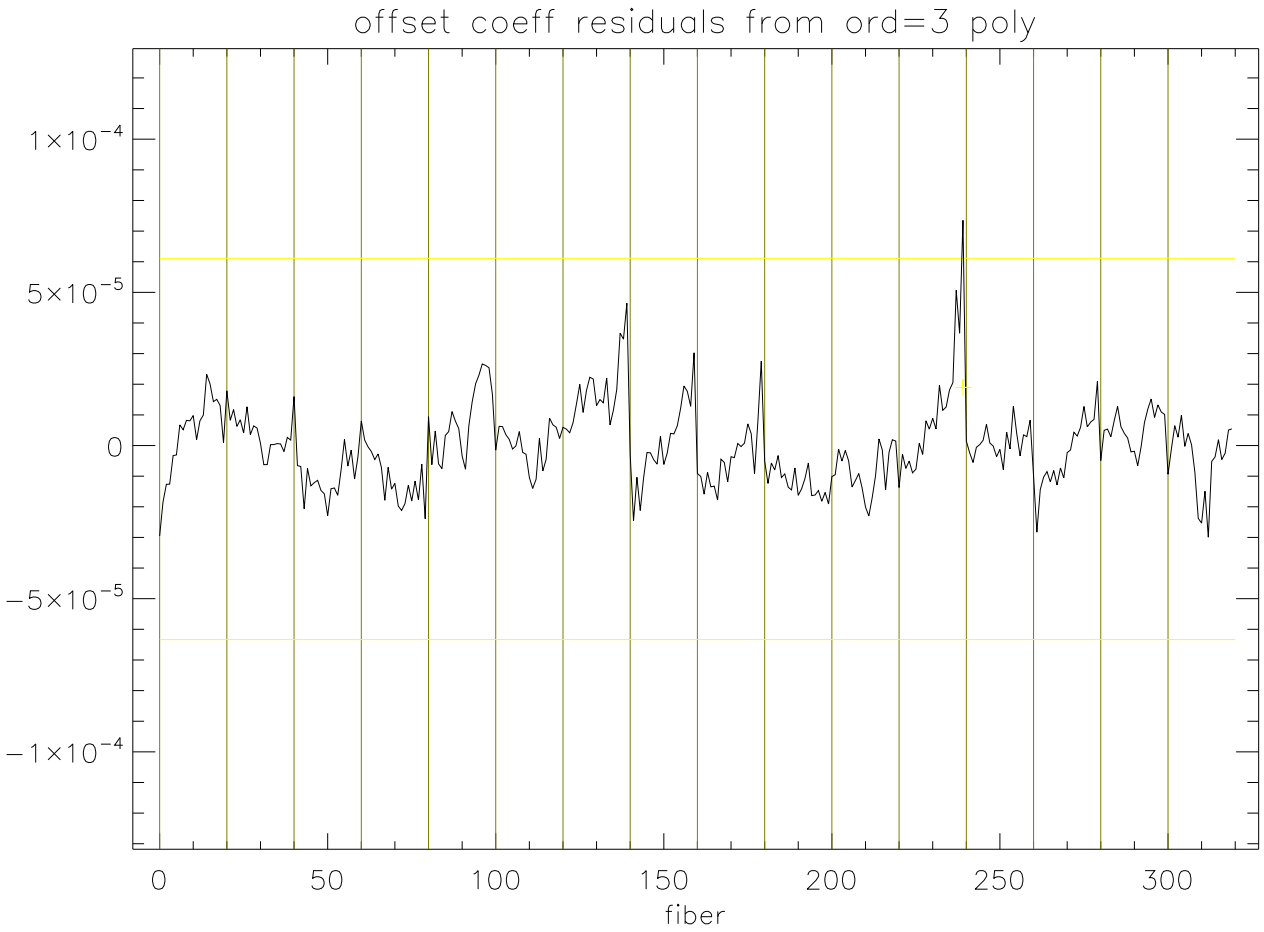
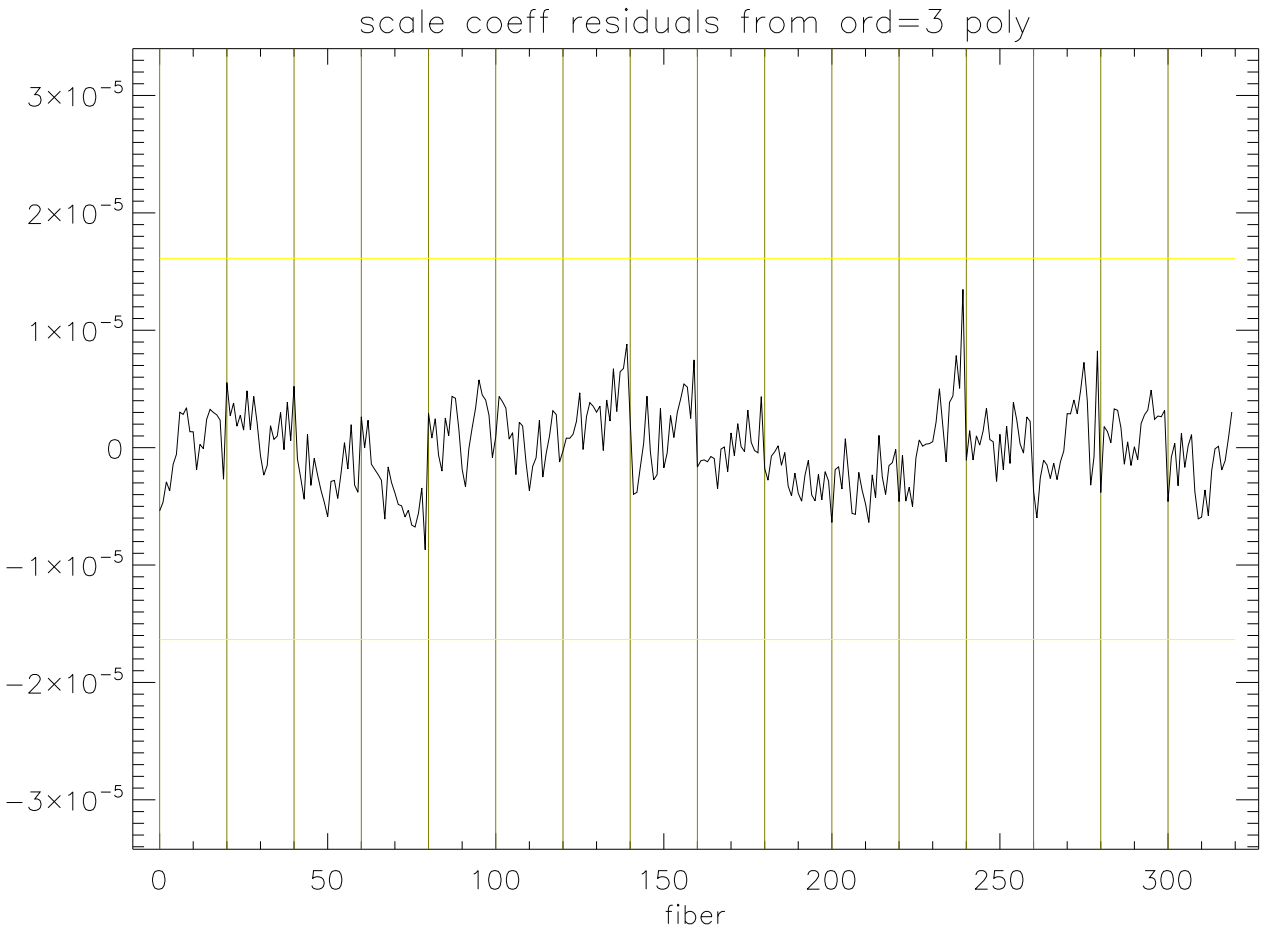
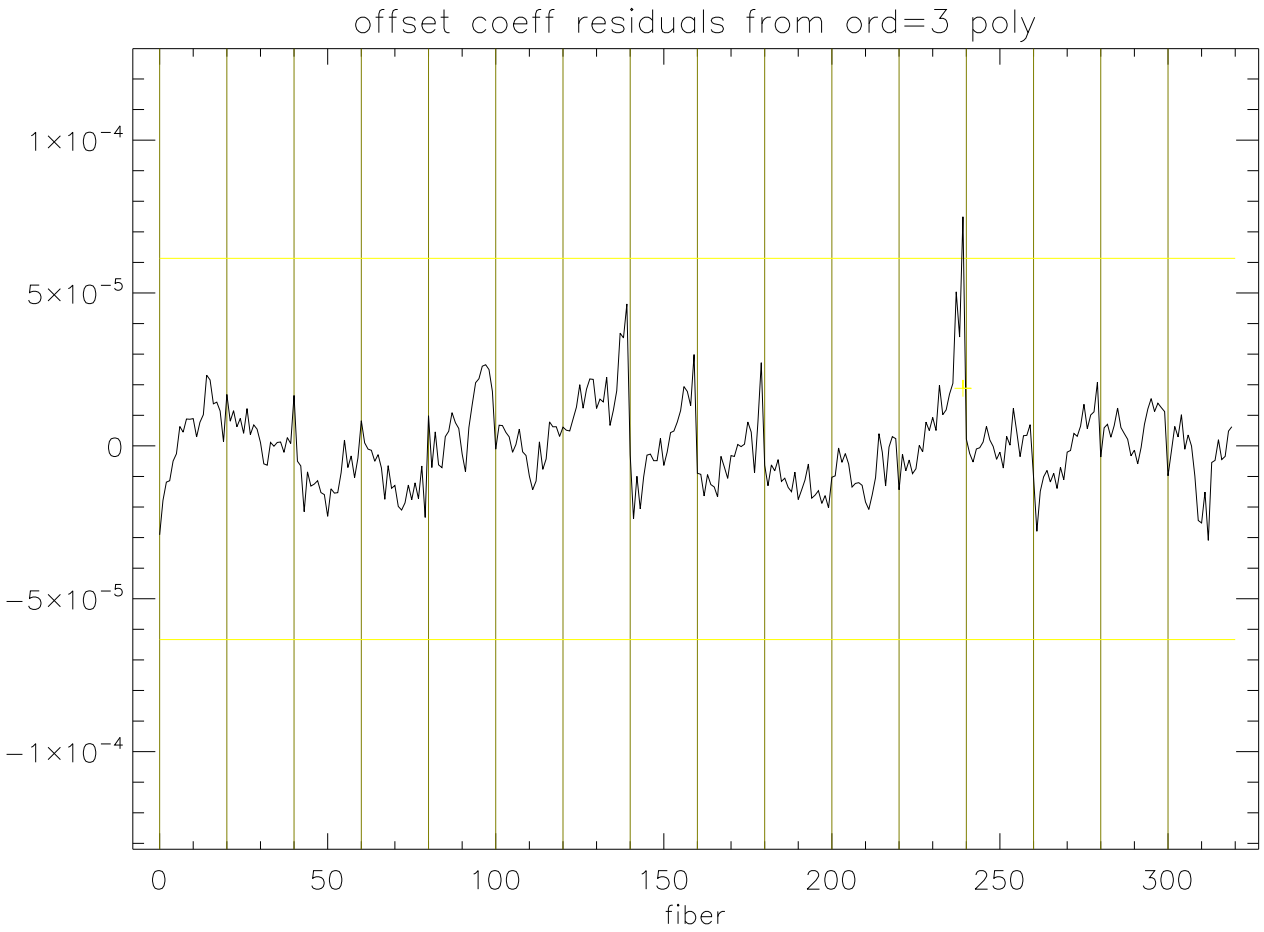
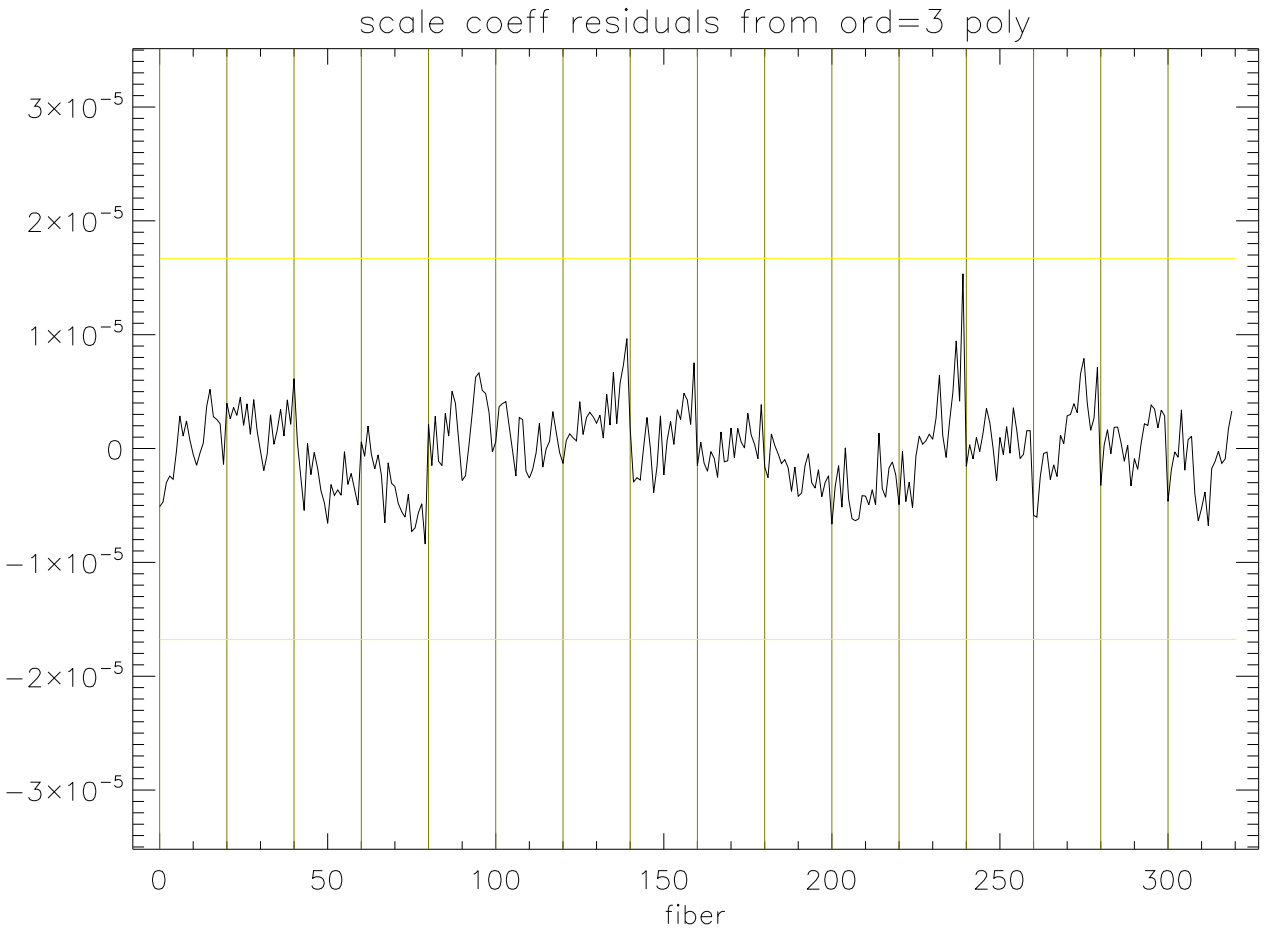
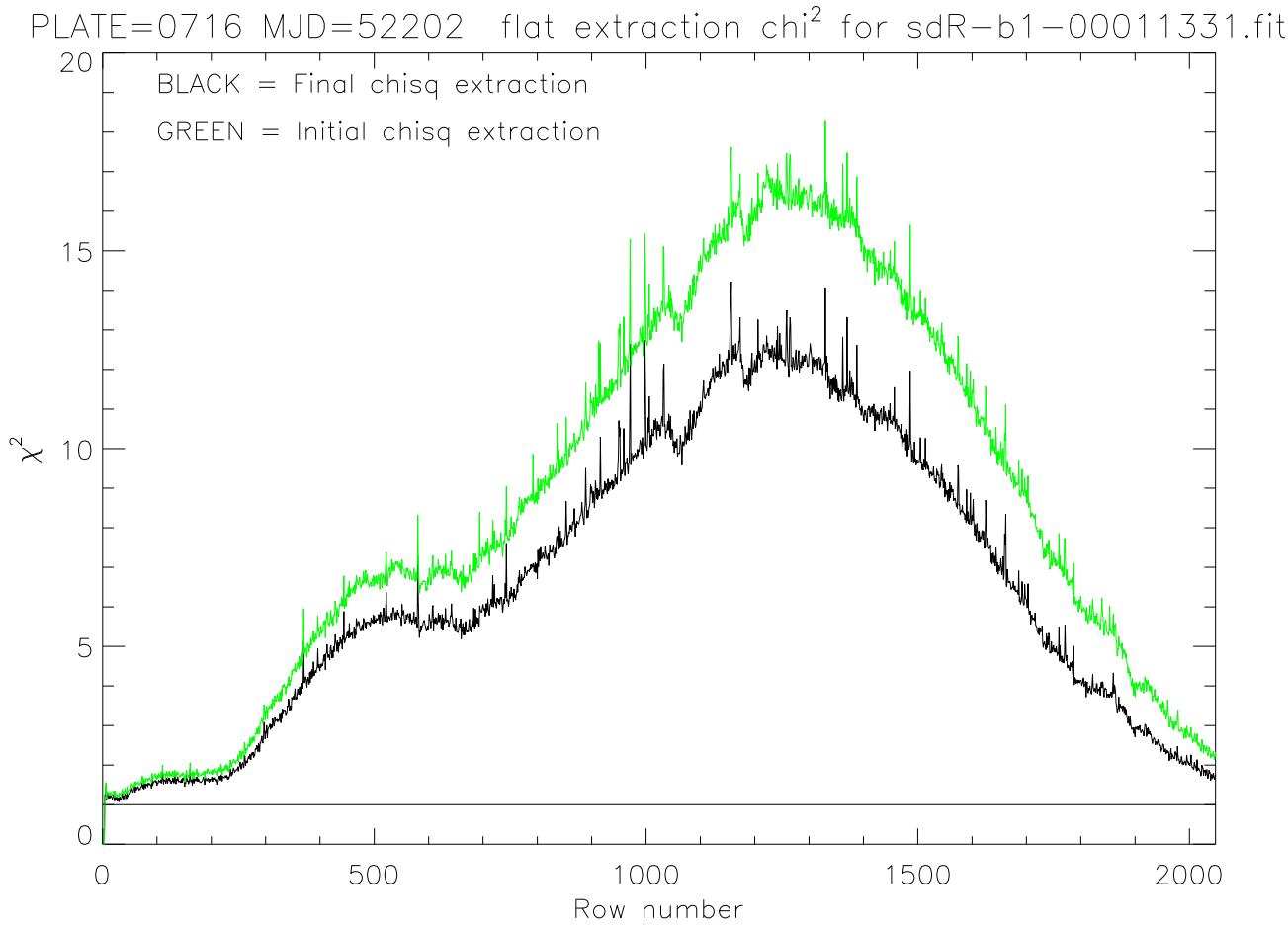
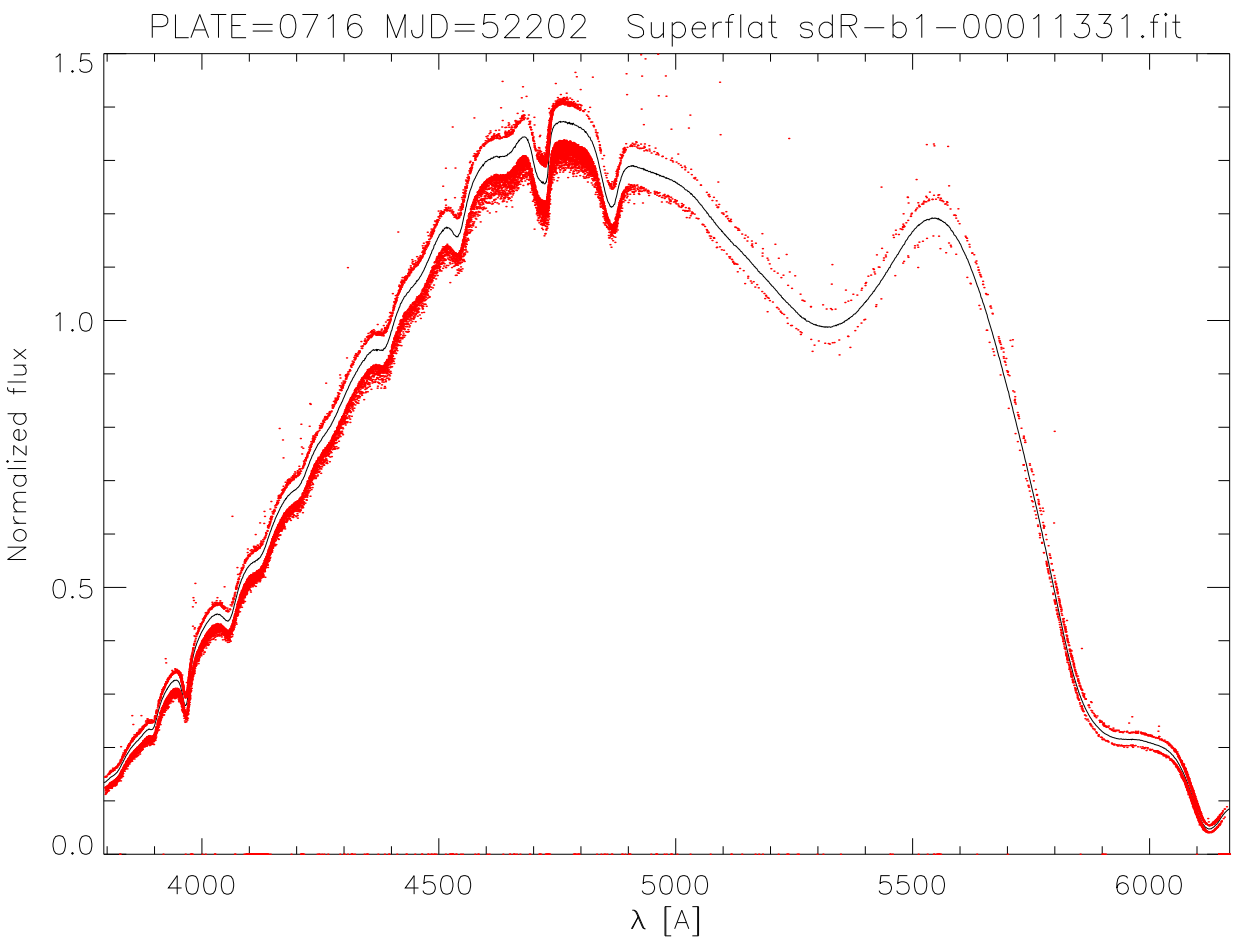

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

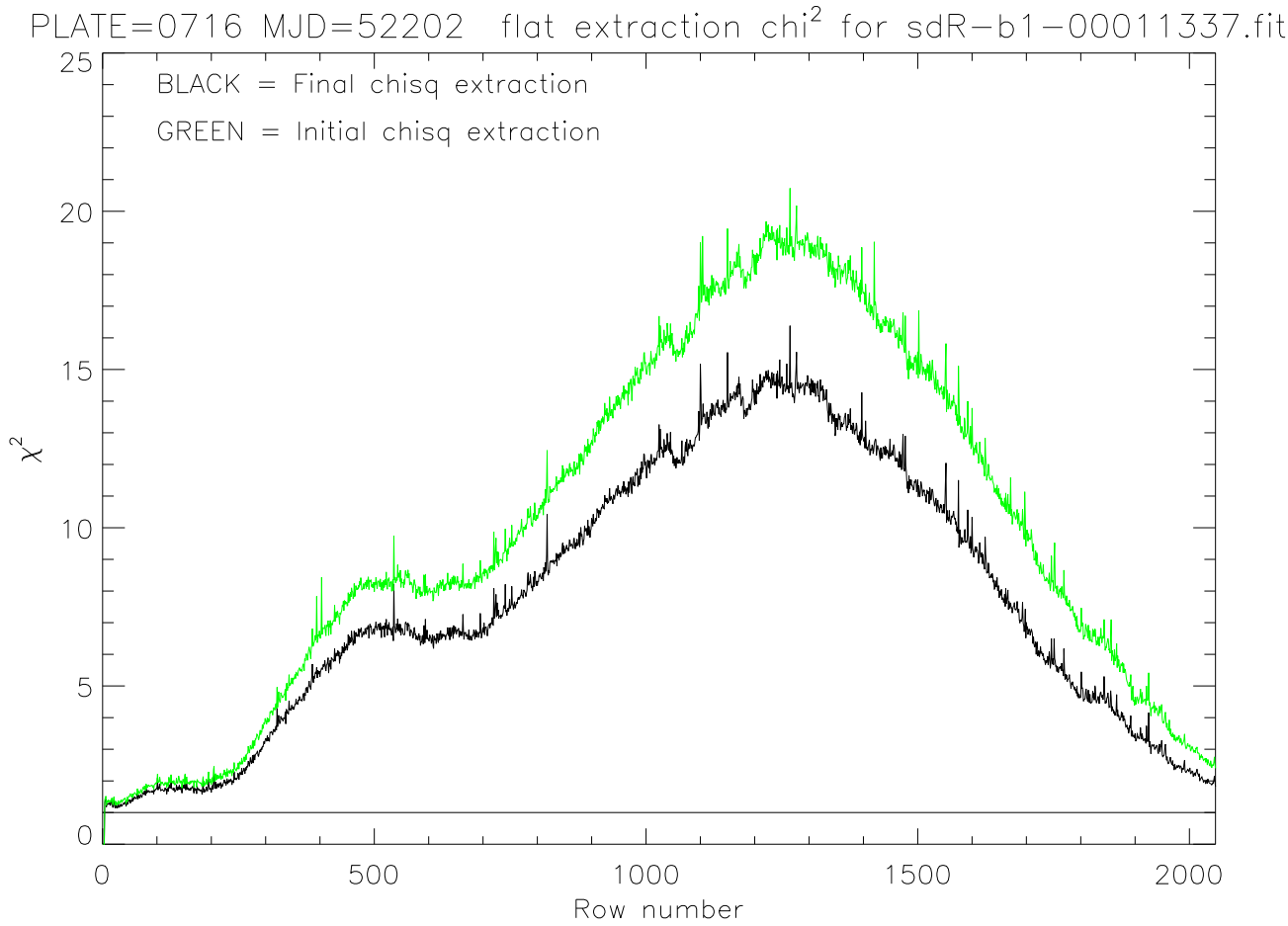

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

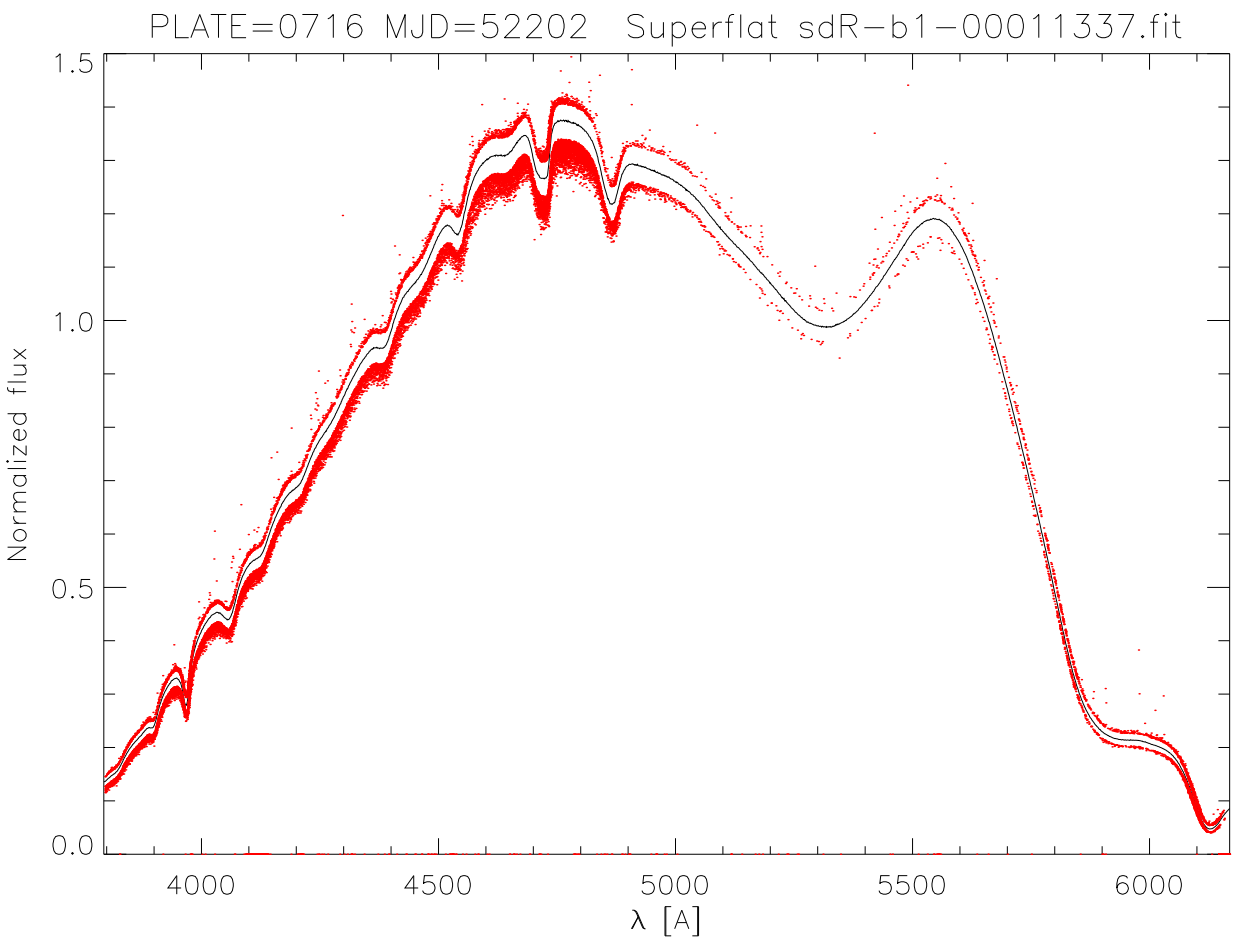

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

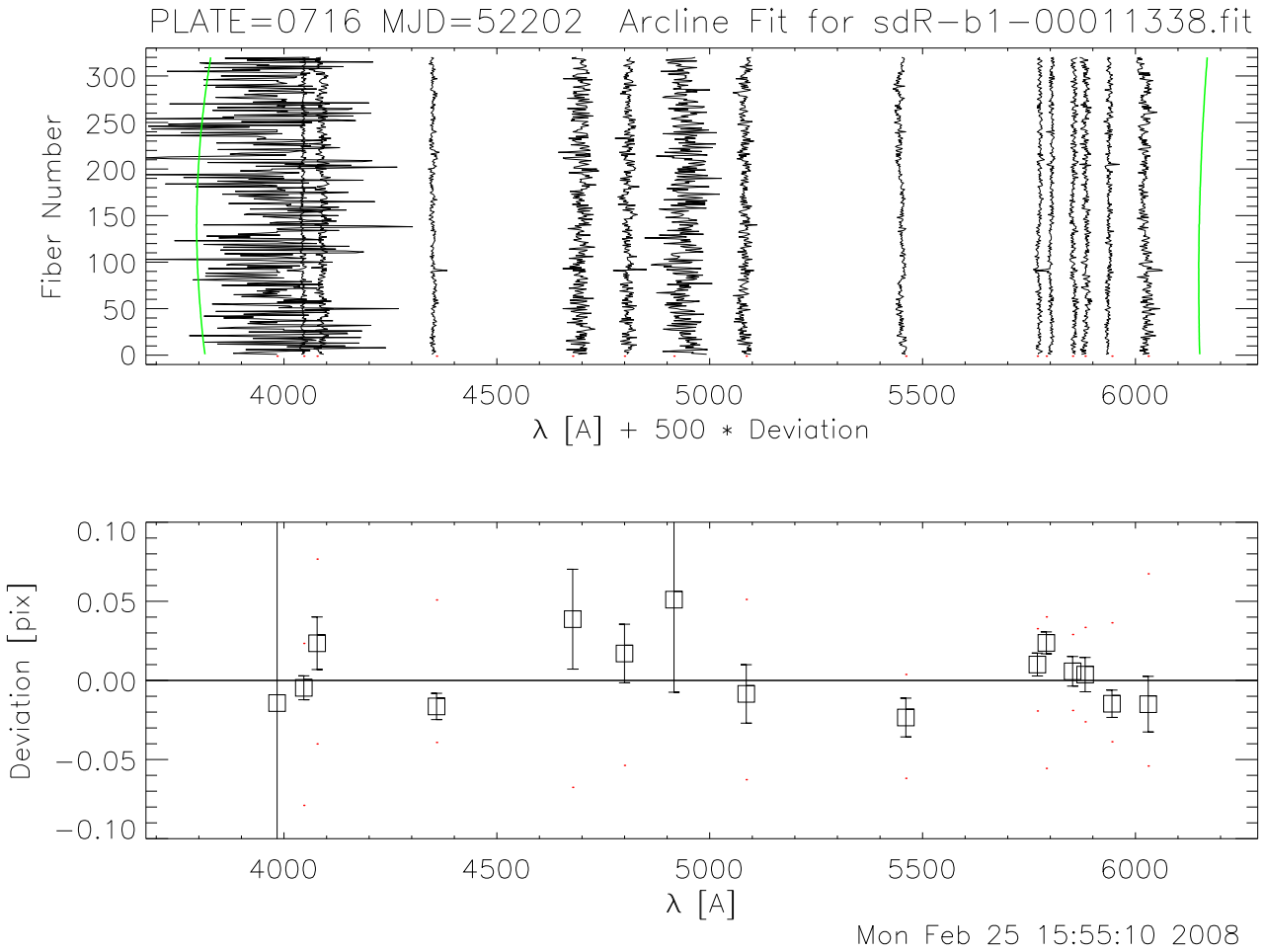

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

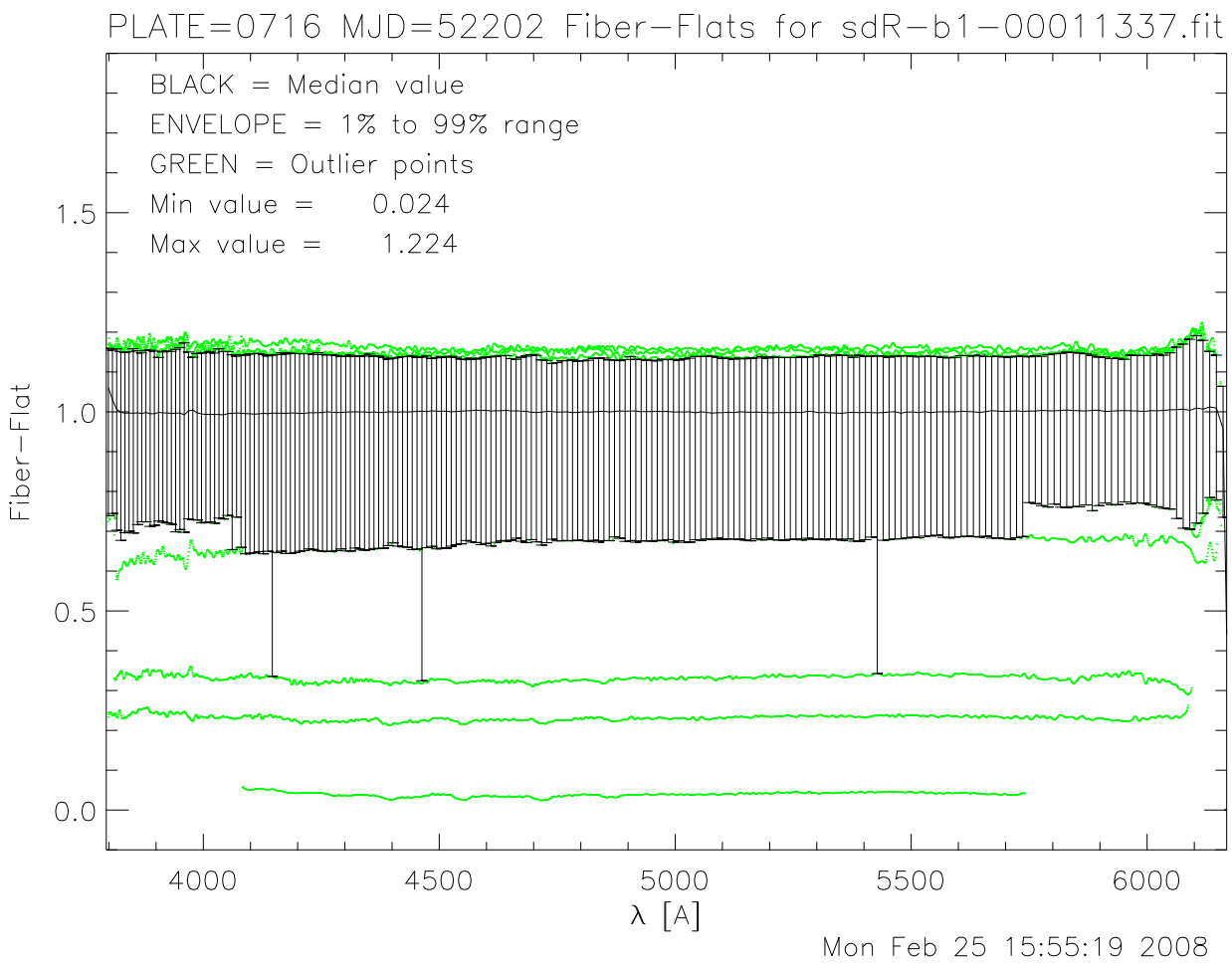

PLATE=0716 MJD=52202 flat extraction chi^2 for sdR−b1−00011331.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

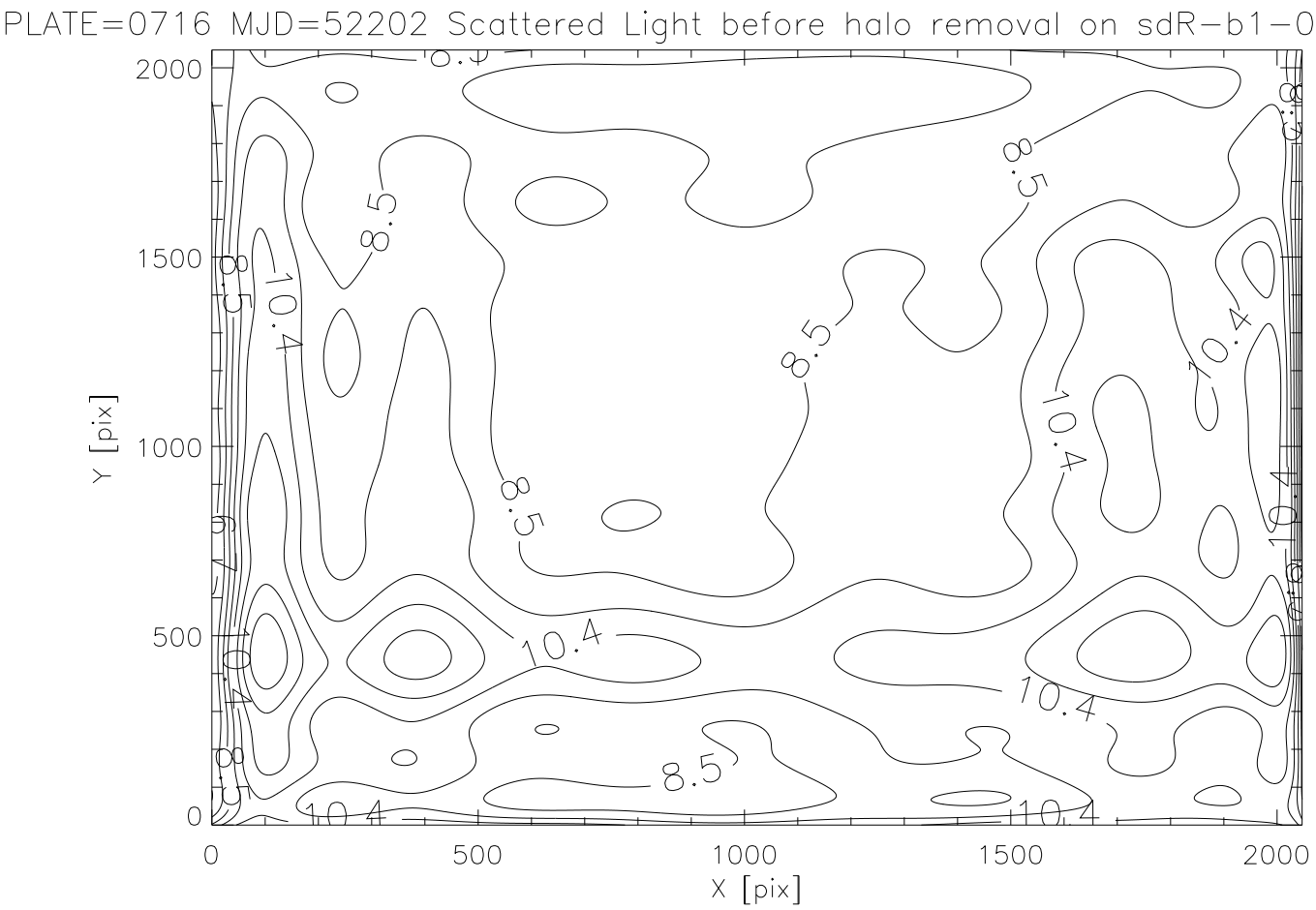

PLATE=0716 MJD=52202 Superflat sdR-b1-00011331.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

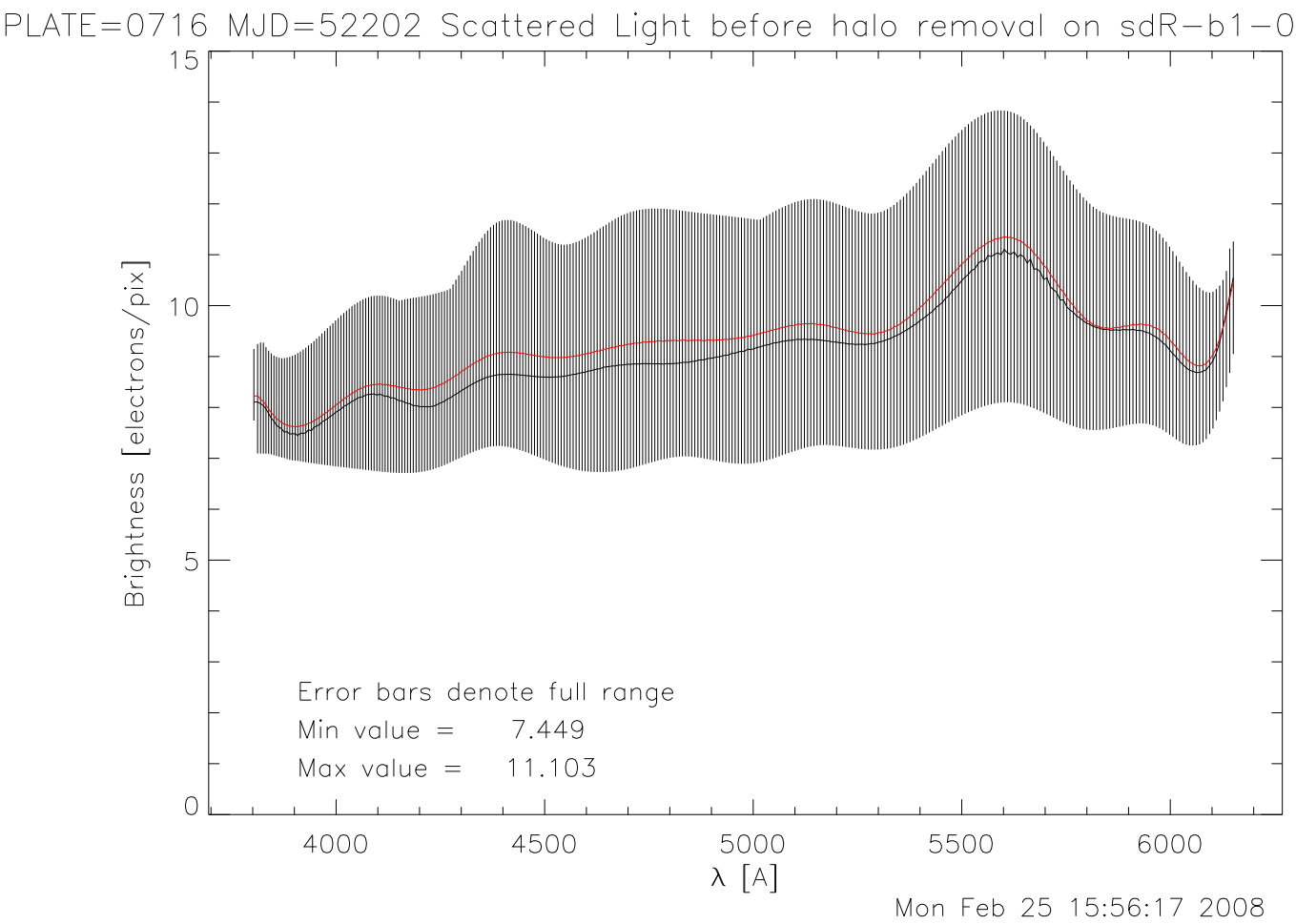

PLATE=0716 MJD=52202 flat extraction chi^2 for sdR−b1−00011337.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

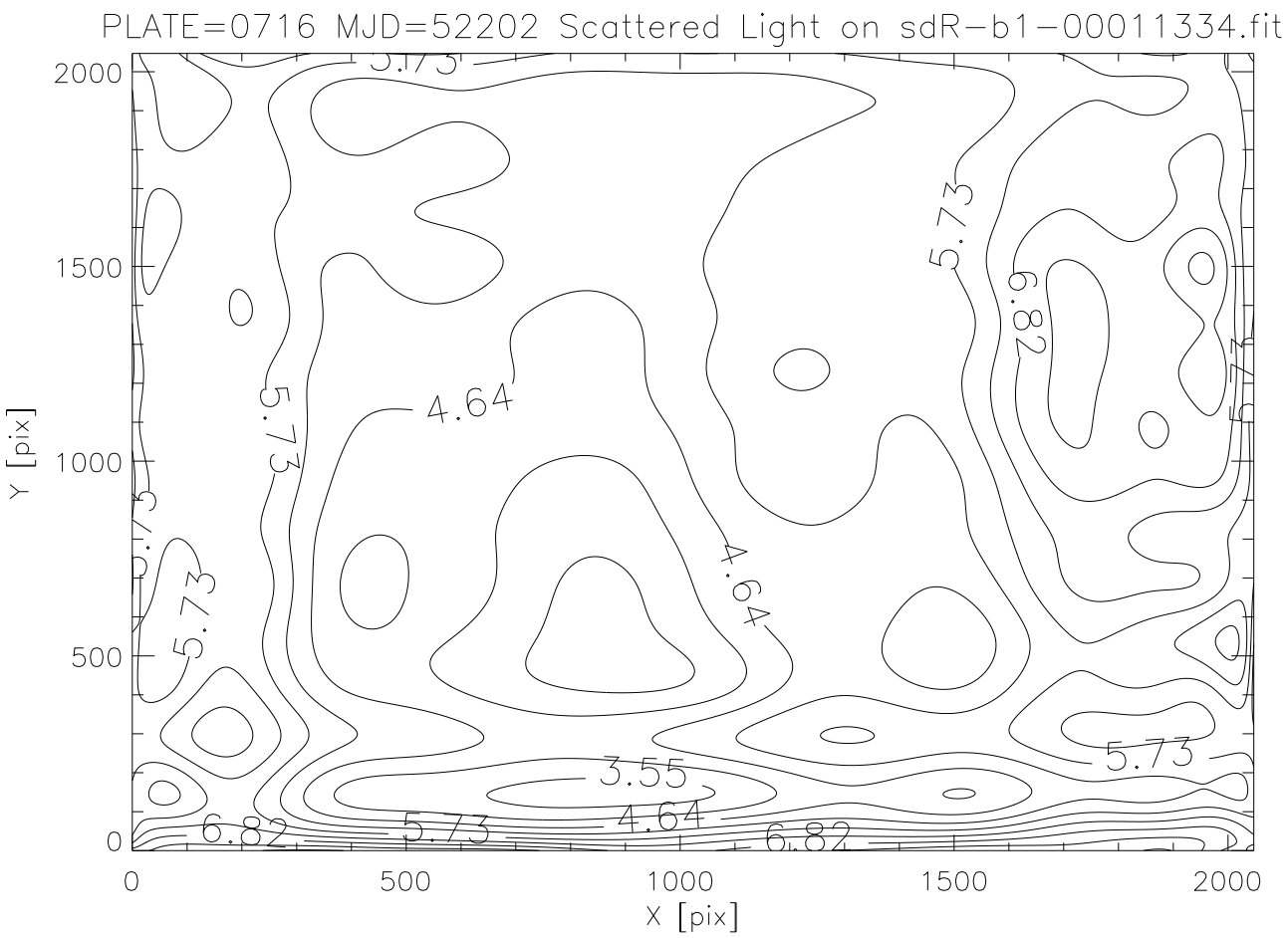

PLATE=0716 MJD=52202 Superflat sdR-b1-00011337.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

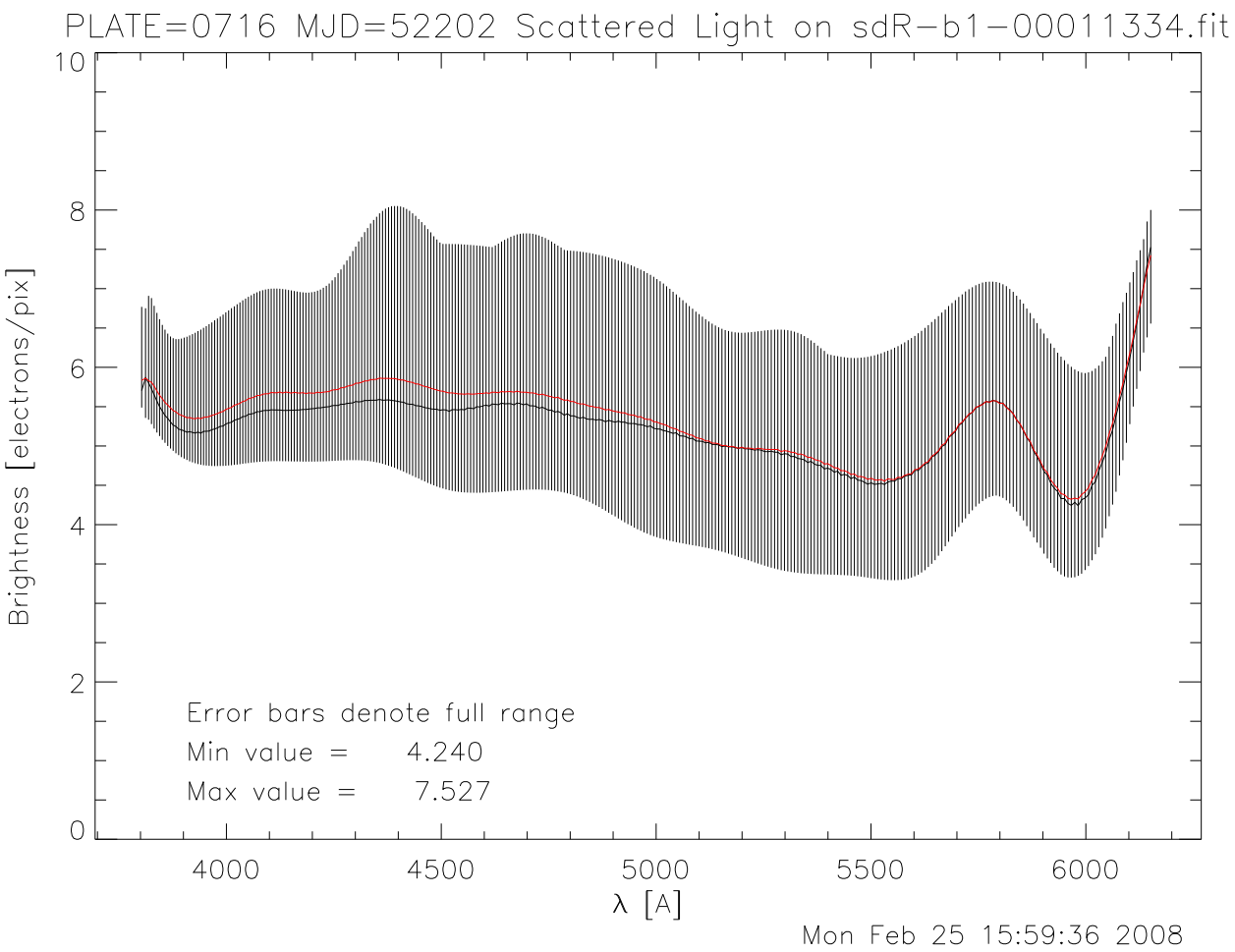

PLATE=0716 MJD=52202 Arcline Fit for sdR-b1-00011338.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 15:55:10 2008

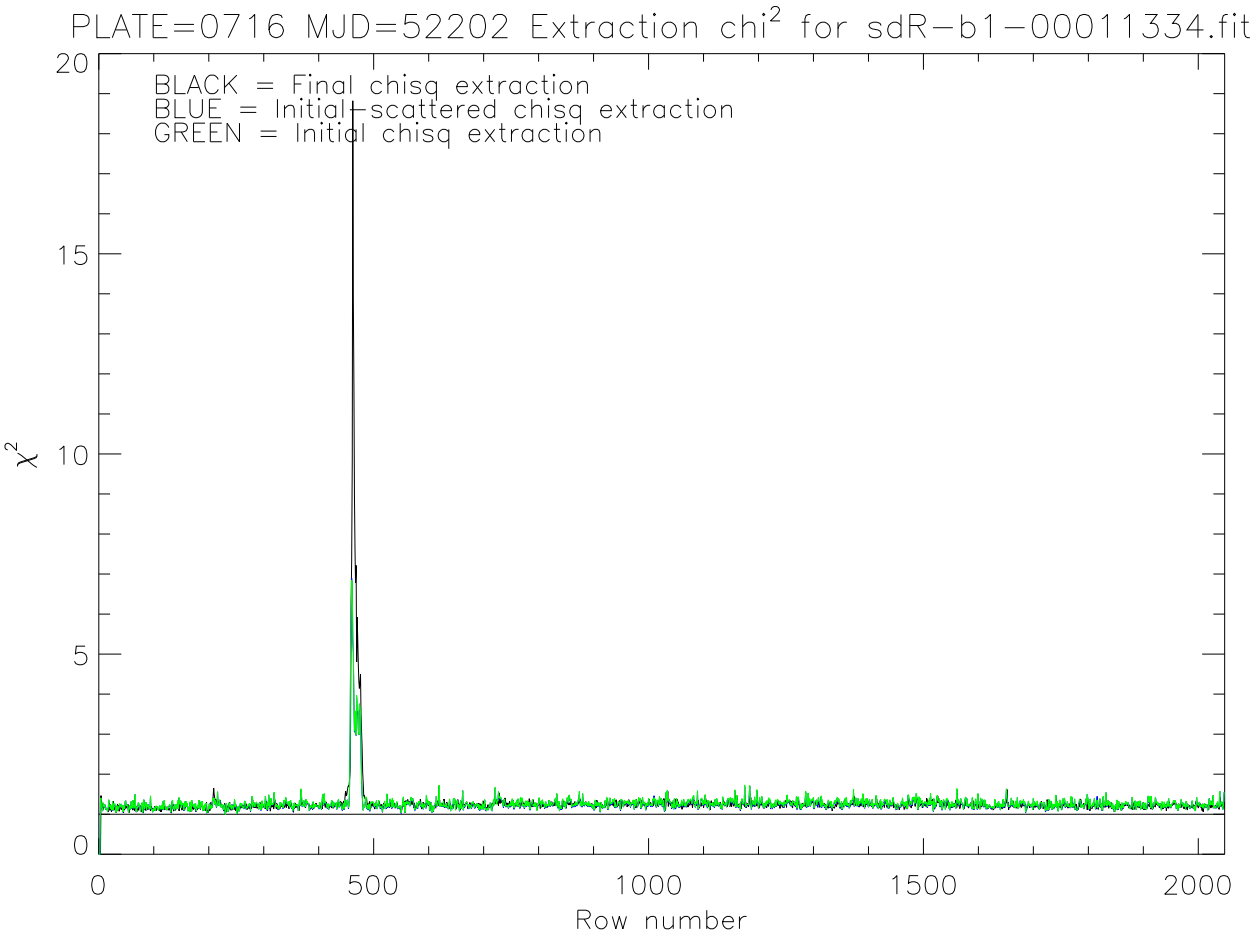

PLATE=0716 MJD=52202 Fiber−Flats for sdR−b1−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.024
Max value = 1.224
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 15:55:19 2008

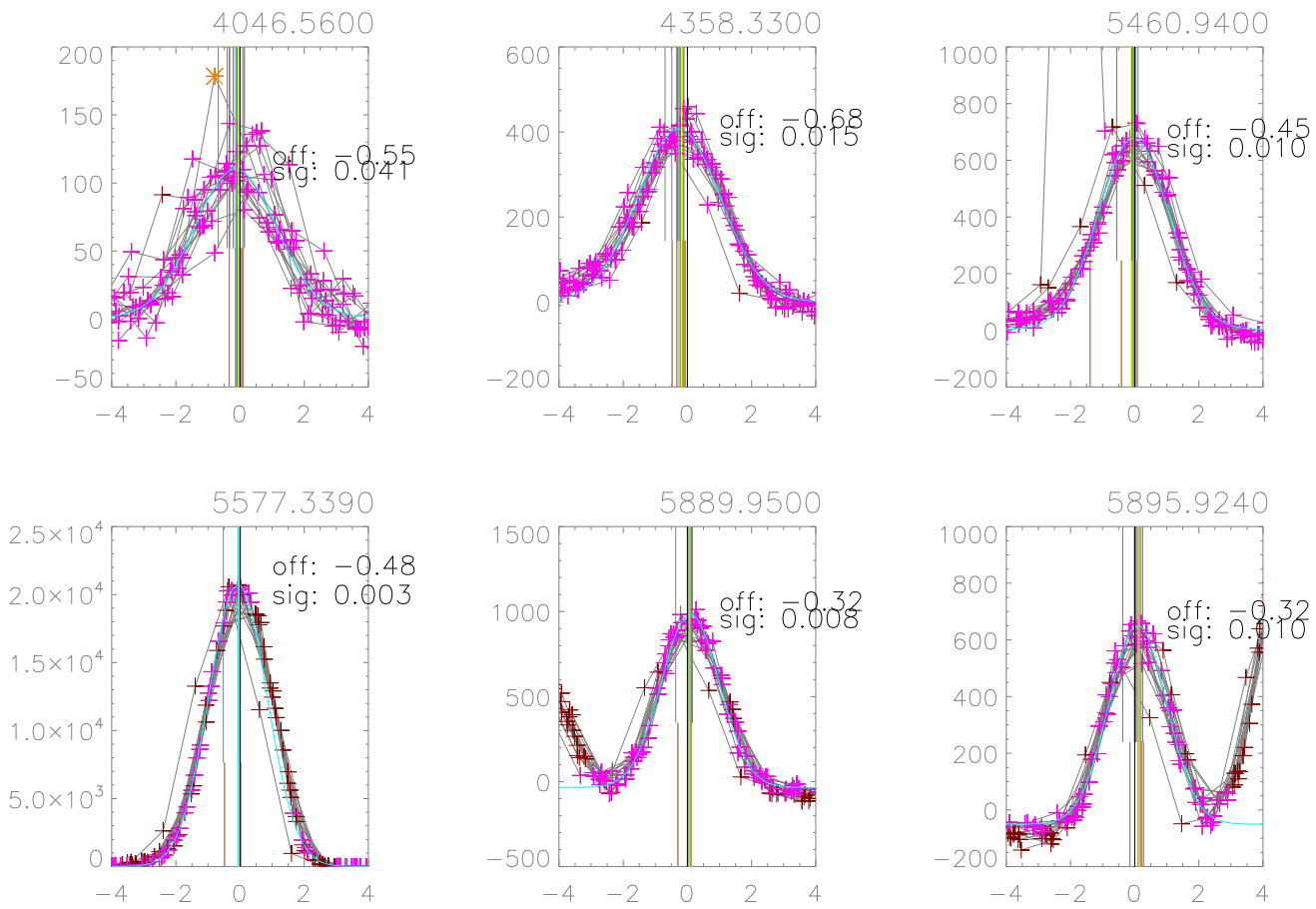

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-b1-00011334.f
Y [pix]
X [pix]
0
500
1000
1500
2000
8.5
10.4

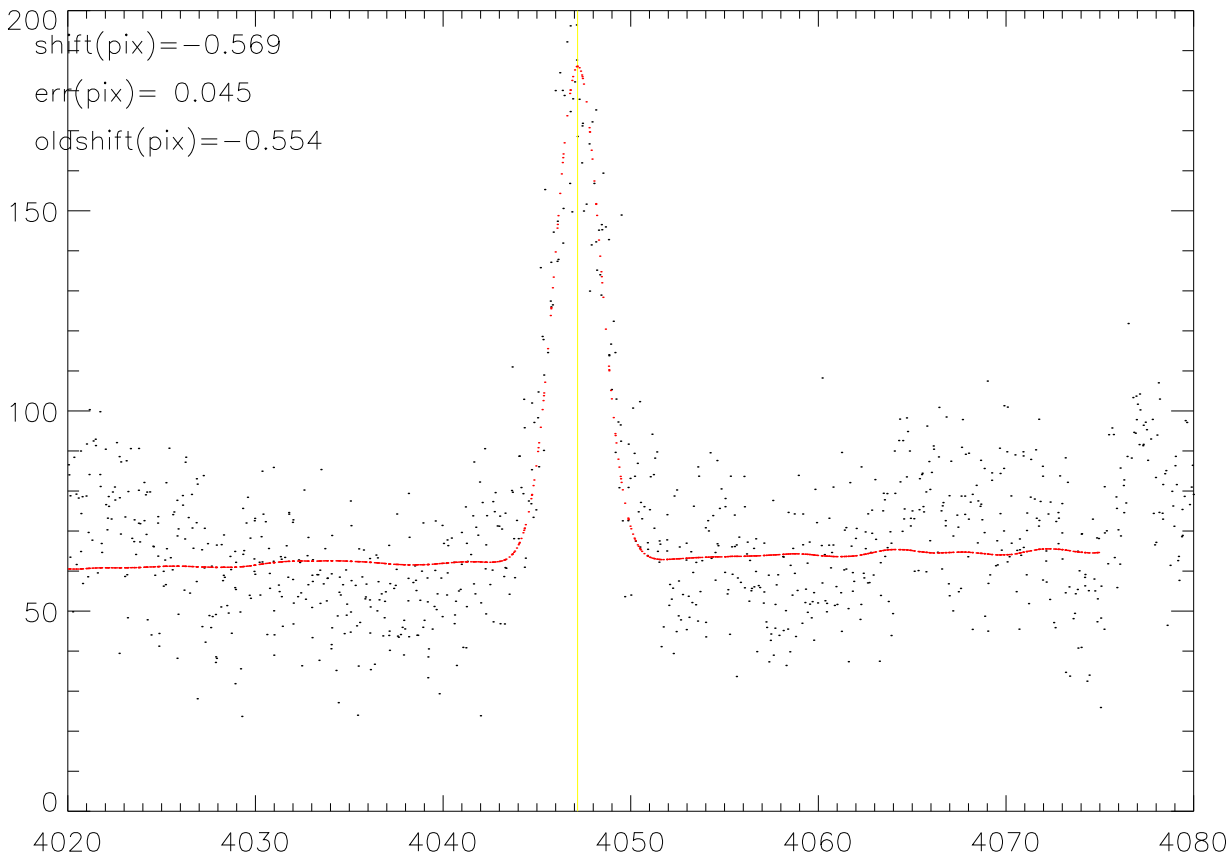

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-b1-00011334.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.449
Max value = 11.103
Mon Feb 25 15:56:17 2008

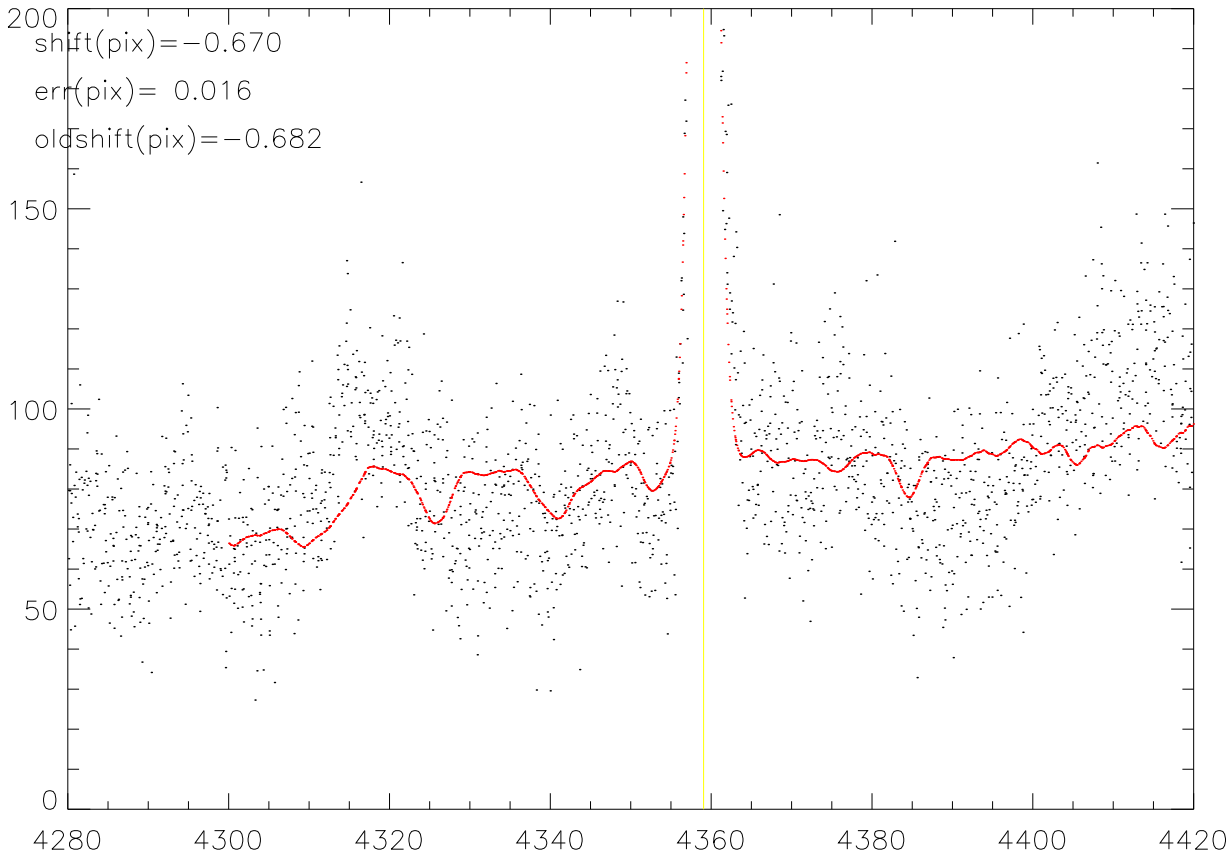

PLATE=0716 MJD=52202 Scattered Light on sdR-b1-00011334.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.55
4.64
5.73
6.82

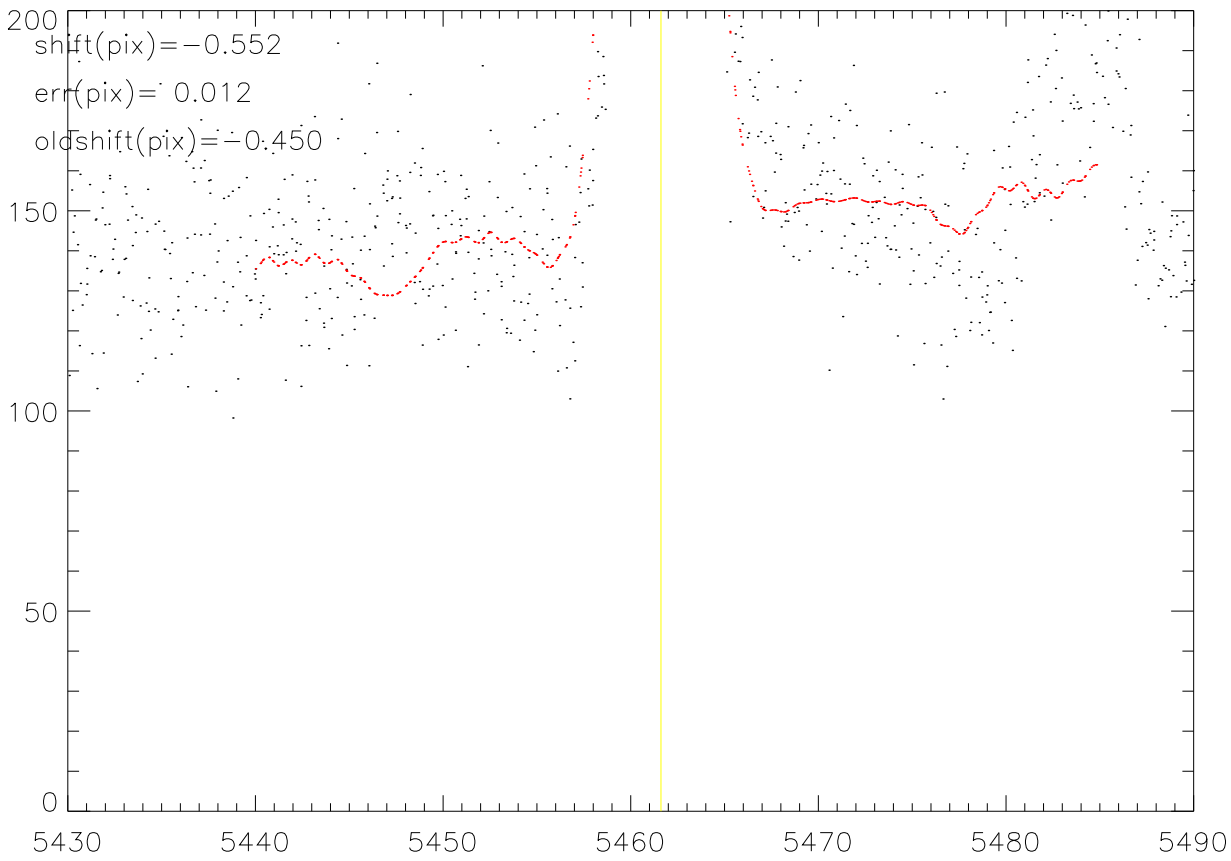

PLATE=0716 MJD=52202 Scattered Light on sdR-b1-00011334.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.240
Max value = 7.527
Mon Feb 25 15:59:36 2008

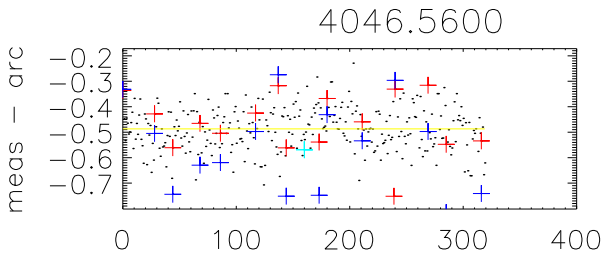

PLATE=0716 MJD=52202 Extraction chi^2 for sdR-b1-00011334.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

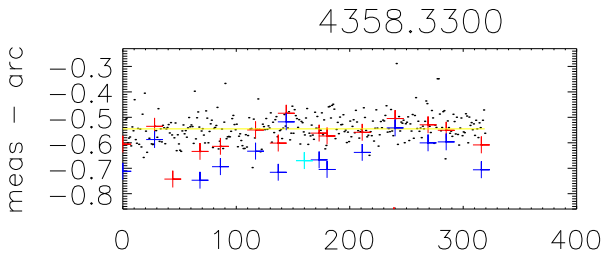

4046.5600
off: −0.55
sig: 0.041
4358.3300
off: −0.68
sig: 0.015
5460.9400
off: −0.45
sig: 0.010
5577.3390
off: −0.48
sig: 0.003
5889.9500
off: −0.32
sig: 0.008
5895.9240
off: −0.32
sig: 0.010

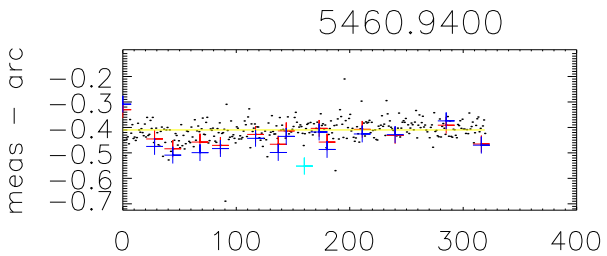

shift(pix)=−0.569
err(pix)= 0.045
oldshift(pix)=−0.554
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

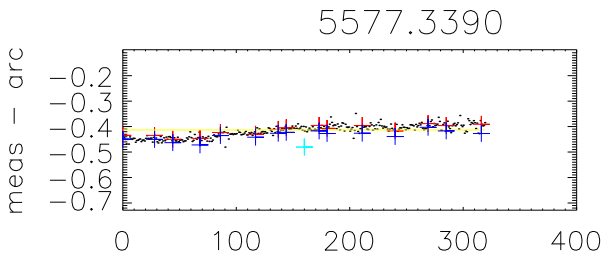

shift(pix)=−0.670
err(pix)= 0.016
oldshift(pix)=−0.682
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

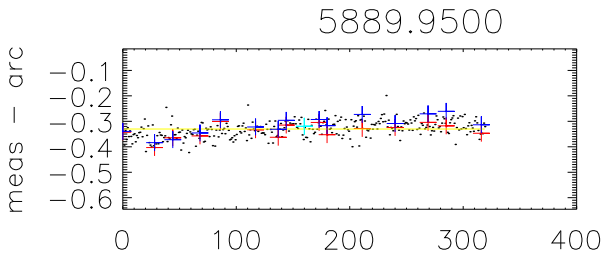

shift(pix)=−0.552
err(pix)= 0.012
oldshift(pix)=−0.450
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

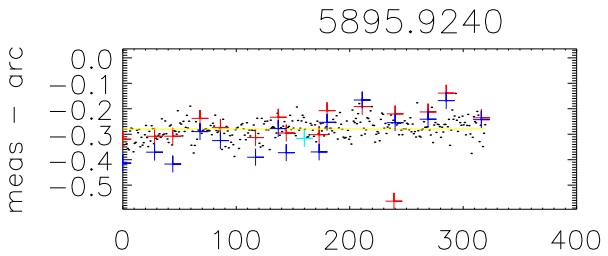

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

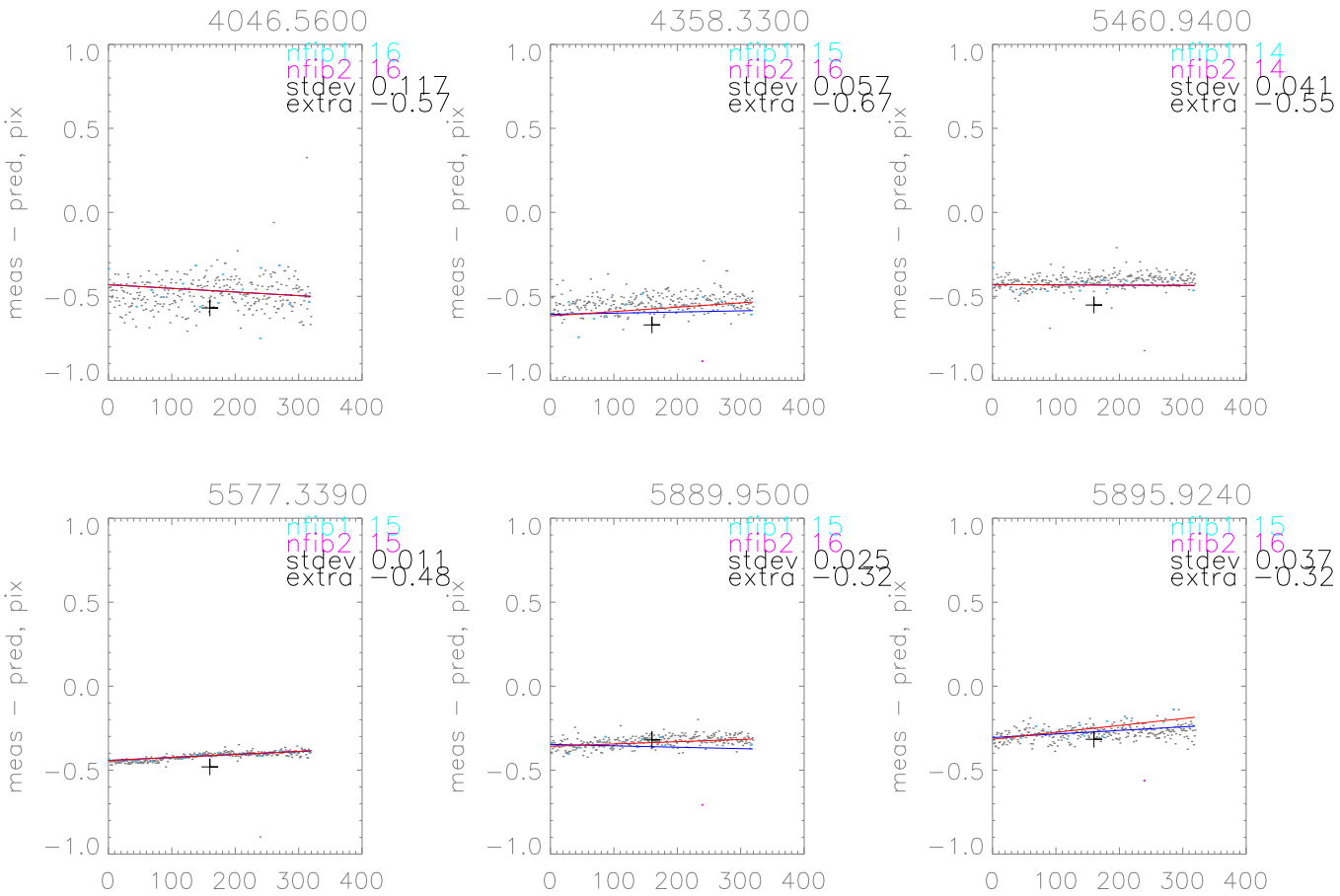

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

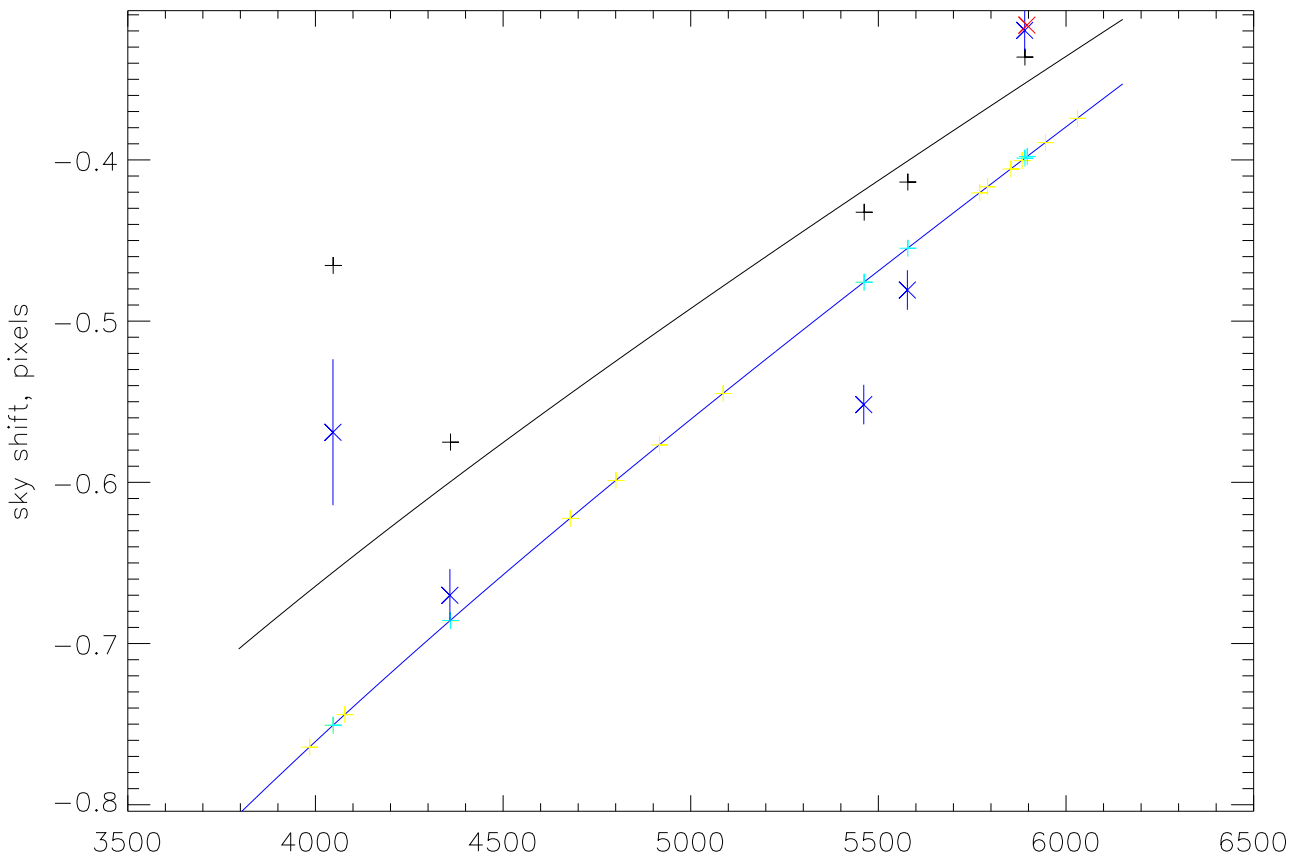

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

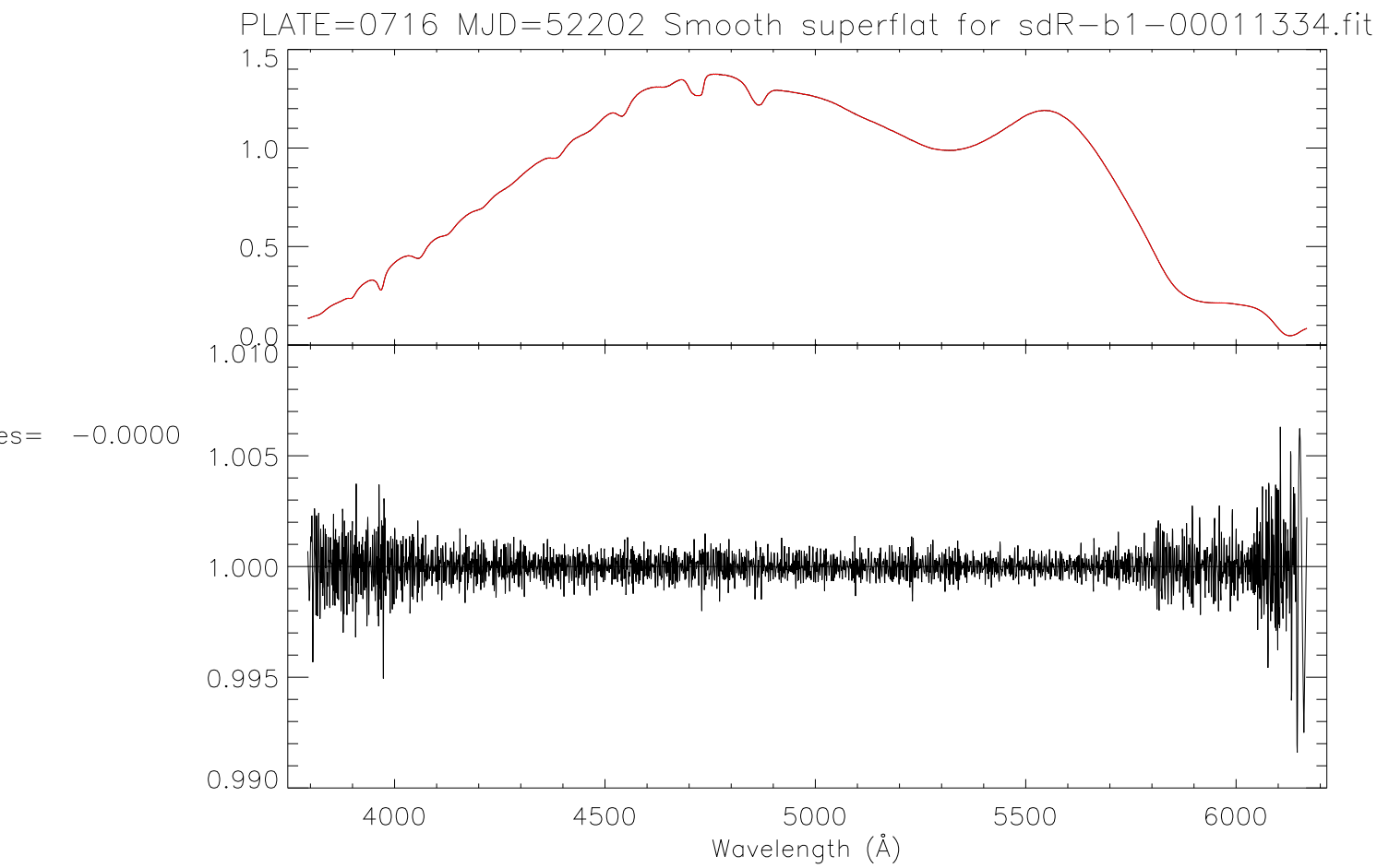

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

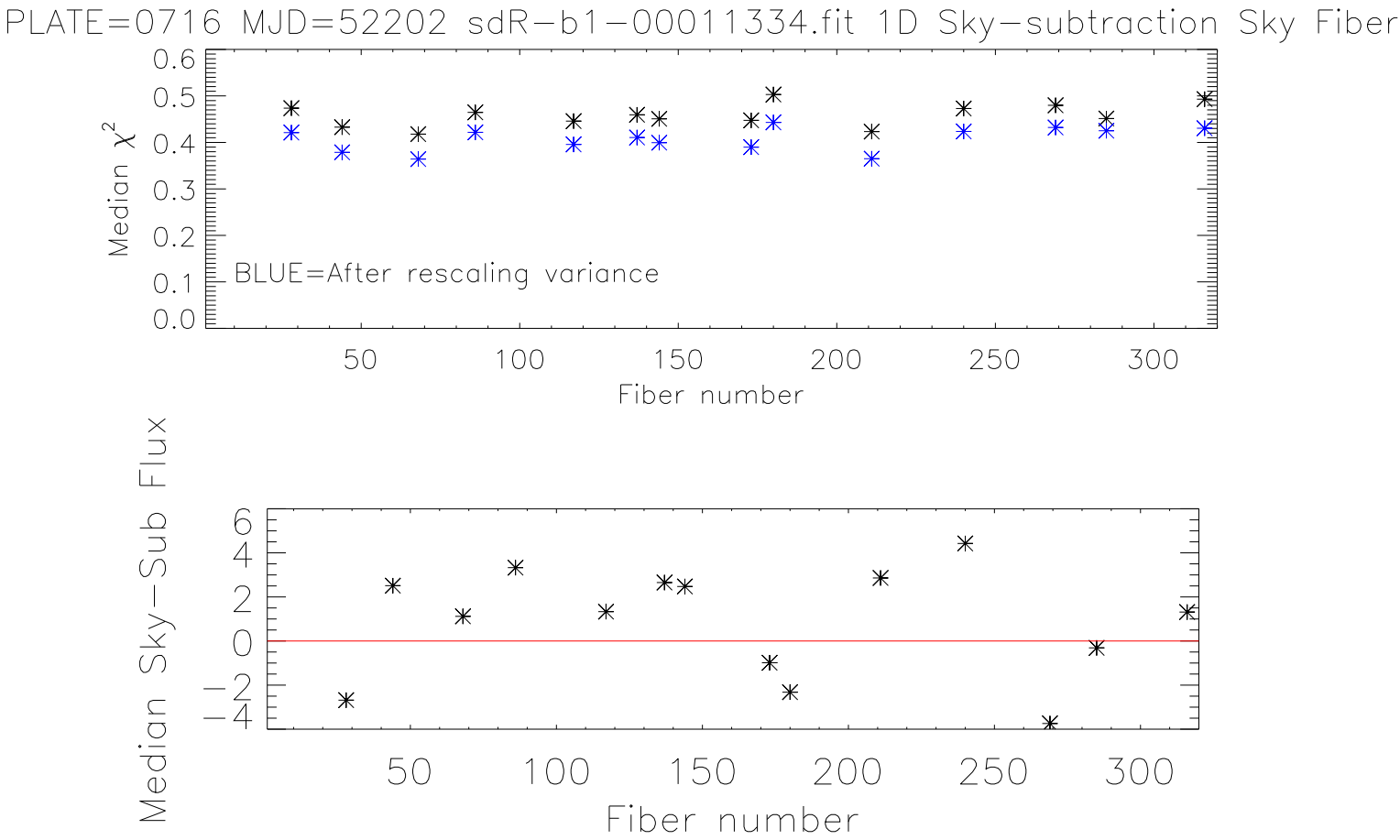

5889.9500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

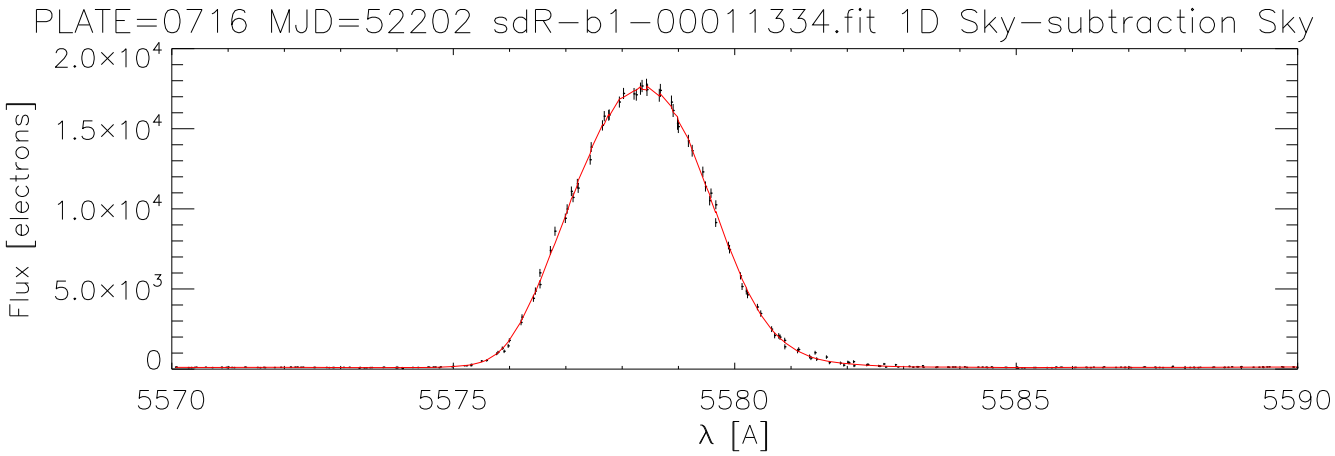

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

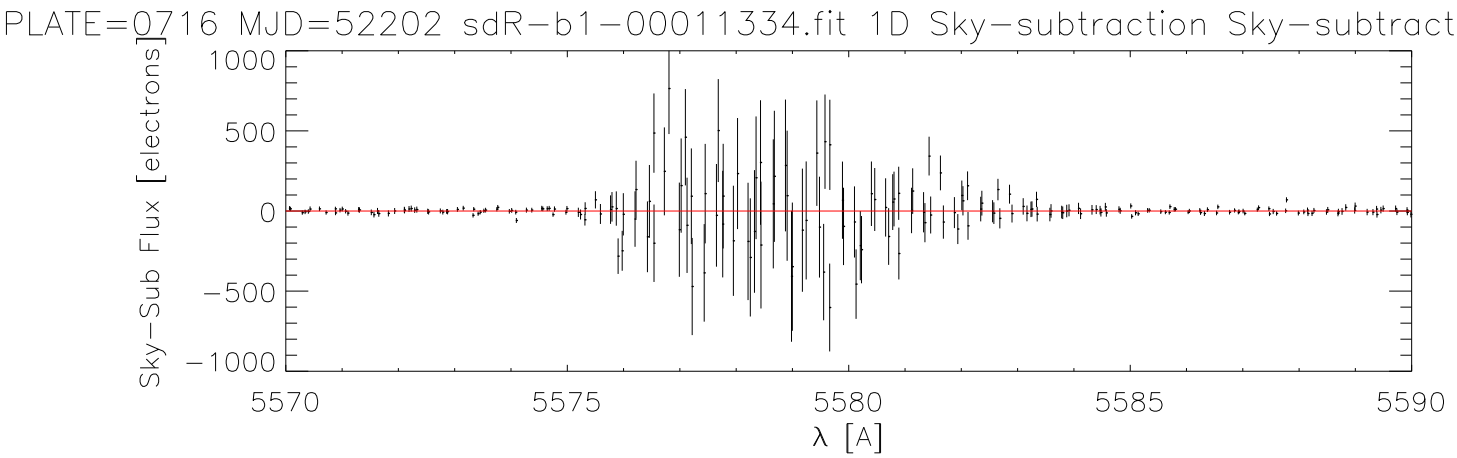

4046.5600
nfib1 16
nfib2 16
stdev 0.117
extra −0.57
4358.3300
nfib1 15
nfib2 16
stdev 0.057
extra −0.67
5460.9400
nfib1 14
nfib2 14
stdev 0.041
extra −0.55
5577.3390
nfib1 15
nfib2 15
stdev 0.011
extra −0.48
5889.9500
nfib1 15
nfib2 16
stdev 0.025
extra −0.32
5895.9240
nfib1 15
nfib2 16
stdev 0.037
extra −0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

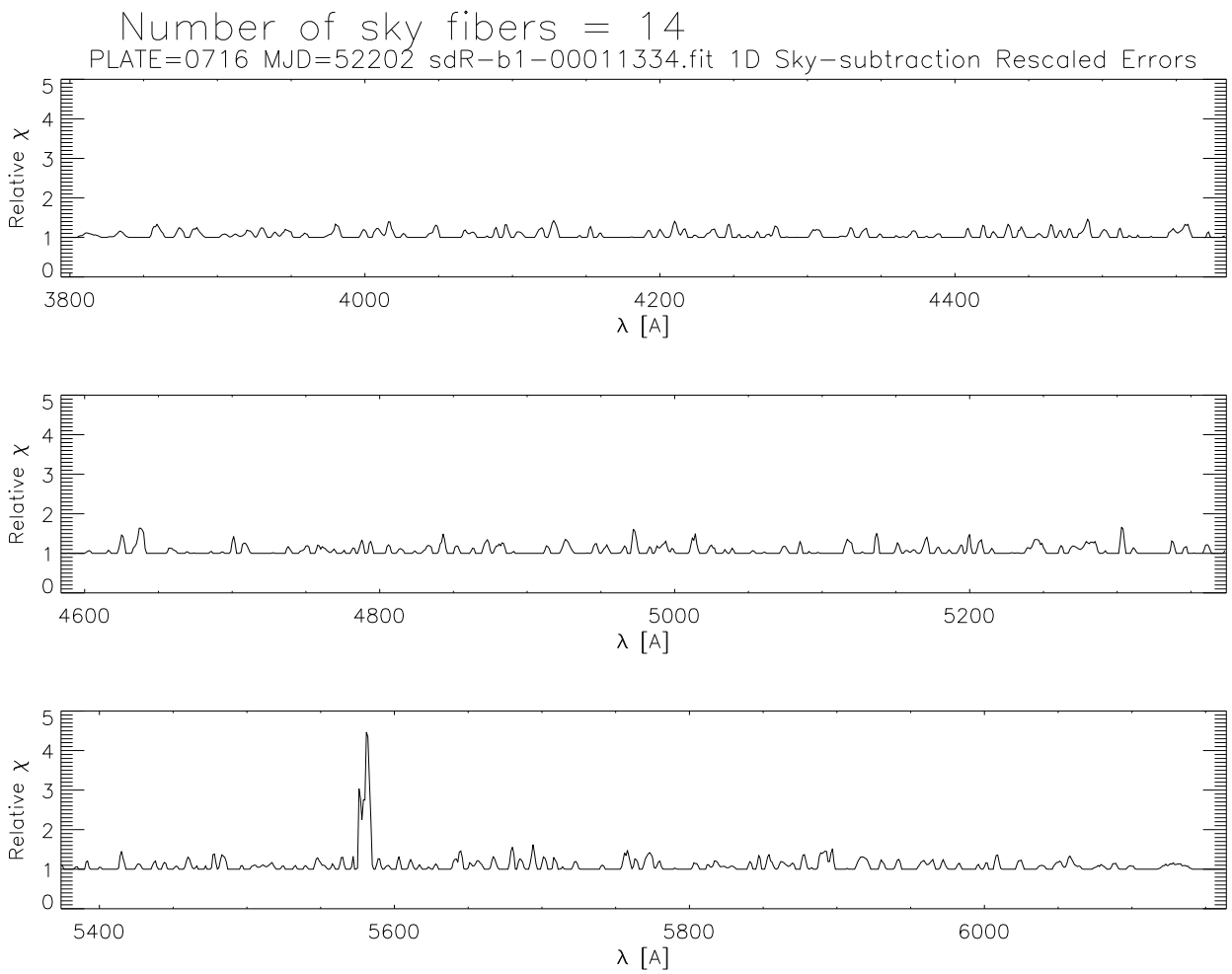

sky shift, pixels
−0.4
−0.5
−0.6
−0.7
−0.8
3500
4000
4500
5000
5500
6000
6500

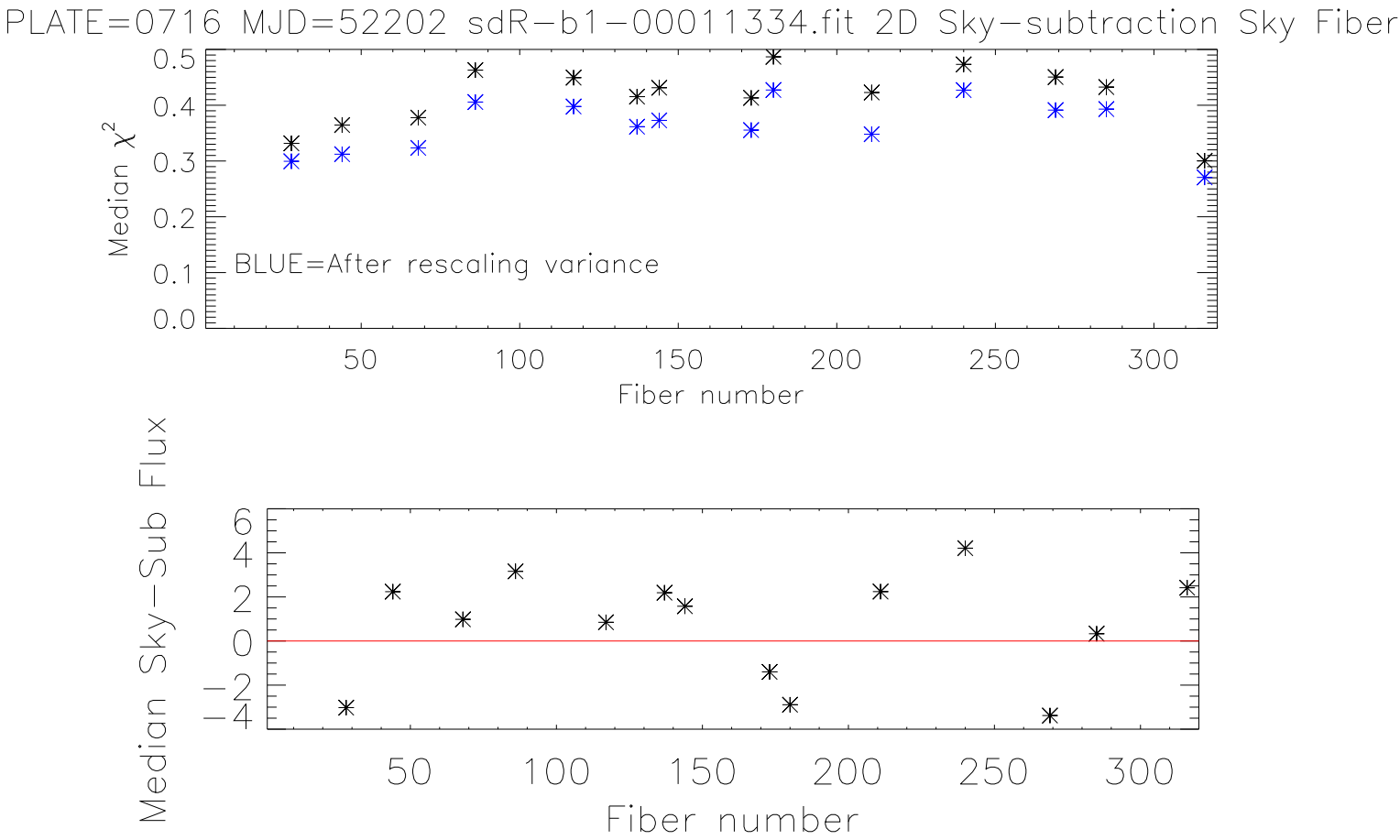

PLATE=0716 MJD=52202 Smooth superflat for sdR-b1-00011334.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

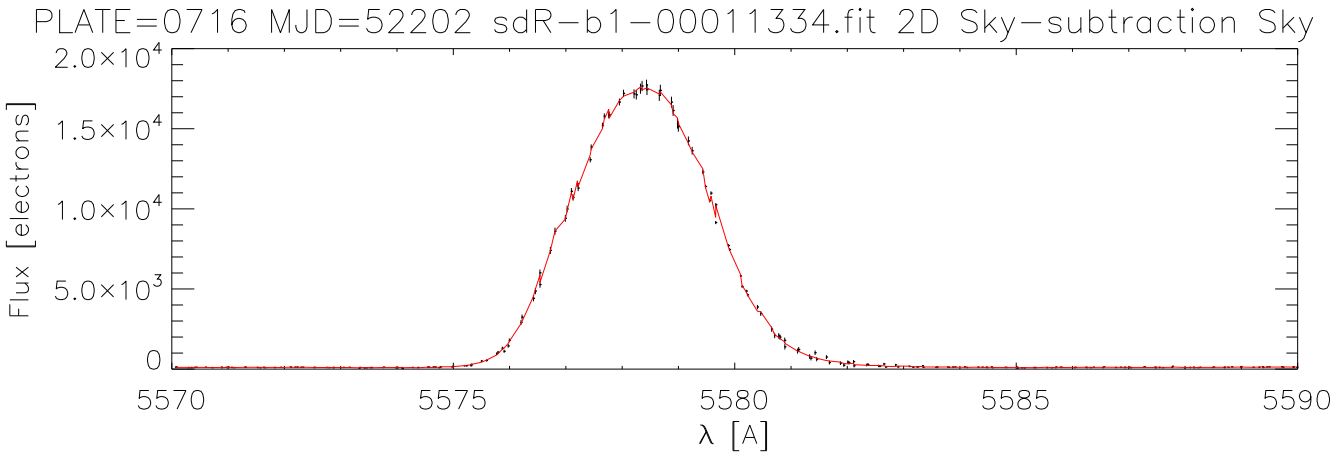

PLATE=0716 MJD=52202 sdR-b1-00011334.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

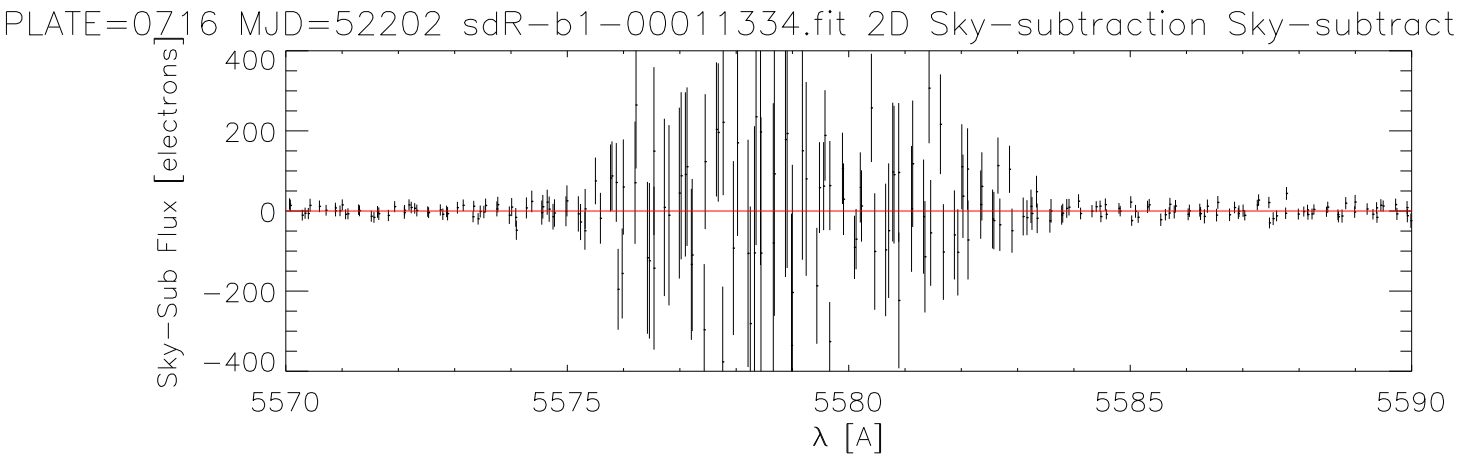

PLATE=0716 MJD=52202 sdR-b1-00011334.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

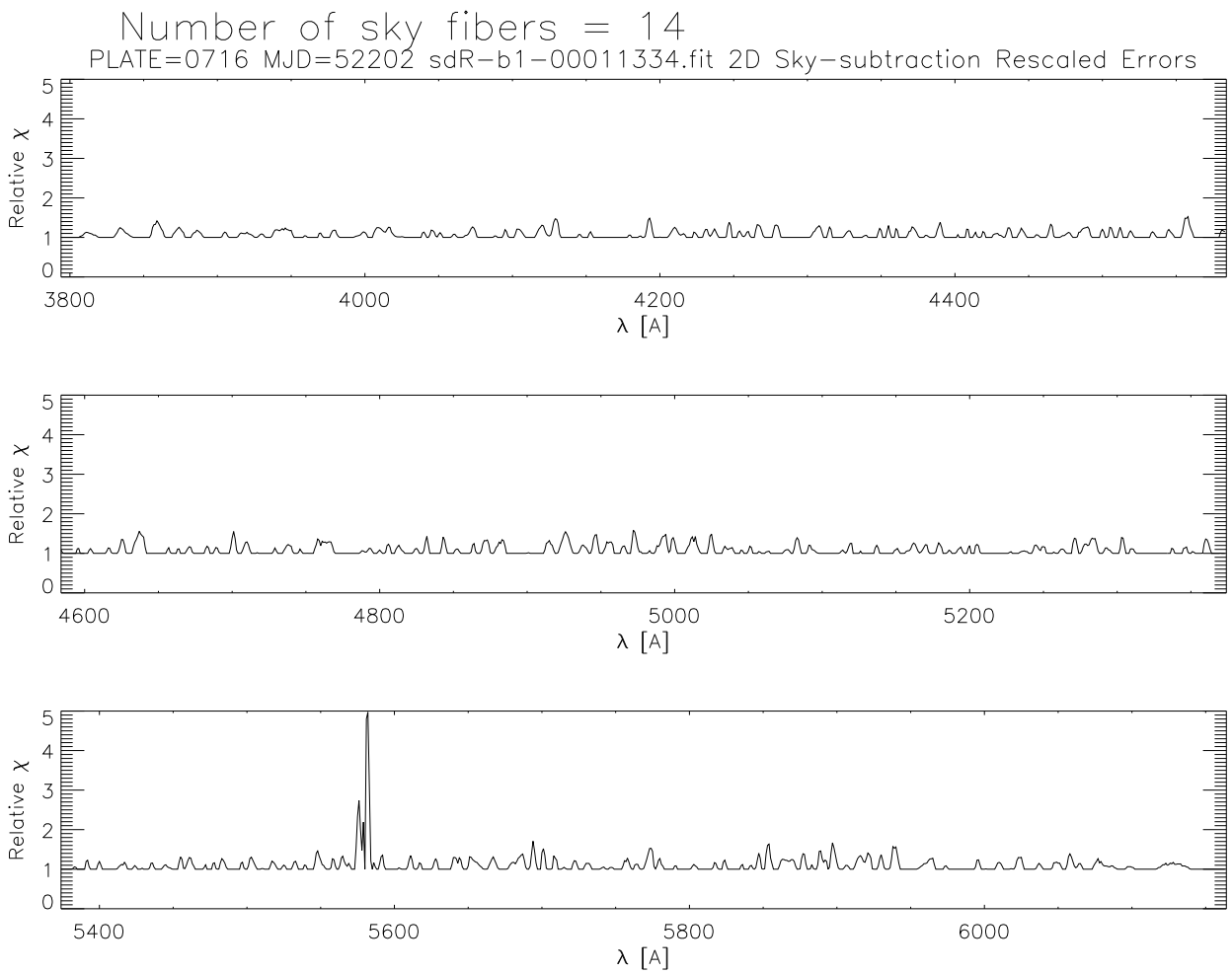

PLATE=0716 MJD=52202 sdR-b1-00011334.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

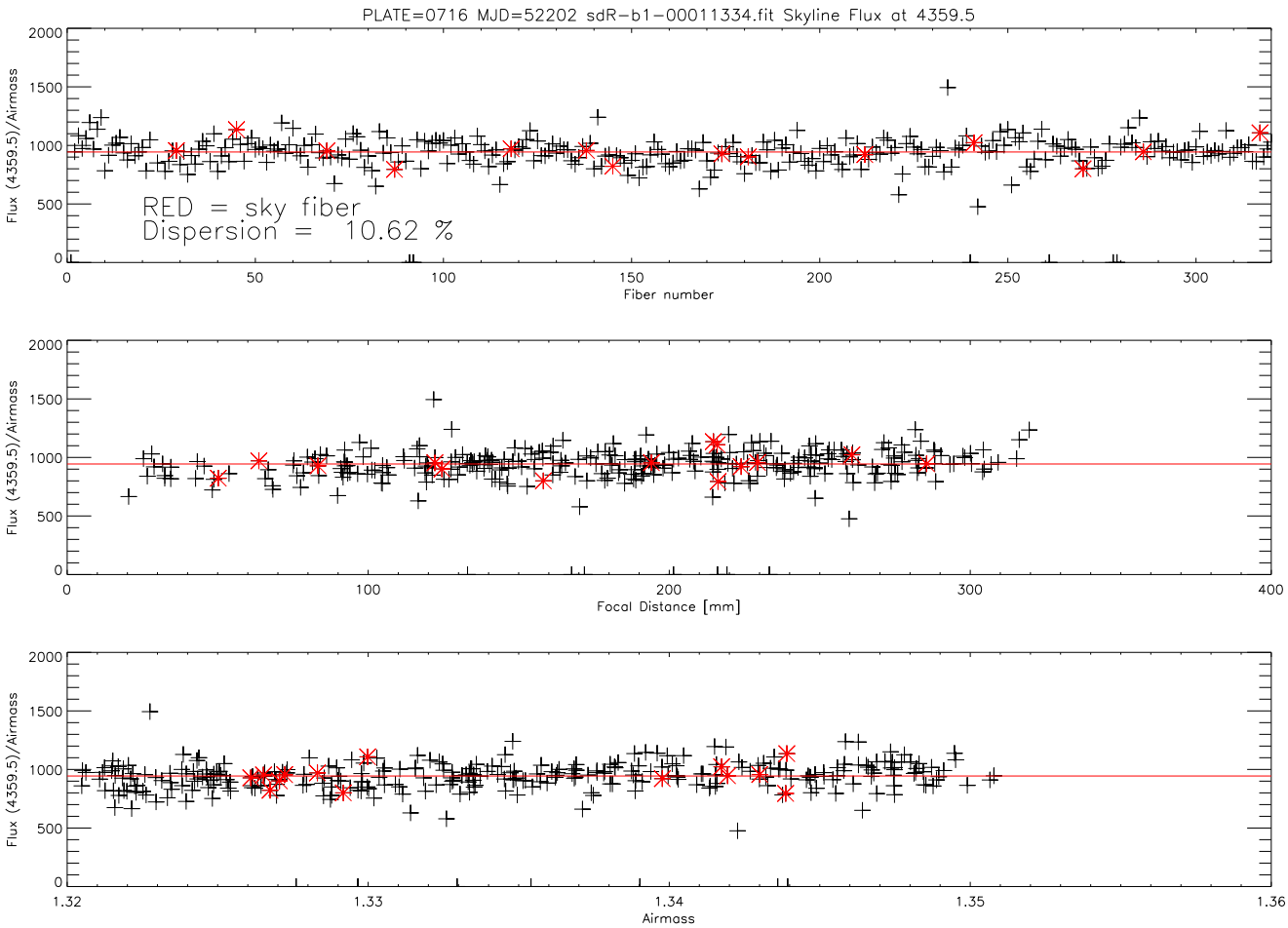

Number of sky fibers = 14
PLATE=0716 MJD=52202 sdR-b1-00011334.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

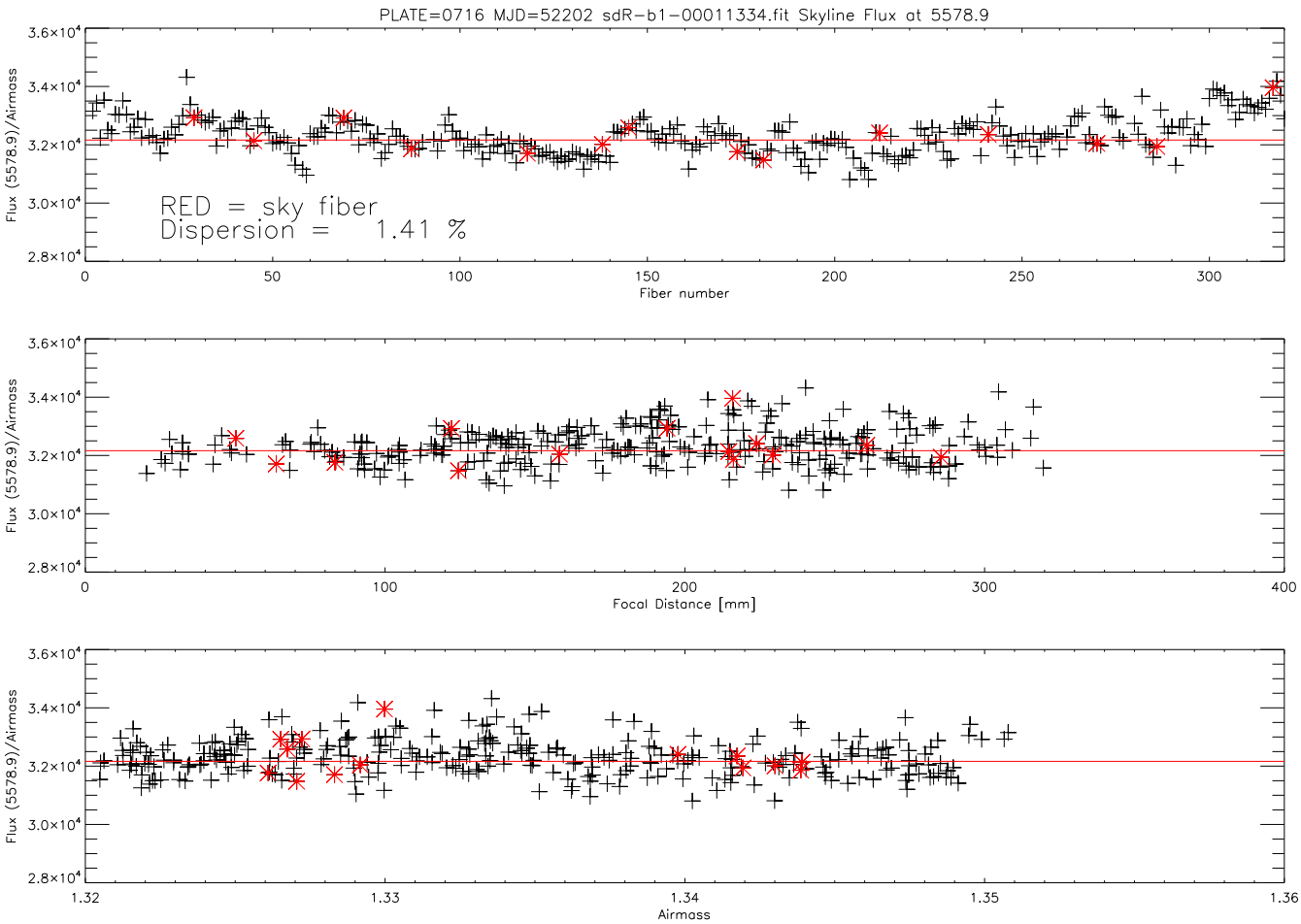

PLATE=0716 MJD=52202 sdR-b1-00011334.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

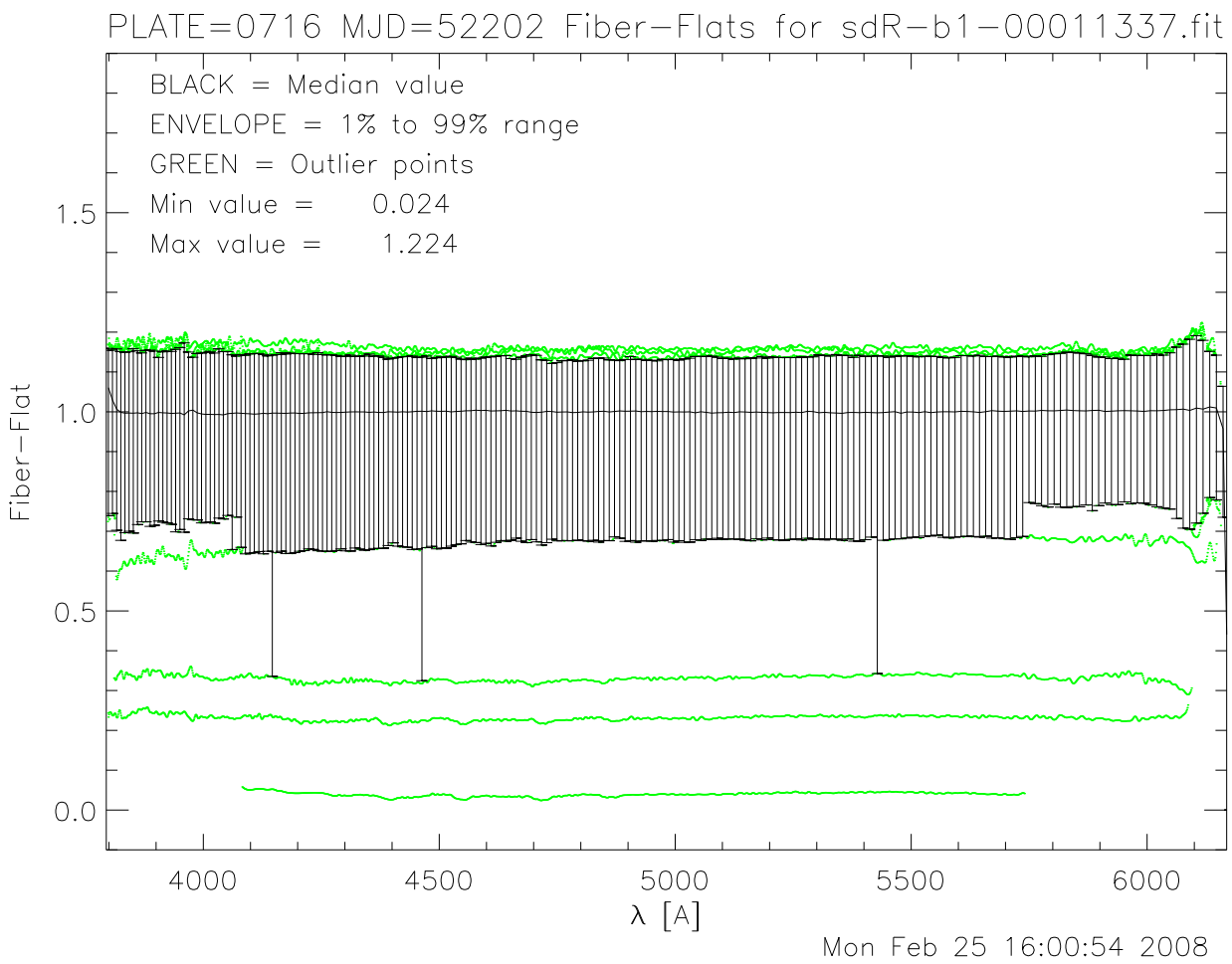

PLATE=0716 MJD=52202 sdR-b1-00011334.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

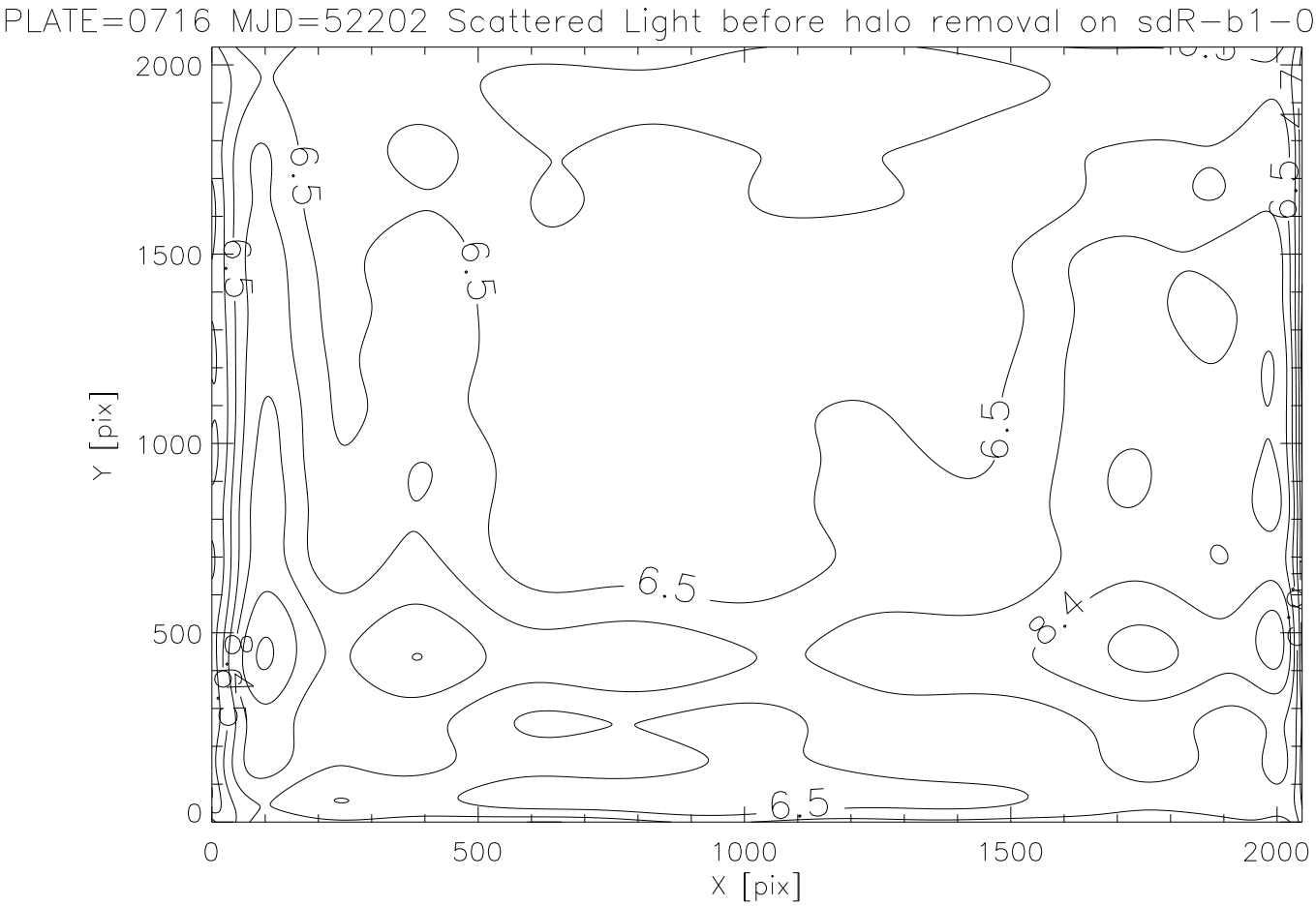

PLATE=0716 MJD=52202 sdR-b1-00011334.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

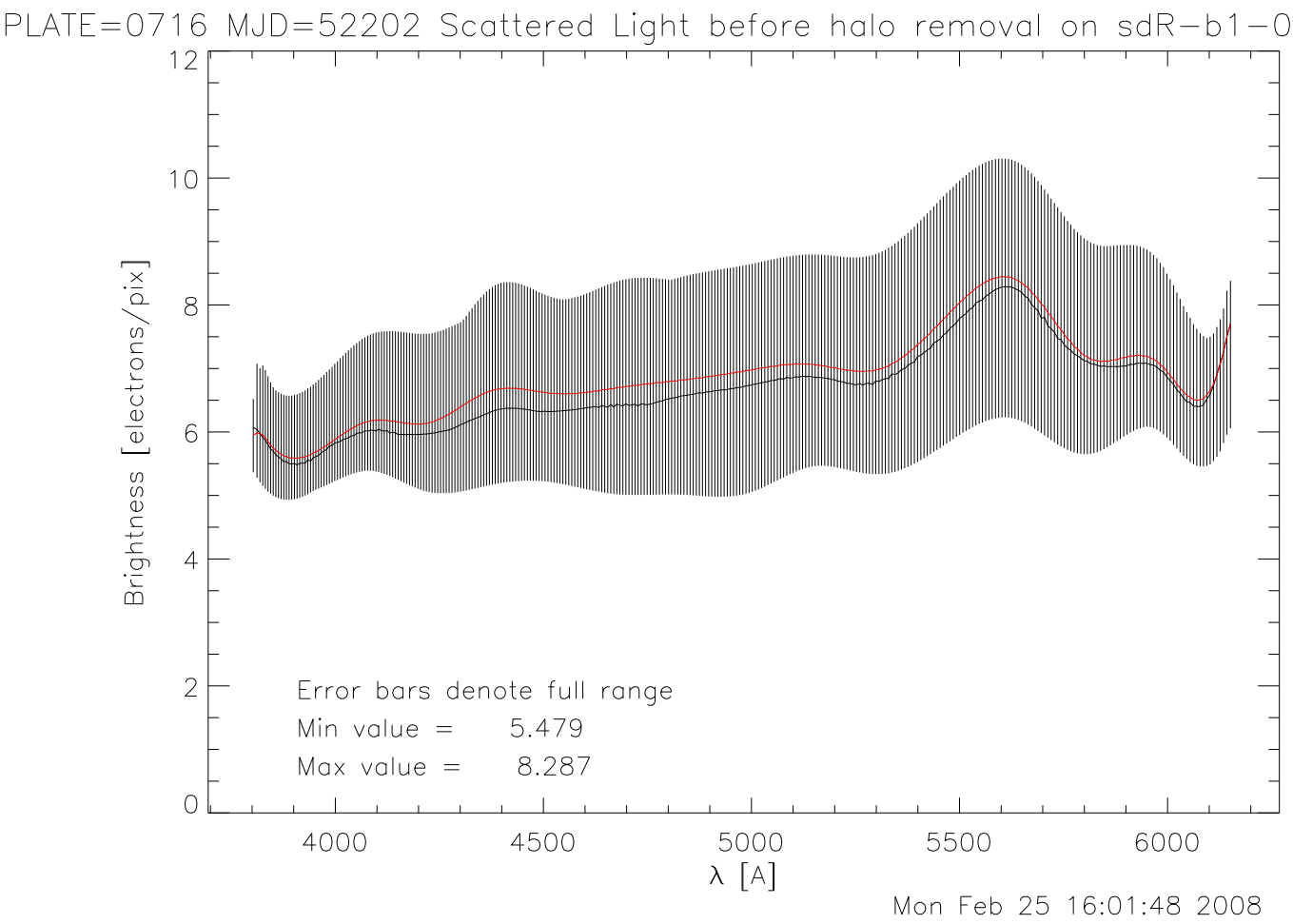

Number of sky fibers = 14
PLATE=0716 MJD=52202 sdR-b1-00011334.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

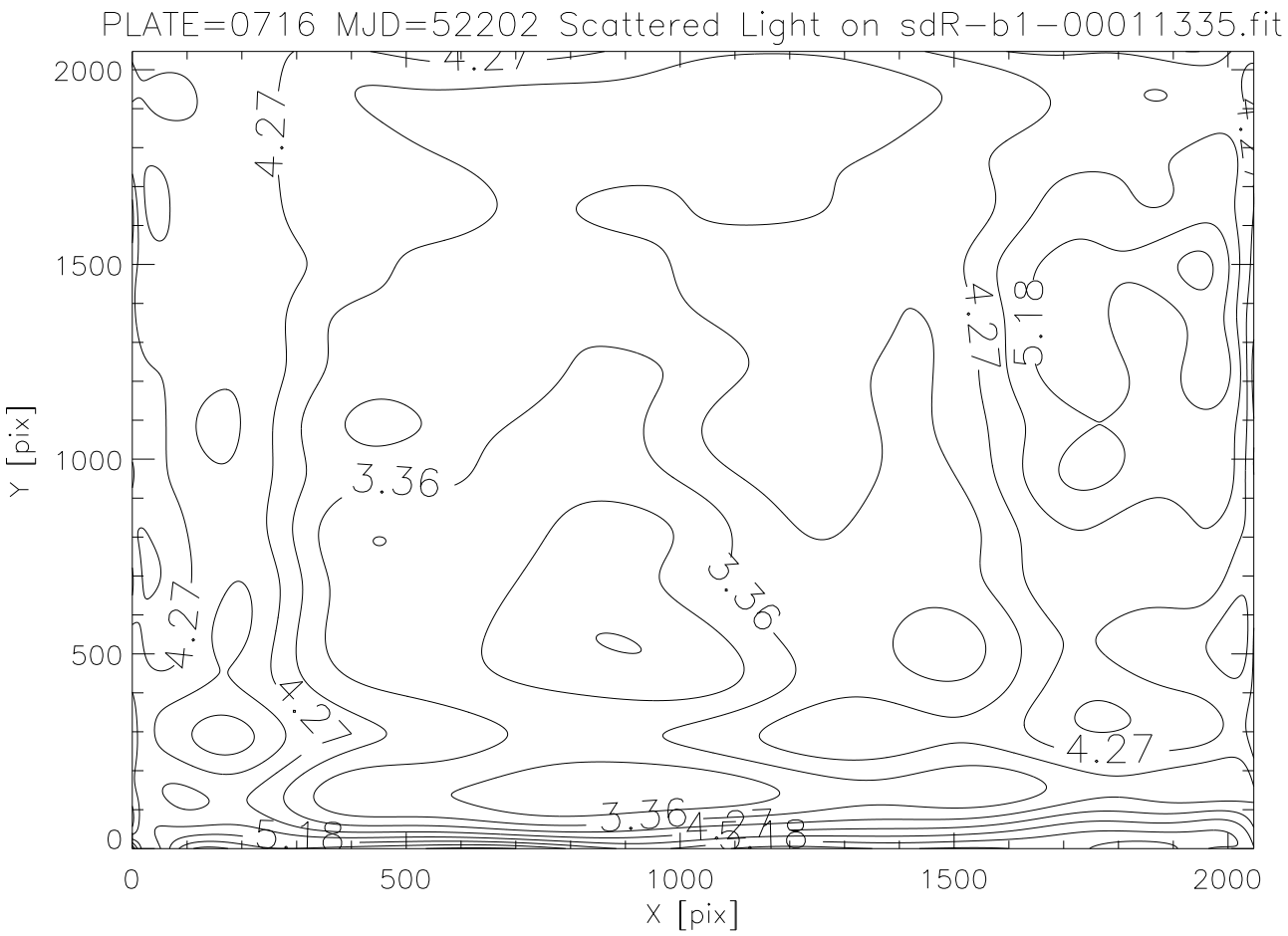

PLATE=0716 MJD=52202 sdR-b1-00011334.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.62 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

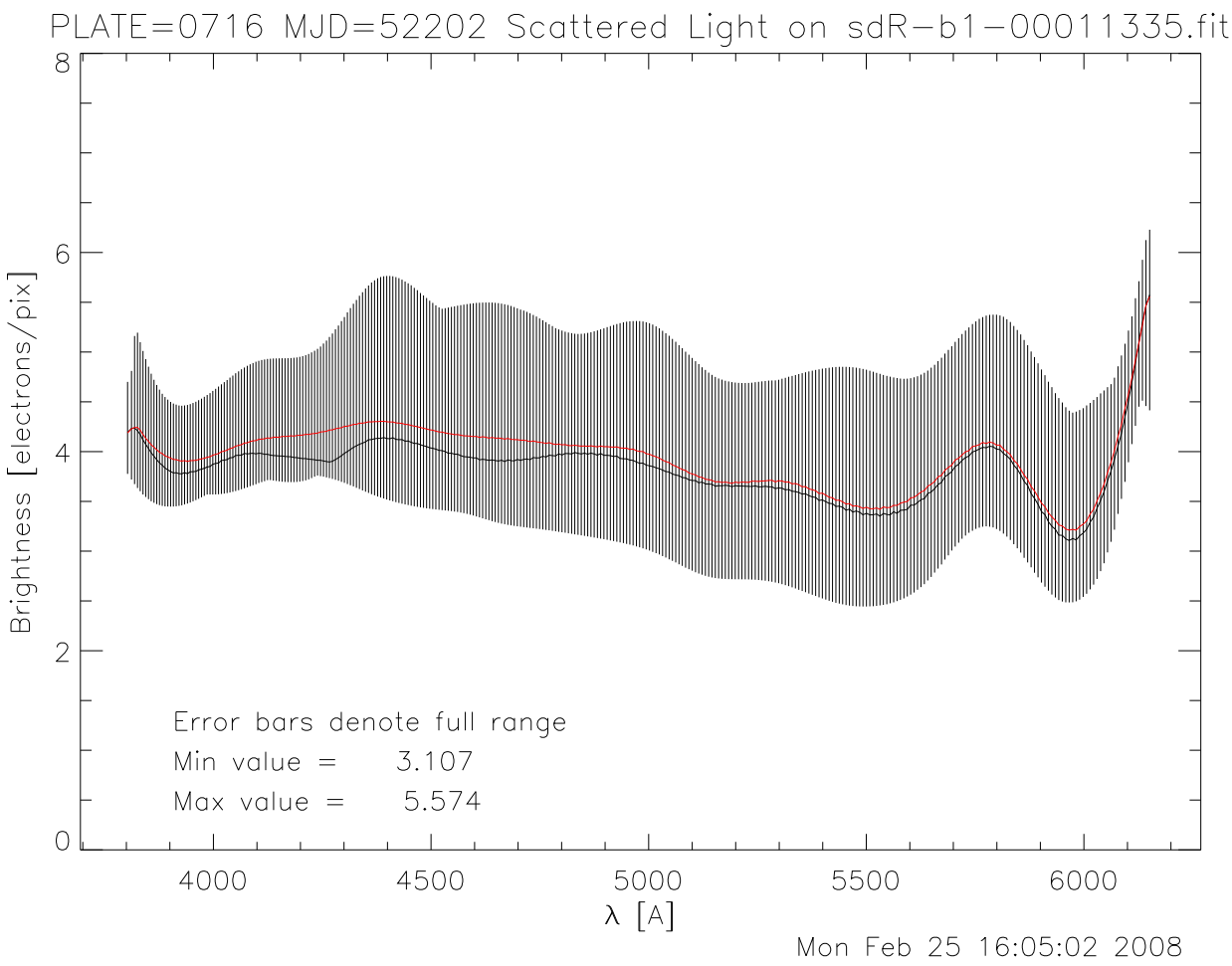

PLATE=0716 MJD=52202 sdR-b1-00011334.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.41 %
Fiber number
Focal Distance [mm]
Airmass

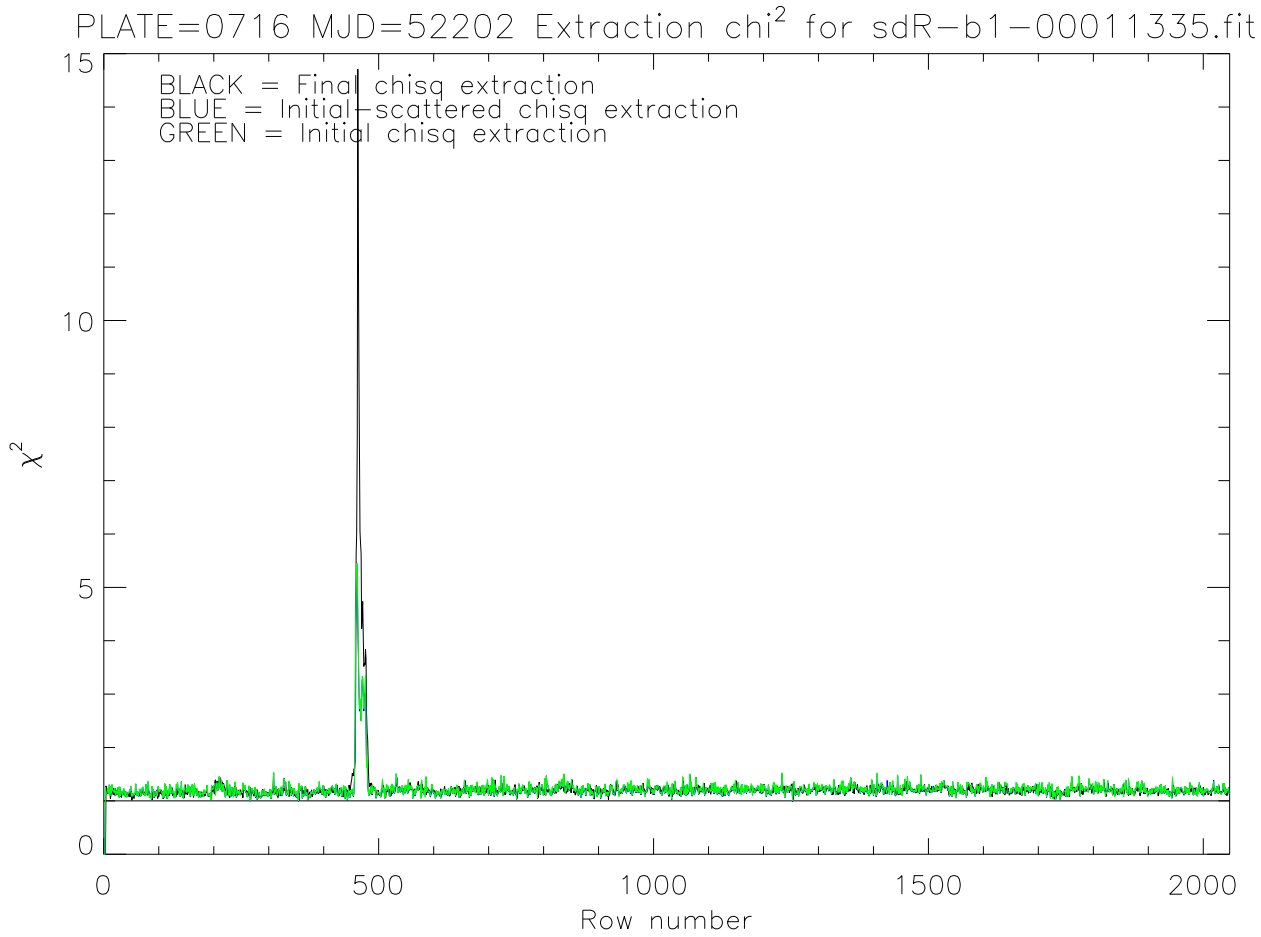

PLATE=0716 MJD=52202 Fiber−Flats for sdR−b1−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.024
Max value = 1.224
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 16:00:54 2008

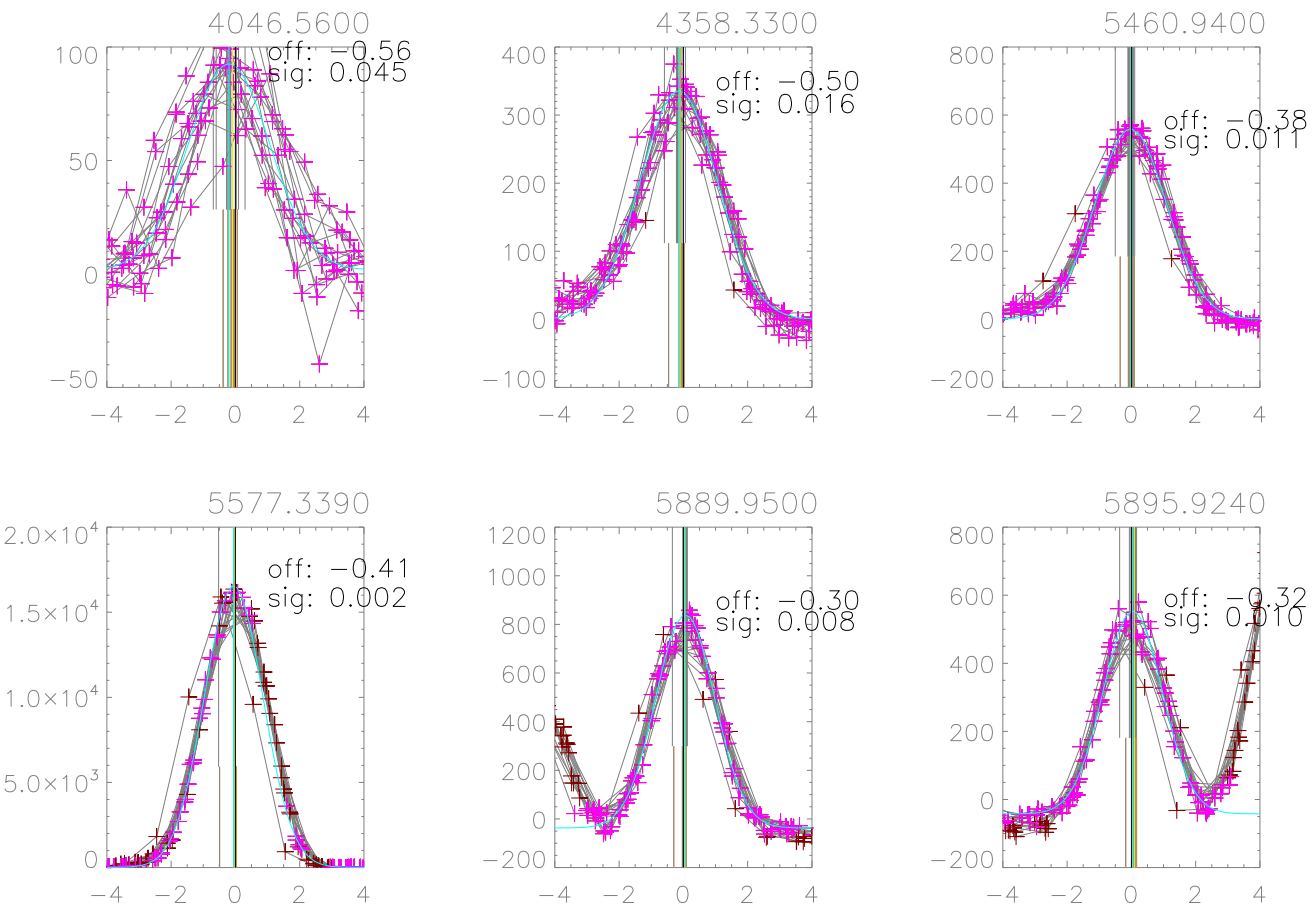

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR−b1−00011335.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4

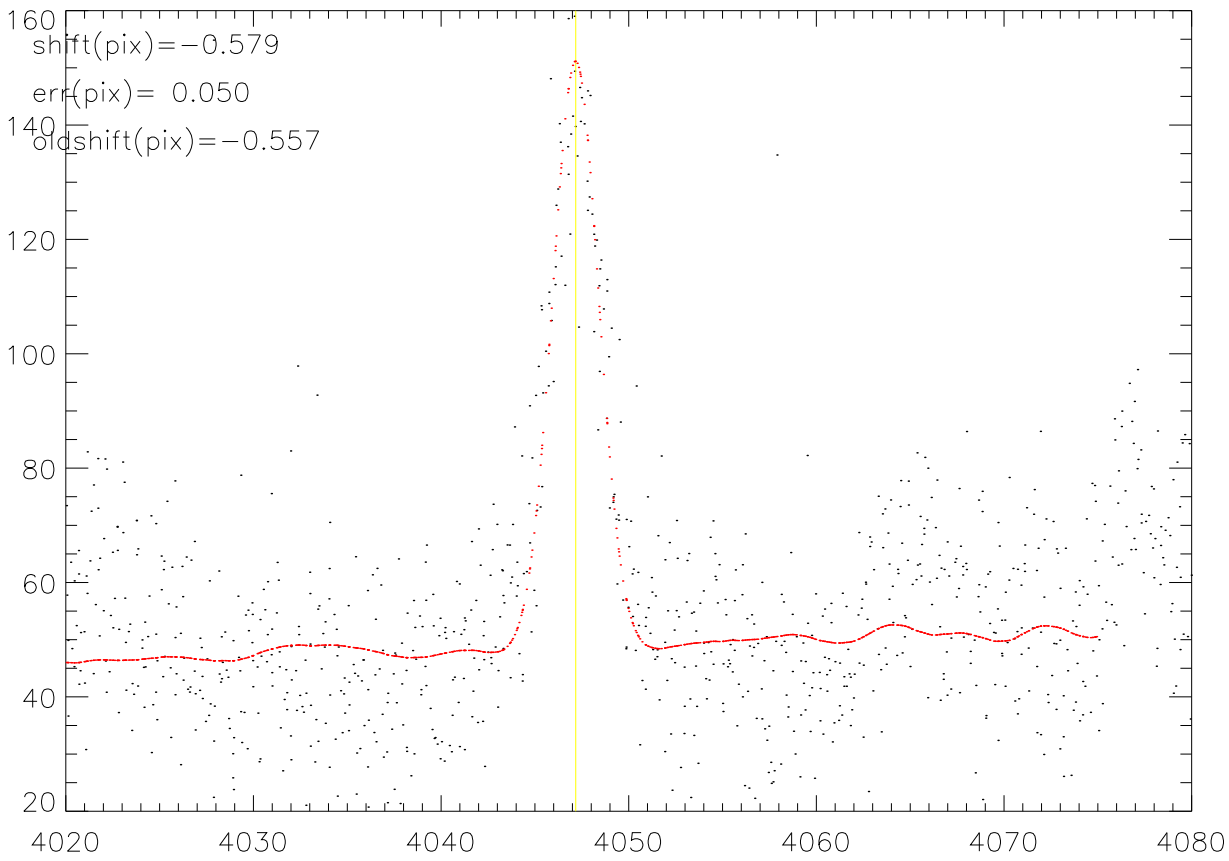

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR−b1−00011335.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.479
Max value = 8.287
Mon Feb 25 16:01:48 2008

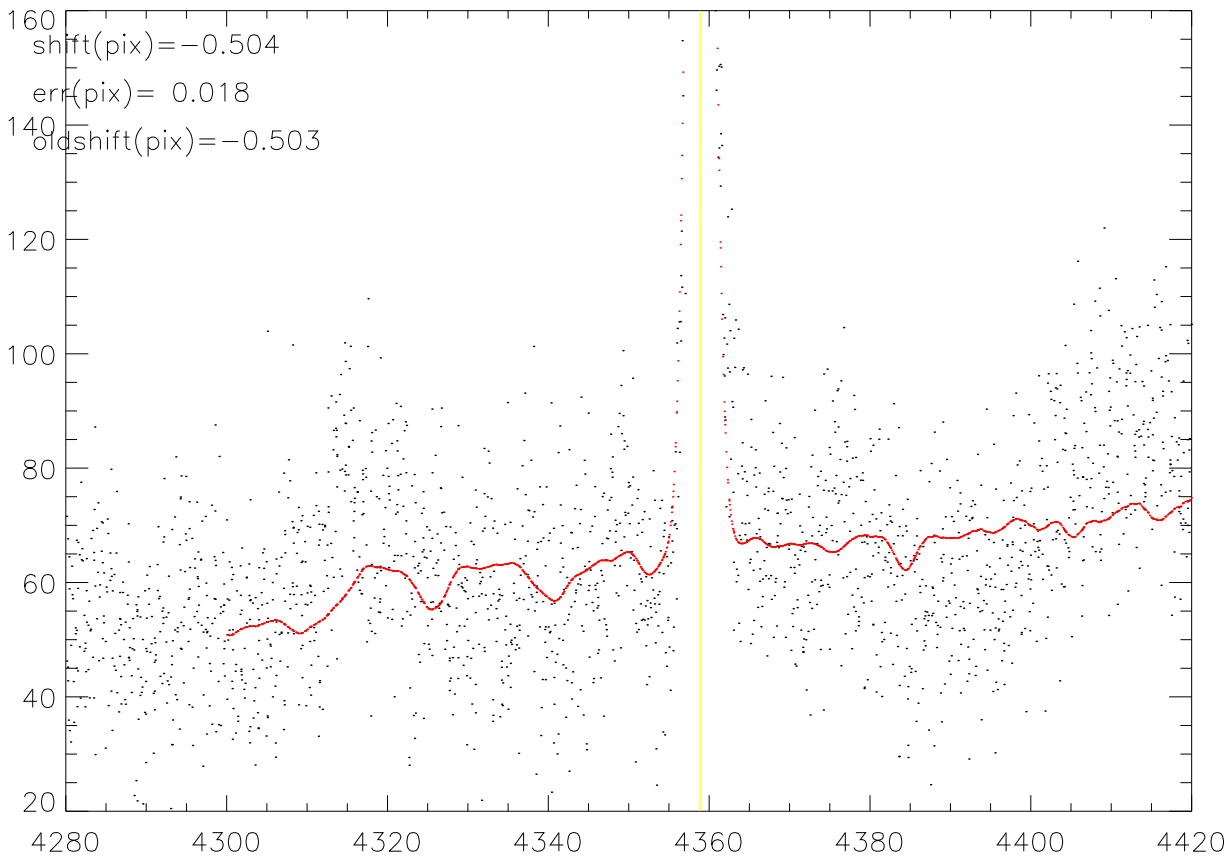

PLATE=0716 MJD=52202 Scattered Light on sdR-b1-00011335.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.27
3.36
5.18

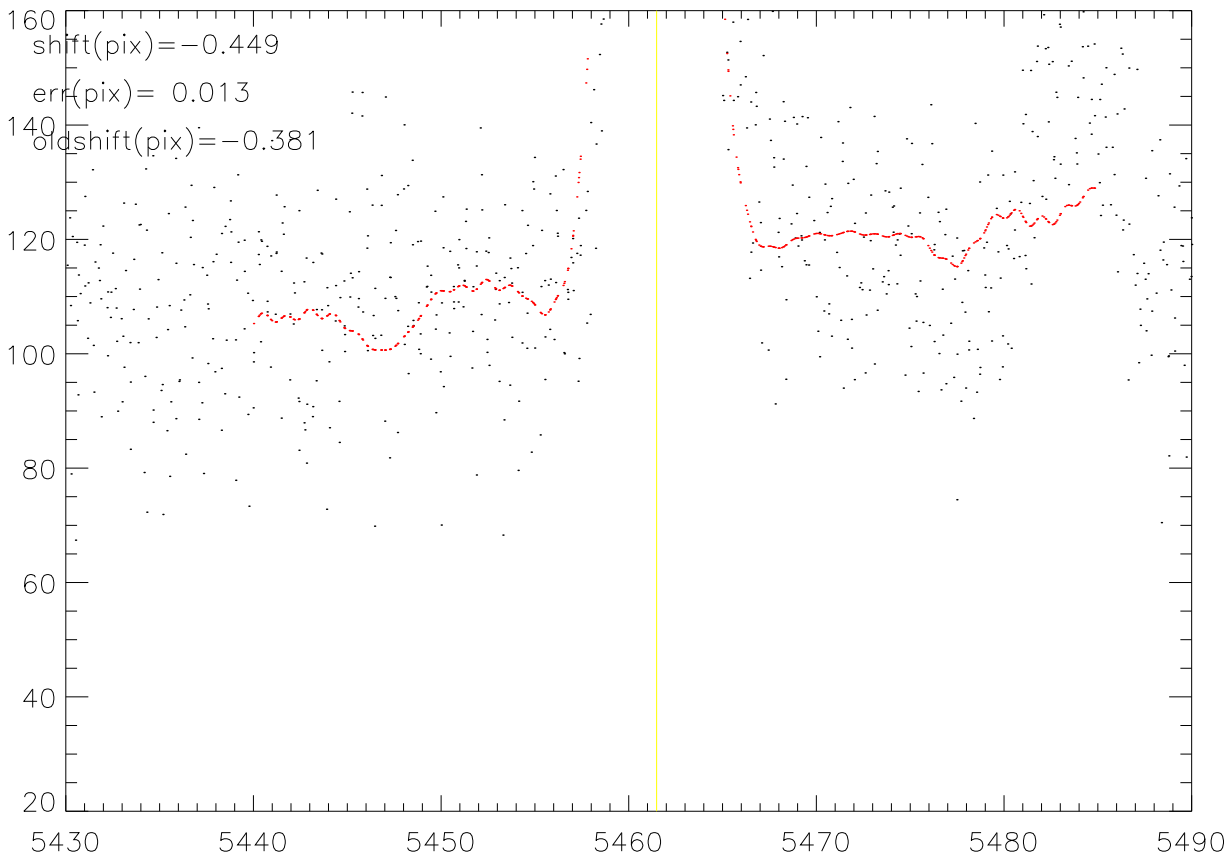

PLATE=0716 MJD=52202 Scattered Light on sdR-b1-00011335.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.107
Max value = 5.574
Mon Feb 25 16:05:02 2008

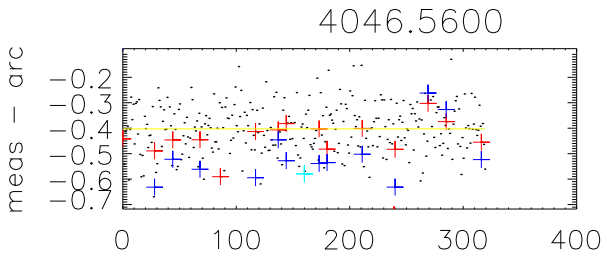

PLATE=0716 MJD=52202 Extraction chi^2 for sdR−b1−00011335.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number

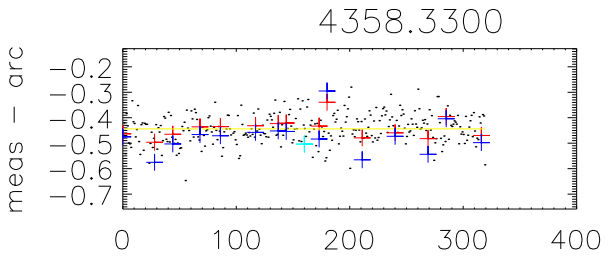

4046.5600
off: −0.56
sig: 0.045
4358.3300
off: −0.50
sig: 0.016
5460.9400
off: −0.38
sig: 0.011
5577.3390
off: −0.41
sig: 0.002
5889.9500
off: −0.30
sig: 0.008
5895.9240
off: −0.32
sig: 0.010

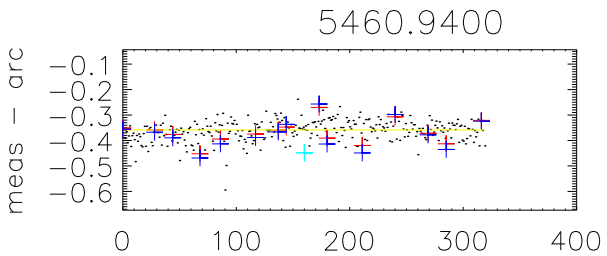

shift(pix)=−0.579
err(pix)= 0.050
oldshift(pix)=−0.557
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

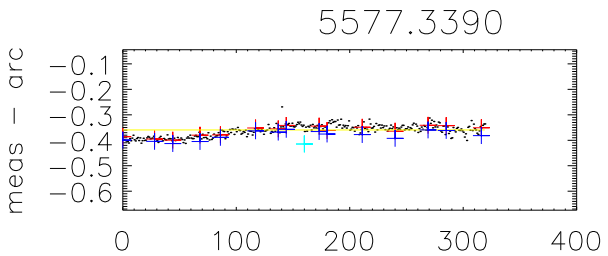

shift(pix)=−0.504
err(pix)= 0.018
oldshift(pix)=−0.503
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

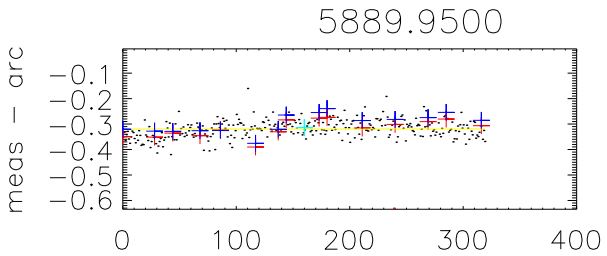

shift(pix)=−0.449
err(pix)= 0.013
oldshift(pix)=−0.381
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

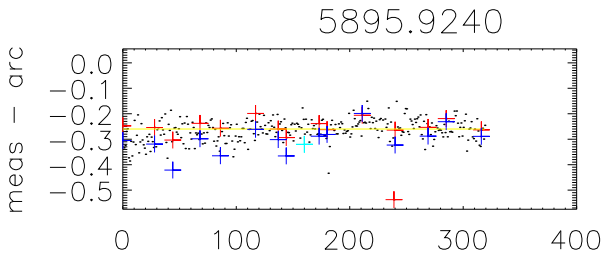

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

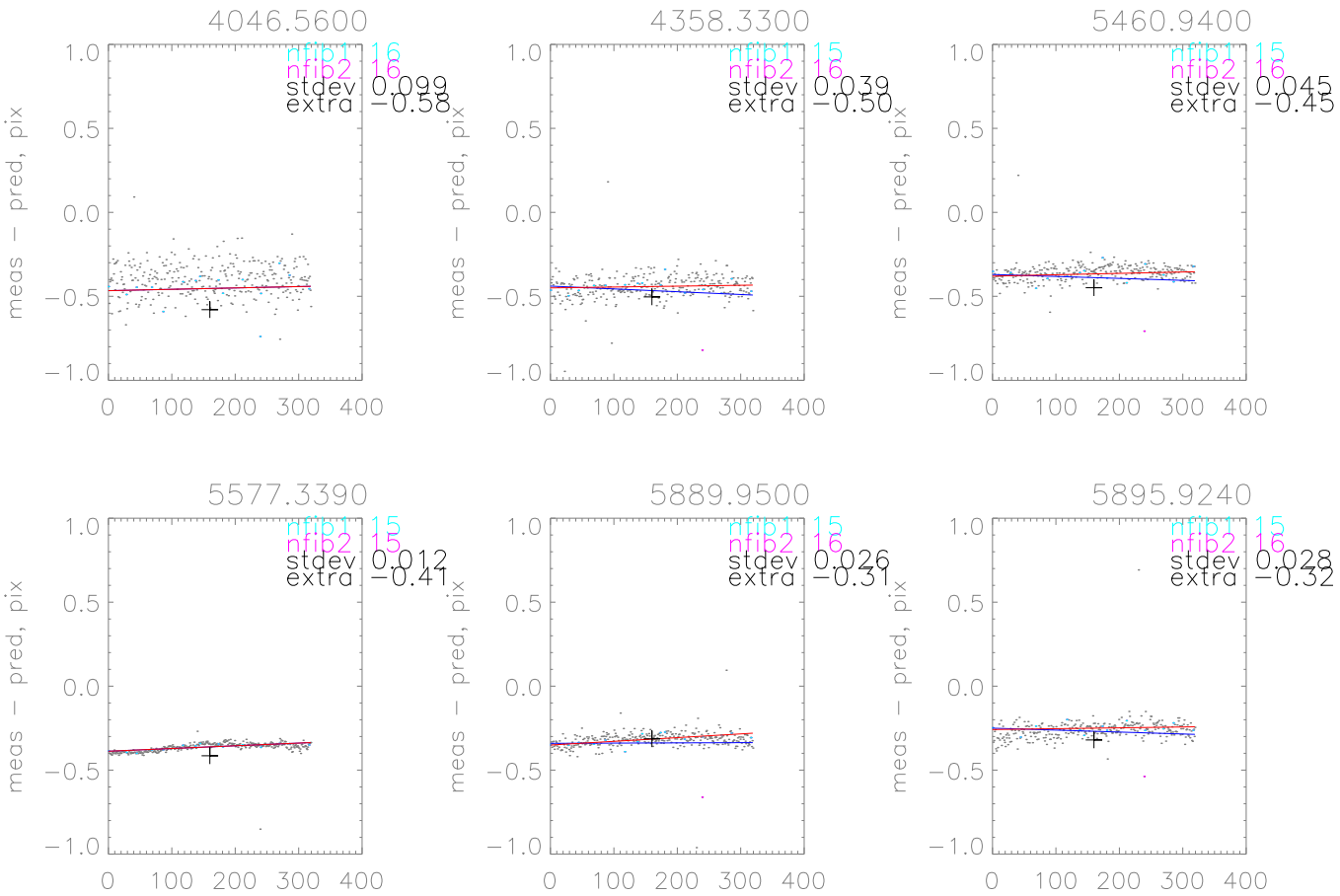

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

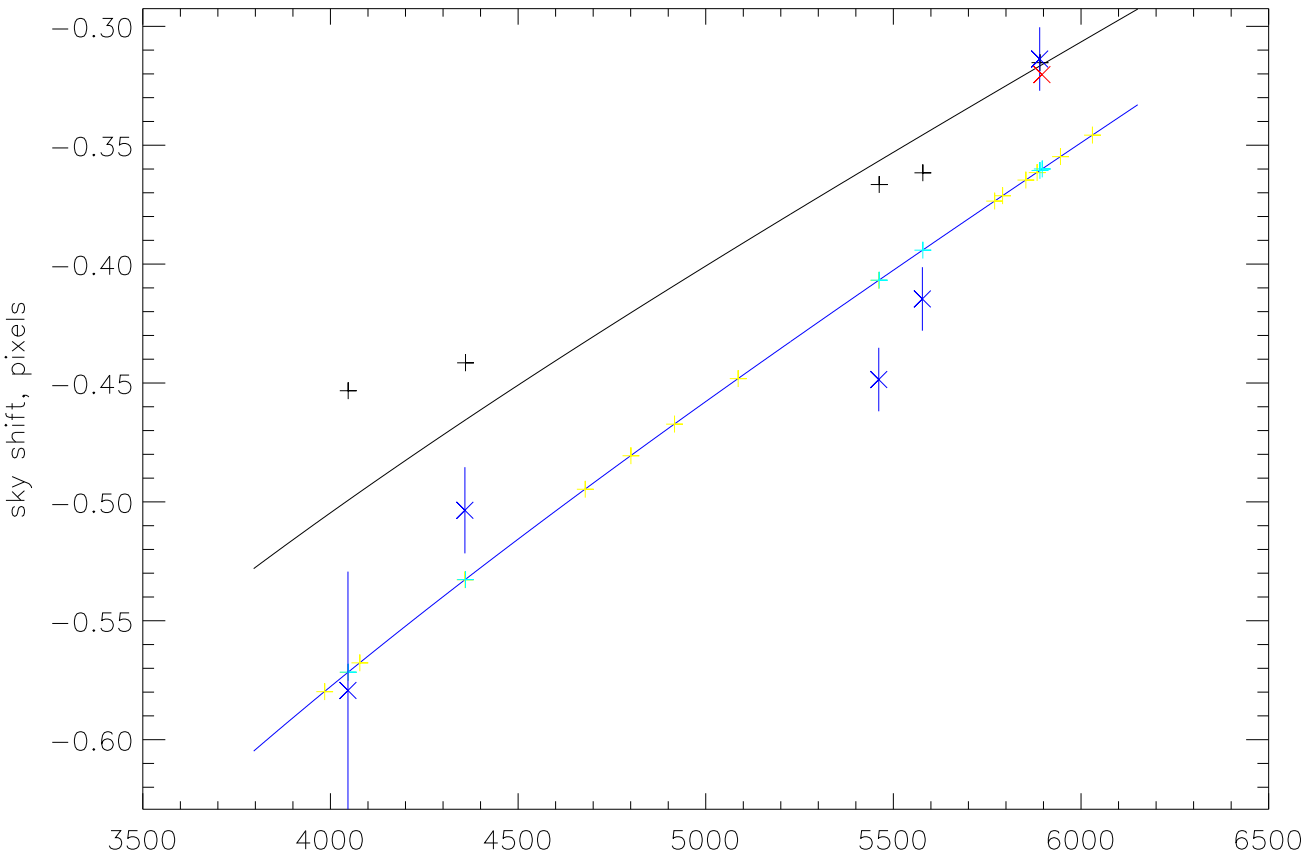

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

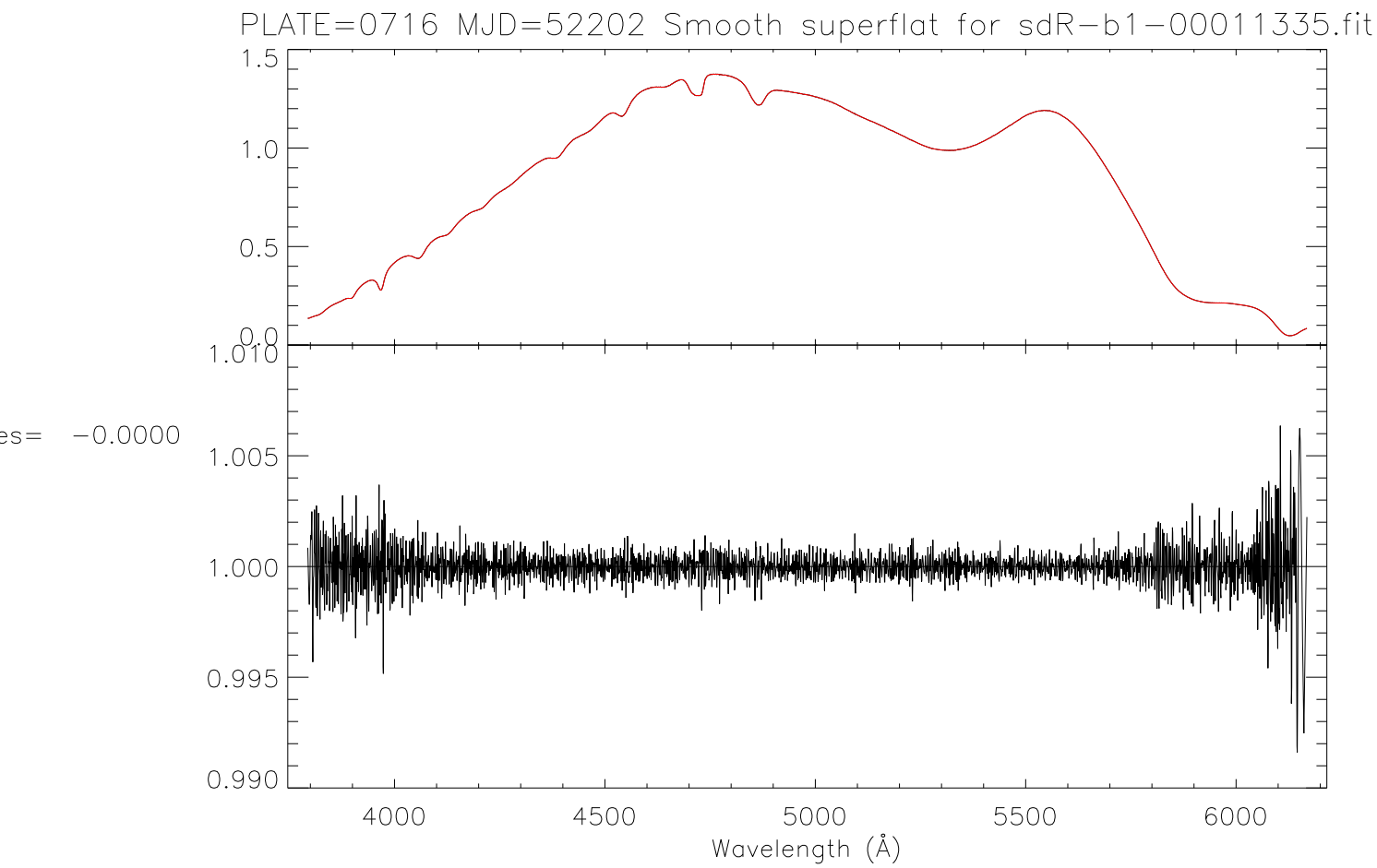

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

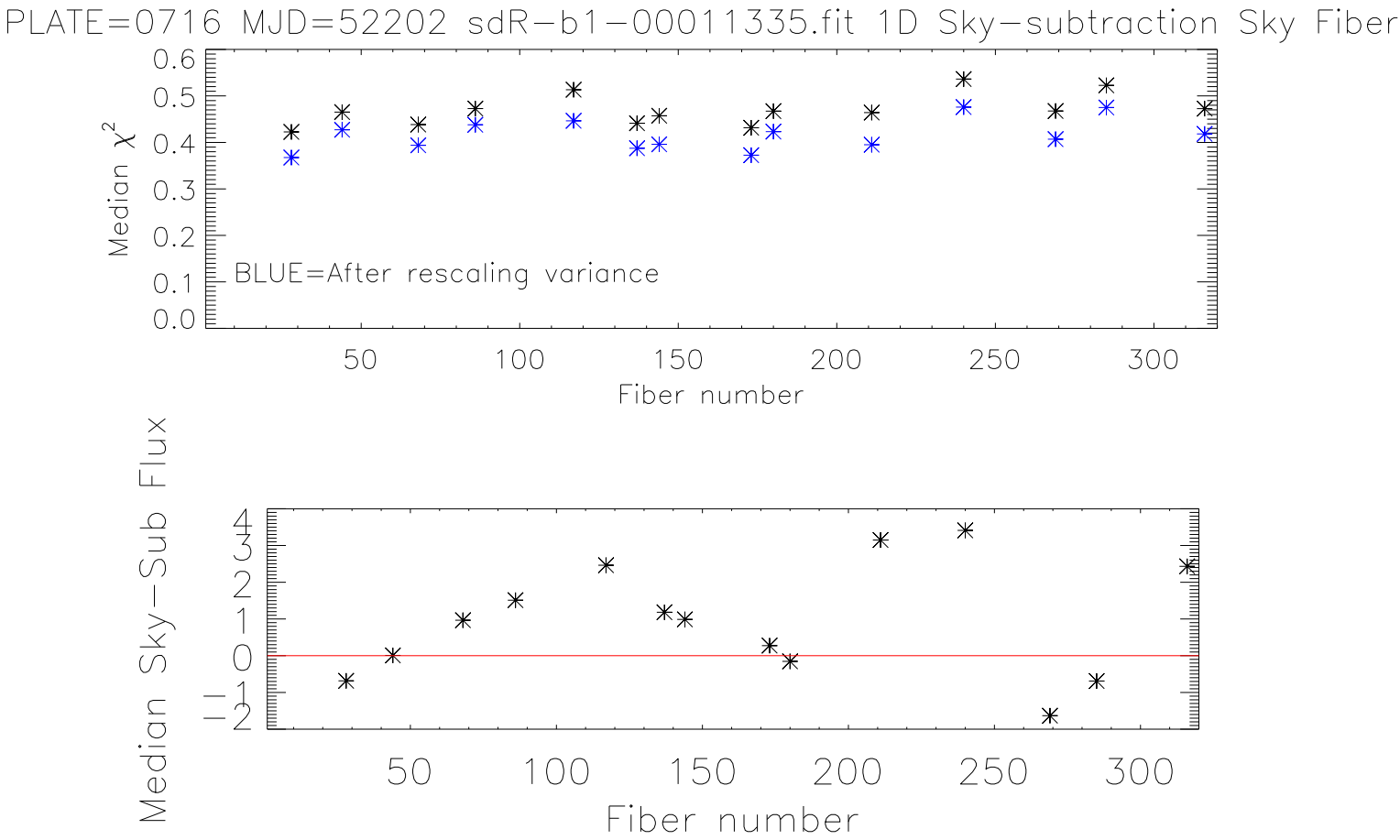

5889.9500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

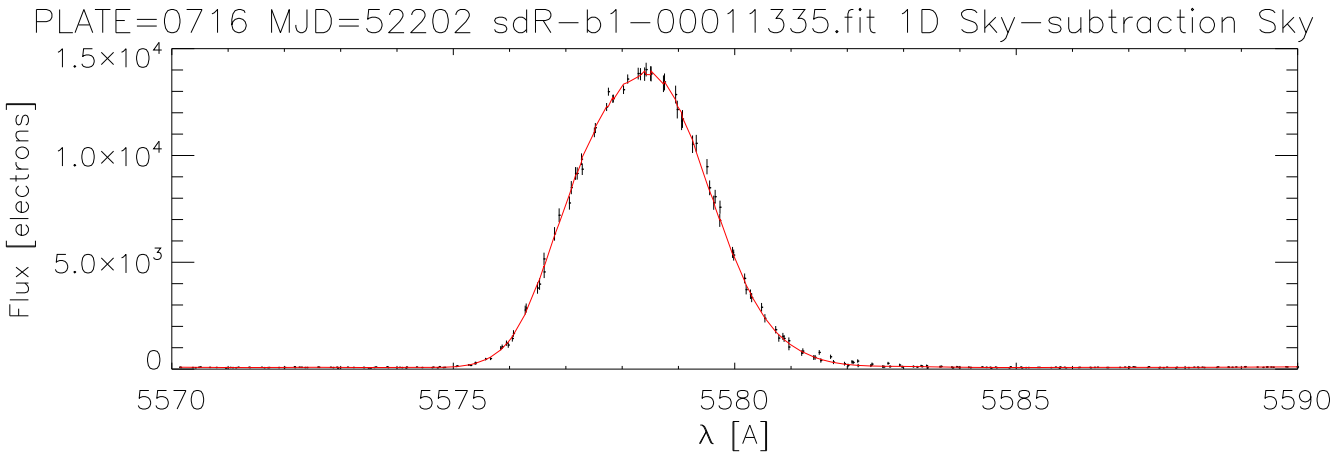

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

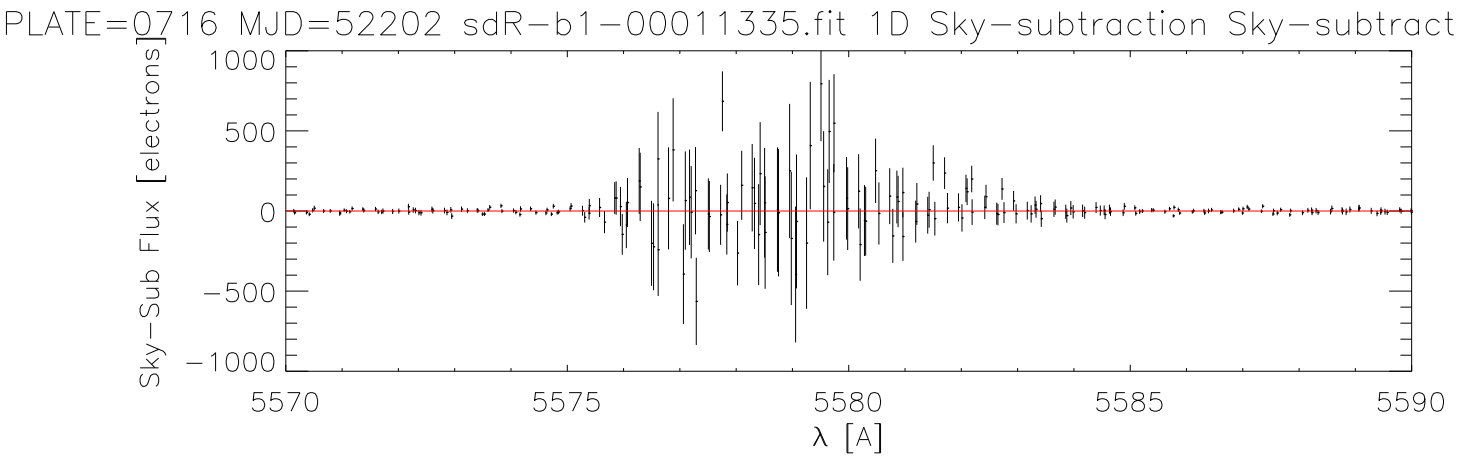

4046.5600
nfib1 16
nfib2 16
stdev 0.099
extra −0.58
4358.3300
nfib1 15
nfib2 16
stdev 0.039
extra −0.50
5460.9400
nfib1 15
nfib2 16
stdev 0.045
extra −0.45
5577.3390
nfib1 15
nfib2 15
stdev 0.012
extra −0.41
5889.9500
nfib1 15
nfib2 16
stdev 0.026
extra −0.31
5895.9240
nfib1 15
nfib2 16
stdev 0.028
extra −0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

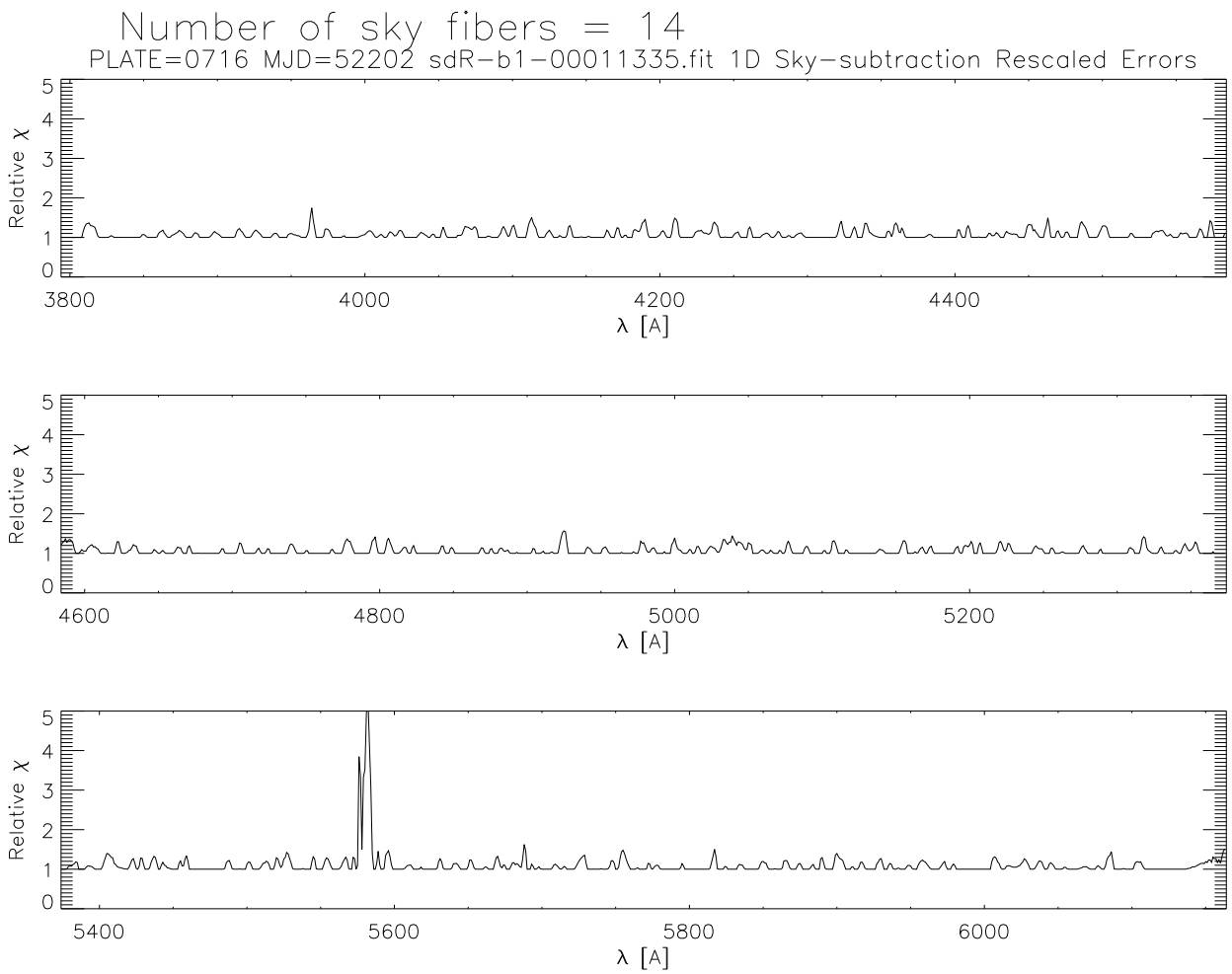

−0.30
−0.35
−0.40
−0.45
−0.50
−0.55
−0.60
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

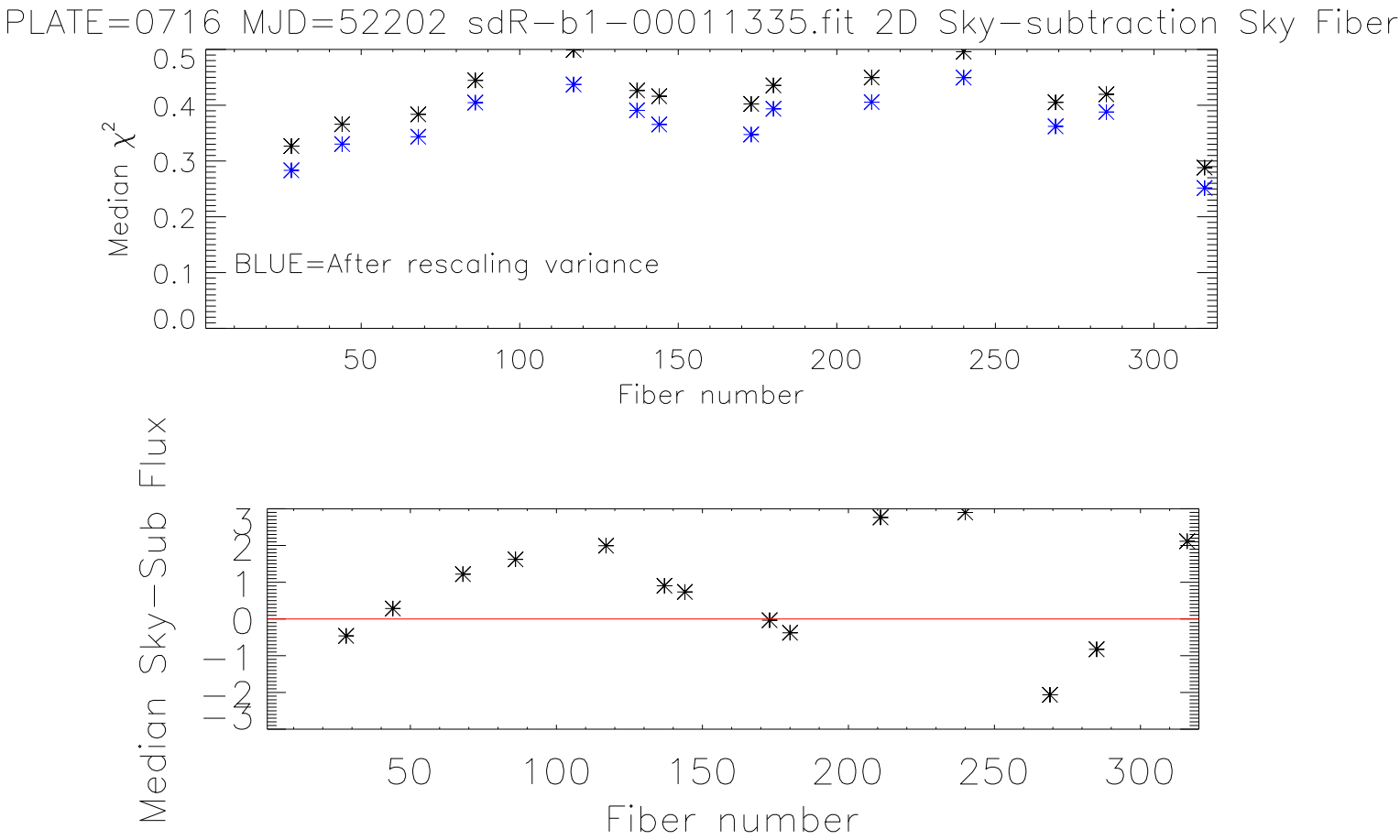

PLATE=0716 MJD=52202 Smooth superflat for sdR-b1-00011335.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

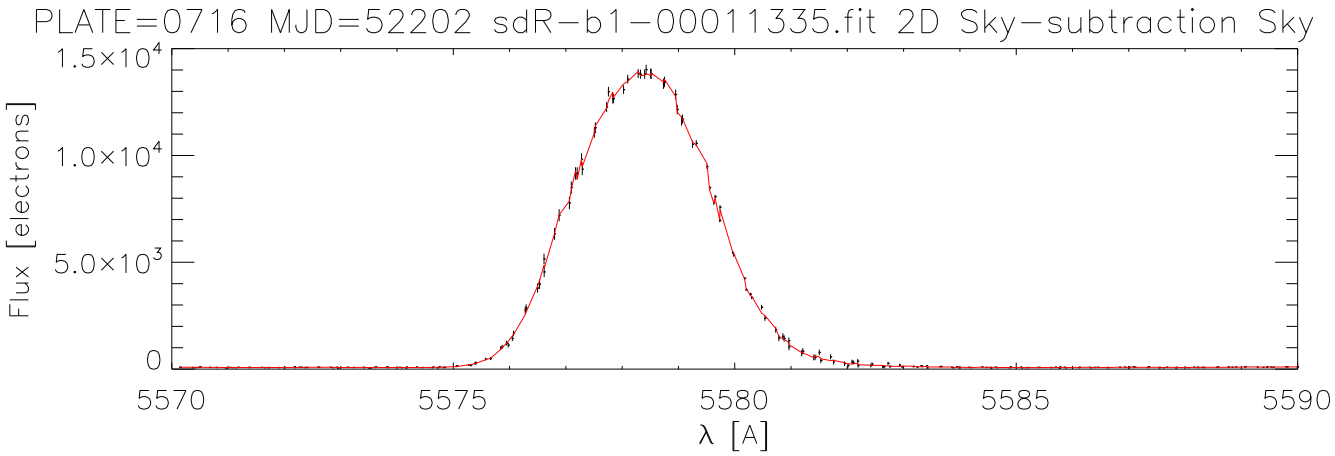

PLATE=0716 MJD=52202 sdR-b1-00011335.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

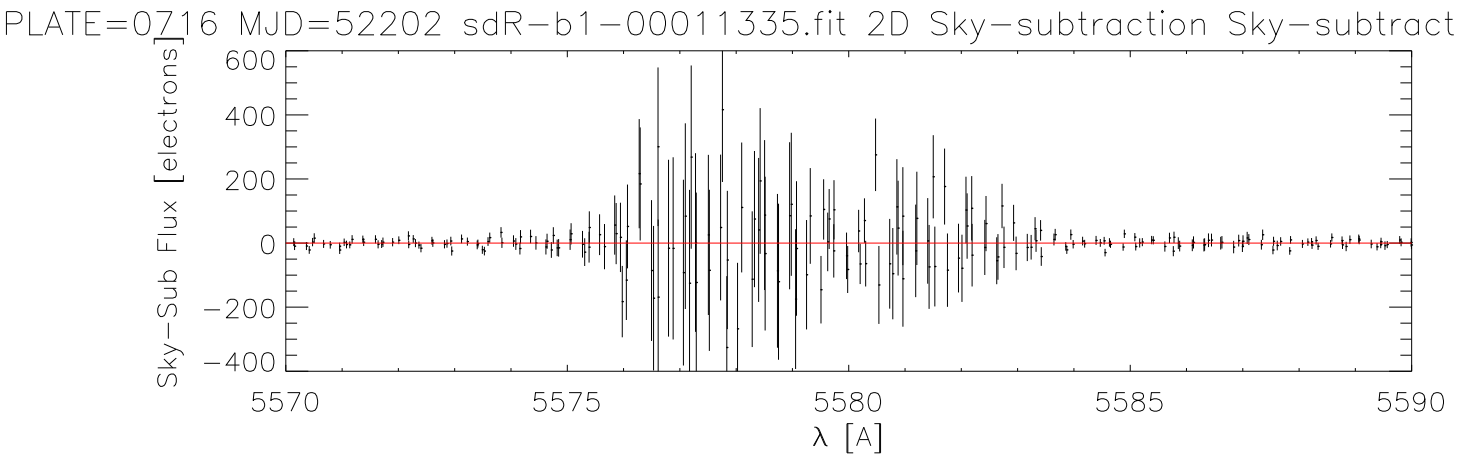

PLATE=0716 MJD=52202 sdR-b1-00011335.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

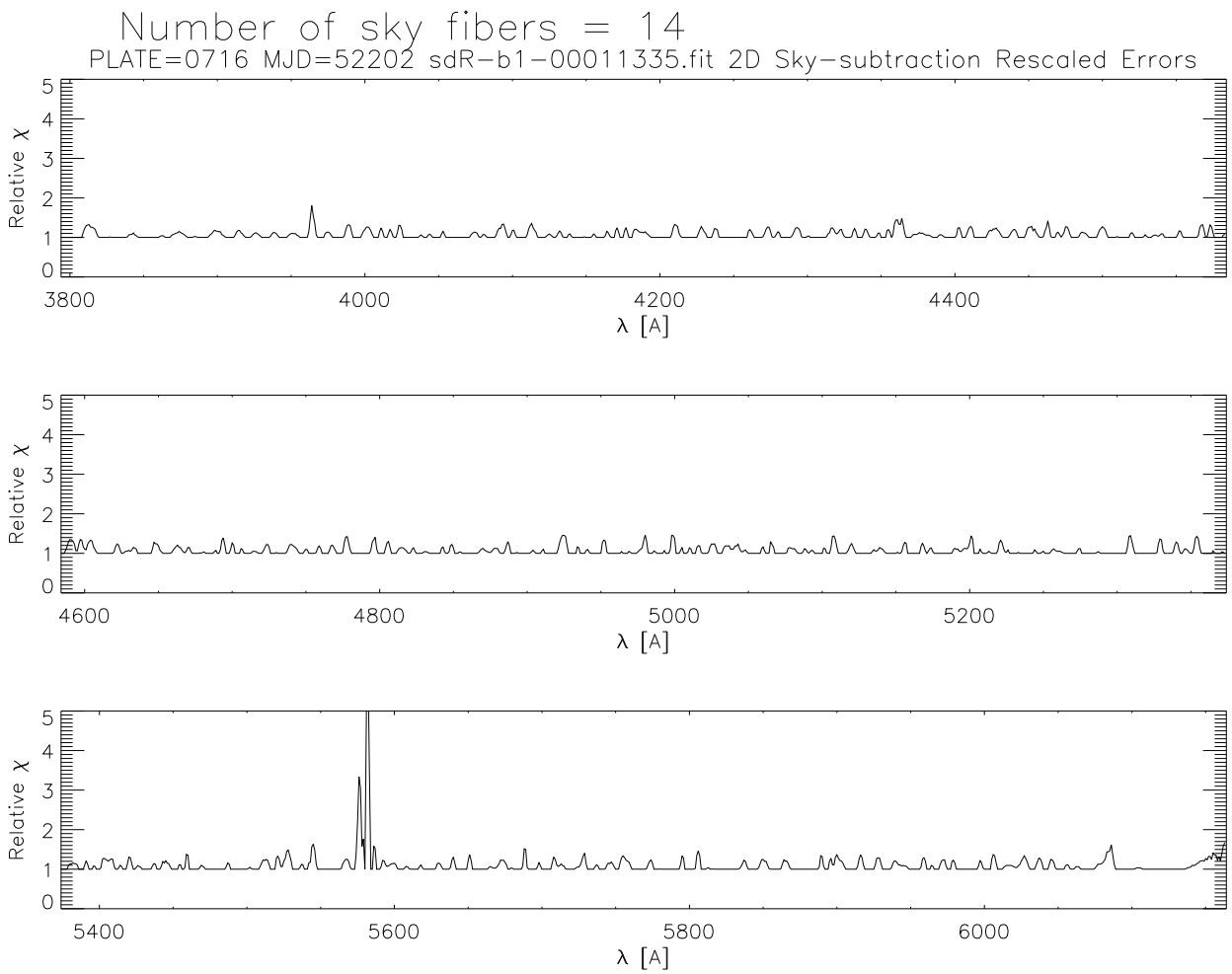

PLATE=0716 MJD=52202 sdR-b1-00011335.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

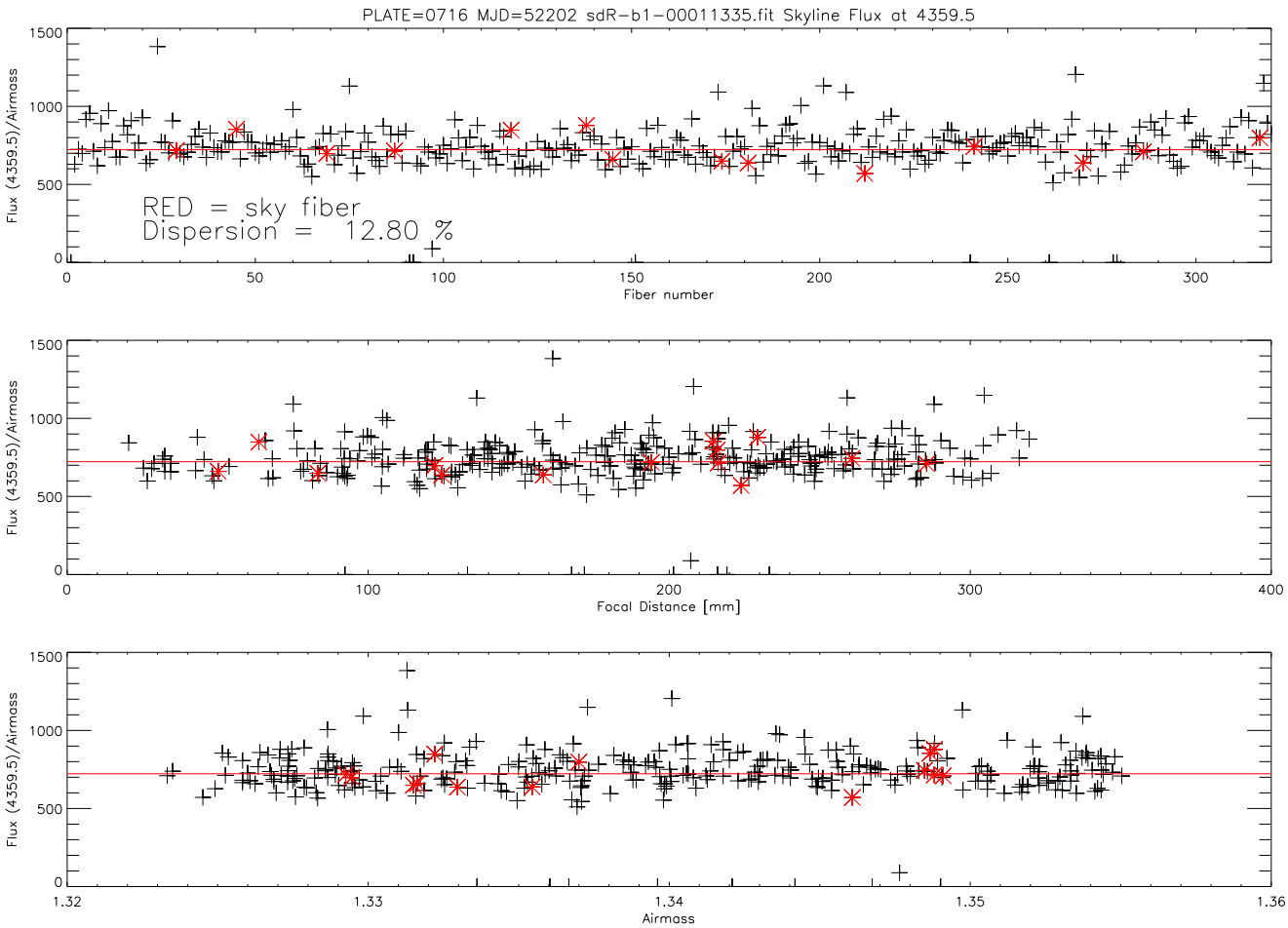

Number of sky fibers = 14
PLATE=0716 MJD=52202 sdR-b1-00011335.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

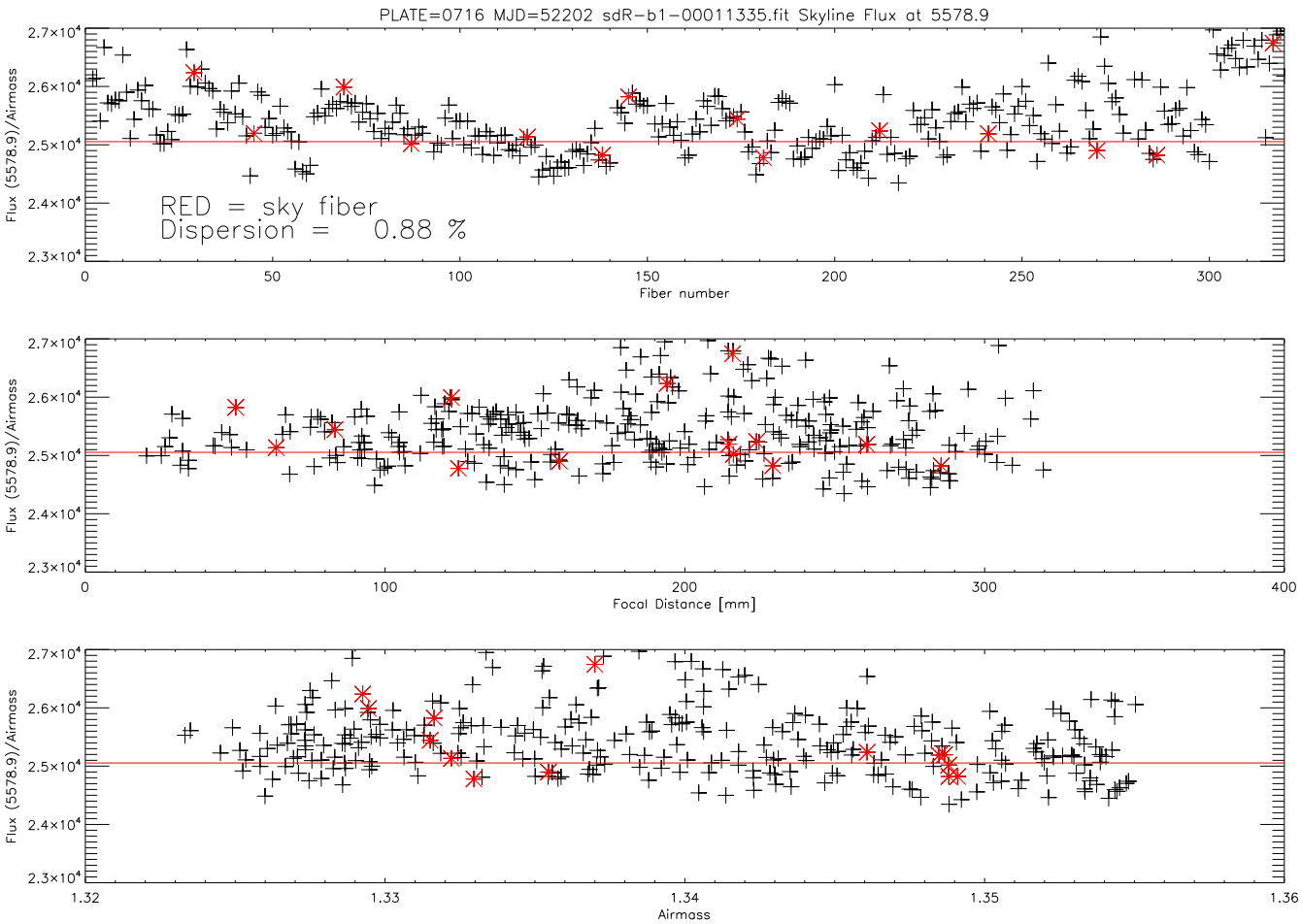

PLATE=0716 MJD=52202 sdR-b1-00011335.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

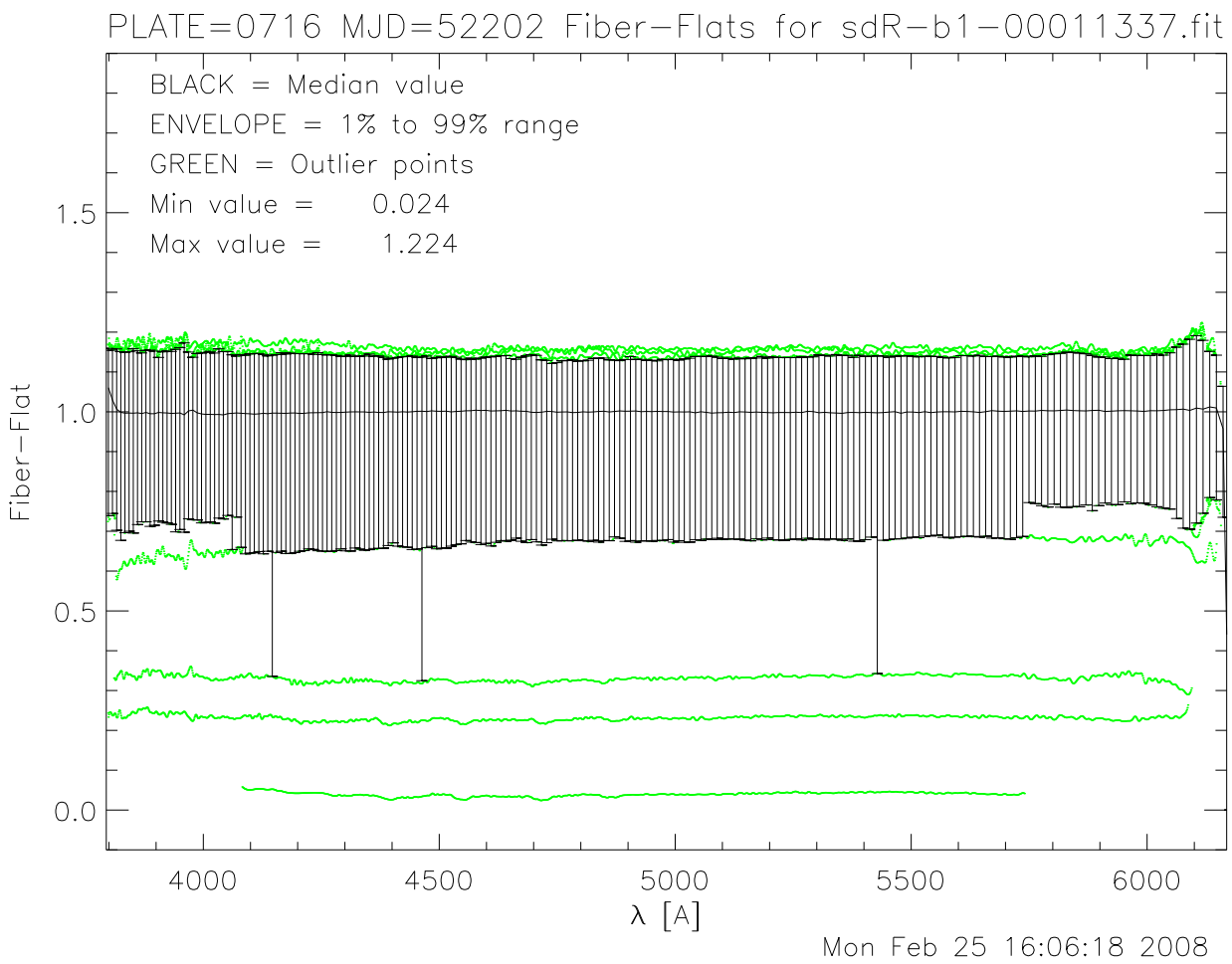

PLATE=0716 MJD=52202 sdR-b1-00011335.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

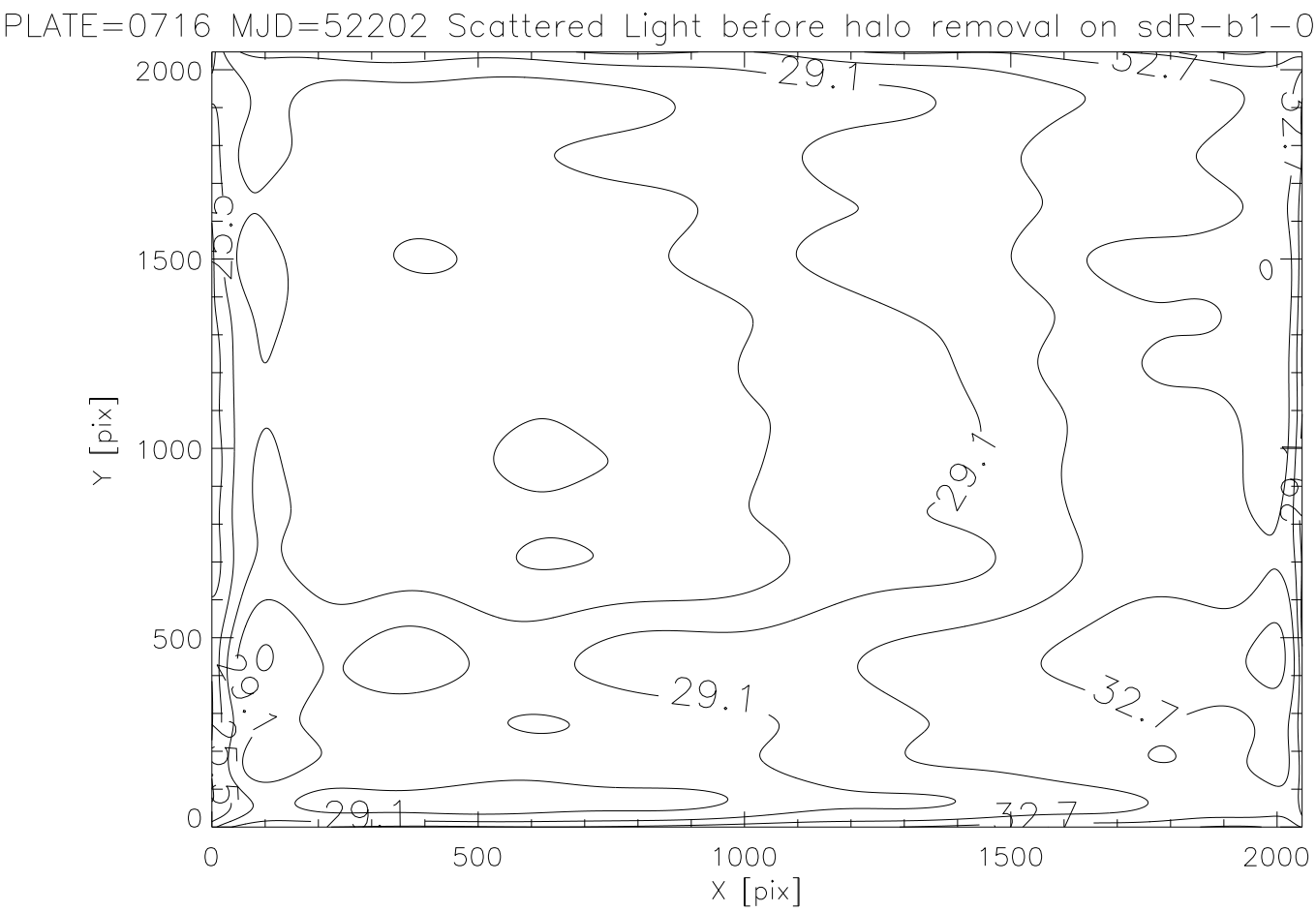

PLATE=0716 MJD=52202 sdR-b1-00011335.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

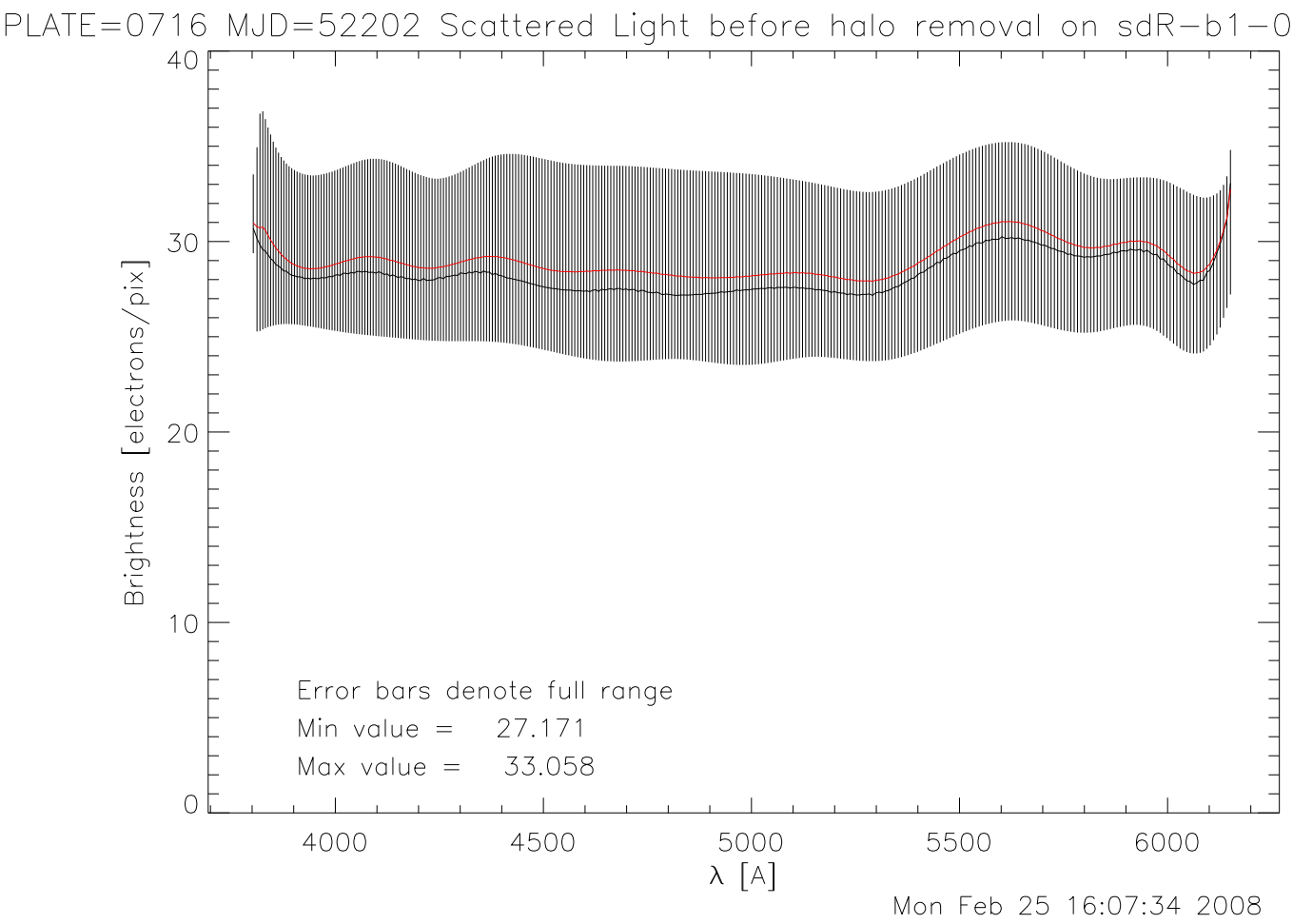

Number of sky fibers = 14
PLATE=0716 MJD=52202 sdR-b1-00011335.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

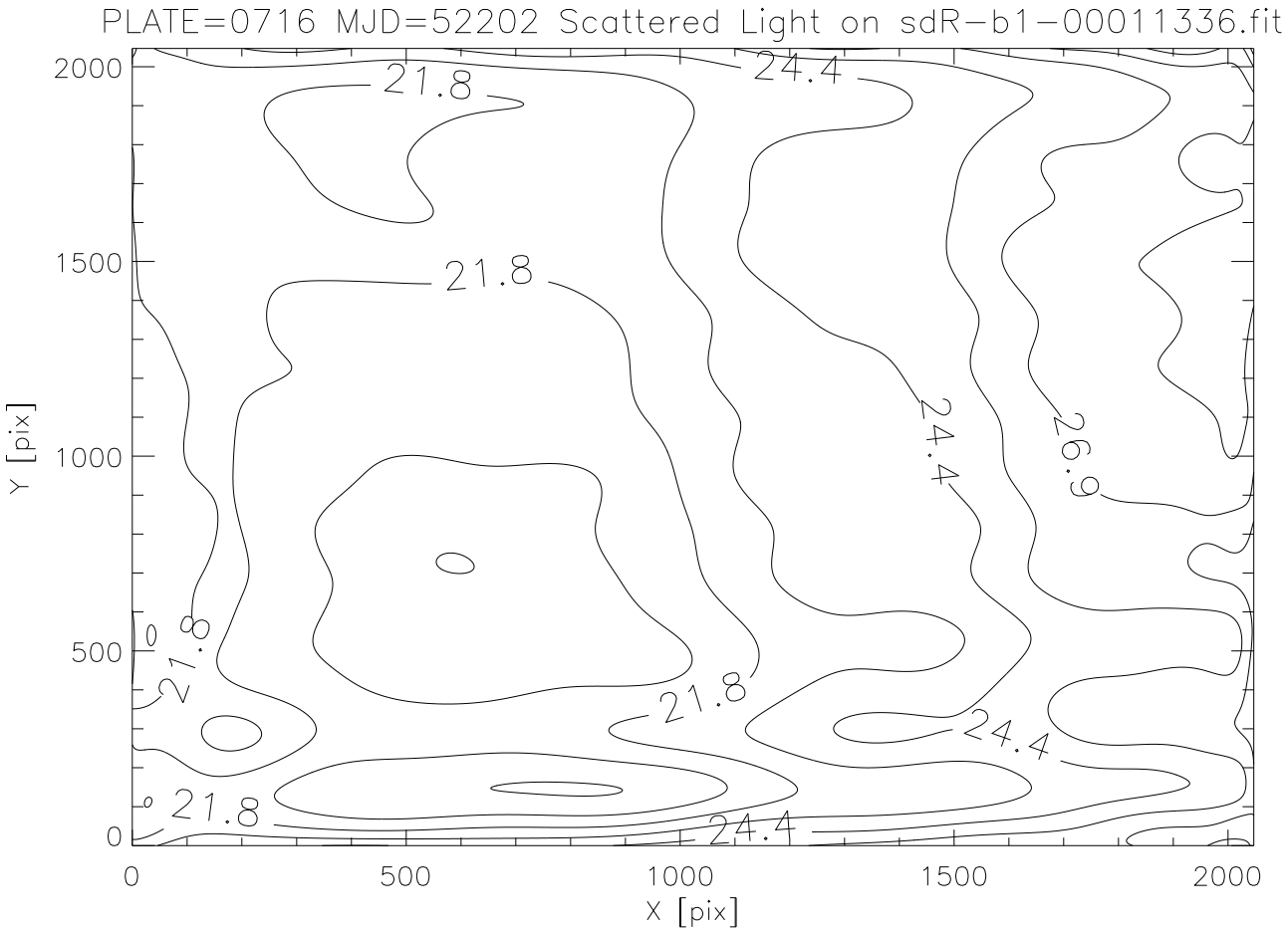

PLATE=0716 MJD=52202 sdR-b1-00011335.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.80 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

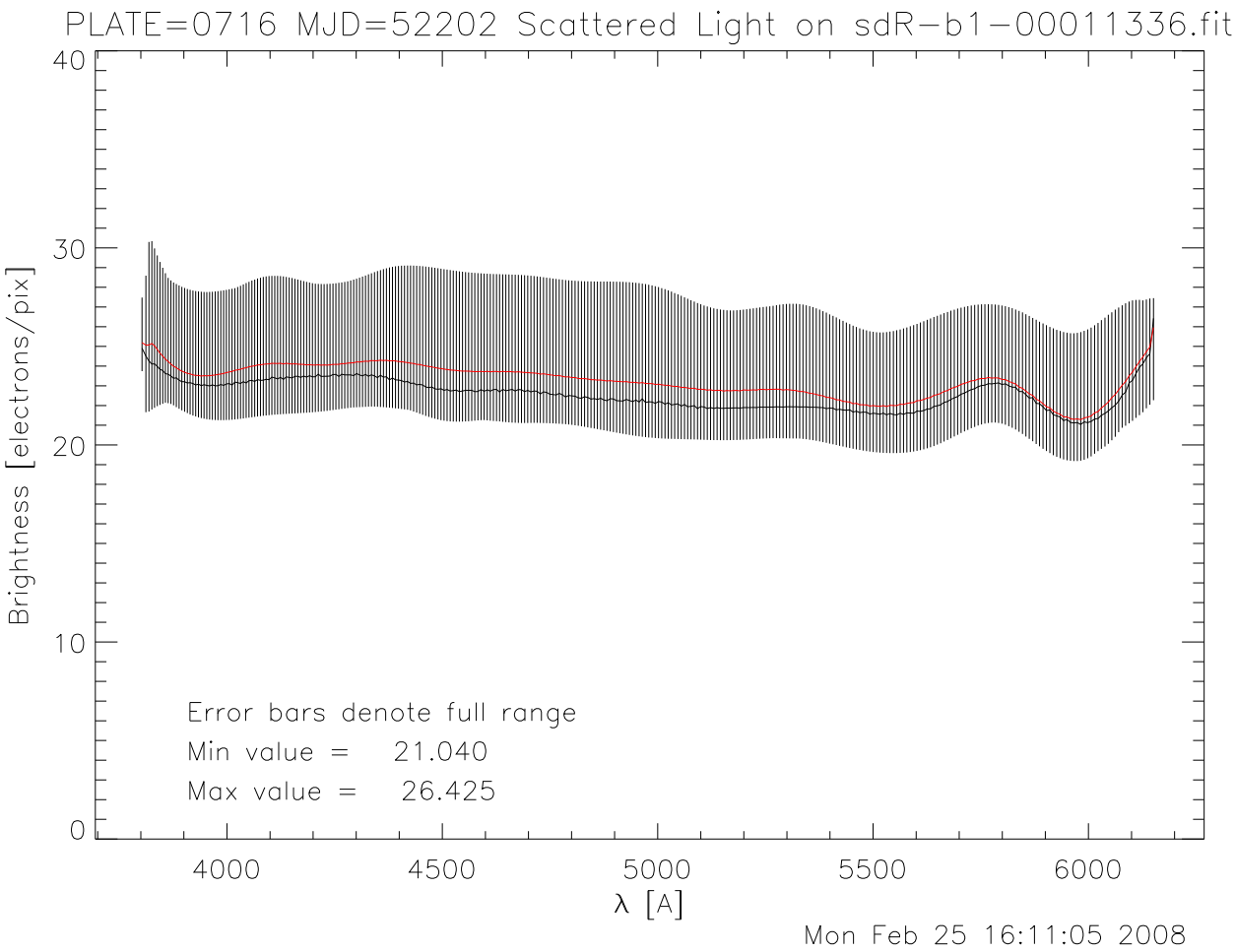

PLATE=0716 MJD=52202 sdR-b1-00011335.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.88 %
Fiber number
Focal Distance [mm]
Airmass

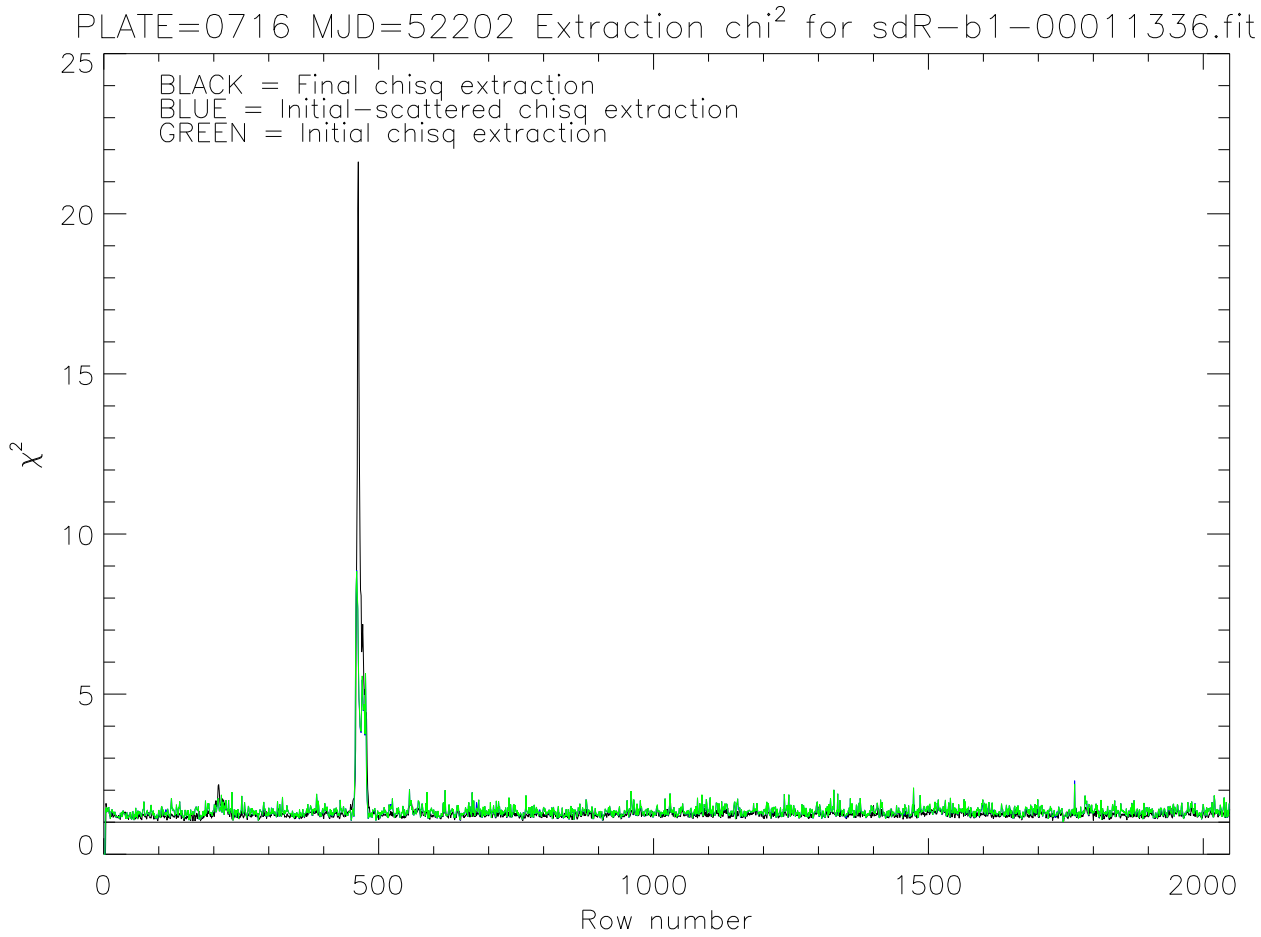

PLATE=0716 MJD=52202 Fiber-Flats for sdR-b1-00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.024
Max value = 1.224
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 16:06:18 2008

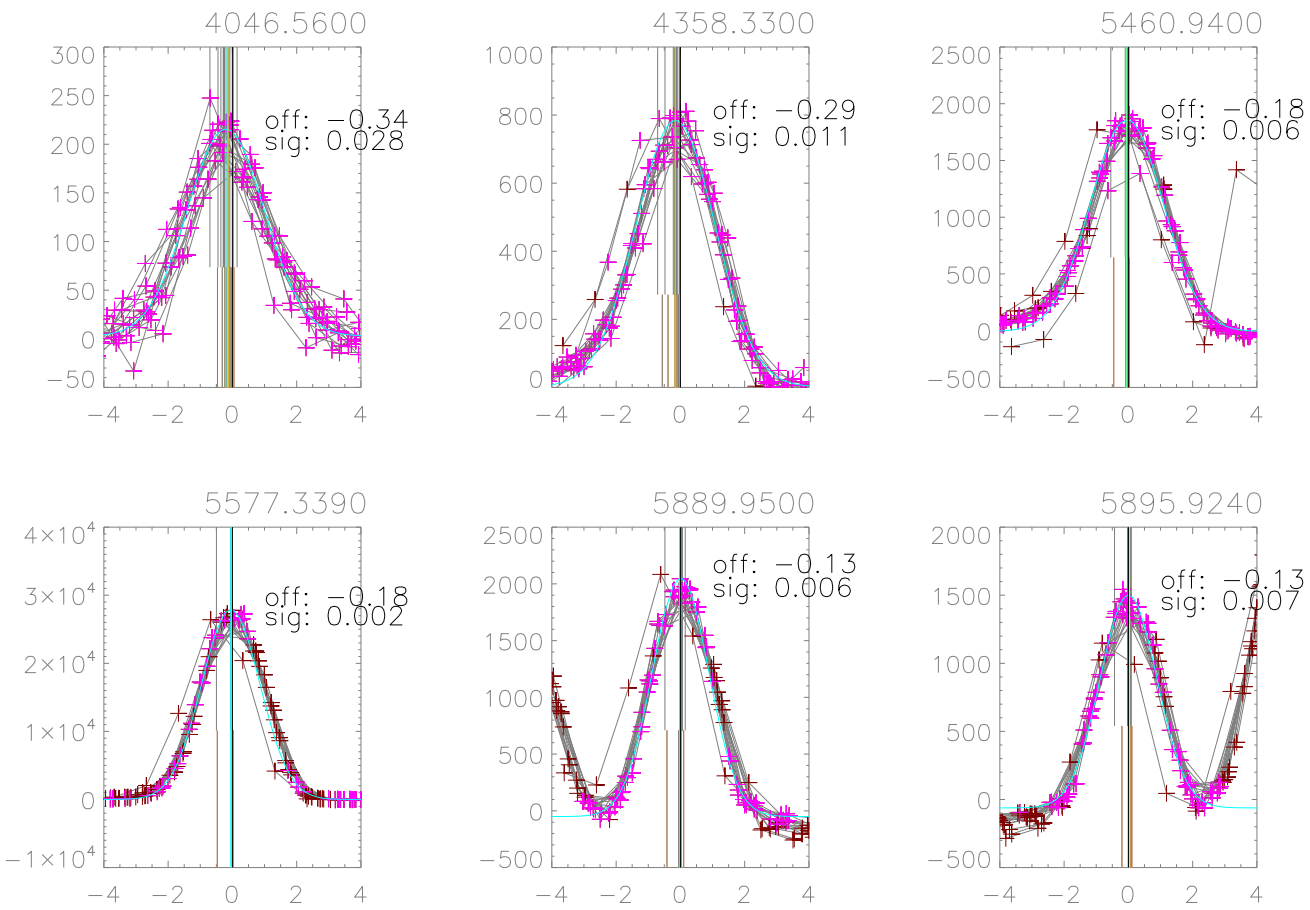

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR−b1−00011336.f
29.1
32.7
29.1
29.1
29.1
32.7
32.7
0
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

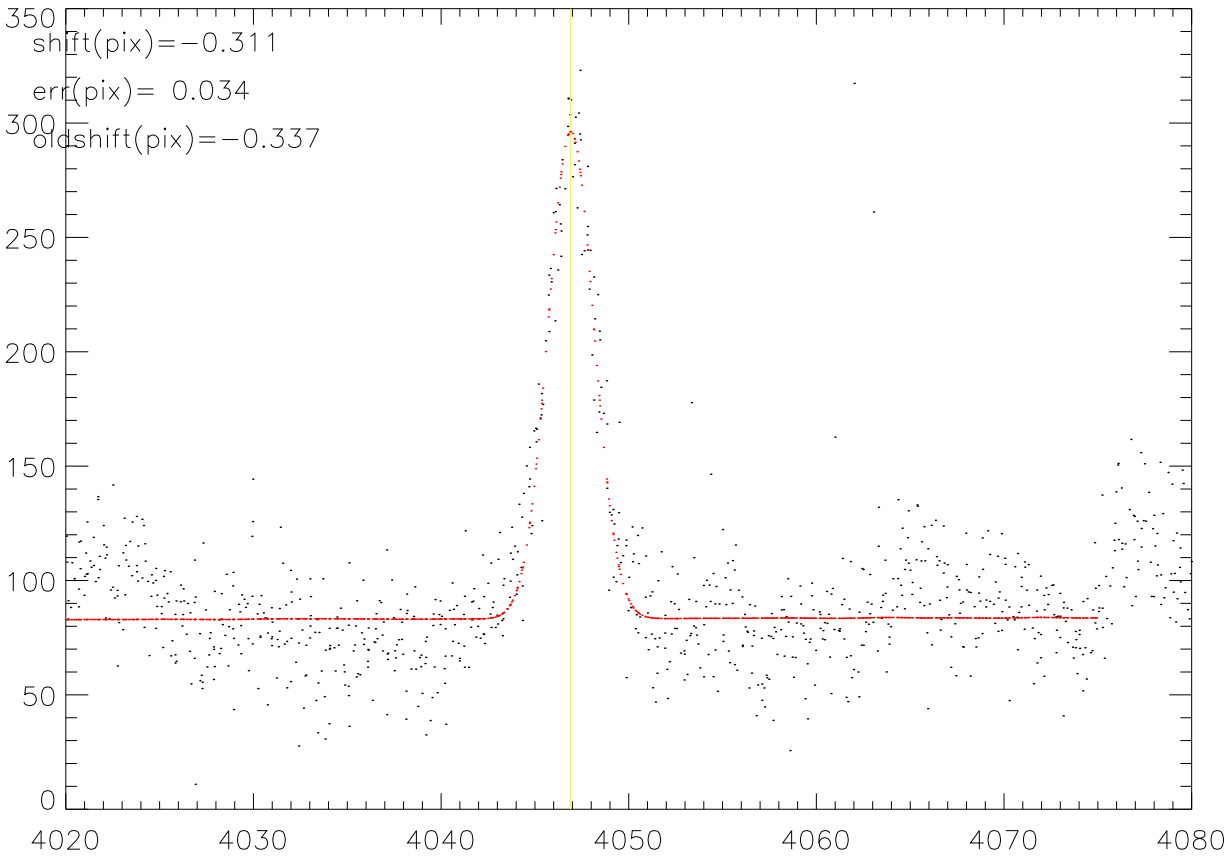

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-b1-00011336.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 27.171
Max value = 33.058
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 16:07:34 2008

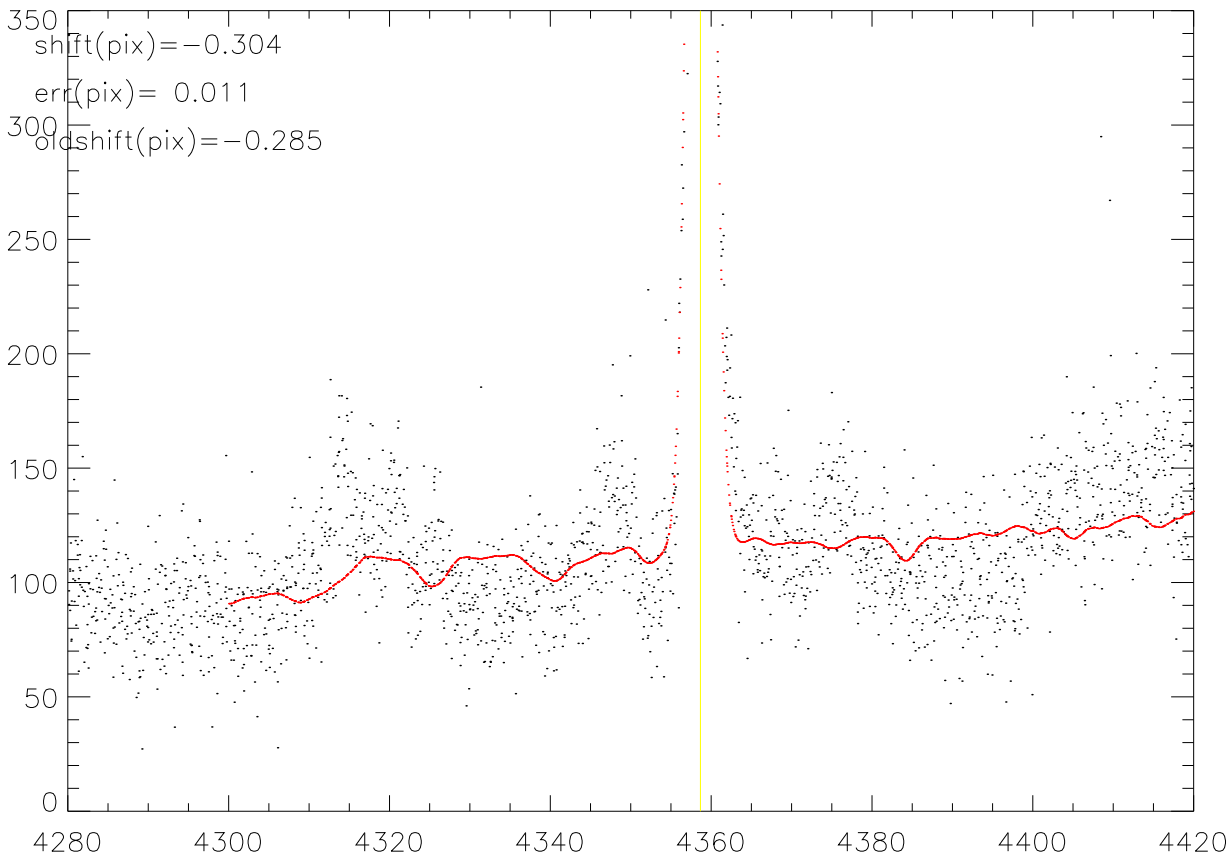

PLATE=0716 MJD=52202 Scattered Light on sdR-b1-00011336.fit
21.8
24.4
21.8
24.4
26.9
21.8
21.8
24.4
21.8
24.4
Y [pix]
X [pix]
0
500
1000
1500
2000

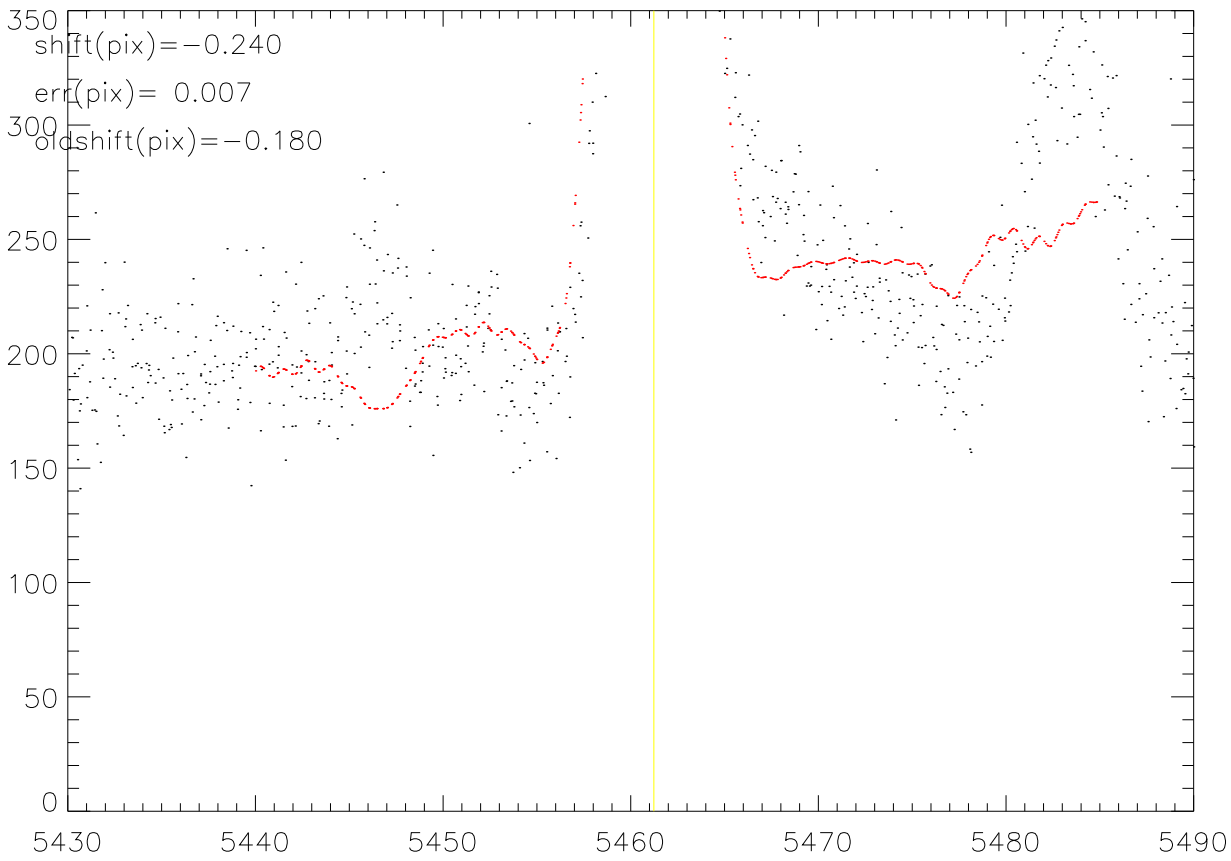

PLATE=0716 MJD=52202 Scattered Light on sdR-b1-00011336.fit
Brightness [electrons/pix]
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 21.040
Max value = 26.425
Mon Feb 25 16:11:05 2008

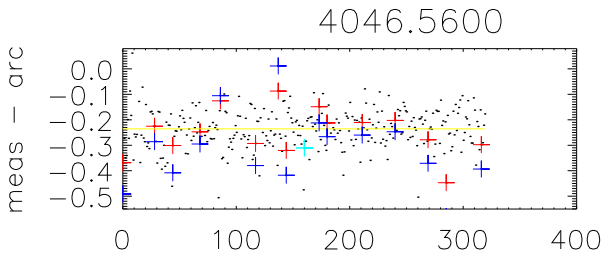

PLATE=0716 MJD=52202 Extraction chi^2 for sdR-b1-00011336.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
25
0
500
1000
1500
2000
Row number

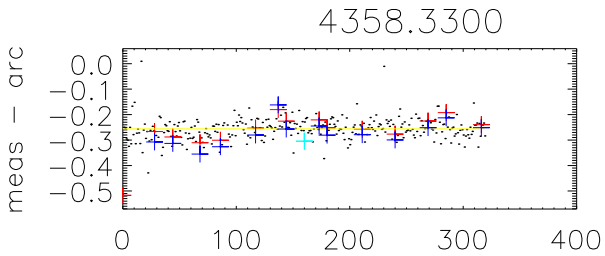

4046.5600
off: −0.34
sig: 0.028
4358.3300
off: −0.29
sig: 0.011
5460.9400
off: −0.18
sig: 0.006
5577.3390
off: −0.18
sig: 0.002
5889.9500
off: −0.13
sig: 0.006
5895.9240
off: −0.13
sig: 0.007

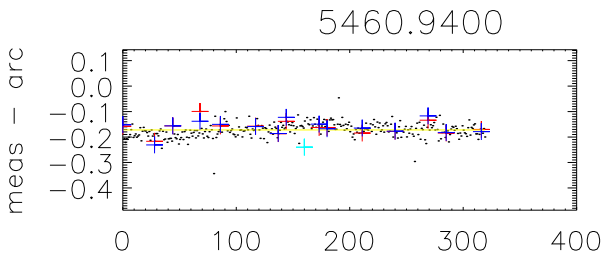

shift(pix)=−0.311
err(pix)= 0.034
oldshift(pix)=−0.337
350
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

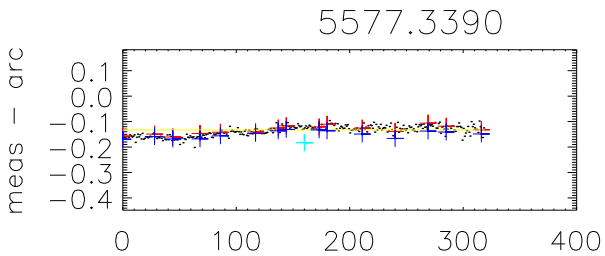

shift(pix)=−0.304
err(pix)= 0.011
oldshift(pix)=−0.285
350
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

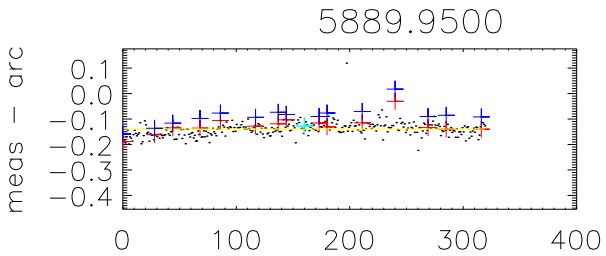

shift(pix)=−0.240
err(pix)= 0.007
oldshift(pix)=−0.180
350
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

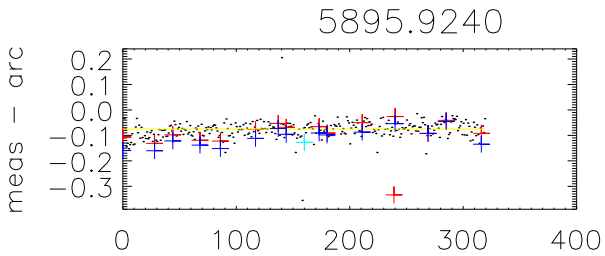

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

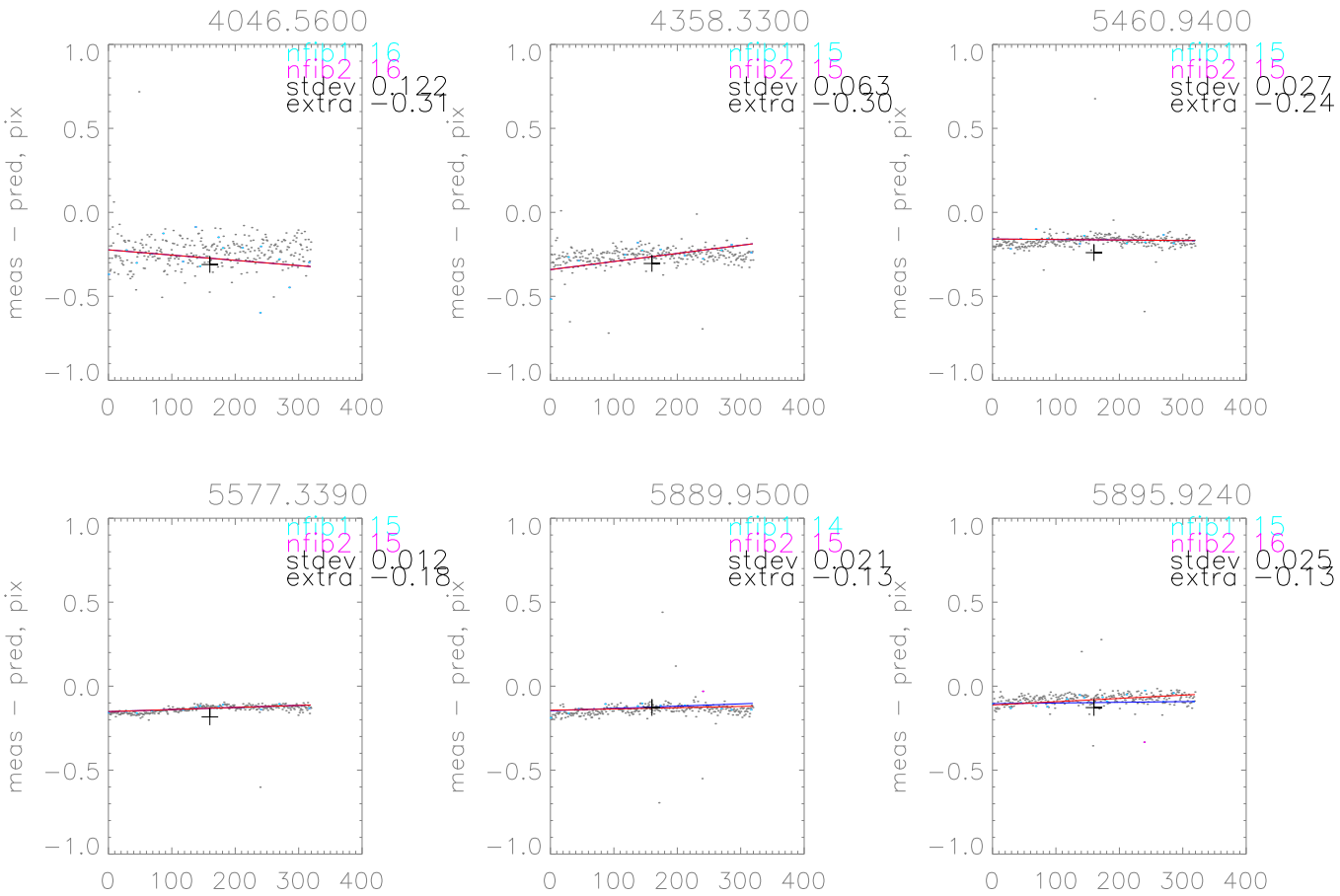

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

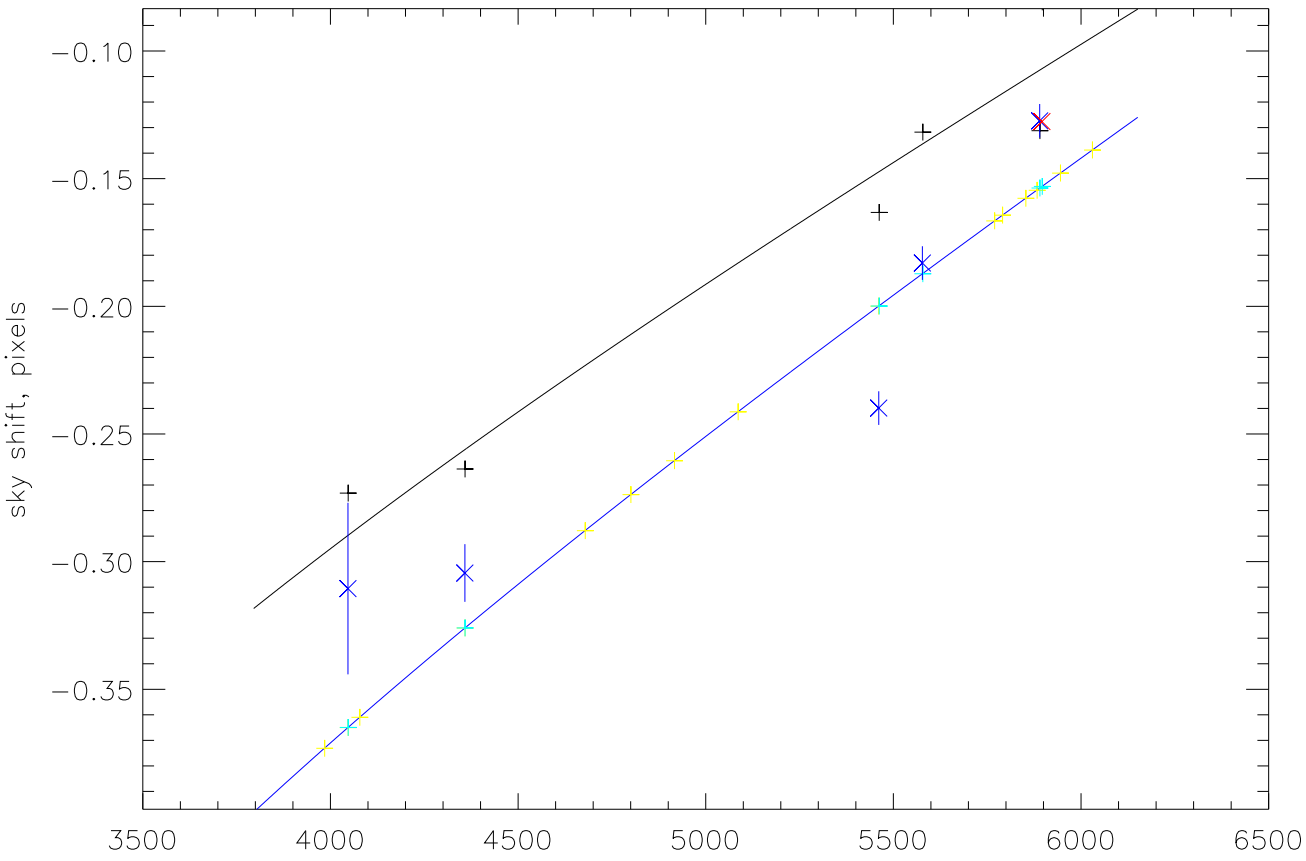

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

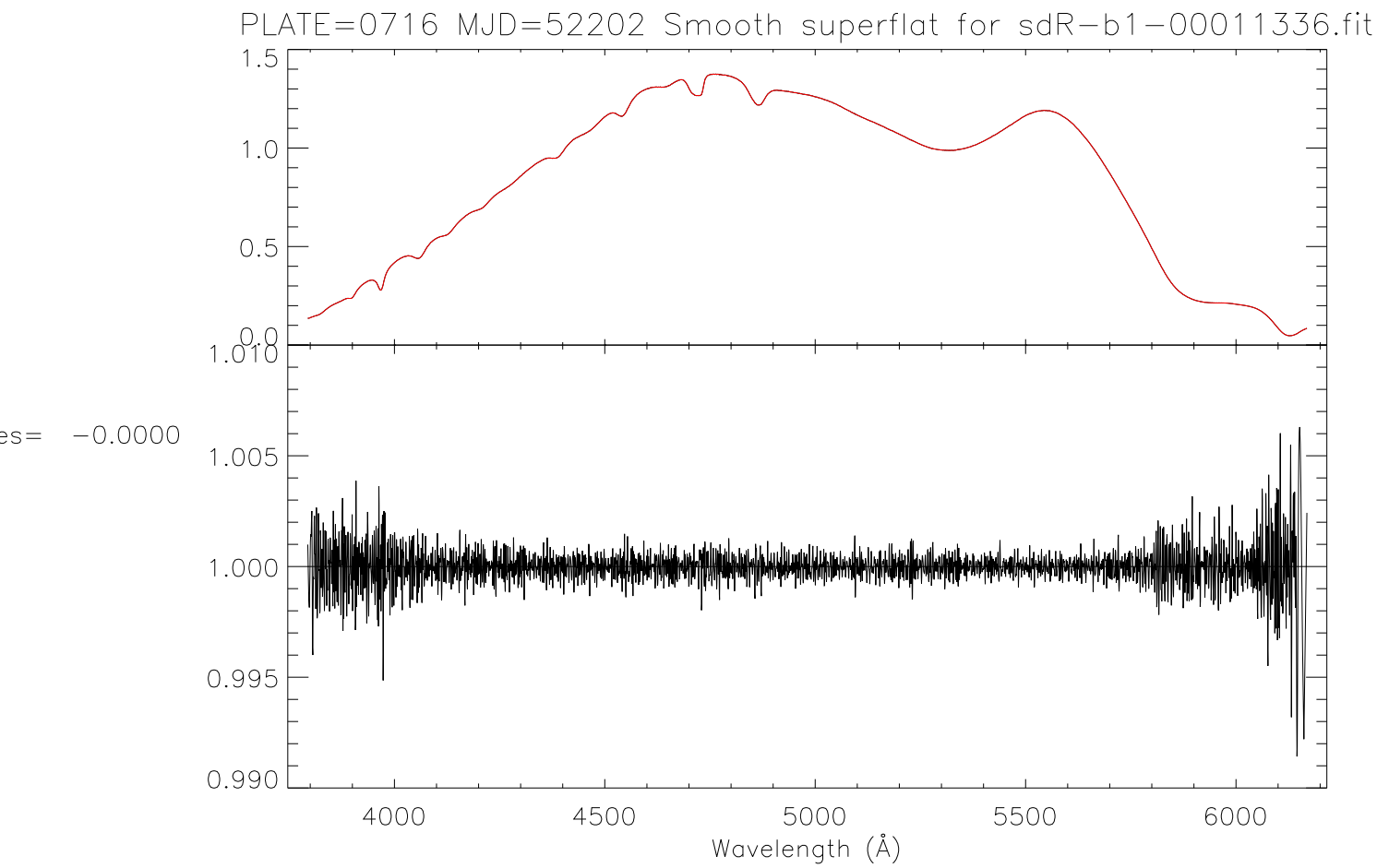

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

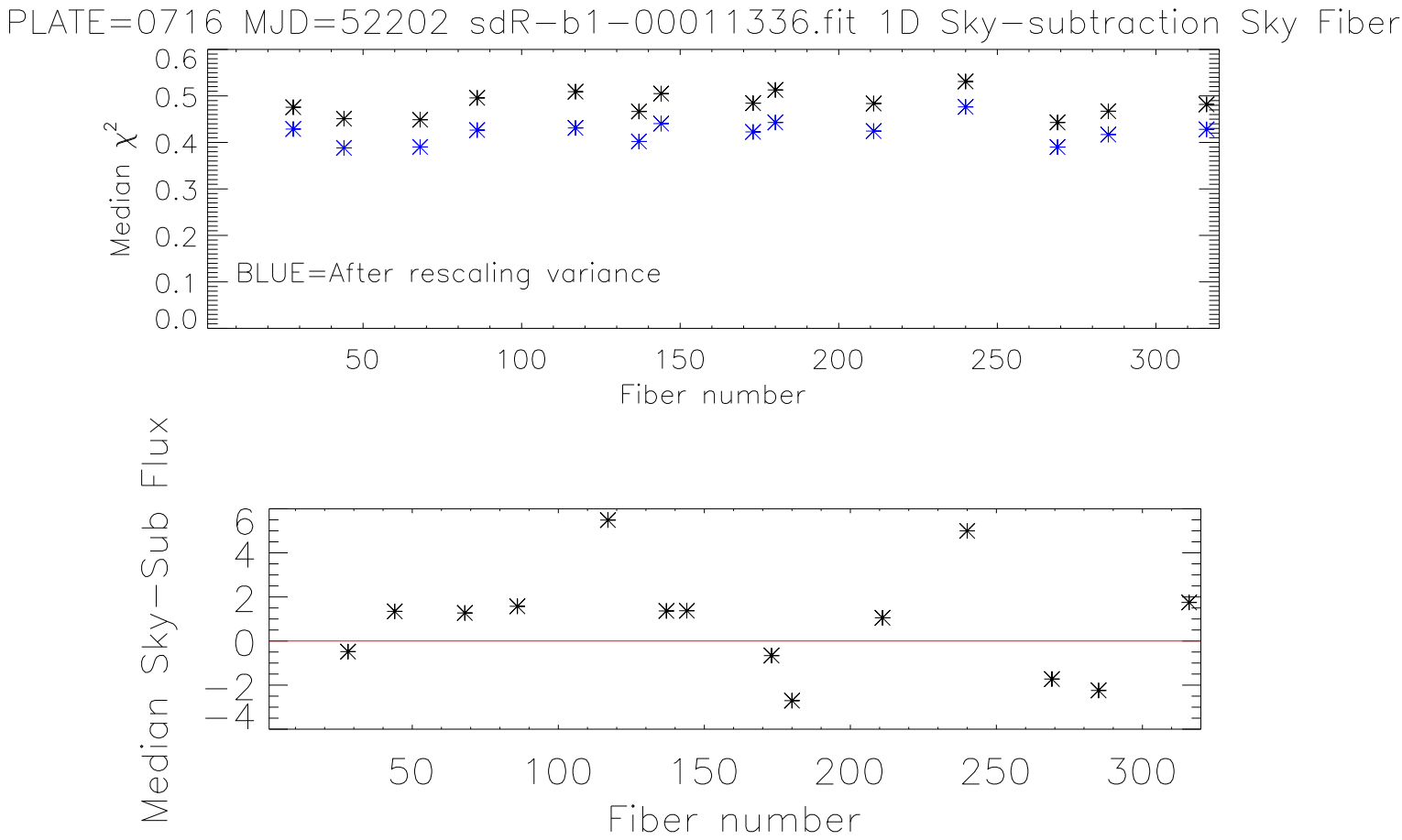

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

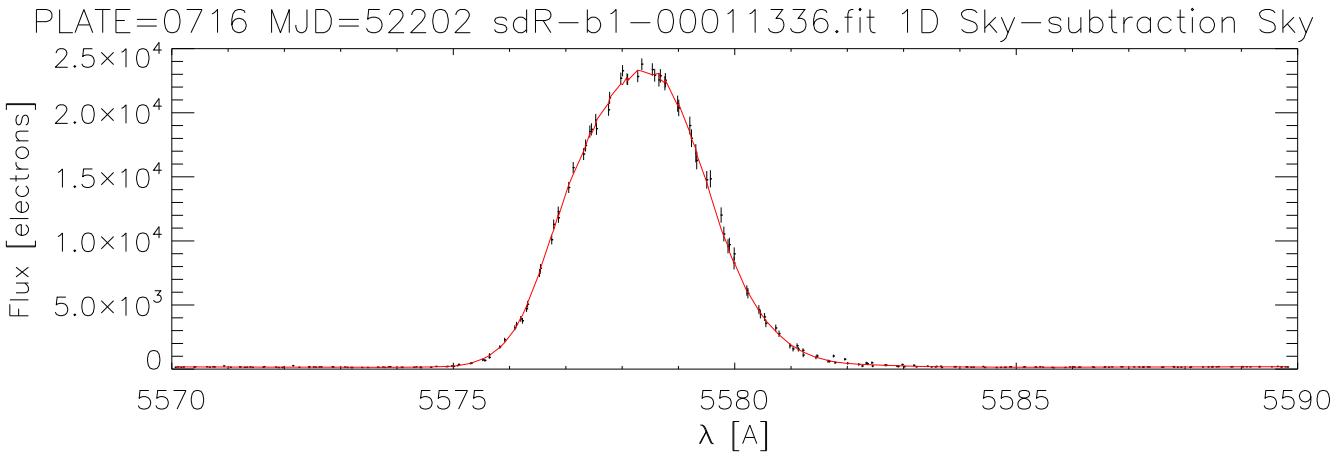

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

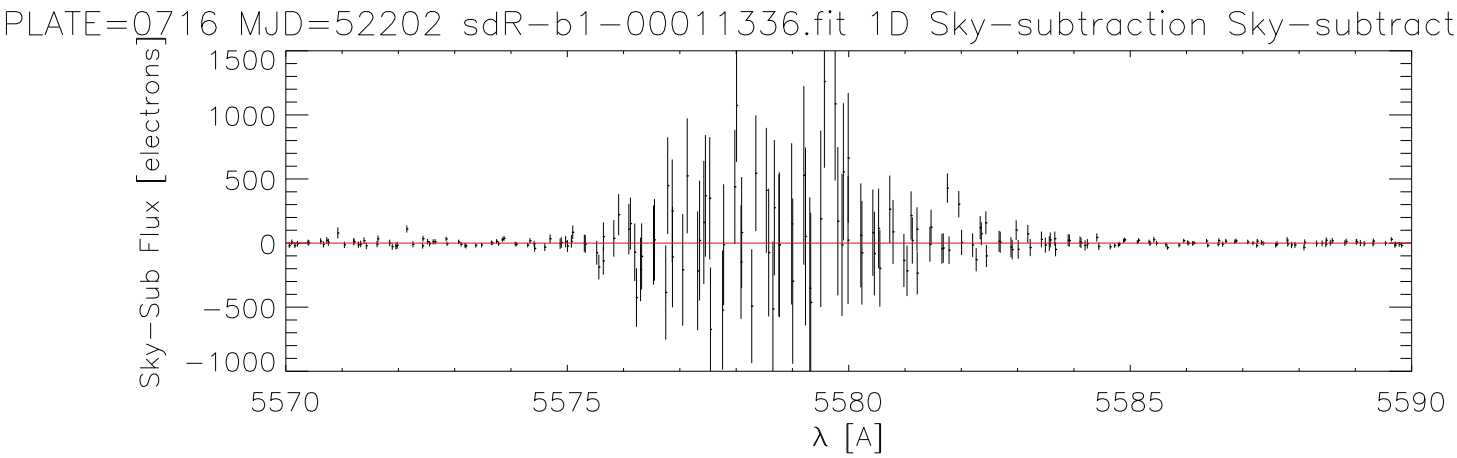

4046.5600
nfib1 16
nfib2 16
stdev 0.122
extra −0.31
4358.3300
nfib1 15
nfib2 15
stdev 0.063
extra −0.30
5460.9400
nfib1 15
nfib2 15
stdev 0.027
extra −0.24
5577.3390
nfib1 15
nfib2 15
stdev 0.012
extra −0.18
5889.9500
nfib1 14
nfib2 15
stdev 0.021
extra −0.13
5895.9240
nfib1 15
nfib2 16
stdev 0.025
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

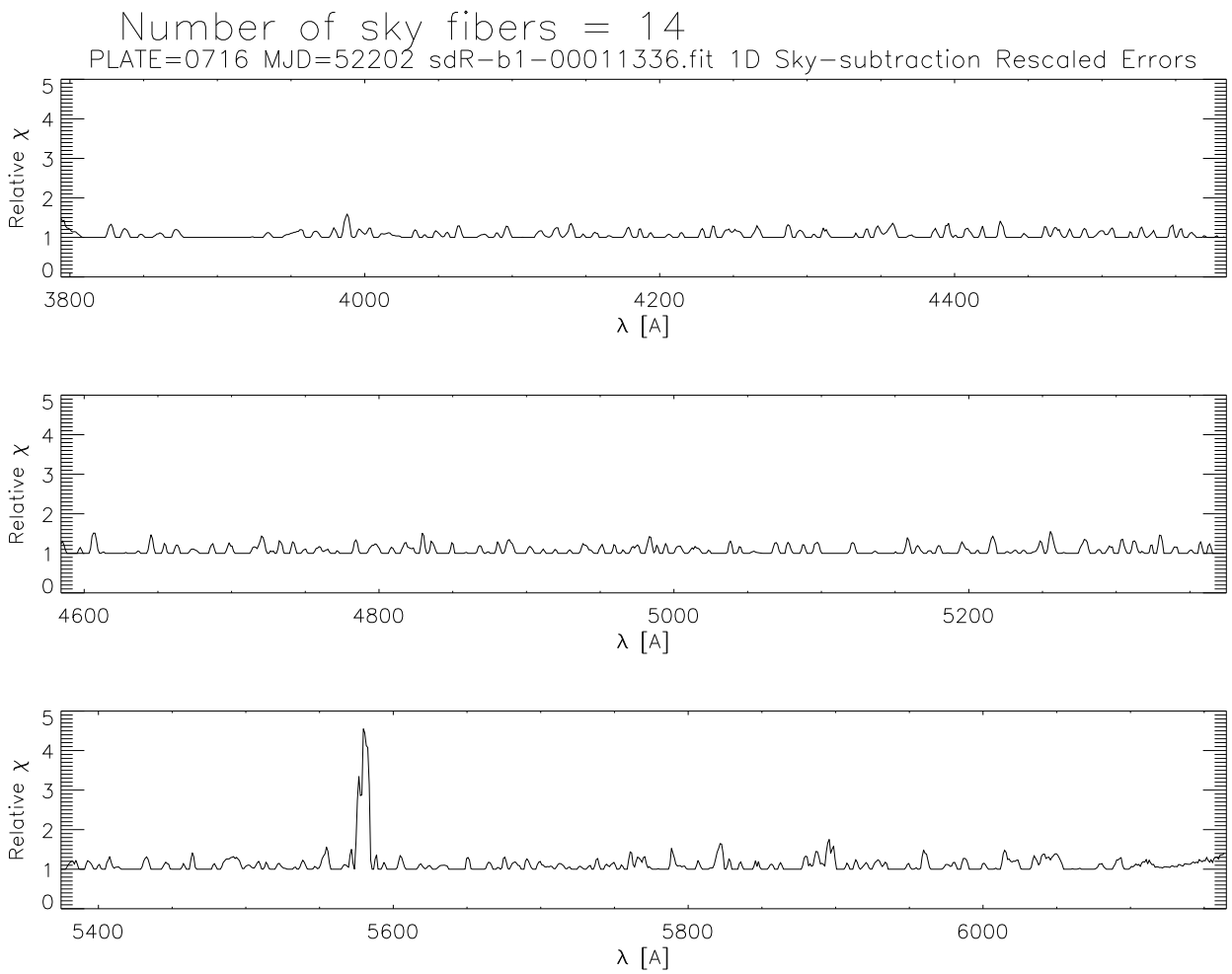

−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

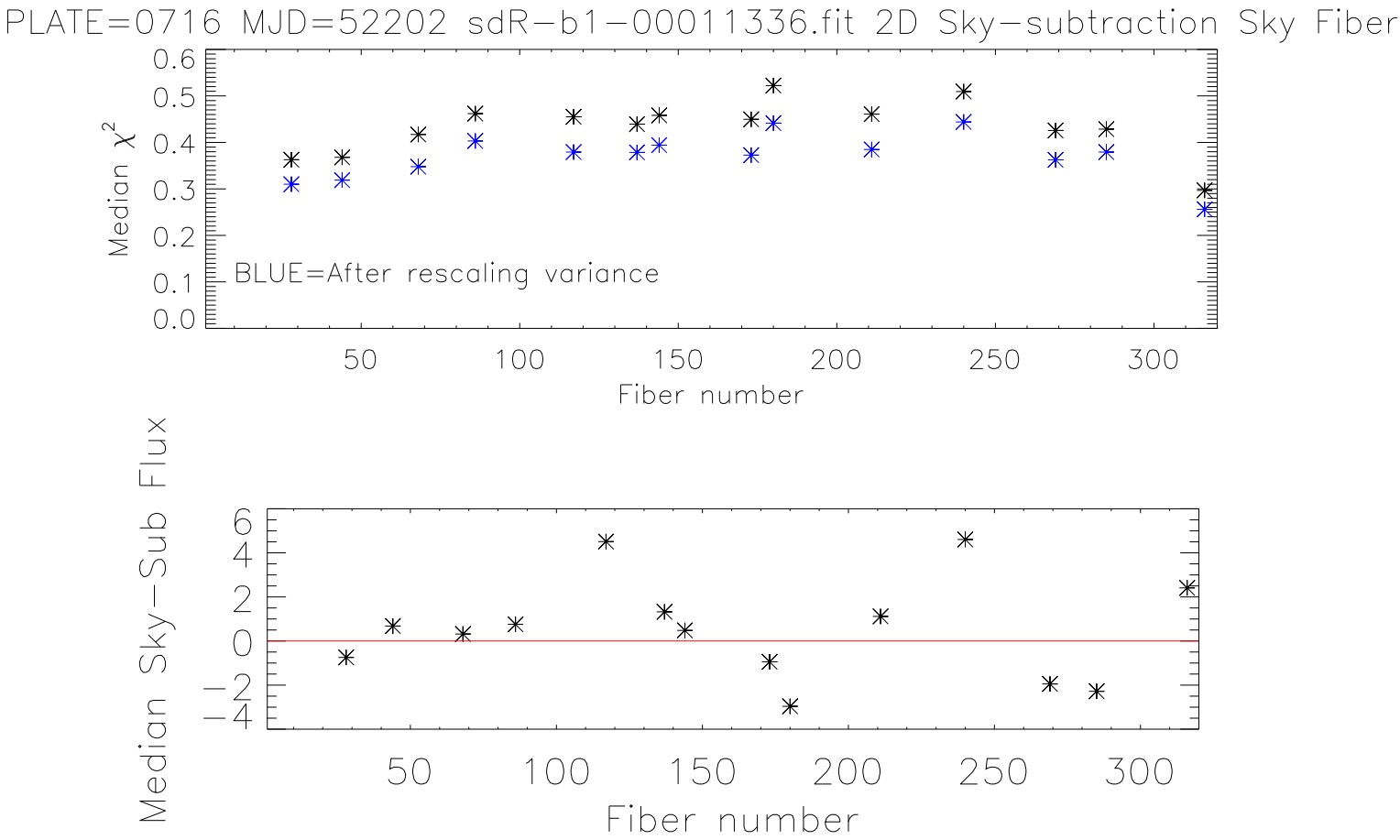

PLATE=0716 MJD=52202 Smooth superflat for sdR-b1-00011336.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

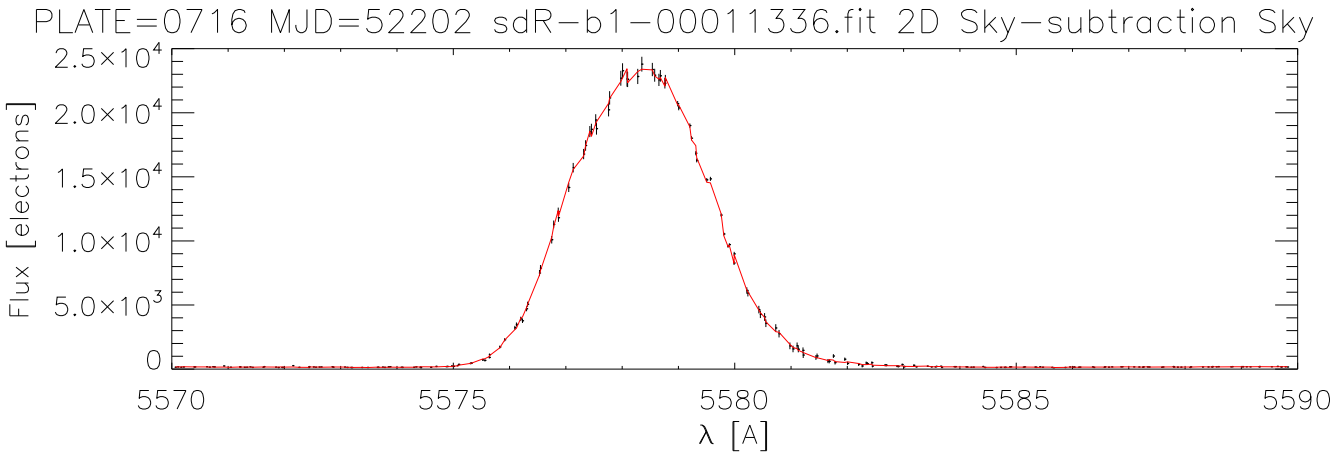

PLATE=0716 MJD=52202 sdR-b1-00011336.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

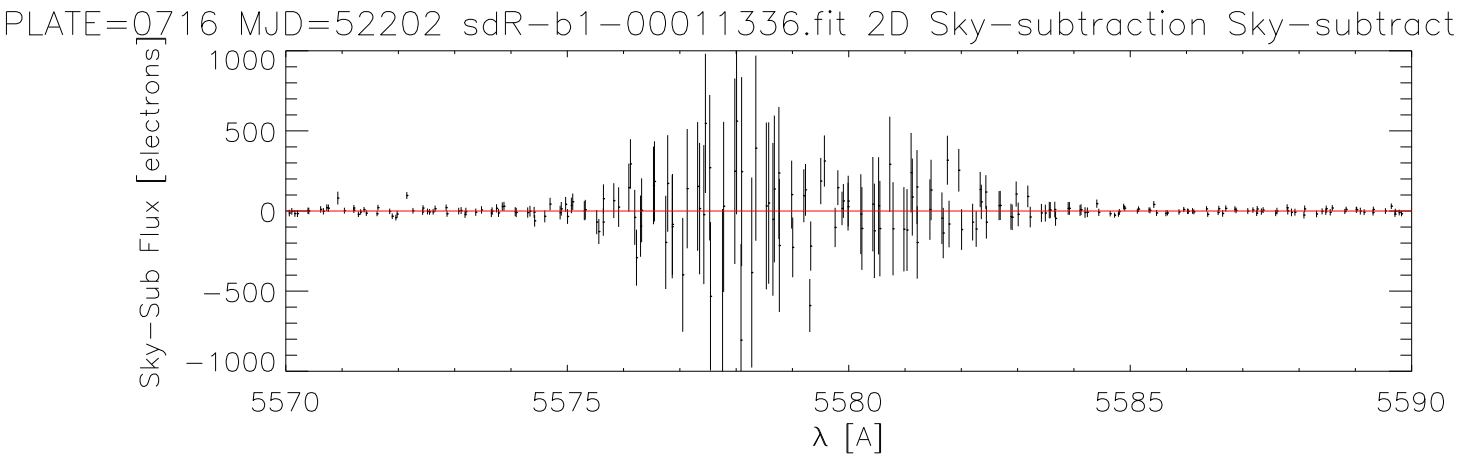

PLATE=0716 MJD=52202 sdR-b1-00011336.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

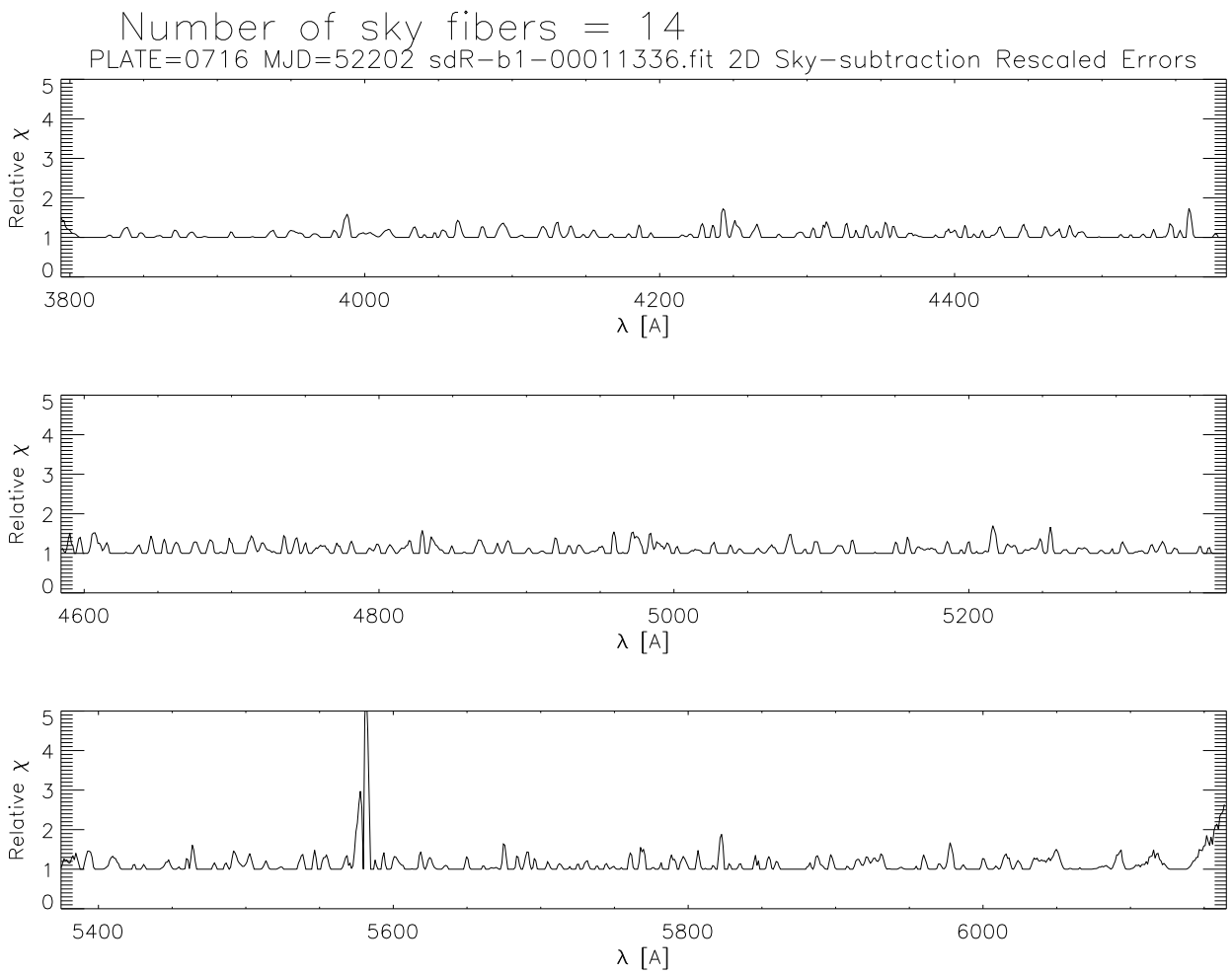

PLATE=0716 MJD=52202 sdR-b1-00011336.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

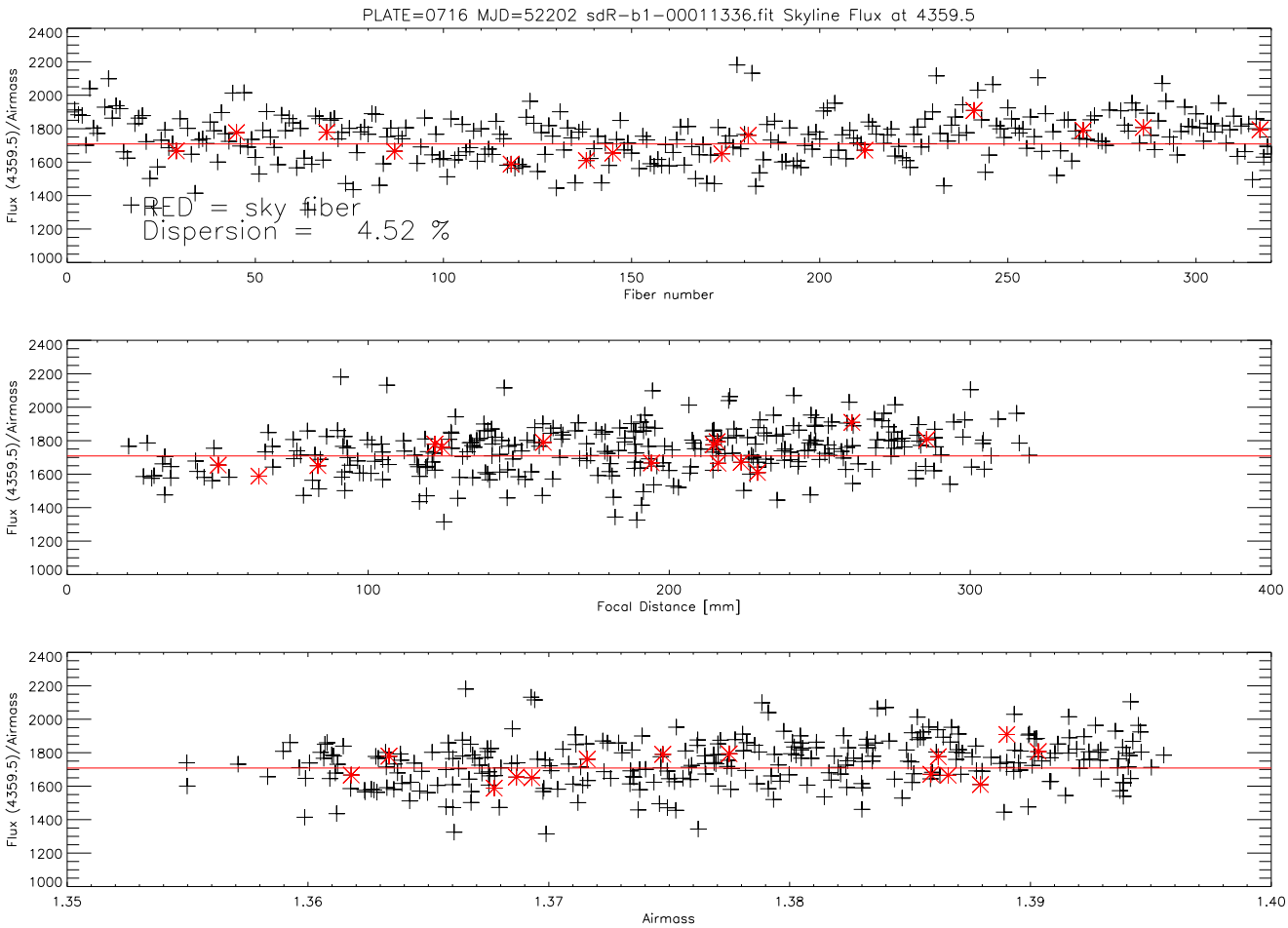

Number of sky fibers = 14
PLATE=0716 MJD=52202 sdR-b1-00011336.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

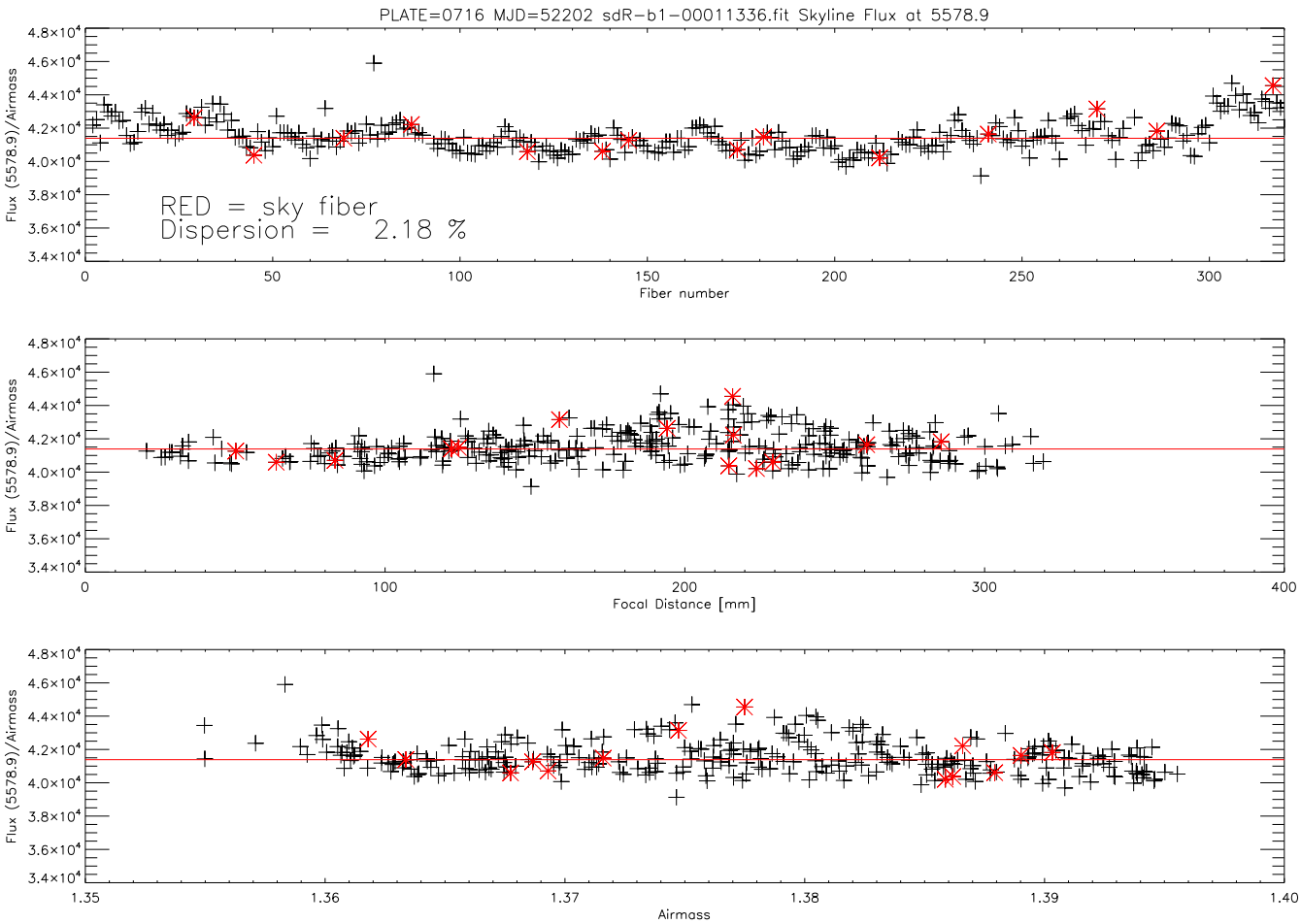

PLATE=0716 MJD=52202 sdR-b1-00011336.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

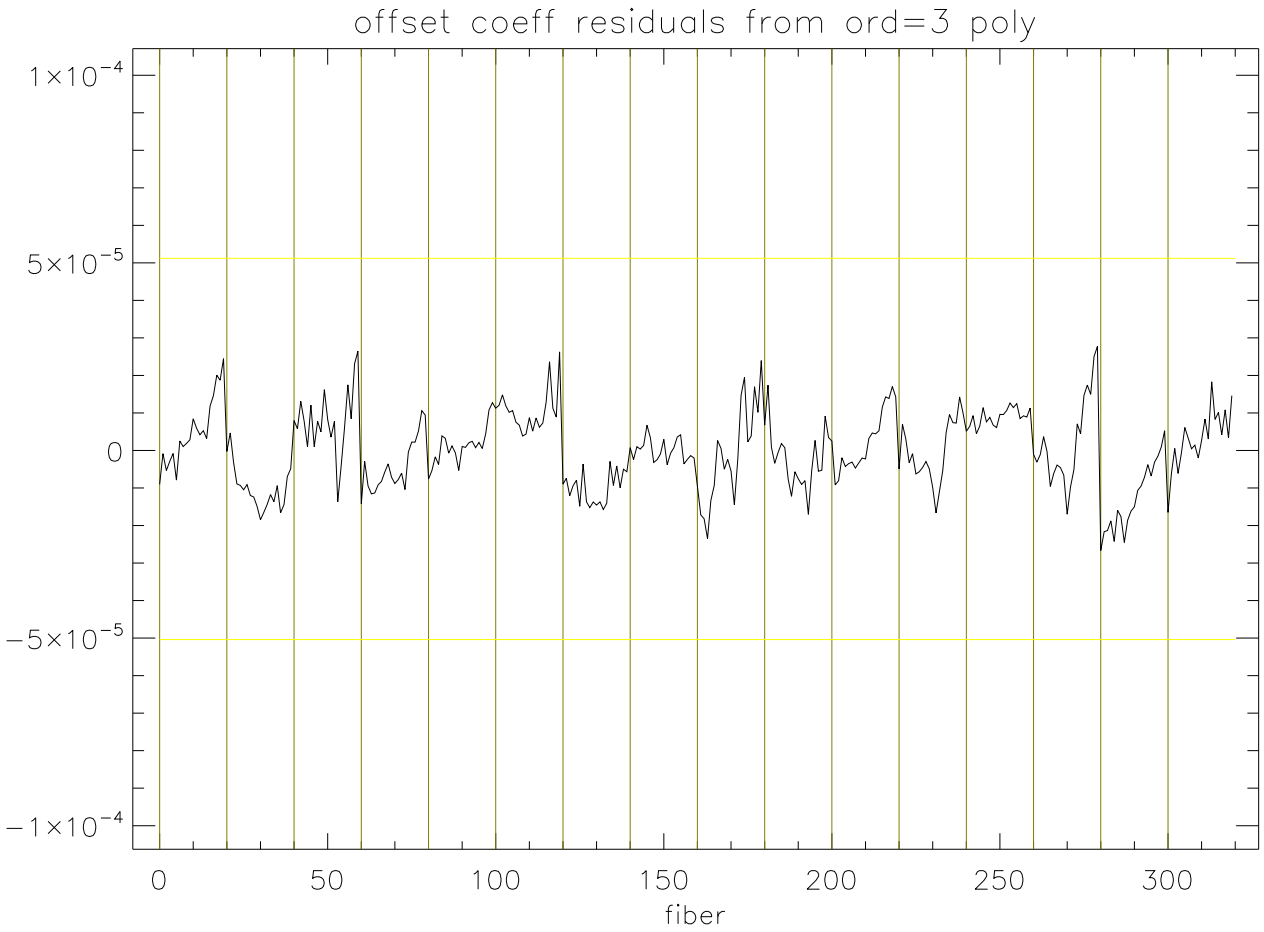

PLATE=0716 MJD=52202 sdR-b1-00011336.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

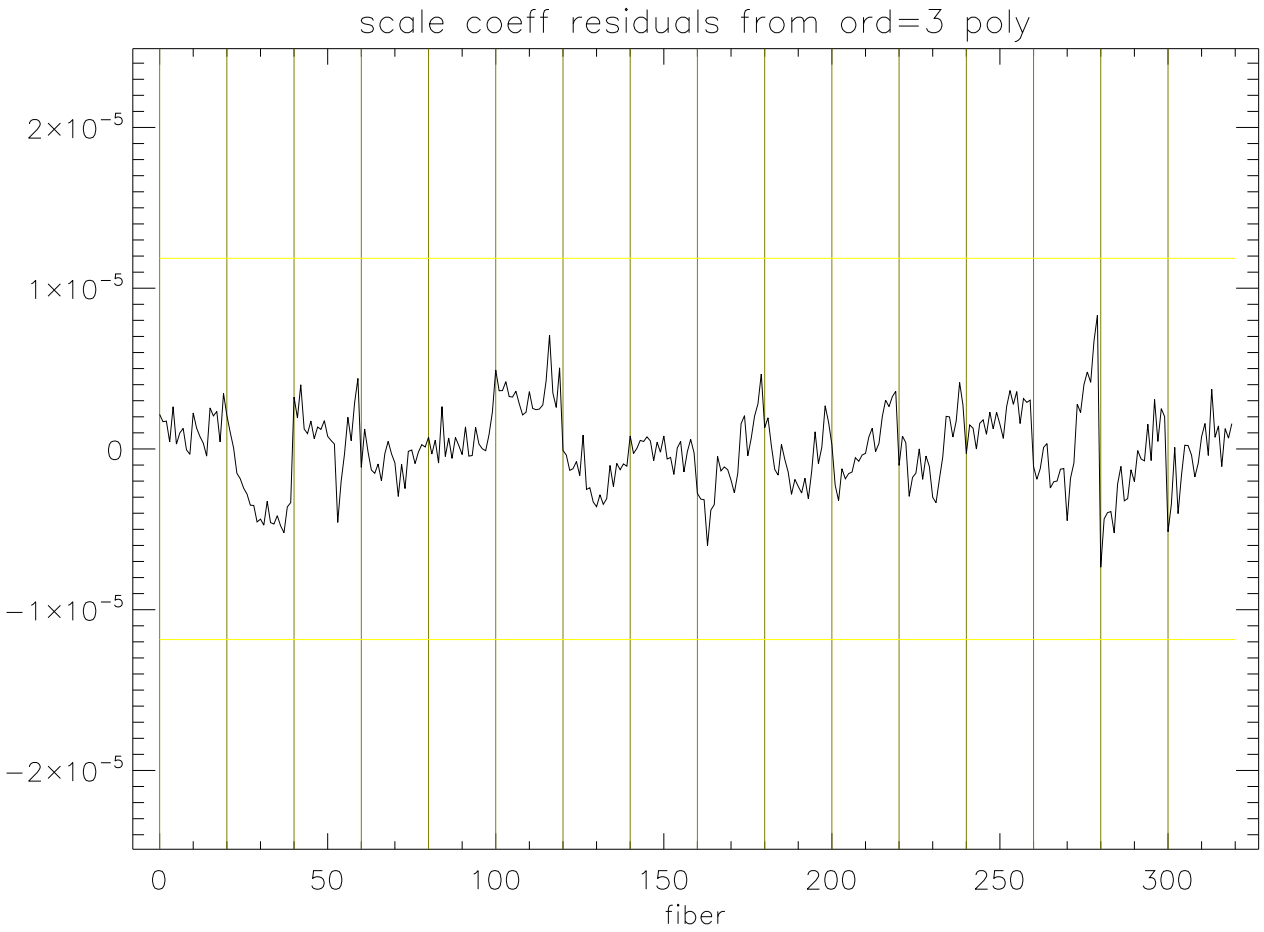

PLATE=0716 MJD=52202 sdR-b1-00011336.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

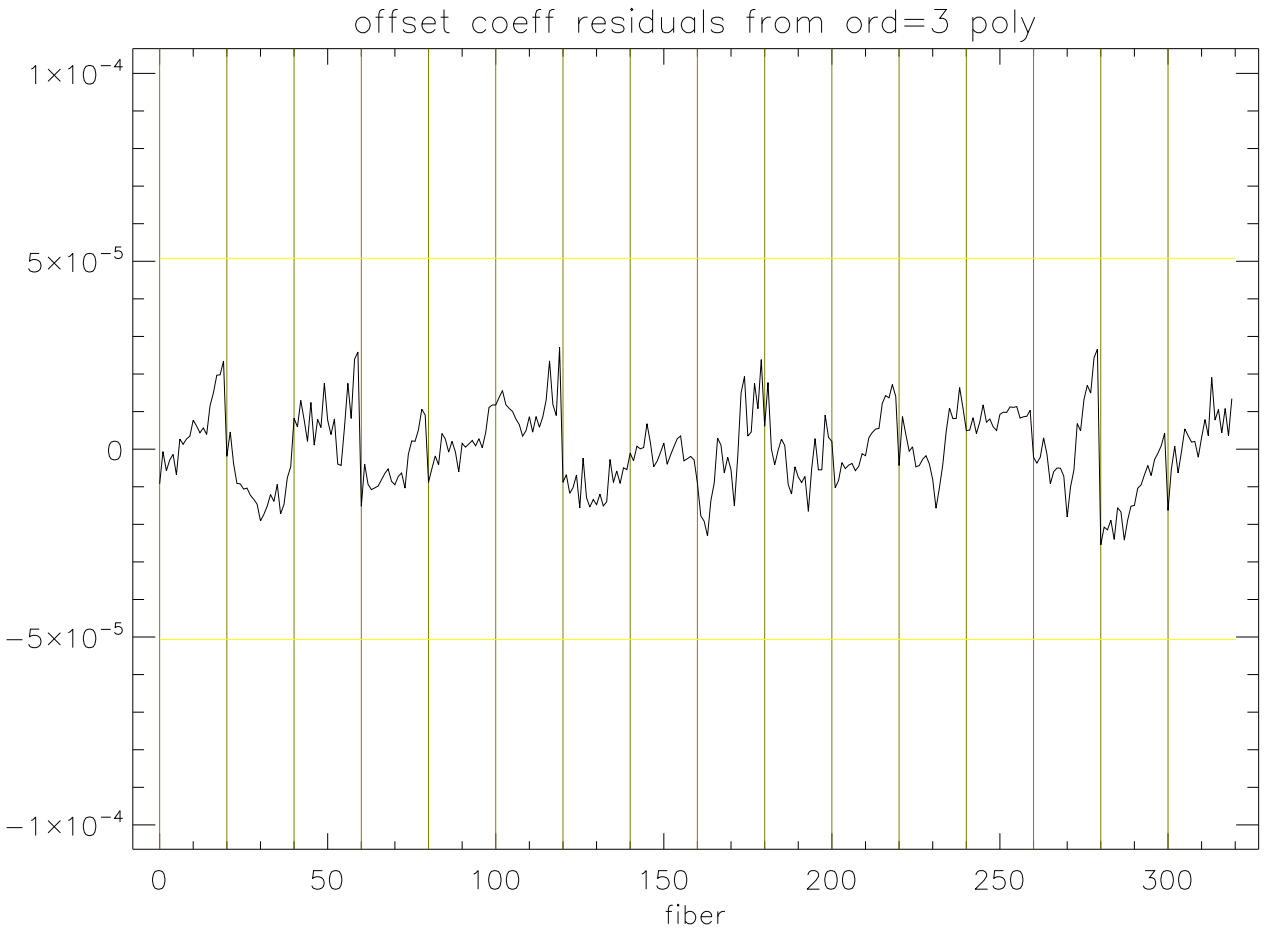

Number of sky fibers = 14
PLATE=0716 MJD=52202 sdR-b1-00011336.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

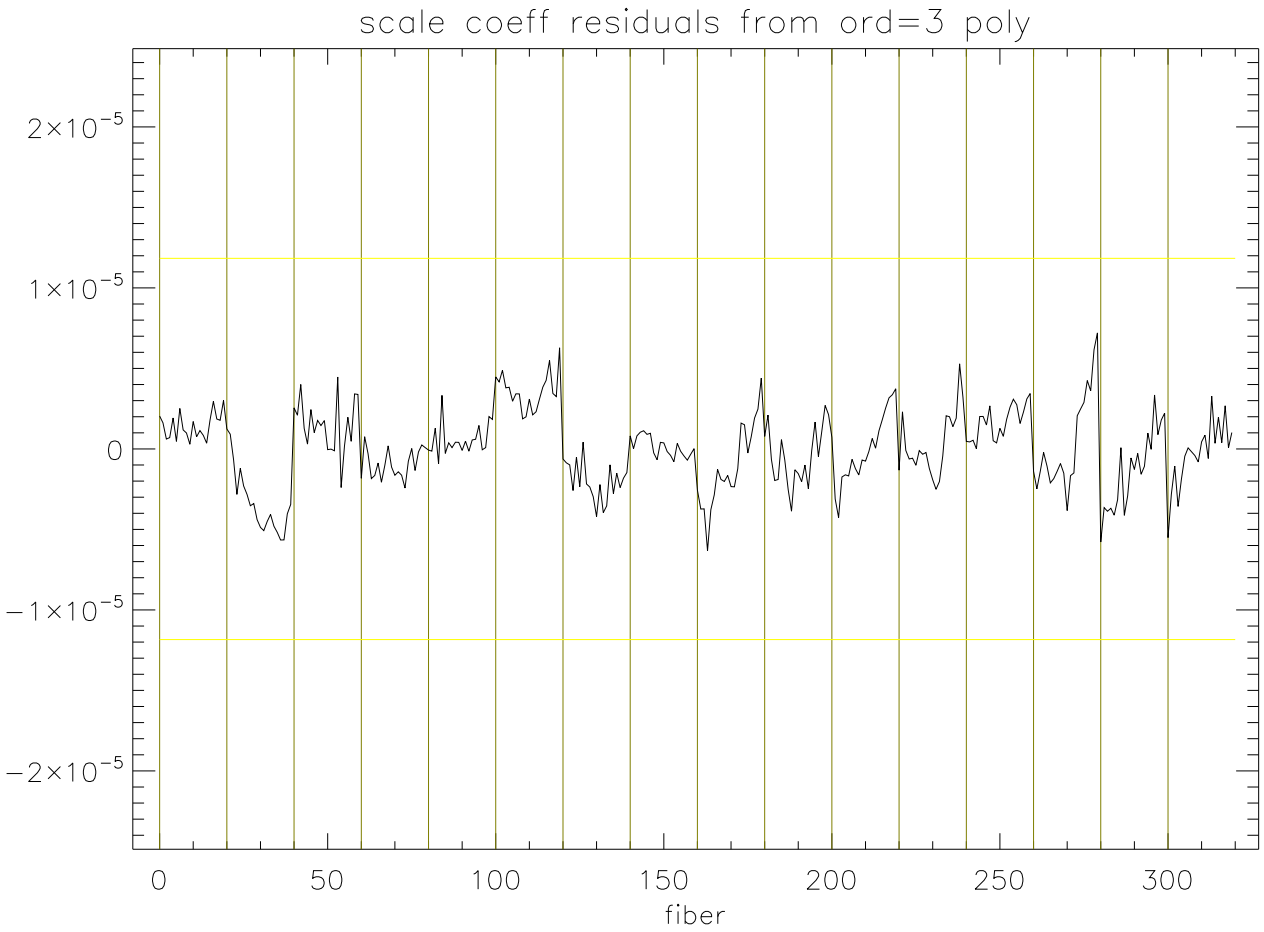

PLATE=0716 MJD=52202 sdR-b1-00011336.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.52 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

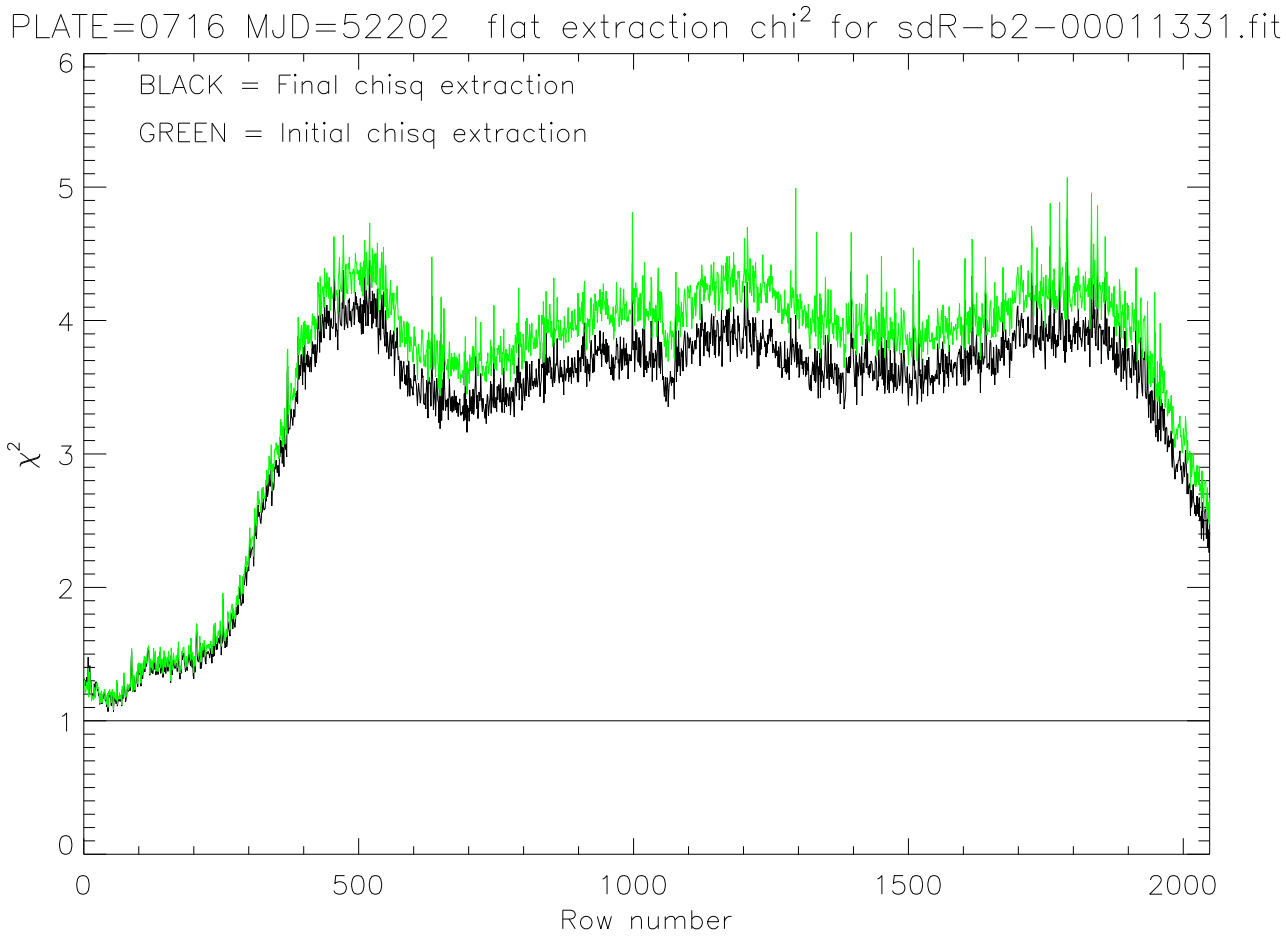

PLATE=0716 MJD=52202 sdR-b1-00011336.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.18 %
Fiber number
Focal Distance [mm]
Airmass

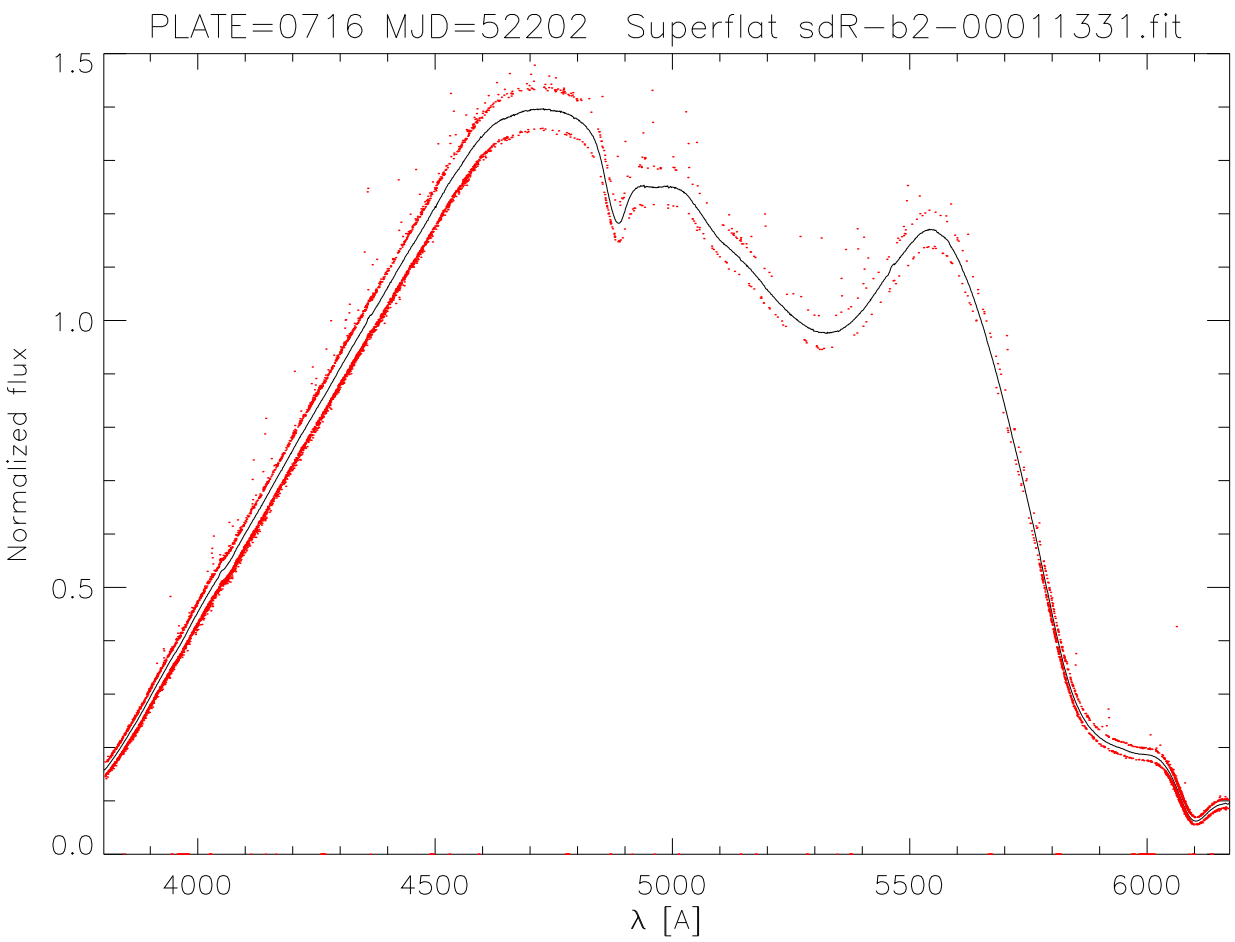

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

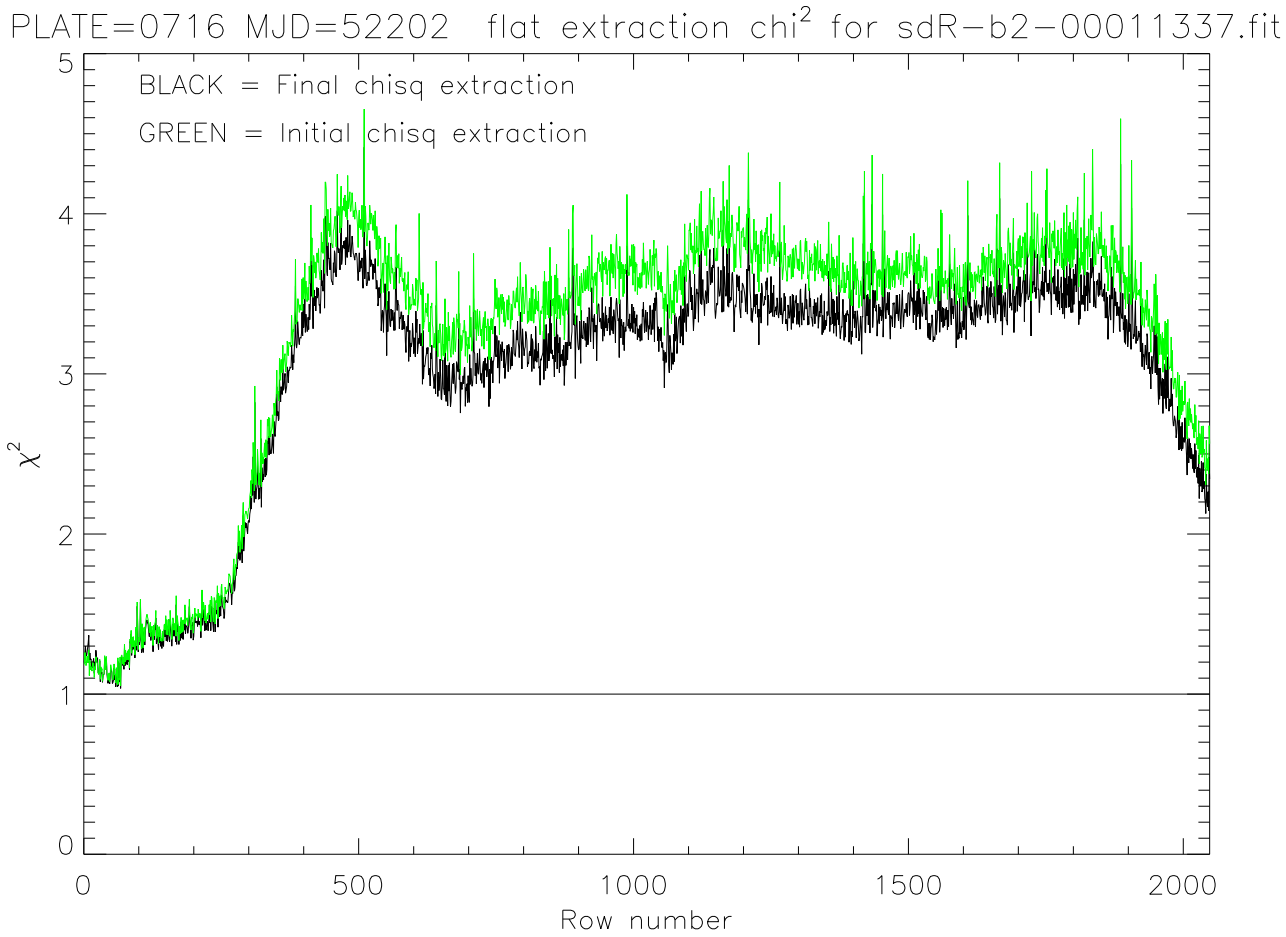

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

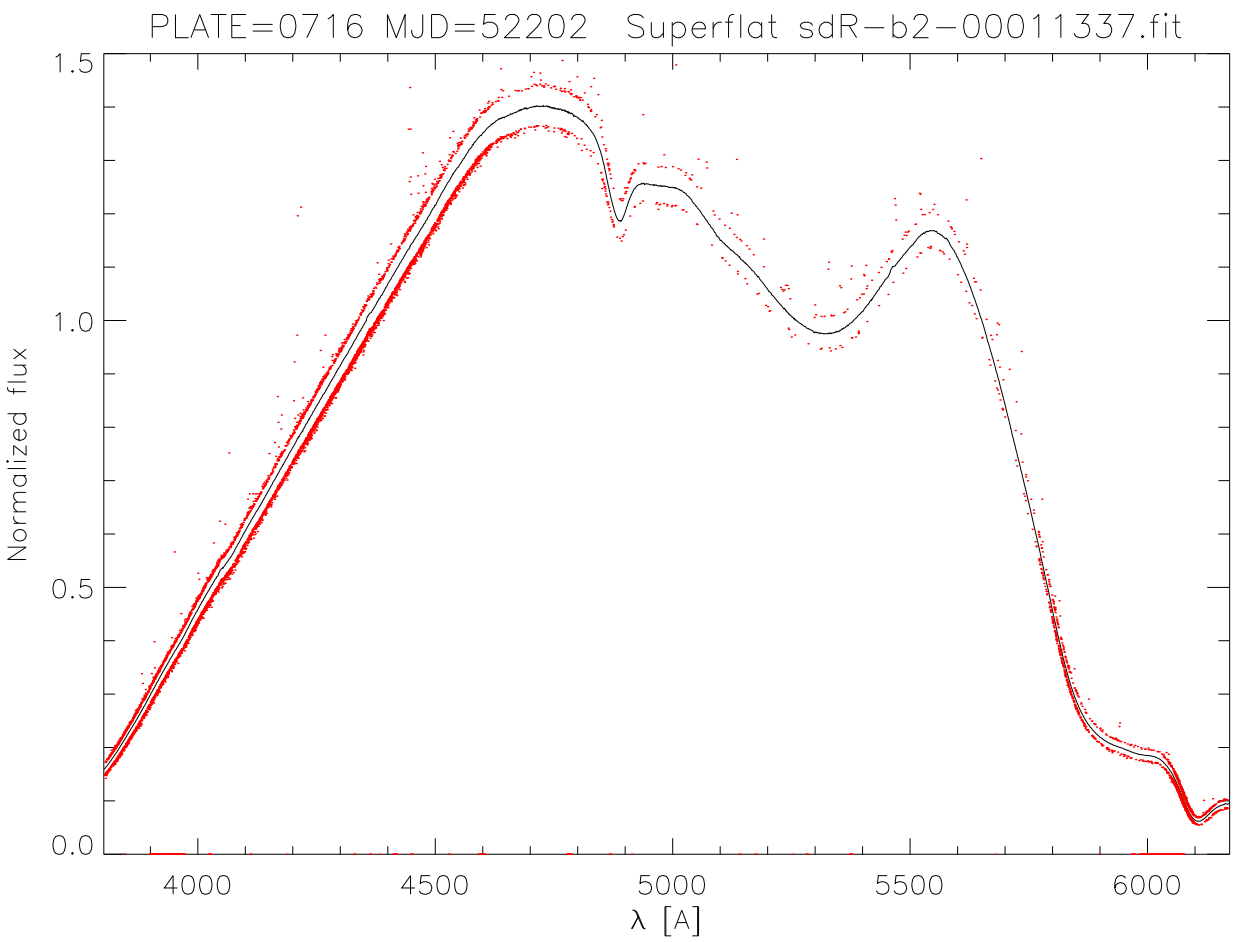

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

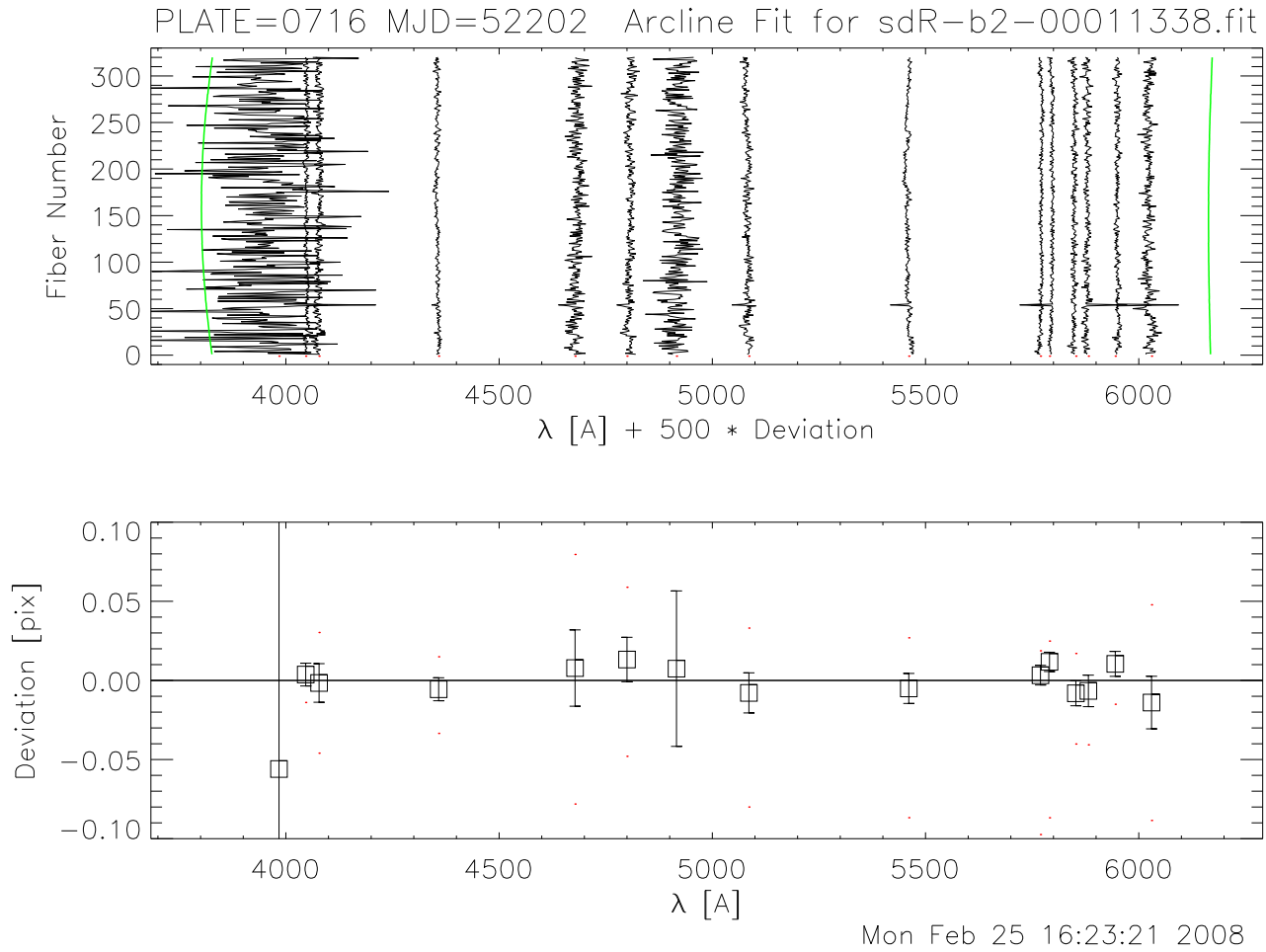

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

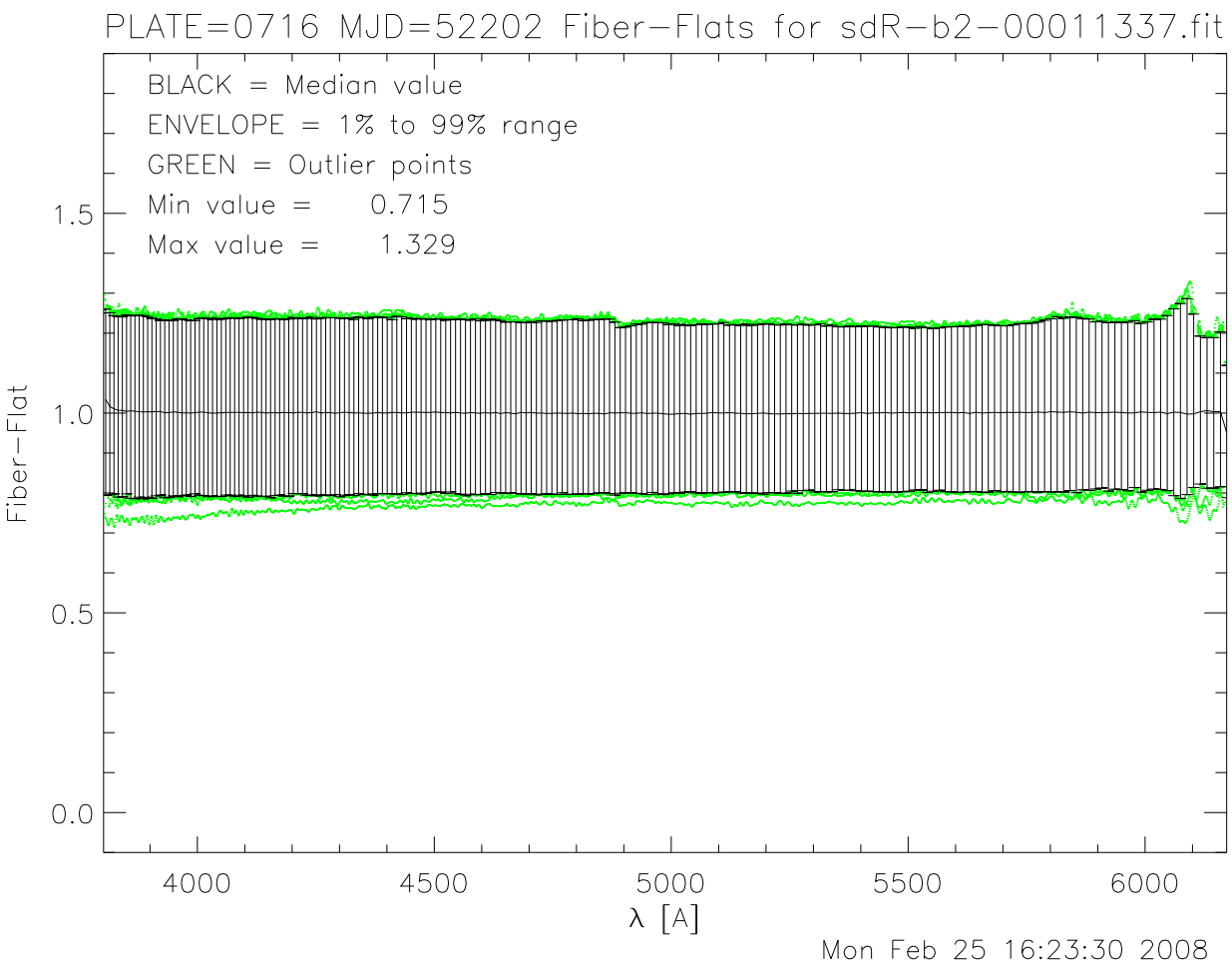

PLATE=0716 MJD=52202 flat extraction chi^2 for sdR−b2−00011331.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

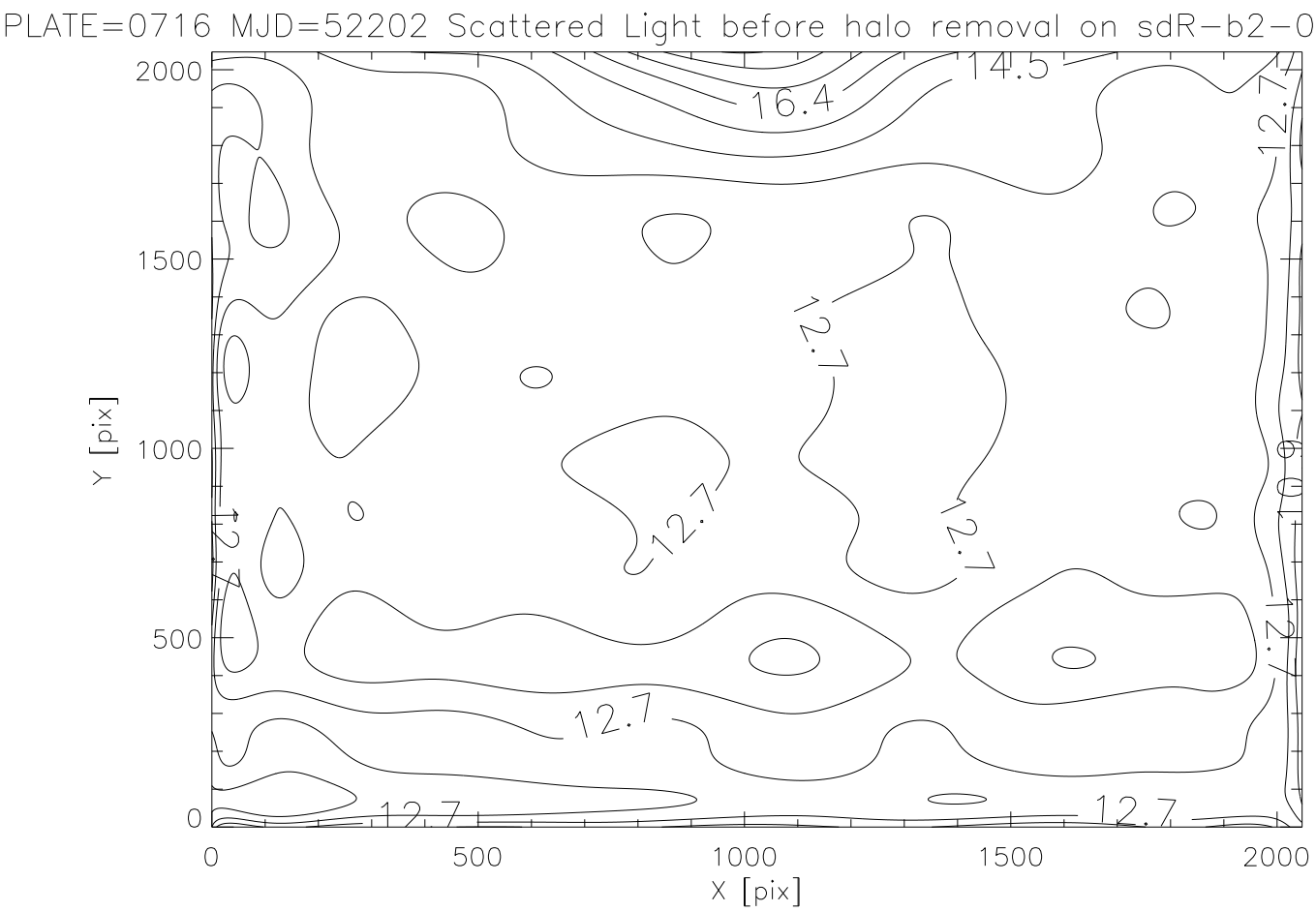

PLATE=0716 MJD=52202 Superflat sdR-b2-00011331.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

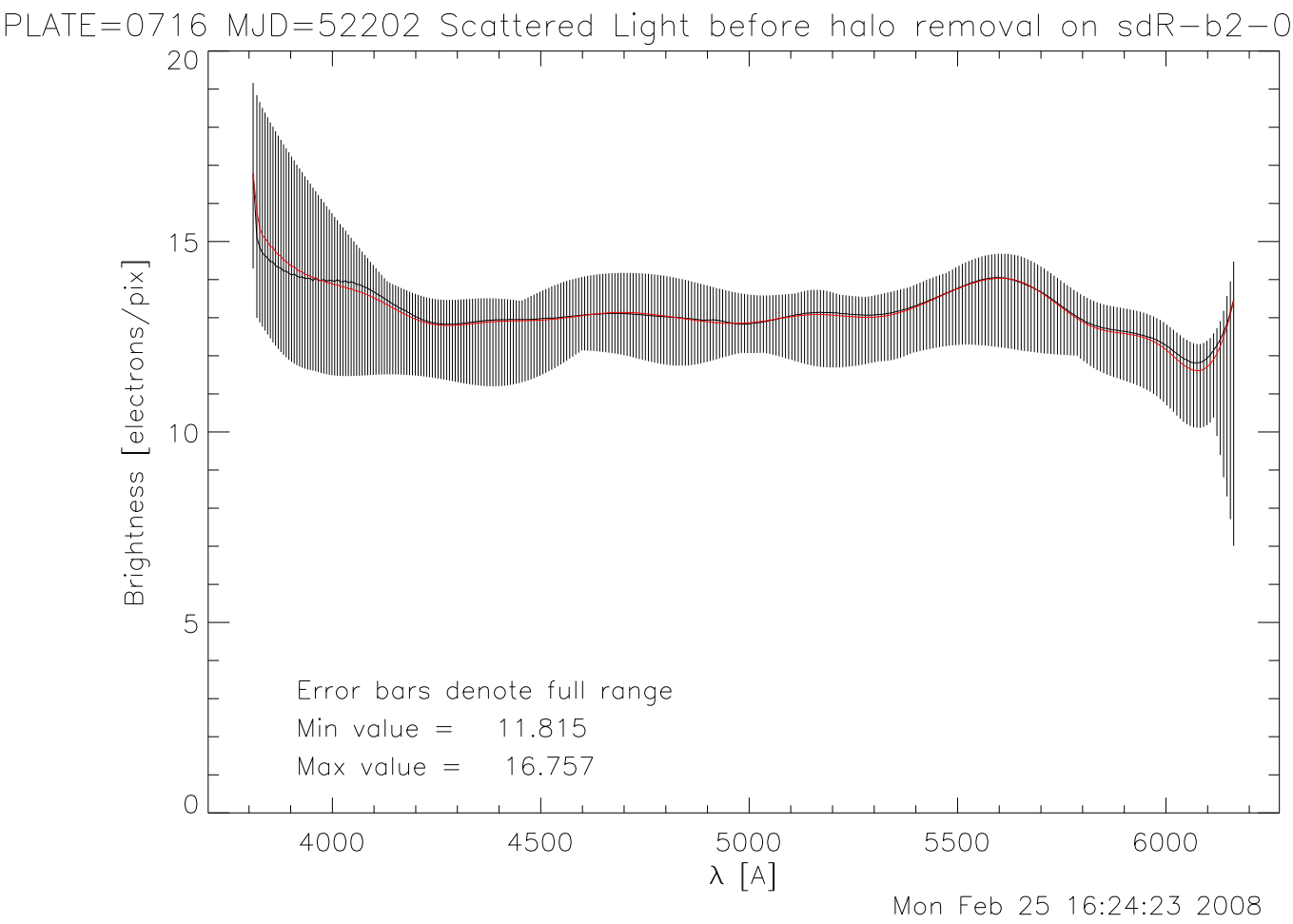

PLATE=0716 MJD=52202 flat extraction chi^2 for sdR−b2−00011337.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
0
500
1000
1500
2000

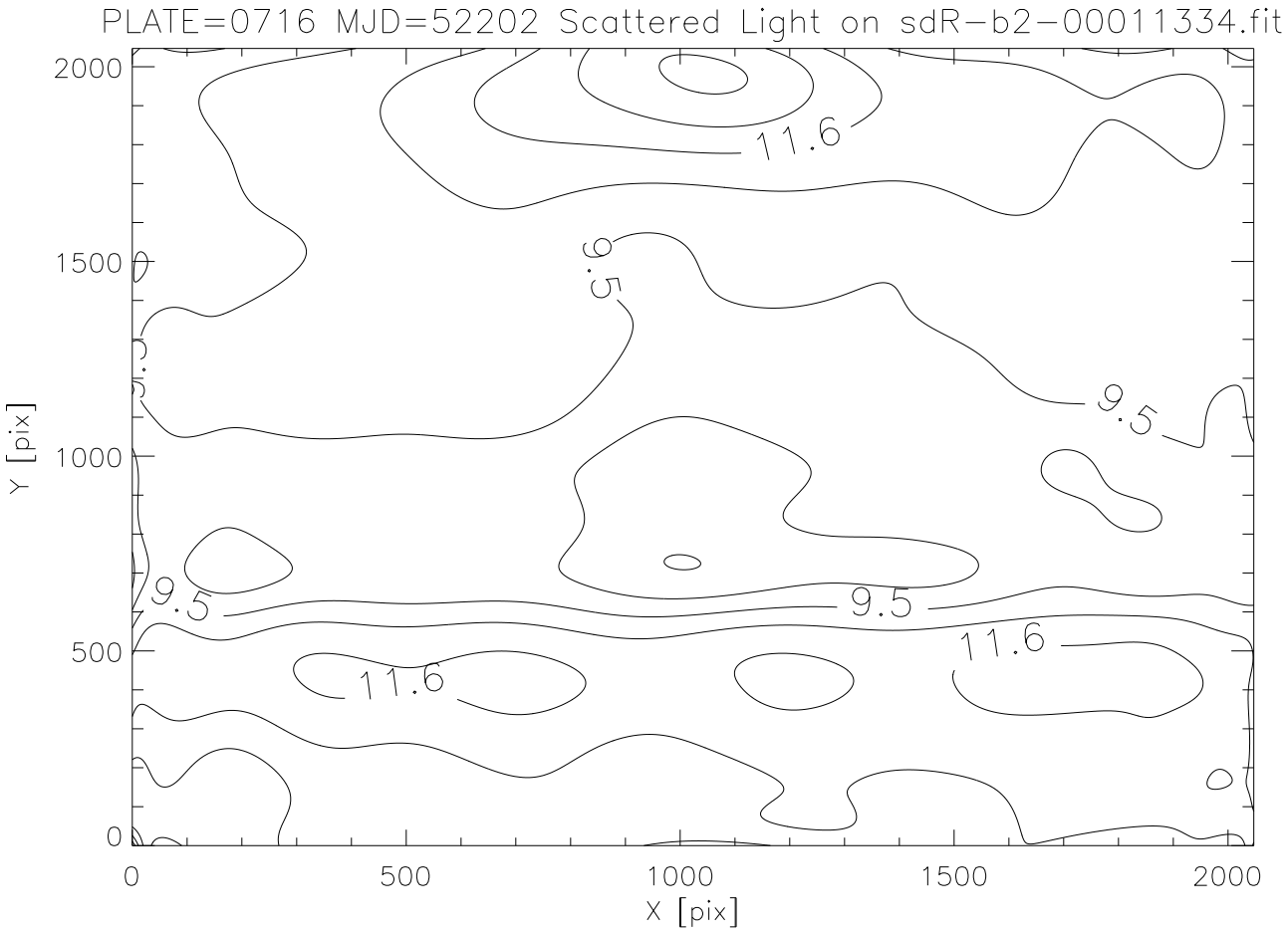

PLATE=0716 MJD=52202 Superflat sdR-b2-00011337.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

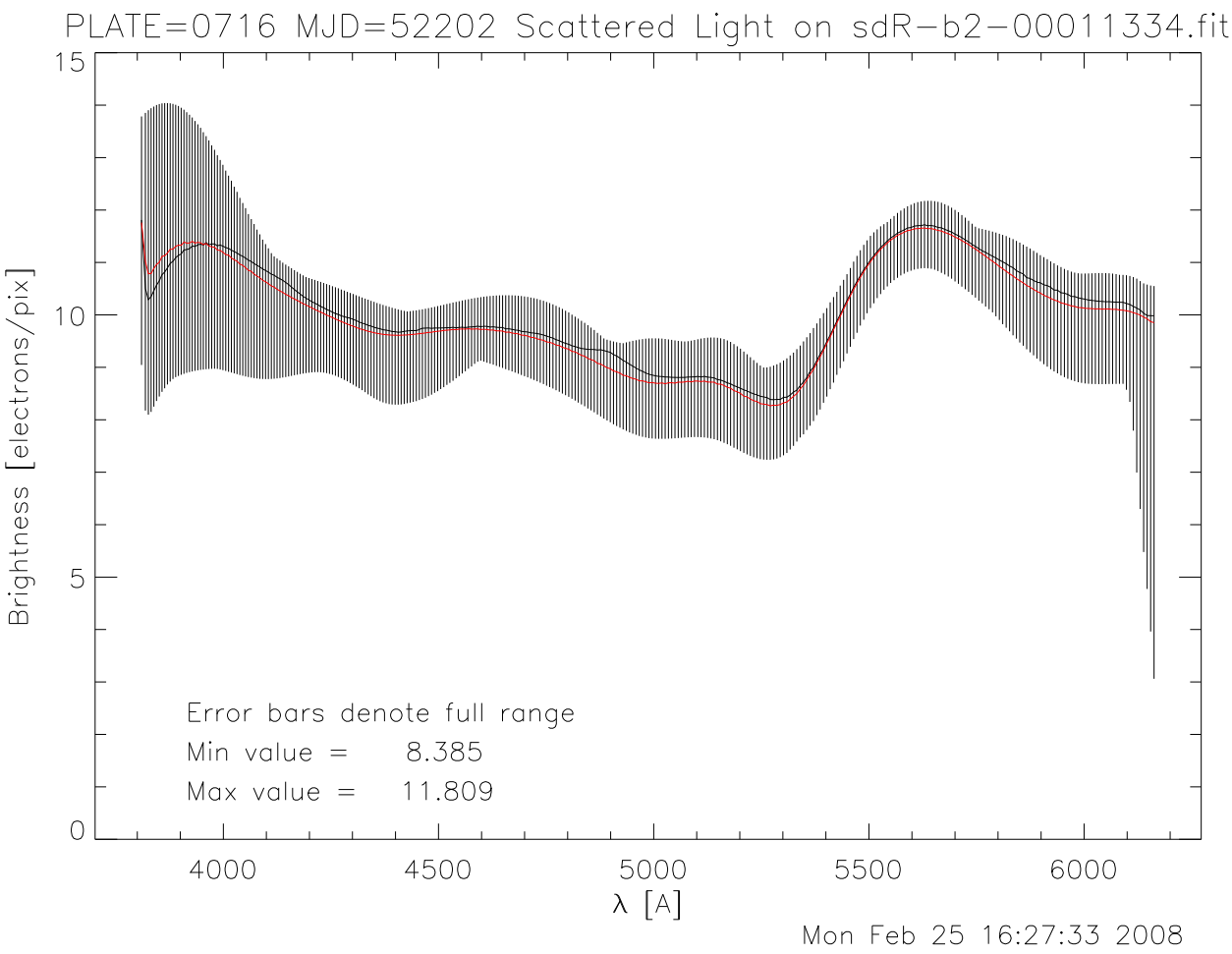

PLATE=0716 MJD=52202 Arcline Fit for sdR-b2-00011338.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 16:23:21 2008

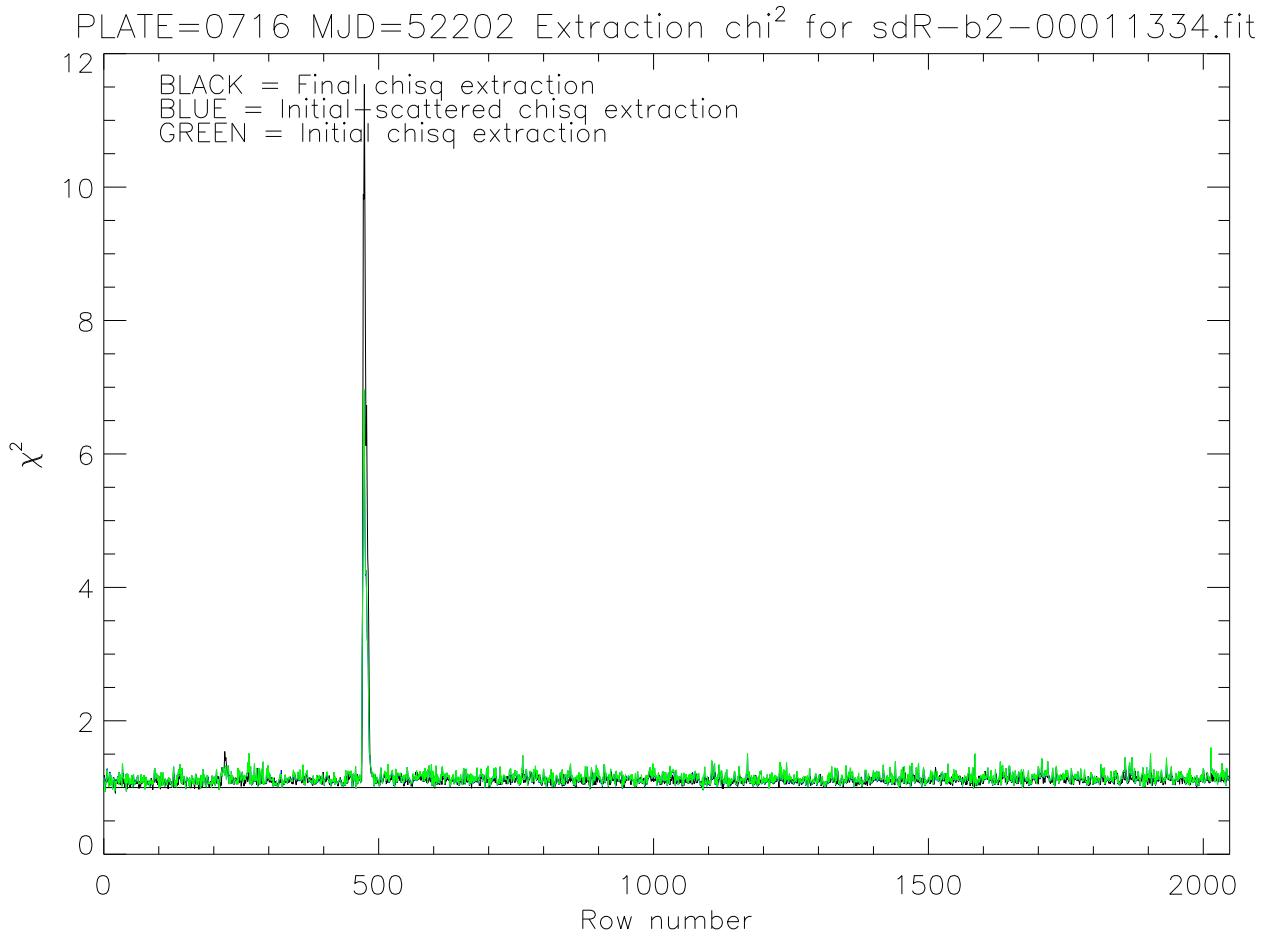

PLATE=0716 MJD=52202 Fiber-Flats for sdR-b2-00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.715
Max value = 1.329
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 16:23:30 2008

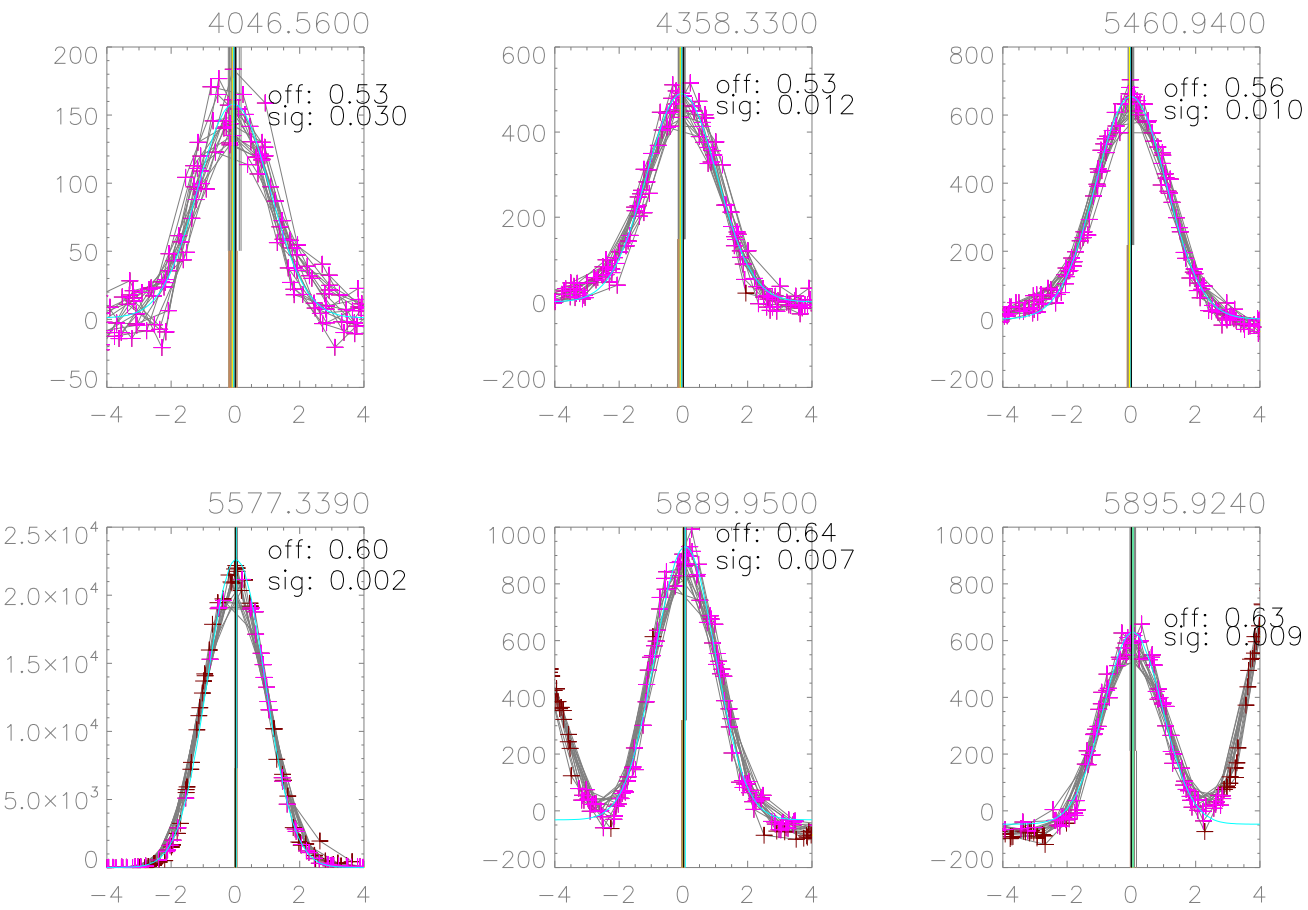

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-b2-00011334.f
16.4
14.5
12.7
12.7
12.7

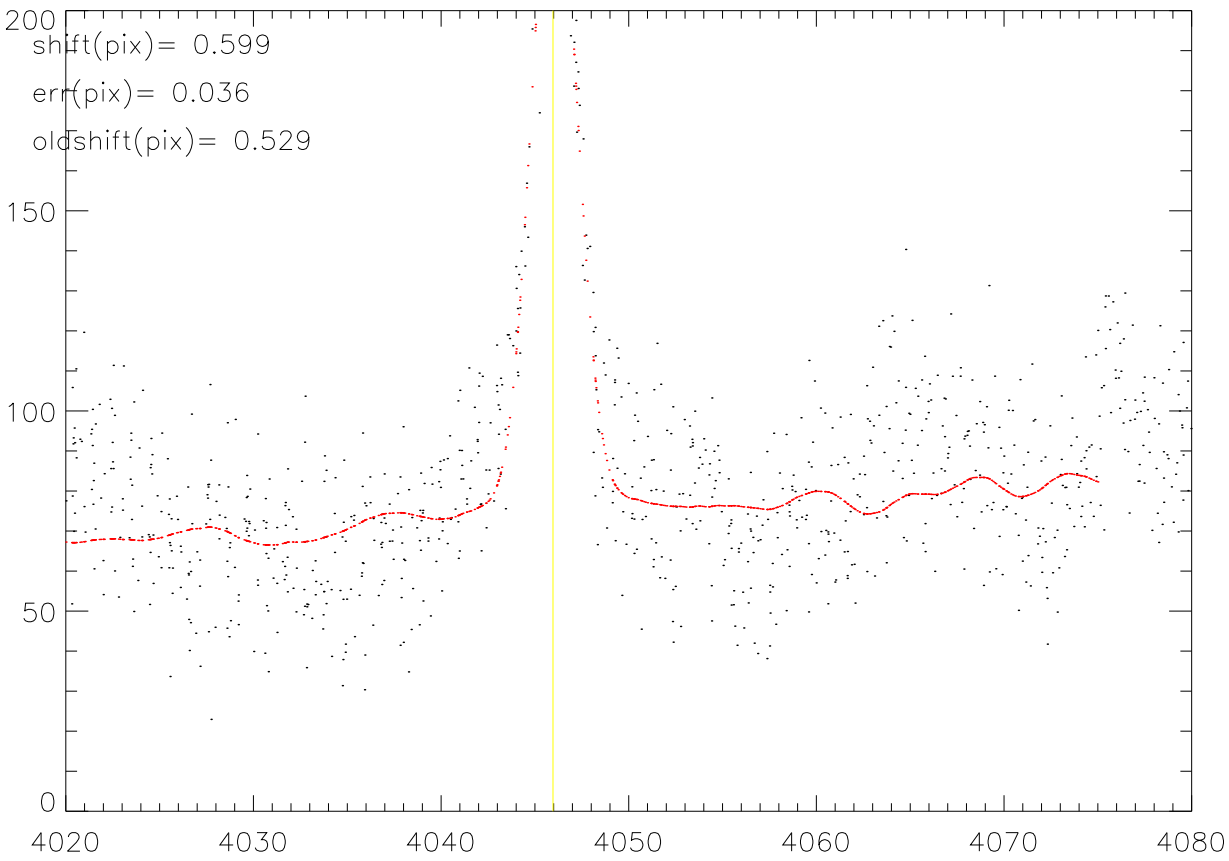

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-b2-00011334.f
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 11.815
Max value = 16.757
Mon Feb 25 16:24:23 2008

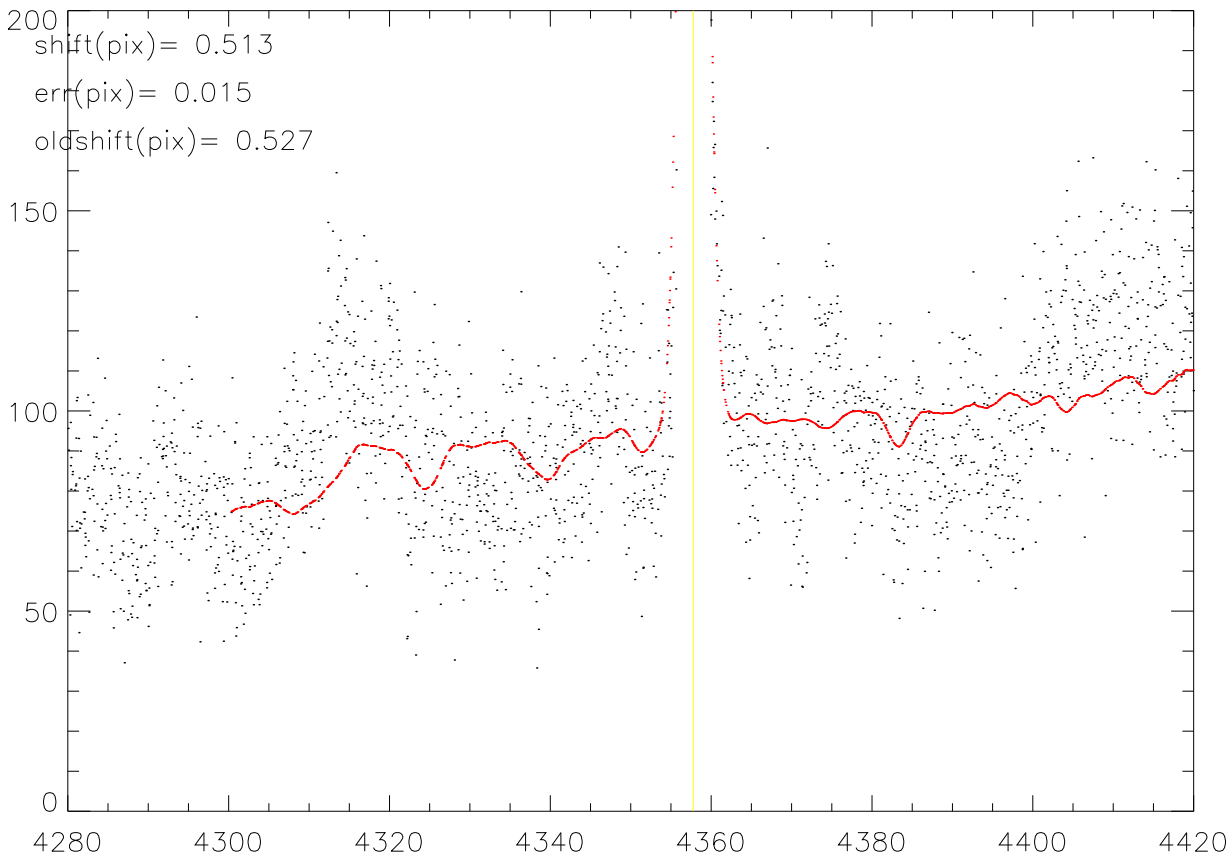

PLATE=0716 MJD=52202 Scattered Light on sdR-b2-00011334.fit
11.6
9.5
9.5
9.5
9.5
11.6
11.6
0
0
500
1000
1500
2000
Y [pix]
X [pix]

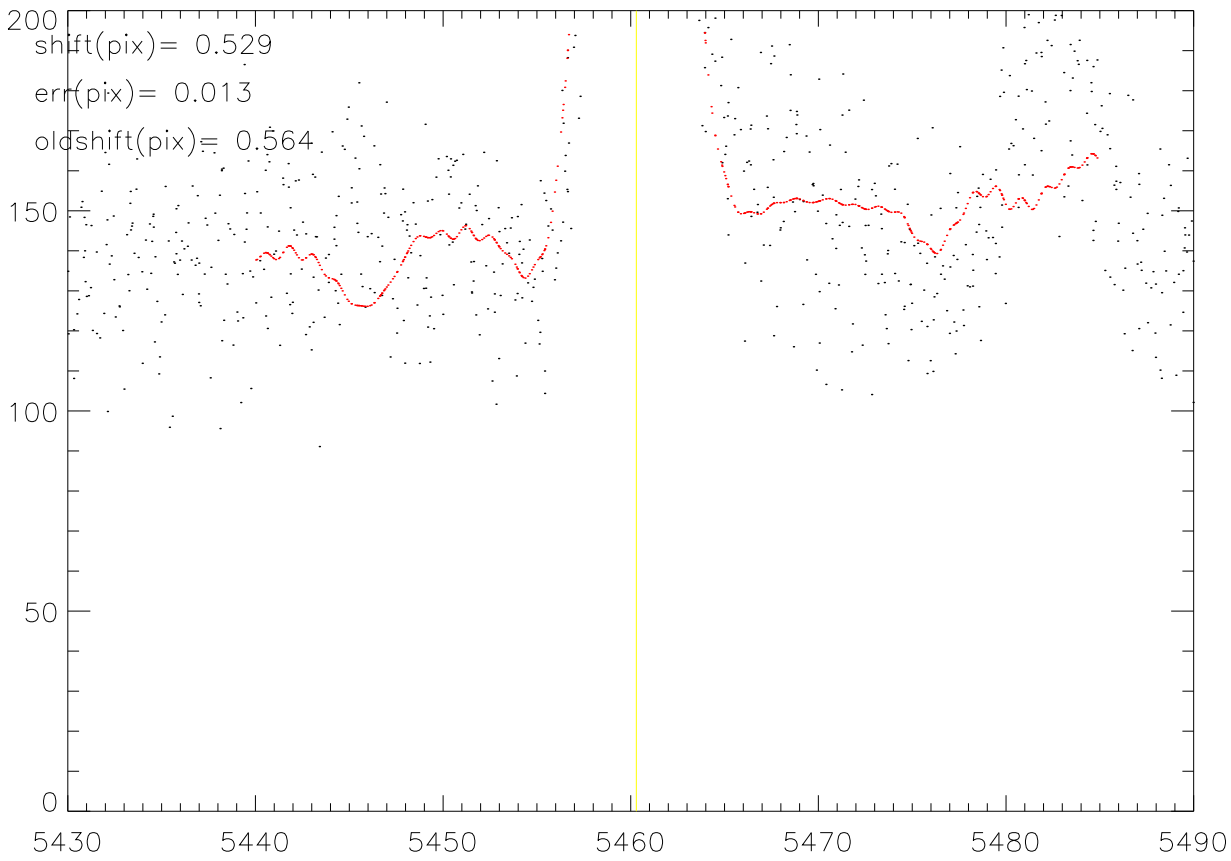

PLATE=0716 MJD=52202 Scattered Light on sdR-b2-00011334.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.385
Max value = 11.809
Mon Feb 25 16:27:33 2008

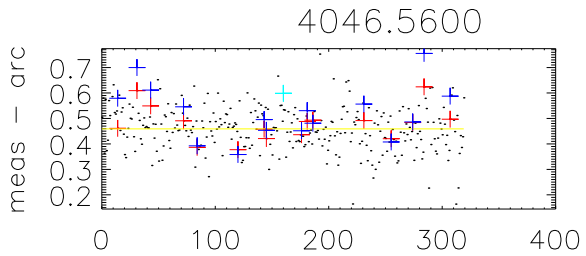

PLATE=0716 MJD=52202 Extraction chi^2 for sdR-b2-00011334.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

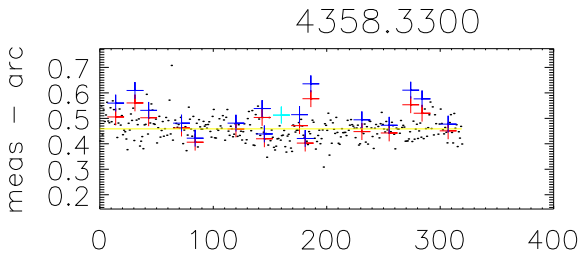

4046.5600
off: 0.53
sig: 0.030
4358.3300
off: 0.53
sig: 0.012
5460.9400
off: 0.56
sig: 0.010
5577.3390
off: 0.60
sig: 0.002
5889.9500
off: 0.64
sig: 0.007
5895.9240
off: 0.63
sig: 0.009

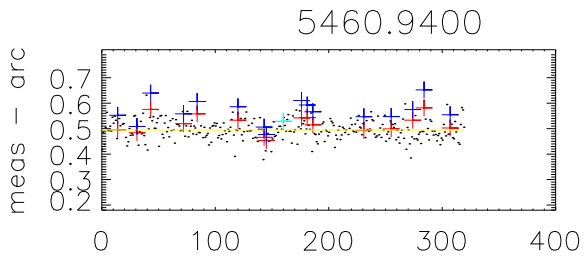

shift(pix)= 0.599
err(pix)= 0.036
oldshift(pix)= 0.529
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

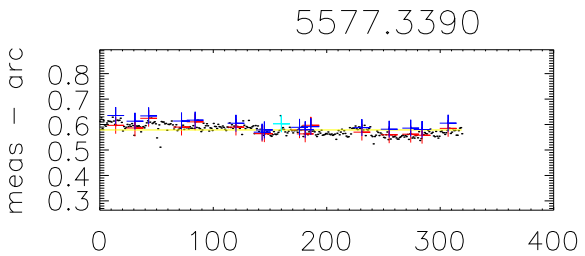

shift(pix)= 0.513
err(pix)= 0.015
oldshift(pix)= 0.527
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

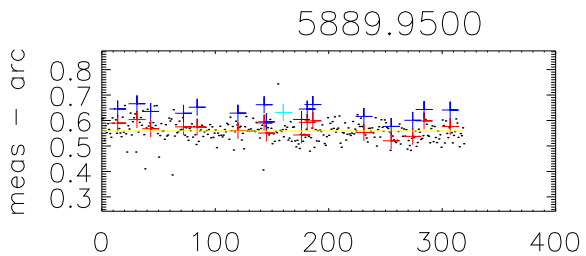

shift(pix)= 0.529
err(pix)= 0.013
oldshift(pix)= 0.564
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

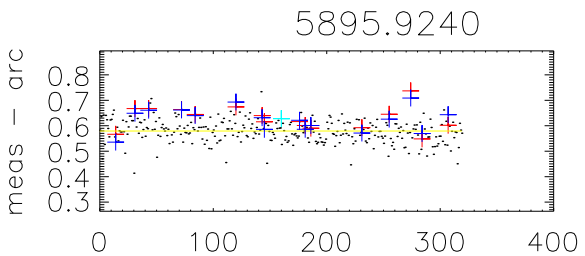

4046.5600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

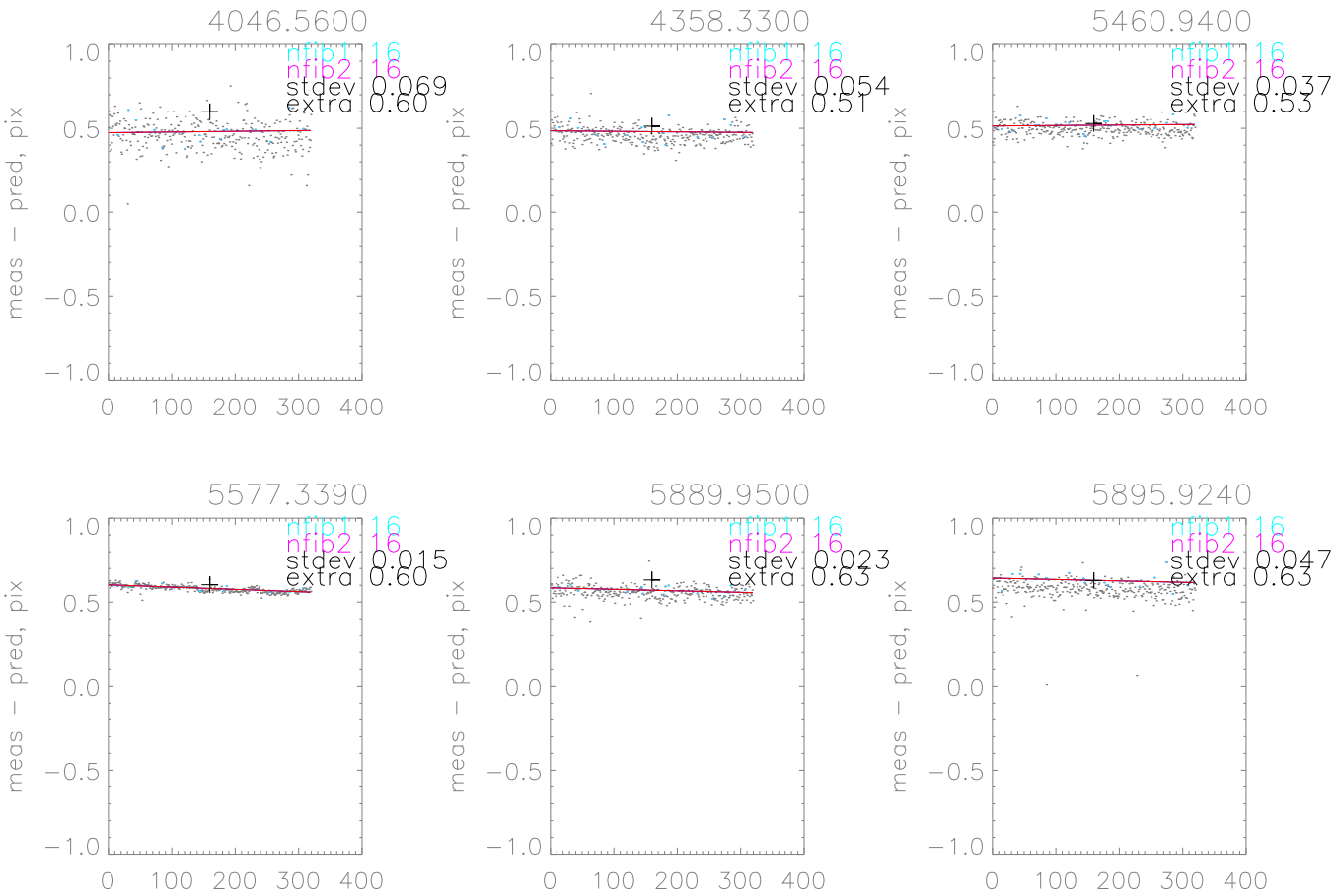

4358.3300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

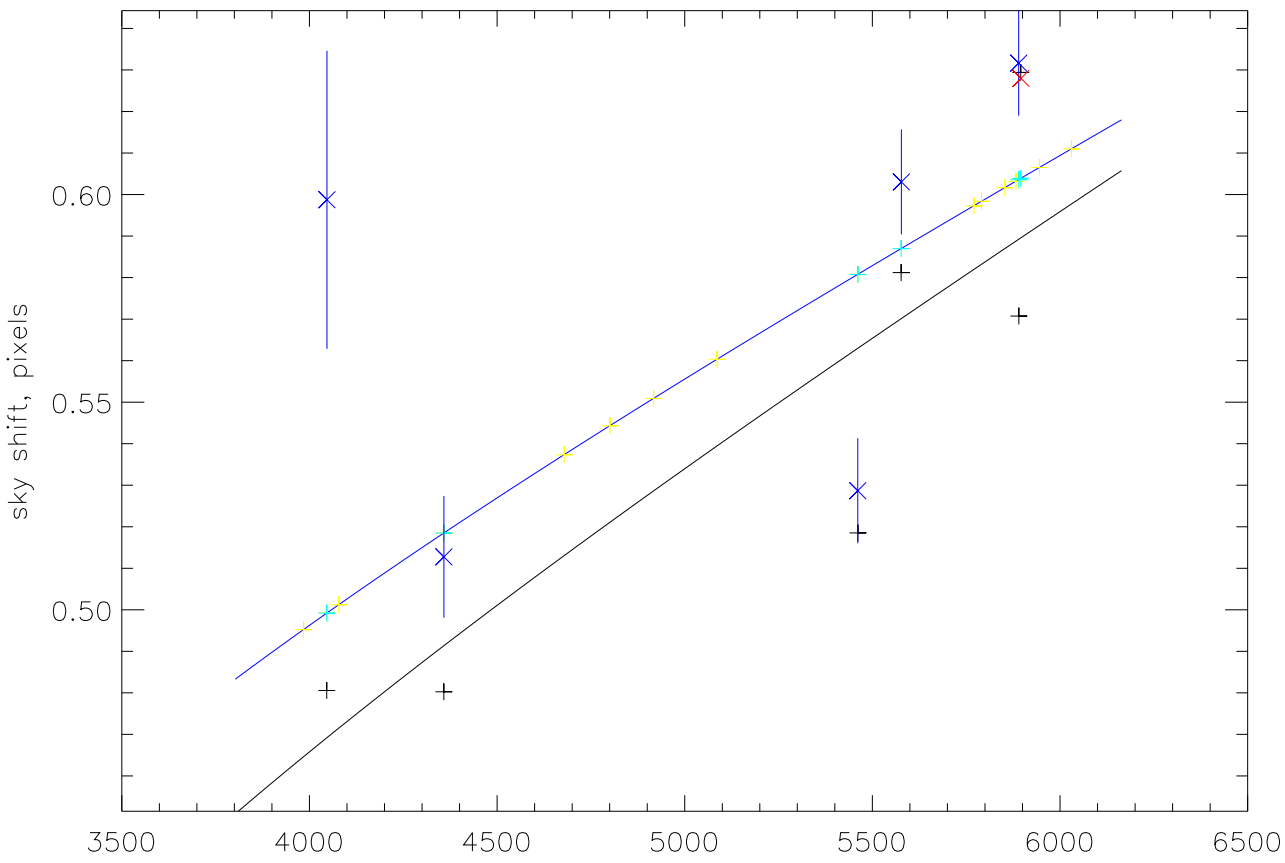

5460.9400
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

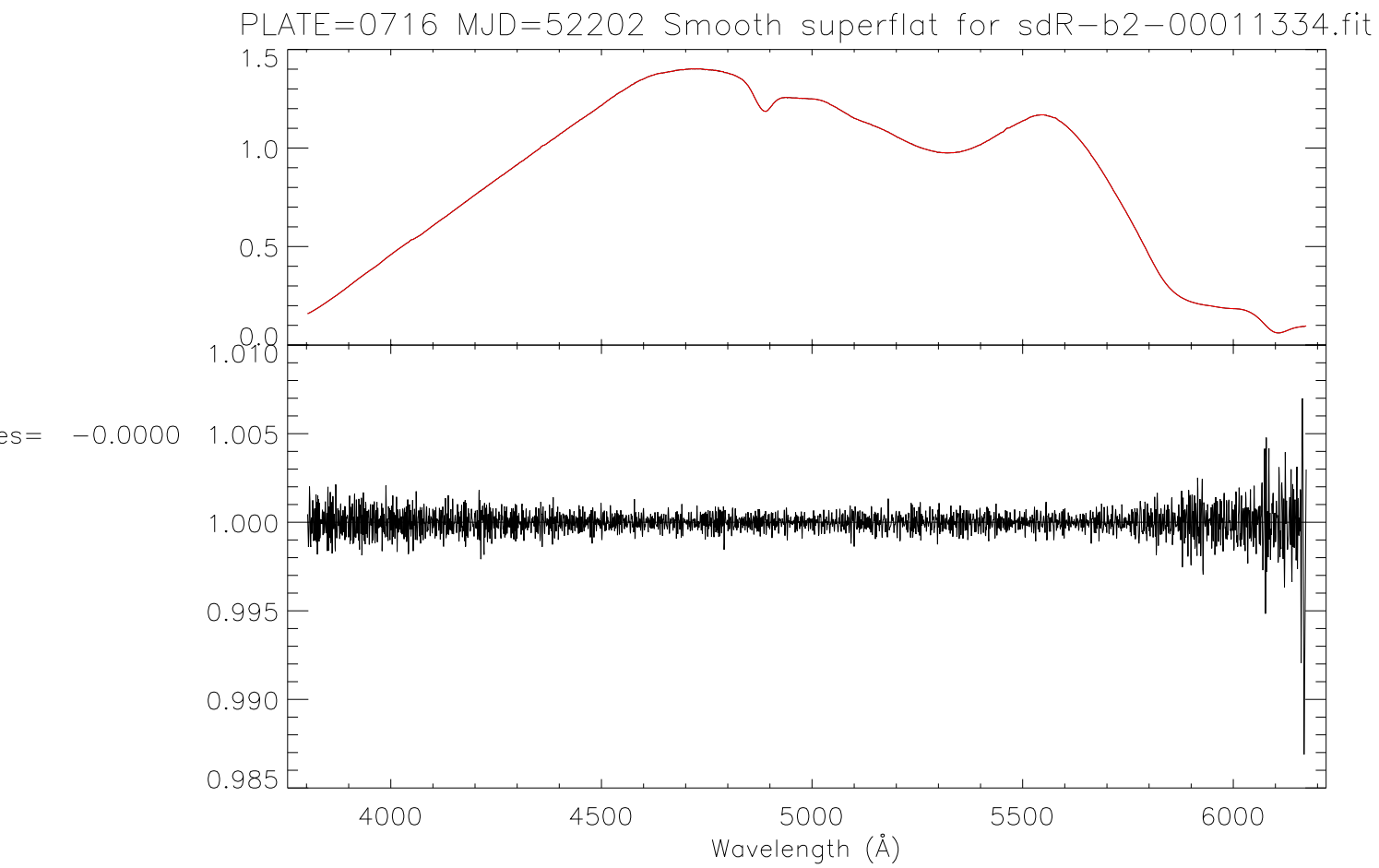

5577.3390
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400


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

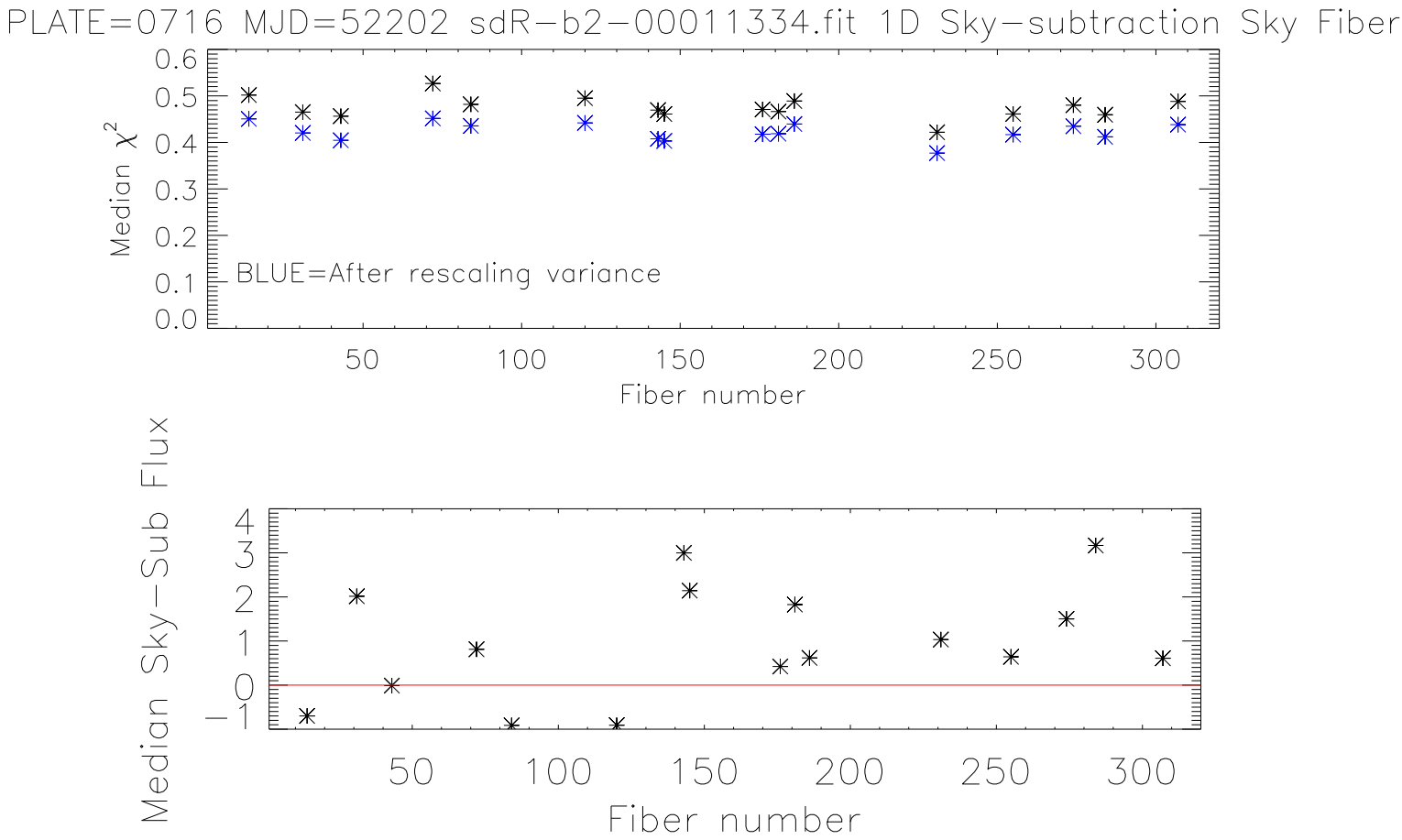

5895.9240
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

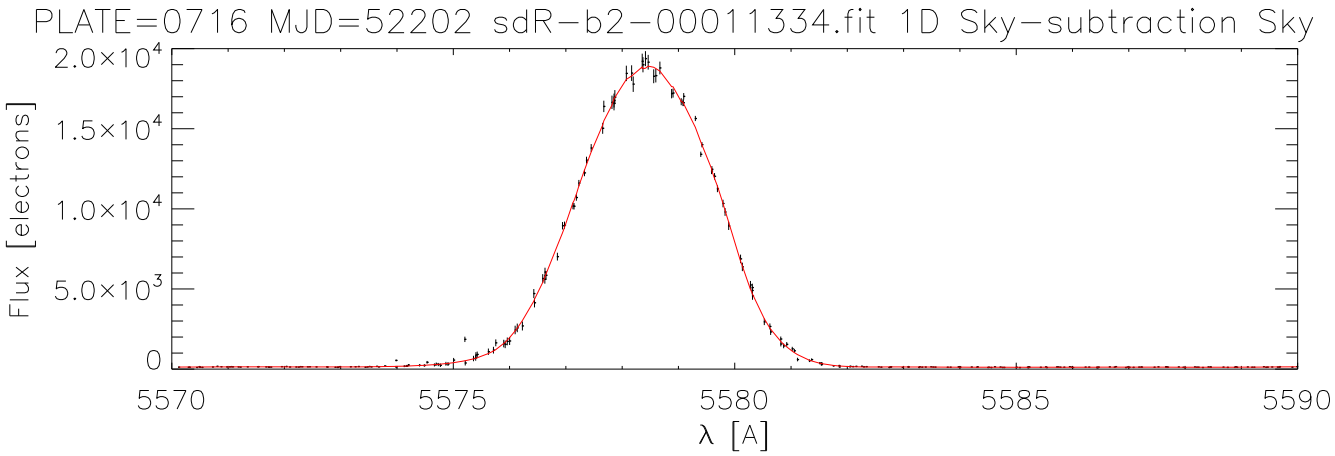

4046.5600
nfib1 16
nfib2 16
stdev 0.069
extra 0.60
4358.3300
nfib1 16
nfib2 16
stdev 0.054
extra 0.51
5460.9400
nfib1 16
nfib2 16
stdev 0.037
extra 0.53
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.60
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra 0.63
5895.9240
nfib1 16
nfib2 16
stdev 0.047
extra 0.63
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

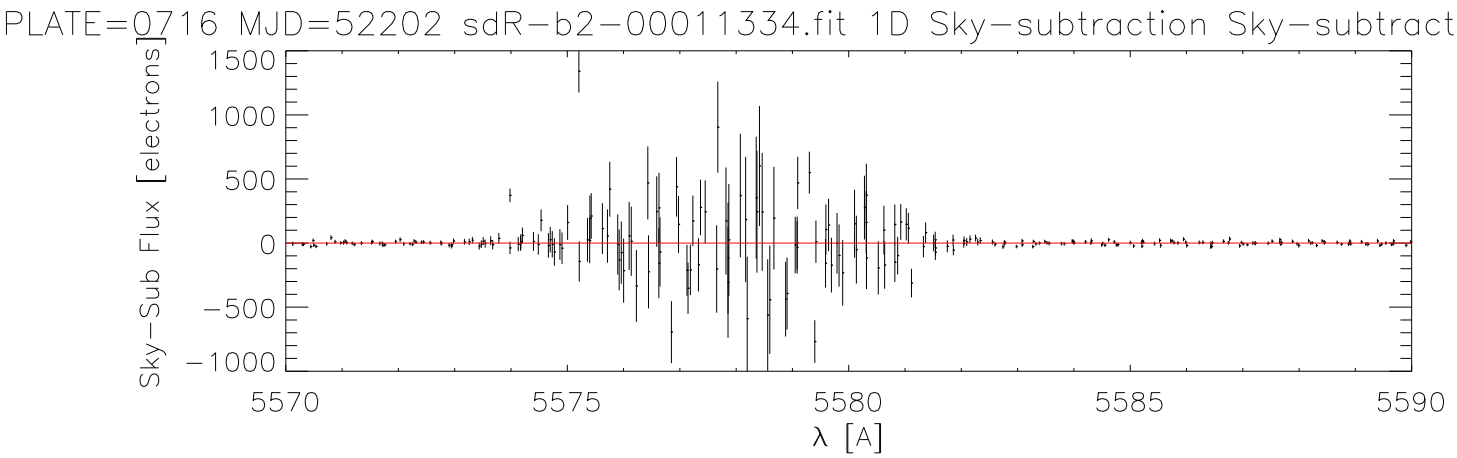

sky shift, pixels
0.60
0.55
0.50
3500
4000
4500
5000
5500
6000
6500

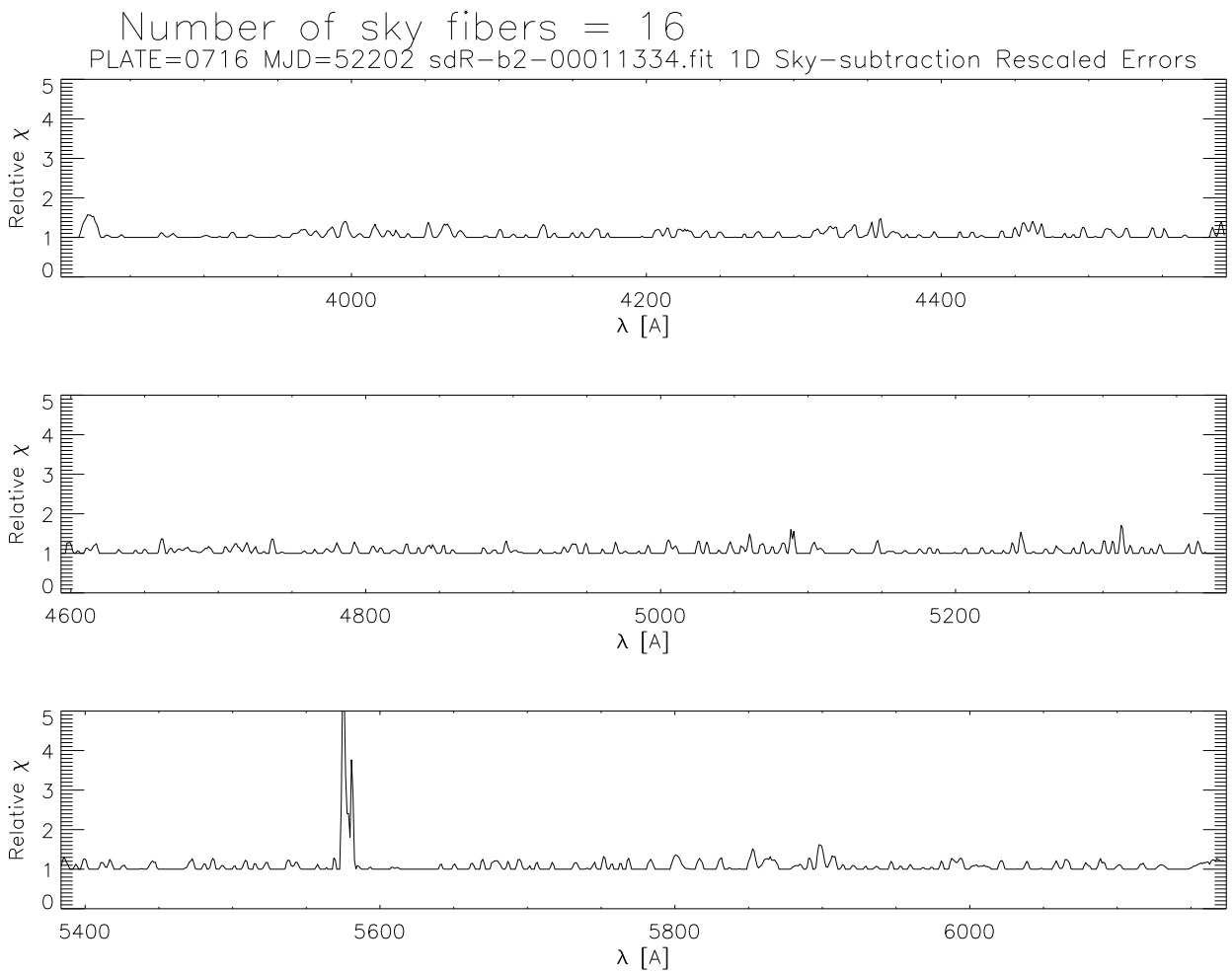

PLATE=0716 MJD=52202 Smooth superflat for sdR-b2-00011334.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

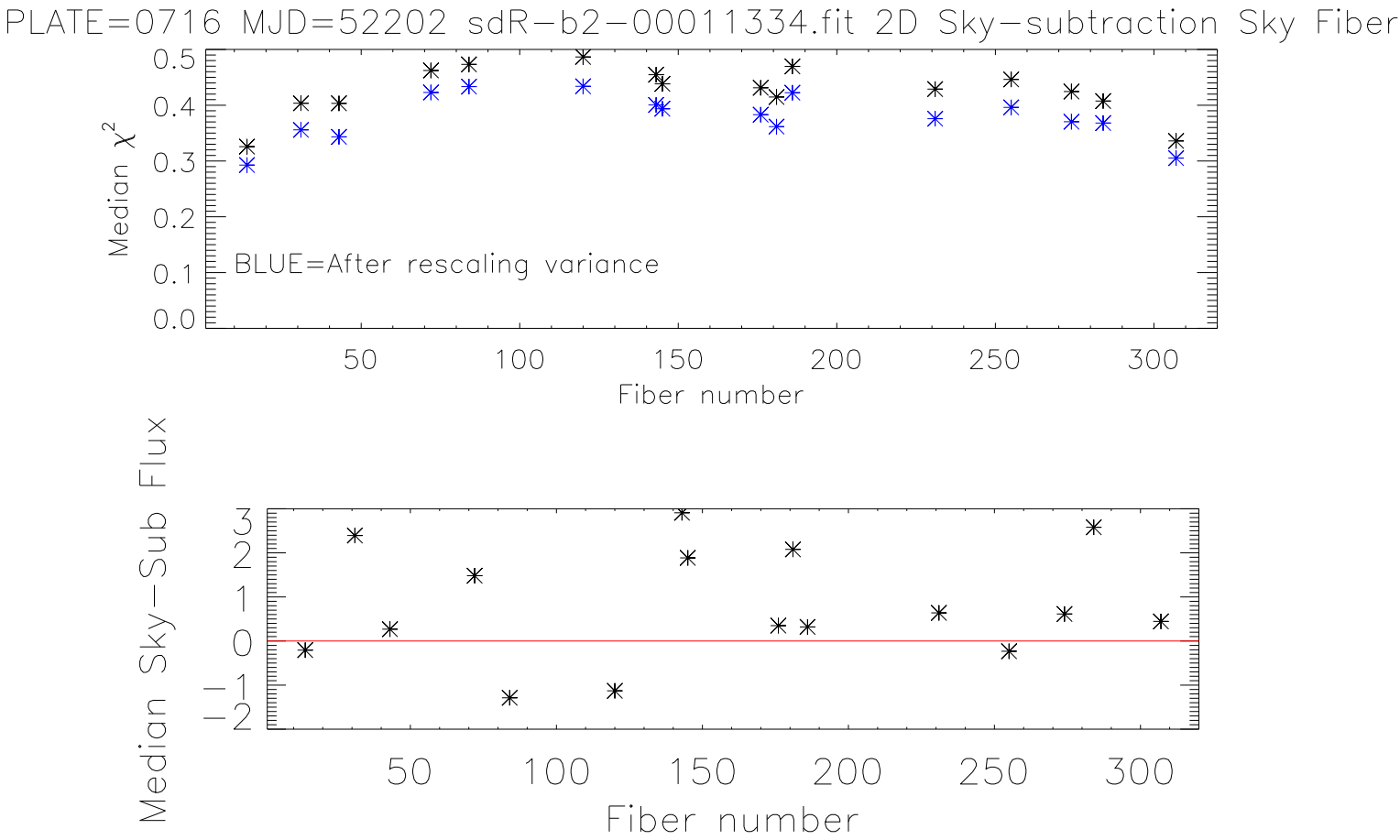
es= −0.0000

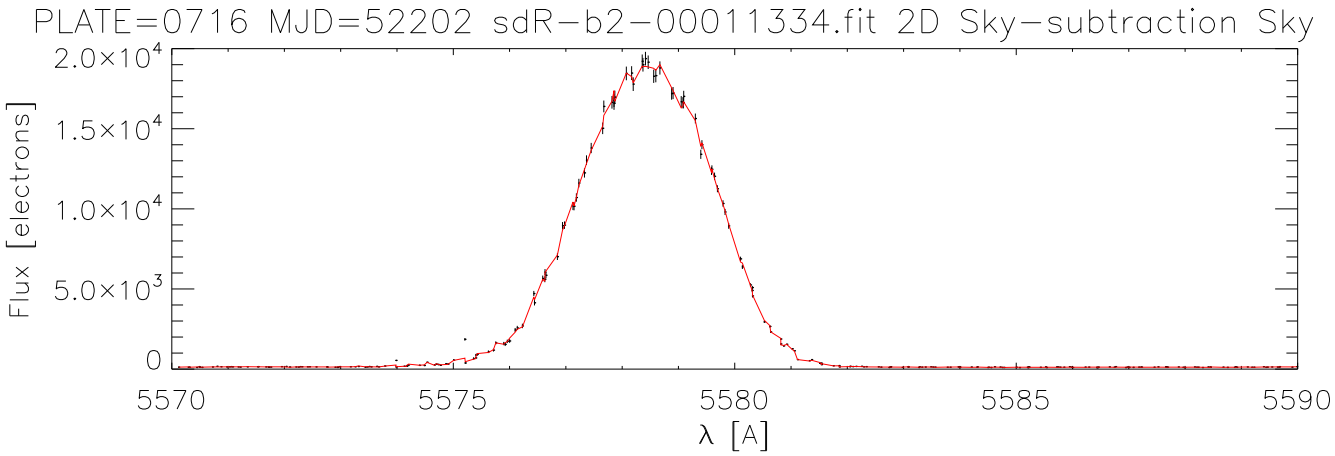

PLATE=0716 MJD=52202 sdR-b2-00011334.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

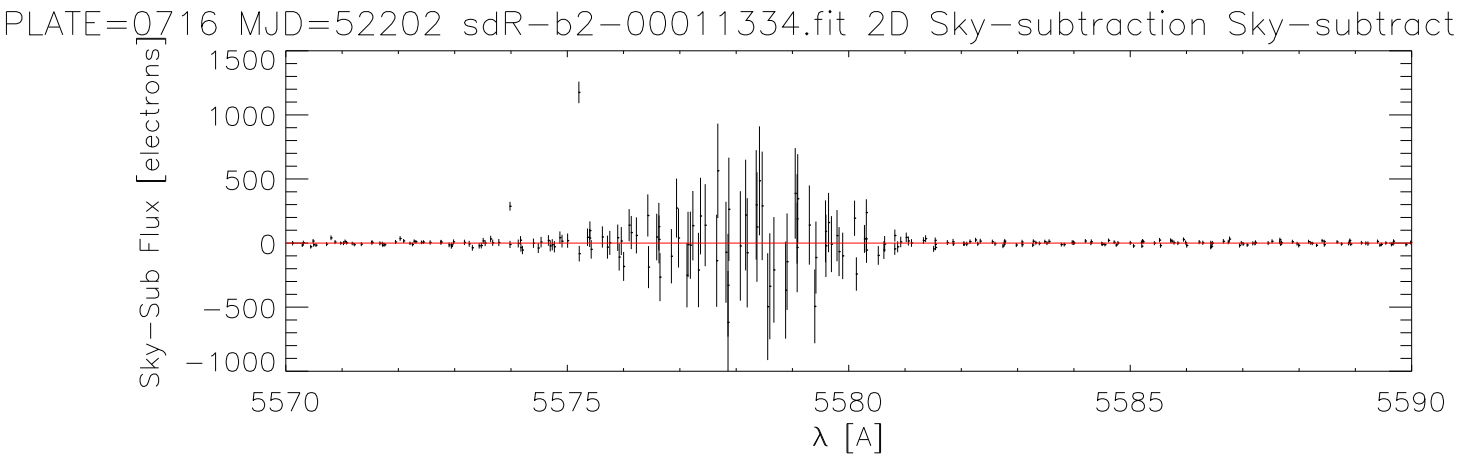

PLATE=0716 MJD=52202 sdR-b2-00011334.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

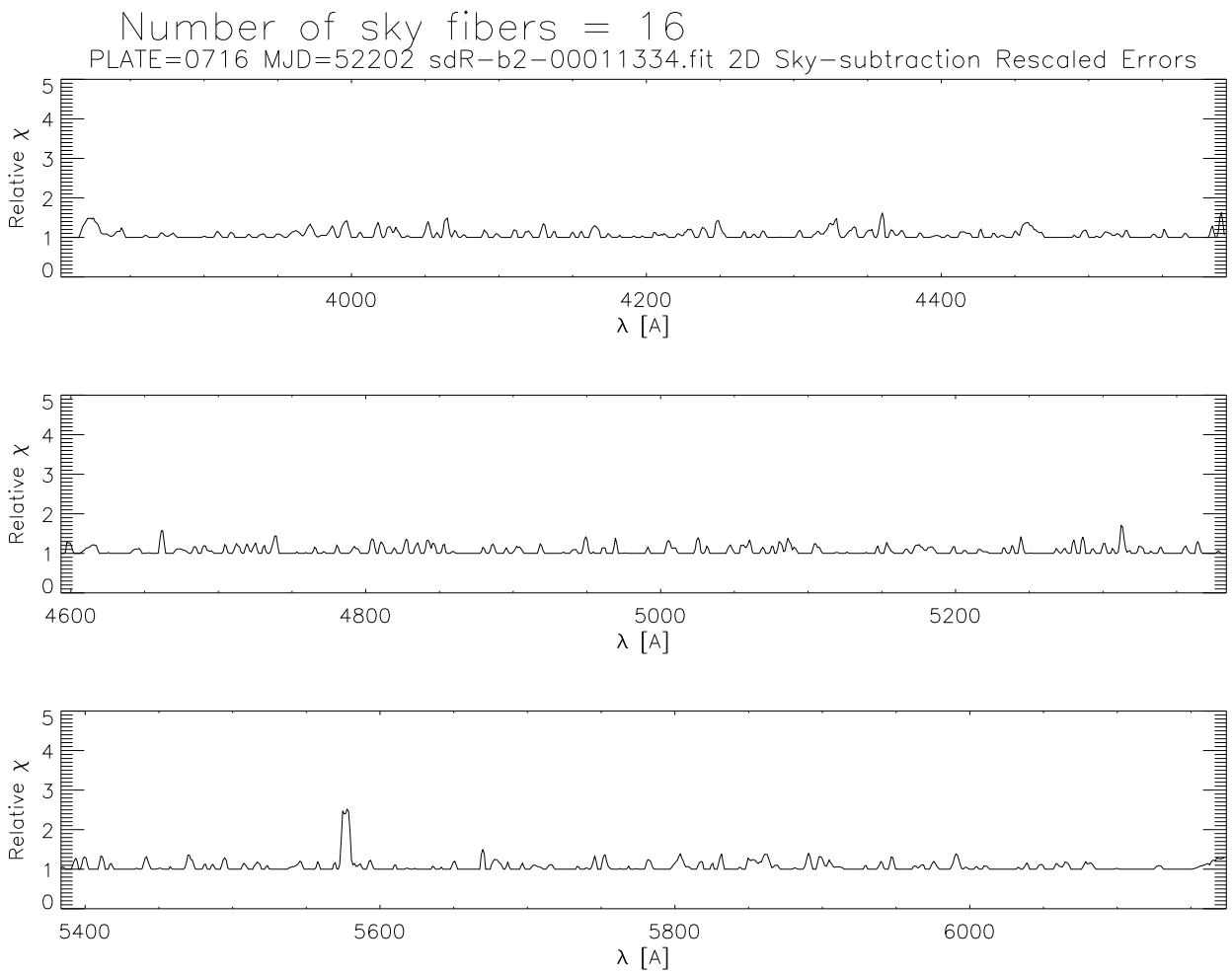

PLATE=0716 MJD=52202 sdR-b2-00011334.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

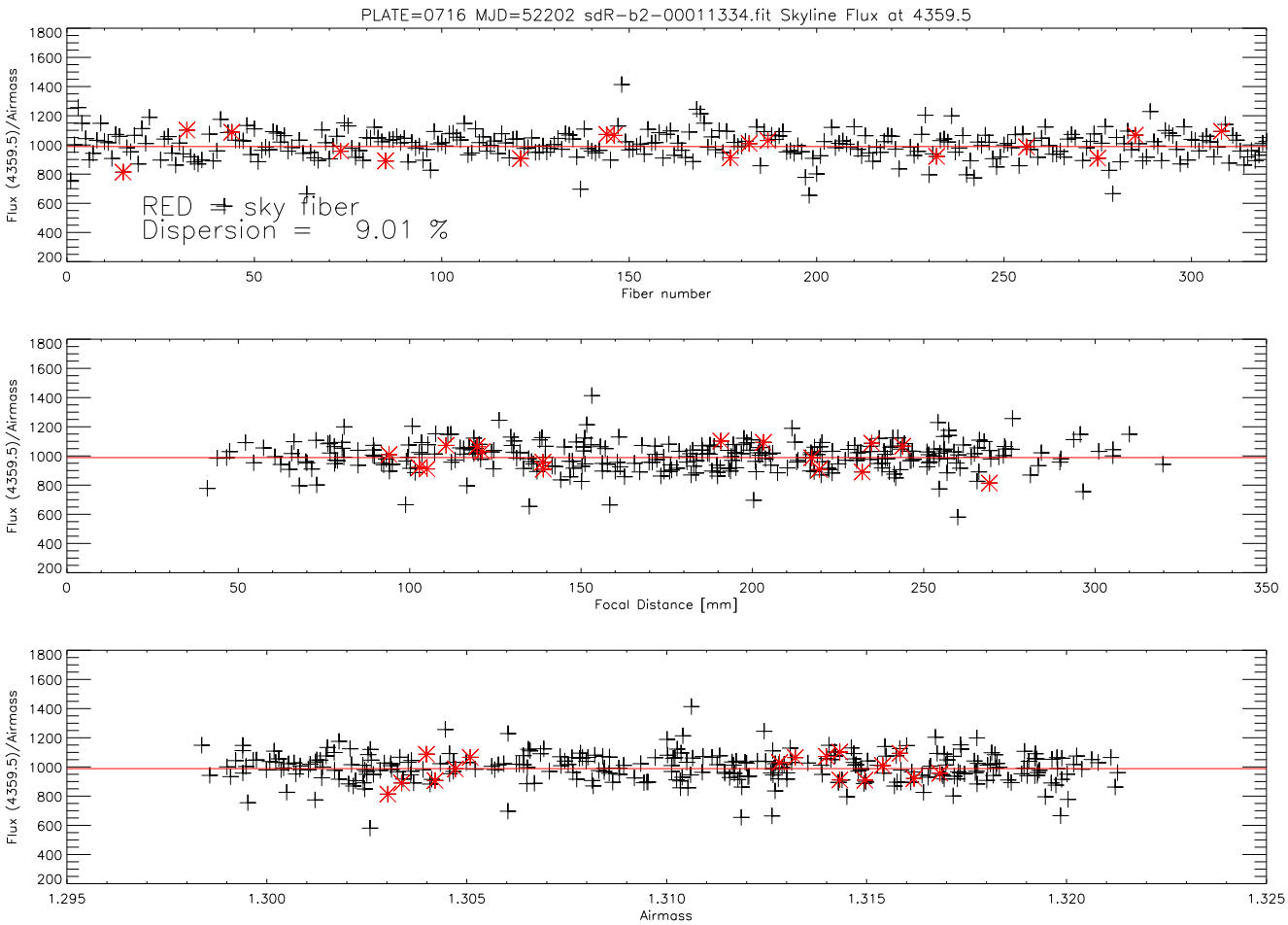

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-b2-00011334.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

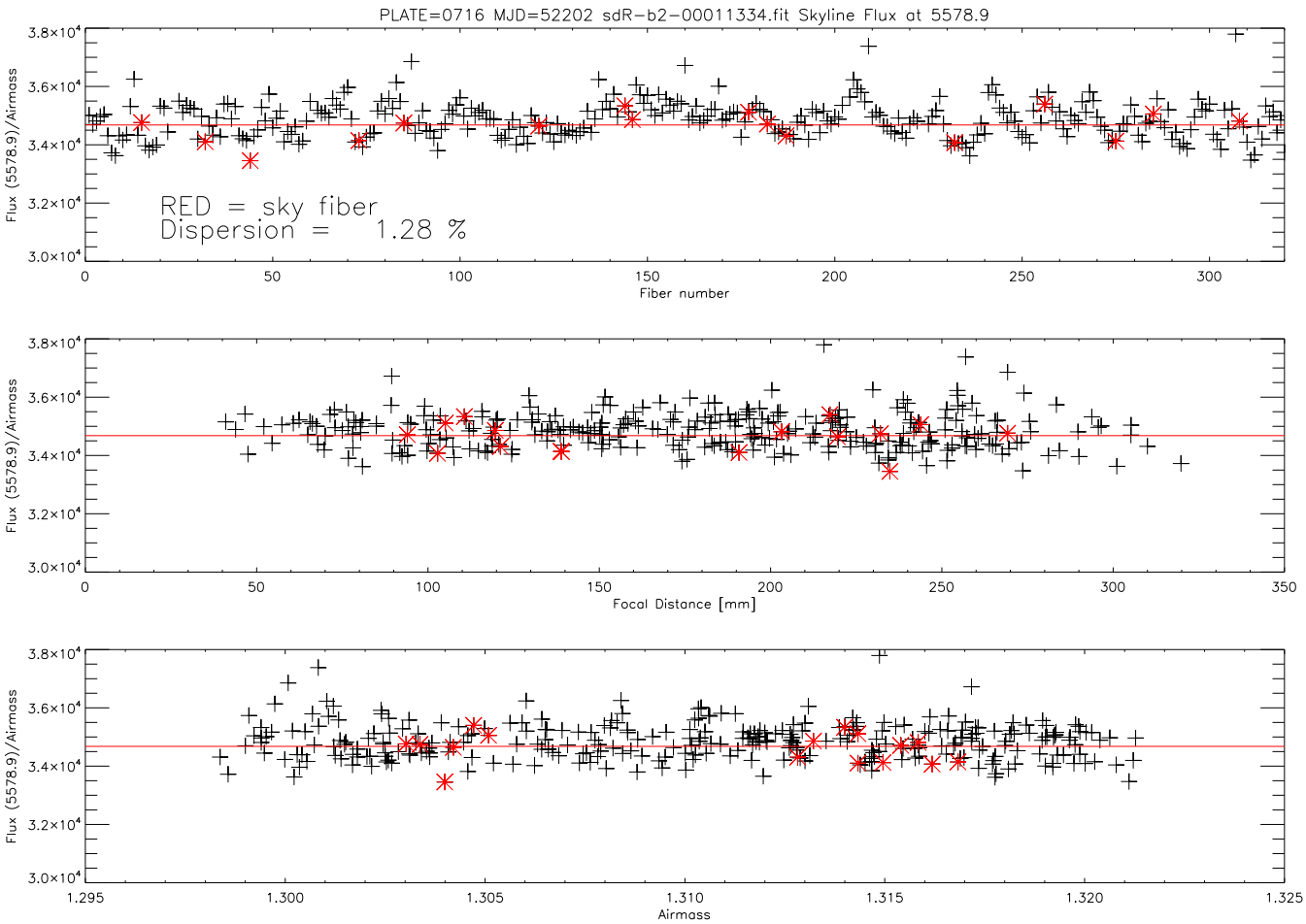

PLATE=0716 MJD=52202 sdR-b2-00011334.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

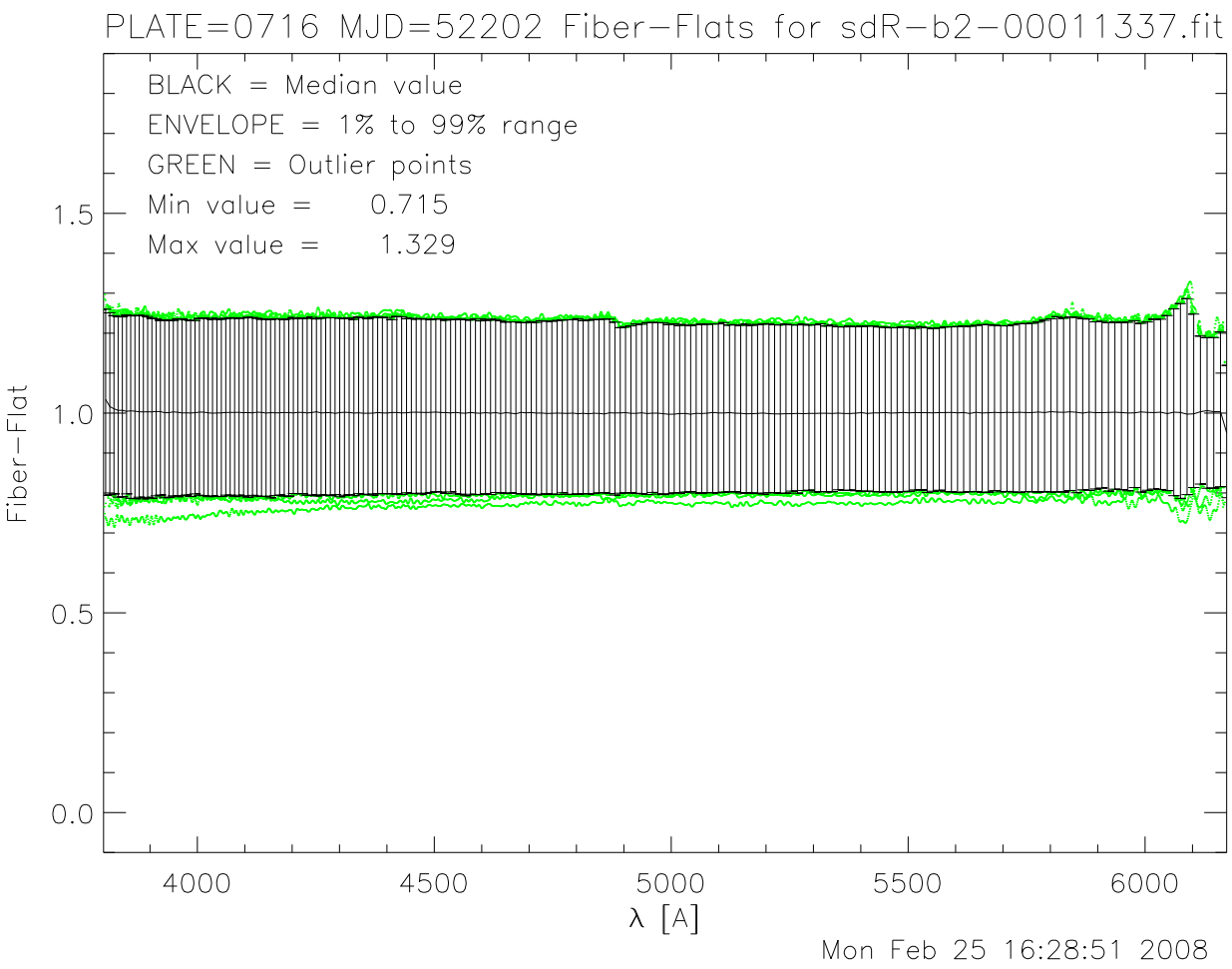

PLATE=0716 MJD=52202 sdR-b2-00011334.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

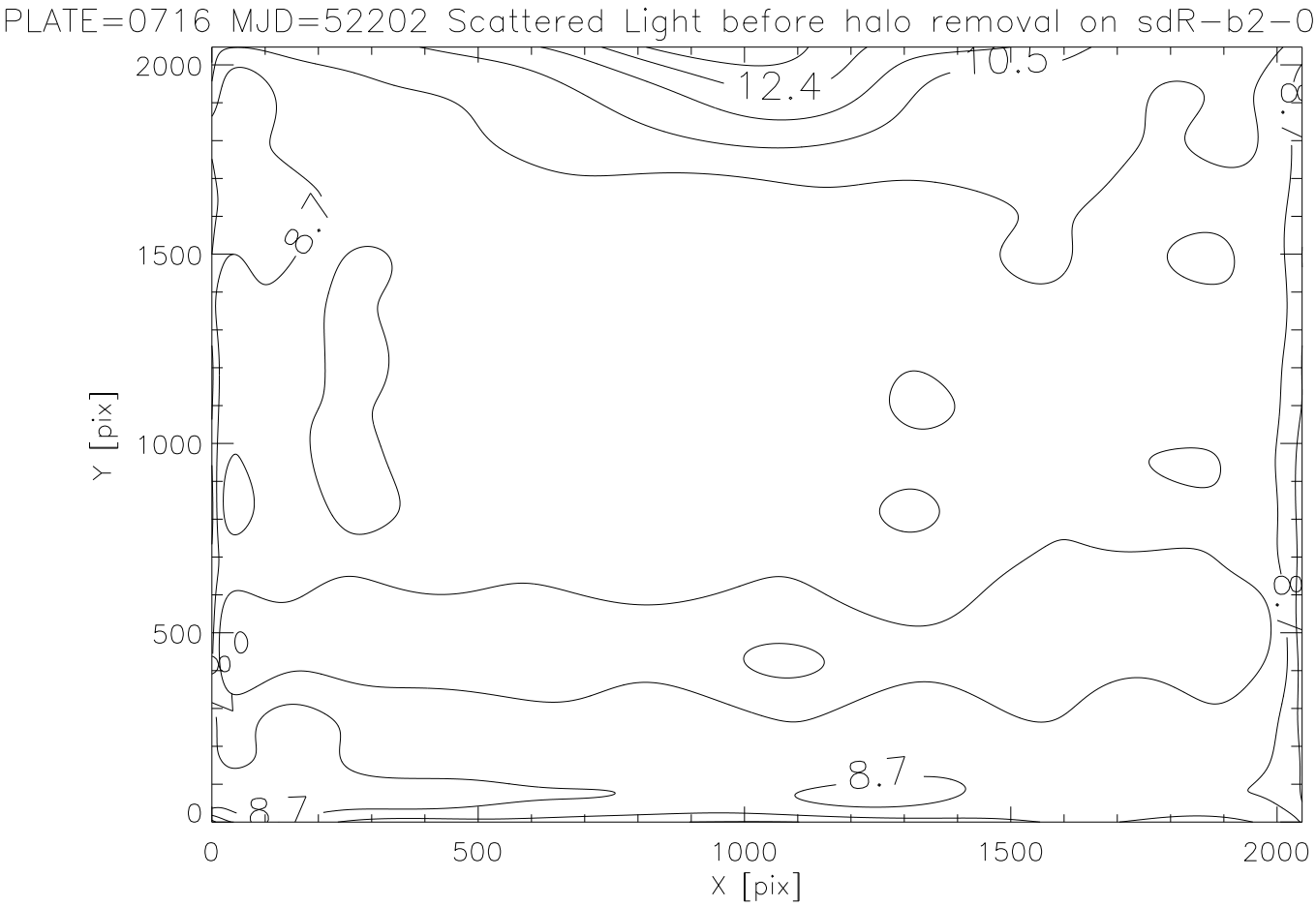

PLATE=0716 MJD=52202 sdR-b2-00011334.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

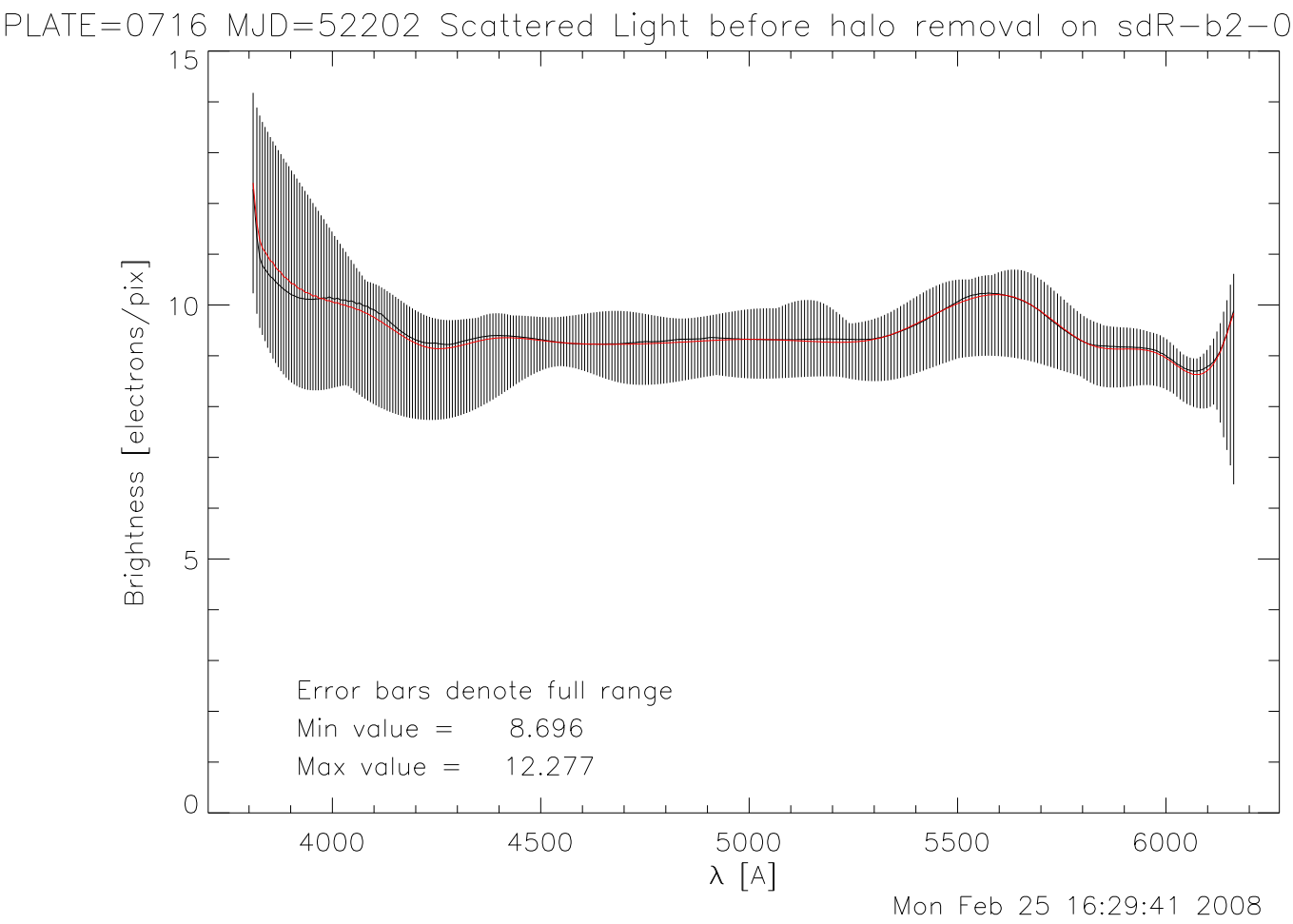

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-b2-00011334.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

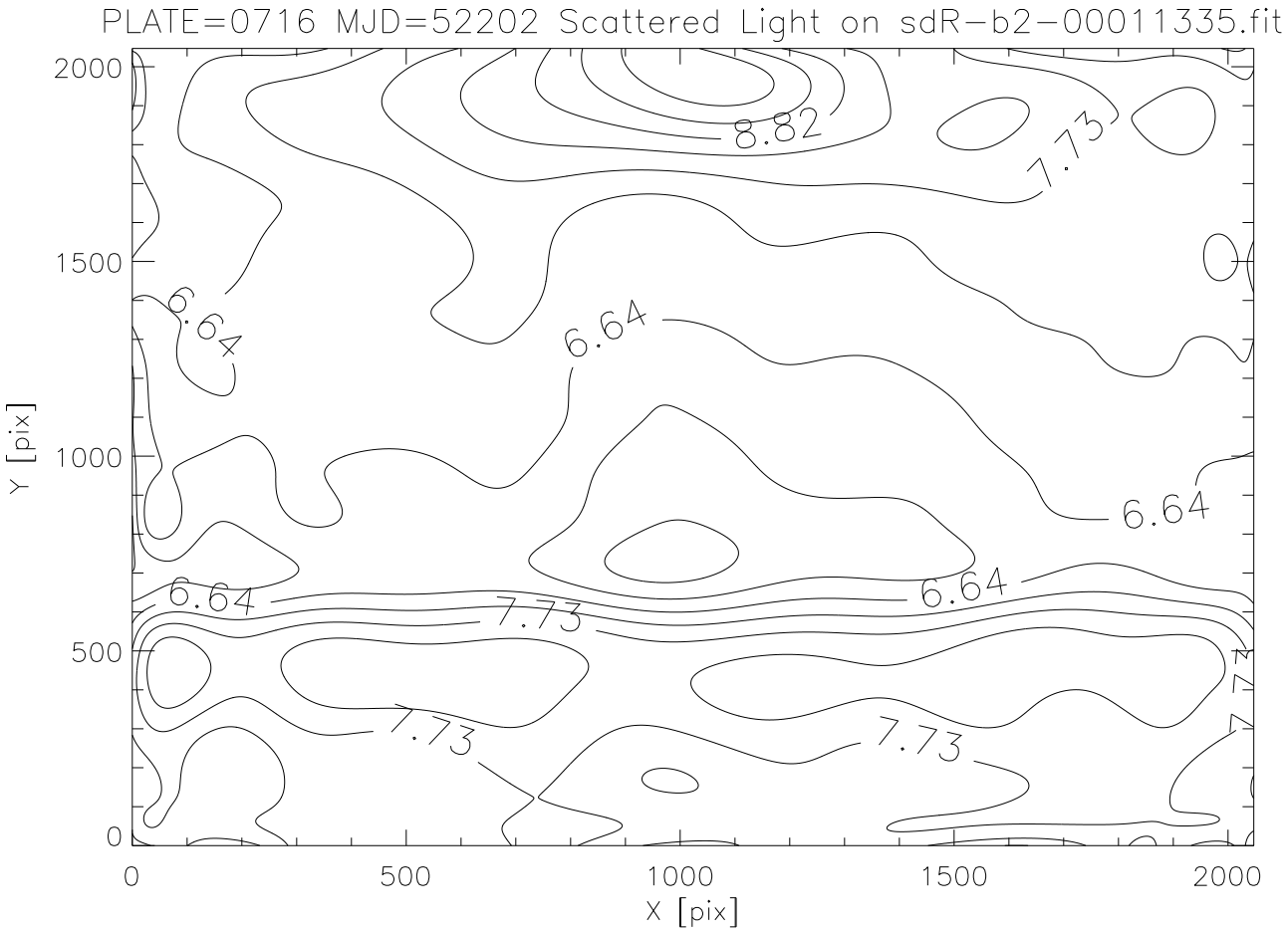

PLATE=0716 MJD=52202 sdR-b2-00011334.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 9.01 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

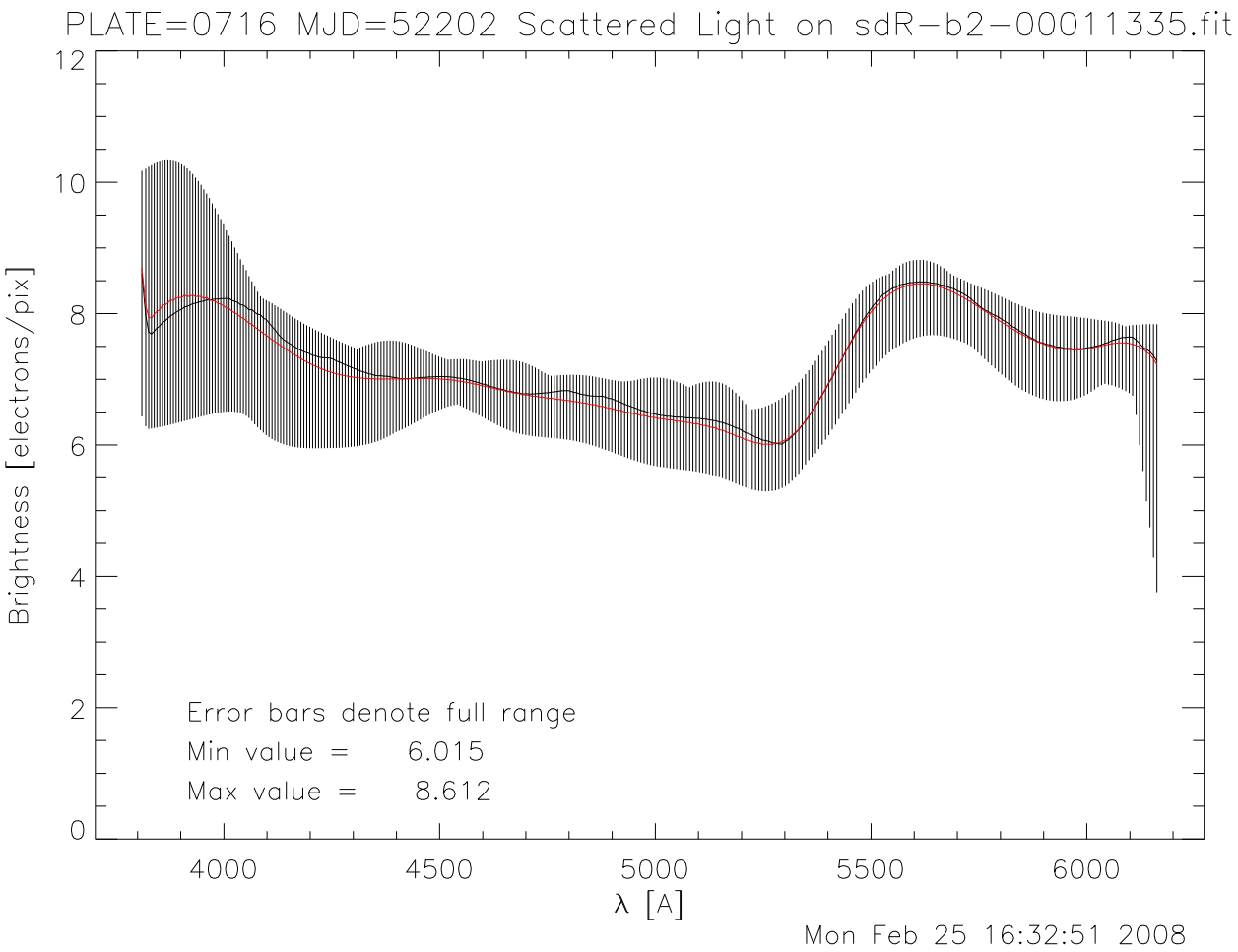

PLATE=0716 MJD=52202 sdR-b2-00011334.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.28 %
Fiber number
Focal Distance [mm]
Airmass

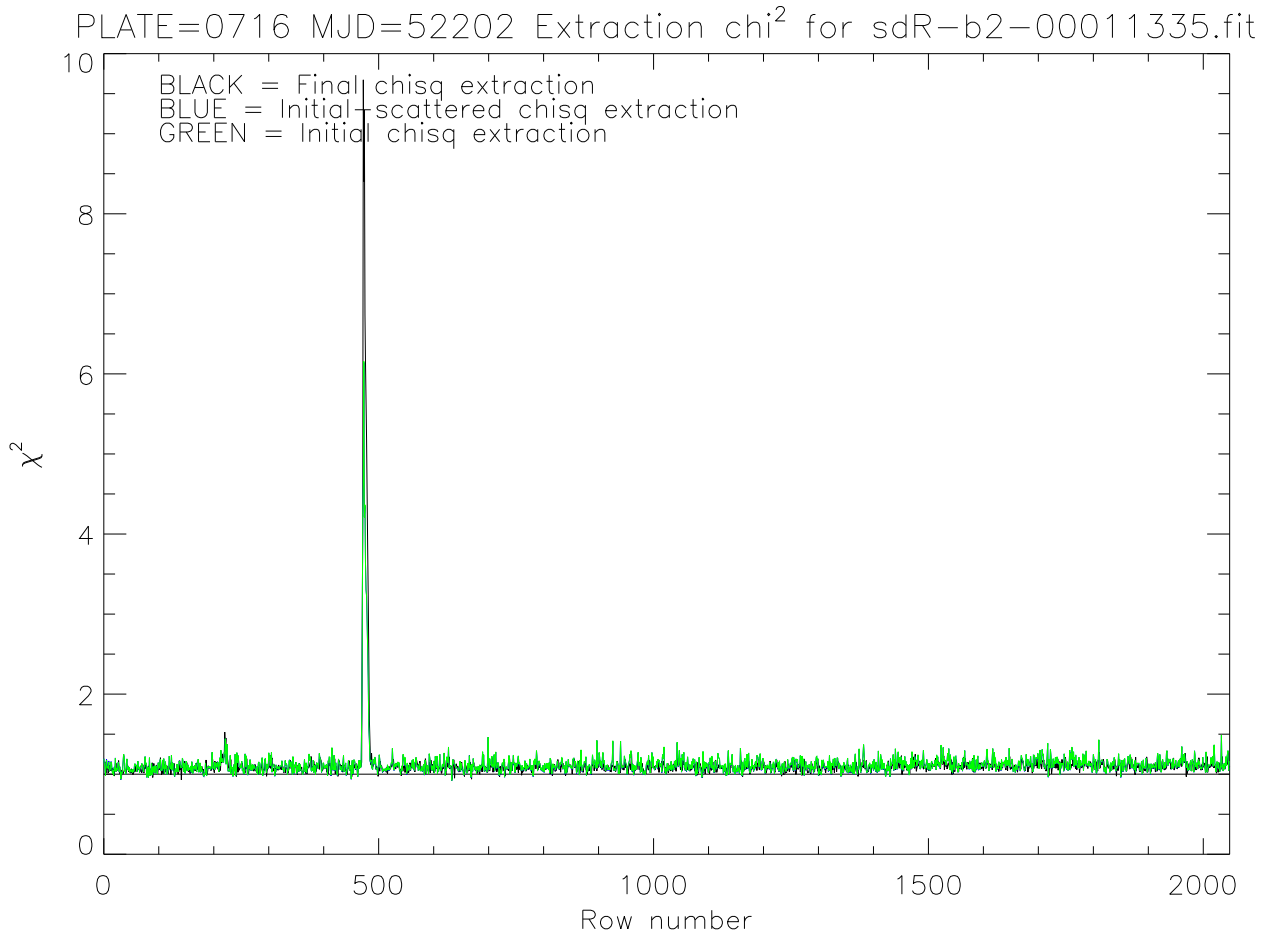

PLATE=0716 MJD=52202 Fiber−Flats for sdR−b2−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.715
Max value = 1.329
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 16:28:51 2008

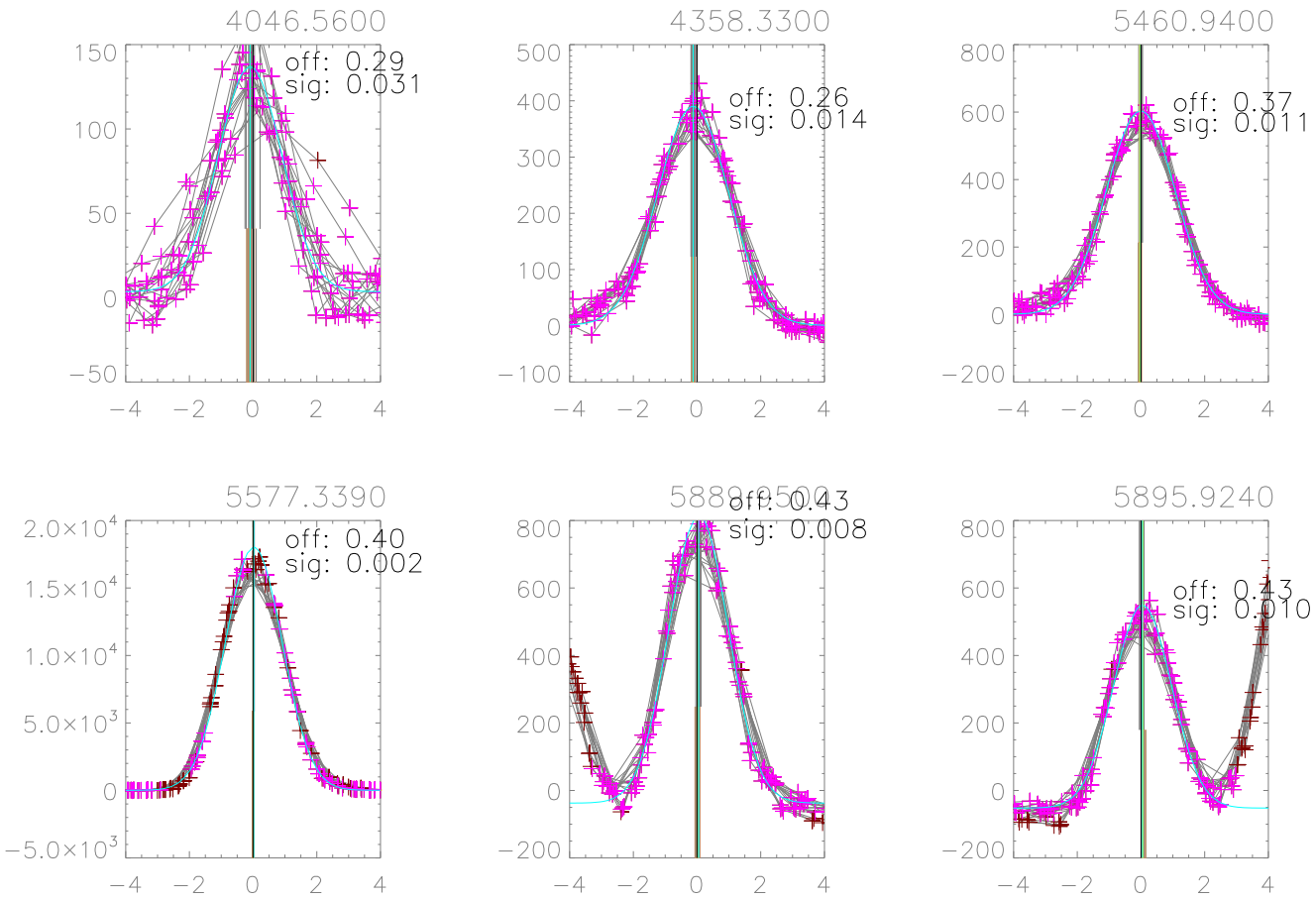

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR−b2−00011335.f
12.4
10.5
8.7
8.7
8.7
8.7
8.7
Y [pix]
X [pix]
0
500
1000
1500
2000

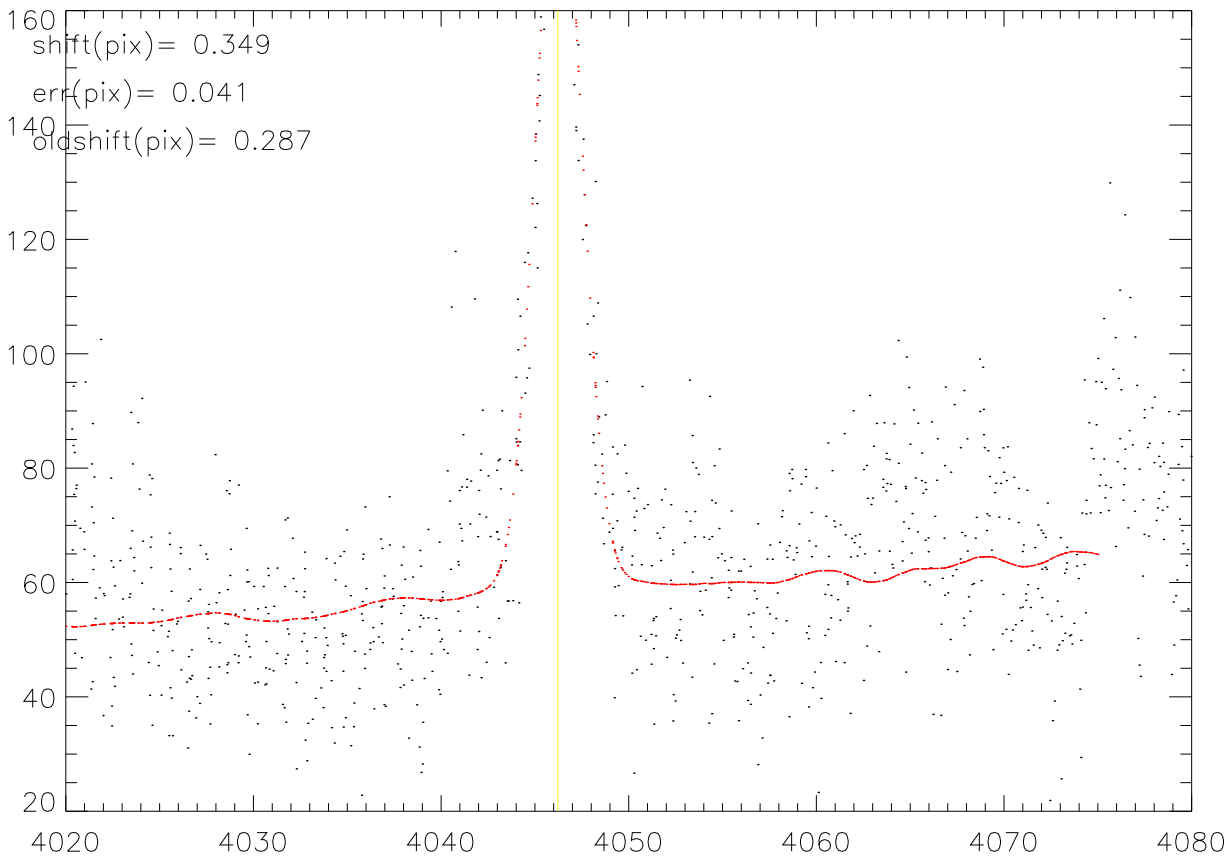

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-b2-00011335.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.696
Max value = 12.277
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 16:29:41 2008

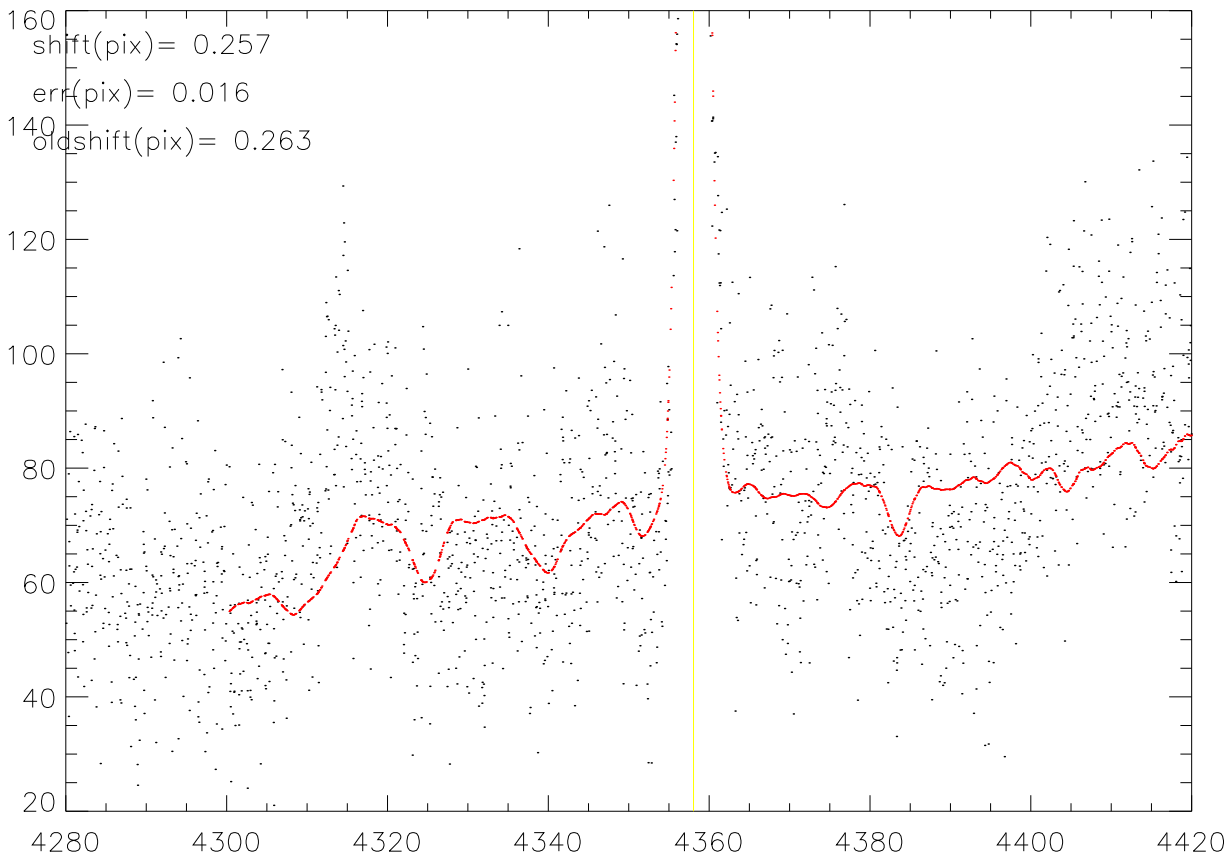

PLATE=0716 MJD=52202 Scattered Light on sdR-b2-00011335.fit
8.82
7.73
6.64
6.64
6.64
6.64
7.73
7.73
7.73
Y [pix]
X [pix]
0
500
1000
1500
2000

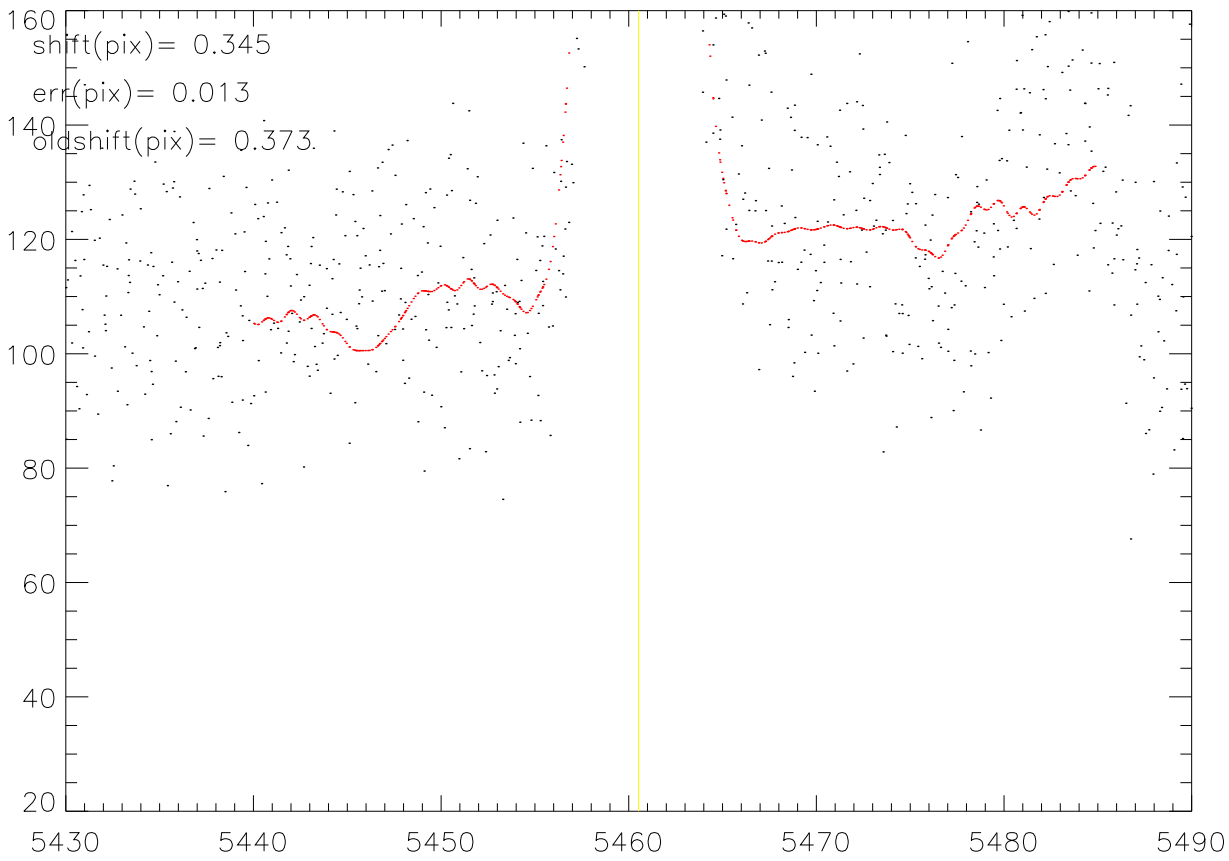

PLATE=0716 MJD=52202 Scattered Light on sdR-b2-00011335.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.015
Max value = 8.612
Mon Feb 25 16:32:51 2008

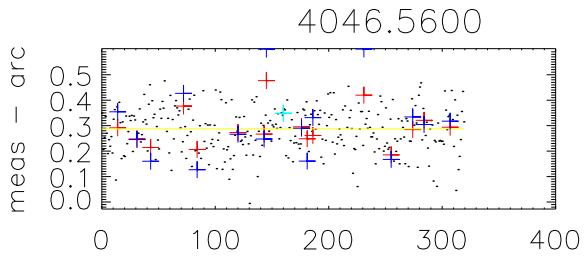

PLATE=0716 MJD=52202 Extraction chi^2 for sdR-b2-00011335.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

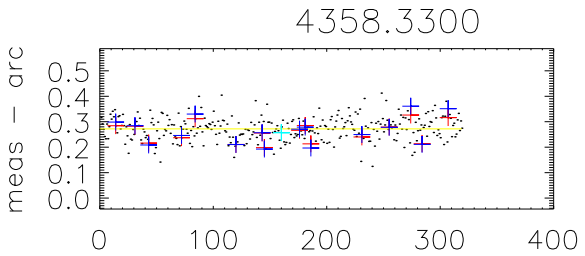

4046.5600
off: 0.29
sig: 0.031
4358.3300
off: 0.26
sig: 0.014
5460.9400
off: 0.37
sig: 0.011
5577.3390
off: 0.40
sig: 0.002
5889.9500
off: 0.43
sig: 0.008
5895.9240
off: 0.43
sig: 0.010

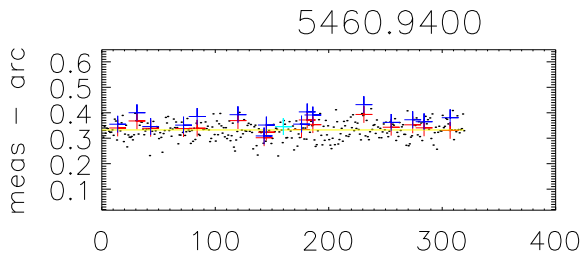

shift(pix)= 0.349
err(pix)= 0.041
oldshift(pix)= 0.287
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

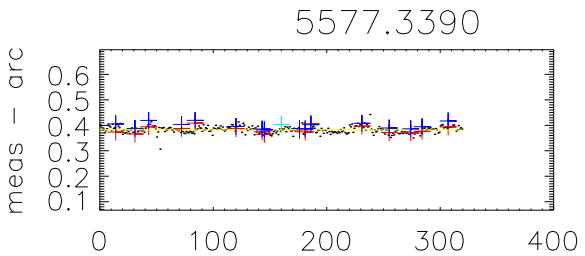

shift(pix)= 0.257
err(pix)= 0.016
oldshift(pix)= 0.263
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

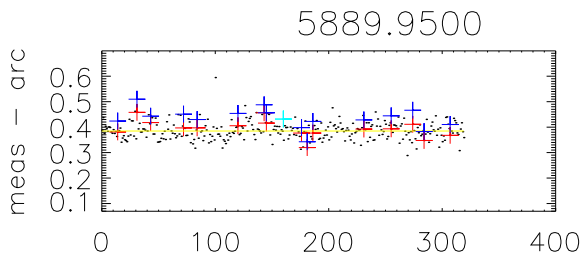

shift(pix)= 0.345
err(pix)= 0.013
oldshift(pix)= 0.373
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

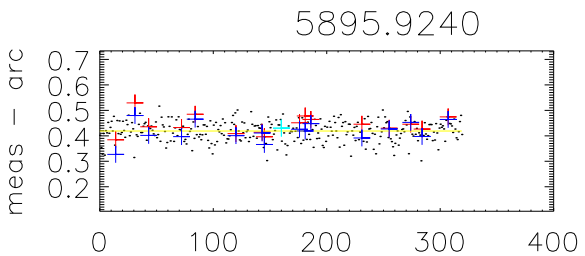

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

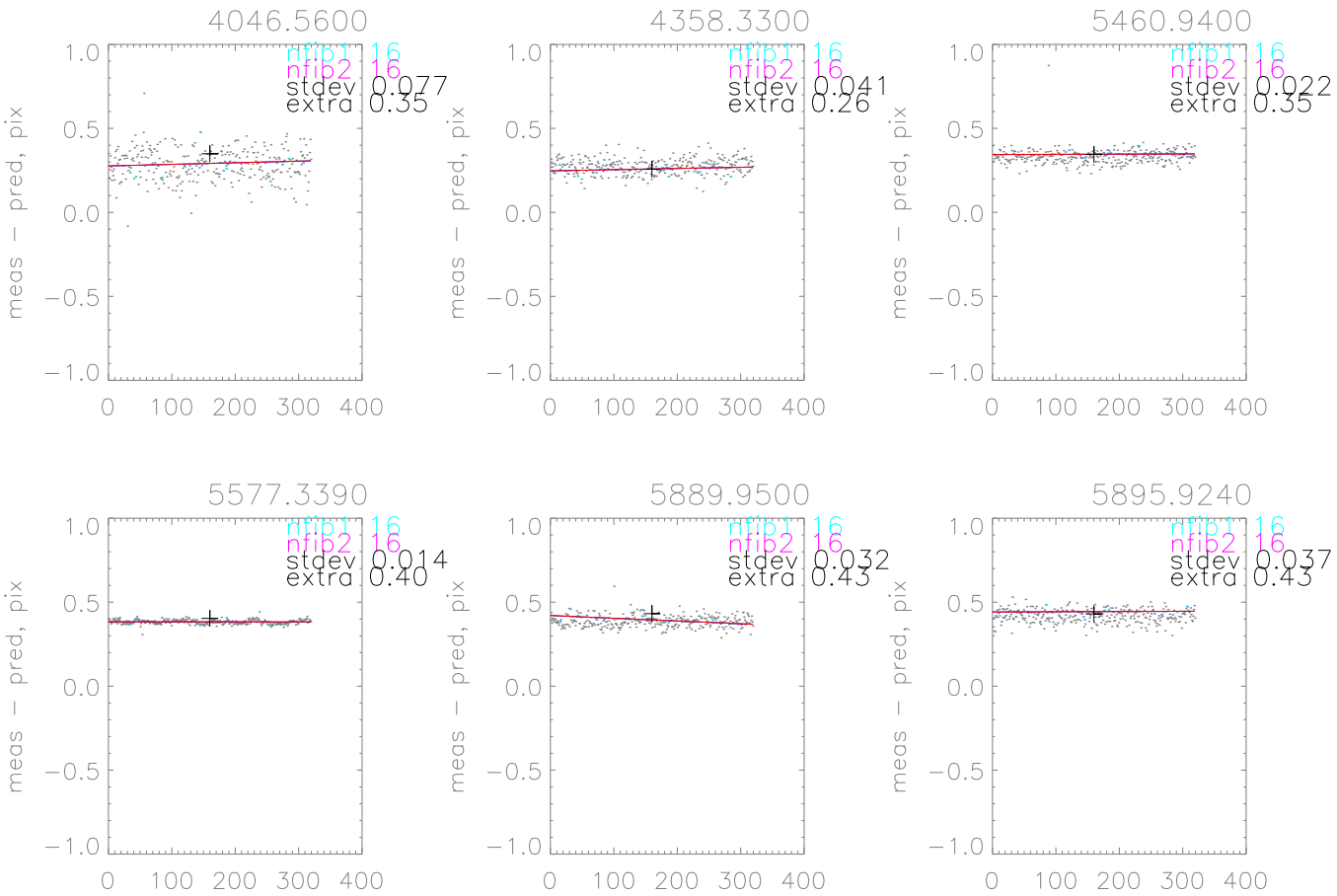

4358.3300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

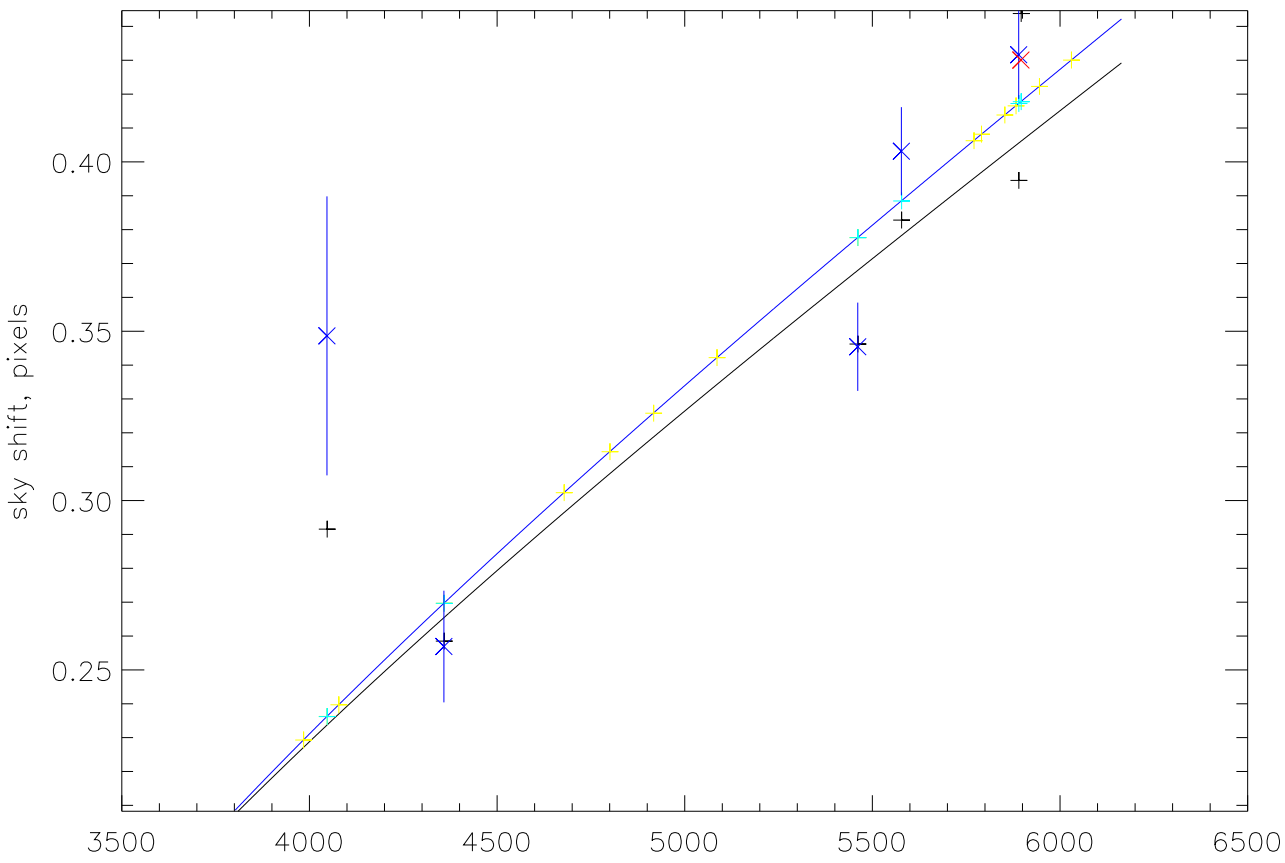

5460.9400
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

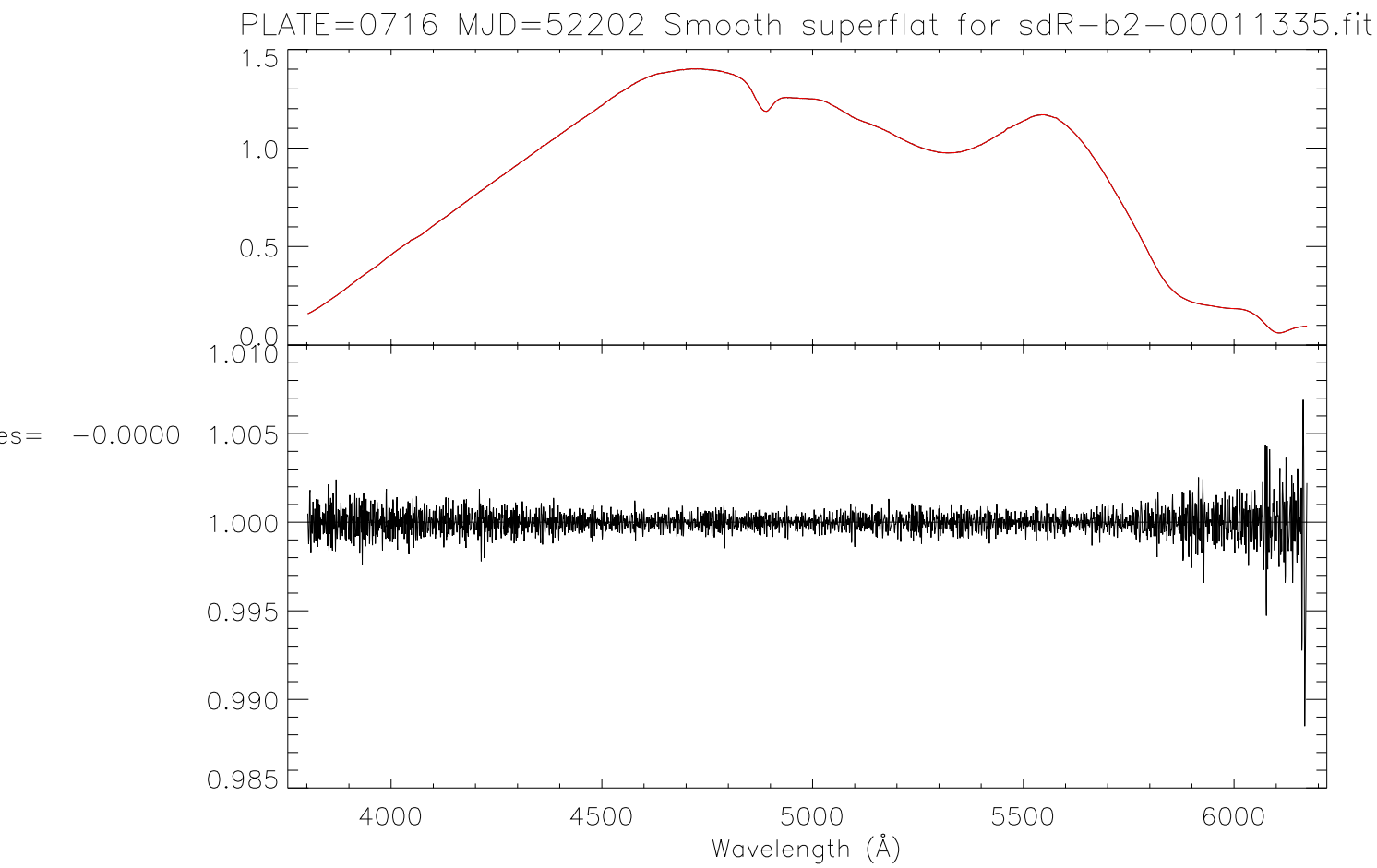

5577.3390
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

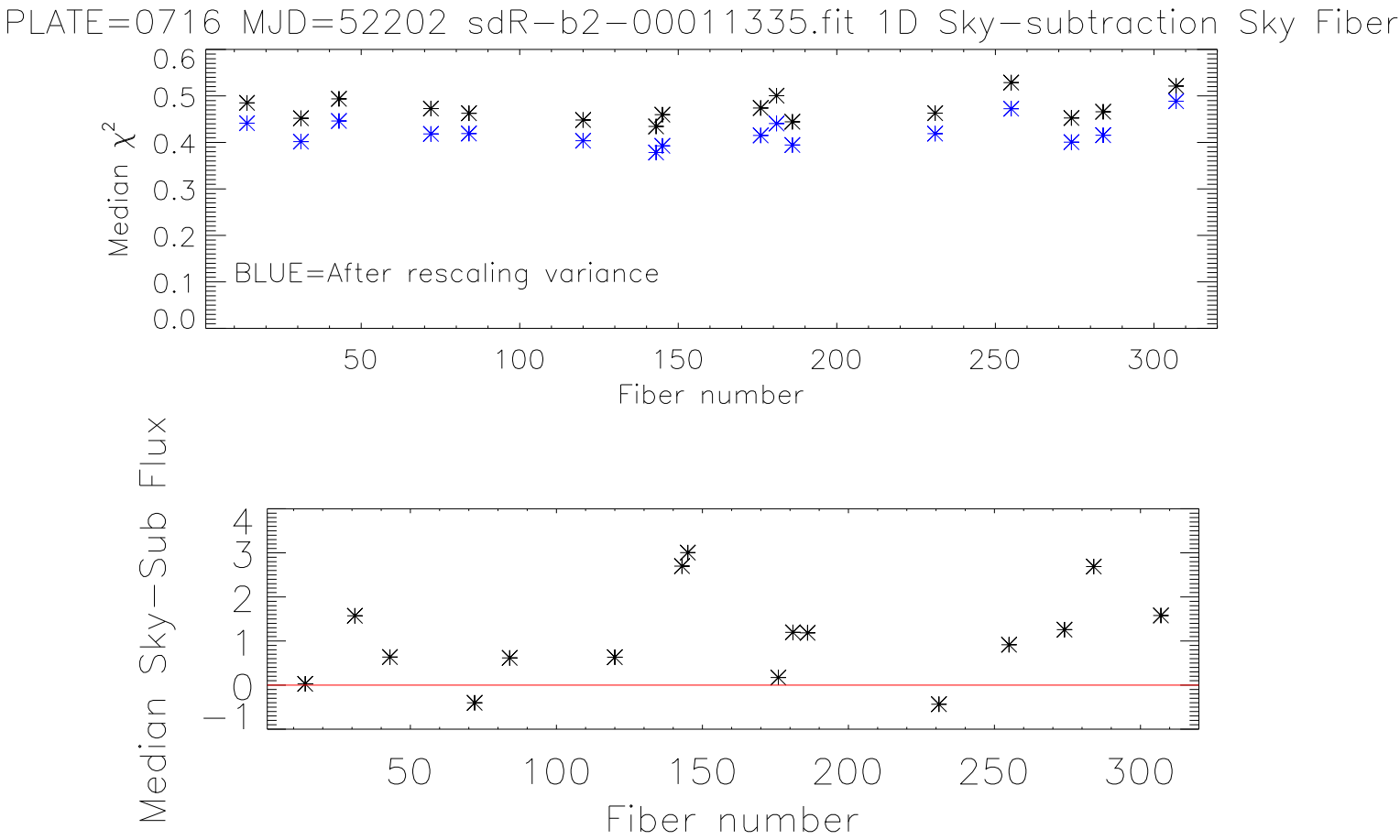

5889.9500
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

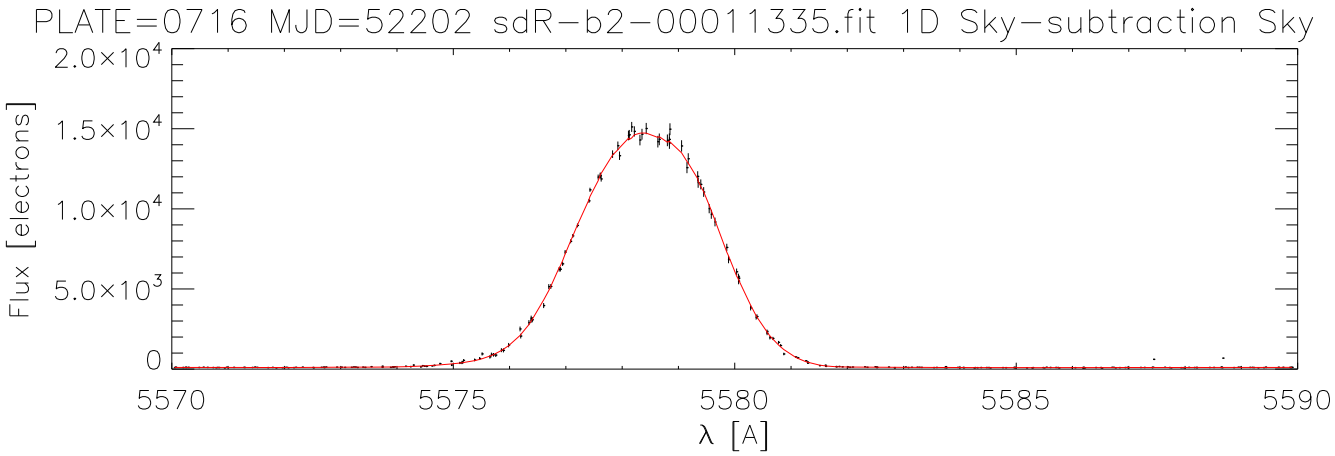

5895.9240
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

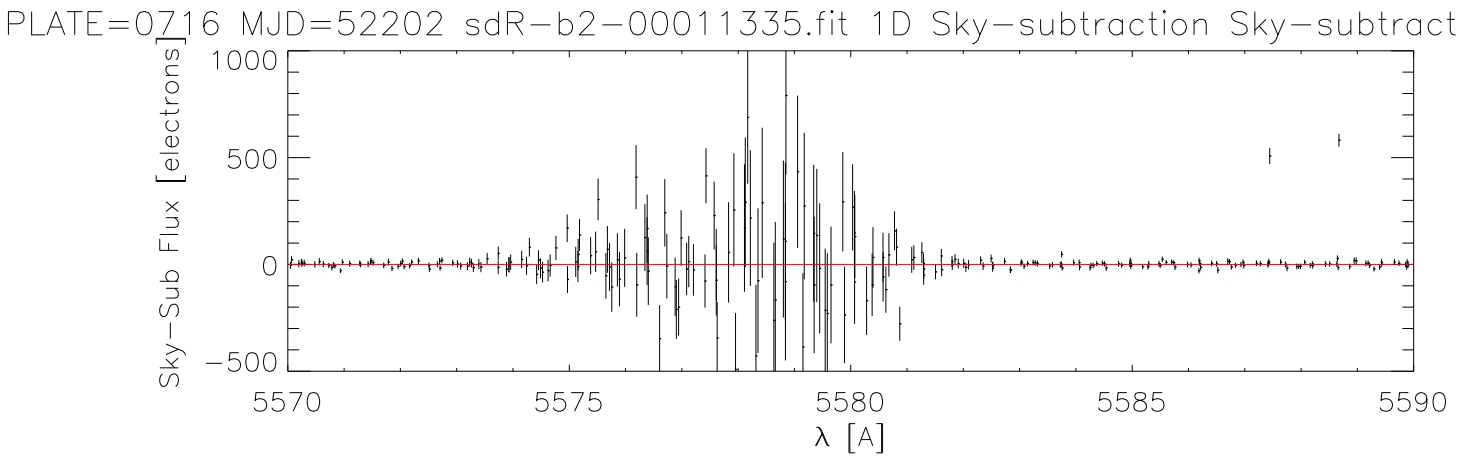

4046.5600
nfib1 16
nfib2 16
stdev 0.077
extra 0.35
4358.3300
nfib1 16
nfib2 16
stdev 0.041
extra 0.26
5460.9400
nfib1 16
nfib2 16
stdev 0.022
extra 0.35
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.40
5889.9500
nfib1 16
nfib2 16
stdev 0.032
extra 0.43
5895.9240
nfib1 16
nfib2 16
stdev 0.037
extra 0.43
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

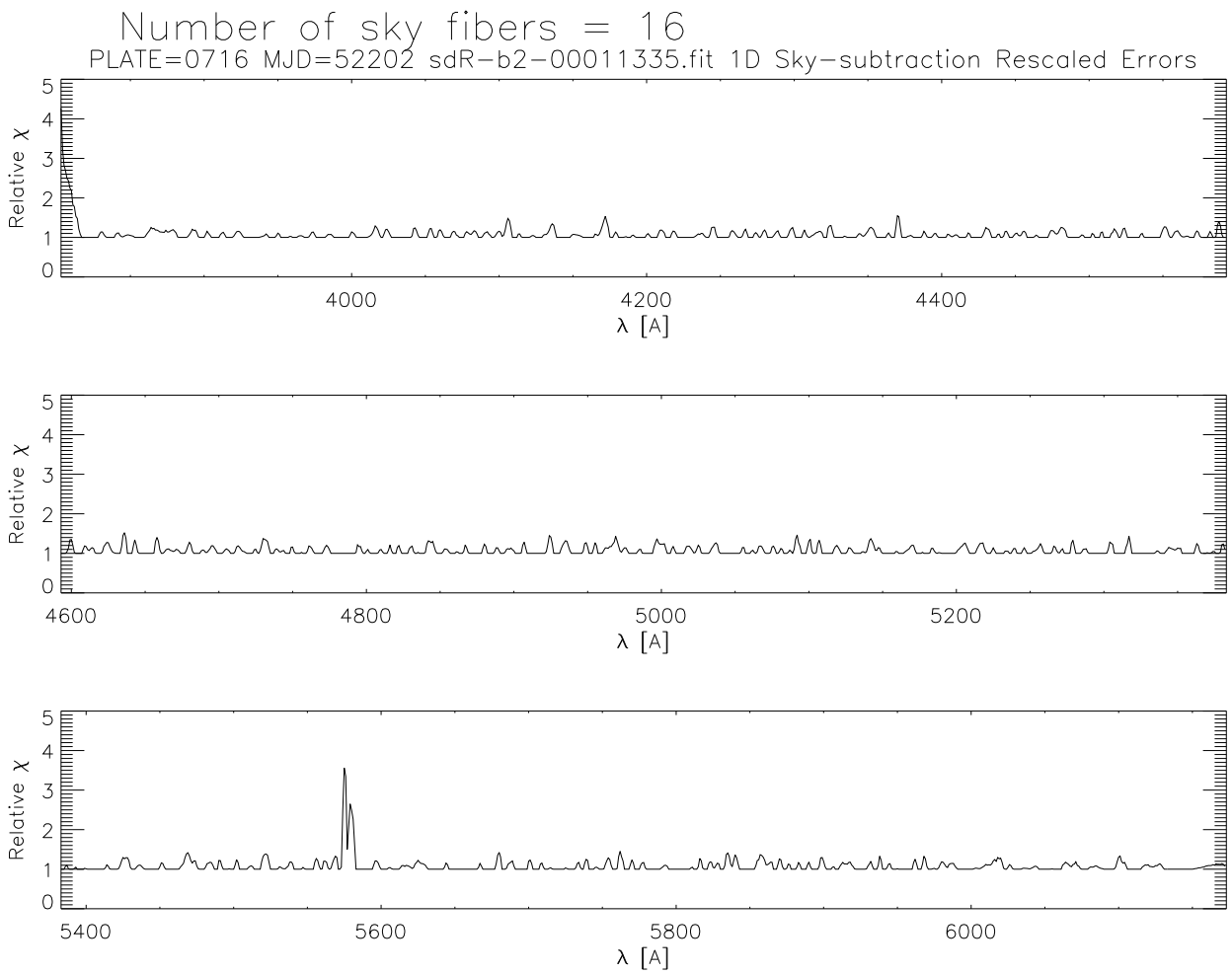

sky shift, pixels
0.40
0.35
0.30
0.25
3500
4000
4500
5000
5500
6000
6500

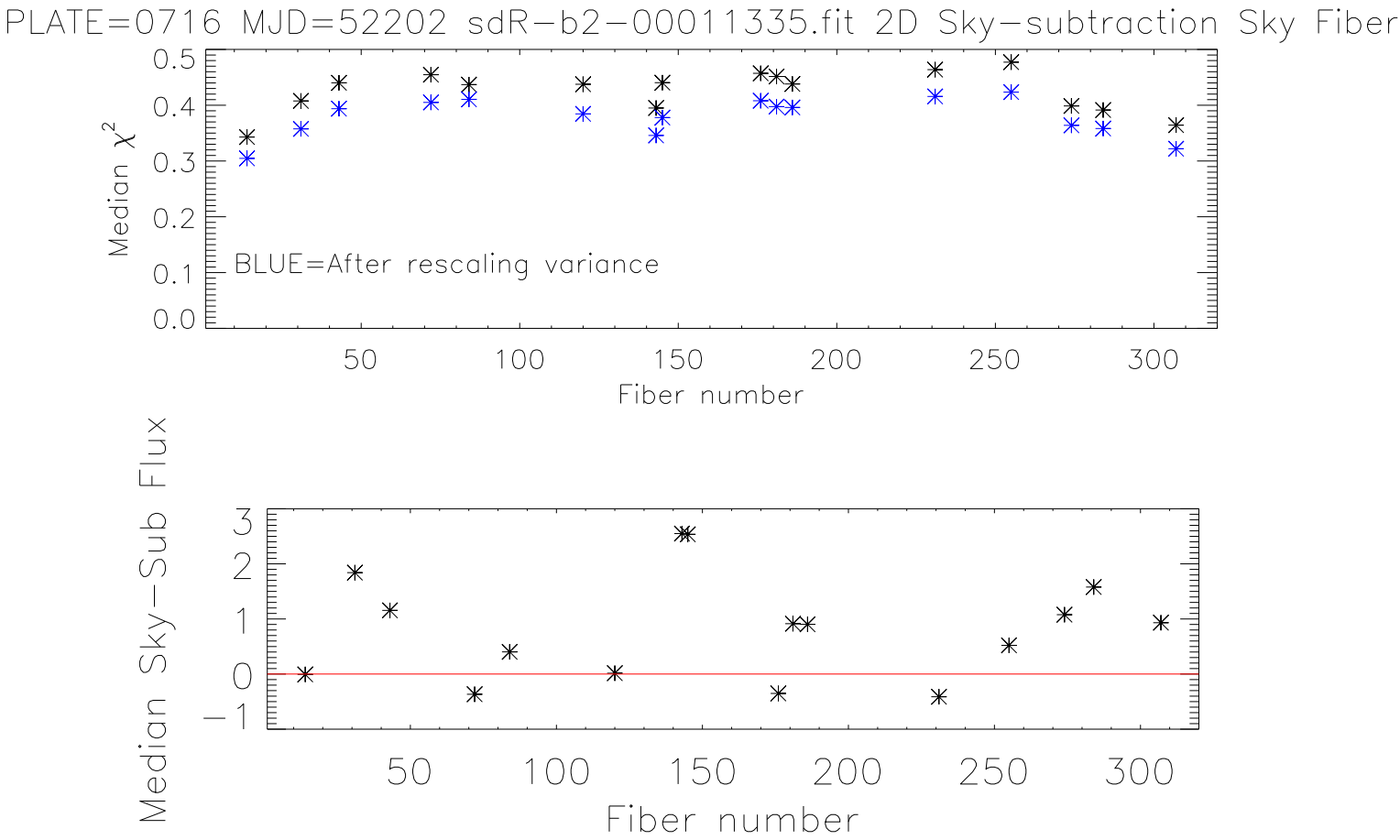

PLATE=0716 MJD=52202 Smooth superflat for sdR-b2-00011335.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

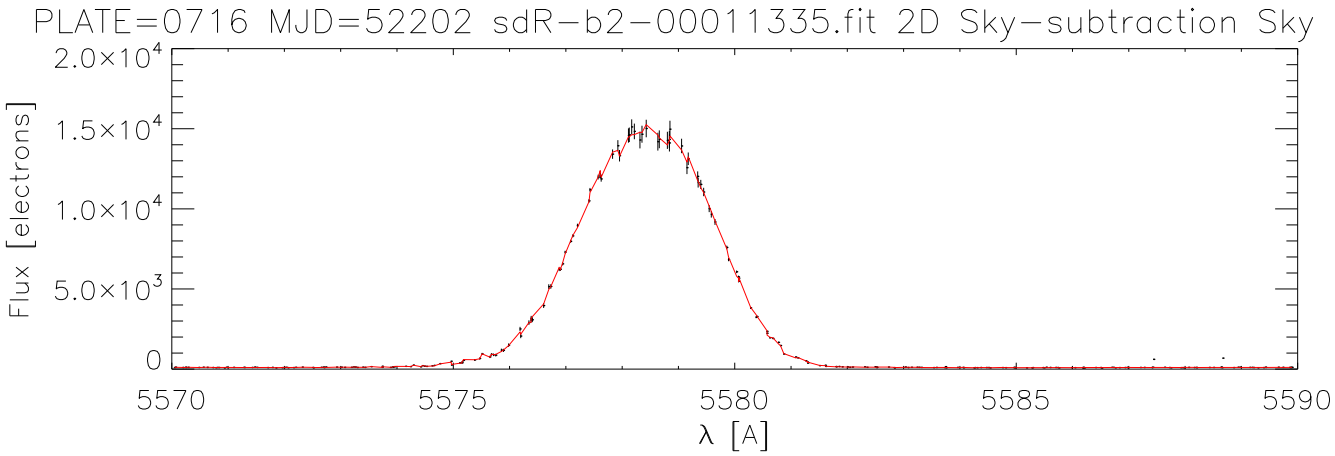

PLATE=0716 MJD=52202 sdR-b2-00011335.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

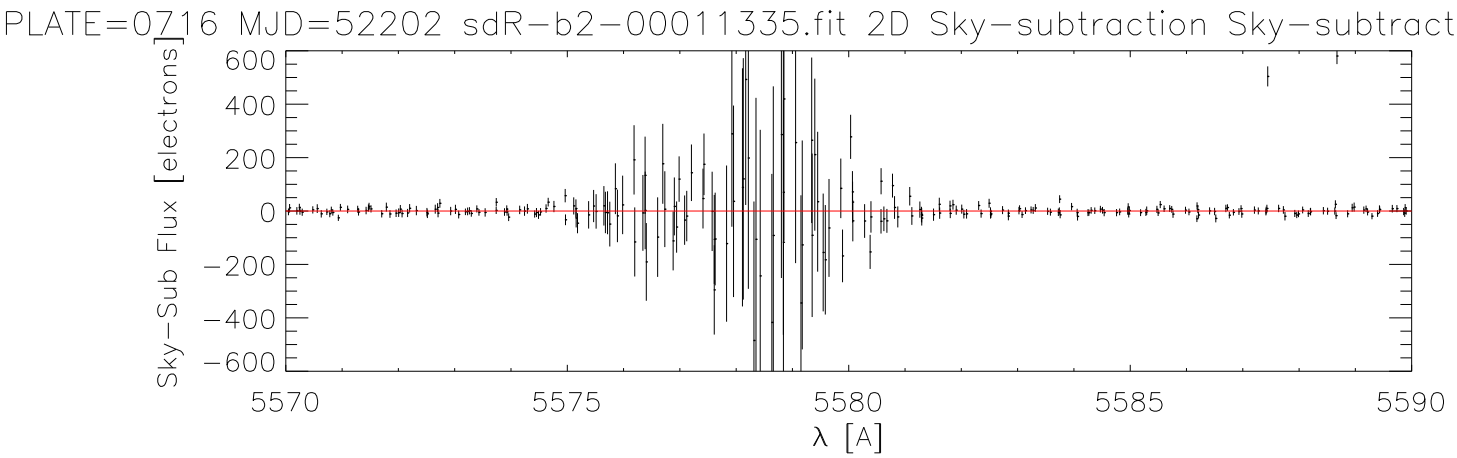

PLATE=0716 MJD=52202 sdR-b2-00011335.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

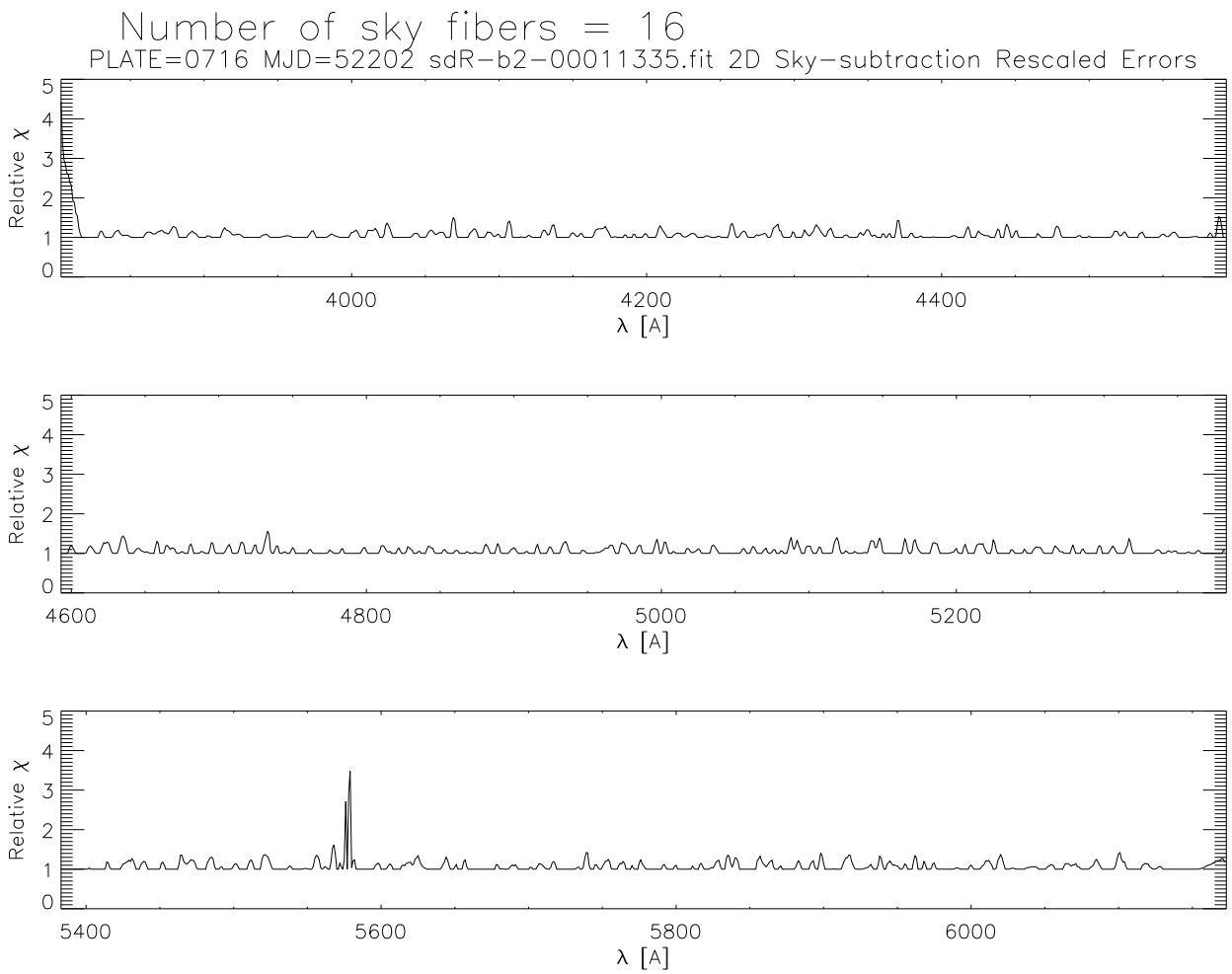

PLATE=0716 MJD=52202 sdR-b2-00011335.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

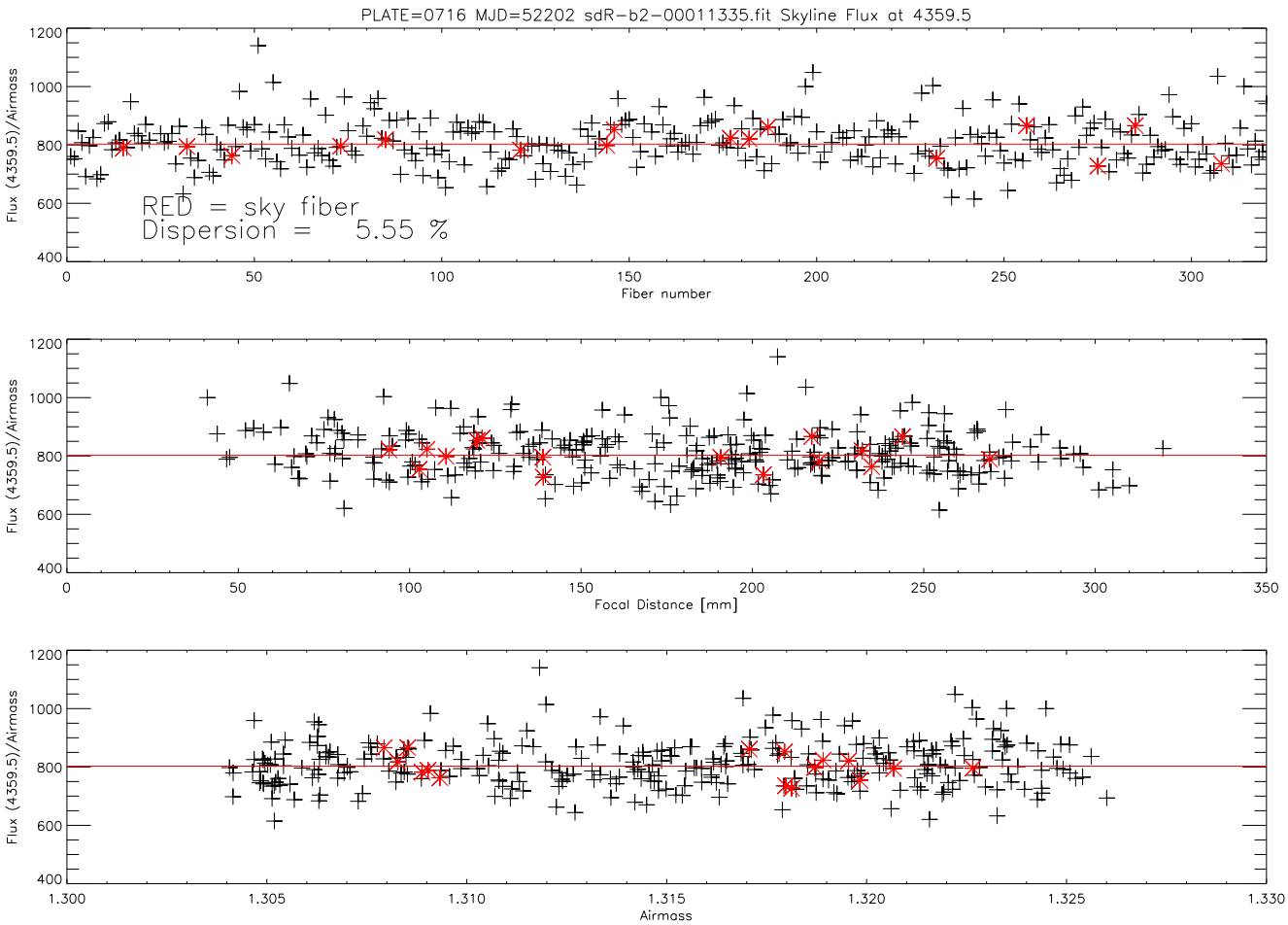

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-b2-00011335.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

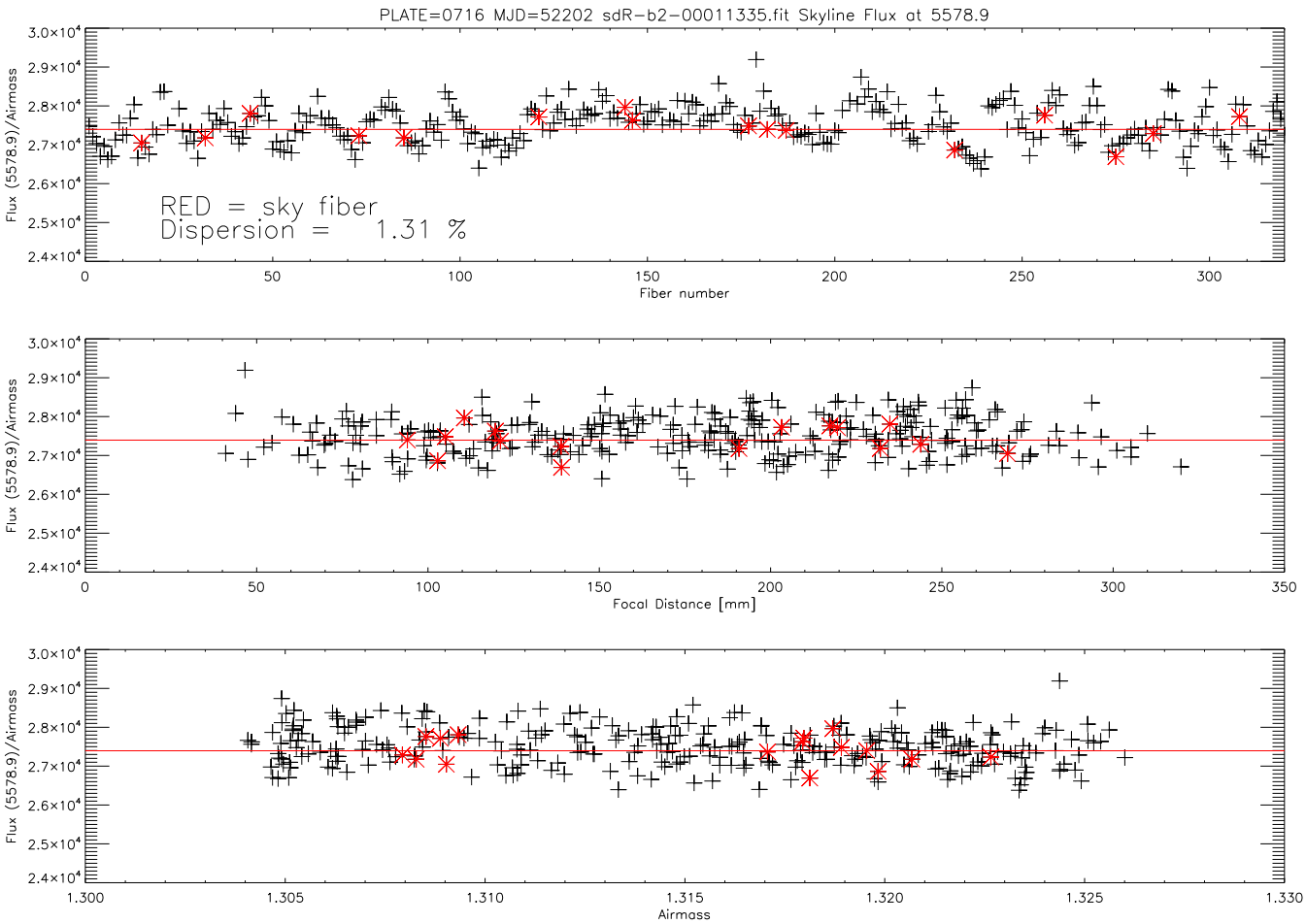

PLATE=0716 MJD=52202 sdR-b2-00011335.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

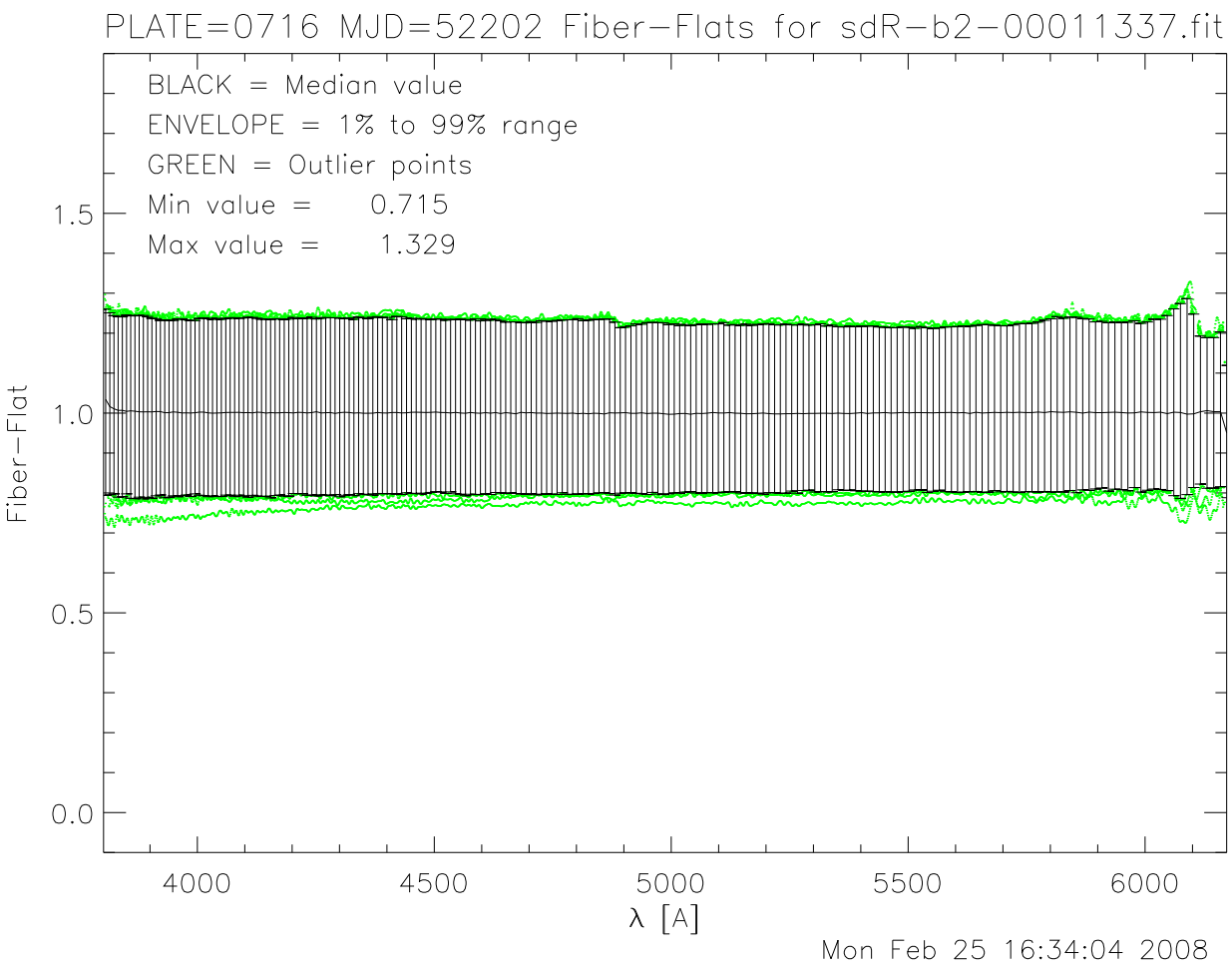

PLATE=0716 MJD=52202 sdR-b2-00011335.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

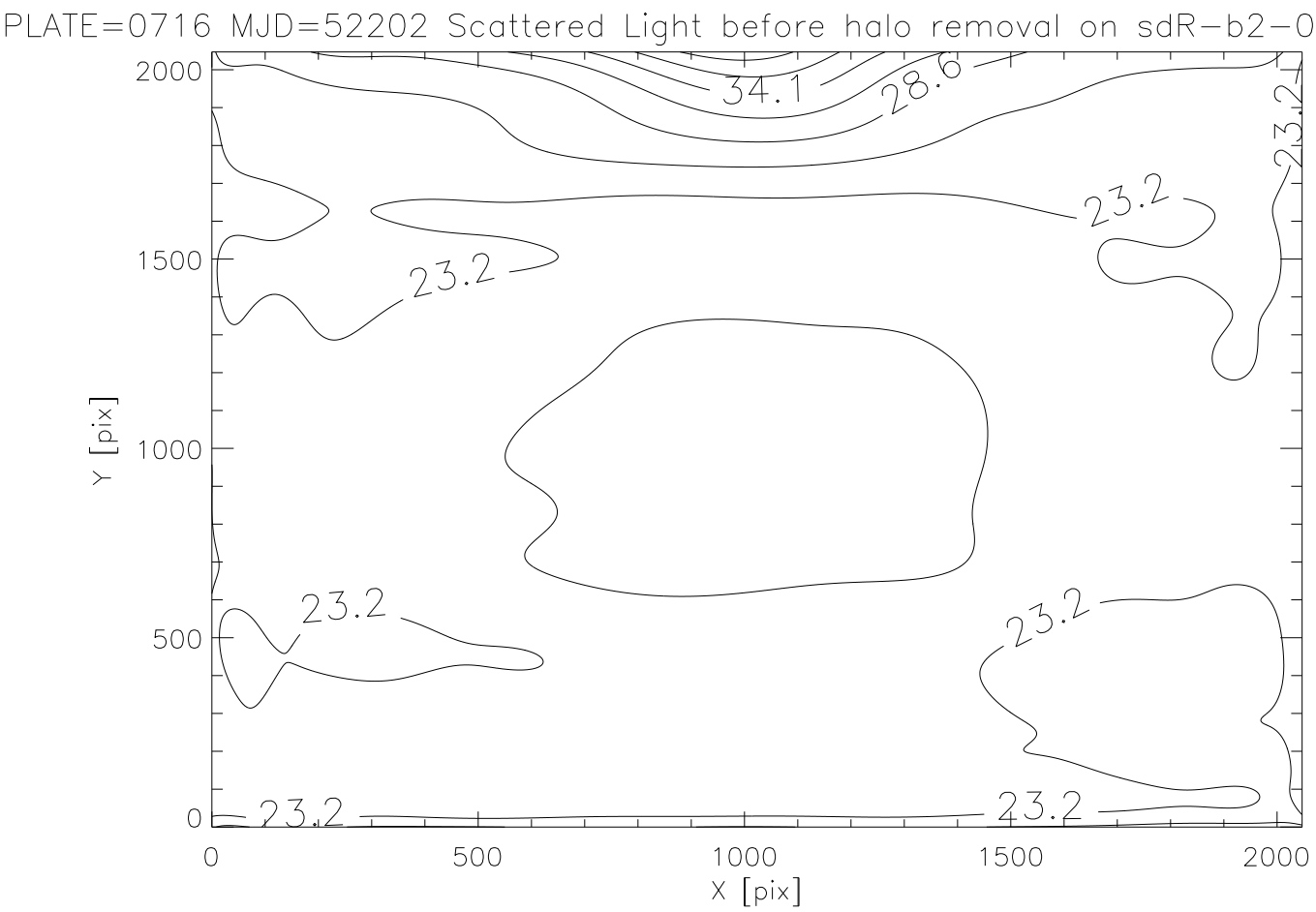

PLATE=0716 MJD=52202 sdR-b2-00011335.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

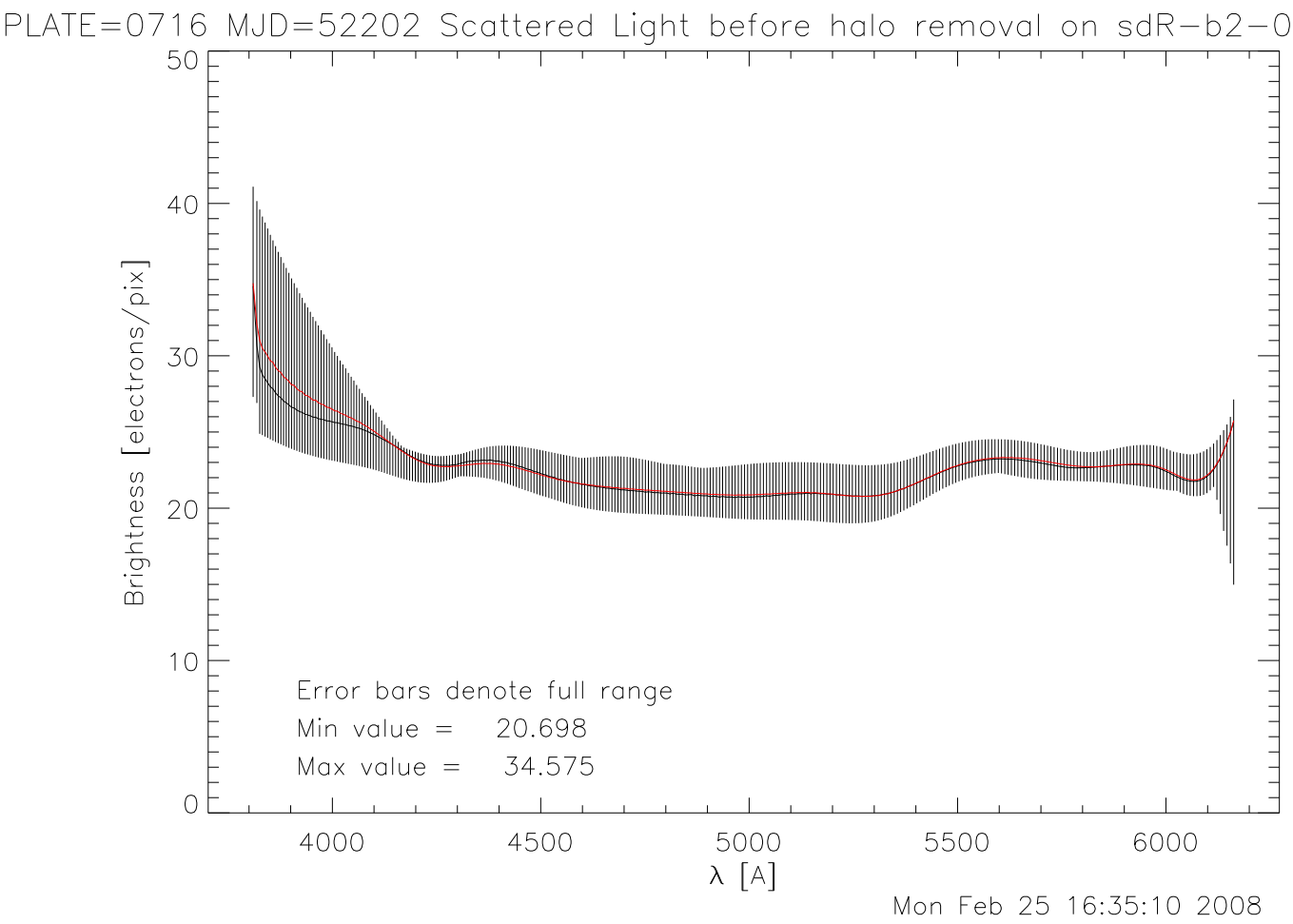

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-b2-00011335.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

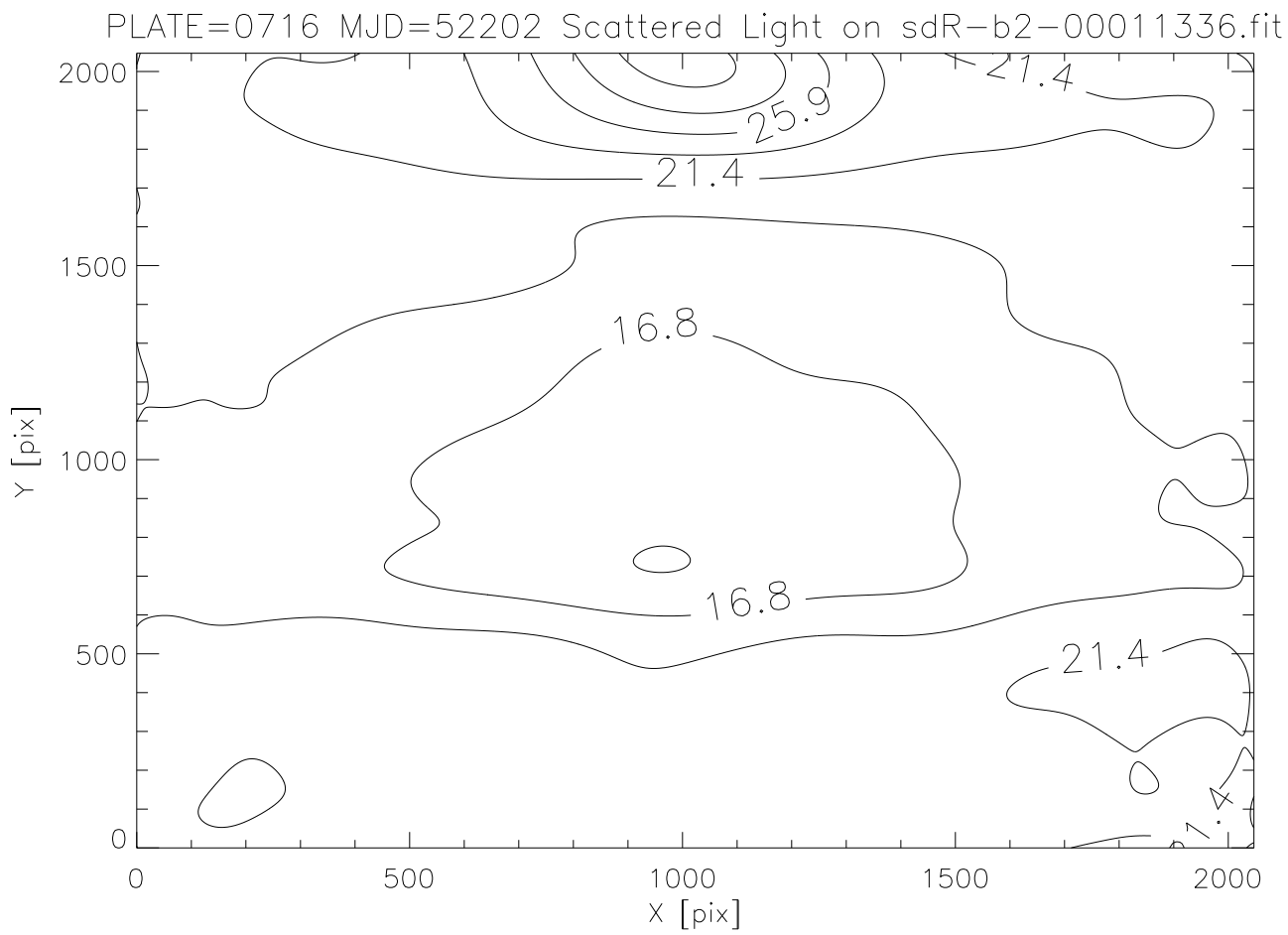

PLATE=0716 MJD=52202 sdR-b2-00011335.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.55 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

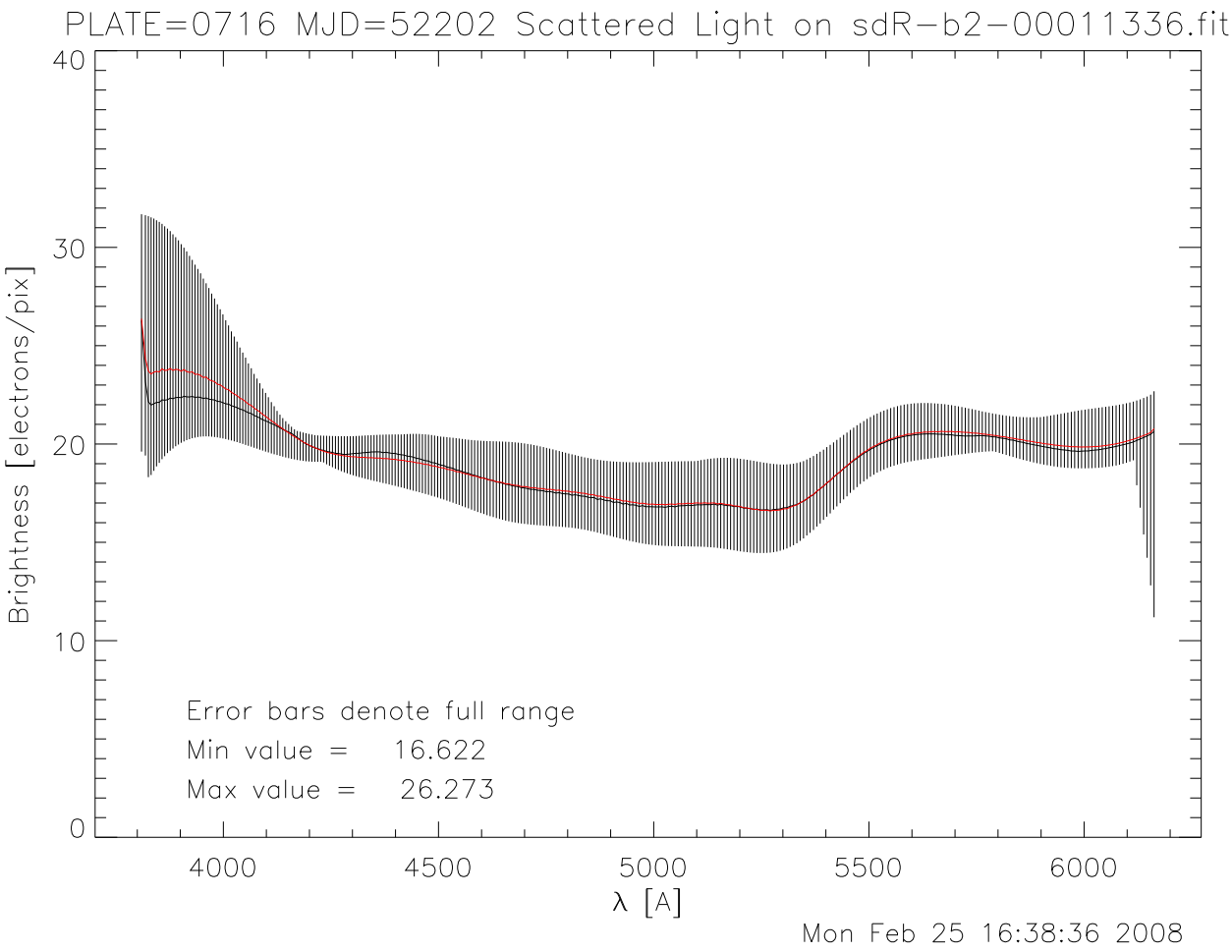

PLATE=0716 MJD=52202 sdR-b2-00011335.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.31 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

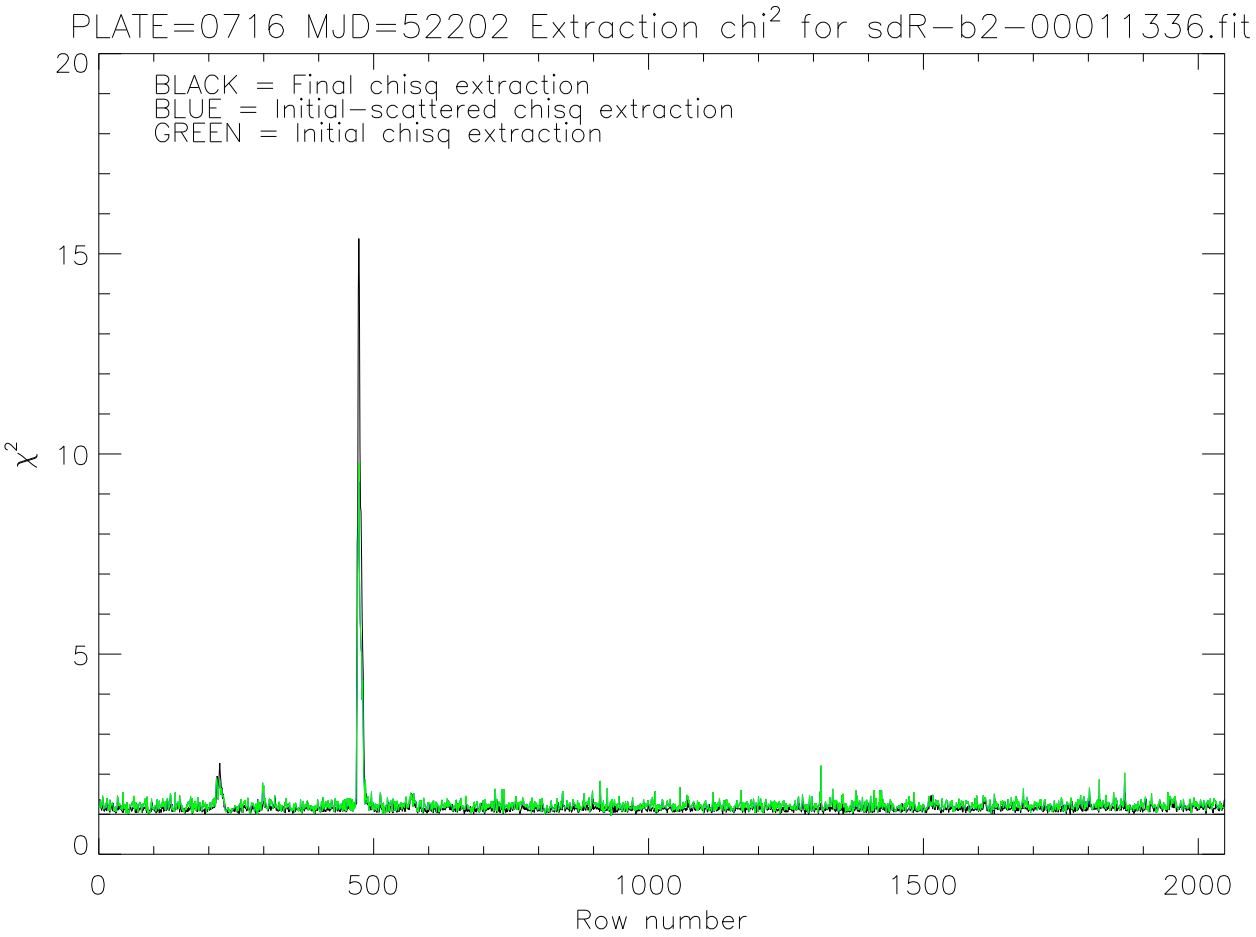

PLATE=0716 MJD=52202 Fiber-Flats for sdR-b2-00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.715
Max value = 1.329
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 16:34:04 2008

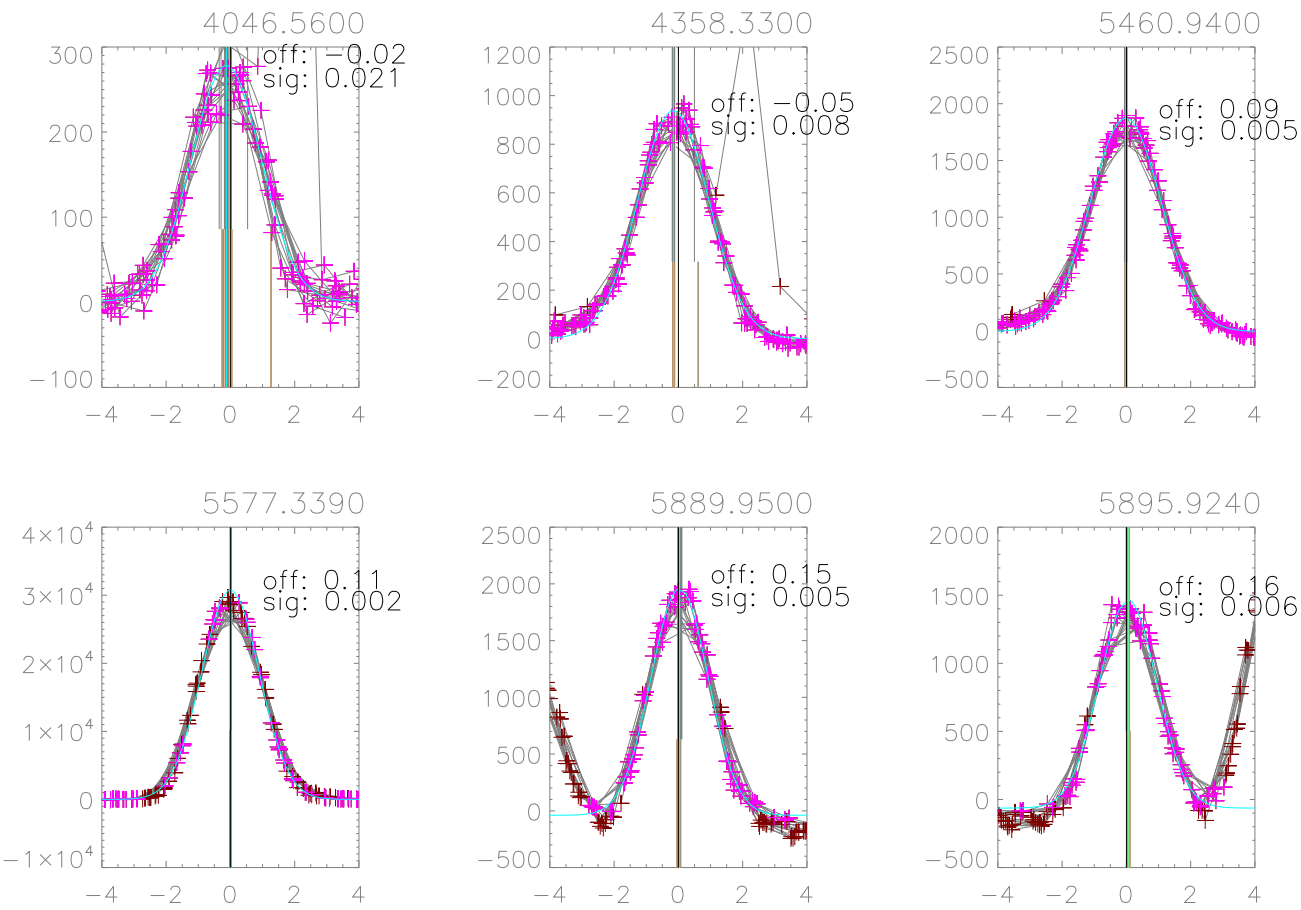

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-b2-00011336.f
34.1
28.6
23.2
23.2
23.2
23.2
23.2
23.2
23.2
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

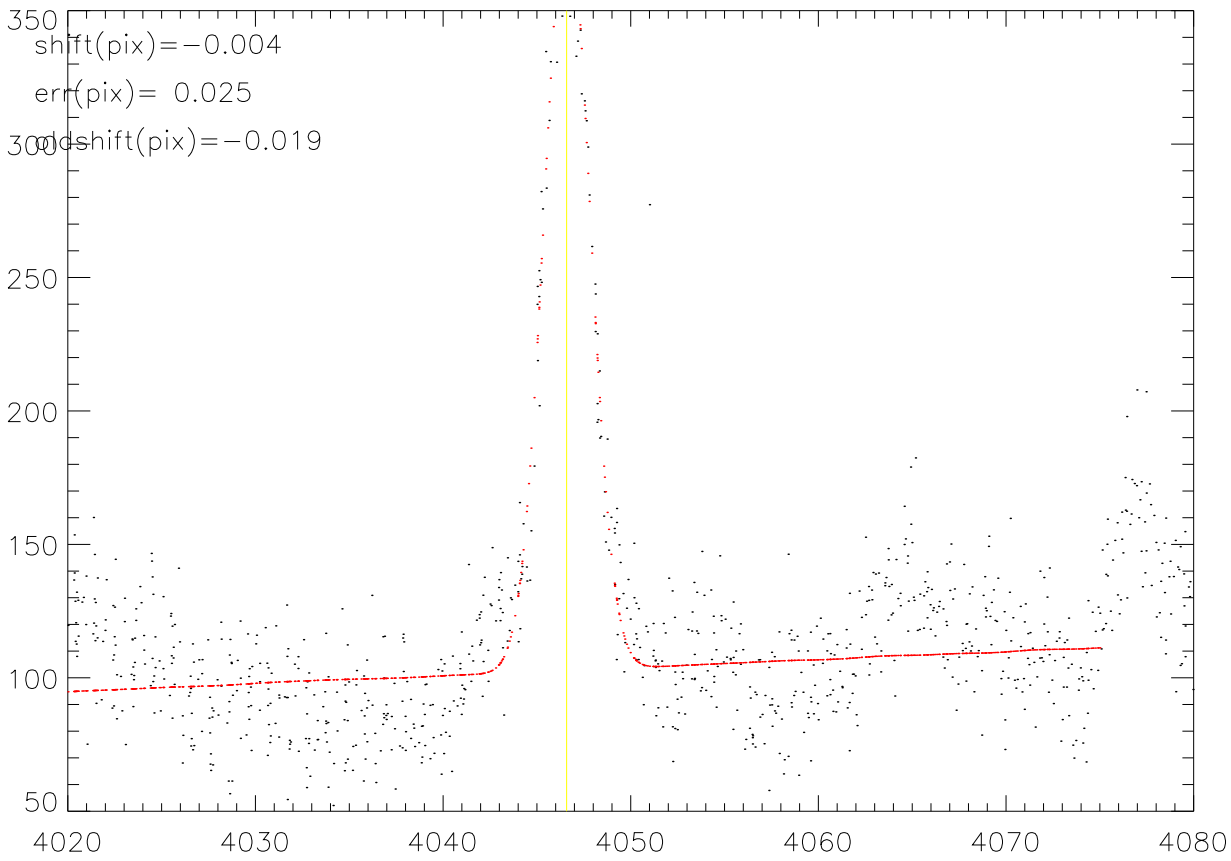

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-b2-00011336.f
Brightness [electrons/pix]
50
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 20.698
Max value = 34.575
Mon Feb 25 16:35:10 2008

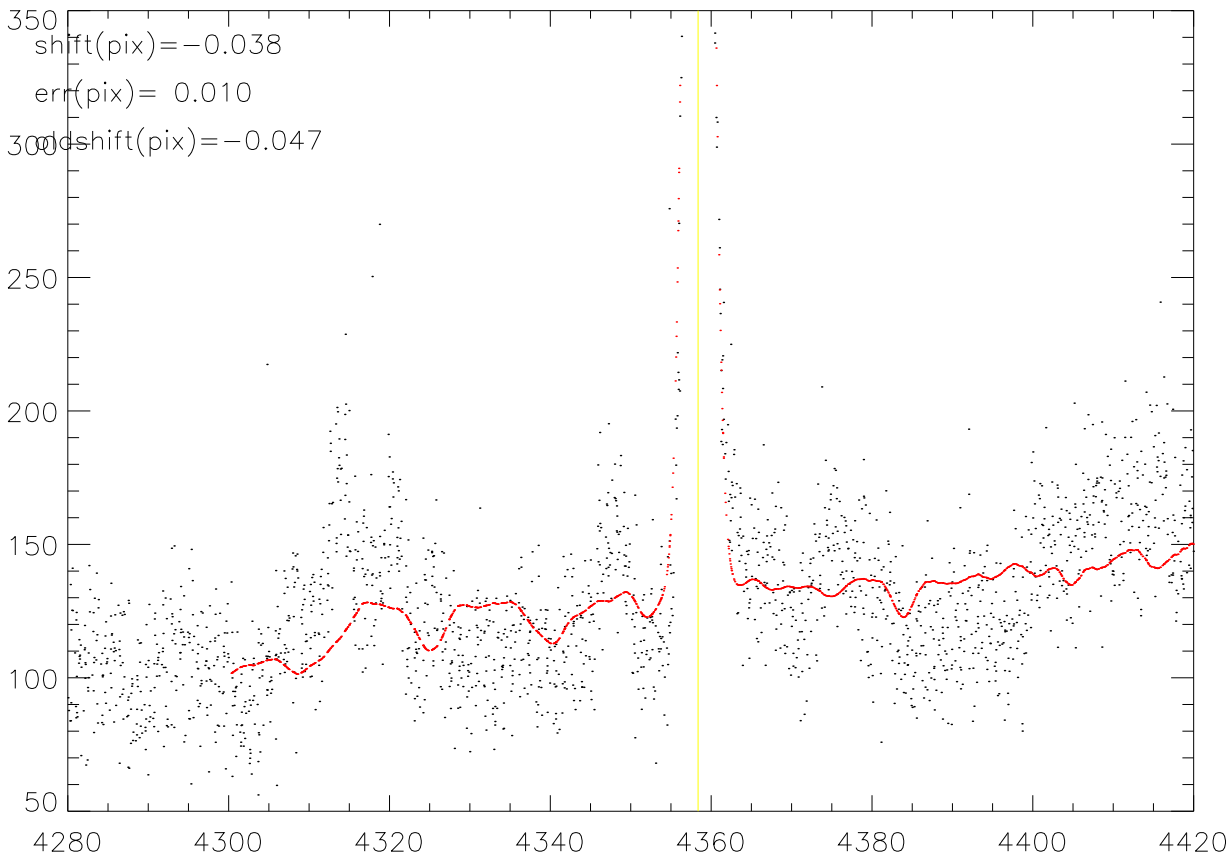

PLATE=0716 MJD=52202 Scattered Light on sdR-b2-00011336.fit
25.9
21.4
21.4
16.8
16.8
21.4
Y [pix]
X [pix]
0
500
1000
1500
2000

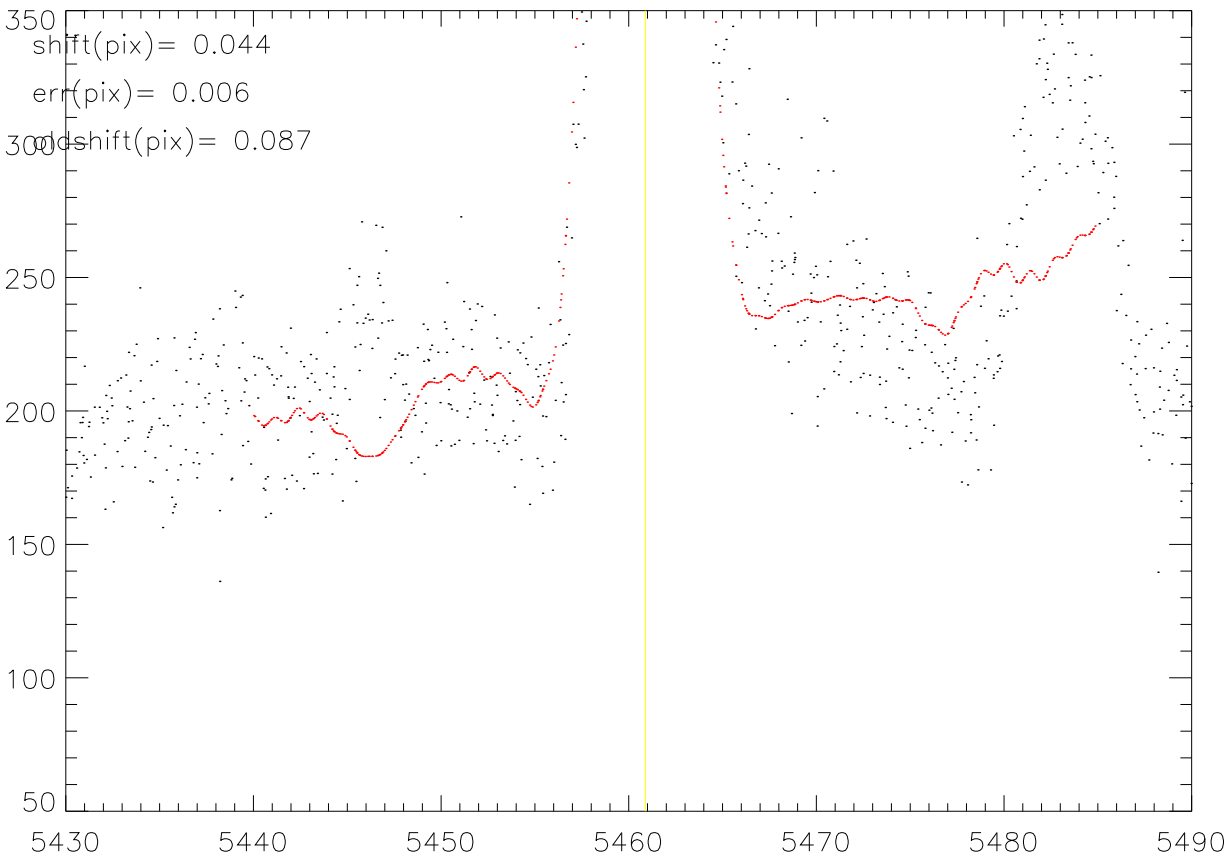

PLATE=0716 MJD=52202 Scattered Light on sdR-b2-00011336.fit
Brightness [electrons/pix]
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 16.622
Max value = 26.273
Mon Feb 25 16:38:36 2008

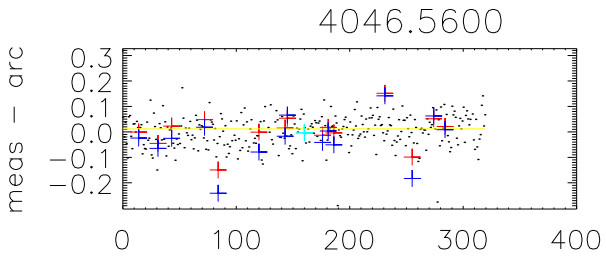

PLATE=0716 MJD=52202 Extraction chi^2 for sdR-b2-00011336.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

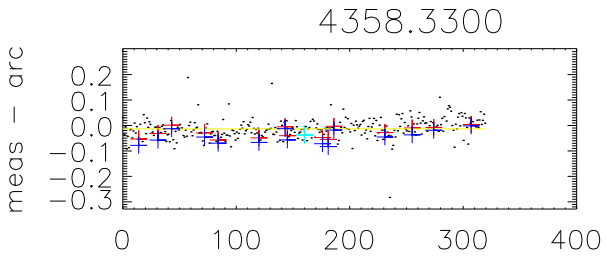

4046.5600
off: −0.02
sig: 0.021
4358.3300
off: −0.05
sig: 0.008
5460.9400
off: 0.09
sig: 0.005
5577.3390
off: 0.11
sig: 0.002
5889.9500
off: 0.15
sig: 0.005
5895.9240
off: 0.16
sig: 0.006

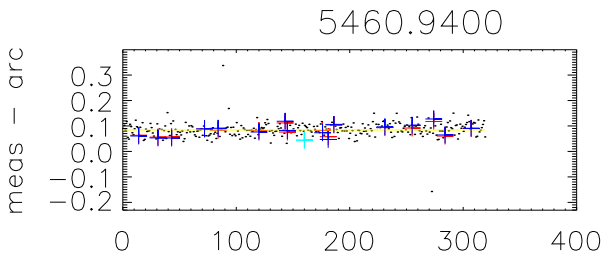

shift(pix)=−0.004
err(pix)= 0.025
oldshift(pix)=−0.019
350
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

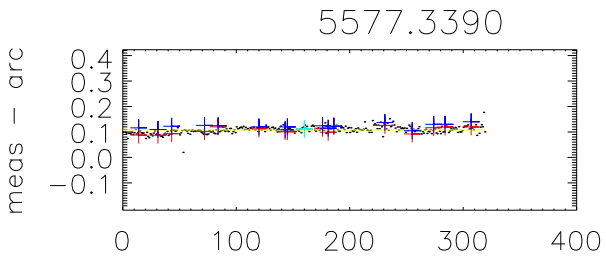

shift(pix)=−0.038
err(pix)= 0.010
oldshift(pix)=−0.047
350
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

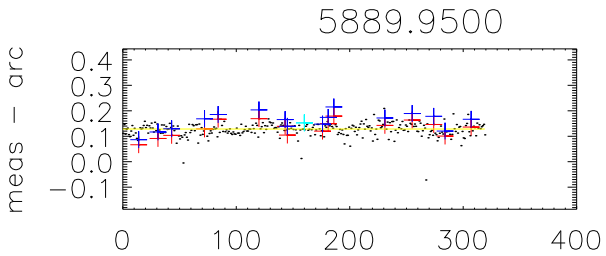

shift(pix)= 0.044
err(pix)= 0.006
oldshift(pix)= 0.087
350
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

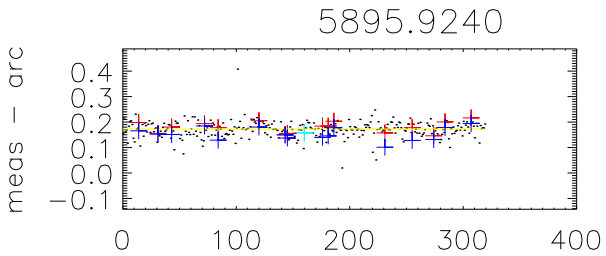

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

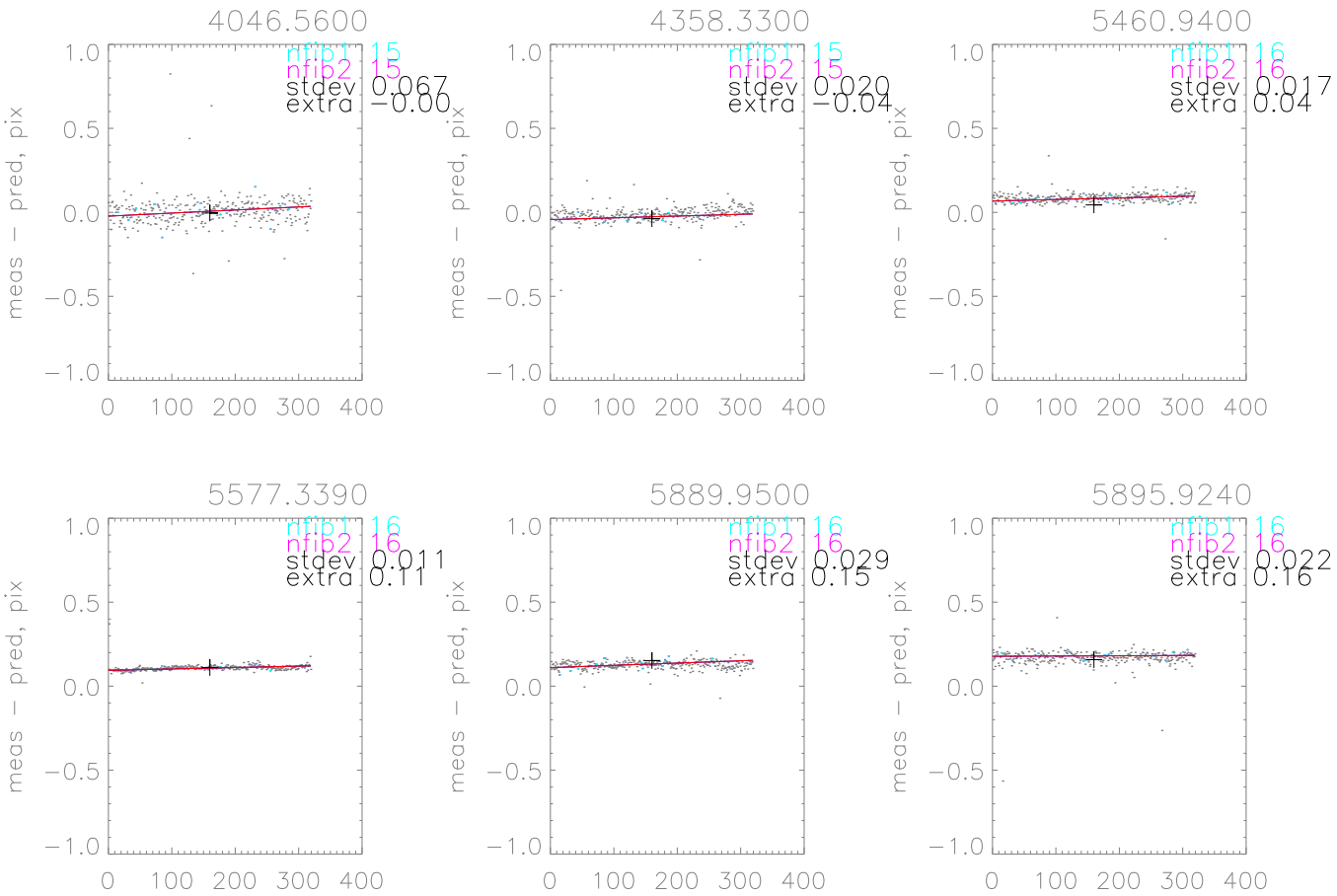

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

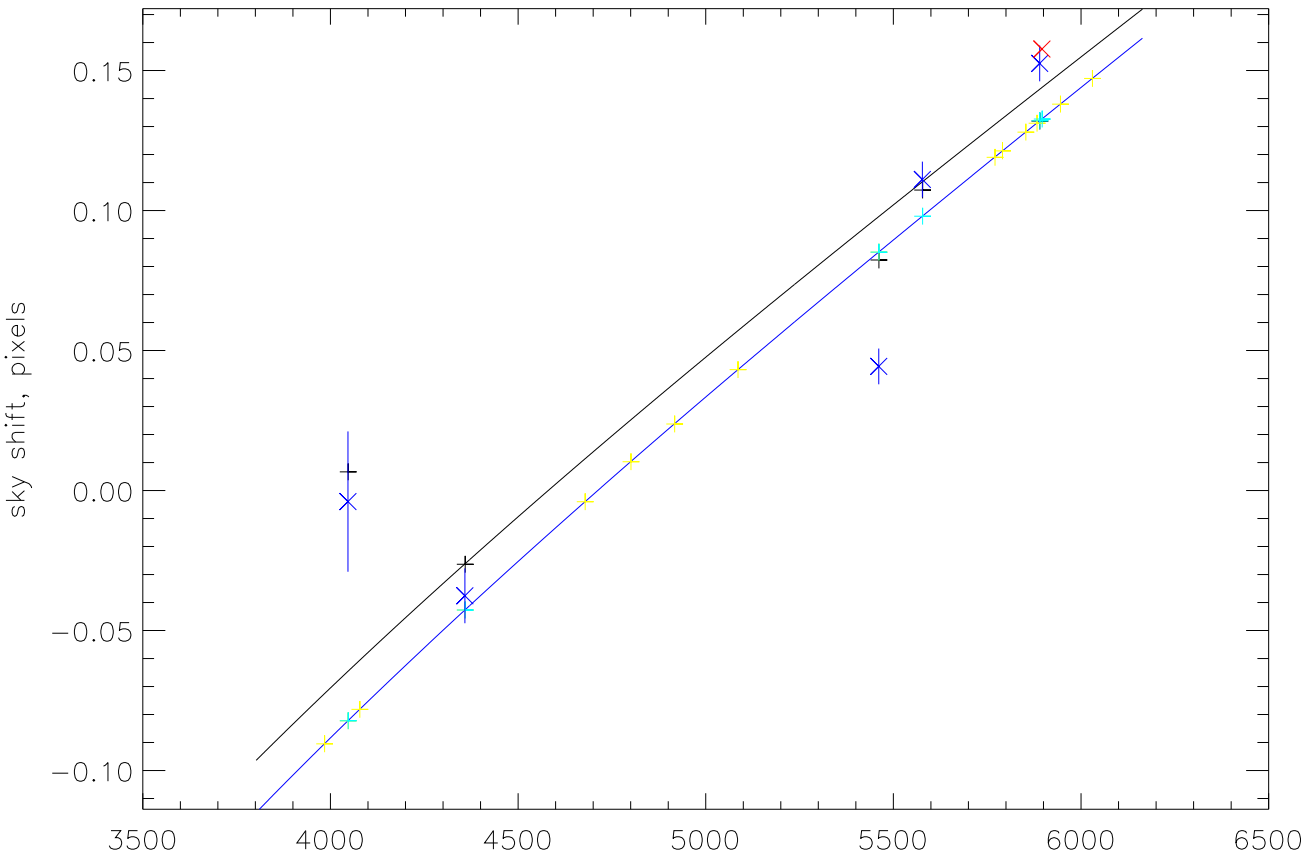

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

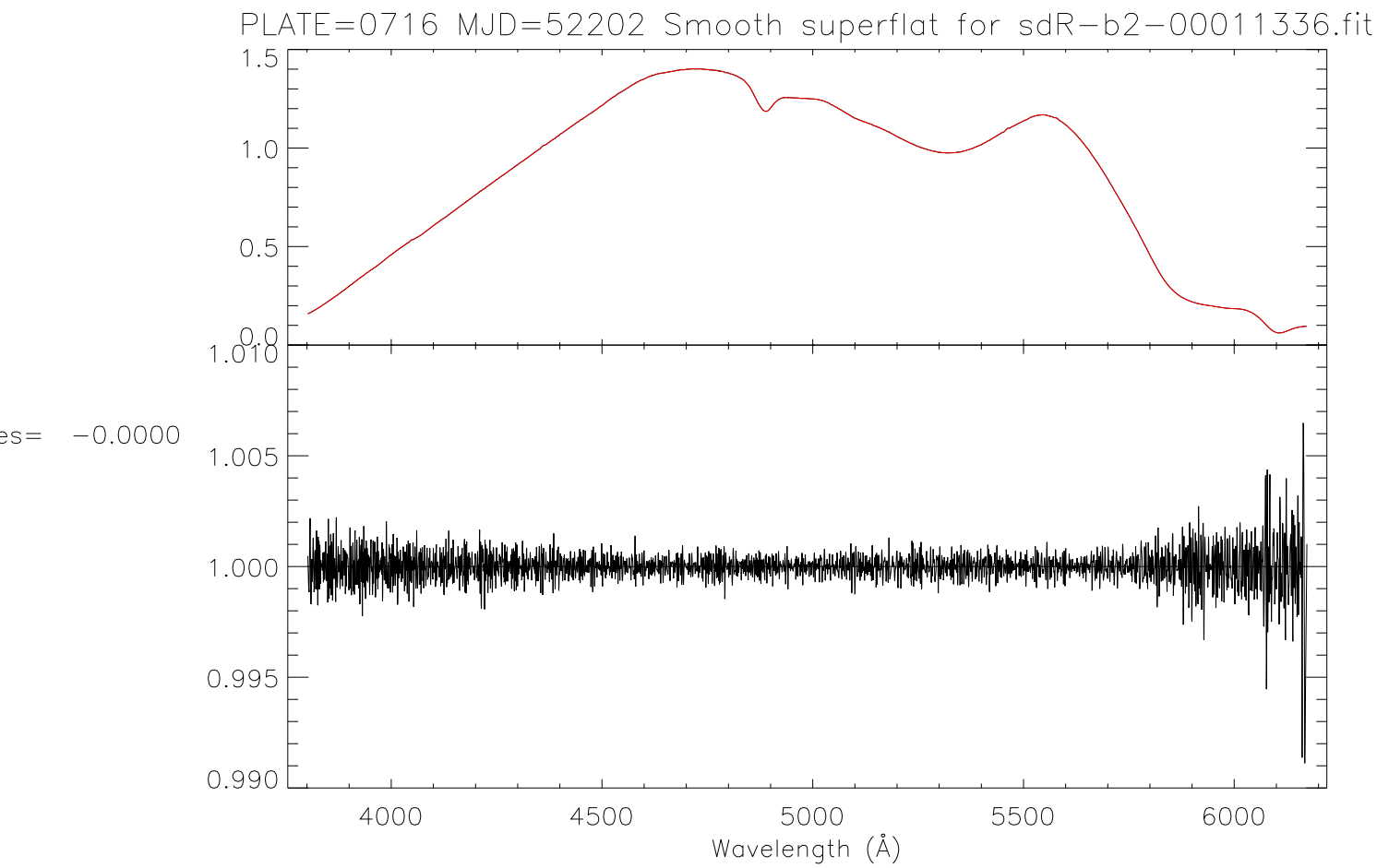

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

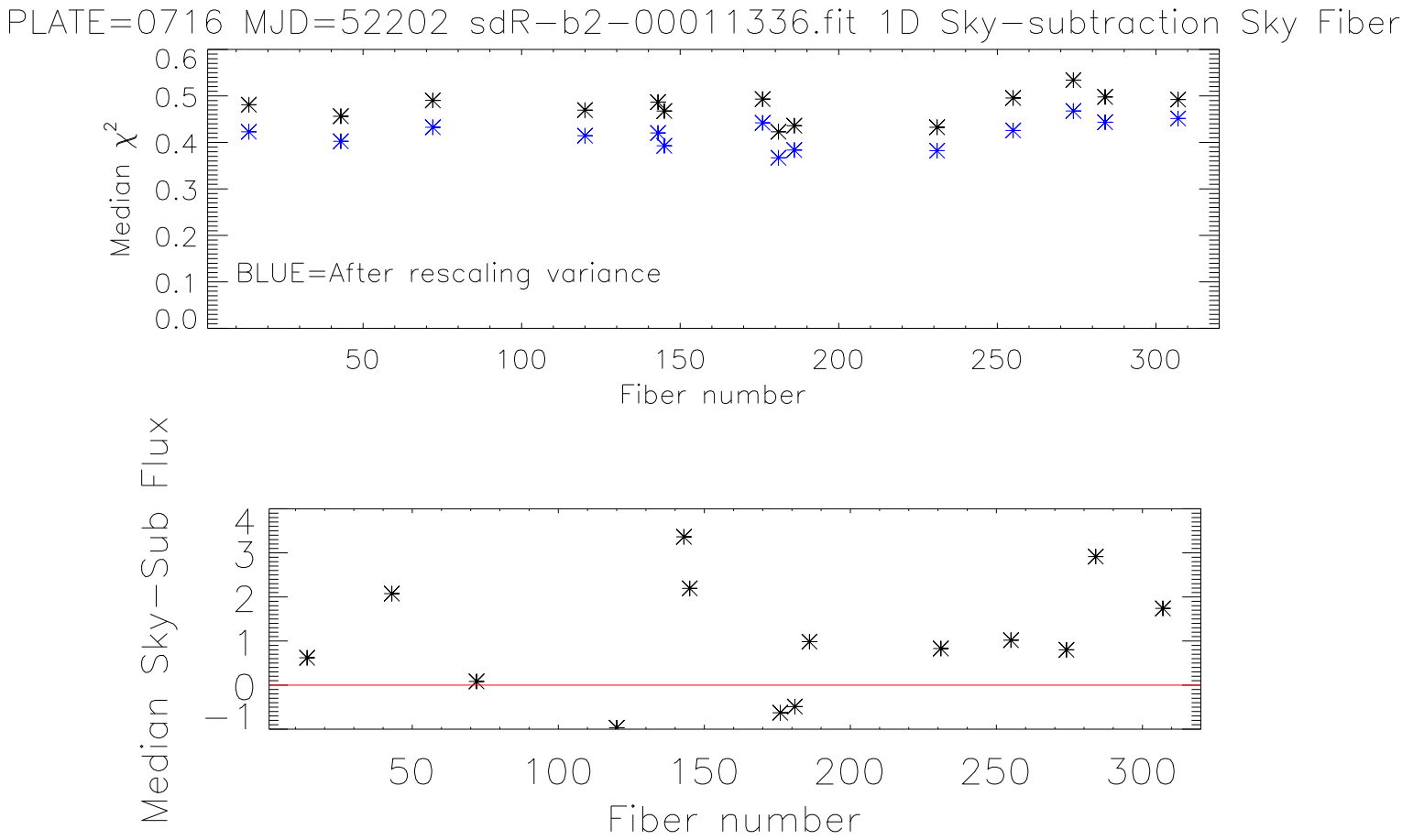

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

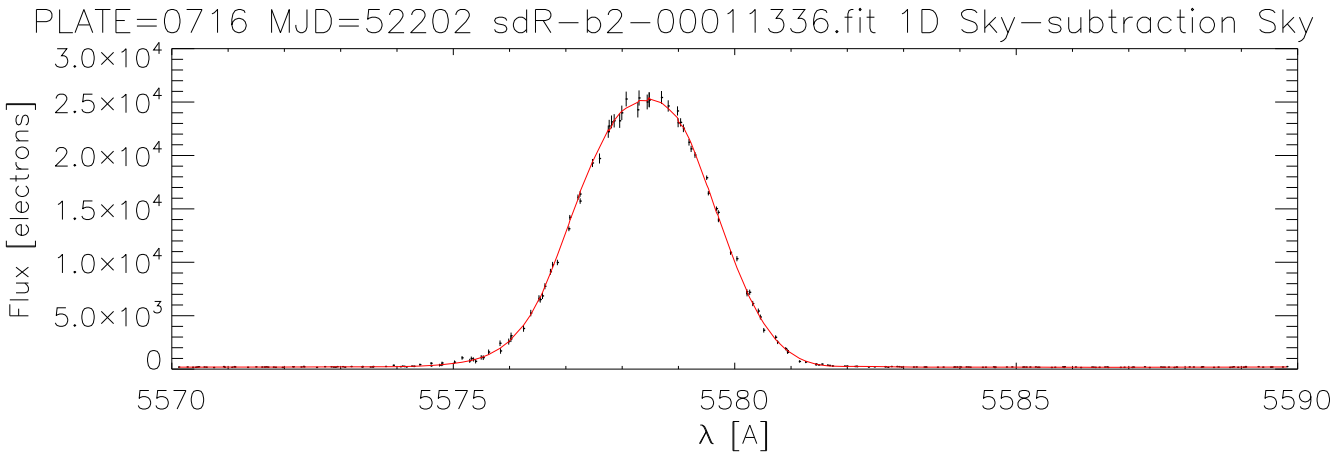

4046.5600
nfib1 15
nfib2 15
stdev 0.067
extra −0.00
4358.3300
nfib1 15
nfib2 15
stdev 0.020
extra −0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.017
extra 0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra 0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra 0.15
5895.9240
nfib1 16
nfib2 16
stdev 0.022
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

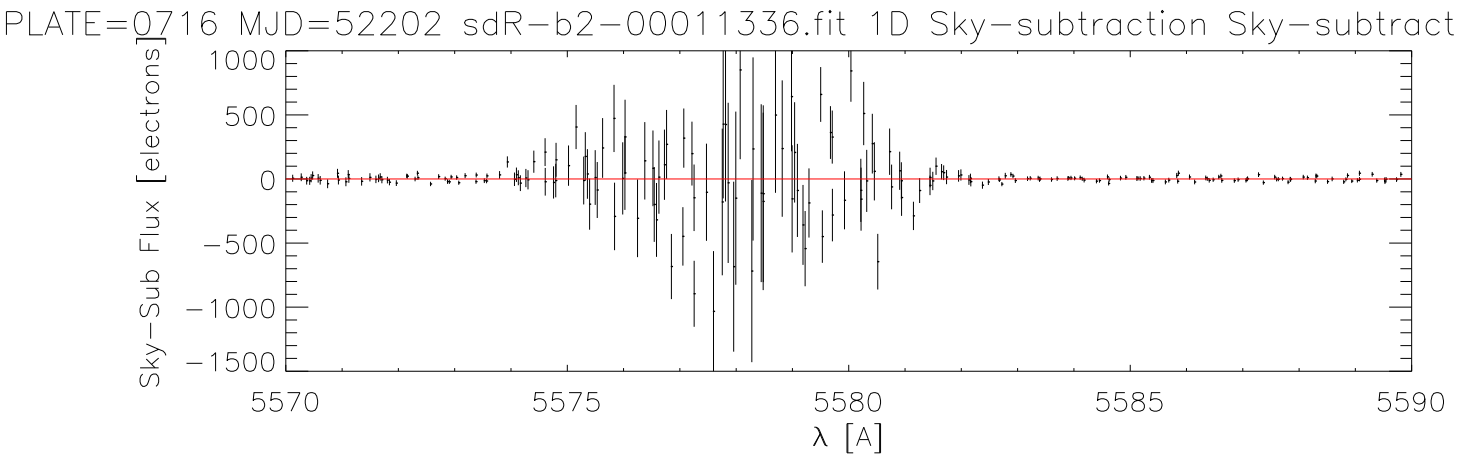

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

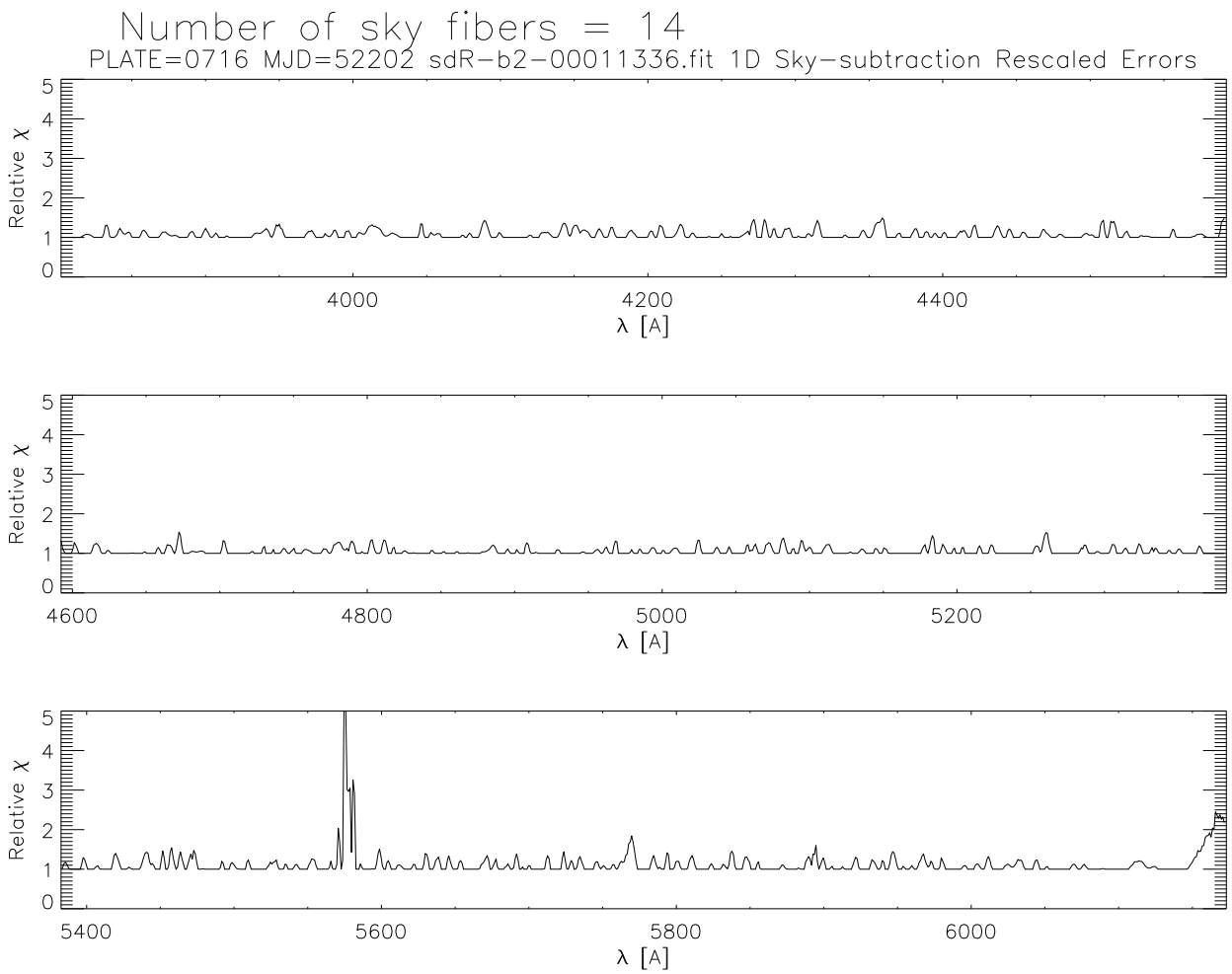

PLATE=0716 MJD=52202 Smooth superflat for sdR-b2-00011336.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

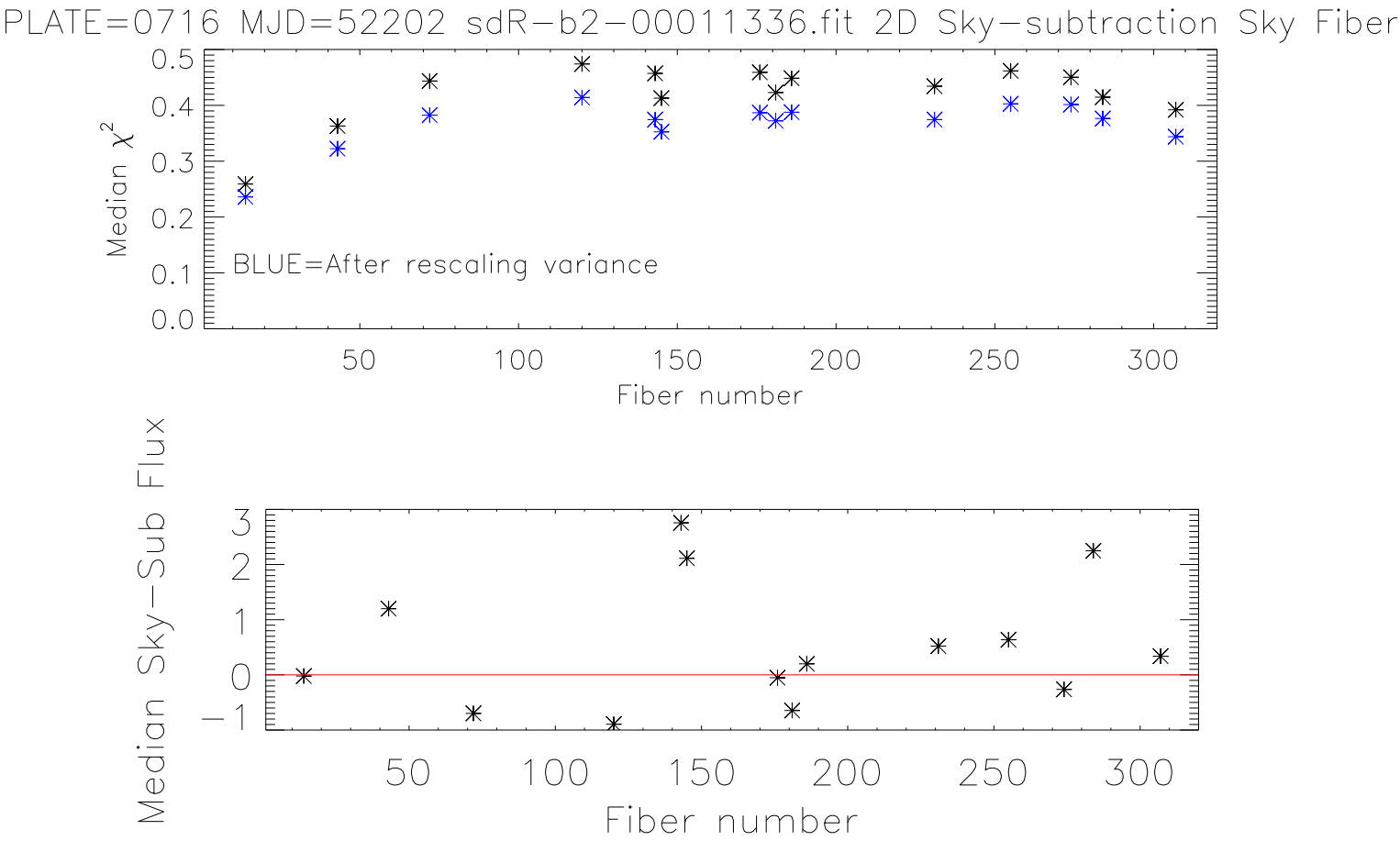
es= −0.0000

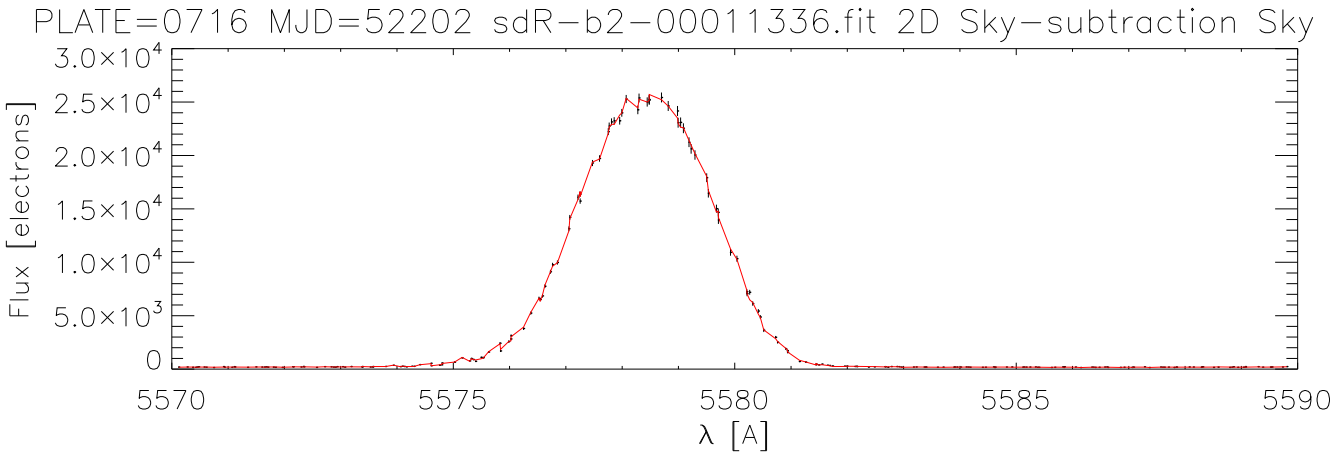

PLATE=0716 MJD=52202 sdR-b2-00011336.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

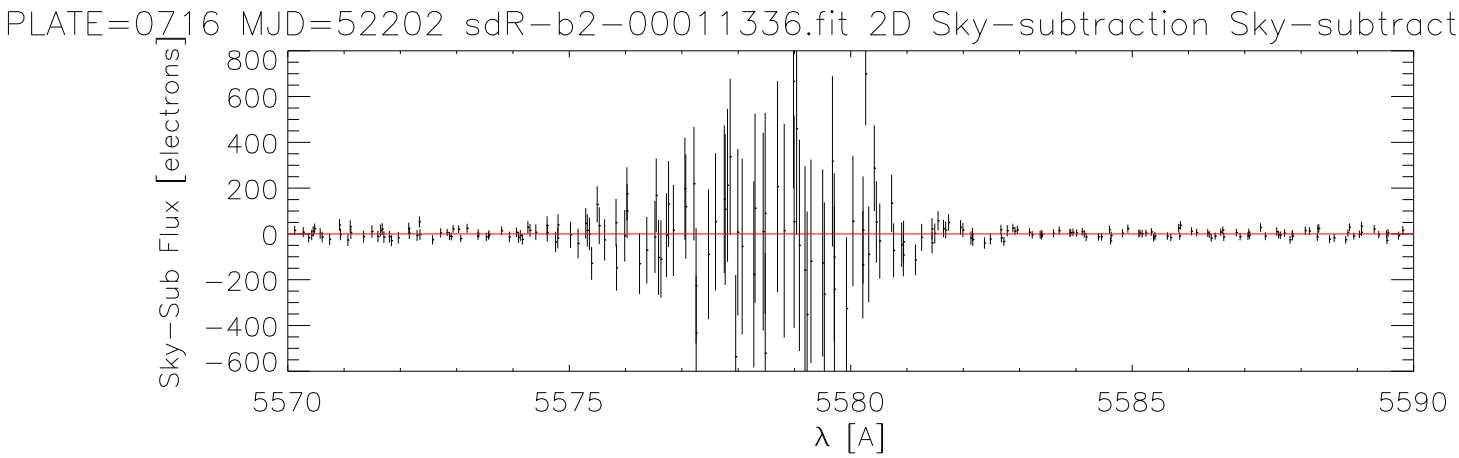

PLATE=0716 MJD=52202 sdR-b2-00011336.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

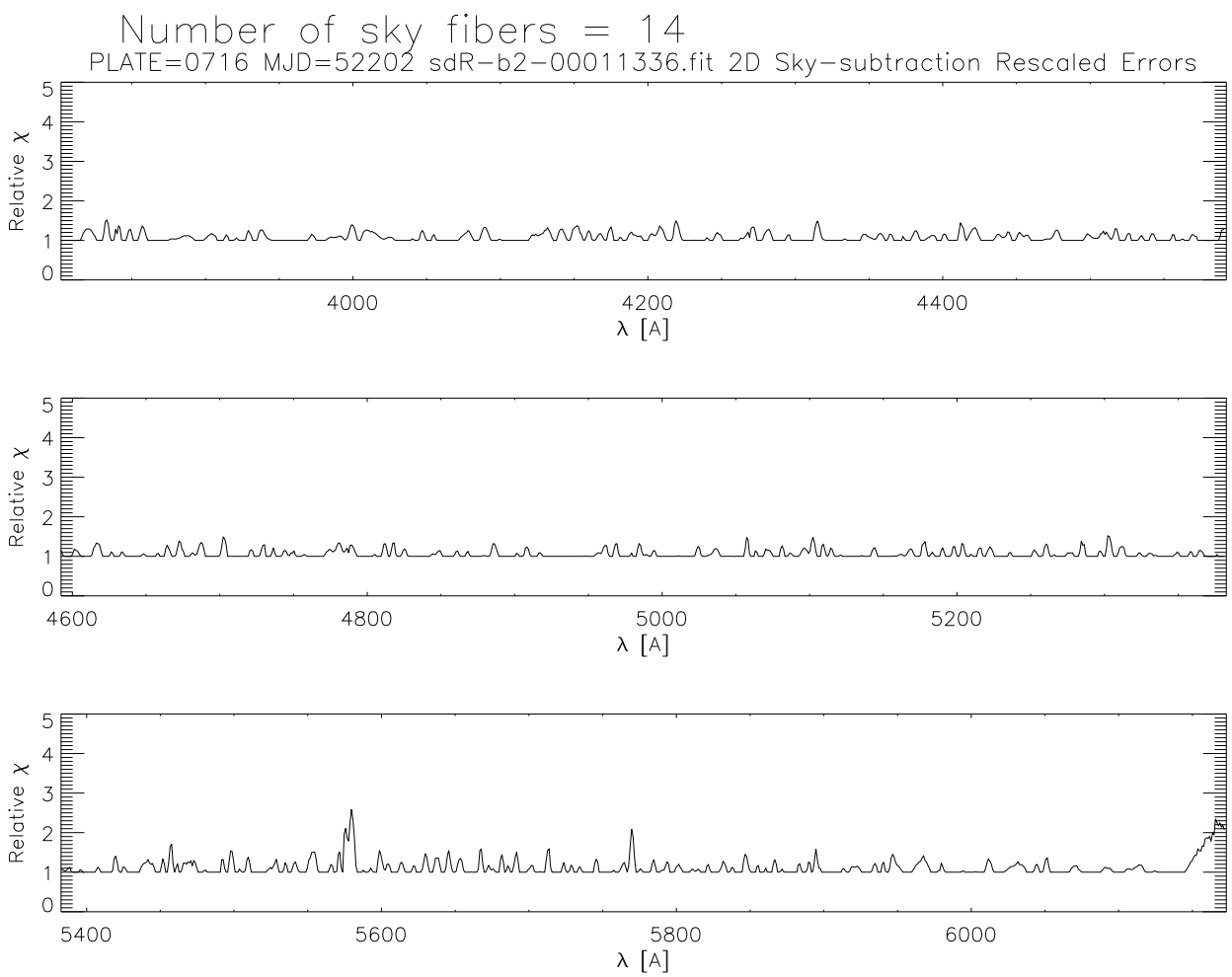

PLATE=0716 MJD=52202 sdR-b2-00011336.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

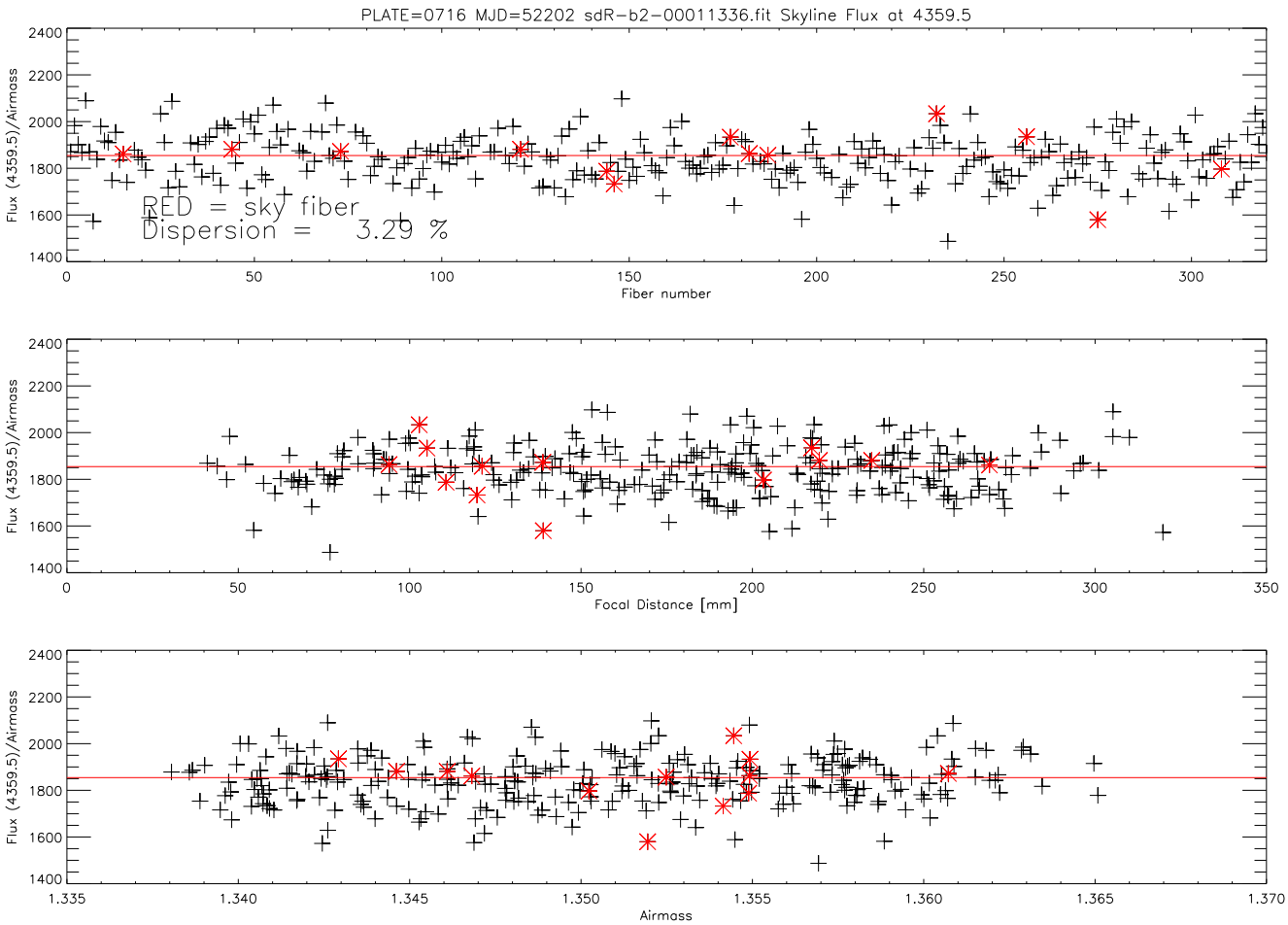

Number of sky fibers = 14
PLATE=0716 MJD=52202 sdR-b2-00011336.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

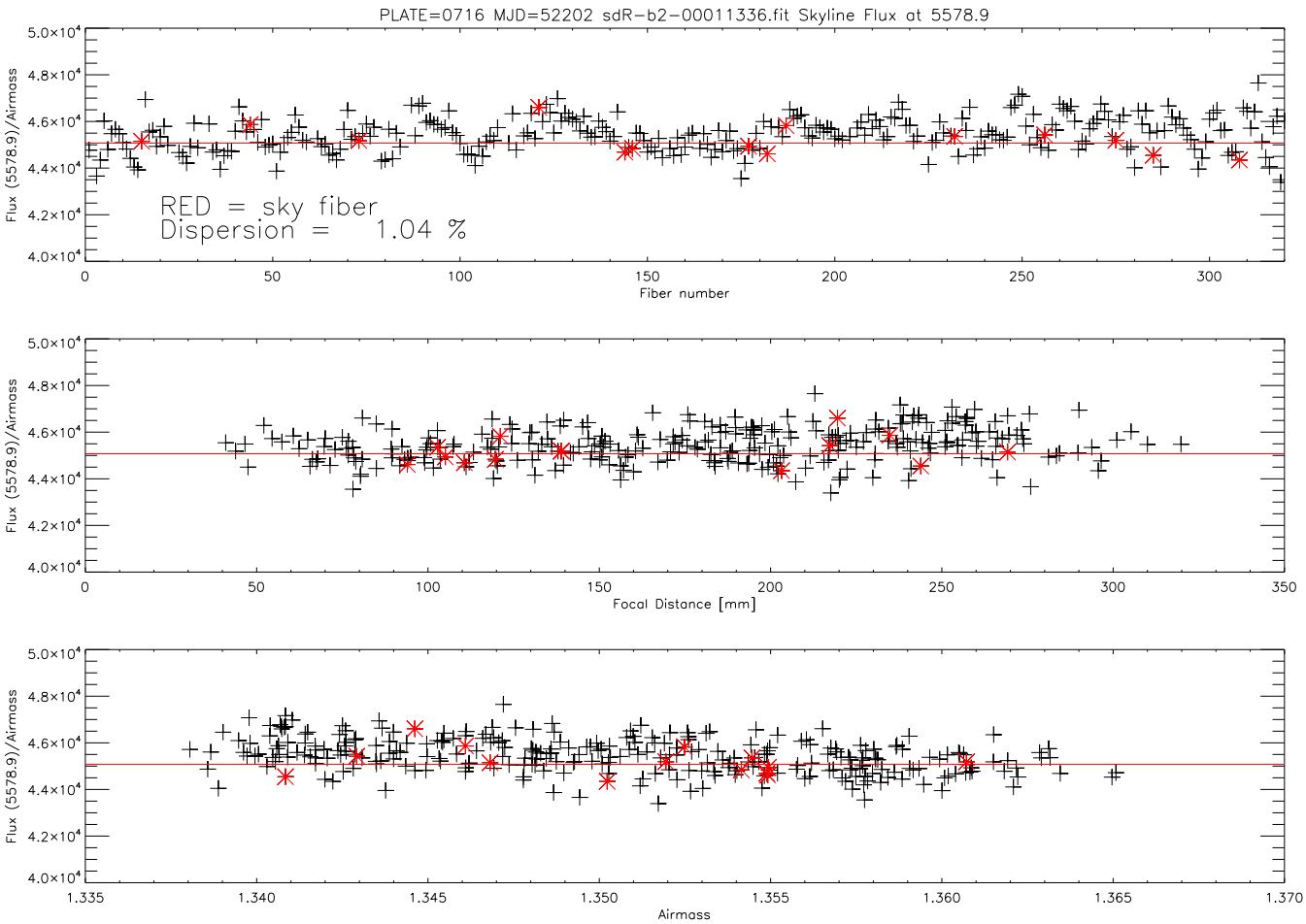

PLATE=0716 MJD=52202 sdR-b2-00011336.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

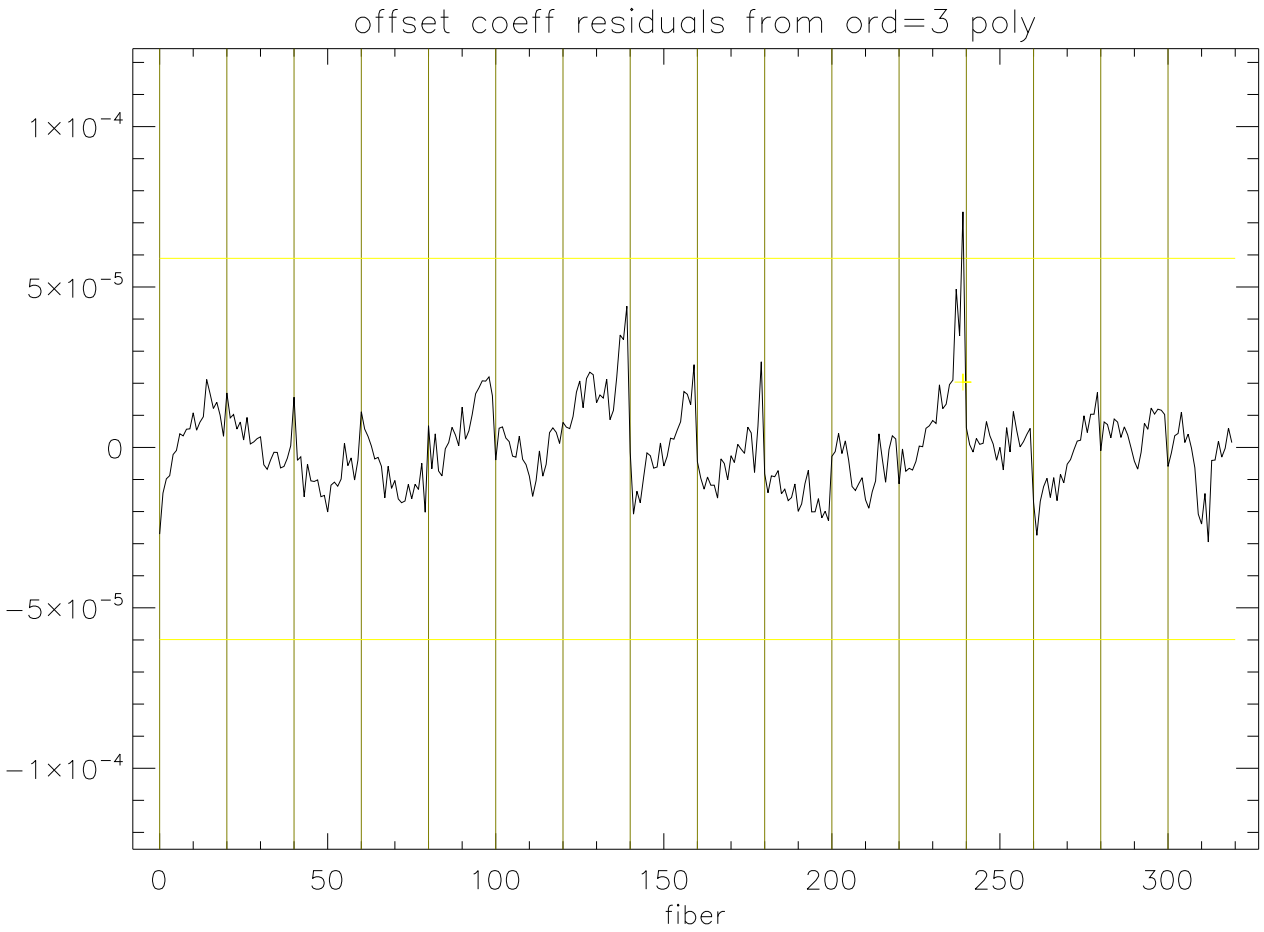

PLATE=0716 MJD=52202 sdR-b2-00011336.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

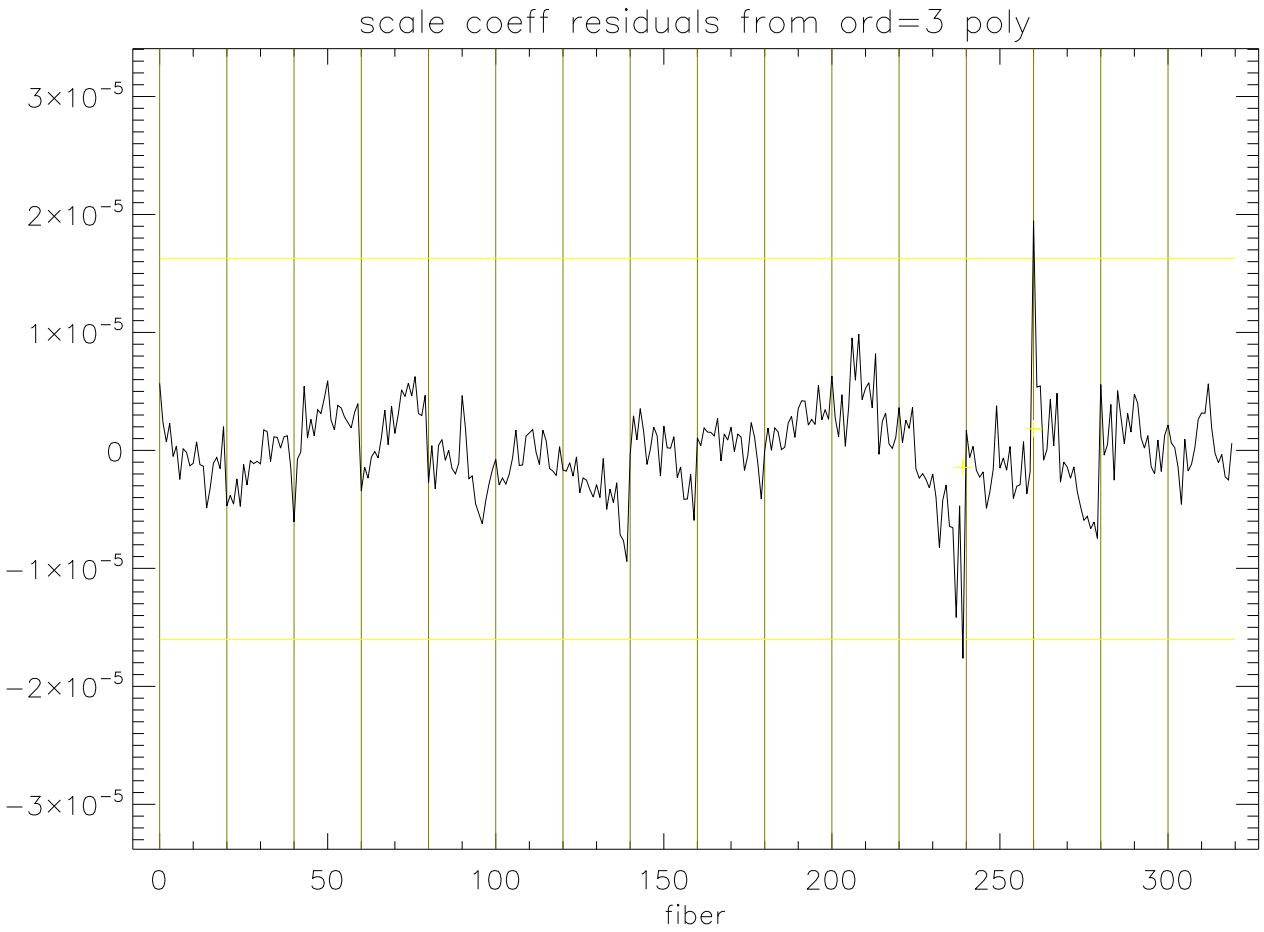

PLATE=0716 MJD=52202 sdR-b2-00011336.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

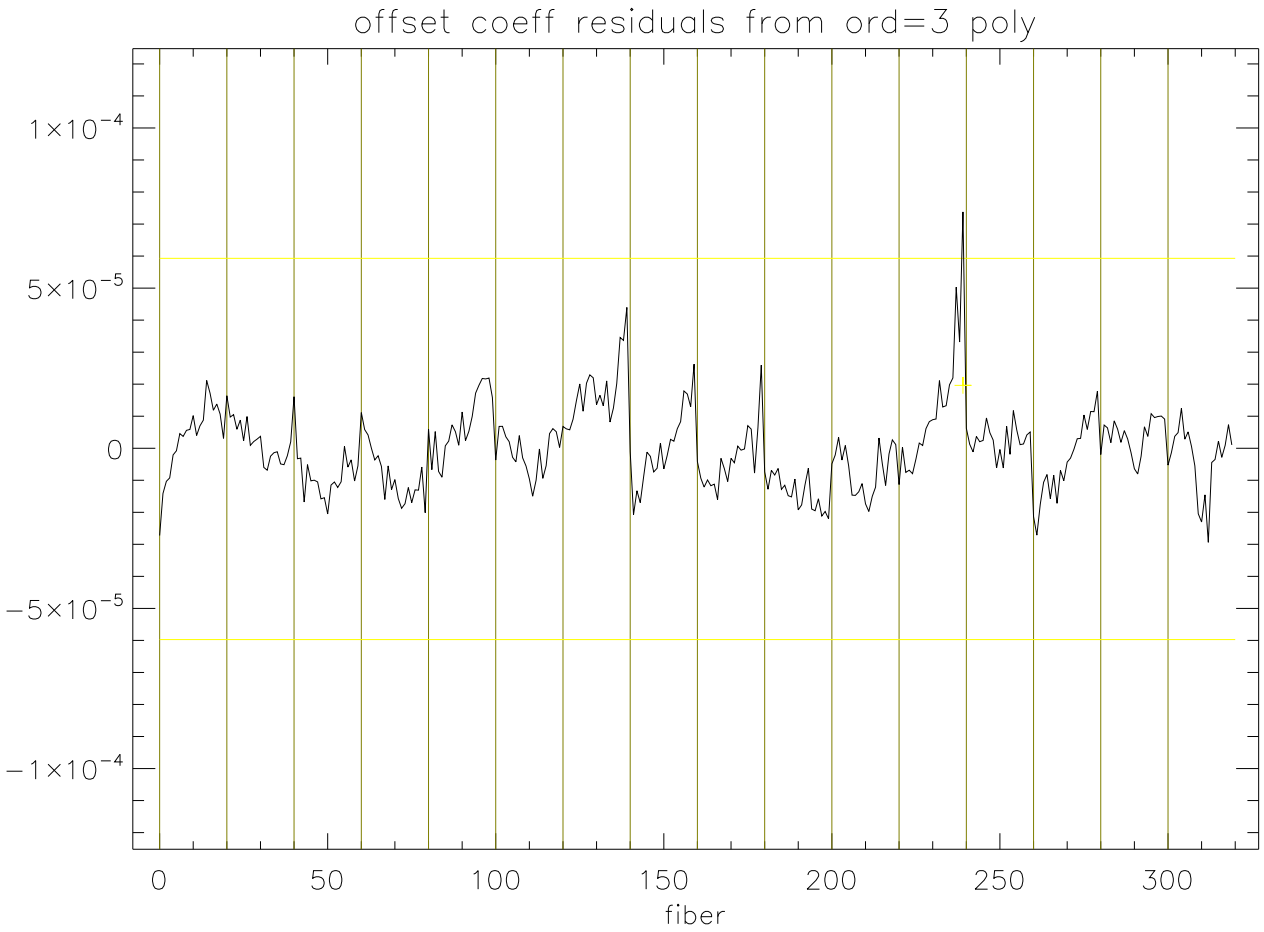

Number of sky fibers = 14
PLATE=0716 MJD=52202 sdR-b2-00011336.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

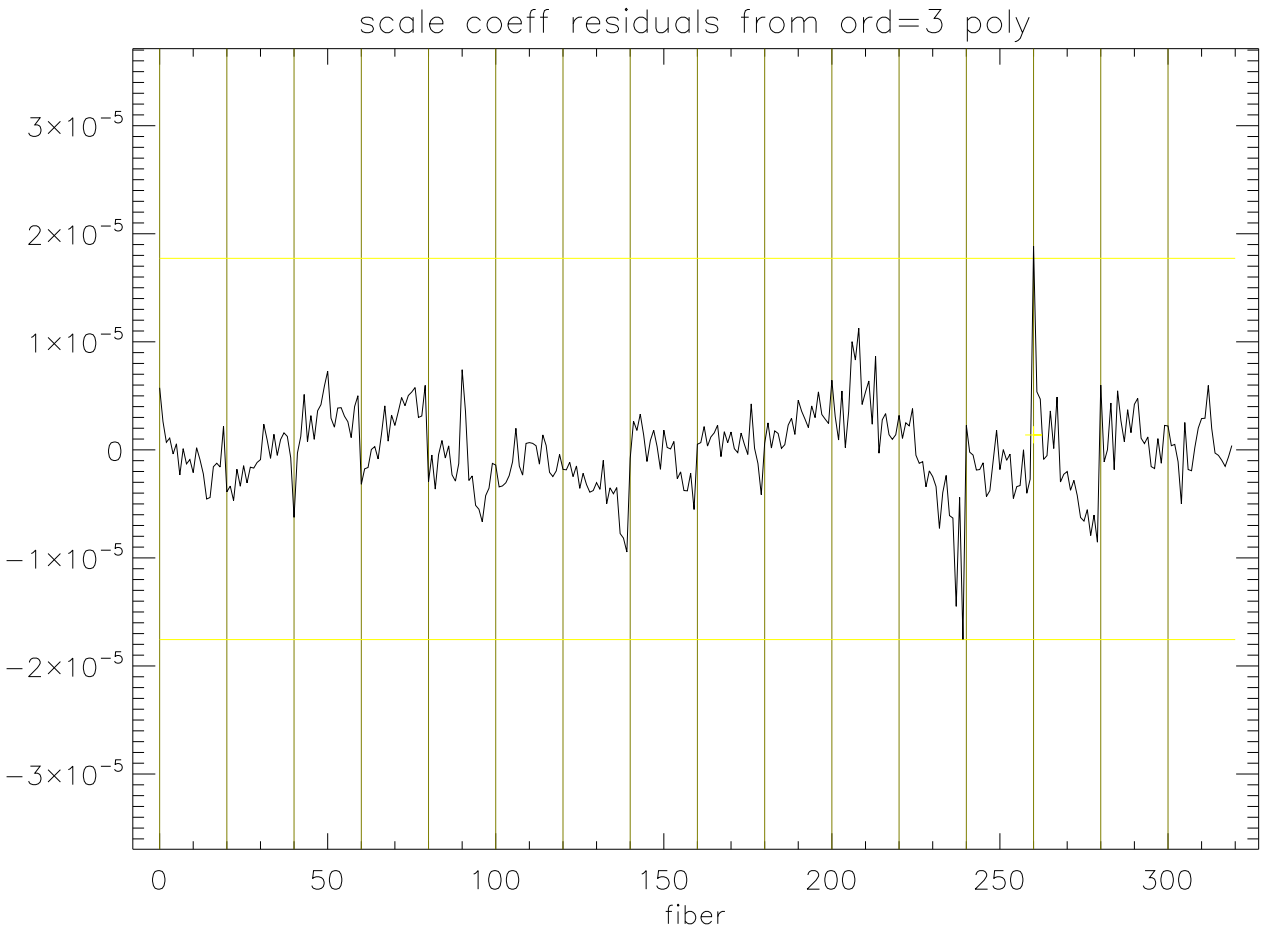

PLATE=0716 MJD=52202 sdR-b2-00011336.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 3.29 %
Fiber number
Focal Distance [mm]
Airmass

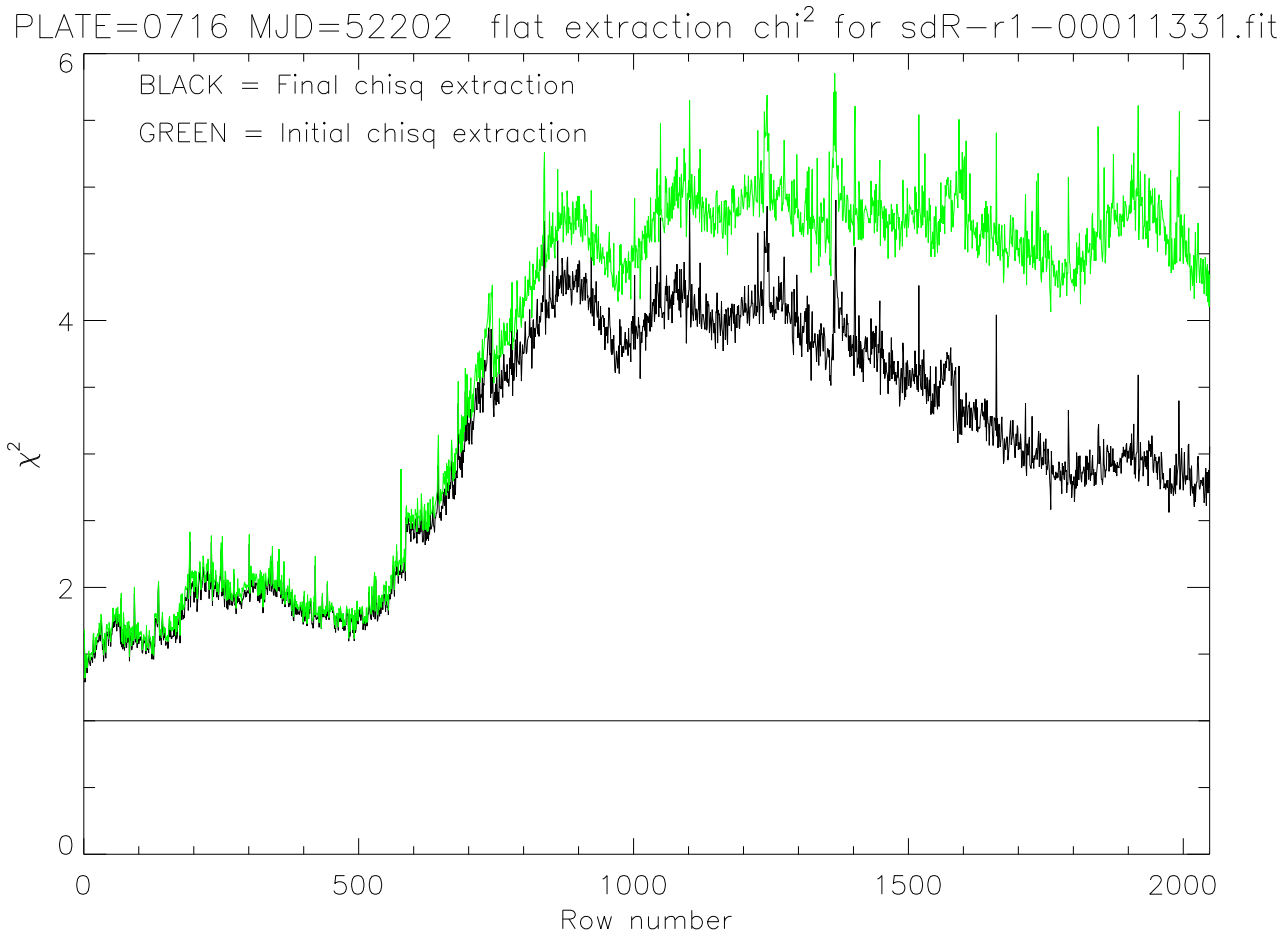

PLATE=0716 MJD=52202 sdR-b2-00011336.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.04 %
Fiber number
Focal Distance [mm]
Airmass

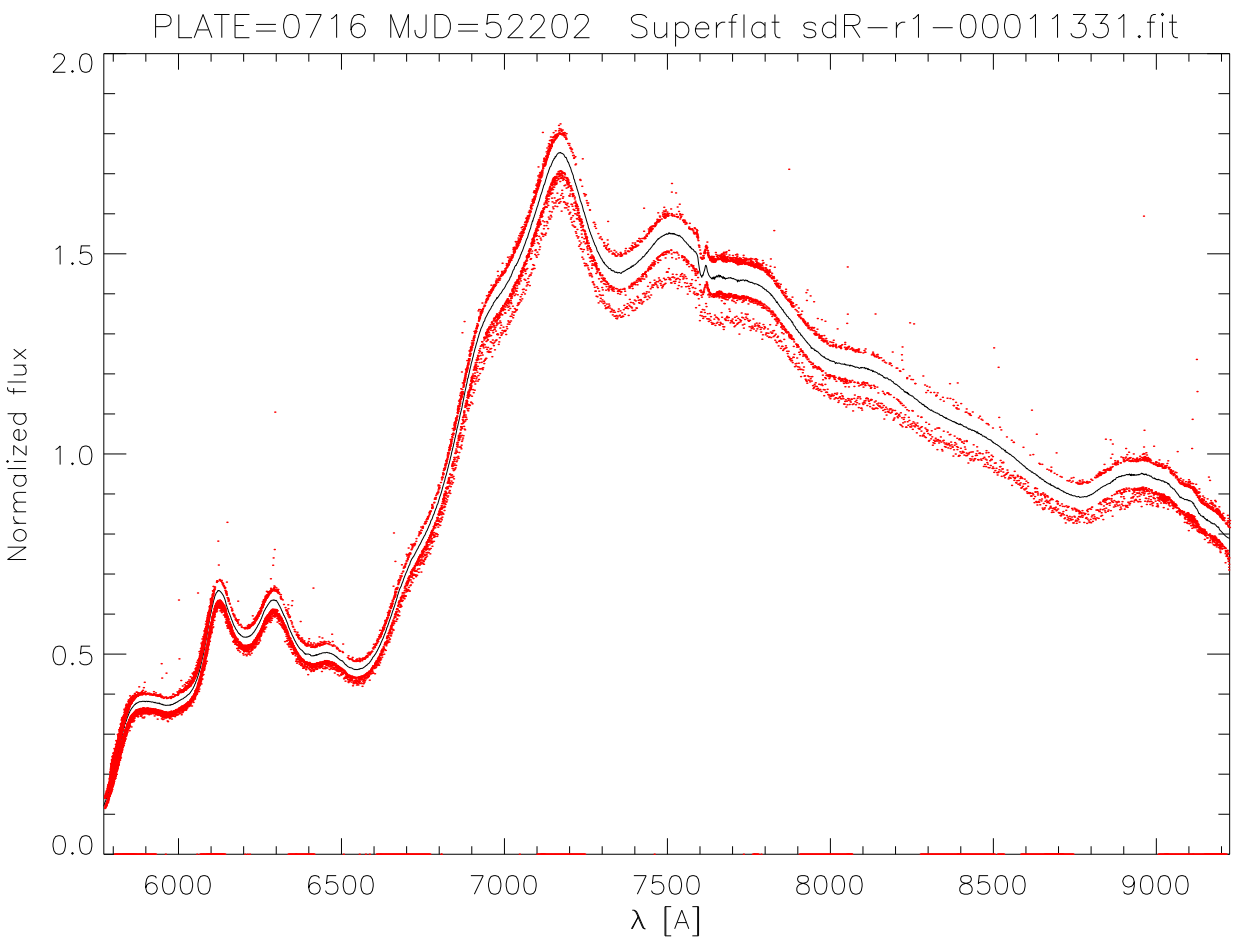

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

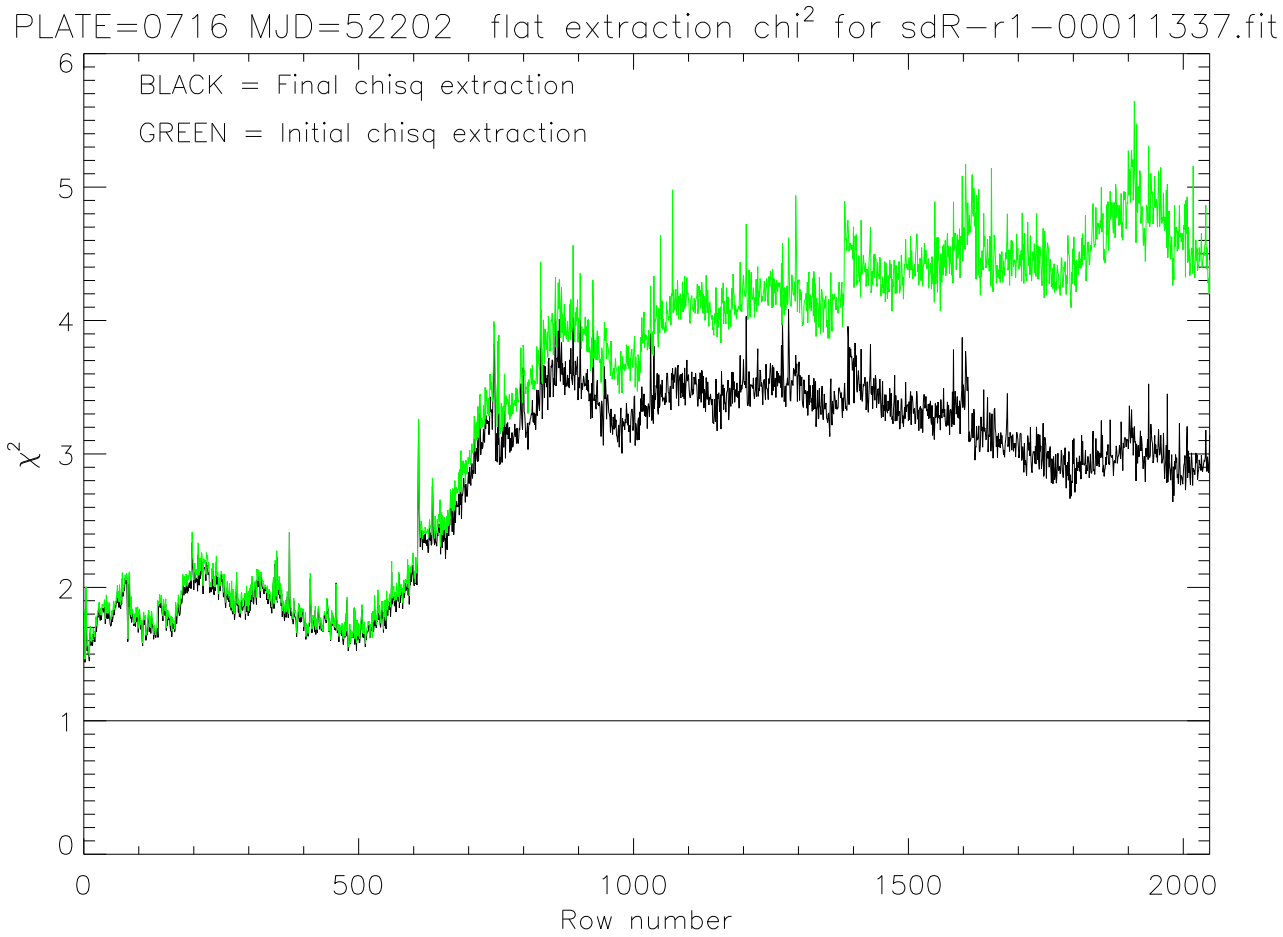

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

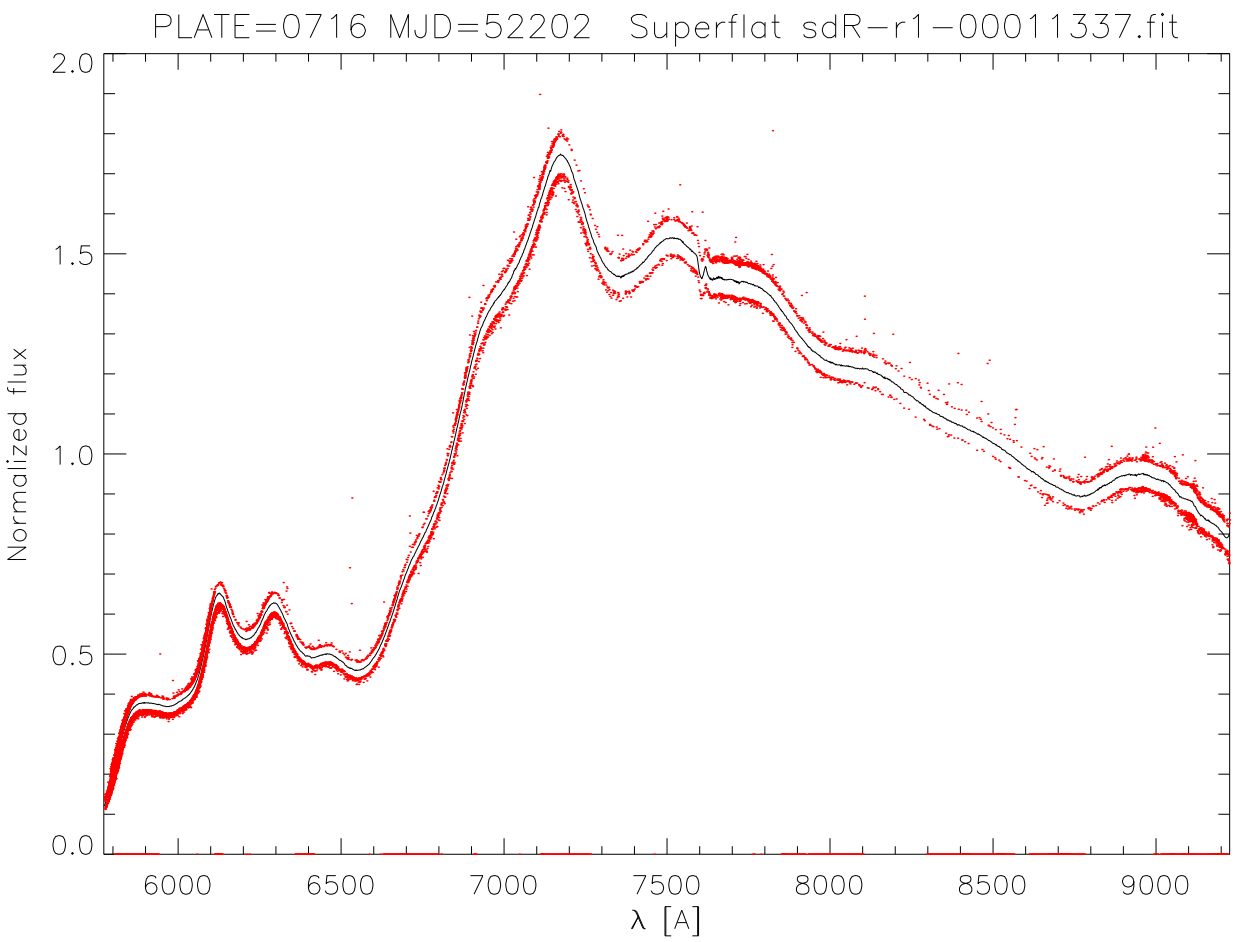

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

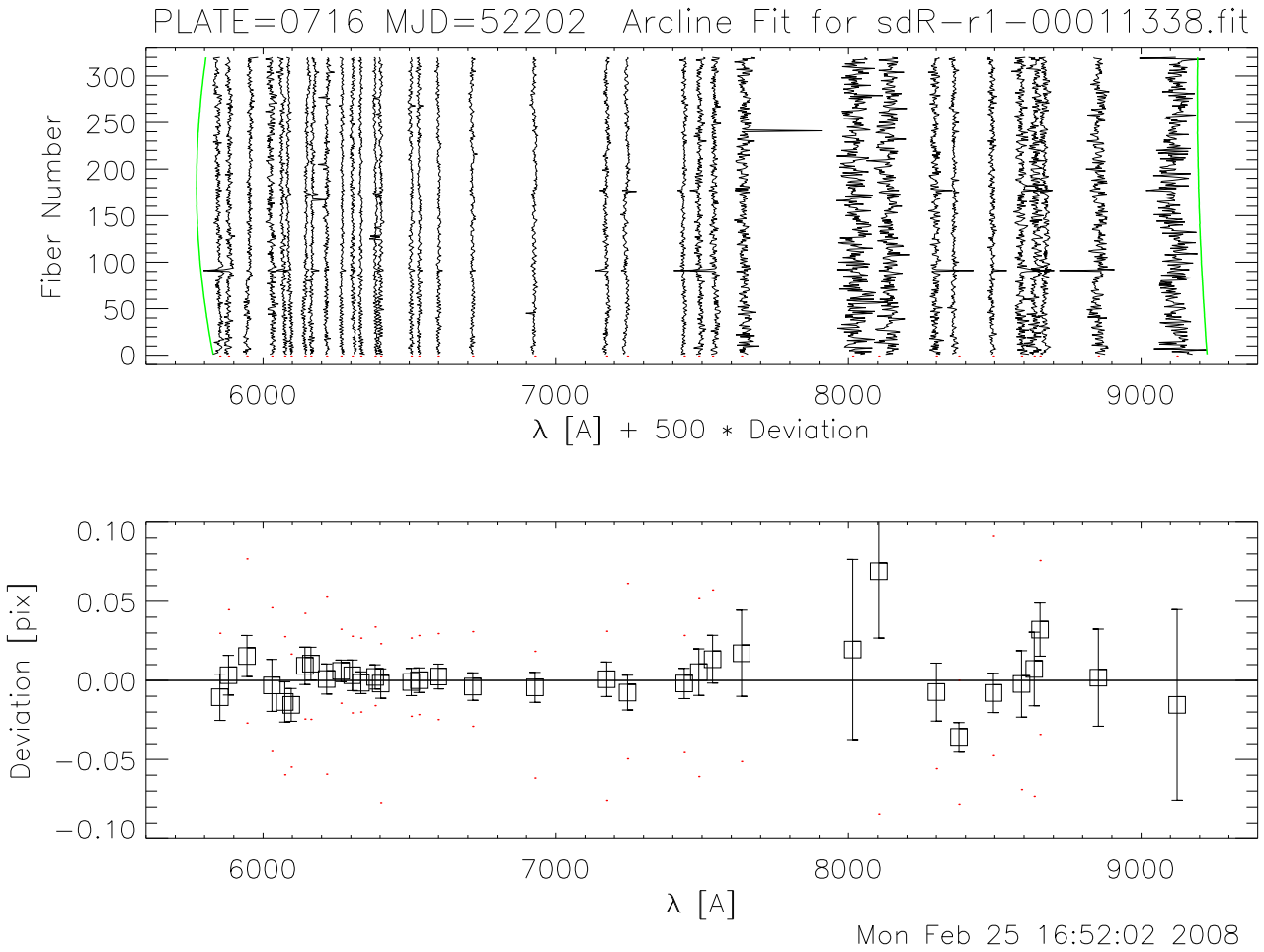

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

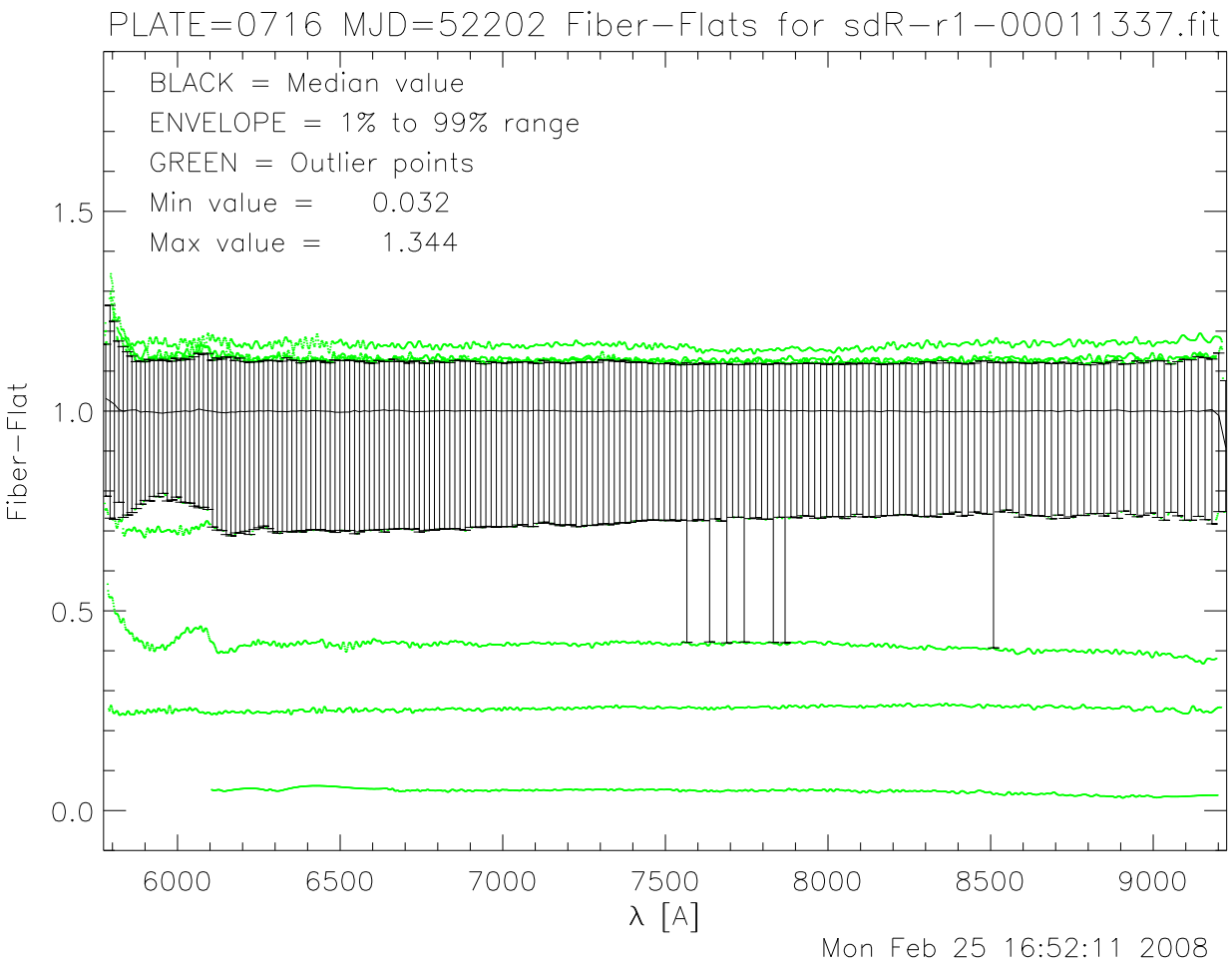

PLATE=0716 MJD=52202 flat extraction chi^2 for sdR−r1−00011331.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

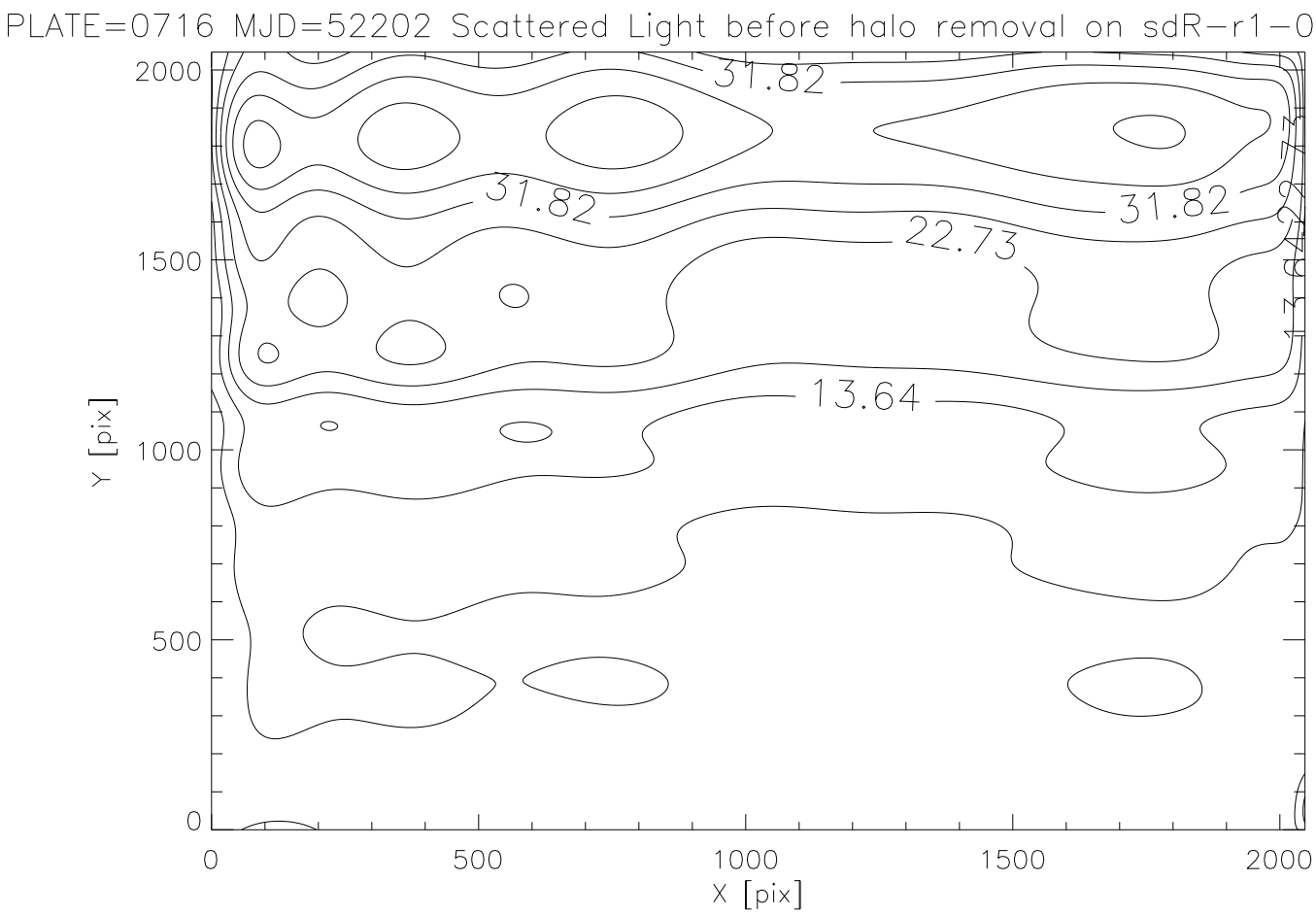

PLATE=0716 MJD=52202 Superflat sdR-r1-00011331.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

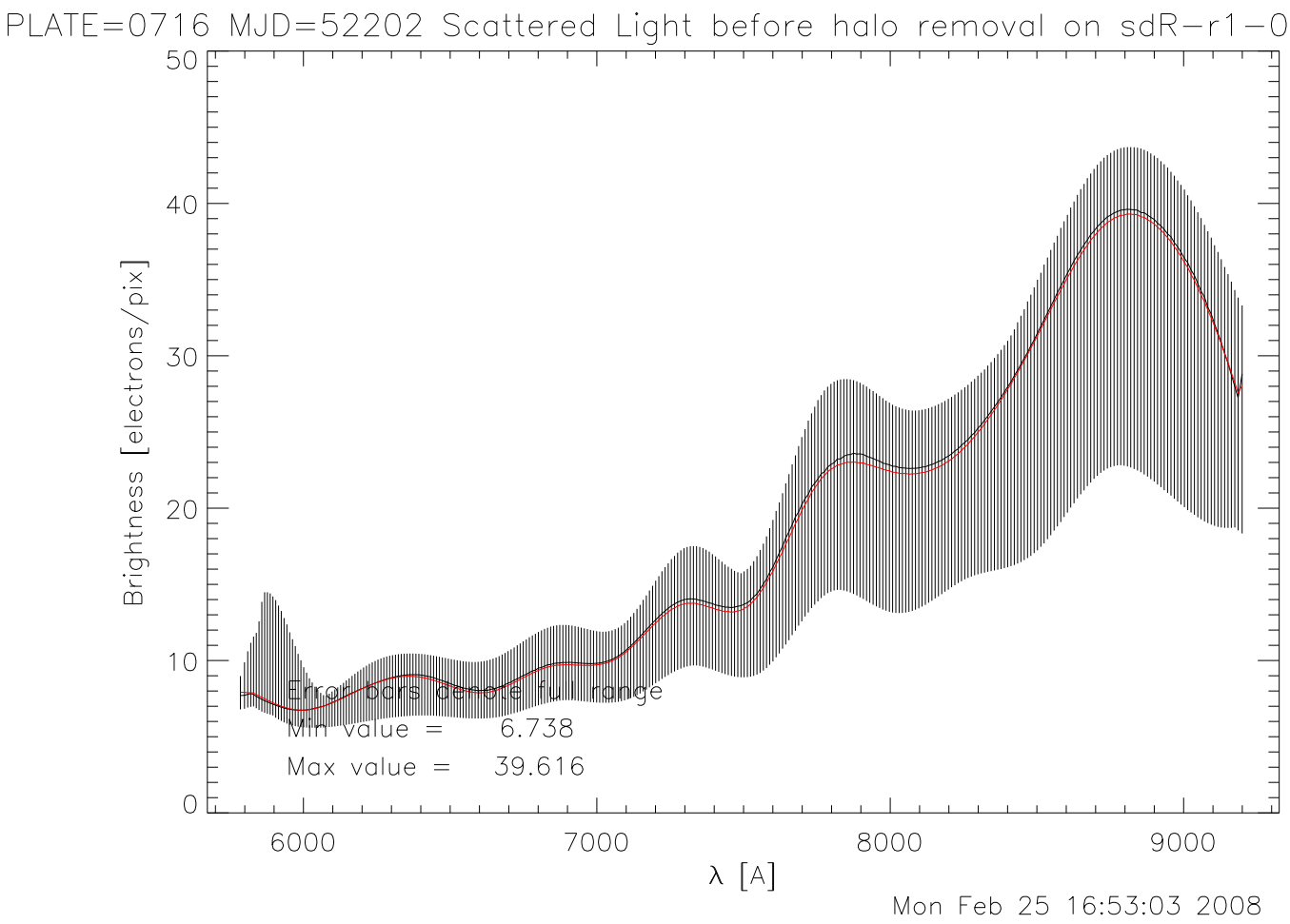

PLATE=0716 MJD=52202 flat extraction chi^2 for sdR−r1−00011337.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

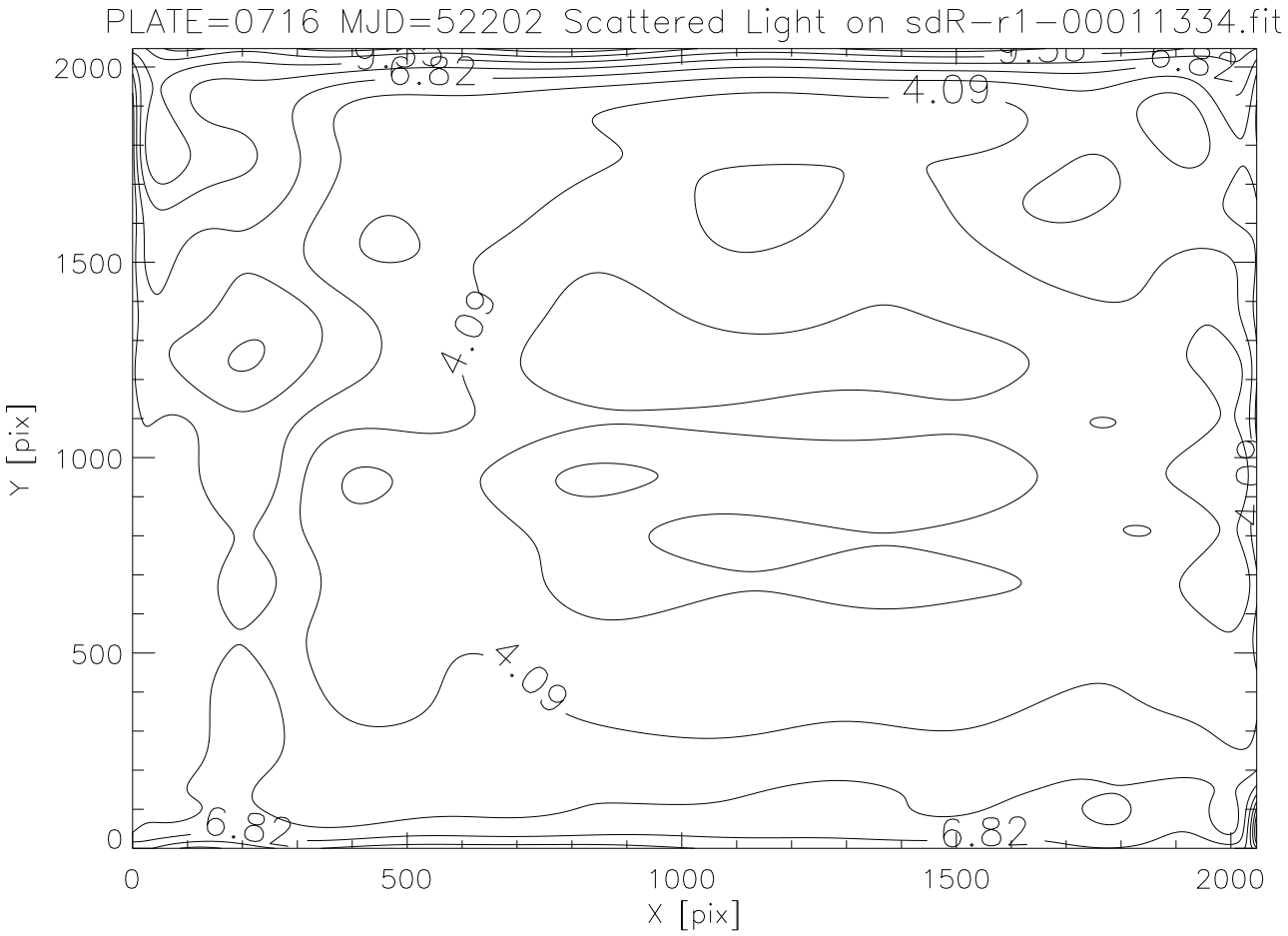

PLATE=0716 MJD=52202 Superflat sdR-r1-00011337.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

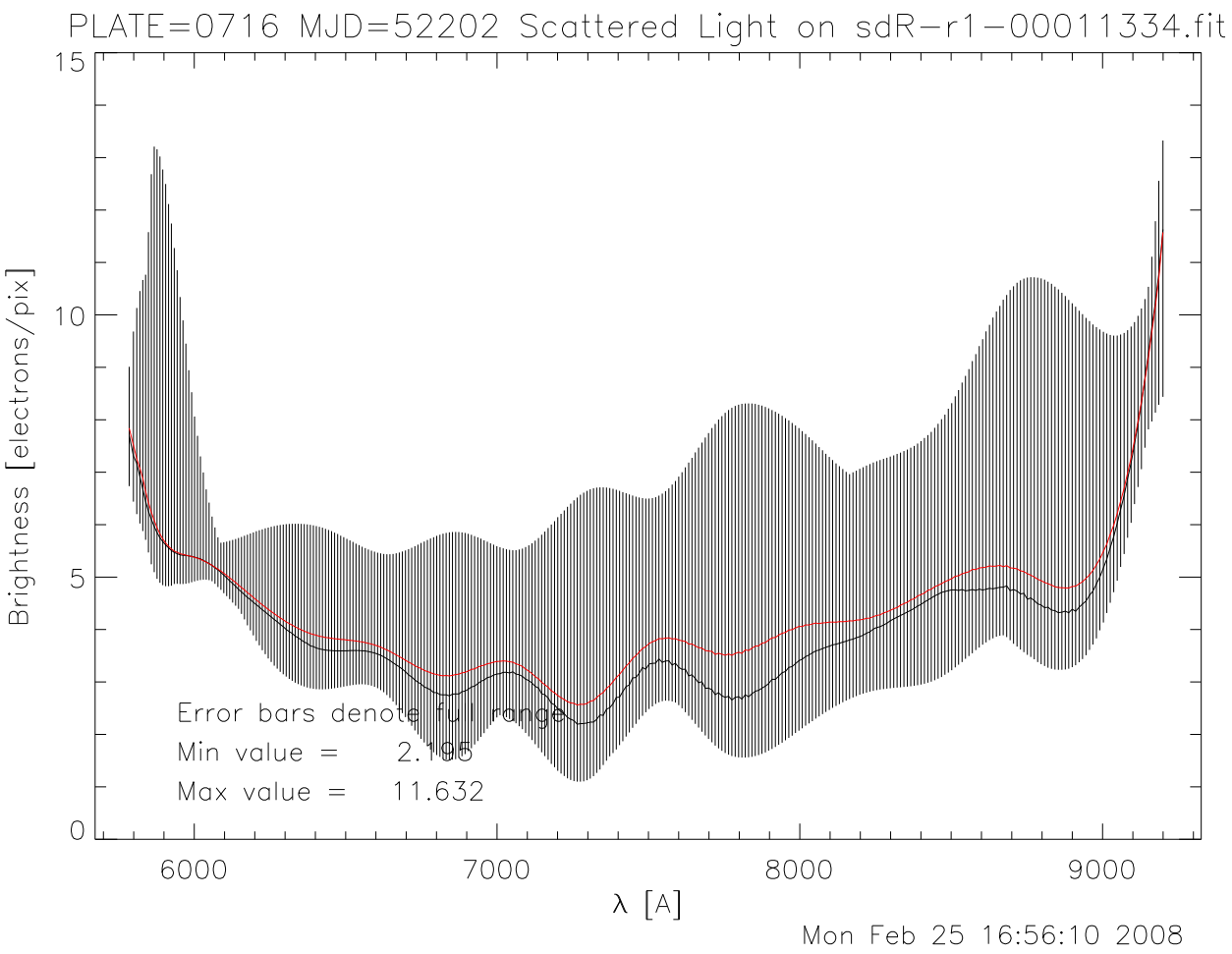

PLATE=0716 MJD=52202 Arcline Fit for sdR-r1-00011338.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 25 16:52:02 2008

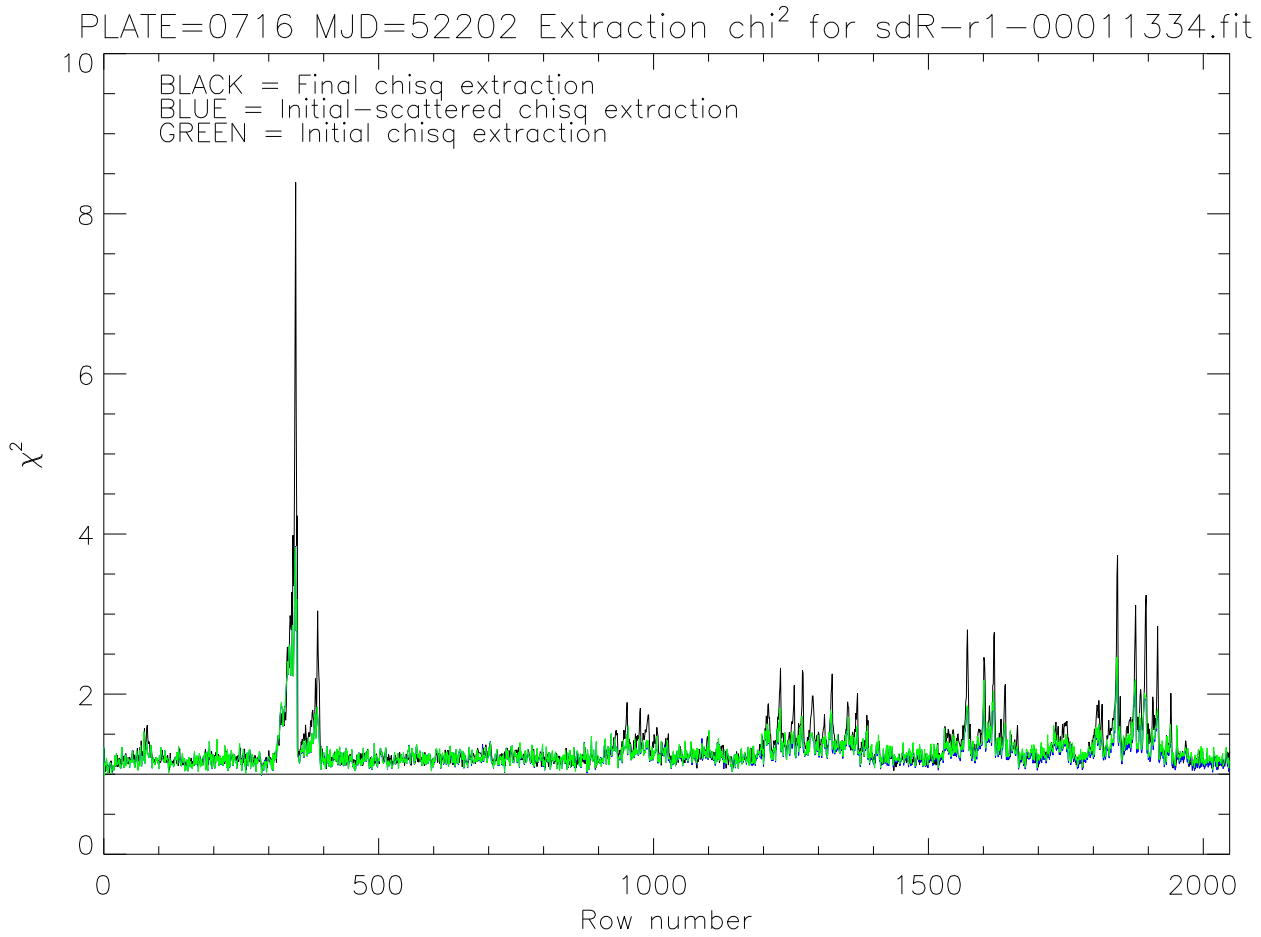

PLATE=0716 MJD=52202 Fiber−Flats for sdR−r1−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.344
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 16:52:11 2008

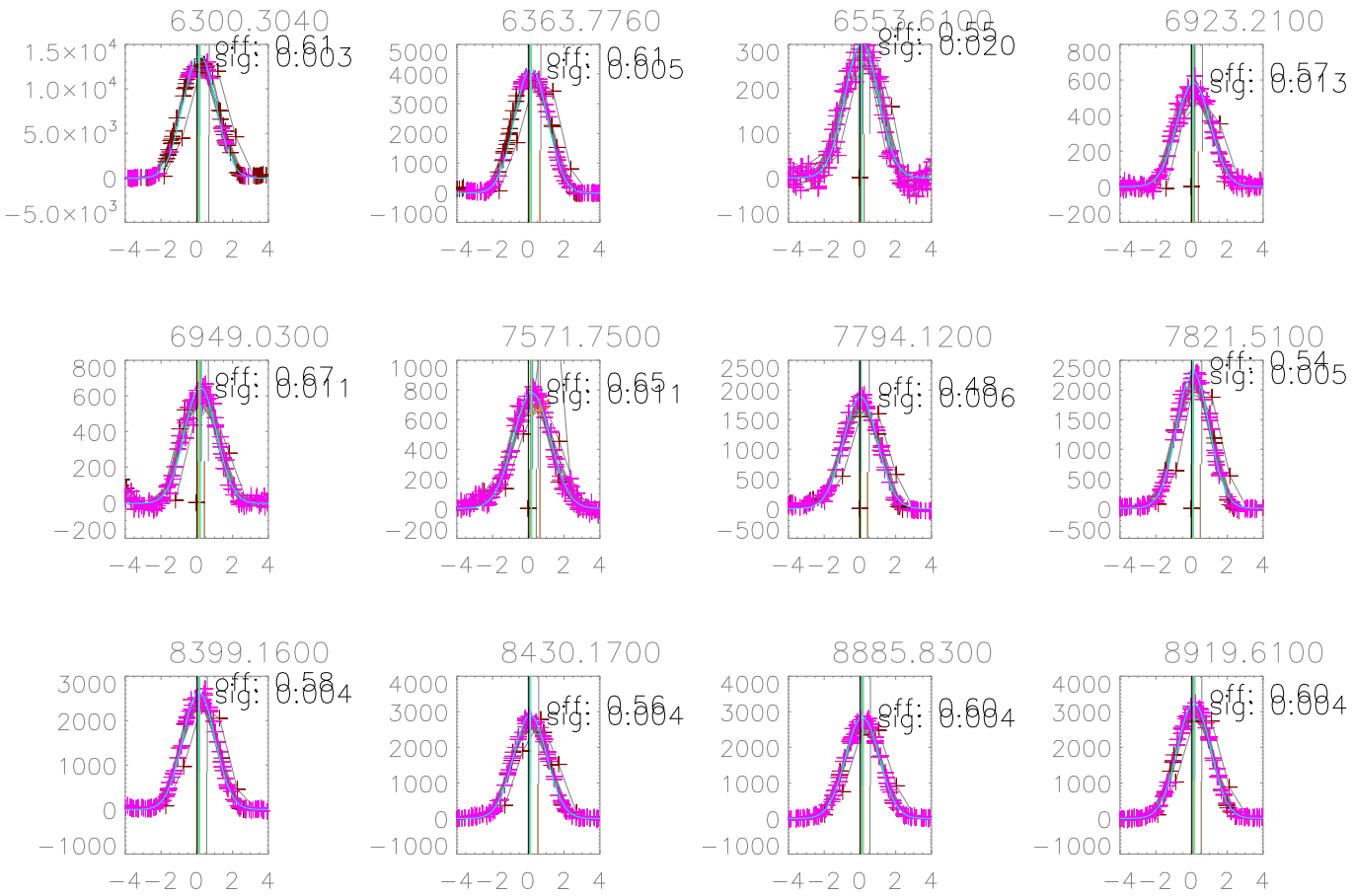

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR−r1−00011334.fi
31.82
31.82
31.82
22.73
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

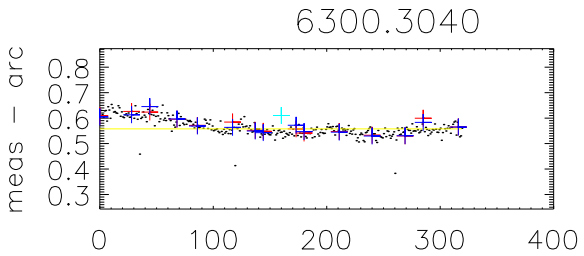

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r1-00011334.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.738
Max value = 39.616
Mon Feb 25 16:53:03 2008

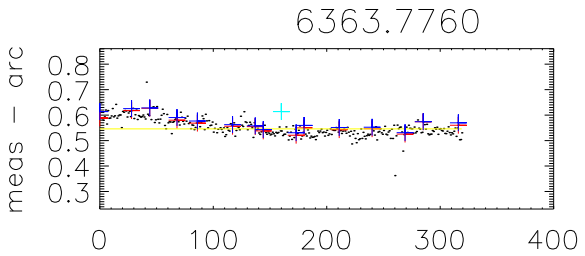

PLATE=0716 MJD=52202 Scattered Light on sdR-r1-00011334.fit
6.82
4.09
0
Y [pix]
X [pix]
0
500
1000
1500
2000

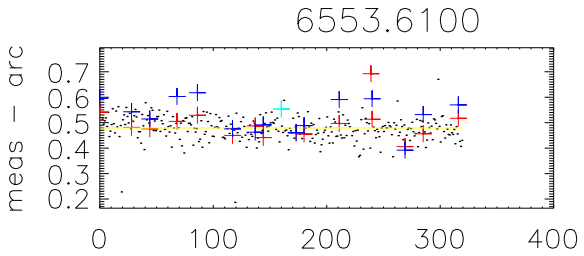

PLATE=0716 MJD=52202 Scattered Light on sdR-r1-00011334.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.195
Max value = 11.632
Mon Feb 25 16:56:10 2008

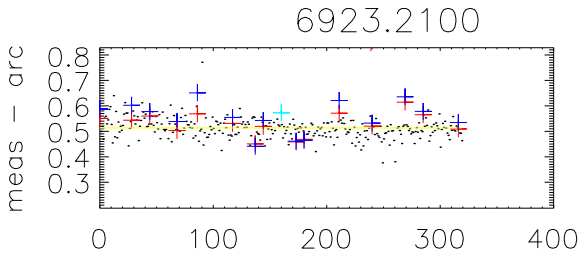

PLATE=0716 MJD=52202 Extraction chi^2 for sdR−r1−00011334.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

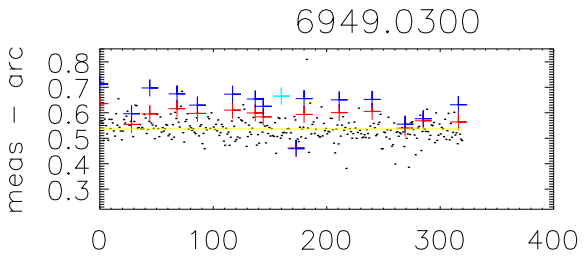

6300.3040
off: 0.61
sig: 0.003
6363.7760
off: 0.61
sig: 0.005
6553.6100
off: 0.55
sig: 0.020
6923.2100
off: 0.57
sig: 0.013
6949.0300
off: 0.67
sig: 0.011
7571.7500
off: 0.65
sig: 0.011
7794.1200
off: 0.48
sig: 0.006
7821.5100
off: 0.54
sig: 0.005
8399.1600
off: 0.58
sig: 0.004
8430.1700
off: 0.56
sig: 0.004
8885.8300
off: 0.60
sig: 0.004
8919.6100
off: 0.60
sig: 0.004

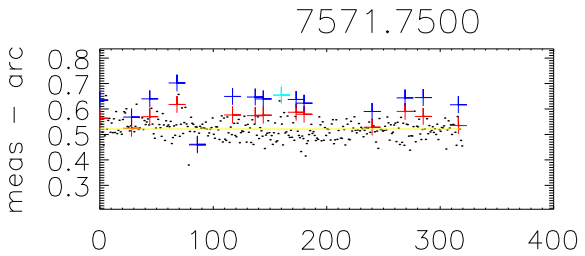

6300.3040
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

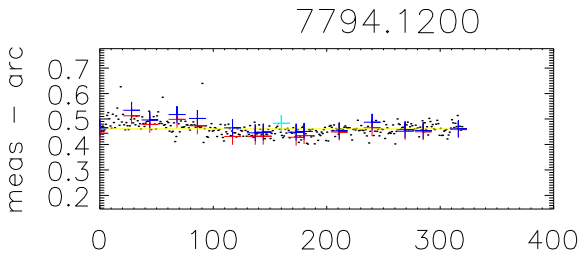

6363.7760
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

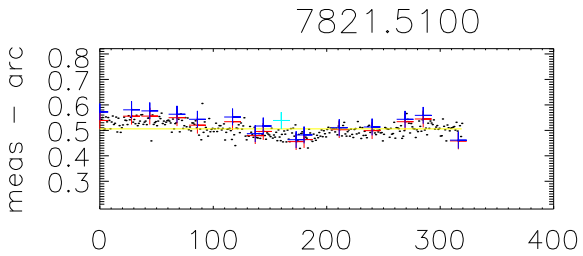

6553.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

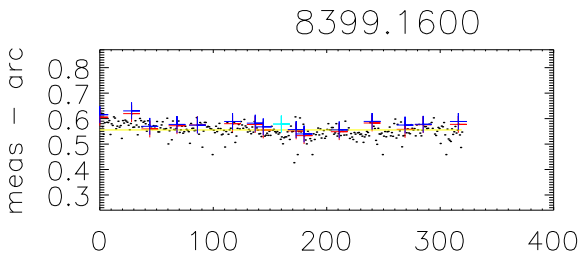

6923.2100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

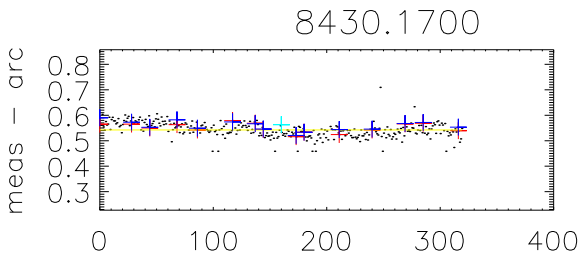

6949.0300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

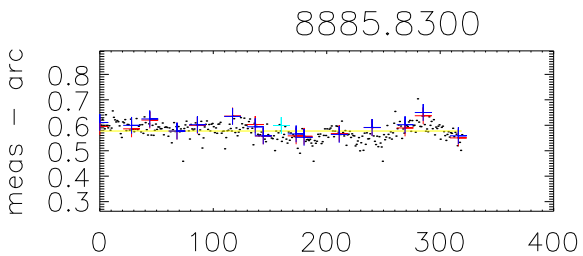

7571.7500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

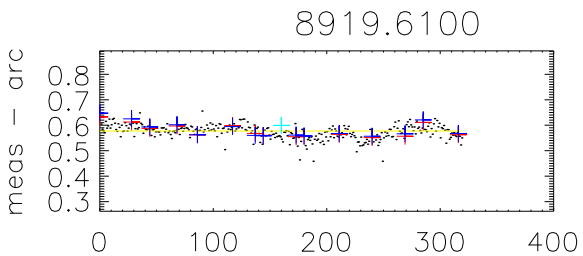

7794.1200
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

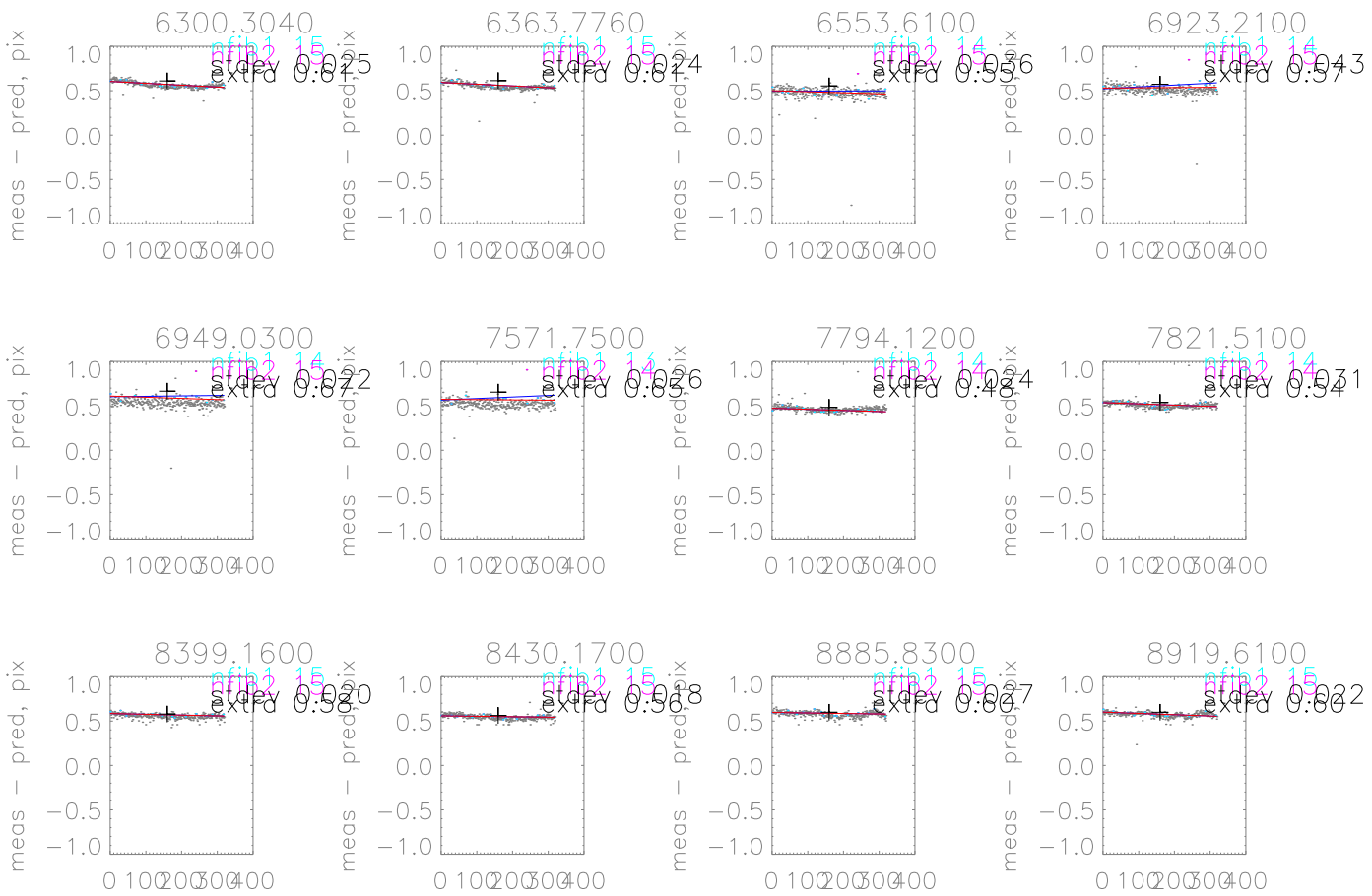

7821.5100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

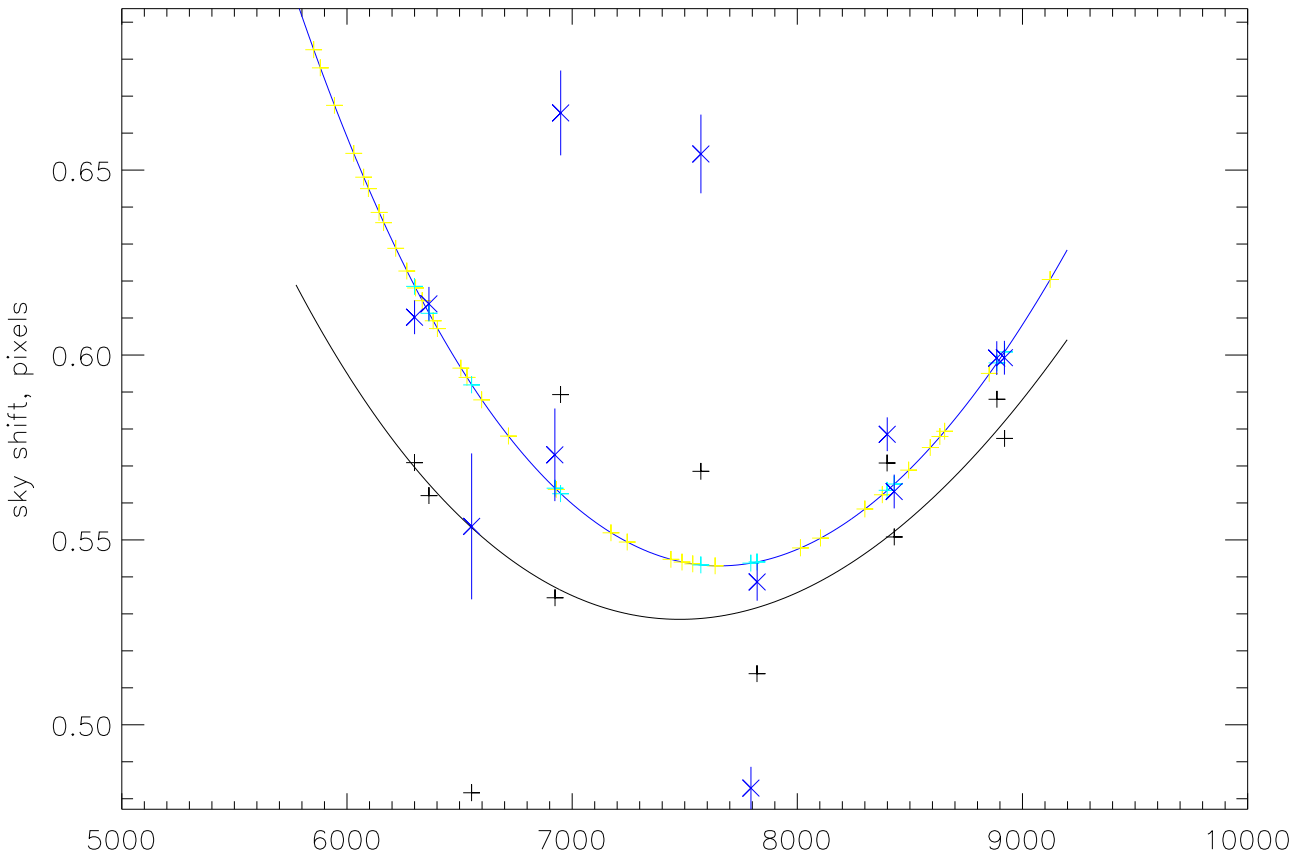

8399.1600
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400


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

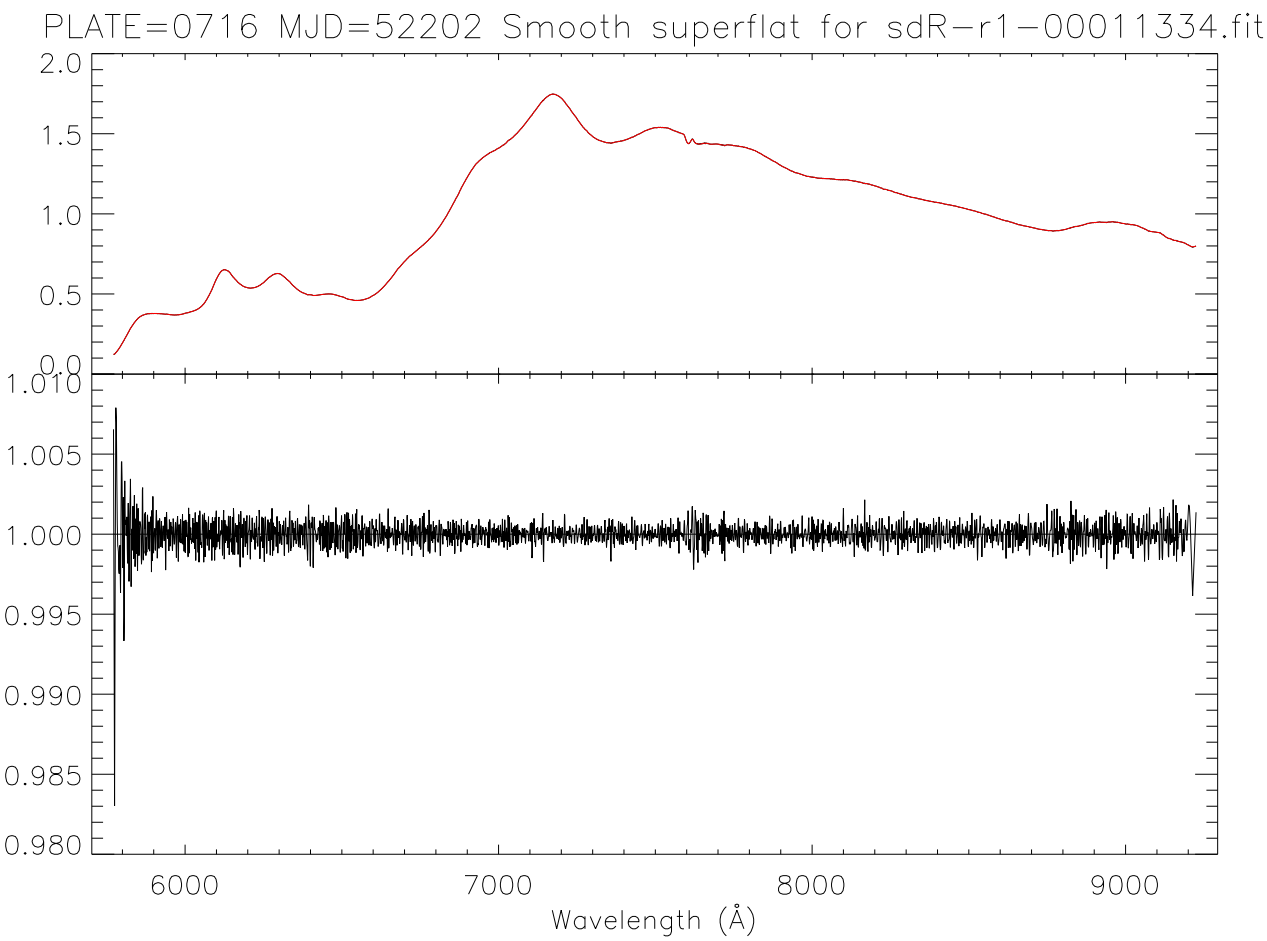

8885.8300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

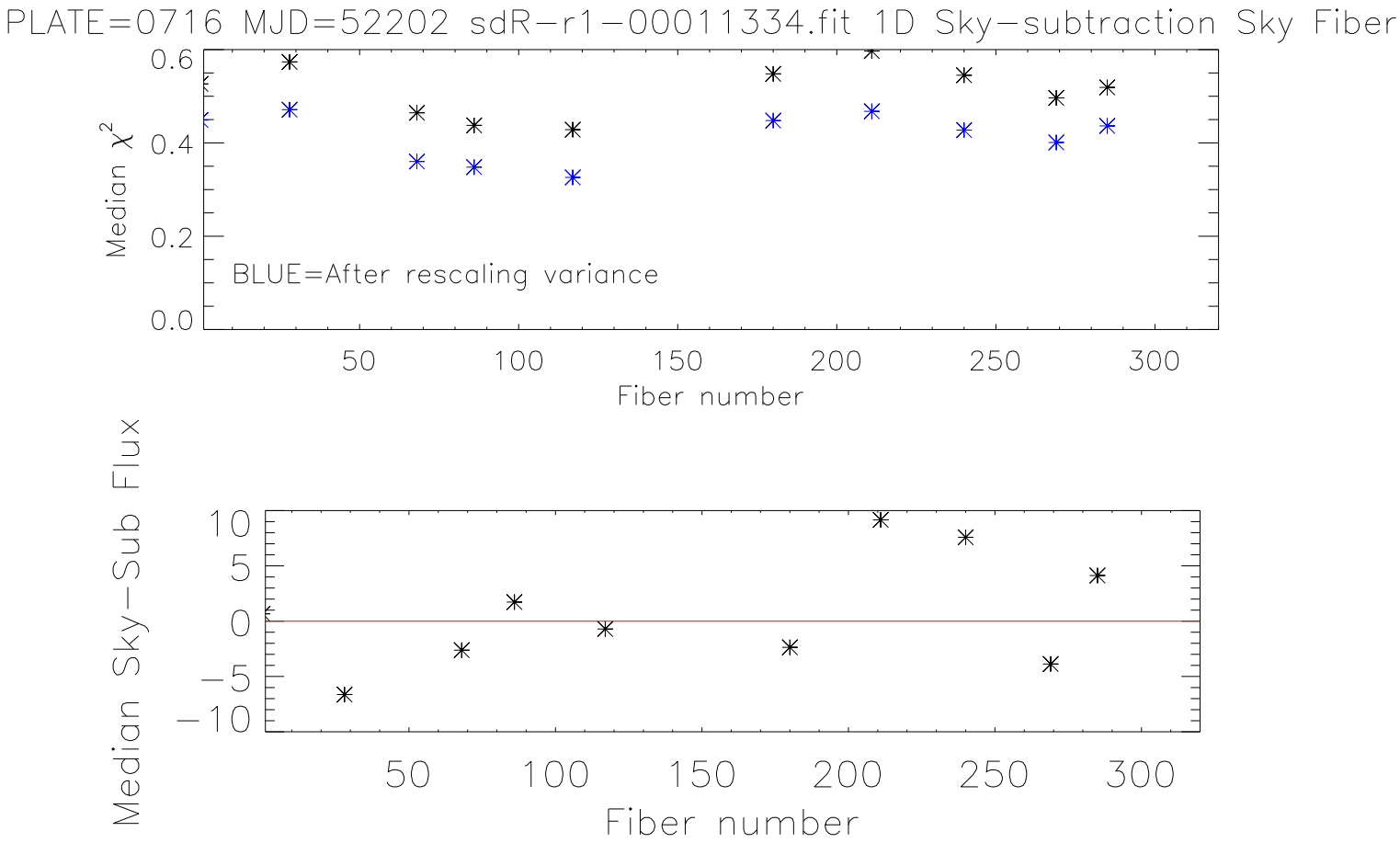

8919.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

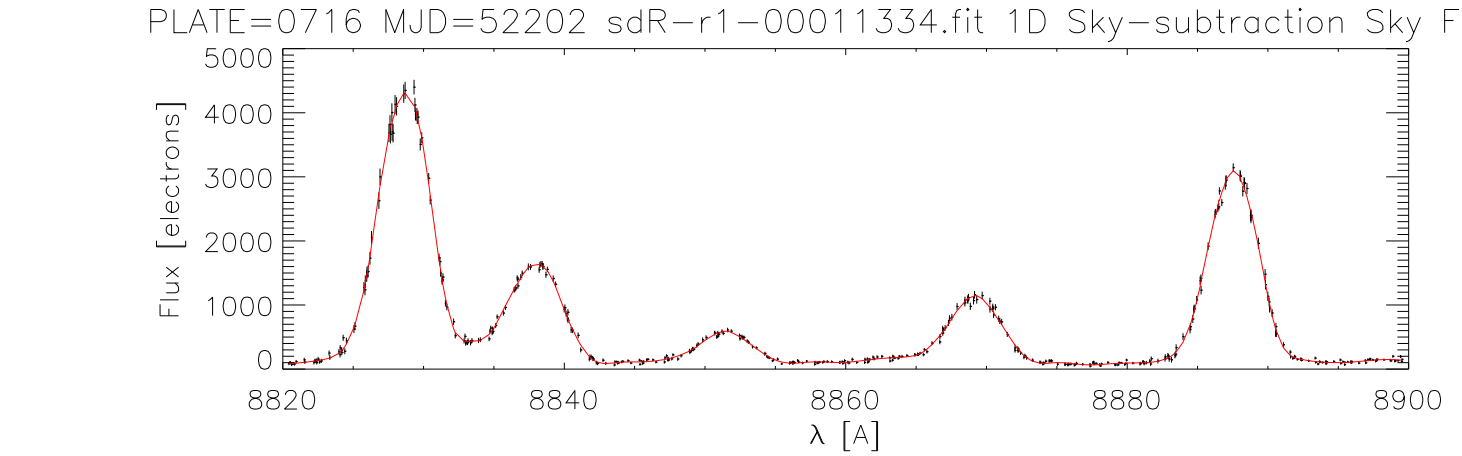

6300.3040
stdev 0.025
extra 0.81
6363.7760
stdev 0.024
extra 0.81
6553.6100
stdev 0.036
extra 0.55
6923.2100
stdev 0.043
extra 0.57
6949.0300
stdev 0.022
extra 0.87
7571.7500
stdev 0.026
extra 0.85
7794.1200
stdev 0.024
extra 0.48
7821.5100
stdev 0.031
extra 0.54
8399.1600
stdev 0.020
extra 0.58
8430.1700
stdev 0.018
extra 0.56
8885.8300
stdev 0.027
extra 0.60
8919.6100
stdev 0.022
extra 0.60
meas − pred, pix

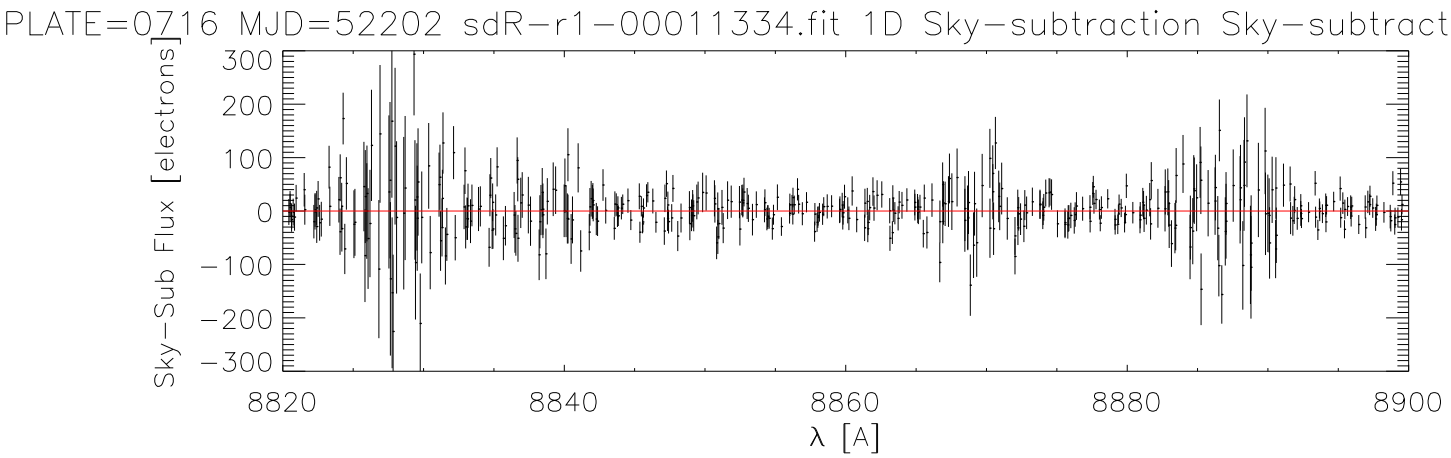

sky shift, pixels
0.65
0.60
0.55
0.50
5000
6000
7000
8000
9000
10000

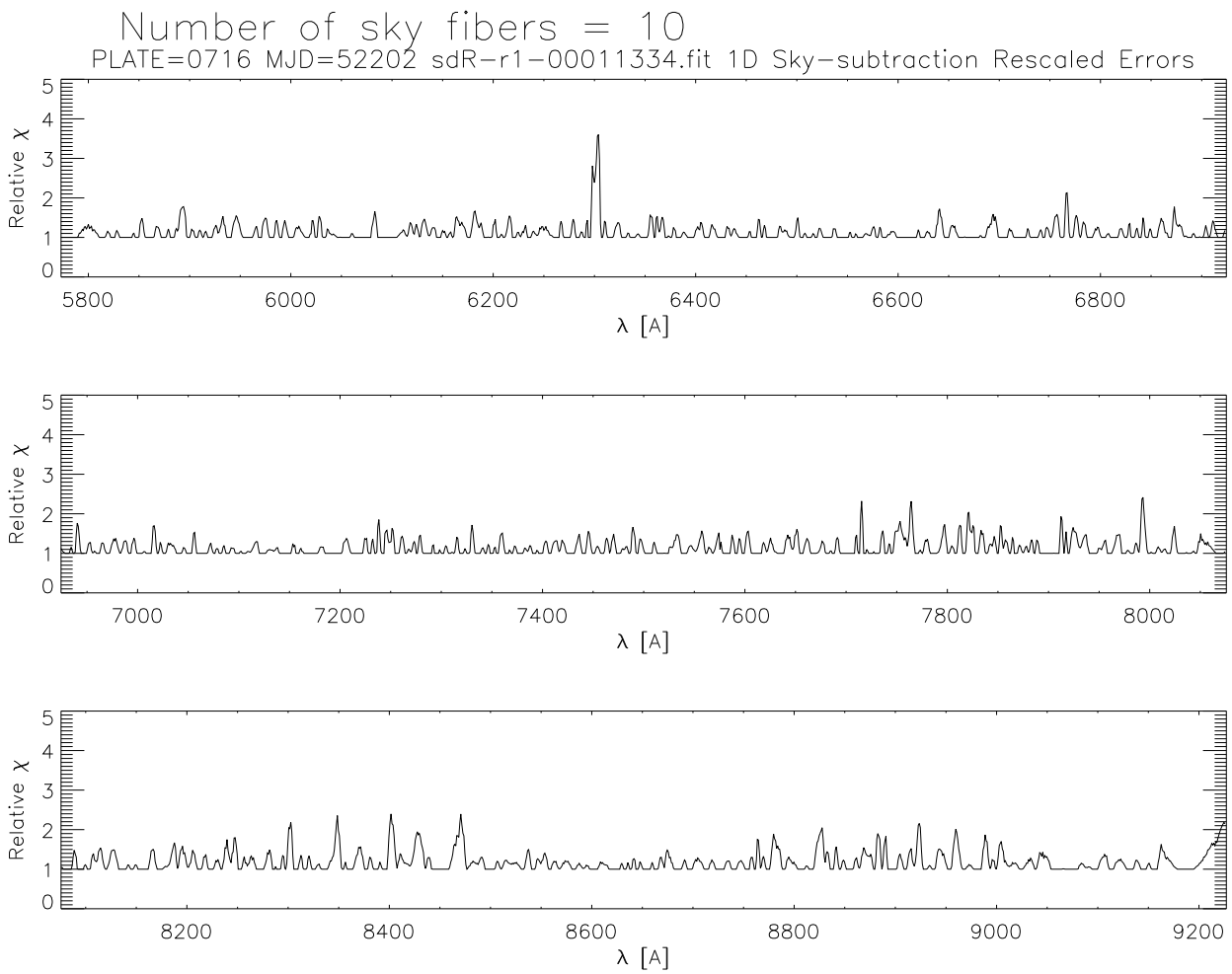
es= −0.0000

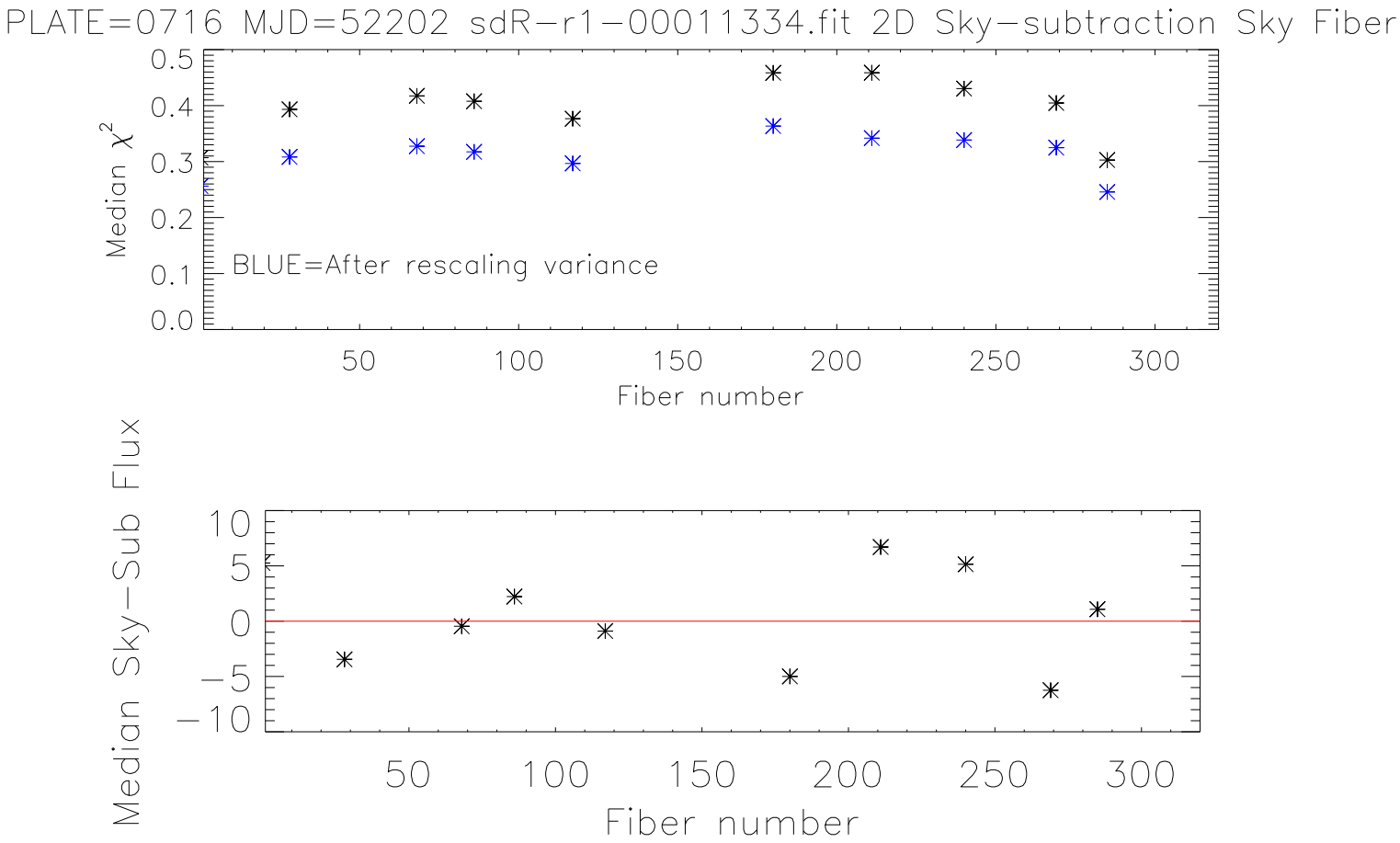

PLATE=0716 MJD=52202 Smooth superflat for sdR−r1−00011334.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
6000
7000
8000
9000
Wavelength (Å)

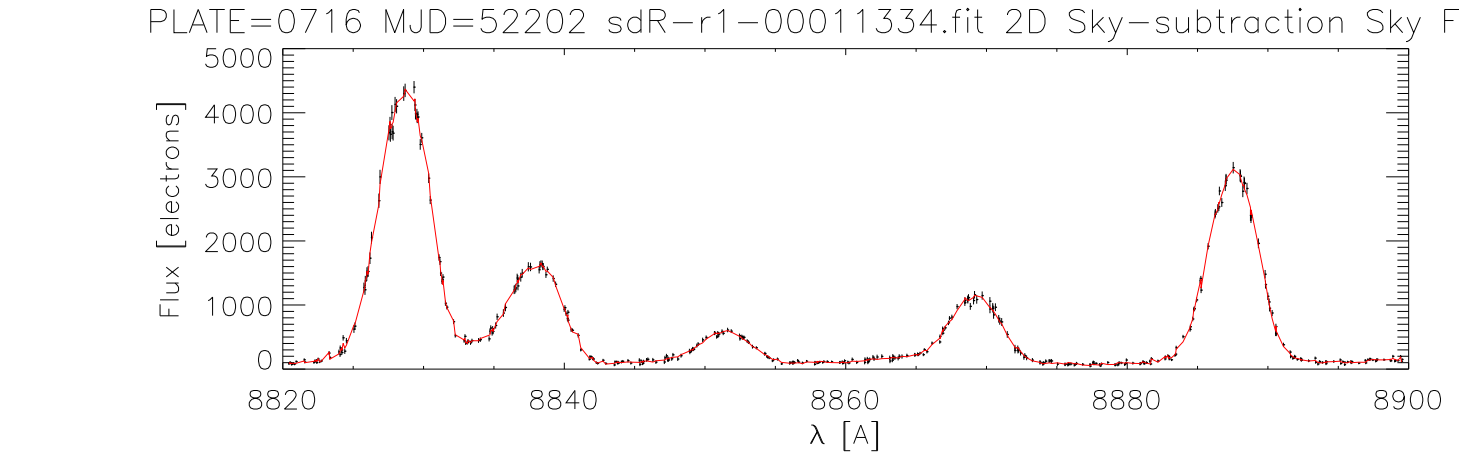

PLATE=0716 MJD=52202 sdR-r1-00011334.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

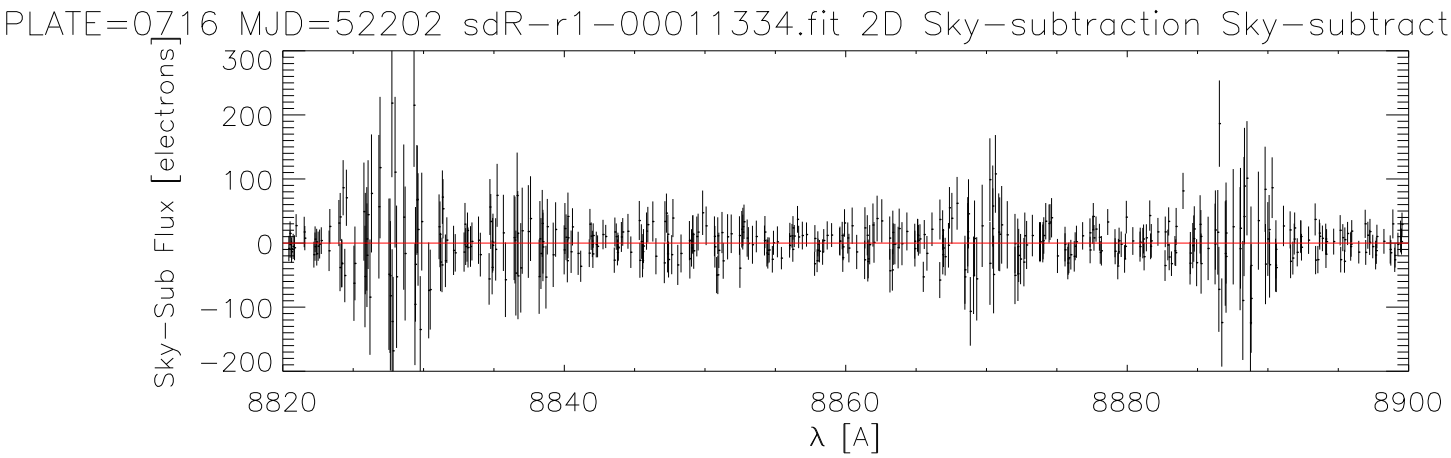

PLATE=0716 MJD=52202 sdR-r1-00011334.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

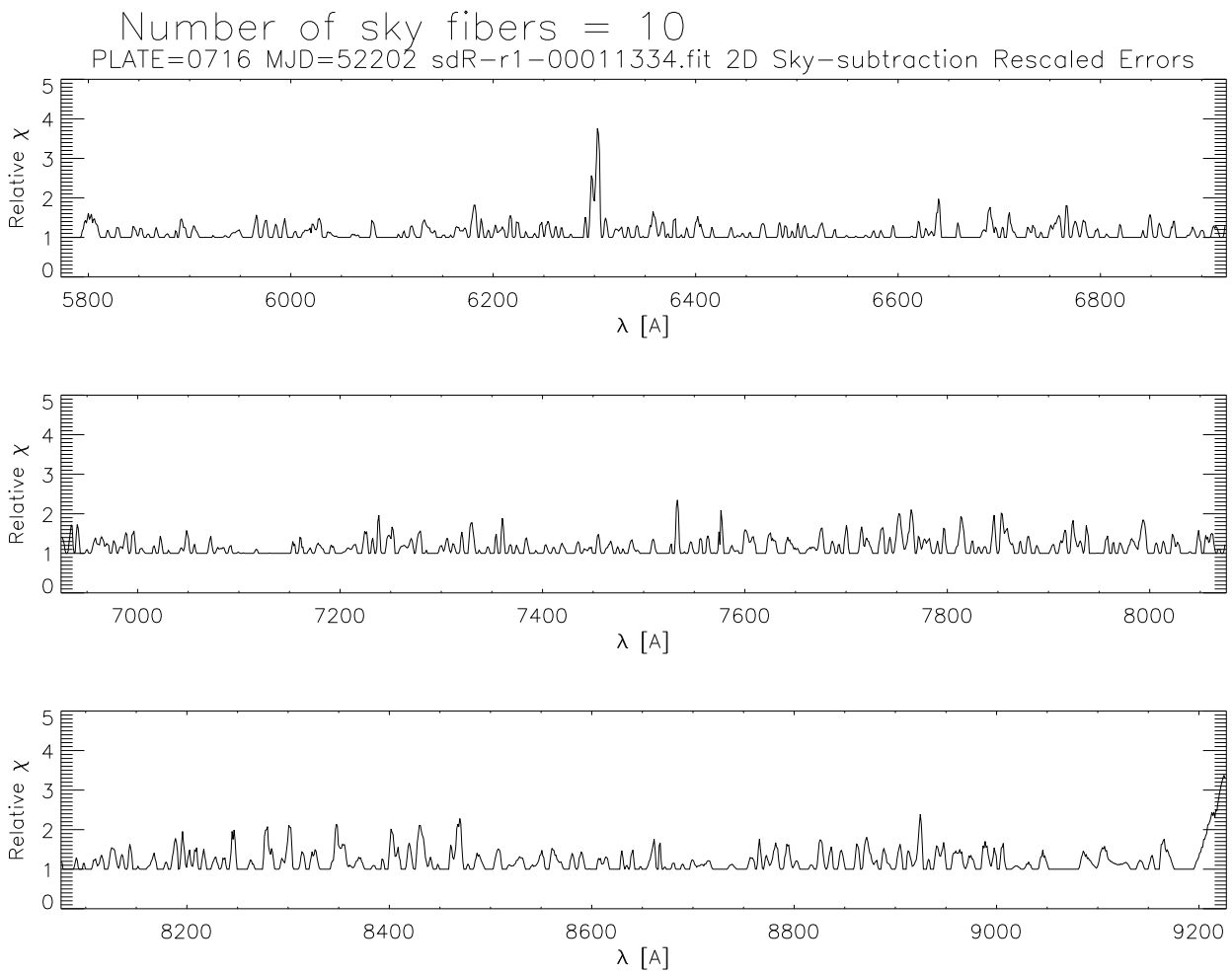

PLATE=0716 MJD=52202 sdR-r1-00011334.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

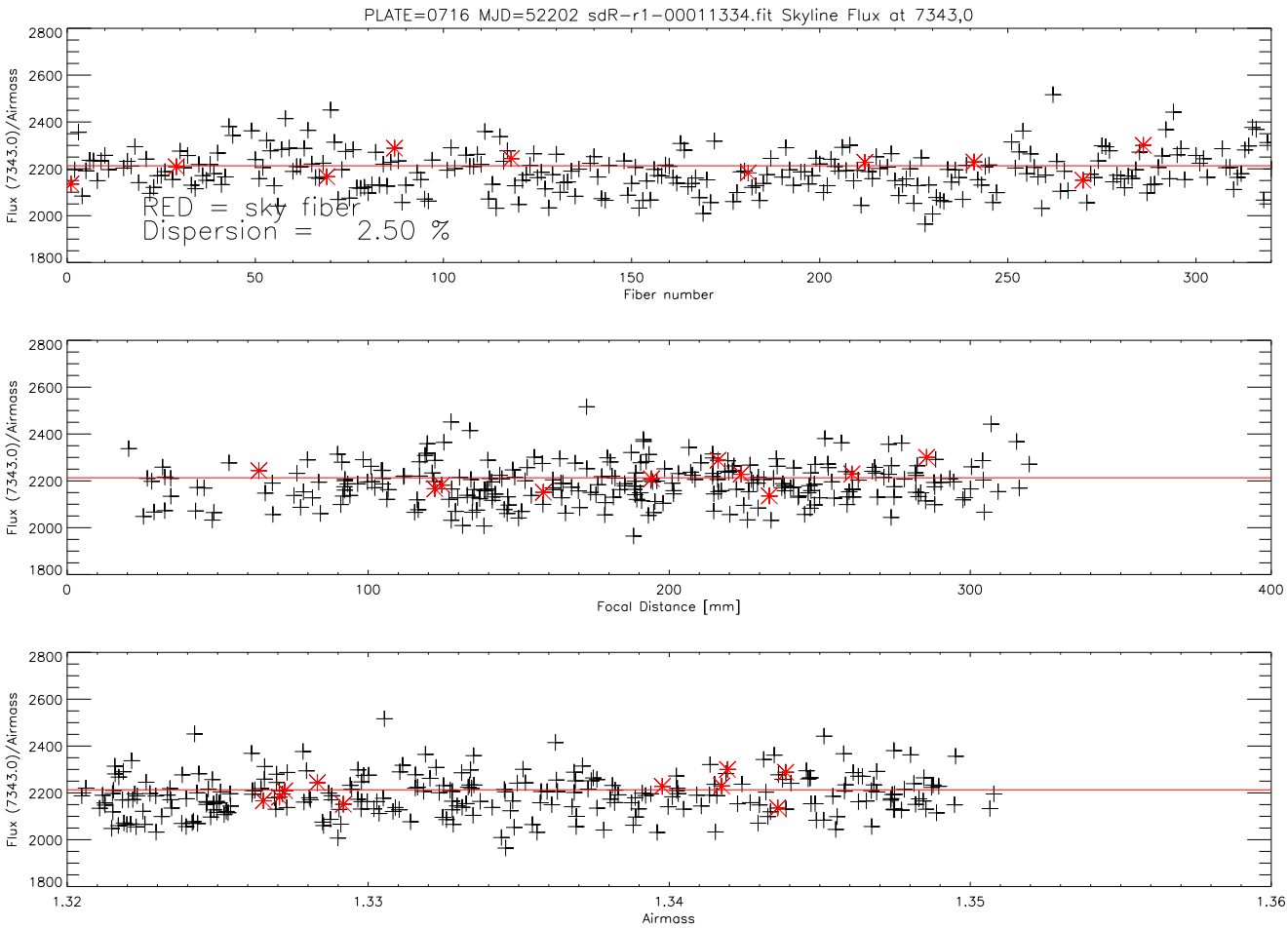

Number of sky fibers = 10
PLATE=0716 MJD=52202 sdR-r1-00011334.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

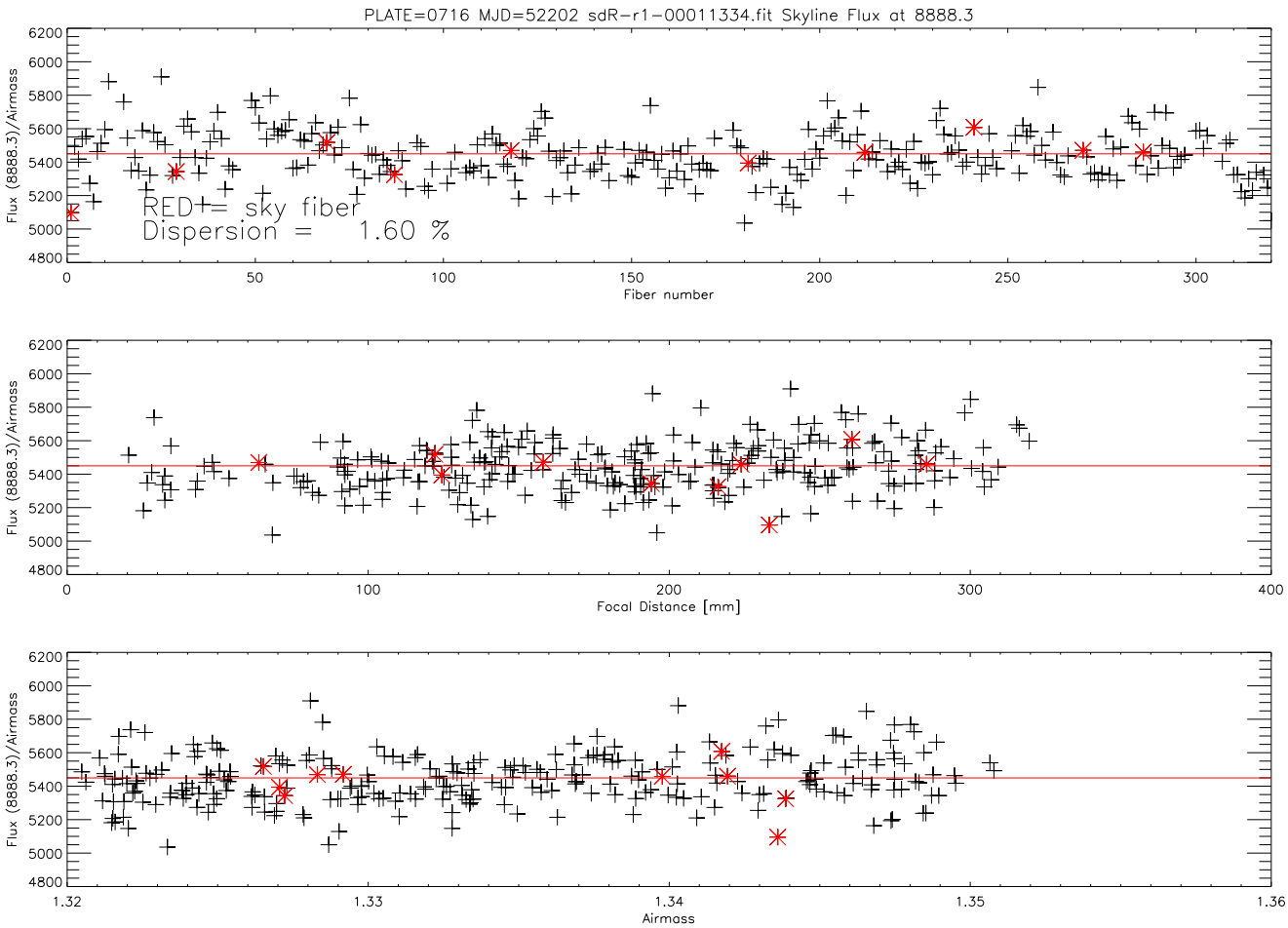

PLATE=0716 MJD=52202 sdR-r1-00011334.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

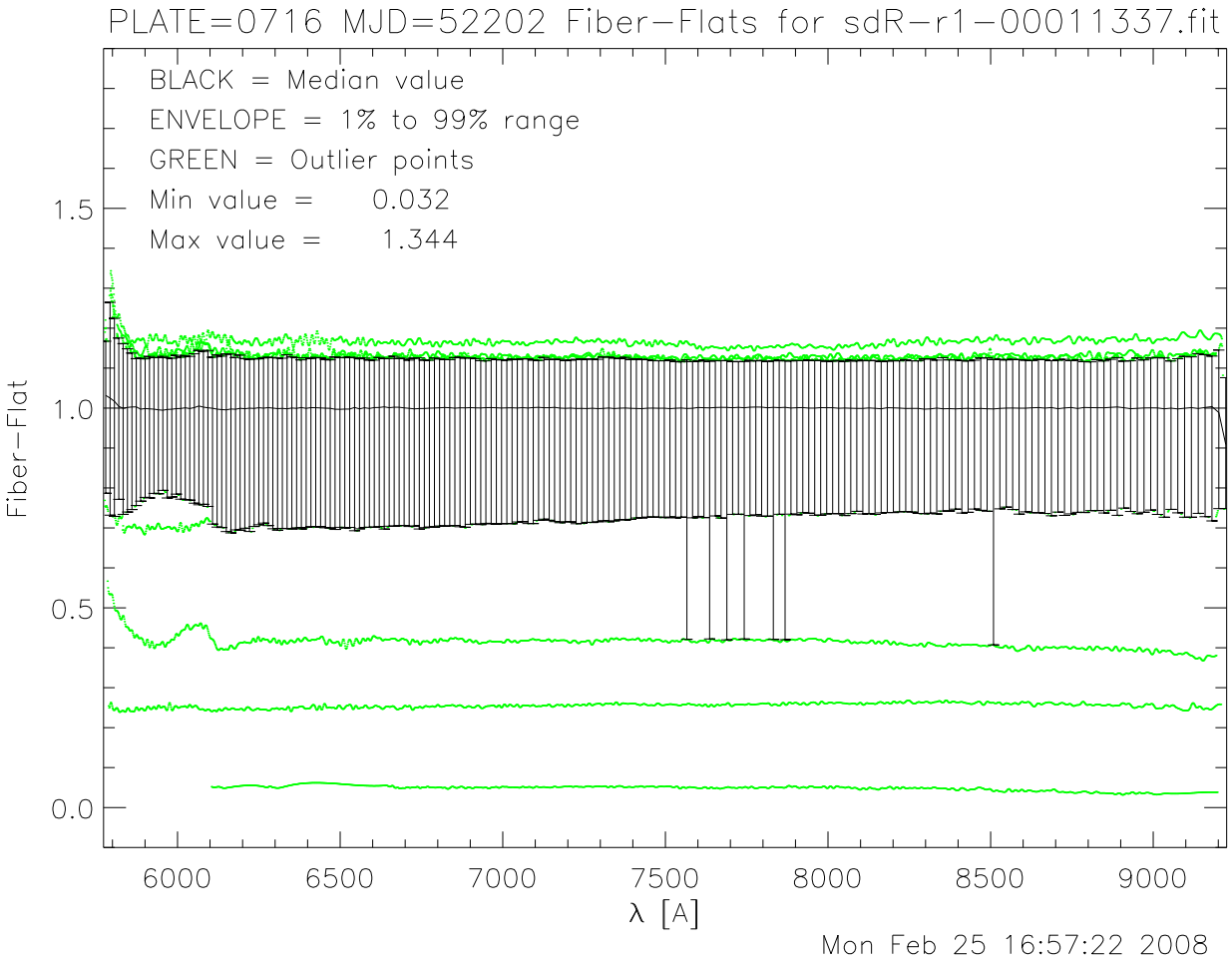

PLATE=0716 MJD=52202 sdR-r1-00011334.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

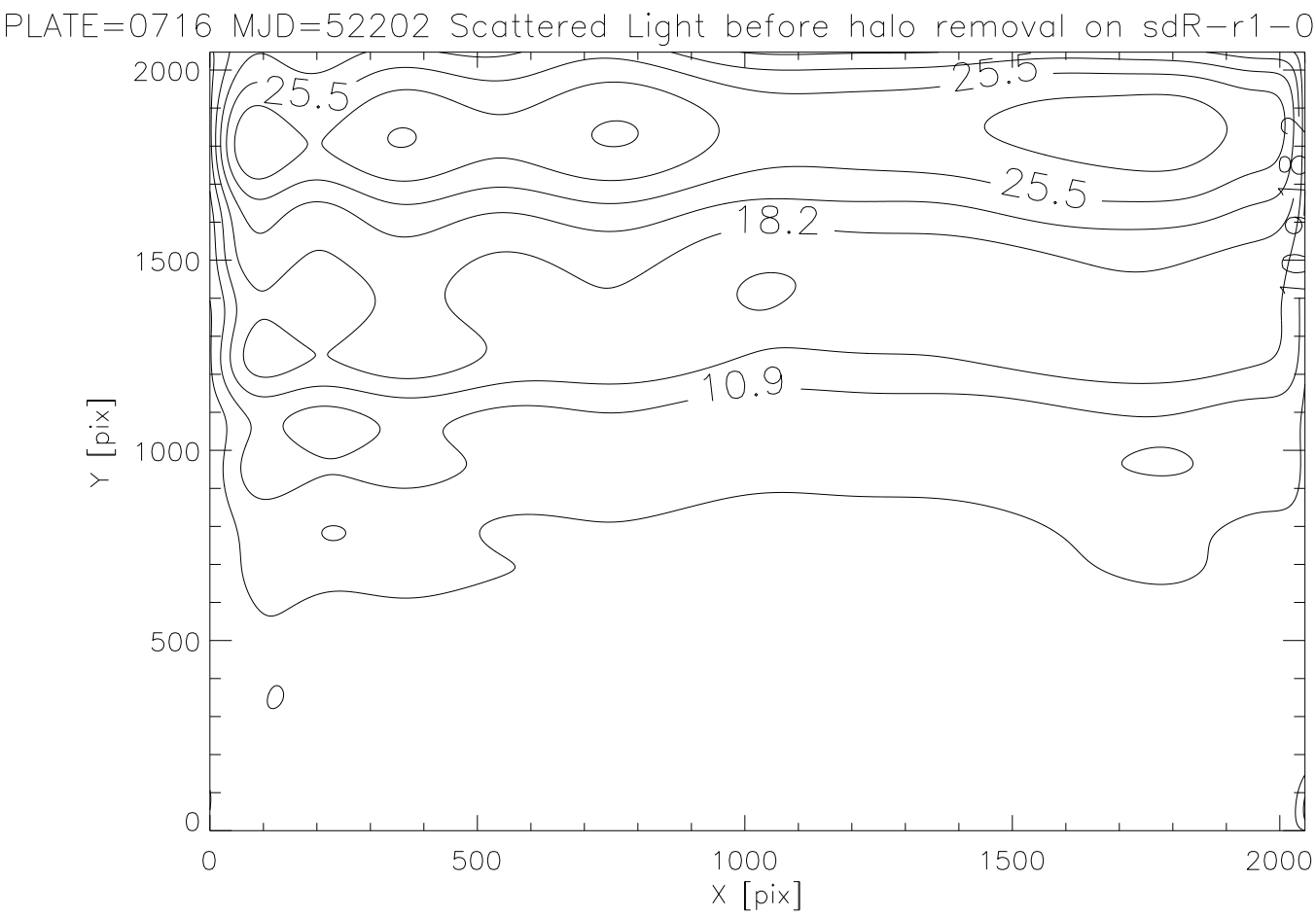

PLATE=0716 MJD=52202 sdR-r1-00011334.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

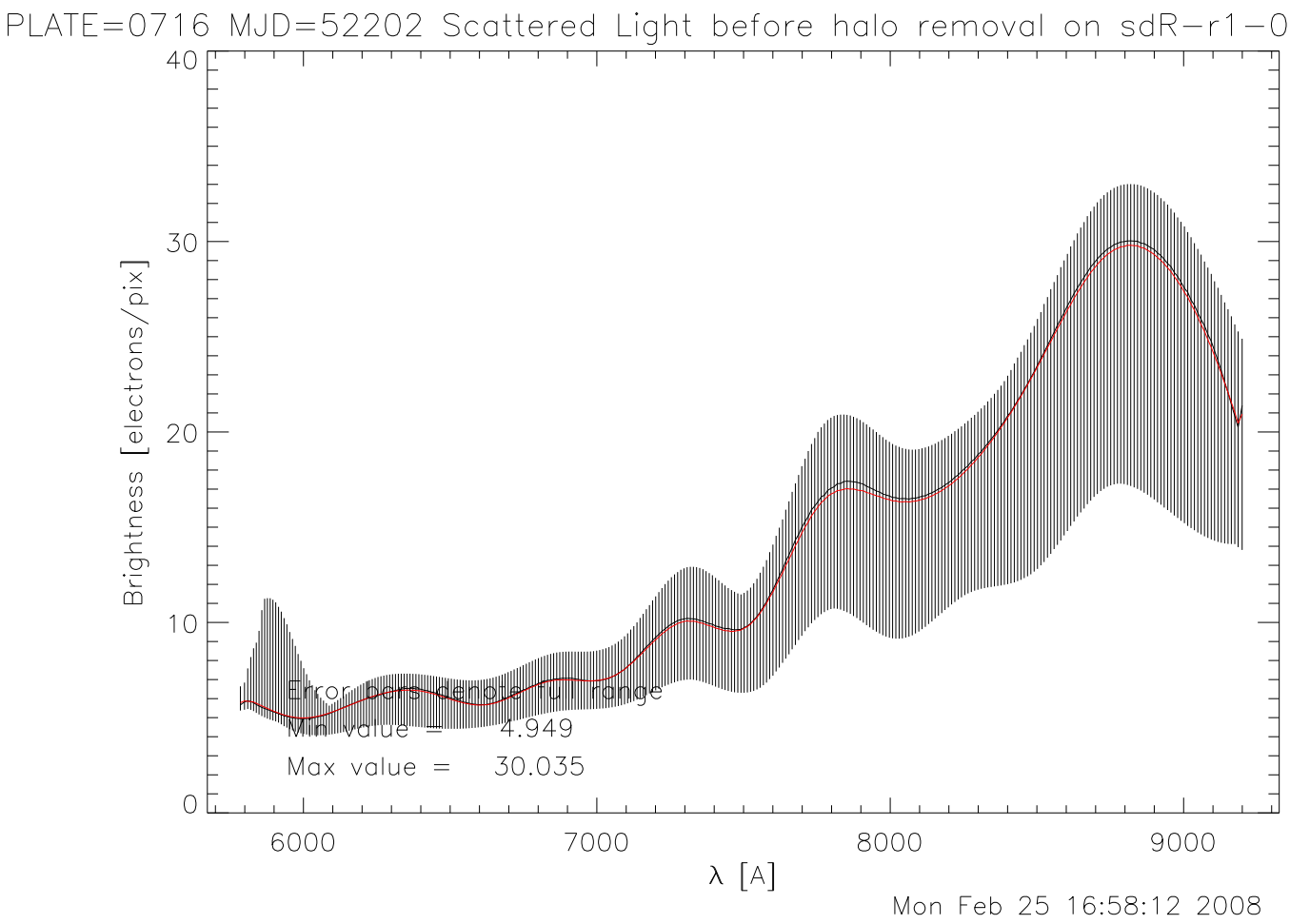

Number of sky fibers = 10
PLATE=0716 MJD=52202 sdR-r1-00011334.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

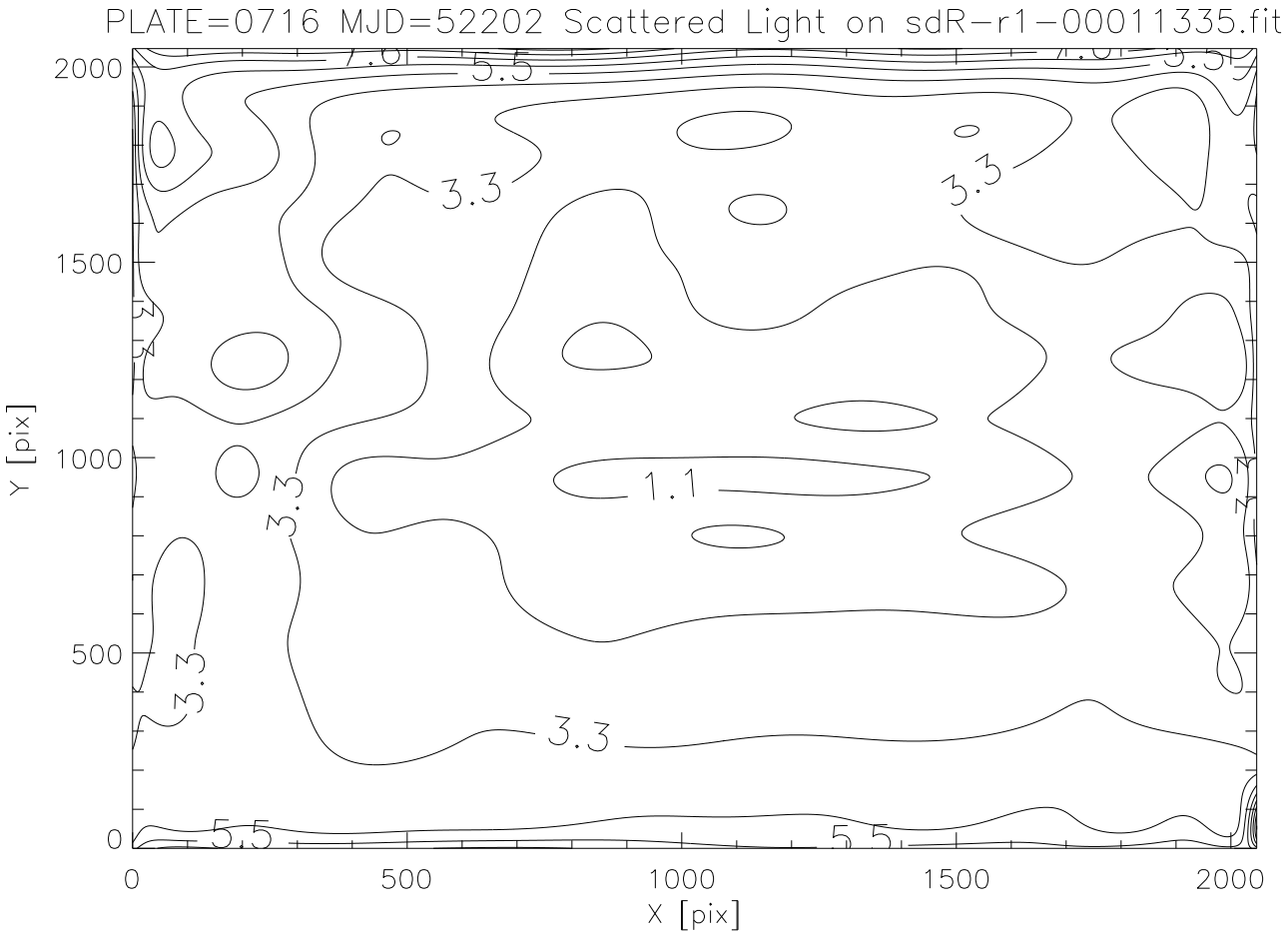

PLATE=0716 MJD=52202 sdR-r1-00011334.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.50 %
Fiber number
Focal Distance [mm]
Airmass

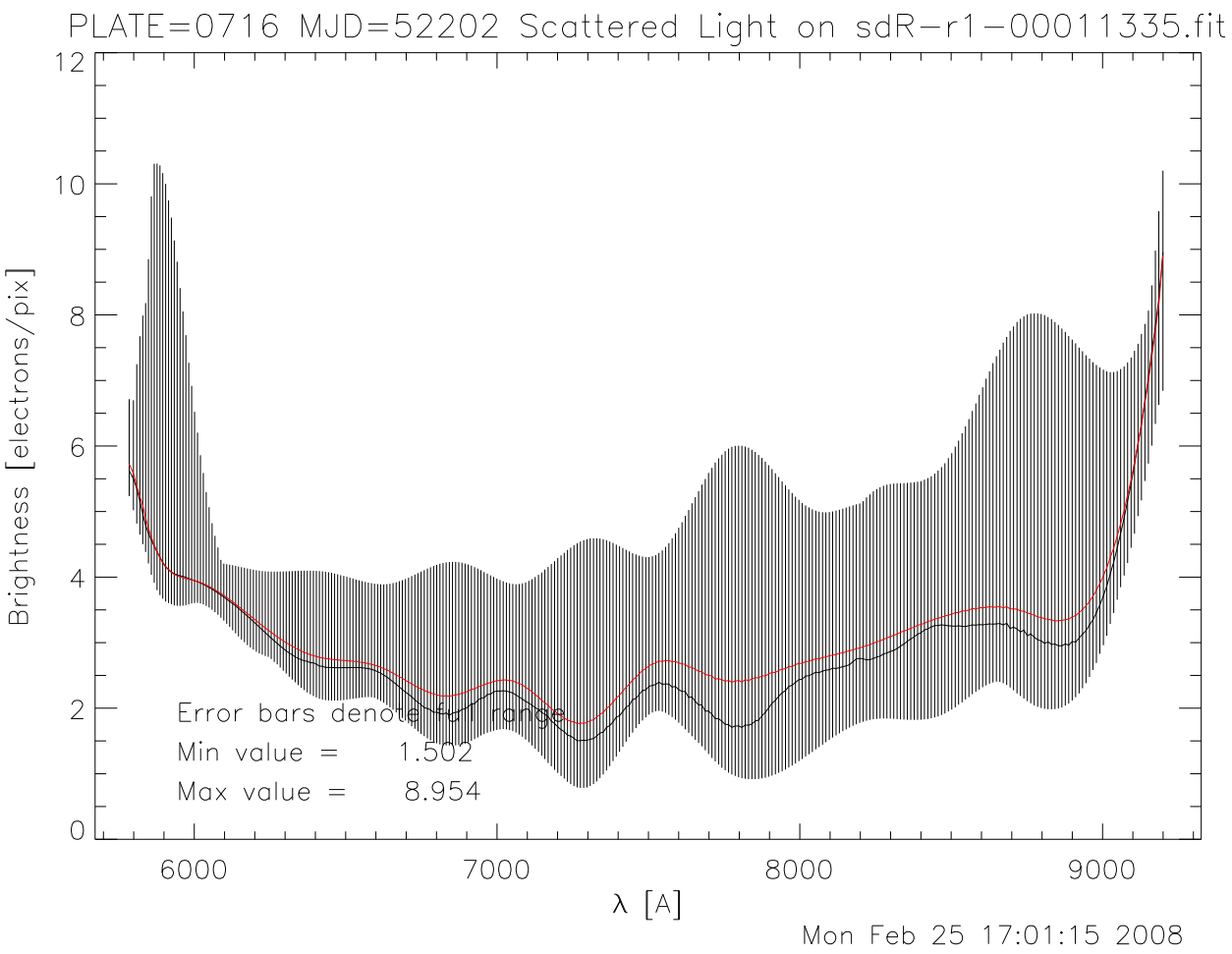

PLATE=0716 MJD=52202 sdR-r1-00011334.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED+= sky fiber
Dispersion = 1.60 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

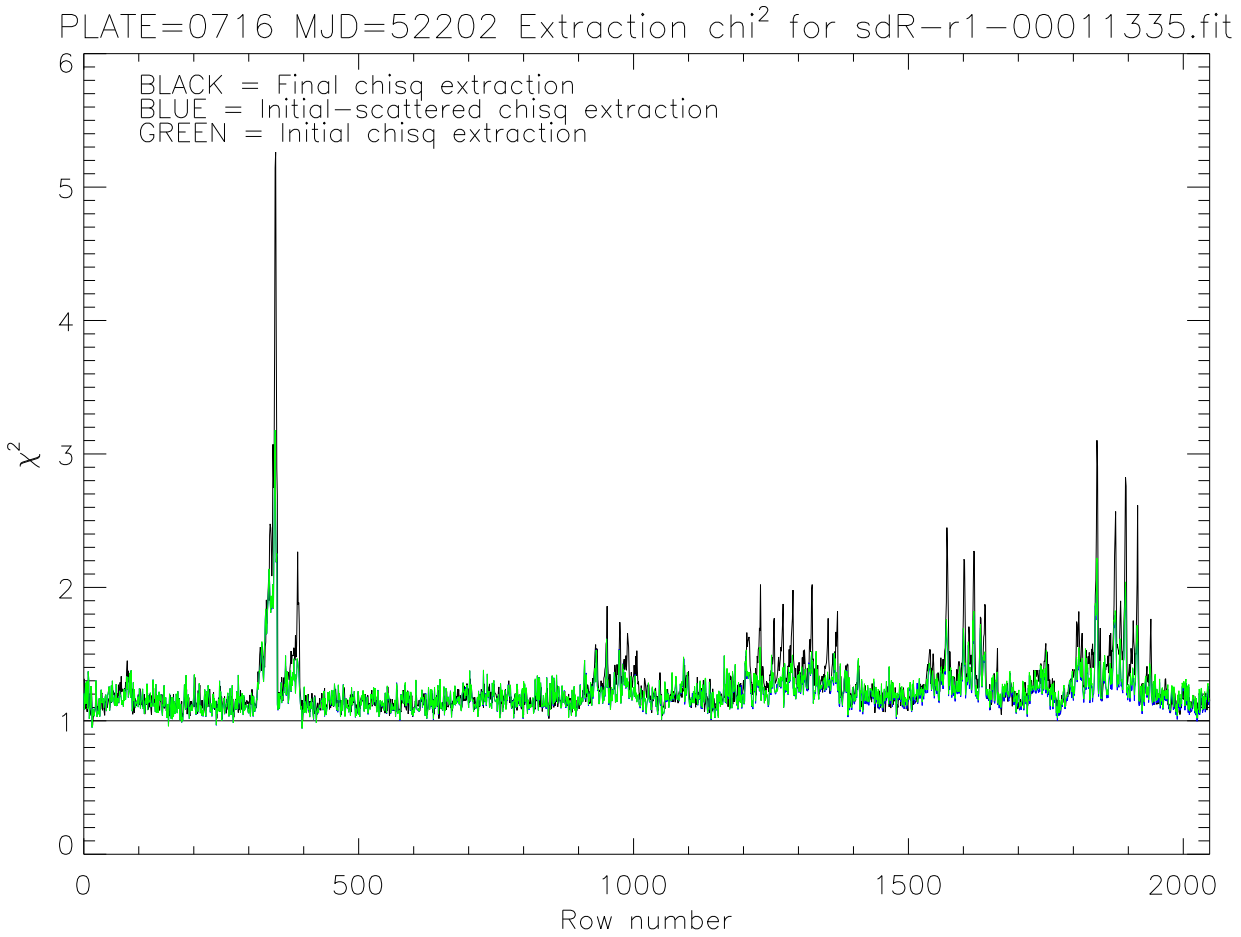

PLATE=0716 MJD=52202 Fiber−Flats for sdR−r1−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.344
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 16:57:22 2008

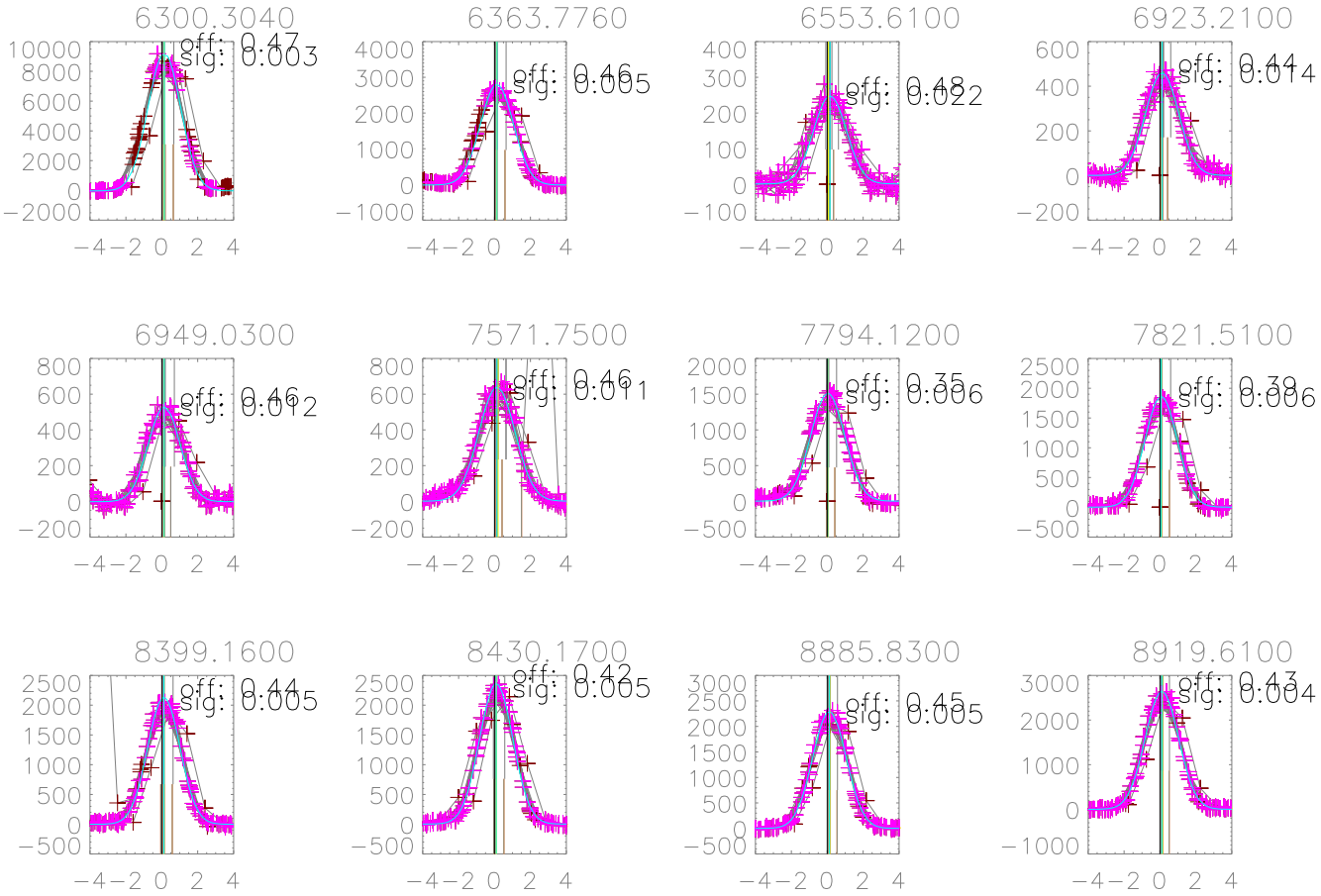

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r1-00011335.fi
25.5
25.5
25.5
18.2
10.9
0
Y [pix]
X [pix]
0
500
1000
1500
2000

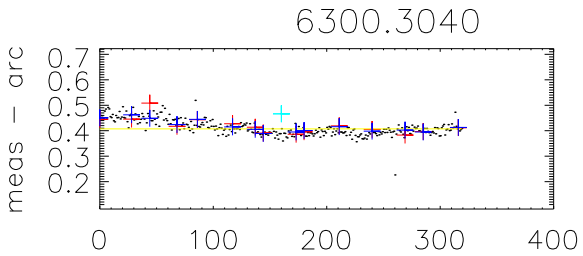

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r1-00011335.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.949
Max value = 30.035
Mon Feb 25 16:58:12 2008

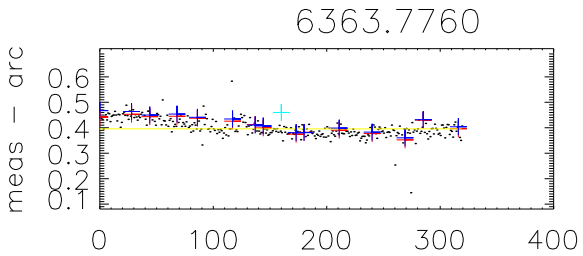

PLATE=0716 MJD=52202 Scattered Light on sdR-r1-00011335.fit
5.5
3.3
3.3
1.1
3.3
3.3
3.3
5.5
5.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

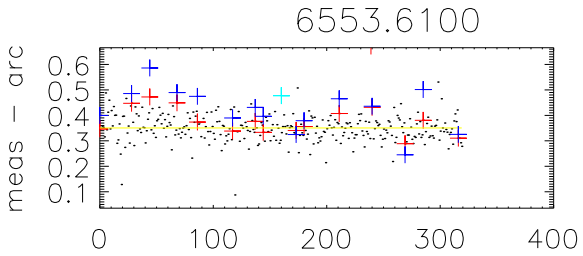

PLATE=0716 MJD=52202 Scattered Light on sdR-r1-00011335.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.502
Max value = 8.954
Mon Feb 25 17:01:15 2008

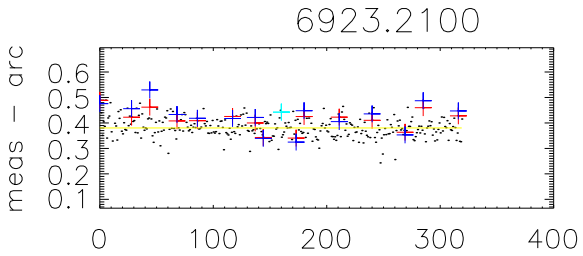

PLATE=0716 MJD=52202 Extraction chi^2 for sdR−r1−00011335.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

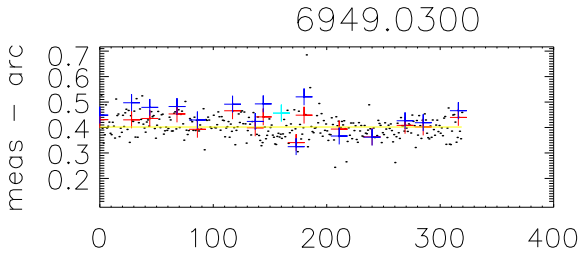

6300.3040
off: 0.47
sig: 0.003
6363.7760
off: 0.46
sig: 0.005
6553.6100
off: 0.48
sig: 0.022
6923.2100
off: 0.44
sig: 0.014
6949.0300
off: 0.46
sig: 0.012
7571.7500
off: 0.46
sig: 0.011
7794.1200
off: 0.35
sig: 0.006
7821.5100
off: 0.39
sig: 0.006
8399.1600
off: 0.44
sig: 0.005
8430.1700
off: 0.42
sig: 0.005
8885.8300
off: 0.45
sig: 0.005
8919.6100
off: 0.43
sig: 0.004

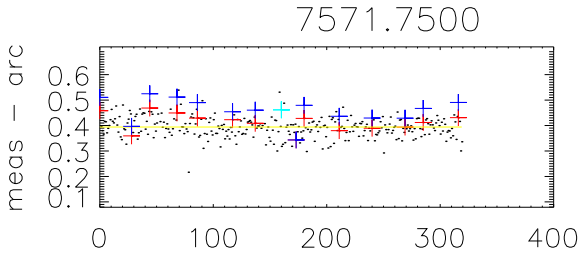

6300.3040
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

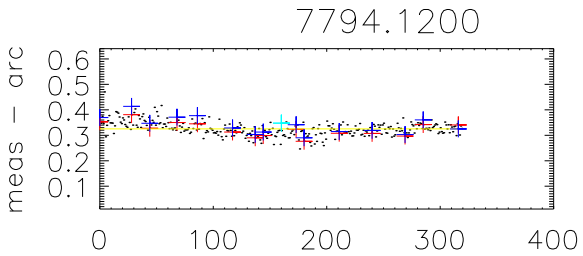

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

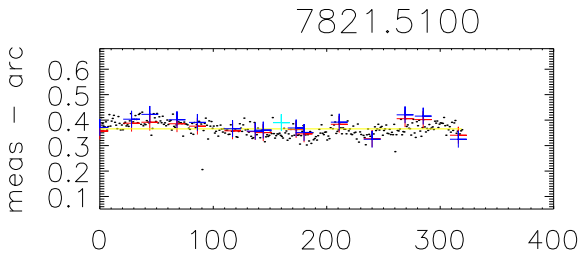

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

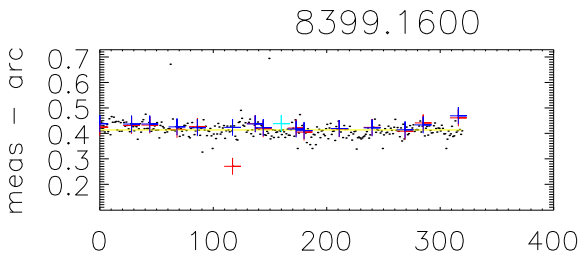

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

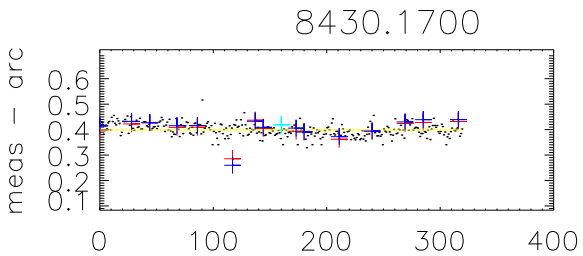

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

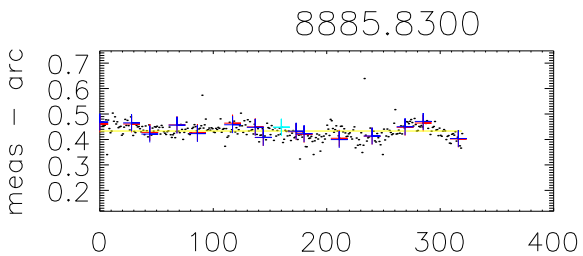

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

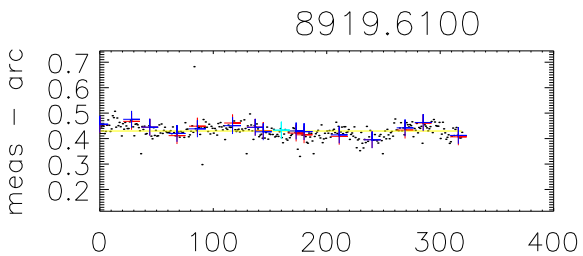

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

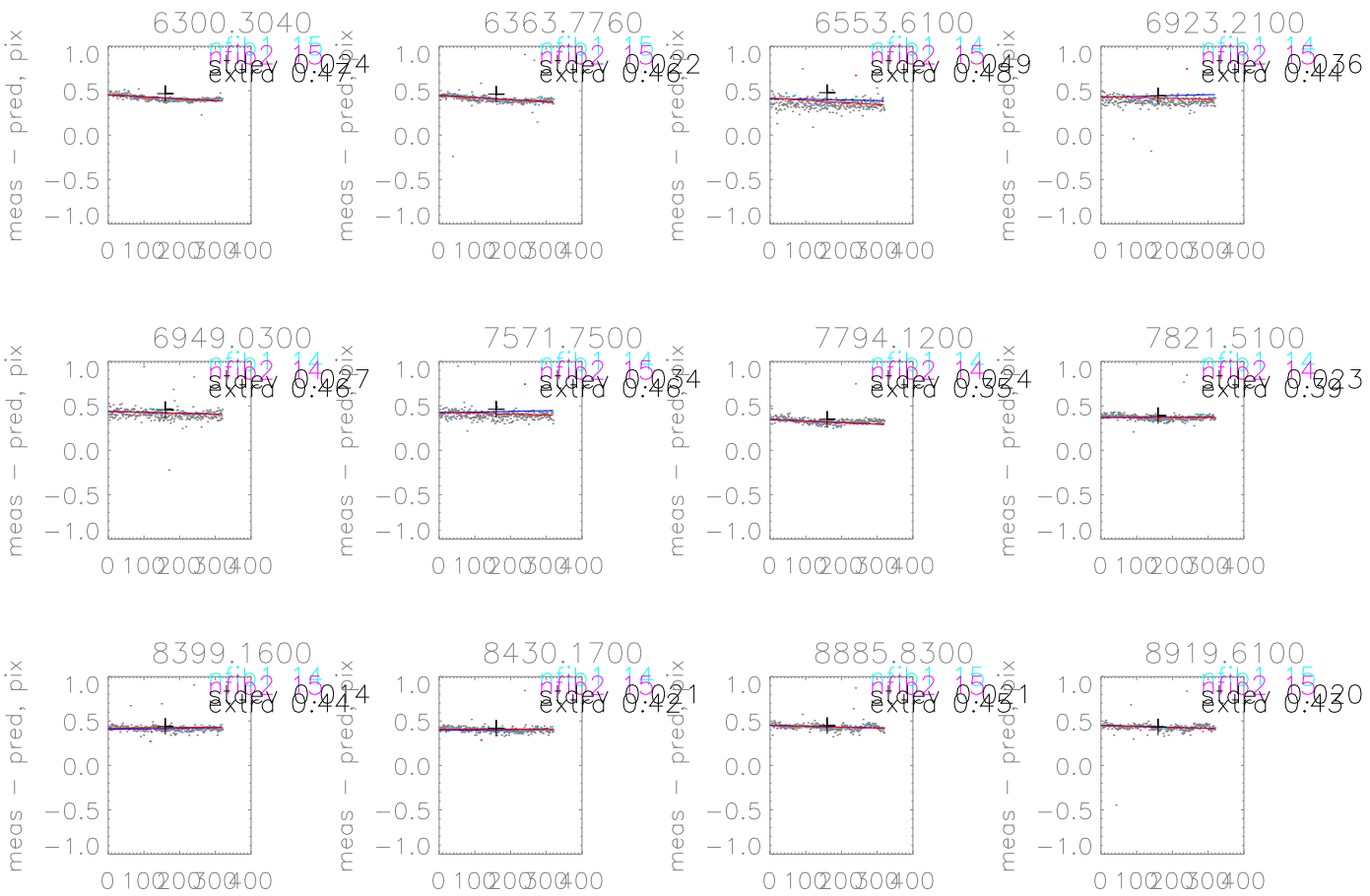

7821.5100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

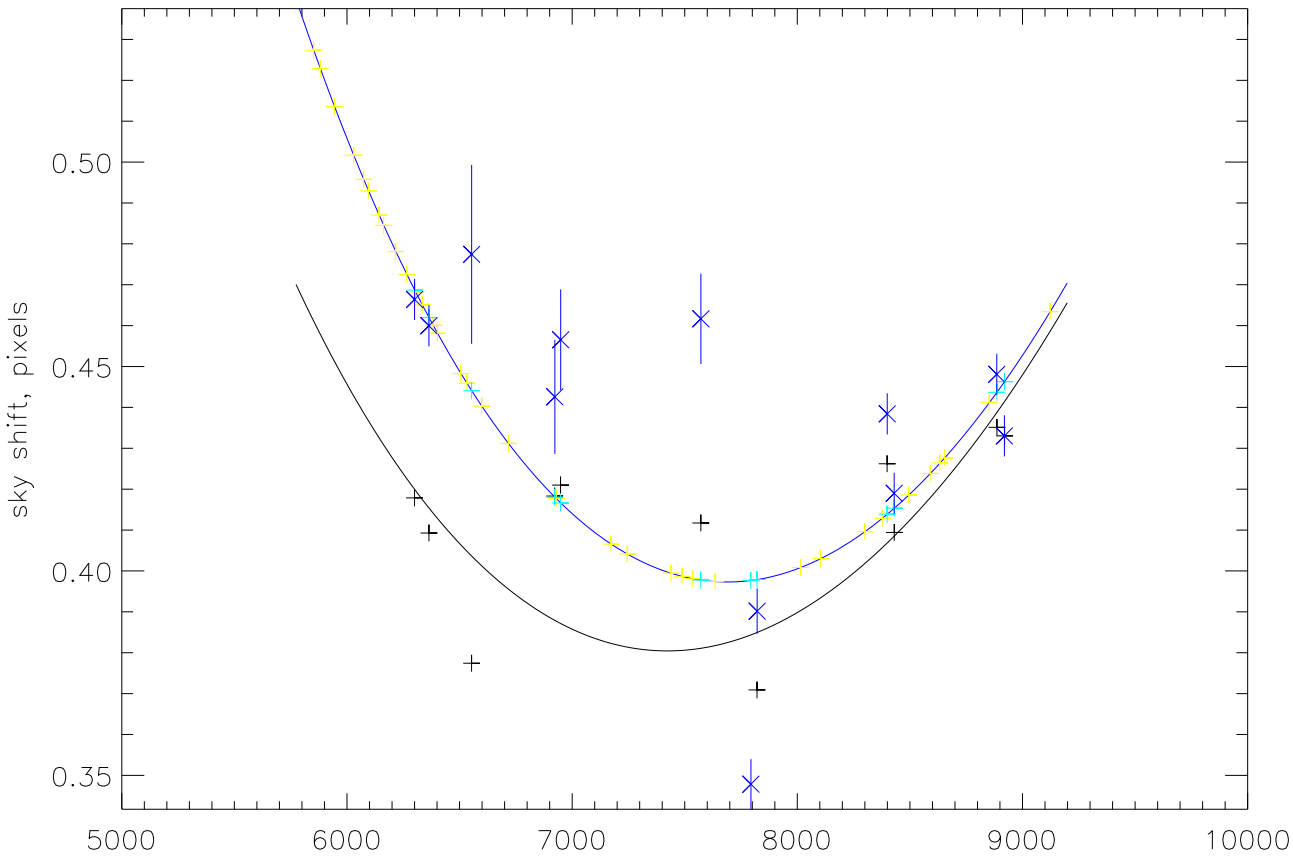

8399.1600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

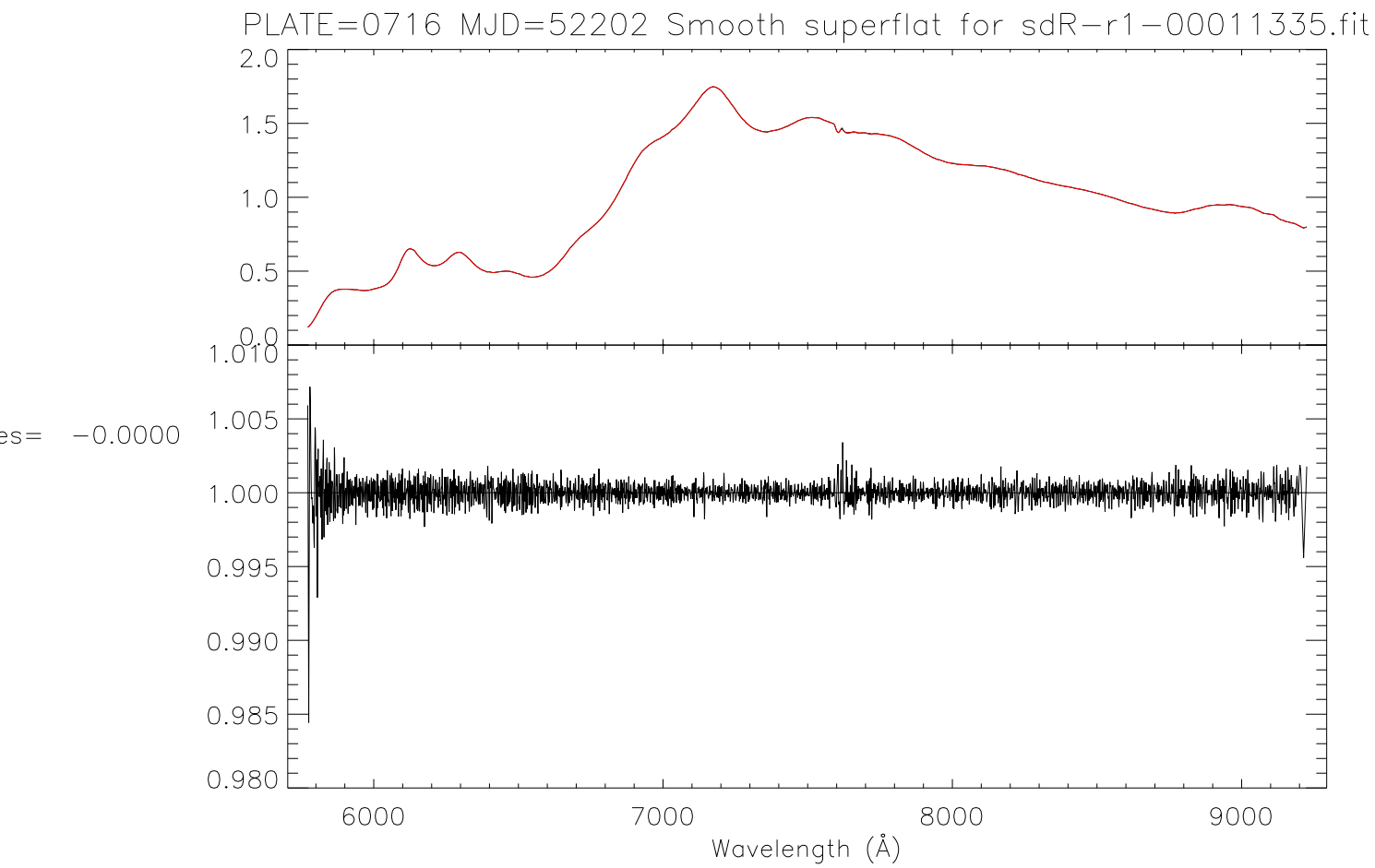

8430.1700
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

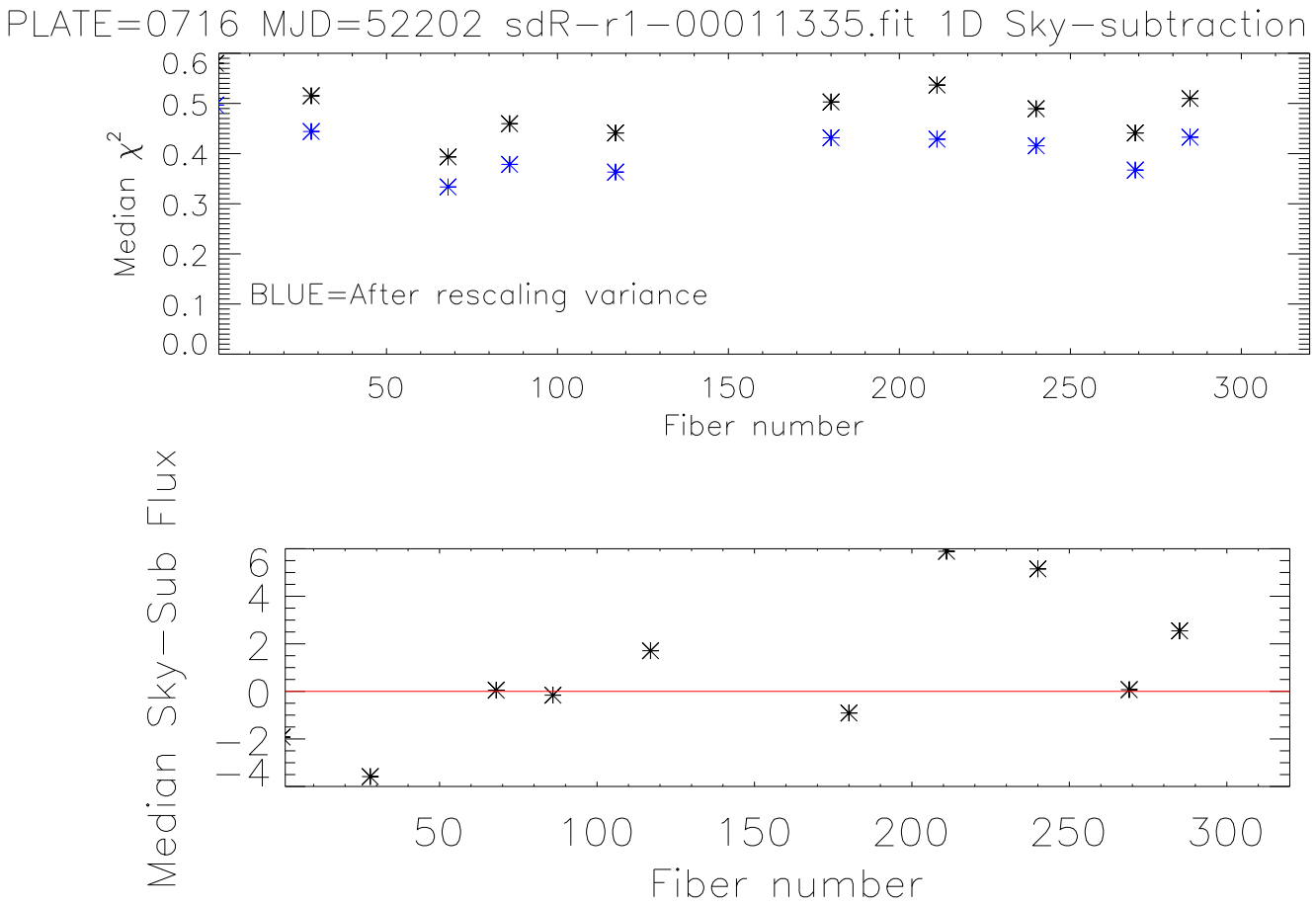

8885.8300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

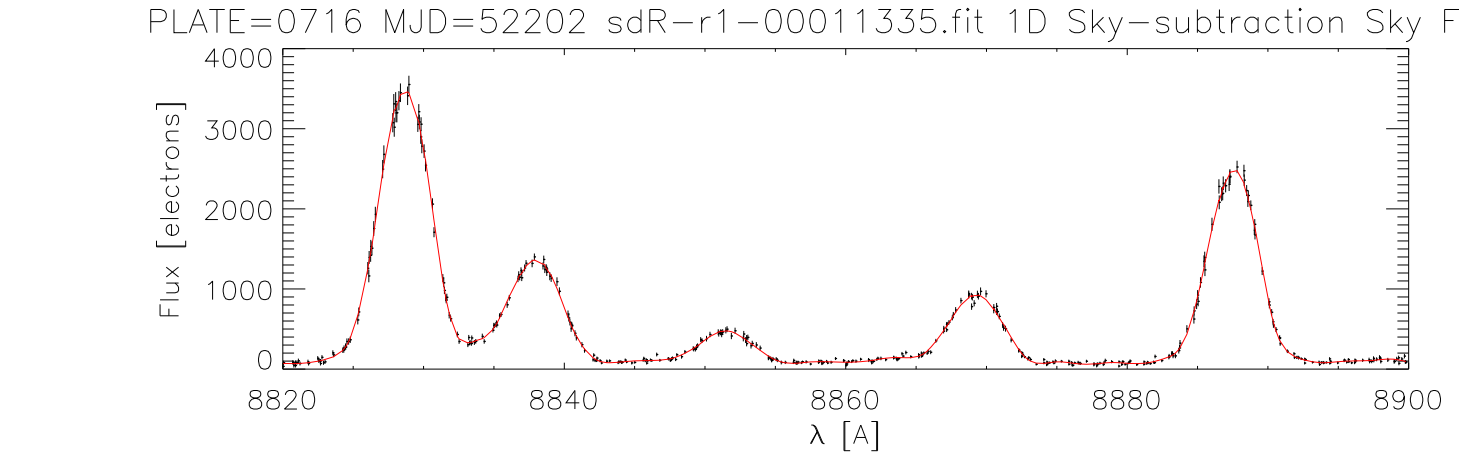

8919.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

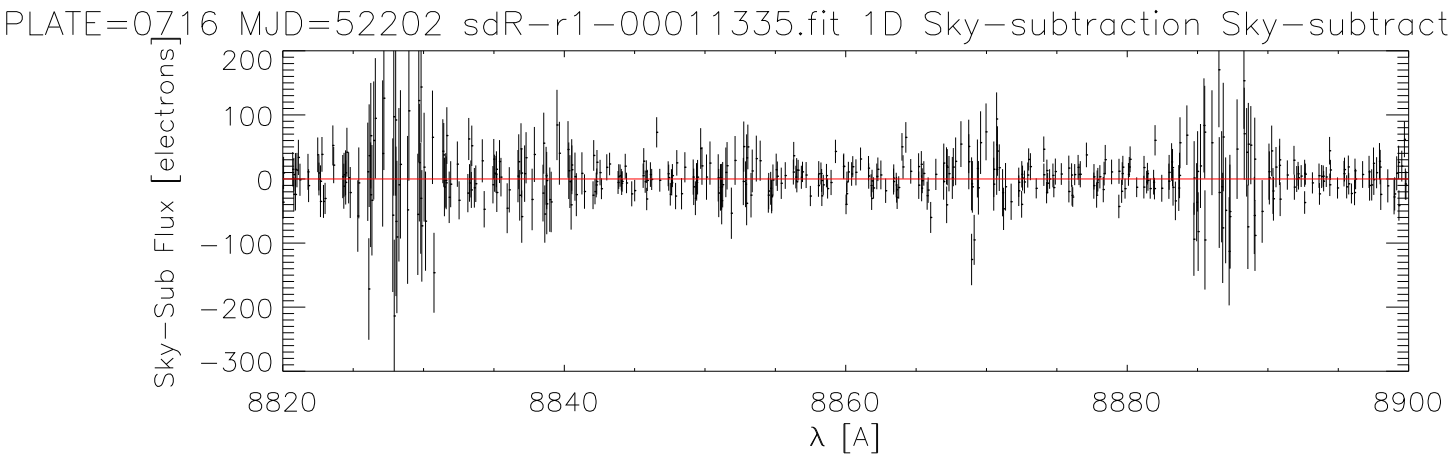

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhi2 15
mfhi1 14
stdev 0.024
extra 0.47
stdev 0.022
extra 0.46
stdev 0.049
extra 0.48
stdev 0.036
extra 0.44
stdev 0.027
extra 0.46
stdev 0.034
extra 0.46
stdev 0.024
extra 0.35
stdev 0.023
extra 0.39
stdev 0.014
extra 0.44
stdev 0.021
extra 0.42
stdev 0.021
extra 0.43
stdev 0.020
extra 0.43

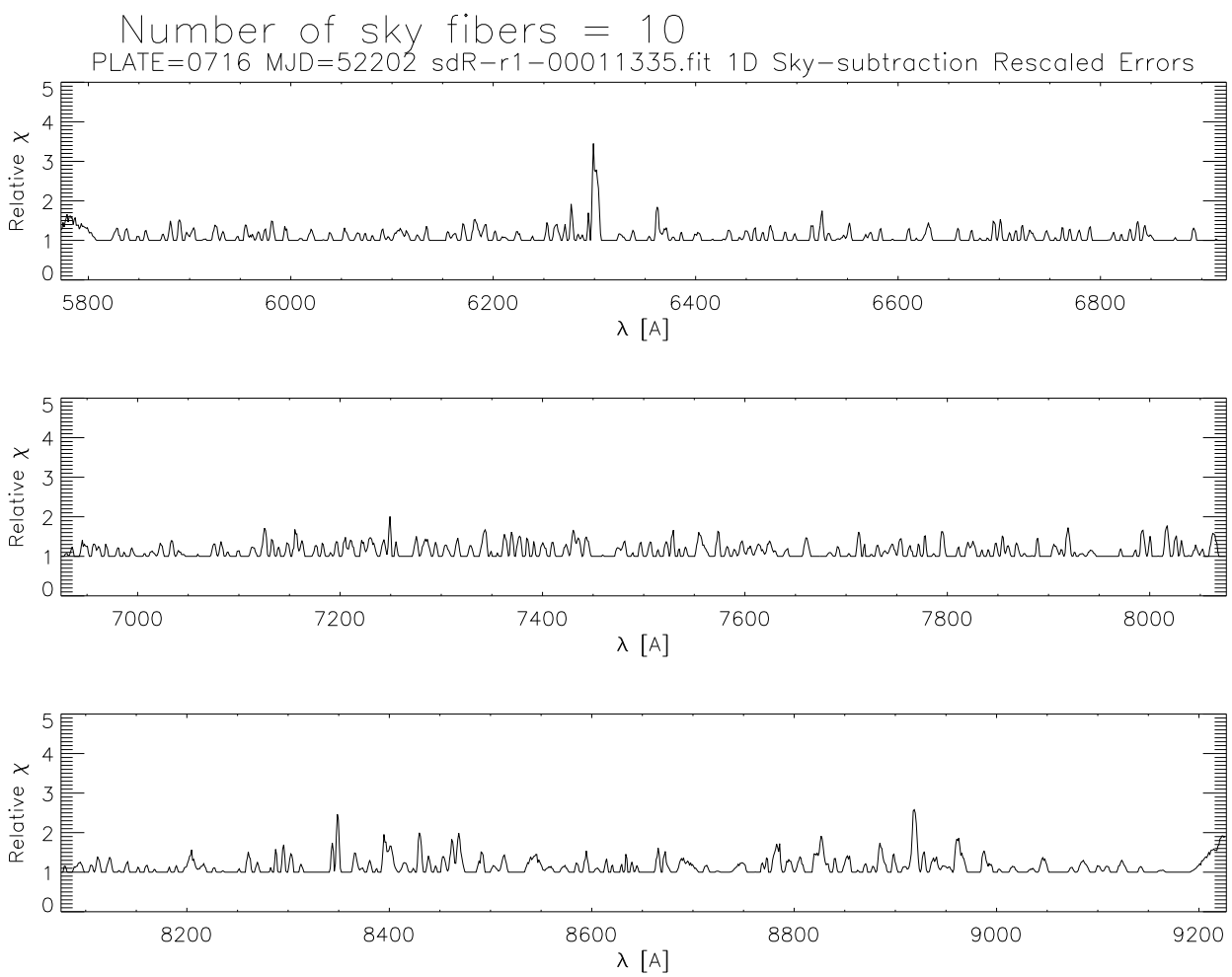

sky shift, pixels
0.50
0.45
0.40
0.35
5000
6000
7000
8000
9000
10000

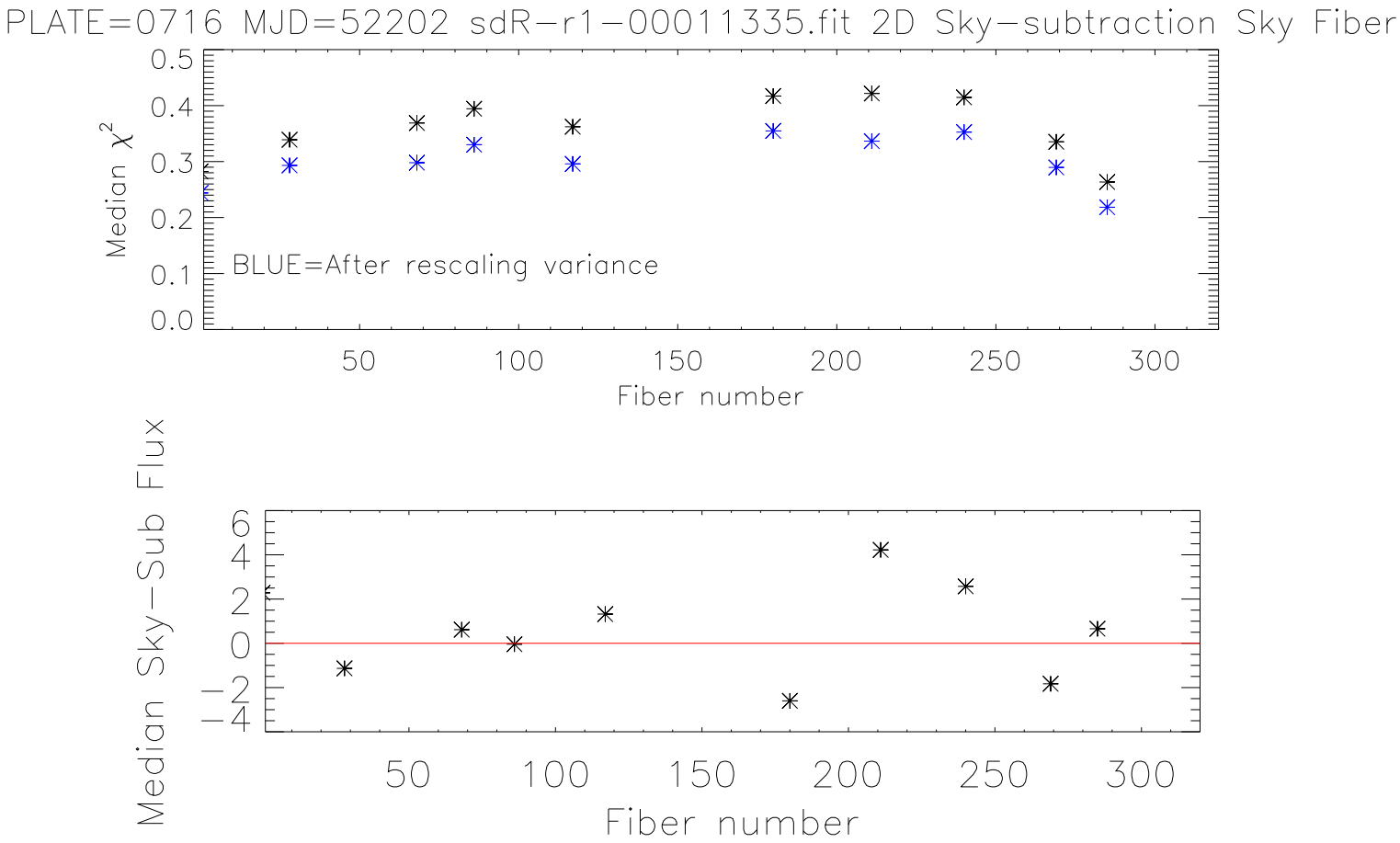

PLATE=0716 MJD=52202 Smooth superflat for sdR-r1-00011335.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

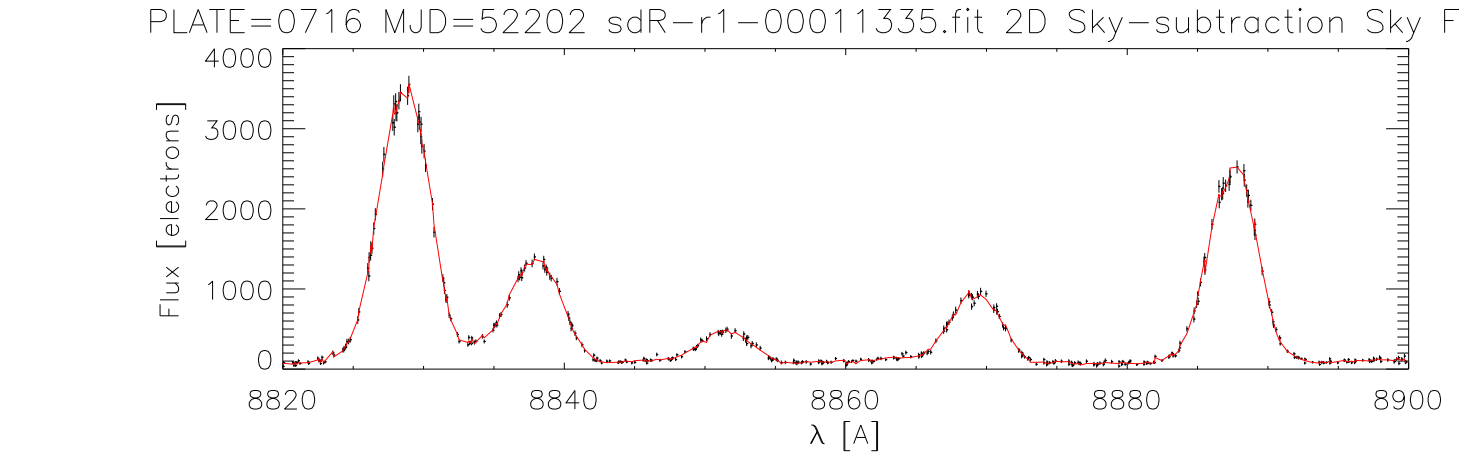

PLATE=0716 MJD=52202 sdR-r1-00011335.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

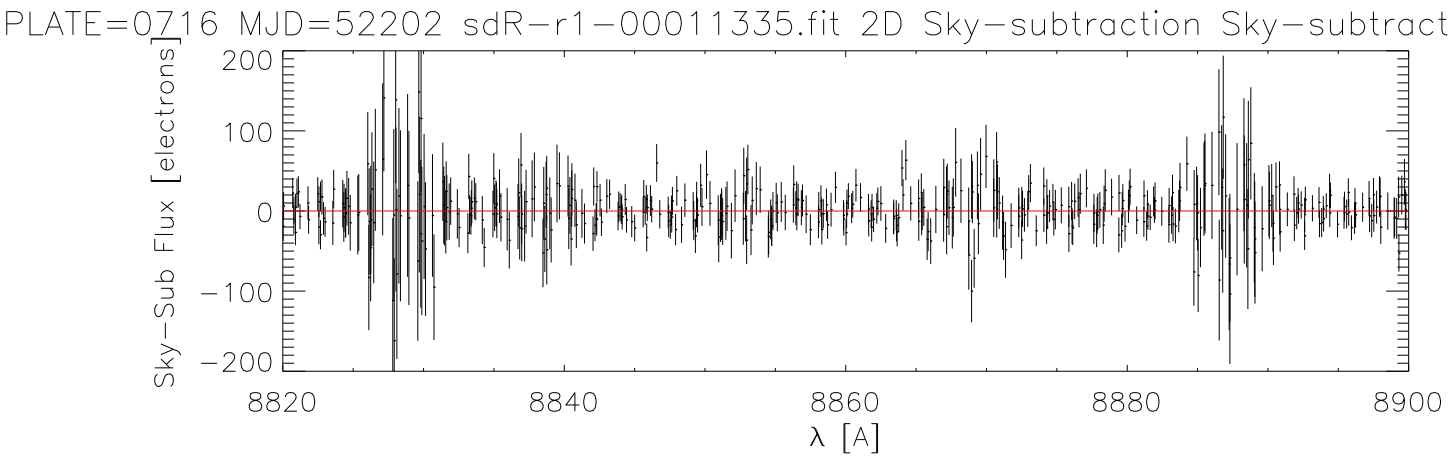

PLATE=0716 MJD=52202 sdR-r1-00011335.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

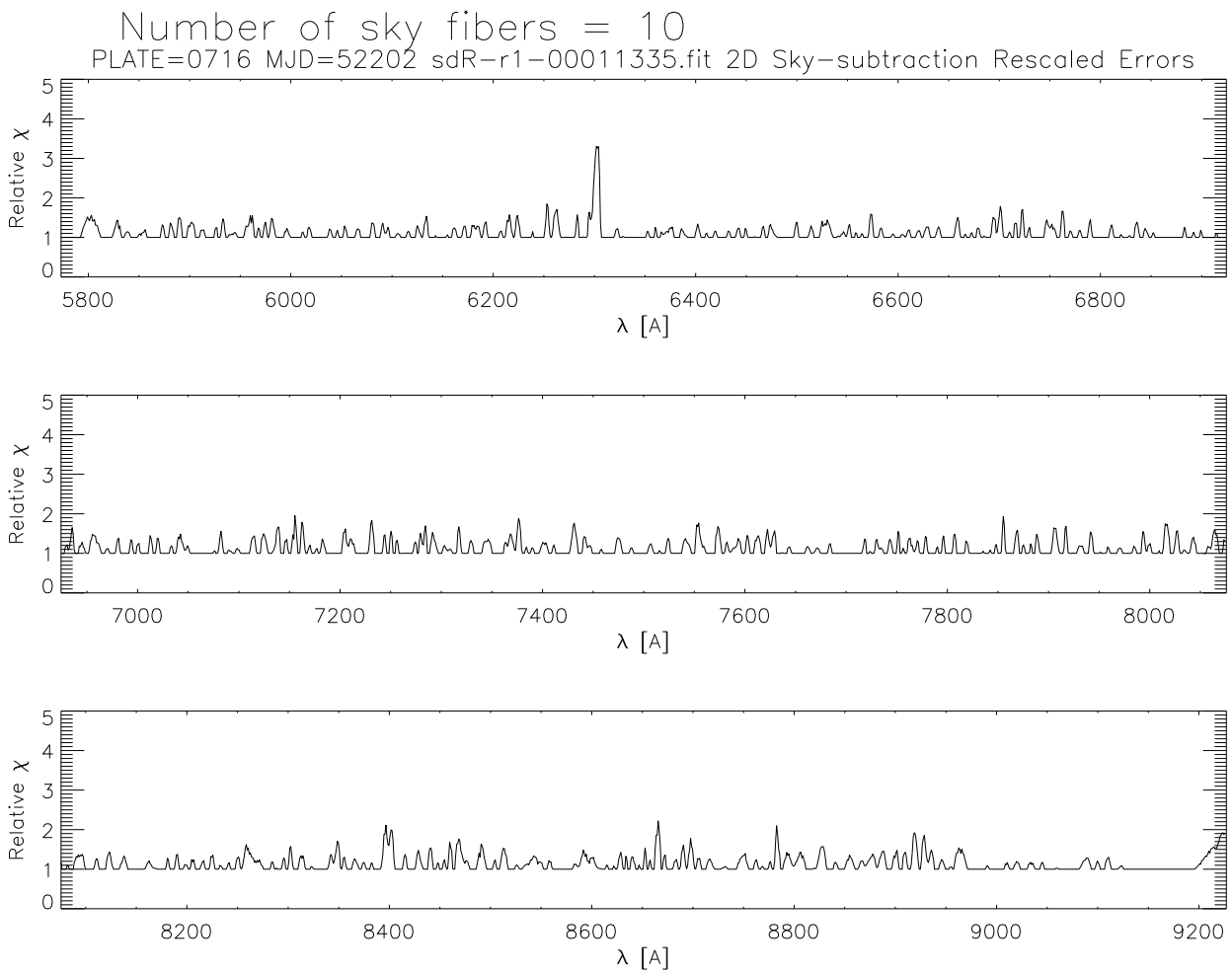

PLATE=0716 MJD=52202 sdR-r1-00011335.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

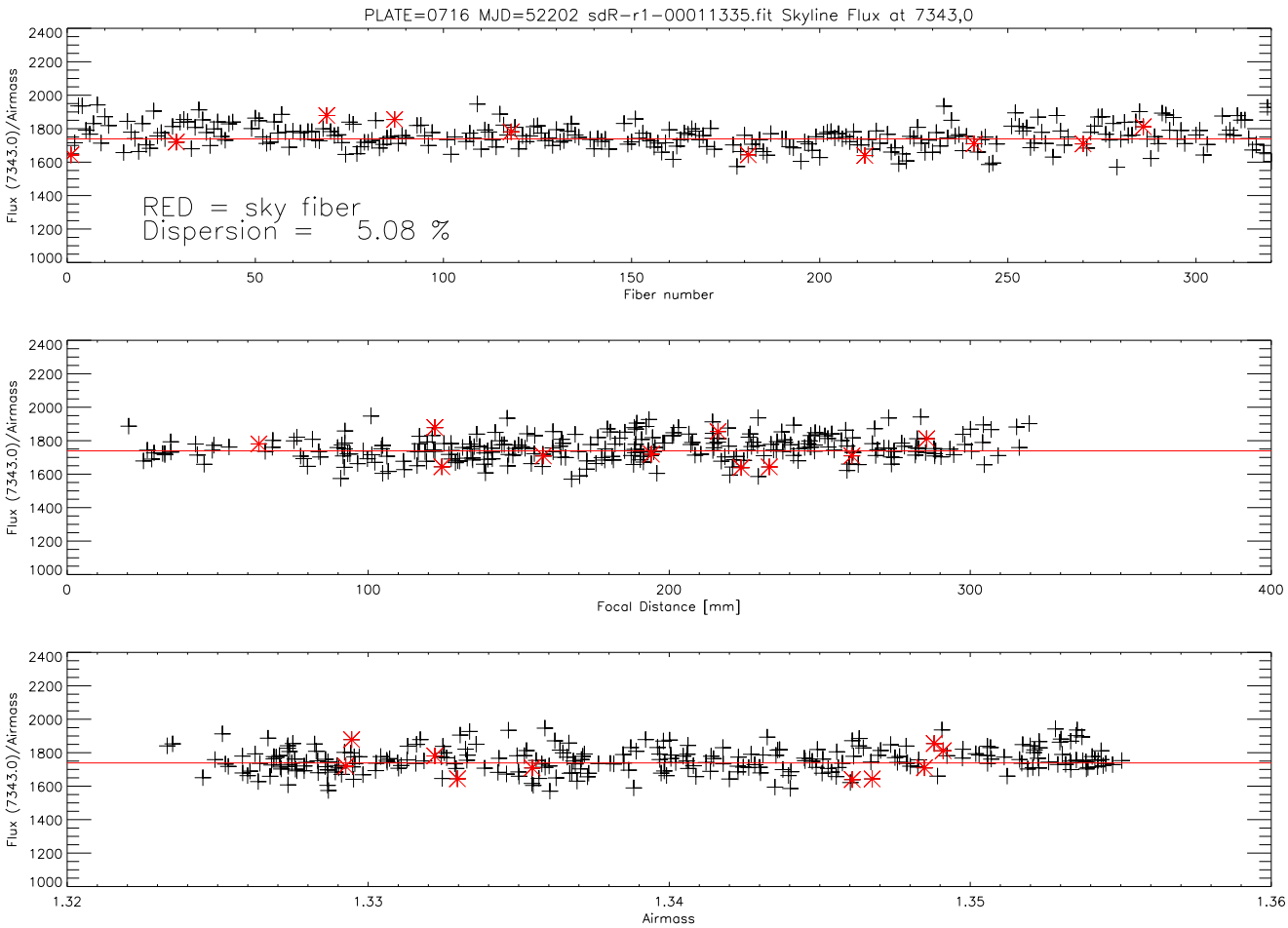

Number of sky fibers = 10
PLATE=0716 MJD=52202 sdR-r1-00011335.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

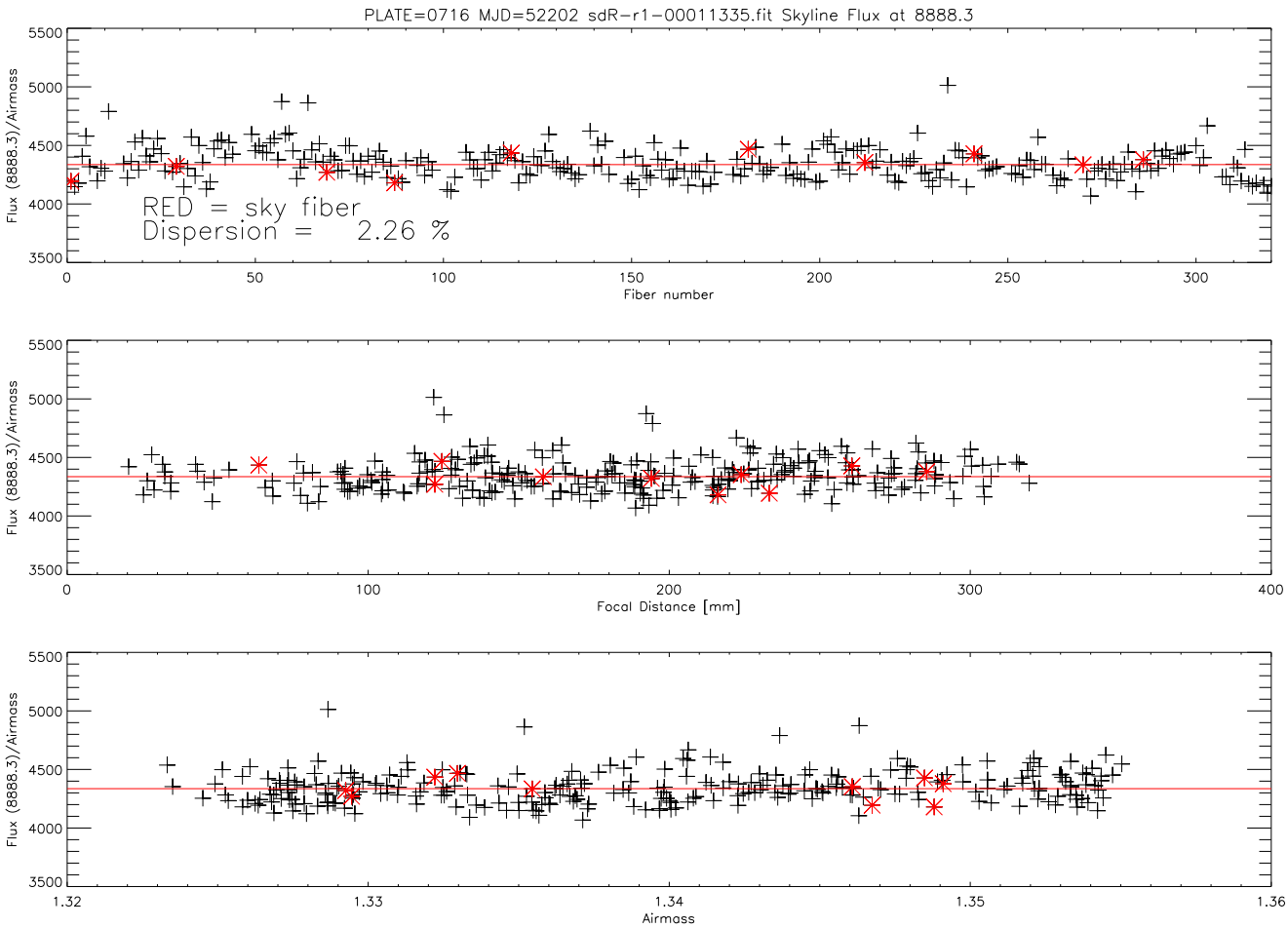

PLATE=0716 MJD=52202 sdR-r1-00011335.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

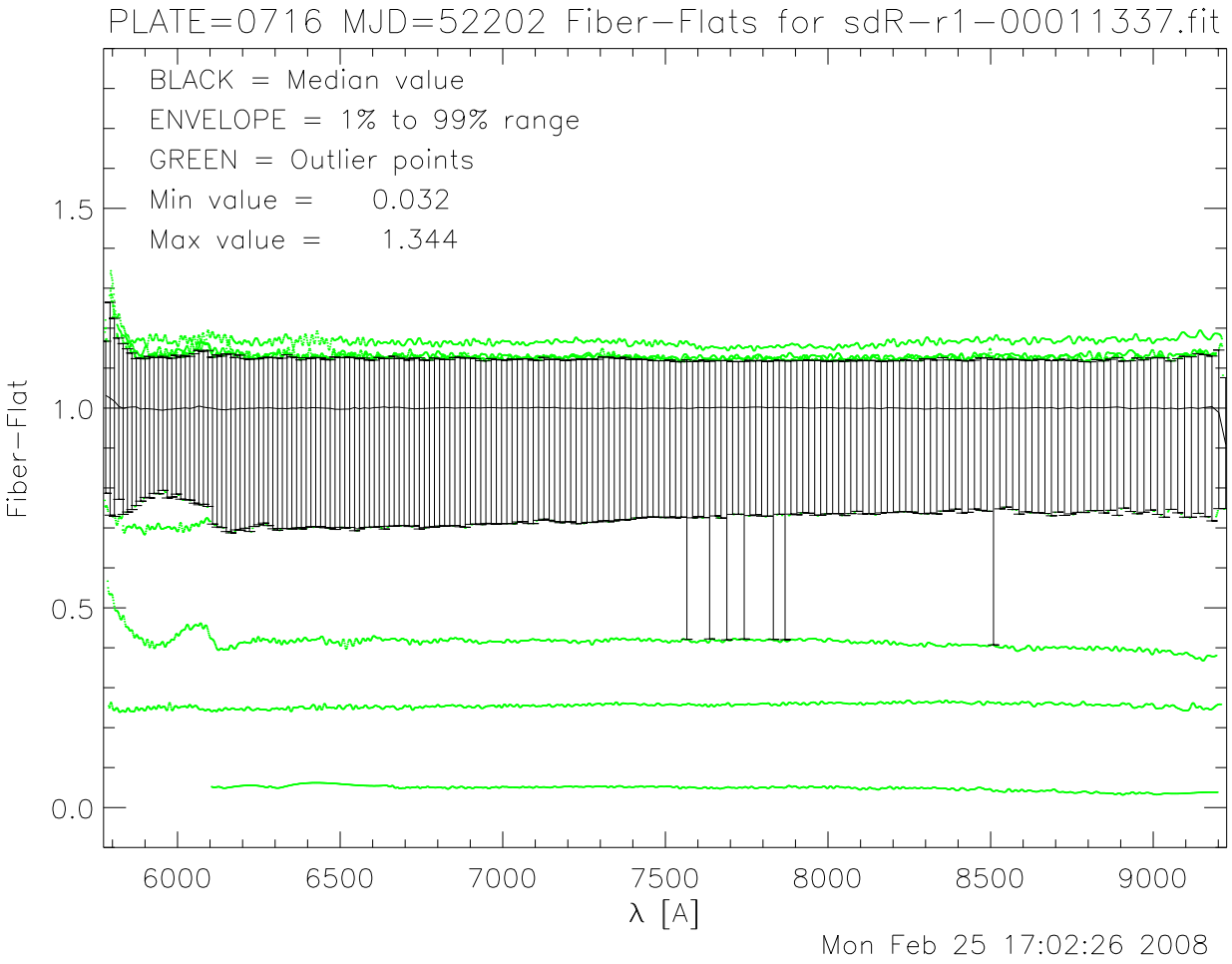

PLATE=0716 MJD=52202 sdR-r1-00011335.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

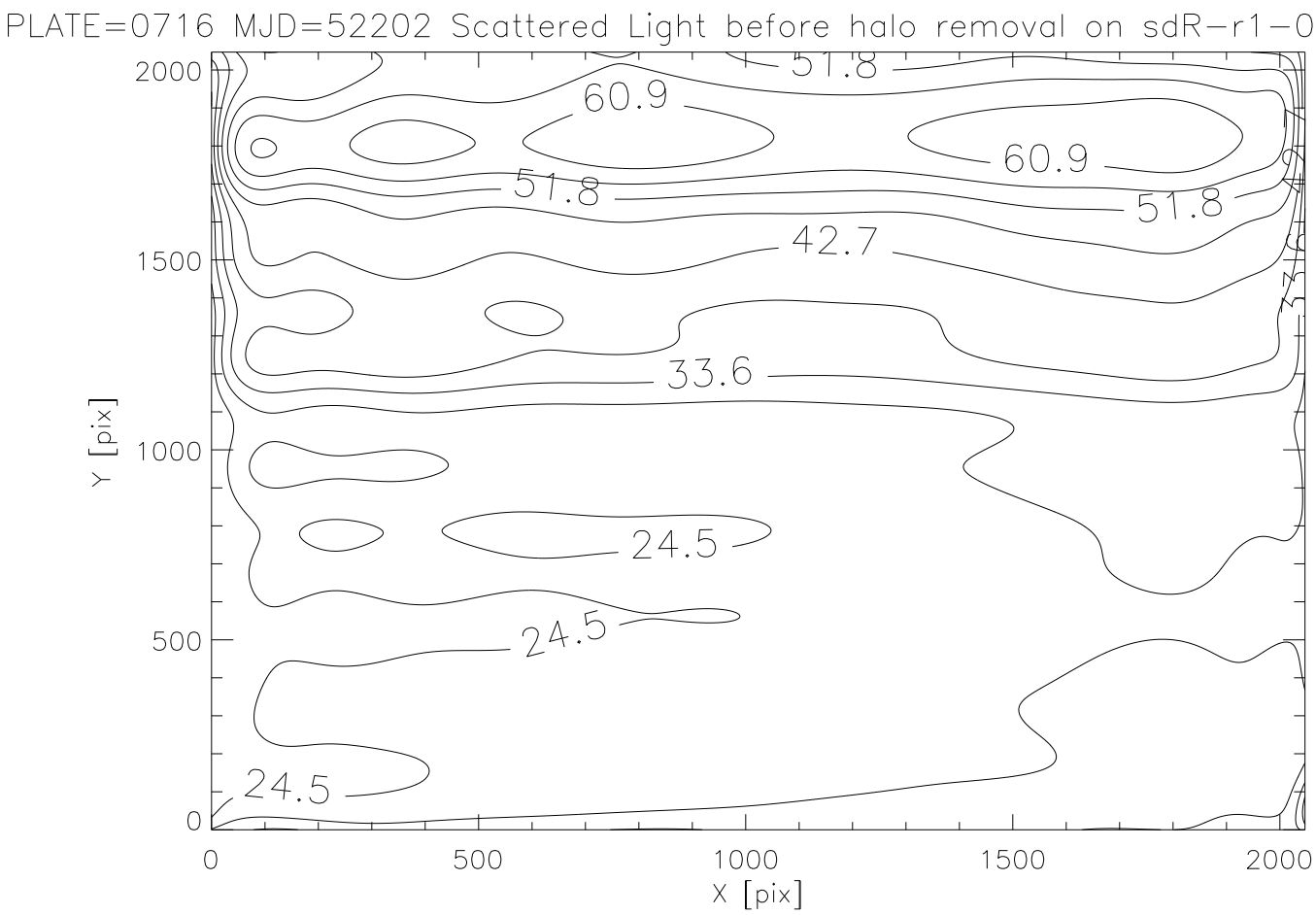

PLATE=0716 MJD=52202 sdR-r1-00011335.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

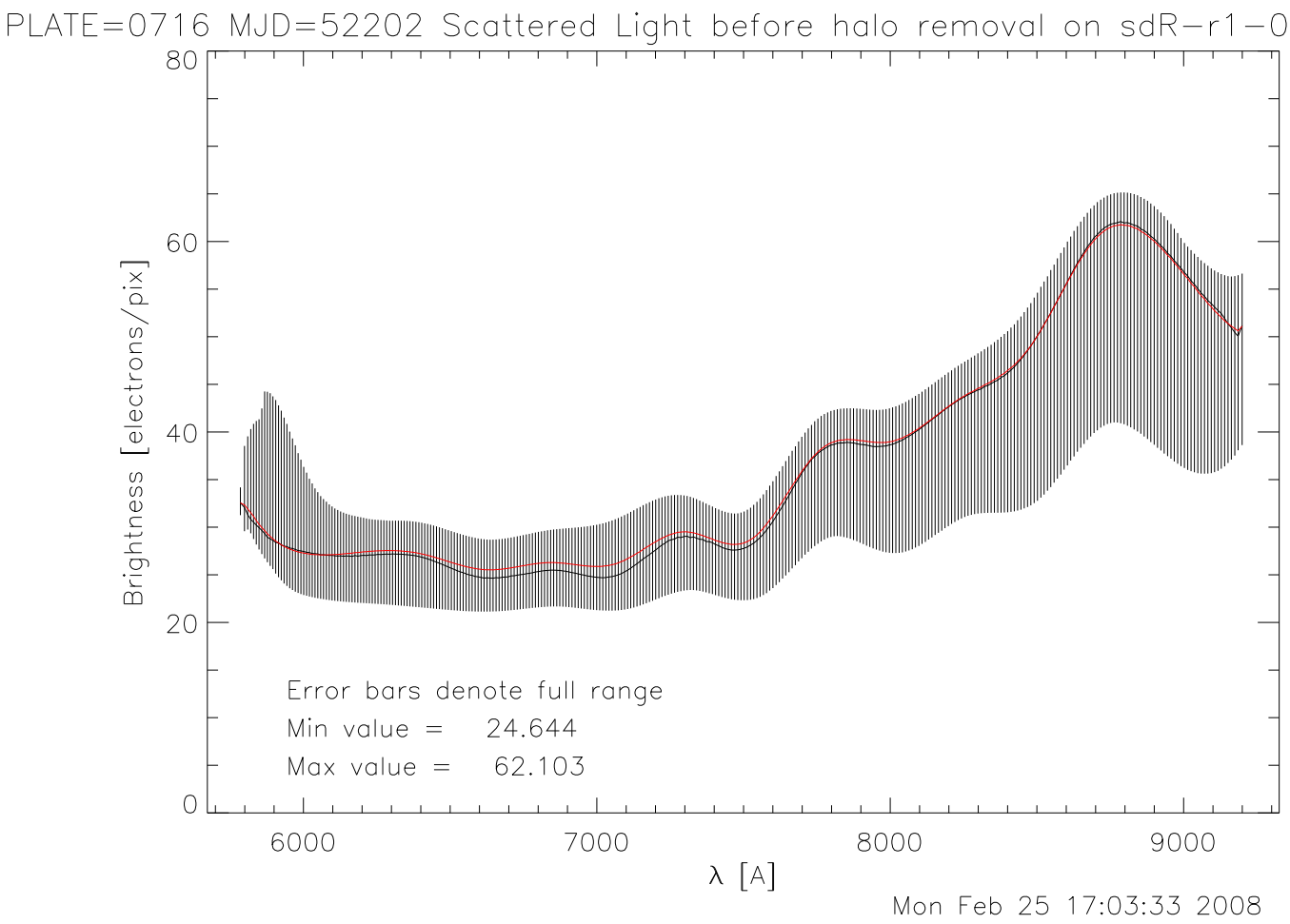

Number of sky fibers = 10
PLATE=0716 MJD=52202 sdR-r1-00011335.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

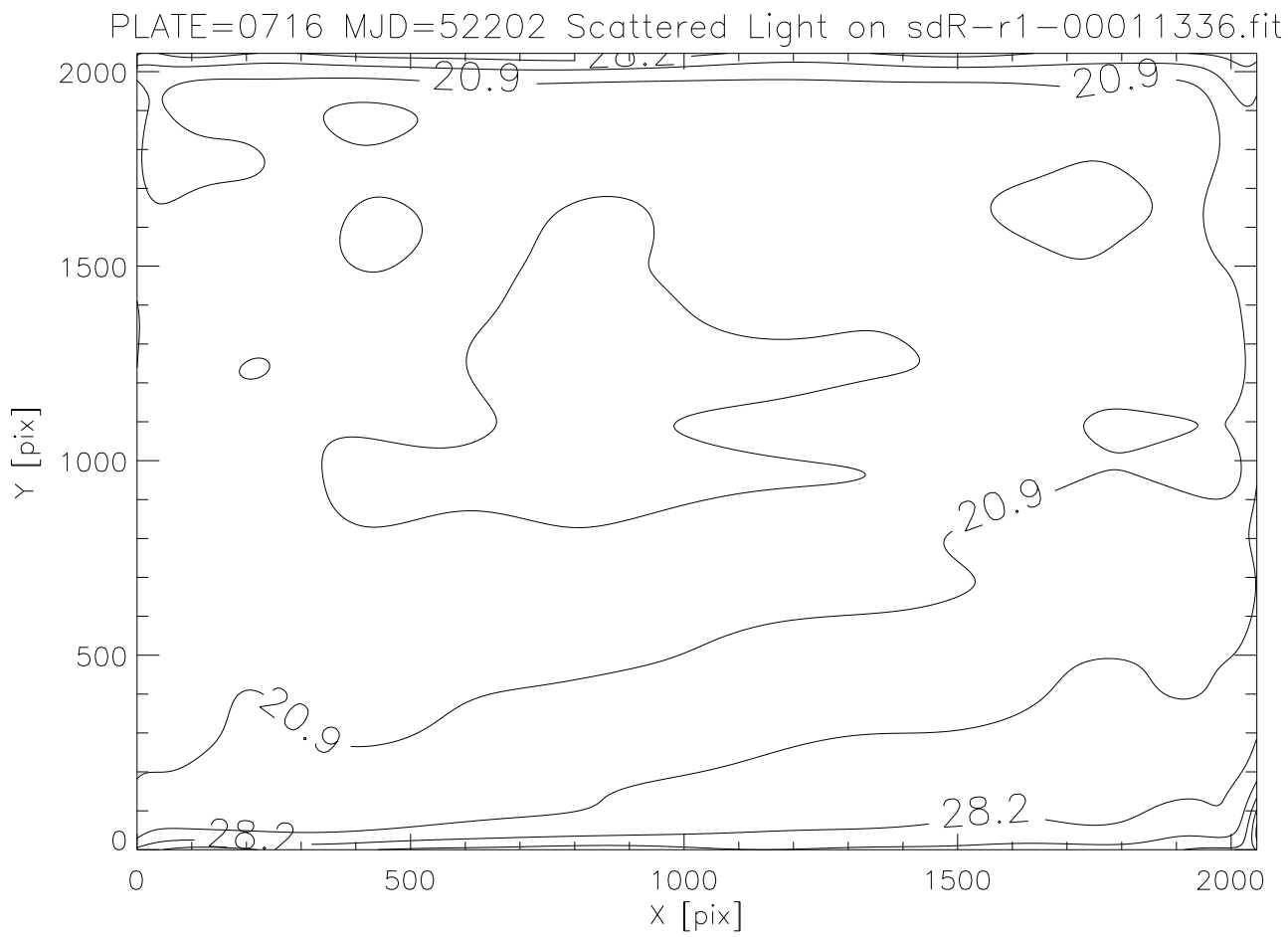

PLATE=0716 MJD=52202 sdR-r1-00011335.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.08 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

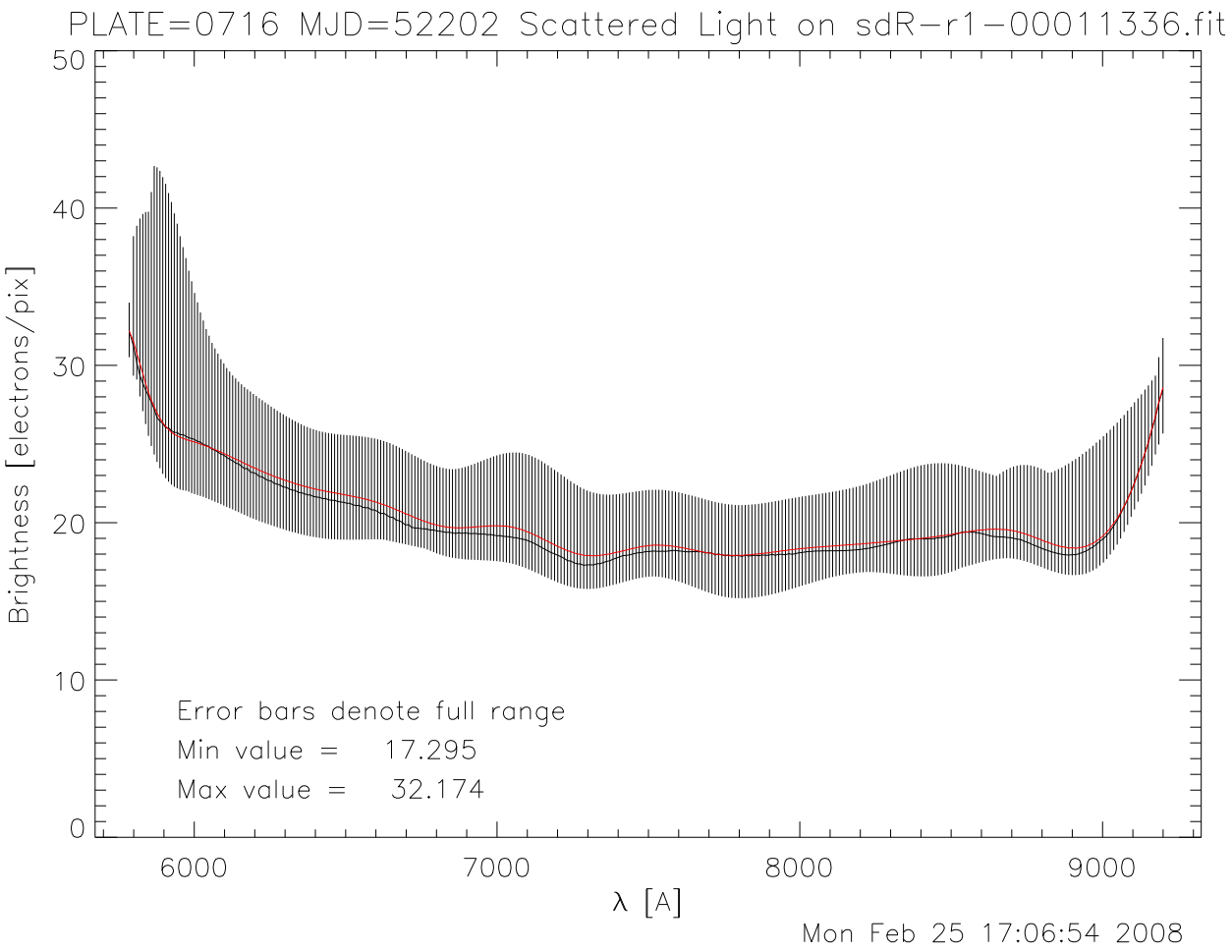

PLATE=0716 MJD=52202 sdR-r1-00011335.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.26 %
Fiber number
Focal Distance [mm]
Airmass

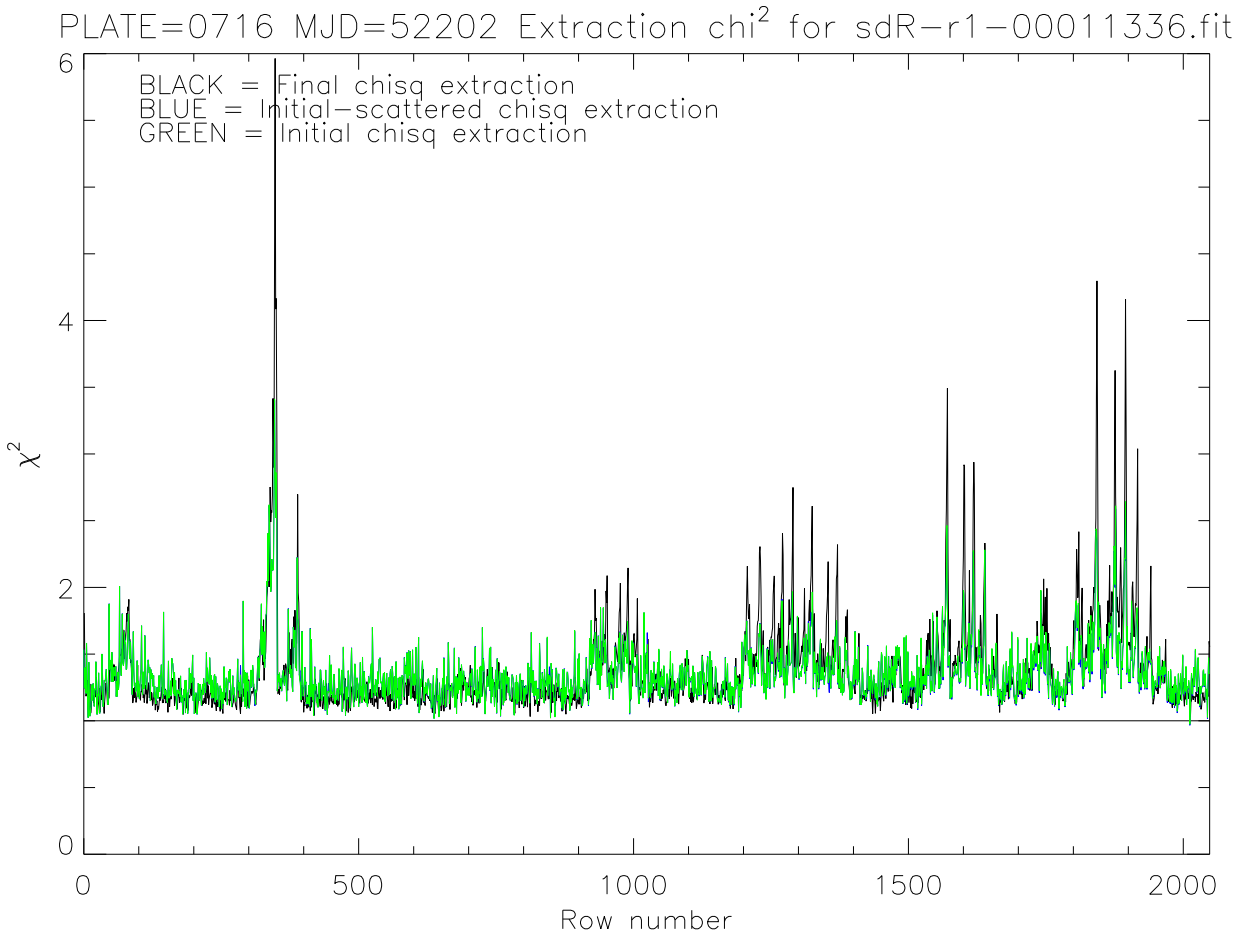

PLATE=0716 MJD=52202 Fiber−Flats for sdR−r1−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.344
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 17:02:26 2008

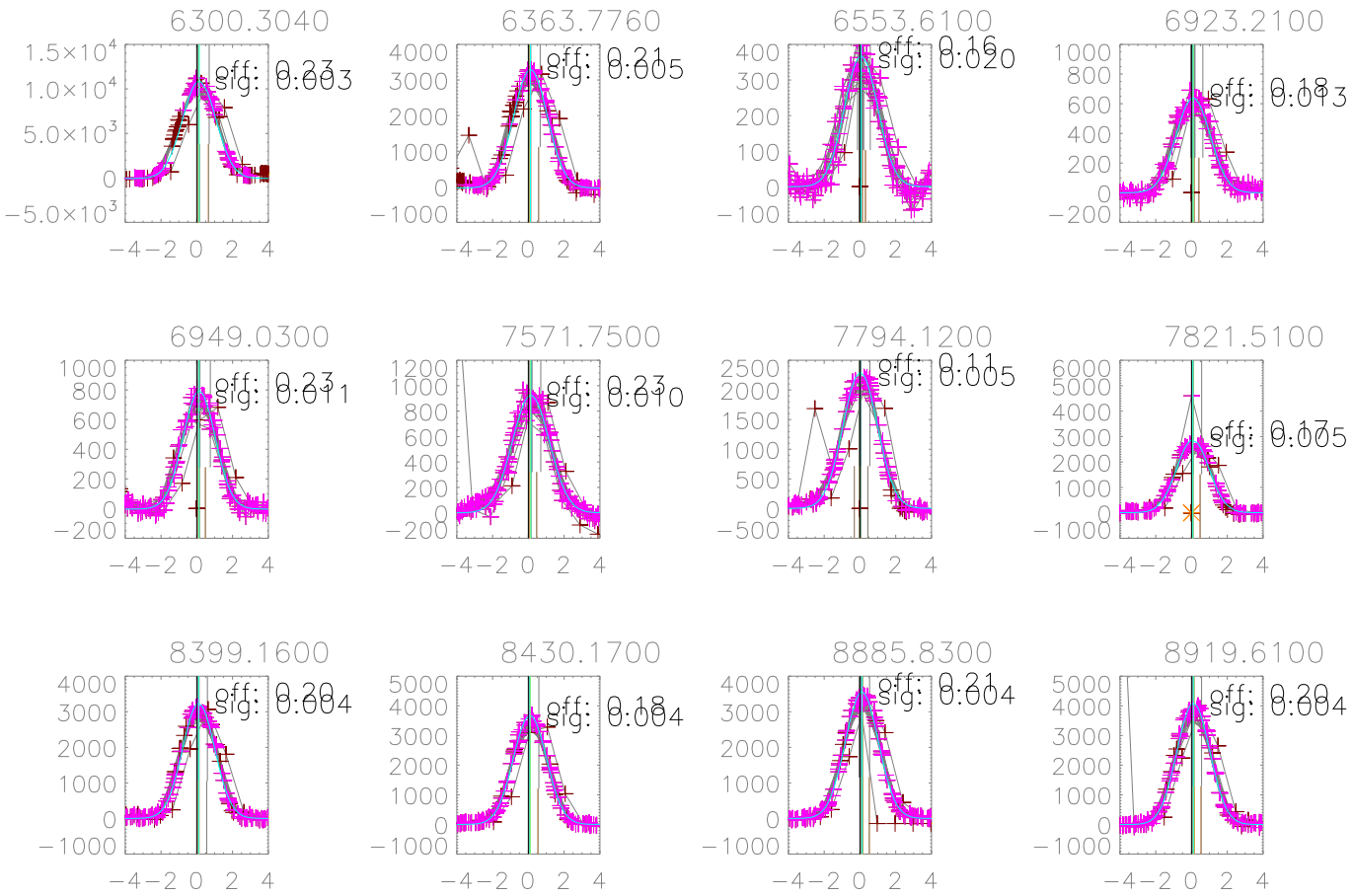

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR−r1−00011336.fi
51.8
60.9
60.9
51.8
51.8
42.7
33.6
24.5
24.5
24.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

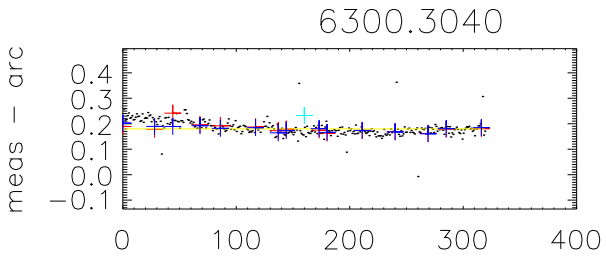

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r1-00011336.fi
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 24.644
Max value = 62.103
Mon Feb 25 17:03:33 2008

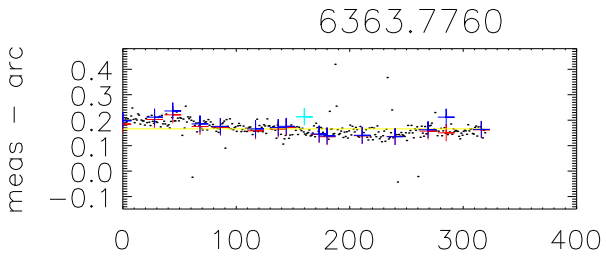

PLATE=0716 MJD=52202 Scattered Light on sdR-r1-00011336.fit
20.9
20.9
20.9
20.9
28.2
28.2
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

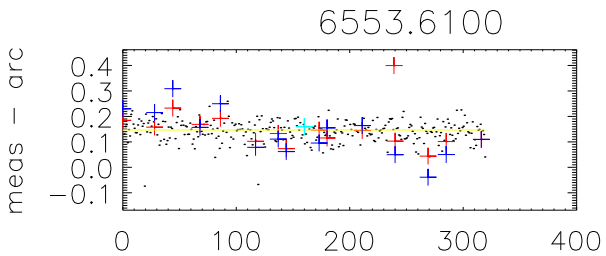

PLATE=0716 MJD=52202 Scattered Light on sdR-r1-00011336.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 17.295
Max value = 32.174
Mon Feb 25 17:06:54 2008

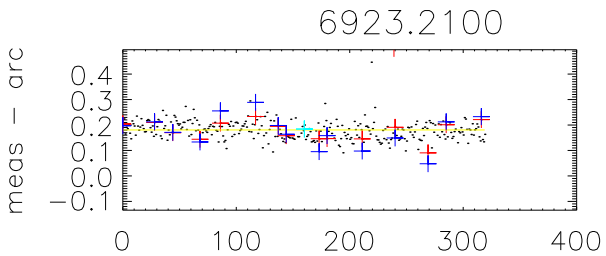

PLATE=0716 MJD=52202 Extraction chi^2 for sdR−r1−00011336.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

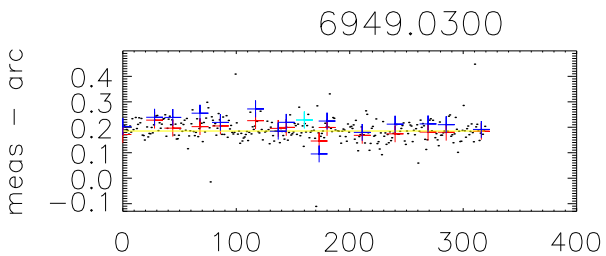

6300.3040
off: 0.23
sig: 0.003
6363.7760
off: 0.21
sig: 0.005
6553.6100
off: 0.16
sig: 0.020
6923.2100
off: 0.18
sig: 0.013
6949.0300
off: 0.23
sig: 0.011
7571.7500
off: 0.23
sig: 0.010
7794.1200
off: 0.11
sig: 0.005
7821.5100
off: 0.17
sig: 0.005
8399.1600
off: 0.20
sig: 0.004
8430.1700
off: 0.18
sig: 0.004
8885.8300
off: 0.21
sig: 0.004
8919.6100
off: 0.20
sig: 0.004

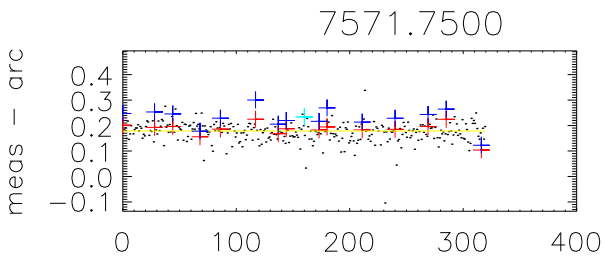

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

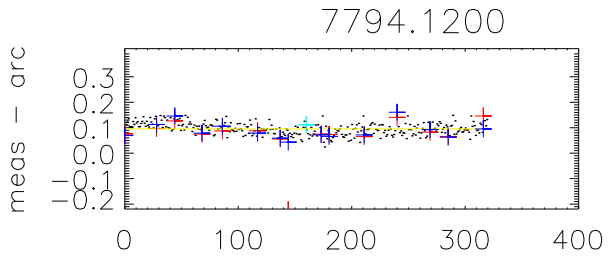

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

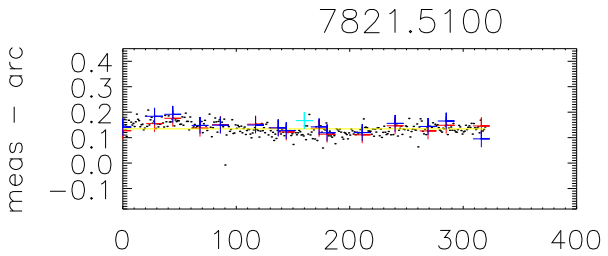

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

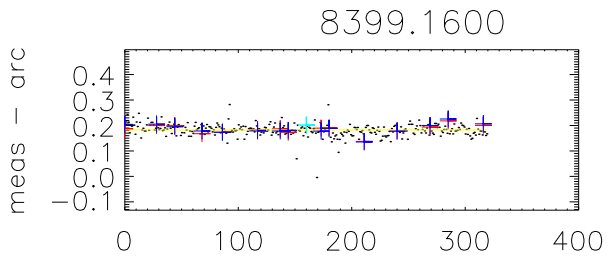

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

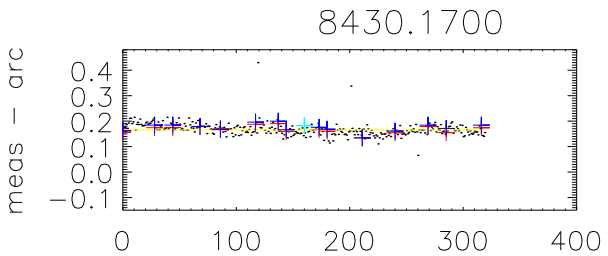

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

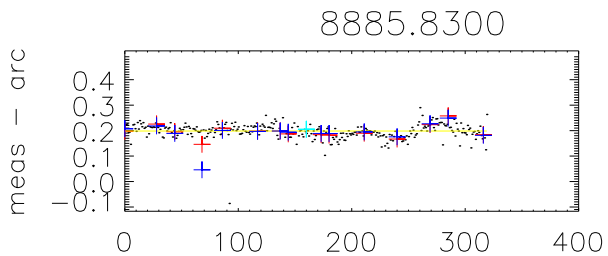

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

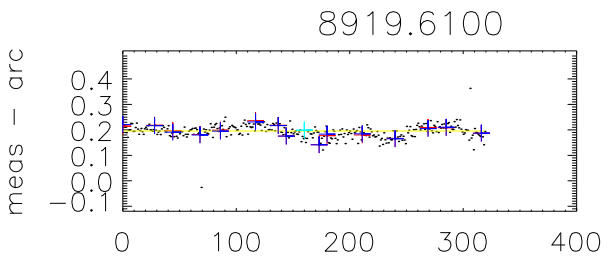

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

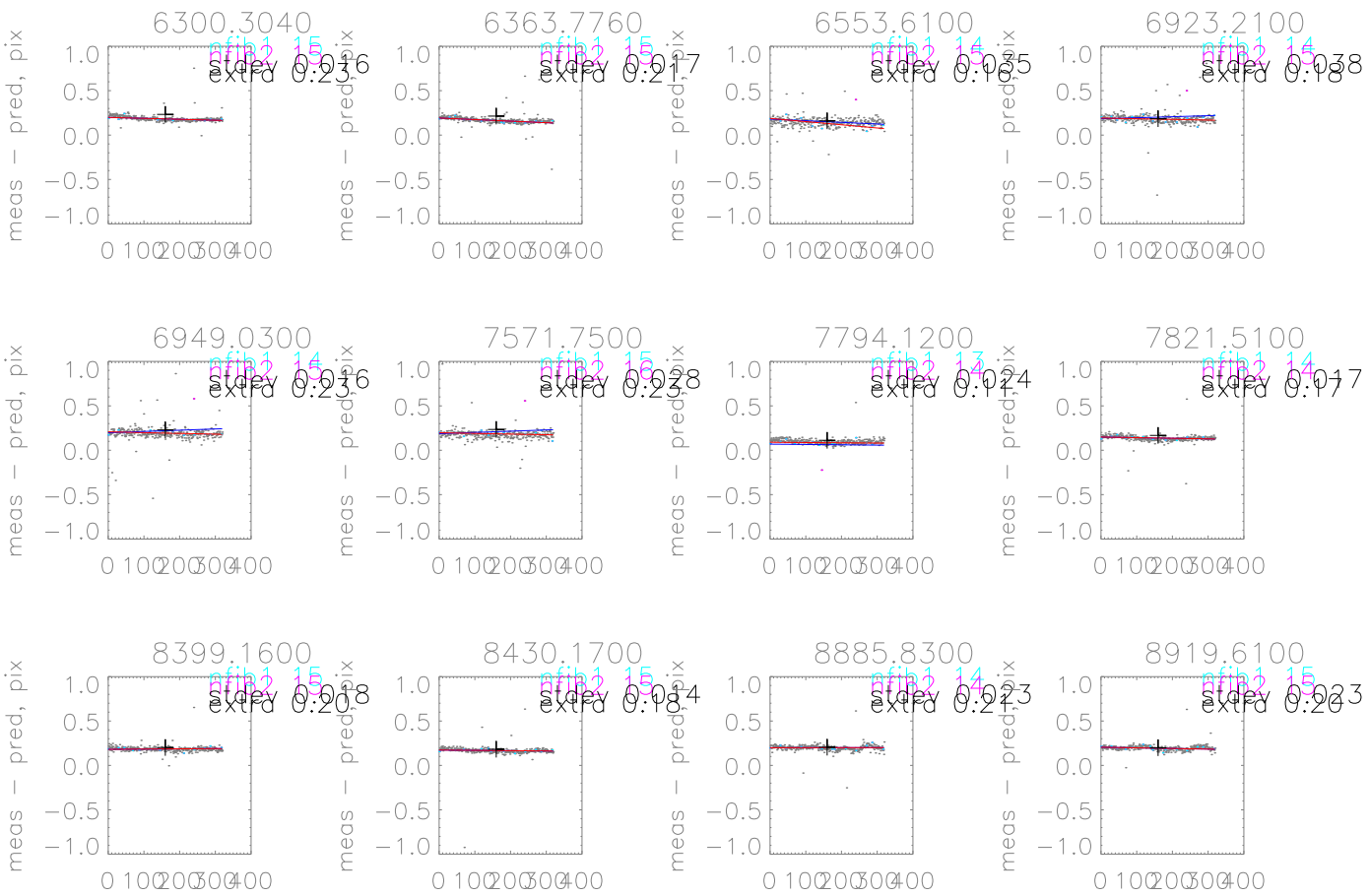

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

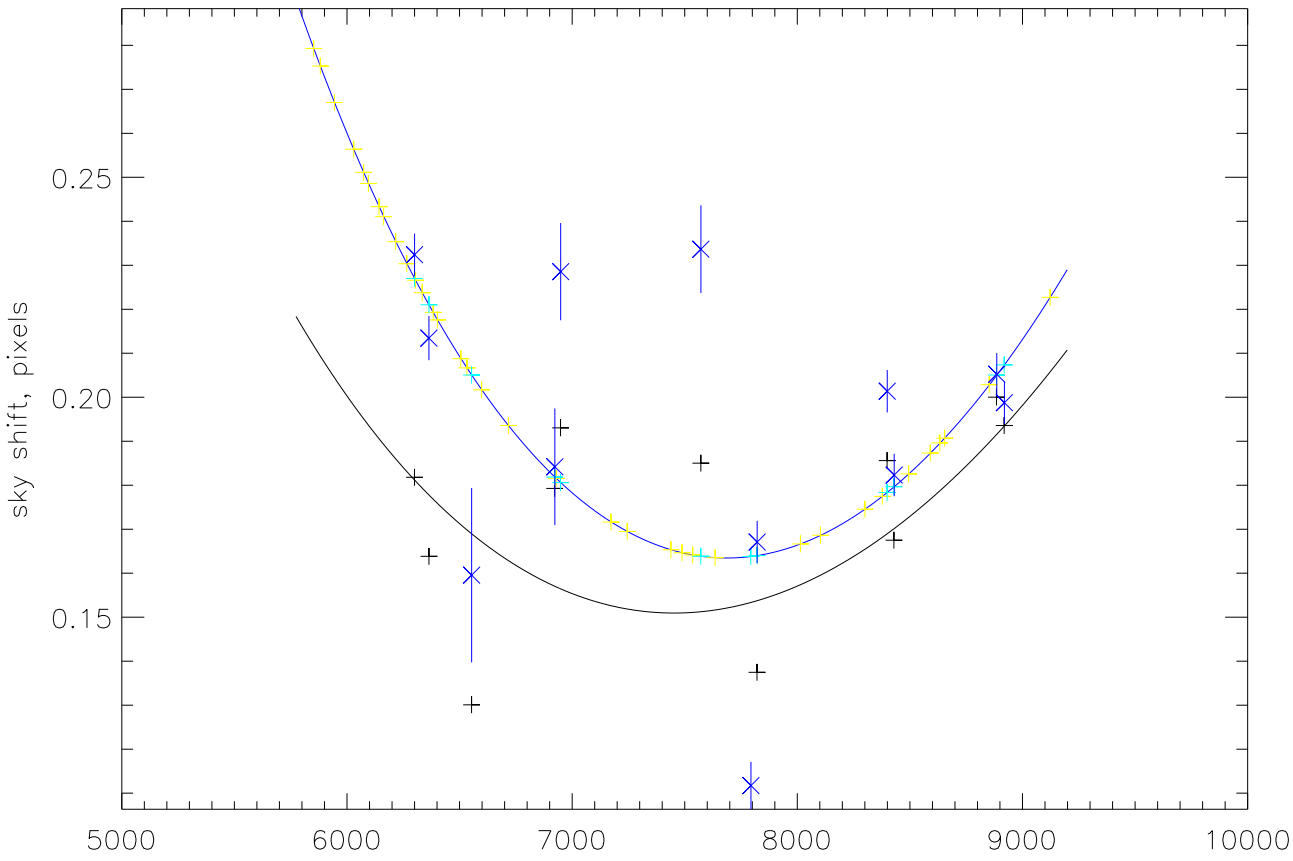

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

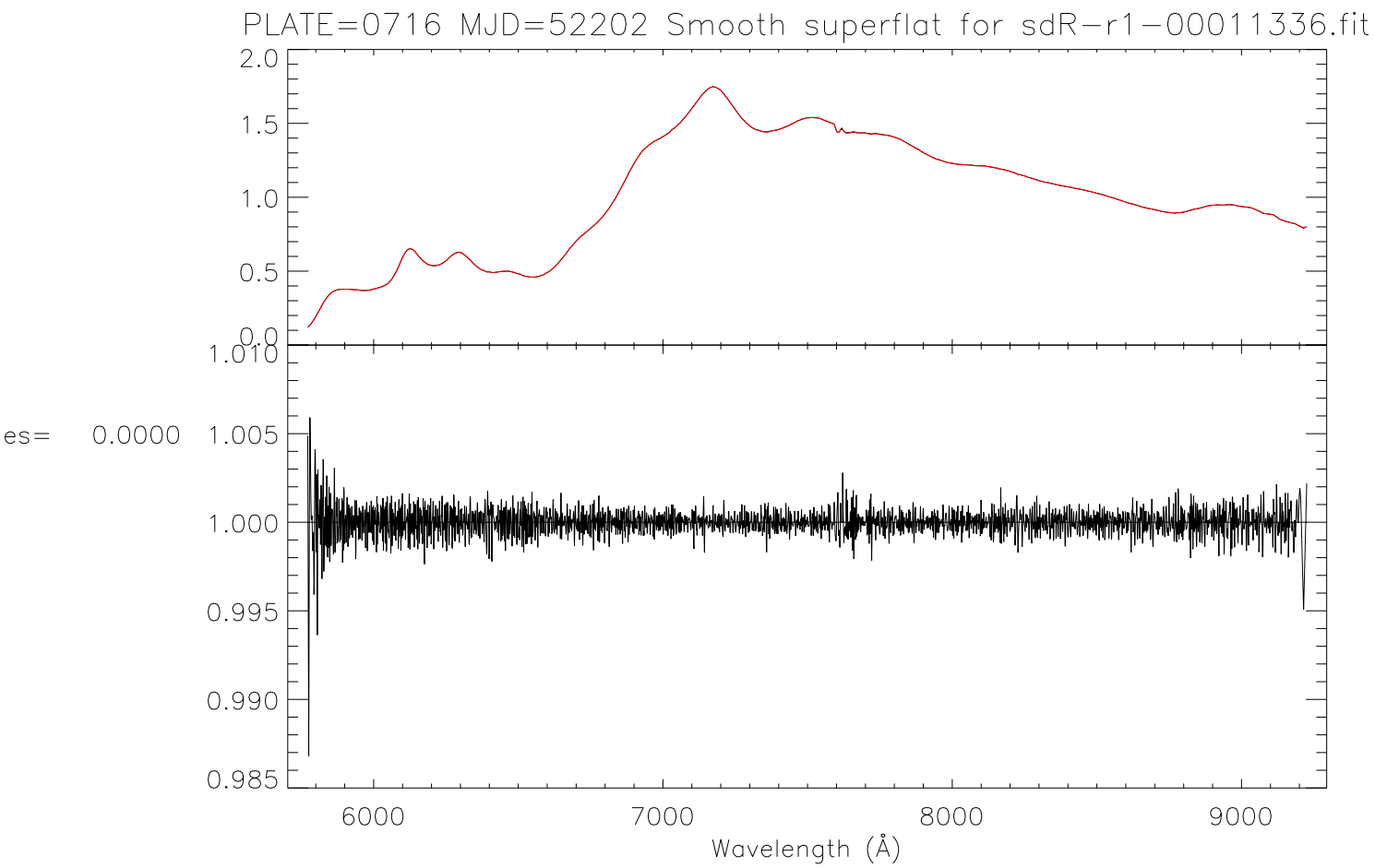

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

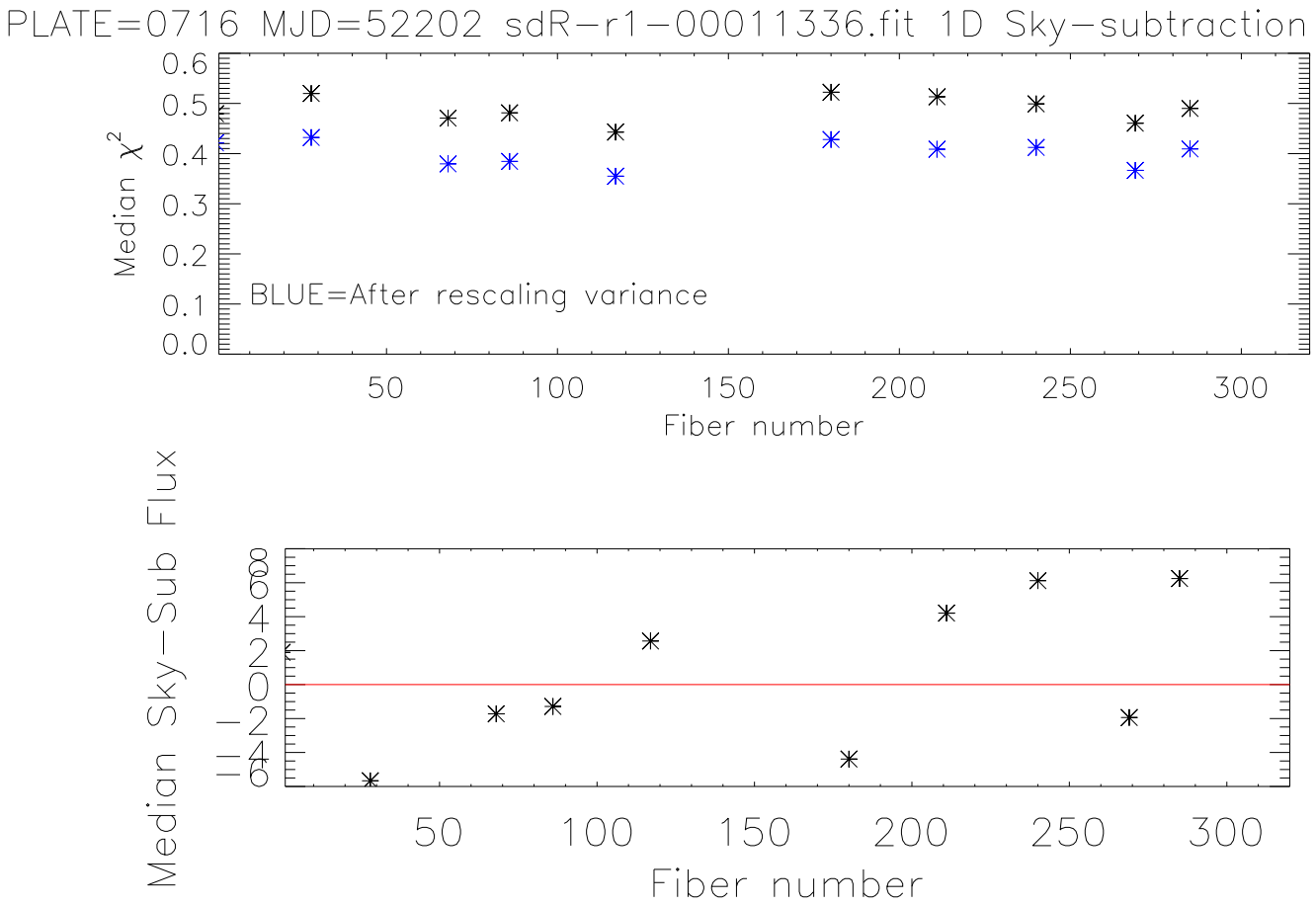

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

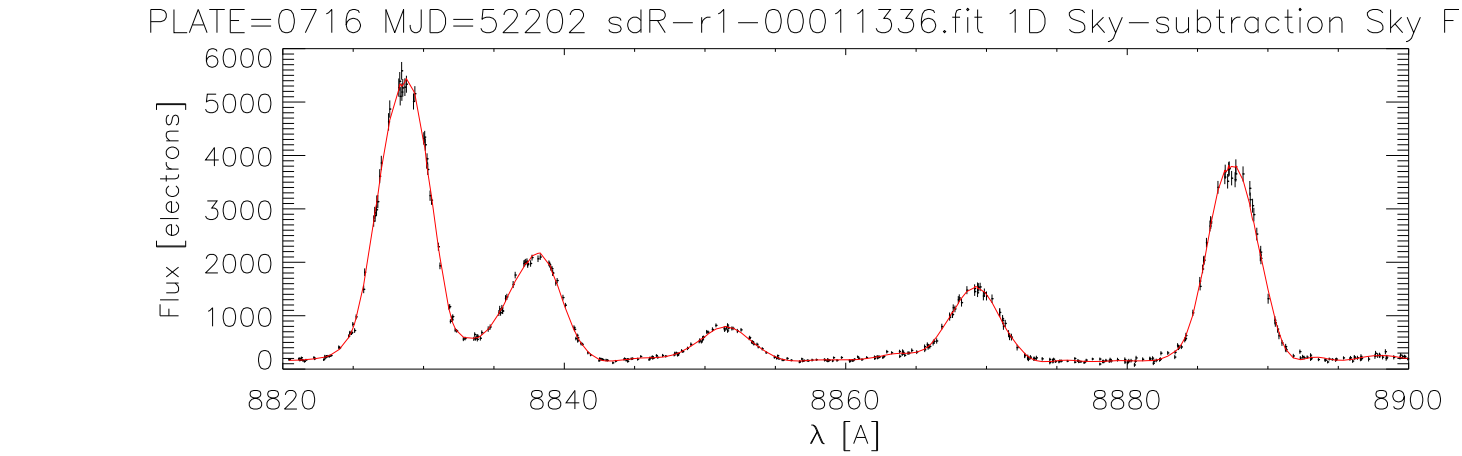

6300.3040
stdev 0.016
extra 0.23
6363.7760
stdev 0.017
extra 0.21
6553.6100
stdev 0.035
extra 0.16
6923.2100
stdev 0.038
extra 0.18
6949.0300
stdev 0.046
extra 0.23
7571.7500
stdev 0.028
extra 0.23
7794.1200
stdev 0.024
extra 0.11
7821.5100
stdev 0.017
extra 0.17
8399.1600
stdev 0.018
extra 0.20
8430.1700
stdev 0.014
extra 0.18
8885.8300
stdev 0.023
extra 0.21
8919.6100
stdev 0.023
extra 0.20
meas − pred, pix

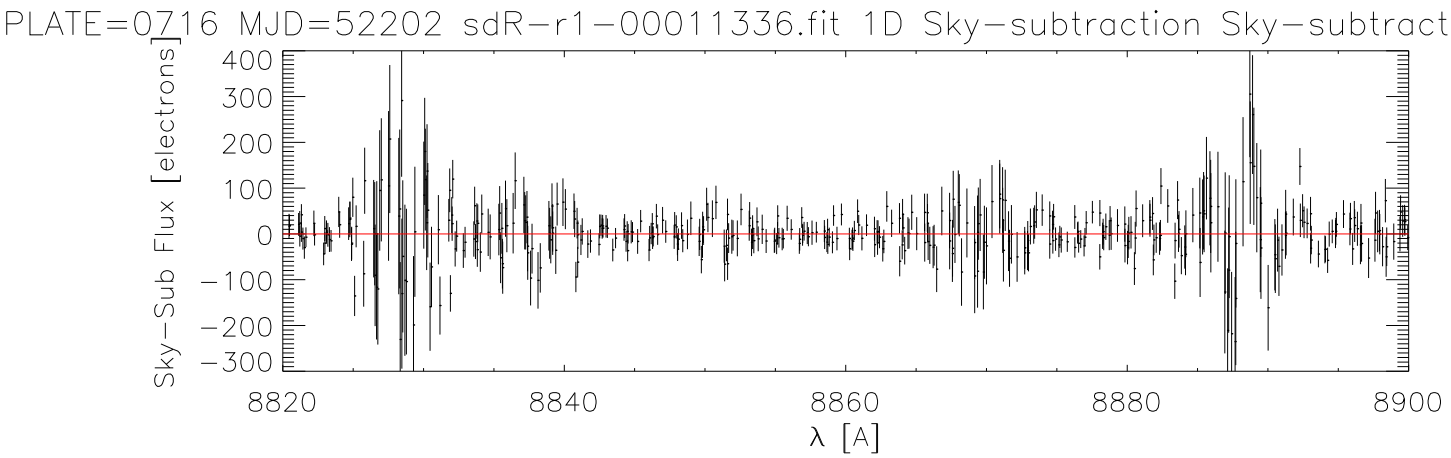

sky shift, pixels
0.25
0.20
0.15
5000
6000
7000
8000
9000
10000

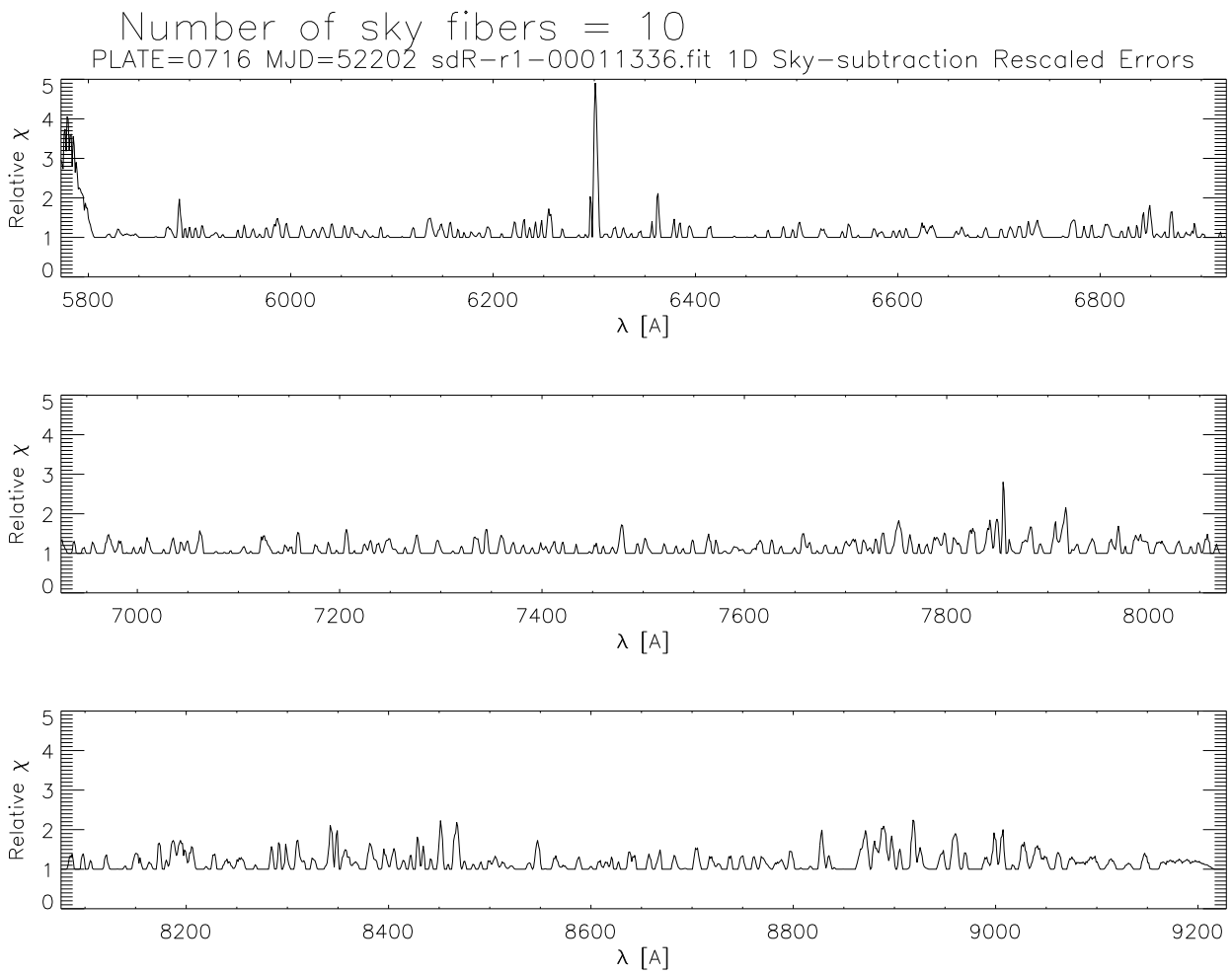

PLATE=0716 MJD=52202 Smooth superflat for sdR-r1-00011336.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

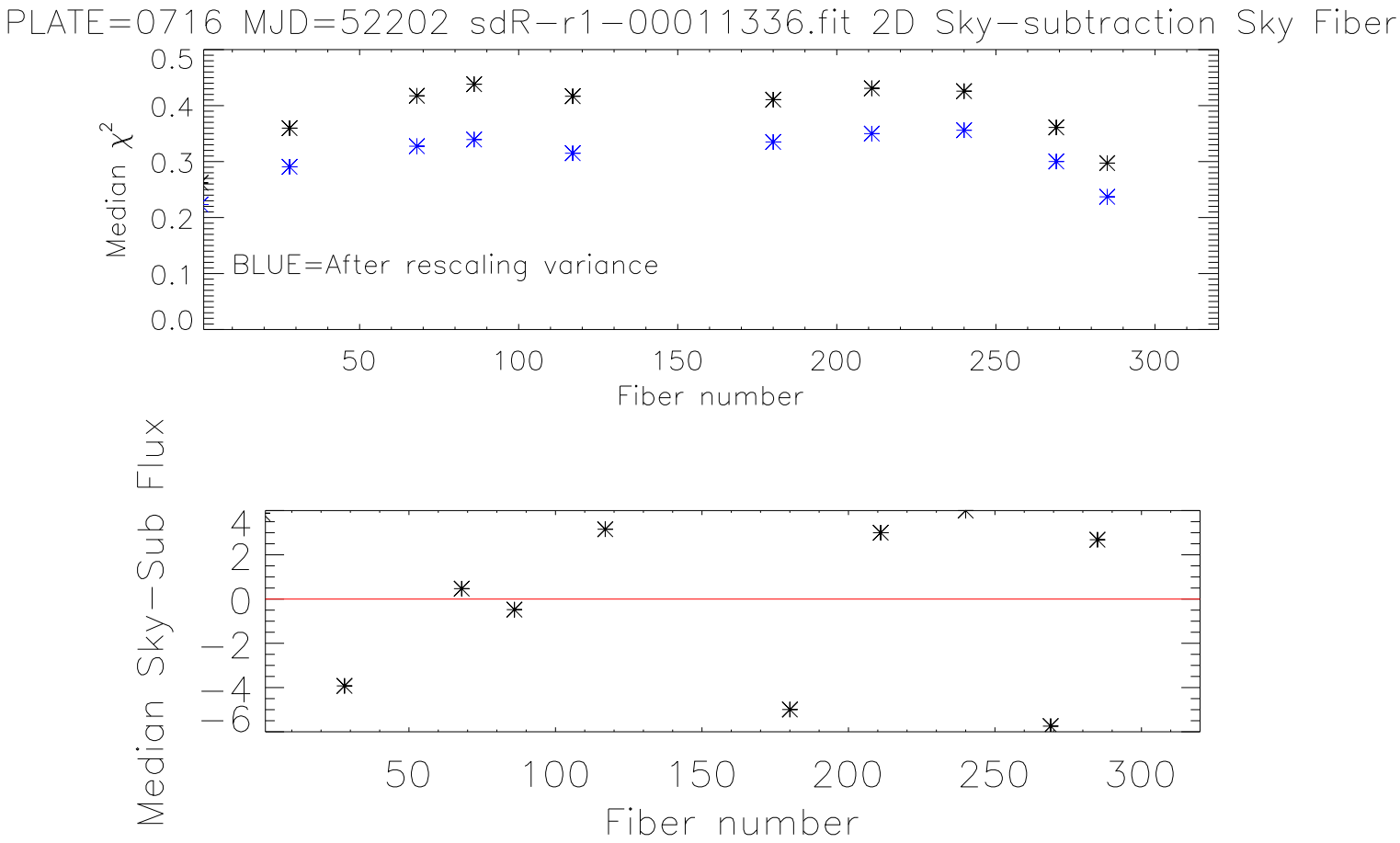
es= 0.0000

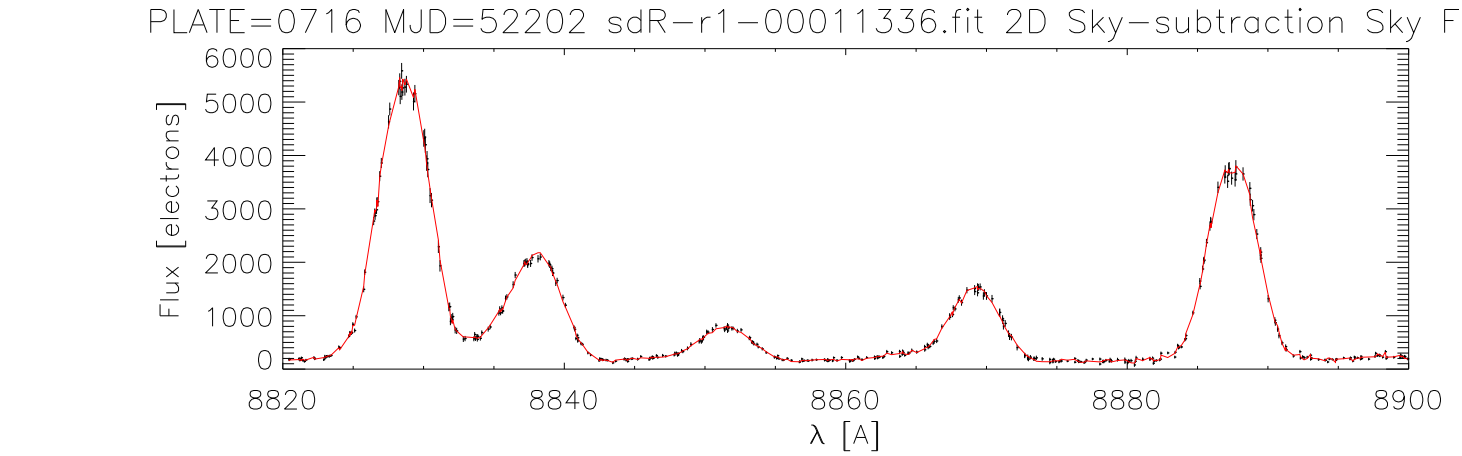

PLATE=0716 MJD=52202 sdR-r1-00011336.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

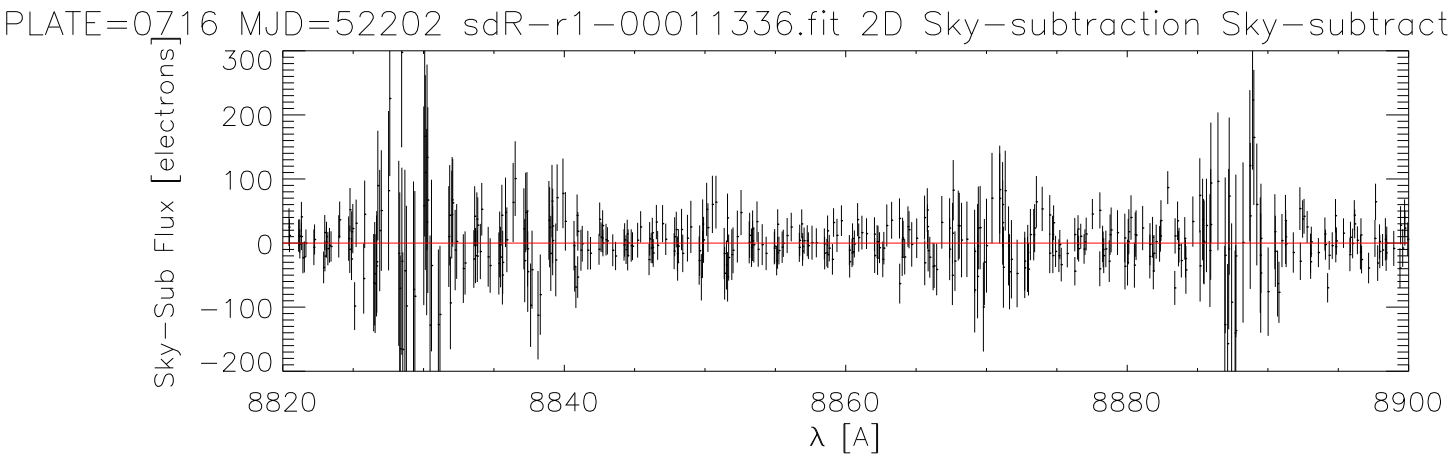

PLATE=0716 MJD=52202 sdR-r1-00011336.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

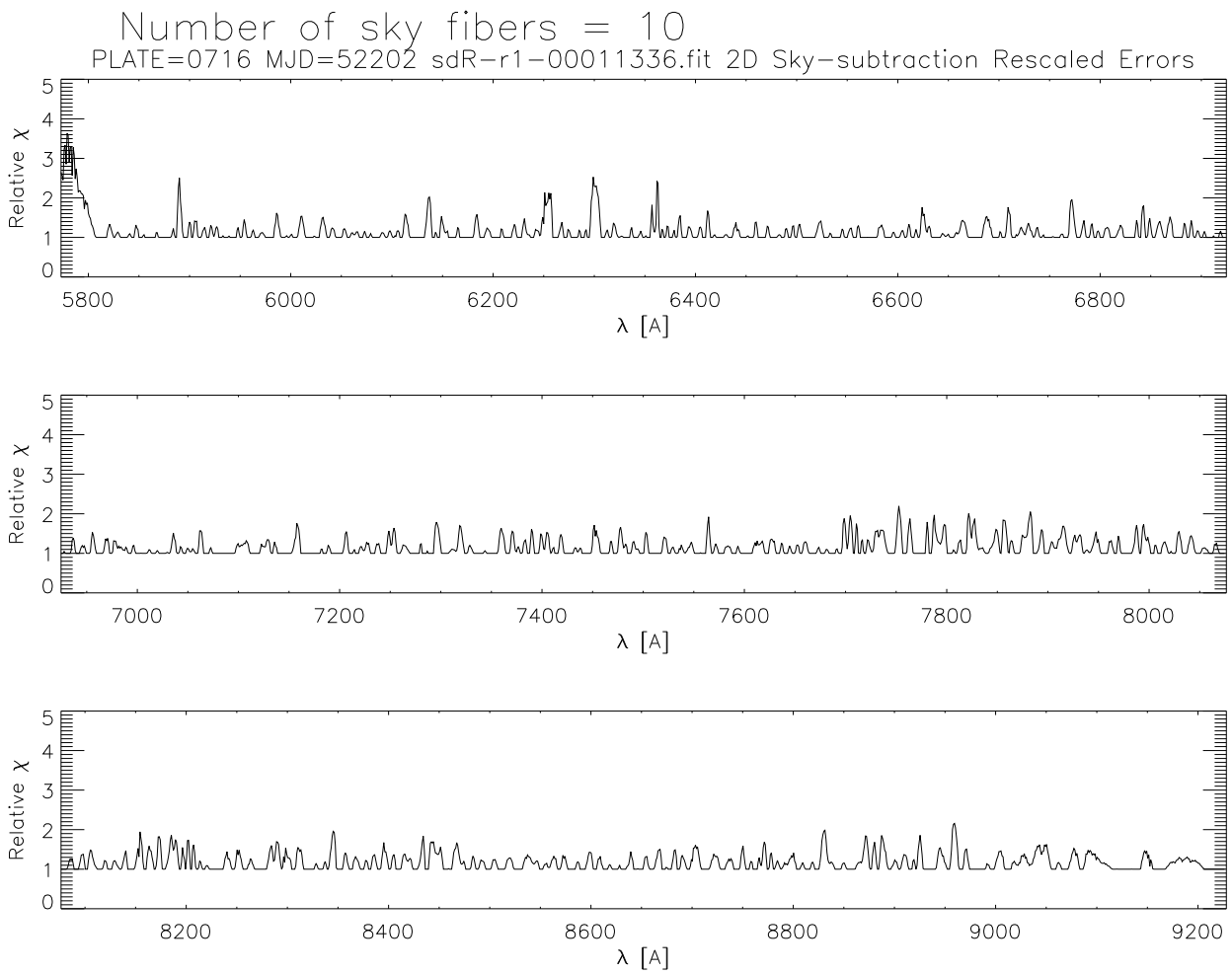

PLATE=0716 MJD=52202 sdR-r1-00011336.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

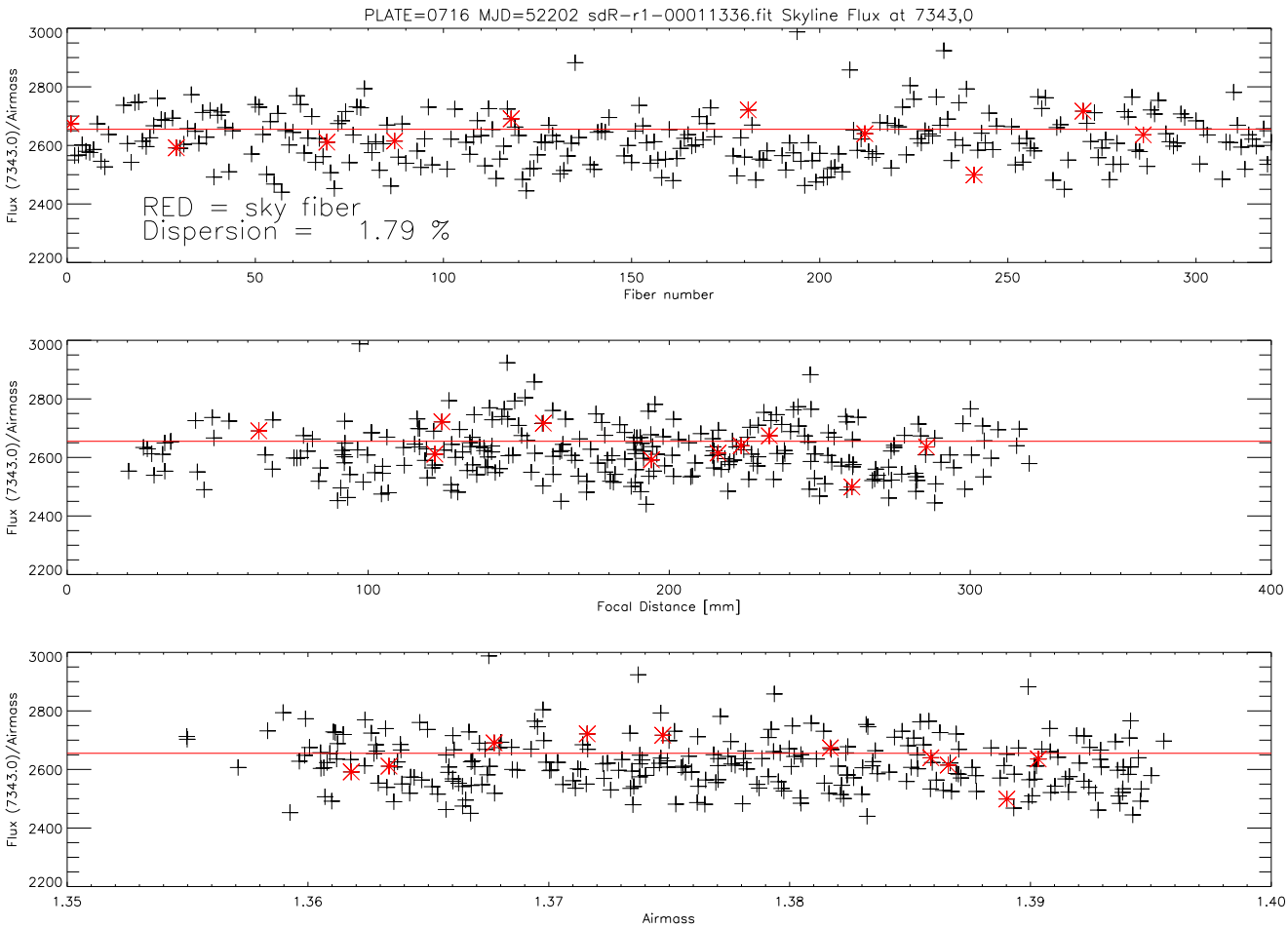

Number of sky fibers = 10
PLATE=0716 MJD=52202 sdR-r1-00011336.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

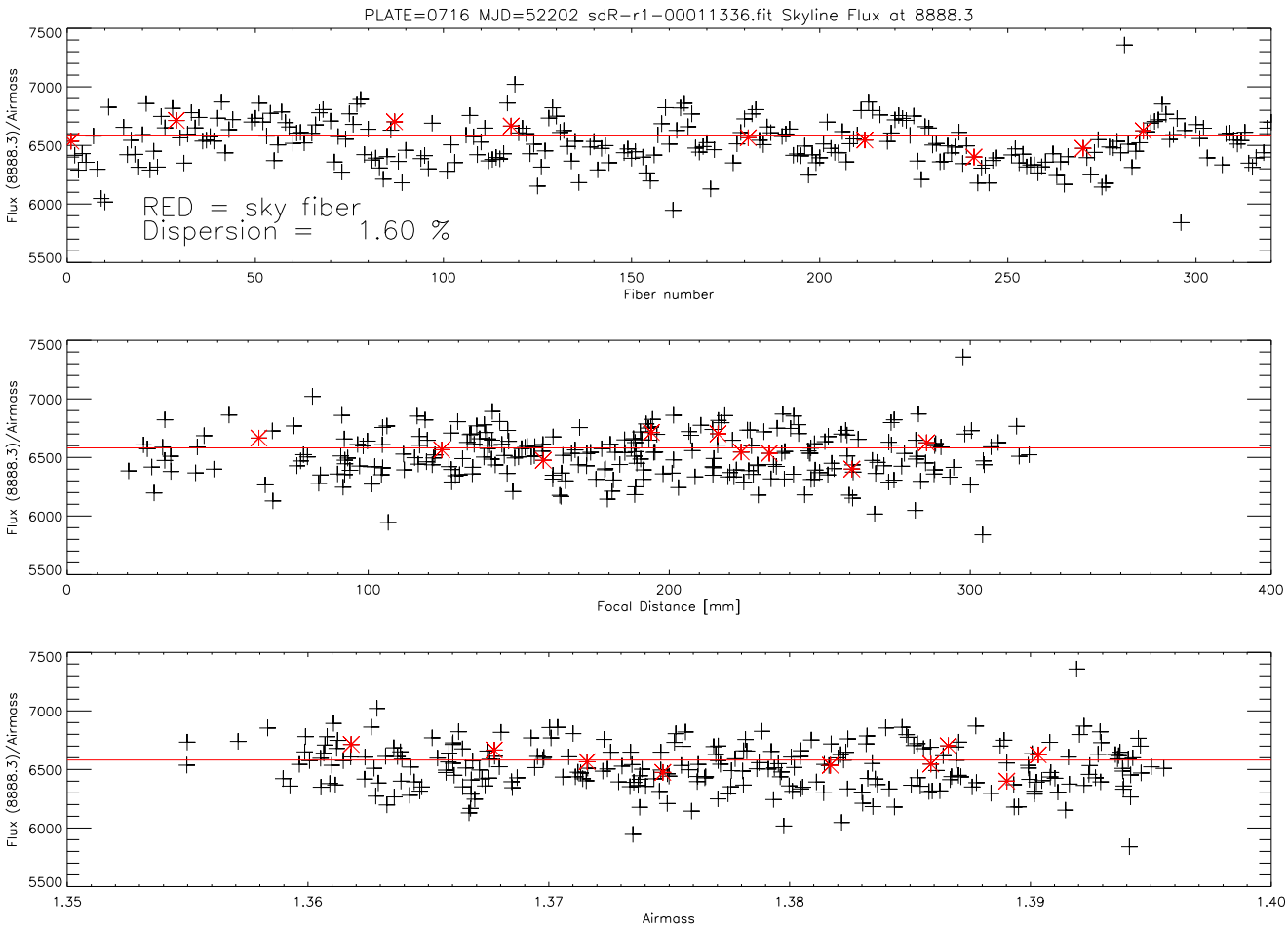

PLATE=0716 MJD=52202 sdR-r1-00011336.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

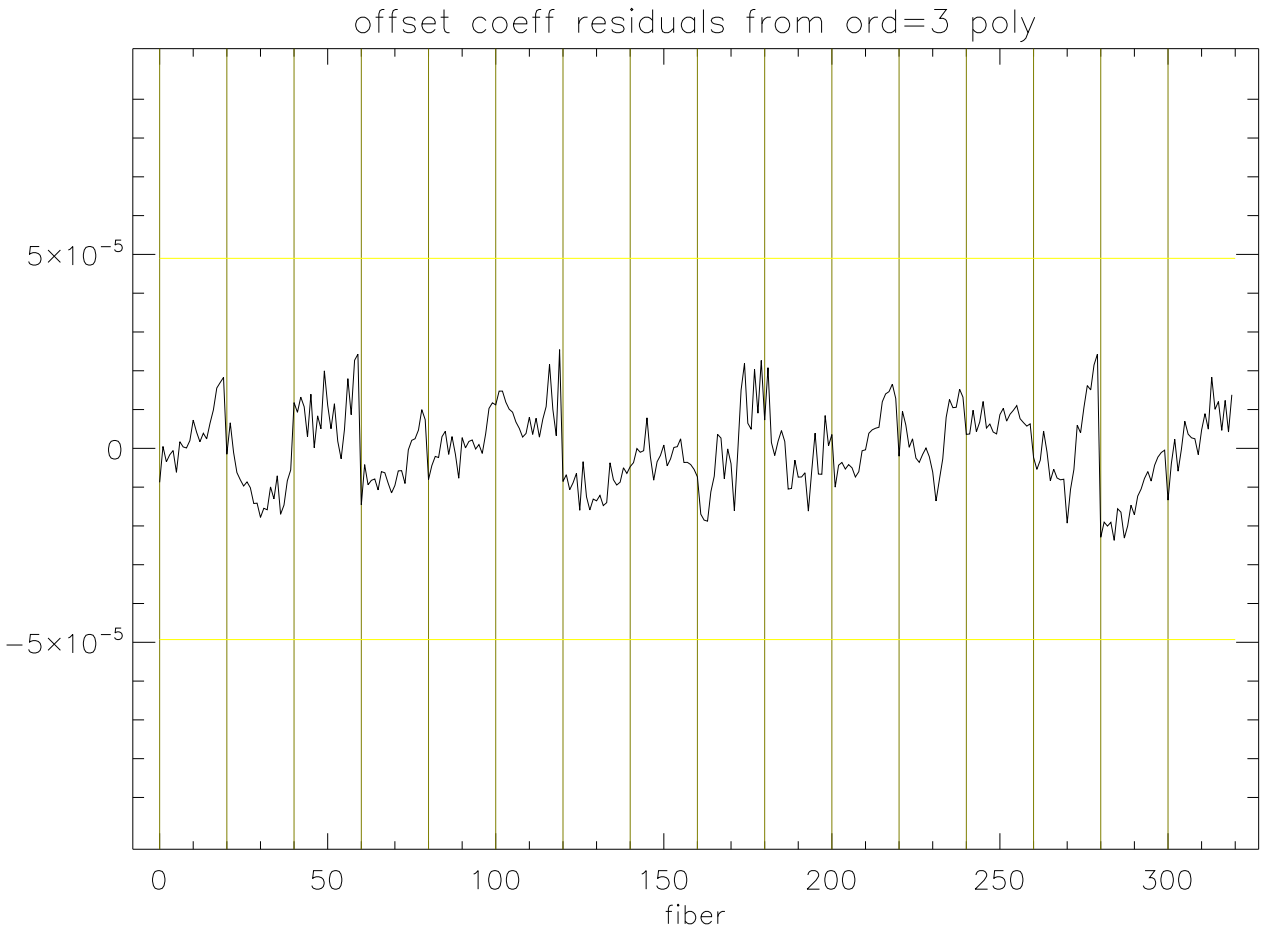

PLATE=0716 MJD=52202 sdR-r1-00011336.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

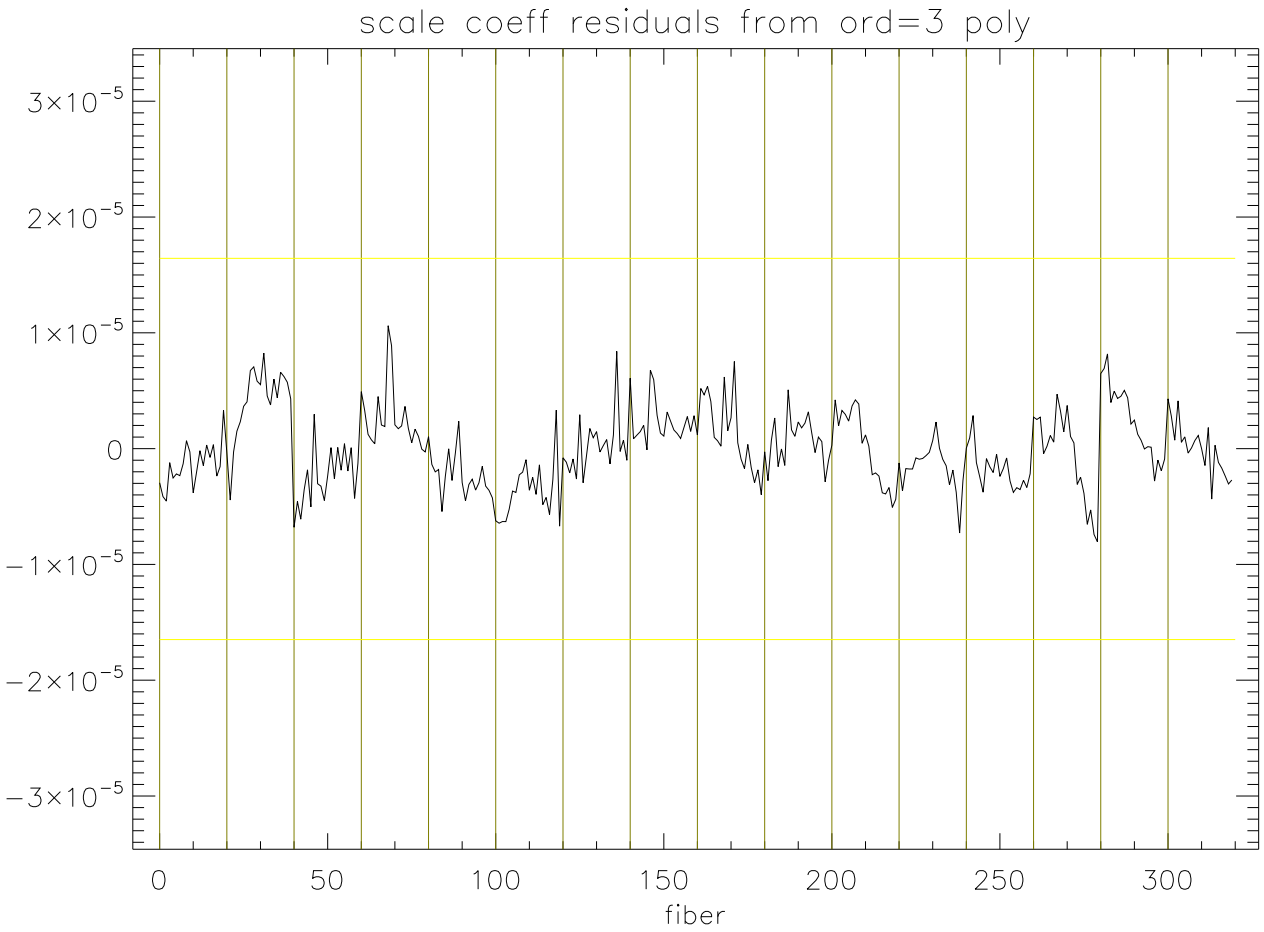

PLATE=0716 MJD=52202 sdR-r1-00011336.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

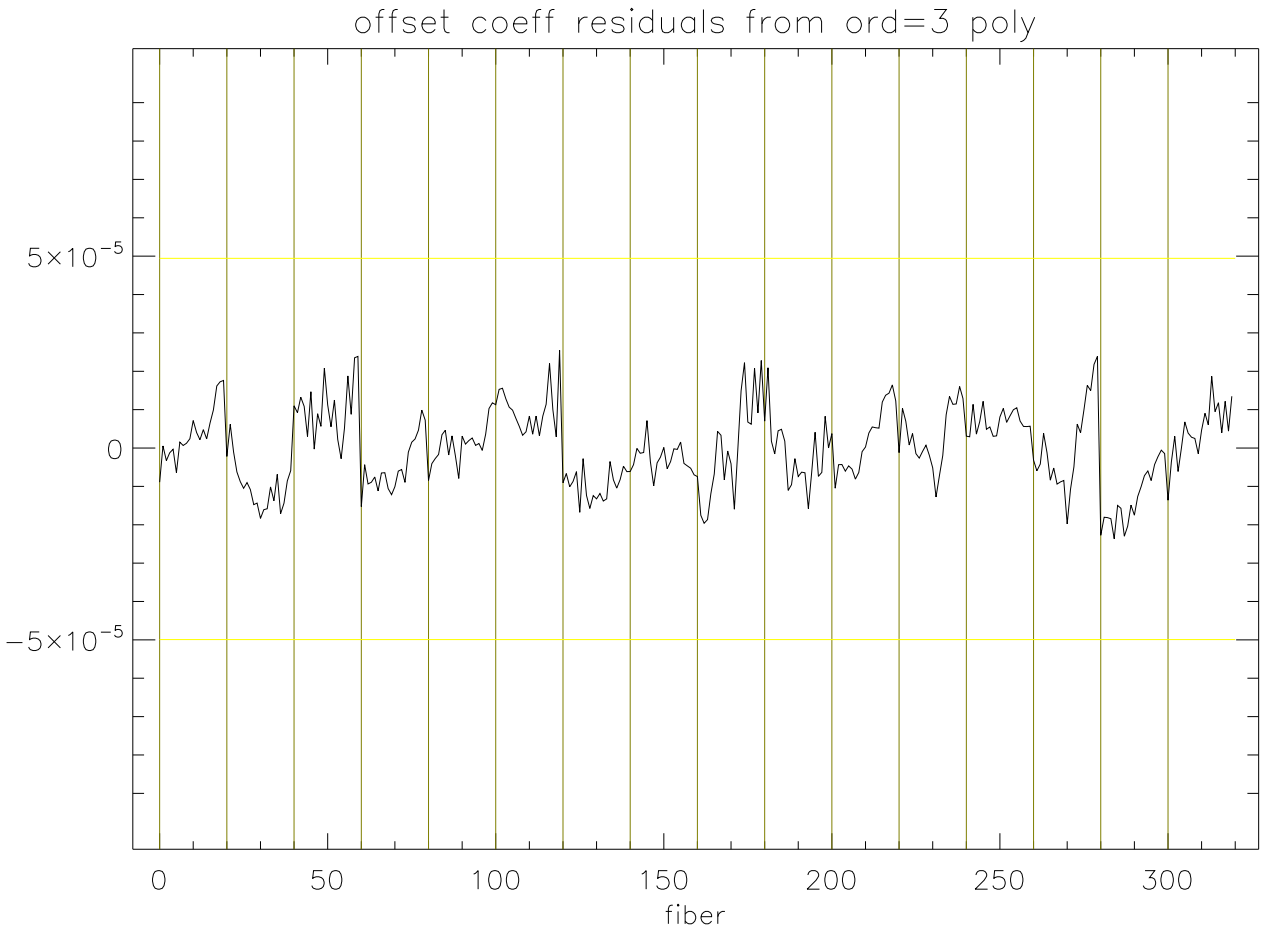

Number of sky fibers = 10
PLATE=0716 MJD=52202 sdR-r1-00011336.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

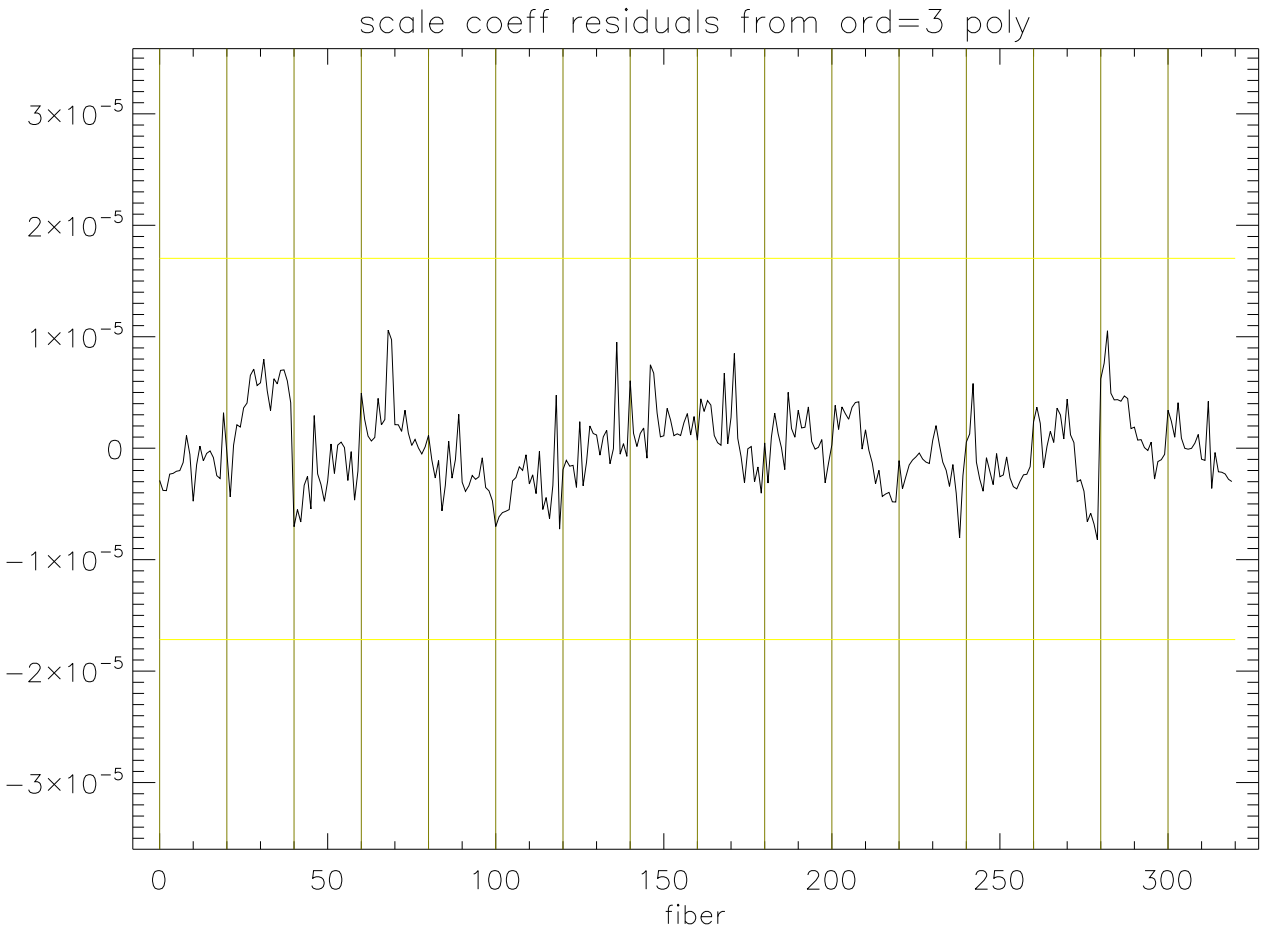

PLATE=0716 MJD=52202 sdR-r1-00011336.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.79 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

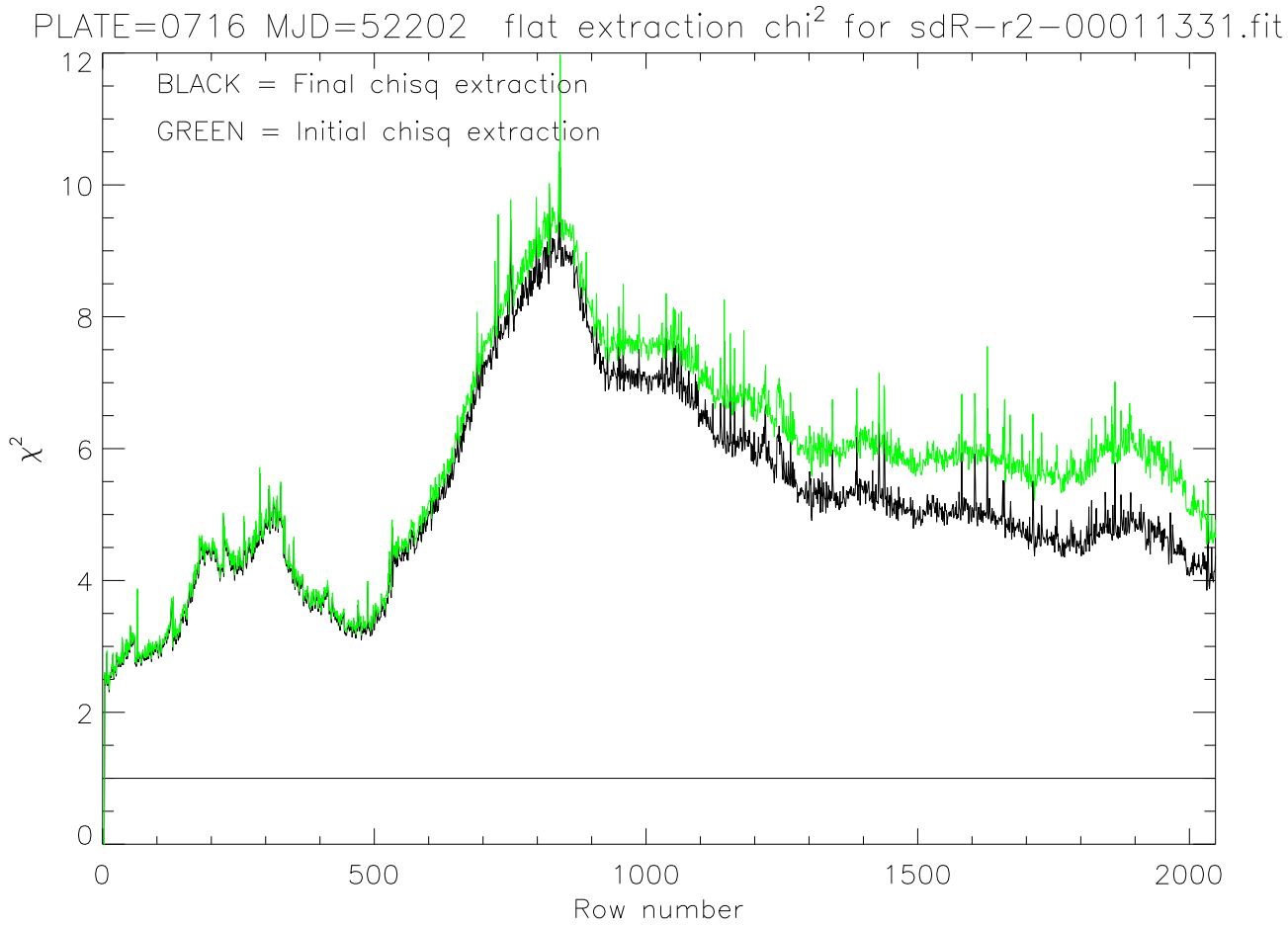

PLATE=0716 MJD=52202 sdR-r1-00011336.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.60 %
Fiber number
Focal Distance [mm]
Airmass

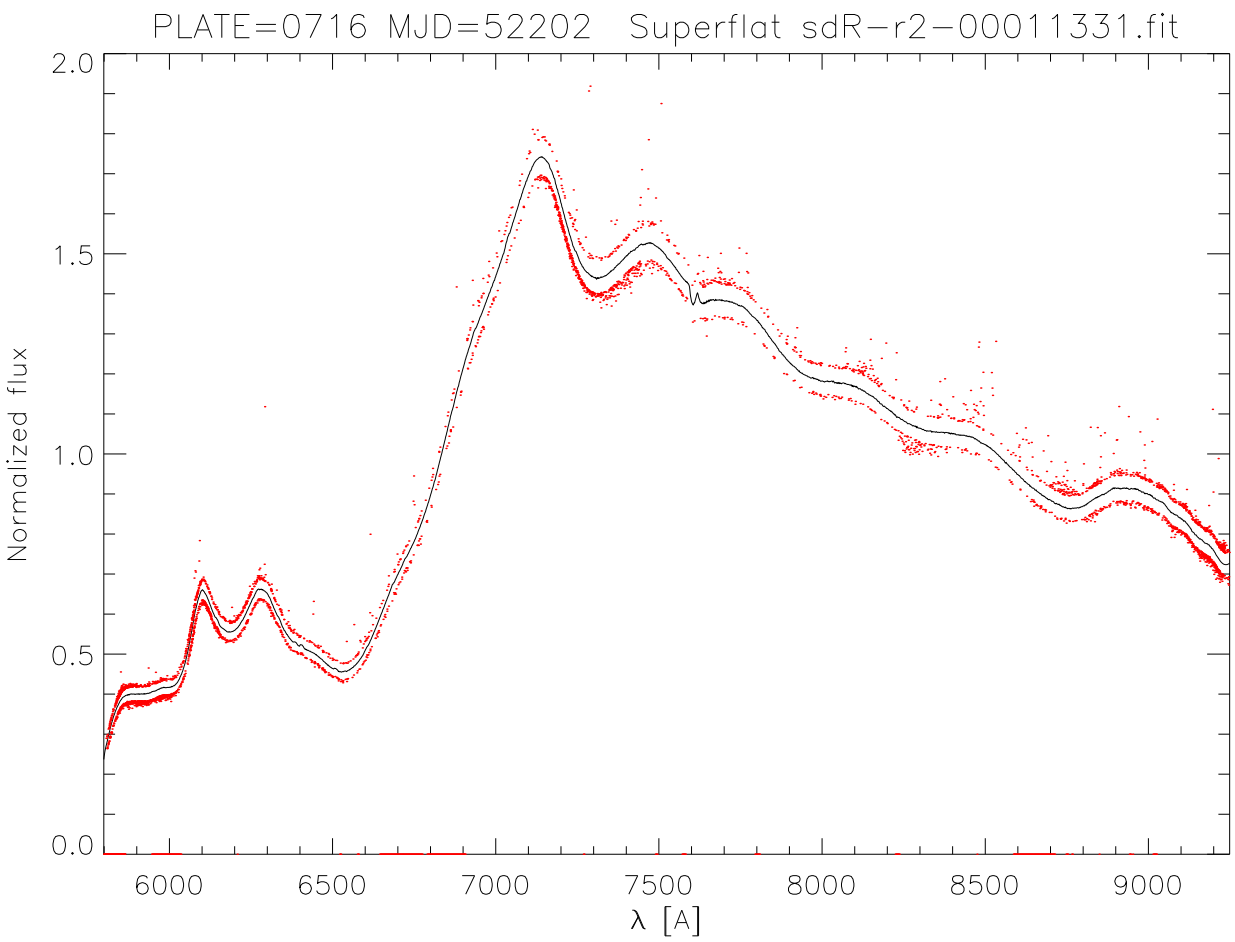

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

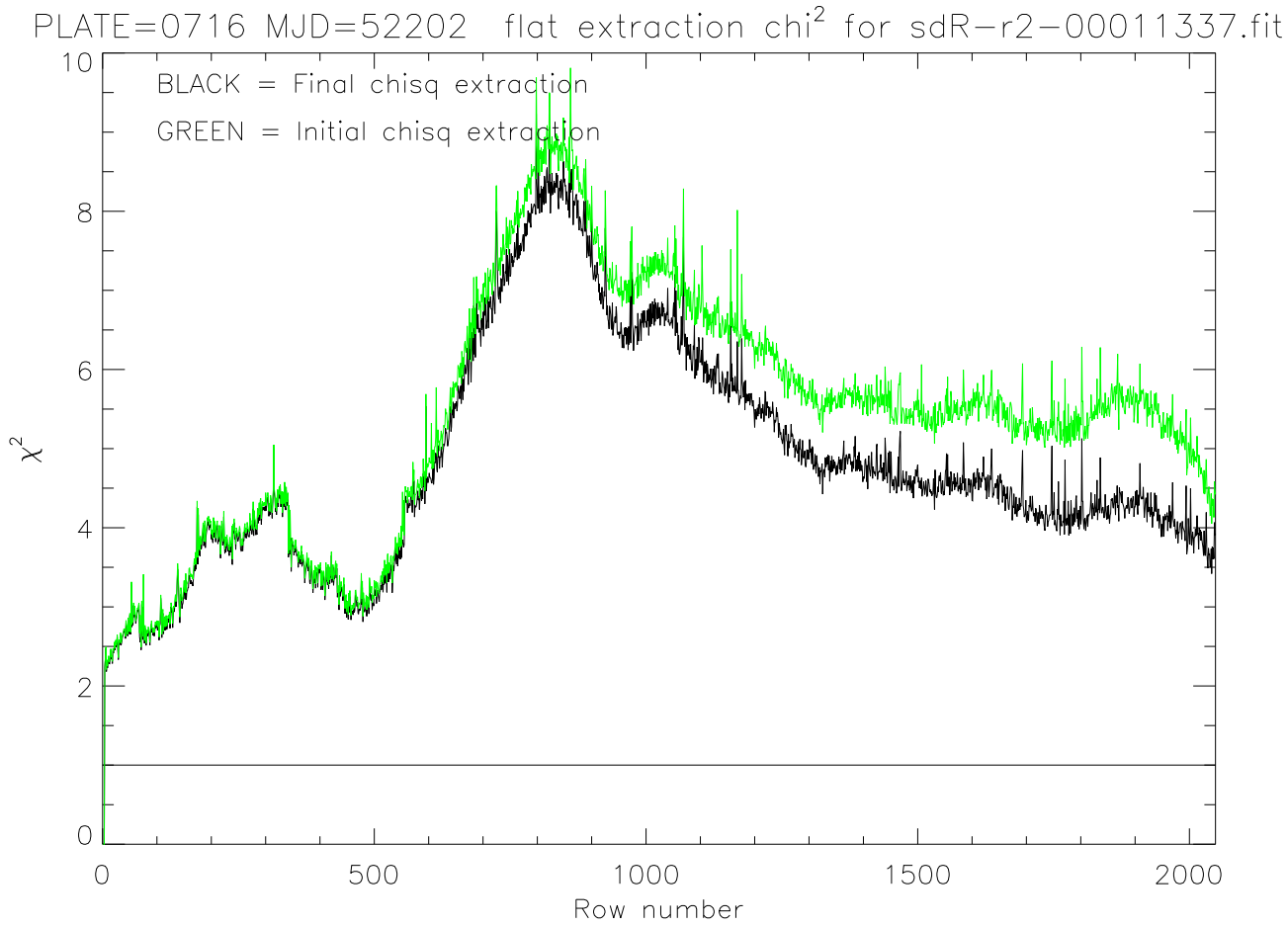

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

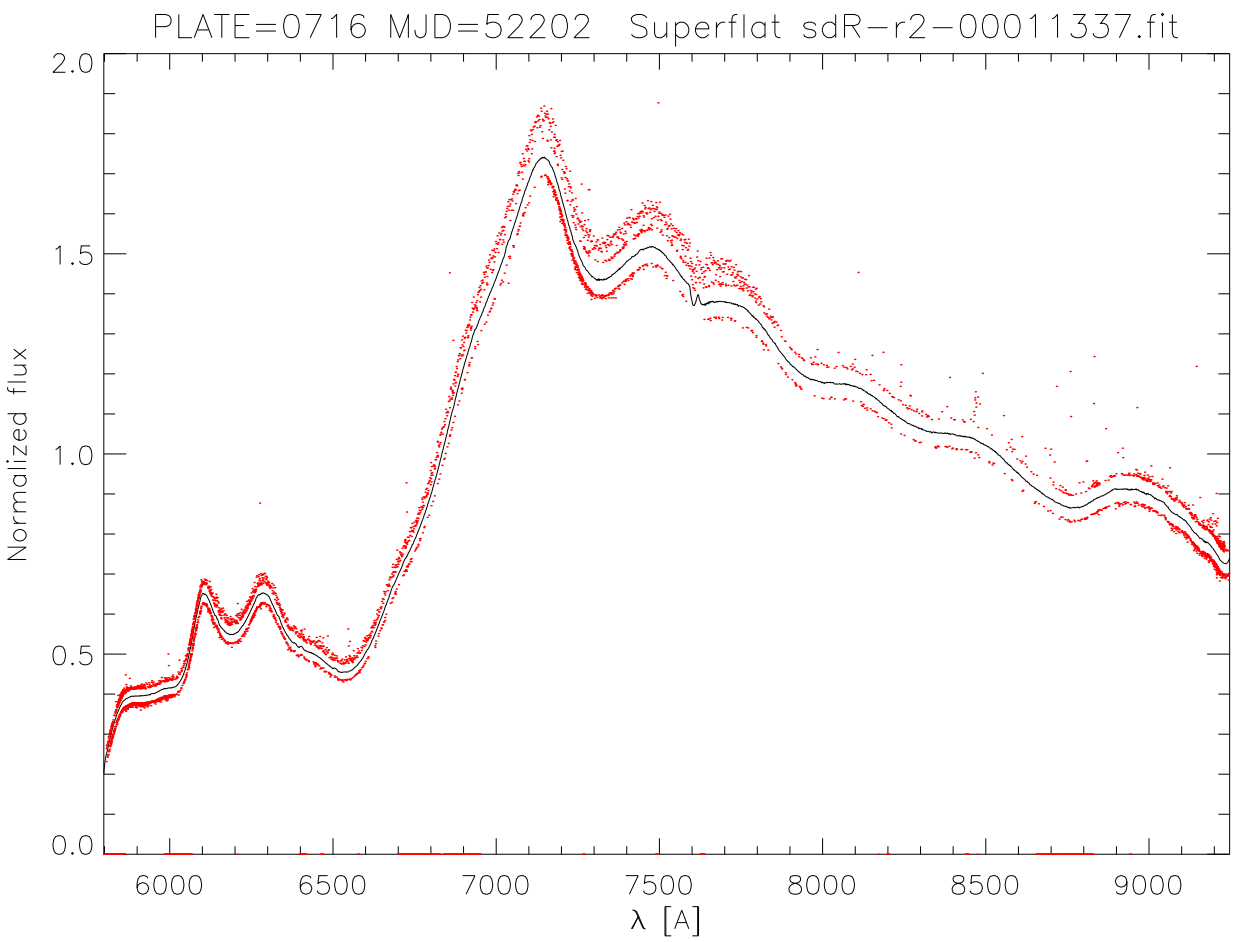

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

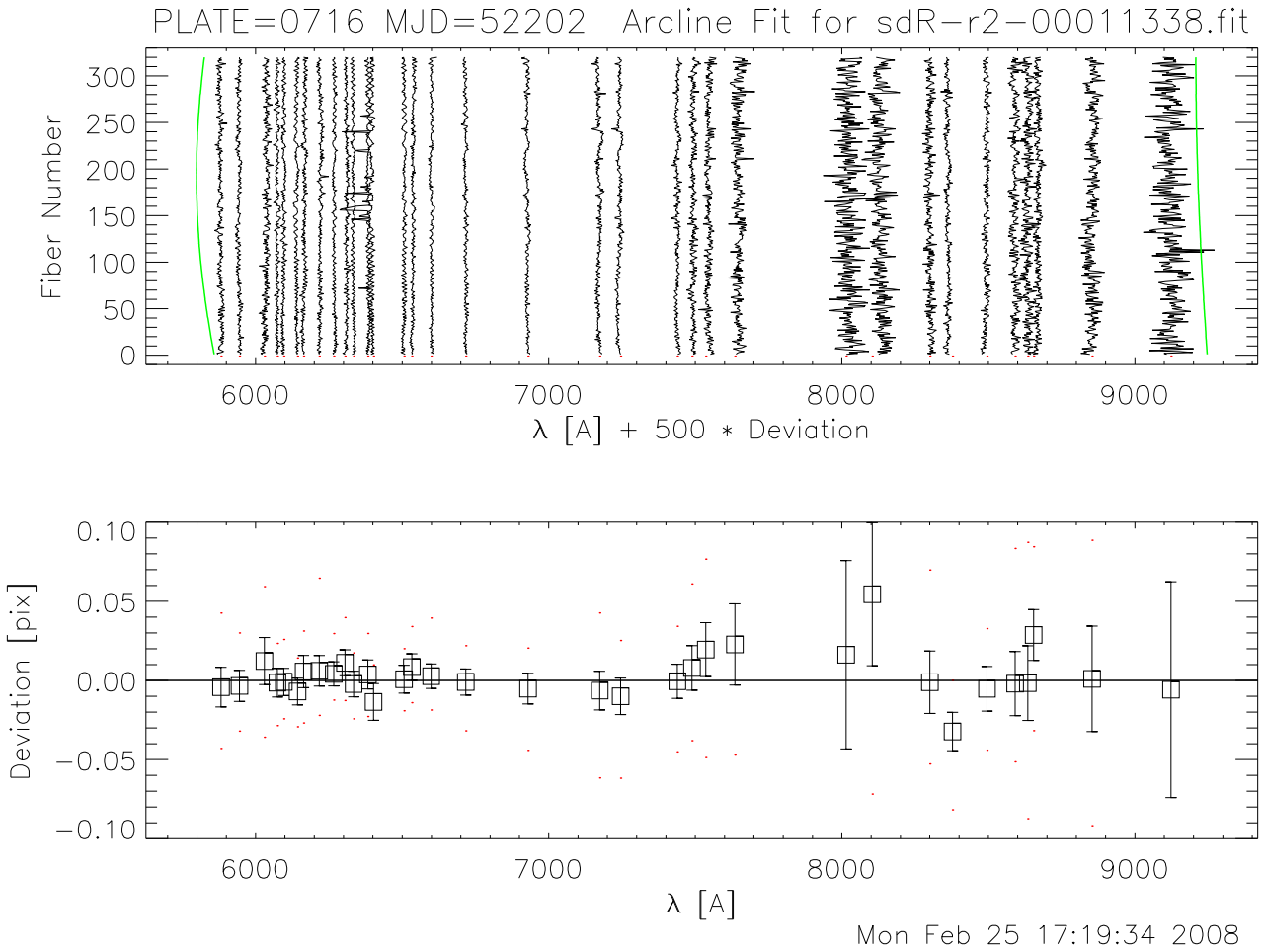

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

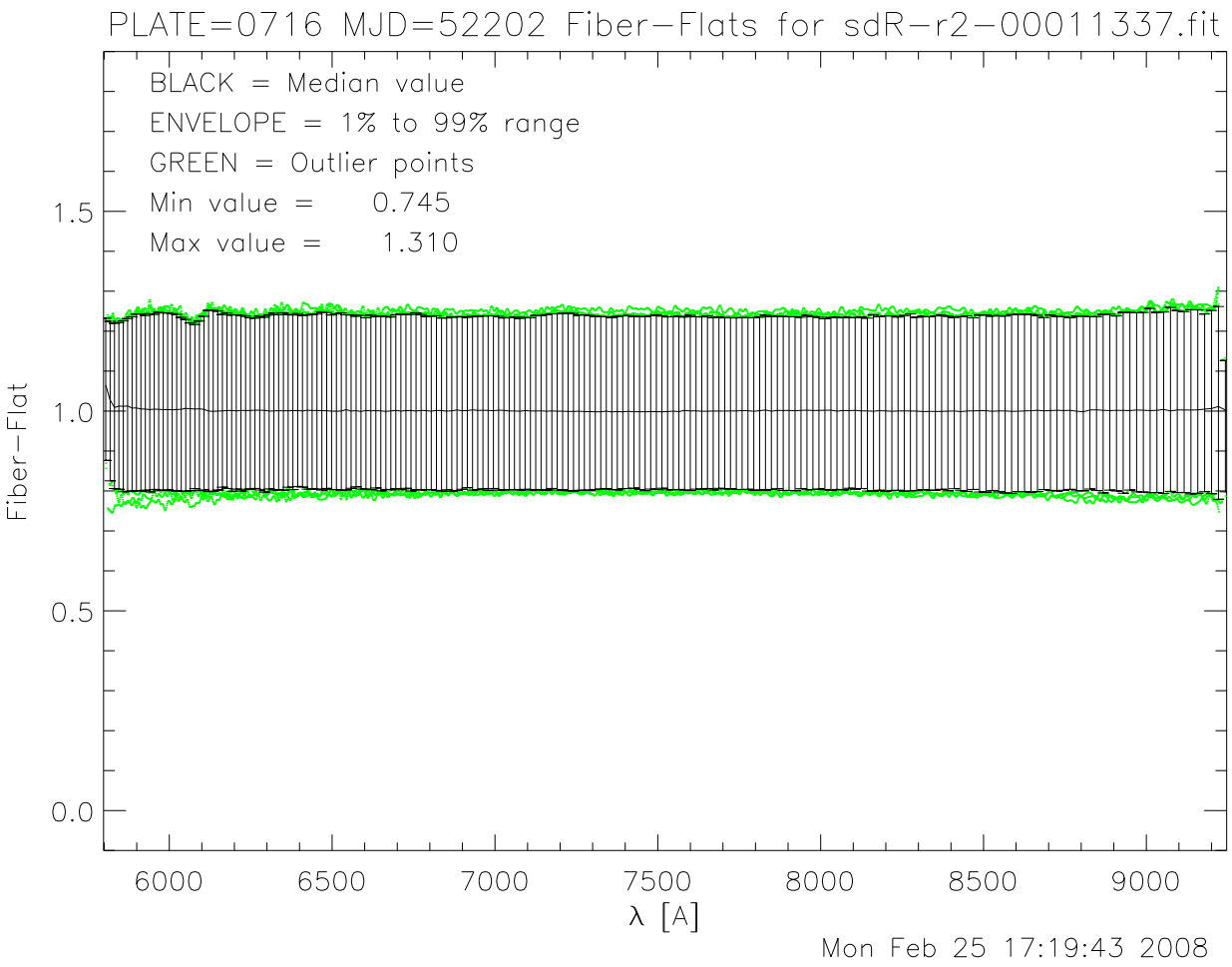

PLATE=0716 MJD=52202 flat extraction chi^2 for sdR−r2−00011331.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

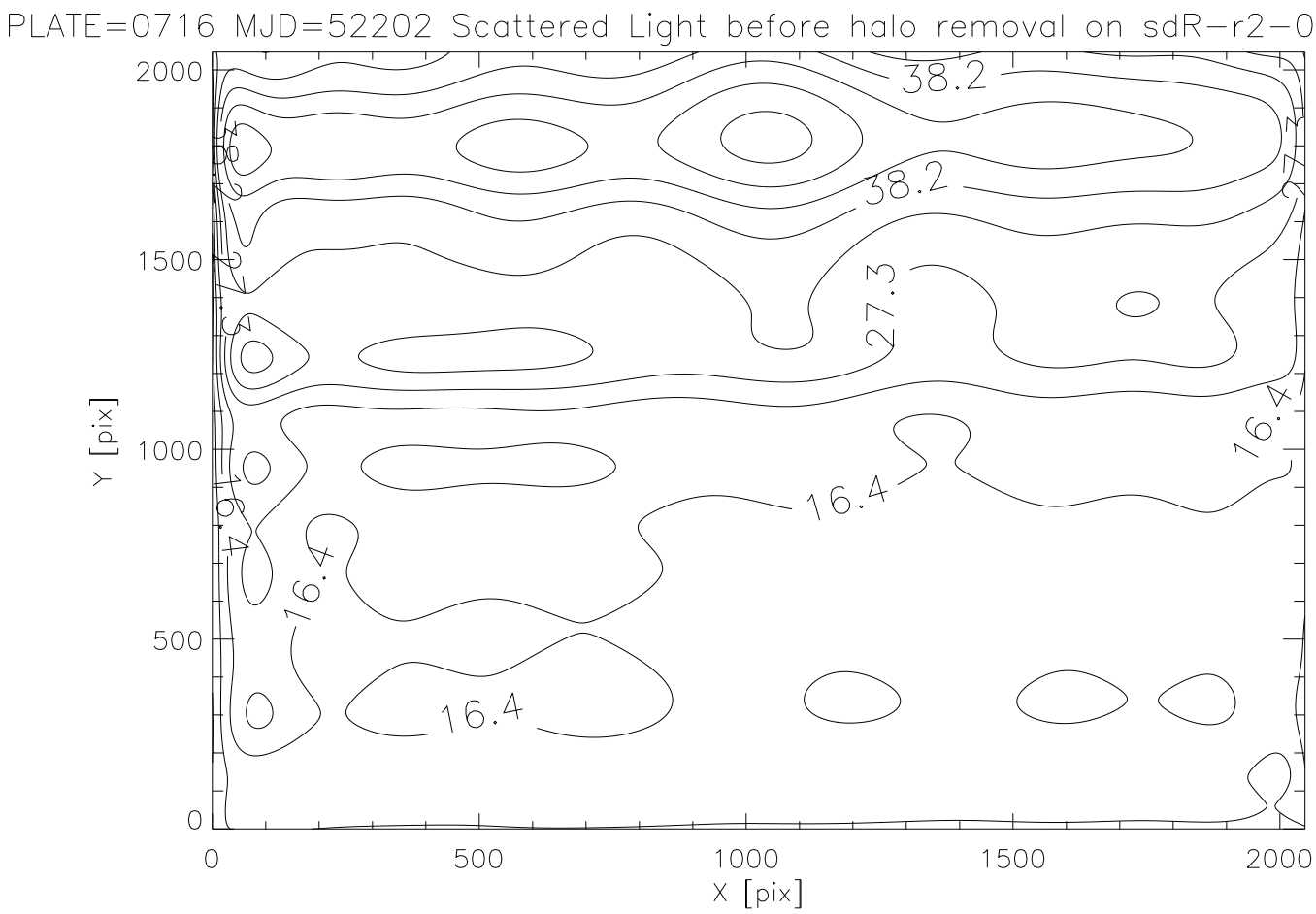

PLATE=0716 MJD=52202 Superflat sdR-r2-00011331.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

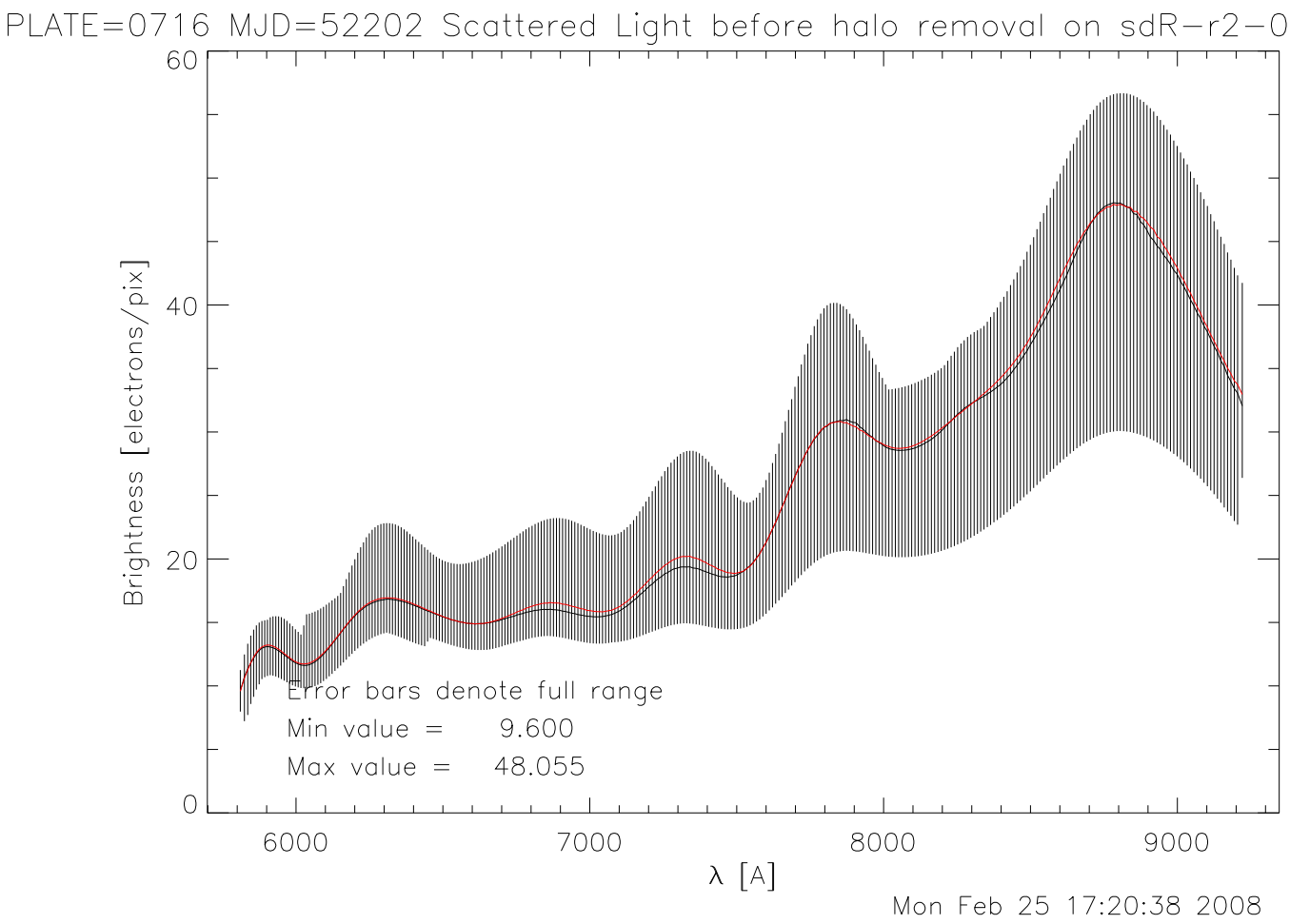

PLATE=0716 MJD=52202 flat extraction chi^2 for sdR−r2−00011337.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

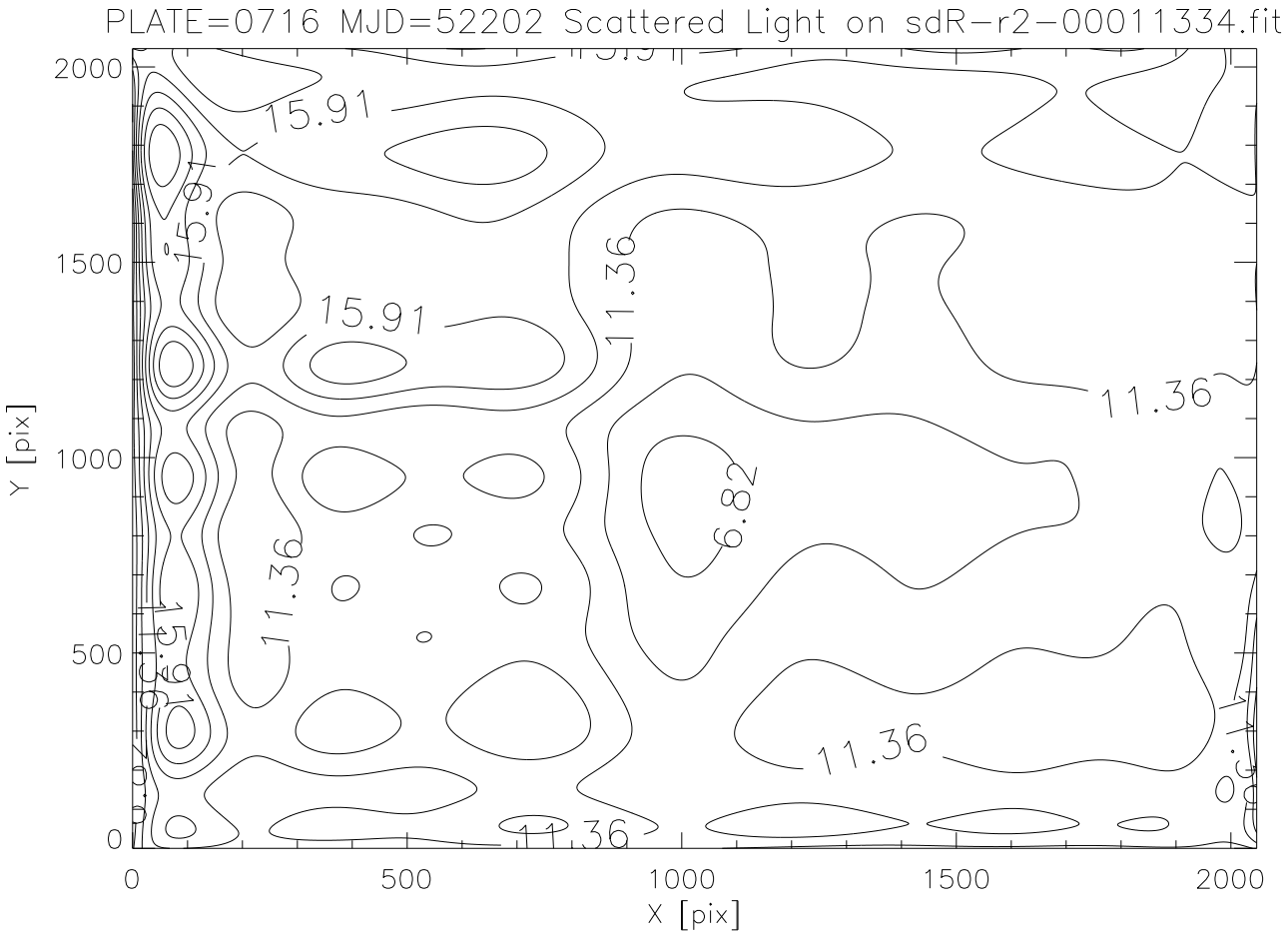

PLATE=0716 MJD=52202 Superflat sdR-r2-00011337.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

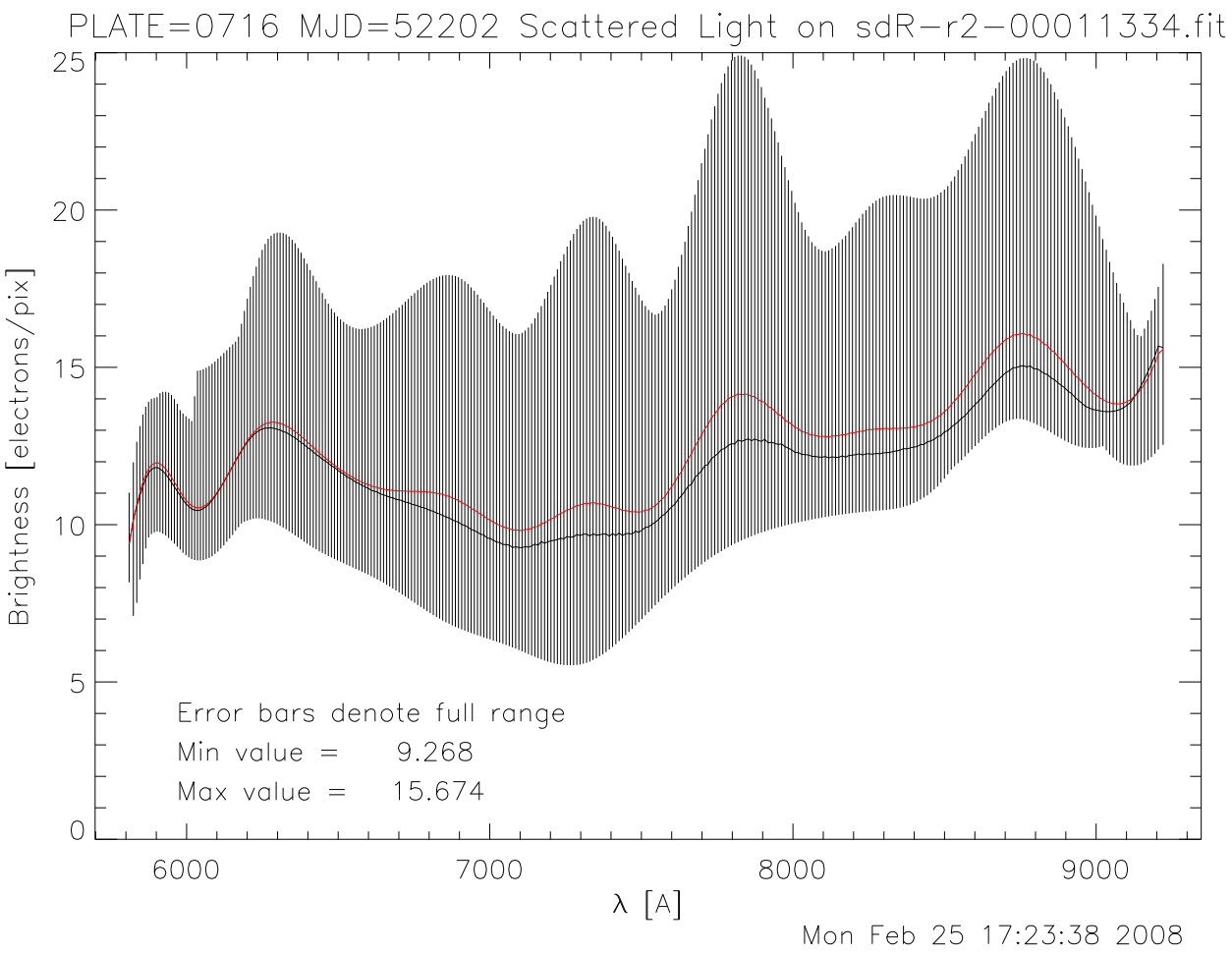

PLATE=0716 MJD=52202 Arcline Fit for sdR-r2-00011338.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 25 17:19:34 2008

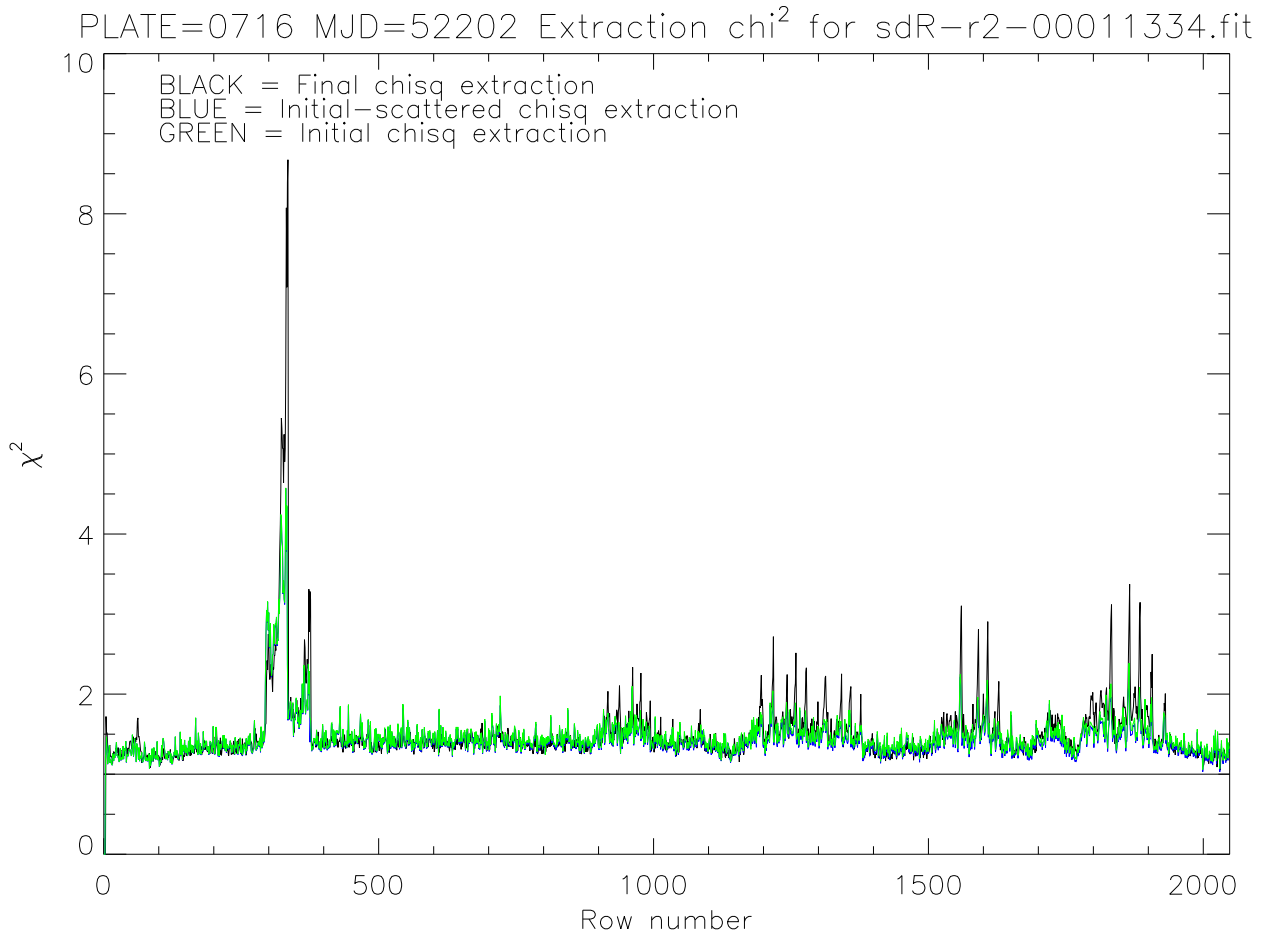

PLATE=0716 MJD=52202 Fiber−Flats for sdR−r2−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.745
Max value = 1.310
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 17:19:43 2008

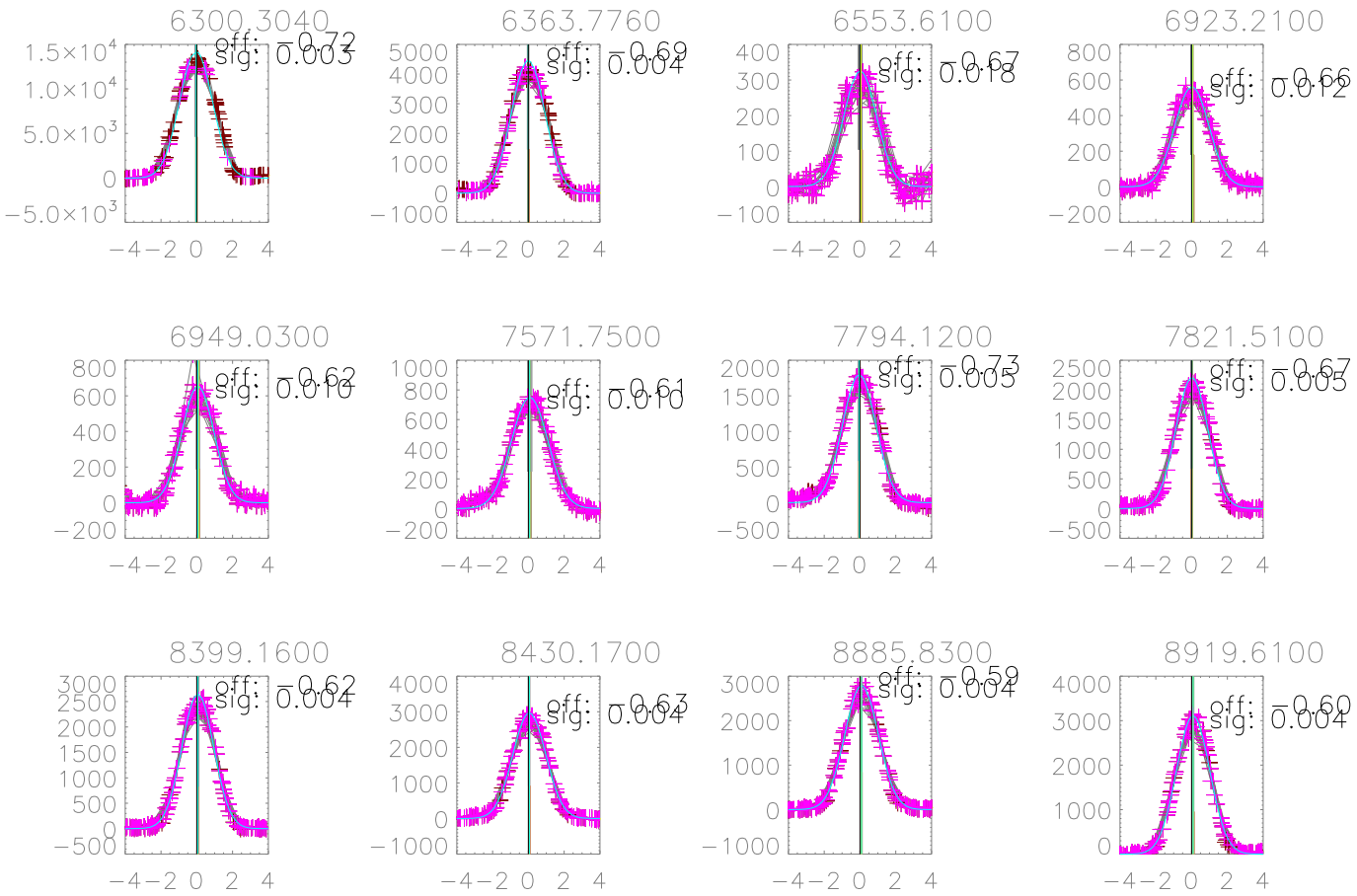

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r2-00011334.fi
38.2
38.2
27.3
27.3
16.4
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

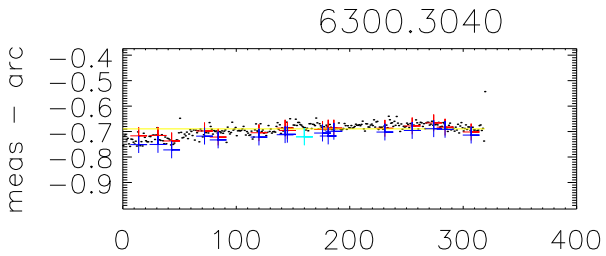

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r2-00011334.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.600
Max value = 48.055
Mon Feb 25 17:20:38 2008

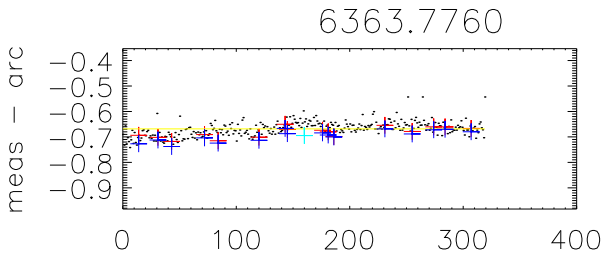

PLATE=0716 MJD=52202 Scattered Light on sdR-r2-00011334.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
15.91
11.36
6.82

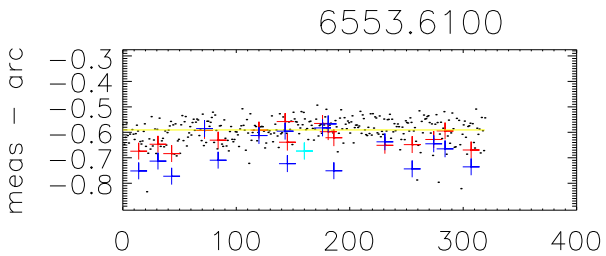

PLATE=0716 MJD=52202 Scattered Light on sdR-r2-00011334.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.268
Max value = 15.674
Mon Feb 25 17:23:38 2008

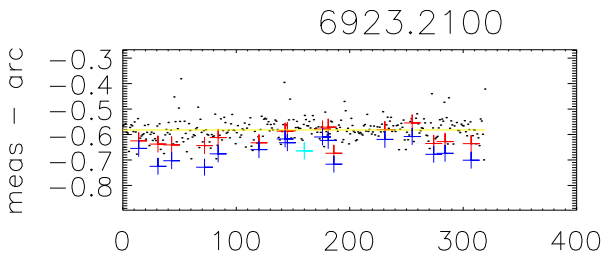

PLATE=0716 MJD=52202 Extraction chi^2 for sdR-r2-00011334.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

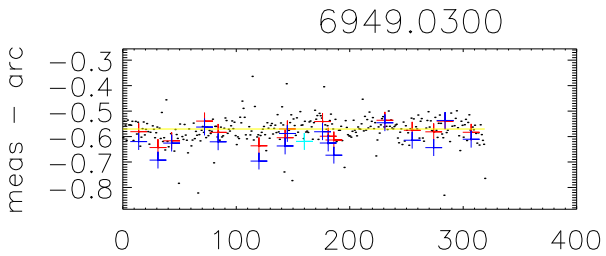

6300.3040
off: −0.72
sig: 0.003
6363.7760
off: −0.69
sig: 0.004
6553.6100
off: −0.67
sig: 0.018
6923.2100
off: −0.66
sig: 0.012
6949.0300
off: −0.62
sig: 0.010
7571.7500
off: −0.61
sig: 0.010
7794.1200
off: −0.73
sig: 0.005
7821.5100
off: −0.67
sig: 0.005
8399.1600
off: −0.62
sig: 0.004
8430.1700
off: −0.63
sig: 0.004
8885.8300
off: −0.59
sig: 0.004
8919.6100
off: −0.60
sig: 0.004

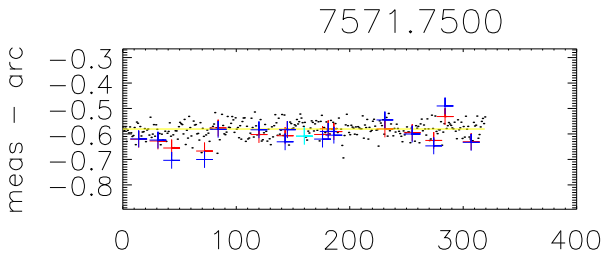

6300.3040
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

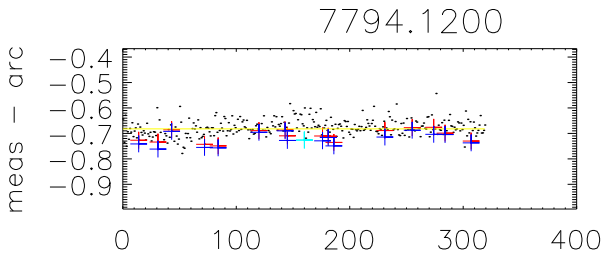

6363.7760
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

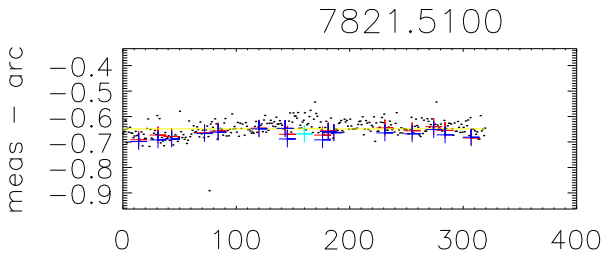

6553.6100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

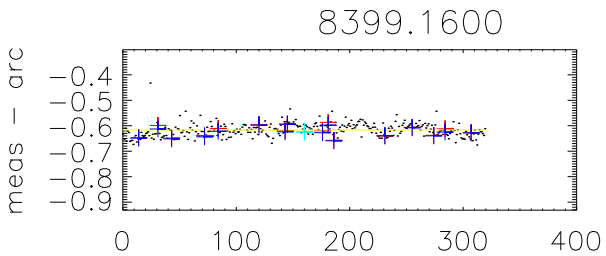

6923.2100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

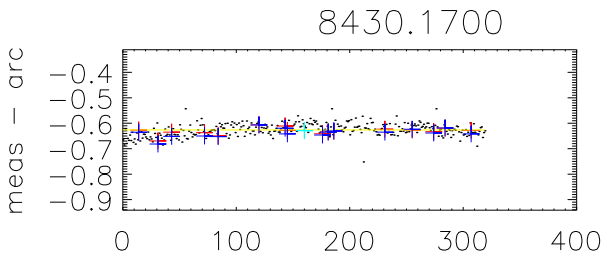

6949.0300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

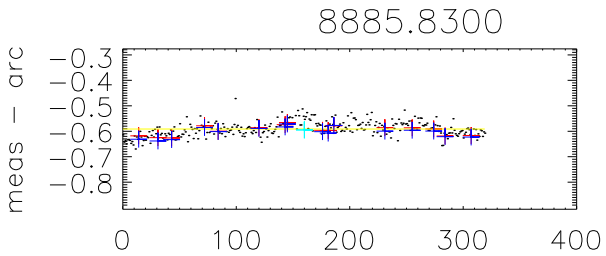

7571.7500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

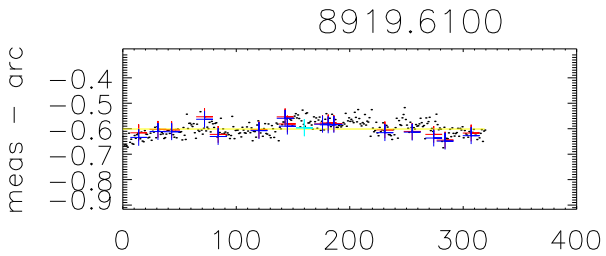

7794.1200
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

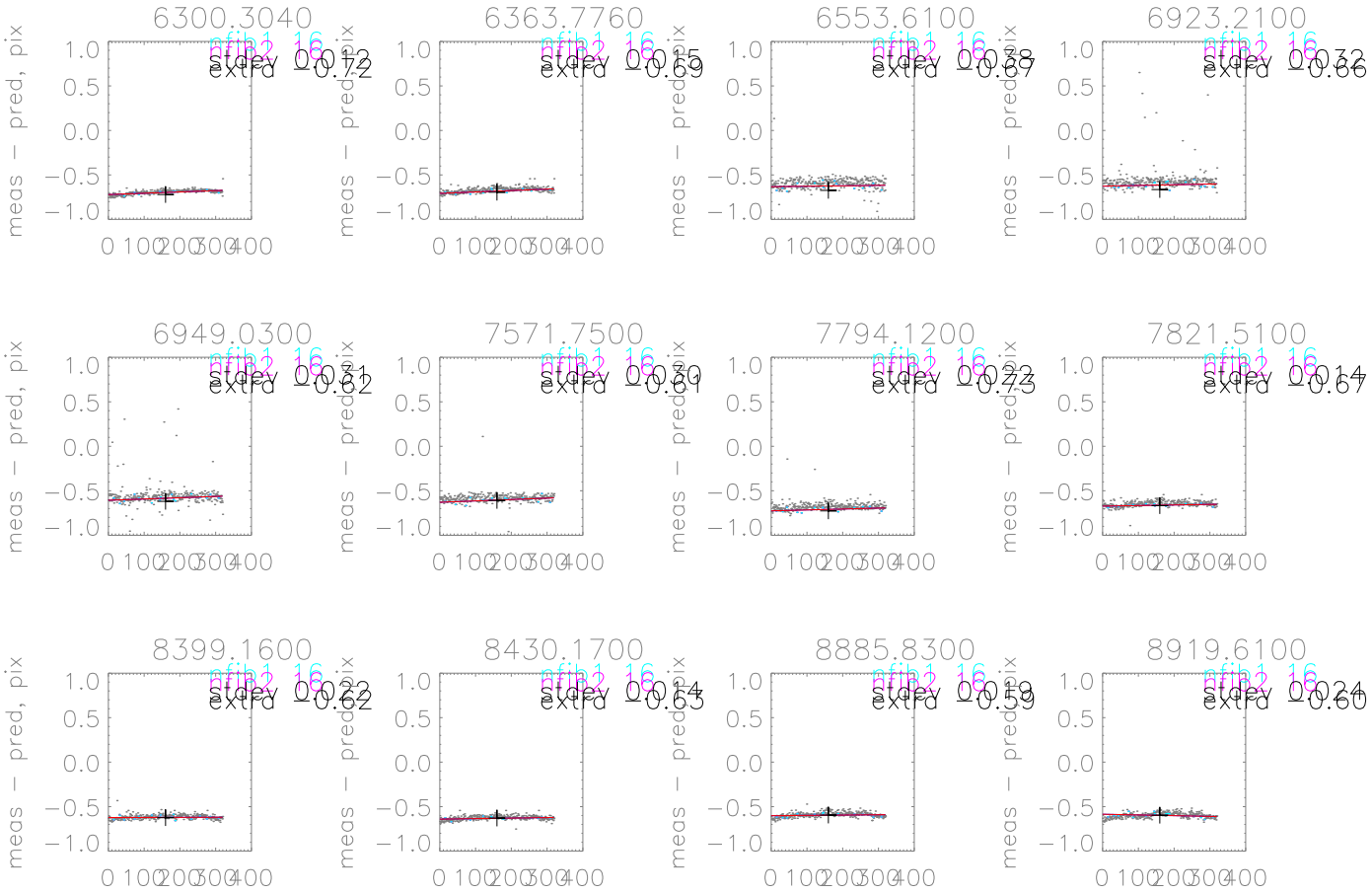

7821.5100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

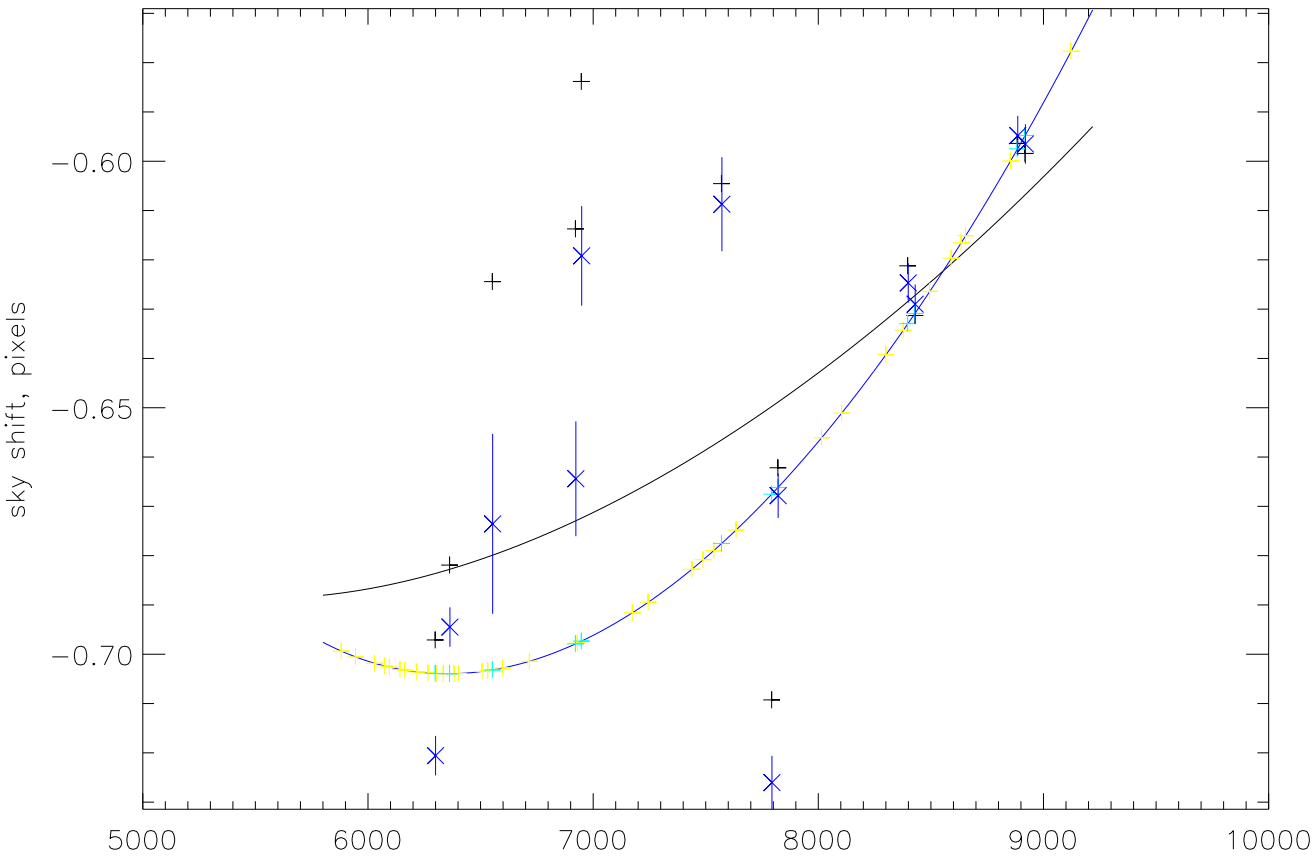

8399.1600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

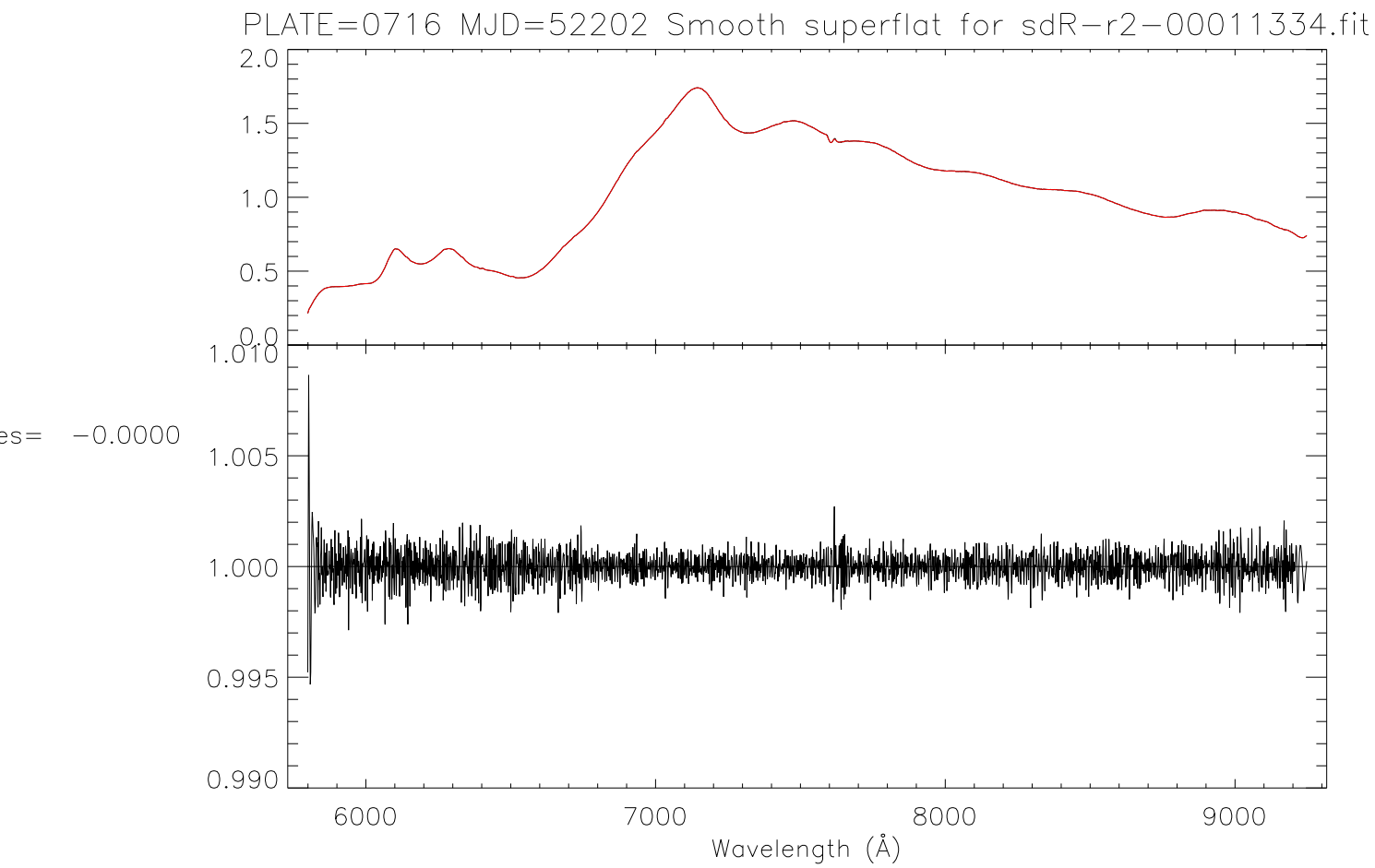

8430.1700
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400


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

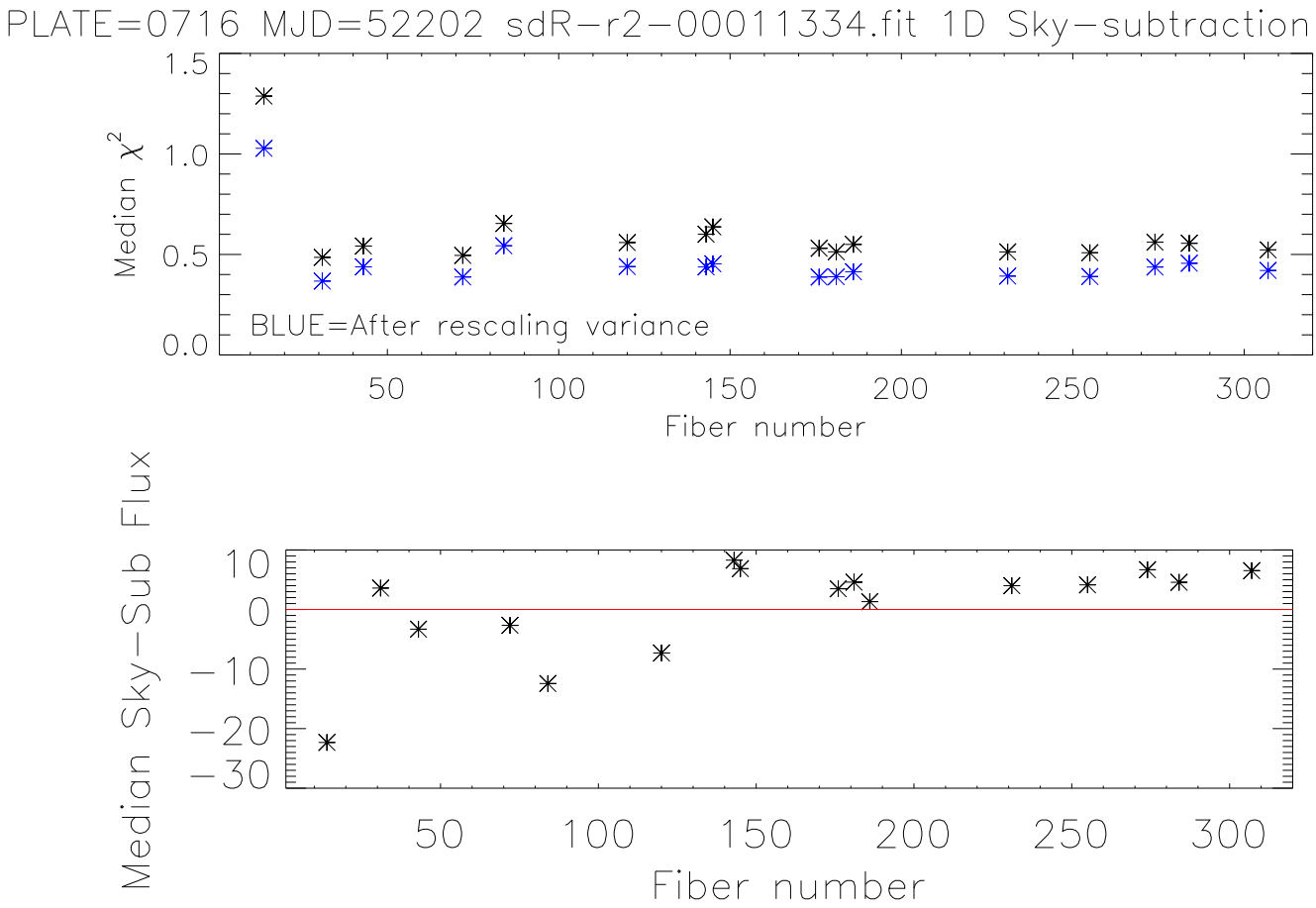

8919.6100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

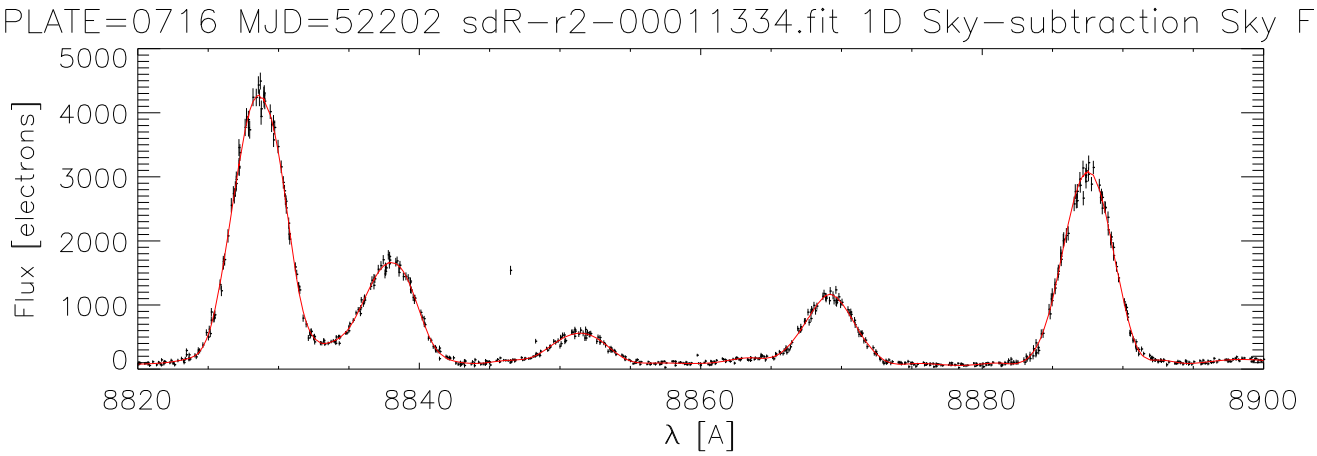

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhs2 16
stdev 0.72
extra 0.72
stdev 0.69
extra 0.69
stdev 0.67
extra 0.67
stdev 0.66
extra 0.66
stdev 0.62
extra 0.62
stdev 0.61
extra 0.61
stdev 0.73
extra 0.73
stdev 0.67
extra 0.67
stdev 0.62
extra 0.62
stdev 0.63
extra 0.63
stdev 0.59
extra 0.59
stdev 0.60
extra 0.60

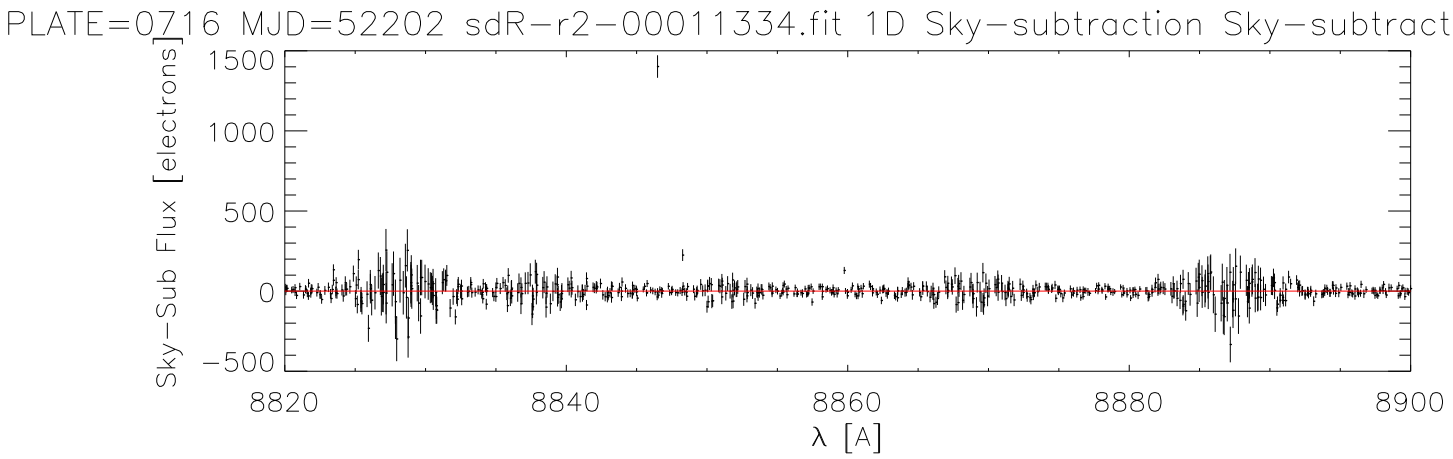

sky shift, pixels
−0.60
−0.65
−0.70
5000
6000
7000
8000
9000
10000

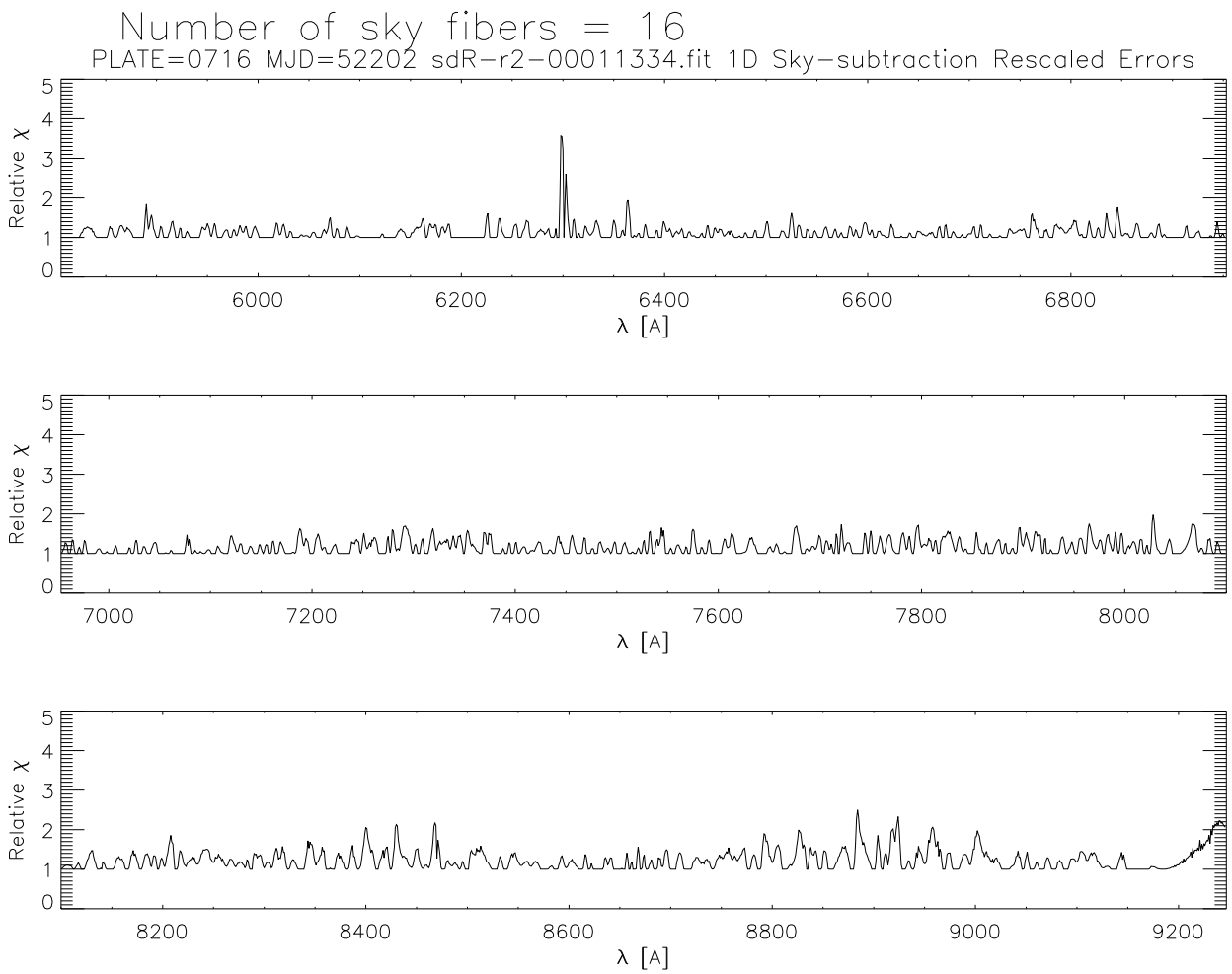

PLATE=0716 MJD=52202 Smooth superflat for sdR-r2-00011334.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

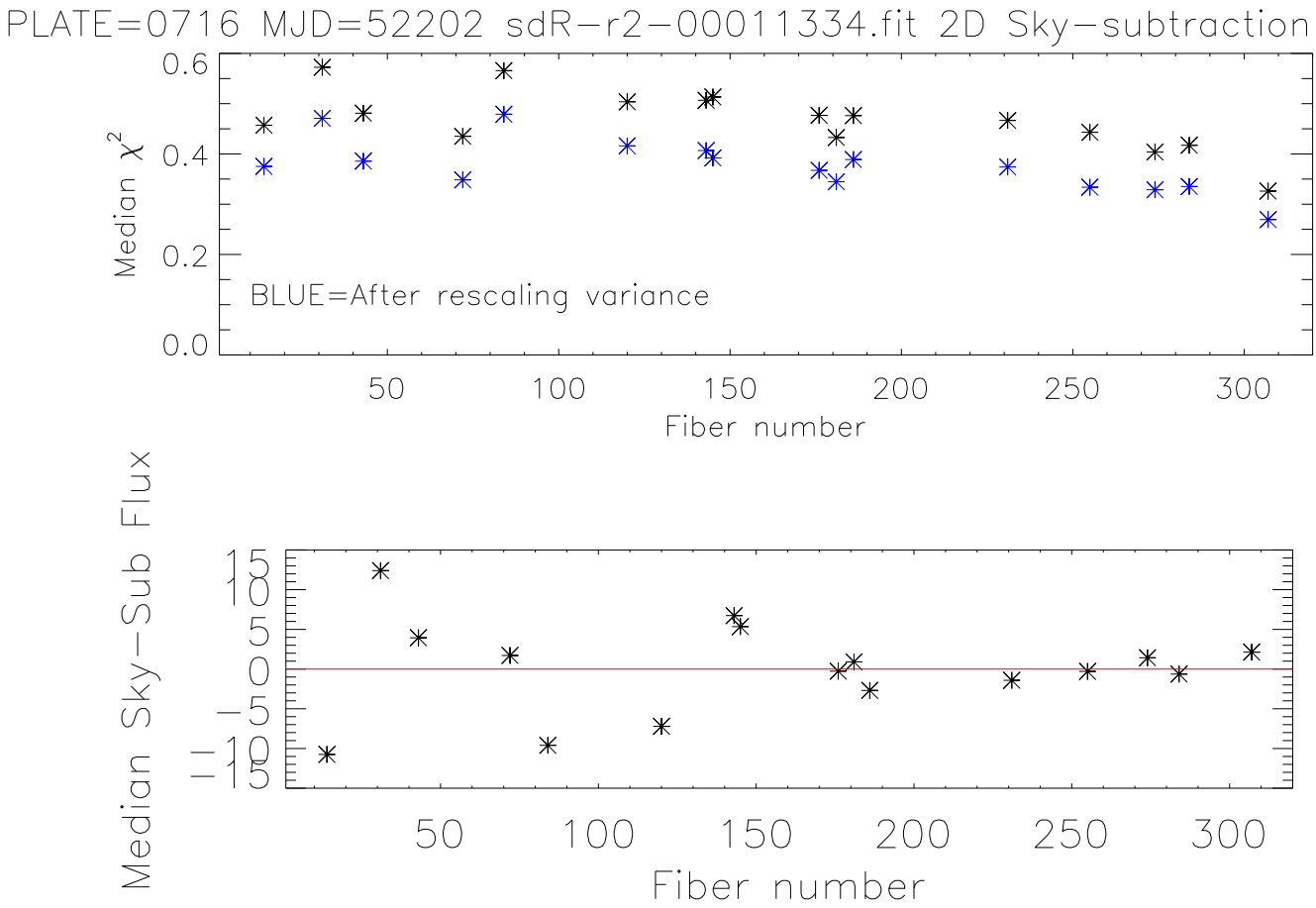
es= −0.0000

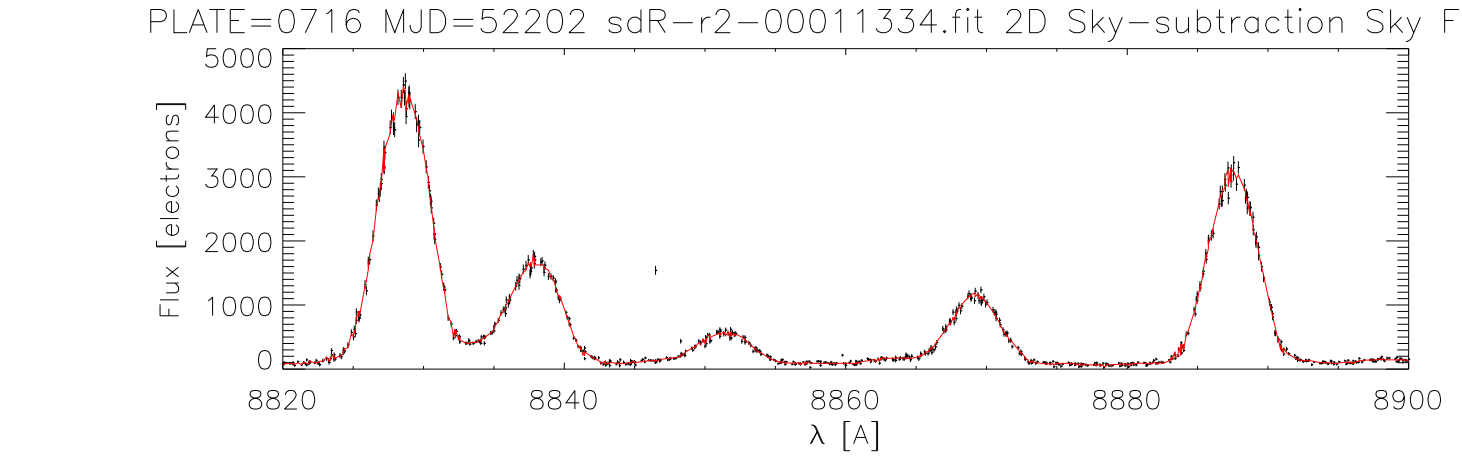

PLATE=0716 MJD=52202 sdR-r2-00011334.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

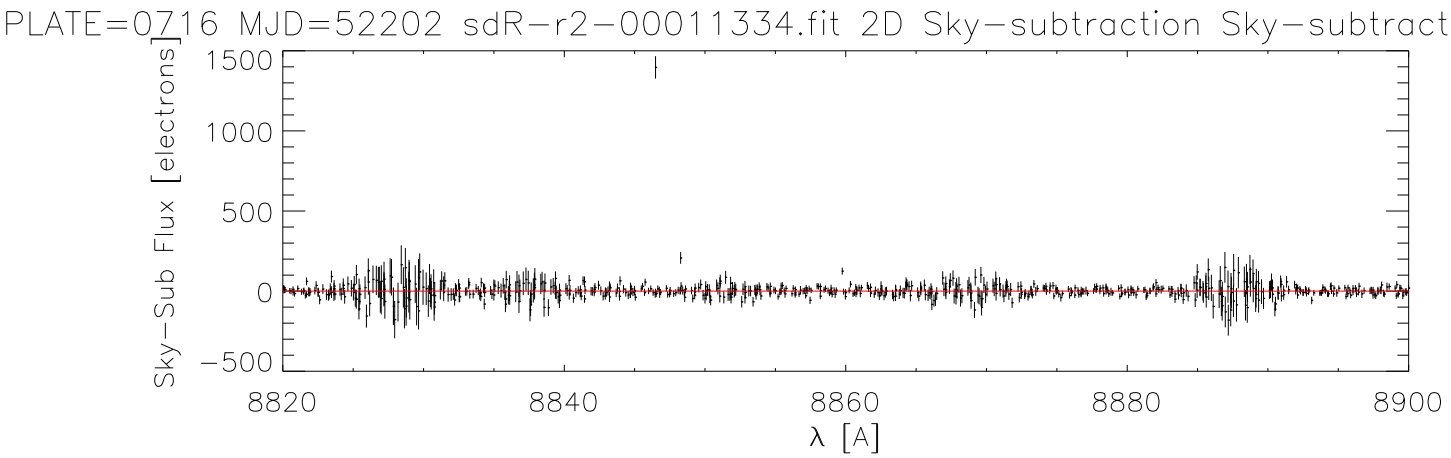

PLATE=0716 MJD=52202 sdR-r2-00011334.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

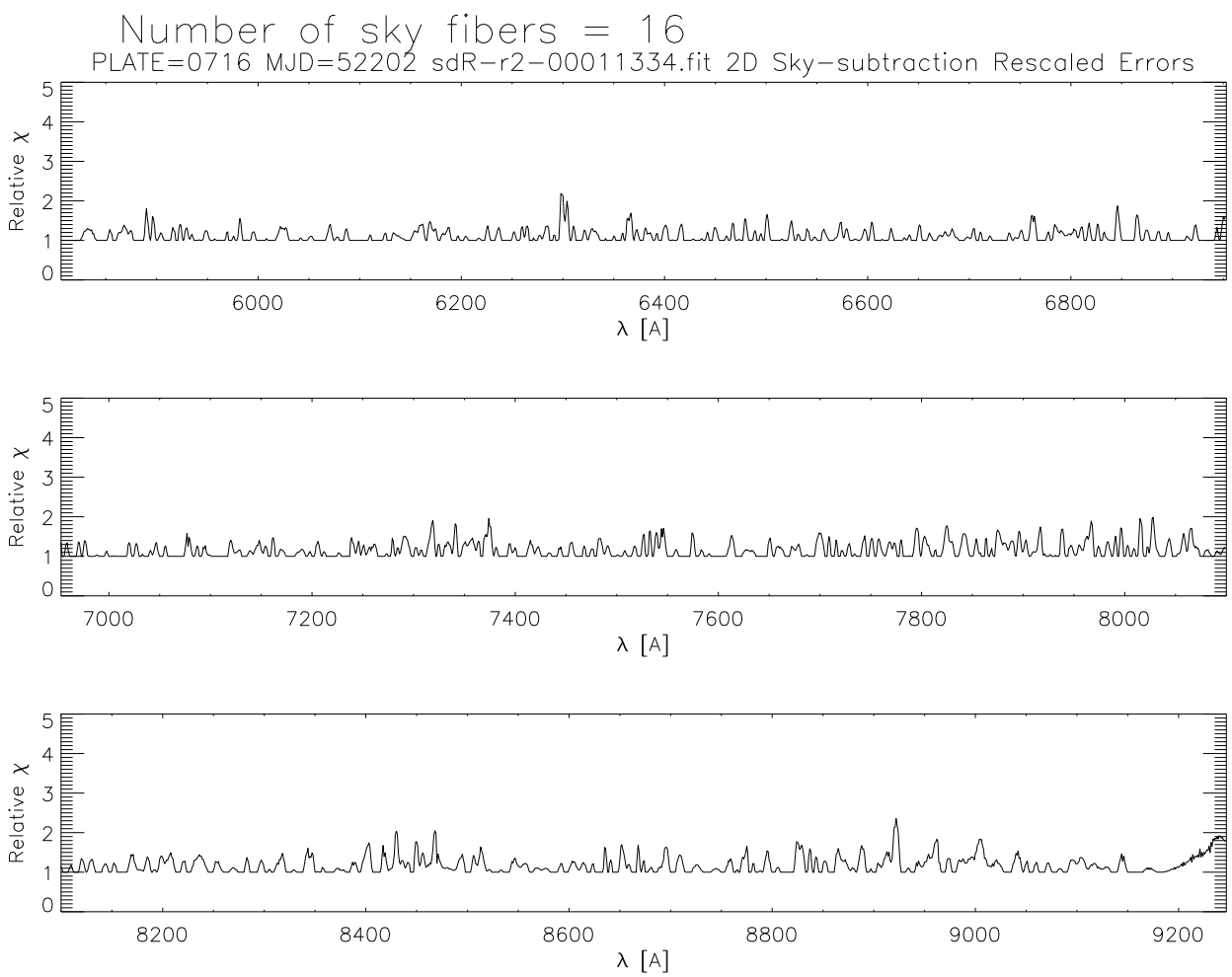

PLATE=0716 MJD=52202 sdR-r2-00011334.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

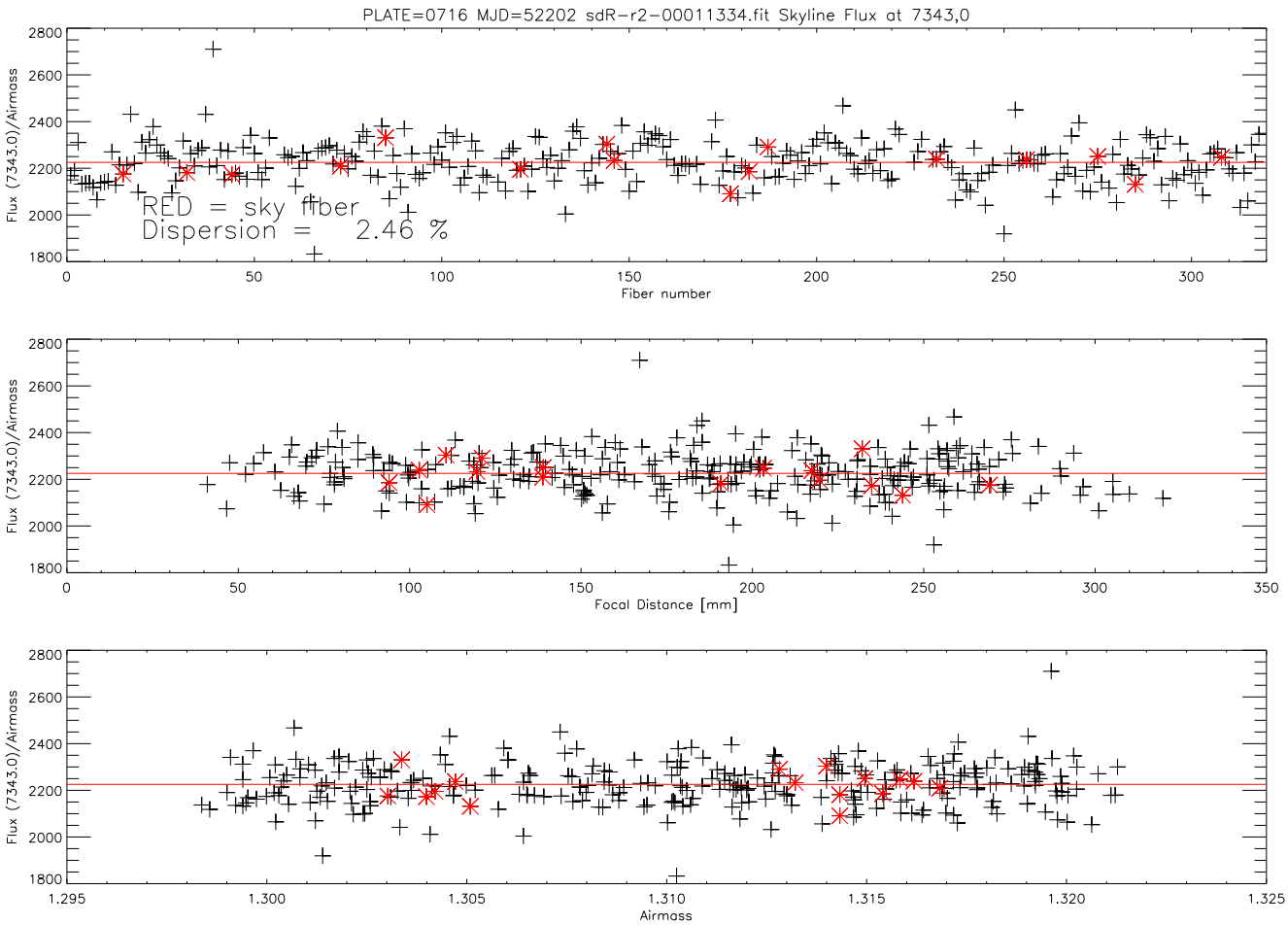

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-r2-00011334.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

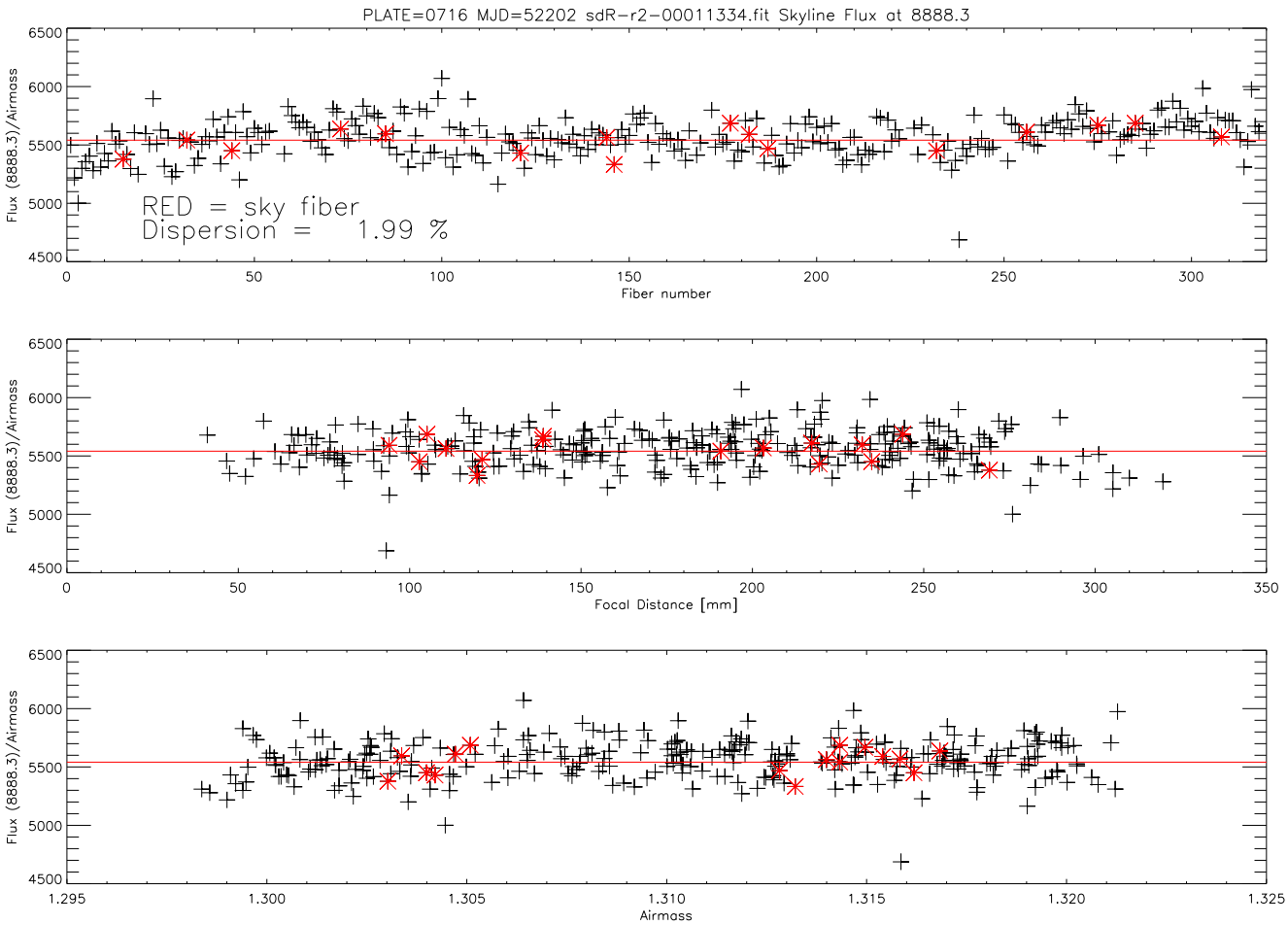

PLATE=0716 MJD=52202 sdR-r2-00011334.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

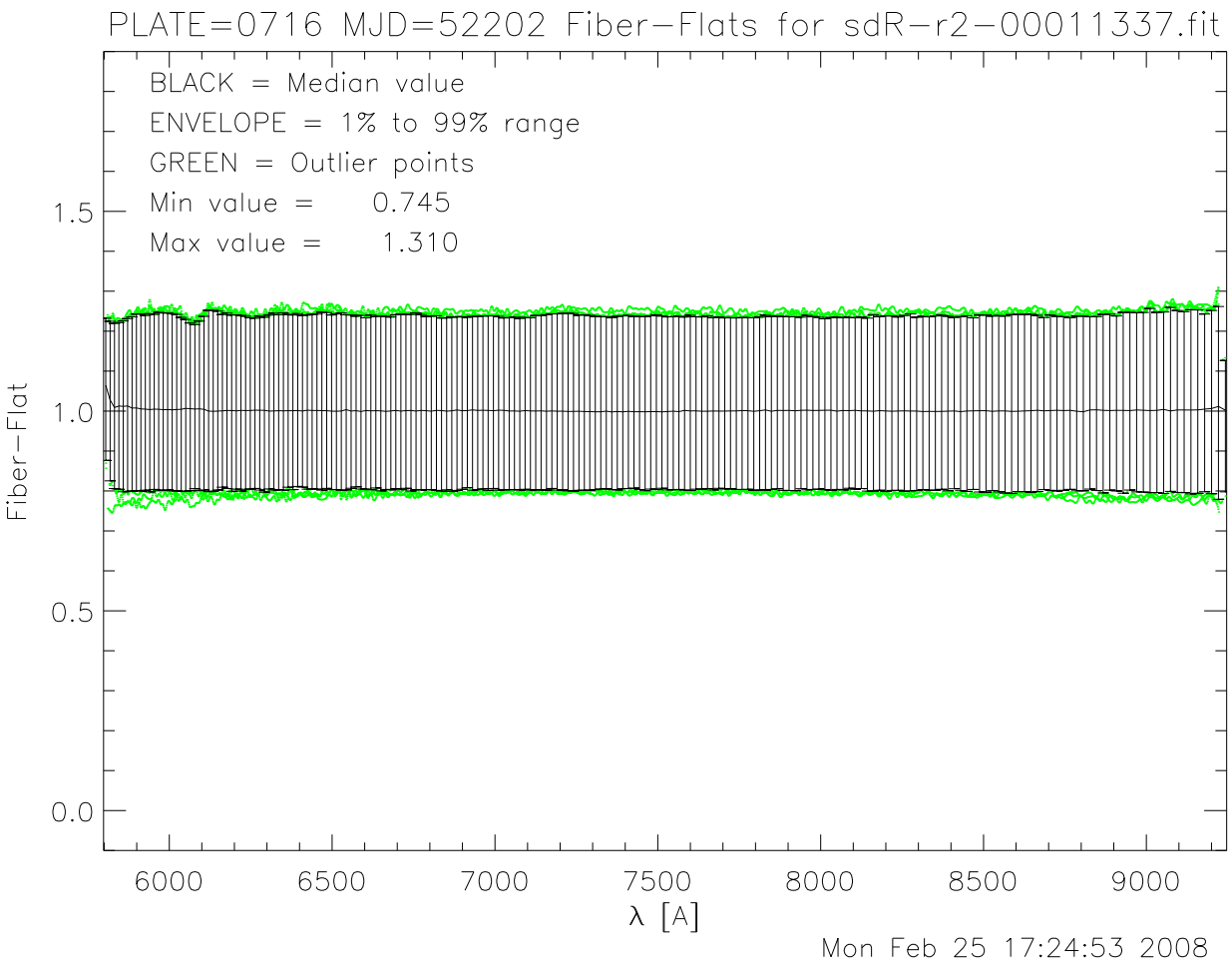

PLATE=0716 MJD=52202 sdR-r2-00011334.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

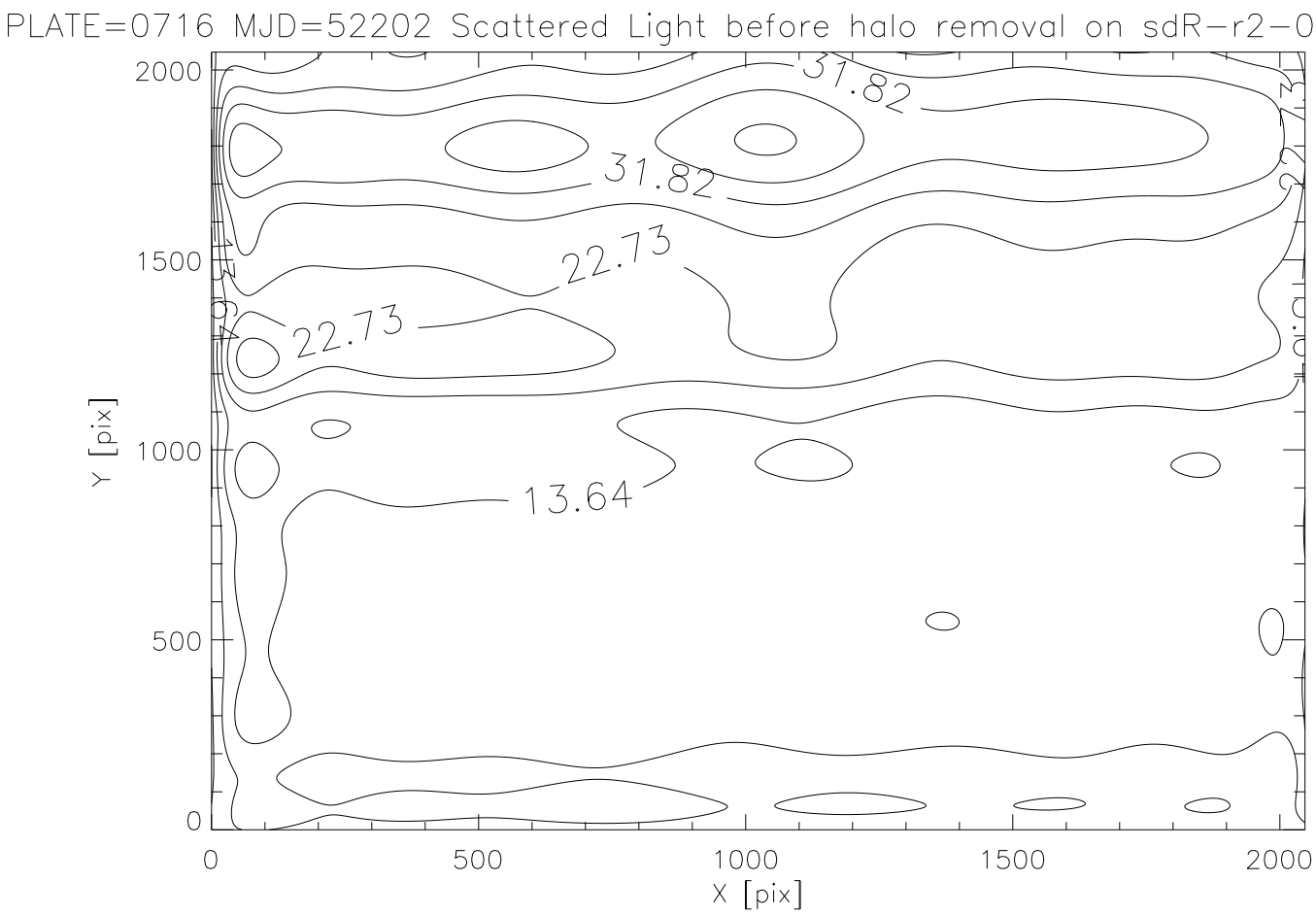

PLATE=0716 MJD=52202 sdR-r2-00011334.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

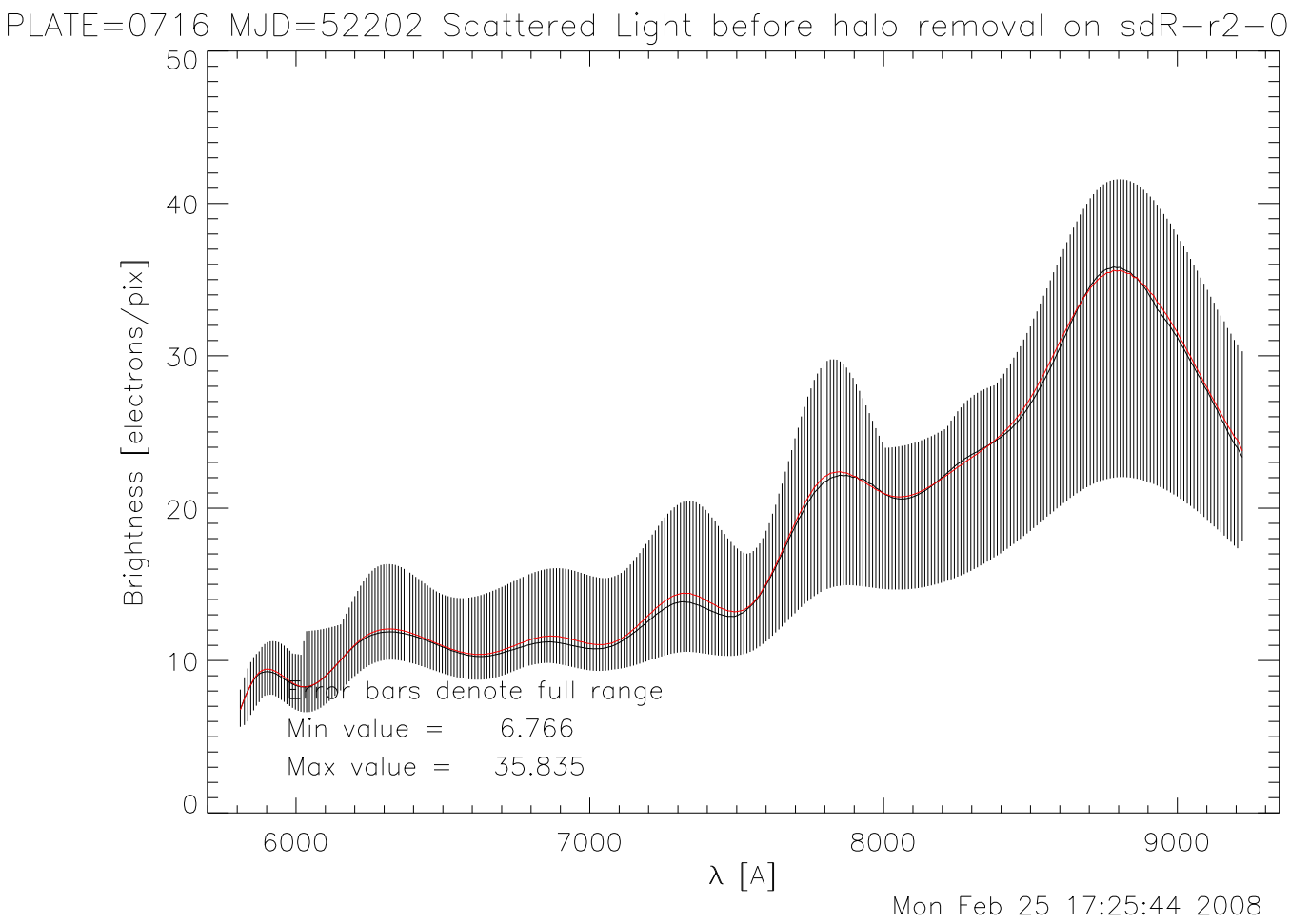

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-r2-00011334.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

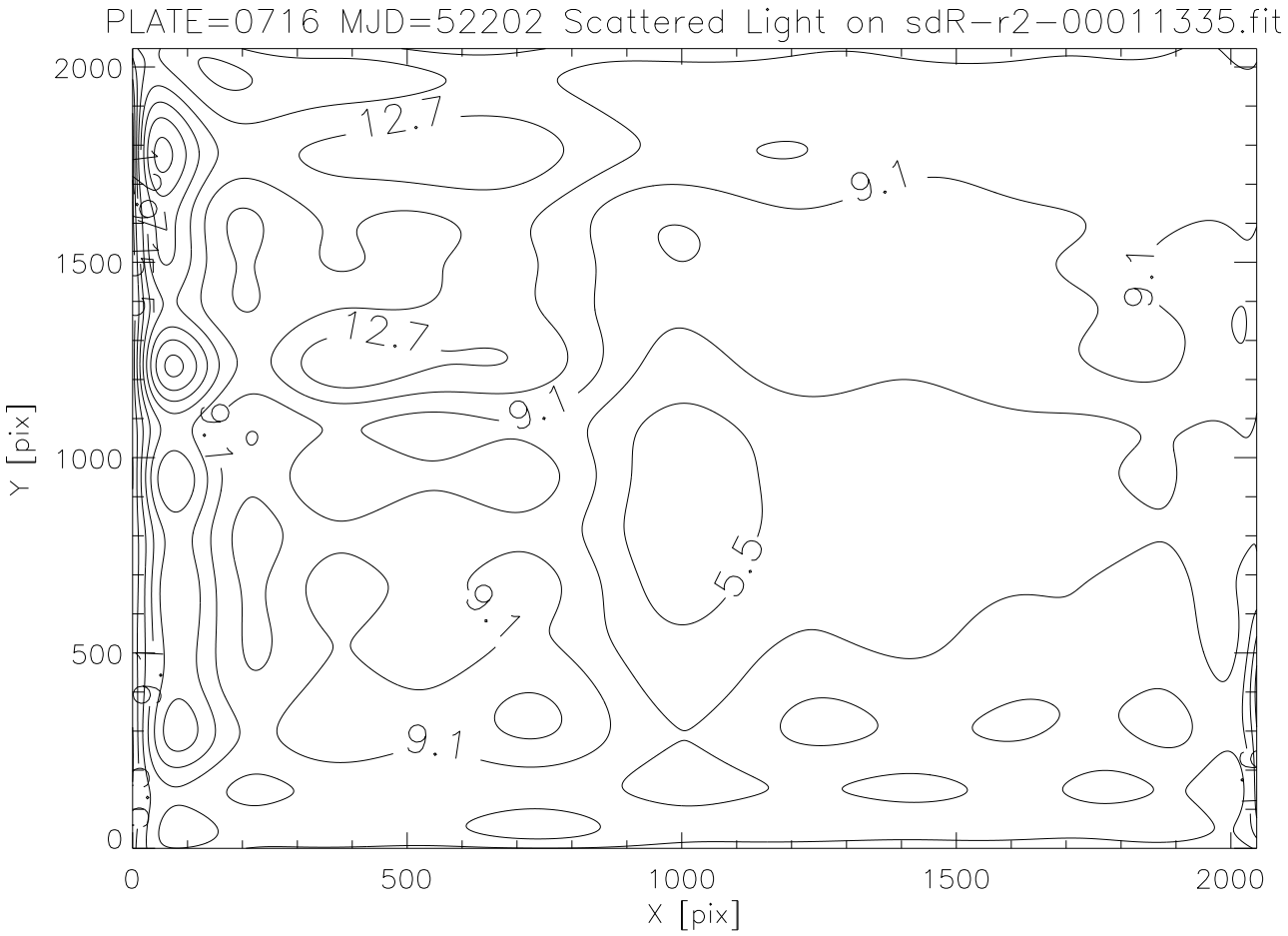

PLATE=0716 MJD=52202 sdR-r2-00011334.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.46 %
Fiber number
Focal Distance [mm]
Airmass

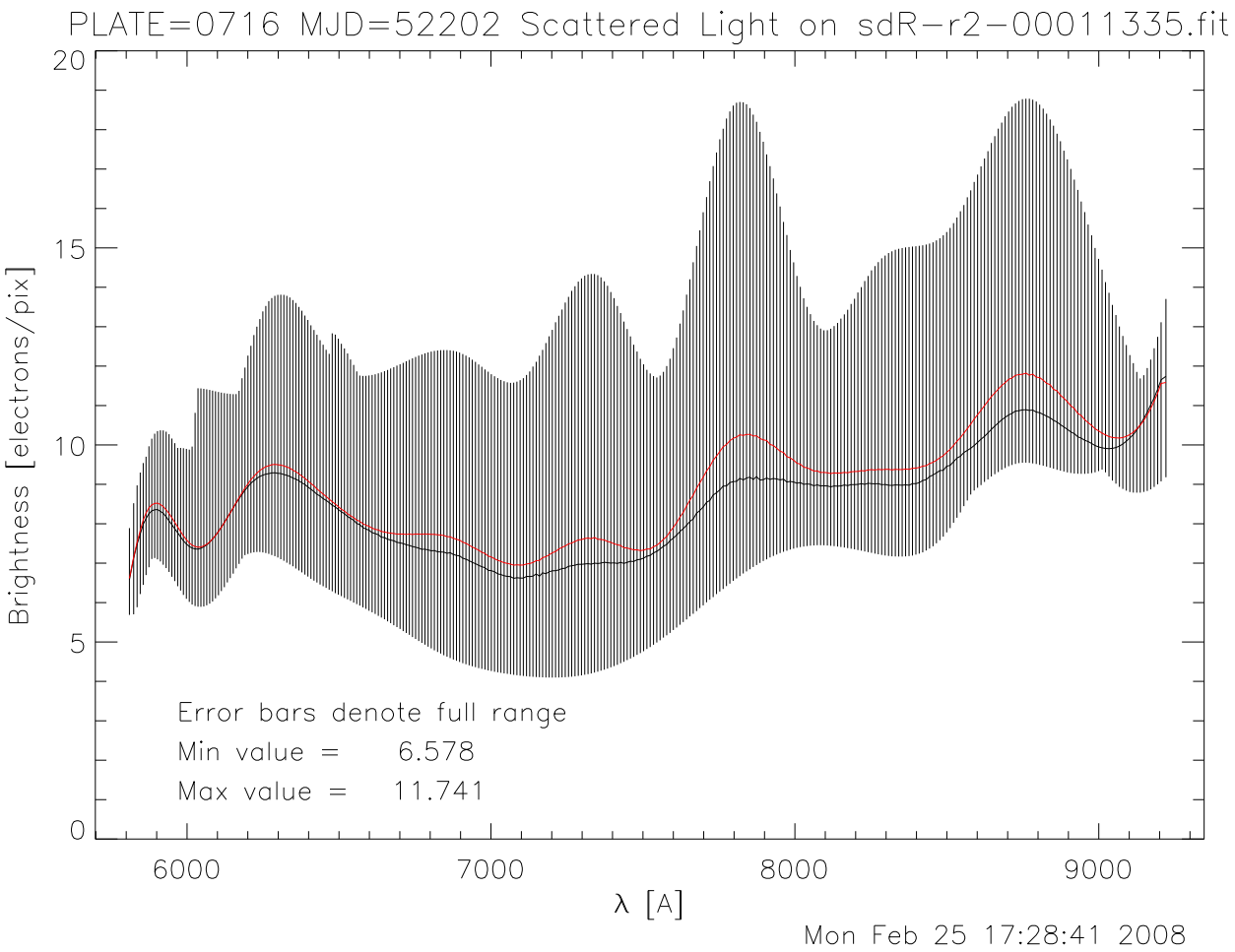

PLATE=0716 MJD=52202 sdR-r2-00011334.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.99 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

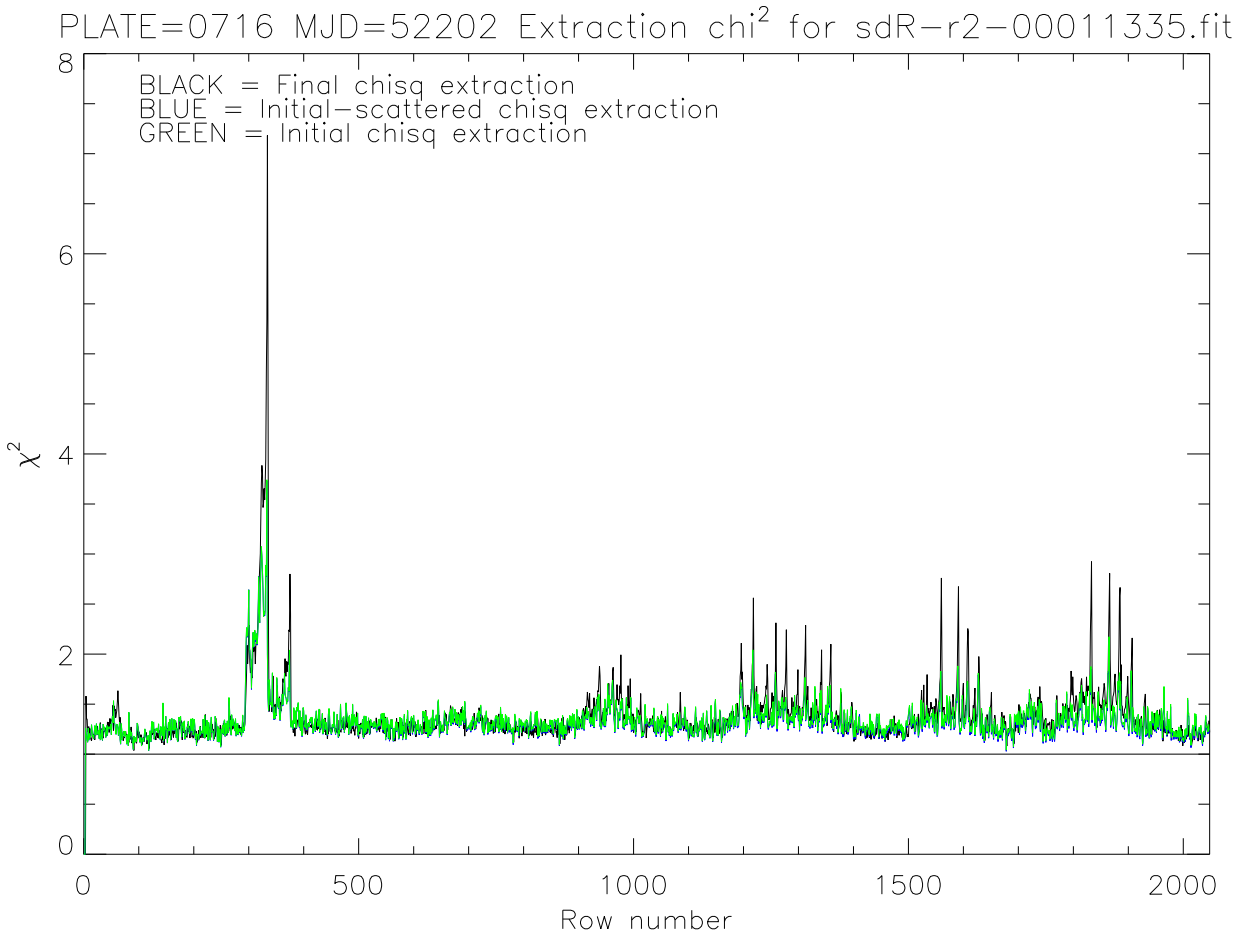

PLATE=0716 MJD=52202 Fiber−Flats for sdR−r2−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.745
Max value = 1.310
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 17:24:53 2008

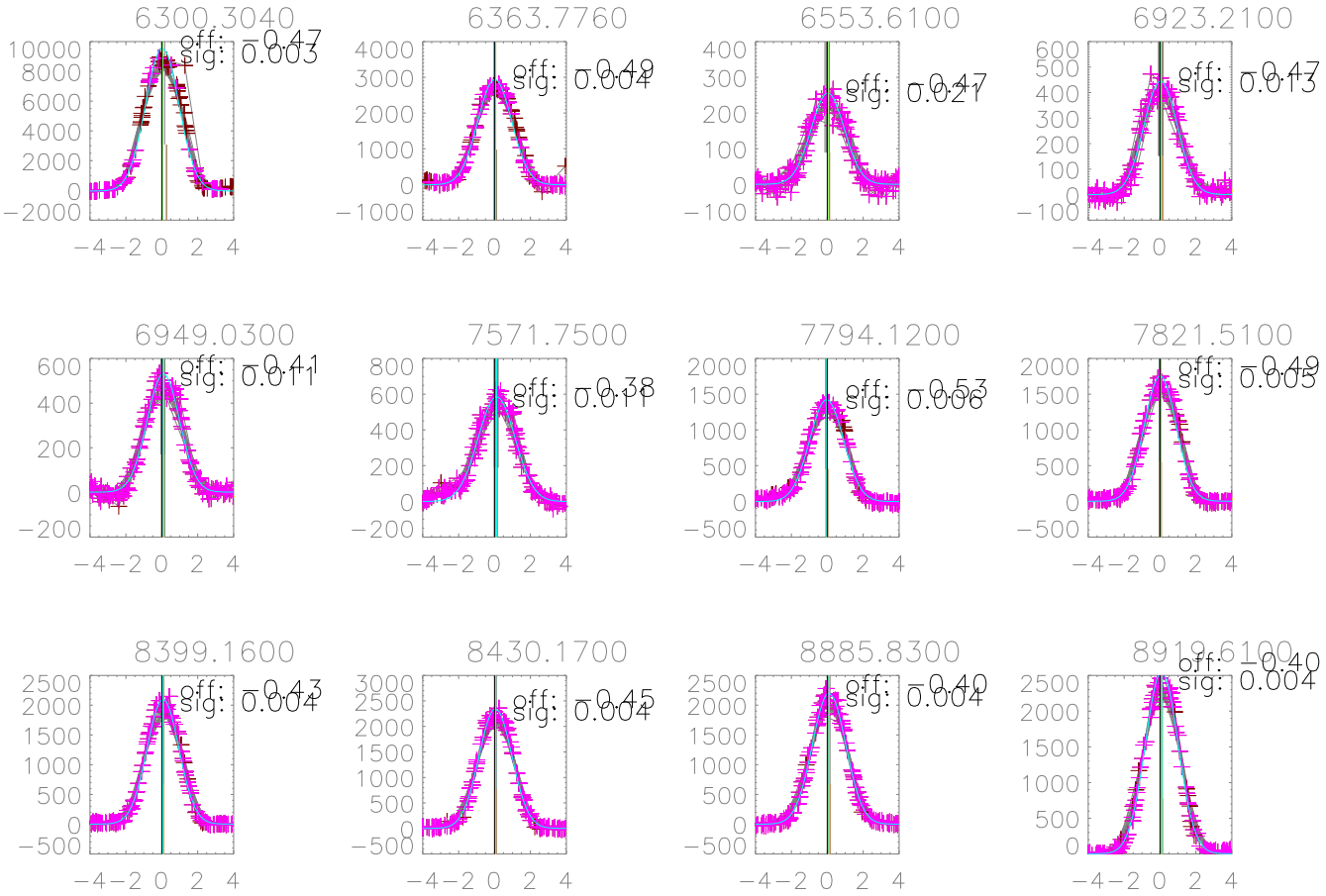

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r2-00011335.fi
31.82
31.82
22.73
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

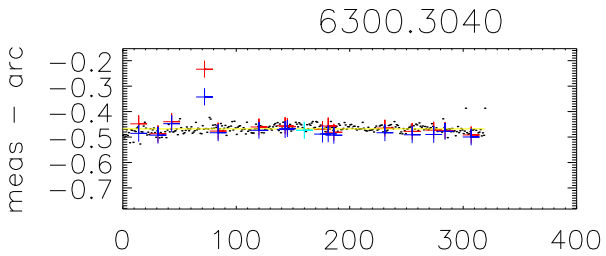

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r2-00011335.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.766
Max value = 35.835
Mon Feb 25 17:25:44 2008

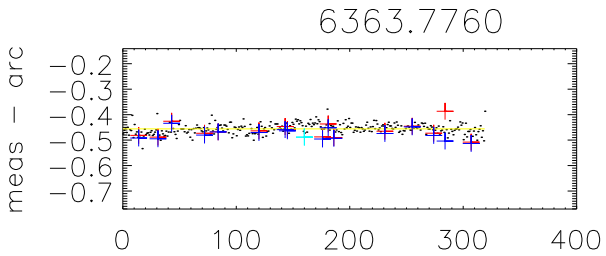

PLATE=0716 MJD=52202 Scattered Light on sdR-r2-00011335.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
9.1
5.5

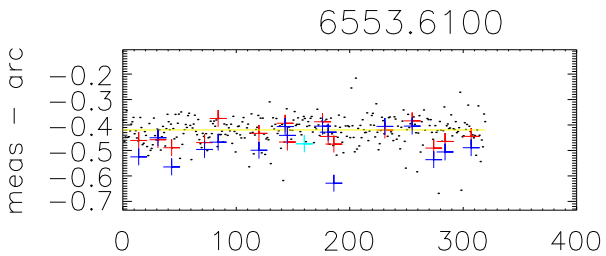

PLATE=0716 MJD=52202 Scattered Light on sdR-r2-00011335.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.578
Max value = 11.741
Mon Feb 25 17:28:41 2008

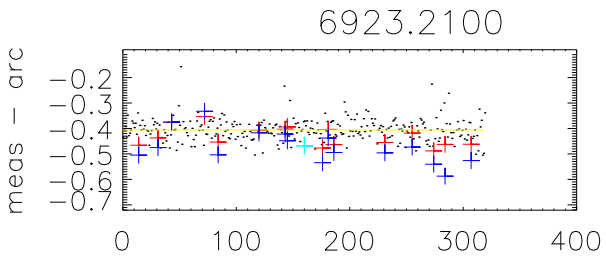

PLATE=0716 MJD=52202 Extraction chi^2 for sdR−r2−00011335.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

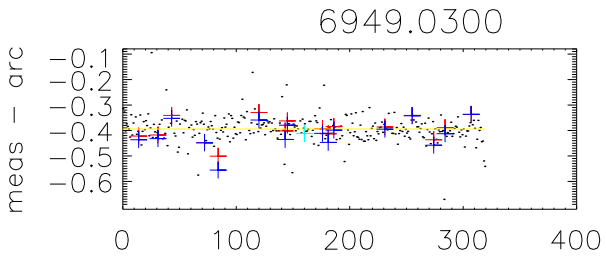

6300.3040
off: −0.47
sig: 0.003
6363.7760
off: −0.49
sig: 0.004
6553.6100
off: −0.47
sig: 0.021
6923.2100
off: −0.47
sig: 0.013
6949.0300
off: −0.41
sig: 0.011
7571.7500
off: −0.38
sig: 0.011
7794.1200
off: −0.53
sig: 0.006
7821.5100
off: −0.49
sig: 0.005
8399.1600
off: −0.43
sig: 0.004
8430.1700
off: −0.45
sig: 0.004
8885.8300
off: −0.40
sig: 0.004
8919.6100
off: −0.40
sig: 0.004

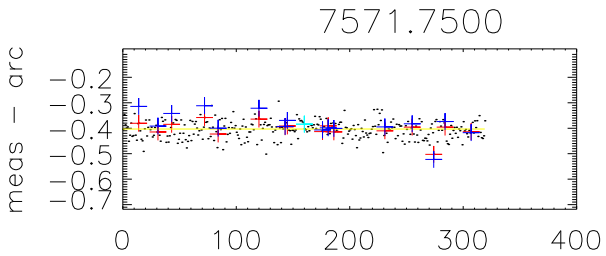

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

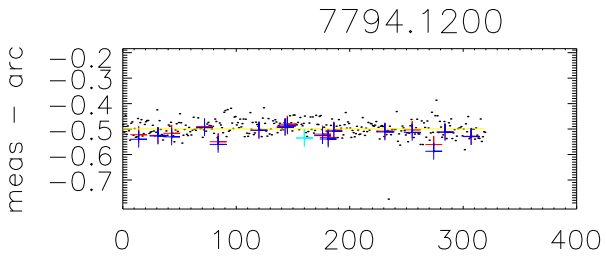

6363.7760
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

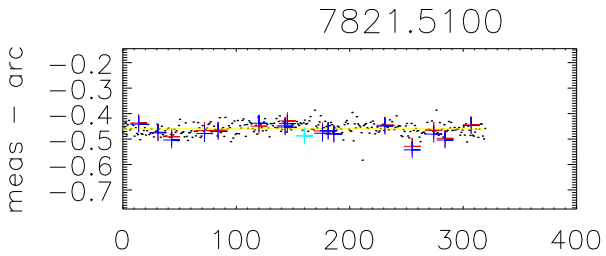

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

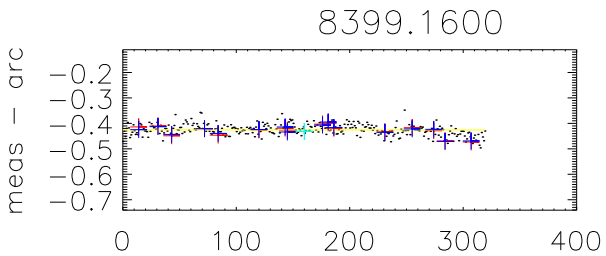

6923.2100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

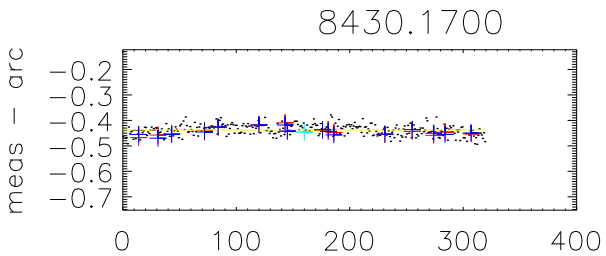

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

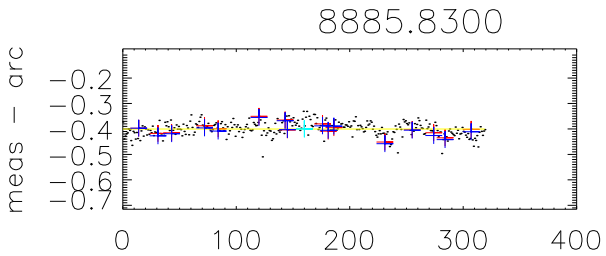

7571.7500
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

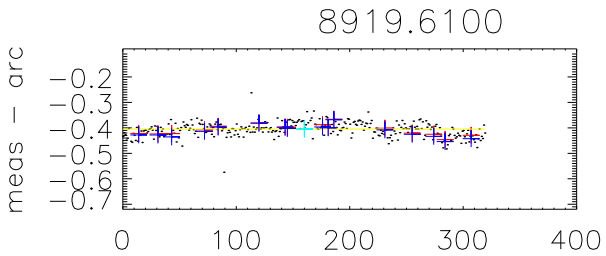

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

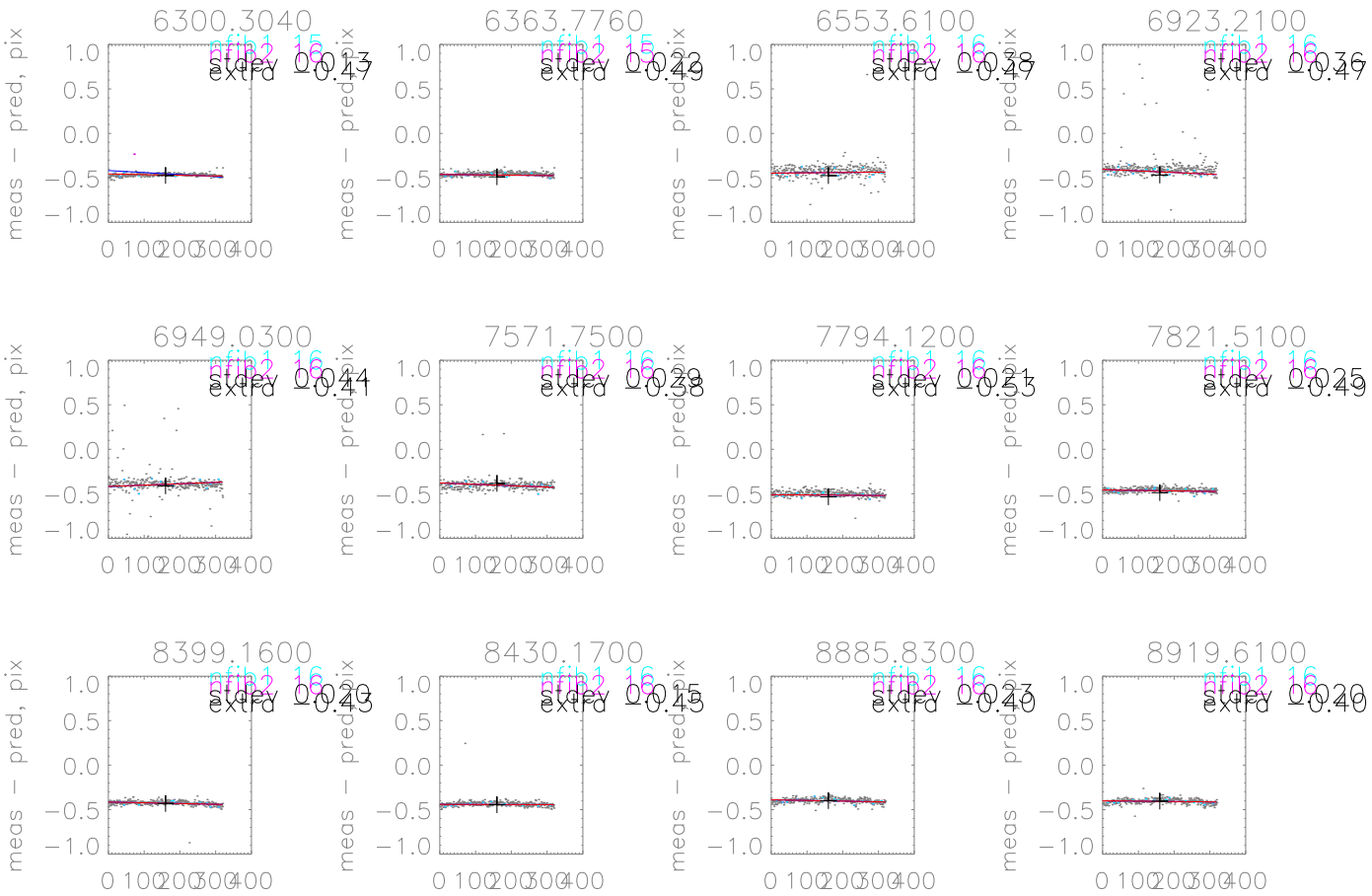

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

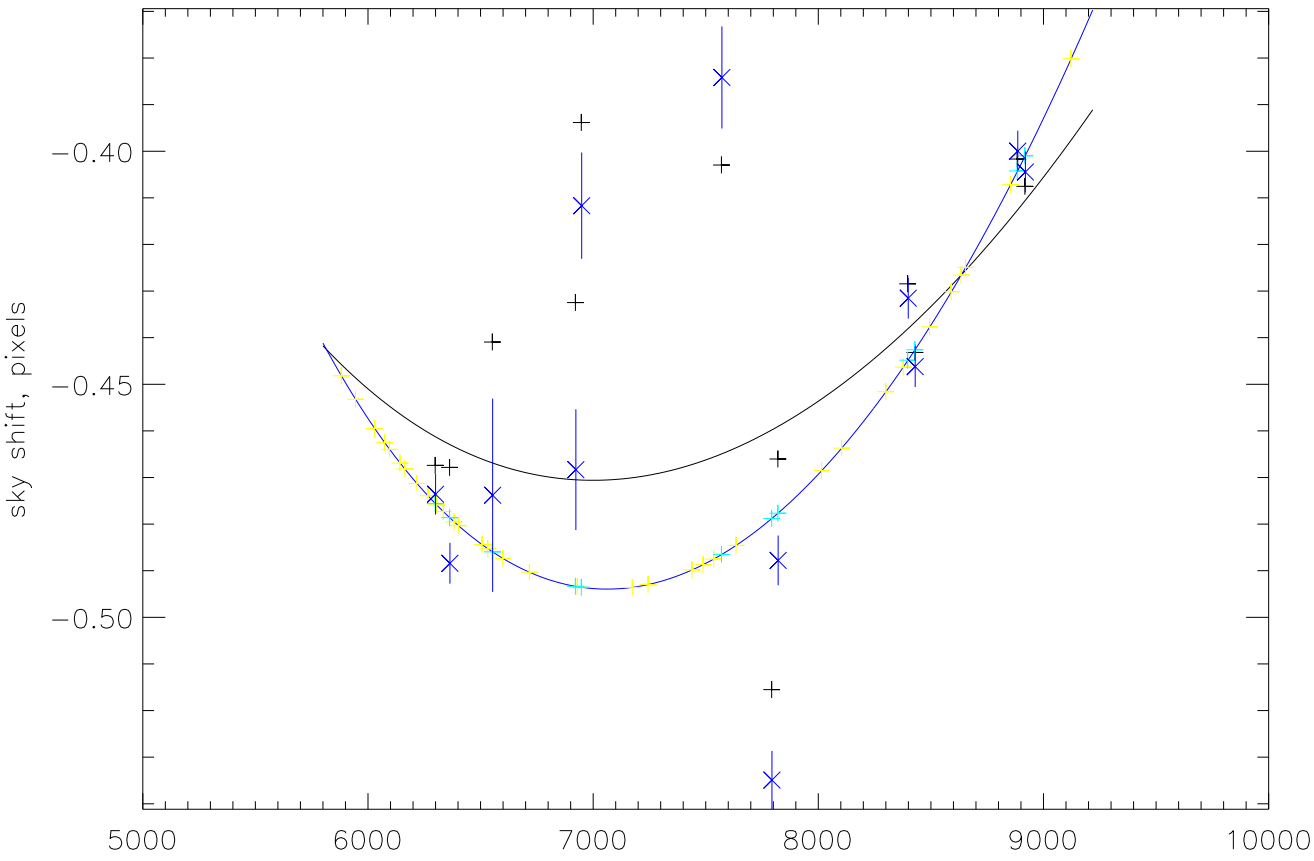

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

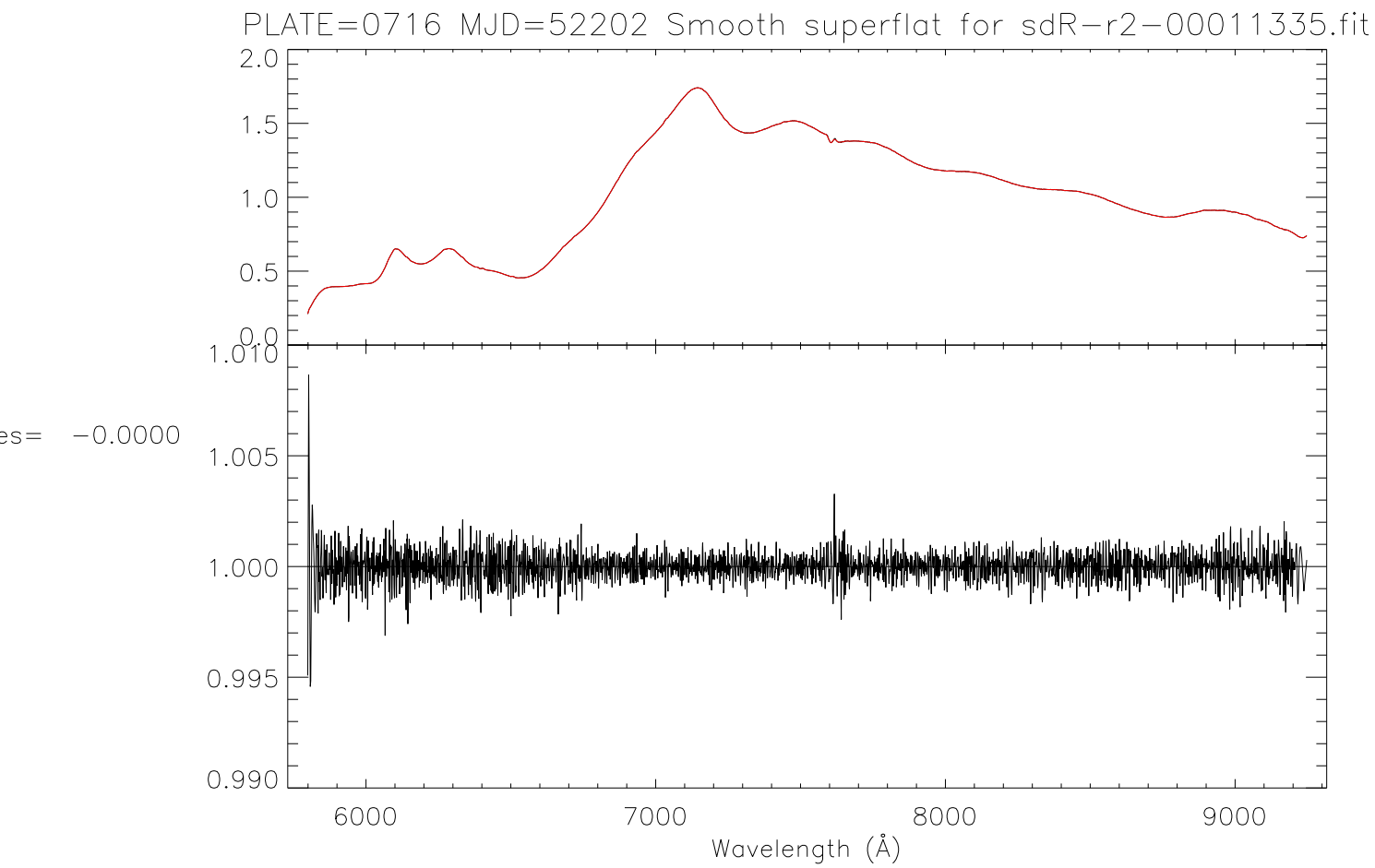

8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

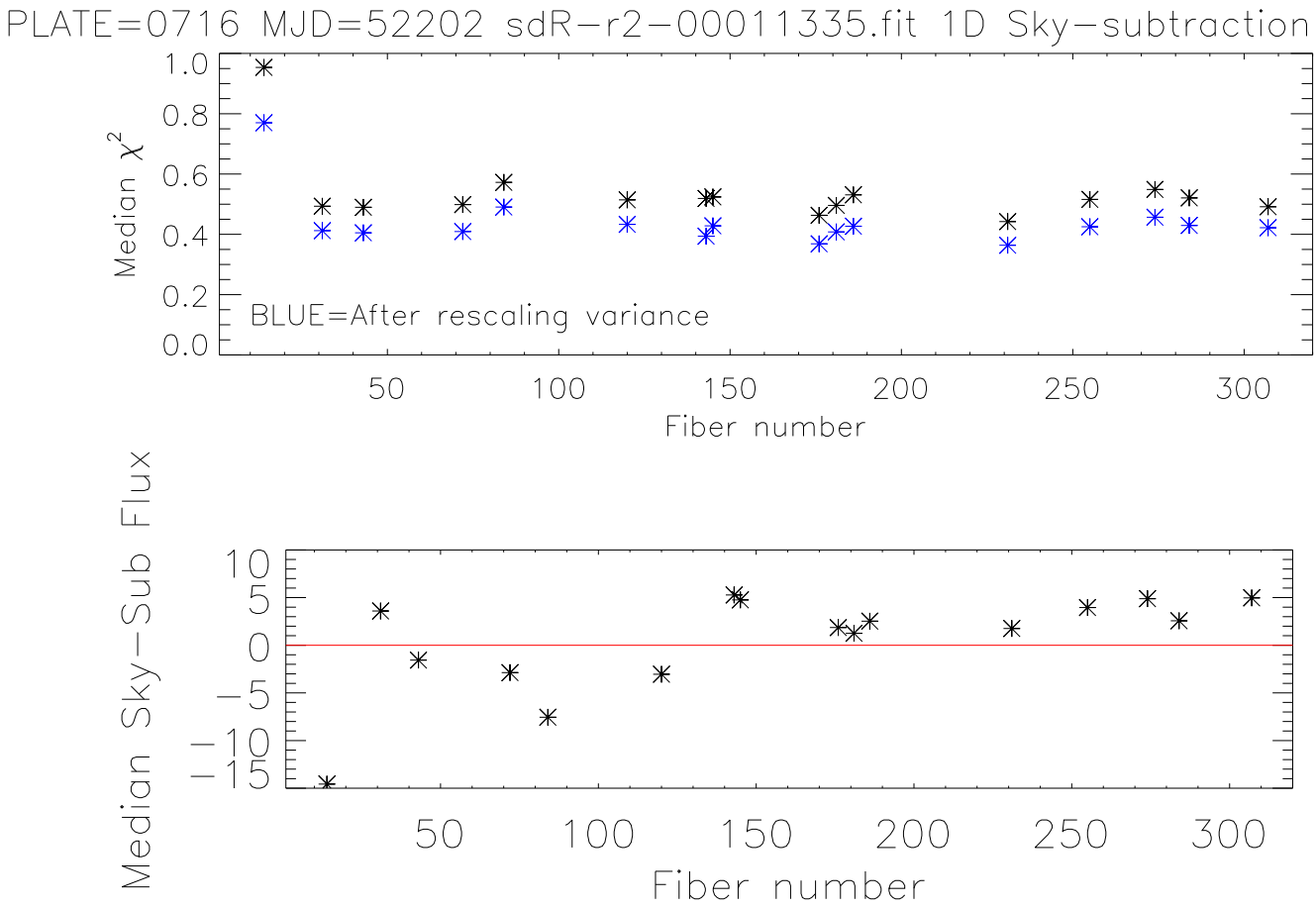

8885.8300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

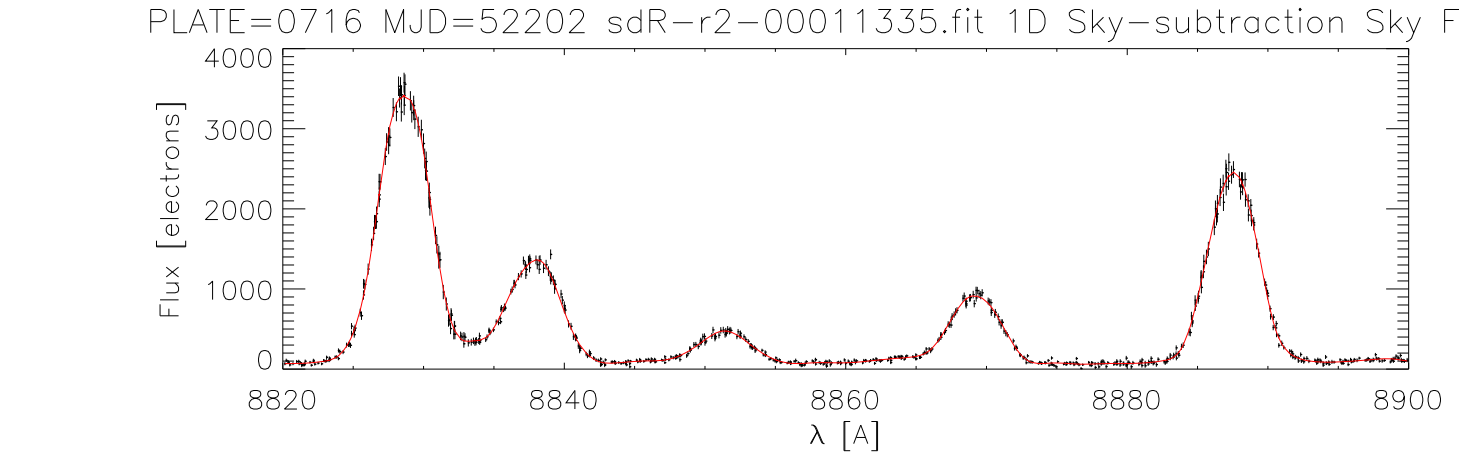

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

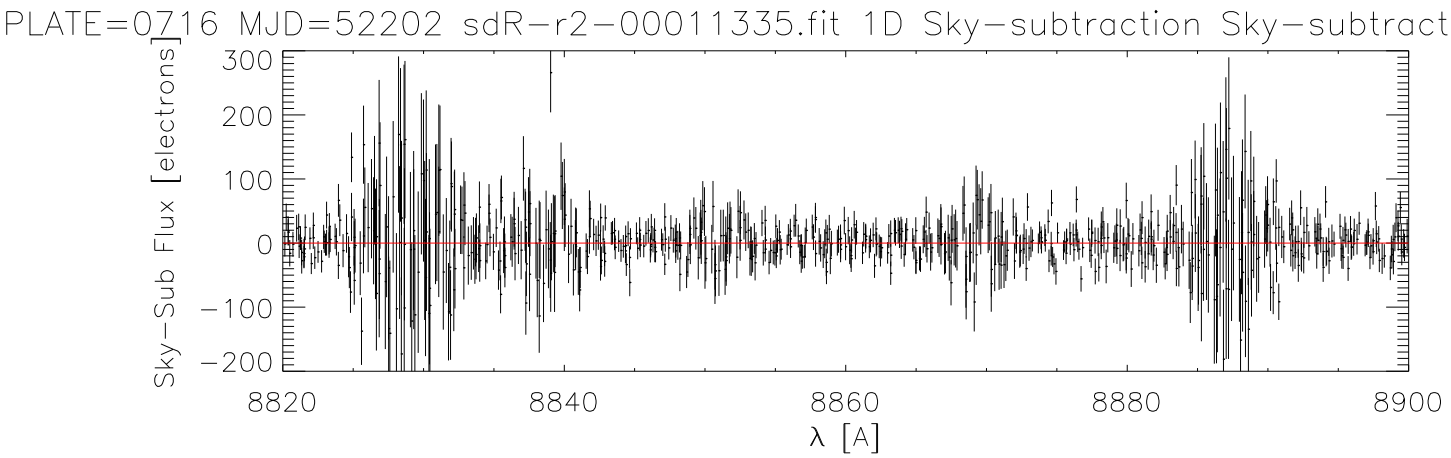

6300.3040
stdev 0.013
extra 0.47
6363.7760
stdev 0.022
extra 0.49
6553.6100
stdev 0.038
extra 0.47
6923.2100
stdev 0.036
extra 0.47
6949.0300
stdev 0.044
extra 0.41
7571.7500
stdev 0.029
extra 0.38
7794.1200
stdev 0.021
extra 0.53
7821.5100
stdev 0.025
extra 0.49
8399.1600
stdev 0.020
extra 0.43
8430.1700
stdev 0.015
extra 0.45
8885.8300
stdev 0.023
extra 0.40
8919.6100
stdev 0.020
extra 0.40
meas − pred, pix
mfhd1 16
mfhd2 15

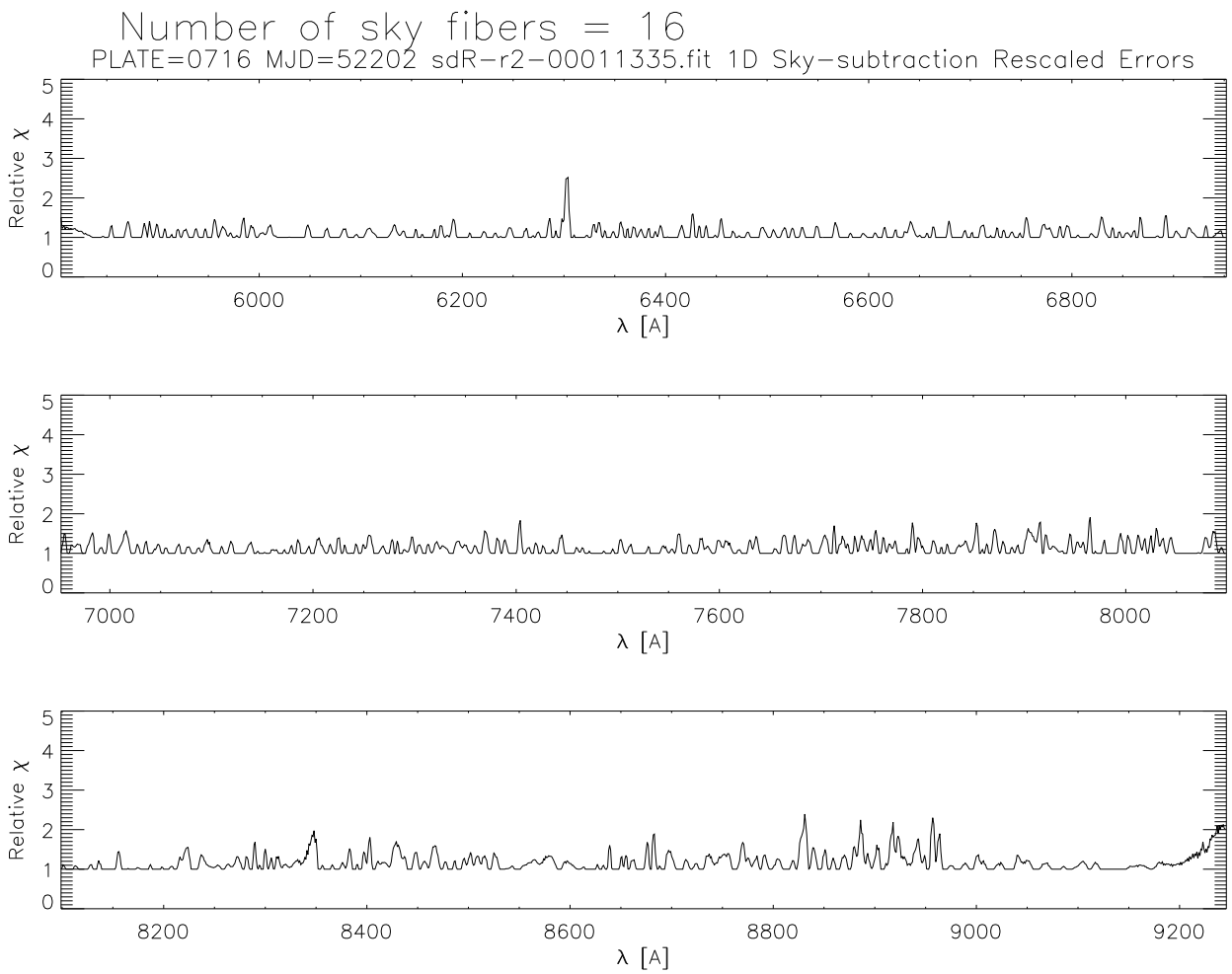

sky shift, pixels
−0.40
−0.45
−0.50
5000
6000
7000
8000
9000
10000

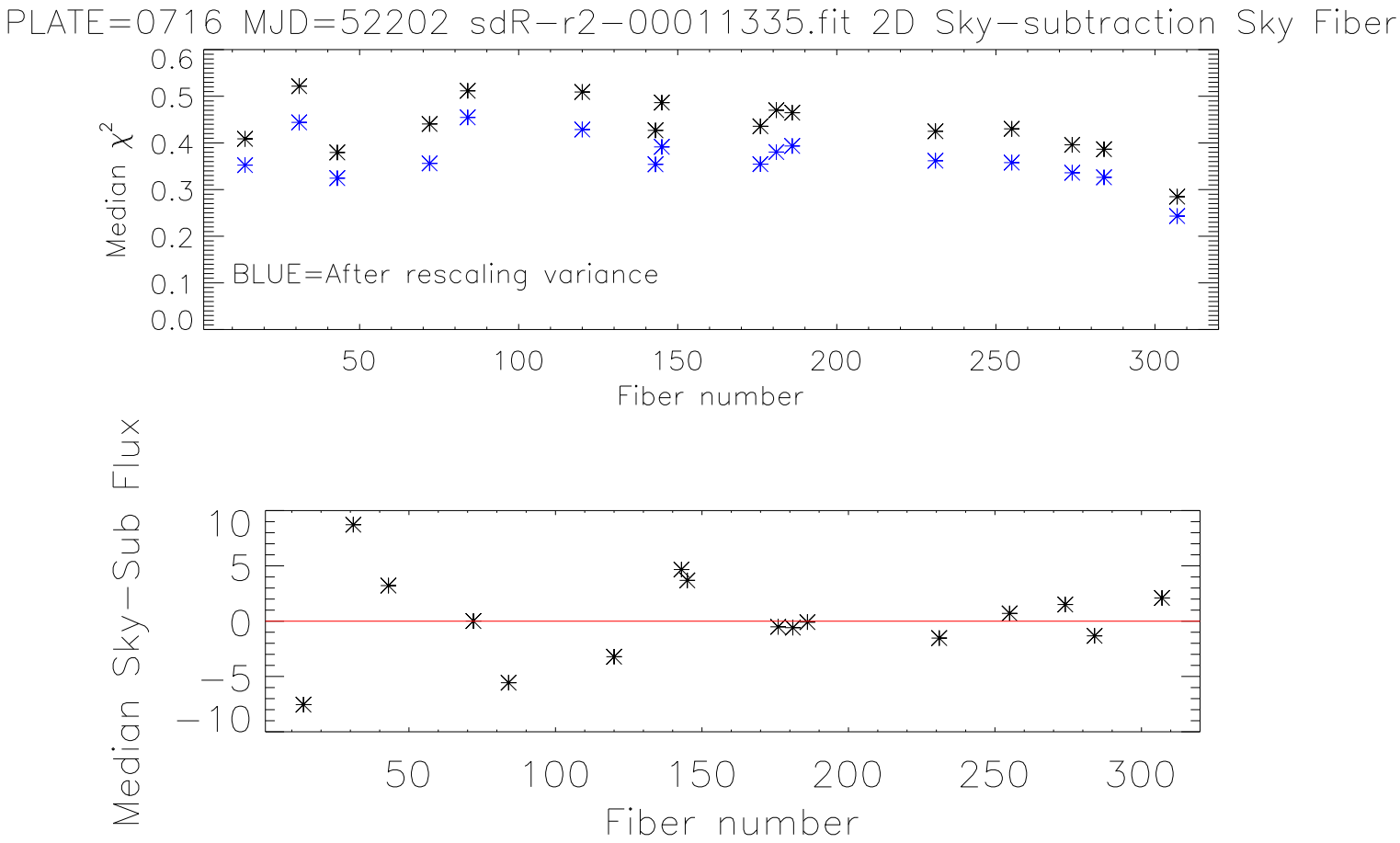

PLATE=0716 MJD=52202 Smooth superflat for sdR-r2-00011335.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

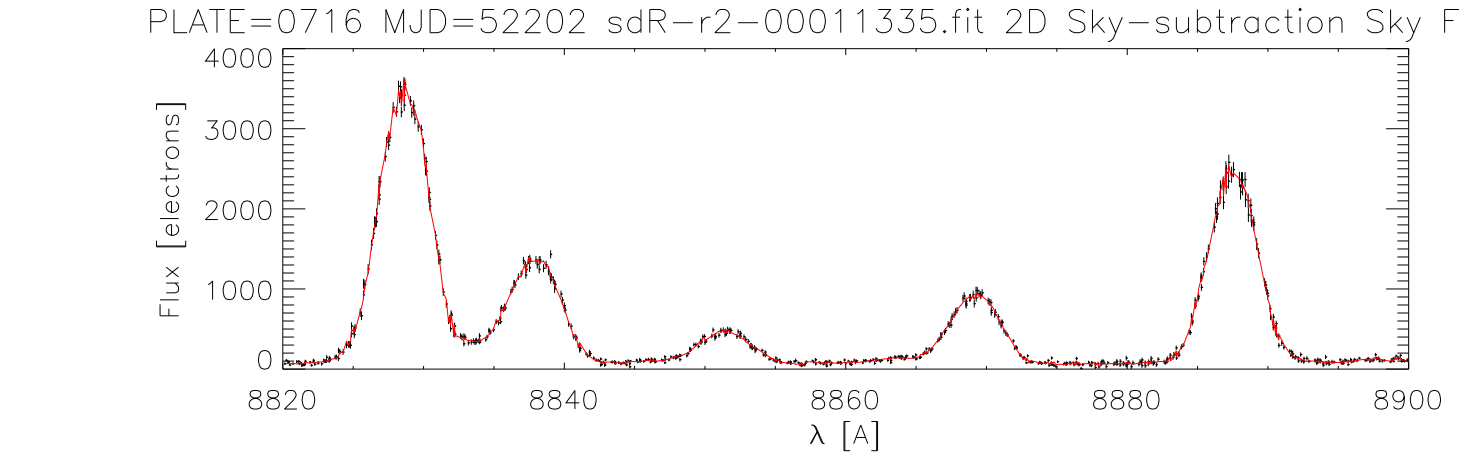

PLATE=0716 MJD=52202 sdR-r2-00011335.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

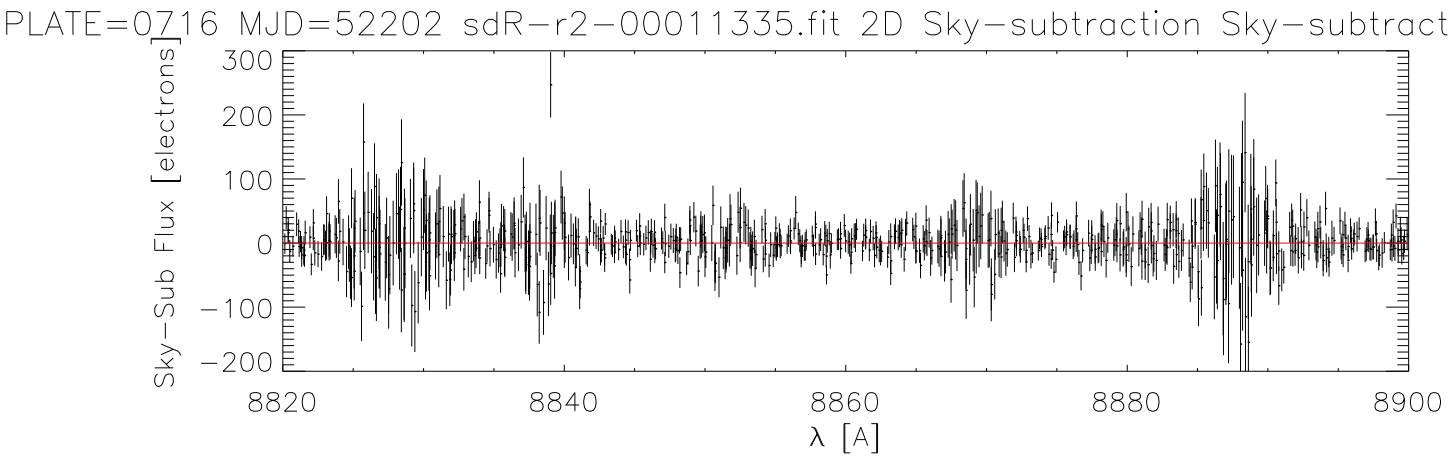

PLATE=0716 MJD=52202 sdR-r2-00011335.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

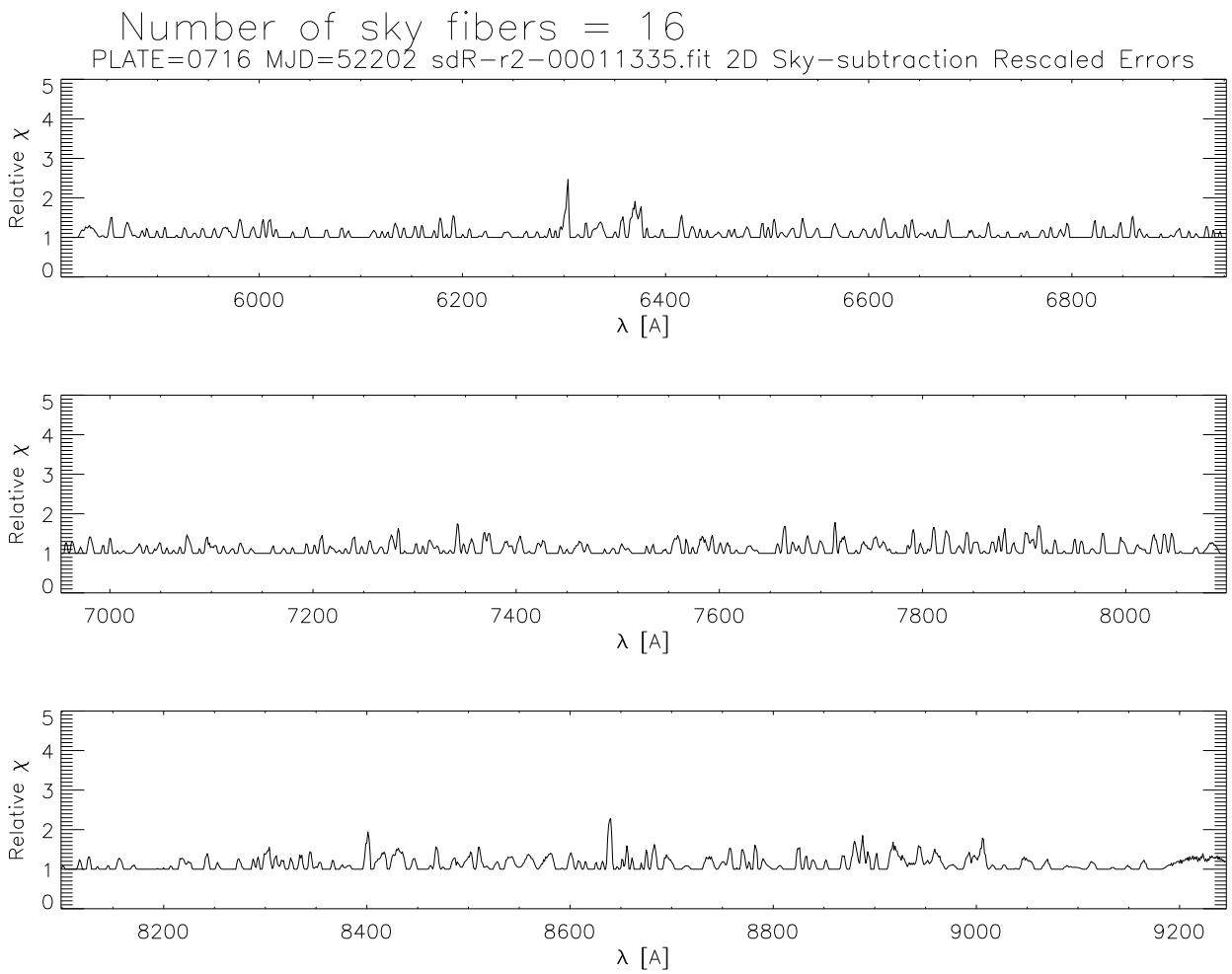

PLATE=0716 MJD=52202 sdR-r2-00011335.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

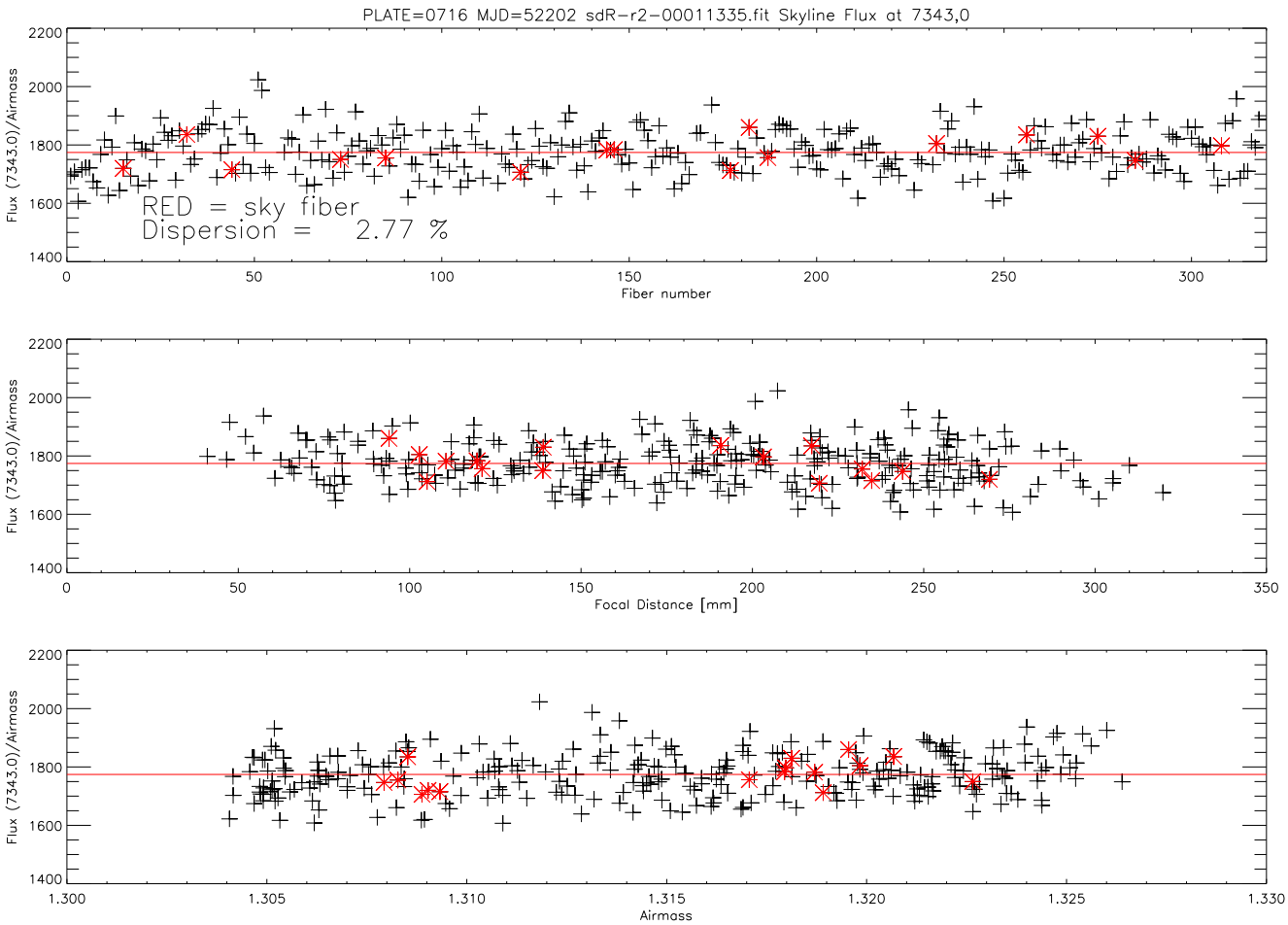

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-r2-00011335.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

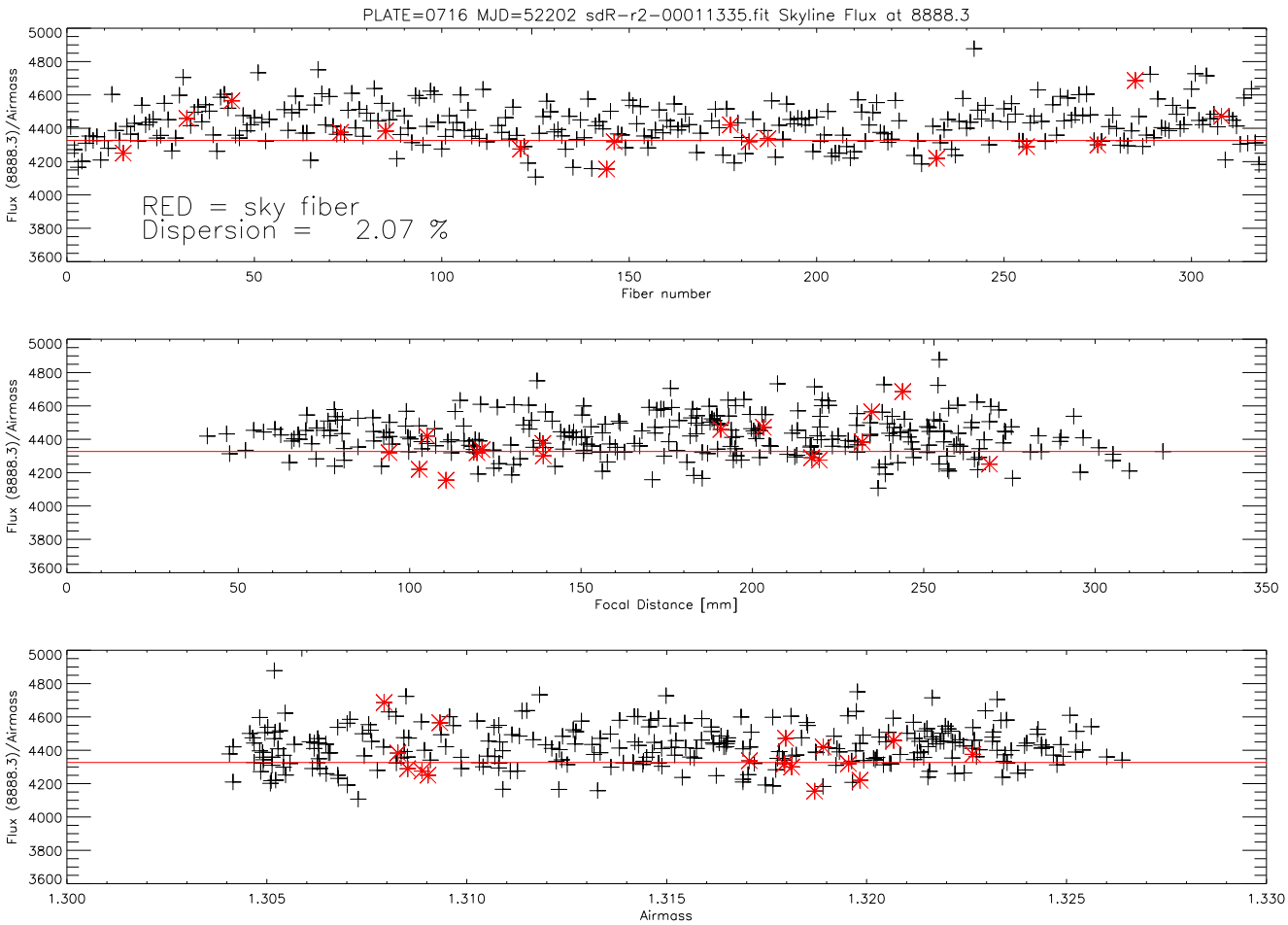

PLATE=0716 MJD=52202 sdR-r2-00011335.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

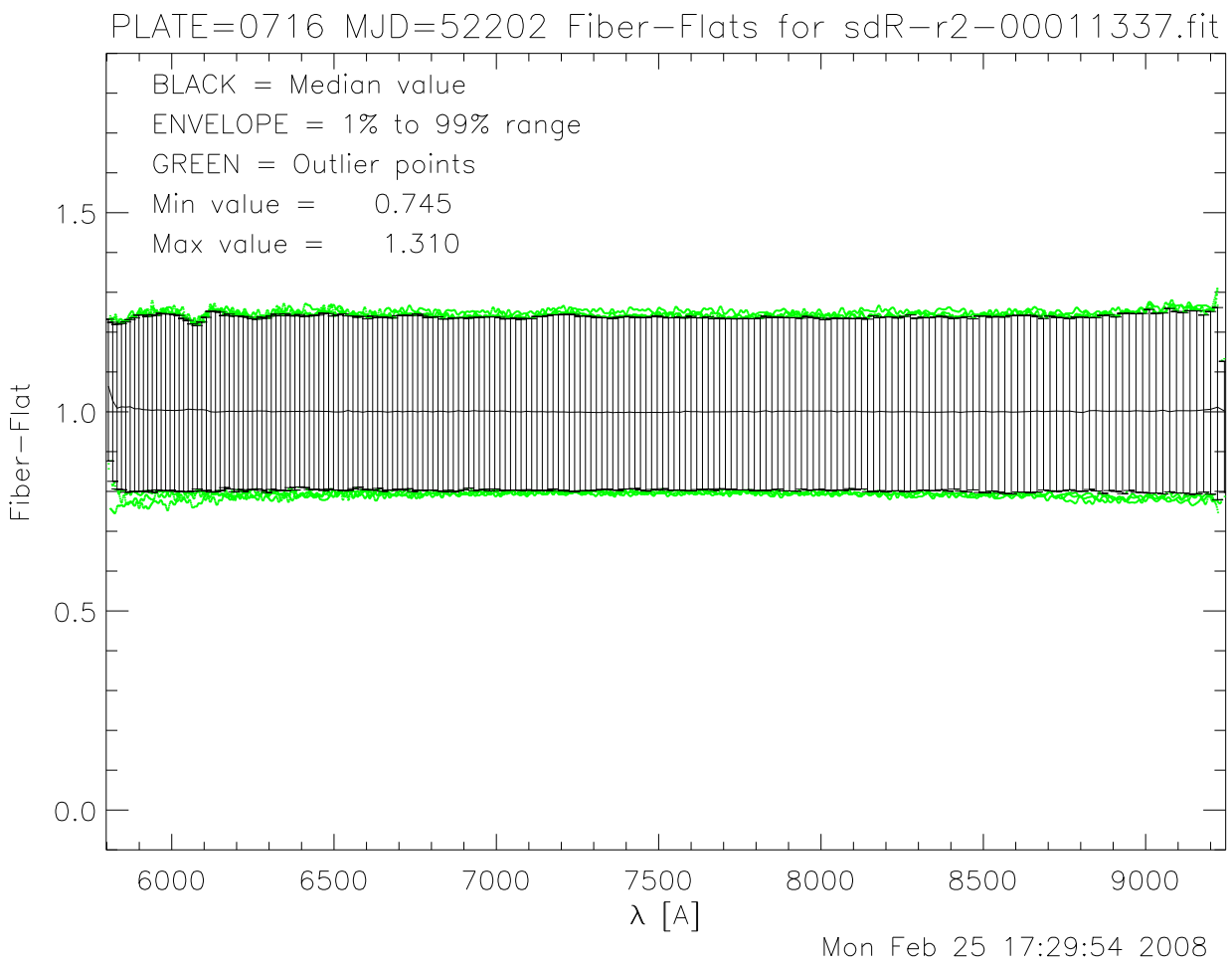

PLATE=0716 MJD=52202 sdR-r2-00011335.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

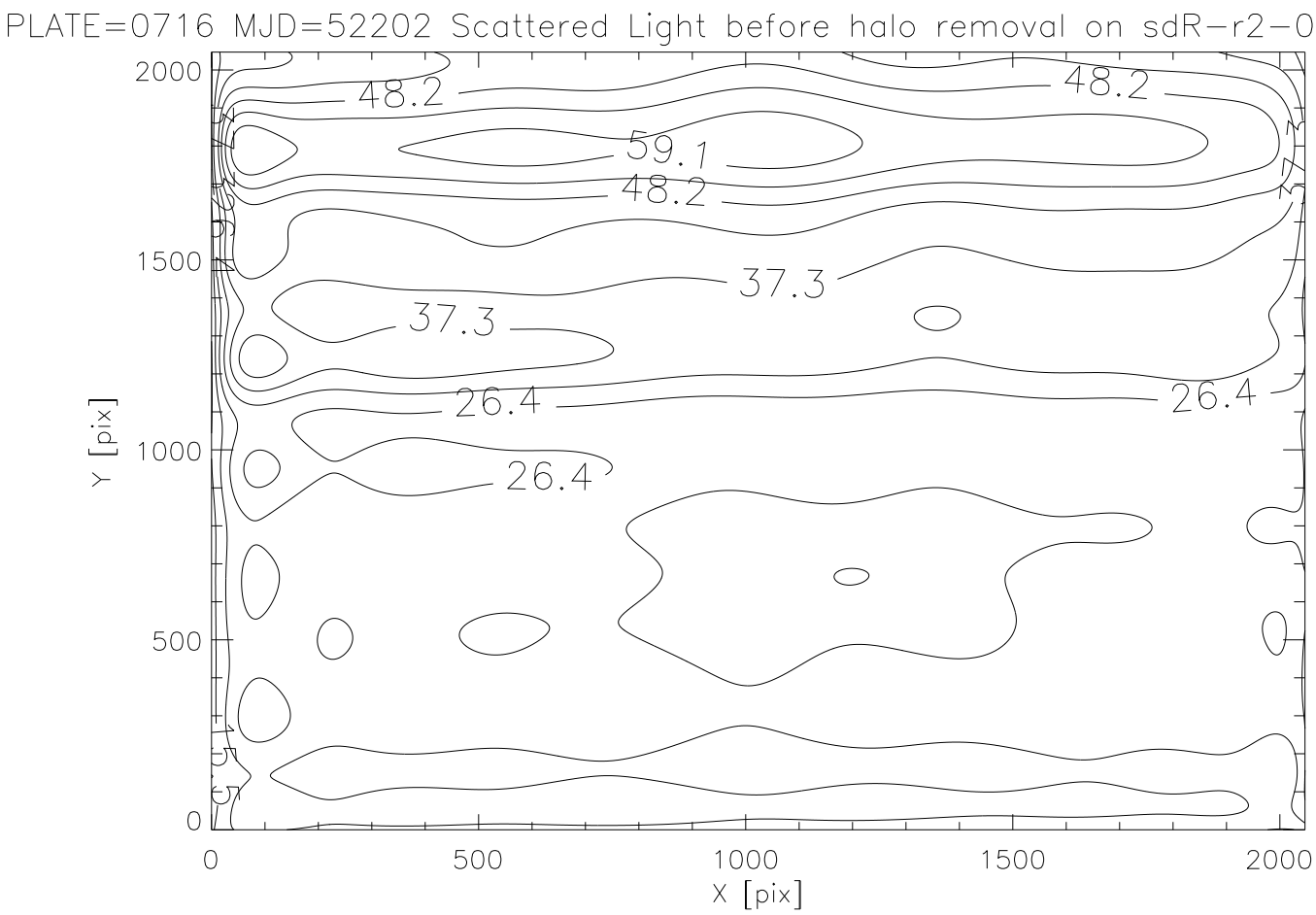

PLATE=0716 MJD=52202 sdR-r2-00011335.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

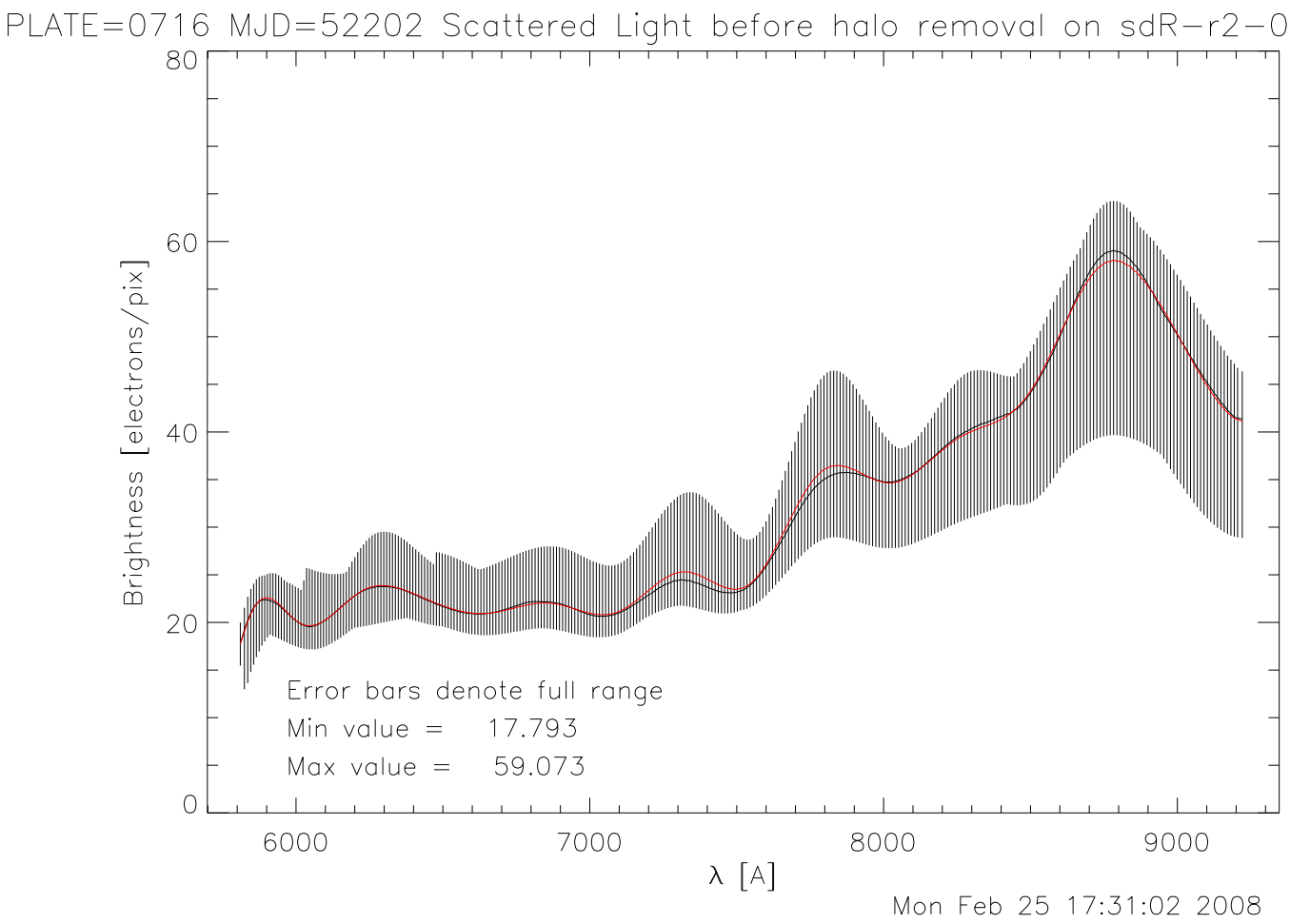

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-r2-00011335.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

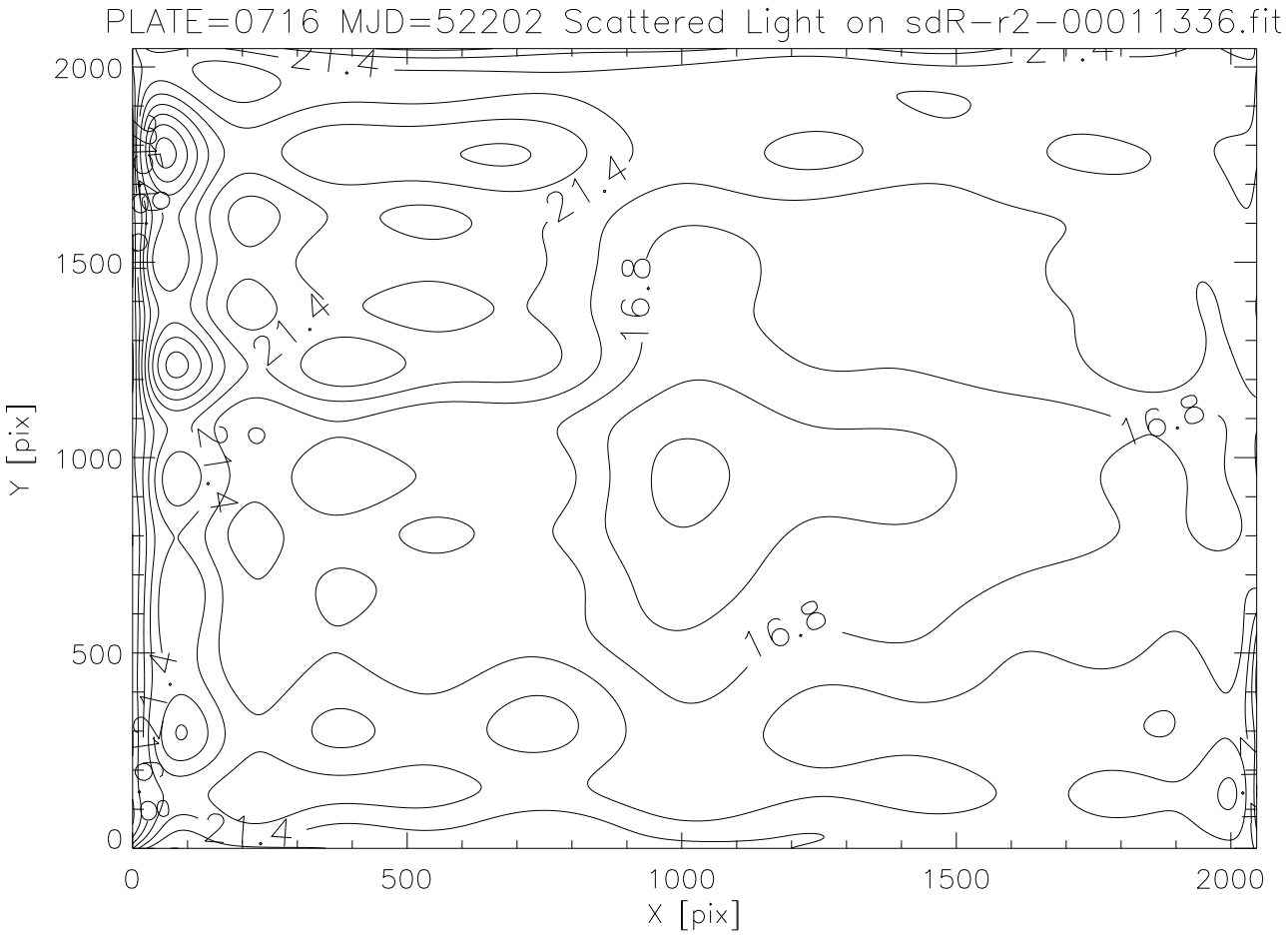

PLATE=0716 MJD=52202 sdR-r2-00011335.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.77 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

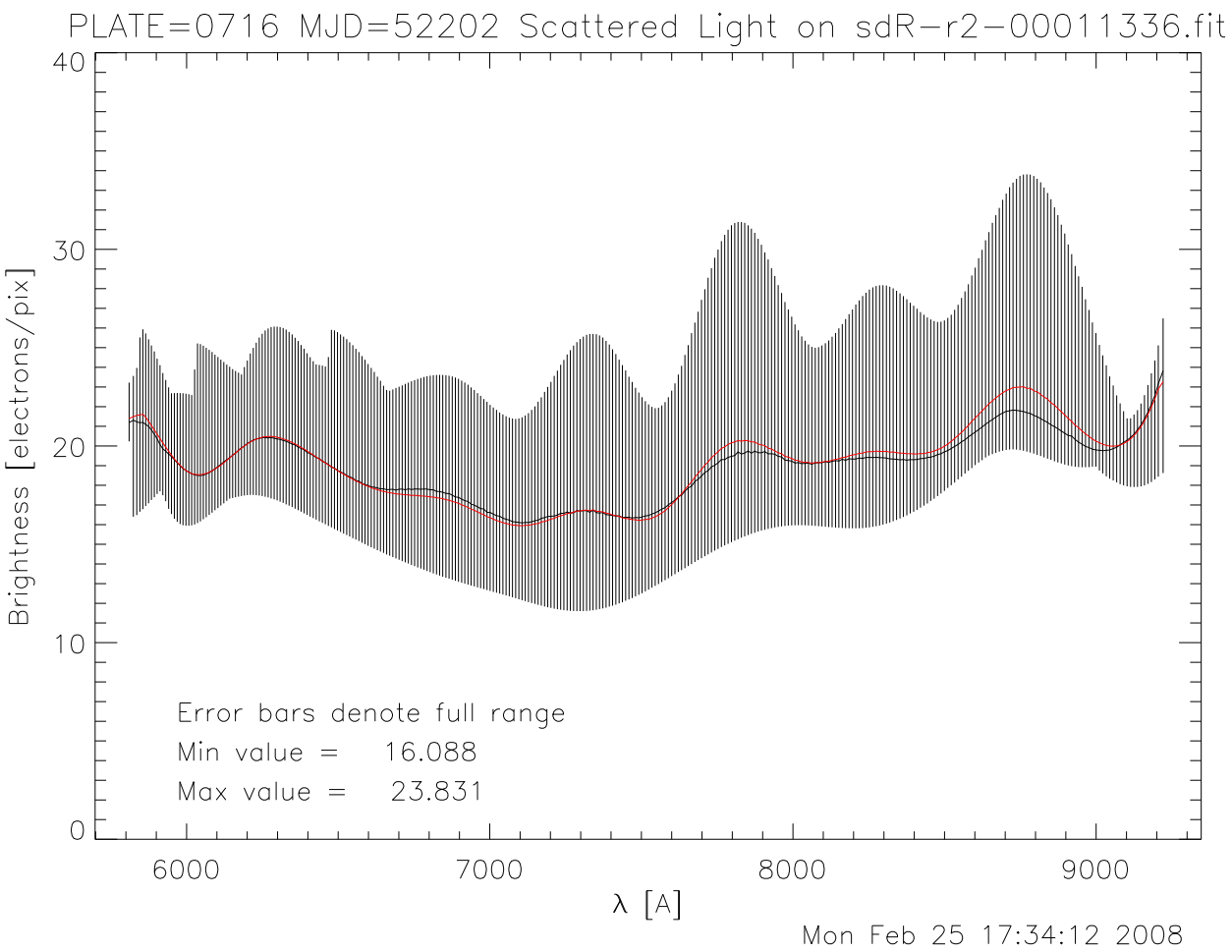

PLATE=0716 MJD=52202 sdR-r2-00011335.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.07 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

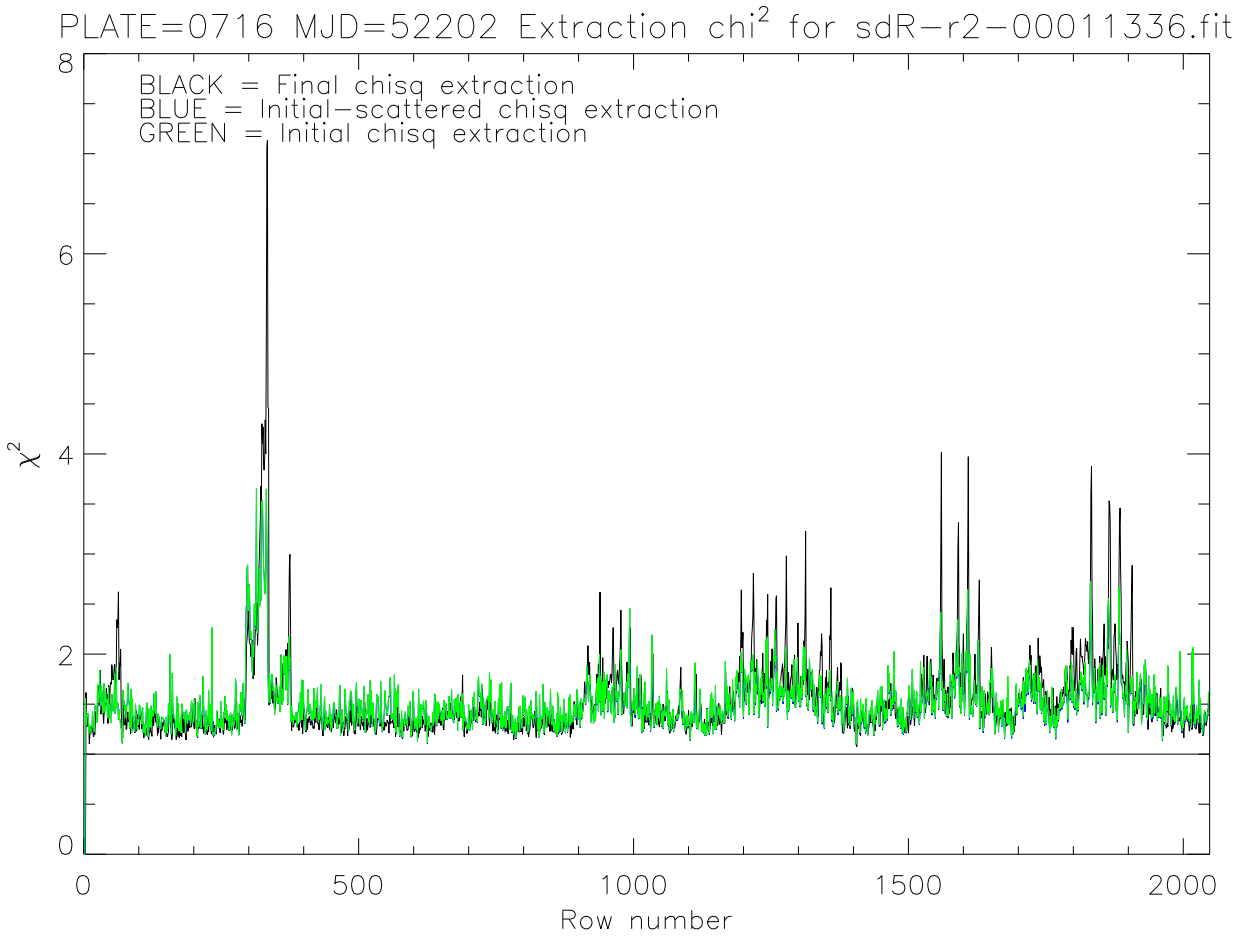

PLATE=0716 MJD=52202 Fiber−Flats for sdR−r2−00011337.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.745
Max value = 1.310
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 17:29:54 2008

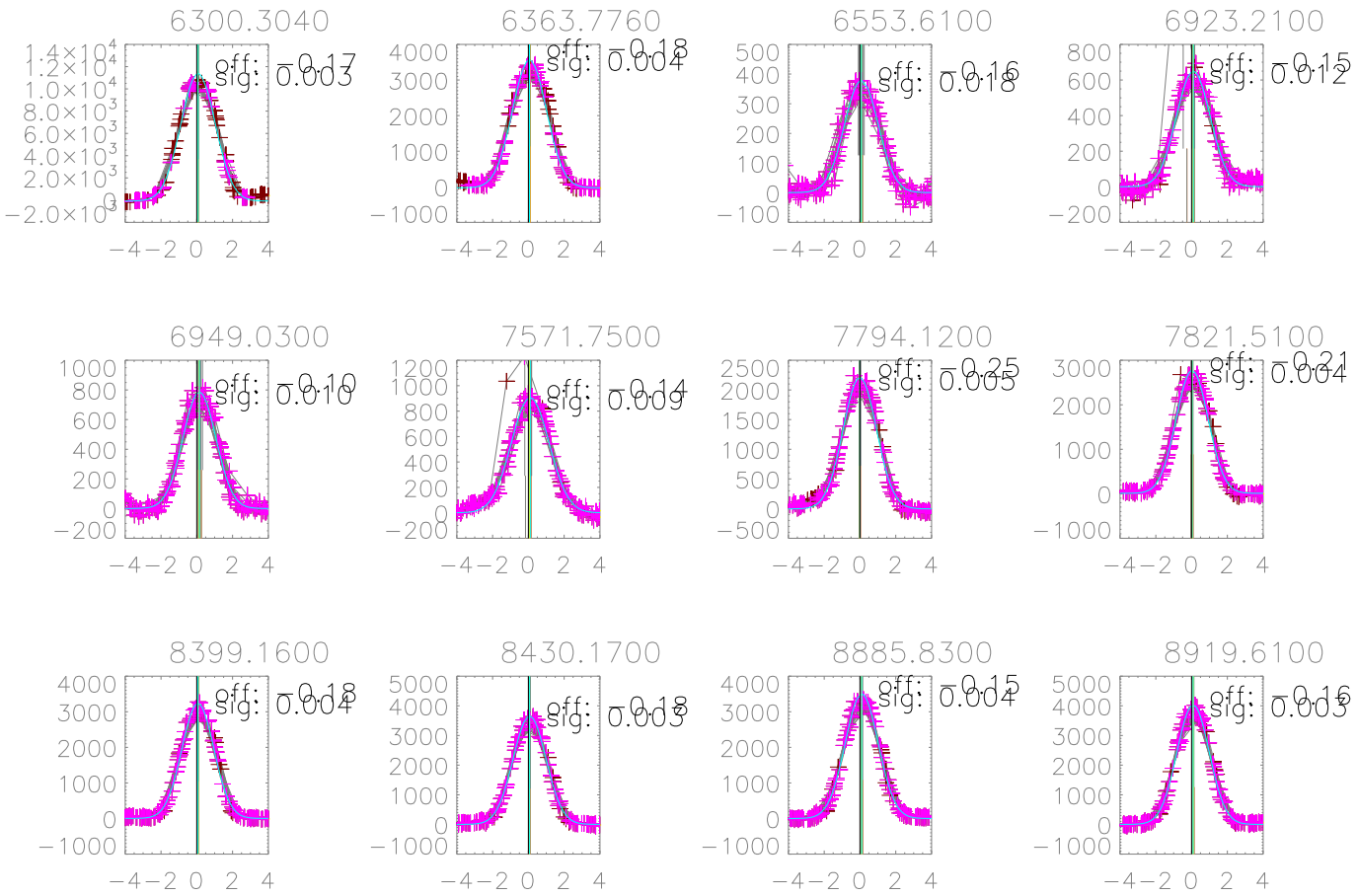

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR−r2−00011336.fi
48.2
48.2
59.1
48.2
37.3
37.3
26.4
26.4
26.4
Y [pix]
X [pix]
0
500
1000
1500
2000

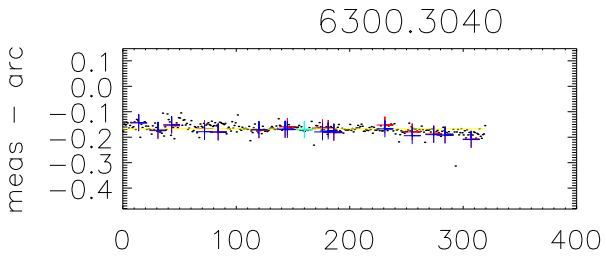

PLATE=0716 MJD=52202 Scattered Light before halo removal on sdR-r2-00011336.fi
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 17.793
Max value = 59.073
Mon Feb 25 17:31:02 2008

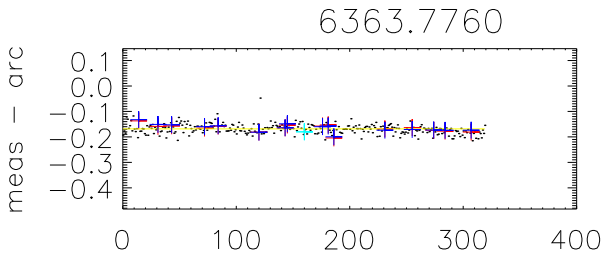

PLATE=0716 MJD=52202 Scattered Light on sdR-r2-00011336.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
21.4
16.8

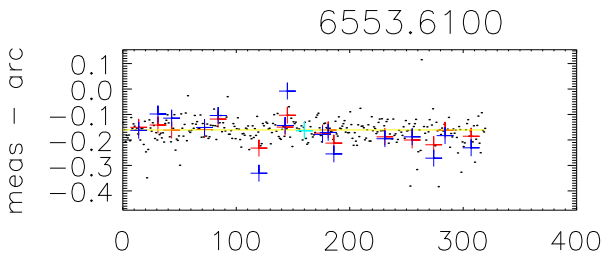

PLATE=0716 MJD=52202 Scattered Light on sdR-r2-00011336.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 16.088
Max value = 23.831
Mon Feb 25 17:34:12 2008

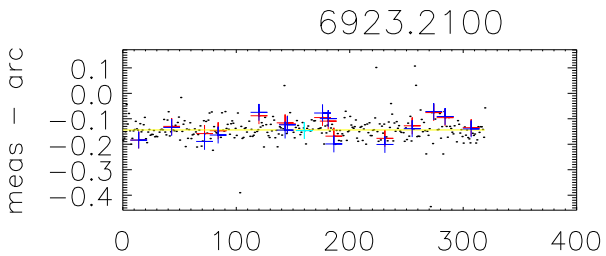

PLATE=0716 MJD=52202 Extraction chi^2 for sdR−r2−00011336.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

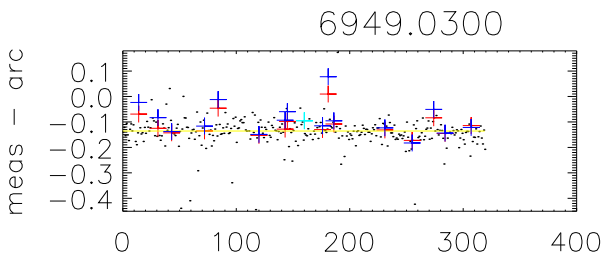

6300.3040
off: −0.17
sig: 0.003
6363.7760
off: −0.18
sig: 0.004
6553.6100
off: −0.16
sig: 0.018
6923.2100
off: −0.15
sig: 0.012
6949.0300
off: −0.10
sig: 0.010
7571.7500
off: −0.14
sig: 0.009
7794.1200
off: −0.25
sig: 0.005
7821.5100
off: −0.21
sig: 0.004
8399.1600
off: −0.18
sig: 0.004
8430.1700
off: −0.18
sig: 0.003
8885.8300
off: −0.15
sig: 0.004
8919.6100
off: −0.16
sig: 0.003

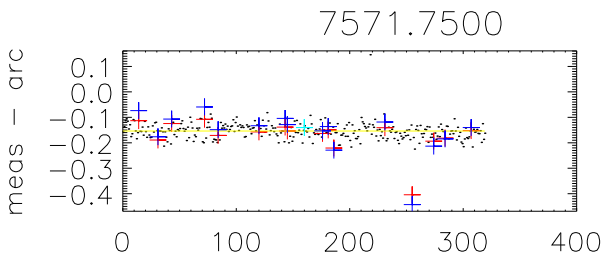

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

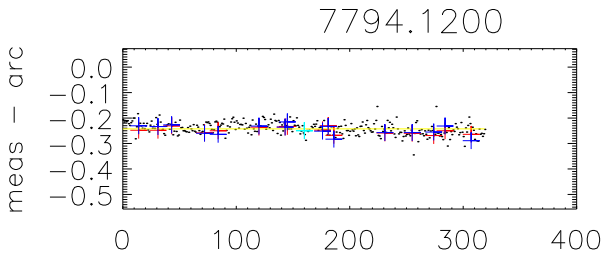

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

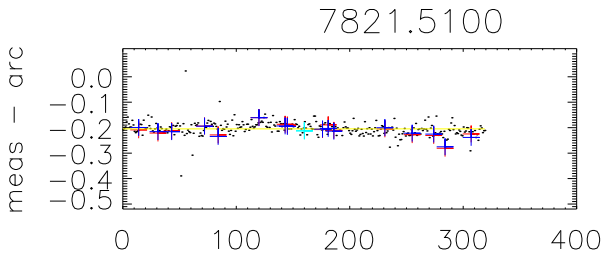

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

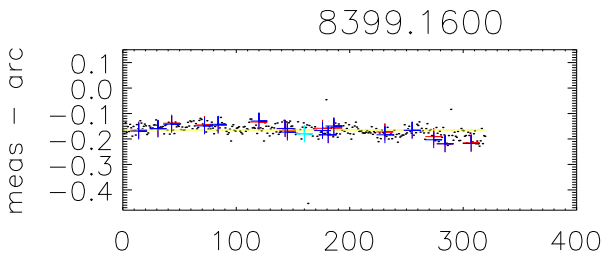

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

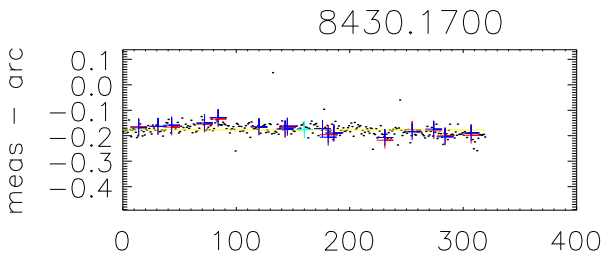

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

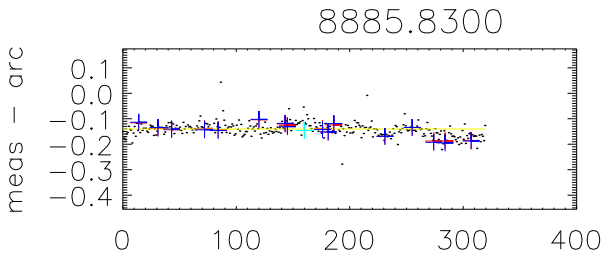

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

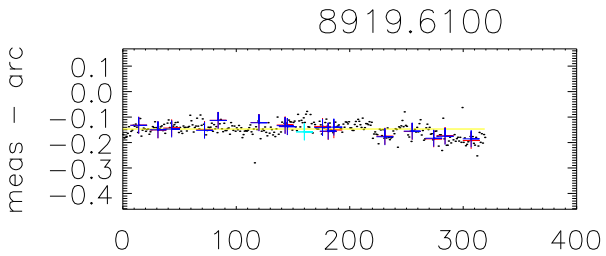

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

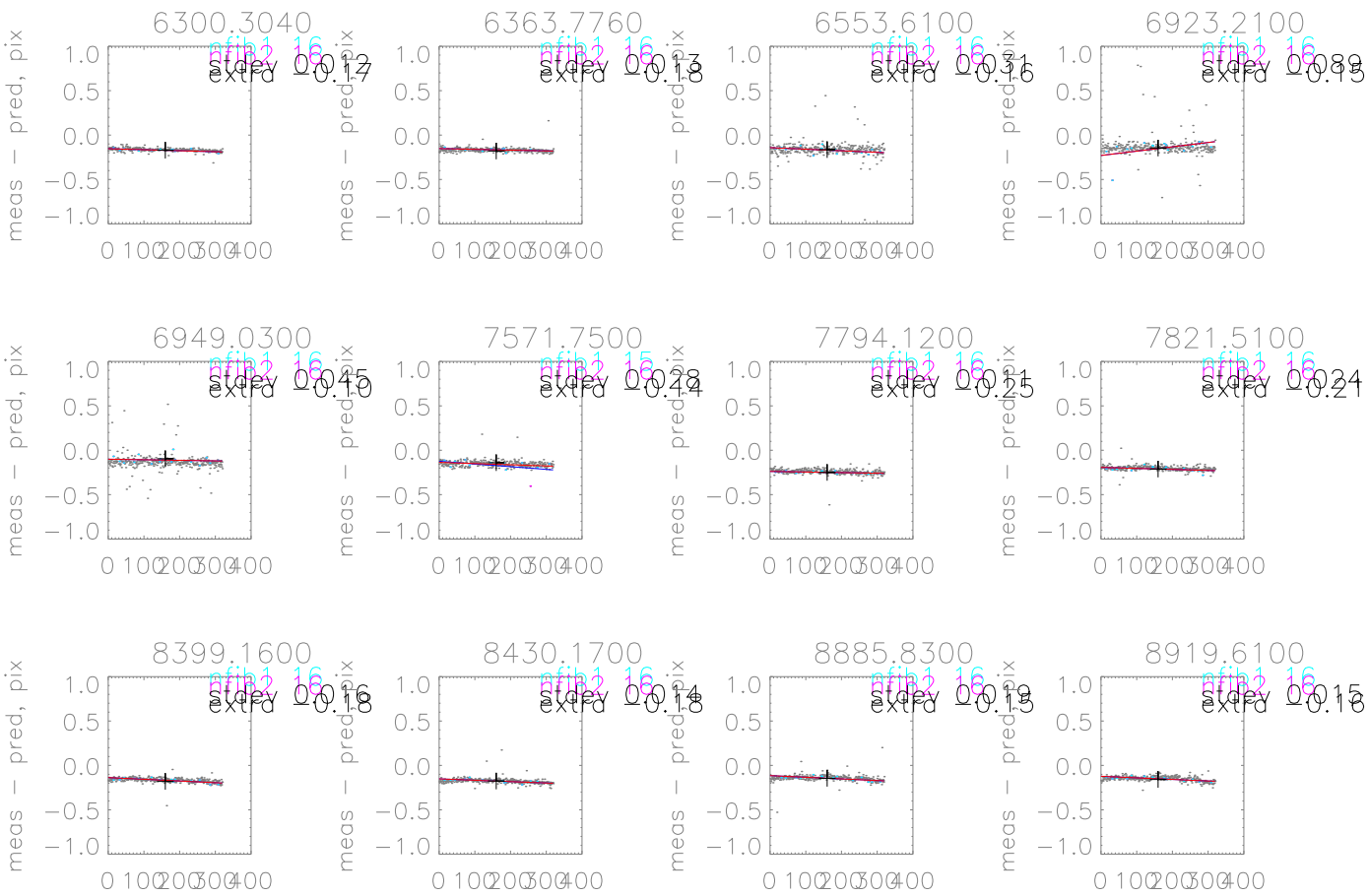

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

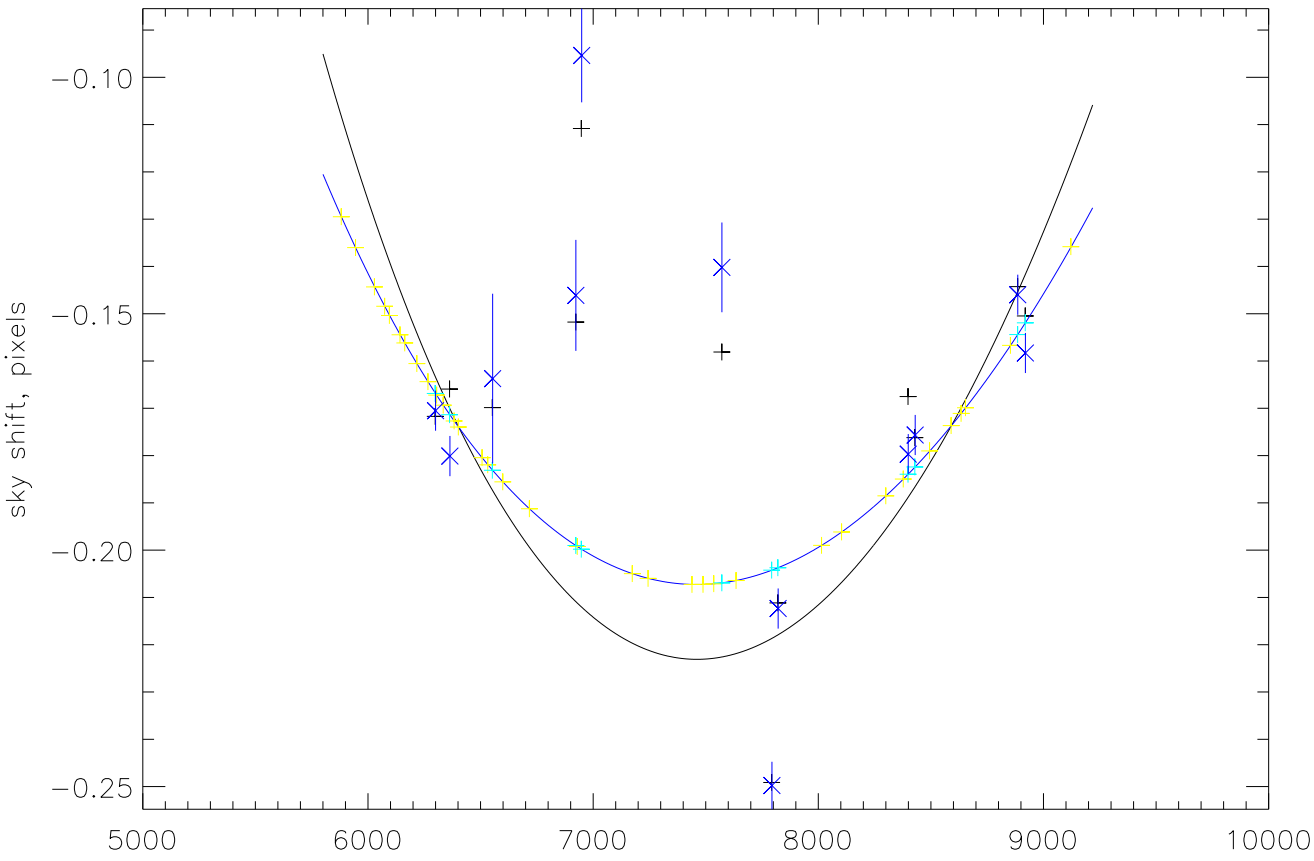

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

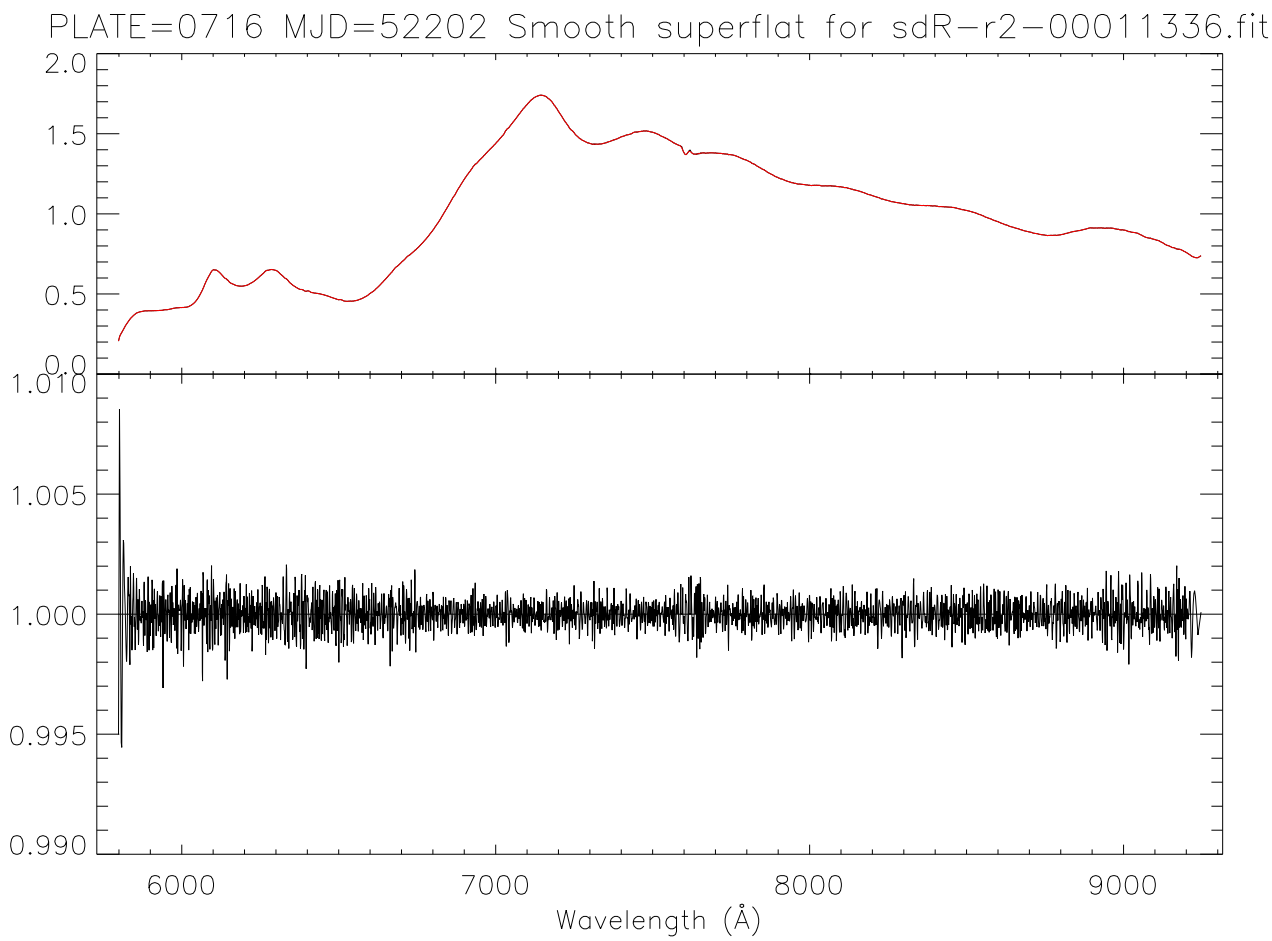

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

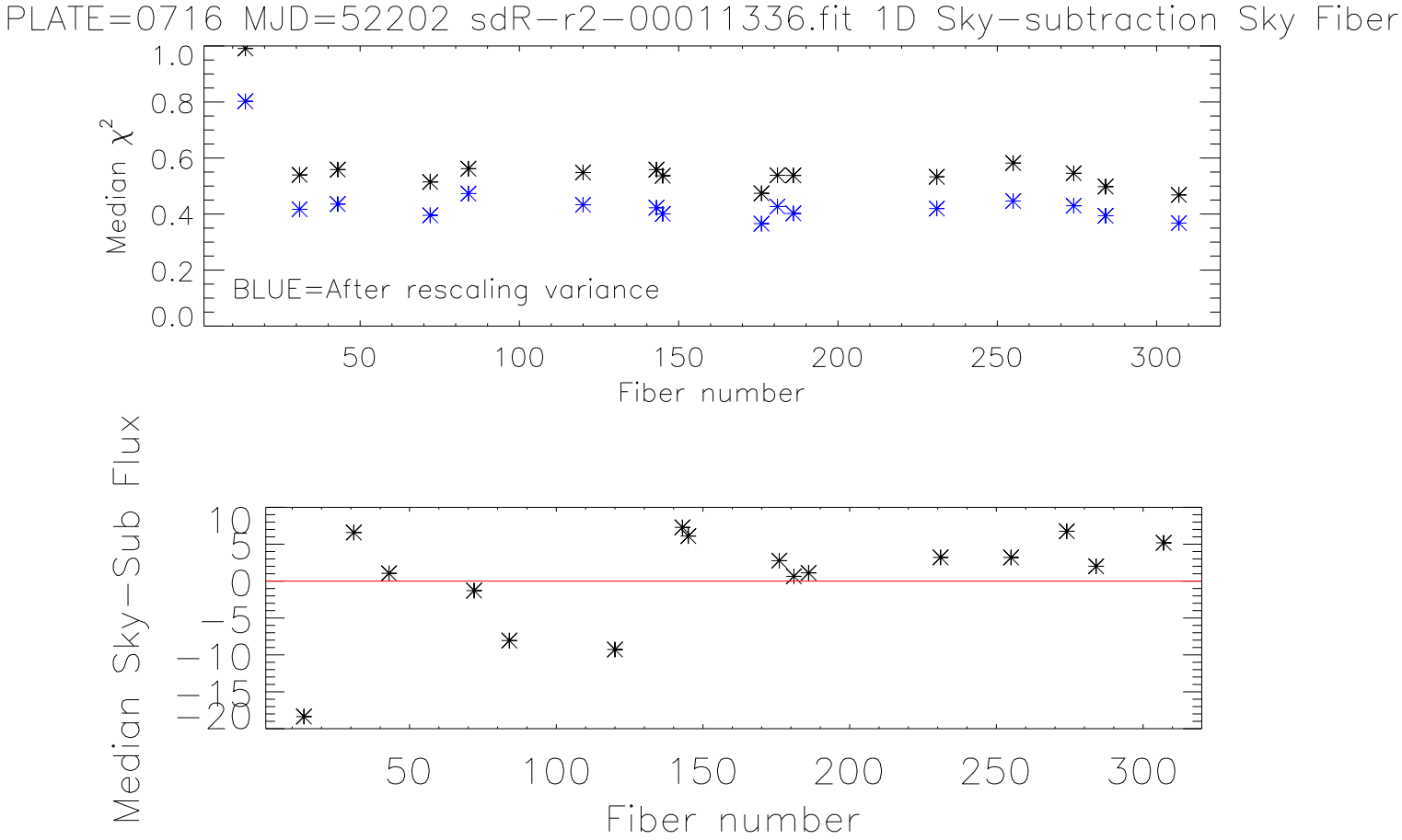

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

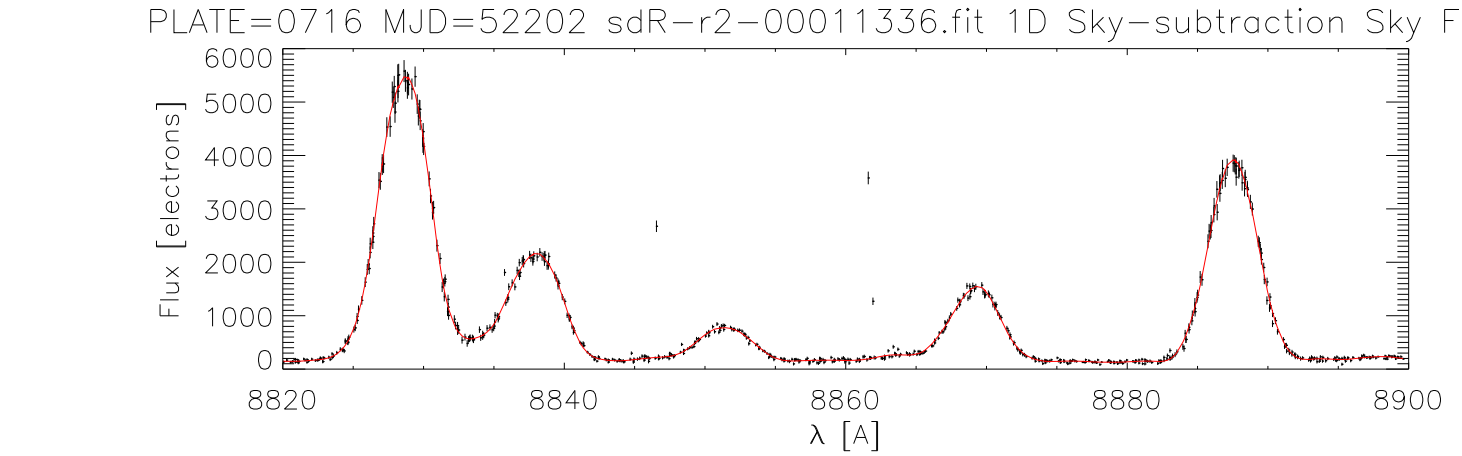

6300.3040
stdev 0.012
extra −0.17
6363.7760
stdev 0.013
extra −0.18
6553.6100
stdev 0.031
extra −0.16
6923.2100
stdev 0.089
extra −0.15
6949.0300
stdev 0.045
extra −0.10
7571.7500
stdev 0.028
extra −0.44
7794.1200
stdev 0.041
extra −0.25
7821.5100
stdev 0.024
extra −0.21
8399.1600
stdev 0.016
extra −0.18
8430.1700
stdev 0.014
extra −0.18
8885.8300
stdev 0.019
extra −0.15
8919.6100
stdev 0.015
extra −0.16
meas − pred, pix

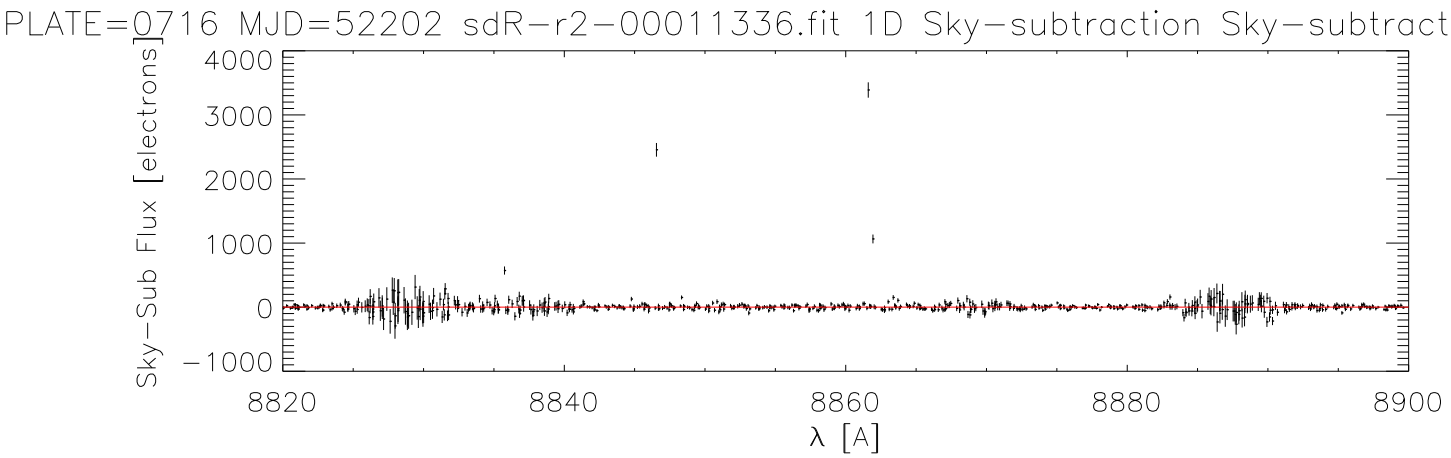

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
5000
6000
7000
8000
9000
10000

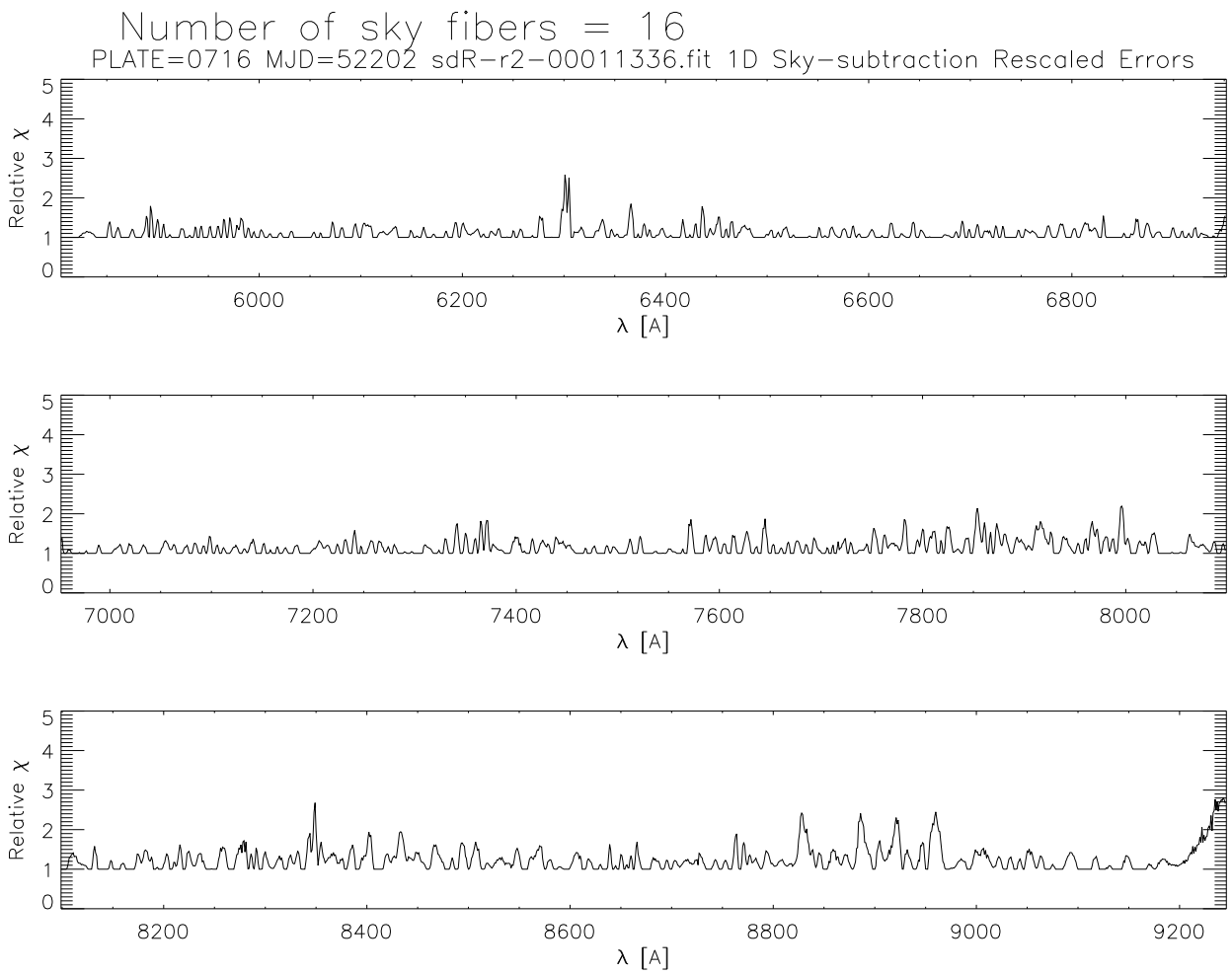
es= −0.0000

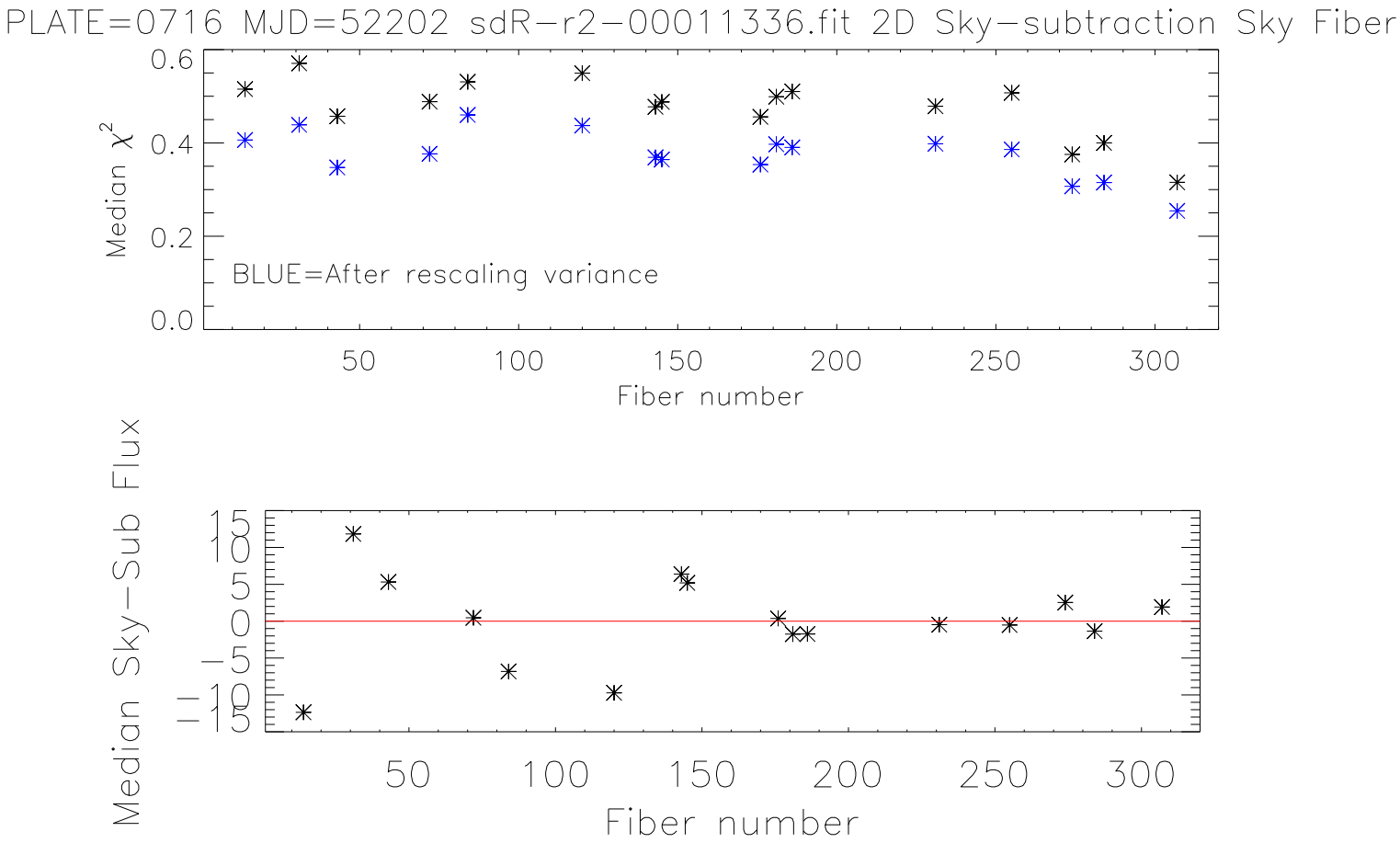

PLATE=0716 MJD=52202 Smooth superflat for sdR−r2−00011336.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

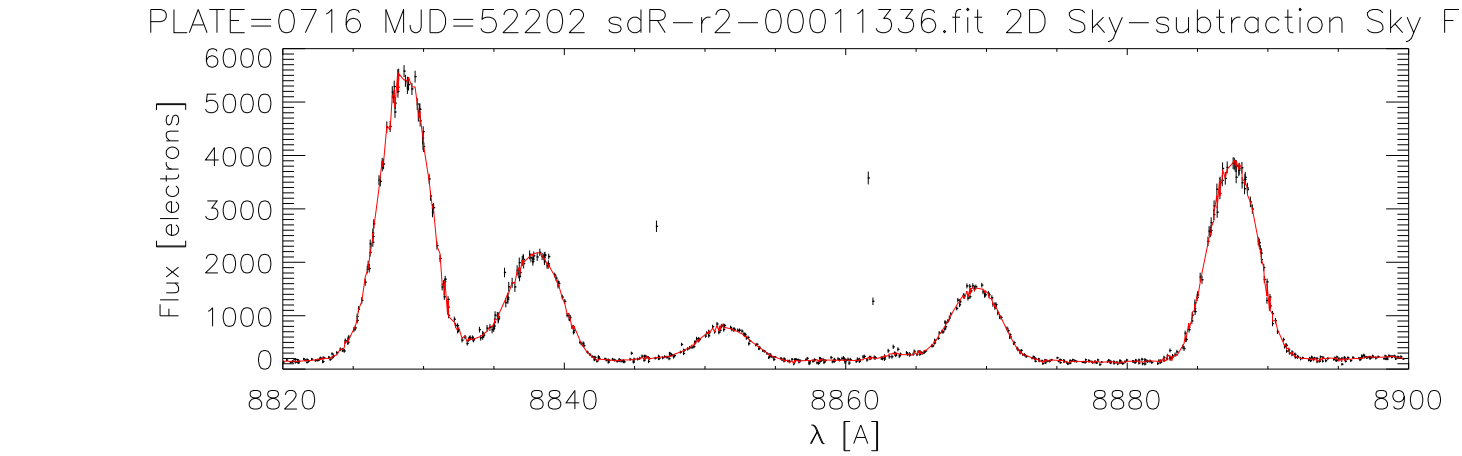

PLATE=0716 MJD=52202 sdR-r2-00011336.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

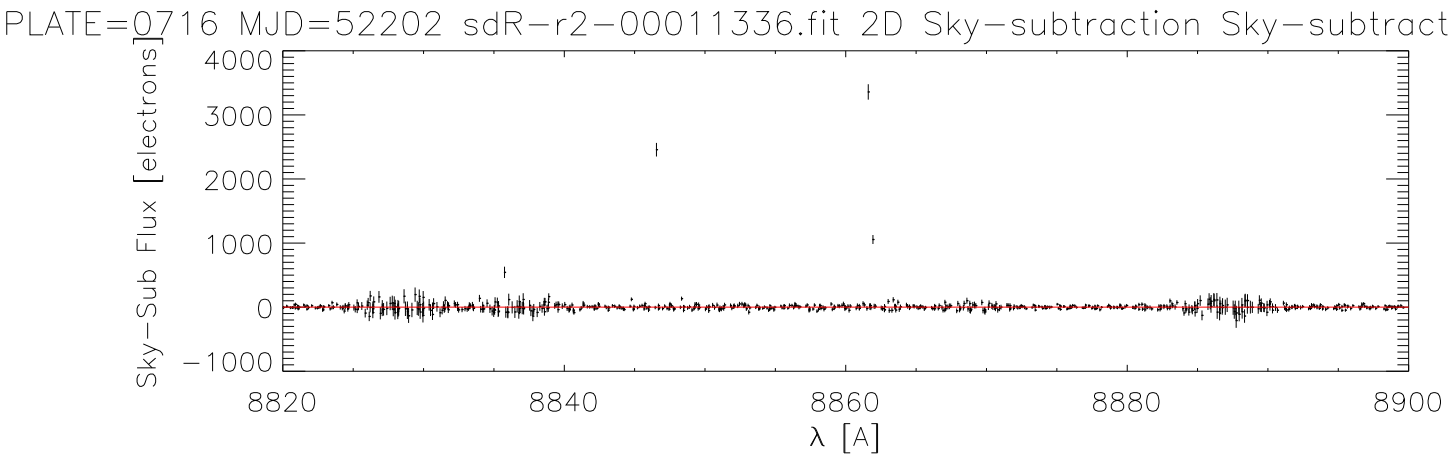

PLATE=0716 MJD=52202 sdR-r2-00011336.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

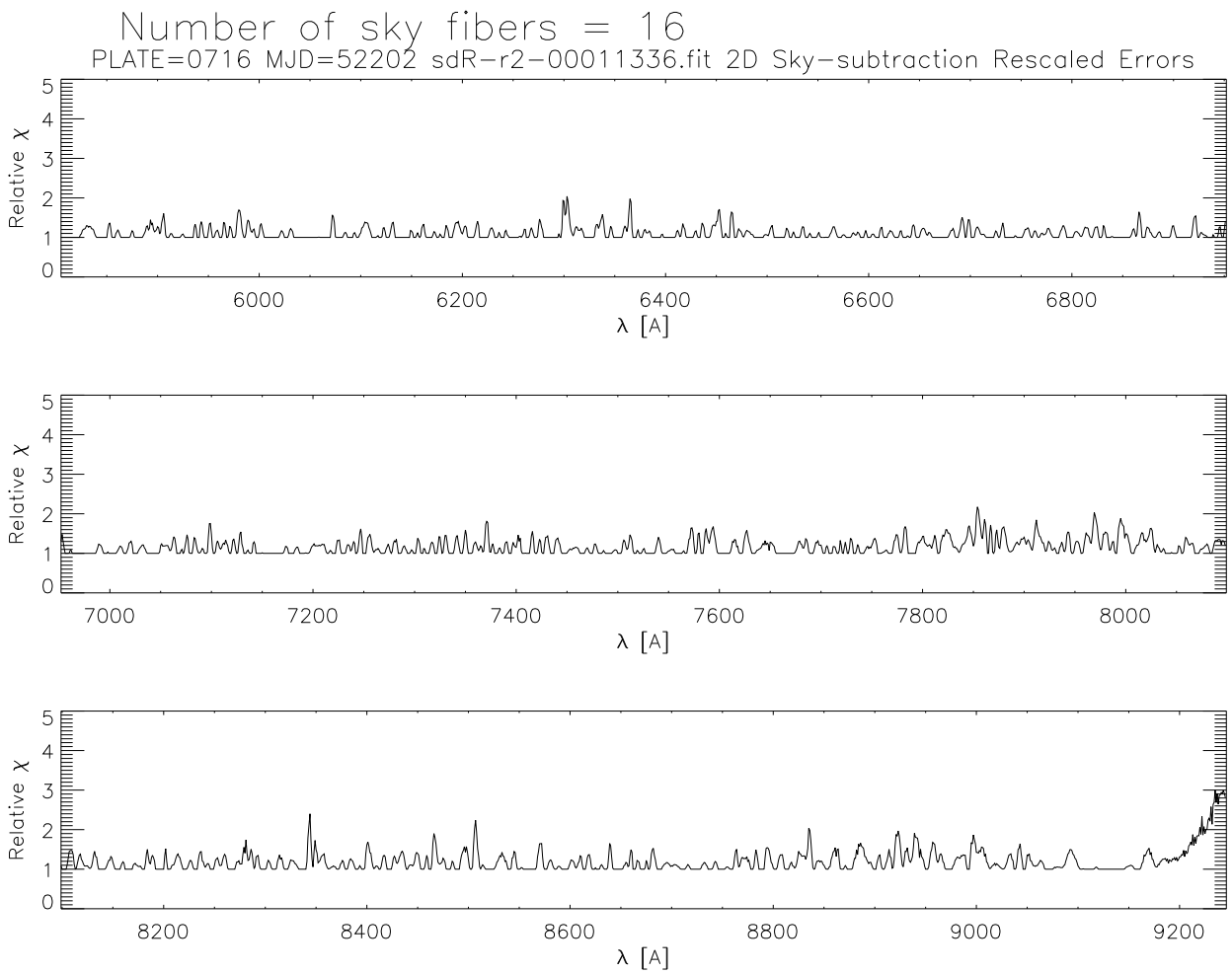

PLATE=0716 MJD=52202 sdR-r2-00011336.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

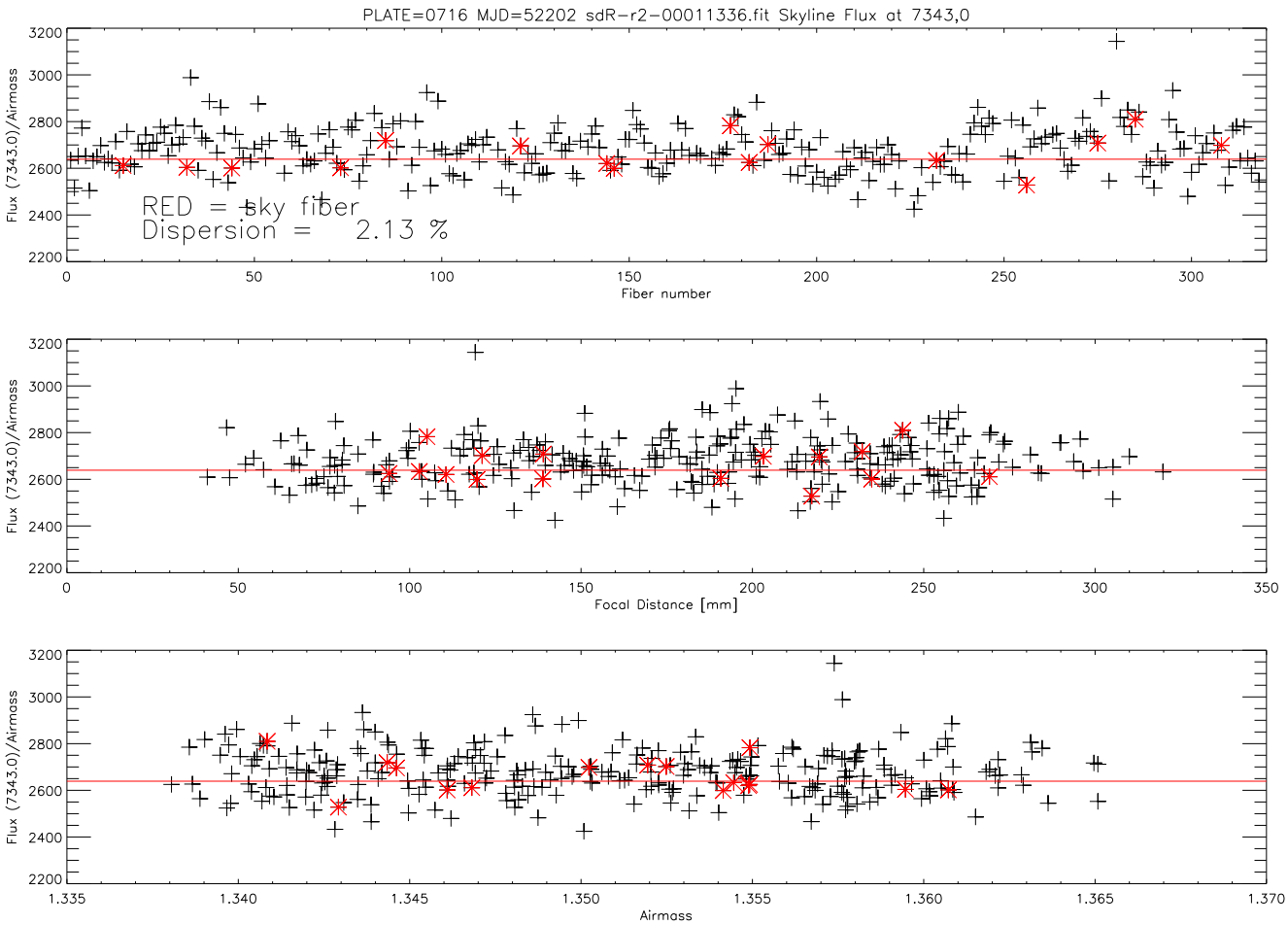

Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-r2-00011336.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

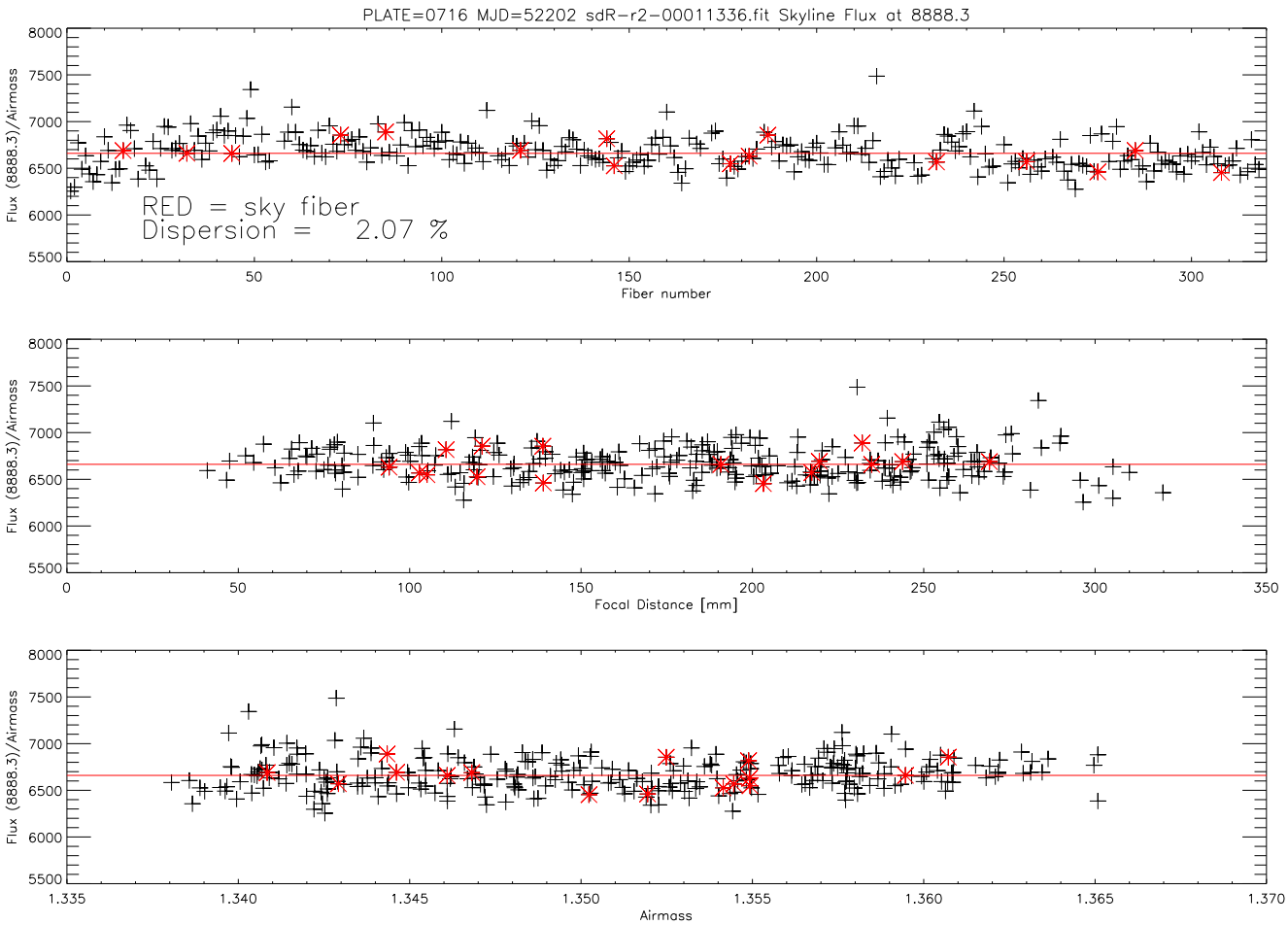

PLATE=0716 MJD=52202 sdR-r2-00011336.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number


PLATE=0716 MJD=52202 sdR-r2-00011336.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=0716 MJD=52202 sdR-r2-00011336.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=0716 MJD=52202 sdR-r2-00011336.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=0716 MJD=52202 sdR-r2-00011336.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.13 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0716 MJD=52202 sdR-r2-00011336.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.07 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass