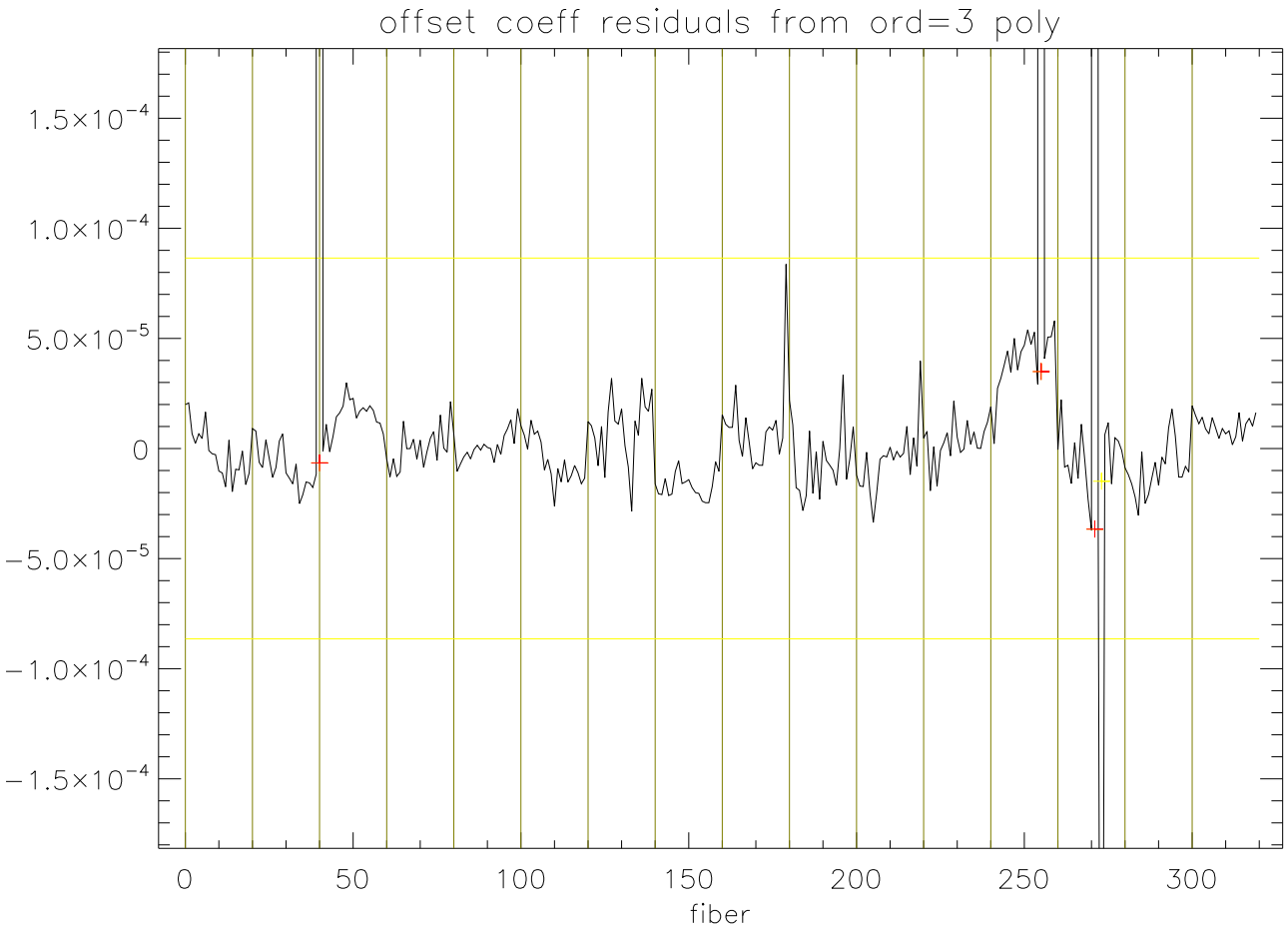
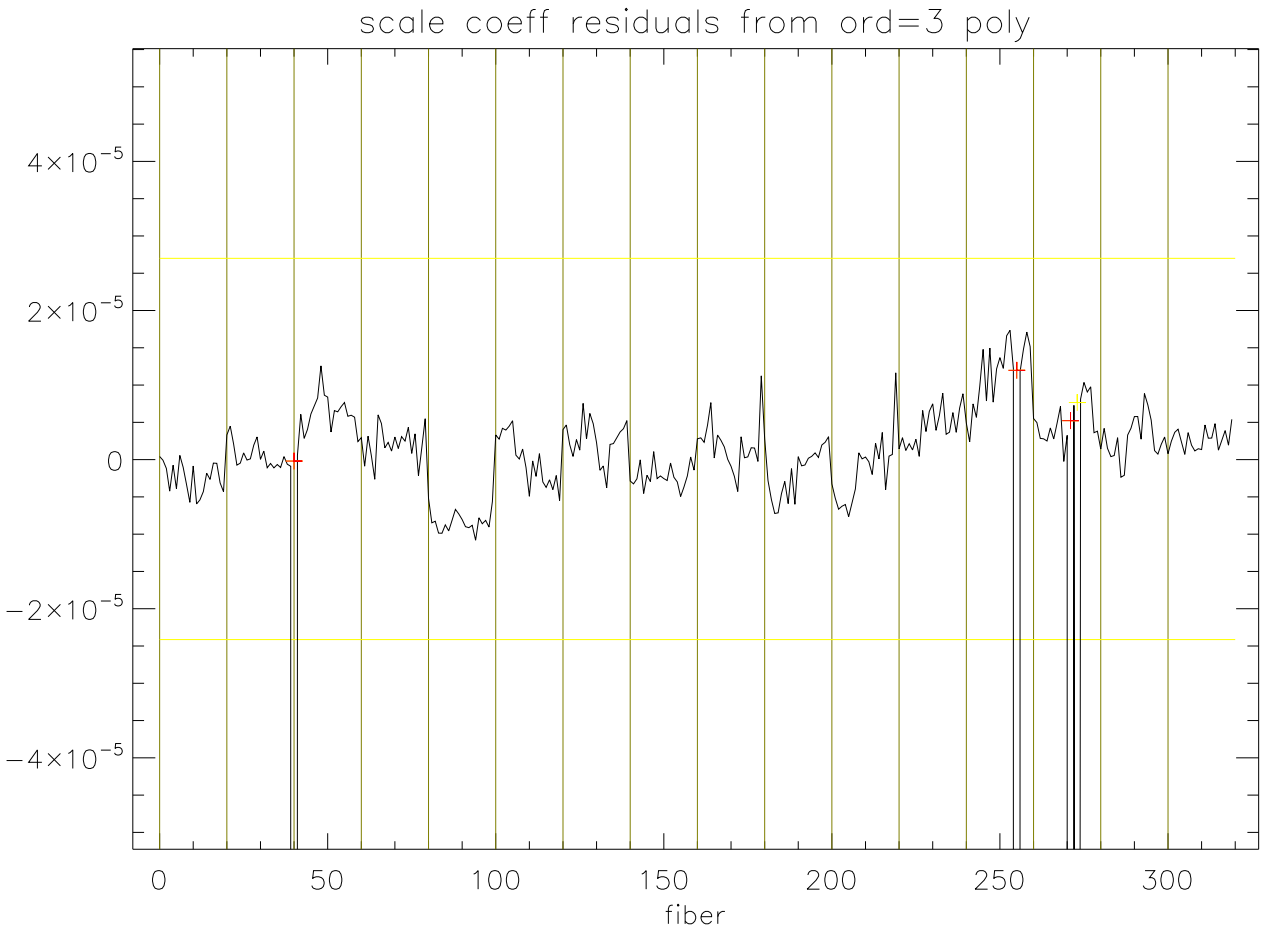
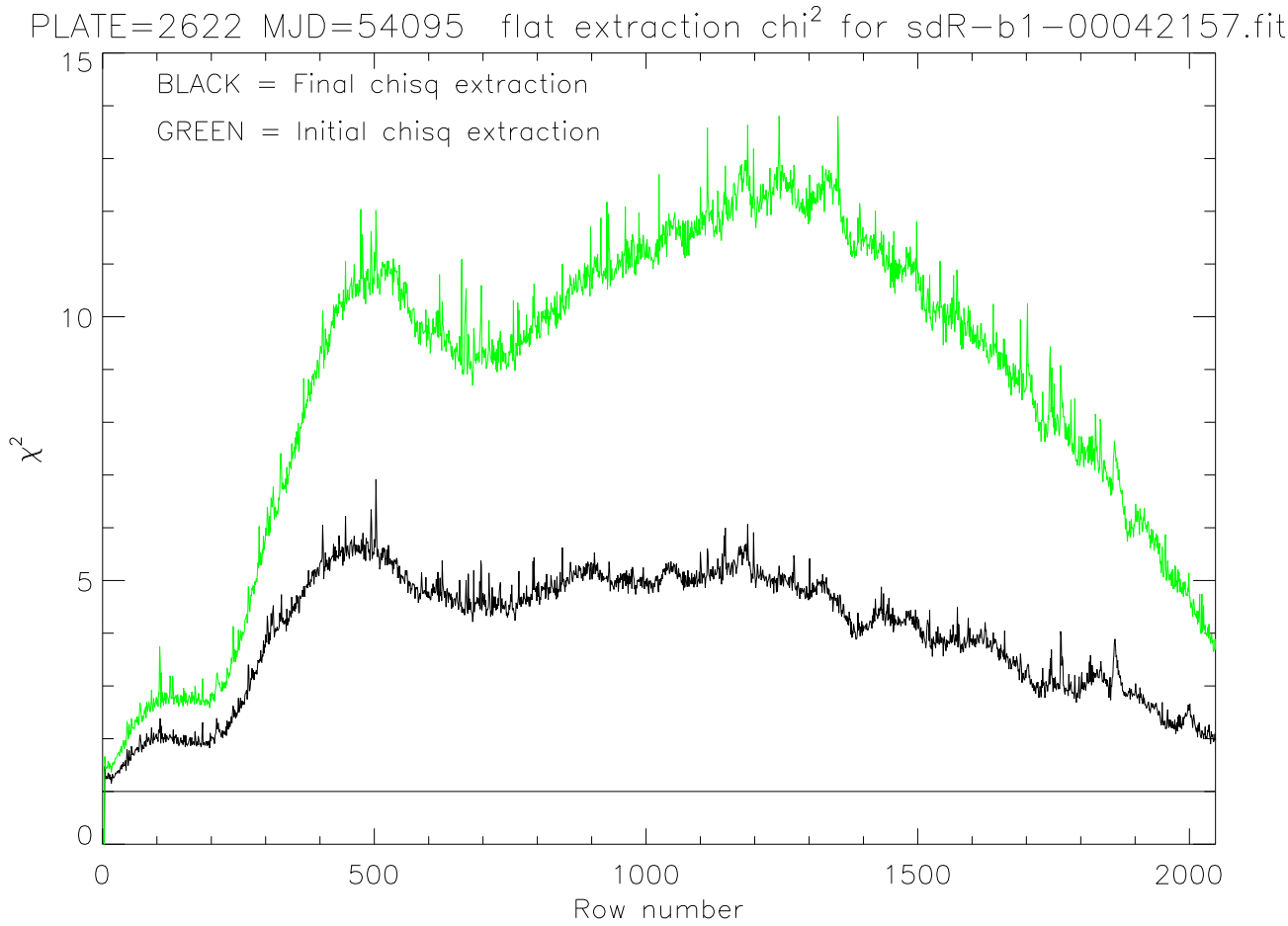
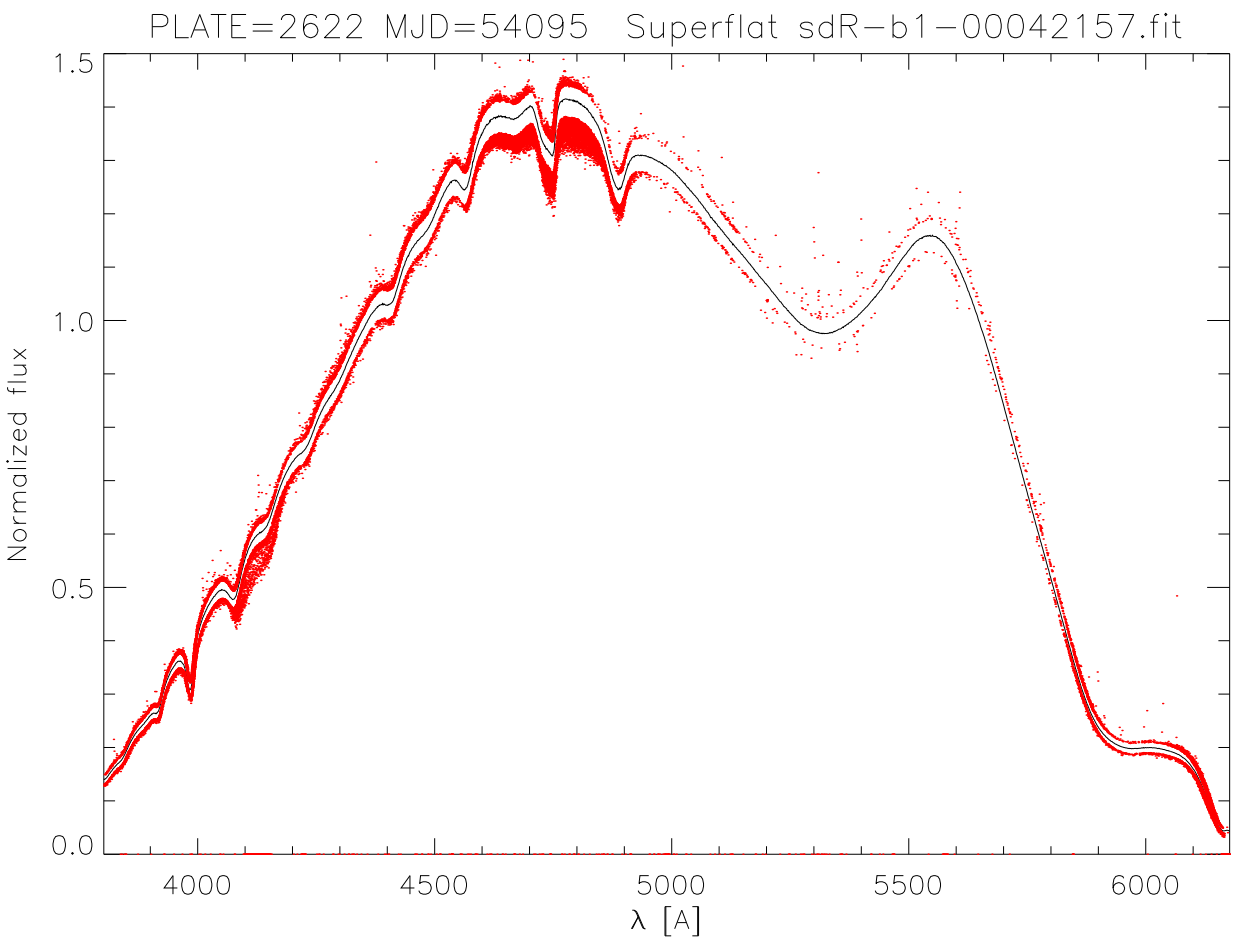
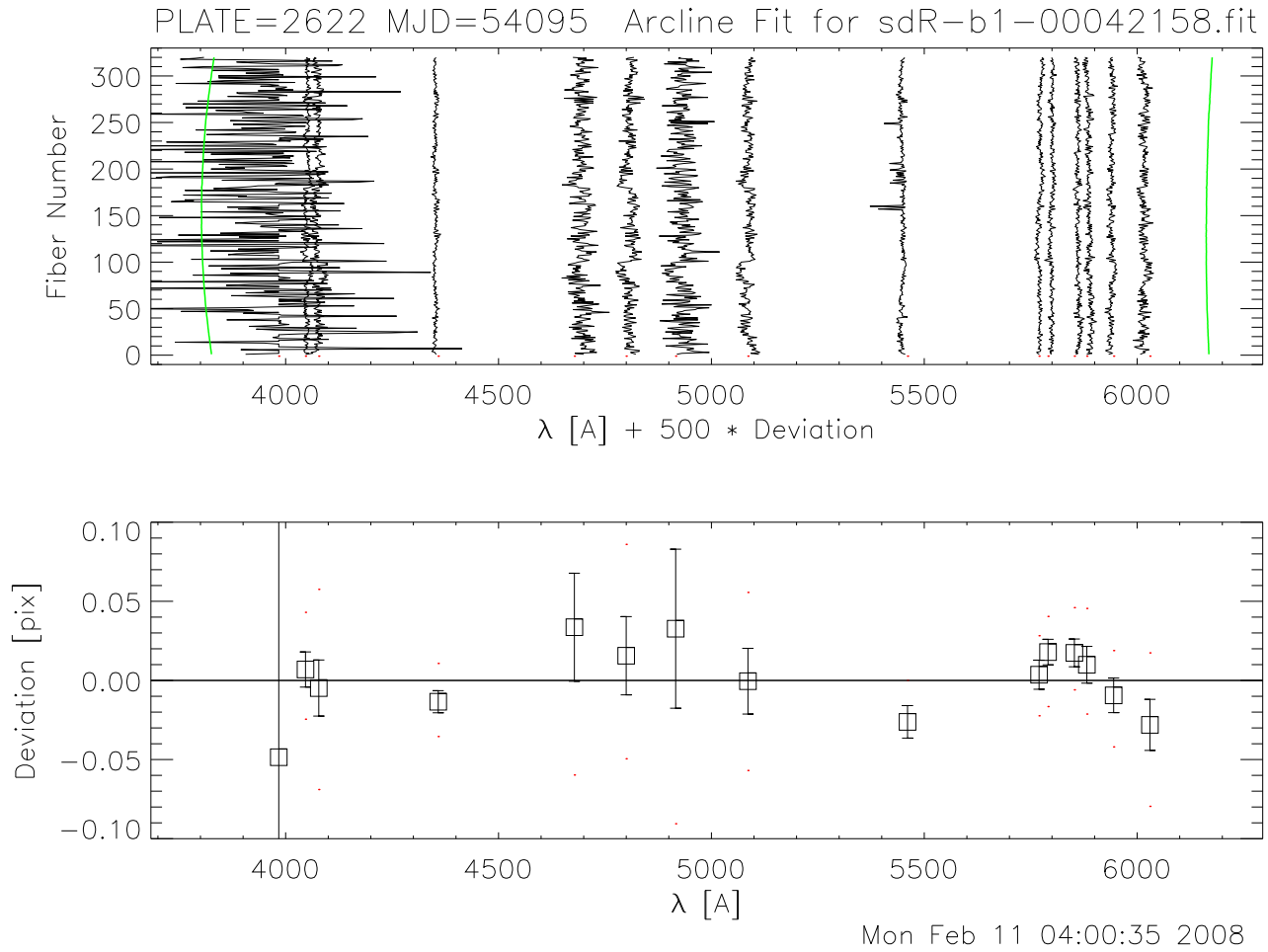
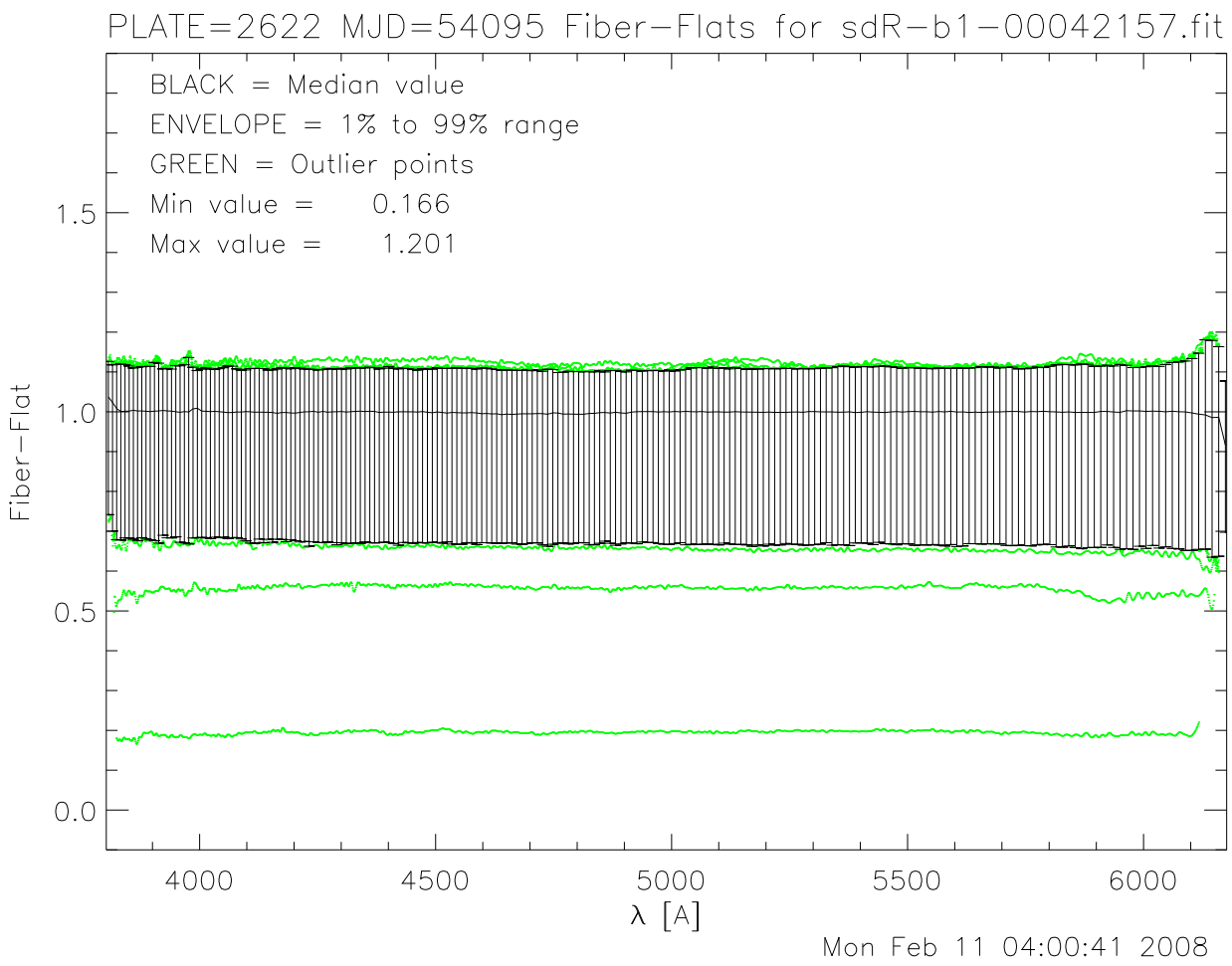

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

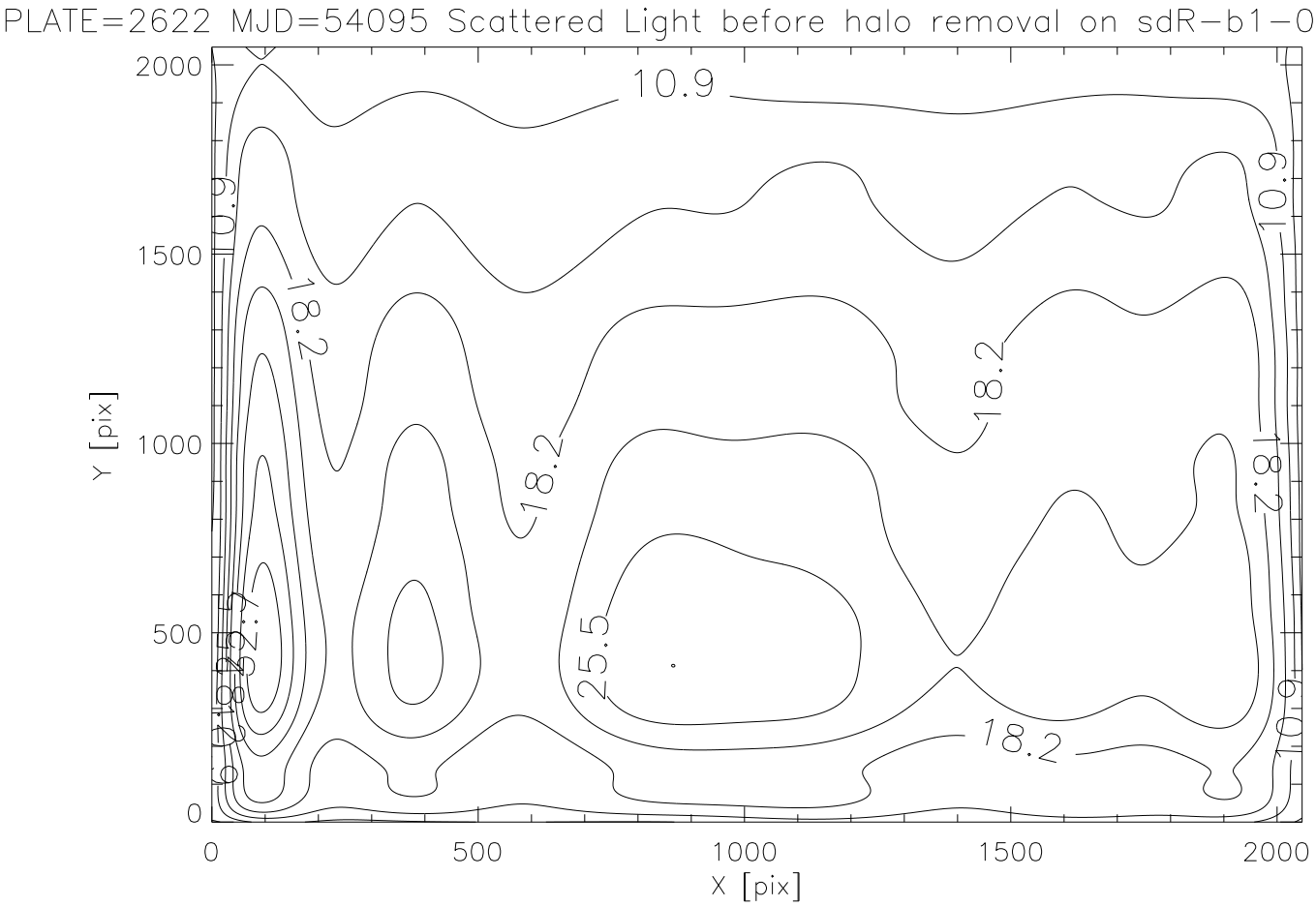

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

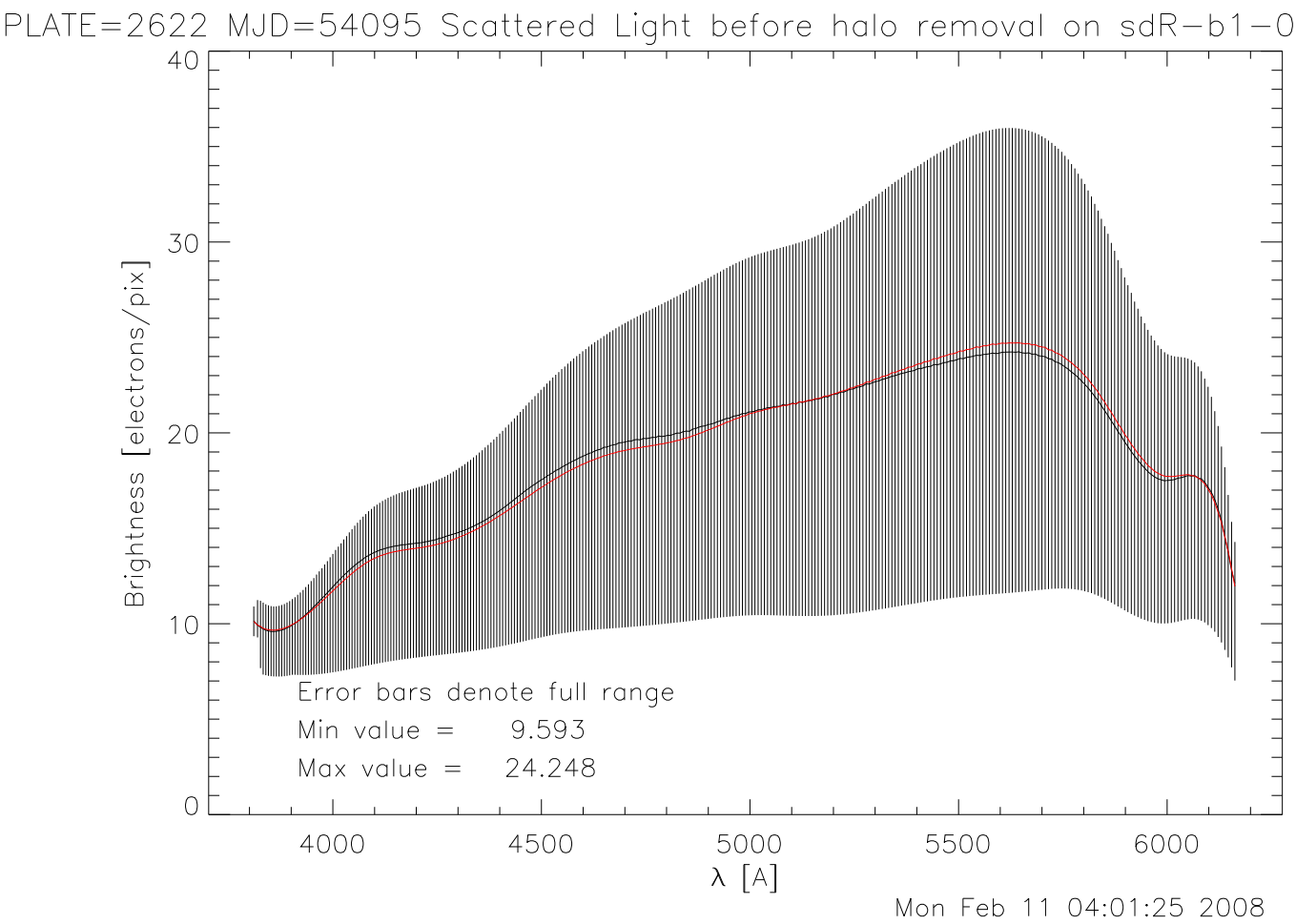

PLATE=2622 MJD=54095 flat extraction chi^2 for sdR−b1−00042157.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

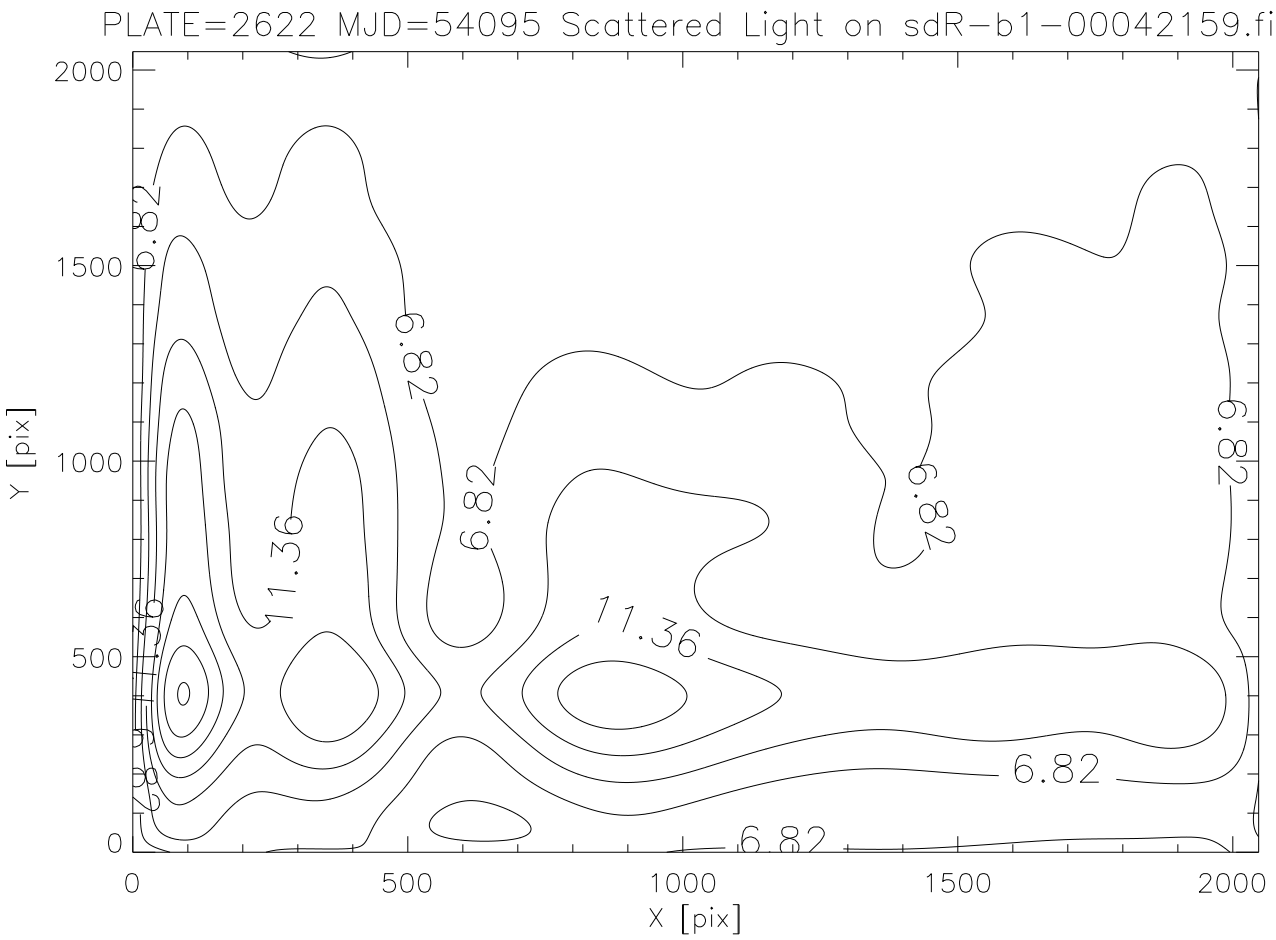

PLATE=2622 MJD=54095 Superflat sdR-b1-00042157.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

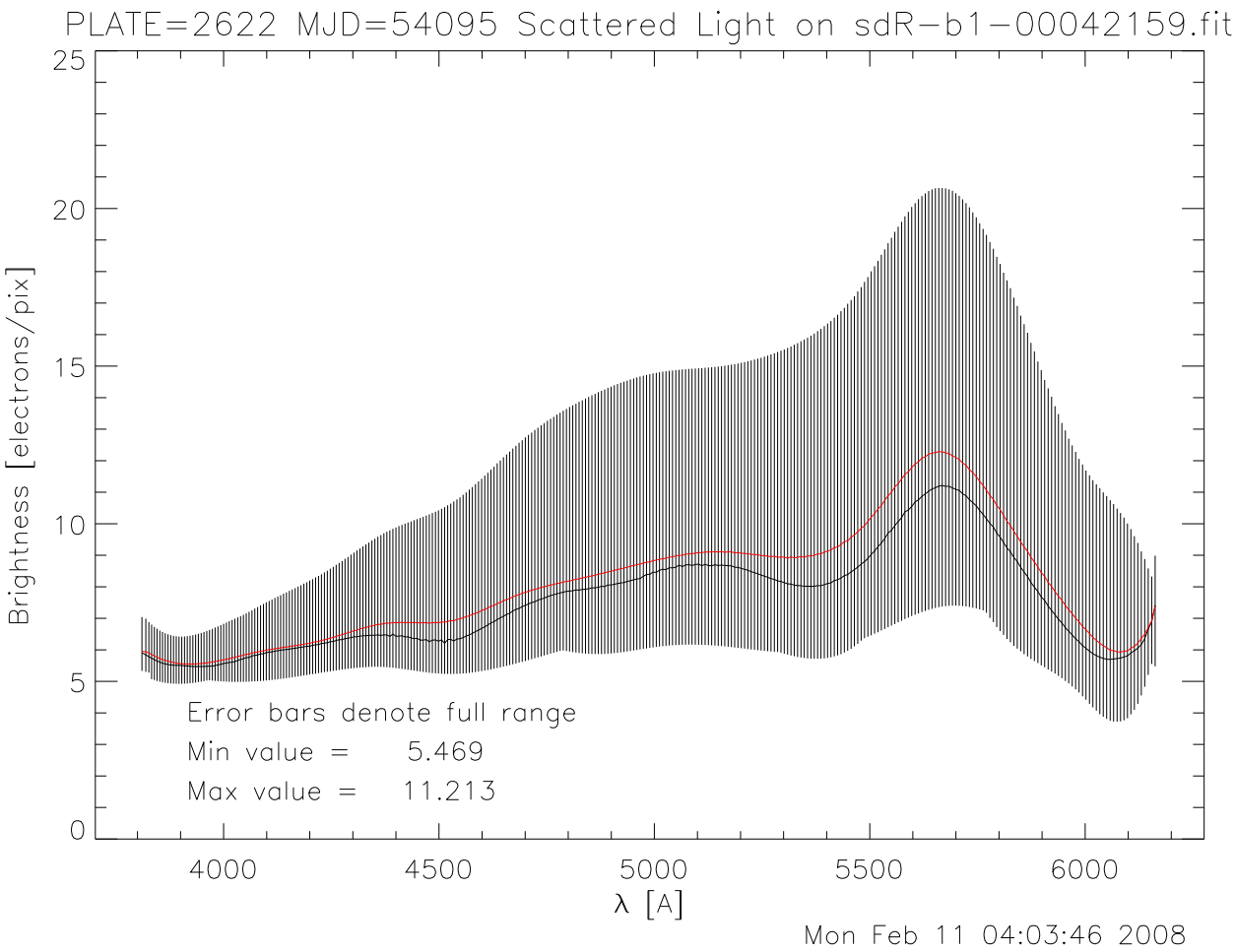

PLATE=2622 MJD=54095 Arcline Fit for sdR-b1-00042158.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 04:00:35 2008

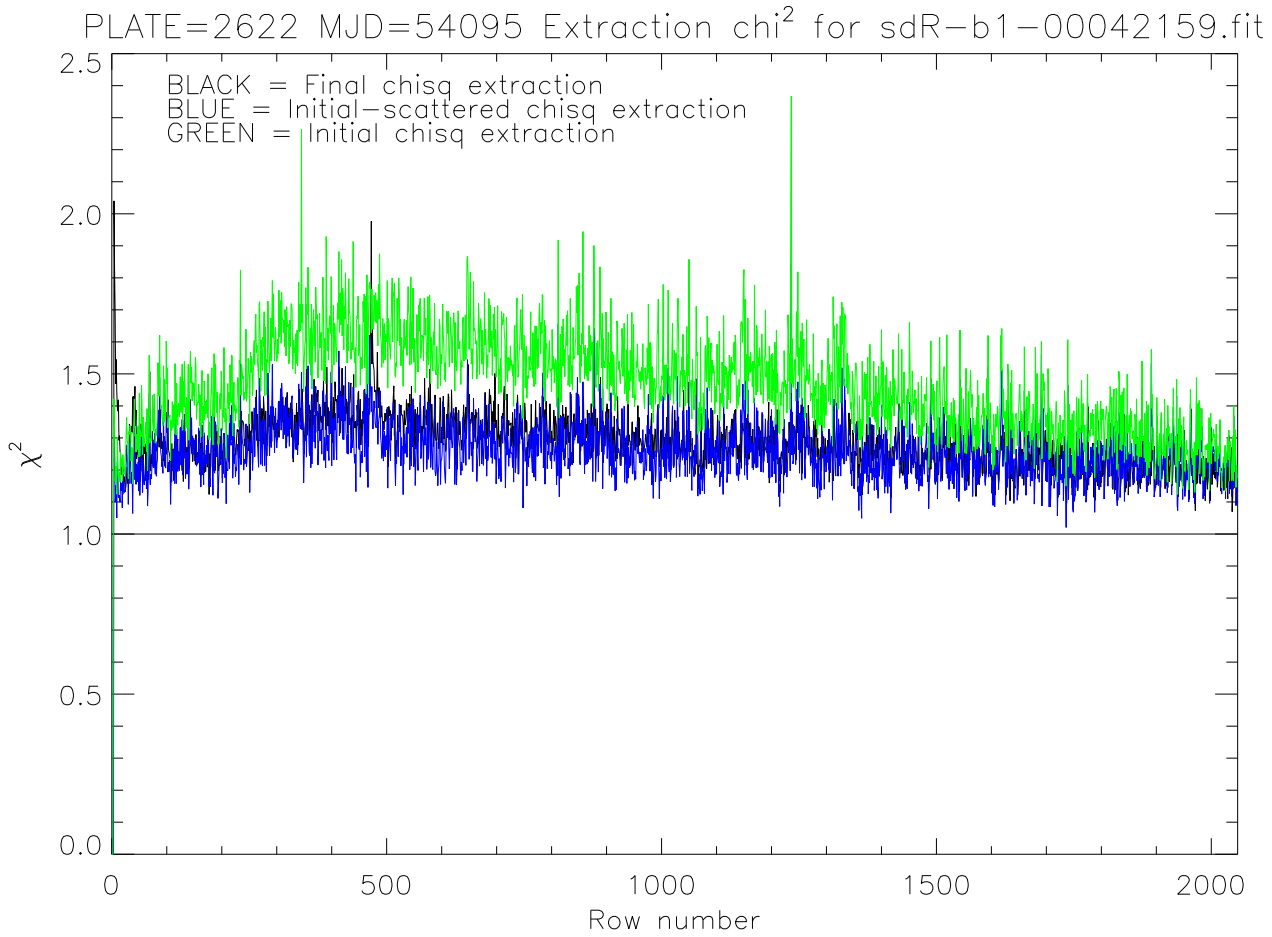

PLATE=2622 MJD=54095 Fiber-Flats for sdR-b1-00042157.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.166
Max value = 1.201
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 04:00:41 2008

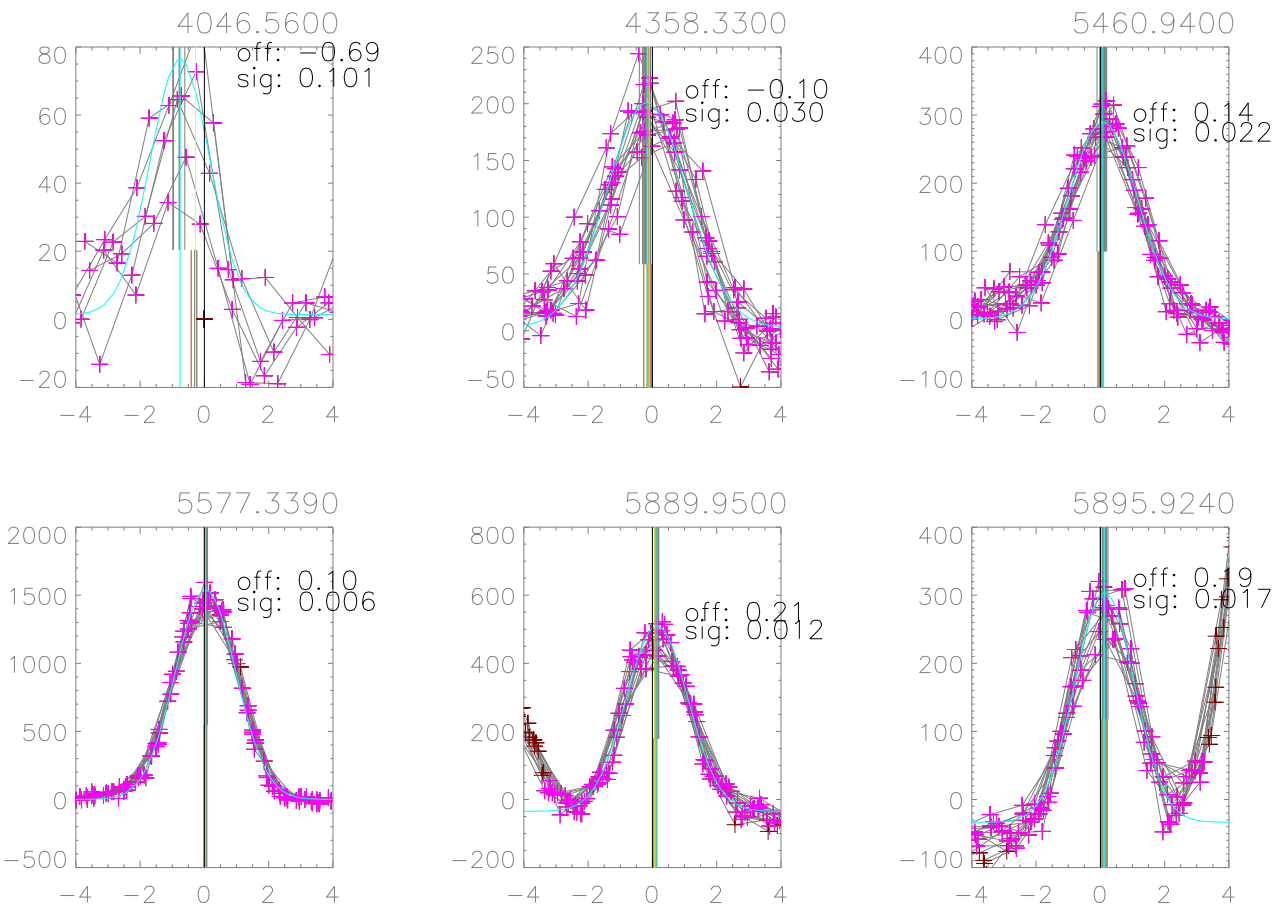

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR−b1−00042159.f
10.9
18.2
25.5
Y [pix]
X [pix]
0
500
1000
1500
2000

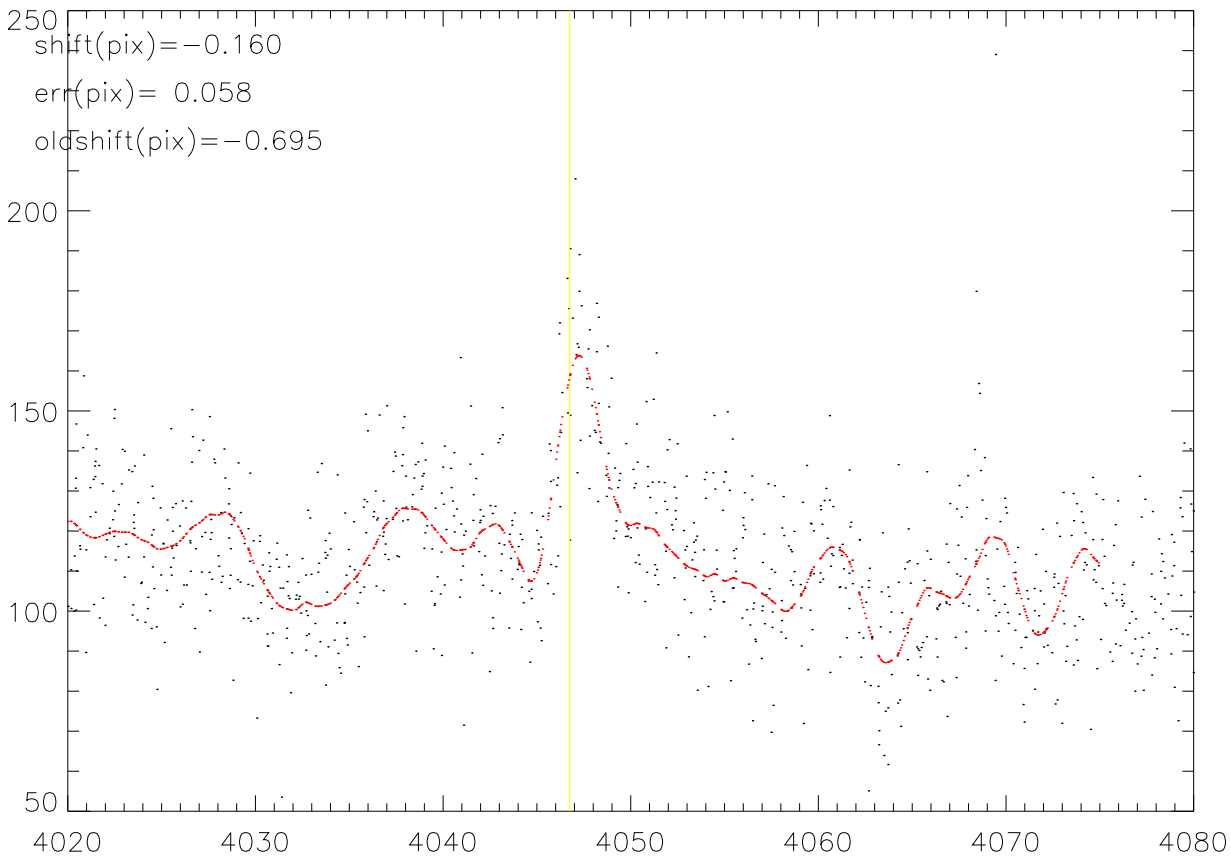

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-b1-00042159.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.593
Max value = 24.248
Mon Feb 11 04:01:25 2008

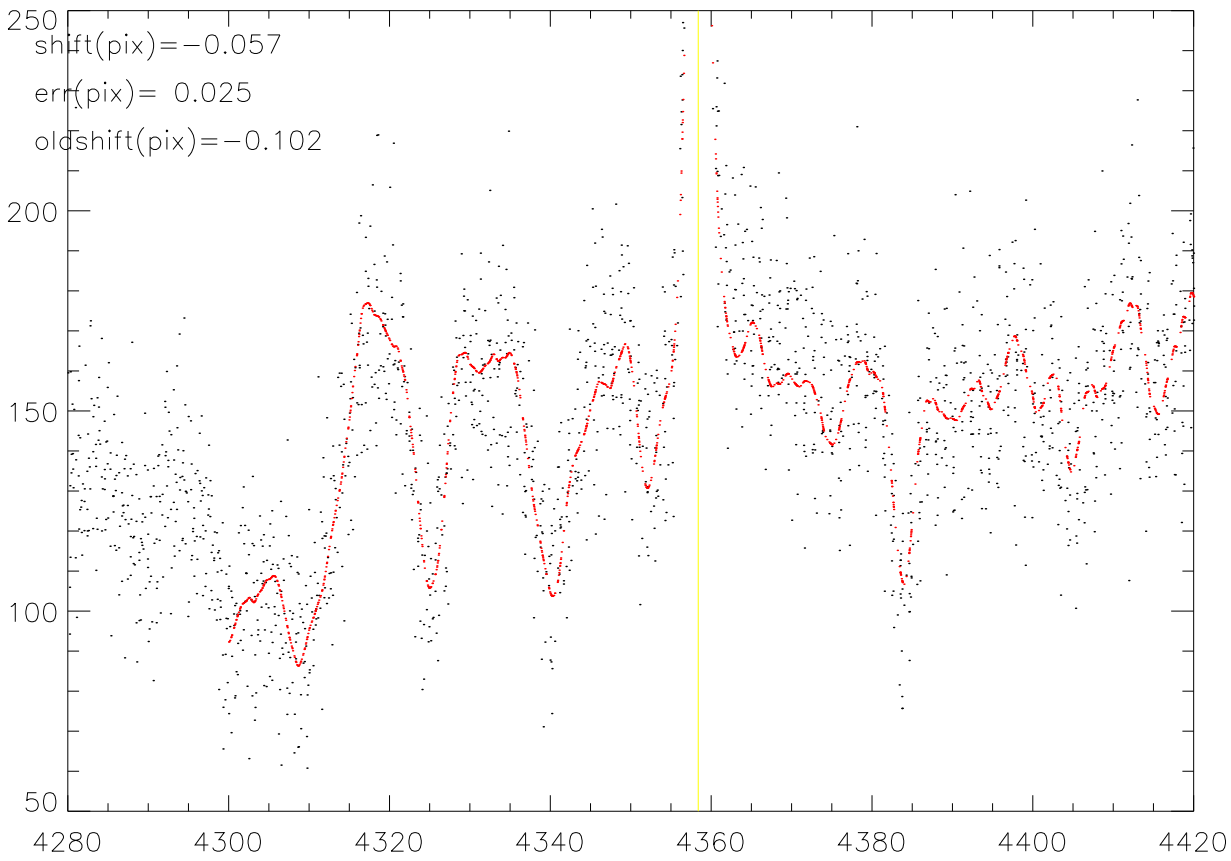

PLATE=2622 MJD=54095 Scattered Light on sdR-b1-00042159.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.82
11.36

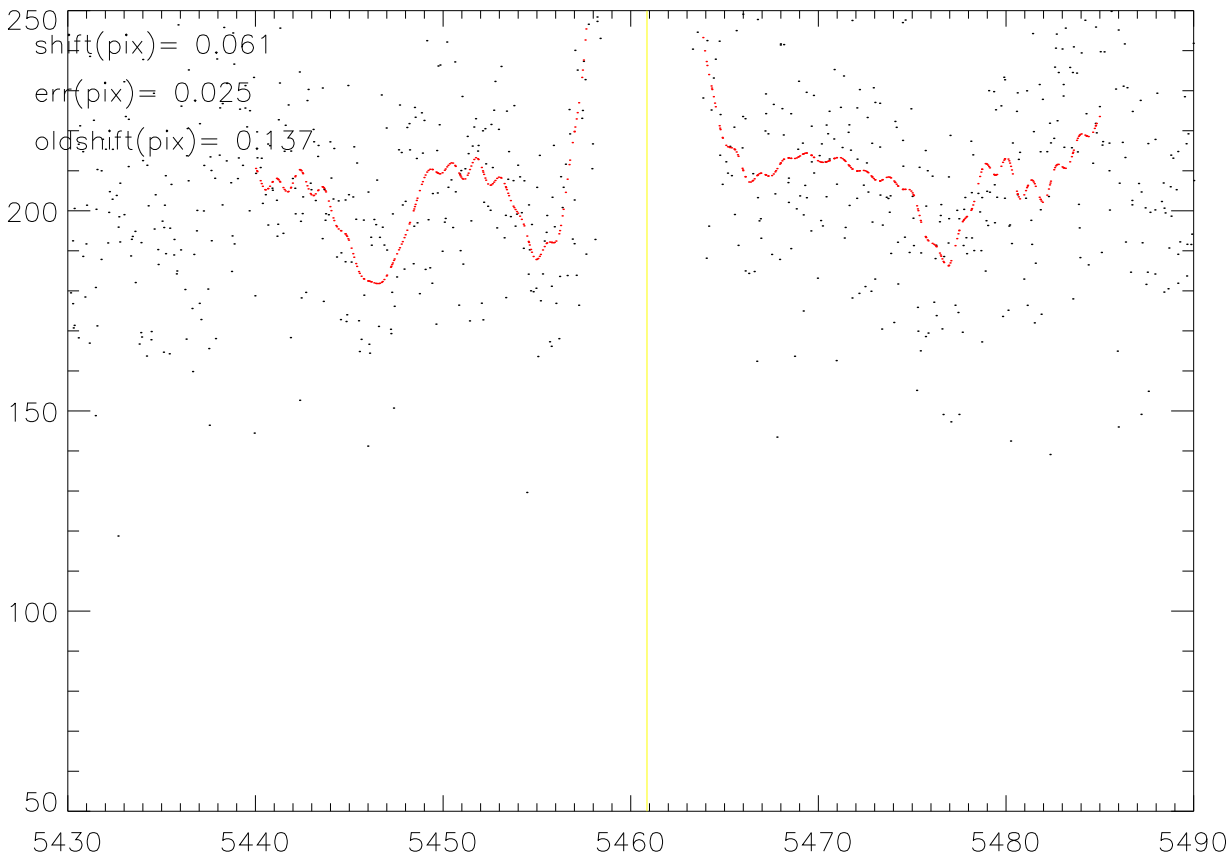

PLATE=2622 MJD=54095 Scattered Light on sdR-b1-00042159.fit
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 5.469
Max value = 11.213
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 04:03:46 2008

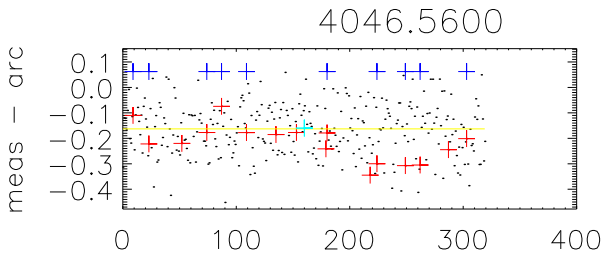

PLATE=2622 MJD=54095 Extraction chi^2 for sdR-b1-00042159.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

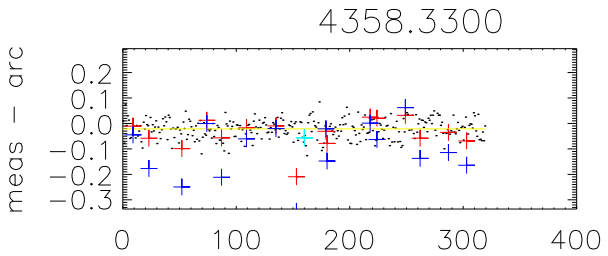

4046.5600
off: −0.69
sig: 0.101
4358.3300
off: −0.10
sig: 0.030
5460.9400
off: 0.14
sig: 0.022
5577.3390
off: 0.10
sig: 0.006
5889.9500
off: 0.21
sig: 0.012
5895.9240
off: 0.19
sig: 0.017

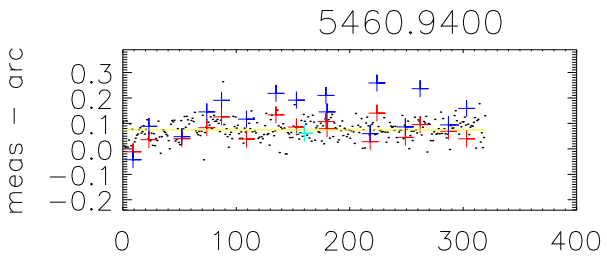

shift(pix)=−0.160
err(pix)= 0.058
oldshift(pix)=−0.695
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

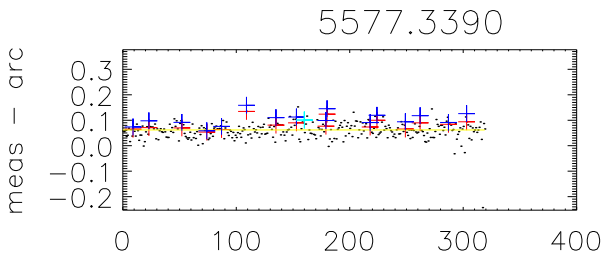

shift(pix)=−0.057
err(pix)= 0.025
oldshift(pix)=−0.102
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

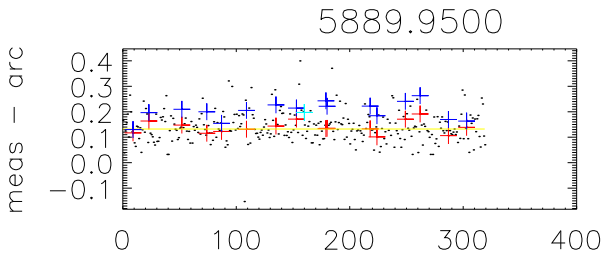

shift(pix)= 0.061
err(pix)= 0.025
oldshift(pix)= 0.137
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

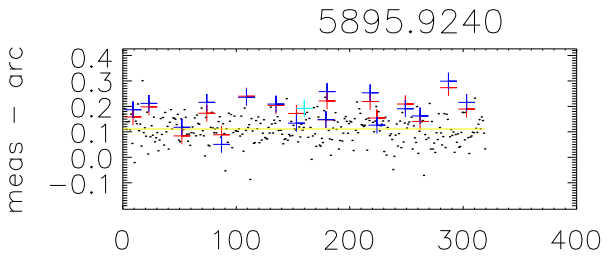

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

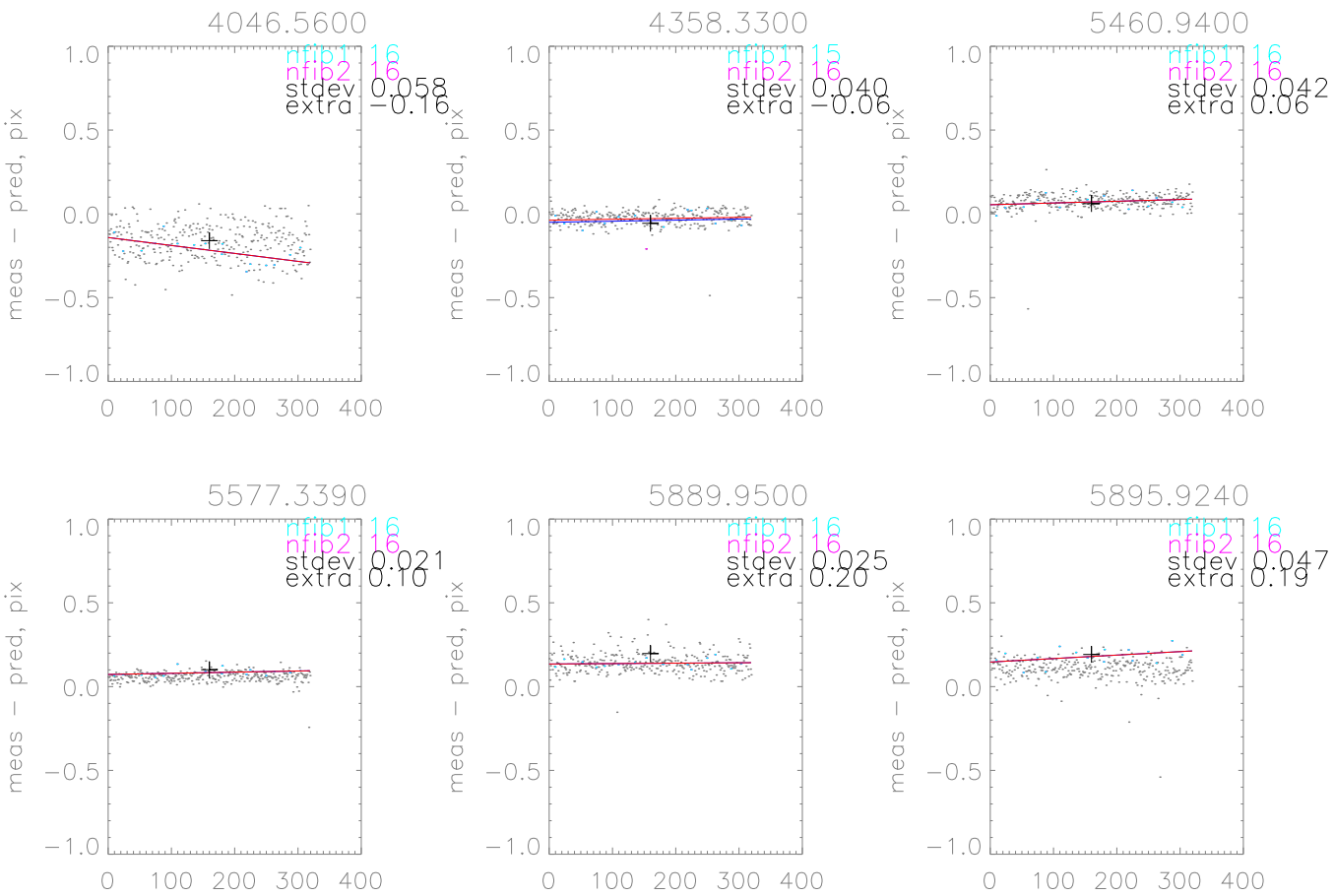

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

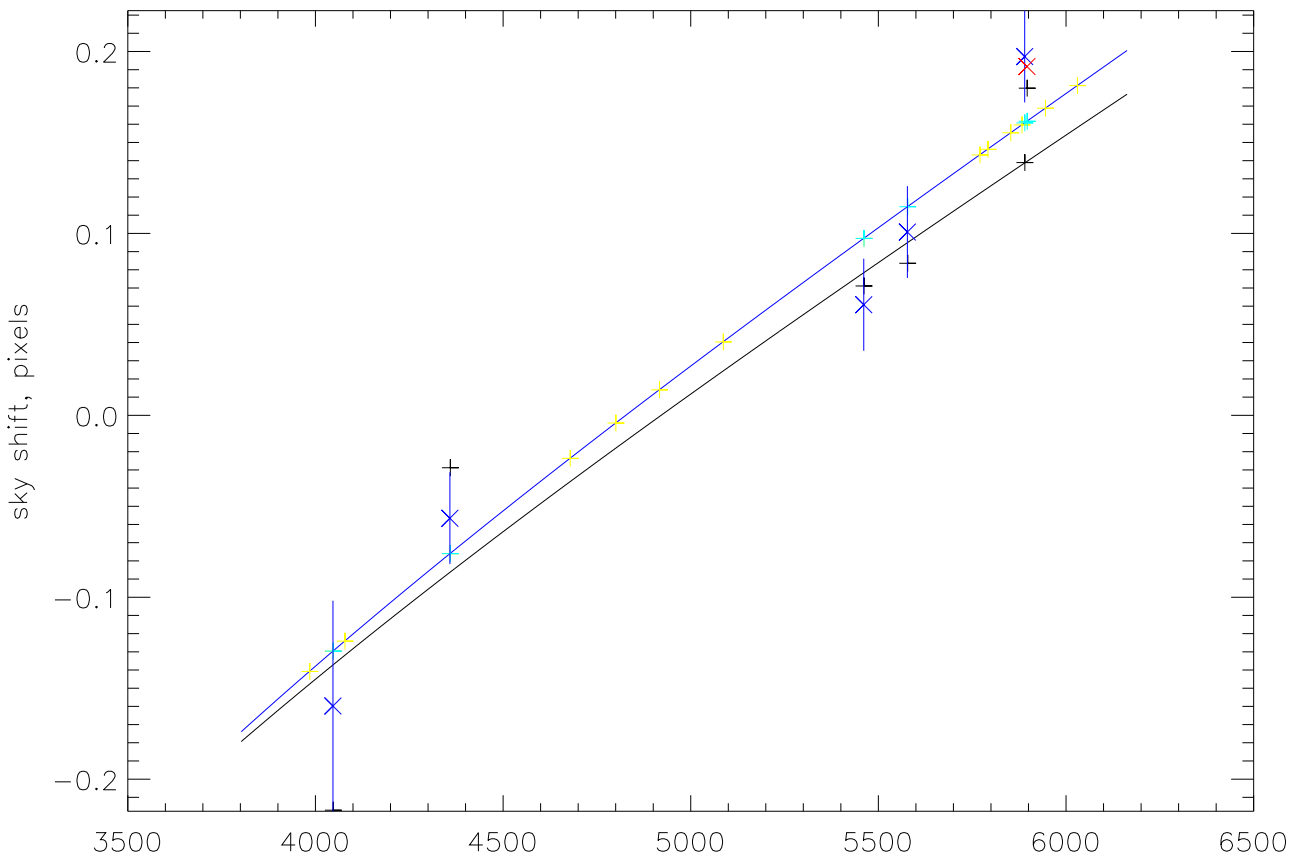

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

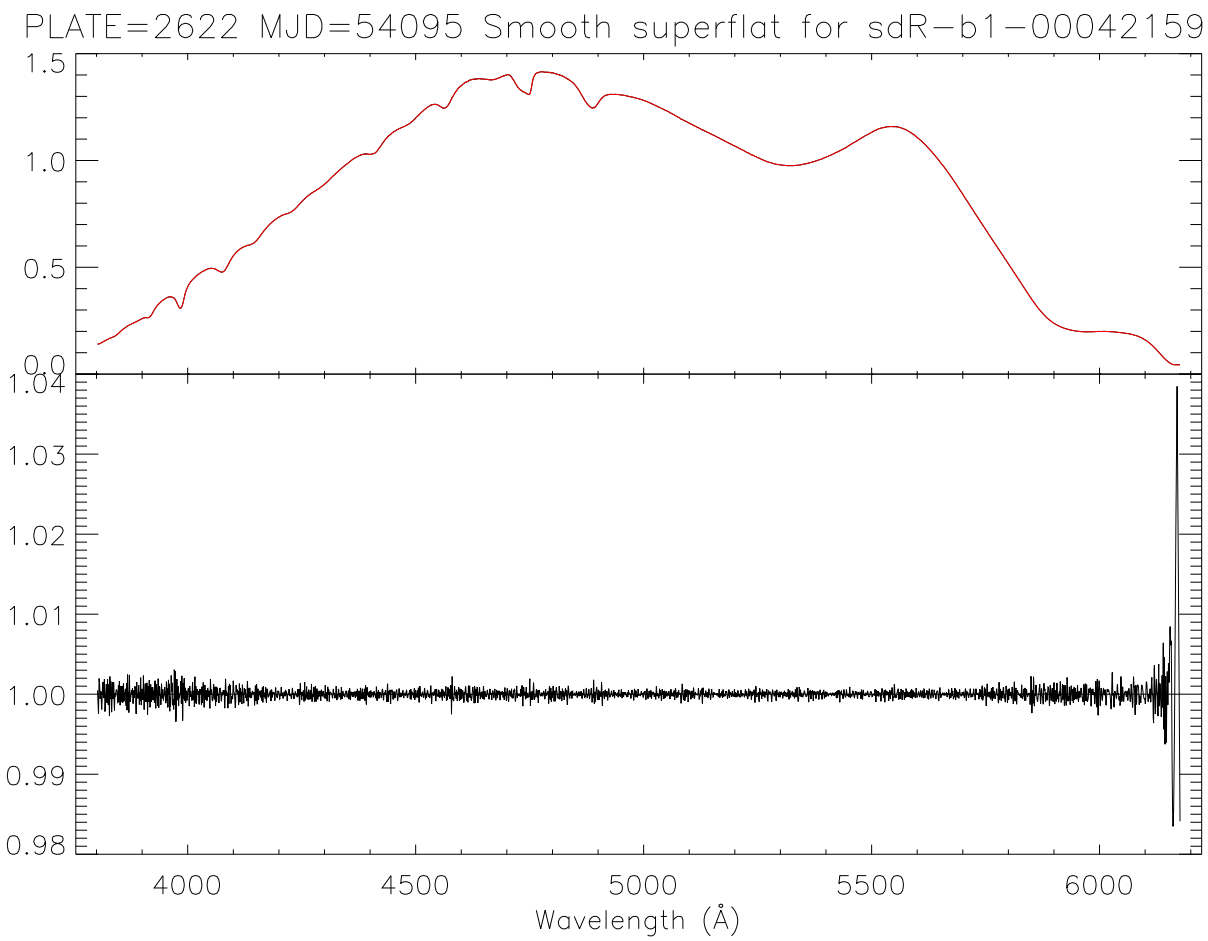

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

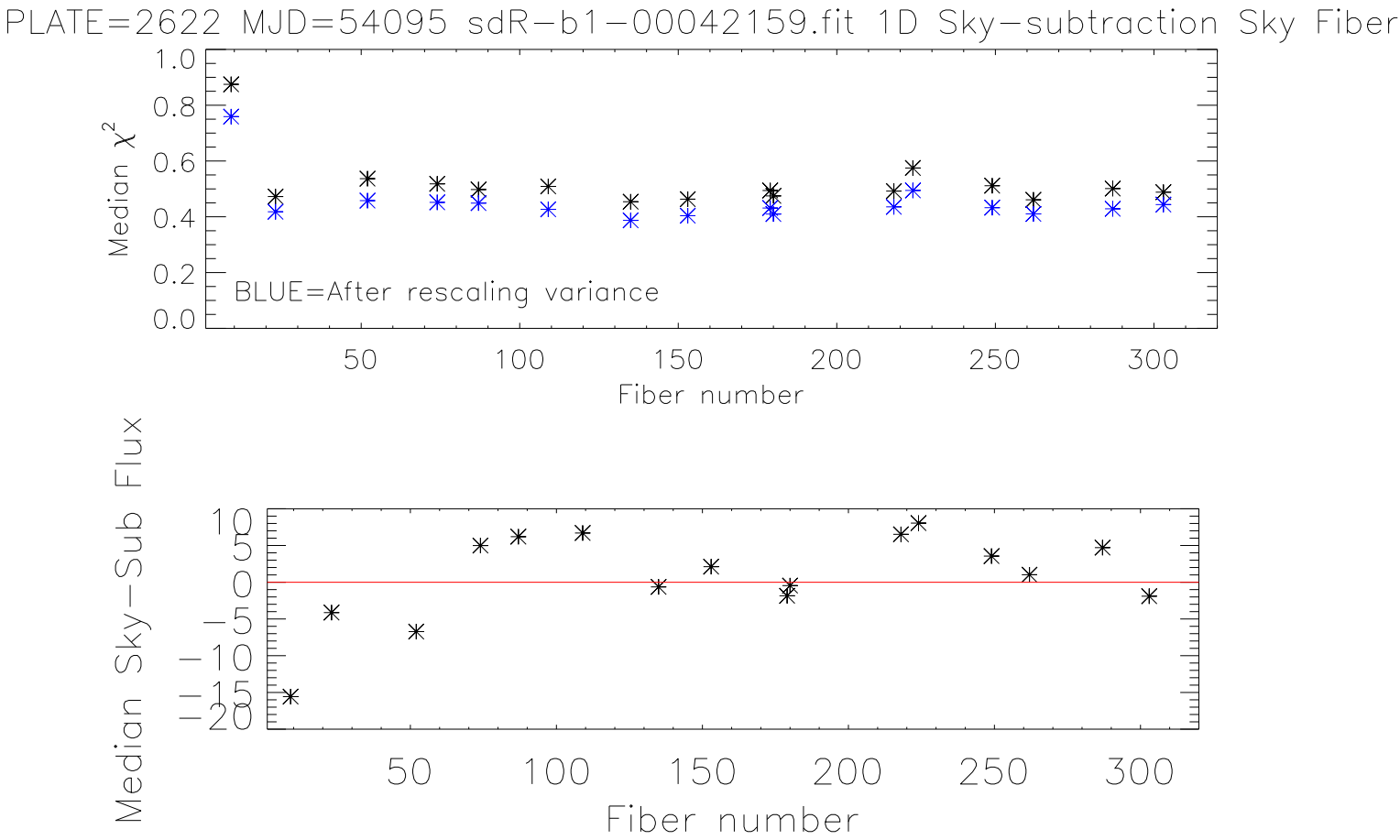

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

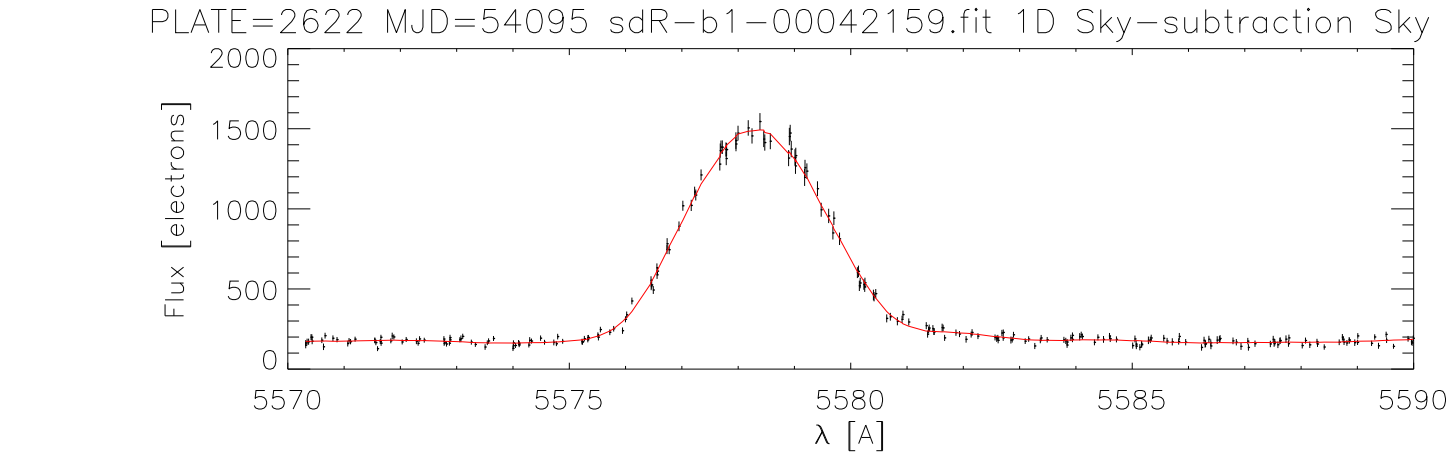

4046.5600
nfib1 16
nfib2 16
stdev 0.058
extra −0.16
4358.3300
nfib1 15
nfib2 16
stdev 0.040
extra −0.06
5460.9400
nfib1 16
nfib2 16
stdev 0.042
extra 0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra 0.20
5895.9240
nfib1 16
nfib2 16
stdev 0.047
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

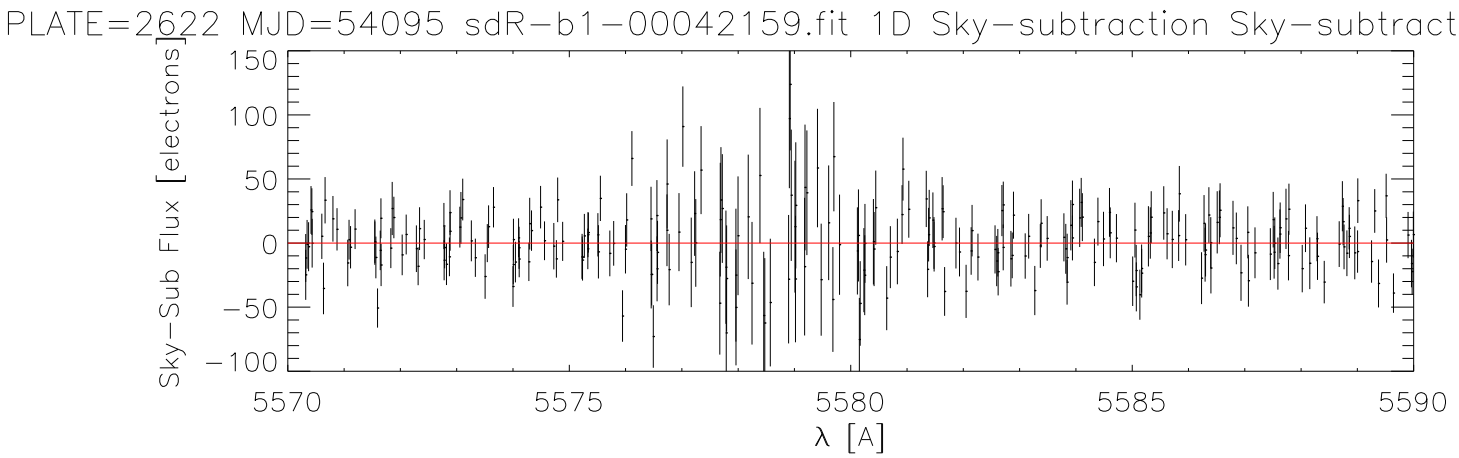

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

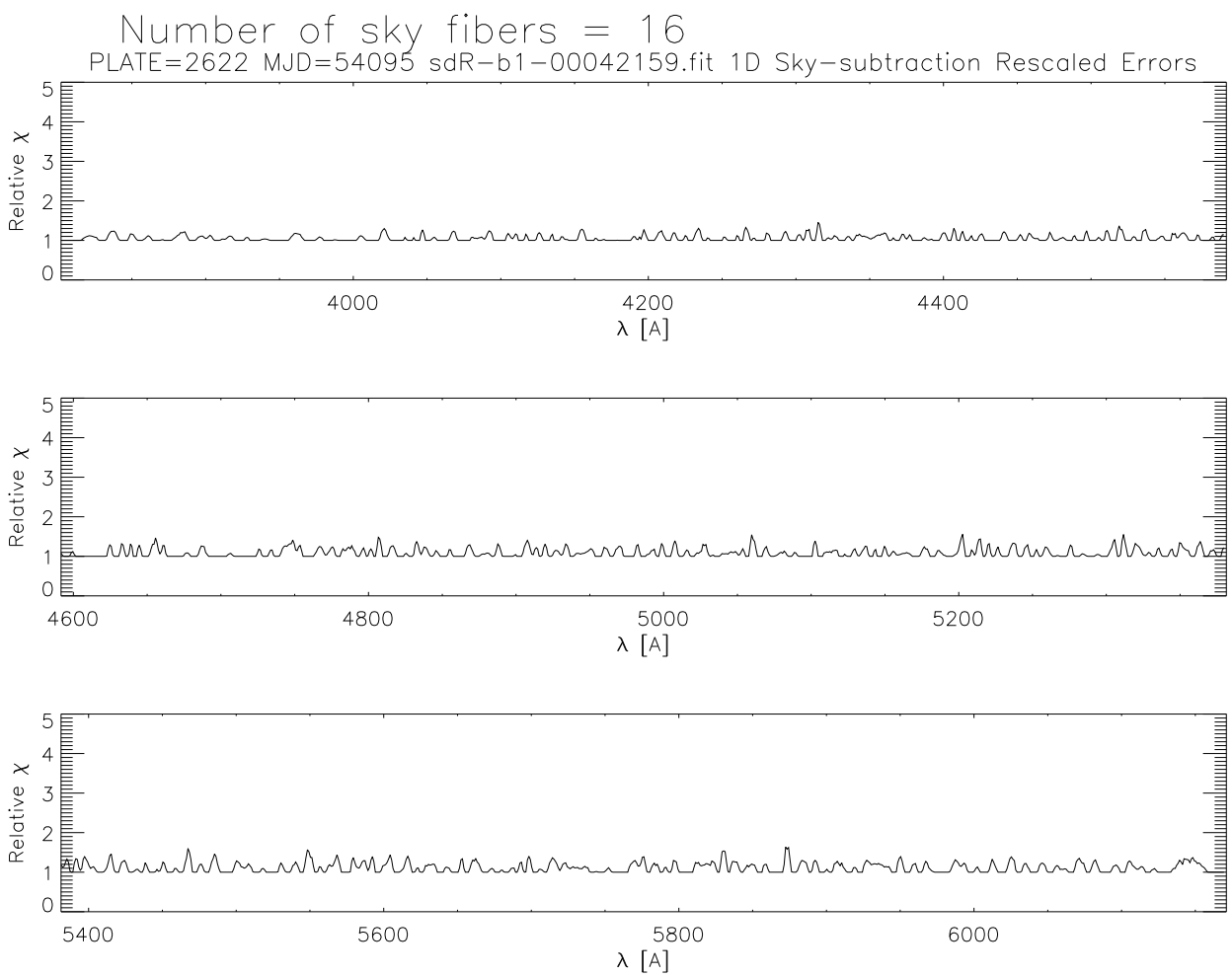
es= −0.0001

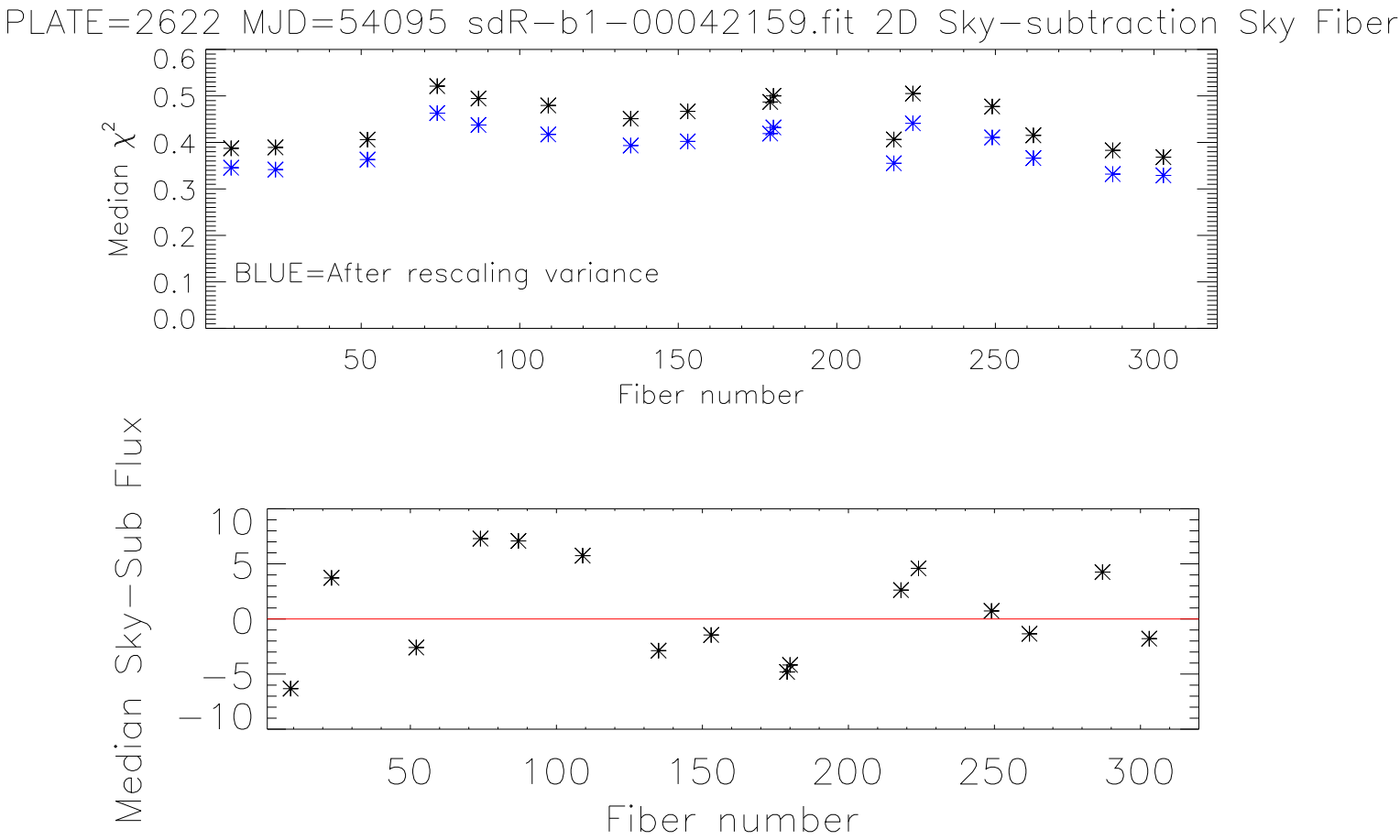

PLATE=2622 MJD=54095 Smooth superflat for sdR−b1−00042159.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

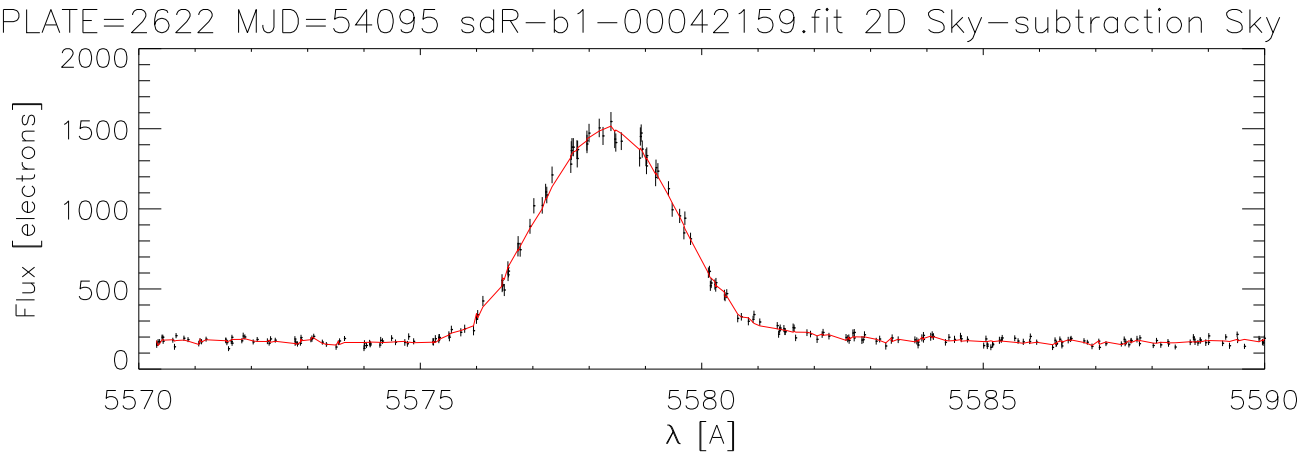

PLATE=2622 MJD=54095 sdR-b1-00042159.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

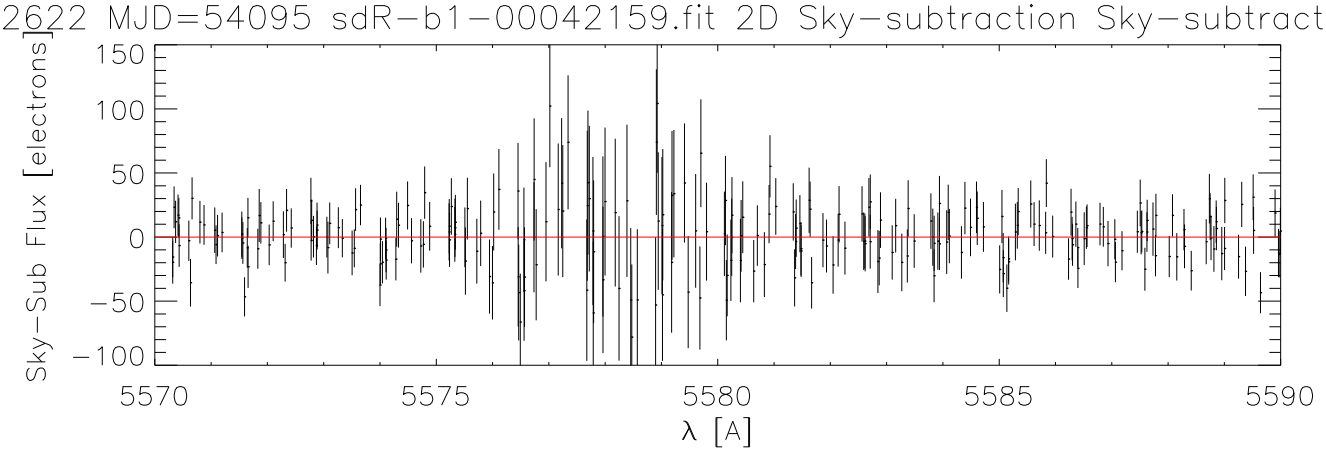

PLATE=2622 MJD=54095 sdR-b1-00042159.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

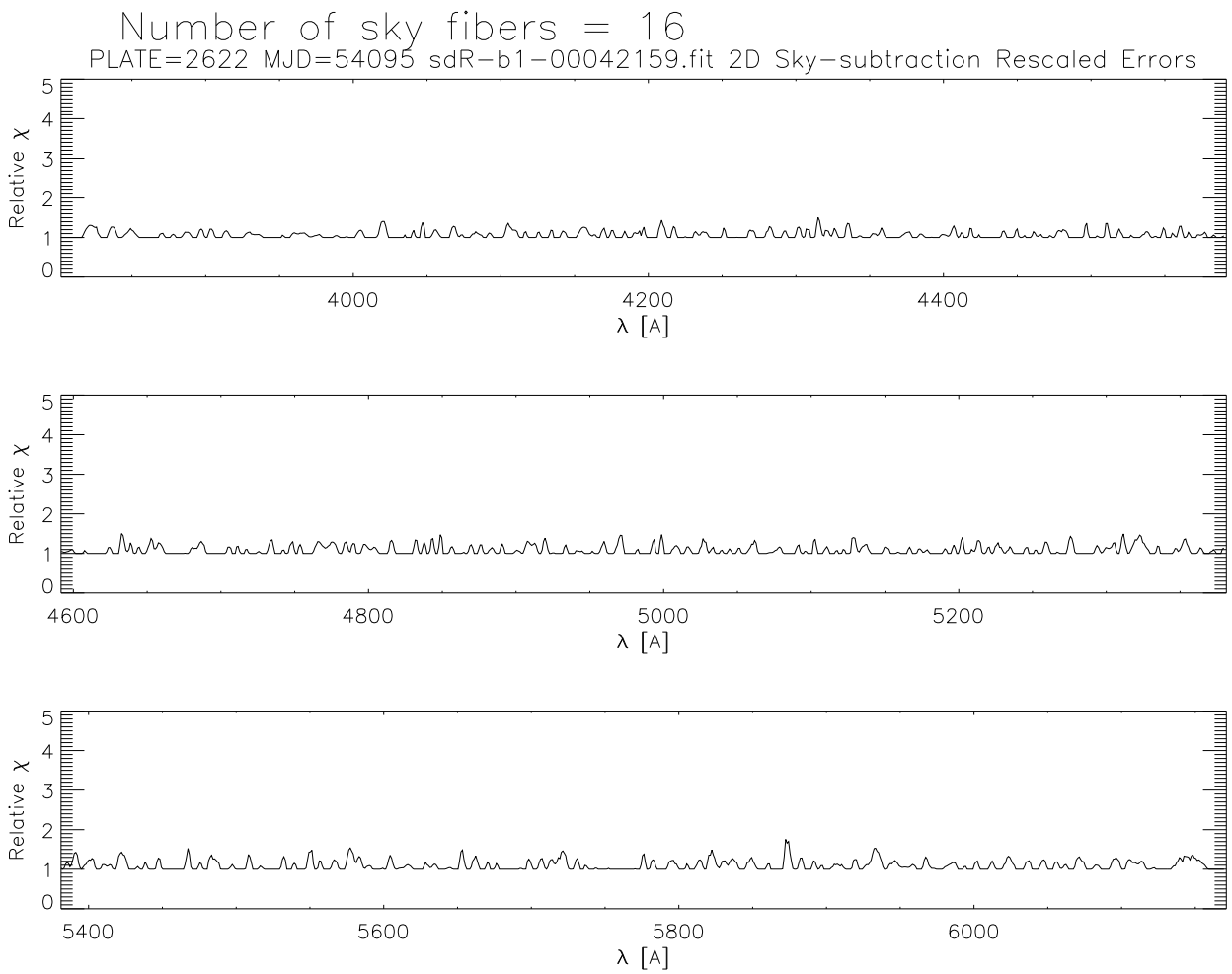

PLATE=2622 MJD=54095 sdR-b1-00042159.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

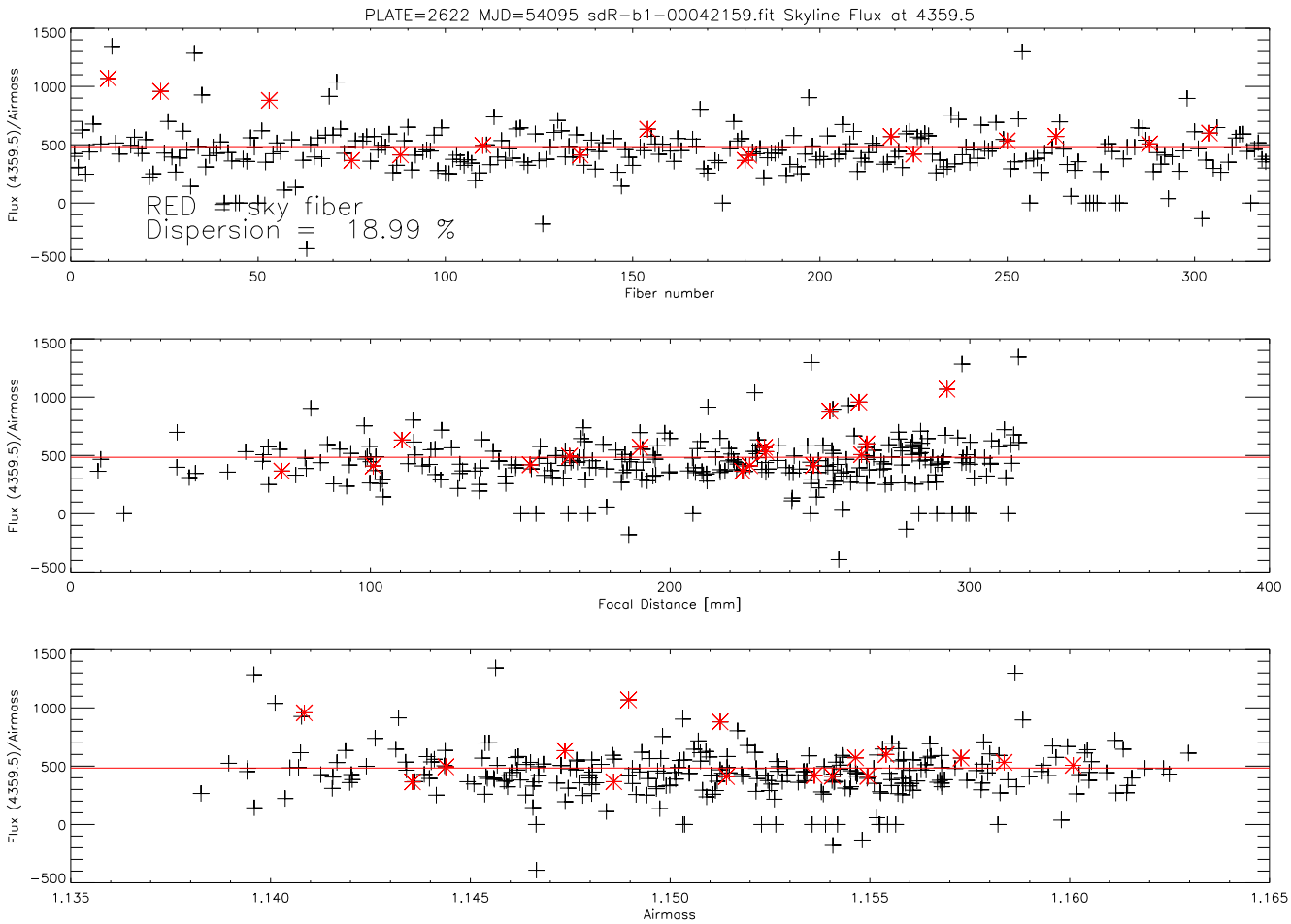

Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-b1-00042159.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

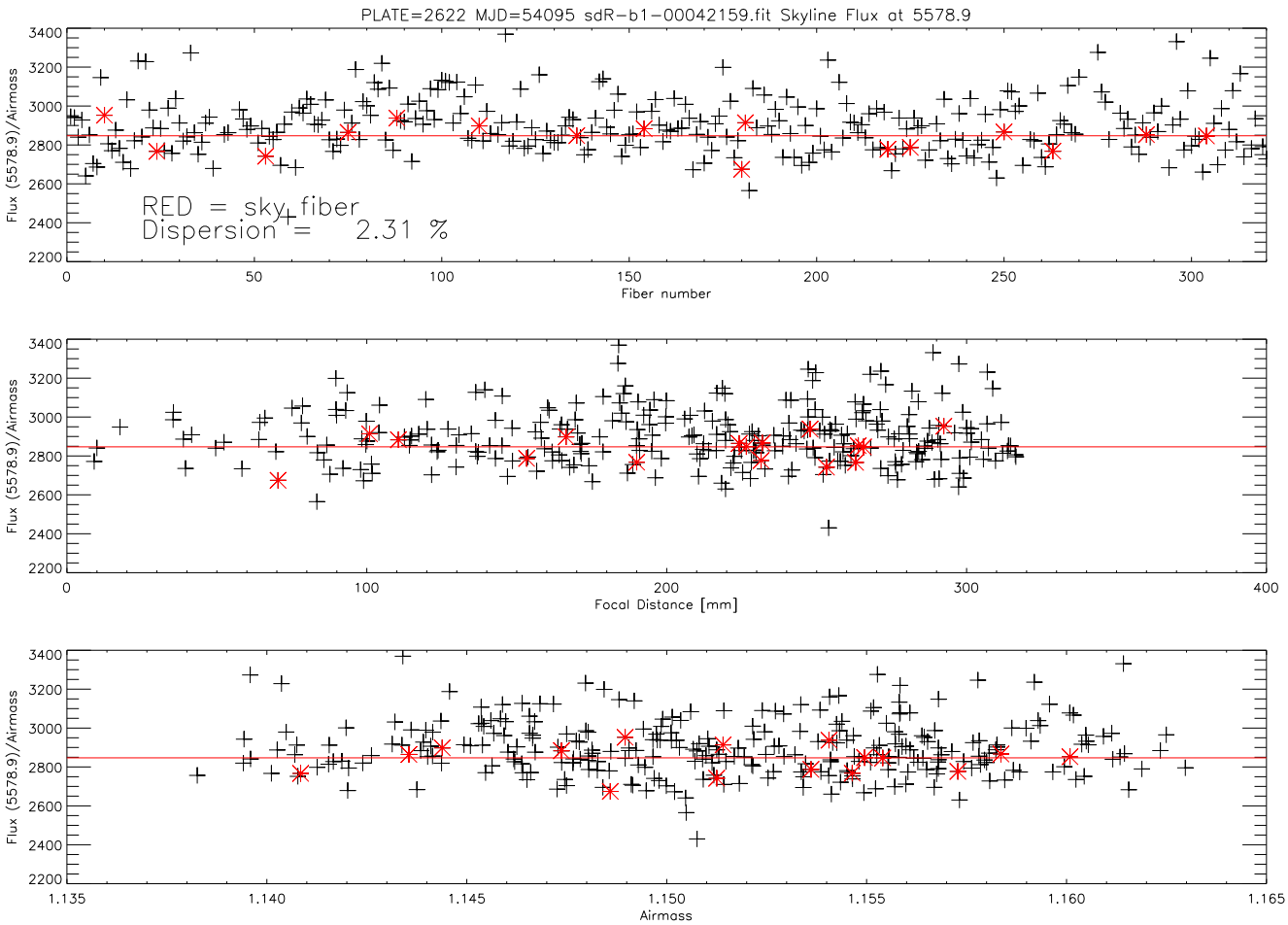

PLATE=2622 MJD=54095 sdR-b1-00042159.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

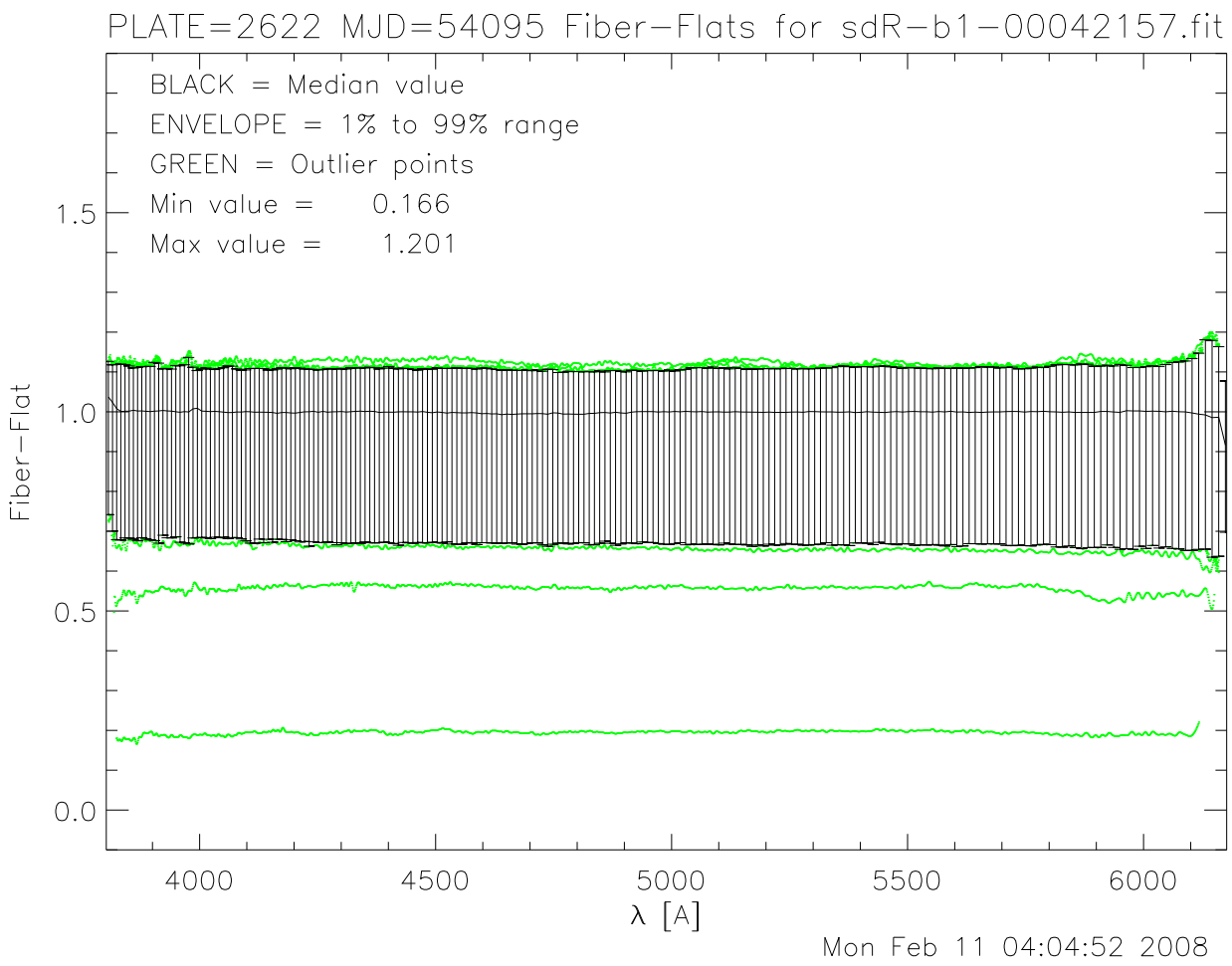

PLATE=2622 MJD=54095 sdR-b1-00042159.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

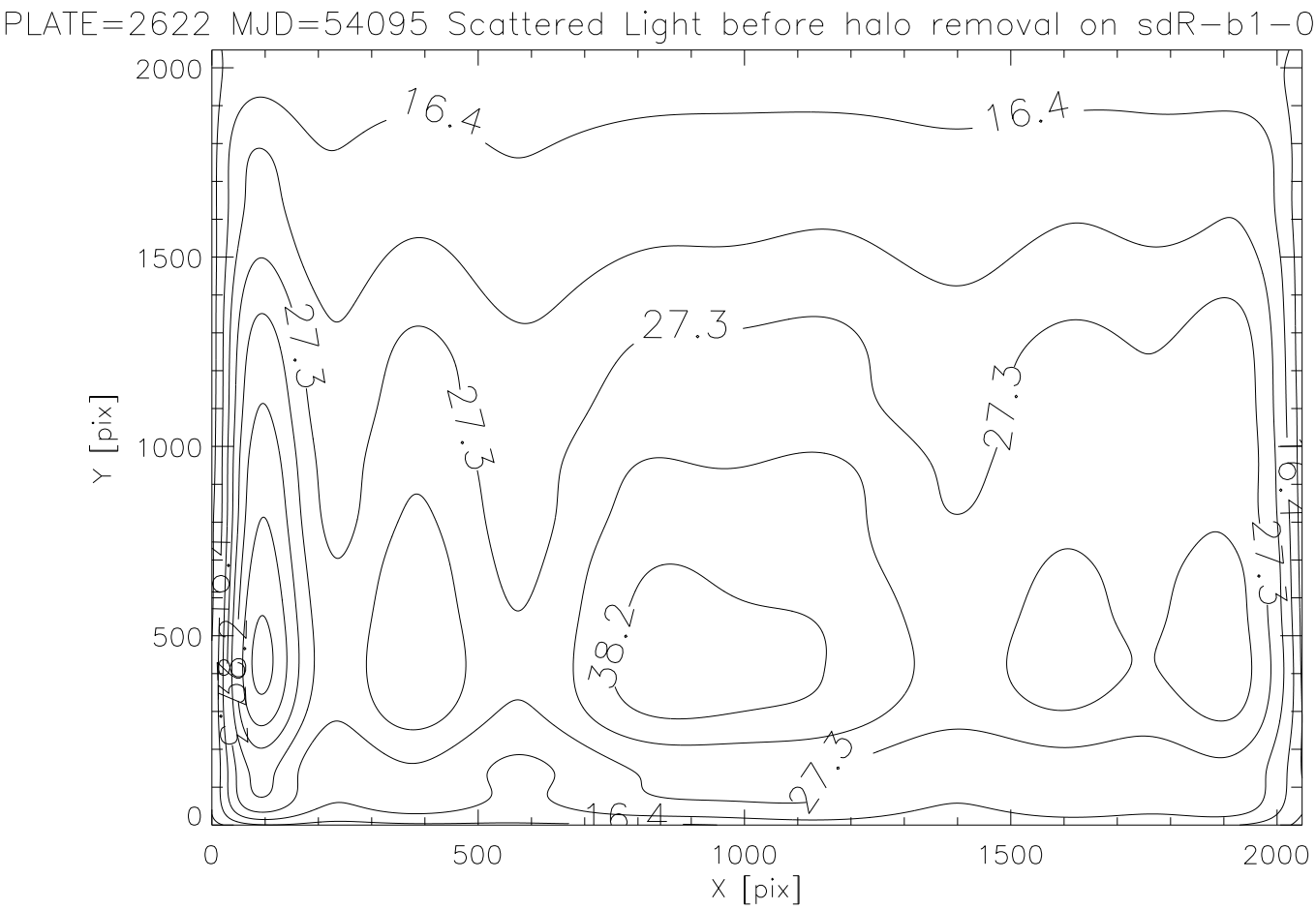

PLATE=2622 MJD=54095 sdR-b1-00042159.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

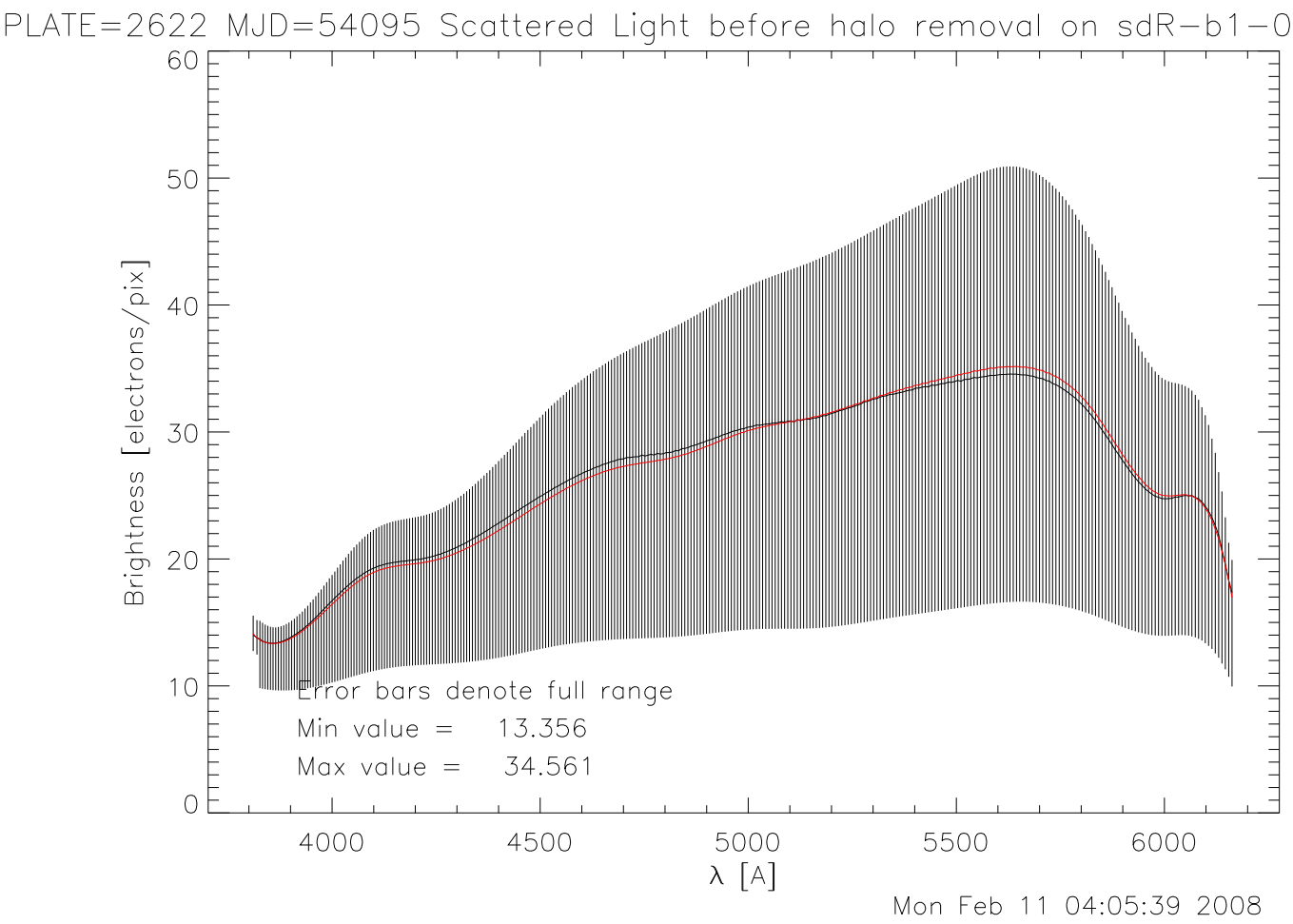

Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-b1-00042159.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

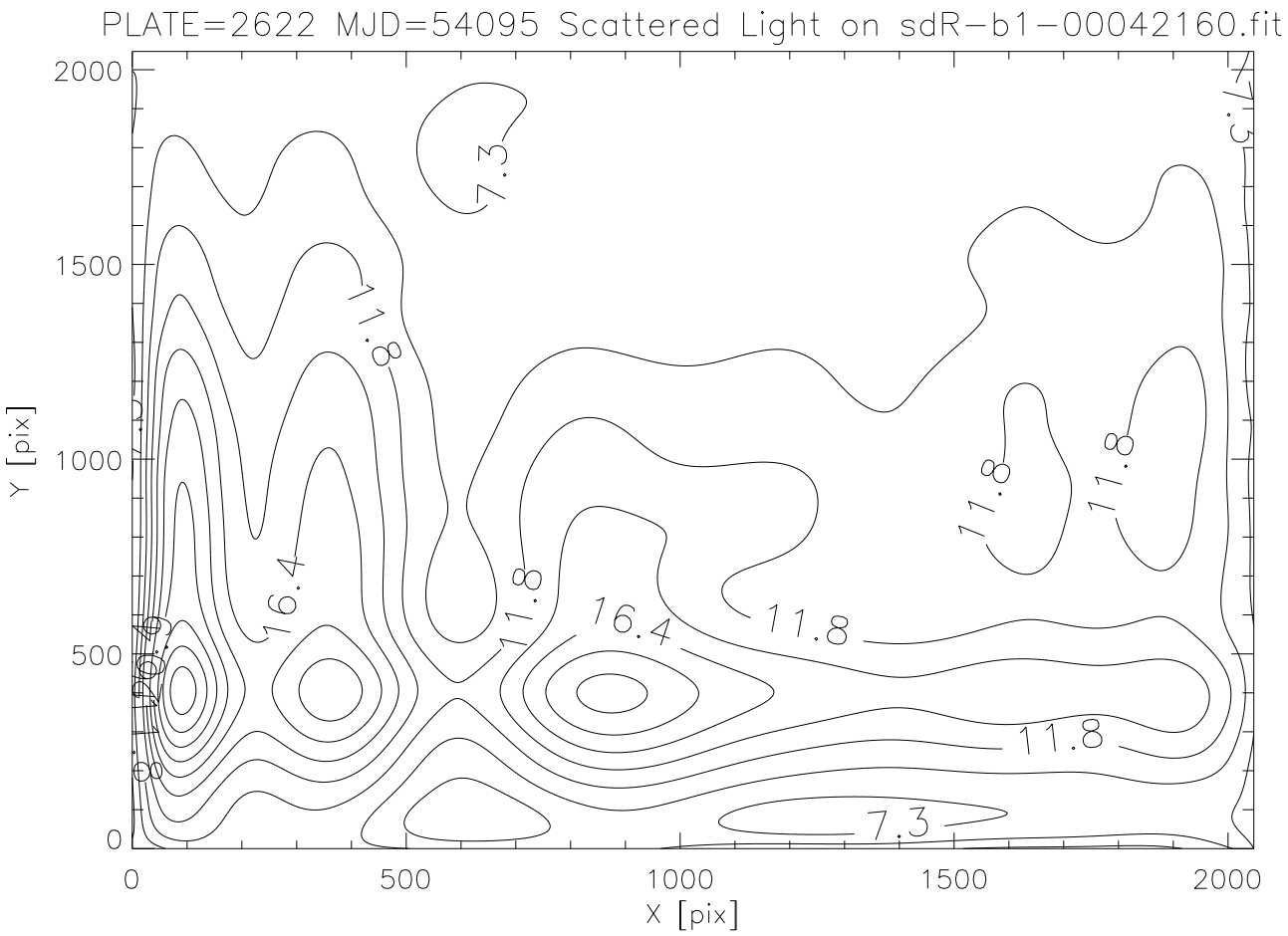

PLATE=2622 MJD=54095 sdR-b1-00042159.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 18.99 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

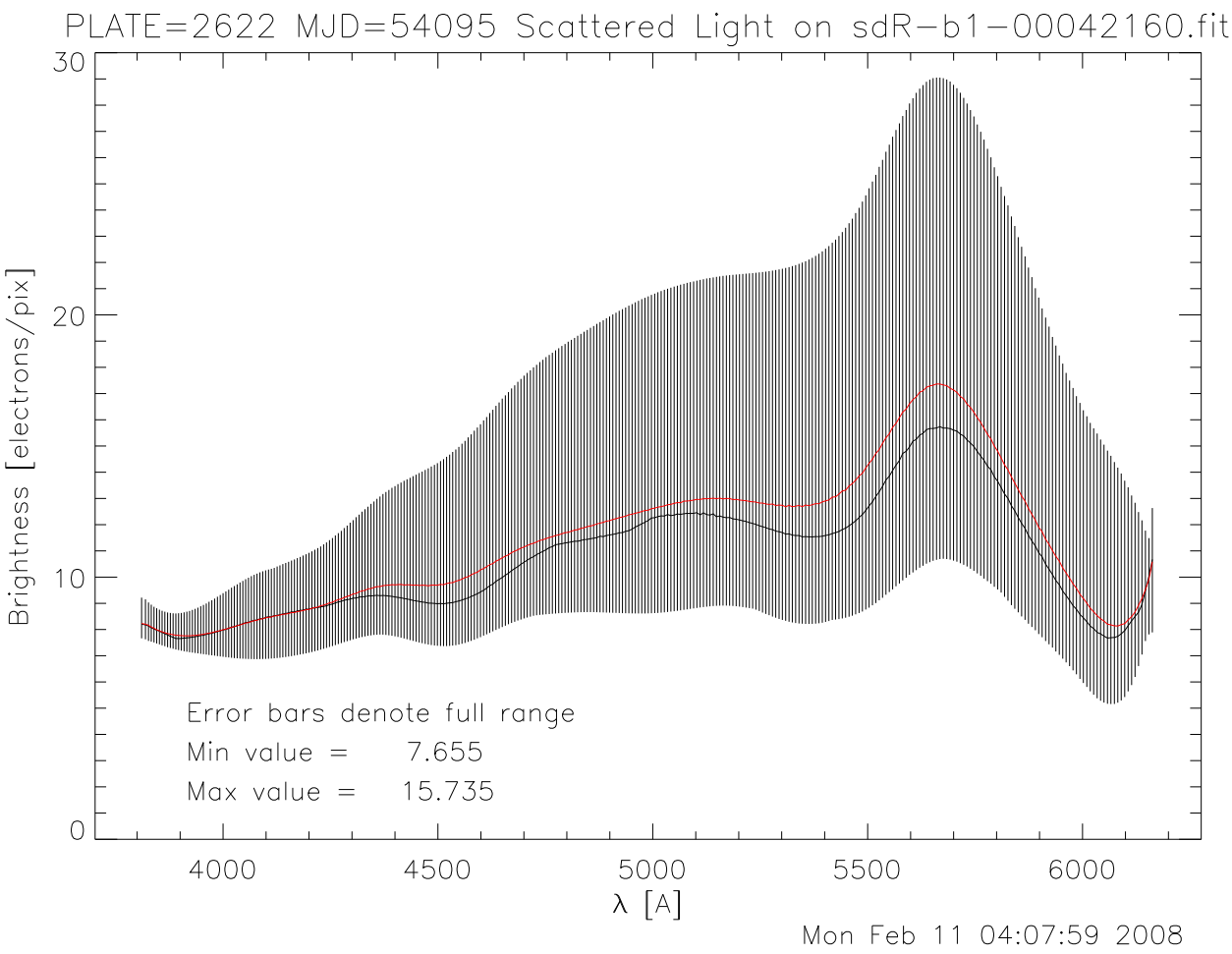

PLATE=2622 MJD=54095 sdR-b1-00042159.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.31 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

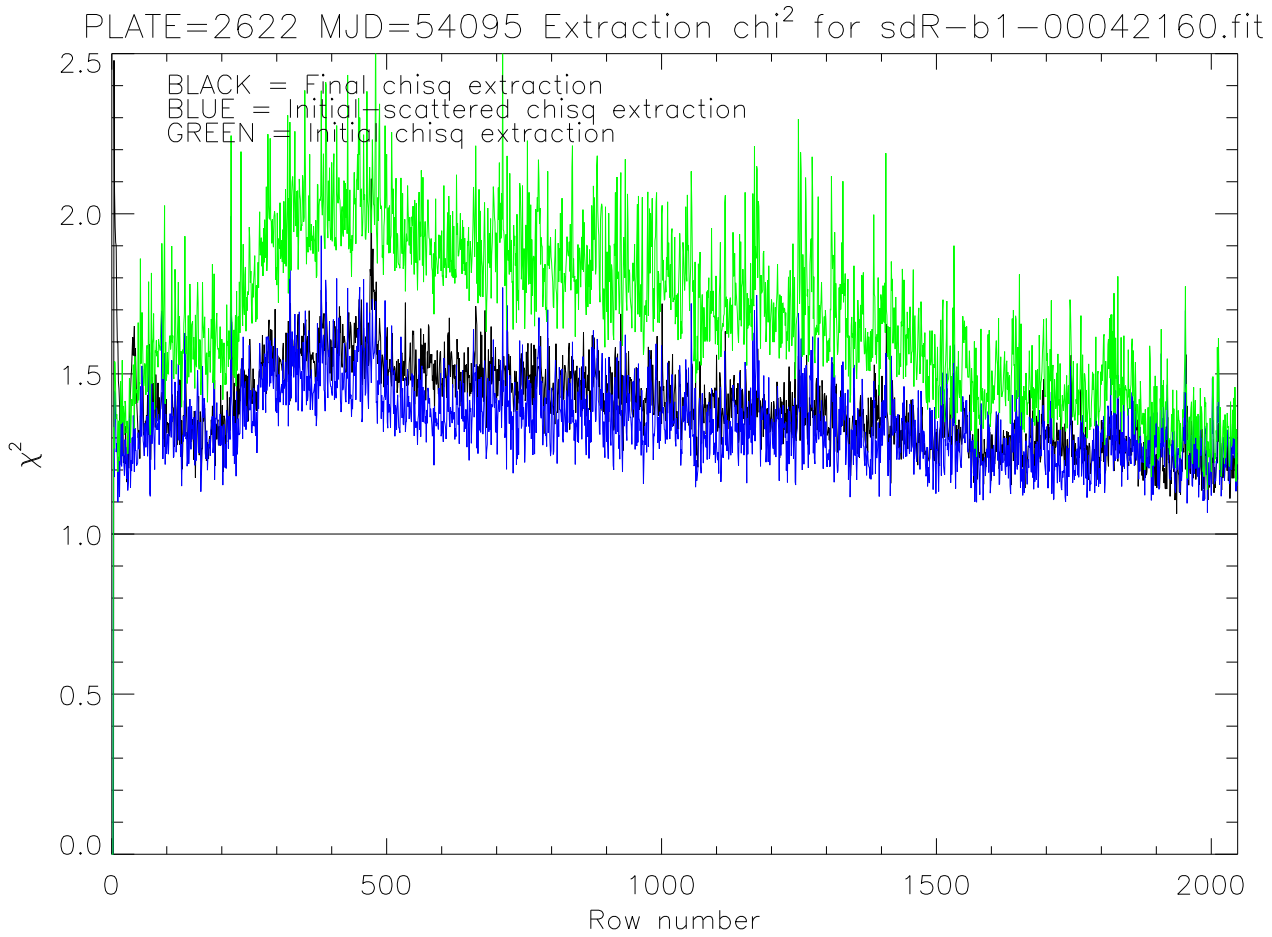

PLATE=2622 MJD=54095 Fiber-Flats for sdR-b1-00042157.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.166
Max value = 1.201
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 04:04:52 2008

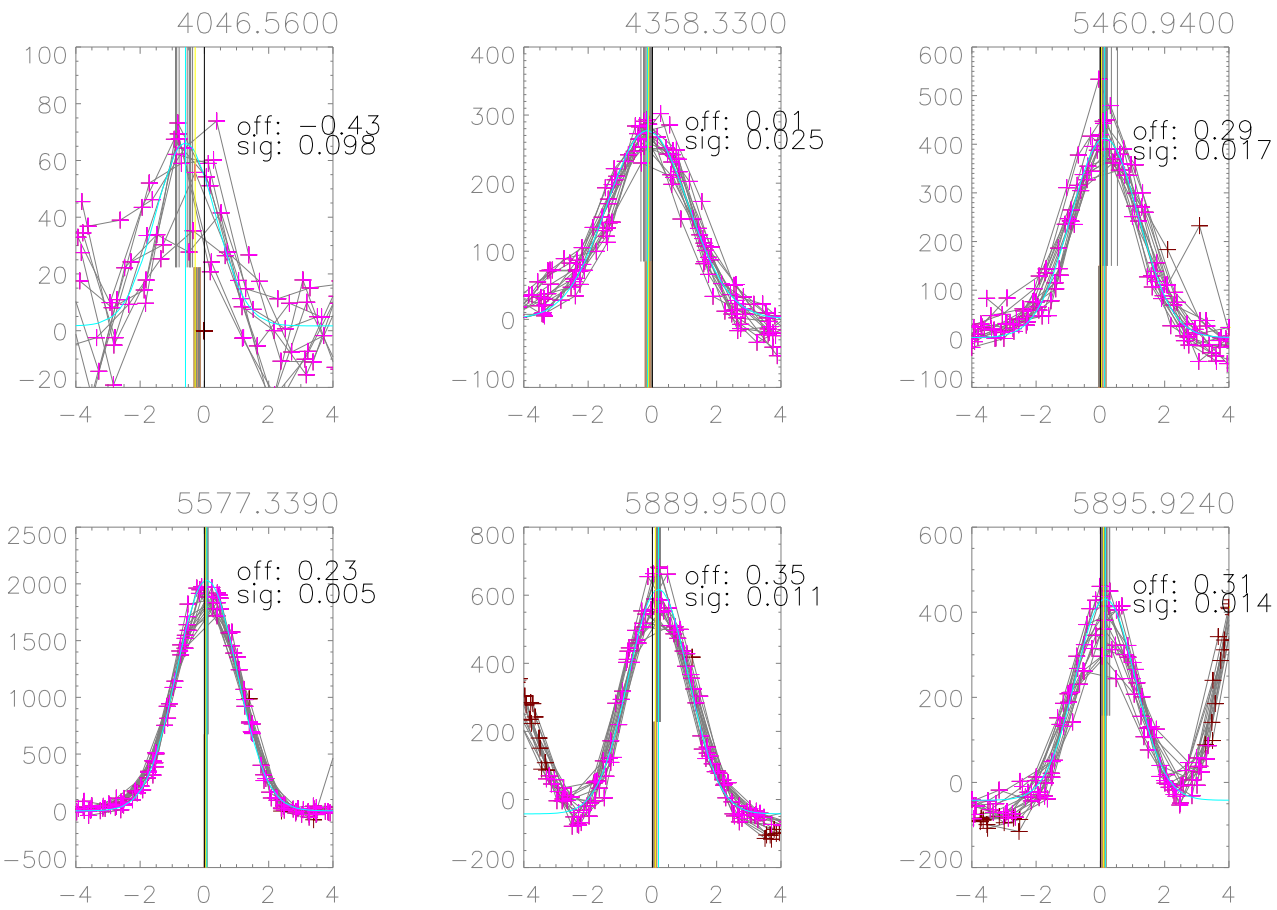

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-b1-00042160.f
16.4
16.4
27.3
27.3
27.3
27.3
38.2
38.2
27.3
16.4
16.4
27.3
Y [pix]
X [pix]
0
500
1000
1500
2000

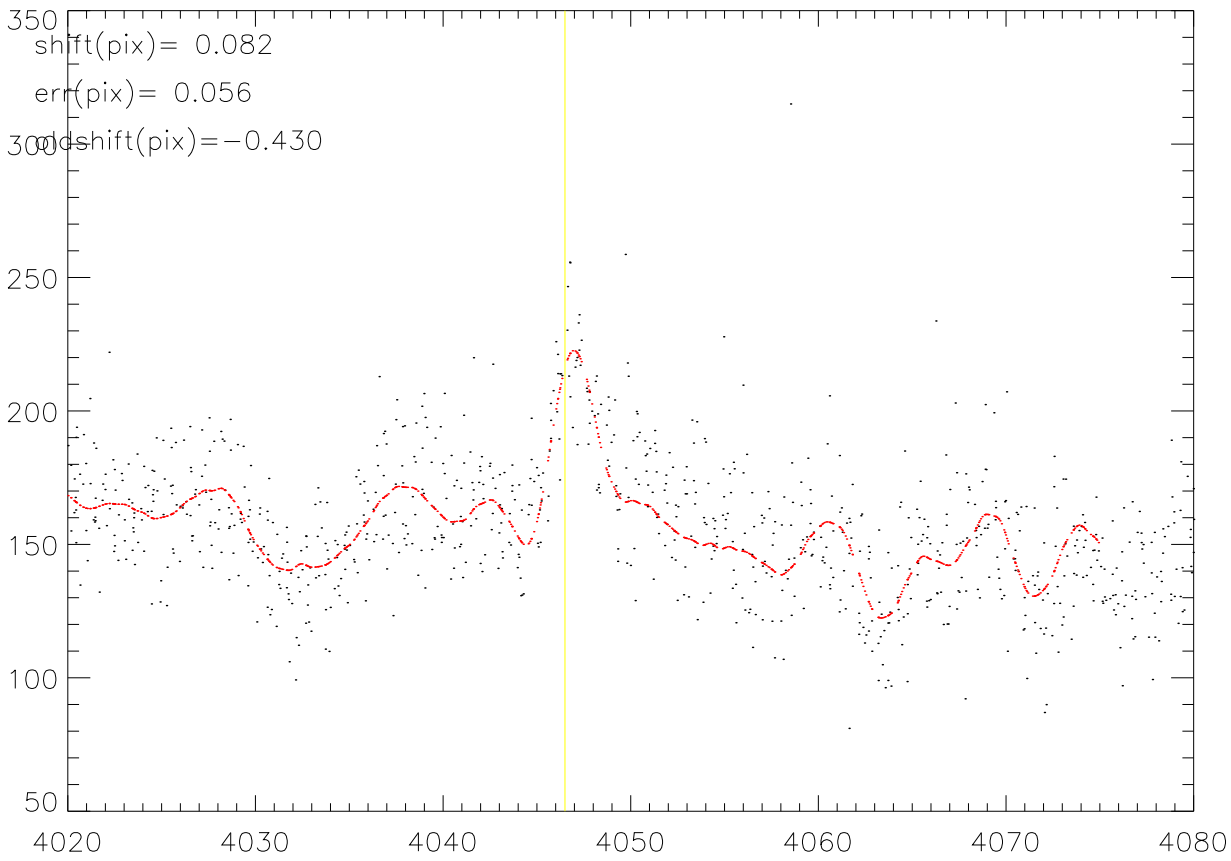

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-b1-00042160.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 13.356
Max value = 34.561
Mon Feb 11 04:05:39 2008

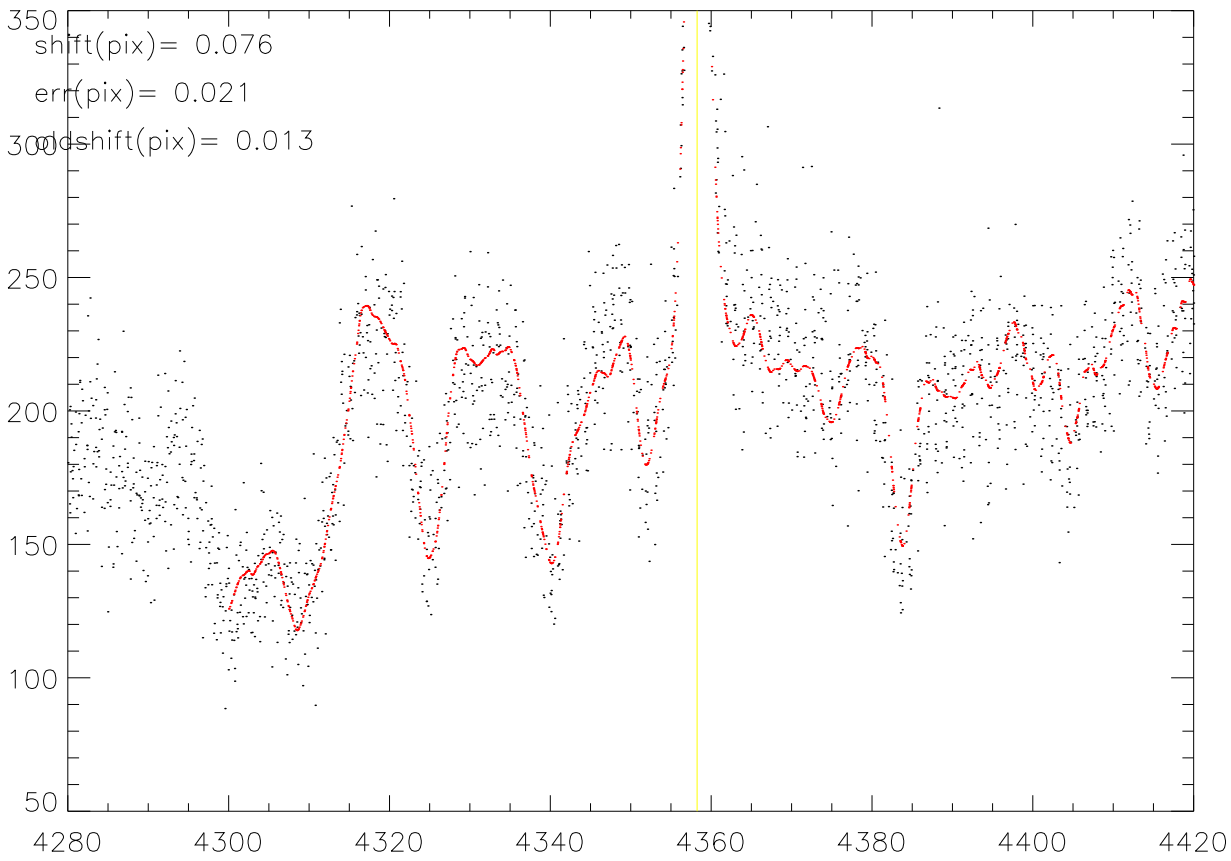

PLATE=2622 MJD=54095 Scattered Light on sdR-b1-00042160.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.3
11.8
16.4
11.8
16.4
11.8
11.8
11.8
11.8
7.3
7.3

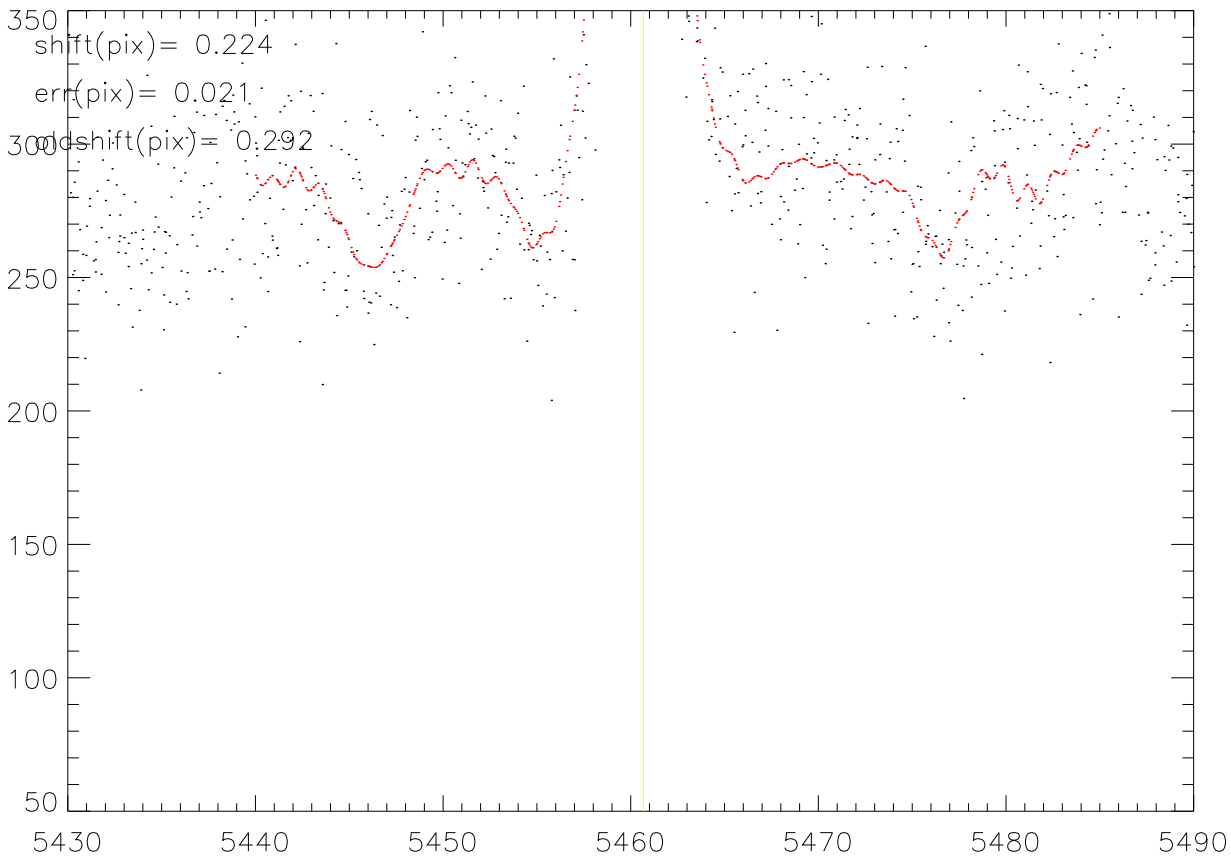

PLATE=2622 MJD=54095 Scattered Light on sdR-b1-00042160.fit
Brightness [electrons/pix]
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.655
Max value = 15.735
Mon Feb 11 04:07:59 2008

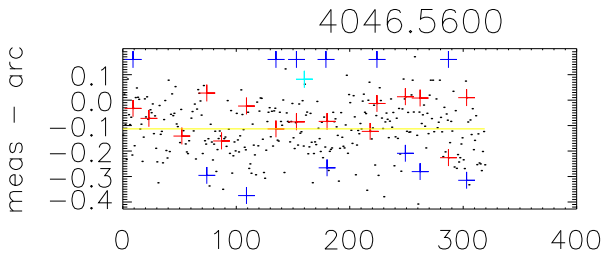

PLATE=2622 MJD=54095 Extraction chi^2 for sdR-b1-00042160.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

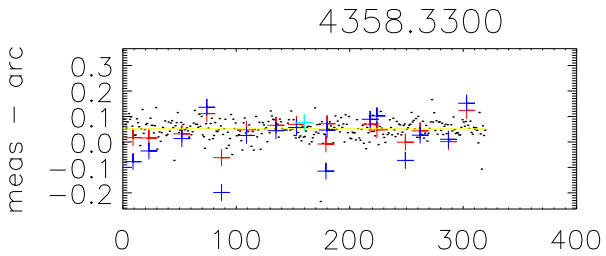

4046.5600
off: −0.43
sig: 0.098
4358.3300
off: 0.01
sig: 0.025
5460.9400
off: 0.29
sig: 0.017
5577.3390
off: 0.23
sig: 0.005
5889.9500
off: 0.35
sig: 0.011
5895.9240
off: 0.31
sig: 0.014

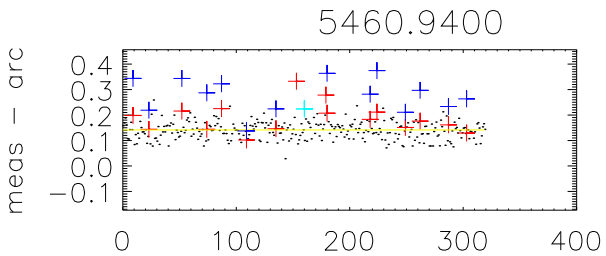

shift(pix)= 0.082
err(pix)= 0.056
oldshift(pix)=−0.430
350
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

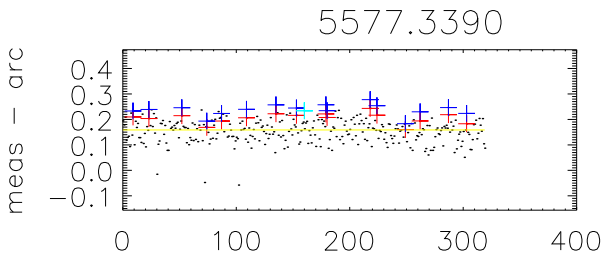

shift(pix)= 0.076
err(pix)= 0.021
oldshift(pix)= 0.013
350
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

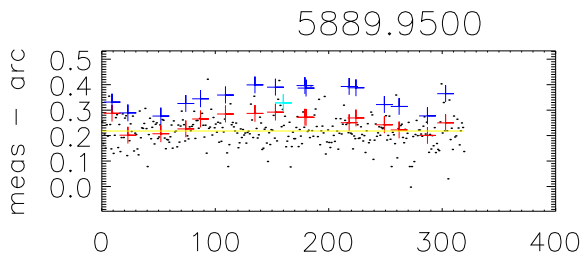

shift(pix)= 0.224
err(pix)= 0.021
oldshift(pix)= 0.292
350
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

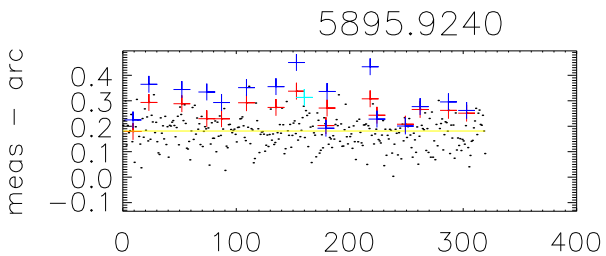

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

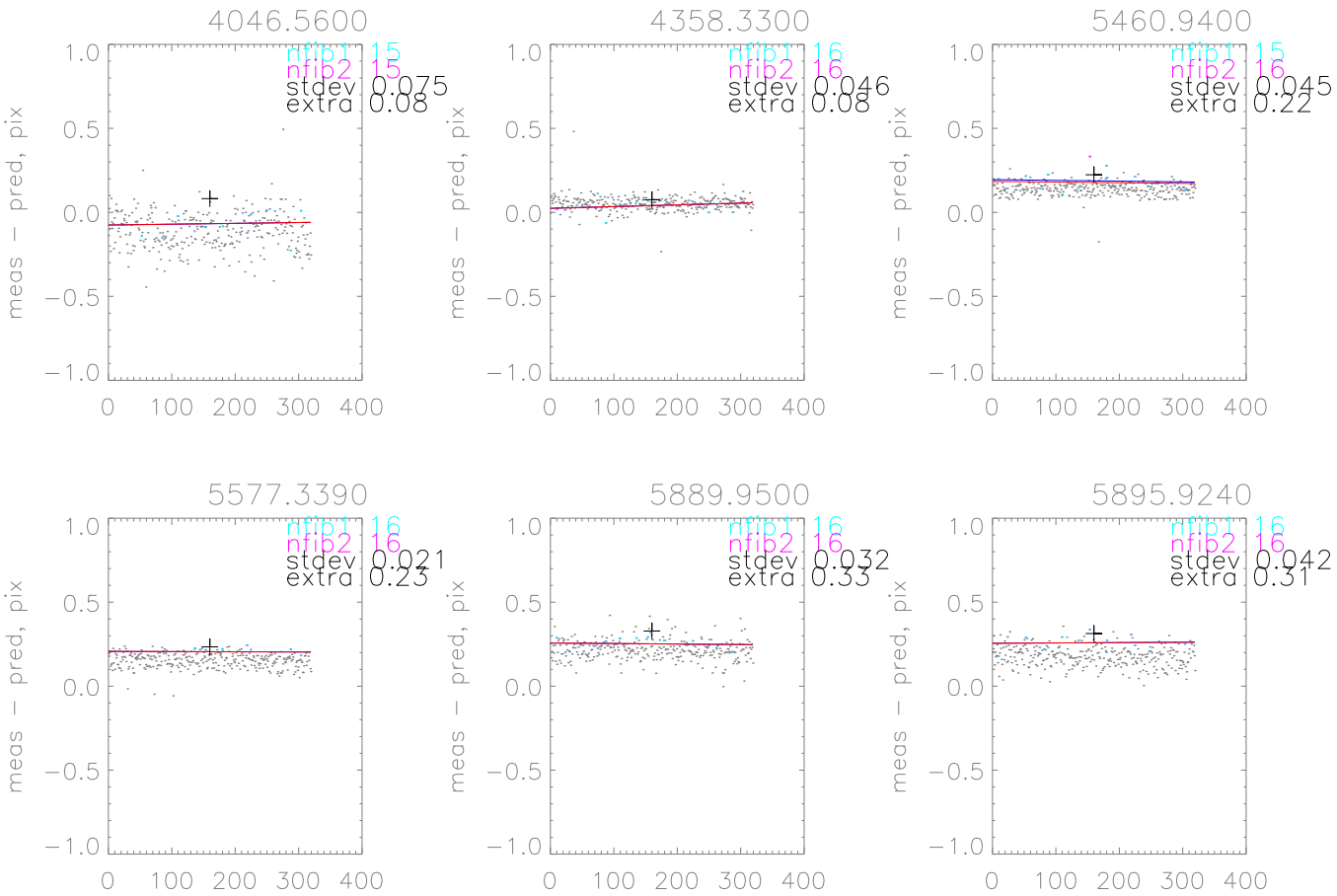

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

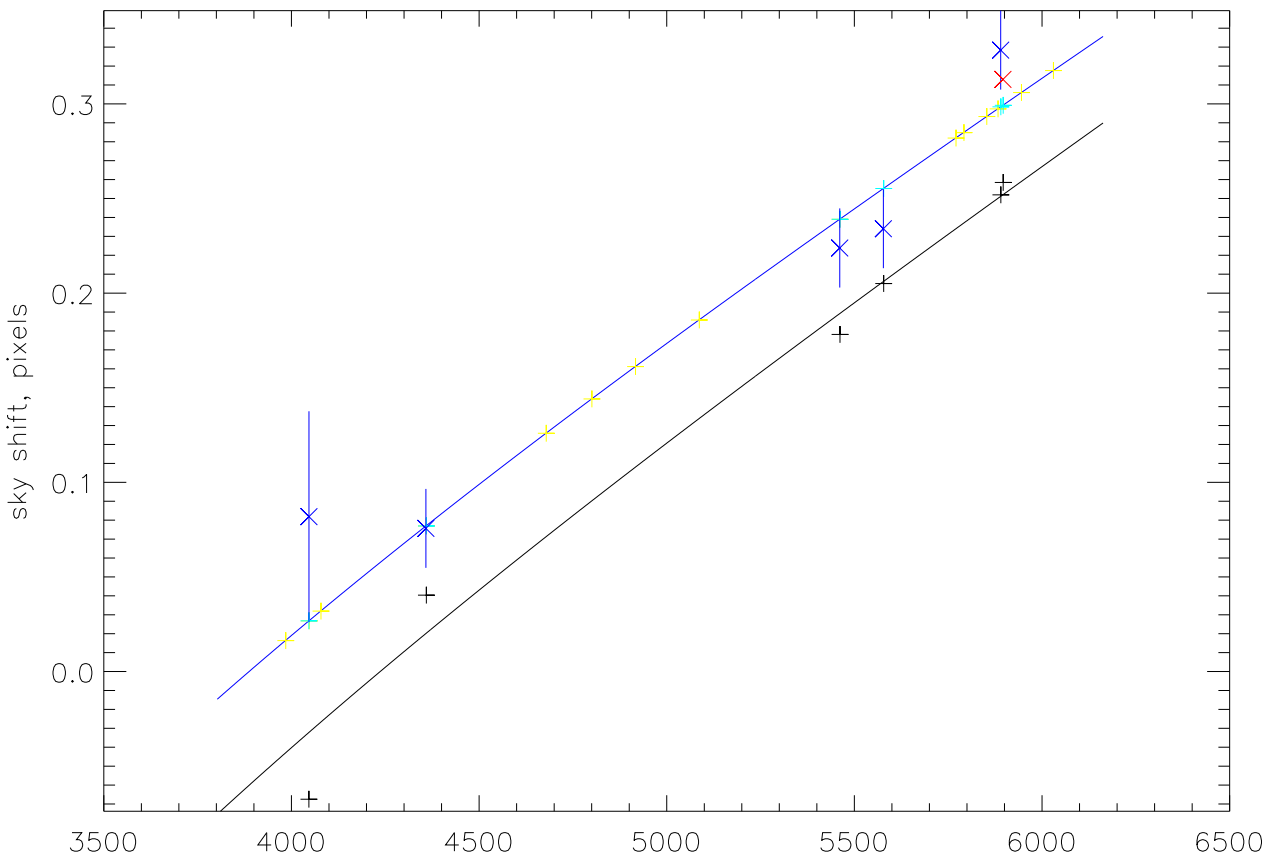

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

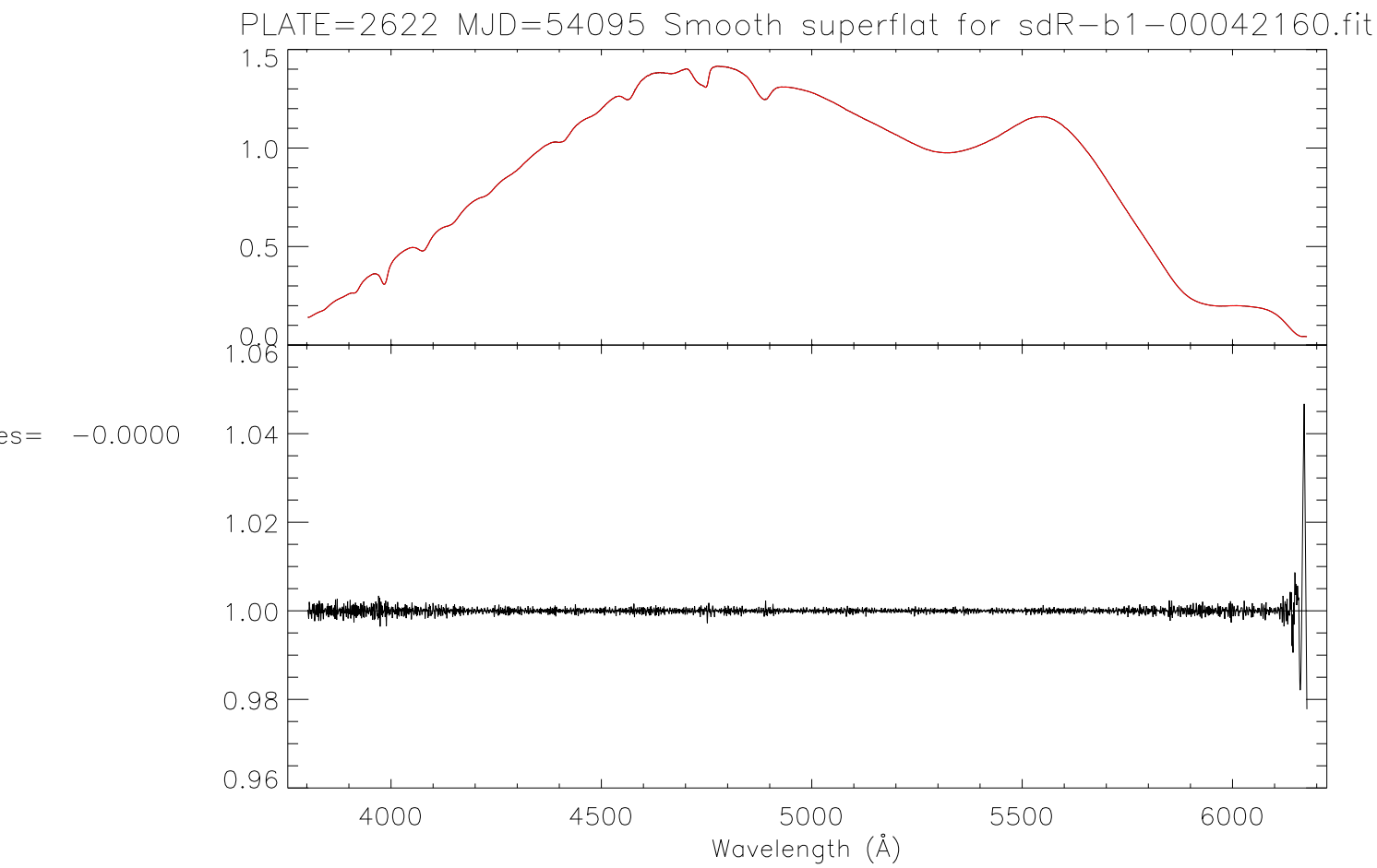

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

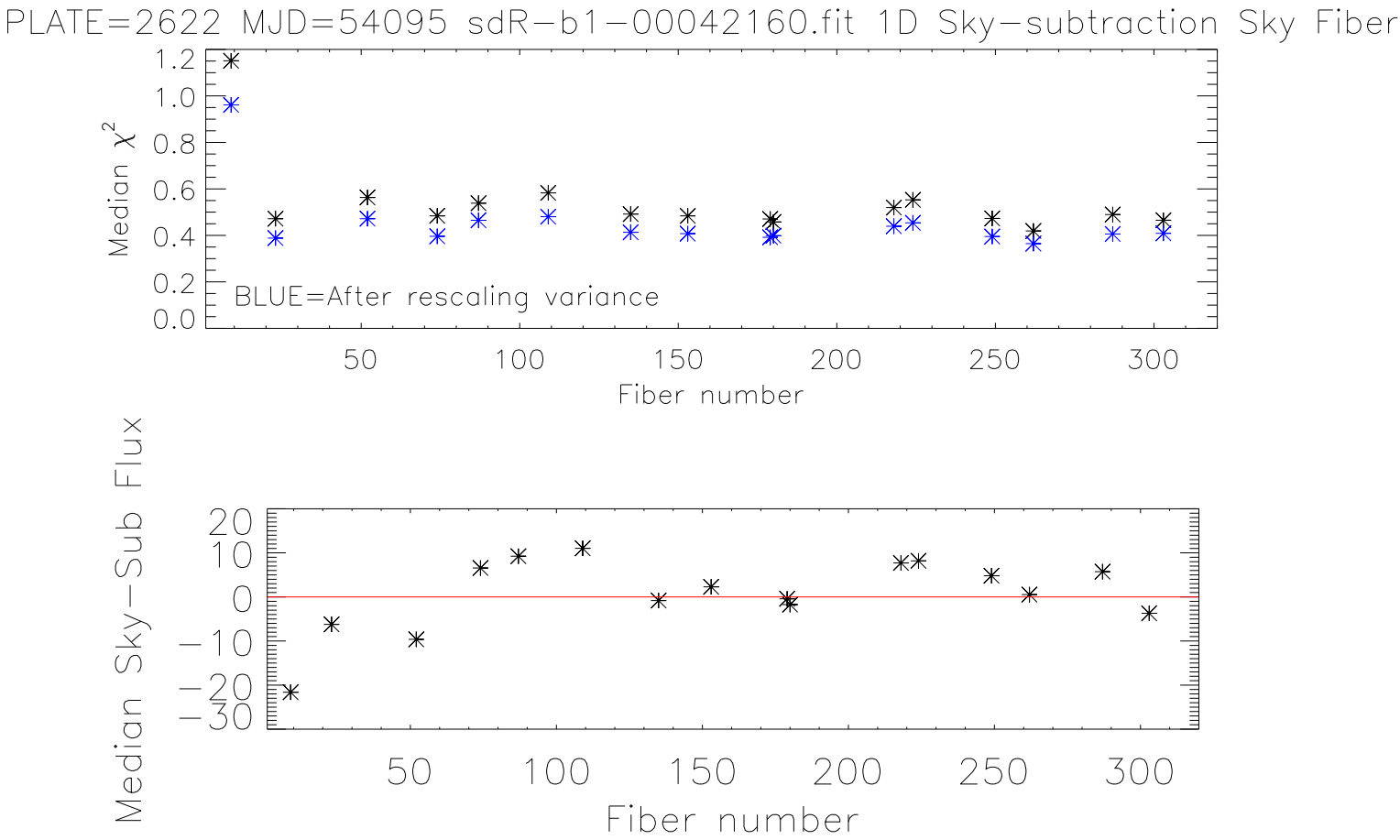

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

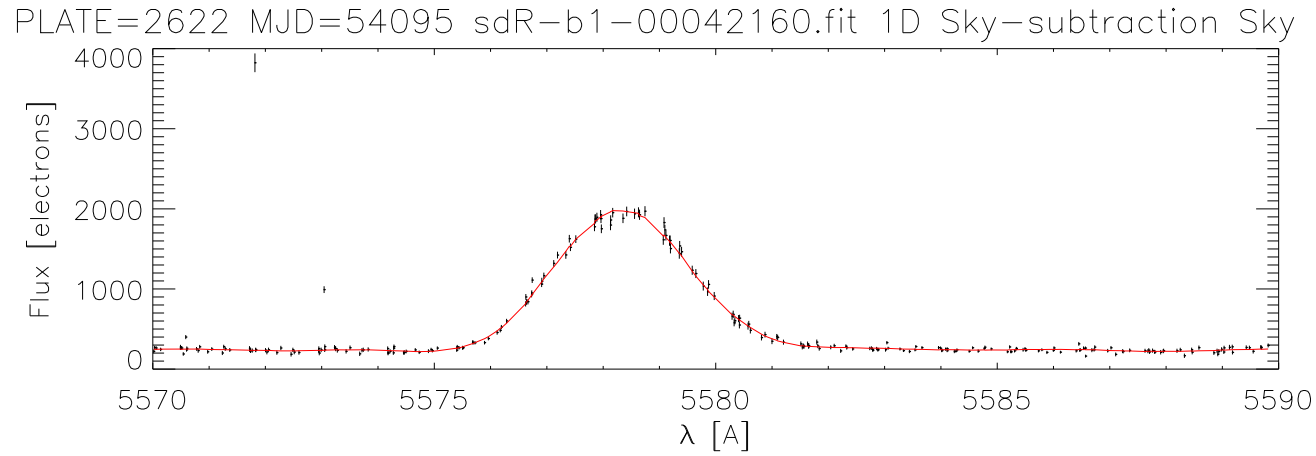

4046.5600
nfib1 15
nfib2 15
stdev 0.075
extra 0.08
4358.3300
nfib1 16
nfib2 16
stdev 0.046
extra 0.08
5460.9400
nfib1 15
nfib2 16
stdev 0.045
extra 0.22
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.23
5889.9500
nfib1 16
nfib2 16
stdev 0.032
extra 0.33
5895.9240
nfib1 16
nfib2 16
stdev 0.042
extra 0.31
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

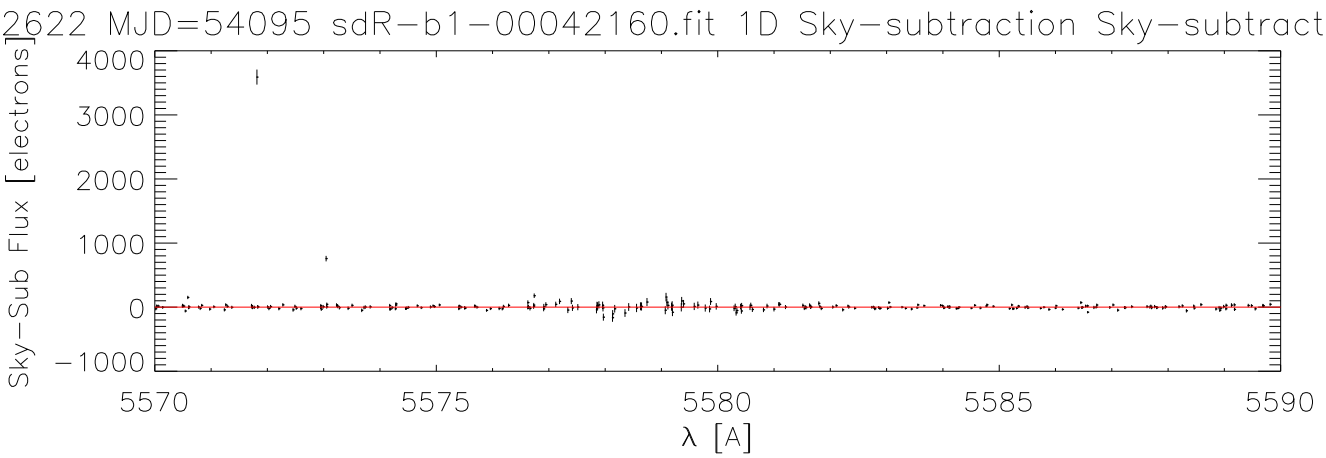

sky shift, pixels
0.3
0.2
0.1
0.0
3500
4000
4500
5000
5500
6000
6500

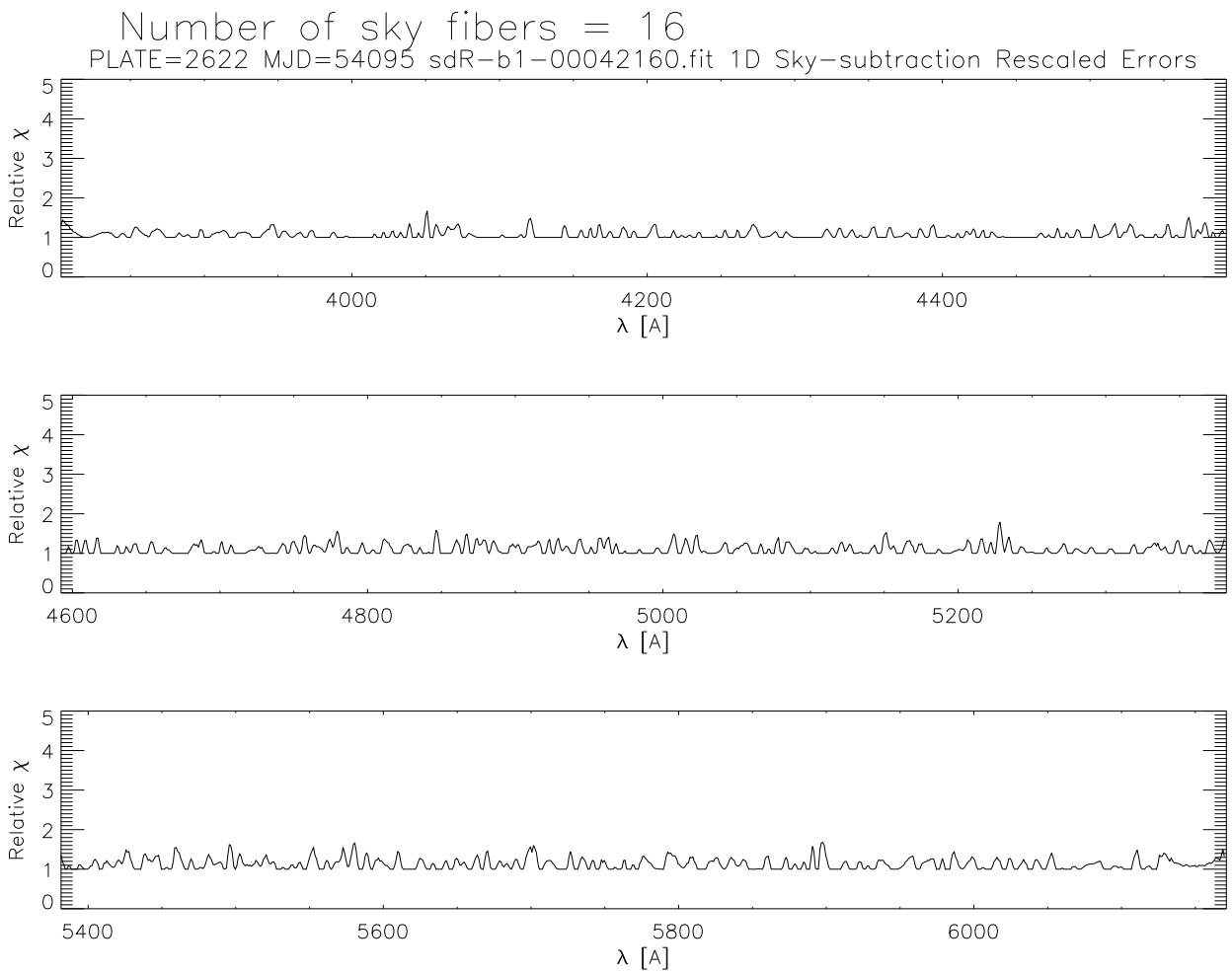

PLATE=2622 MJD=54095 Smooth superflat for sdR-b1-00042160.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

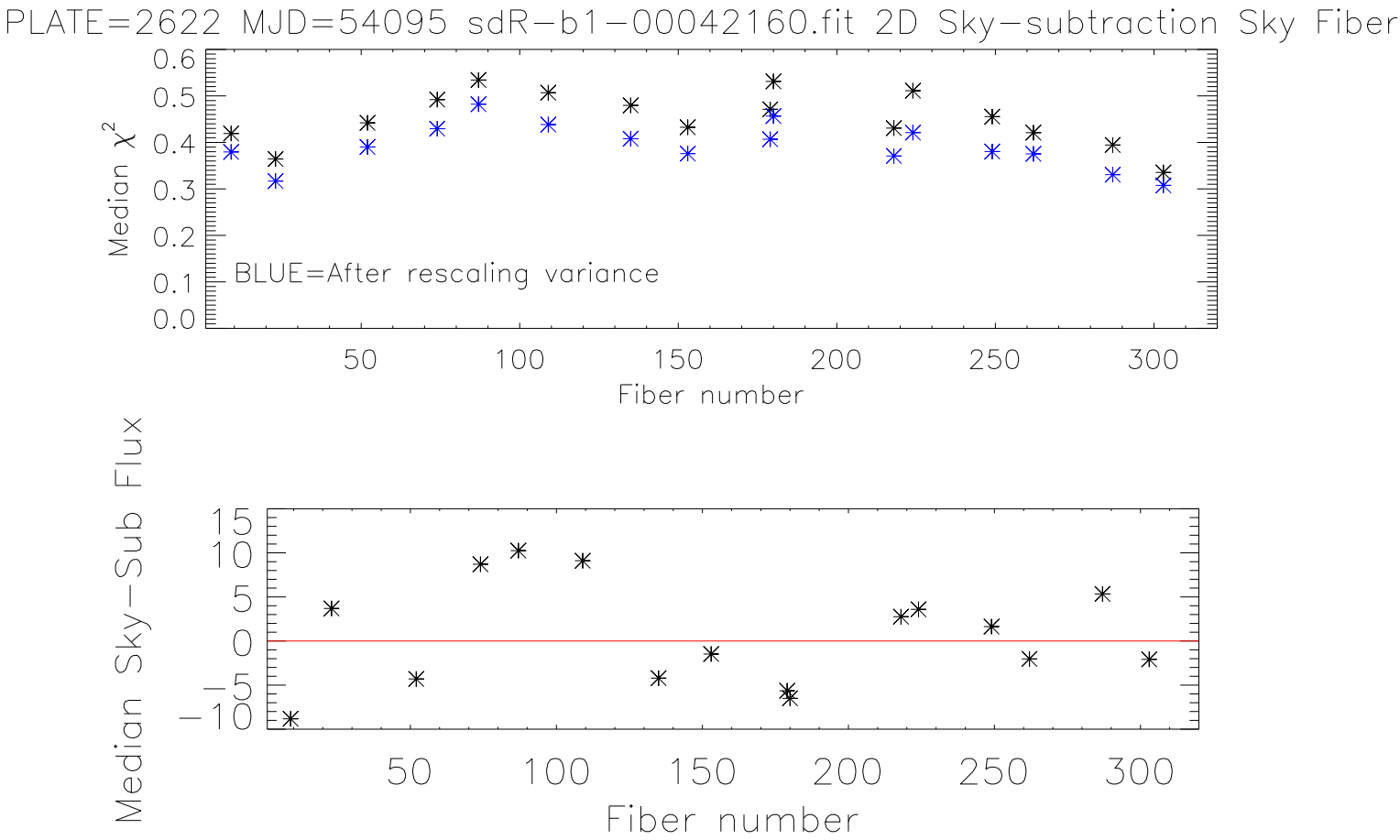
es= −0.0000

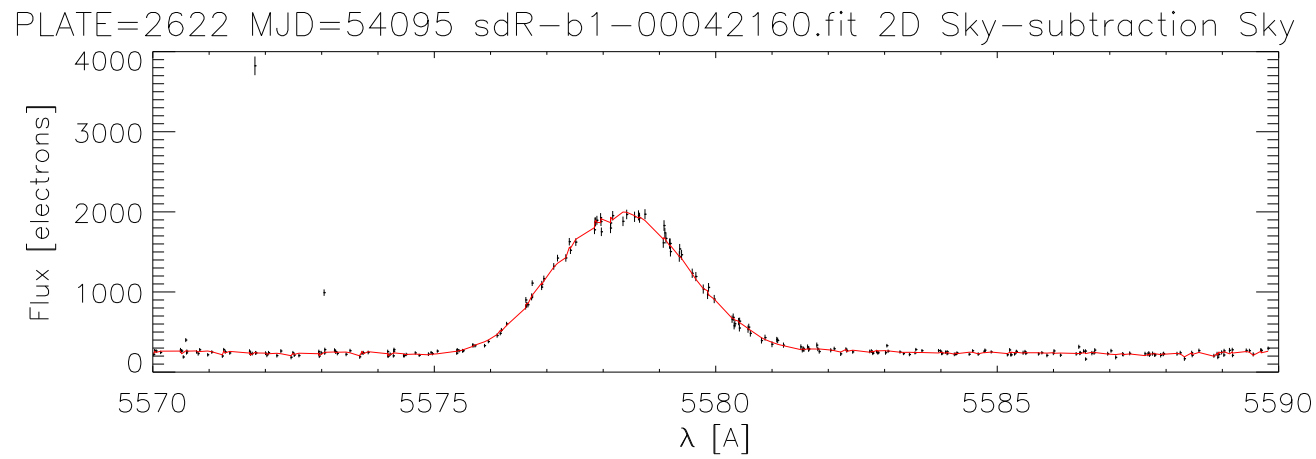

PLATE=2622 MJD=54095 sdR-b1-00042160.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

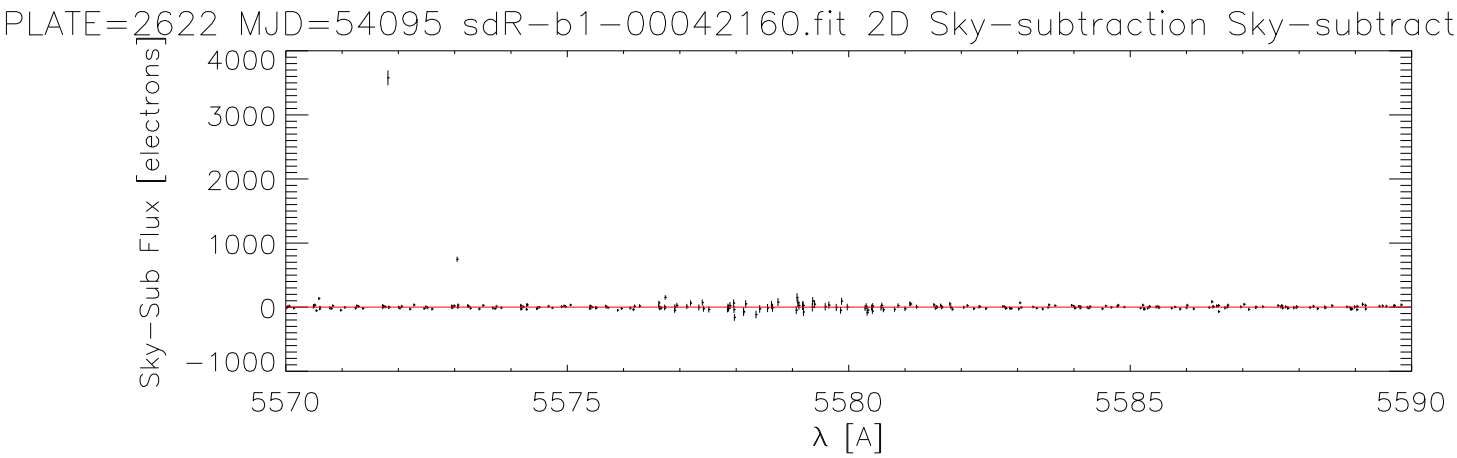

PLATE=2622 MJD=54095 sdR-b1-00042160.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

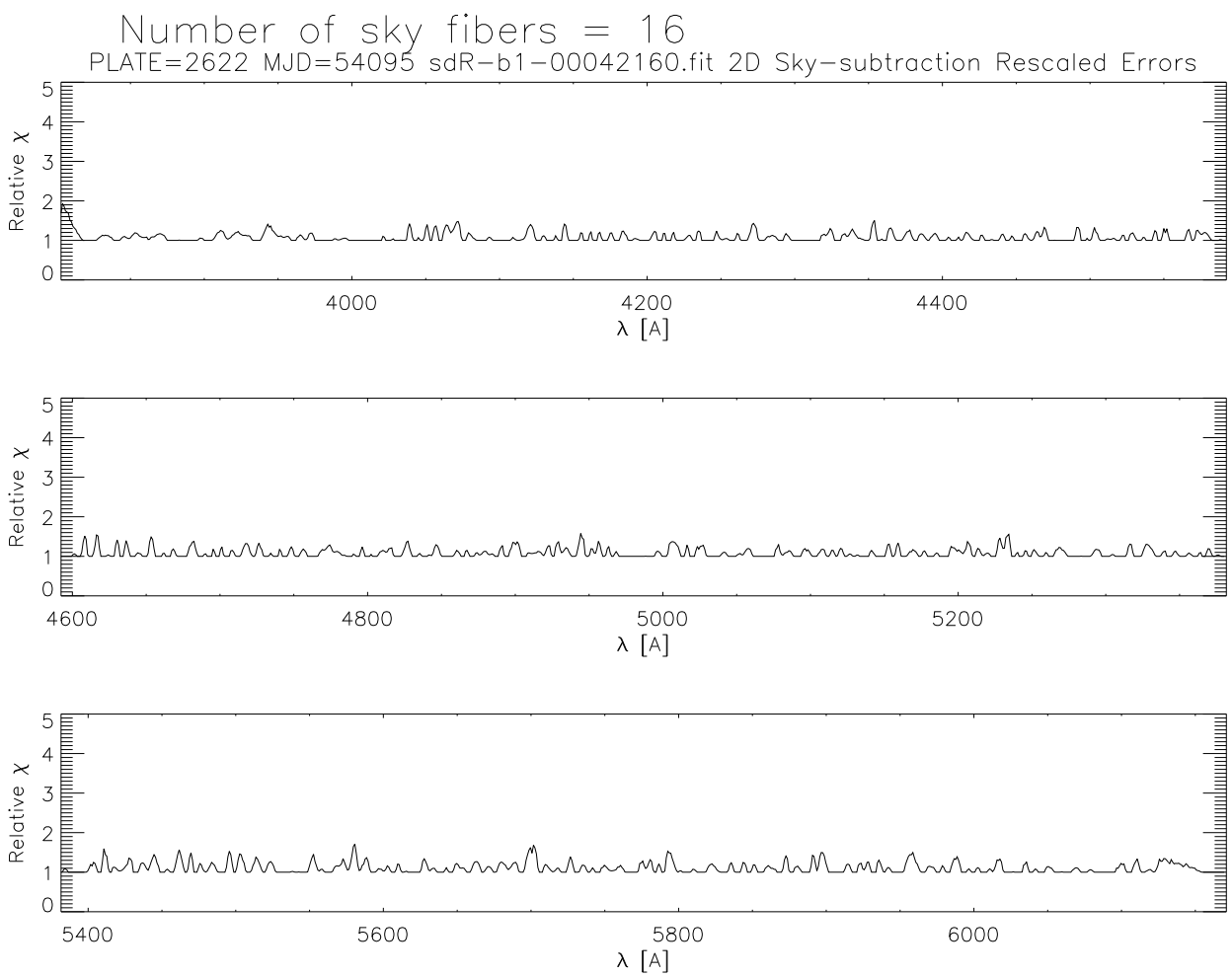

PLATE=2622 MJD=54095 sdR-b1-00042160.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

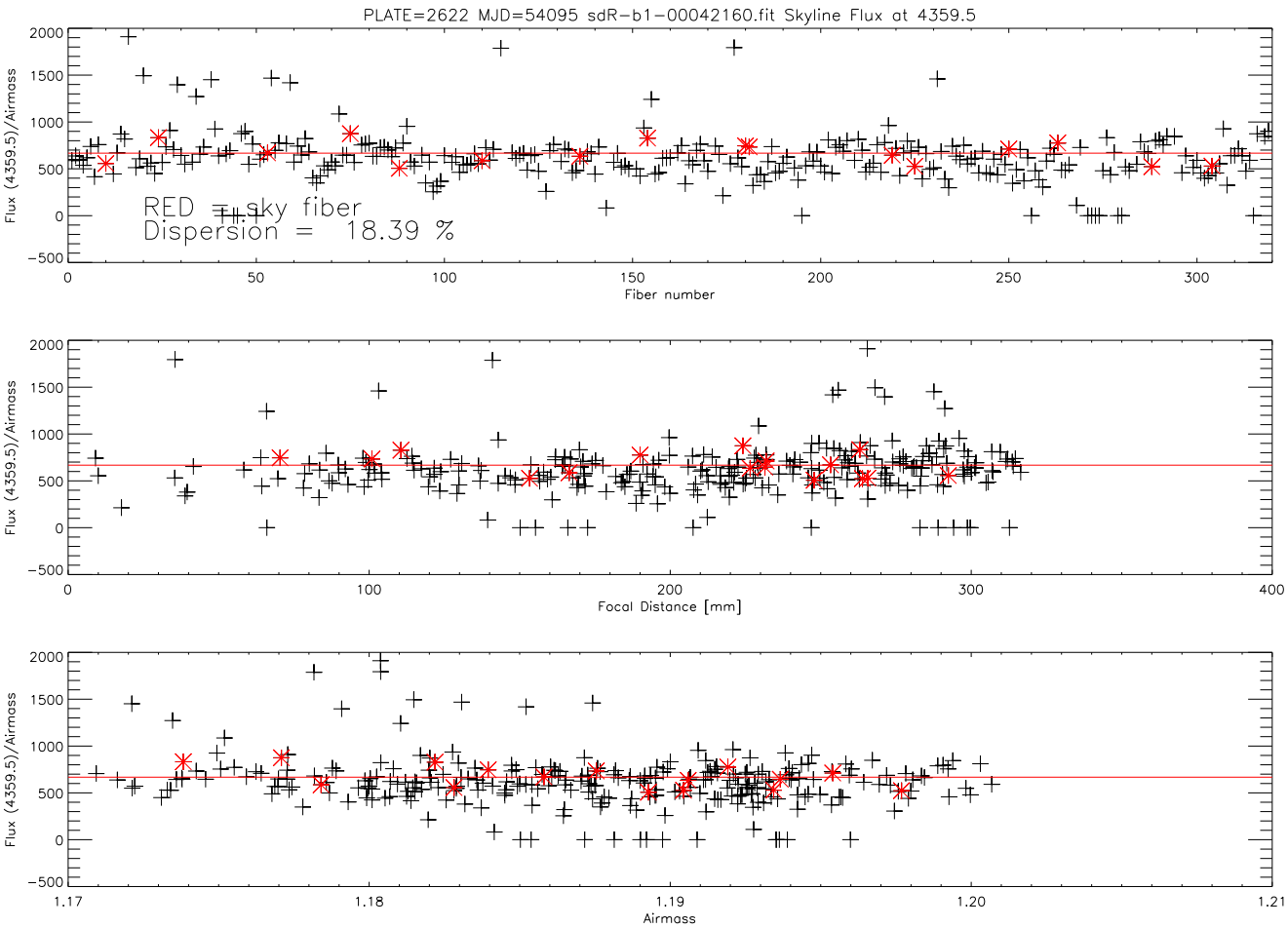

Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-b1-00042160.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

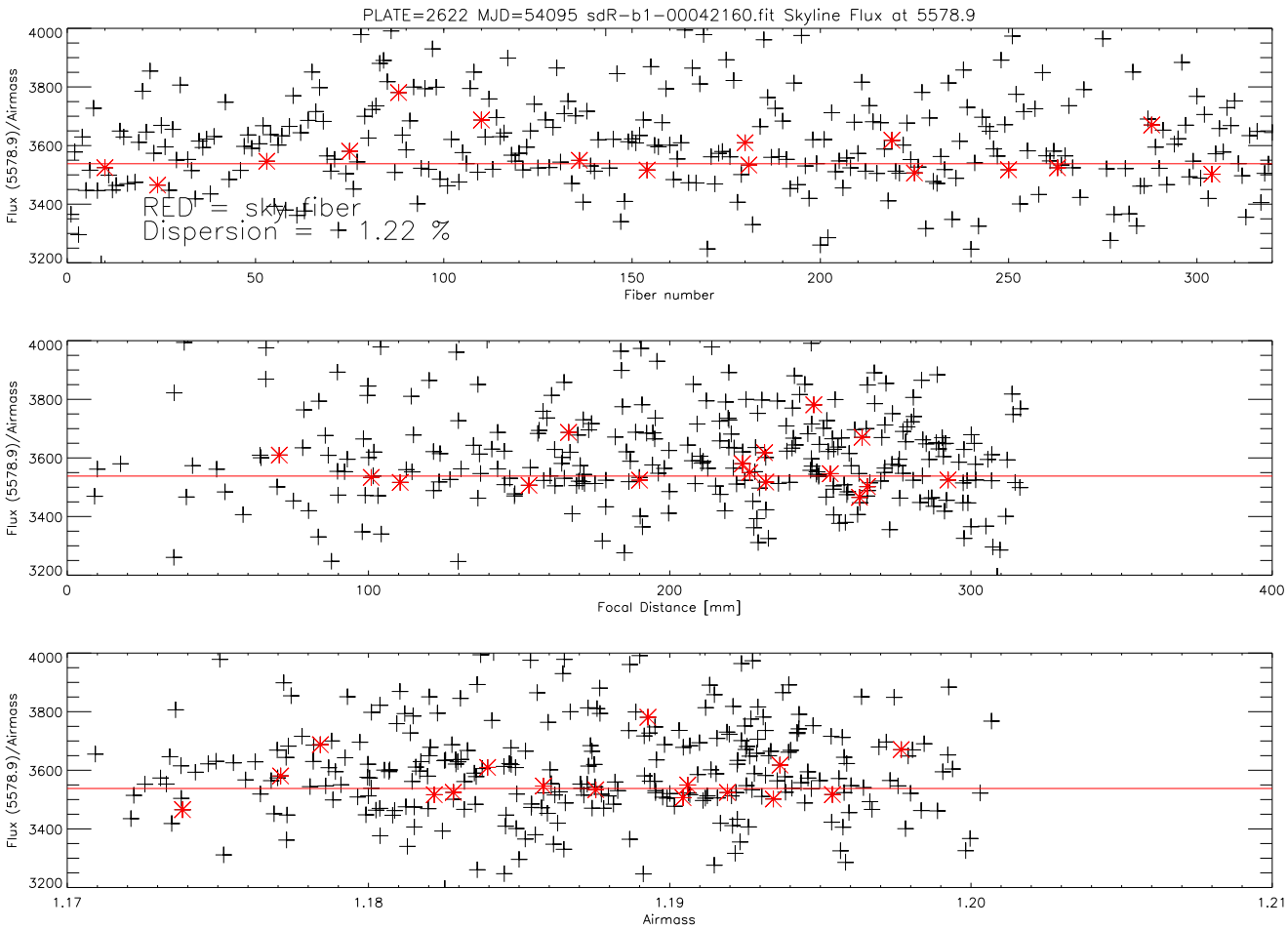

PLATE=2622 MJD=54095 sdR-b1-00042160.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

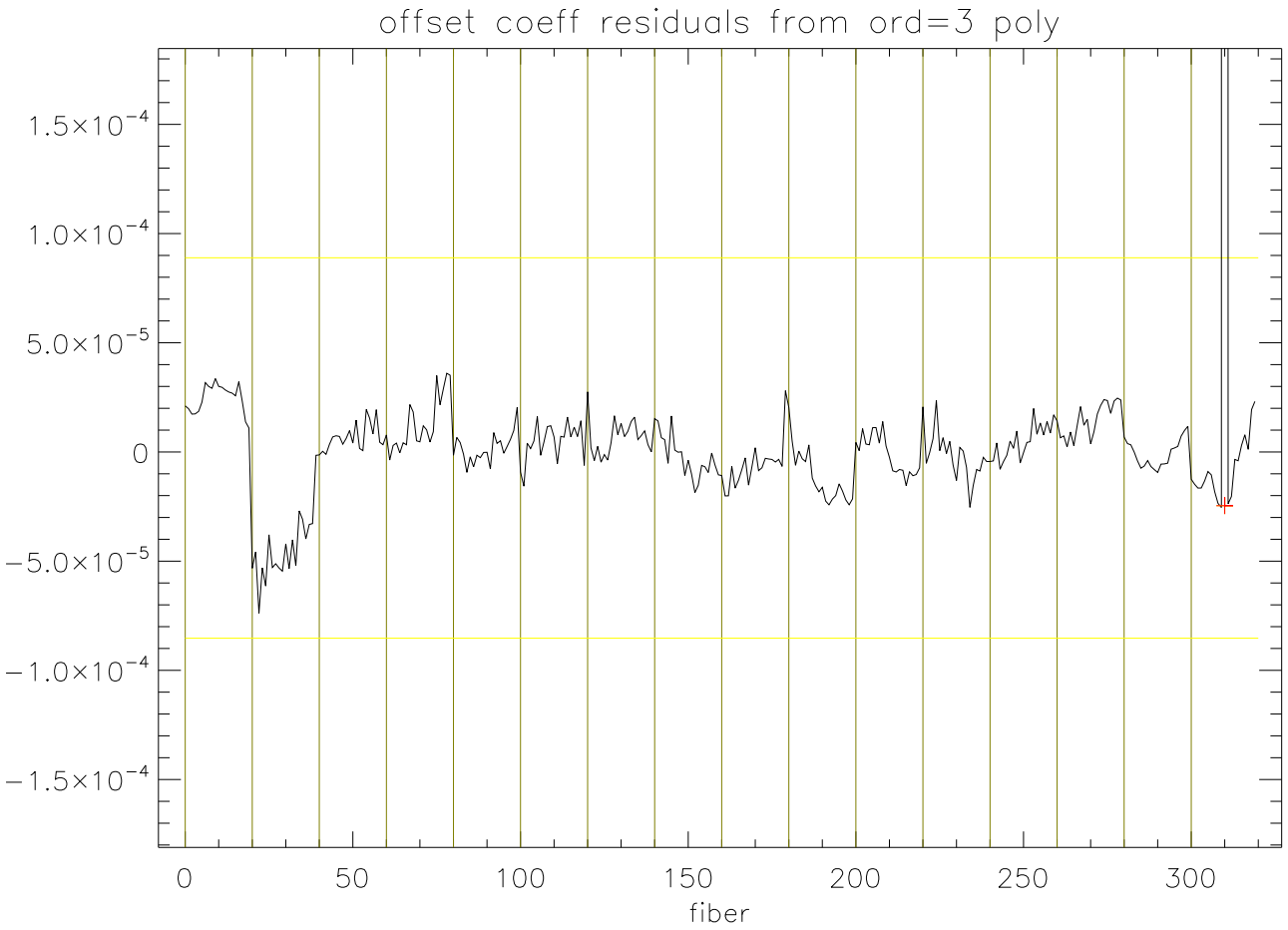

PLATE=2622 MJD=54095 sdR-b1-00042160.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

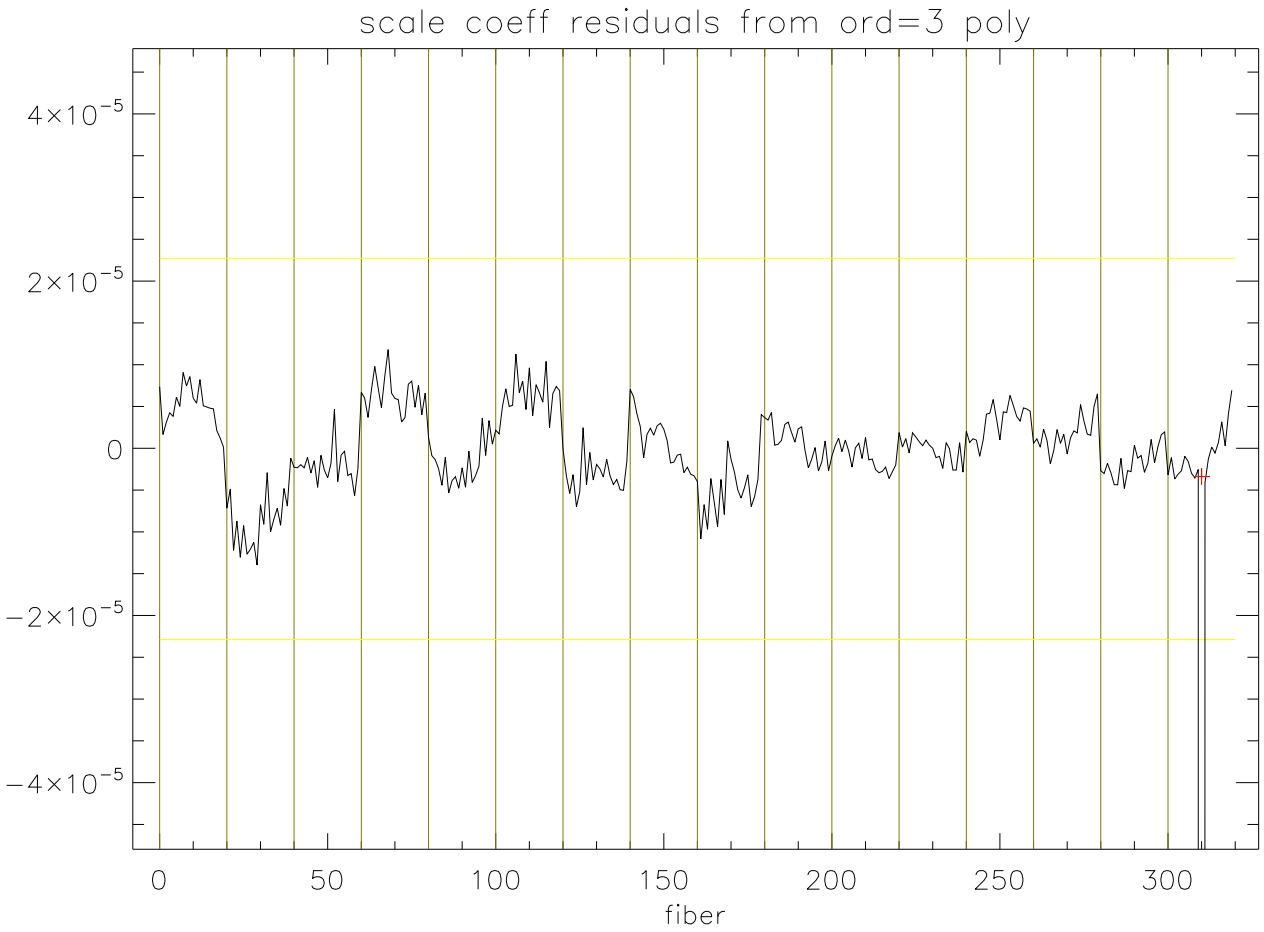

PLATE=2622 MJD=54095 sdR-b1-00042160.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

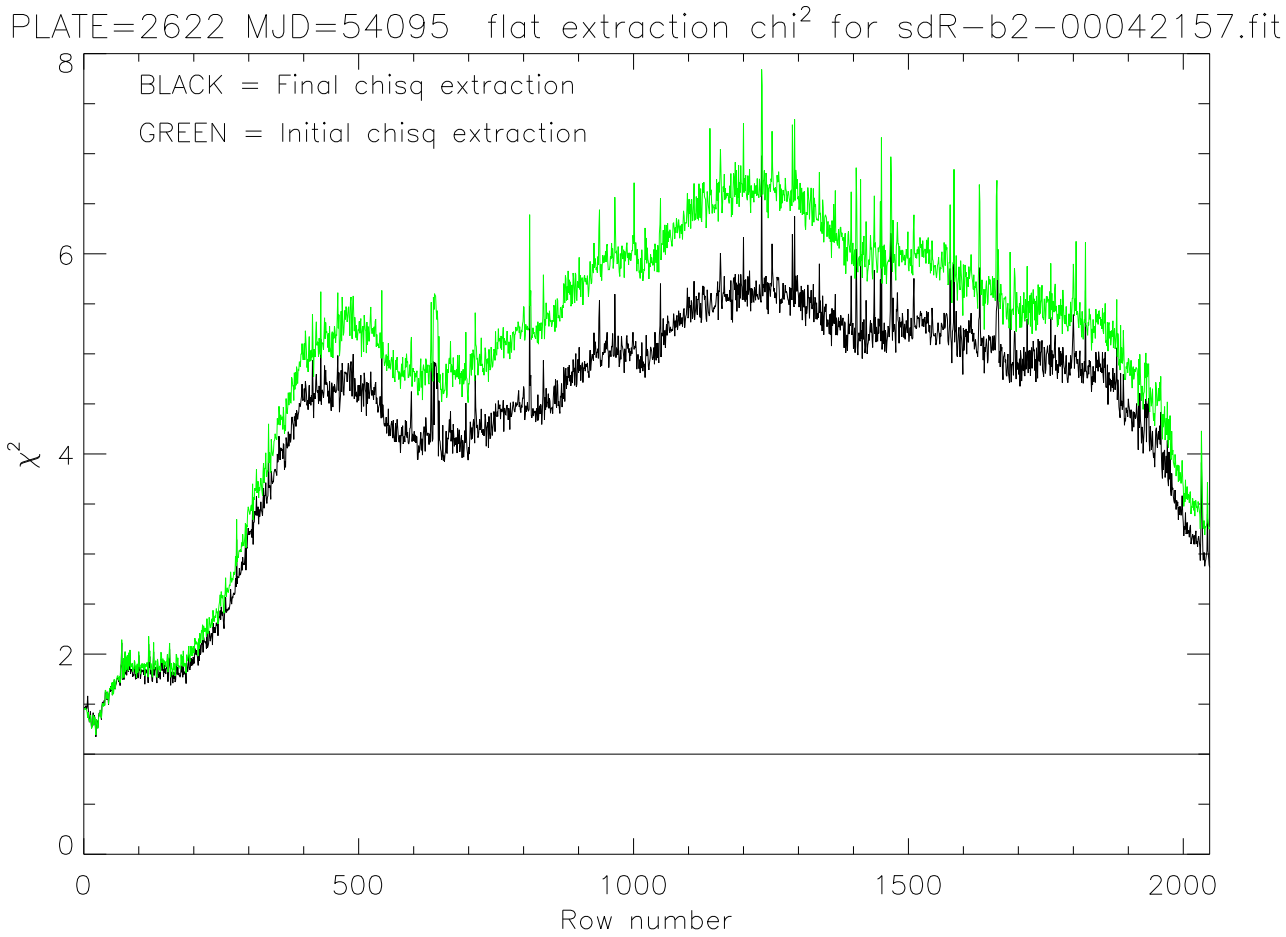

Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-b1-00042160.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

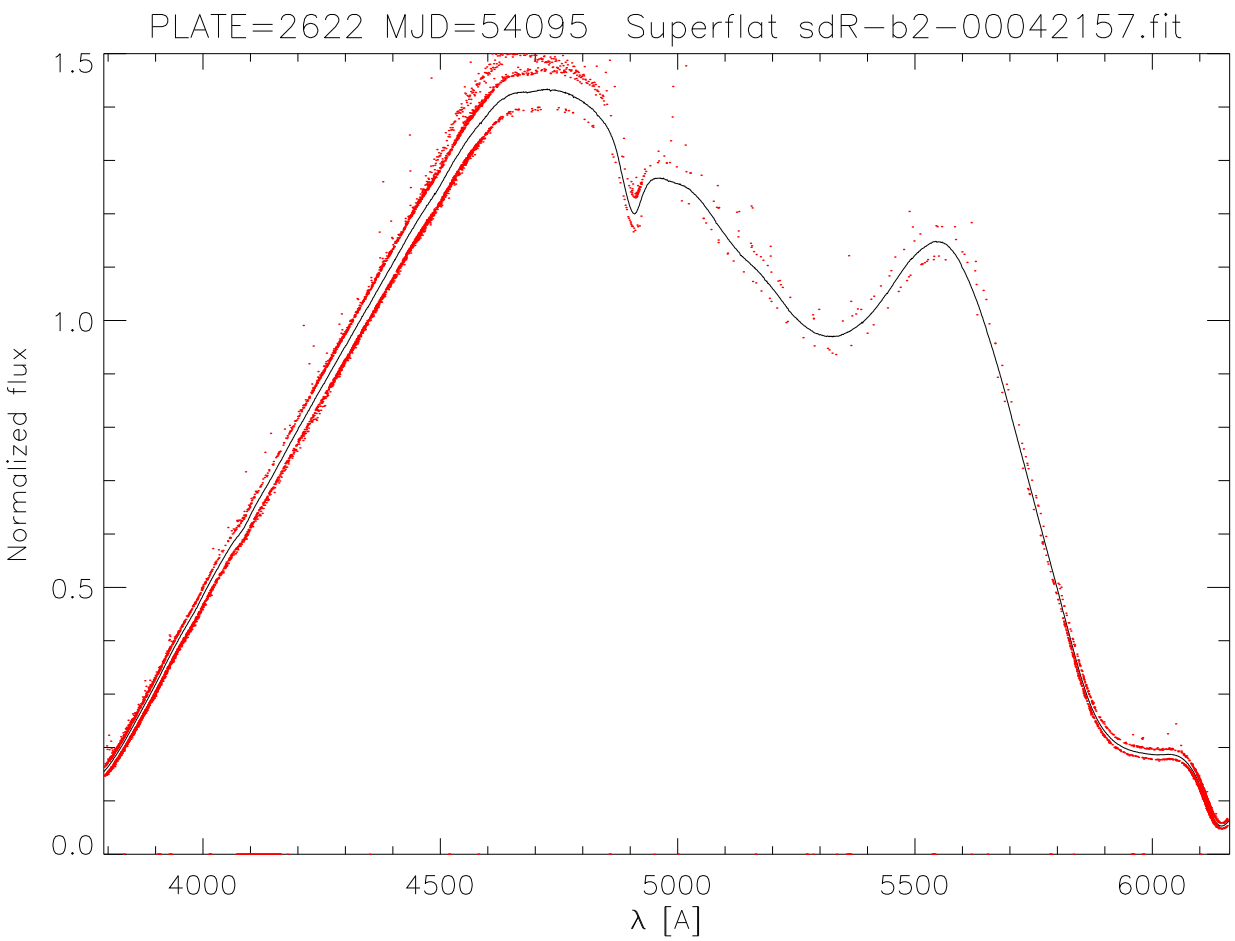

PLATE=2622 MJD=54095 sdR-b1-00042160.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 18.39 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

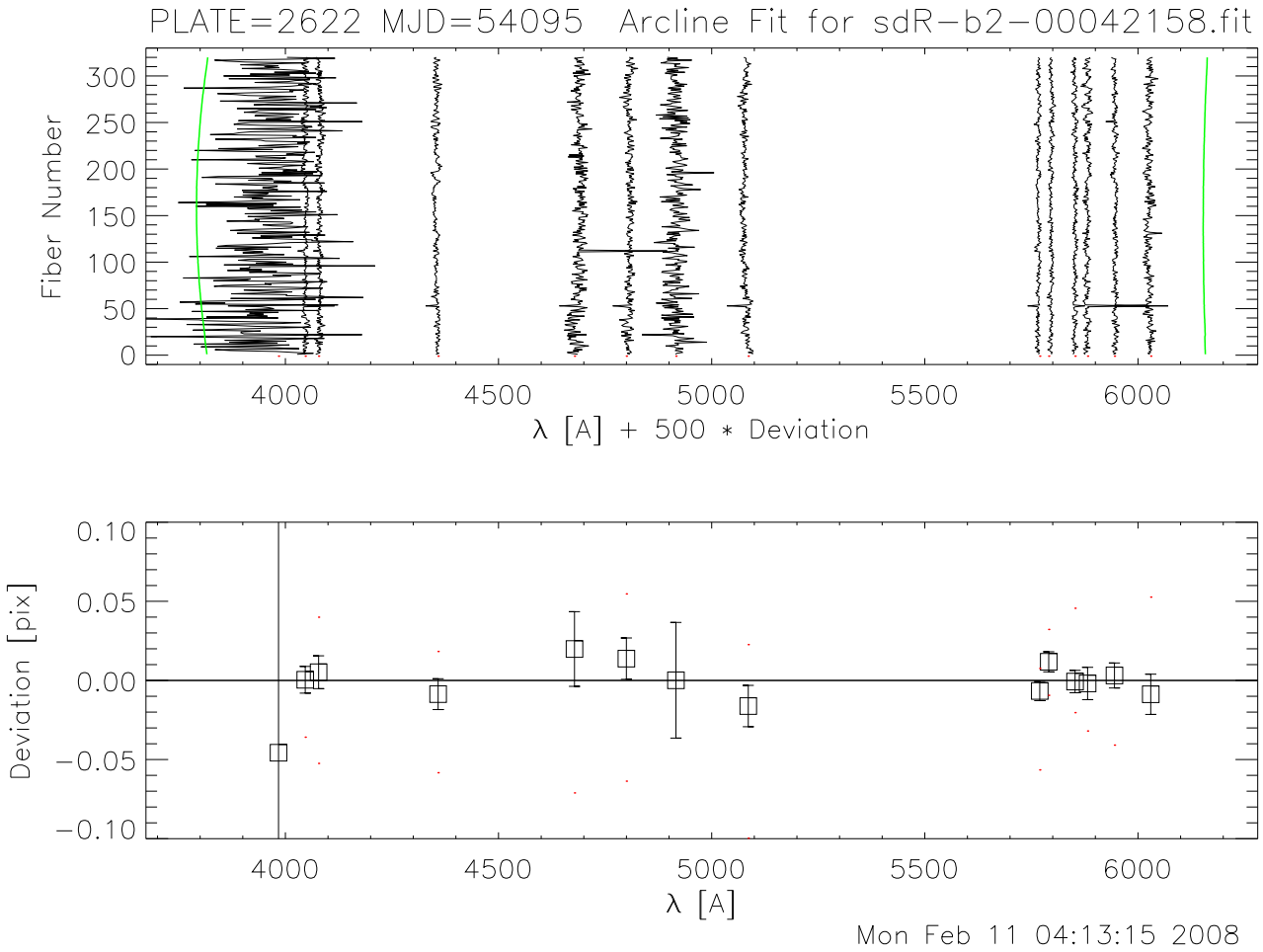

PLATE=2622 MJD=54095 sdR-b1-00042160.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = +1.22 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

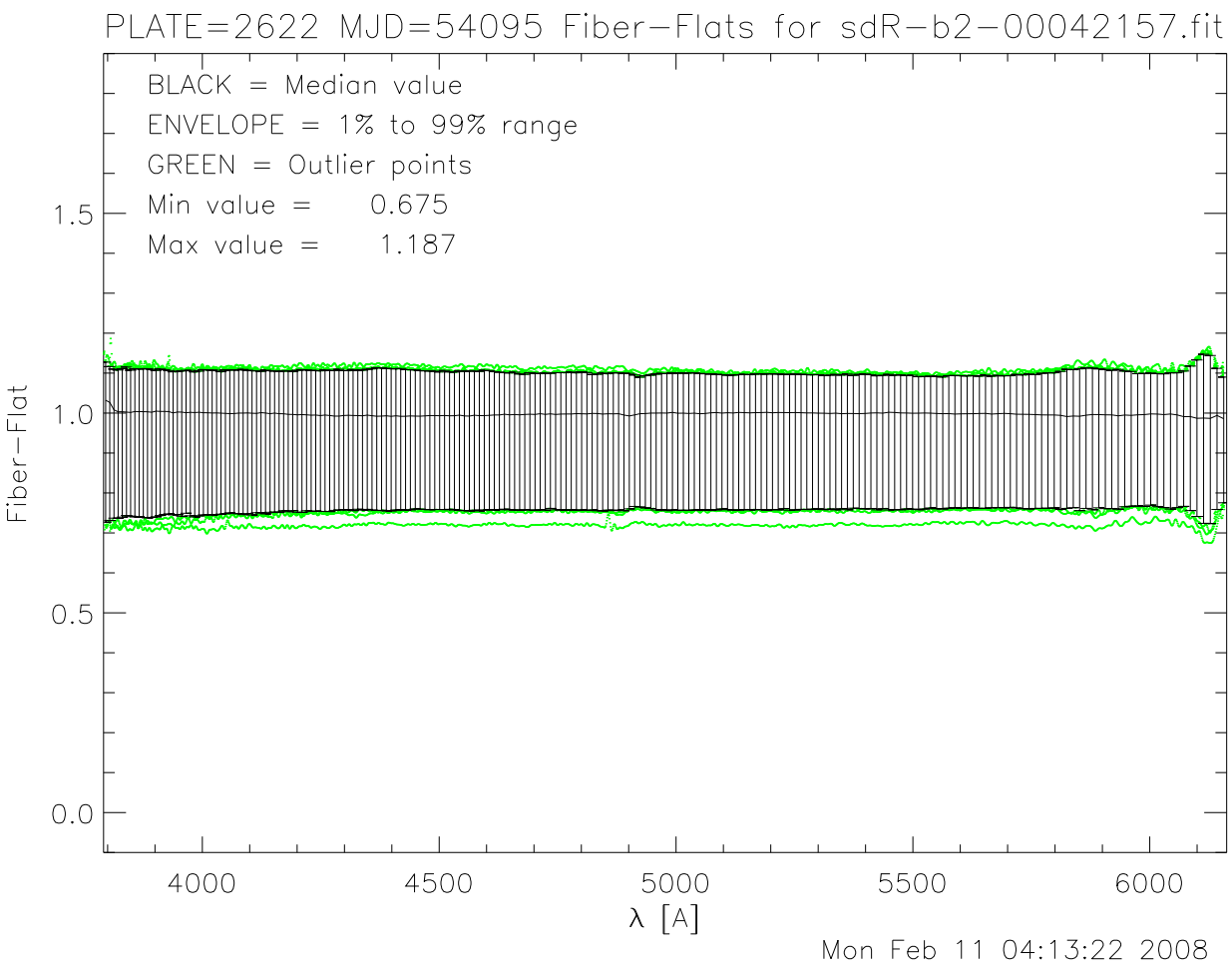

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

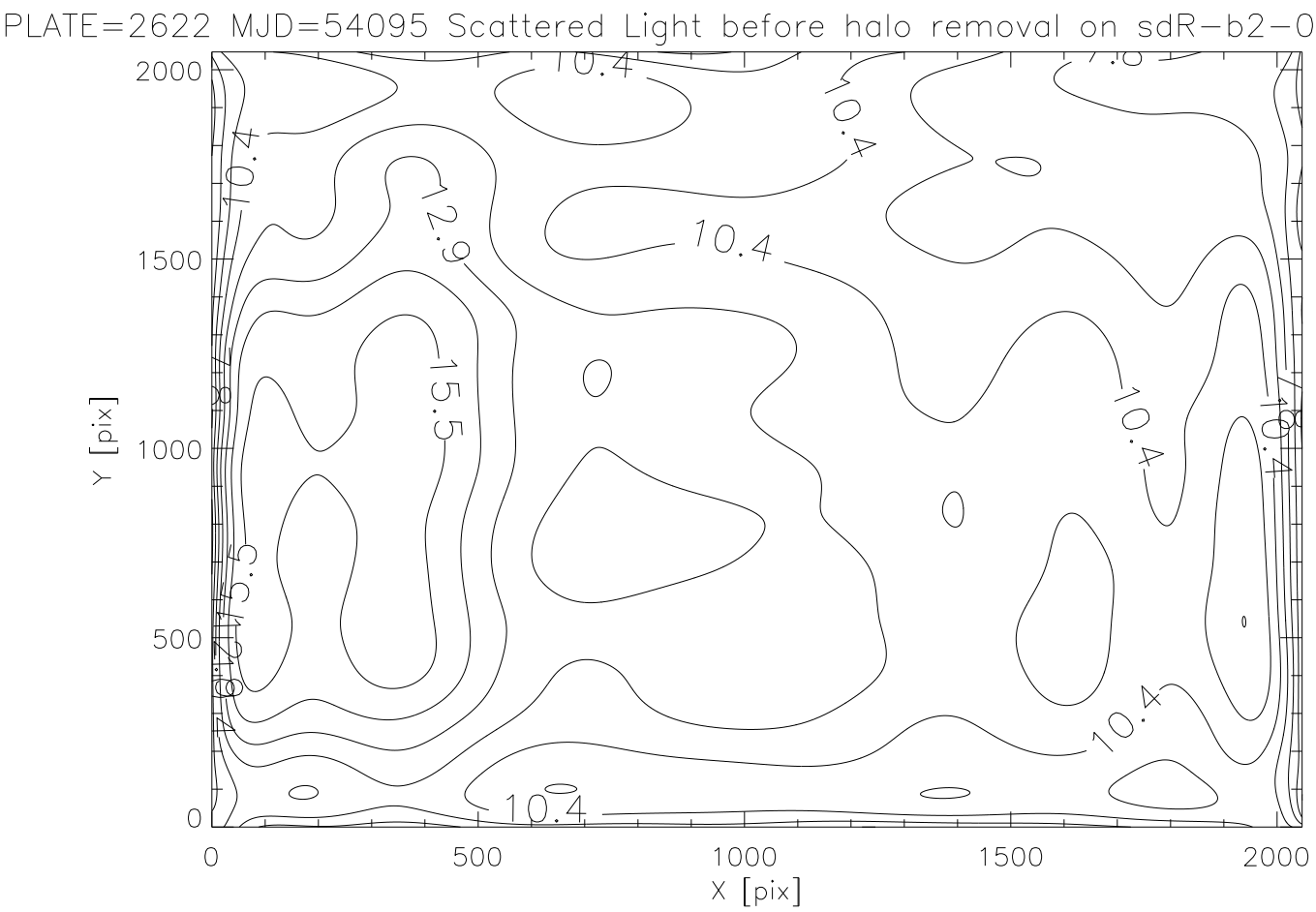

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

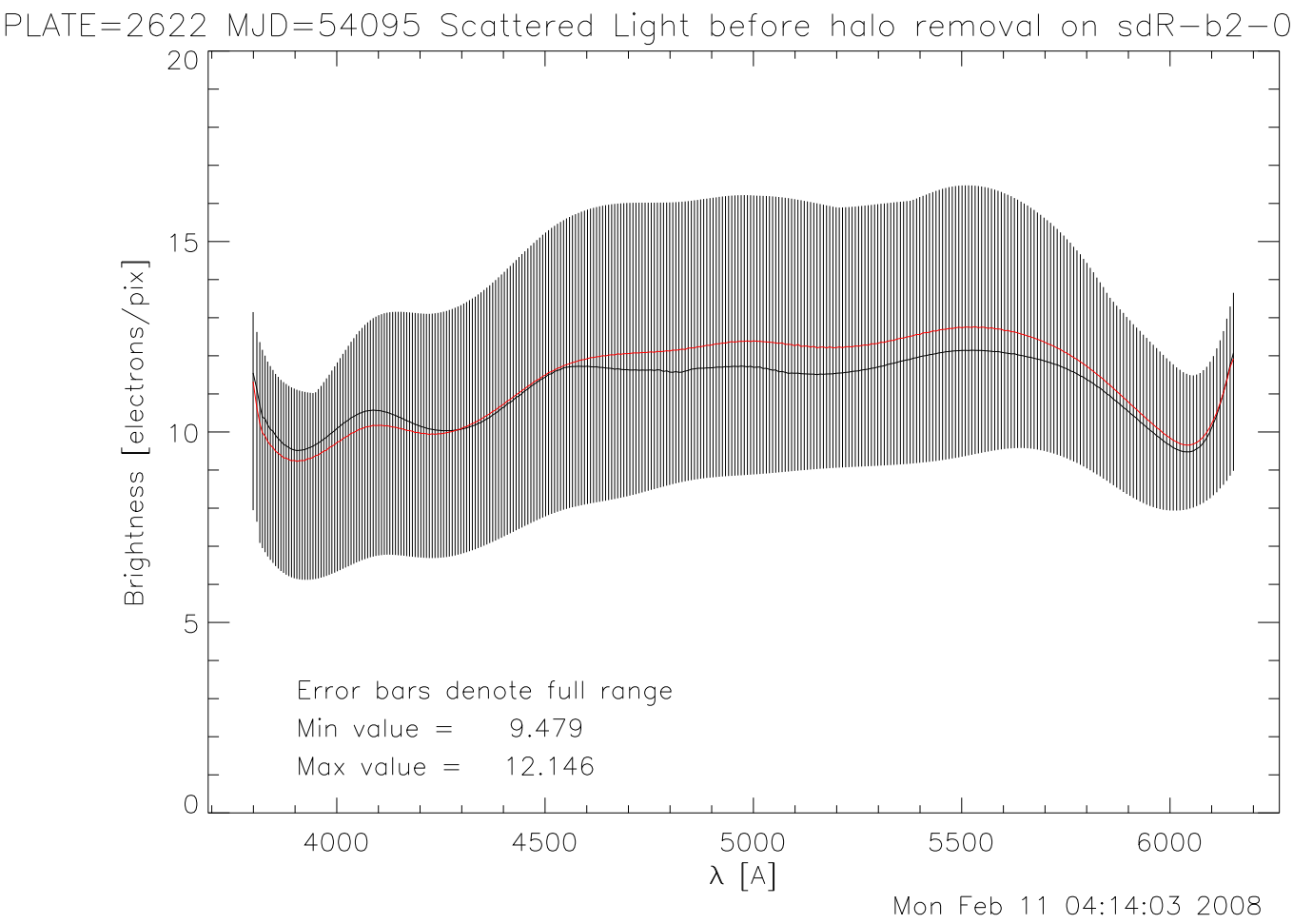

PLATE=2622 MJD=54095 flat extraction chi^2 for sdR−b2−00042157.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

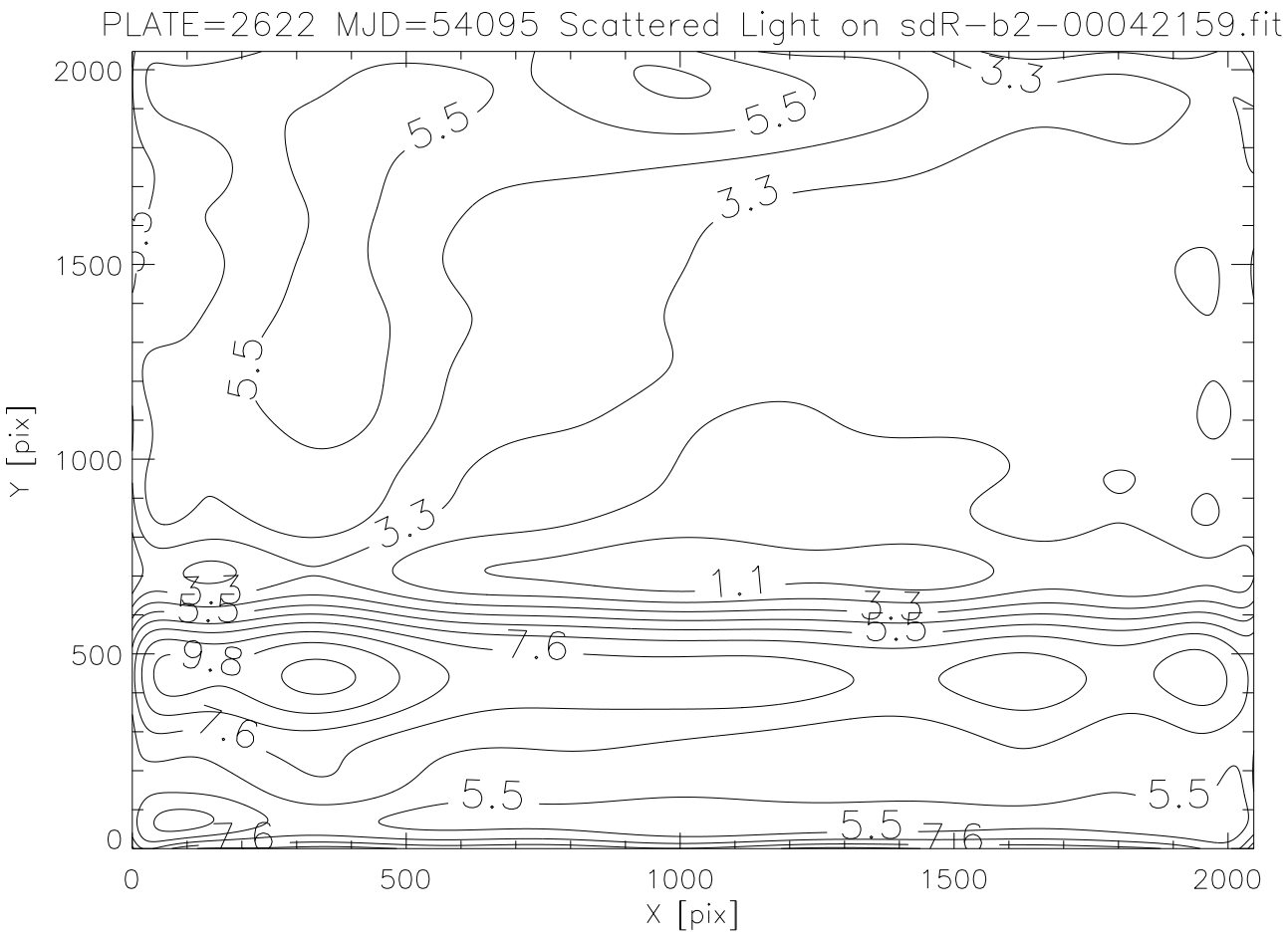

PLATE=2622 MJD=54095 Superflat sdR-b2-00042157.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

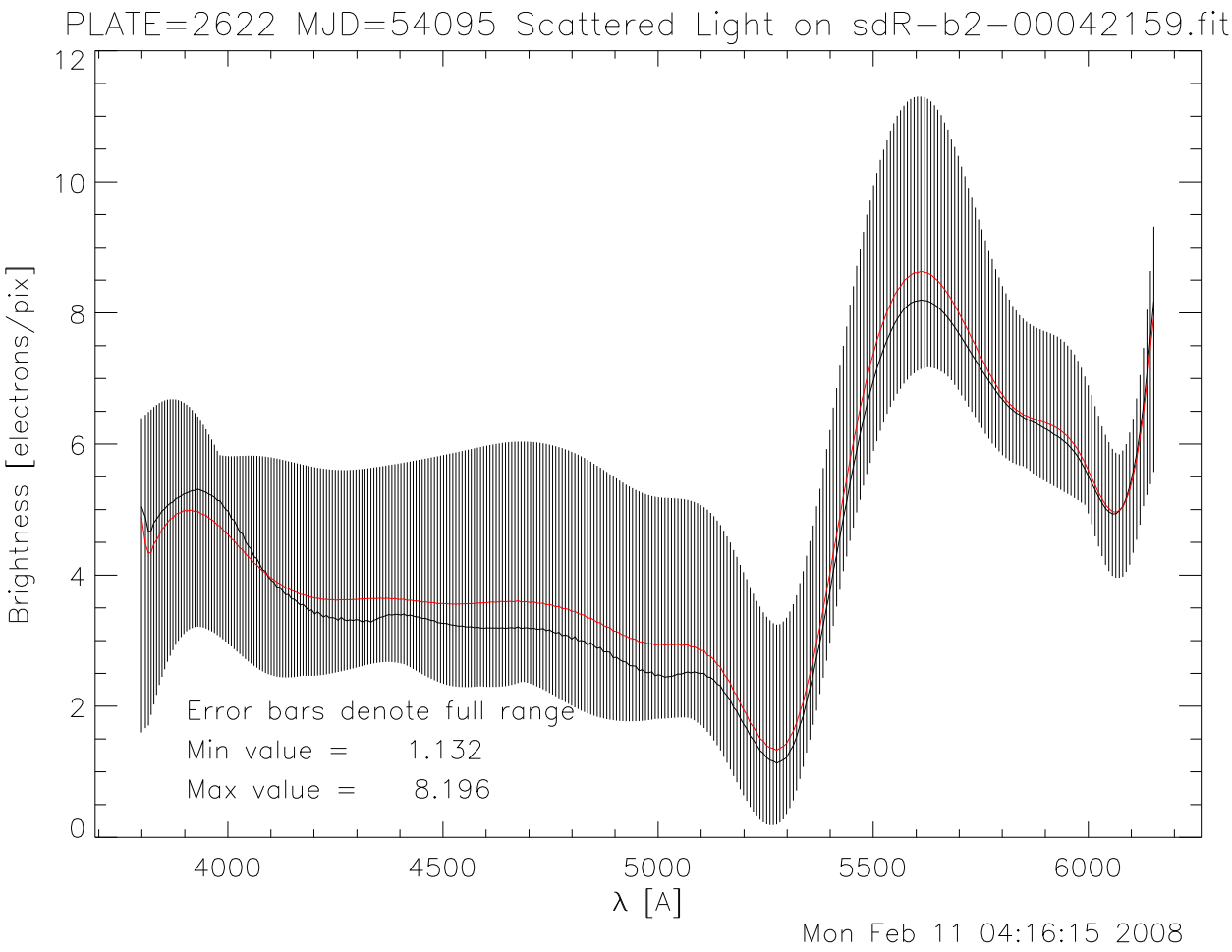

PLATE=2622 MJD=54095 Arcline Fit for sdR-b2-00042158.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 04:13:15 2008


PLATE=2622 MJD=54095 Fiber-Flats for sdR-b2-00042157.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.675
Max value = 1.187
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 04:13:22 2008


PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR−b2−00042159.f
10.4
10.4
10.4
12.9
10.4
15.5
0
0
10.4
10.4
10.4
10.4
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-b2-00042159.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.479
Max value = 12.146
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 04:14:03 2008


PLATE=2622 MJD=54095 Scattered Light on sdR-b2-00042159.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3
1.1
9.8
7.6
0


PLATE=2622 MJD=54095 Scattered Light on sdR-b2-00042159.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.132
Max value = 8.196
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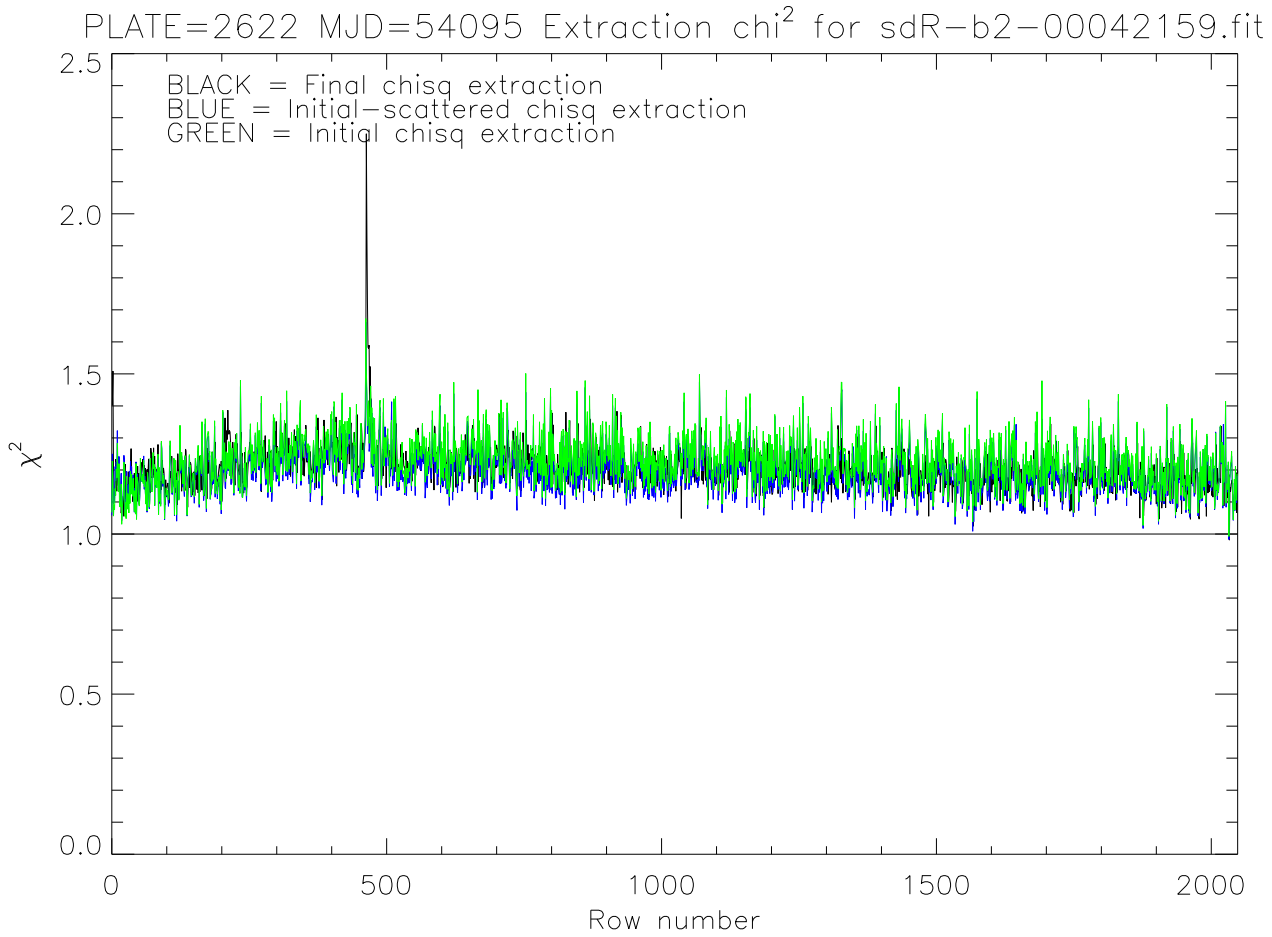
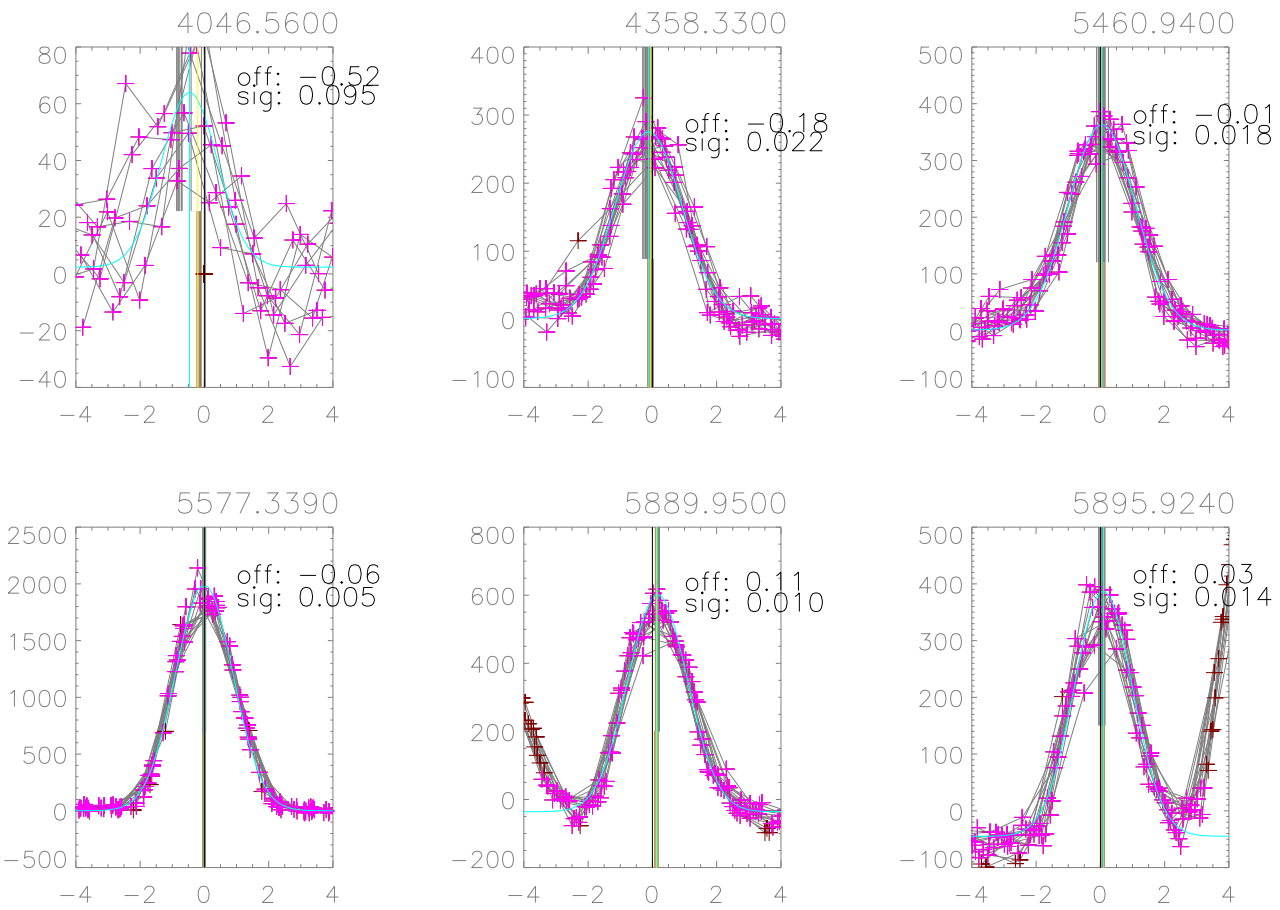
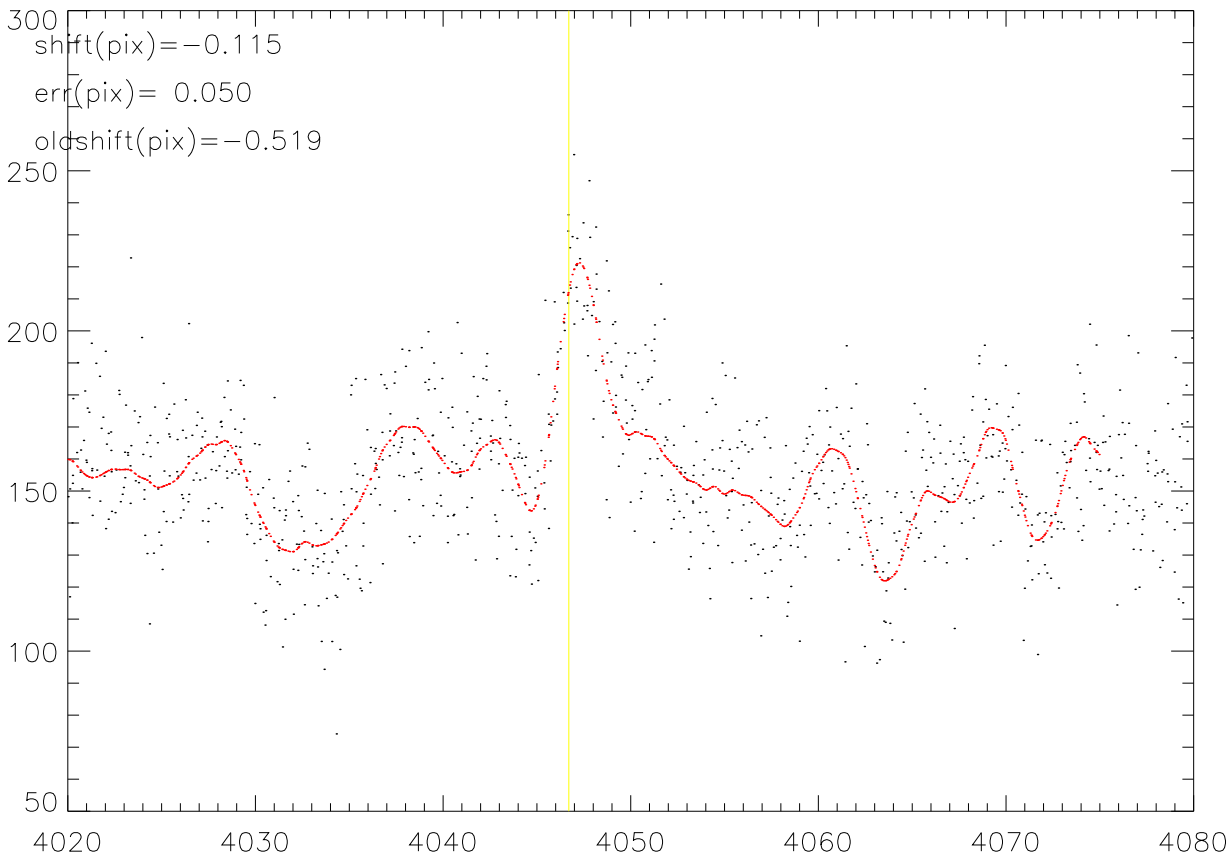
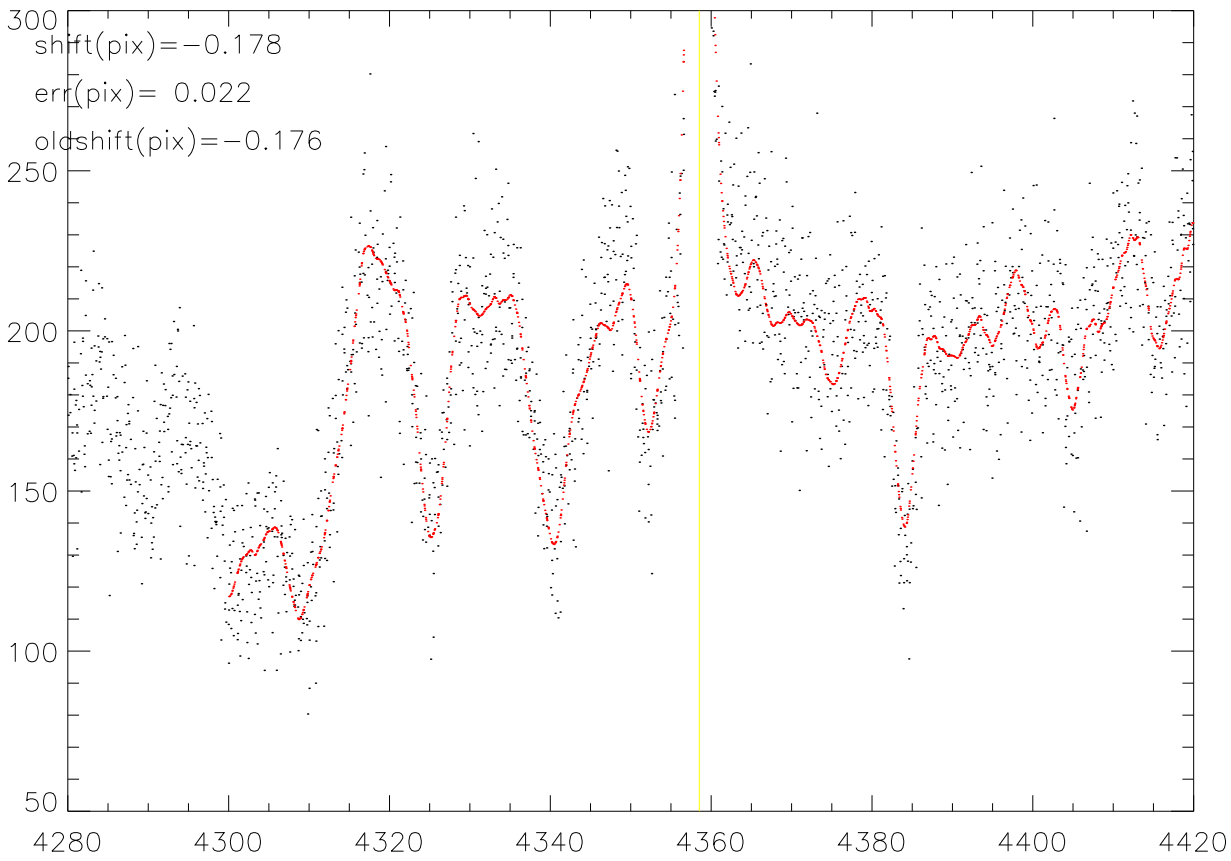
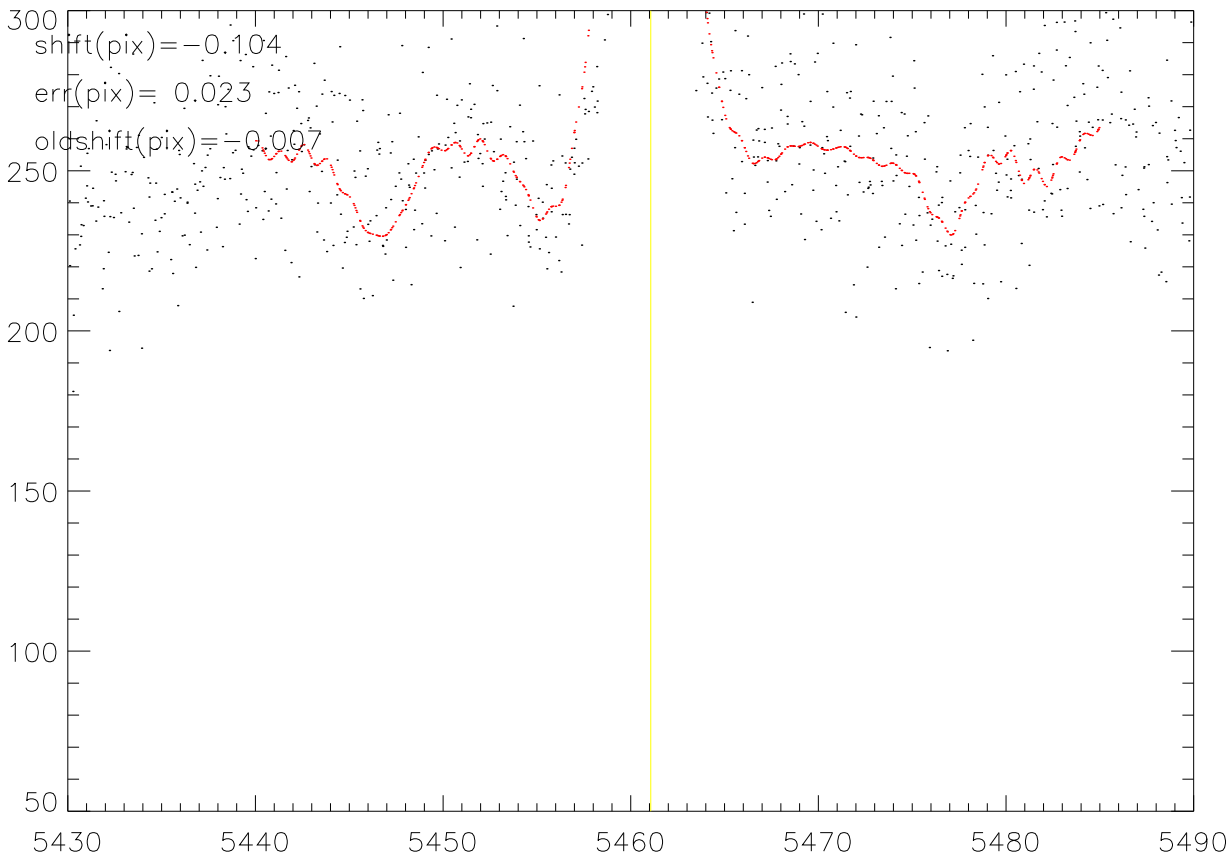
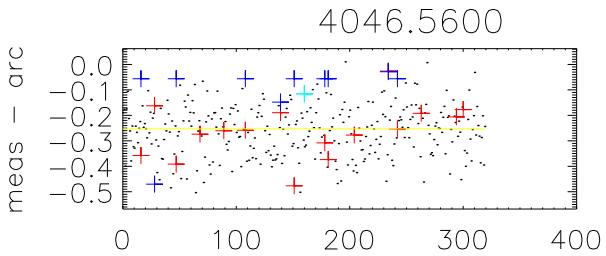

PLATE=2622 MJD=54095 Extraction chi^2 for sdR-b2-00042159.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

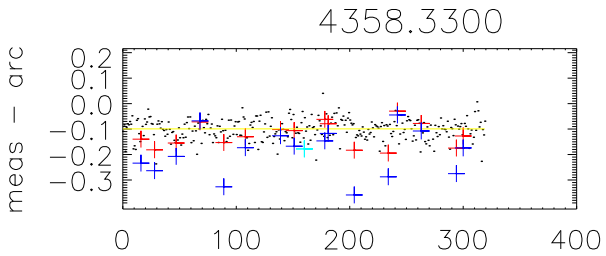

4046.5600
off: −0.52
sig: 0.095
4358.3300
off: −0.18
sig: 0.022
5460.9400
off: −0.01
sig: 0.018
5577.3390
off: −0.06
sig: 0.005
5889.9500
off: 0.11
sig: 0.010
5895.9240
off: 0.03
sig: 0.014

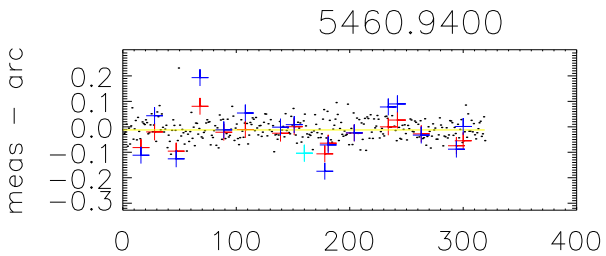

shift(pix)=−0.115
err(pix)= 0.050
oldshift(pix)=−0.519
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

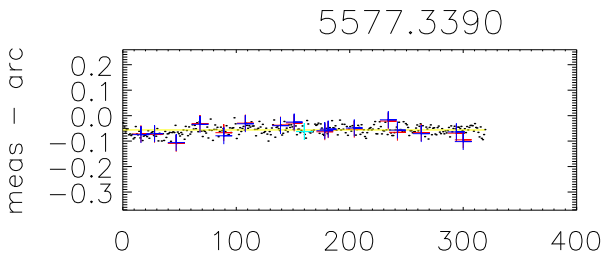

shift(pix)=−0.178
err(pix)= 0.022
oldshift(pix)=−0.176
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

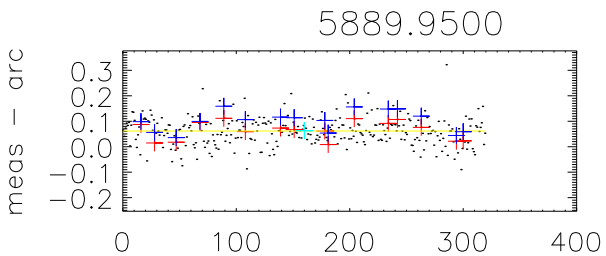

shift(pix)=−0.104
err(pix)= 0.023
oldshift(pix)=−0.007
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

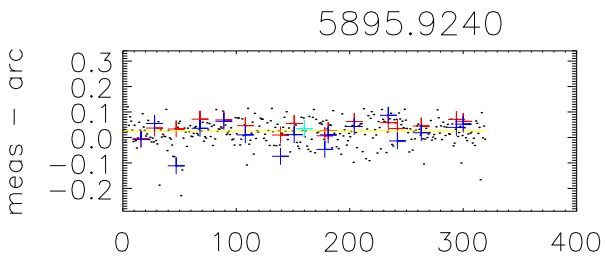

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

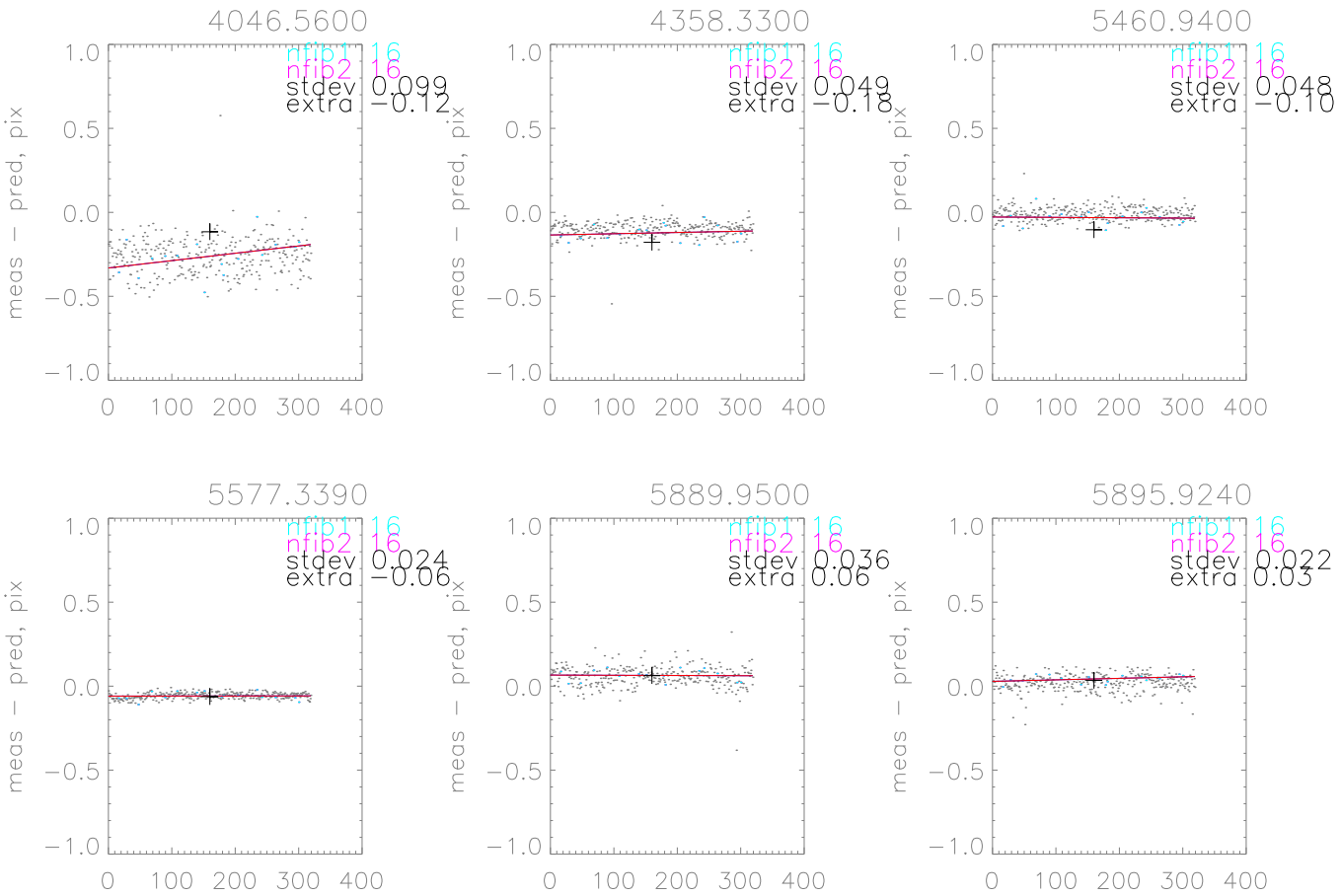

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

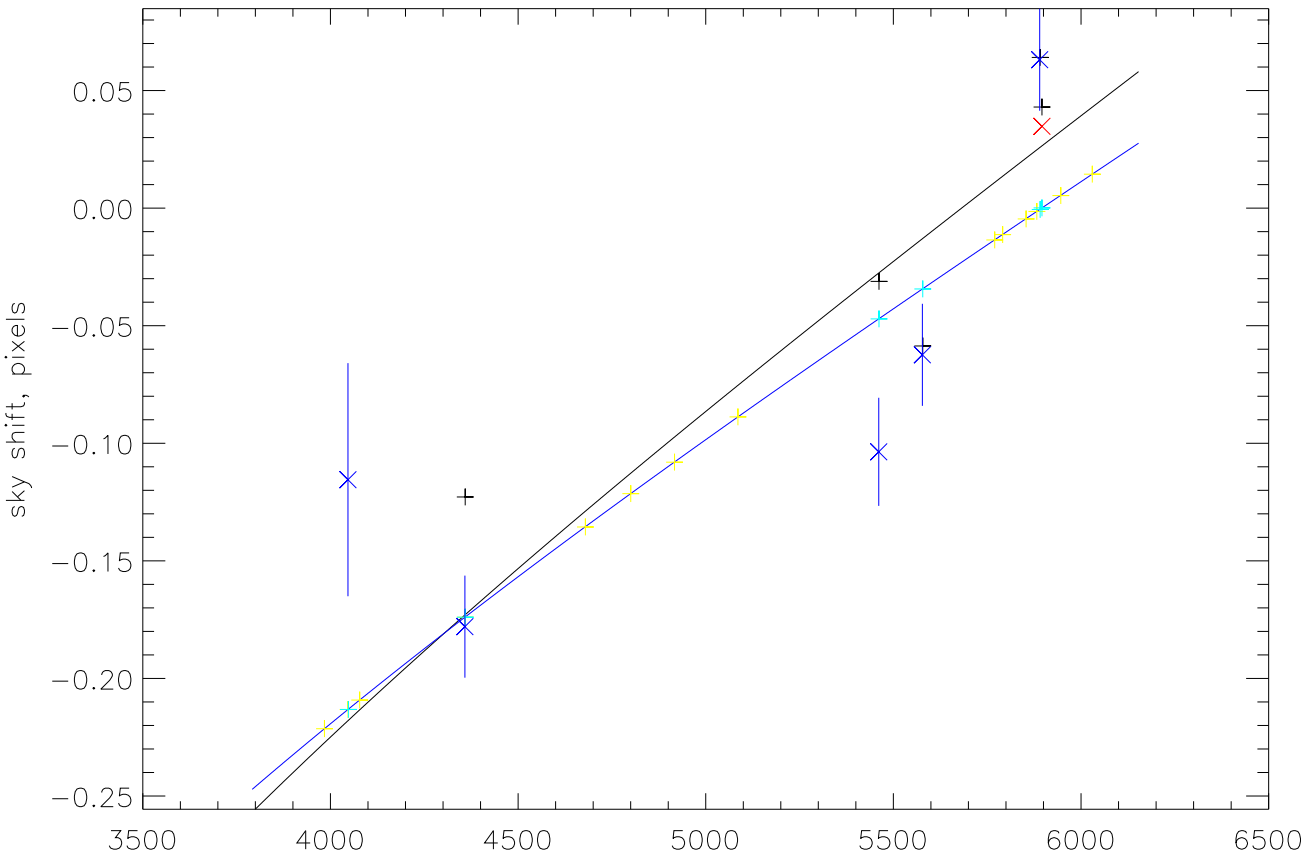

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

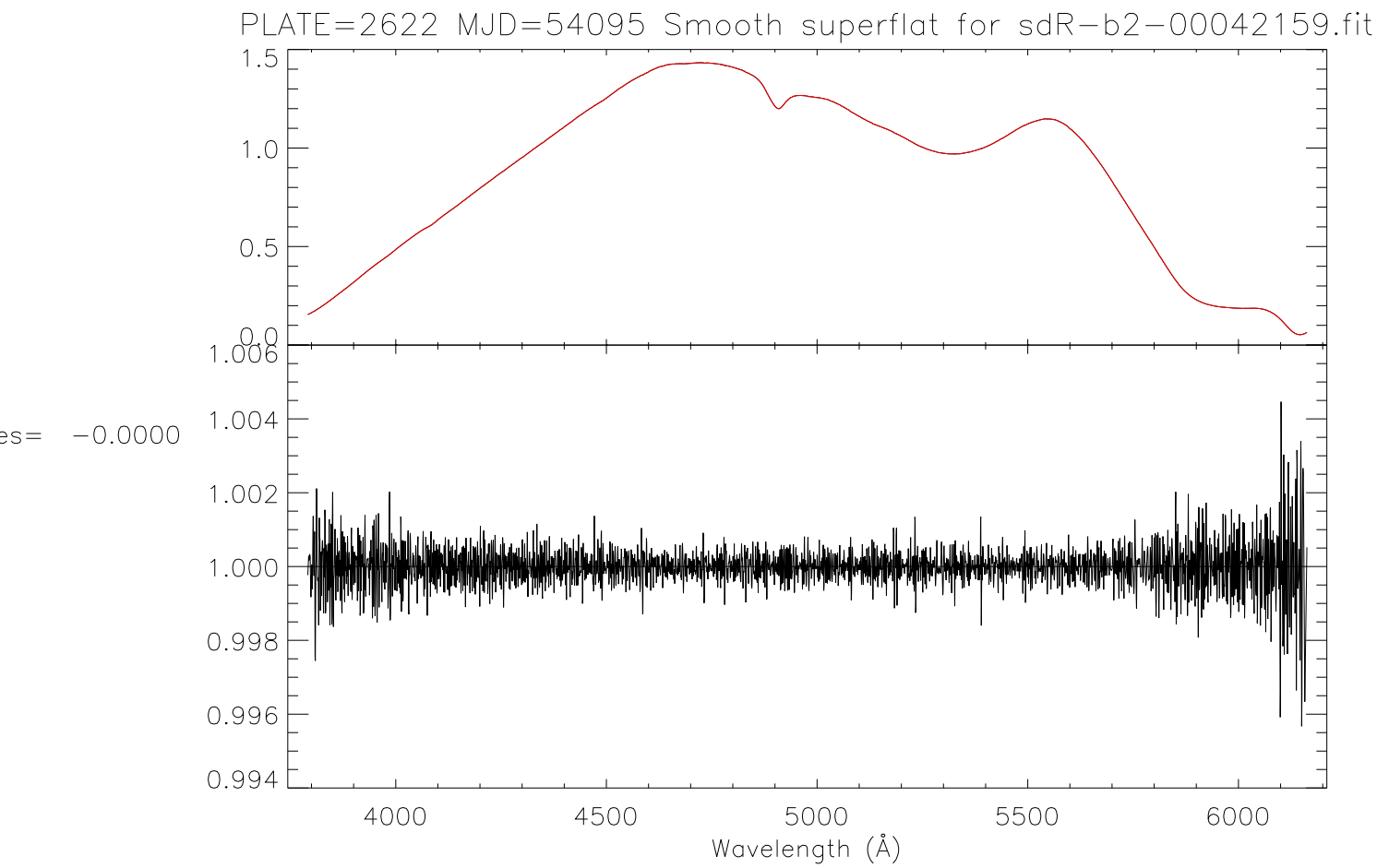

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

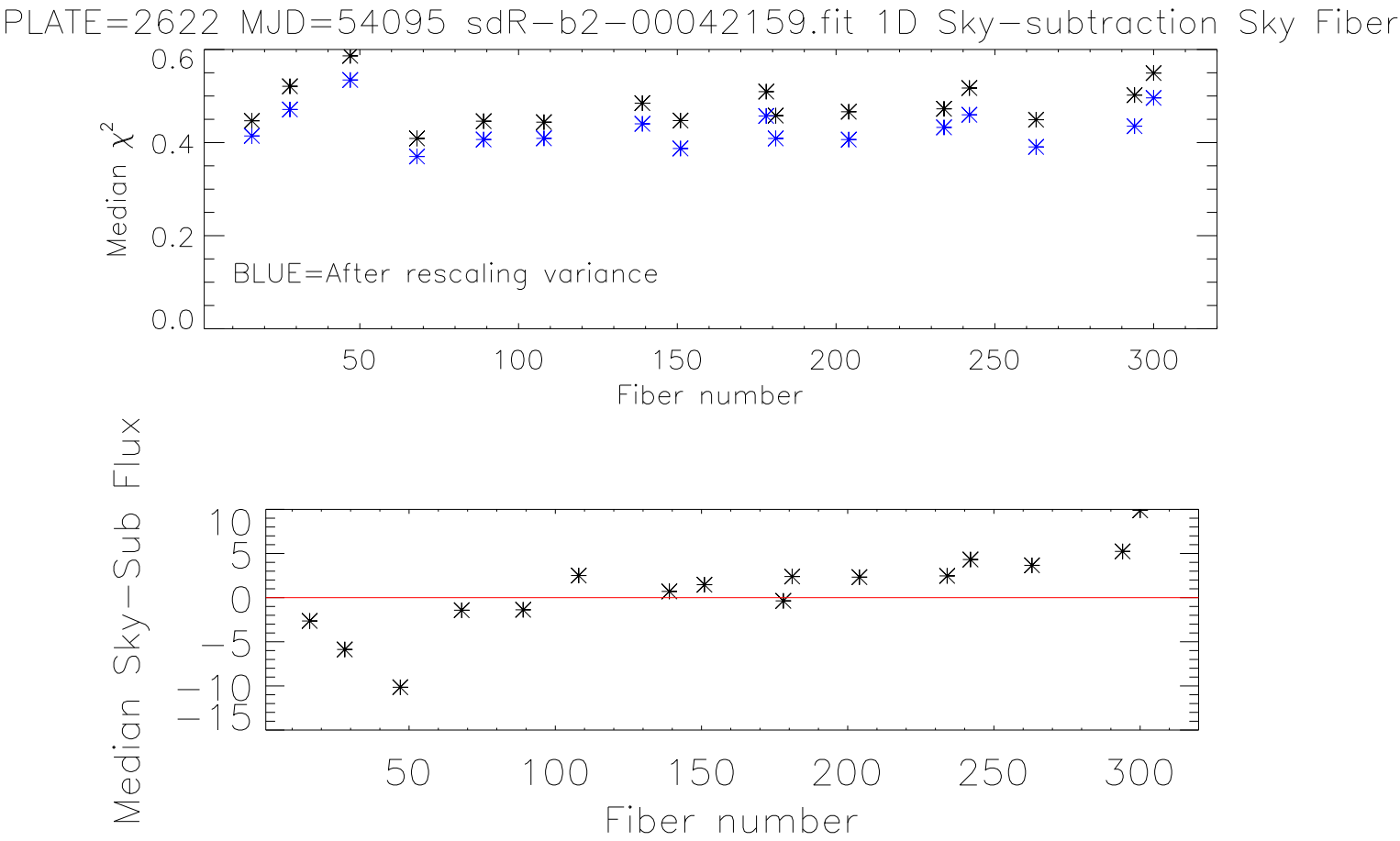

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

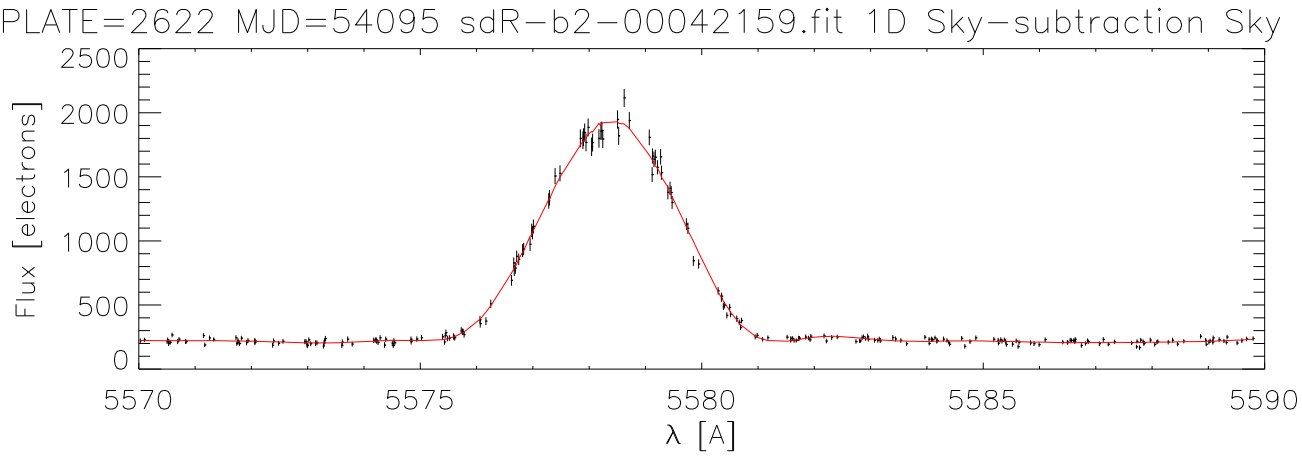

4046.5600
nfib1 16
nfib2 16
stdev 0.099
extra −0.12
4358.3300
nfib1 16
nfib2 16
stdev 0.049
extra −0.18
5460.9400
nfib1 16
nfib2 16
stdev 0.048
extra −0.10
5577.3390
nfib1 16
nfib2 16
stdev 0.024
extra −0.06
5889.9500
nfib1 16
nfib2 16
stdev 0.036
extra 0.06
5895.9240
nfib1 16
nfib2 16
stdev 0.022
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

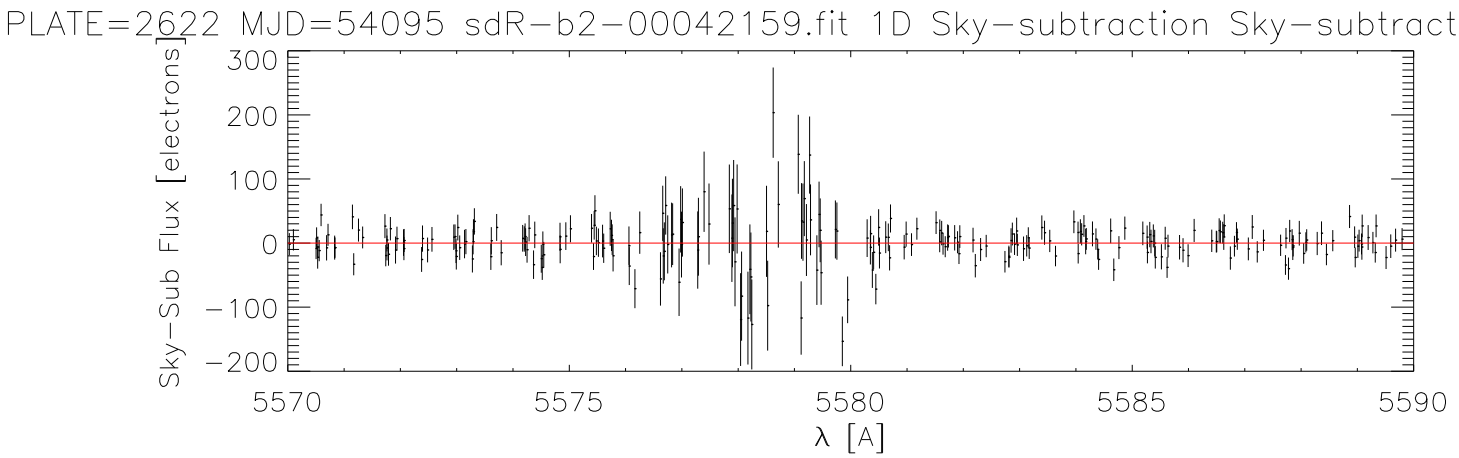

sky shift, pixels
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
3500
4000
4500
5000
5500
6000
6500

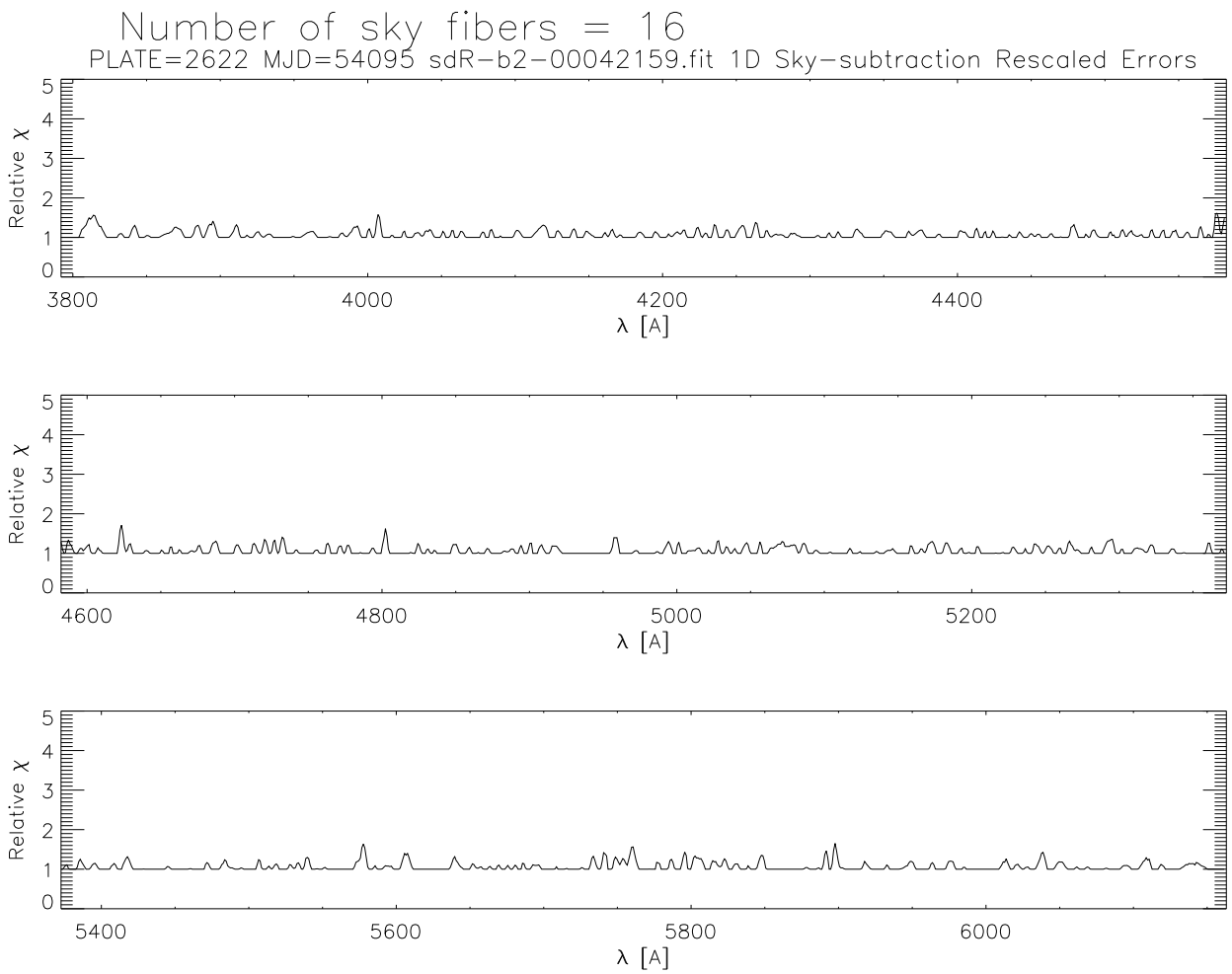

PLATE=2622 MJD=54095 Smooth superflat for sdR-b2-00042159.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

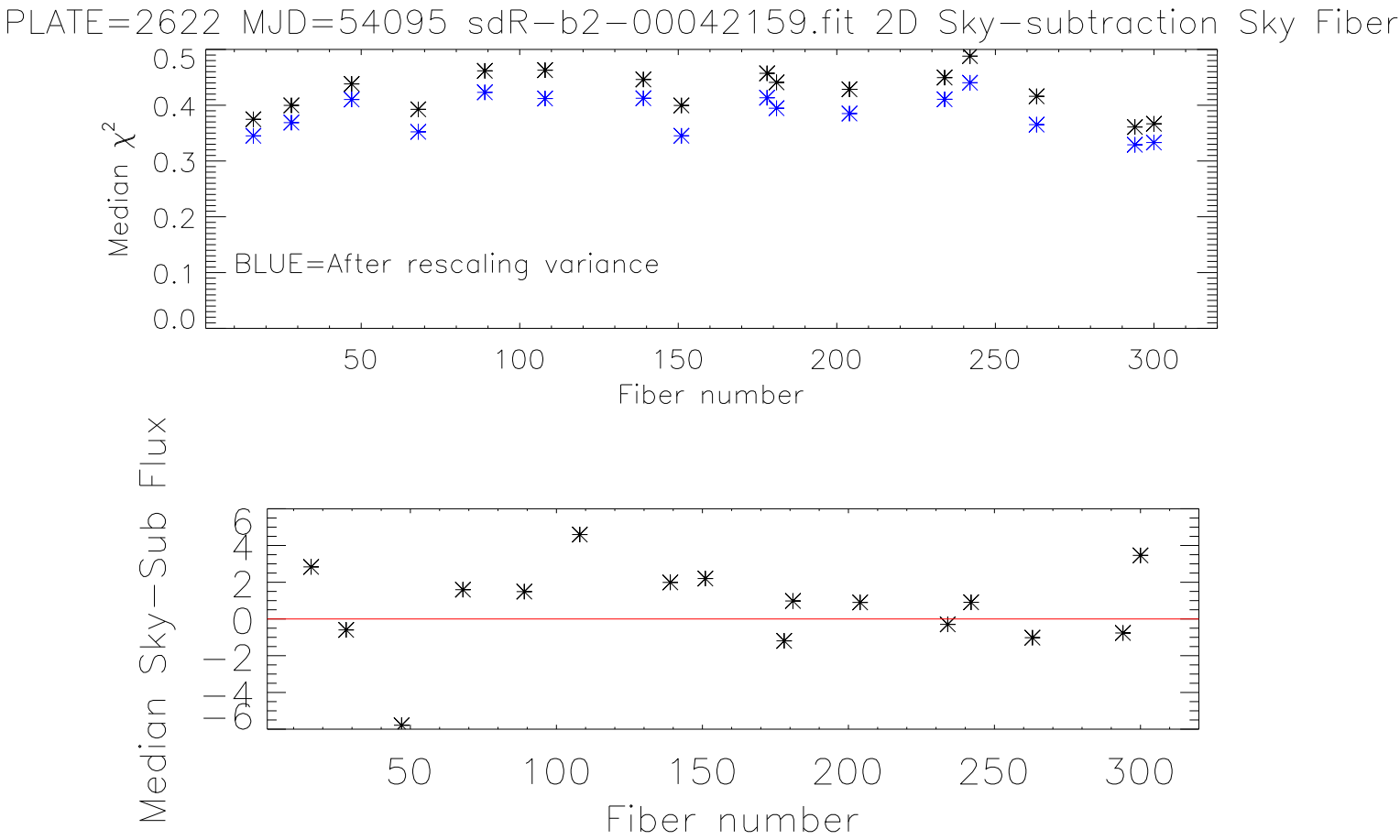
es= −0.0000

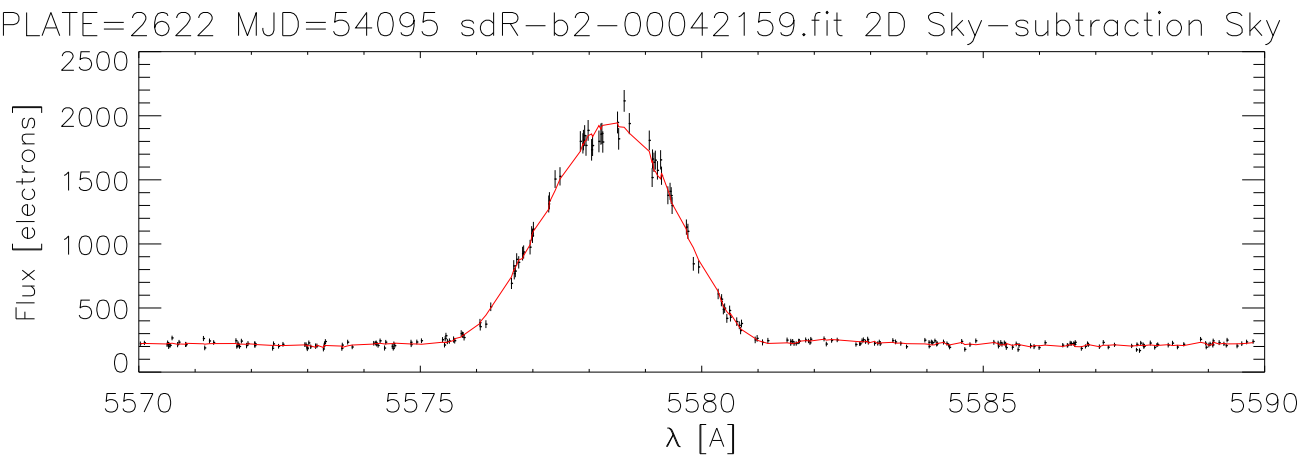

PLATE=2622 MJD=54095 sdR-b2-00042159.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

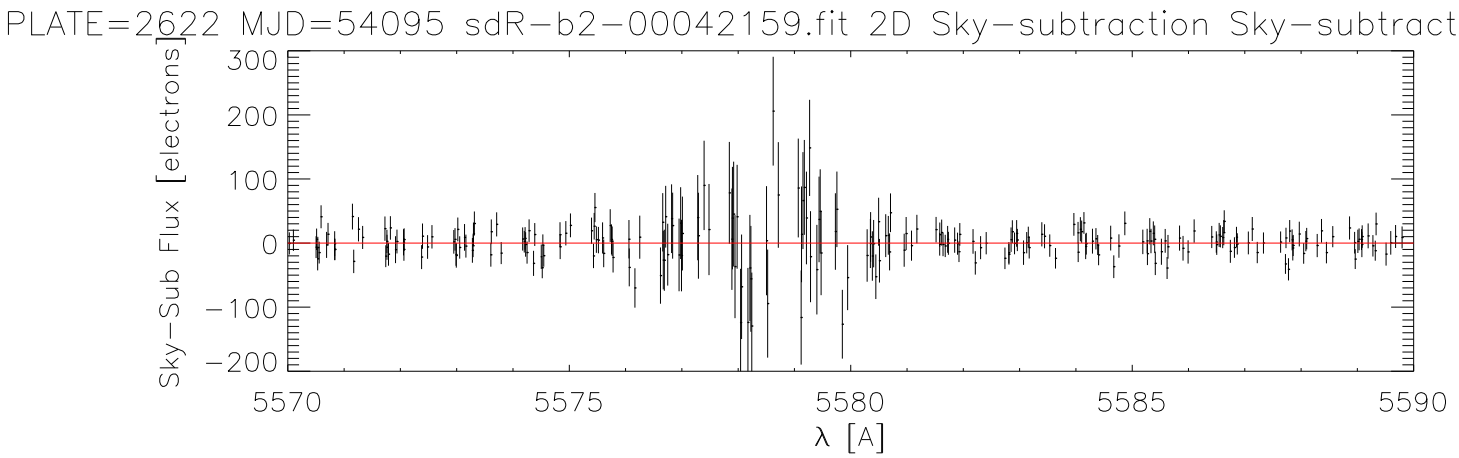

PLATE=2622 MJD=54095 sdR-b2-00042159.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

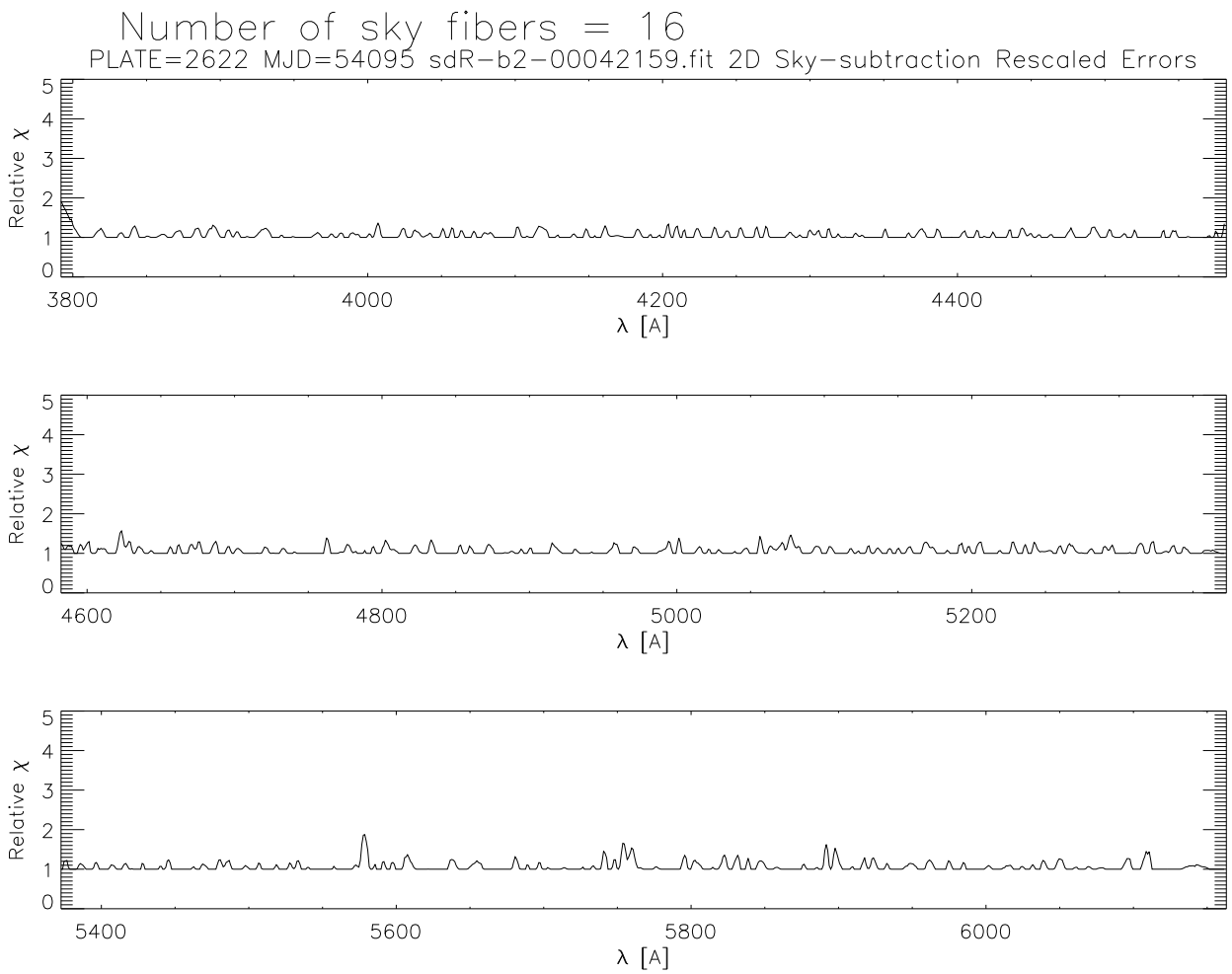

PLATE=2622 MJD=54095 sdR-b2-00042159.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

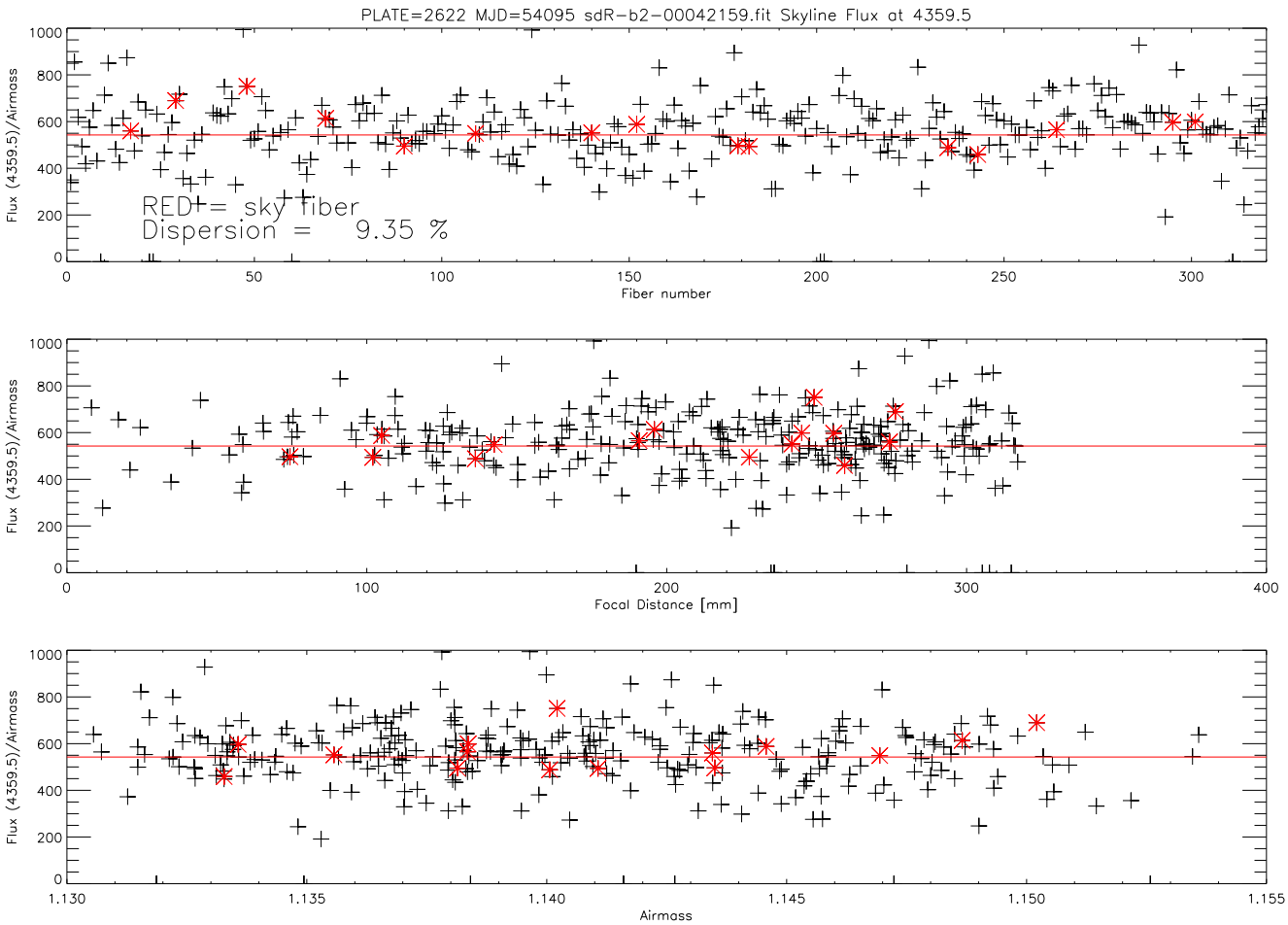

Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-b2-00042159.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

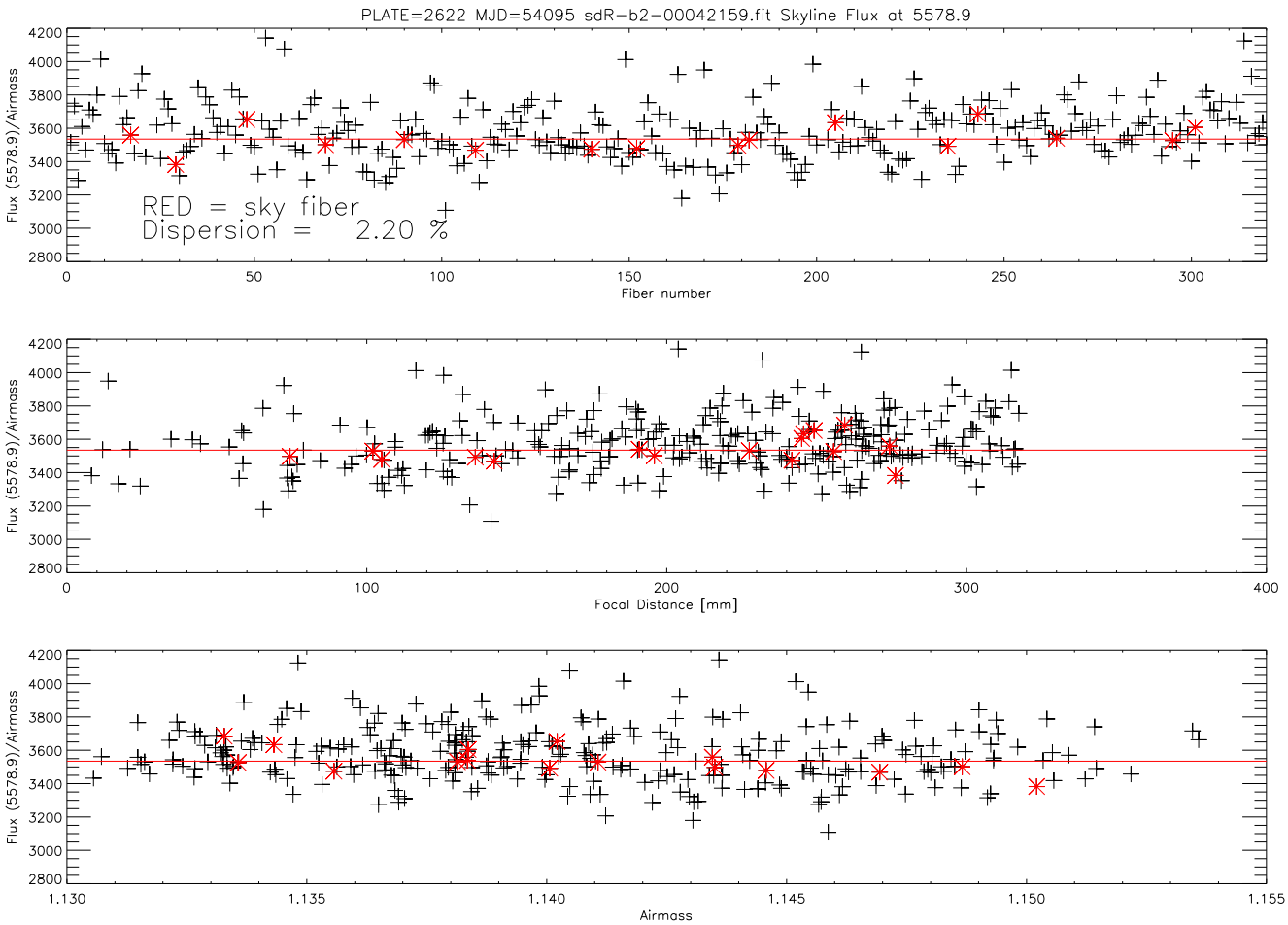

PLATE=2622 MJD=54095 sdR-b2-00042159.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

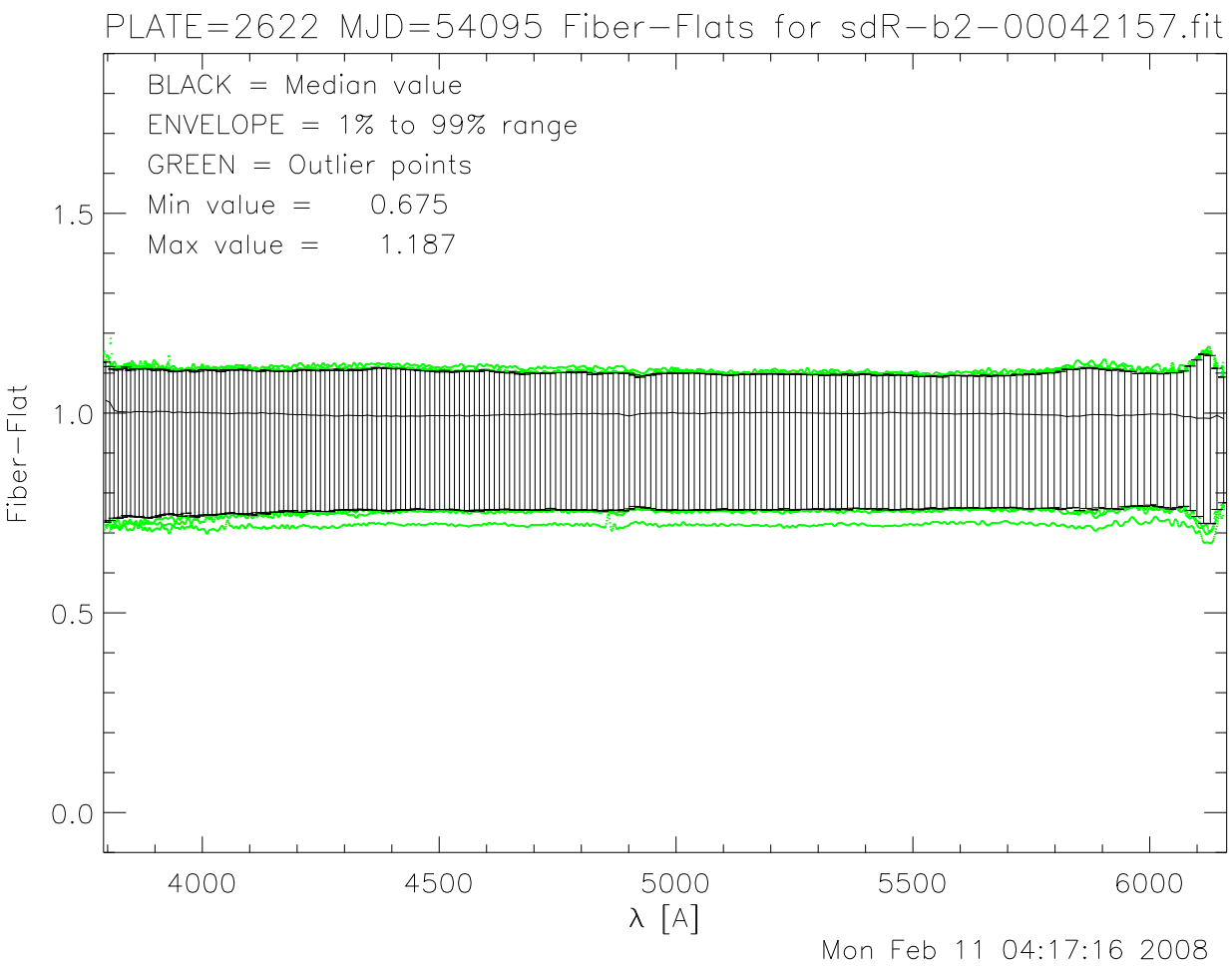

PLATE=2622 MJD=54095 sdR-b2-00042159.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2622 MJD=54095 sdR-b2-00042159.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=2622 MJD=54095 sdR-b2-00042159.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5


PLATE=2622 MJD=54095 sdR-b2-00042159.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED+= sky fiber
Dispersion = 9.35 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=2622 MJD=54095 sdR-b2-00042159.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.20 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass


PLATE=2622 MJD=54095 Fiber-Flats for sdR-b2-00042157.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.675
Max value = 1.187
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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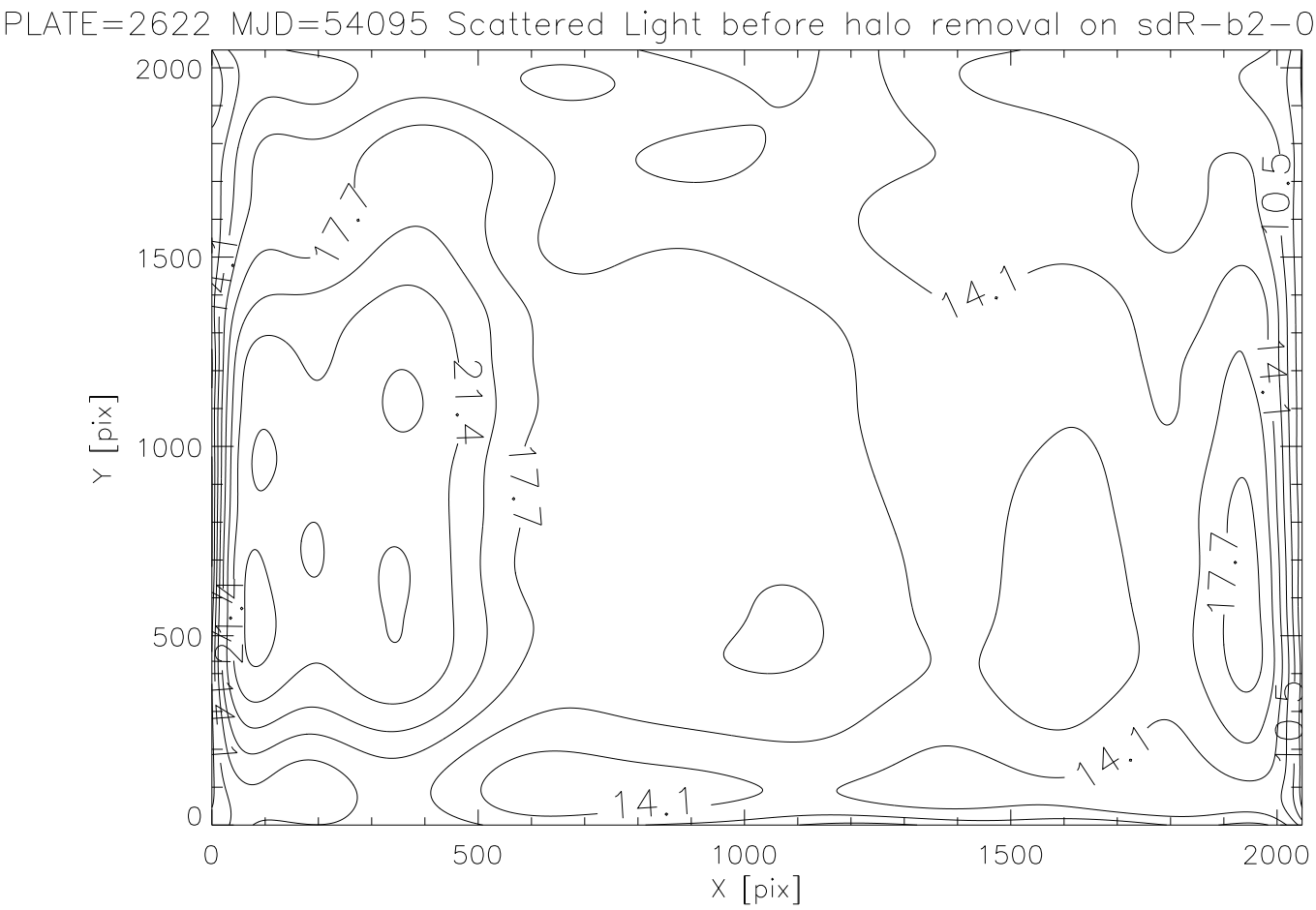
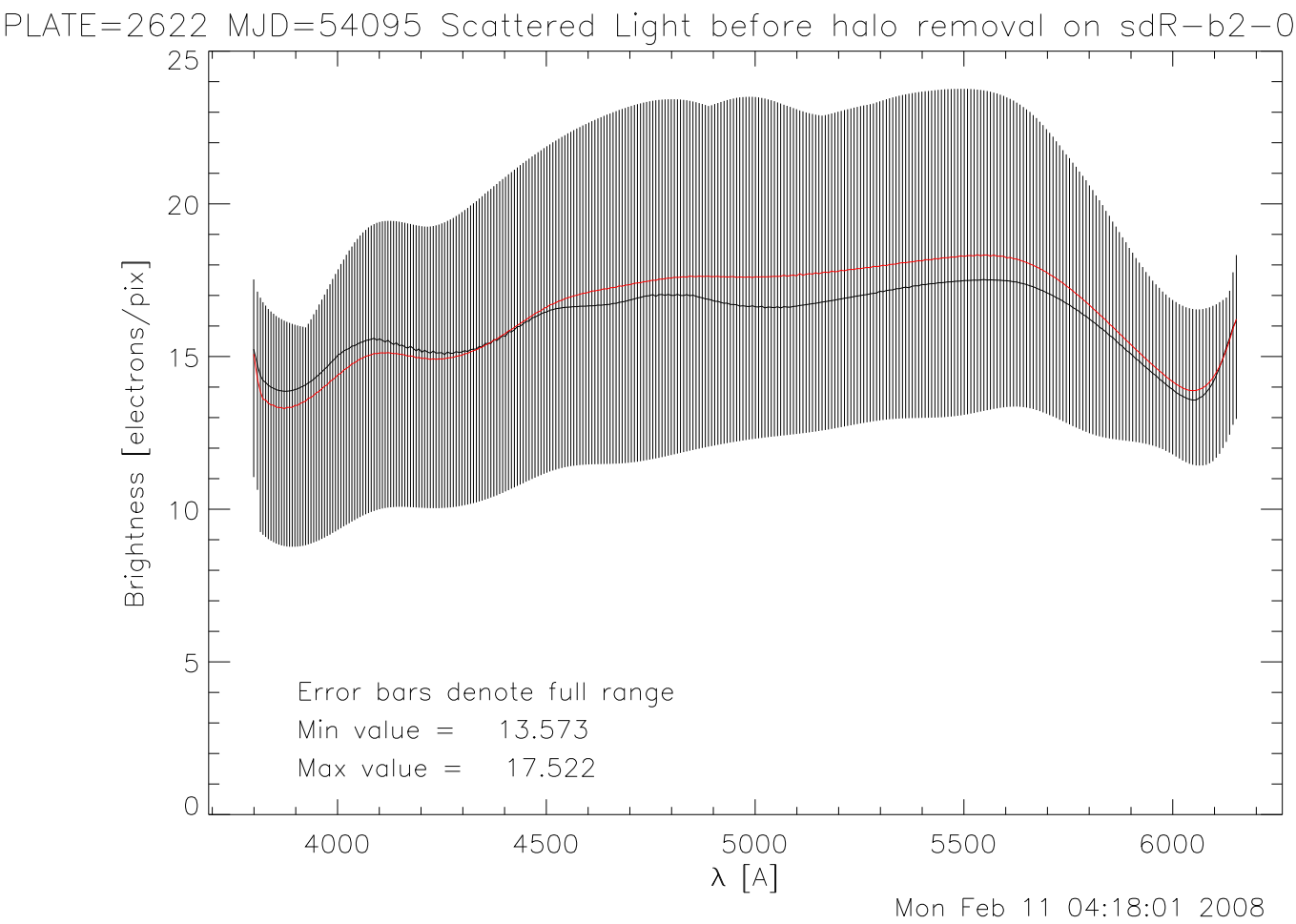
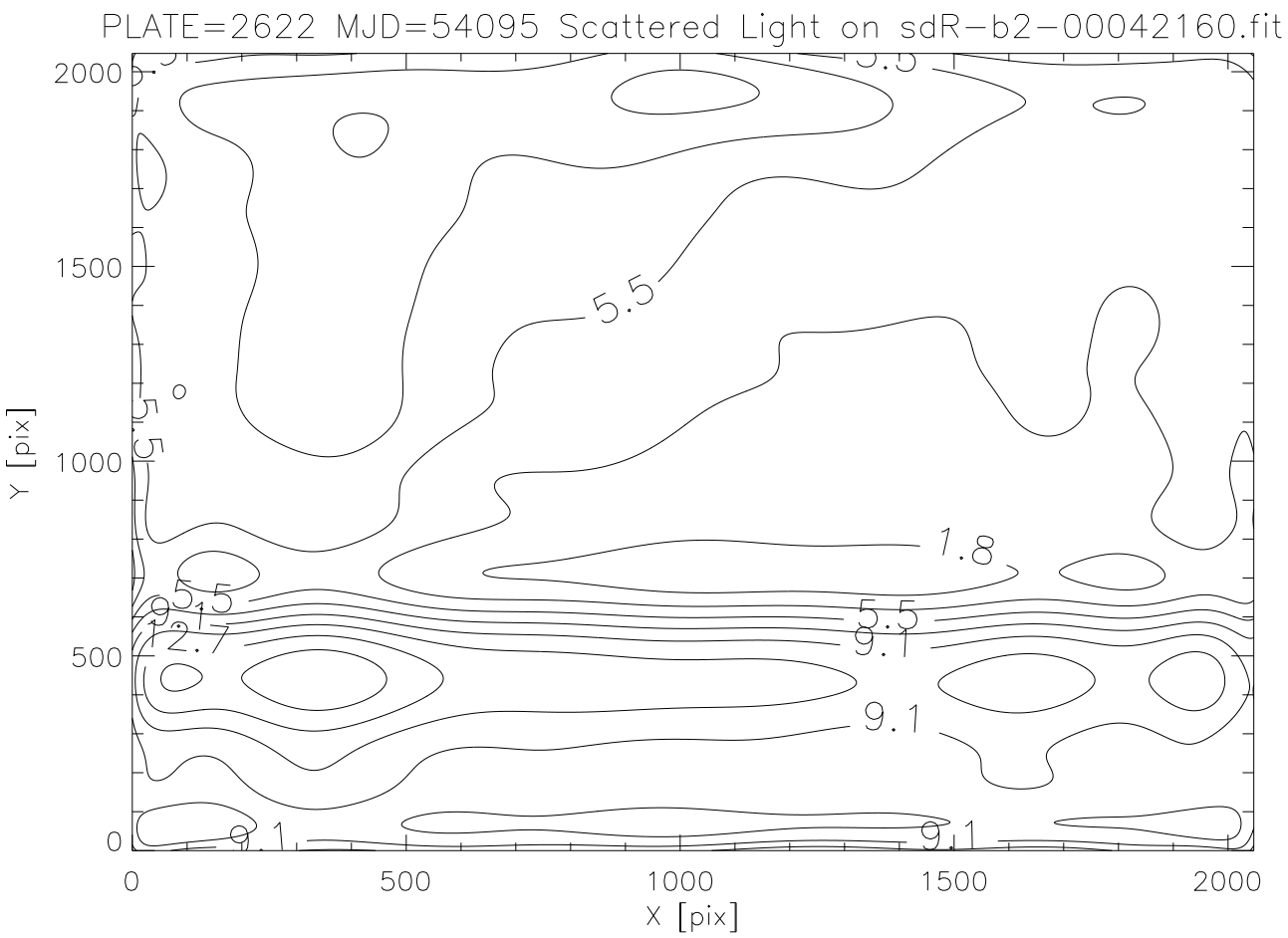
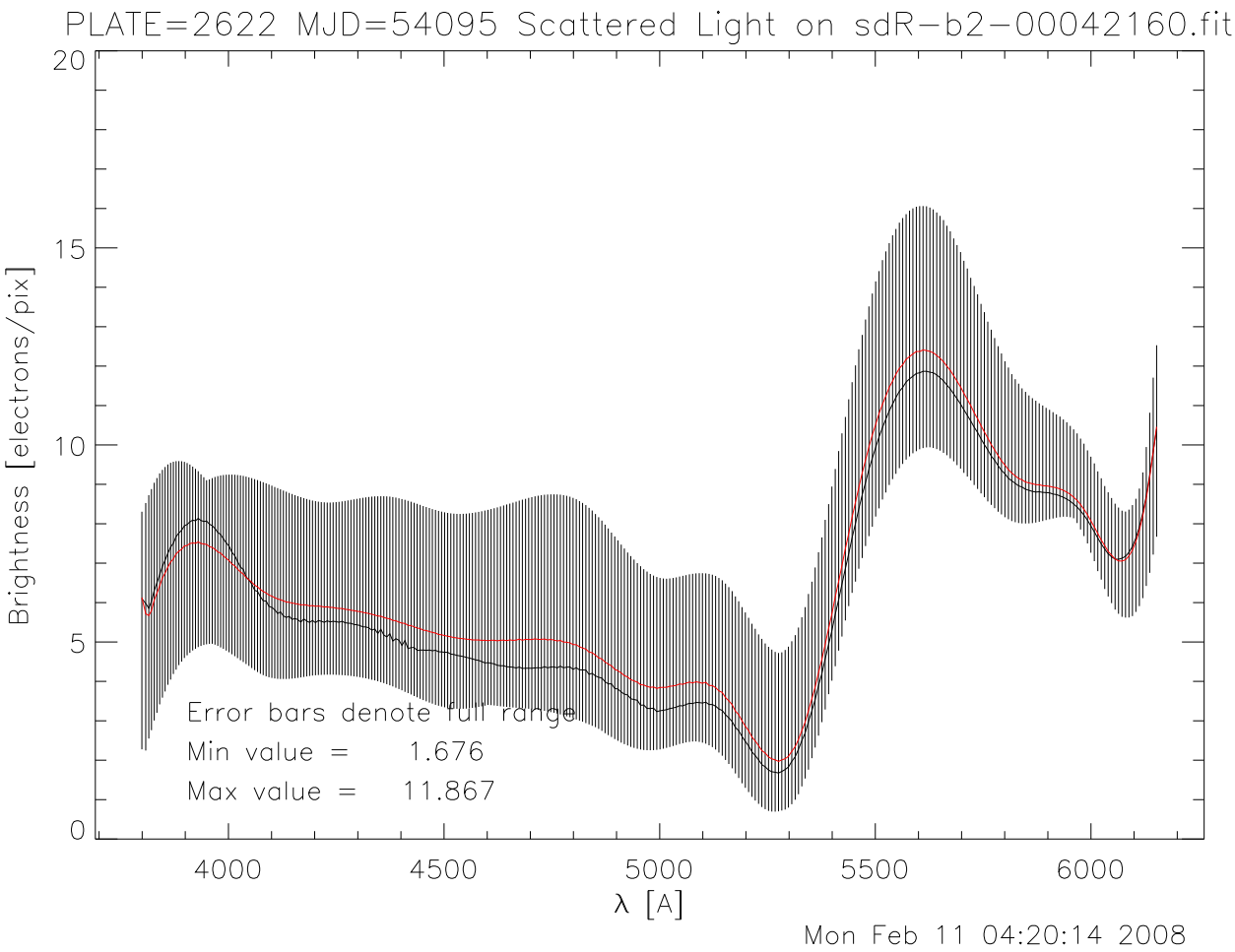
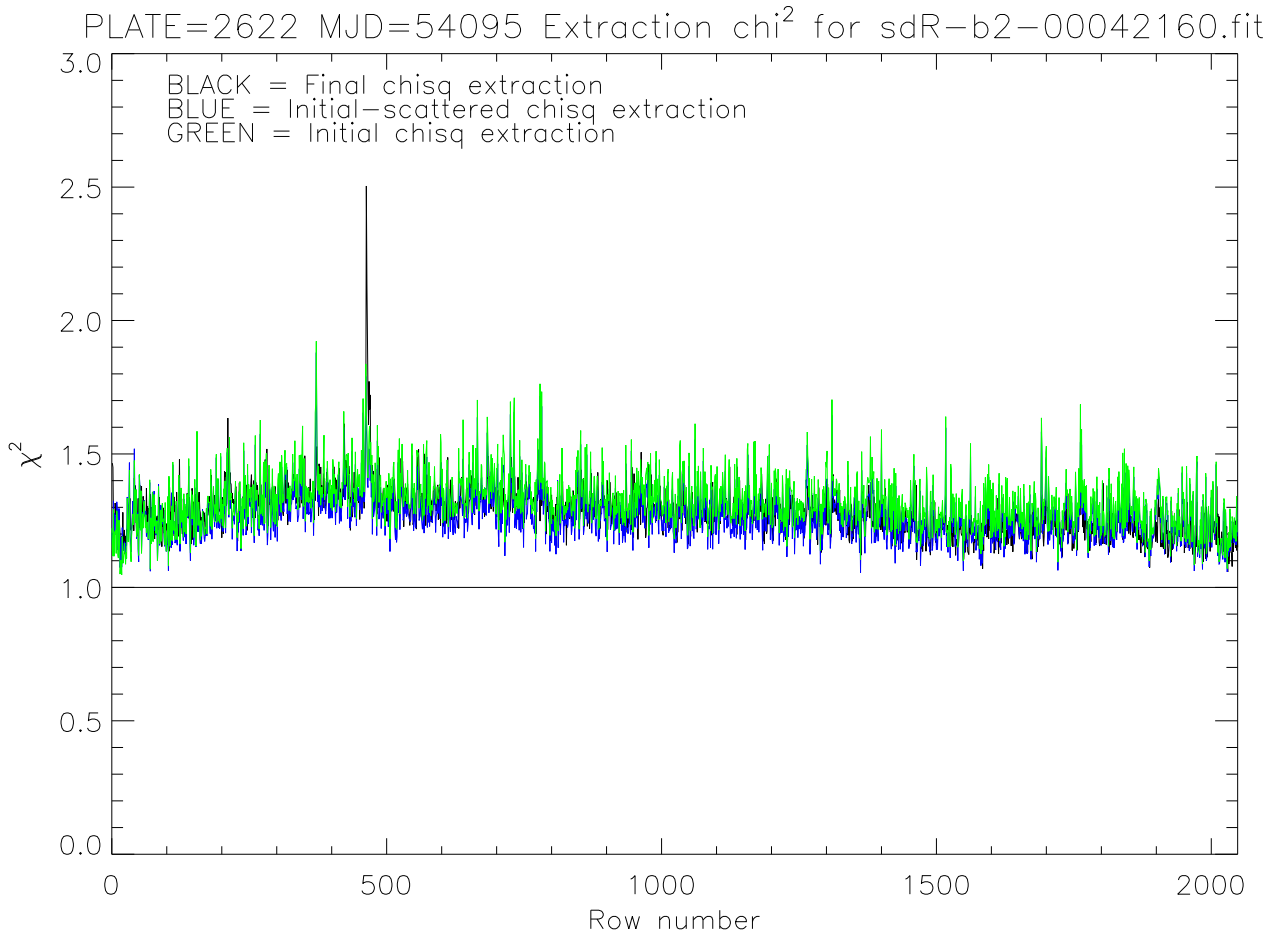
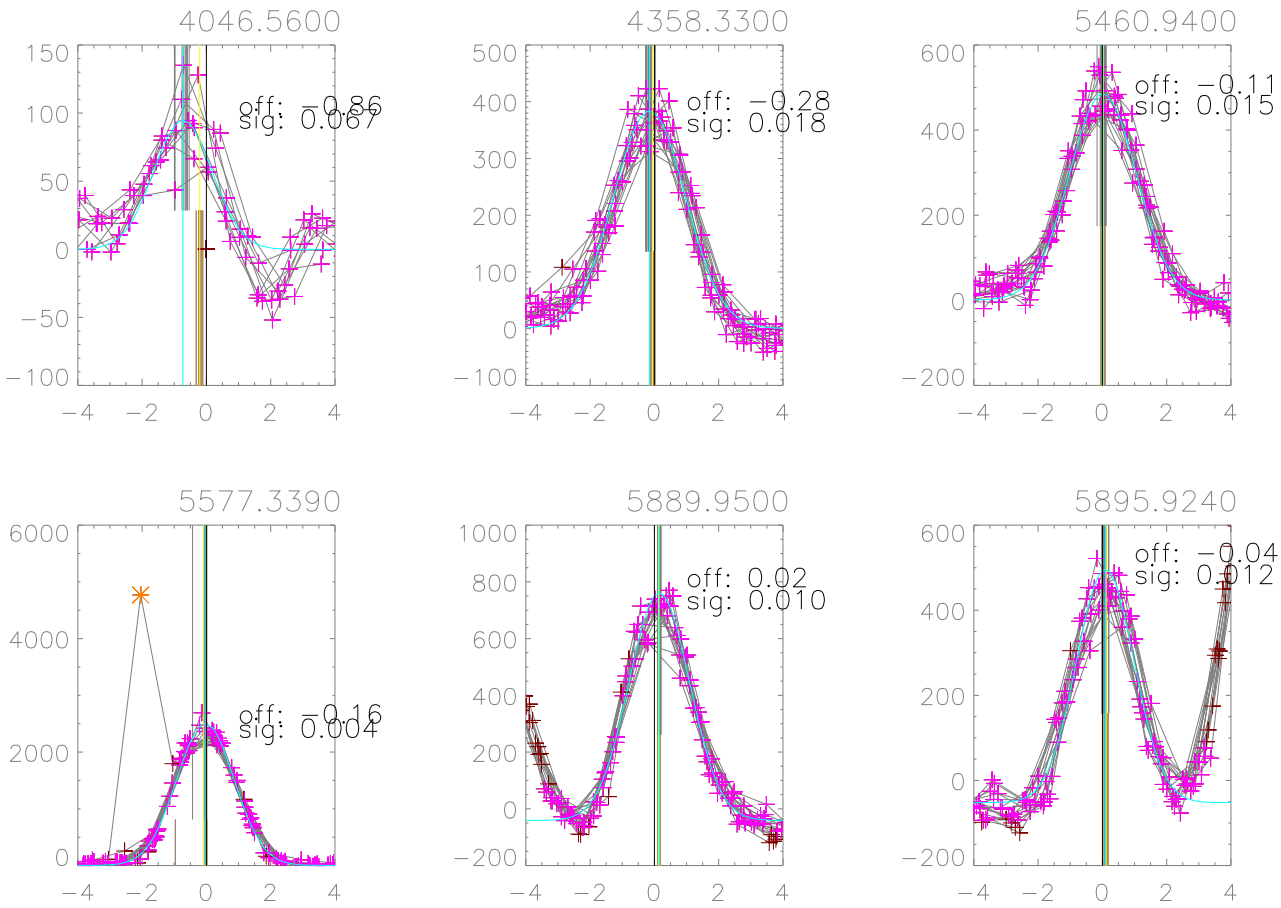

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-b2-00042160.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
17.7
21.4
14.1
10.5

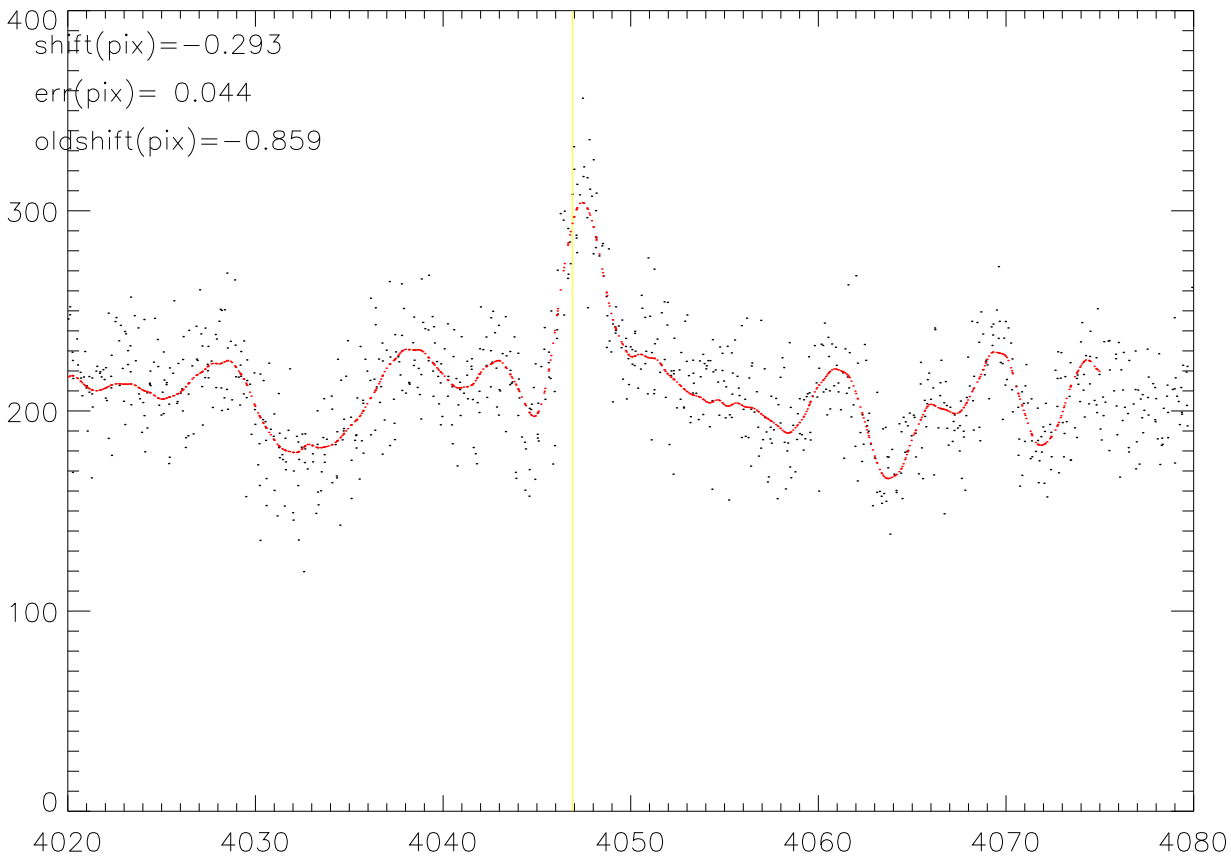

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-b2-00042160.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 13.573
Max value = 17.522
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 04:18:01 2008

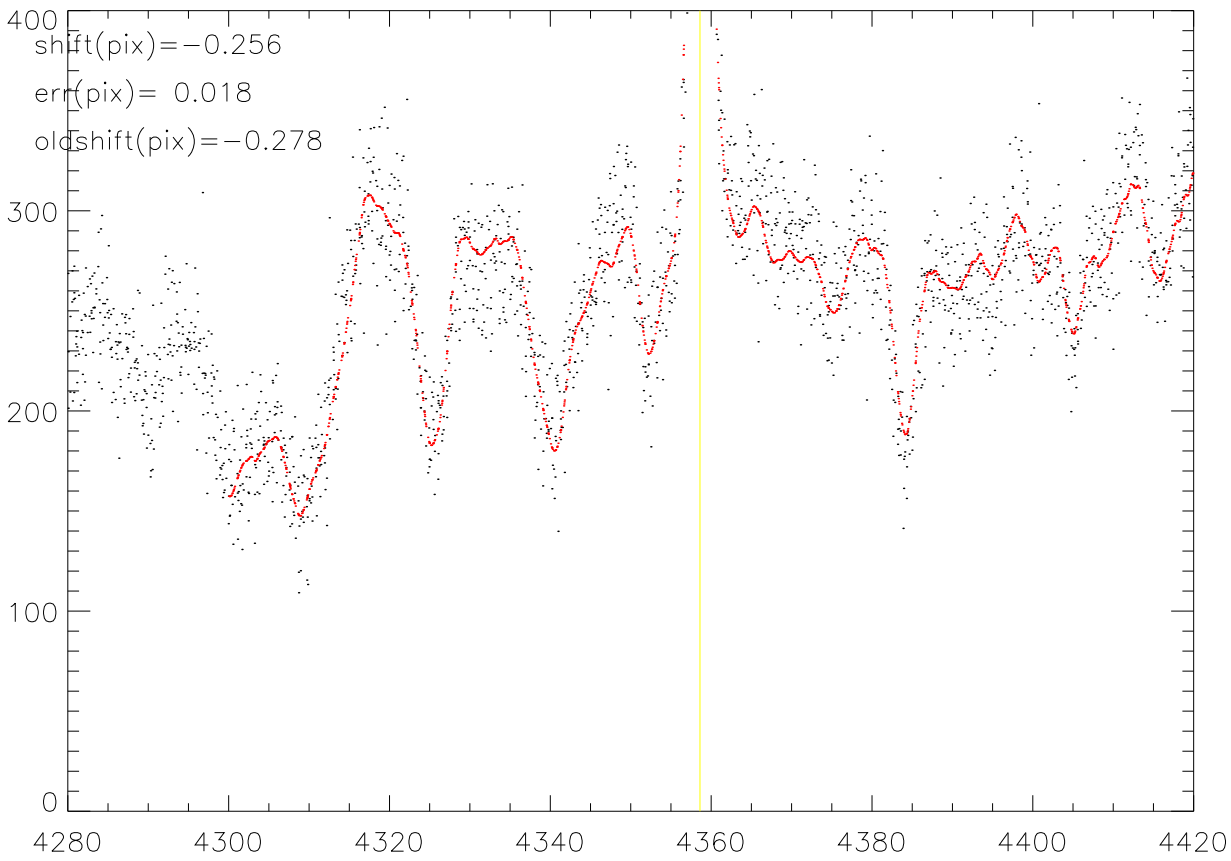

PLATE=2622 MJD=54095 Scattered Light on sdR-b2-00042160.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
1.8
9.1
12.7

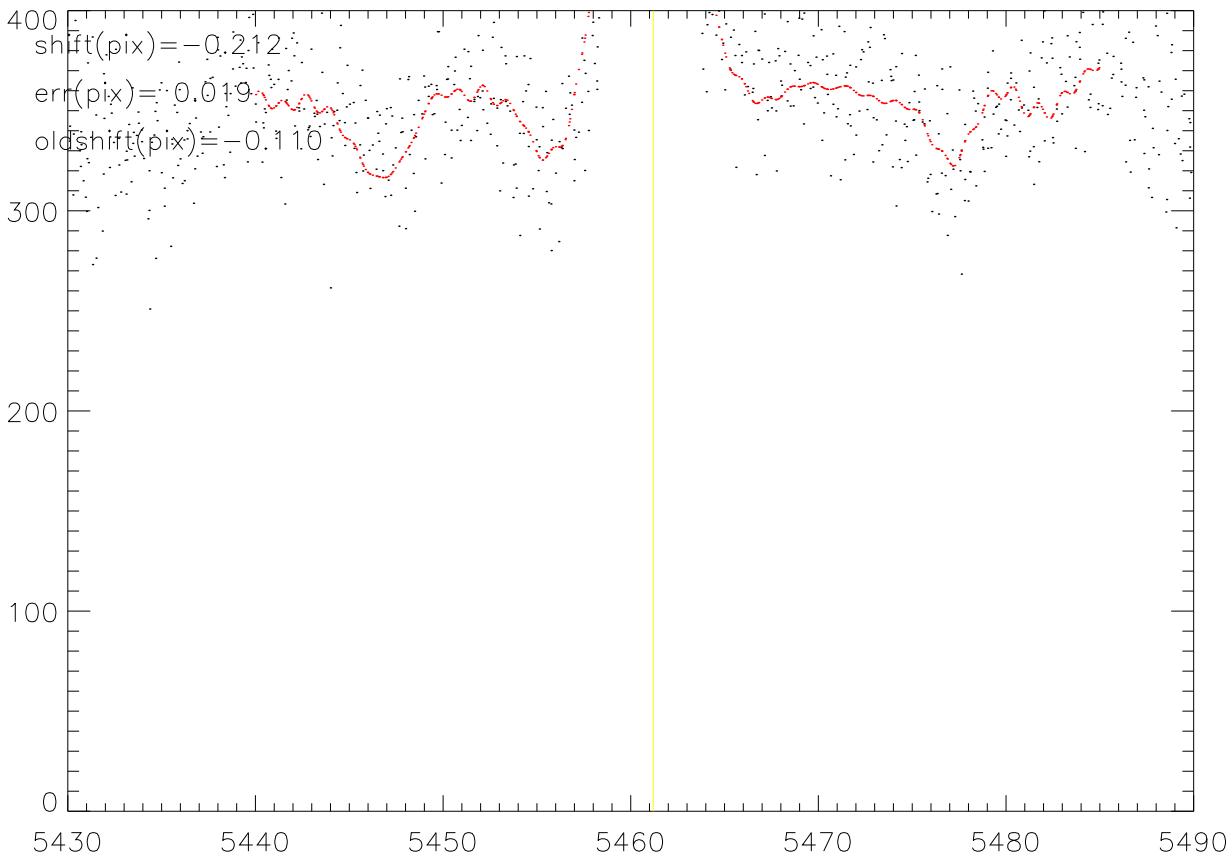

PLATE=2622 MJD=54095 Scattered Light on sdR-b2-00042160.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.676
Max value = 11.867
Mon Feb 11 04:20:14 2008

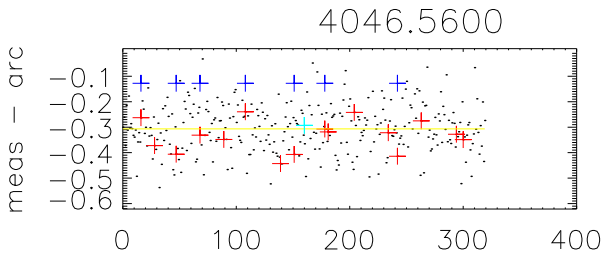

PLATE=2622 MJD=54095 Extraction chi^2 for sdR-b2-00042160.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

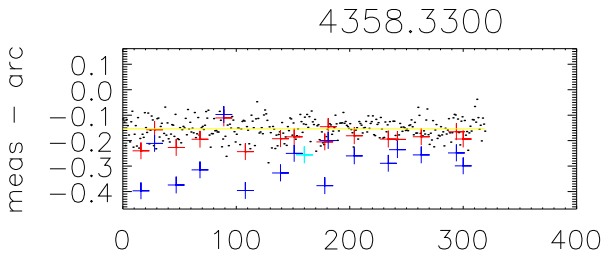

4046.5600
off: −0.86
sig: 0.067
4358.3300
off: −0.28
sig: 0.018
5460.9400
off: −0.11
sig: 0.015
5577.3390
off: −0.16
sig: 0.004
5889.9500
off: 0.02
sig: 0.010
5895.9240
off: −0.04
sig: 0.012

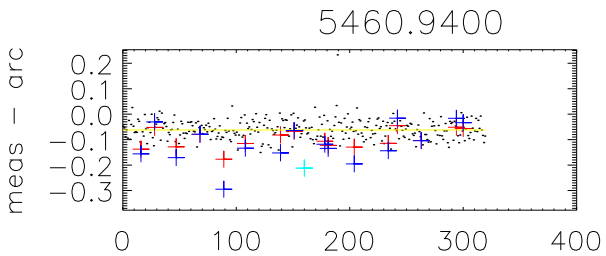

shift(pix)=−0.293
err(pix)= 0.044
oldshift(pix)=−0.859
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

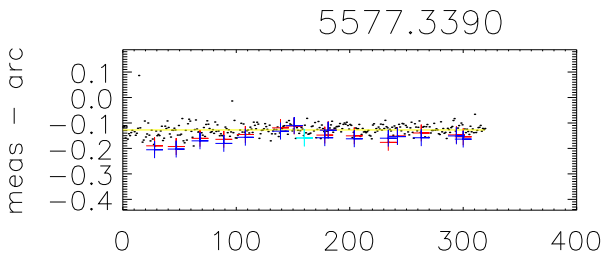

shift(pix)=−0.256
err(pix)= 0.018
oldshift(pix)=−0.278
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

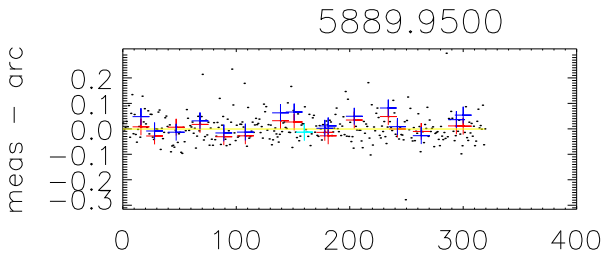

shift(pix)=−0.212
err(pix)= 0.019
oldshift(pix)=−0.110
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

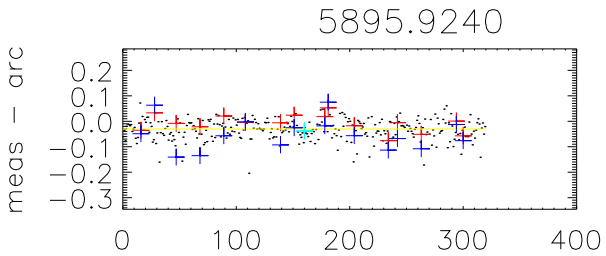

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

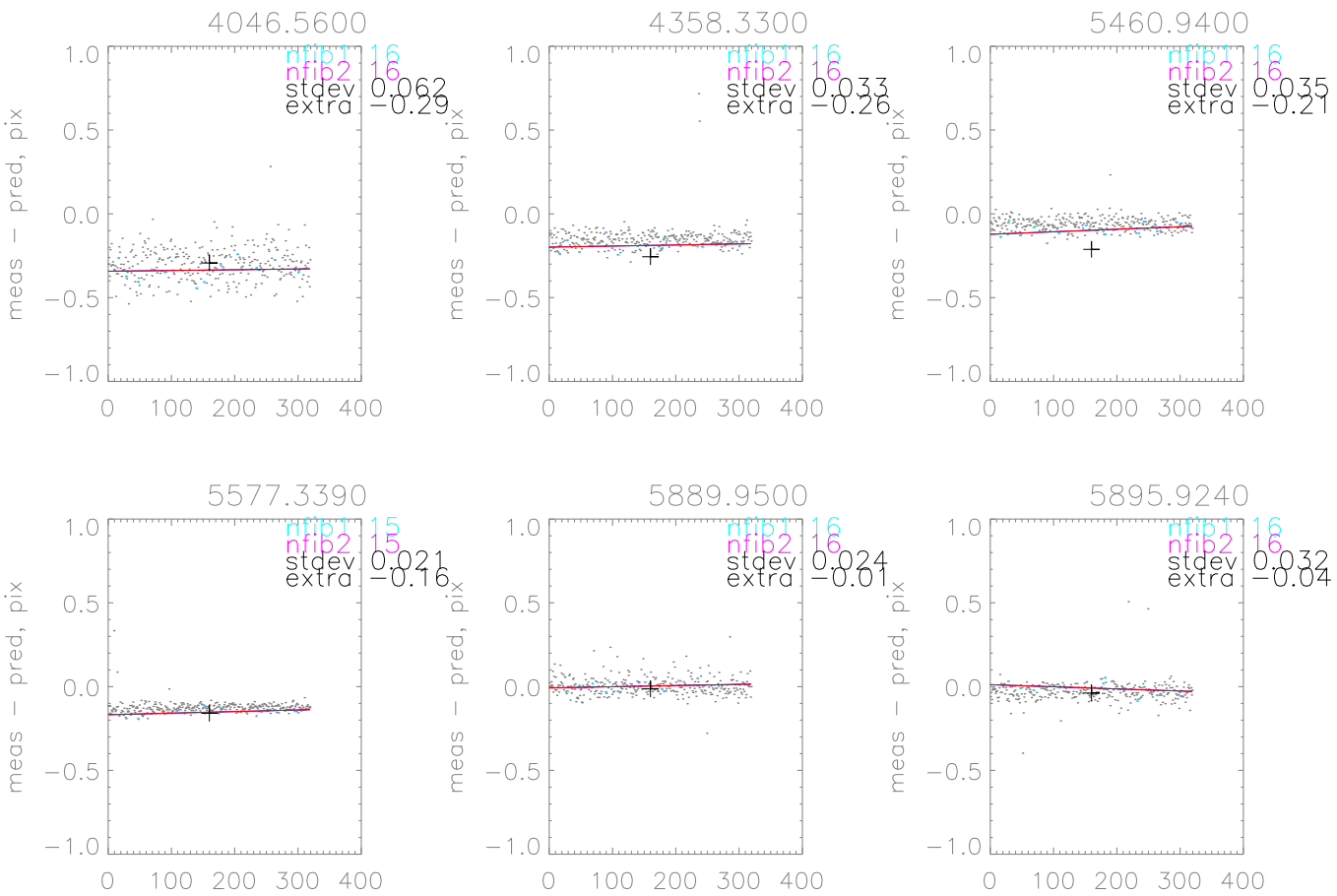

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

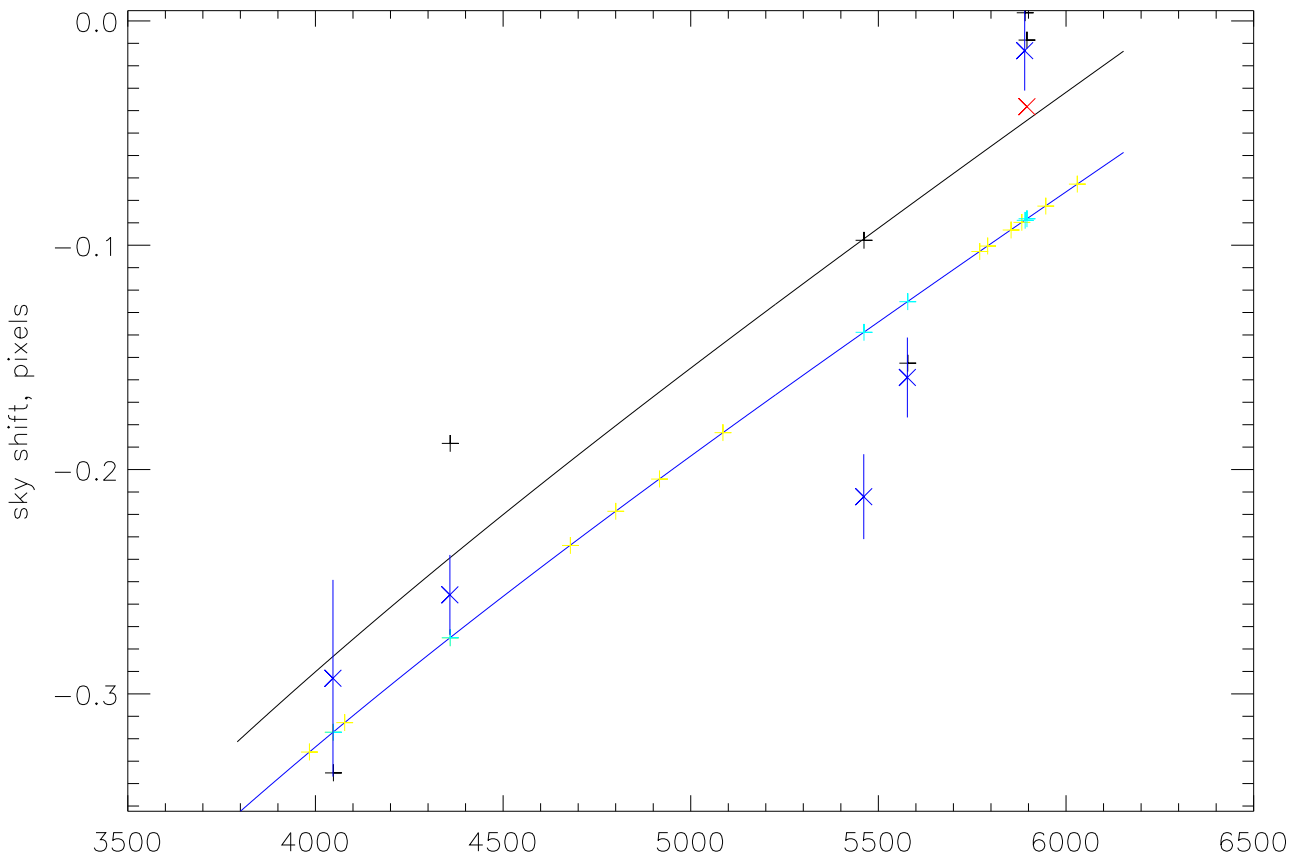

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

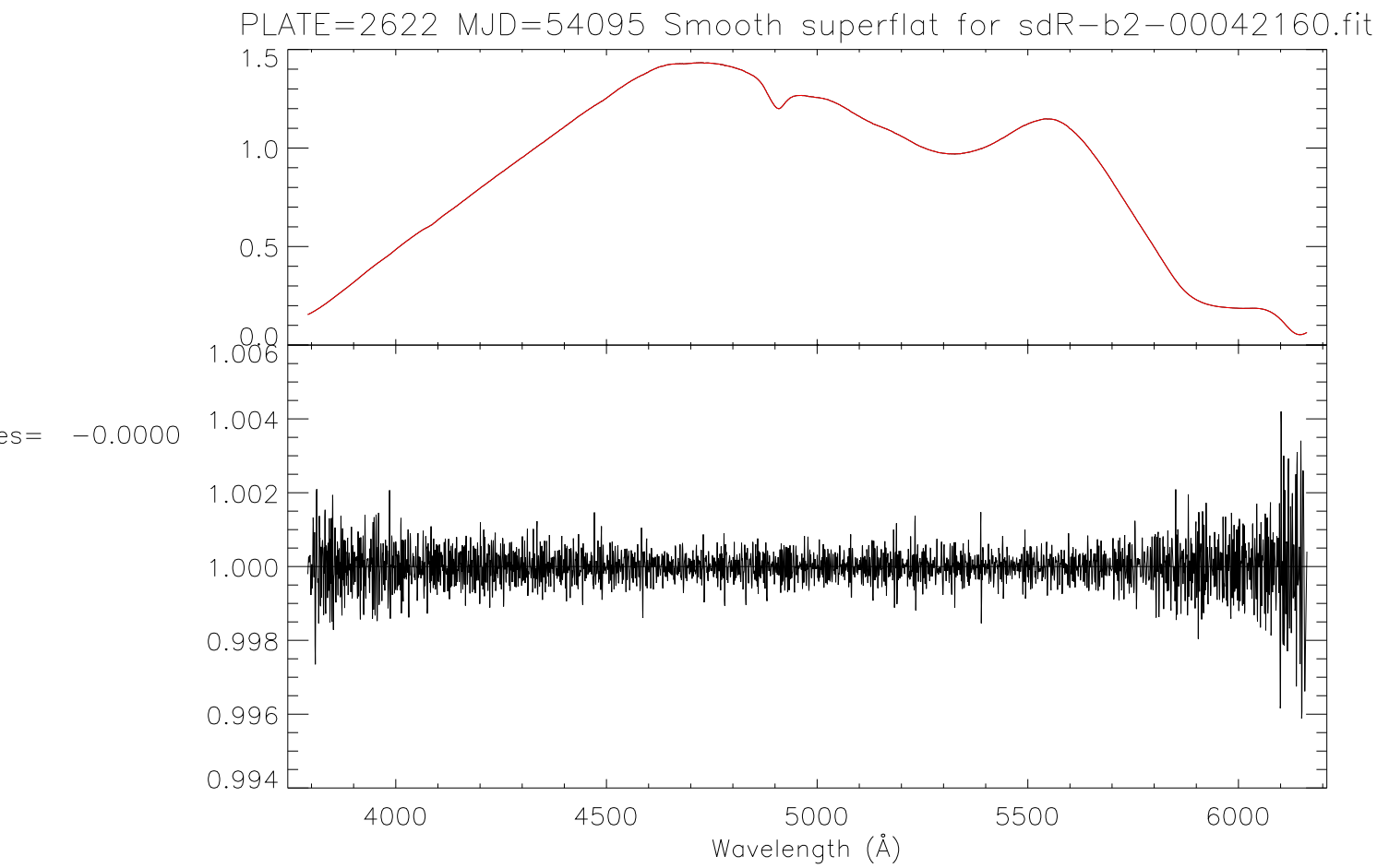

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

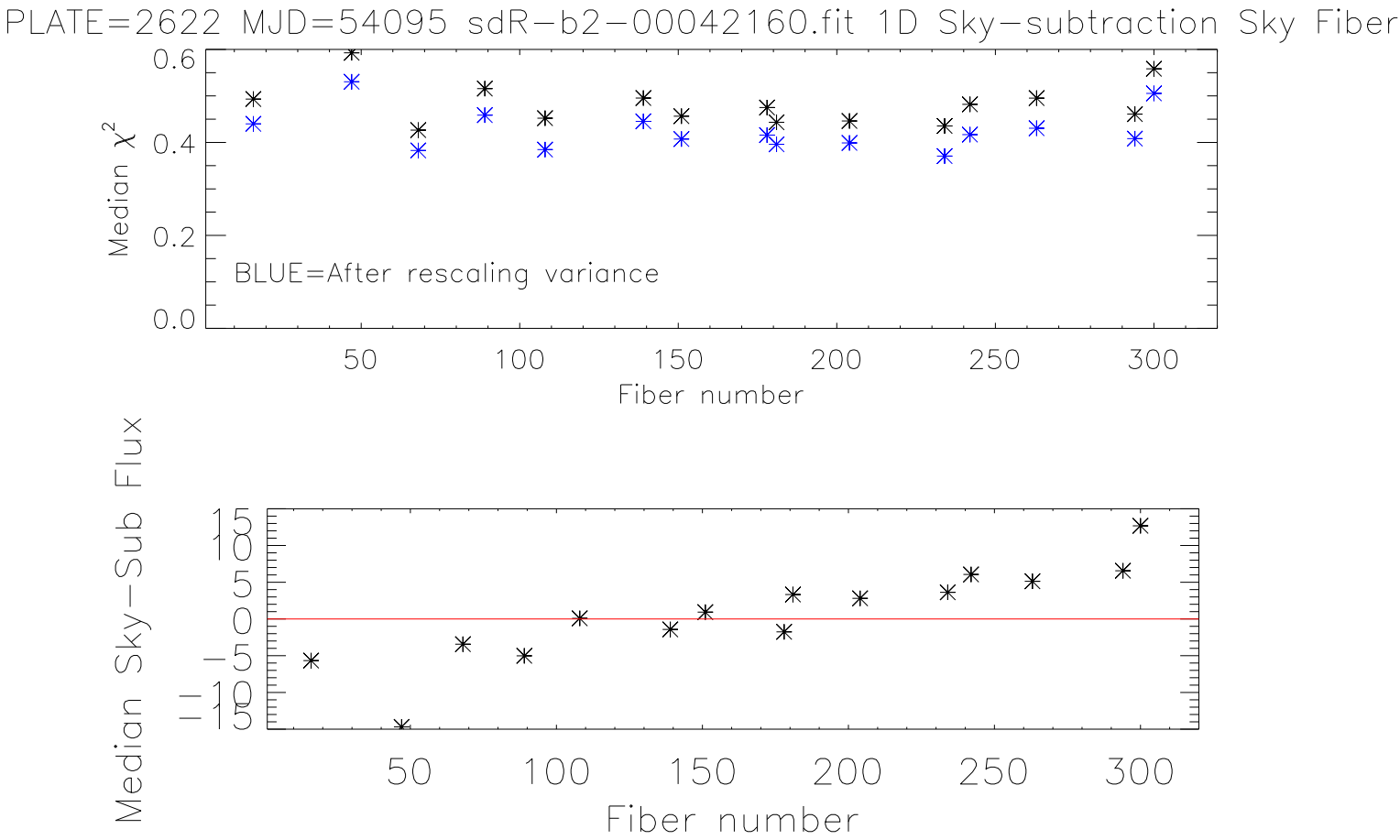

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

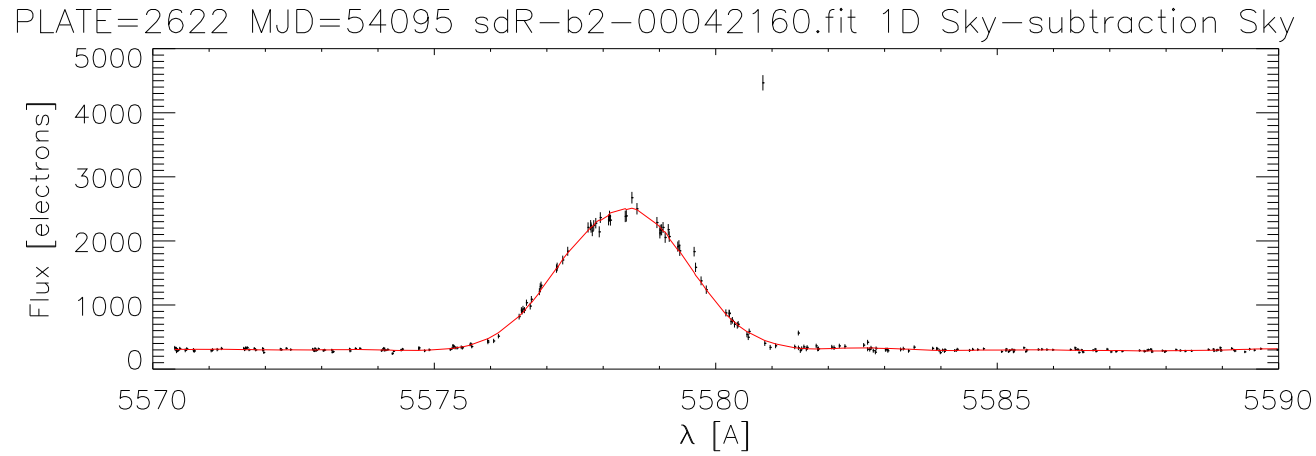

4046.5600
nfib1 16
nfib2 16
stdev 0.062
extra −0.29
4358.3300
nfib1 16
nfib2 16
stdev 0.033
extra −0.26
5460.9400
nfib1 16
nfib2 16
stdev 0.035
extra −0.21
5577.3390
nfib1 15
nfib2 15
stdev 0.021
extra −0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra −0.01
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

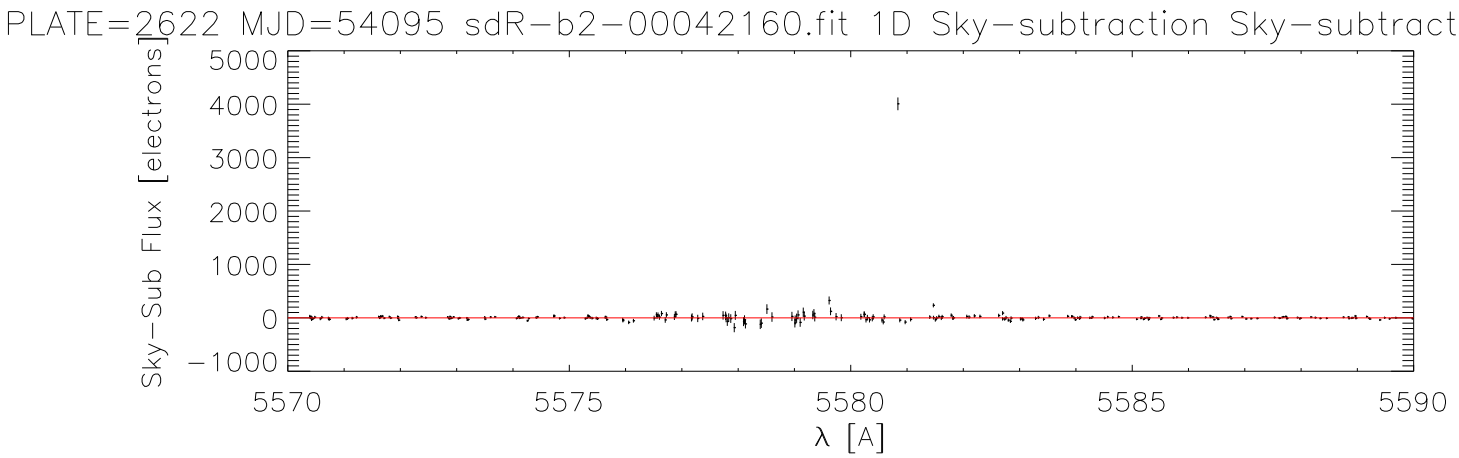

0.0
−0.1
−0.2
−0.3
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

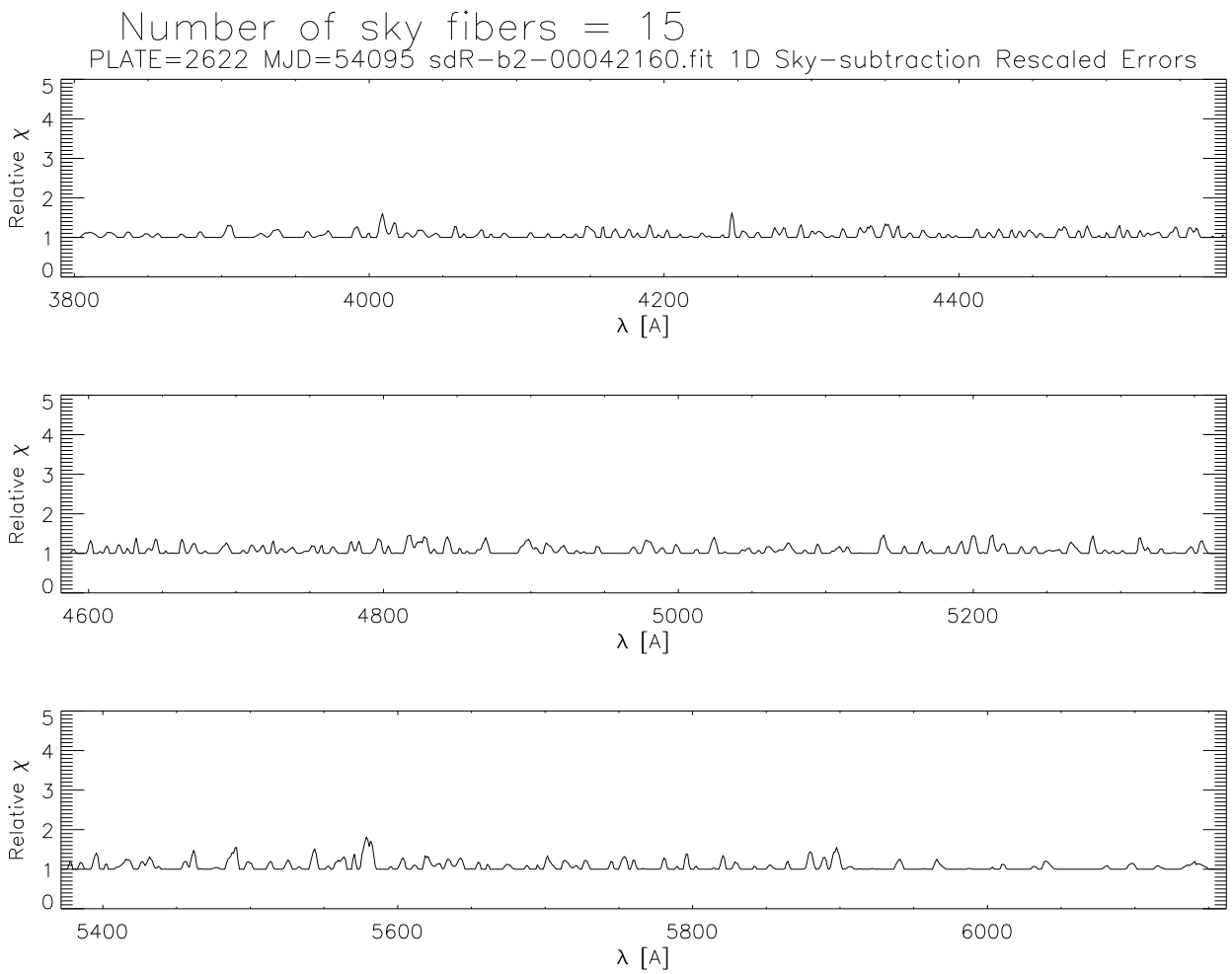

PLATE=2622 MJD=54095 Smooth superflat for sdR-b2-00042160.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

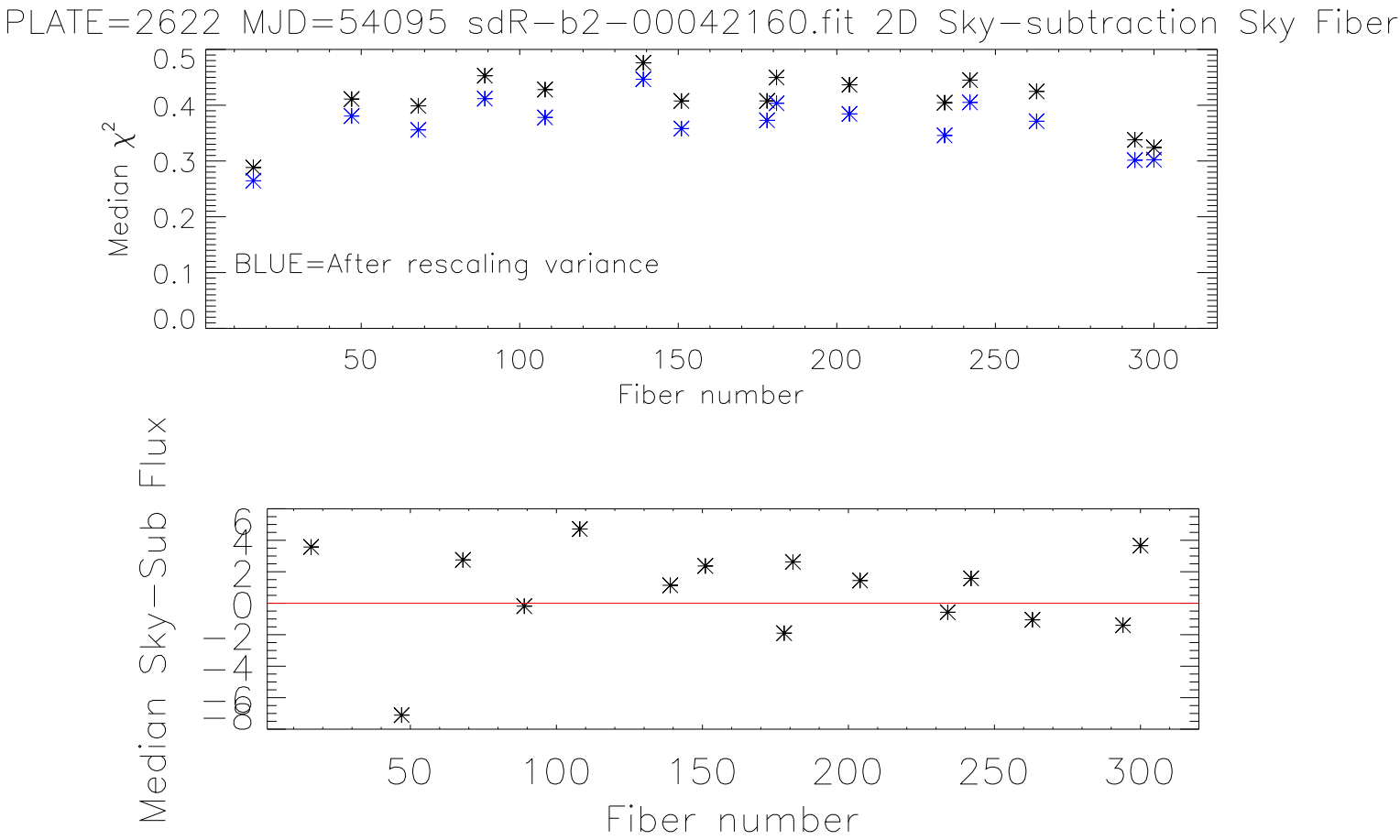
es= −0.0000

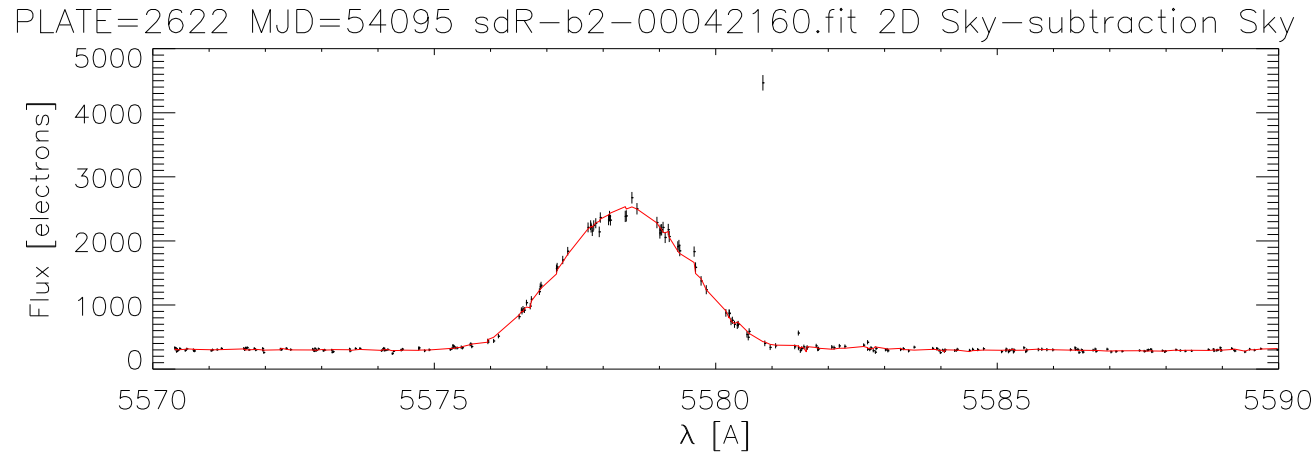

PLATE=2622 MJD=54095 sdR-b2-00042160.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

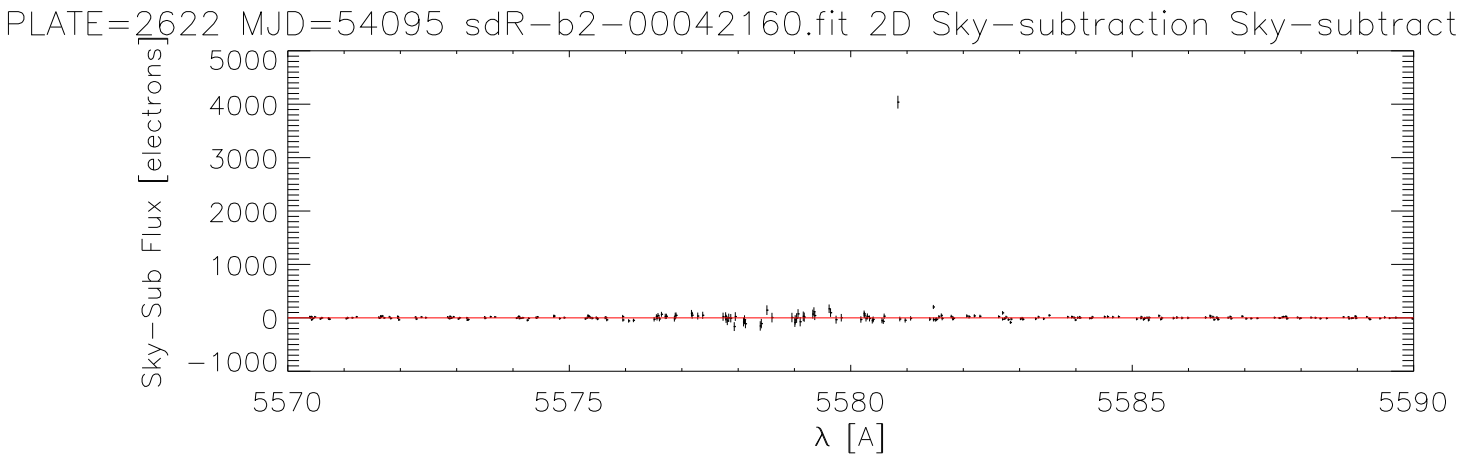

PLATE=2622 MJD=54095 sdR-b2-00042160.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

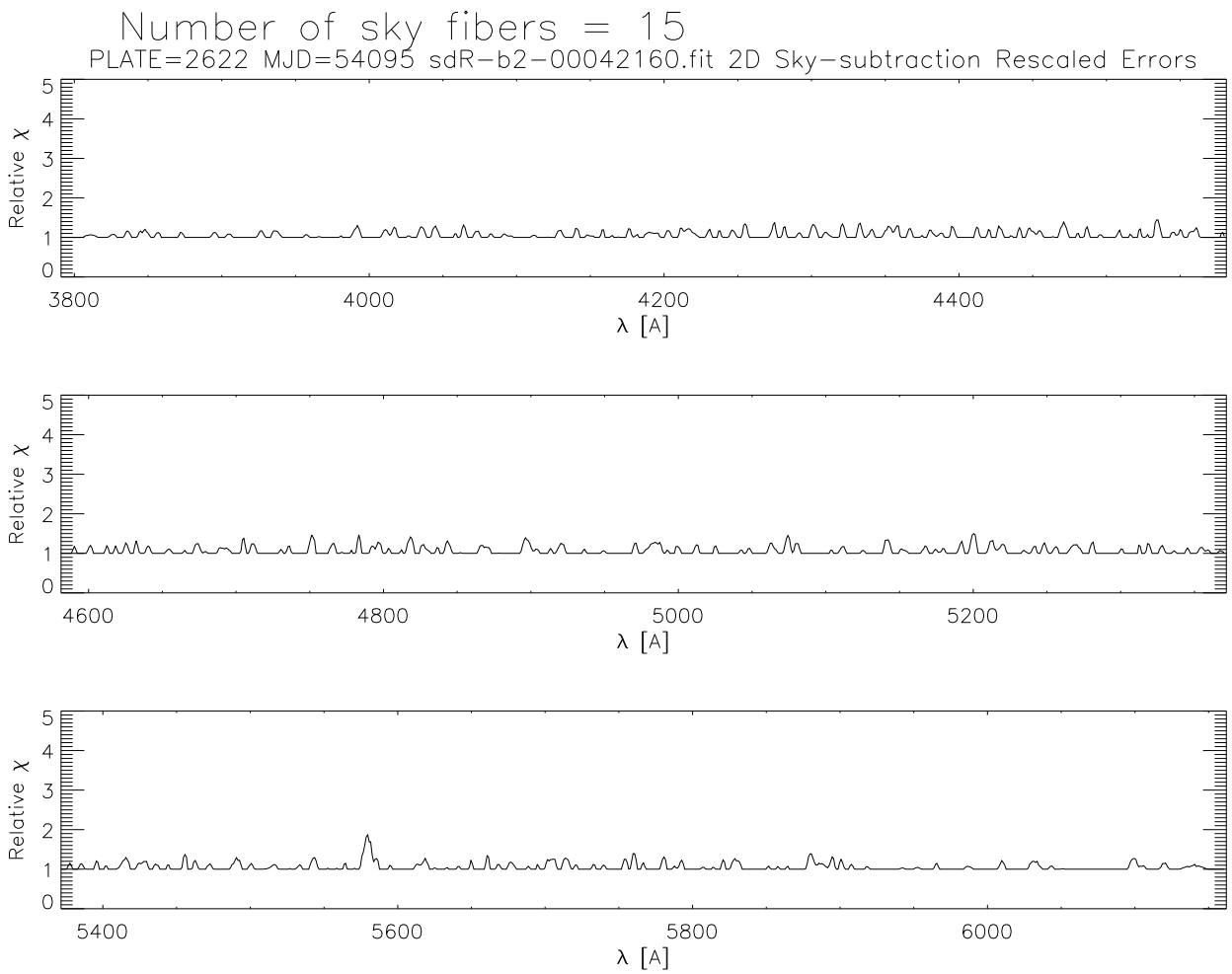

PLATE=2622 MJD=54095 sdR-b2-00042160.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

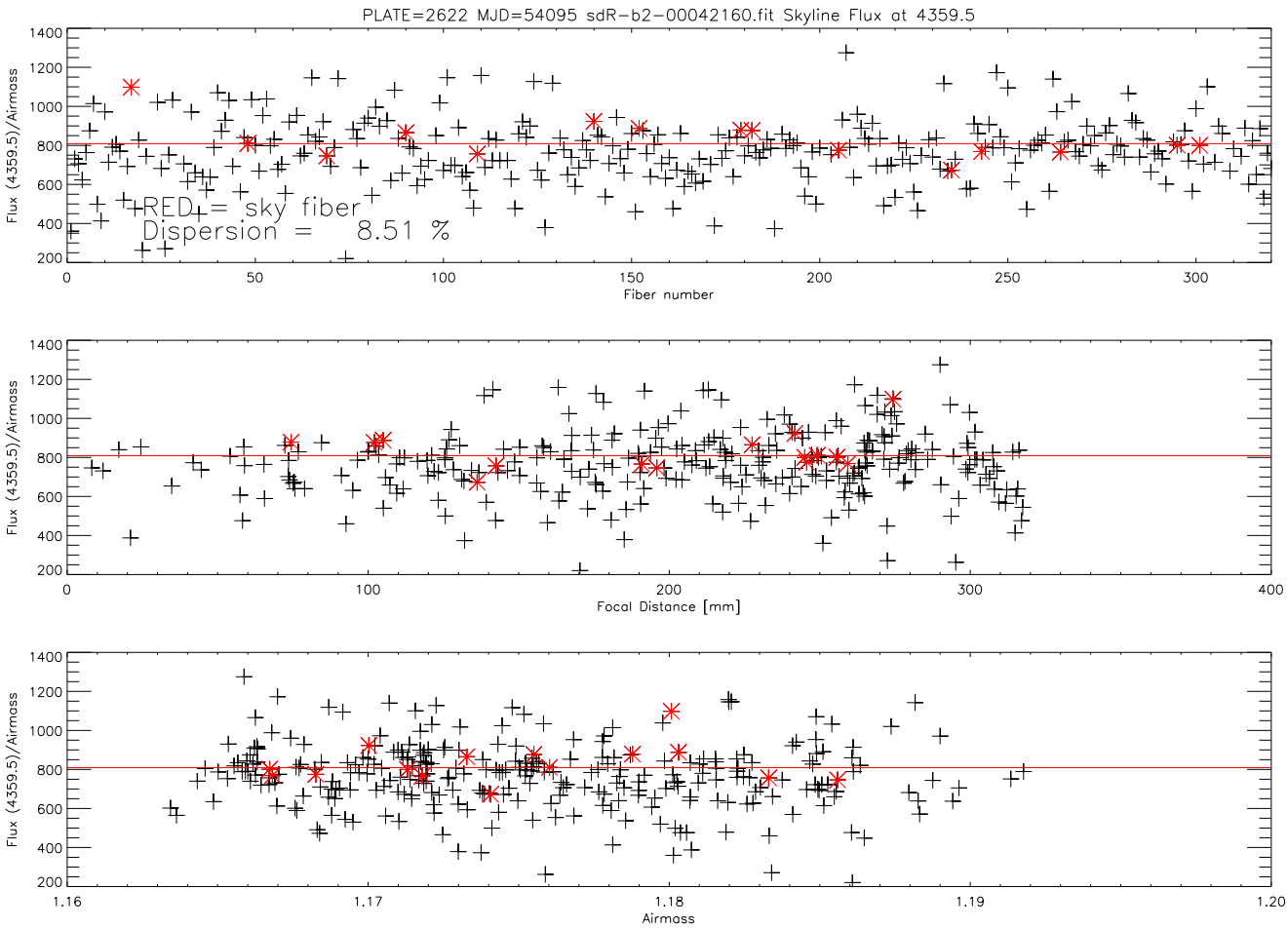

Number of sky fibers = 15
PLATE=2622 MJD=54095 sdR-b2-00042160.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

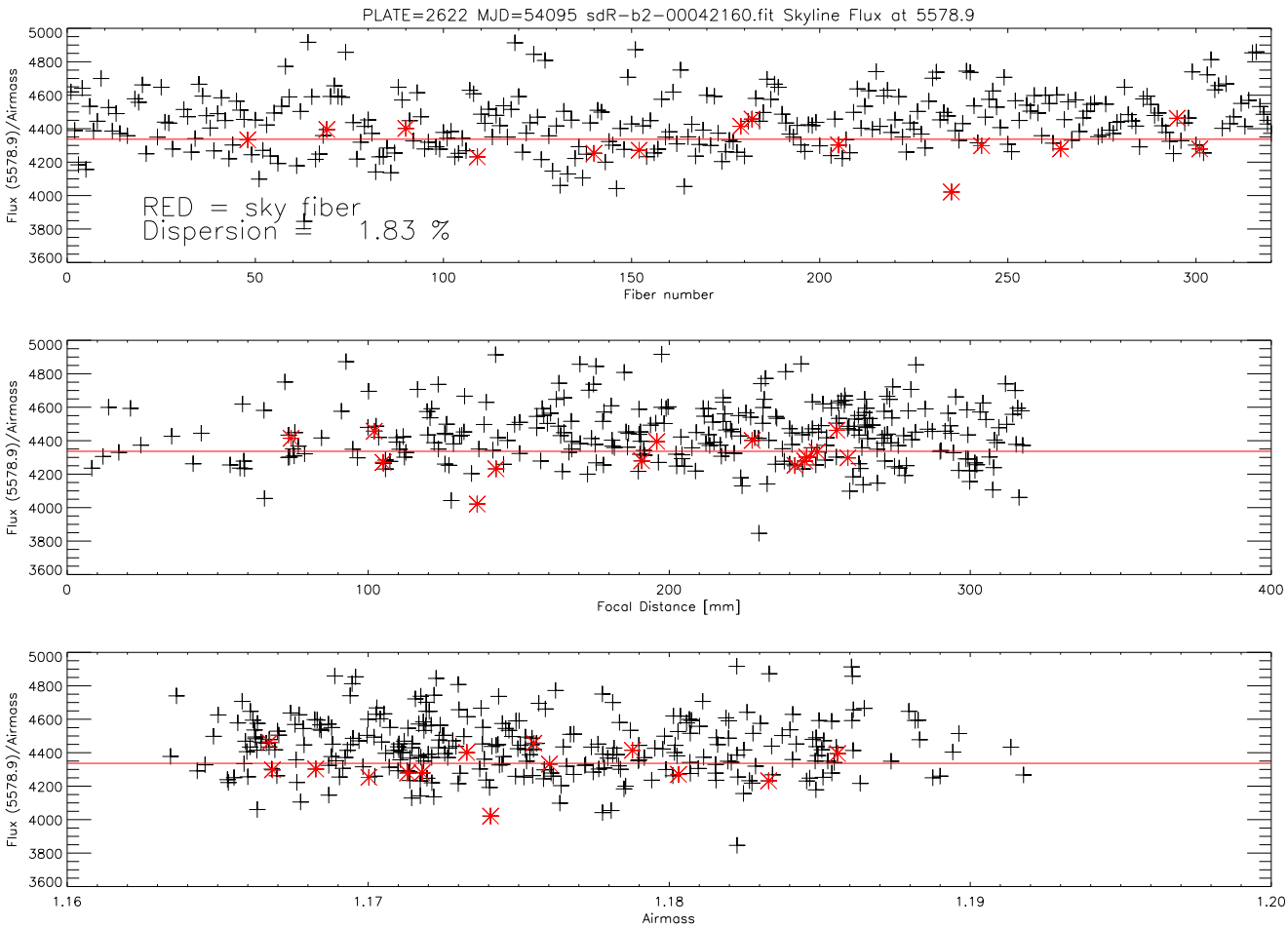

PLATE=2622 MJD=54095 sdR-b2-00042160.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

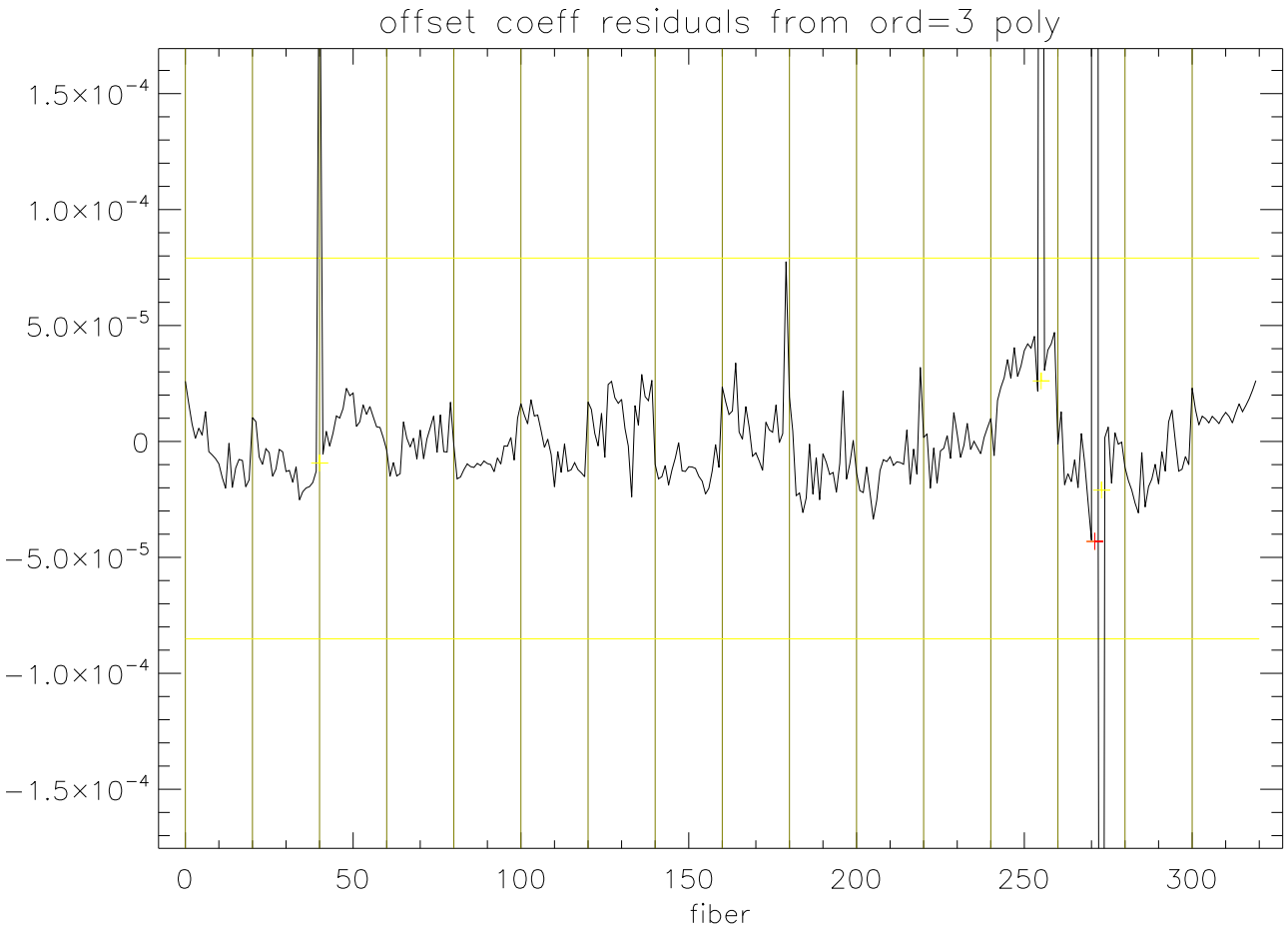

PLATE=2622 MJD=54095 sdR-b2-00042160.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

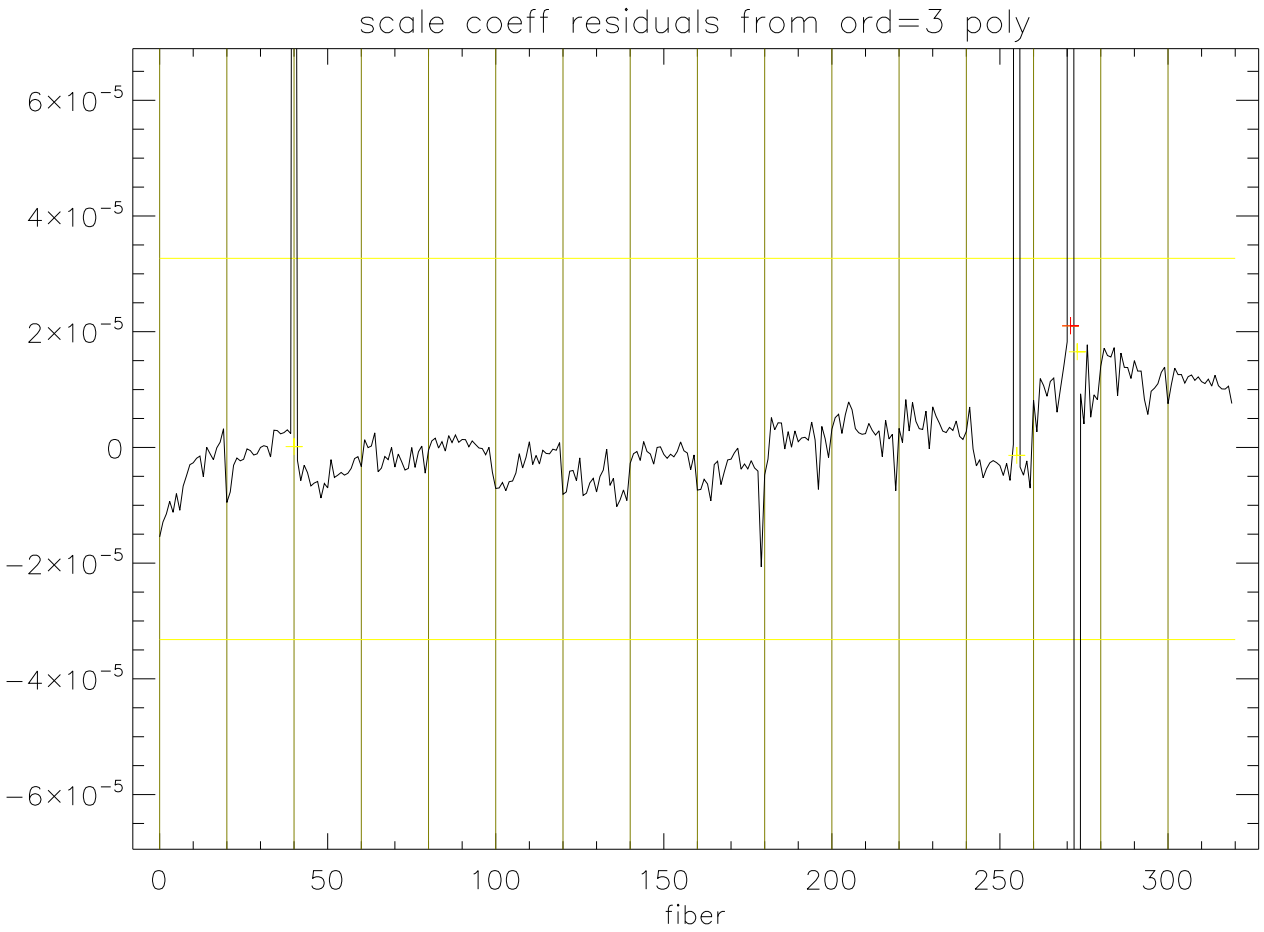

PLATE=2622 MJD=54095 sdR-b2-00042160.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

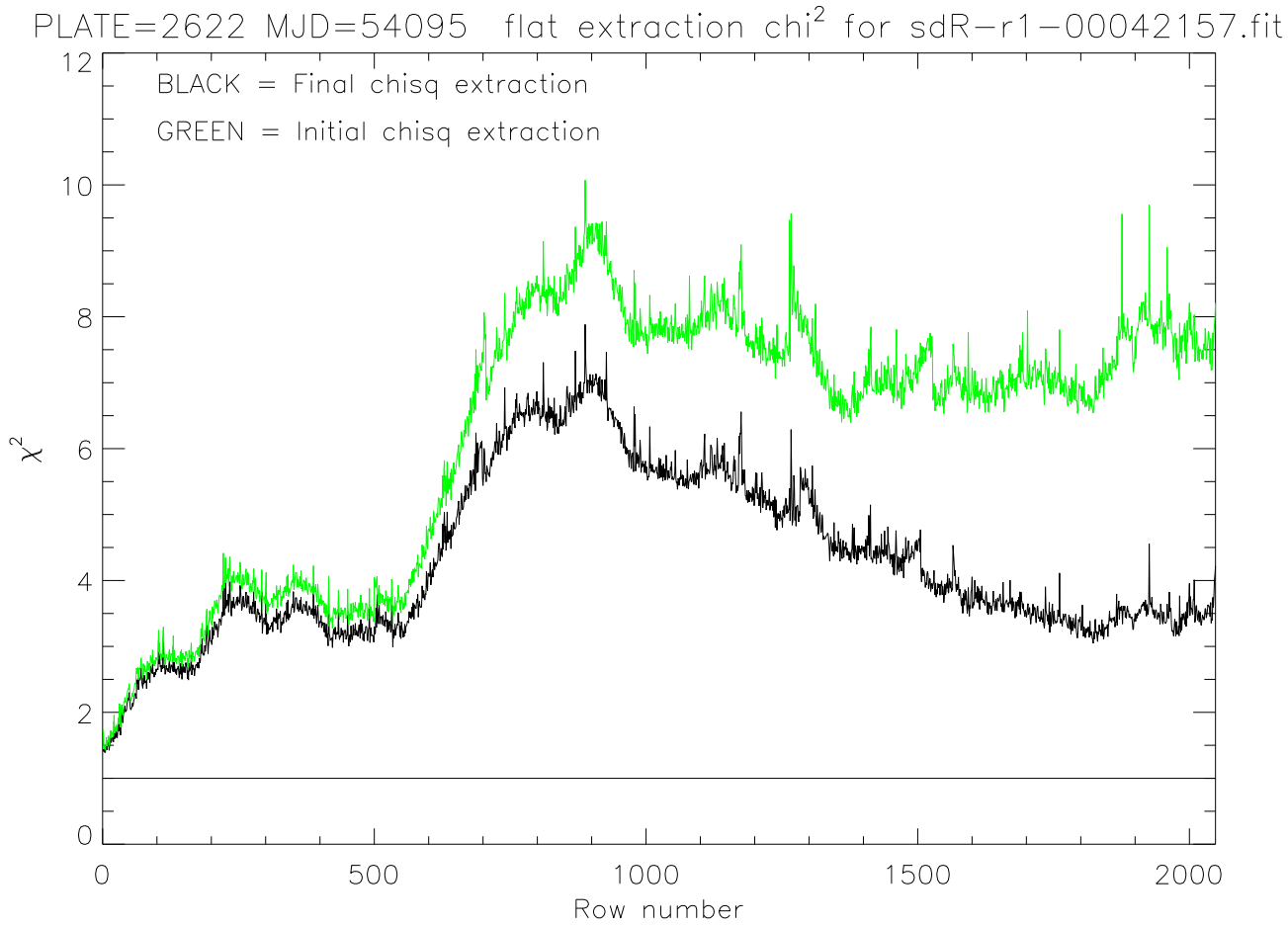

Number of sky fibers = 15
PLATE=2622 MJD=54095 sdR-b2-00042160.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

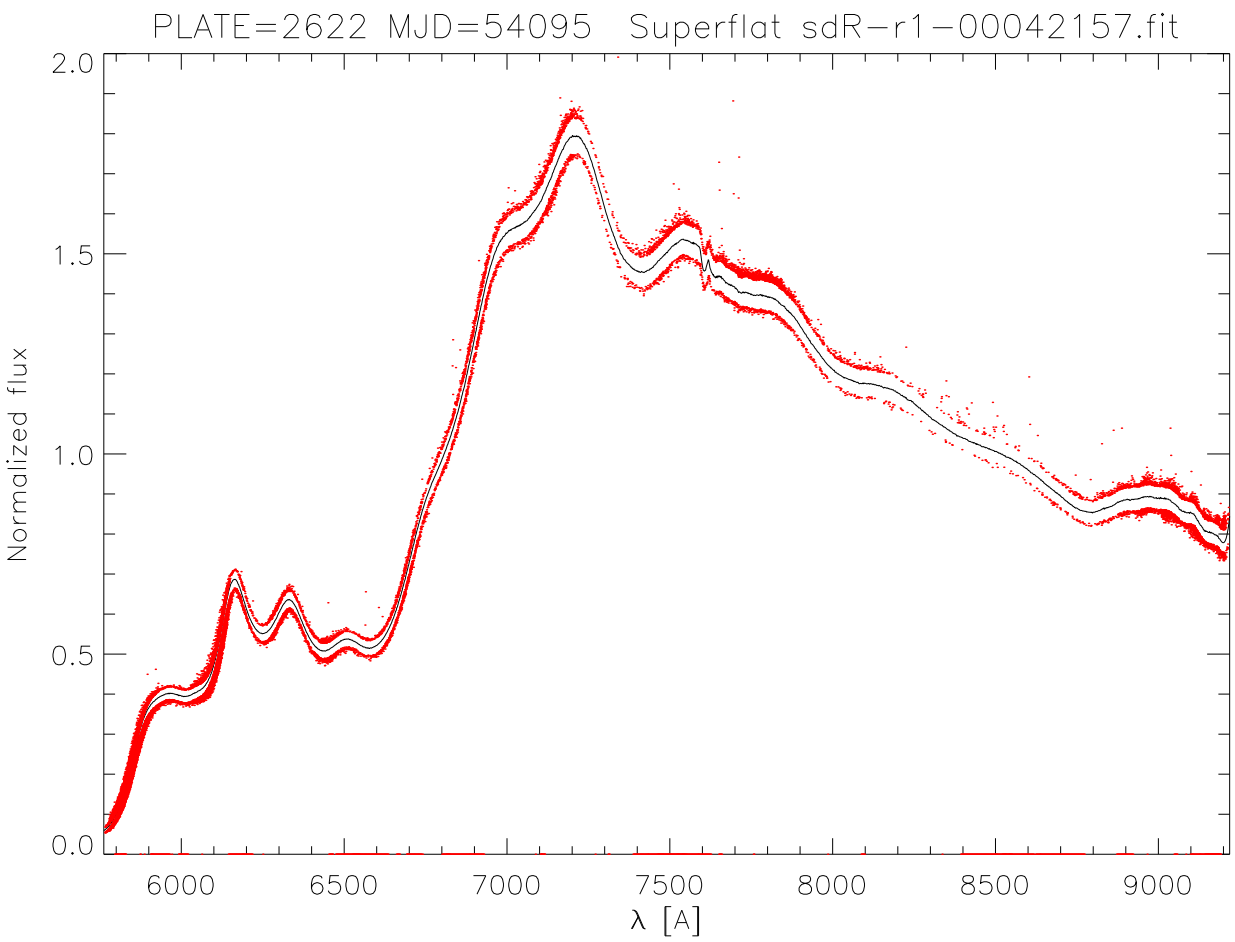

PLATE=2622 MJD=54095 sdR-b2-00042160.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED+= sky fiber
Dispersion = 8.51 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

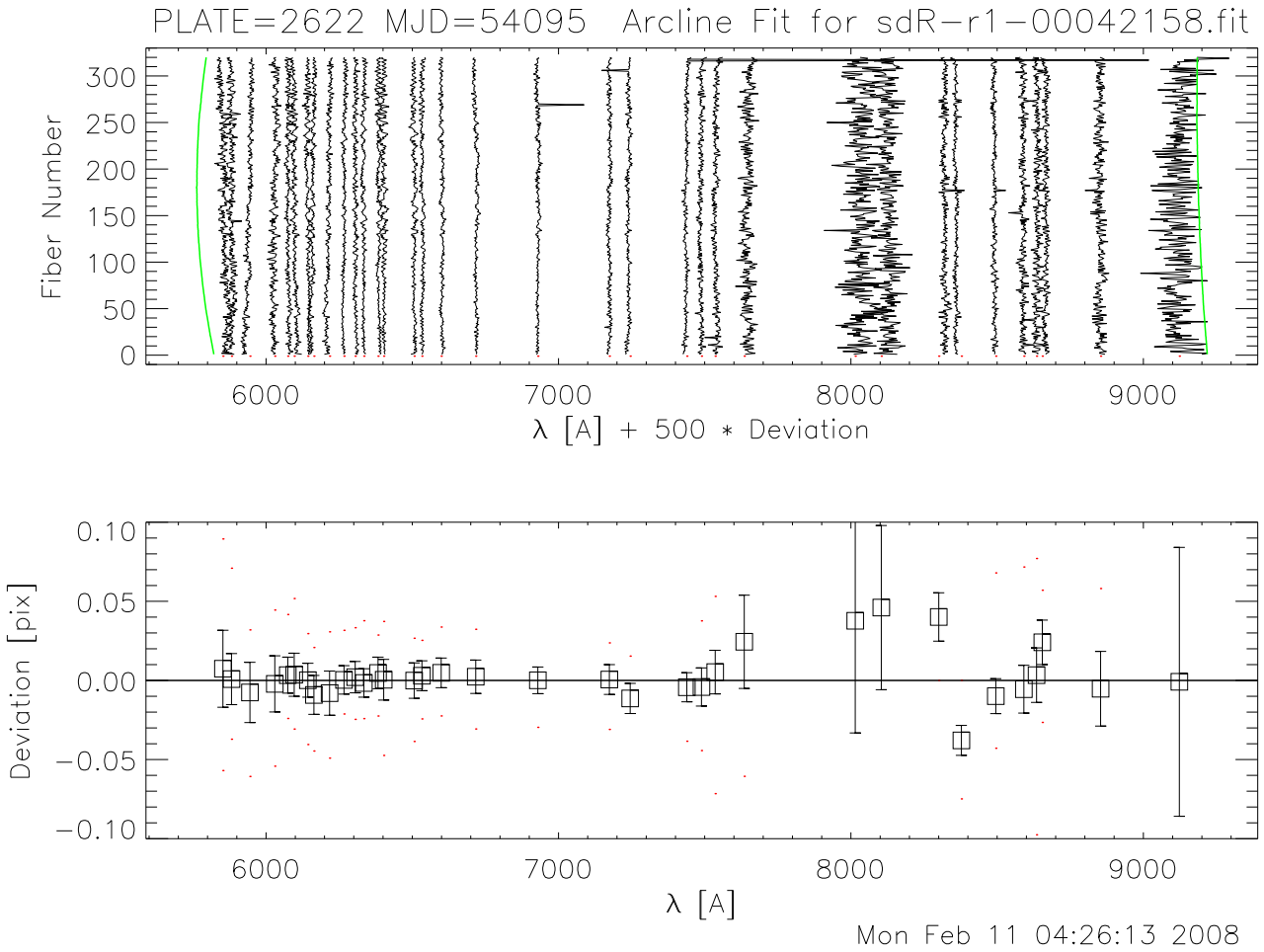

PLATE=2622 MJD=54095 sdR-b2-00042160.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.83 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

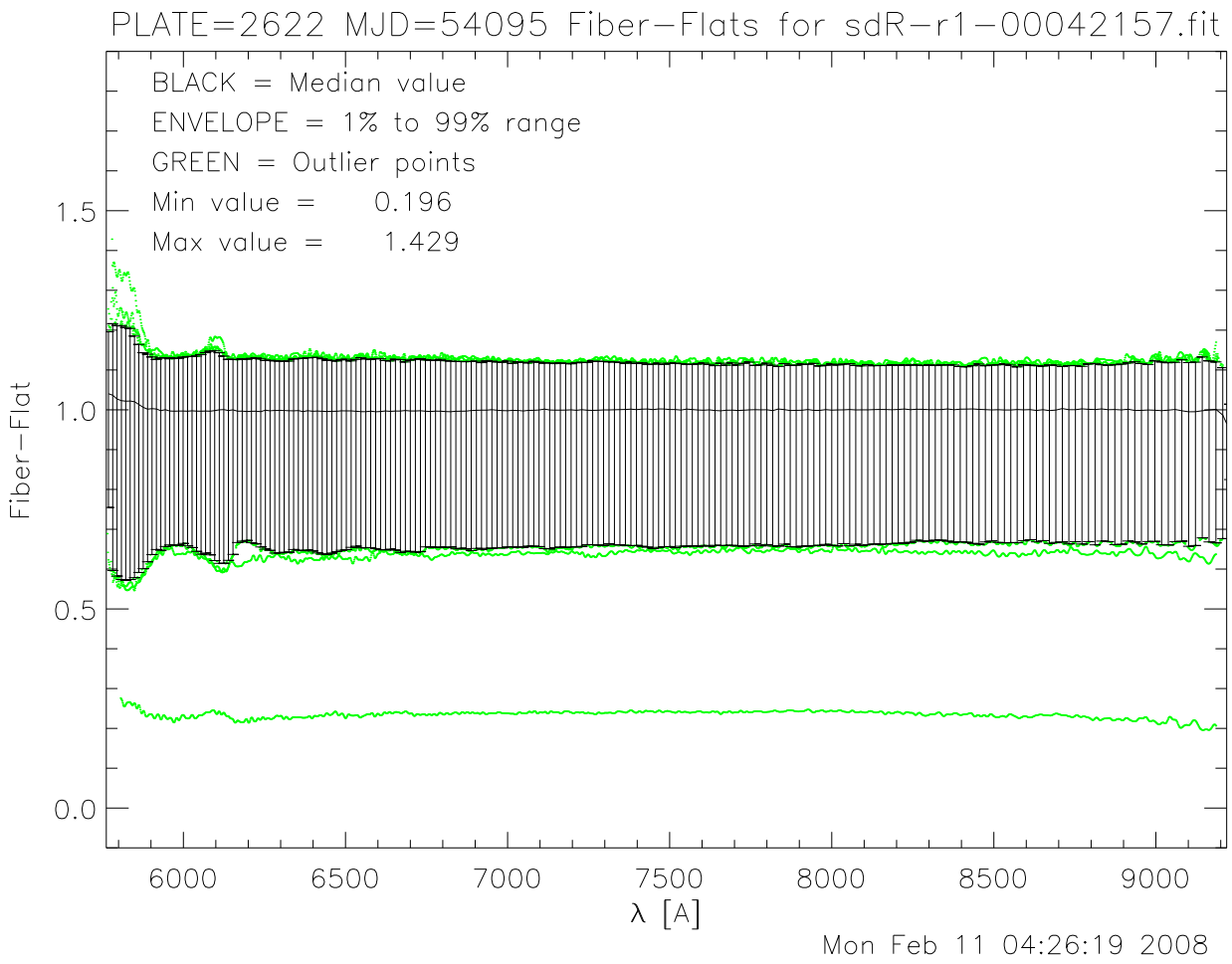

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

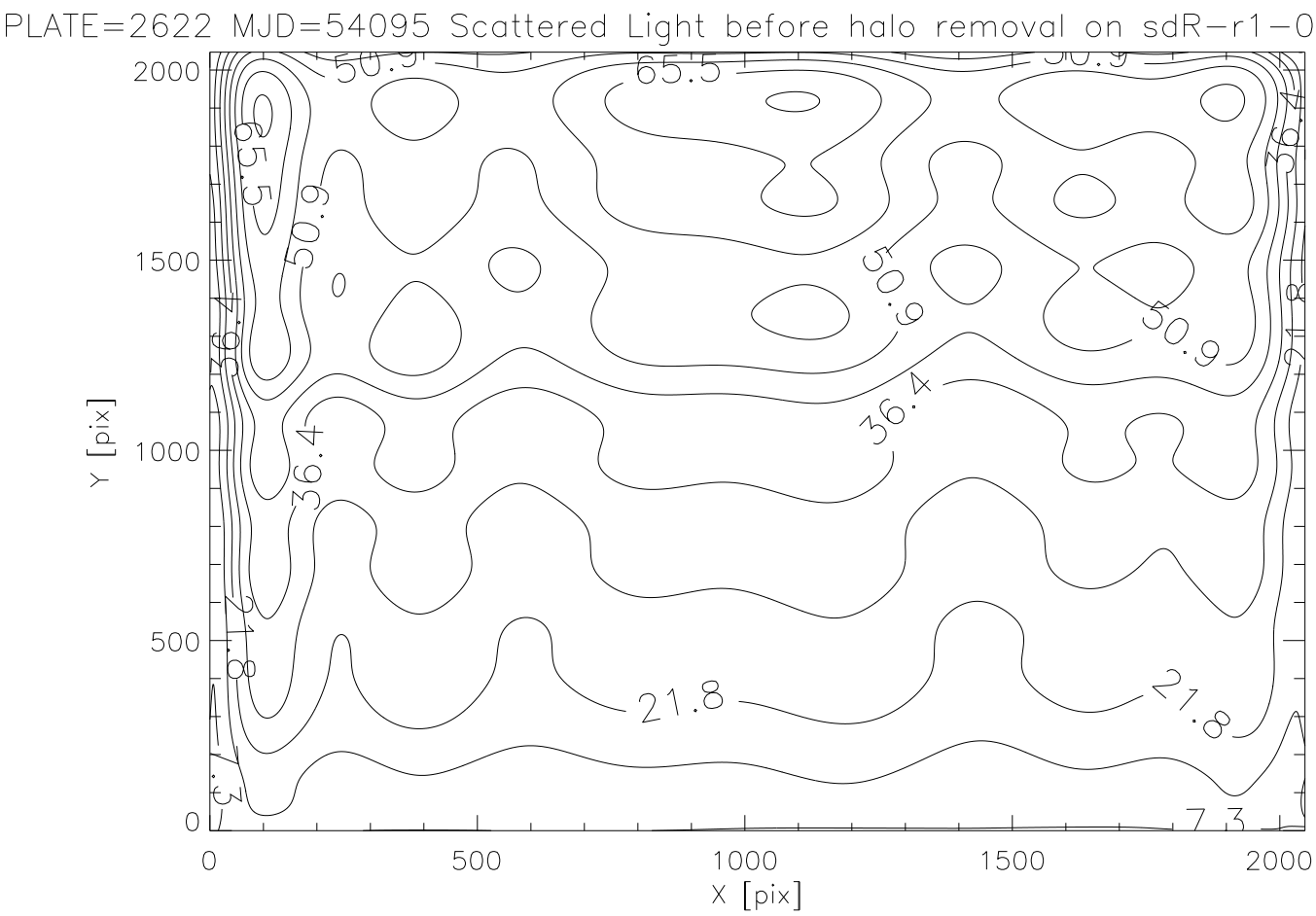

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

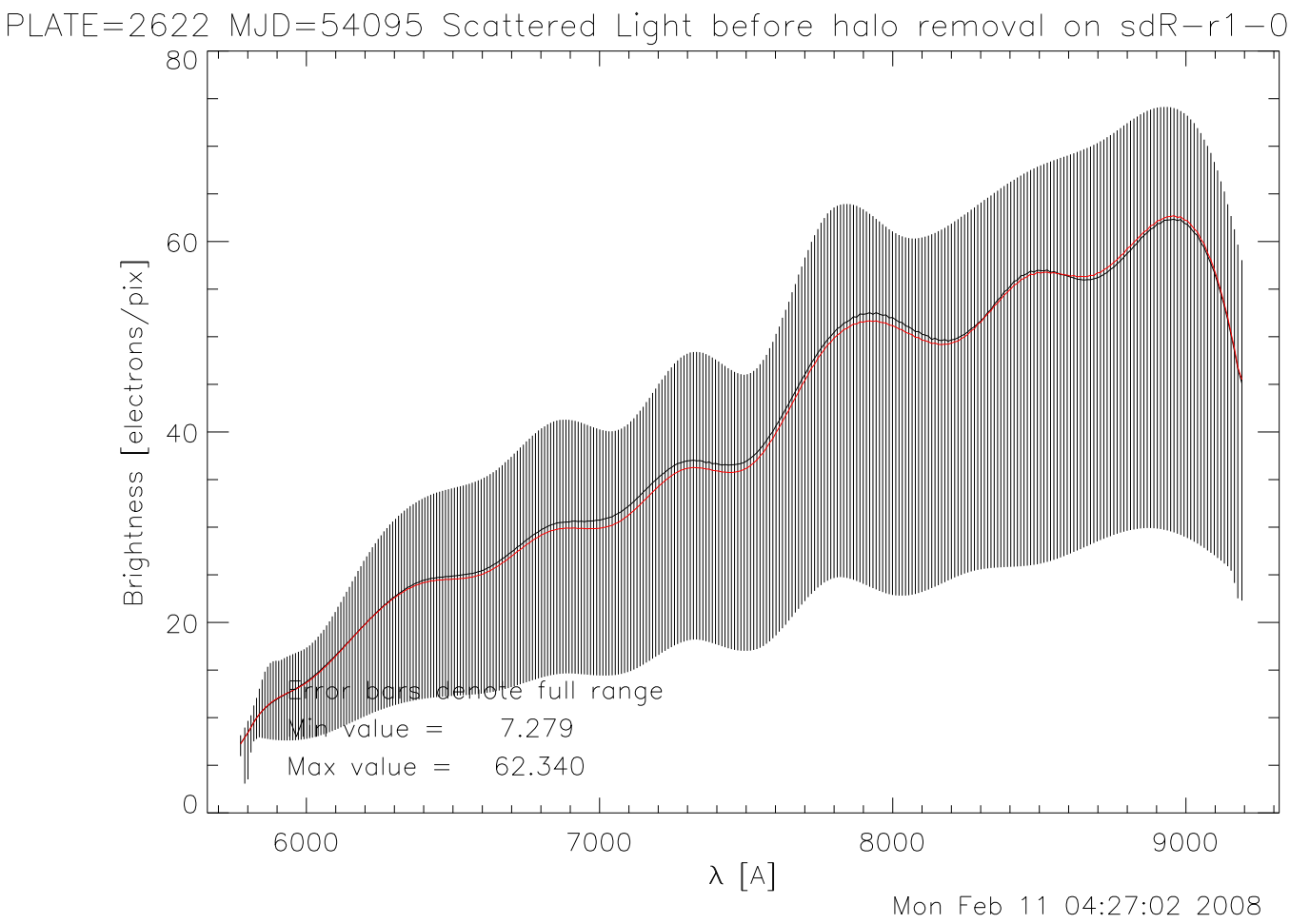

PLATE=2622 MJD=54095 flat extraction chi^2 for sdR−r1−00042157.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

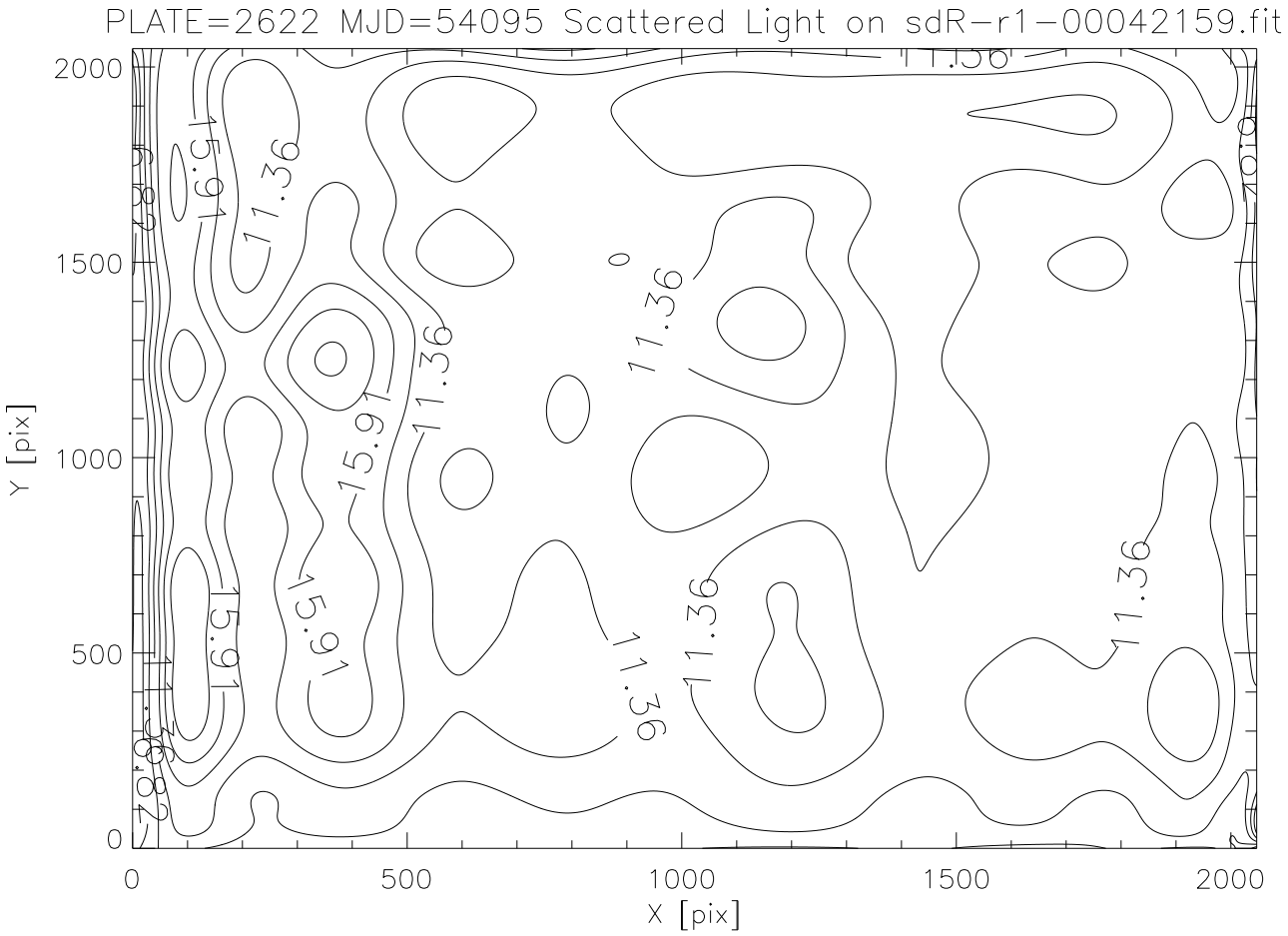

PLATE=2622 MJD=54095 Superflat sdR-r1-00042157.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

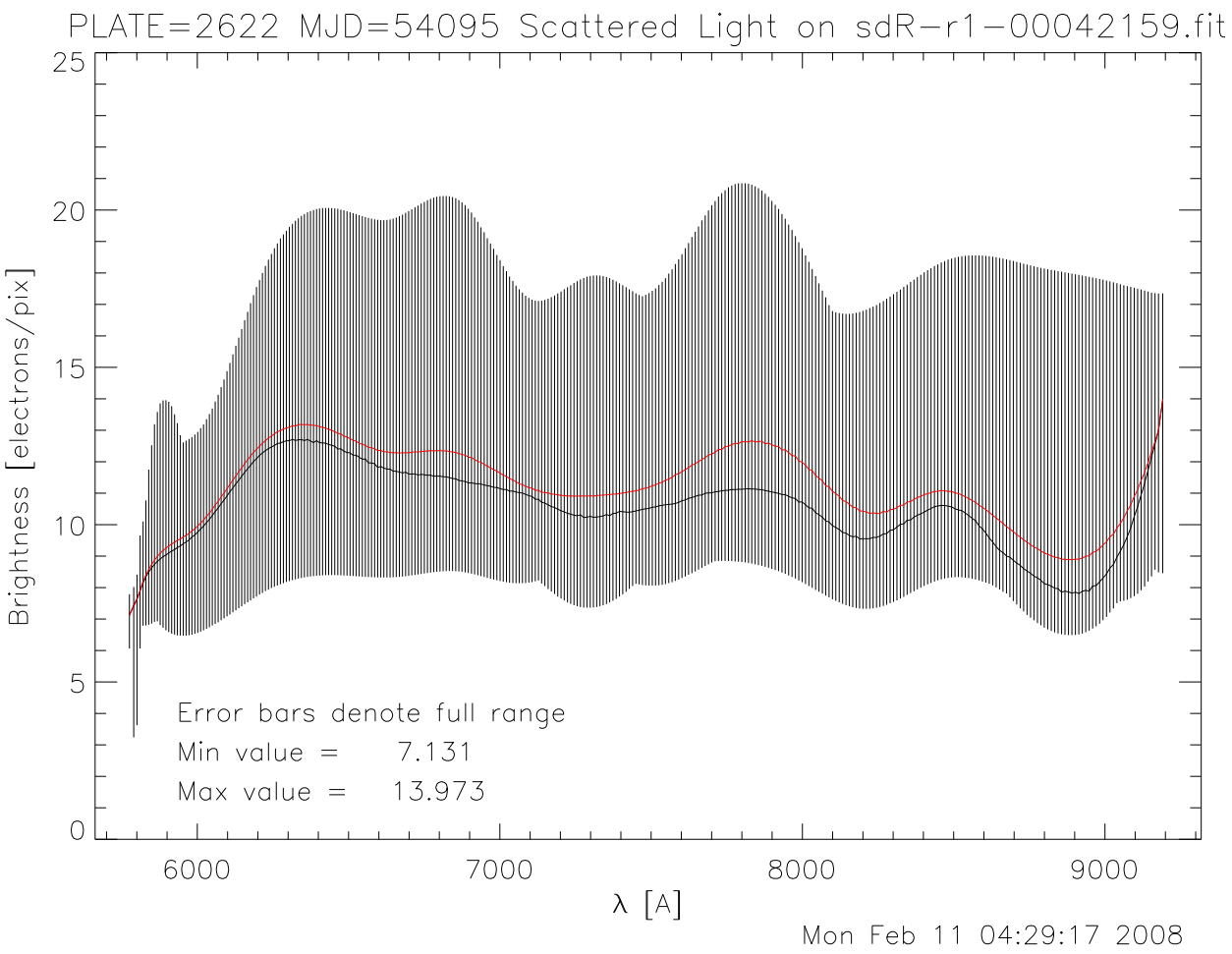

PLATE=2622 MJD=54095 Arcline Fit for sdR-r1-00042158.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 04:26:13 2008

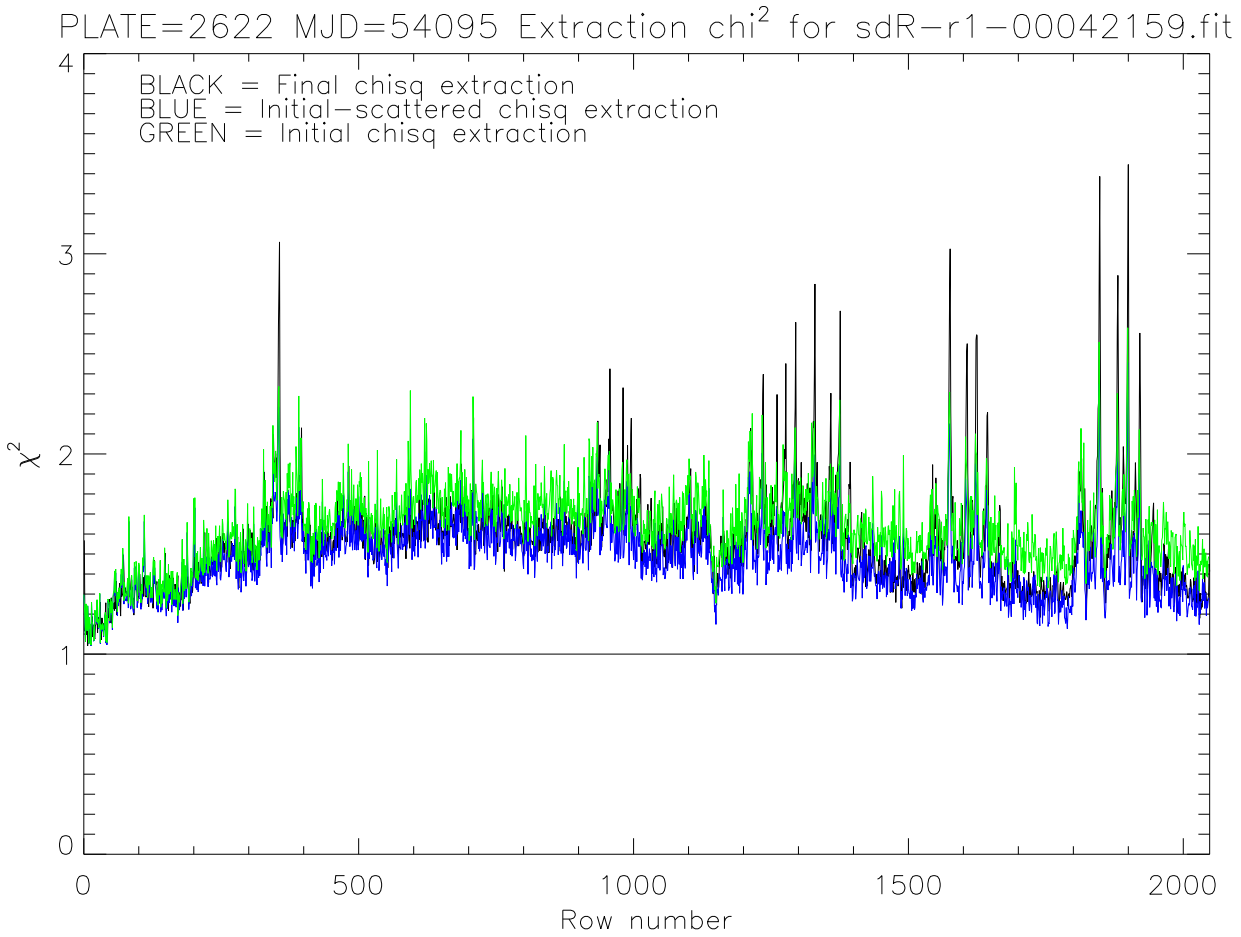

PLATE=2622 MJD=54095 Fiber−Flats for sdR−r1−00042157.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.196
Max value = 1.429
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:26:19 2008

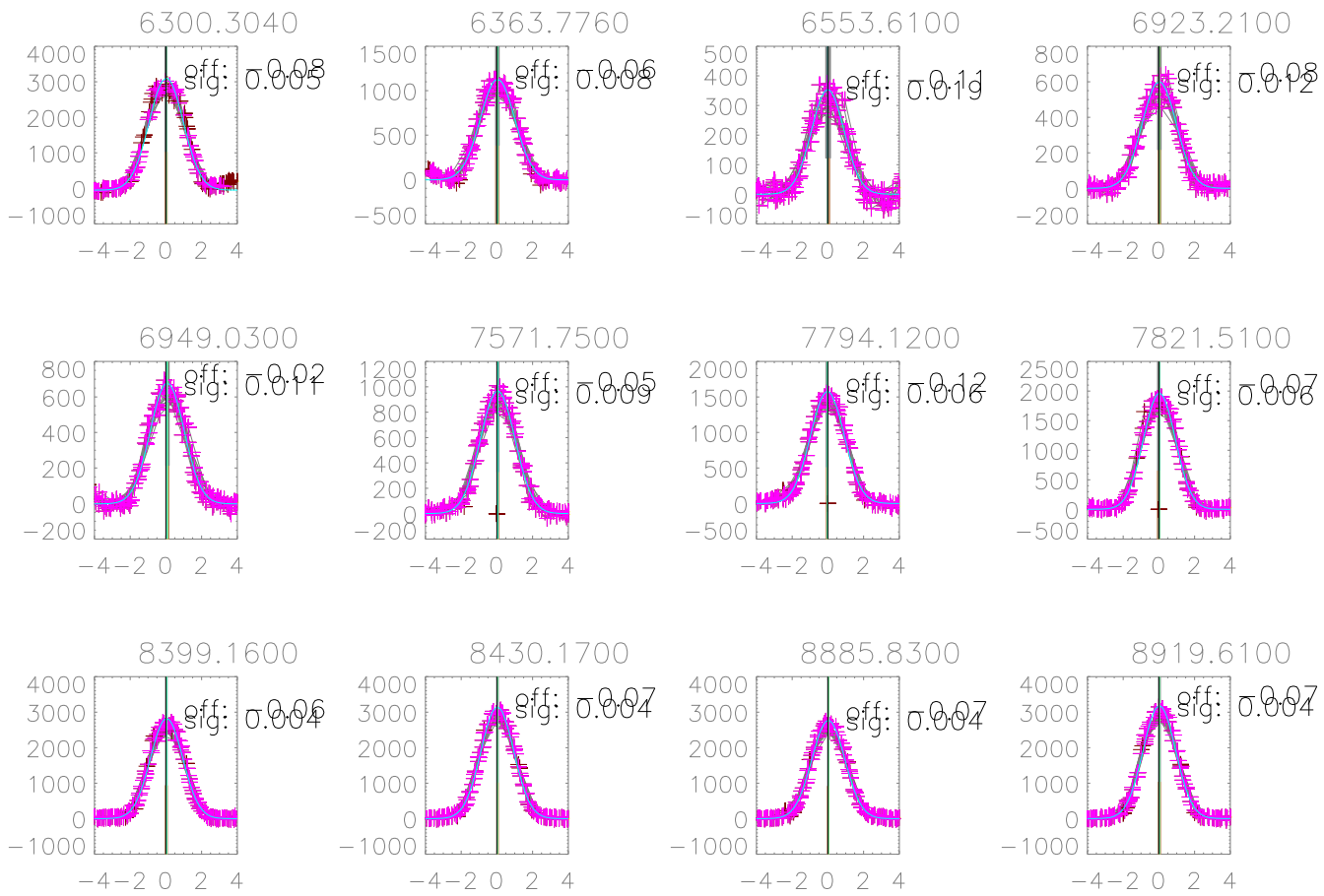

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-r1-00042159.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
65.5
50.9
36.4
21.8
7.3
0

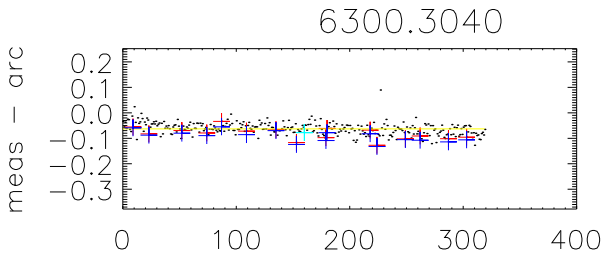

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-r1-00042159.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.279
Max value = 62.340
Mon Feb 11 04:27:02 2008

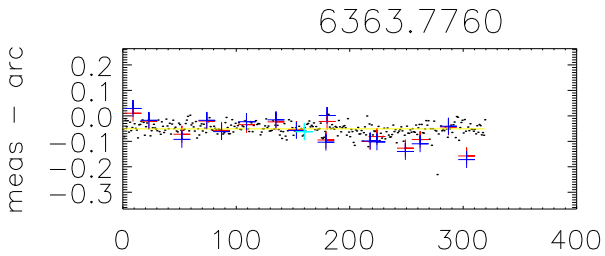

PLATE=2622 MJD=54095 Scattered Light on sdR-r1-00042159.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
15.91

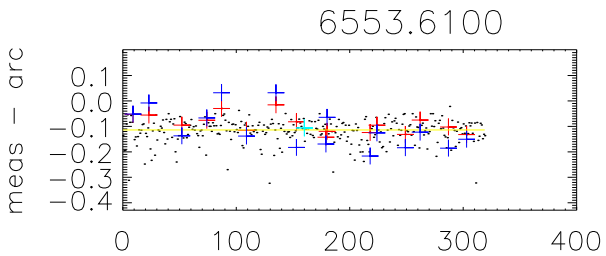

PLATE=2622 MJD=54095 Scattered Light on sdR-r1-00042159.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.131
Max value = 13.973
Mon Feb 11 04:29:17 2008

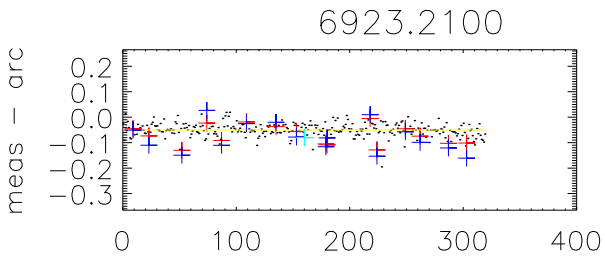

PLATE=2622 MJD=54095 Extraction chi^2 for sdR−r1−00042159.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

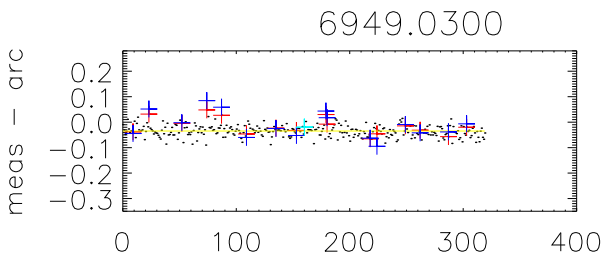

6300.3040
off: -0.08
sig: 0.005
6363.7760
off: -0.06
sig: 0.008
6553.6100
off: -0.11
sig: 0.019
6923.2100
off: -0.08
sig: 0.012
6949.0300
off: -0.02
sig: 0.011
7571.7500
off: -0.05
sig: 0.009
7794.1200
off: -0.12
sig: 0.006
7821.5100
off: -0.07
sig: 0.006
8399.1600
off: -0.06
sig: 0.004
8430.1700
off: -0.07
sig: 0.004
8885.8300
off: -0.07
sig: 0.004
8919.6100
off: -0.07
sig: 0.004

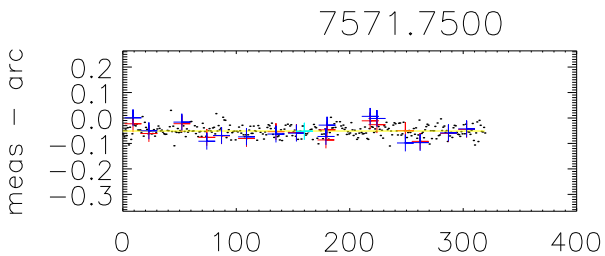

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

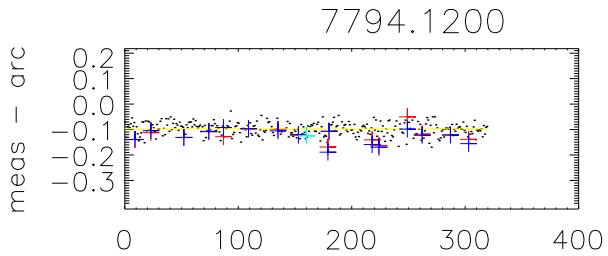

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

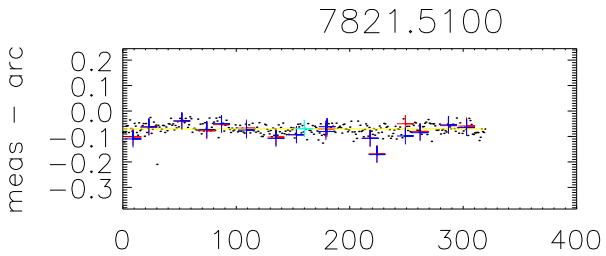

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

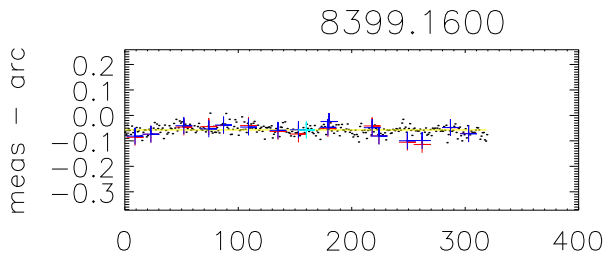

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

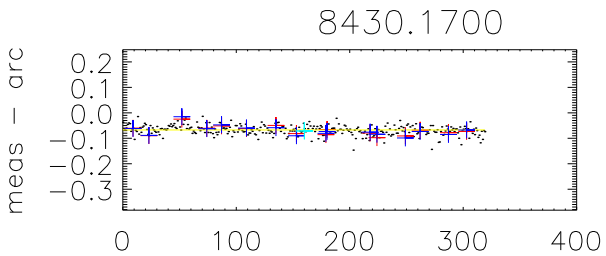

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

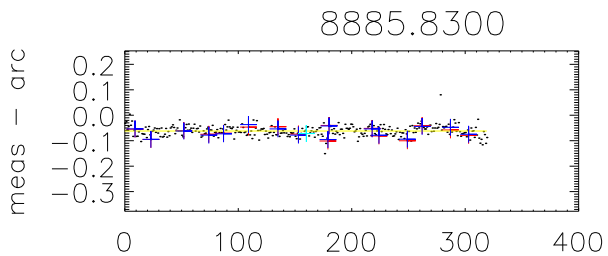

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

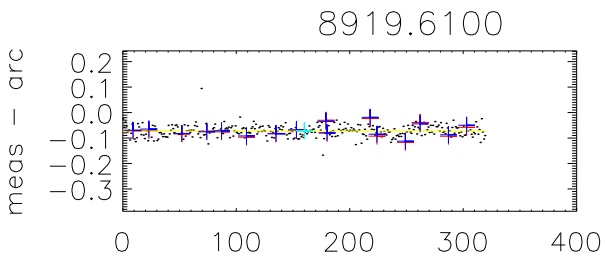

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

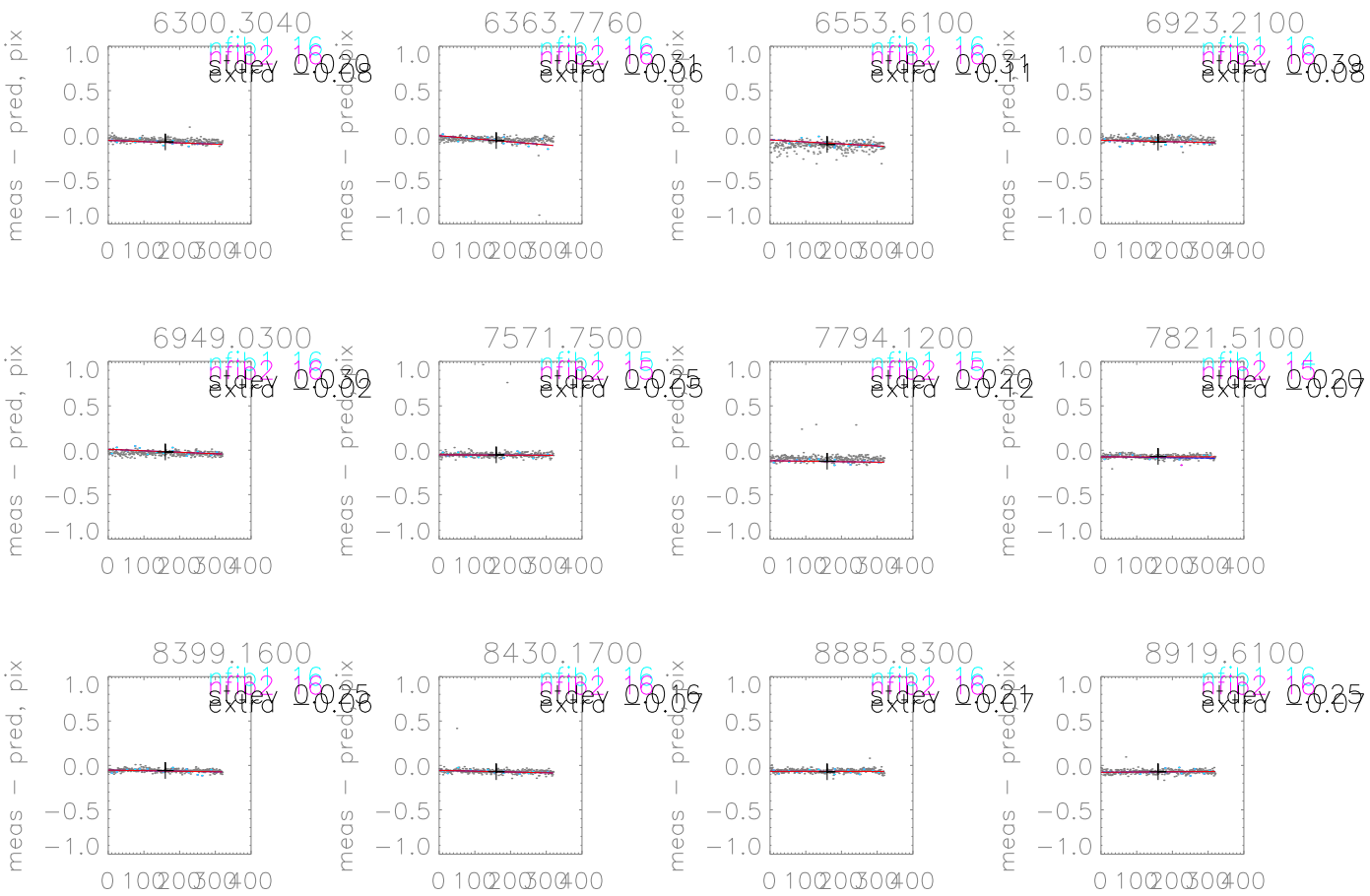

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

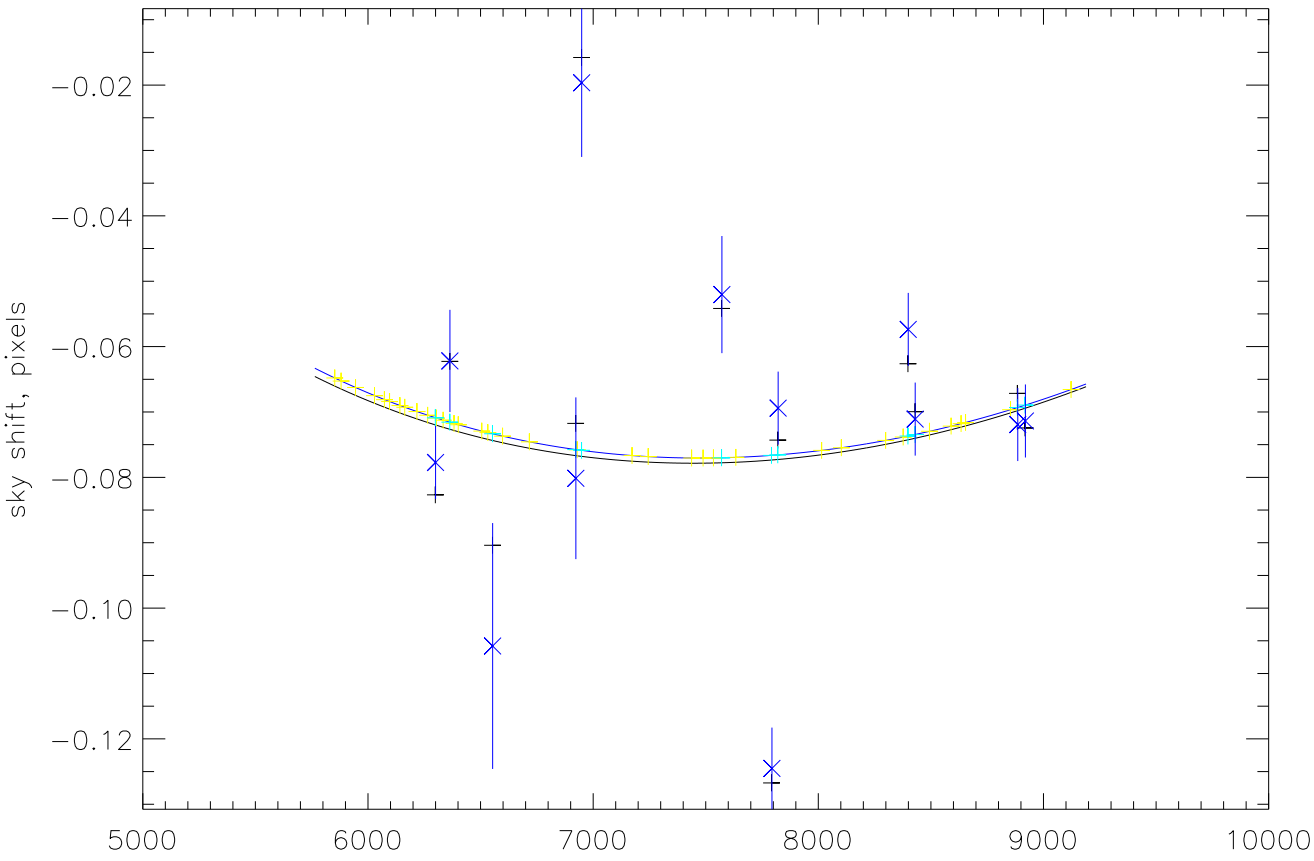

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

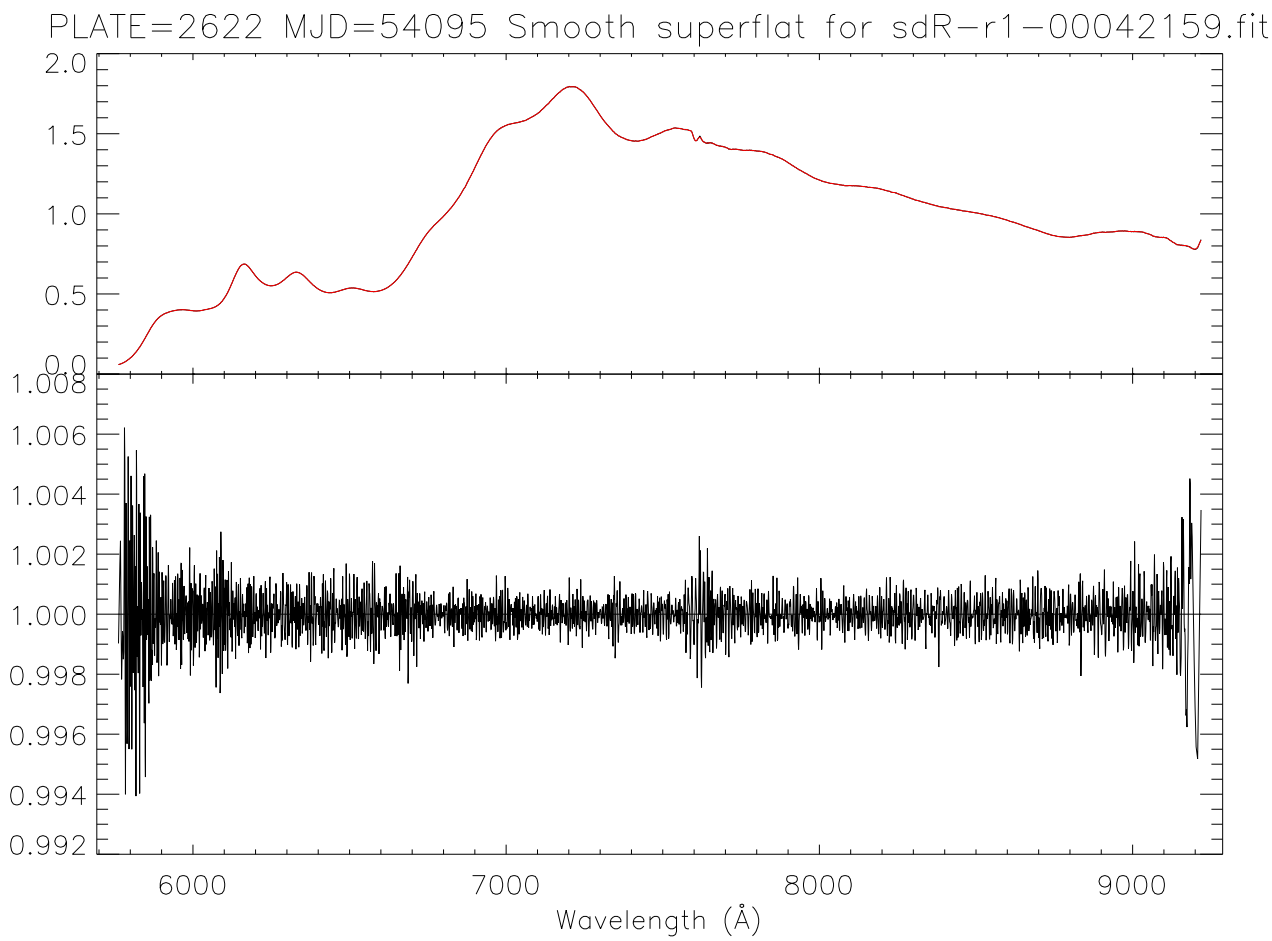

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

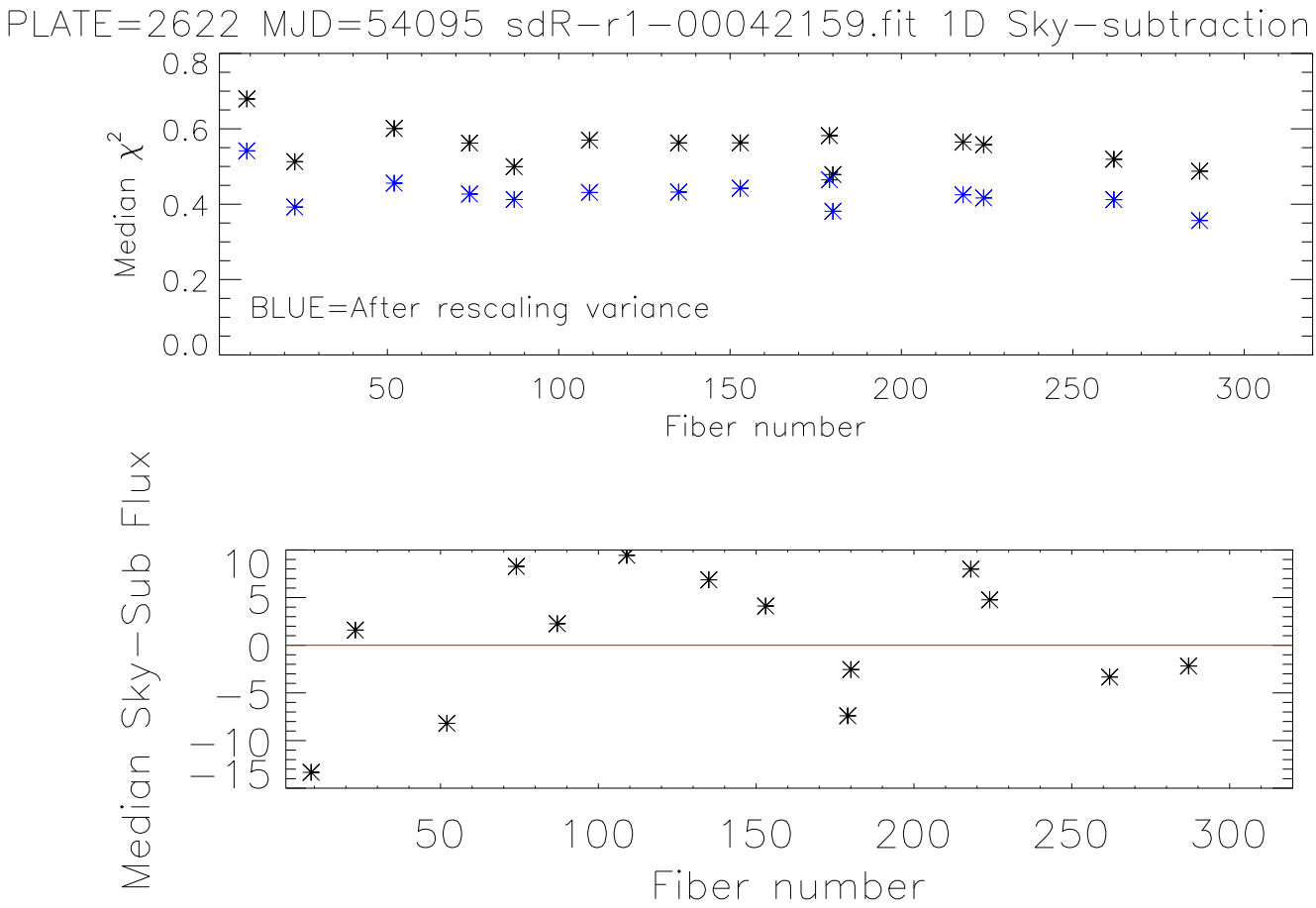

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

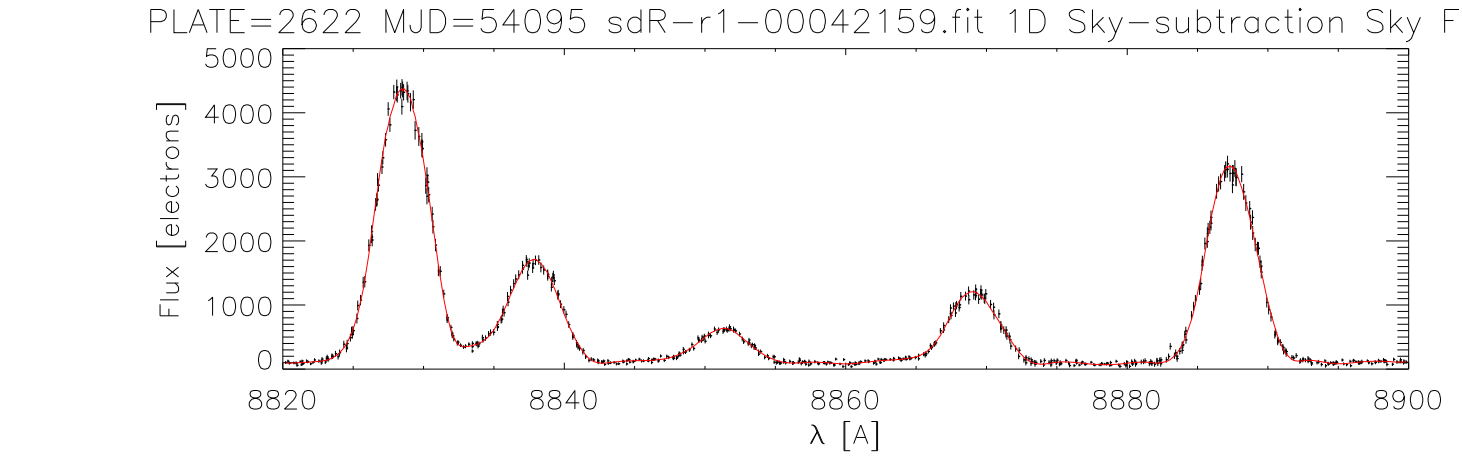

6300.3040
mfhd1 16
mfhd2 16
stdev 0.020
extra 0.008
6363.7760
mfhd1 16
mfhd2 16
stdev 0.031
extra 0.006
6553.6100
mfhd1 16
mfhd2 16
stdev 0.031
extra 0.011
6923.2100
mfhd1 16
mfhd2 16
stdev 0.039
extra 0.008
6949.0300
mfhd1 16
mfhd2 16
stdev 0.030
extra 0.002
7571.7500
mfhd1 15
mfhd2 15
stdev 0.025
extra 0.005
7794.1200
mfhd1 15
mfhd2 15
stdev 0.020
extra 0.042
7821.5100
mfhd1 14
mfhd2 15
stdev 0.020
extra 0.007
8399.1600
mfhd1 16
mfhd2 16
stdev 0.025
extra 0.008
8430.1700
mfhd1 16
mfhd2 16
stdev 0.016
extra 0.007
8885.8300
mfhd1 16
mfhd2 16
stdev 0.021
extra 0.007
8919.6100
mfhd1 16
mfhd2 16
stdev 0.025
extra 0.007
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

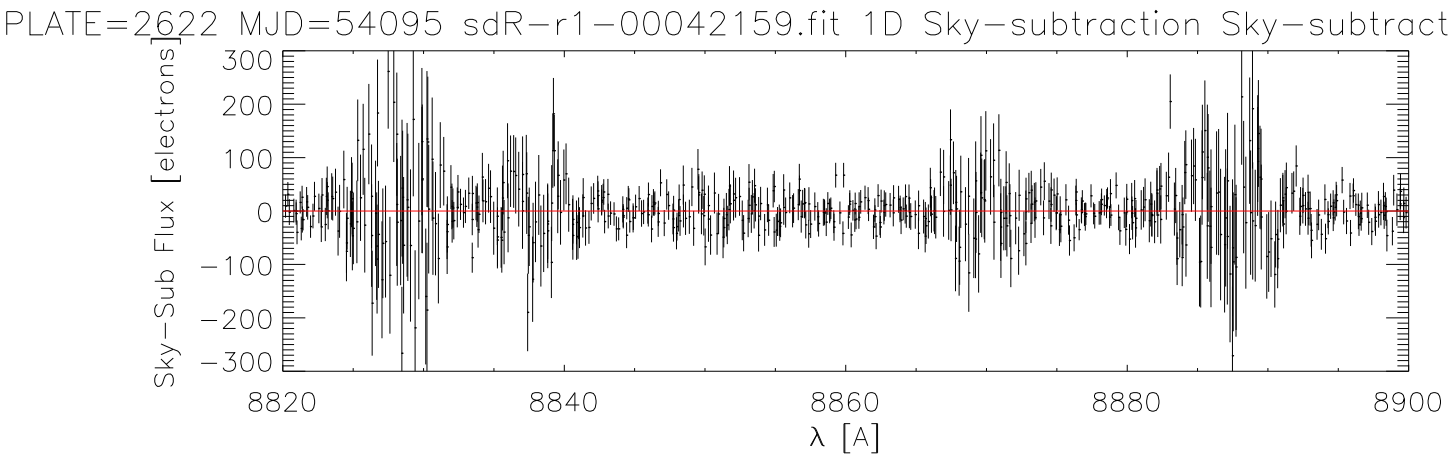

−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
sky shift, pixels
5000
6000
7000
8000
9000
10000

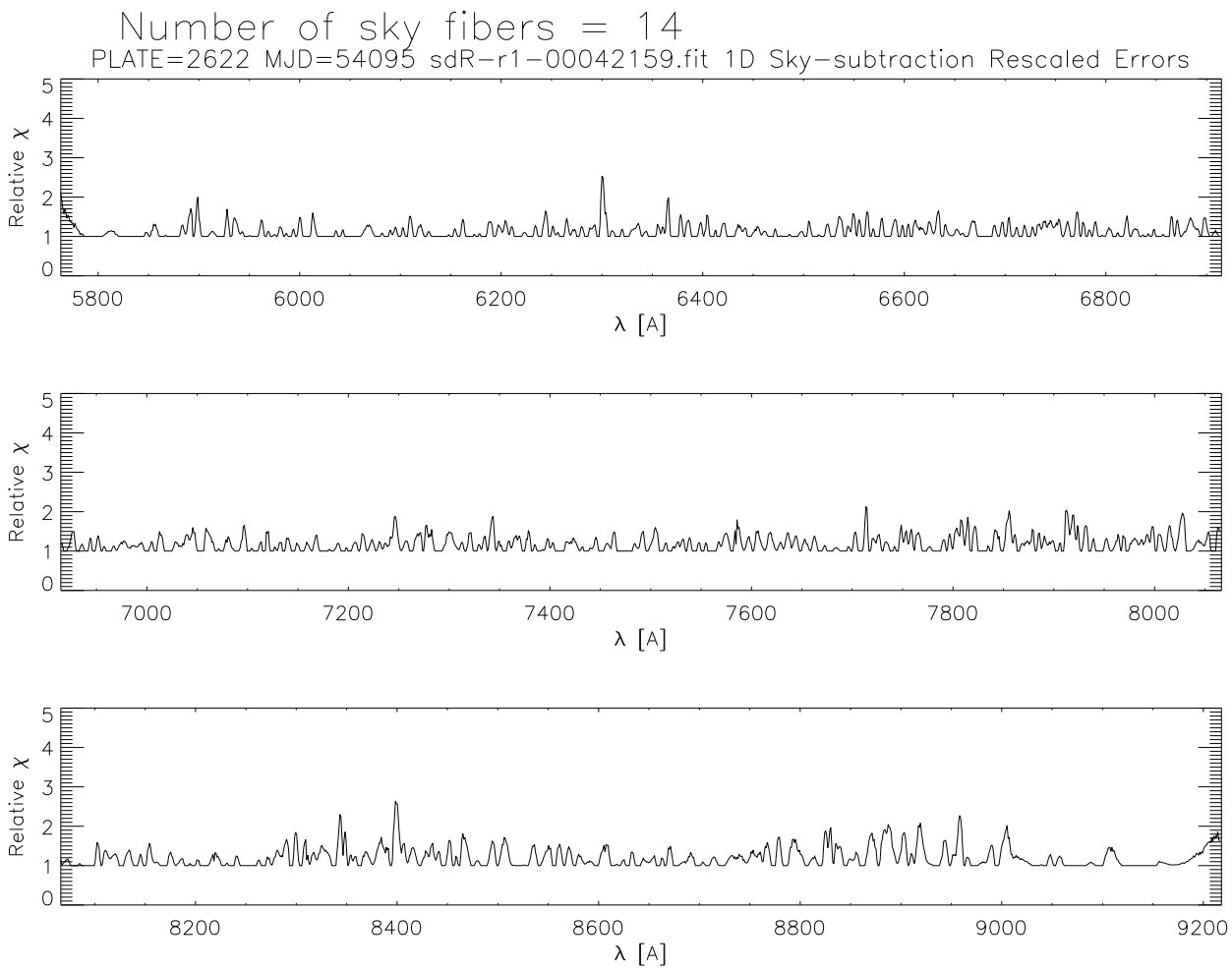
es= 0.0000

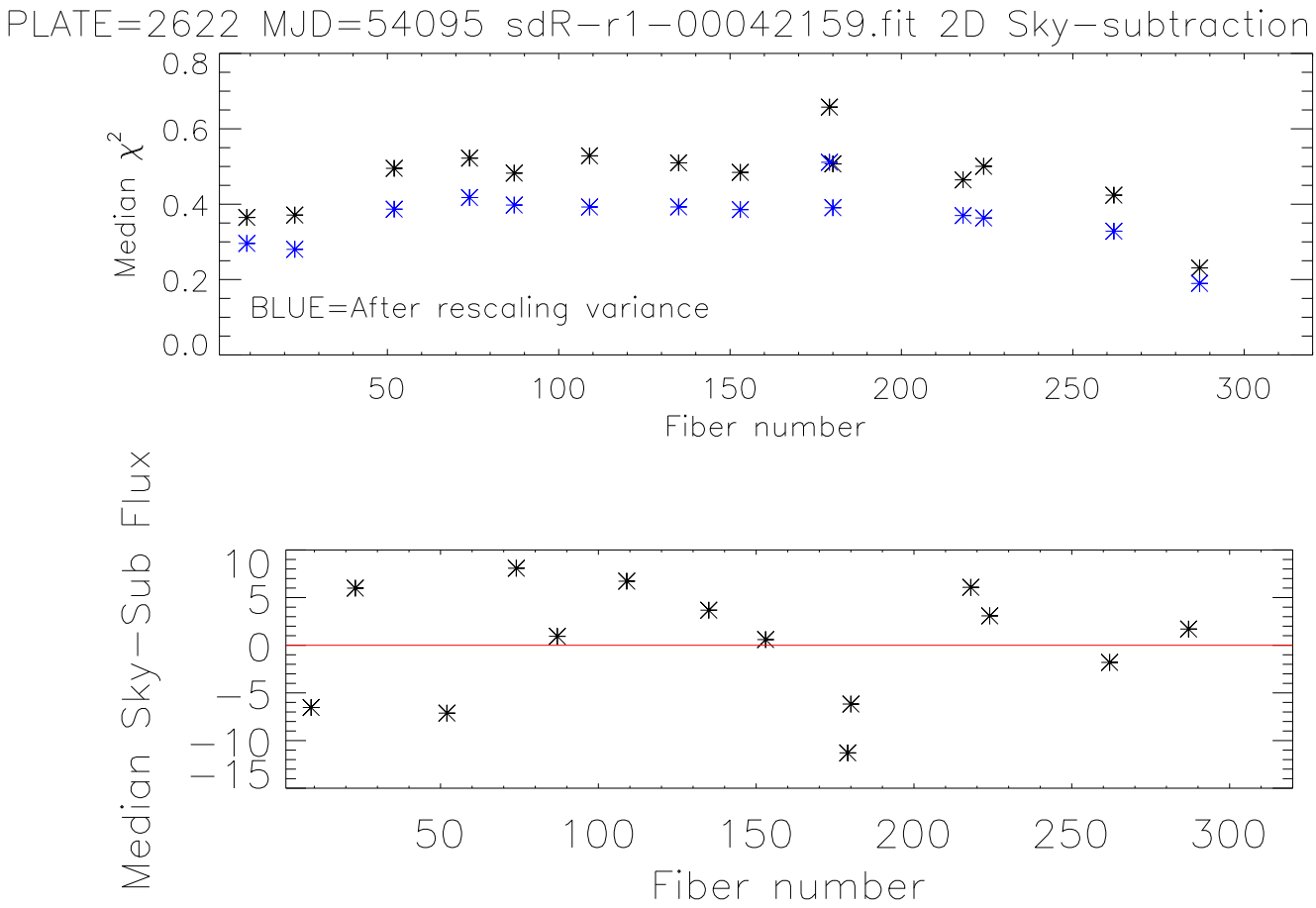

PLATE=2622 MJD=54095 Smooth superflat for sdR-r1-00042159.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

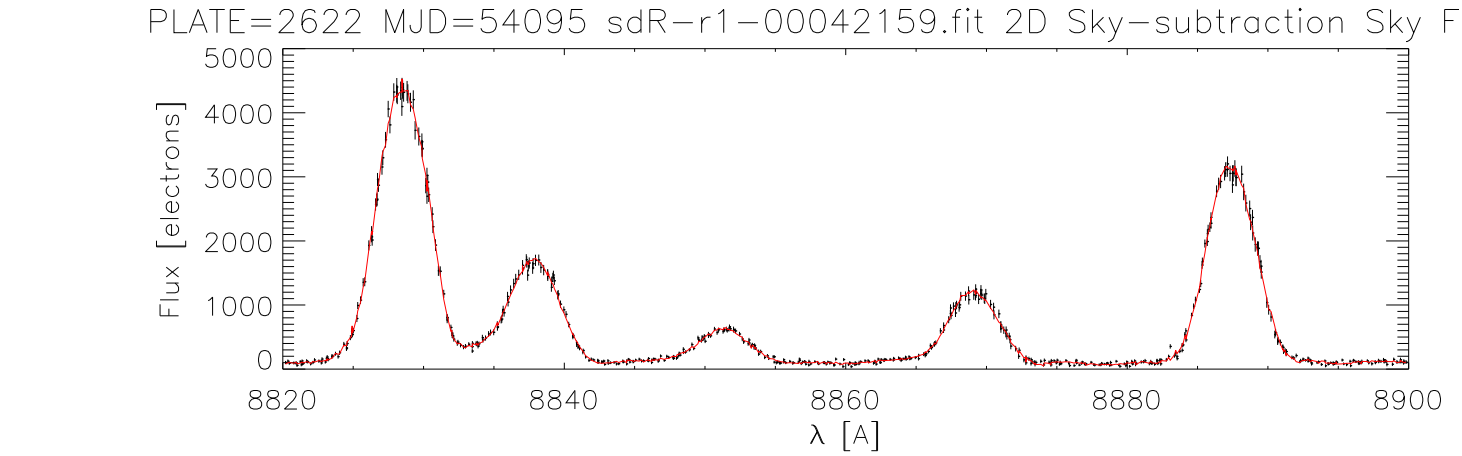

PLATE=2622 MJD=54095 sdR-r1-00042159.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

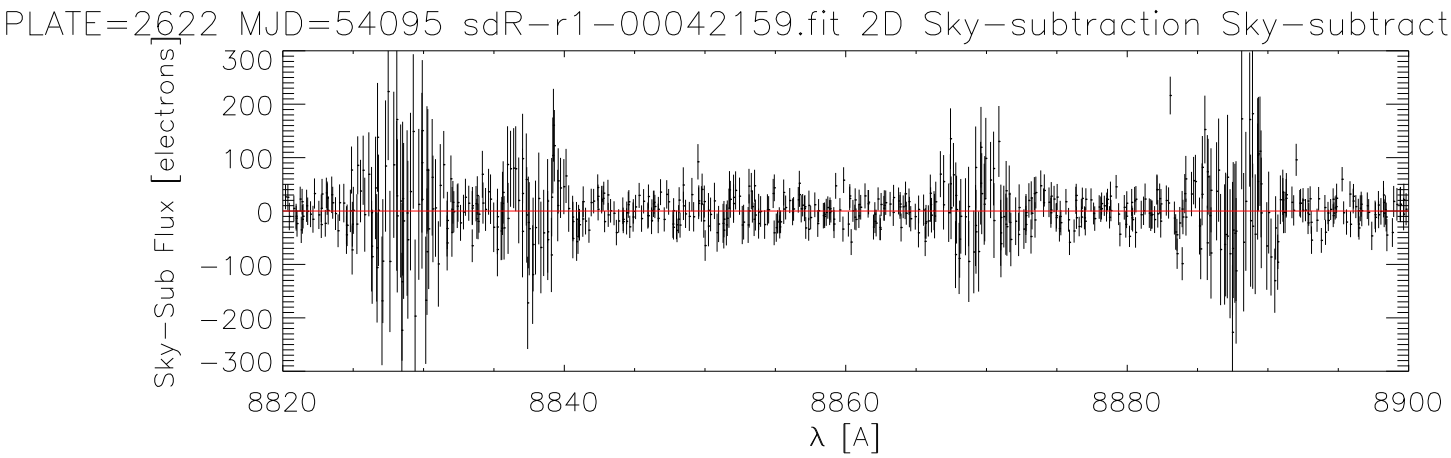

PLATE=2622 MJD=54095 sdR-r1-00042159.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

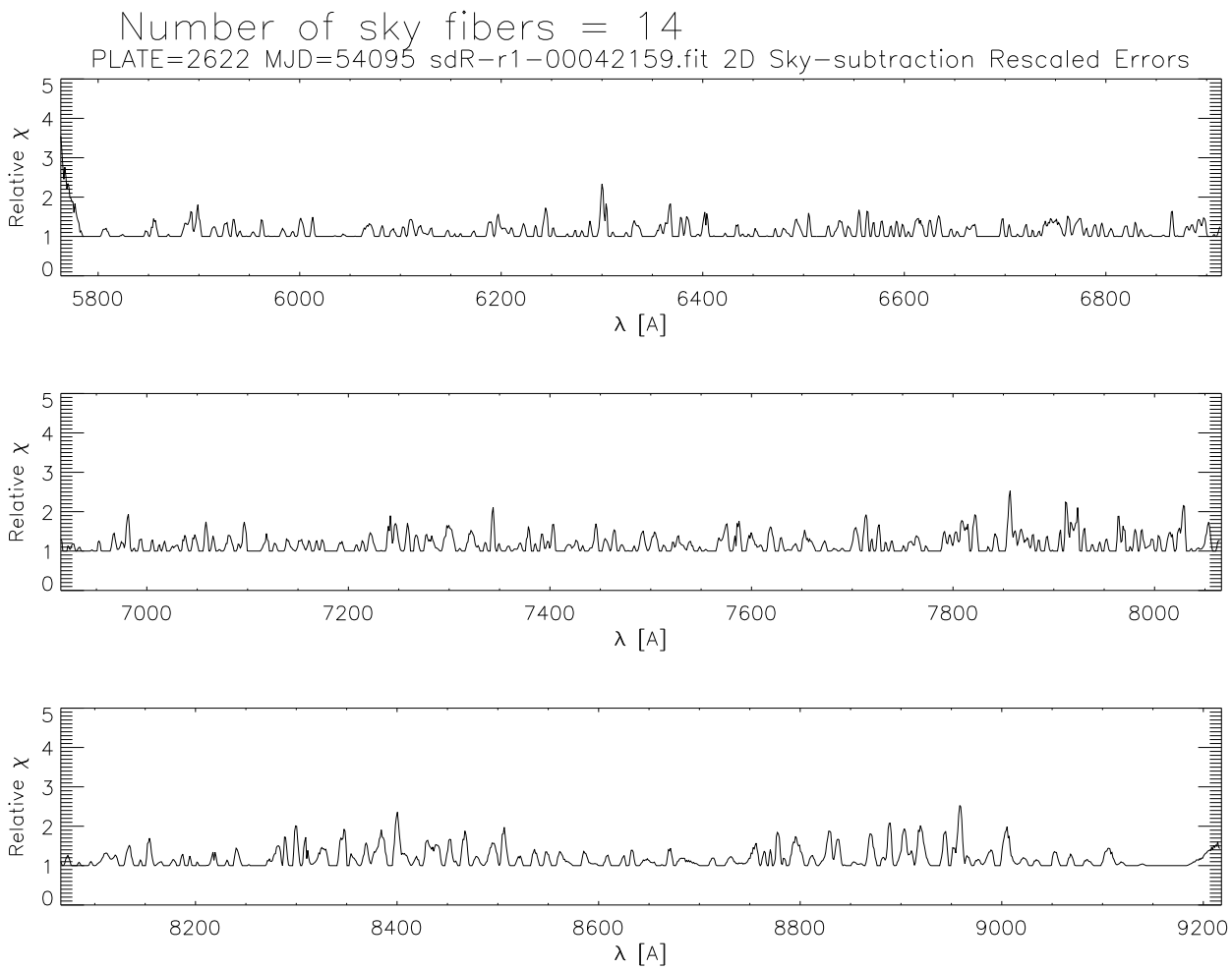

PLATE=2622 MJD=54095 sdR-r1-00042159.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

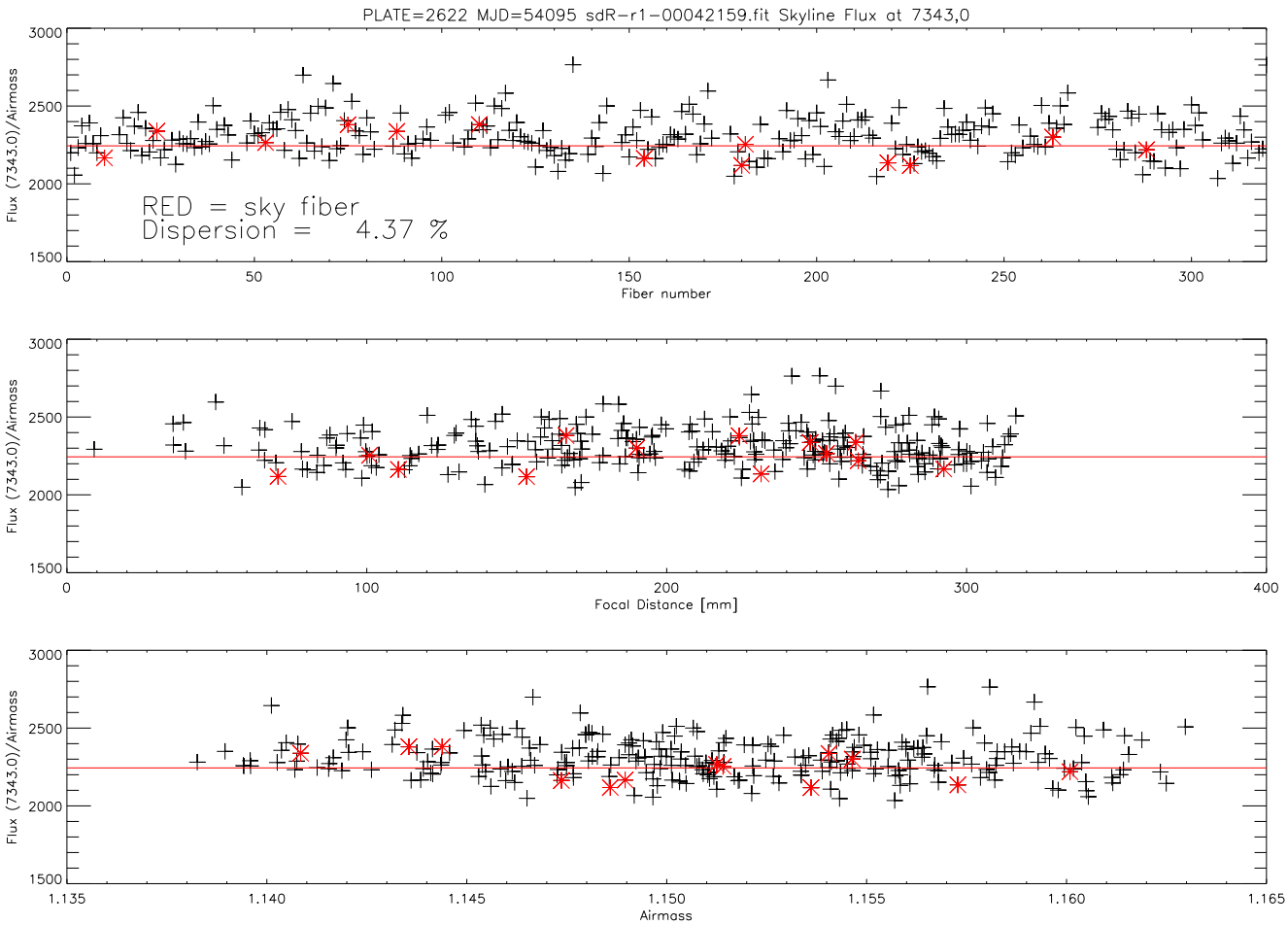

Number of sky fibers = 14
PLATE=2622 MJD=54095 sdR-r1-00042159.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

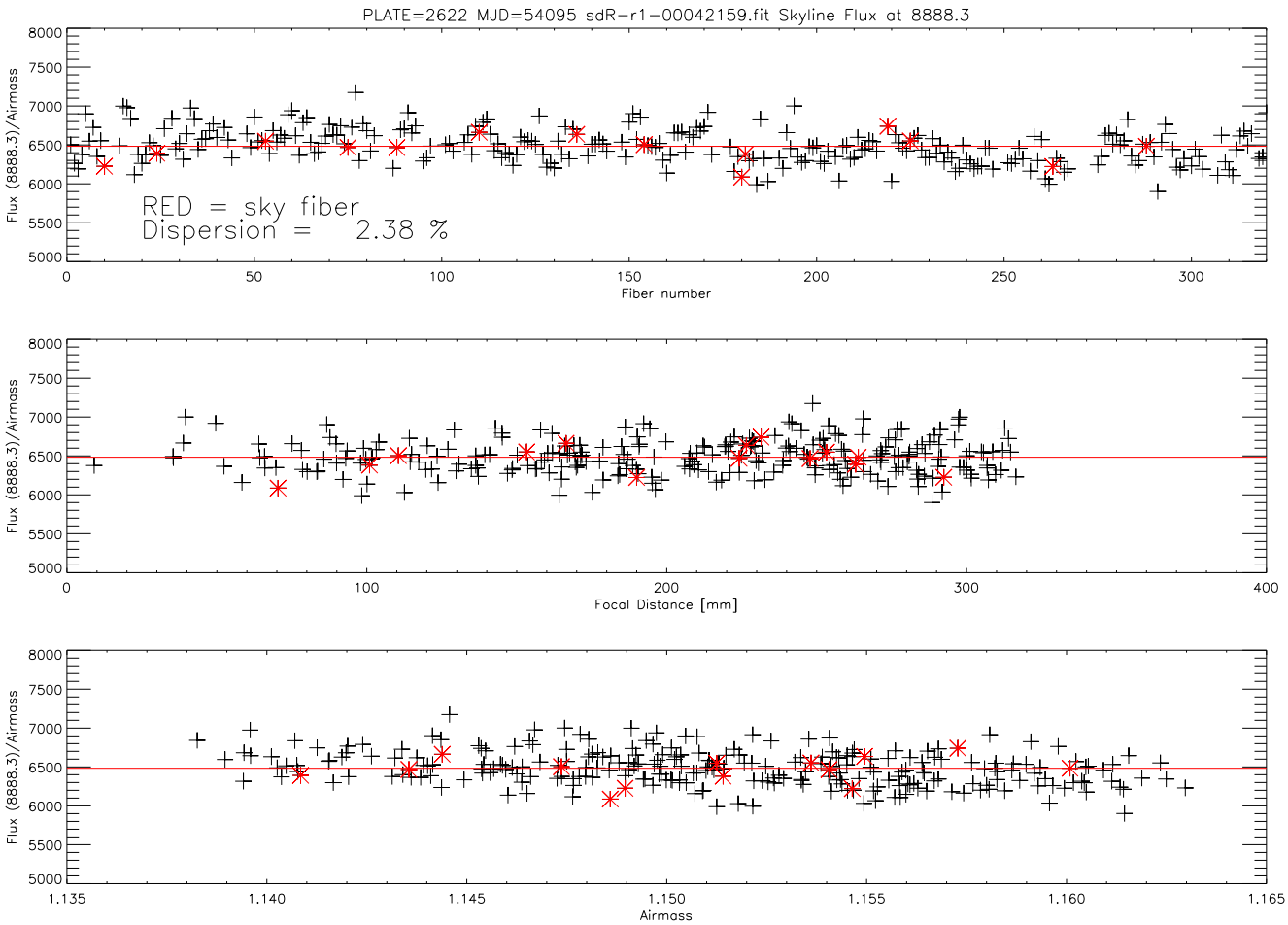

PLATE=2622 MJD=54095 sdR-r1-00042159.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

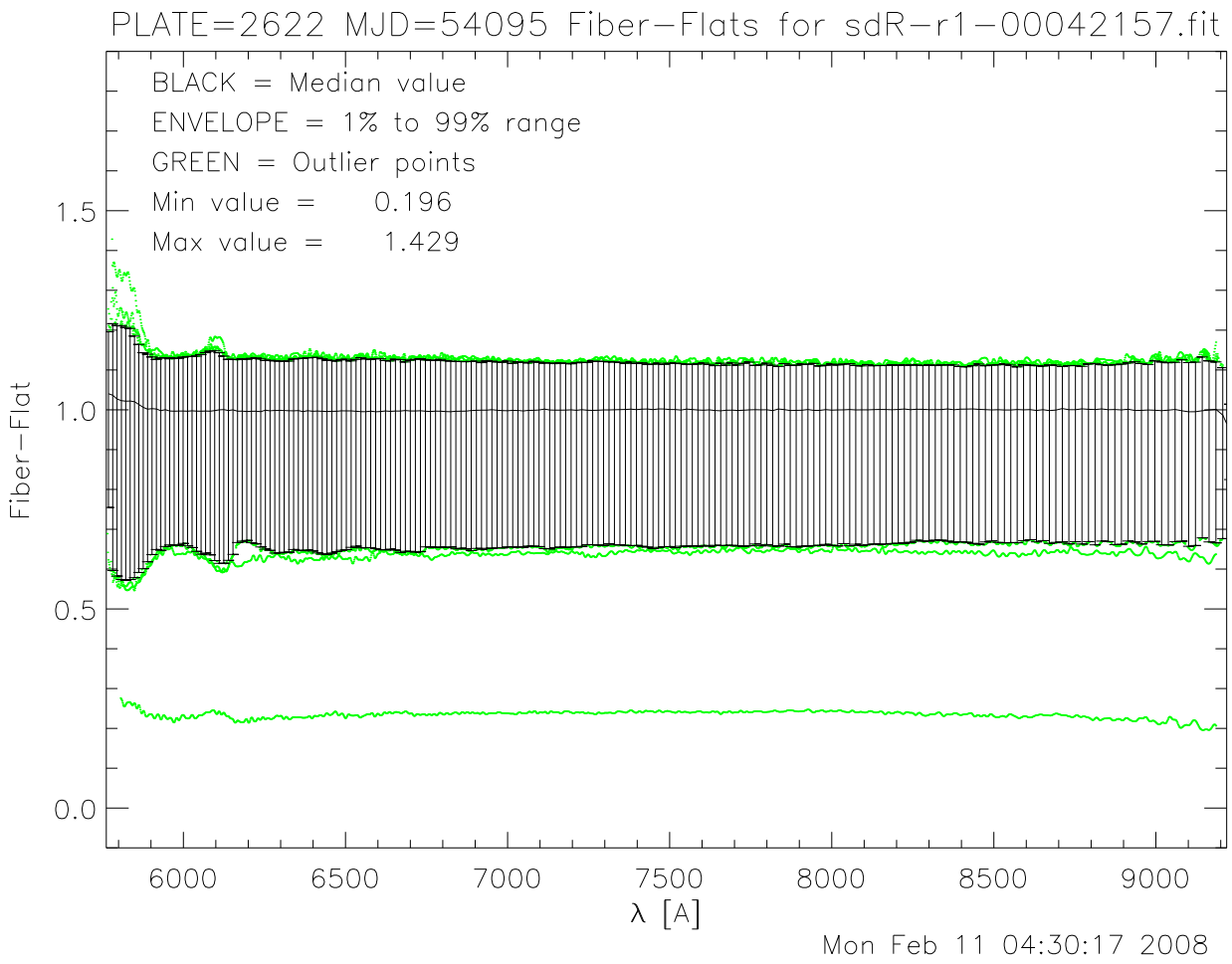

PLATE=2622 MJD=54095 sdR-r1-00042159.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

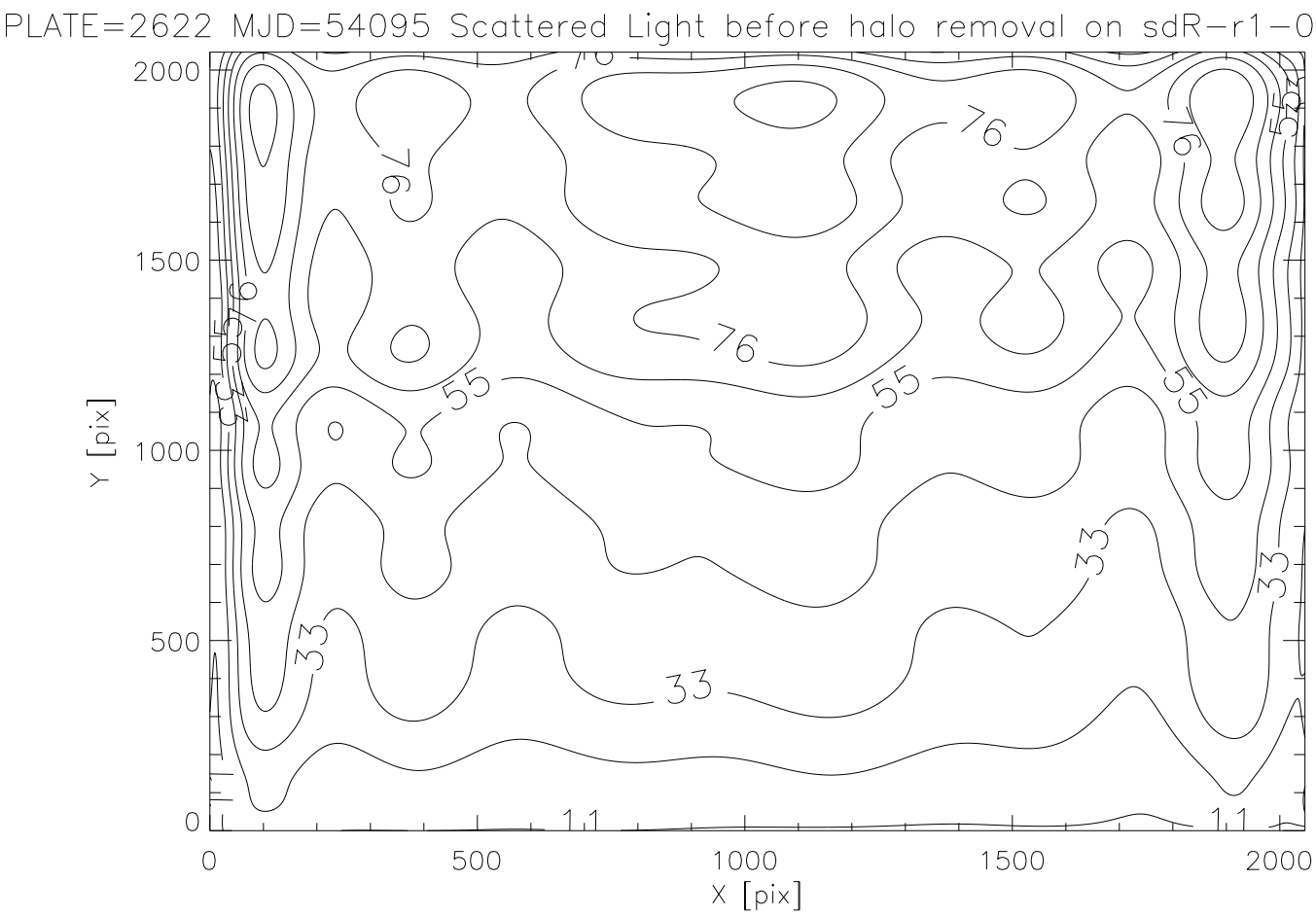

PLATE=2622 MJD=54095 sdR-r1-00042159.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

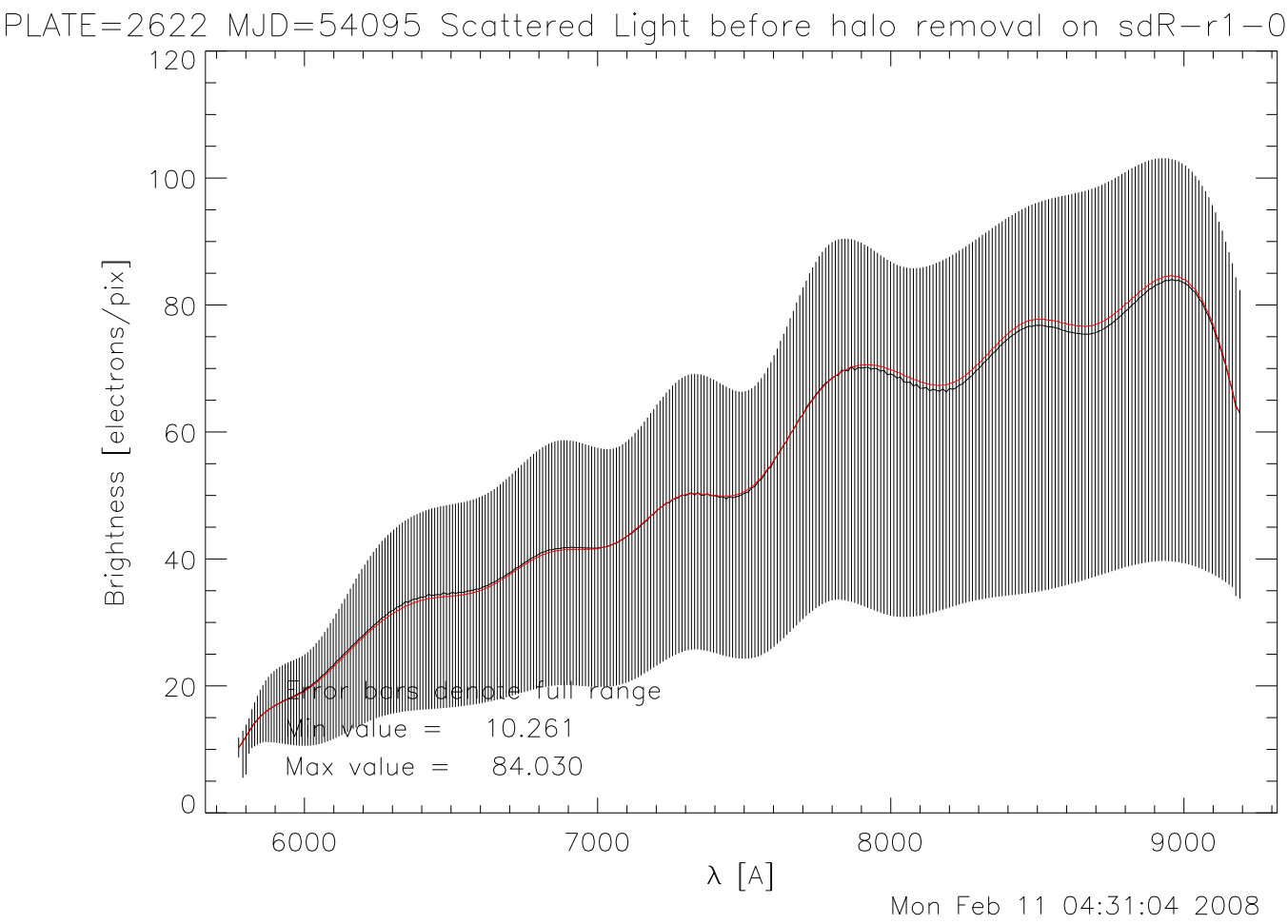

Number of sky fibers = 14
PLATE=2622 MJD=54095 sdR-r1-00042159.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

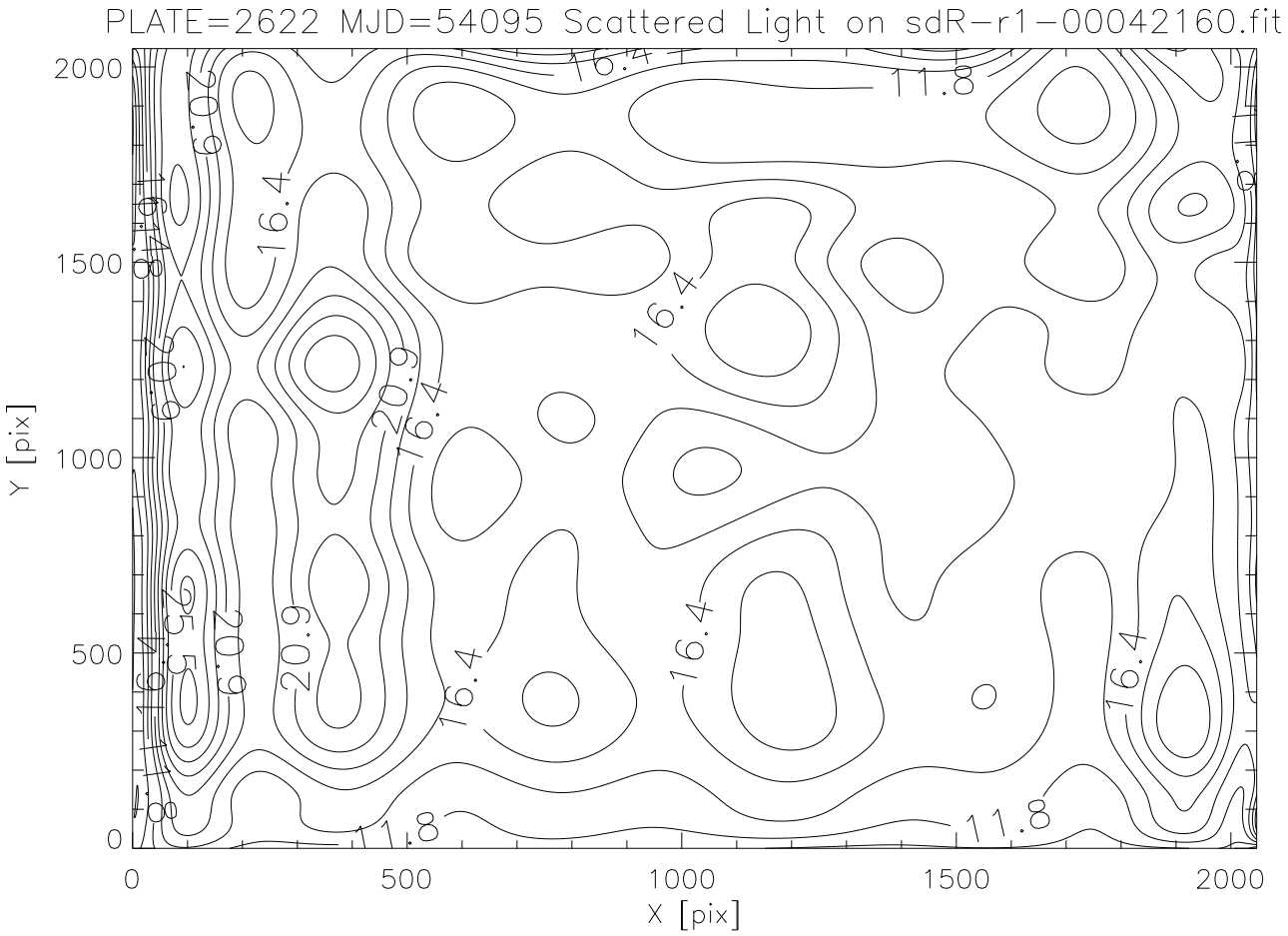

PLATE=2622 MJD=54095 sdR-r1-00042159.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.37 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

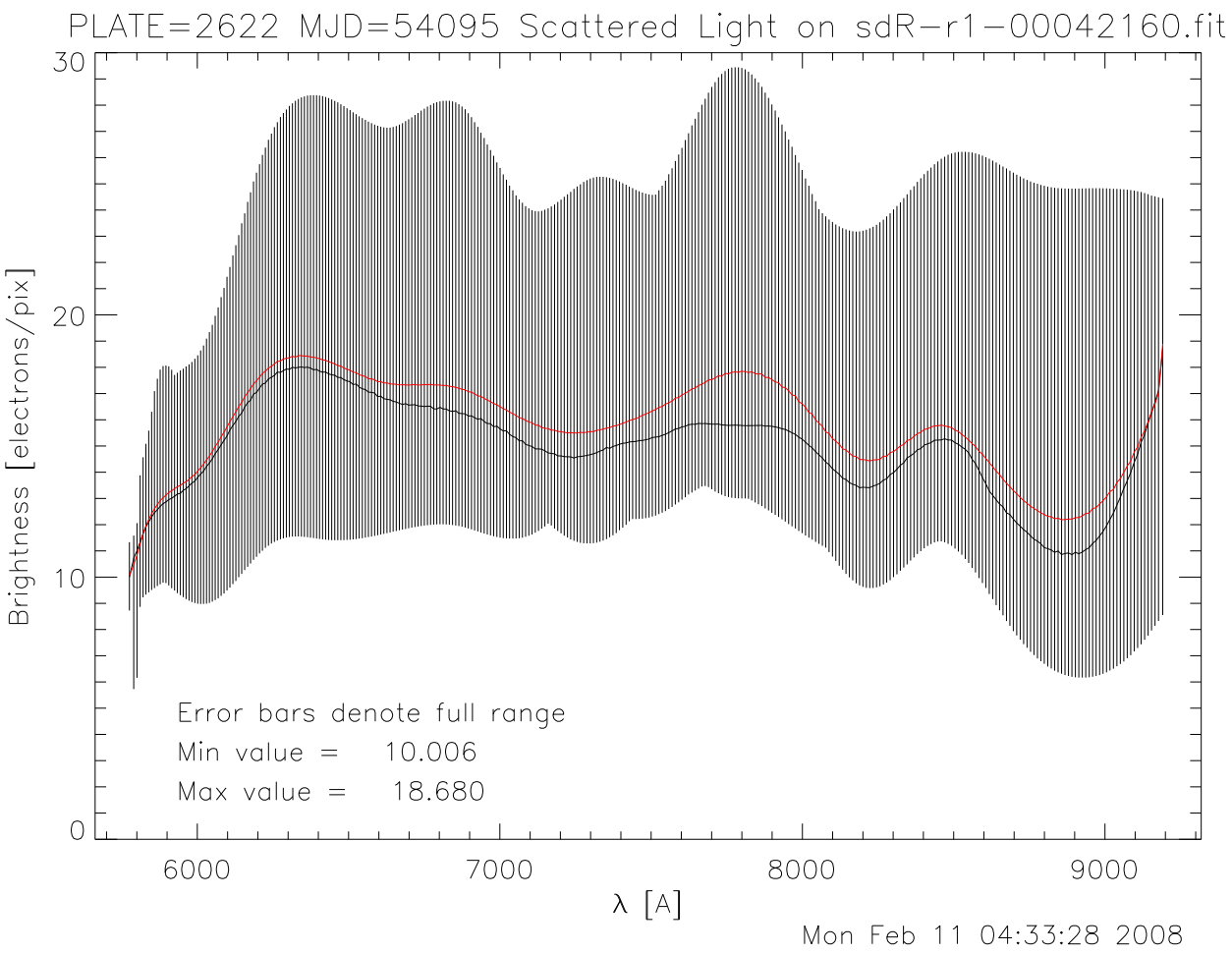

PLATE=2622 MJD=54095 sdR-r1-00042159.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.38 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

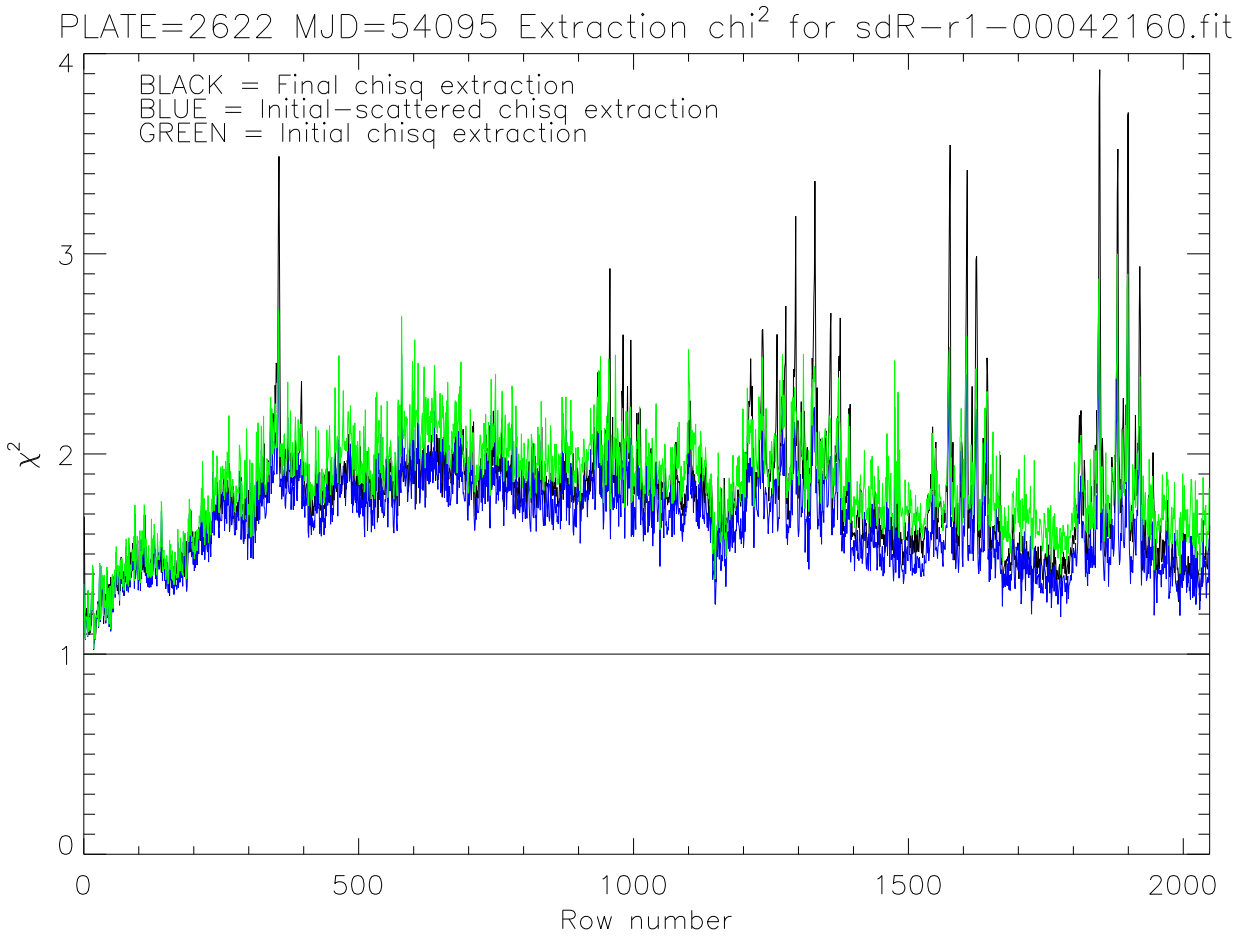

PLATE=2622 MJD=54095 Fiber−Flats for sdR−r1−00042157.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.196
Max value = 1.429
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:30:17 2008

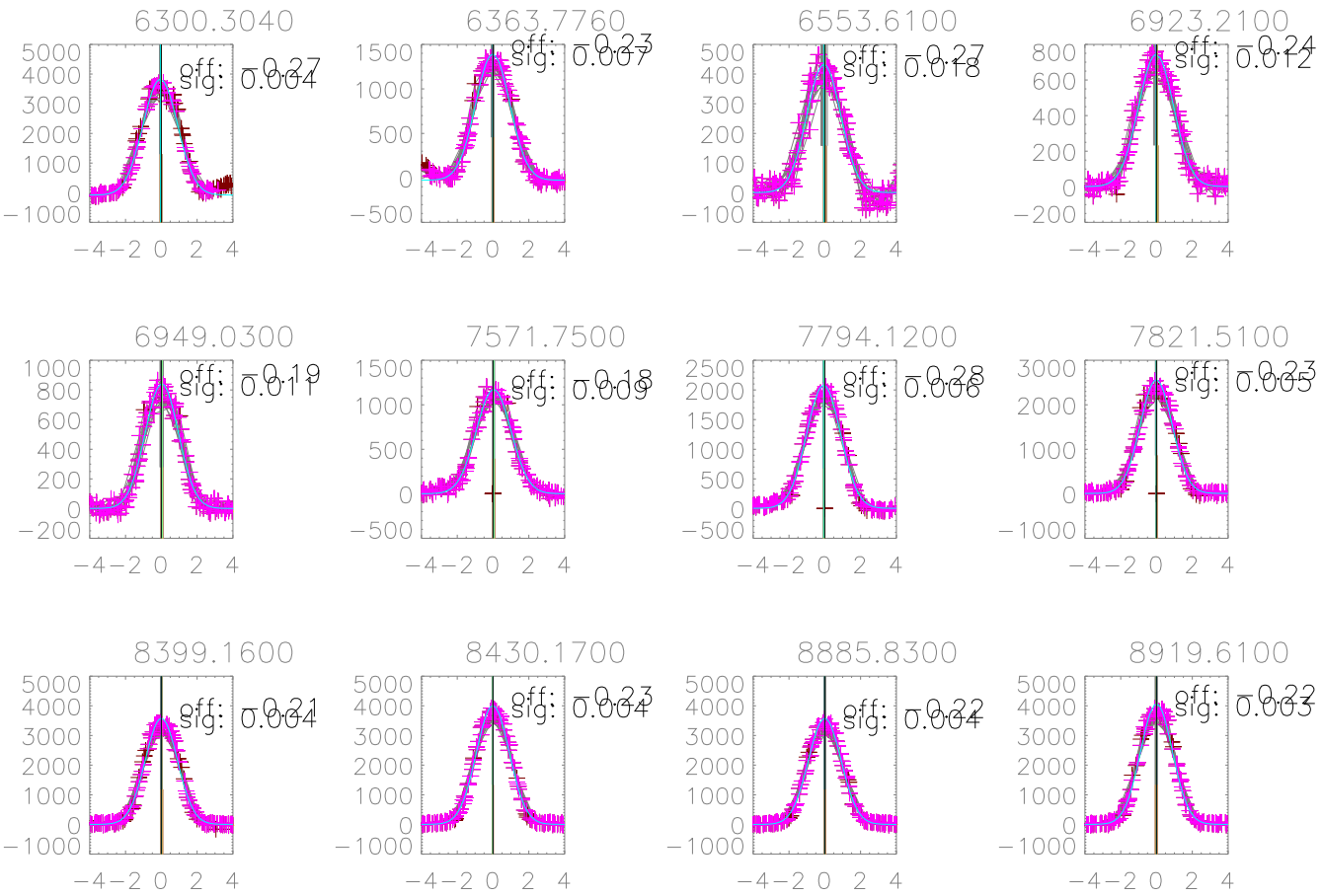

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-r1-00042160.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
97
76
55
33
11

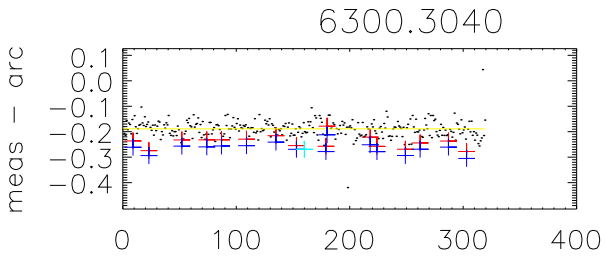

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-r1-00042160.fi
Brightness [electrons/pix]
120
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.261
Max value = 84.030
Mon Feb 11 04:31:04 2008

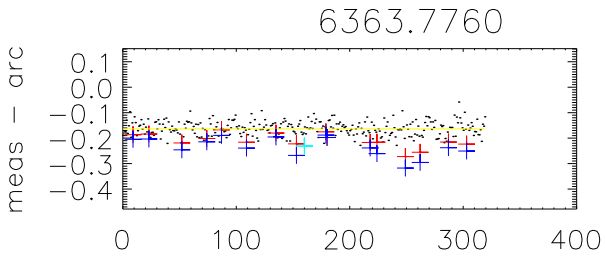

PLATE=2622 MJD=54095 Scattered Light on sdR-r1-00042160.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.8
16.4
20.9

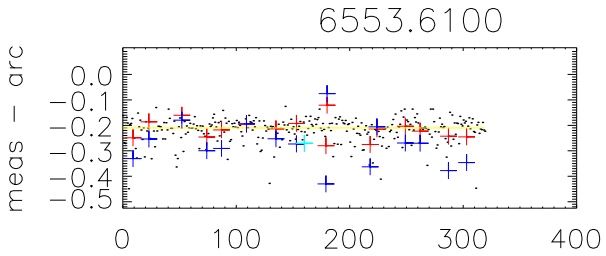

PLATE=2622 MJD=54095 Scattered Light on sdR-r1-00042160.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.006
Max value = 18.680
Mon Feb 11 04:33:28 2008

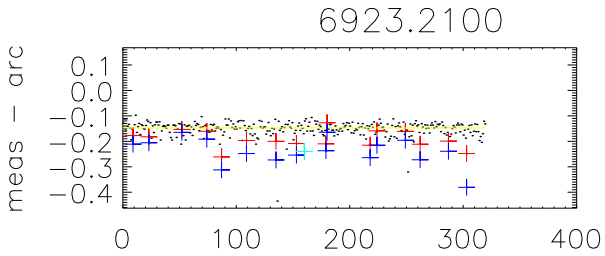

PLATE=2622 MJD=54095 Extraction chi^2 for sdR−r1−00042160.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

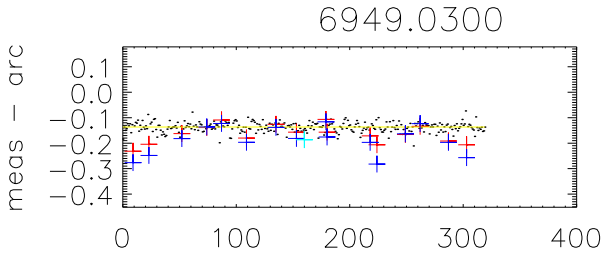

6300.3040
off: −0.27
sig: 0.004
6363.7760
off: −0.23
sig: 0.007
6553.6100
off: −0.27
sig: 0.018
6923.2100
off: −0.24
sig: 0.012
6949.0300
off: −0.19
sig: 0.011
7571.7500
off: −0.18
sig: 0.009
7794.1200
off: −0.28
sig: 0.006
7821.5100
off: −0.23
sig: 0.005
8399.1600
off: −0.21
sig: 0.004
8430.1700
off: −0.23
sig: 0.004
8885.8300
off: −0.22
sig: 0.004
8919.6100
off: −0.22
sig: 0.003

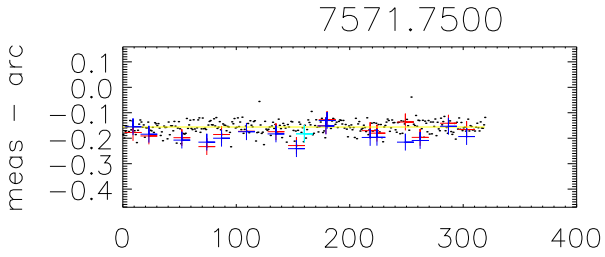

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

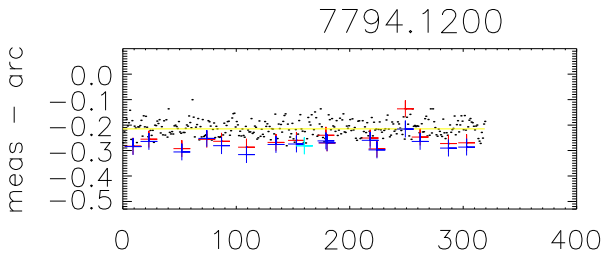

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

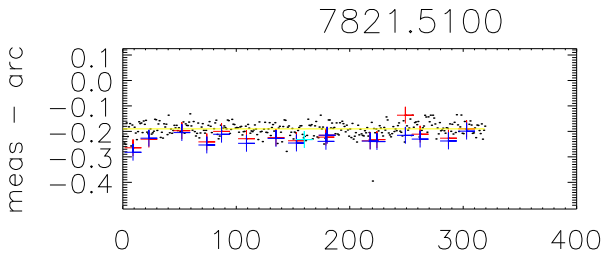

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

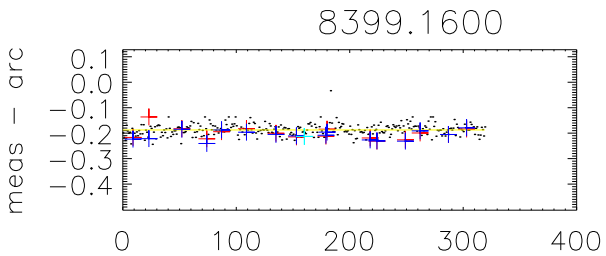

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

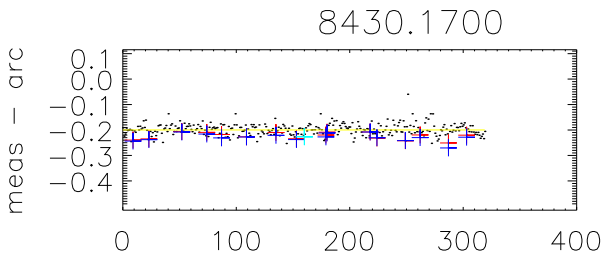

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

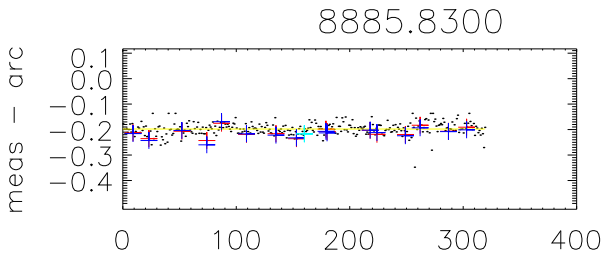

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

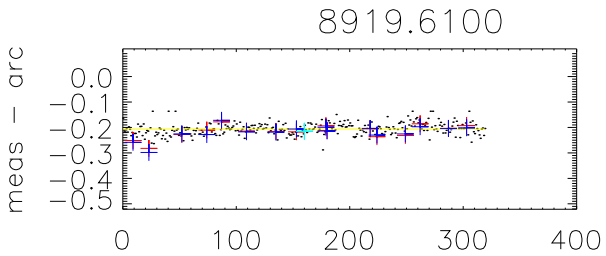

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

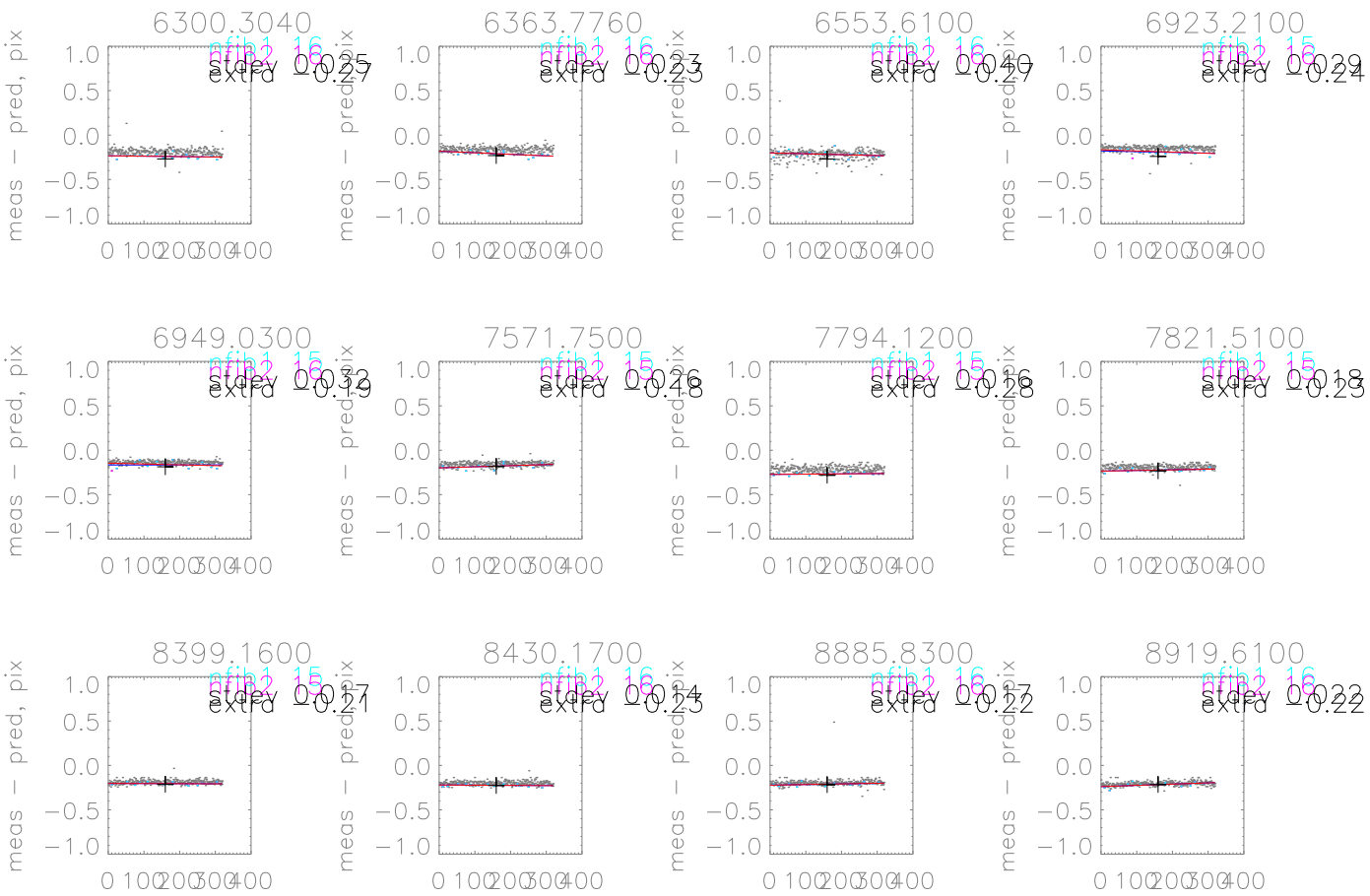

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

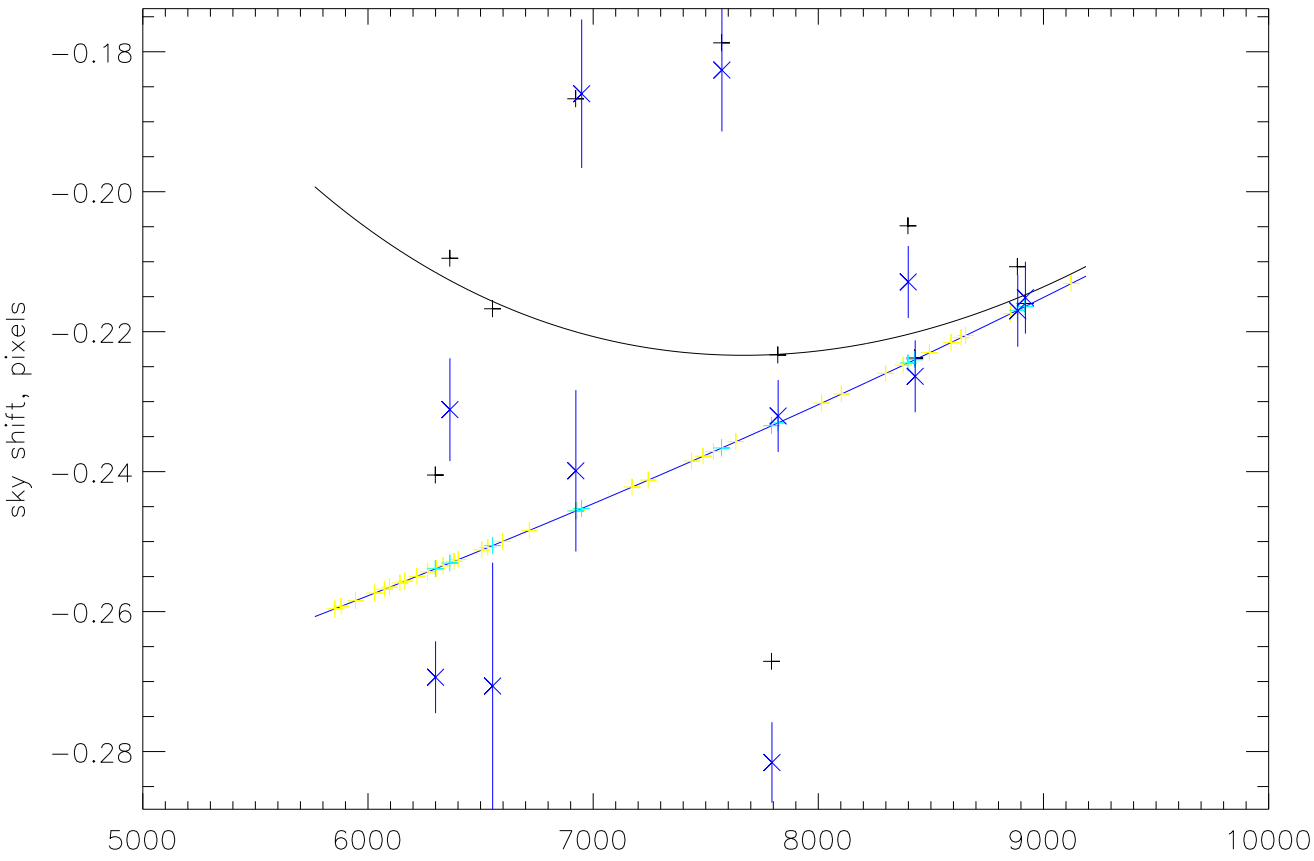

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

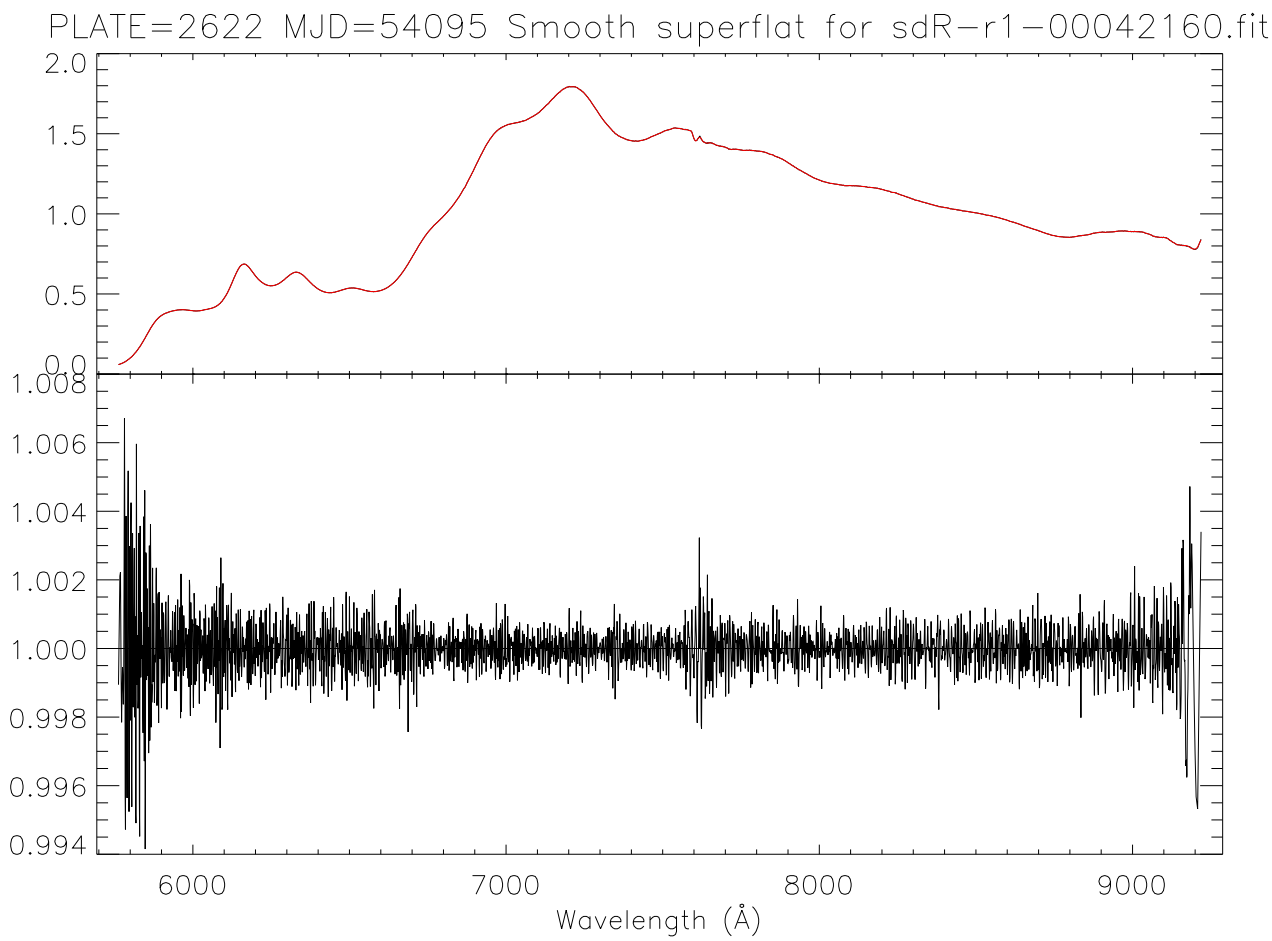

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

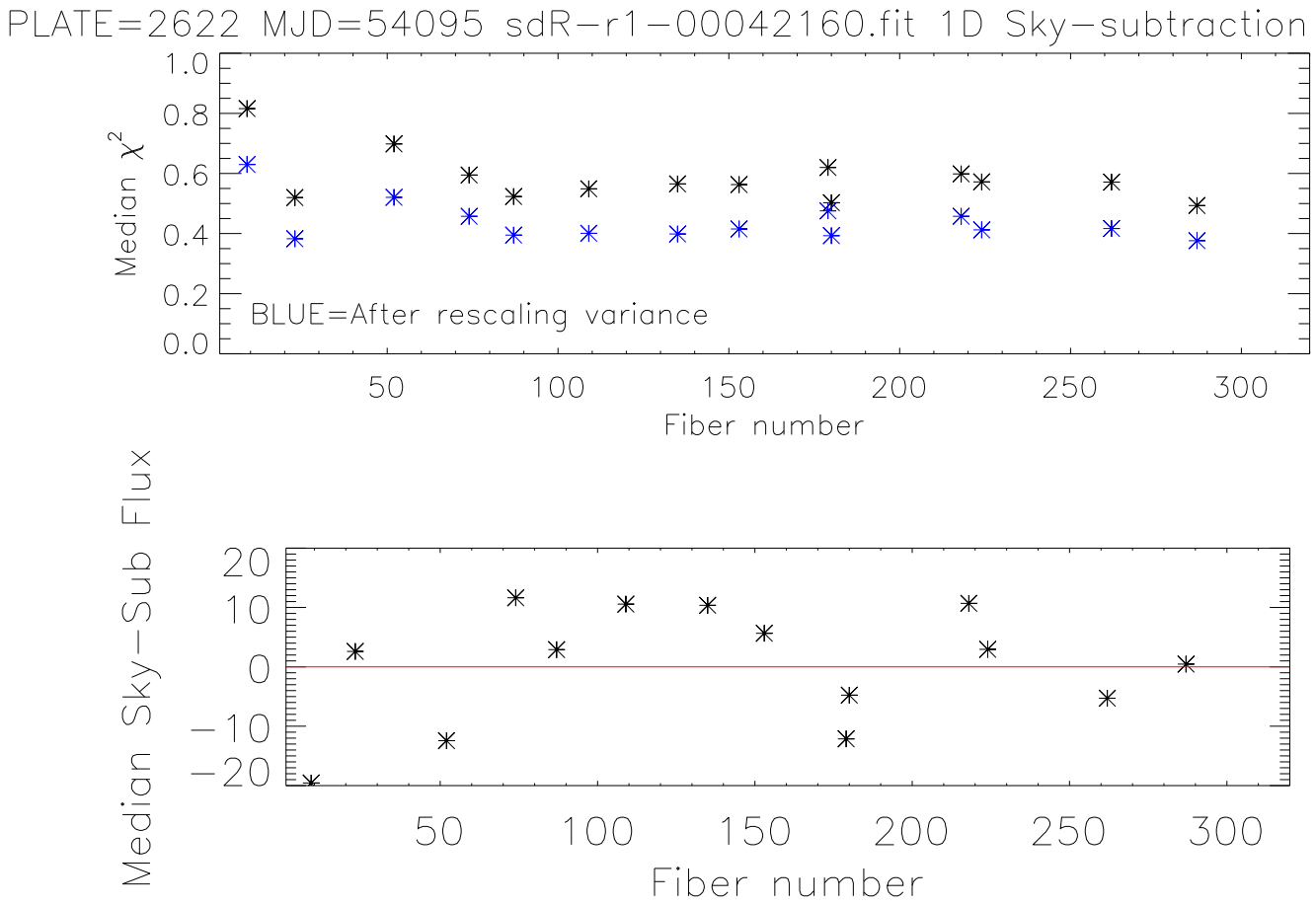

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

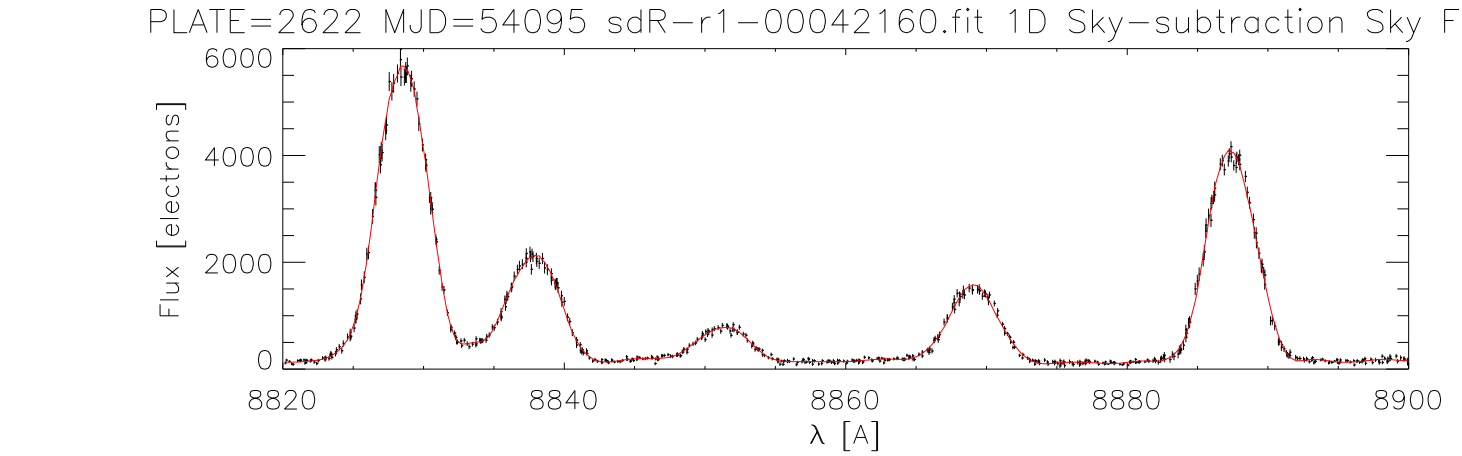

6300.3040
stdev 0.25
extra 0.27
6363.7760
stdev 0.23
extra 0.23
6553.6100
stdev 0.40
extra 0.27
6923.2100
stdev 0.29
extra 0.24
6949.0300
stdev 0.32
extra 0.19
7571.7500
stdev 0.26
extra 0.48
7794.1200
stdev 0.46
extra 0.28
7821.5100
stdev 0.18
extra 0.23
8399.1600
stdev 0.17
extra 0.21
8430.1700
stdev 0.24
extra 0.23
8885.8300
stdev 0.17
extra 0.22
8919.6100
stdev 0.22
extra 0.22
meas − pred, pix
mfib1 15 16
mfib2 15 16

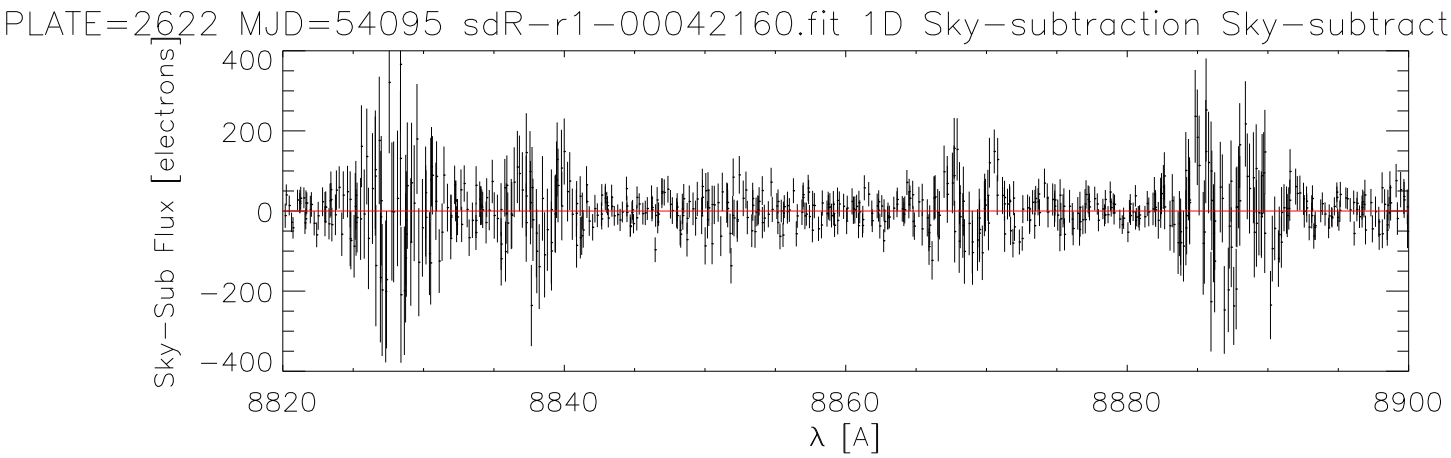

−0.18
−0.20
−0.22
−0.24
−0.26
−0.28
sky shift, pixels
5000
6000
7000
8000
9000
10000

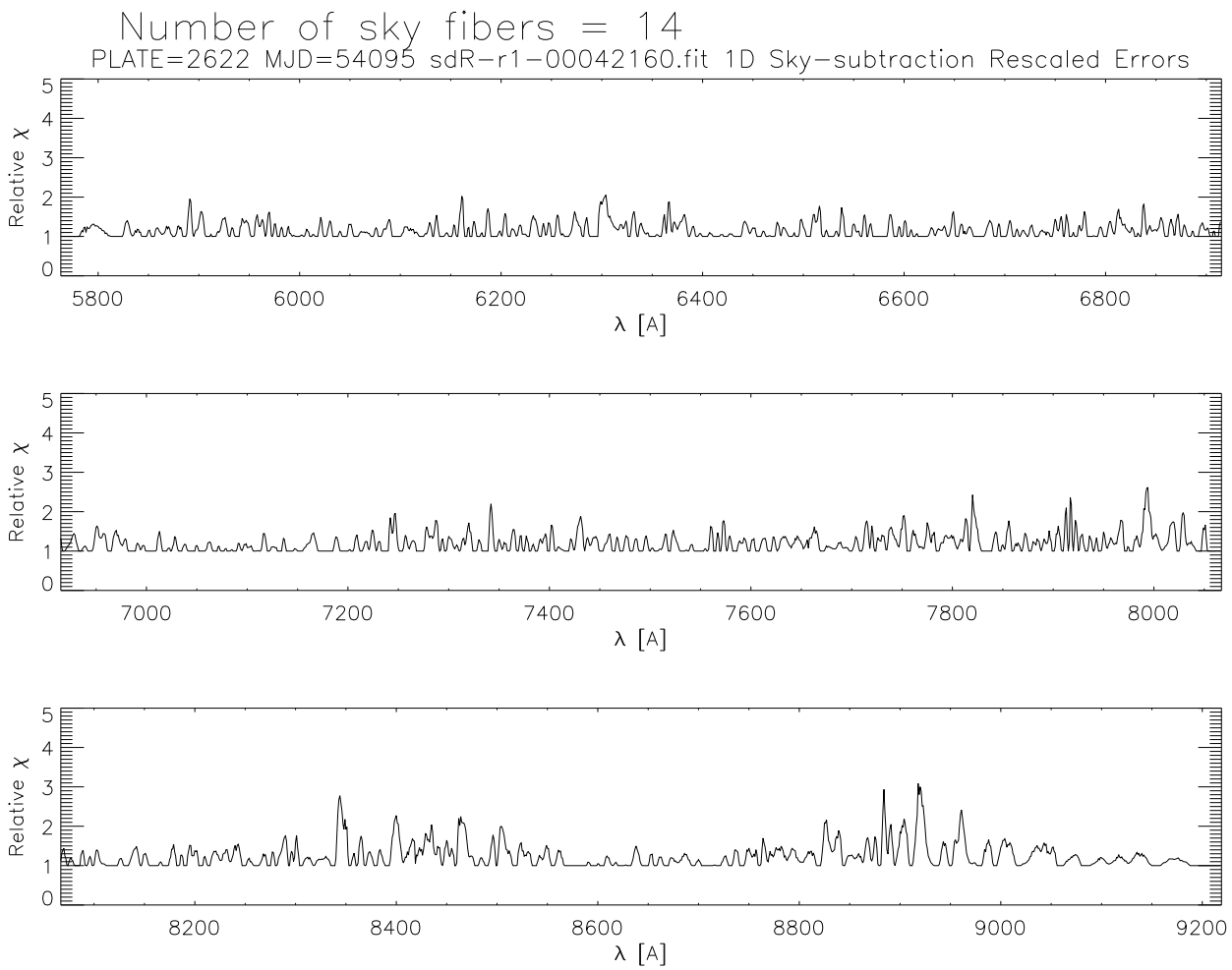
es= 0.0000

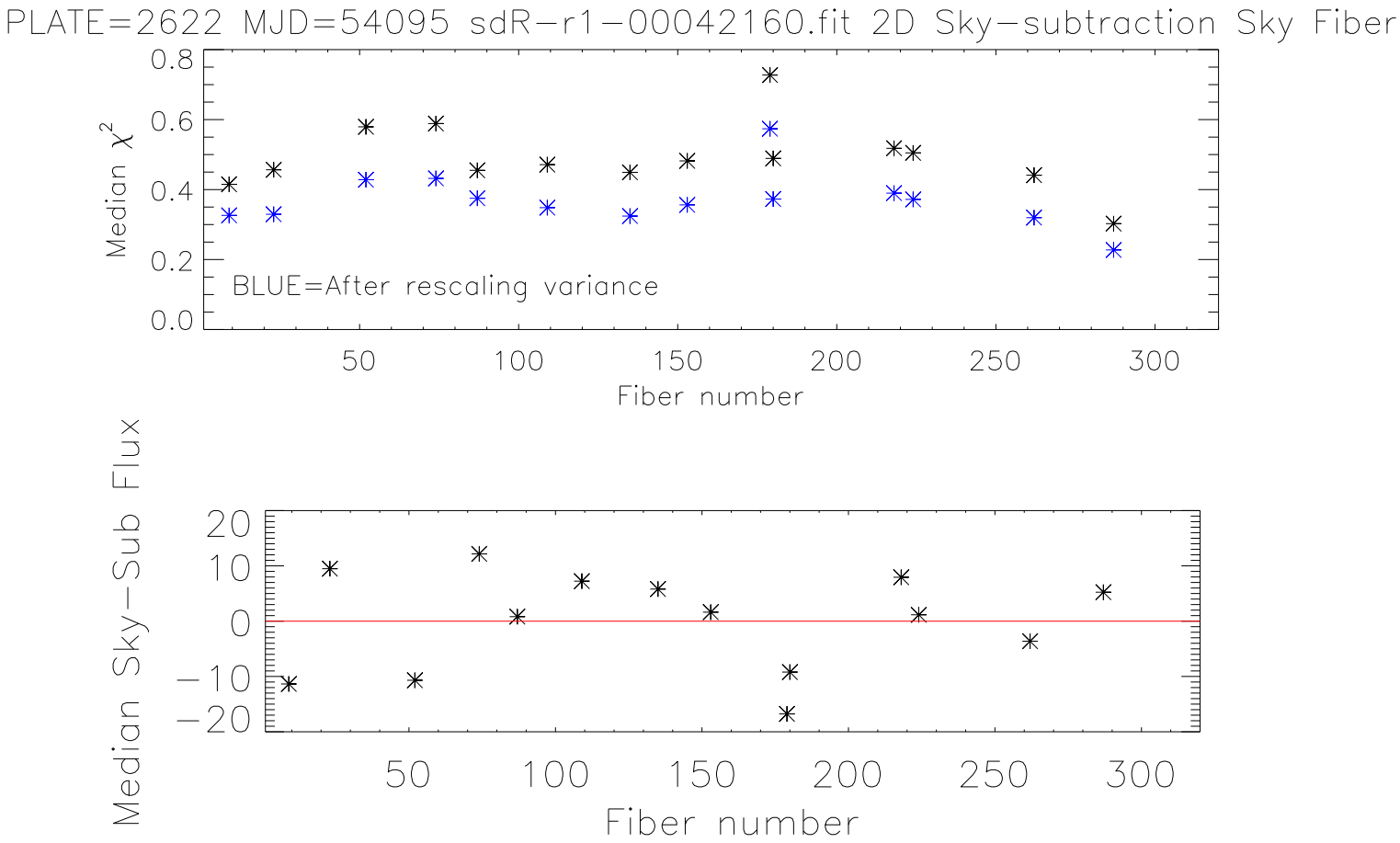

PLATE=2622 MJD=54095 Smooth superflat for sdR-r1-00042160.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

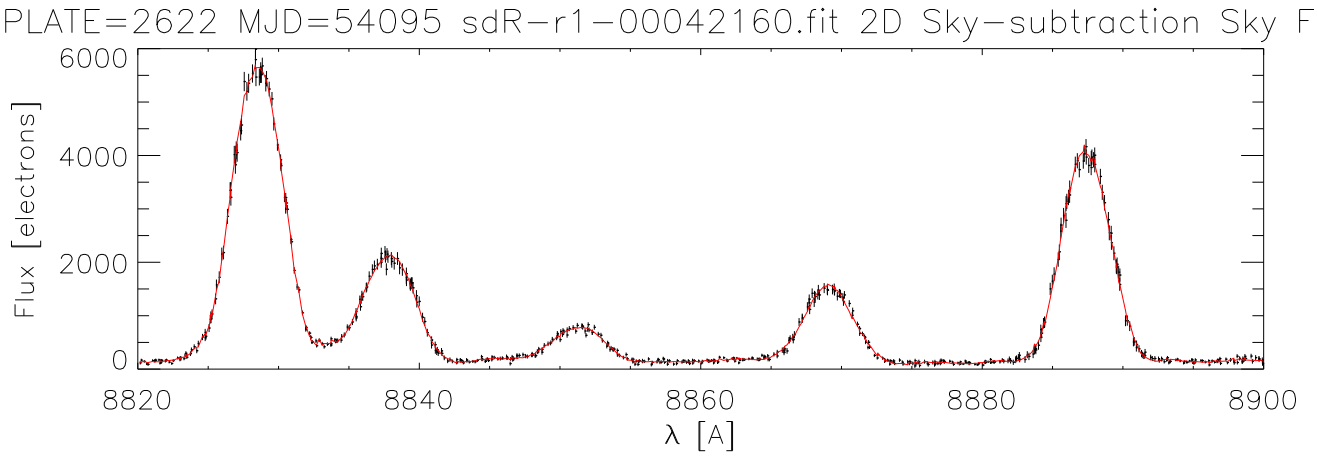

PLATE=2622 MJD=54095 sdR-r1-00042160.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

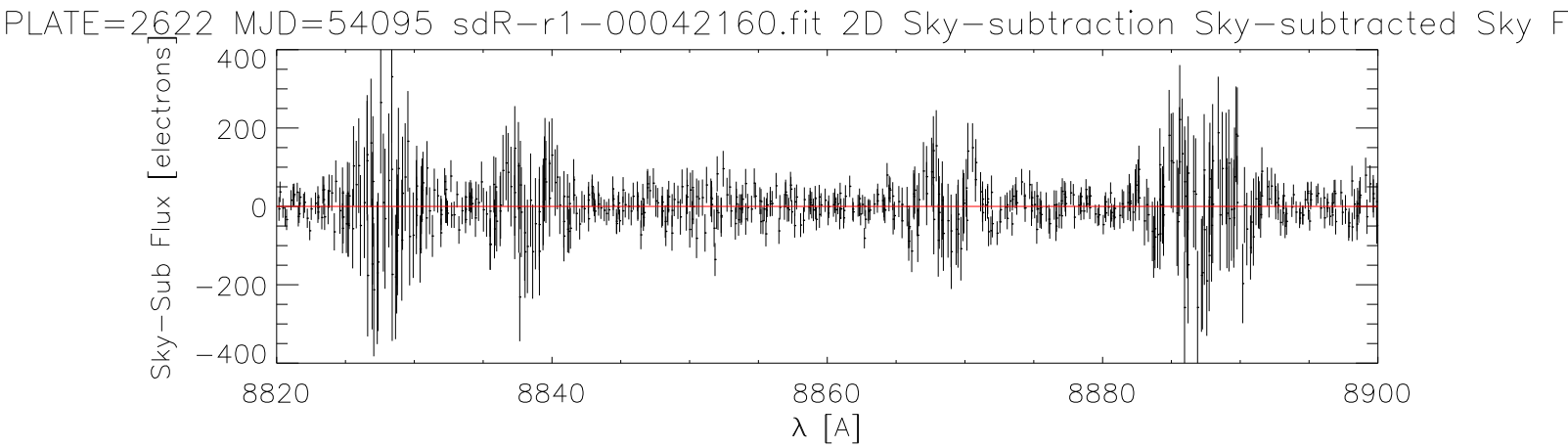

PLATE=2622 MJD=54095 sdR-r1-00042160.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

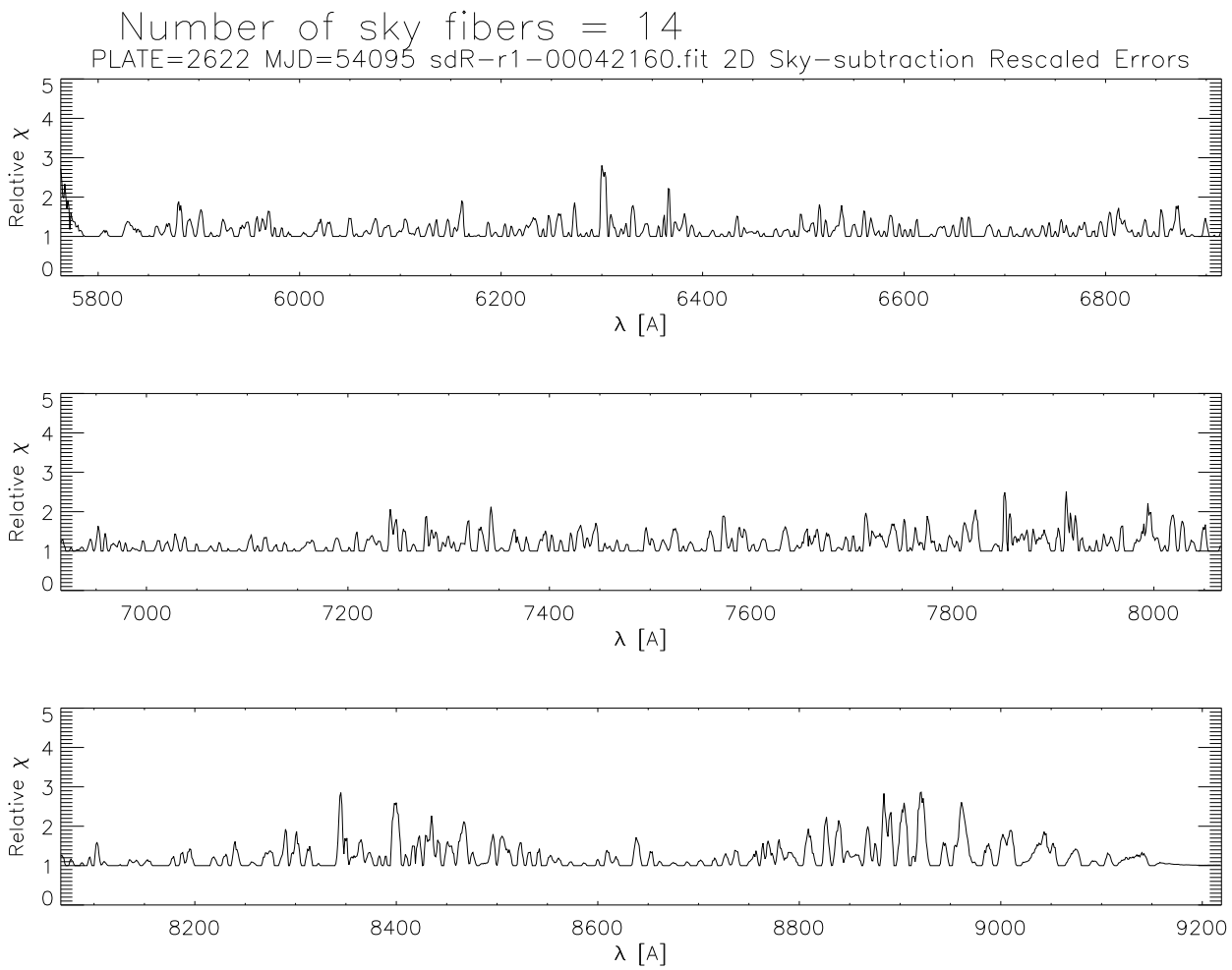

PLATE=2622 MJD=54095 sdR-r1-00042160.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

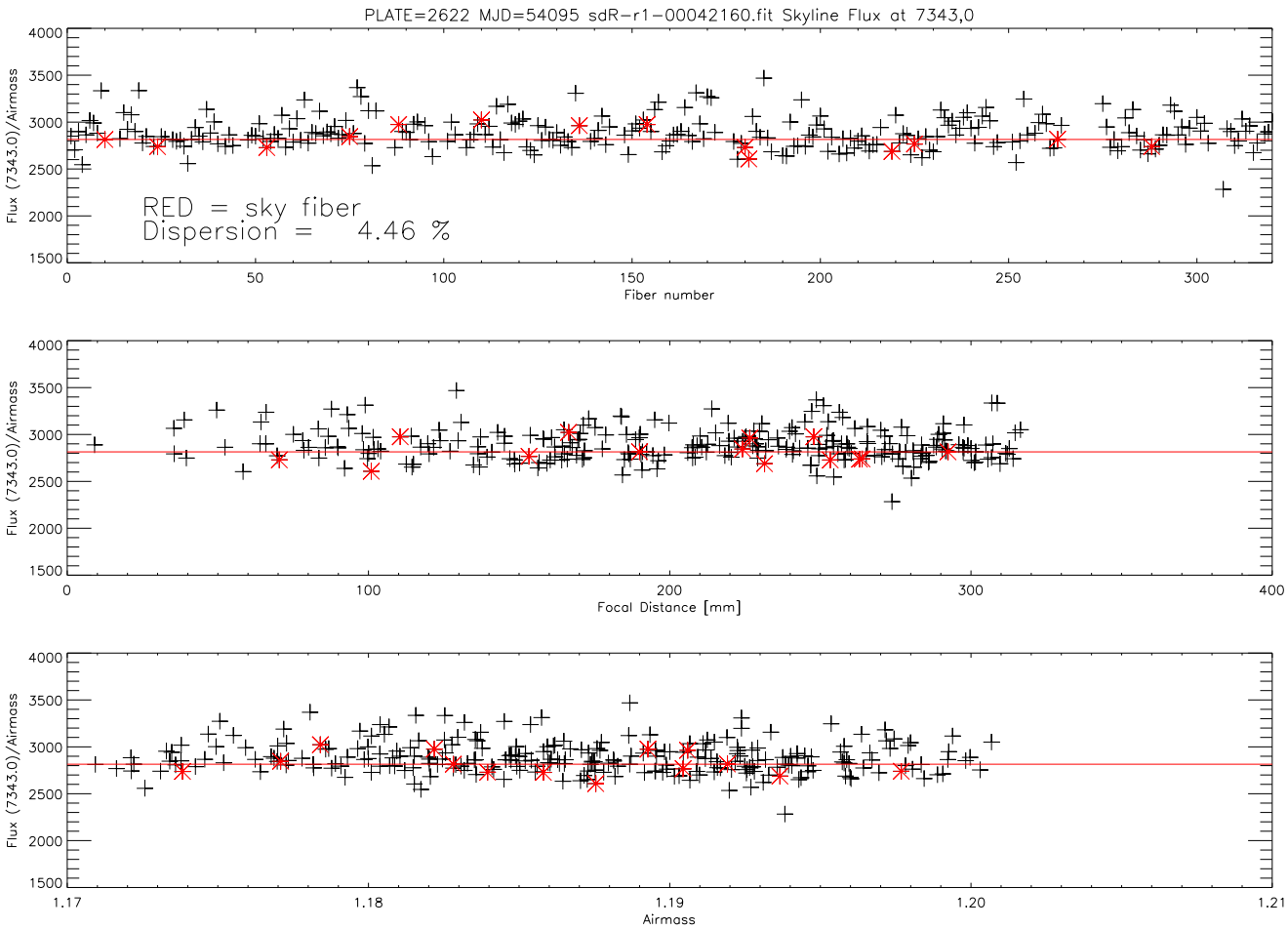

Number of sky fibers = 14
PLATE=2622 MJD=54095 sdR-r1-00042160.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

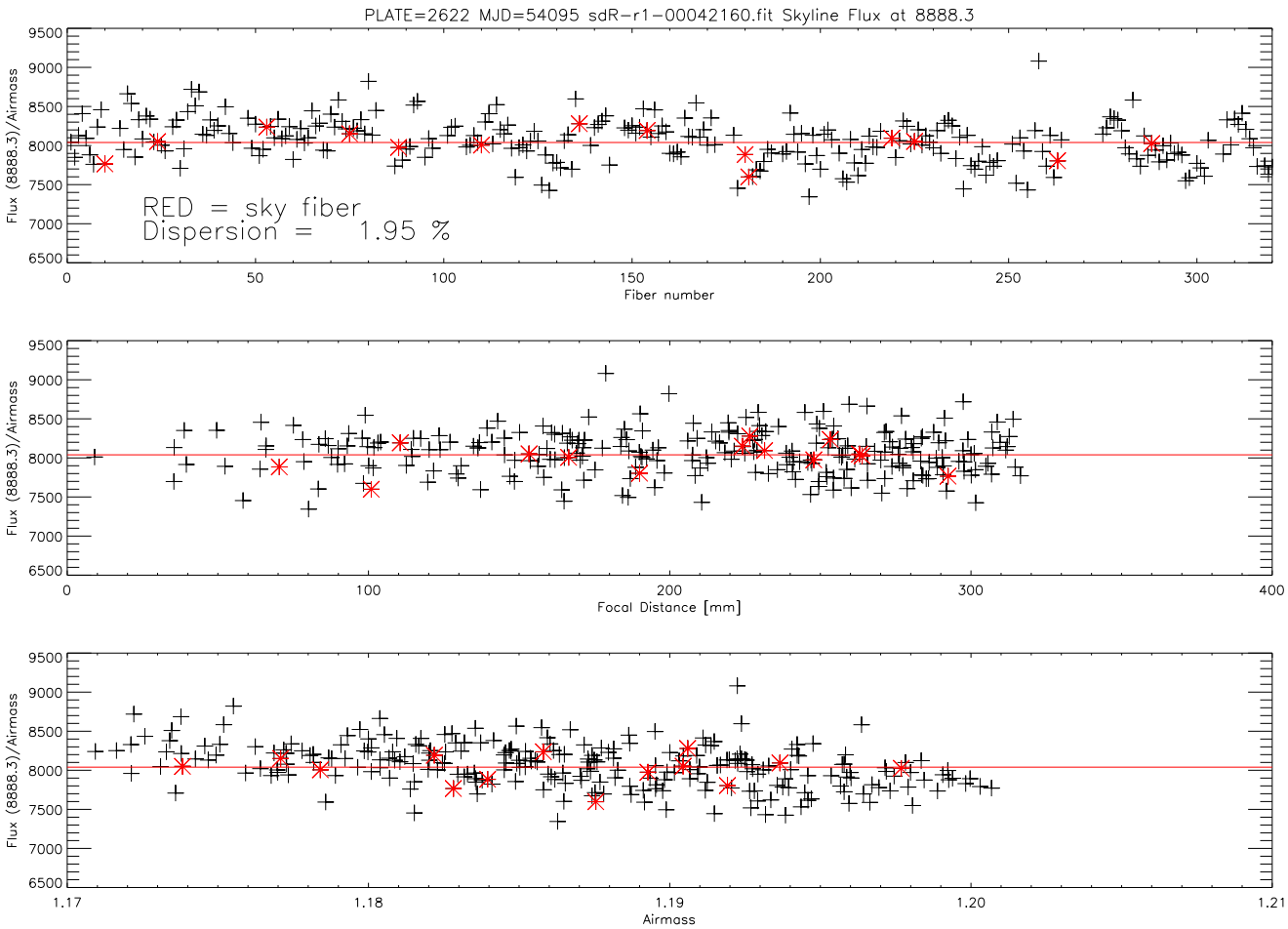

PLATE=2622 MJD=54095 sdR-r1-00042160.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

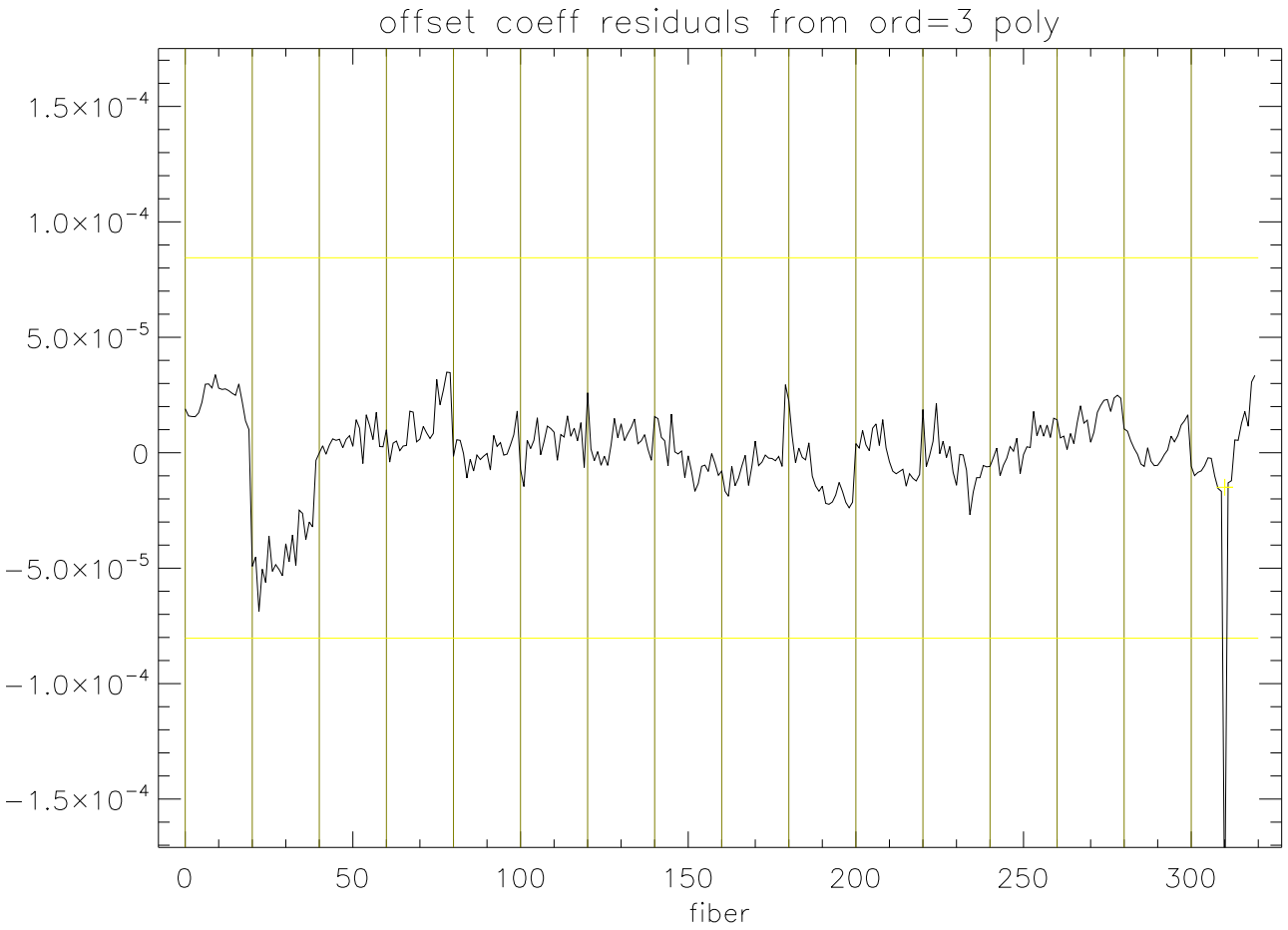

PLATE=2622 MJD=54095 sdR-r1-00042160.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

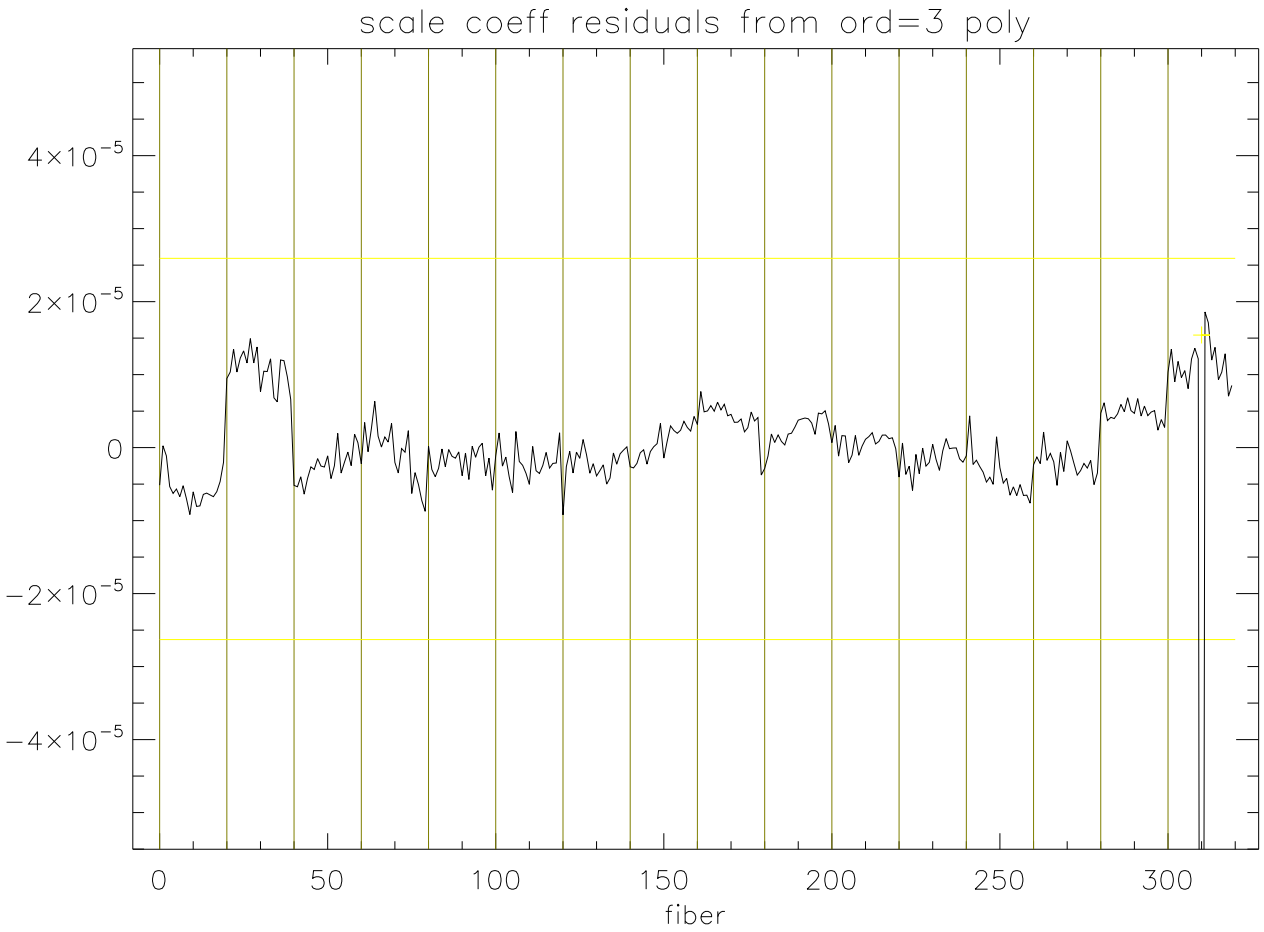

PLATE=2622 MJD=54095 sdR-r1-00042160.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

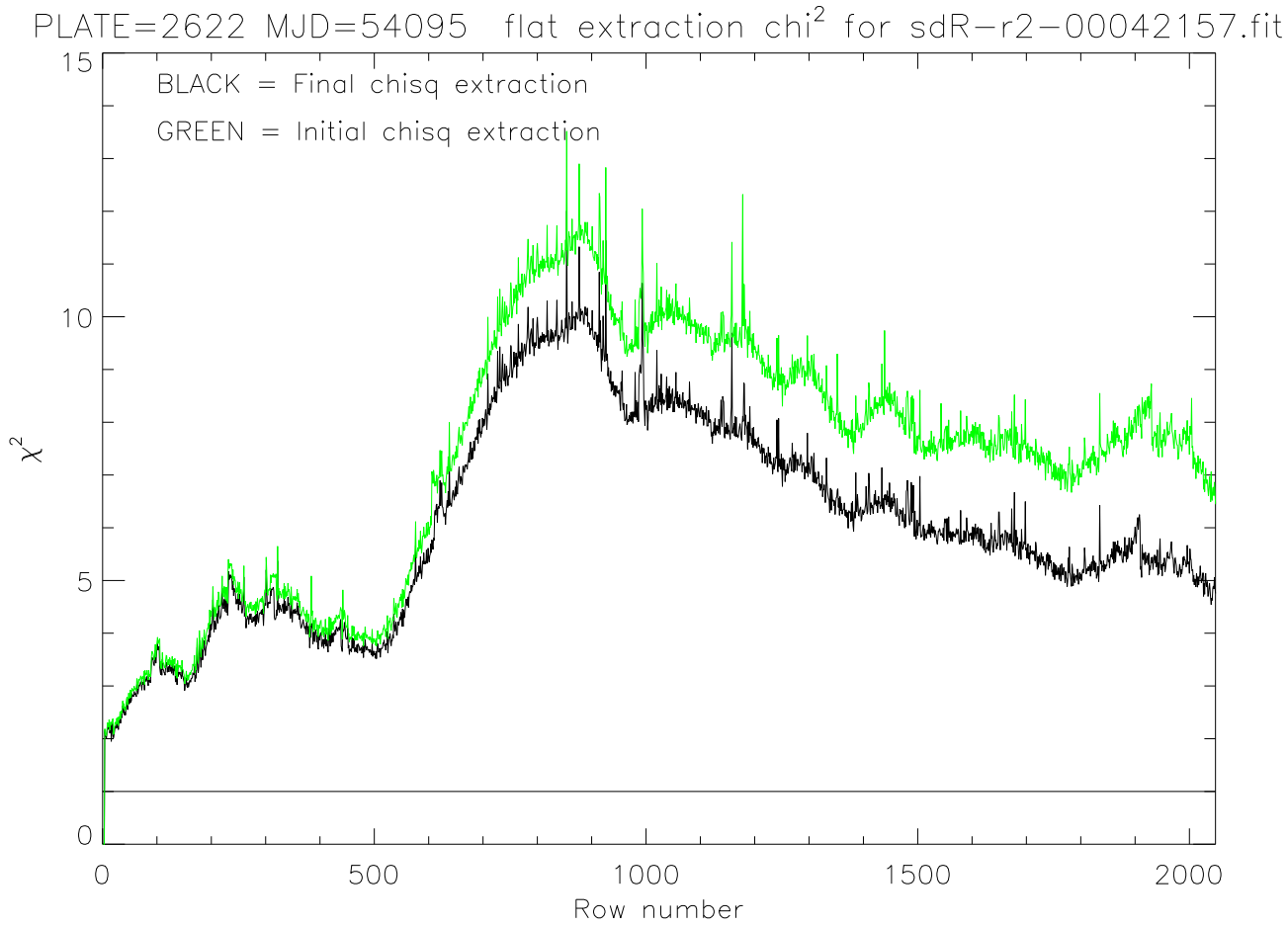

Number of sky fibers = 14
PLATE=2622 MJD=54095 sdR-r1-00042160.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

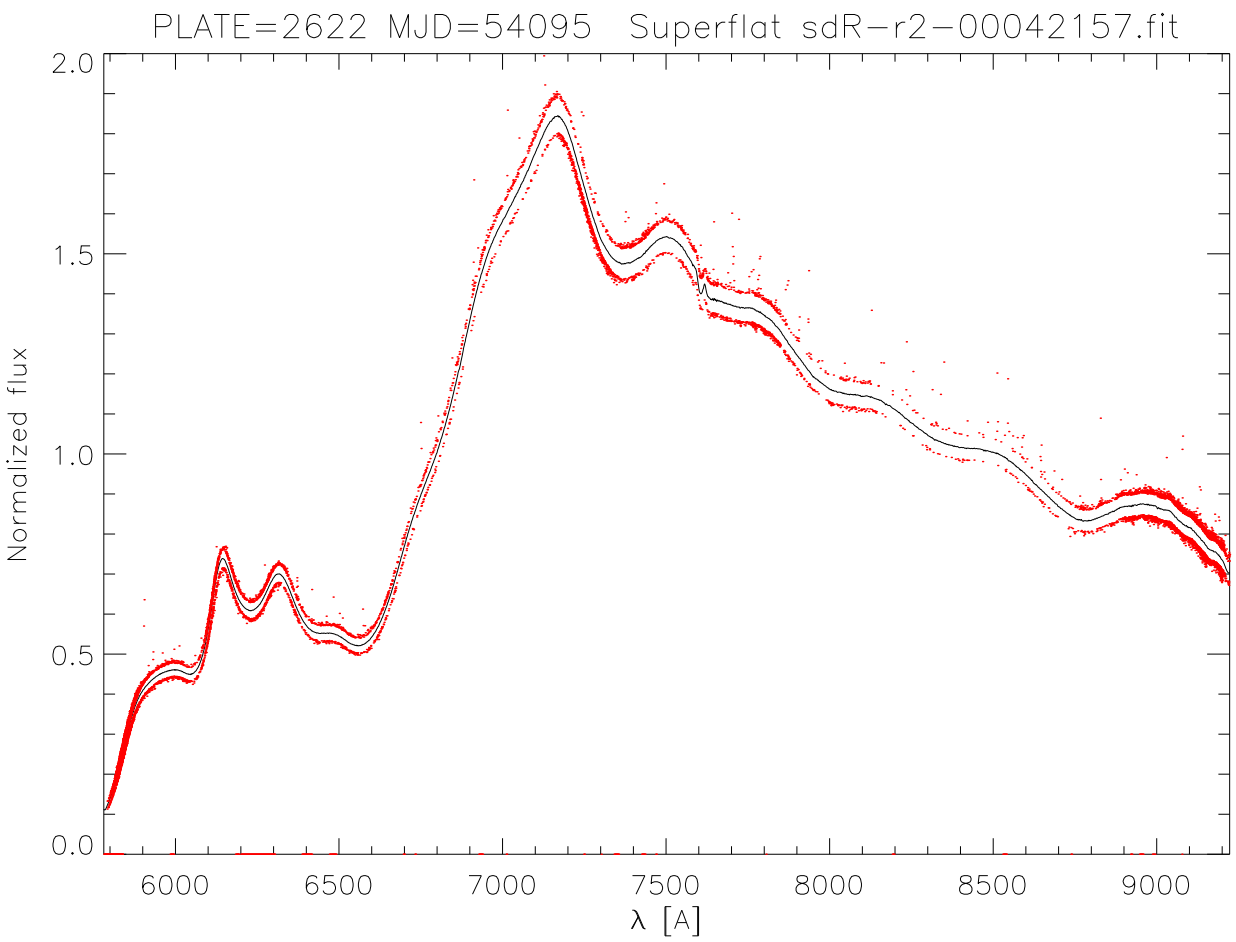

PLATE=2622 MJD=54095 sdR-r1-00042160.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.46 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

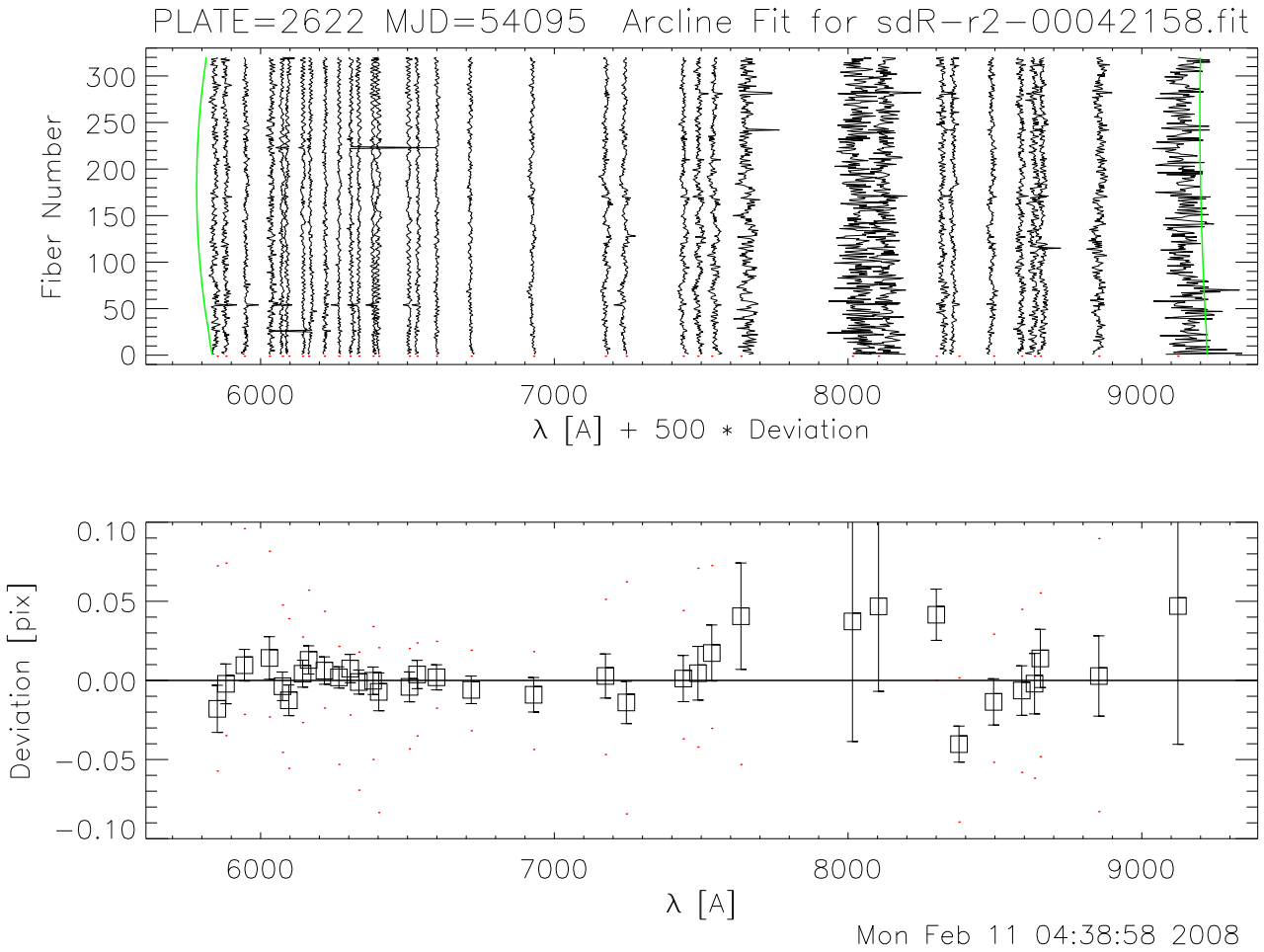

PLATE=2622 MJD=54095 sdR-r1-00042160.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.95 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

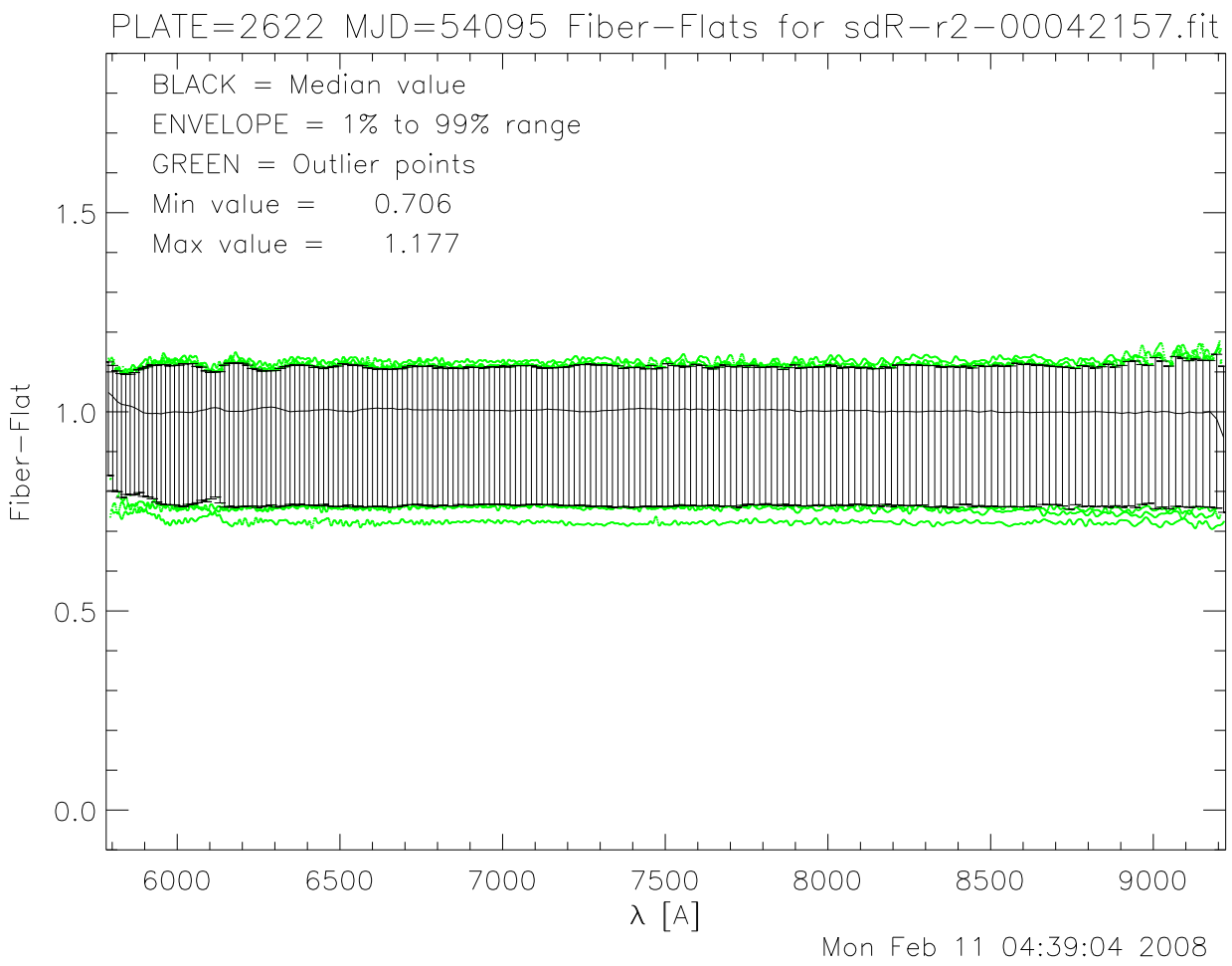

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

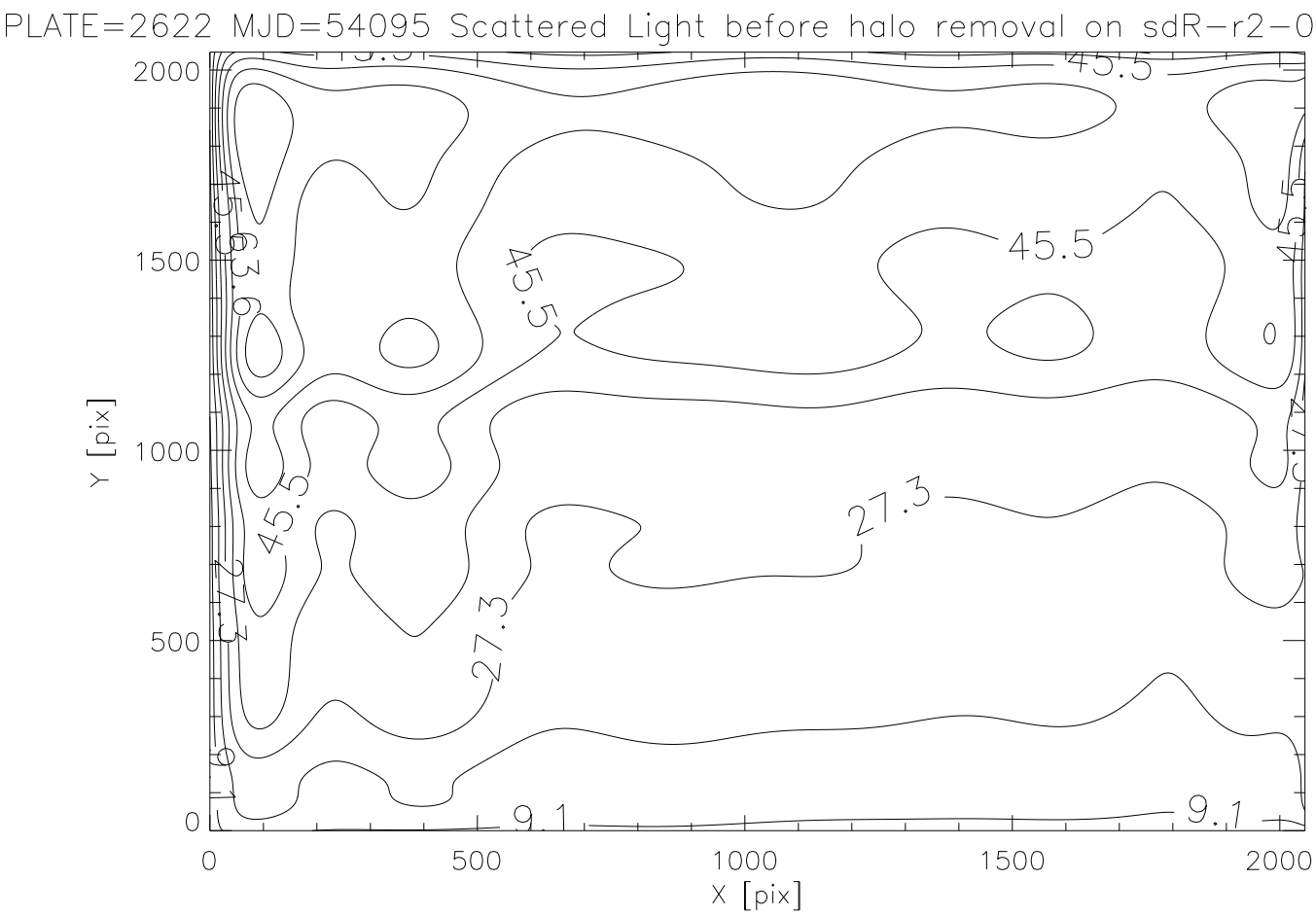

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

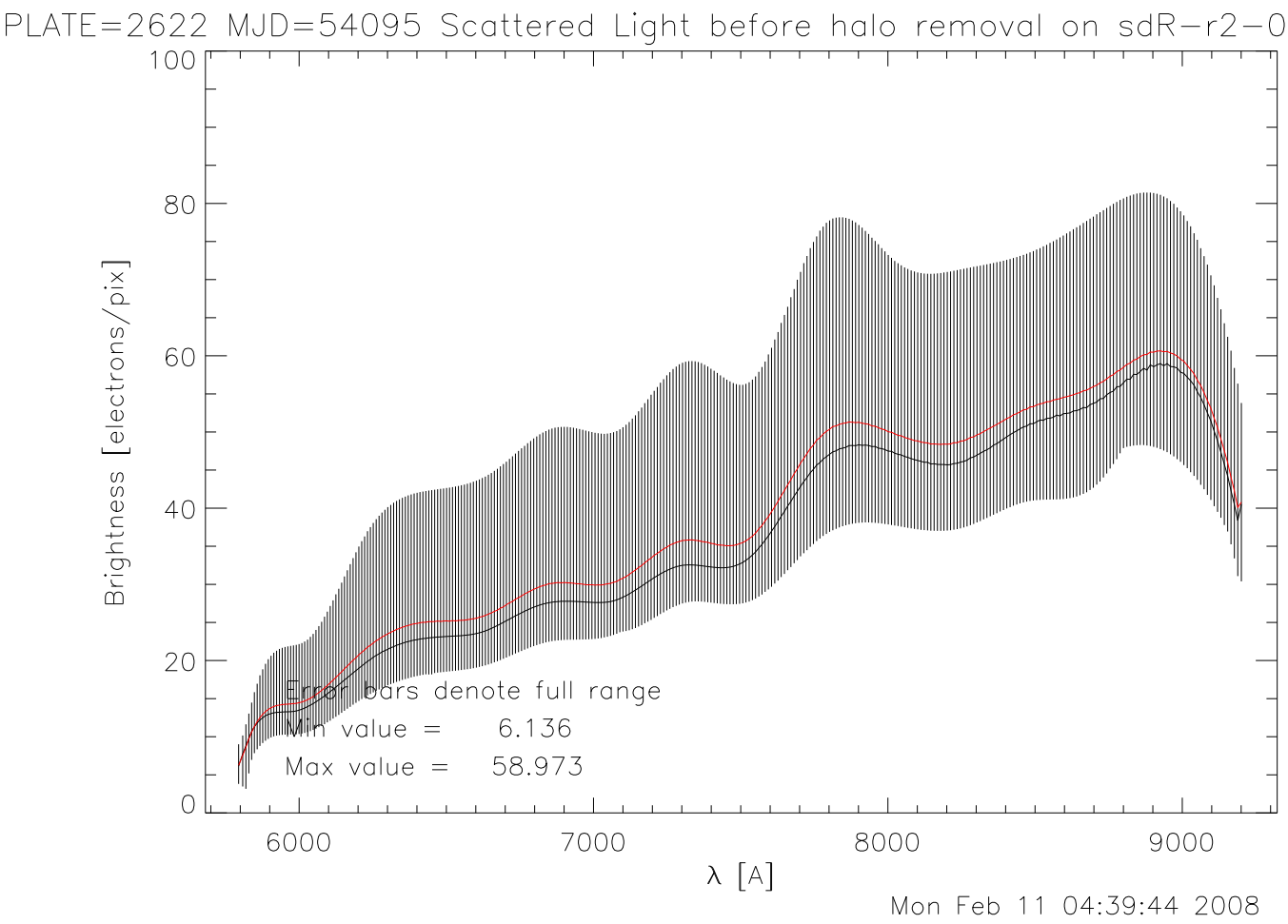

PLATE=2622 MJD=54095 flat extraction chi^2 for sdR-r2-00042157.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

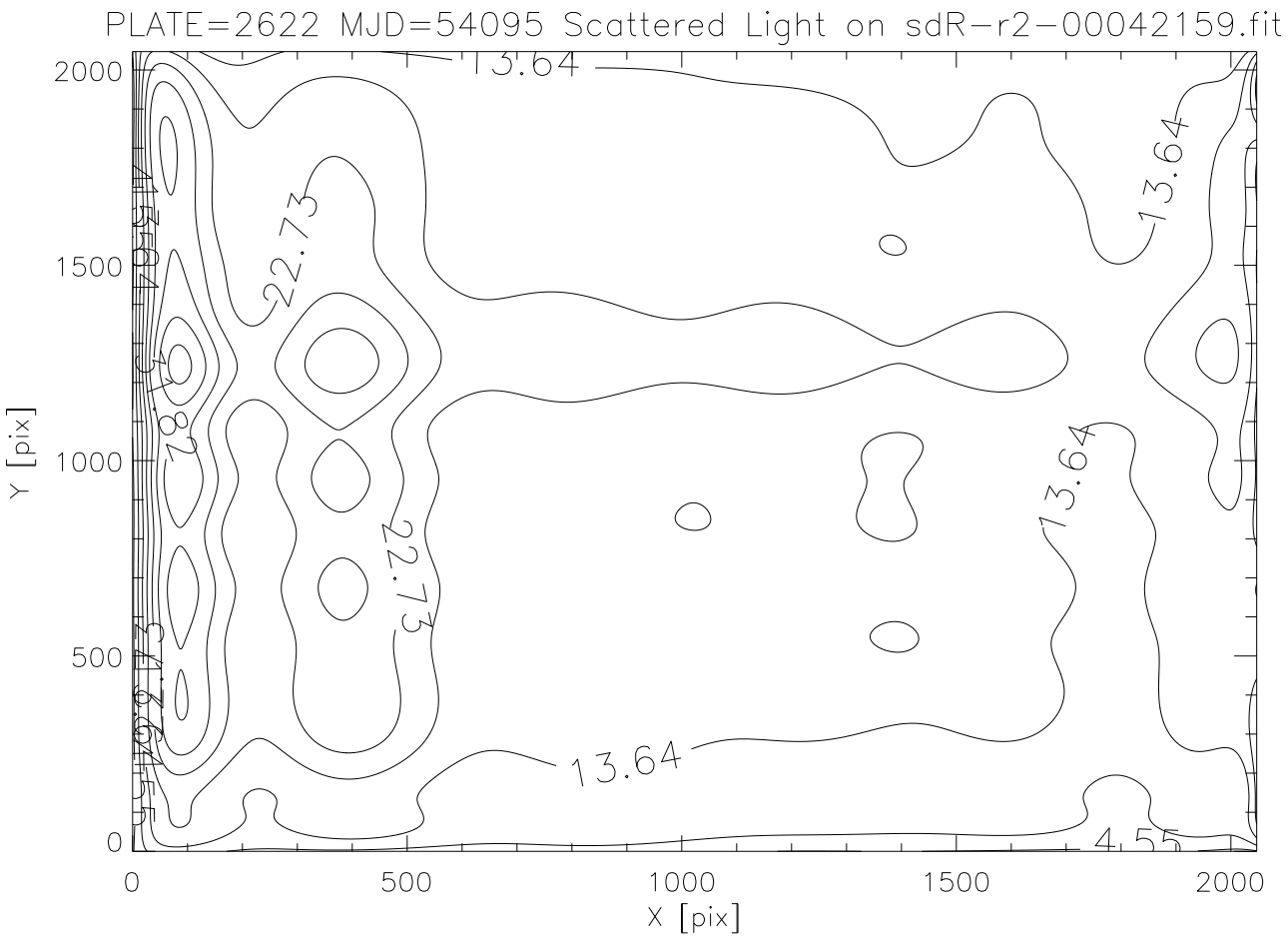

PLATE=2622 MJD=54095 Superflat sdR-r2-00042157.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

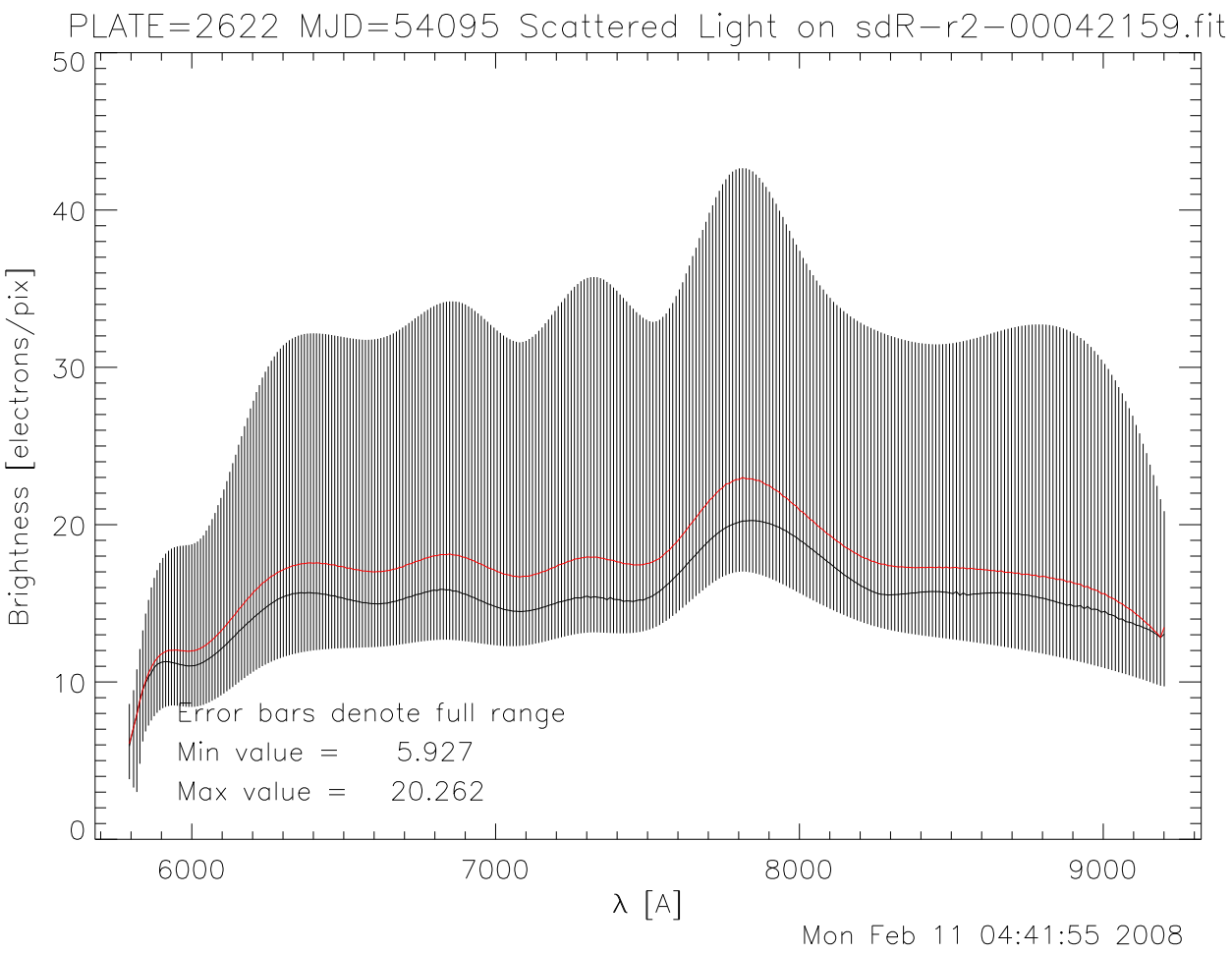

PLATE=2622 MJD=54095 Arcline Fit for sdR-r2-00042158.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 04:38:58 2008

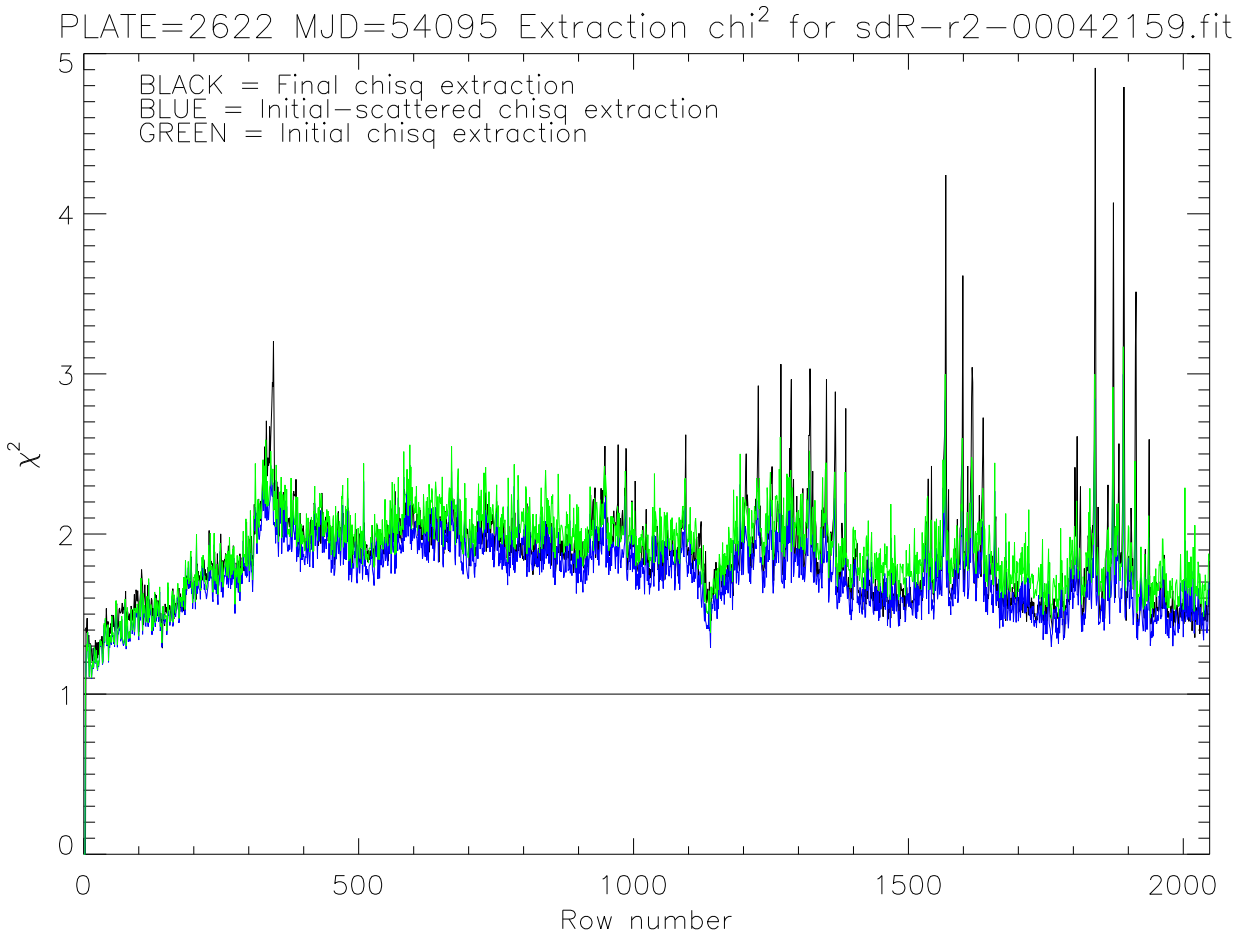

PLATE=2622 MJD=54095 Fiber-Flats for sdR-r2-00042157.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.706
Max value = 1.177
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:39:04 2008

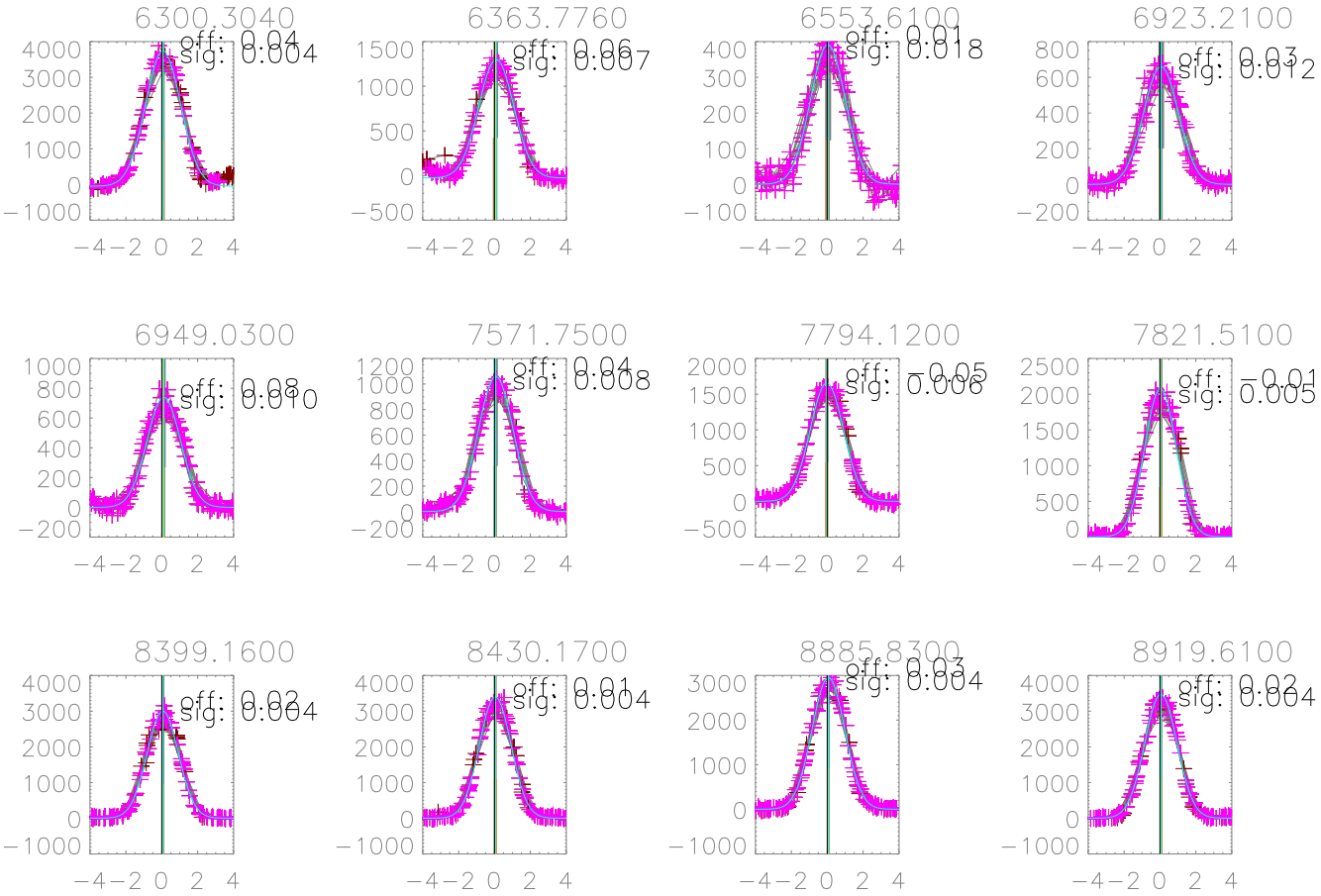

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR−r2−00042159.fi
45.5
45.5
45.5
45.5
27.3
27.3
27.3
9.1
9.1
0
Y [pix]
X [pix]
0
500
1000
1500
2000

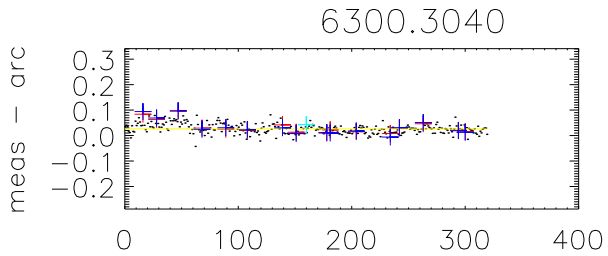

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-r2-00042159.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.136
Max value = 58.973
Mon Feb 11 04:39:44 2008

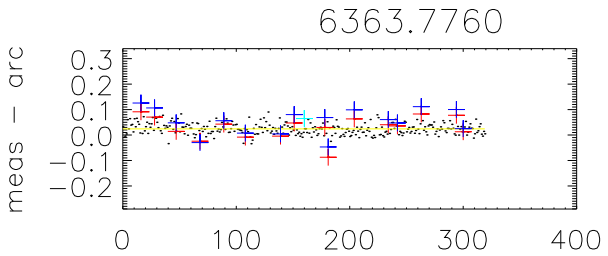

PLATE=2622 MJD=54095 Scattered Light on sdR-r2-00042159.fit
13.64
22.73
0
13.64
31.82
22.73
0
13.64
41.91
31.82
0
13.64
41.91
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

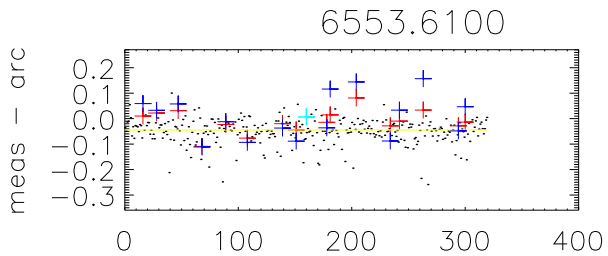

PLATE=2622 MJD=54095 Scattered Light on sdR-r2-00042159.fit
Brightness [electrons/pix]
50
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.927
Max value = 20.262
Mon Feb 11 04:41:55 2008

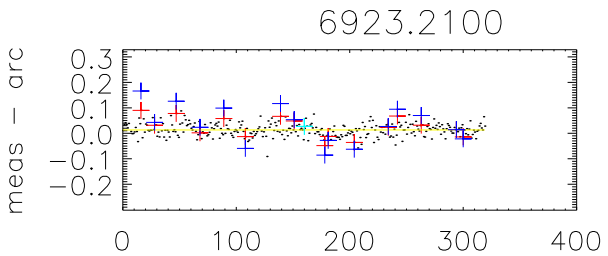

PLATE=2622 MJD=54095 Extraction chi^2 for sdR−r2−00042159.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

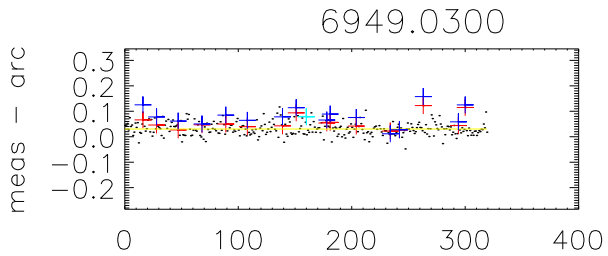

6300.3040
off: 0.04
sig: 0.004
6363.7760
off: 0.06
sig: 0.007
6553.6100
off: 0.01
sig: 0.018
6923.2100
off: 0.03
sig: 0.012
6949.0300
off: 0.08
sig: 0.010
7571.7500
off: 0.04
sig: 0.008
7794.1200
off: −0.05
sig: 0.006
7821.5100
off: −0.01
sig: 0.005
8399.1600
off: 0.02
sig: 0.004
8430.1700
off: 0.01
sig: 0.004
8885.8300
off: 0.03
sig: 0.004
8919.6100
off: 0.02
sig: 0.004

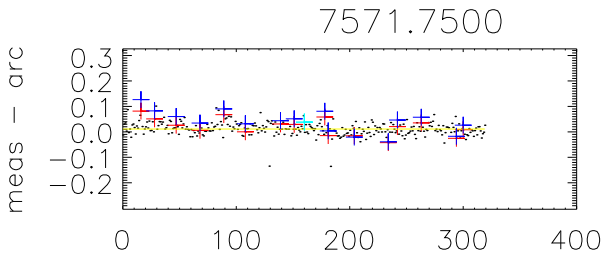

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

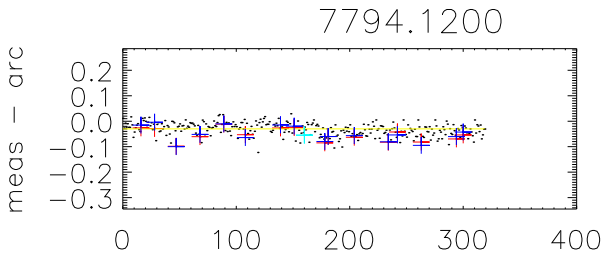

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

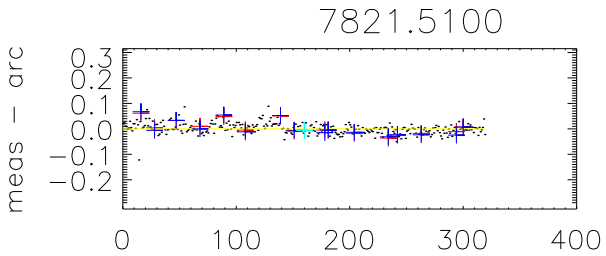

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

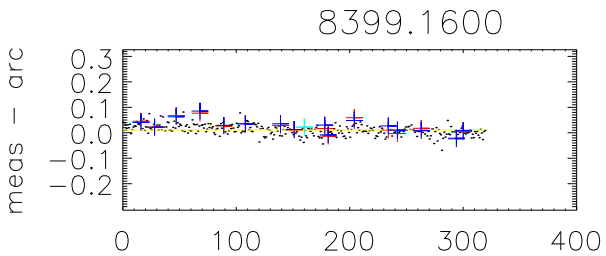

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

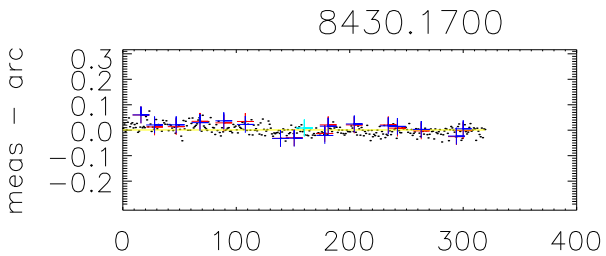

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

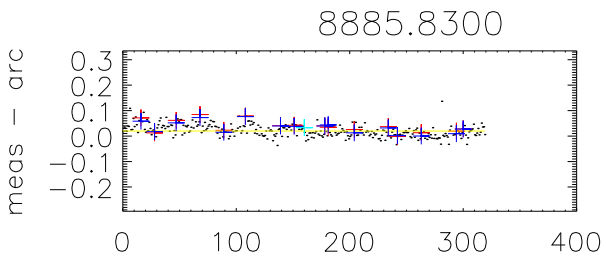

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

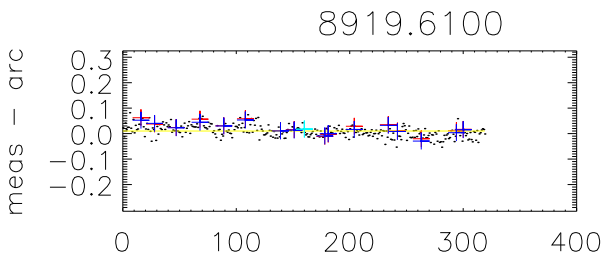

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

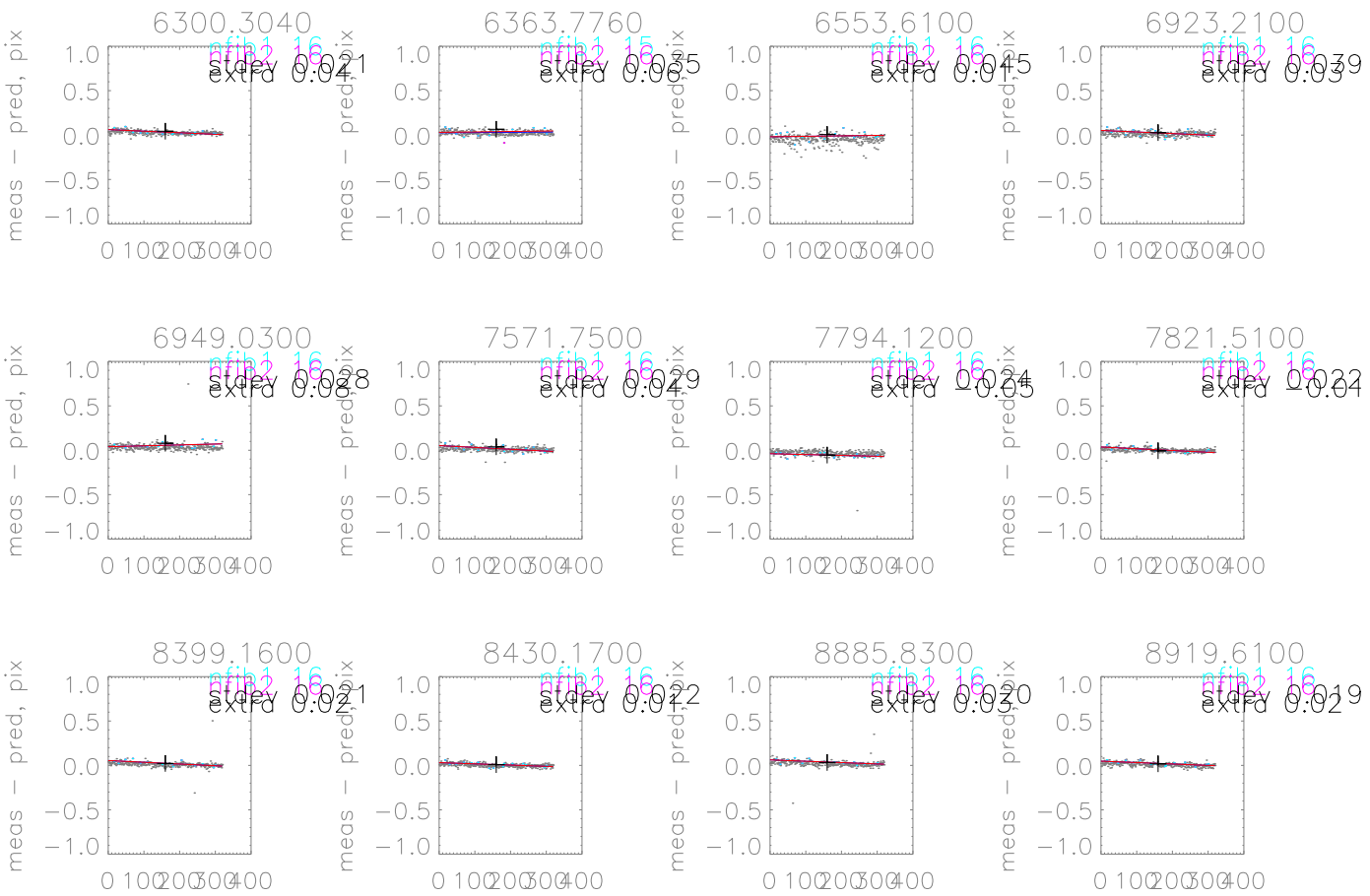

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

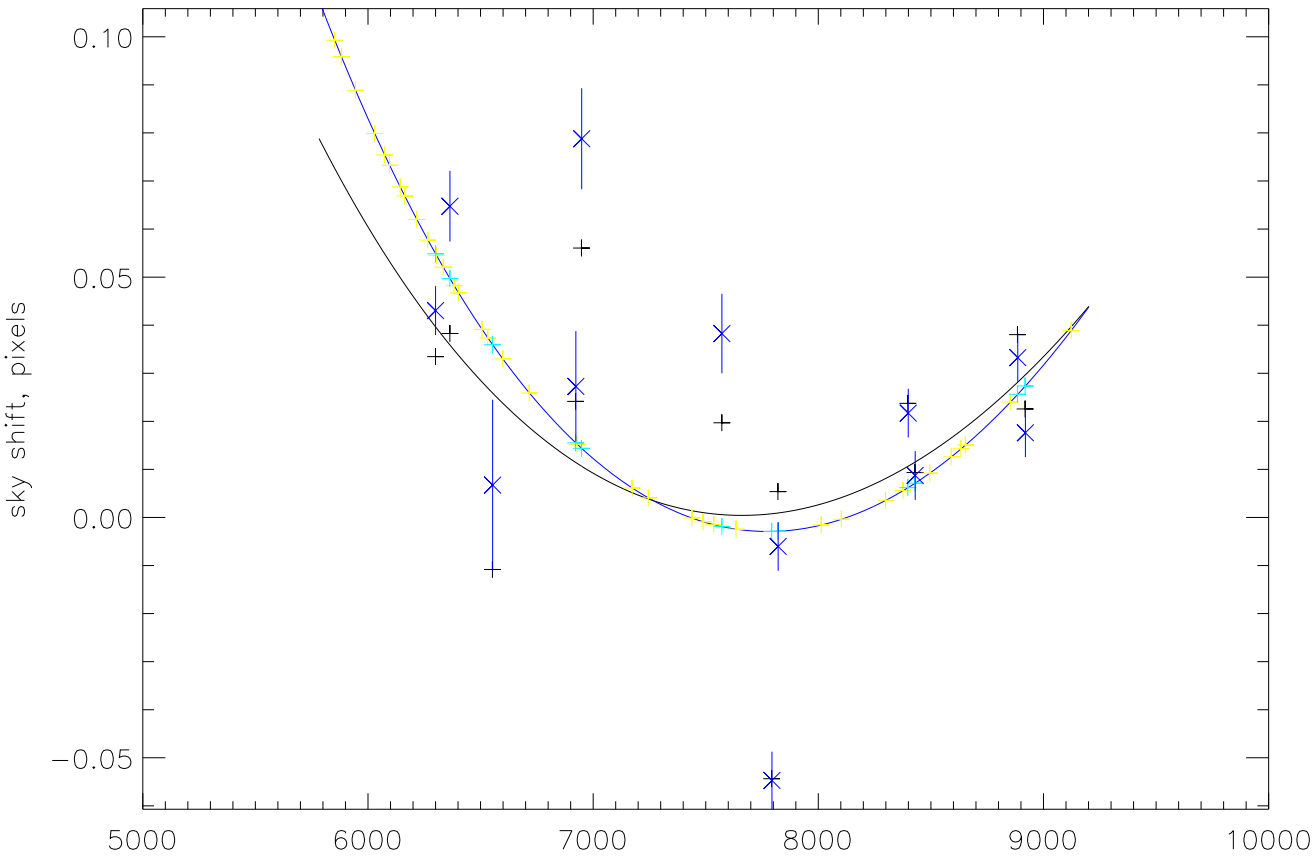

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

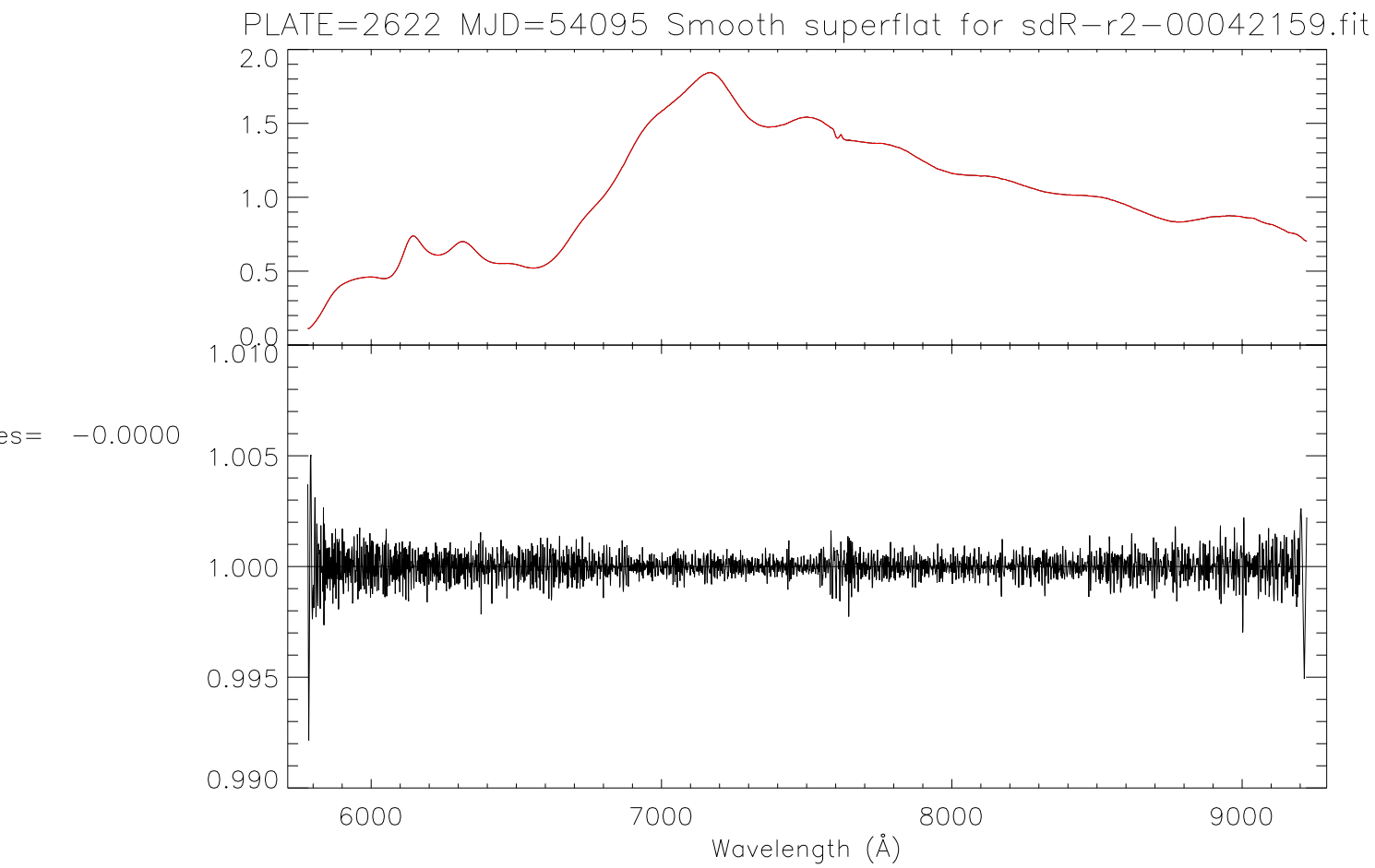

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

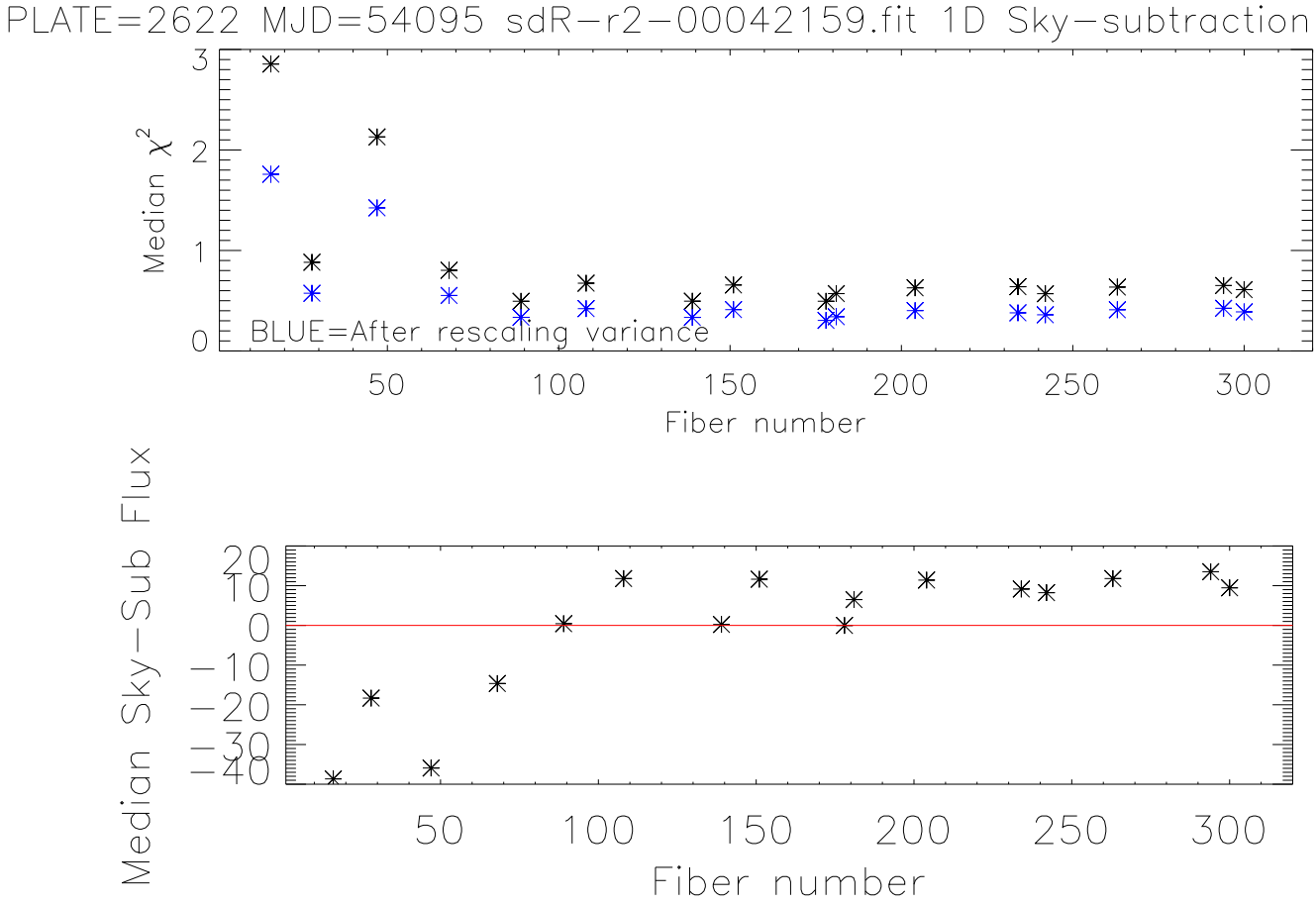

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

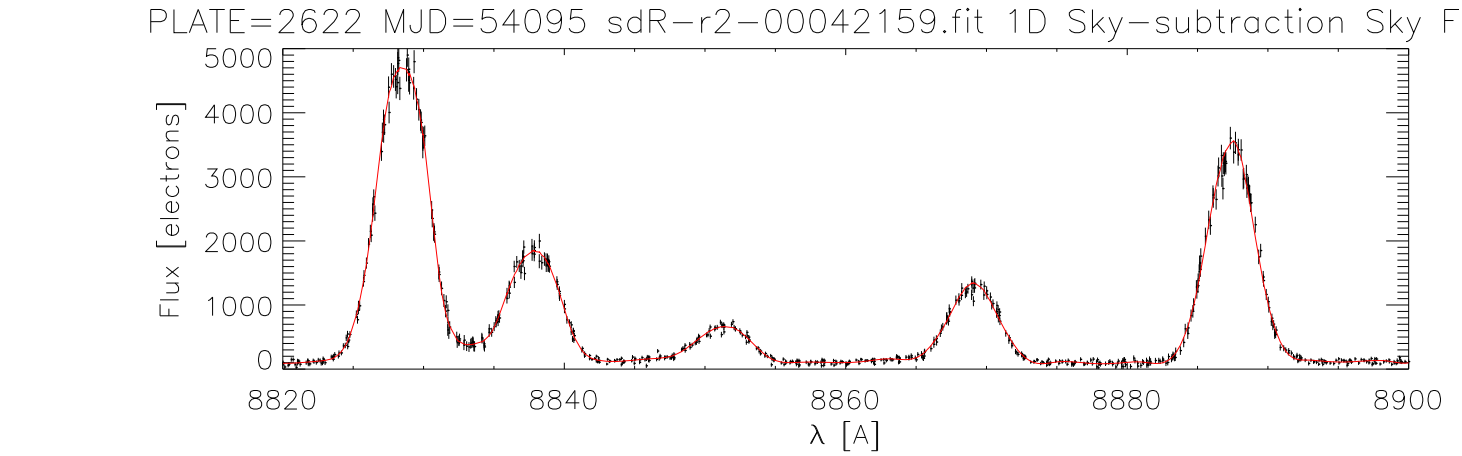

6300.3040
stdev 0.021
extra 0.04
6363.7760
stdev 0.035
extra 0.06
6553.6100
stdev 0.045
extra 0.01
6923.2100
stdev 0.039
extra 0.03
6949.0300
stdev 0.028
extra 0.08
7571.7500
stdev 0.029
extra 0.04
7794.1200
stdev 0.034
extra −0.05
7821.5100
stdev 0.022
extra −0.04
8399.1600
stdev 0.021
extra 0.02
8430.1700
stdev 0.022
extra 0.01
8885.8300
stdev 0.020
extra 0.03
8919.6100
stdev 0.019
extra 0.02
meas − pred, pix
mfb32 16
mfb32 15
mfb32 16

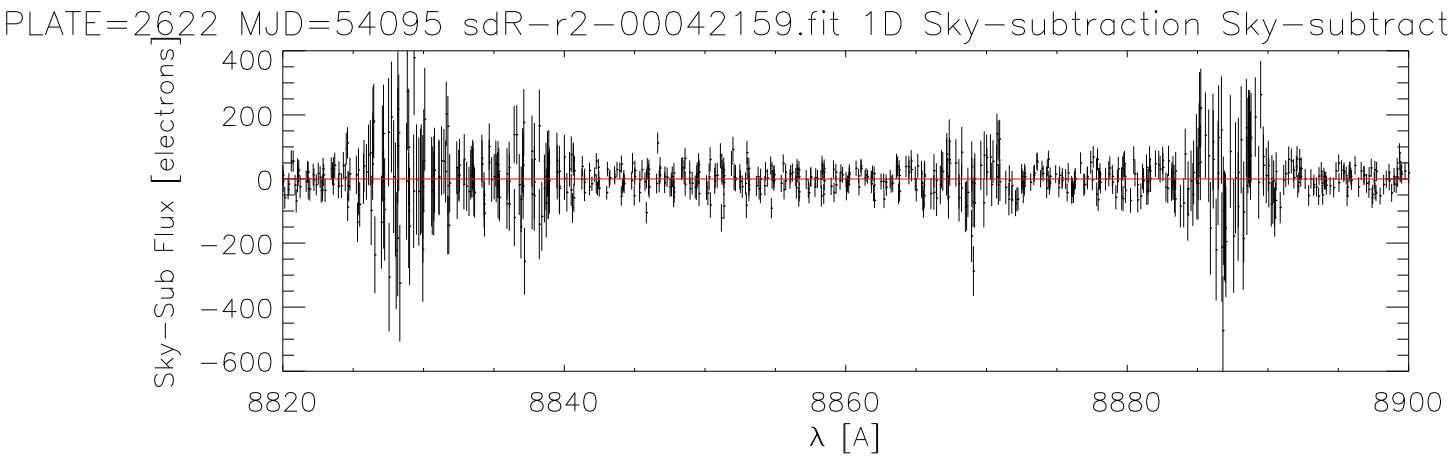

0.10
0.05
0.00
−0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

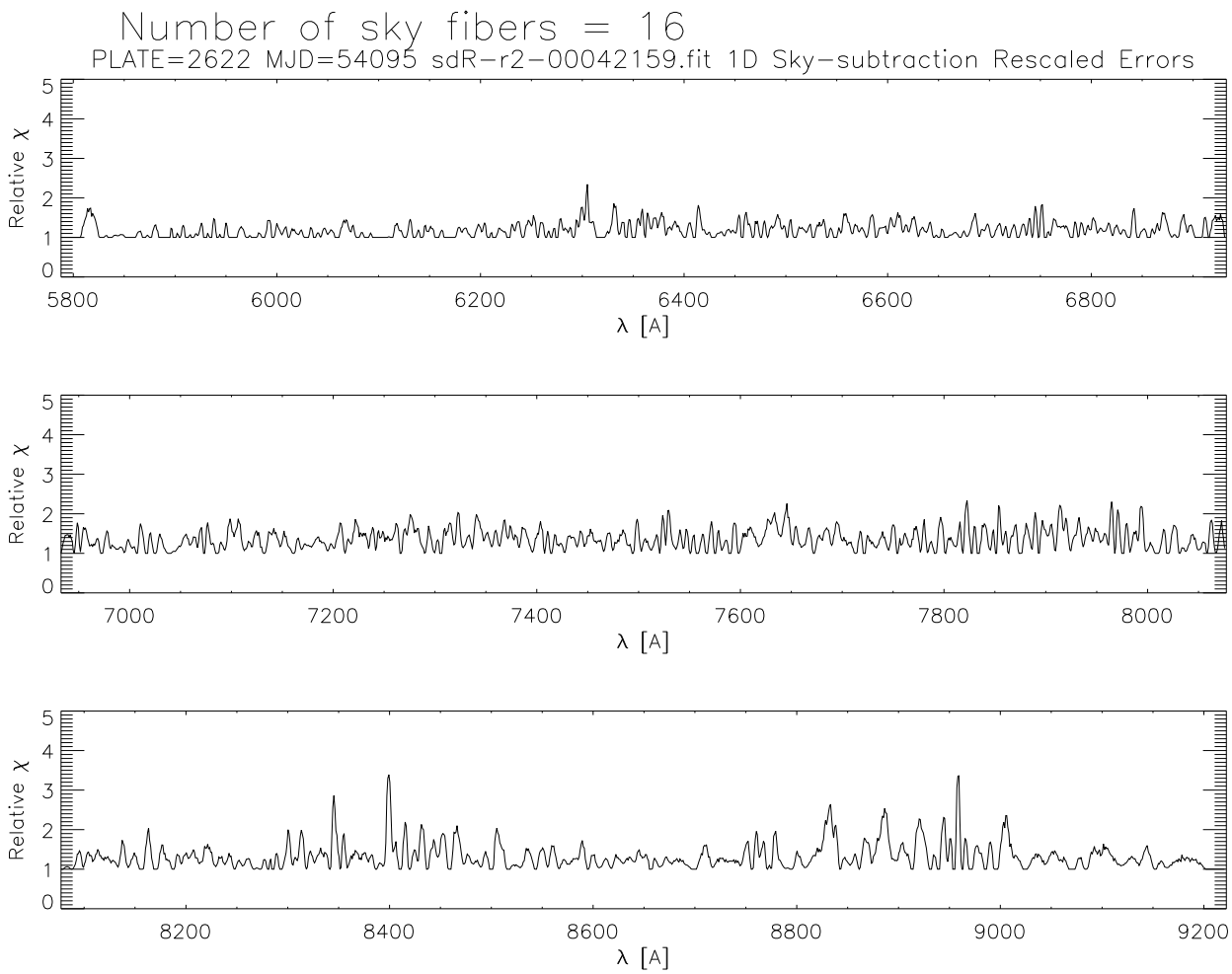

PLATE=2622 MJD=54095 Smooth superflat for sdR-r2-00042159.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

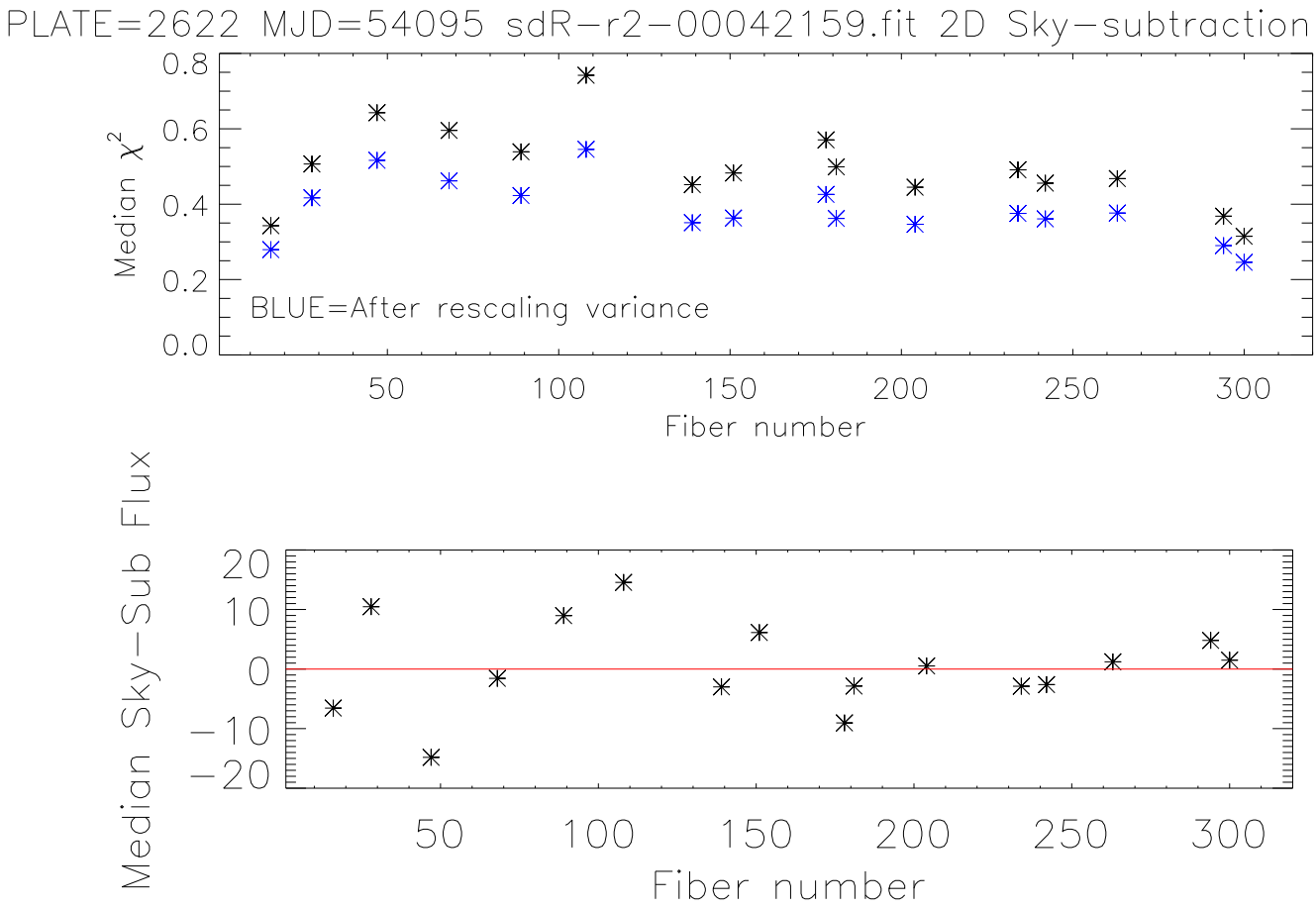
es= −0.0000

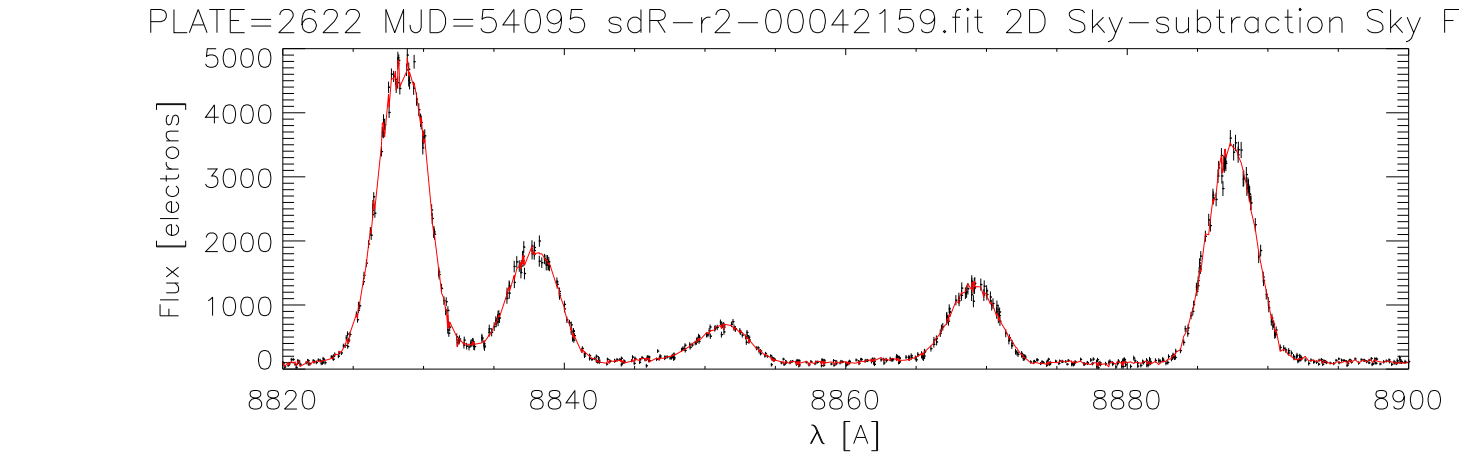

PLATE=2622 MJD=54095 sdR-r2-00042159.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

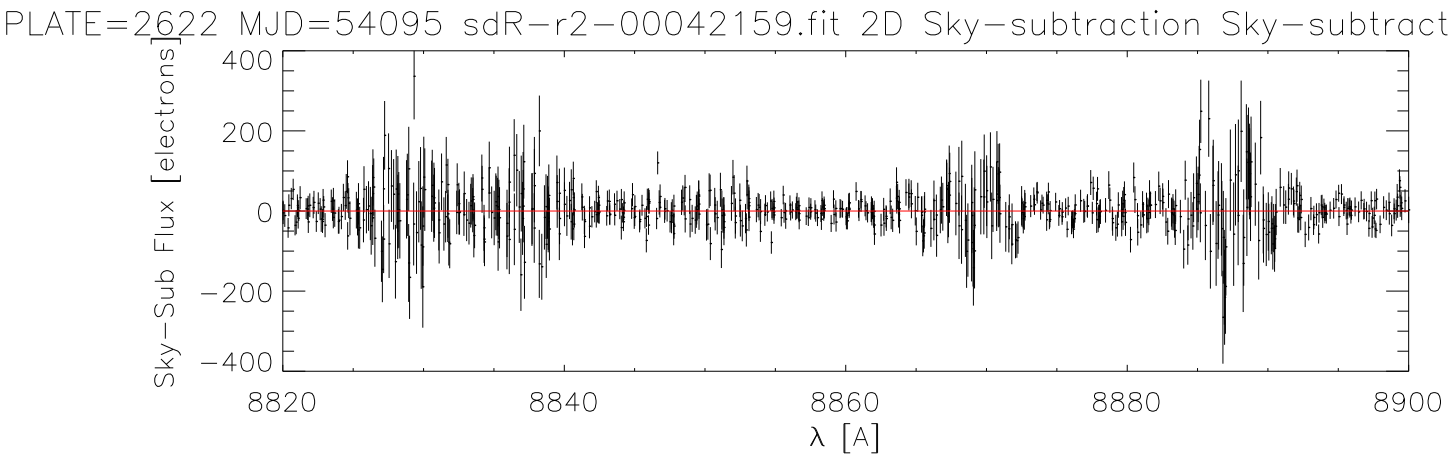

PLATE=2622 MJD=54095 sdR-r2-00042159.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

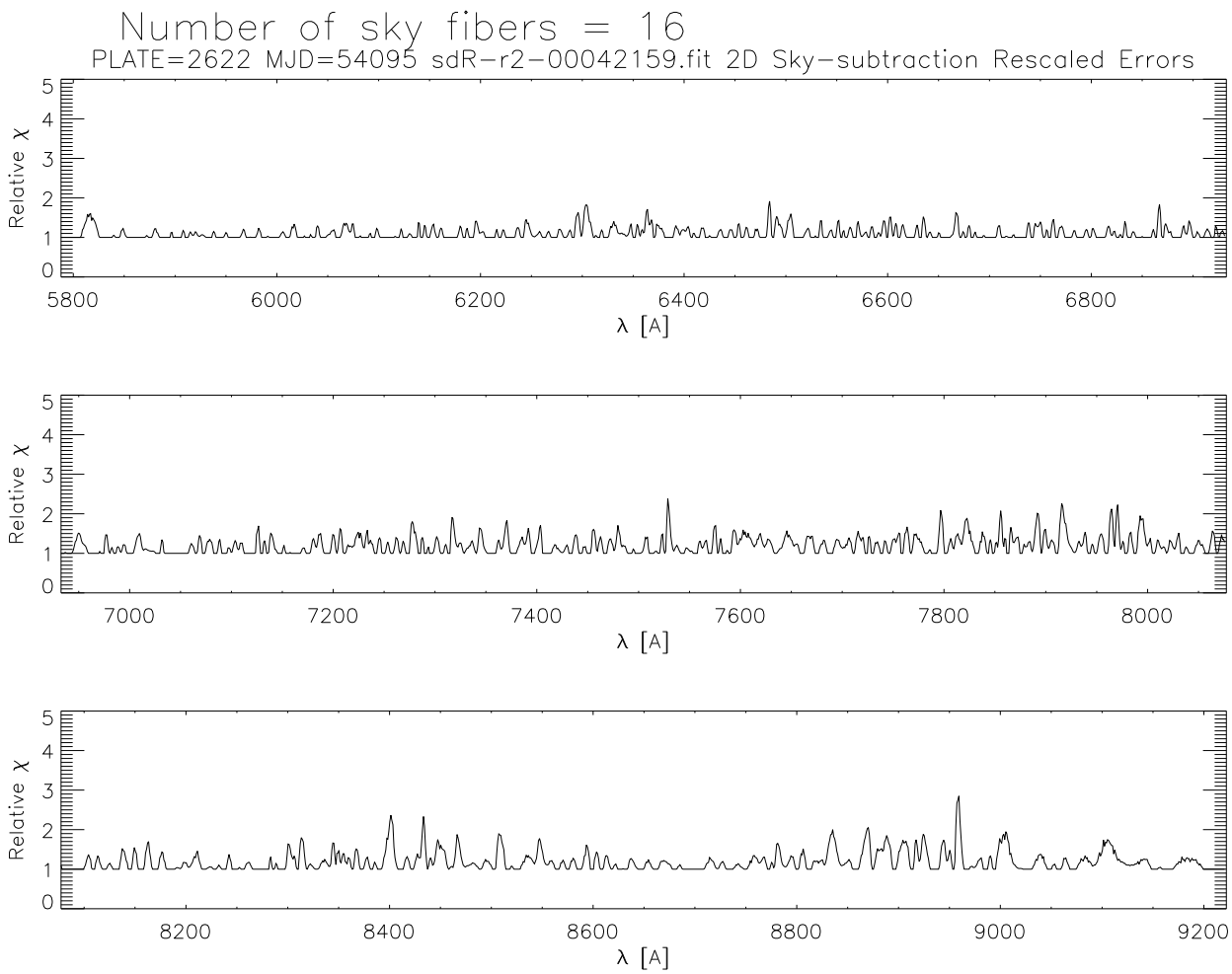

PLATE=2622 MJD=54095 sdR-r2-00042159.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

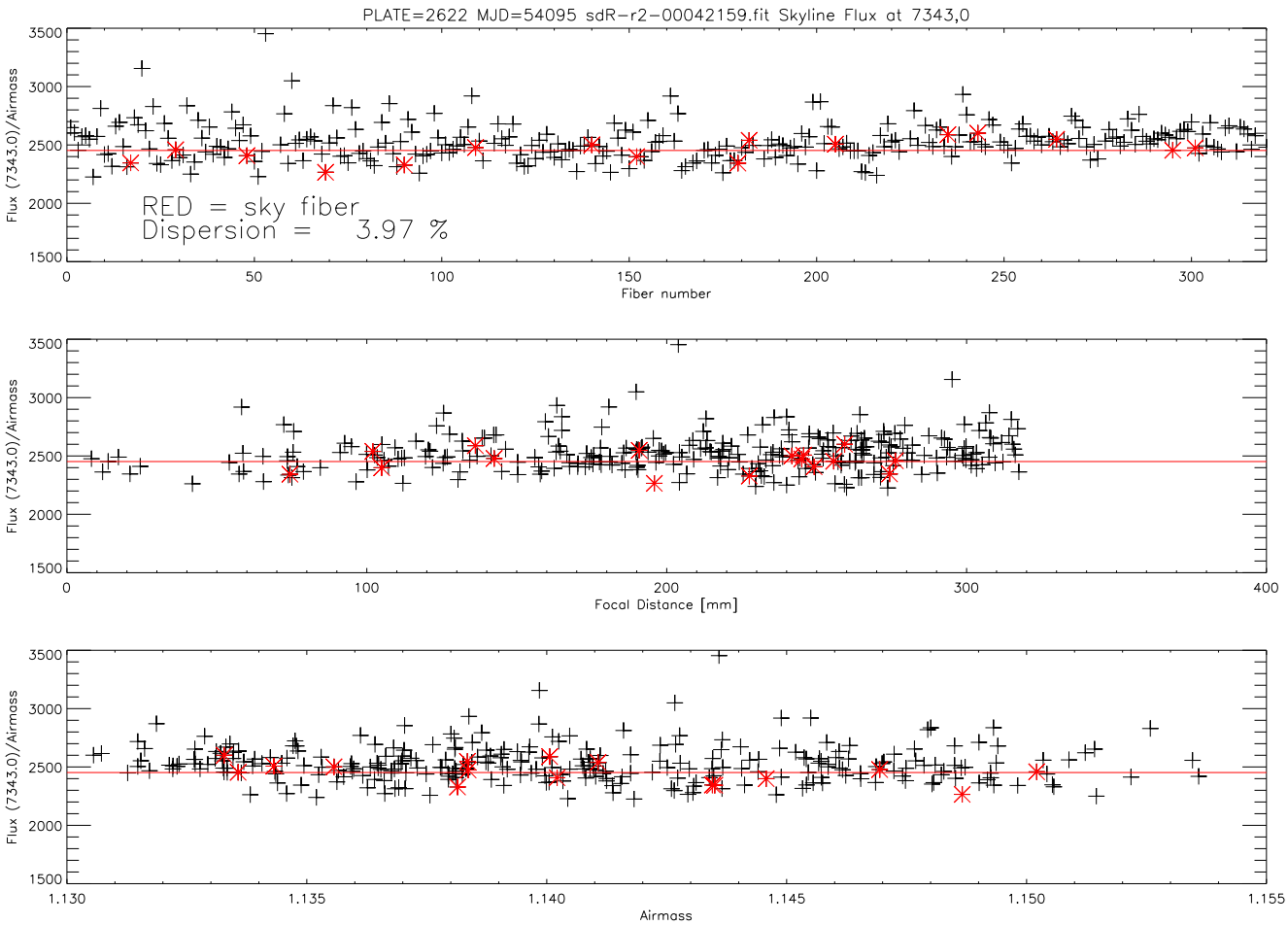

Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-r2-00042159.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

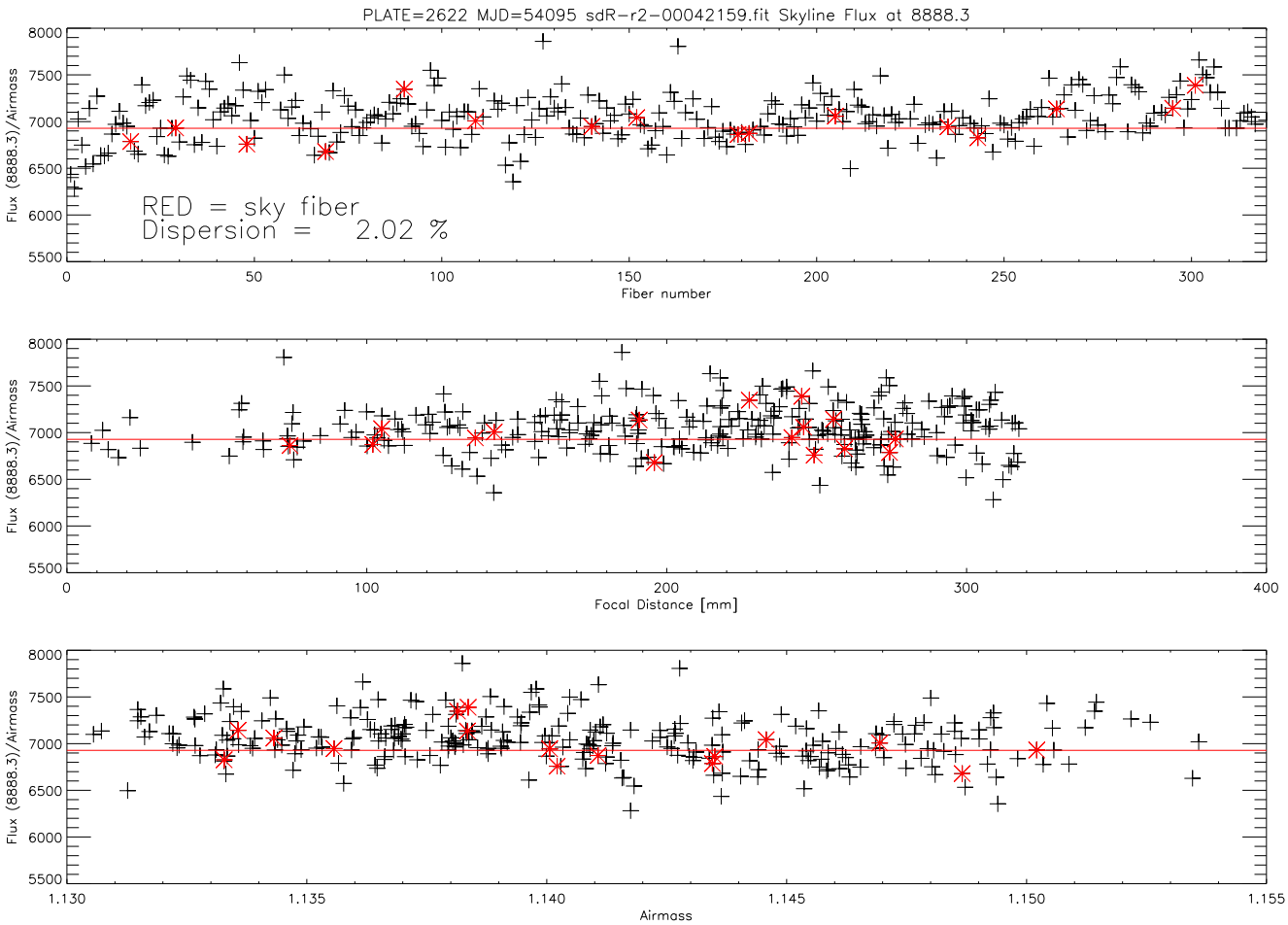

PLATE=2622 MJD=54095 sdR-r2-00042159.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

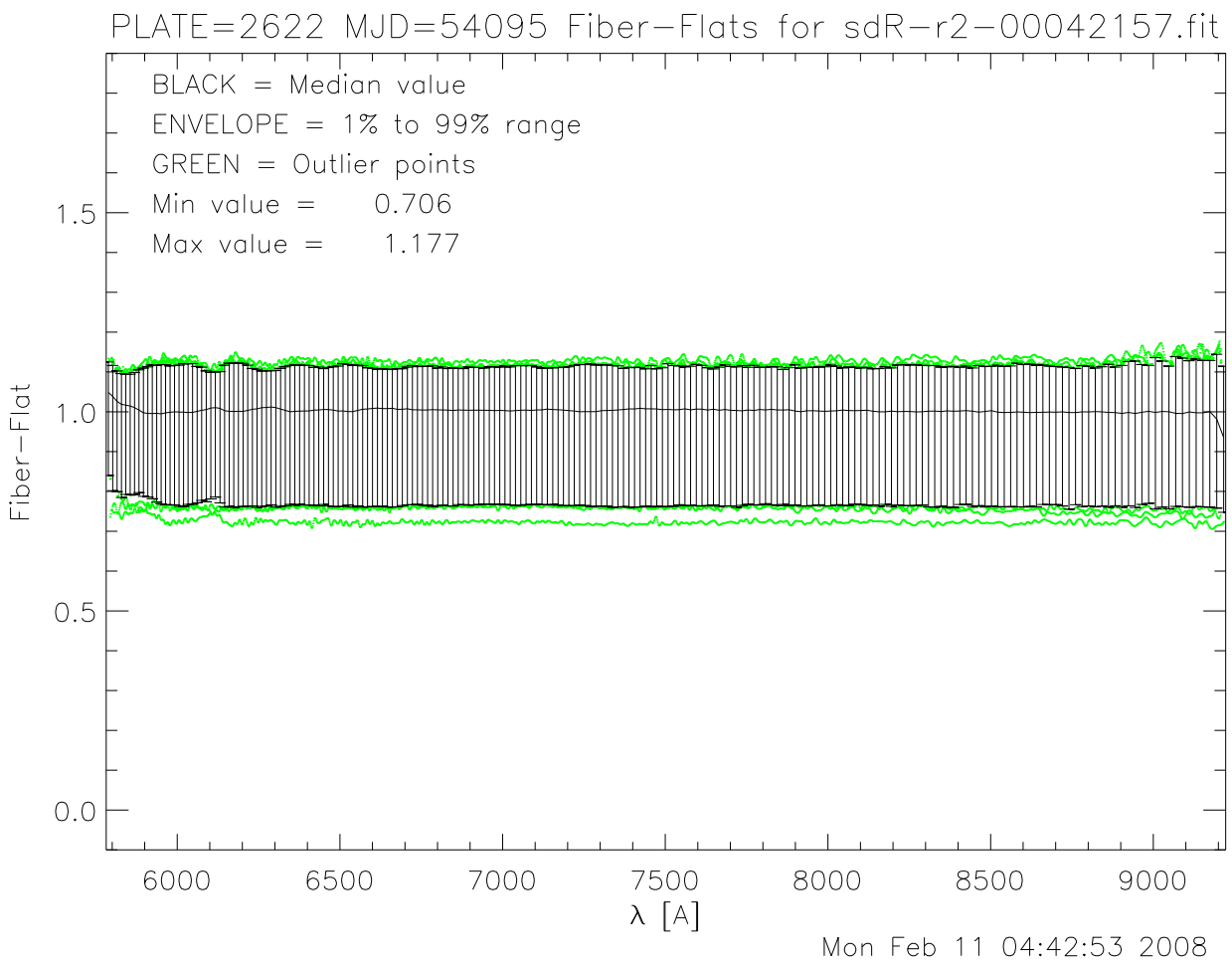

PLATE=2622 MJD=54095 sdR-r2-00042159.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

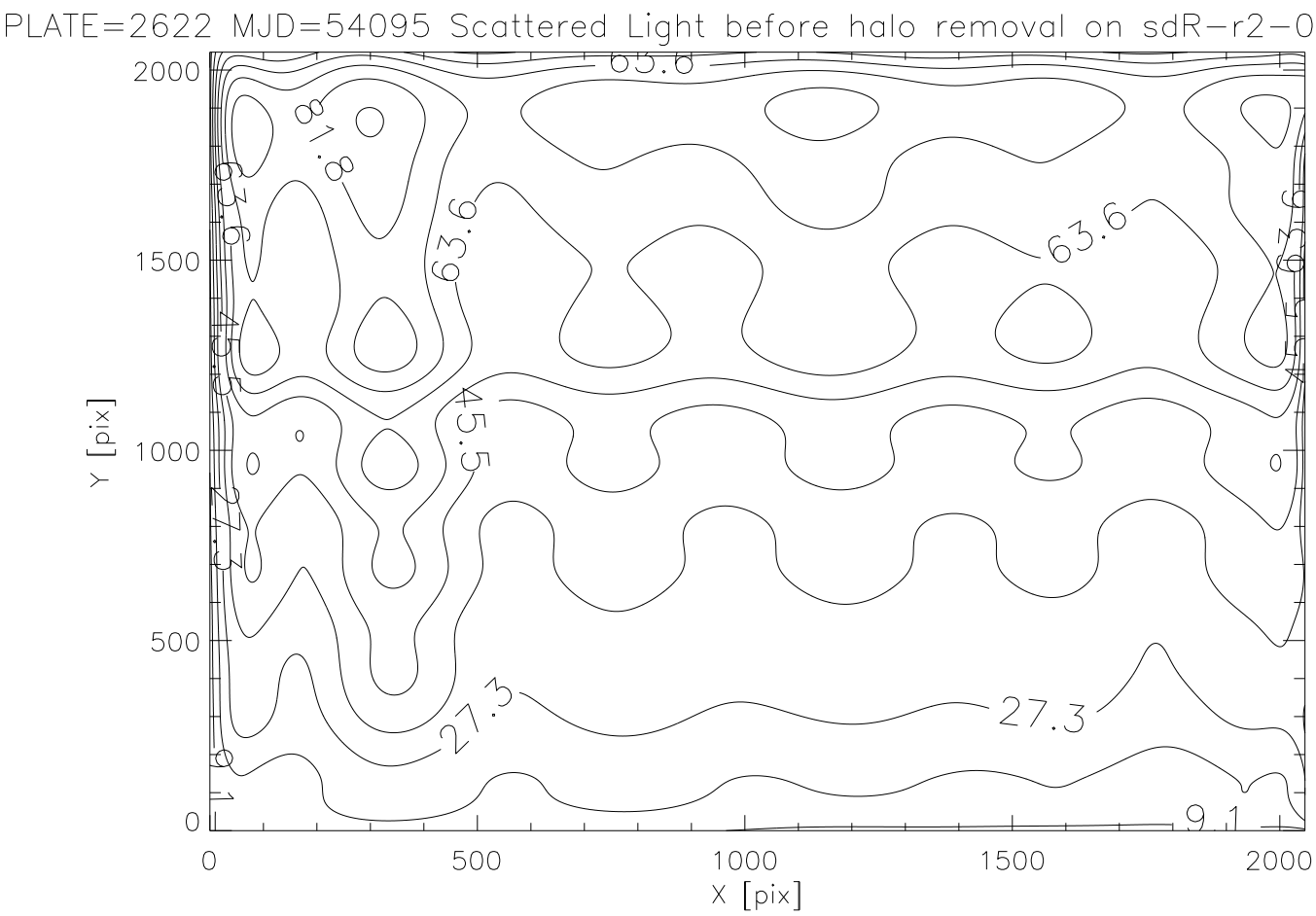

PLATE=2622 MJD=54095 sdR-r2-00042159.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

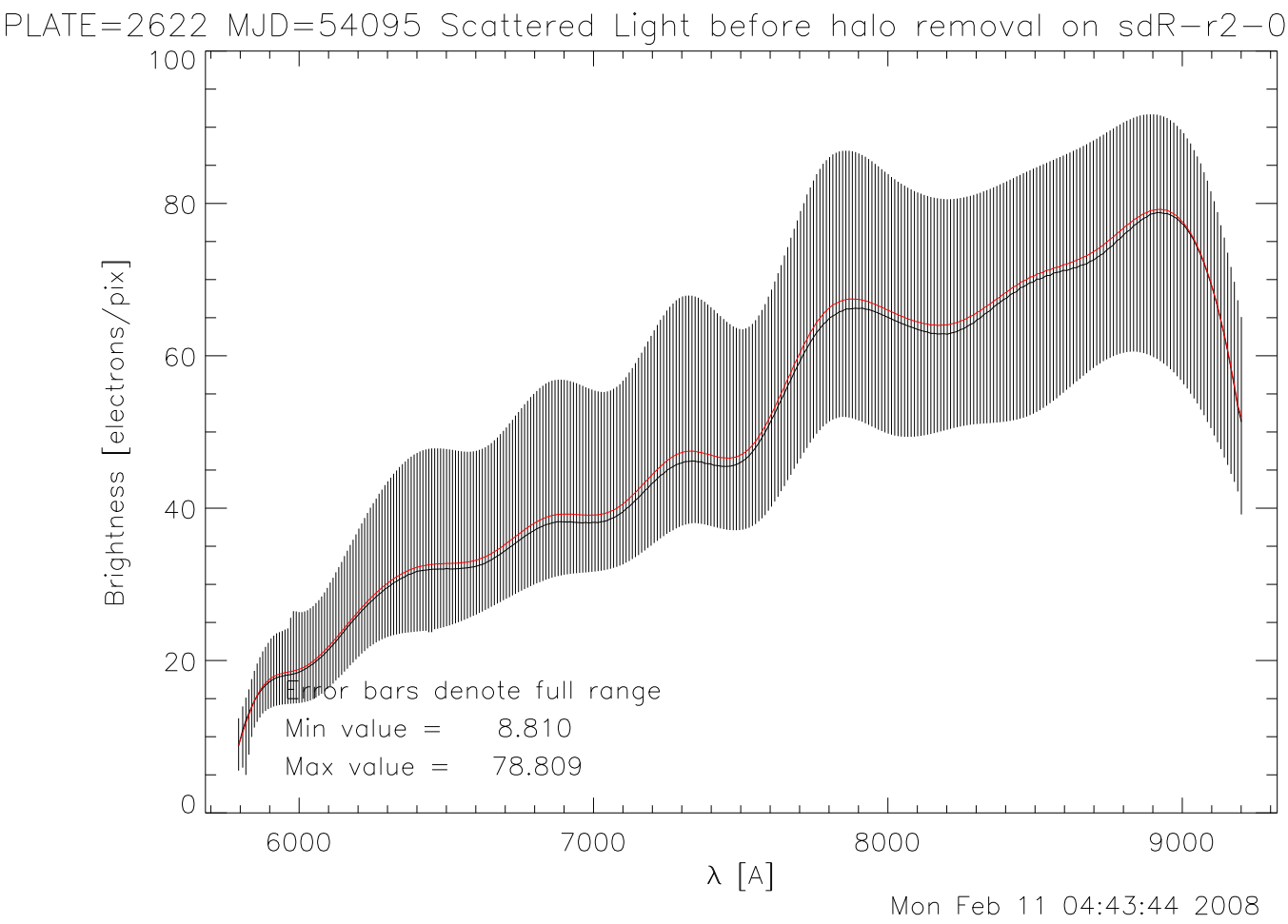

Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-r2-00042159.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

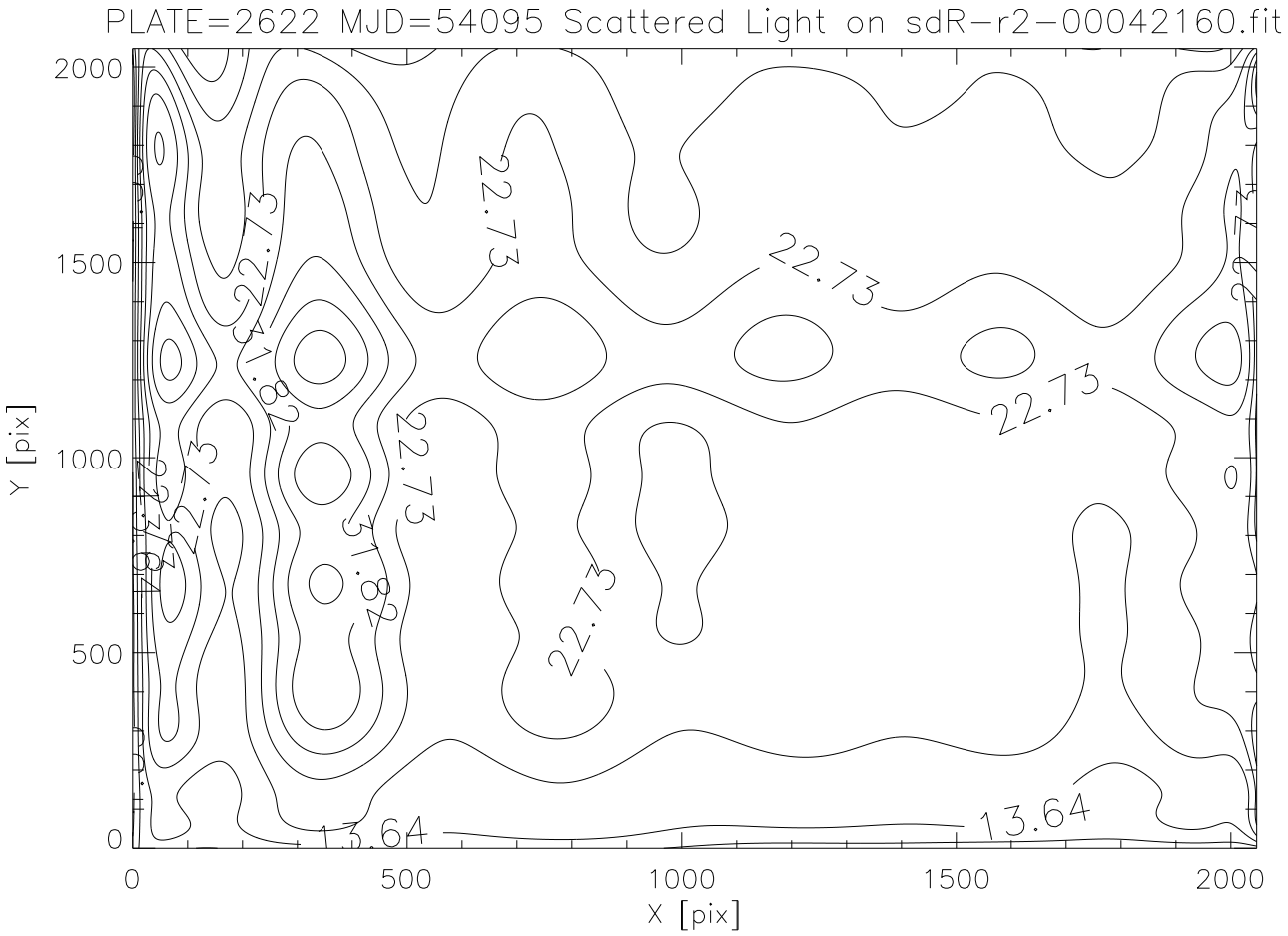

PLATE=2622 MJD=54095 sdR-r2-00042159.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.97 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

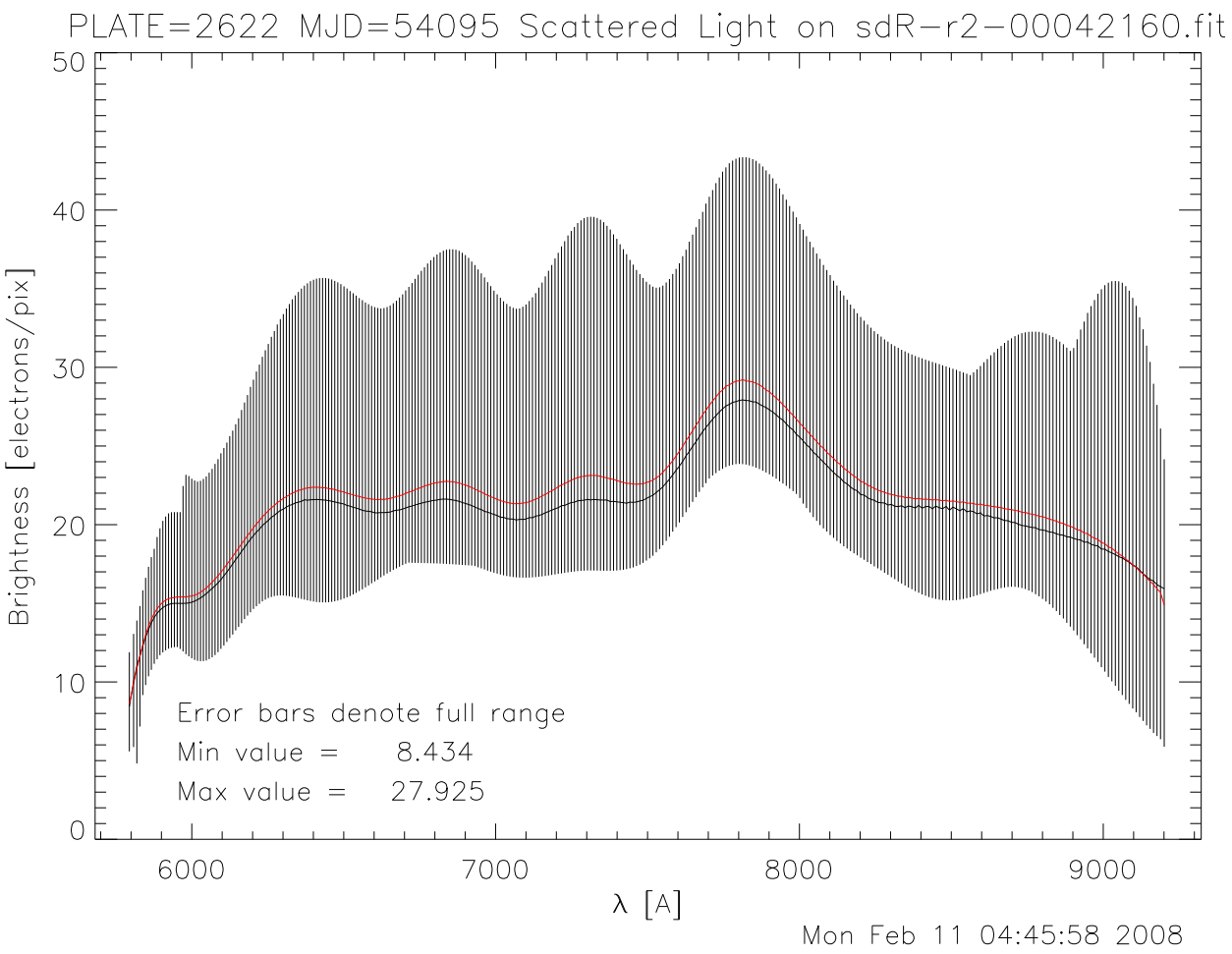

PLATE=2622 MJD=54095 sdR-r2-00042159.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.02 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

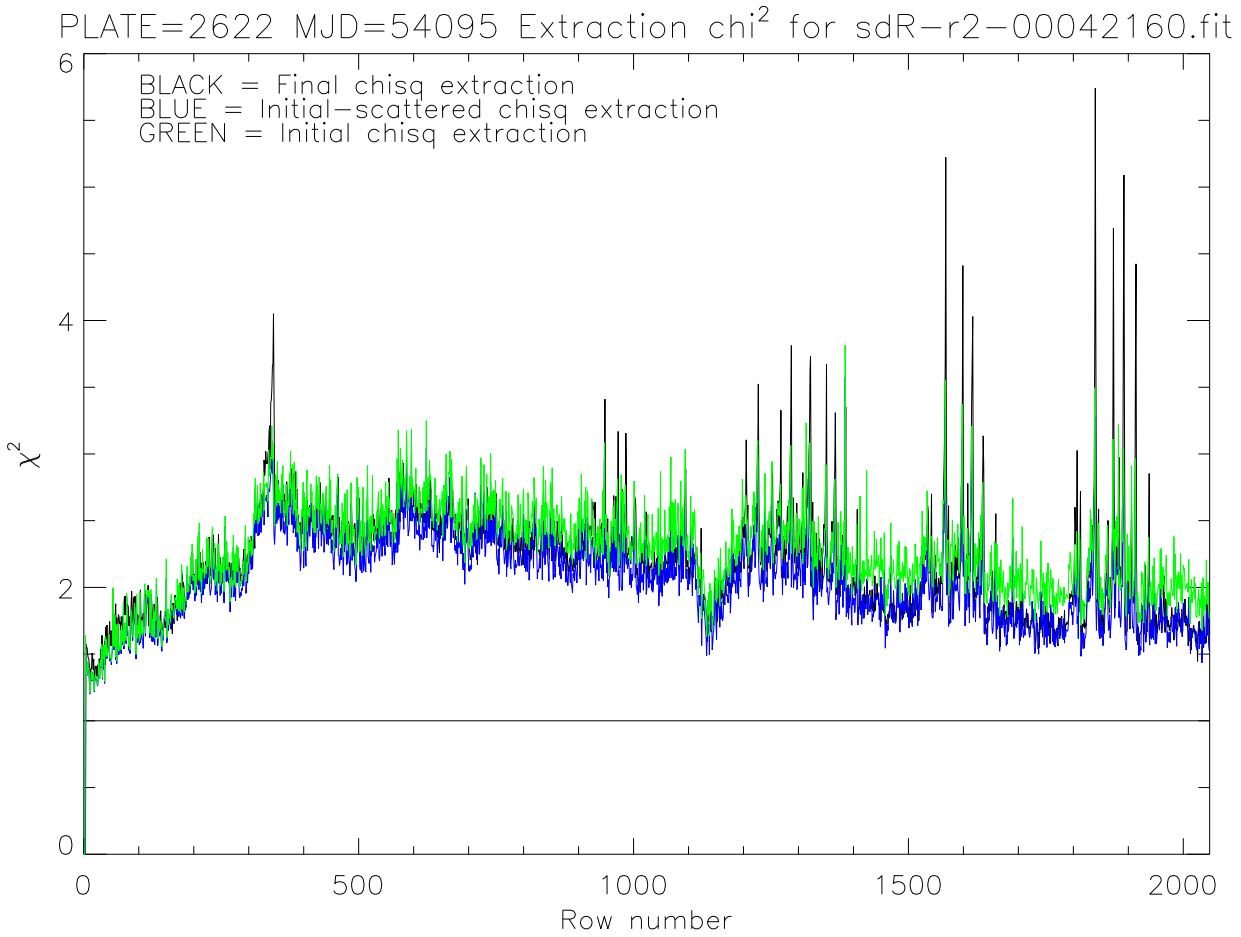

PLATE=2622 MJD=54095 Fiber−Flats for sdR−r2−00042157.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.706
Max value = 1.177
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:42:53 2008

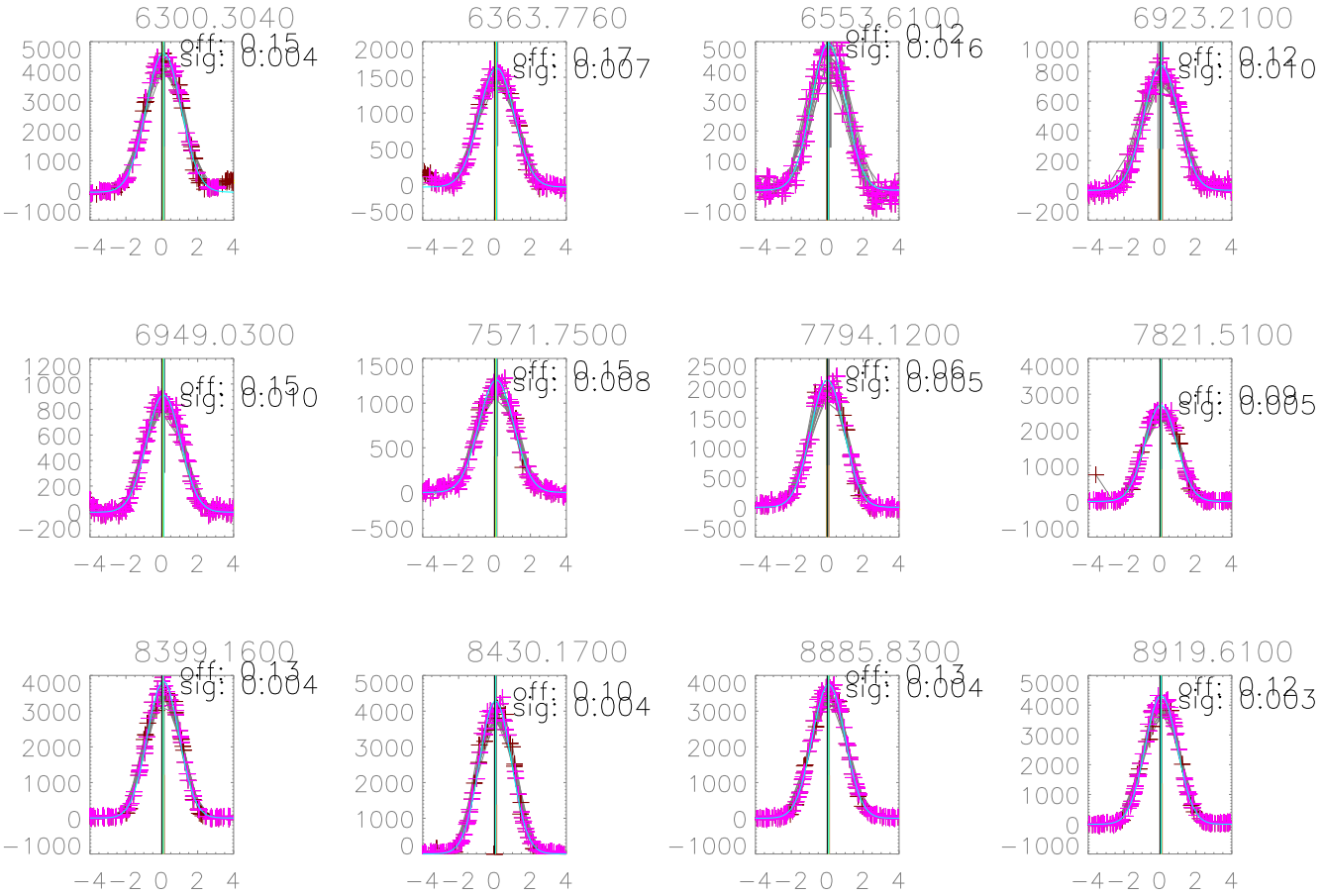

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-r2-00042160.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
63.6
45.5
27.3
9.1

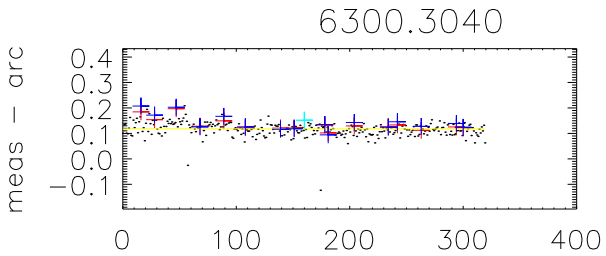

PLATE=2622 MJD=54095 Scattered Light before halo removal on sdR-r2-00042160.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.810
Max value = 78.809
Mon Feb 11 04:43:44 2008

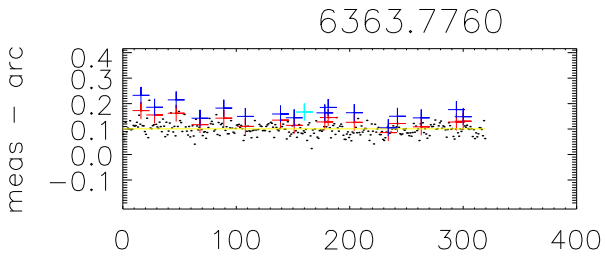

PLATE=2622 MJD=54095 Scattered Light on sdR-r2-00042160.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
22.73
31.82
13.64

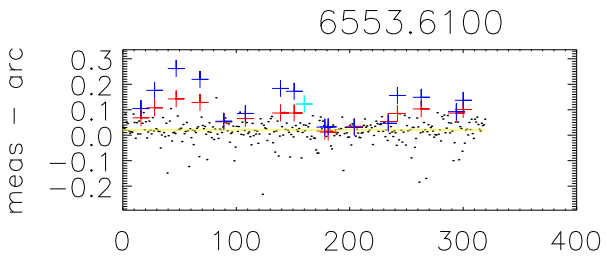

PLATE=2622 MJD=54095 Scattered Light on sdR-r2-00042160.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.434
Max value = 27.925
Mon Feb 11 04:45:58 2008

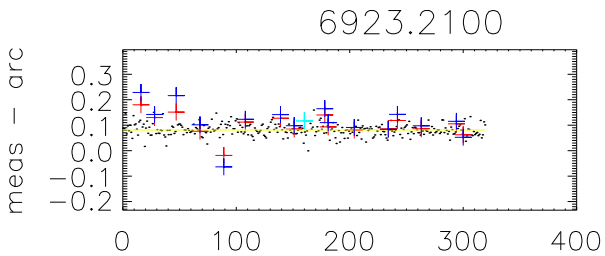

PLATE=2622 MJD=54095 Extraction chi^2 for sdR−r2−00042160.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

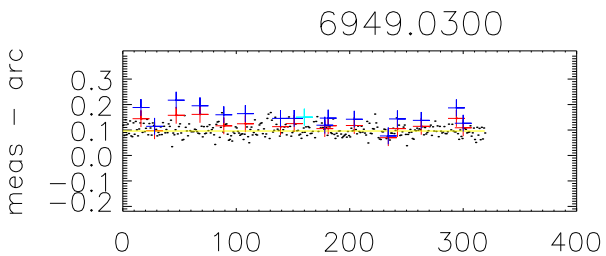

6300.3040
off: 0.15
sig: 0.004
6363.7760
off: 0.17
sig: 0.007
6553.6100
off: 0.12
sig: 0.016
6923.2100
off: 0.12
sig: 0.010
6949.0300
off: 0.15
sig: 0.010
7571.7500
off: 0.15
sig: 0.008
7794.1200
off: 0.06
sig: 0.005
7821.5100
off: 0.09
sig: 0.005
8399.1600
off: 0.13
sig: 0.004
8430.1700
off: 0.10
sig: 0.004
8885.8300
off: 0.13
sig: 0.004
8919.6100
off: 0.12
sig: 0.003

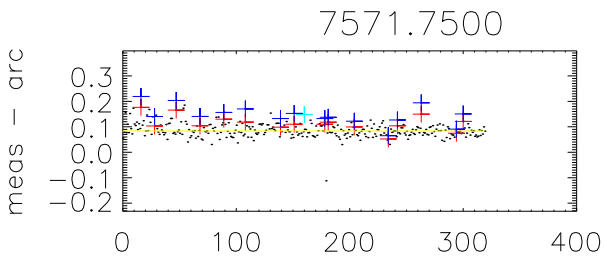

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

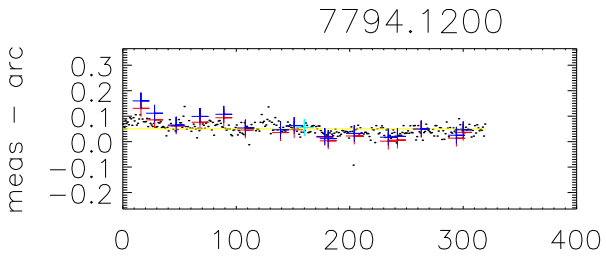

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

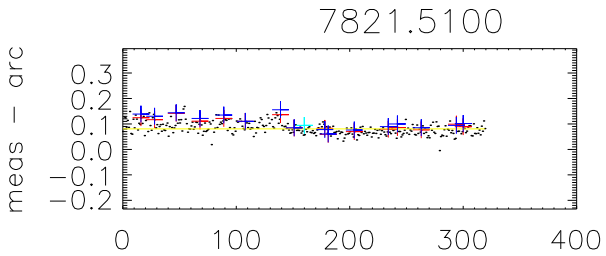

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

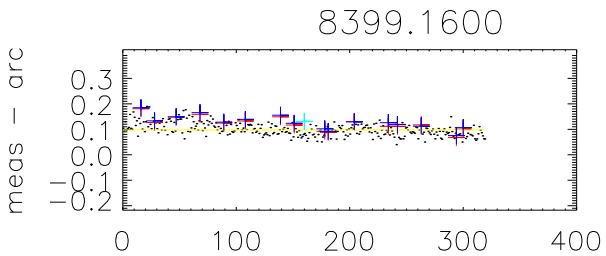

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

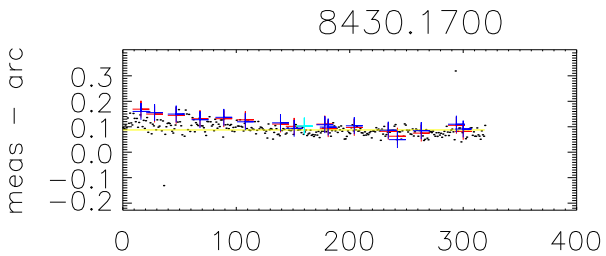

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

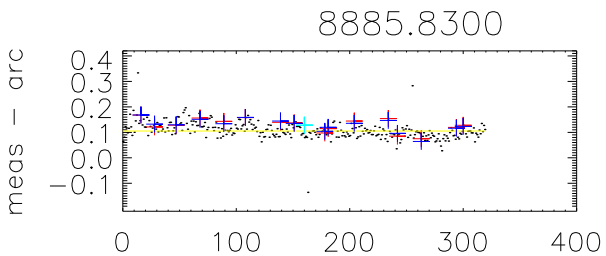

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

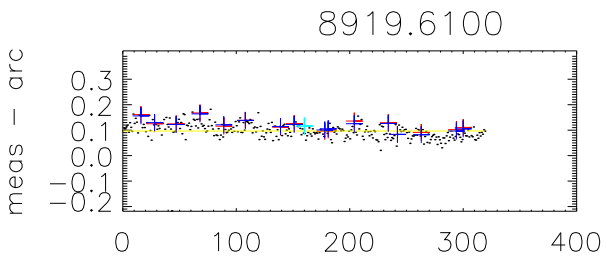

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

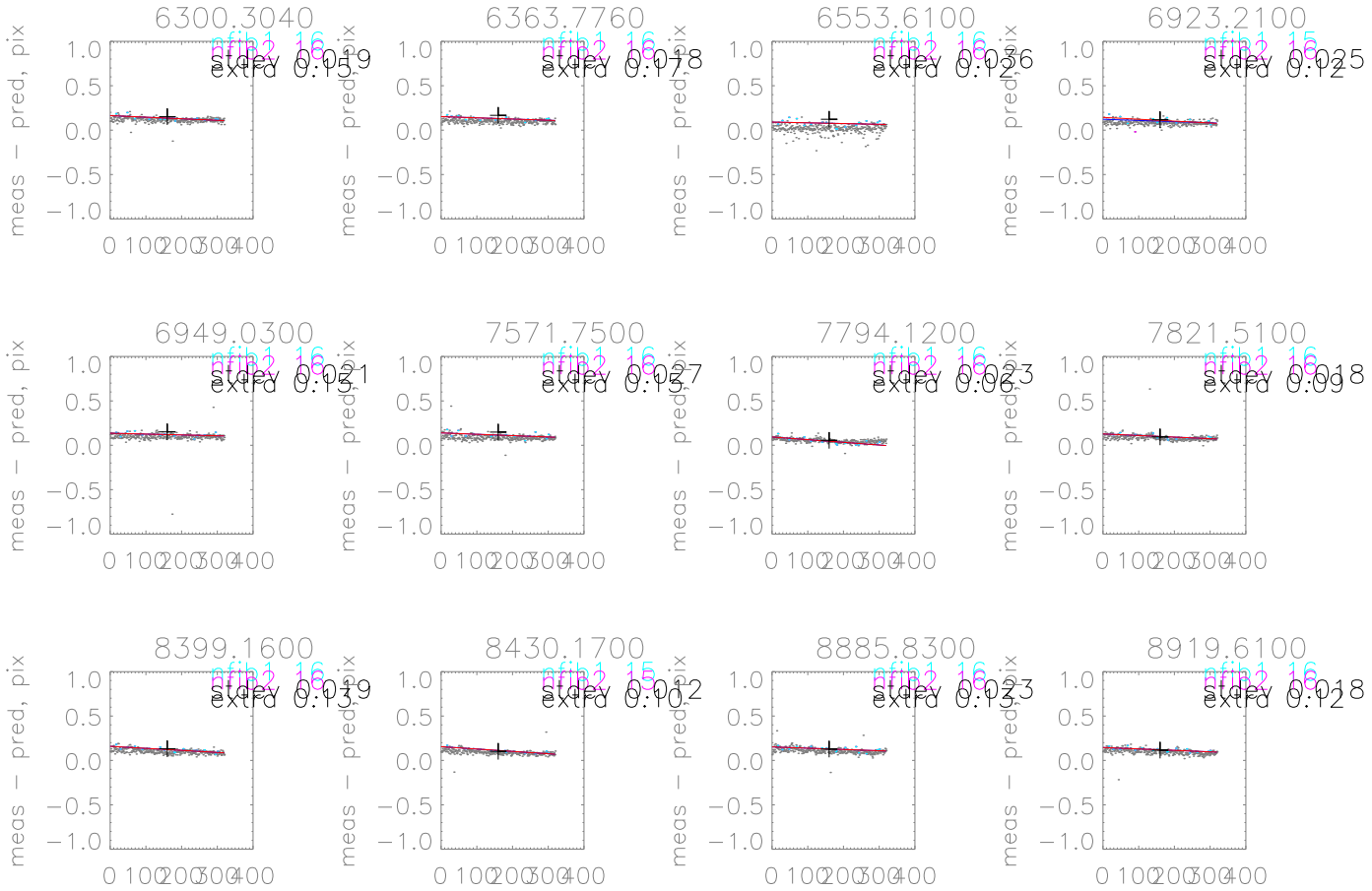

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

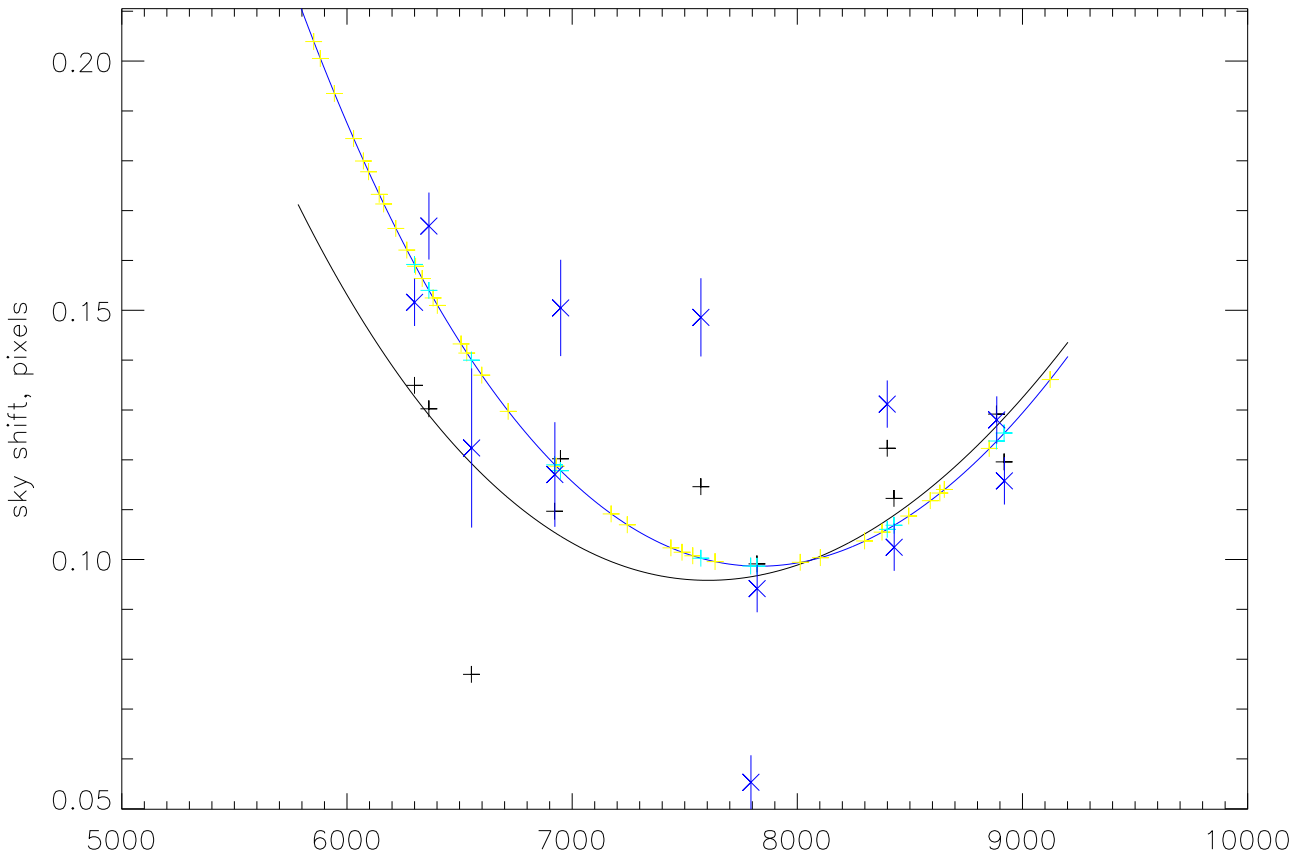

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

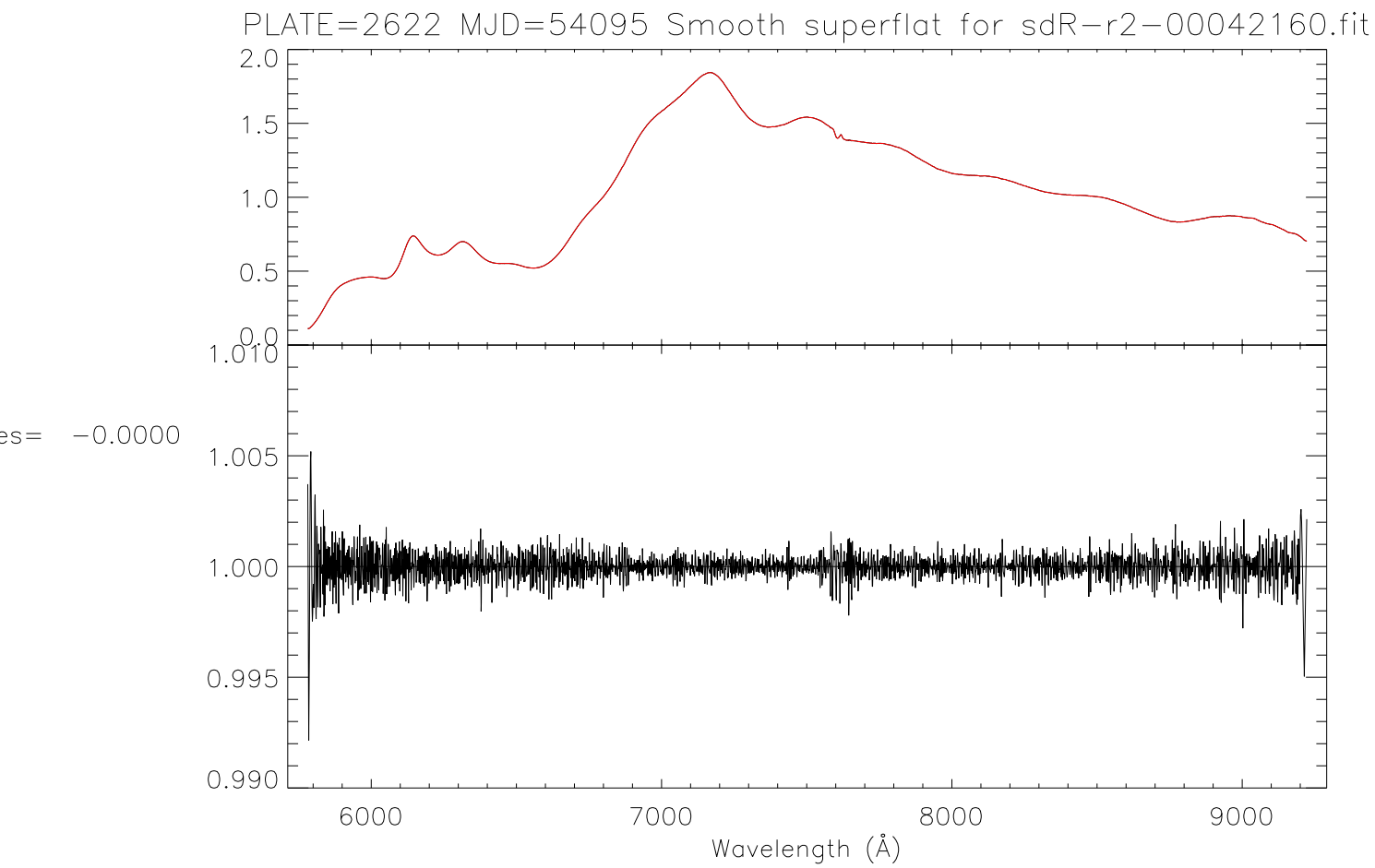

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

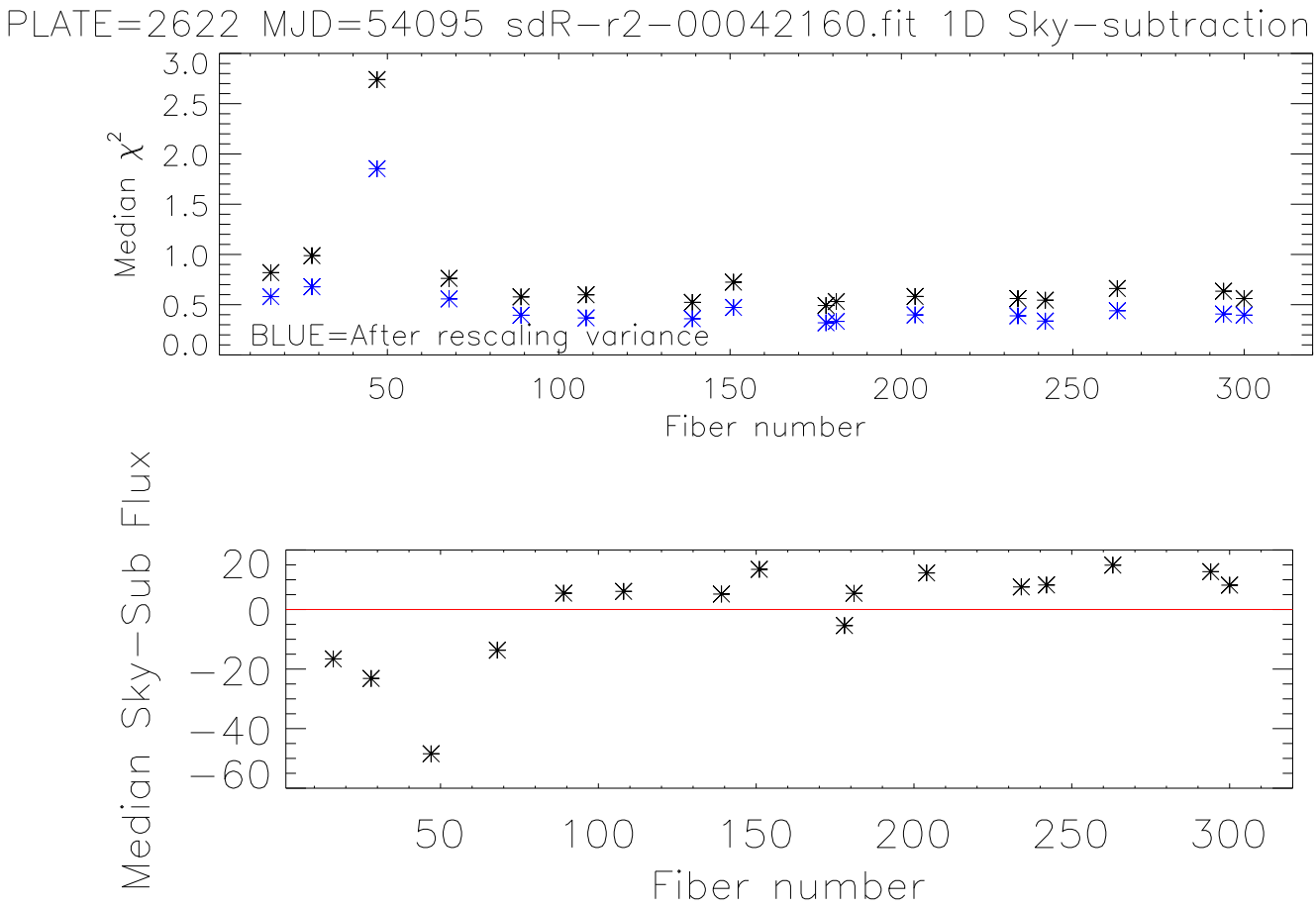

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

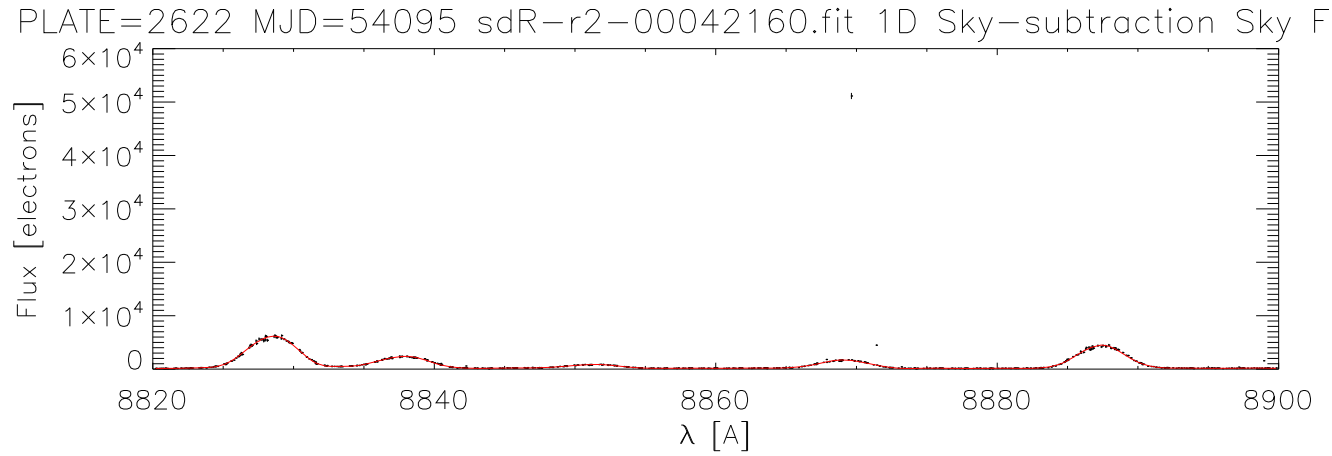

6300.3040
stdev 0.059
extra 0.15
6363.7760
stdev 0.078
extra 0.17
6553.6100
stdev 0.036
extra 0.12
6923.2100
stdev 0.025
extra 0.12
6949.0300
stdev 0.021
extra 0.13
7571.7500
stdev 0.027
extra 0.13
7794.1200
stdev 0.023
extra 0.06
7821.5100
stdev 0.018
extra 0.09
8399.1600
stdev 0.019
extra 0.13
8430.1700
stdev 0.012
extra 0.10
8885.8300
stdev 0.023
extra 0.13
8919.6100
stdev 0.018
extra 0.12
meas − pred, pix
mfib1 16
mfib2 16
mfib1 15
mfib2 15

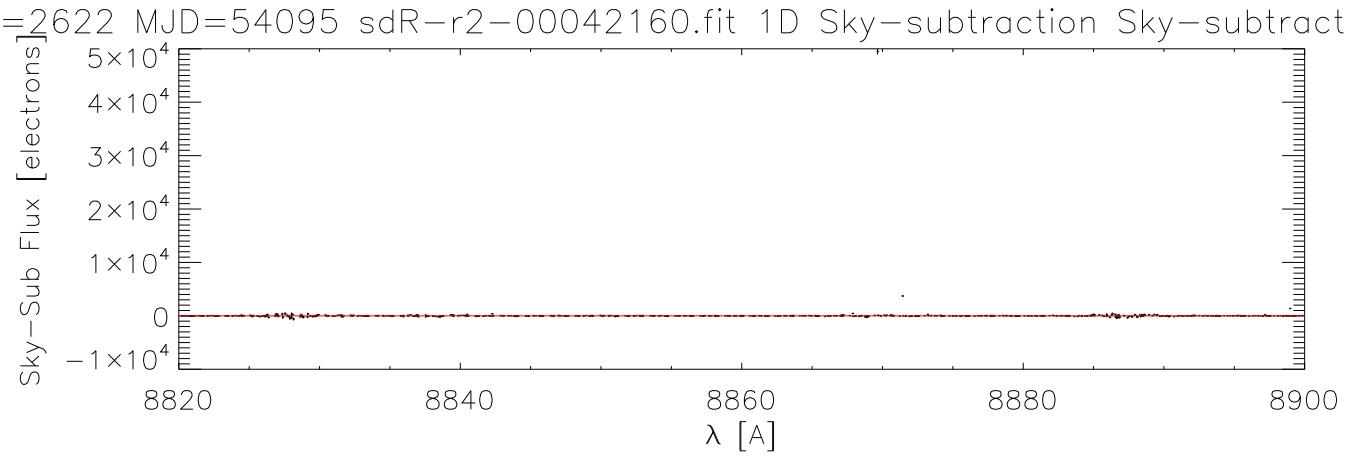

0.20
0.15
0.10
0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

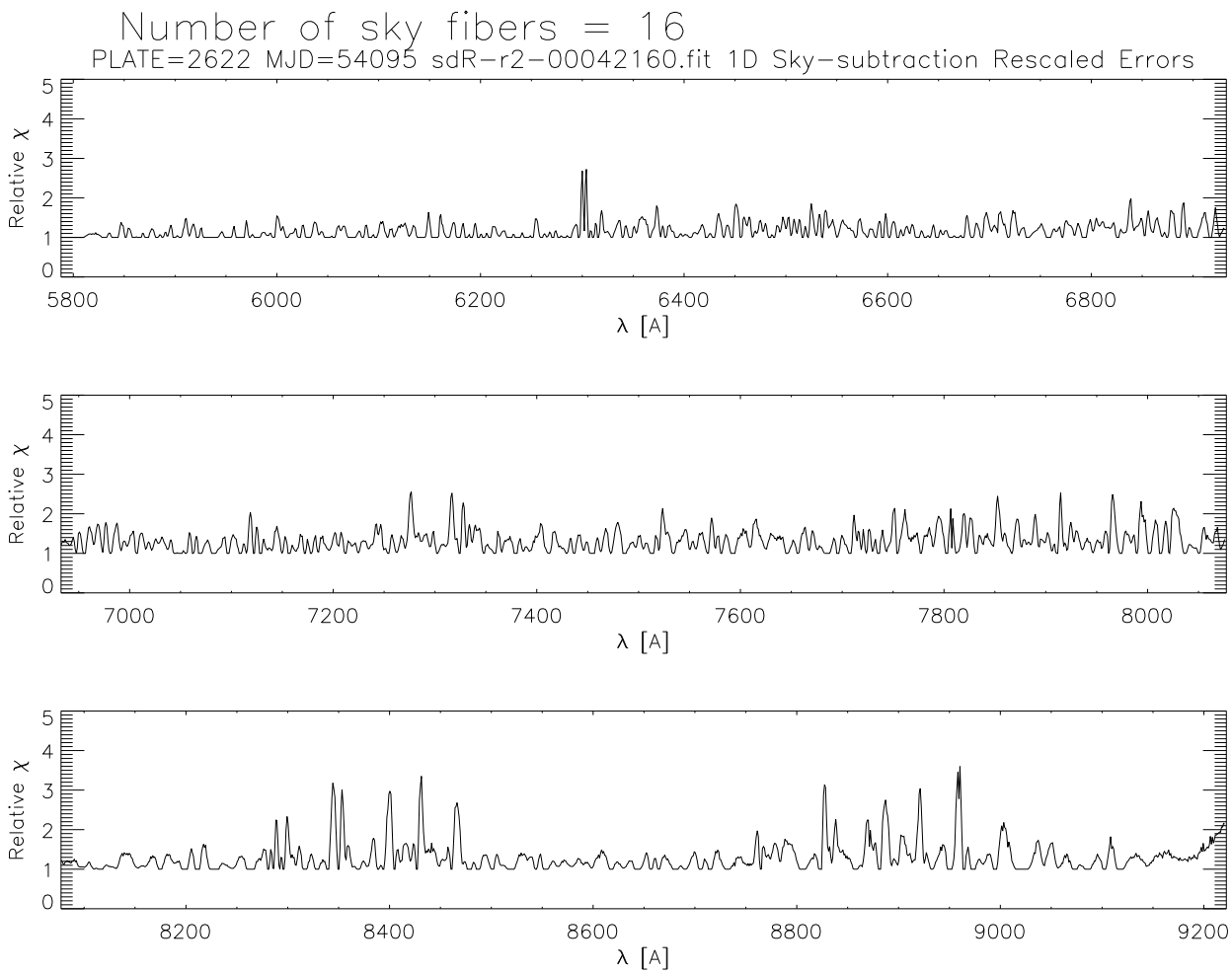

PLATE=2622 MJD=54095 Smooth superflat for sdR-r2-00042160.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

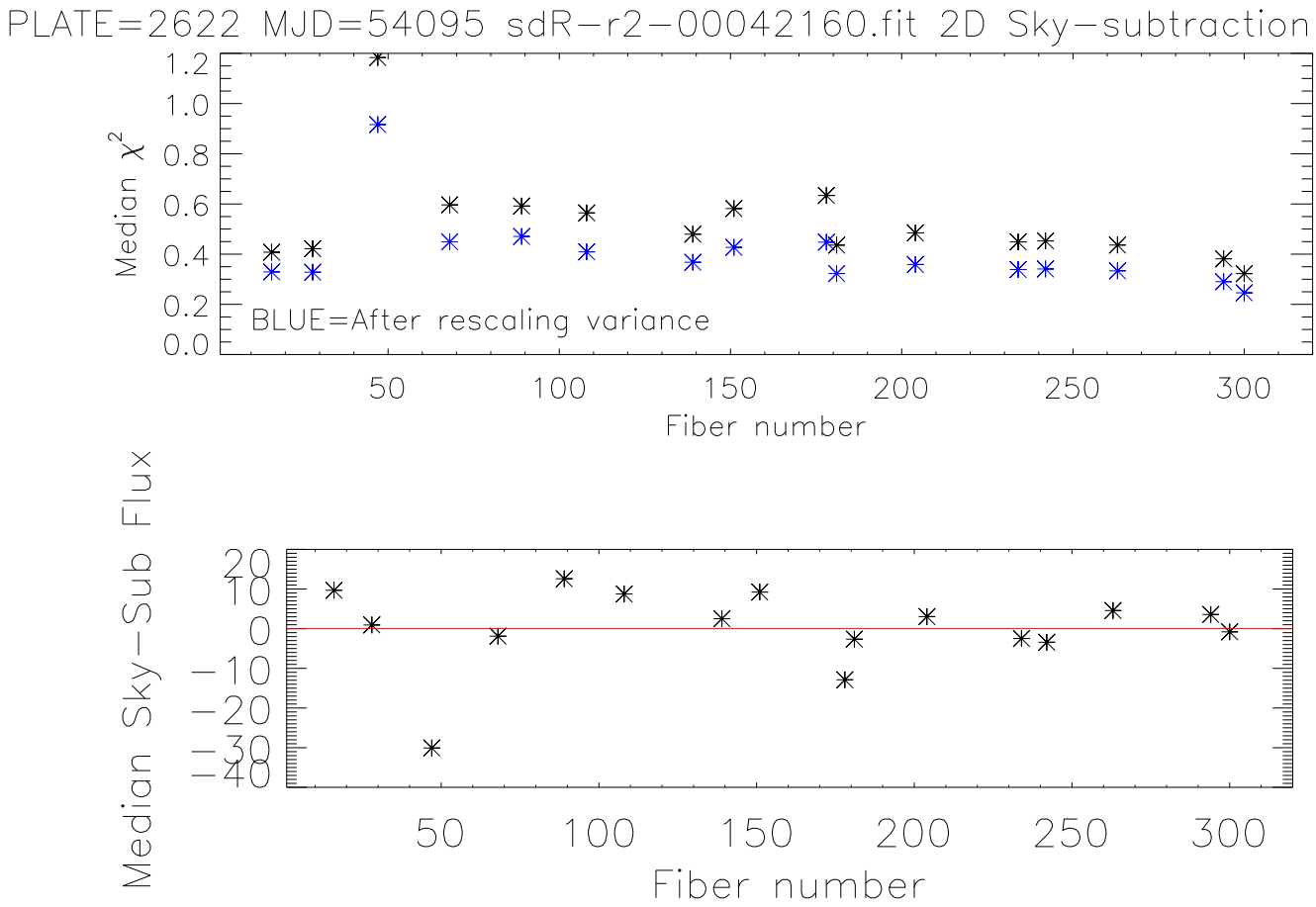
es= −0.0000

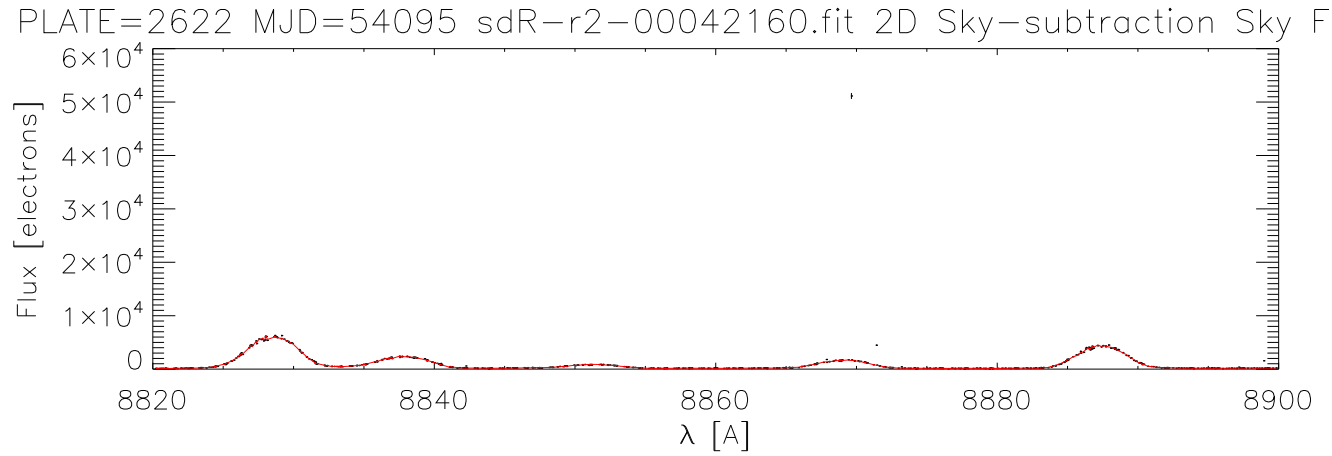

PLATE=2622 MJD=54095 sdR-r2-00042160.fit 1D Sky-subtraction Sky Fibers
Median χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
0
-20
-40
-60
50
100
150
200
250
300
Fiber number

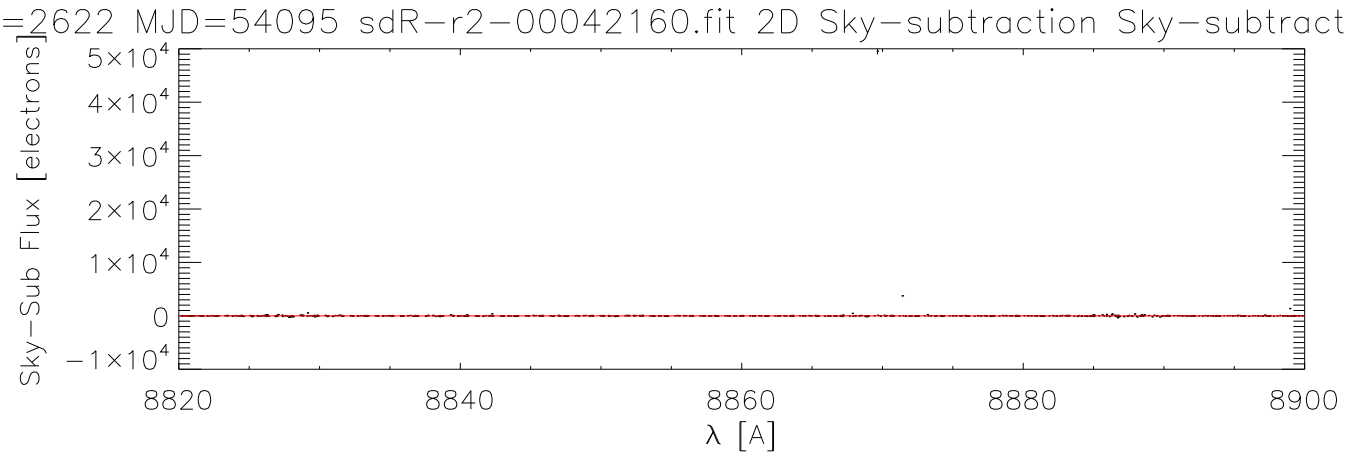

PLATE=2622 MJD=54095 sdR-r2-00042160.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6×10^4
5×10^4
4×10^4
3×10^4
2×10^4
1×10^4
0
8820
8840
8860
8880
8900
λ [A]

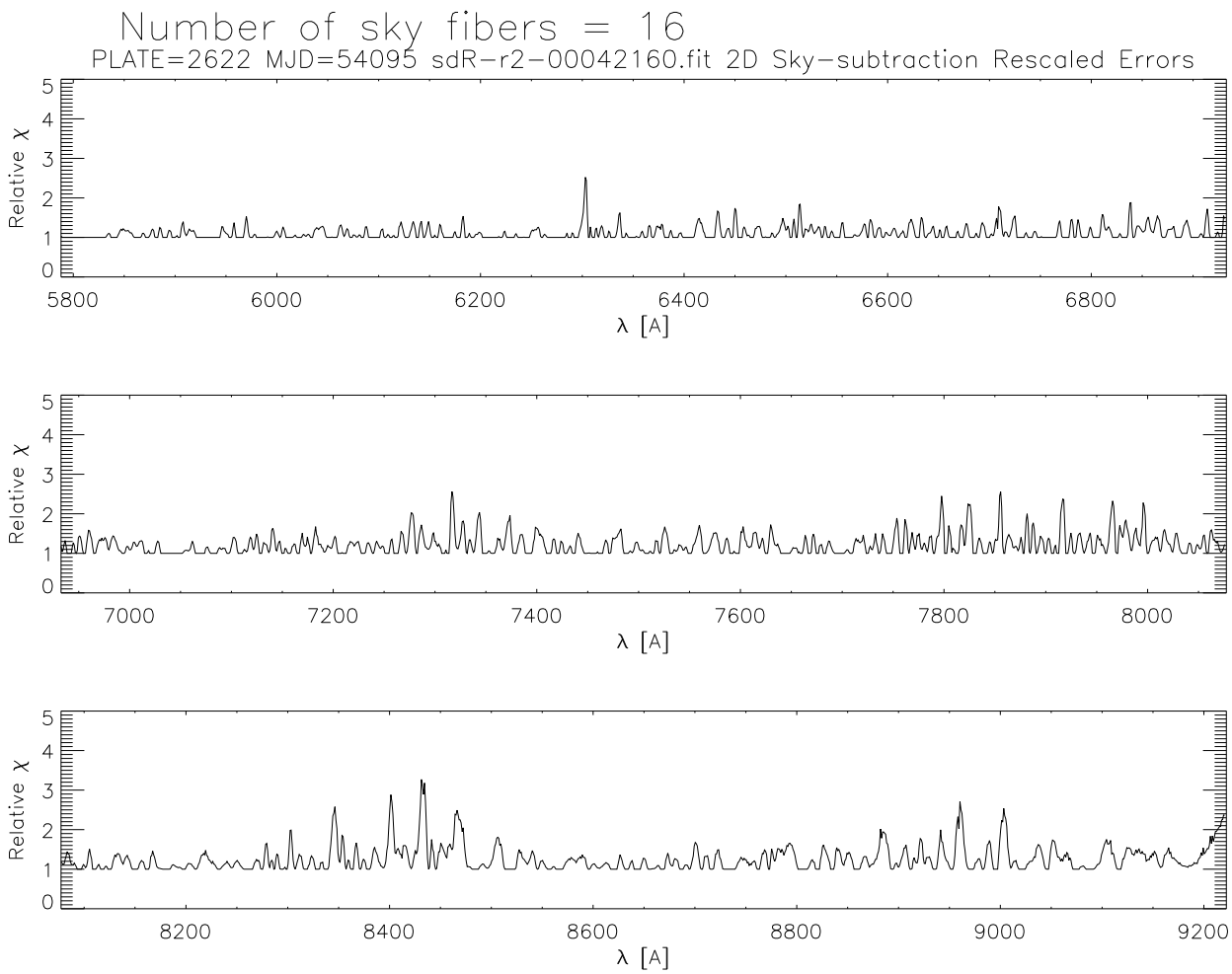

PLATE=2622 MJD=54095 sdR-r2-00042160.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5×10^4
4×10^4
3×10^4
2×10^4
1×10^4
0
-1×10^4
8820
8840
8860
8880
8900
λ [A]

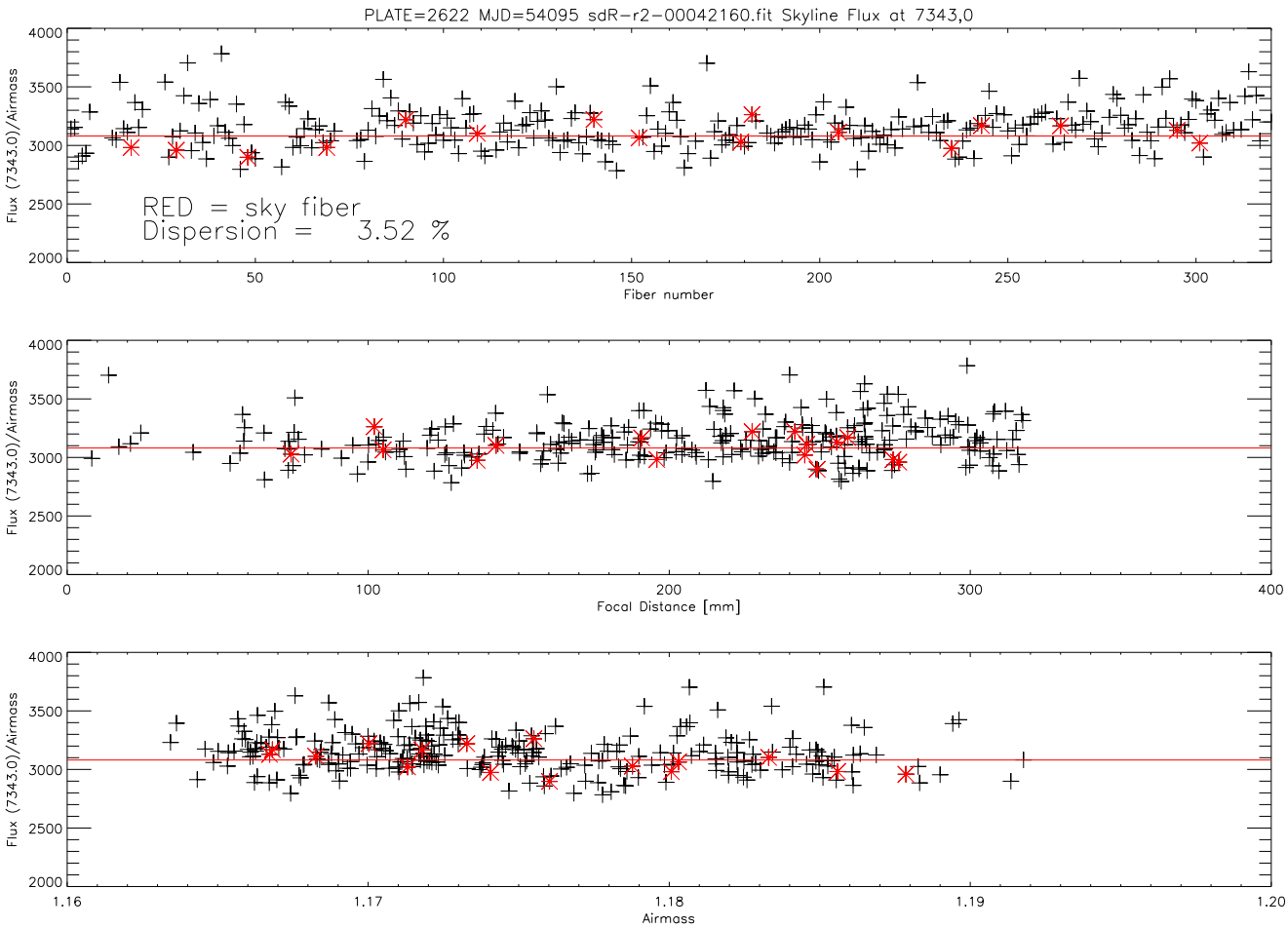

Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-r2-00042160.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

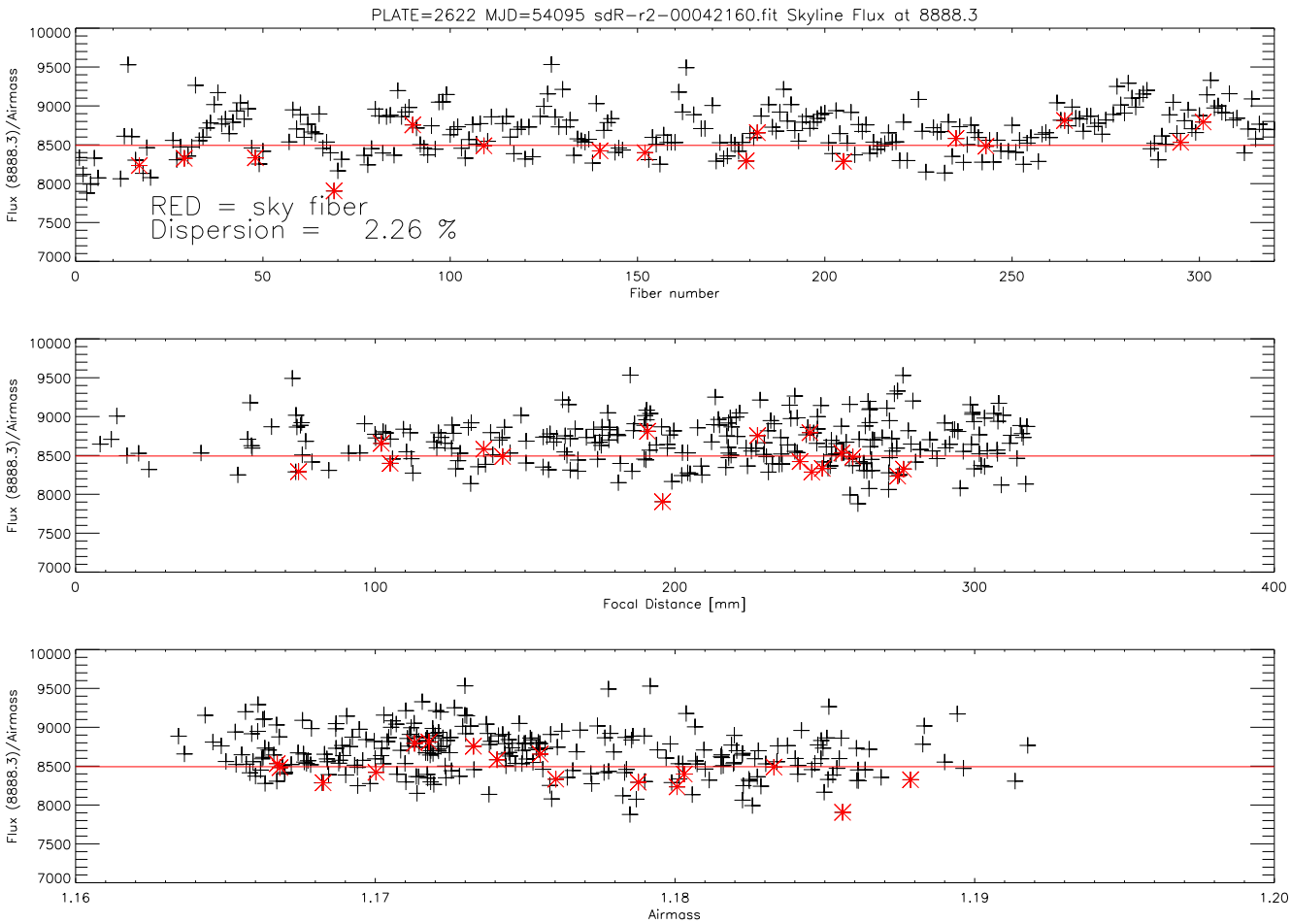

PLATE=2622 MJD=54095 sdR-r2-00042160.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=2622 MJD=54095 sdR-r2-00042160.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6×10^4
5×10^4
4×10^4
3×10^4
2×10^4
1×10^4
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2622 MJD=54095 sdR-r2-00042160.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5×10^4
4×10^4
3×10^4
2×10^4
1×10^4
0
-1×10^4
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=2622 MJD=54095 sdR-r2-00042160.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=2622 MJD=54095 sdR-r2-00042160.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.52 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2622 MJD=54095 sdR-r2-00042160.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.26 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass