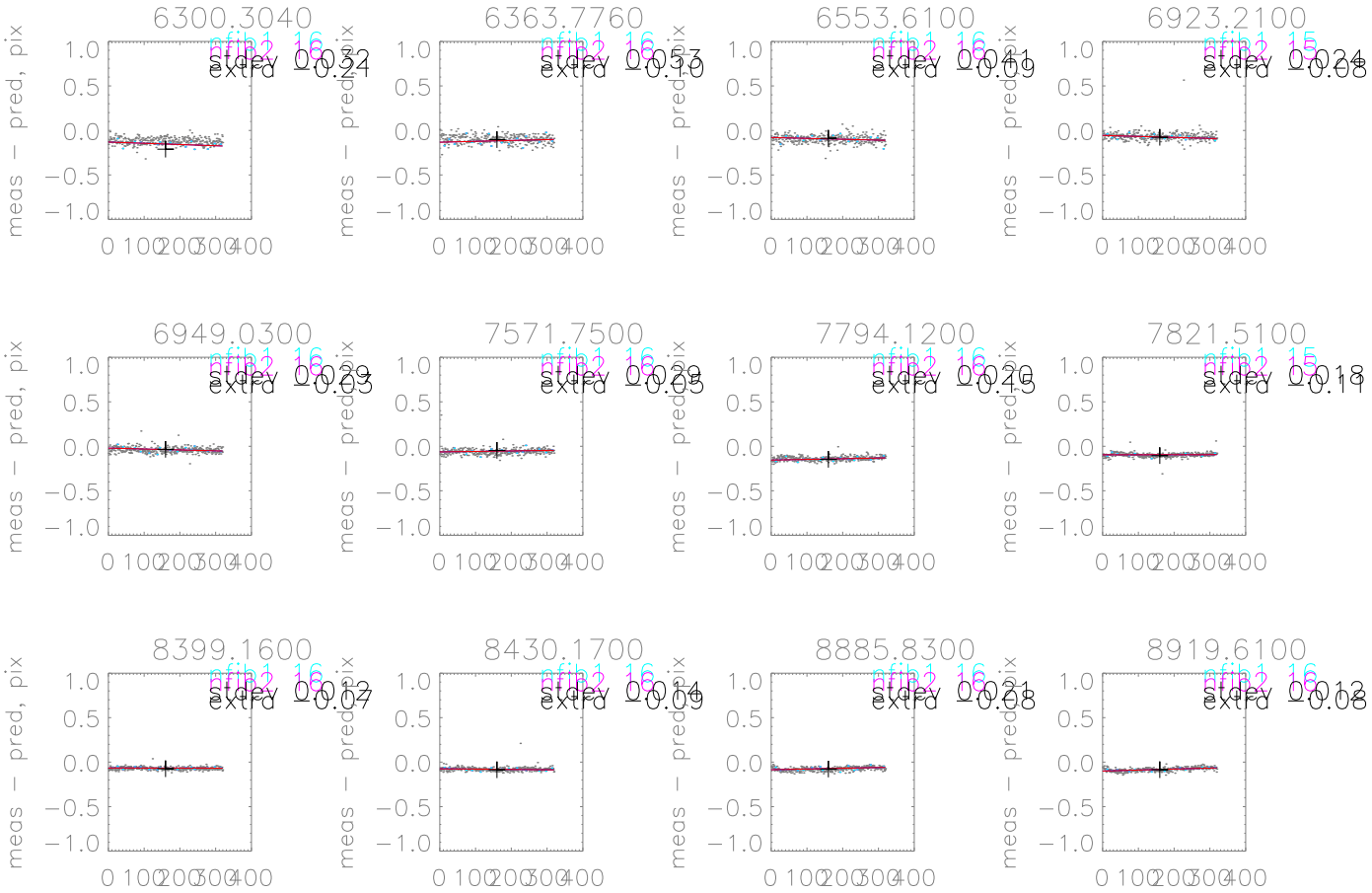

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

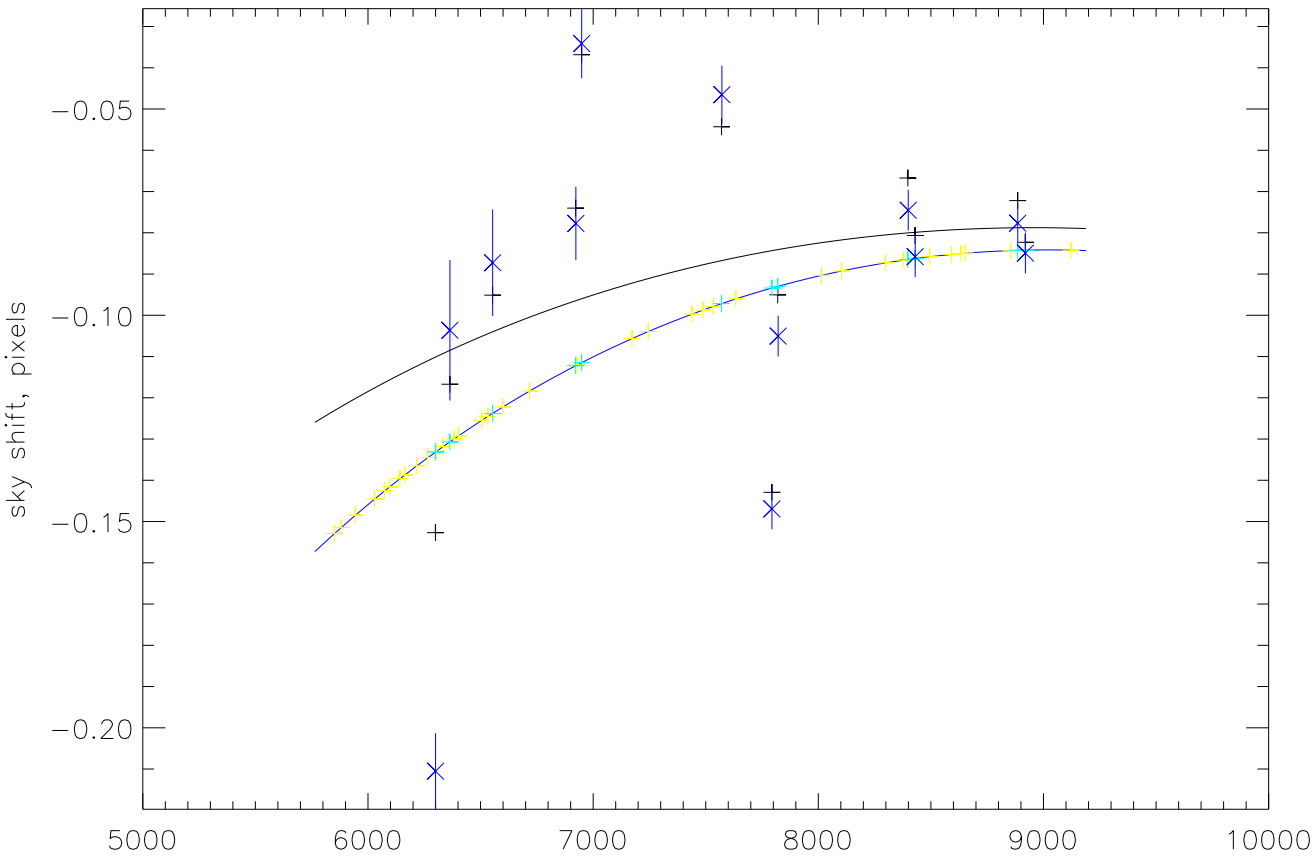

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

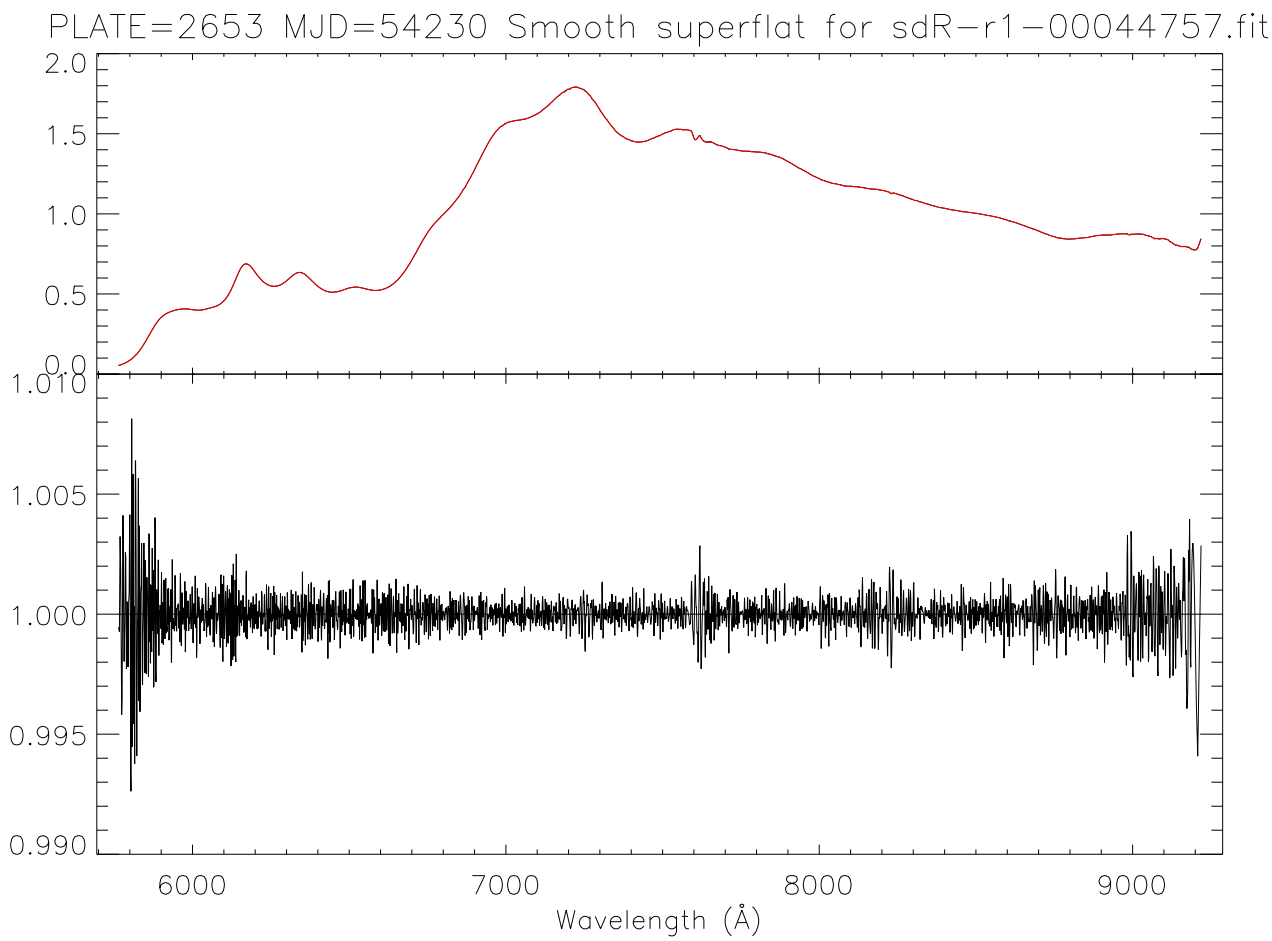

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

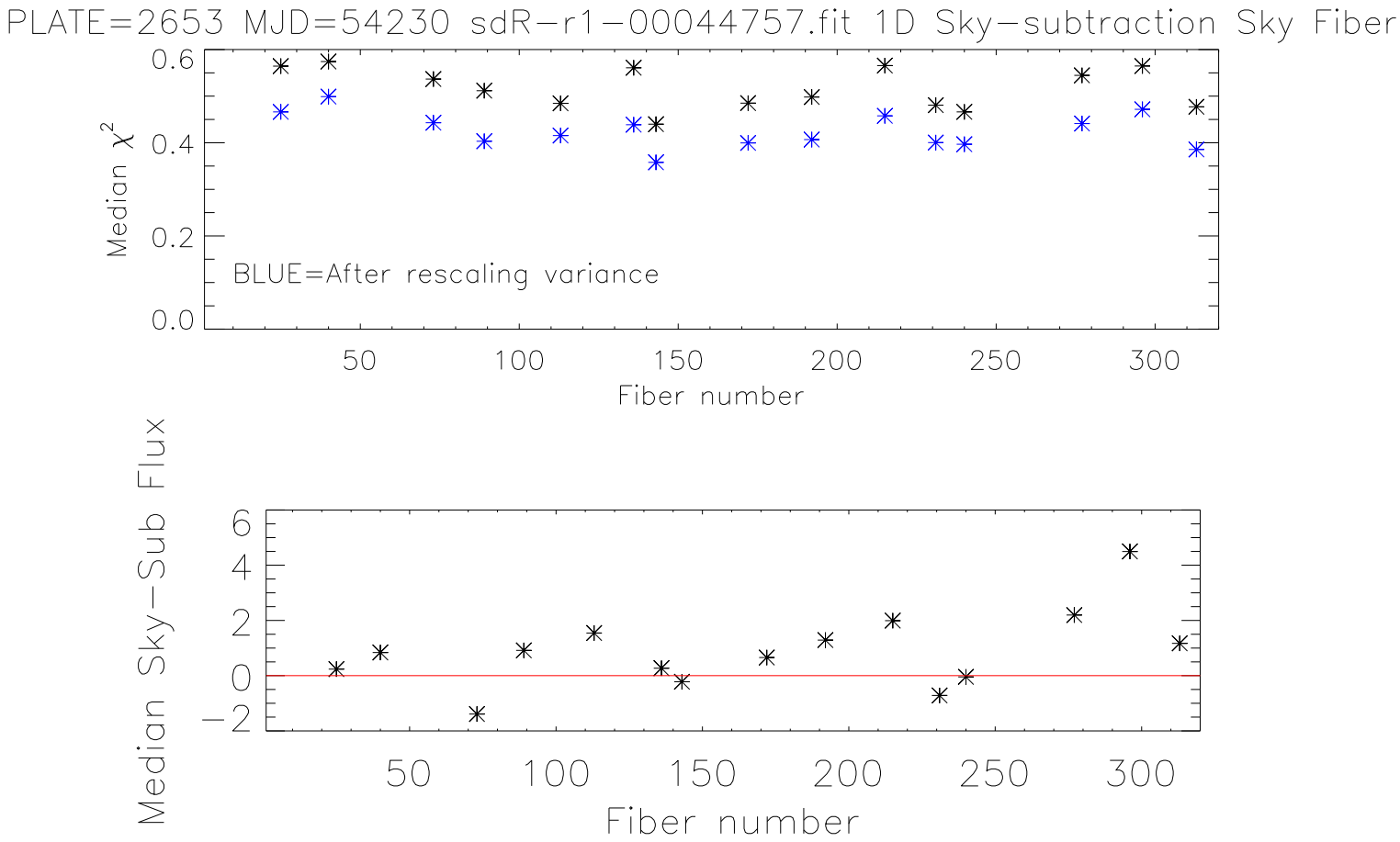

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

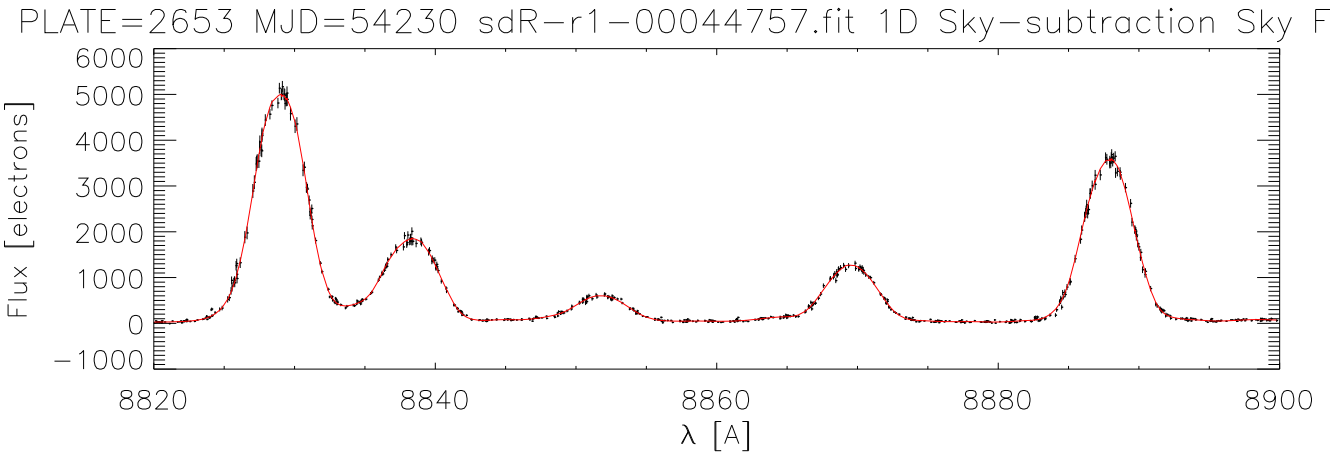

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 16
mfib2 16
mfib1 15
mfib2 15
stdev 0.032
extrd 0.24
stdev 0.053
extrd 0.10
stdev 0.041
extrd 0.09
stdev 0.024
extrd 0.08
stdev 0.029
extrd 0.03
stdev 0.029
extrd 0.05
stdev 0.020
extrd 0.45
stdev 0.018
extrd 0.11
stdev 0.012
extrd 0.07
stdev 0.014
extrd 0.09
stdev 0.021
extrd 0.08
stdev 0.012
extrd 0.08

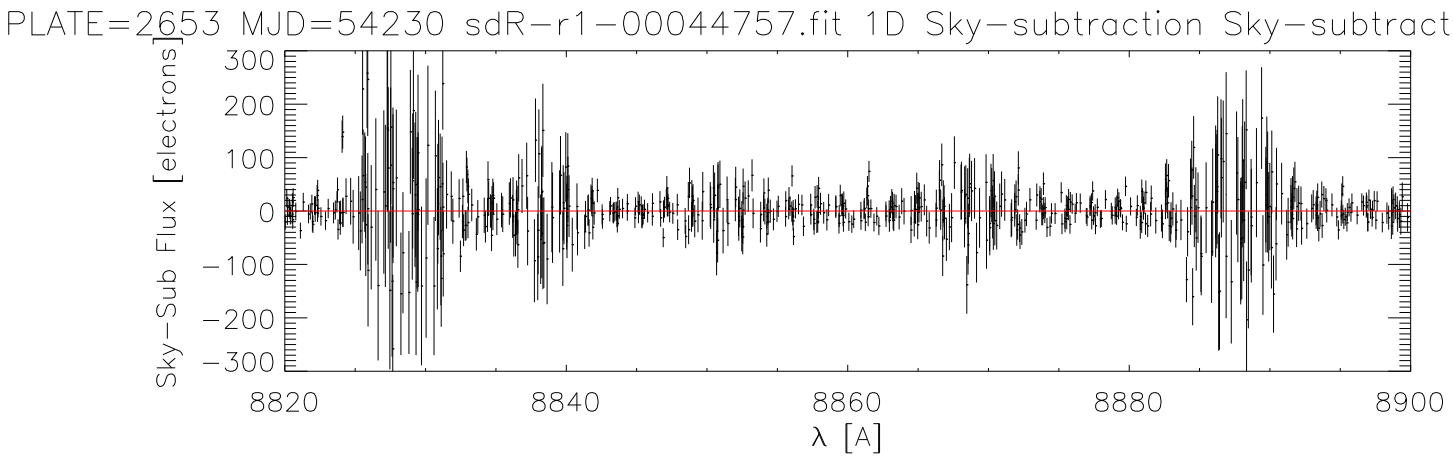

−0.05
−0.10
−0.15
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

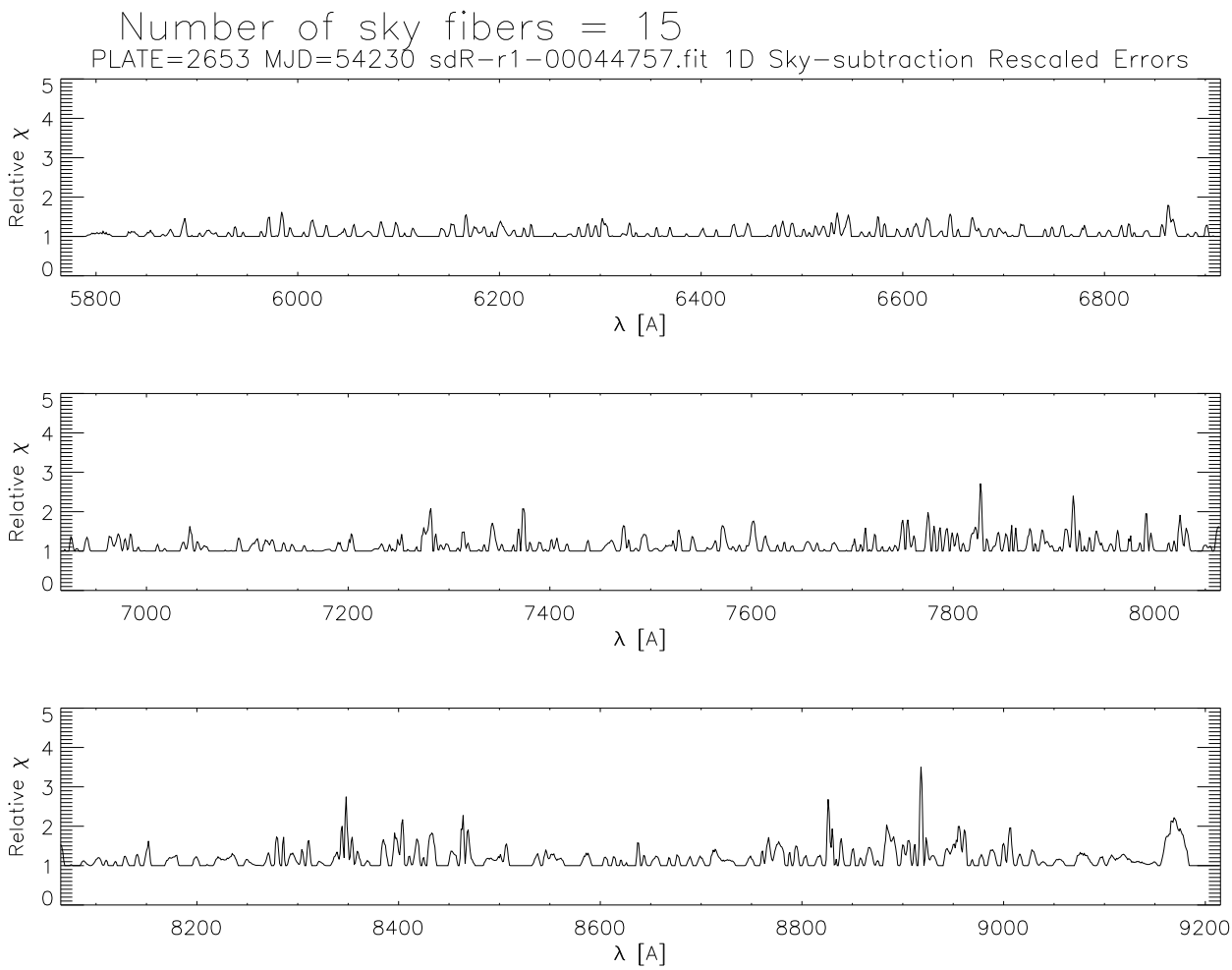
es= 0.0000

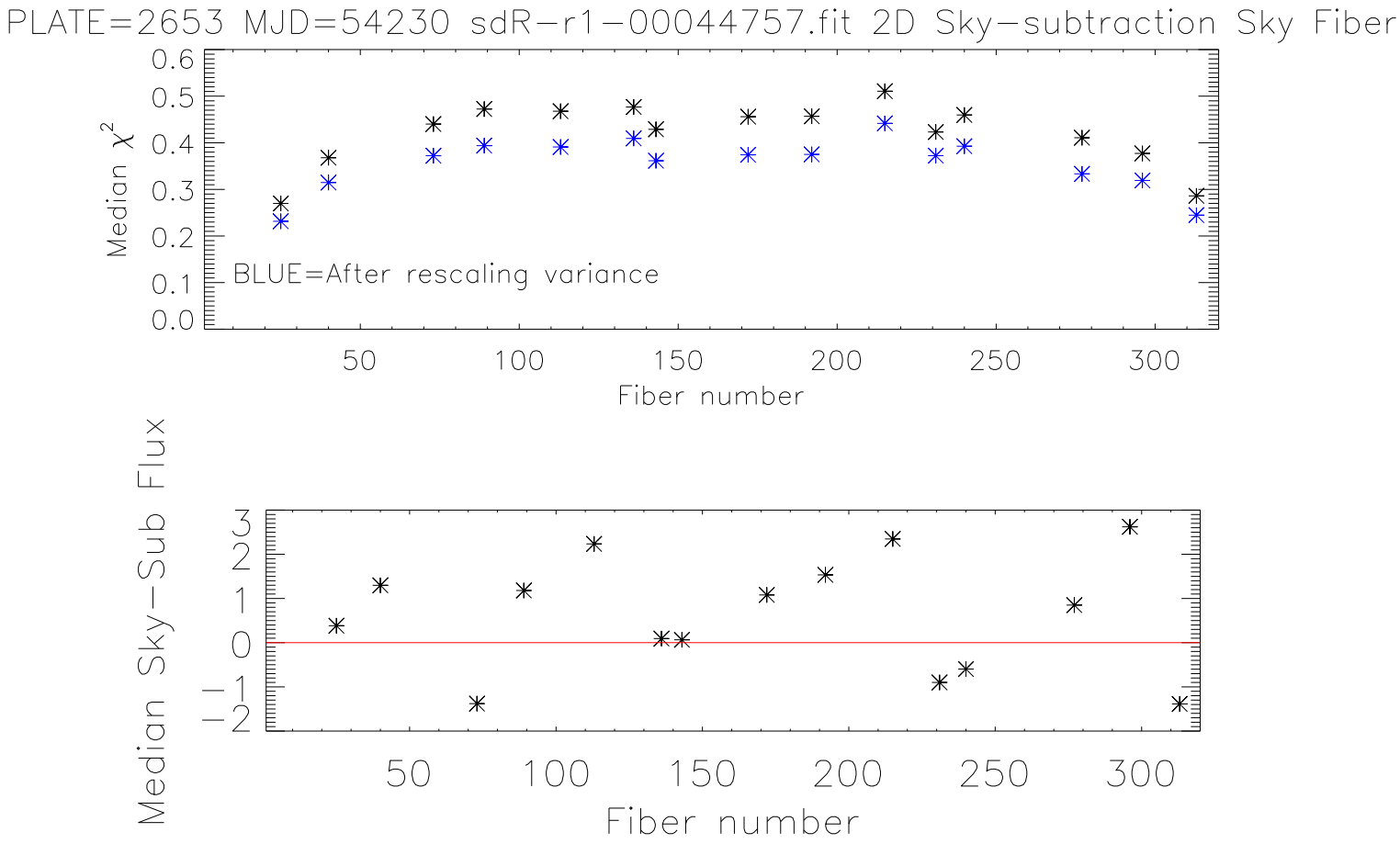

PLATE=2653 MJD=54230 Smooth superflat for sdR-r1-00044757.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

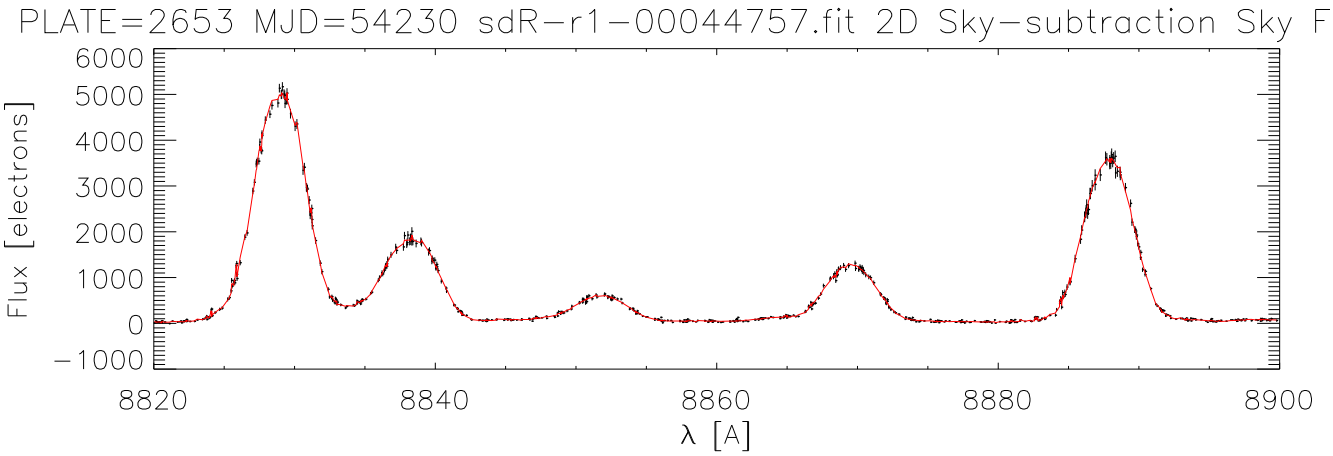

PLATE=2653 MJD=54230 sdR-r1-00044757.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

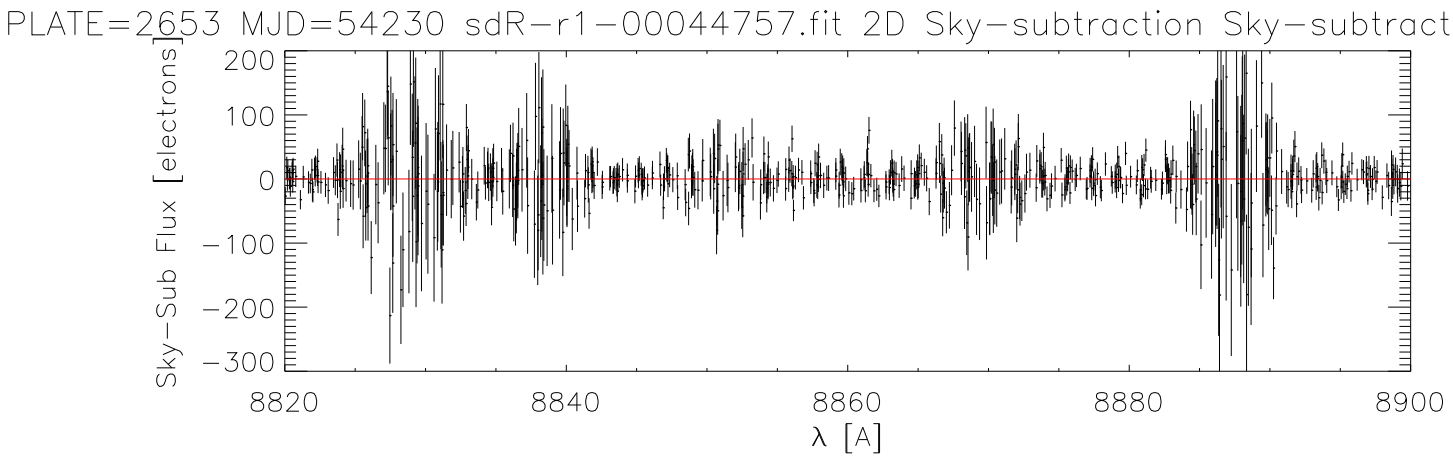

PLATE=2653 MJD=54230 sdR-r1-00044757.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

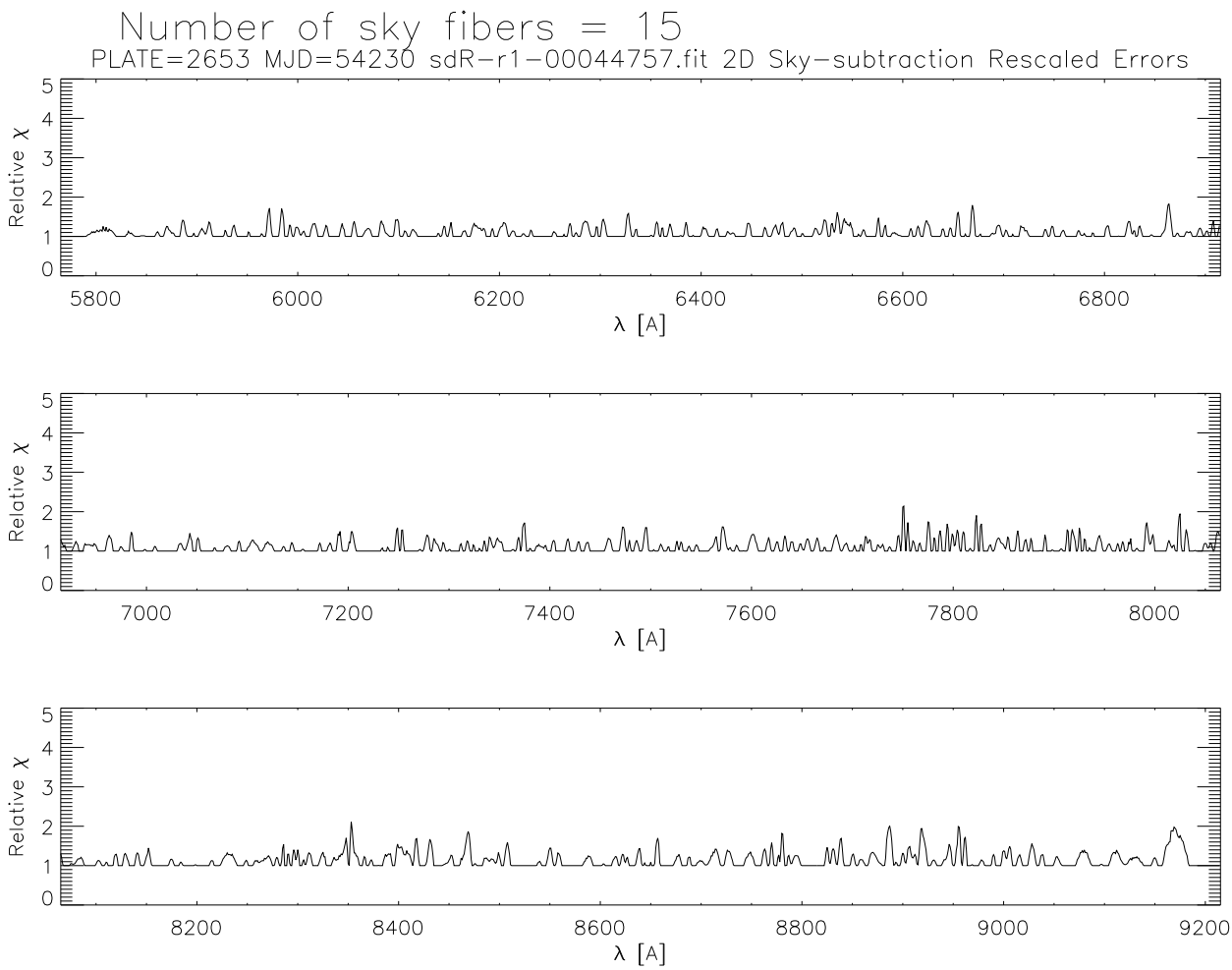

PLATE=2653 MJD=54230 sdR-r1-00044757.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

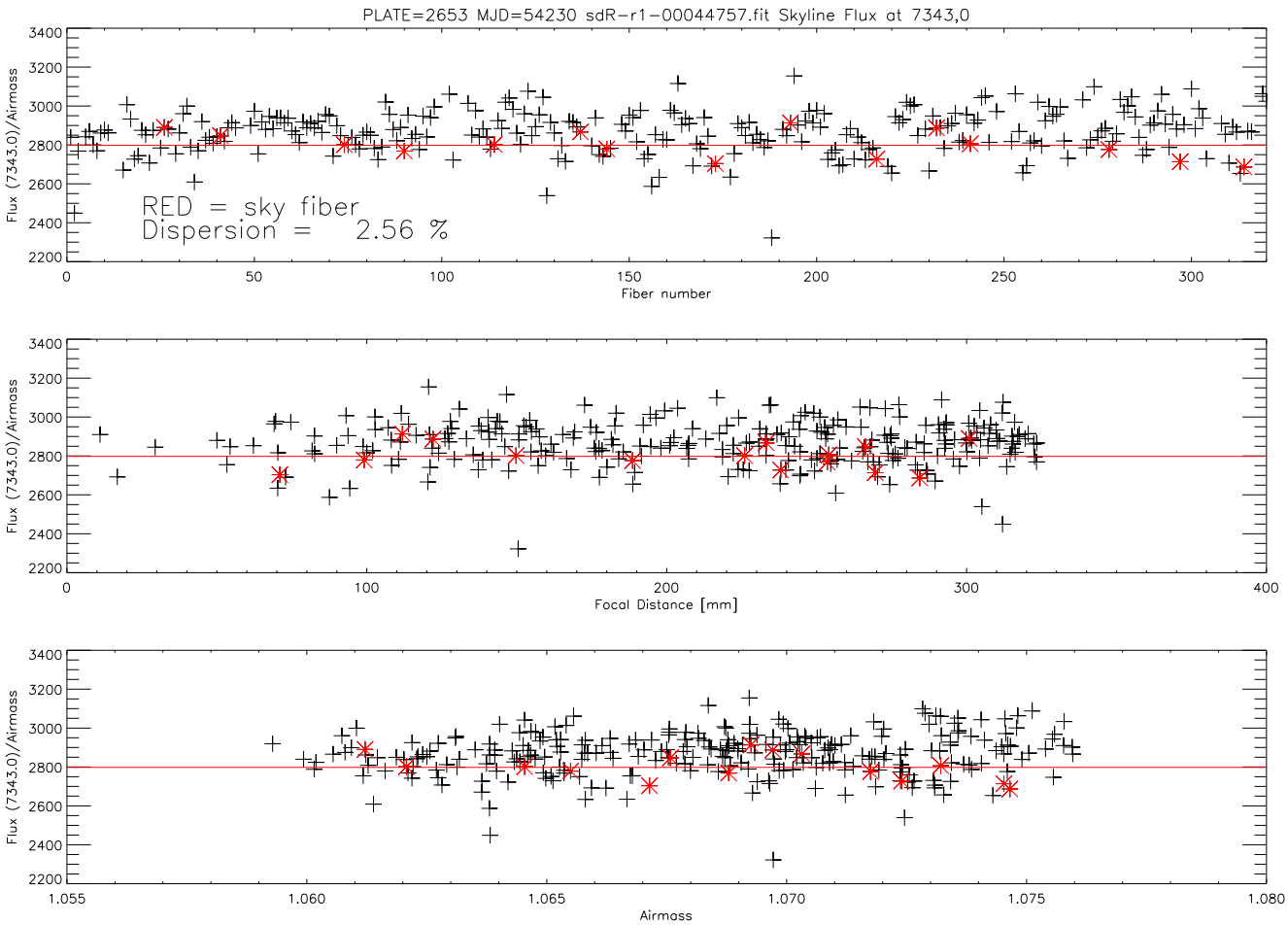

Number of sky fibers = 15
PLATE=2653 MJD=54230 sdR-r1-00044757.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

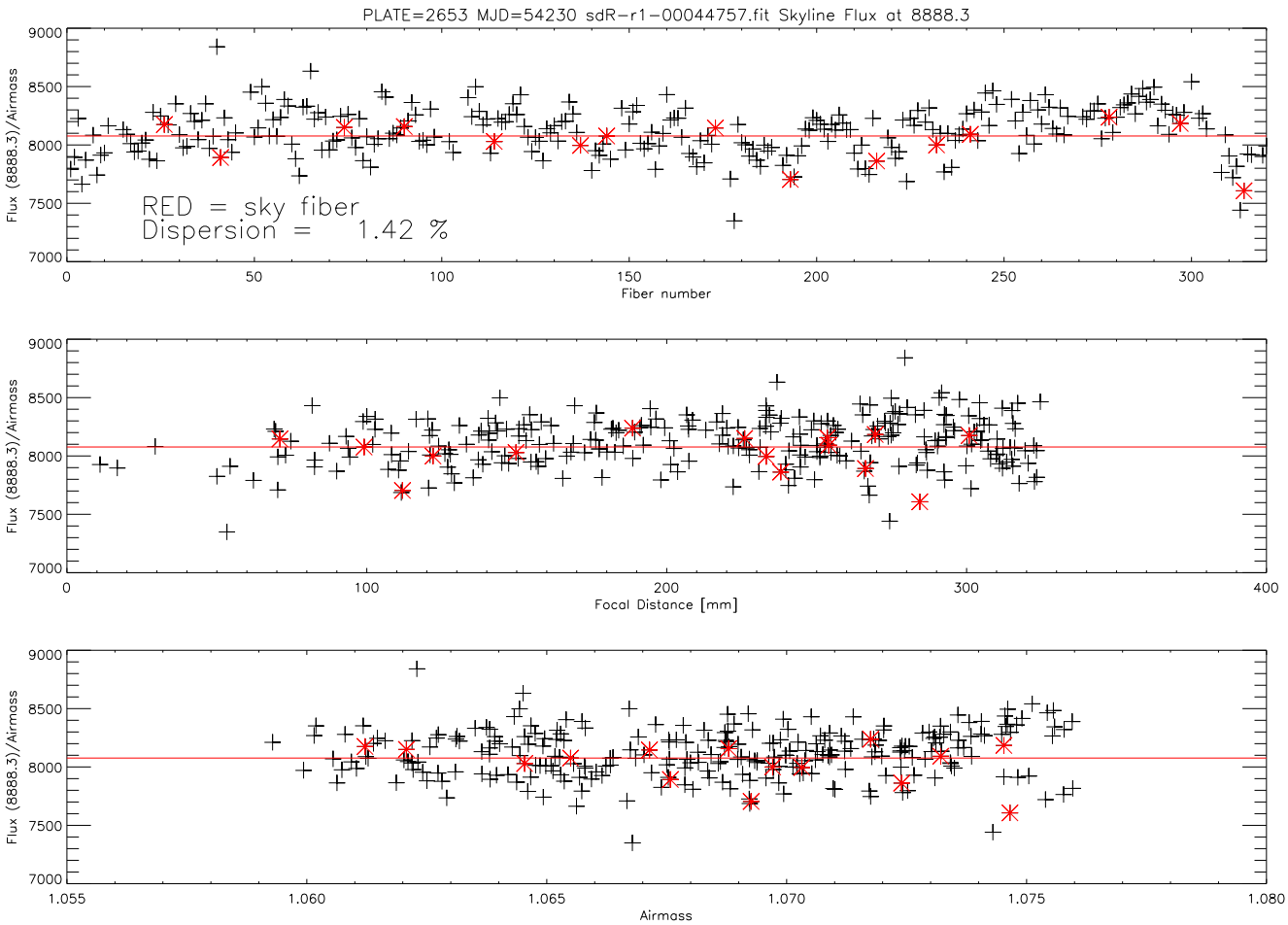

PLATE=2653 MJD=54230 sdR-r1-00044757.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

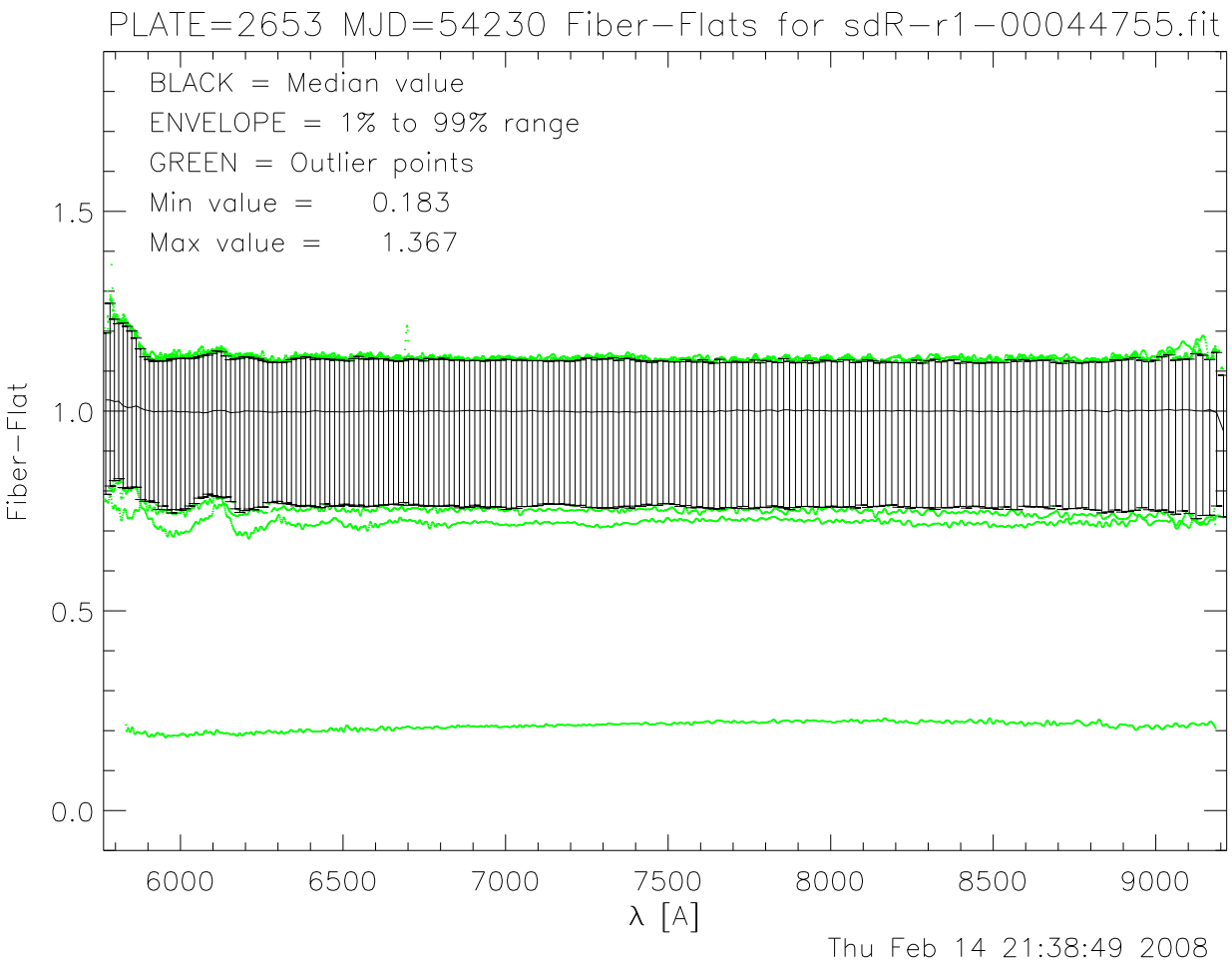

PLATE=2653 MJD=54230 sdR-r1-00044757.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

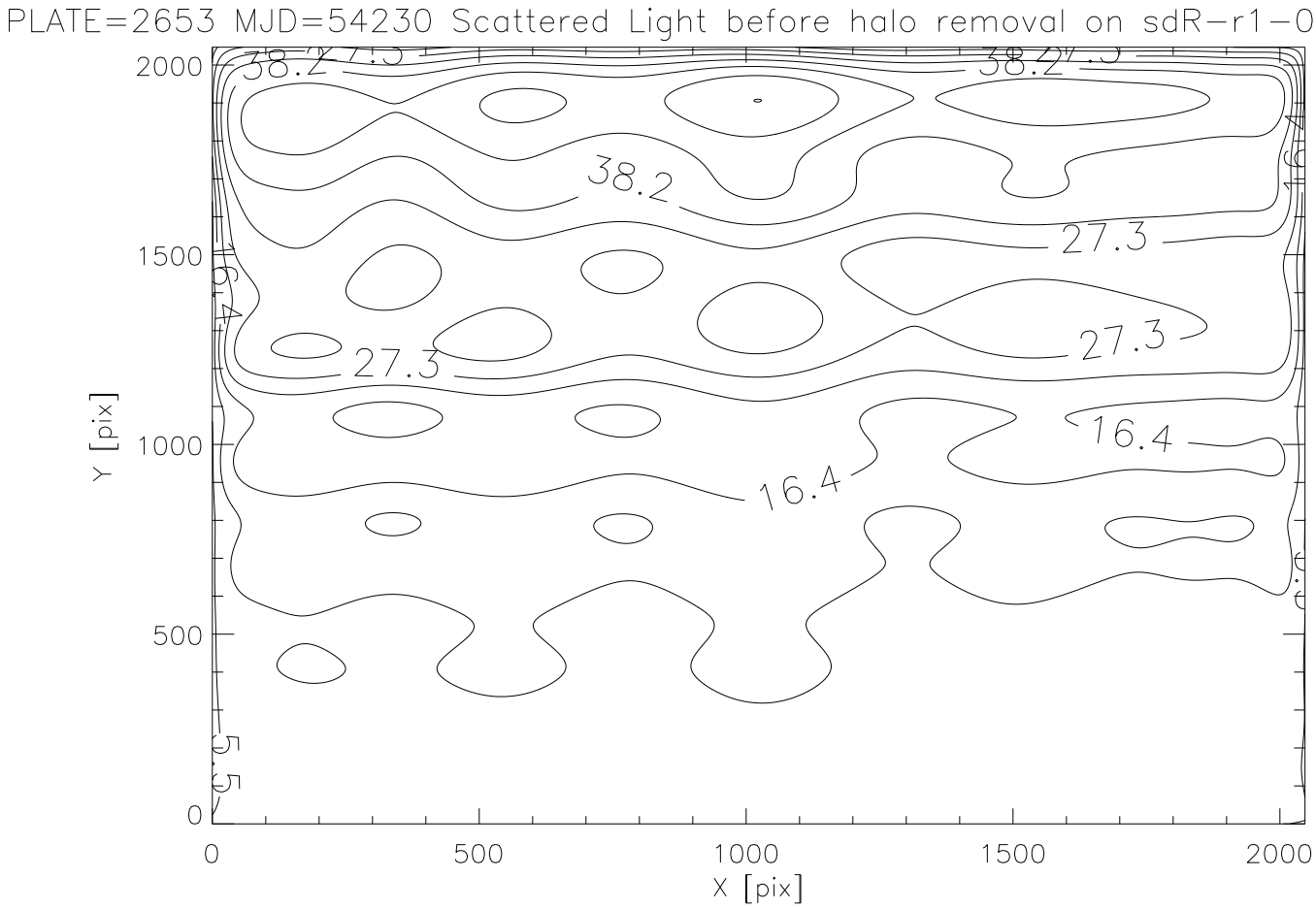

PLATE=2653 MJD=54230 sdR-r1-00044757.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

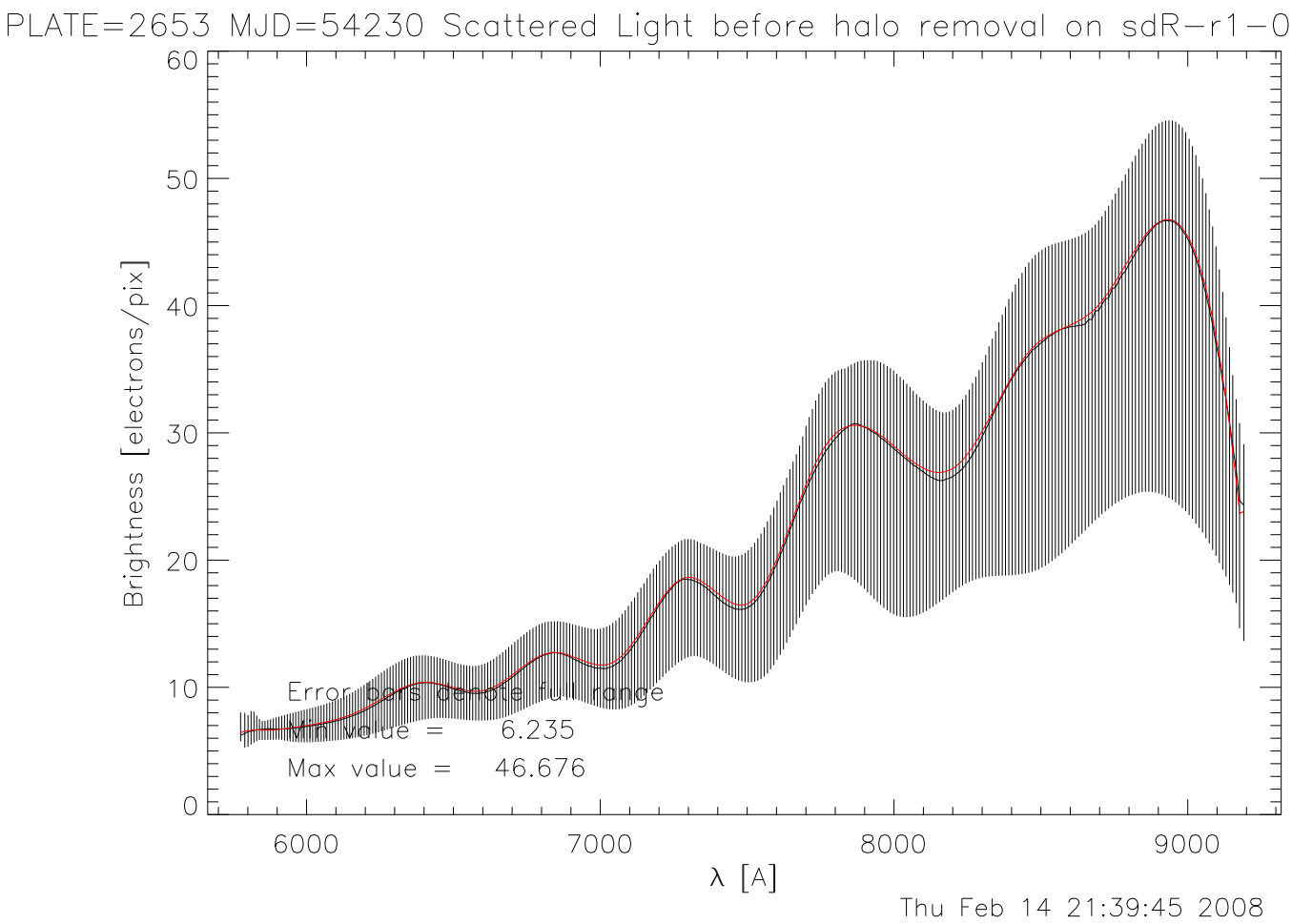

Number of sky fibers = 15
PLATE=2653 MJD=54230 sdR-r1-00044757.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

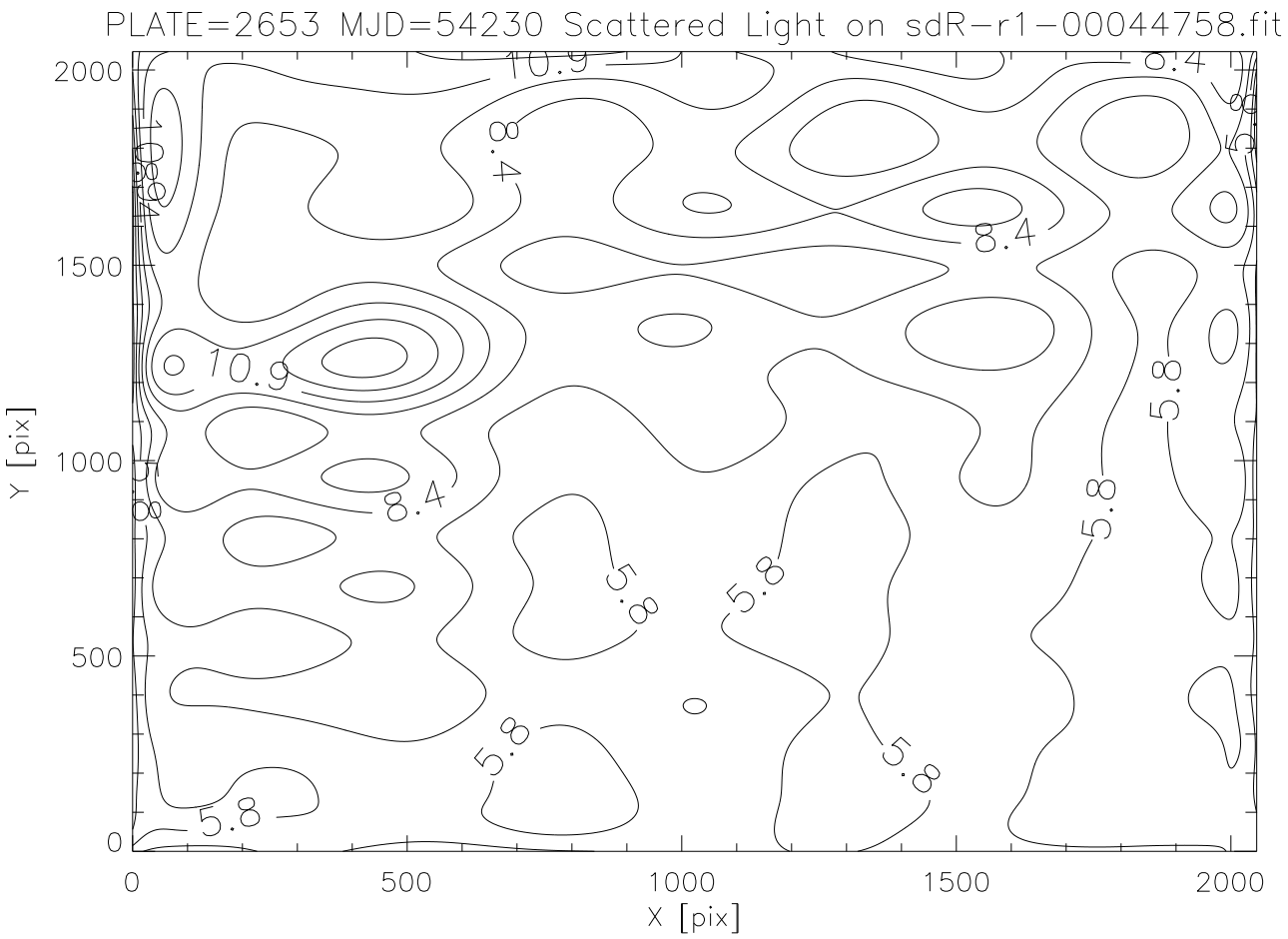

PLATE=2653 MJD=54230 sdR-r1-00044757.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.56 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

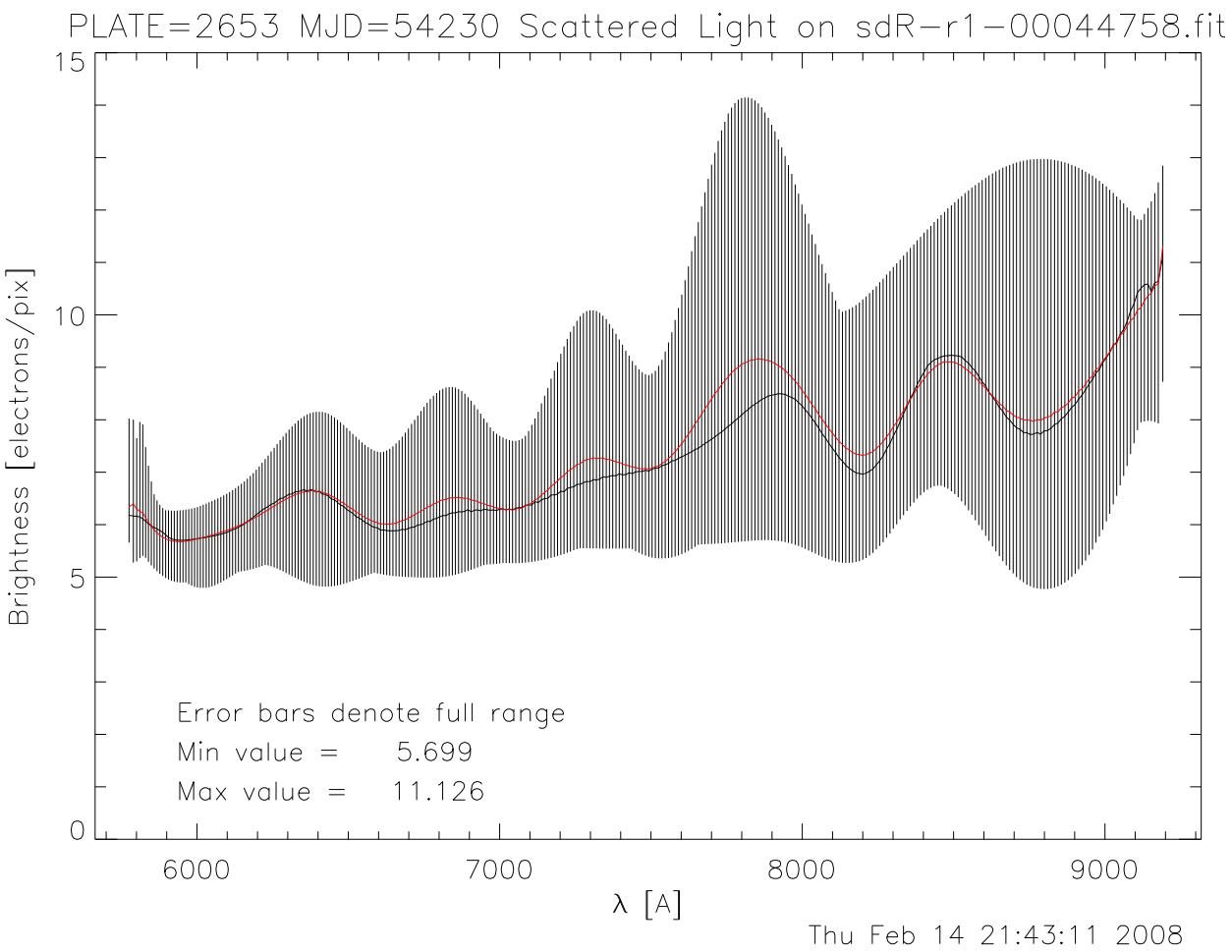

PLATE=2653 MJD=54230 sdR-r1-00044757.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.42 %
Fiber number
Focal Distance [mm]
Airmass

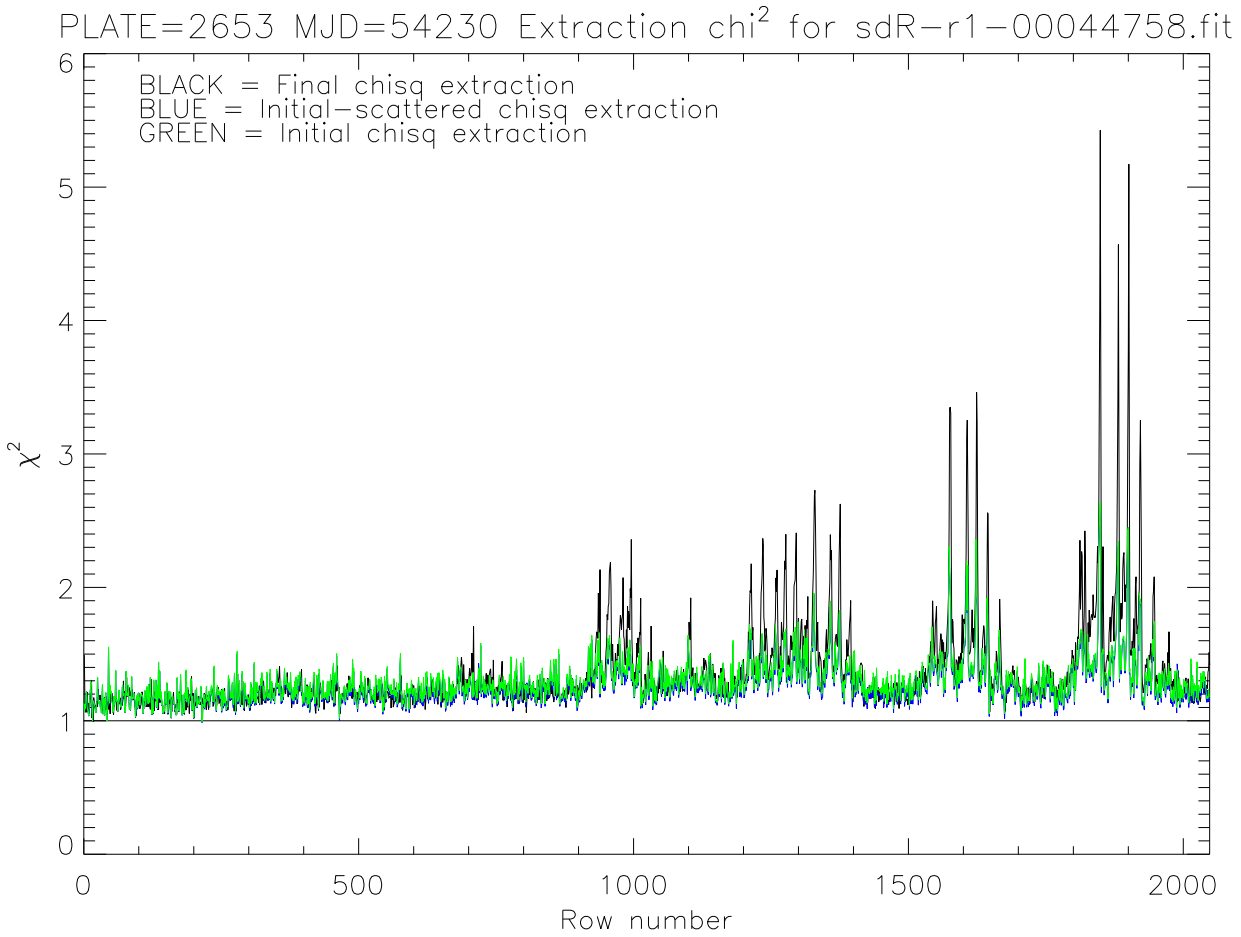

PLATE=2653 MJD=54230 Fiber-Flats for sdR-r1-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.183
Max value = 1.367
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 14 21:38:49 2008

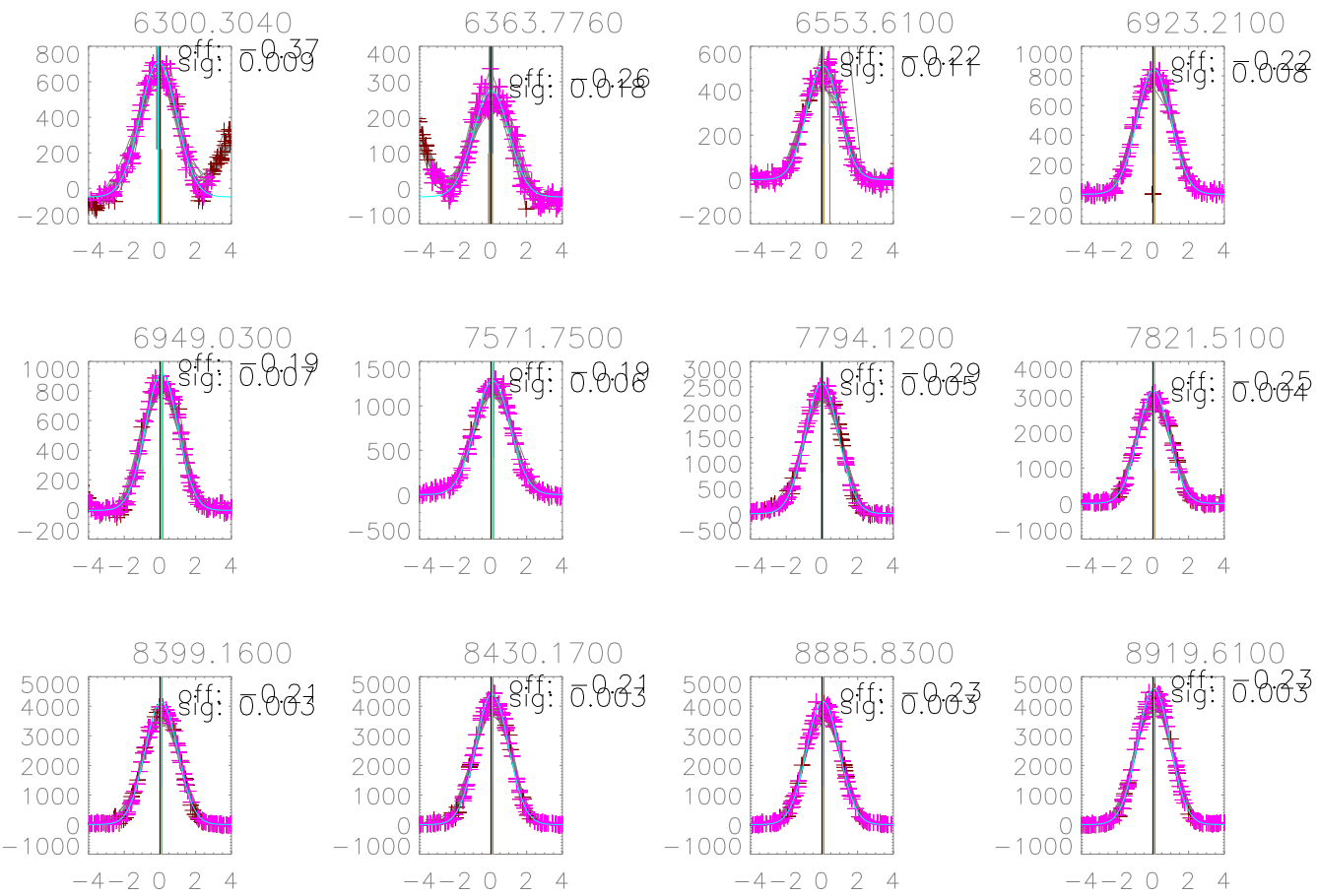

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r1-00044758.fi
38.2
27.3
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

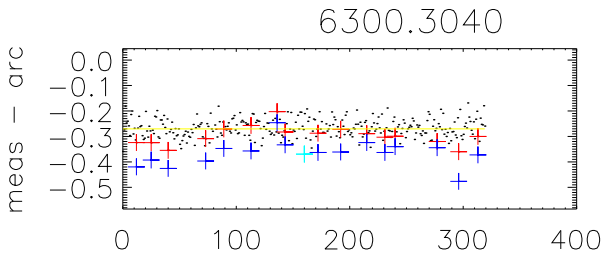

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r1-00044758.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.235
Max value = 46.676
Thu Feb 14 21:39:45 2008

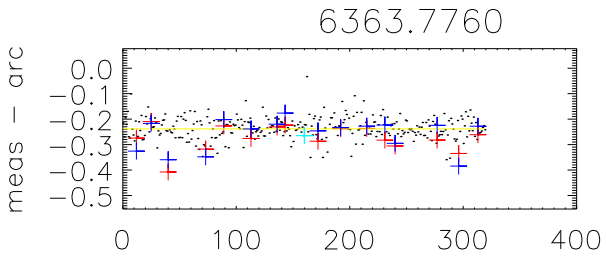

PLATE=2653 MJD=54230 Scattered Light on sdR−r1−00044758.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.9
8.4
5.8

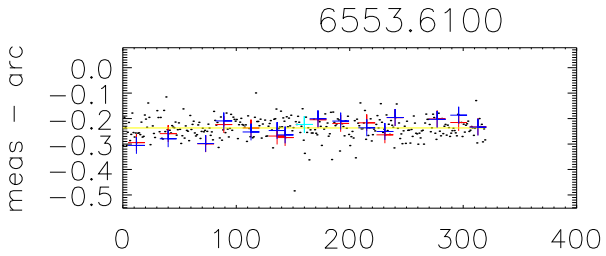

PLATE=2653 MJD=54230 Scattered Light on sdR-r1-00044758.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.699
Max value = 11.126
Thu Feb 14 21:43:11 2008

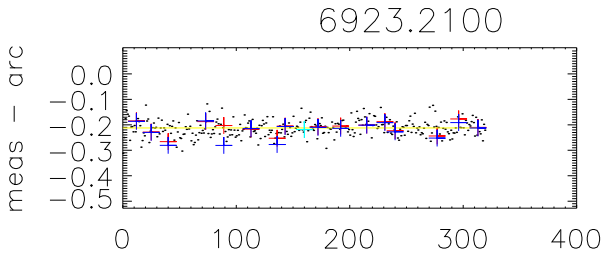

PLATE=2653 MJD=54230 Extraction chi^2 for sdR−r1−00044758.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

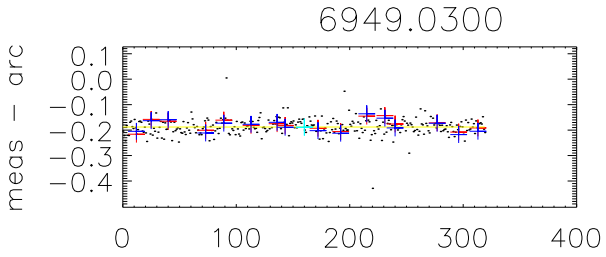

6300.3040
off: −0.37
sig: 0.009
6363.7760
off: −0.26
sig: 0.018
6553.6100
off: −0.22
sig: 0.011
6923.2100
off: −0.22
sig: 0.008
6949.0300
off: −0.19
sig: 0.007
7571.7500
off: −0.19
sig: 0.006
7794.1200
off: −0.29
sig: 0.005
7821.5100
off: −0.25
sig: 0.004
8399.1600
off: −0.21
sig: 0.003
8430.1700
off: −0.21
sig: 0.003
8885.8300
off: −0.23
sig: 0.003
8919.6100
off: −0.23
sig: 0.003

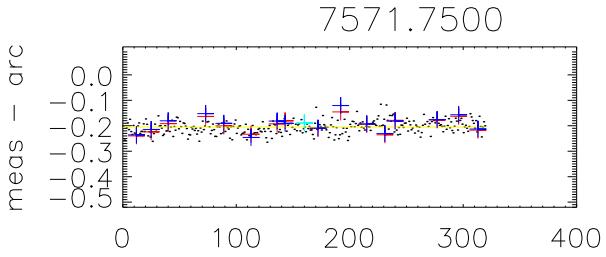

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

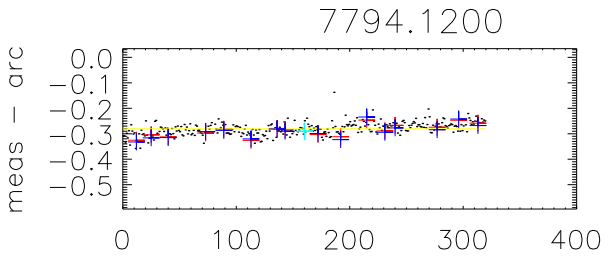

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

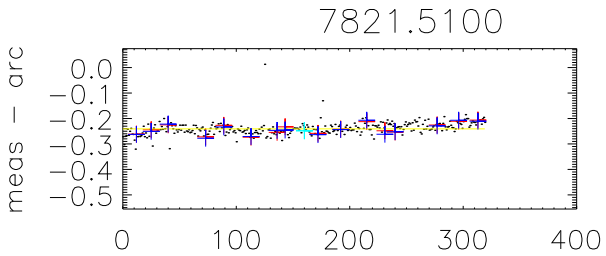

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

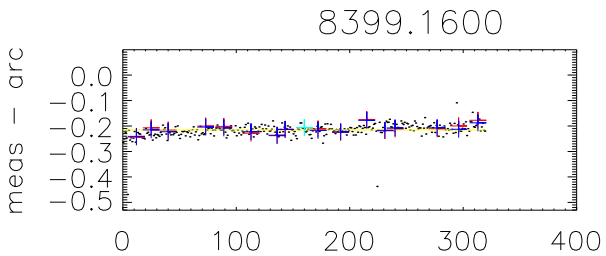

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

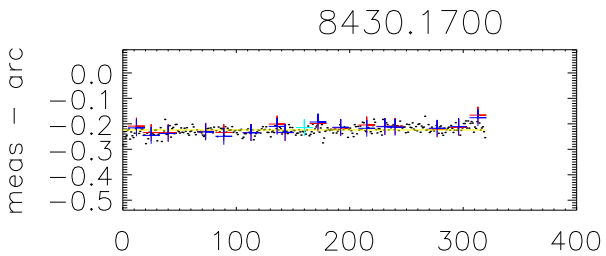

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

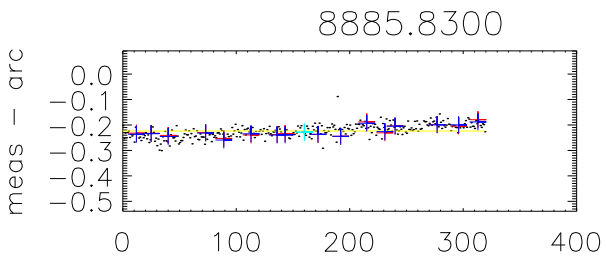

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

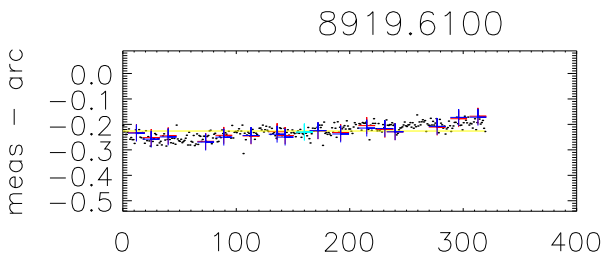

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

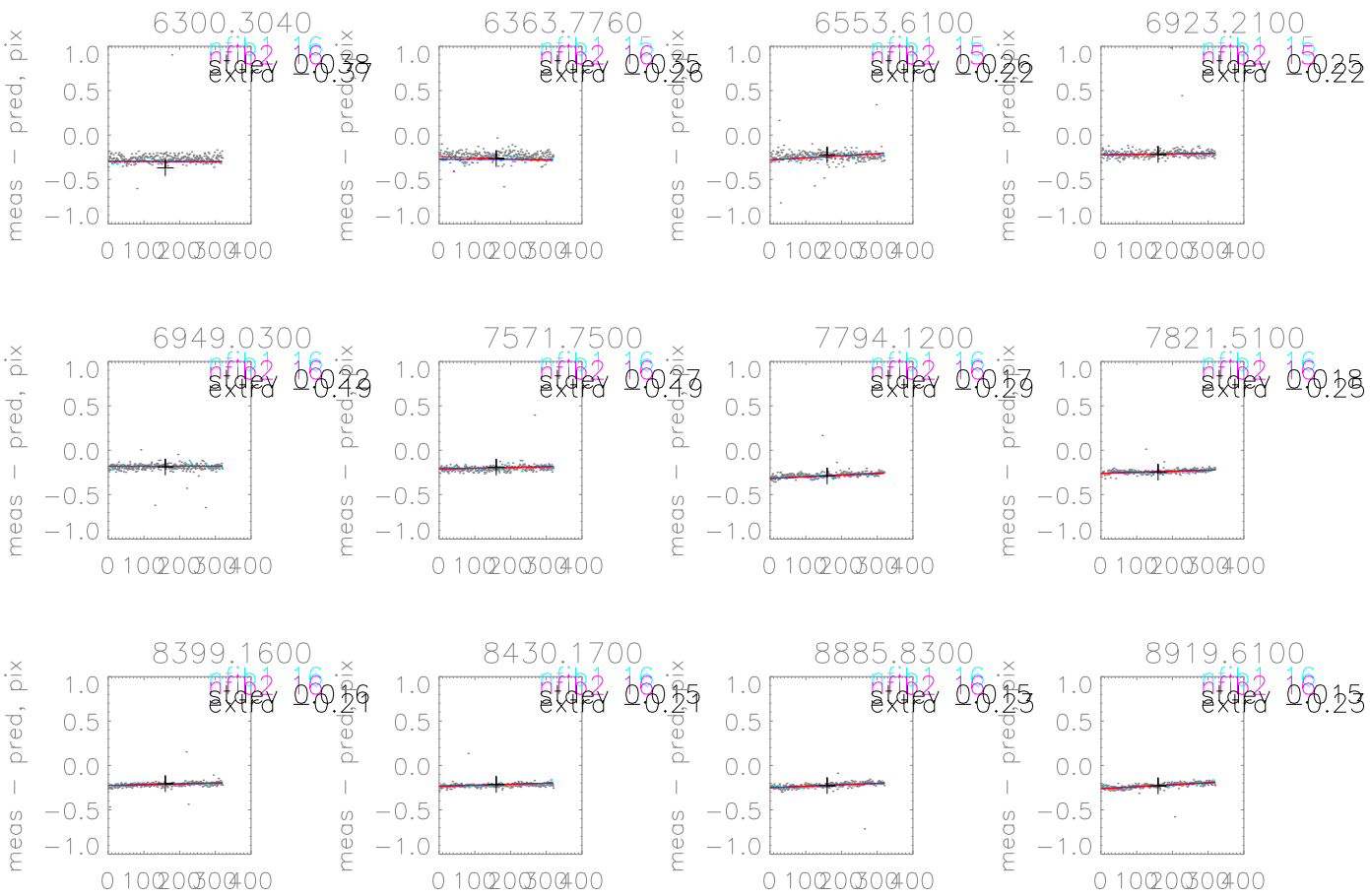

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

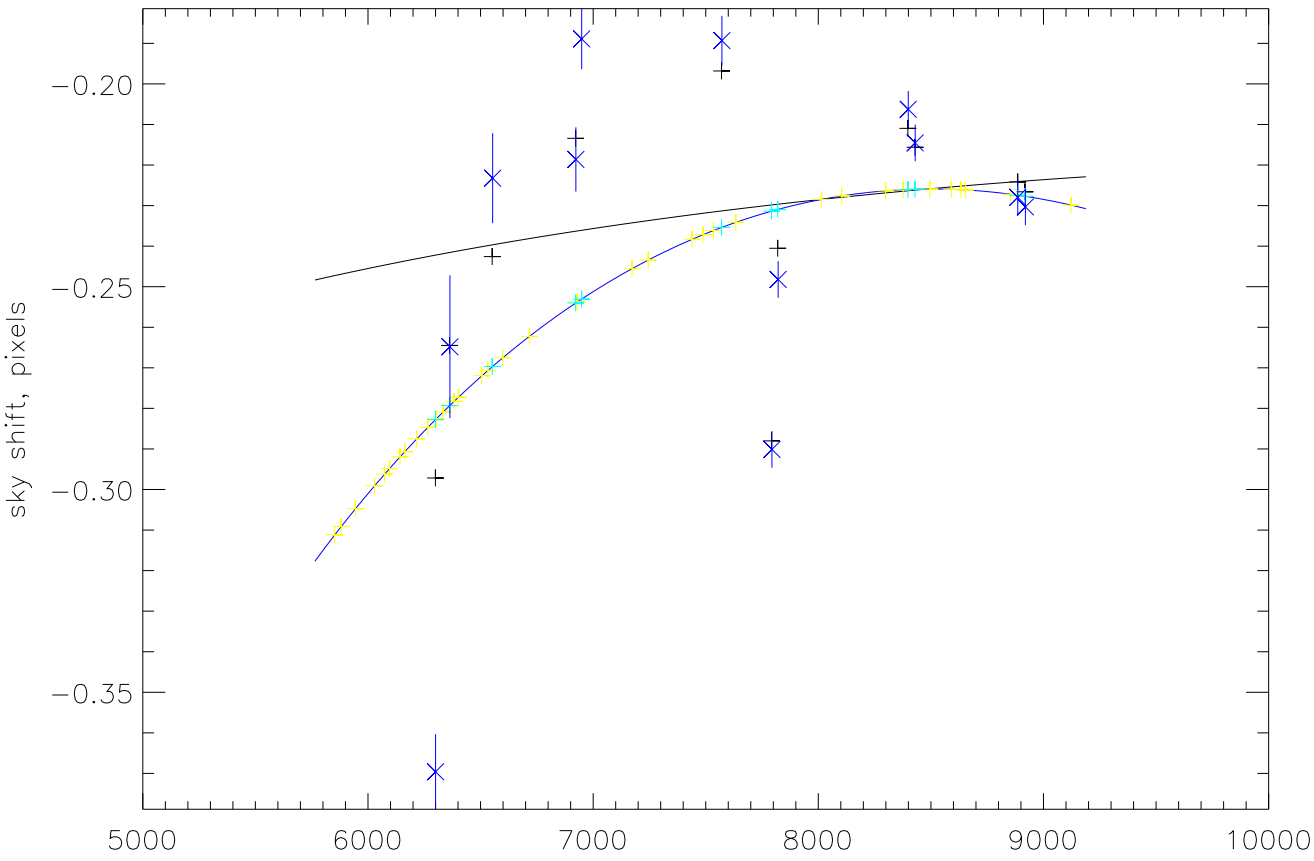

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

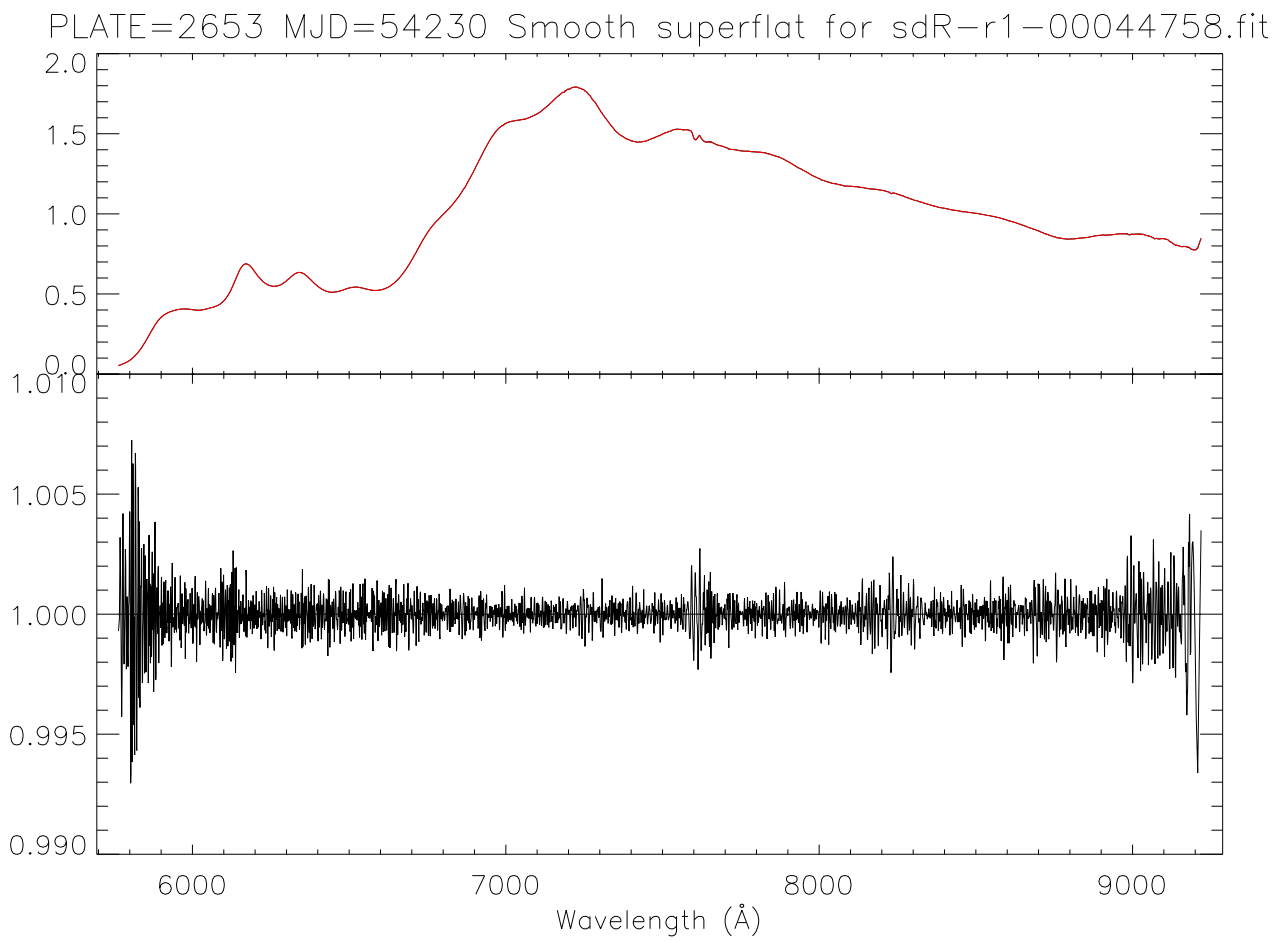

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

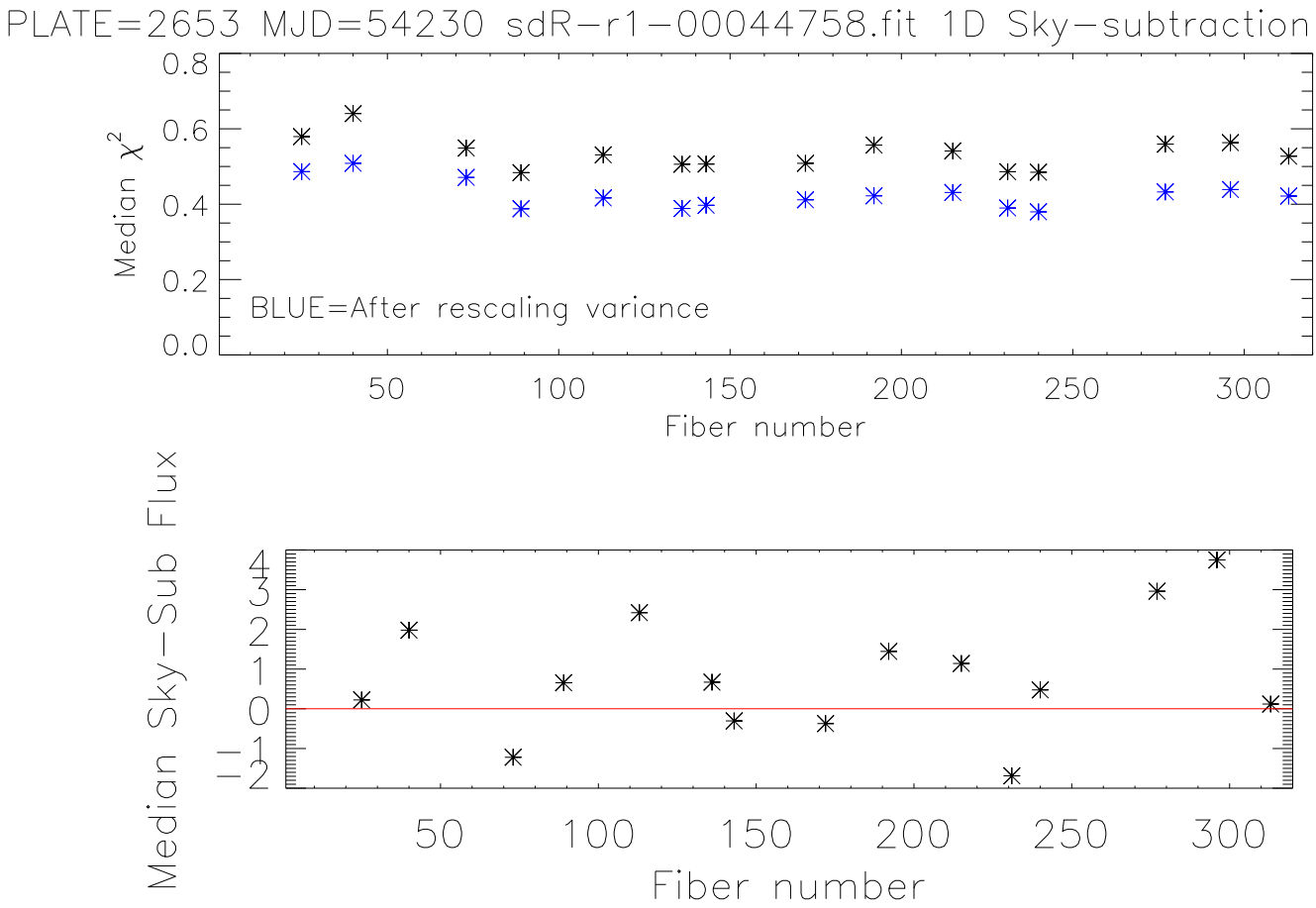

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 16
mfib2 15
stdev 0.38
extrd 0.37
stdev 0.35
extrd 0.28
stdev 0.26
extrd 0.22
stdev 0.25
extrd 0.22
stdev 0.22
extrd 0.19
stdev 0.27
extrd 0.19
stdev 0.17
extrd 0.29
stdev 0.18
extrd 0.25
stdev 0.16
extrd 0.21
stdev 0.15
extrd 0.21
stdev 0.15
extrd 0.23
stdev 0.15
extrd 0.23
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

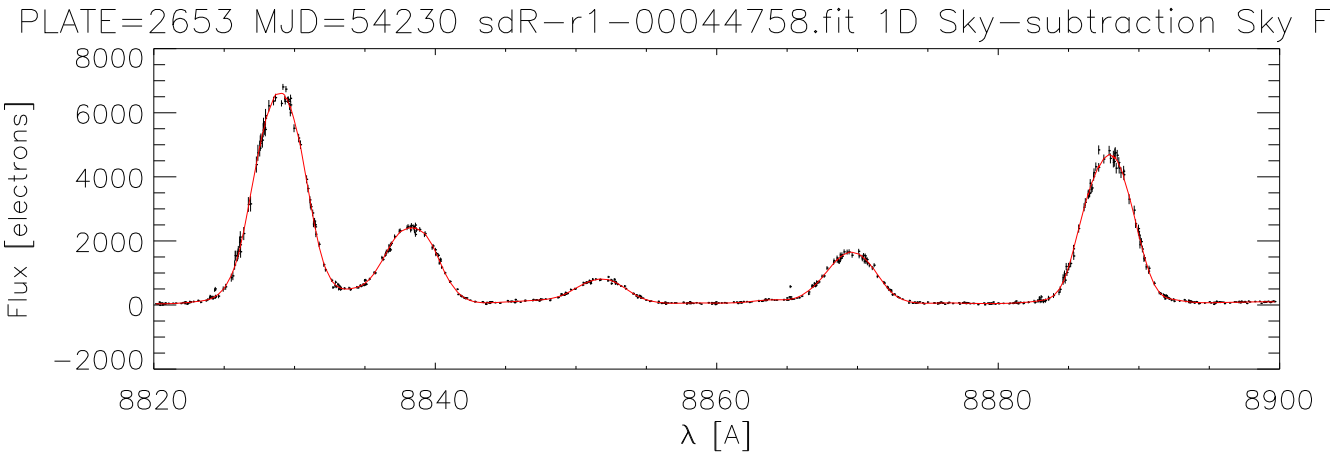

−0.20
−0.25
−0.30
−0.35
sky shift, pixels
5000
6000
7000
8000
9000
10000

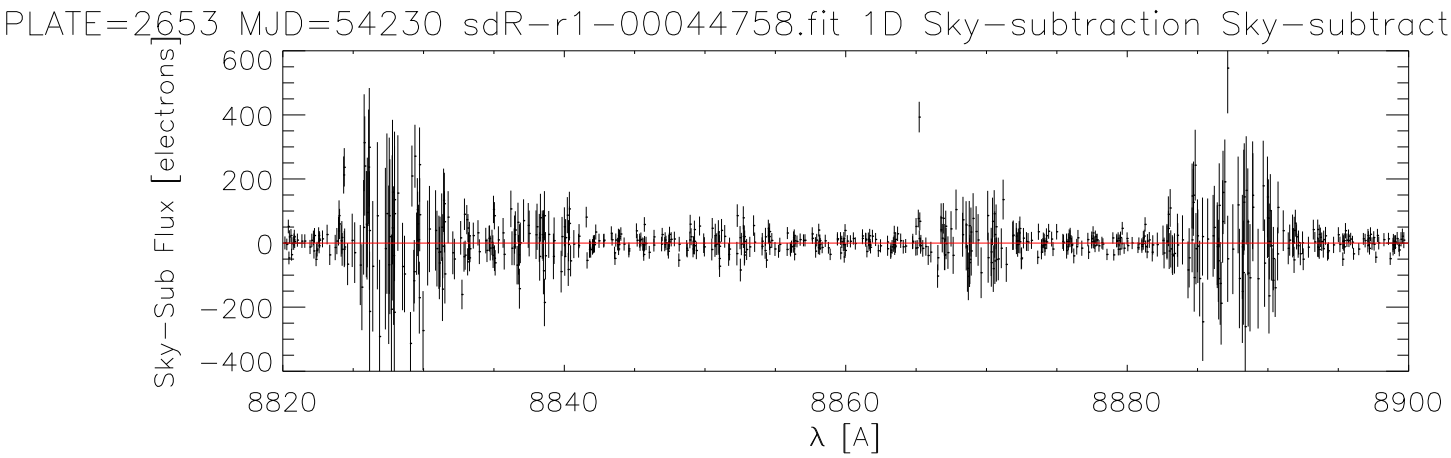
es= 0.0000

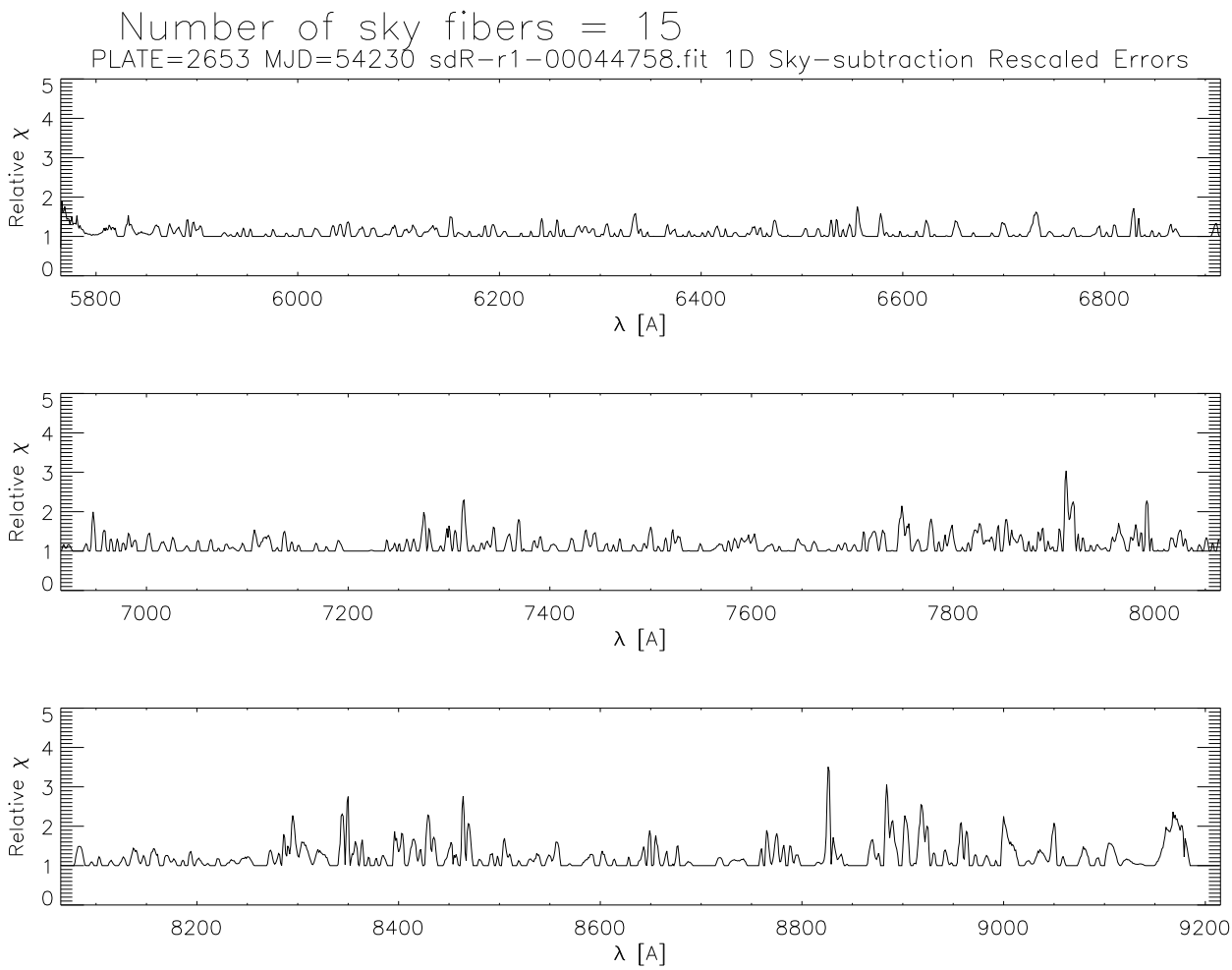

PLATE=2653 MJD=54230 Smooth superflat for sdR-r1-00044758.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

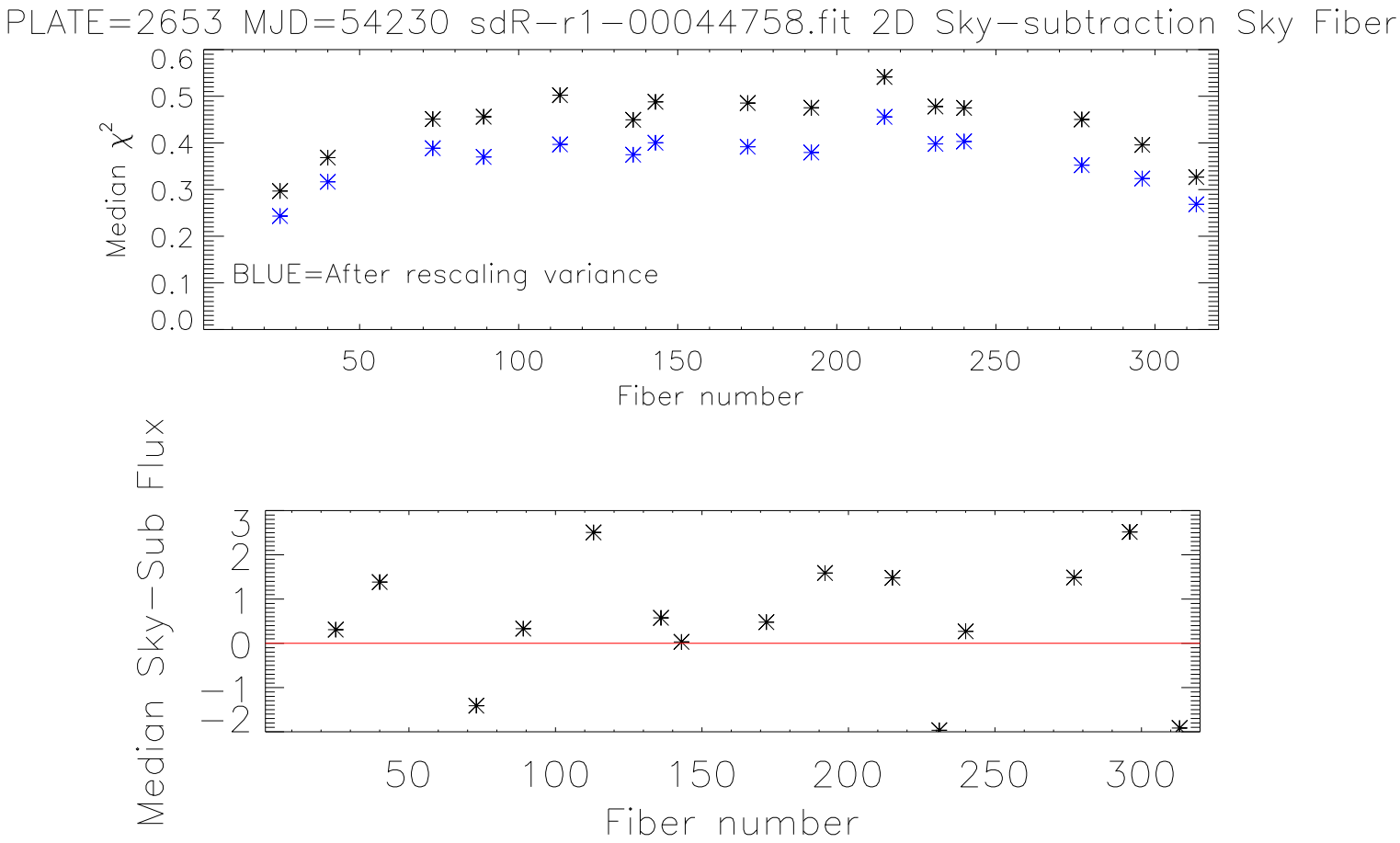

PLATE=2653 MJD=54230 sdR-r1-00044758.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

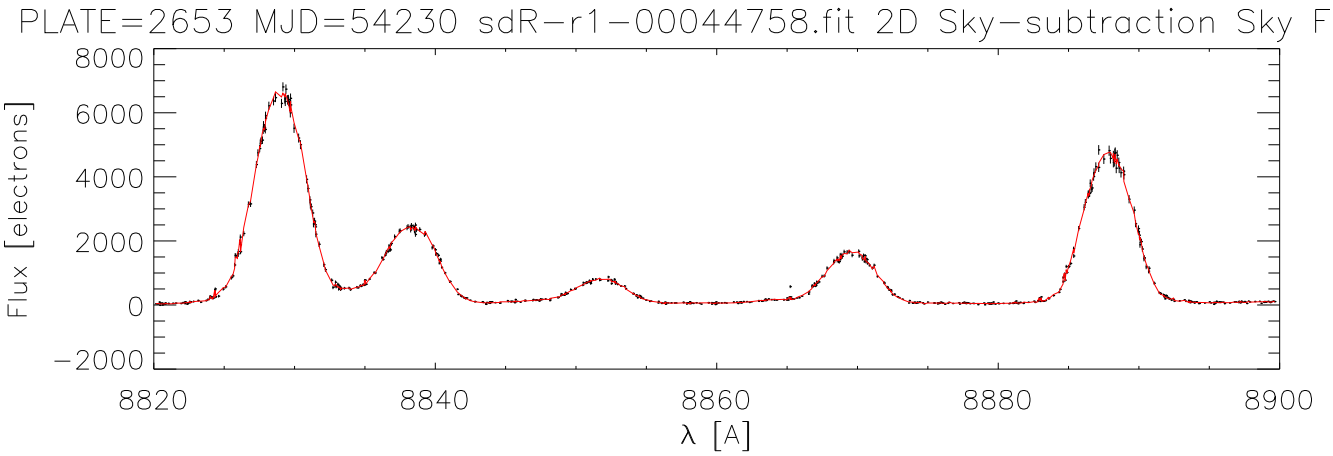
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

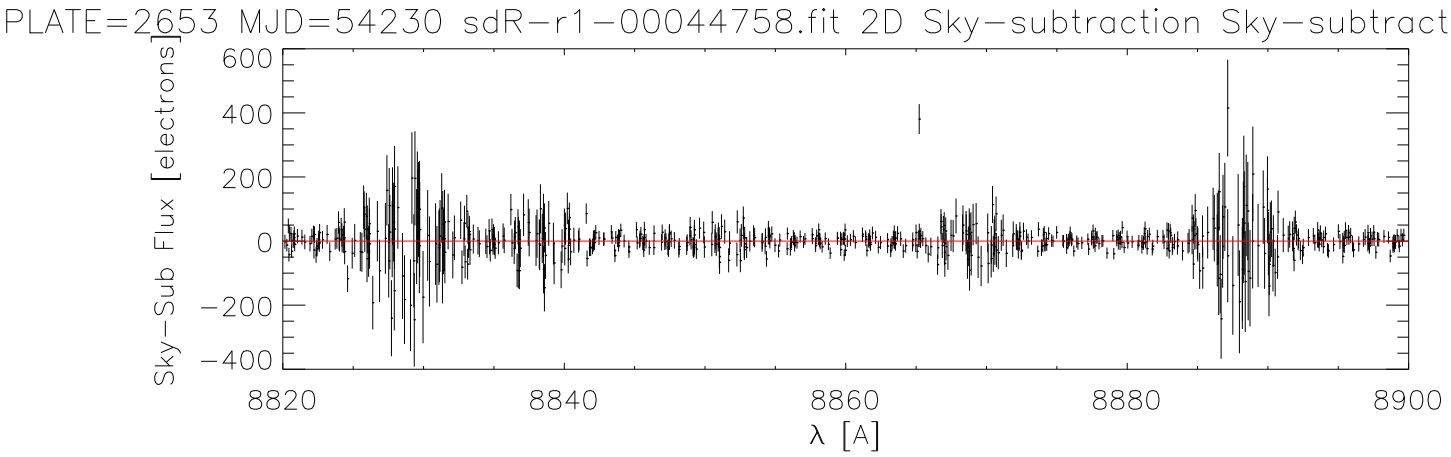

PLATE=2653 MJD=54230 sdR-r1-00044758.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

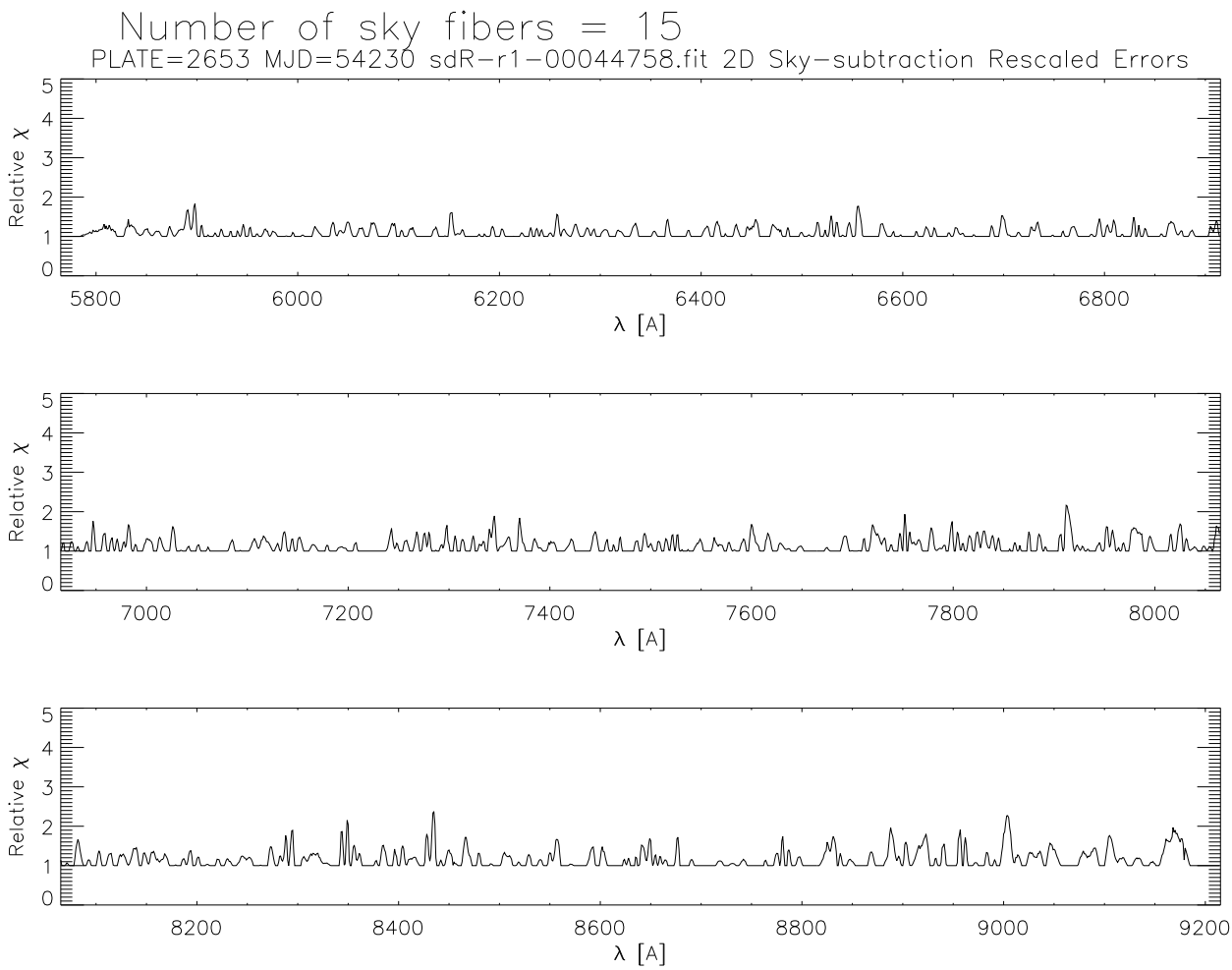

PLATE=2653 MJD=54230 sdR-r1-00044758.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

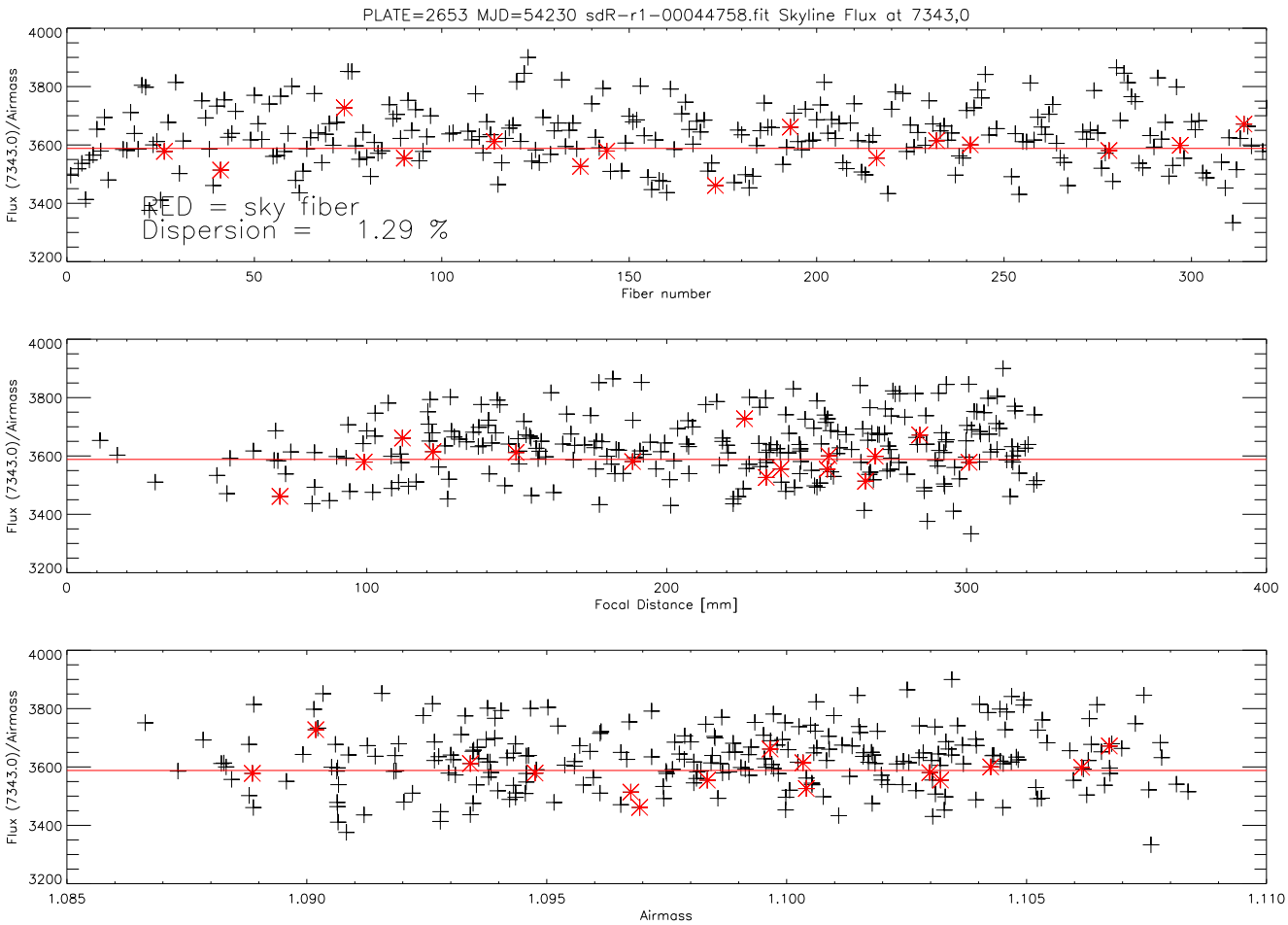

Number of sky fibers = 15
PLATE=2653 MJD=54230 sdR-r1-00044758.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

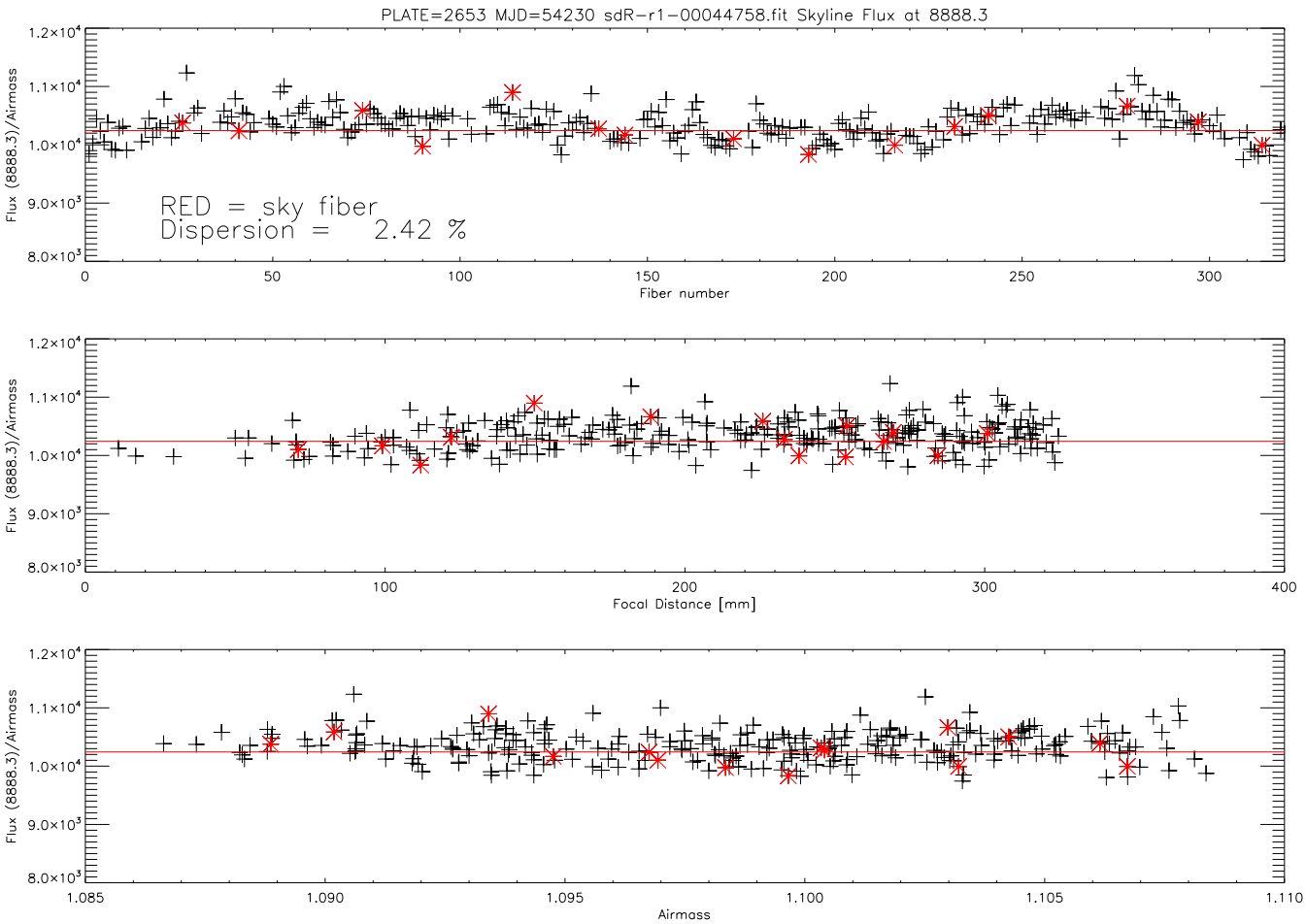

PLATE=2653 MJD=54230 sdR-r1-00044758.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

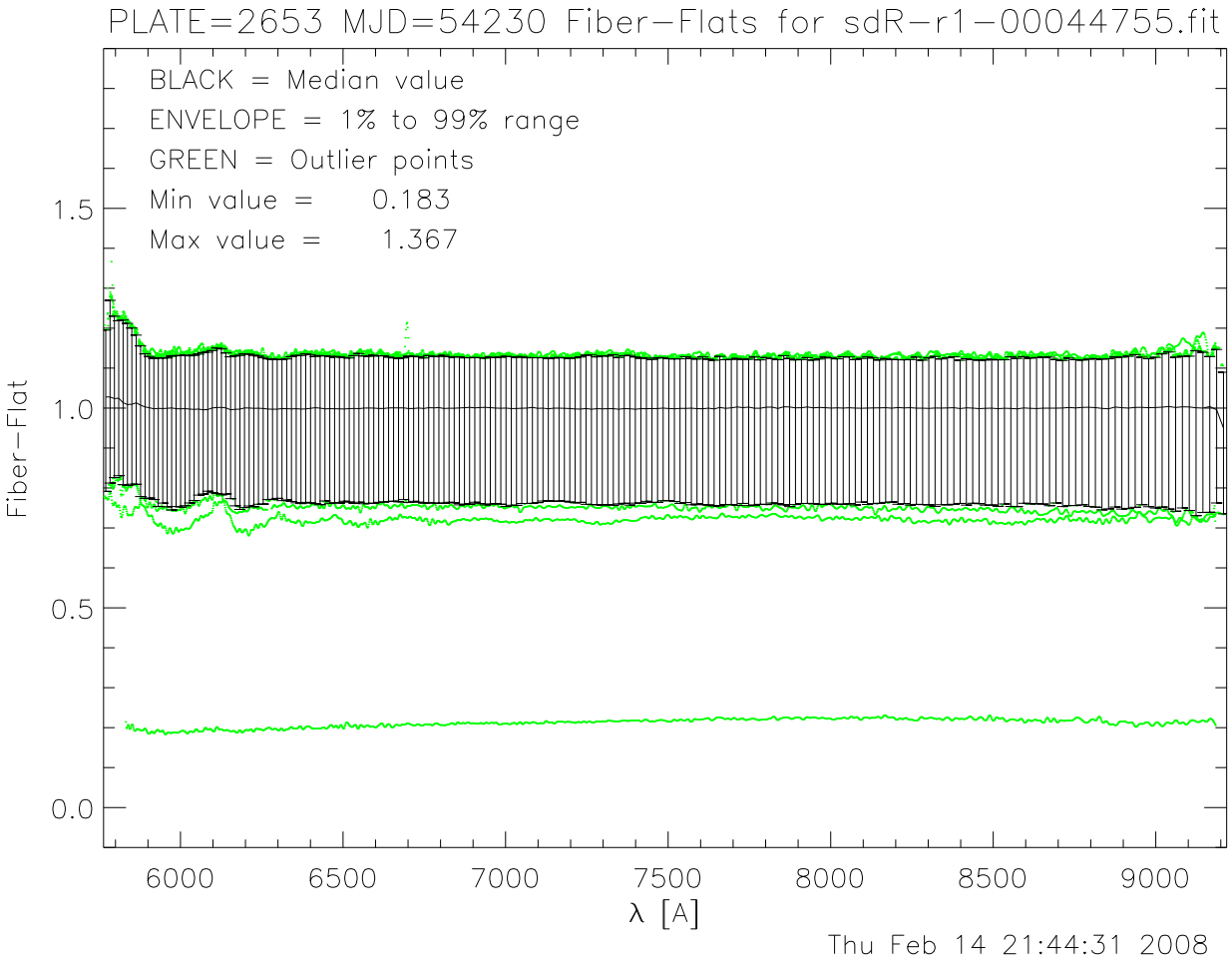

PLATE=2653 MJD=54230 sdR-r1-00044758.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

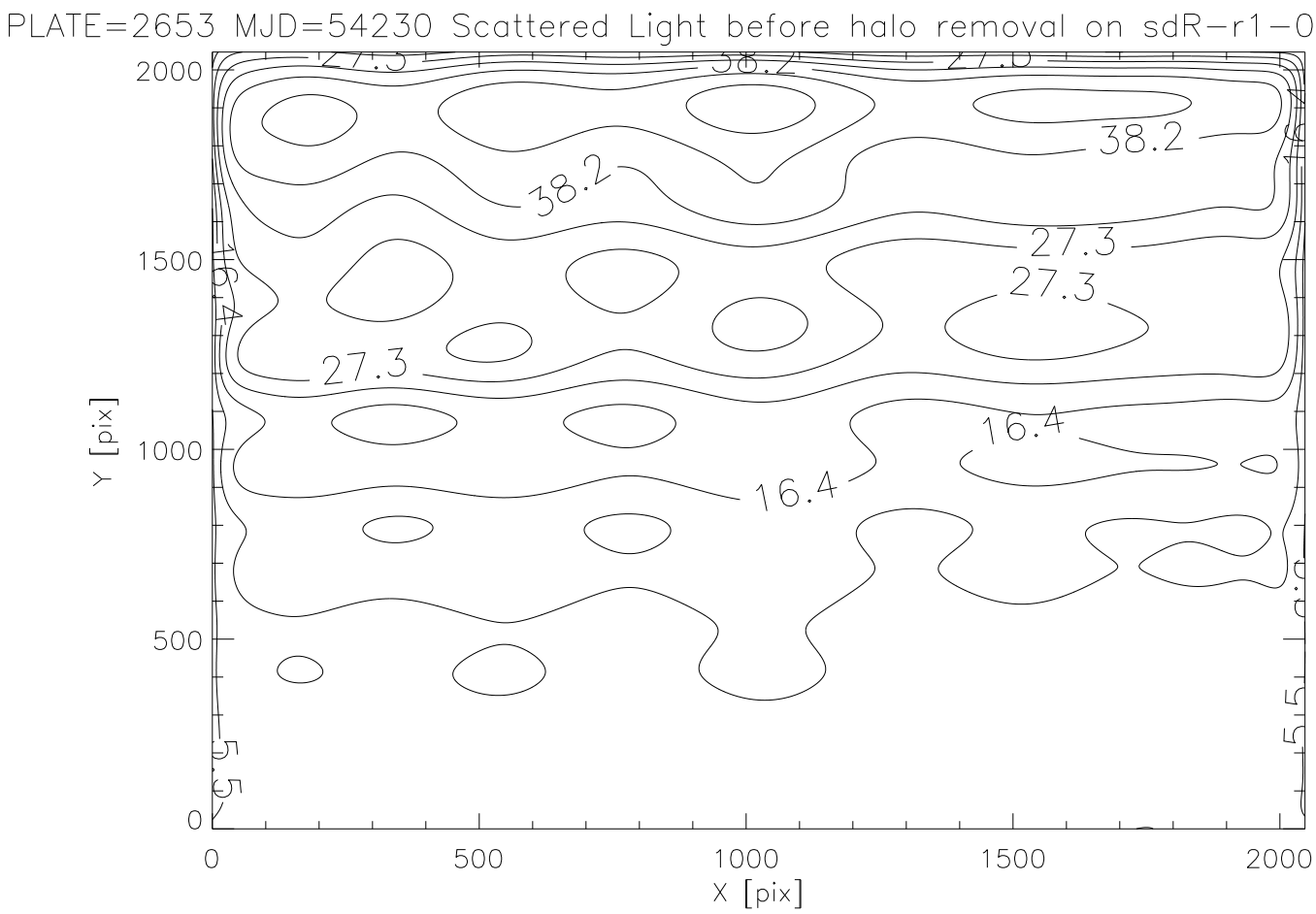

PLATE=2653 MJD=54230 sdR-r1-00044758.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

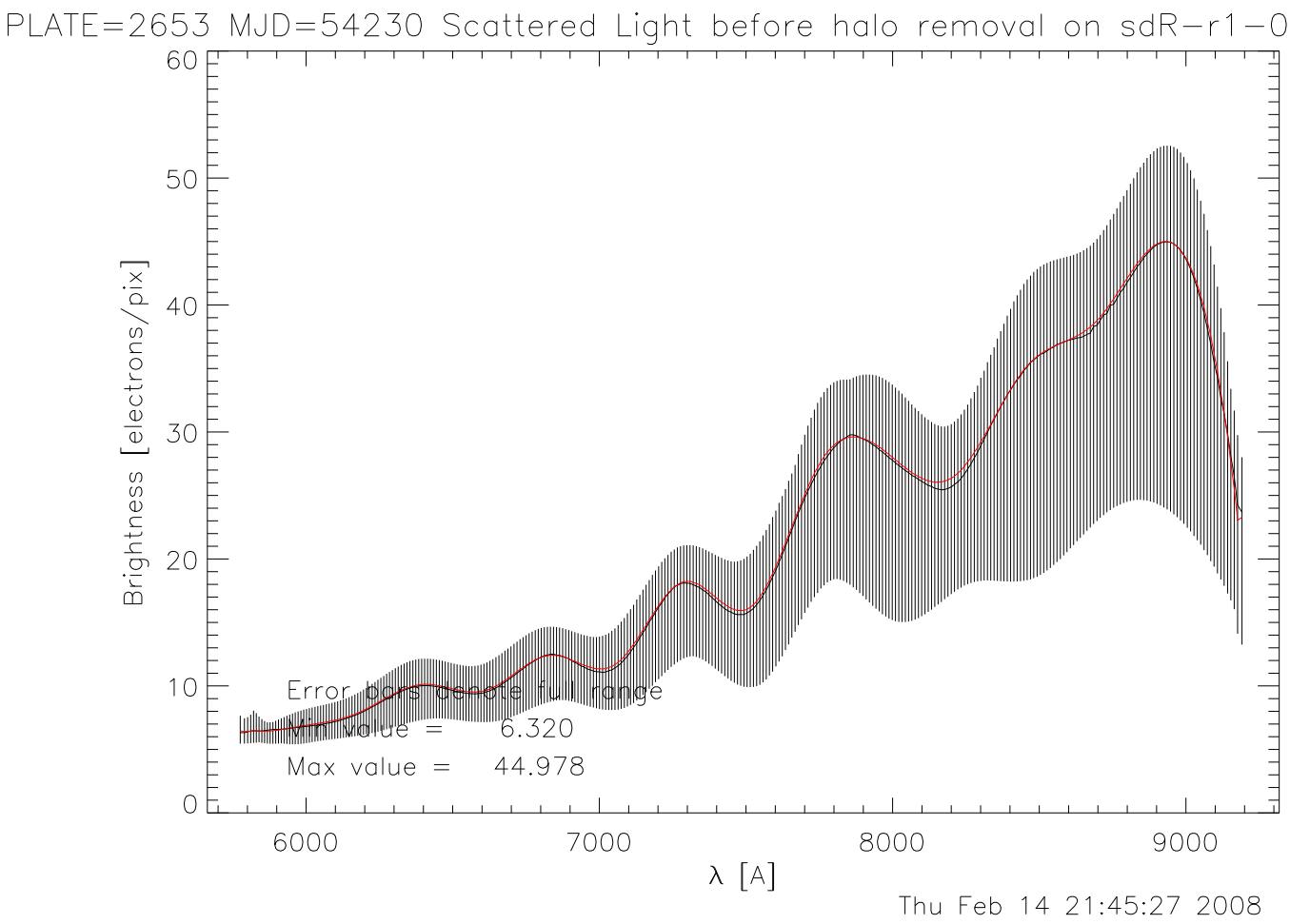

Number of sky fibers = 15
PLATE=2653 MJD=54230 sdR-r1-00044758.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

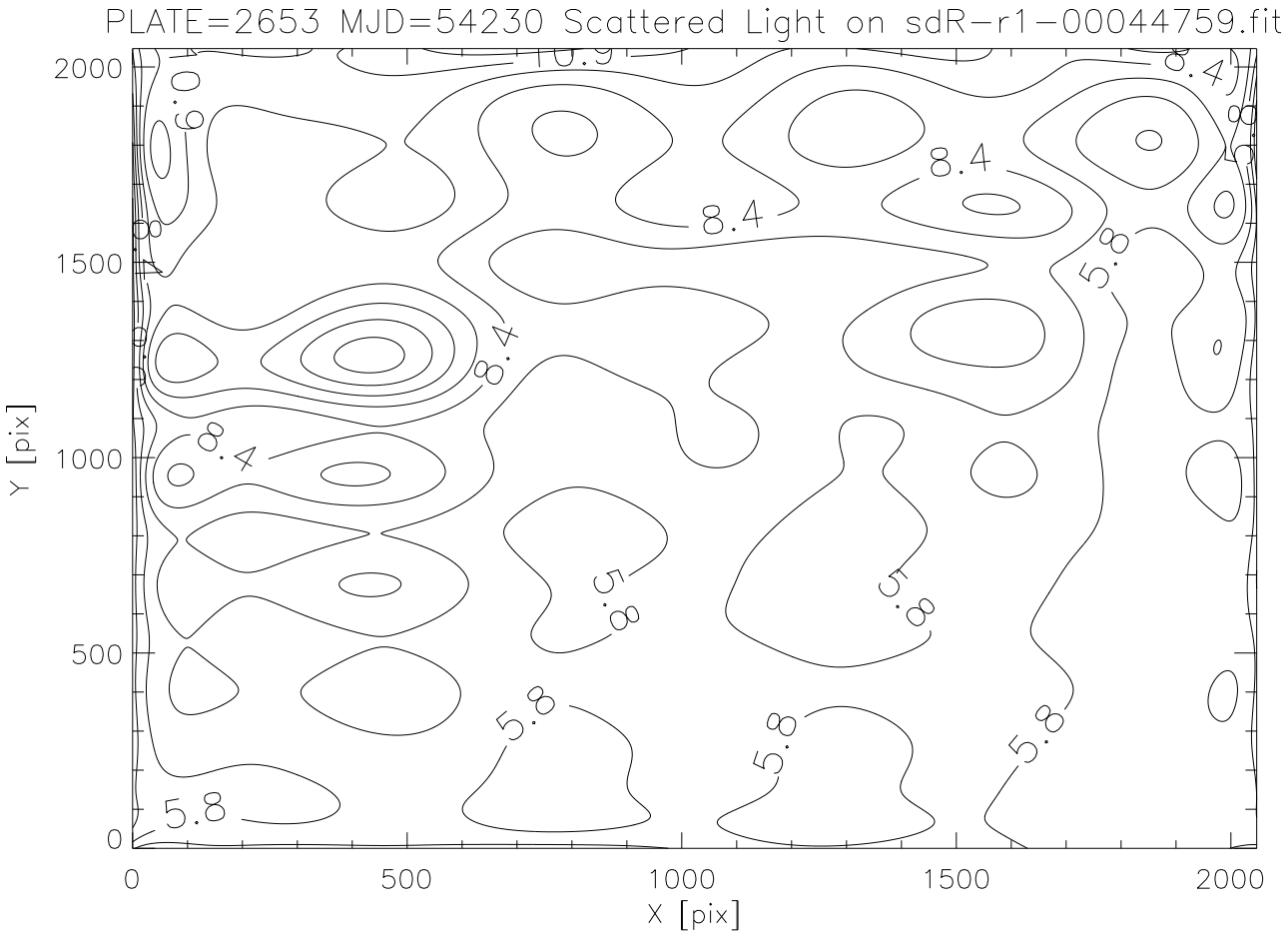

PLATE=2653 MJD=54230 sdR-r1-00044758.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.29 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

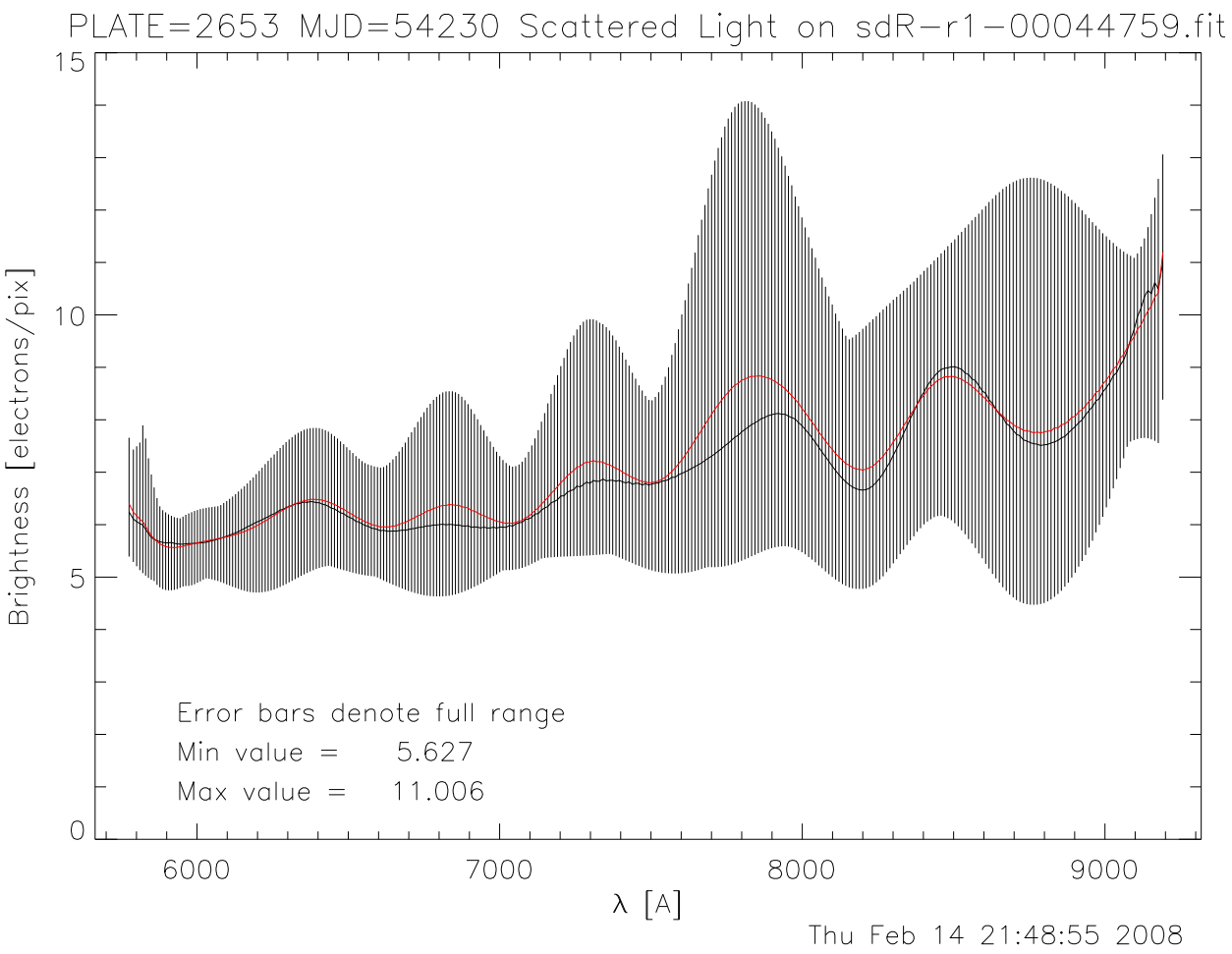

PLATE=2653 MJD=54230 sdR-r1-00044758.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.42 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

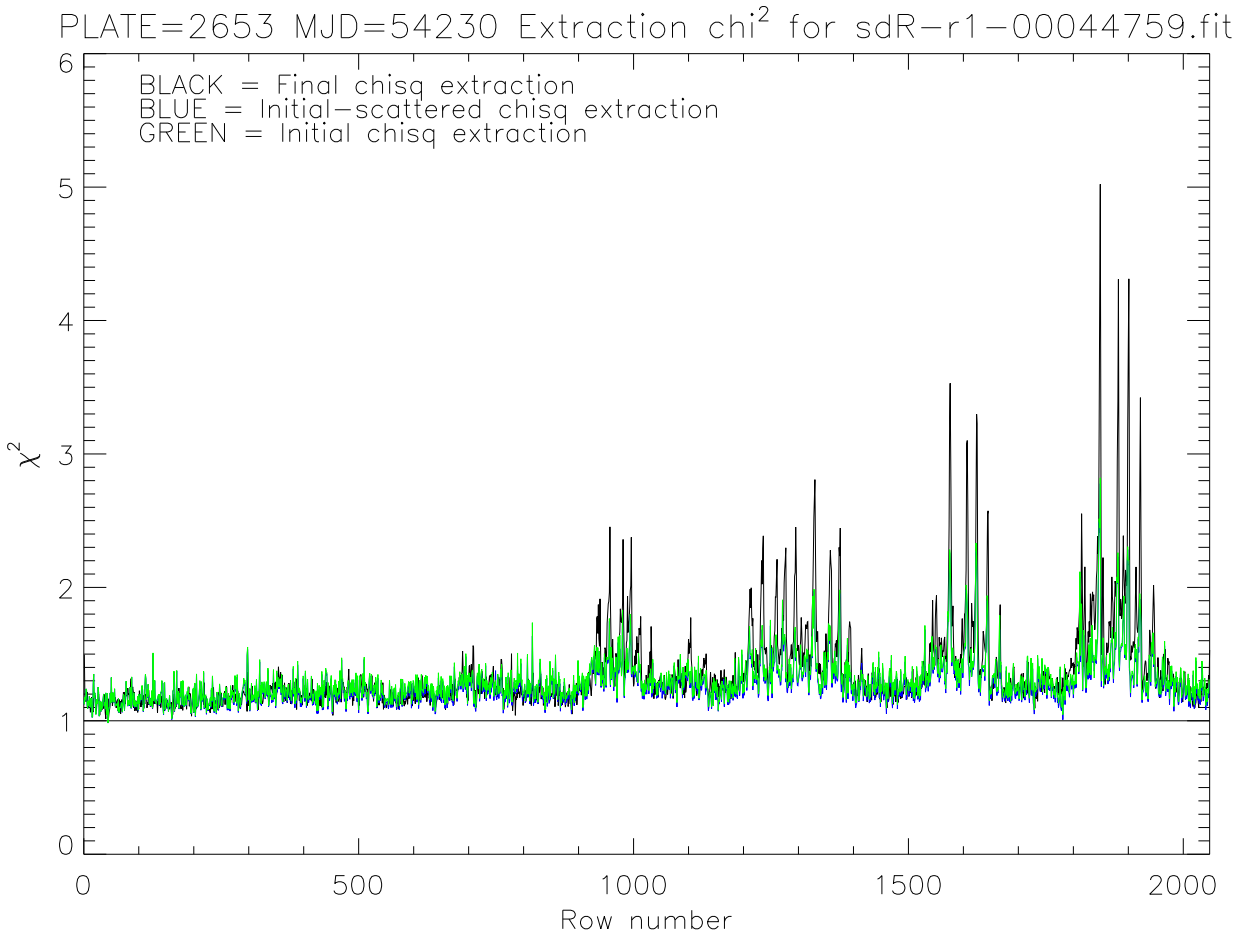

PLATE=2653 MJD=54230 Fiber-Flats for sdR-r1-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.183
Max value = 1.367
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 14 21:44:31 2008

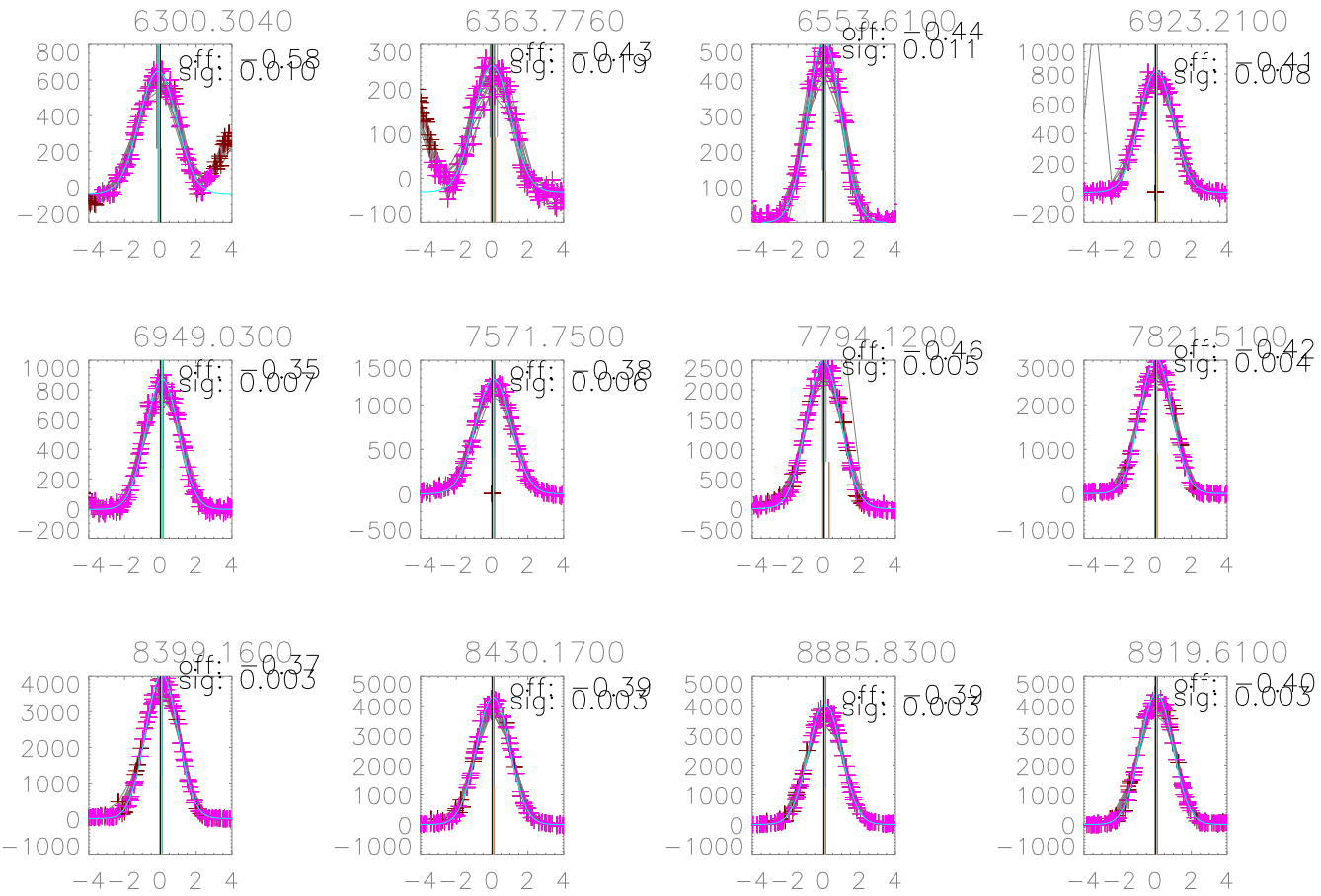

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR−r1−00044759.fi
38.2
27.3
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

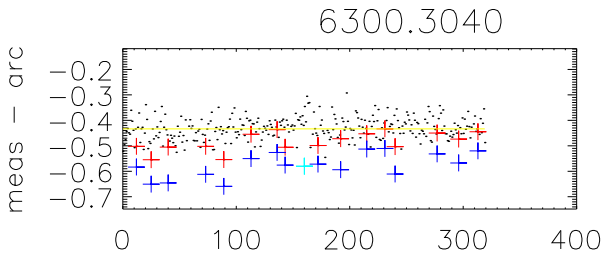

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r1-00044759.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.320
Max value = 44.978
Thu Feb 14 21:45:27 2008

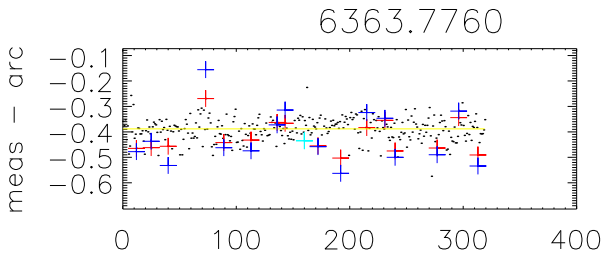

PLATE=2653 MJD=54230 Scattered Light on sdR-r1-00044759.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
5.8

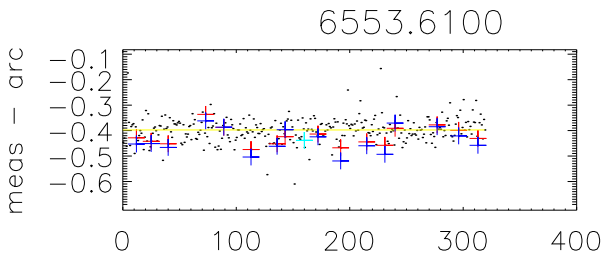

PLATE=2653 MJD=54230 Scattered Light on sdR-r1-00044759.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.627
Max value = 11.006
Thu Feb 14 21:48:55 2008

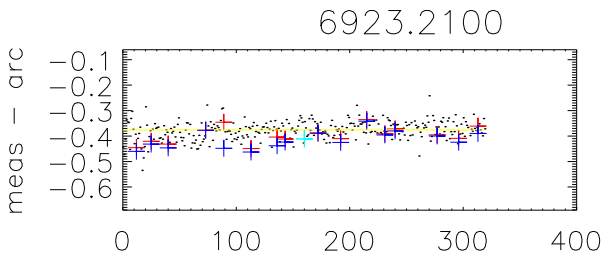

PLATE=2653 MJD=54230 Extraction chi^2 for sdR−r1−00044759.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

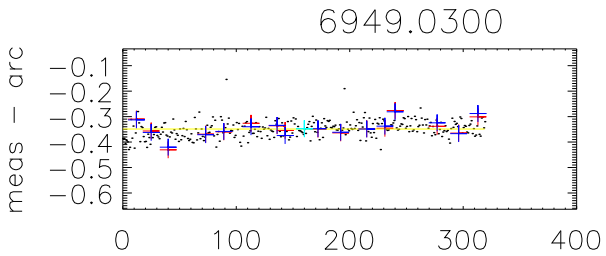

6300.3040
off: −0.58
sig: 0.010
6363.7760
off: −0.43
sig: 0.019
6553.6100
off: −0.44
sig: 0.011
6923.2100
off: −0.41
sig: 0.008
6949.0300
off: −0.35
sig: 0.007
7571.7500
off: −0.38
sig: 0.006
7794.1200
off: −0.46
sig: 0.005
7821.5100
off: −0.42
sig: 0.004
8399.1600
off: −0.37
sig: 0.003
8430.1700
off: −0.39
sig: 0.003
8885.8300
off: −0.39
sig: 0.003
8919.6100
off: −0.40
sig: 0.003

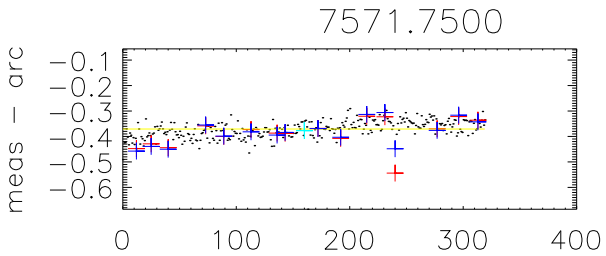

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

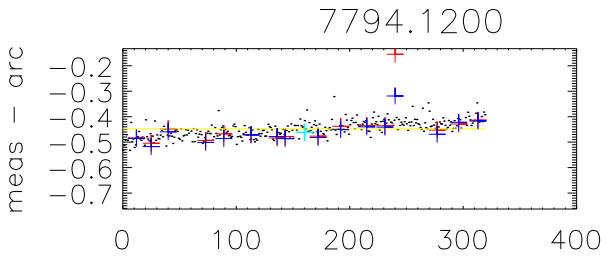

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

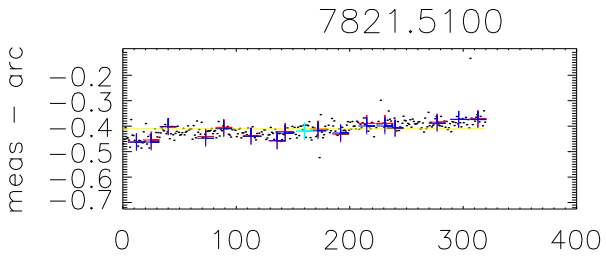

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

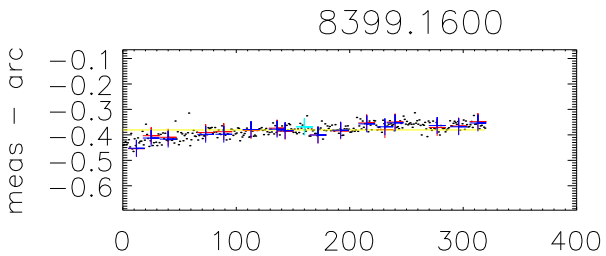

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

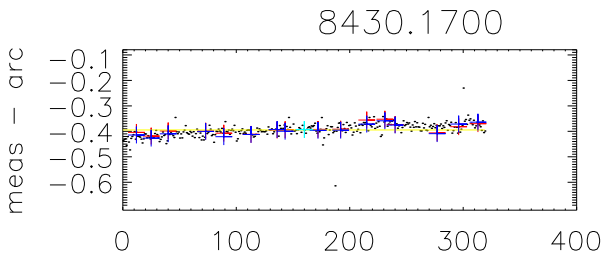

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

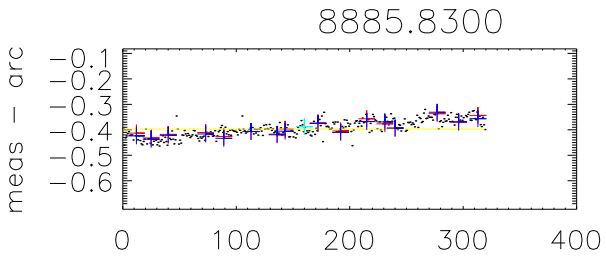

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

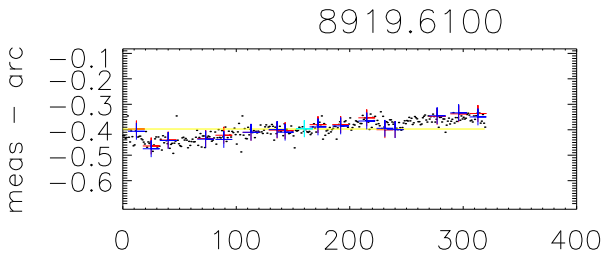

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

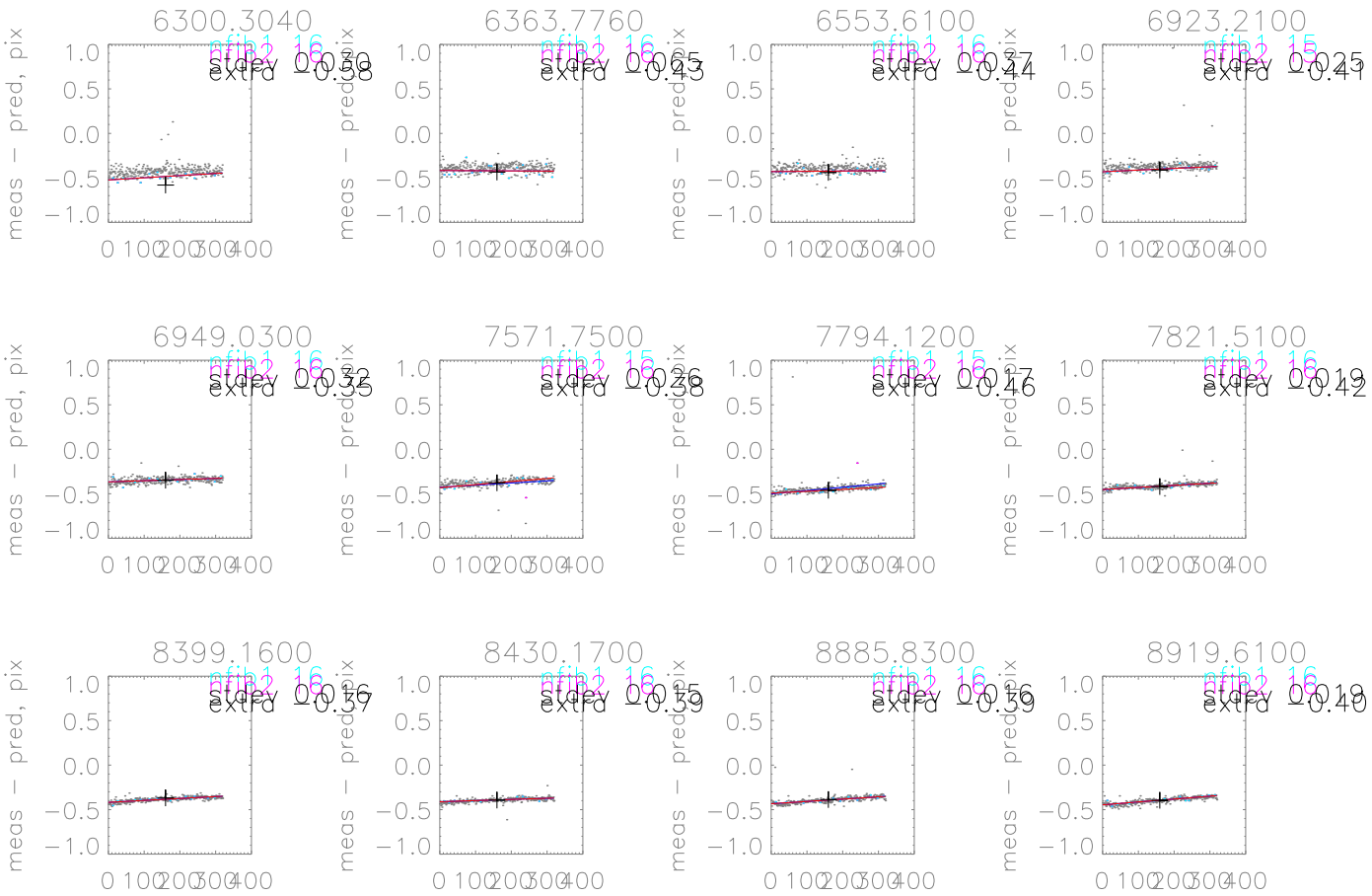

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

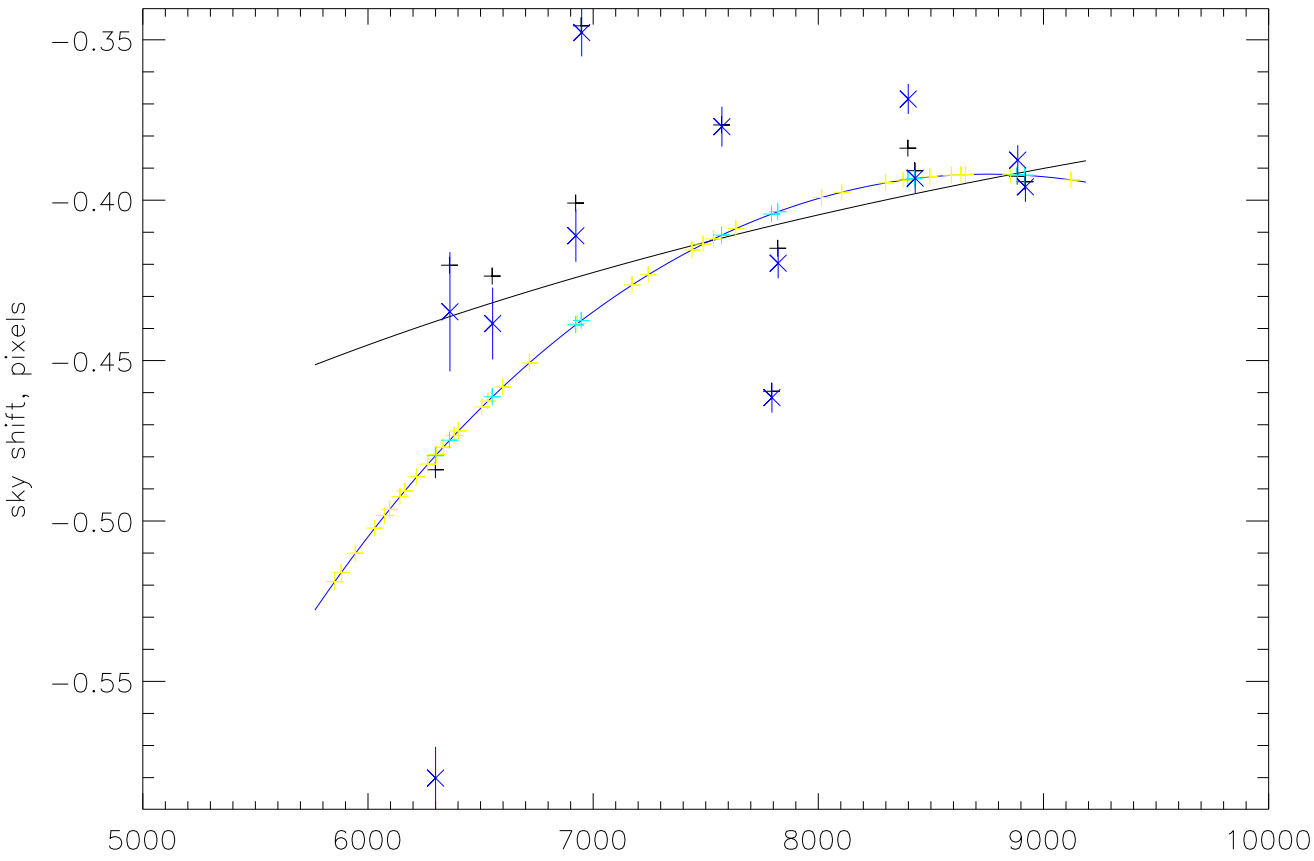

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

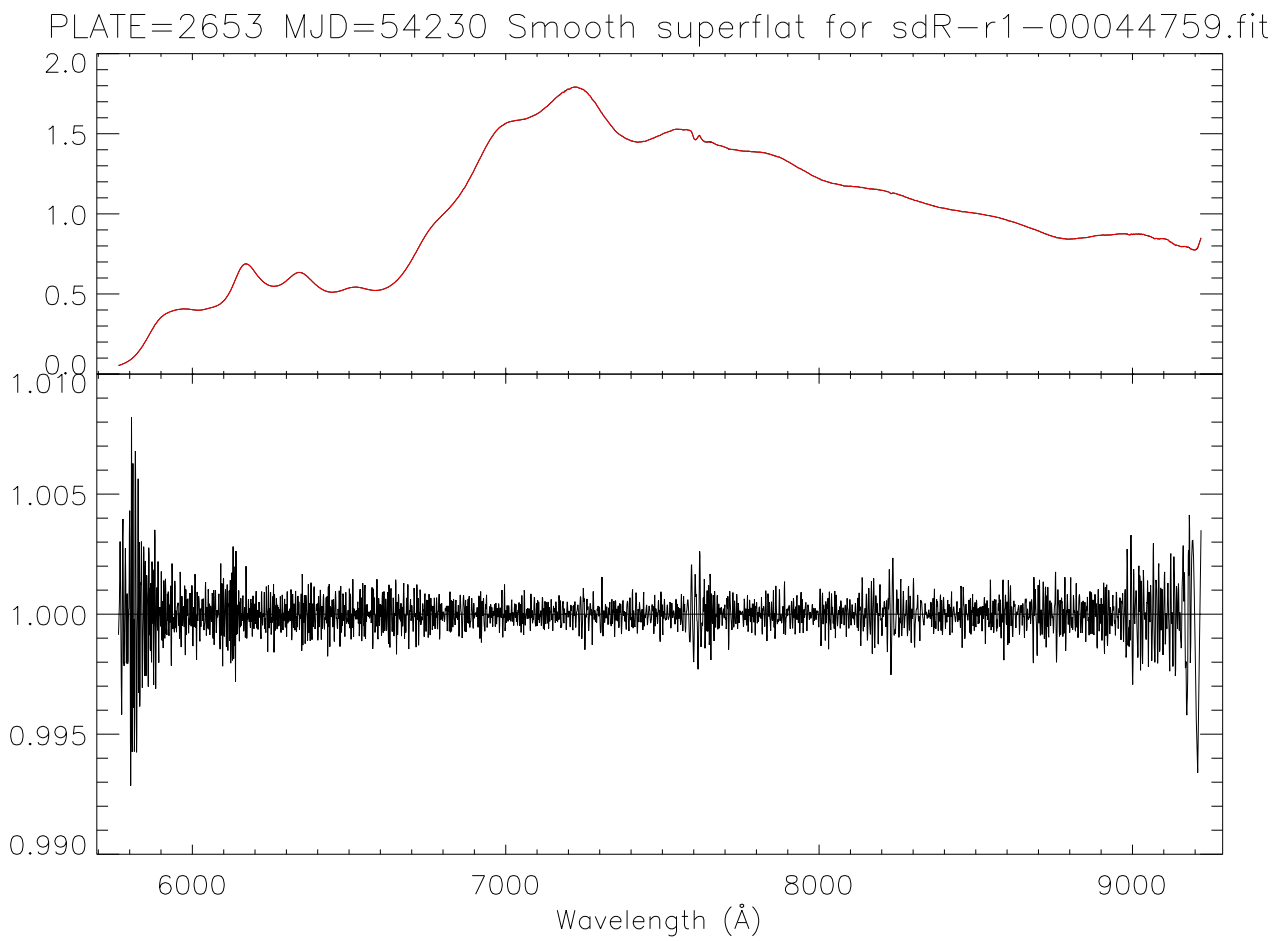

8885.8300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

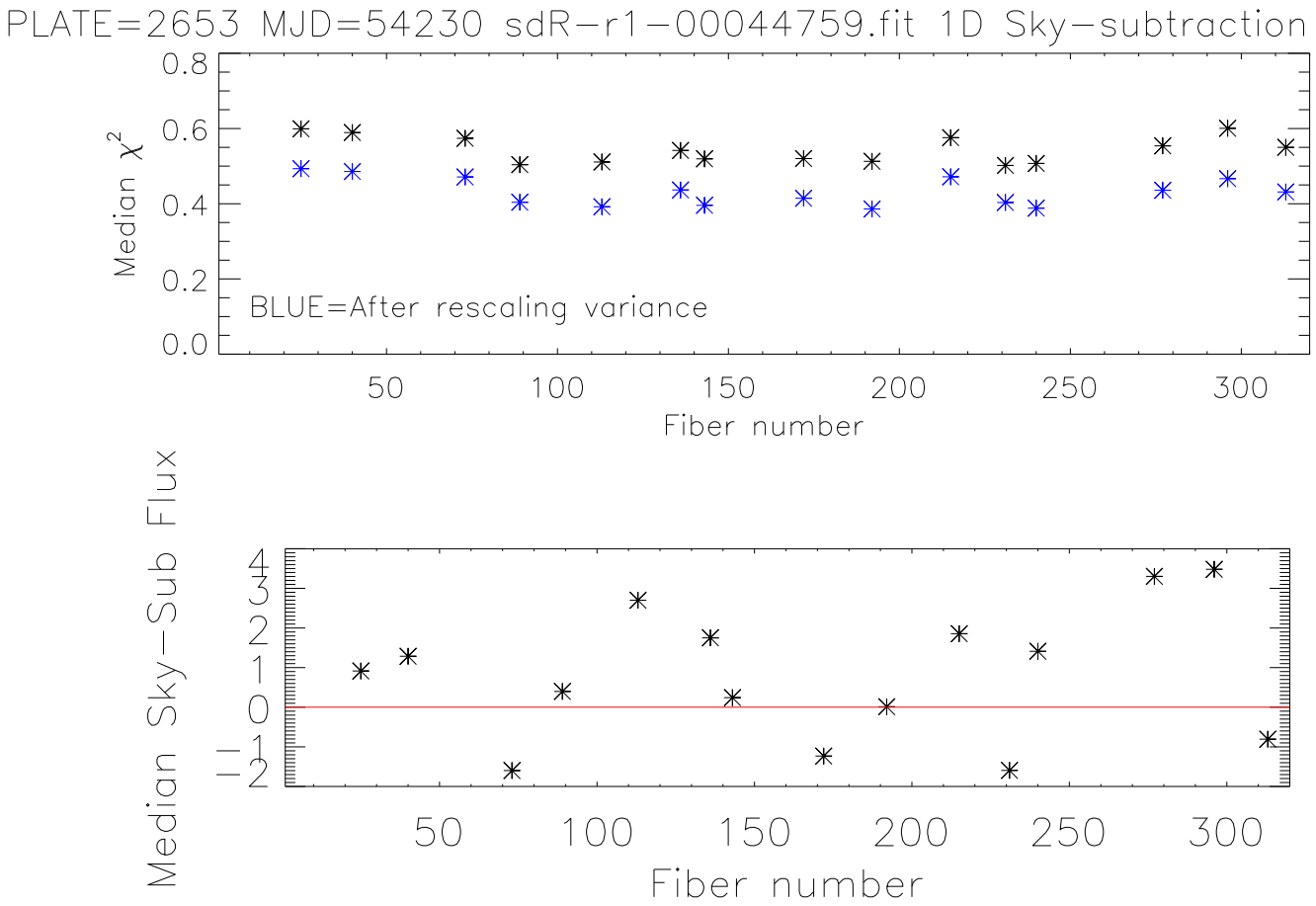

8919.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


6300.3040
stdev 0.30
extra 0.58
6363.7760
stdev 0.065
extra 0.43
6553.6100
stdev 0.37
extra 0.44
6923.2100
stdev 0.025
extra 0.41
6949.0300
stdev 0.32
extra 0.35
7571.7500
stdev 0.26
extra 0.38
7794.1200
stdev 0.17
extra 0.46
7821.5100
stdev 0.19
extra 0.42
8399.1600
stdev 0.16
extra 0.37
8430.1700
stdev 0.15
extra 0.39
8885.8300
stdev 0.16
extra 0.39
8919.6100
stdev 0.18
extra 0.40
meas − pred, pix

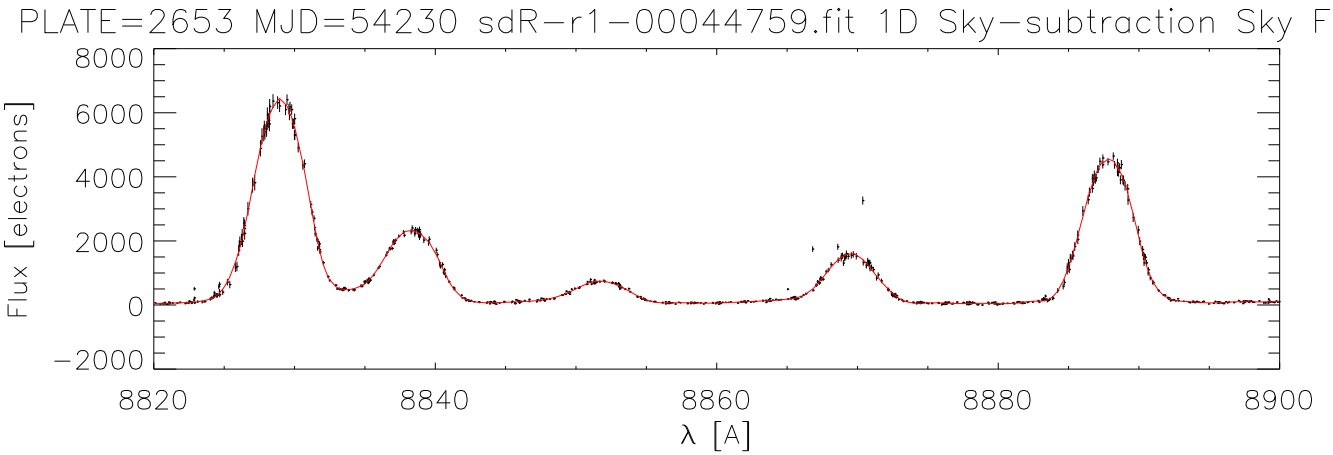

−0.35
−0.40
−0.45
−0.50
−0.55
sky shift, pixels
5000
6000
7000
8000
9000
10000

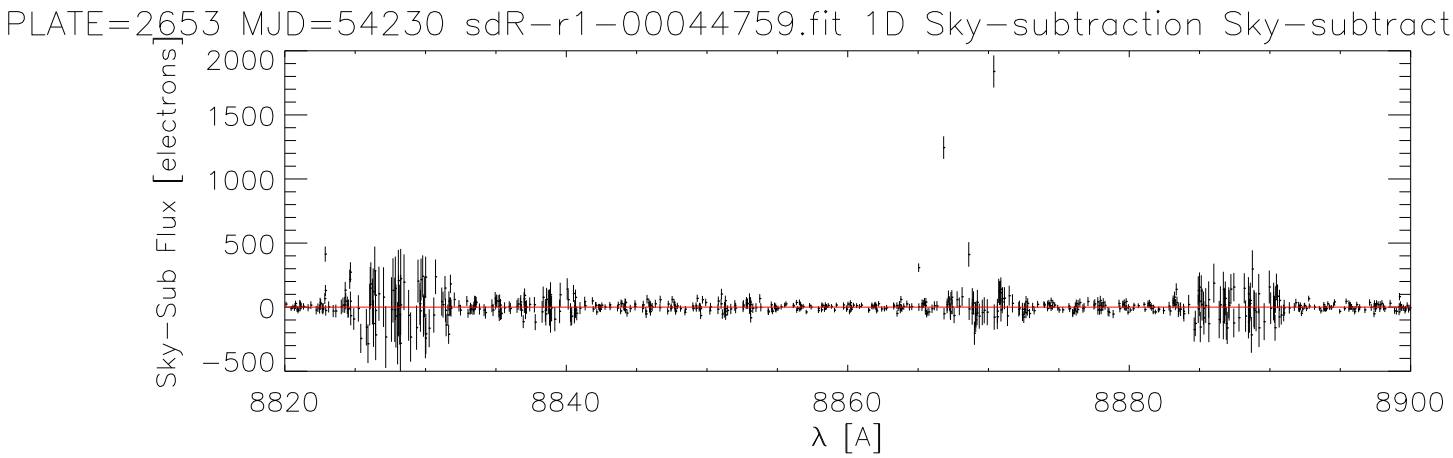
es= 0.0000

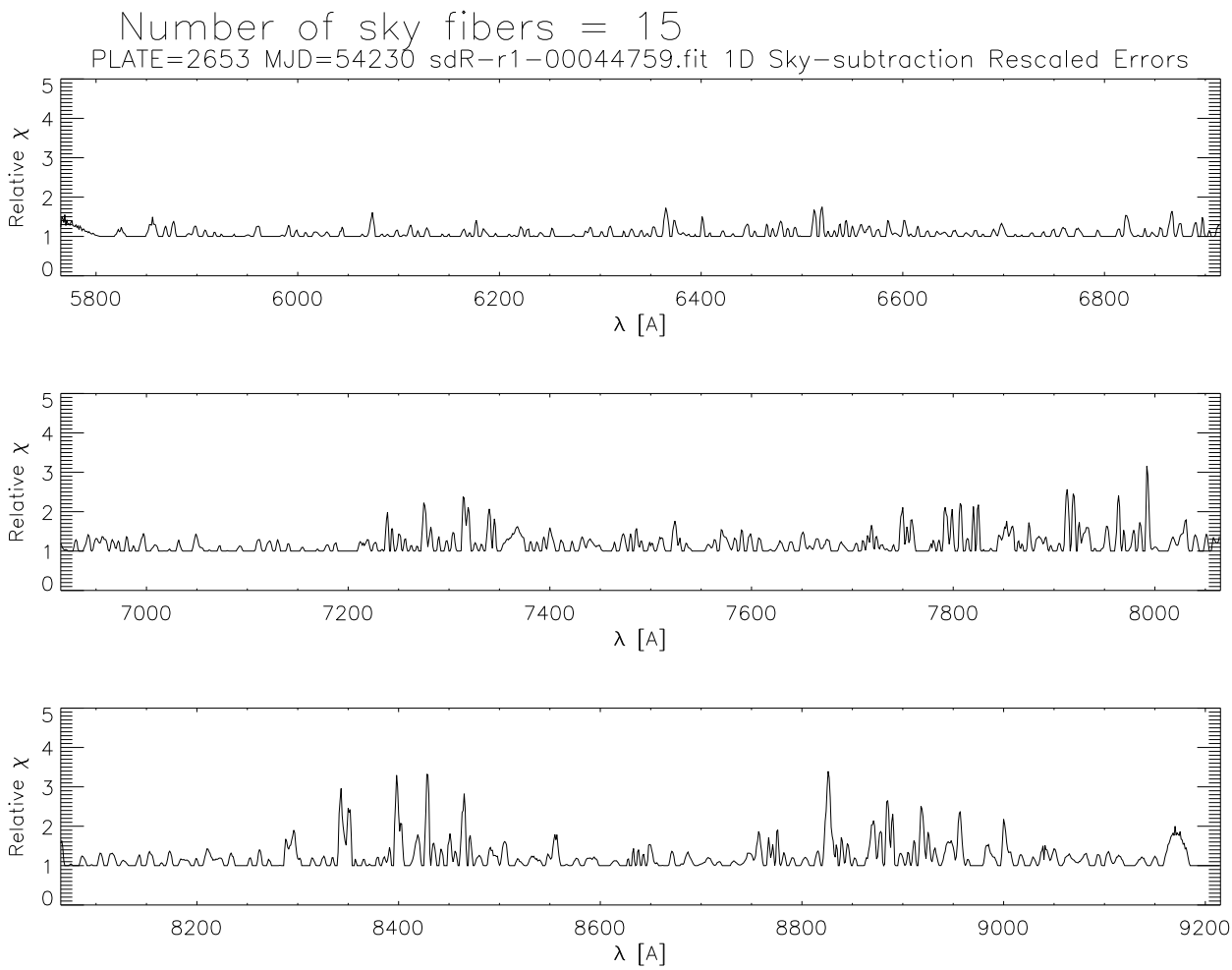

PLATE=2653 MJD=54230 Smooth superflat for sdR-r1-00044759.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

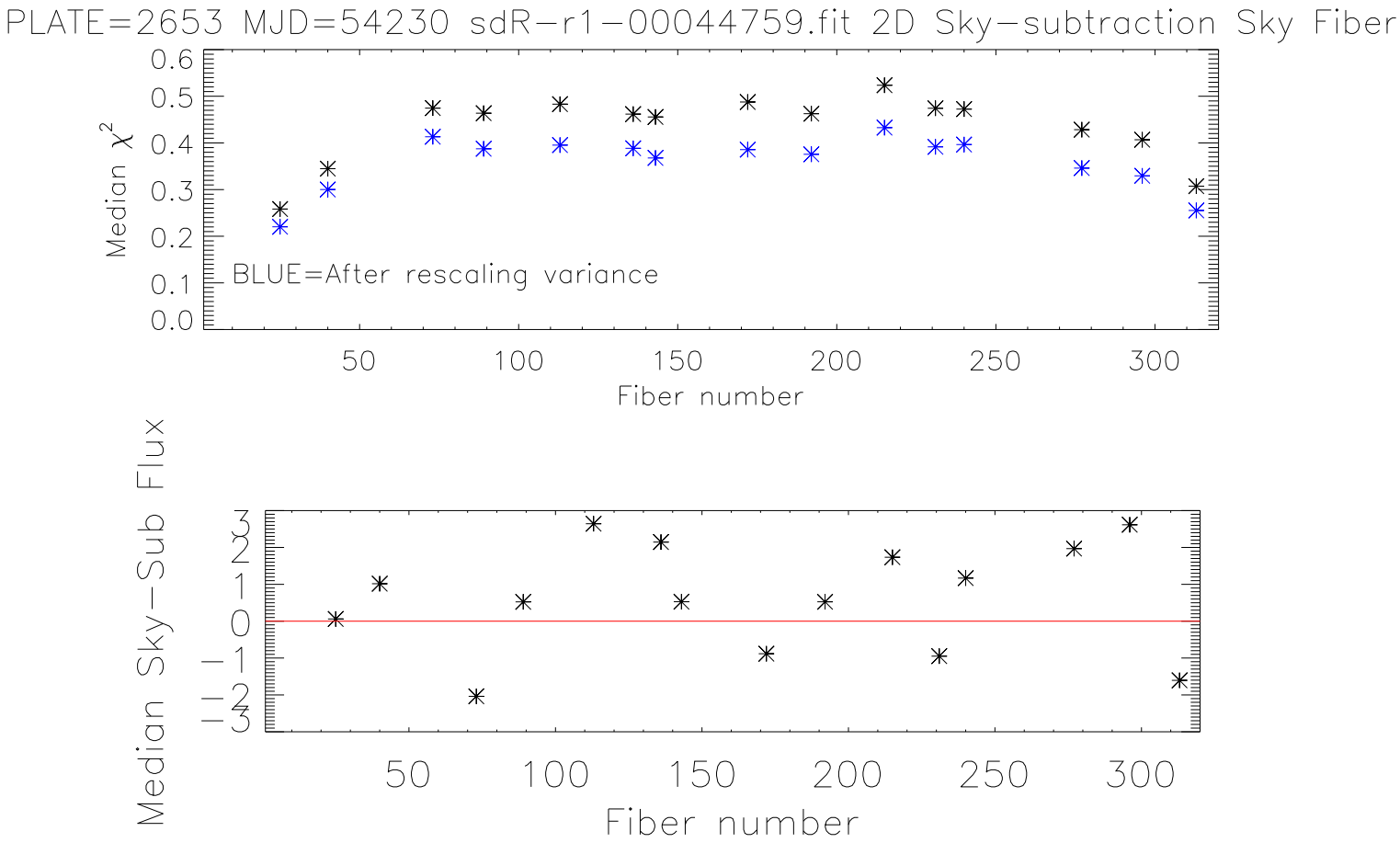

PLATE=2653 MJD=54230 sdR-r1-00044759.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

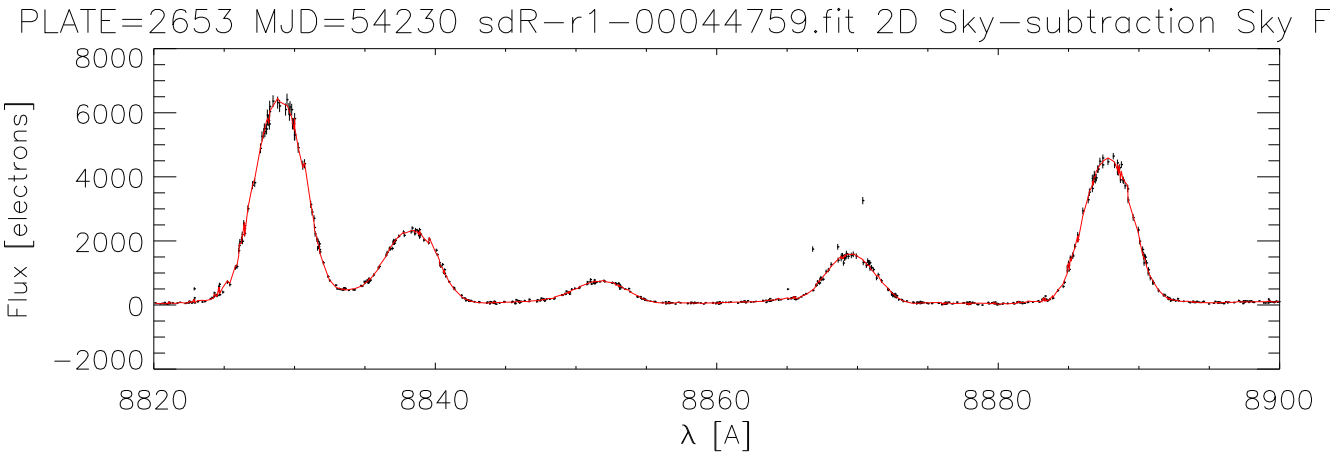
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

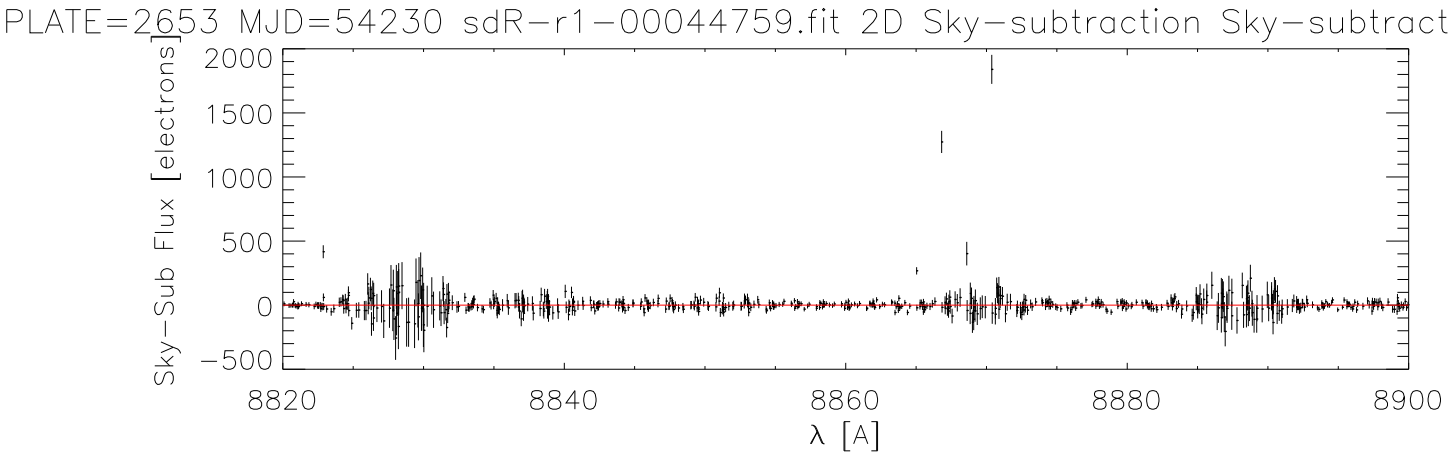

PLATE=2653 MJD=54230 sdR-r1-00044759.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

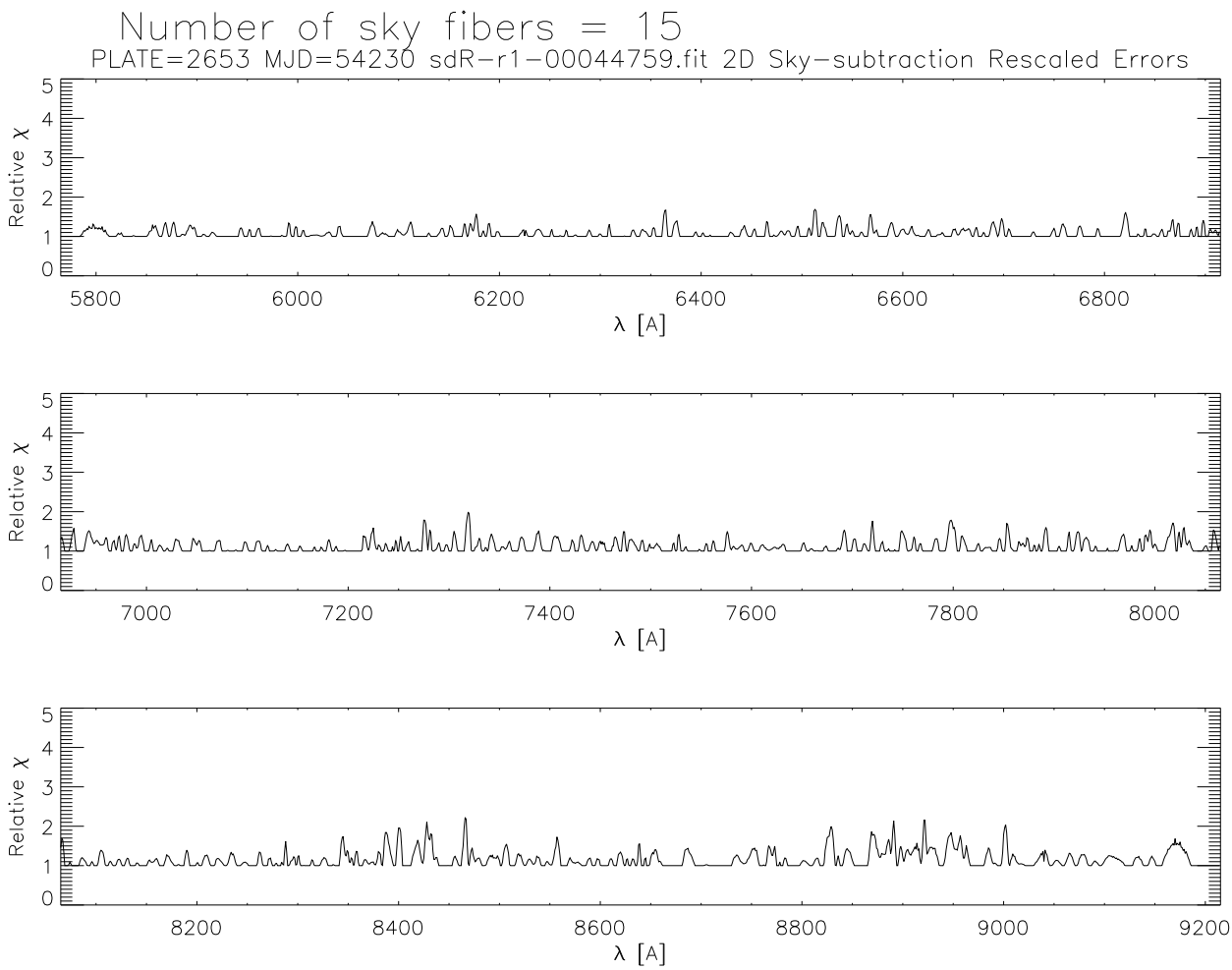

PLATE=2653 MJD=54230 sdR-r1-00044759.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

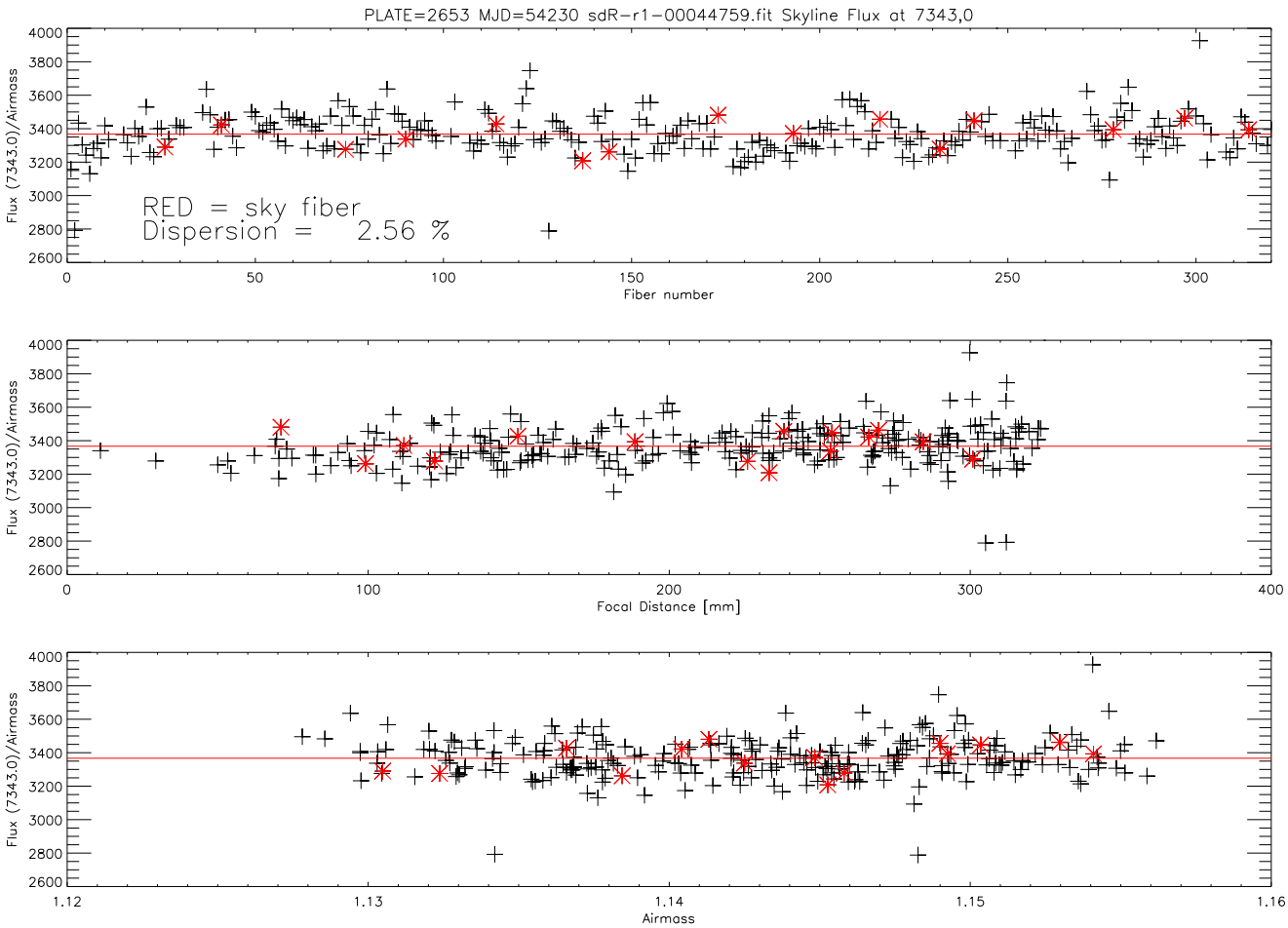

Number of sky fibers = 15
PLATE=2653 MJD=54230 sdR-r1-00044759.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

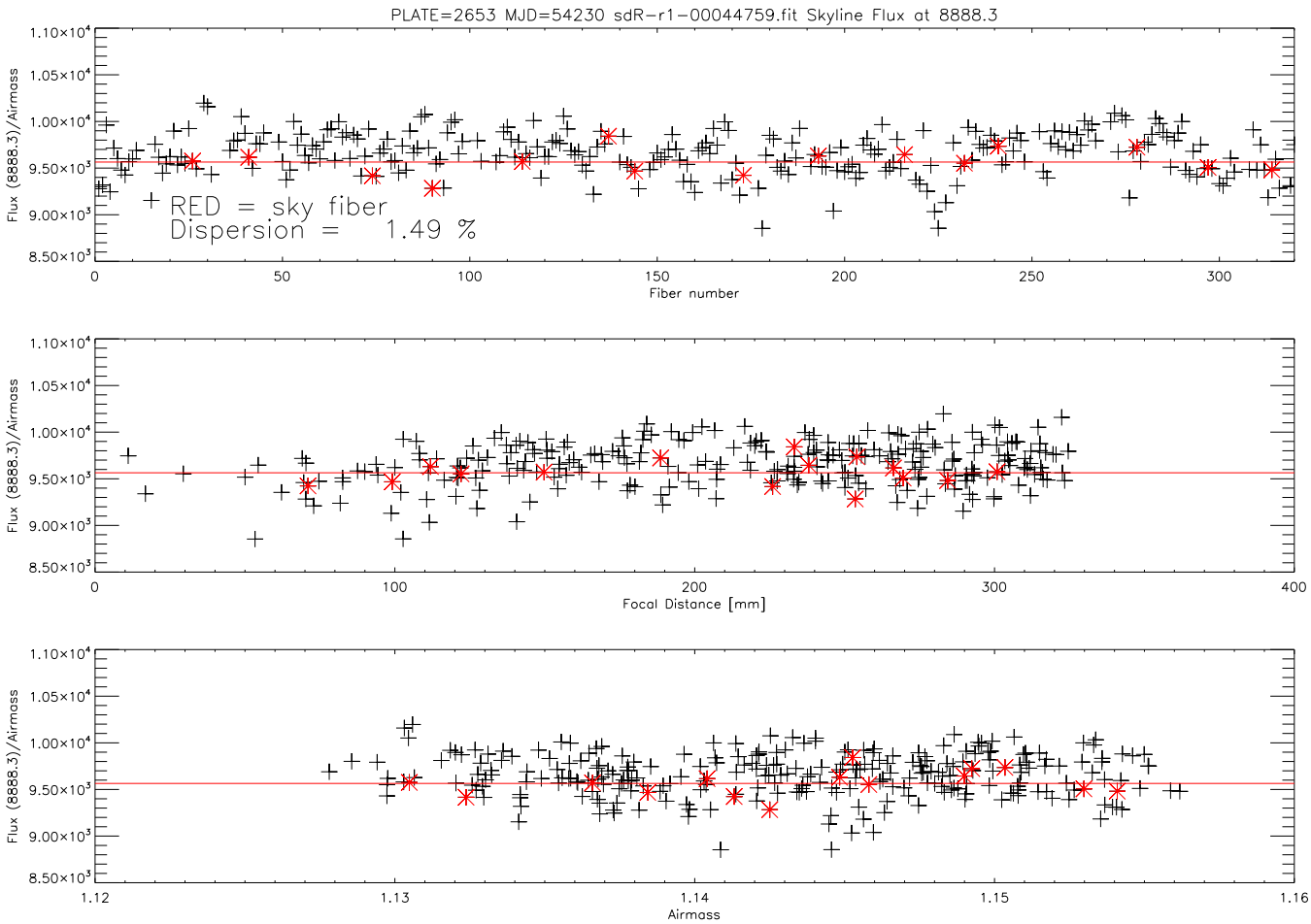

PLATE=2653 MJD=54230 sdR-r1-00044759.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

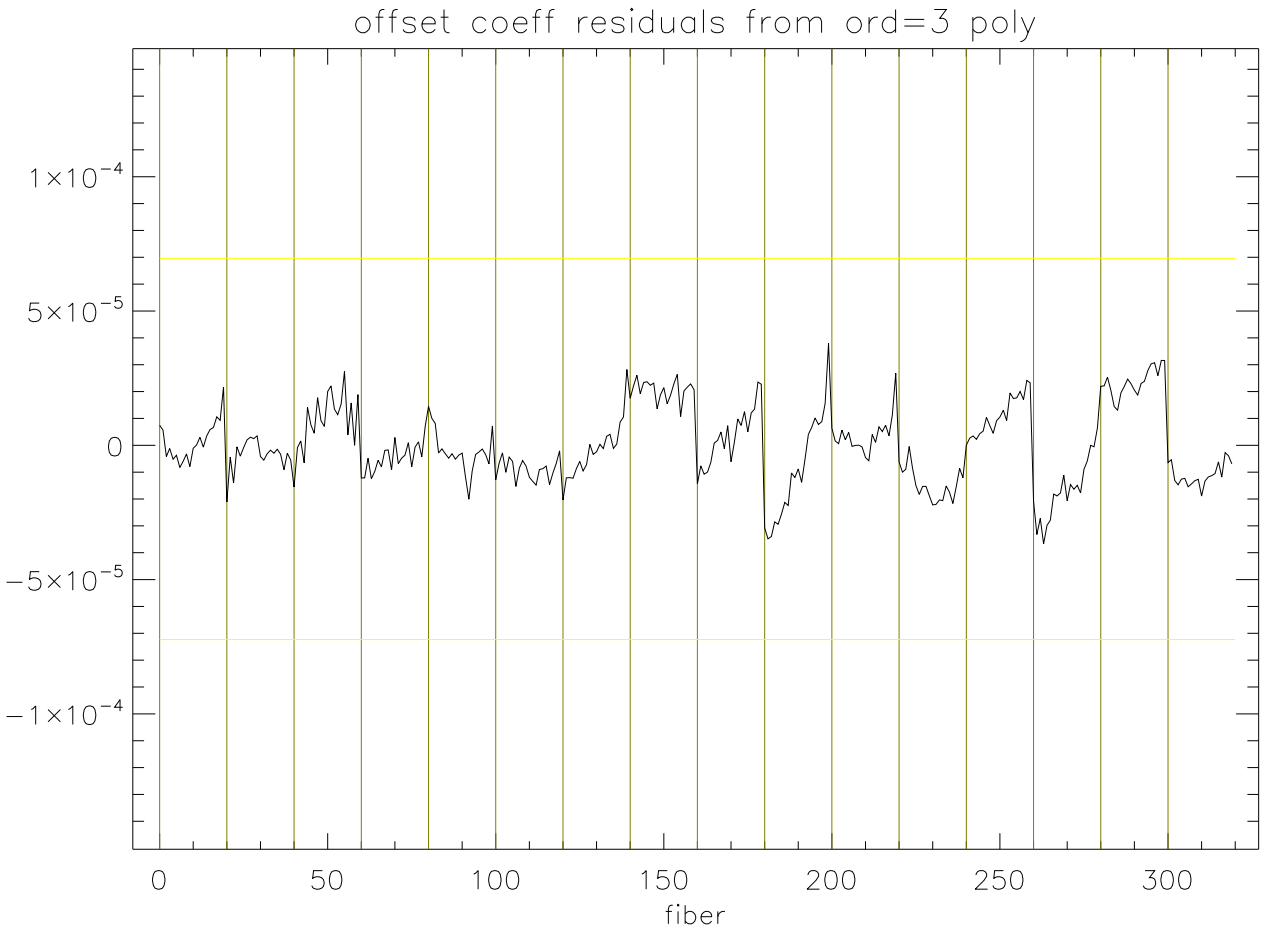

PLATE=2653 MJD=54230 sdR-r1-00044759.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

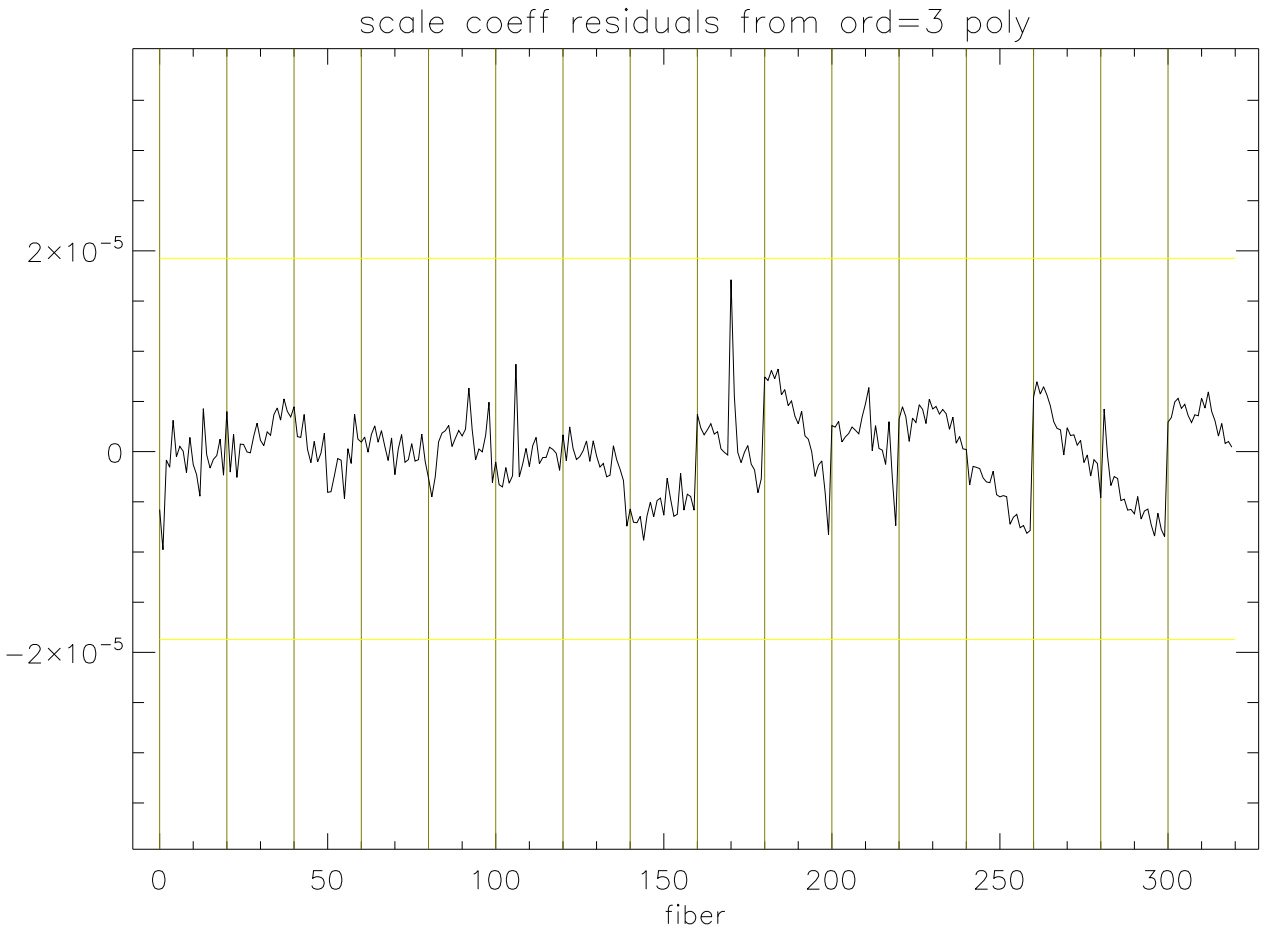

PLATE=2653 MJD=54230 sdR-r1-00044759.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

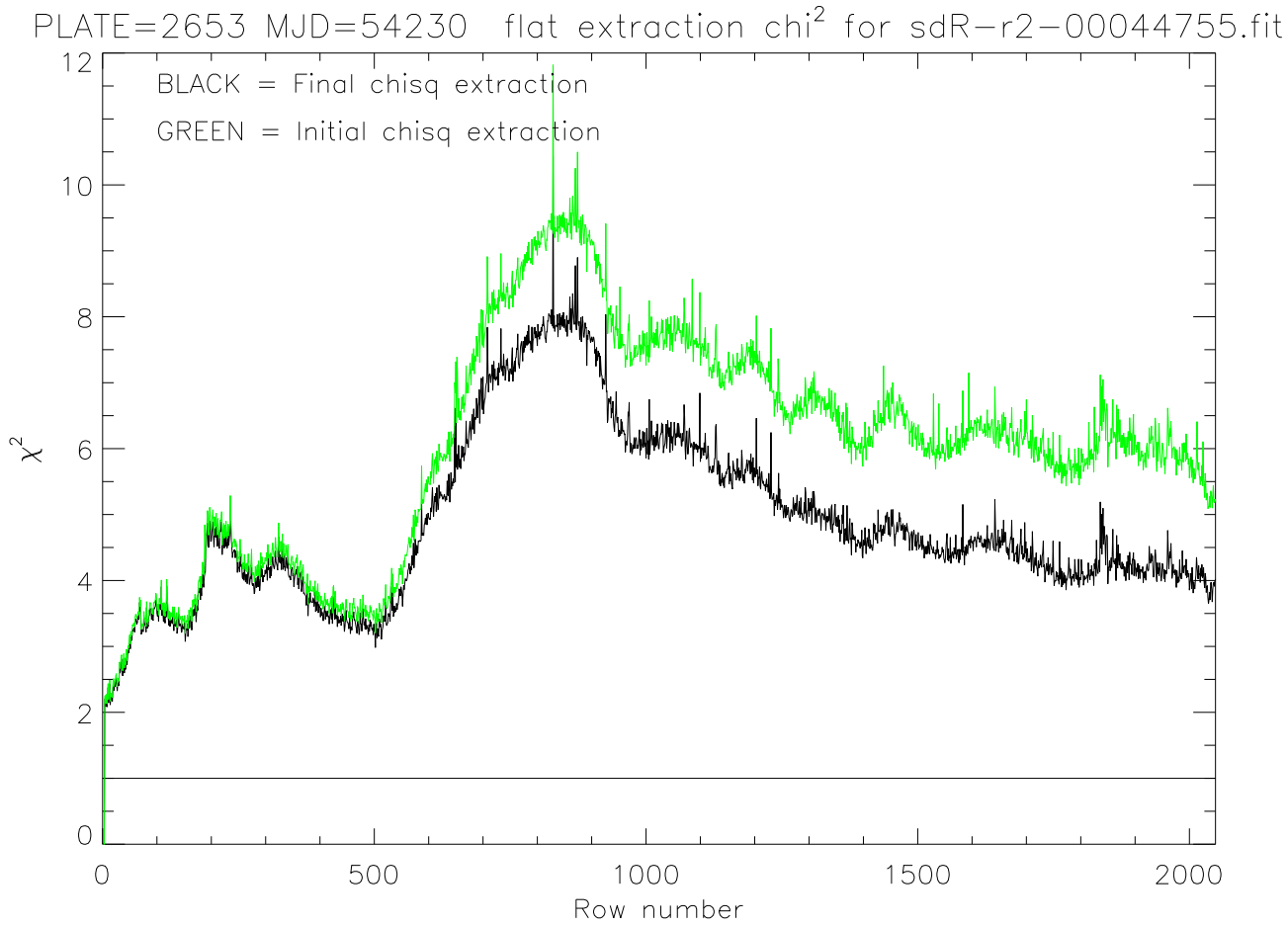

Number of sky fibers = 15
PLATE=2653 MJD=54230 sdR-r1-00044759.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

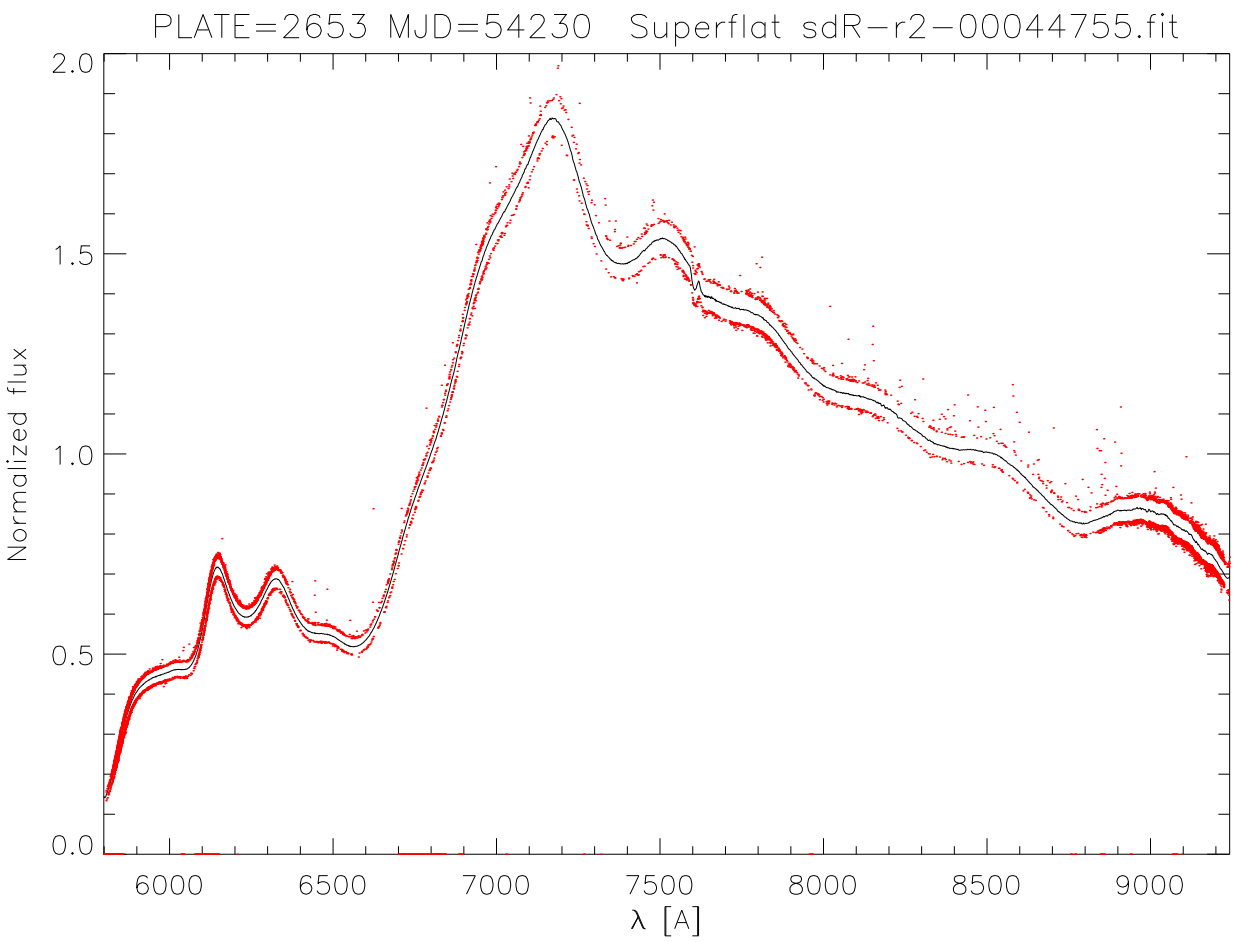

PLATE=2653 MJD=54230 sdR-r1-00044759.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.56 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

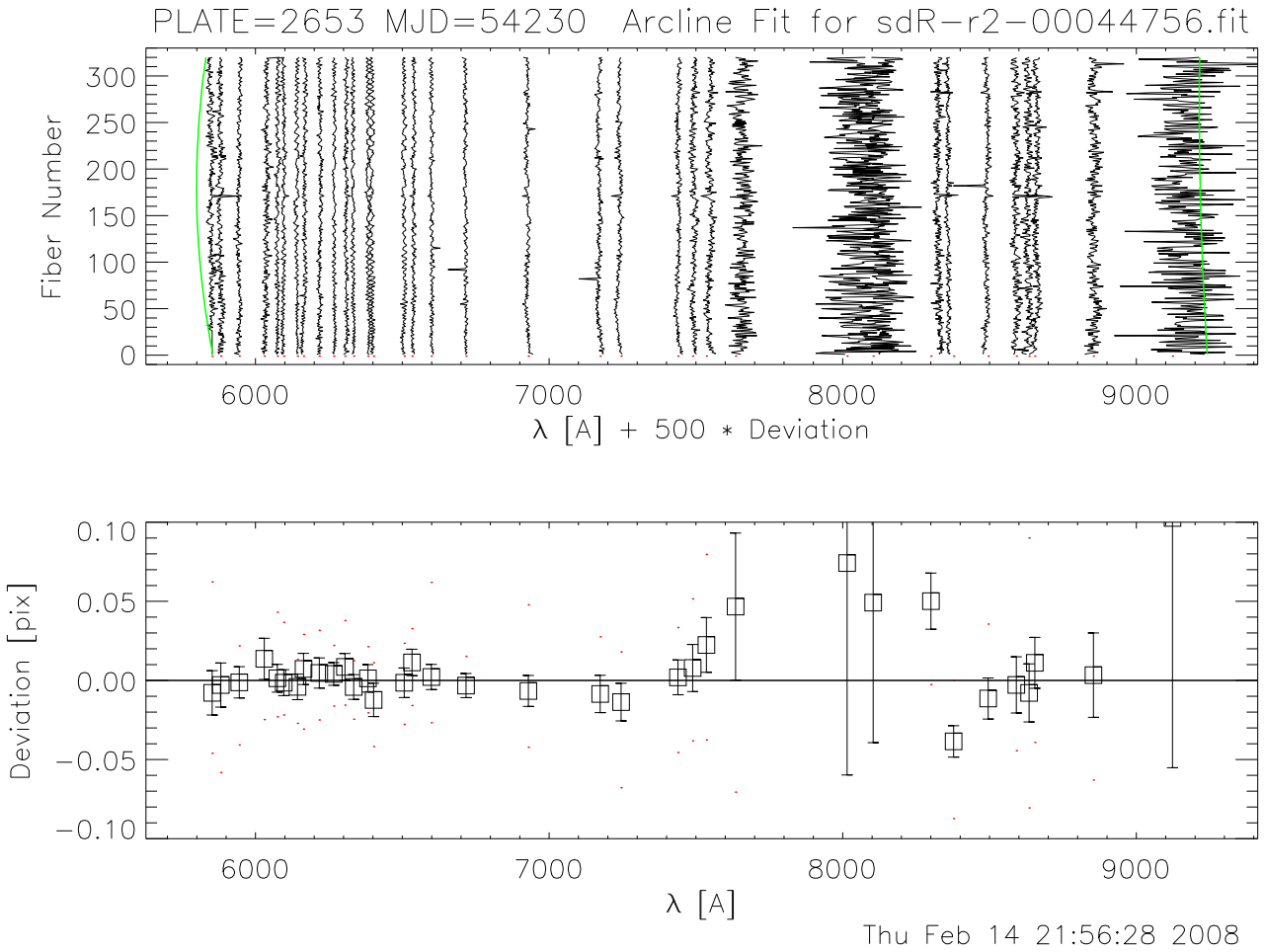

PLATE=2653 MJD=54230 sdR-r1-00044759.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.49 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

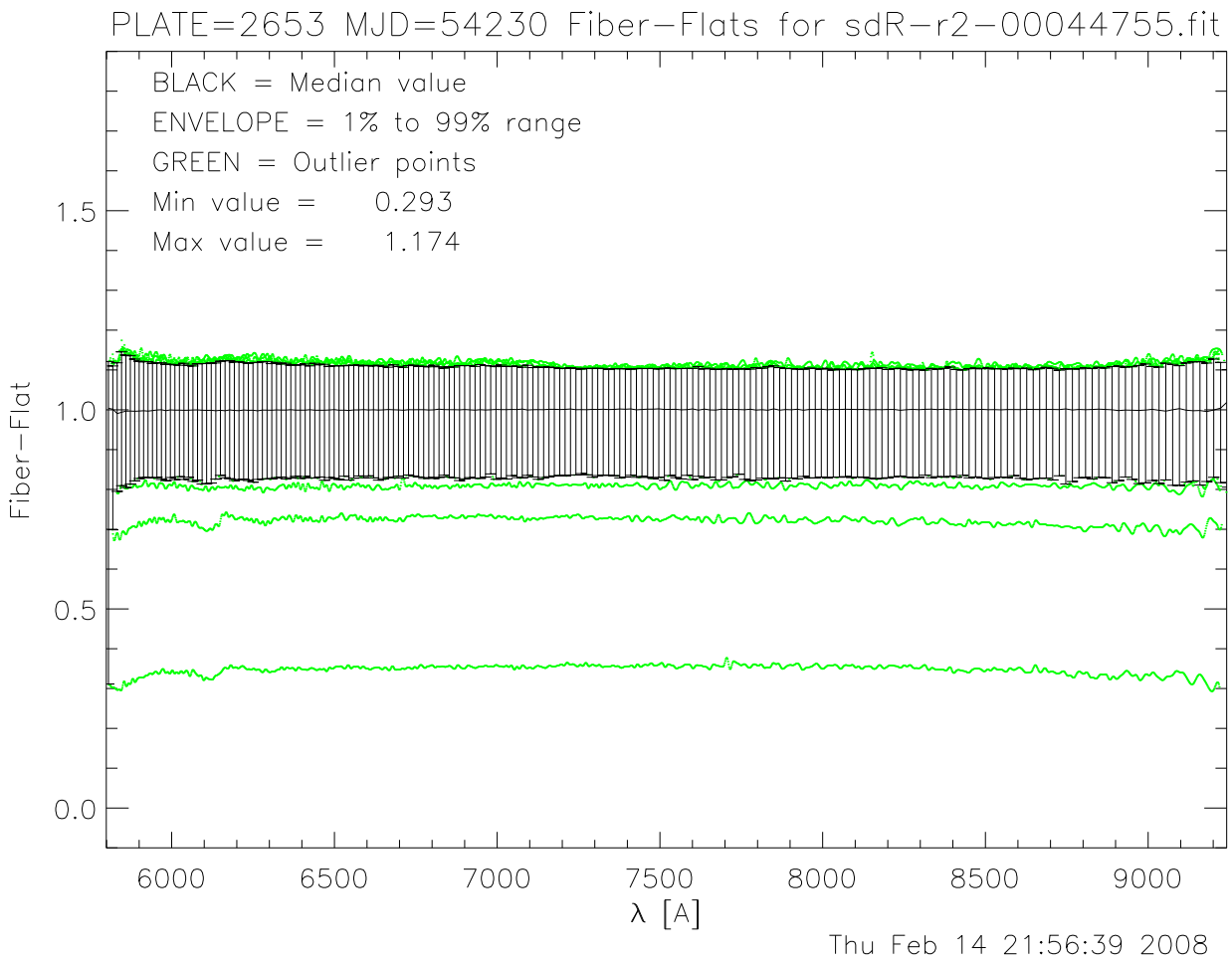

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

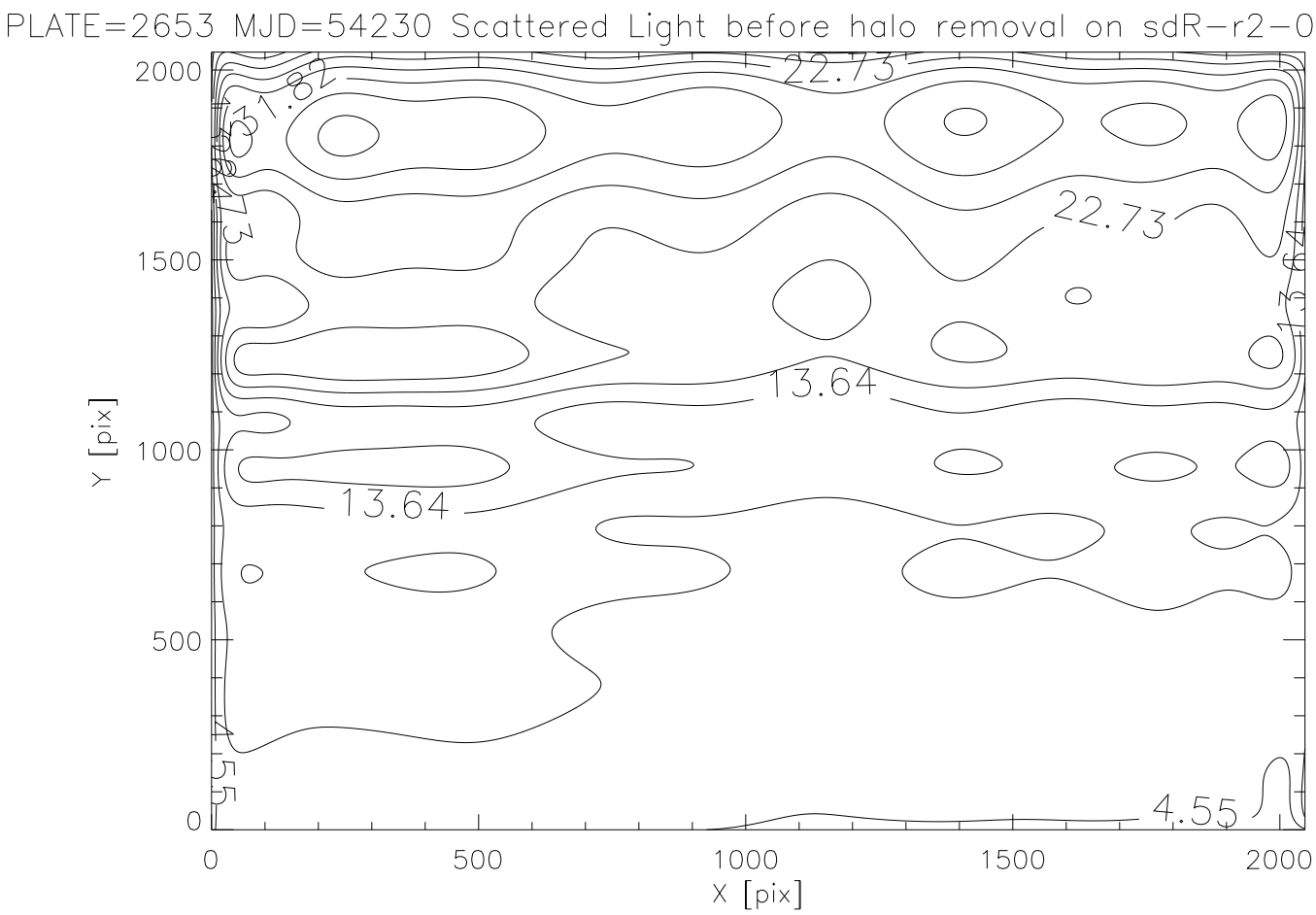

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

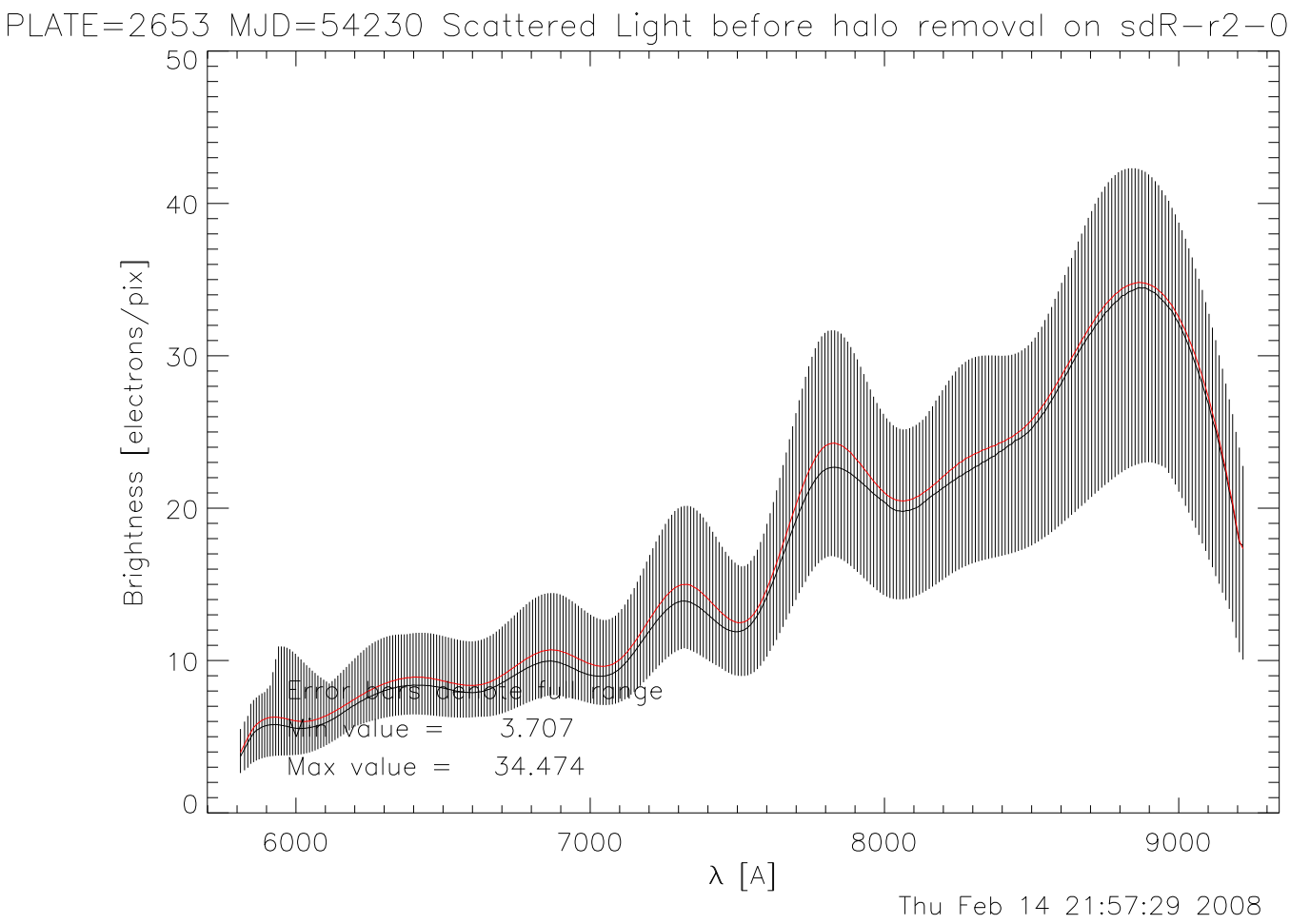

PLATE=2653 MJD=54230 flat extraction chi^2 for sdR−r2−00044755.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

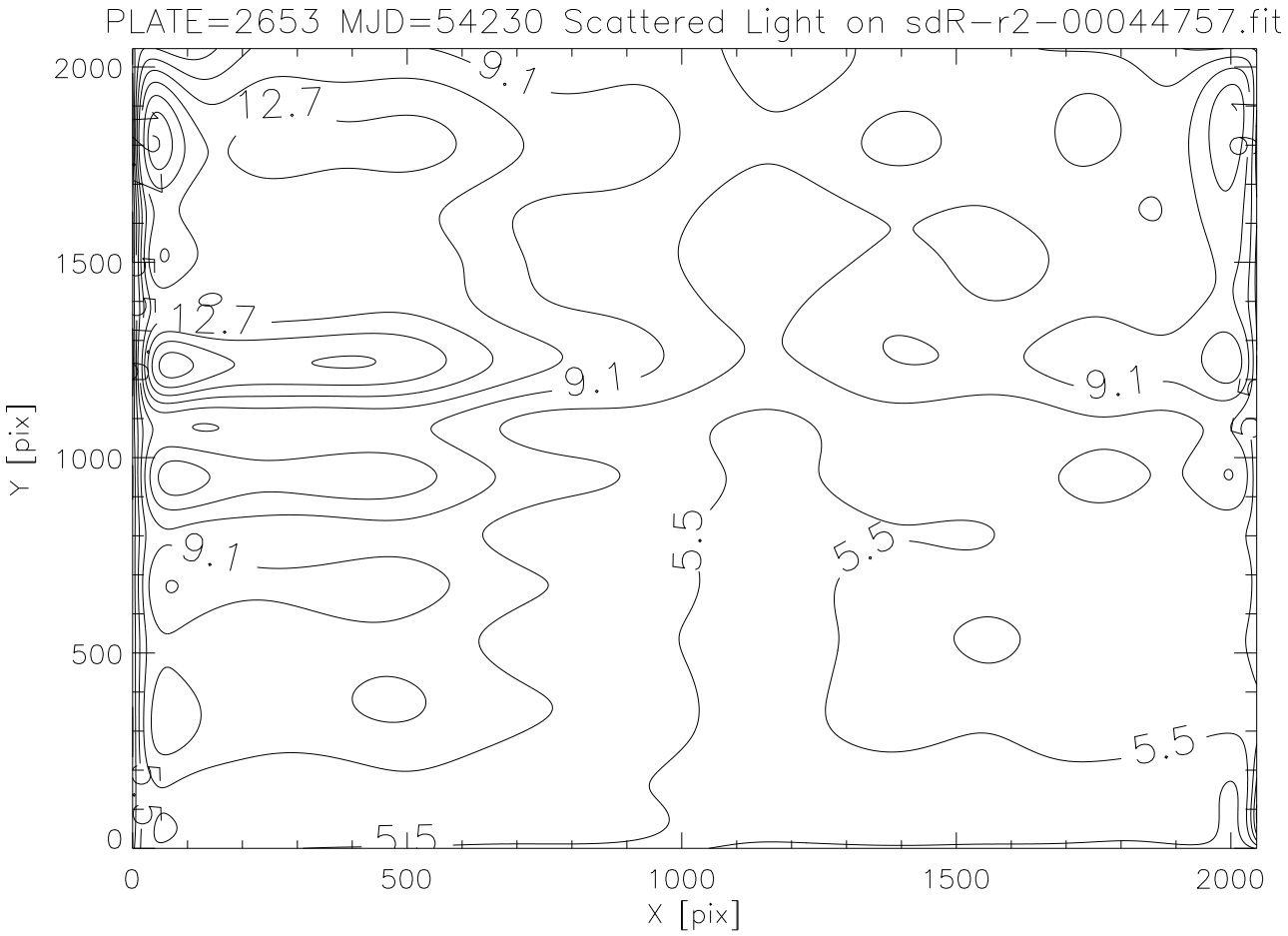

PLATE=2653 MJD=54230 Superflat sdR-r2-00044755.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

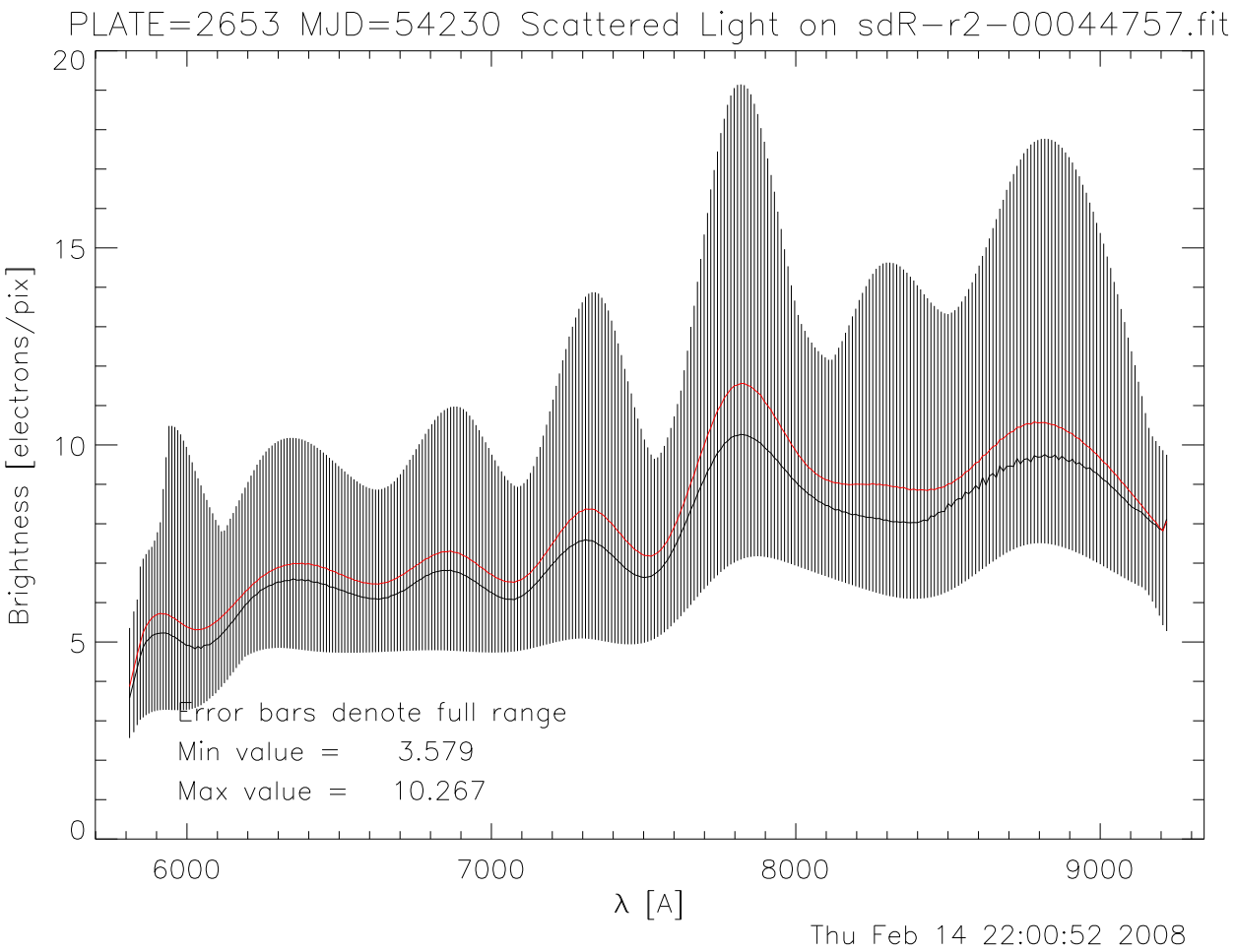

PLATE=2653 MJD=54230 Arcline Fit for sdR-r2-00044756.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu Feb 14 21:56:28 2008

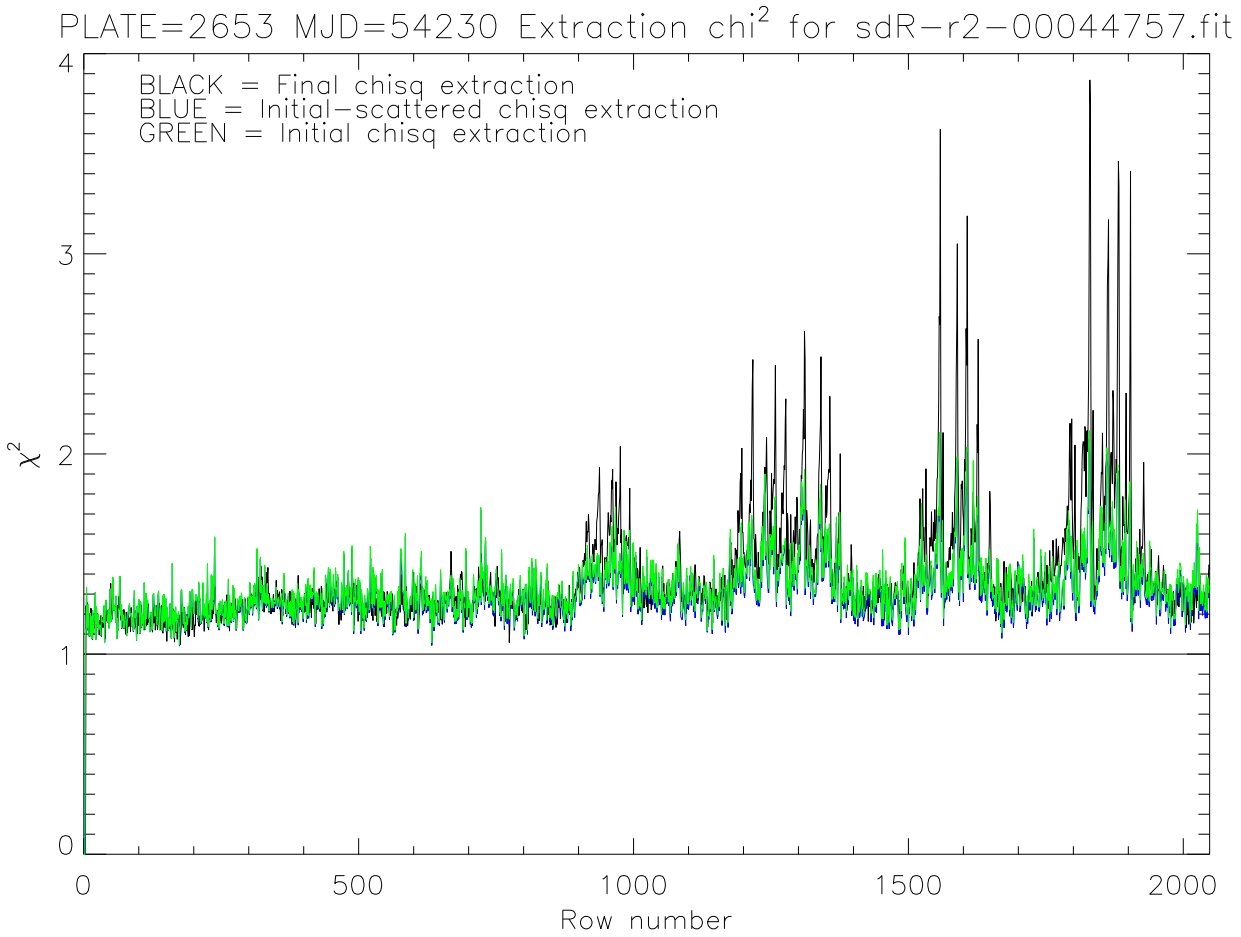

PLATE=2653 MJD=54230 Fiber−Flats for sdR−r2−00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.293
Max value = 1.174
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 14 21:56:39 2008

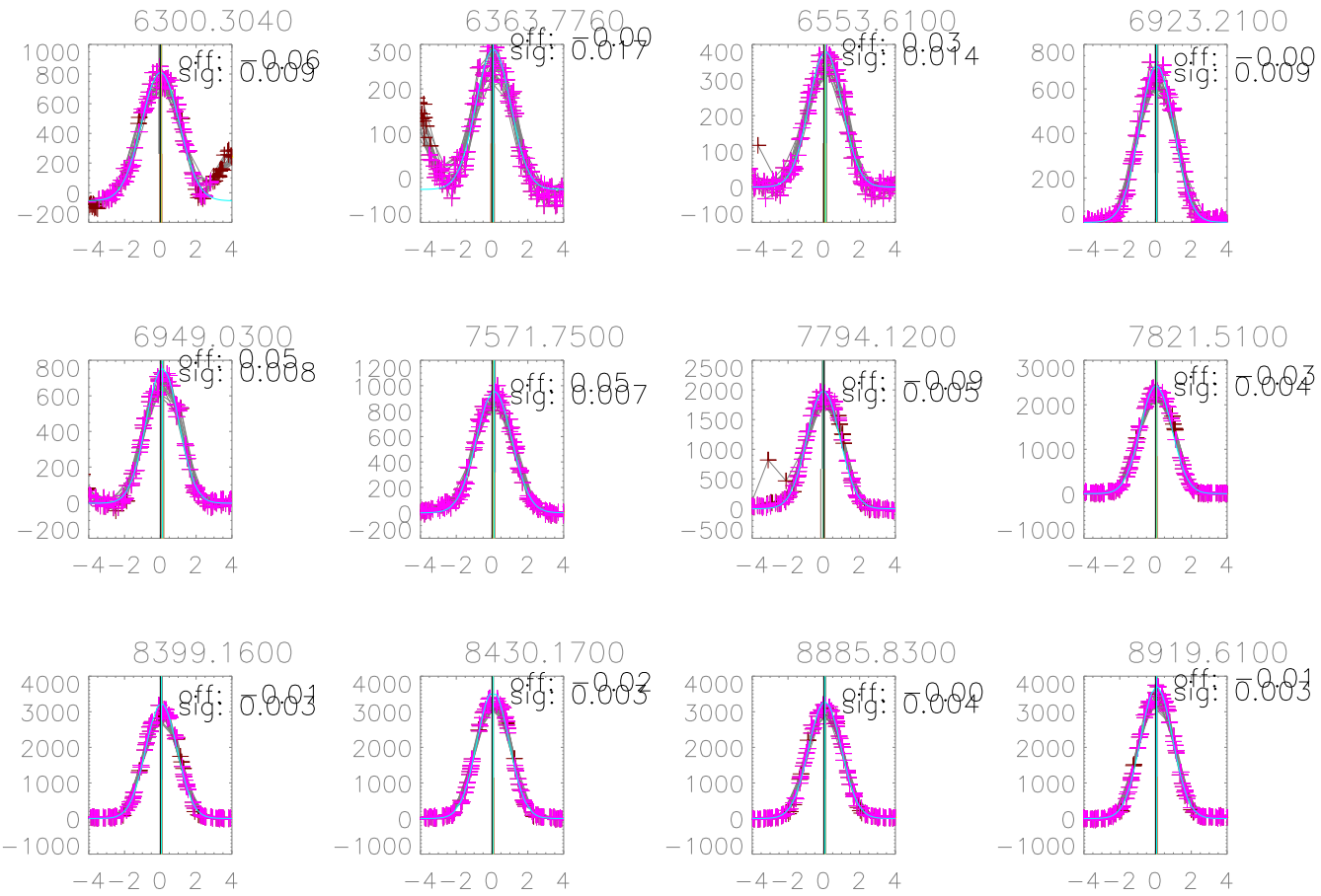

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r2-00044757.fi
22.73
22.73
13.64
13.64
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

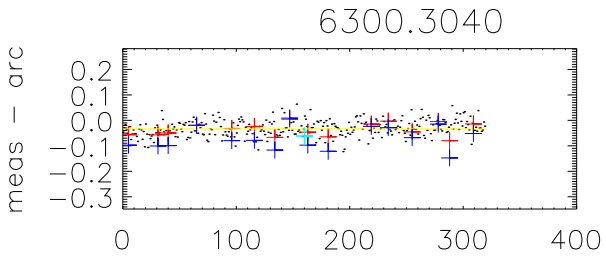

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r2-00044757.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.707
Max value = 34.474
Thu Feb 14 21:57:29 2008

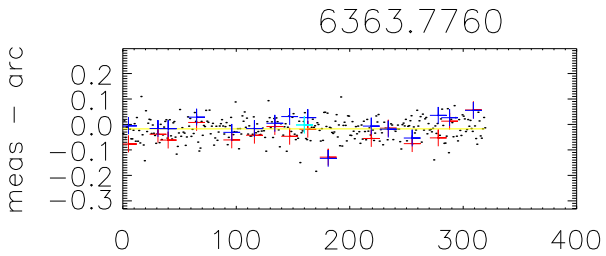

PLATE=2653 MJD=54230 Scattered Light on sdR-r2-00044757.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
9.1
5.5

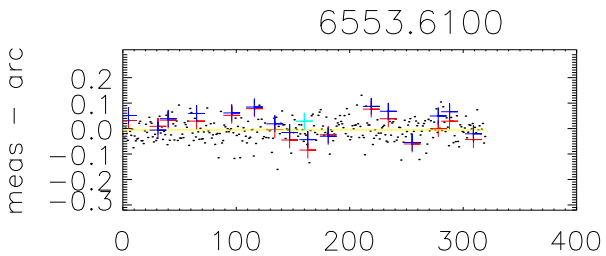

PLATE=2653 MJD=54230 Scattered Light on sdR-r2-00044757.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 3.579
Max value = 10.267
Thu Feb 14 22:00:52 2008

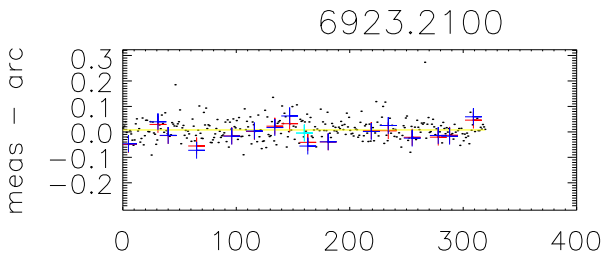

PLATE=2653 MJD=54230 Extraction chi^2 for sdR-r2-00044757.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

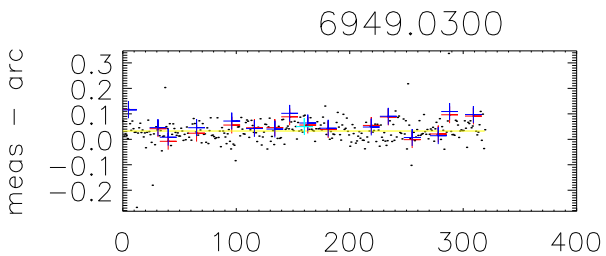

6300.3040
off: −0.06
sig: 0.009
6363.7760
off: −0.00
sig: 0.017
6553.6100
off: 0.03
sig: 0.014
6923.2100
off: −0.00
sig: 0.009
6949.0300
off: 0.05
sig: 0.008
7571.7500
off: 0.05
sig: 0.007
7794.1200
off: −0.09
sig: 0.005
7821.5100
off: −0.03
sig: 0.004
8399.1600
off: −0.01
sig: 0.003
8430.1700
off: −0.02
sig: 0.003
8885.8300
off: −0.00
sig: 0.004
8919.6100
off: −0.01
sig: 0.003

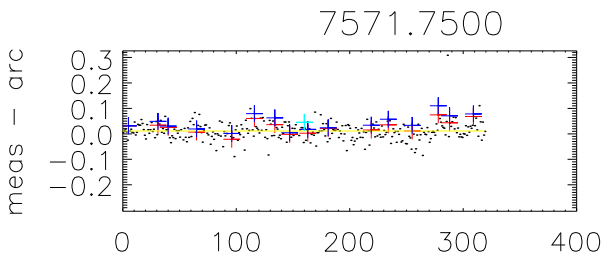

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

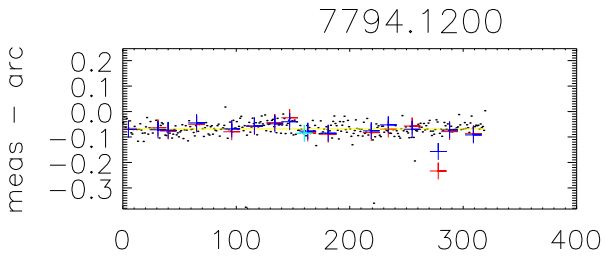

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

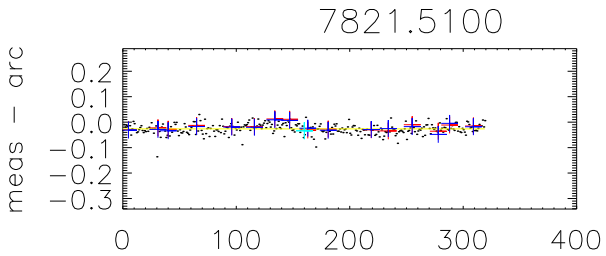

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

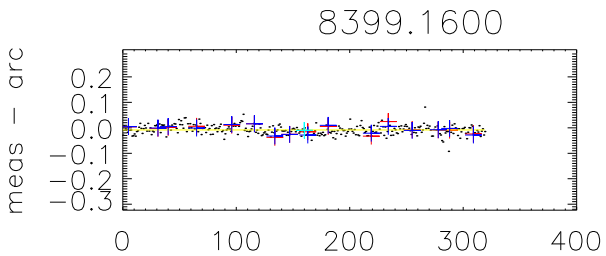

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

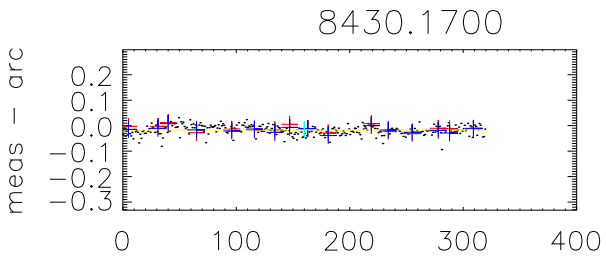

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

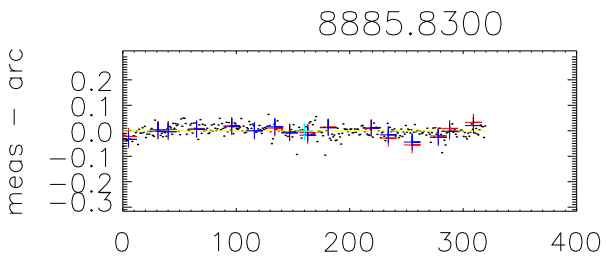

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

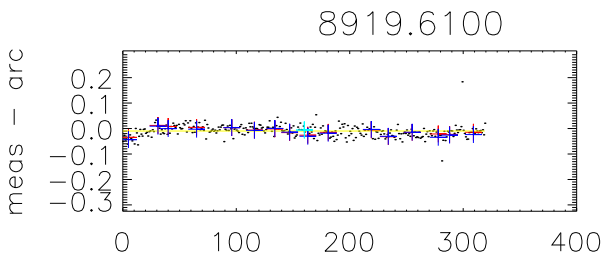

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

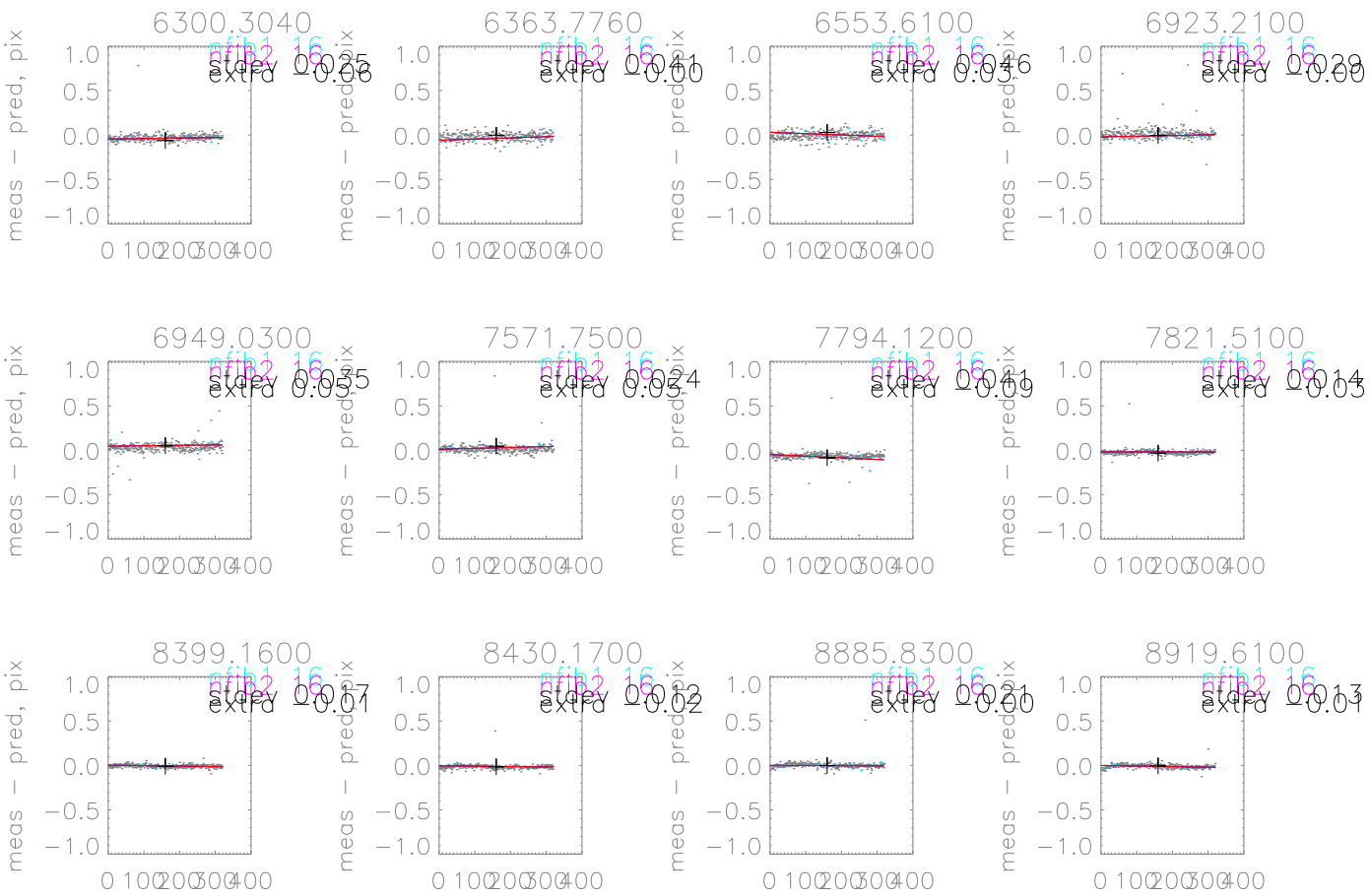

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

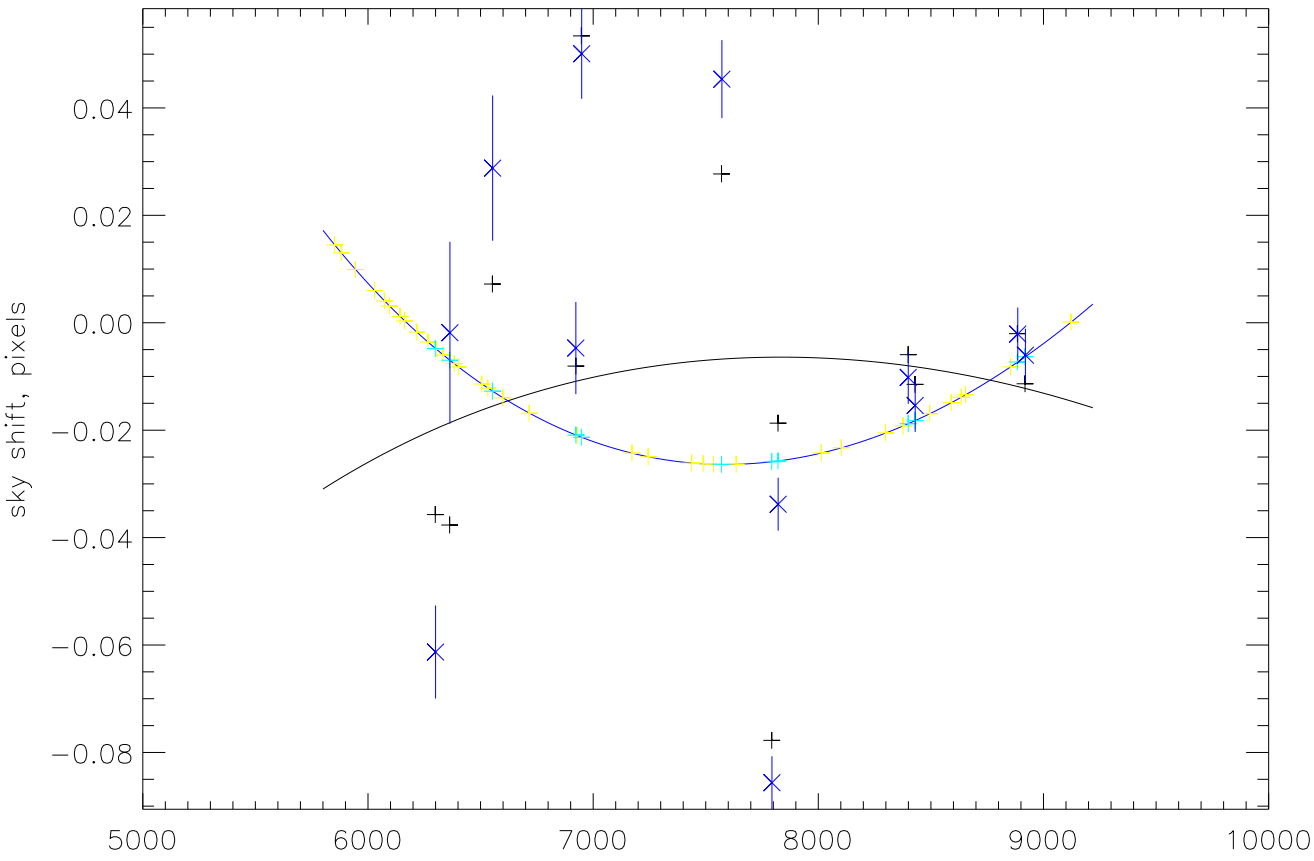

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

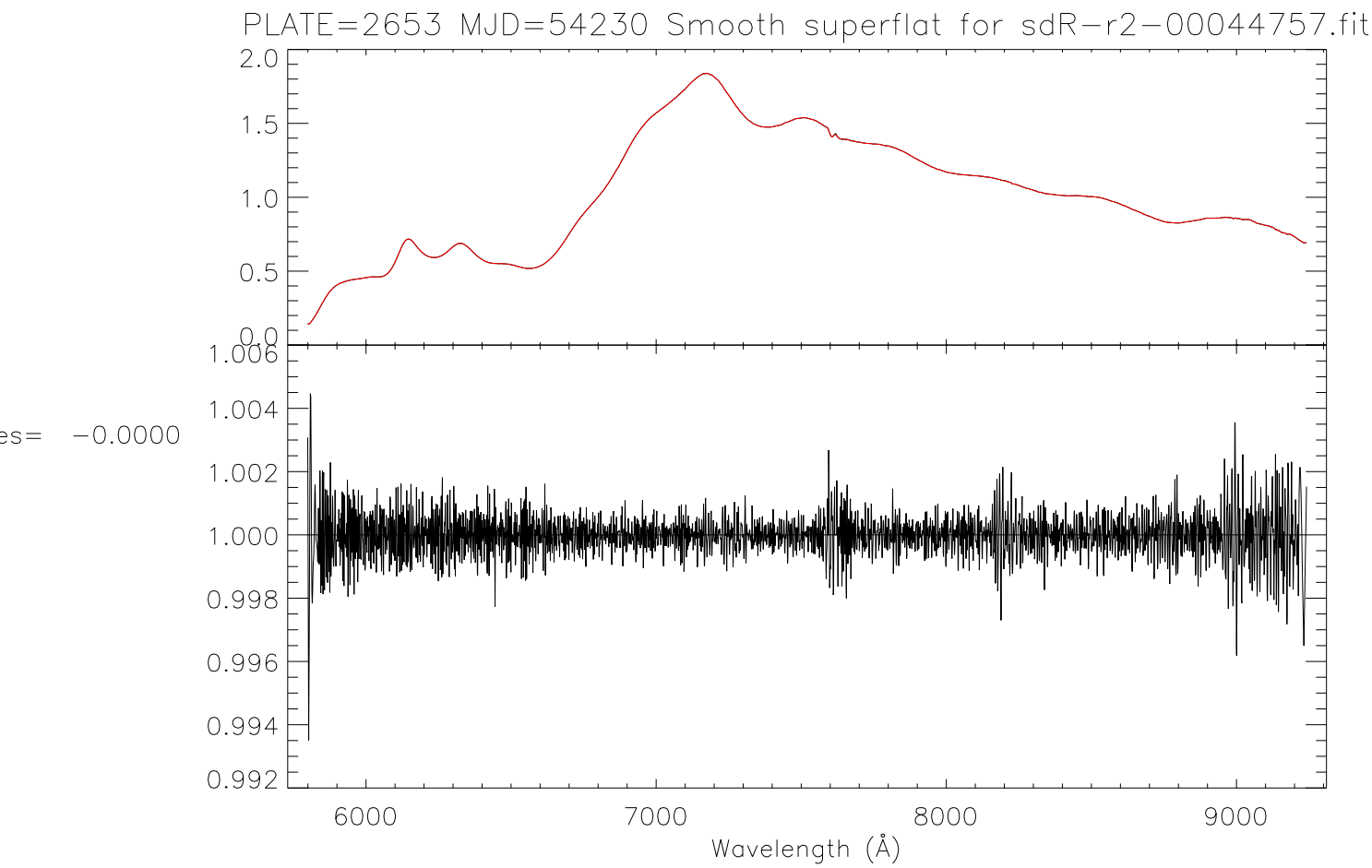

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

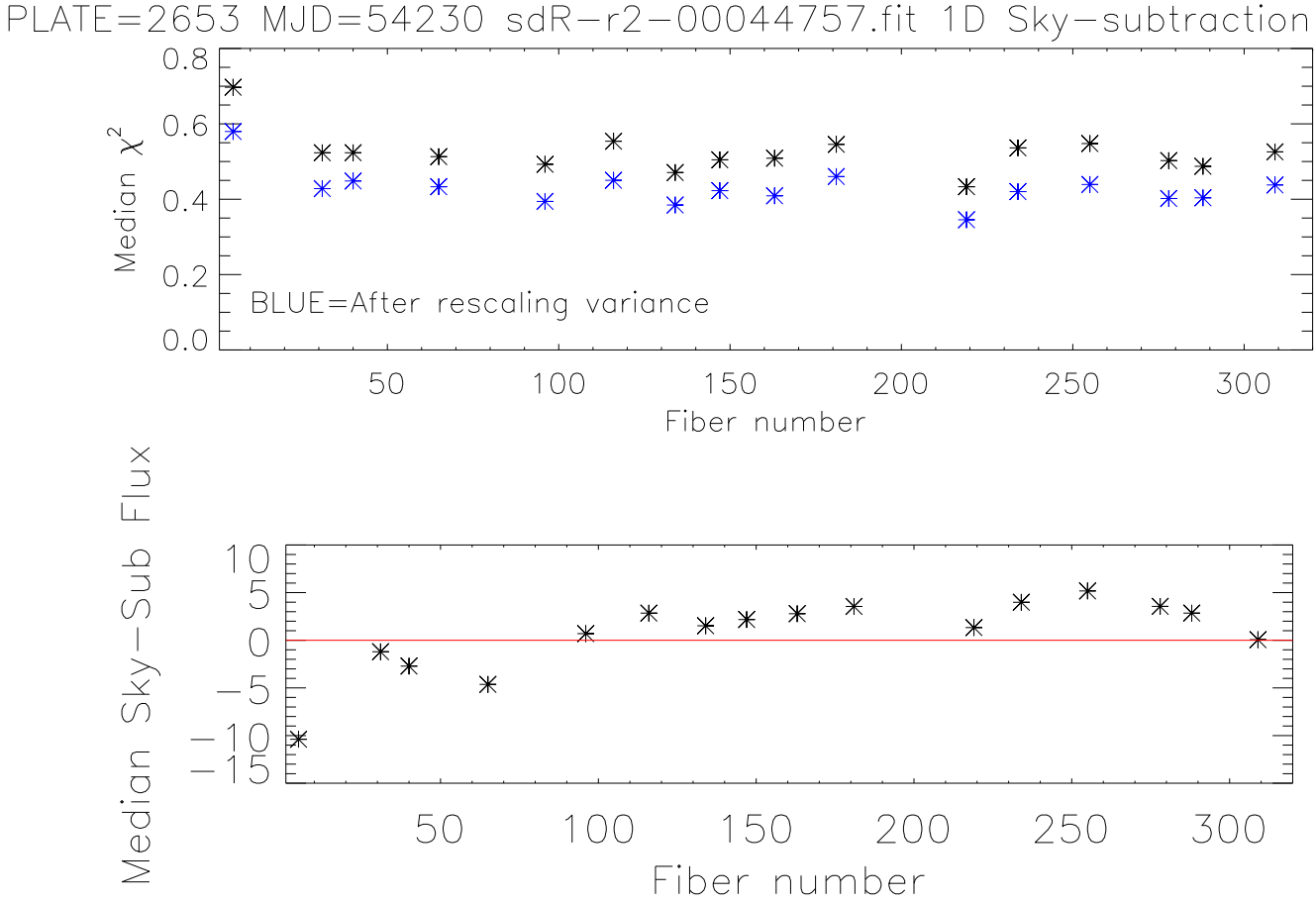

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


6300.3040
stdev 0.025
extra −0.08
6363.7760
stdev 0.041
extra −0.00
6553.6100
stdev 0.046
extra 0.03
6923.2100
stdev 0.029
extra −0.00
6949.0300
stdev 0.035
extra 0.05
7571.7500
stdev 0.024
extra 0.03
7794.1200
stdev 0.041
extra −0.09
7821.5100
stdev 0.014
extra −0.03
8399.1600
stdev 0.017
extra −0.01
8430.1700
stdev 0.012
extra −0.02
8885.8300
stdev 0.021
extra −0.00
8919.6100
stdev 0.013
extra −0.01
meas − pred, pix
mfib1 16
mfib2 16

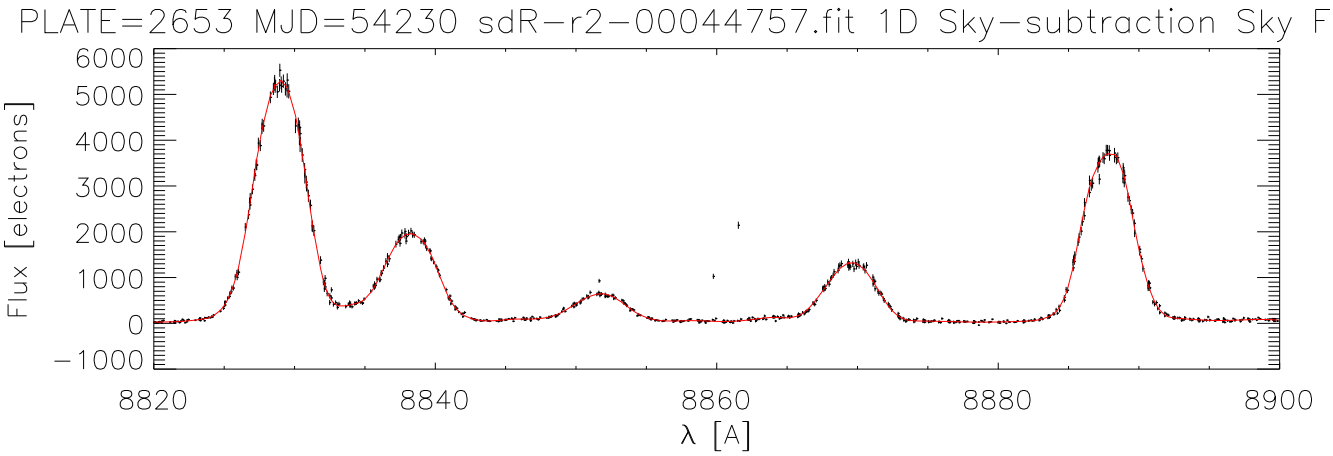

sky shift, pixels
0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
5000
6000
7000
8000
9000
10000

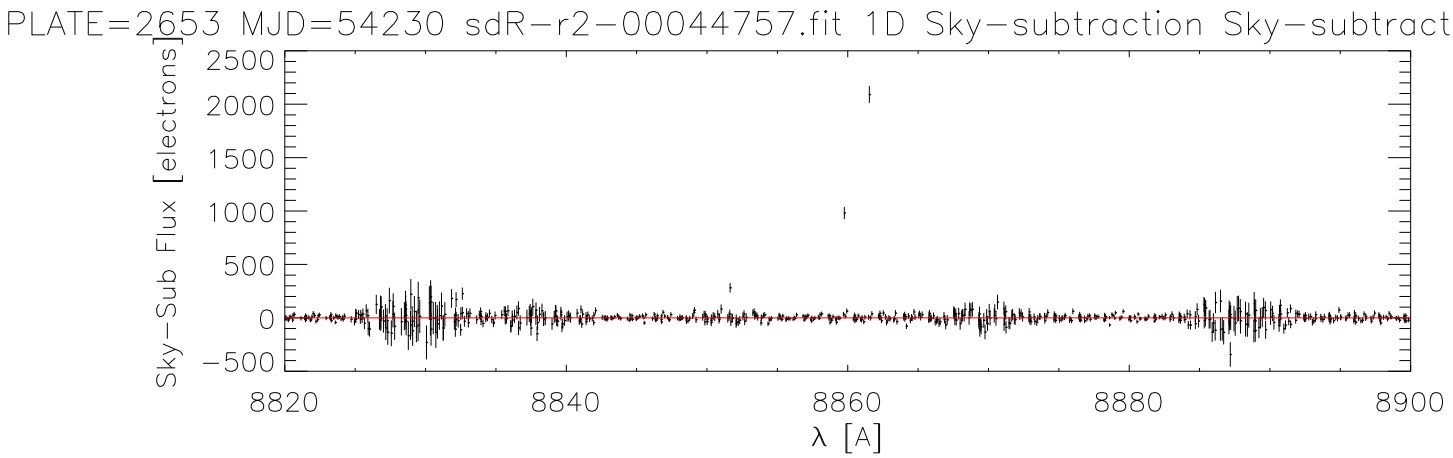

PLATE=2653 MJD=54230 Smooth superflat for sdR-r2-00044757.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

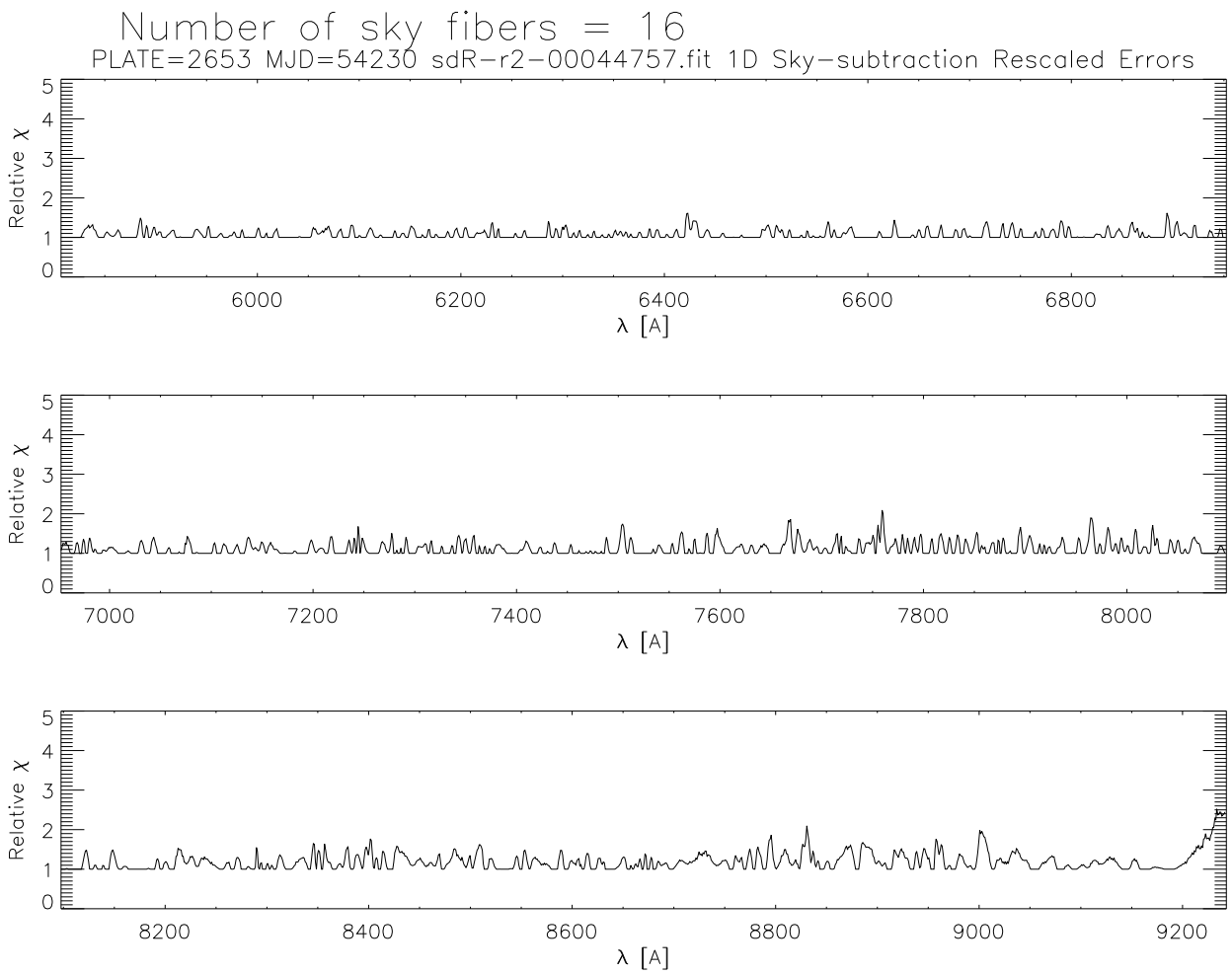
es= −0.0000

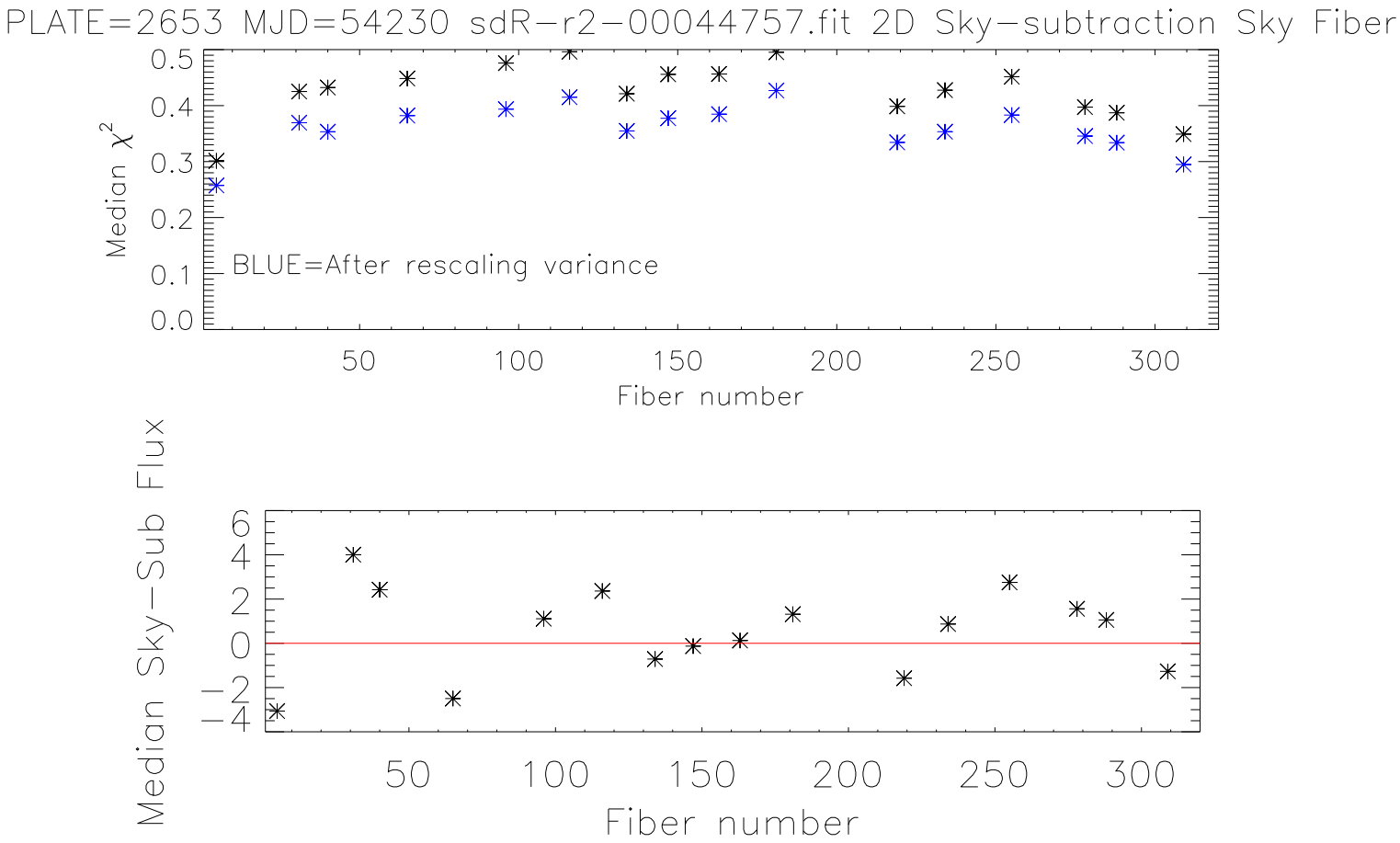

PLATE=2653 MJD=54230 sdR-r2-00044757.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

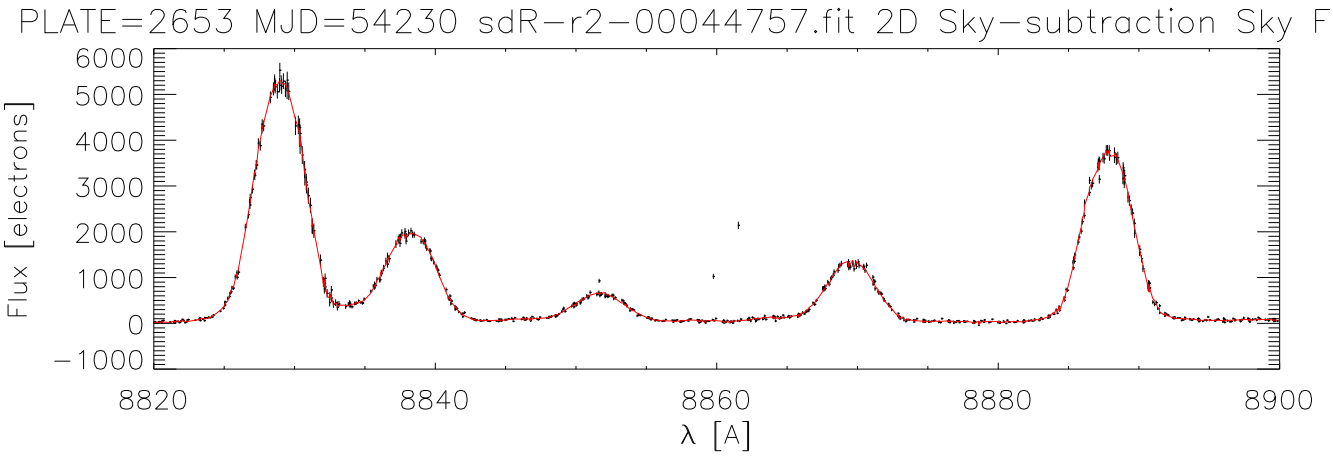
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

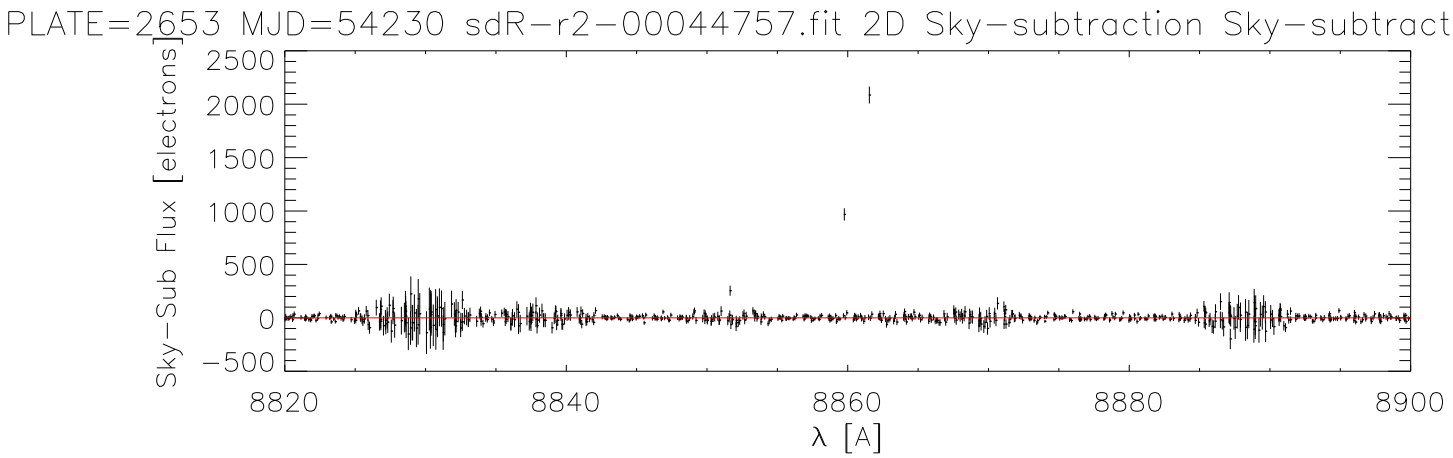

PLATE=2653 MJD=54230 sdR-r2-00044757.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

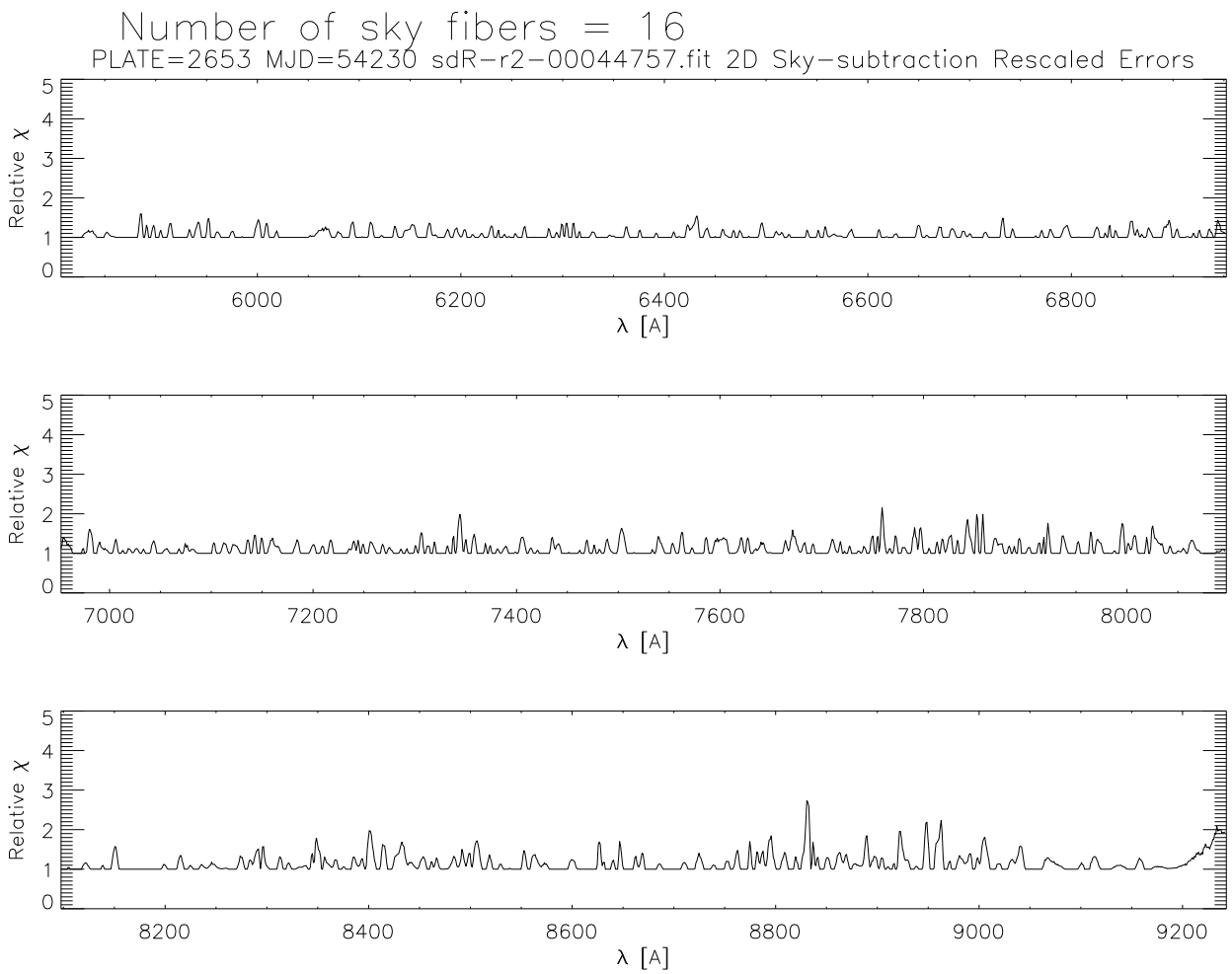

PLATE=2653 MJD=54230 sdR-r2-00044757.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

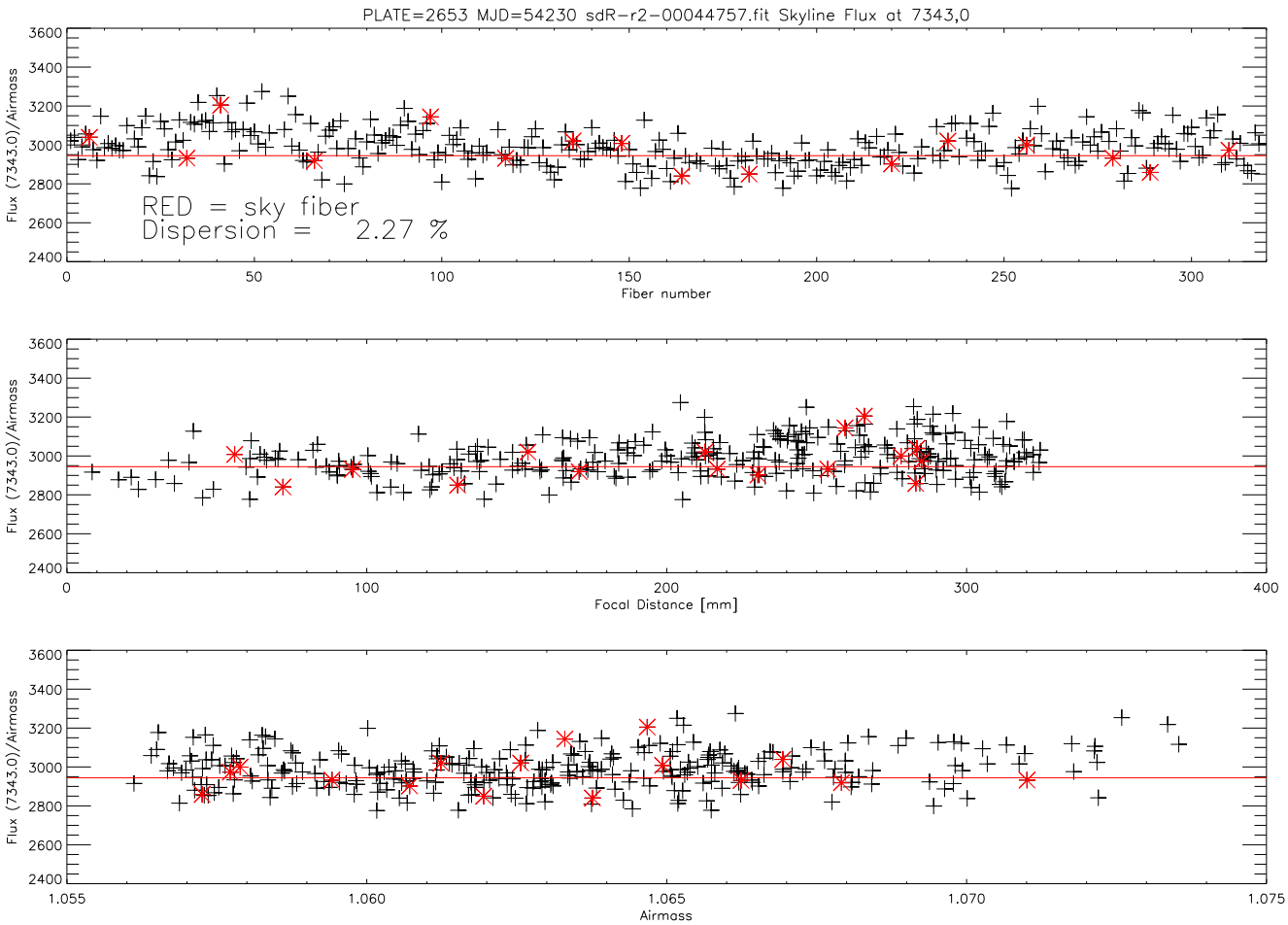

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-r2-00044757.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

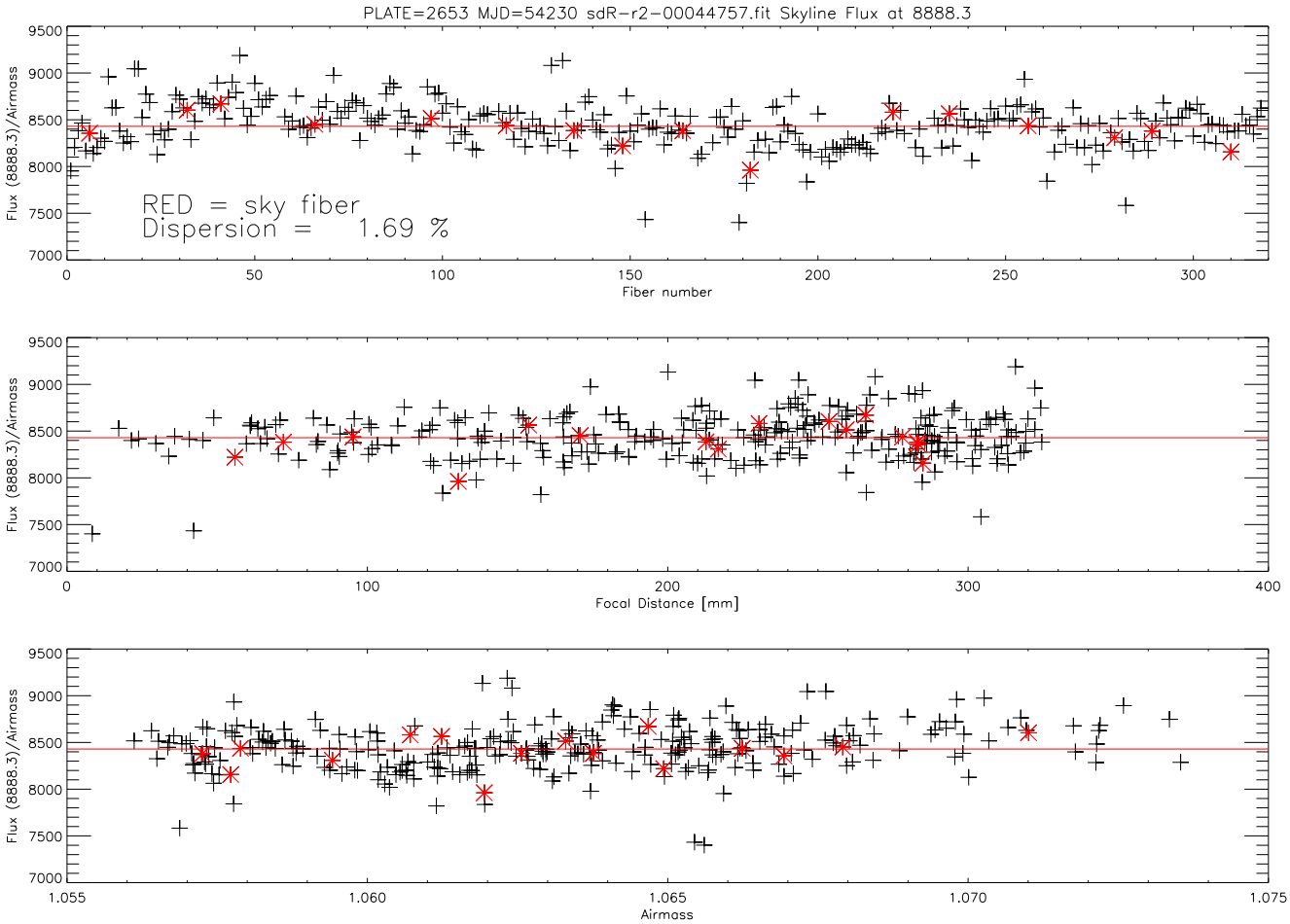

PLATE=2653 MJD=54230 sdR-r2-00044757.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

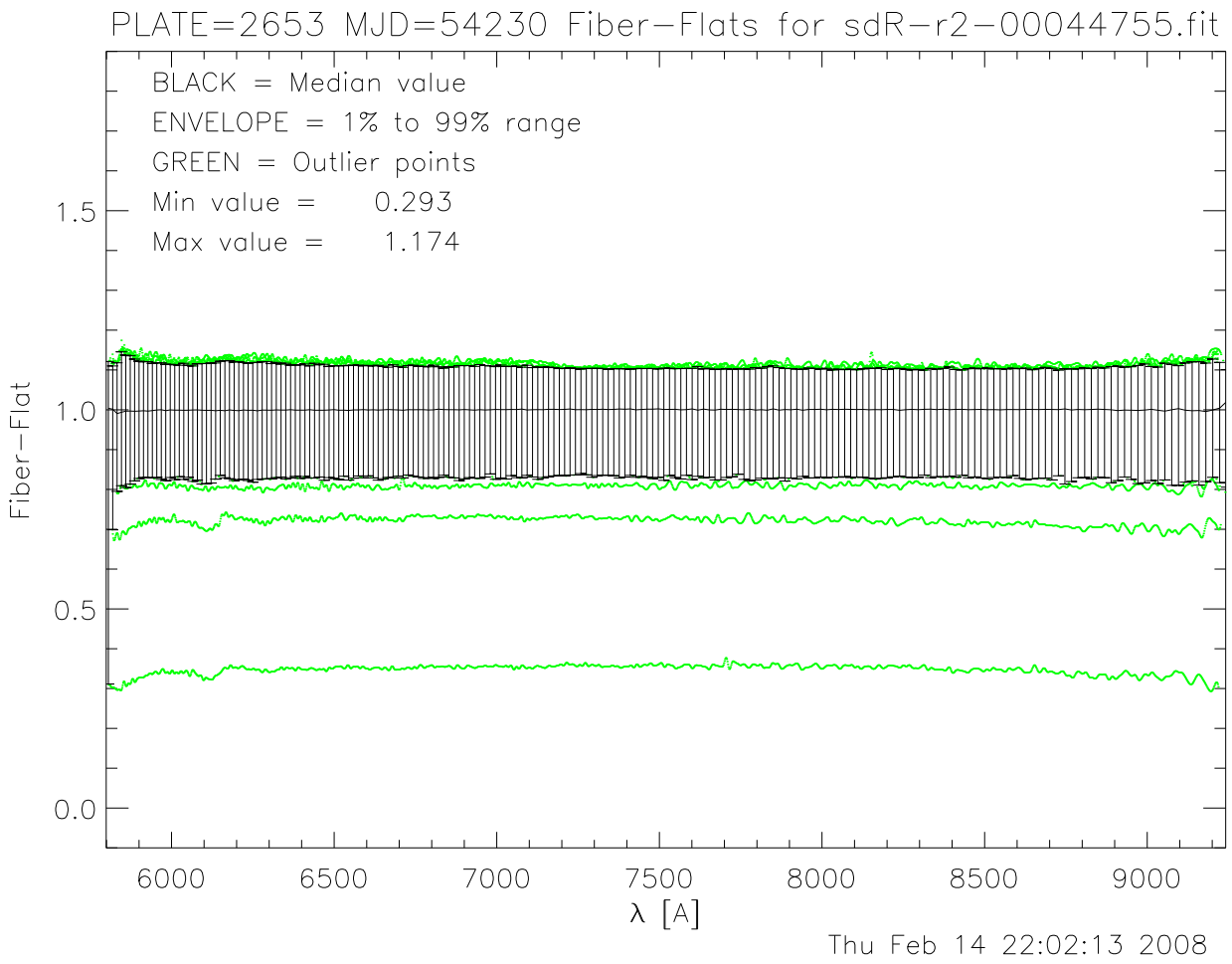

PLATE=2653 MJD=54230 sdR-r2-00044757.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

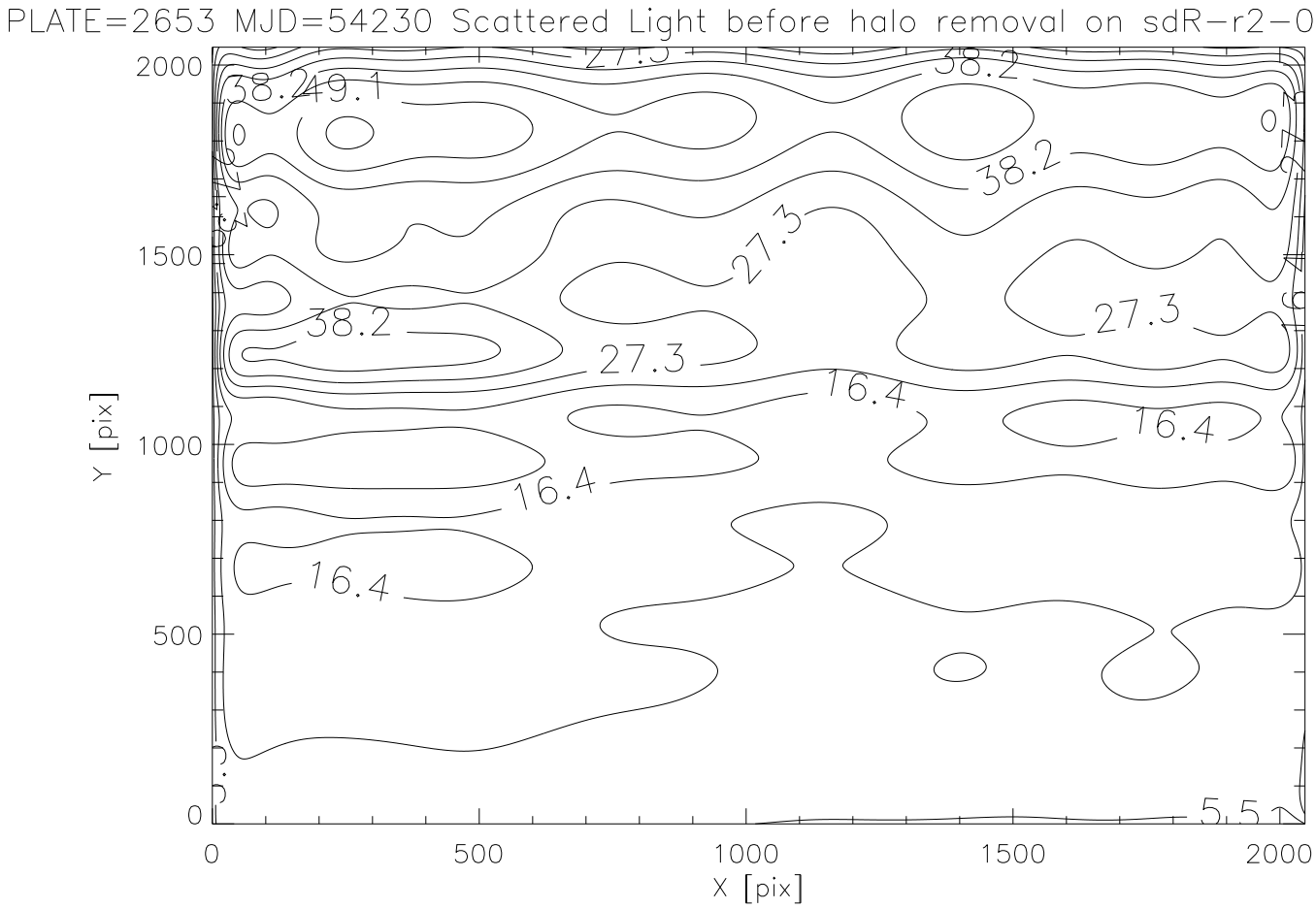

PLATE=2653 MJD=54230 sdR-r2-00044757.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

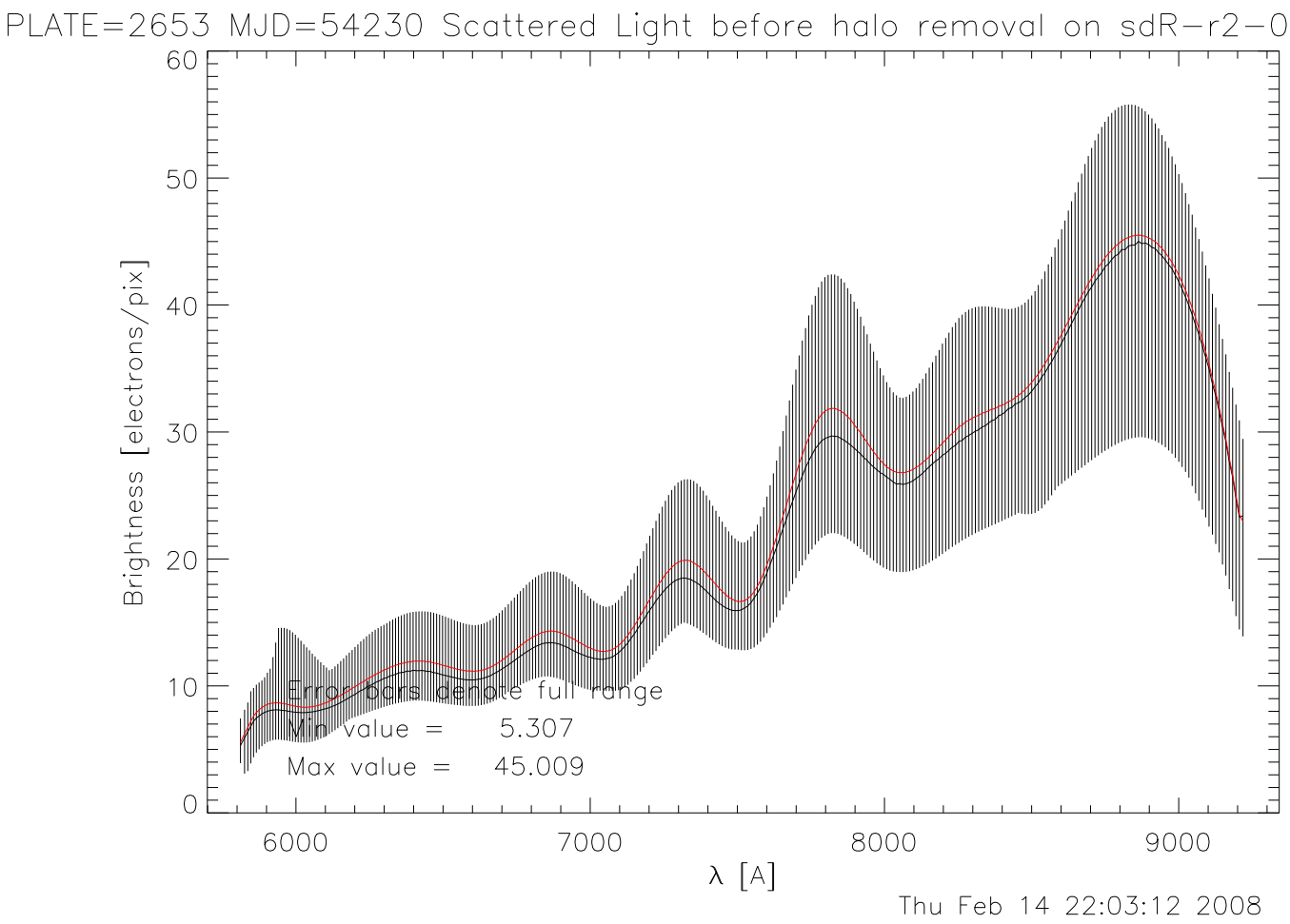

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-r2-00044757.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

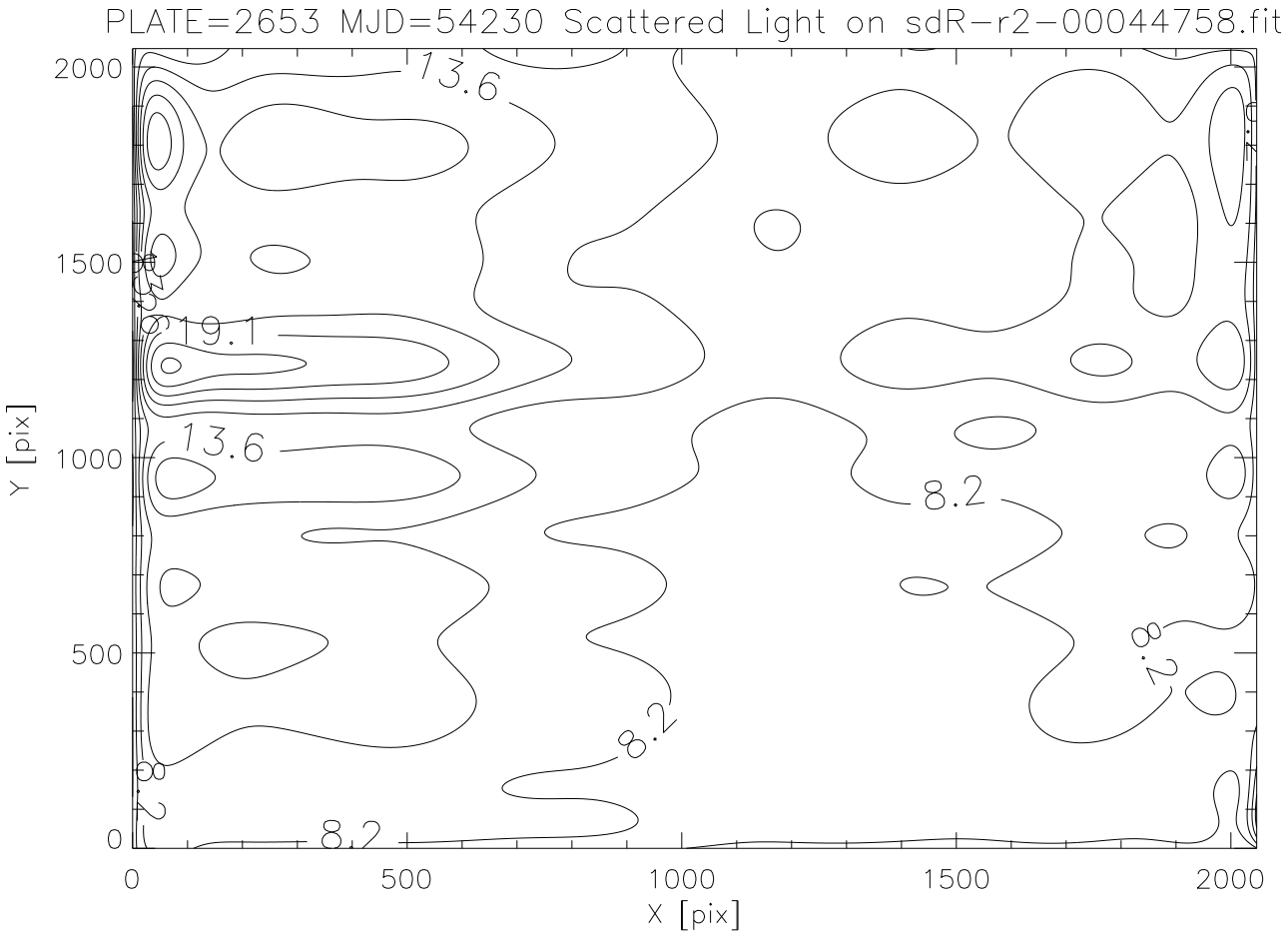

PLATE=2653 MJD=54230 sdR-r2-00044757.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.27 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

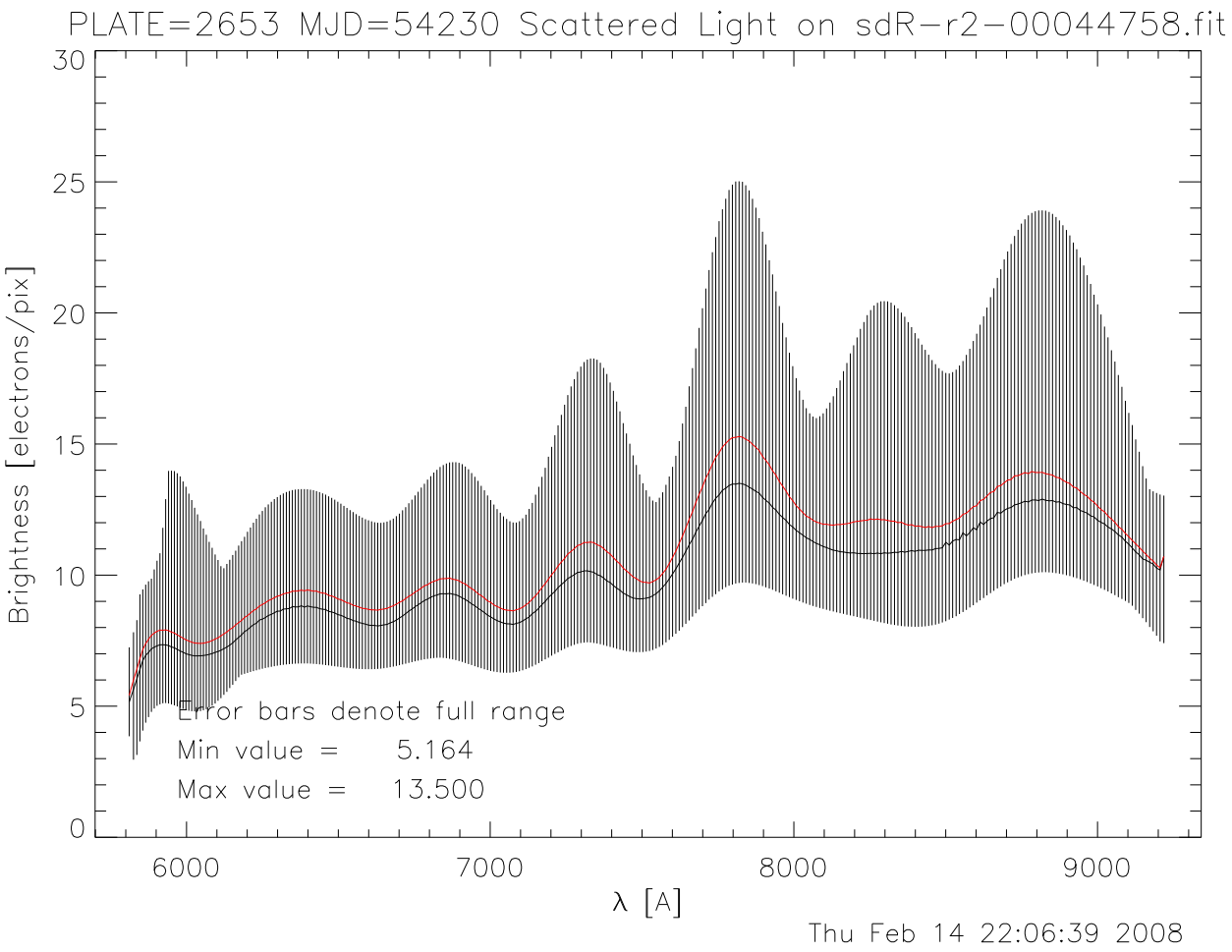

PLATE=2653 MJD=54230 sdR-r2-00044757.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.69 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

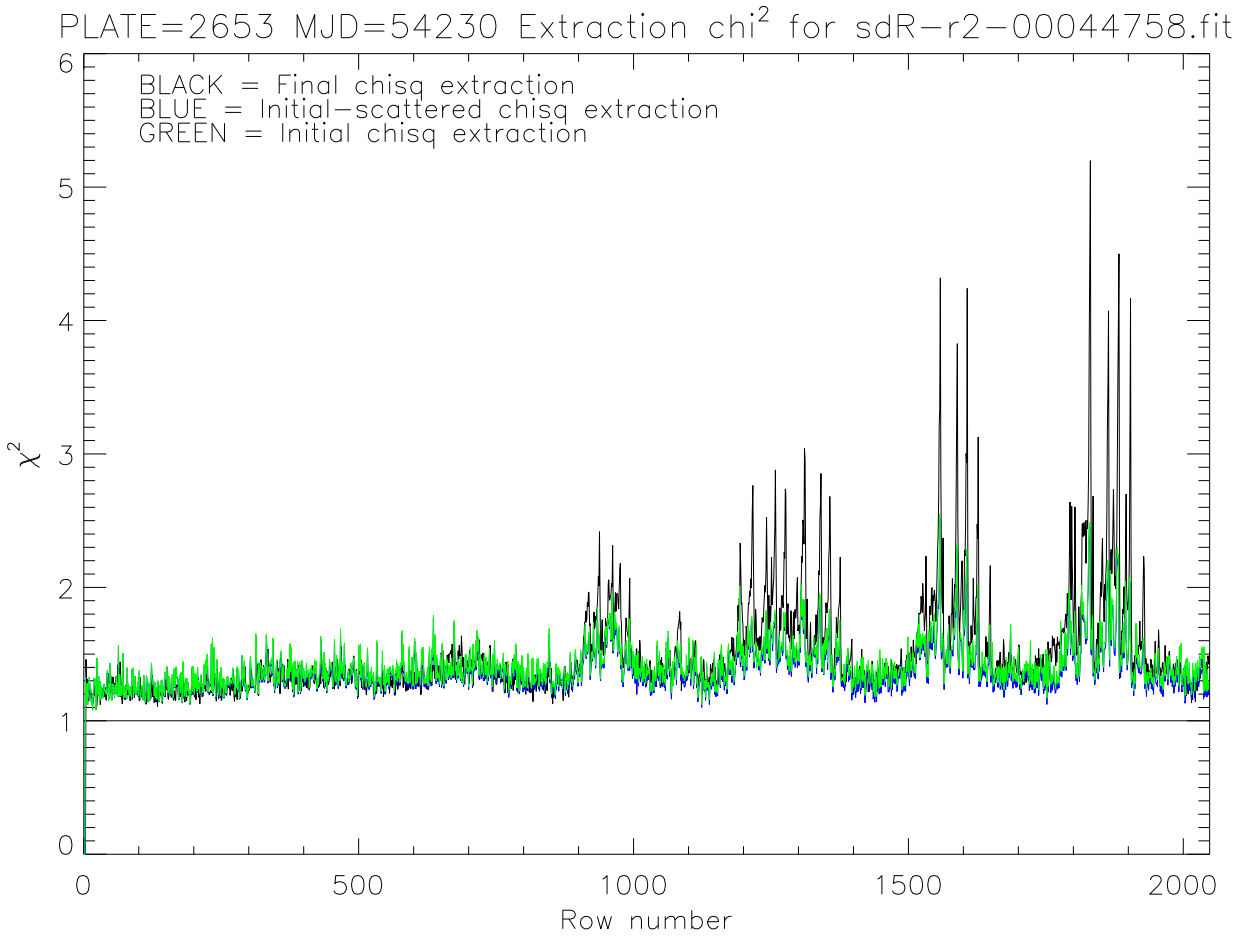

PLATE=2653 MJD=54230 Fiber-Flats for sdR-r2-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.293
Max value = 1.174
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 14 22:02:13 2008

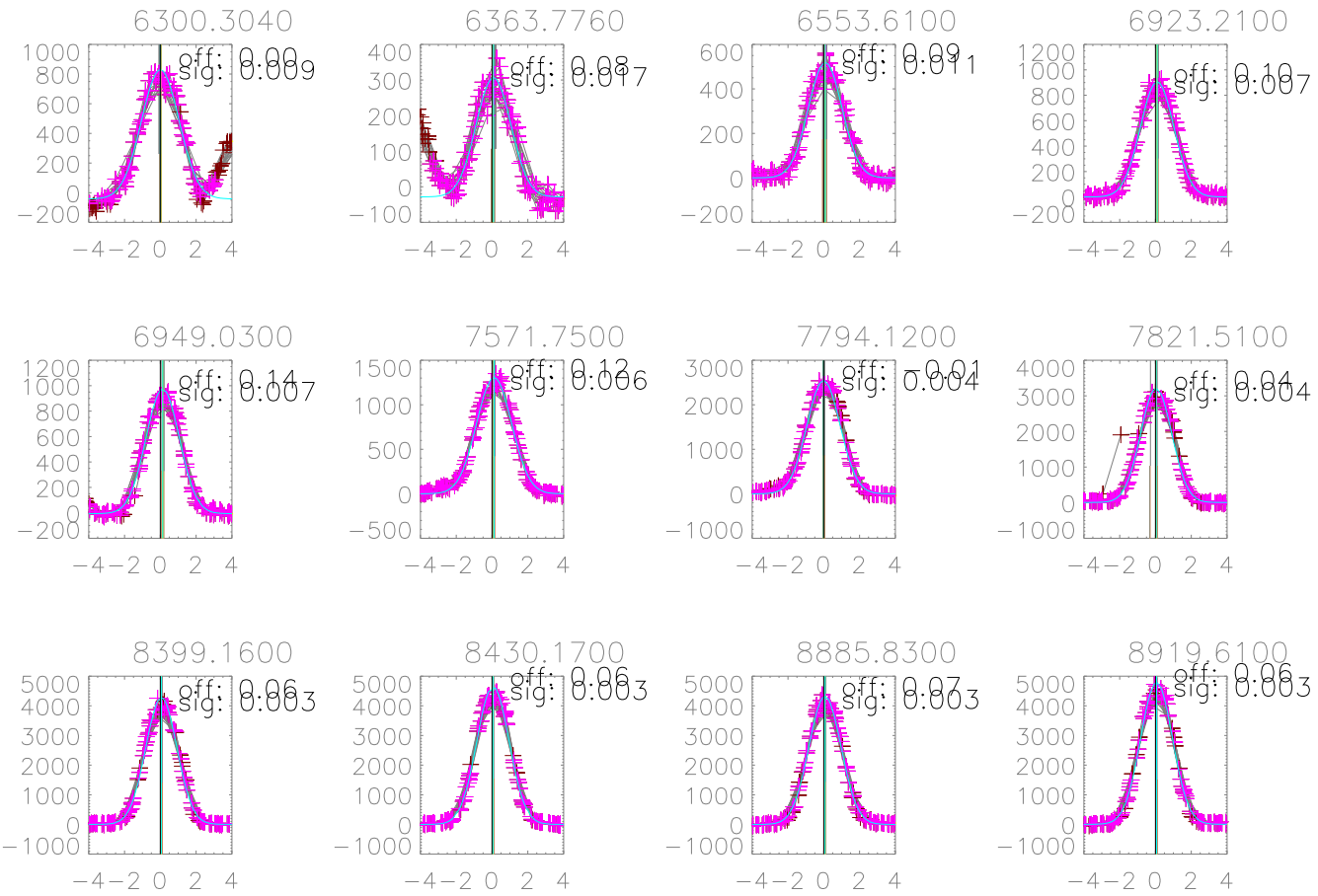

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r2-00044758.fi
38.2
49.1
38.2
27.3
38.2
27.3
27.3
16.4
16.4
16.4
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

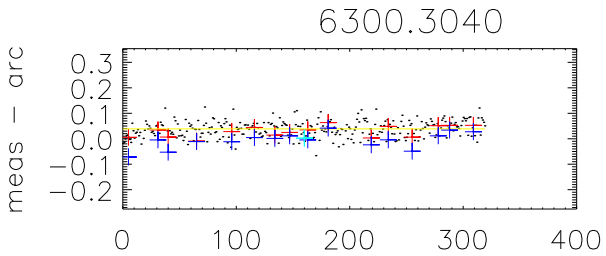

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r2-00044758.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.307
Max value = 45.009
Thu Feb 14 22:03:12 2008

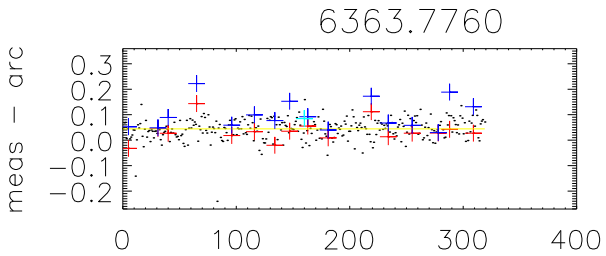

PLATE=2653 MJD=54230 Scattered Light on sdR-r2-00044758.fit
13.6
19.1
13.6
8.2
8.2
8.2
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

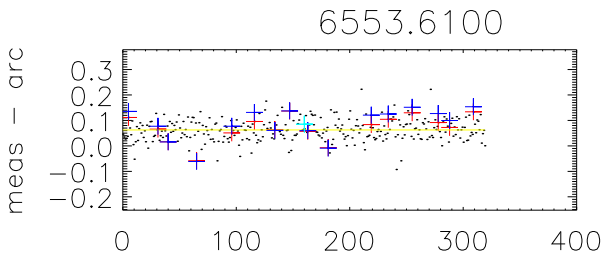

PLATE=2653 MJD=54230 Scattered Light on sdR-r2-00044758.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.164
Max value = 13.500
Thu Feb 14 22:06:39 2008

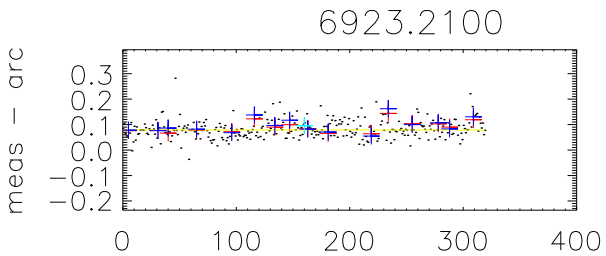

PLATE=2653 MJD=54230 Extraction chi^2 for sdR−r2−00044758.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

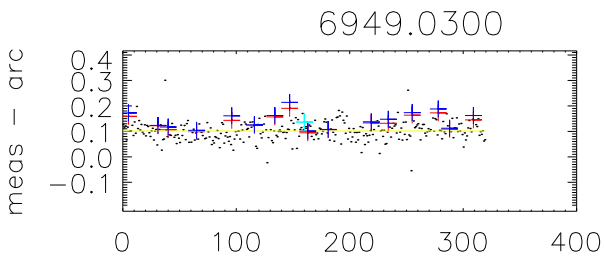

6300.3040
off: 0.00
sig: 0.009
6363.7760
off: 0.08
sig: 0.017
6553.6100
off: 0.09
sig: 0.011
6923.2100
off: 0.10
sig: 0.007
6949.0300
off: 0.14
sig: 0.007
7571.7500
off: 0.12
sig: 0.006
7794.1200
off: -0.01
sig: 0.004
7821.5100
off: 0.04
sig: 0.004
8399.1600
off: 0.06
sig: 0.003
8430.1700
off: 0.06
sig: 0.003
8885.8300
off: 0.07
sig: 0.003
8919.6100
off: 0.06
sig: 0.003

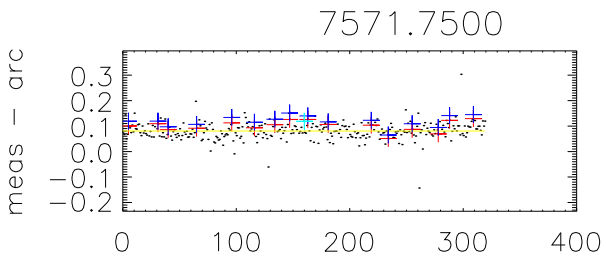

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

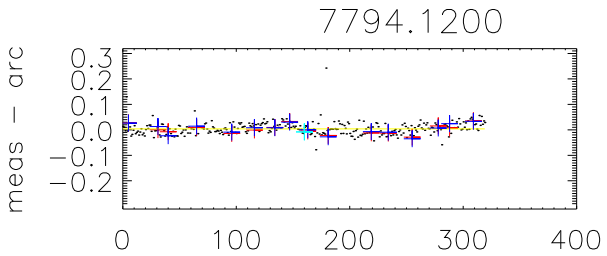

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

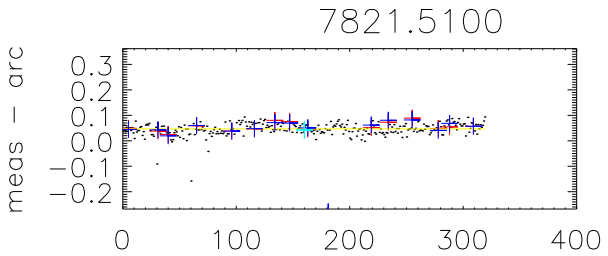

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

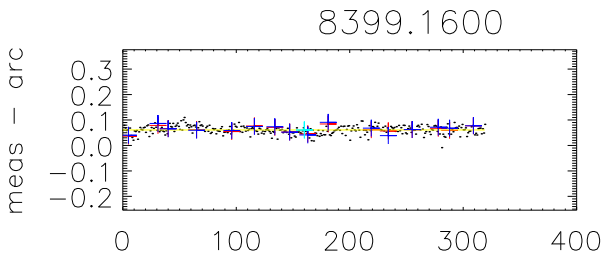

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

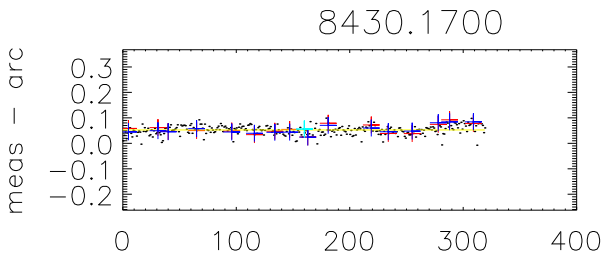

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

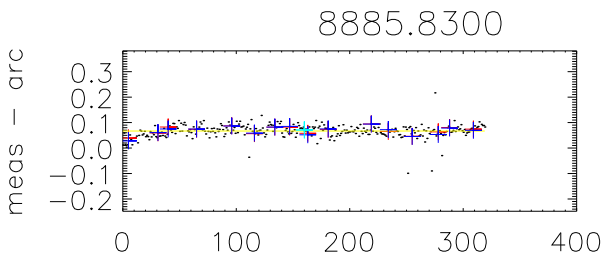

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

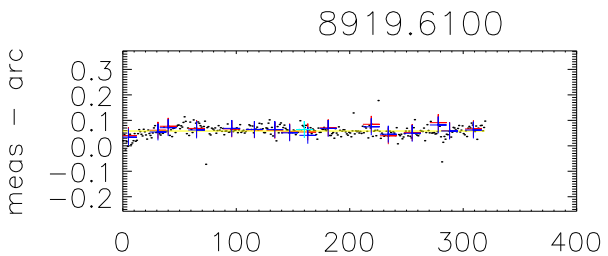

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

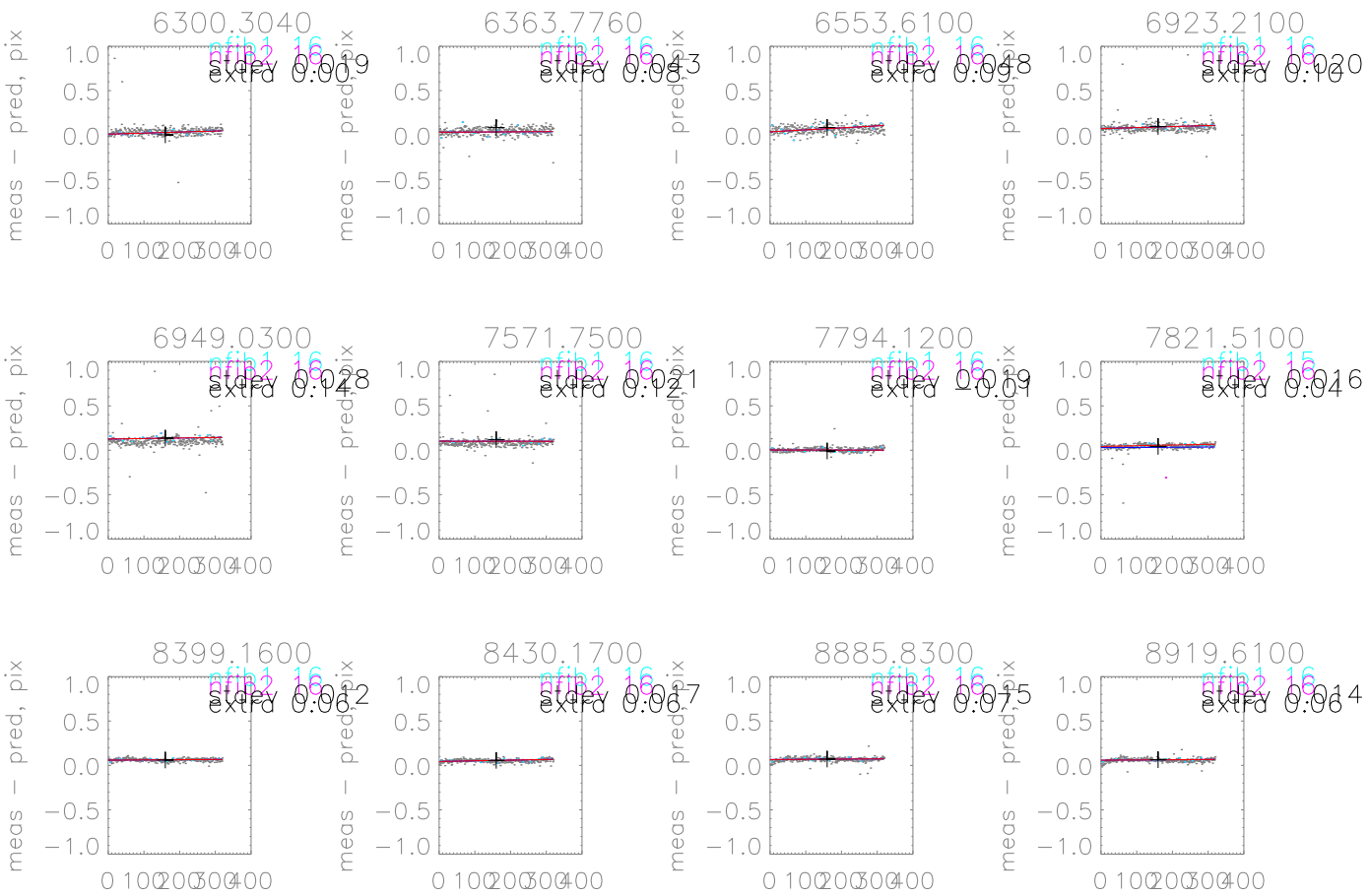

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

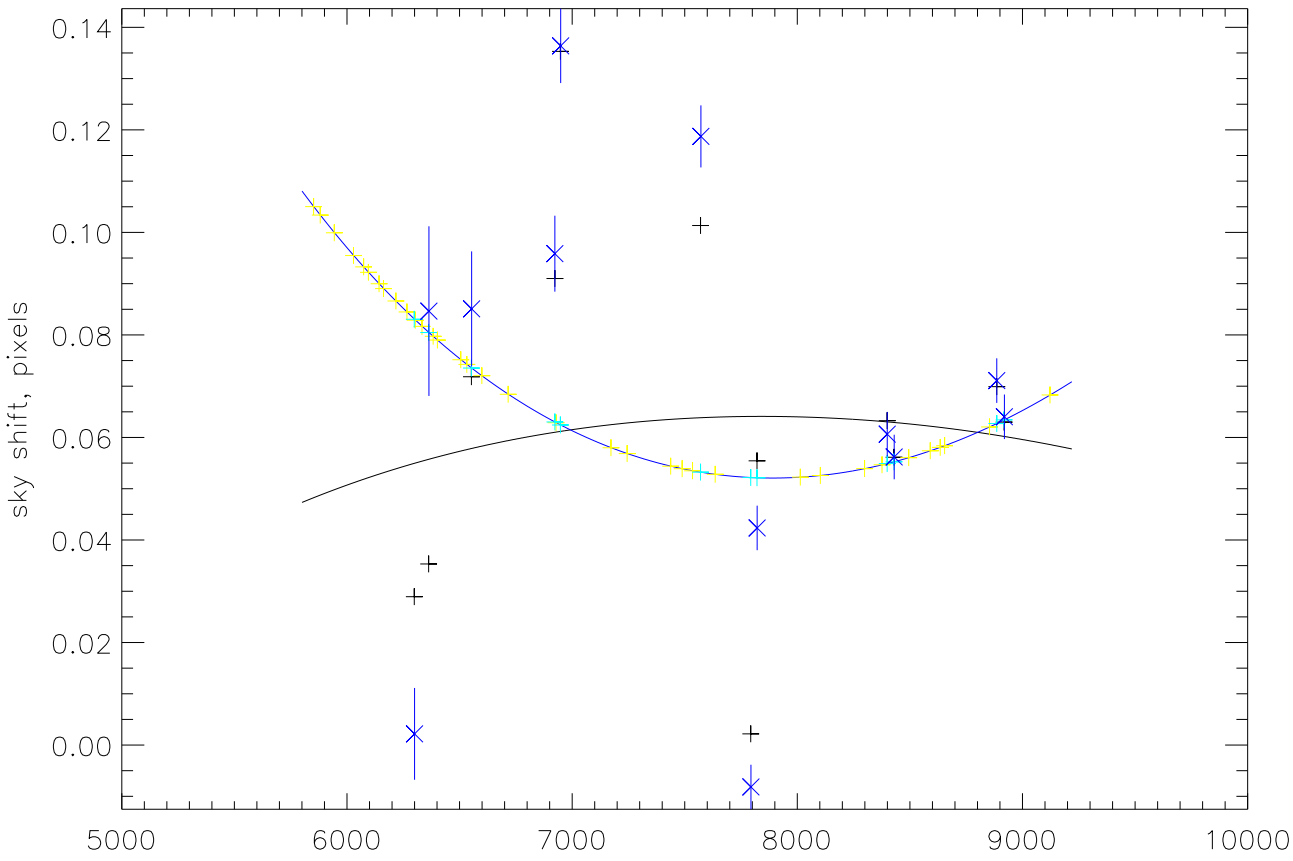

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

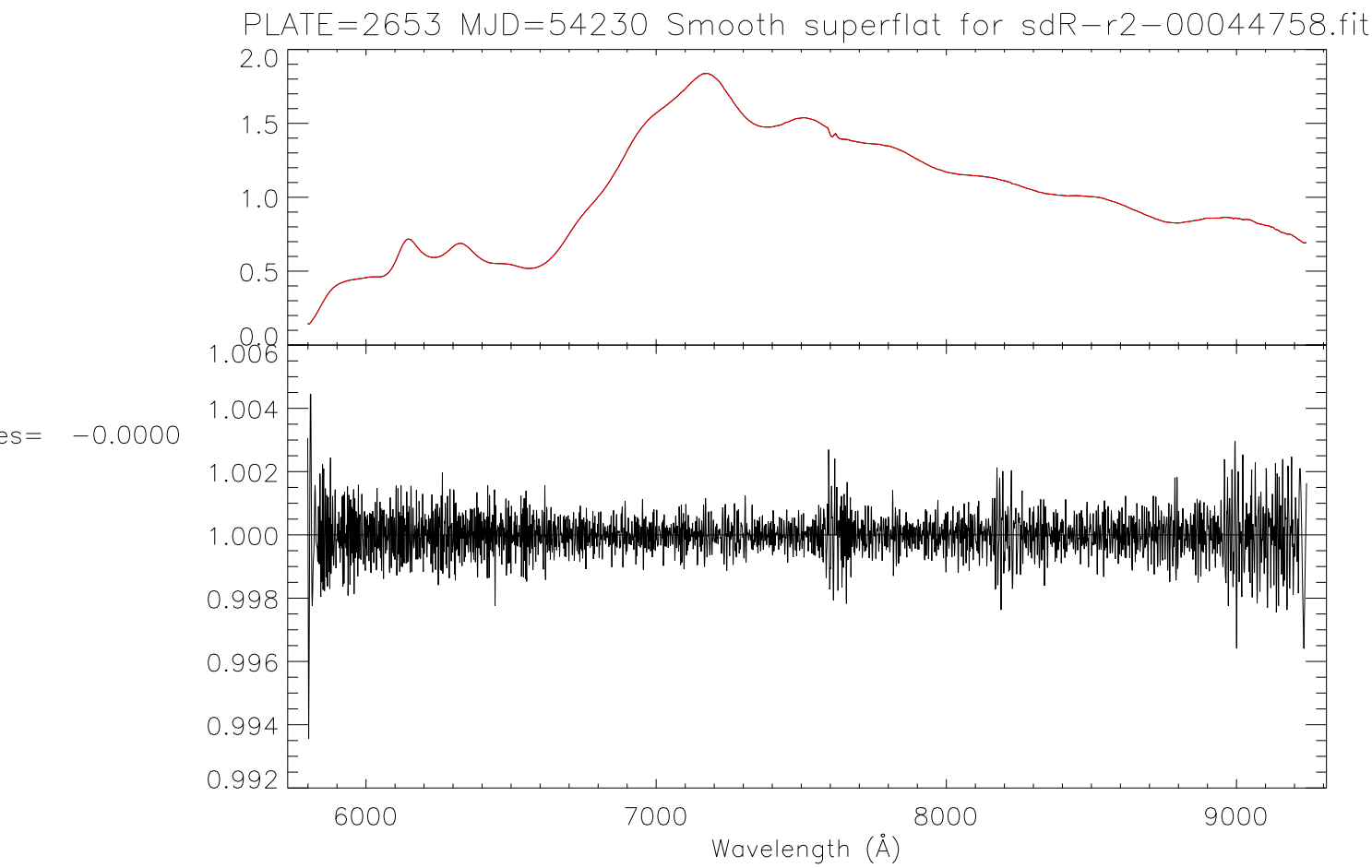

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

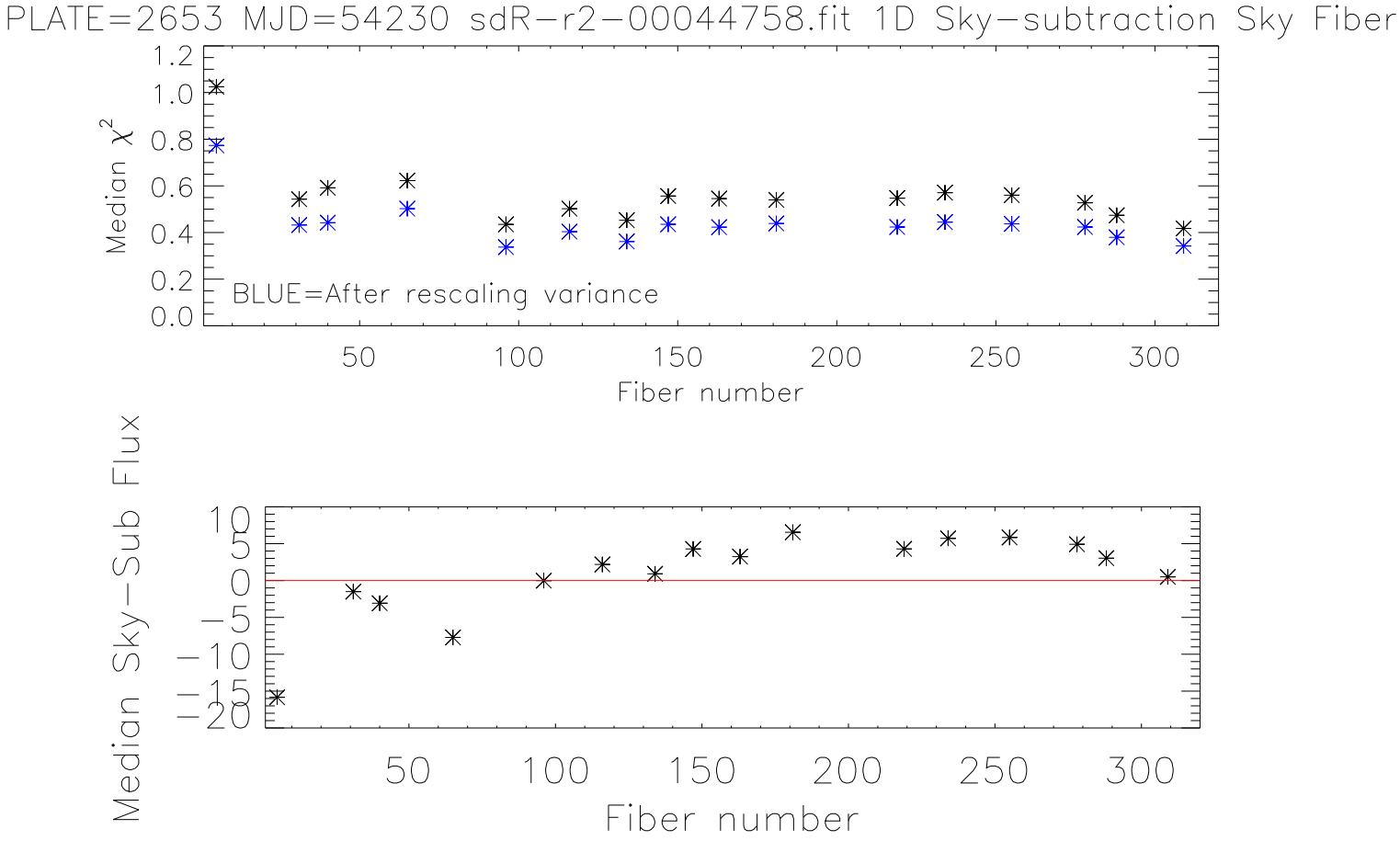

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

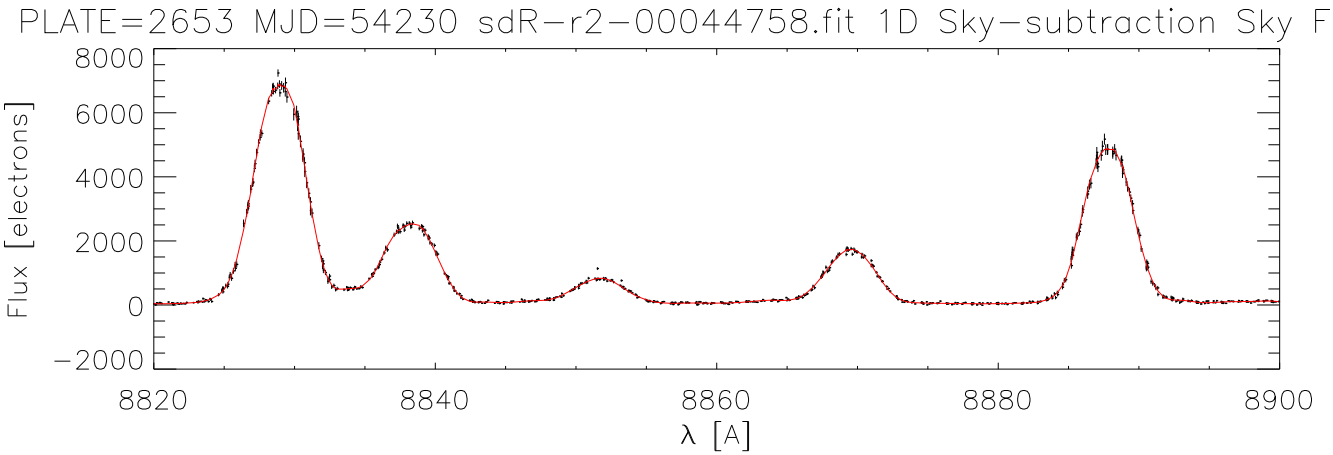

6300.3040
stdev 0.009
extra 0.000
6363.7760
stdev 0.043
extra 0.083
6553.6100
stdev 0.048
extra 0.099
6923.2100
stdev 0.020
extra 0.110
6949.0300
stdev 0.028
extra 0.144
7571.7500
stdev 0.021
extra 0.121
7794.1200
stdev 0.019
extra −0.001
7821.5100
stdev 0.016
extra 0.044
8399.1600
stdev 0.042
extra 0.062
8430.1700
stdev 0.047
extra 0.062
8885.8300
stdev 0.075
extra 0.072
8919.6100
stdev 0.014
extra 0.066
meas − pred, pix
mfib2 16
mfib1 16
mfib2 15
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

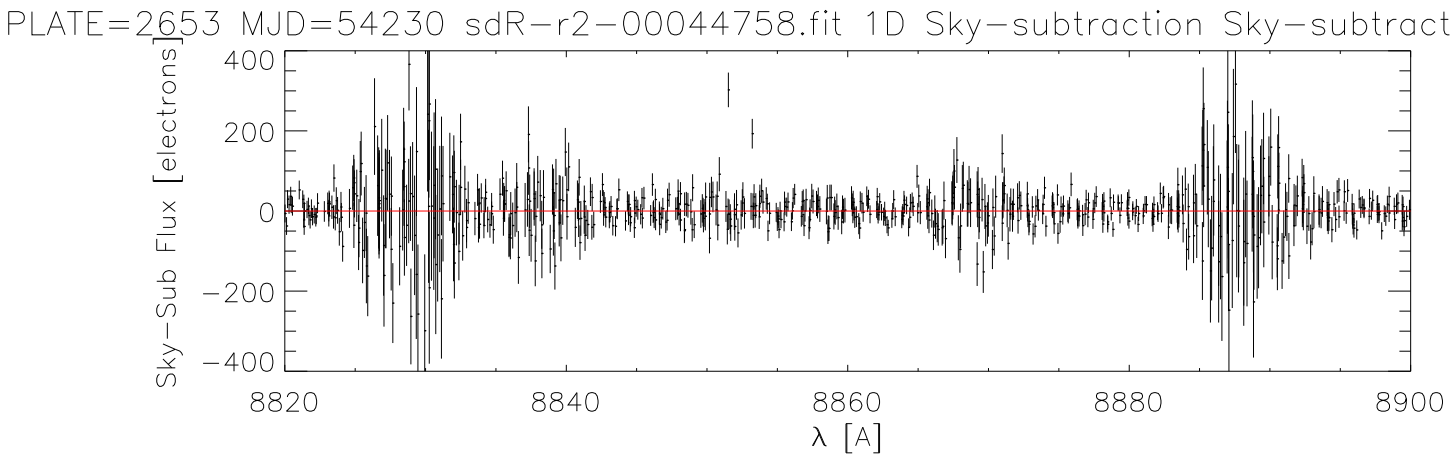

sky shift, pixels
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
5000
6000
7000
8000
9000
10000

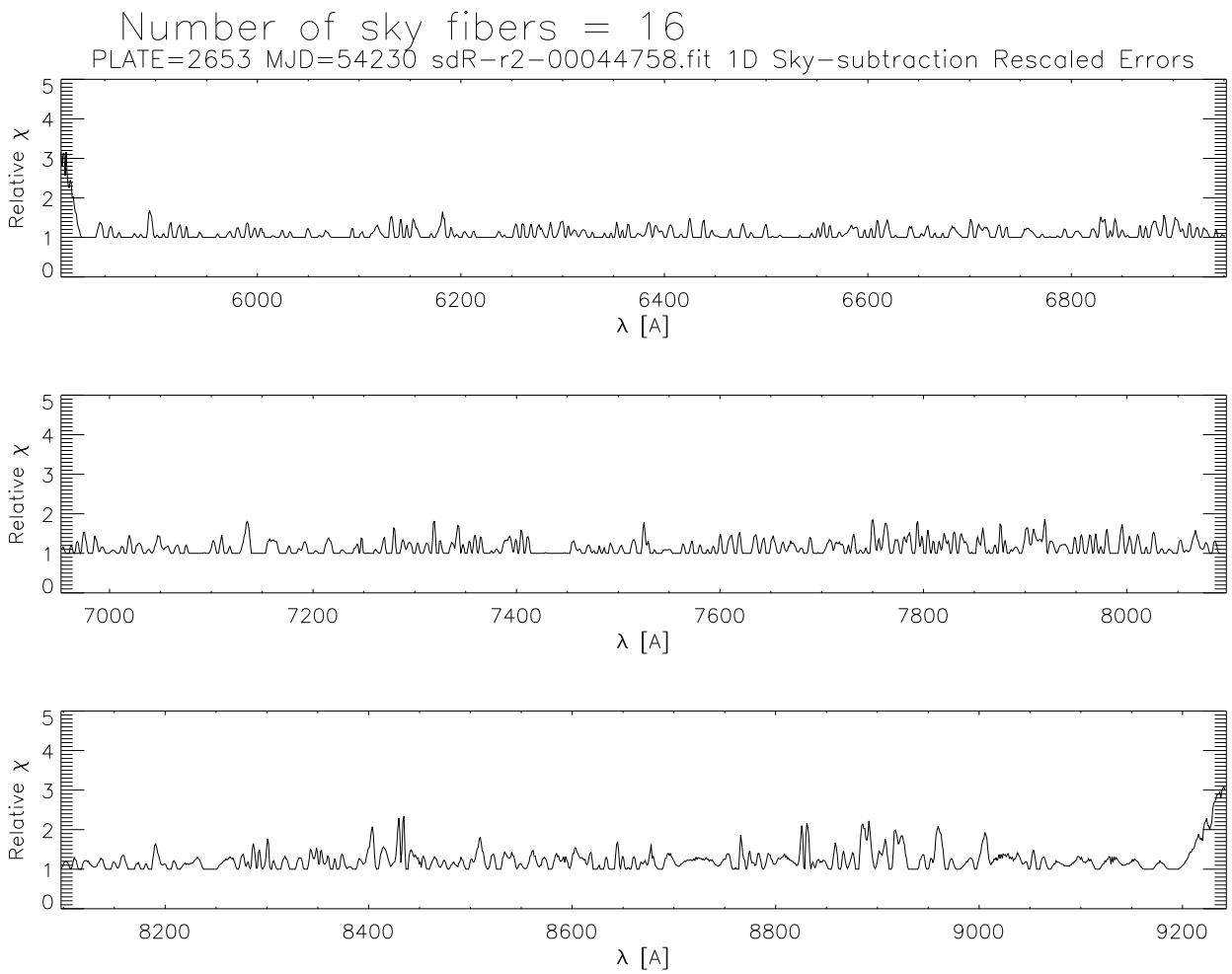

PLATE=2653 MJD=54230 Smooth superflat for sdR-r2-00044758.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

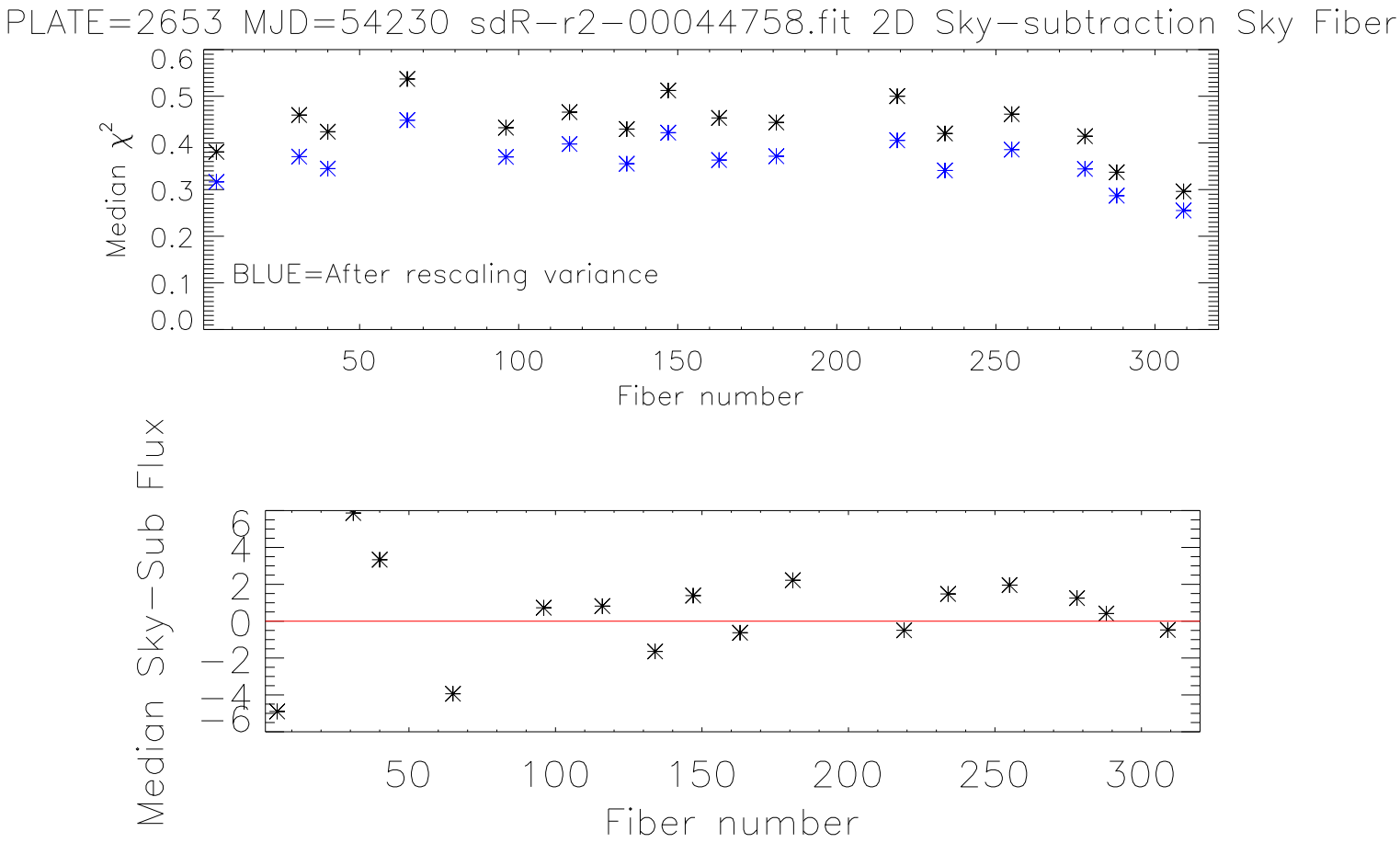
es= −0.0000

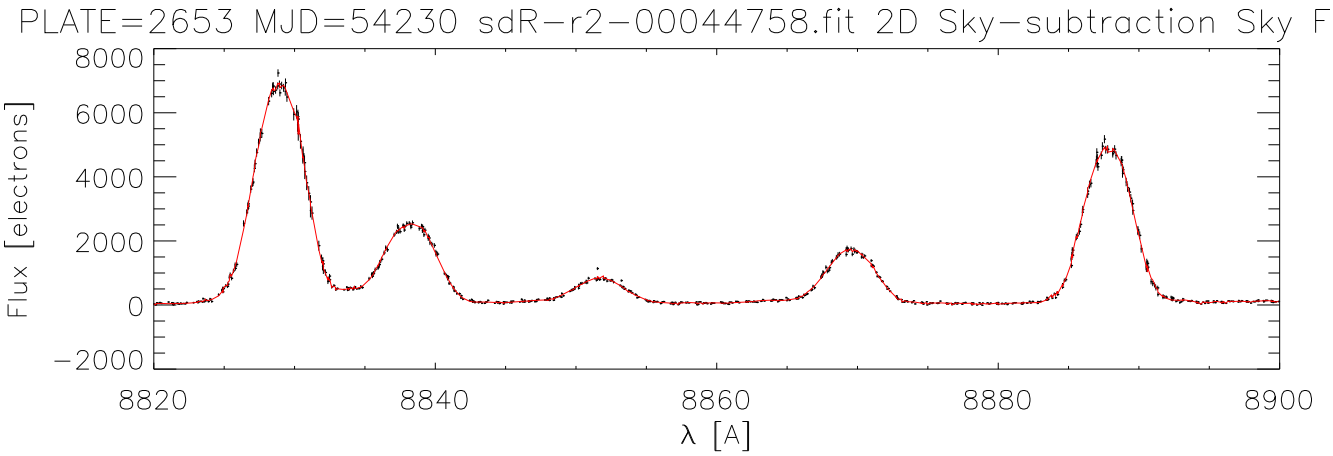

PLATE=2653 MJD=54230 sdR-r2-00044758.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

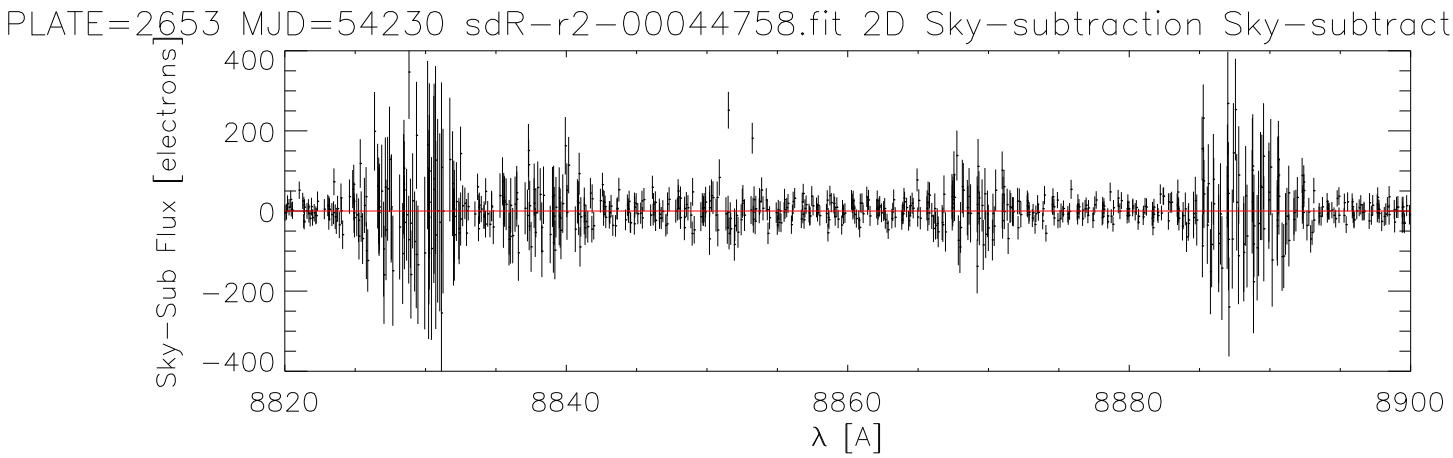

PLATE=2653 MJD=54230 sdR-r2-00044758.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

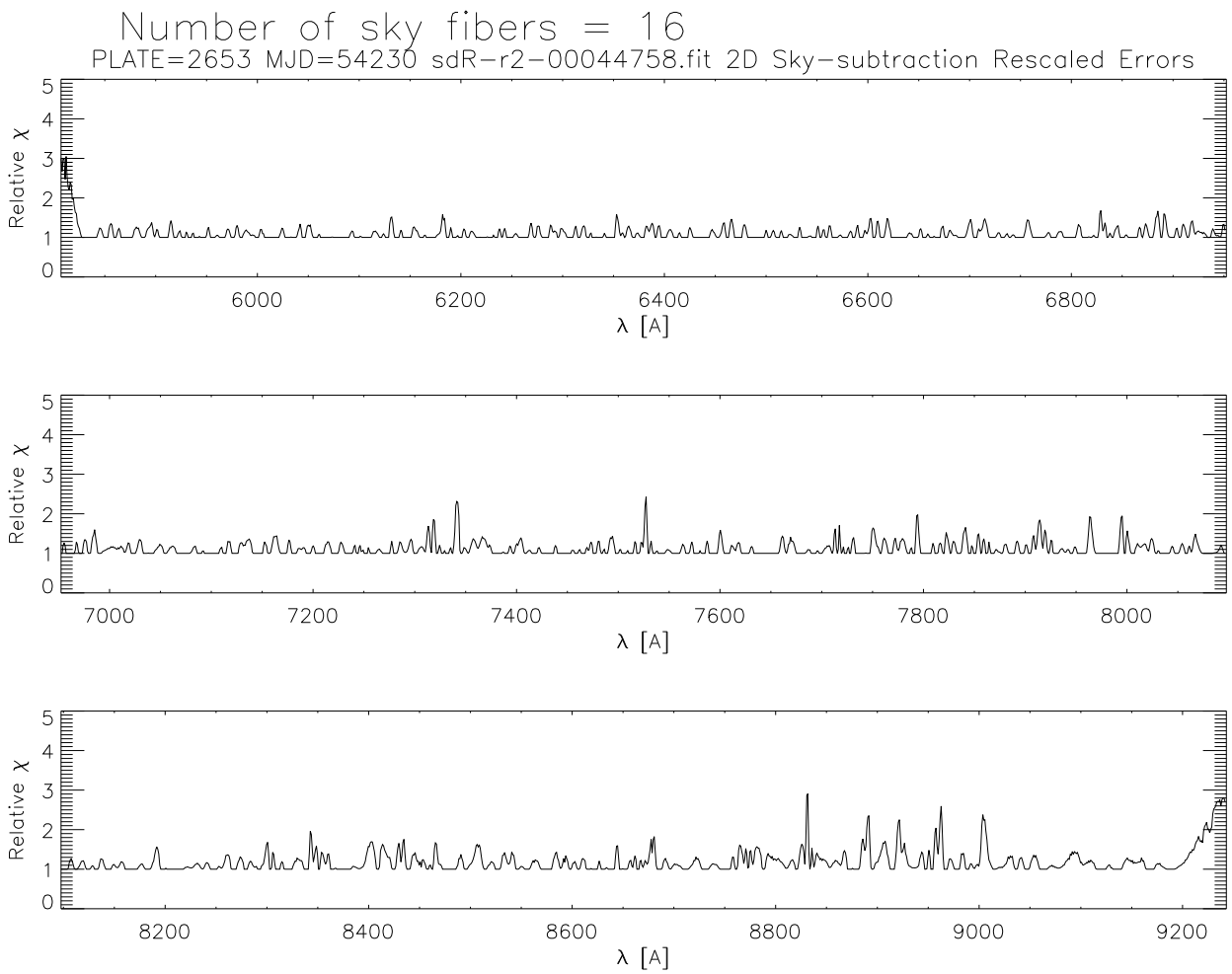

PLATE=2653 MJD=54230 sdR-r2-00044758.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

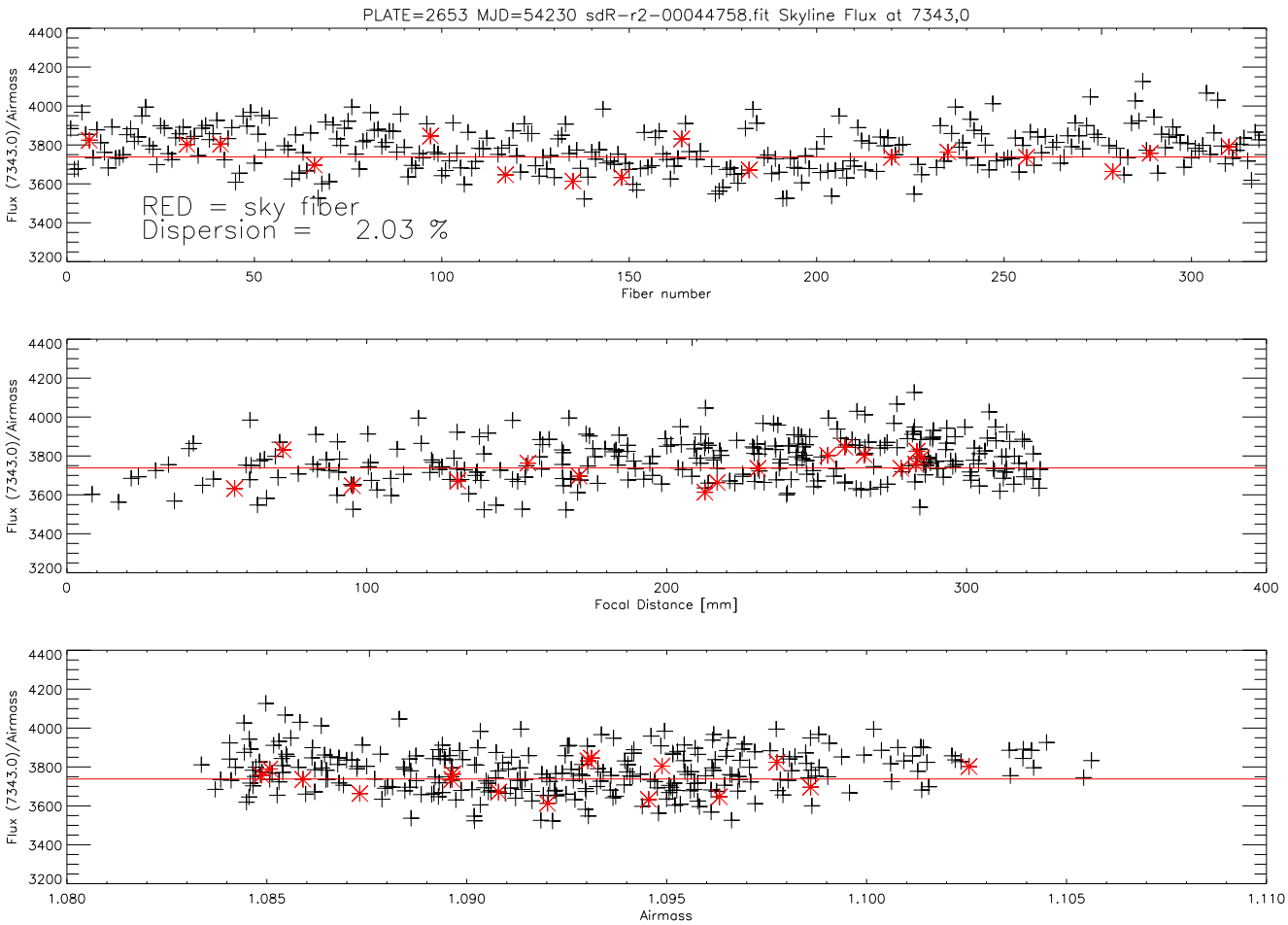

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-r2-00044758.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

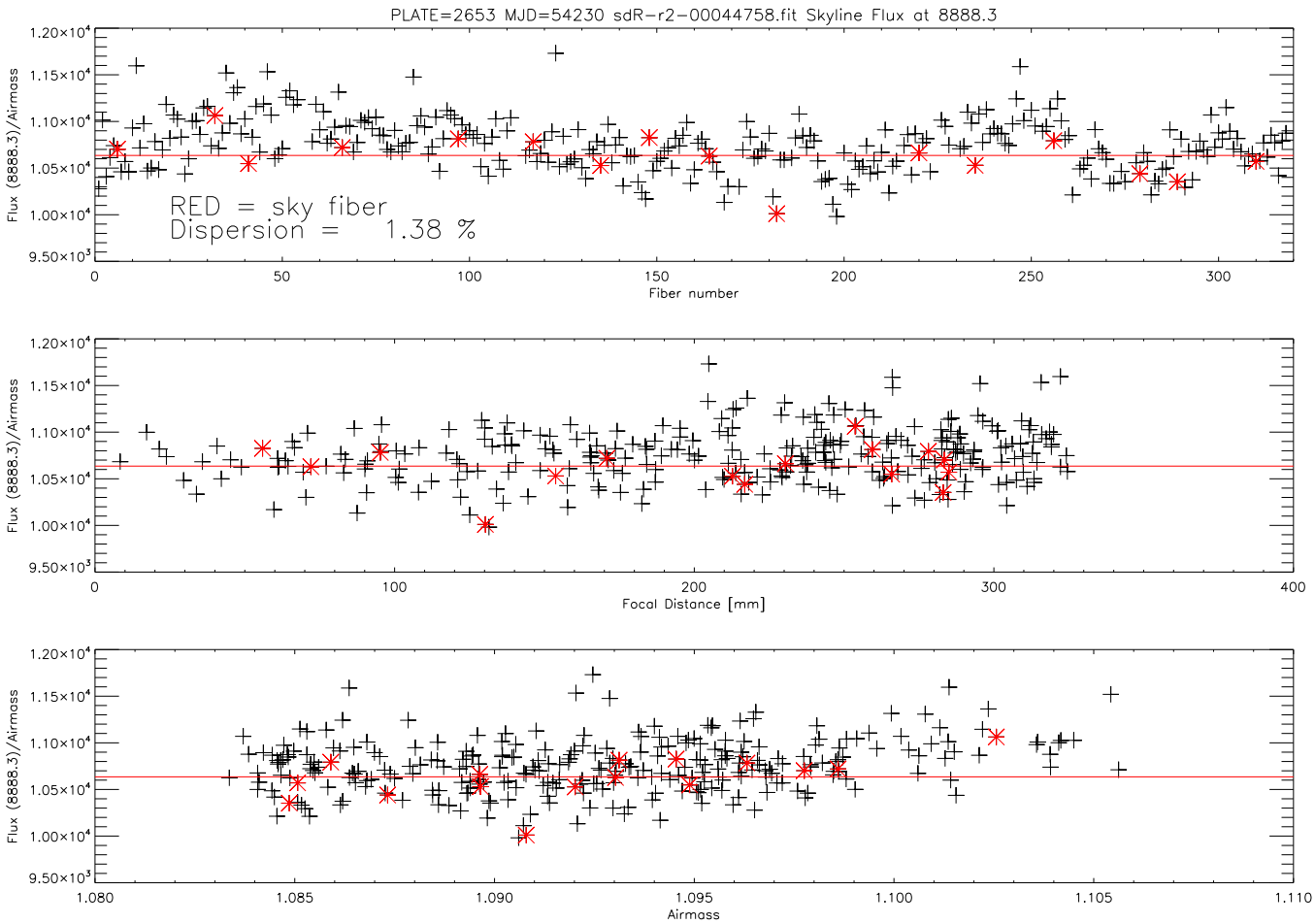

PLATE=2653 MJD=54230 sdR-r2-00044758.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

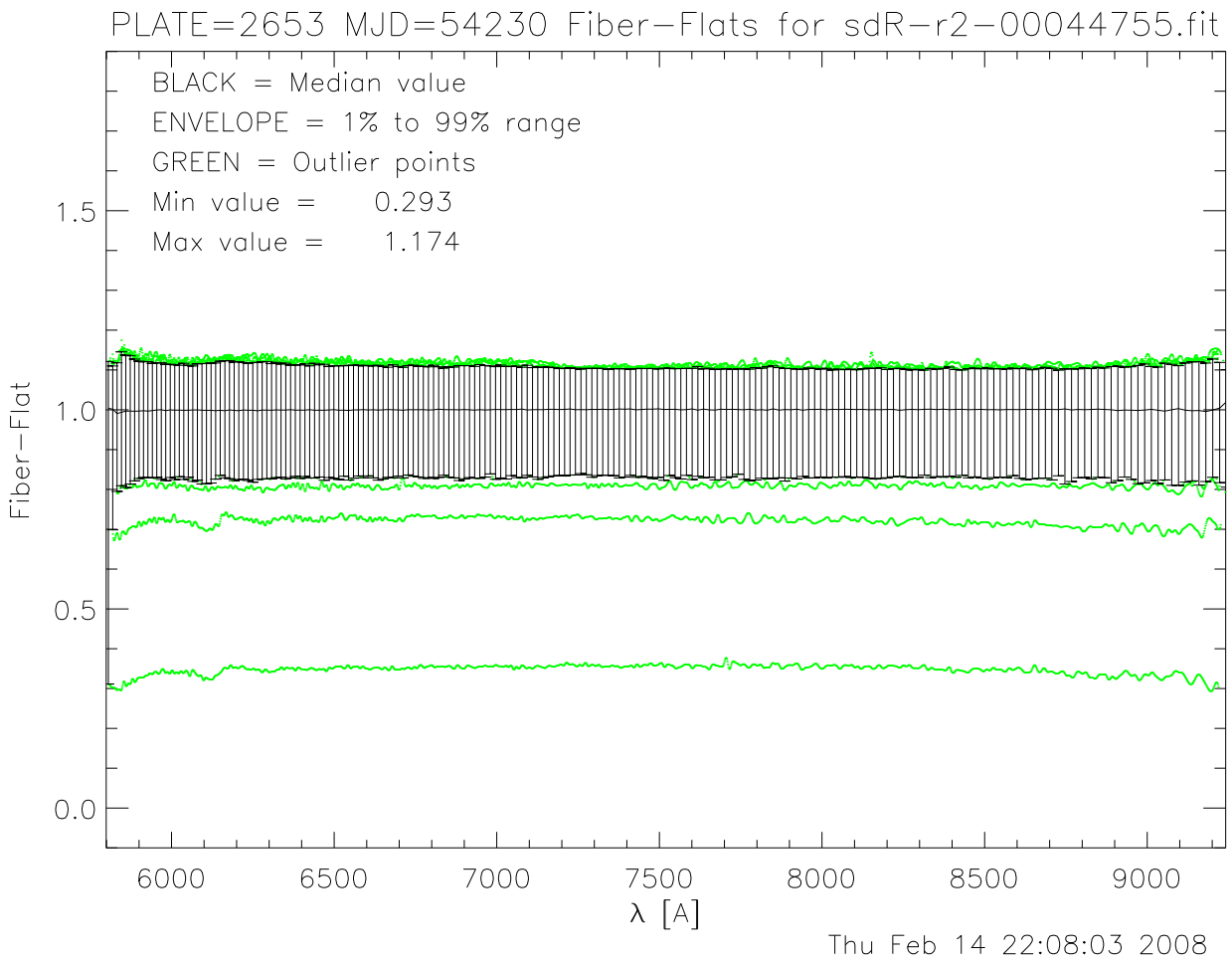

PLATE=2653 MJD=54230 sdR-r2-00044758.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

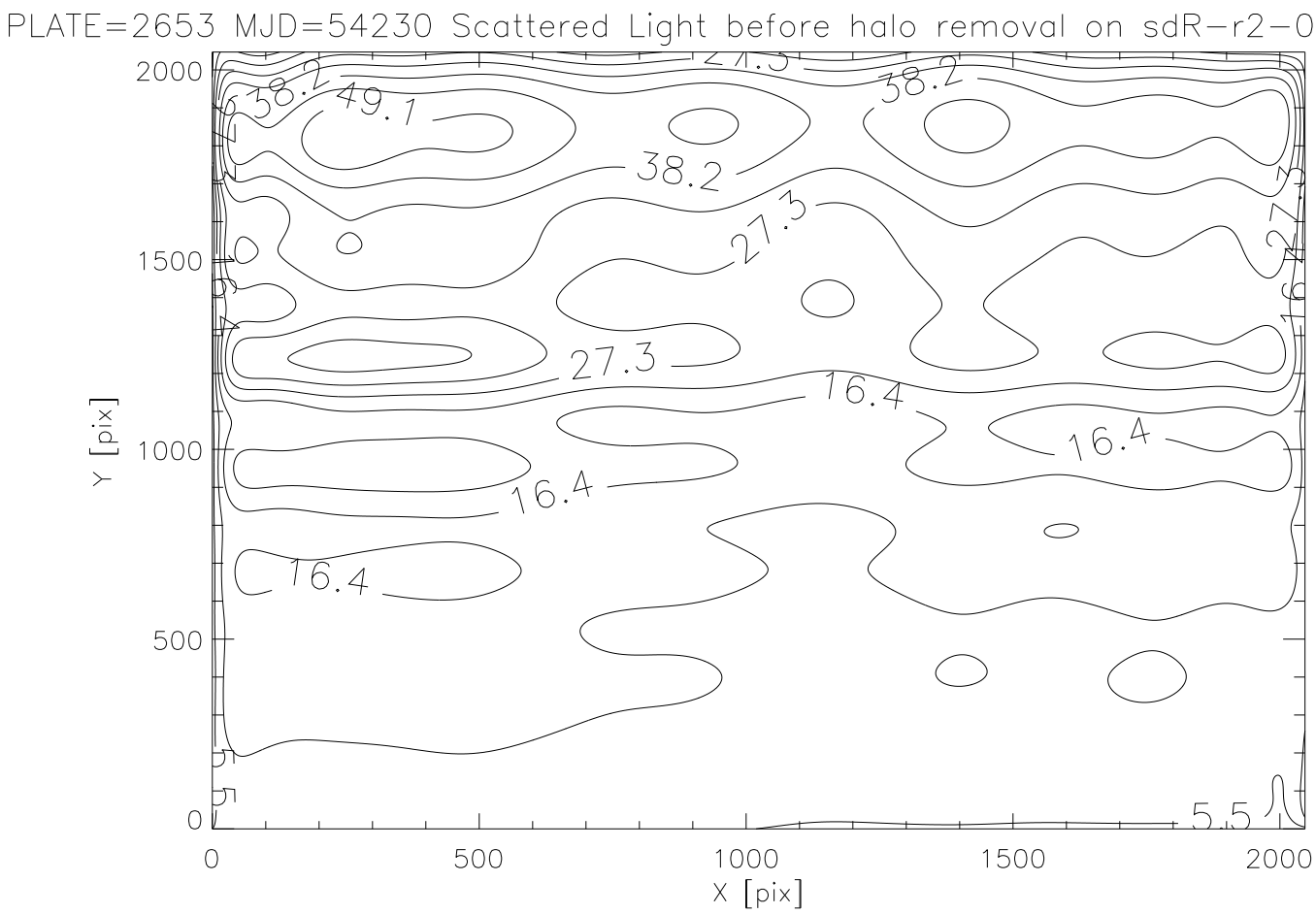

PLATE=2653 MJD=54230 sdR-r2-00044758.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

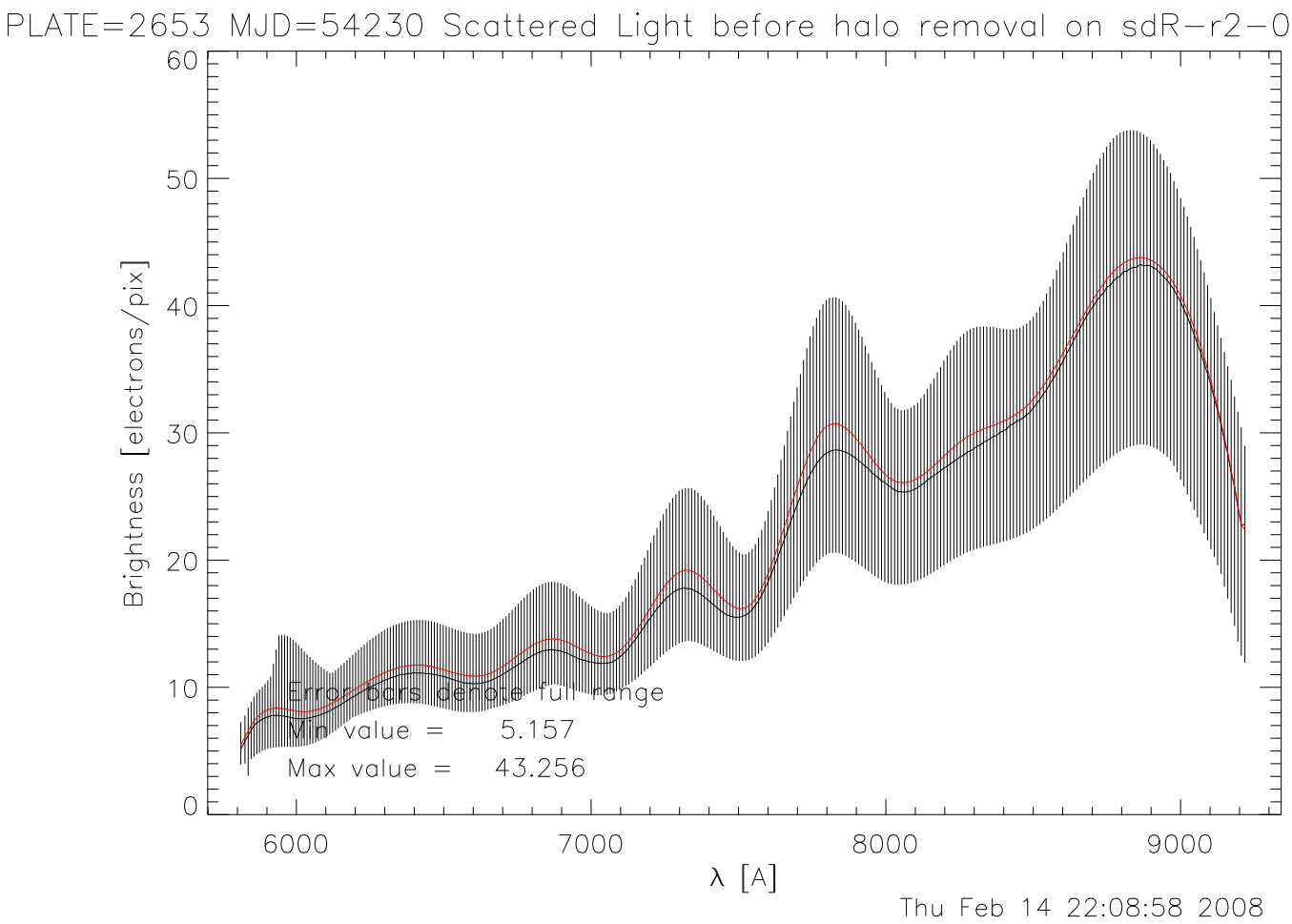

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-r2-00044758.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

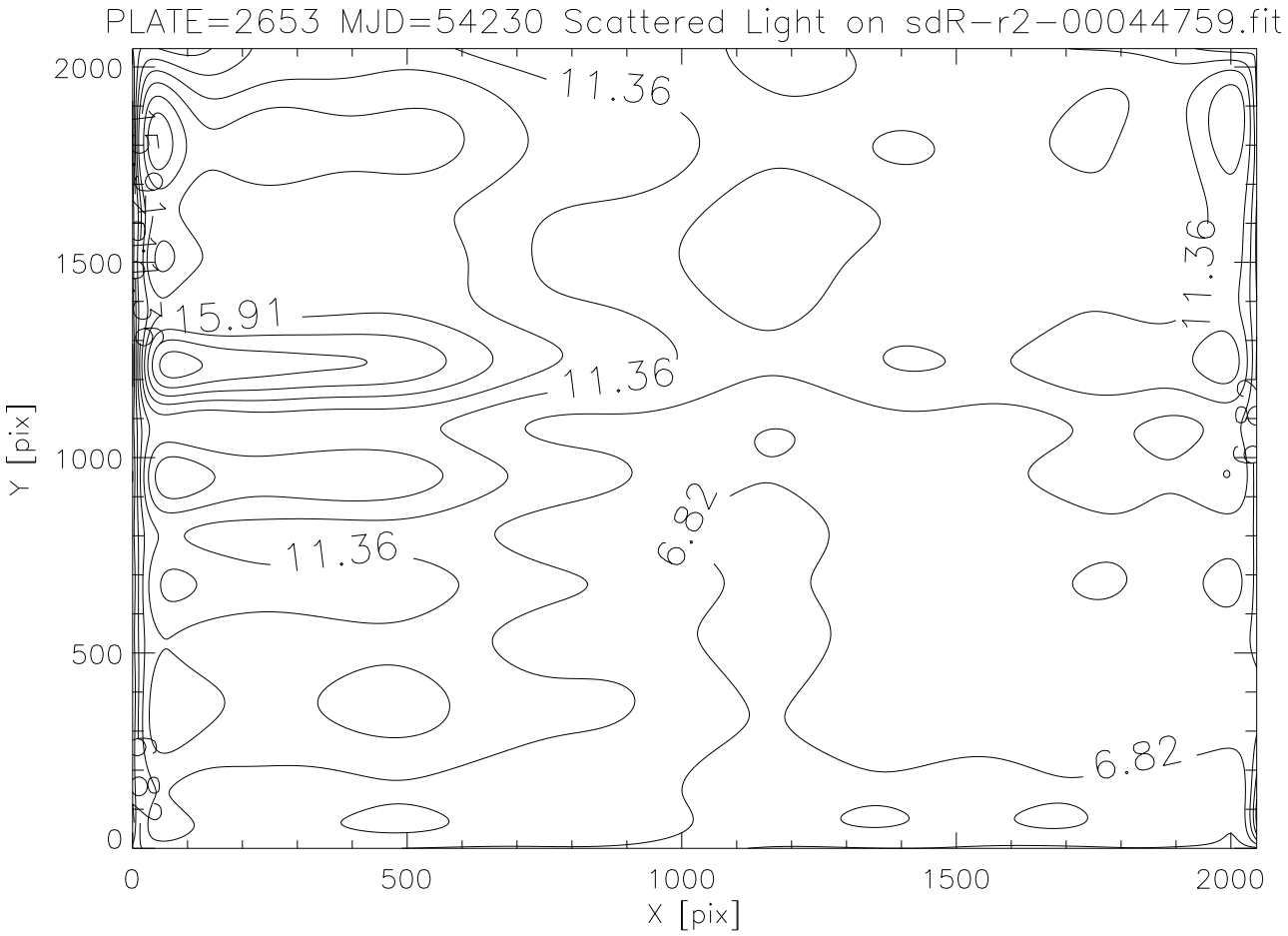

PLATE=2653 MJD=54230 sdR-r2-00044758.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.03 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

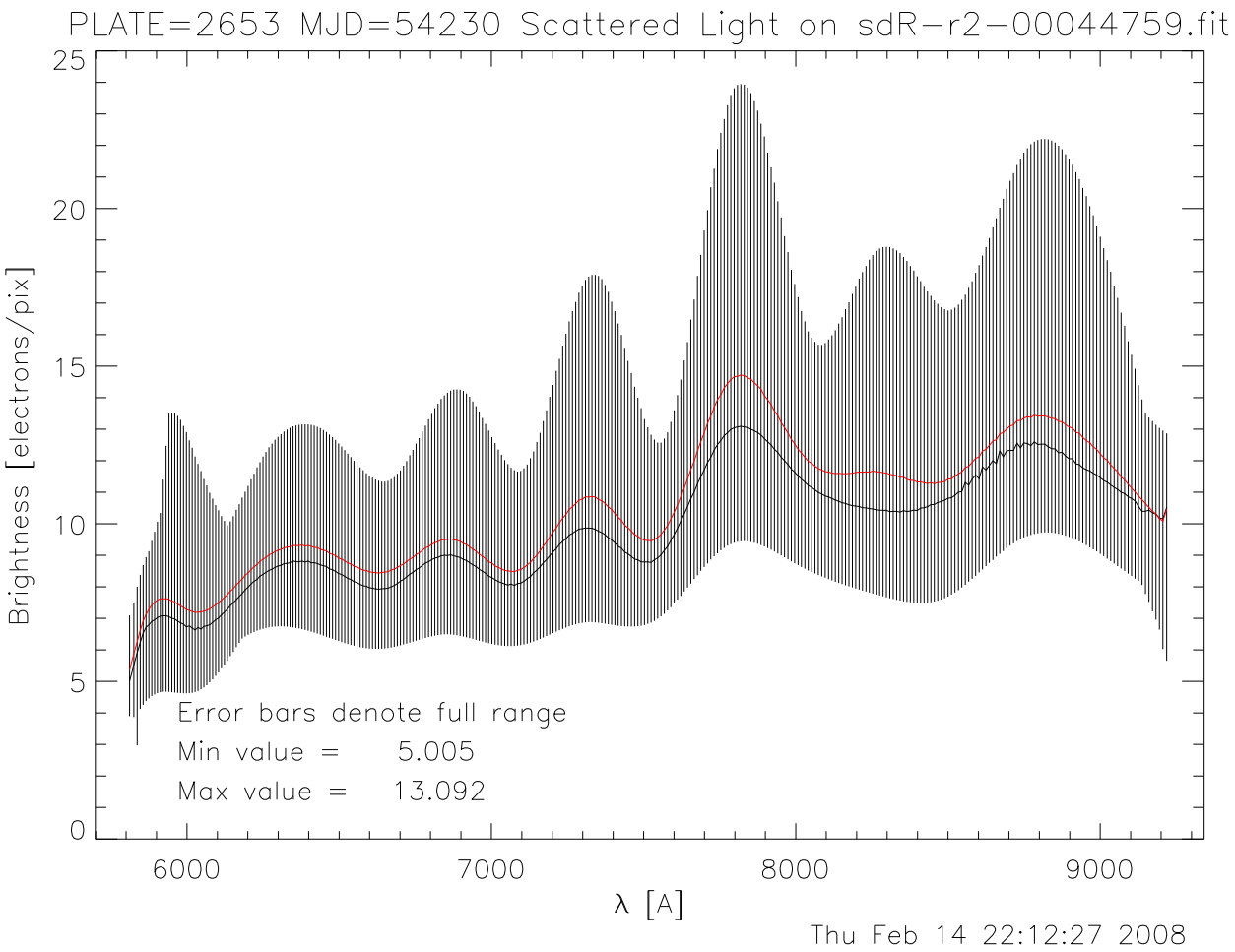

PLATE=2653 MJD=54230 sdR-r2-00044758.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.38 %
Fiber number
Focal Distance [mm]
Airmass

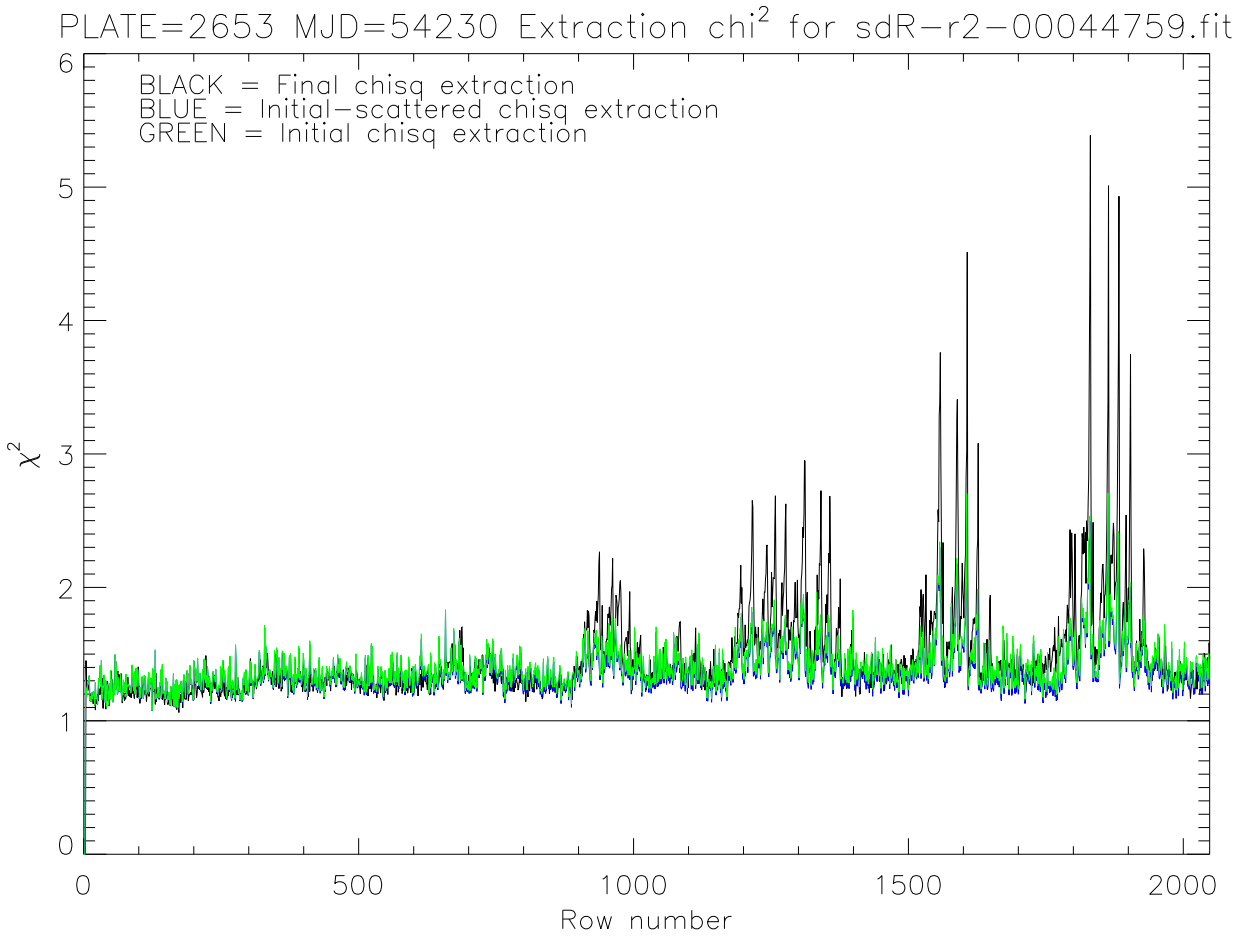

PLATE=2653 MJD=54230 Fiber-Flats for sdR-r2-00044755.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.293
Max value = 1.174
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 14 22:08:03 2008

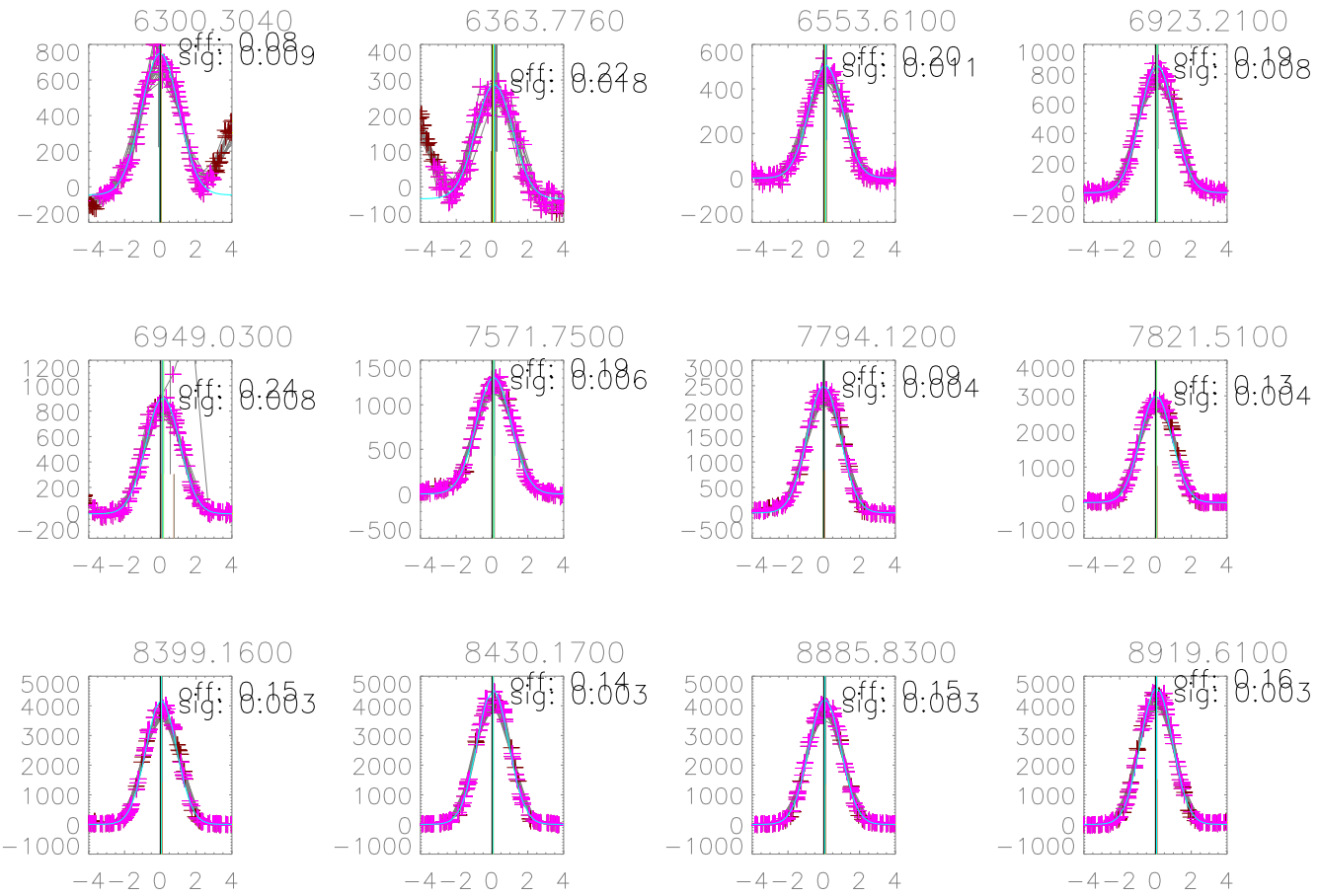

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r2-00044759.fi
38.2
49.1
38.2
38.2
27.3
27.3
16.4
16.4
16.4
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

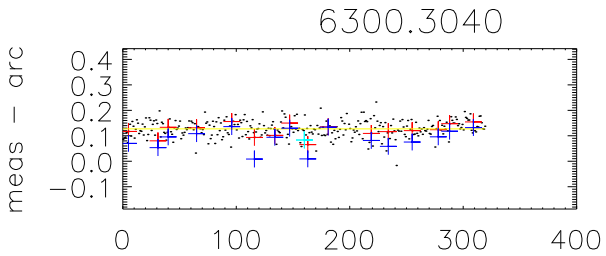

PLATE=2653 MJD=54230 Scattered Light before halo removal on sdR-r2-00044759.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.157
Max value = 43.256
Thu Feb 14 22:08:58 2008

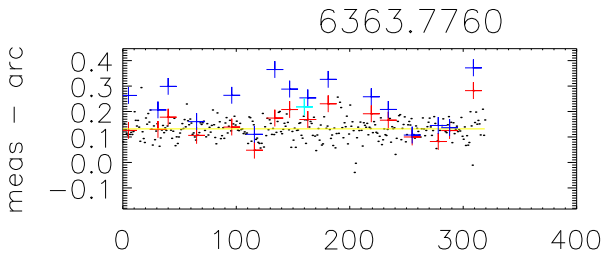

PLATE=2653 MJD=54230 Scattered Light on sdR-r2-00044759.fit
11.36
15.91
11.36
11.36
6.82
6.82
11.36
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

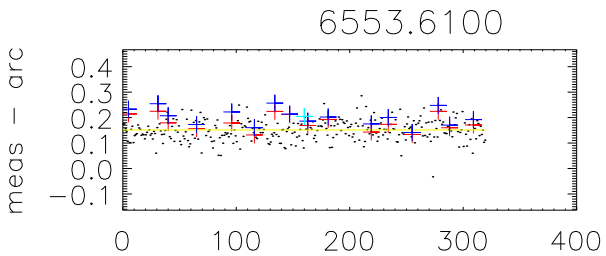

PLATE=2653 MJD=54230 Scattered Light on sdR-r2-00044759.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.005
Max value = 13.092
Thu Feb 14 22:12:27 2008

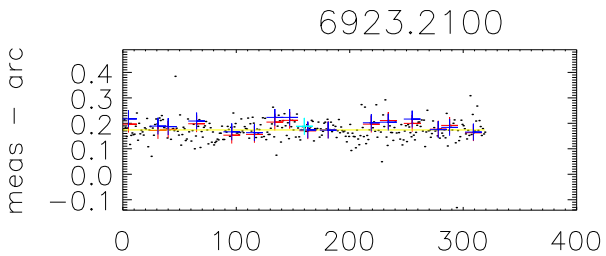

PLATE=2653 MJD=54230 Extraction chi^2 for sdR−r2−00044759.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

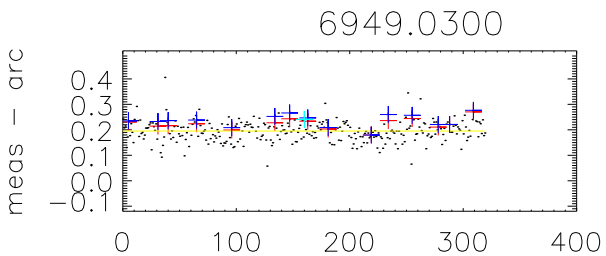

6300.3040
off: 0.08
sig: 0.009
6363.7760
off: 0.22
sig: 0.048
6553.6100
off: 0.20
sig: 0.011
6923.2100
off: 0.19
sig: 0.008
6949.0300
off: 0.24
sig: 0.008
7571.7500
off: 0.19
sig: 0.006
7794.1200
off: 0.09
sig: 0.004
7821.5100
off: 0.13
sig: 0.004
8399.1600
off: 0.15
sig: 0.003
8430.1700
off: 0.14
sig: 0.003
8885.8300
off: 0.15
sig: 0.003
8919.6100
off: 0.16
sig: 0.003

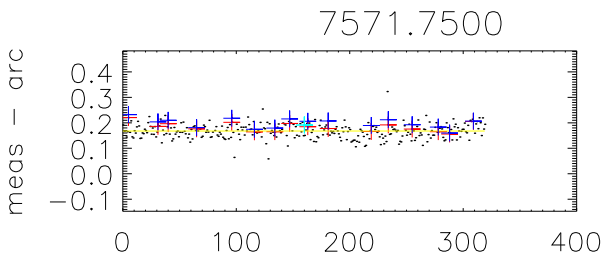

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

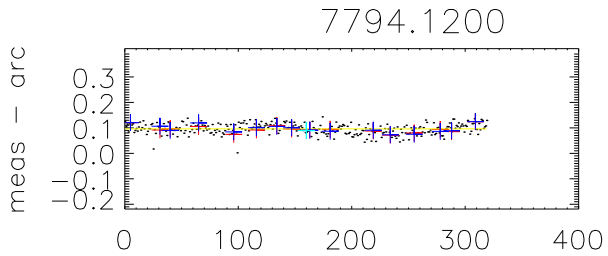

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

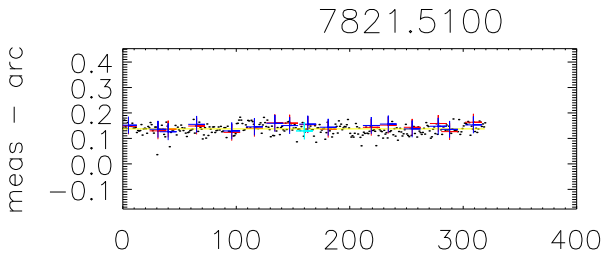

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

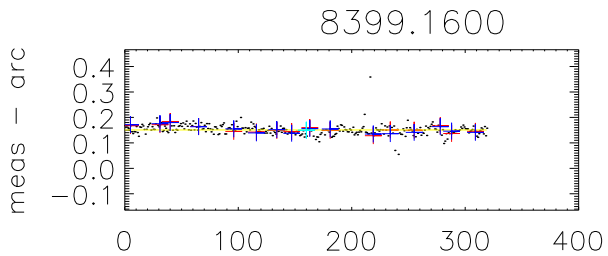

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

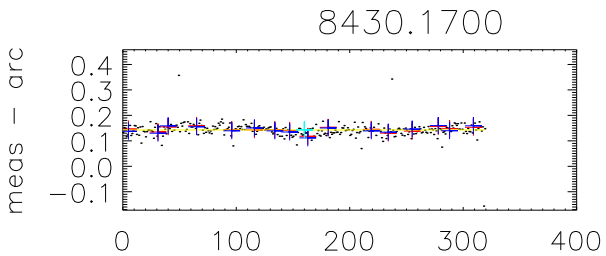

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

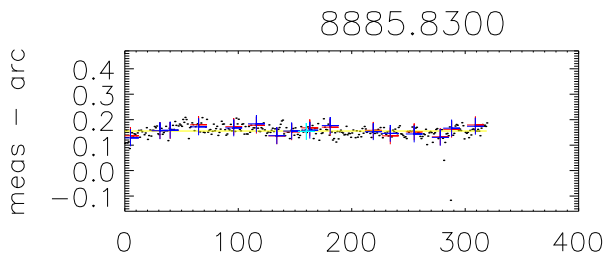

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

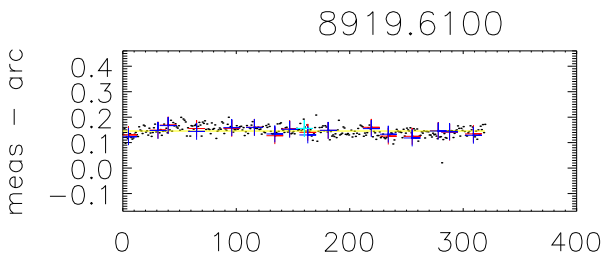

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

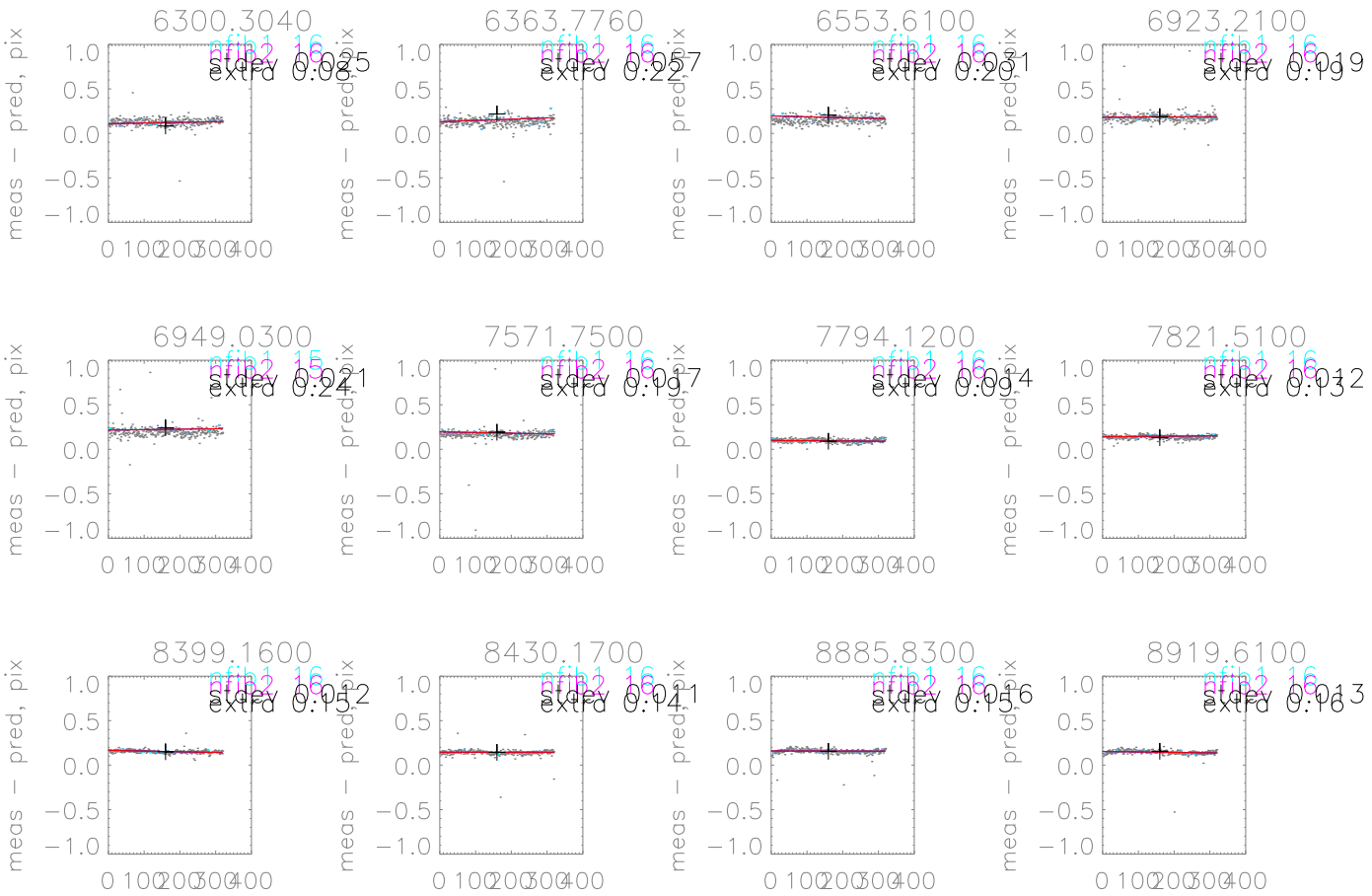

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

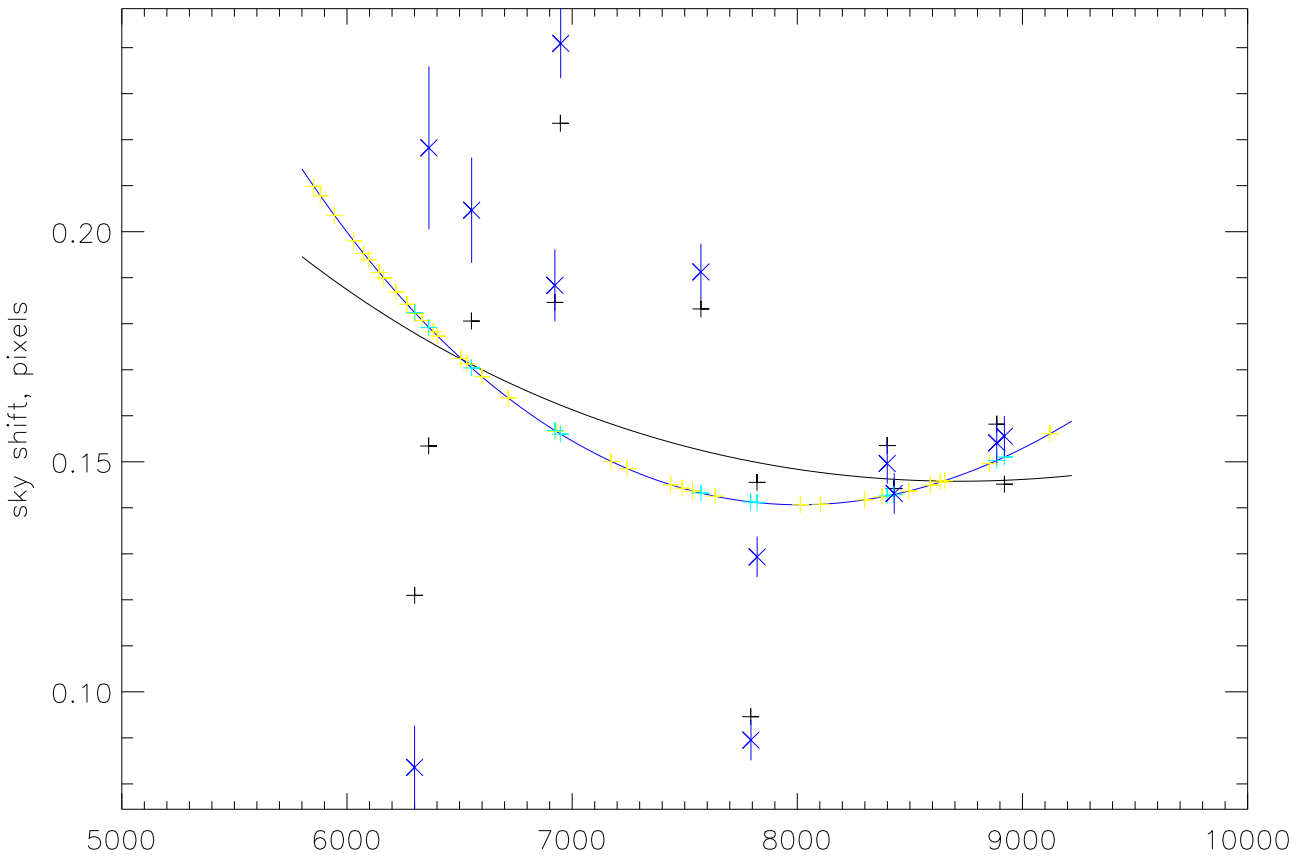

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

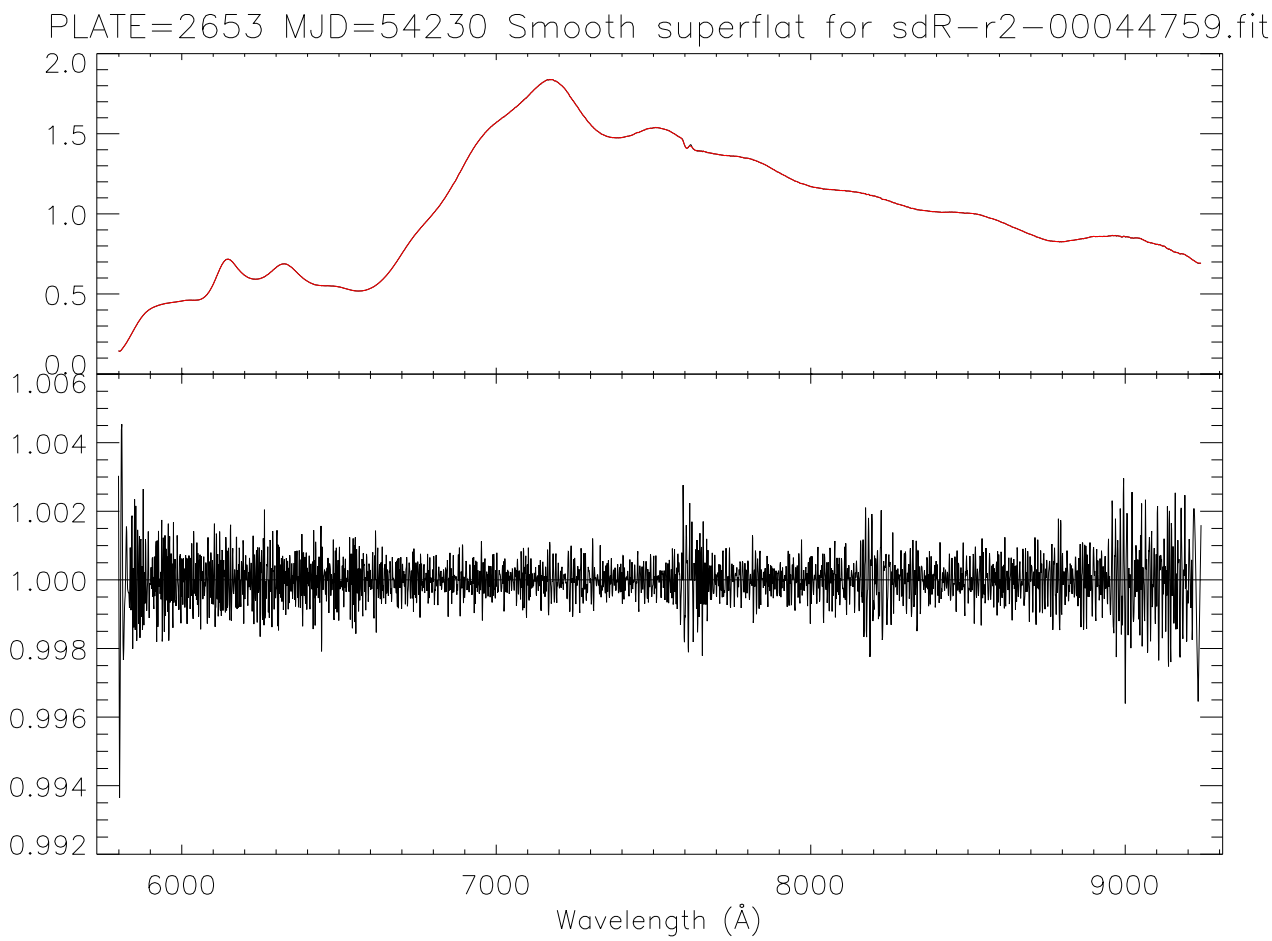

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

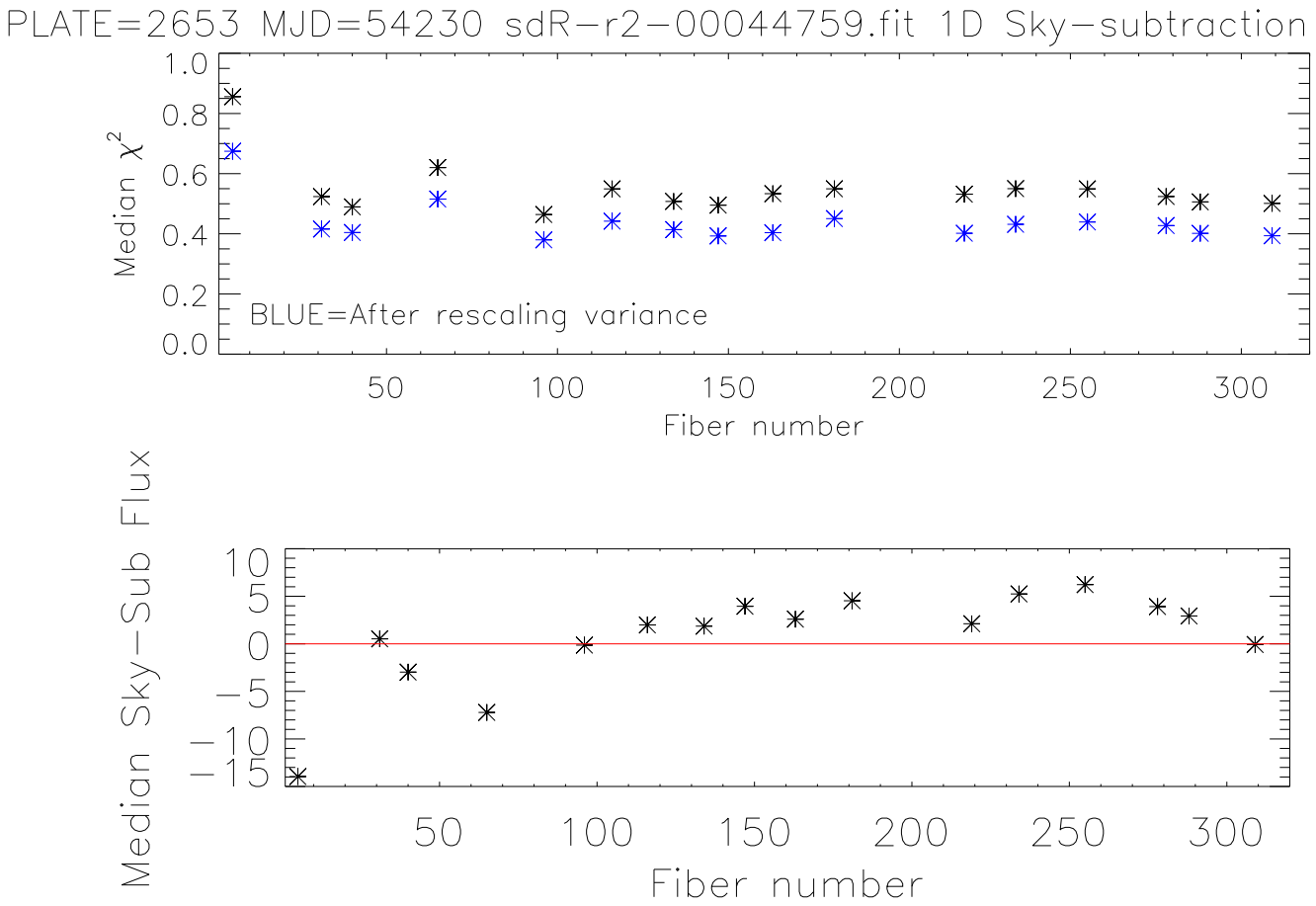

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

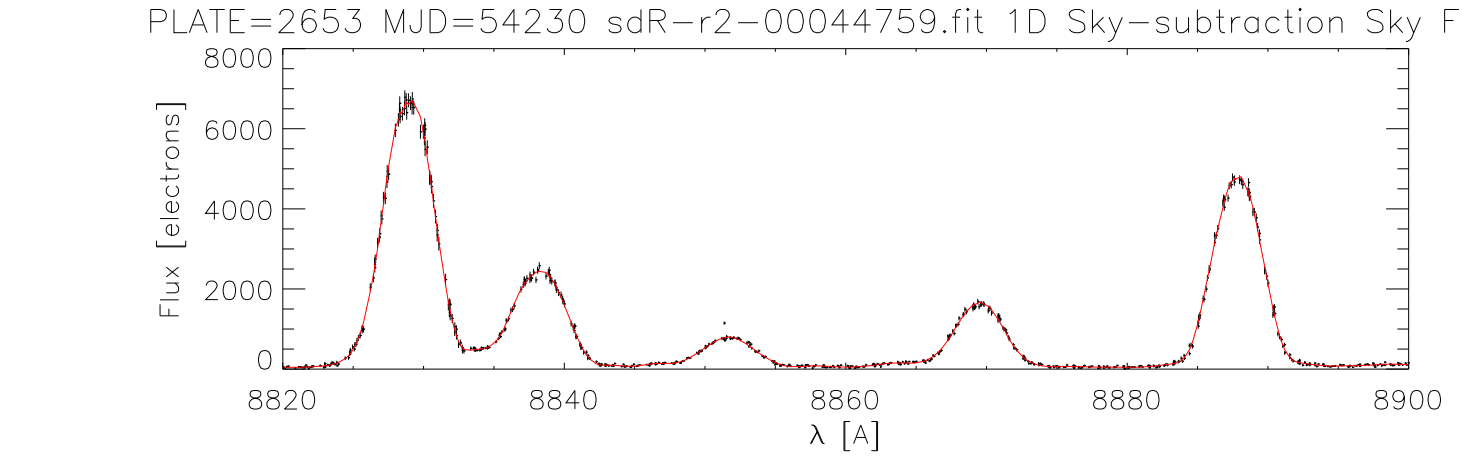

6300.3040
mfib1 16
mfib2 16
stdev 0.025
extra 0.085
6363.7760
mfib1 16
mfib2 16
stdev 0.057
extra 0.227
6553.6100
mfib1 16
mfib2 16
stdev 0.031
extra 0.201
6923.2100
mfib1 16
mfib2 16
stdev 0.019
extra 0.199
6949.0300
mfib1 15
mfib2 16
stdev 0.021
extra 0.241
7571.7500
mfib1 16
mfib2 16
stdev 0.017
extra 0.197
7794.1200
mfib1 16
mfib2 16
stdev 0.014
extra 0.094
7821.5100
mfib1 16
mfib2 16
stdev 0.012
extra 0.132
8399.1600
mfib1 16
mfib2 16
stdev 0.012
extra 0.152
8430.1700
mfib1 16
mfib2 16
stdev 0.011
extra 0.141
8885.8300
mfib1 16
mfib2 16
stdev 0.016
extra 0.156
8919.6100
mfib1 16
mfib2 16
stdev 0.013
extra 0.168
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

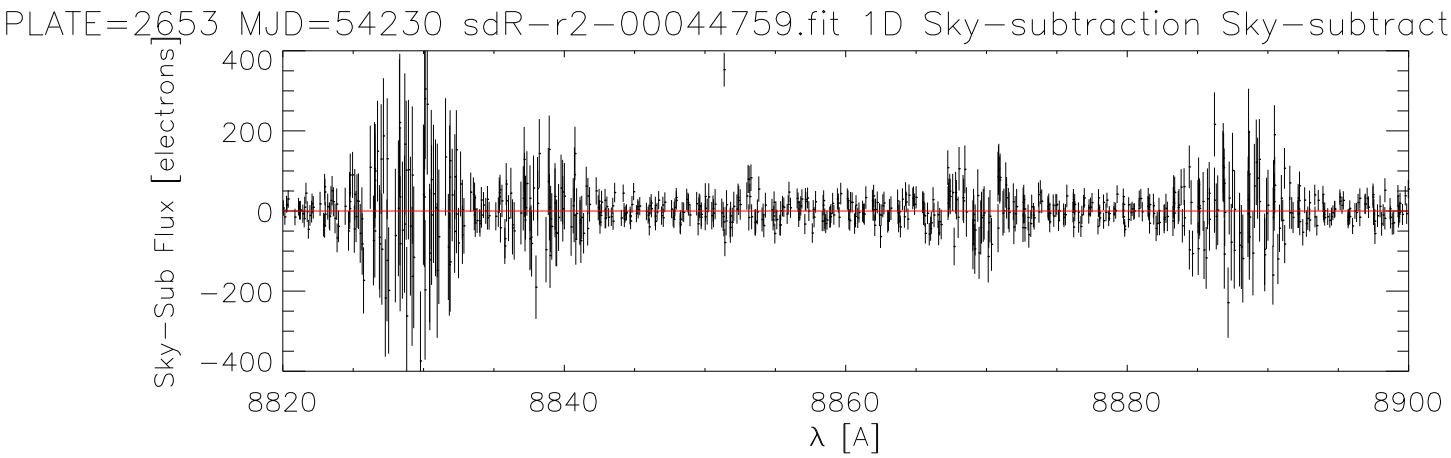

sky shift, pixels
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

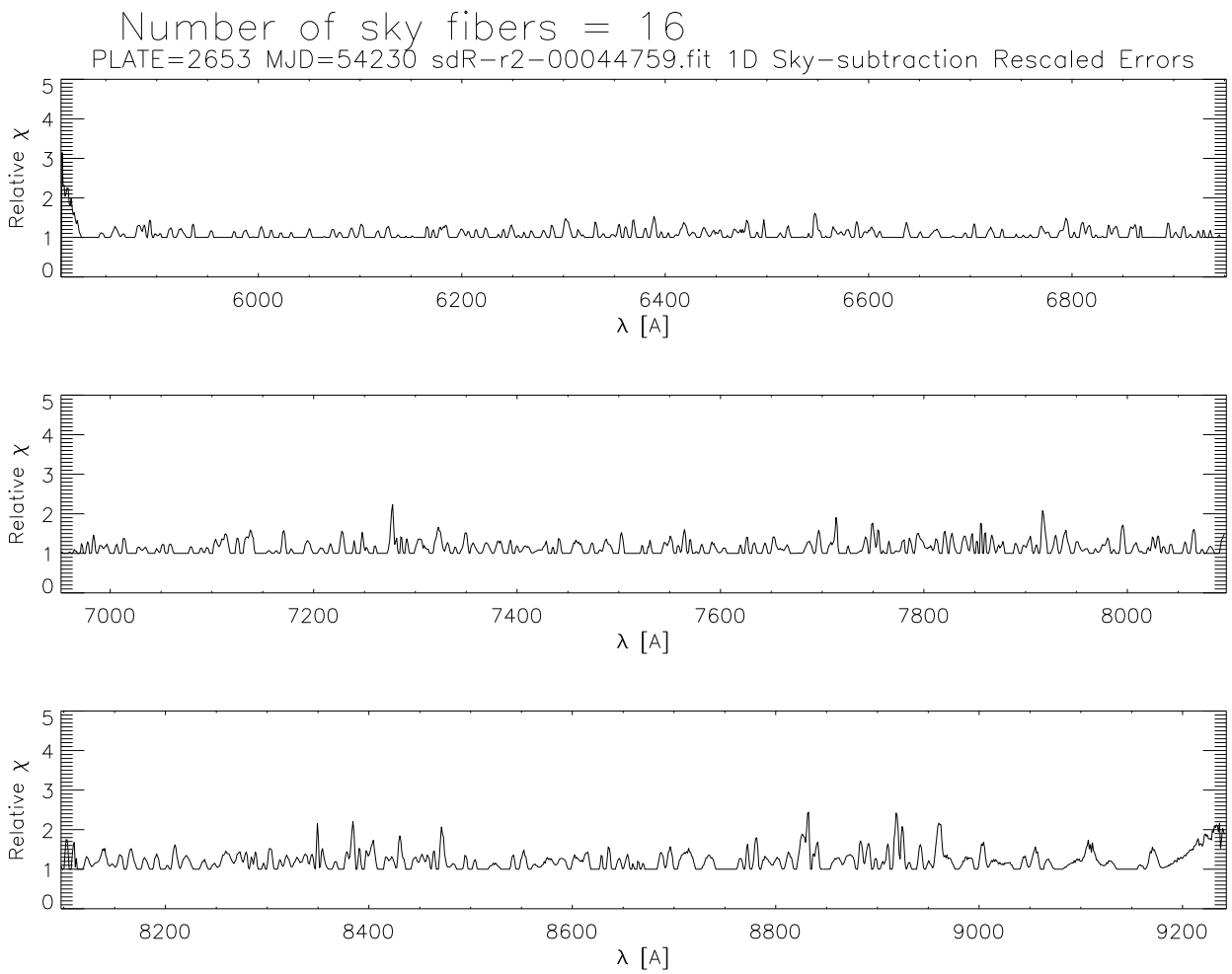
es= −0.0000

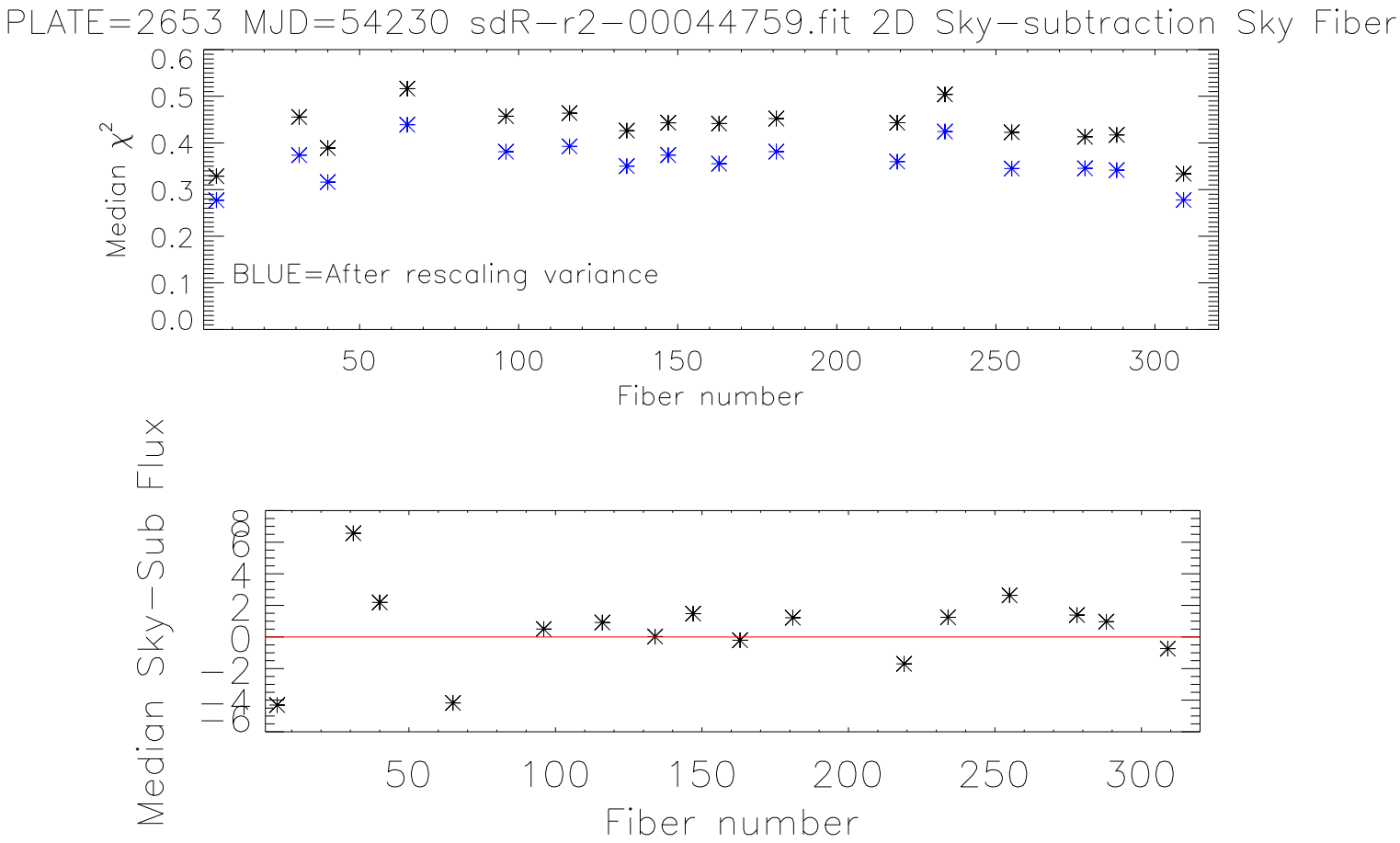

PLATE=2653 MJD=54230 Smooth superflat for sdR−r2−00044759.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

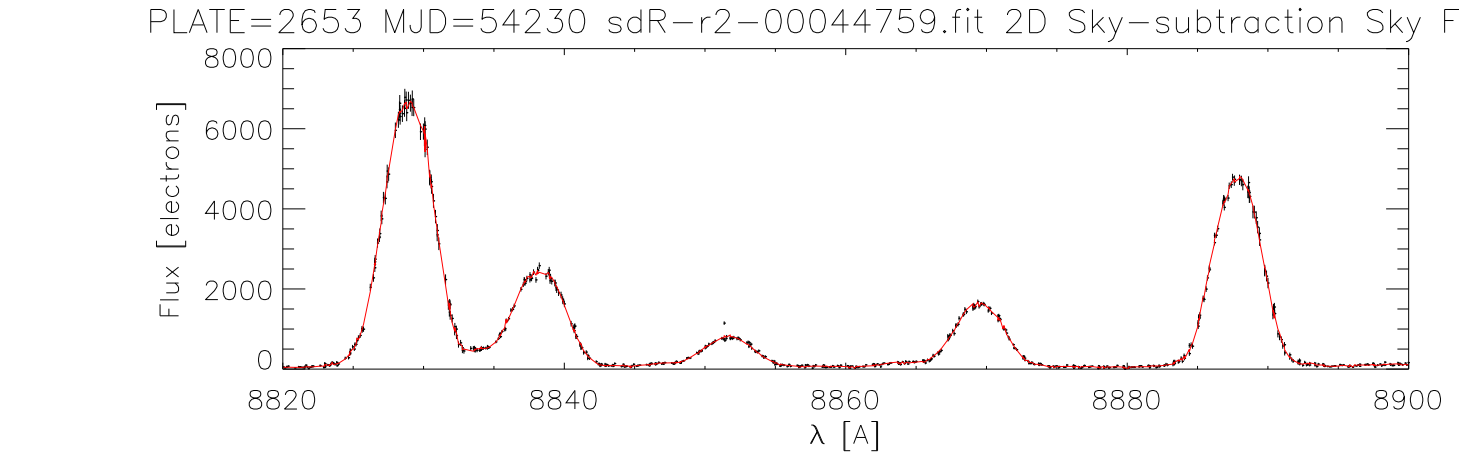

PLATE=2653 MJD=54230 sdR-r2-00044759.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

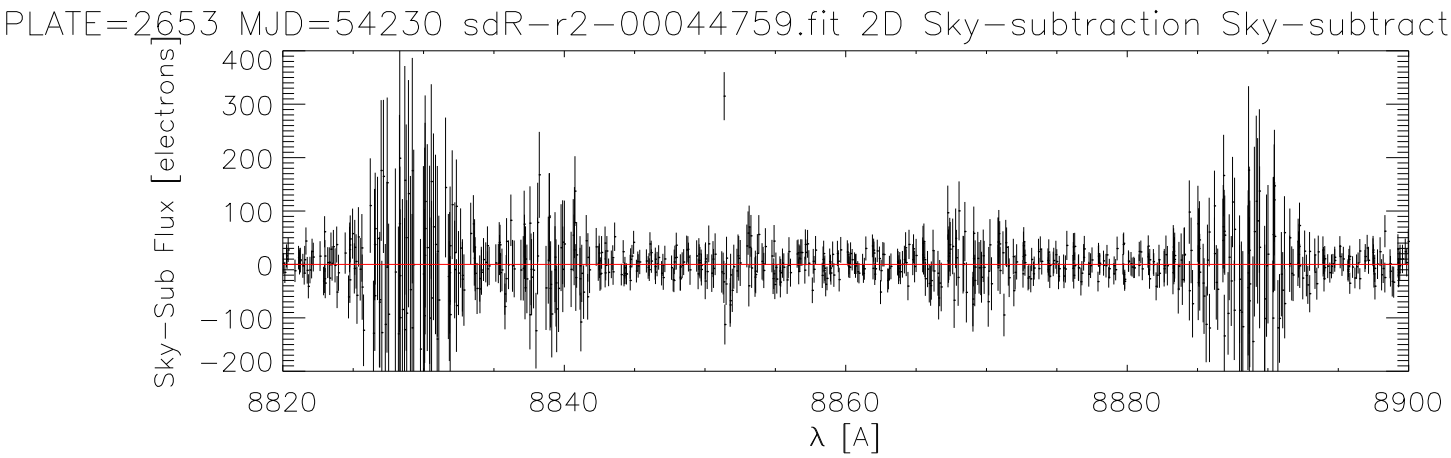

PLATE=2653 MJD=54230 sdR-r2-00044759.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

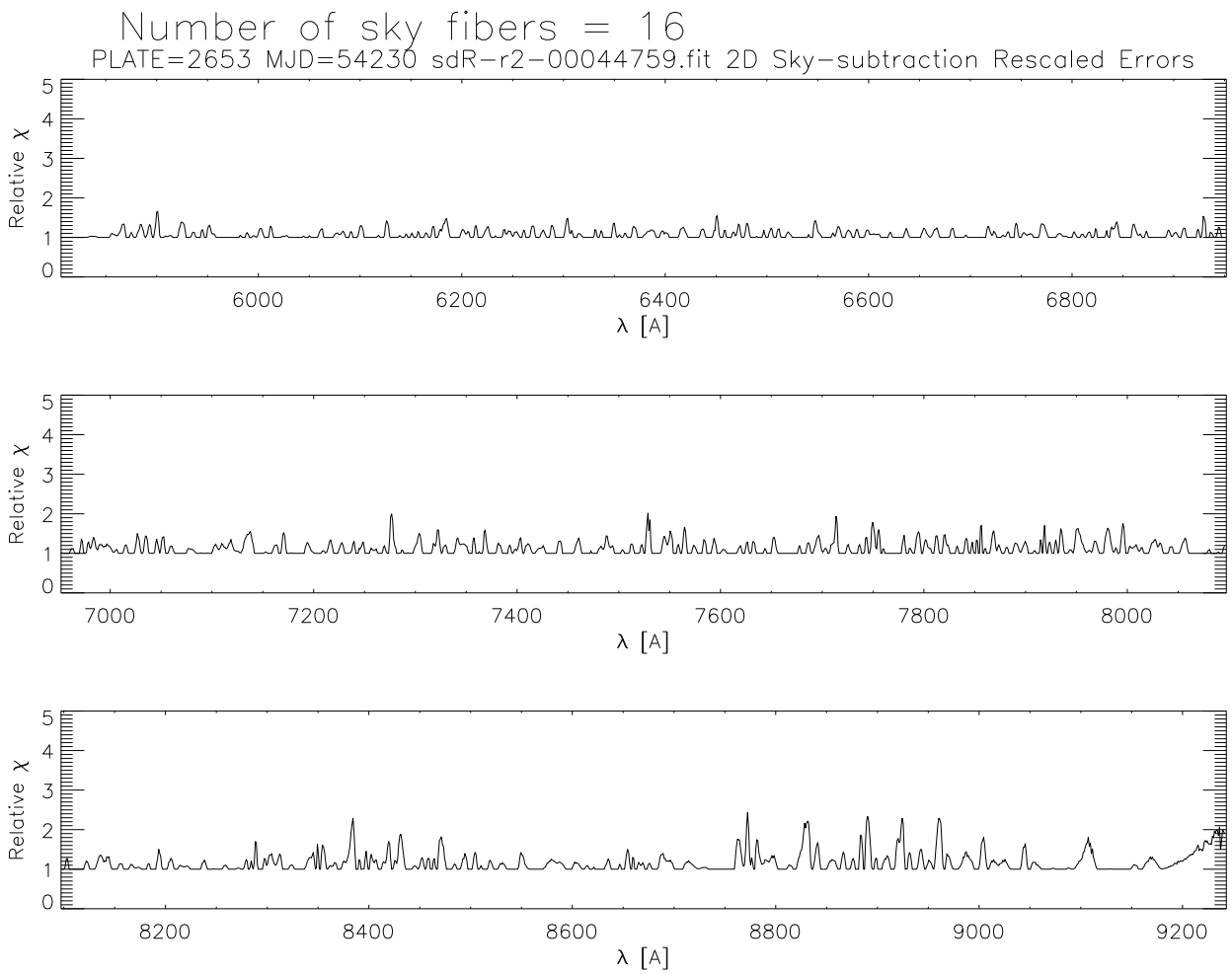

PLATE=2653 MJD=54230 sdR-r2-00044759.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

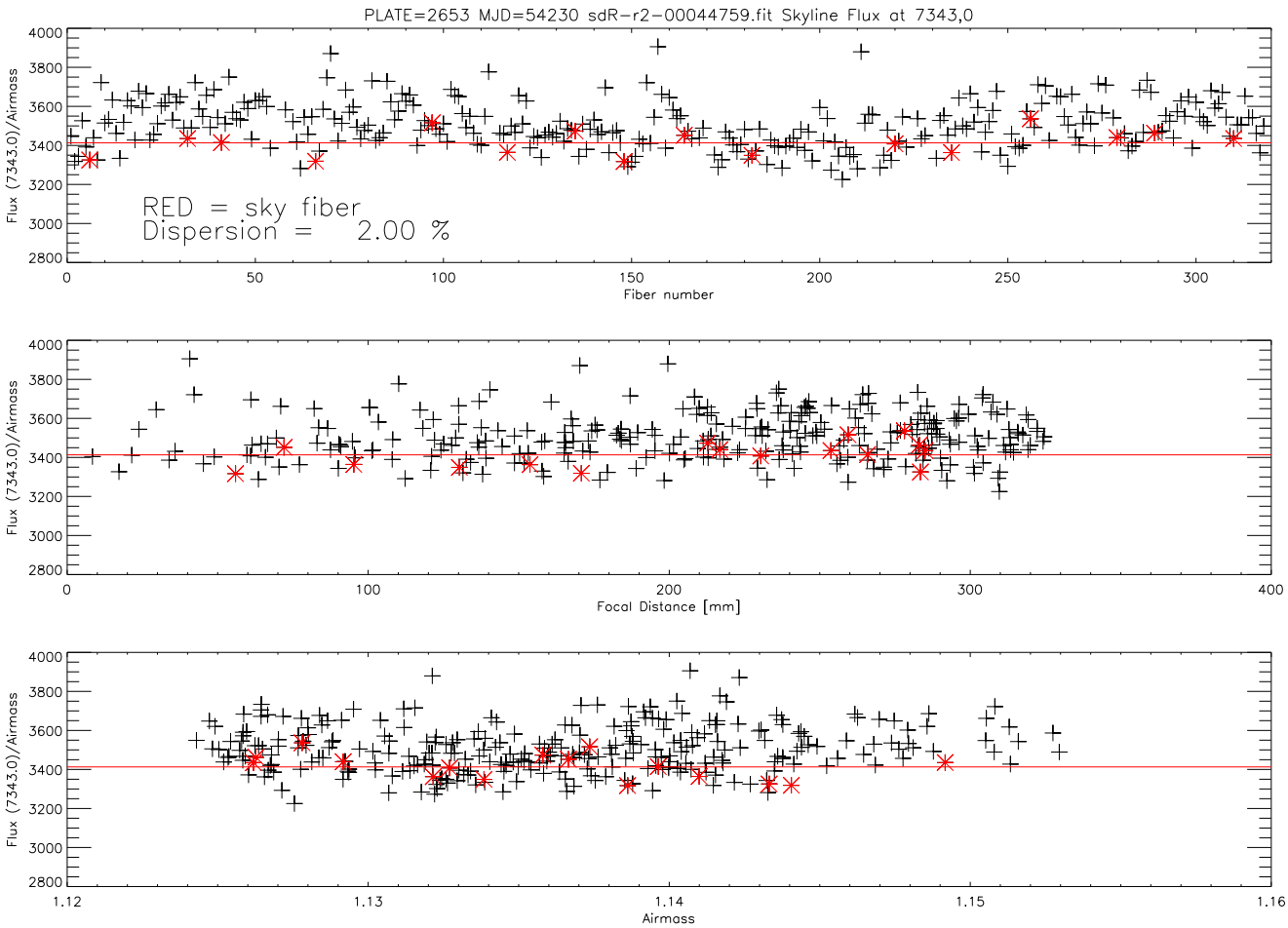

Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-r2-00044759.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

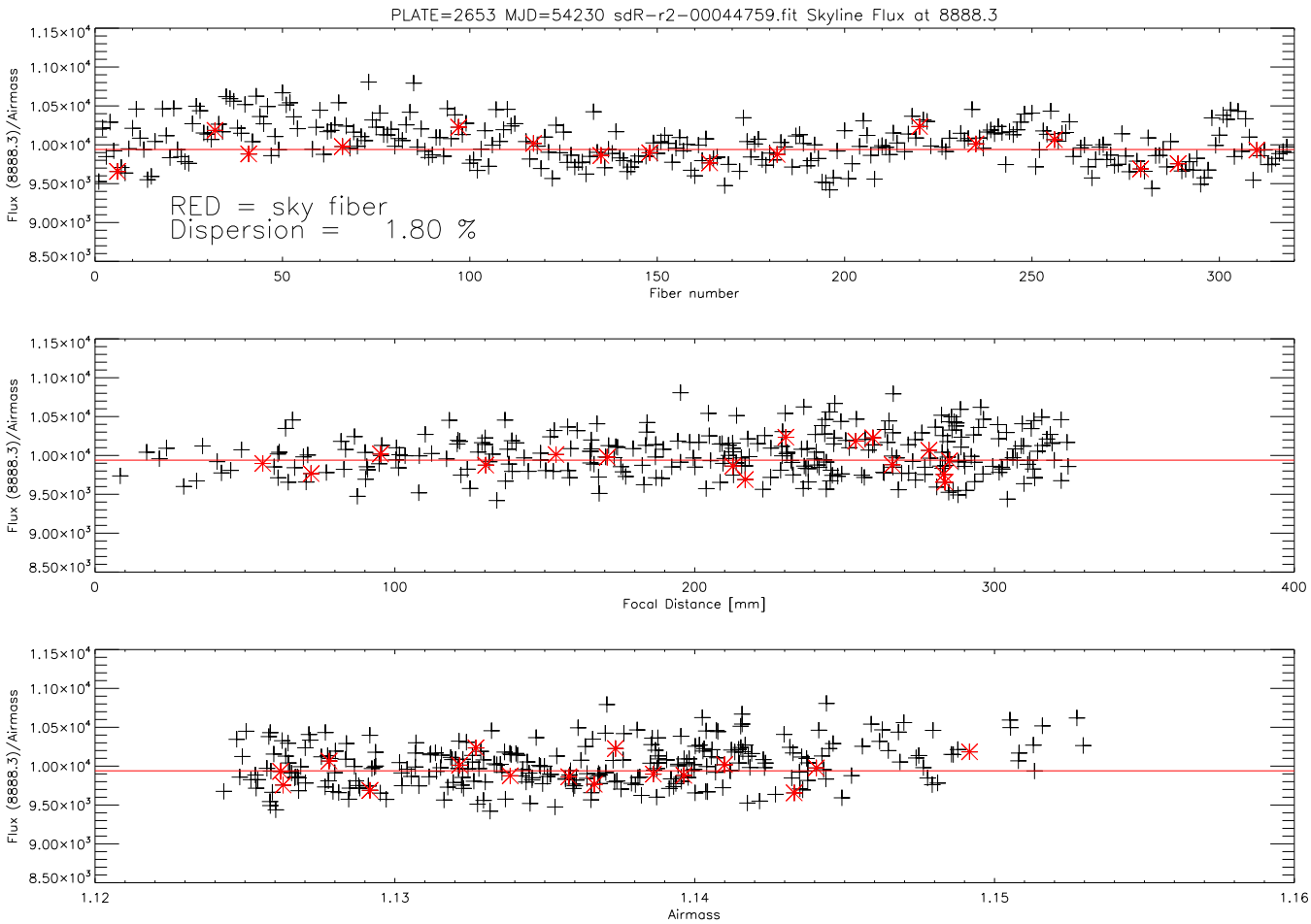

PLATE=2653 MJD=54230 sdR-r2-00044759.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number


PLATE=2653 MJD=54230 sdR-r2-00044759.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2653 MJD=54230 sdR-r2-00044759.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=2653 MJD=54230 sdR-r2-00044759.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=2653 MJD=54230 sdR-r2-00044759.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.00 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2653 MJD=54230 sdR-r2-00044759.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.80 %
Fiber number
Focal Distance [mm]
Airmass