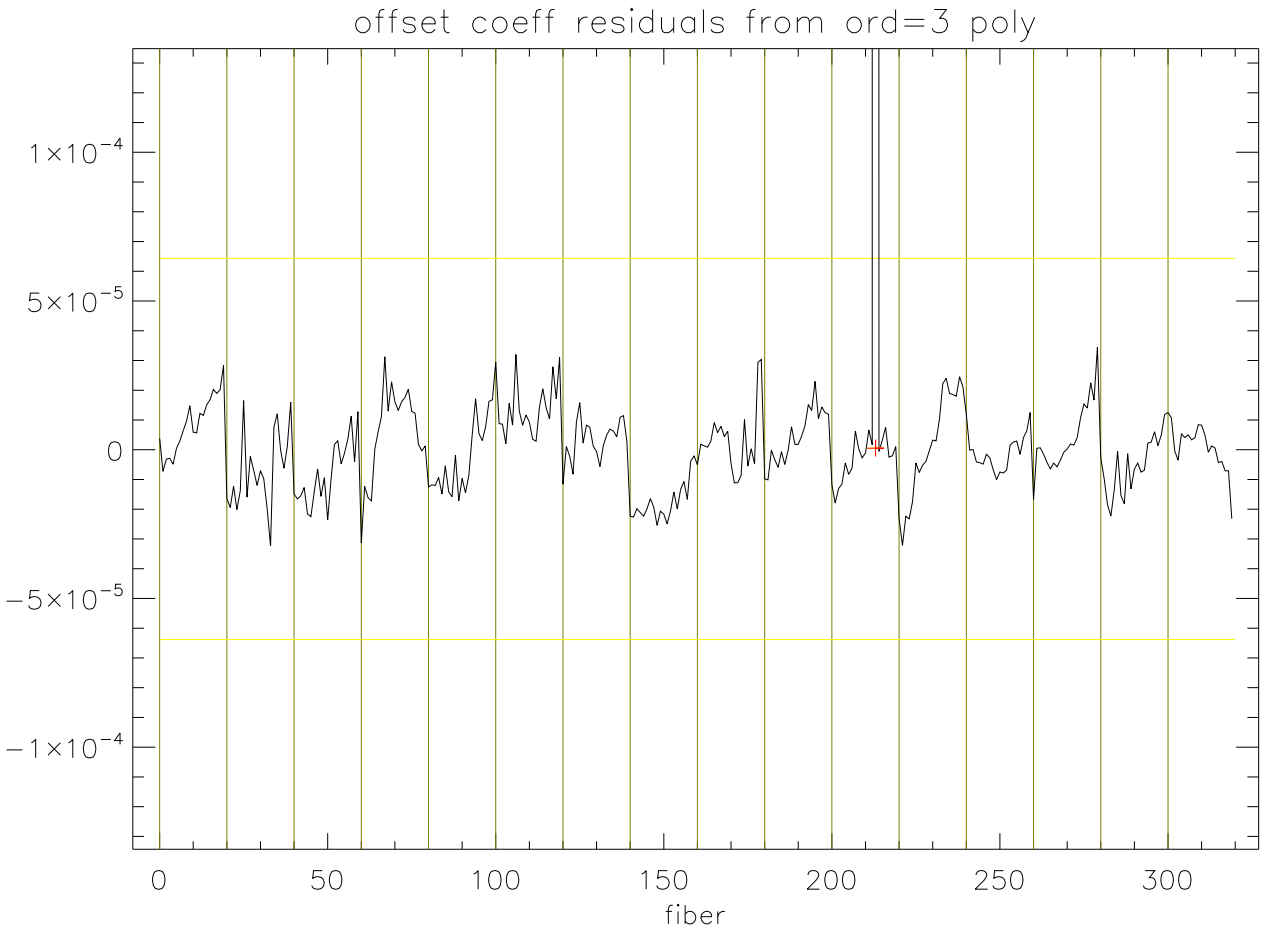
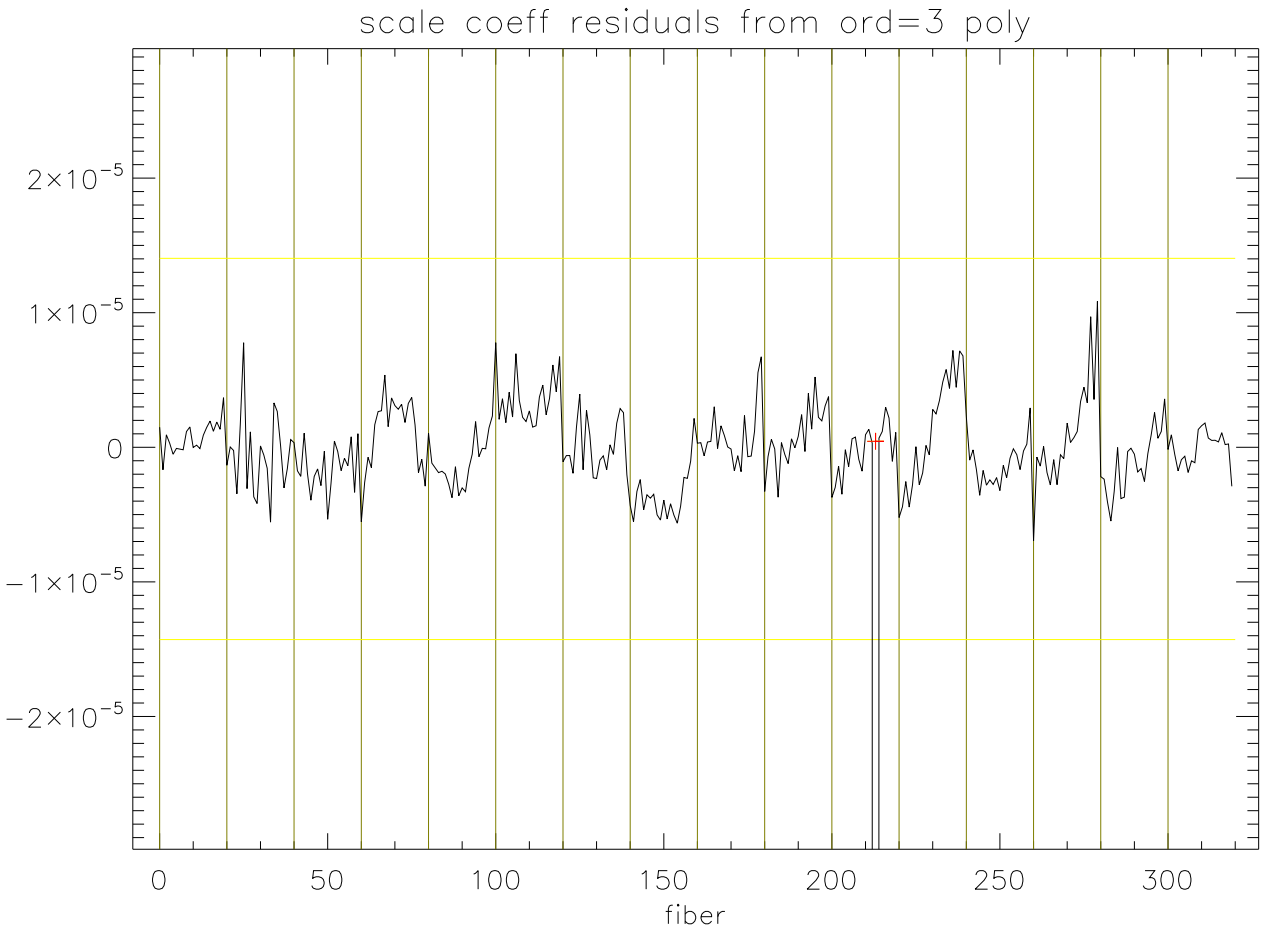
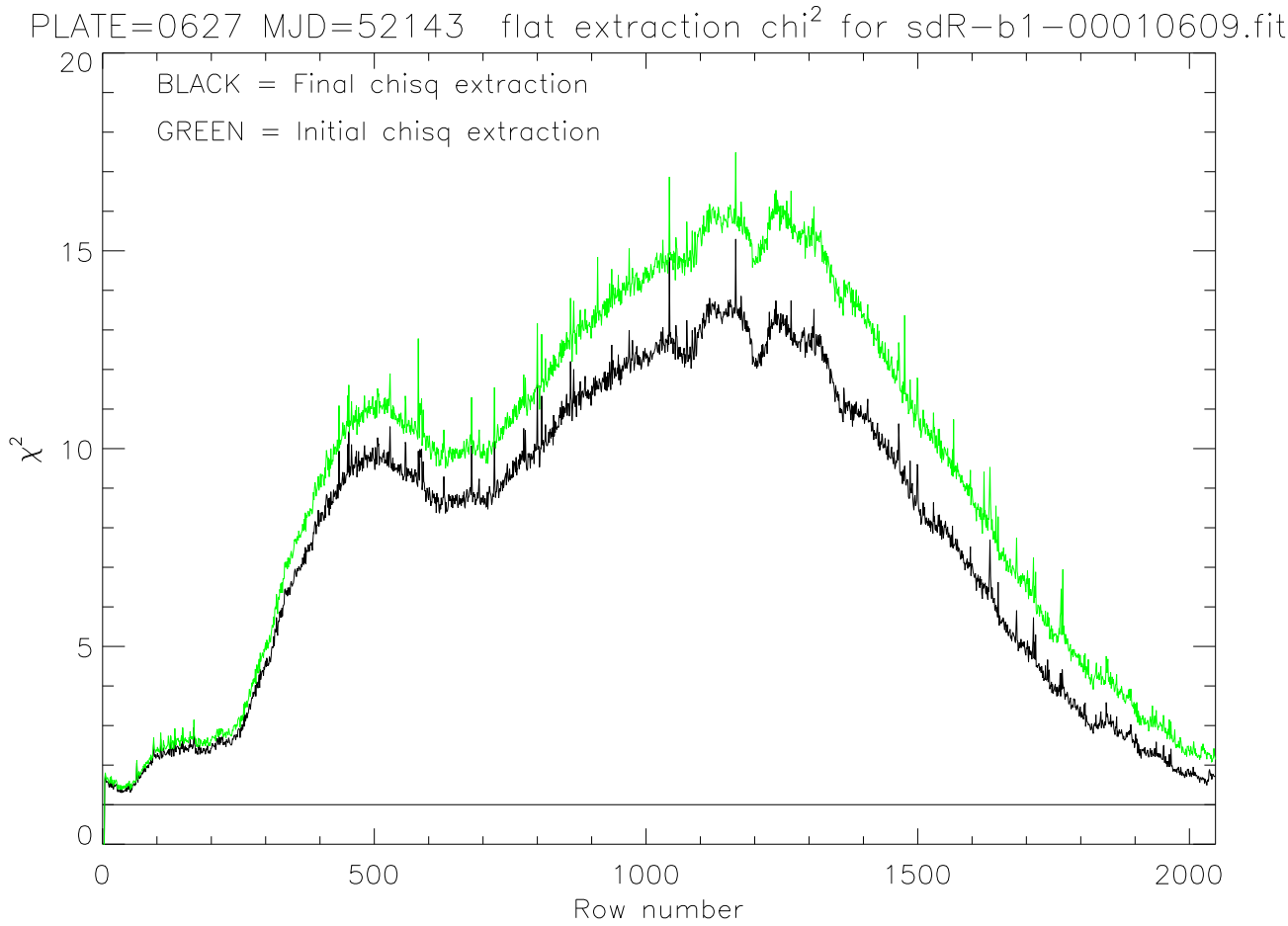
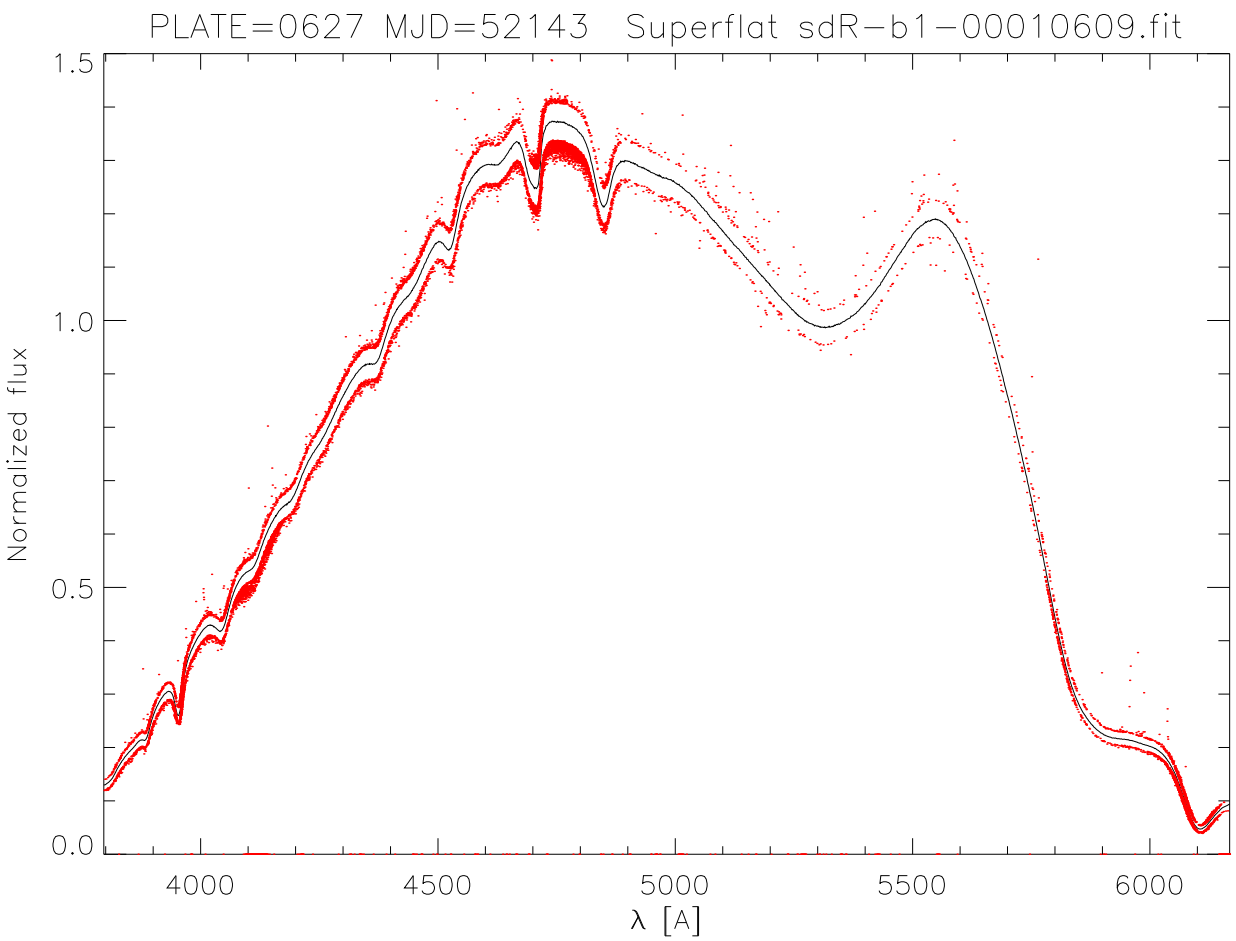
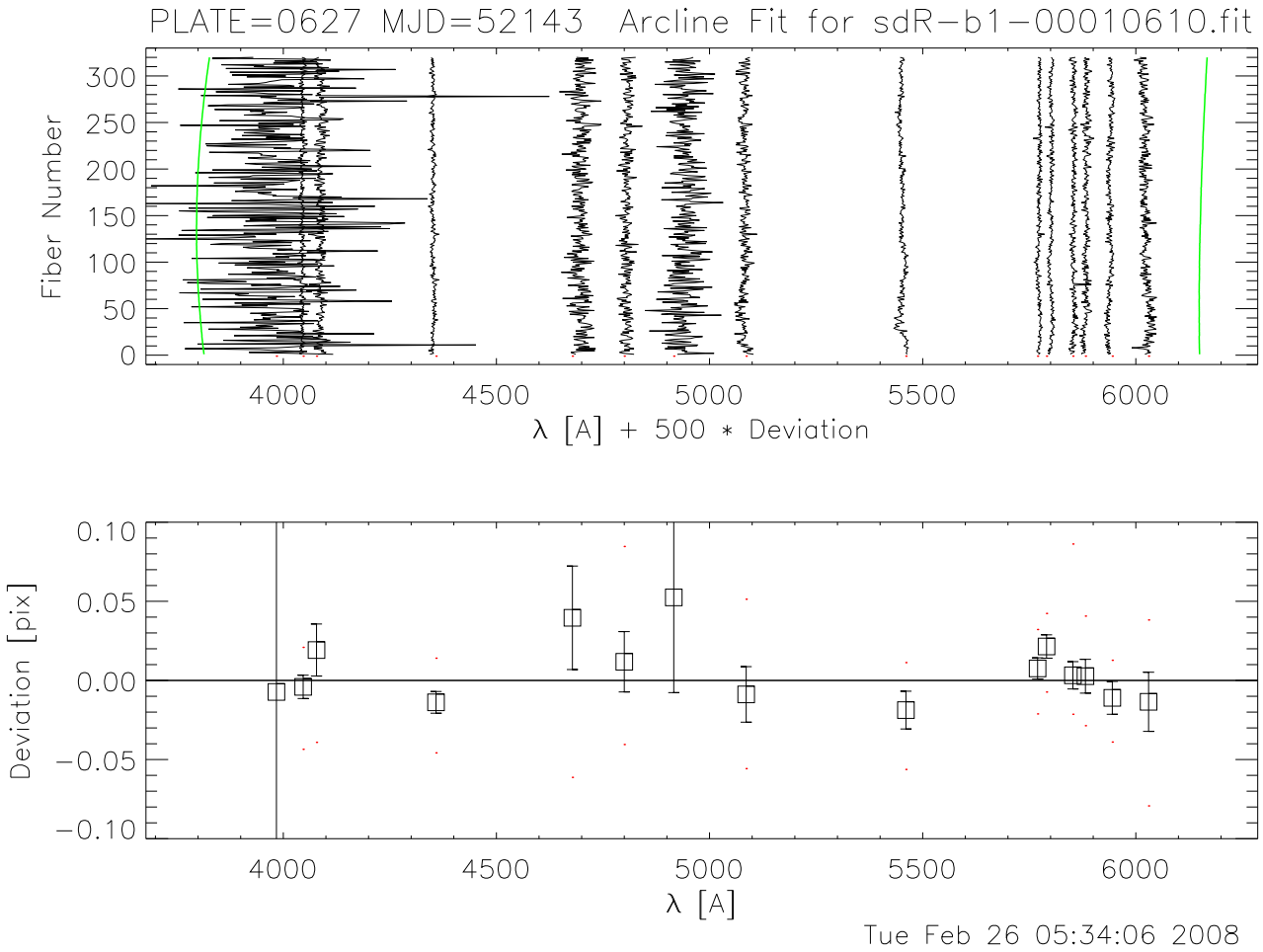
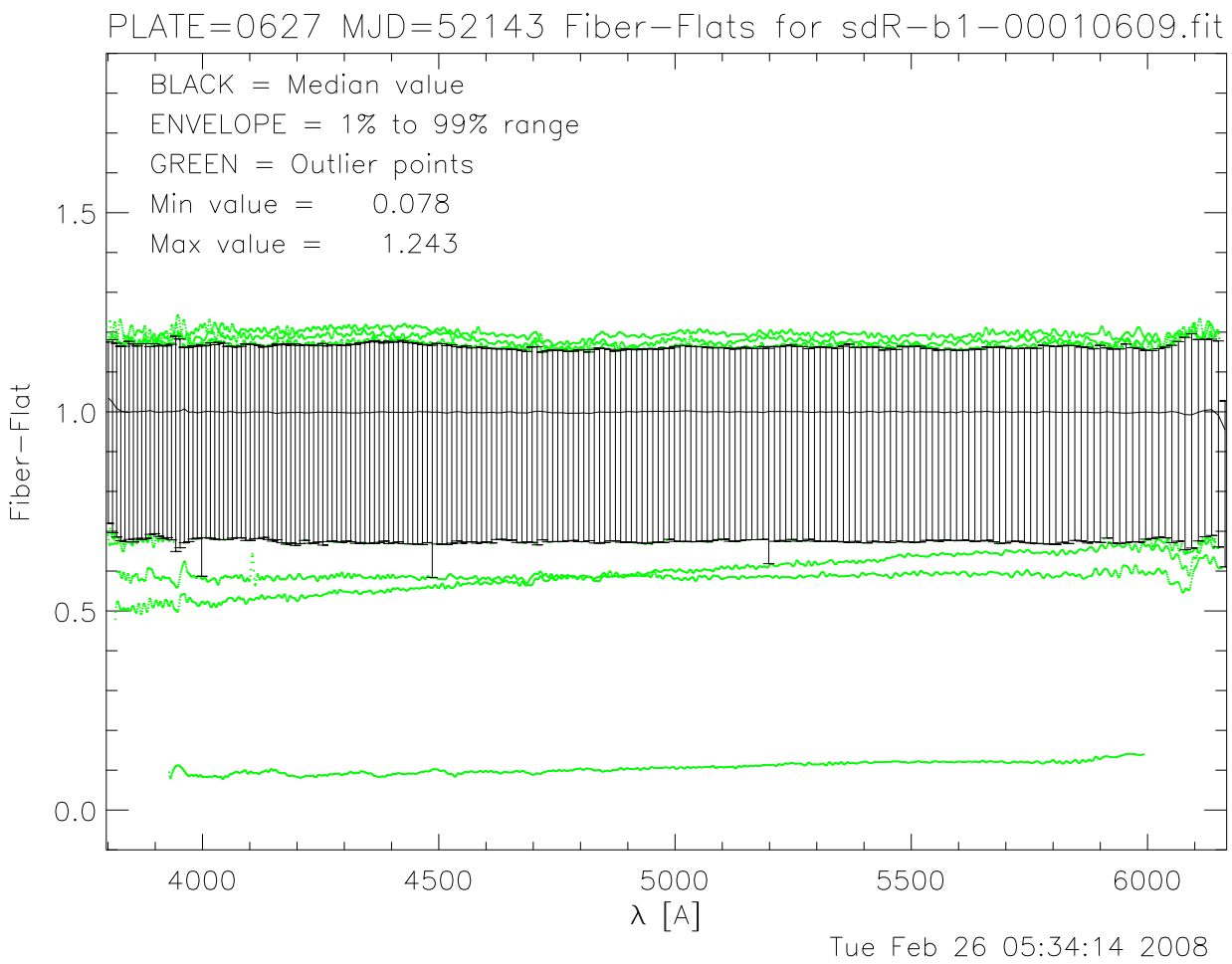

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

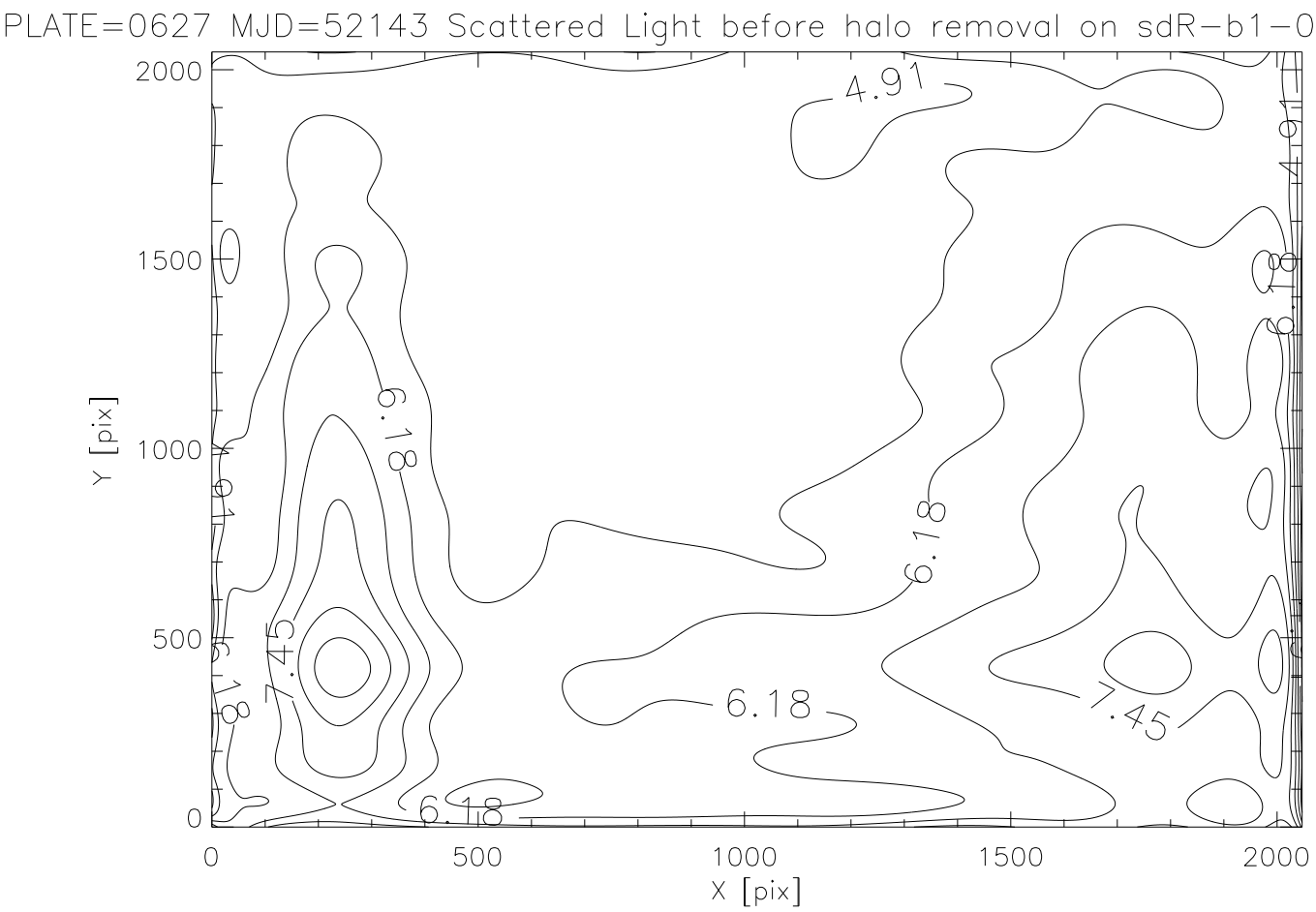

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

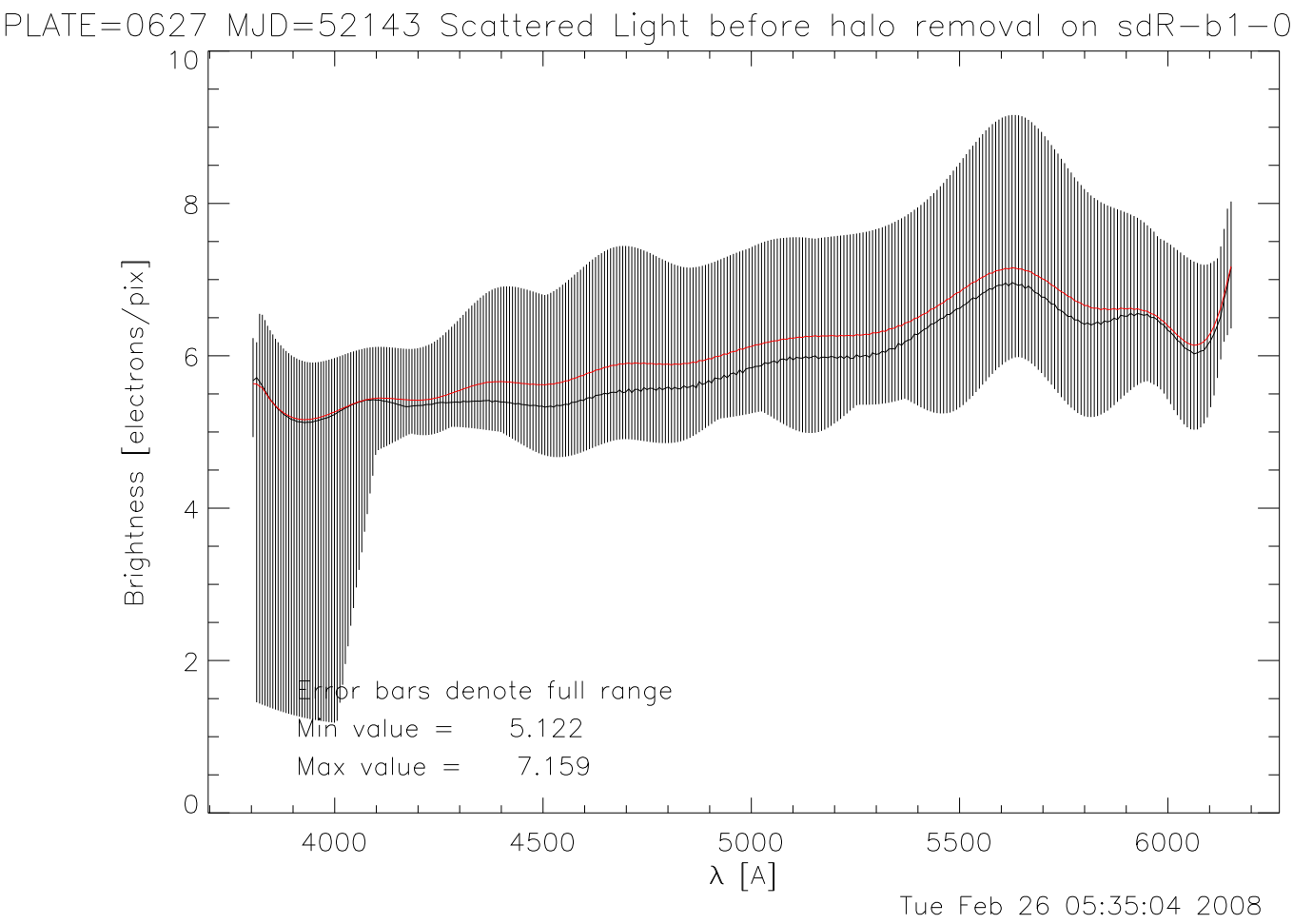

PLATE=0627 MJD=52143 flat extraction chi^2 for sdR−b1−00010609.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

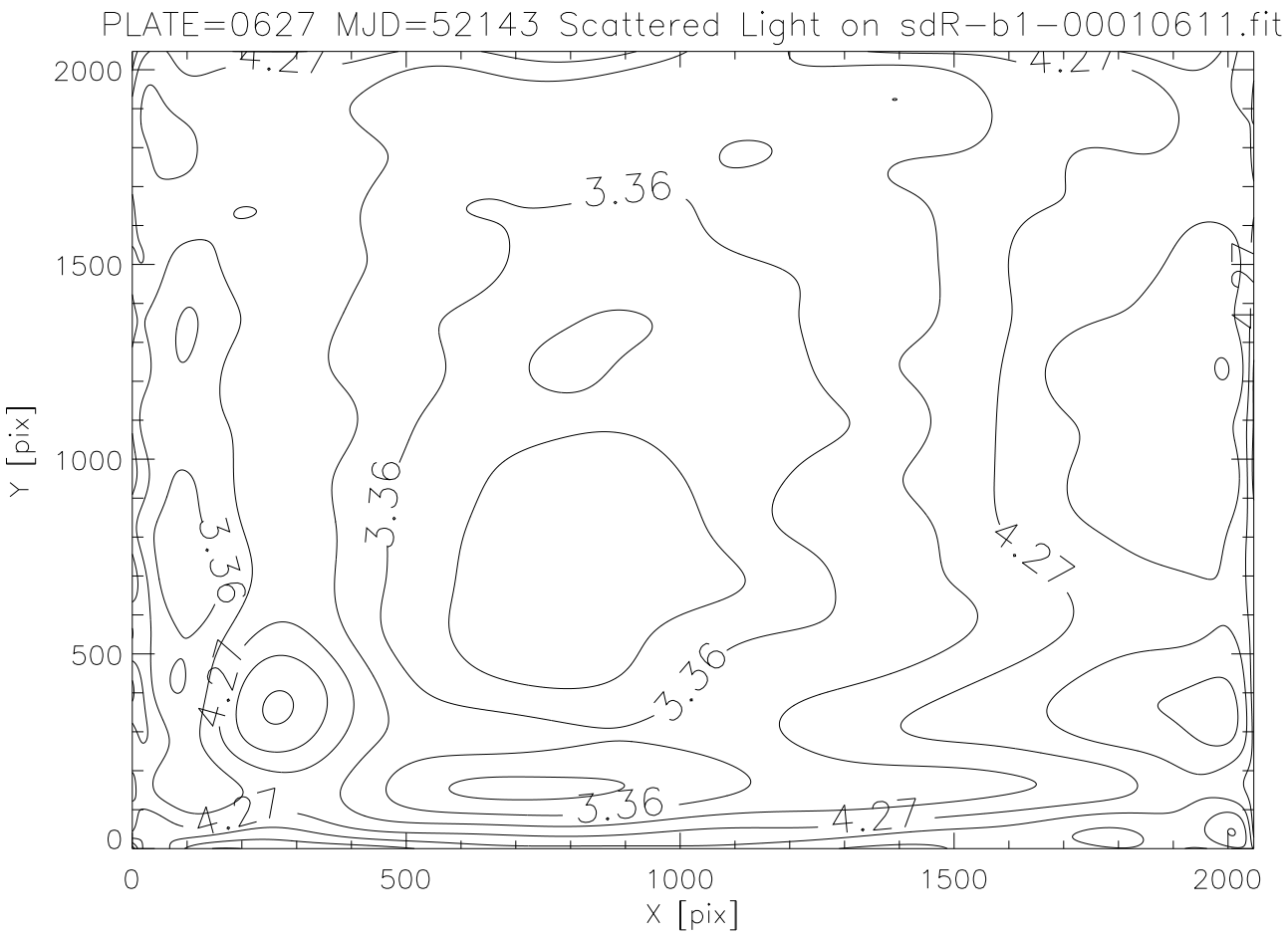

PLATE=0627 MJD=52143 Superflat sdR-b1-00010609.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

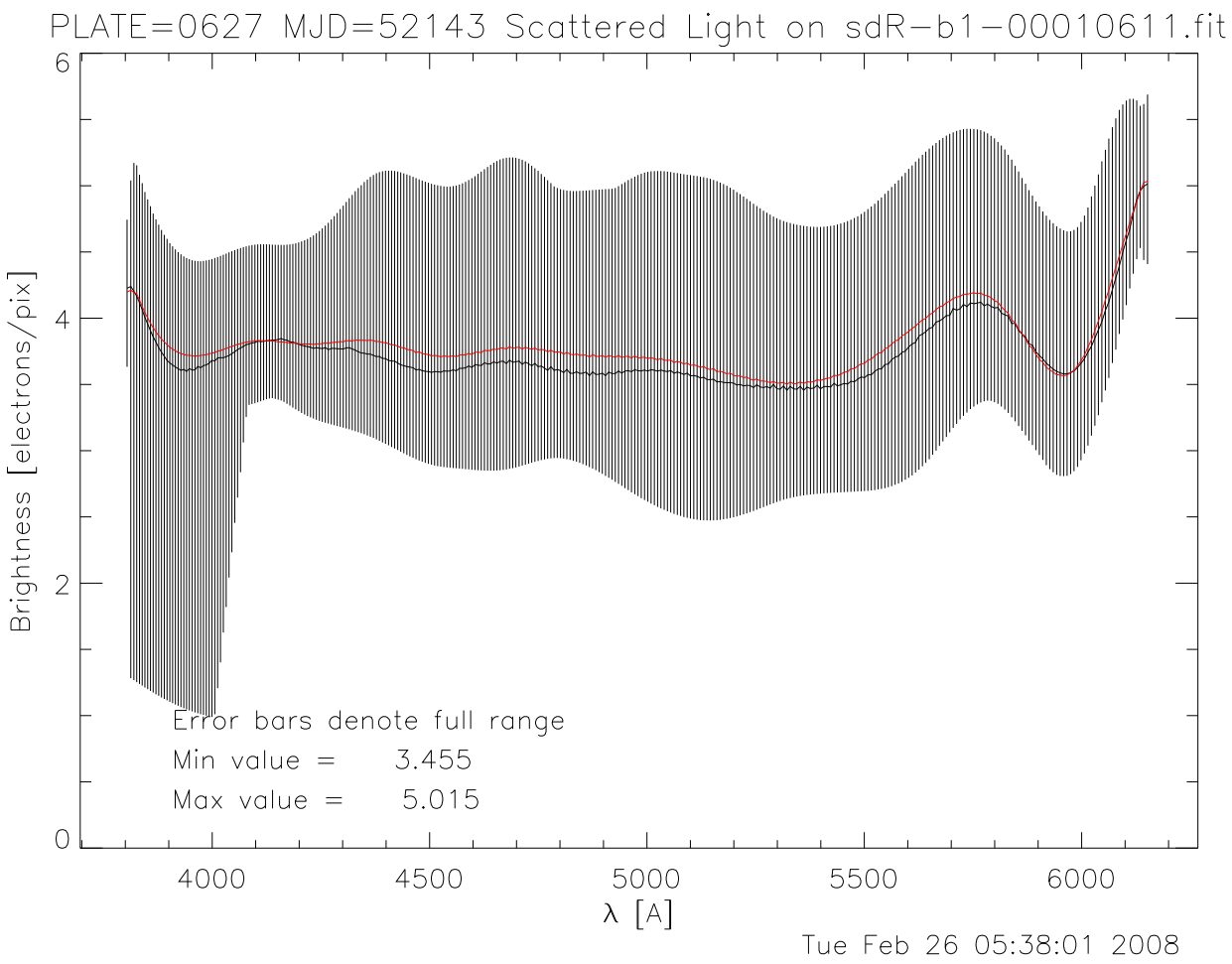

PLATE=0627 MJD=52143 Arcline Fit for sdR-b1-00010610.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 05:34:06 2008

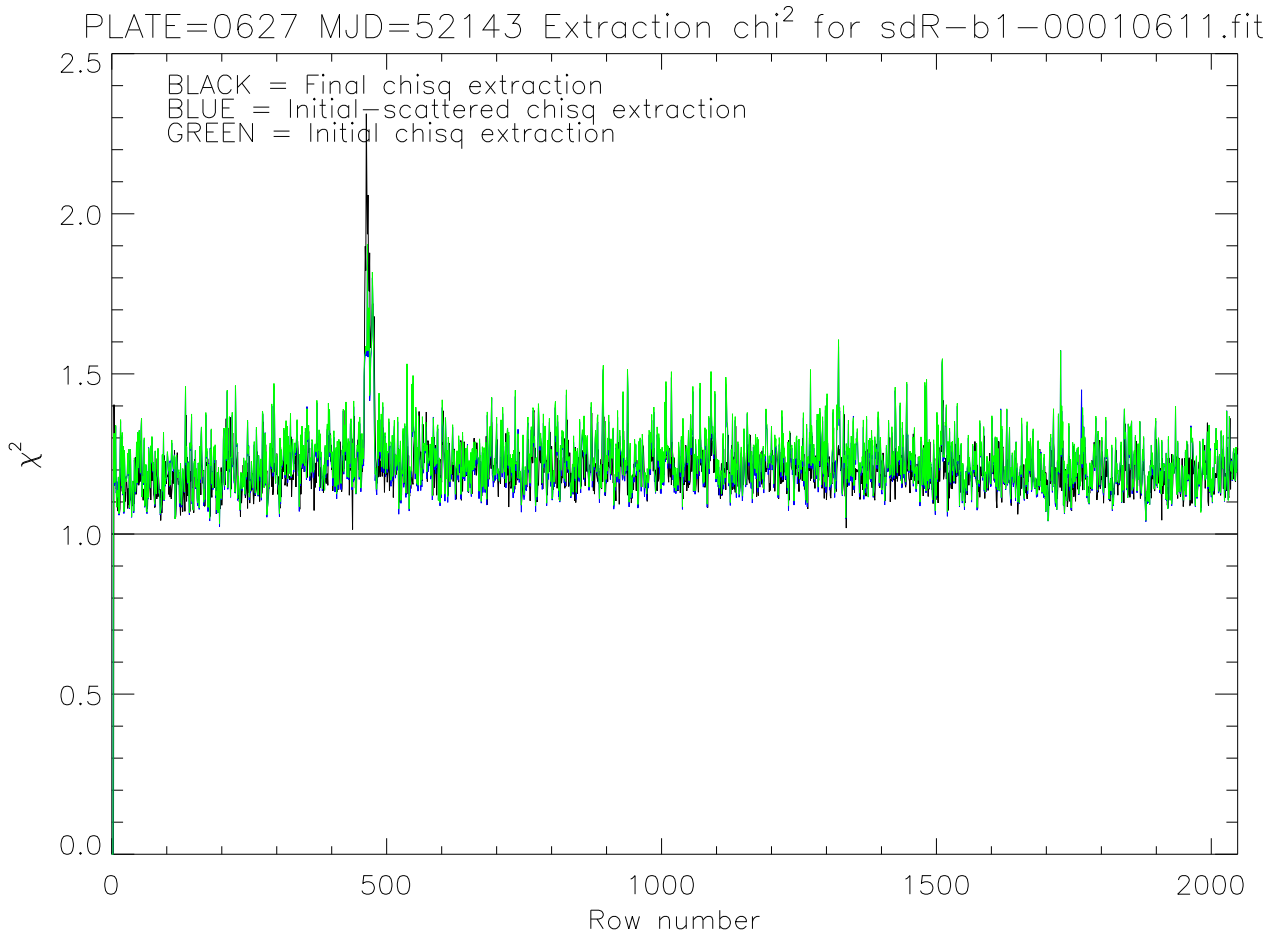

PLATE=0627 MJD=52143 Fiber-Flats for sdR-b1-00010609.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.078
Max value = 1.243
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 05:34:14 2008

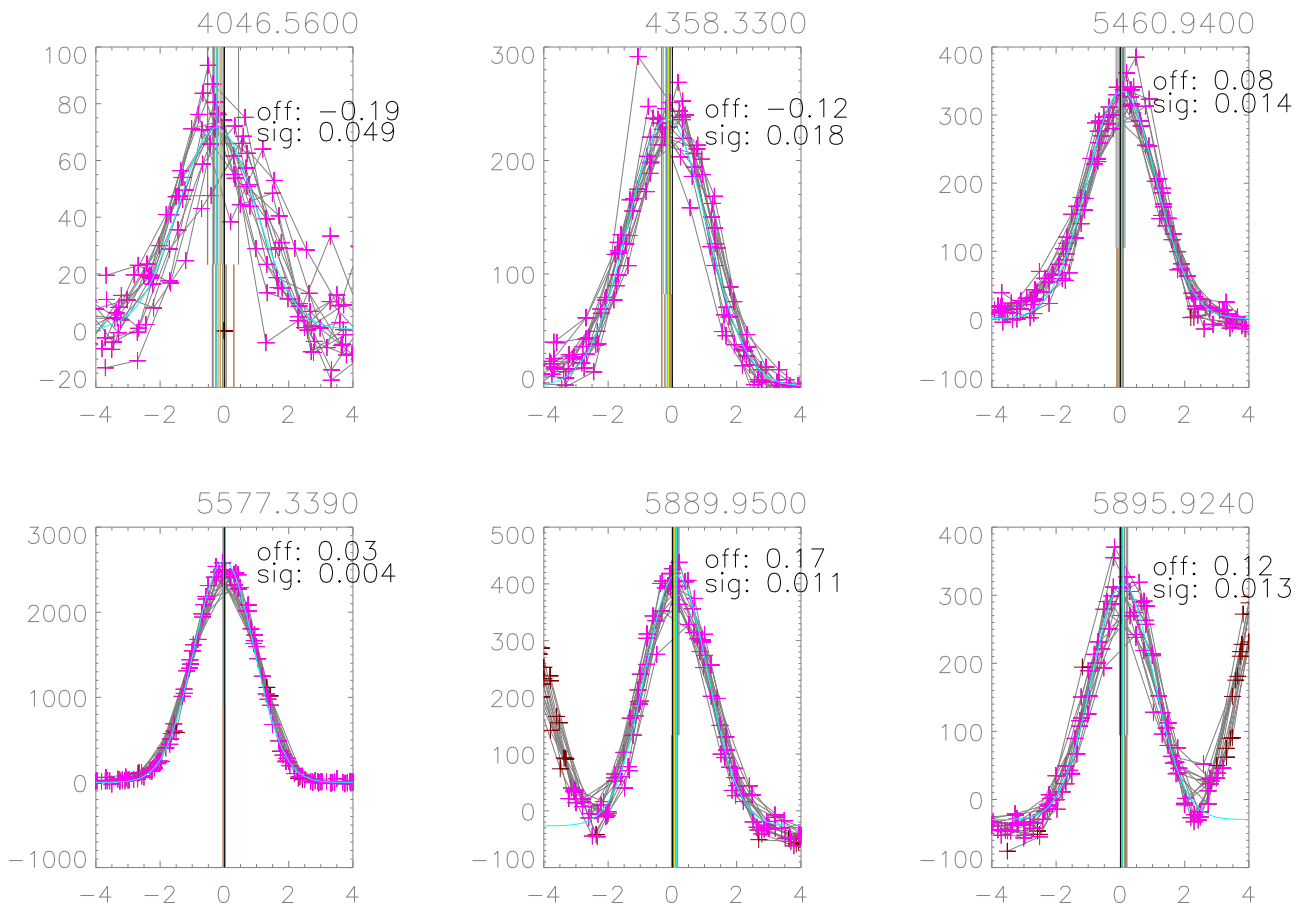

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR−b1−00010611.f
4.91
6.18
7.45
Y [pix]
X [pix]
0
500
1000
1500
2000

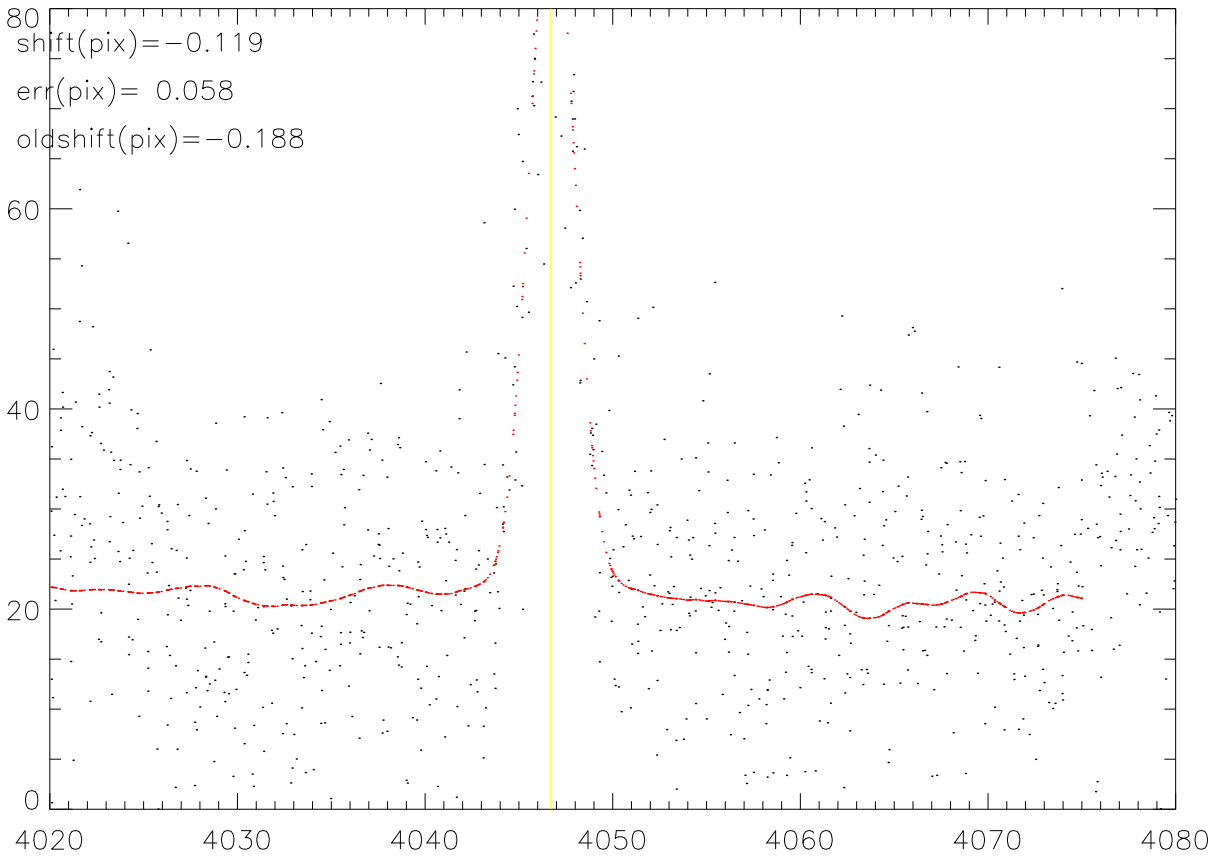

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-b1-00010611.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.122
Max value = 7.159
Tue Feb 26 05:35:04 2008

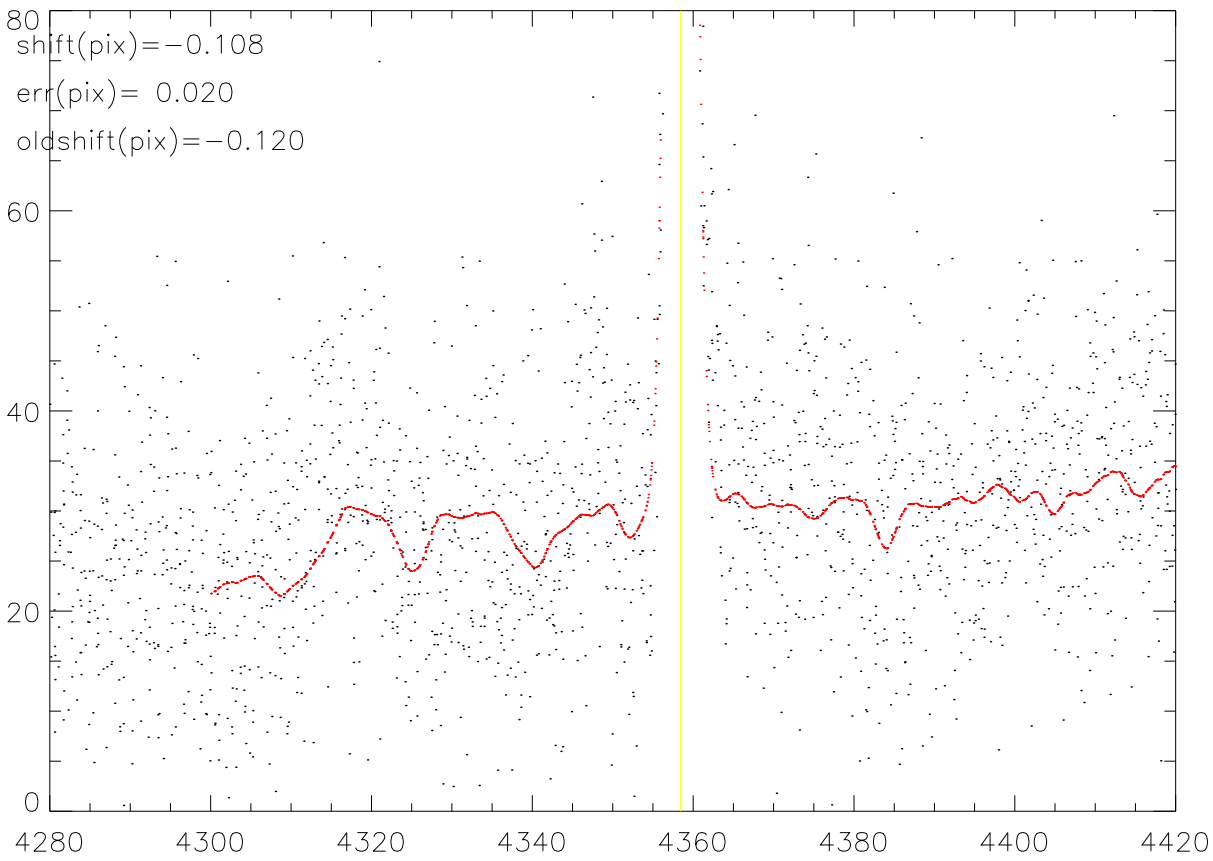

PLATE=0627 MJD=52143 Scattered Light on sdR-b1-00010611.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.36
4.27

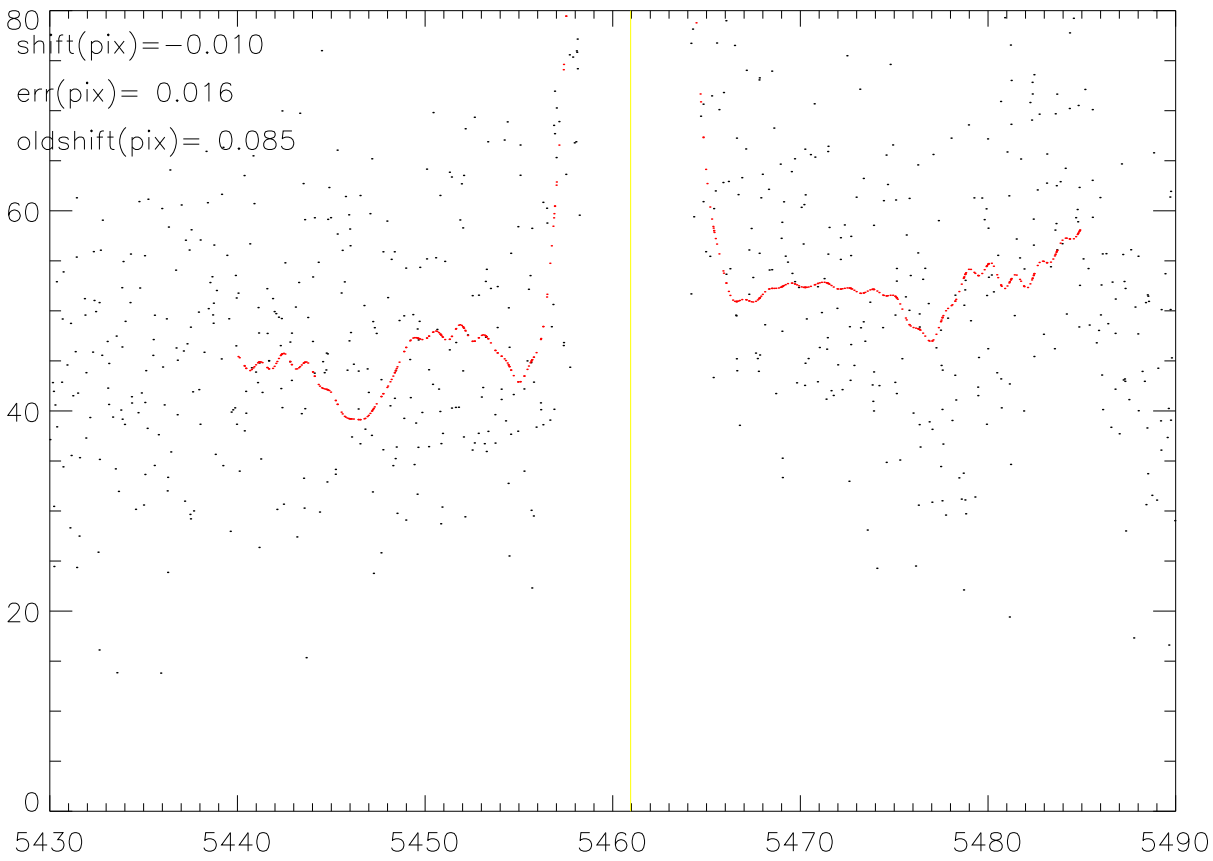

PLATE=0627 MJD=52143 Scattered Light on sdR-b1-00010611.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.455
Max value = 5.015
Tue Feb 26 05:38:01 2008

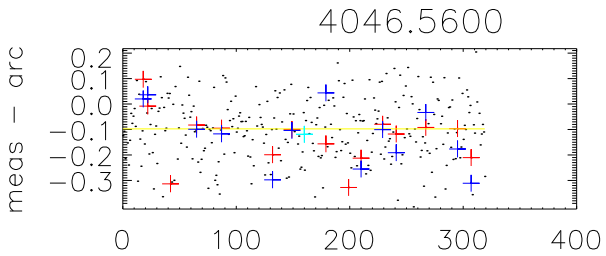

PLATE=0627 MJD=52143 Extraction chi^2 for sdR-b1-00010611.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

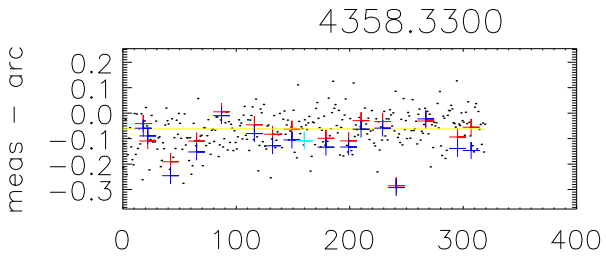

4046.5600
off: −0.19
sig: 0.049
4358.3300
off: −0.12
sig: 0.018
5460.9400
off: 0.08
sig: 0.014
5577.3390
off: 0.03
sig: 0.004
5889.9500
off: 0.17
sig: 0.011
5895.9240
off: 0.12
sig: 0.013

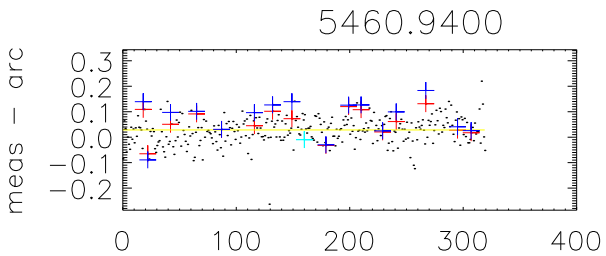

shift(pix)=−0.119
err(pix)= 0.058
oldshift(pix)=−0.188
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

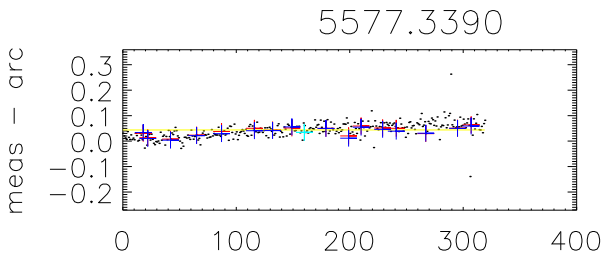

shift(pix)=−0.108
err(pix)= 0.020
oldshift(pix)=−0.120
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

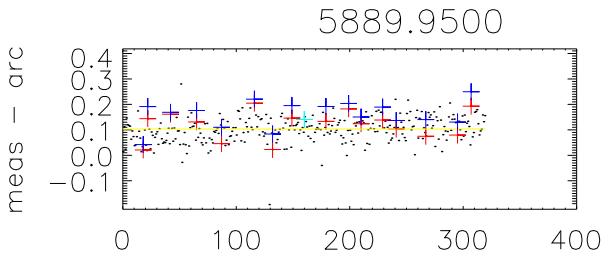

shift(pix)=−0.010
err(pix)= 0.016
oldshift(pix)= 0.085
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

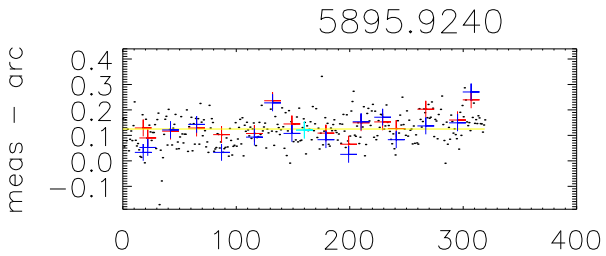

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

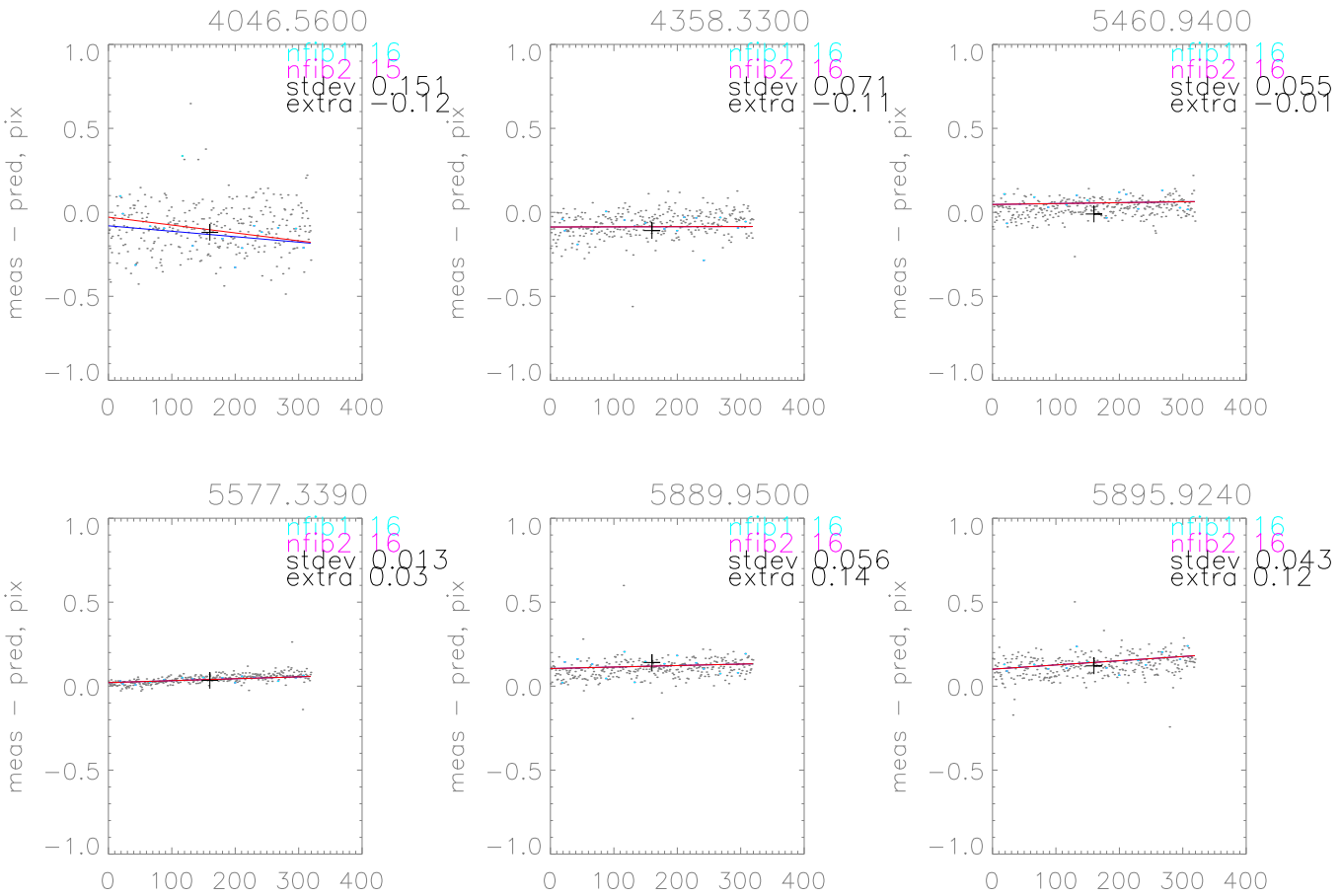

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

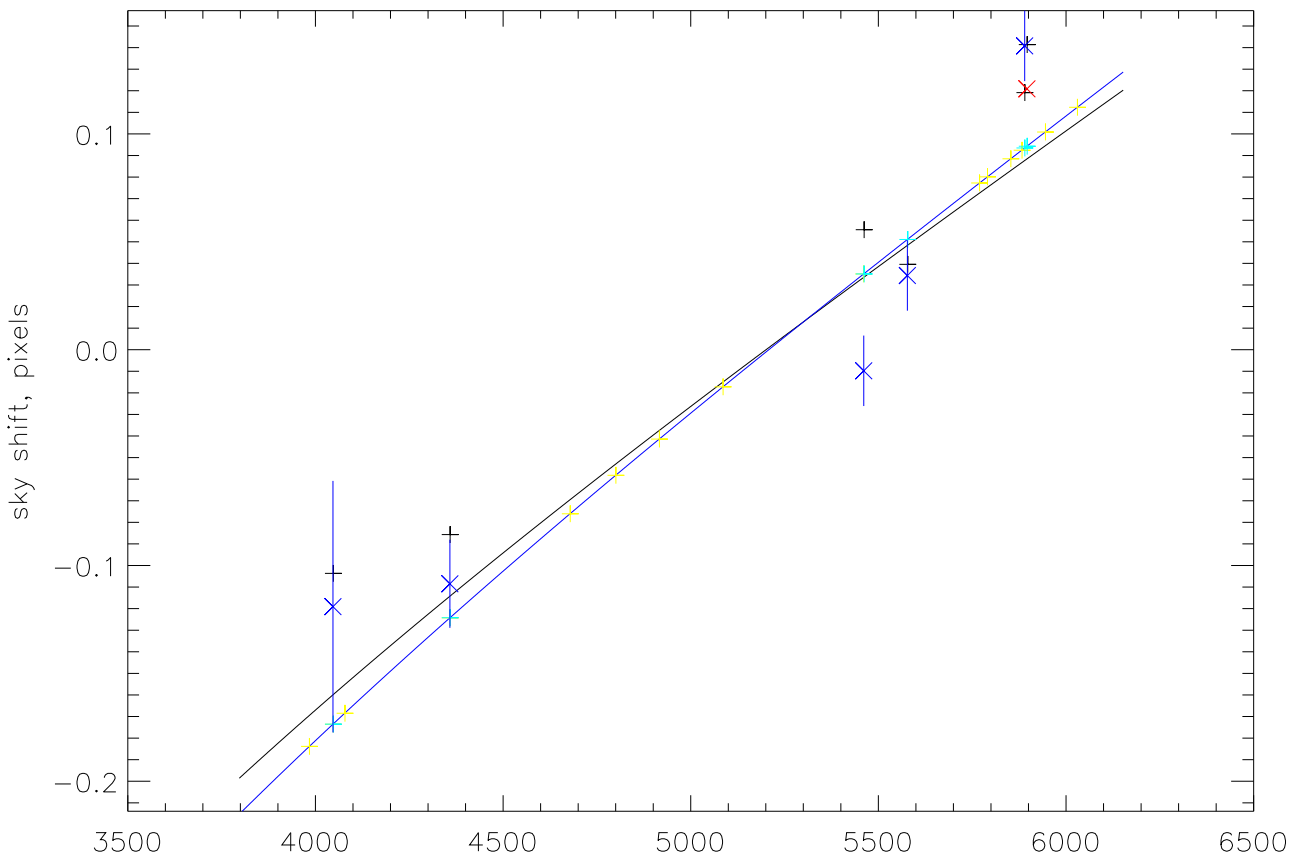

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

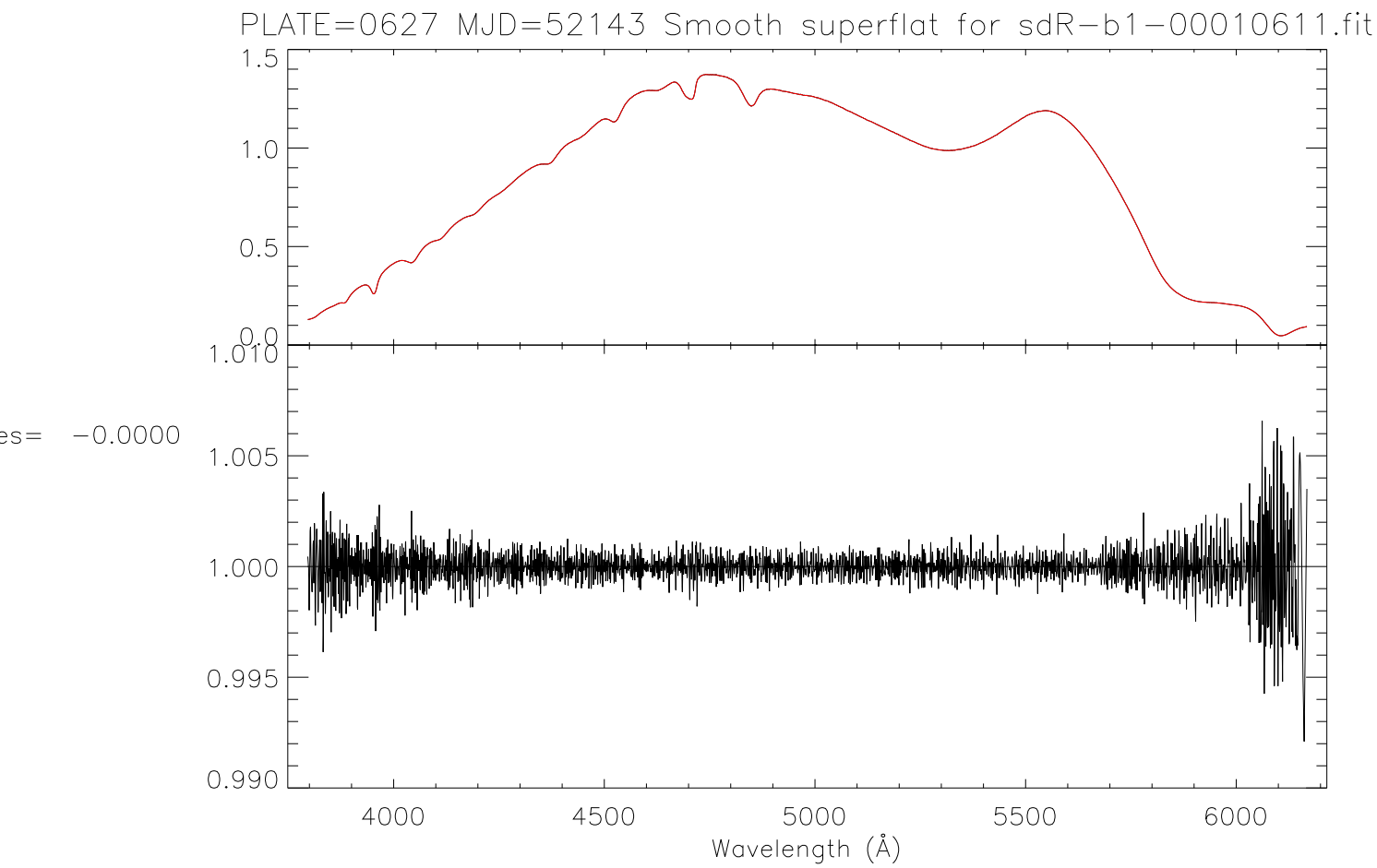

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

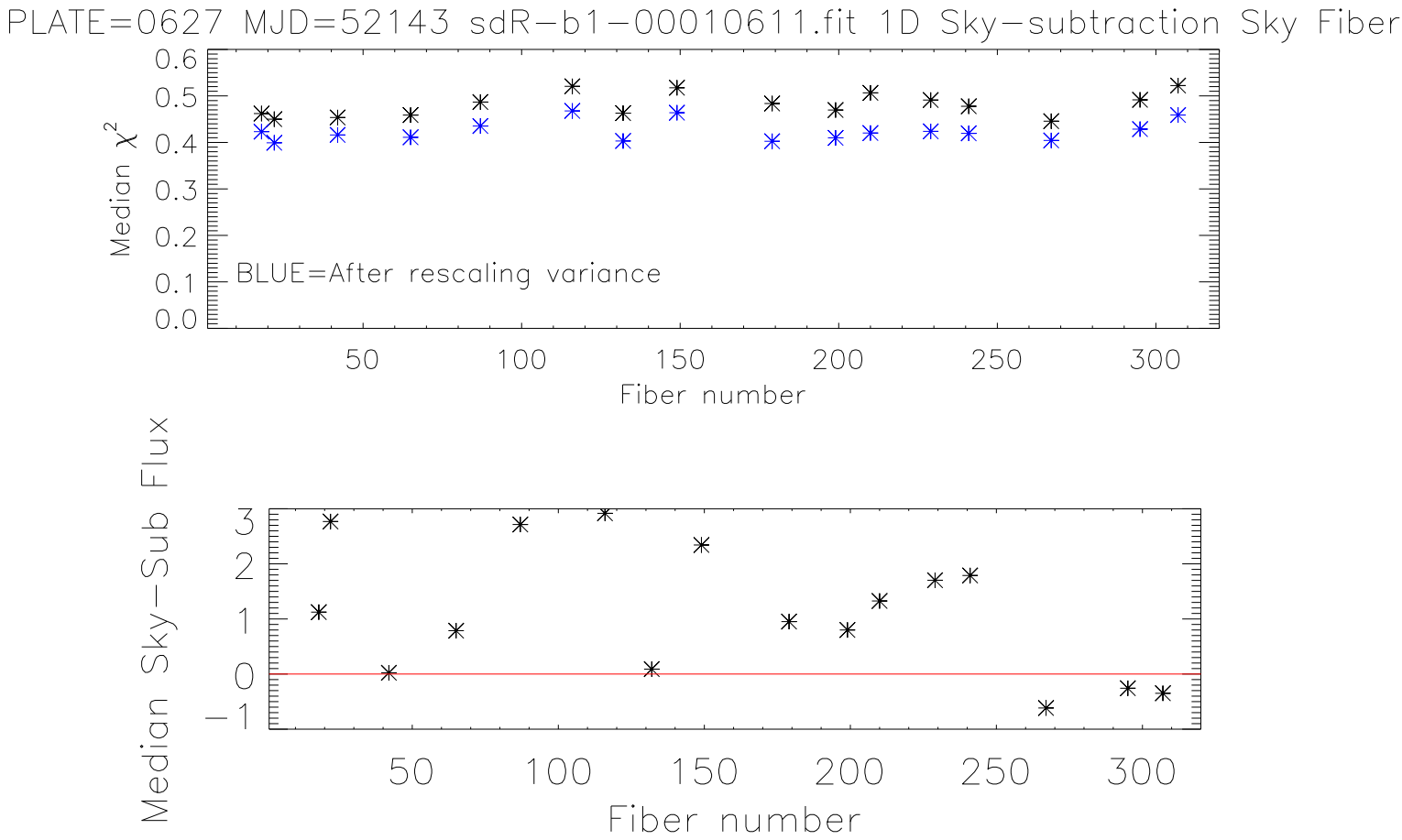

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

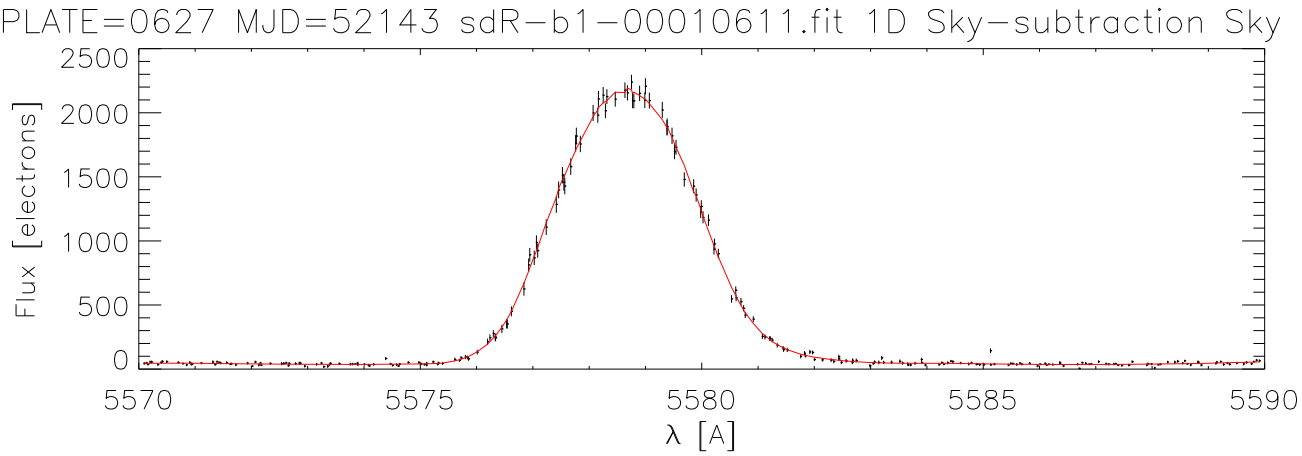

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

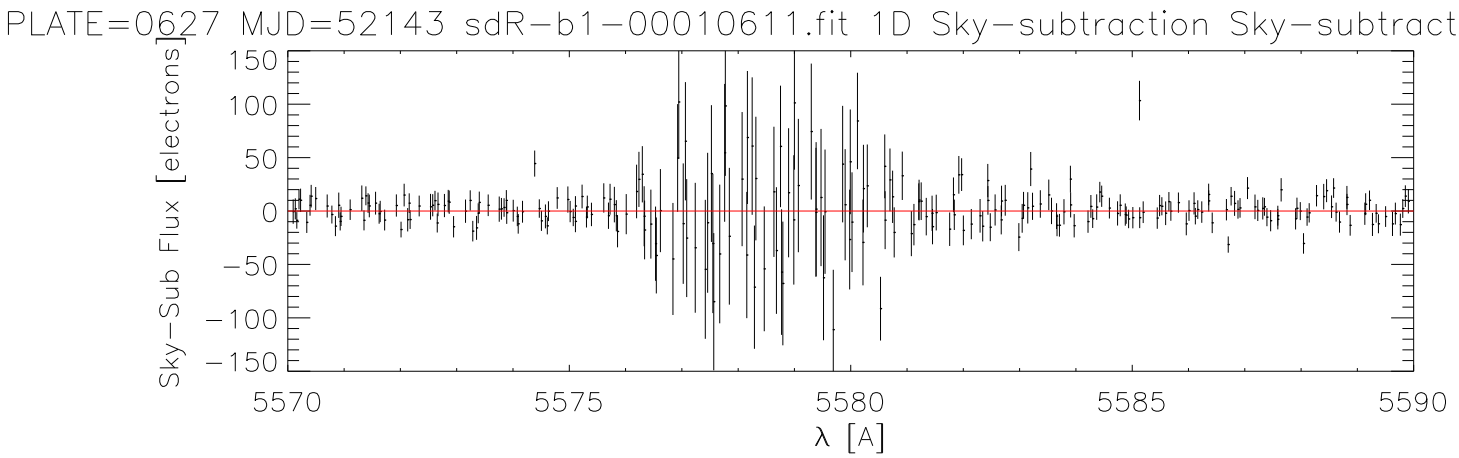

4046.5600
nfib1 16
nfib2 15
stdev 0.151
extra −0.12
4358.3300
nfib1 16
nfib2 16
stdev 0.071
extra −0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.055
extra −0.01
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra 0.03
5889.9500
nfib1 16
nfib2 16
stdev 0.056
extra 0.14
5895.9240
nfib1 16
nfib2 16
stdev 0.043
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

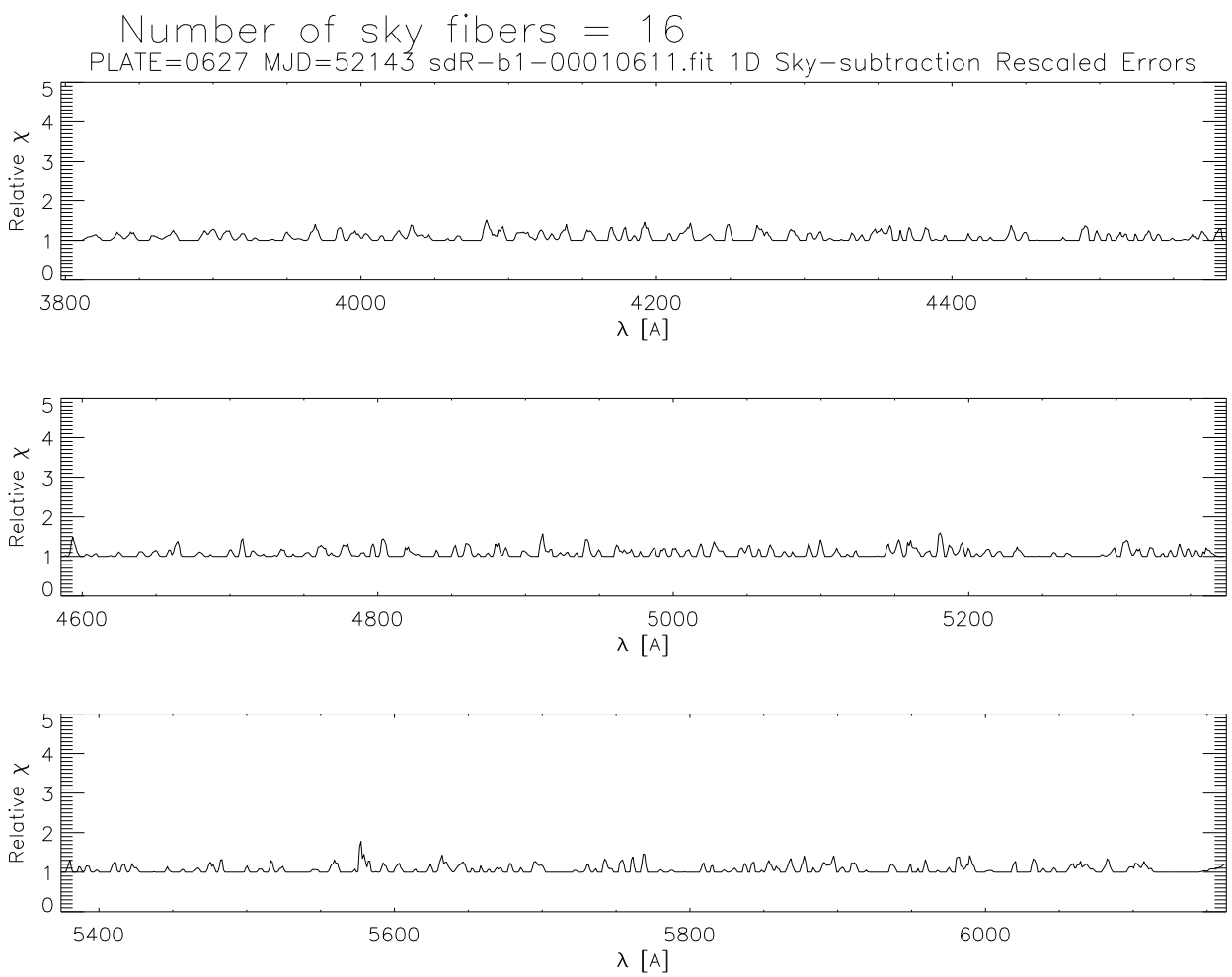

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

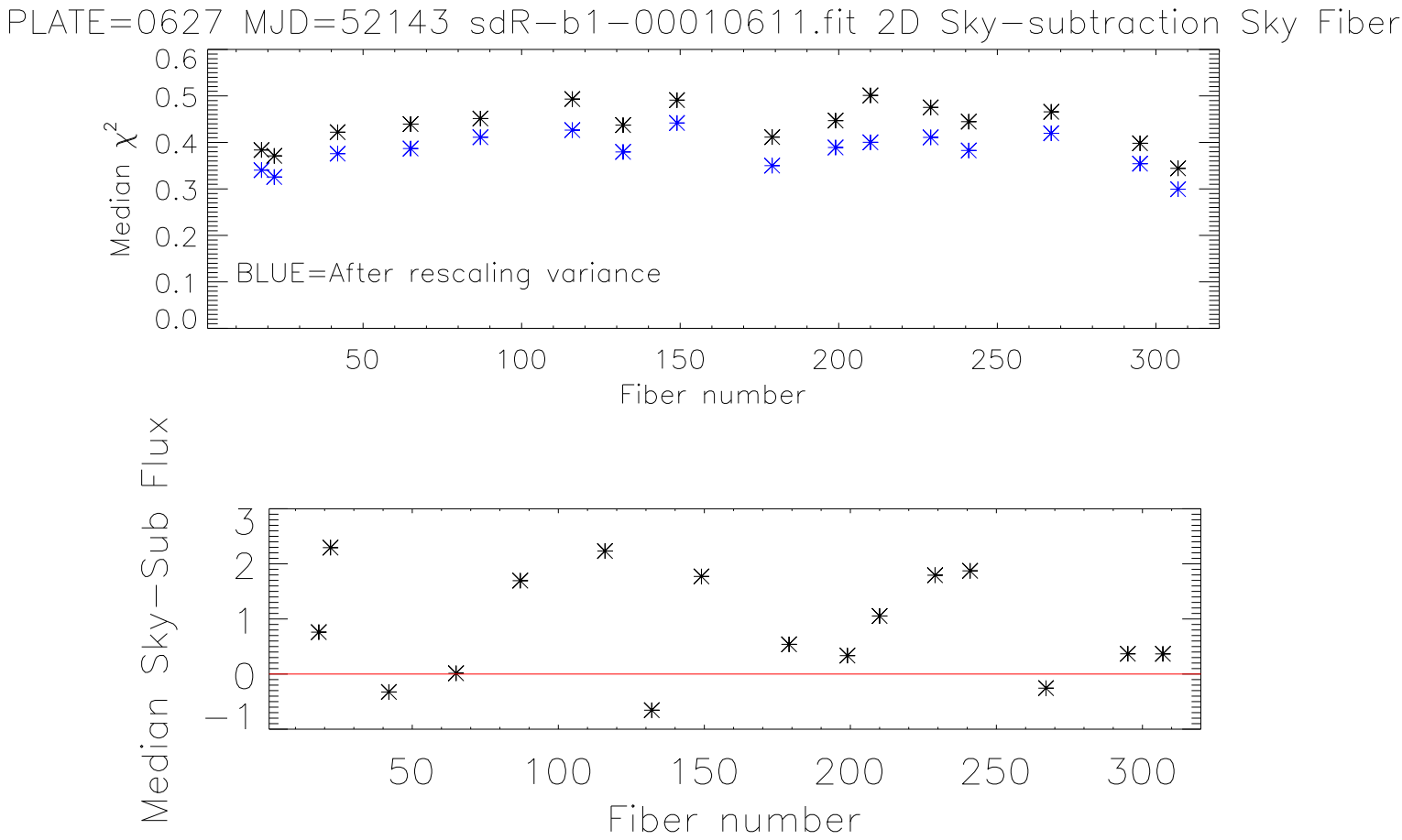

PLATE=0627 MJD=52143 Smooth superflat for sdR-b1-00010611.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

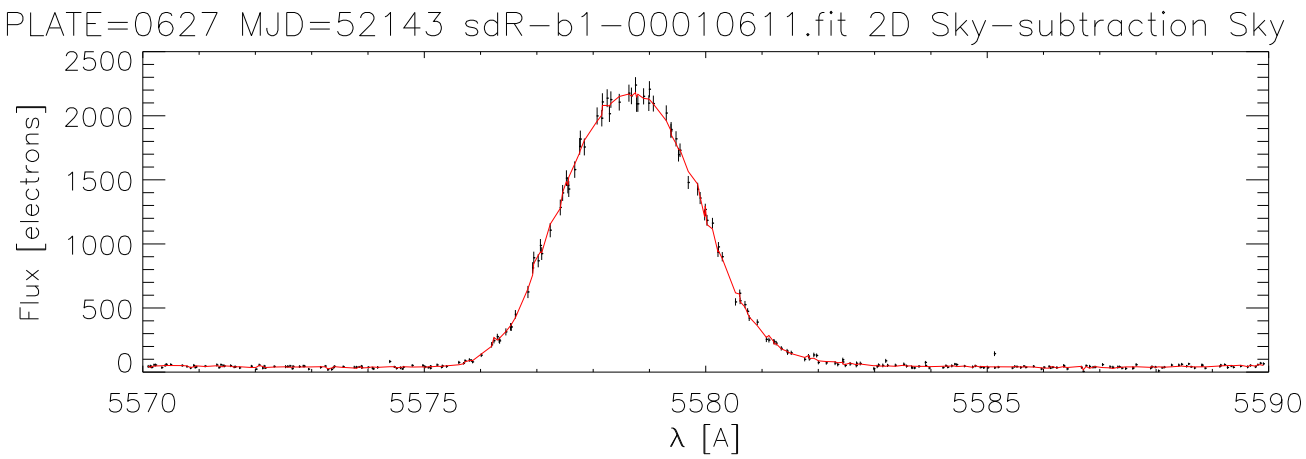

PLATE=0627 MJD=52143 sdR-b1-00010611.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

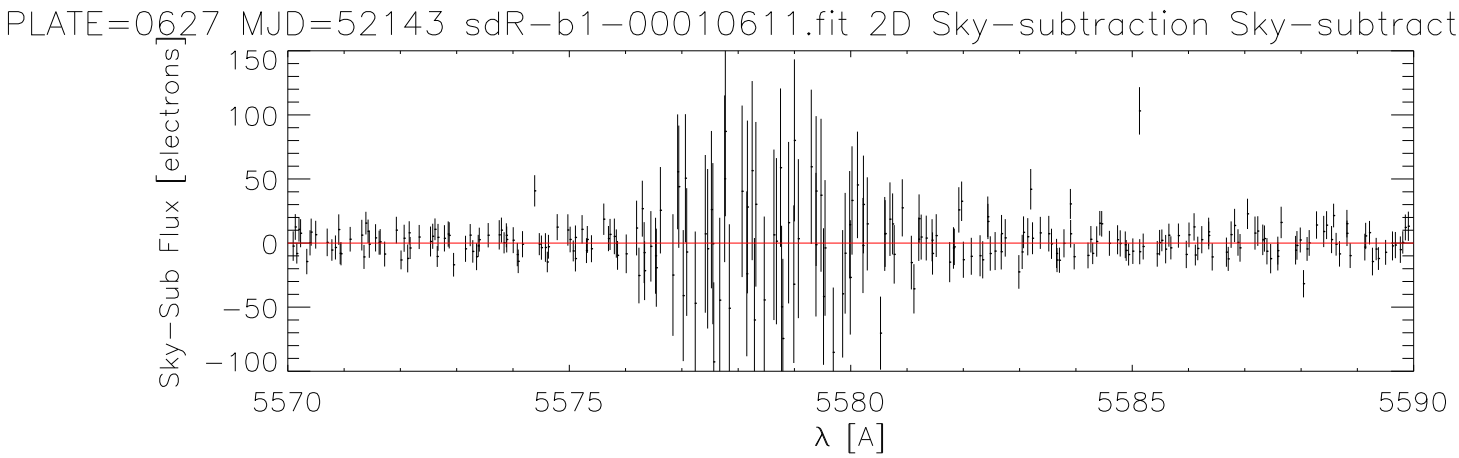

PLATE=0627 MJD=52143 sdR-b1-00010611.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

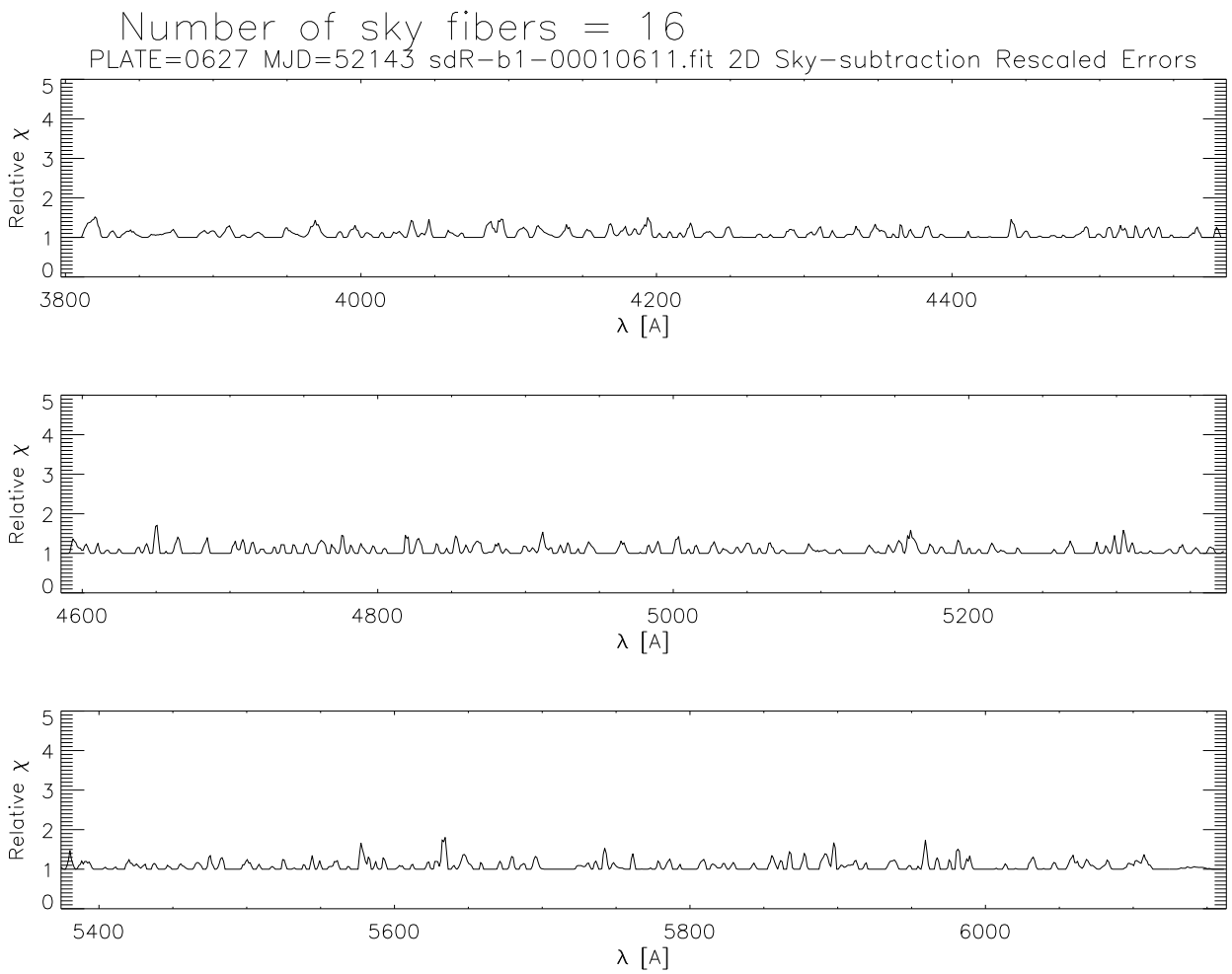

PLATE=0627 MJD=52143 sdR-b1-00010611.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

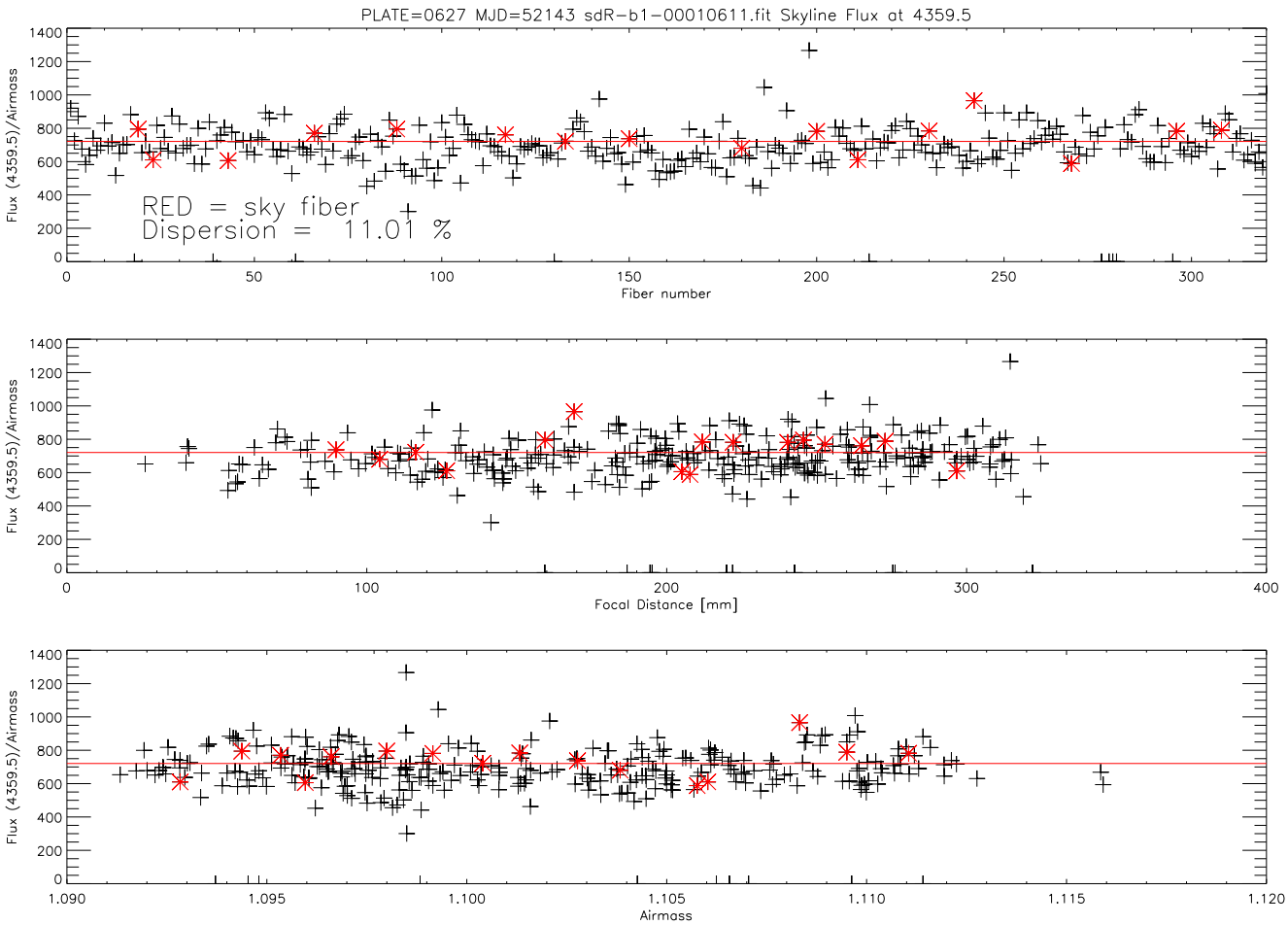

Number of sky fibers = 16
PLATE=0627 MJD=52143 sdR-b1-00010611.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

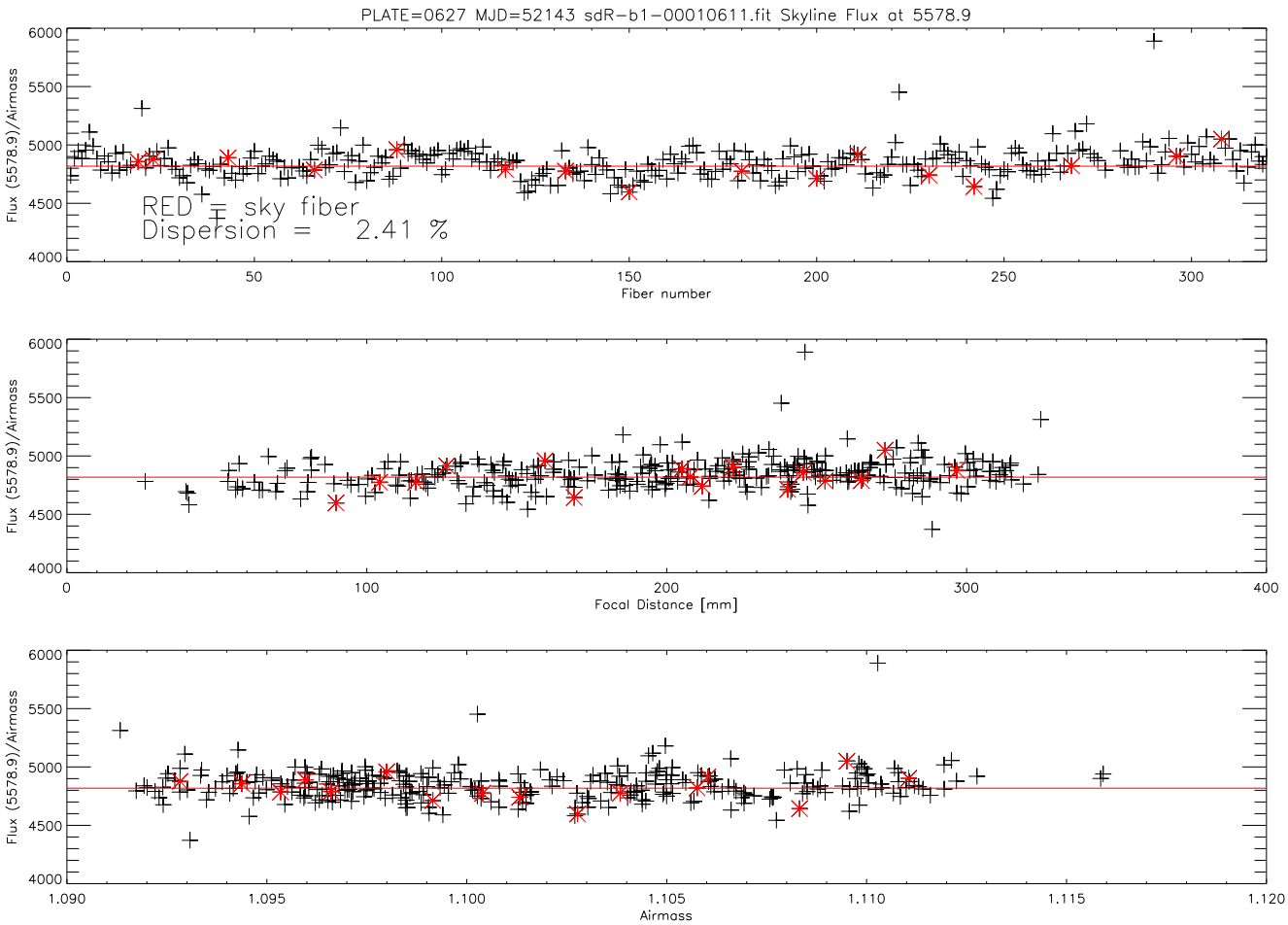

PLATE=0627 MJD=52143 sdR-b1-00010611.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

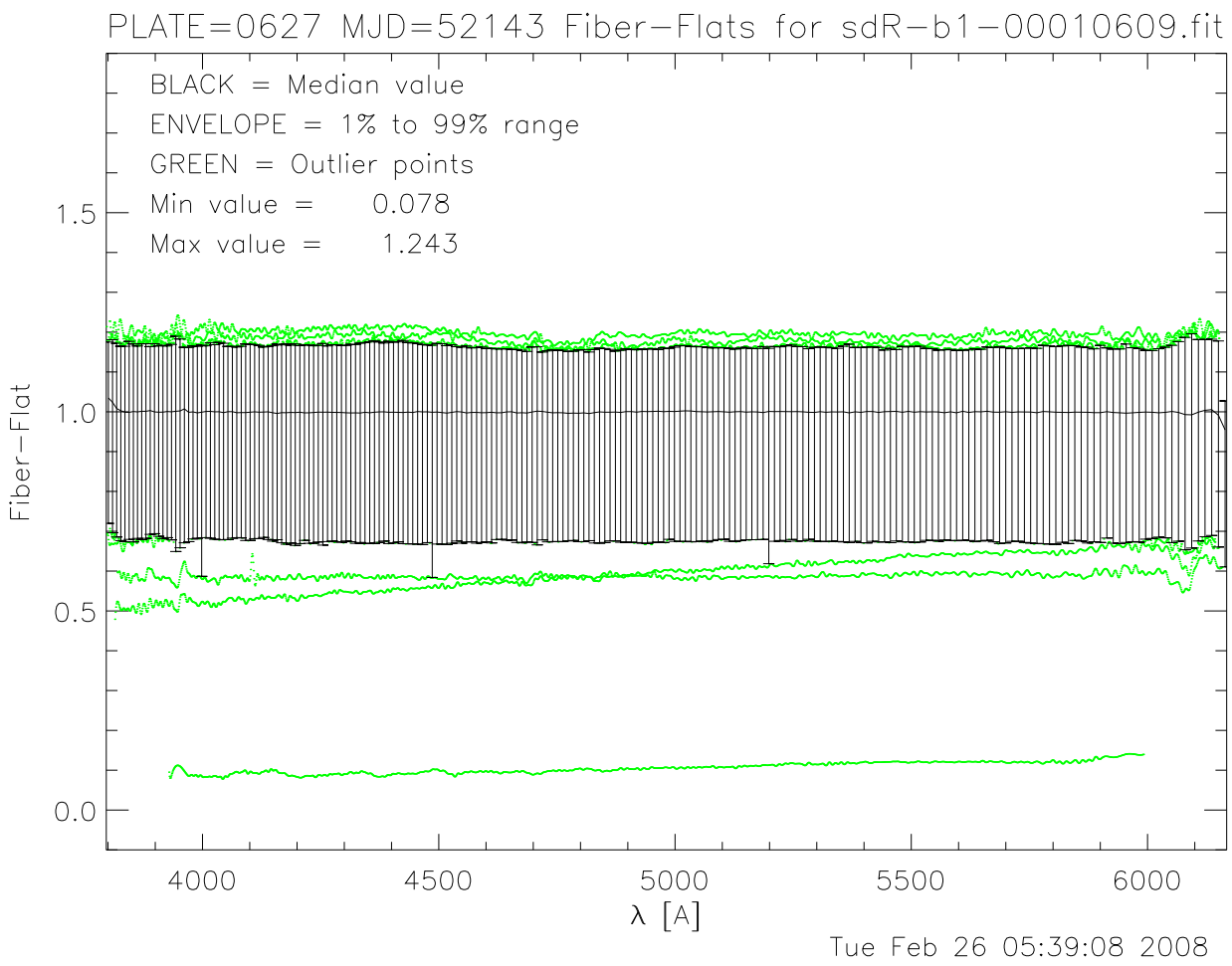

PLATE=0627 MJD=52143 sdR-b1-00010611.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

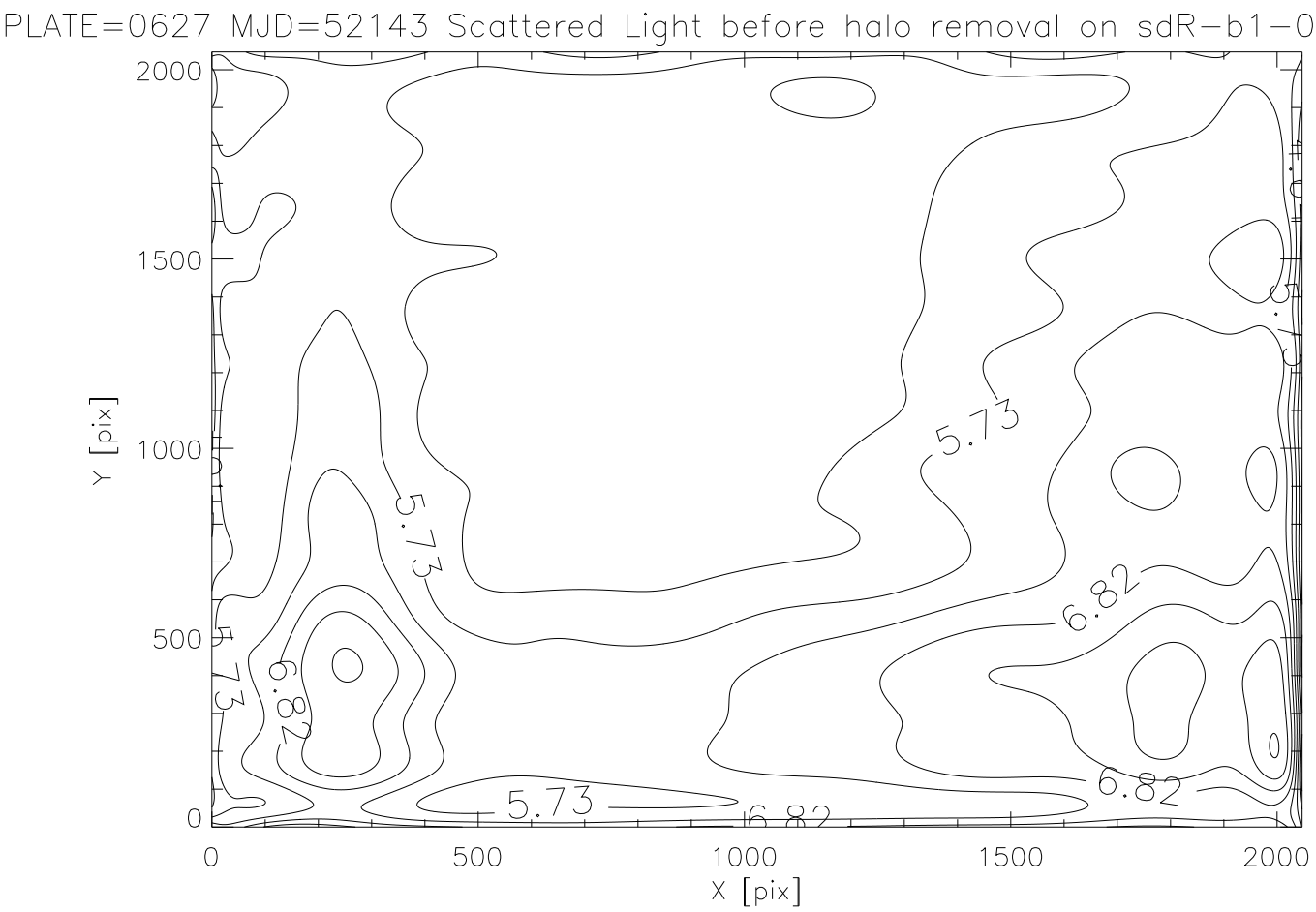

PLATE=0627 MJD=52143 sdR-b1-00010611.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

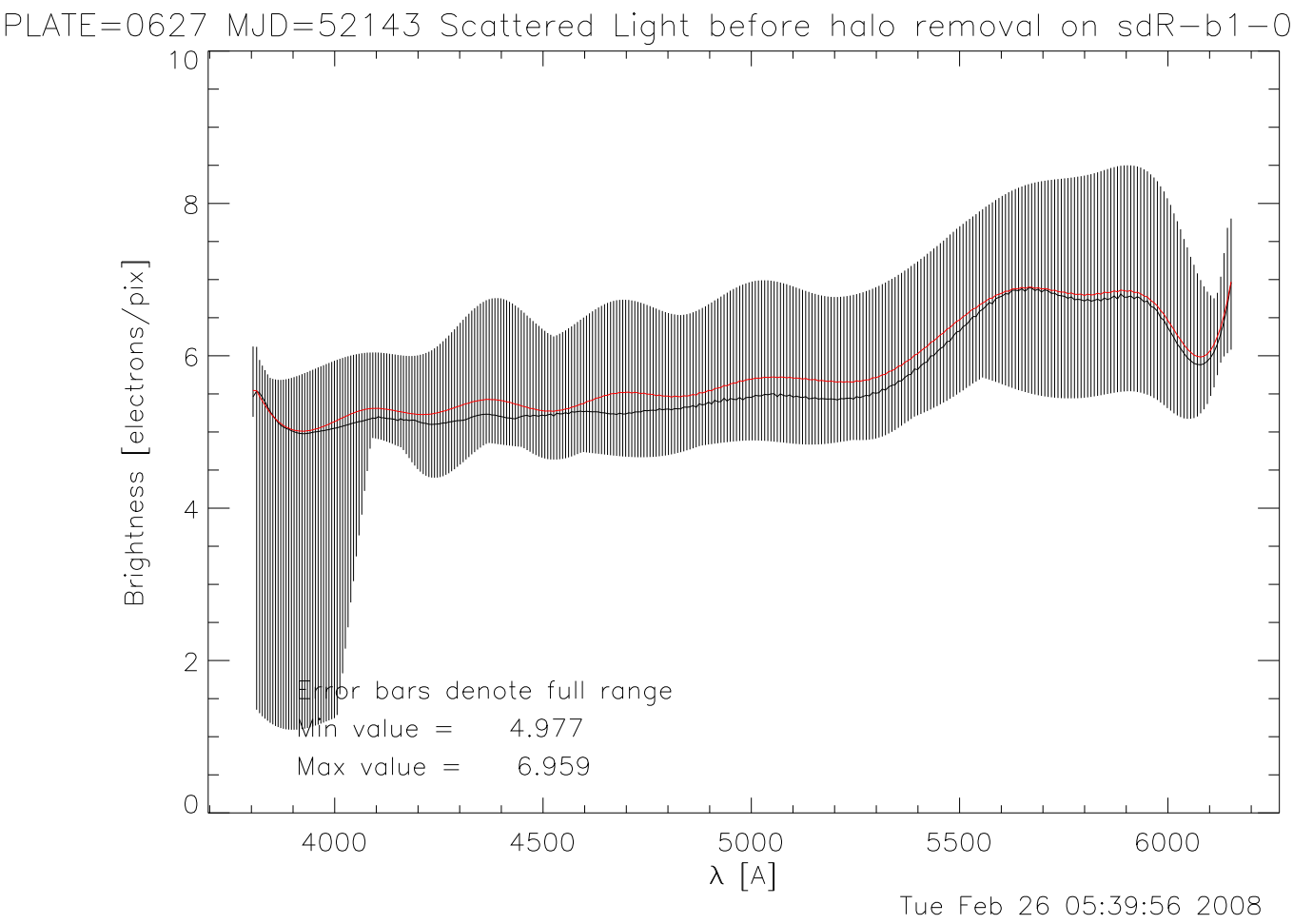

Number of sky fibers = 16
PLATE=0627 MJD=52143 sdR-b1-00010611.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

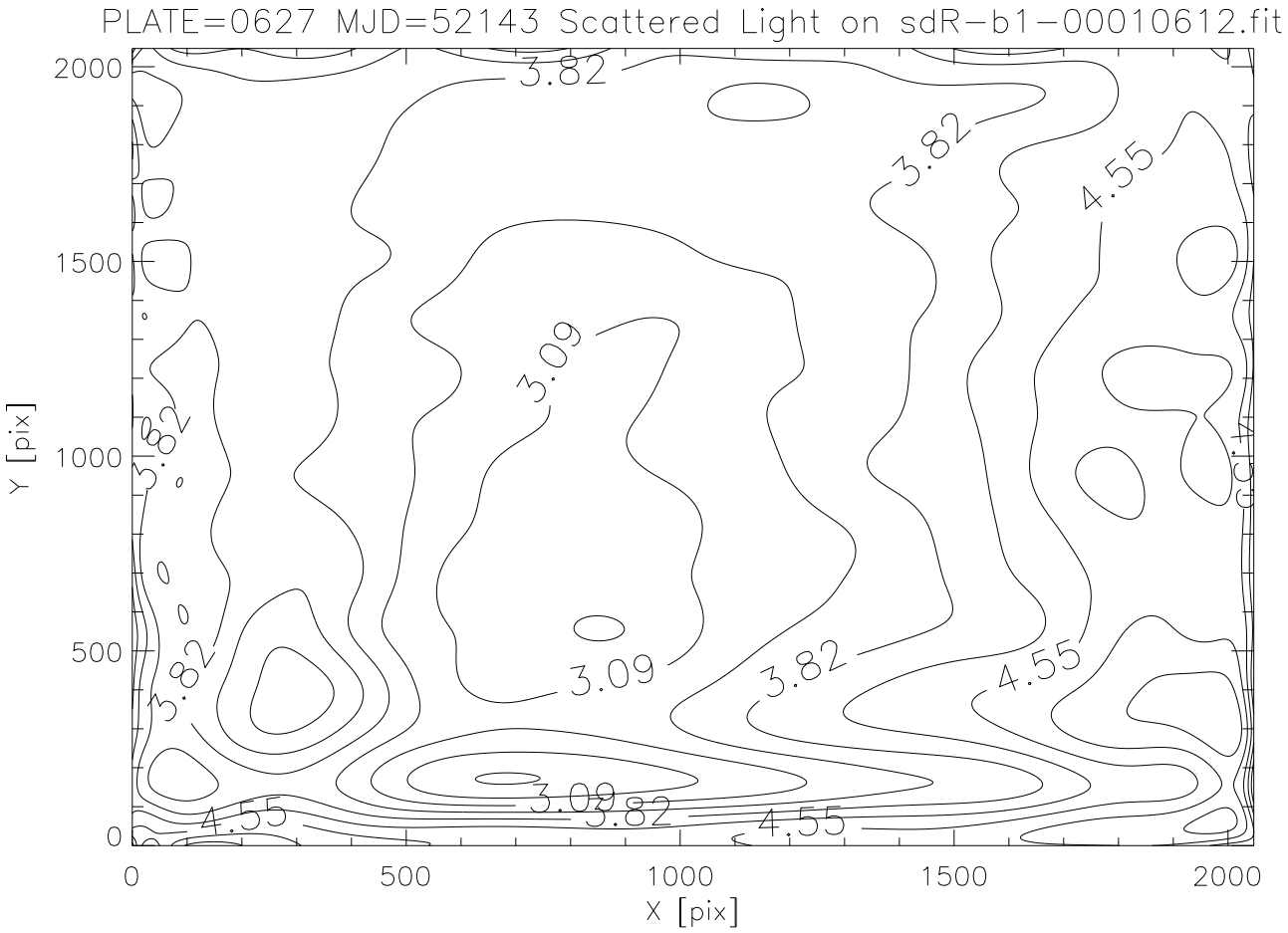

PLATE=0627 MJD=52143 sdR-b1-00010611.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.01 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

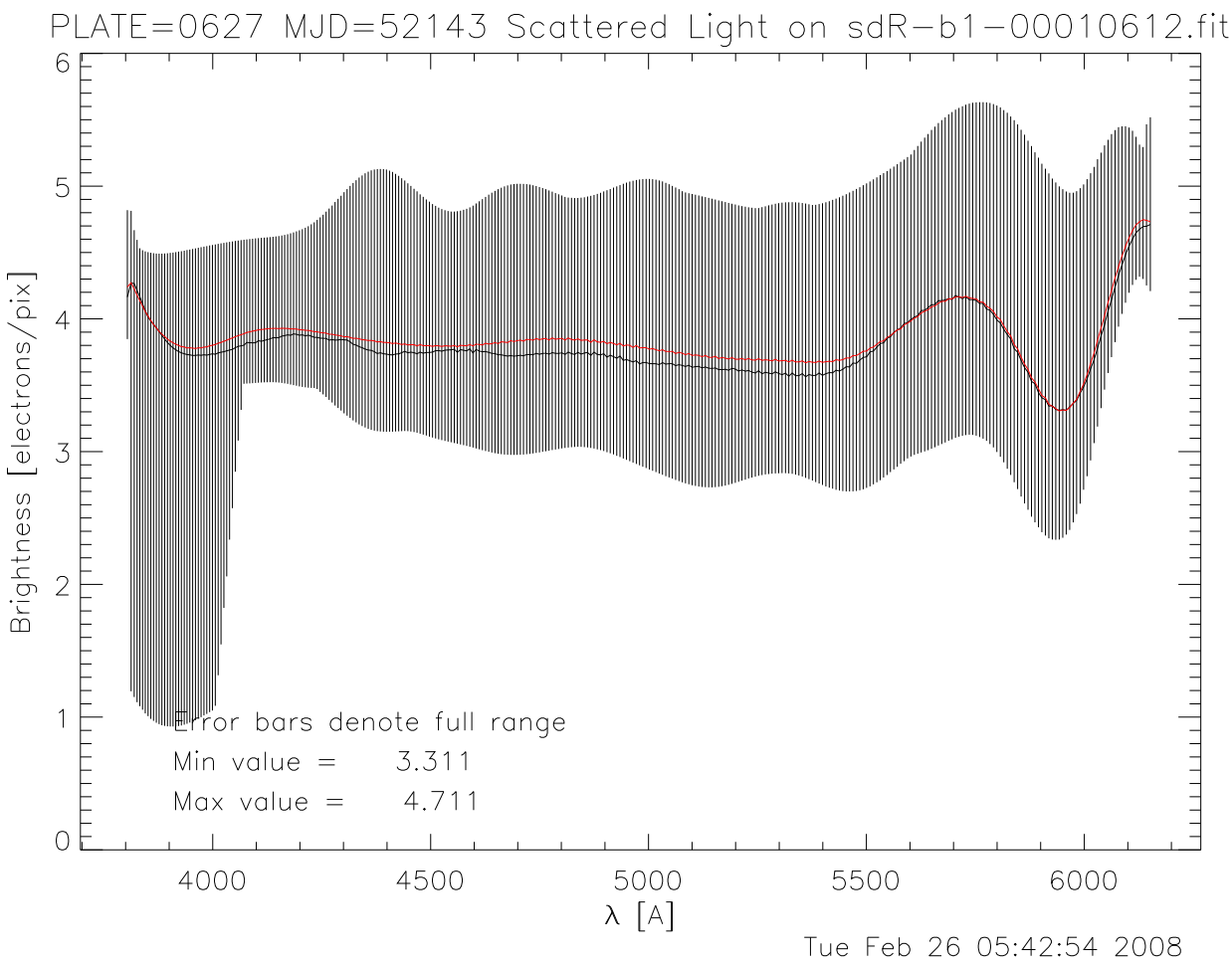

PLATE=0627 MJD=52143 sdR-b1-00010611.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.41 %
Fiber number
Focal Distance [mm]
Airmass

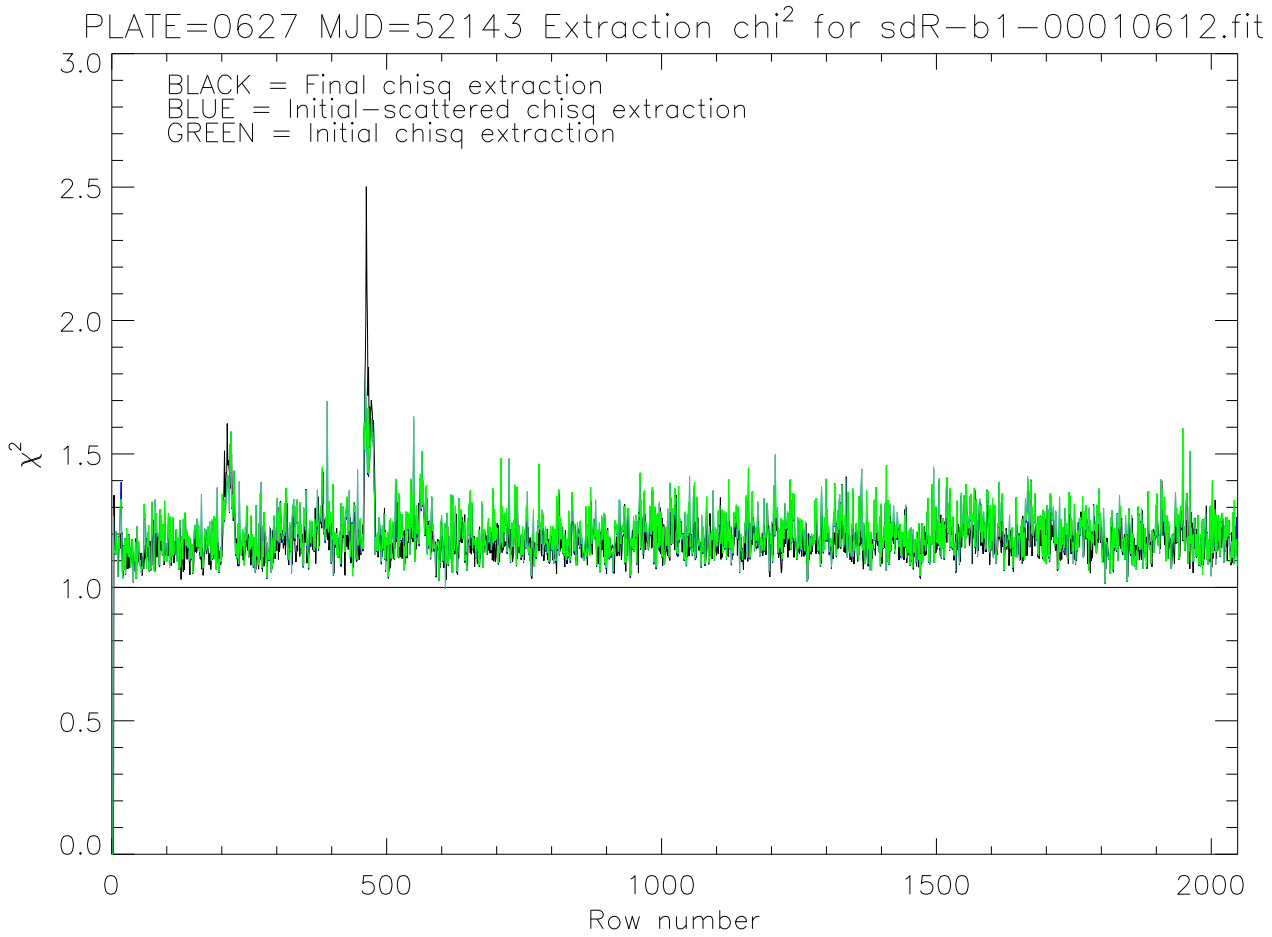

PLATE=0627 MJD=52143 Fiber-Flats for sdR-b1-00010609.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.078
Max value = 1.243
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 05:39:08 2008

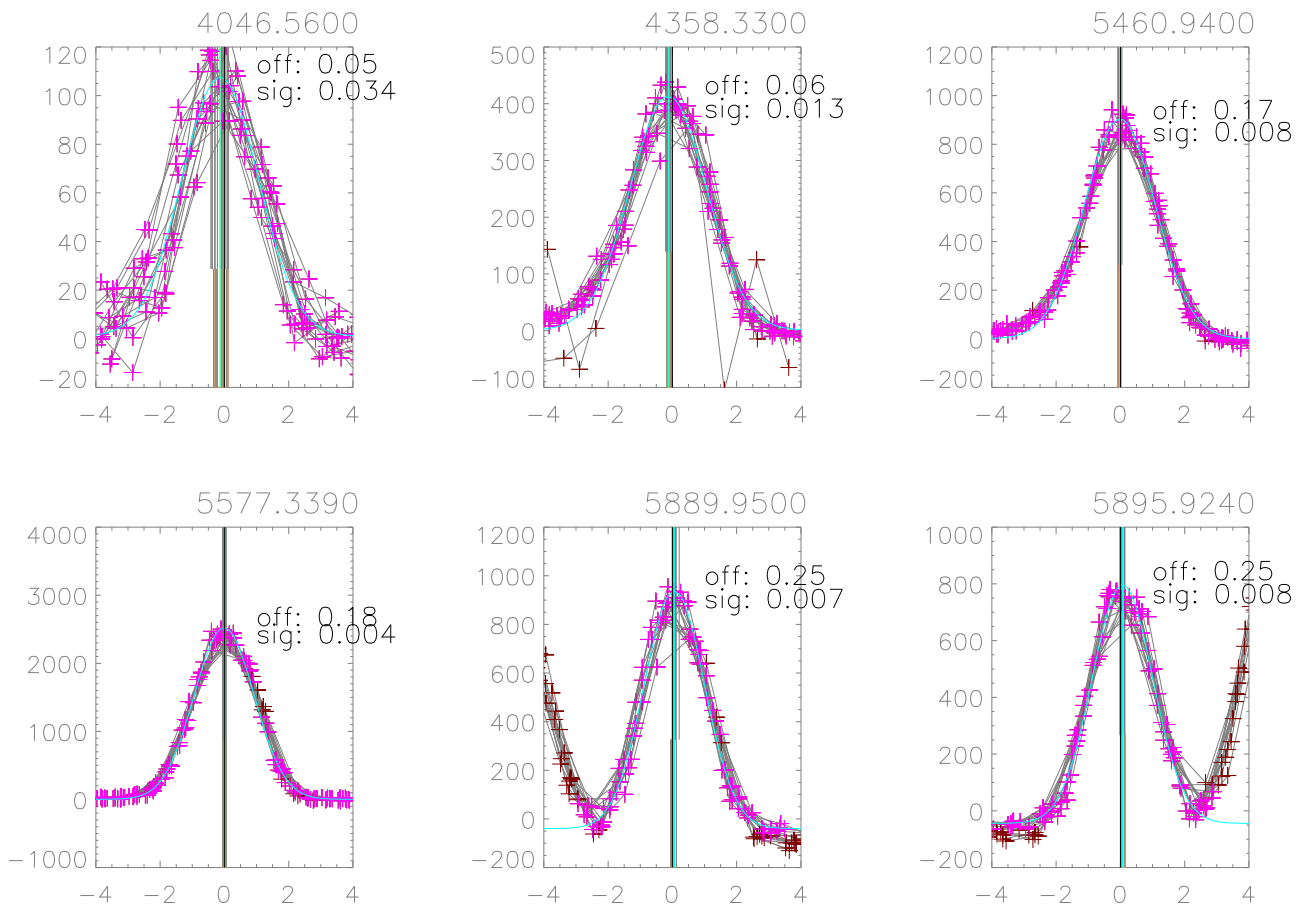

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR−b1−00010612.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.73
6.82

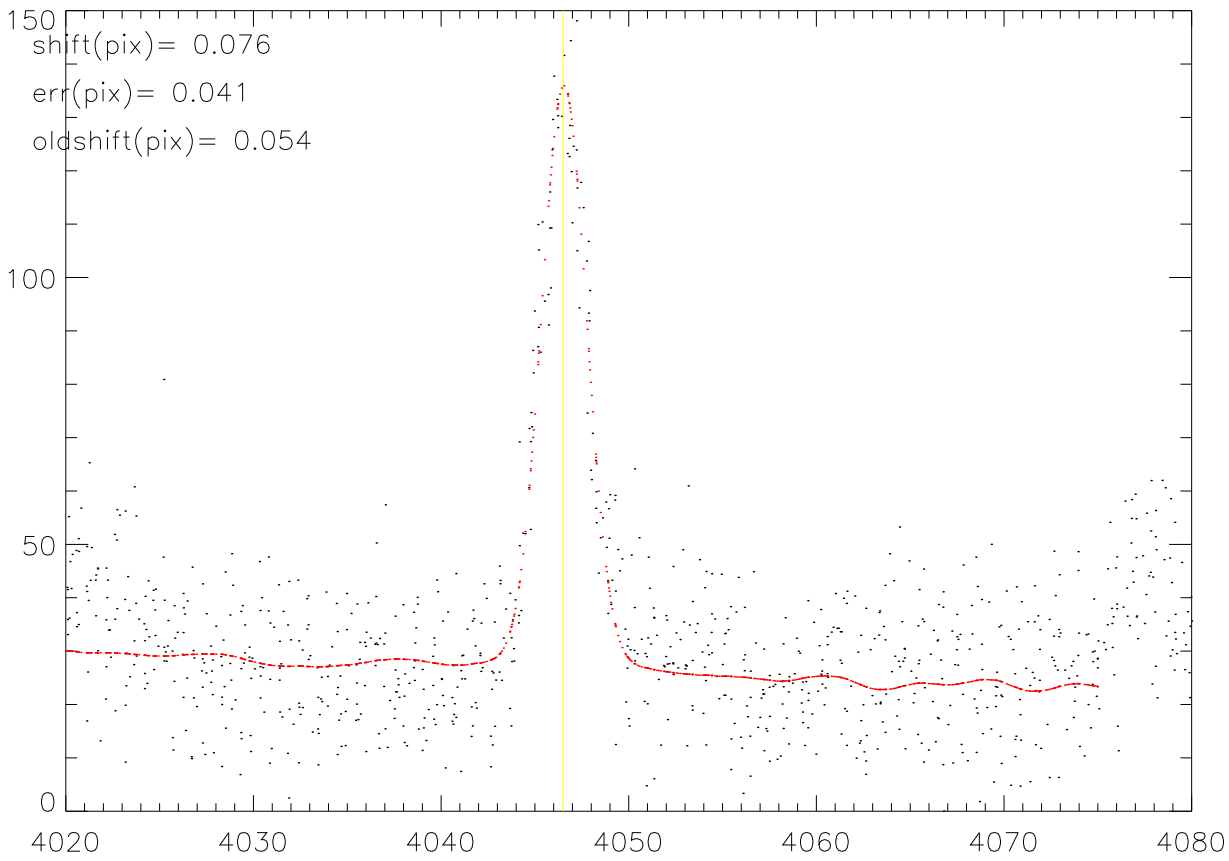

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-b1-00010612.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.977
Max value = 6.959
Tue Feb 26 05:39:56 2008

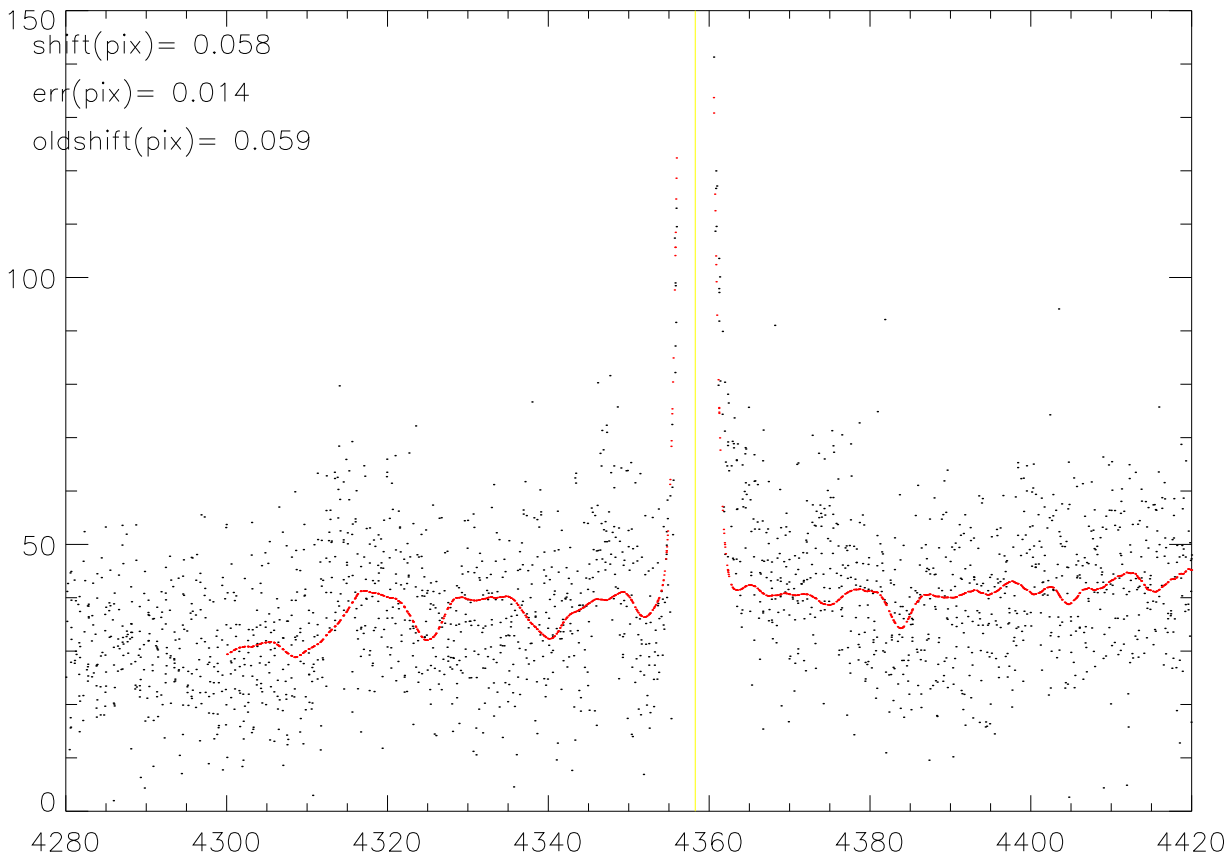

PLATE=0627 MJD=52143 Scattered Light on sdR-b1-00010612.fit
3.82
3.82
4.55
3.09
3.82
3.09
3.82
4.55
3.09
3.82
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

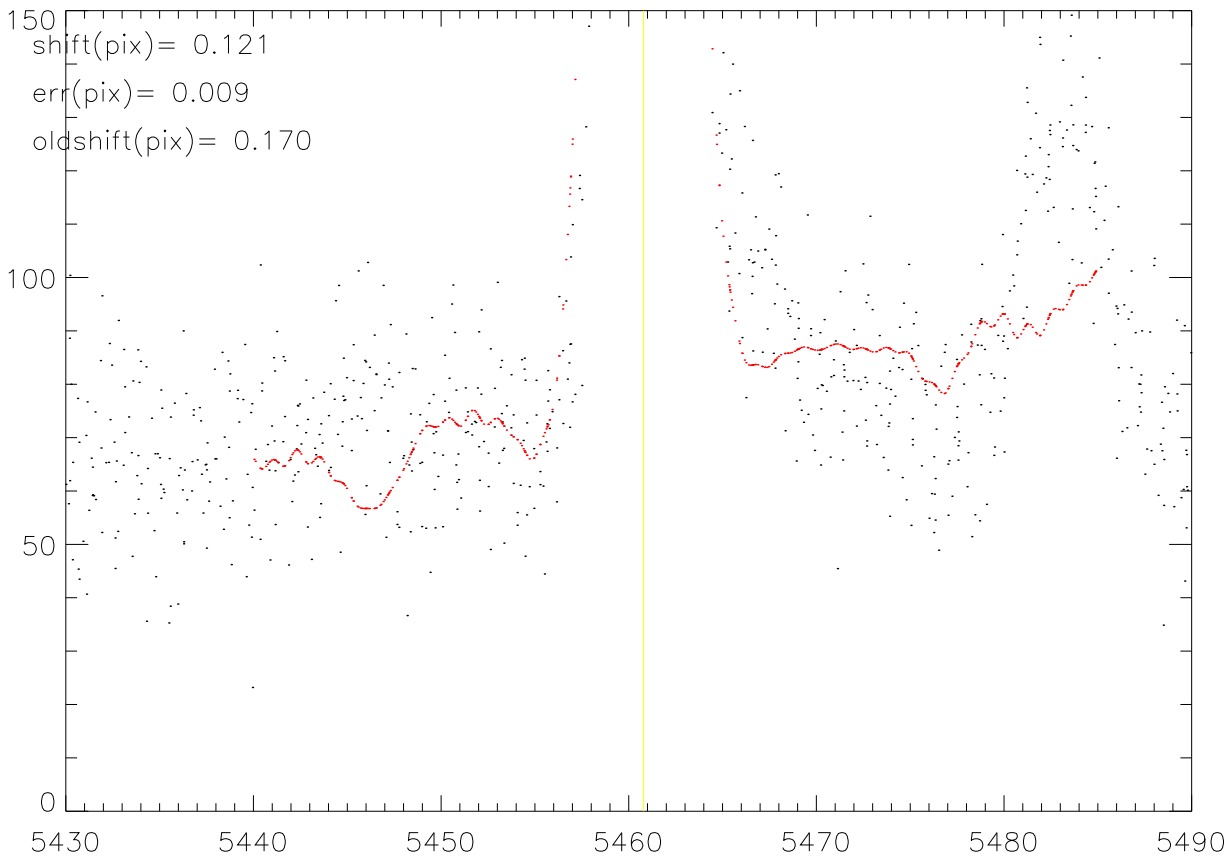

PLATE=0627 MJD=52143 Scattered Light on sdR-b1-00010612.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.311
Max value = 4.711
Tue Feb 26 05:42:54 2008

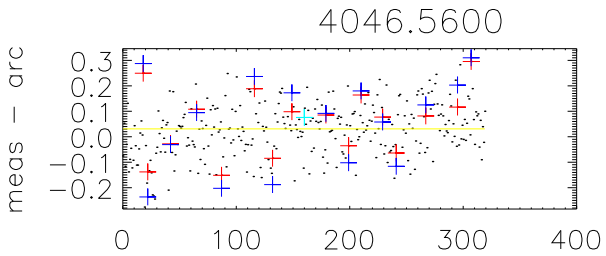

PLATE=0627 MJD=52143 Extraction chi^2 for sdR-b1-00010612.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

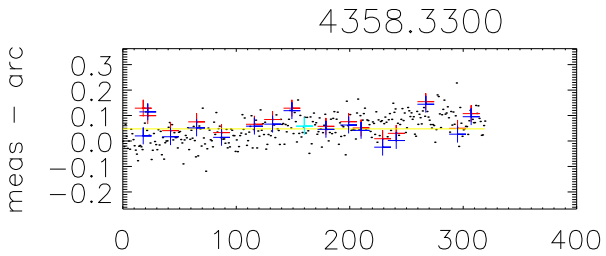

4046.5600
off: 0.05
sig: 0.034
4358.3300
off: 0.06
sig: 0.013
5460.9400
off: 0.17
sig: 0.008
5577.3390
off: 0.18
sig: 0.004
5889.9500
off: 0.25
sig: 0.007
5895.9240
off: 0.25
sig: 0.008

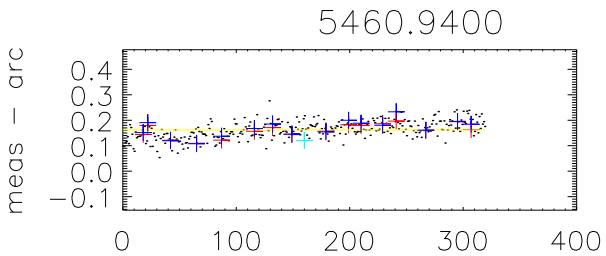

shift(pix)= 0.076
err(pix)= 0.041
oldshift(pix)= 0.054
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

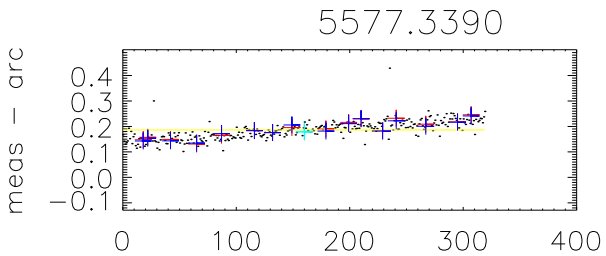

shift(pix)= 0.058
err(pix)= 0.014
oldshift(pix)= 0.059
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

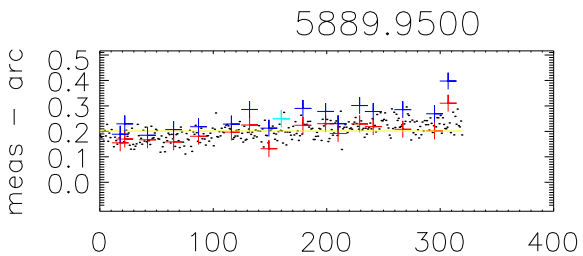

shift(pix)= 0.121
err(pix)= 0.009
oldshift(pix)= 0.170
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

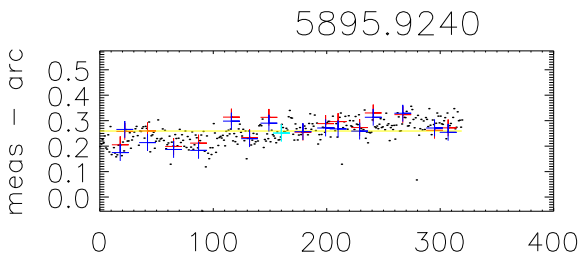

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

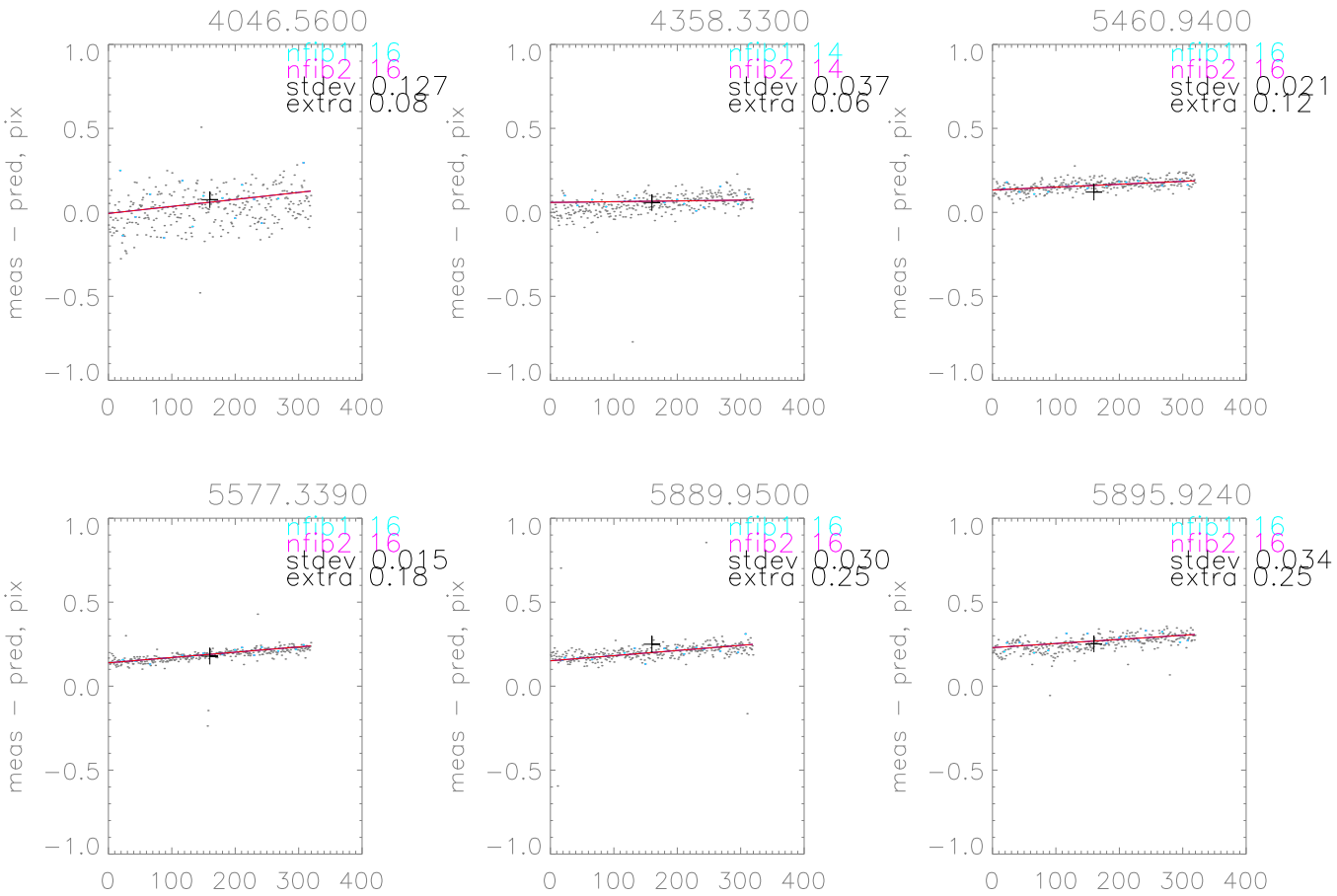

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

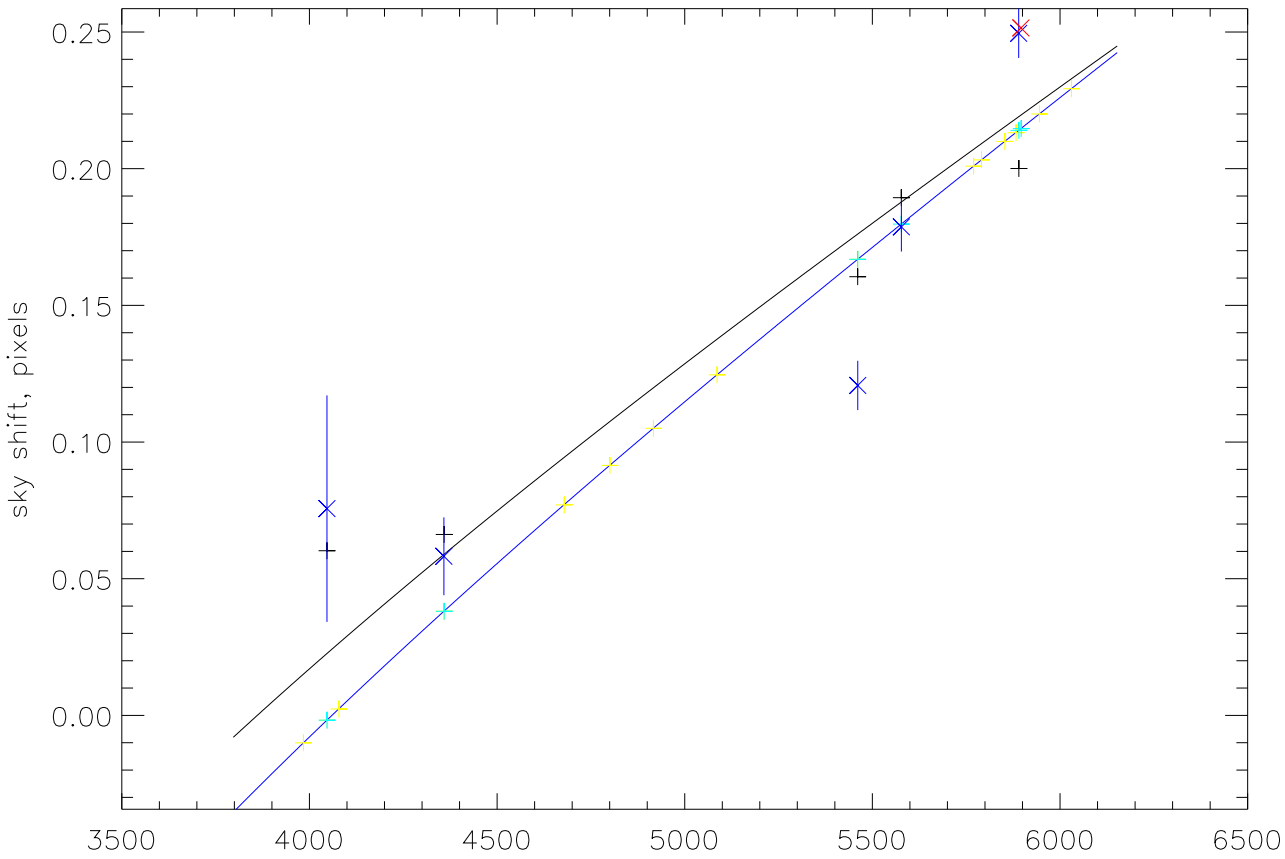

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

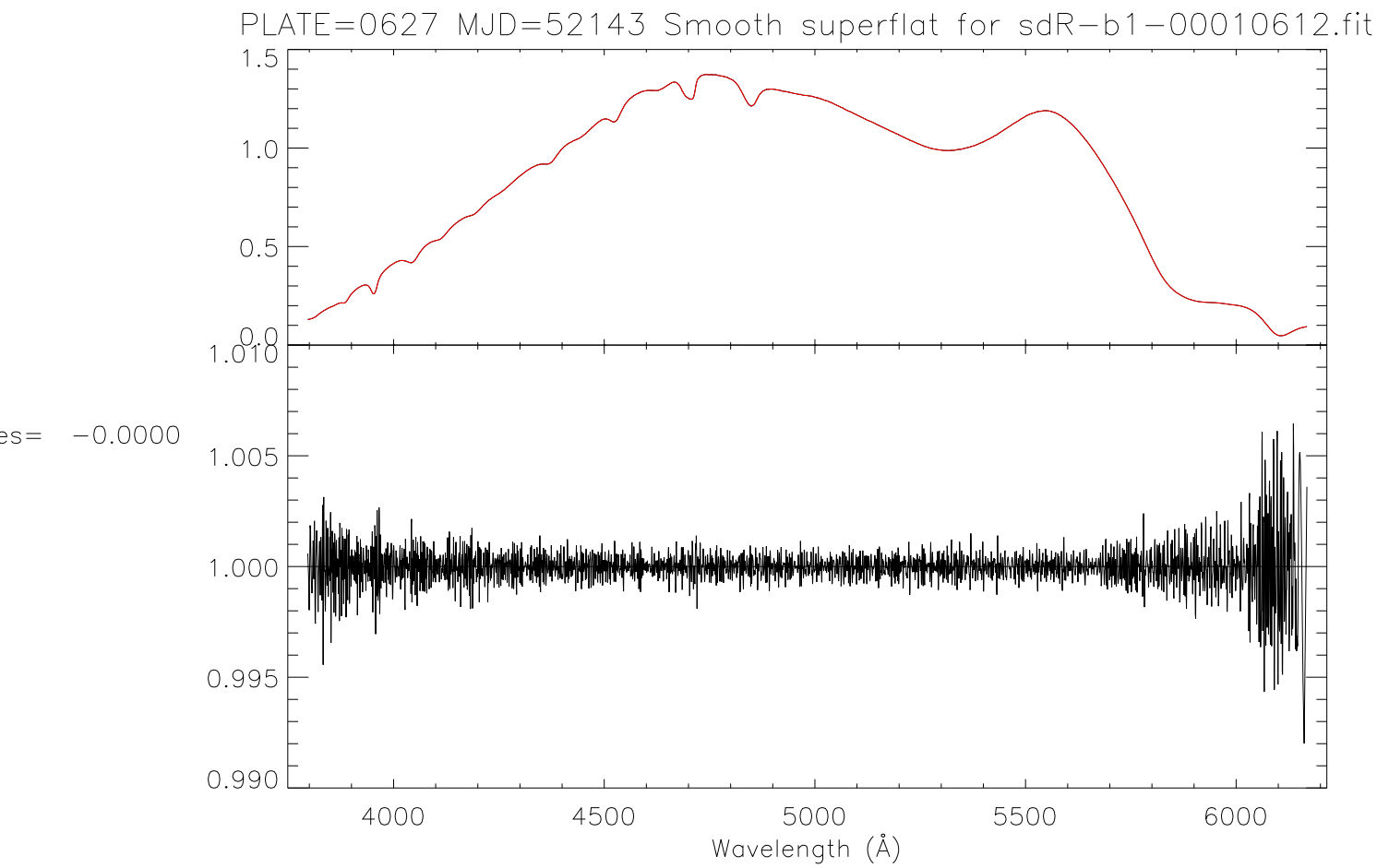

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

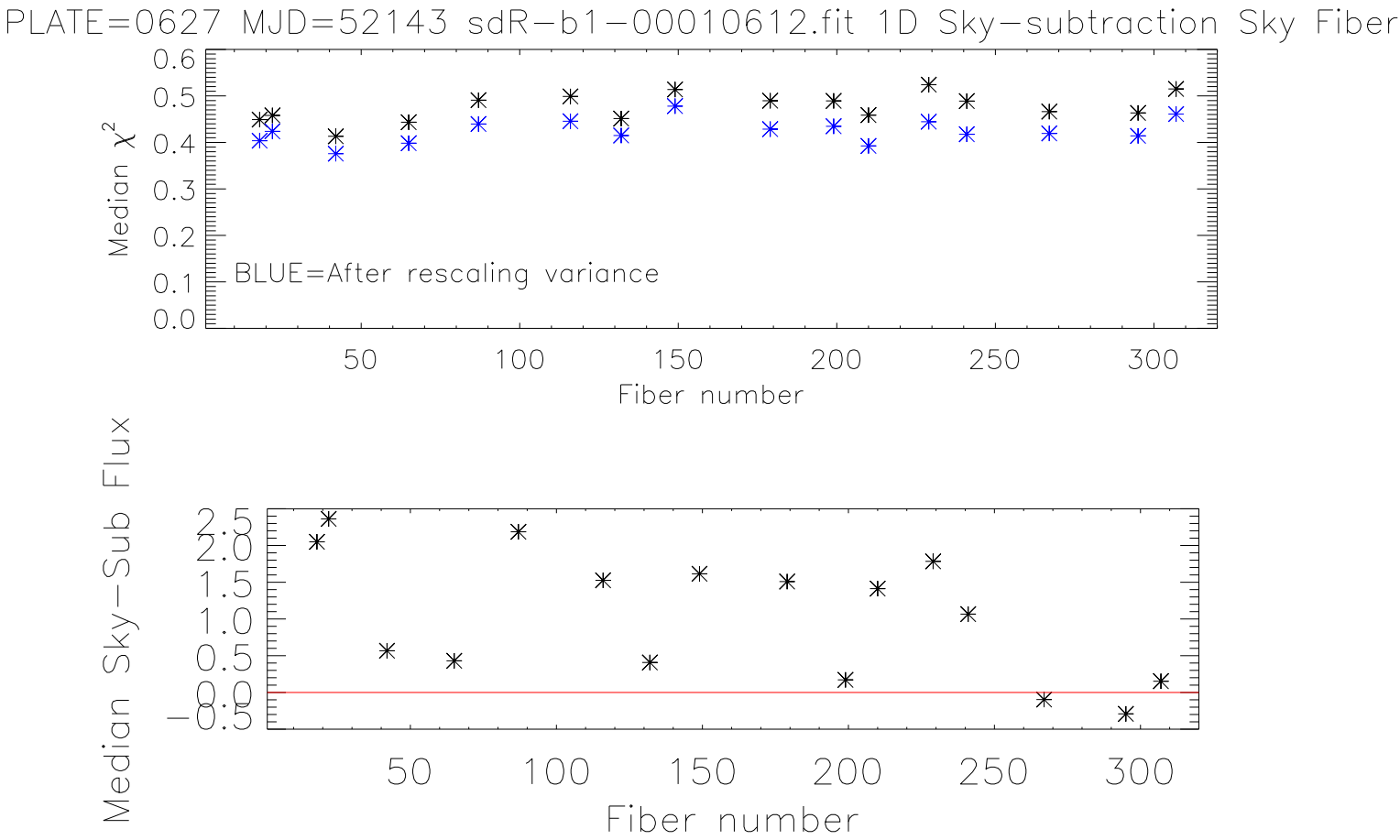

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

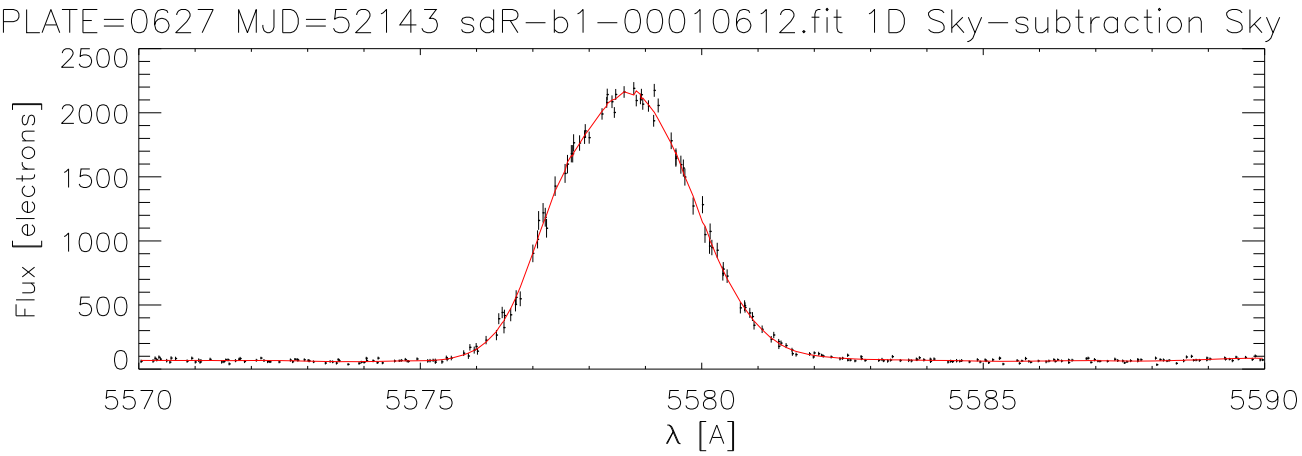

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

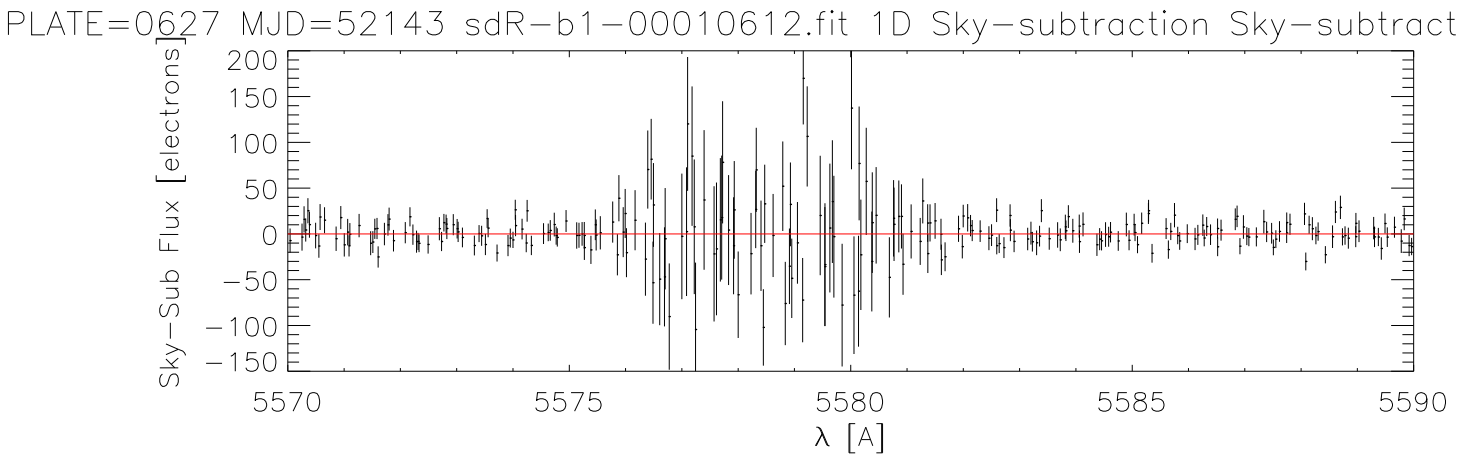

4046.5600
nfib1 16
nfib2 16
stdev 0.127
extra 0.08
4358.3300
nfib1 14
nfib2 14
stdev 0.037
extra 0.06
5460.9400
nfib1 16
nfib2 16
stdev 0.021
extra 0.12
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.18
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra 0.25
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

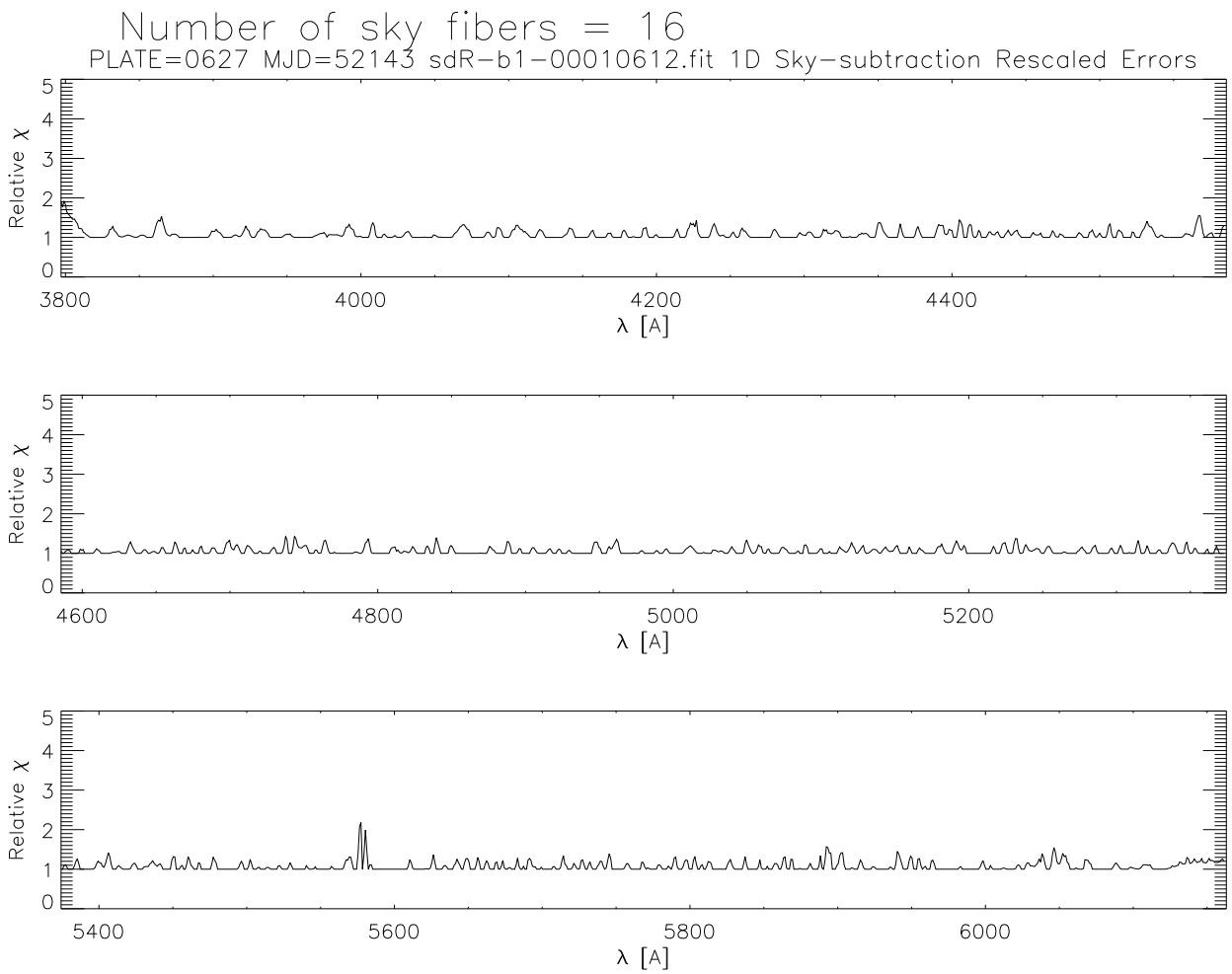

0.25
0.20
0.15
0.10
0.05
0.00
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

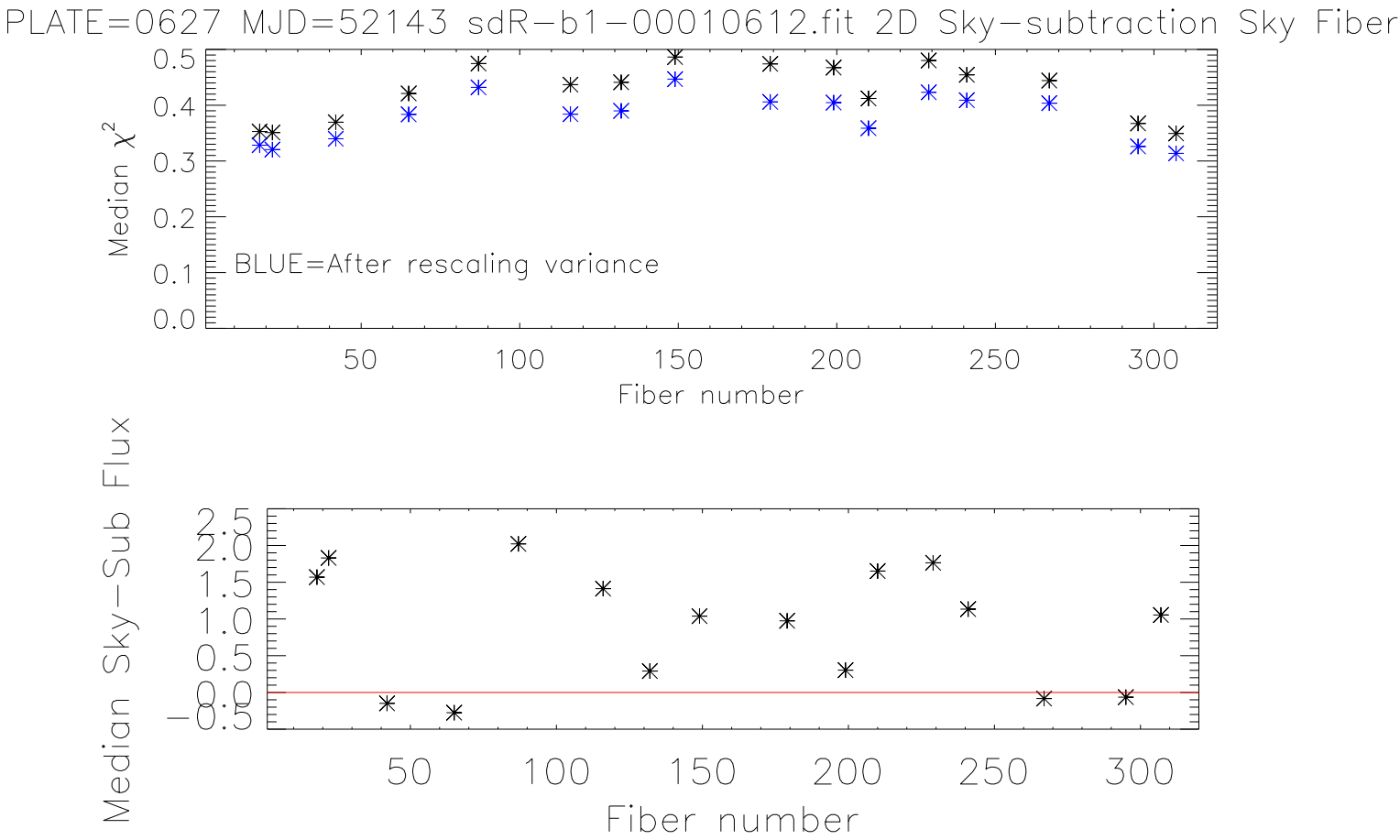

PLATE=0627 MJD=52143 Smooth superflat for sdR-b1-00010612.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

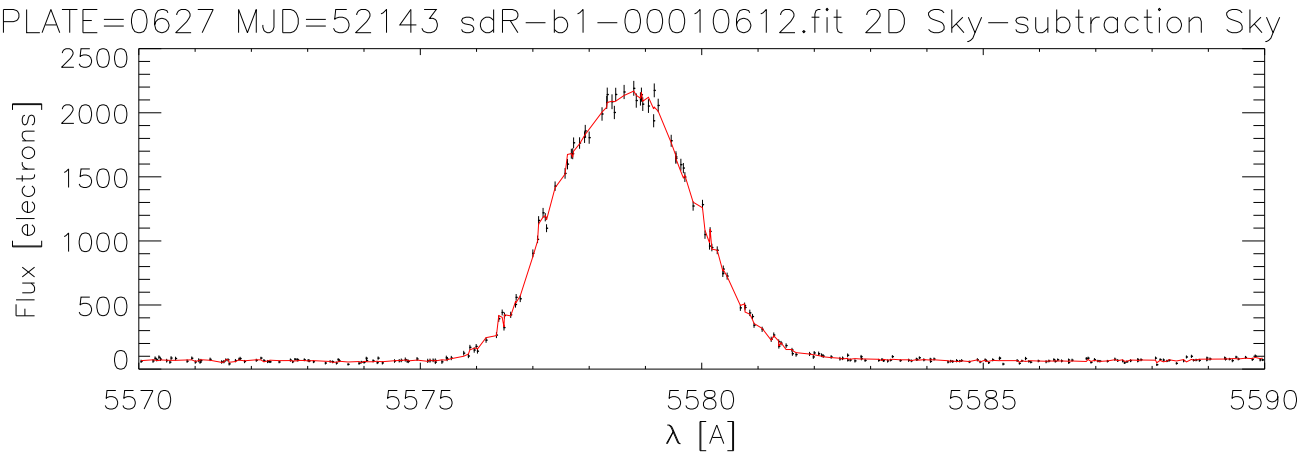

PLATE=0627 MJD=52143 sdR-b1-00010612.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

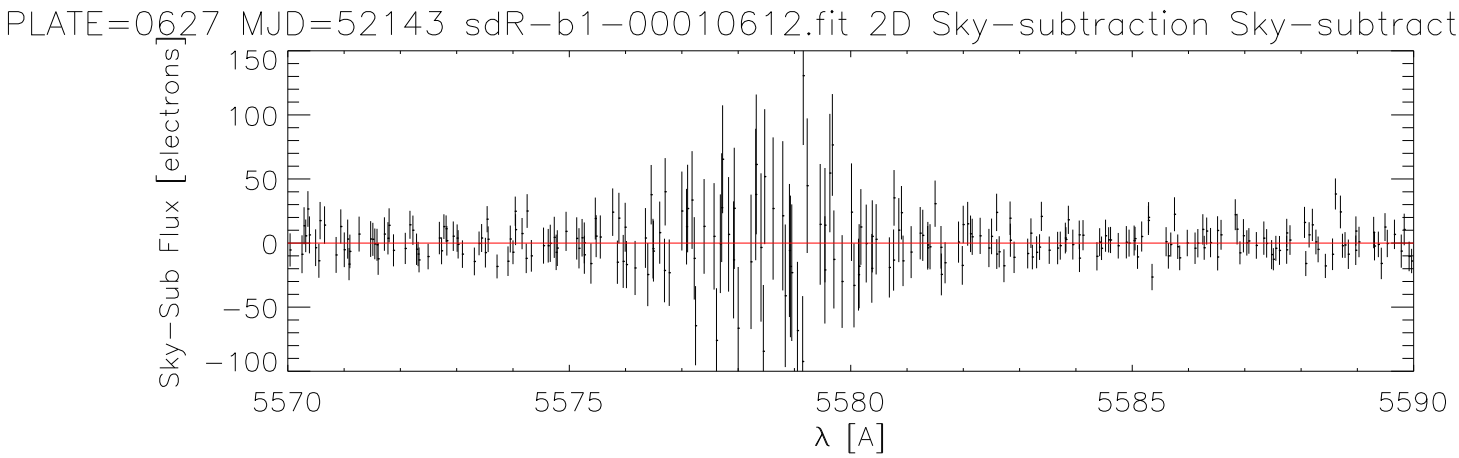

PLATE=0627 MJD=52143 sdR-b1-00010612.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

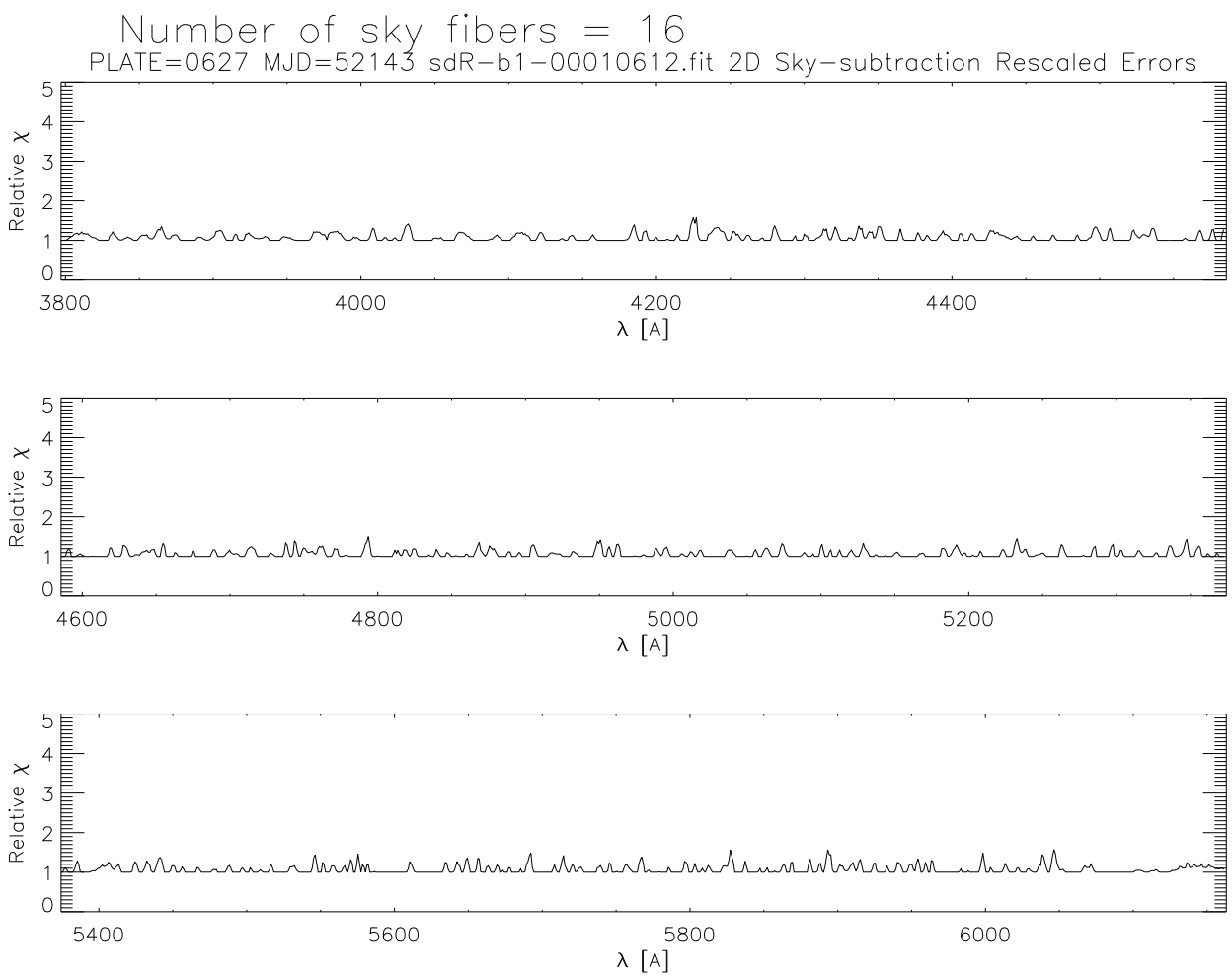

PLATE=0627 MJD=52143 sdR-b1-00010612.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

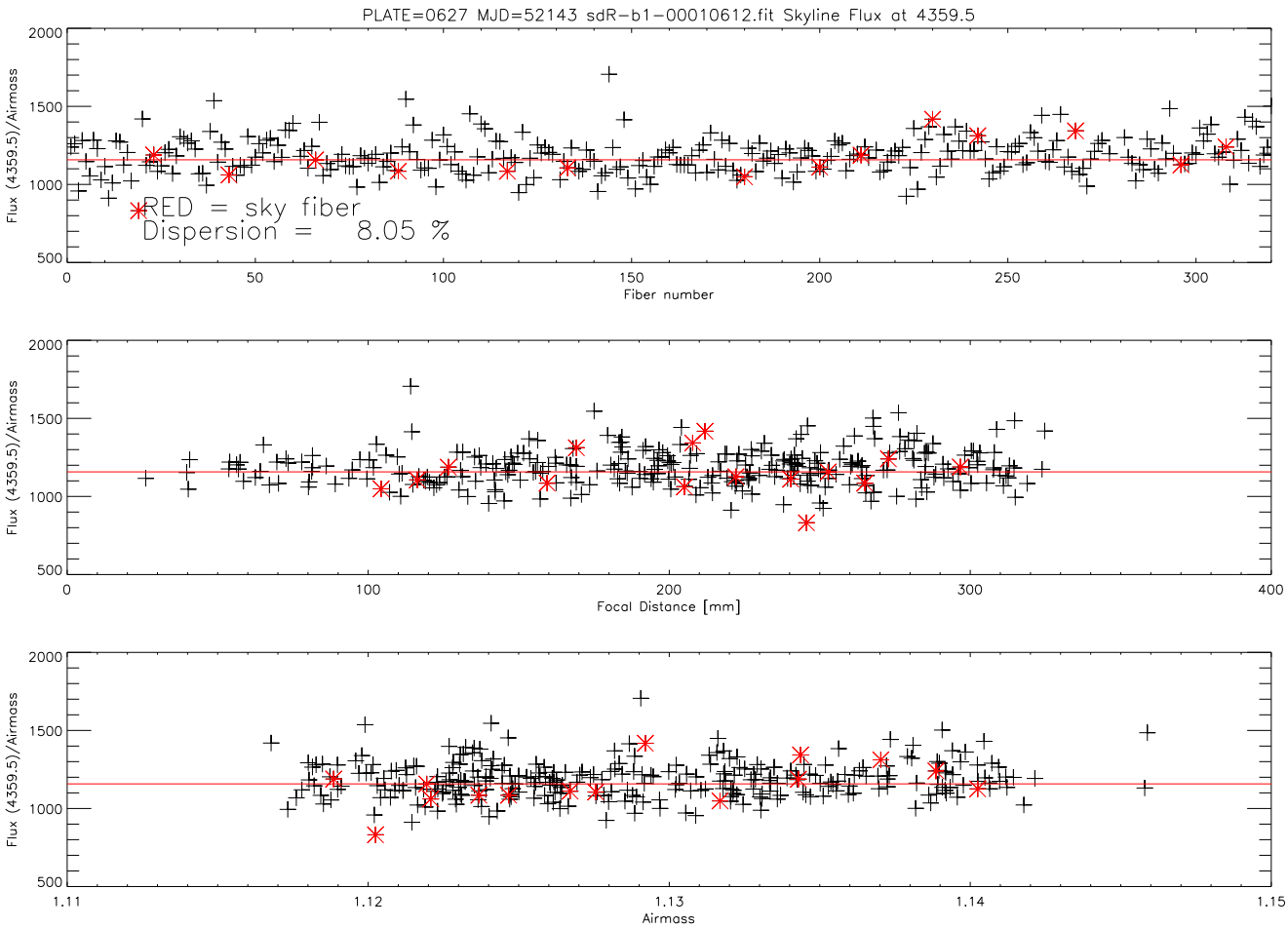

Number of sky fibers = 16
PLATE=0627 MJD=52143 sdR-b1-00010612.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

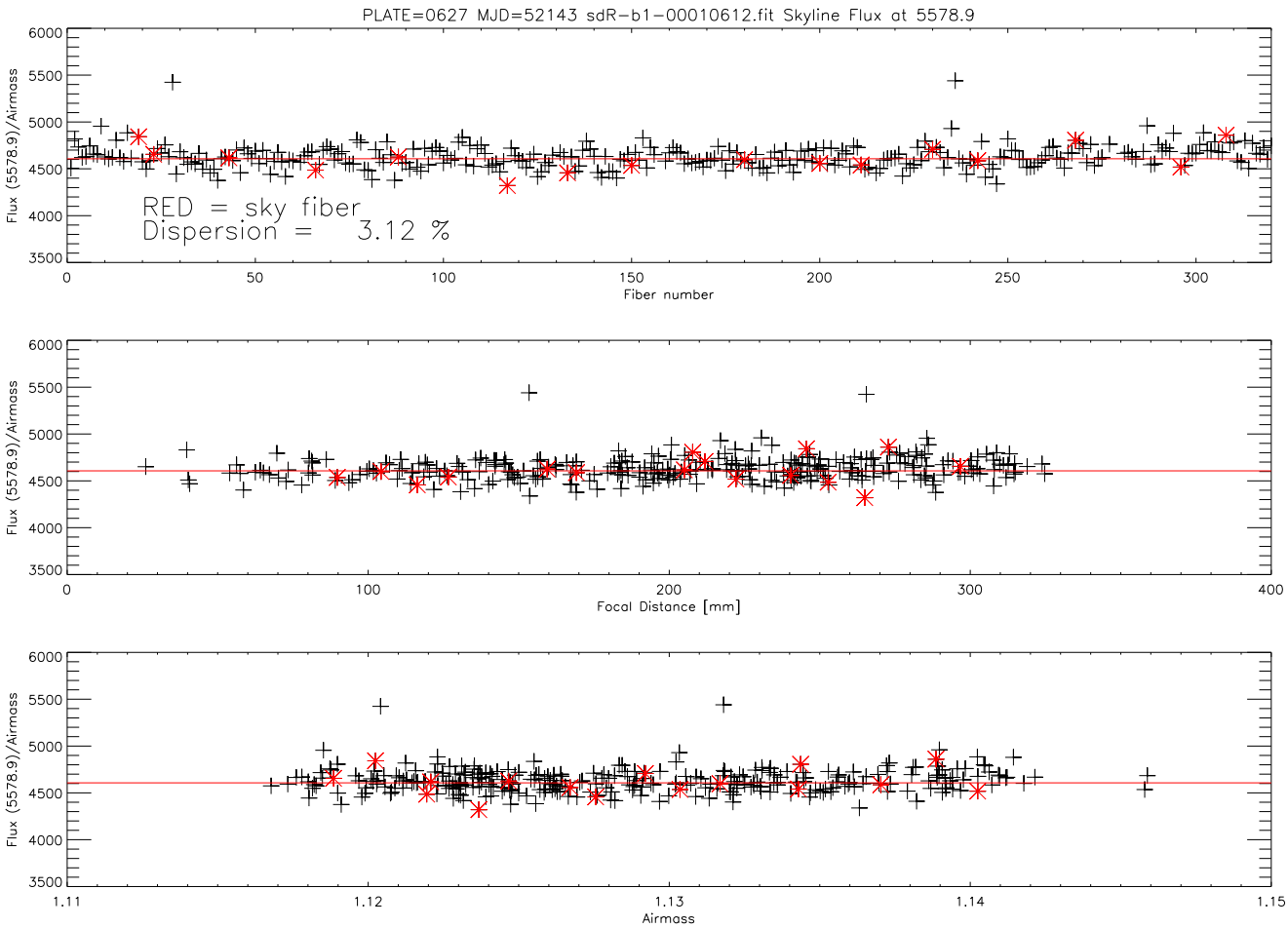

PLATE=0627 MJD=52143 sdR-b1-00010612.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

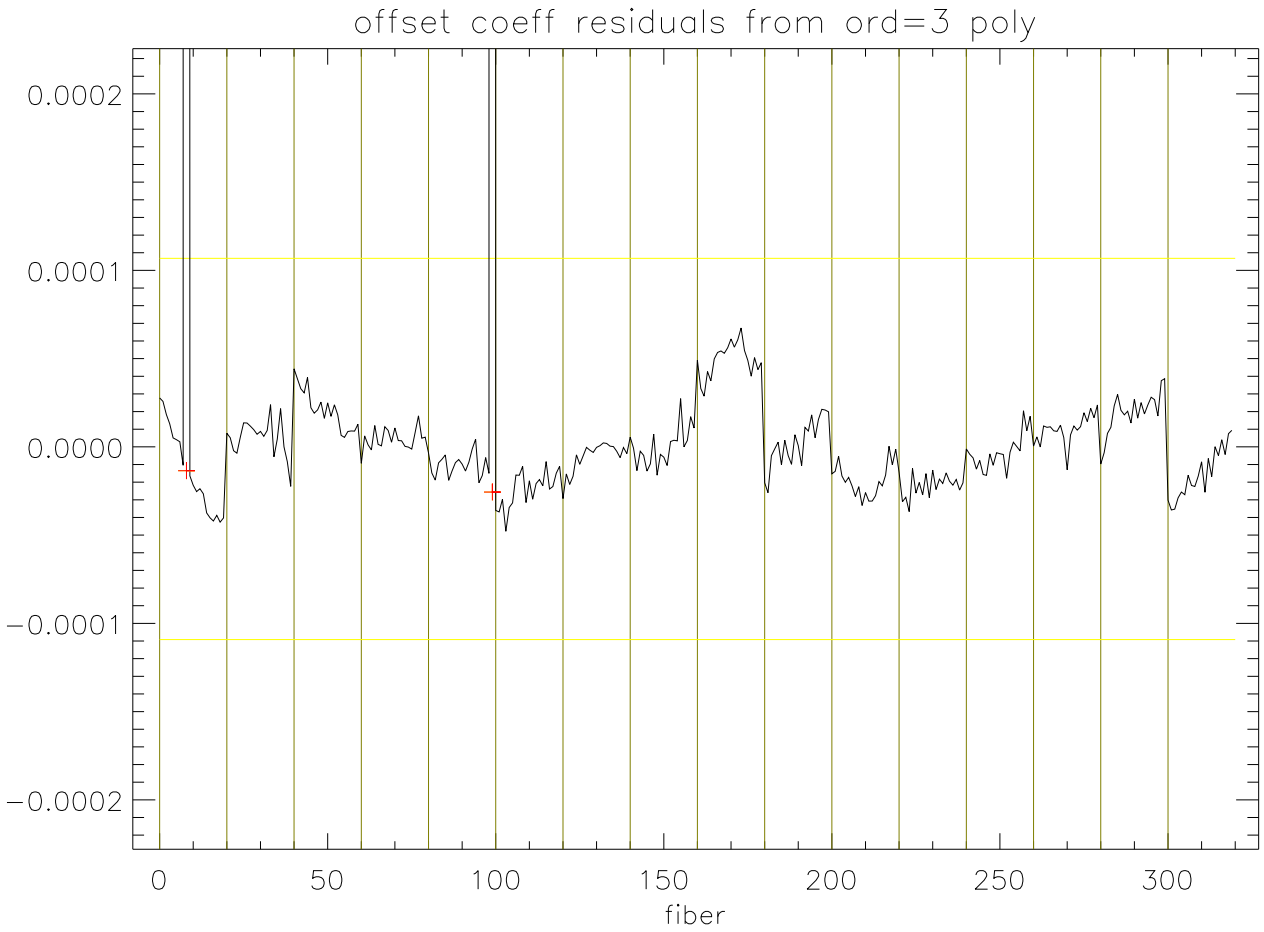

PLATE=0627 MJD=52143 sdR-b1-00010612.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

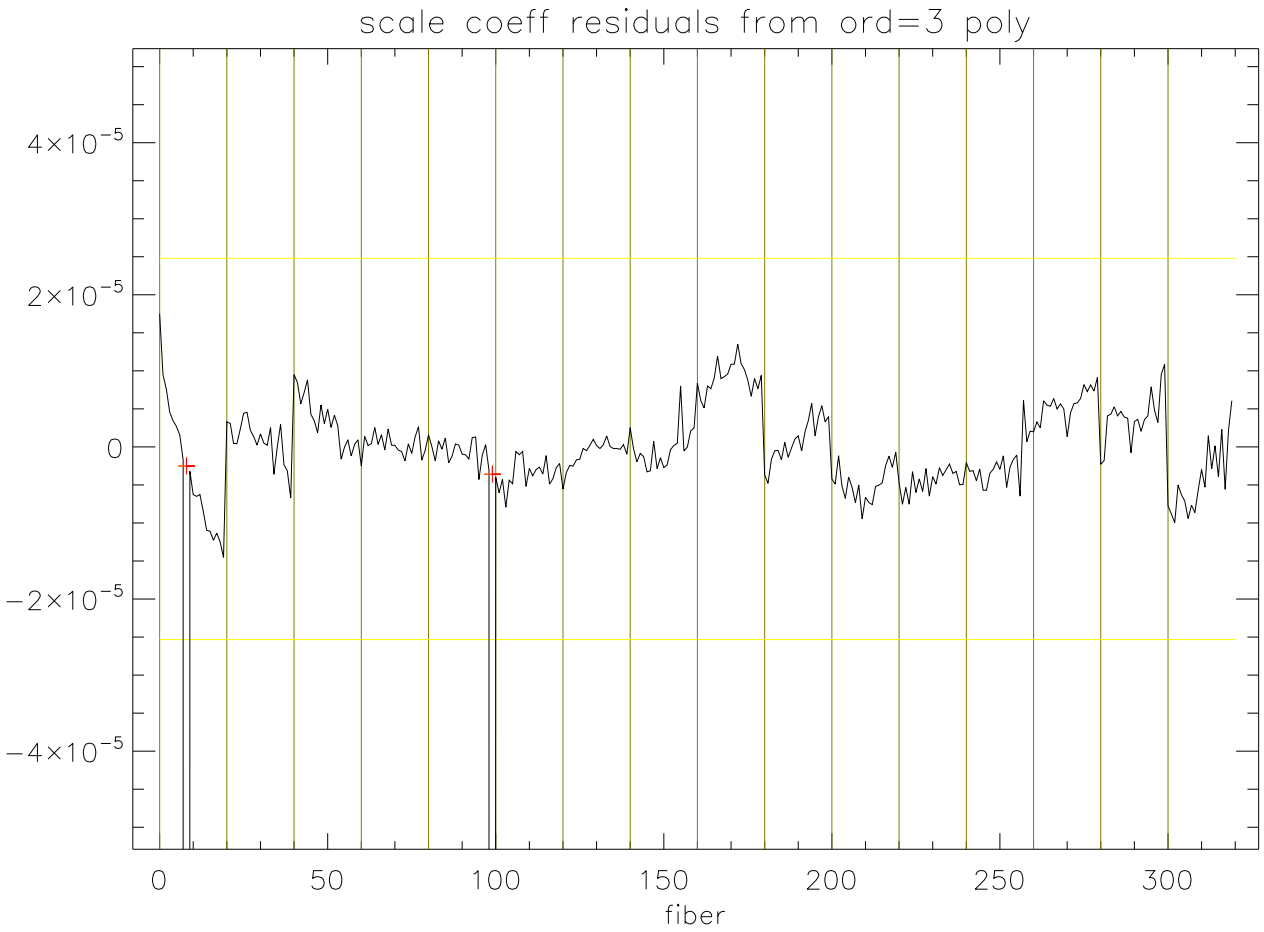

PLATE=0627 MJD=52143 sdR-b1-00010612.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

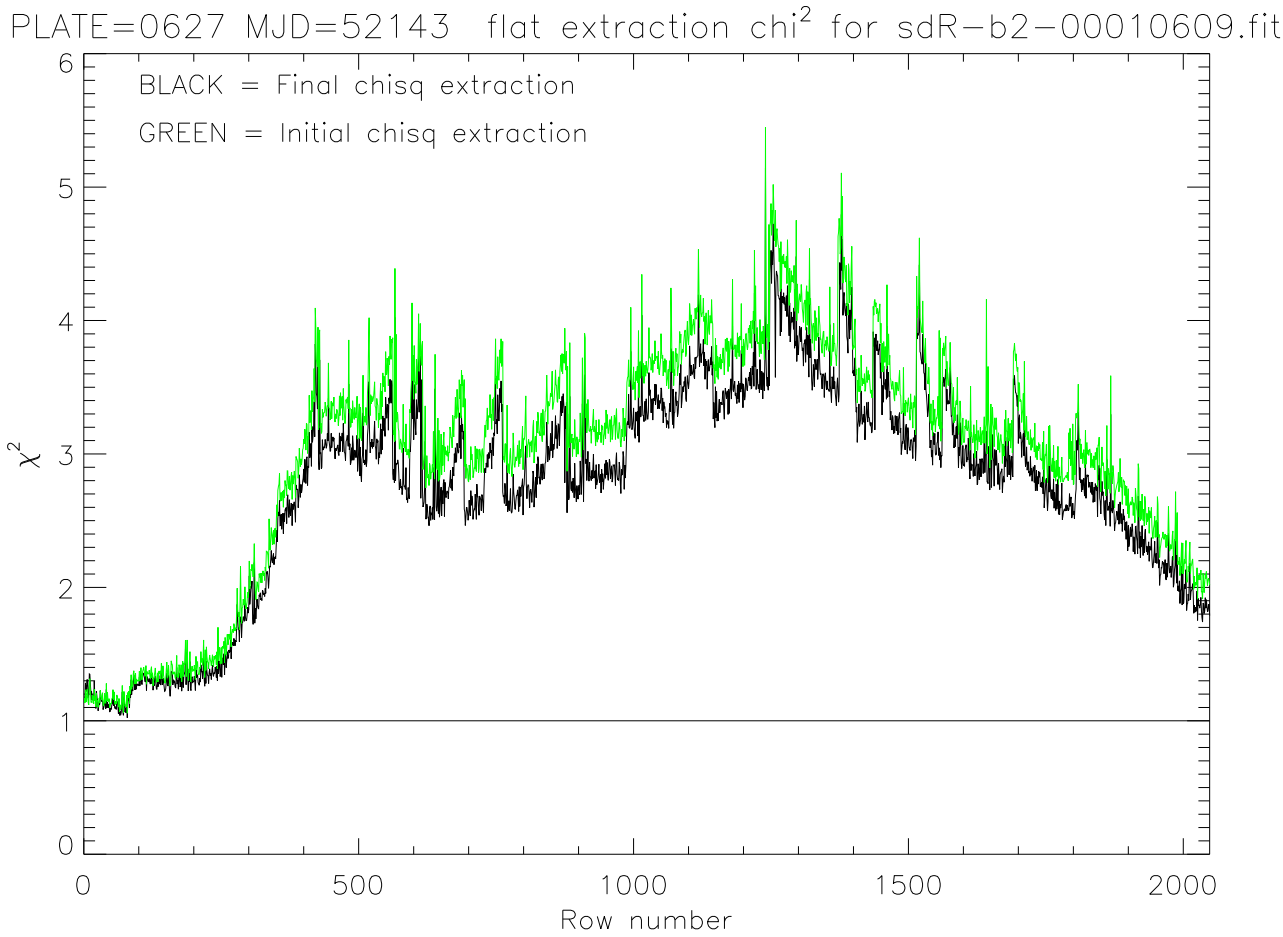

Number of sky fibers = 16
PLATE=0627 MJD=52143 sdR-b1-00010612.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

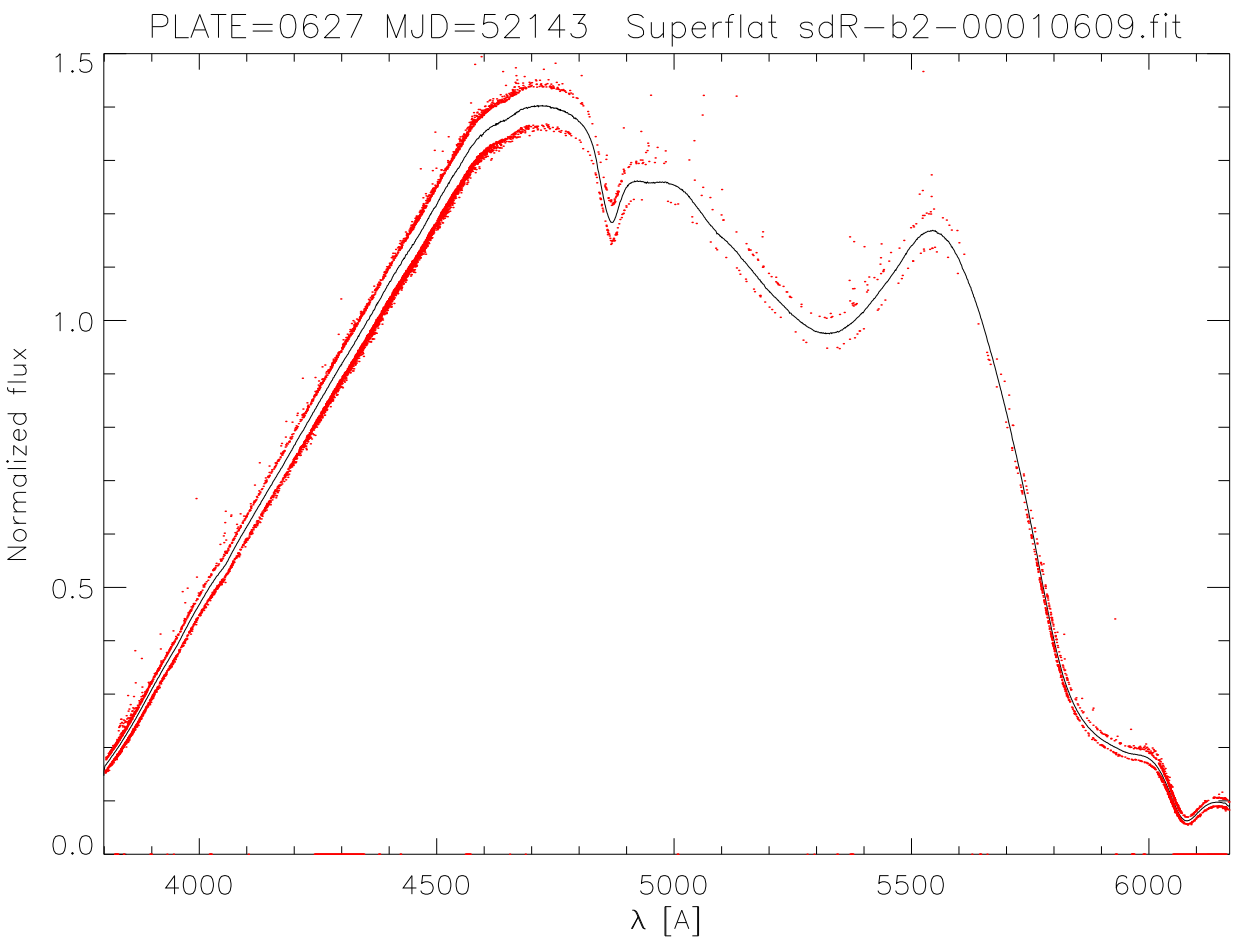

PLATE=0627 MJD=52143 sdR-b1-00010612.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 8.05 %
Fiber number
Focal Distance [mm]
Airmass

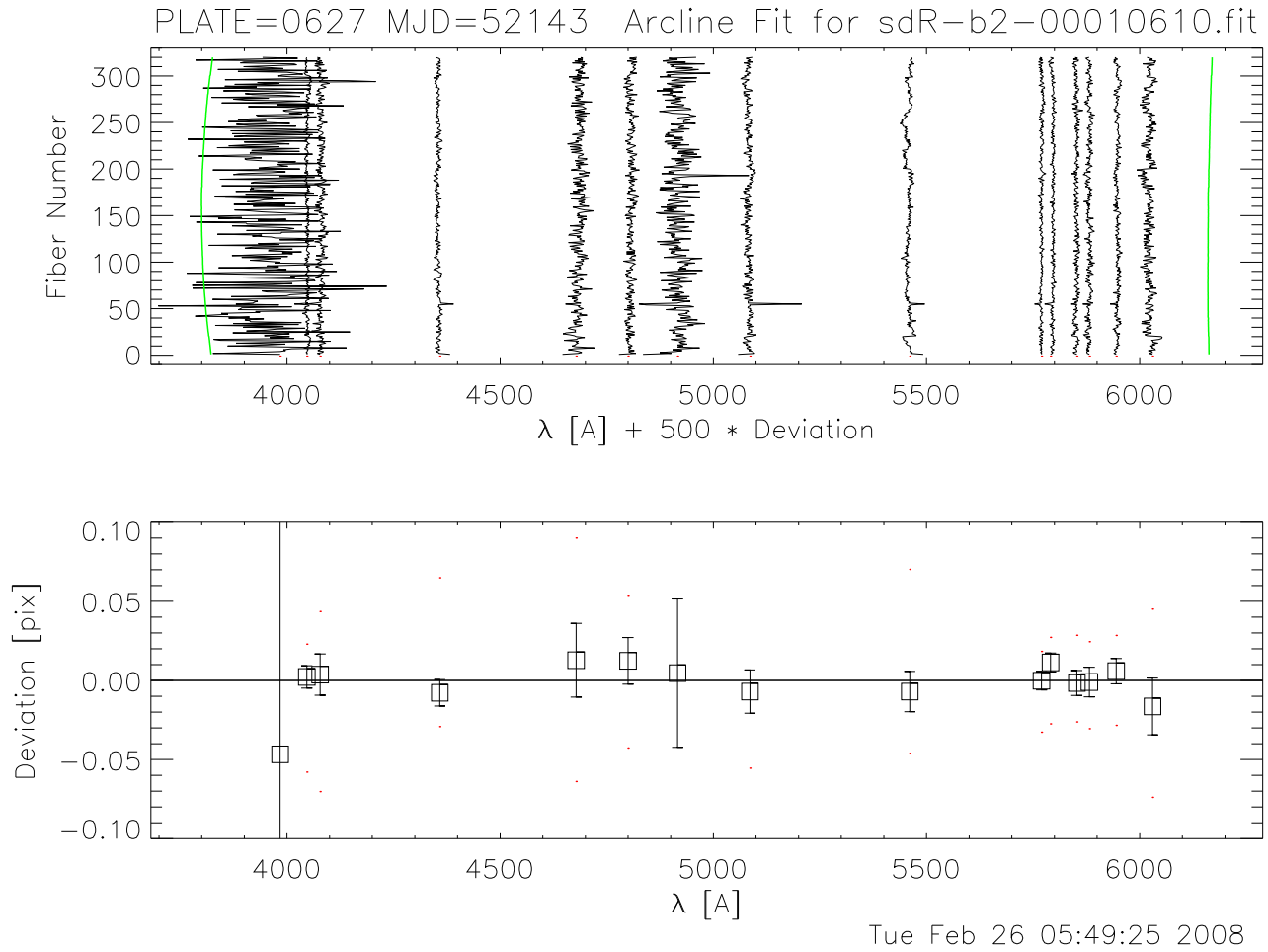

PLATE=0627 MJD=52143 sdR-b1-00010612.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 3.12 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

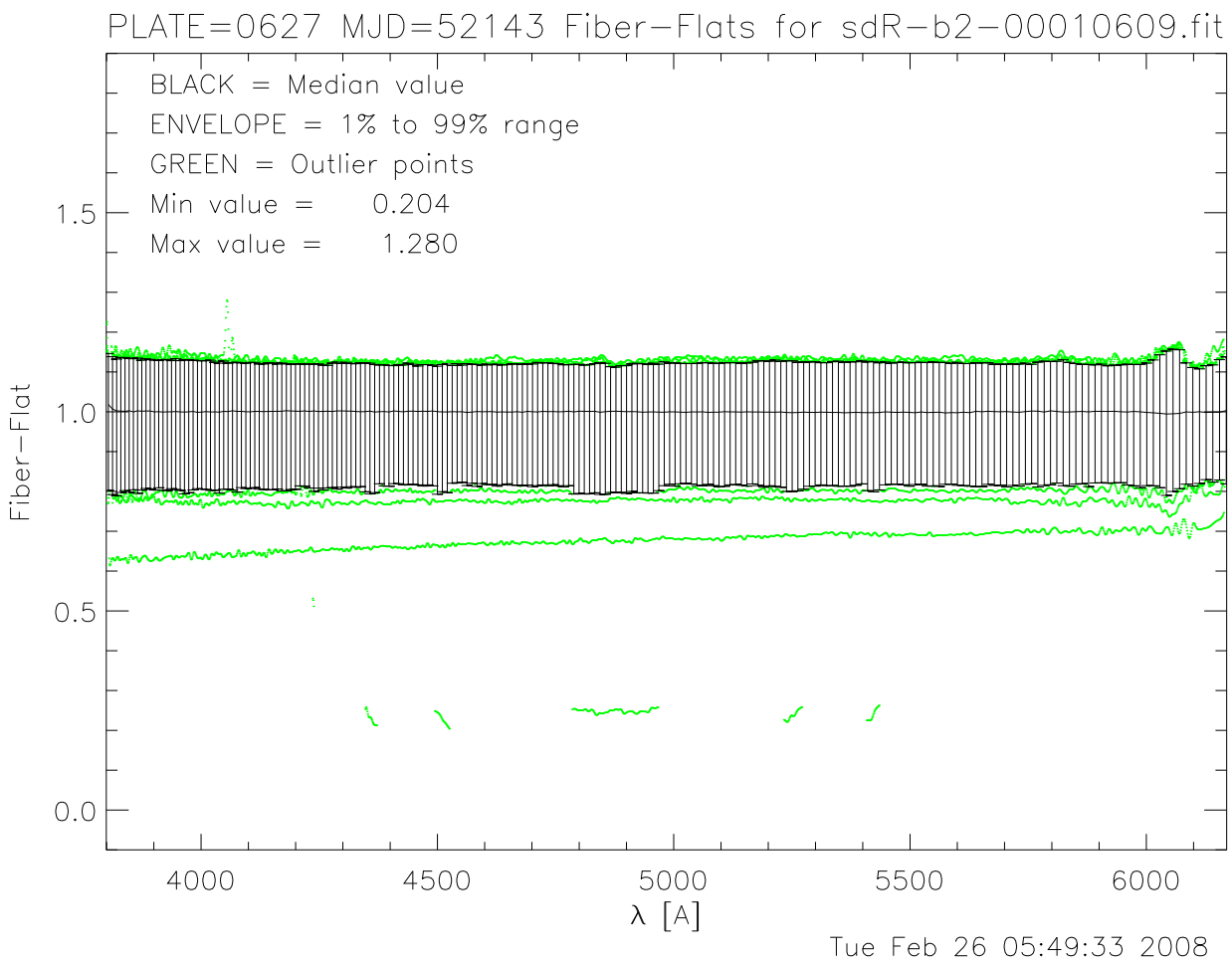

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

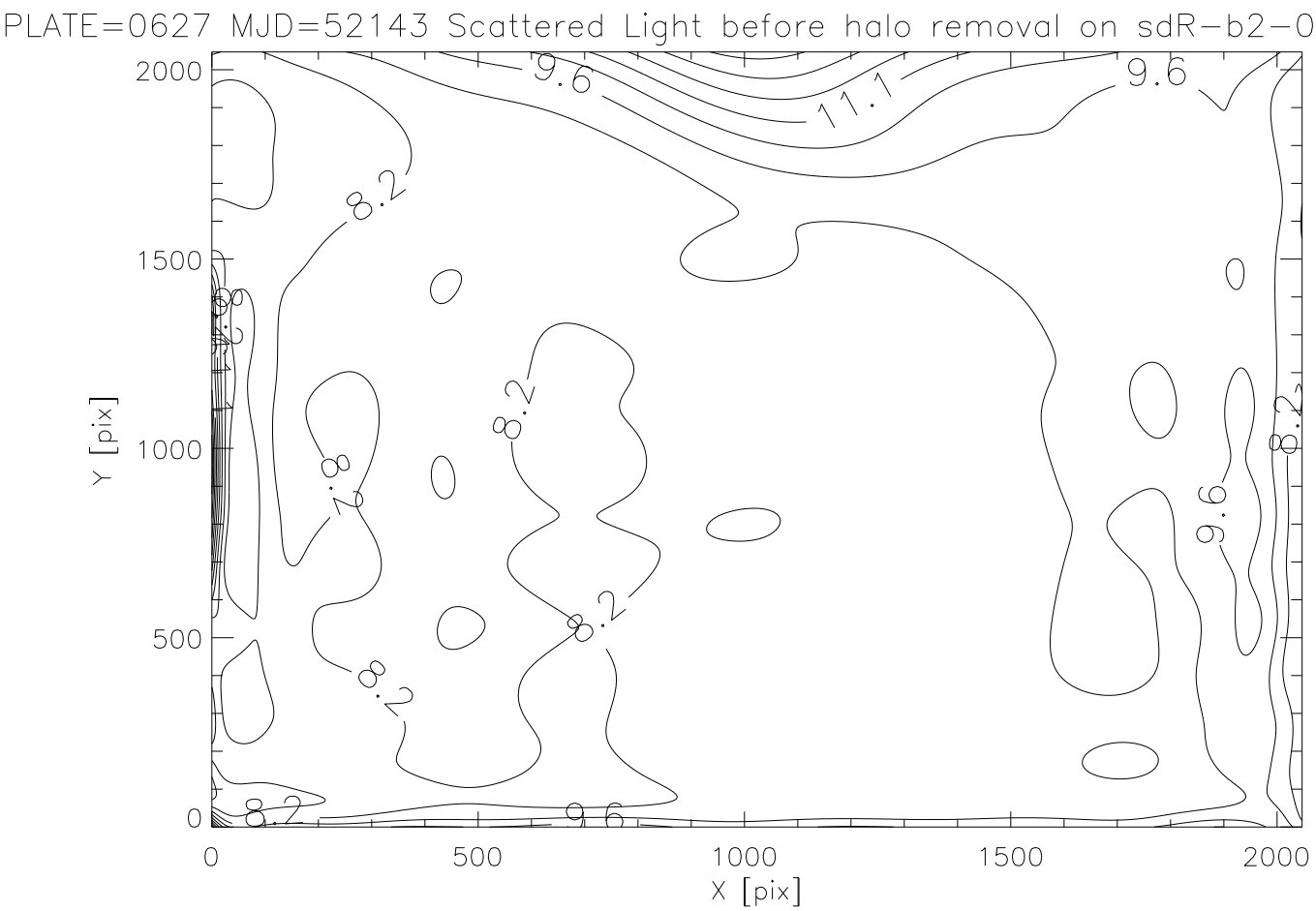

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

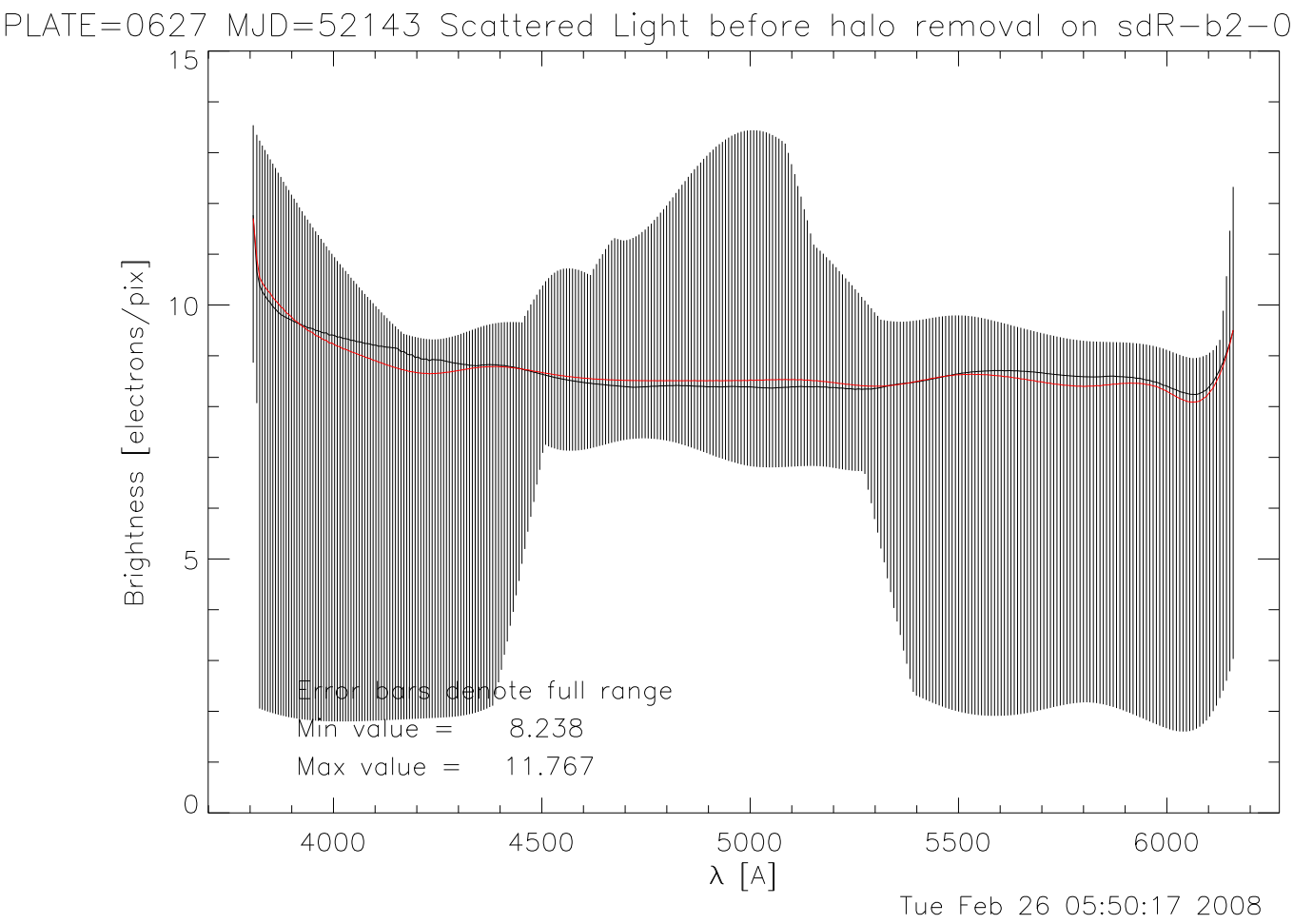

PLATE=0627 MJD=52143 flat extraction chi^2 for sdR−b2−00010609.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

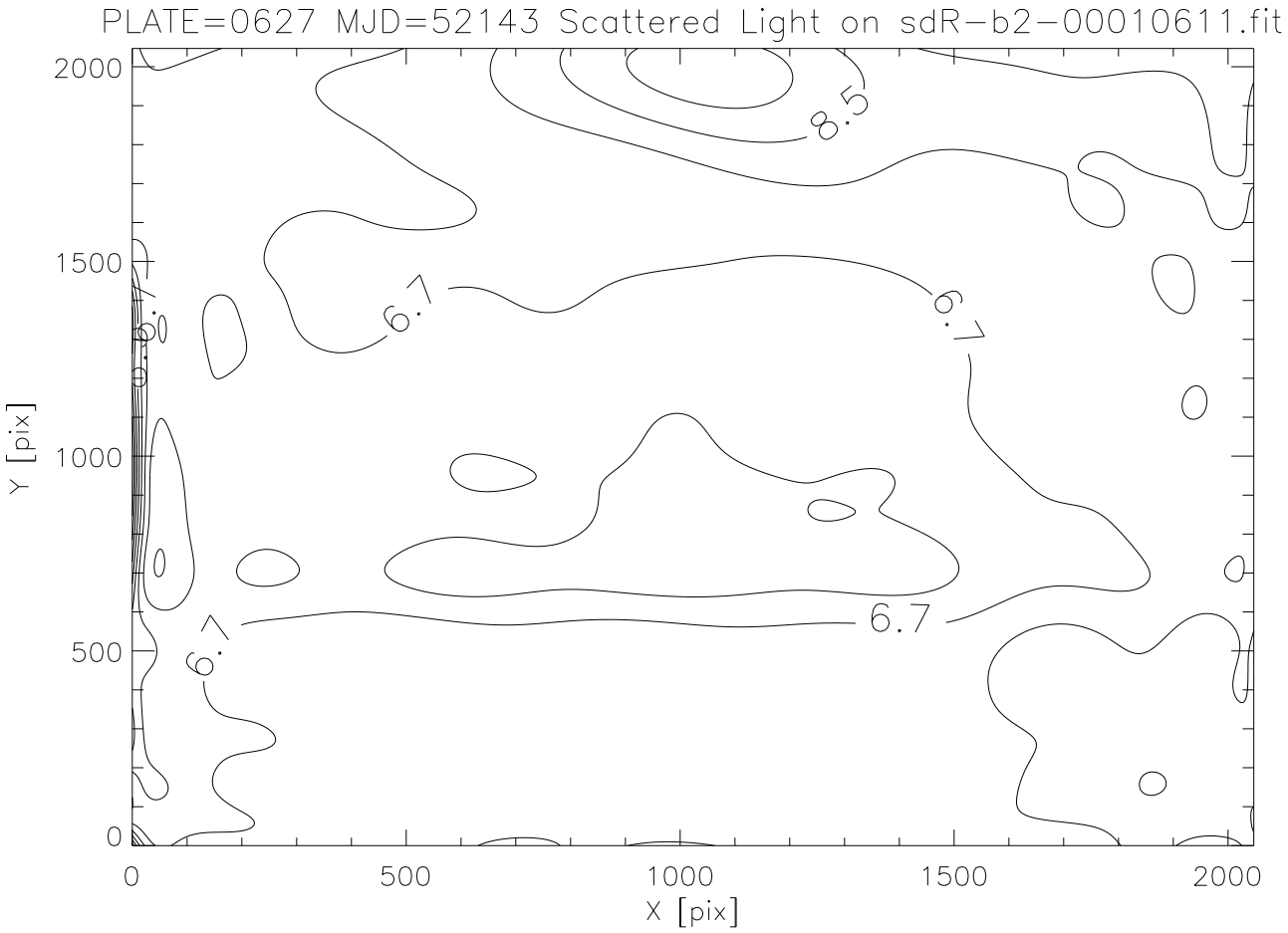

PLATE=0627 MJD=52143 Superflat sdR-b2-00010609.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

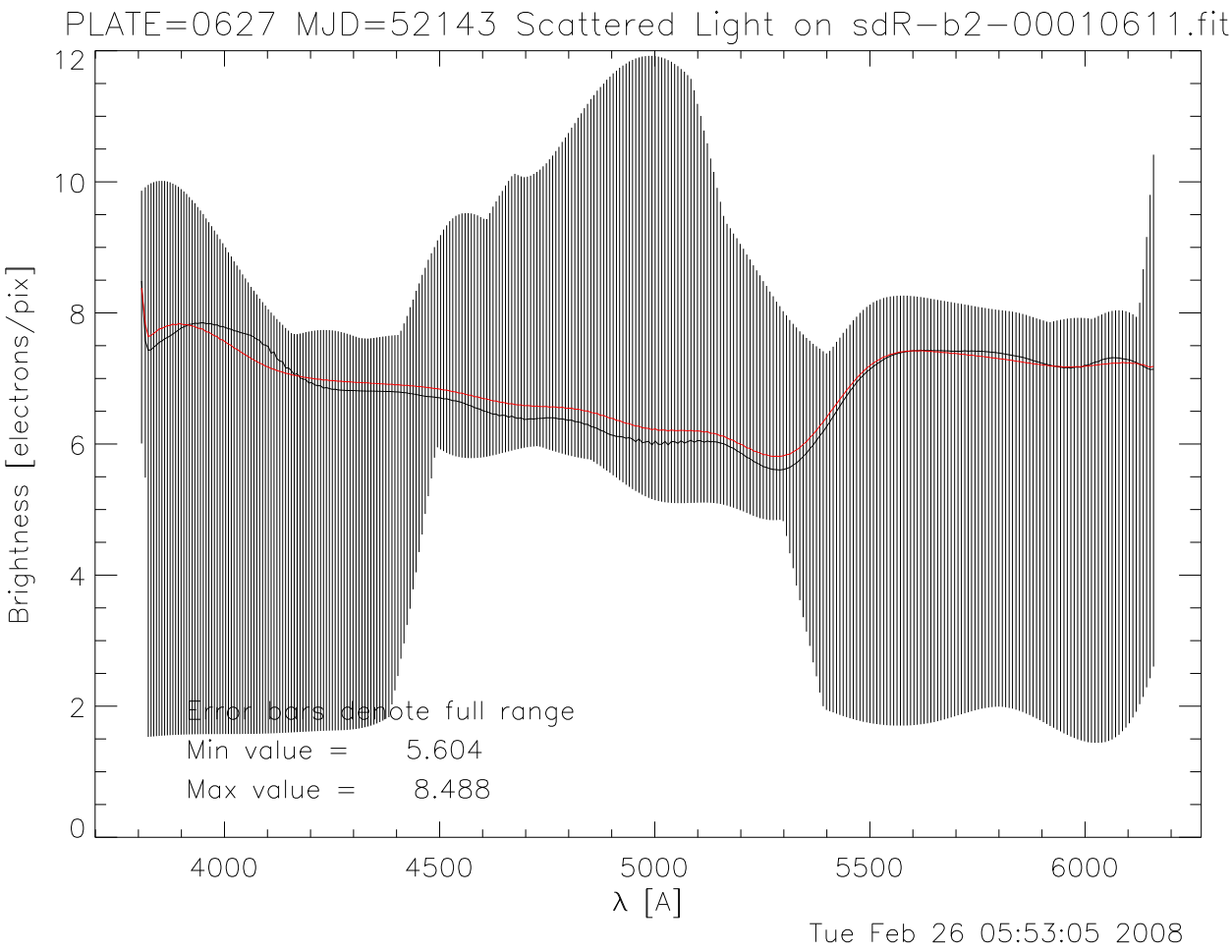

PLATE=0627 MJD=52143 Arcline Fit for sdR-b2-00010610.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 05:49:25 2008

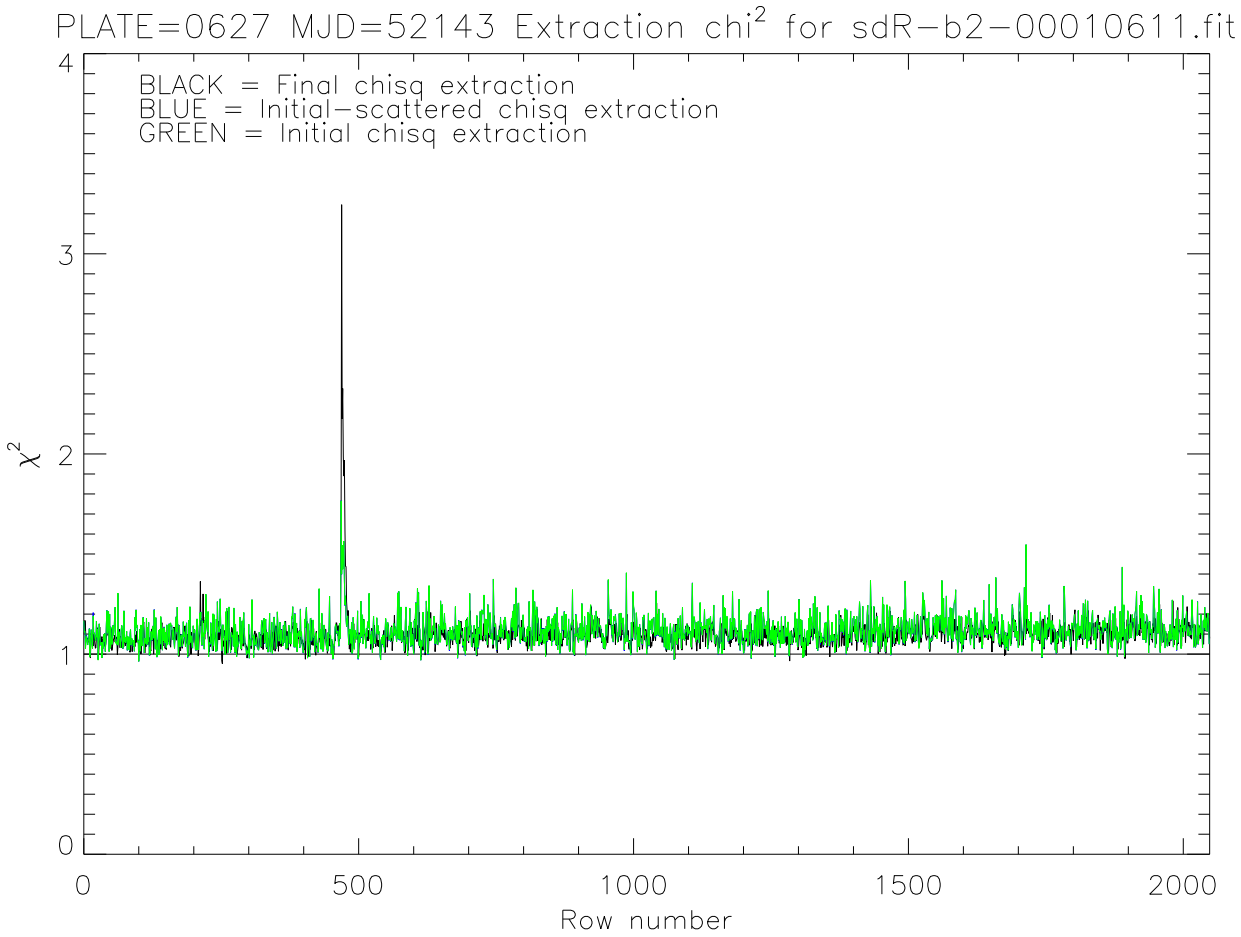

PLATE=0627 MJD=52143 Fiber-Flats for sdR-b2-00010609.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.204
Max value = 1.280
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 05:49:33 2008

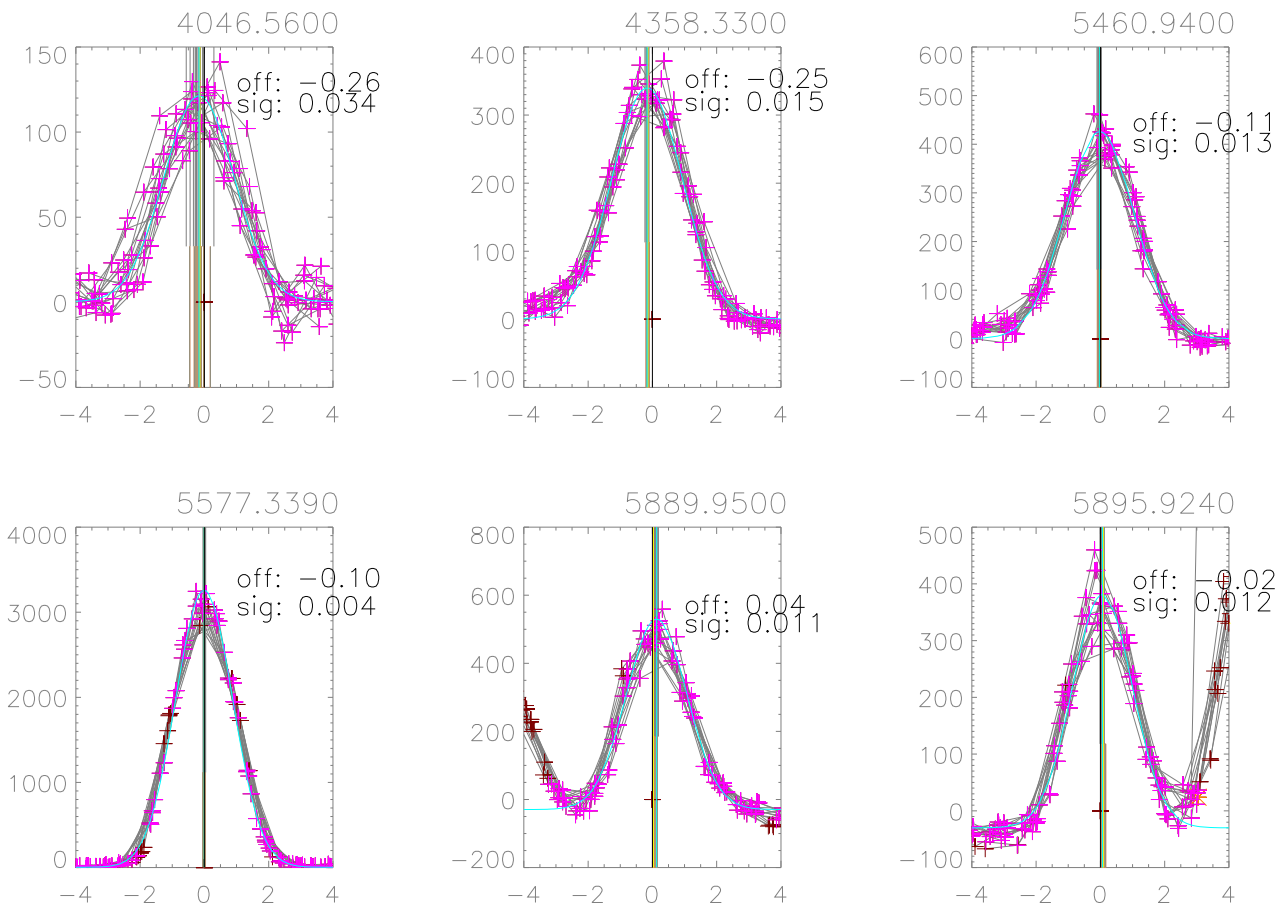

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR−b2−00010611.f
9.6
11.1
9.6
8.2
0
8.2
8.2
8.2
9.6
8.2
8.2
8.2
9.6
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

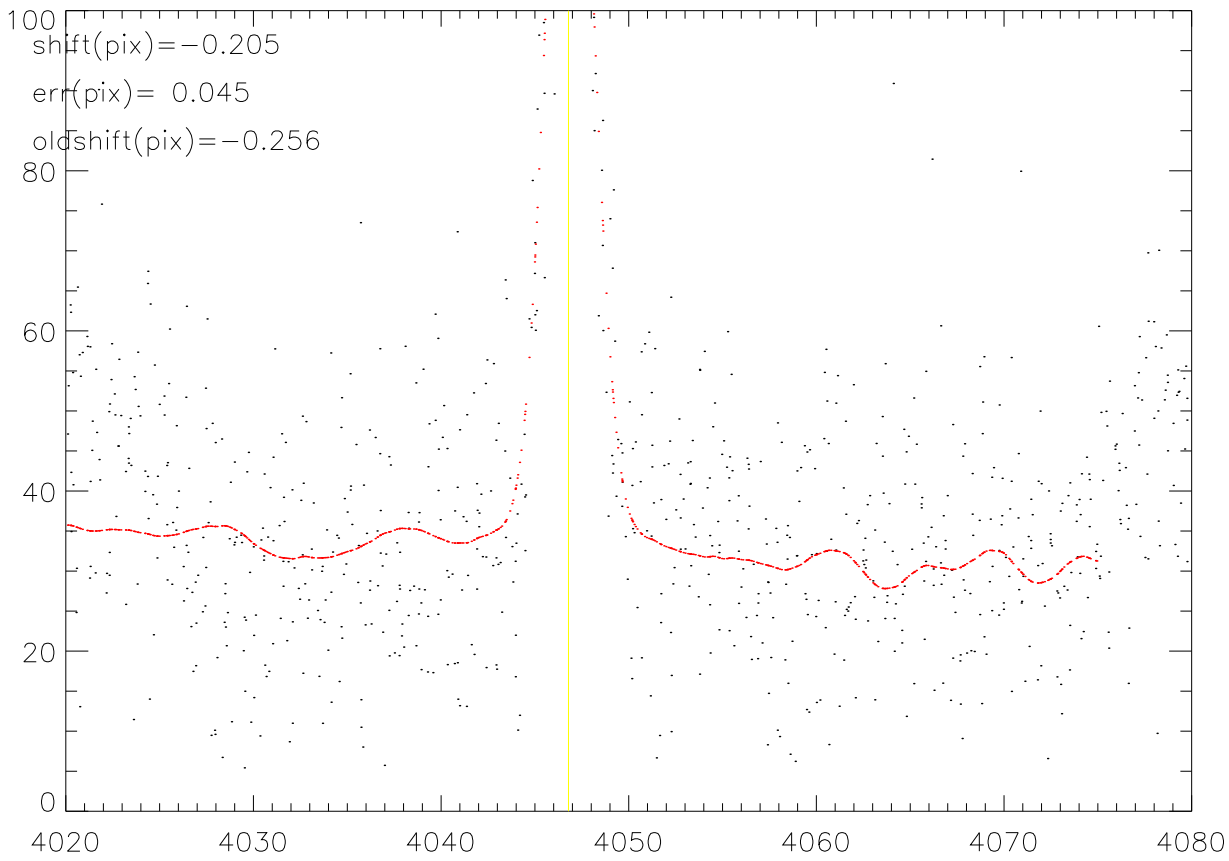

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-b2-00010611.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.238
Max value = 11.767
Tue Feb 26 05:50:17 2008

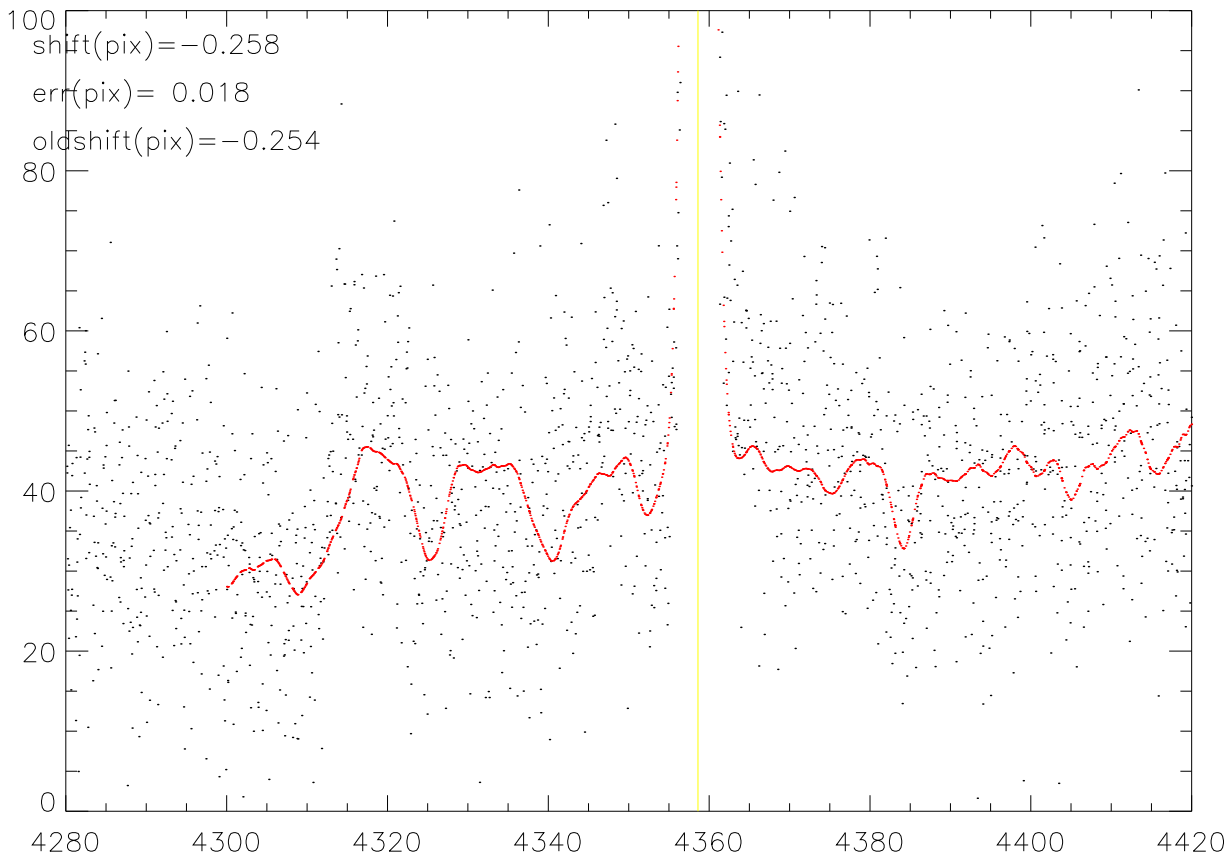

PLATE=0627 MJD=52143 Scattered Light on sdR-b2-00010611.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
8.5
6.7
6.7
6.7
6.7
0
0
0
0

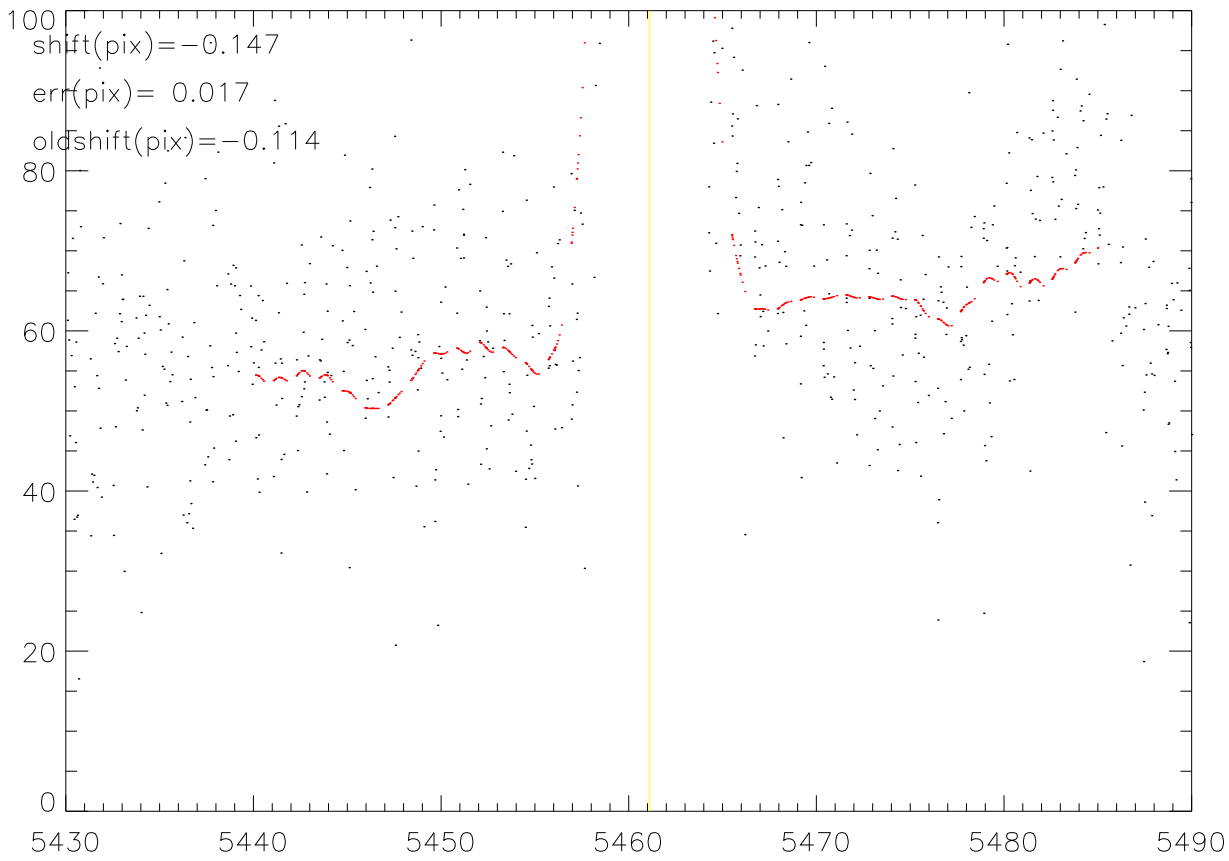

PLATE=0627 MJD=52143 Scattered Light on sdR-b2-00010611.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.604
Max value = 8.488
Tue Feb 26 05:53:05 2008

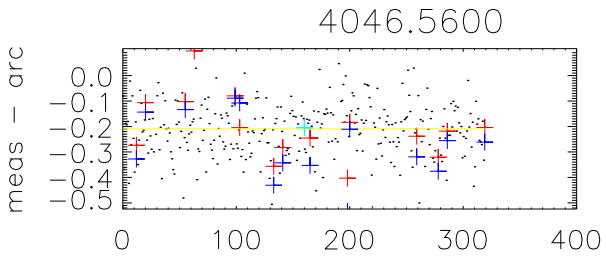

PLATE=0627 MJD=52143 Extraction chi^2 for sdR-b2-00010611.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

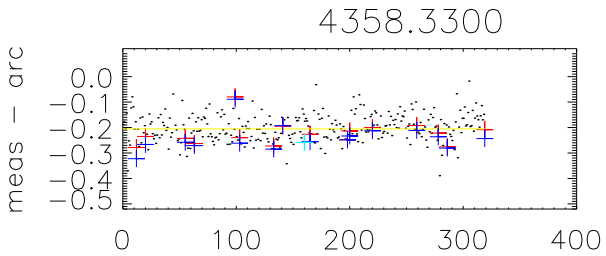

4046.5600
off: −0.26
sig: 0.034
4358.3300
off: −0.25
sig: 0.015
5460.9400
off: −0.11
sig: 0.013
5577.3390
off: −0.10
sig: 0.004
5889.9500
off: 0.04
sig: 0.011
5895.9240
off: −0.02
sig: 0.012

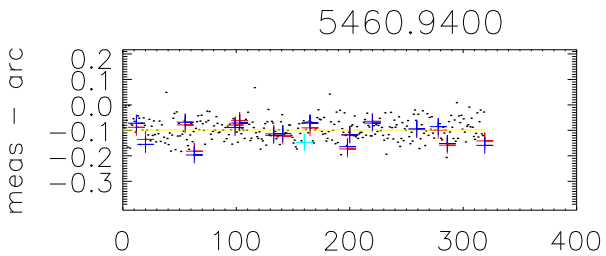

shift(pix)=−0.205
err(pix)= 0.045
oldshift(pix)=−0.256
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

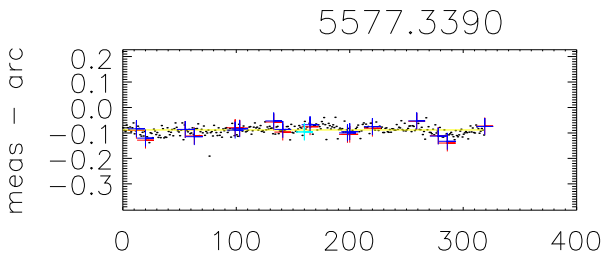

shift(pix)=−0.258
err(pix)= 0.018
oldshift(pix)=−0.254
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

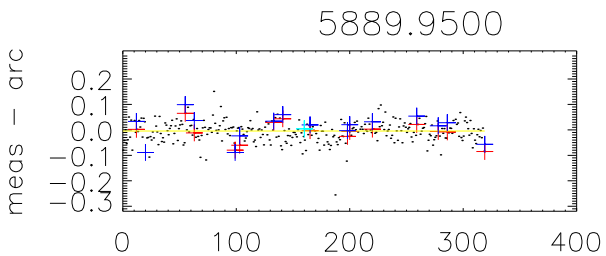

shift(pix)=−0.147
err(pix)= 0.017
oldshift(pix)=−0.114
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

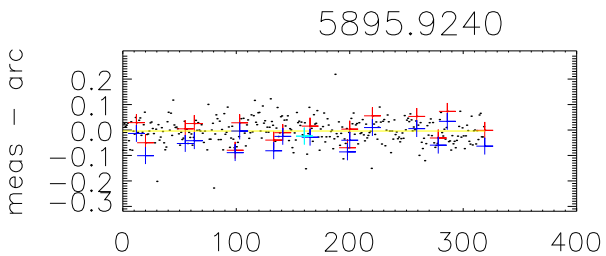

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

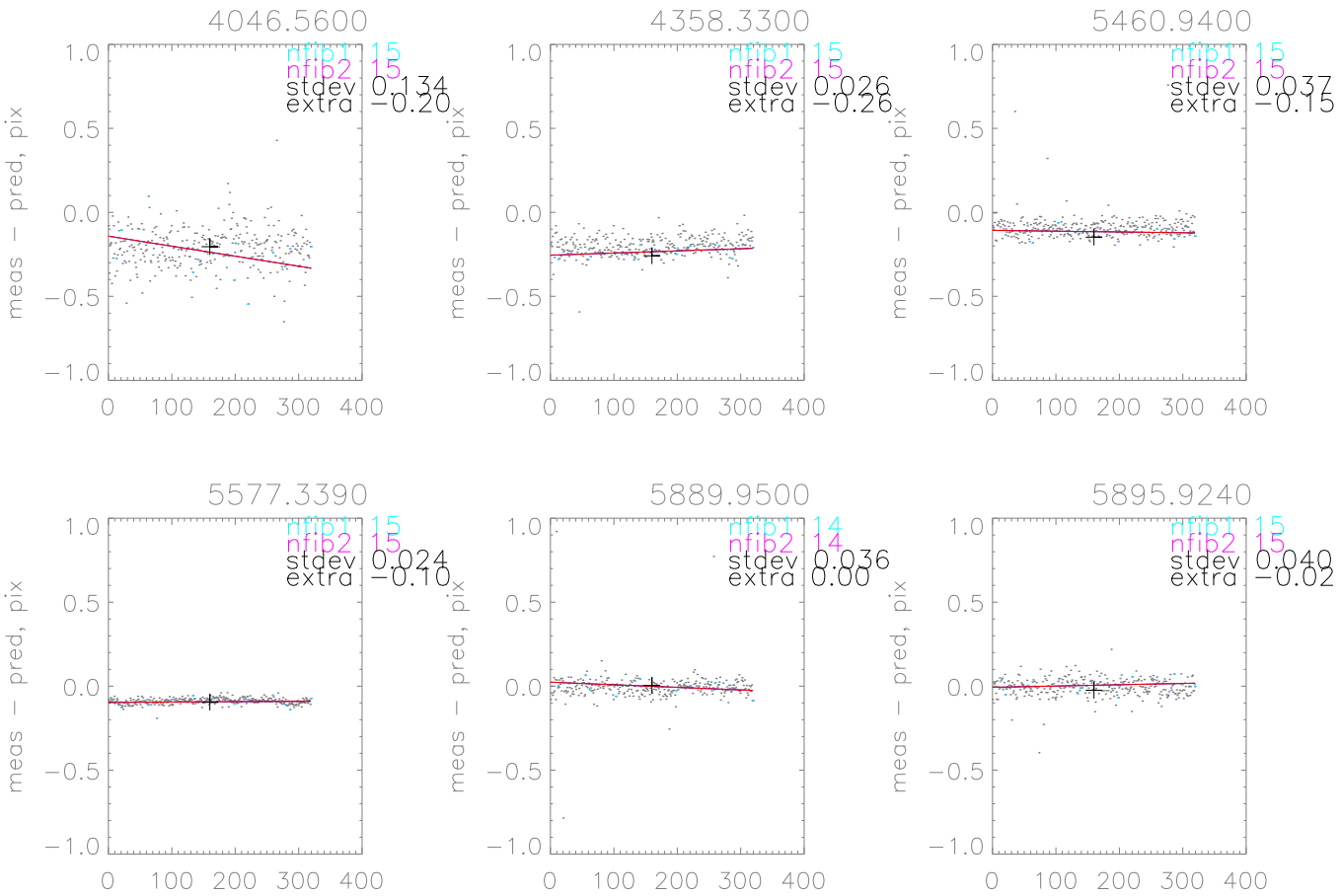

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

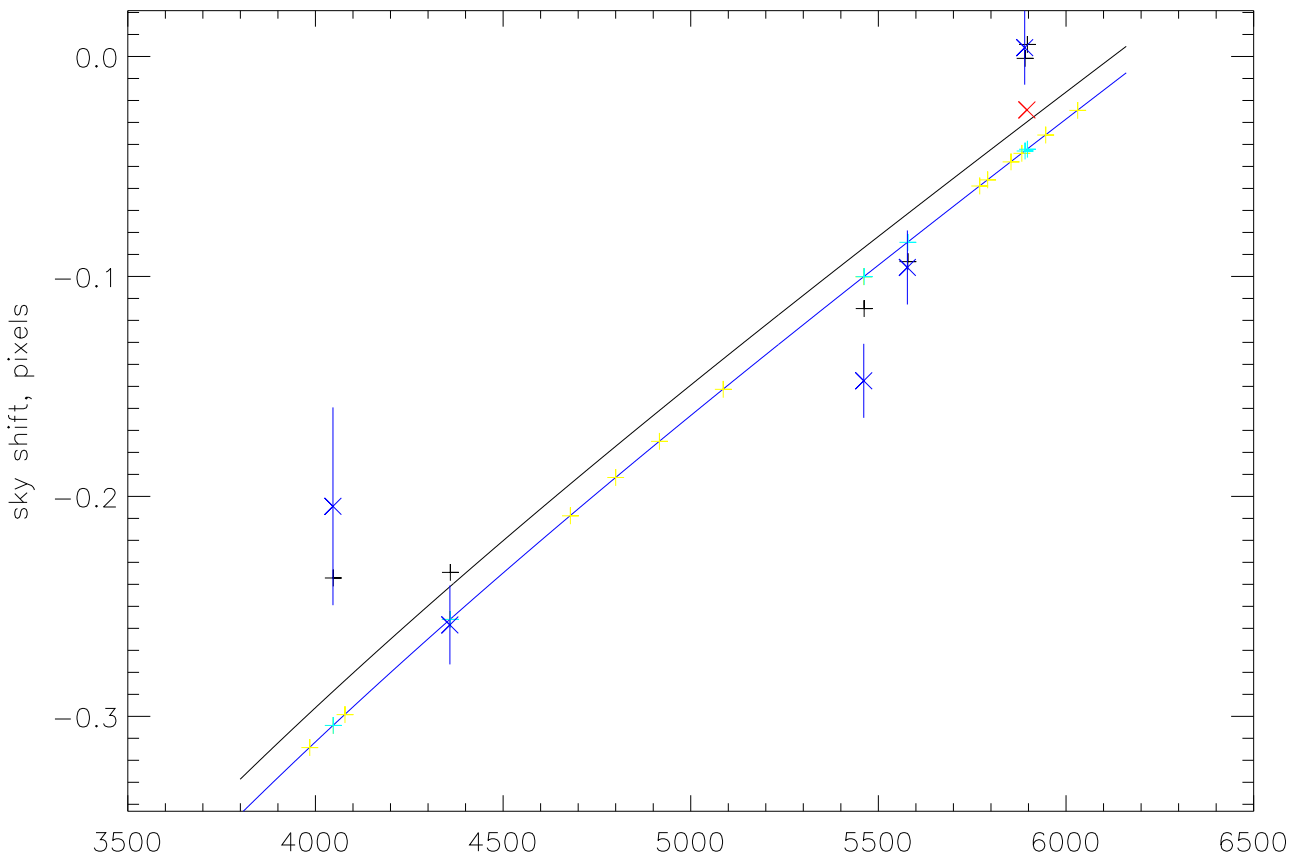

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

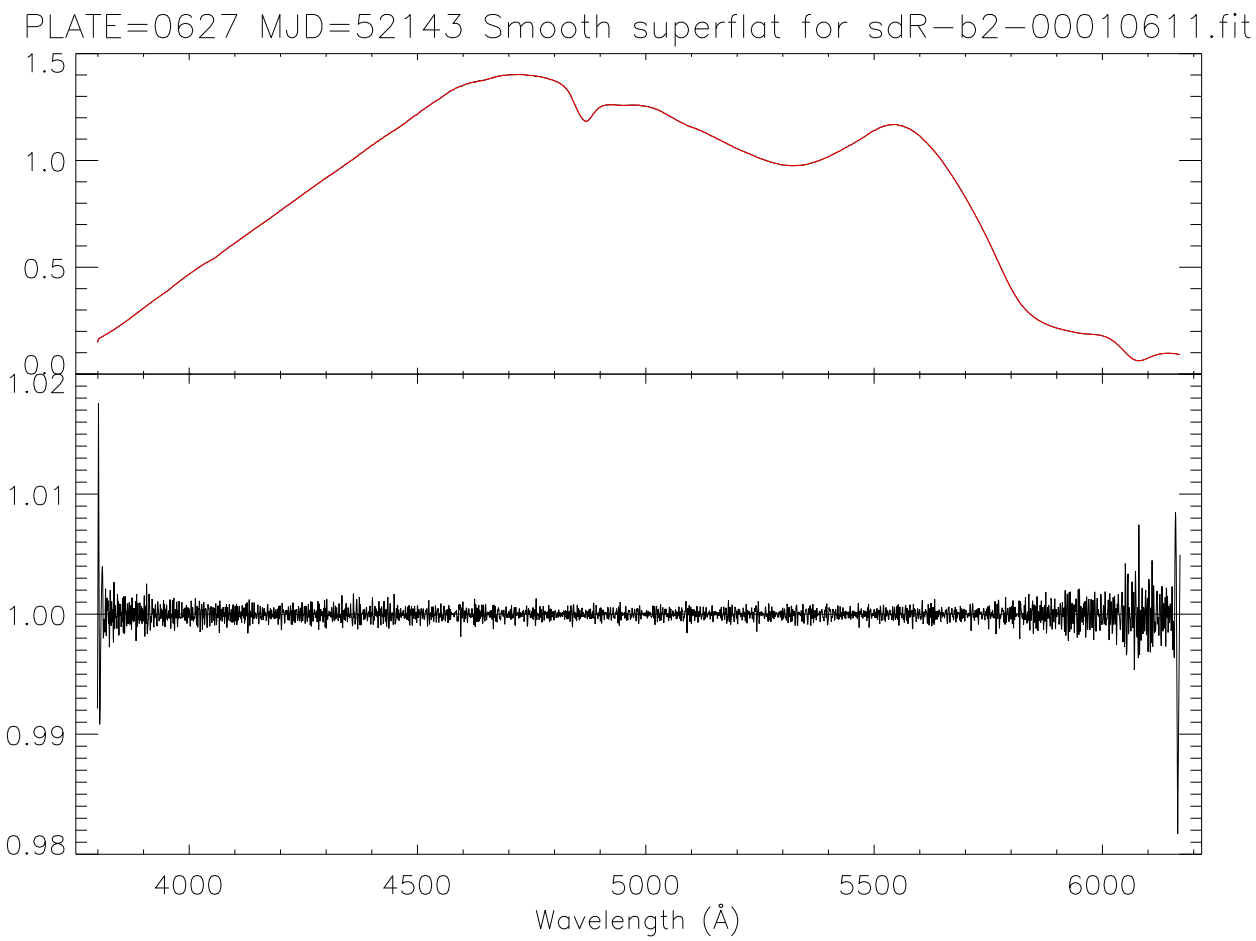

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

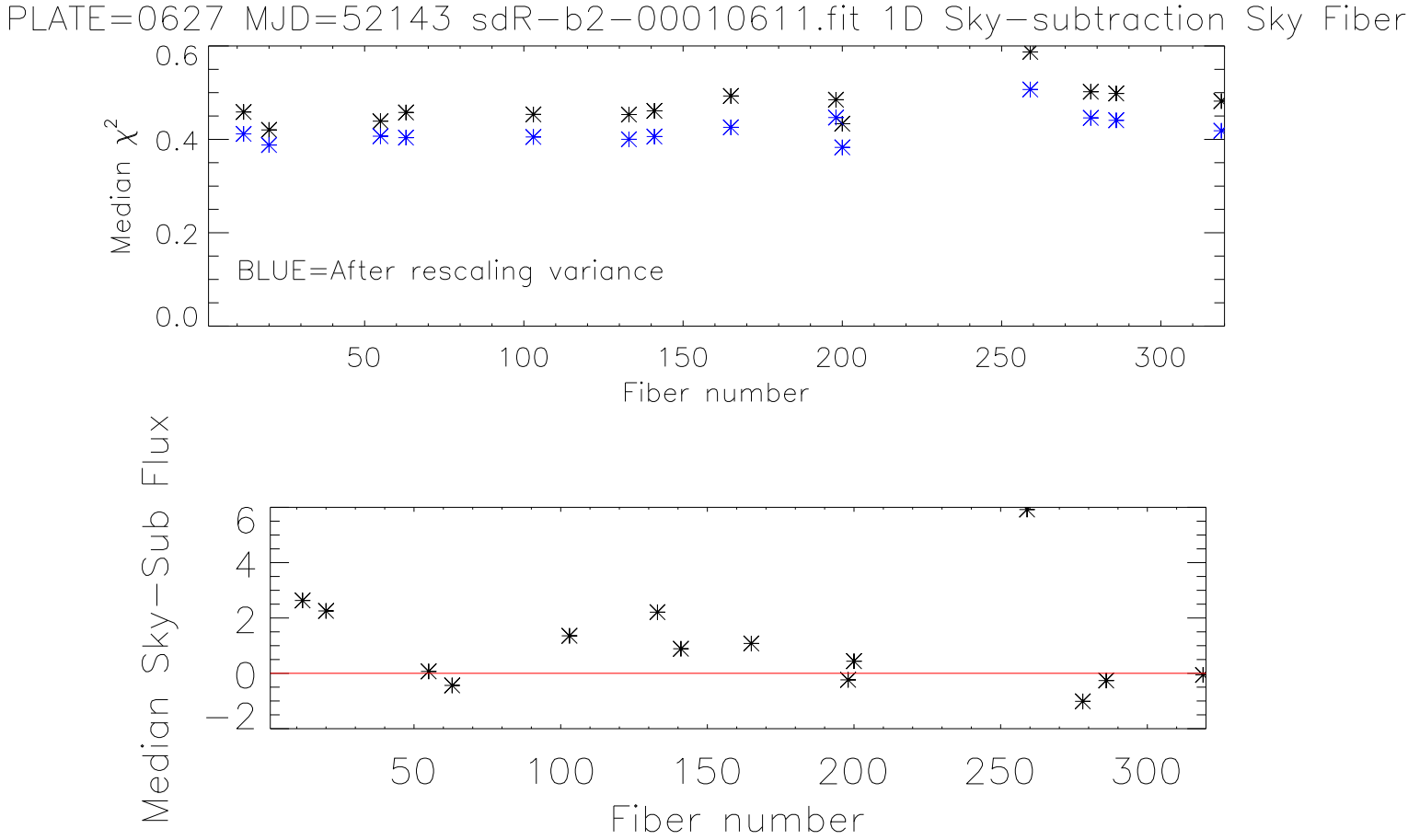

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

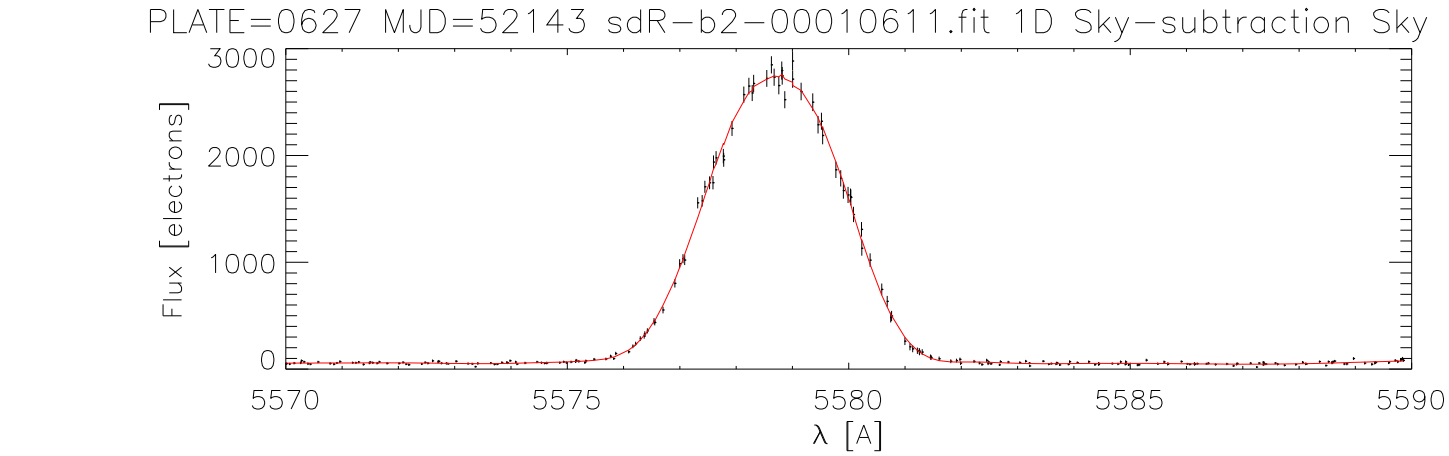

4046.5600
nfib1 15
nfib2 15
stdev 0.134
extra −0.20
4358.3300
nfib1 15
nfib2 15
stdev 0.026
extra −0.26
5460.9400
nfib1 15
nfib2 15
stdev 0.037
extra −0.15
5577.3390
nfib1 15
nfib2 15
stdev 0.024
extra −0.10
5889.9500
nfib1 14
nfib2 14
stdev 0.036
extra 0.00
5895.9240
nfib1 15
nfib2 15
stdev 0.040
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

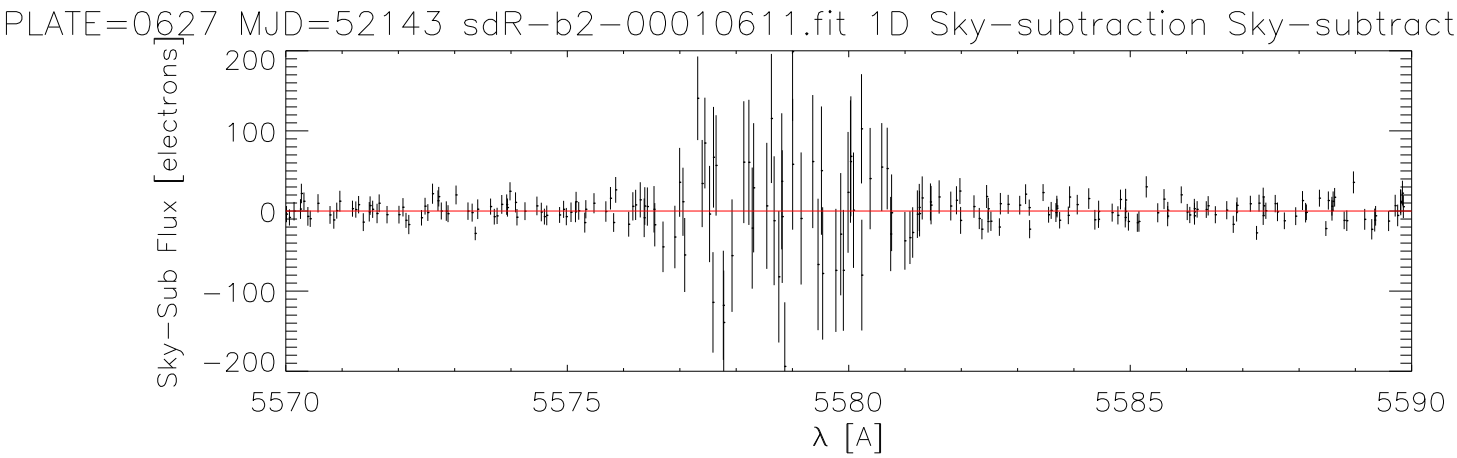

0.0
−0.1
−0.2
−0.3
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

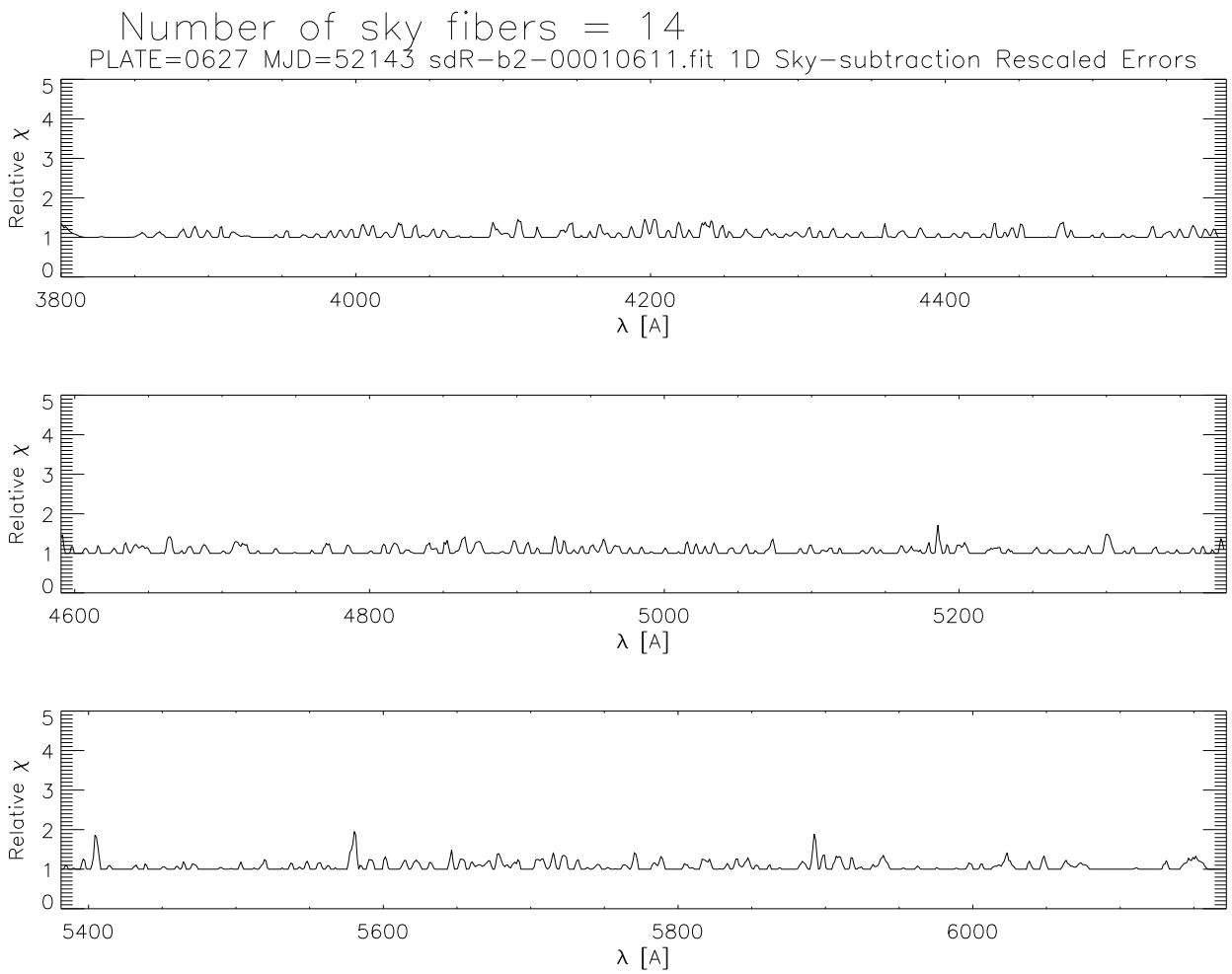
es= −0.0001

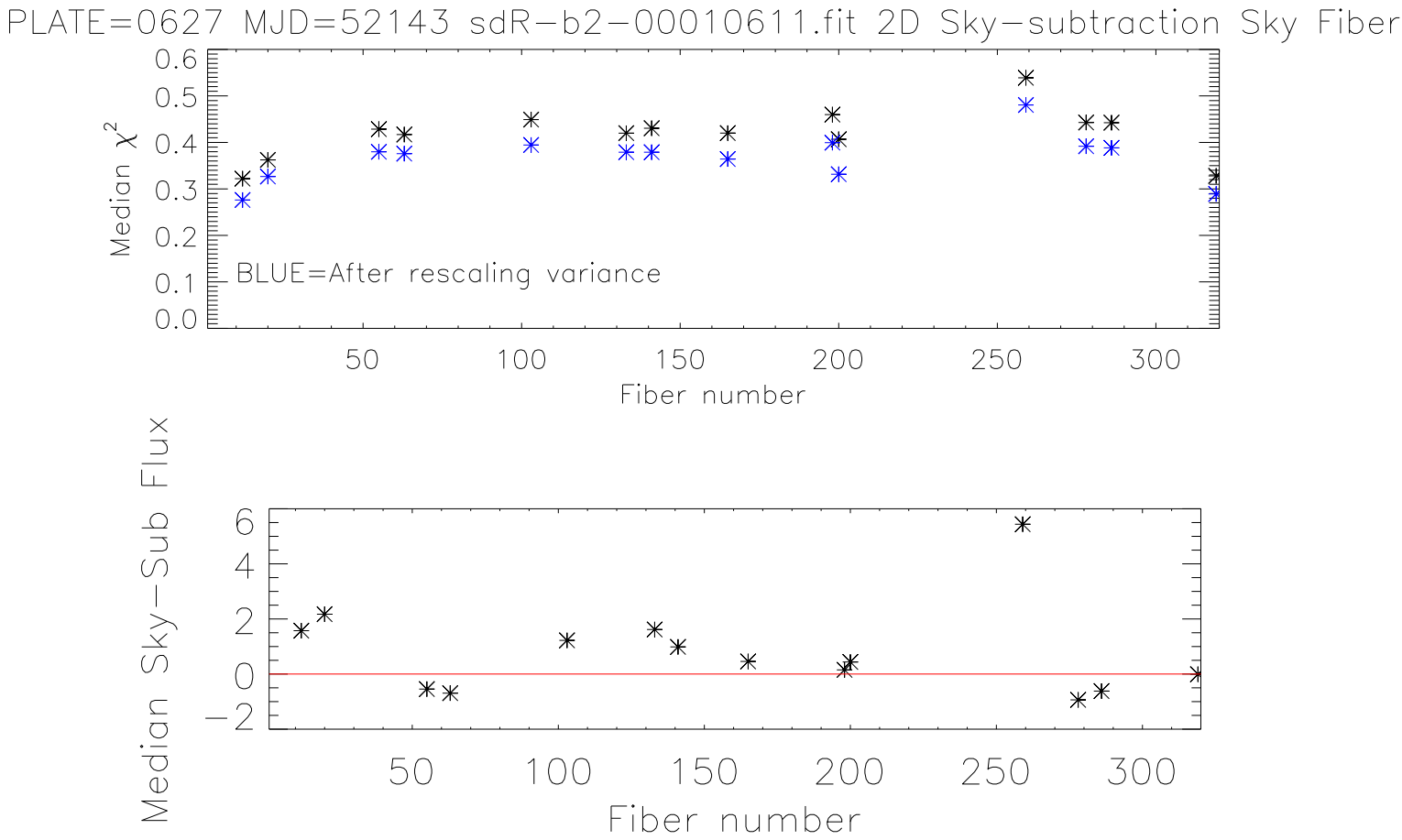

PLATE=0627 MJD=52143 Smooth superflat for sdR−b2−00010611.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

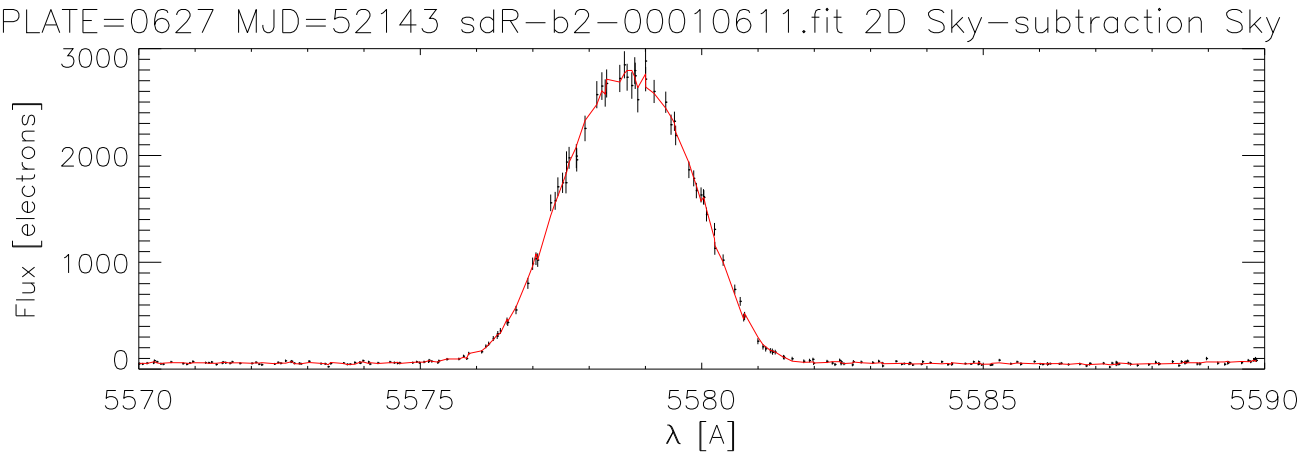

PLATE=0627 MJD=52143 sdR-b2-00010611.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

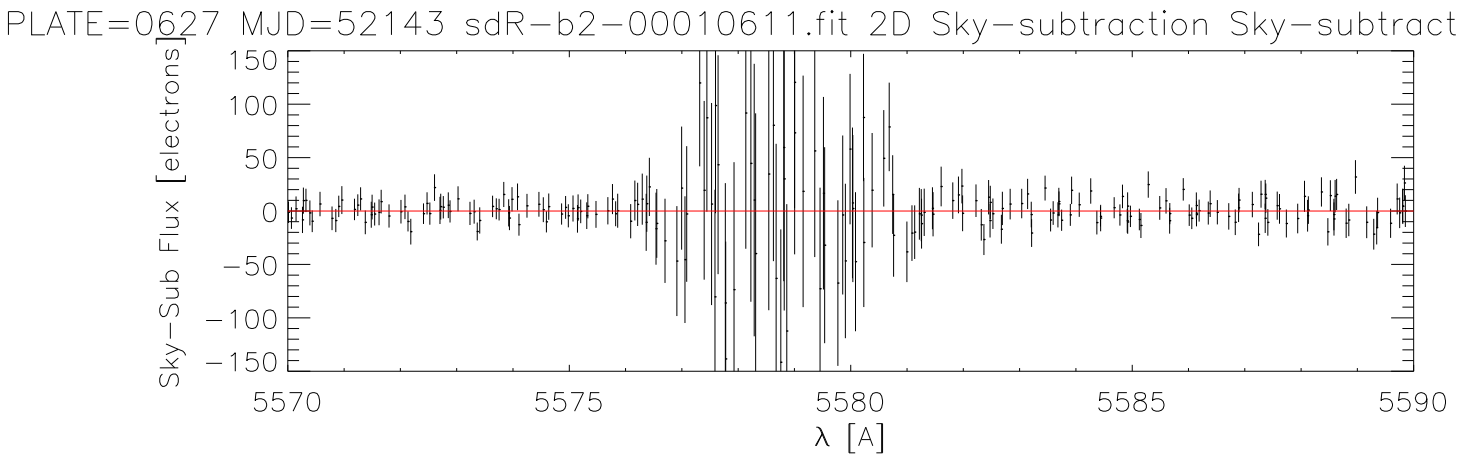

PLATE=0627 MJD=52143 sdR-b2-00010611.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

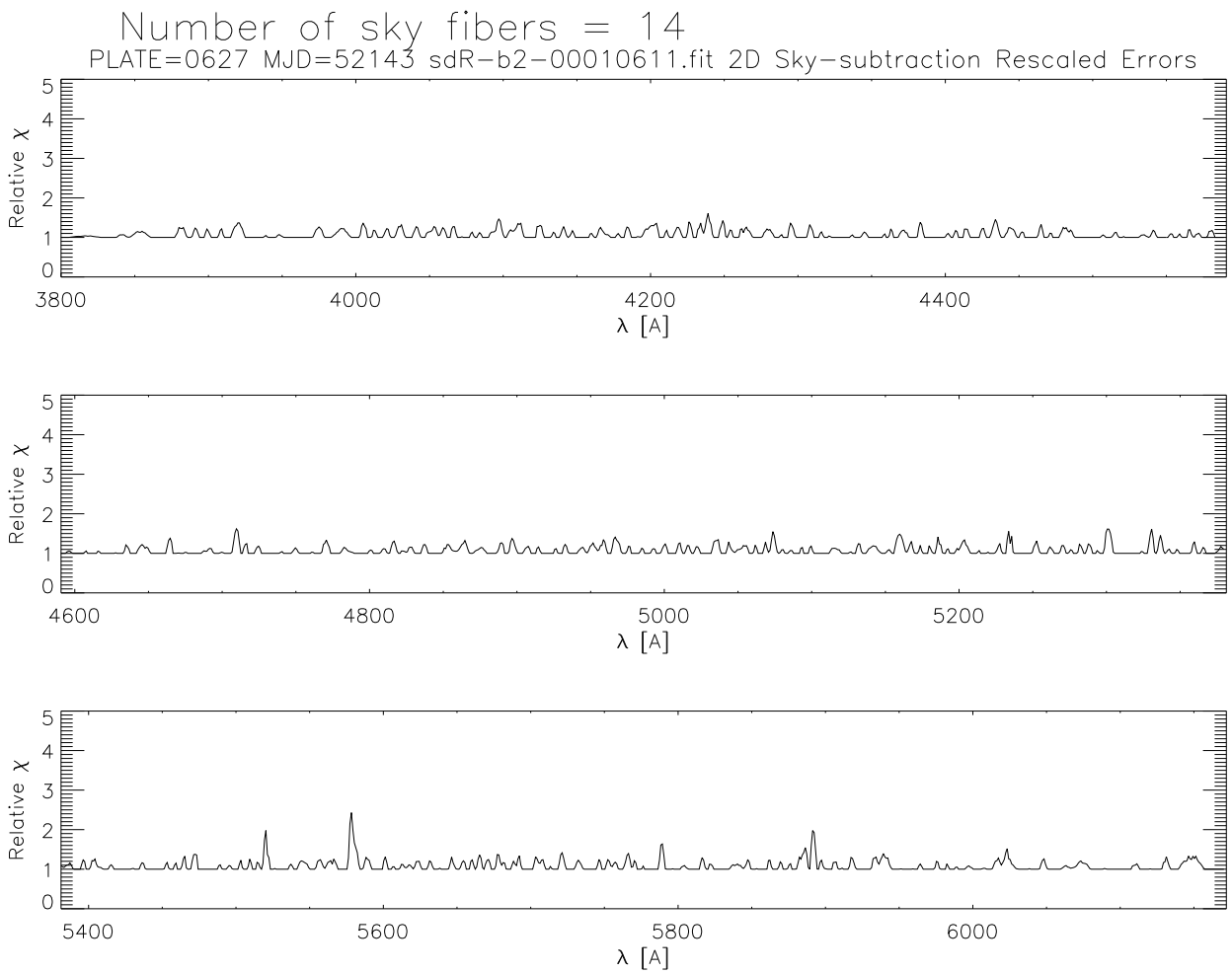

PLATE=0627 MJD=52143 sdR-b2-00010611.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

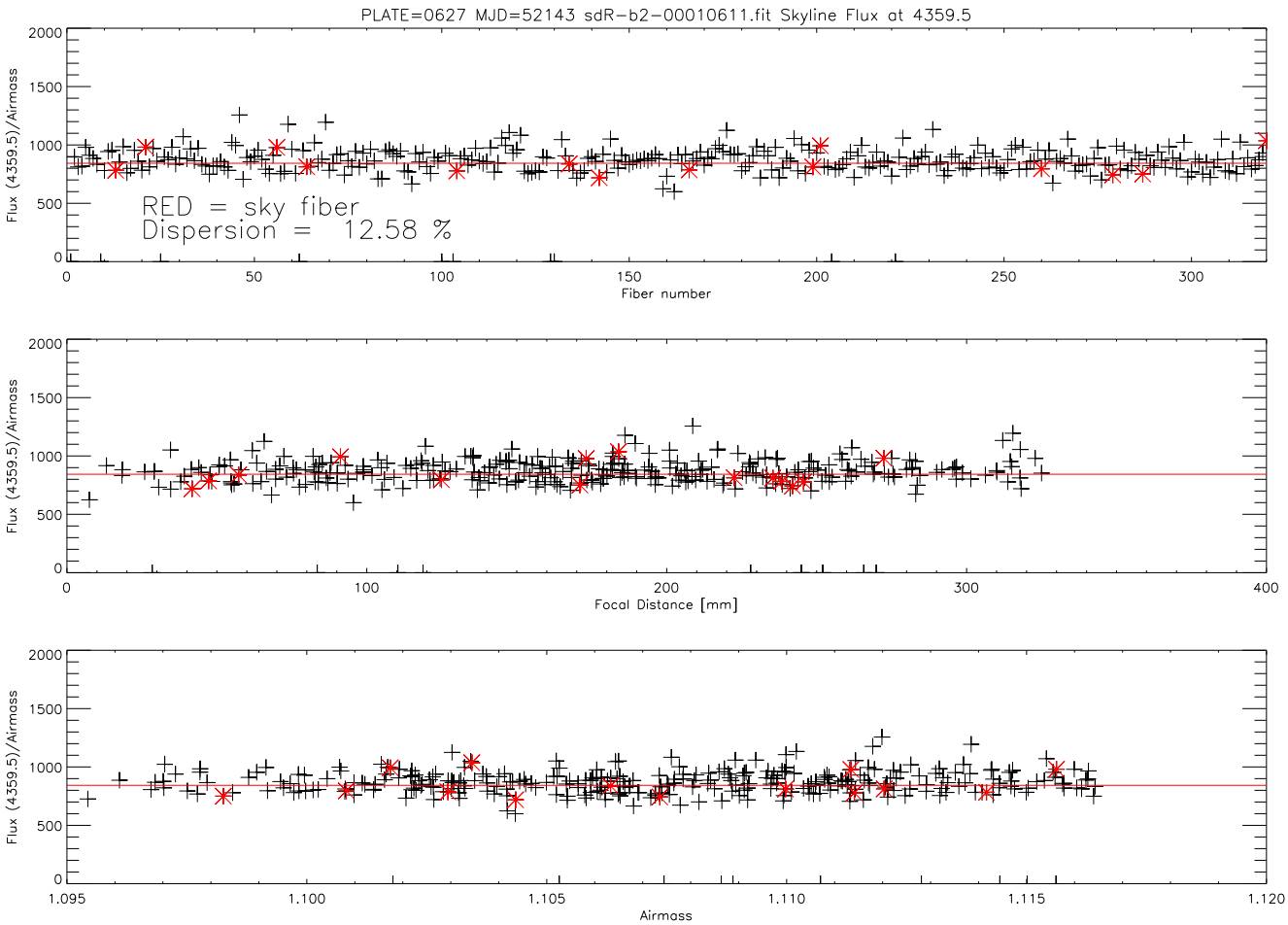

Number of sky fibers = 14
PLATE=0627 MJD=52143 sdR-b2-00010611.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

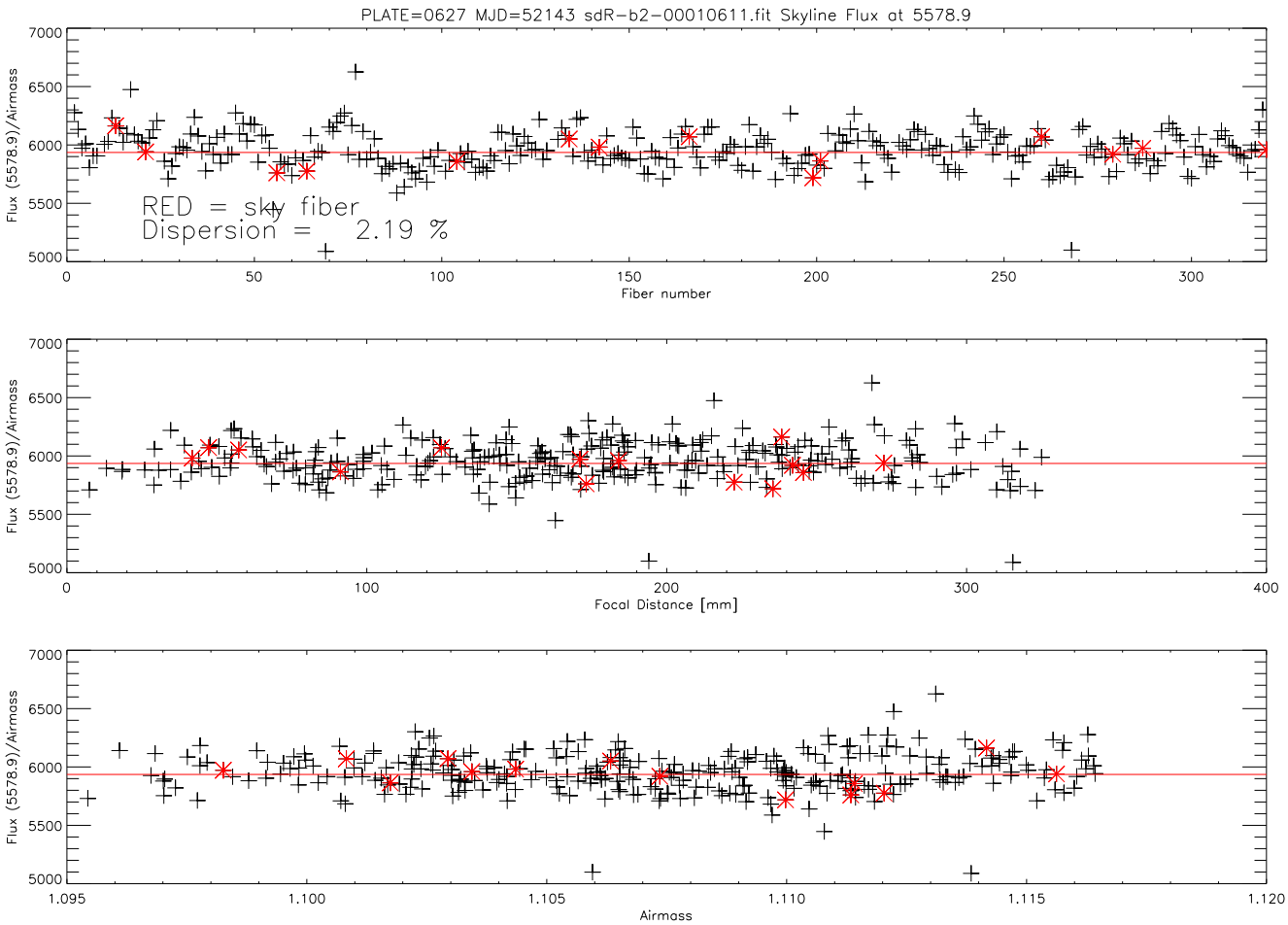

PLATE=0627 MJD=52143 sdR-b2-00010611.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

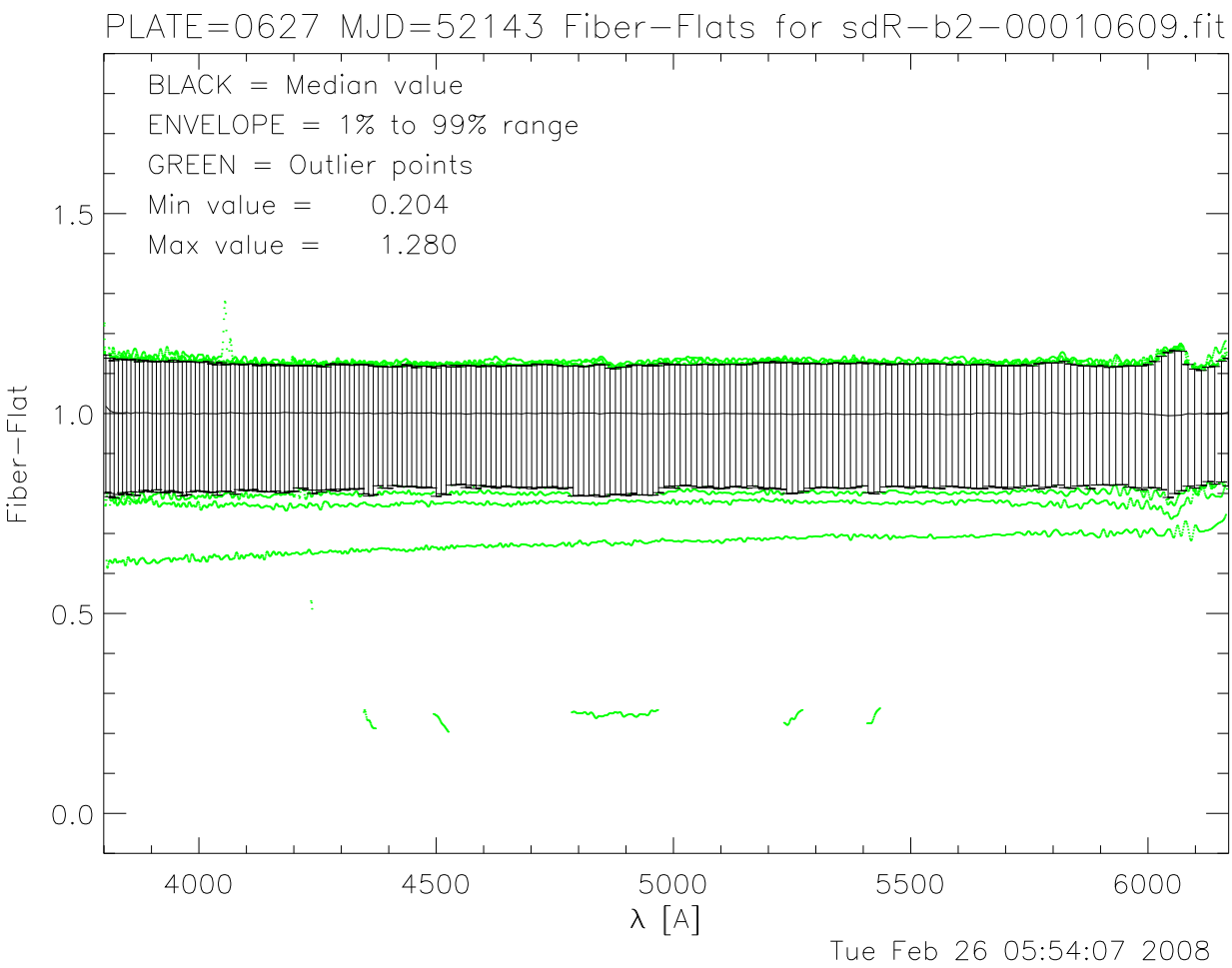

PLATE=0627 MJD=52143 sdR-b2-00010611.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

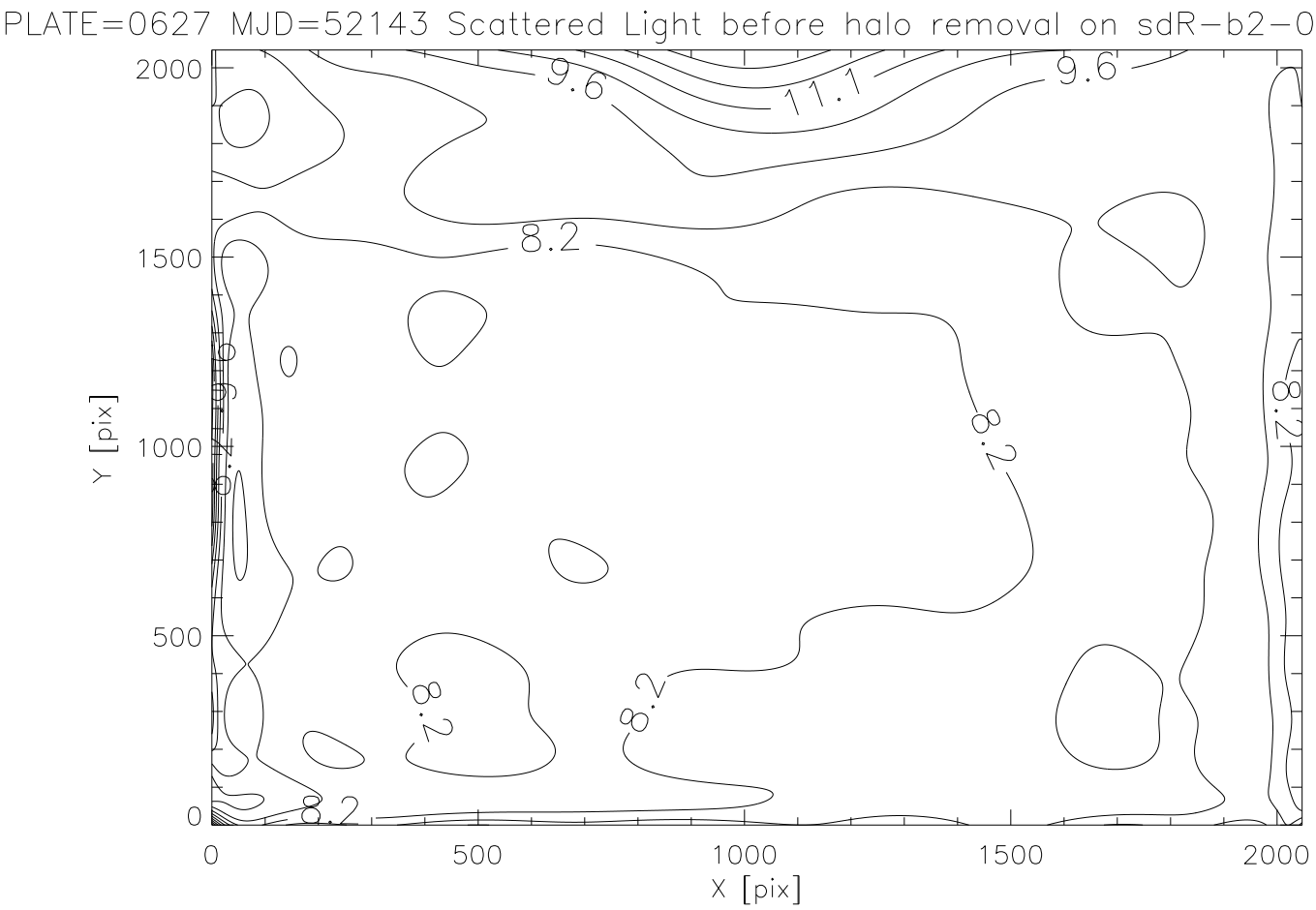

PLATE=0627 MJD=52143 sdR-b2-00010611.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

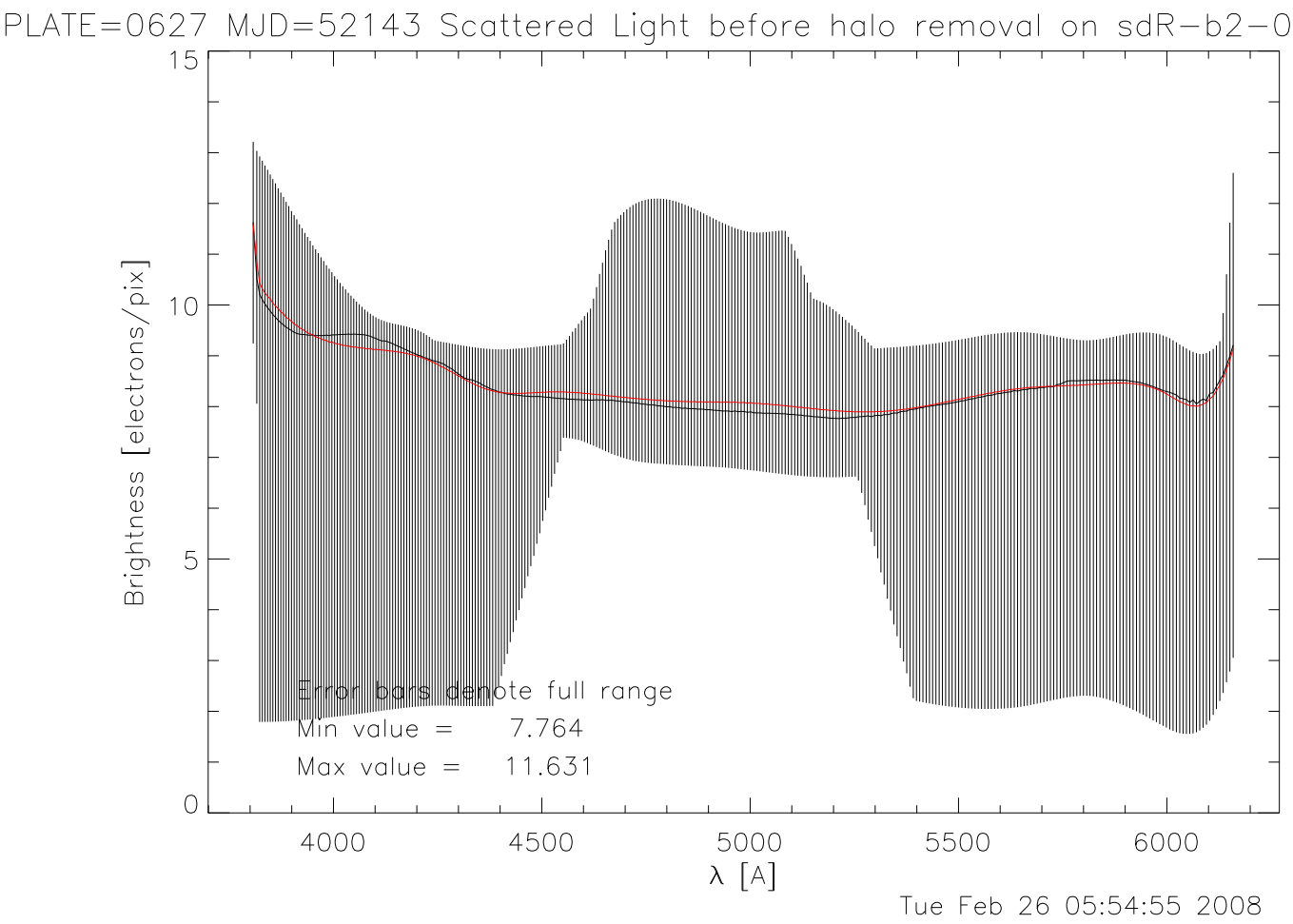

Number of sky fibers = 14
PLATE=0627 MJD=52143 sdR-b2-00010611.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

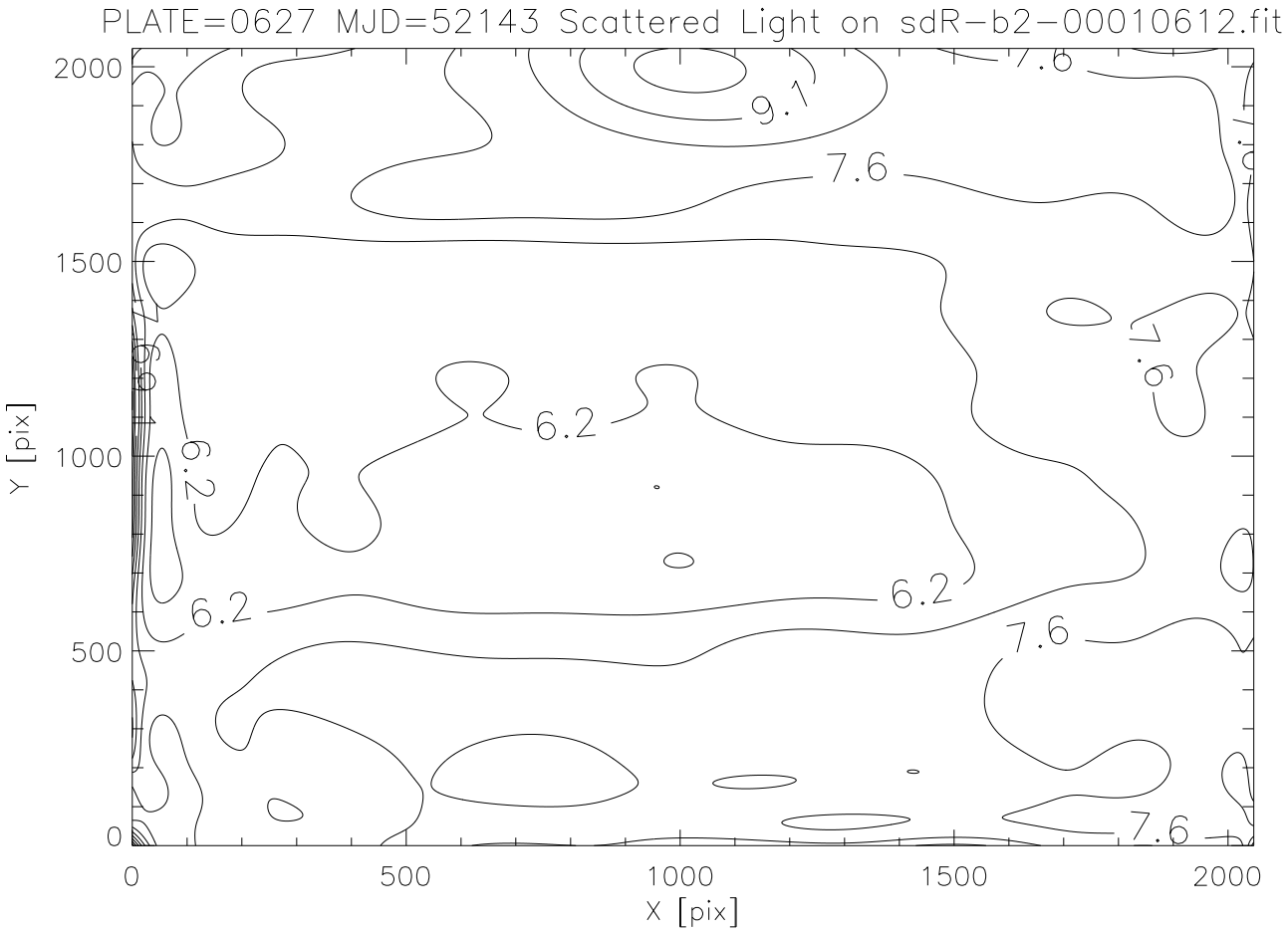

PLATE=0627 MJD=52143 sdR-b2-00010611.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.58 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

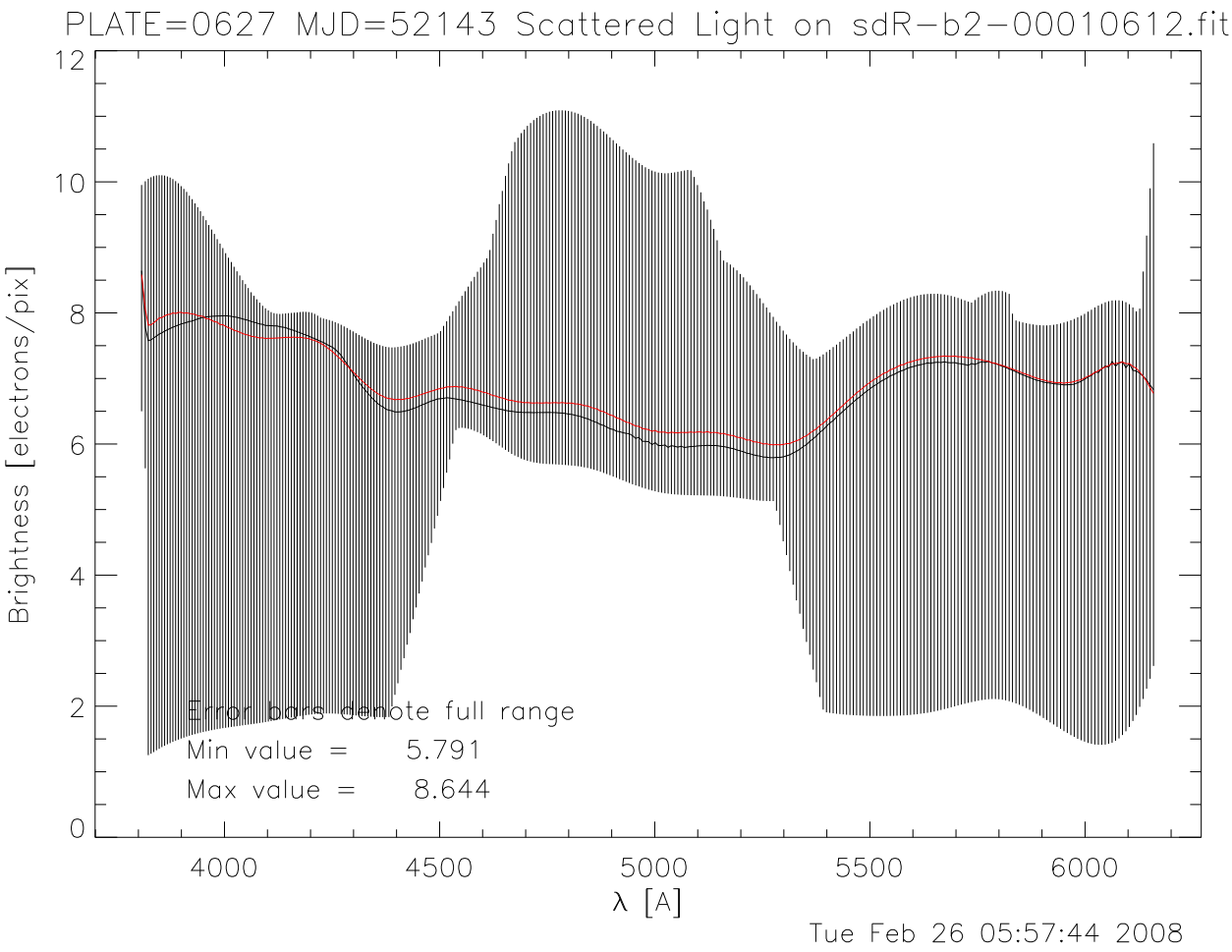

PLATE=0627 MJD=52143 sdR-b2-00010611.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.19 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

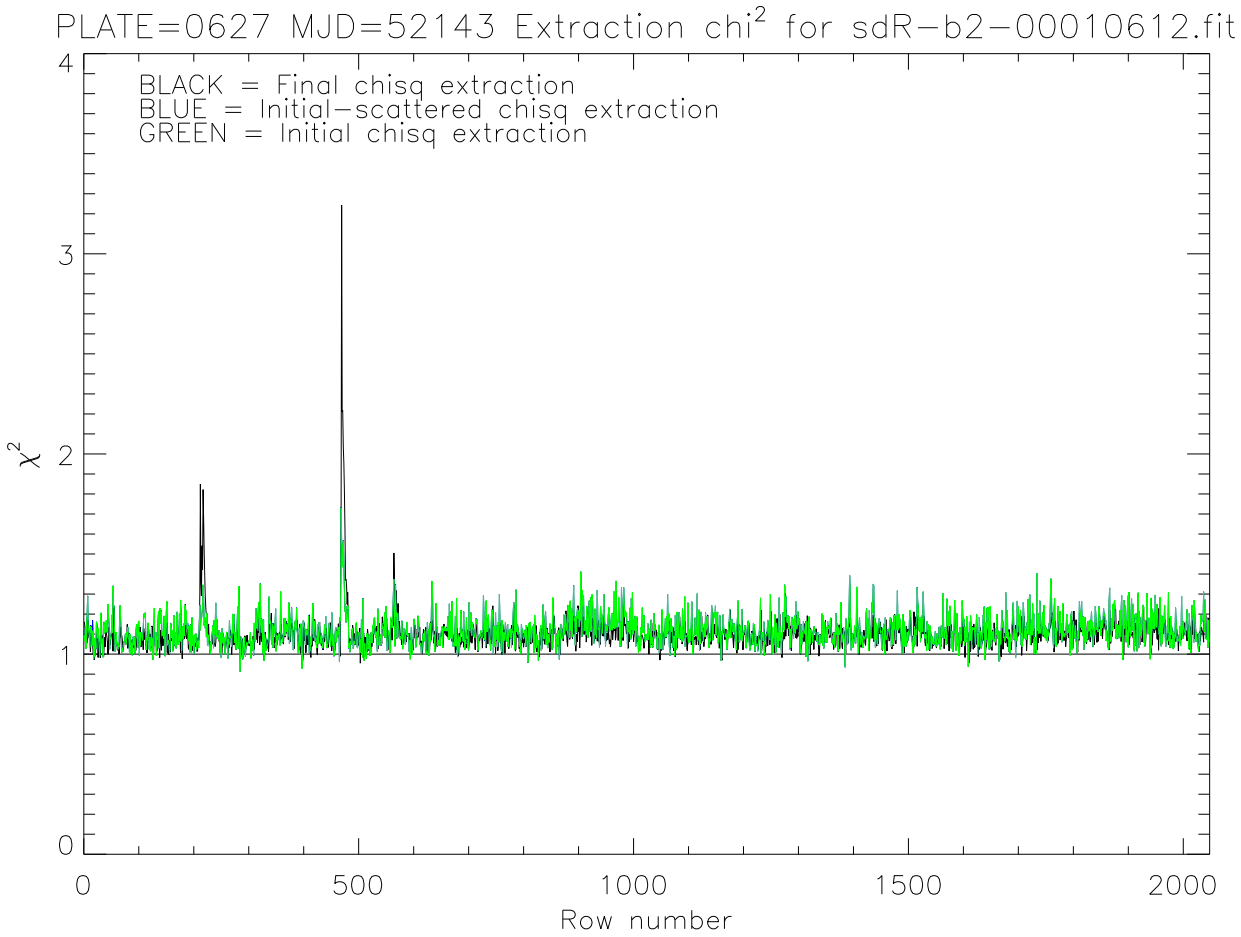

PLATE=0627 MJD=52143 Fiber-Flats for sdR-b2-00010609.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.204
Max value = 1.280
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 05:54:07 2008

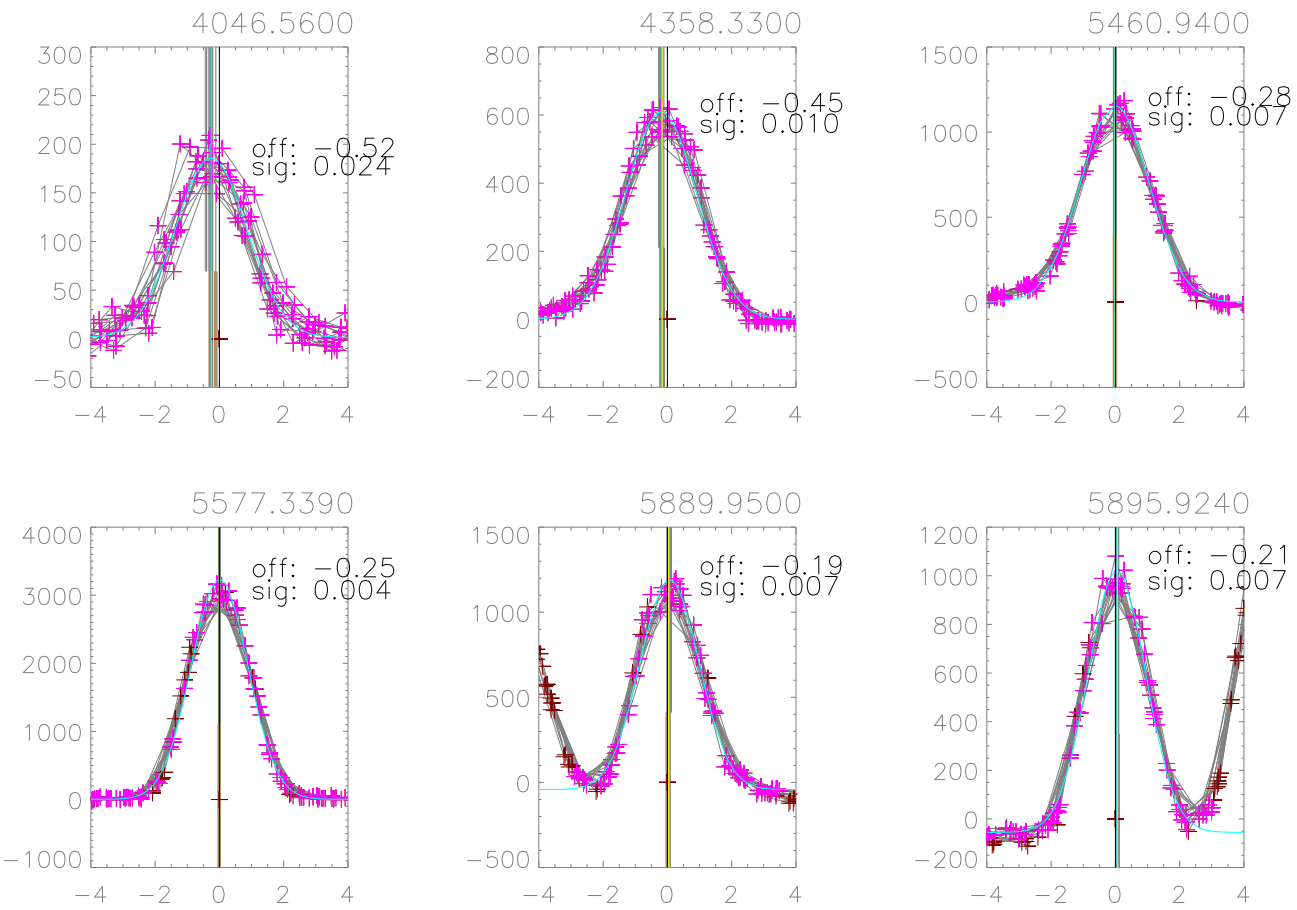

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR−b2−00010612.f
9.6
11.1
9.6
8.2
0
8.2
8.2
8.2
8.2
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

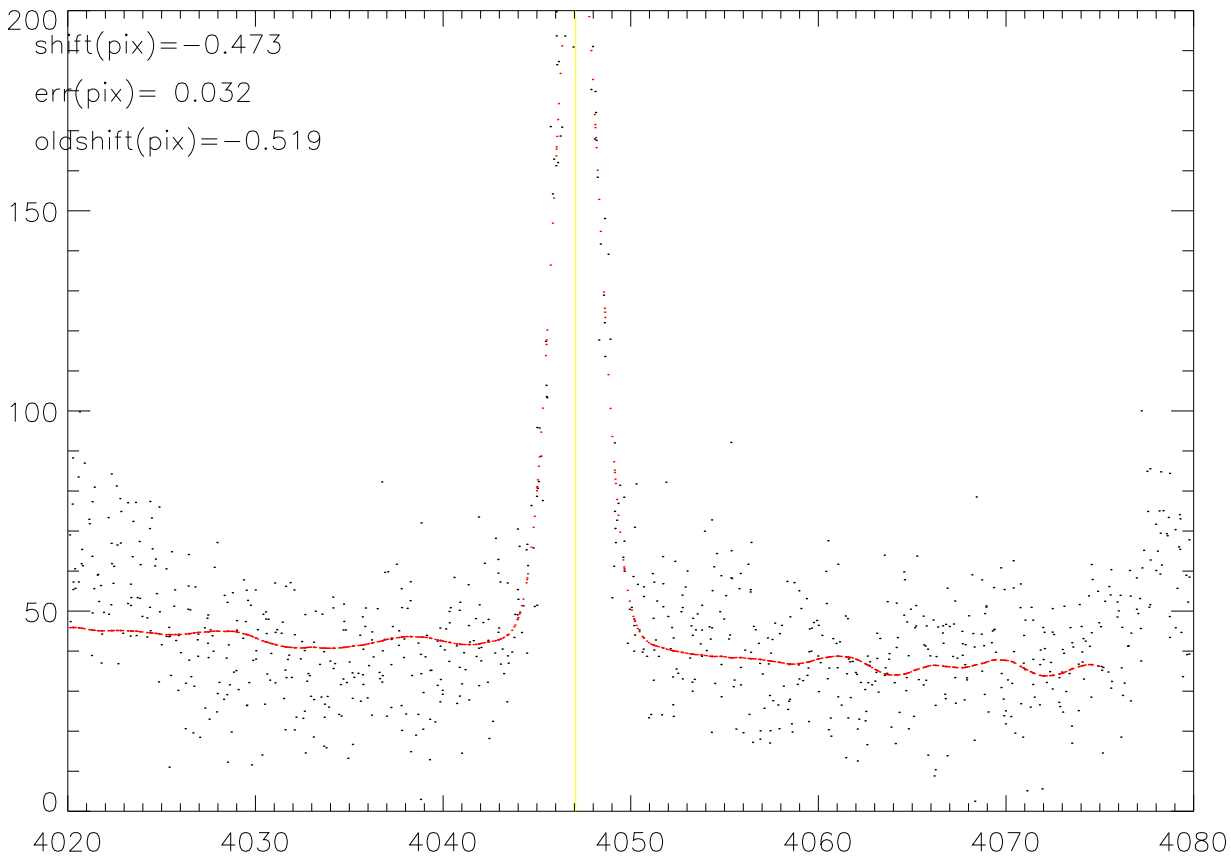

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-b2-00010612.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.764
Max value = 11.631
Tue Feb 26 05:54:55 2008

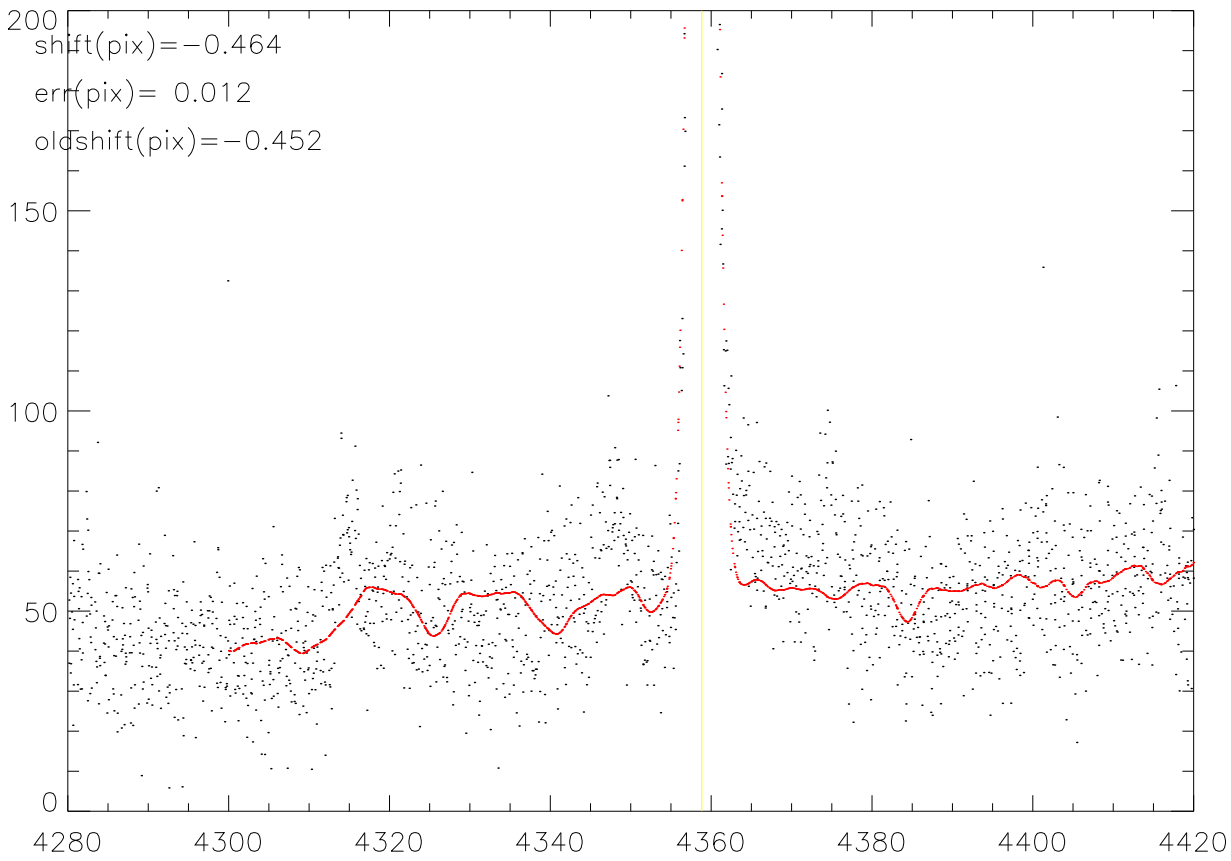

PLATE=0627 MJD=52143 Scattered Light on sdR-b2-00010612.fit
9.1
7.6
6.2
6.2
6.2
7.6
7.6
7.6
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

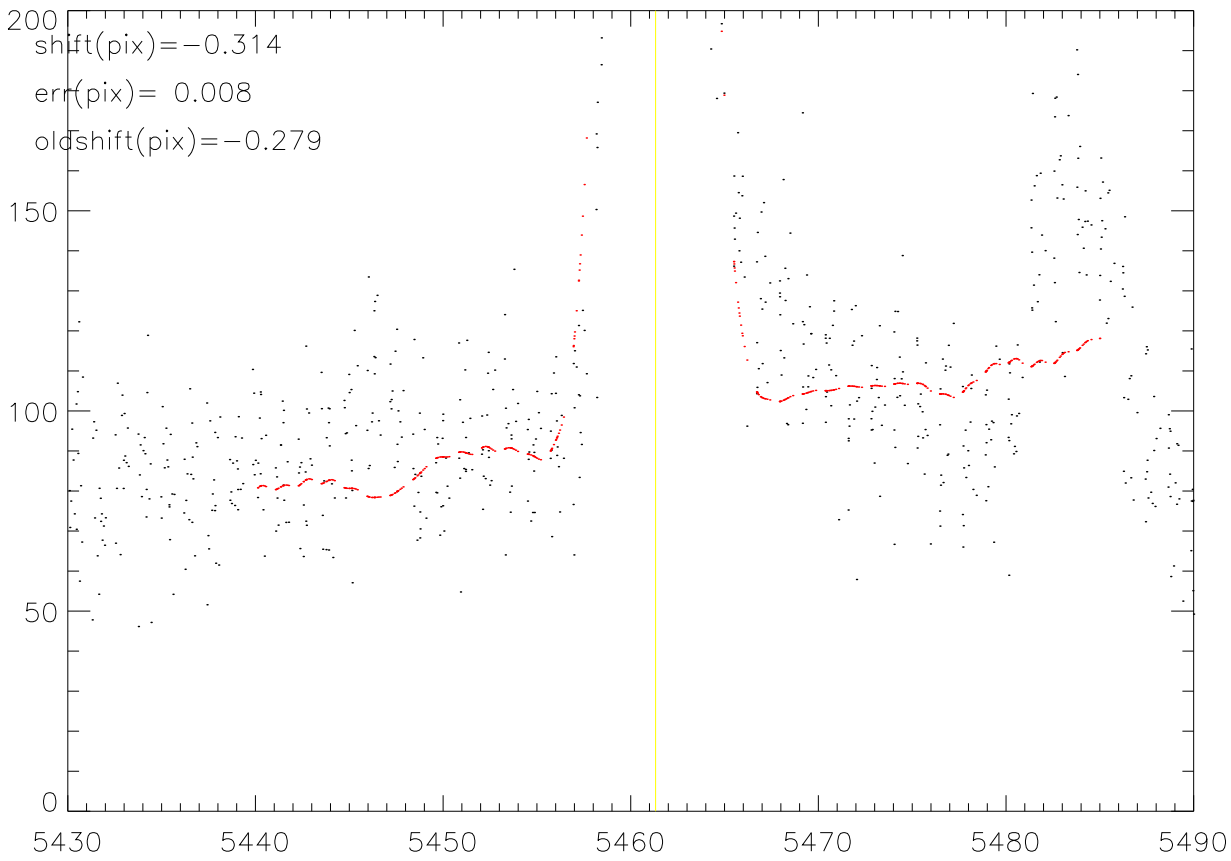

PLATE=0627 MJD=52143 Scattered Light on sdR-b2-00010612.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.791
Max value = 8.644
Tue Feb 26 05:57:44 2008

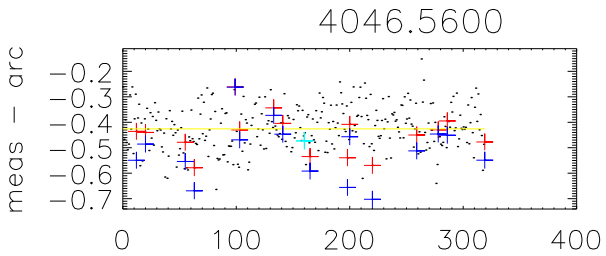

PLATE=0627 MJD=52143 Extraction chi^2 for sdR-b2-00010612.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

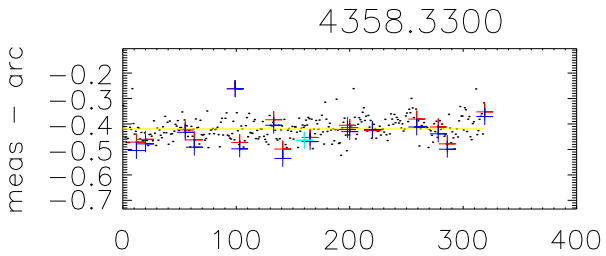

4046.5600
off: −0.52
sig: 0.024
4358.3300
off: −0.45
sig: 0.010
5460.9400
off: −0.28
sig: 0.007
5577.3390
off: −0.25
sig: 0.004
5889.9500
off: −0.19
sig: 0.007
5895.9240
off: −0.21
sig: 0.007

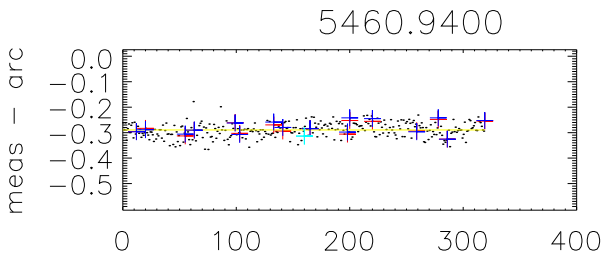

shift(pix)=−0.473
err(pix)= 0.032
oldshift(pix)=−0.519
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

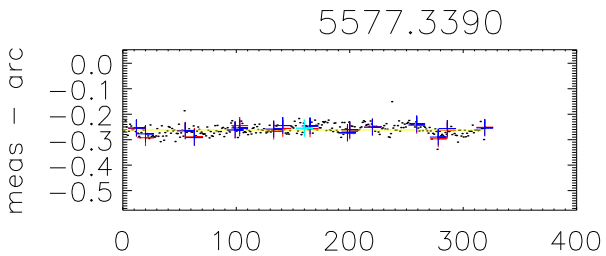

shift(pix)=−0.464
err(pix)= 0.012
oldshift(pix)=−0.452
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

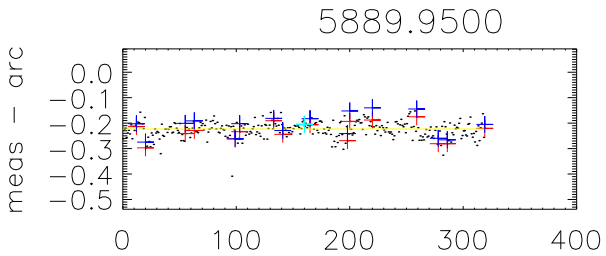

shift(pix)=−0.314
err(pix)= 0.008
oldshift(pix)=−0.279
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

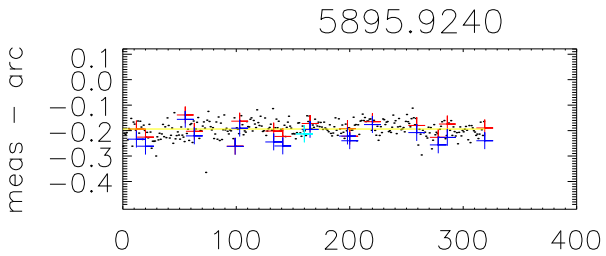

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

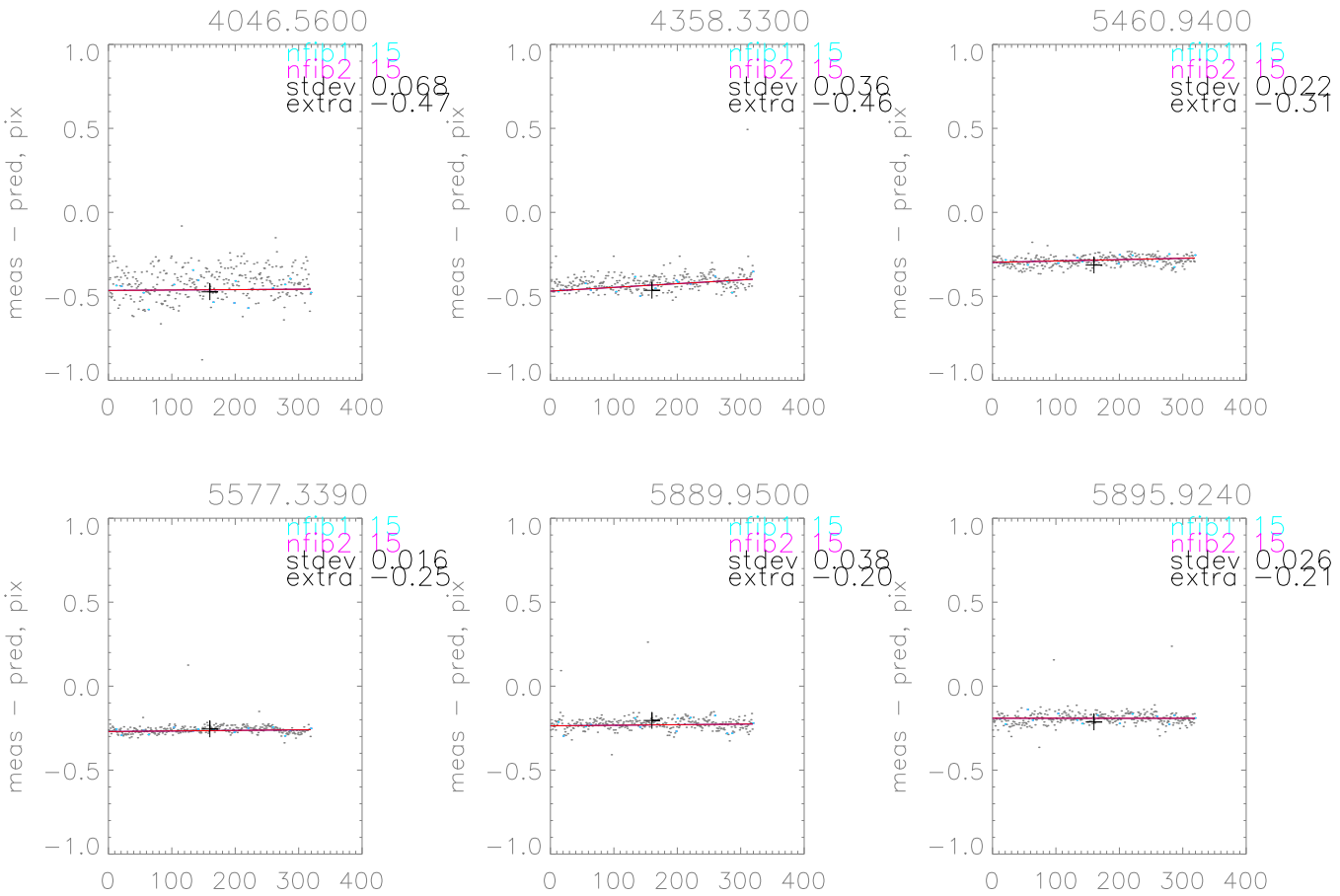

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

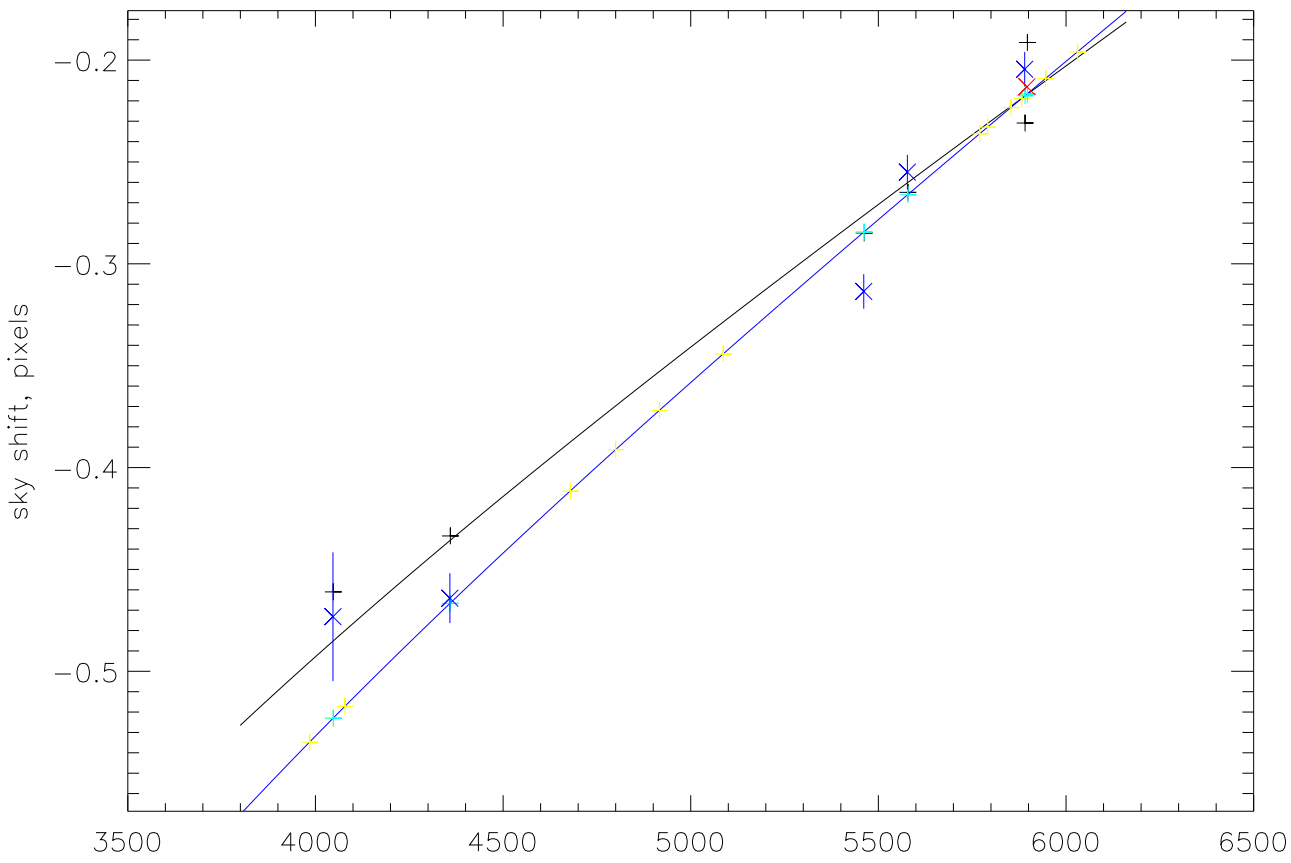

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

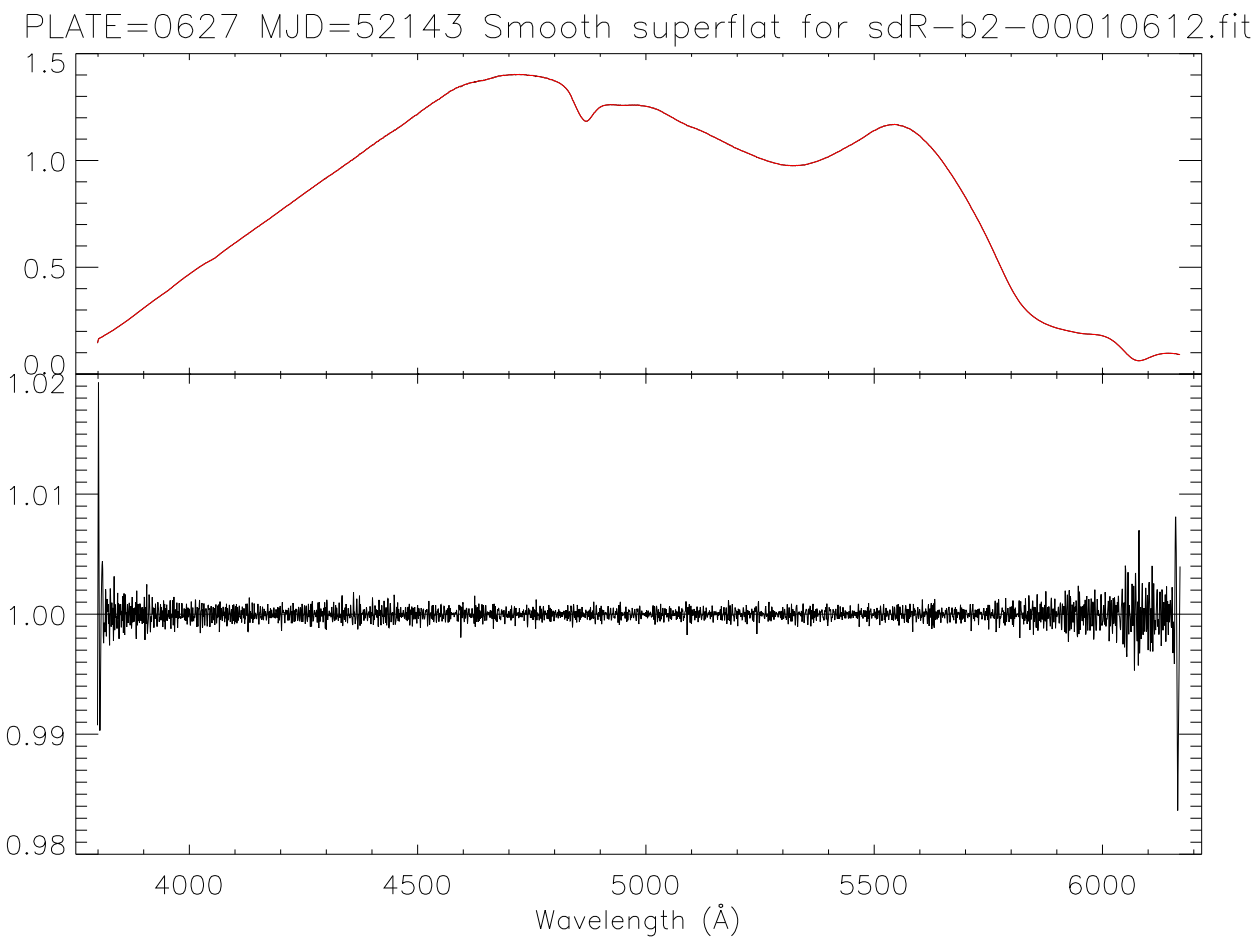

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

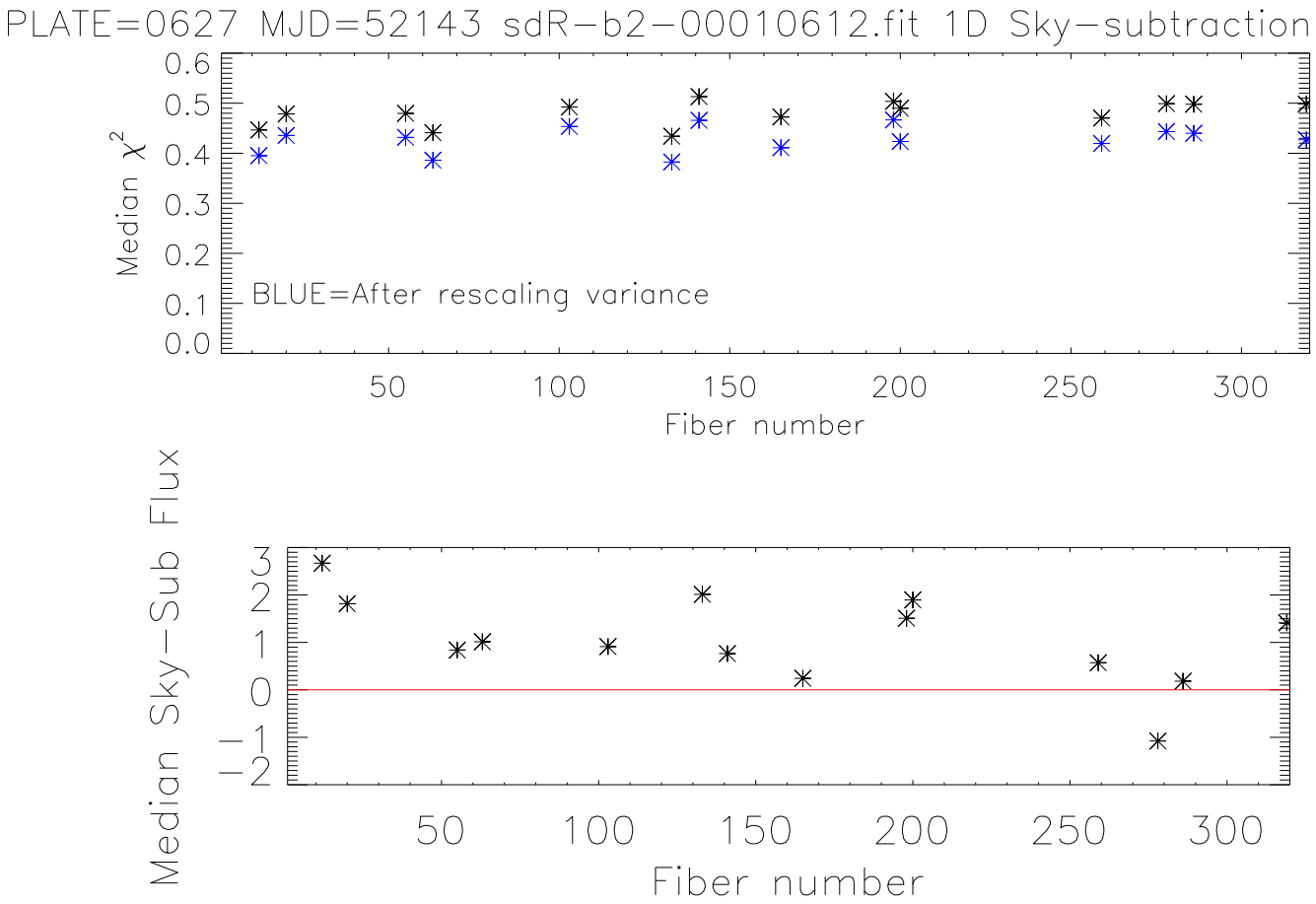

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

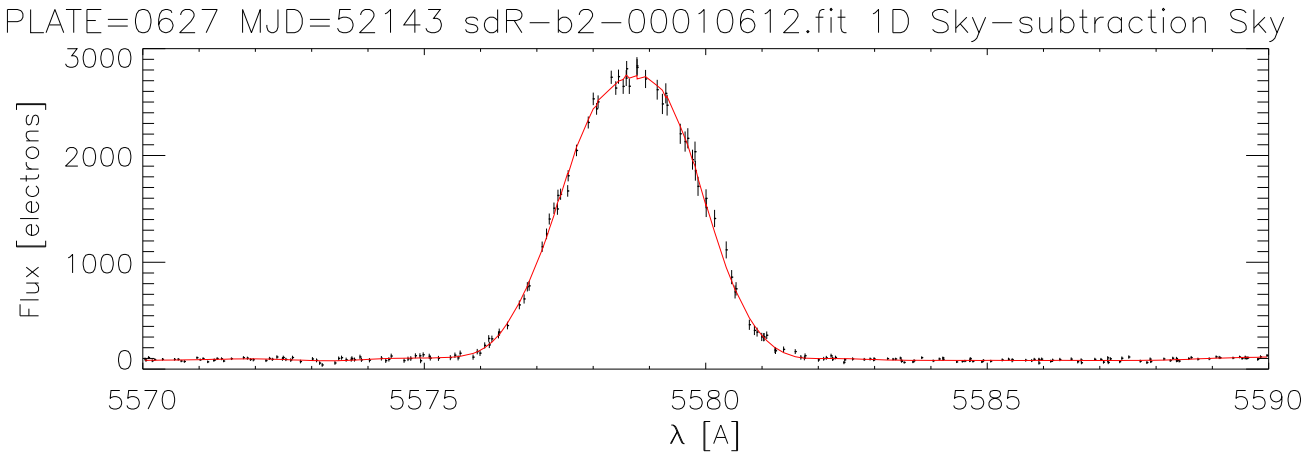

4046.5600
nfib1 15
nfib2 15
stdev 0.068
extra −0.47
4358.3300
nfib1 15
nfib2 15
stdev 0.036
extra −0.46
5460.9400
nfib1 15
nfib2 15
stdev 0.022
extra −0.31
5577.3390
nfib1 15
nfib2 15
stdev 0.016
extra −0.25
5889.9500
nfib1 15
nfib2 15
stdev 0.038
extra −0.20
5895.9240
nfib1 15
nfib2 15
stdev 0.026
extra −0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

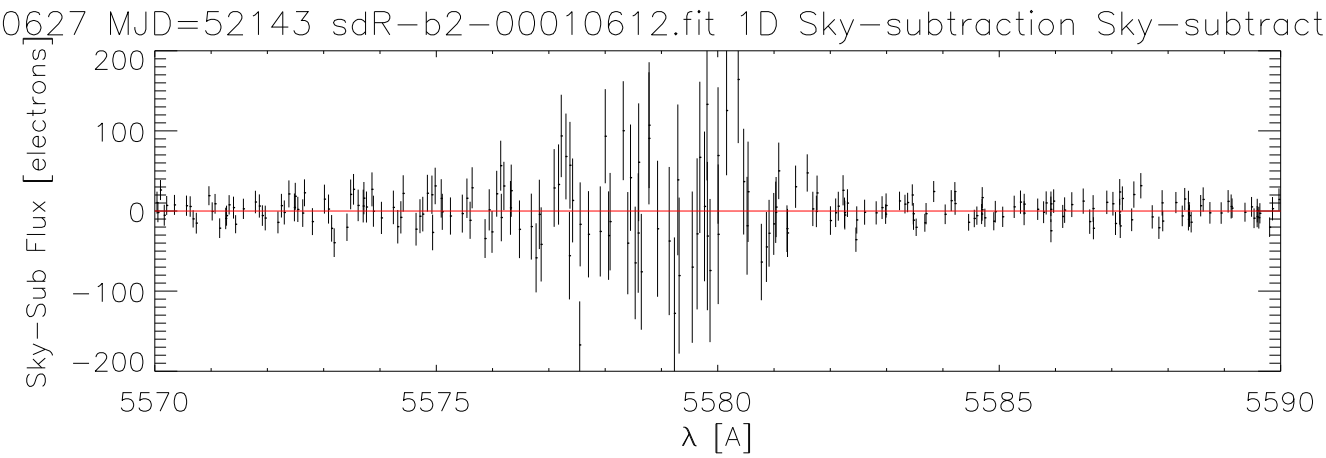

sky shift, pixels
−0.2
−0.3
−0.4
−0.5
3500
4000
4500
5000
5500
6000
6500

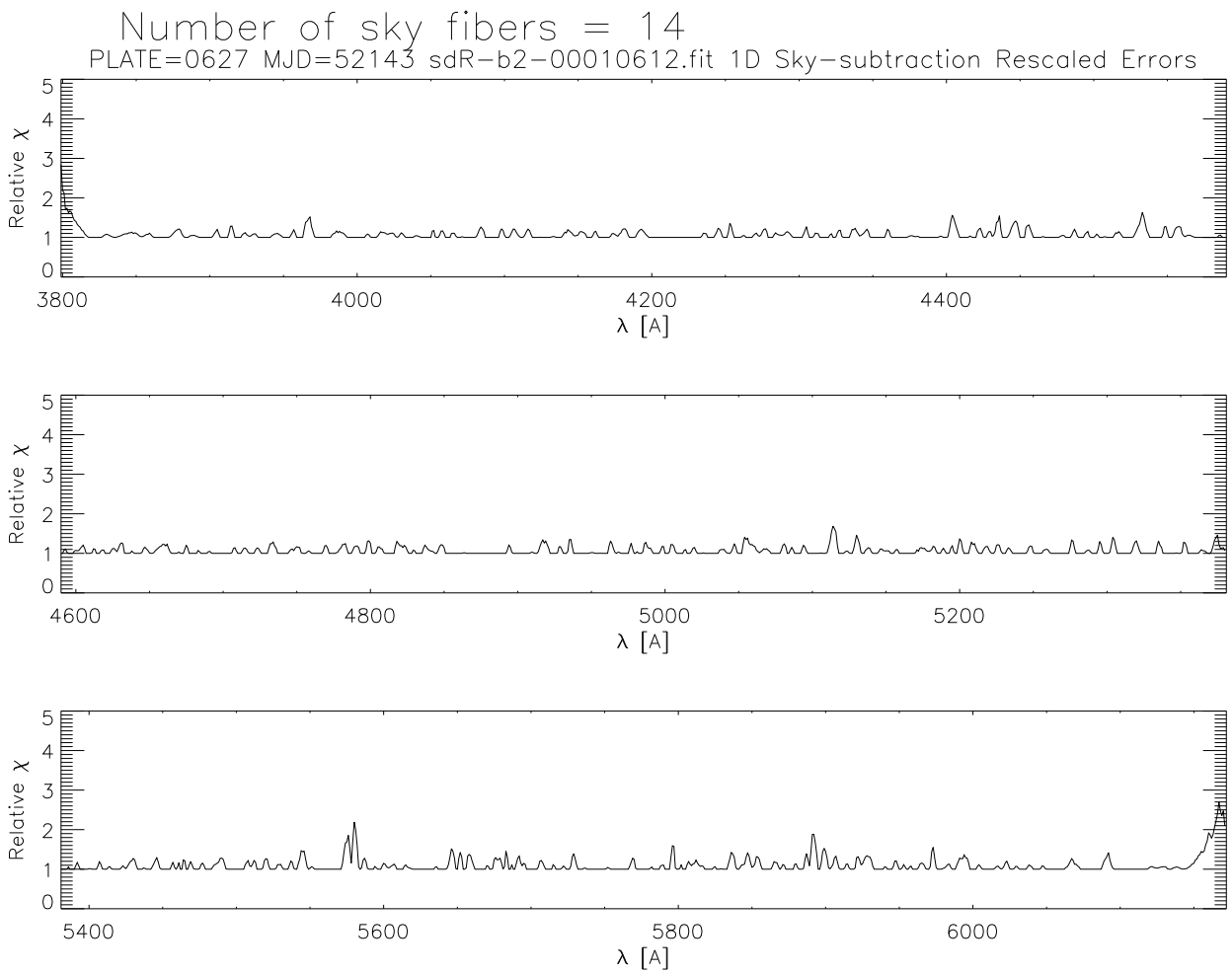
es= −0.0001

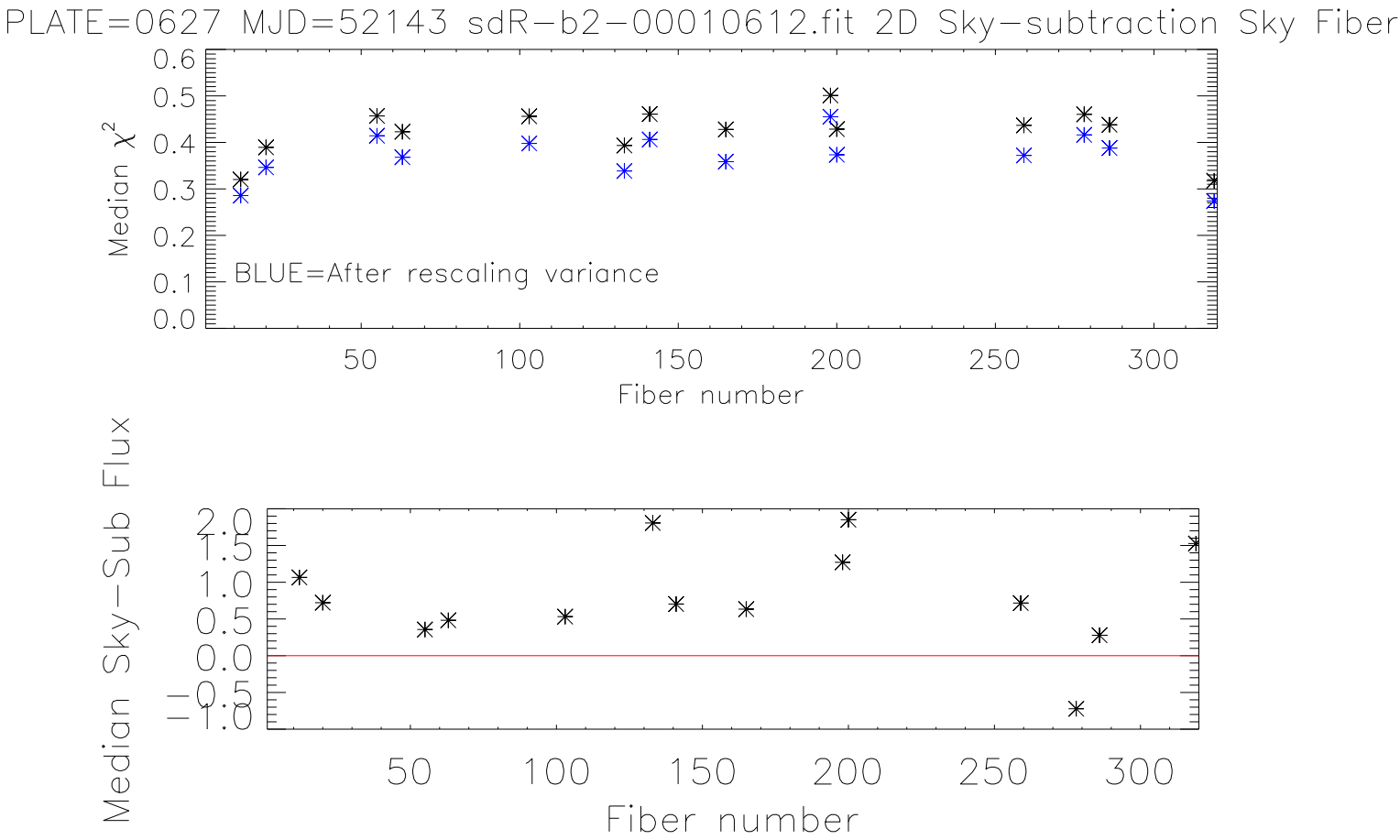

PLATE=0627 MJD=52143 Smooth superflat for sdR−b2−00010612.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

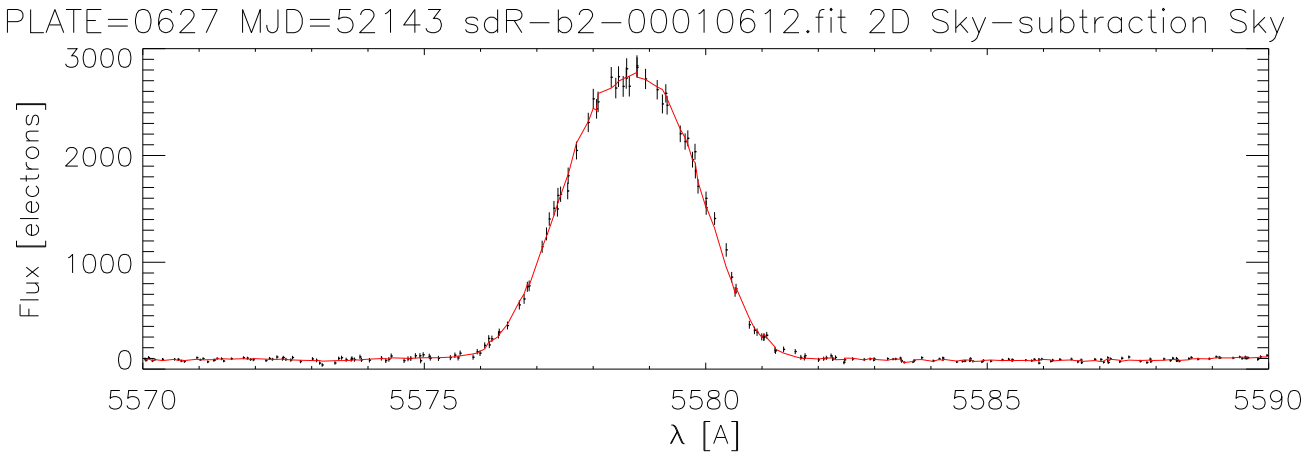

PLATE=0627 MJD=52143 sdR-b2-00010612.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

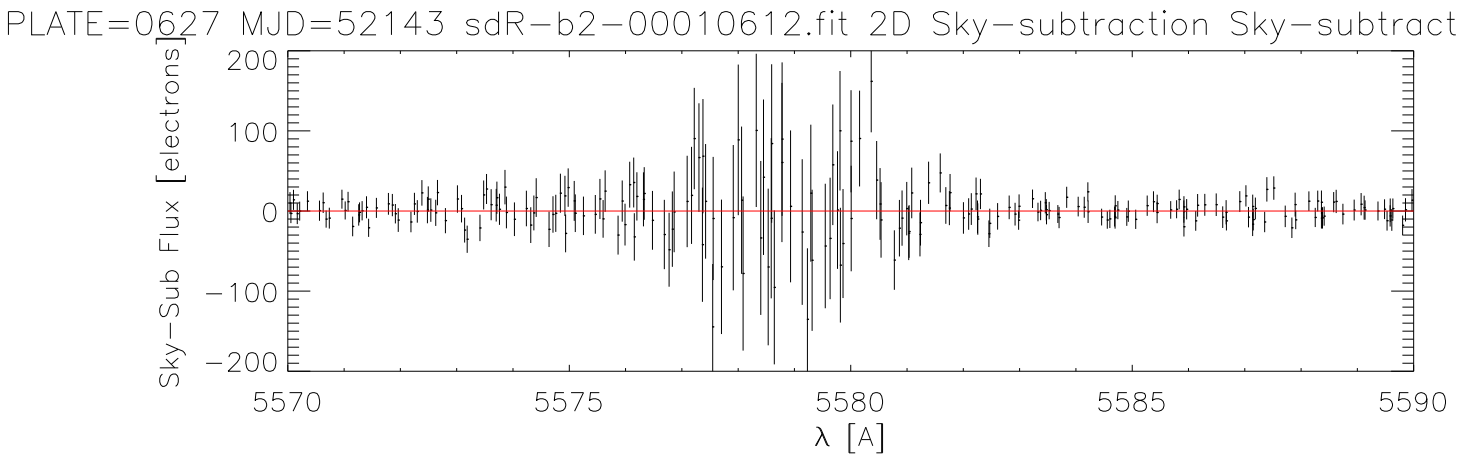

PLATE=0627 MJD=52143 sdR-b2-00010612.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

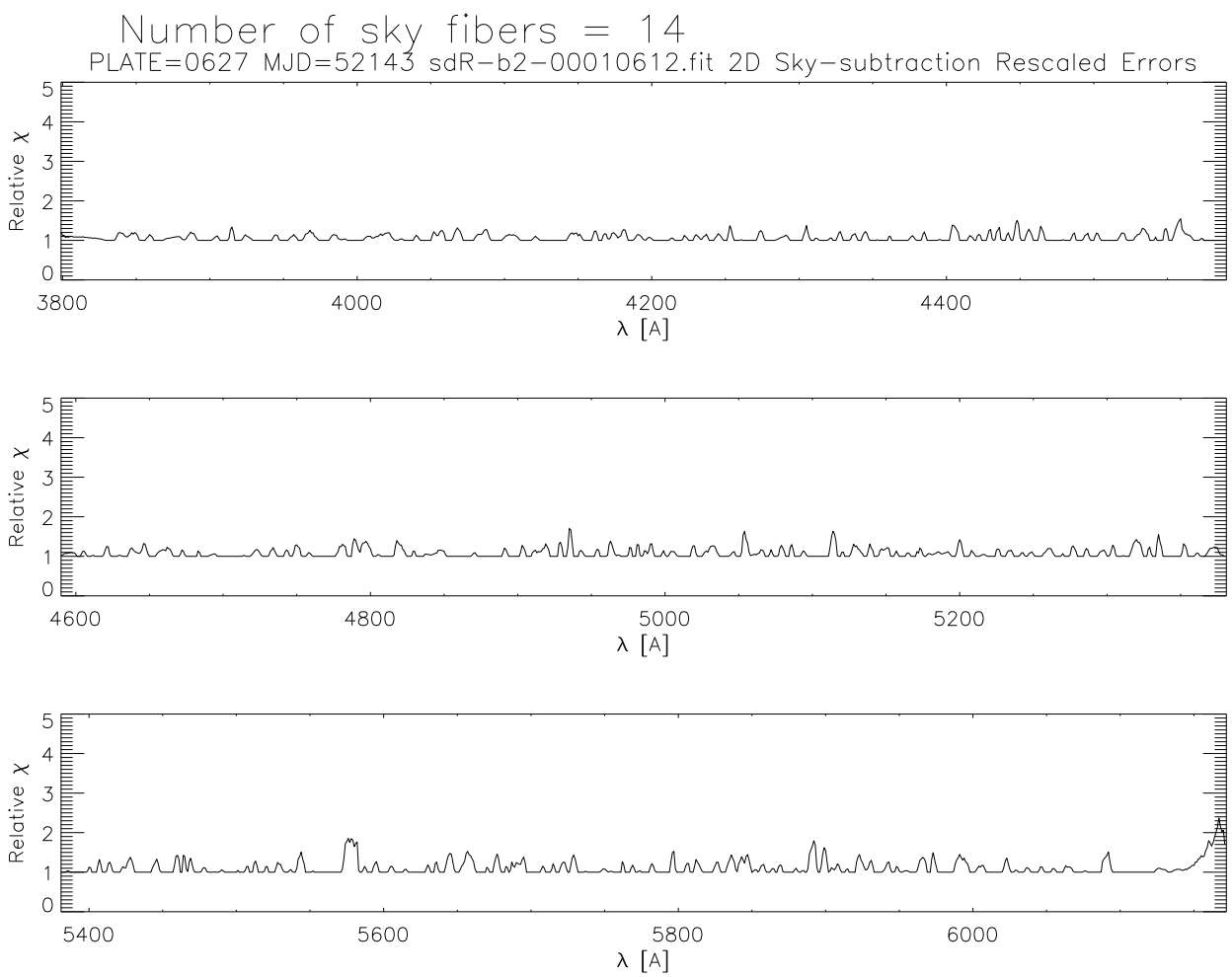

PLATE=0627 MJD=52143 sdR-b2-00010612.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

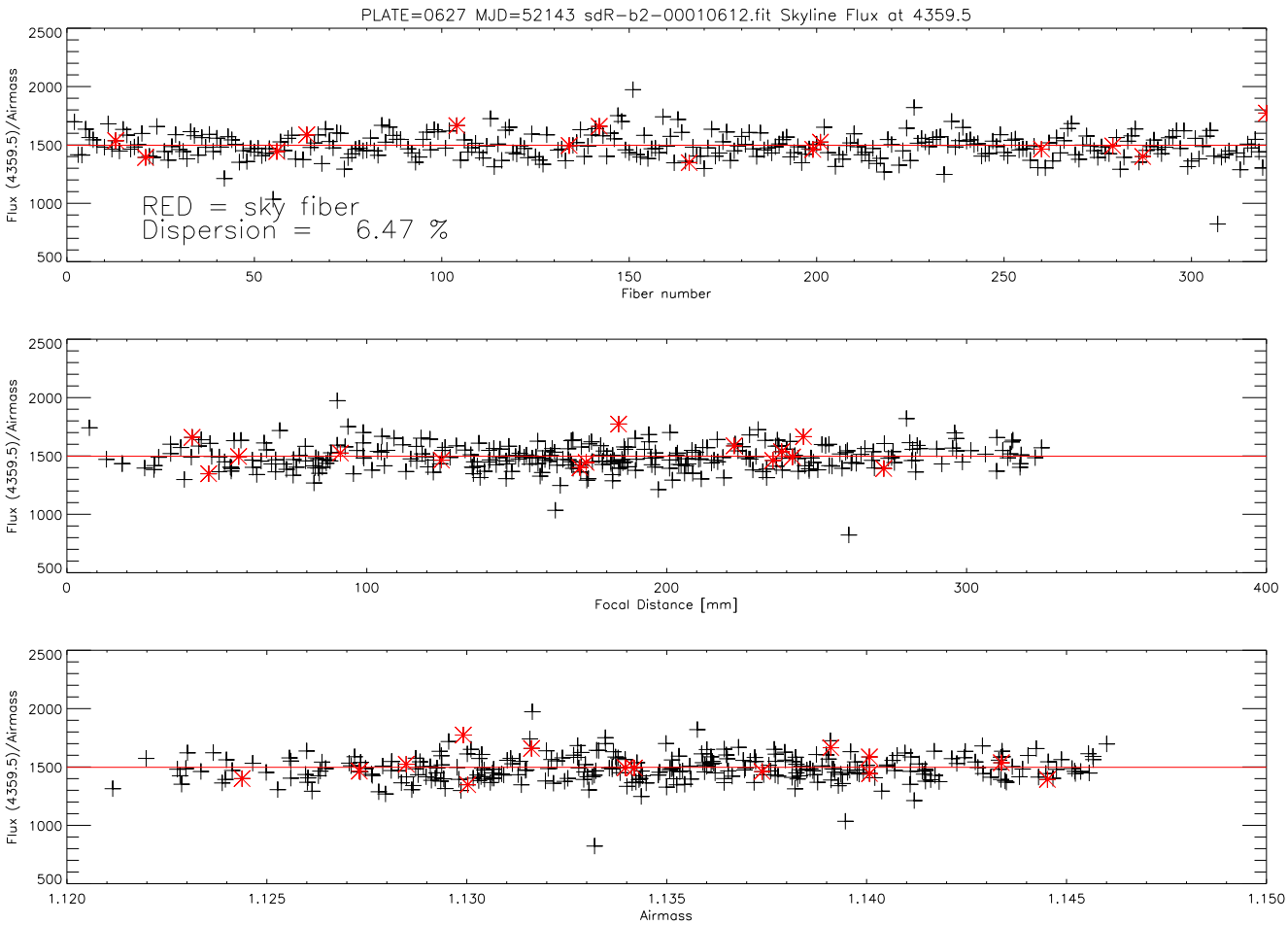

Number of sky fibers = 14
PLATE=0627 MJD=52143 sdR-b2-00010612.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

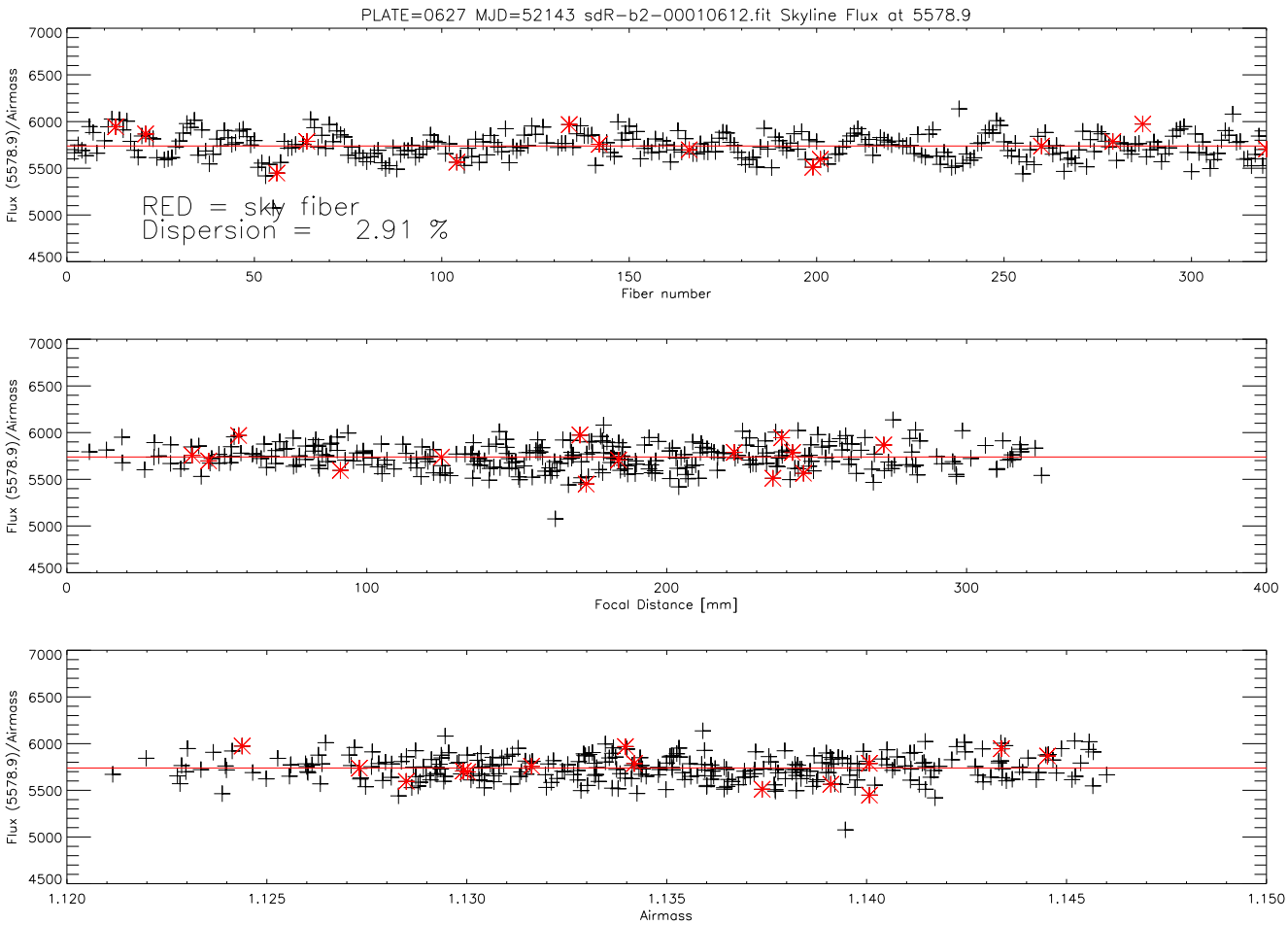

PLATE=0627 MJD=52143 sdR-b2-00010612.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

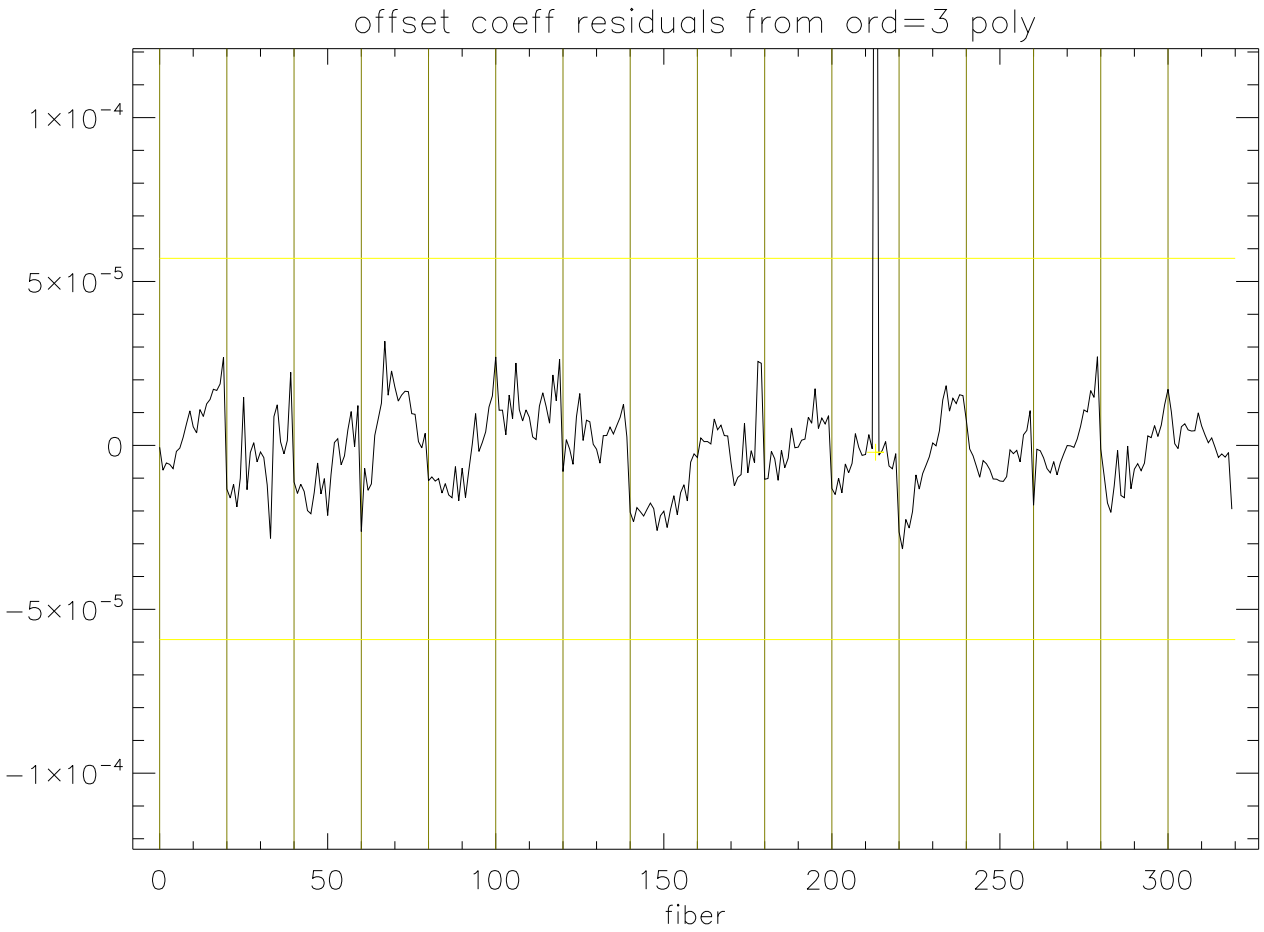

PLATE=0627 MJD=52143 sdR-b2-00010612.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

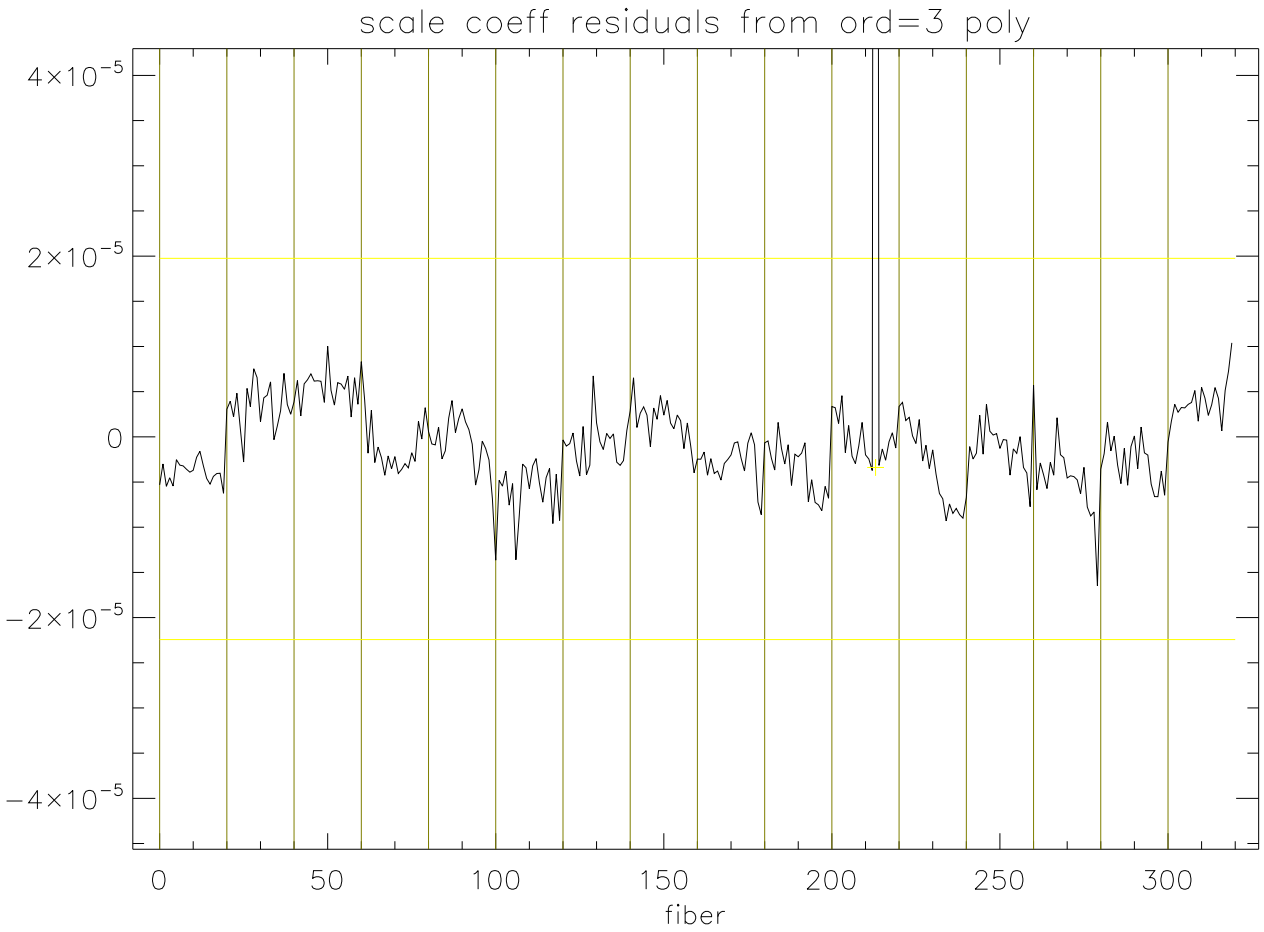

PLATE=0627 MJD=52143 sdR-b2-00010612.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

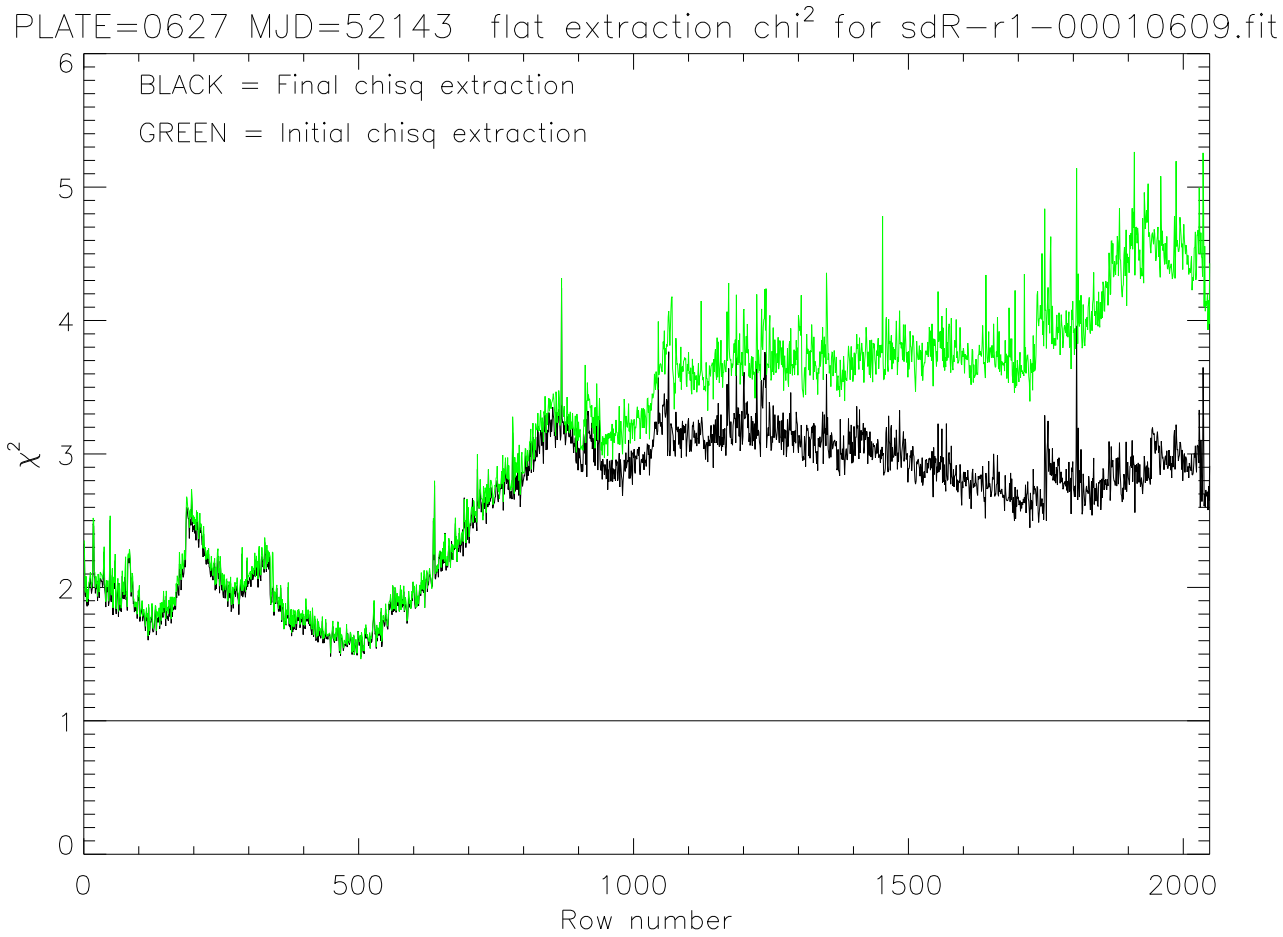

Number of sky fibers = 14
PLATE=0627 MJD=52143 sdR-b2-00010612.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

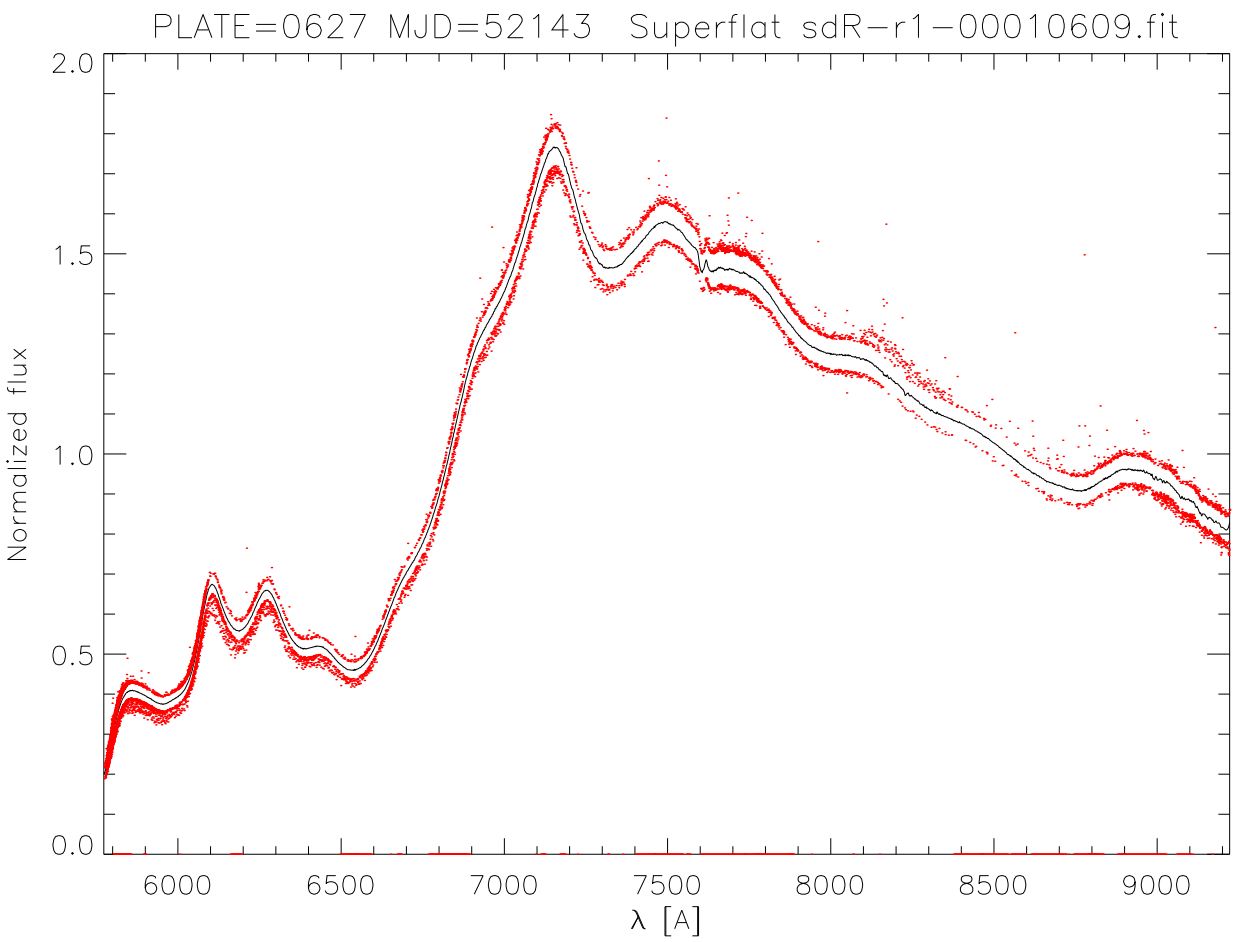

PLATE=0627 MJD=52143 sdR-b2-00010612.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.47 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

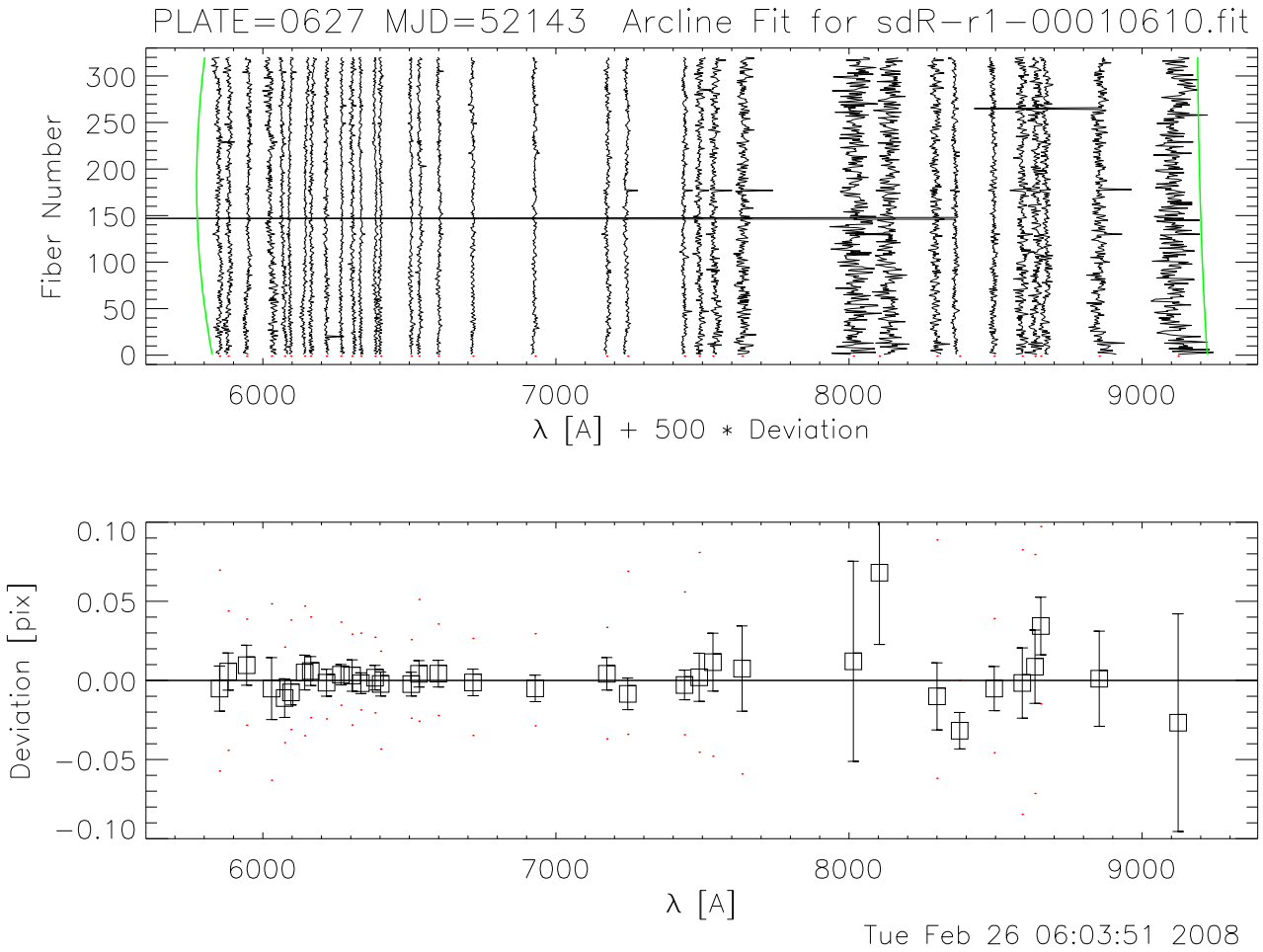

PLATE=0627 MJD=52143 sdR-b2-00010612.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.91 %
Fiber number
Focal Distance [mm]
Airmass

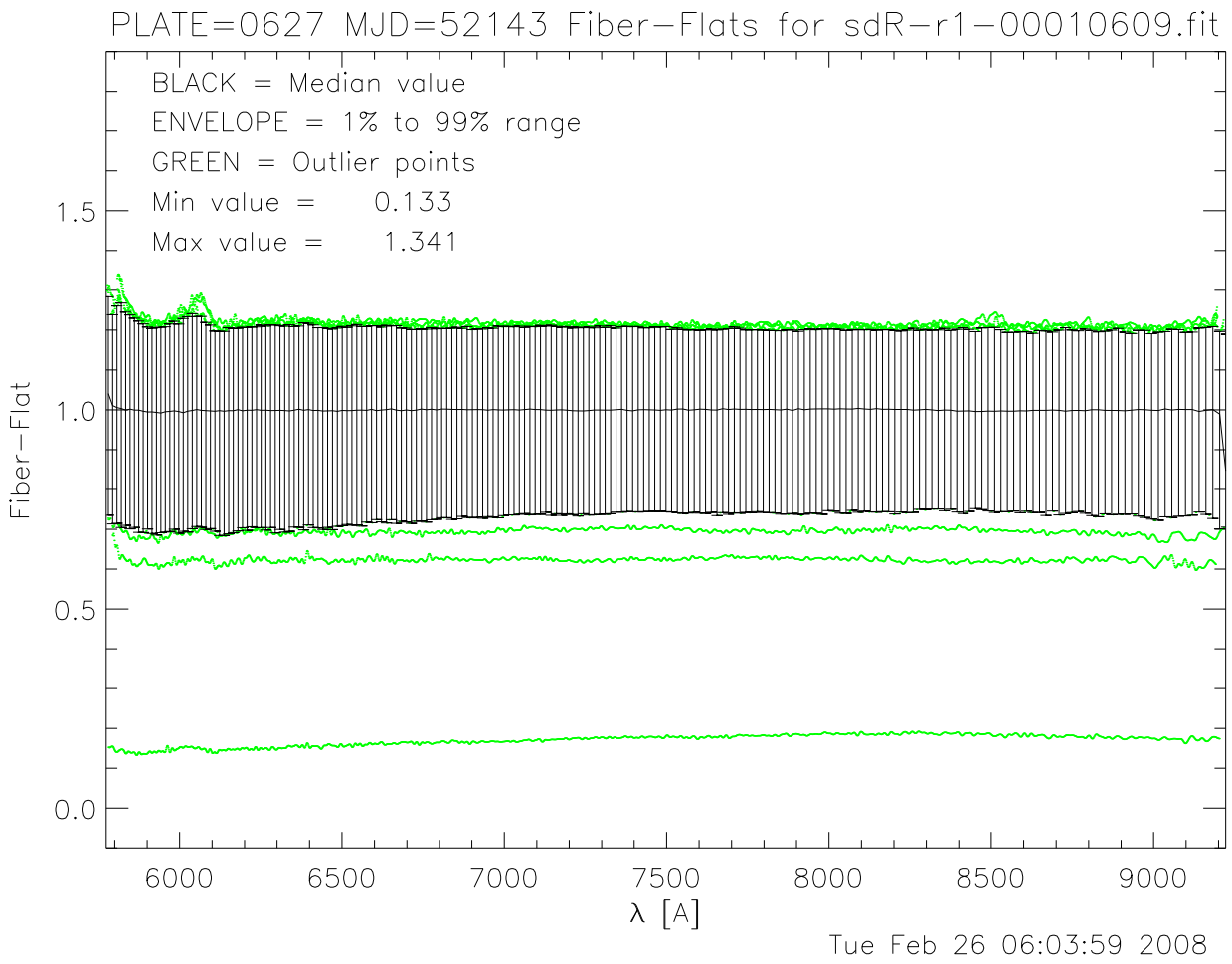

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

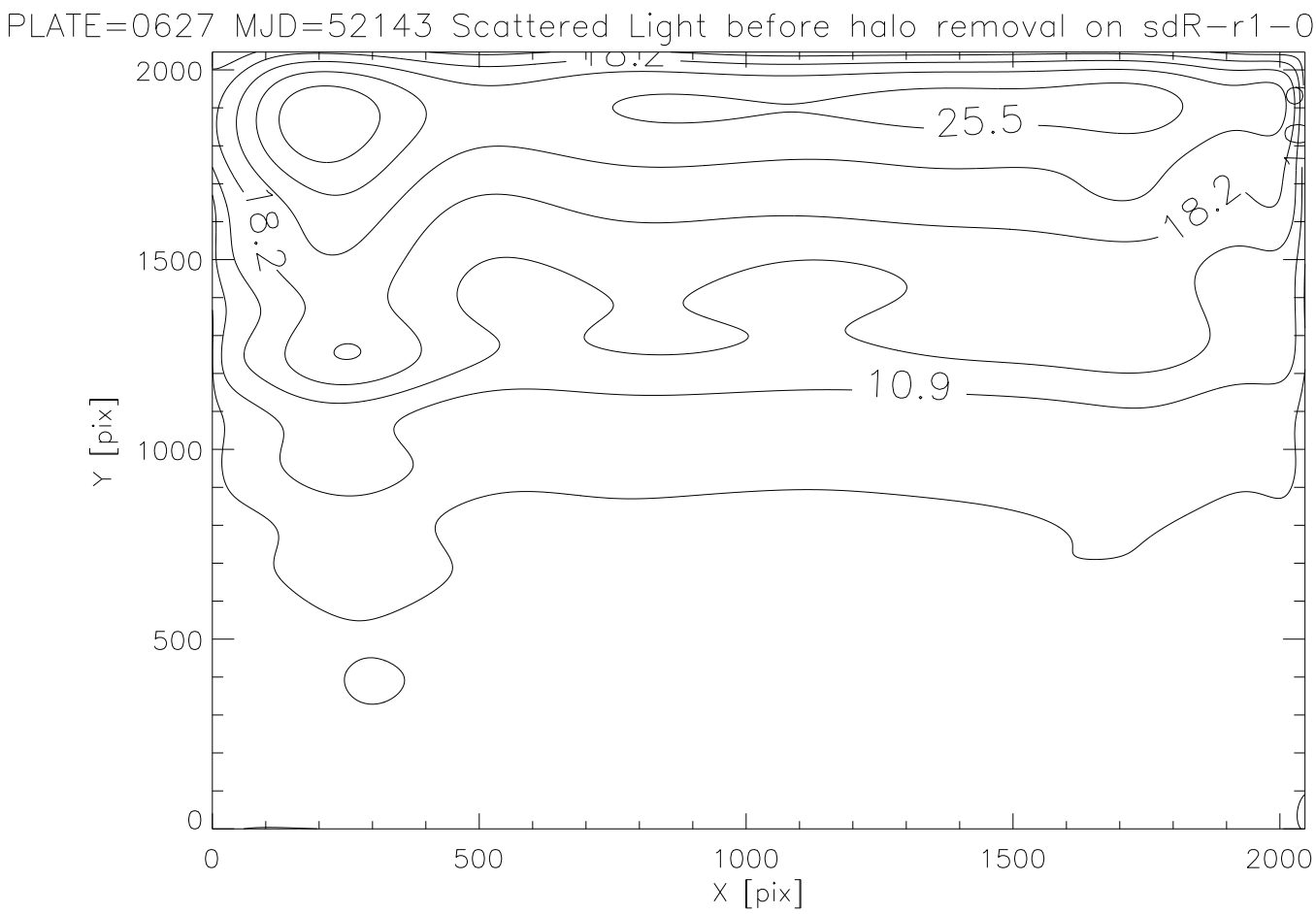

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

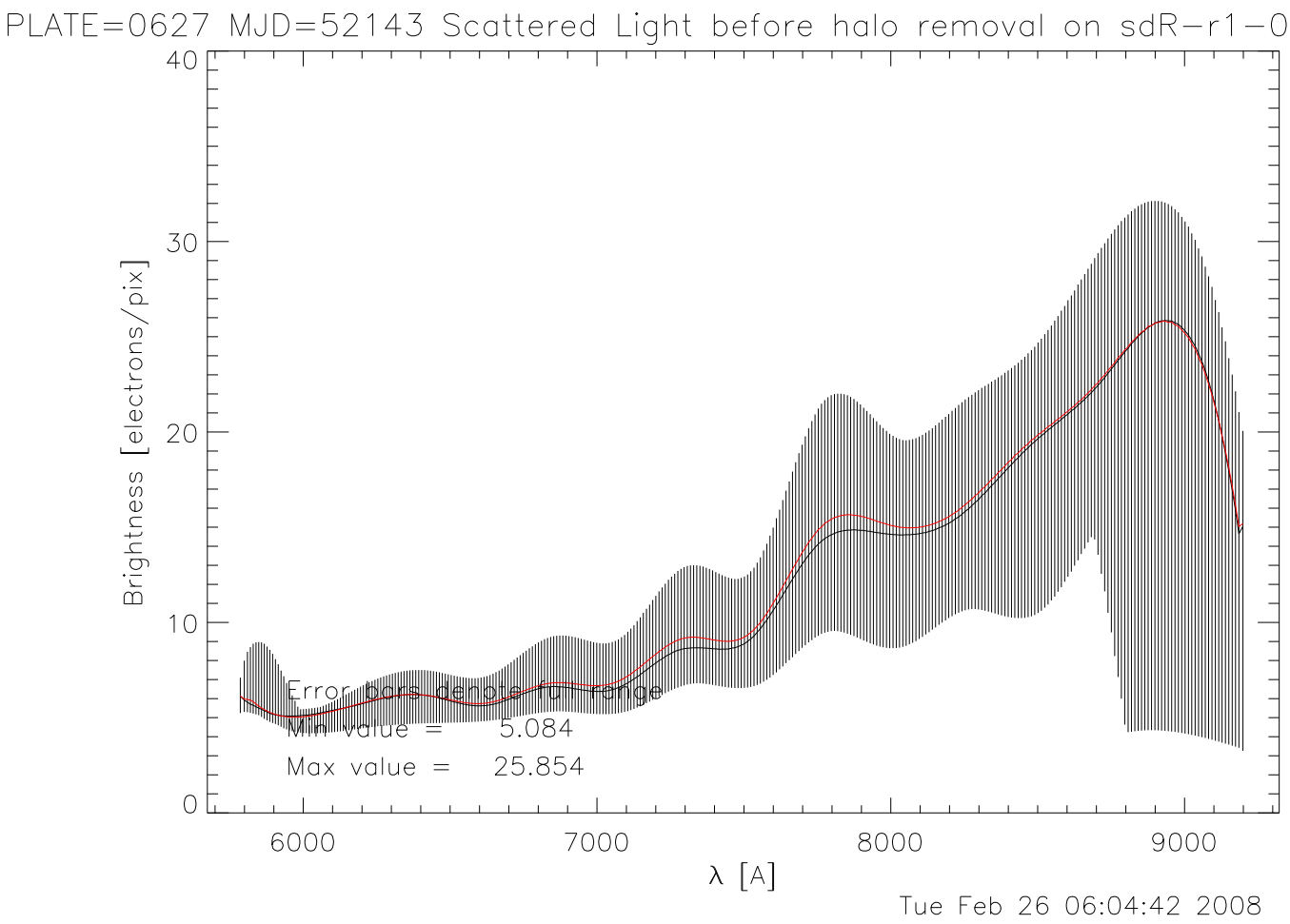

PLATE=0627 MJD=52143 flat extraction chi^2 for sdR−r1−00010609.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

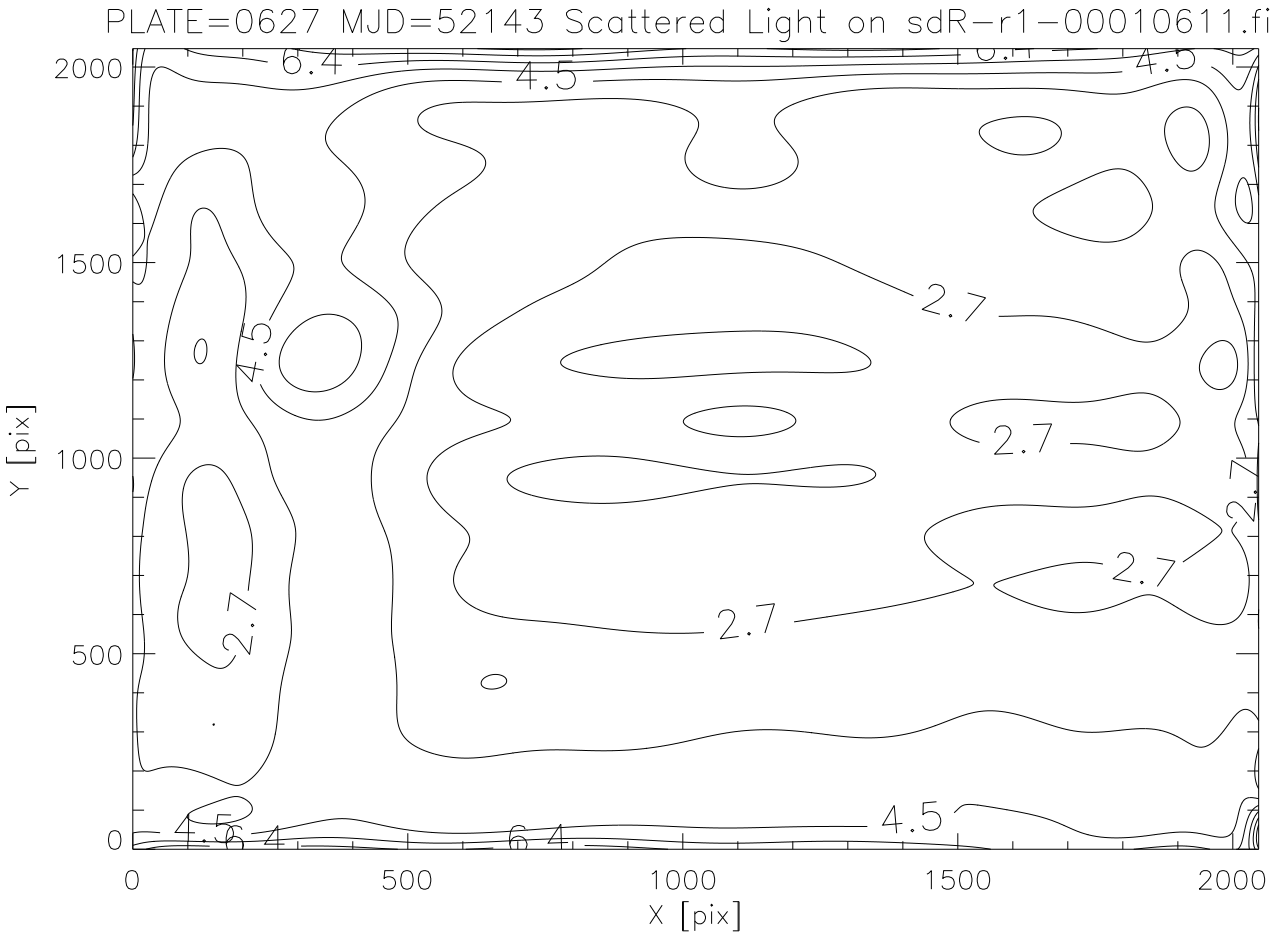

PLATE=0627 MJD=52143 Superflat sdR-r1-00010609.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

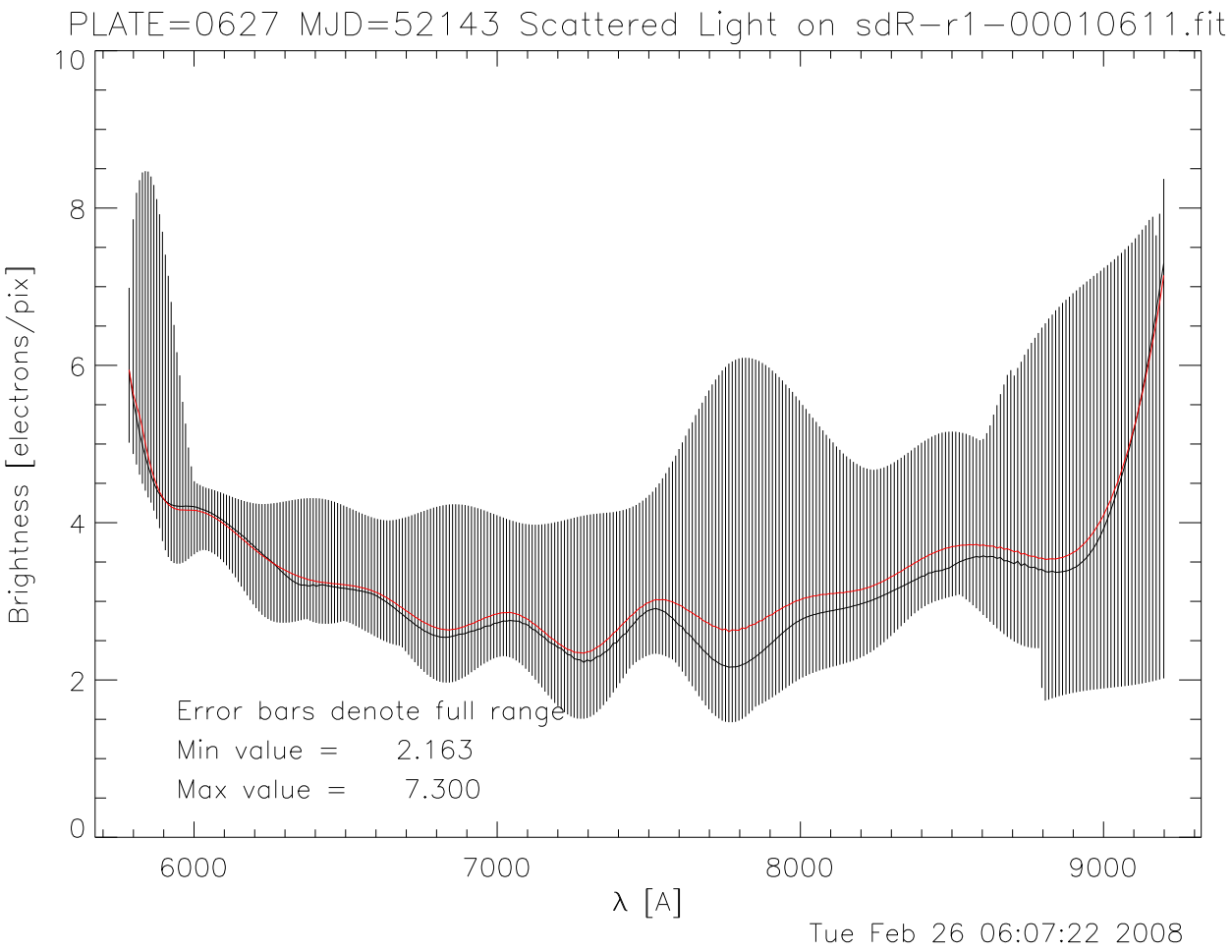

PLATE=0627 MJD=52143 Arcline Fit for sdR-r1-00010610.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 26 06:03:51 2008

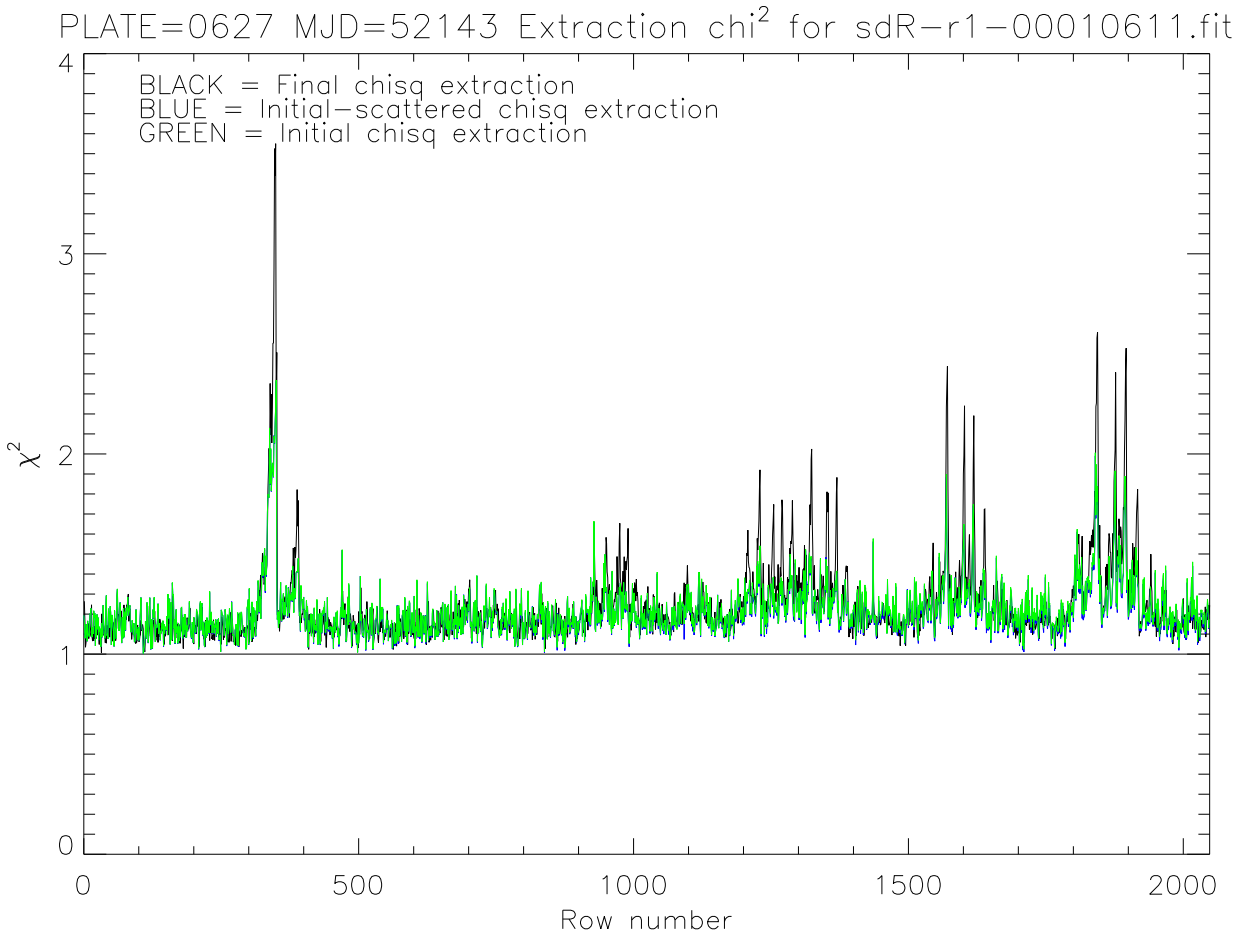

PLATE=0627 MJD=52143 Fiber−Flats for sdR−r1−00010609.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.133
Max value = 1.341
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 06:03:59 2008

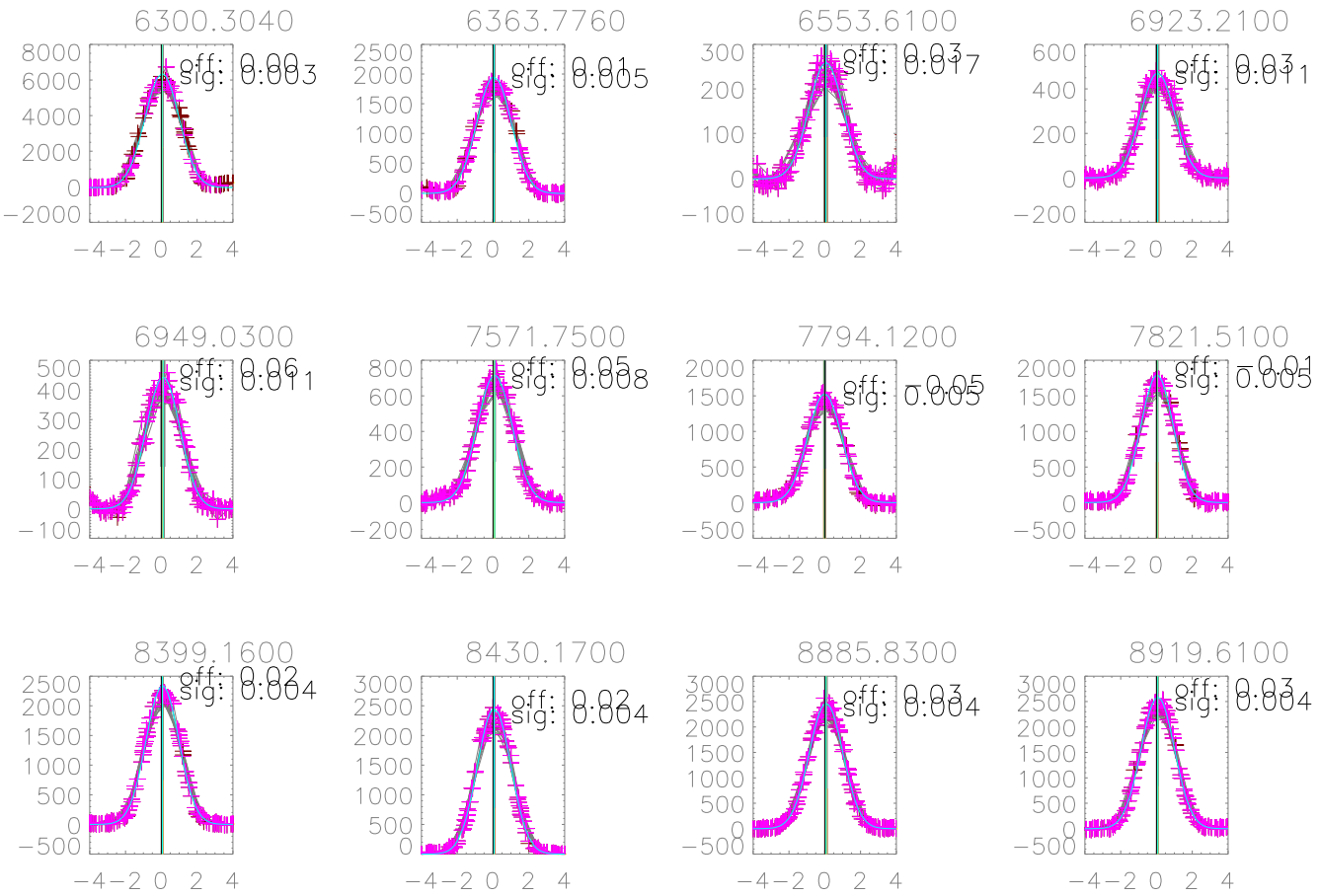

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-r1-00010611.fi
18.2
25.5
18.2
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

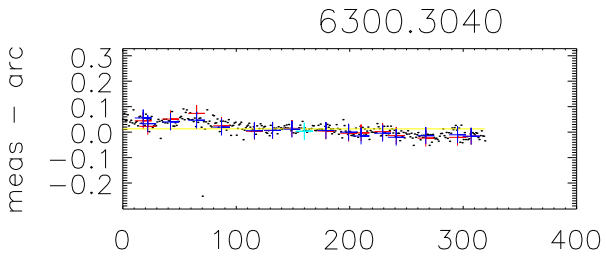

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-r1-00010611.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 1σ range
Min value = 5.084
Max value = 25.854
Tue Feb 26 06:04:42 2008

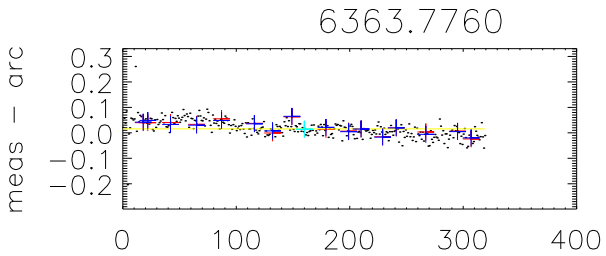

PLATE=0627 MJD=52143 Scattered Light on sdR-r1-00010611.fit
6.4
4.5
2.7
0
Y [pix]
X [pix]
0
500
1000
1500
2000

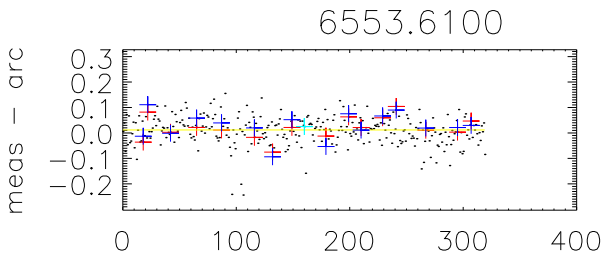

PLATE=0627 MJD=52143 Scattered Light on sdR-r1-00010611.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.163
Max value = 7.300
Tue Feb 26 06:07:22 2008

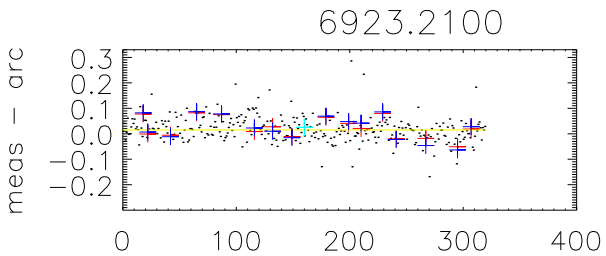

PLATE=0627 MJD=52143 Extraction chi^2 for sdR−r1−00010611.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

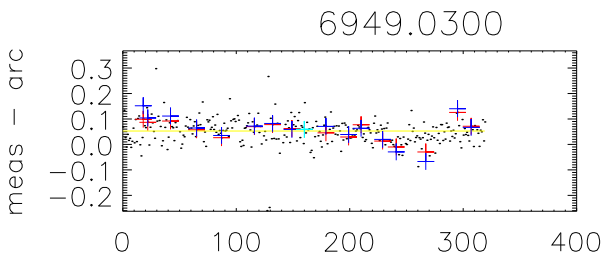

6300.3040
off: 0.00
sig: 0.003
6363.7760
off: 0.01
sig: 0.005
6553.6100
off: 0.03
sig: 0.017
6923.2100
off: 0.03
sig: 0.011
6949.0300
off: 0.06
sig: 0.011
7571.7500
off: 0.05
sig: 0.008
7794.1200
off: −0.05
sig: 0.005
7821.5100
off: −0.01
sig: 0.005
8399.1600
off: 0.02
sig: 0.004
8430.1700
off: 0.02
sig: 0.004
8885.8300
off: 0.03
sig: 0.004
8919.6100
off: 0.03
sig: 0.004

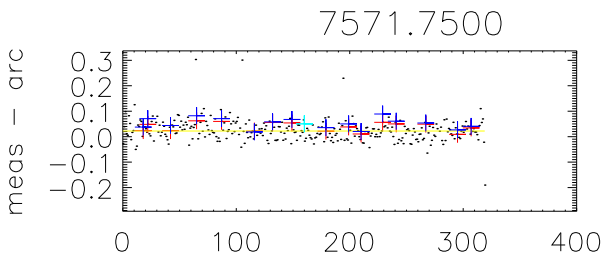

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

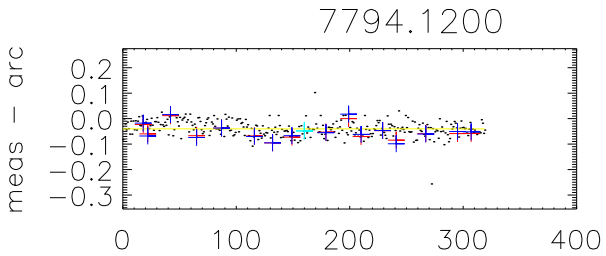

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

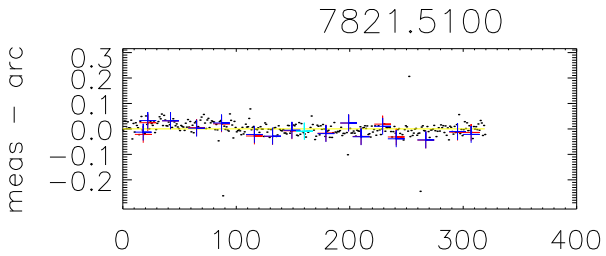

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

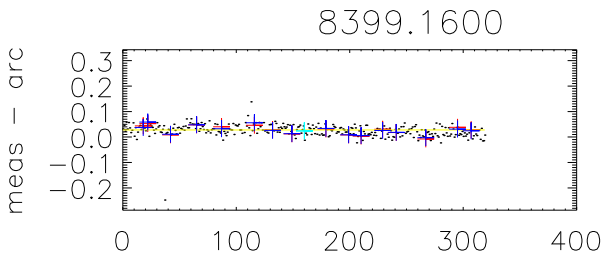

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

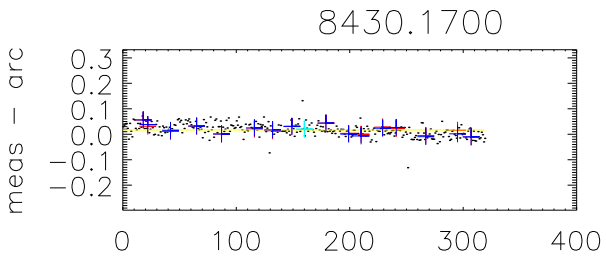

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

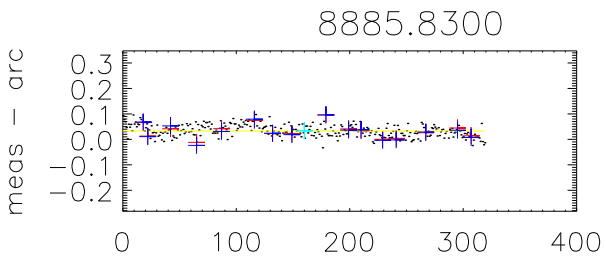

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

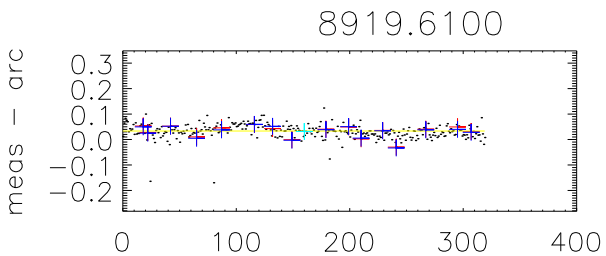

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

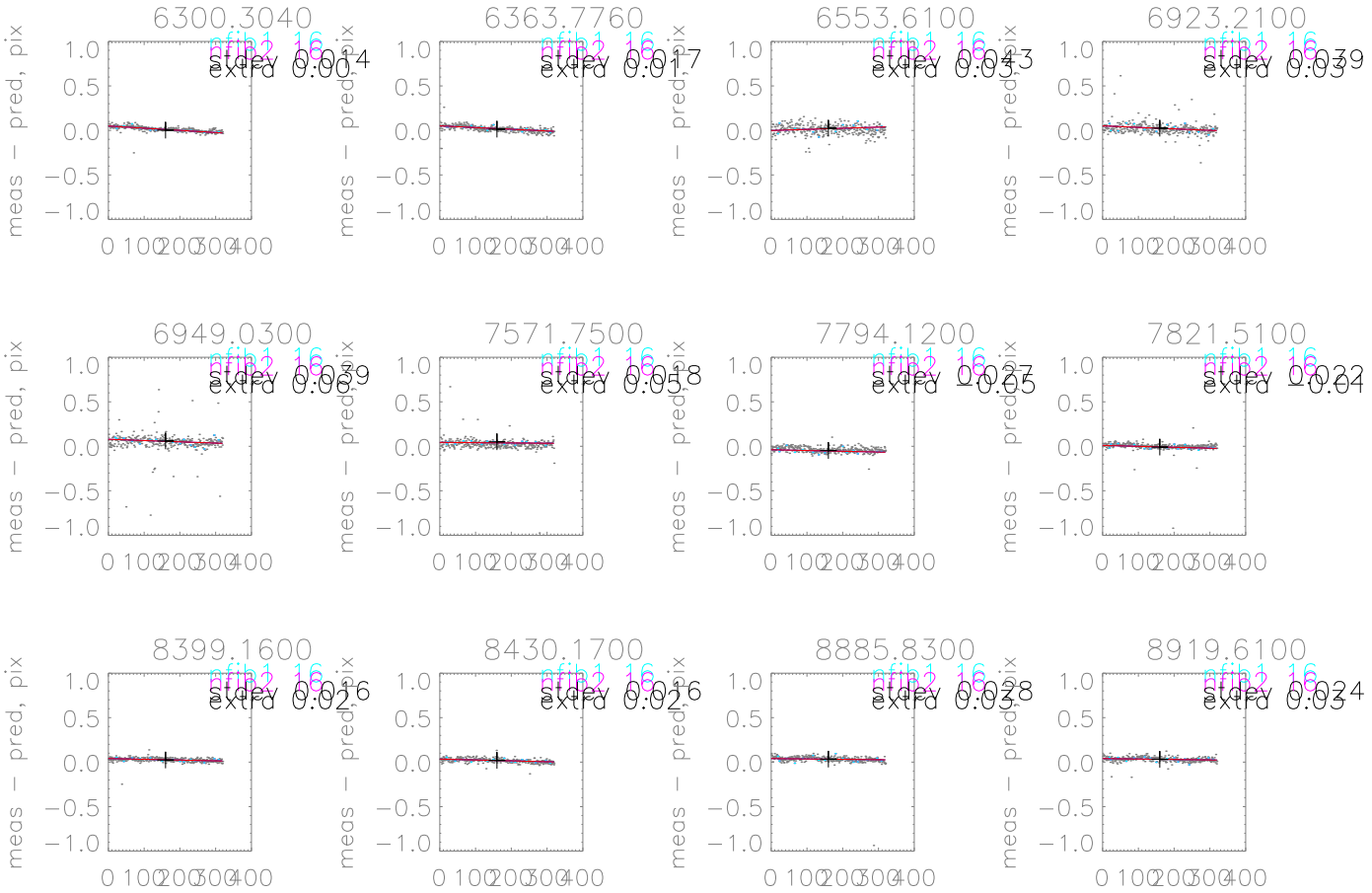

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

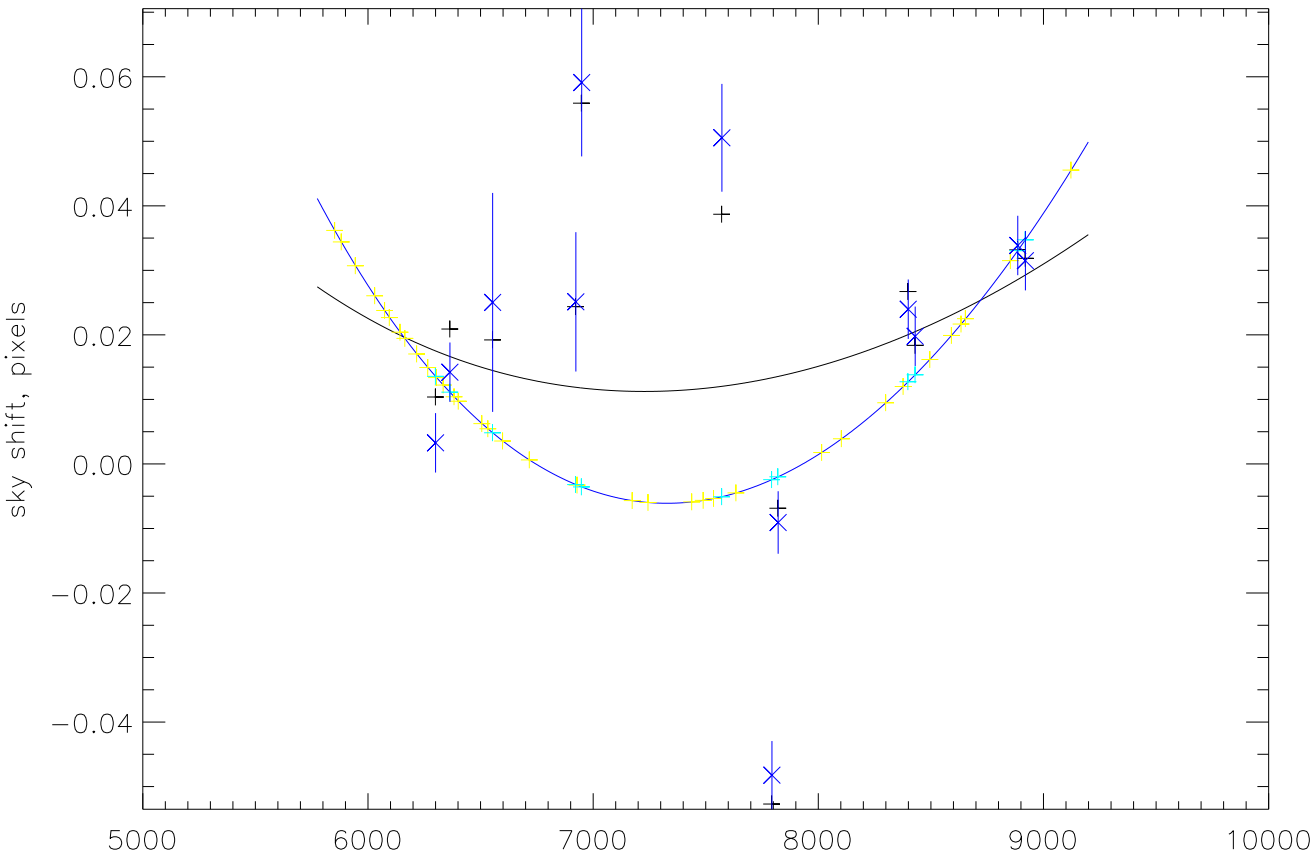

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

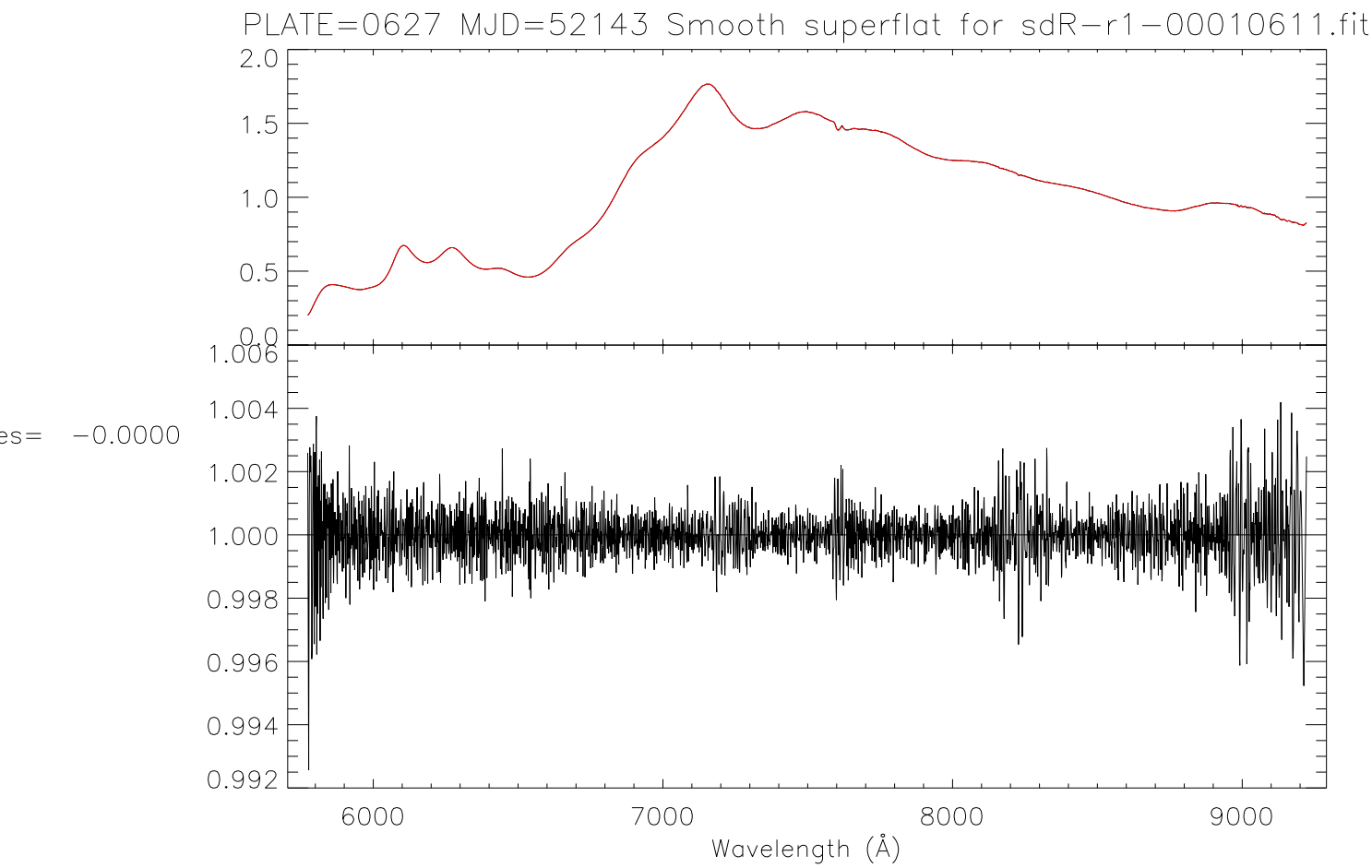

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

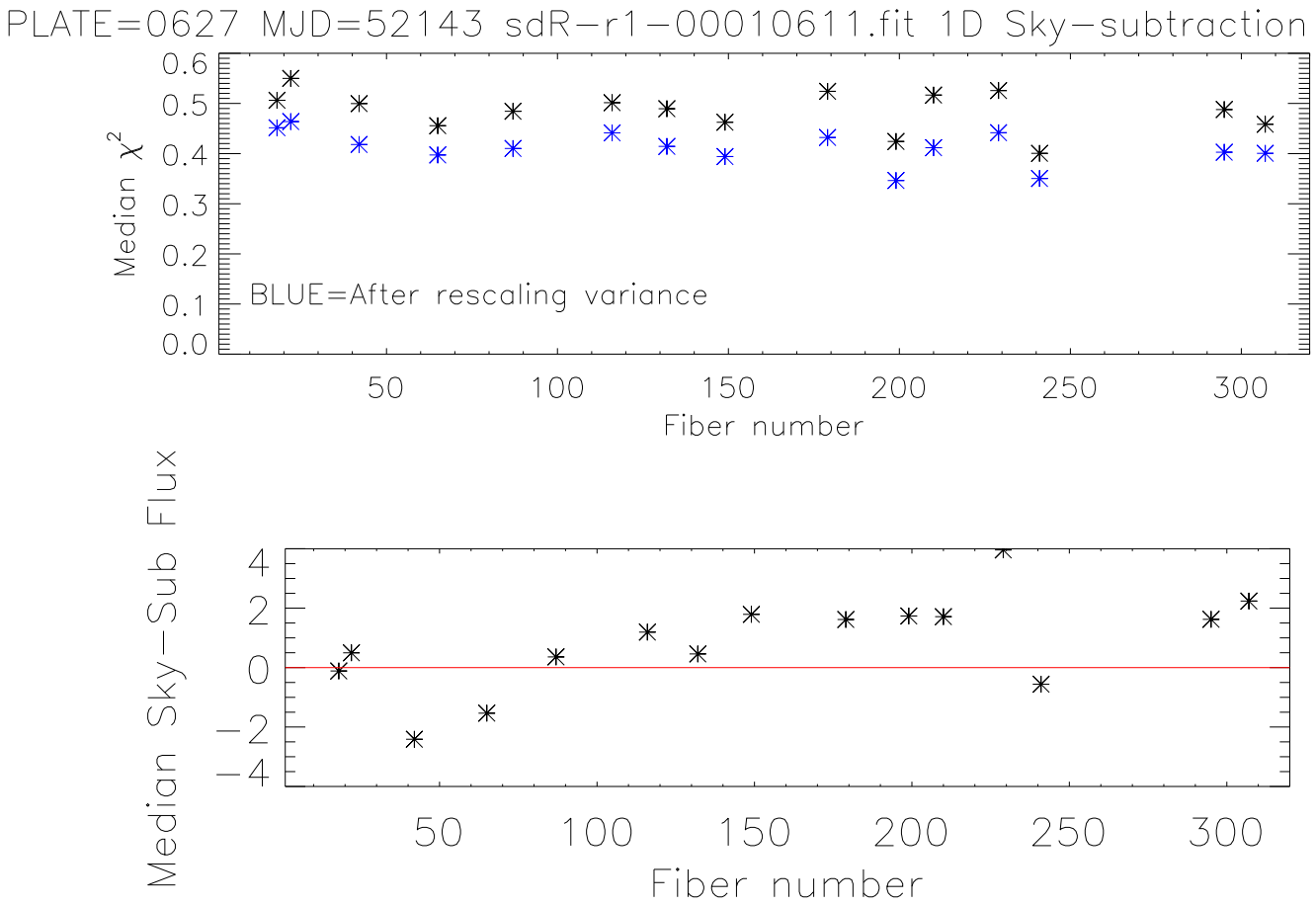

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

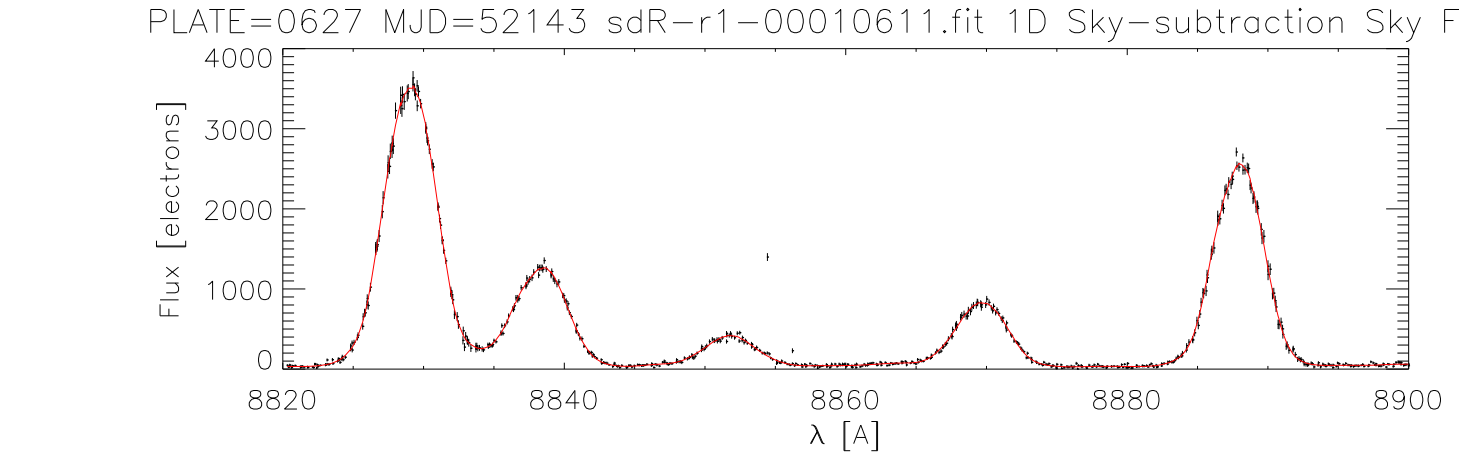

6300.3040
stdev 0.014
extra 0.00
6363.7760
stdev 0.017
extra 0.01
6553.6100
stdev 0.043
extra 0.03
6923.2100
stdev 0.039
extra 0.03
6949.0300
stdev 0.039
extra 0.06
7571.7500
stdev 0.048
extra 0.05
7794.1200
stdev 0.027
extra −0.05
7821.5100
stdev 0.022
extra −0.04
8399.1600
stdev 0.016
extra 0.02
8430.1700
stdev 0.016
extra 0.02
8885.8300
stdev 0.028
extra 0.03
8919.6100
stdev 0.024
extra 0.03
meas − pred, pix
mfhs2 16

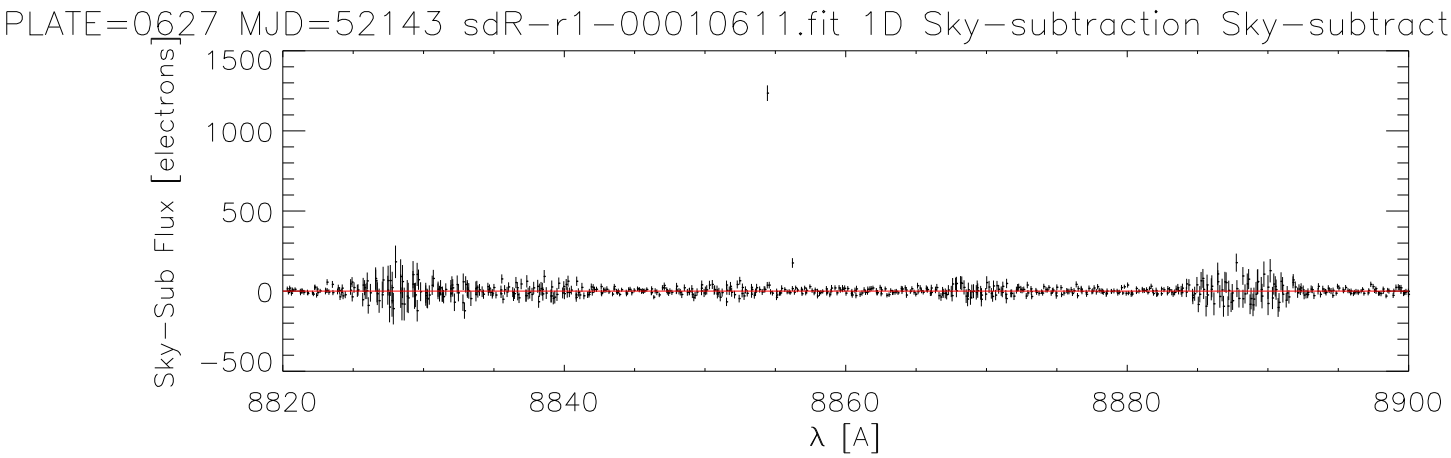

sky shift, pixels
0.06
0.04
0.02
0.00
−0.02
−0.04
5000
6000
7000
8000
9000
10000

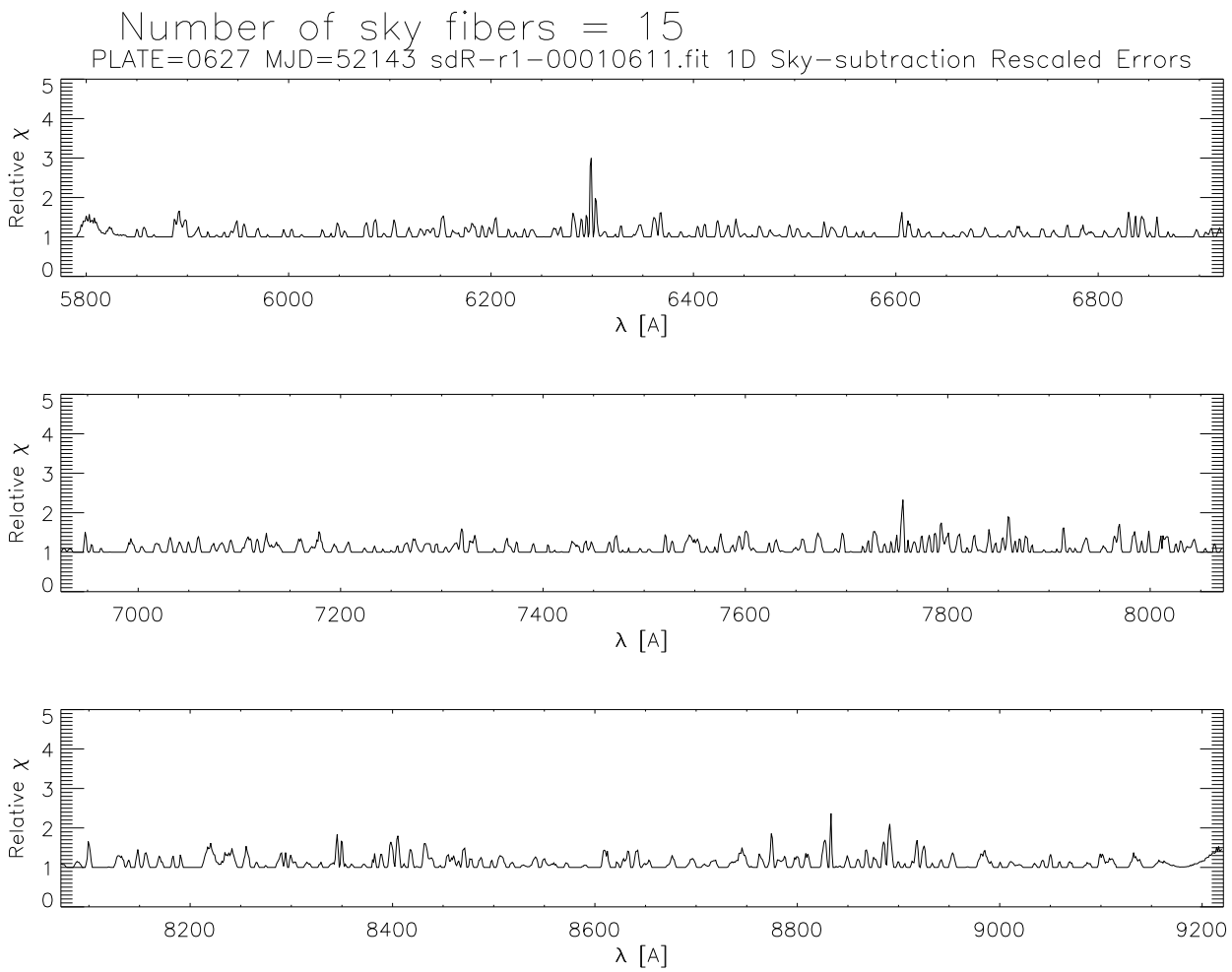

PLATE=0627 MJD=52143 Smooth superflat for sdR-r1-00010611.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

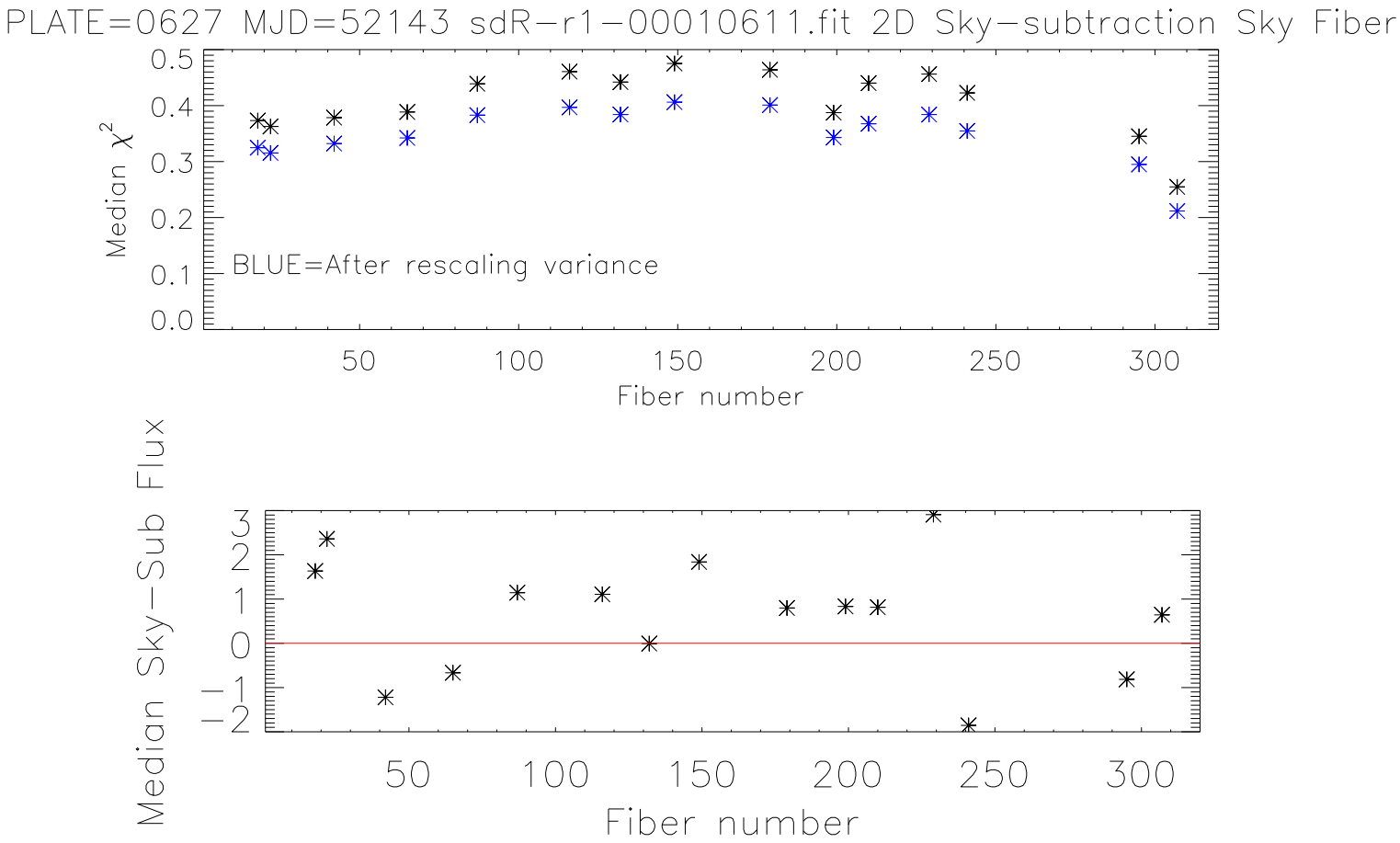
es= −0.0000

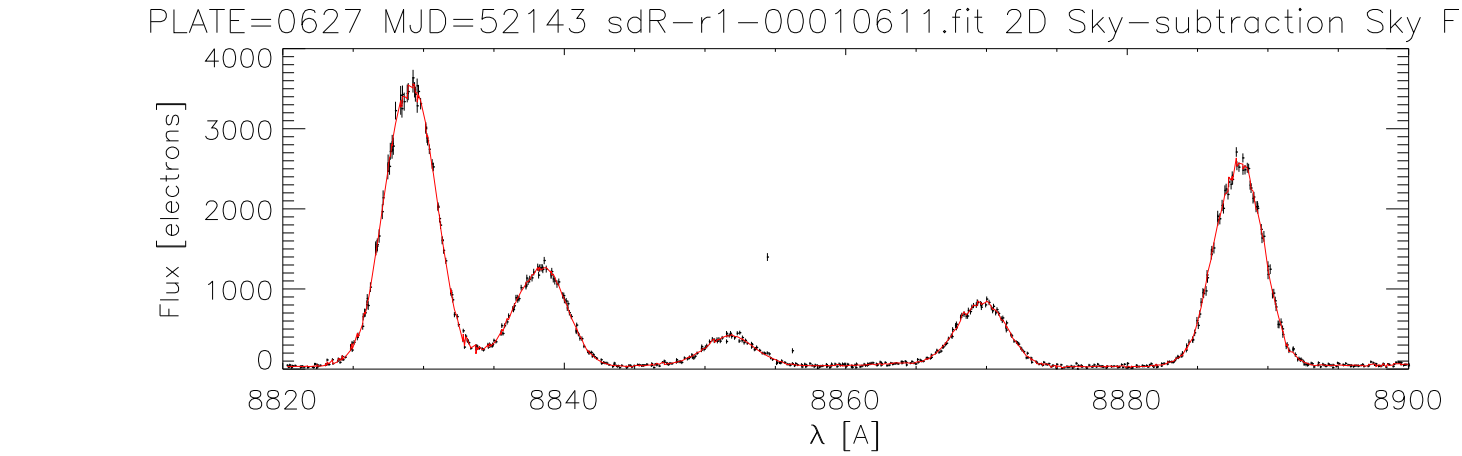

PLATE=0627 MJD=52143 sdR-r1-00010611.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

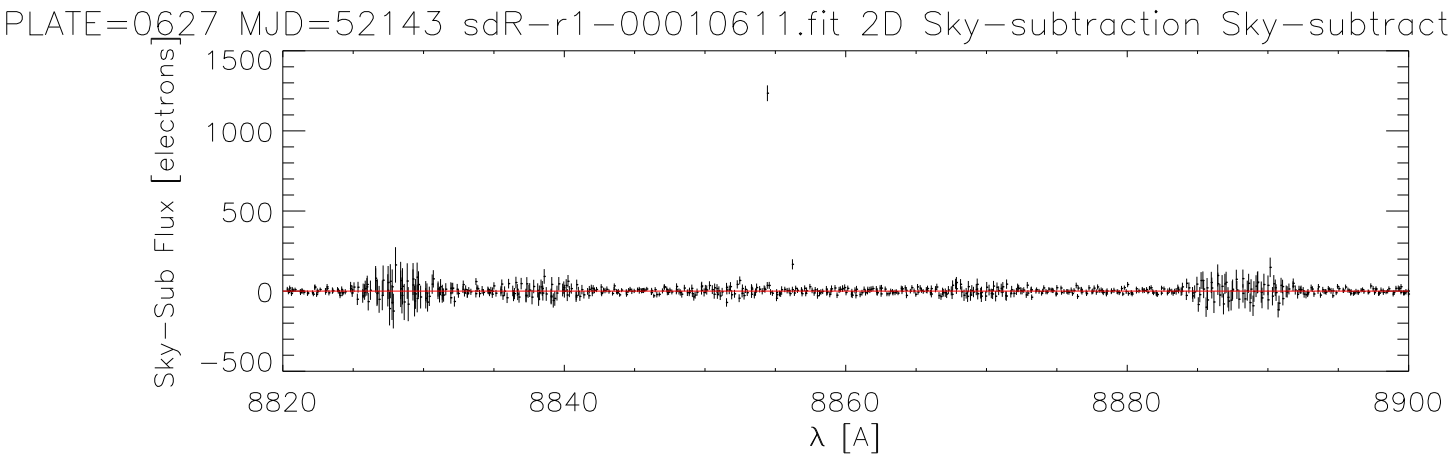

PLATE=0627 MJD=52143 sdR-r1-00010611.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

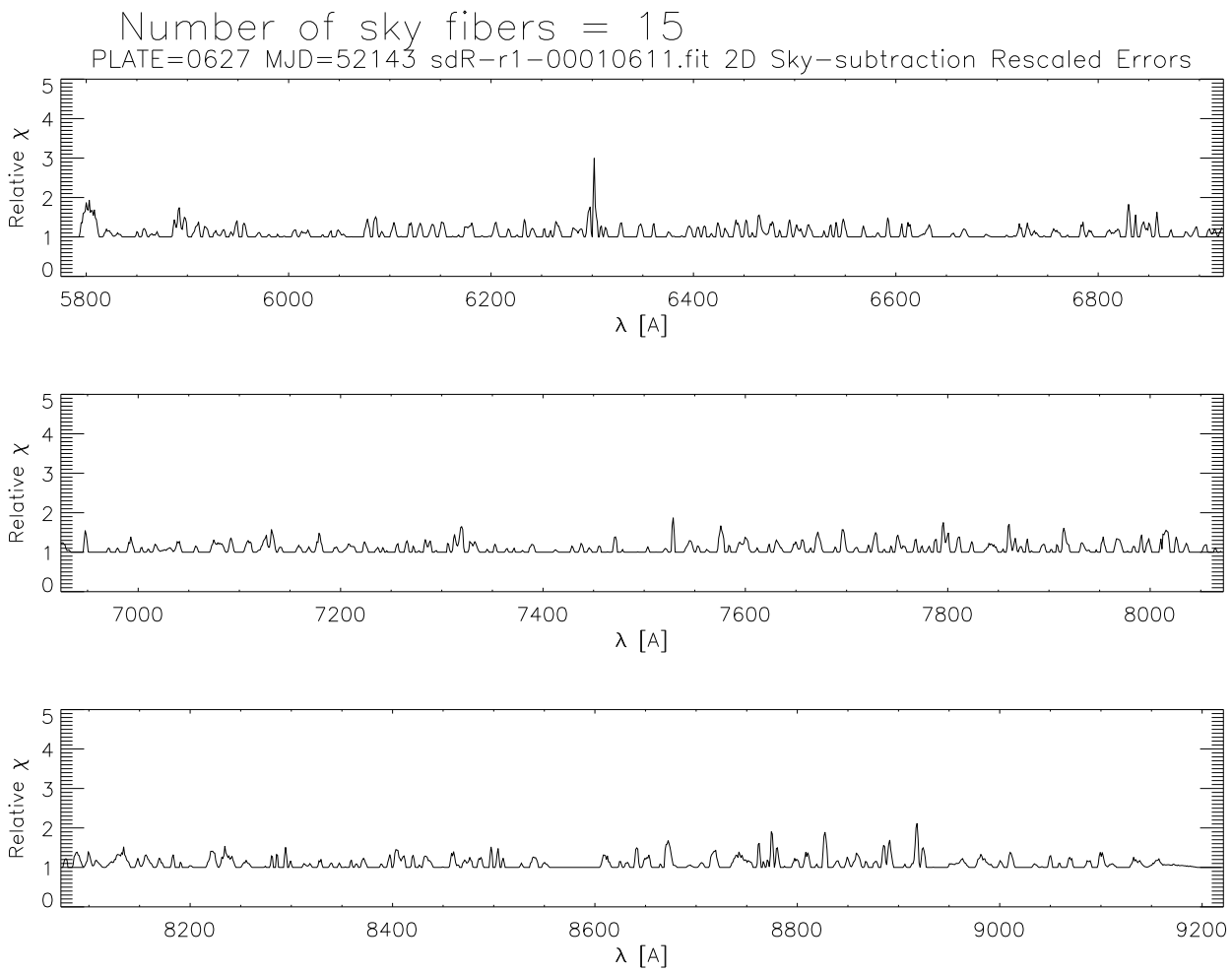

PLATE=0627 MJD=52143 sdR-r1-00010611.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

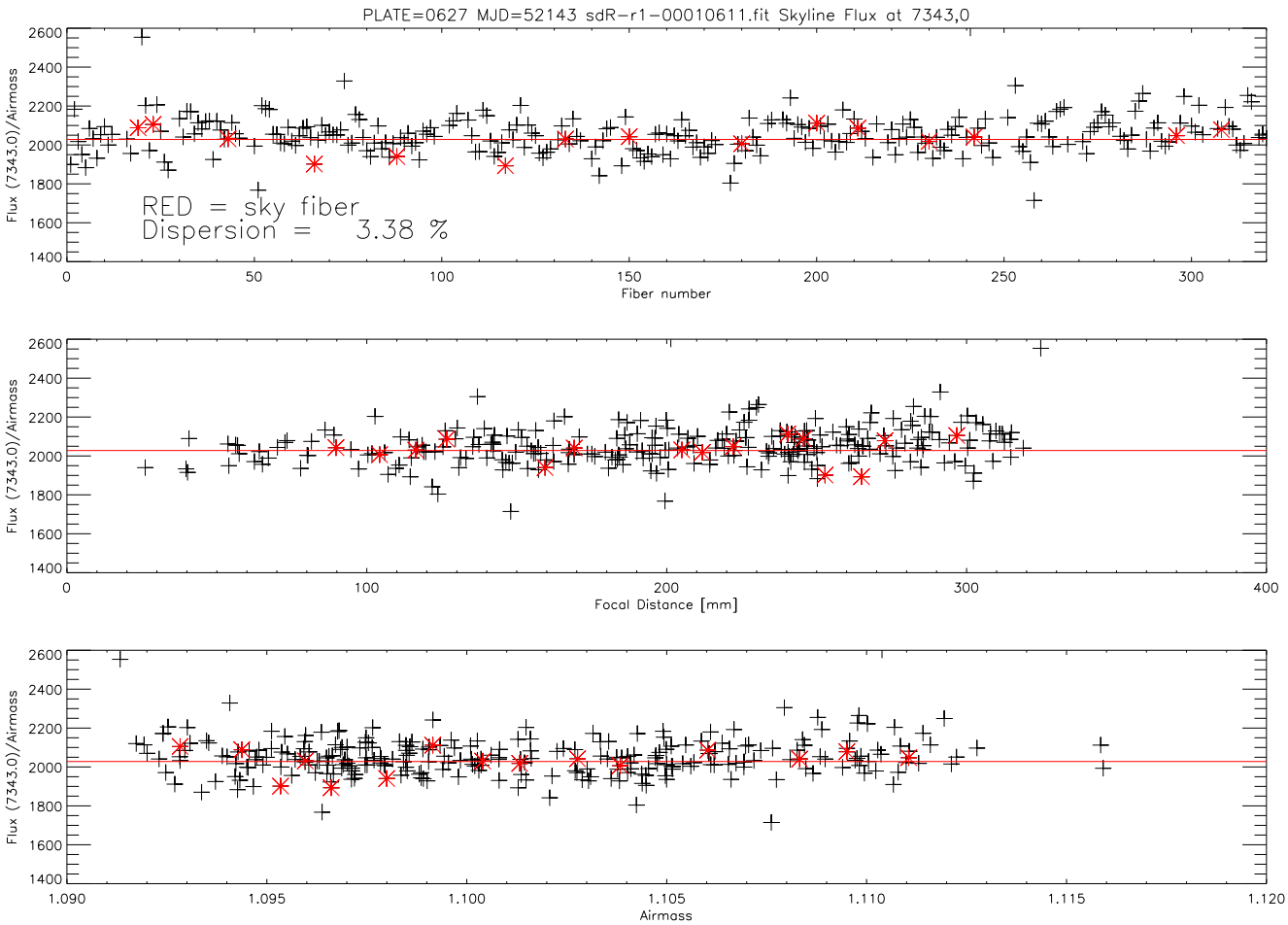

Number of sky fibers = 15
PLATE=0627 MJD=52143 sdR-r1-00010611.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

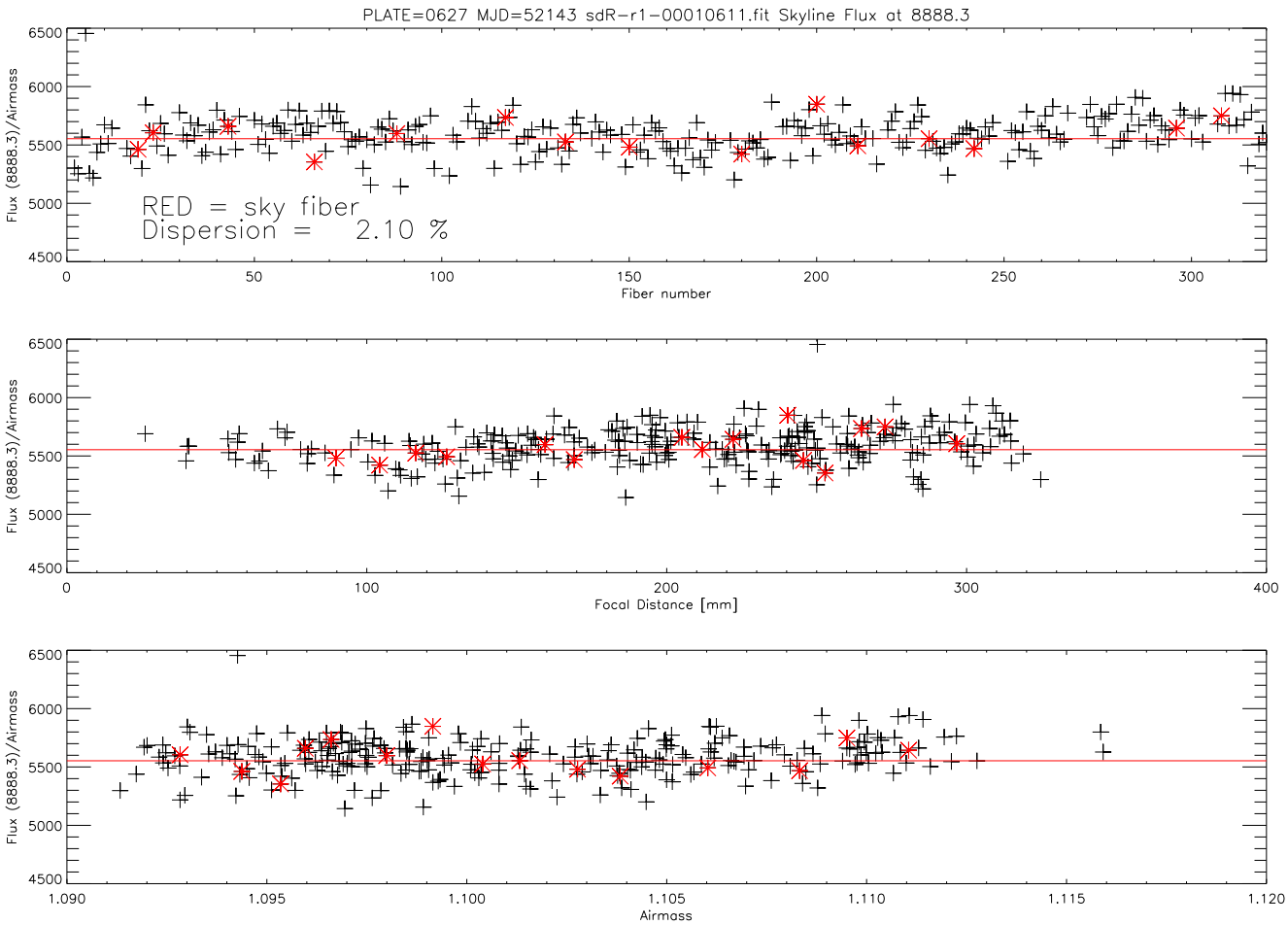

PLATE=0627 MJD=52143 sdR-r1-00010611.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

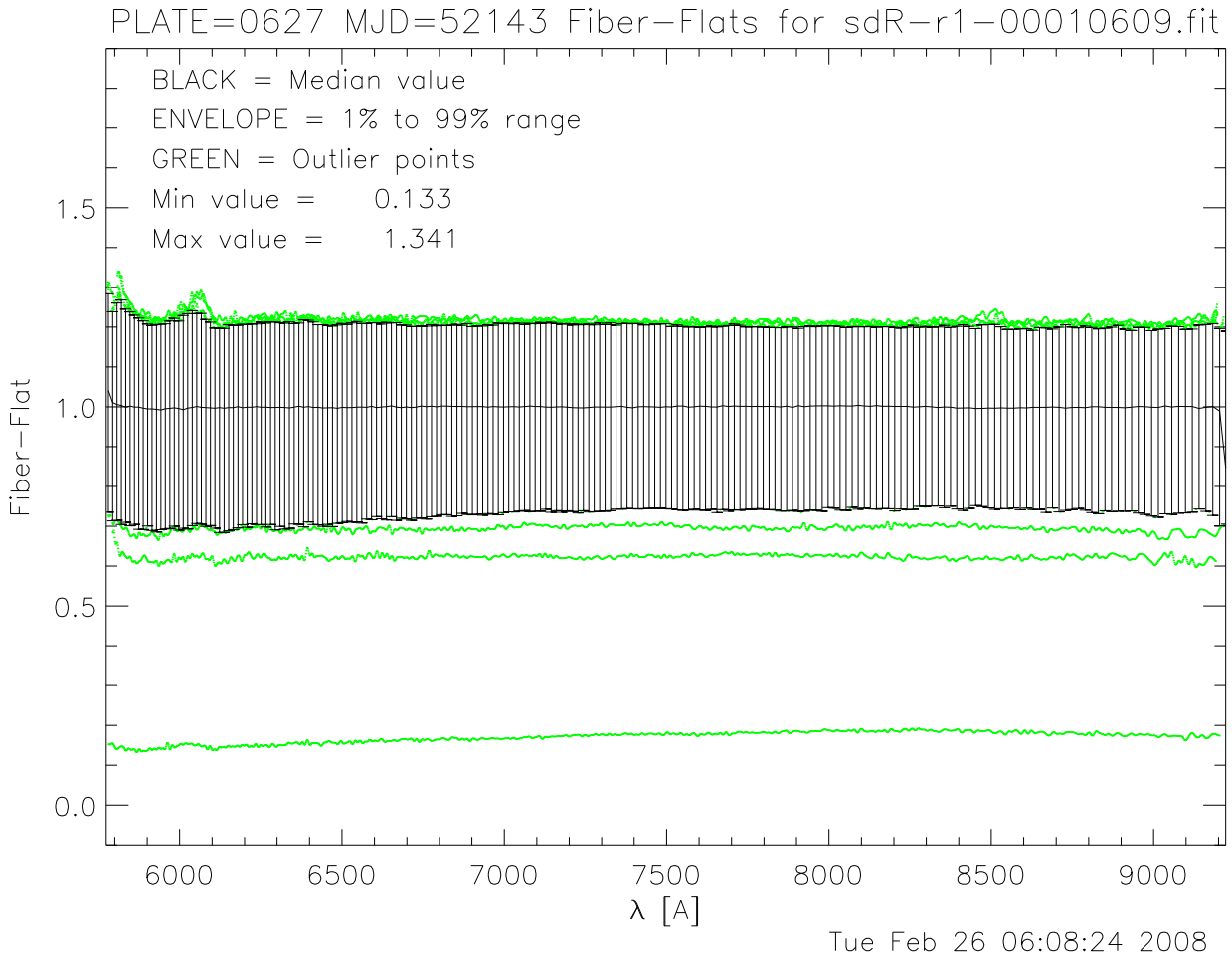

PLATE=0627 MJD=52143 sdR-r1-00010611.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

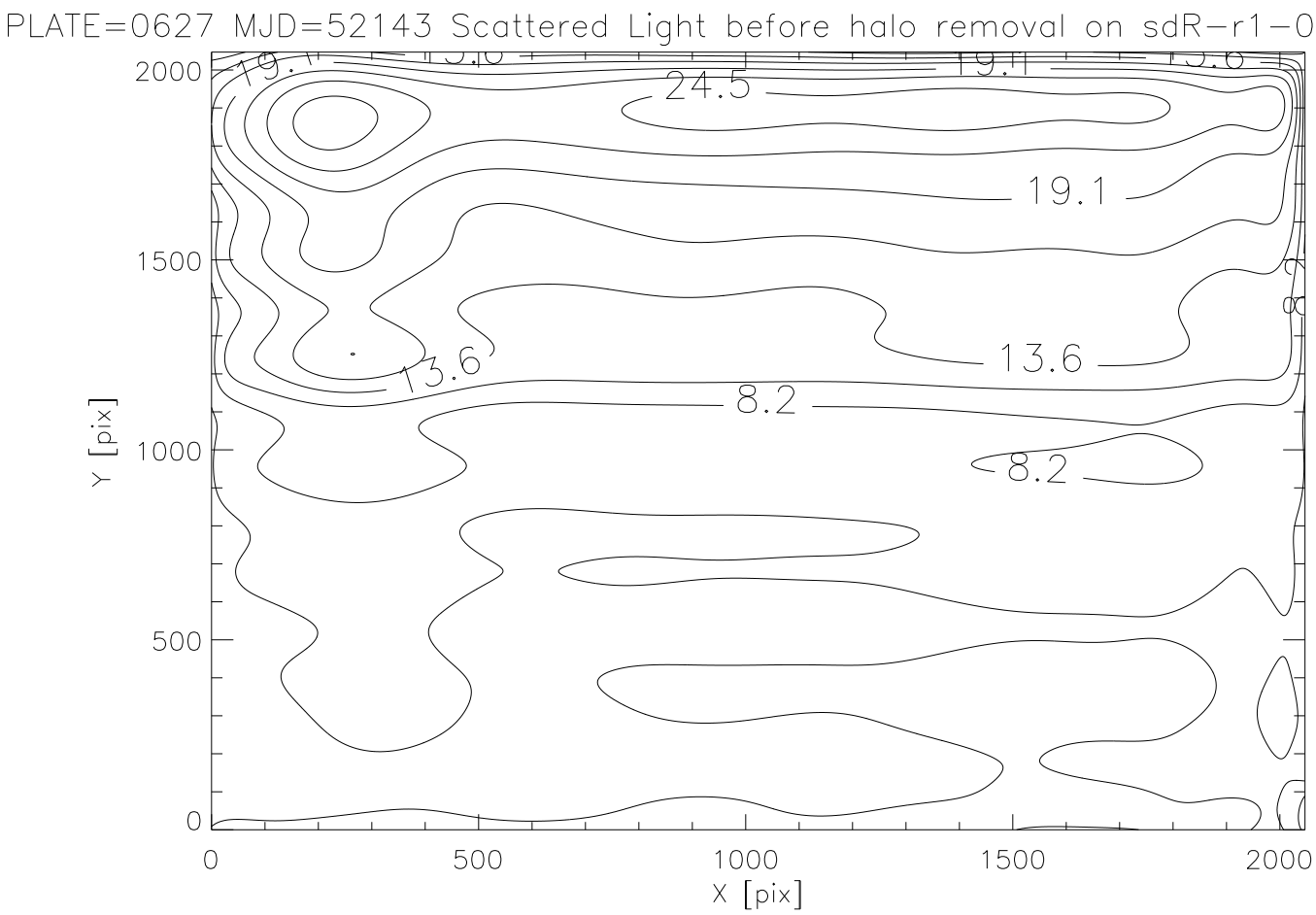

PLATE=0627 MJD=52143 sdR-r1-00010611.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

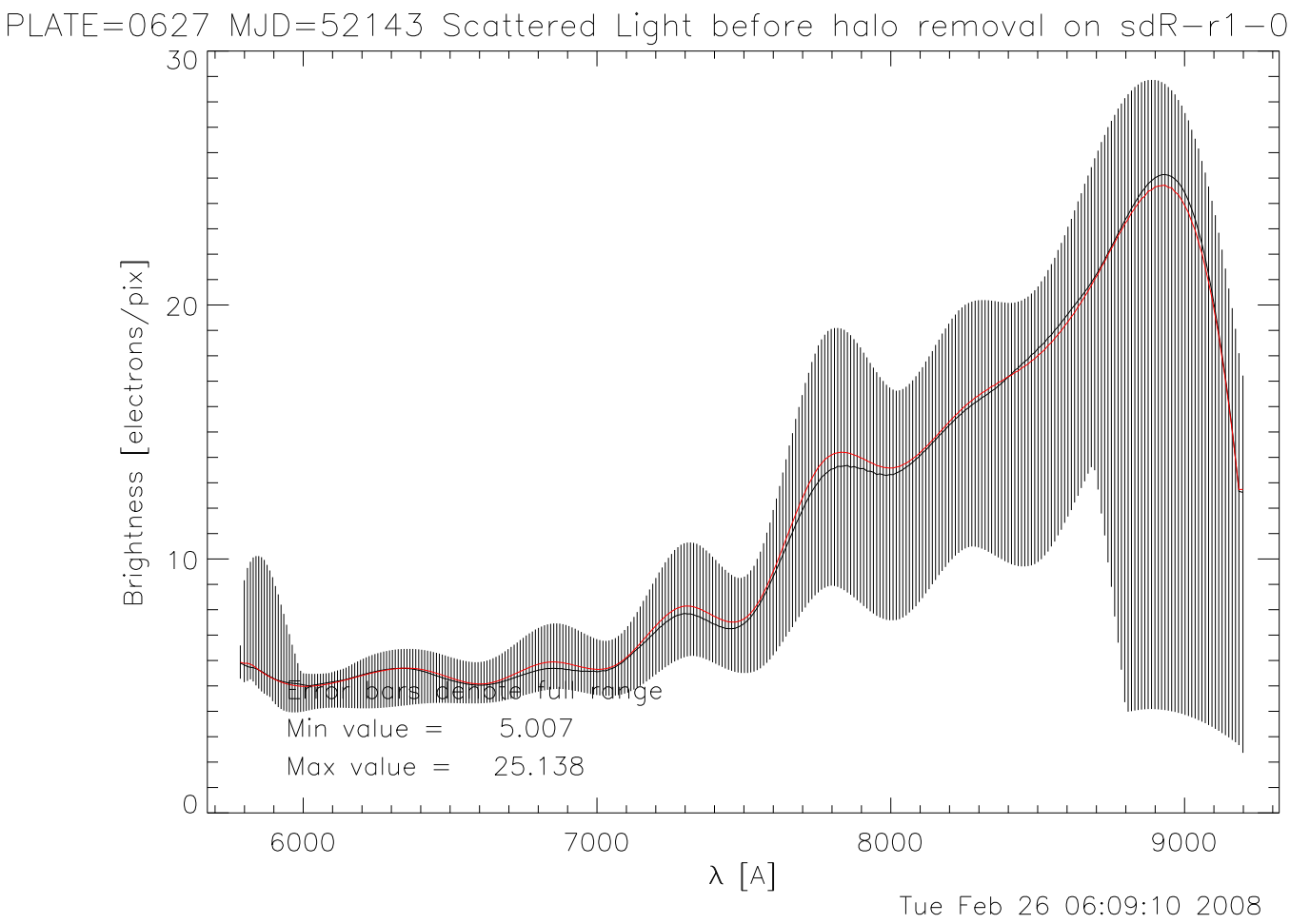

Number of sky fibers = 15
PLATE=0627 MJD=52143 sdR-r1-00010611.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

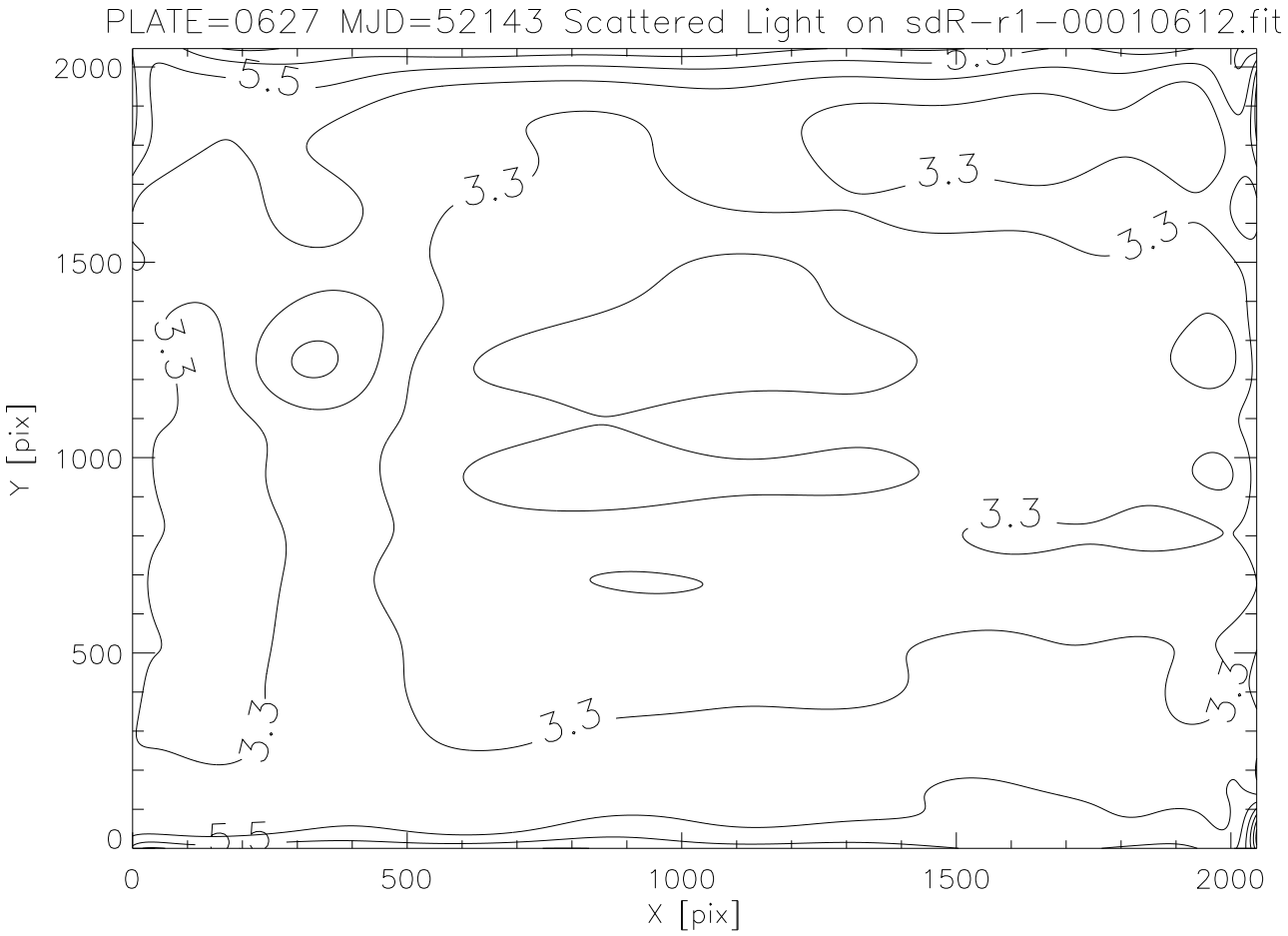

PLATE=0627 MJD=52143 sdR-r1-00010611.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.38 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

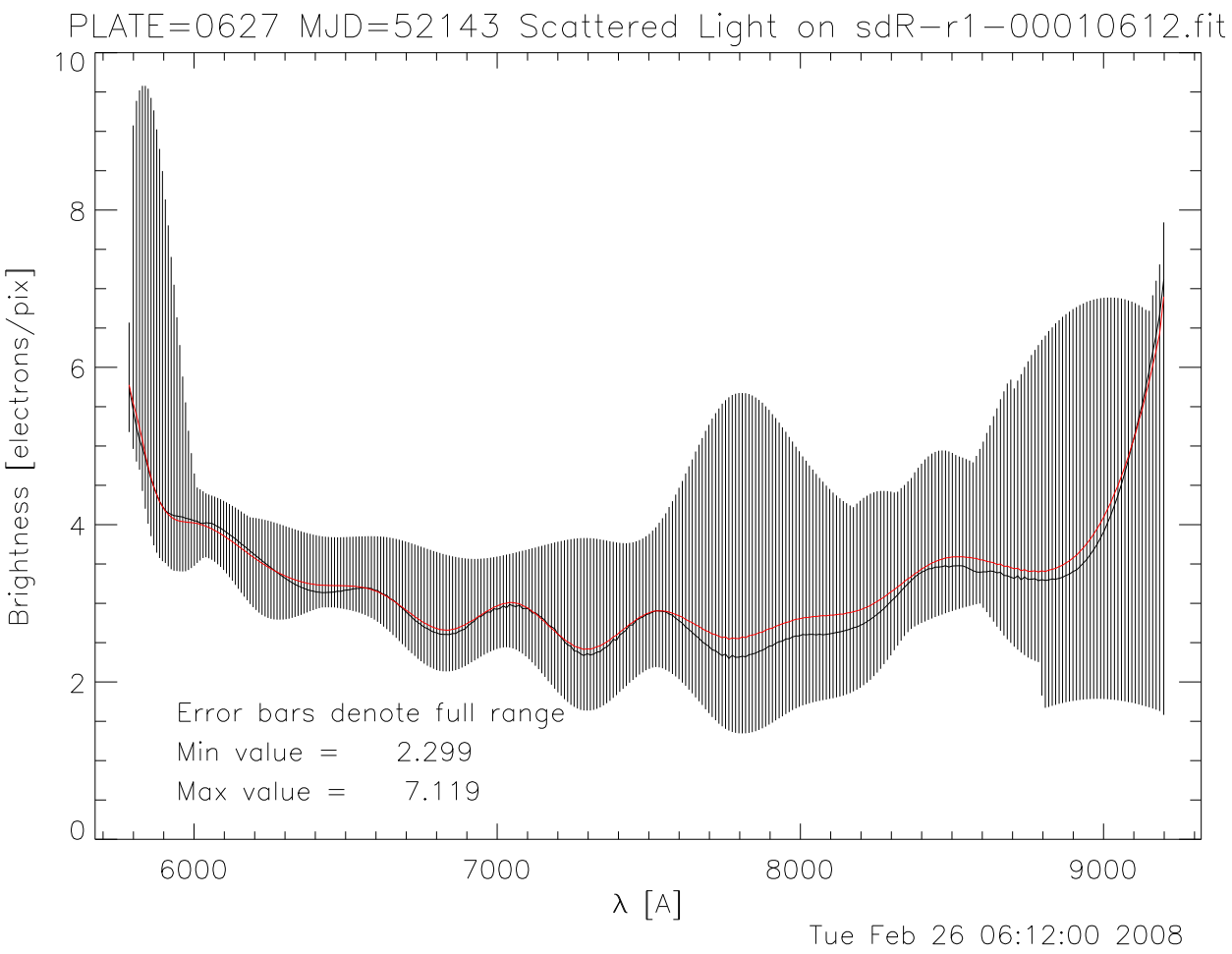

PLATE=0627 MJD=52143 sdR-r1-00010611.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.10 %
Fiber number
Focal Distance [mm]
Airmass

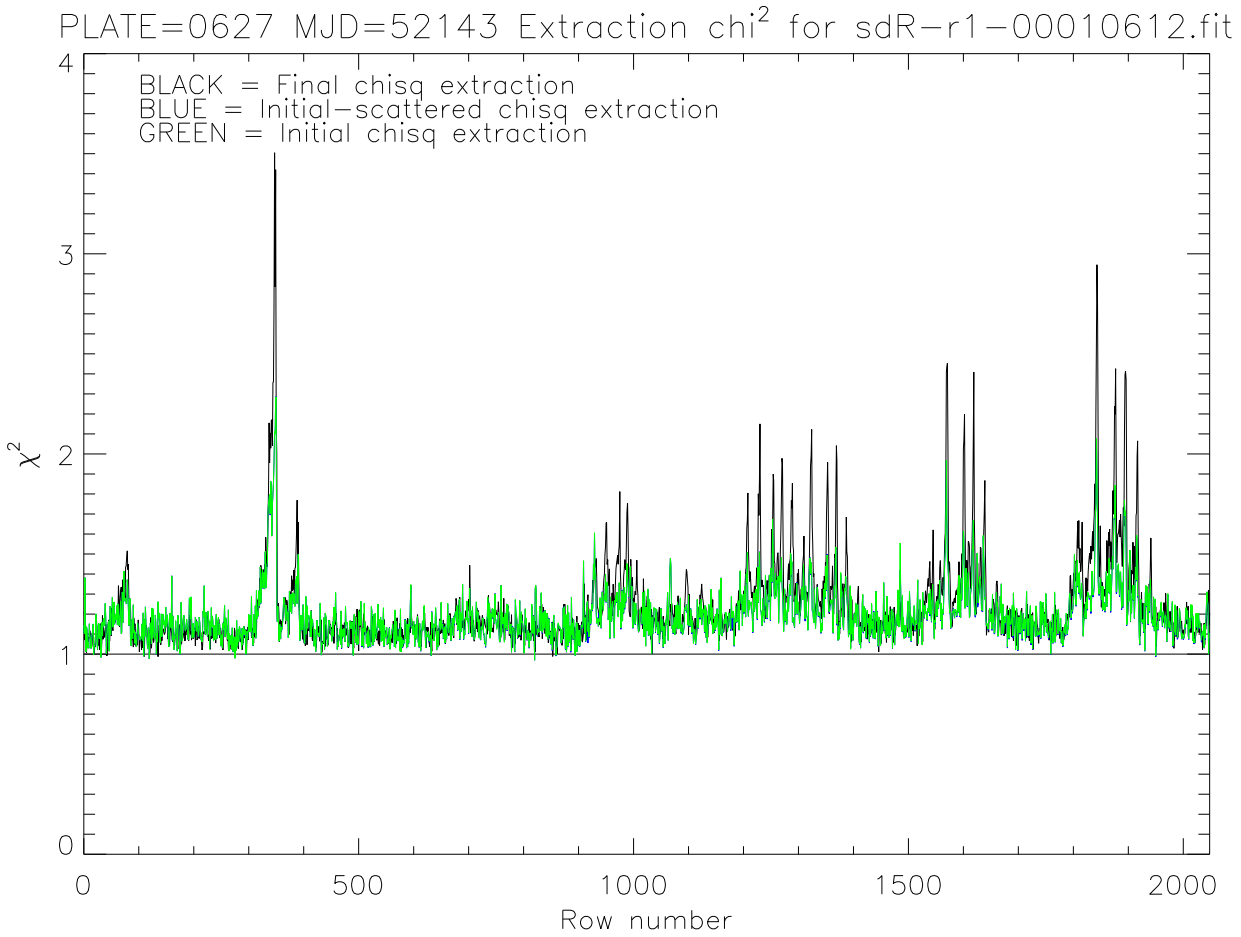

PLATE=0627 MJD=52143 Fiber−Flats for sdR−r1−00010609.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.133
Max value = 1.341
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 06:08:24 2008

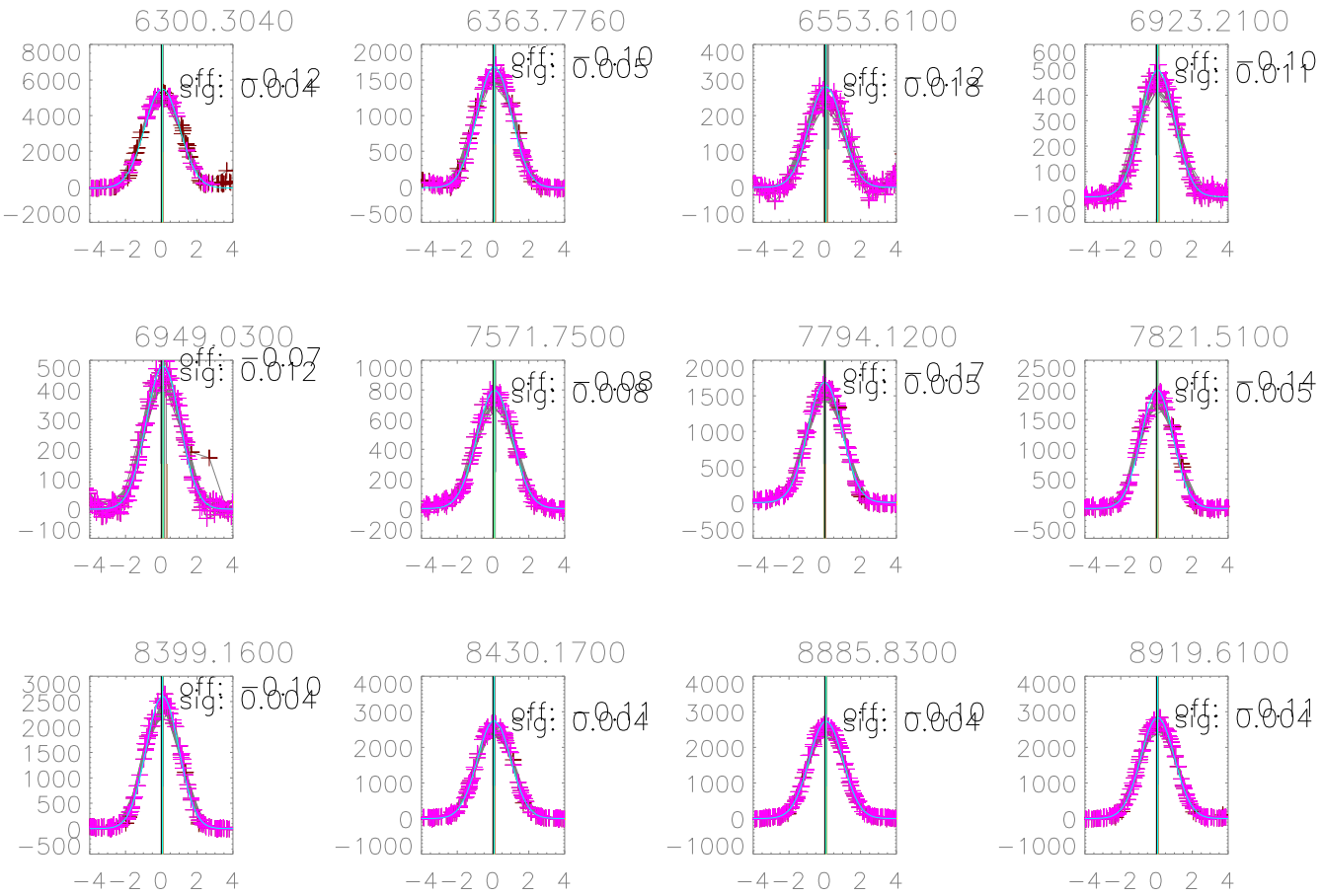

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-r1-00010612.fi
24.5
19.1
13.6
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

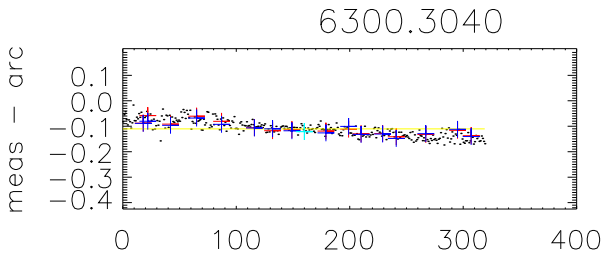

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-r1-00010612.fi
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.007
Max value = 25.138
Tue Feb 26 06:09:10 2008

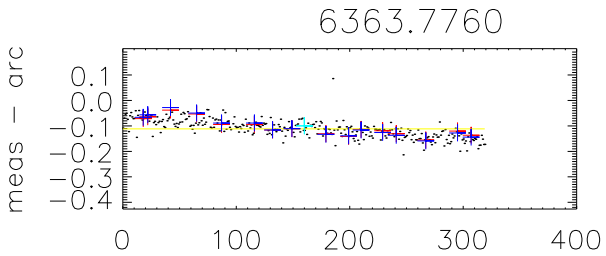

PLATE=0627 MJD=52143 Scattered Light on sdR−r1−00010612.fit
5.5
3.3
3.3
3.3
3.3
3.3
3.3
3.3
5.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

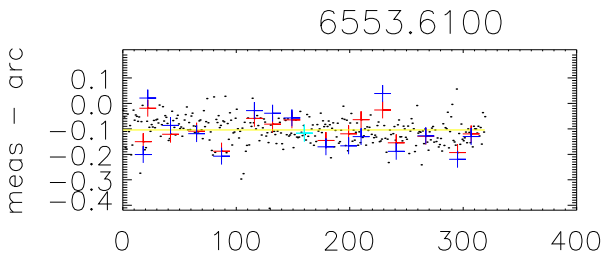

PLATE=0627 MJD=52143 Scattered Light on sdR-r1-00010612.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.299
Max value = 7.119
Tue Feb 26 06:12:00 2008

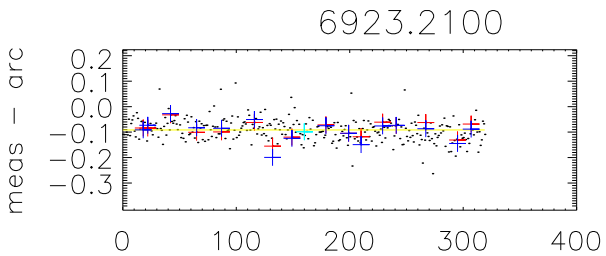

PLATE=0627 MJD=52143 Extraction chi^2 for sdR−r1−00010612.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

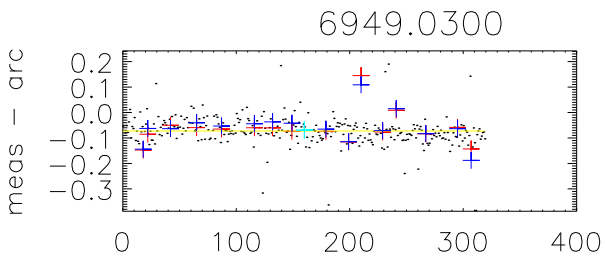

6300.3040
off: −0.12
sig: 0.004
6363.7760
off: −0.10
sig: 0.005
6553.6100
off: −0.12
sig: 0.018
6923.2100
off: −0.10
sig: 0.011
6949.0300
off: −0.07
sig: 0.012
7571.7500
off: −0.08
sig: 0.008
7794.1200
off: −0.17
sig: 0.005
7821.5100
off: −0.14
sig: 0.005
8399.1600
off: −0.10
sig: 0.004
8430.1700
off: −0.11
sig: 0.004
8885.8300
off: −0.10
sig: 0.004
8919.6100
off: −0.11
sig: 0.004

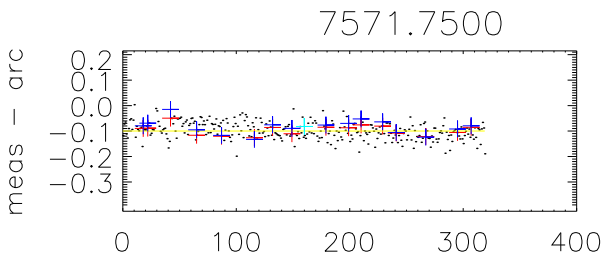

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

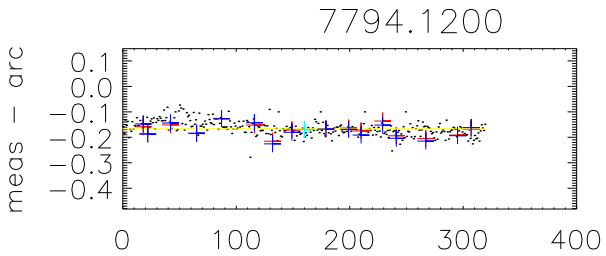

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

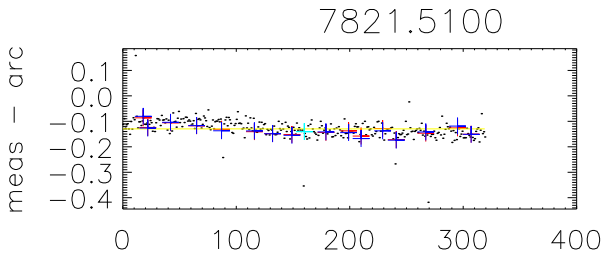

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

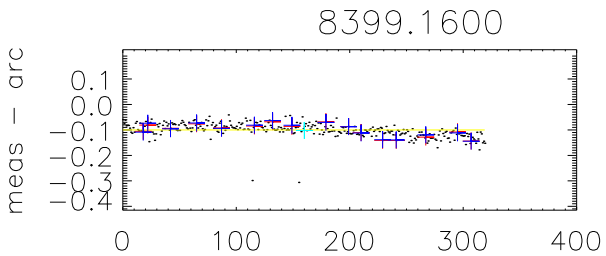

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

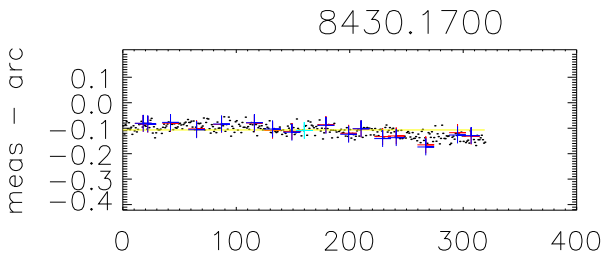

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

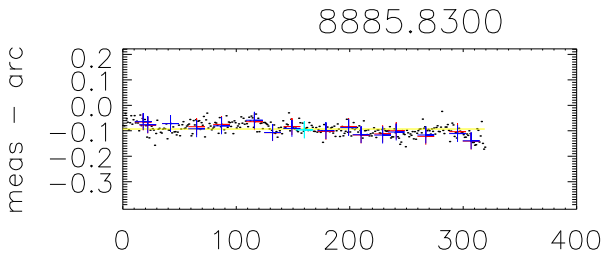

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

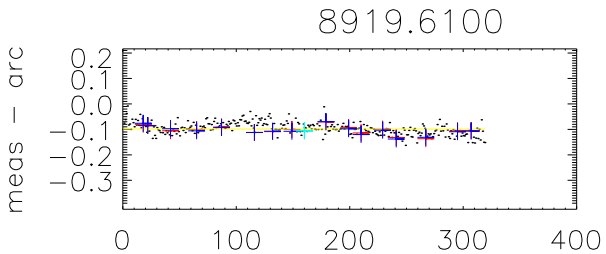

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

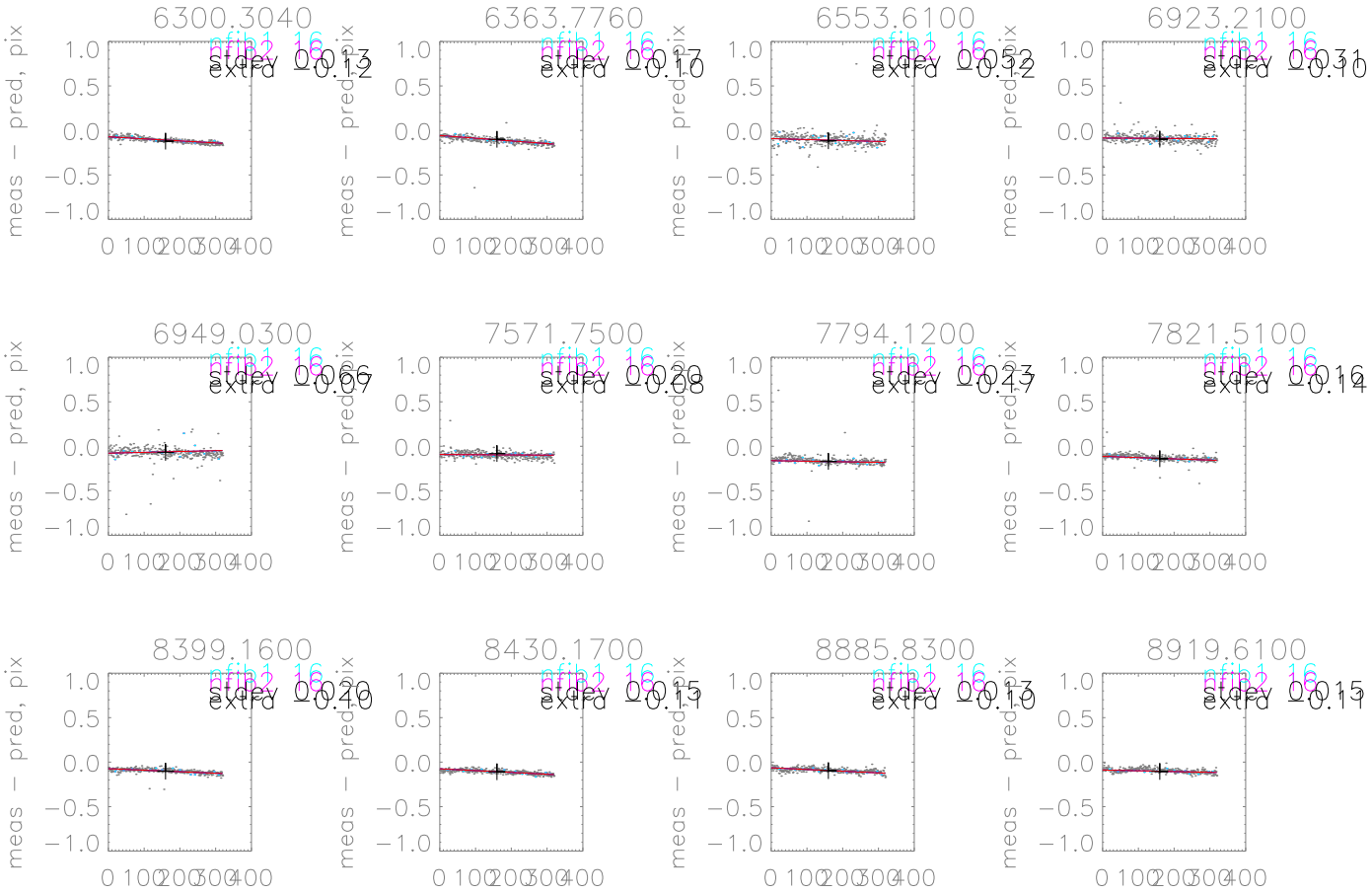

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

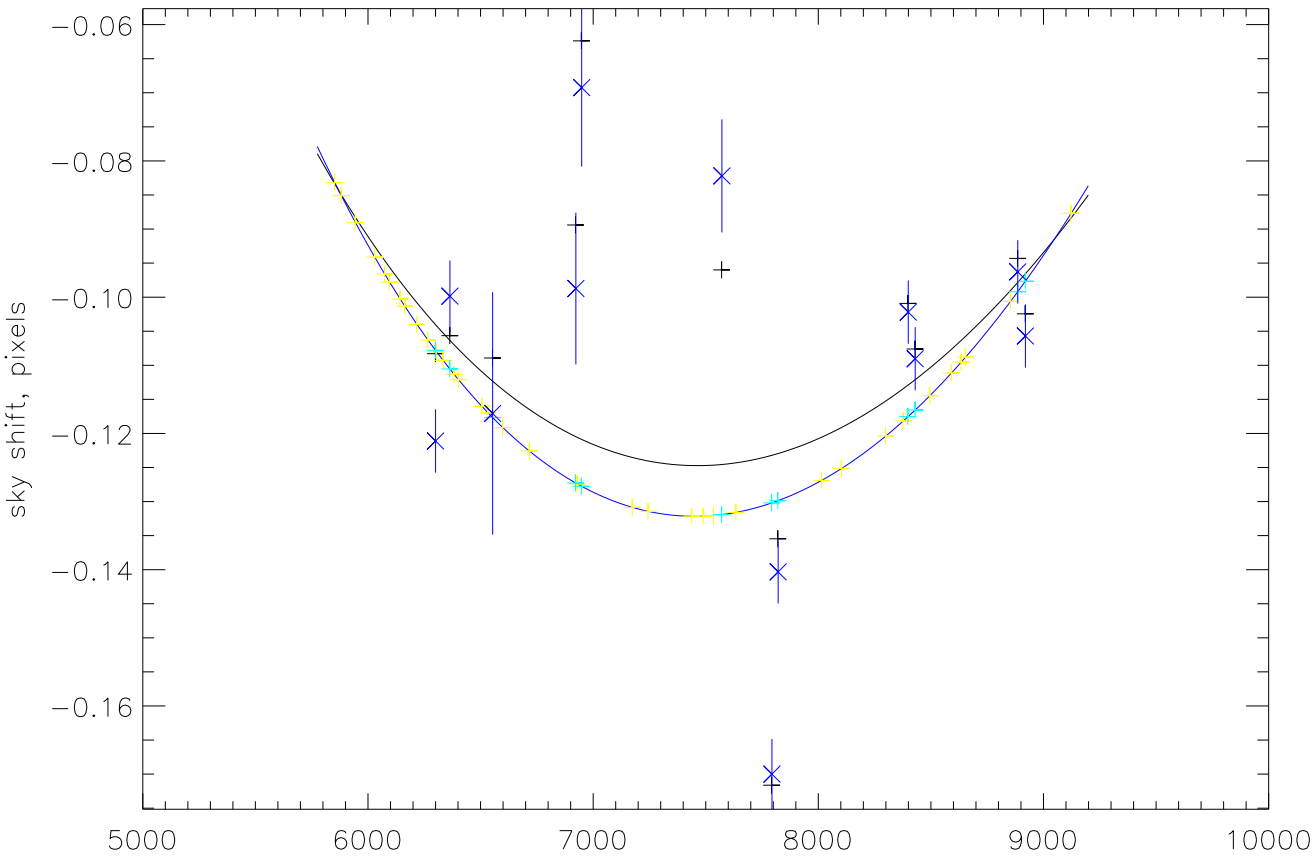

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

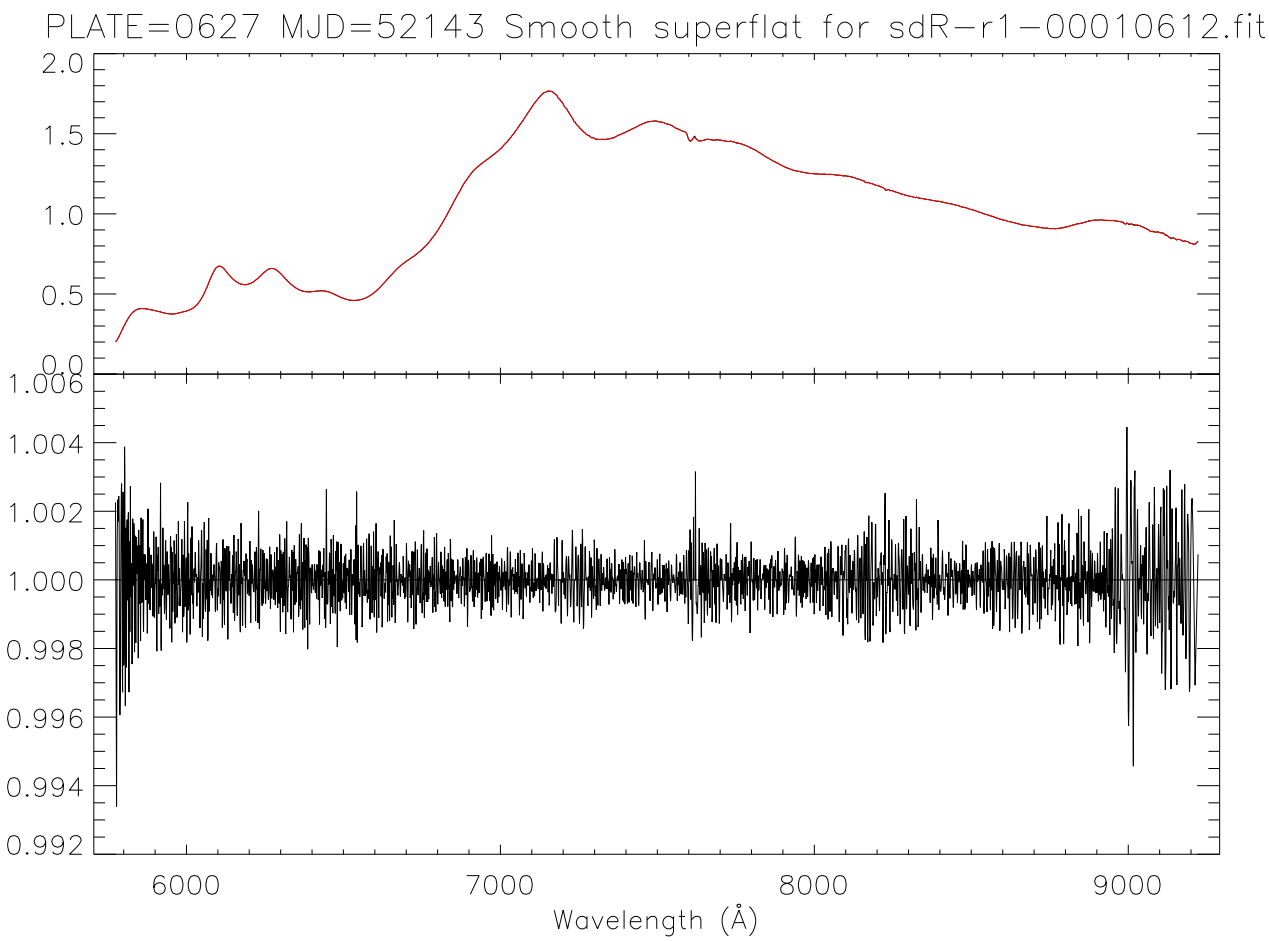

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

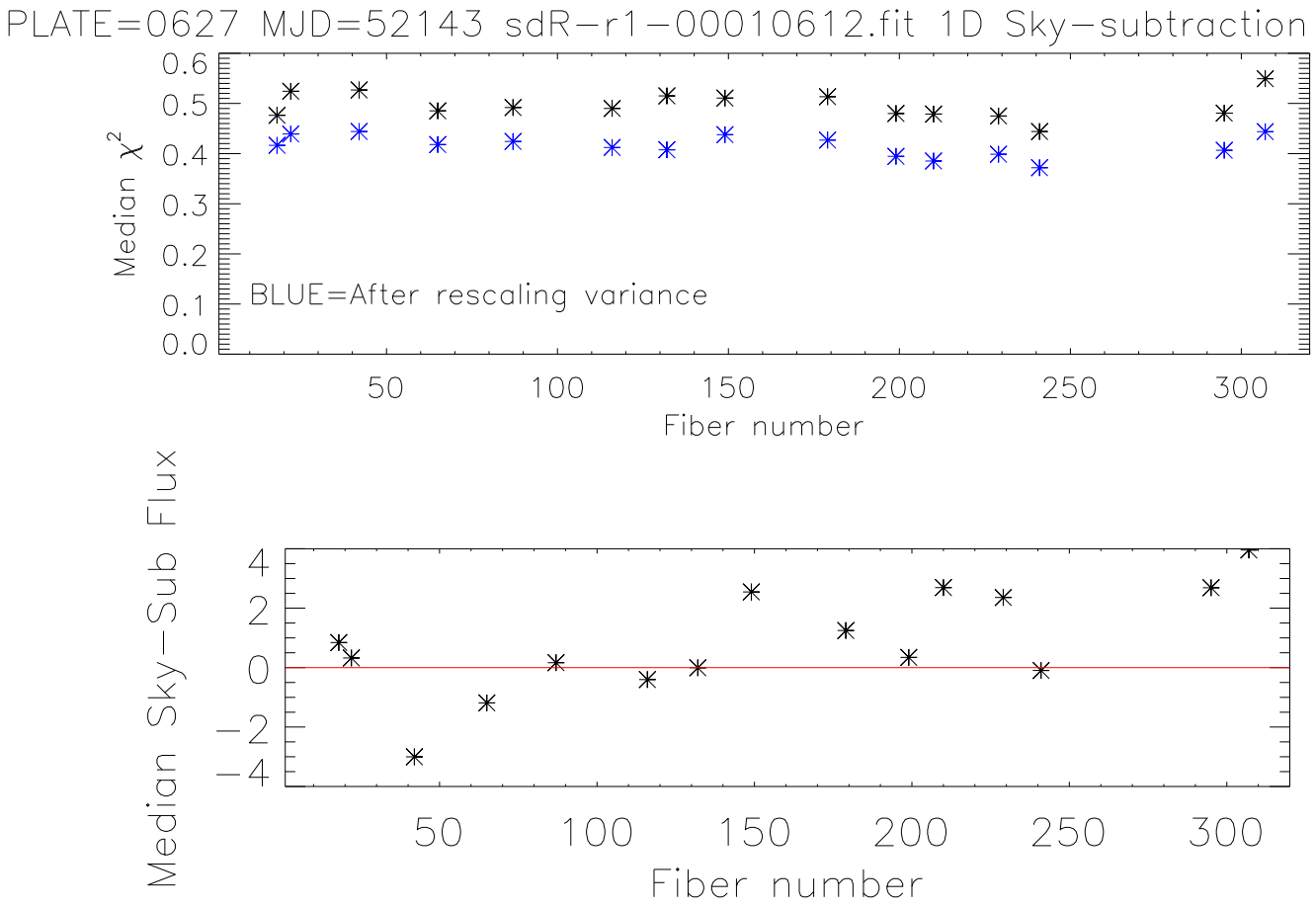

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

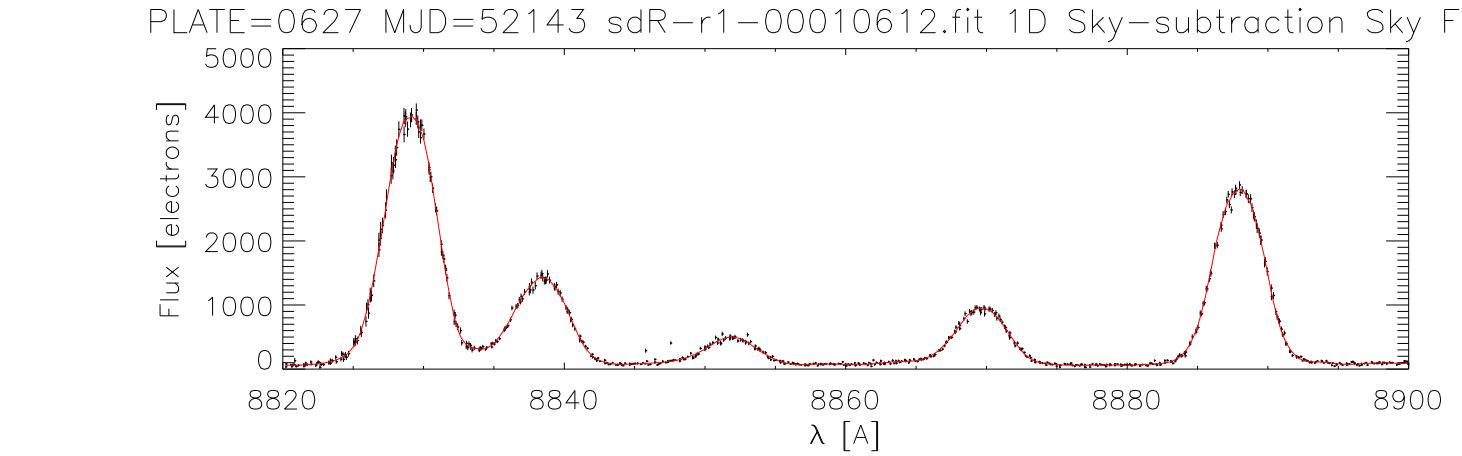

6300.3040
stdev 0.013
extra 0.12
6363.7760
stdev 0.017
extra 0.10
6553.6100
stdev 0.052
extra 0.32
6923.2100
stdev 0.031
extra 0.10
6949.0300
stdev 0.066
extra 0.07
7571.7500
stdev 0.030
extra 0.08
7794.1200
stdev 0.023
extra 0.47
7821.5100
stdev 0.016
extra 0.14
8399.1600
stdev 0.020
extra 0.40
8430.1700
stdev 0.015
extra 0.11
8885.8300
stdev 0.013
extra 0.10
8919.6100
stdev 0.015
extra 0.11
meas − pred, pix
mfib1 16
mfib2 16

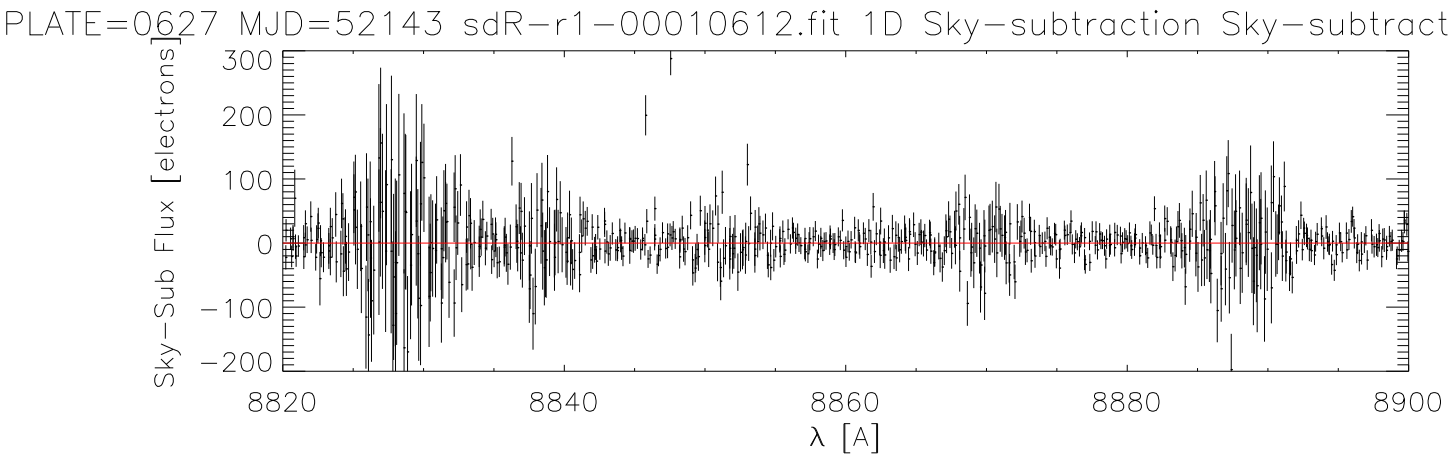

−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
sky shift, pixels
5000
6000
7000
8000
9000
10000

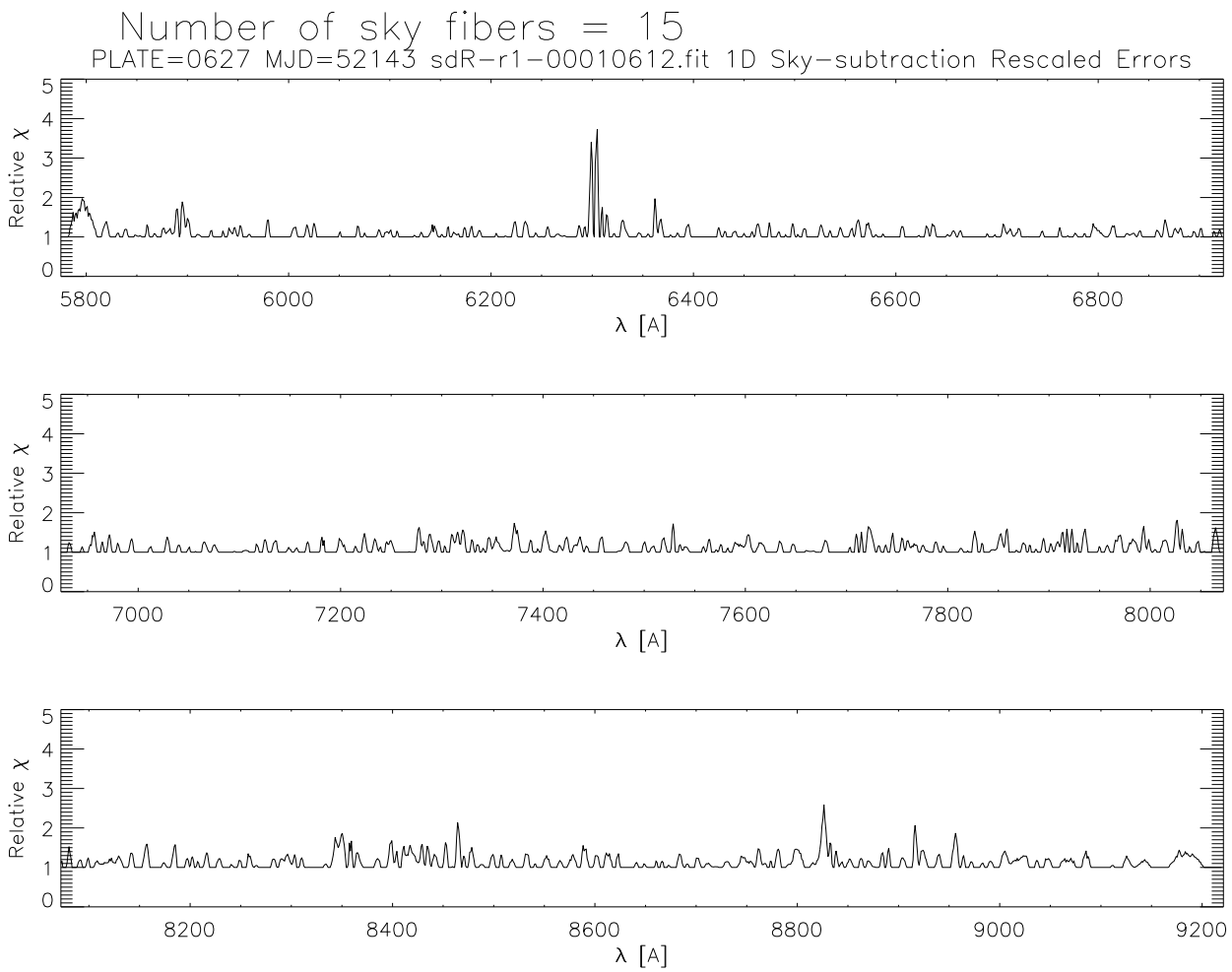
es= −0.0000

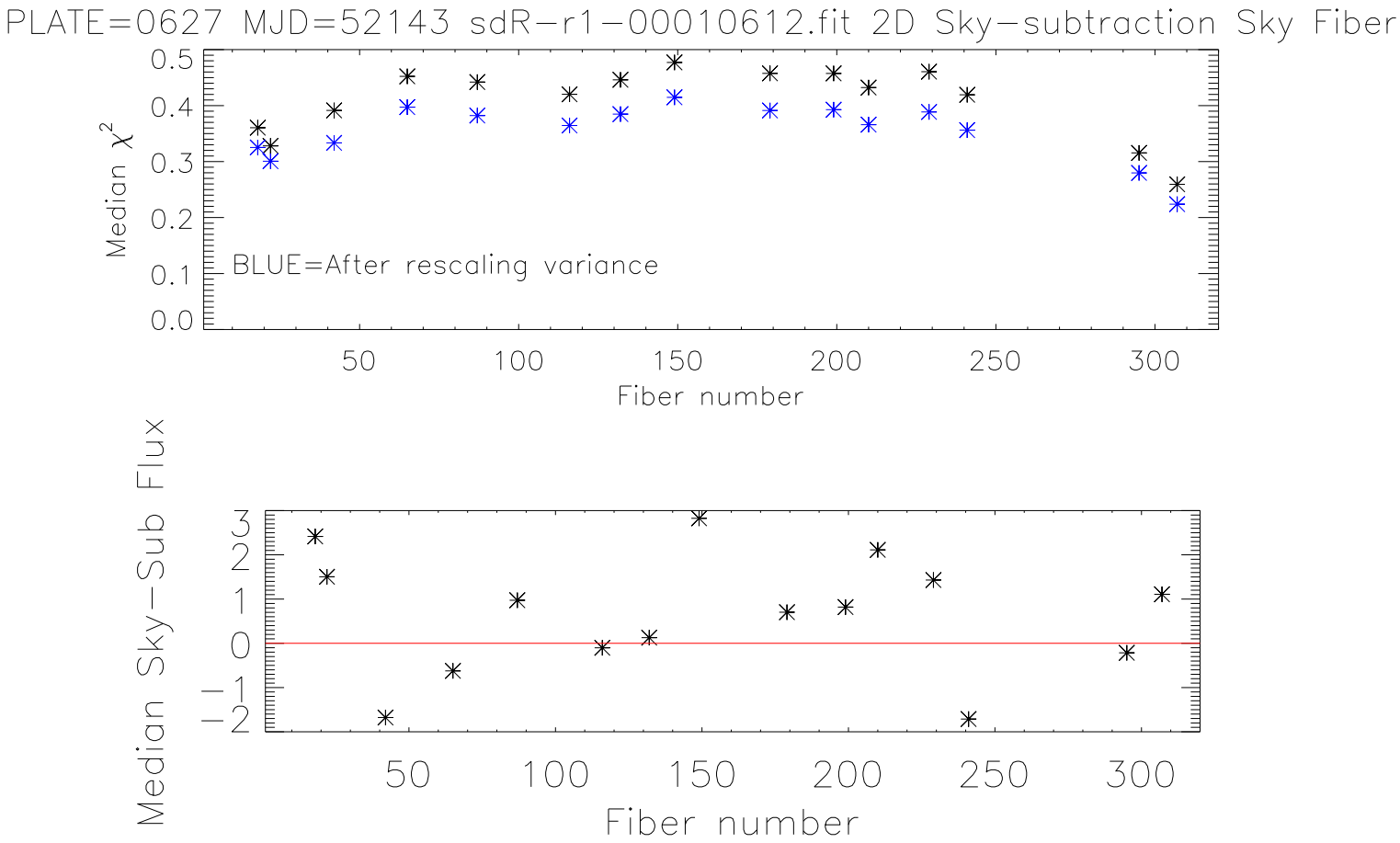

PLATE=0627 MJD=52143 Smooth superflat for sdR−r1−00010612.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

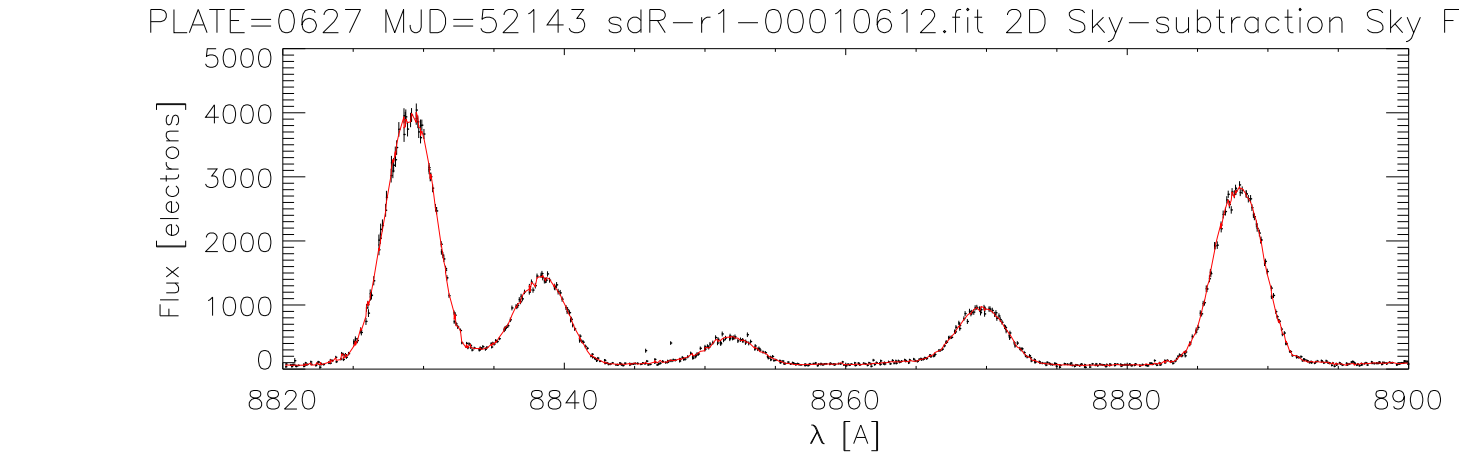

PLATE=0627 MJD=52143 sdR-r1-00010612.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

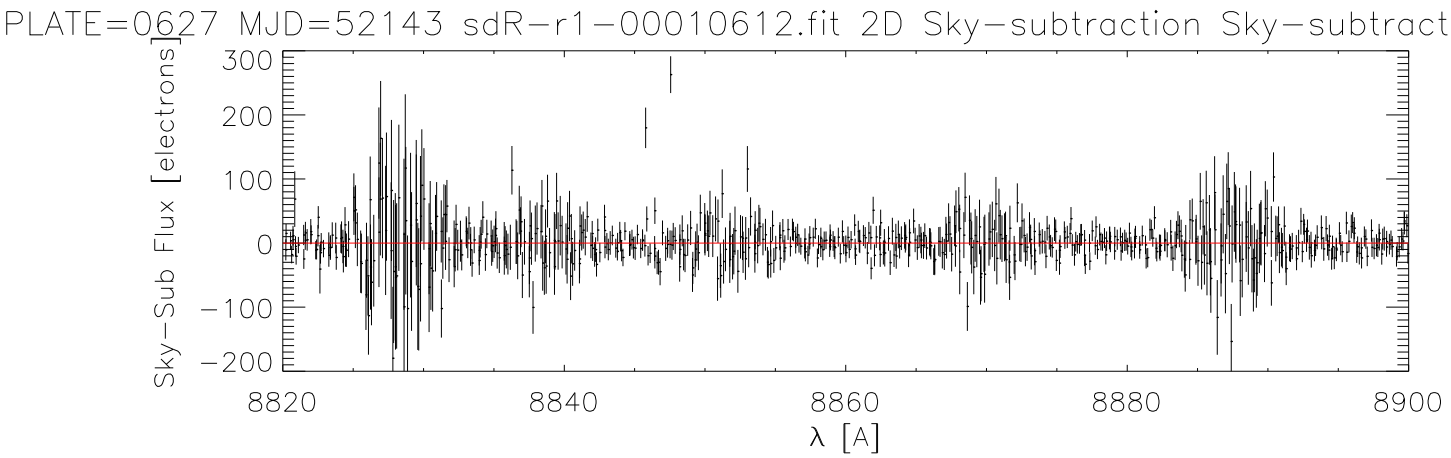

PLATE=0627 MJD=52143 sdR-r1-00010612.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

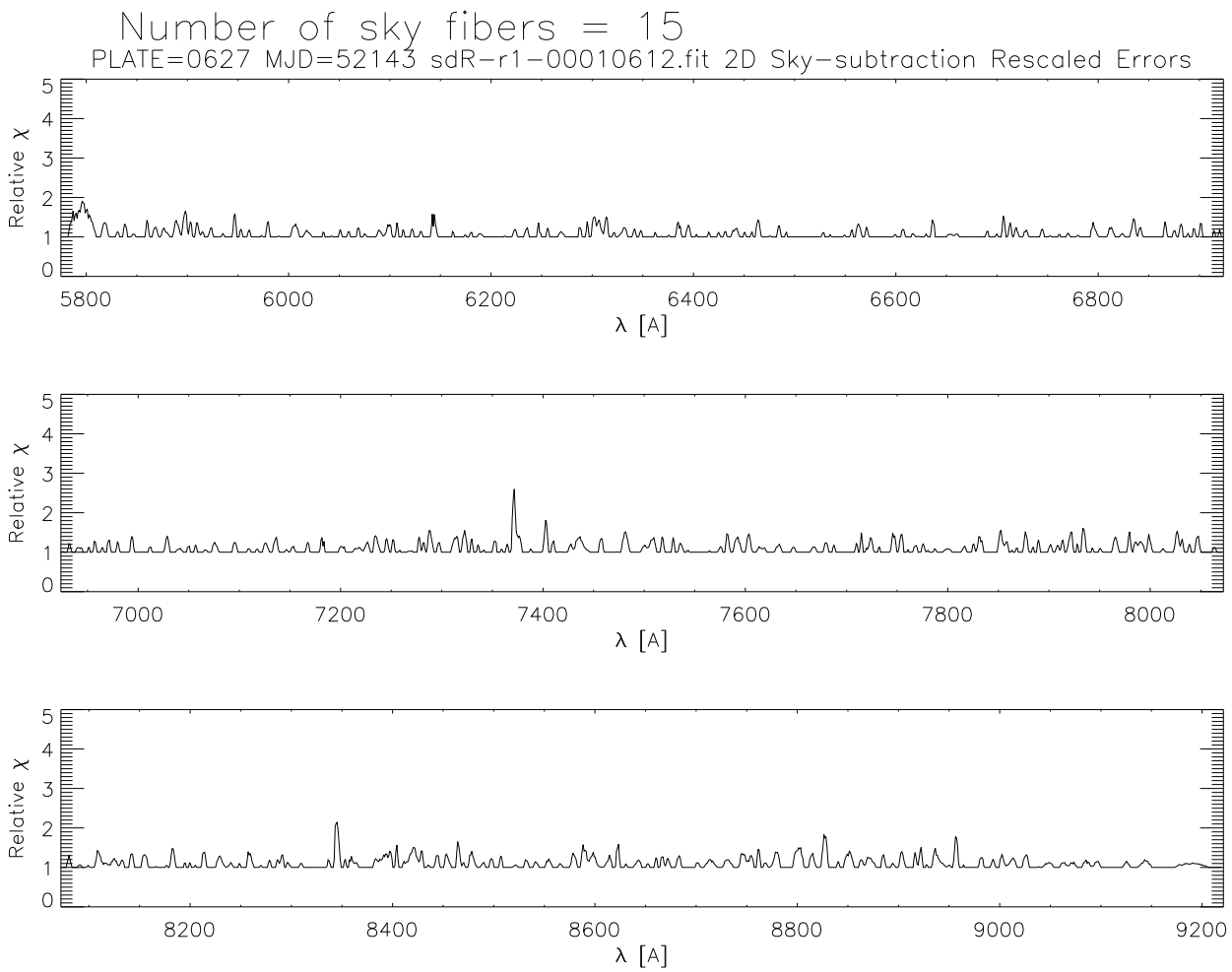

PLATE=0627 MJD=52143 sdR-r1-00010612.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

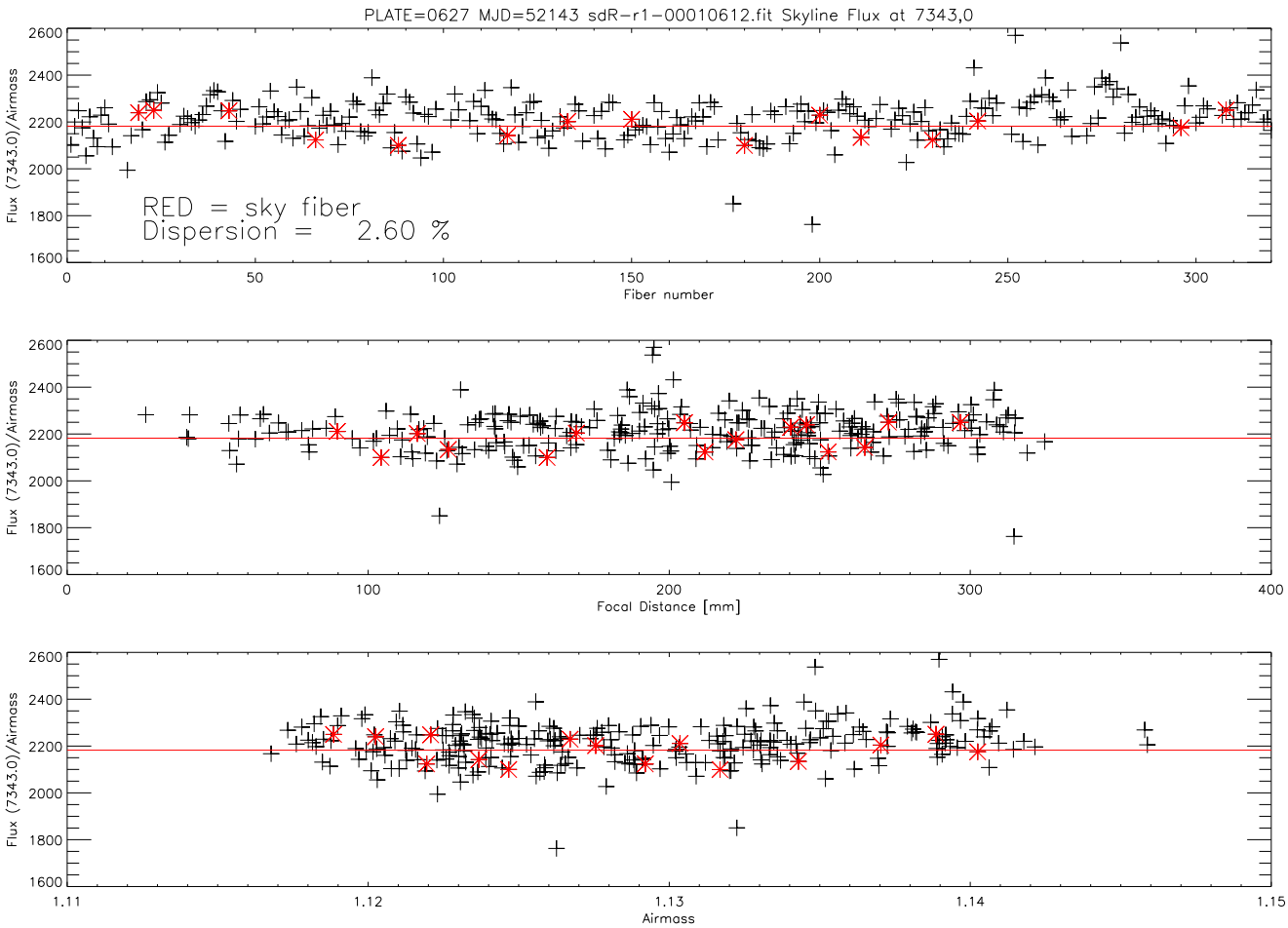

Number of sky fibers = 15
PLATE=0627 MJD=52143 sdR-r1-00010612.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

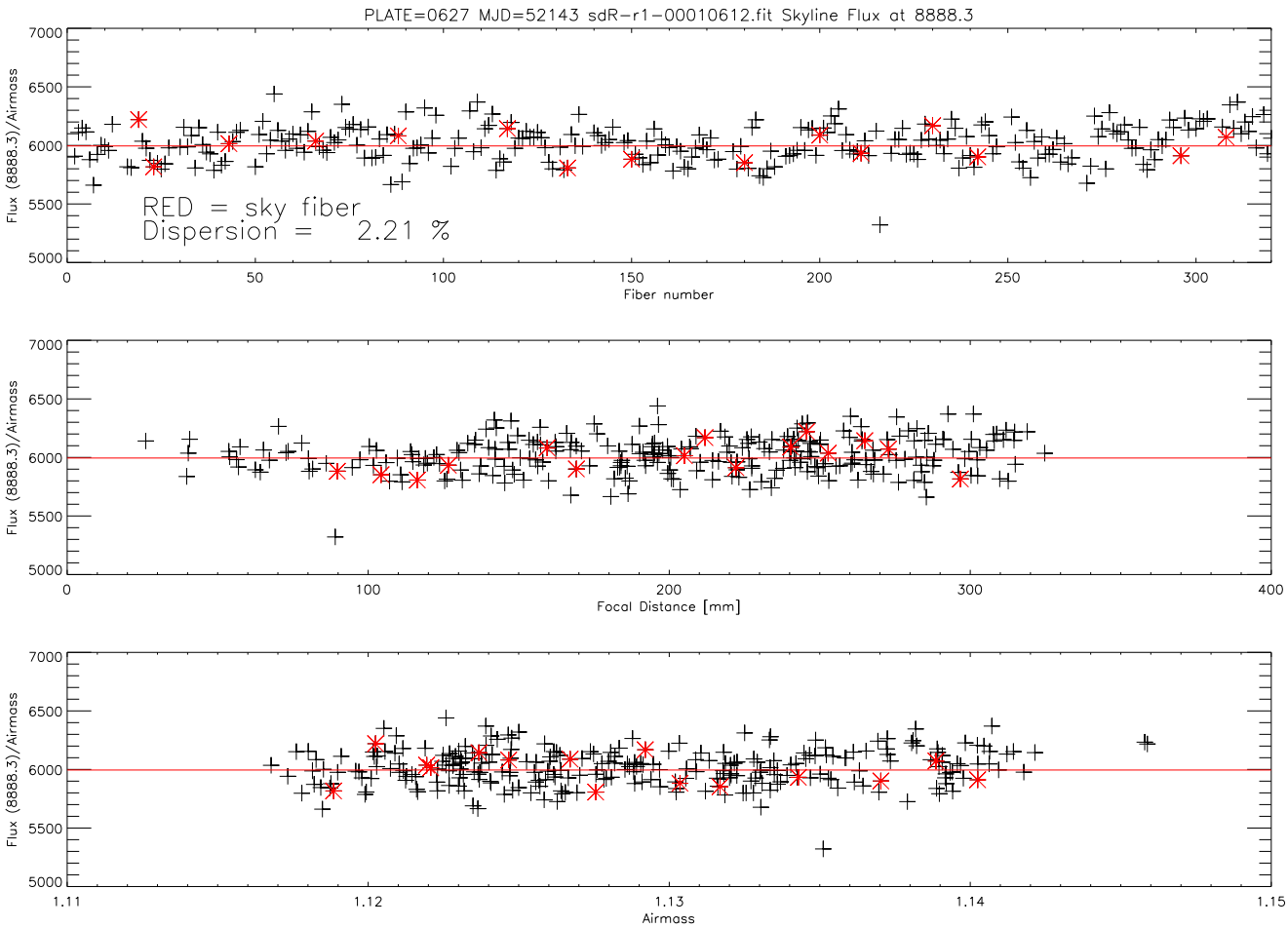

PLATE=0627 MJD=52143 sdR-r1-00010612.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

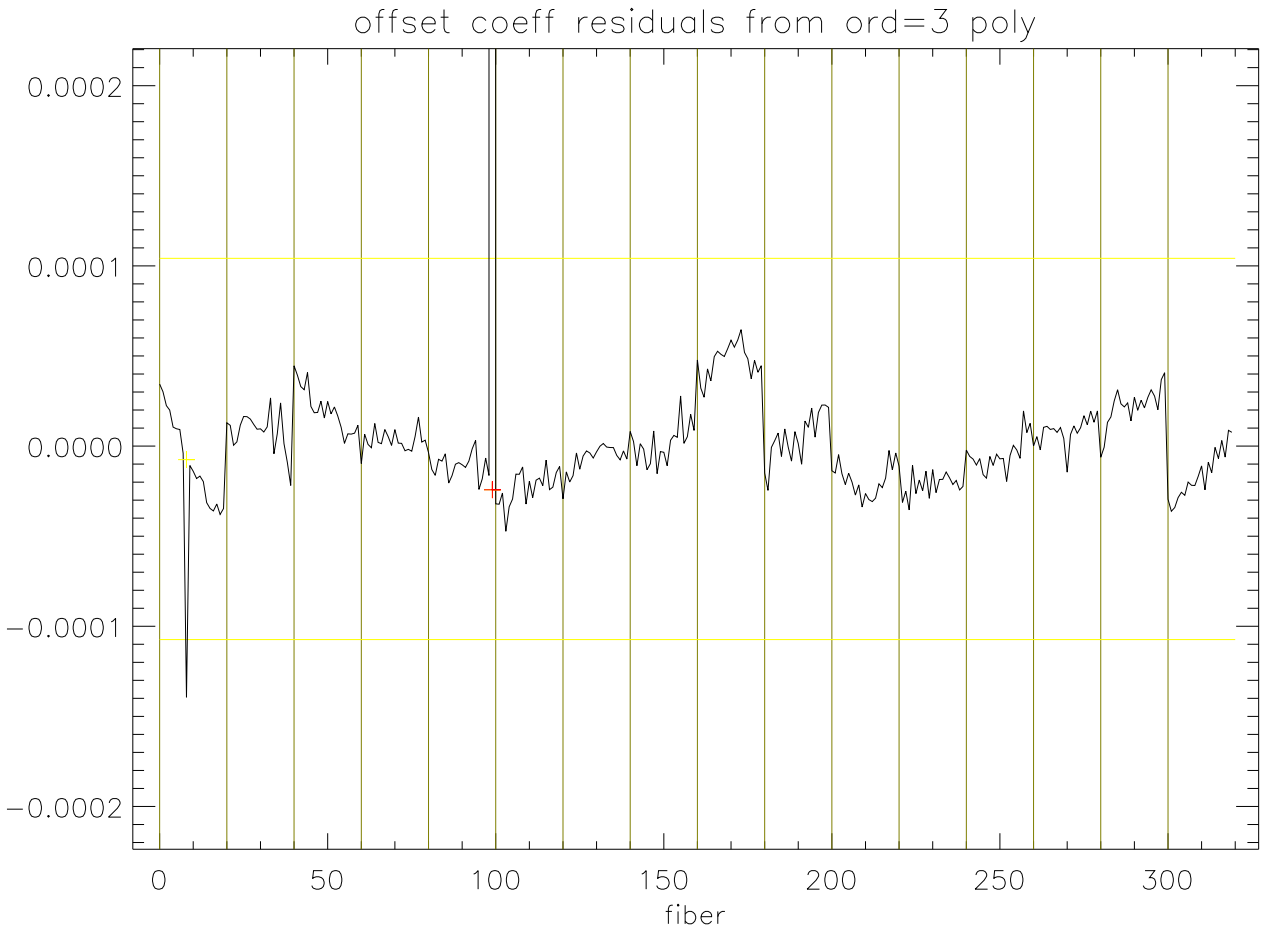

PLATE=0627 MJD=52143 sdR-r1-00010612.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

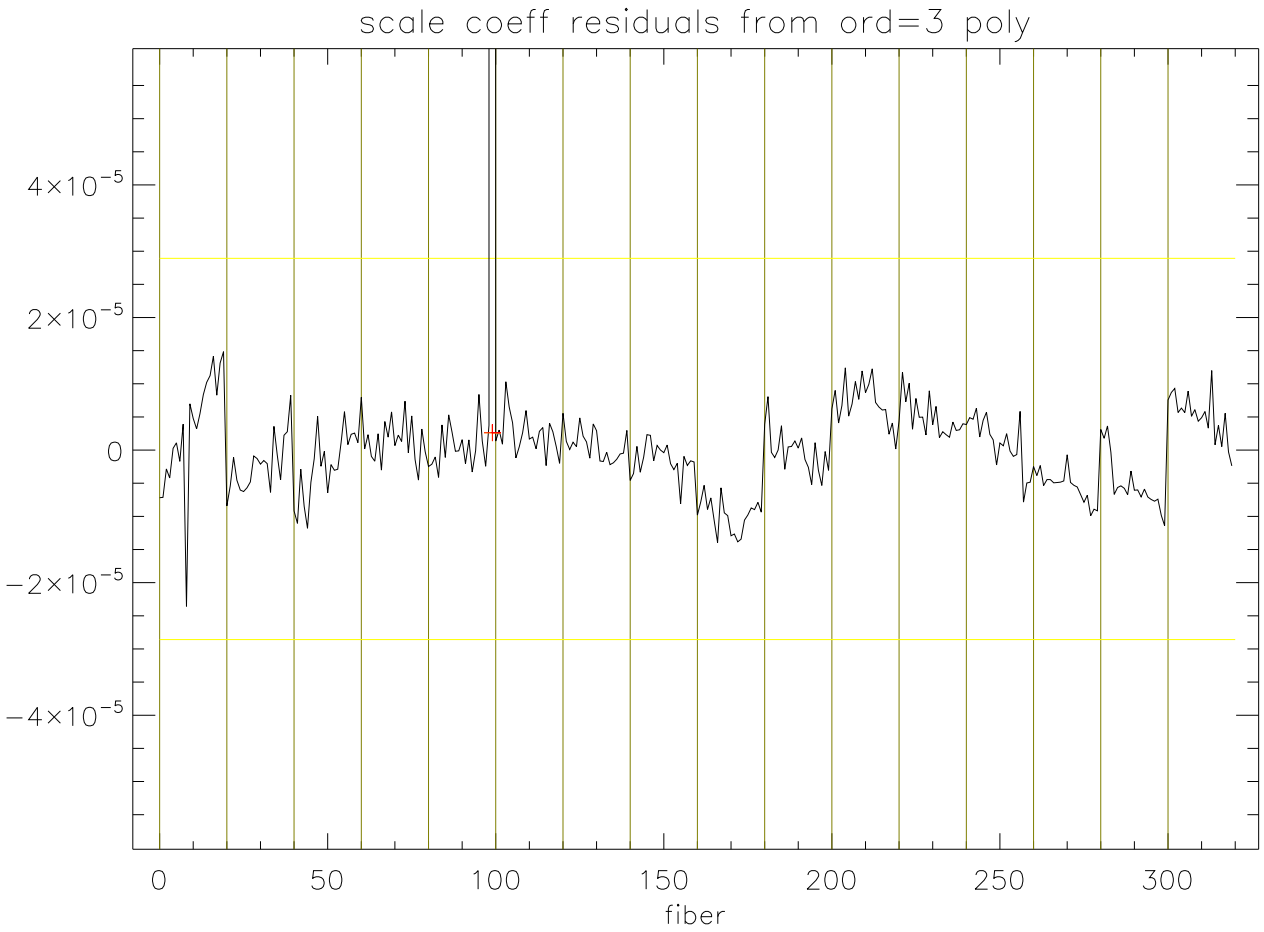

PLATE=0627 MJD=52143 sdR-r1-00010612.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

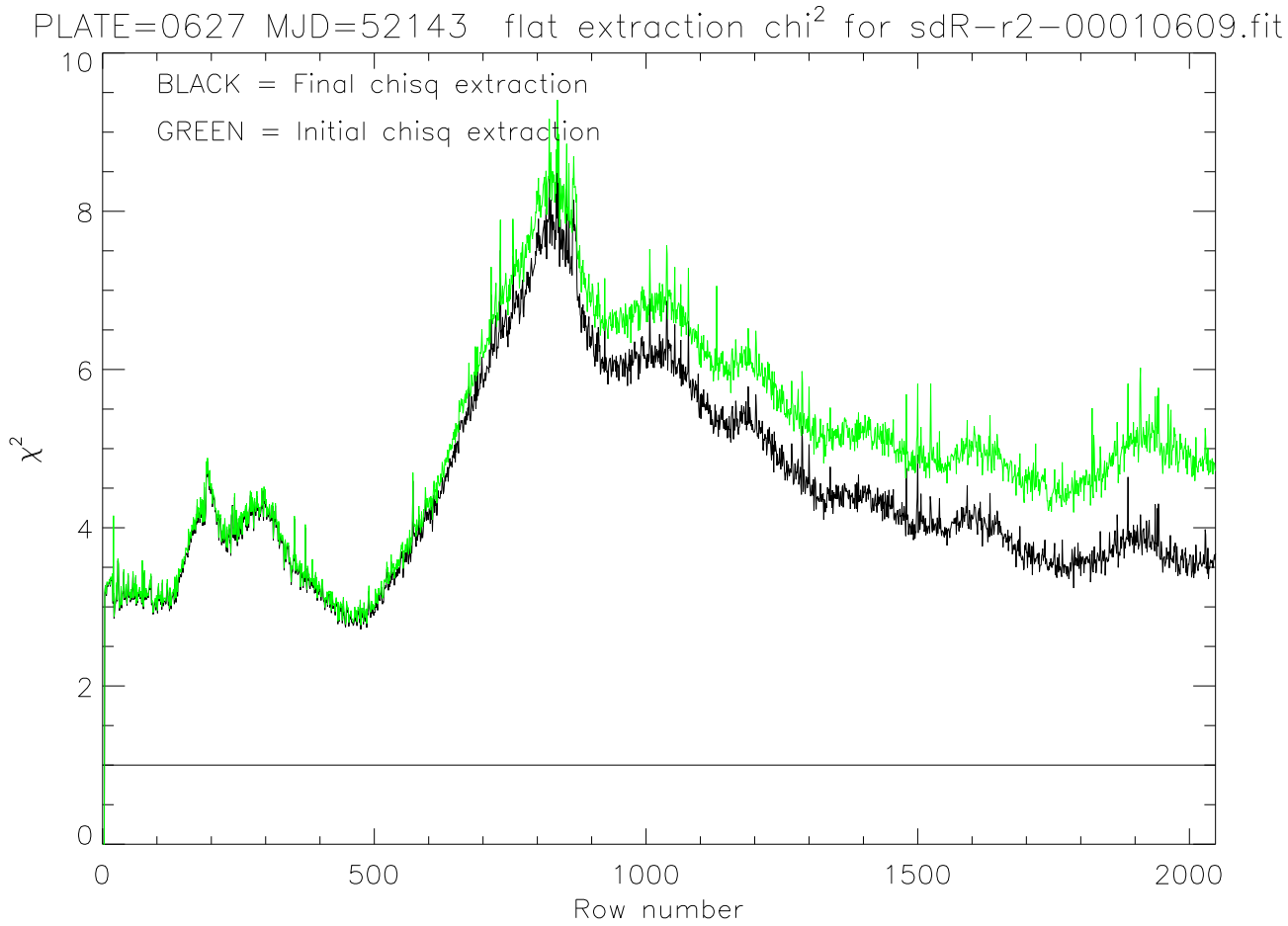

Number of sky fibers = 15
PLATE=0627 MJD=52143 sdR-r1-00010612.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

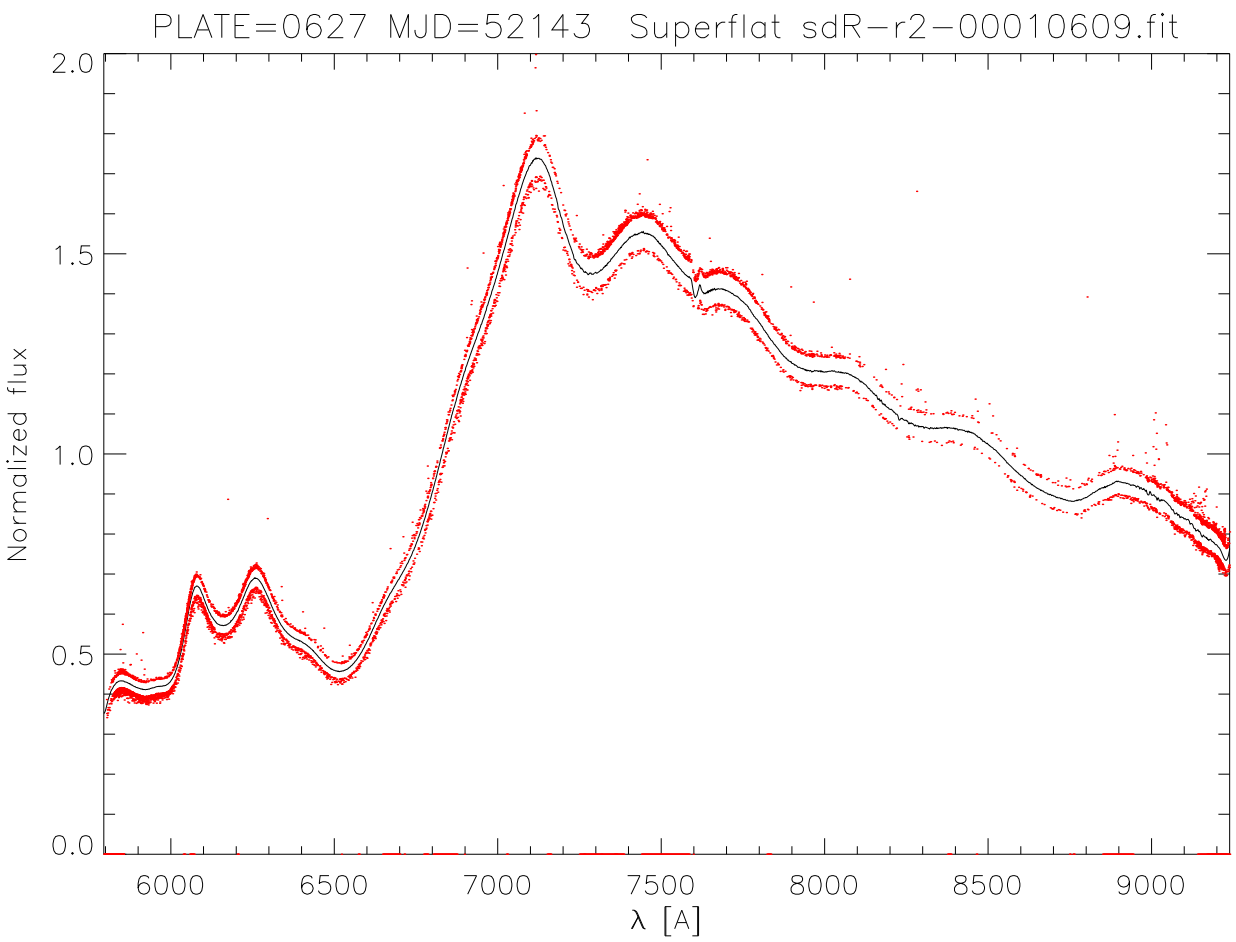

PLATE=0627 MJD=52143 sdR-r1-00010612.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.60 %
Fiber number
Focal Distance [mm]
Airmass

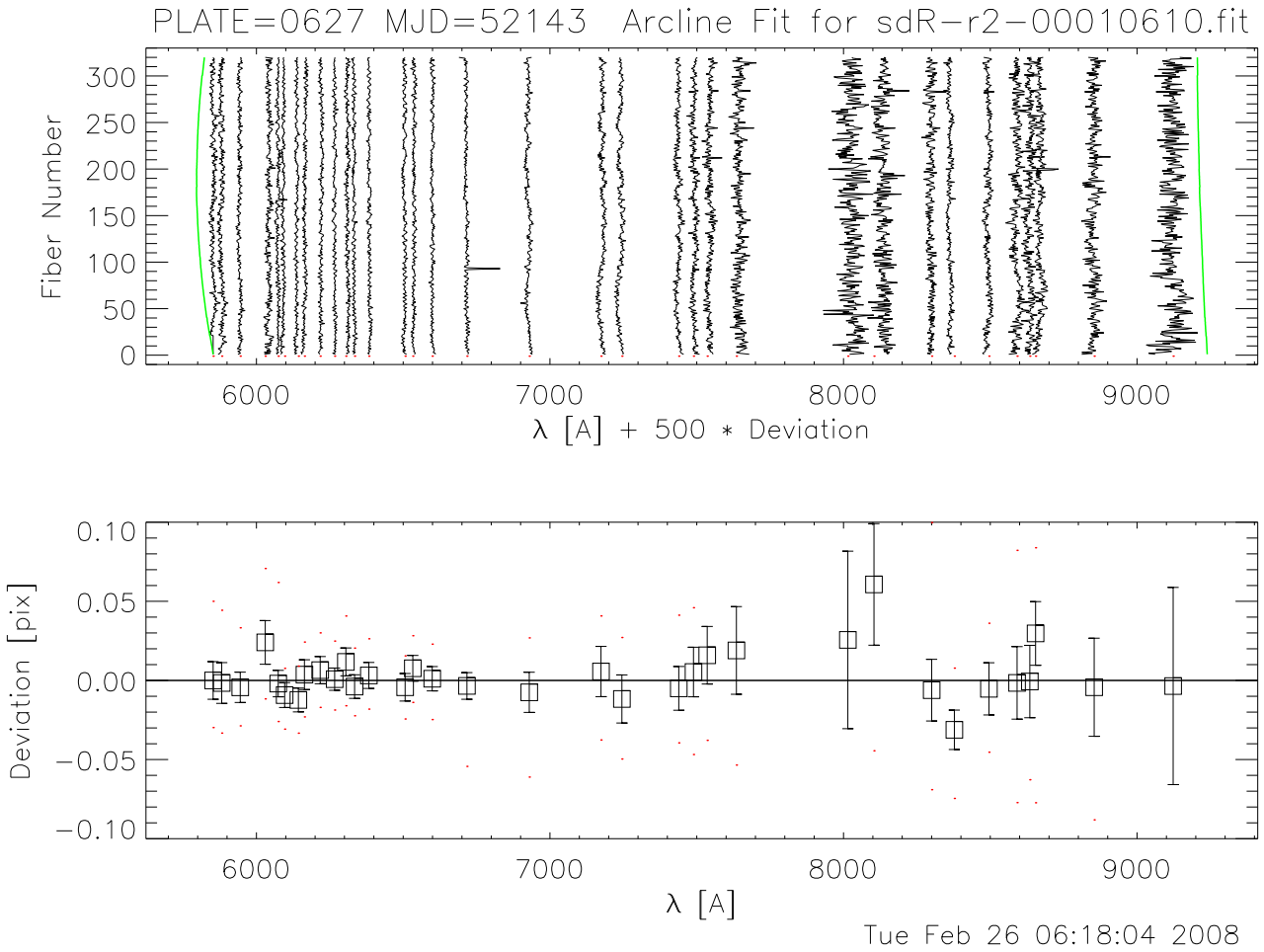

PLATE=0627 MJD=52143 sdR-r1-00010612.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Focal Distance [mm]
Airmass

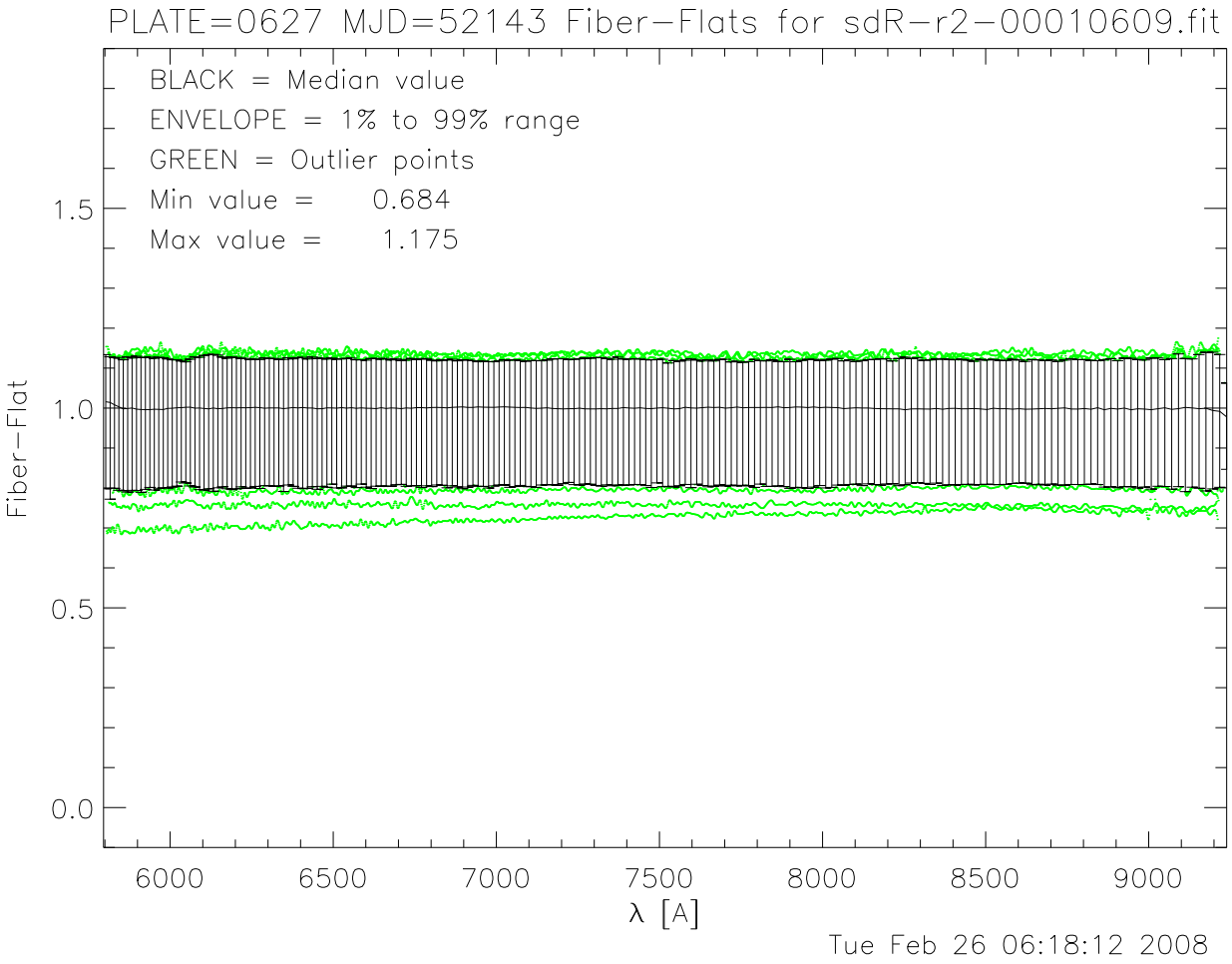

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

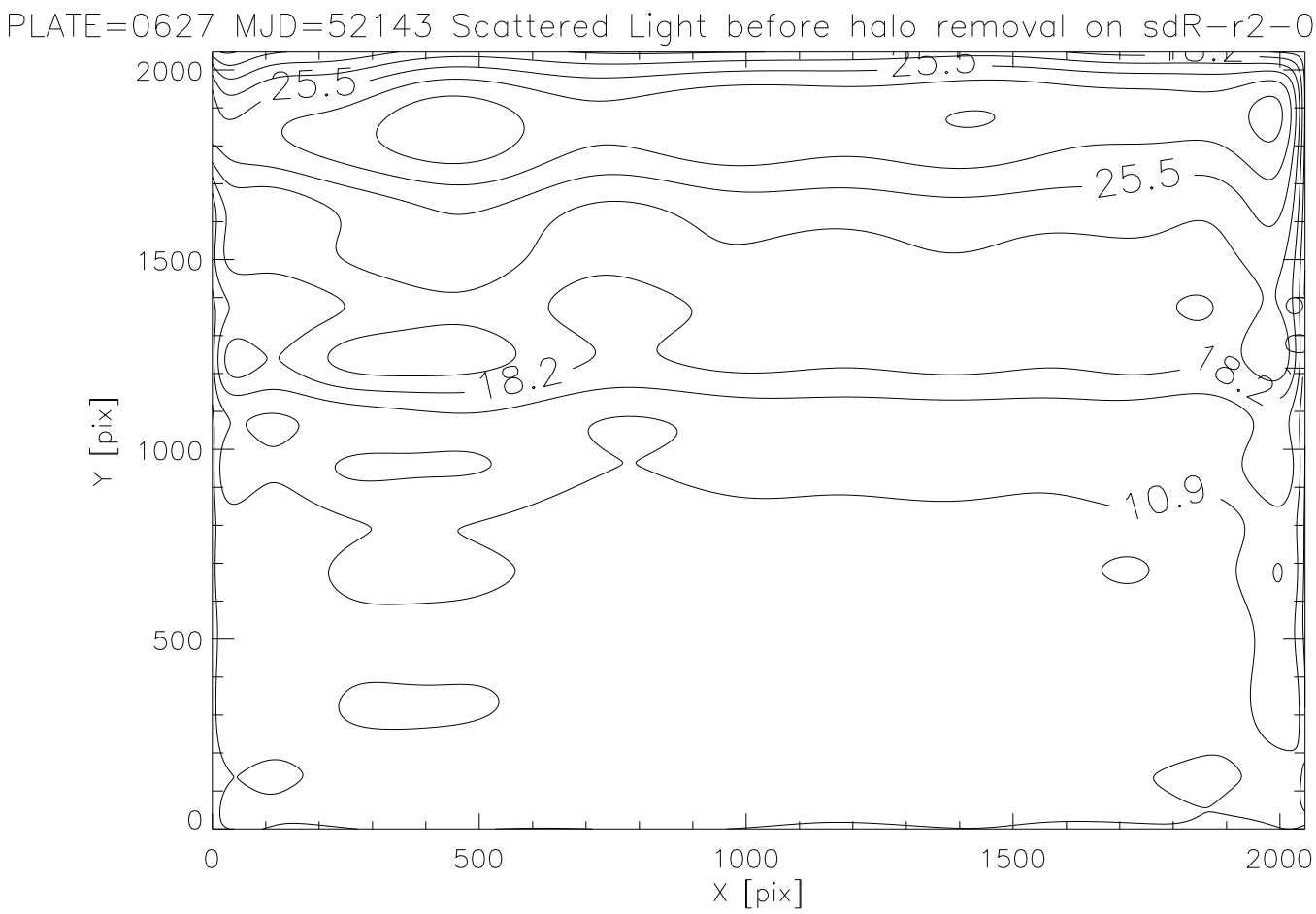

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

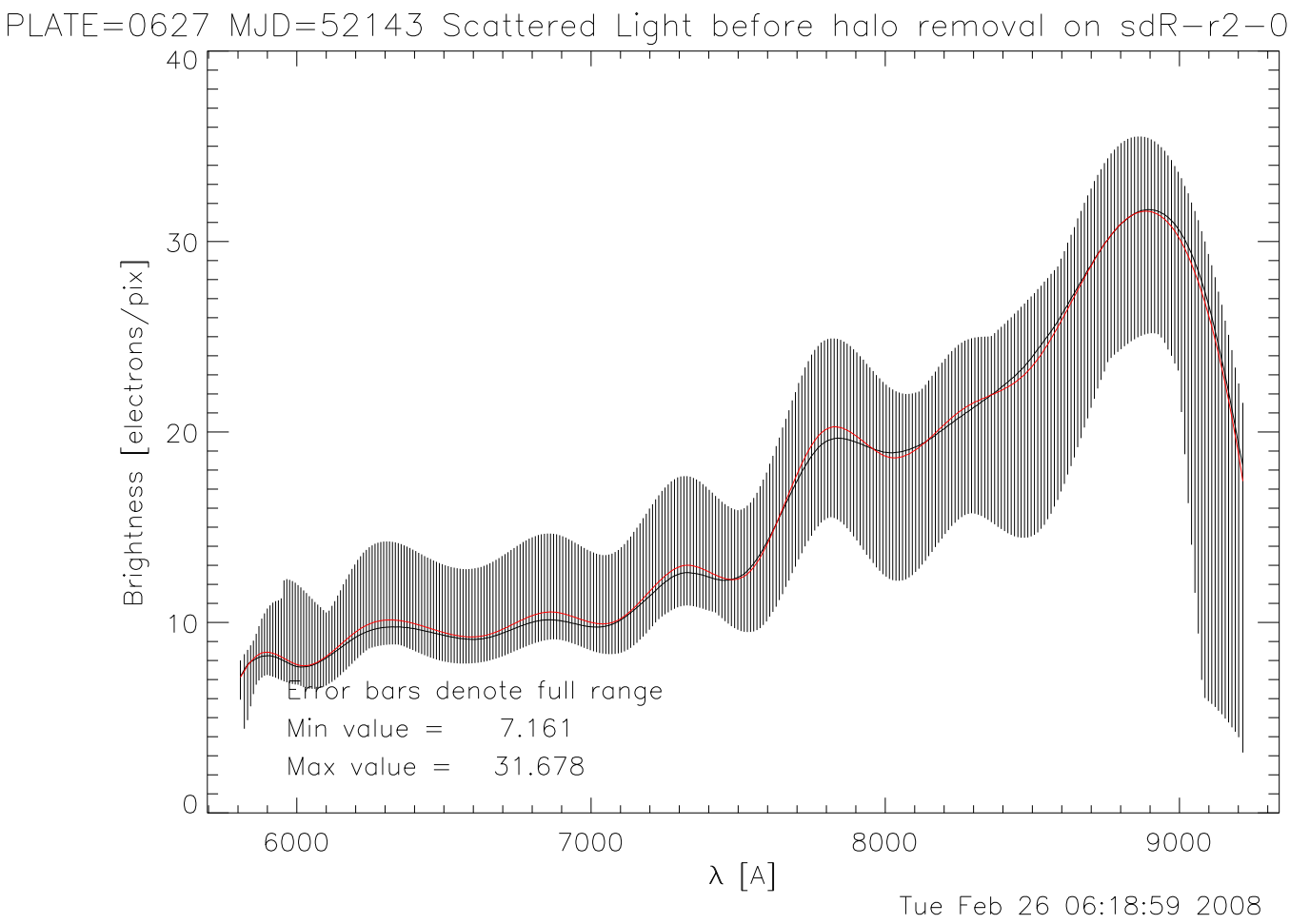

PLATE=0627 MJD=52143 flat extraction chi^2 for sdR−r2−00010609.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

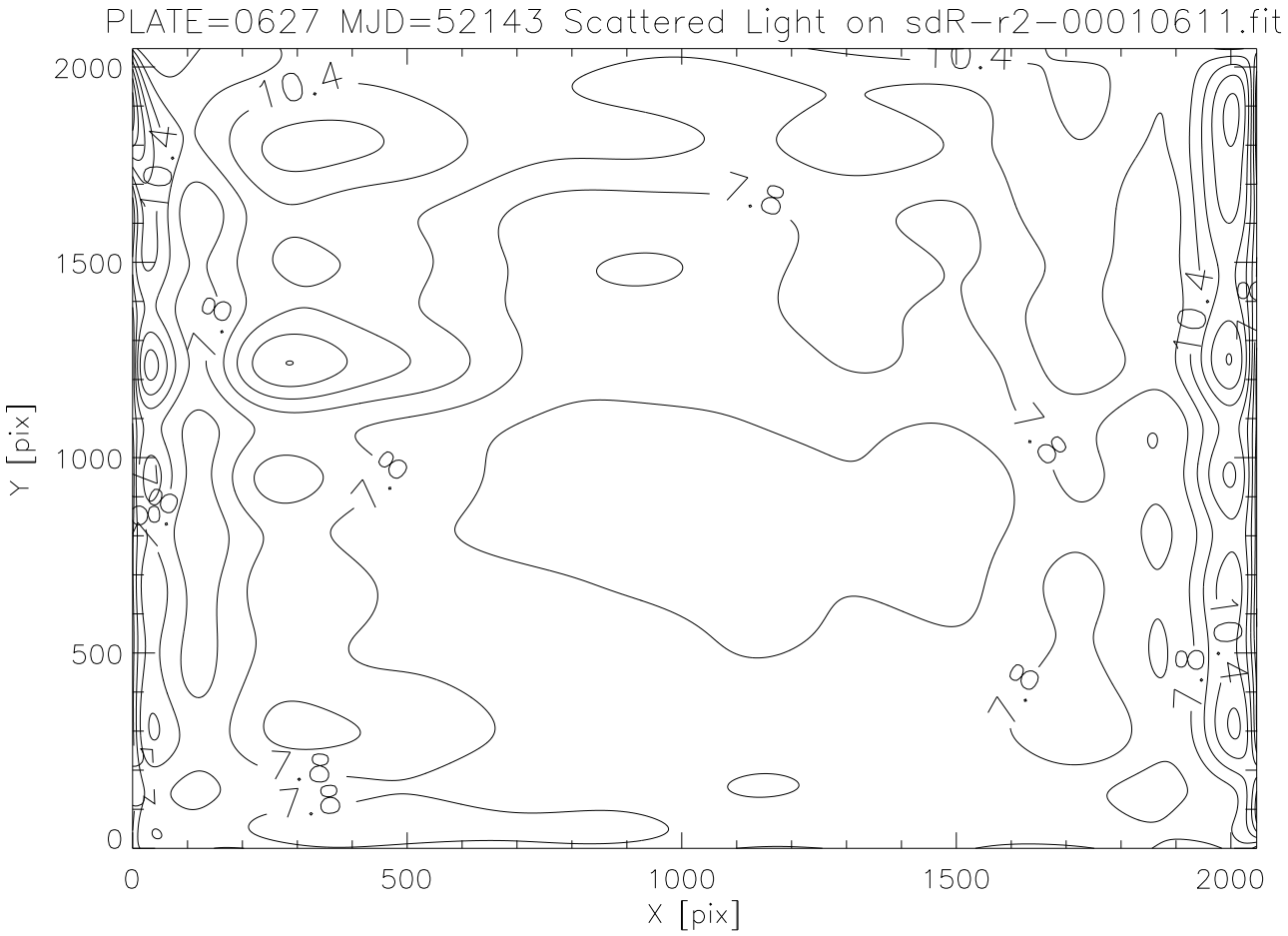

PLATE=0627 MJD=52143 Superflat sdR-r2-00010609.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

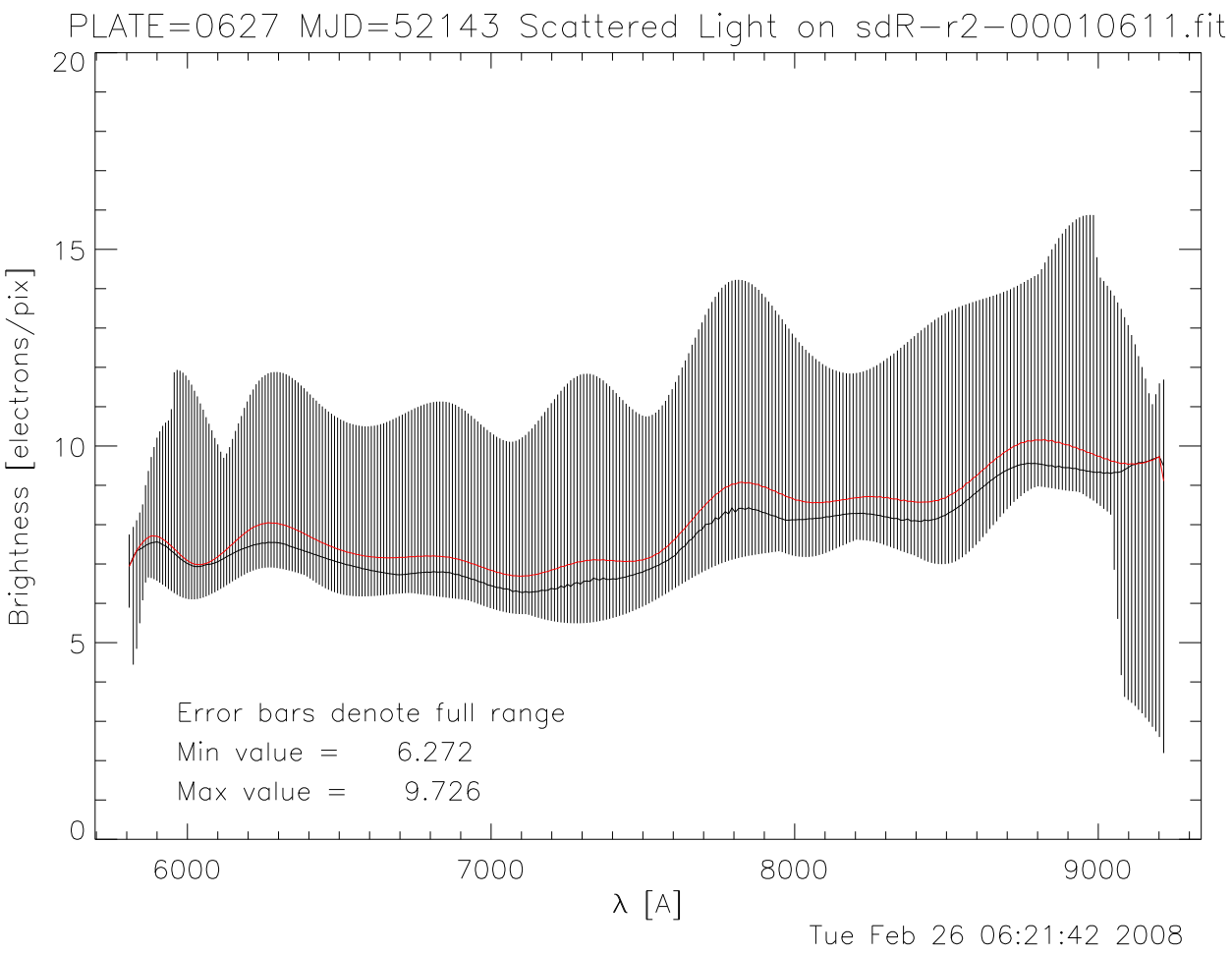

PLATE=0627 MJD=52143 Arcline Fit for sdR-r2-00010610.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 26 06:18:04 2008

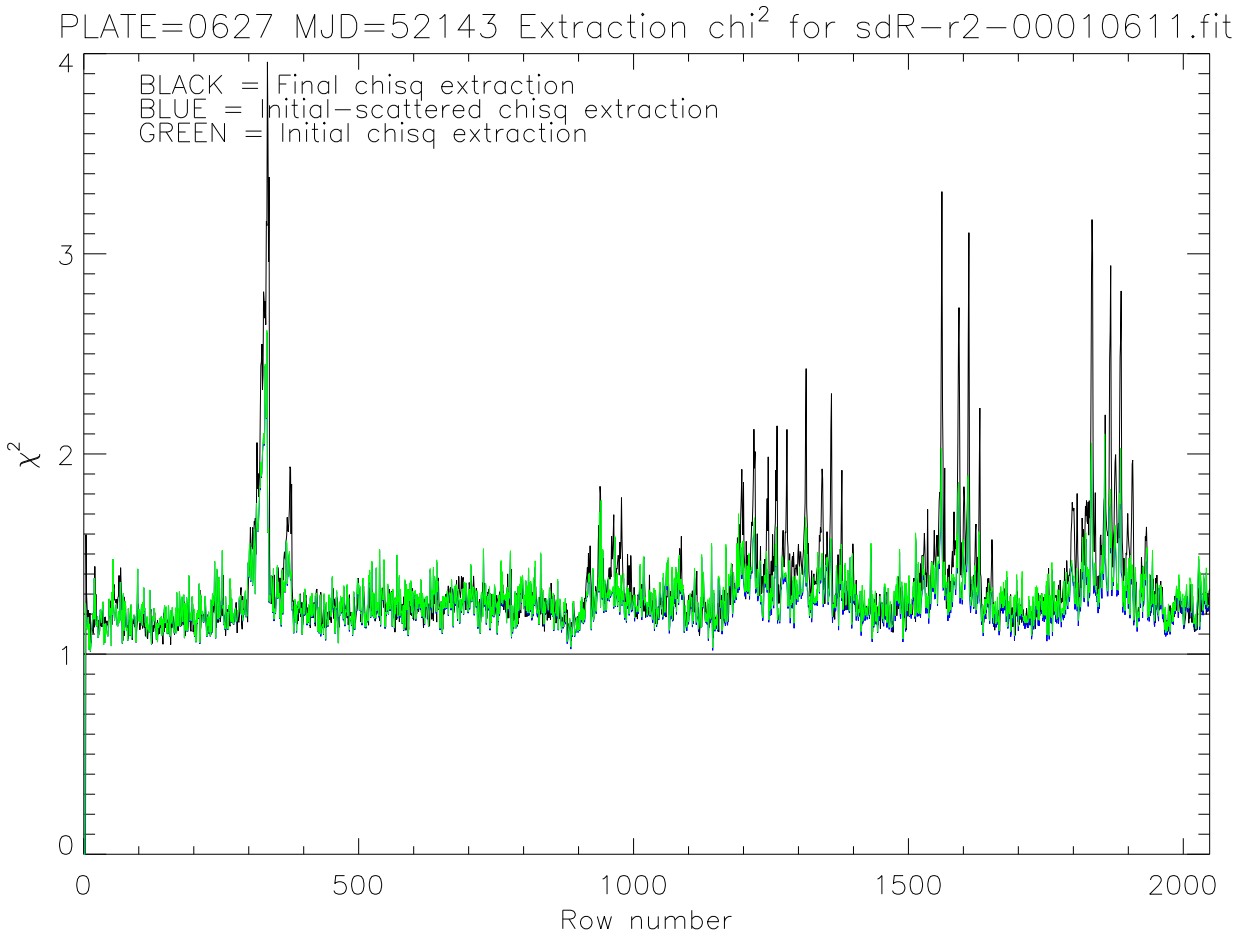

PLATE=0627 MJD=52143 Fiber−Flats for sdR−r2−00010609.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.684
Max value = 1.175
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 06:18:12 2008

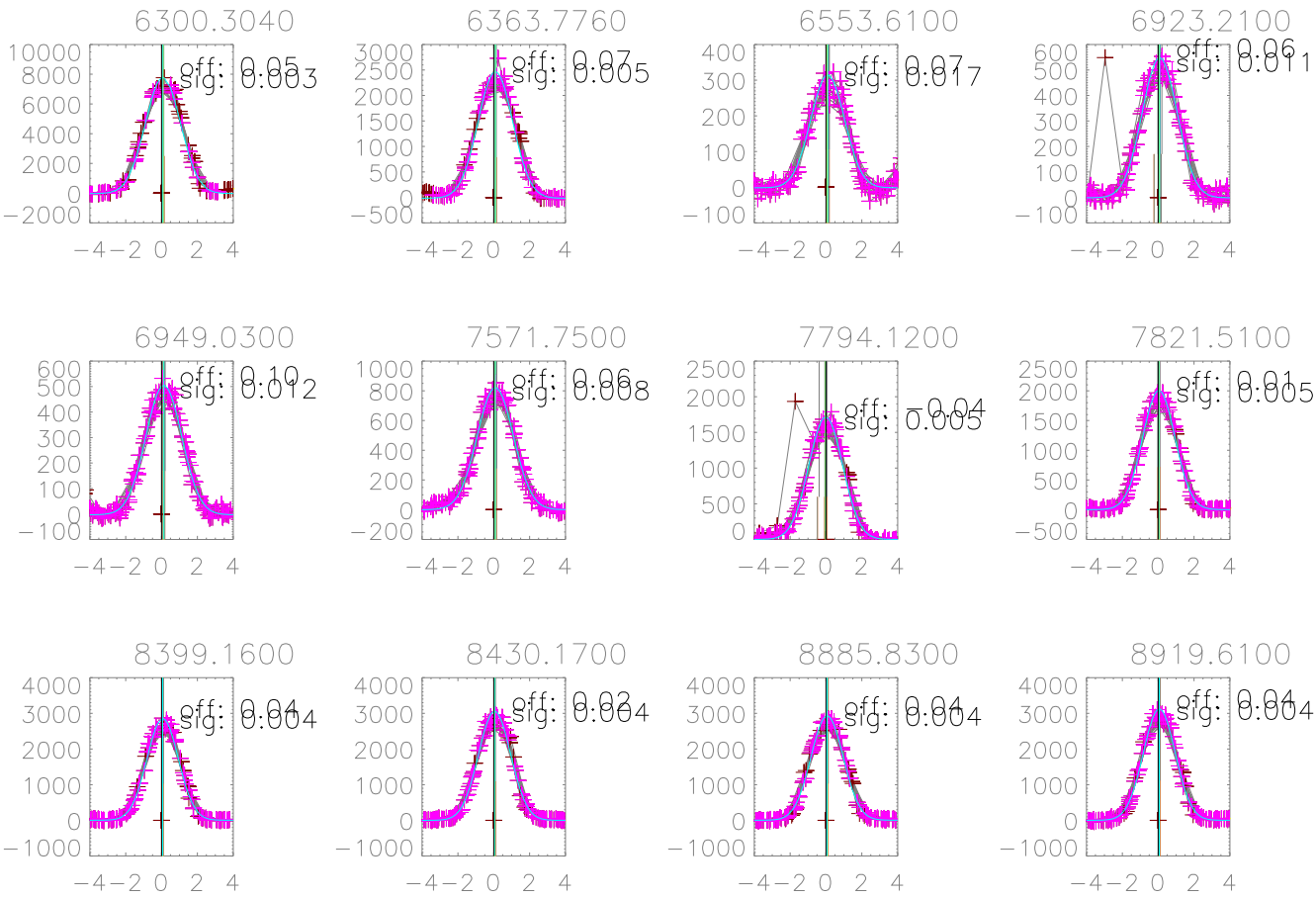

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-r2-00010611.fi
25.5
25.5
25.5
18.2
18.2
10.9
0
Y [pix]
X [pix]
0
500
1000
1500
2000

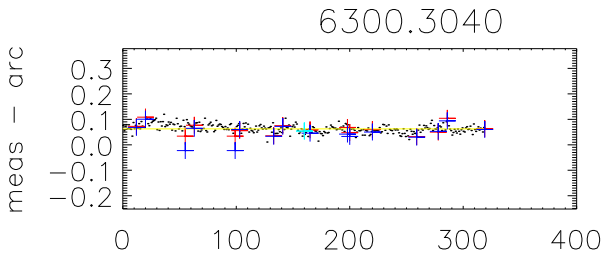

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-r2-00010611.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.161
Max value = 31.678
Tue Feb 26 06:18:59 2008

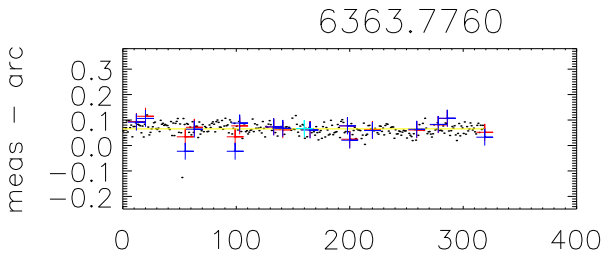

PLATE=0627 MJD=52143 Scattered Light on sdR-r2-00010611.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.4
7.8

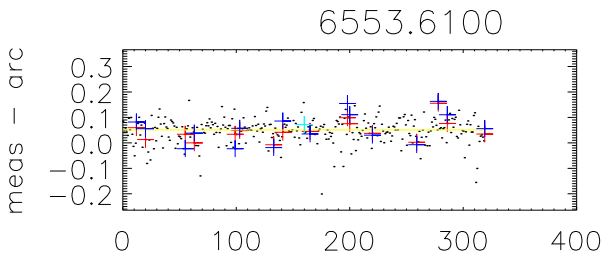

PLATE=0627 MJD=52143 Scattered Light on sdR-r2-00010611.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.272
Max value = 9.726
Tue Feb 26 06:21:42 2008

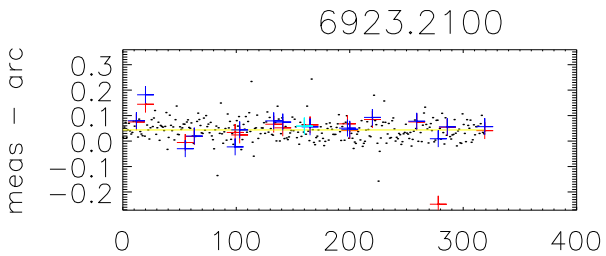

PLATE=0627 MJD=52143 Extraction chi^2 for sdR−r2−00010611.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

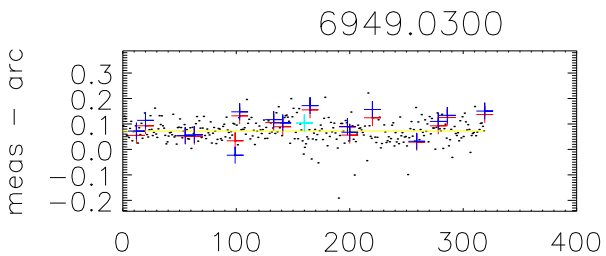

6300.3040
off: 0.05
sig: 0.003
6363.7760
off: 0.07
sig: 0.005
6553.6100
off: 0.07
sig: 0.017
6923.2100
off: 0.06
sig: 0.011
6949.0300
off: 0.10
sig: 0.012
7571.7500
off: 0.06
sig: 0.008
7794.1200
off: −0.04
sig: 0.005
7821.5100
off: 0.01
sig: 0.005
8399.1600
off: 0.04
sig: 0.004
8430.1700
off: 0.02
sig: 0.004
8885.8300
off: 0.04
sig: 0.004
8919.6100
off: 0.04
sig: 0.004

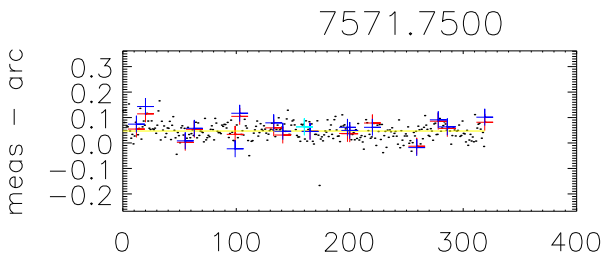

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

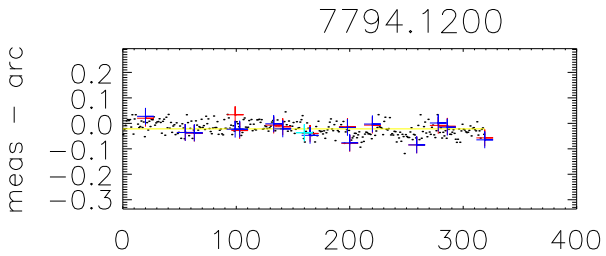

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

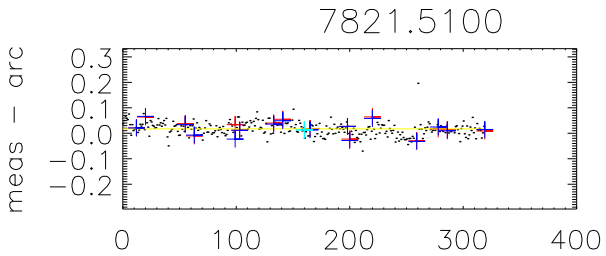

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

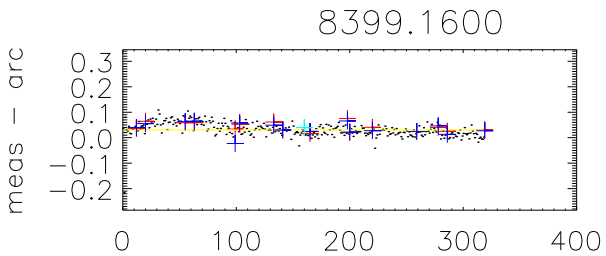

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

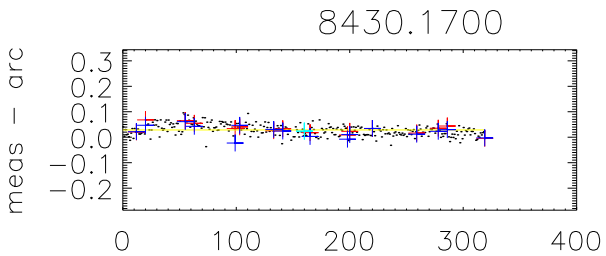

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

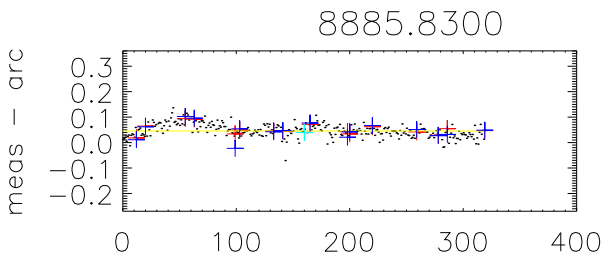

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

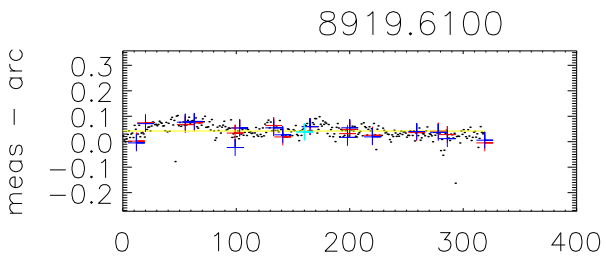

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

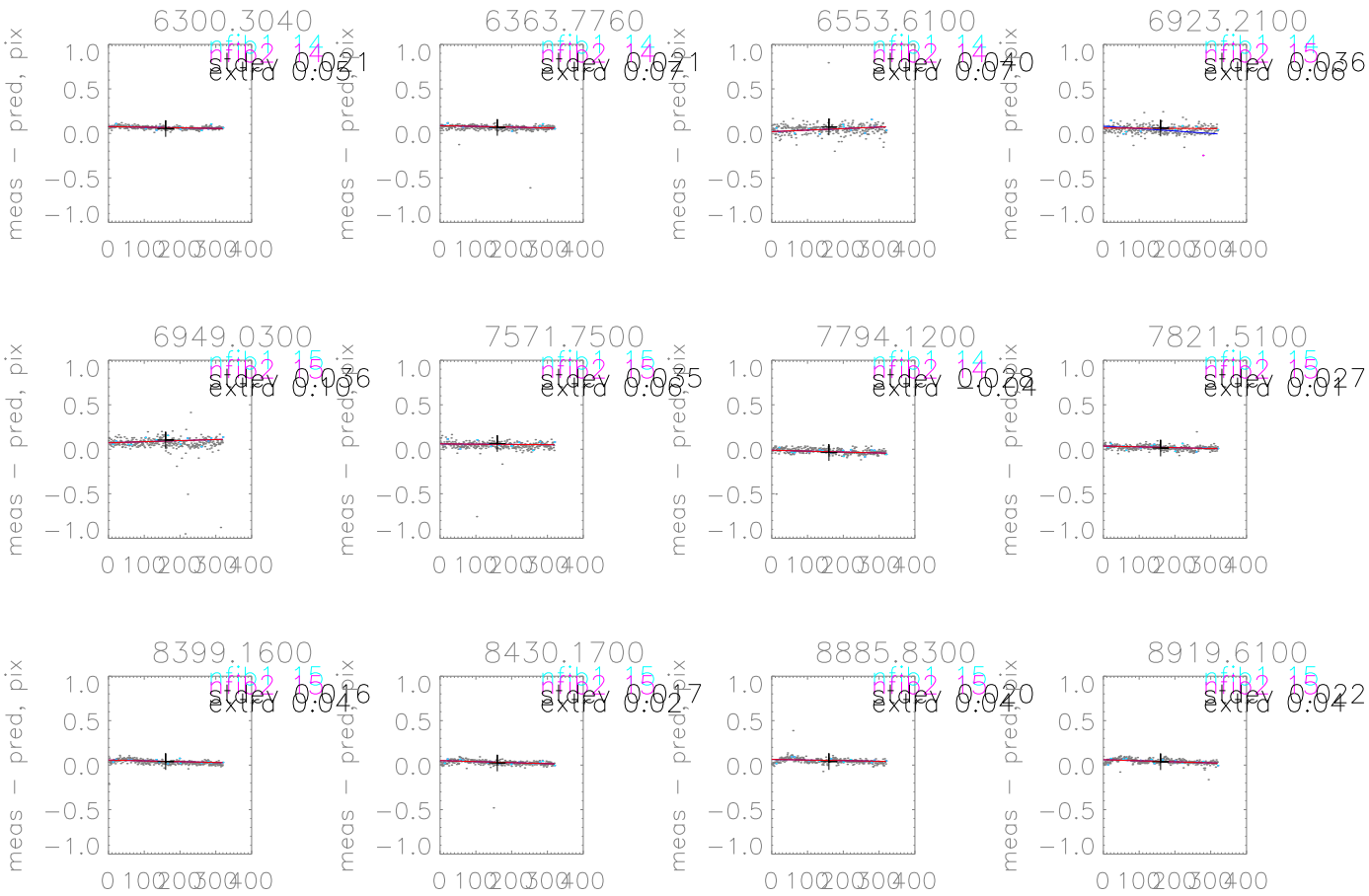

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

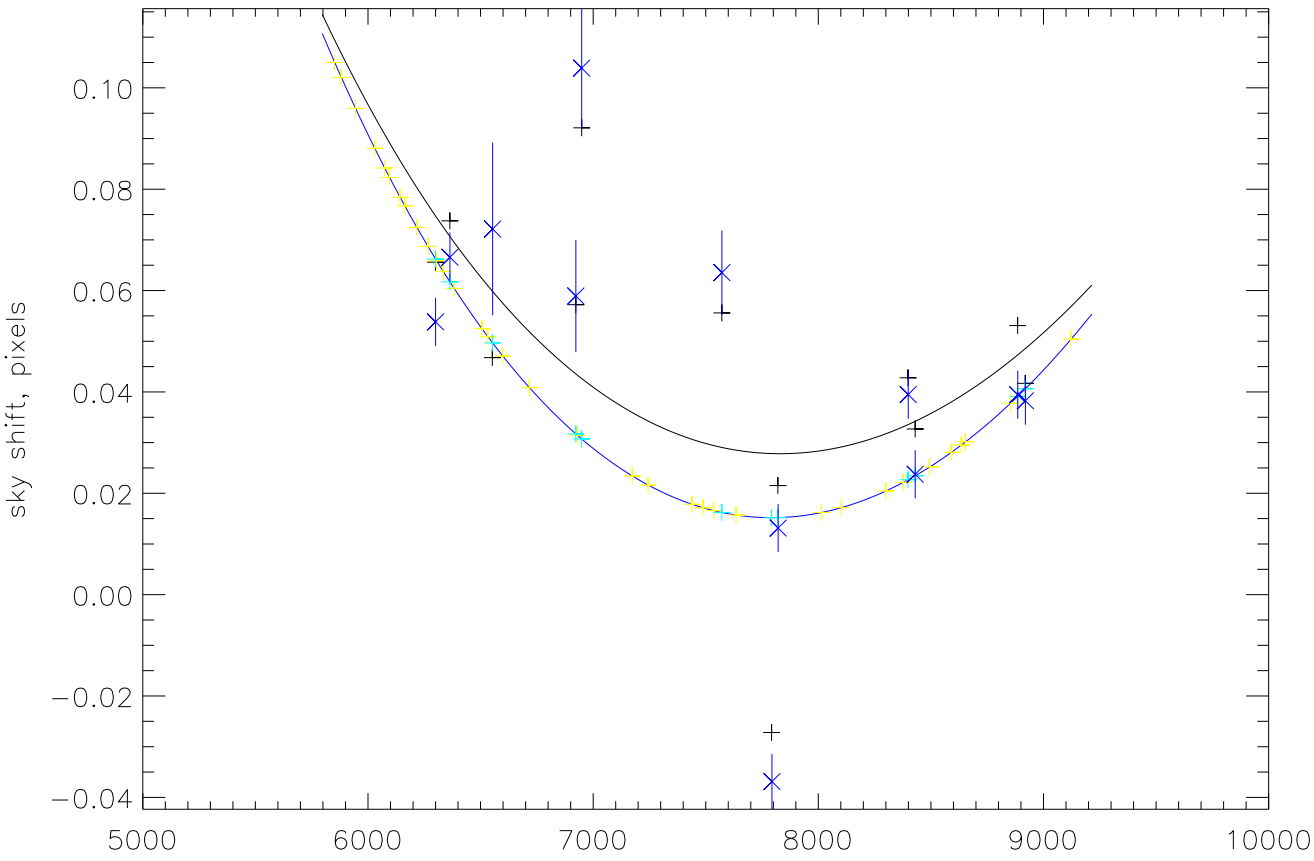

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

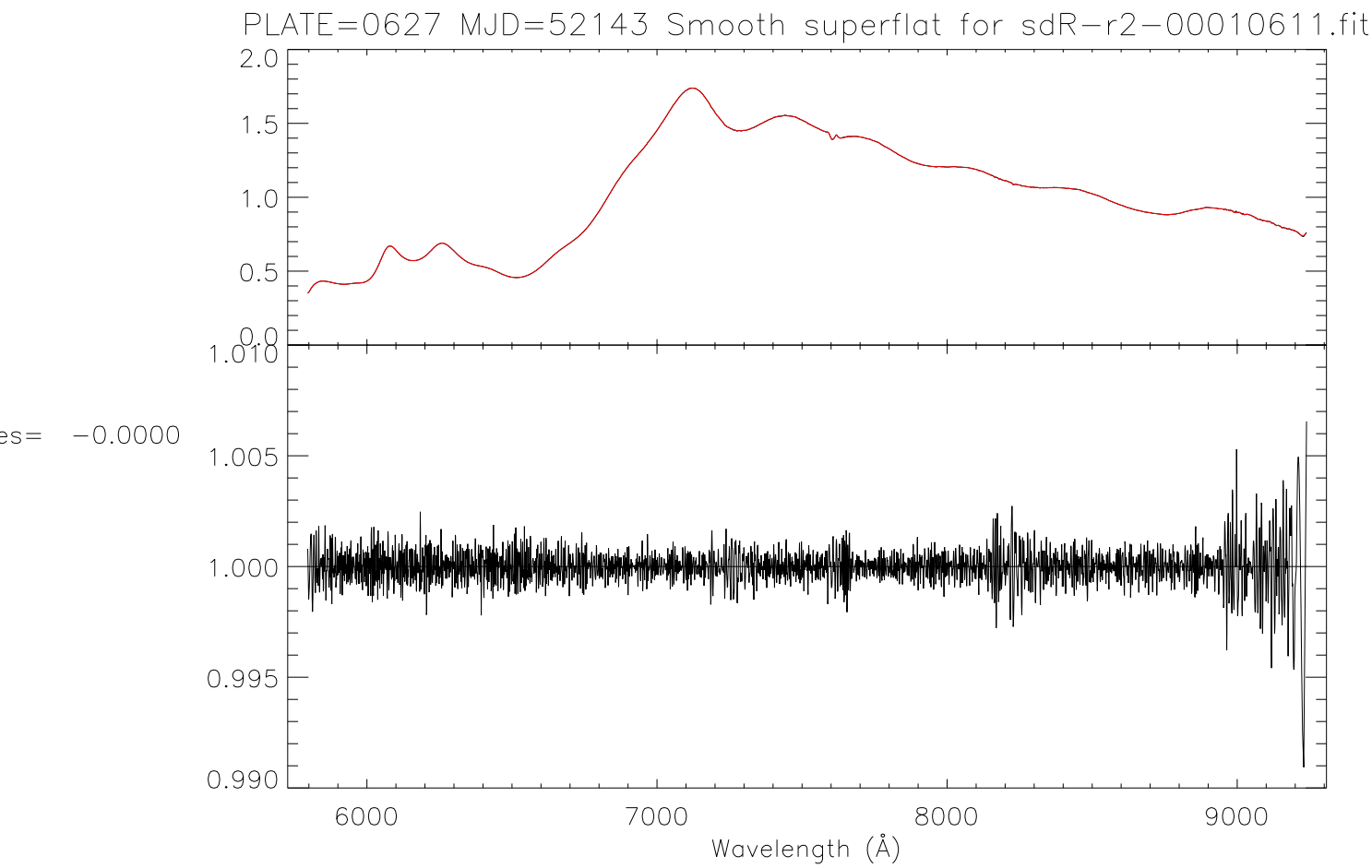

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

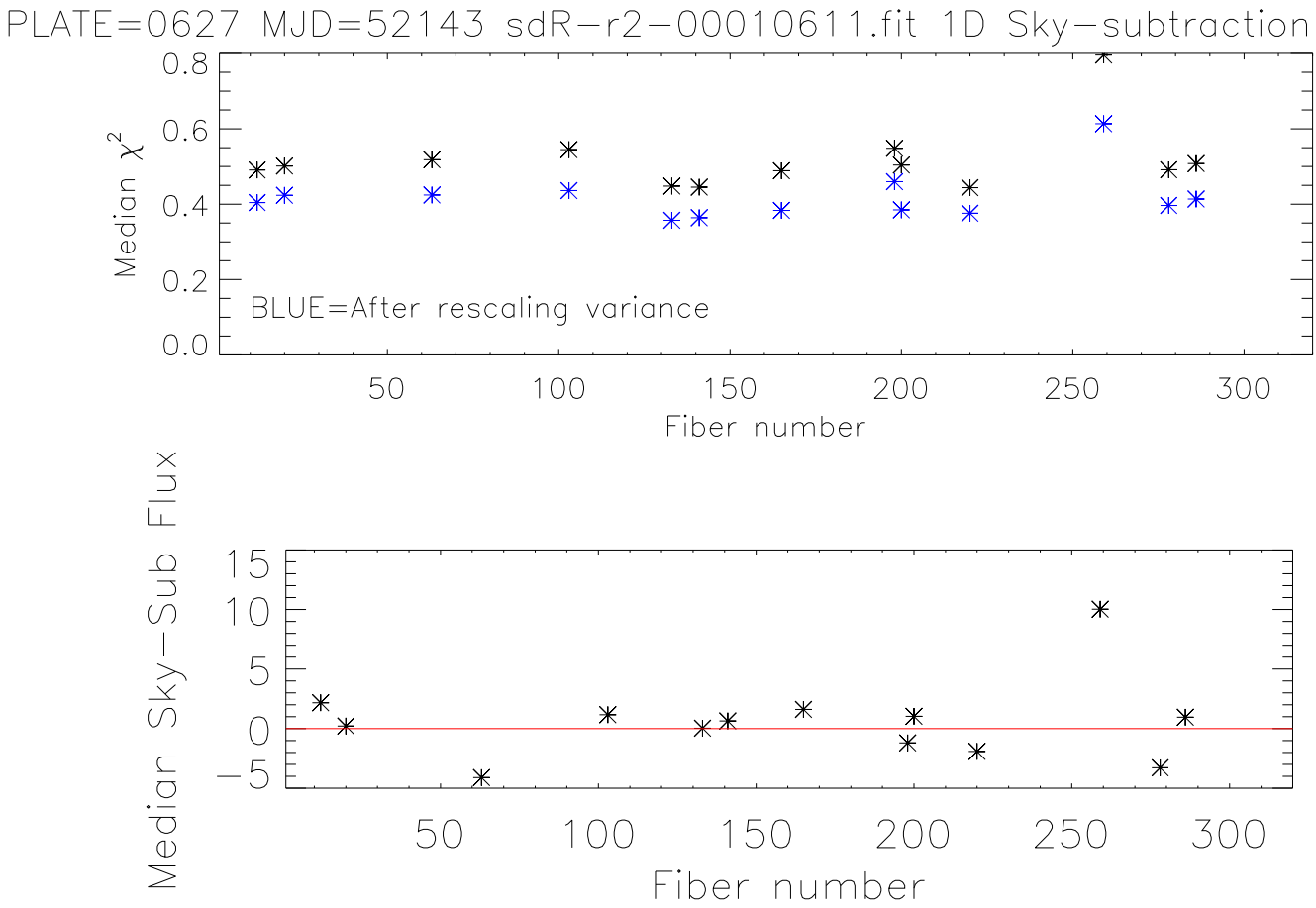

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6300.3040
stdev 0.021
extra 0.05
6363.7760
stdev 0.021
extra 0.07
6553.6100
stdev 0.040
extra 0.07
6923.2100
stdev 0.036
extra 0.06
6949.0300
stdev 0.036
extra 0.10
7571.7500
stdev 0.035
extra 0.06
7794.1200
stdev 0.028
extra −0.04
7821.5100
stdev 0.027
extra 0.01
8399.1600
stdev 0.016
extra 0.04
8430.1700
stdev 0.017
extra 0.02
8885.8300
stdev 0.020
extra 0.04
8919.6100
stdev 0.022
extra 0.04
meas − pred, pix

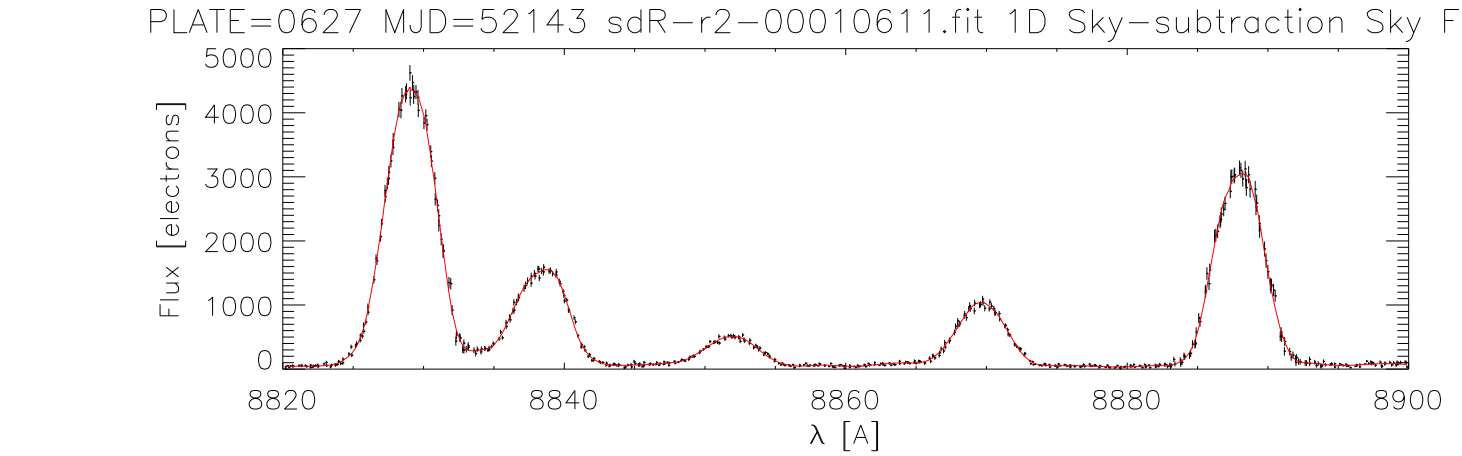

sky shift, pixels
0.10
0.08
0.06
0.04
0.02
0.00
−0.02
−0.04
5000
6000
7000
8000
9000
10000

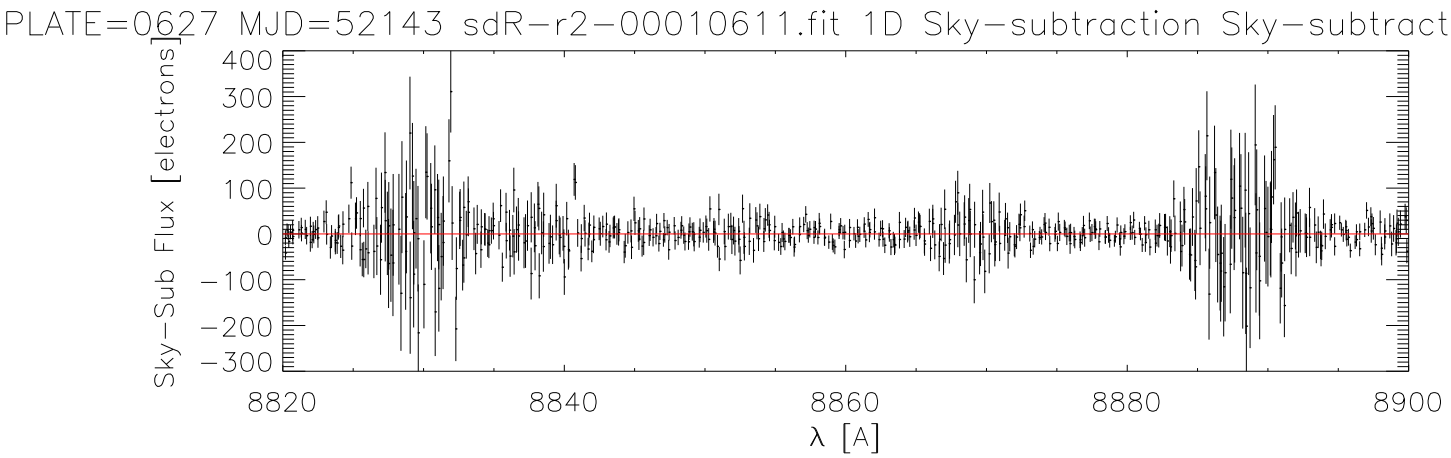

PLATE=0627 MJD=52143 Smooth superflat for sdR-r2-00010611.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

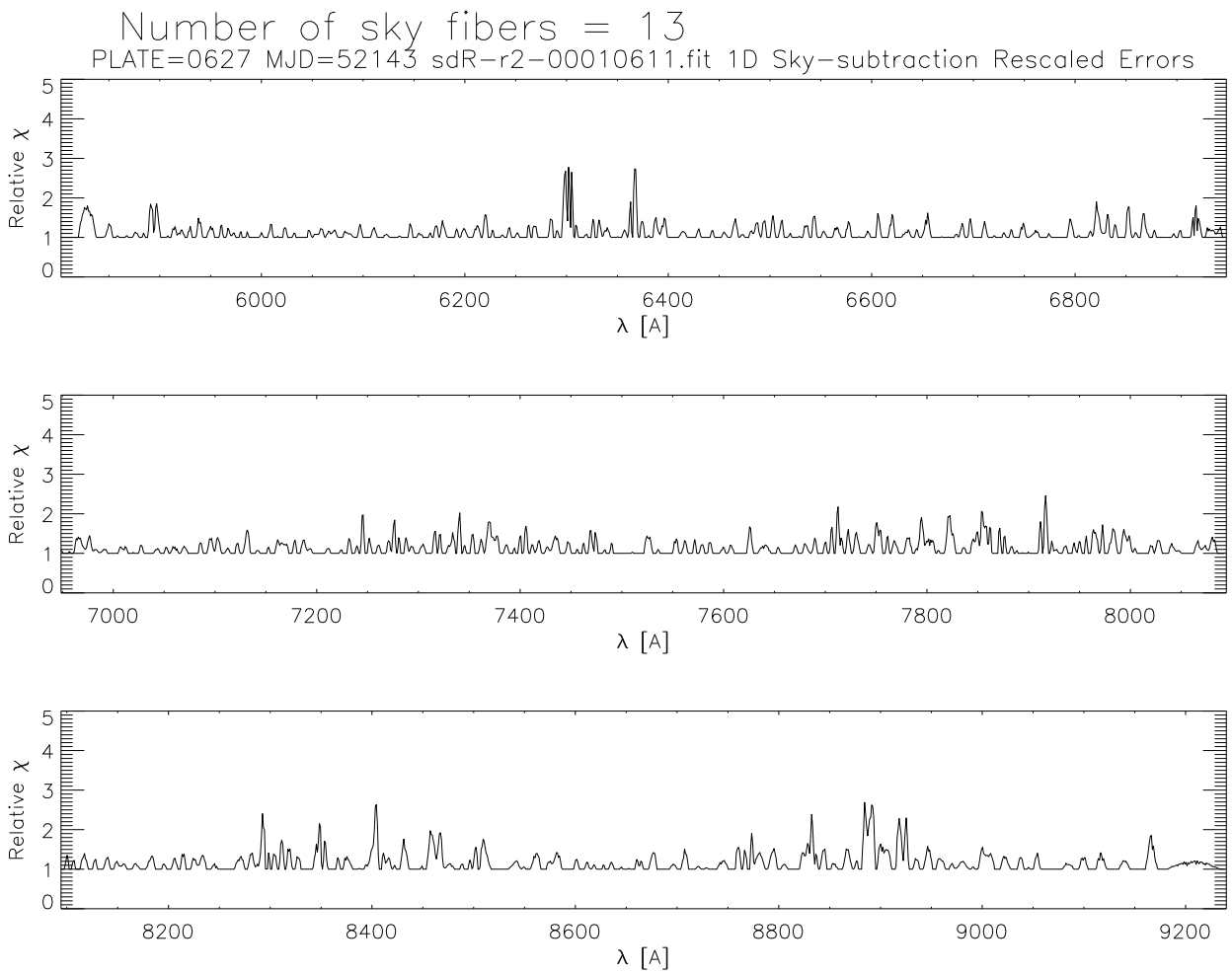
es= −0.0000

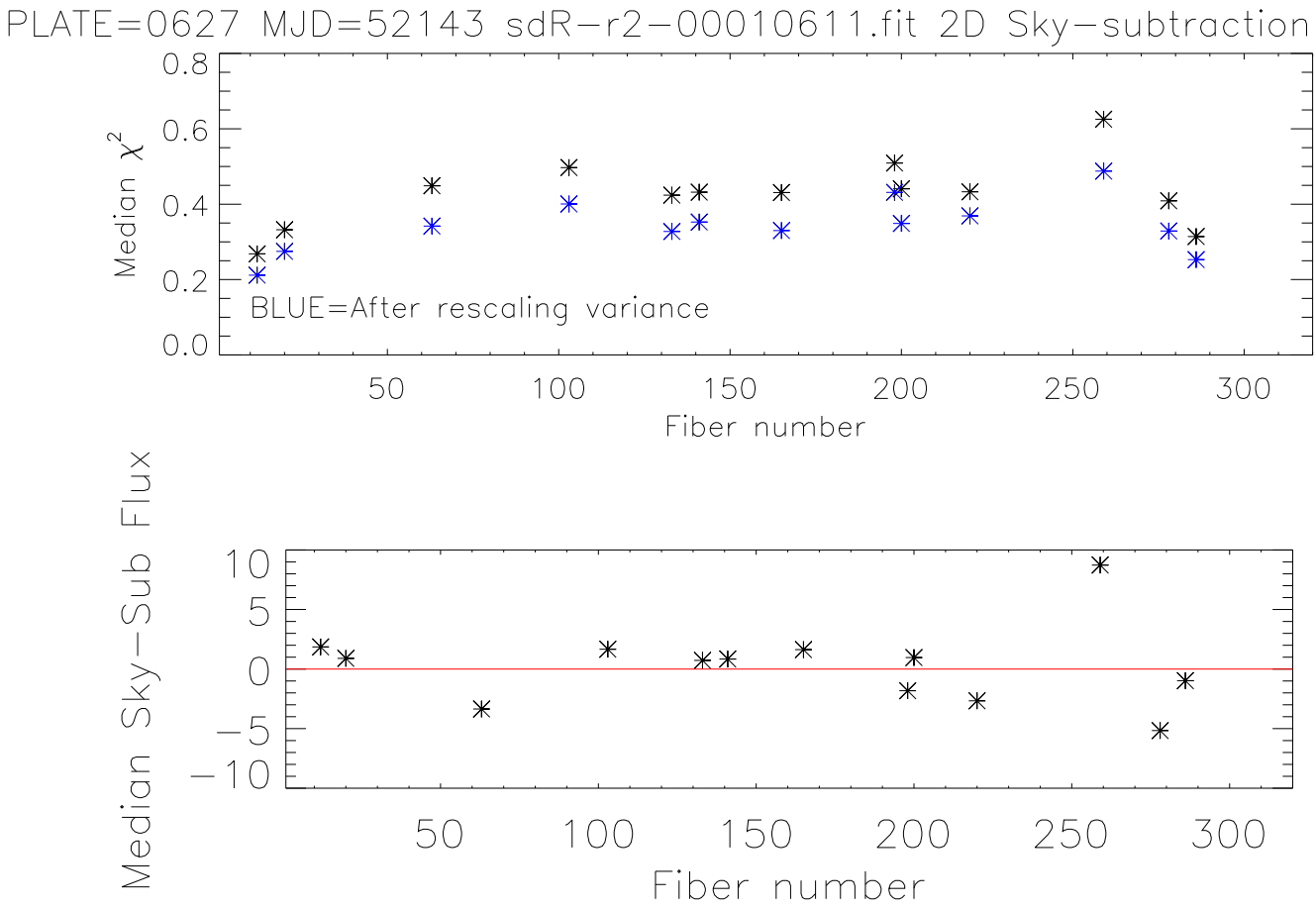

PLATE=0627 MJD=52143 sdR-r2-00010611.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

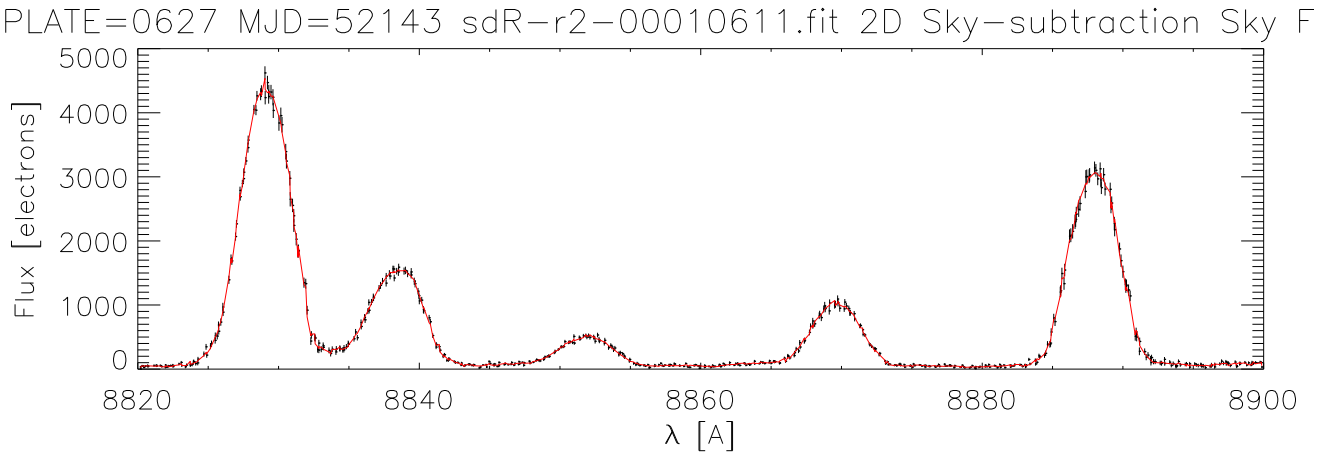
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

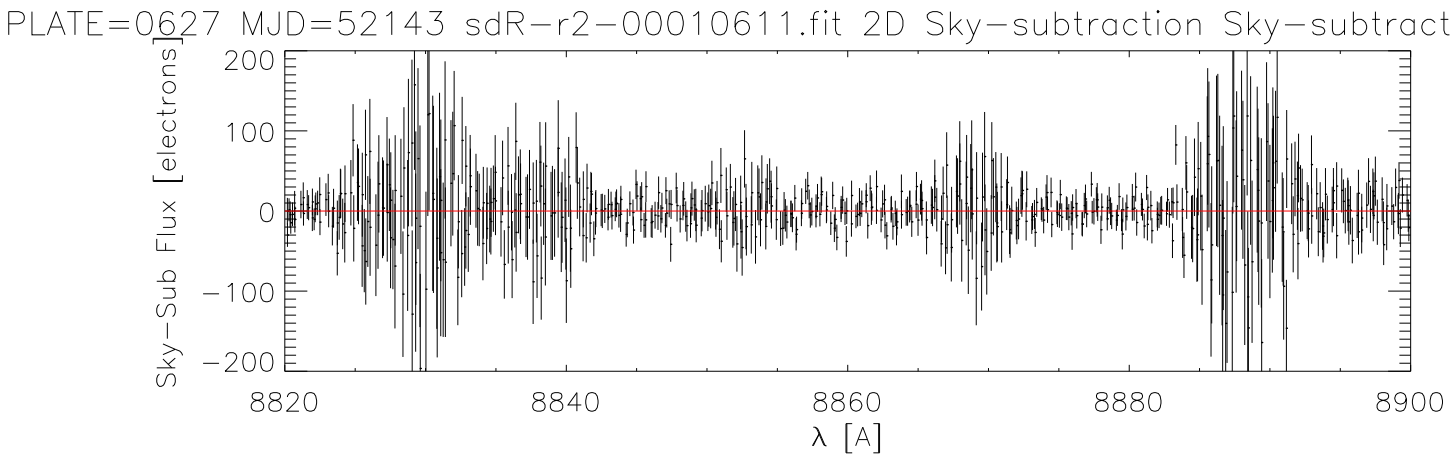

PLATE=0627 MJD=52143 sdR-r2-00010611.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

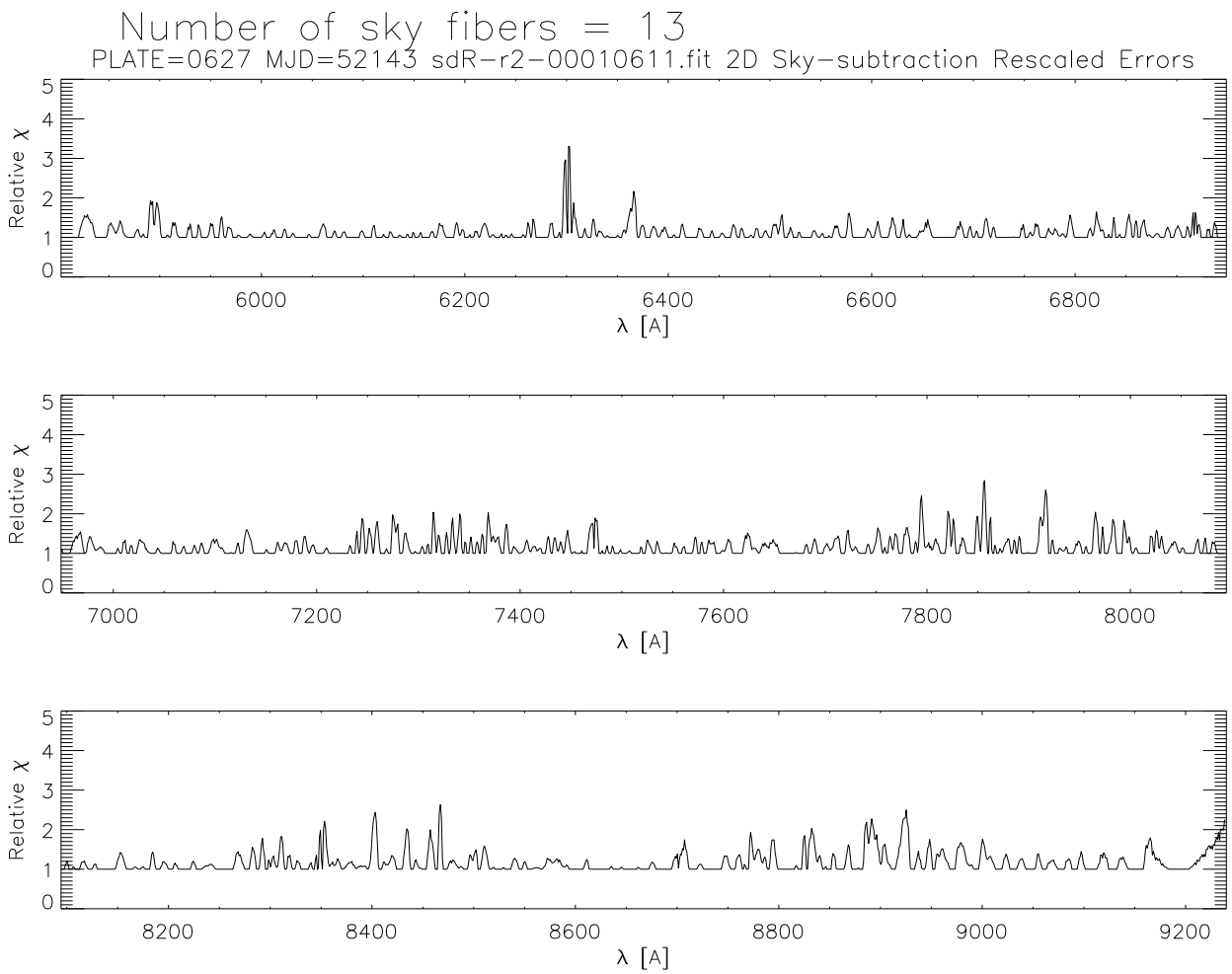

PLATE=0627 MJD=52143 sdR-r2-00010611.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

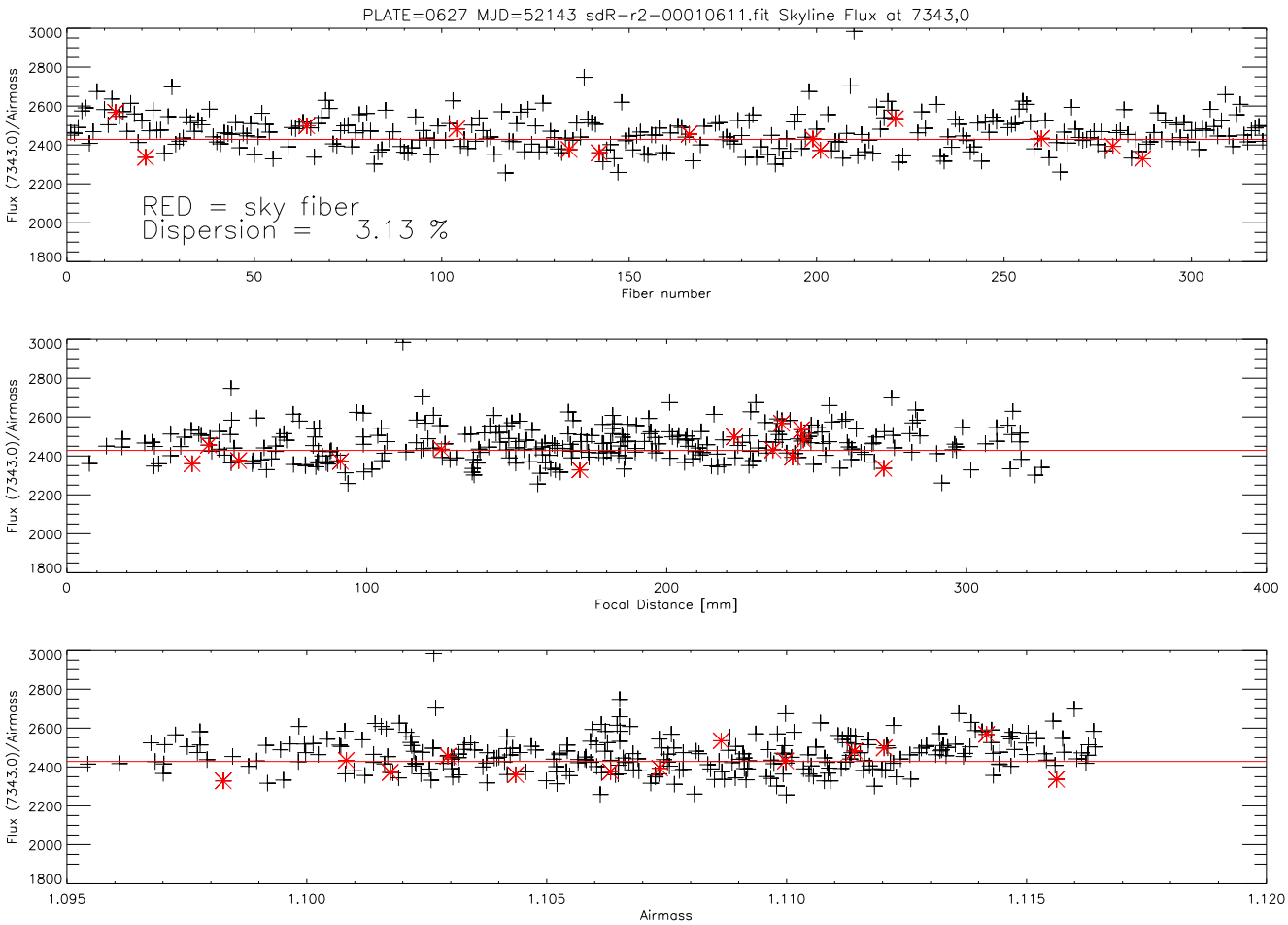

Number of sky fibers = 13
PLATE=0627 MJD=52143 sdR-r2-00010611.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

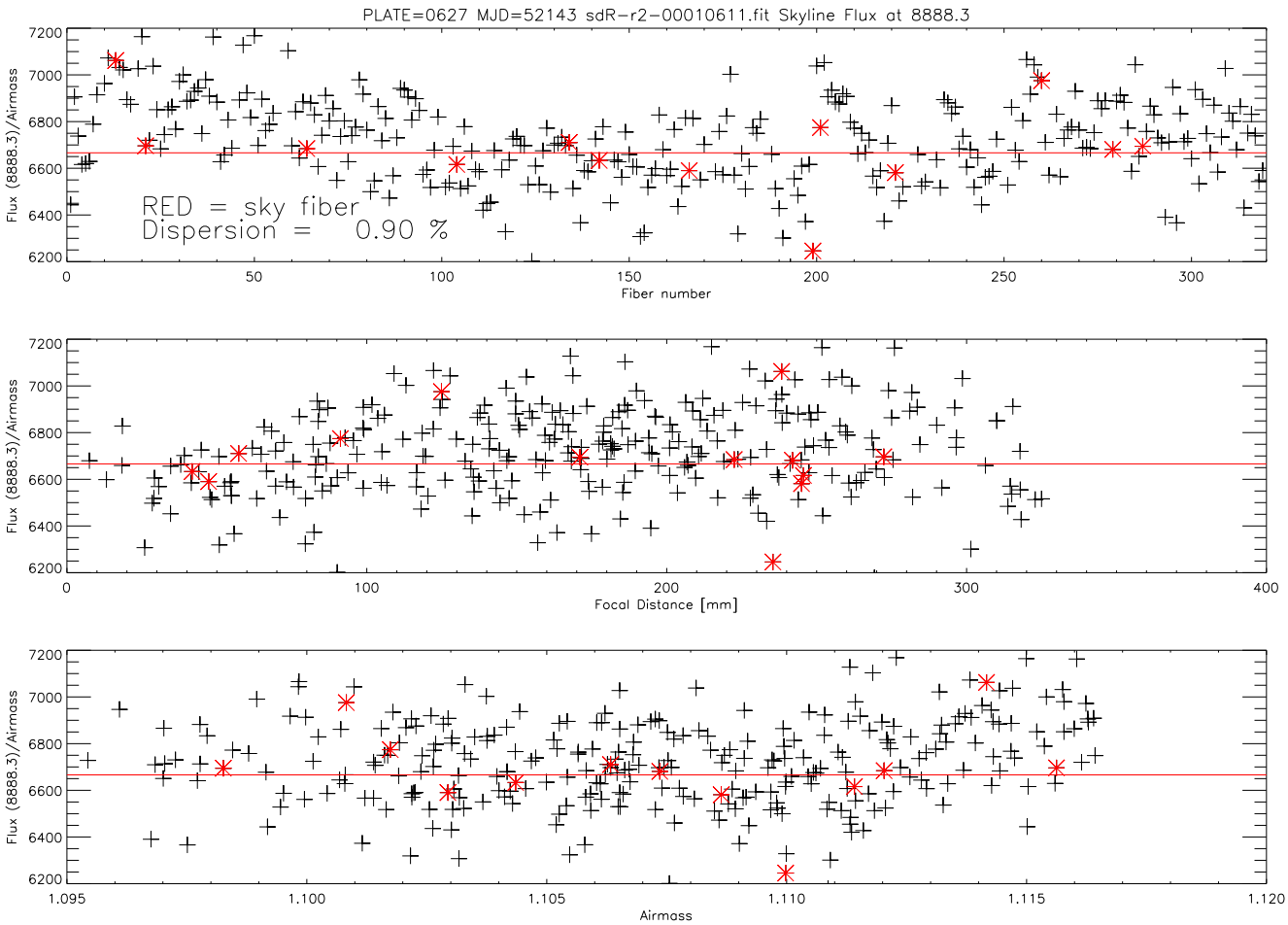

PLATE=0627 MJD=52143 sdR-r2-00010611.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

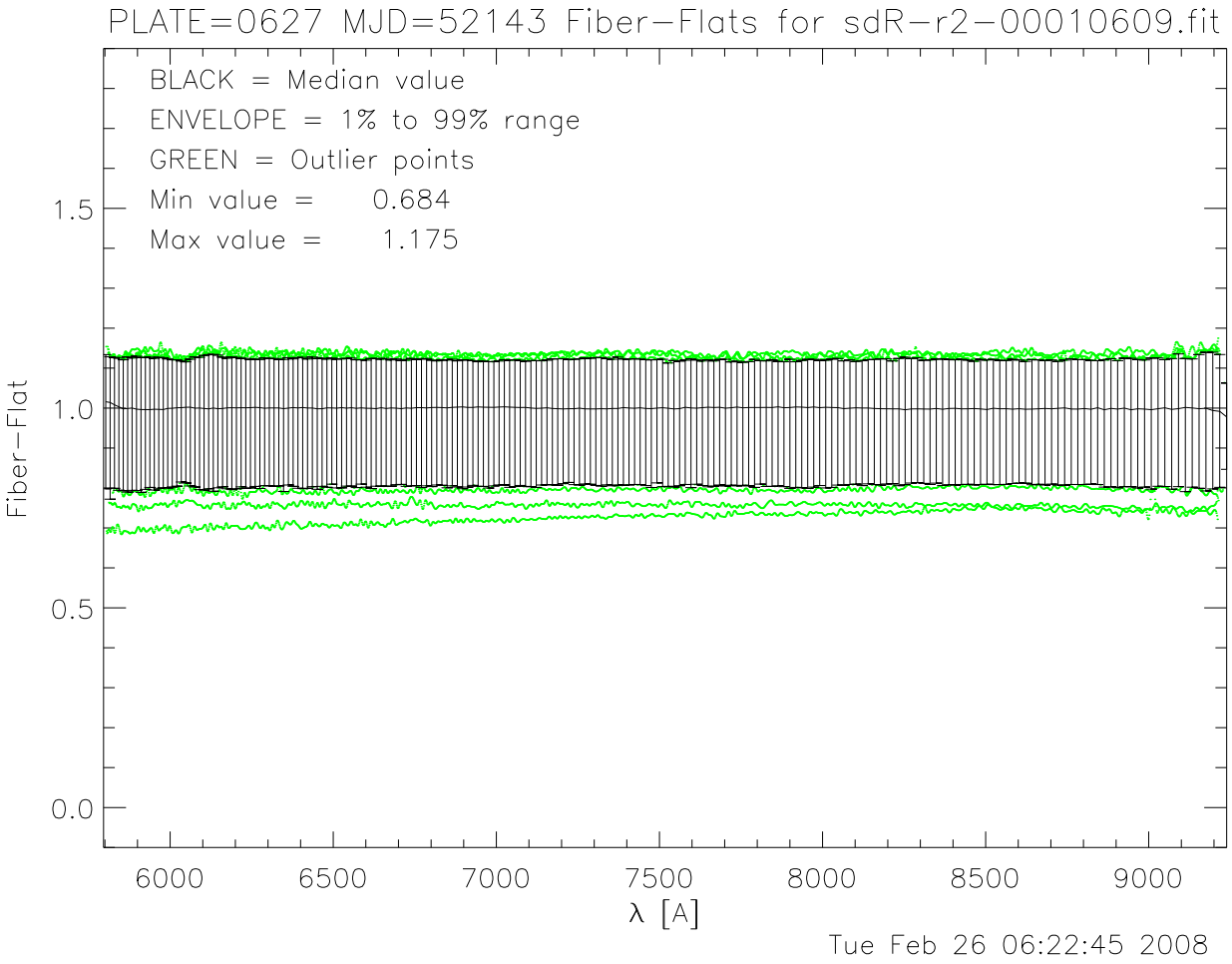

PLATE=0627 MJD=52143 sdR-r2-00010611.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

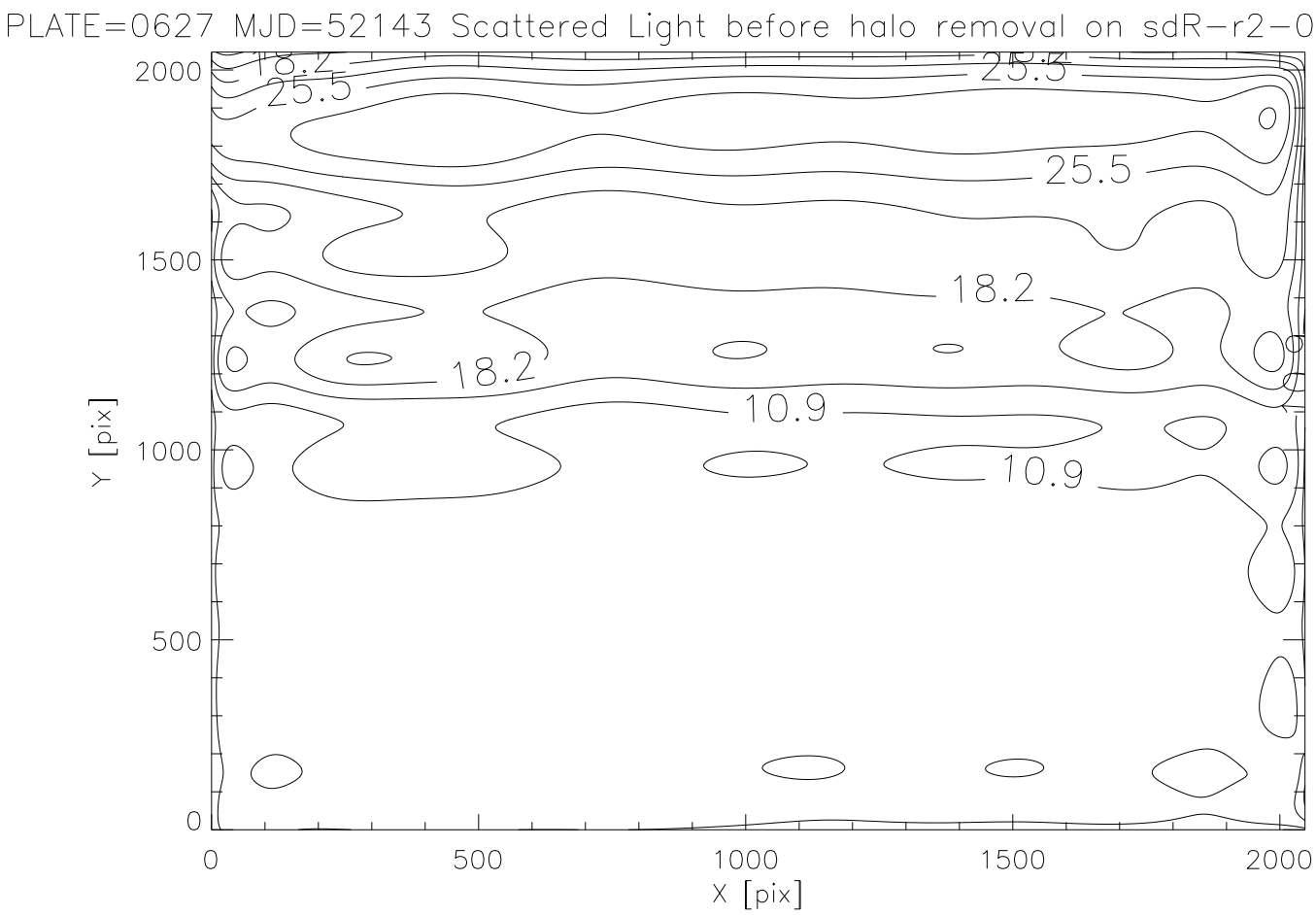

PLATE=0627 MJD=52143 sdR-r2-00010611.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

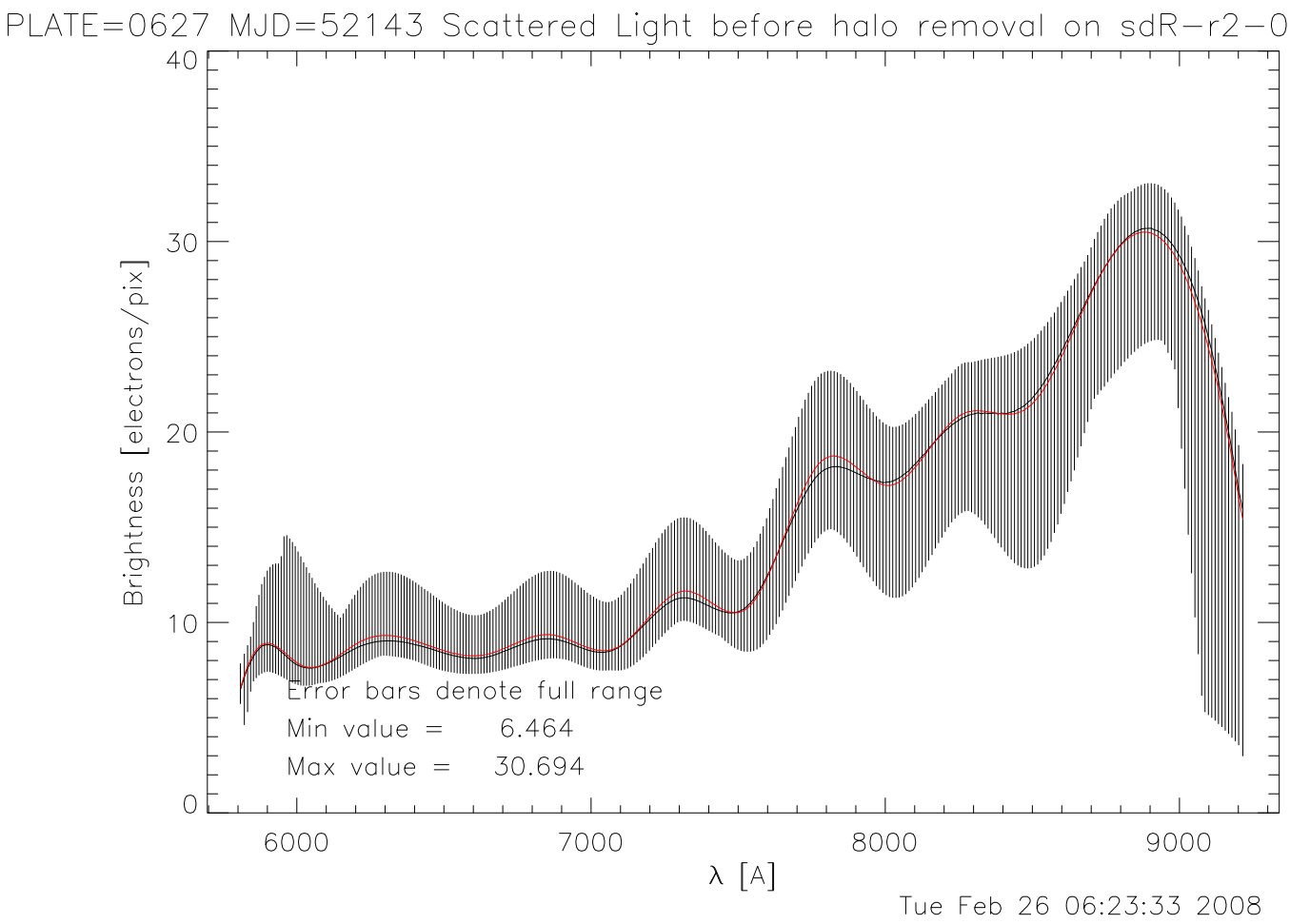

Number of sky fibers = 13
PLATE=0627 MJD=52143 sdR-r2-00010611.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

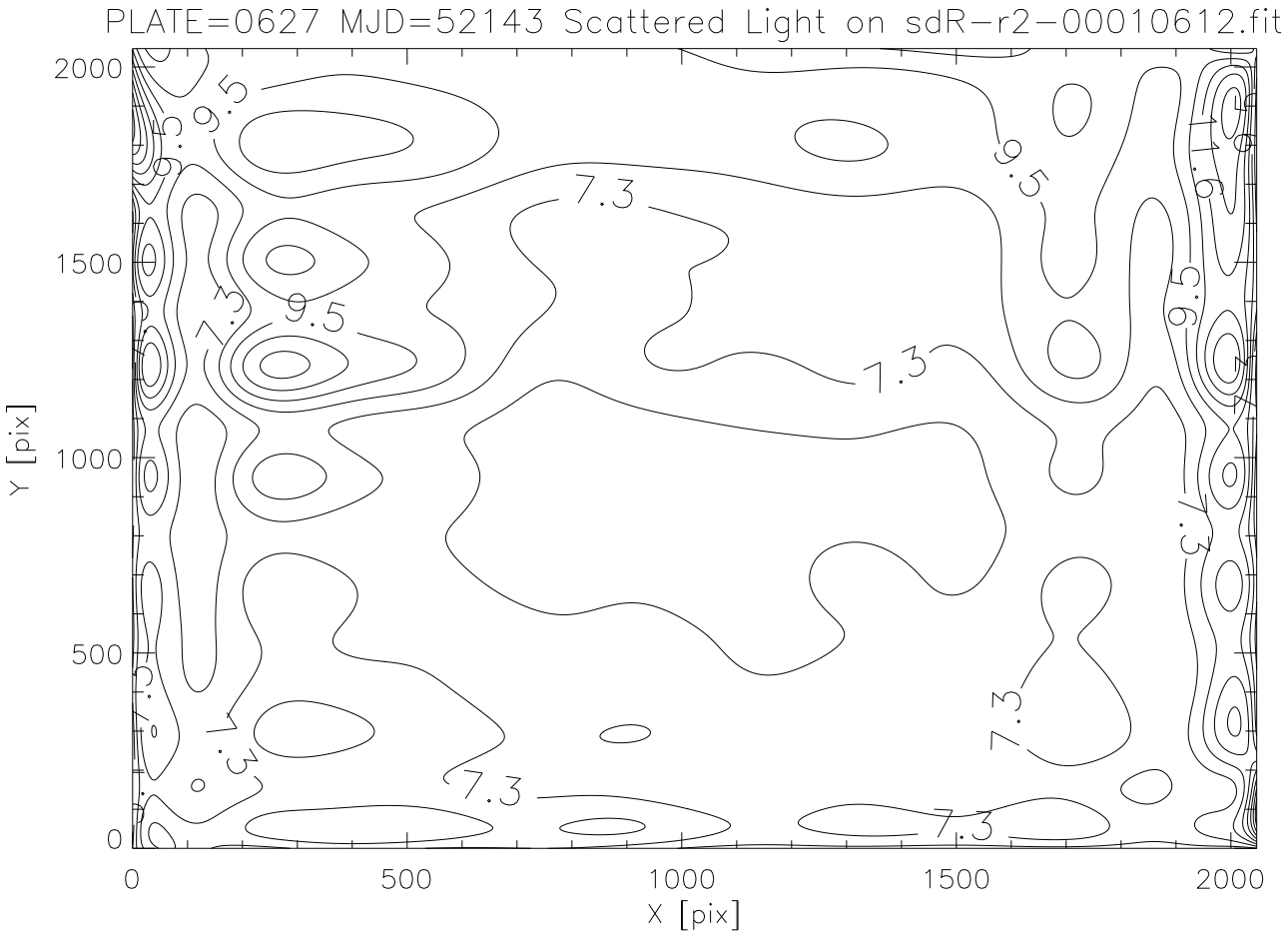

PLATE=0627 MJD=52143 sdR-r2-00010611.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.13 %
Fiber number
Focal Distance [mm]
Airmass

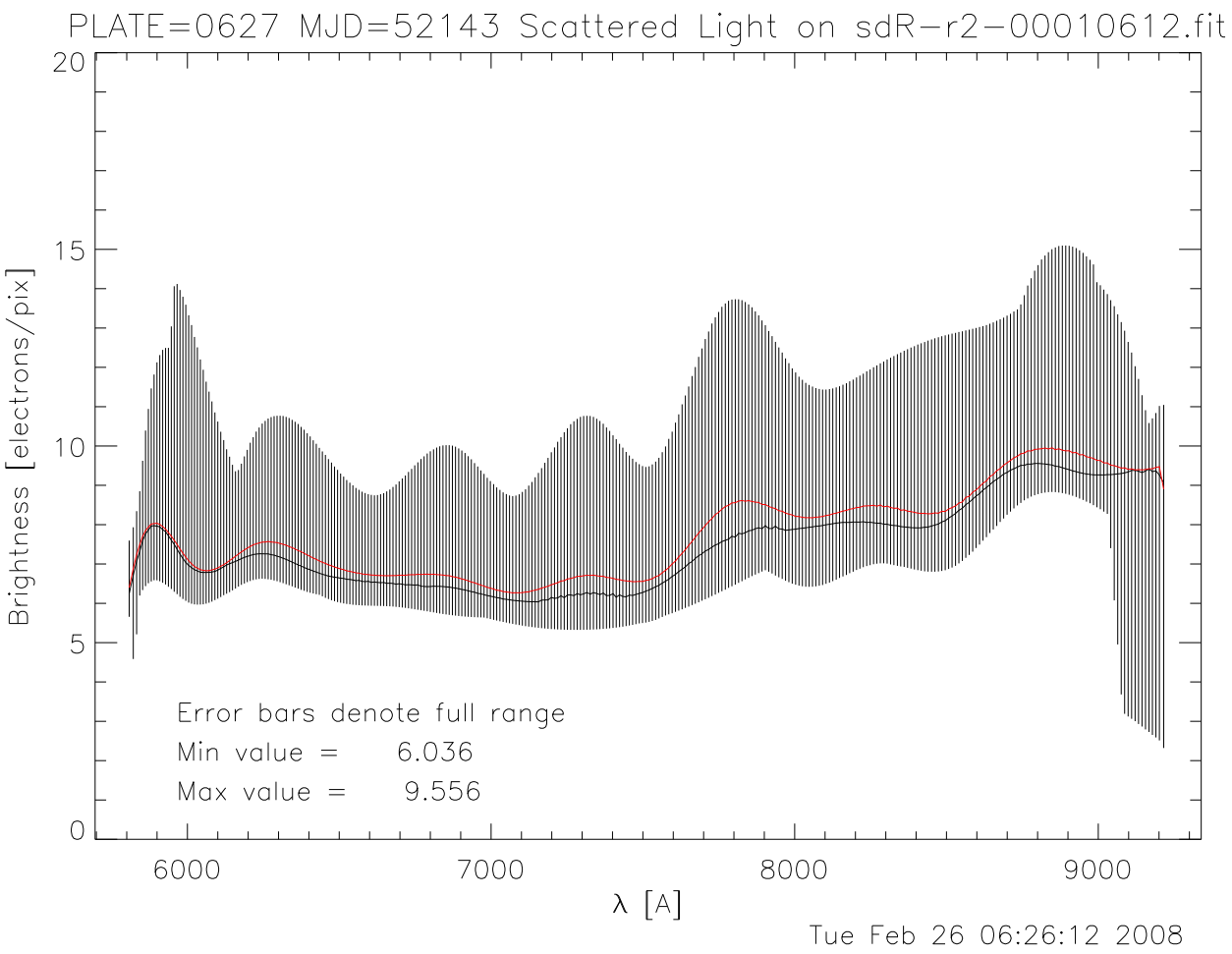

PLATE=0627 MJD=52143 sdR-r2-00010611.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 0.90 %
Fiber number
Focal Distance [mm]
Airmass

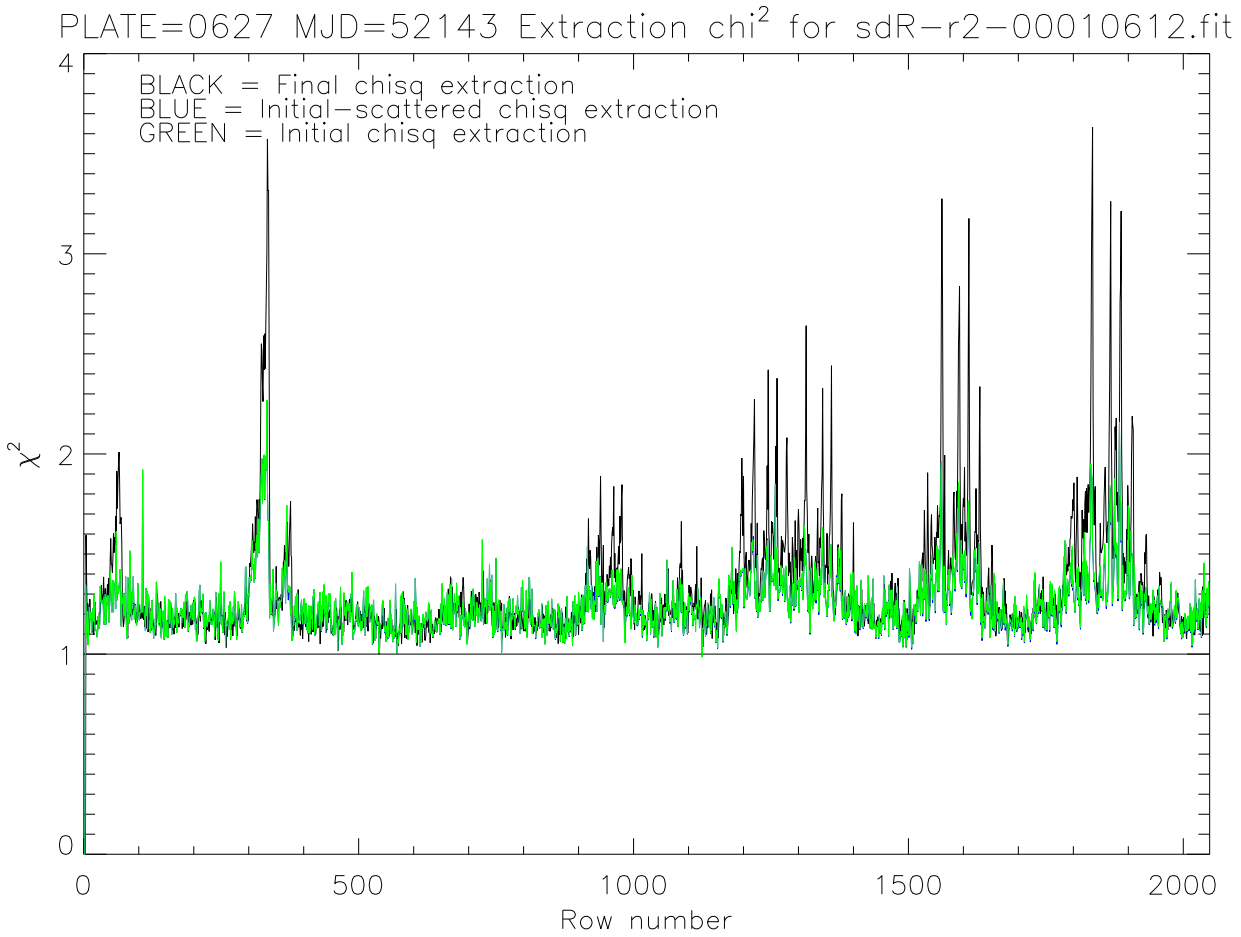

PLATE=0627 MJD=52143 Fiber−Flats for sdR−r2−00010609.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.684
Max value = 1.175
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 06:22:45 2008

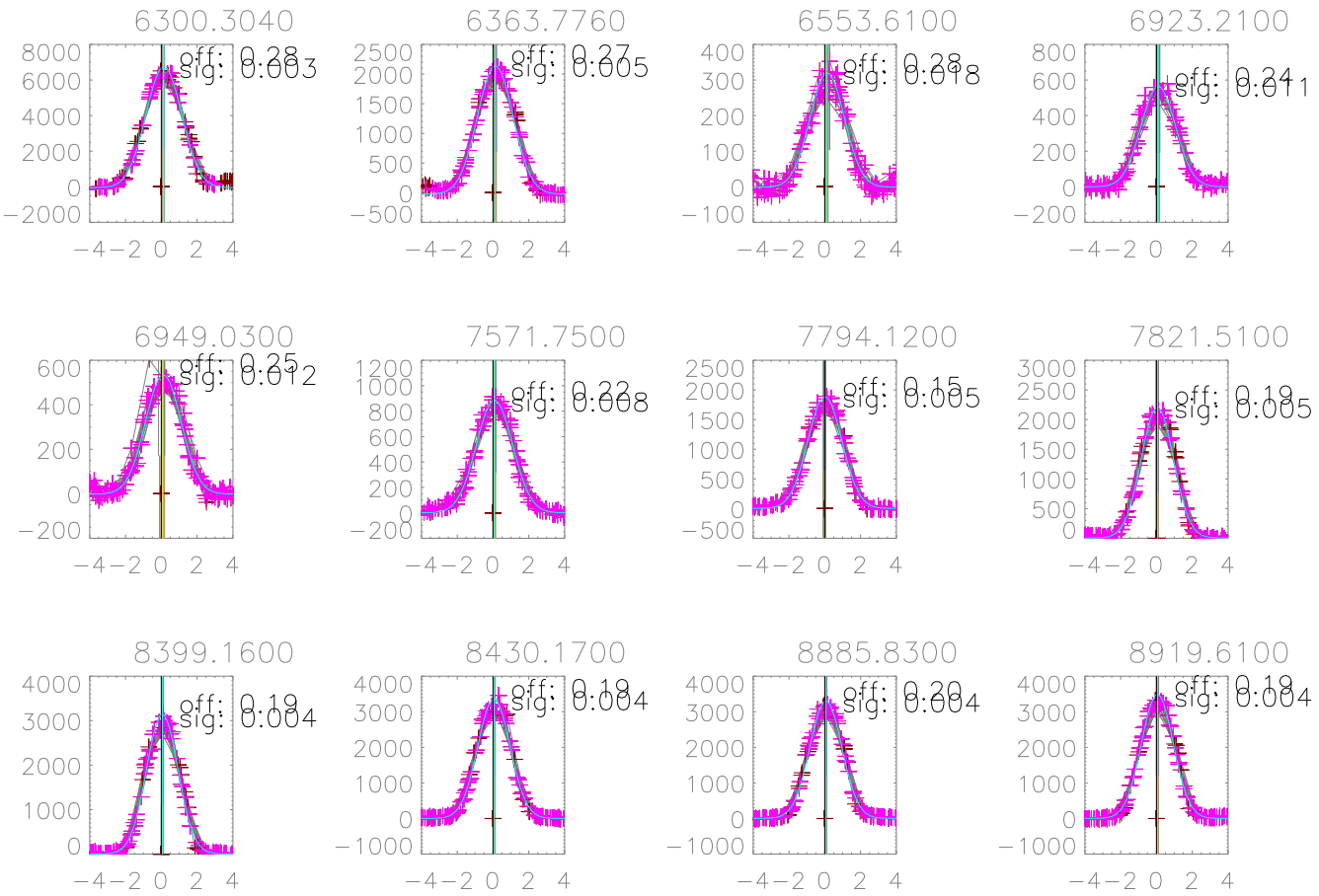

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-r2-00010612.fi
18.2
25.5
25.3
25.5
18.2
18.2
10.9
10.9
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

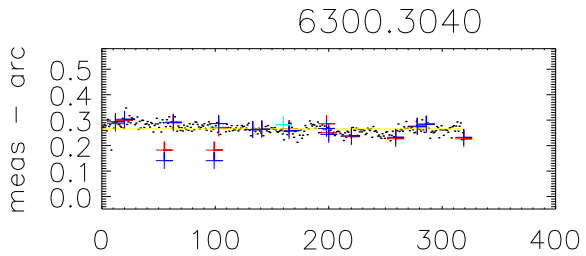

PLATE=0627 MJD=52143 Scattered Light before halo removal on sdR-r2-00010612.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.464
Max value = 30.694
Tue Feb 26 06:23:33 2008

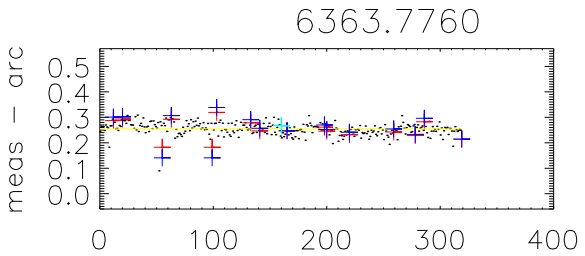

PLATE=0627 MJD=52143 Scattered Light on sdR-r2-00010612.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.3
9.5

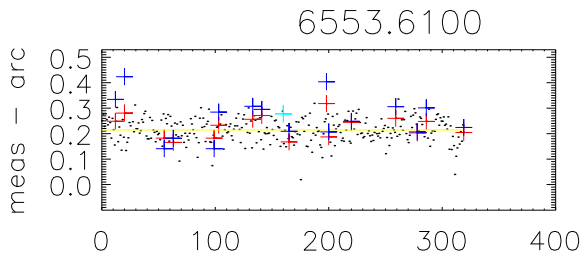

PLATE=0627 MJD=52143 Scattered Light on sdR-r2-00010612.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.036
Max value = 9.556
Tue Feb 26 06:26:12 2008

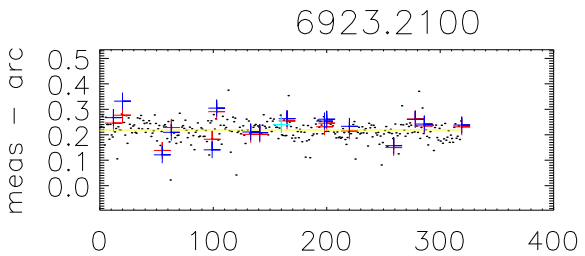

PLATE=0627 MJD=52143 Extraction chi^2 for sdR-r2-00010612.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

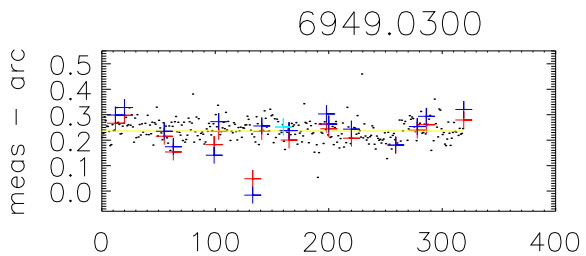

6300.3040
off: 0.28
sig: 0.003
6363.7760
off: 0.27
sig: 0.005
6553.6100
off: 0.28
sig: 0.018
6923.2100
off: 0.24
sig: 0.011
6949.0300
off: 0.25
sig: 0.012
7571.7500
off: 0.22
sig: 0.008
7794.1200
off: 0.15
sig: 0.005
7821.5100
off: 0.19
sig: 0.005
8399.1600
off: 0.19
sig: 0.004
8430.1700
off: 0.19
sig: 0.004
8885.8300
off: 0.20
sig: 0.004
8919.6100
off: 0.19
sig: 0.004

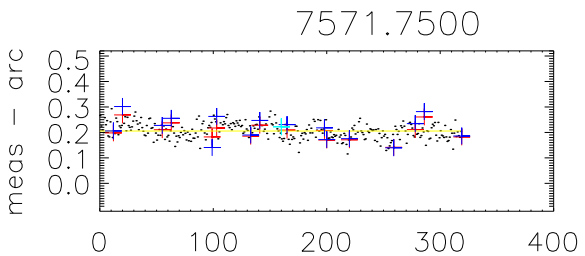

6300.3040
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

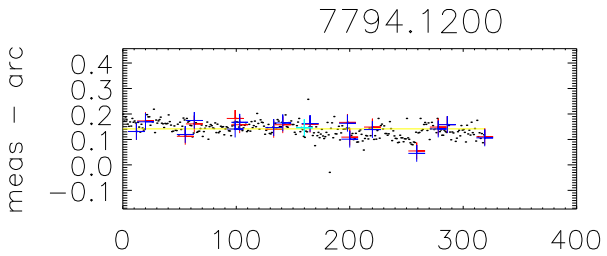

6363.7760
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

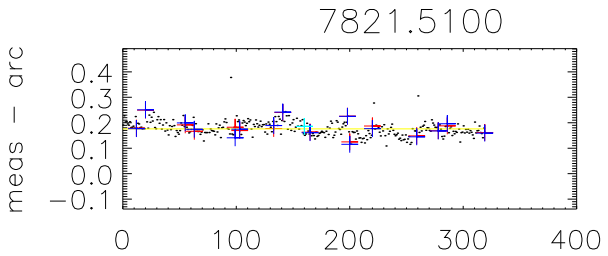

6553.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

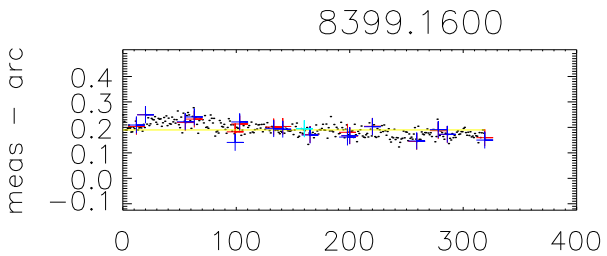

6923.2100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

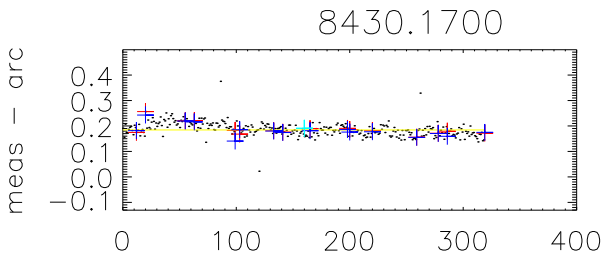

6949.0300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

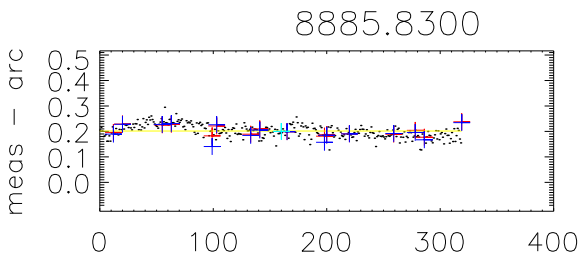

7571.7500
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

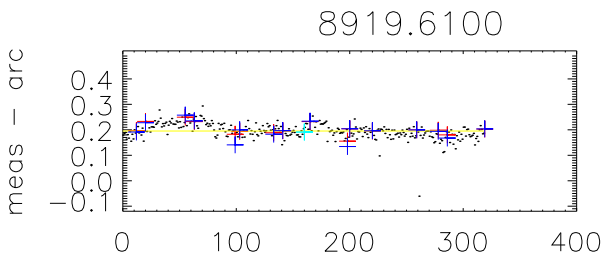

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

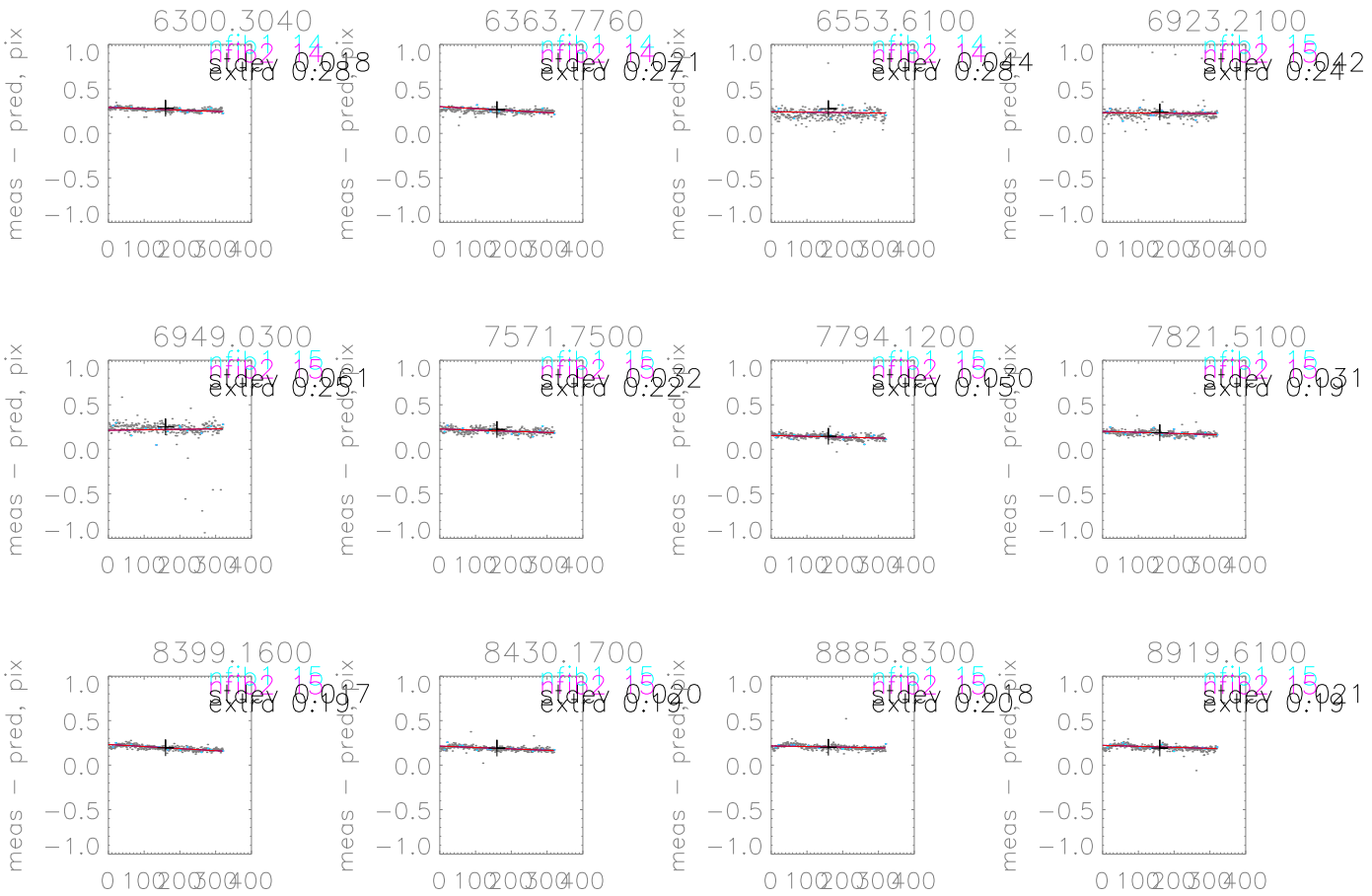

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

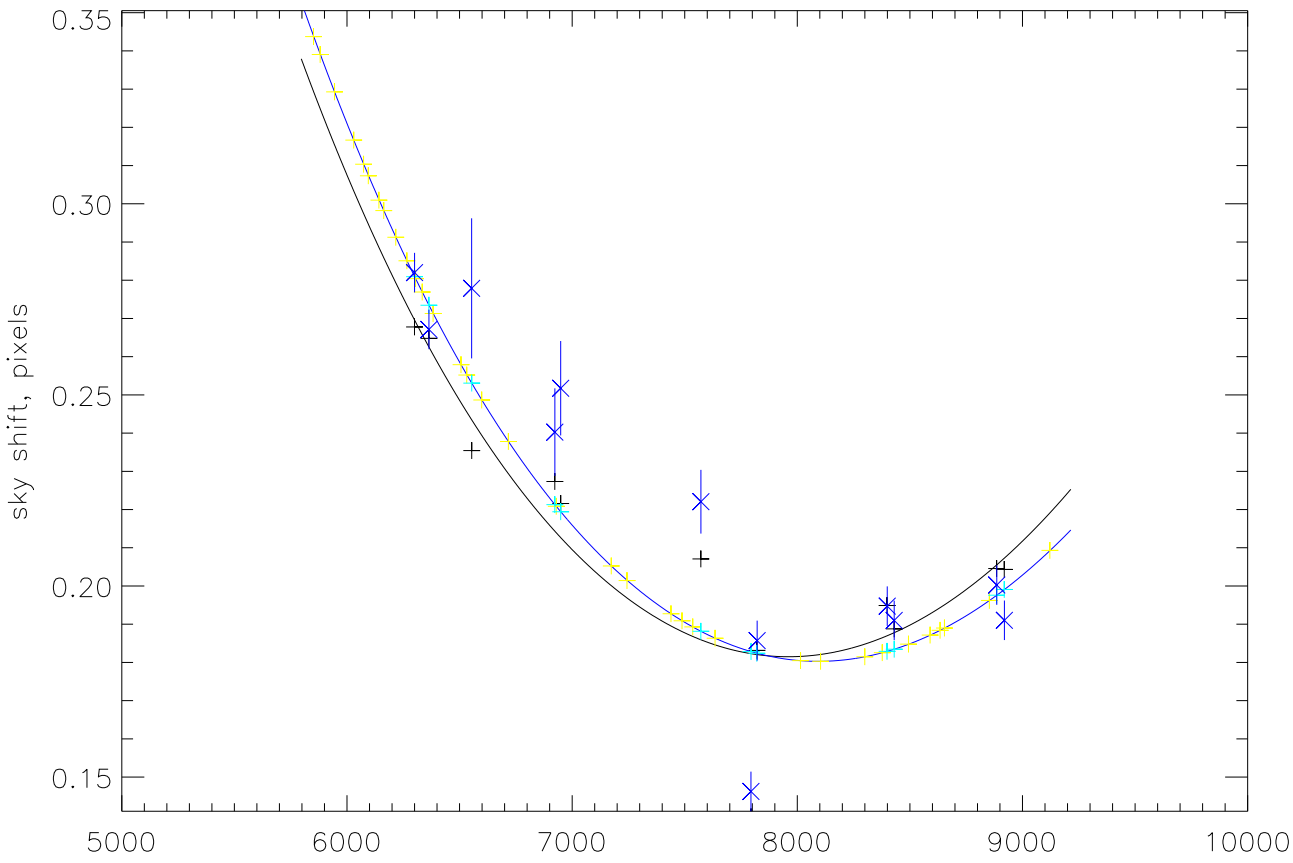

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

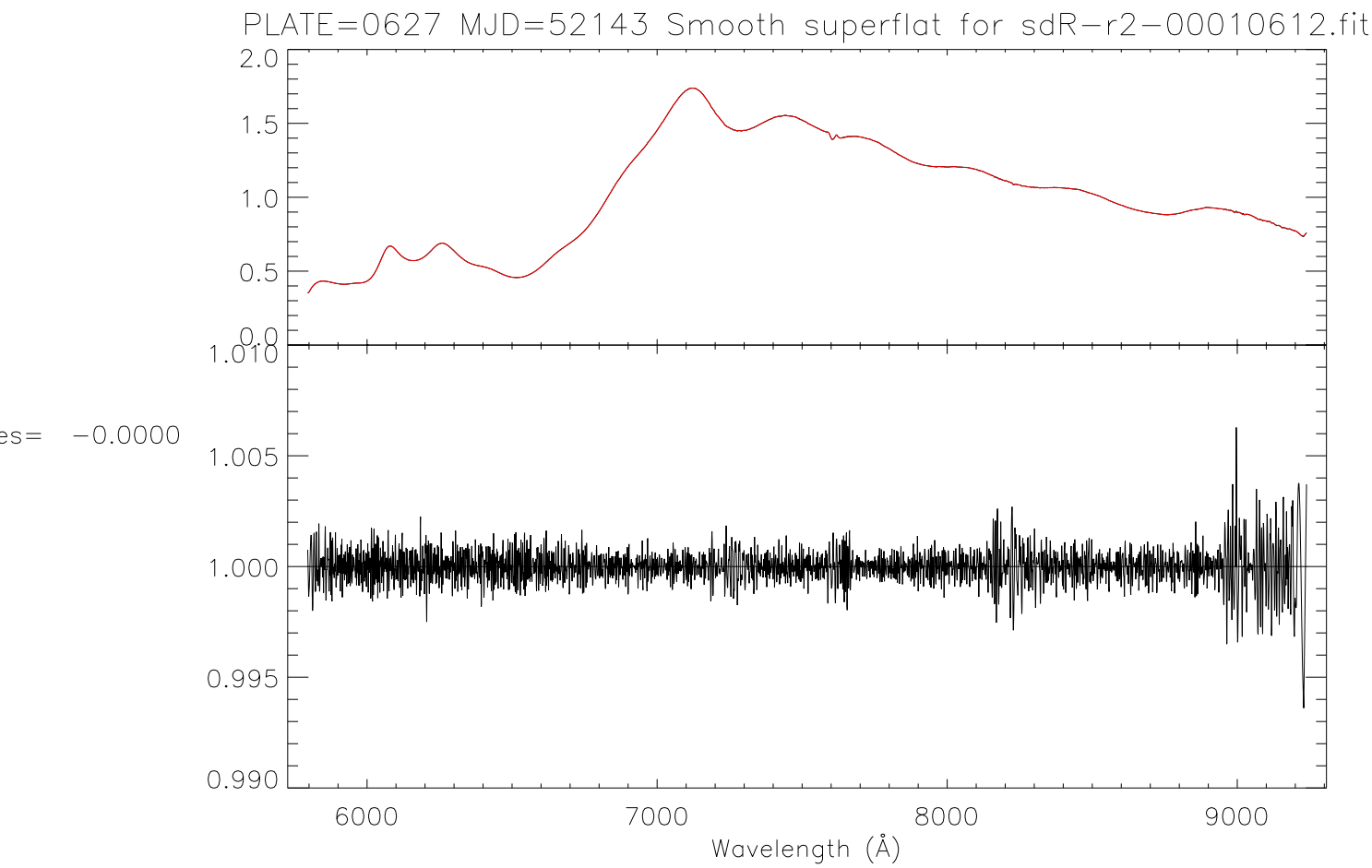

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

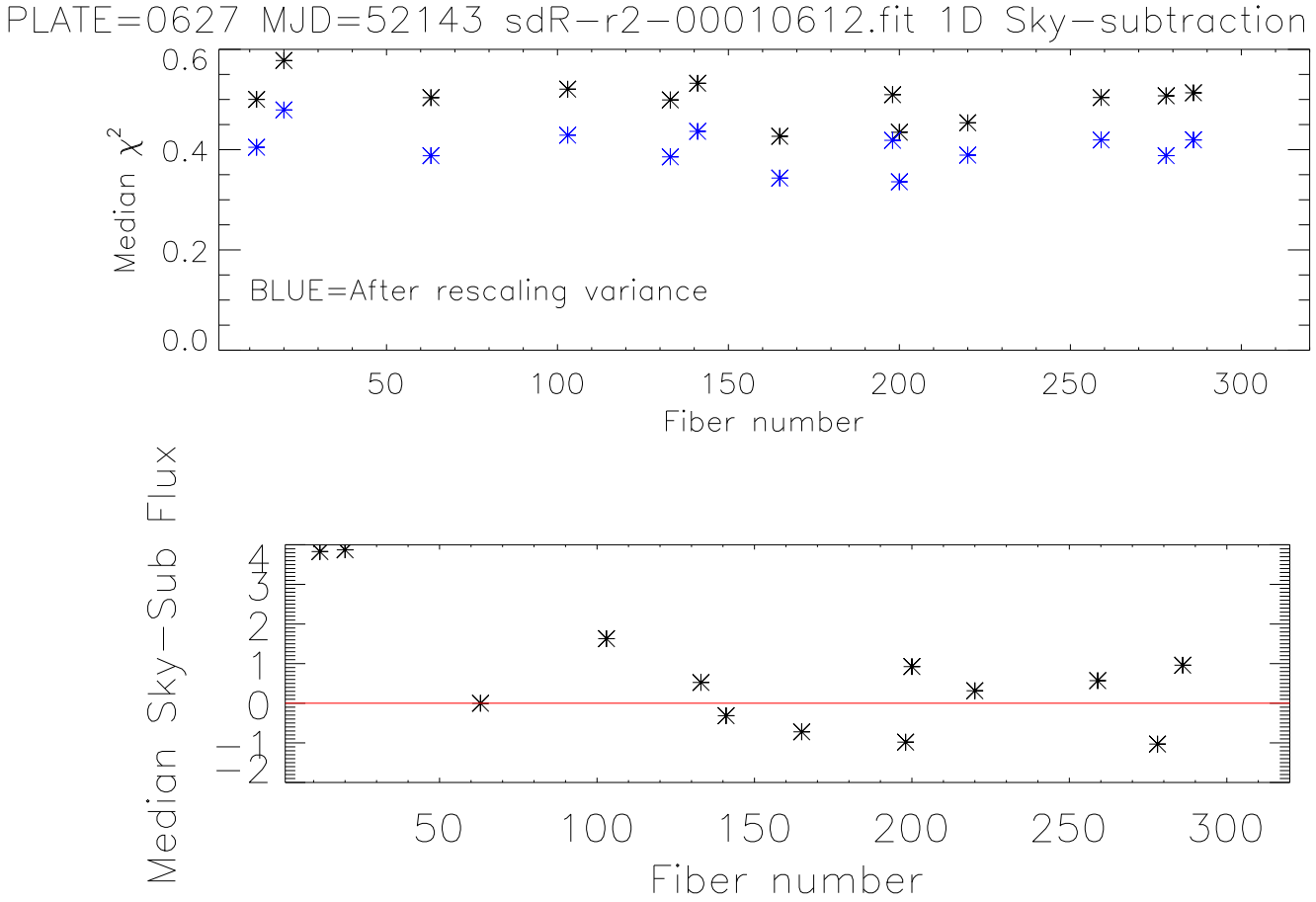

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

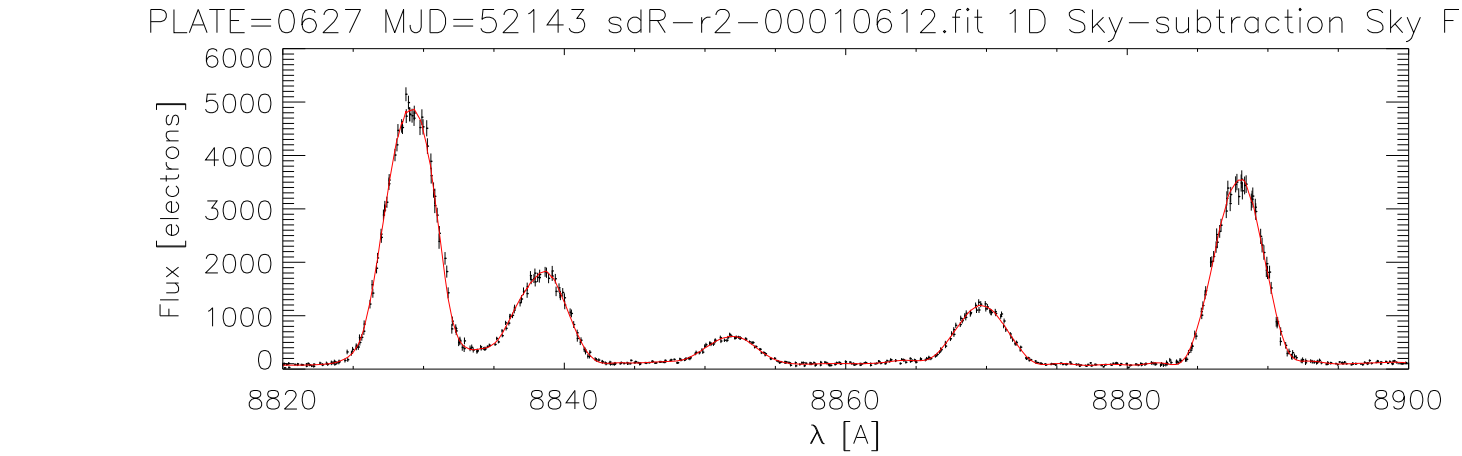

6300.3040
stdev 0.028
extra 0.28
6363.7760
stdev 0.021
extra 0.27
6553.6100
stdev 0.044
extra 0.28
6923.2100
stdev 0.042
extra 0.24
6949.0300
stdev 0.061
extra 0.25
7571.7500
stdev 0.032
extra 0.22
7794.1200
stdev 0.030
extra 0.15
7821.5100
stdev 0.031
extra 0.19
8399.1600
stdev 0.017
extra 0.19
8430.1700
stdev 0.020
extra 0.19
8885.8300
stdev 0.018
extra 0.20
8919.6100
stdev 0.021
extra 0.19
meas − pred, pix
mfb1 14
mfb2 15

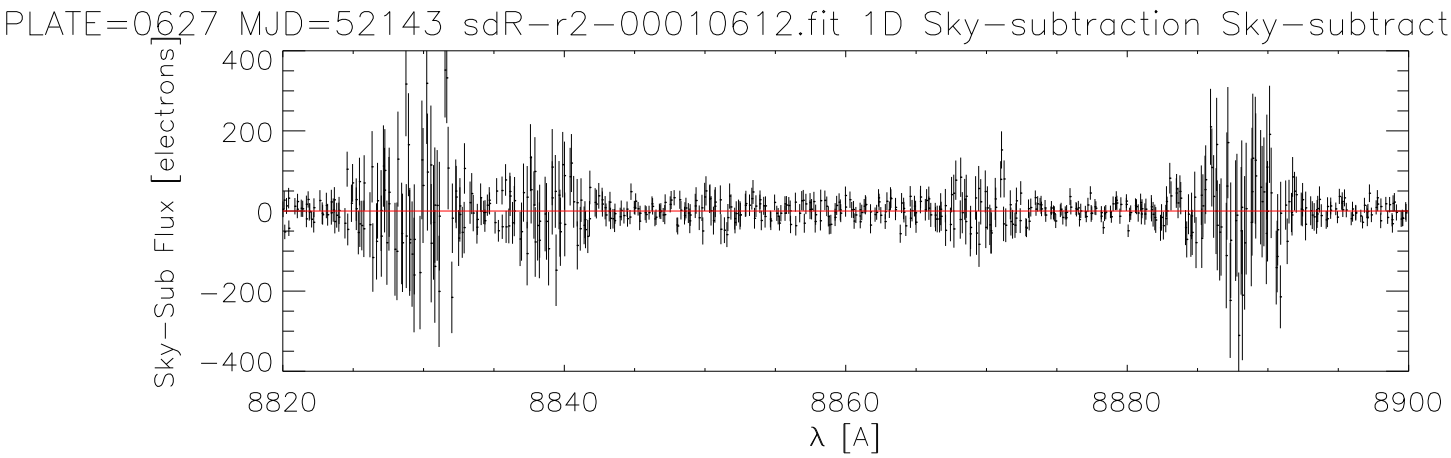

0.35
0.30
0.25
0.20
0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

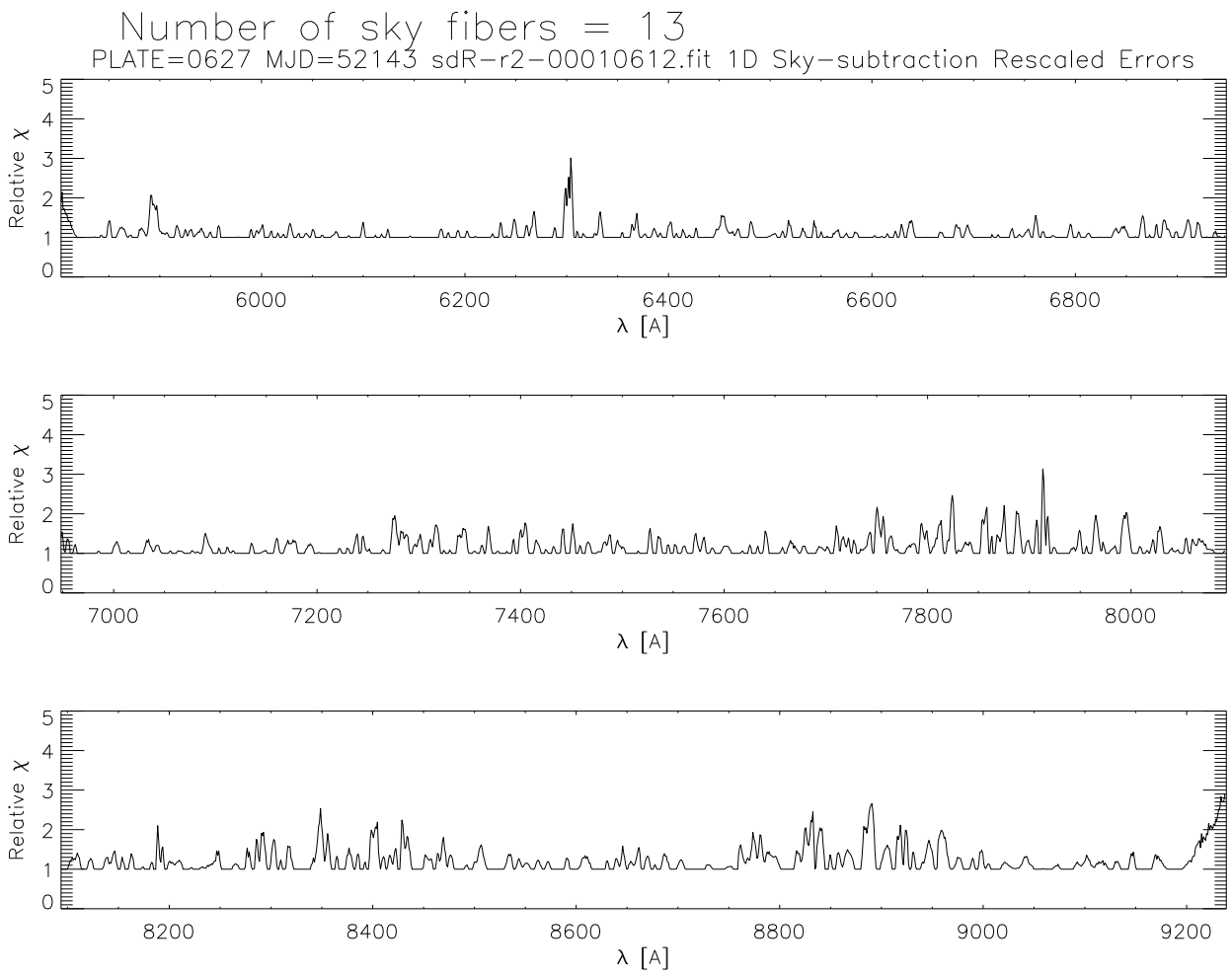

PLATE=0627 MJD=52143 Smooth superflat for sdR-r2-00010612.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

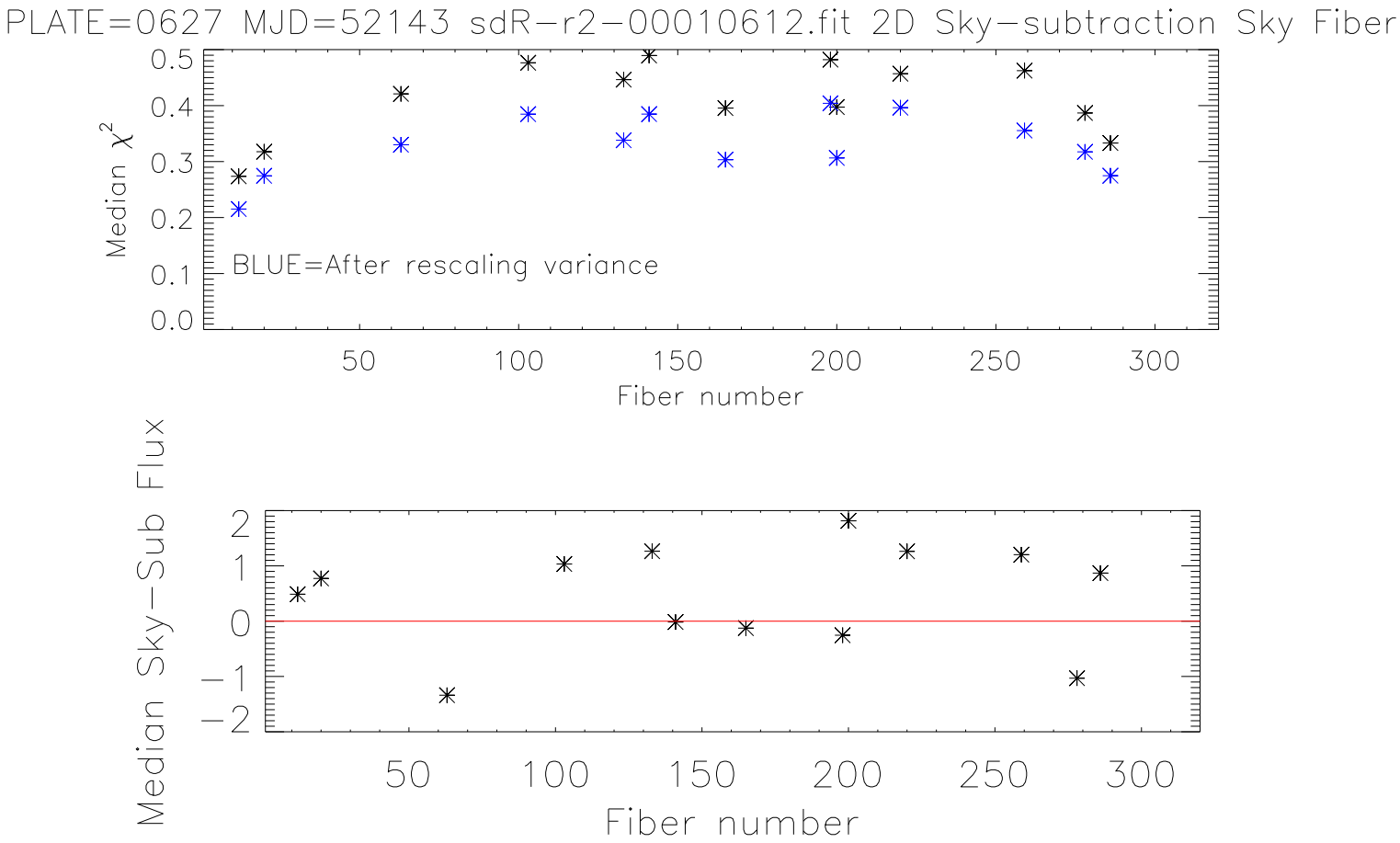
es= −0.0000

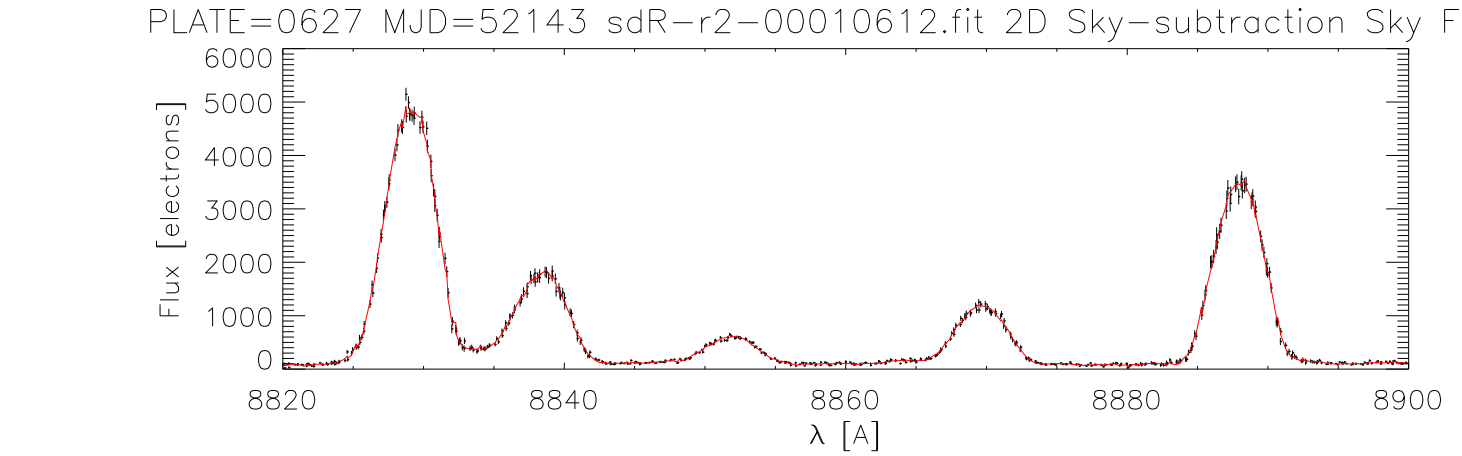

PLATE=0627 MJD=52143 sdR-r2-00010612.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

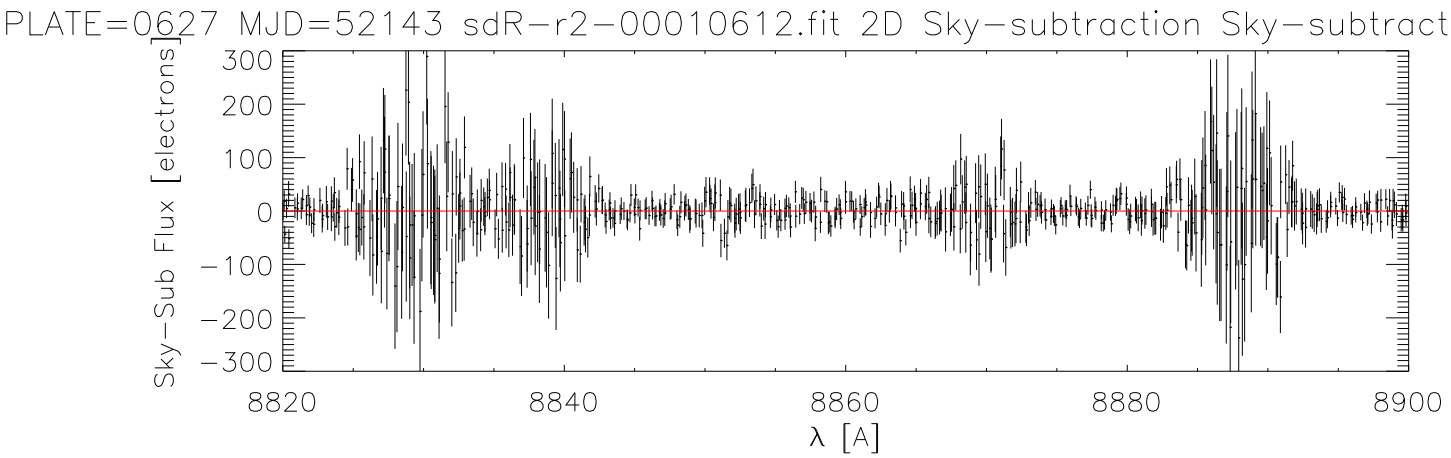

PLATE=0627 MJD=52143 sdR-r2-00010612.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

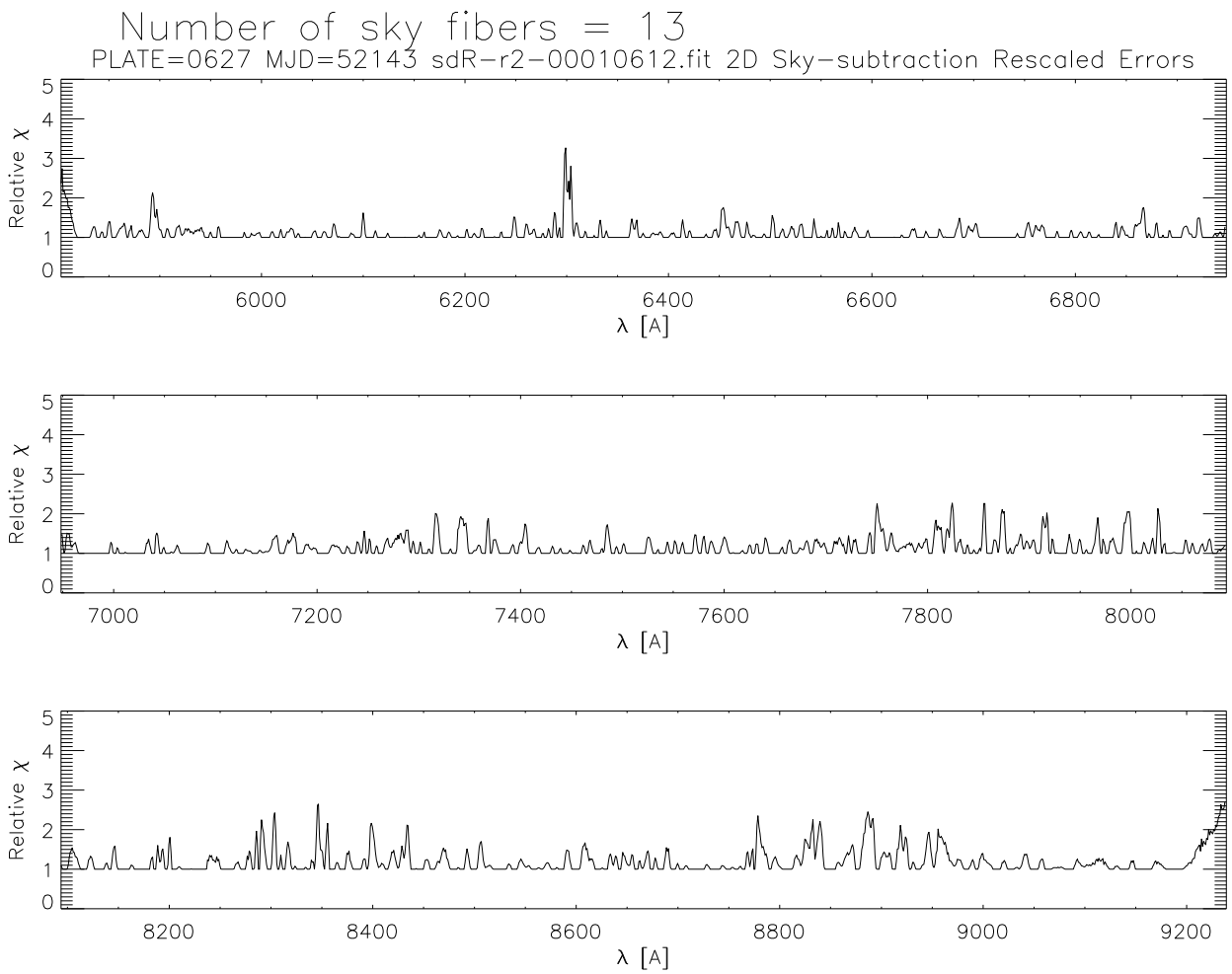

PLATE=0627 MJD=52143 sdR-r2-00010612.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

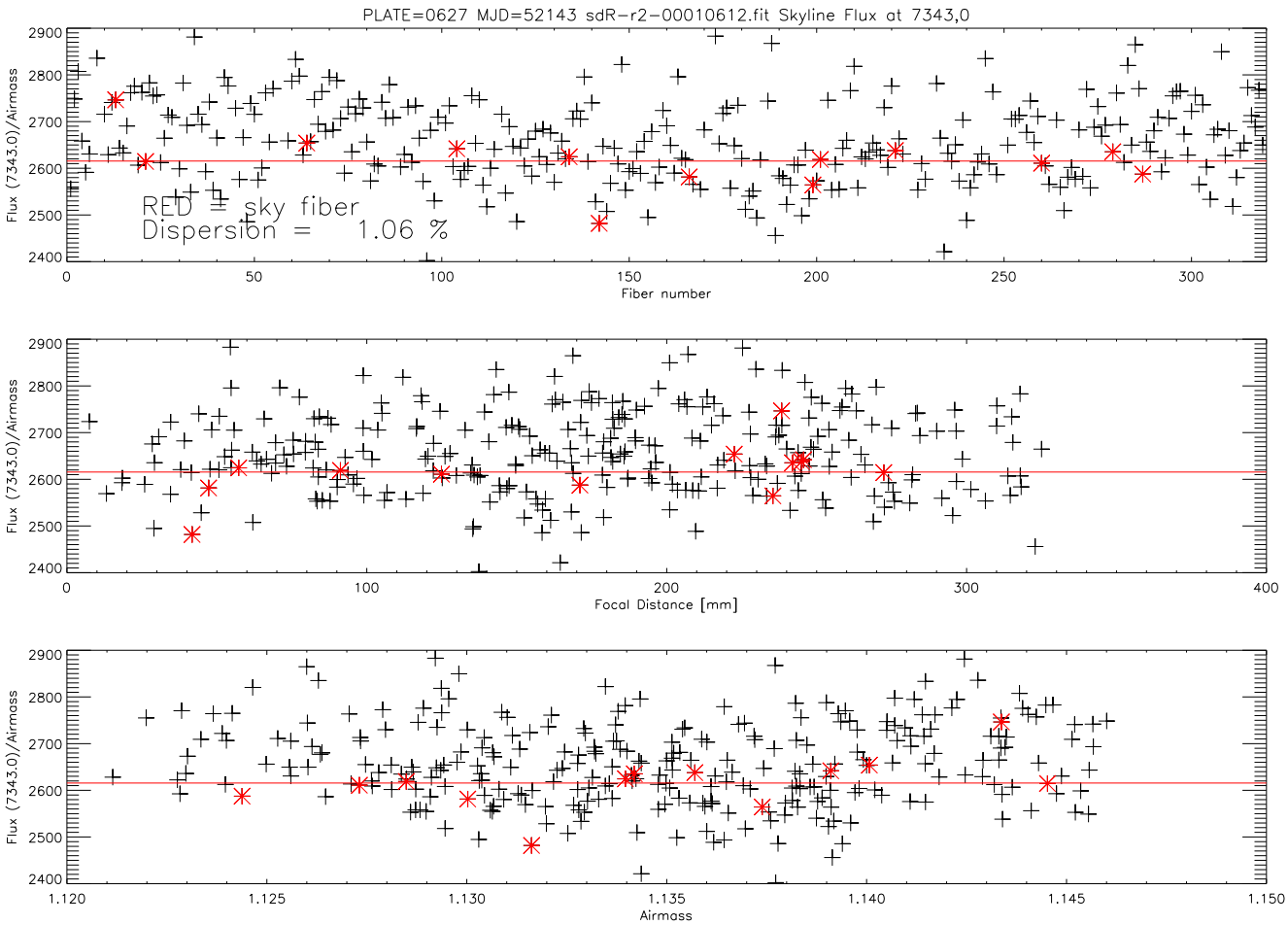

Number of sky fibers = 13
PLATE=0627 MJD=52143 sdR-r2-00010612.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

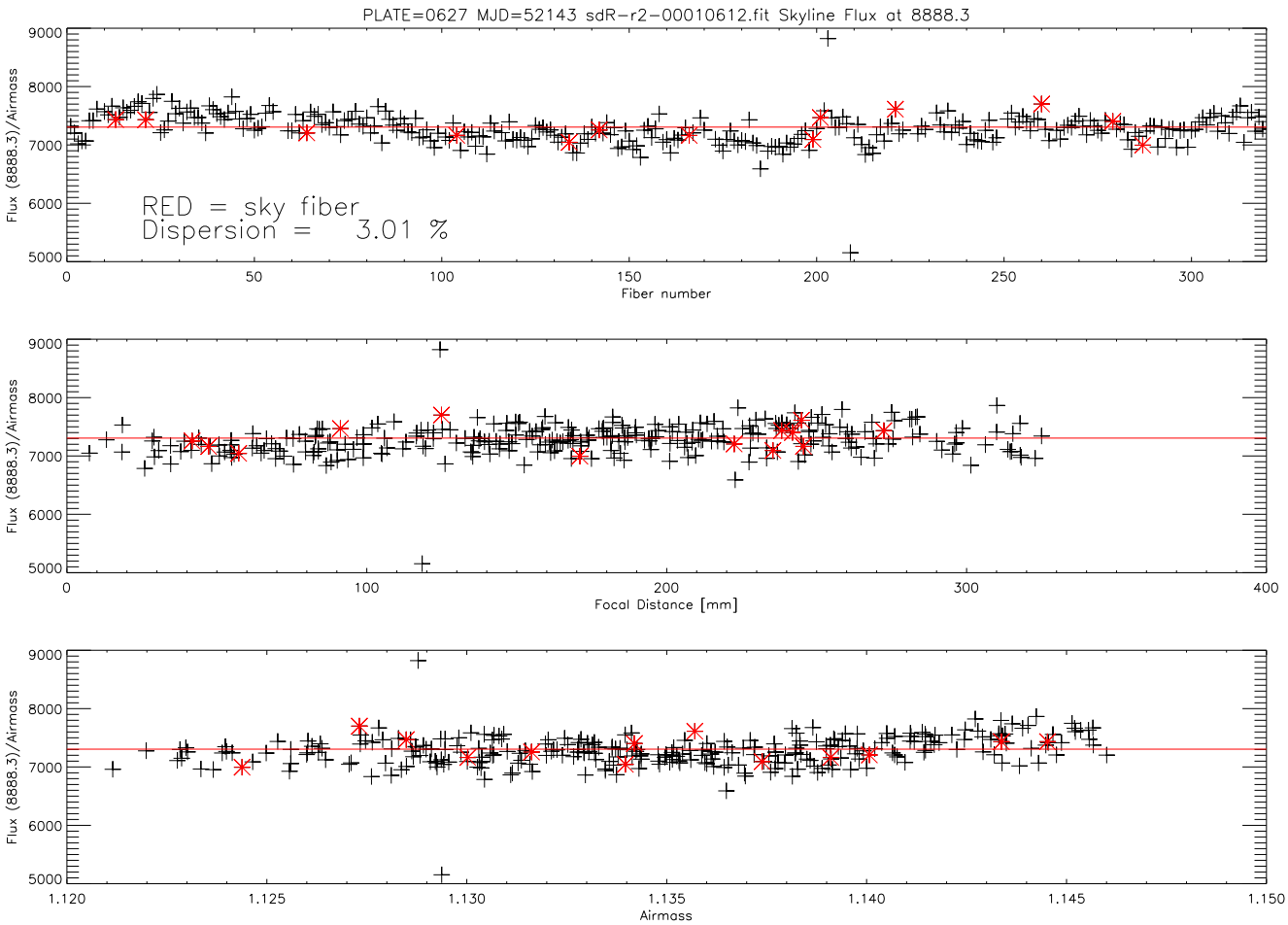

PLATE=0627 MJD=52143 sdR-r2-00010612.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
2
1
0
−1
−2
50
100
150
200
250
300
Fiber number


PLATE=0627 MJD=52143 sdR-r2-00010612.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=0627 MJD=52143 sdR-r2-00010612.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 13
PLATE=0627 MJD=52143 sdR-r2-00010612.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=0627 MJD=52143 sdR-r2-00010612.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.06 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0627 MJD=52143 sdR-r2-00010612.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.01 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass