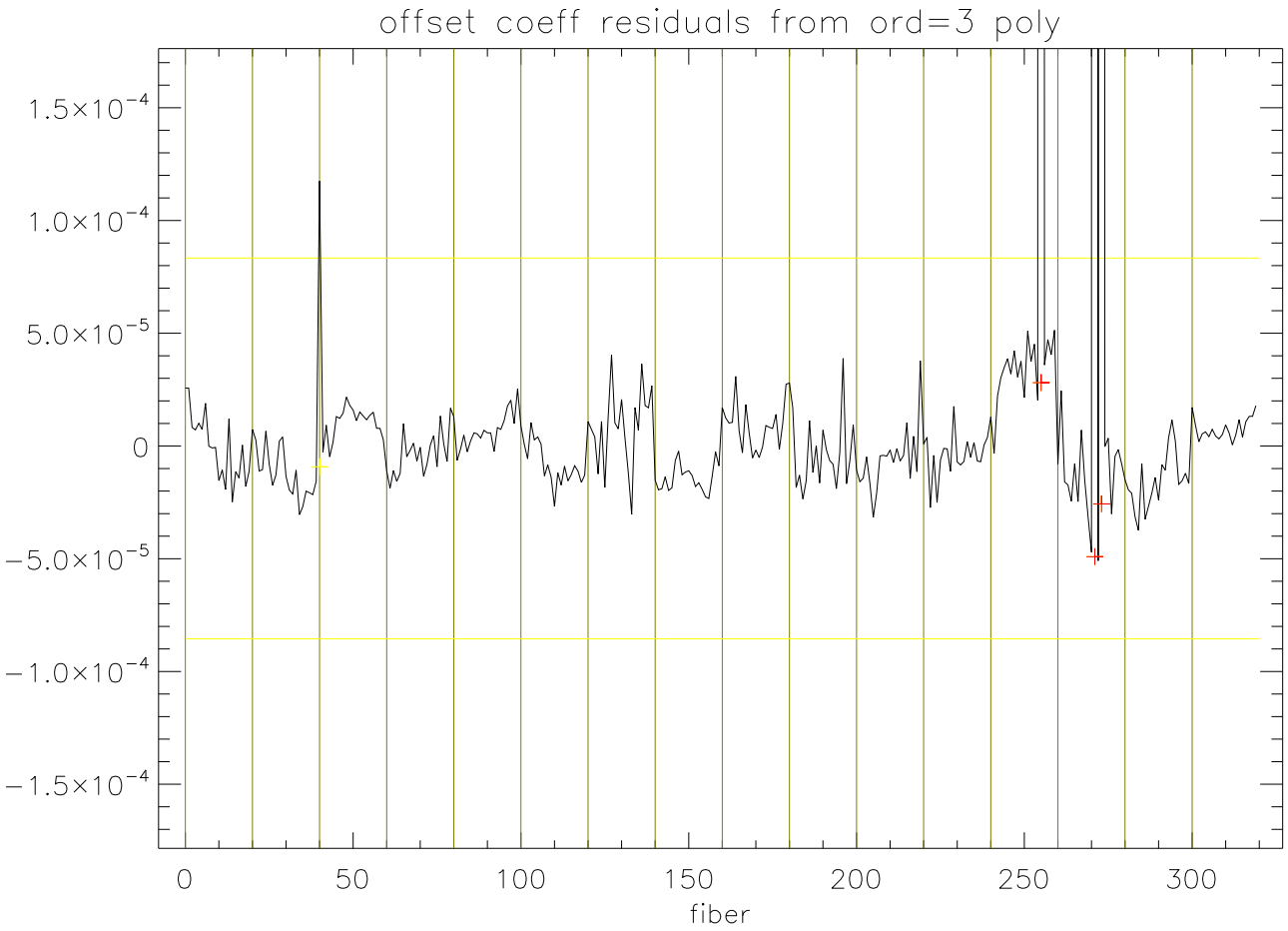
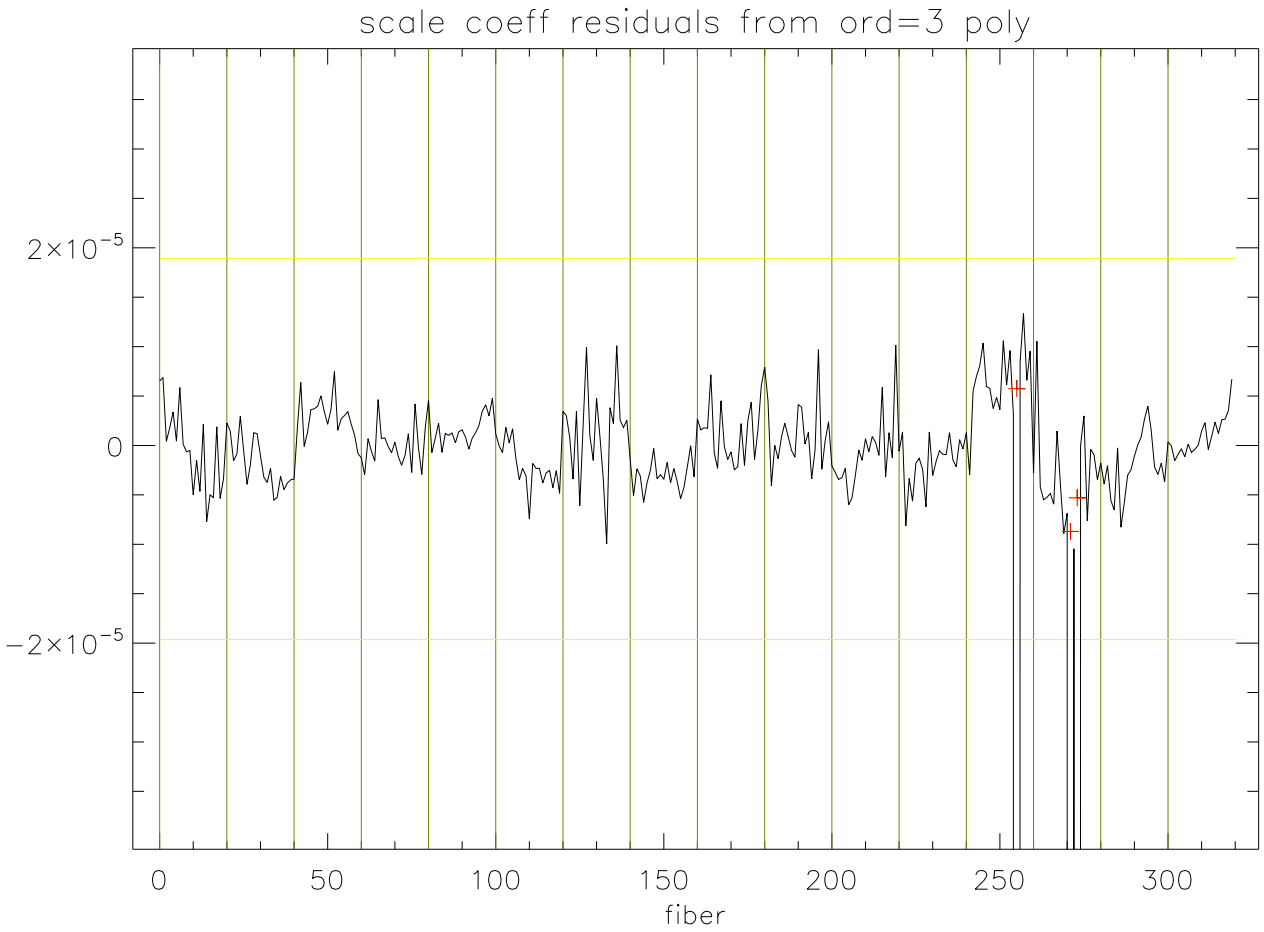
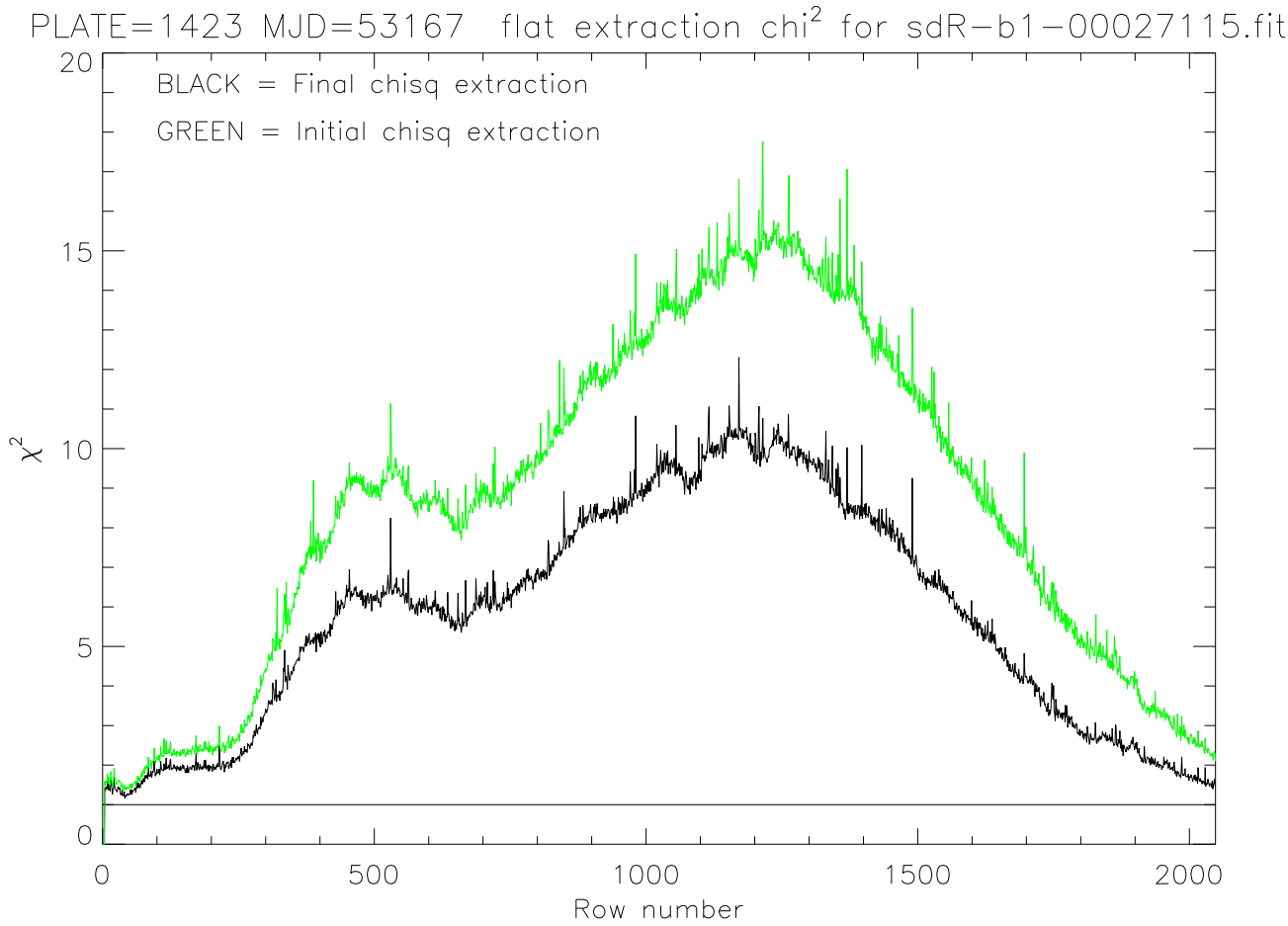
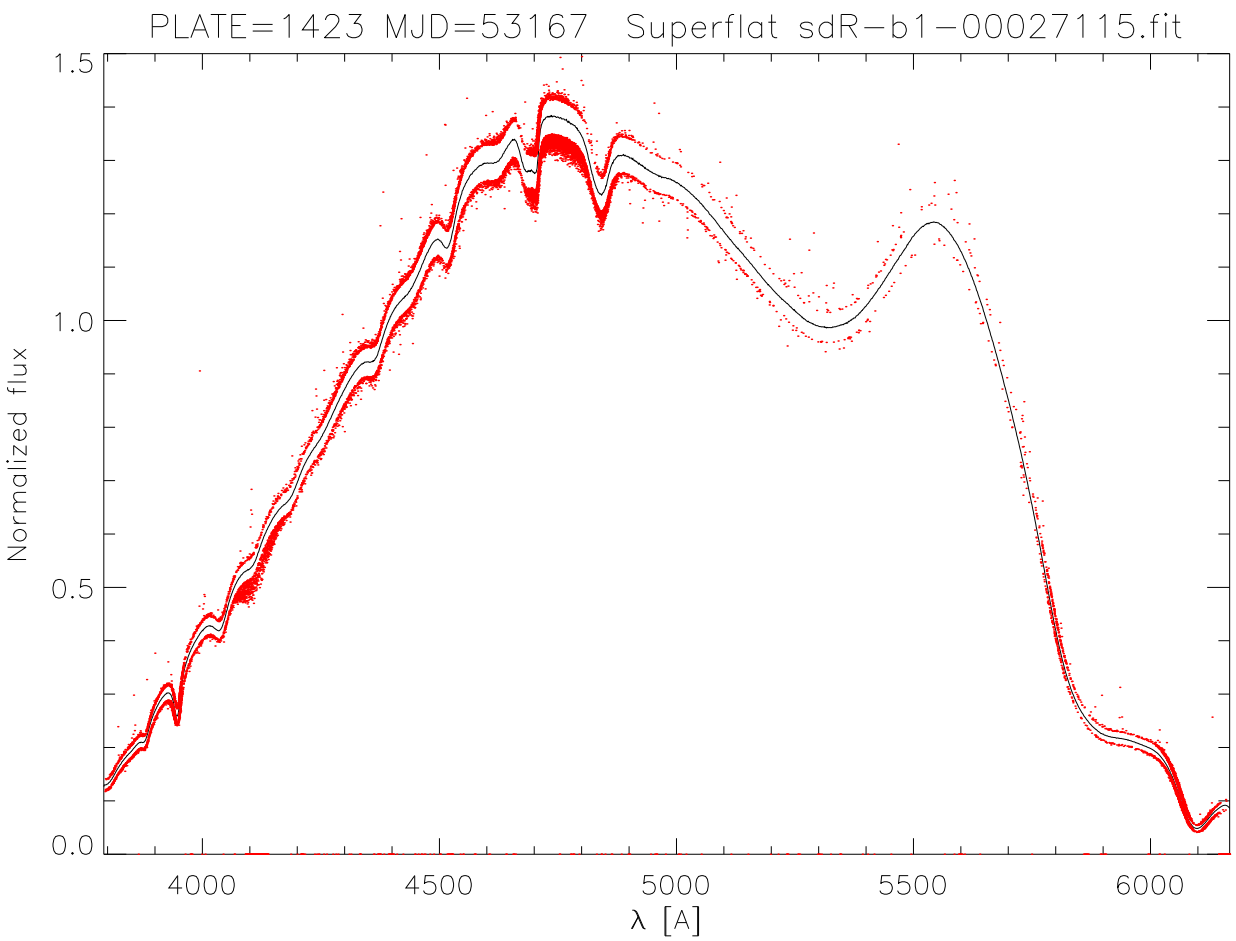
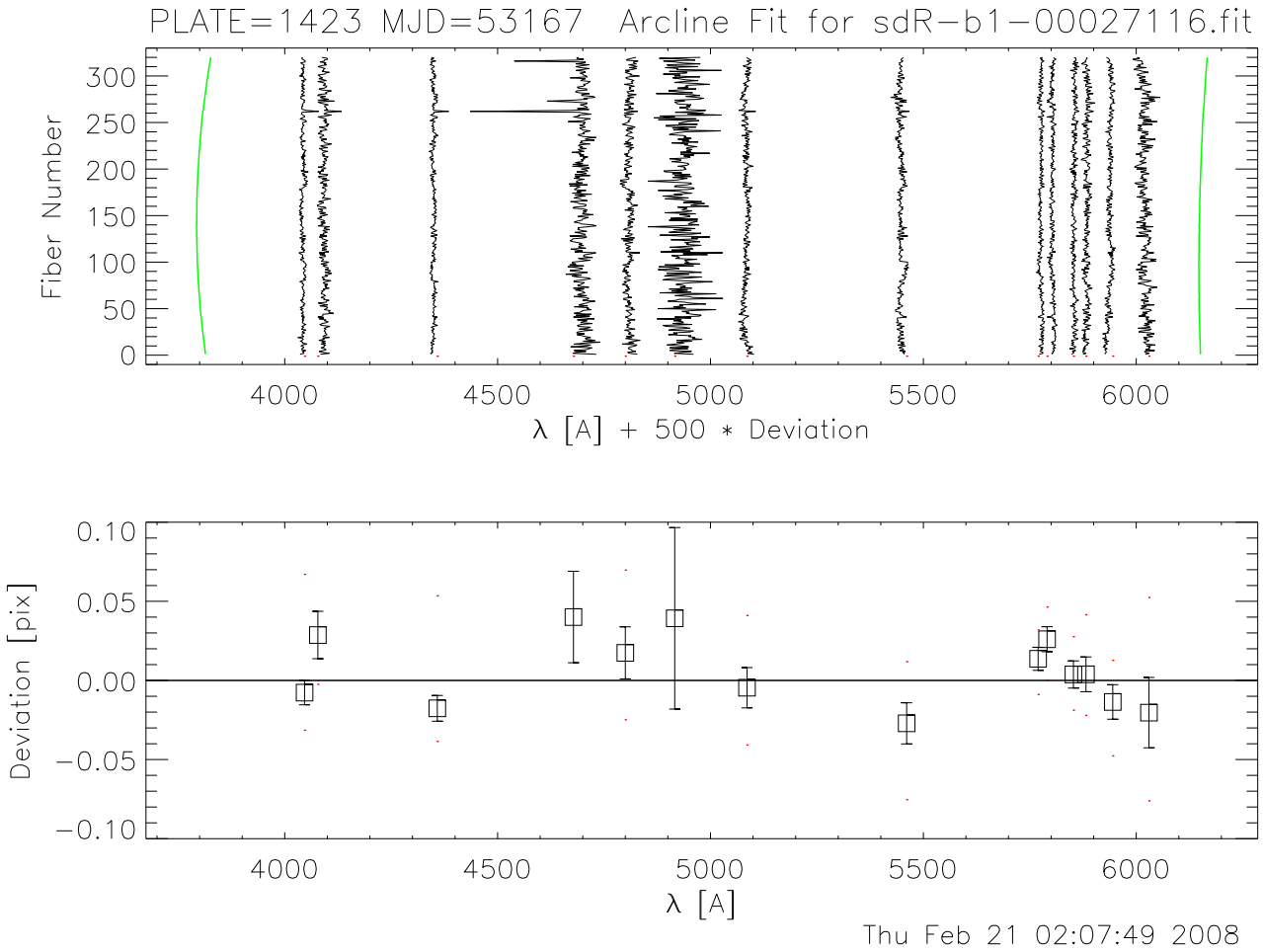
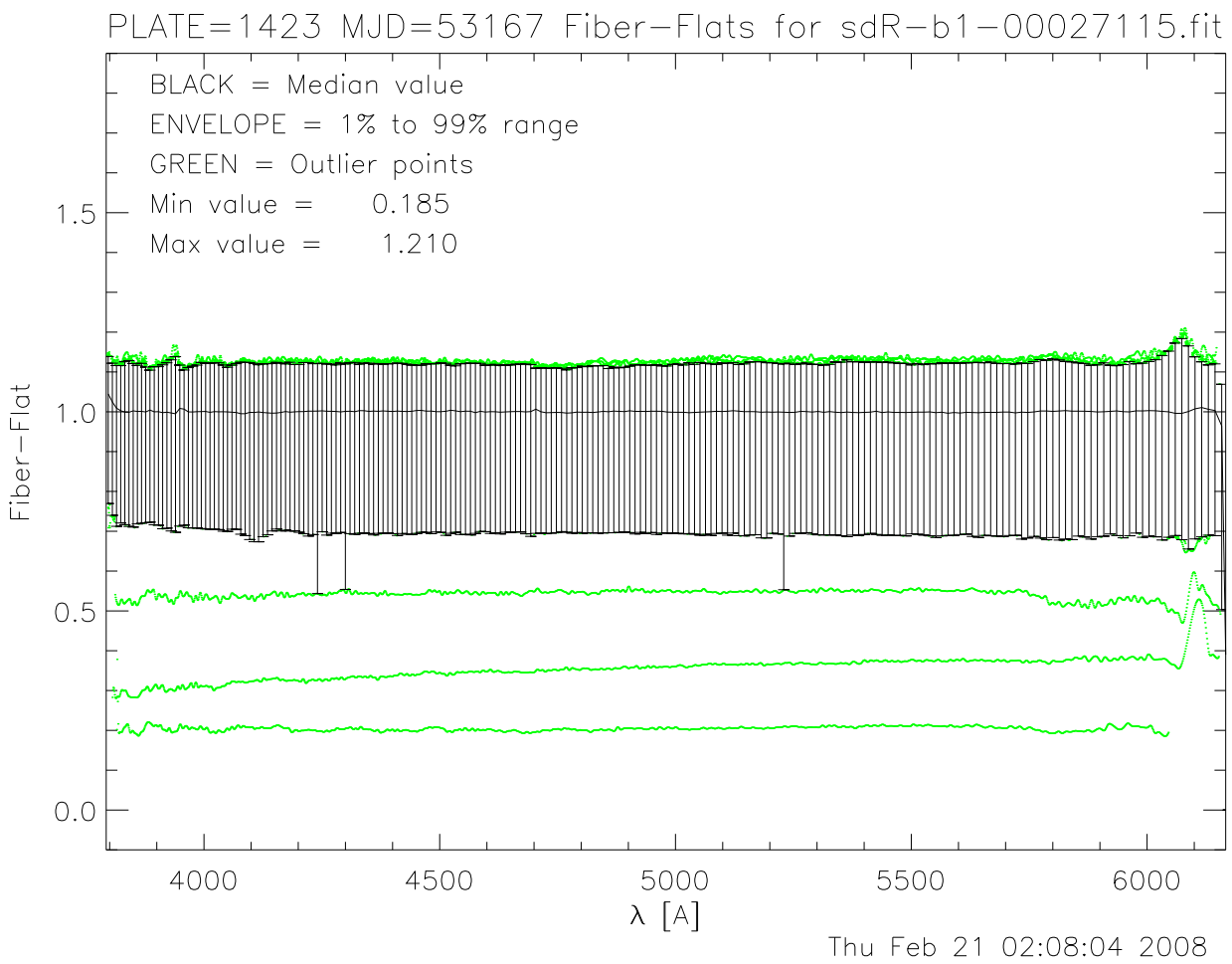

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

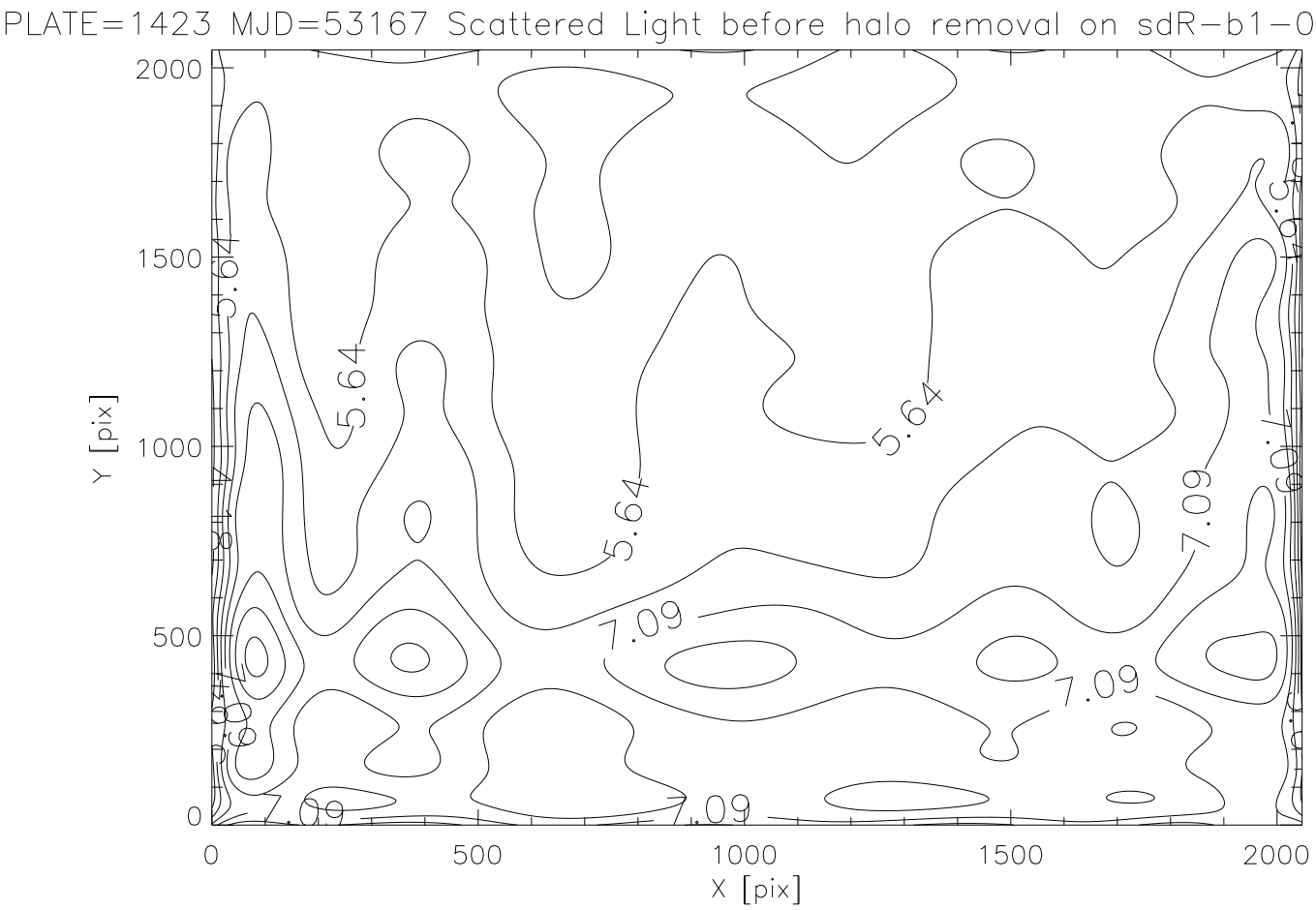

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

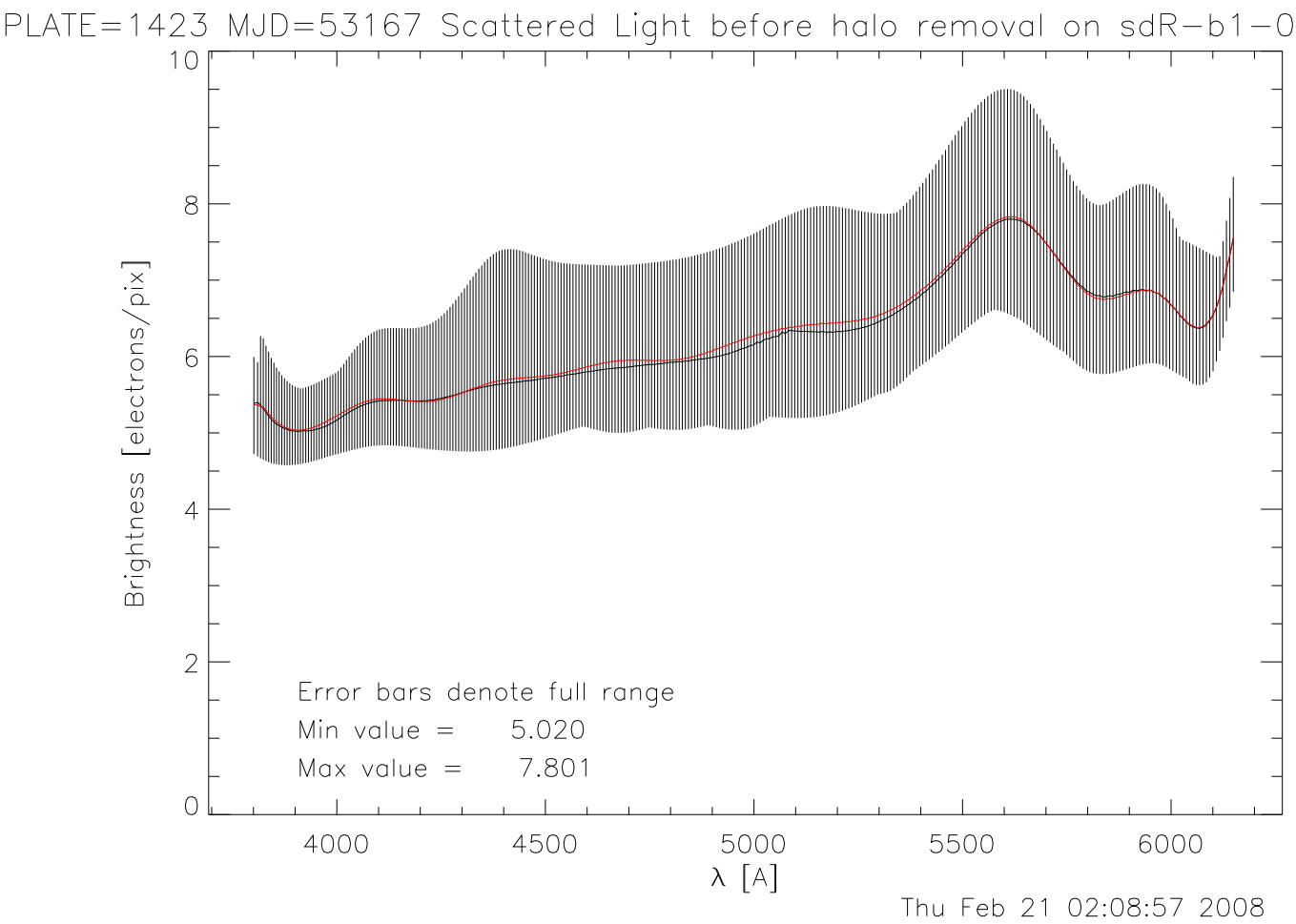

PLATE=1423 MJD=53167 flat extraction chi^2 for sdR−b1−00027115.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

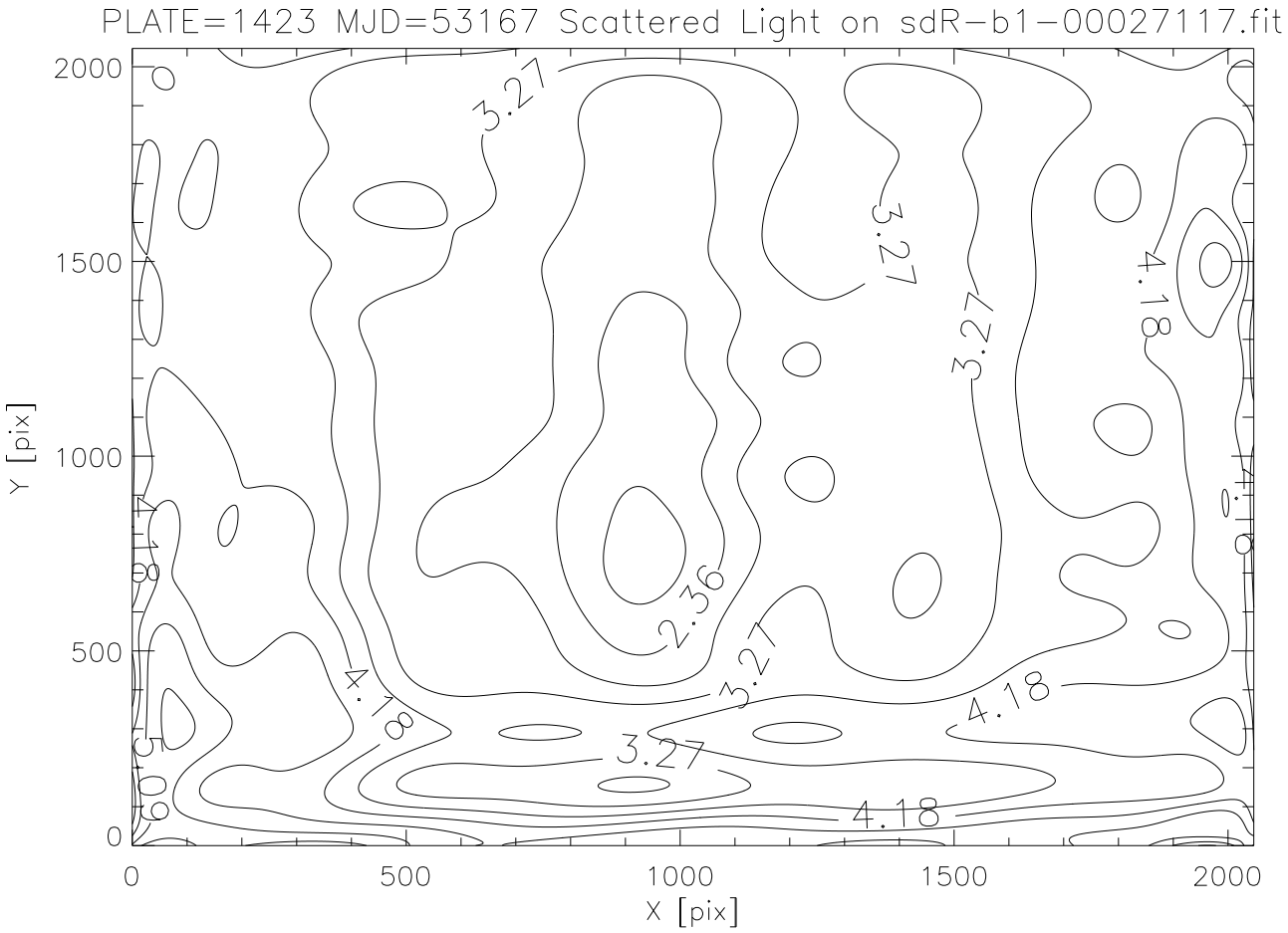

PLATE=1423 MJD=53167 Superflat sdR-b1-00027115.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

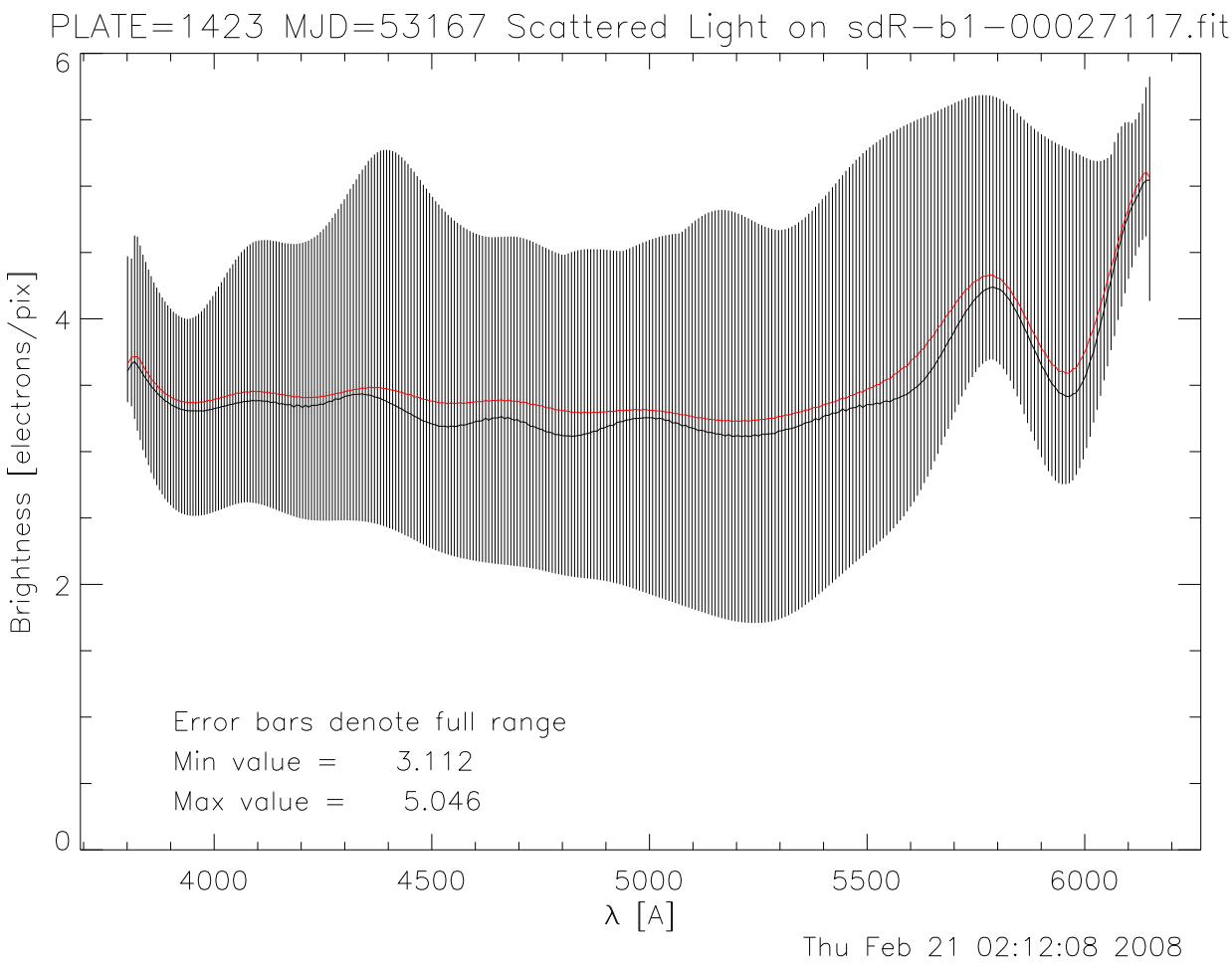

PLATE=1423 MJD=53167 Arcline Fit for sdR-b1-00027116.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Thu Feb 21 02:07:49 2008

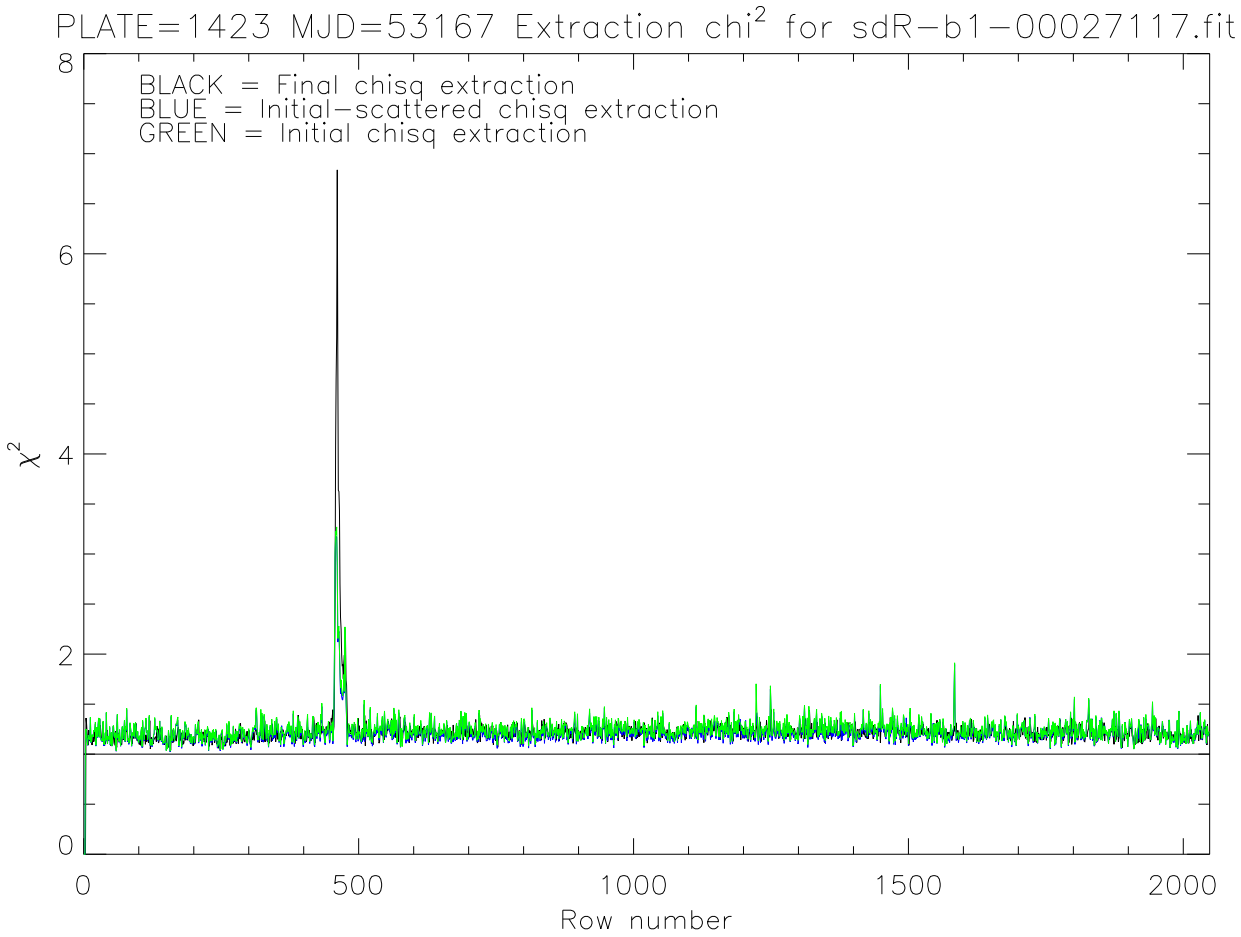

PLATE=1423 MJD=53167 Fiber−Flats for sdR−b1−00027115.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.185
Max value = 1.210
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 21 02:08:04 2008

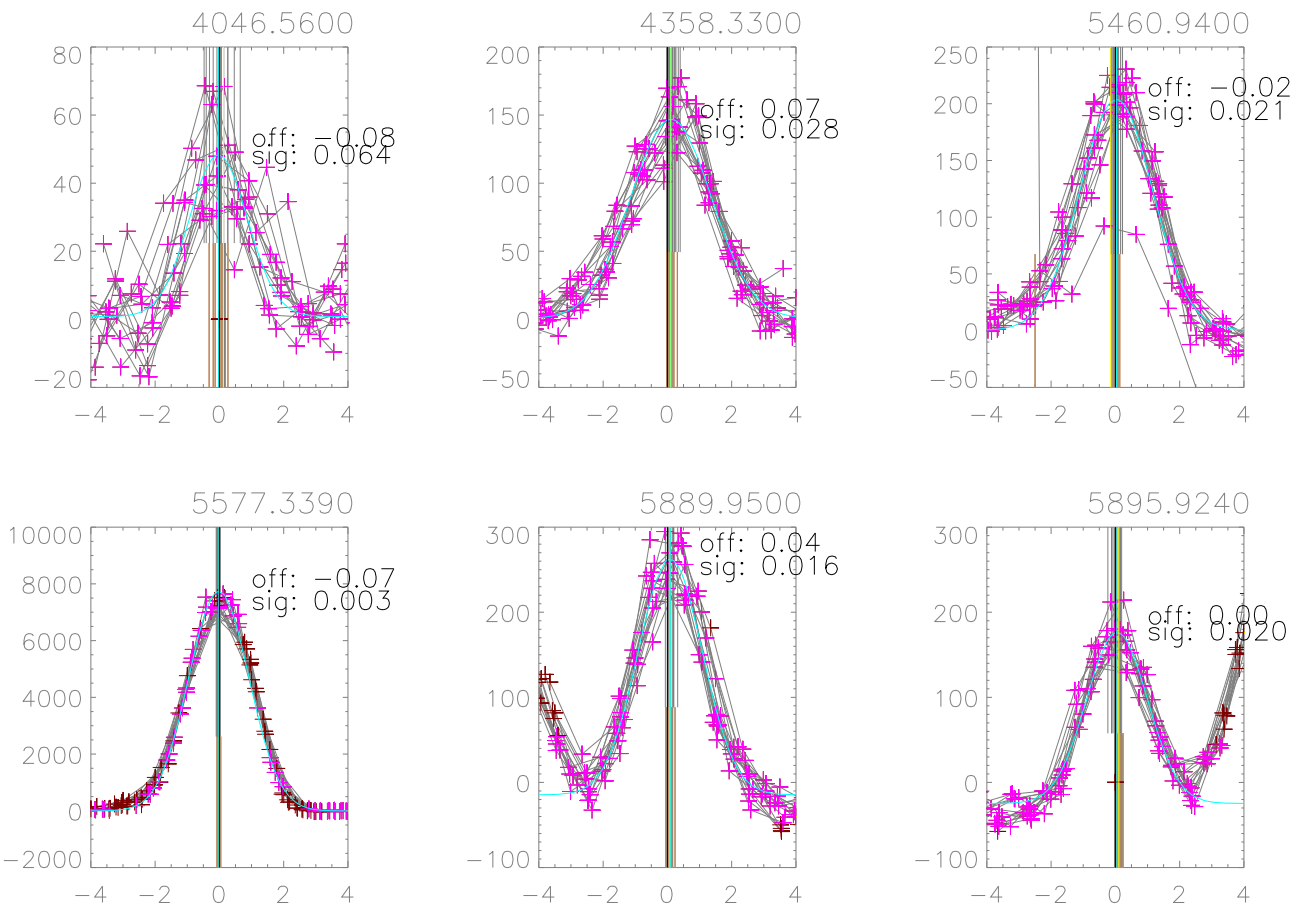

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR−b1−00027117.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.64
7.09

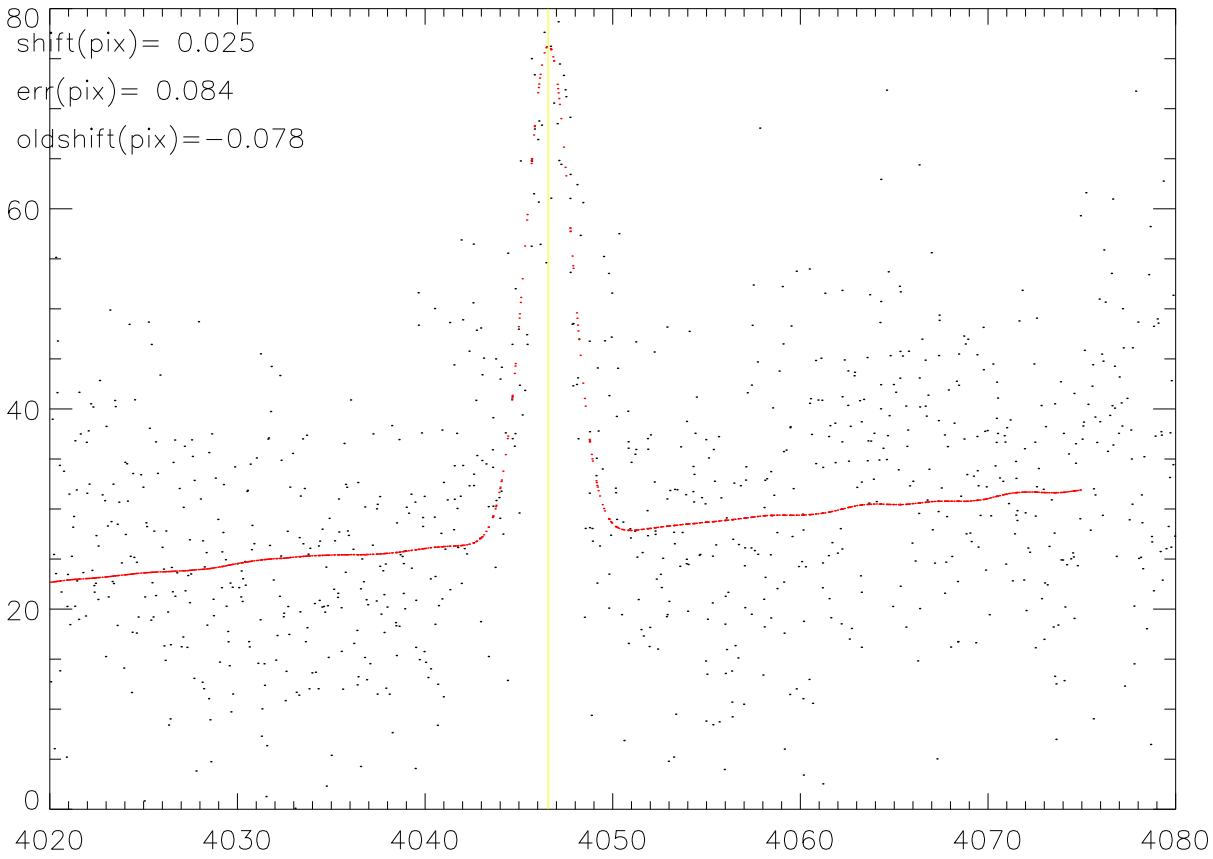

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR−b1−00027117.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.020
Max value = 7.801
Thu Feb 21 02:08:57 2008

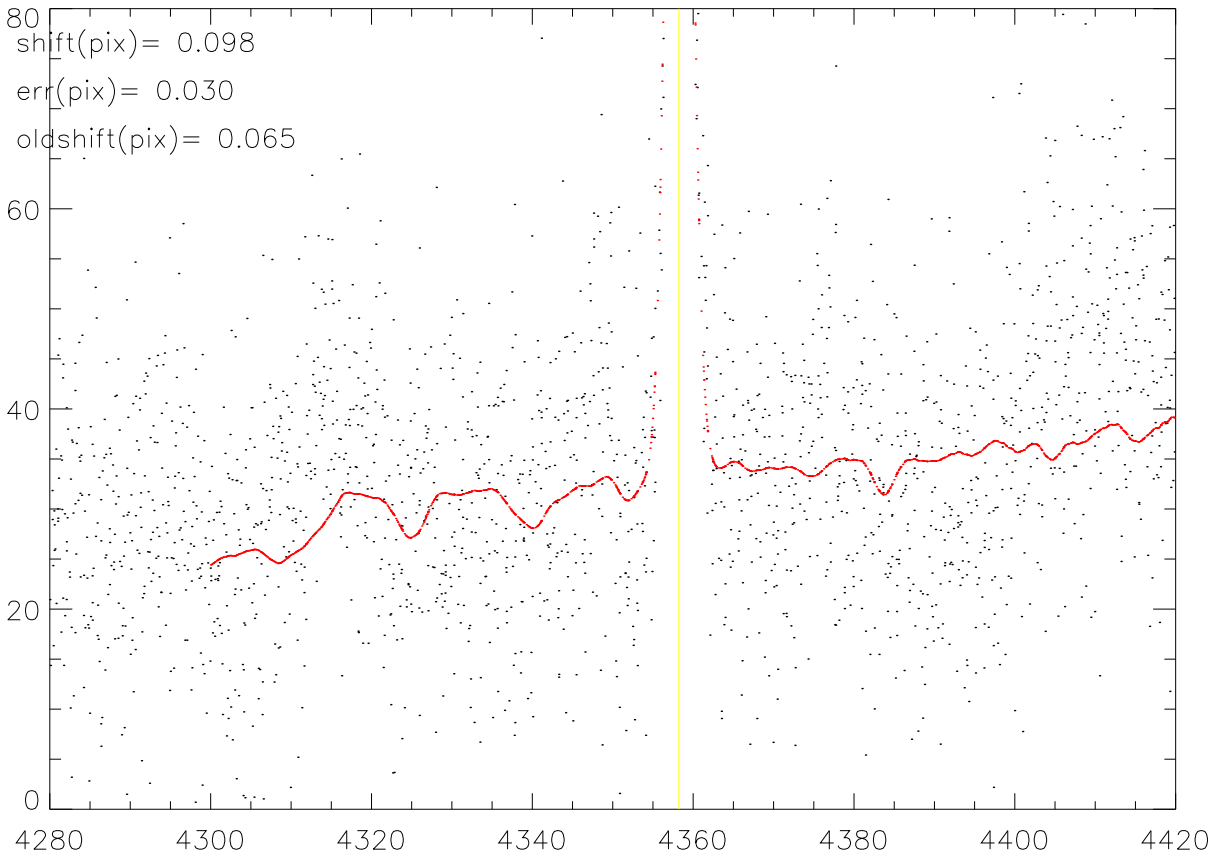

PLATE=1423 MJD=53167 Scattered Light on sdR-b1-00027117.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
3.27
4.18
2.36

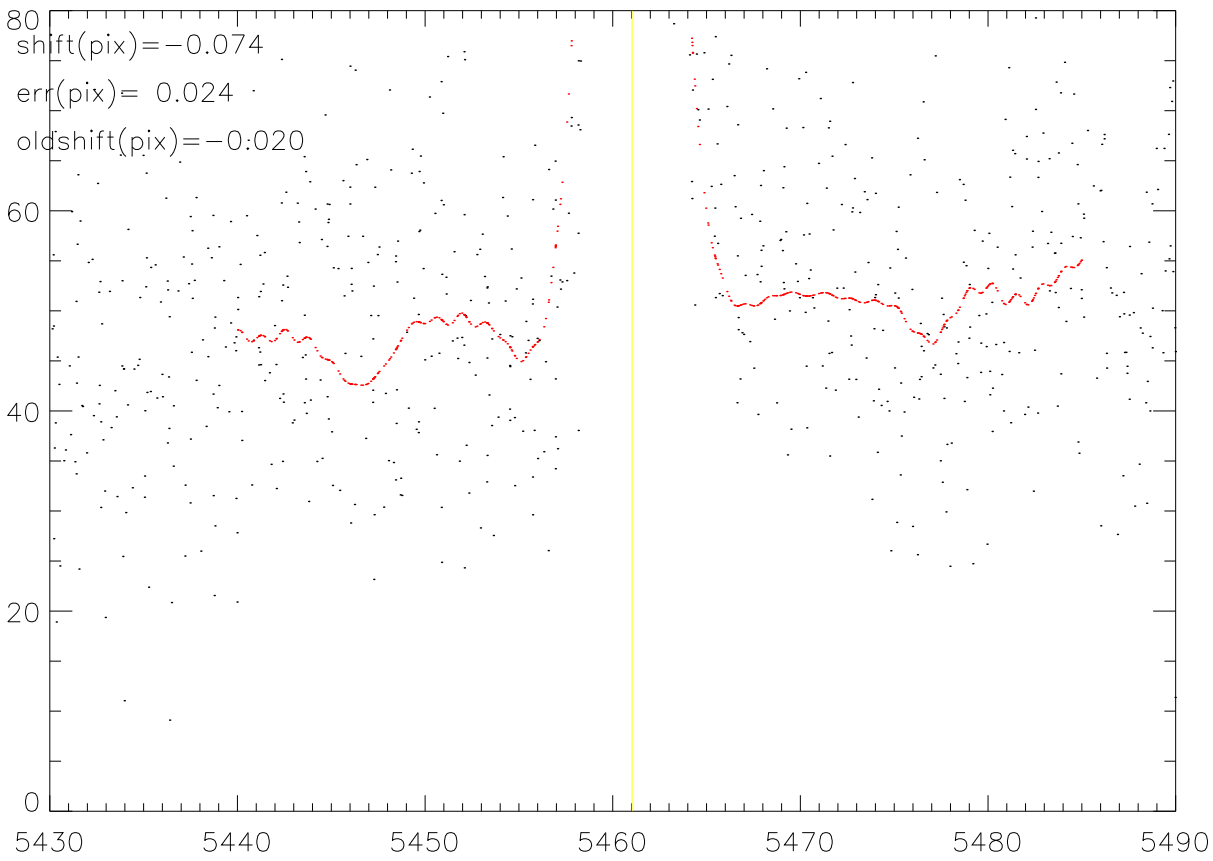

PLATE=1423 MJD=53167 Scattered Light on sdR-b1-00027117.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.112
Max value = 5.046
Thu Feb 21 02:12:08 2008

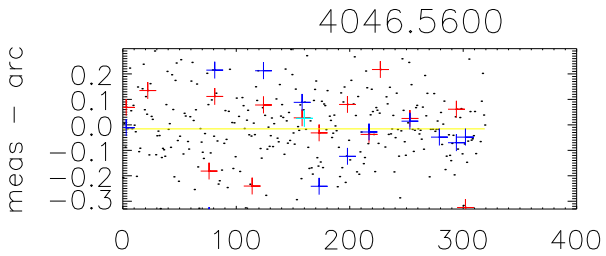

PLATE=1423 MJD=53167 Extraction chi^2 for sdR-b1-00027117.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

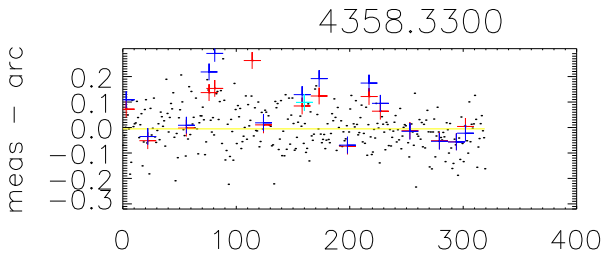

4046.5600
off: −0.08
sig: 0.064
4358.3300
off: 0.07
sig: 0.028
5460.9400
off: −0.02
sig: 0.021
5577.3390
off: −0.07
sig: 0.003
5889.9500
off: 0.04
sig: 0.016
5895.9240
off: 0.00
sig: 0.020

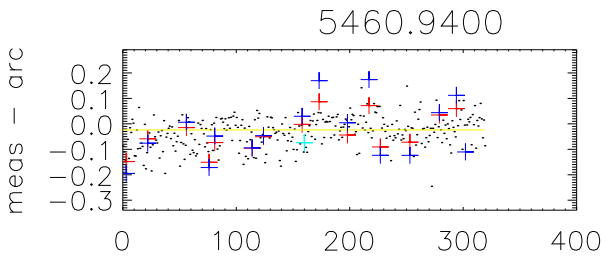

shift(pix)= 0.025
err(pix)= 0.084
oldshift(pix)=−0.078
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

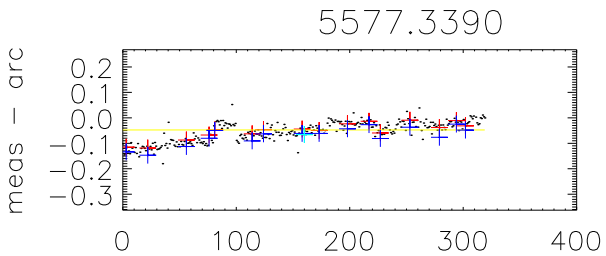

shift(pix)= 0.098
err(pix)= 0.030
oldshift(pix)= 0.065
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

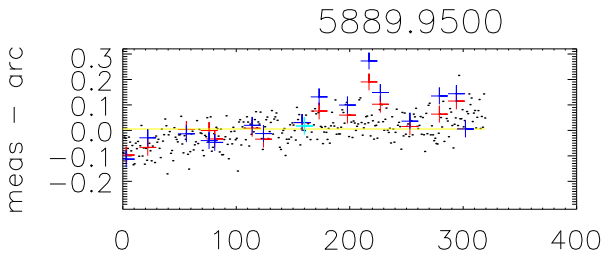

shift(pix)=−0.074
err(pix)= 0.024
oldshift(pix)=−0:020
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

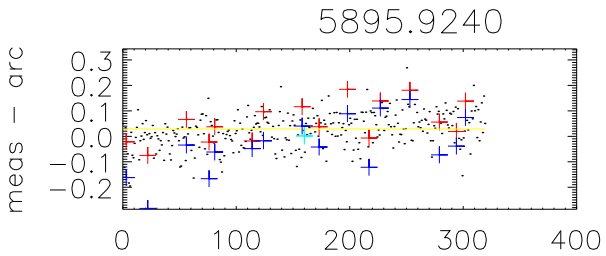

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

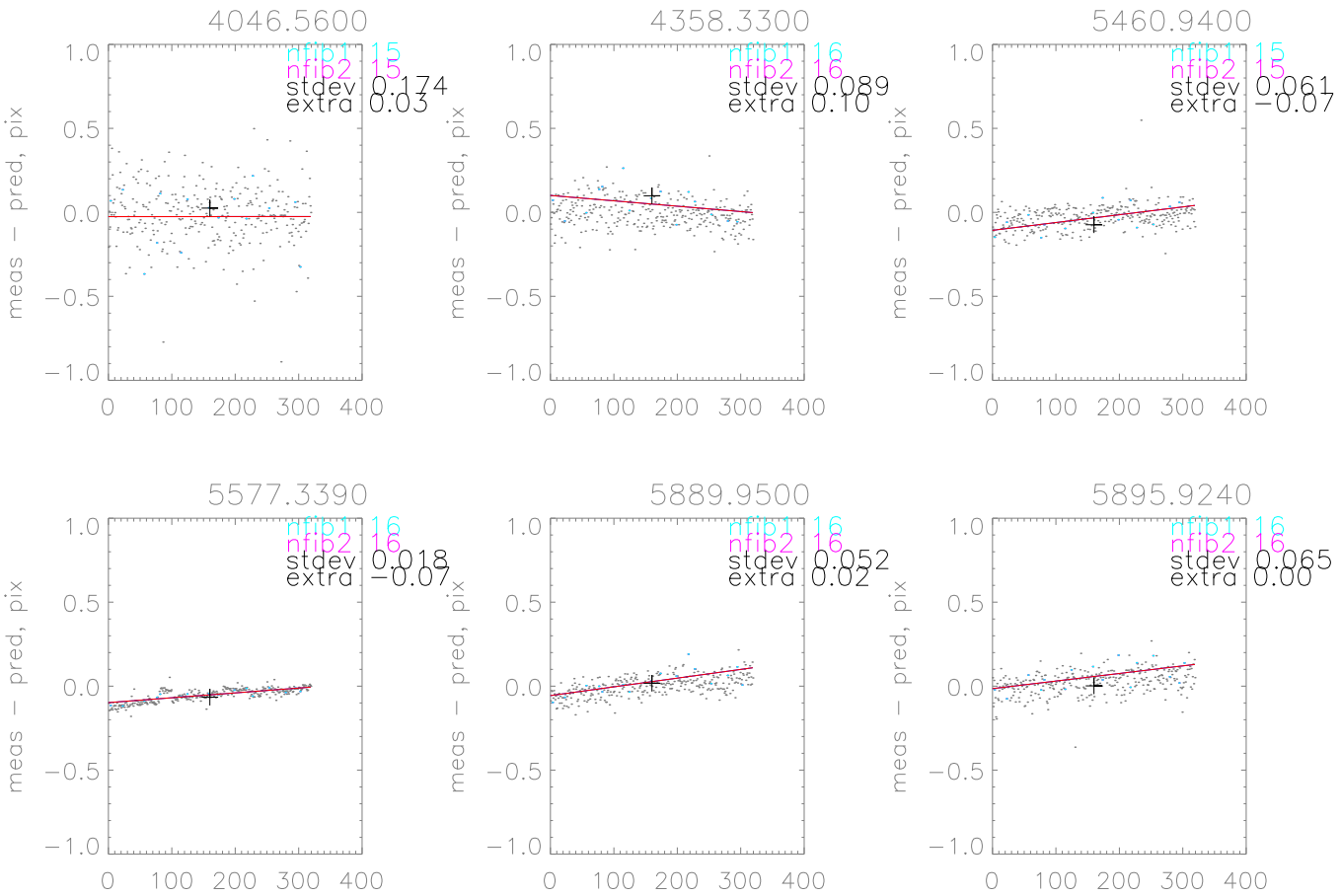

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

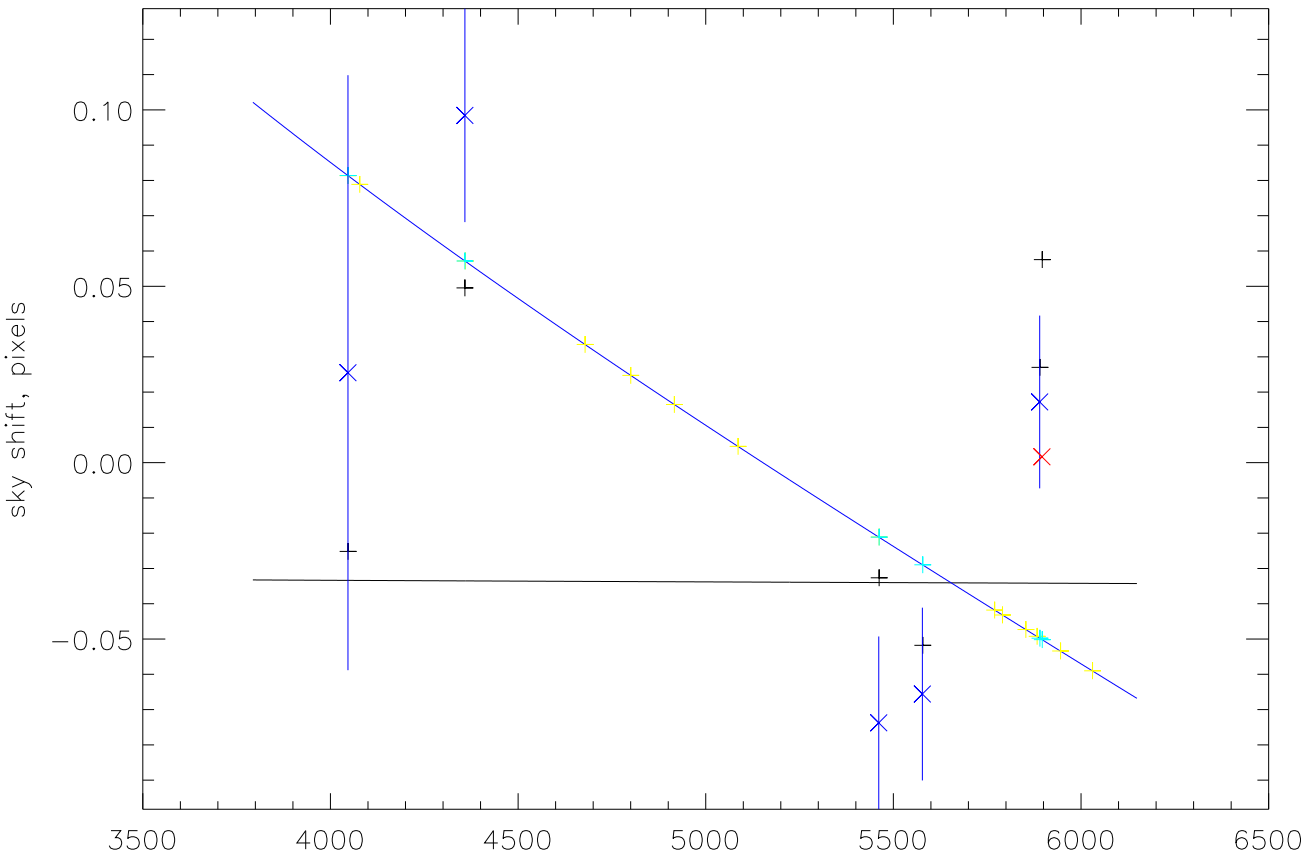

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

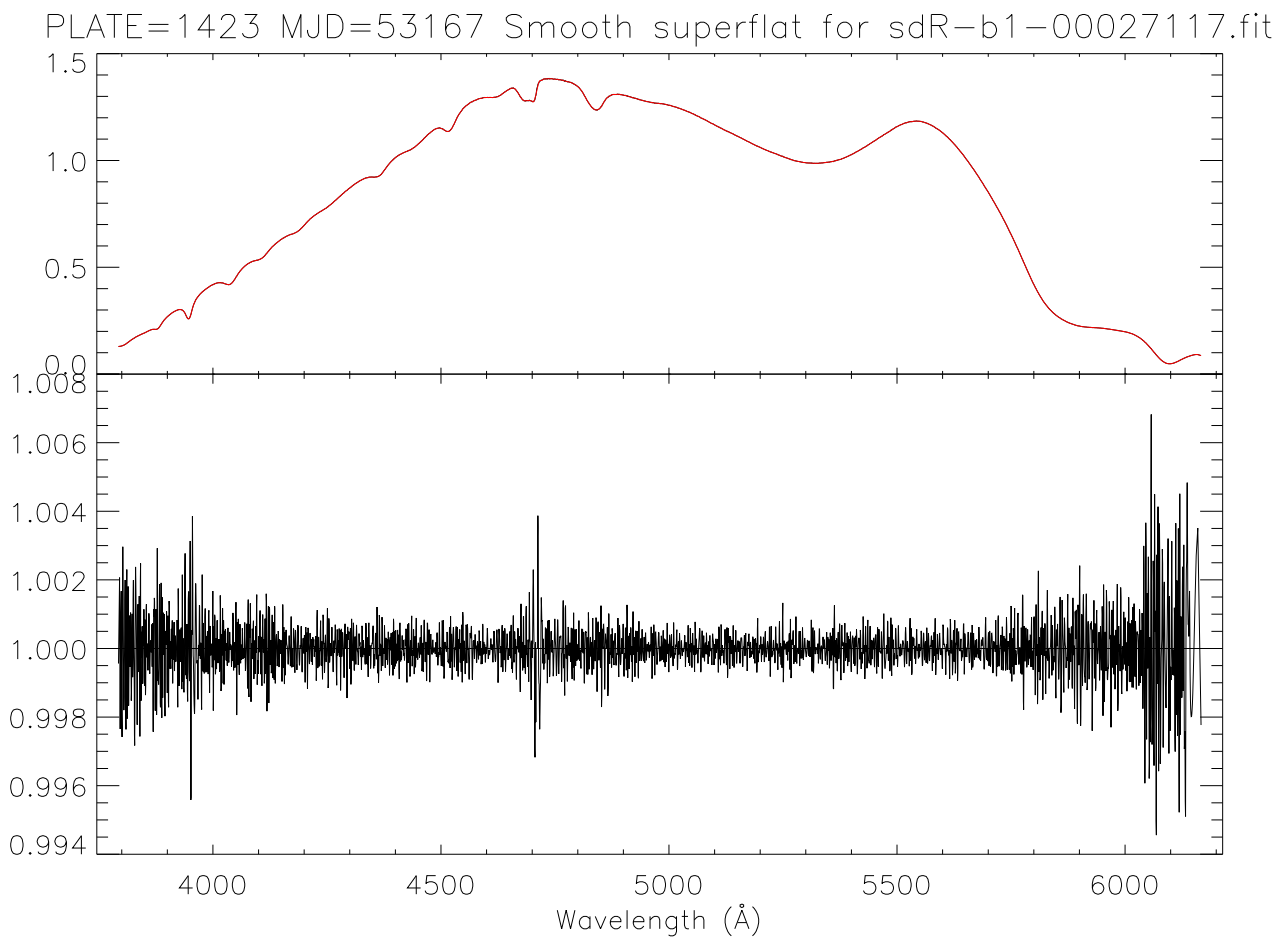

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

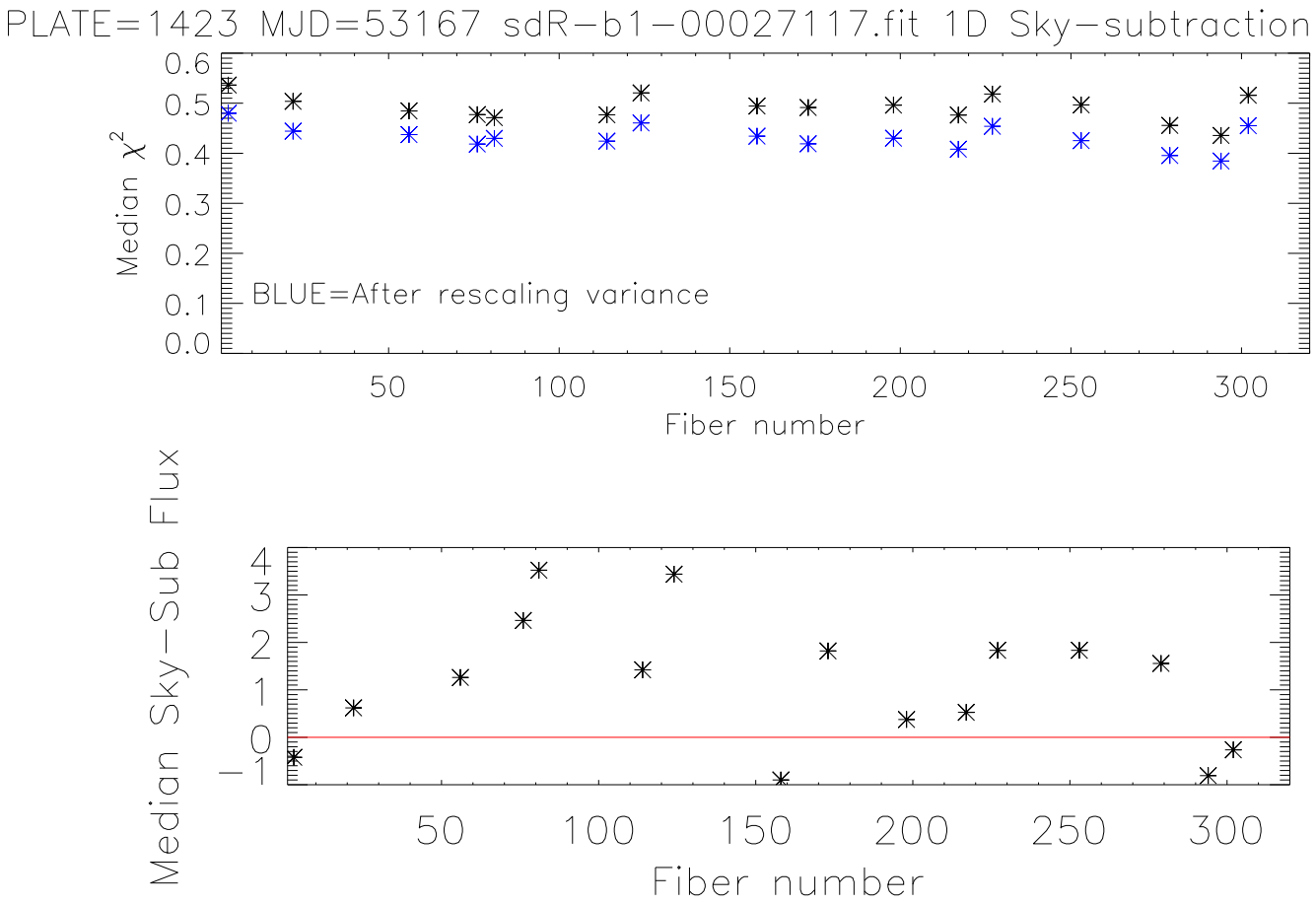

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

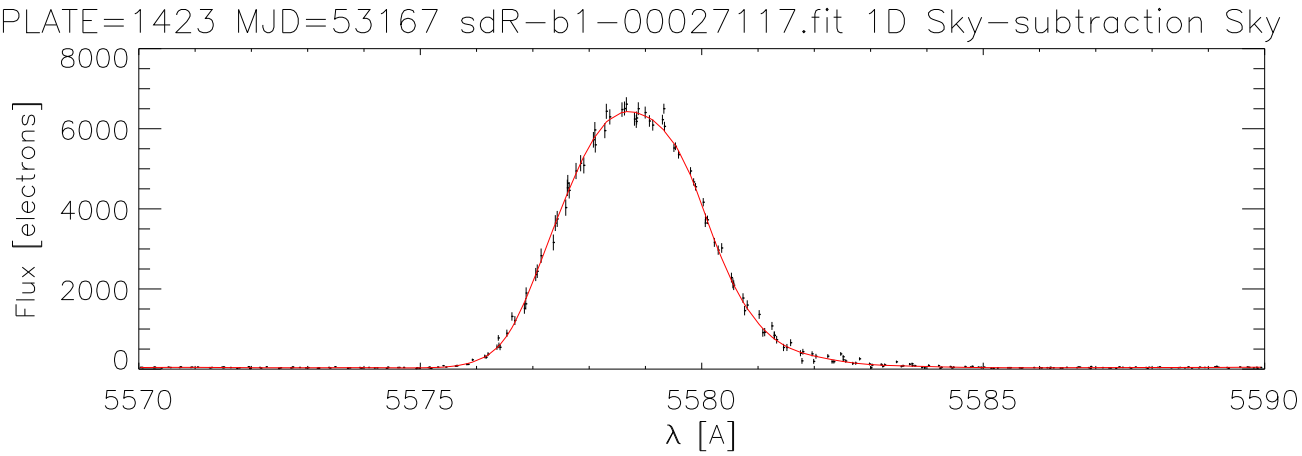

4046.5600
nfib1 15
nfib2 15
stdev 0.174
extra 0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.089
extra 0.10
5460.9400
nfib1 15
nfib2 15
stdev 0.061
extra −0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.07
5889.9500
nfib1 16
nfib2 16
stdev 0.052
extra 0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.065
extra 0.00
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

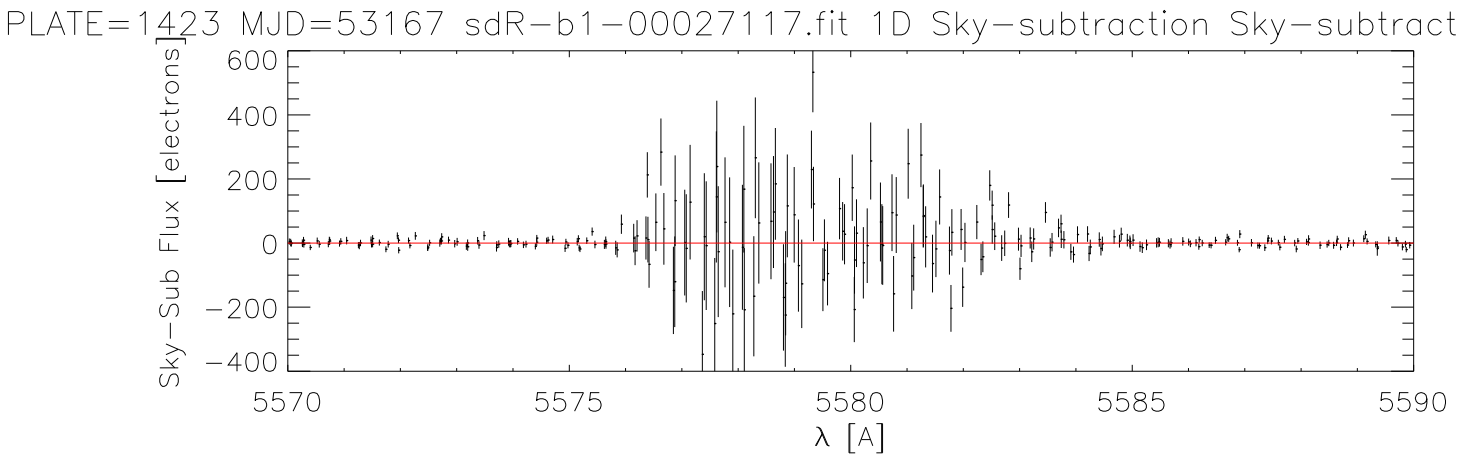

sky shift, pixels
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

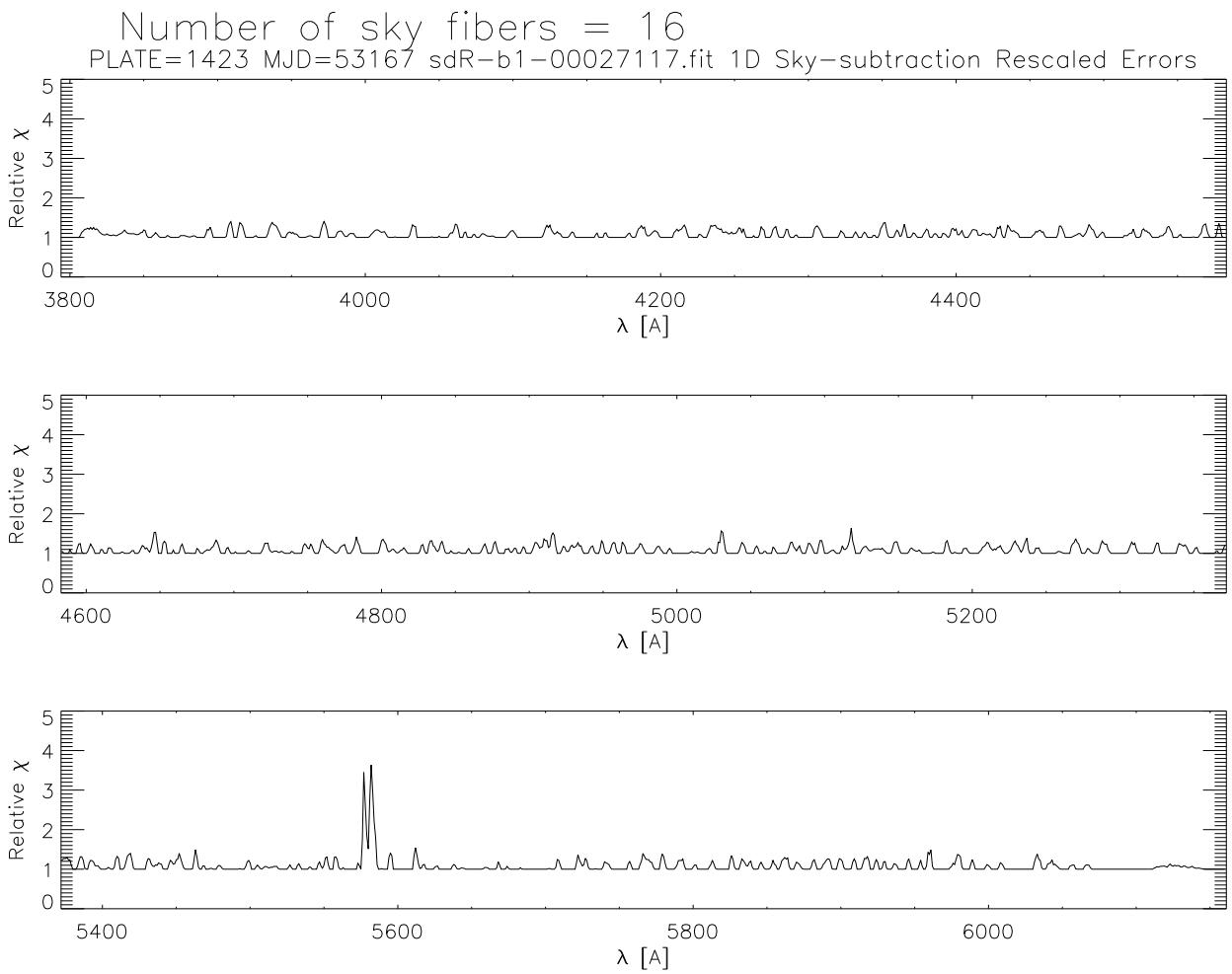
es= 0.0000

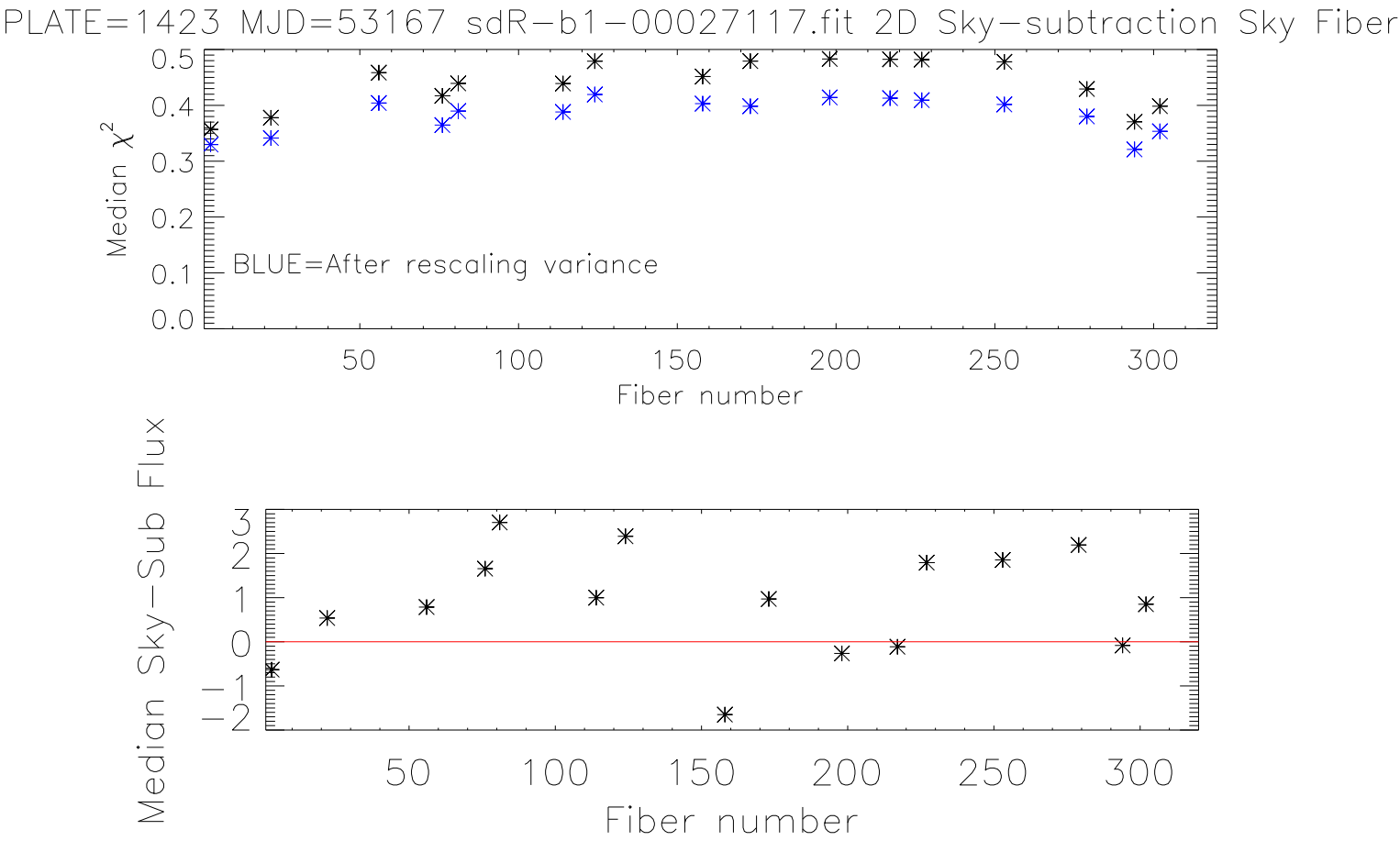

PLATE=1423 MJD=53167 Smooth superflat for sdR-b1-00027117.fit
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

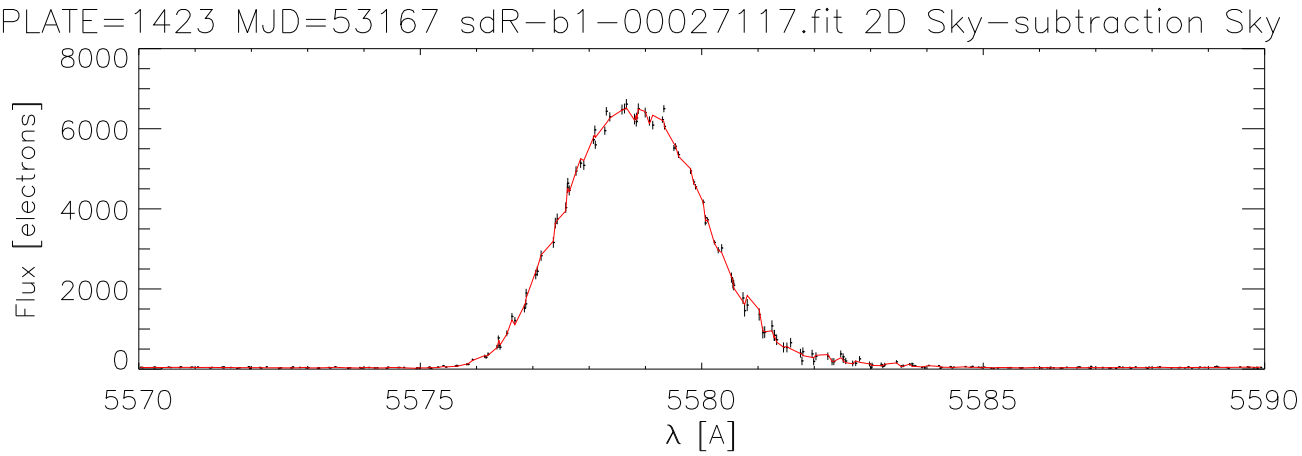

PLATE=1423 MJD=53167 sdR-b1-00027117.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

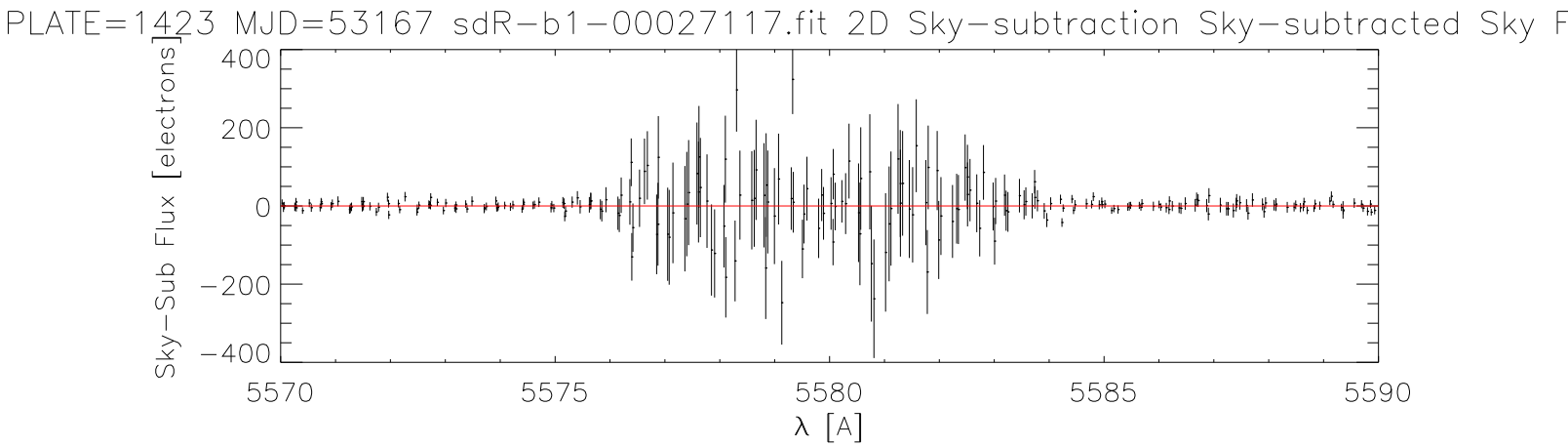

PLATE=1423 MJD=53167 sdR-b1-00027117.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

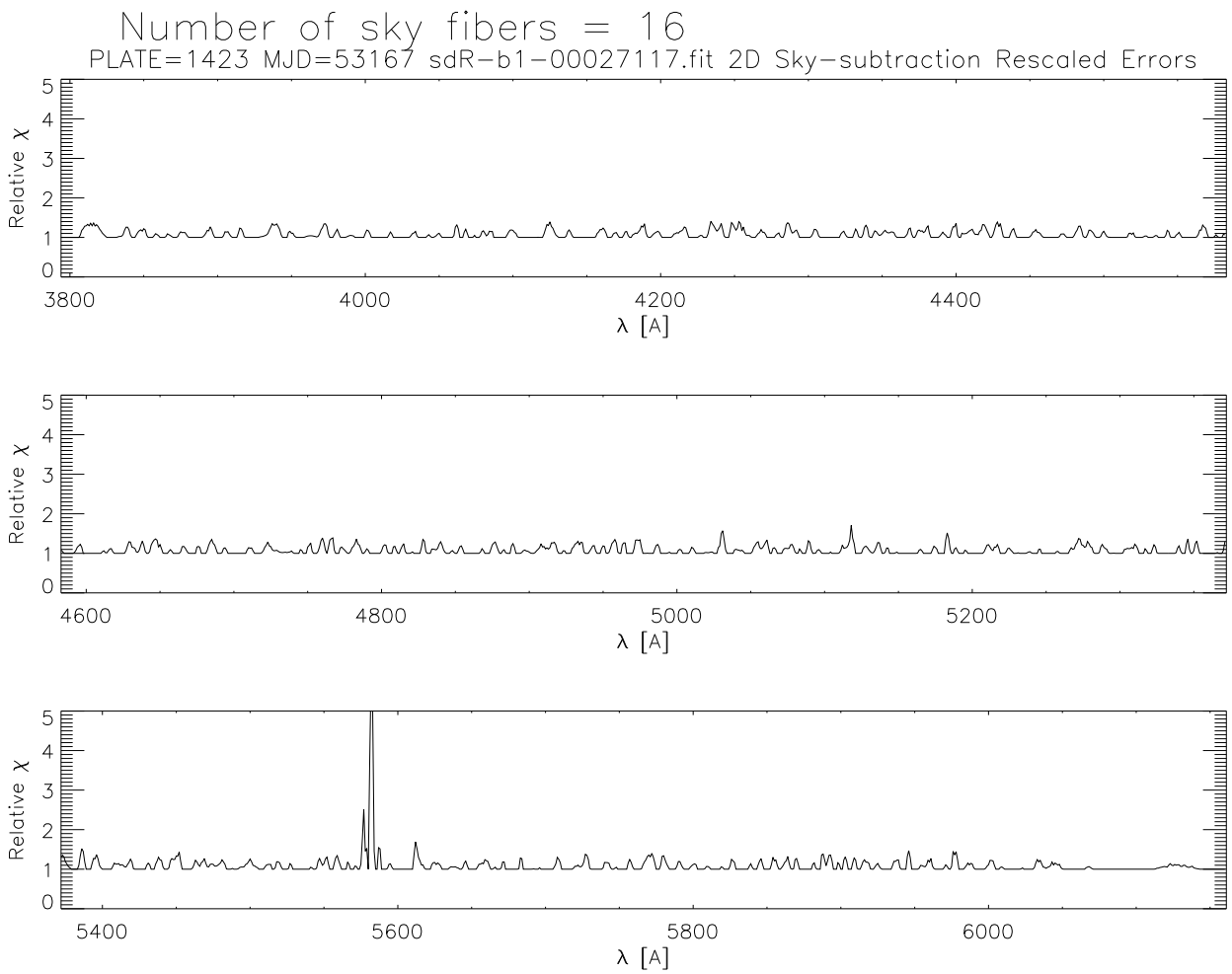

PLATE=1423 MJD=53167 sdR-b1-00027117.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

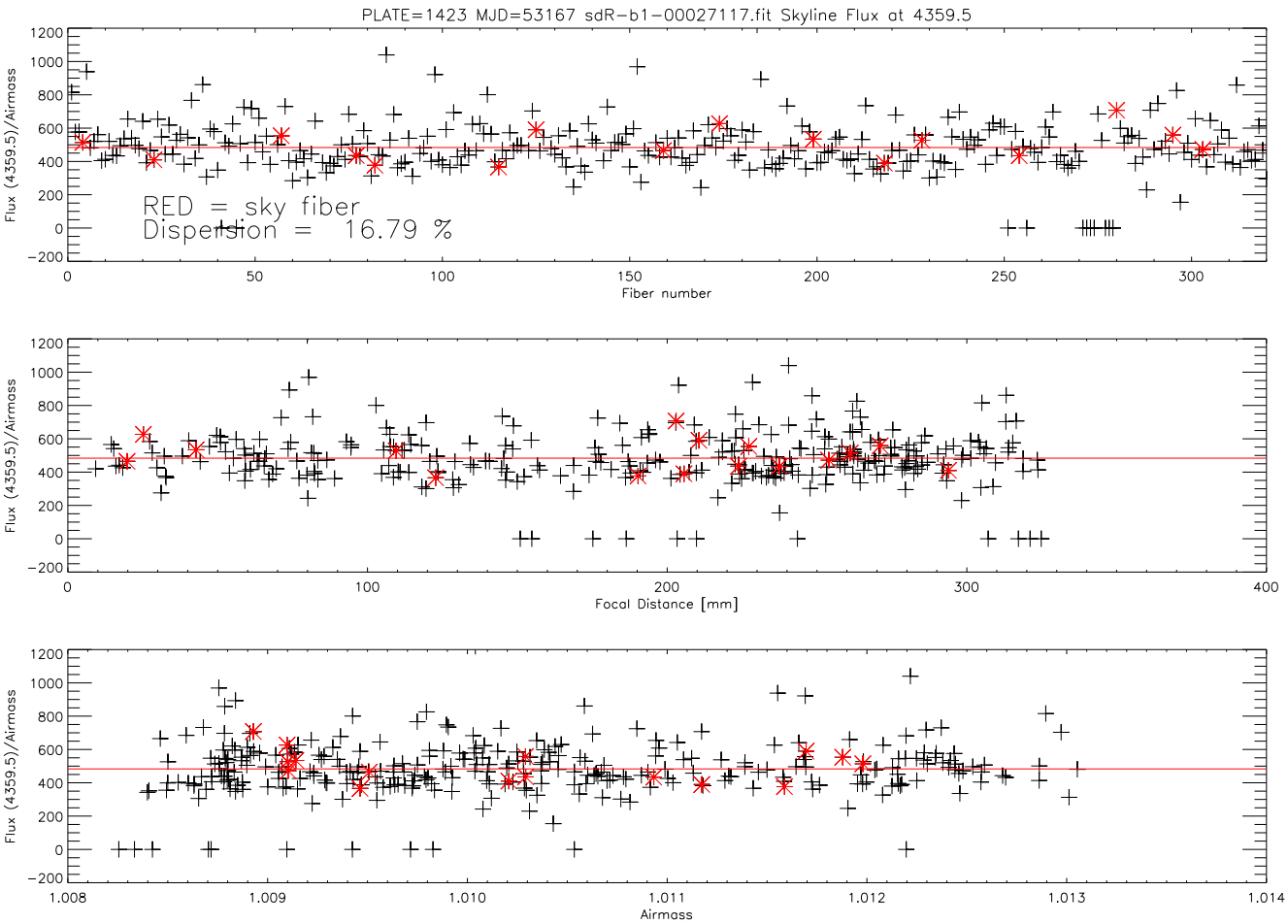

Number of sky fibers = 16
PLATE=1423 MJD=53167 sdR-b1-00027117.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

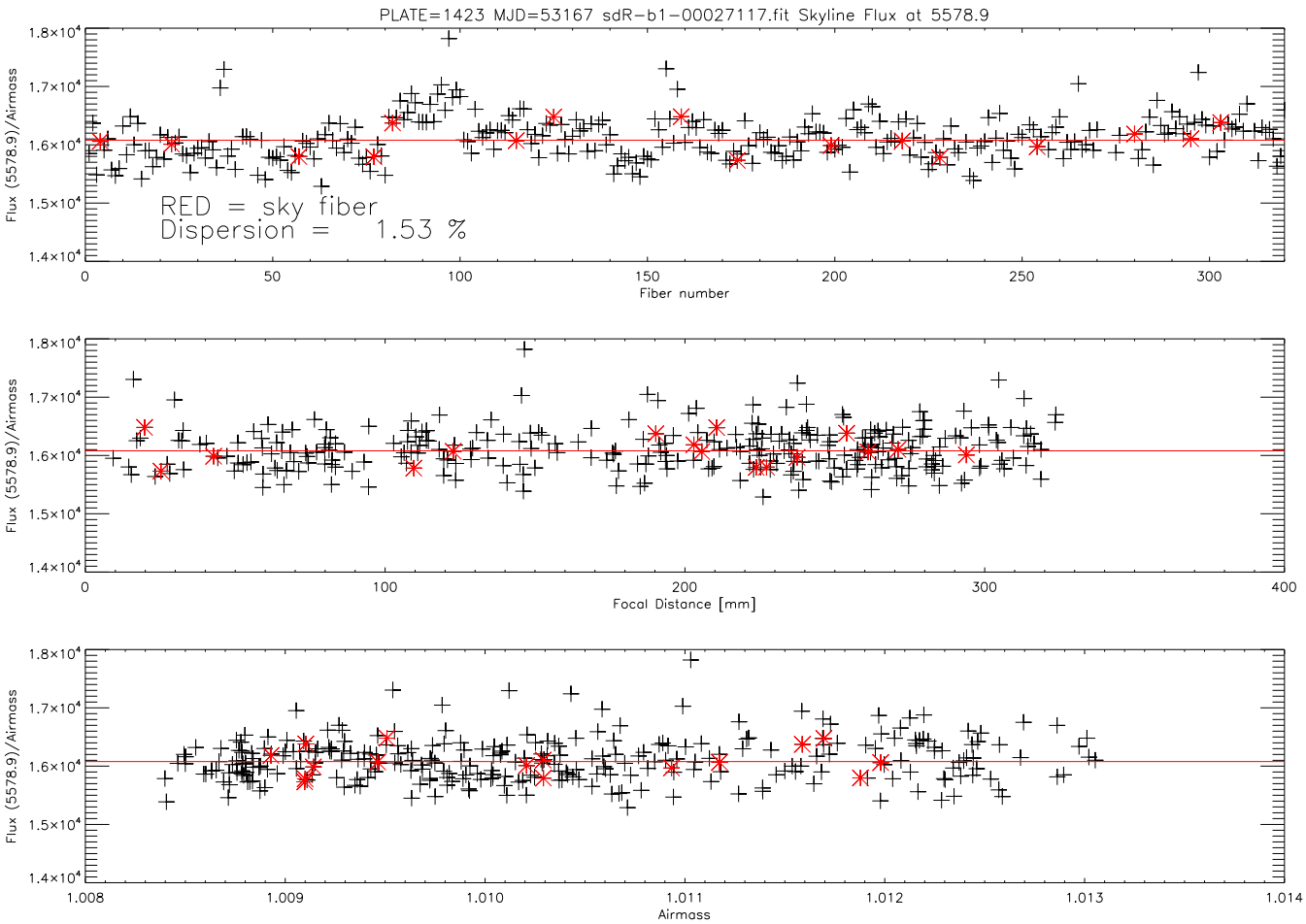

PLATE=1423 MJD=53167 sdR-b1-00027117.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

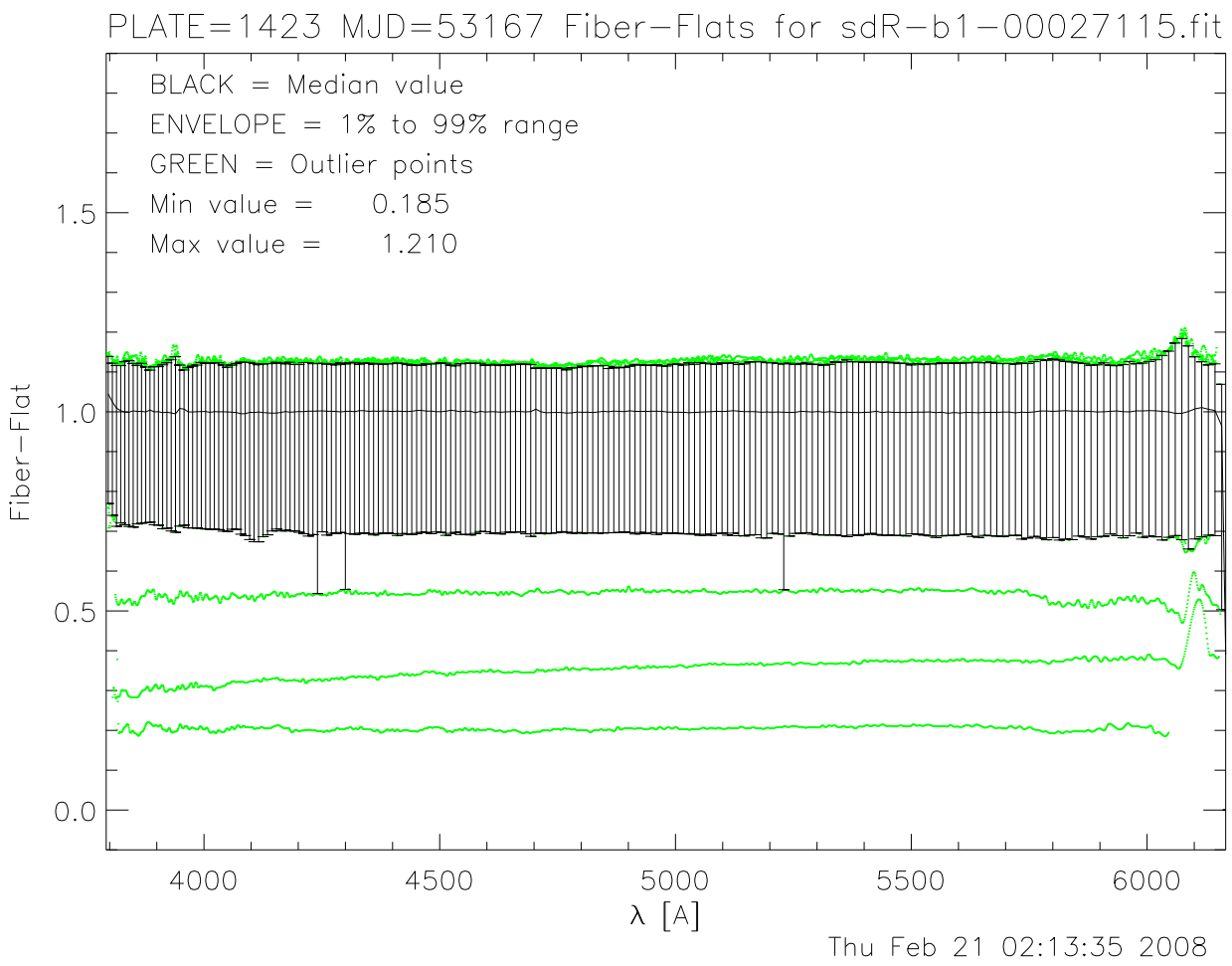

PLATE=1423 MJD=53167 sdR-b1-00027117.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

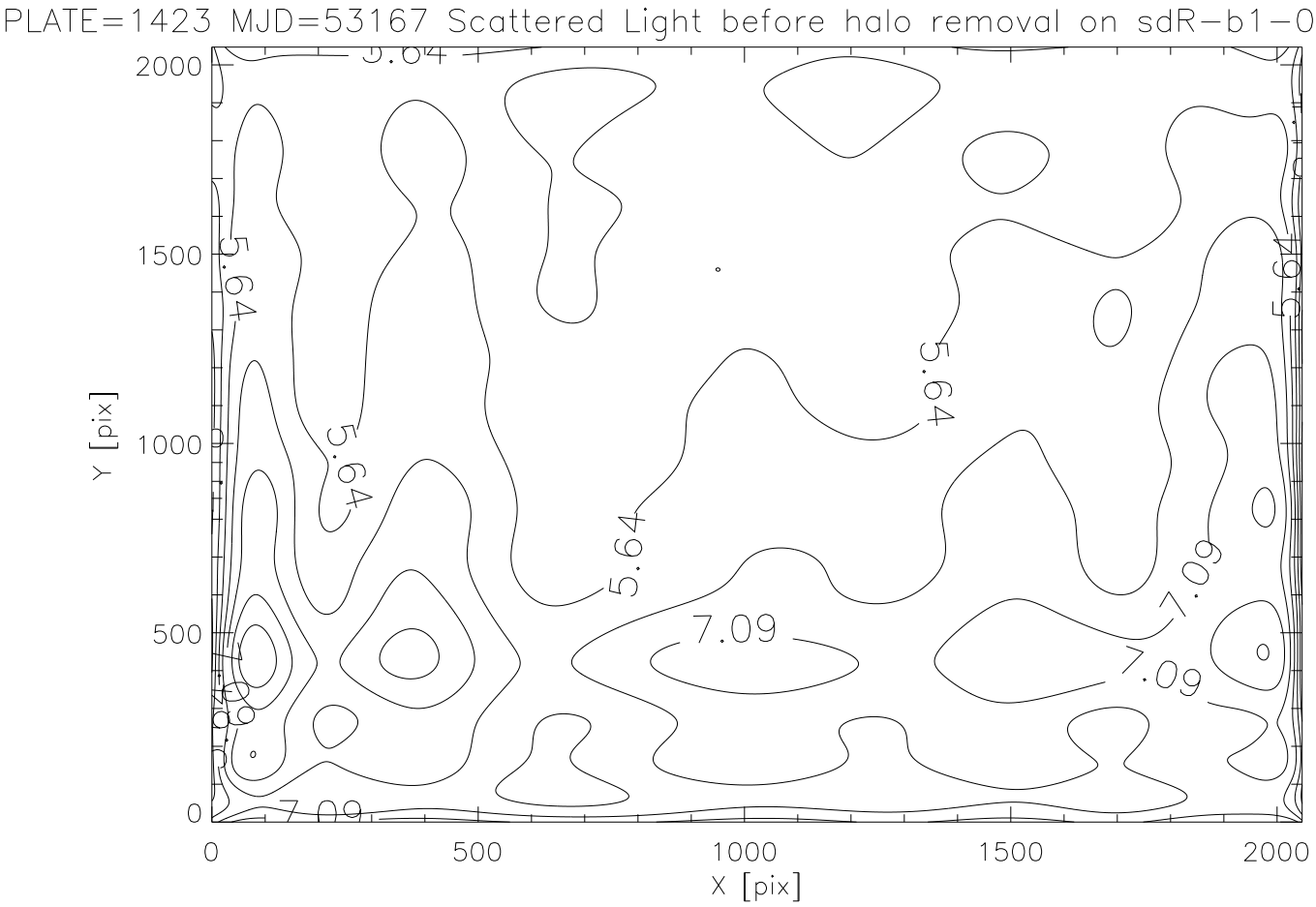

PLATE=1423 MJD=53167 sdR-b1-00027117.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

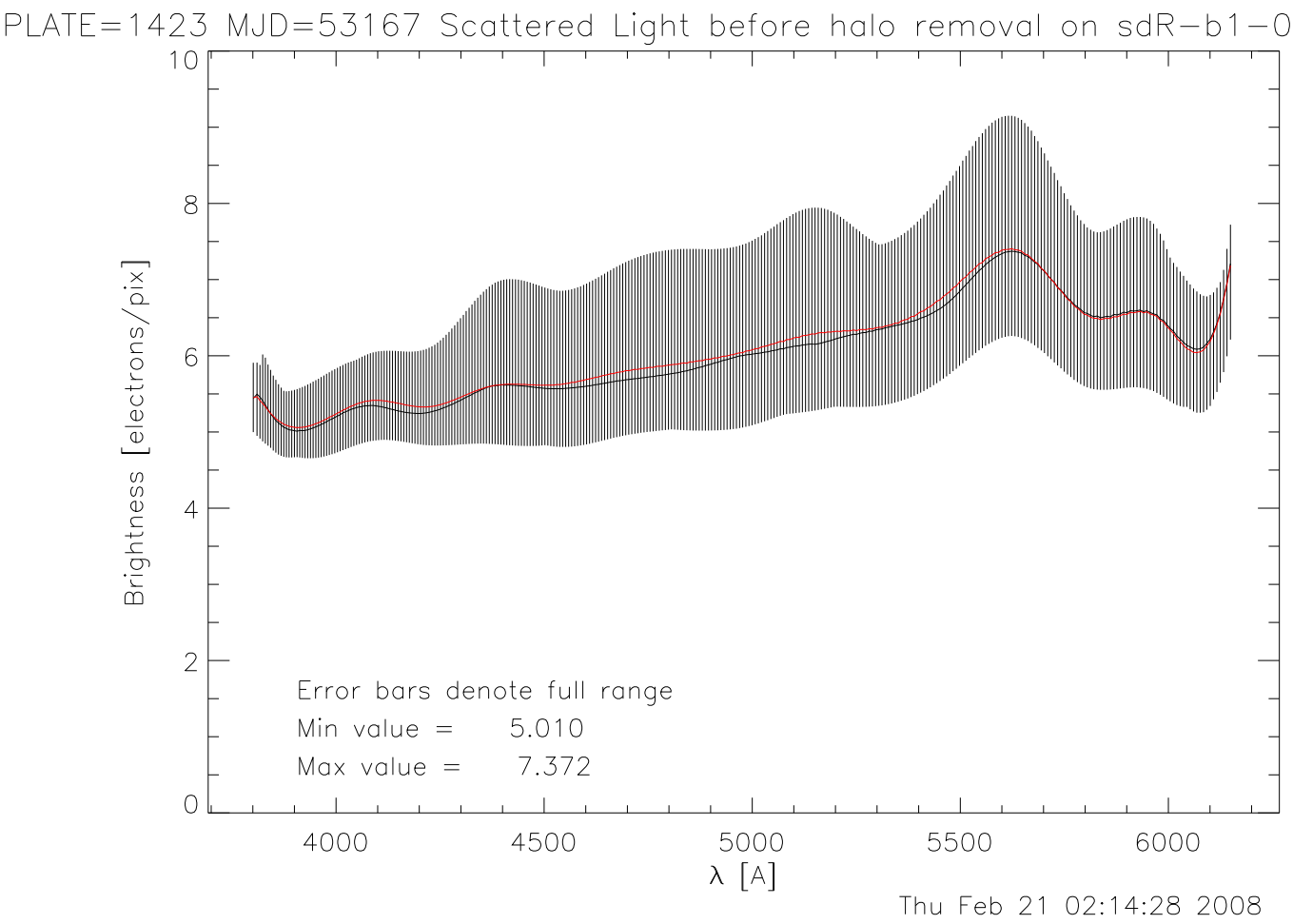

Number of sky fibers = 16
PLATE=1423 MJD=53167 sdR-b1-00027117.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5


PLATE=1423 MJD=53167 sdR-b1-00027117.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 16.79 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=1423 MJD=53167 sdR-b1-00027117.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.53 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=1423 MJD=53167 Fiber-Flats for sdR-b1-00027115.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.185
Max value = 1.210
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 21 02:13:35 2008


PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-b1-00027118.f
5.64
7.09
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-b1-00027118.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.010
Max value = 7.372
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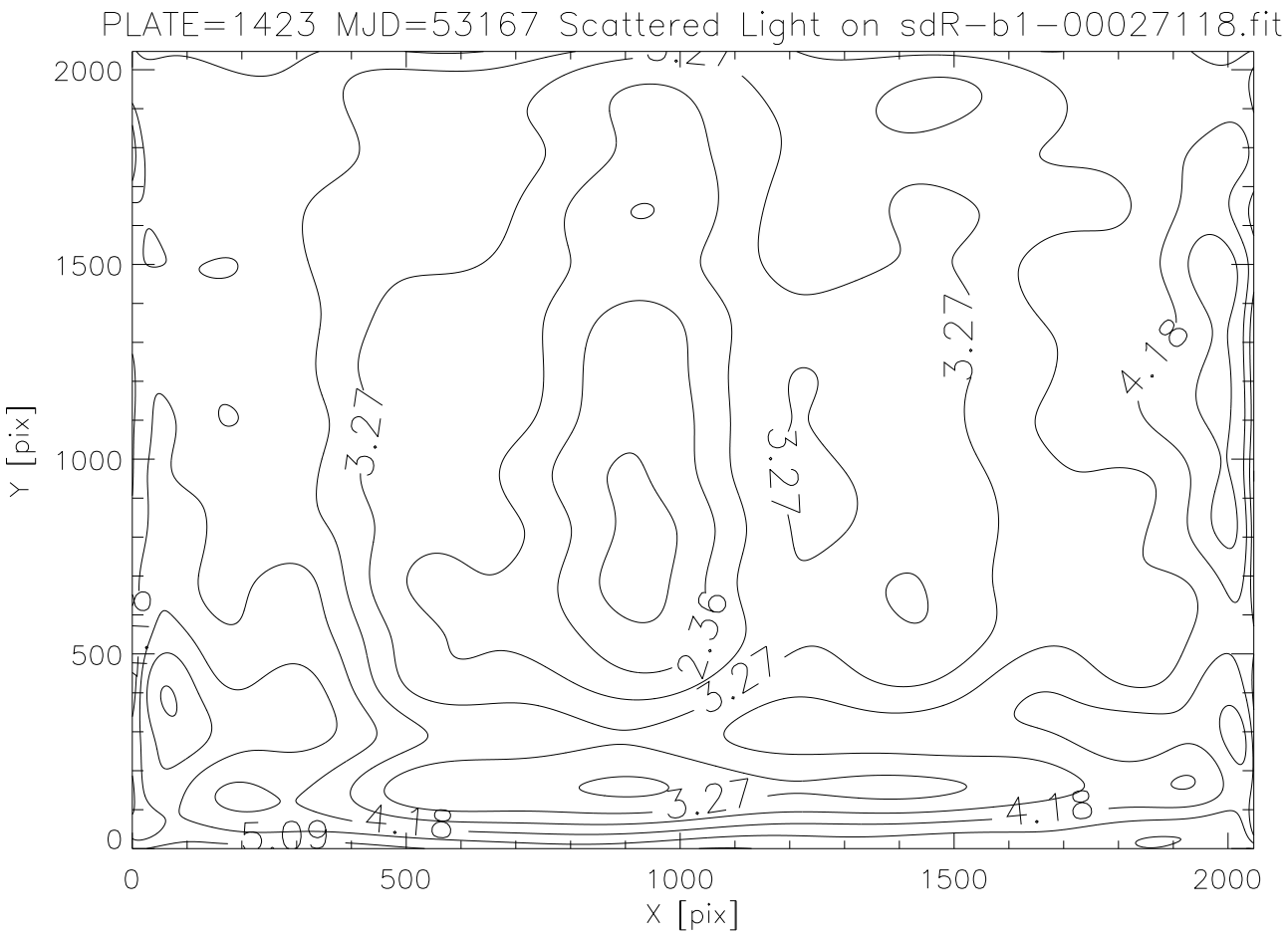
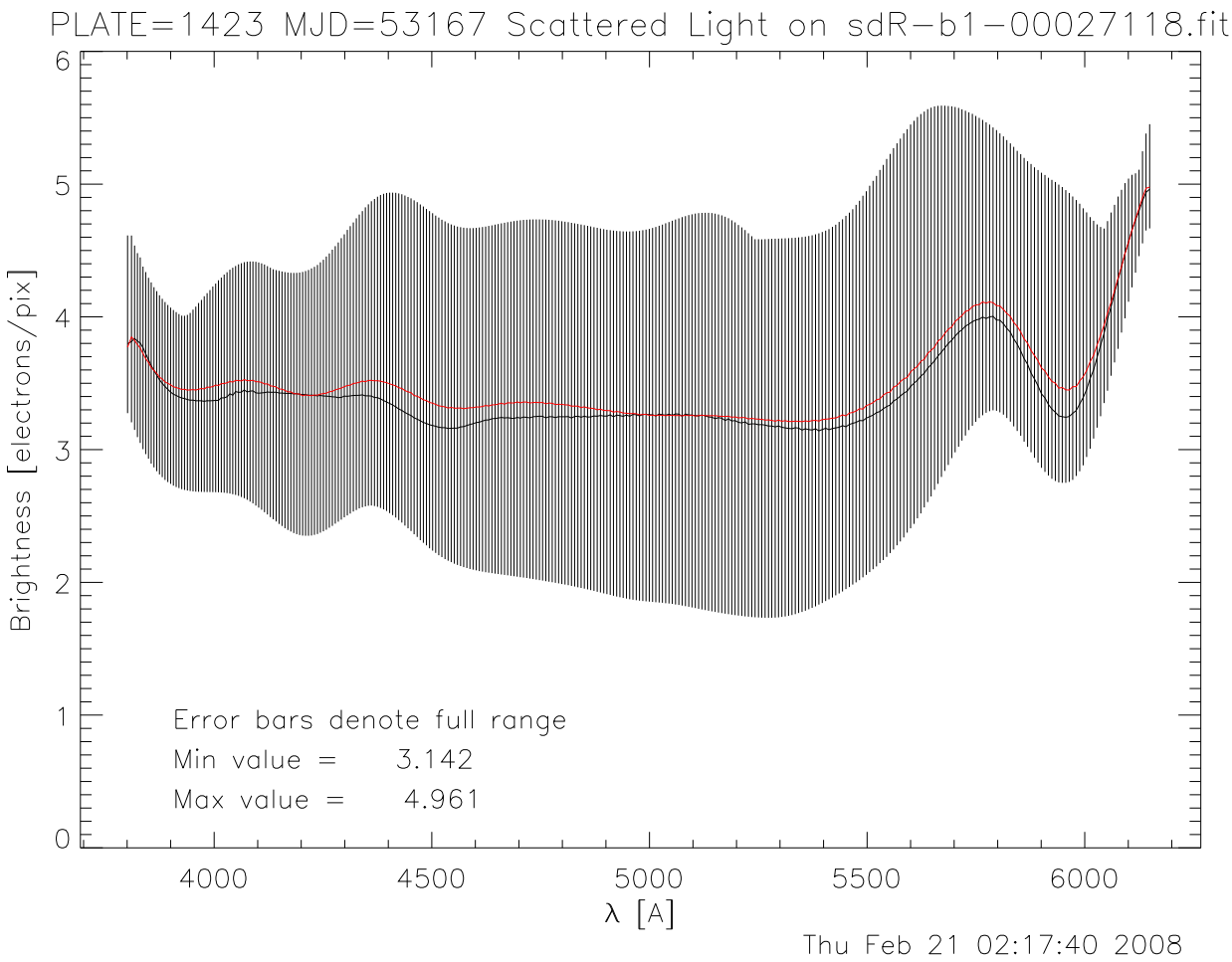
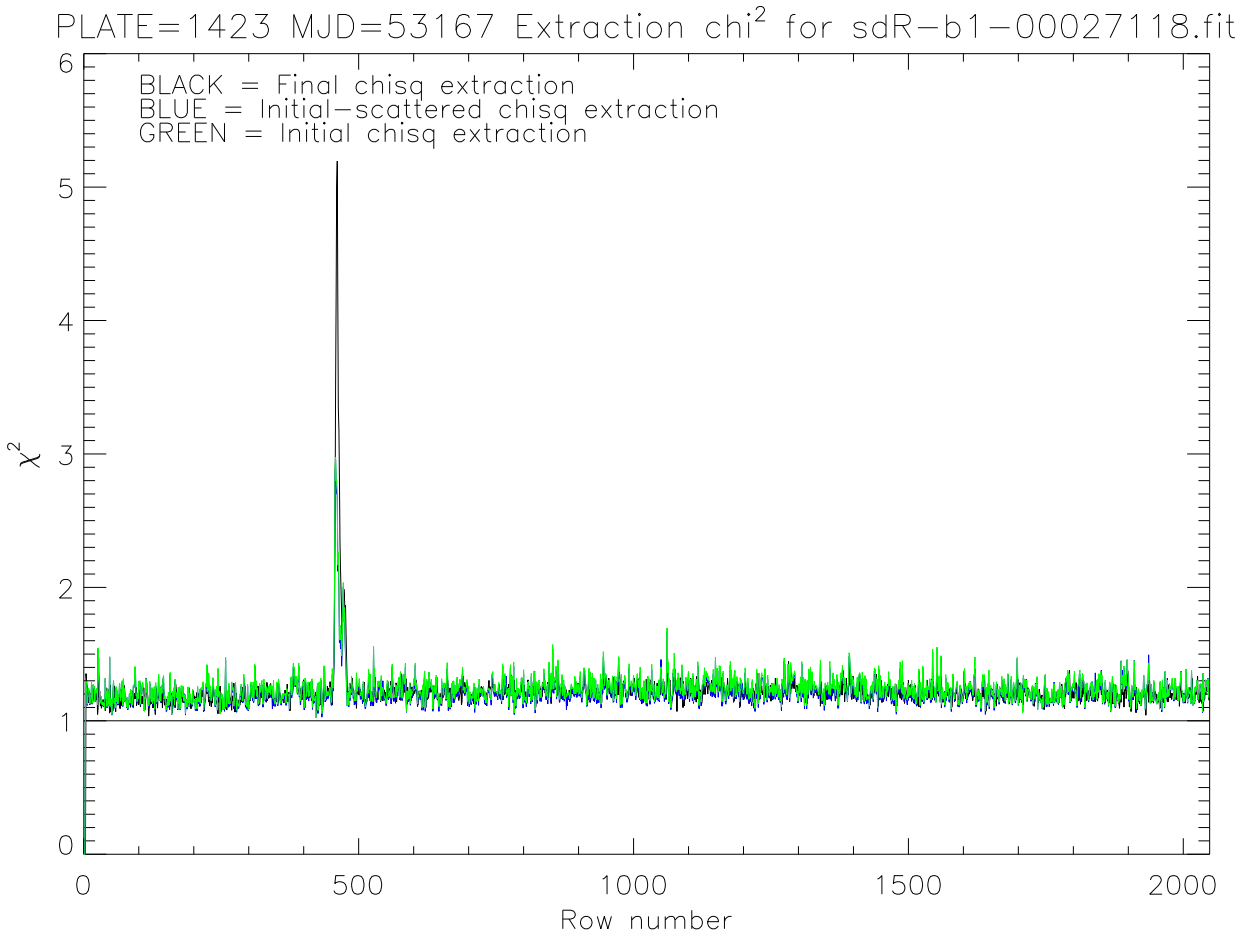
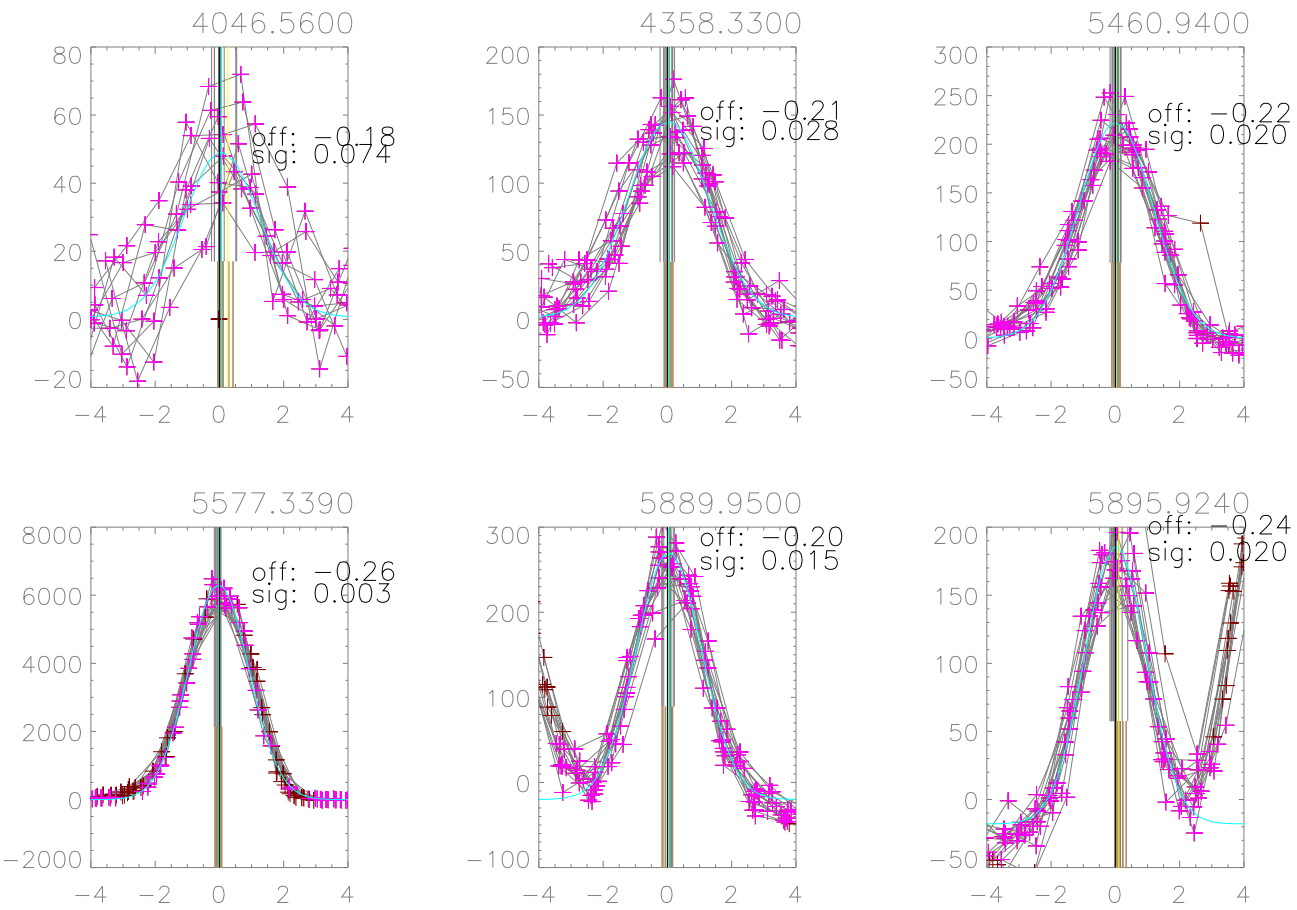
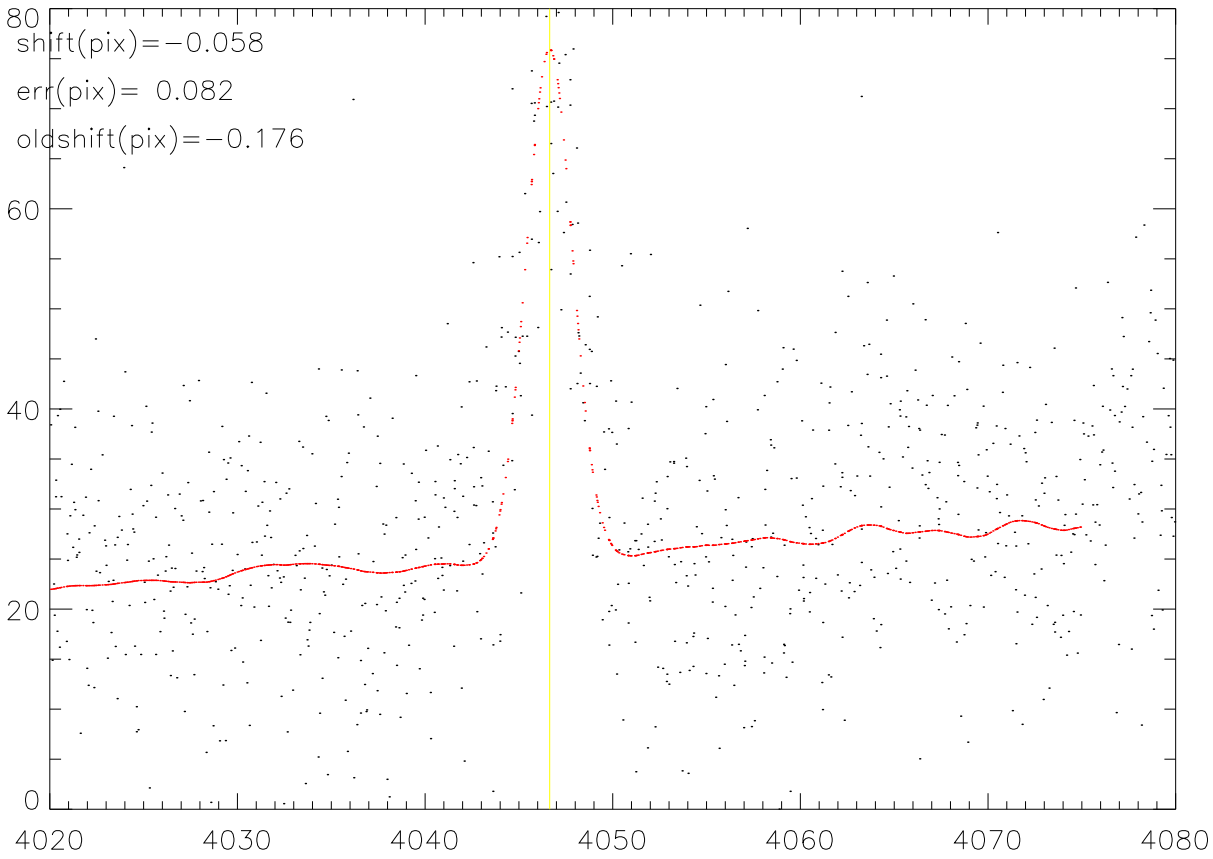
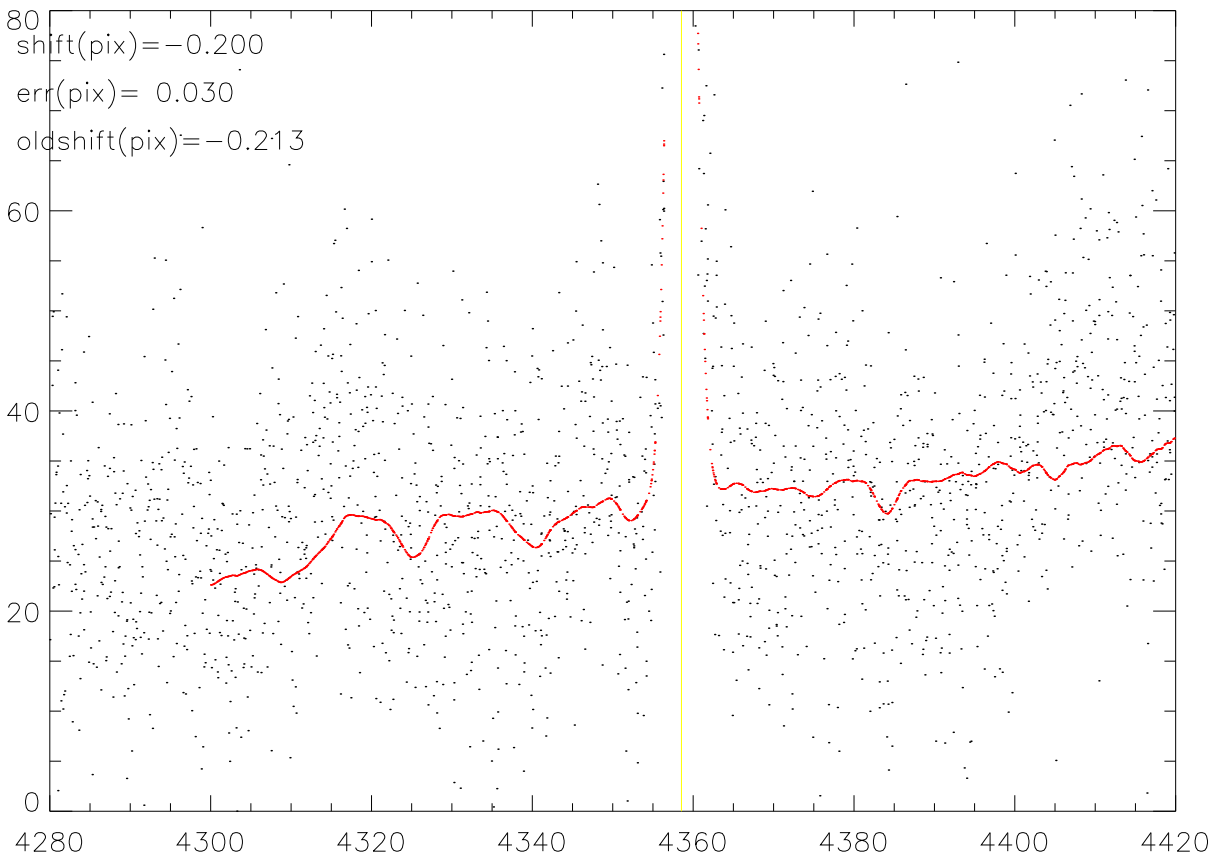

PLATE=1423 MJD=53167 Scattered Light on sdR-b1-00027118.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.27
4.18
5.09
2.36

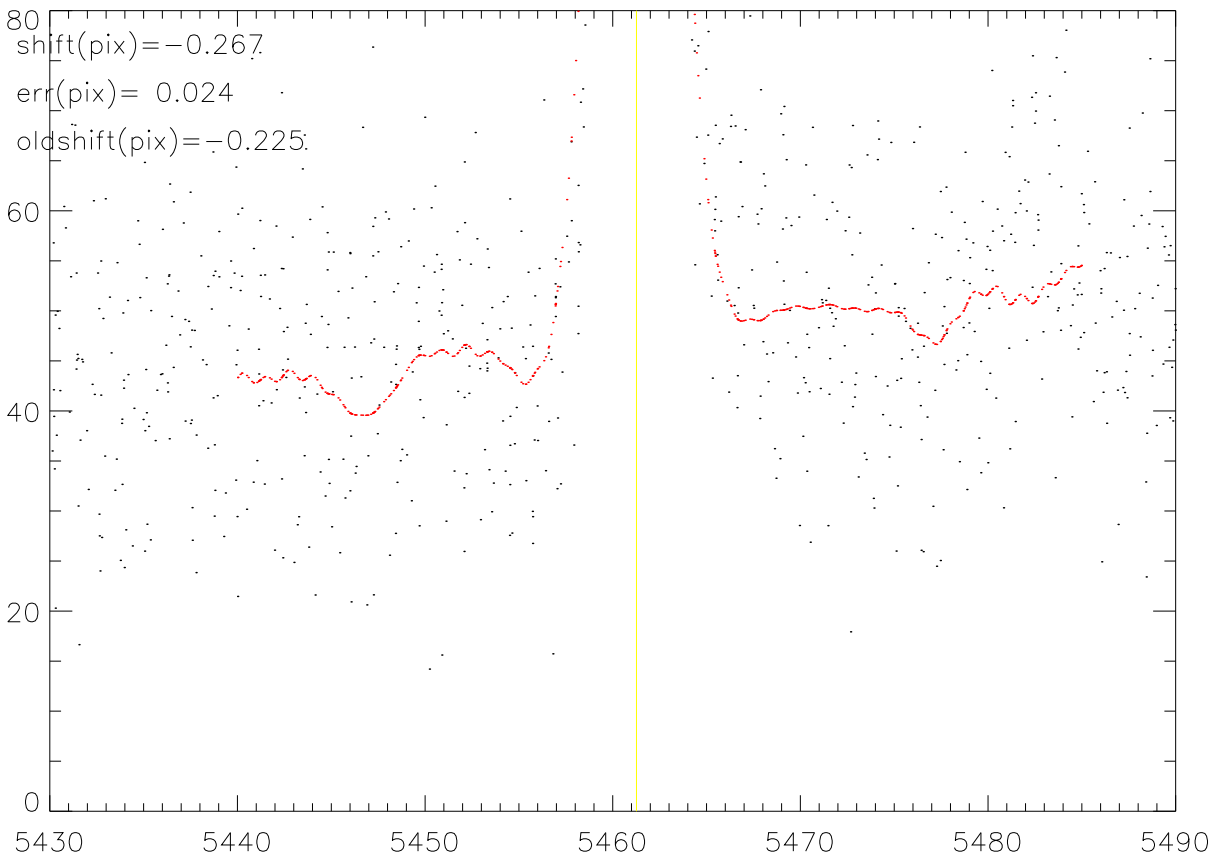

PLATE=1423 MJD=53167 Scattered Light on sdR-b1-00027118.fit
Brightness [electrons/pix]
0
1
2
3
4
5
6
Error bars denote full range
Min value = 3.142
Max value = 4.961
4000
4500
5000
5500
6000
λ [A]
Thu Feb 21 02:17:40 2008

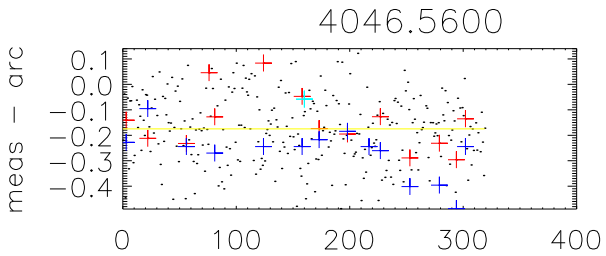

PLATE=1423 MJD=53167 Extraction chi^2 for sdR-b1-00027118.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

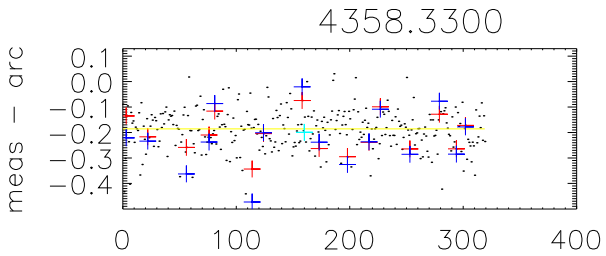

4046.5600
off: −0.18
sig: 0.074
4358.3300
off: −0.21
sig: 0.028
5460.9400
off: −0.22
sig: 0.020
5577.3390
off: −0.26
sig: 0.003
5889.9500
off: −0.20
sig: 0.015
5895.9240
off: −0.24
sig: 0.020

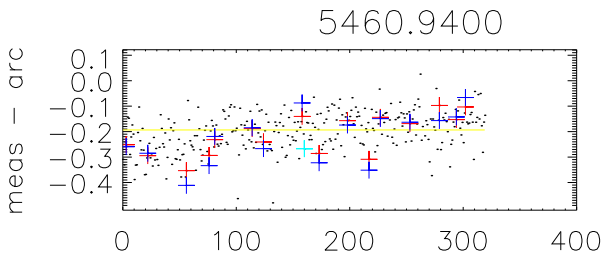

shift(pix)=−0.058
err(pix)= 0.082
oldshift(pix)=−0.176
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

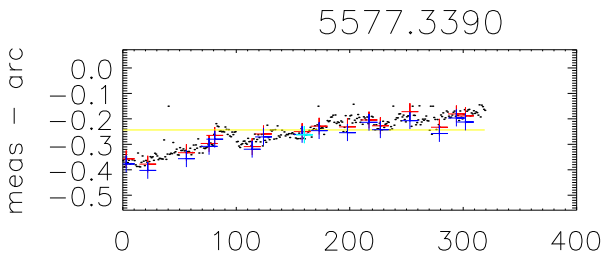

shift(pix)=−0.200
err(pix)= 0.030
oldshift(pix)=−0.213
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

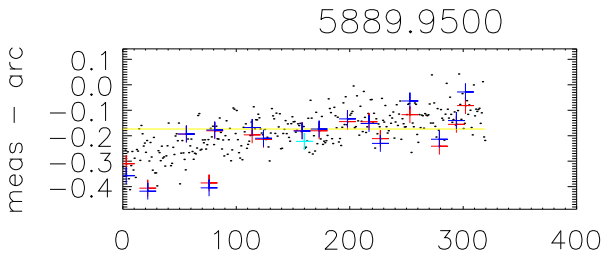

shift(pix)=−0.267
err(pix)= 0.024
oldshift(pix)=−0.225
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

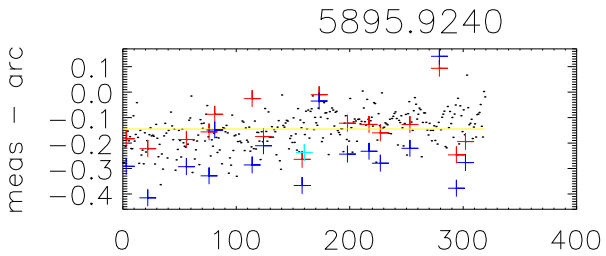

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

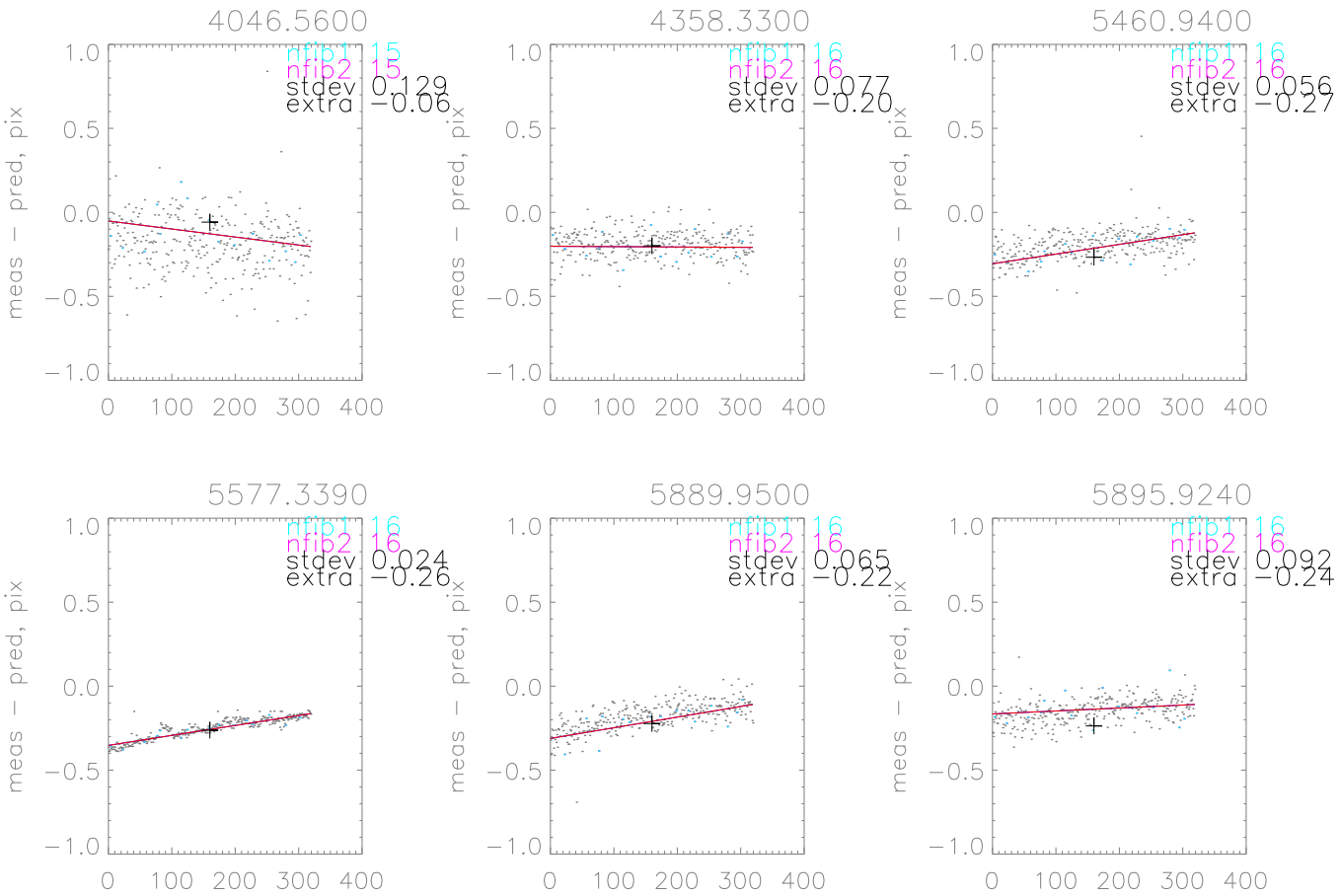

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

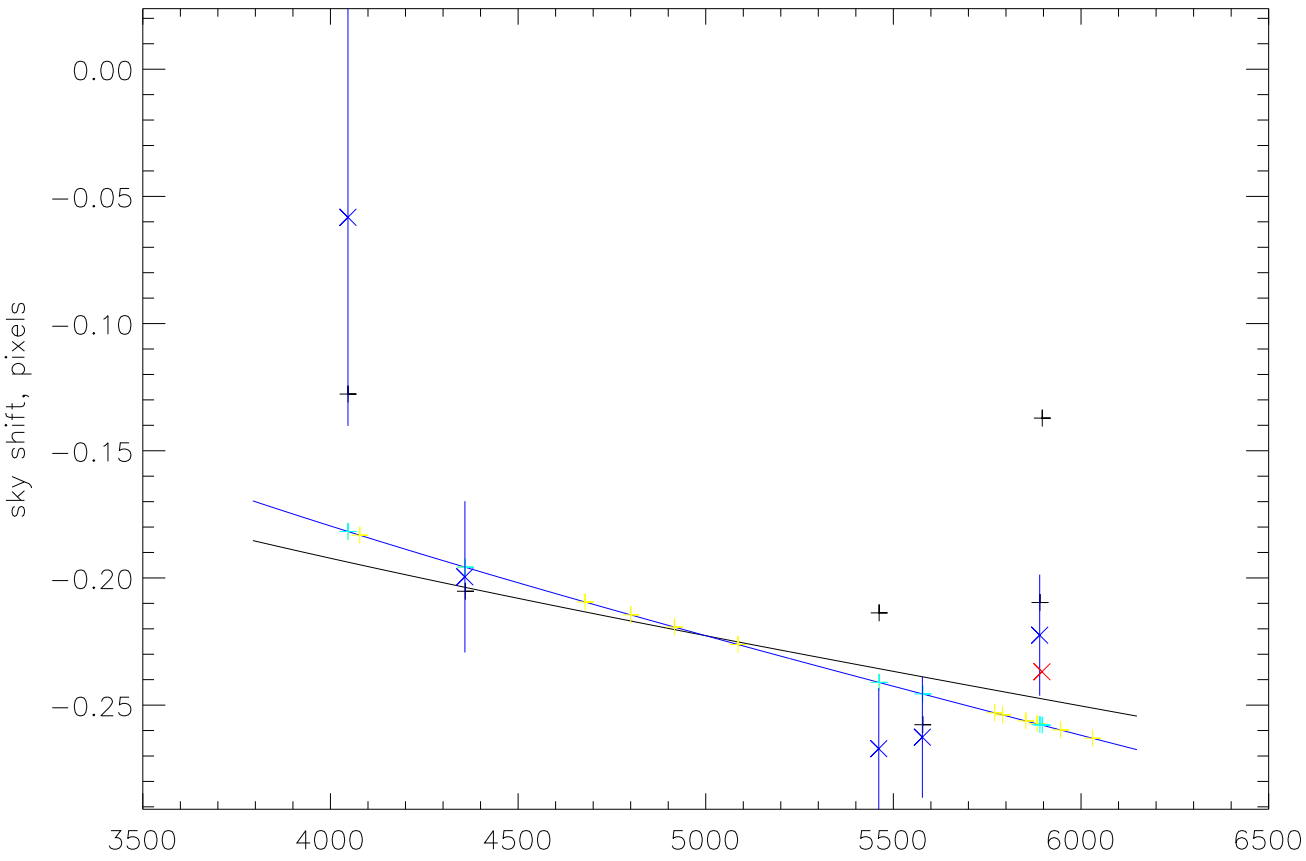

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

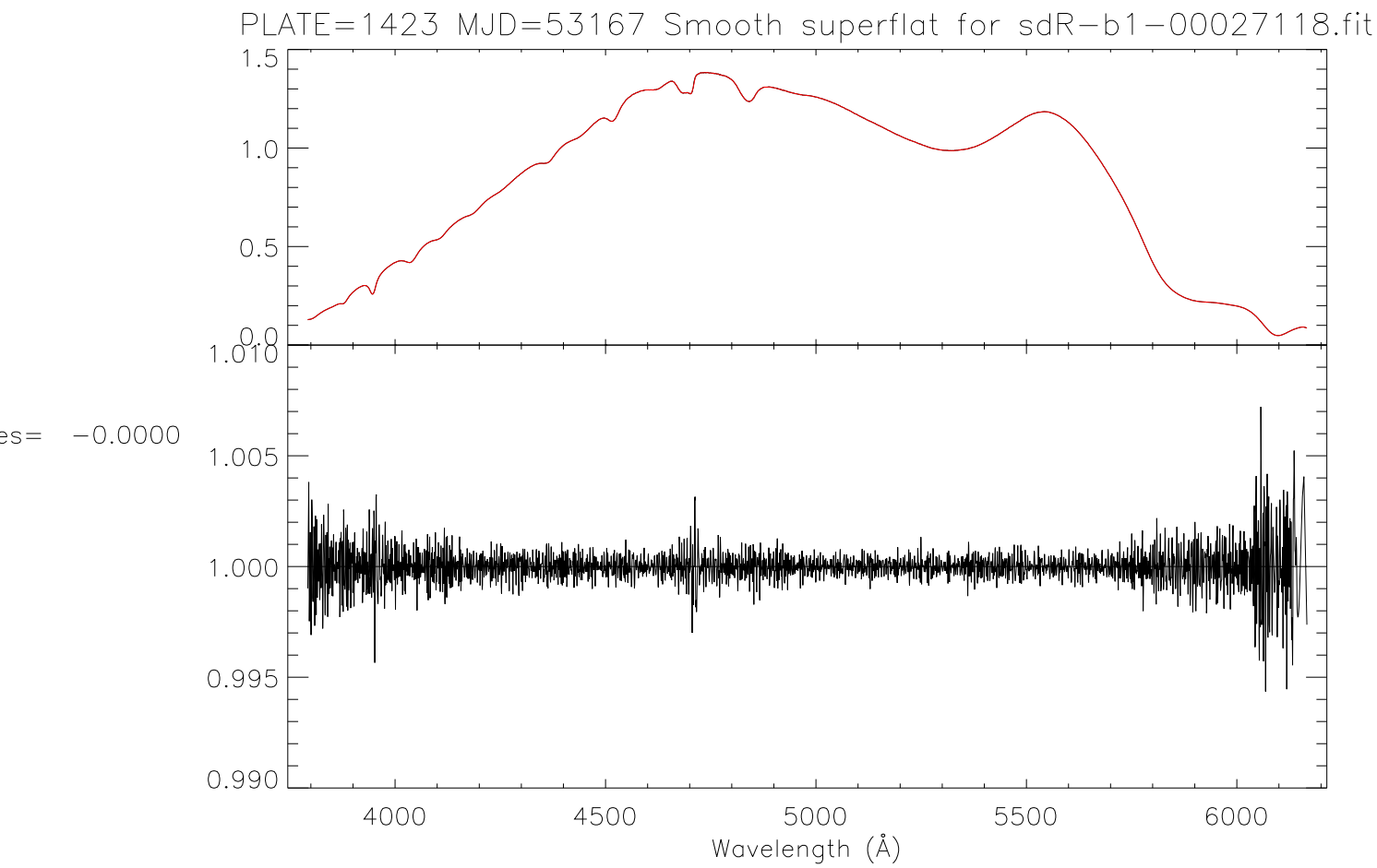

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

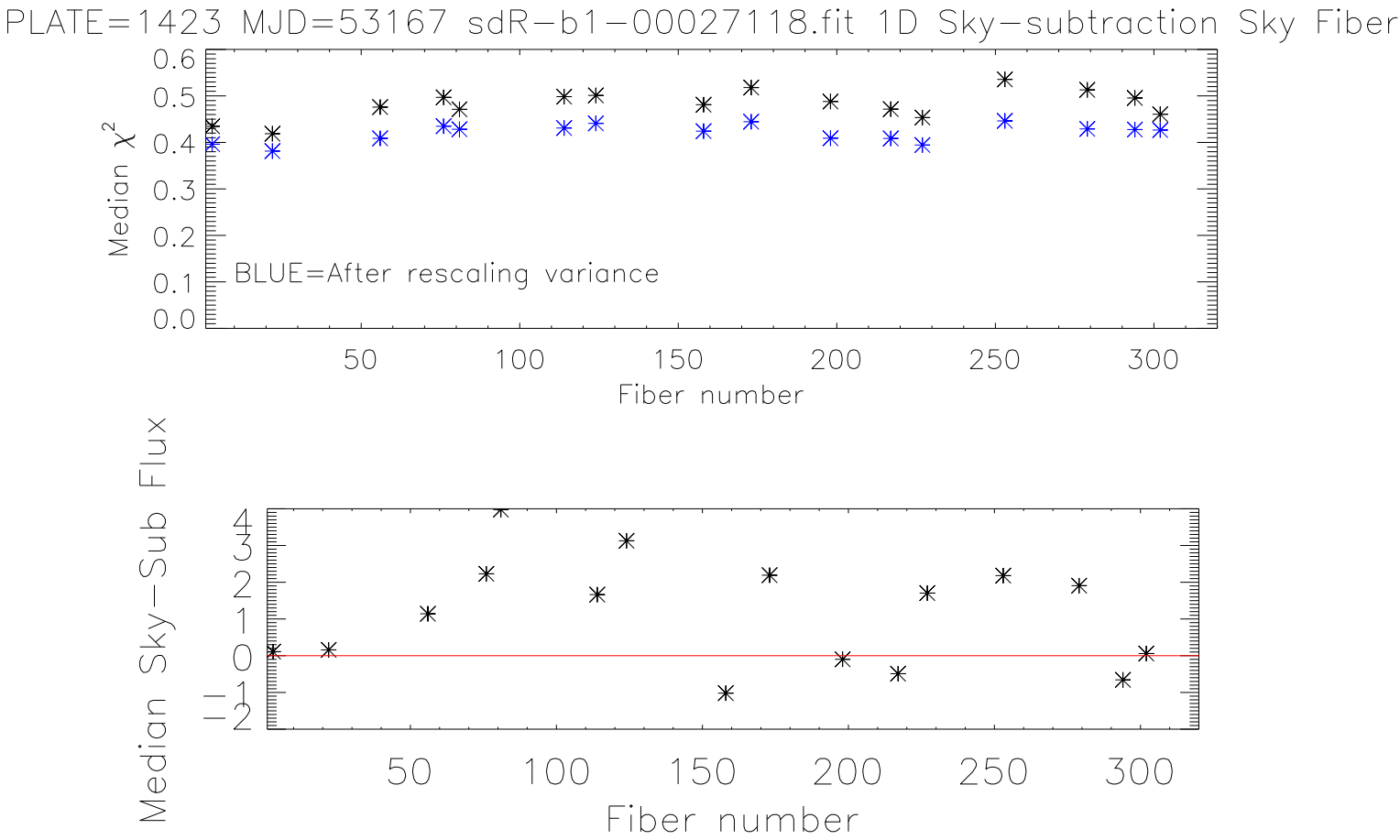

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

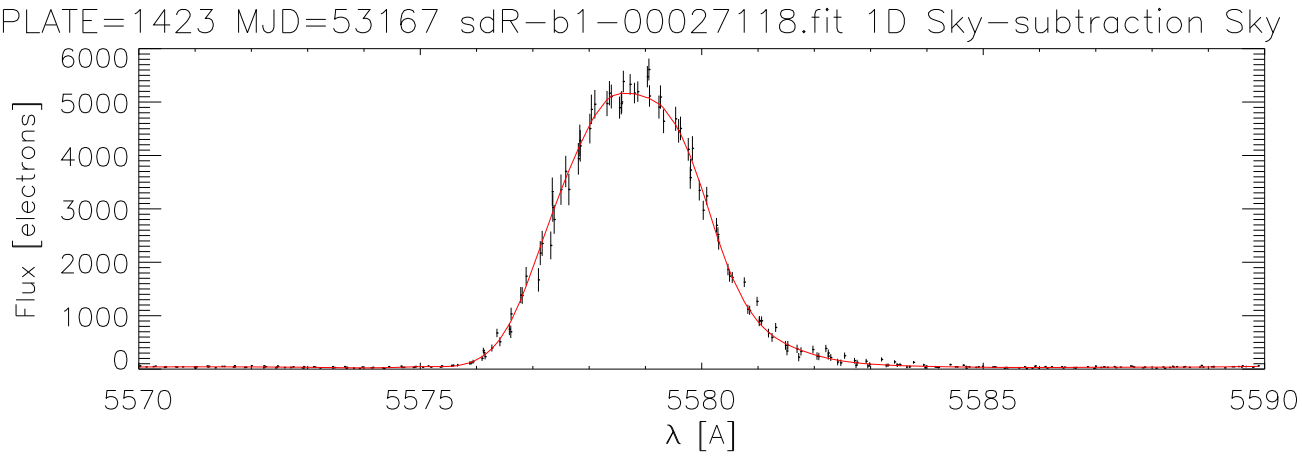

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

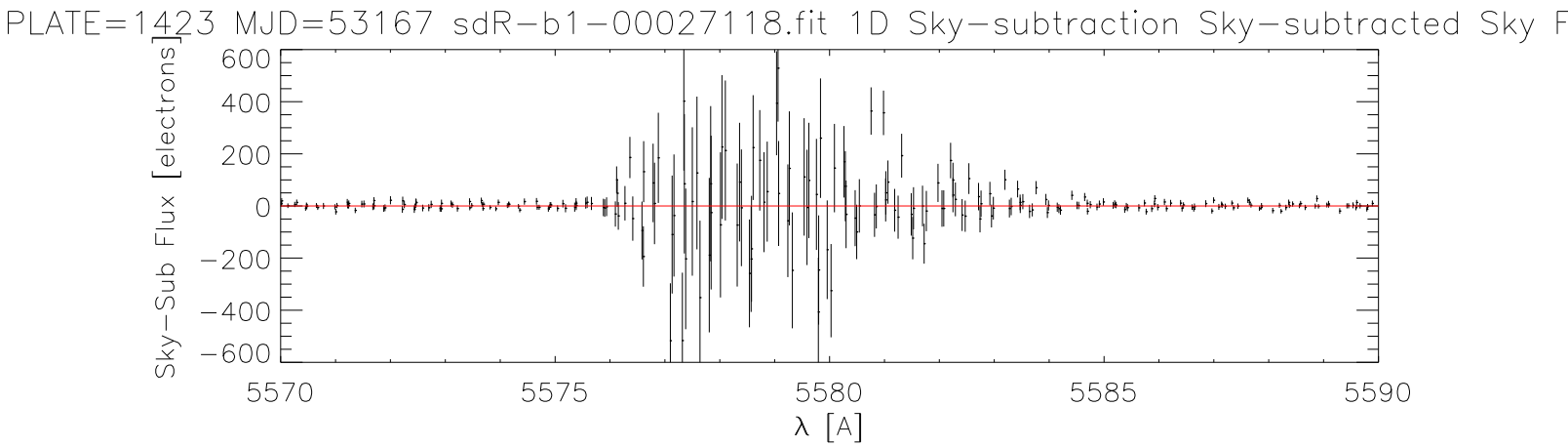

4046.5600
nfib1 15
nfib2 15
stdev 0.129
extra −0.06
4358.3300
nfib1 16
nfib2 16
stdev 0.077
extra −0.20
5460.9400
nfib1 16
nfib2 16
stdev 0.056
extra −0.27
5577.3390
nfib1 16
nfib2 16
stdev 0.024
extra −0.26
5889.9500
nfib1 16
nfib2 16
stdev 0.065
extra −0.22
5895.9240
nfib1 16
nfib2 16
stdev 0.092
extra −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

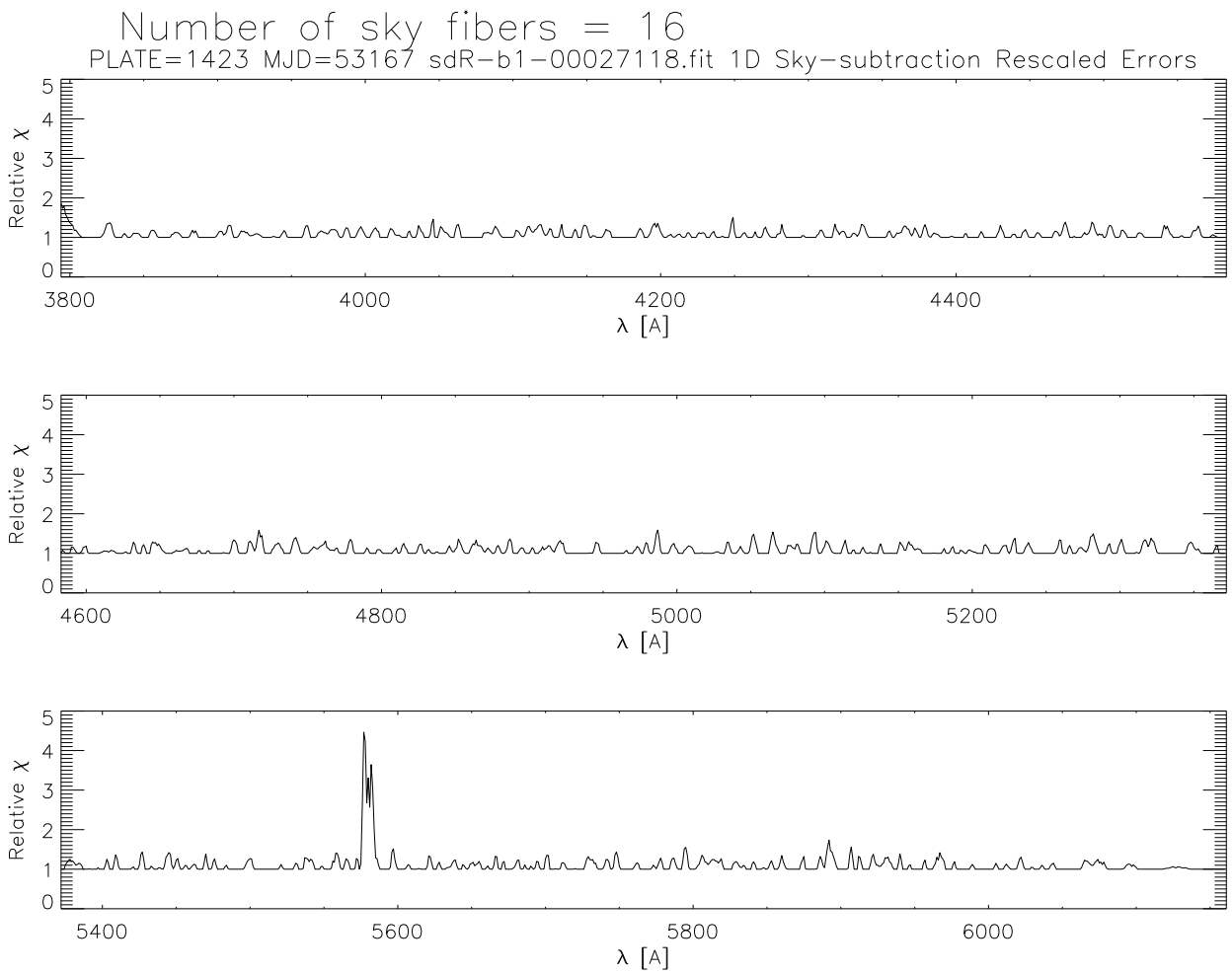

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

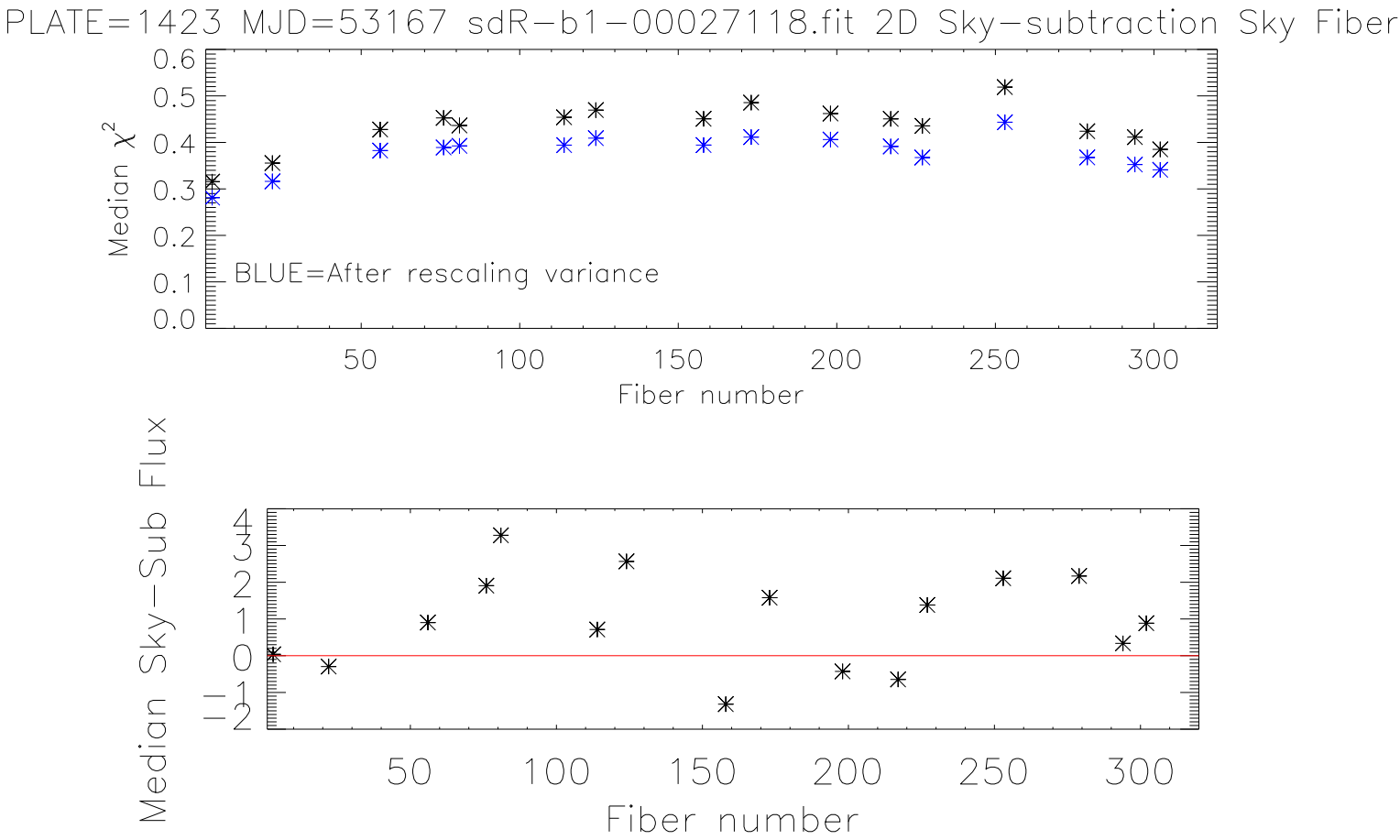

PLATE=1423 MJD=53167 Smooth superflat for sdR-b1-00027118.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

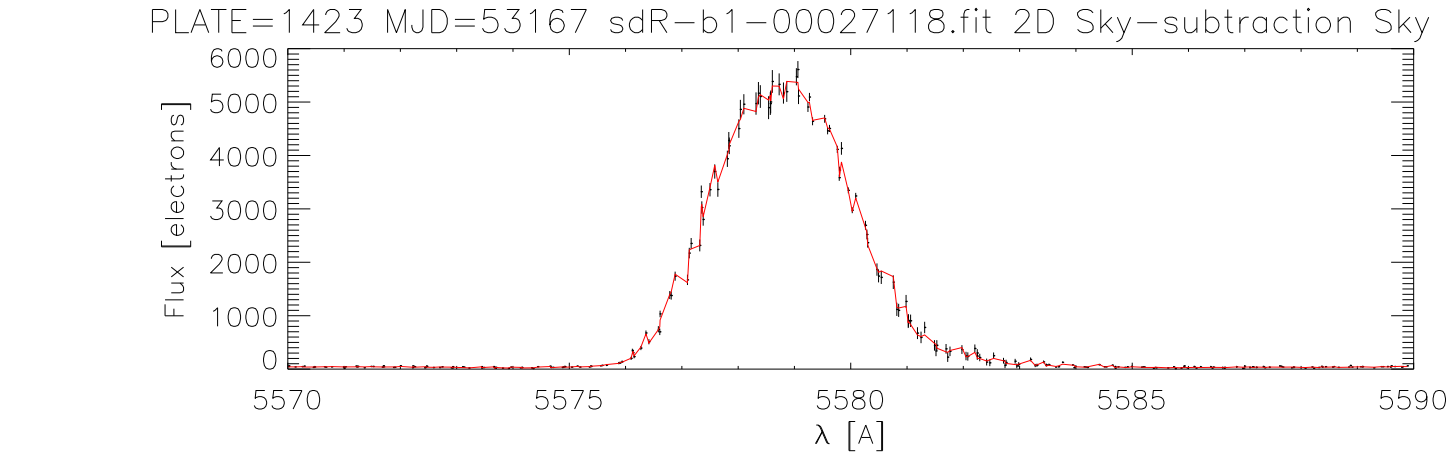

PLATE=1423 MJD=53167 sdR-b1-00027118.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

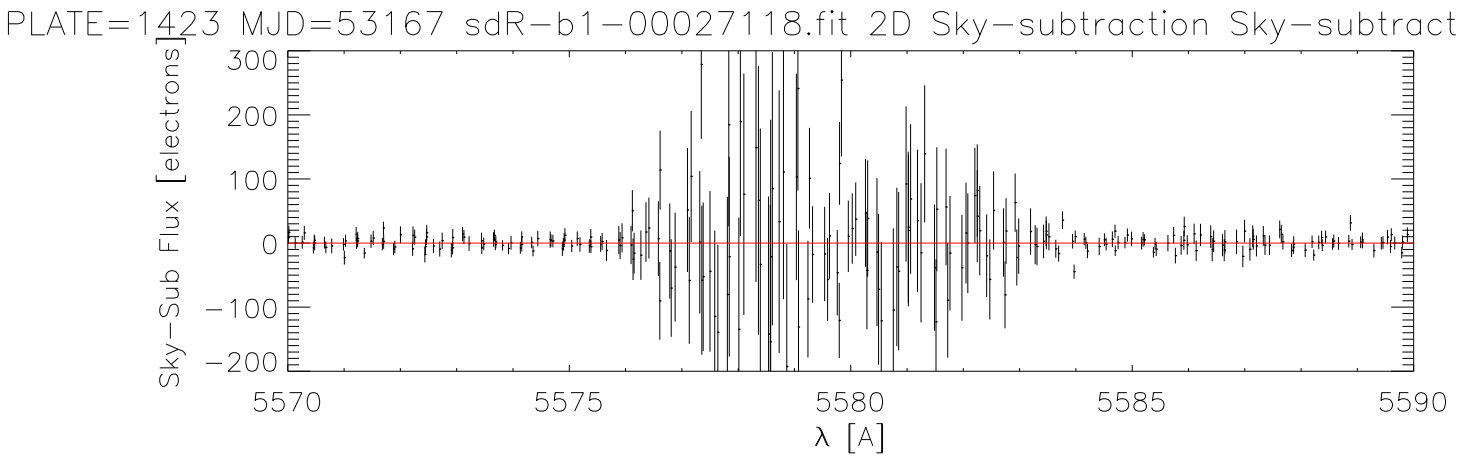

PLATE=1423 MJD=53167 sdR-b1-00027118.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

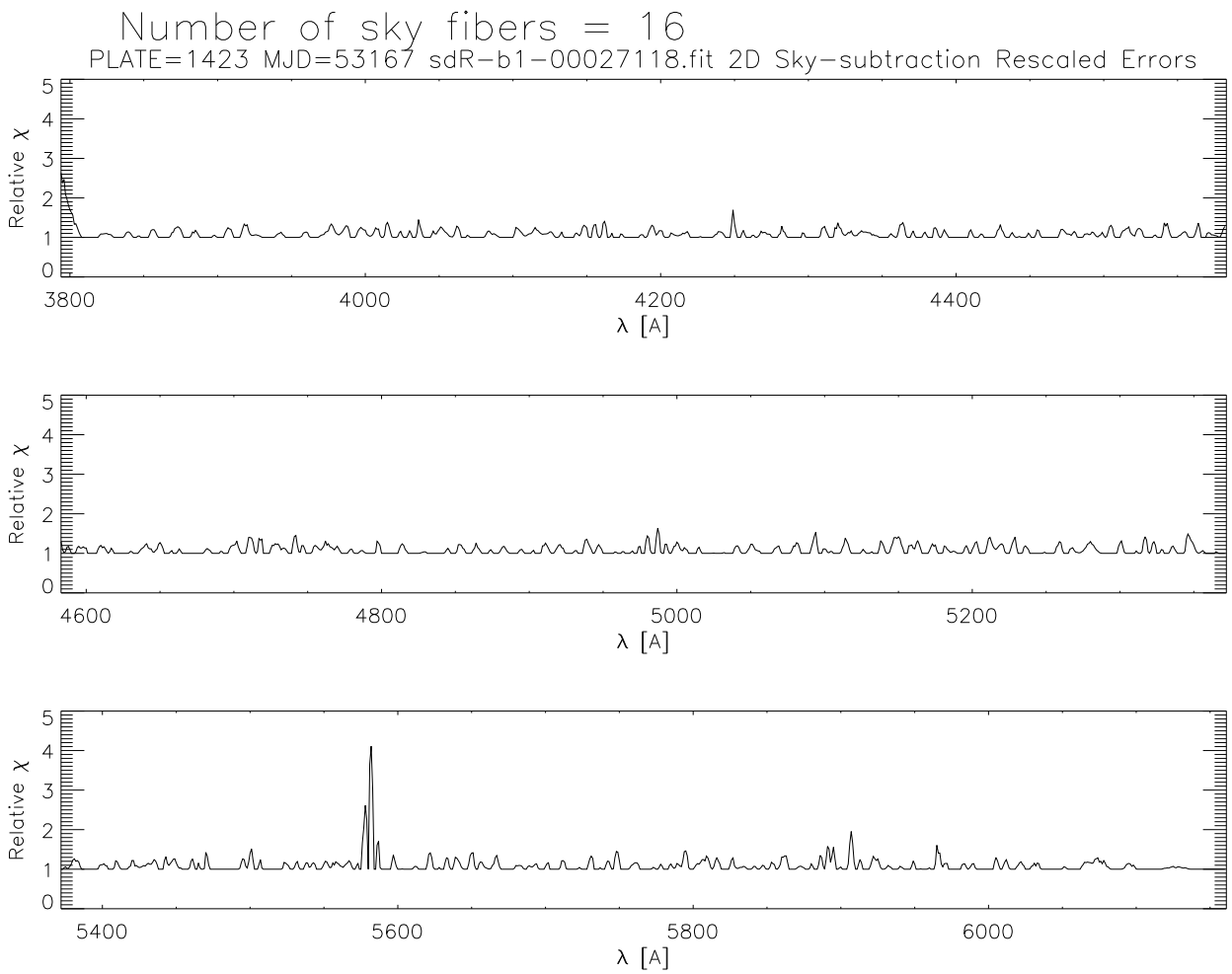

PLATE=1423 MJD=53167 sdR-b1-00027118.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

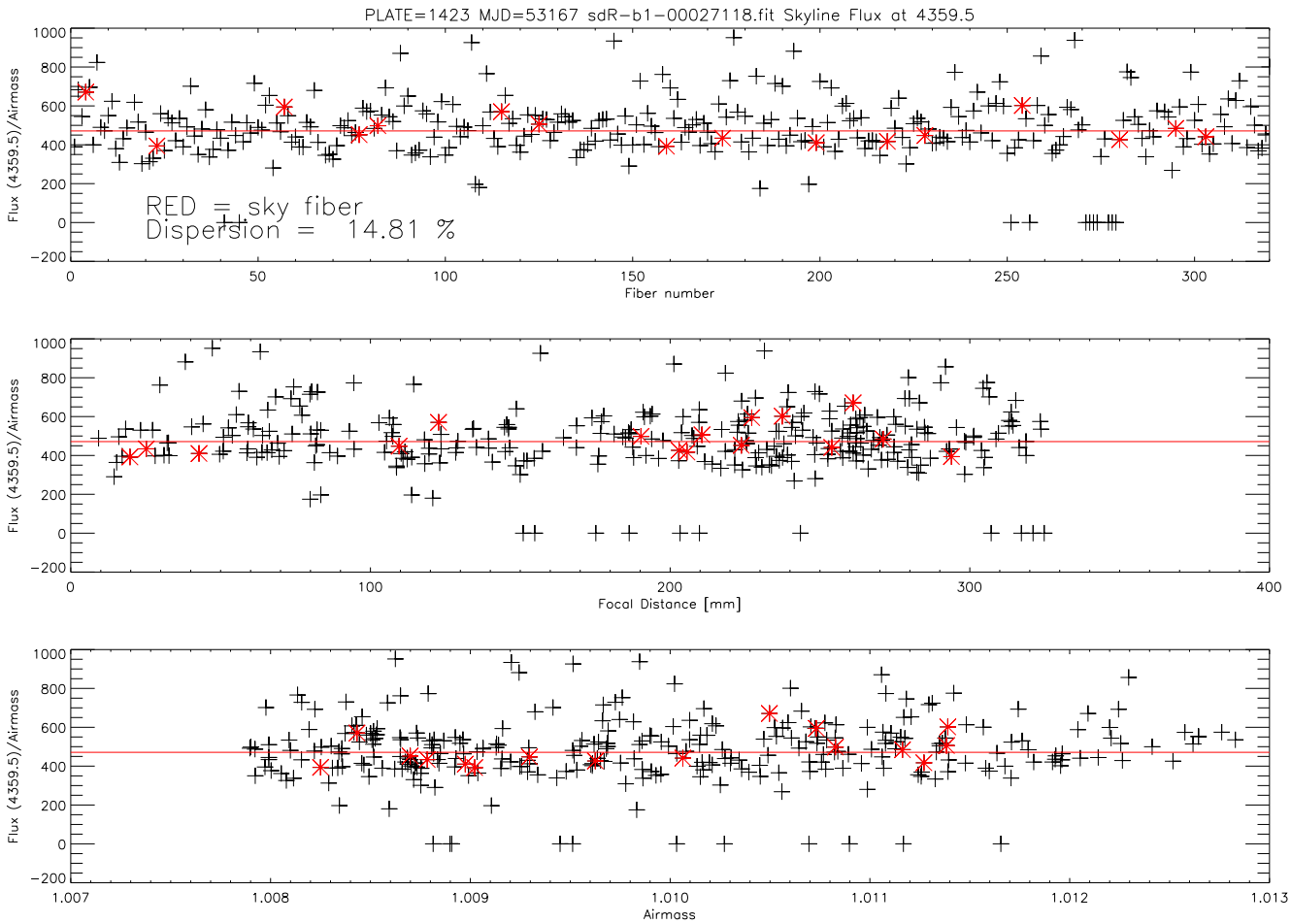

Number of sky fibers = 16
PLATE=1423 MJD=53167 sdR-b1-00027118.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

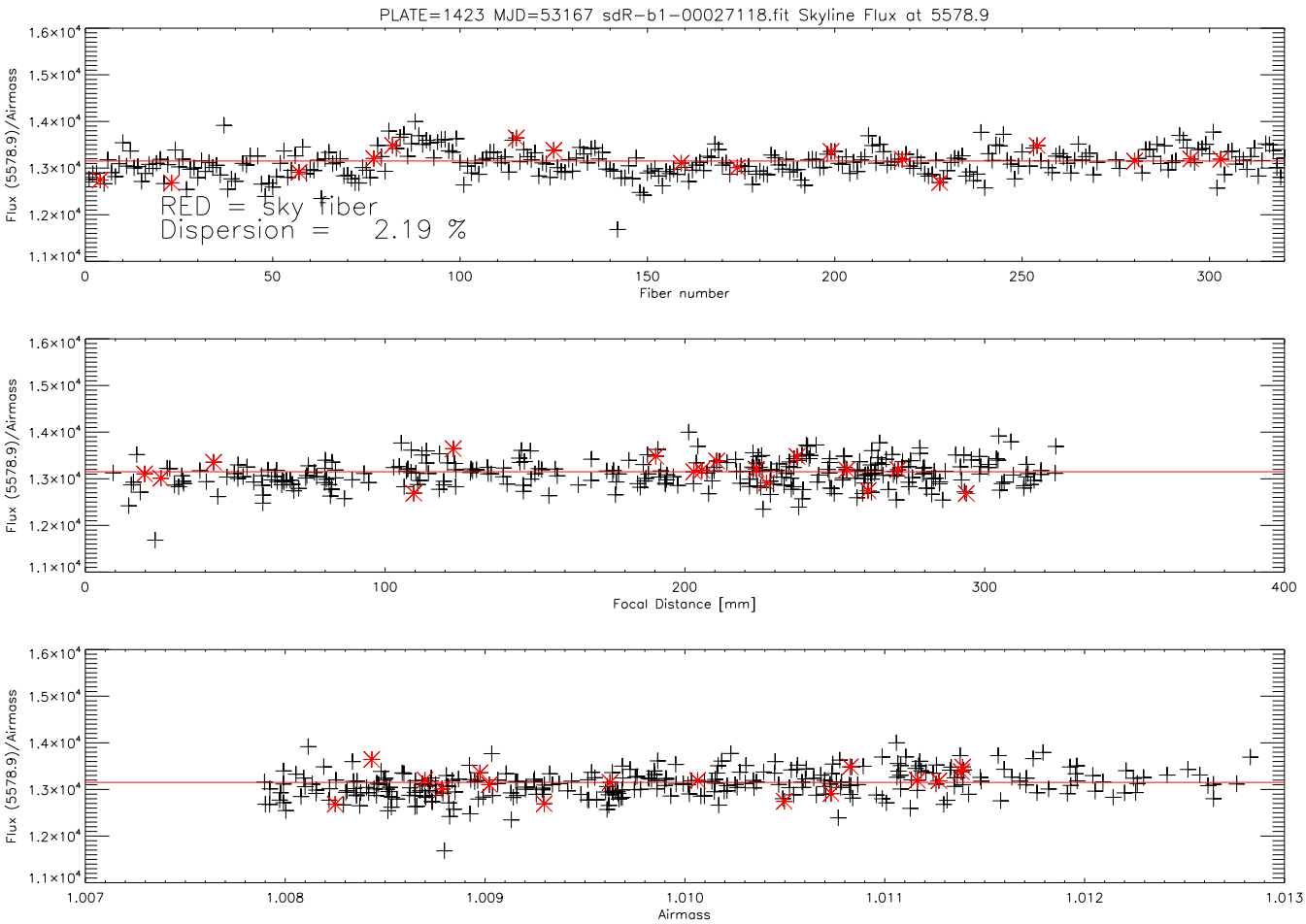

PLATE=1423 MJD=53167 sdR-b1-00027118.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

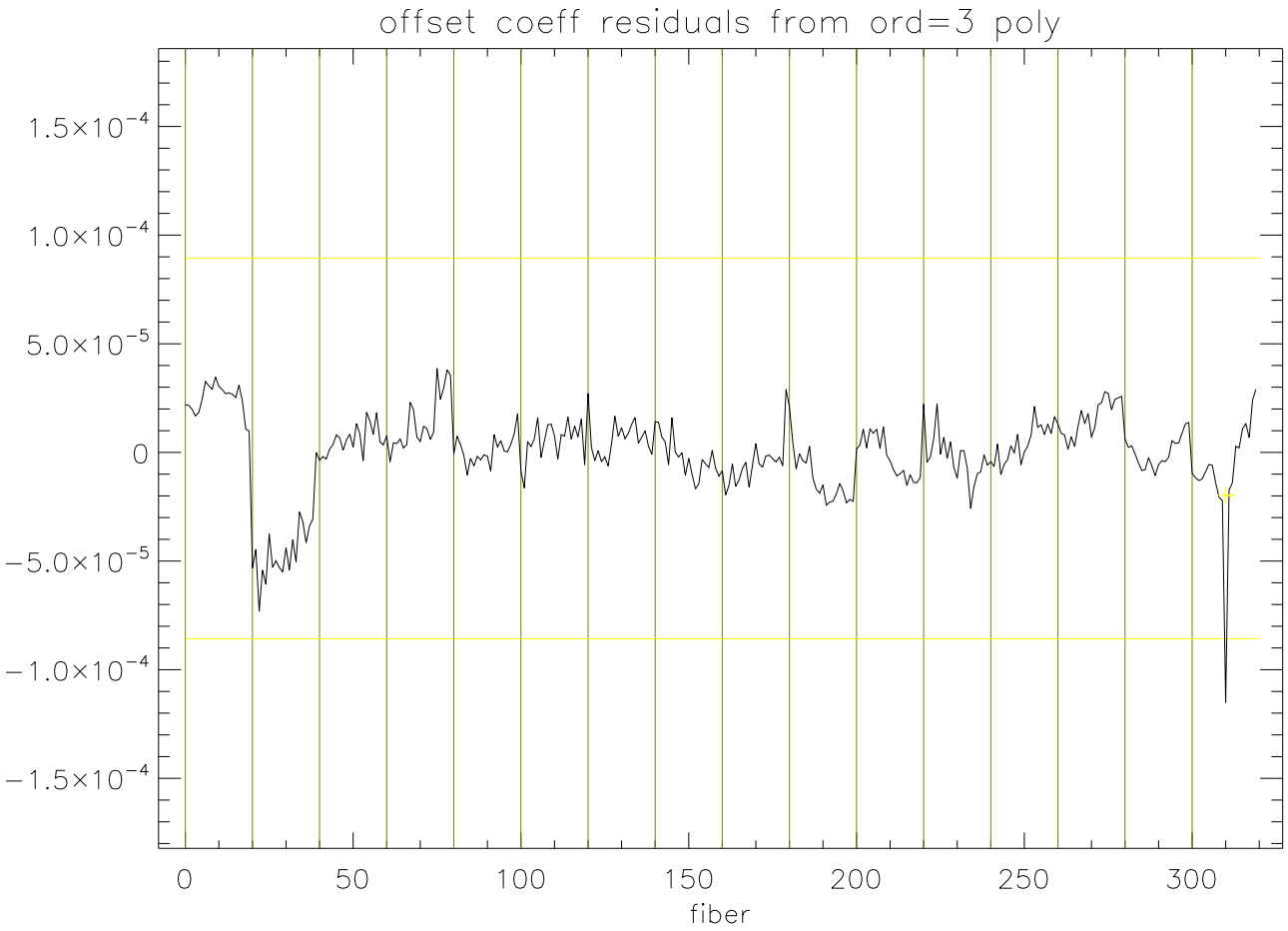

PLATE=1423 MJD=53167 sdR-b1-00027118.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

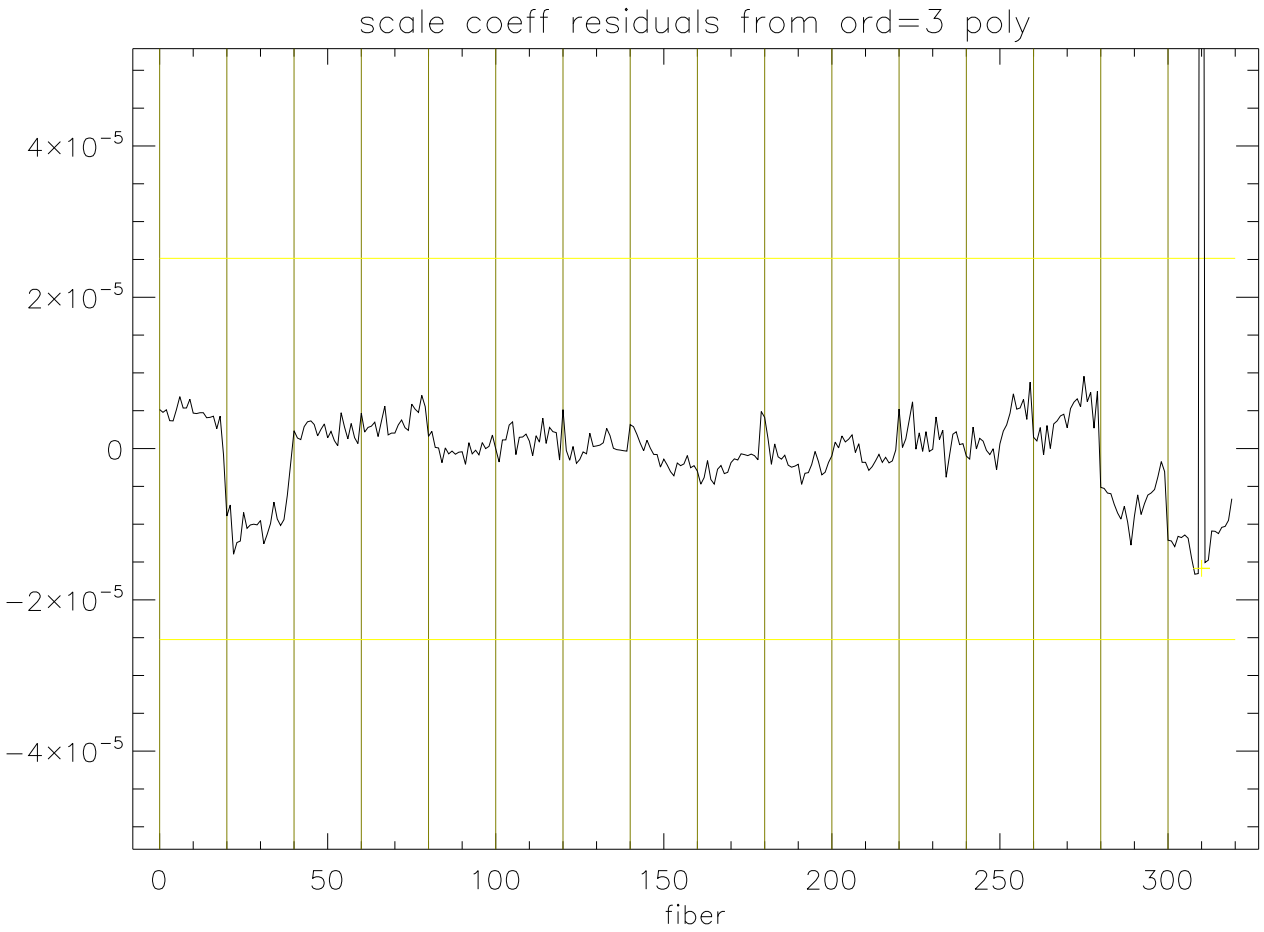

PLATE=1423 MJD=53167 sdR-b1-00027118.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

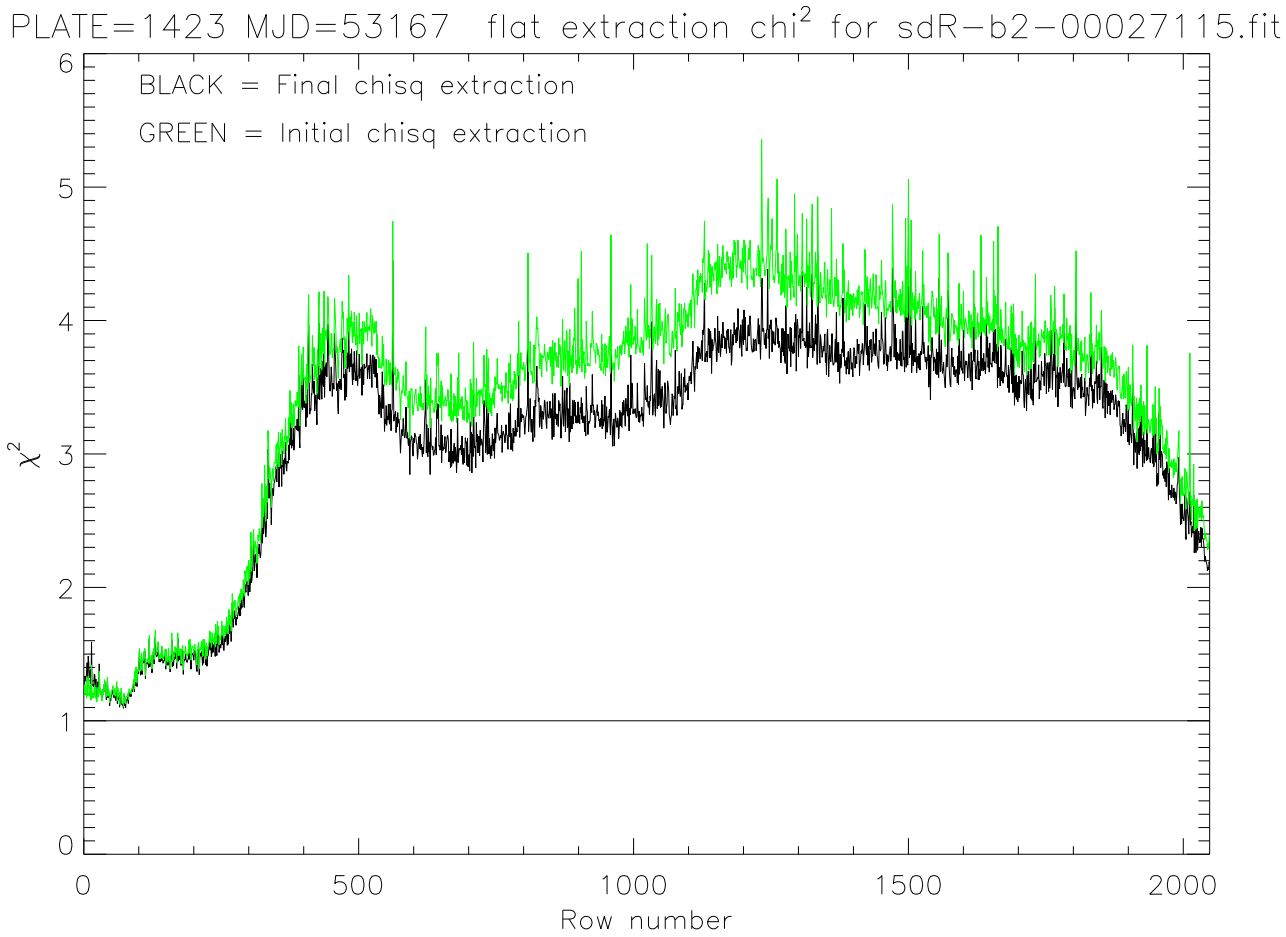

Number of sky fibers = 16
PLATE=1423 MJD=53167 sdR-b1-00027118.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

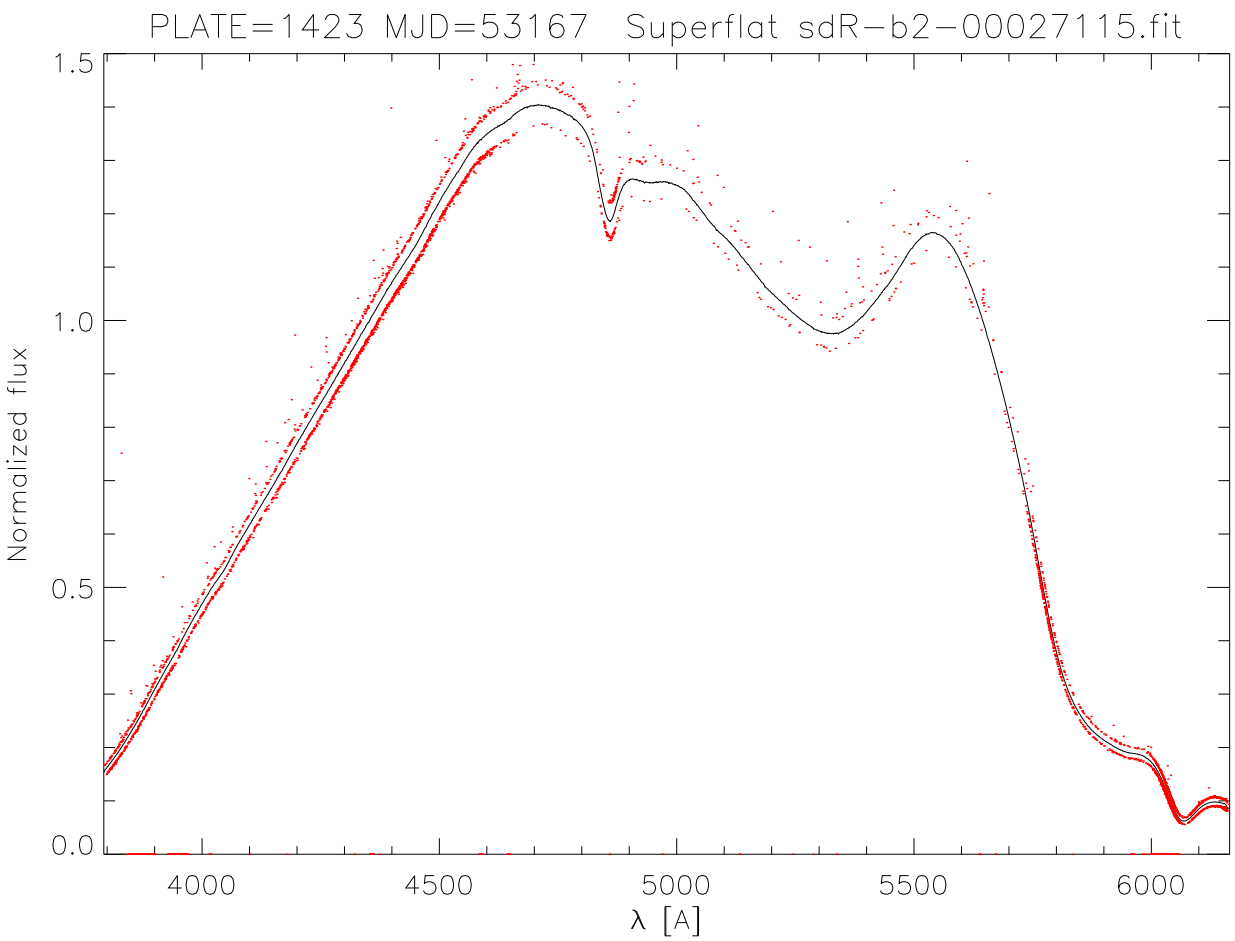

PLATE=1423 MJD=53167 sdR-b1-00027118.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.81 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

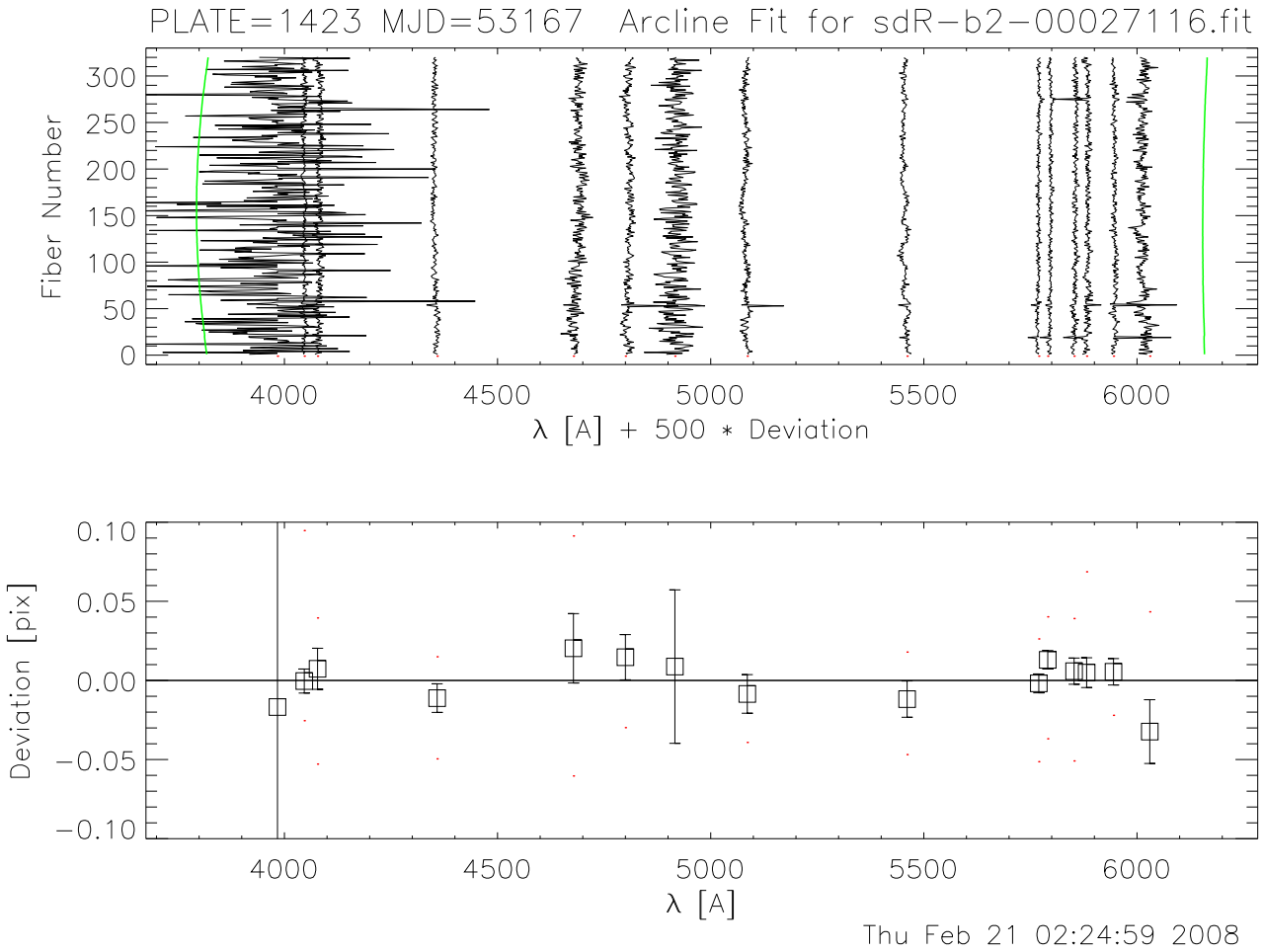

PLATE=1423 MJD=53167 sdR-b1-00027118.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.19 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

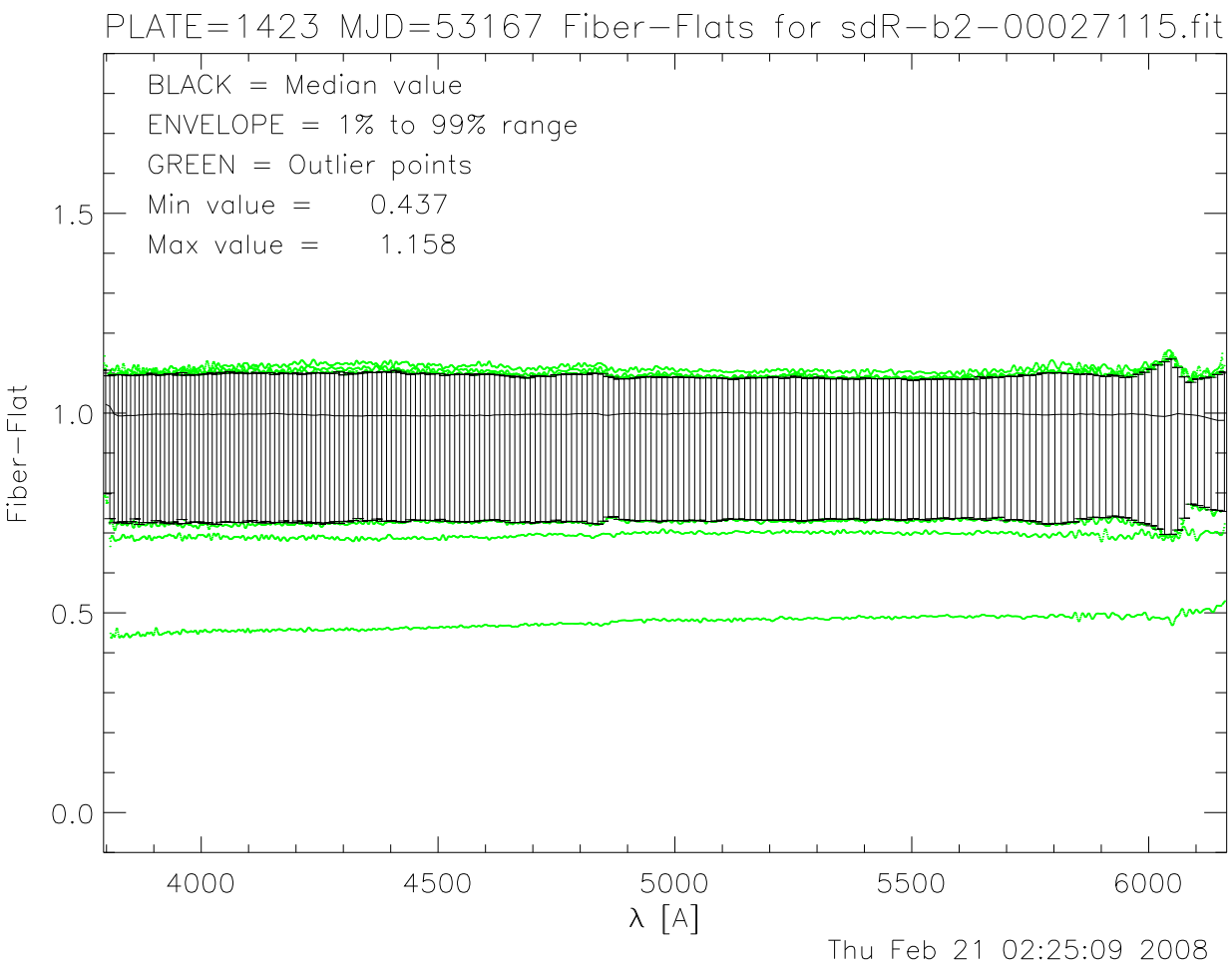

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

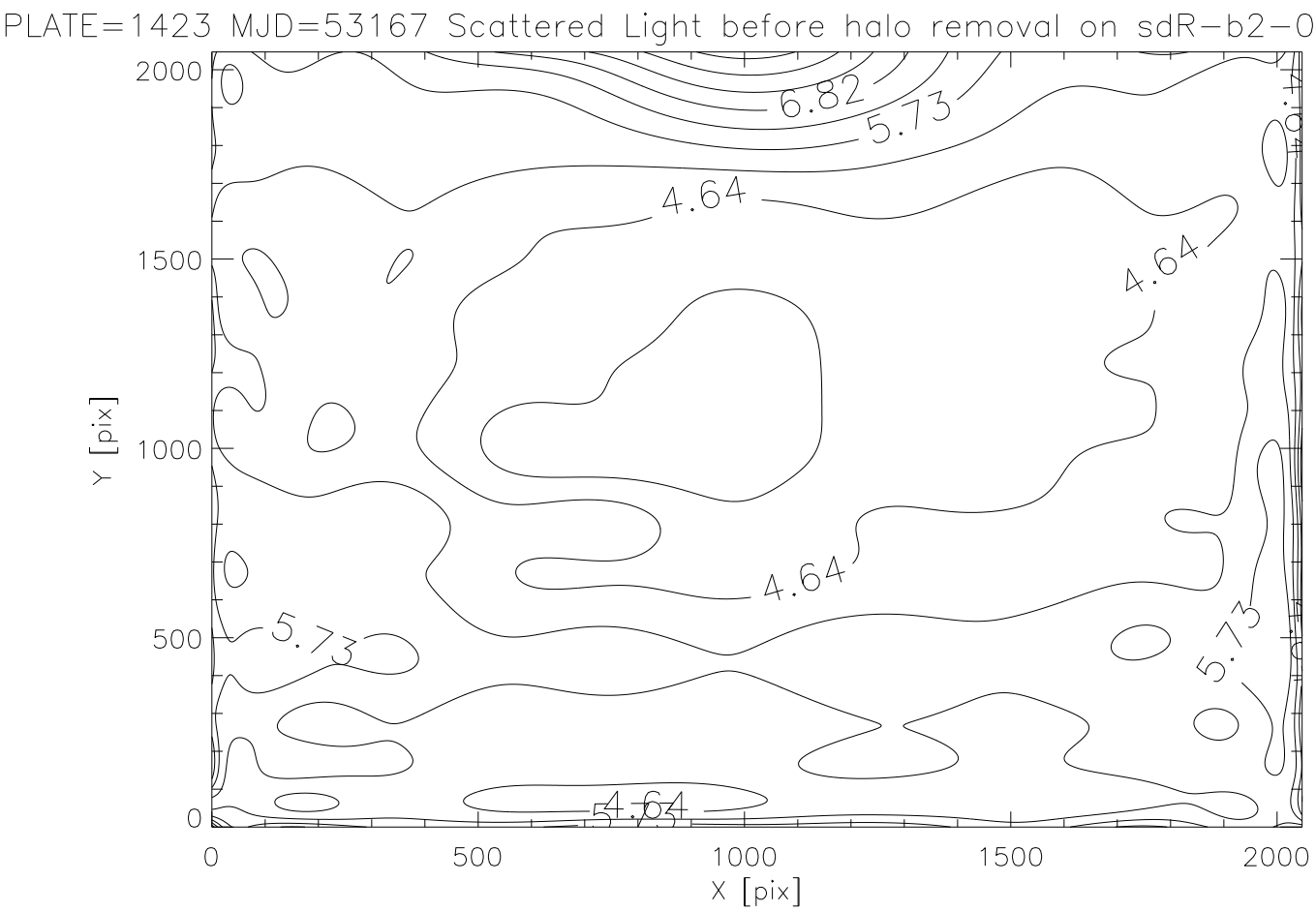

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

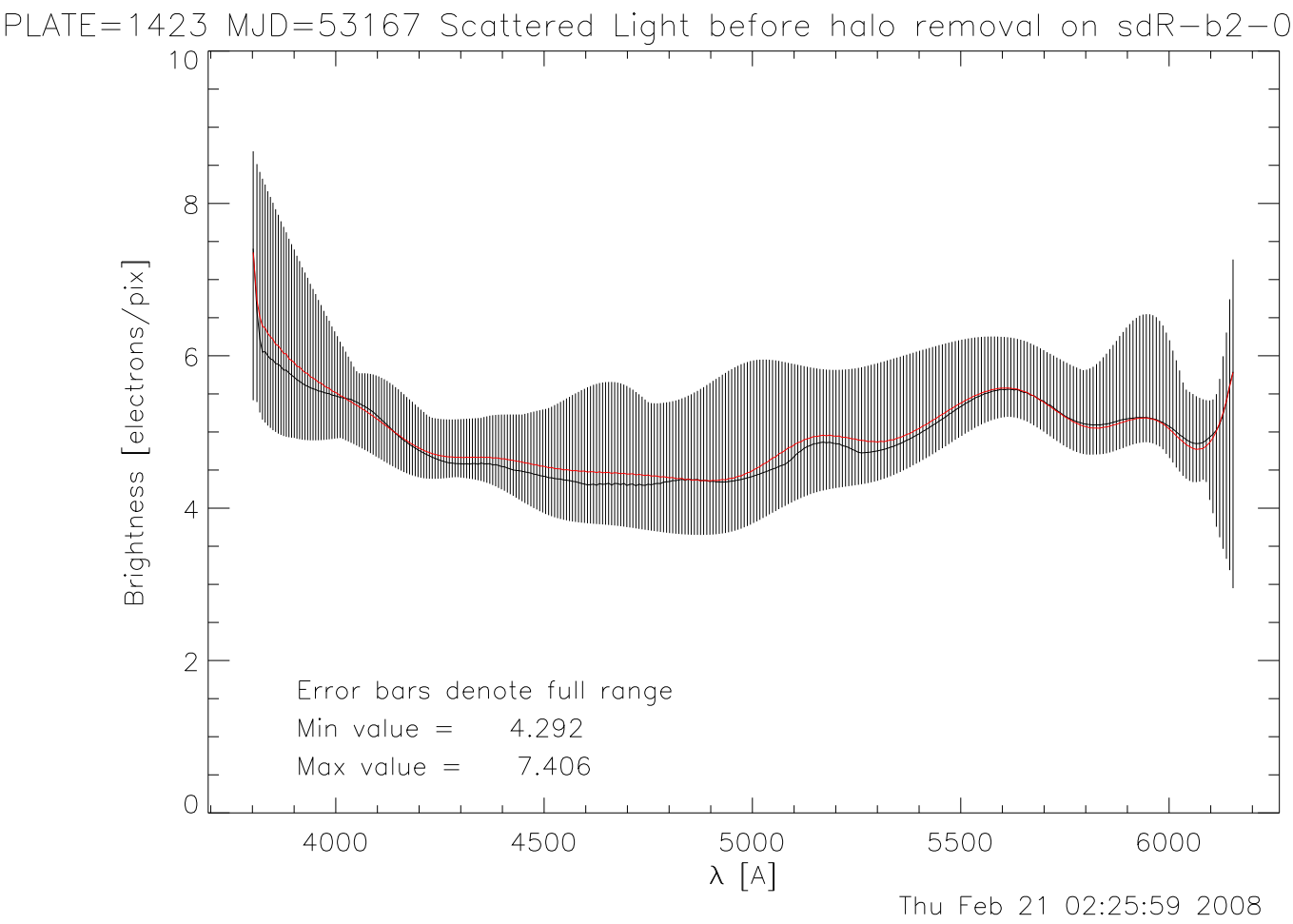

PLATE=1423 MJD=53167 flat extraction chi^2 for sdR-b2-00027115.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

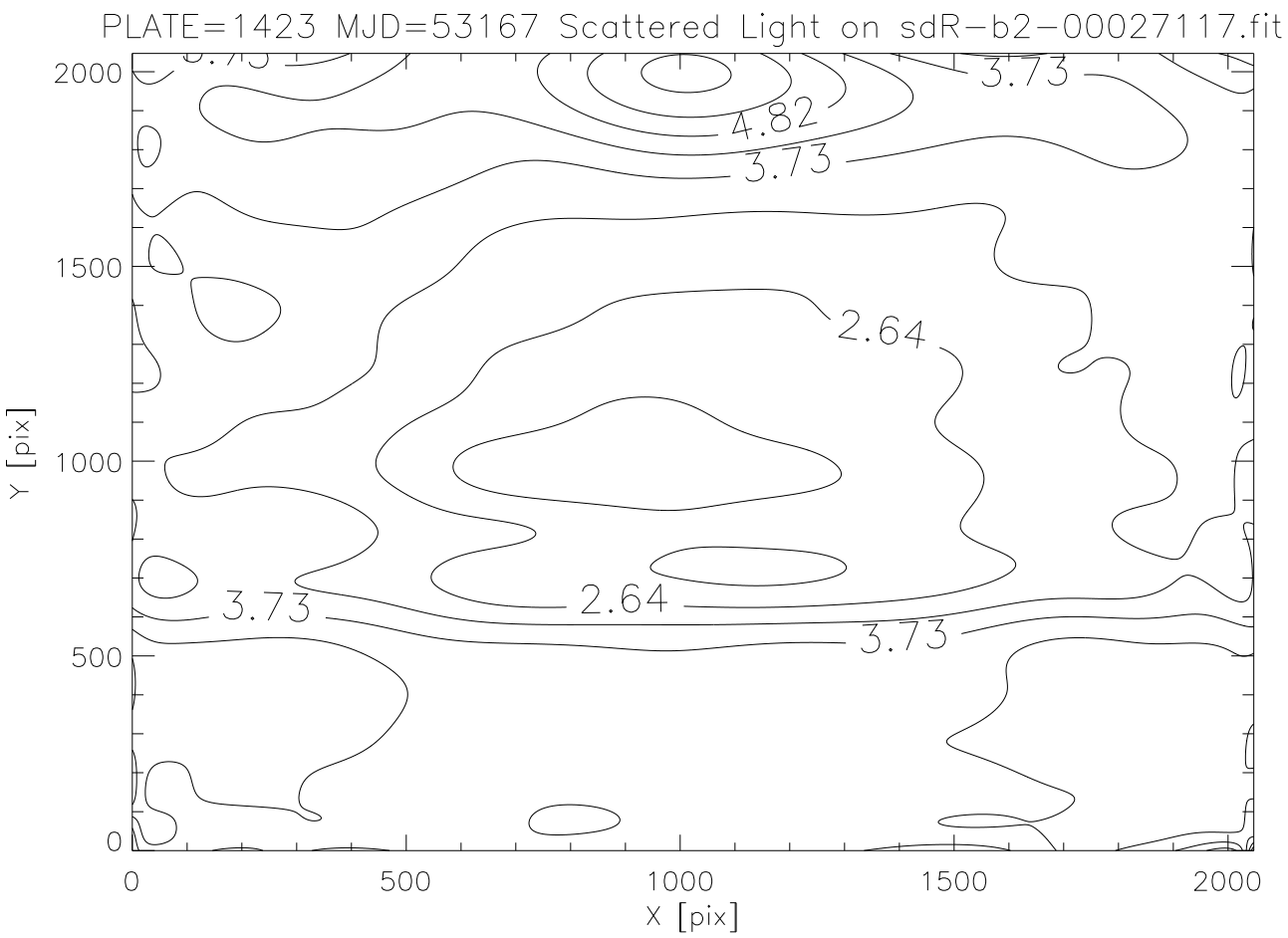

PLATE=1423 MJD=53167 Superflat sdR-b2-00027115.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

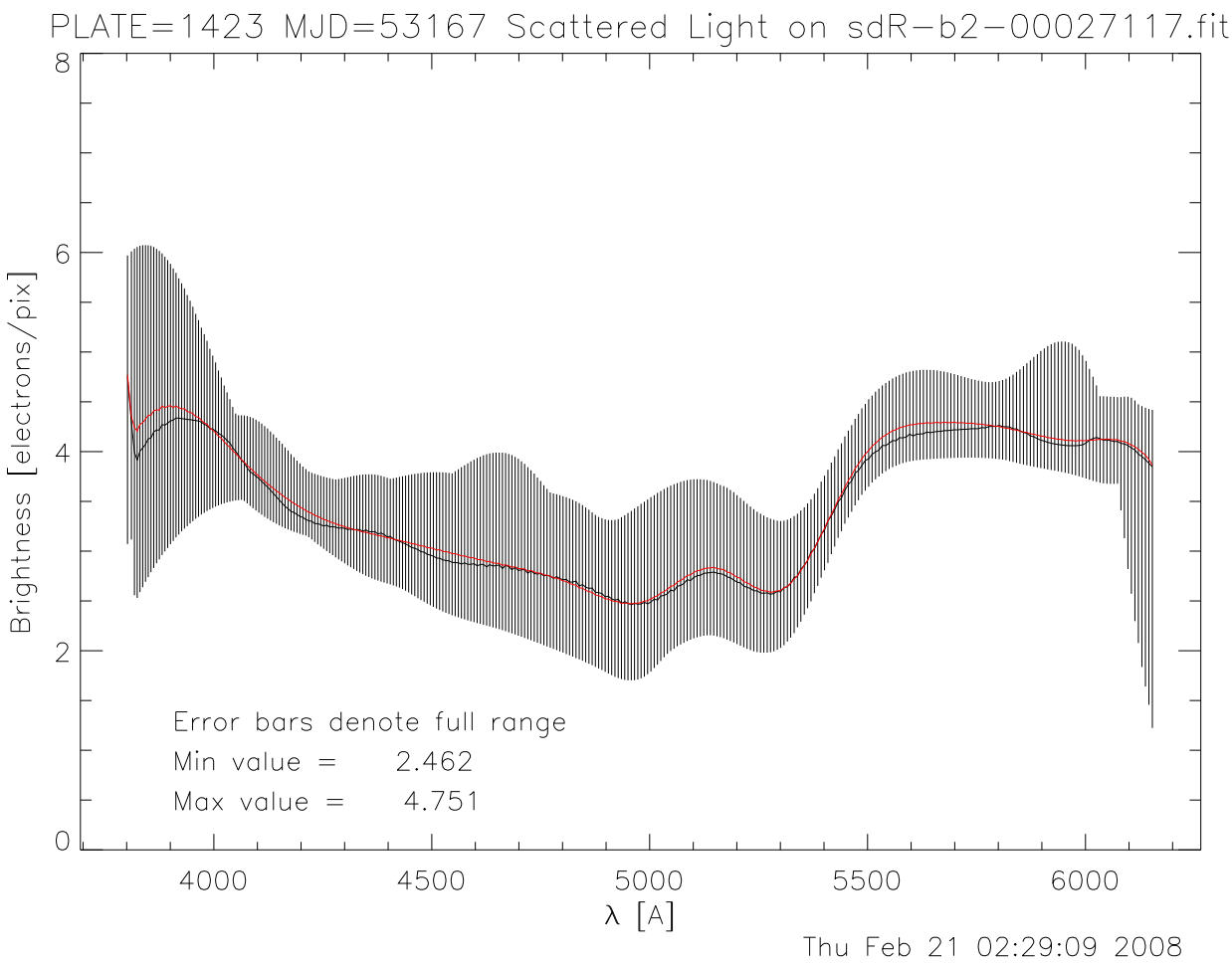

PLATE=1423 MJD=53167 Arcline Fit for sdR-b2-00027116.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Thu Feb 21 02:24:59 2008


PLATE=1423 MJD=53167 Fiber-Flats for sdR-b2-00027115.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.437
Max value = 1.158
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 21 02:25:09 2008


PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-b2-00027117.f
6.82
5.73
4.64
4.64
4.64
5.73
5.73
4.64
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR−b2−00027117.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.292
Max value = 7.406
Thu Feb 21 02:25:59 2008


PLATE=1423 MJD=53167 Scattered Light on sdR-b2-00027117.fit
3.73
4.82
3.73
2.64
3.73
2.64
3.73
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]


PLATE=1423 MJD=53167 Scattered Light on sdR-b2-00027117.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.462
Max value = 4.751
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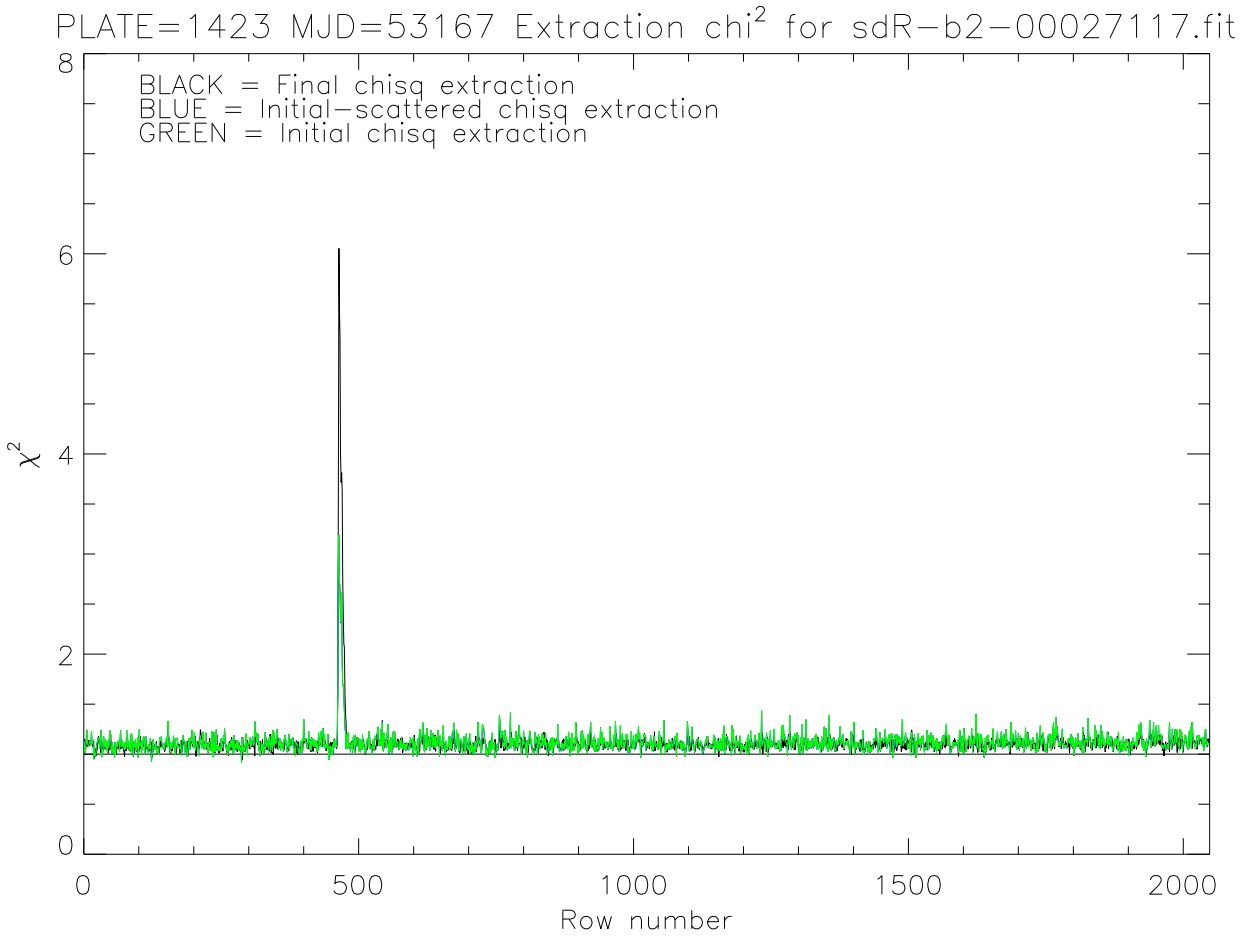
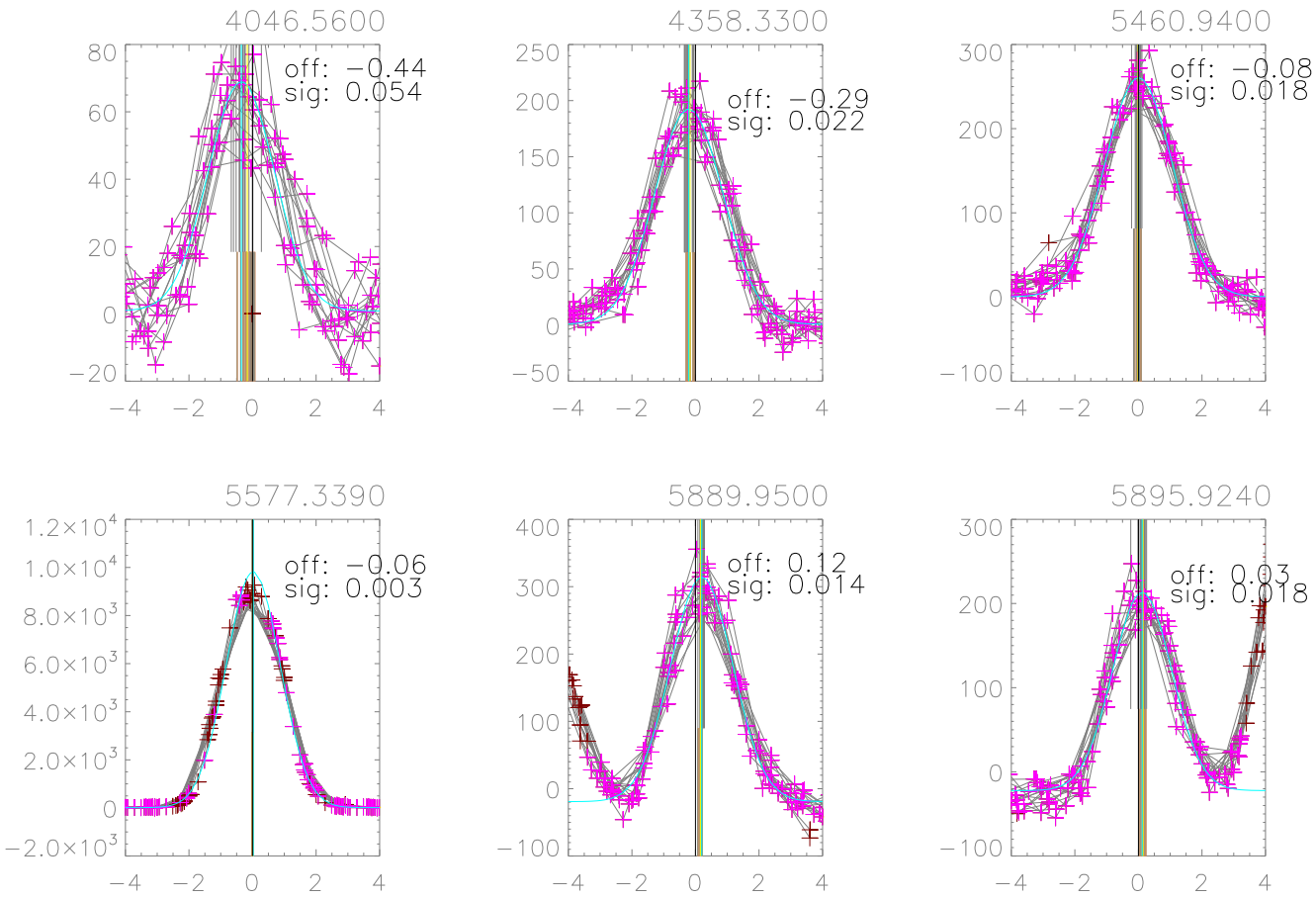
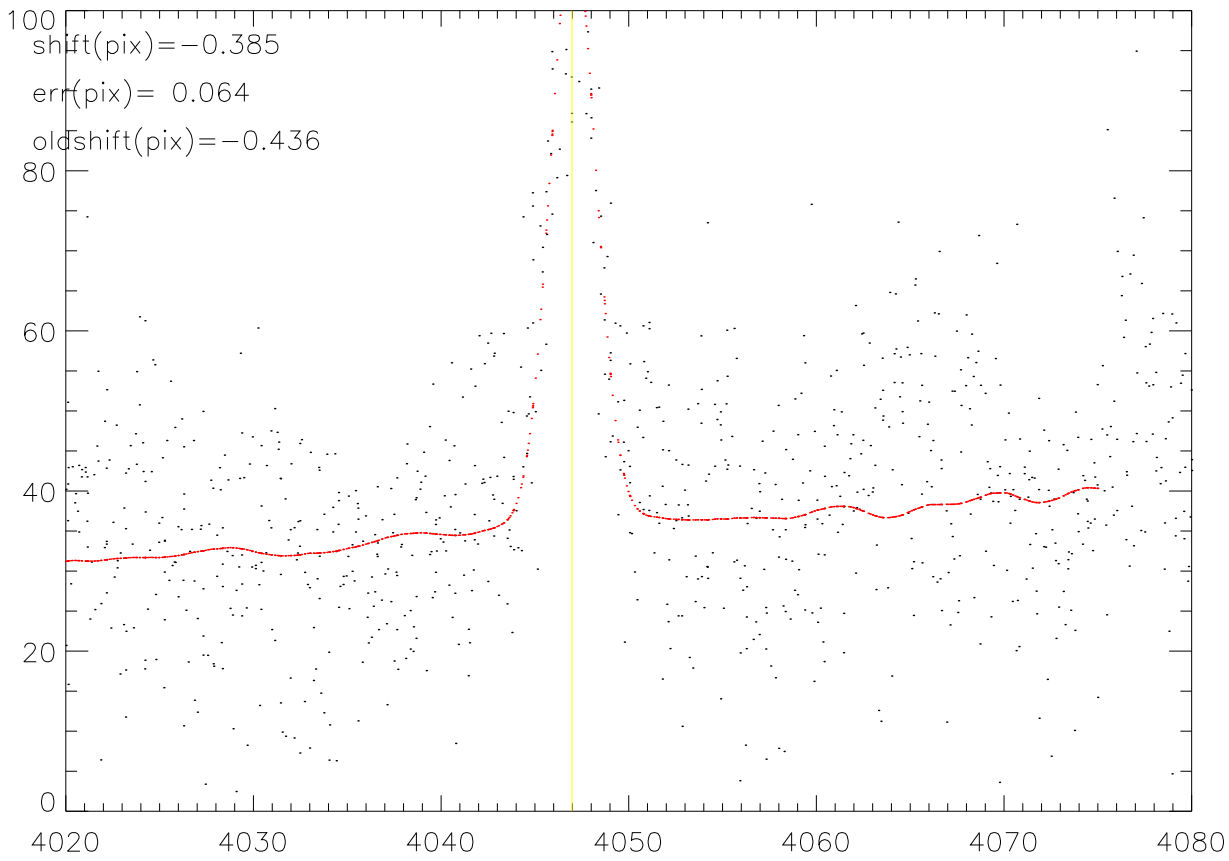
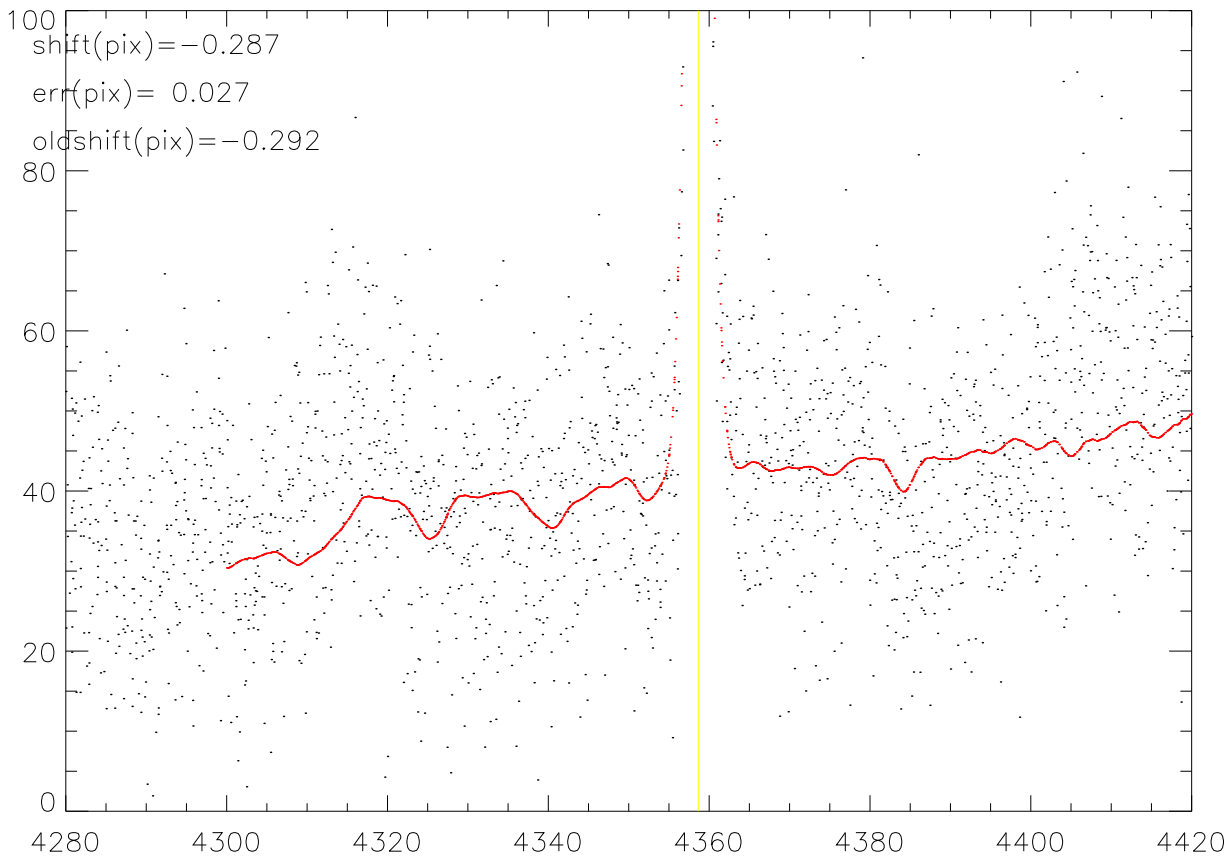
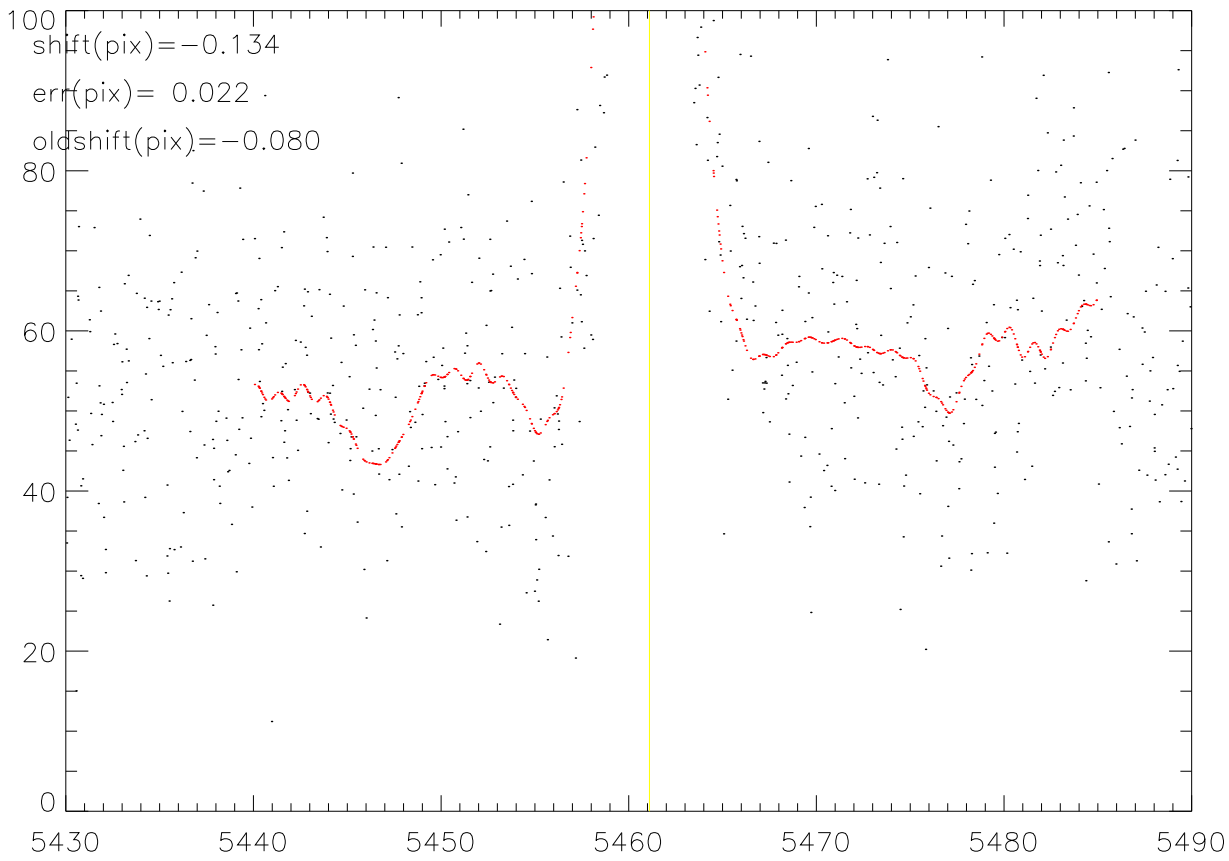
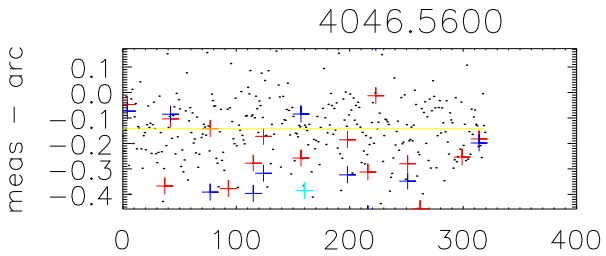

PLATE=1423 MJD=53167 Extraction chi^2 for sdR-b2-00027117.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

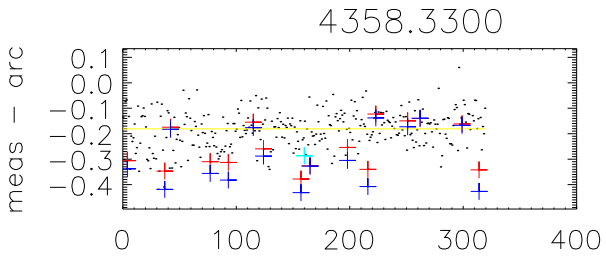

4046.5600
off: −0.44
sig: 0.054
4358.3300
off: −0.29
sig: 0.022
5460.9400
off: −0.08
sig: 0.018
5577.3390
off: −0.06
sig: 0.003
5889.9500
off: 0.12
sig: 0.014
5895.9240
off: 0.03
sig: 0.018

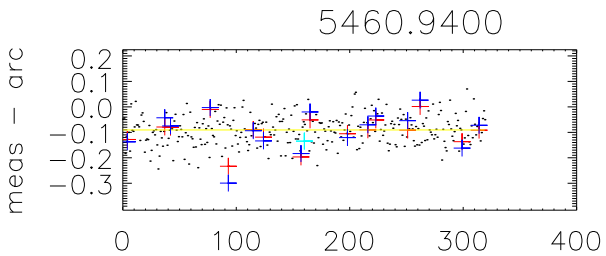

shift(pix)=−0.385
err(pix)= 0.064
oldshift(pix)=−0.436
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

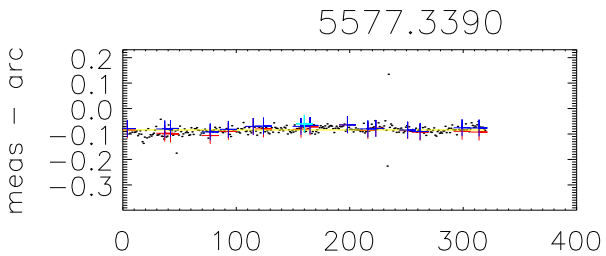

shift(pix)=−0.287
err(pix)= 0.027
oldshift(pix)=−0.292
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

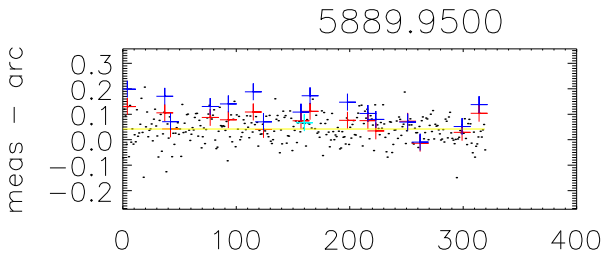

shift(pix)=−0.134
err(pix)= 0.022
oldshift(pix)=−0.080
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

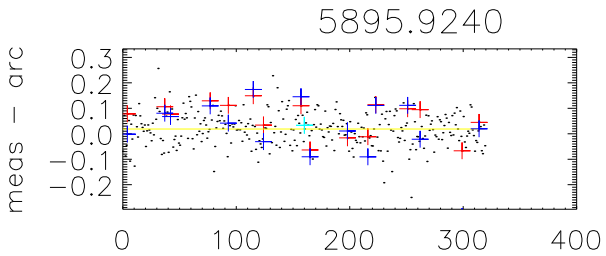

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

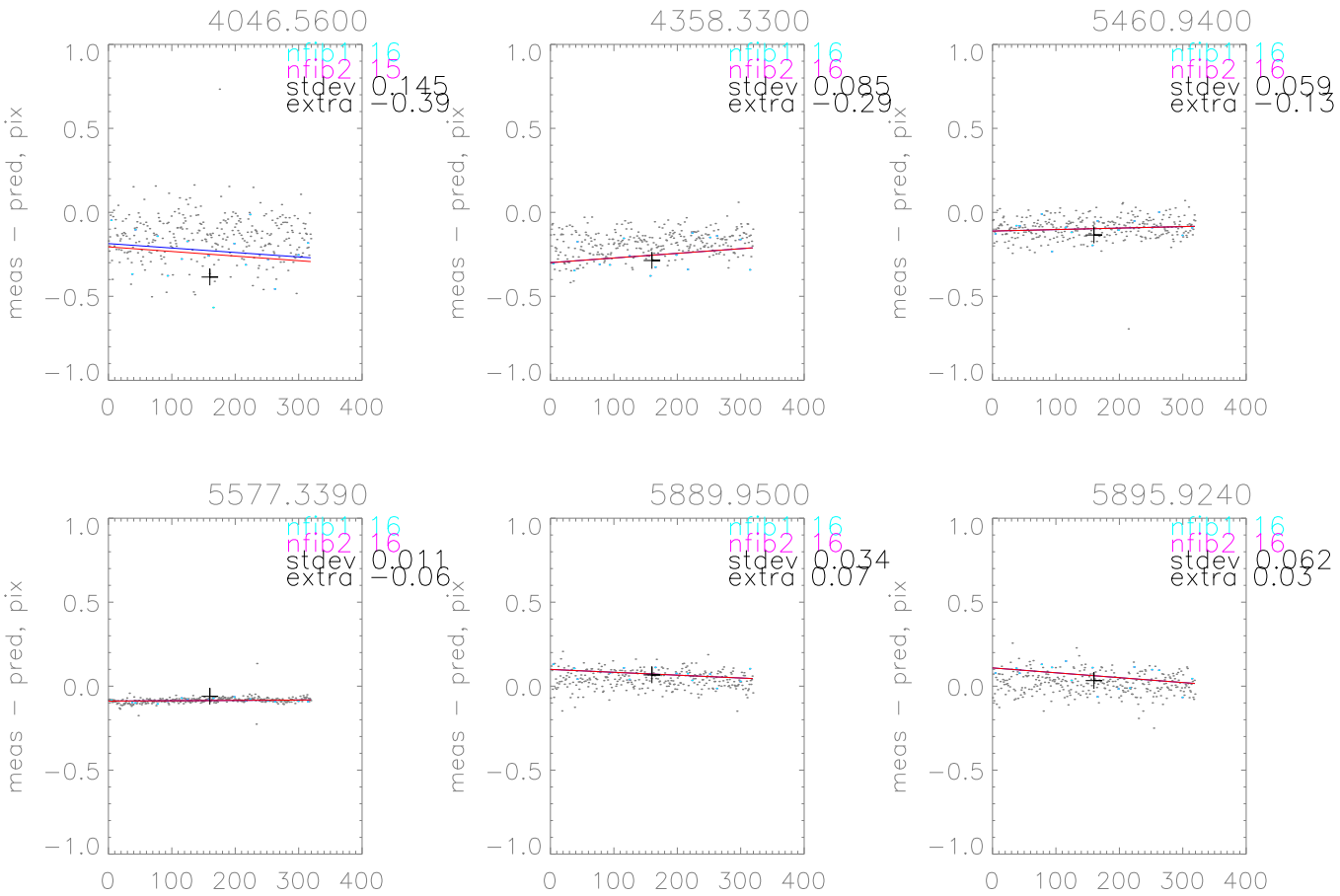

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

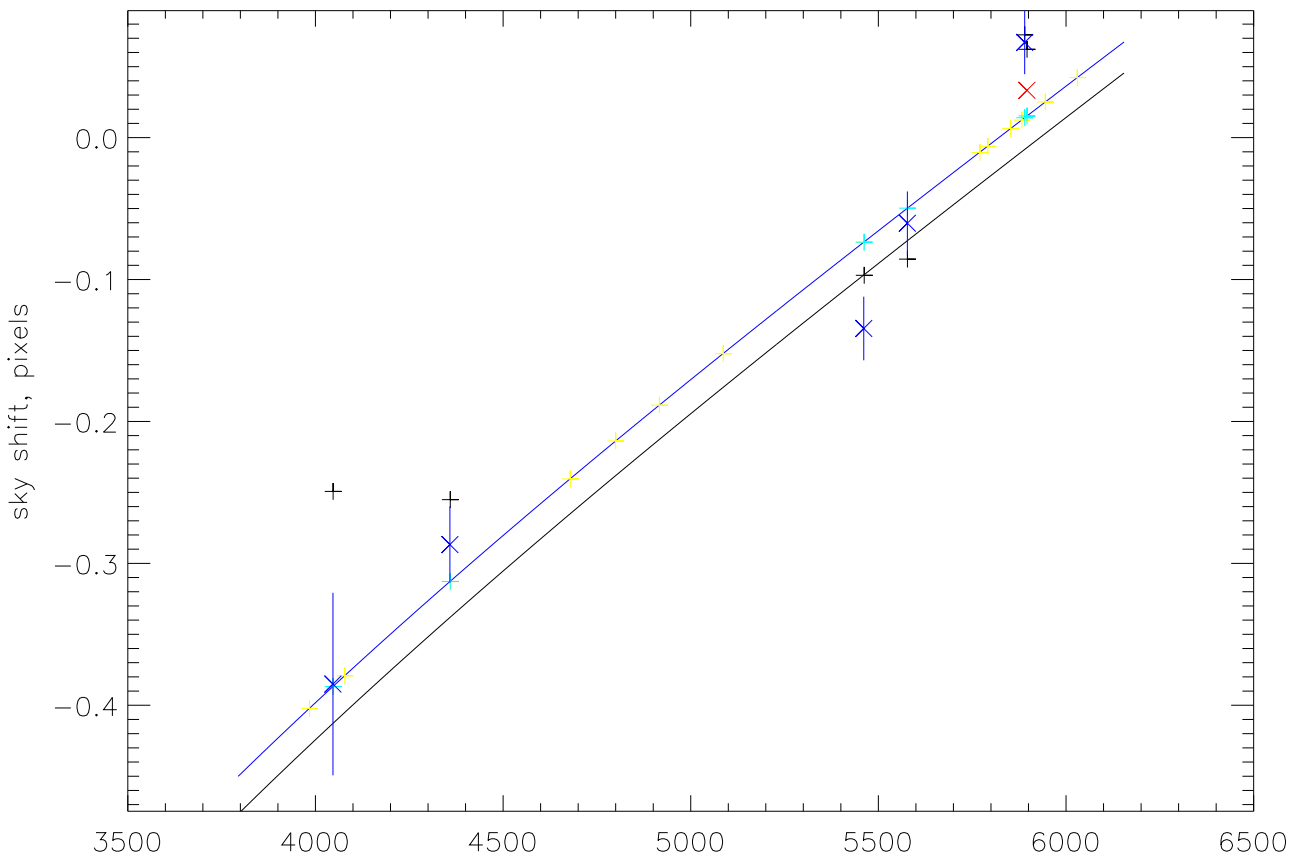

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

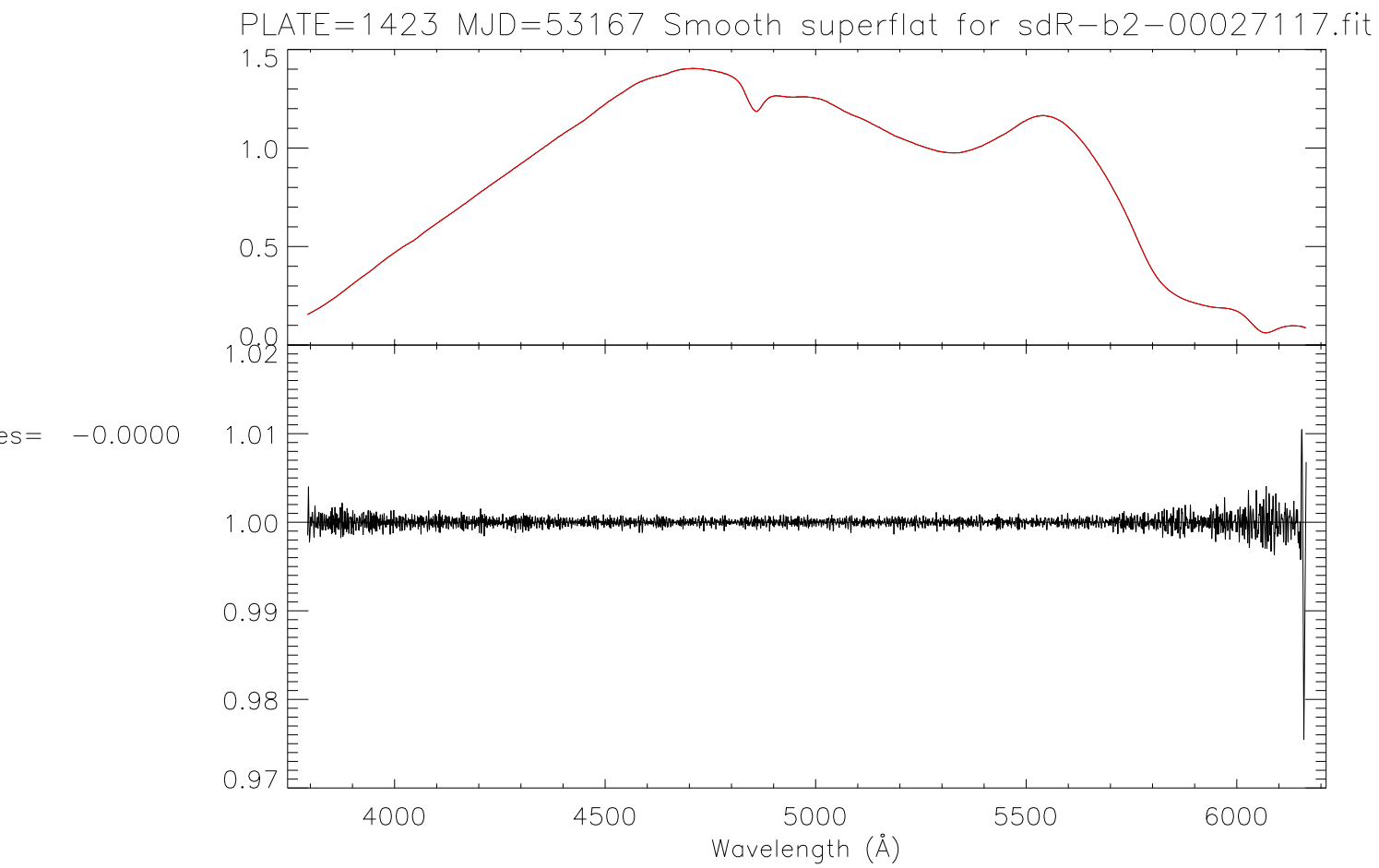

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

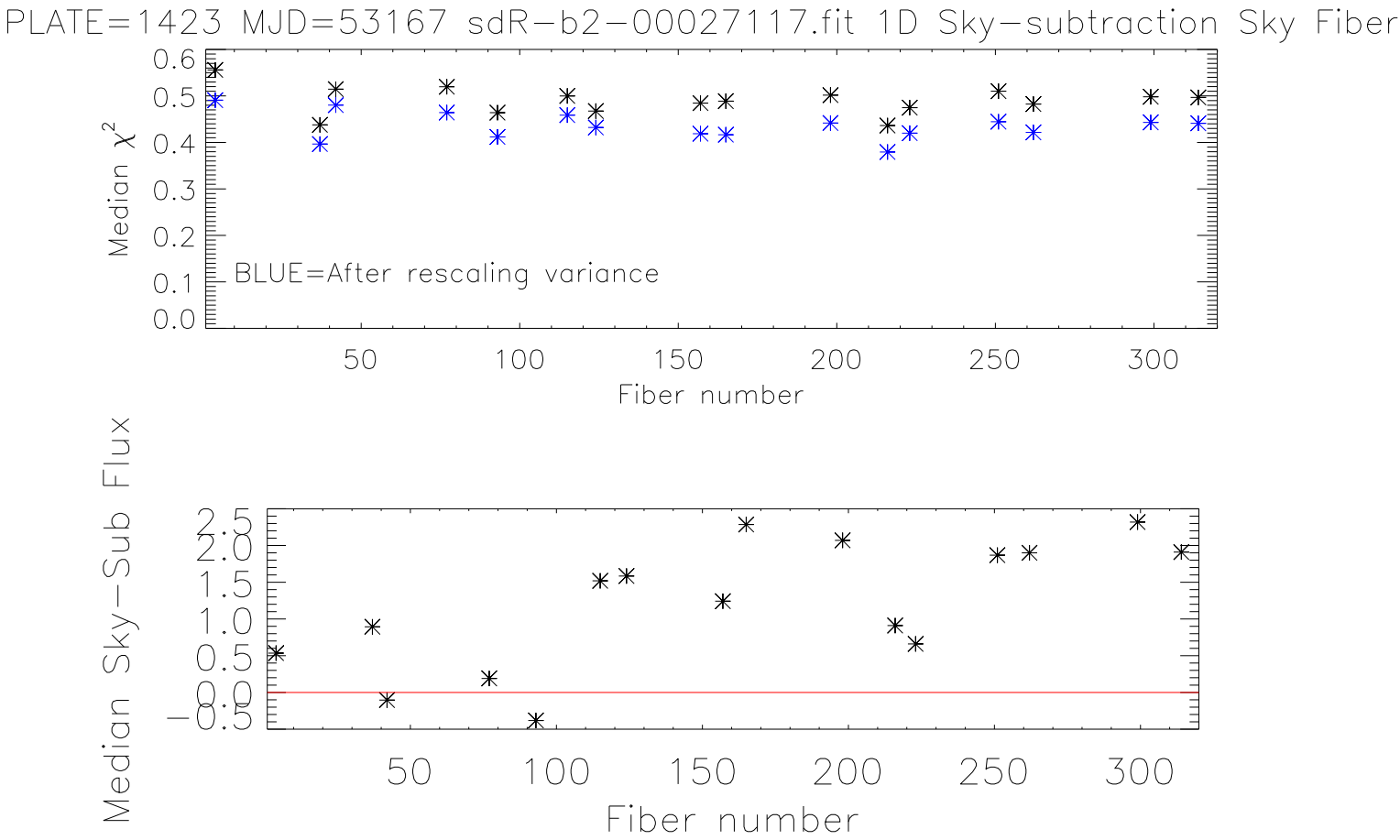

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

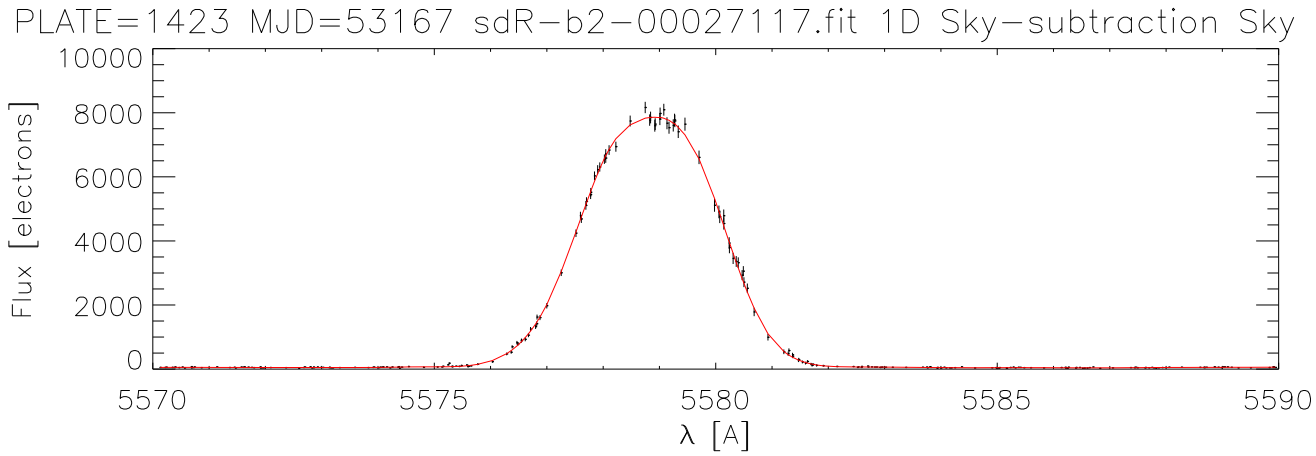

4046.5600
nfib1 16
nfib2 15
stdev 0.145
extra −0.39
4358.3300
nfib1 16
nfib2 16
stdev 0.085
extra −0.29
5460.9400
nfib1 16
nfib2 16
stdev 0.059
extra −0.13
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra −0.06
5889.9500
nfib1 16
nfib2 16
stdev 0.034
extra 0.07
5895.9240
nfib1 16
nfib2 16
stdev 0.062
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

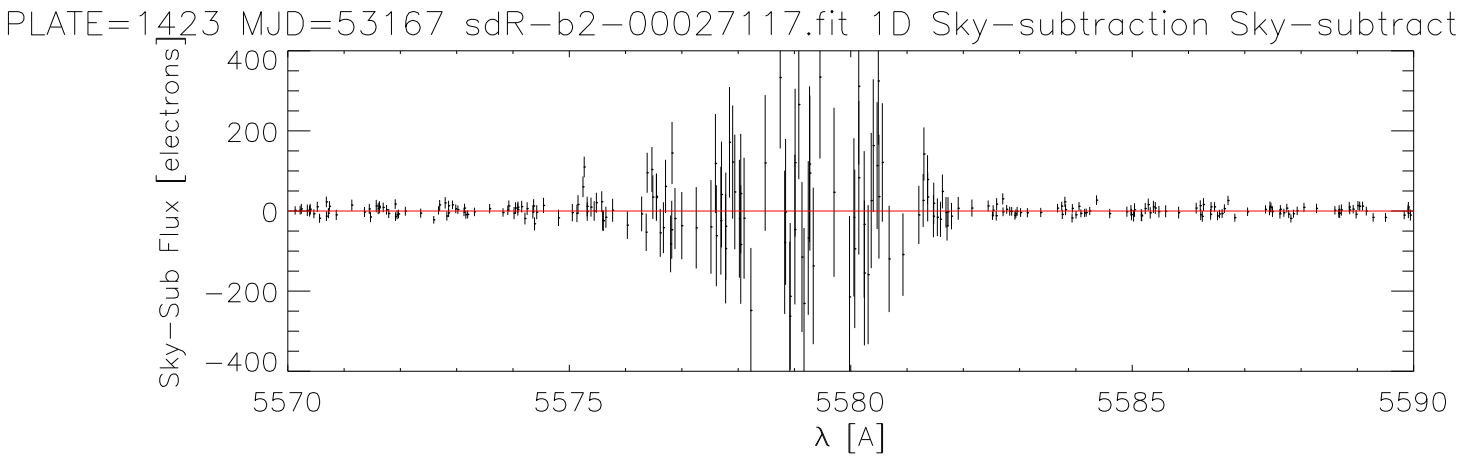

sky shift, pixels
0.0
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

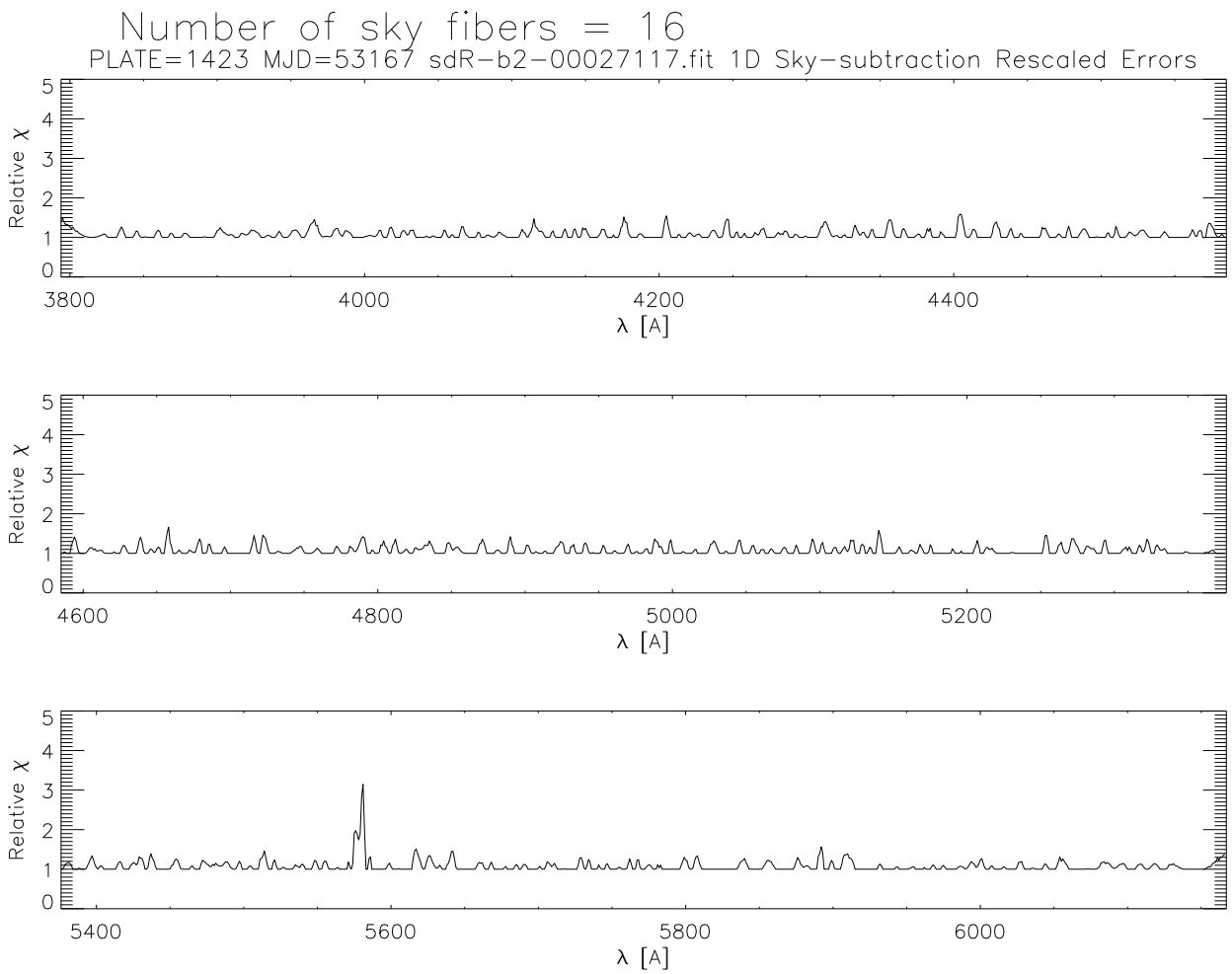

PLATE=1423 MJD=53167 Smooth superflat for sdR-b2-00027117.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

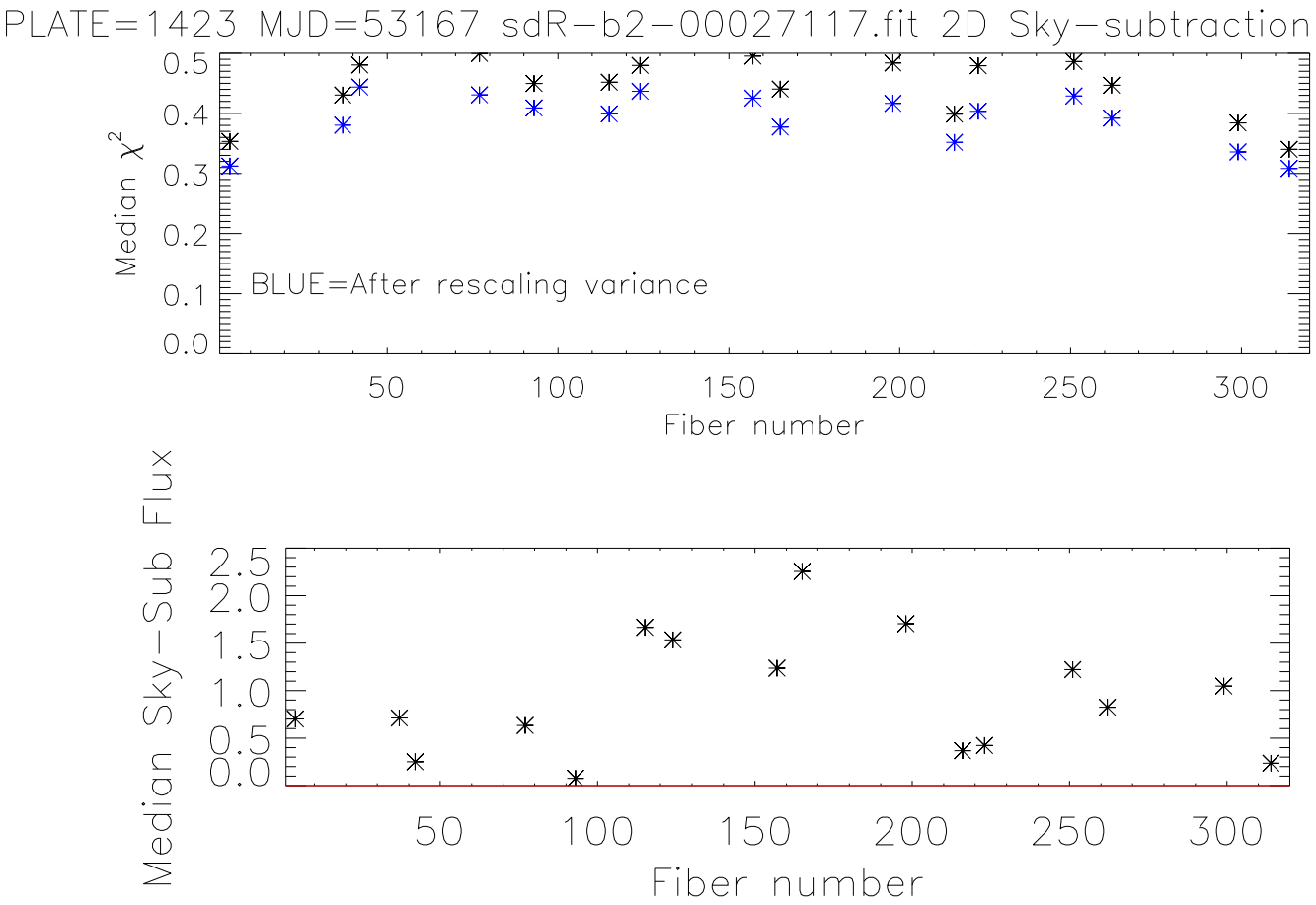
es= −0.0000

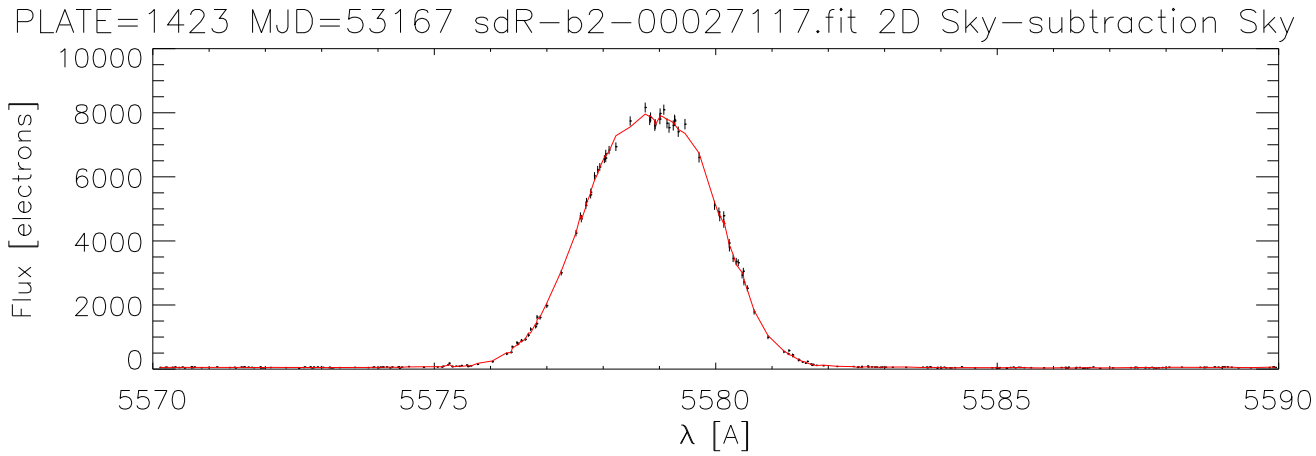

PLATE=1423 MJD=53167 sdR-b2-00027117.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

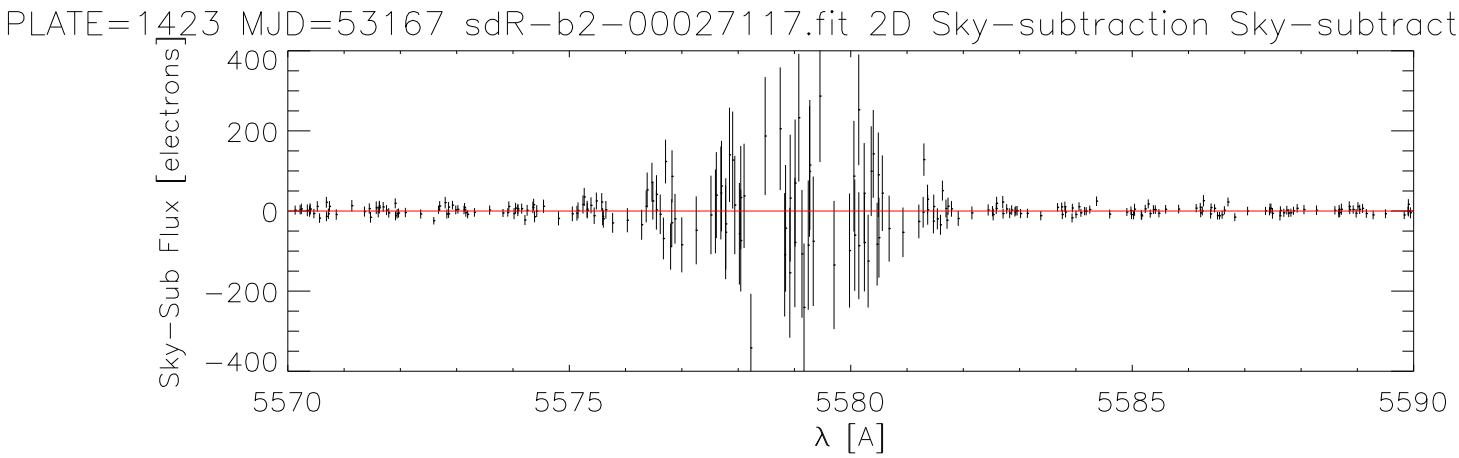

PLATE=1423 MJD=53167 sdR-b2-00027117.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

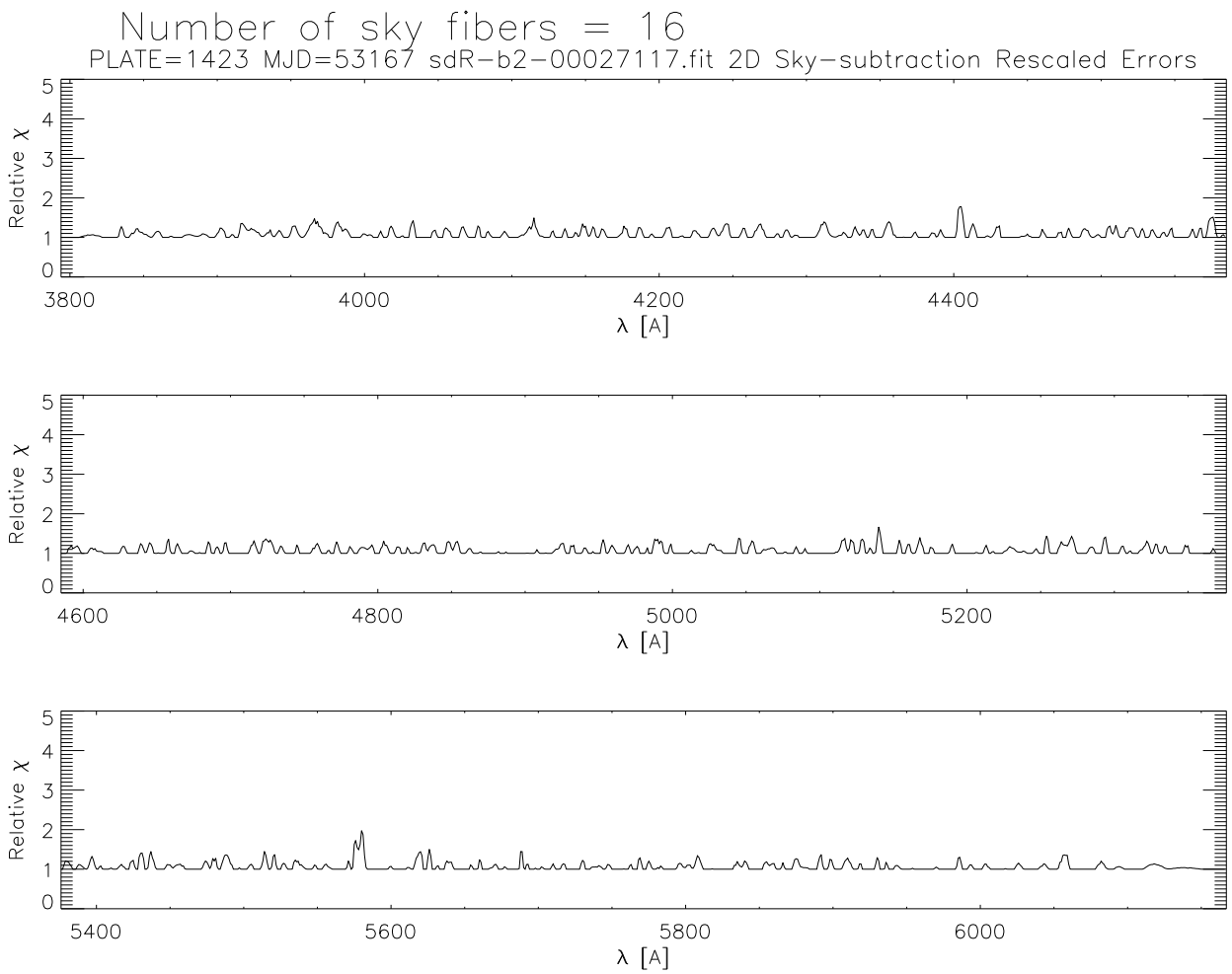

PLATE=1423 MJD=53167 sdR-b2-00027117.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

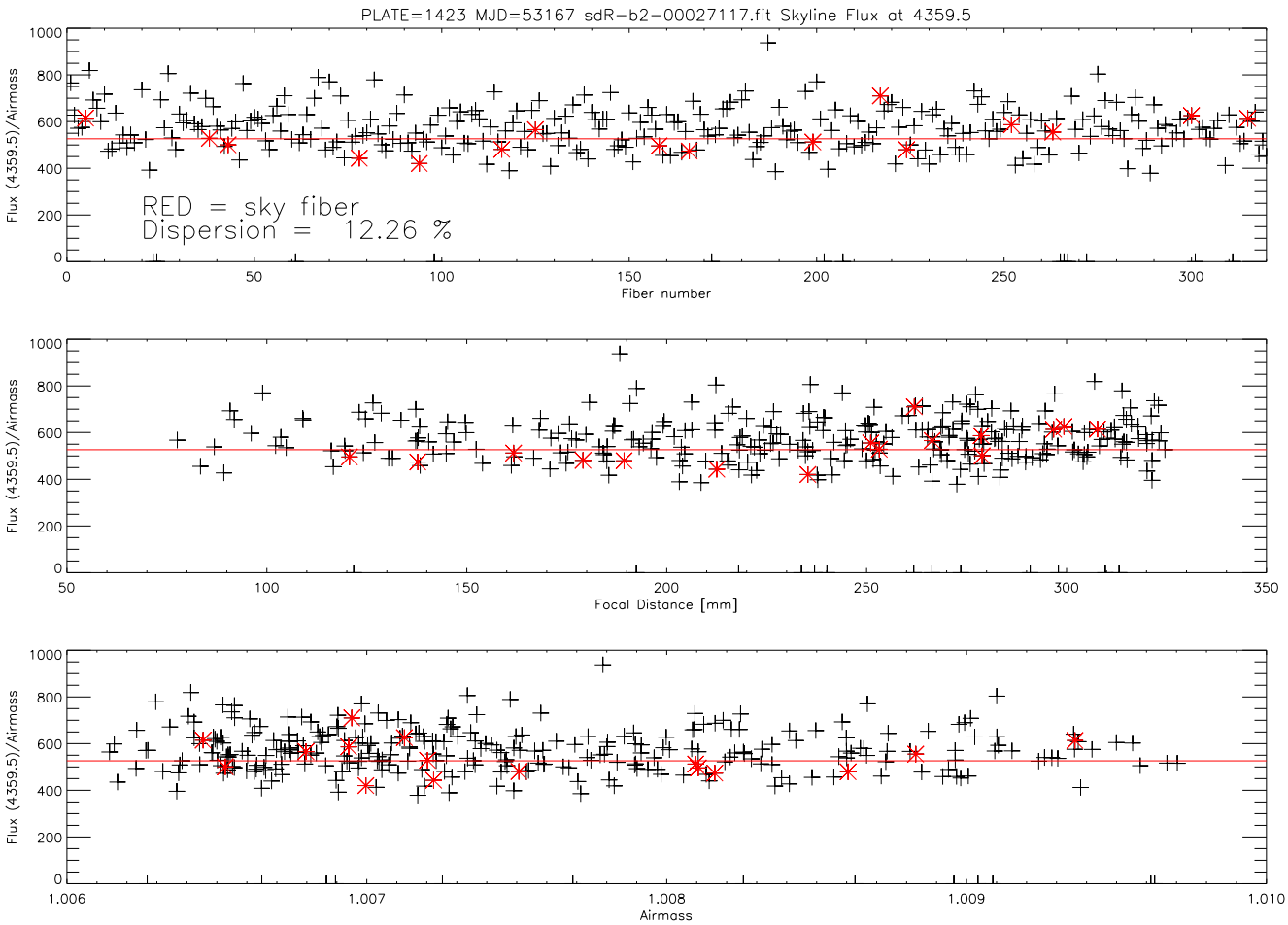

Number of sky fibers = 16
PLATE=1423 MJD=53167 sdR-b2-00027117.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

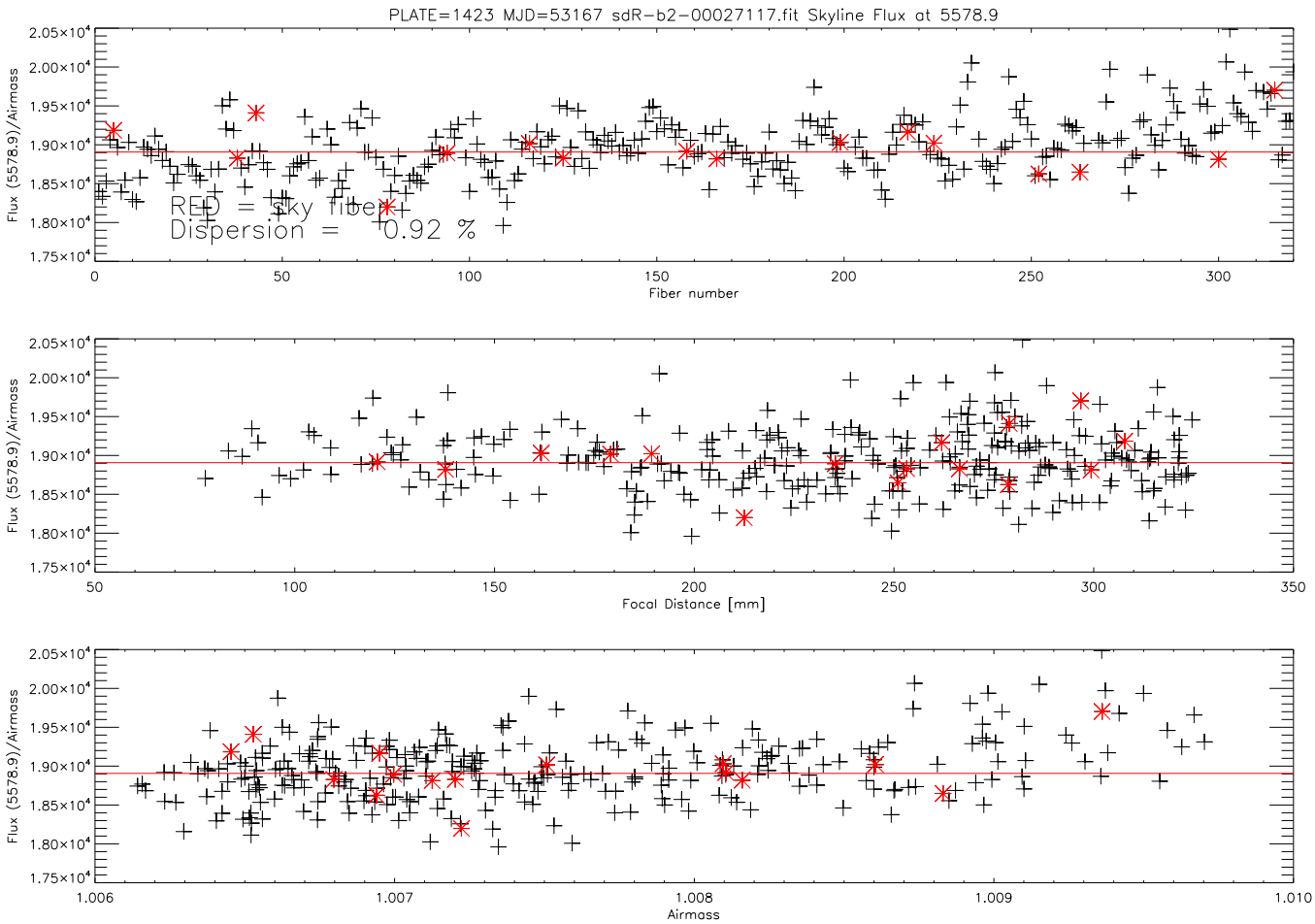

PLATE=1423 MJD=53167 sdR-b2-00027117.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

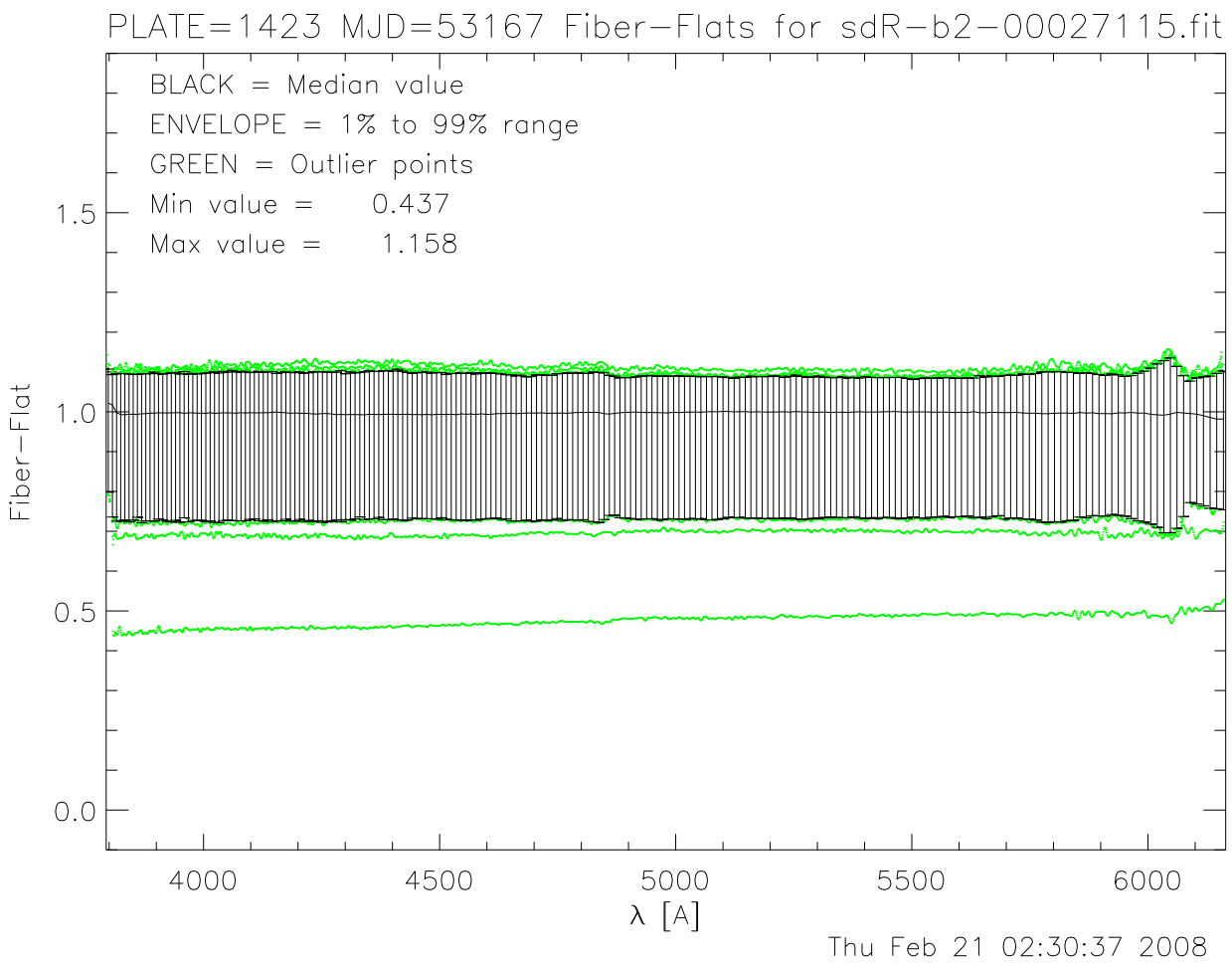

PLATE=1423 MJD=53167 sdR-b2-00027117.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=1423 MJD=53167 sdR-b2-00027117.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 16
PLATE=1423 MJD=53167 sdR-b2-00027117.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=1423 MJD=53167 sdR-b2-00027117.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.26 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=1423 MJD=53167 sdR-b2-00027117.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.05×10⁴
2.00×10⁴
1.95×10⁴
1.90×10⁴
1.85×10⁴
1.80×10⁴
1.75×10⁴
RED = sky fiber
Dispersion = 0.92 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
50
100
150
200
250
300
350
Focal Distance [mm]
Flux (5578.9)/Airmass
1.006
1.007
1.008
1.009
1.010
Airmass


PLATE=1423 MJD=53167 Fiber-Flats for sdR-b2-00027115.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.437
Max value = 1.158
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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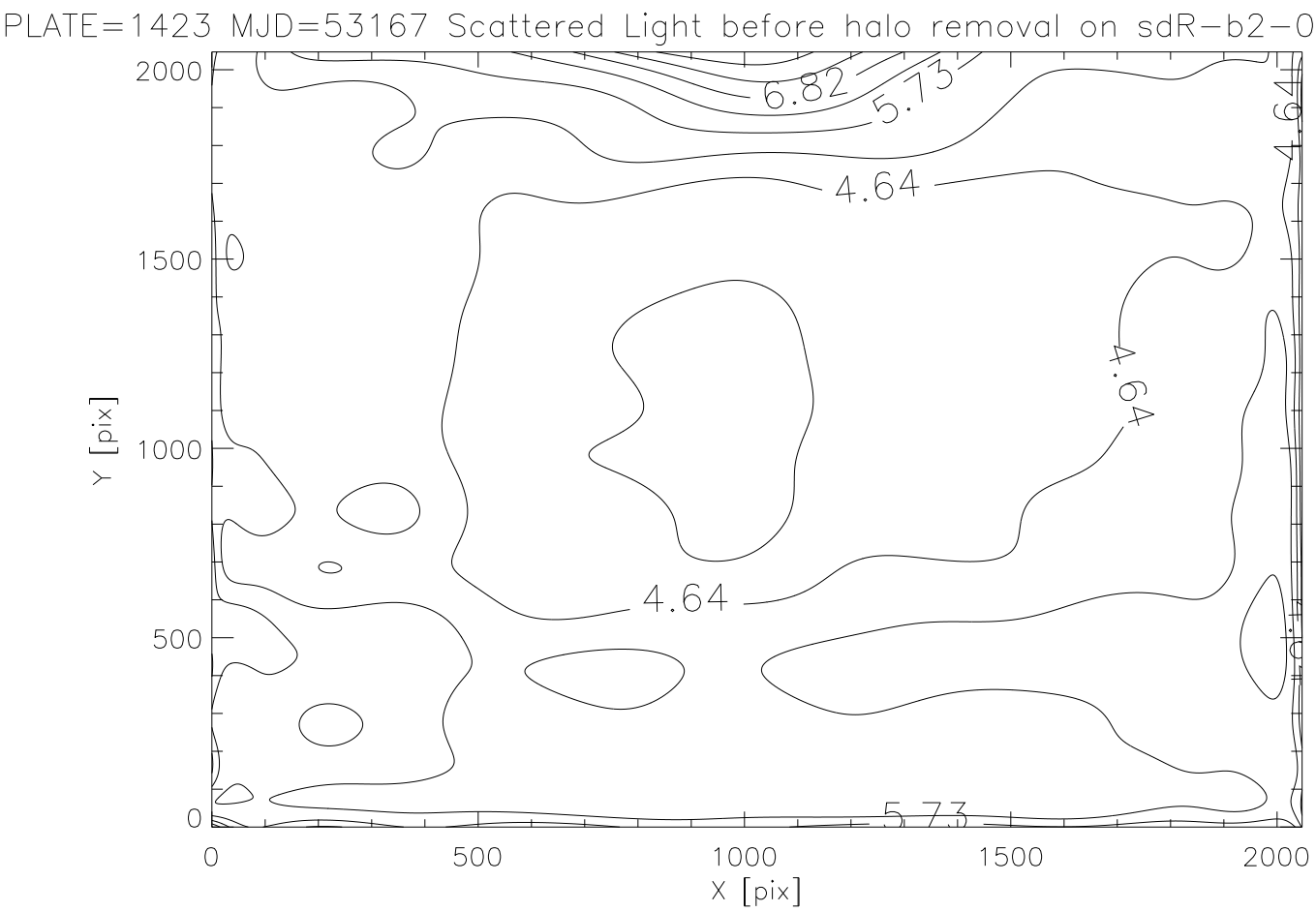
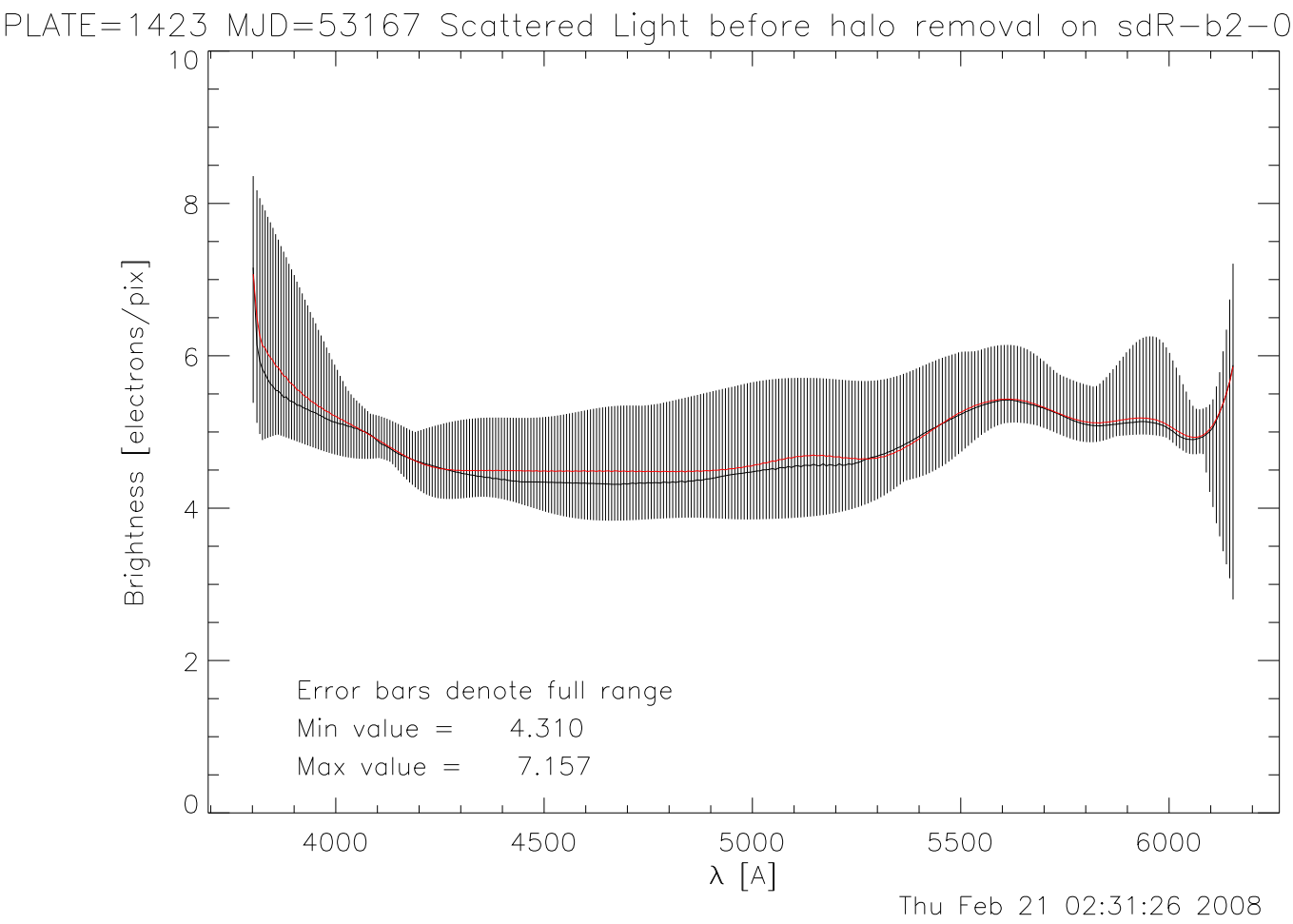
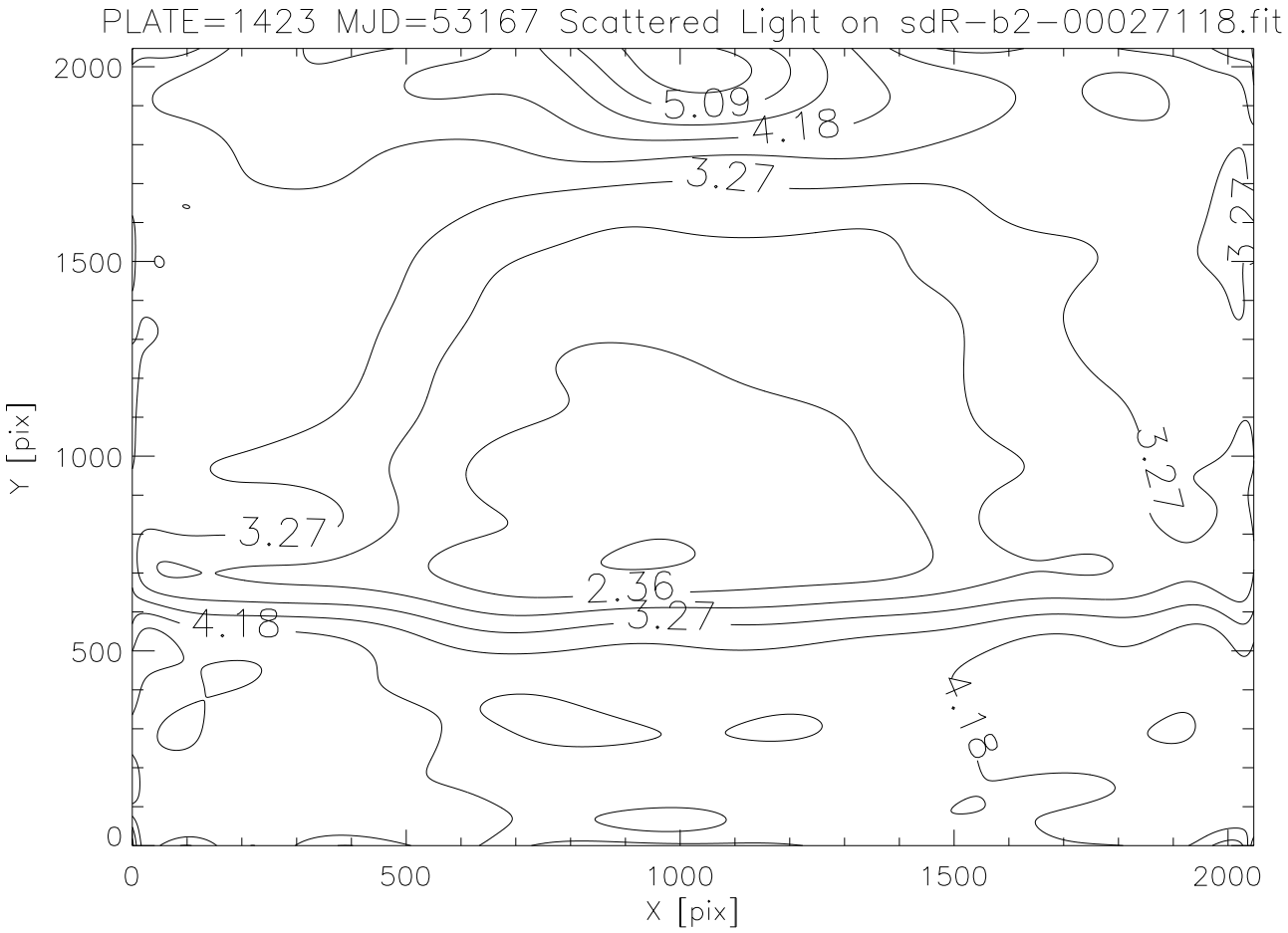
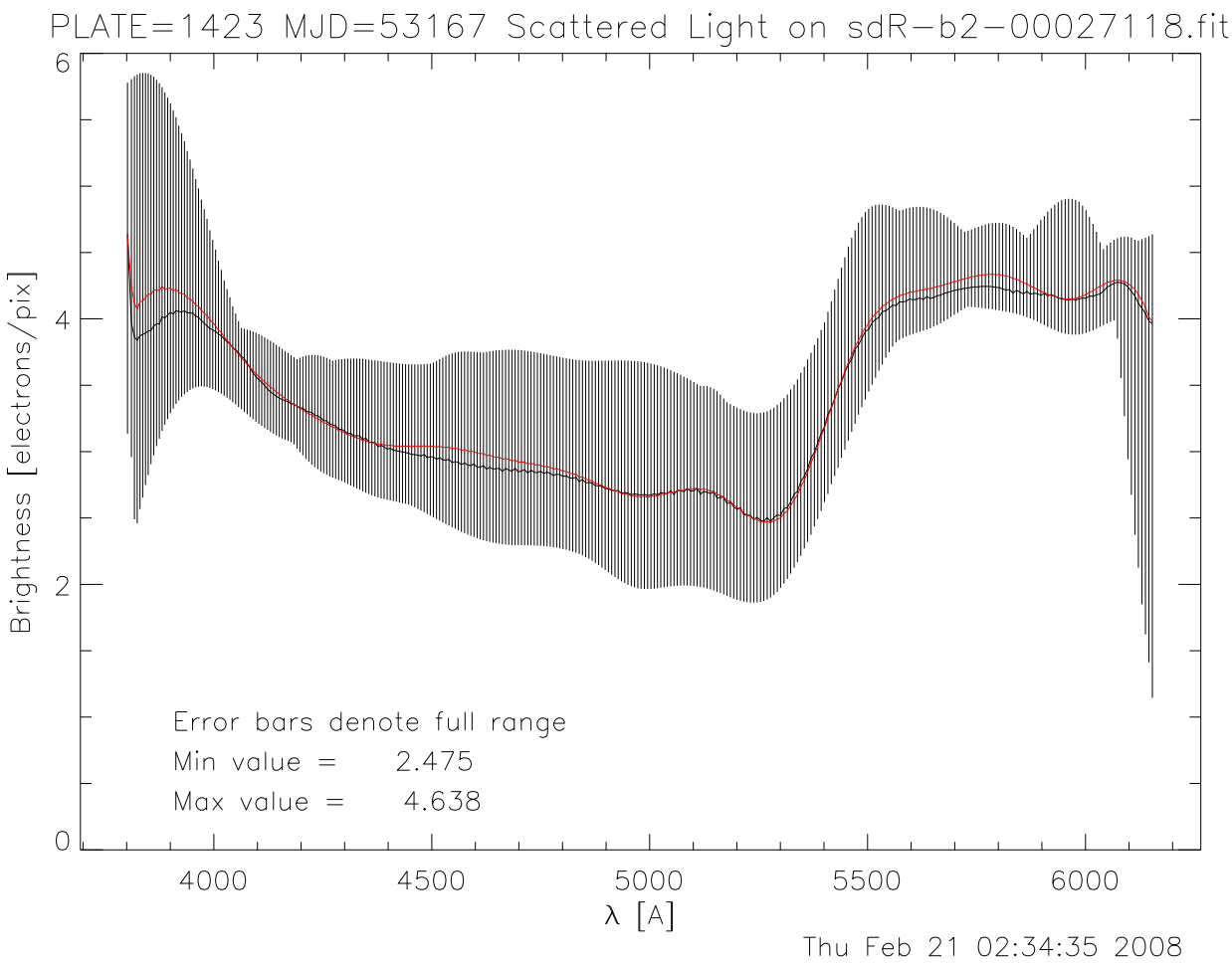
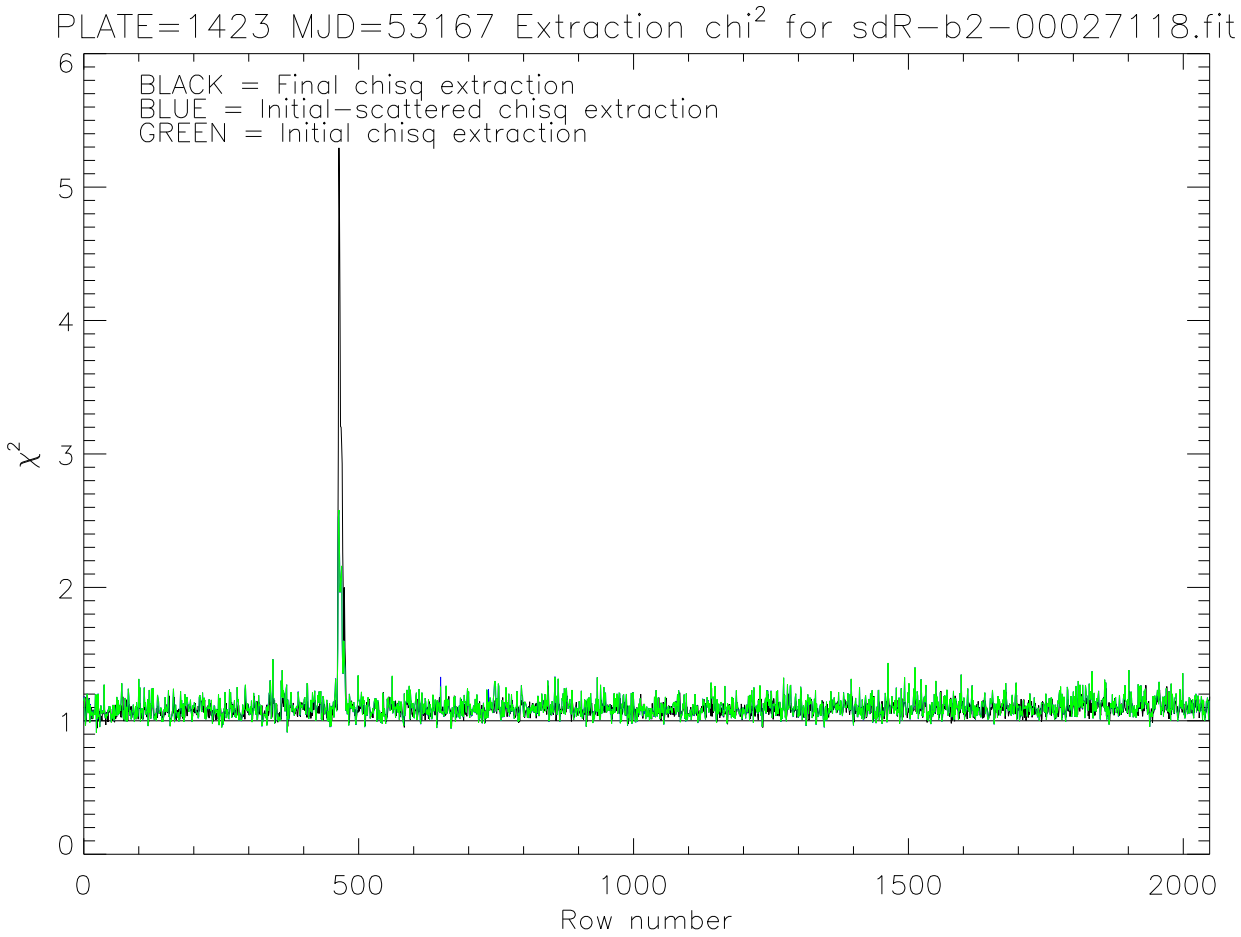
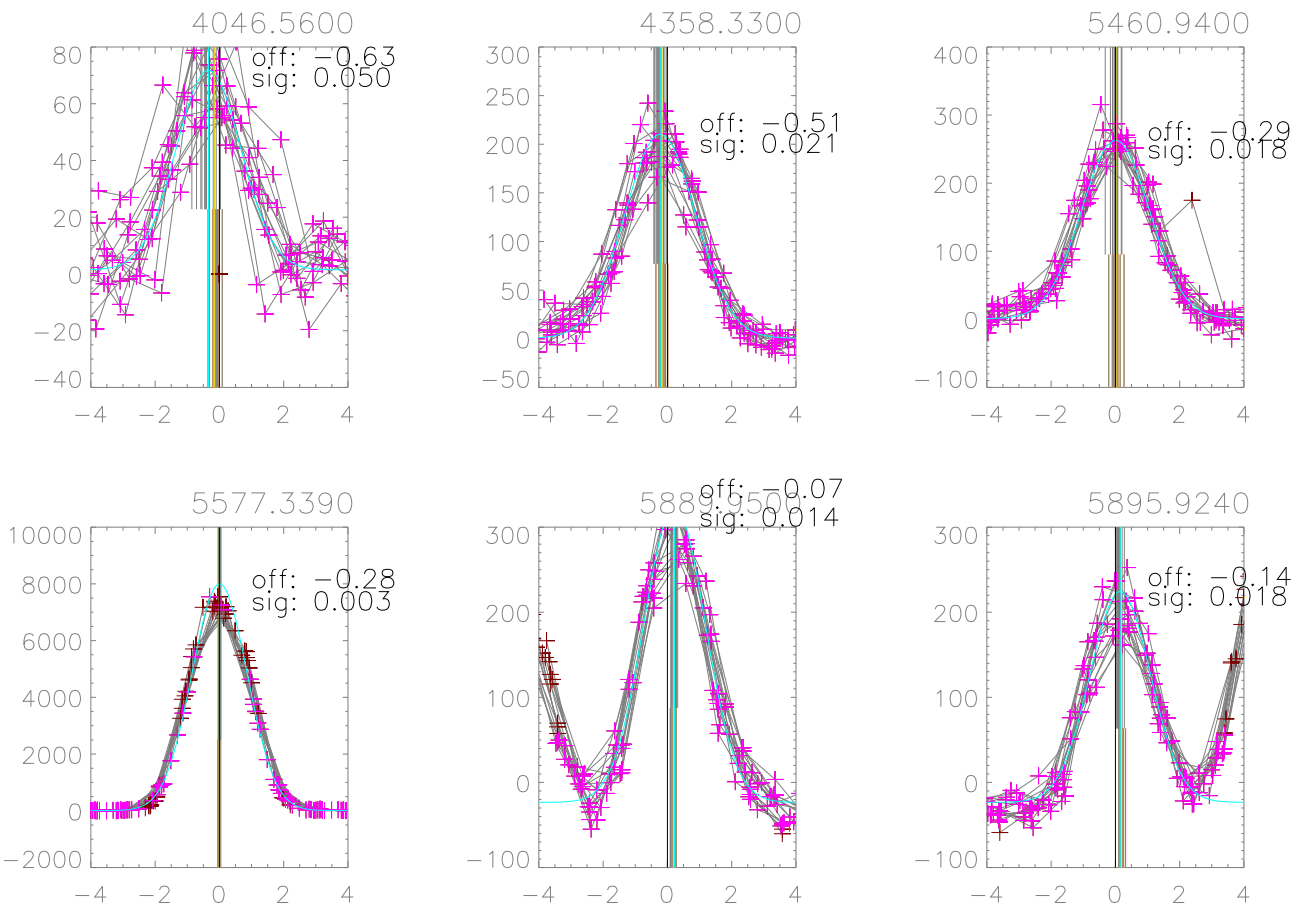

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-b2-00027118.f
6.82
5.73
4.64
4.64
4.64
4.64
5.73
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

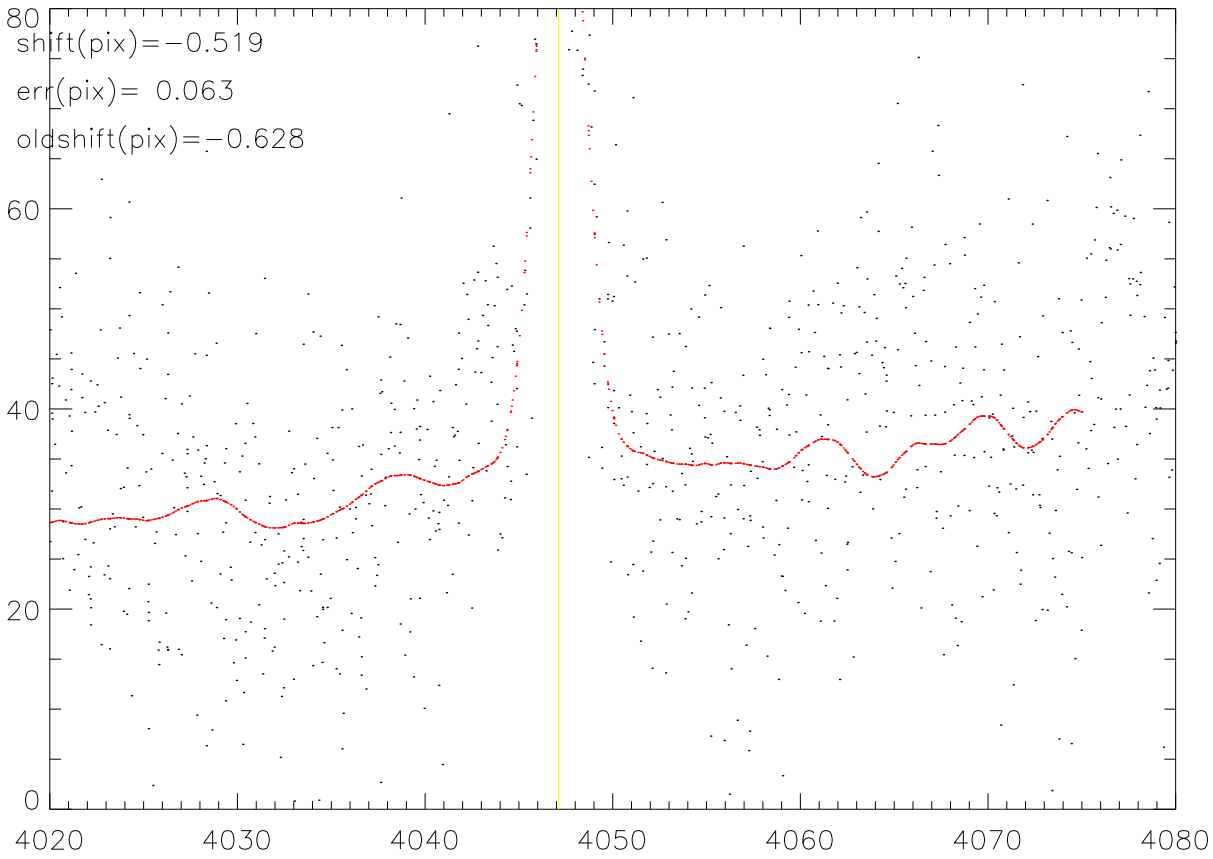

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-b2-00027118.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.310
Max value = 7.157
Thu Feb 21 02:31:26 2008

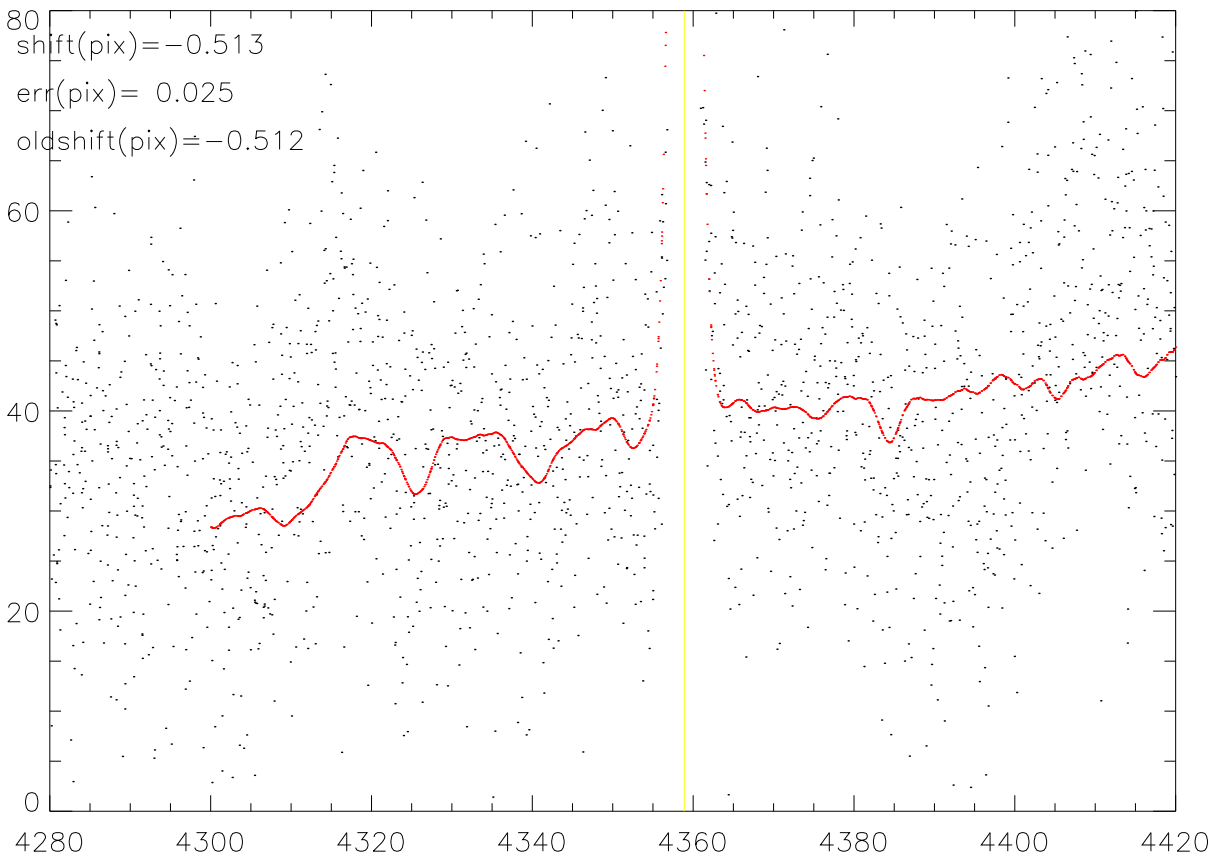

PLATE=1423 MJD=53167 Scattered Light on sdR-b2-00027118.fit
5.09
4.18
3.27
3.27
3.27
3.27
2.36
3.27
4.18
4.18
Y [pix]
X [pix]
0
500
1000
1500
2000

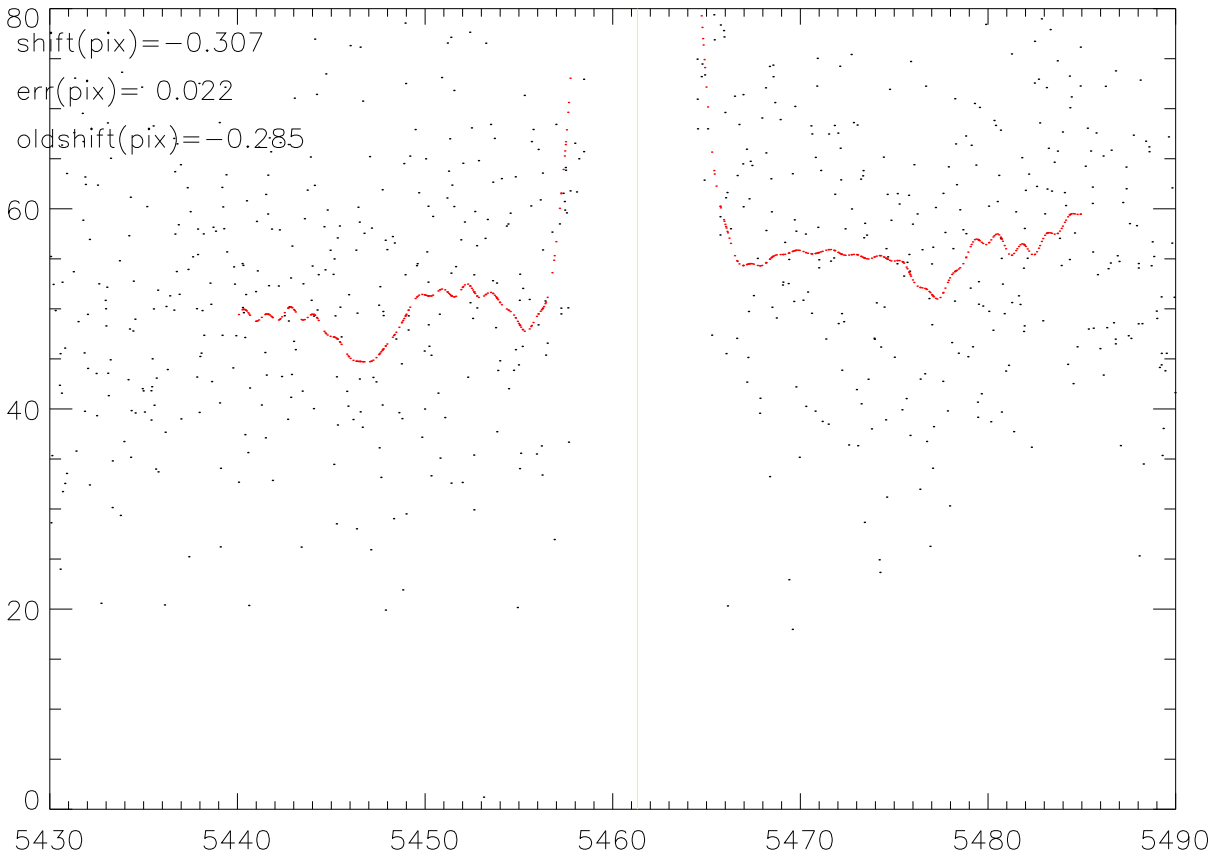

PLATE=1423 MJD=53167 Scattered Light on sdR-b2-00027118.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.475
Max value = 4.638
Thu Feb 21 02:34:35 2008

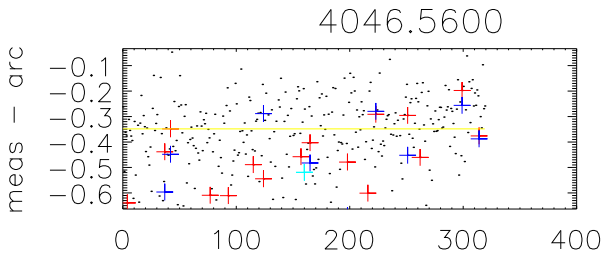

PLATE=1423 MJD=53167 Extraction chi^2 for sdR-b2-00027118.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

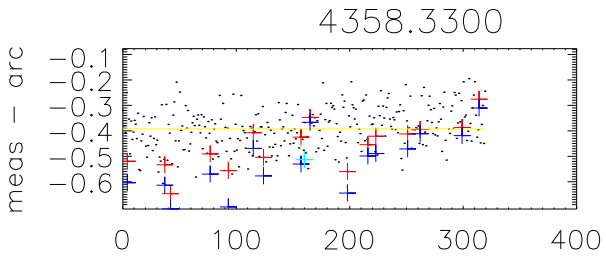

4046.5600
off: −0.63
sig: 0.050
4358.3300
off: −0.51
sig: 0.021
5460.9400
off: −0.29
sig: 0.018
5577.3390
off: −0.28
sig: 0.003
5889.9500
off: −0.07
sig: 0.014
5895.9240
off: −0.14
sig: 0.018

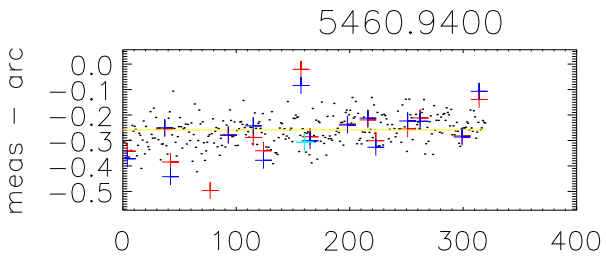

shift(pix)=−0.519
err(pix)= 0.063
oldshift(pix)=−0.628
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

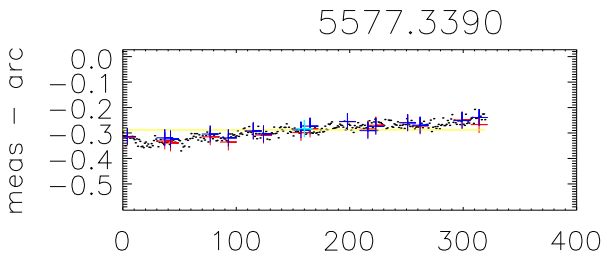

shift(pix)=−0.513
err(pix)= 0.025
oldshift(pix)=−0.512
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

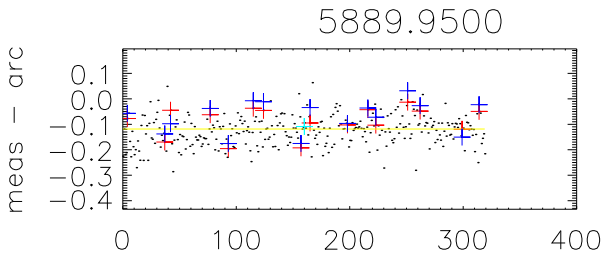

shift(pix)=−0.307
err(pix)= 0.022
oldshift(pix)=−0.285
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

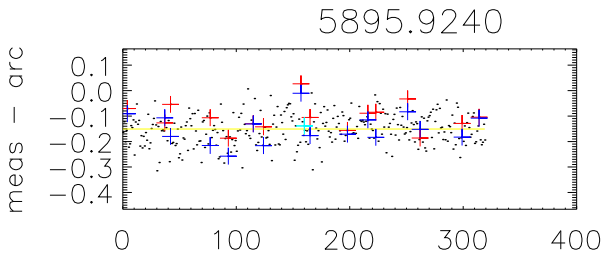

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

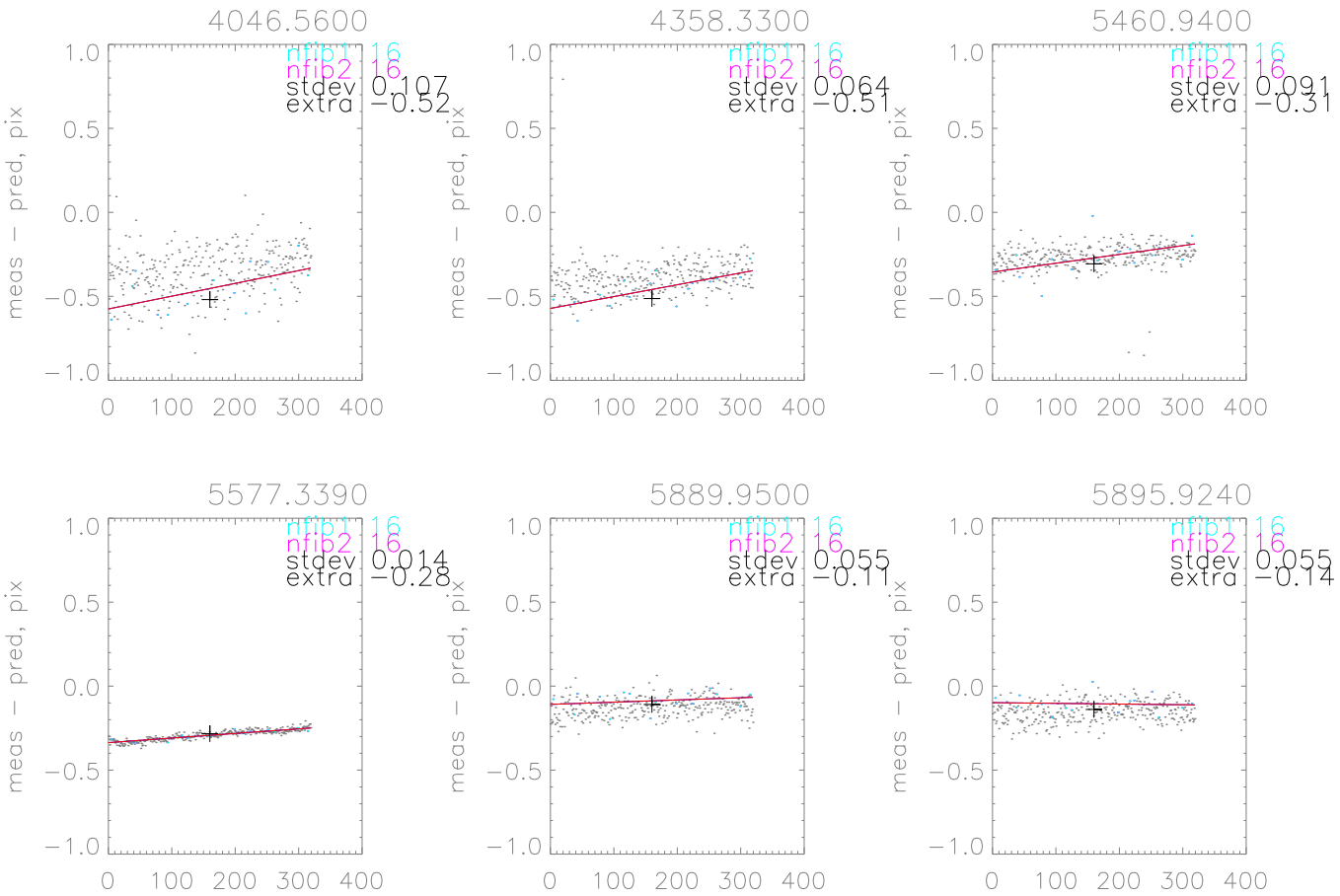

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

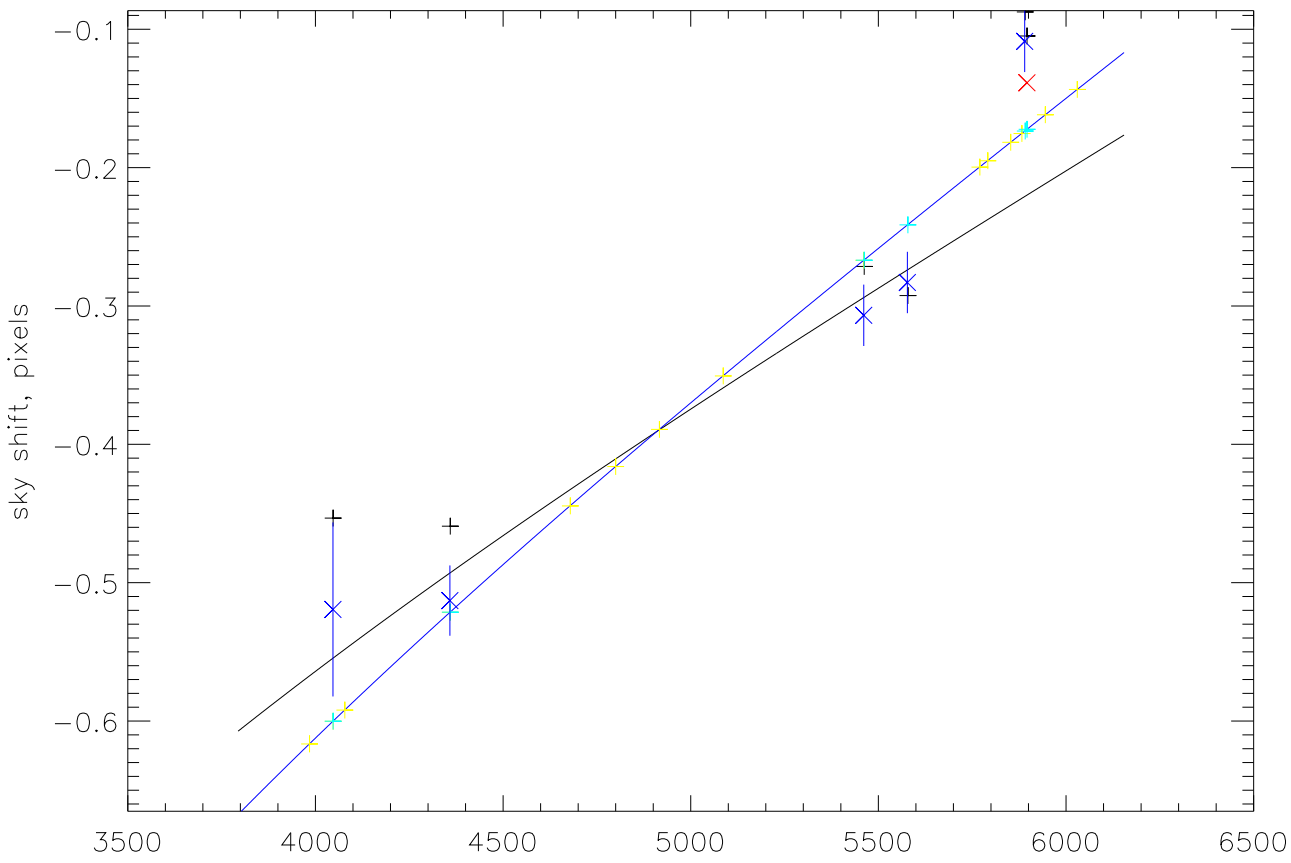

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

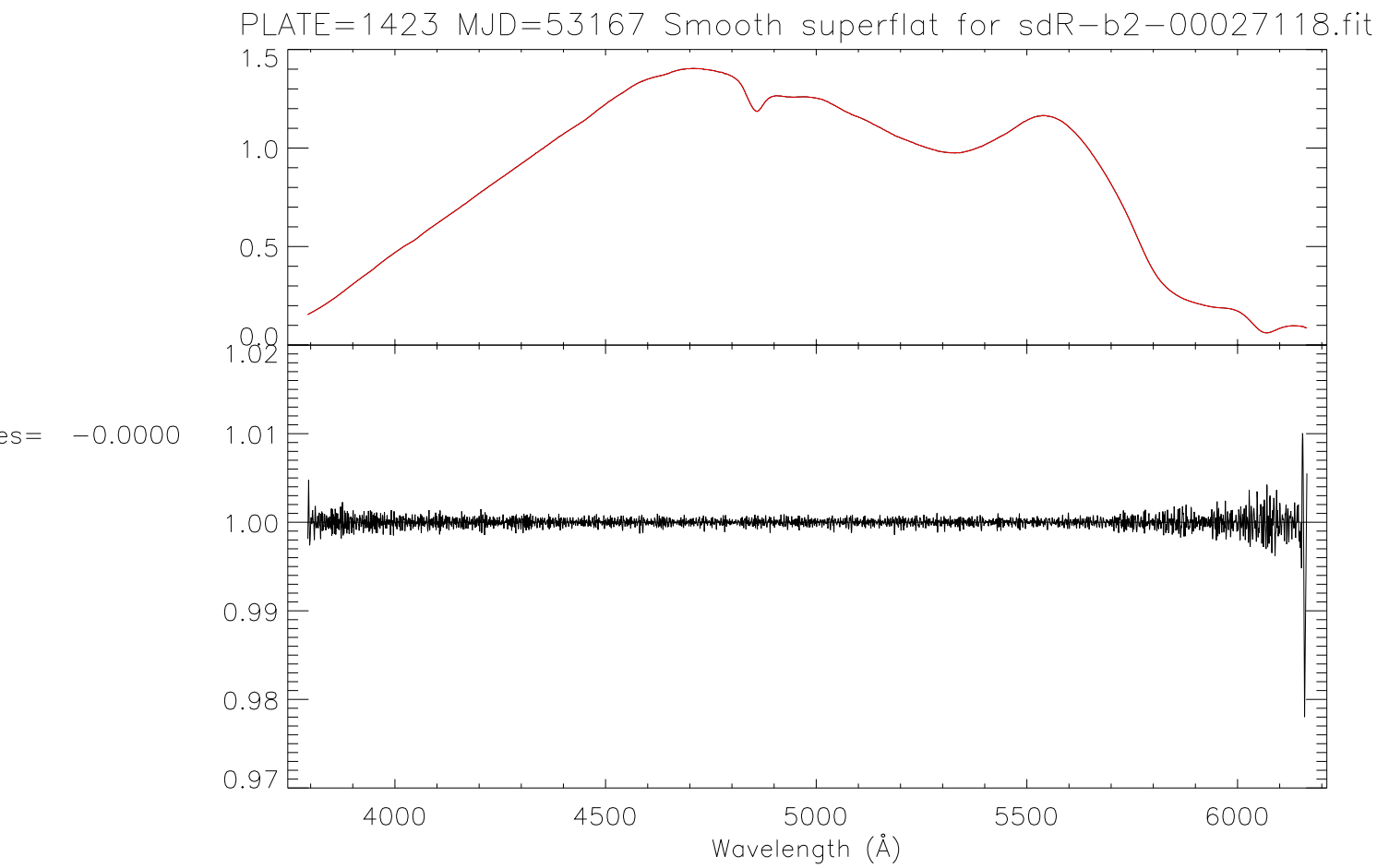

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

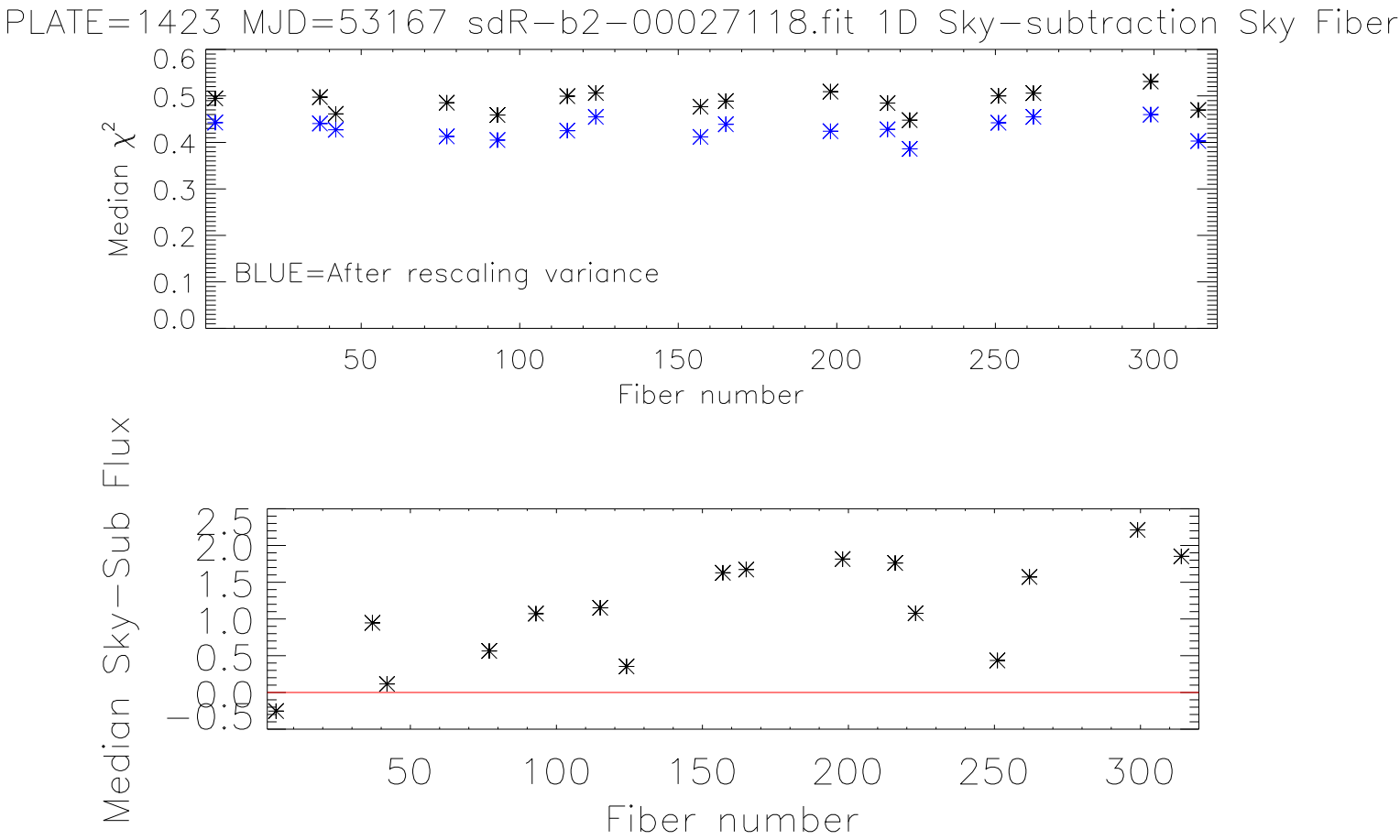

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

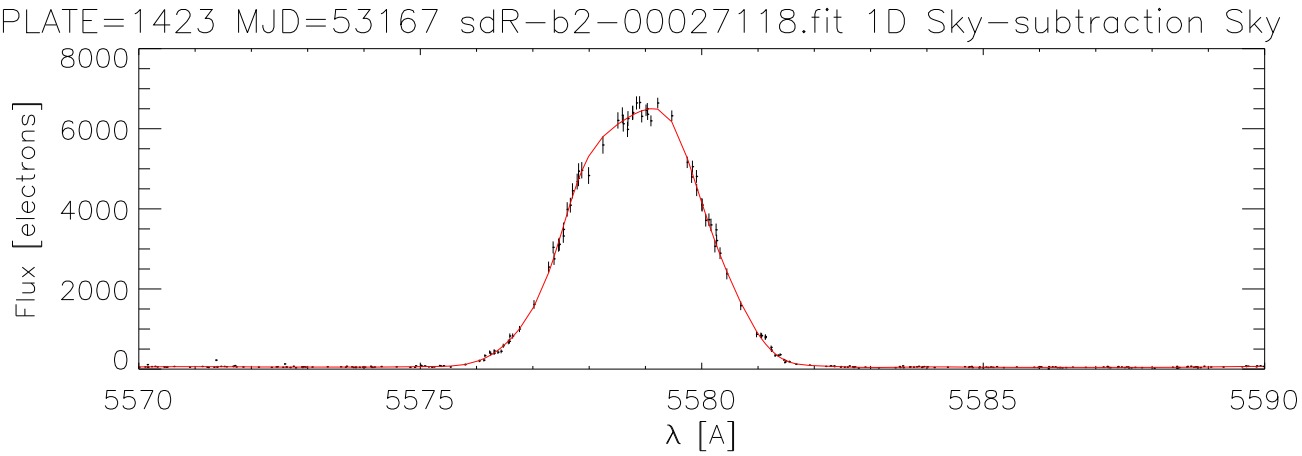

4046.5600
nfib1 16
nfib2 16
stdev 0.107
extra −0.52
4358.3300
nfib1 16
nfib2 16
stdev 0.064
extra −0.51
5460.9400
nfib1 16
nfib2 16
stdev 0.091
extra −0.31
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra −0.28
5889.9500
nfib1 16
nfib2 16
stdev 0.055
extra −0.11
5895.9240
nfib1 16
nfib2 16
stdev 0.055
extra −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

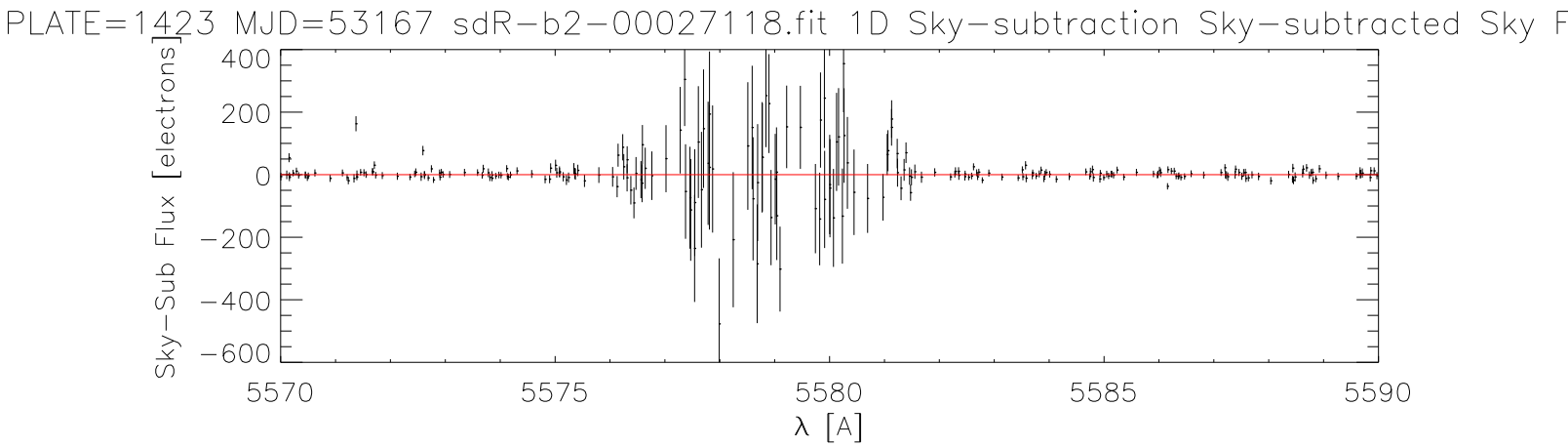

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500

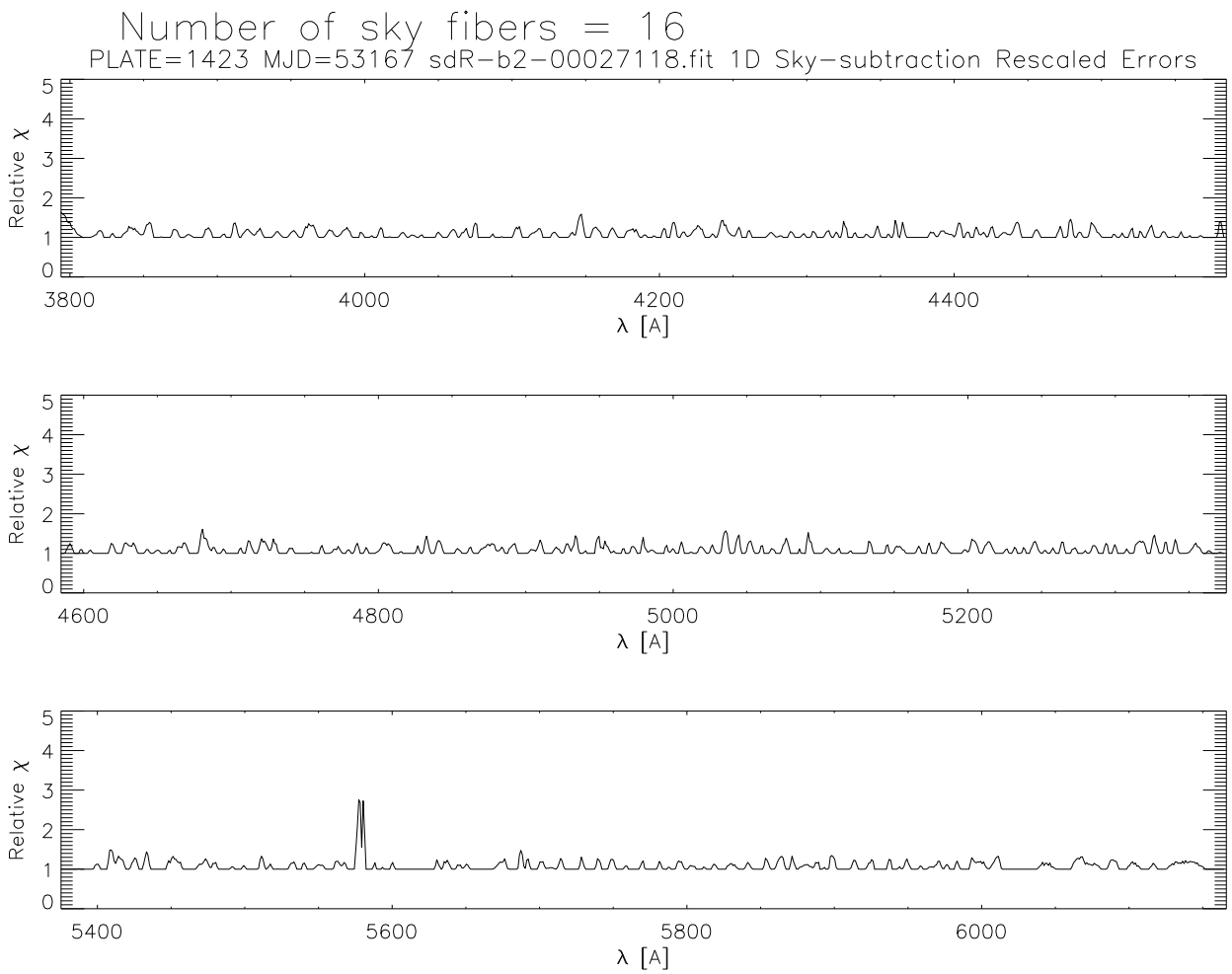

PLATE=1423 MJD=53167 Smooth superflat for sdR-b2-00027118.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

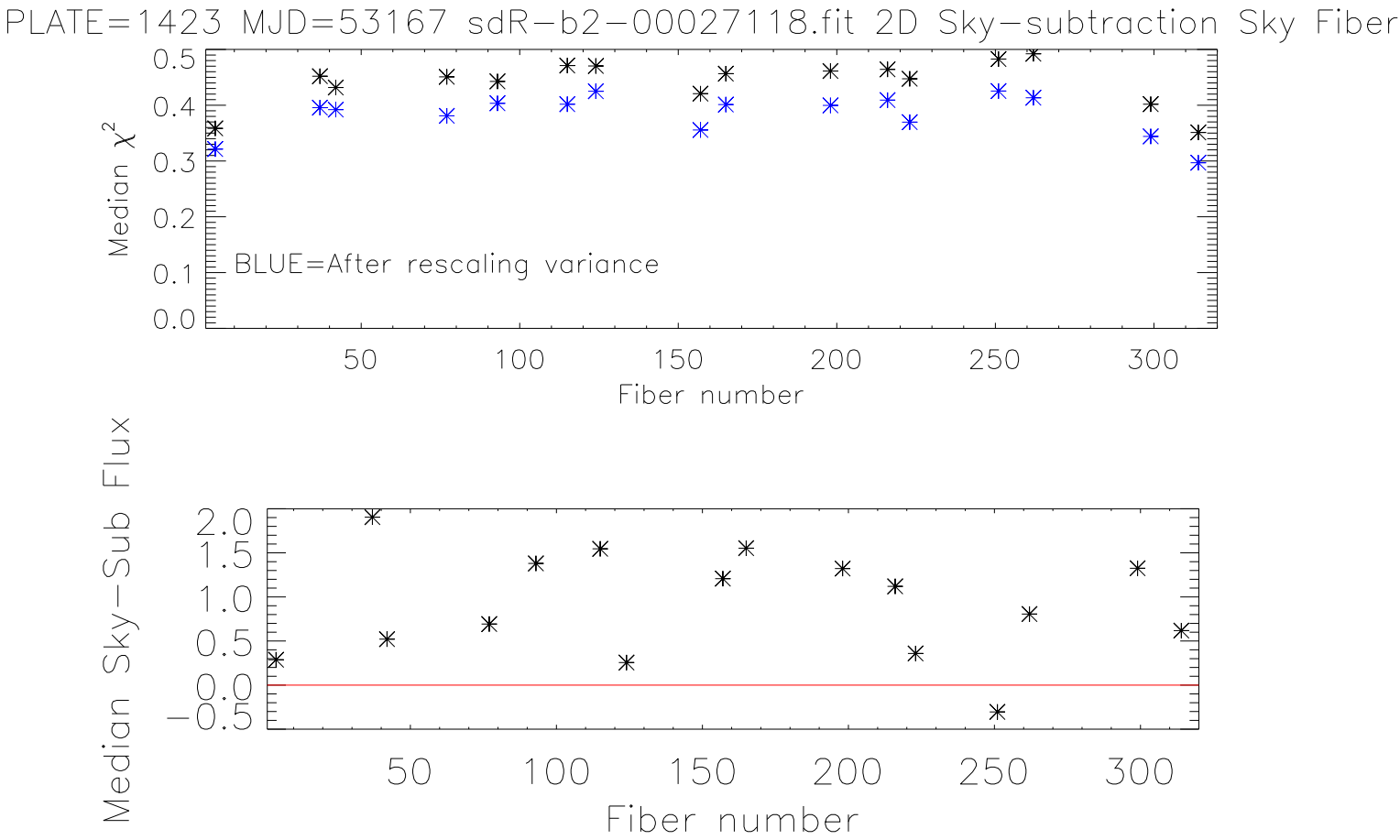
es= −0.0000

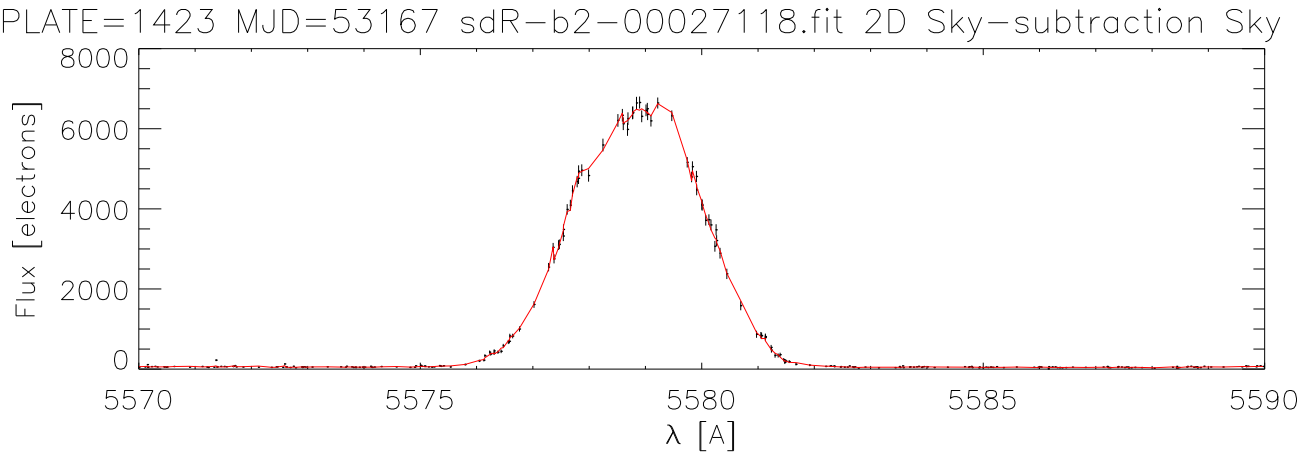

PLATE=1423 MJD=53167 sdR-b2-00027118.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

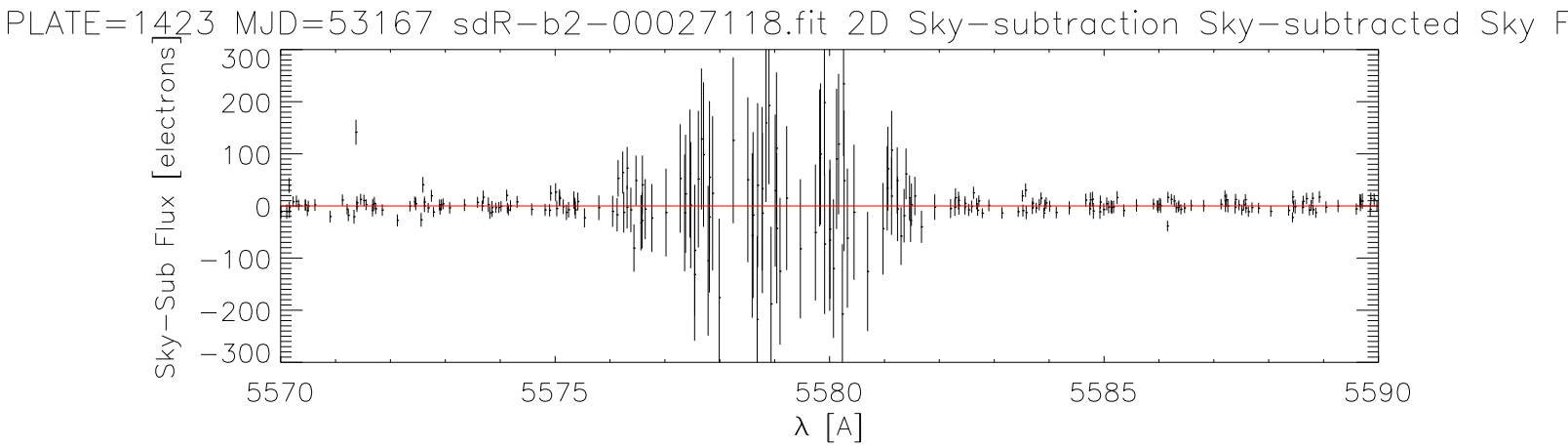

PLATE=1423 MJD=53167 sdR-b2-00027118.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

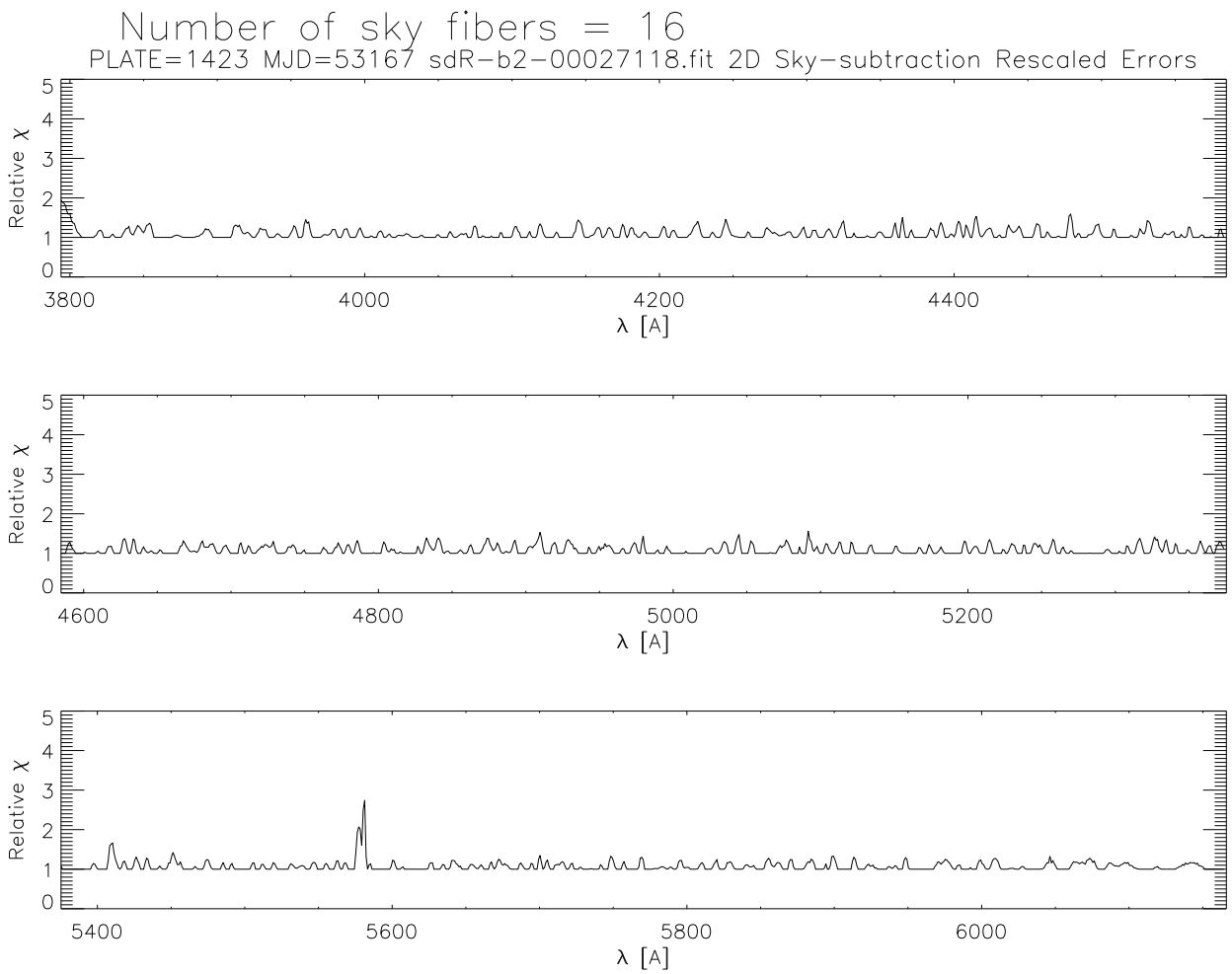

PLATE=1423 MJD=53167 sdR-b2-00027118.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

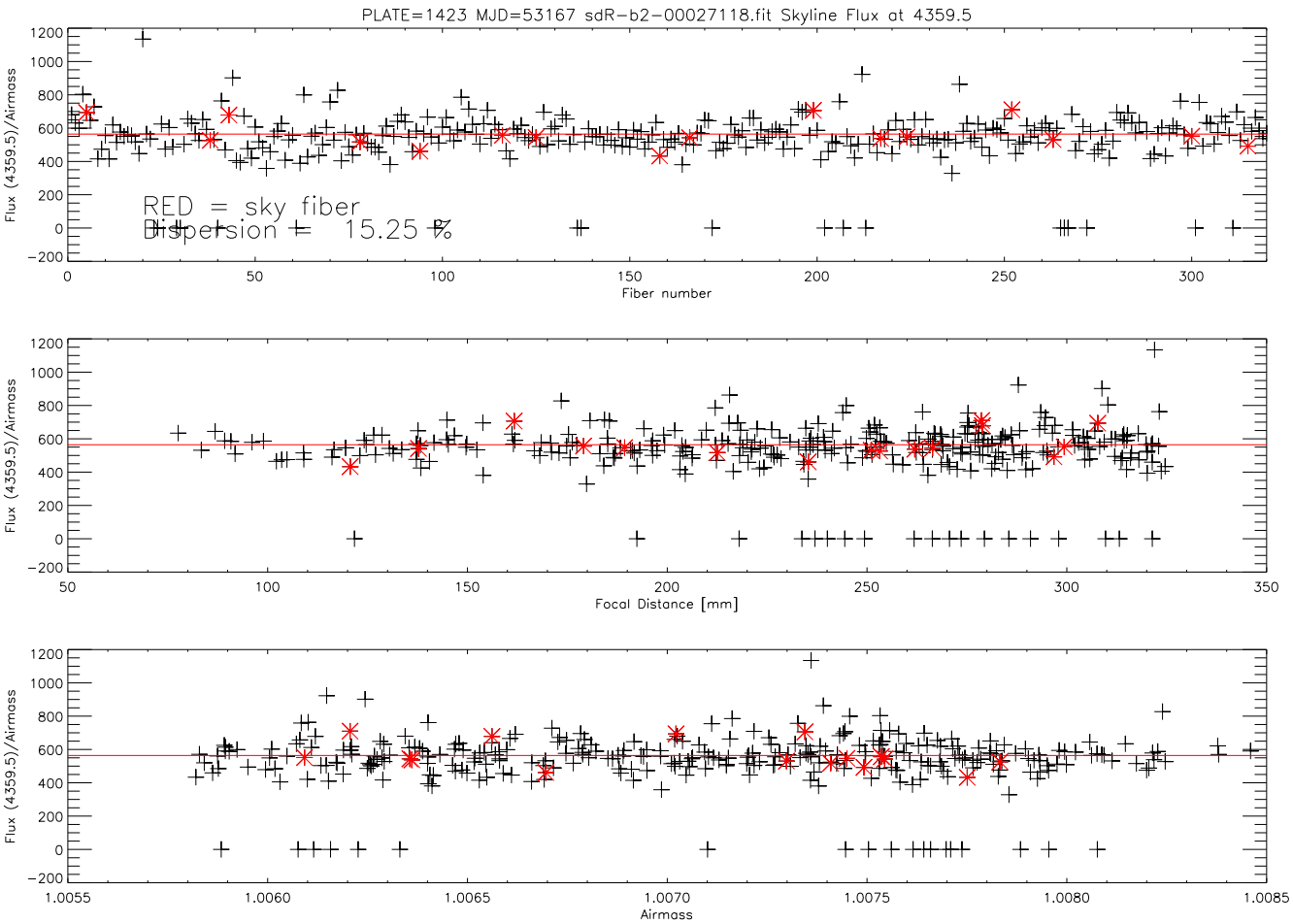

Number of sky fibers = 16
PLATE=1423 MJD=53167 sdR-b2-00027118.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

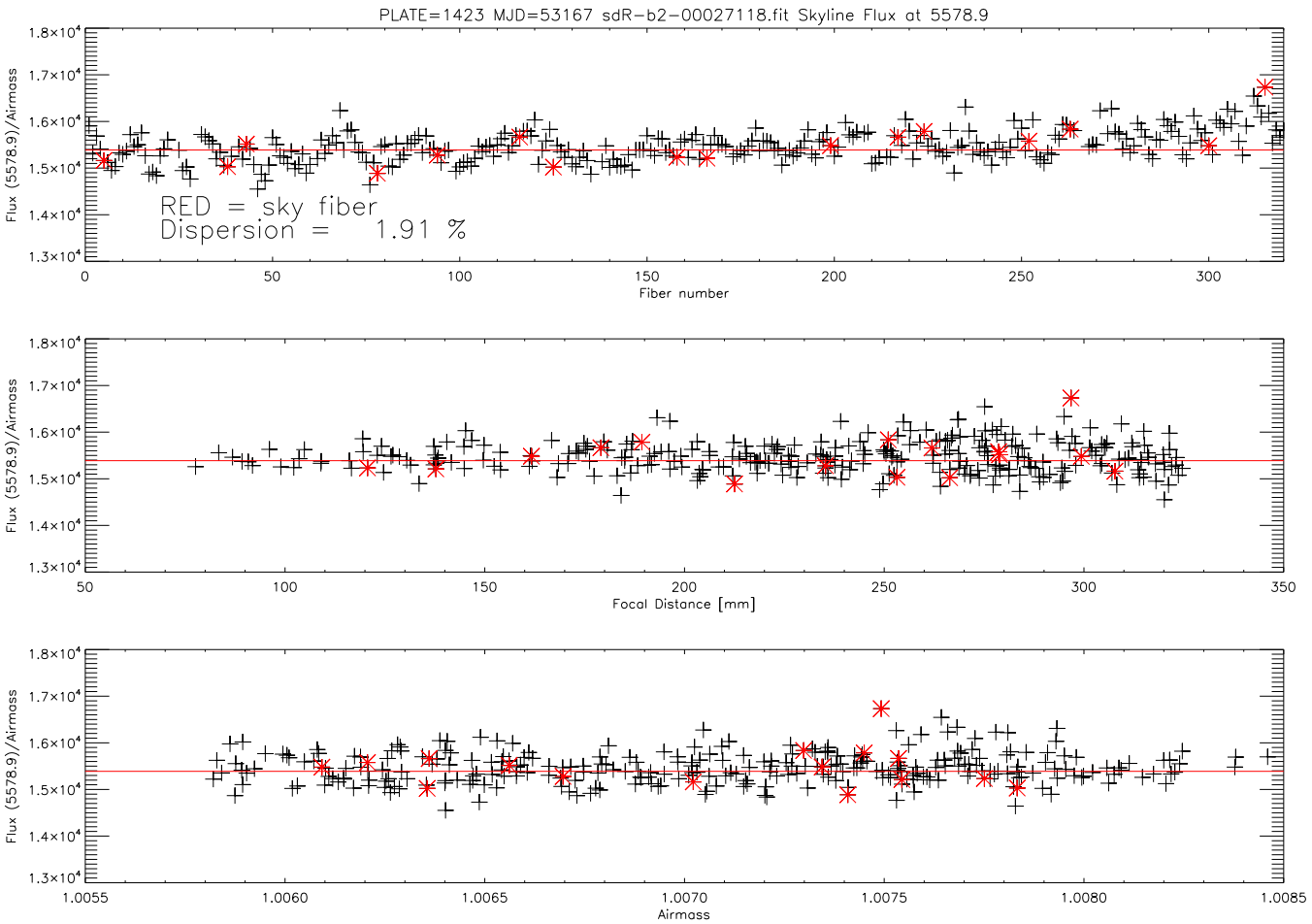

PLATE=1423 MJD=53167 sdR-b2-00027118.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

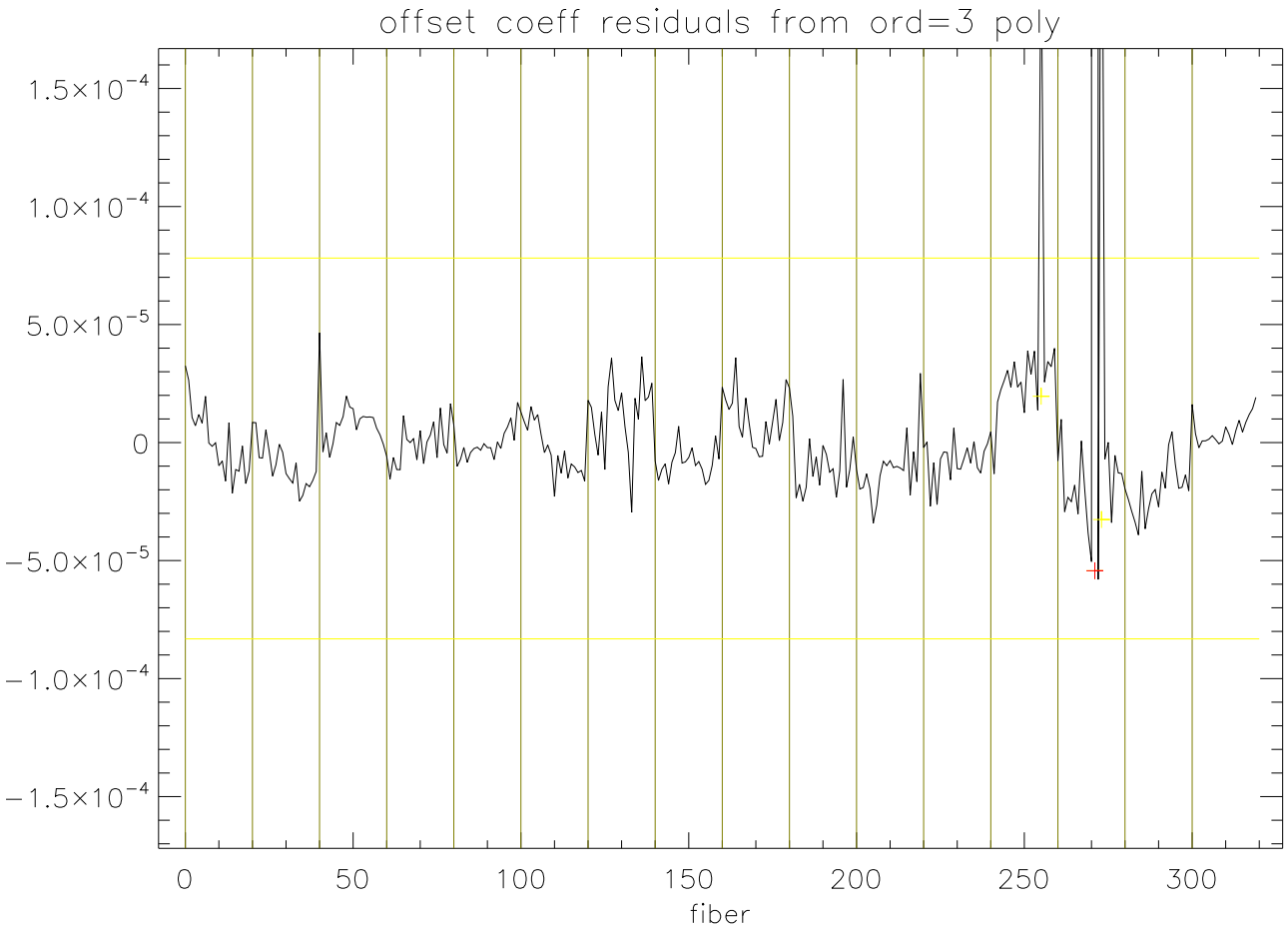

PLATE=1423 MJD=53167 sdR-b2-00027118.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

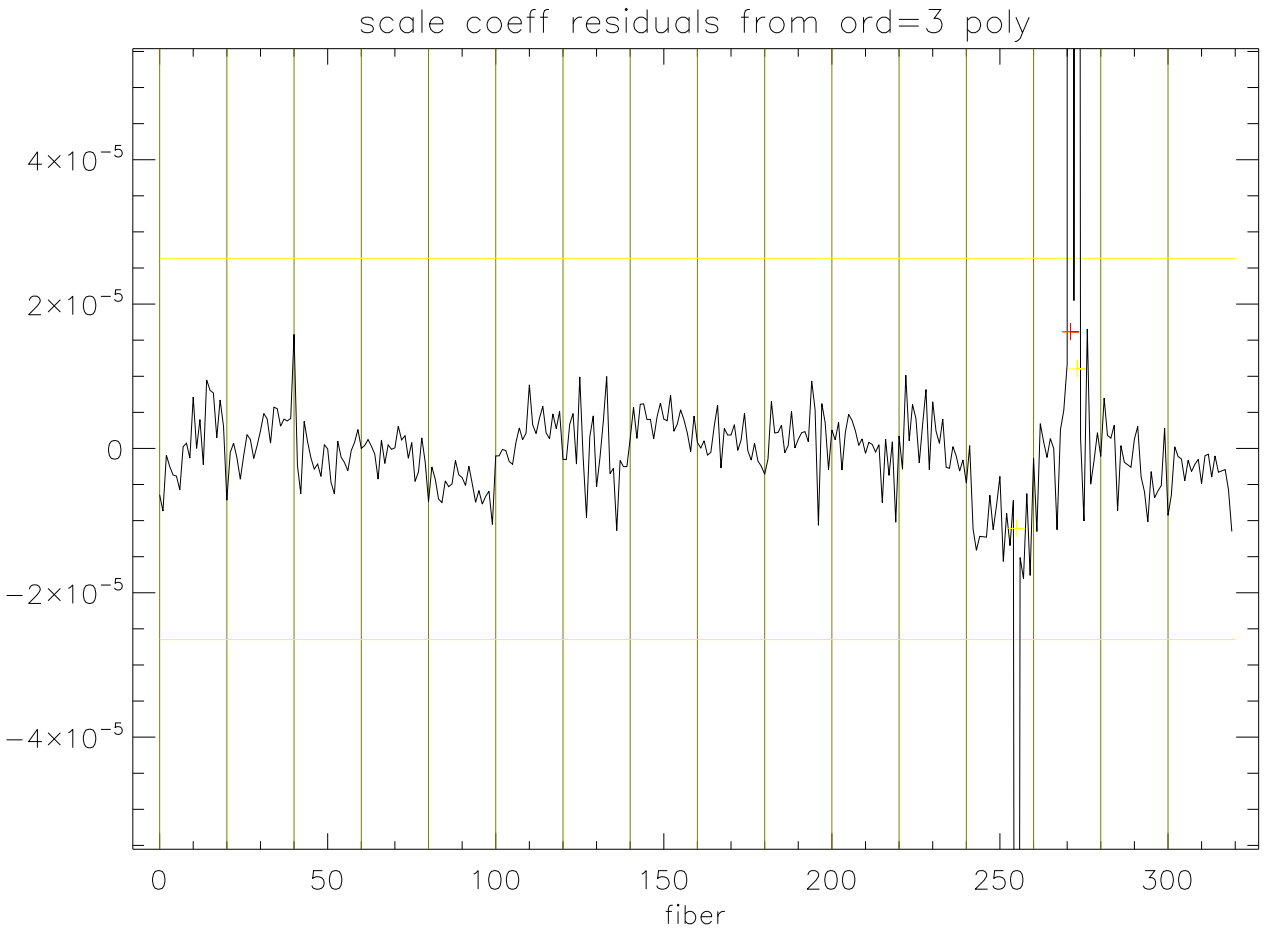

PLATE=1423 MJD=53167 sdR-b2-00027118.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

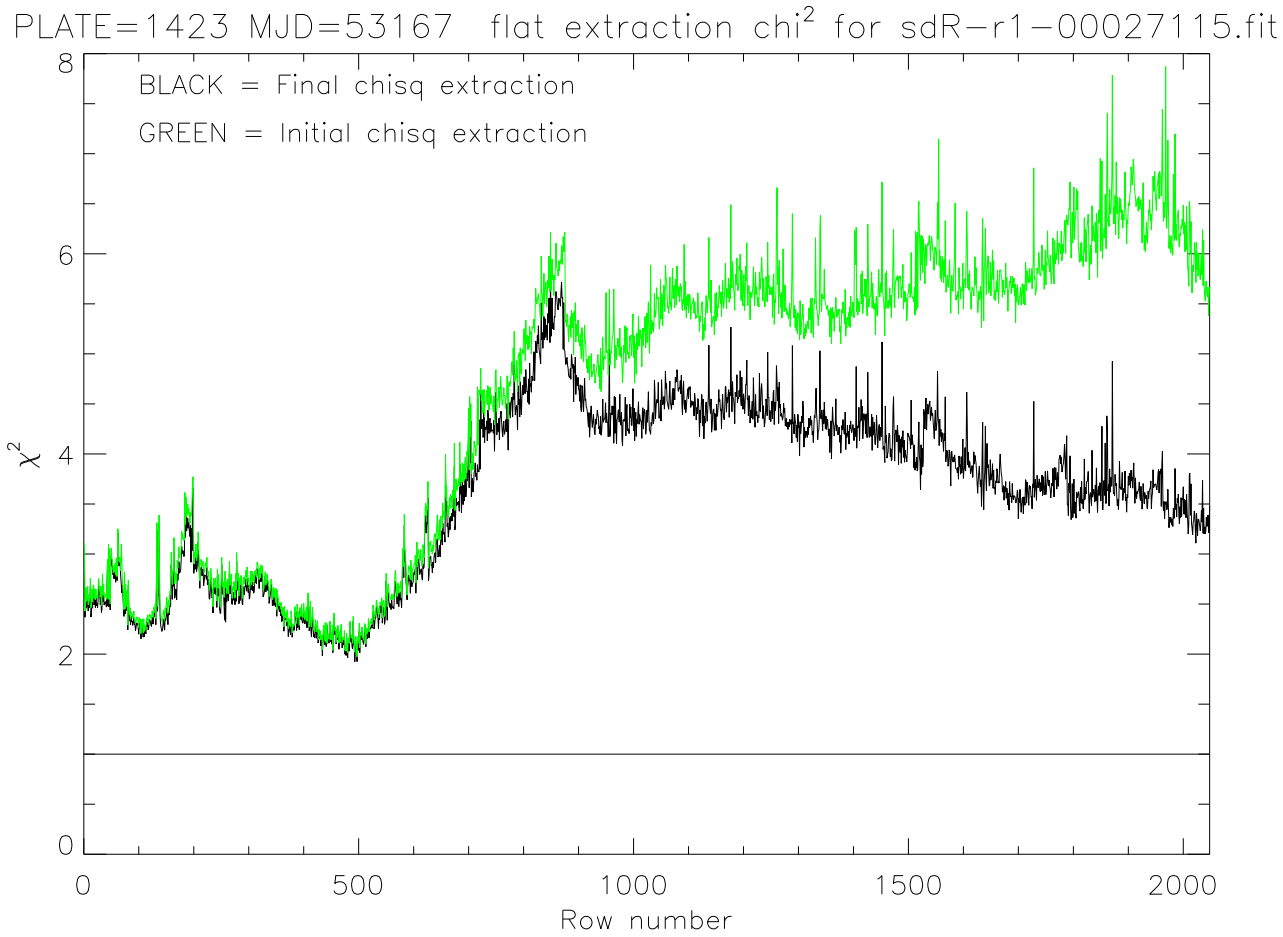

Number of sky fibers = 16
PLATE=1423 MJD=53167 sdR-b2-00027118.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

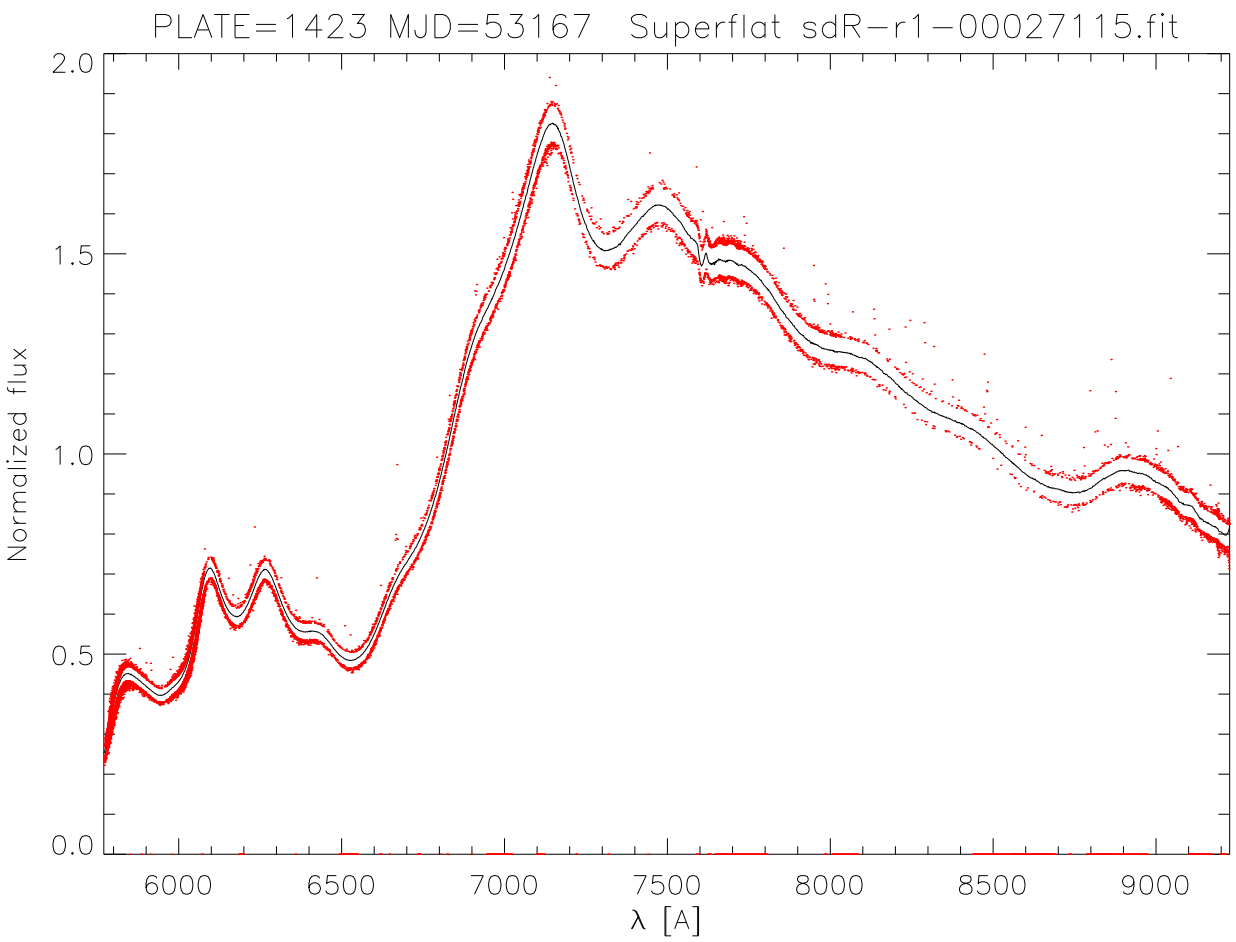

PLATE=1423 MJD=53167 sdR-b2-00027118.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 15.25 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

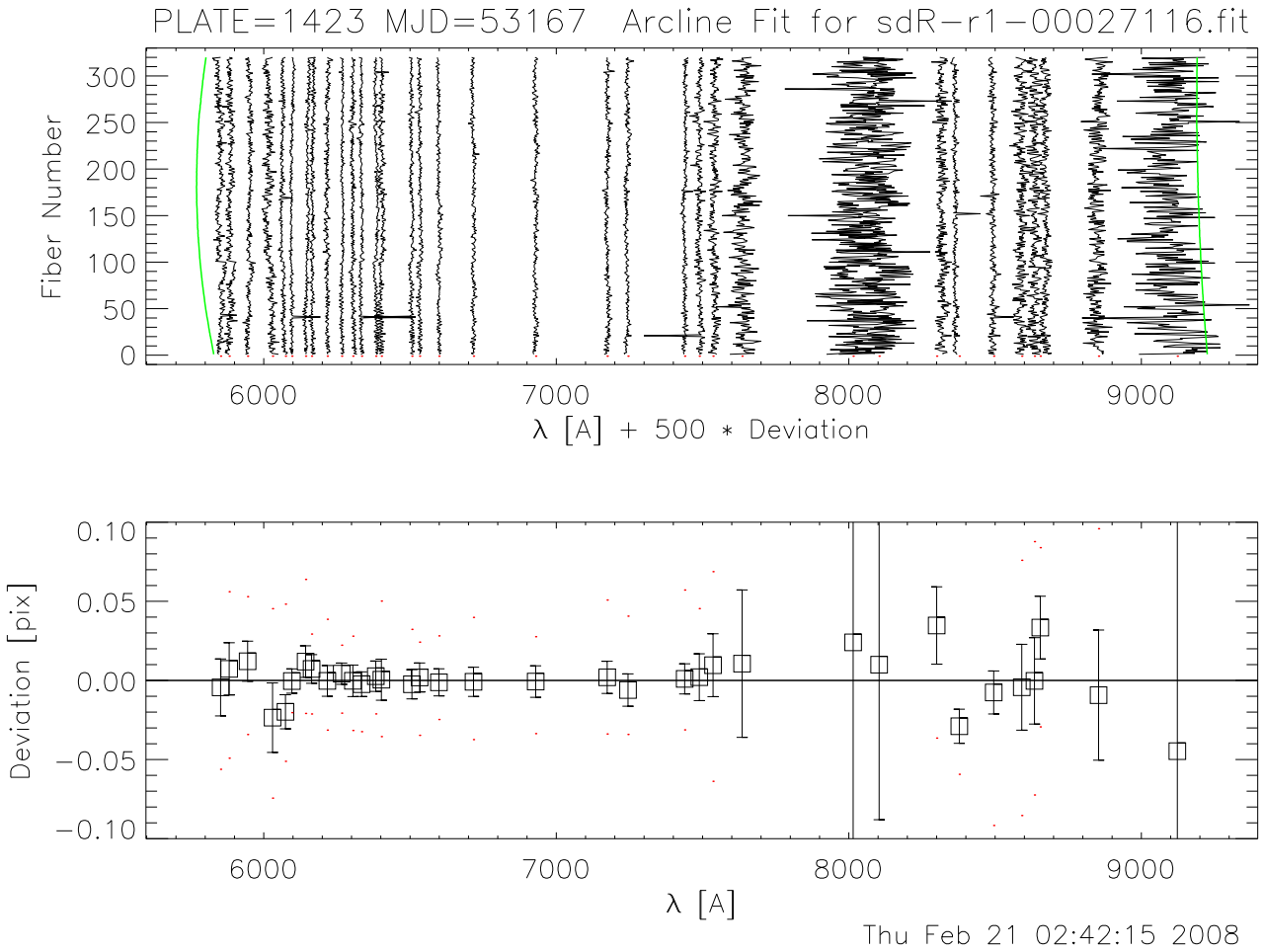

PLATE=1423 MJD=53167 sdR-b2-00027118.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.91 %
Fiber number
Focal Distance [mm]
Airmass

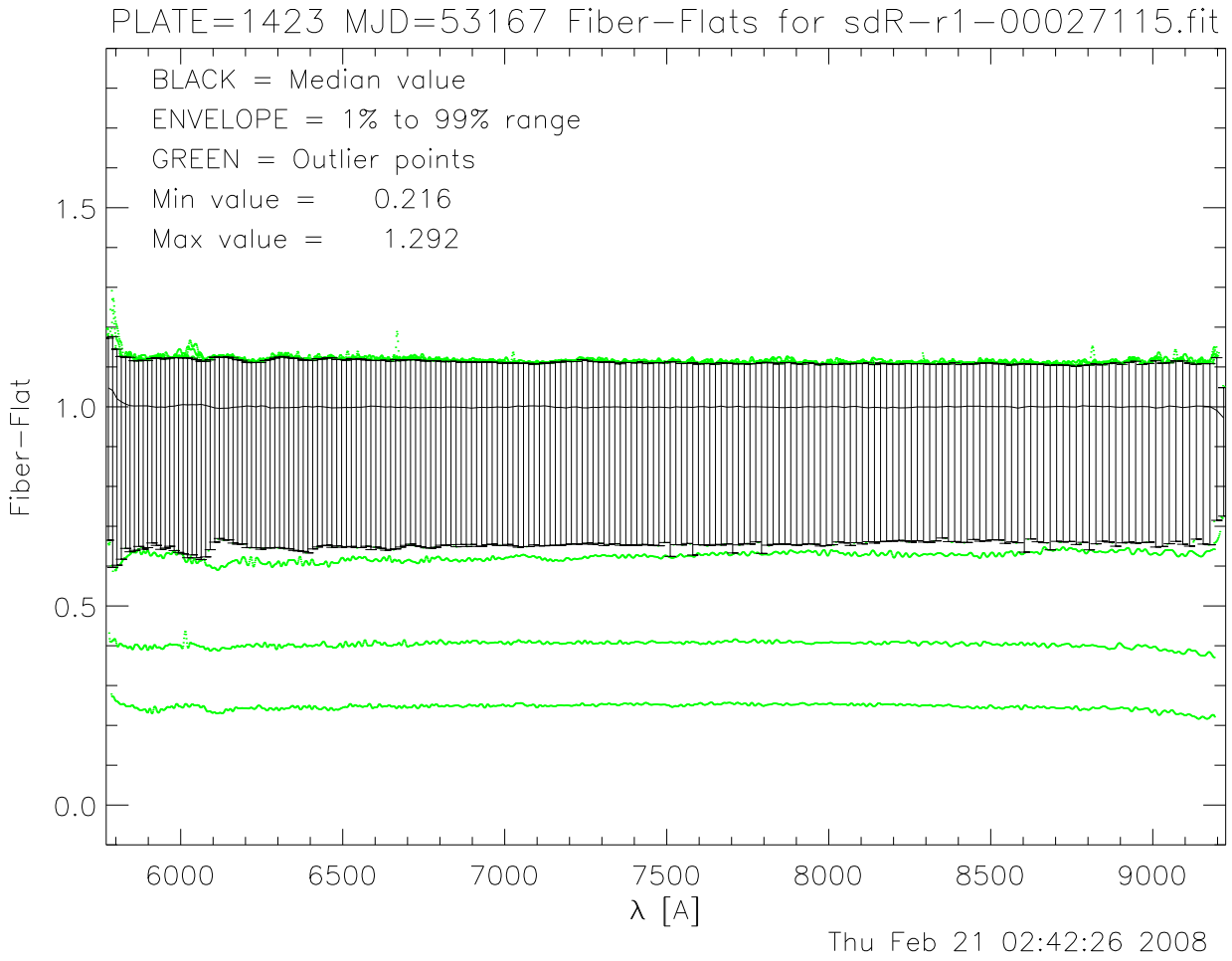

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

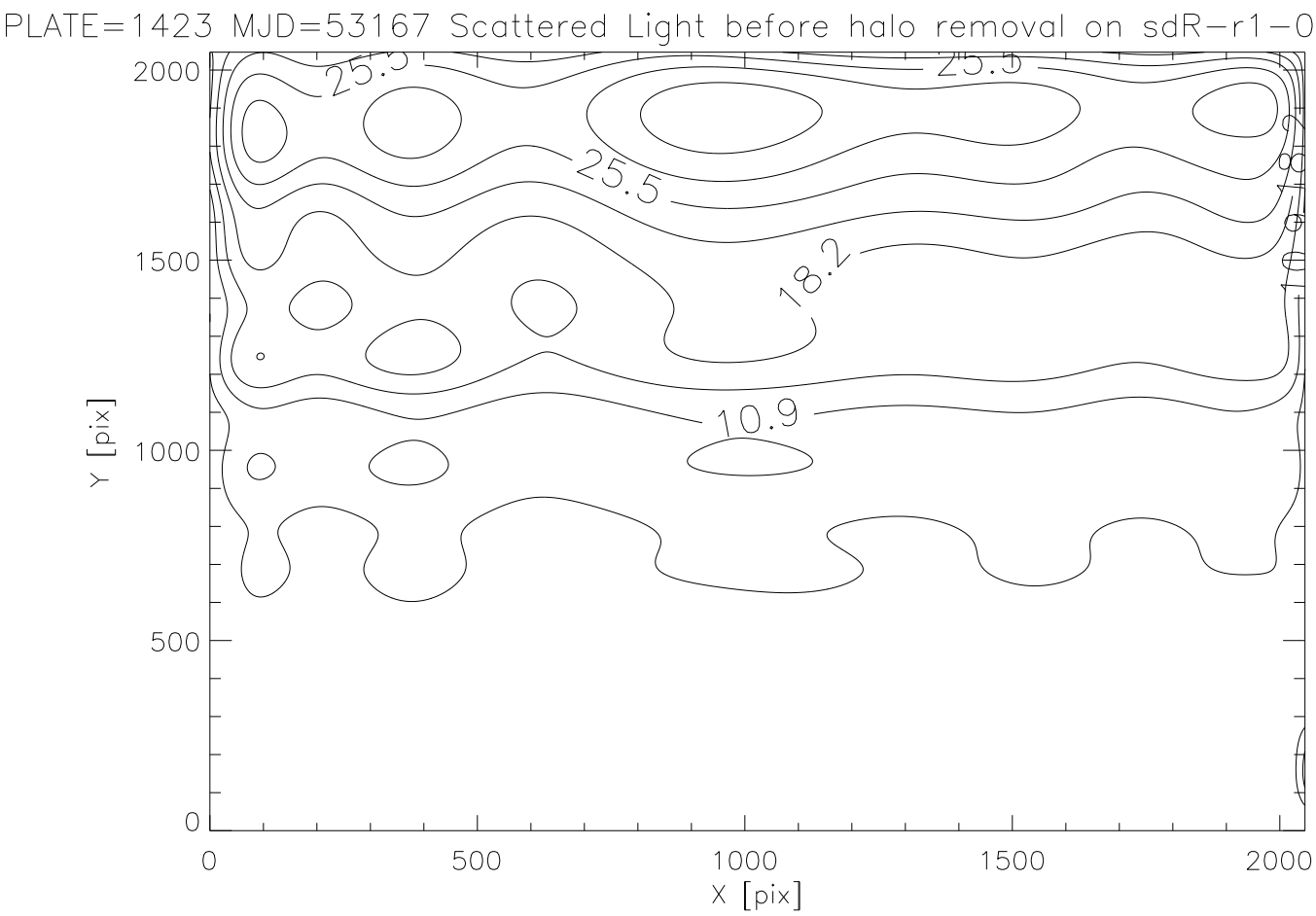

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

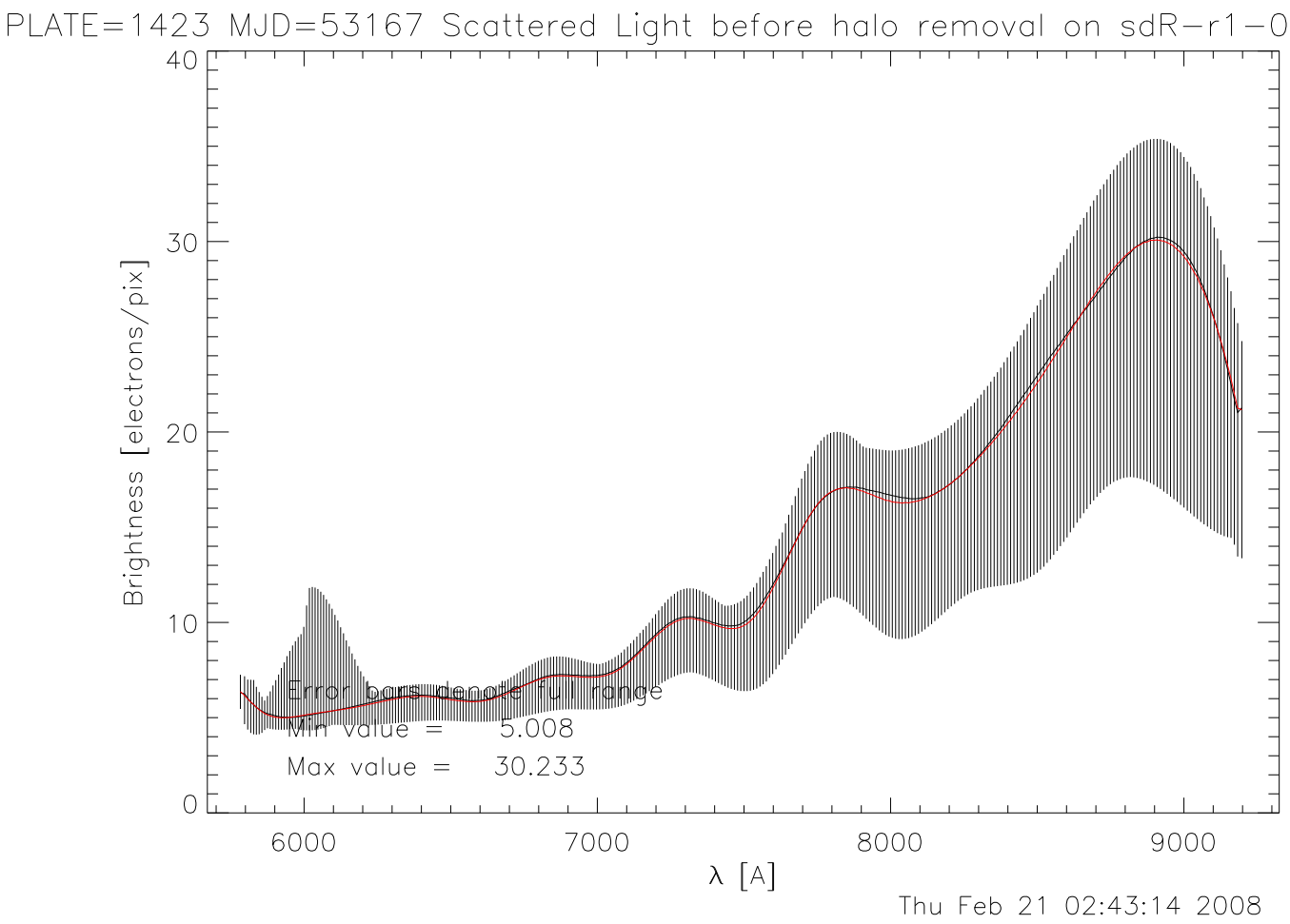

PLATE=1423 MJD=53167 flat extraction chi^2 for sdR−r1−00027115.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

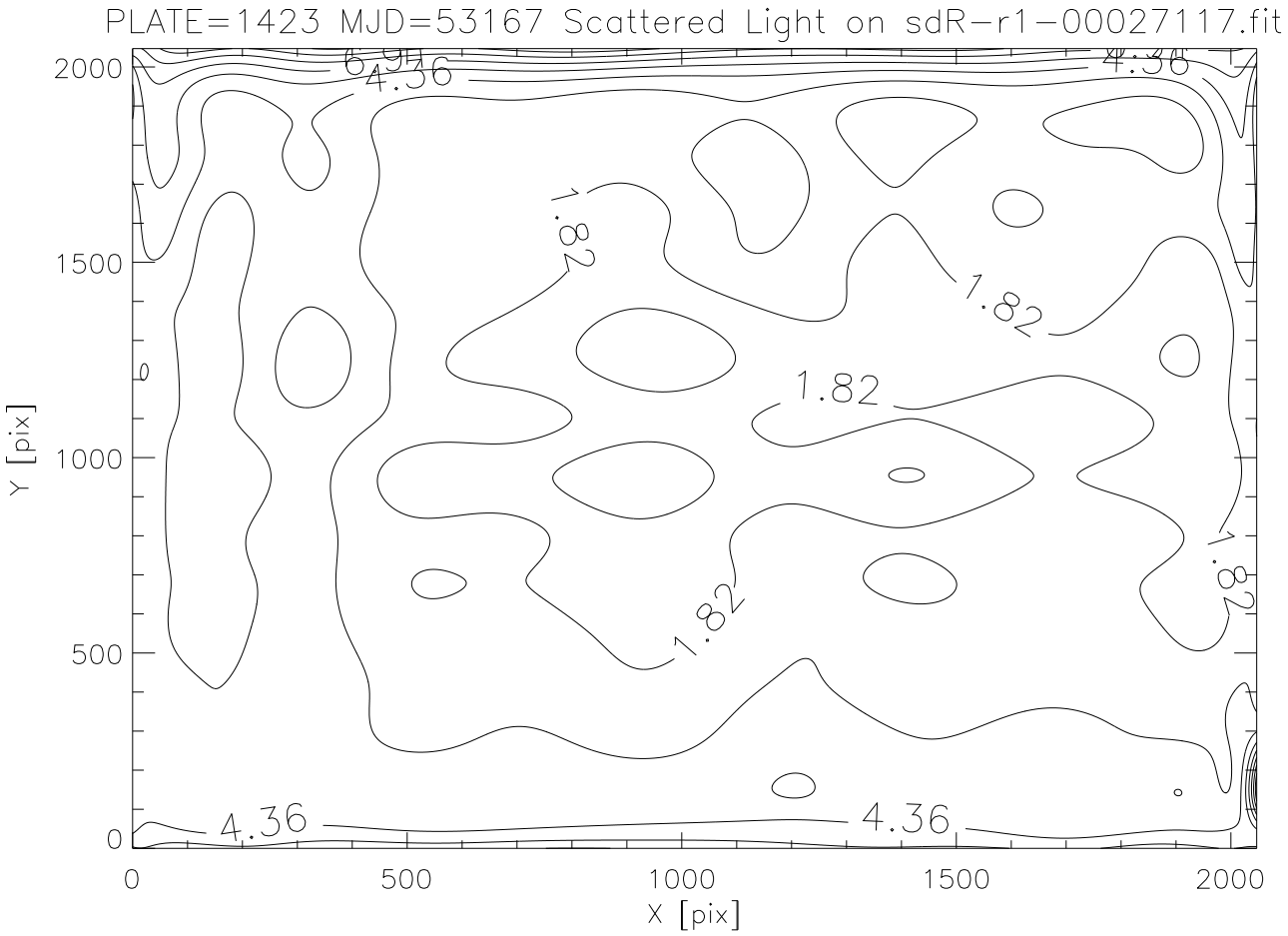

PLATE=1423 MJD=53167 Superflat sdR-r1-00027115.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

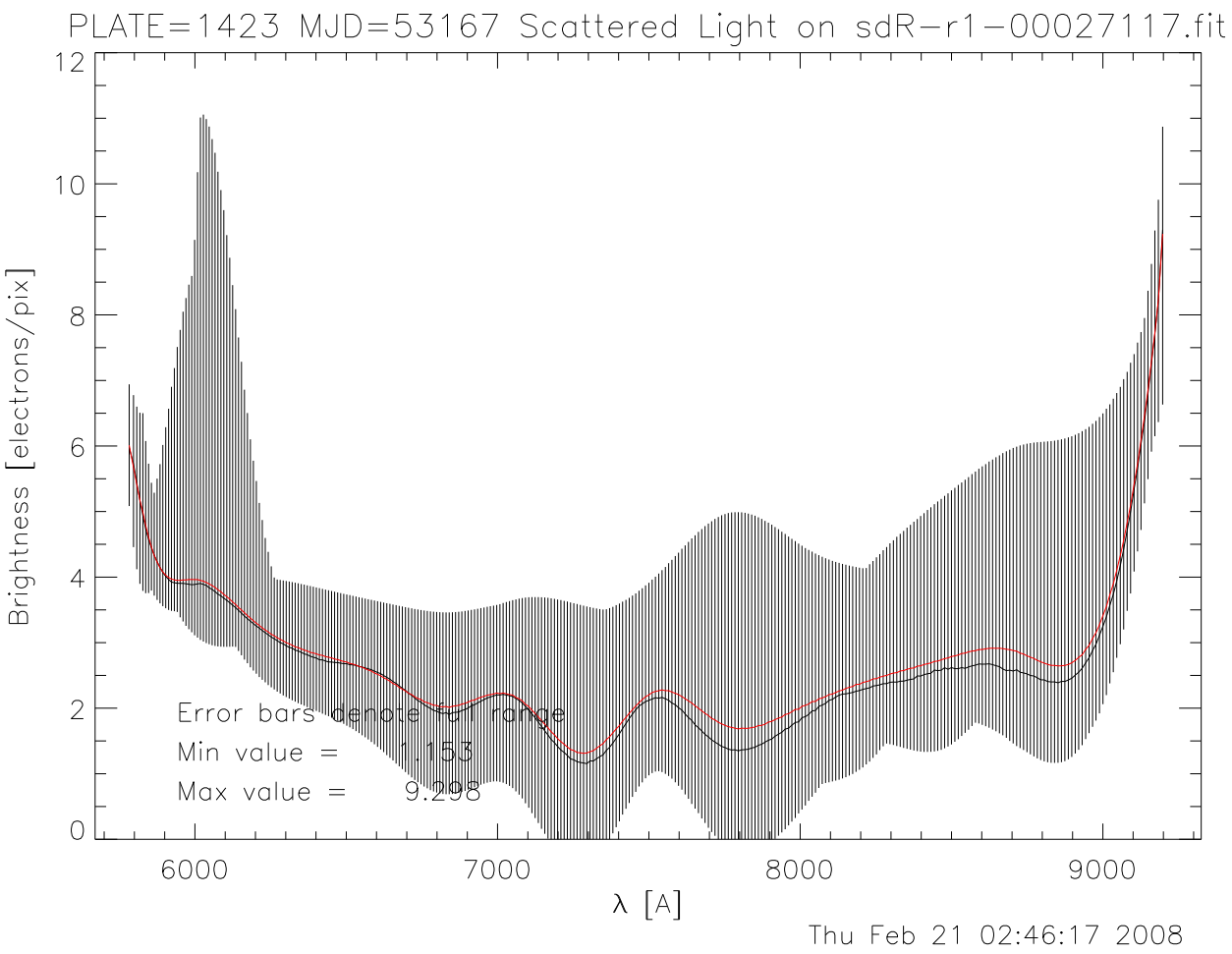

PLATE=1423 MJD=53167 Arcline Fit for sdR-r1-00027116.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu Feb 21 02:42:15 2008

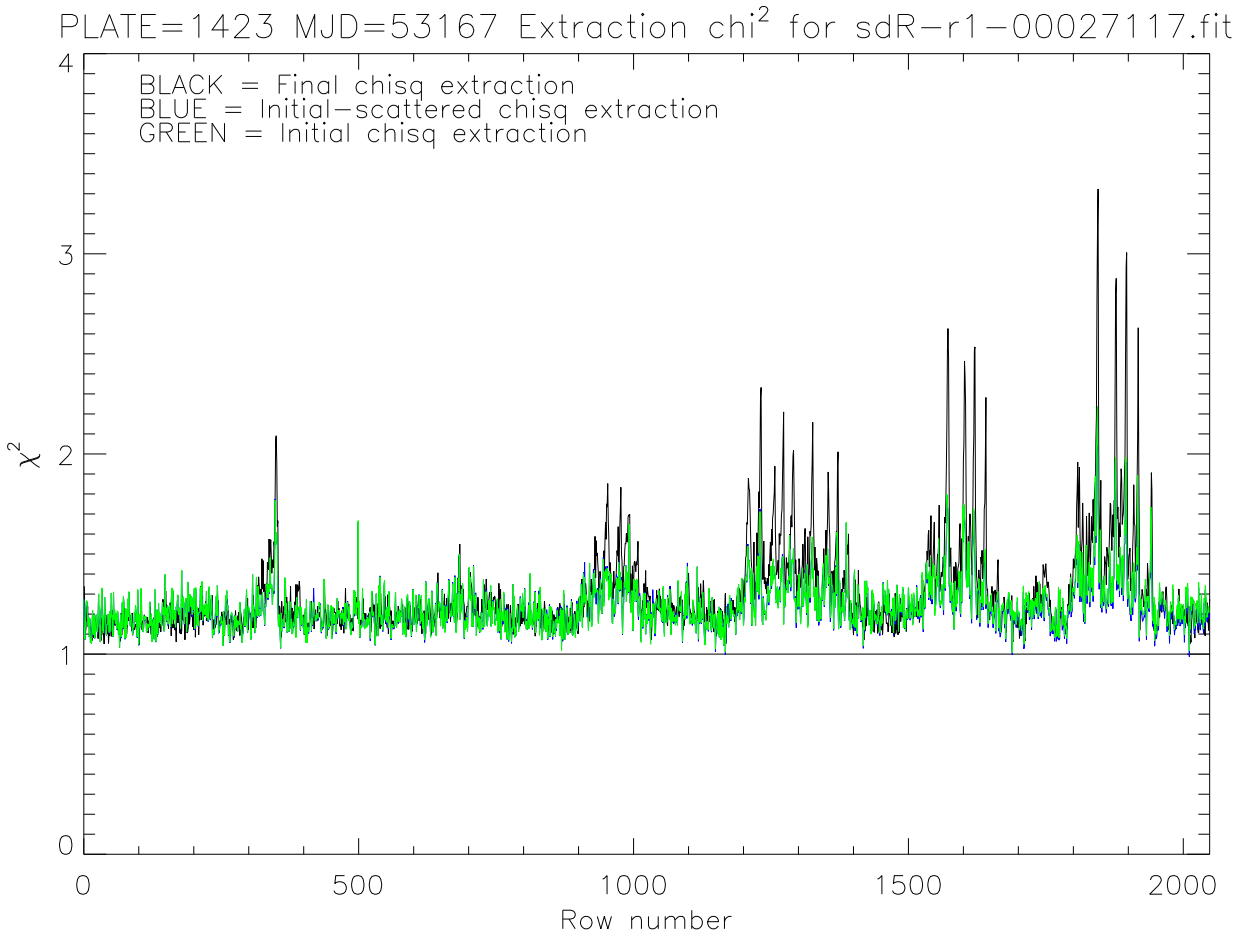

PLATE=1423 MJD=53167 Fiber−Flats for sdR−r1−00027115.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.216
Max value = 1.292
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 21 02:42:26 2008

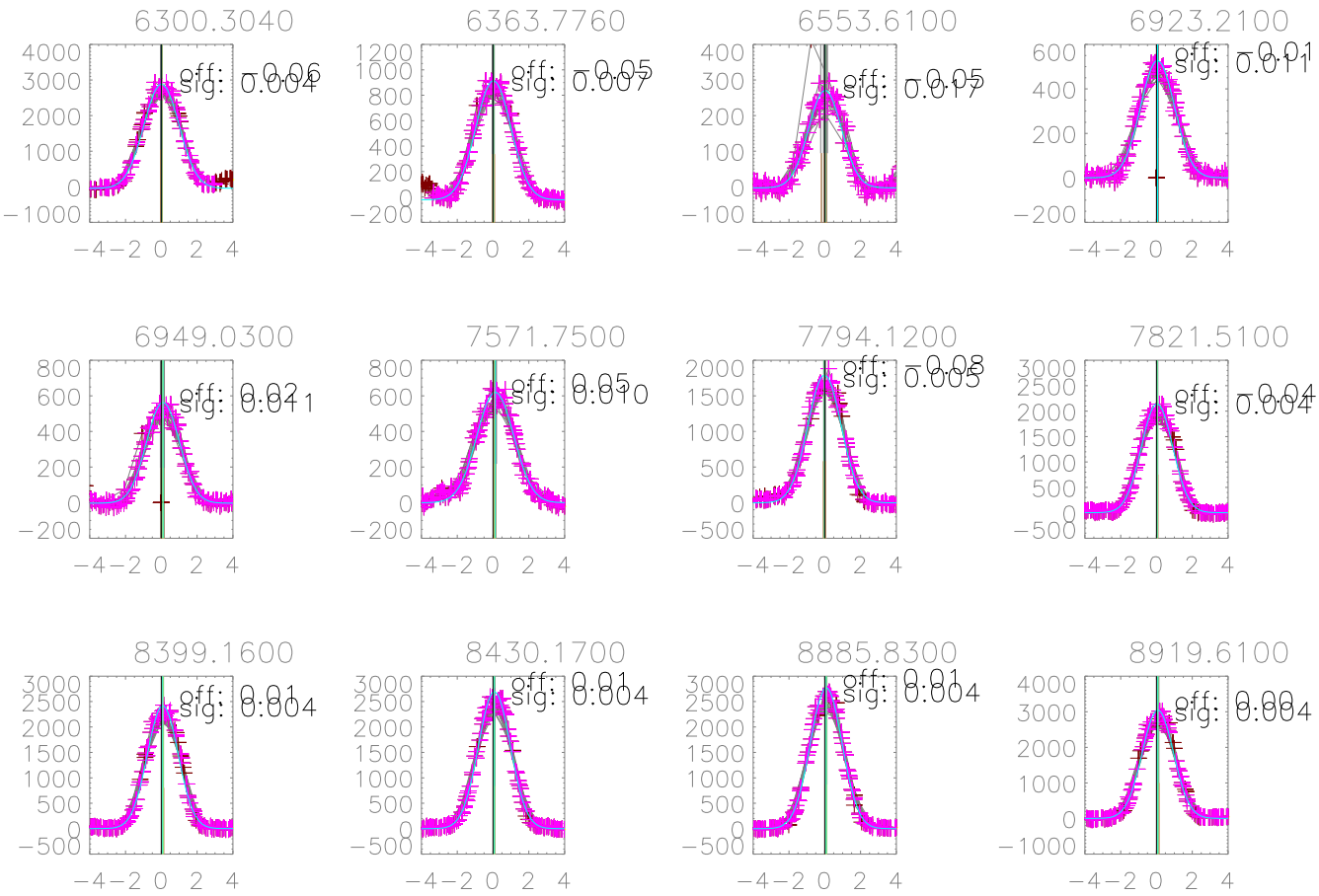

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-r1-00027117.fi
25.5
25.5
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

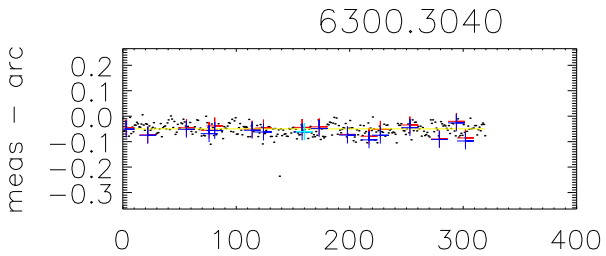

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-r1-00027117.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.008
Max value = 30.233
Thu Feb 21 02:43:14 2008

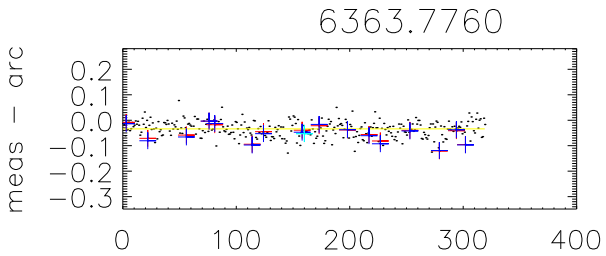

PLATE=1423 MJD=53167 Scattered Light on sdR-r1-00027117.fit
4.36
4.36
1.82
1.82
1.82
1.82
1.82
4.36
4.36
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

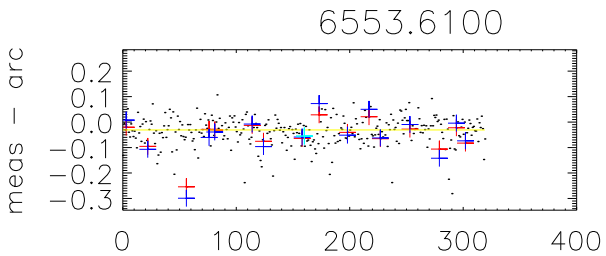

PLATE=1423 MJD=53167 Scattered Light on sdR-r1-00027117.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.153
Max value = 9.298
Thu Feb 21 02:46:17 2008

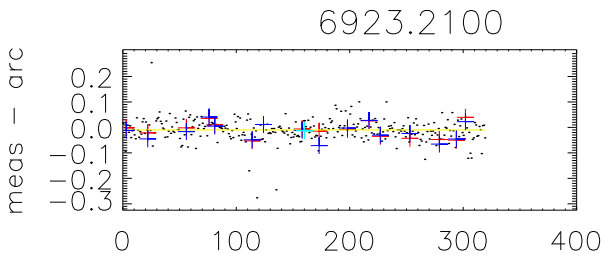

PLATE=1423 MJD=53167 Extraction chi^2 for sdR−r1−00027117.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

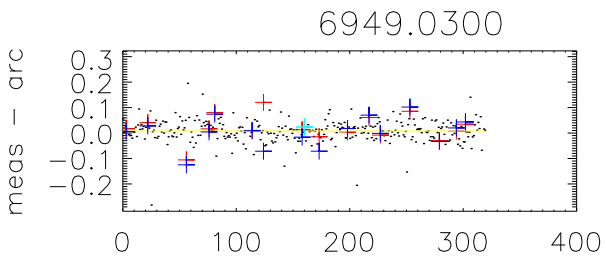

6300.3040
off: −0.06
sig: 0.004
6363.7760
off: −0.05
sig: 0.007
6553.6100
off: −0.05
sig: 0.017
6923.2100
off: −0.01
sig: 0.011
6949.0300
off: 0.02
sig: 0.011
7571.7500
off: 0.05
sig: 0.010
7794.1200
off: −0.08
sig: 0.005
7821.5100
off: −0.04
sig: 0.004
8399.1600
off: 0.01
sig: 0.004
8430.1700
off: 0.01
sig: 0.004
8885.8300
off: 0.01
sig: 0.004
8919.6100
off: 0.00
sig: 0.004

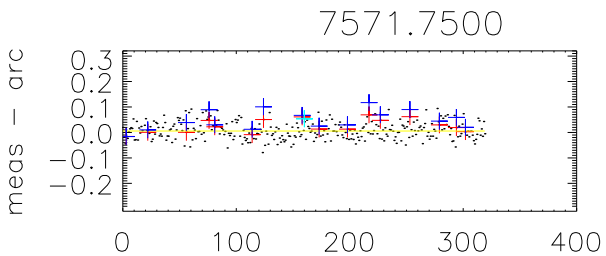

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

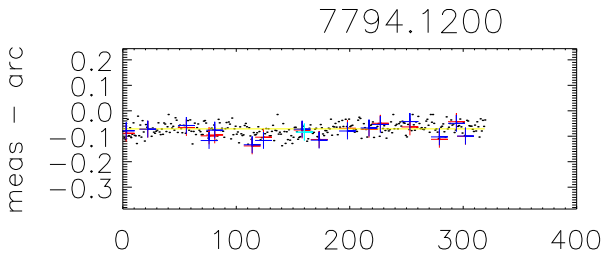

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

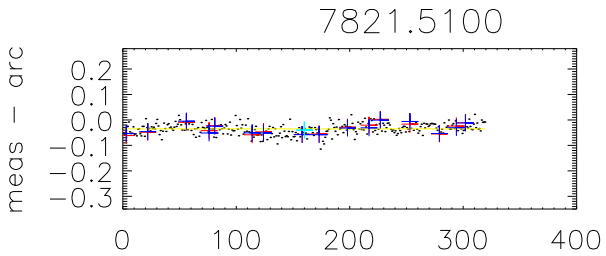

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

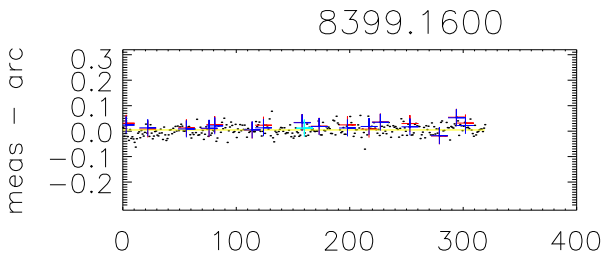

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

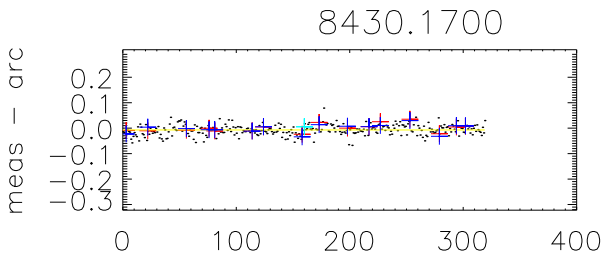

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

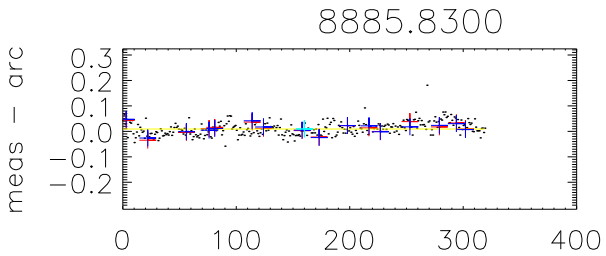

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

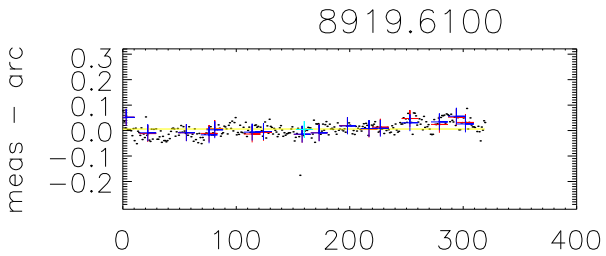

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

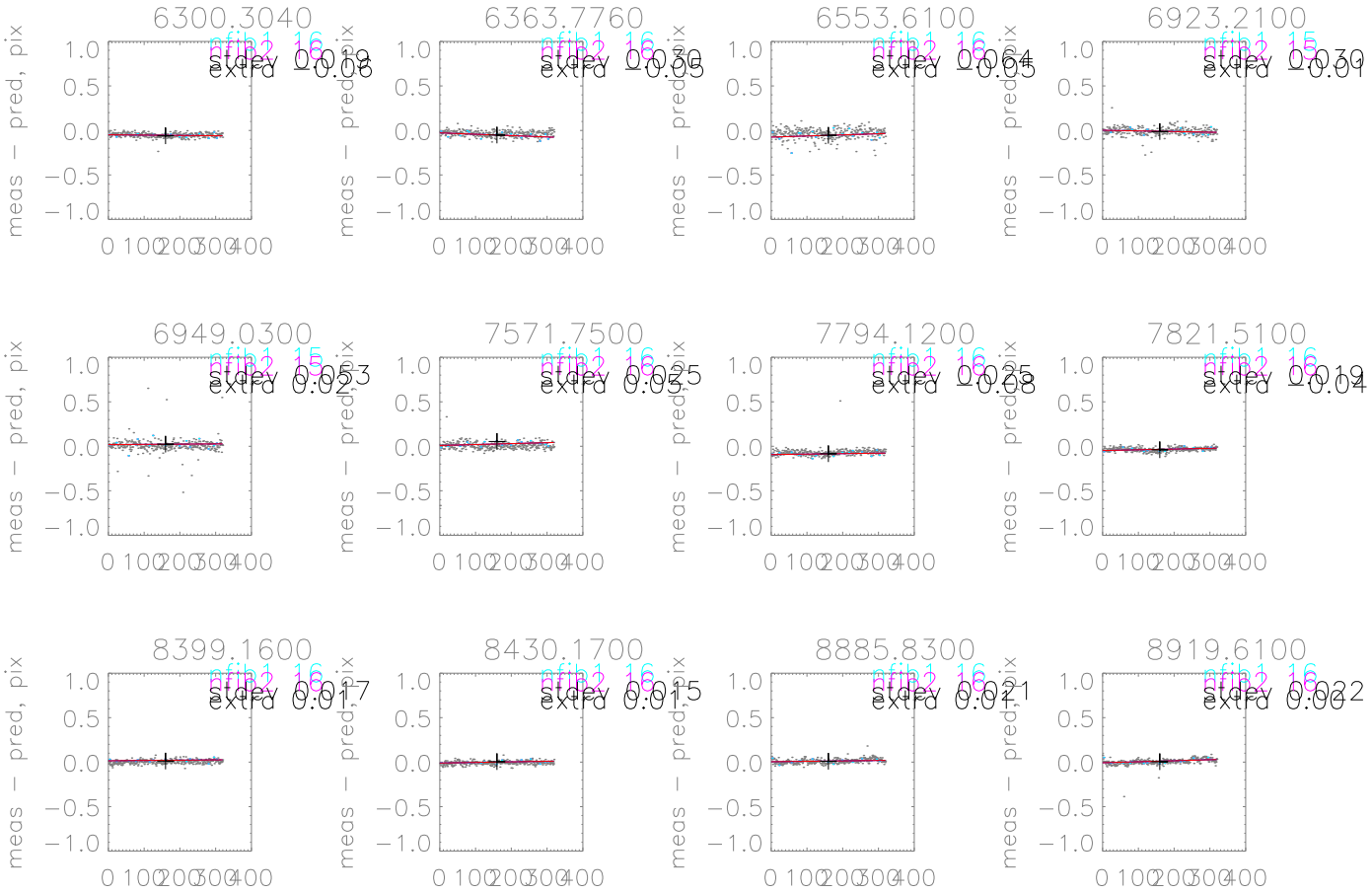

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

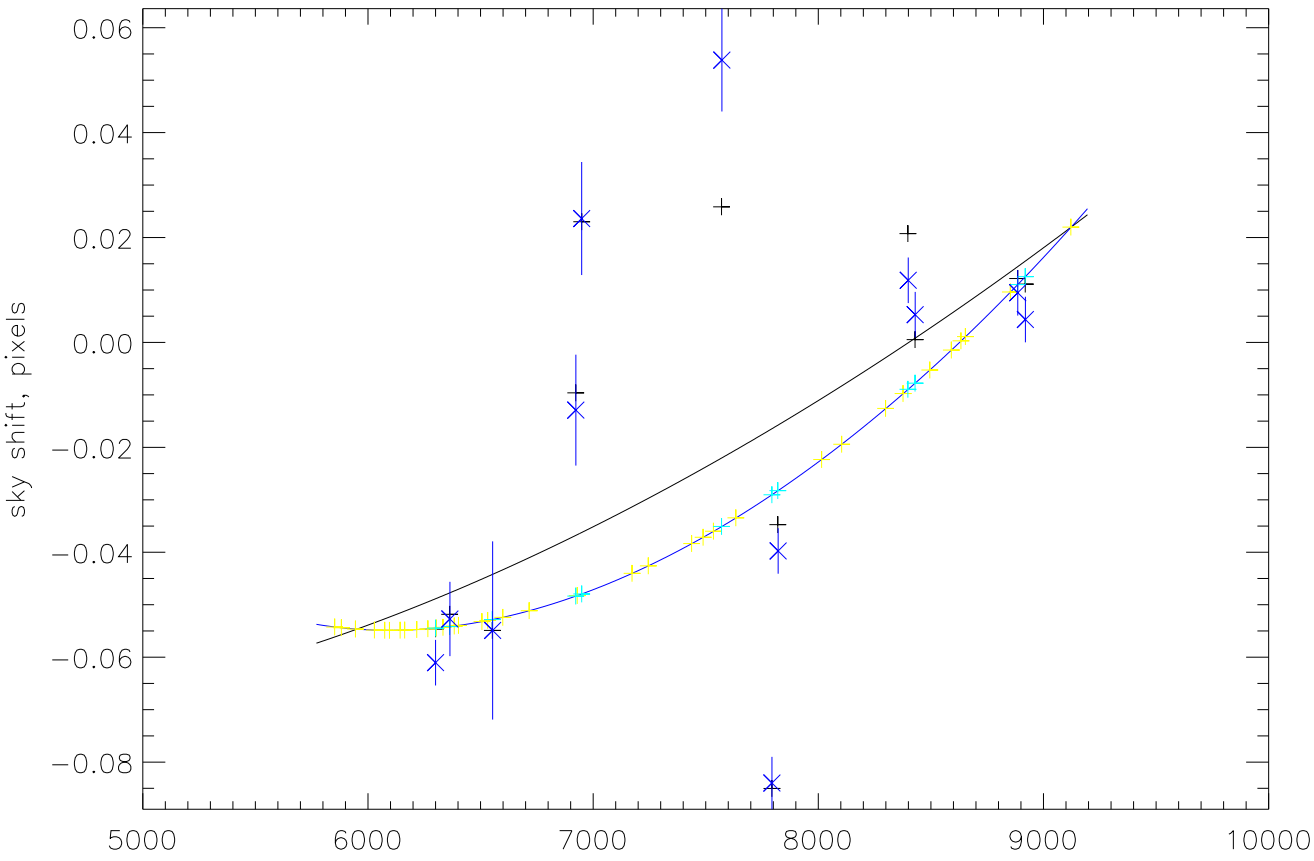

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

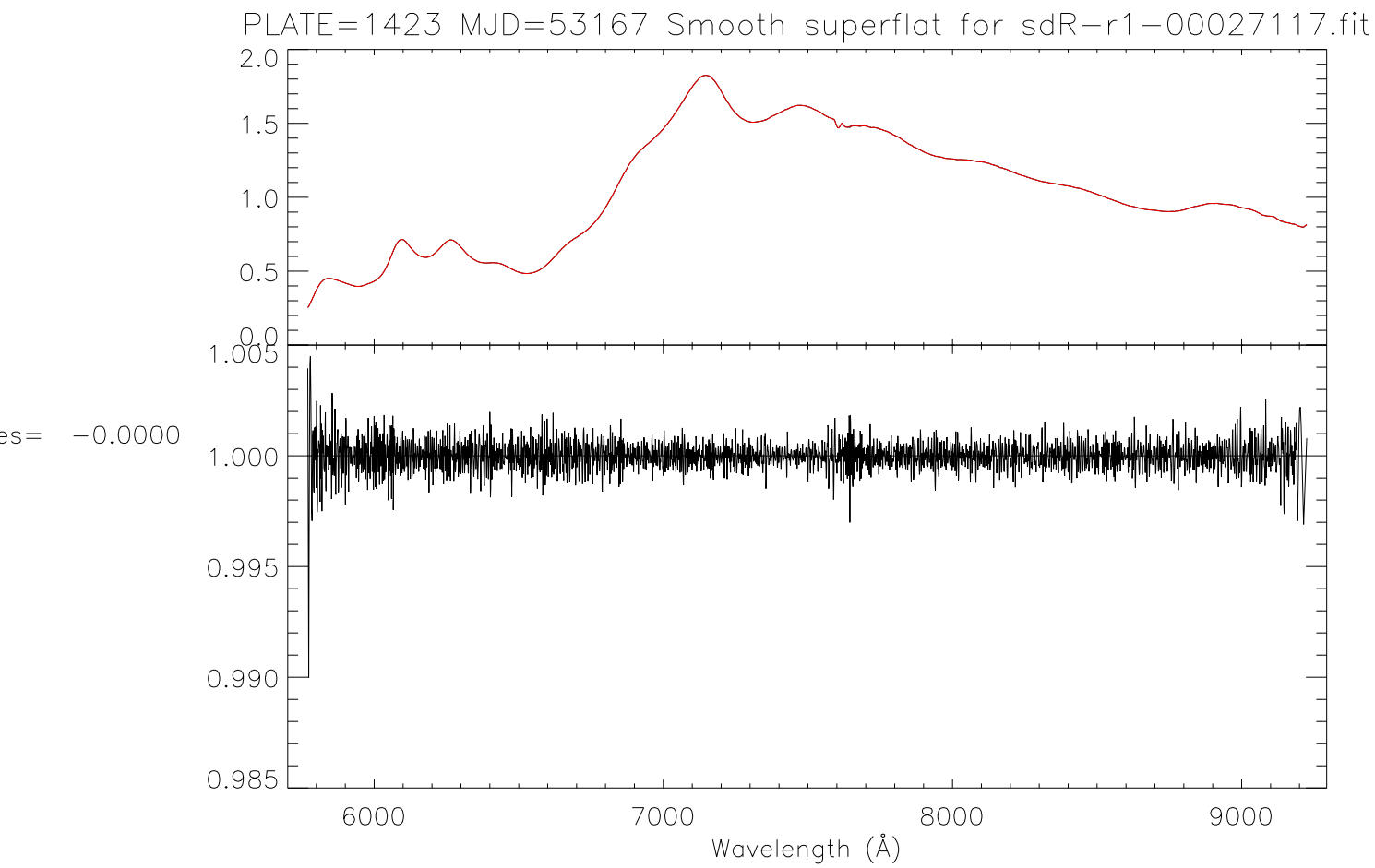

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

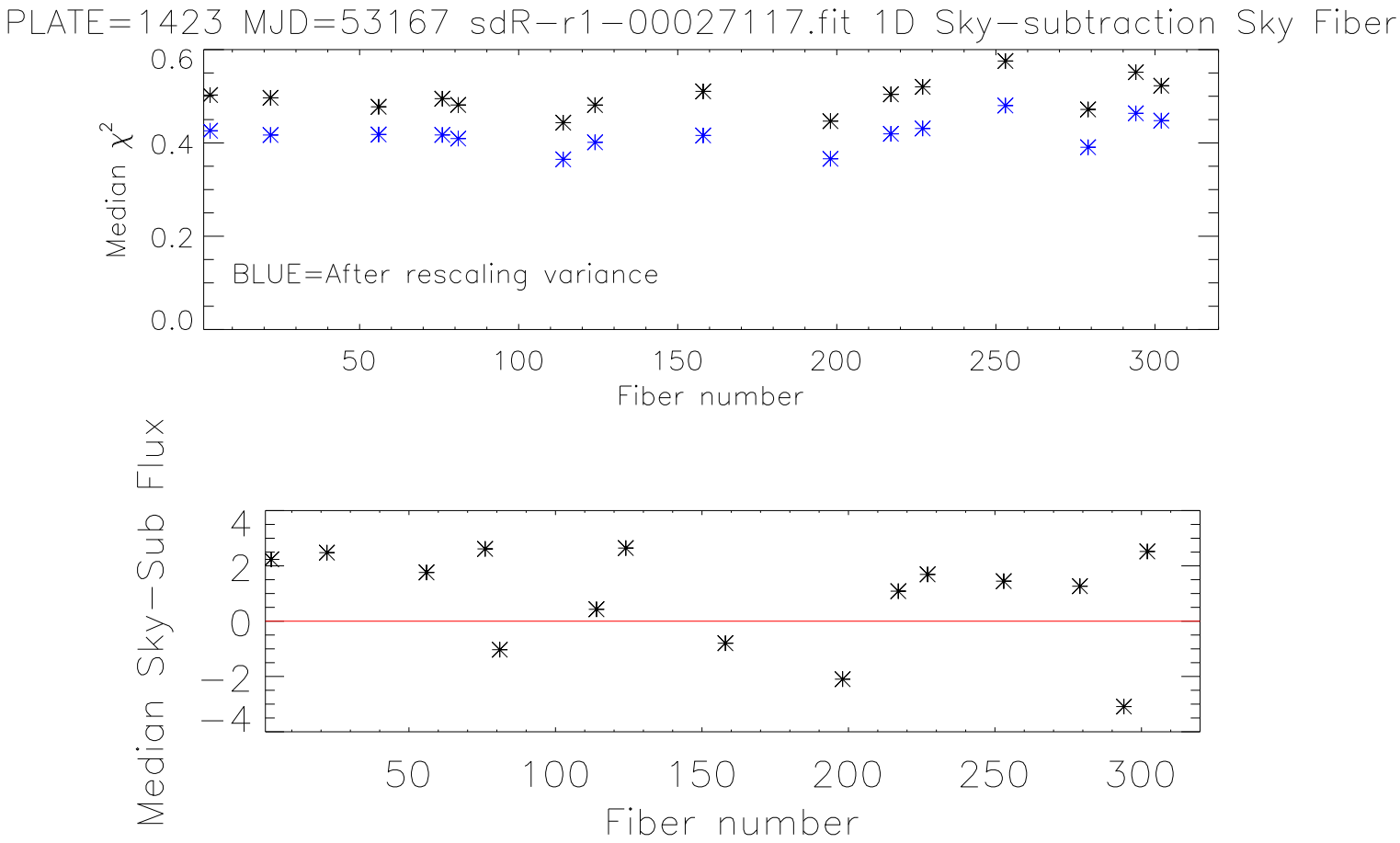

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

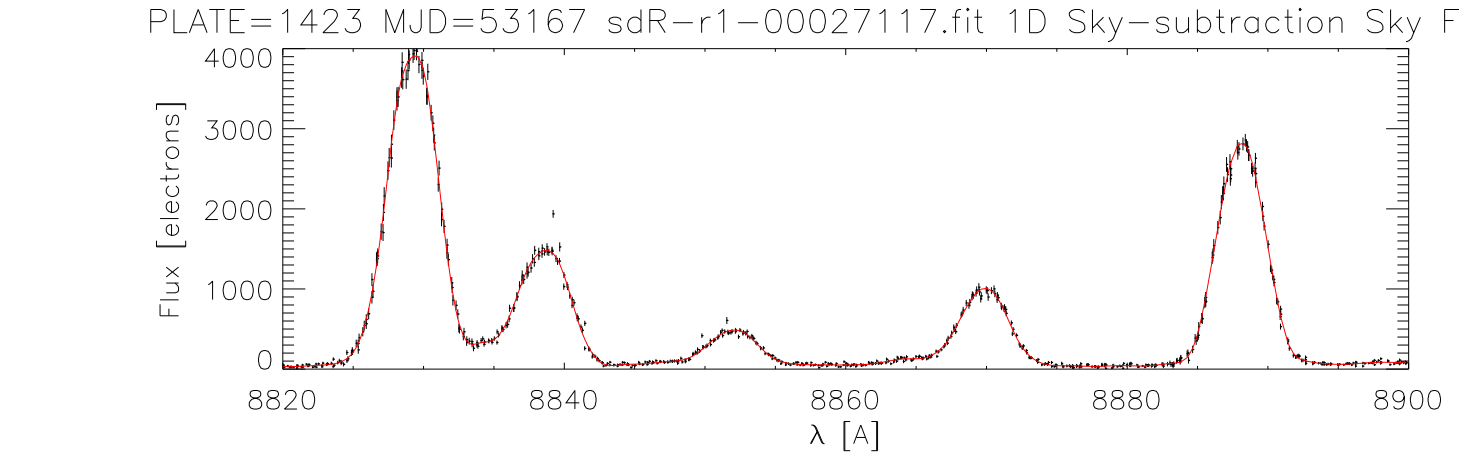

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

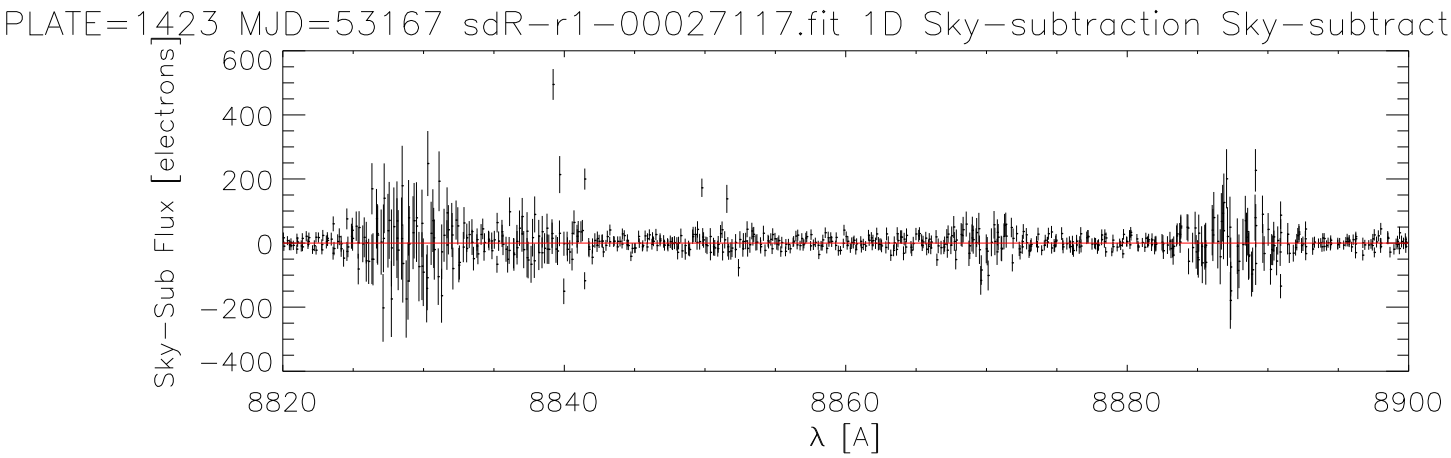

6300.3040
stdev 0.018
extra −0.008
6363.7760
stdev 0.030
extra −0.005
6553.6100
stdev 0.064
extra −0.005
6923.2100
stdev 0.030
extra −0.001
6949.0300
stdev 0.053
extra 0.002
7571.7500
stdev 0.025
extra 0.003
7794.1200
stdev 0.025
extra −0.008
7821.5100
stdev 0.019
extra −0.004
8399.1600
stdev 0.017
extra 0.001
8430.1700
stdev 0.015
extra 0.001
8885.8300
stdev 0.021
extra 0.002
8919.6100
stdev 0.032
extra 0.000
meas − pred, pix
mfhd2 16
mfhd1 15

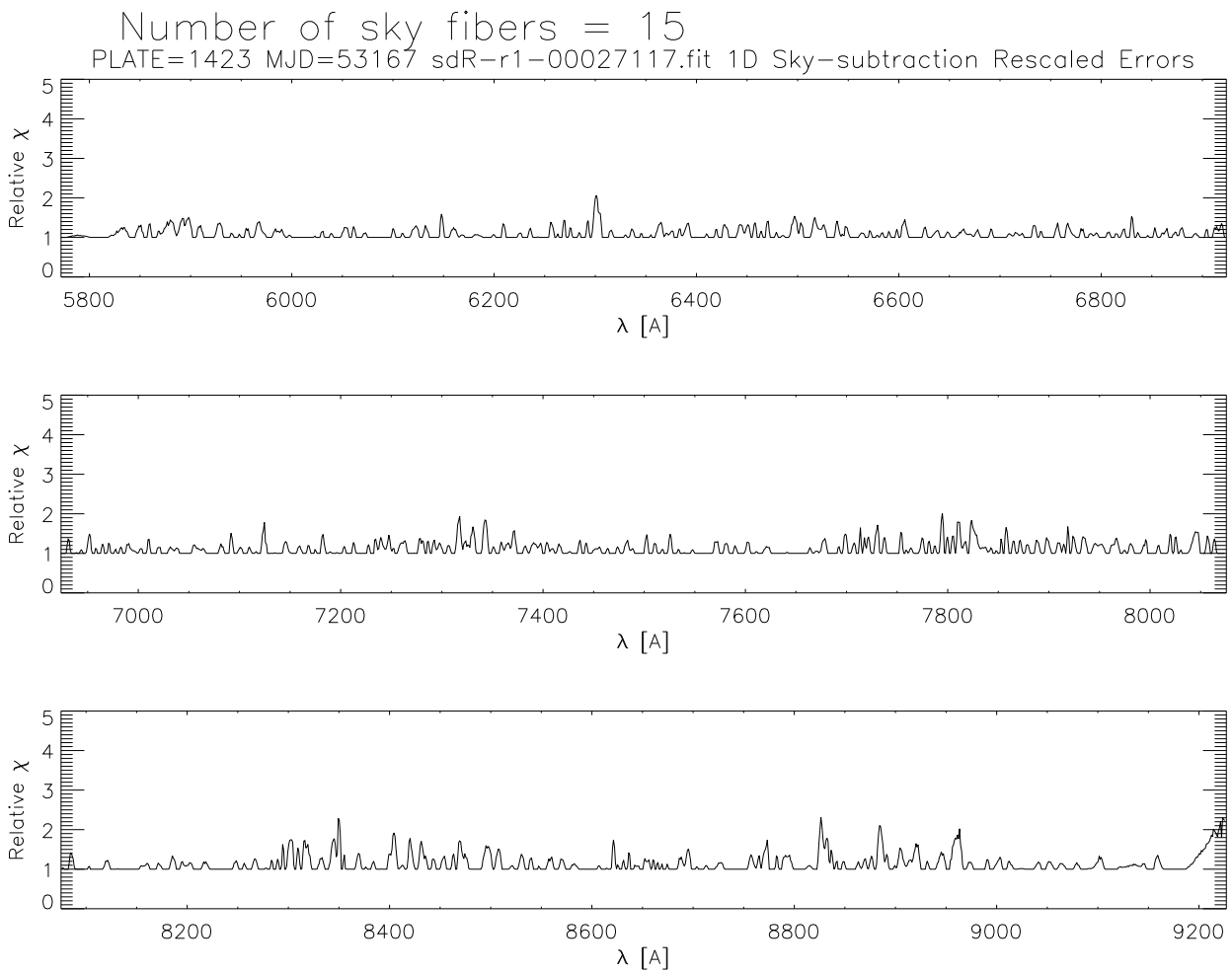

0.06
0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
sky shift, pixels
5000
6000
7000
8000
9000
10000

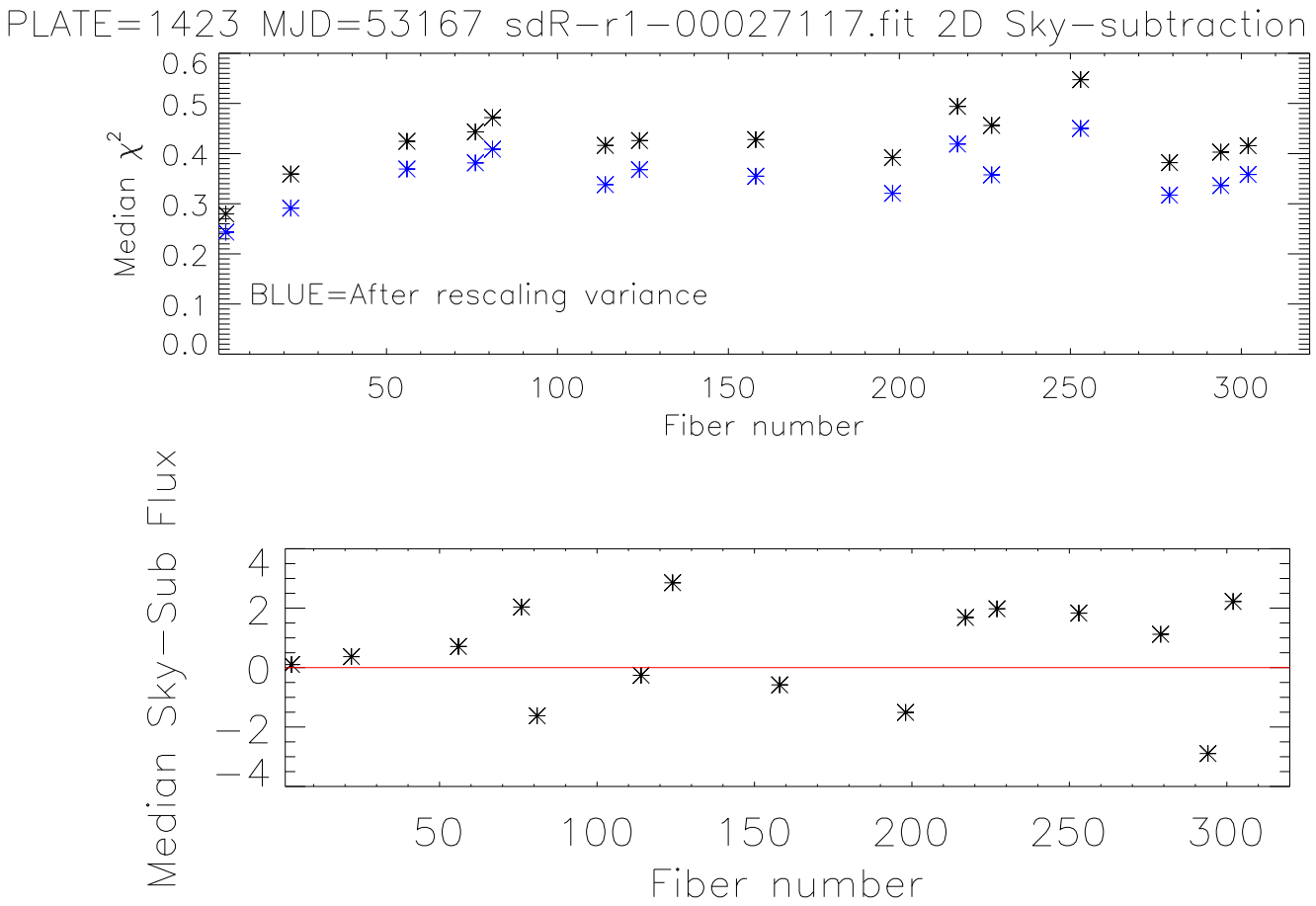

PLATE=1423 MJD=53167 Smooth superflat for sdR-r1-00027117.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

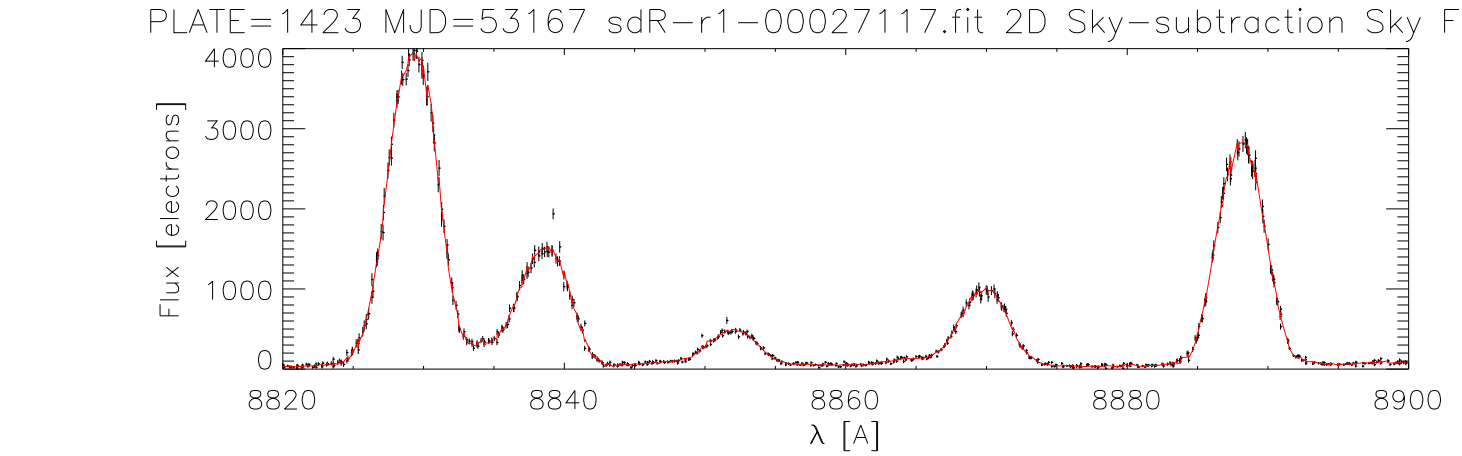

PLATE=1423 MJD=53167 sdR-r1-00027117.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

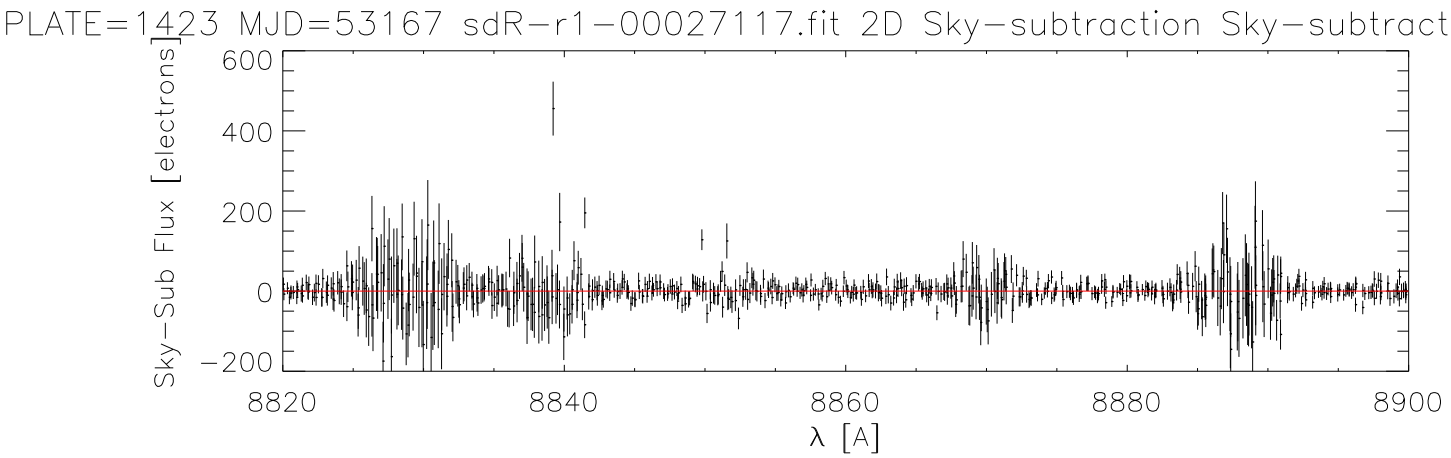

PLATE=1423 MJD=53167 sdR-r1-00027117.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

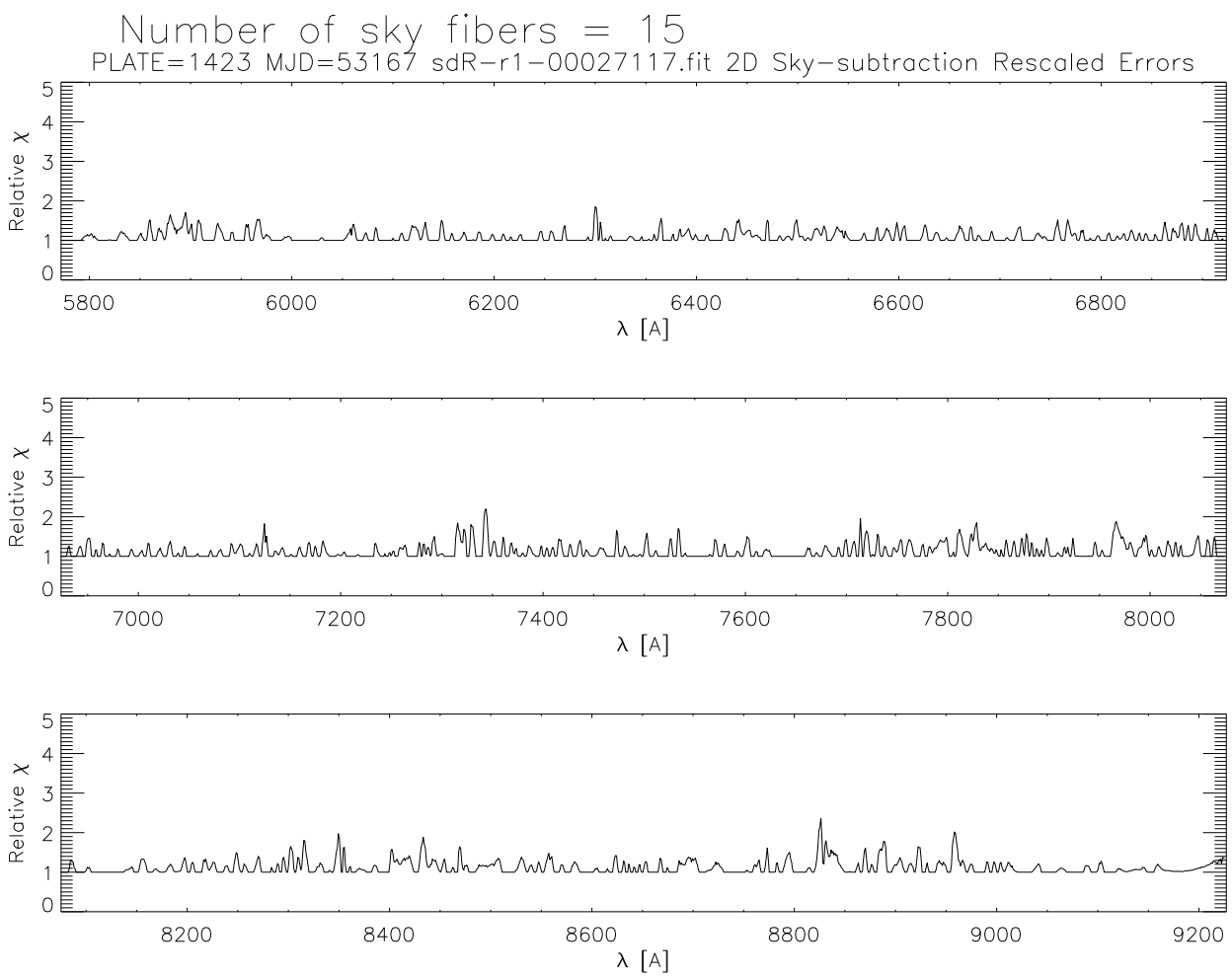

PLATE=1423 MJD=53167 sdR-r1-00027117.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

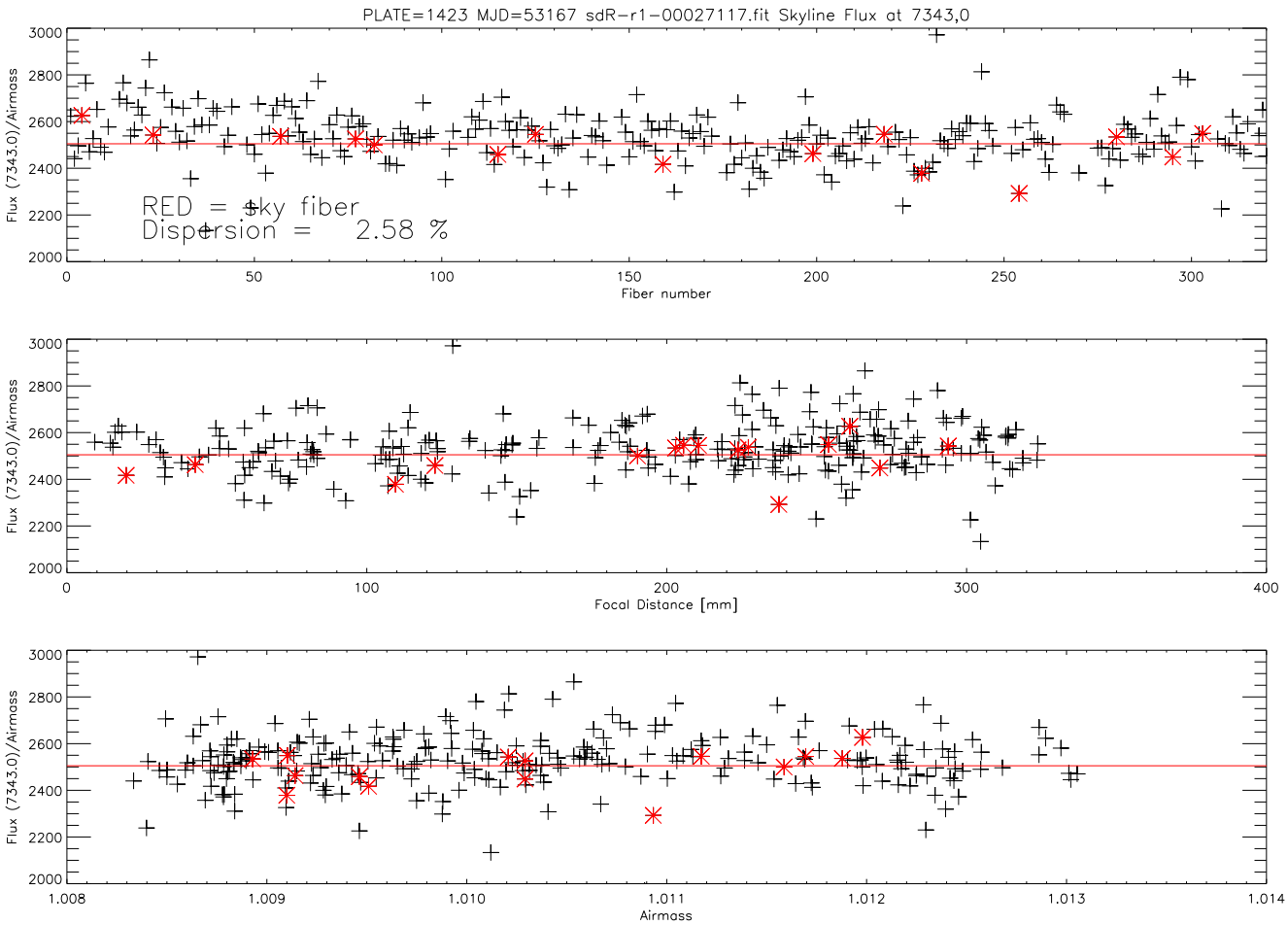

Number of sky fibers = 15
PLATE=1423 MJD=53167 sdR-r1-00027117.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

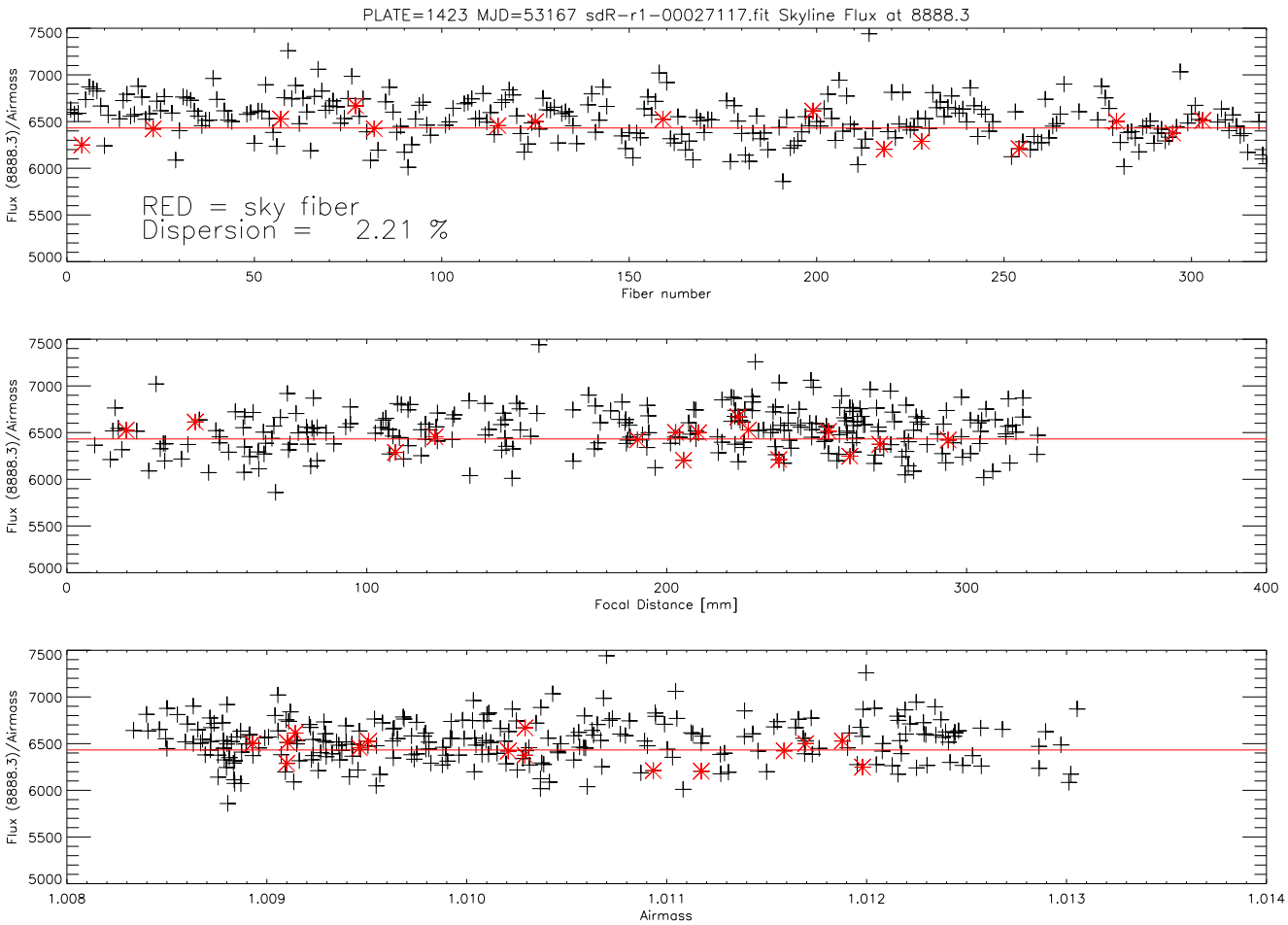

PLATE=1423 MJD=53167 sdR-r1-00027117.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

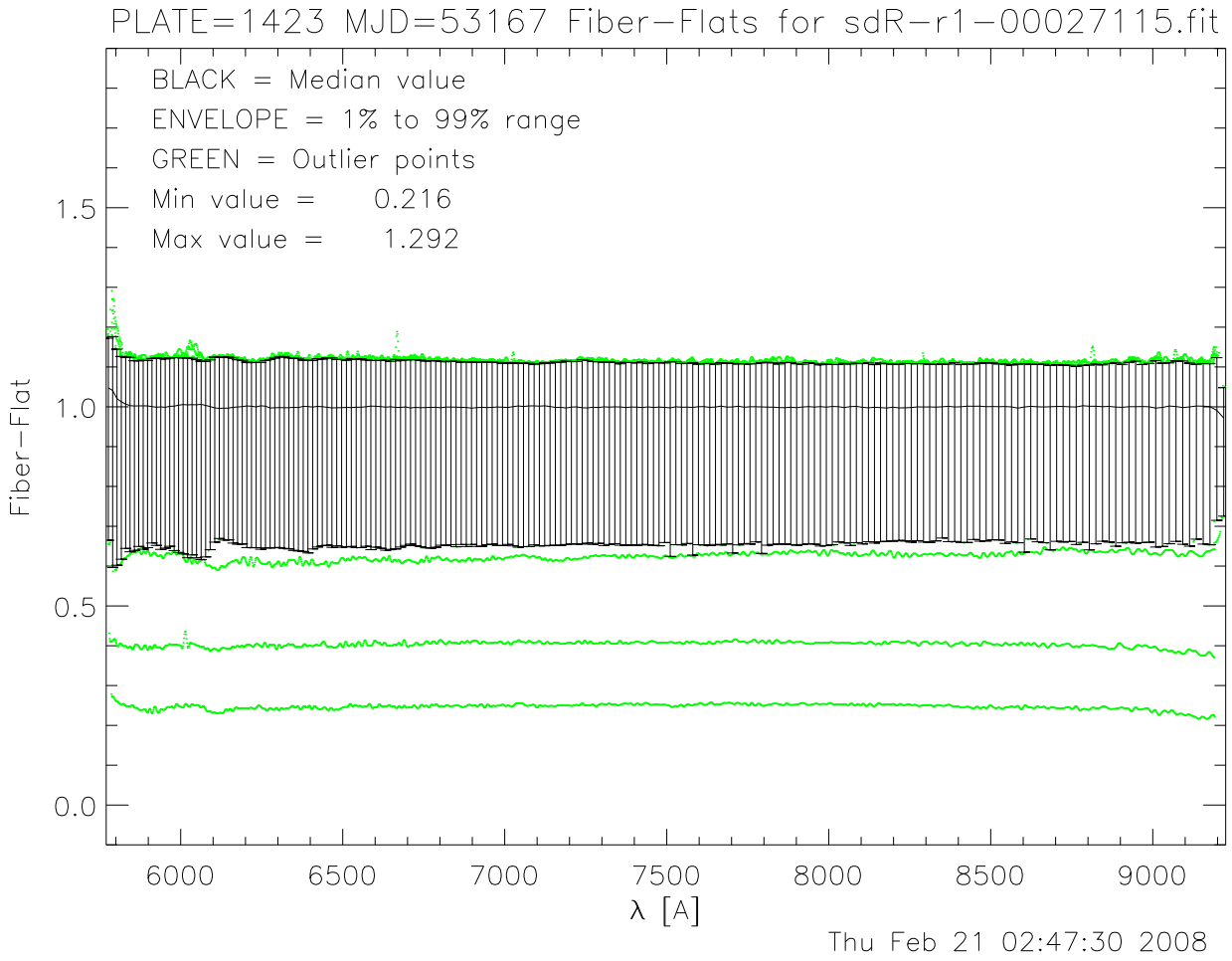

PLATE=1423 MJD=53167 sdR-r1-00027117.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

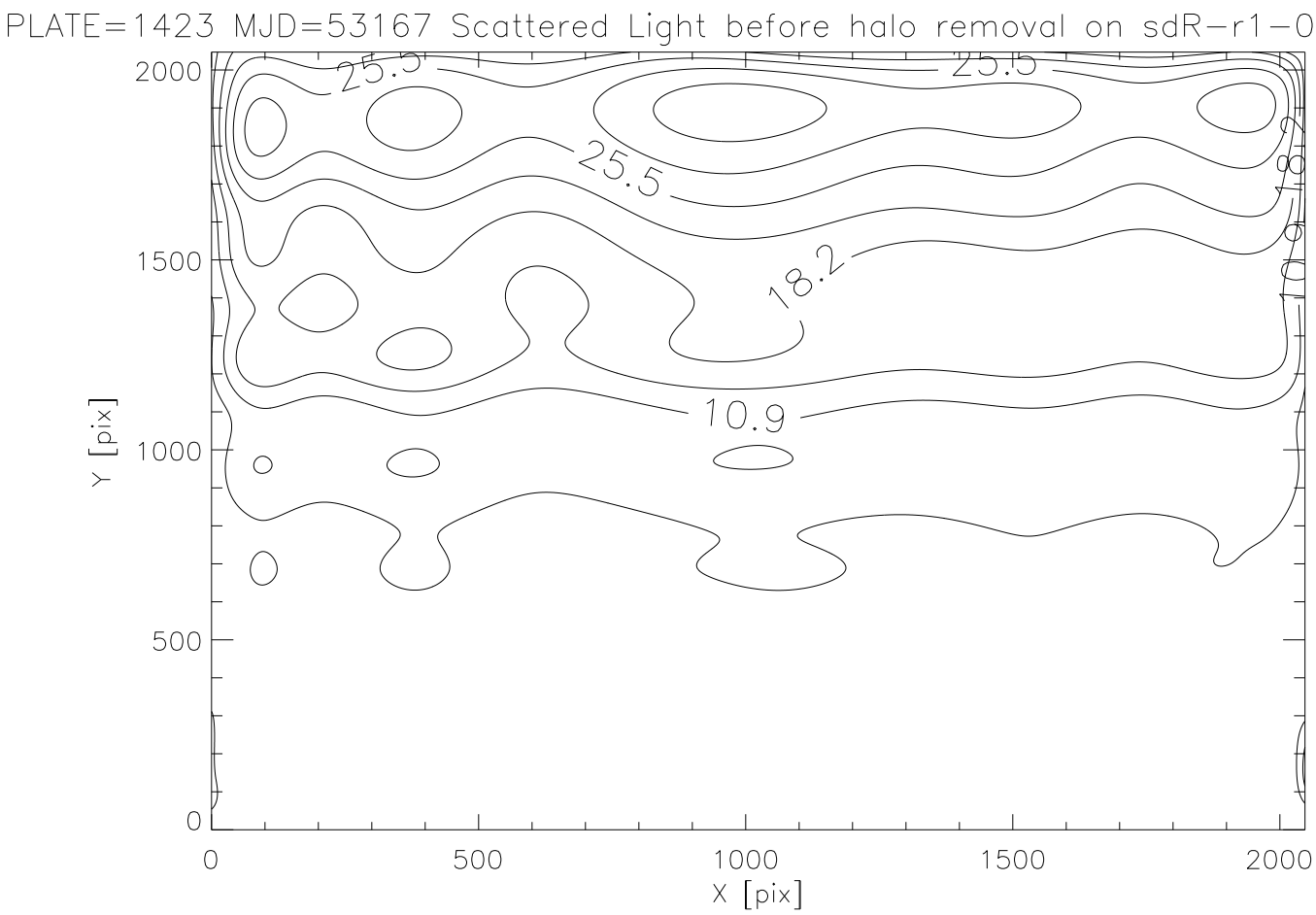

PLATE=1423 MJD=53167 sdR-r1-00027117.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

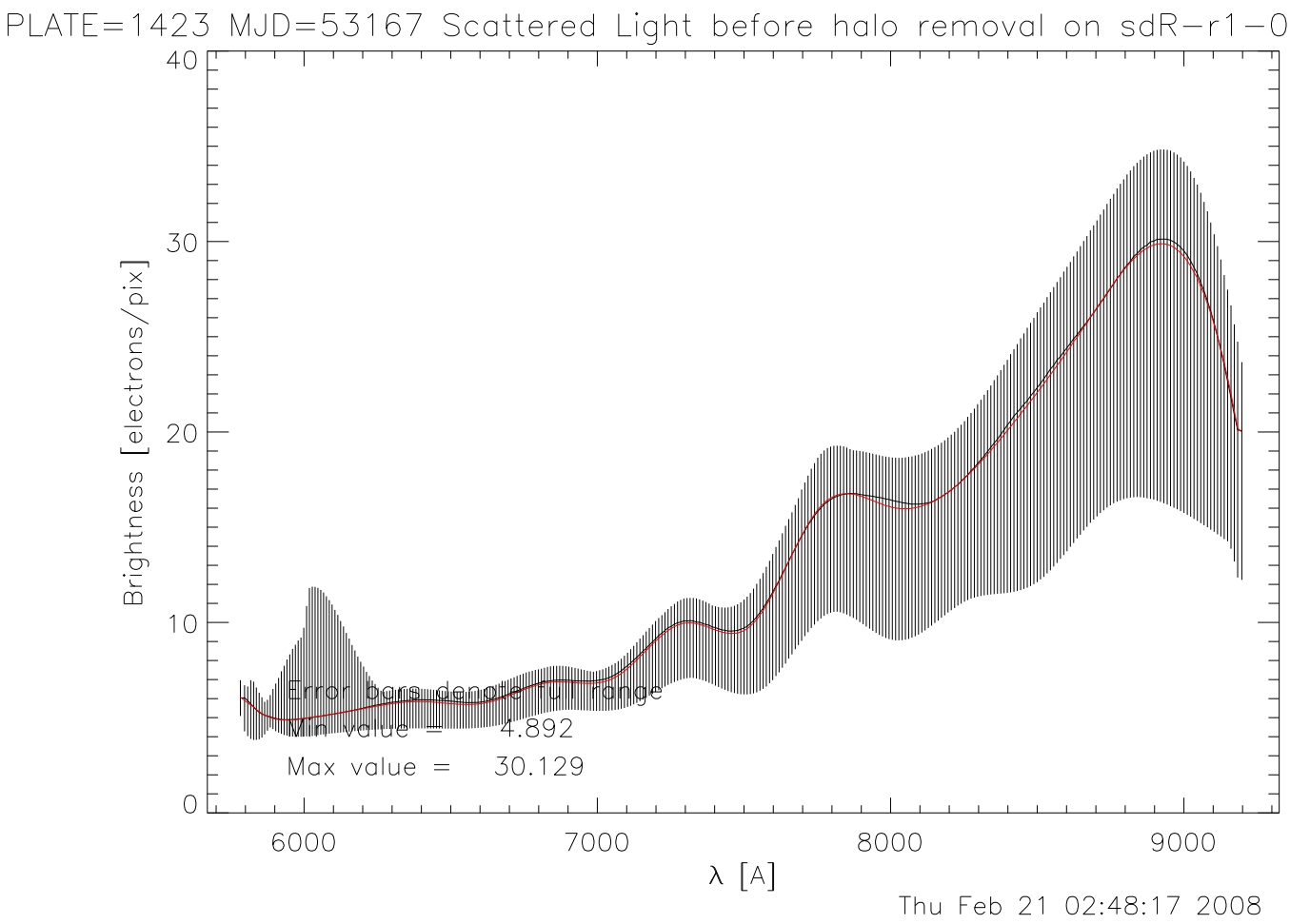

Number of sky fibers = 15
PLATE=1423 MJD=53167 sdR-r1-00027117.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

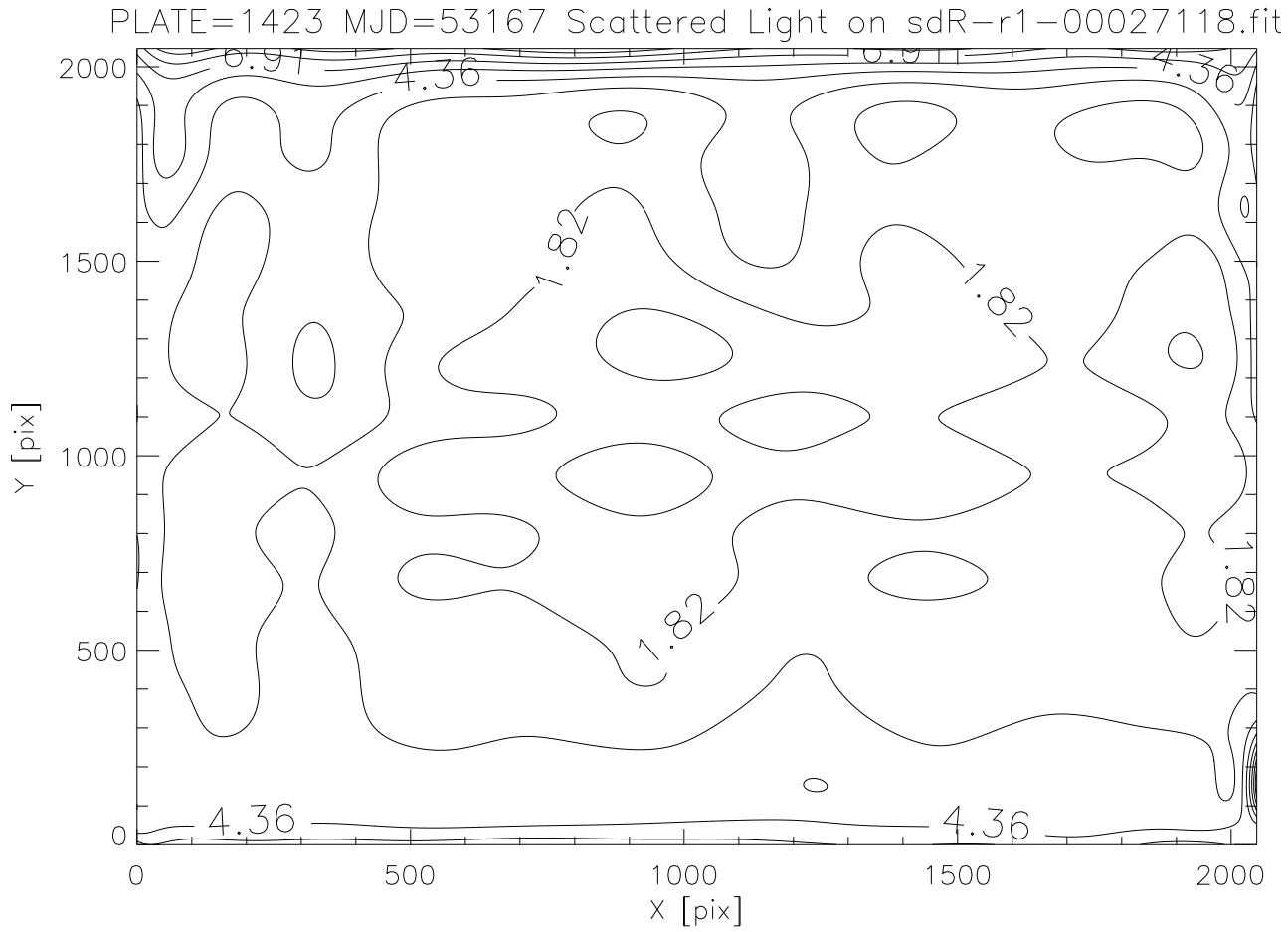

PLATE=1423 MJD=53167 sdR-r1-00027117.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.58 %
Fiber number
Focal Distance [mm]
Airmass

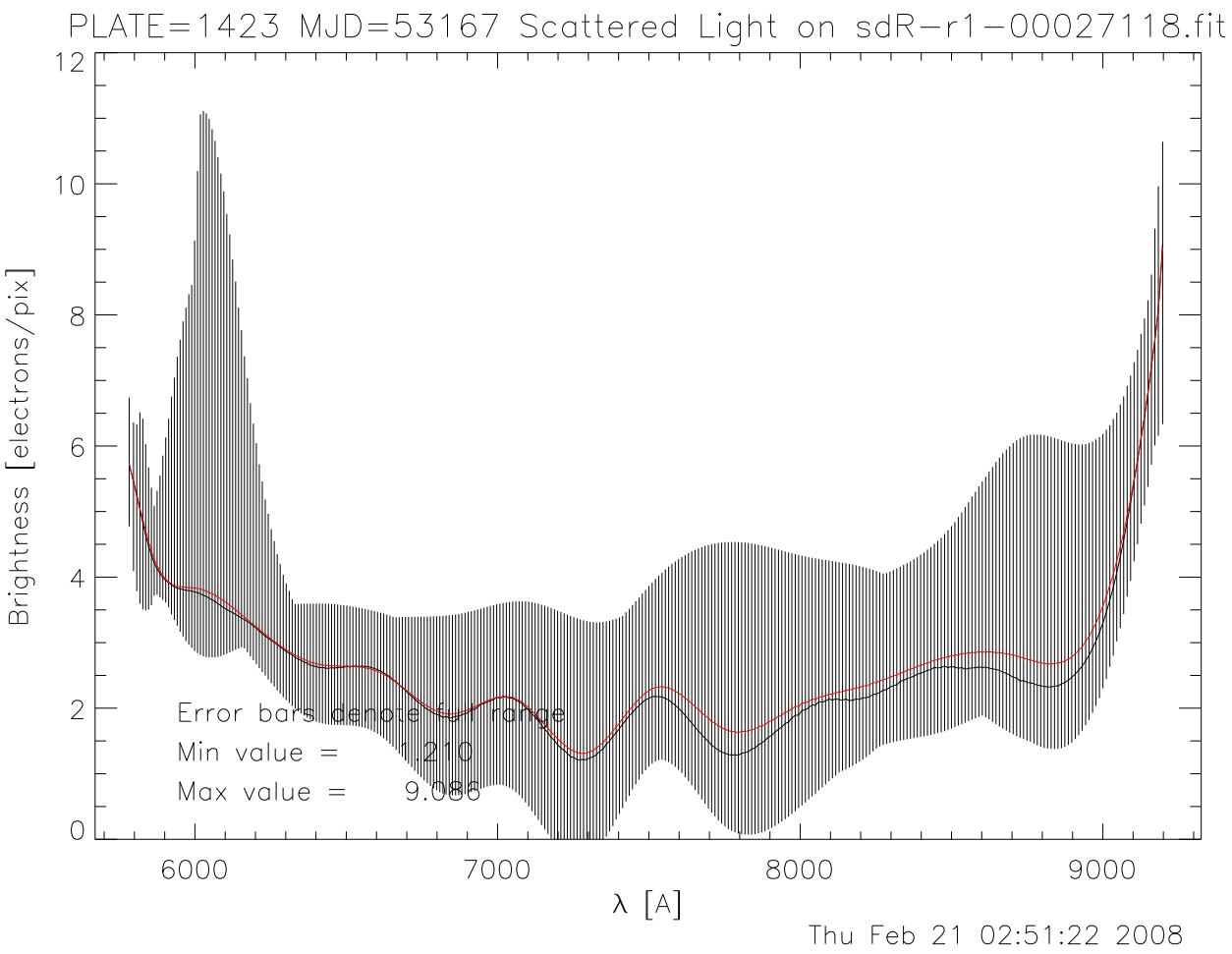

PLATE=1423 MJD=53167 sdR-r1-00027117.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

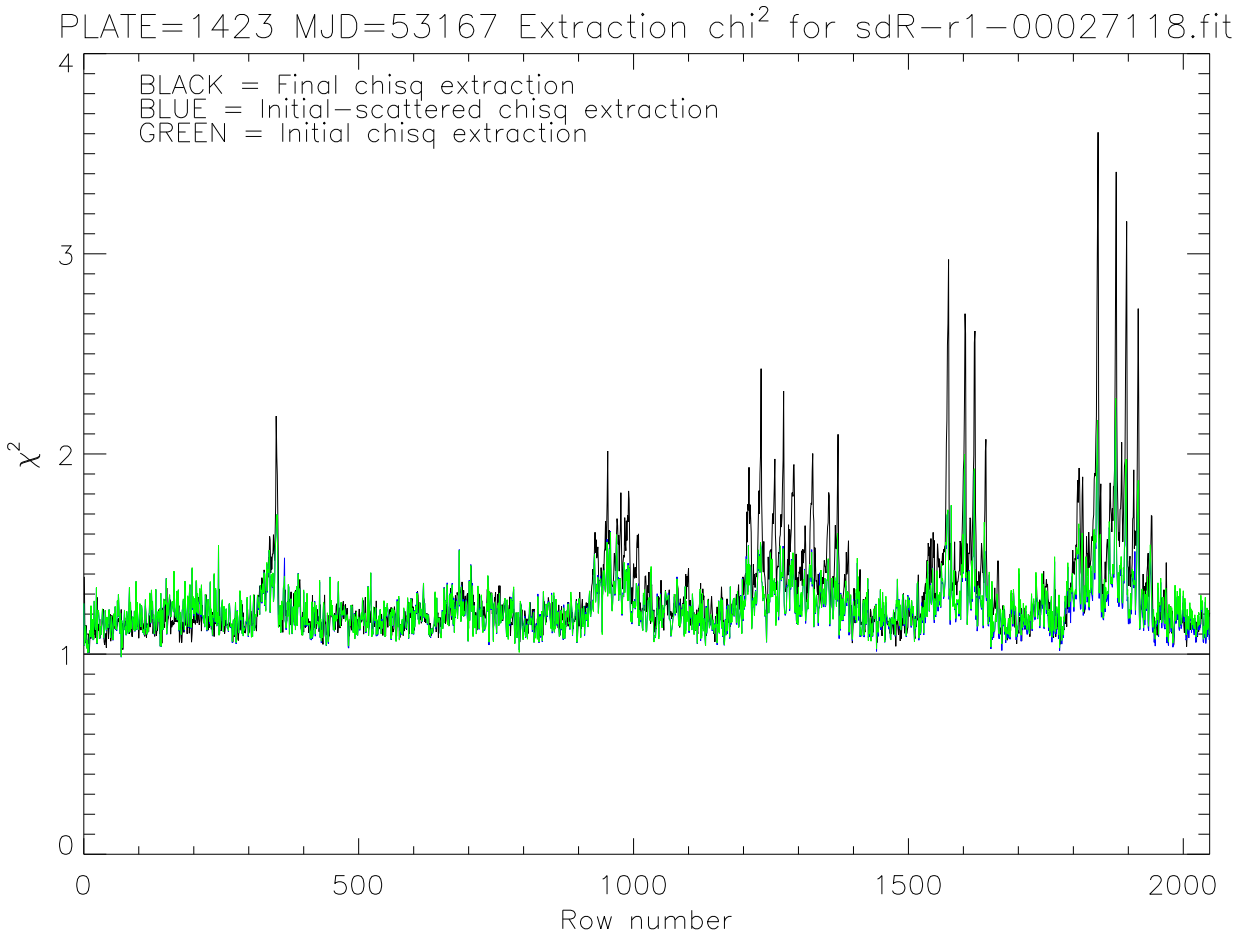

PLATE=1423 MJD=53167 Fiber−Flats for sdR−r1−00027115.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.216
Max value = 1.292
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 21 02:47:30 2008

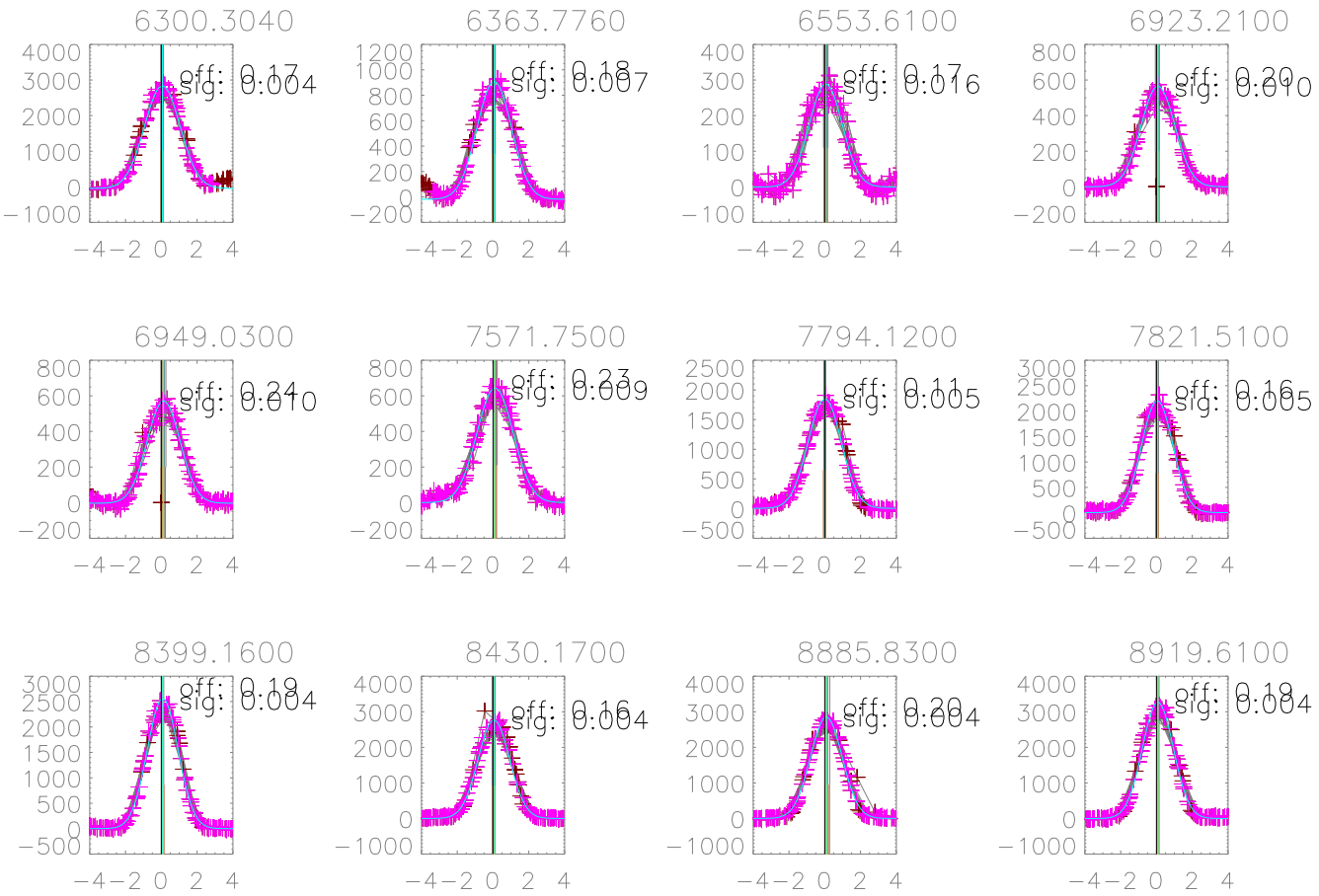

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-r1-00027118.fi
25.5
25.5
25.5
18.2
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

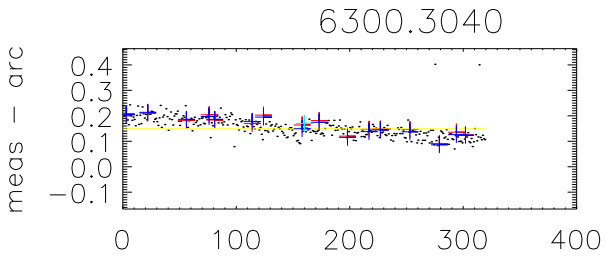

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-r1-00027118.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.892
Max value = 30.129
Thu Feb 21 02:48:17 2008

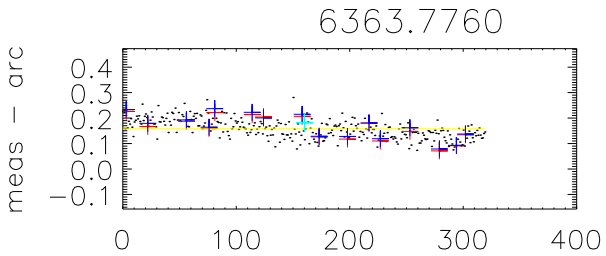

PLATE=1423 MJD=53167 Scattered Light on sdR-r1-00027118.fit
6.91
4.36
1.82
0
Y [pix]
X [pix]
0
500
1000
1500
2000

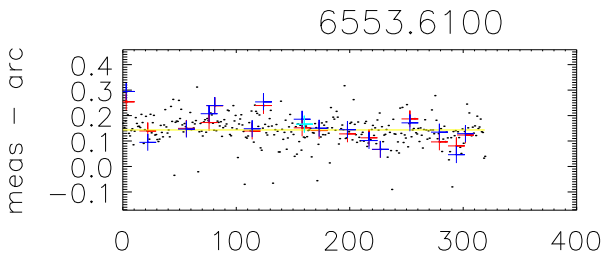

PLATE=1423 MJD=53167 Scattered Light on sdR-r1-00027118.fit
Brightness [electrons/pix]
λ [A]
Error bars denote 1-σ range
Min value = 1.210
Max value = 9.086
Thu Feb 21 02:51:22 2008

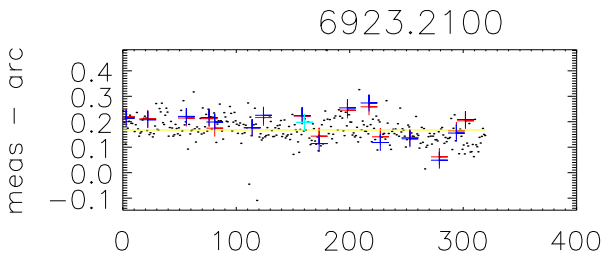

PLATE=1423 MJD=53167 Extraction chi^2 for sdR−r1−00027118.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

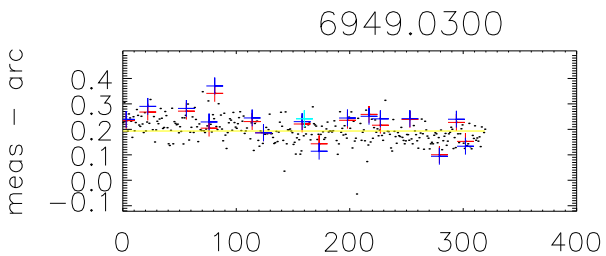

6300.3040
off: 0.17
sig: 0.004
6363.7760
off: 0.18
sig: 0.007
6553.6100
off: 0.17
sig: 0.016
6923.2100
off: 0.20
sig: 0.010
6949.0300
off: 0.24
sig: 0.010
7571.7500
off: 0.23
sig: 0.009
7794.1200
off: 0.11
sig: 0.005
7821.5100
off: 0.16
sig: 0.005
8399.1600
off: 0.19
sig: 0.004
8430.1700
off: 0.16
sig: 0.004
8885.8300
off: 0.20
sig: 0.004
8919.6100
off: 0.18
sig: 0.004

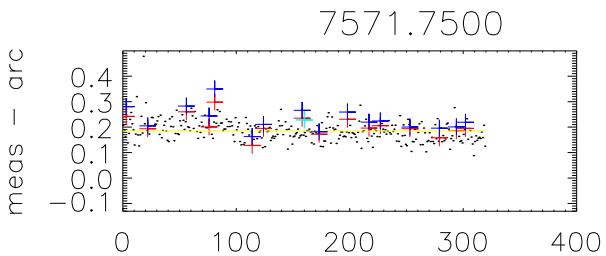

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

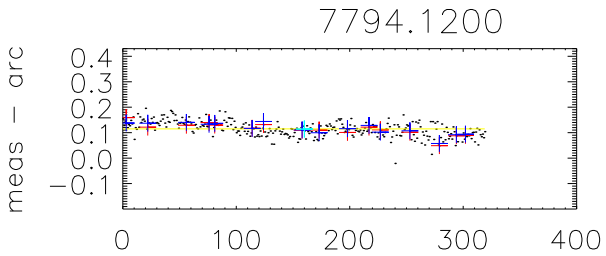

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

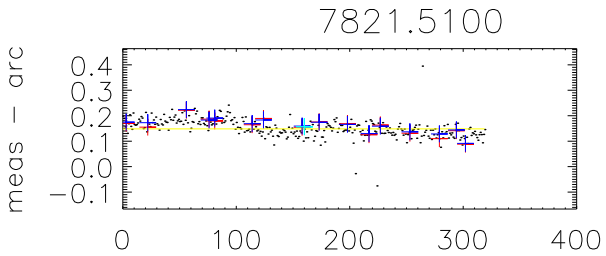

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

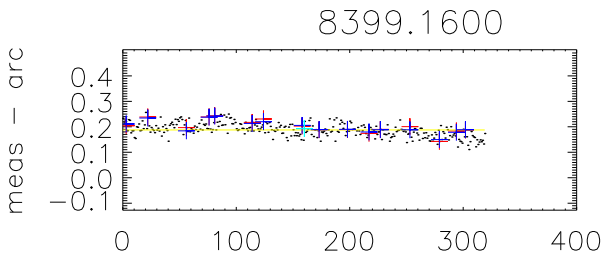

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

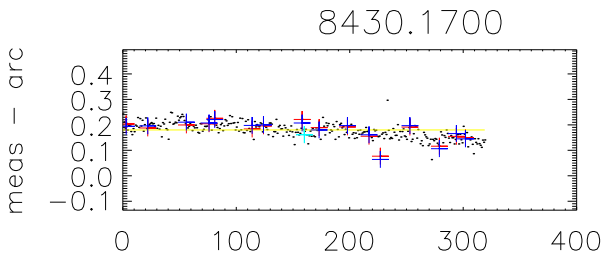

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

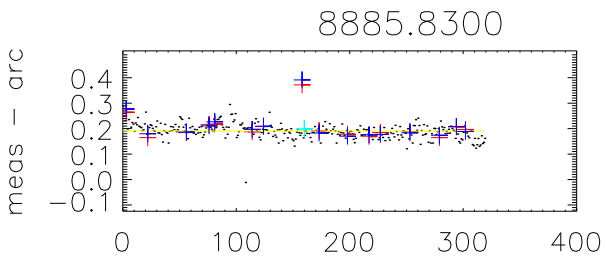

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

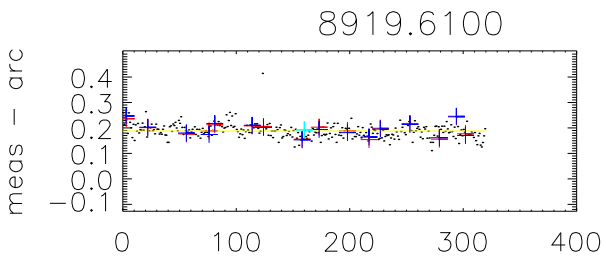

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

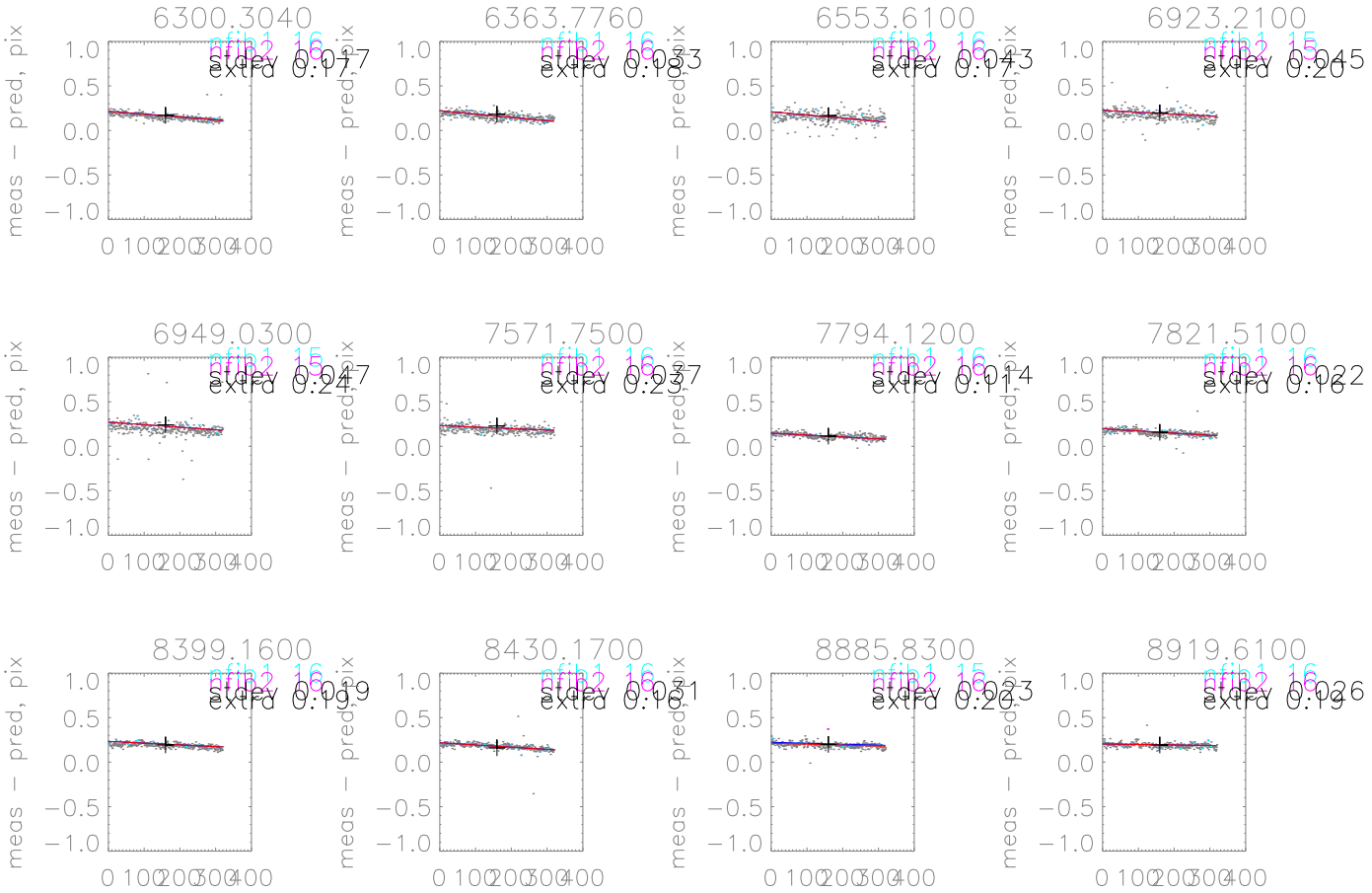

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

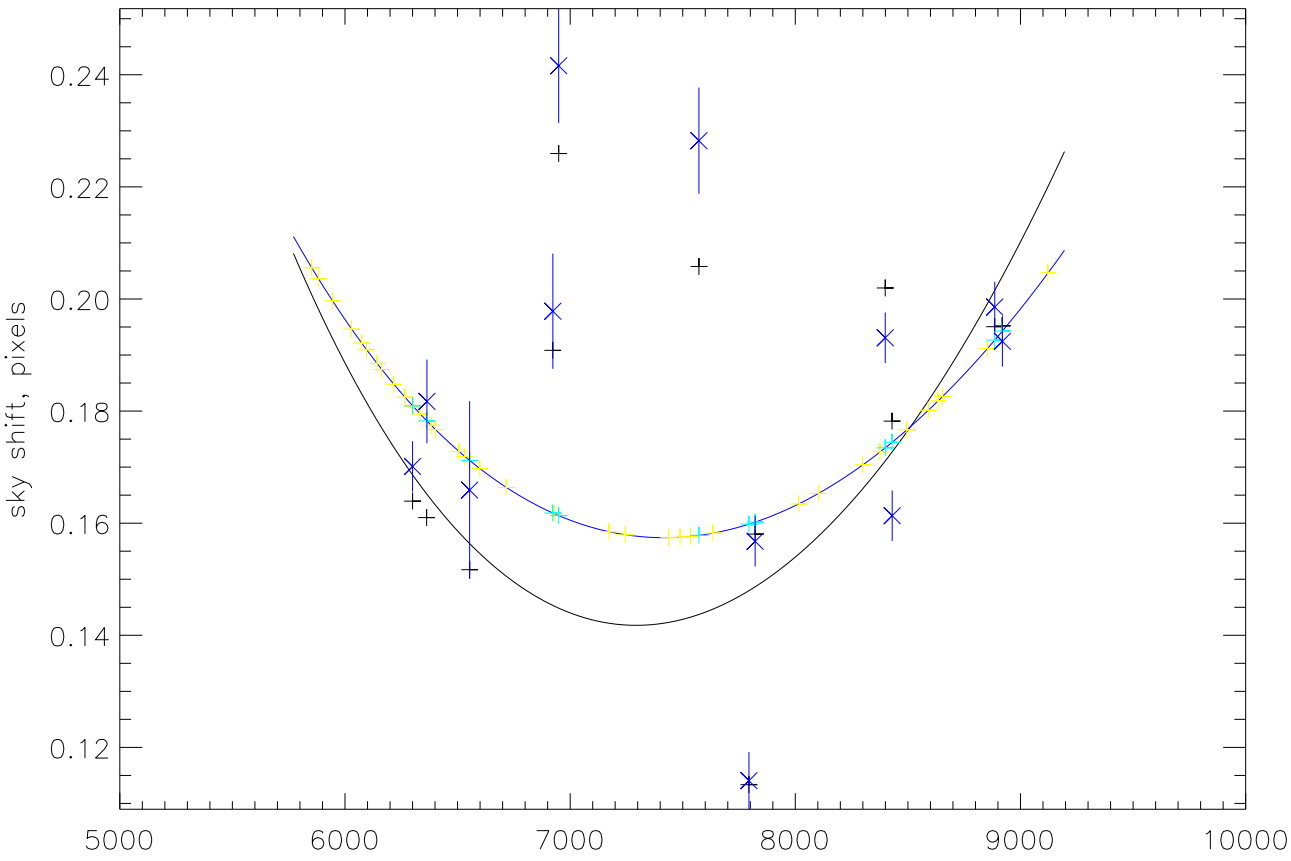

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

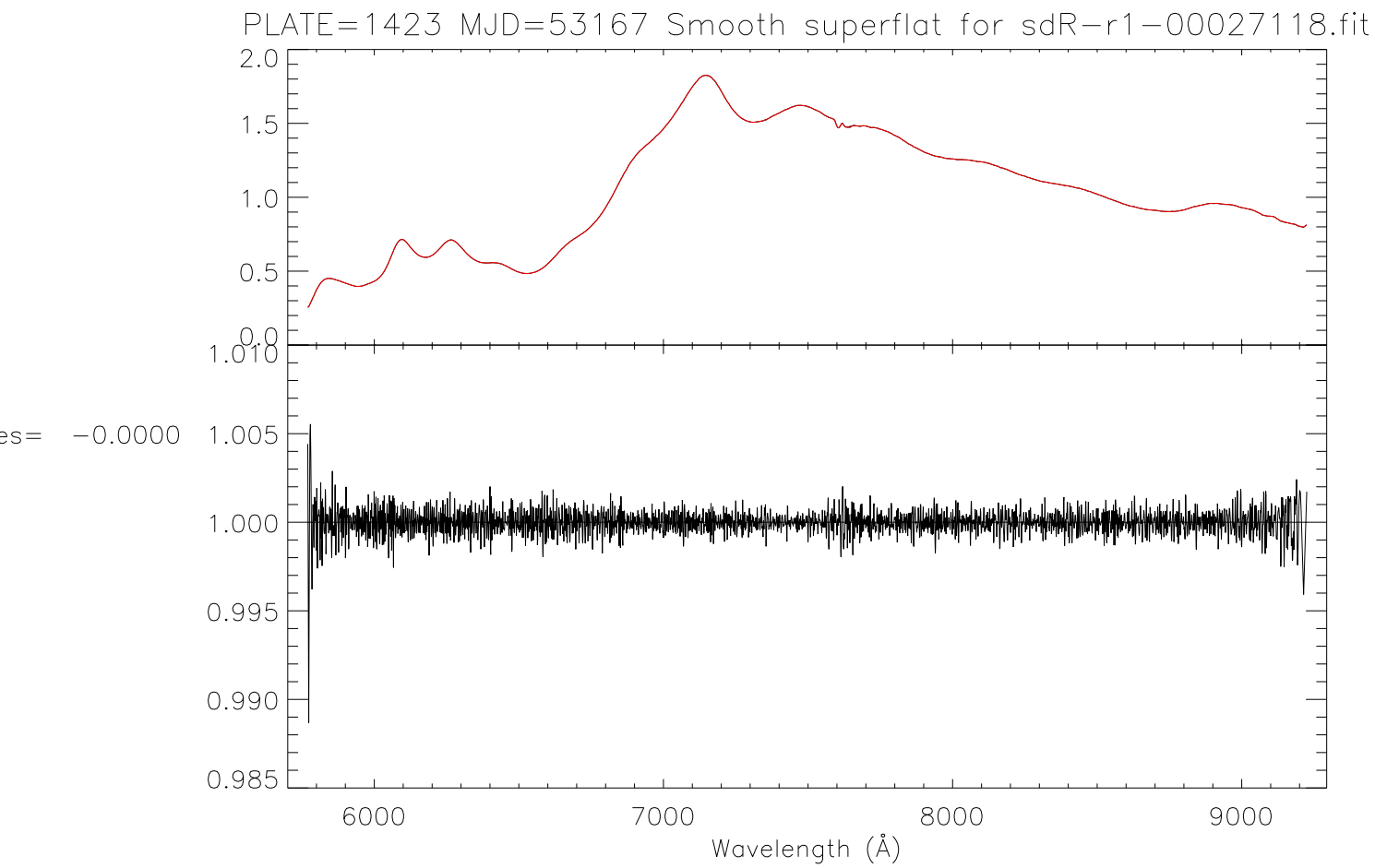

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

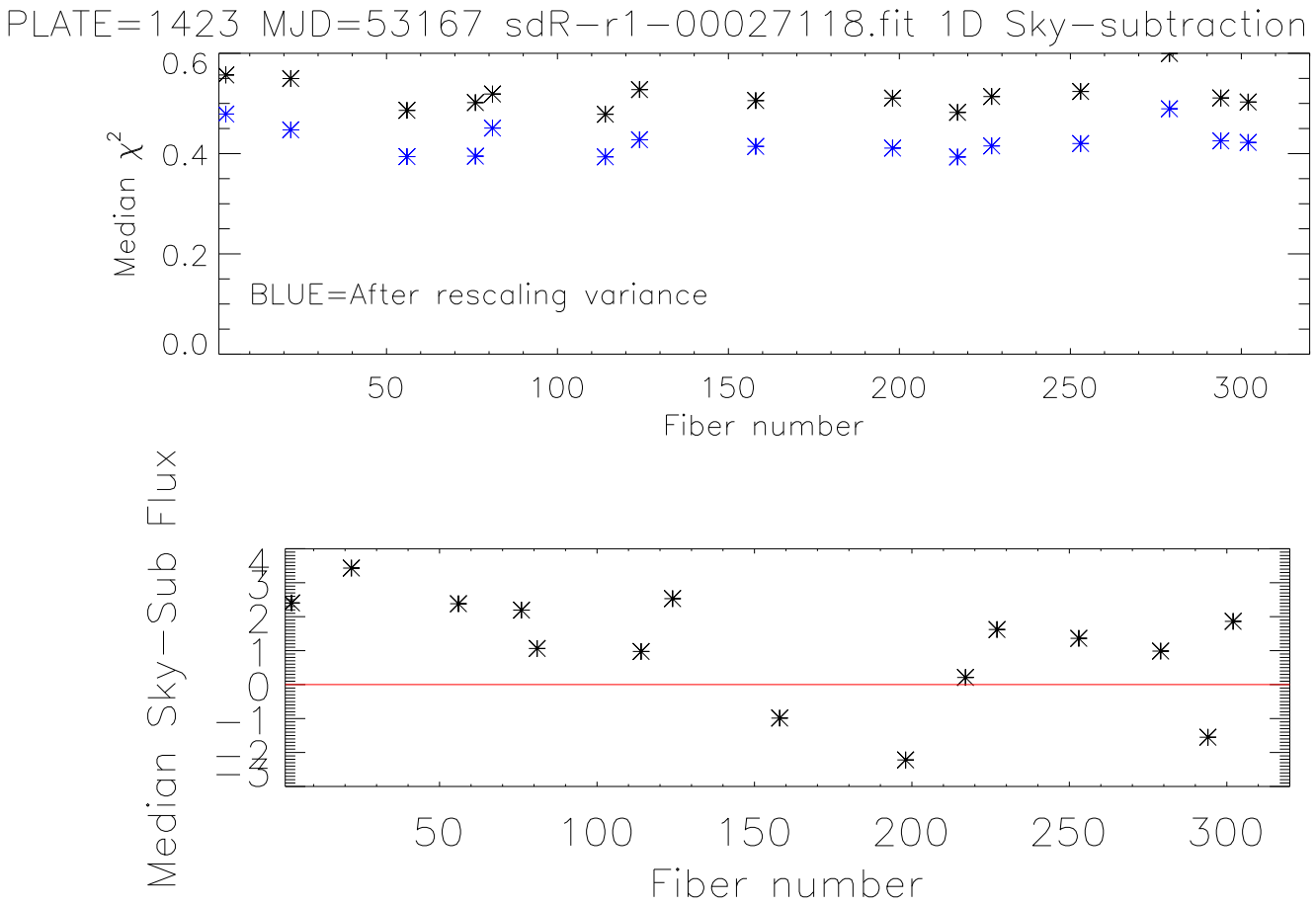

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

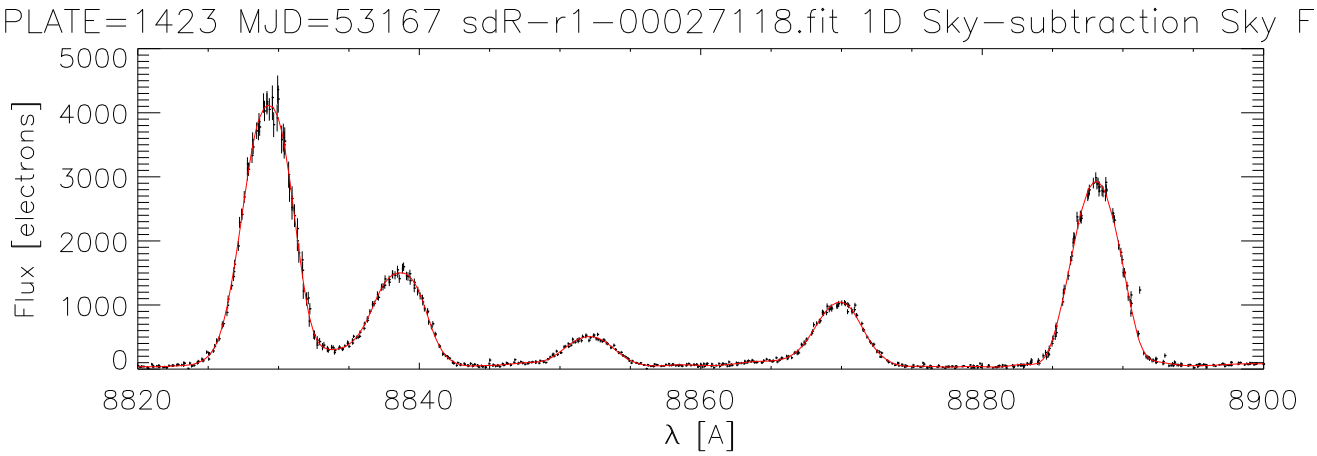

6300.3040
stdev 0.017
extra 0.017
6363.7760
stdev 0.033
extra 0.018
6553.6100
stdev 0.043
extra 0.017
6923.2100
stdev 0.045
extra 0.020
6949.0300
stdev 0.047
extra 0.024
7571.7500
stdev 0.037
extra 0.023
7794.1200
stdev 0.014
extra 0.011
7821.5100
stdev 0.022
extra 0.016
8399.1600
stdev 0.049
extra 0.019
8430.1700
stdev 0.031
extra 0.016
8885.8300
stdev 0.023
extra 0.020
8919.6100
stdev 0.026
extra 0.019
meas − pred, pix
mfib1 16
mfib2 15

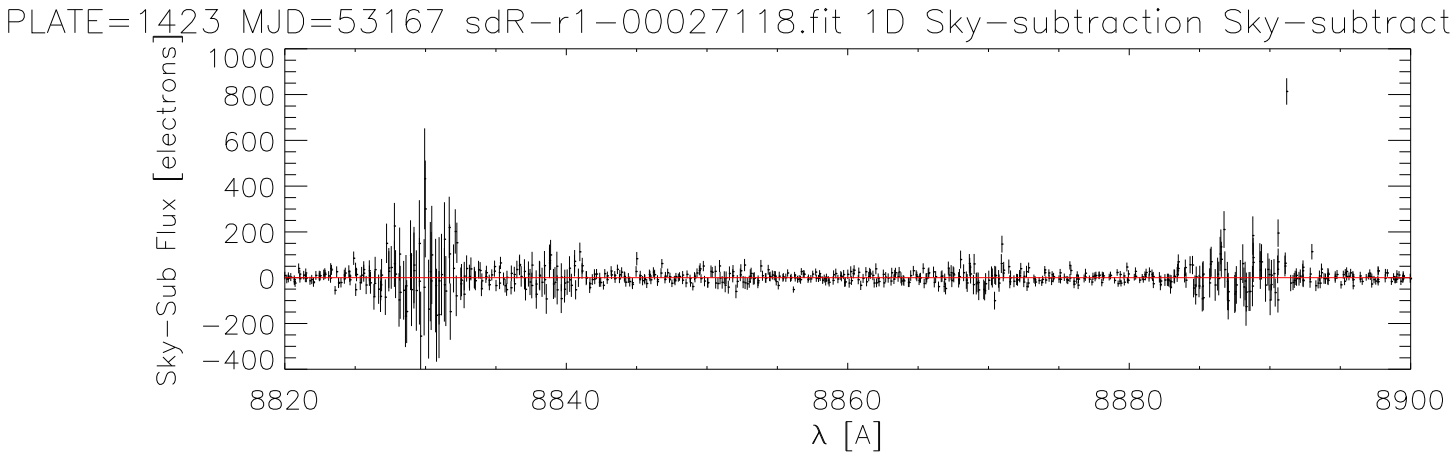

sky shift, pixels
0.24
0.22
0.20
0.18
0.16
0.14
0.12
5000
6000
7000
8000
9000
10000

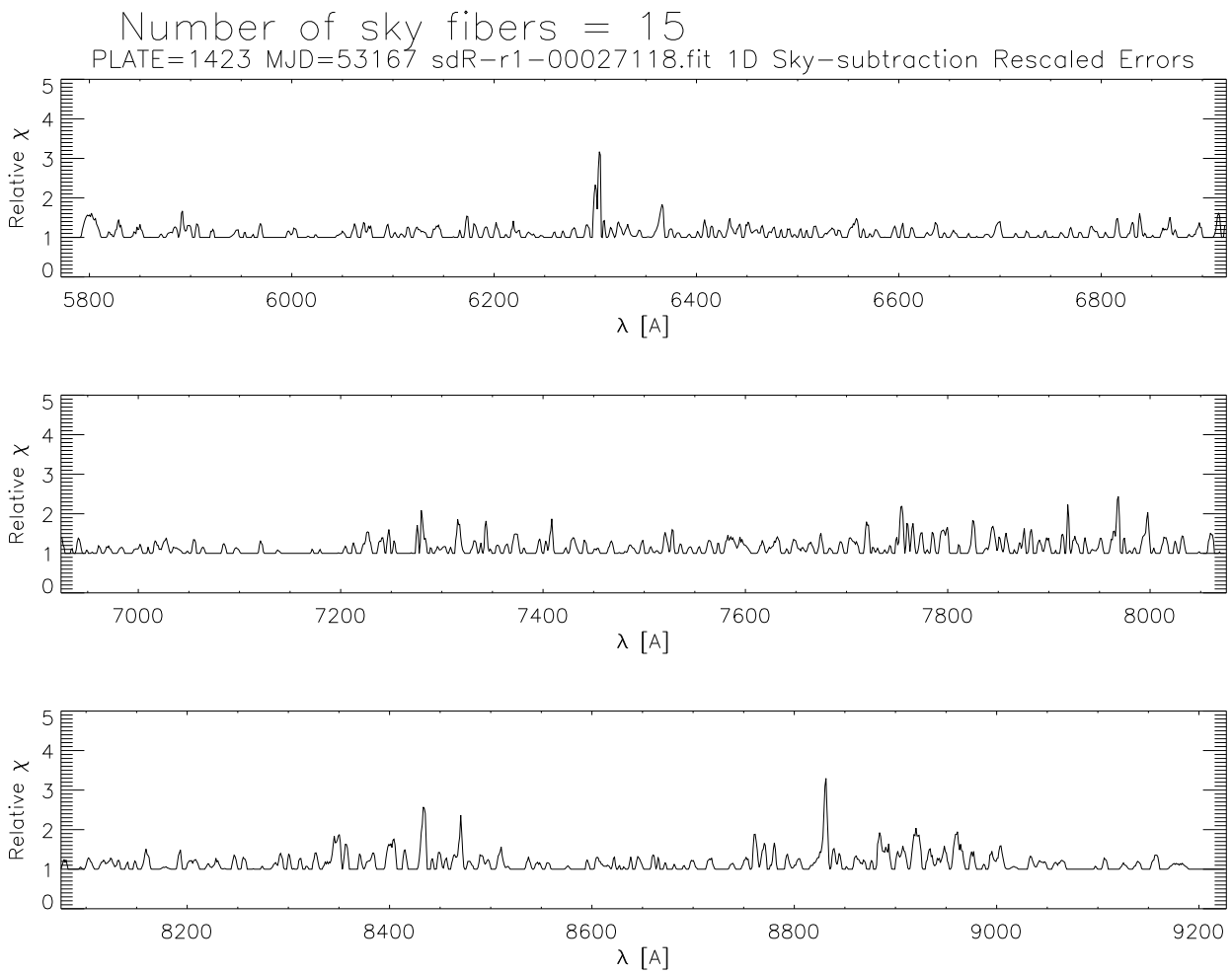

PLATE=1423 MJD=53167 Smooth superflat for sdR-r1-00027118.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

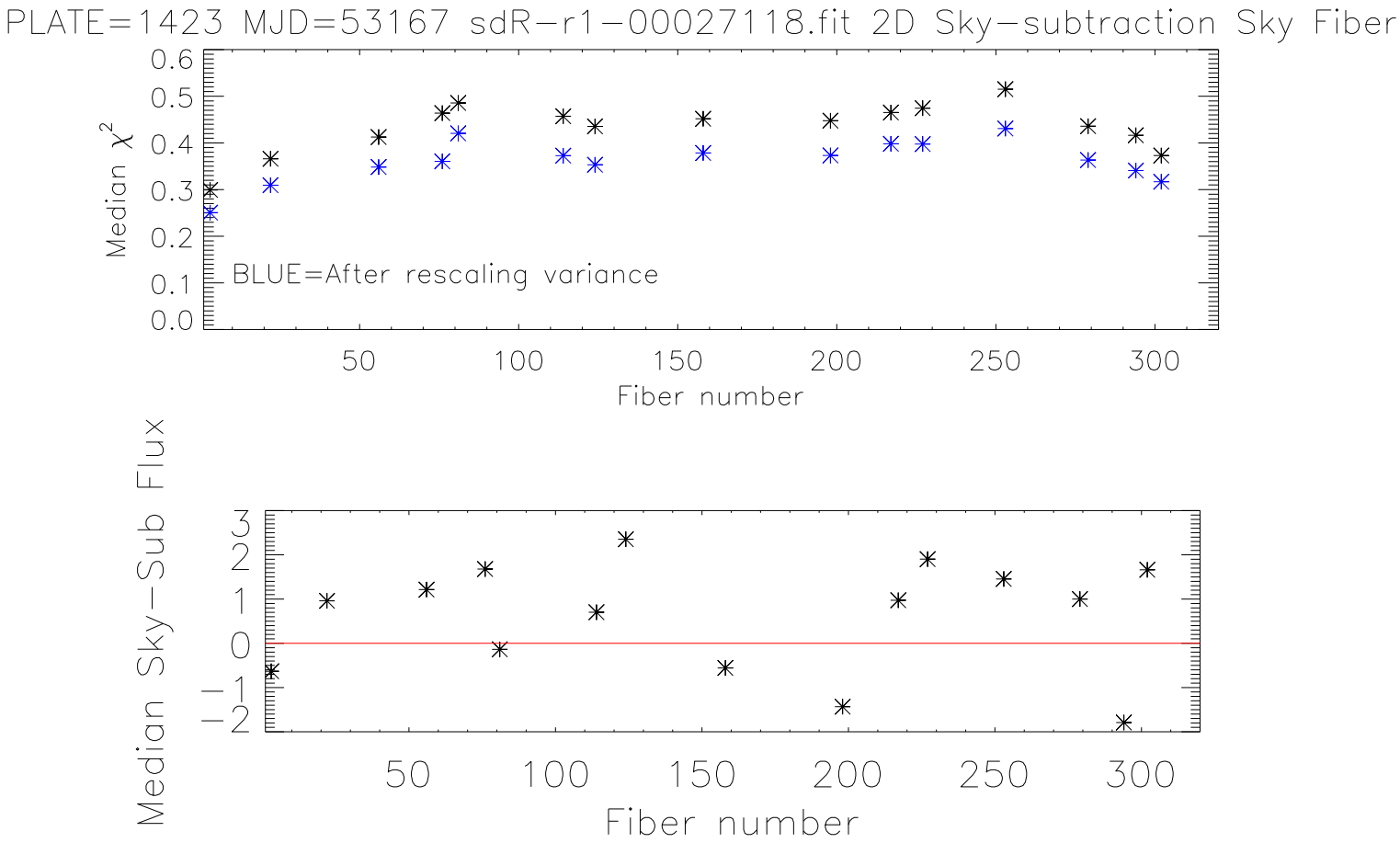

PLATE=1423 MJD=53167 sdR-r1-00027118.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

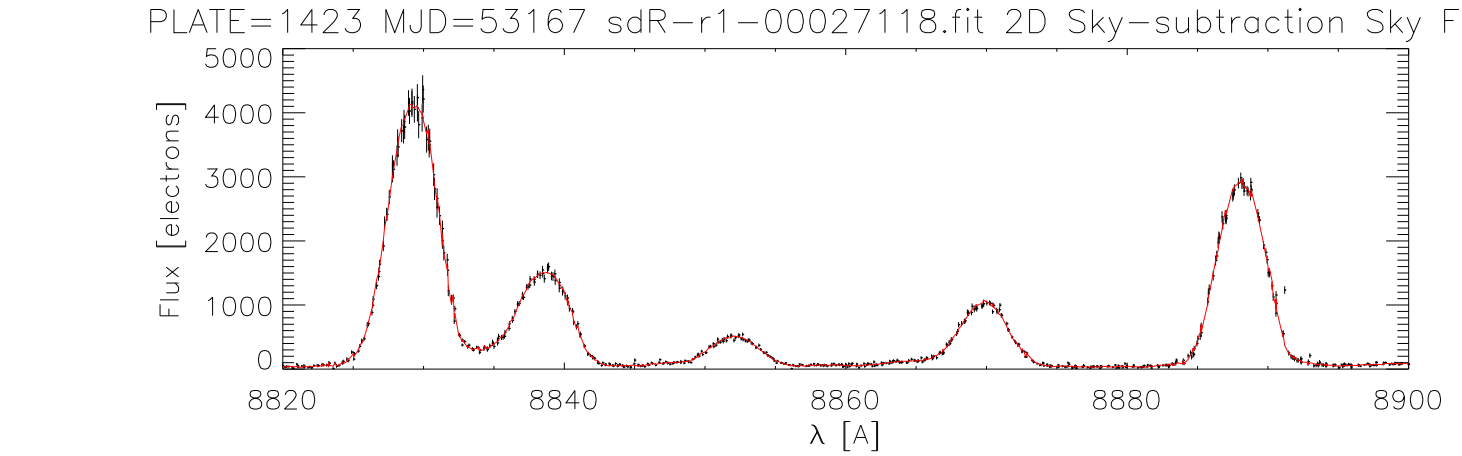
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

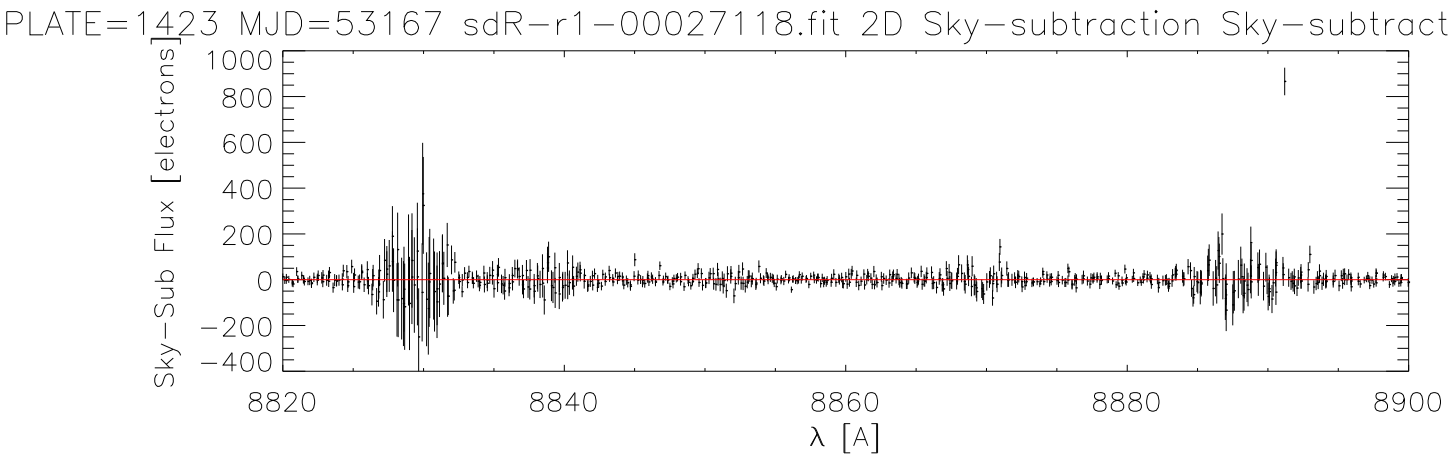

PLATE=1423 MJD=53167 sdR-r1-00027118.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

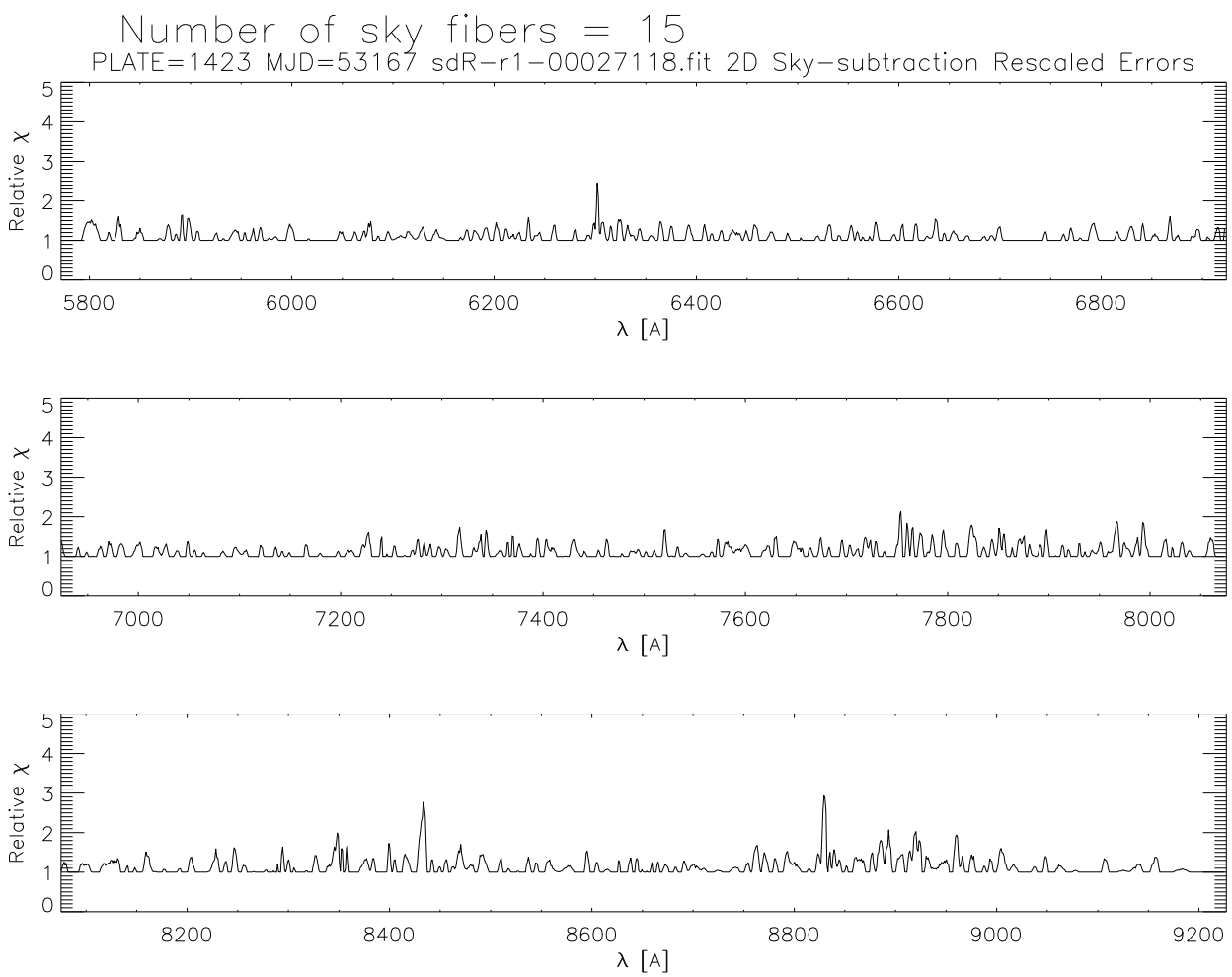

PLATE=1423 MJD=53167 sdR-r1-00027118.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

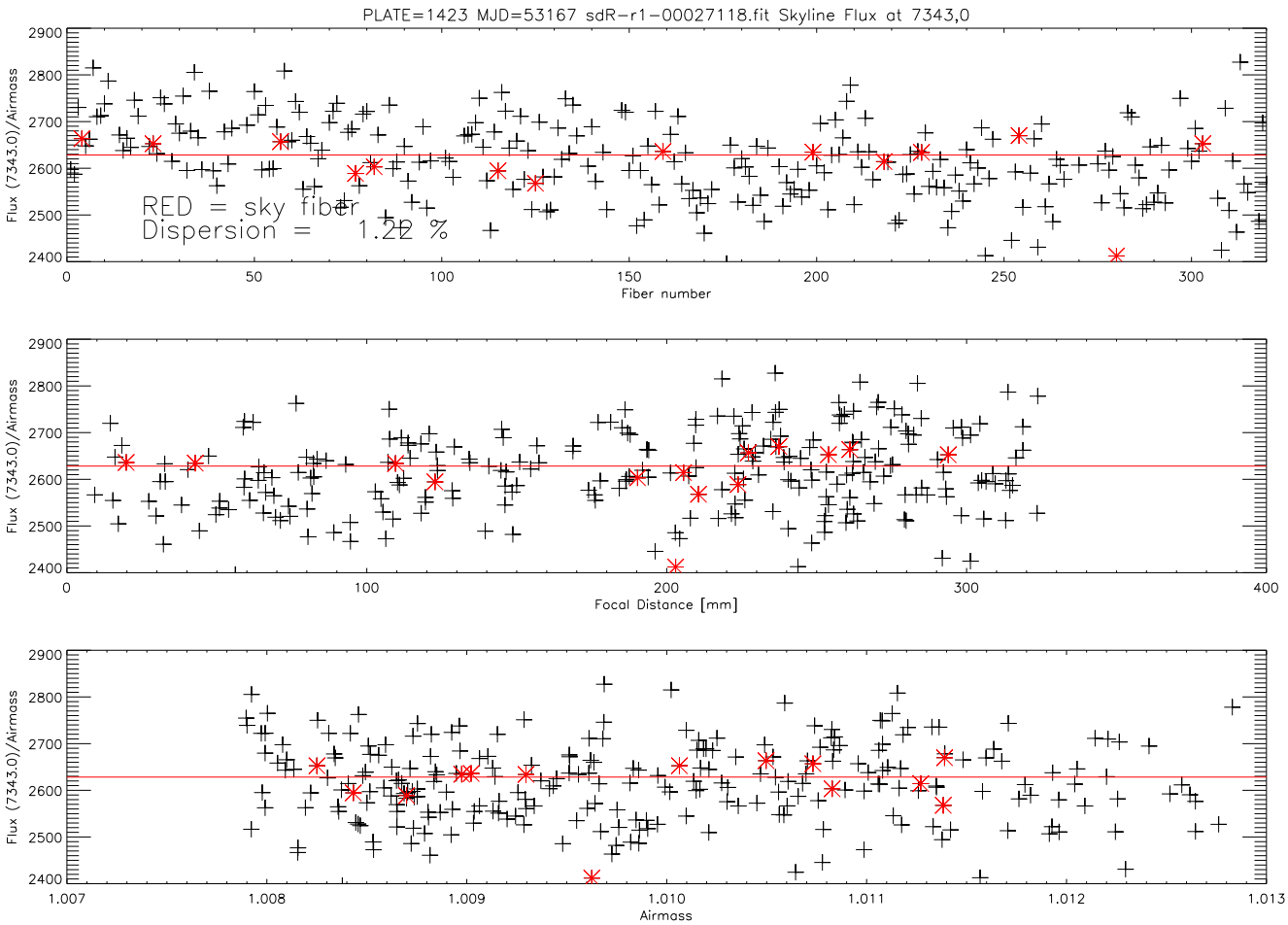

Number of sky fibers = 15
PLATE=1423 MJD=53167 sdR-r1-00027118.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

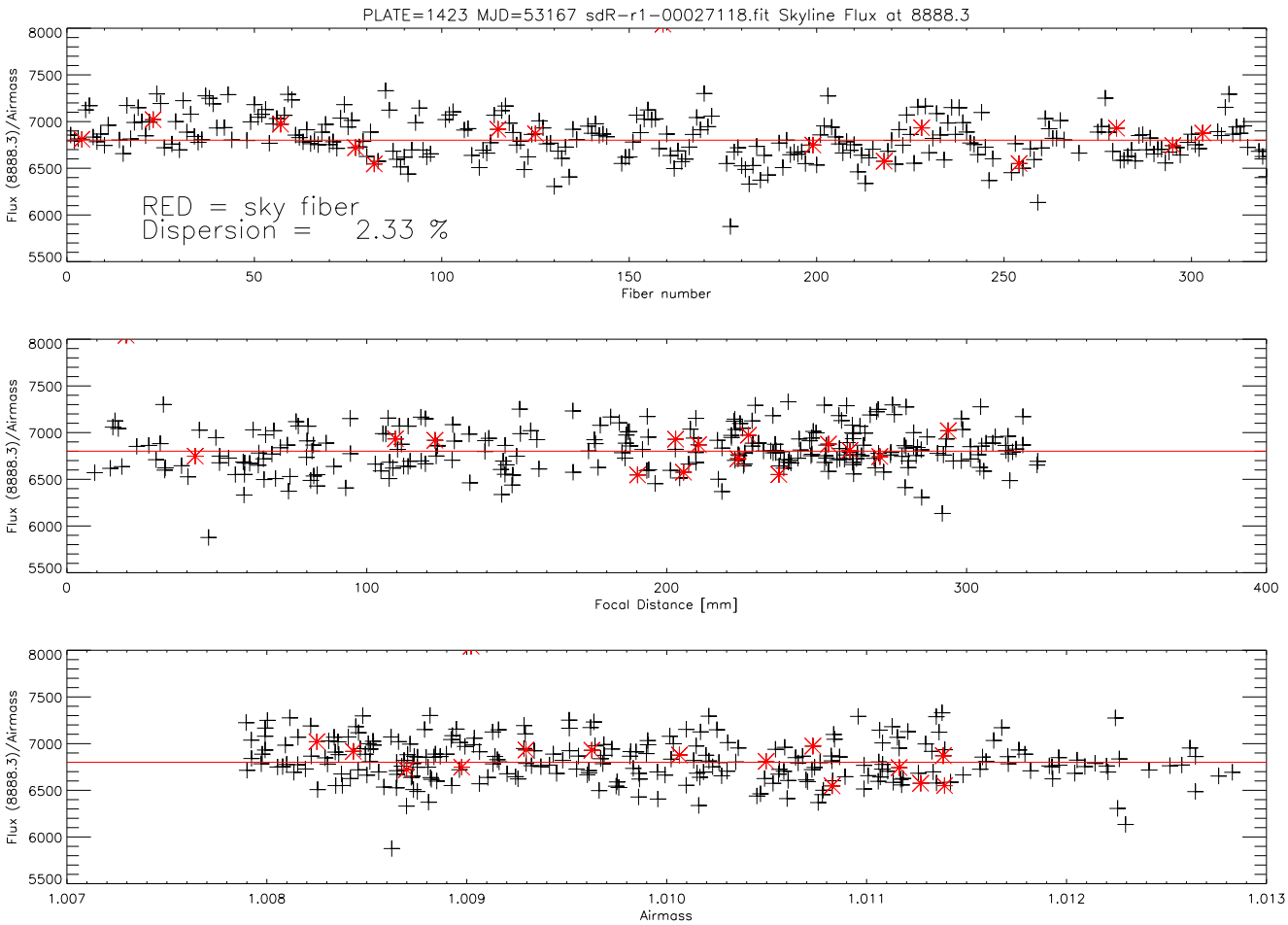

PLATE=1423 MJD=53167 sdR-r1-00027118.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

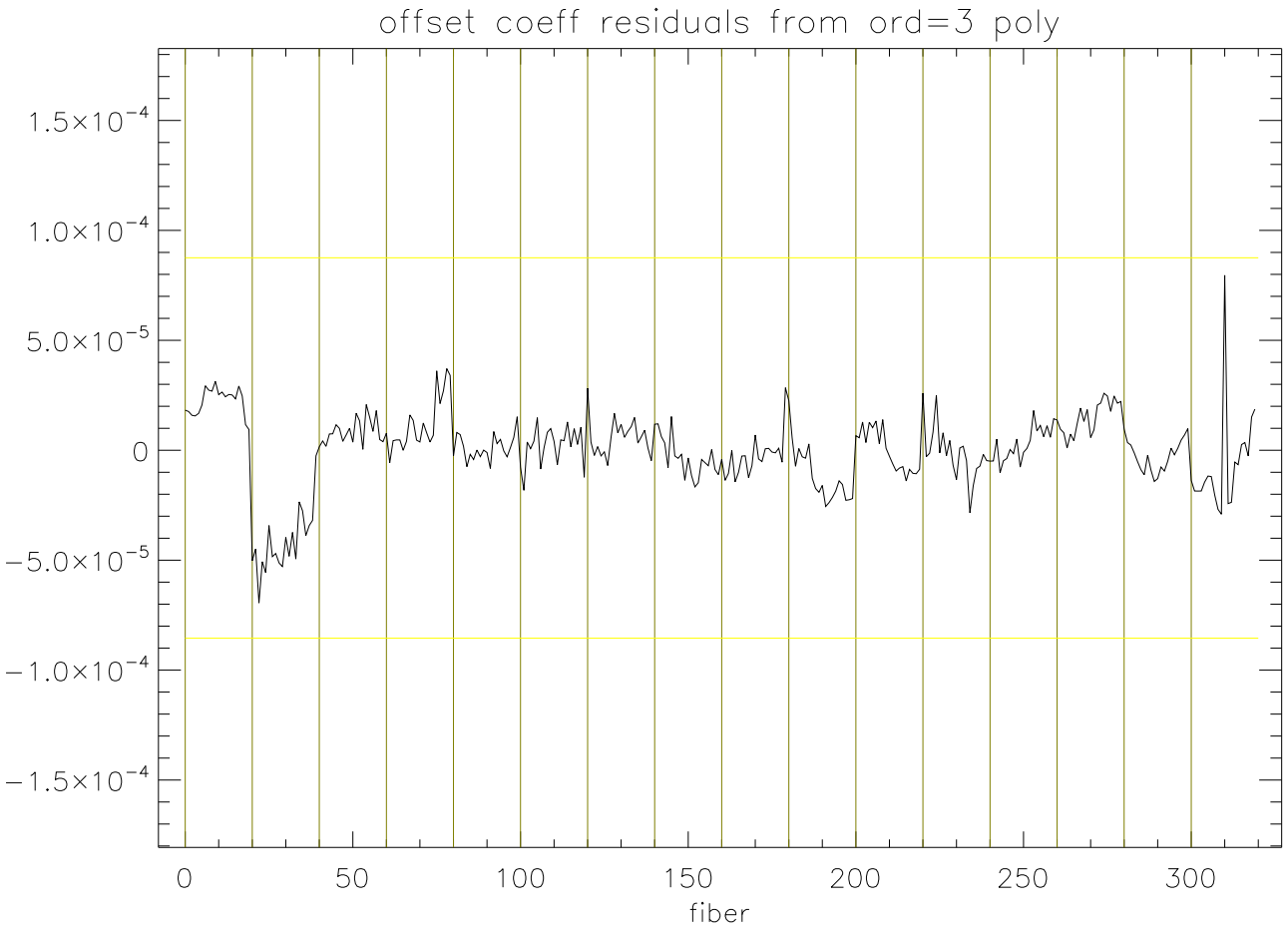

PLATE=1423 MJD=53167 sdR-r1-00027118.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

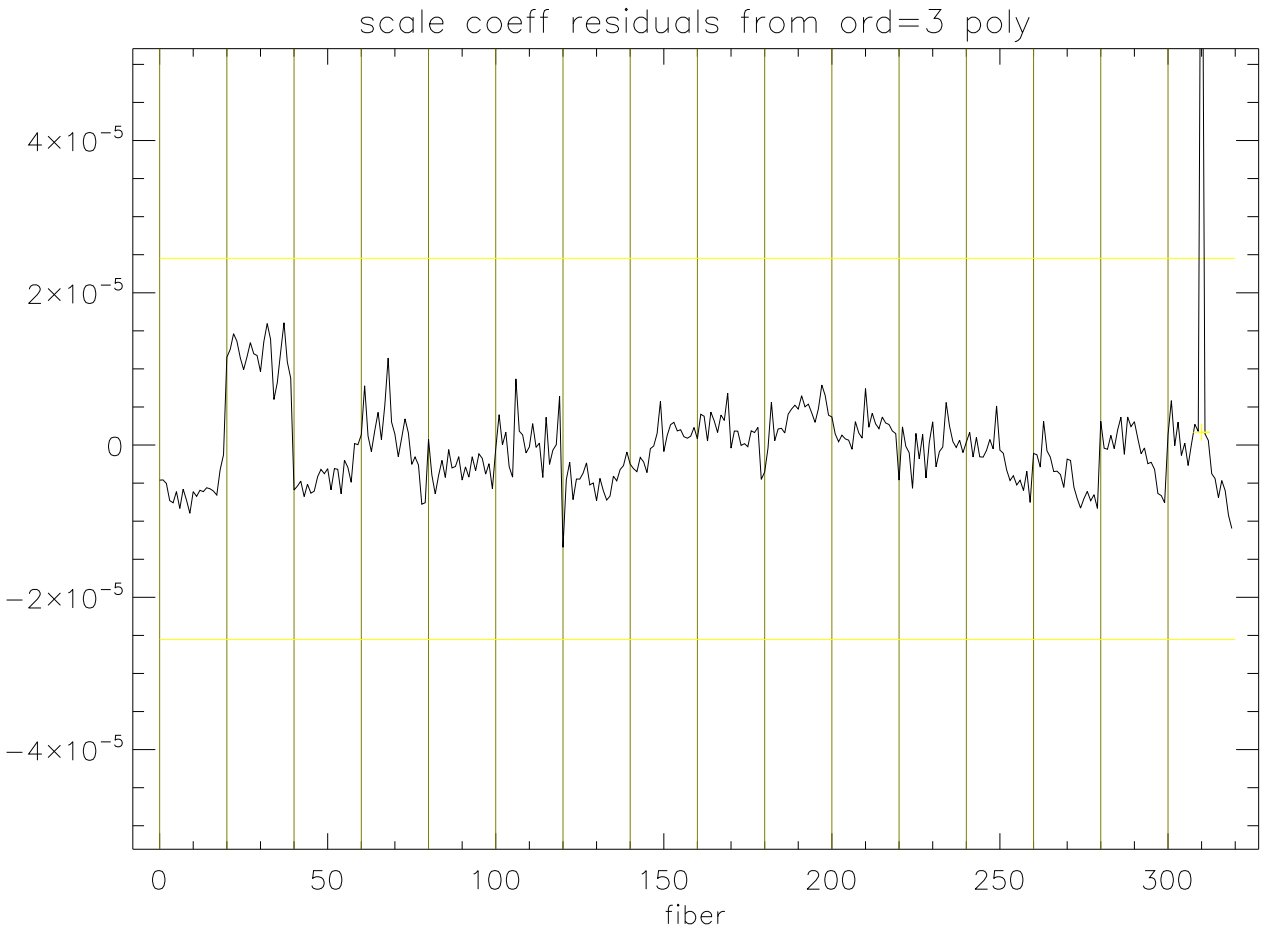

PLATE=1423 MJD=53167 sdR-r1-00027118.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

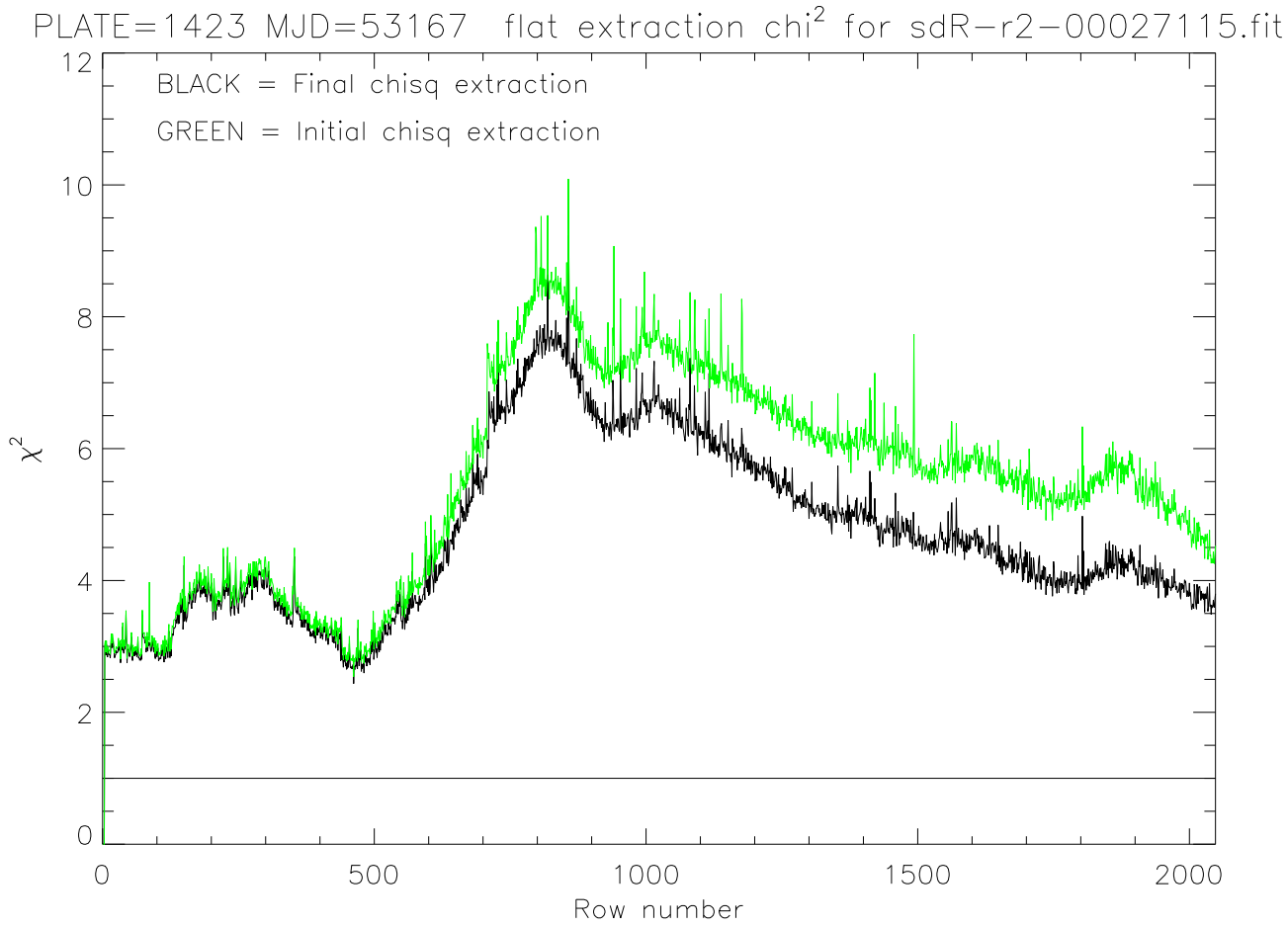

Number of sky fibers = 15
PLATE=1423 MJD=53167 sdR-r1-00027118.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

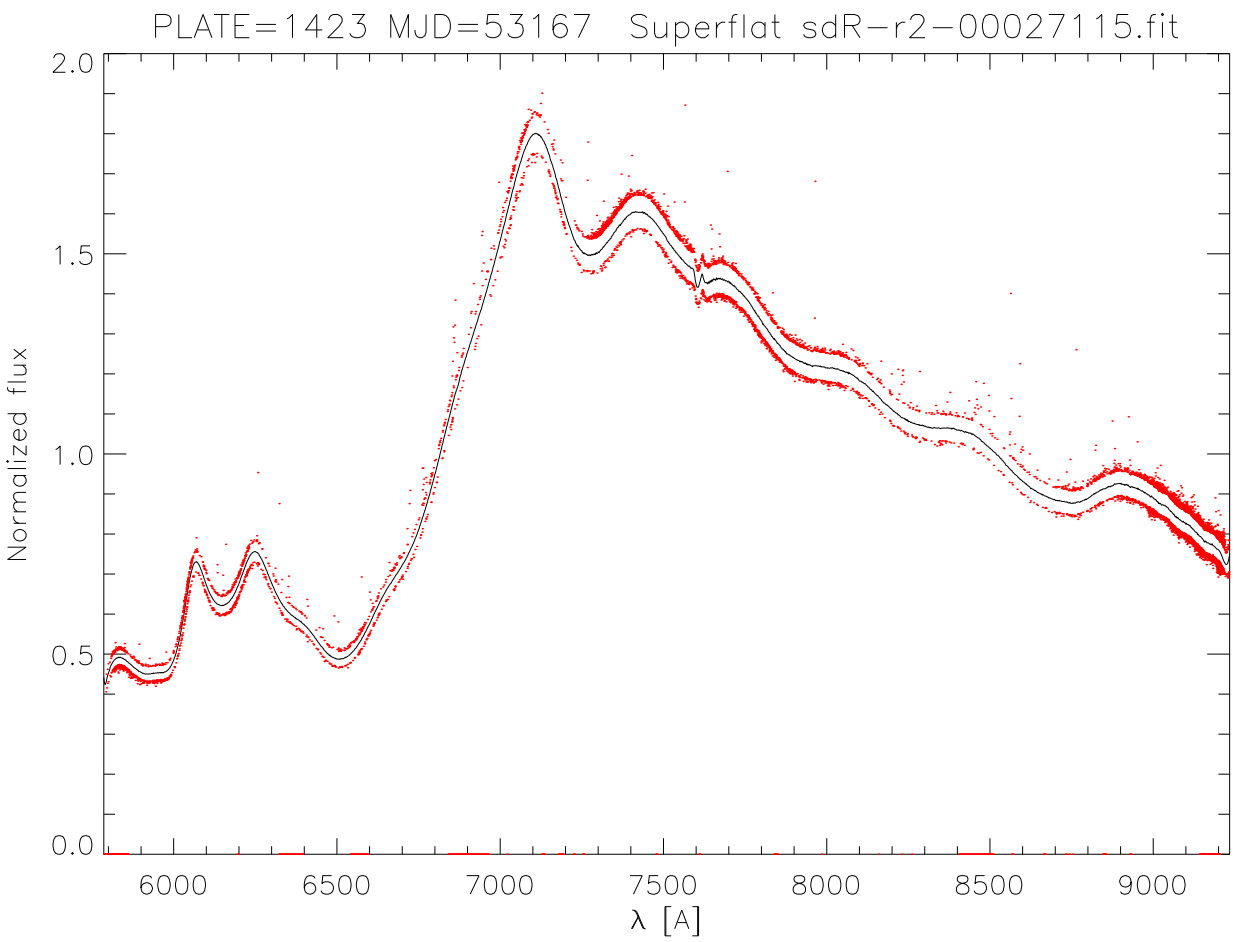

PLATE=1423 MJD=53167 sdR-r1-00027118.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.22 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

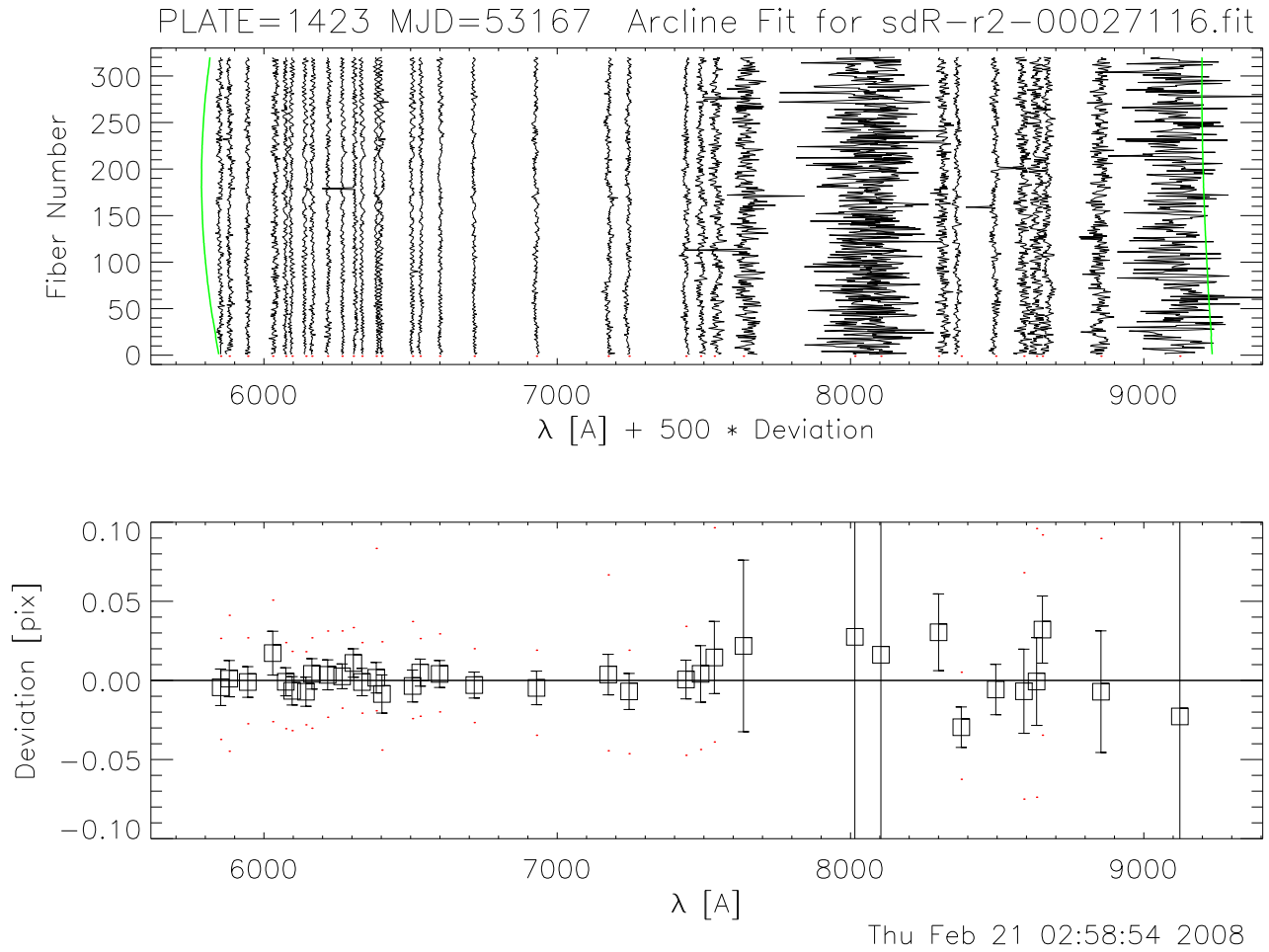

PLATE=1423 MJD=53167 sdR-r1-00027118.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.33 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

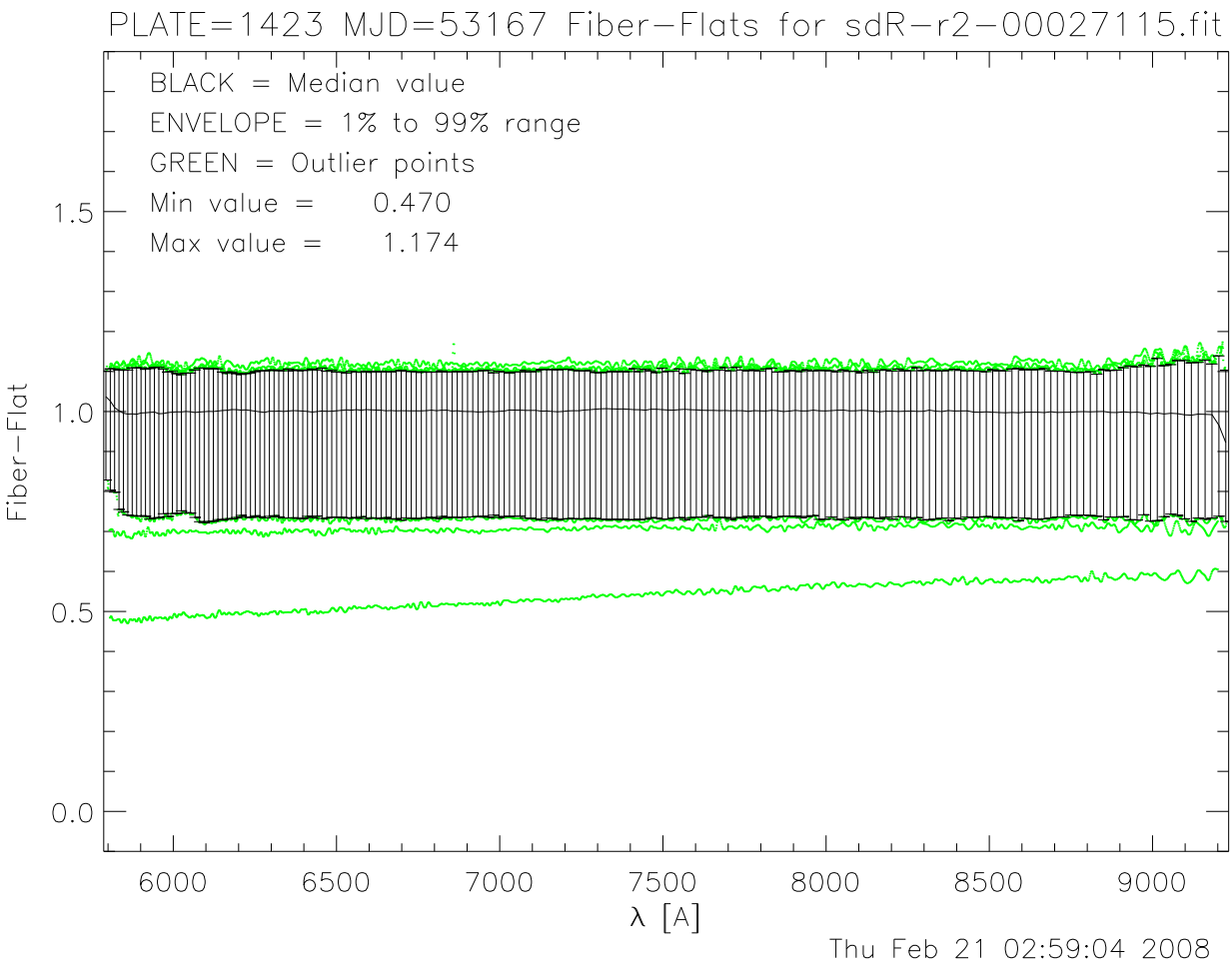

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

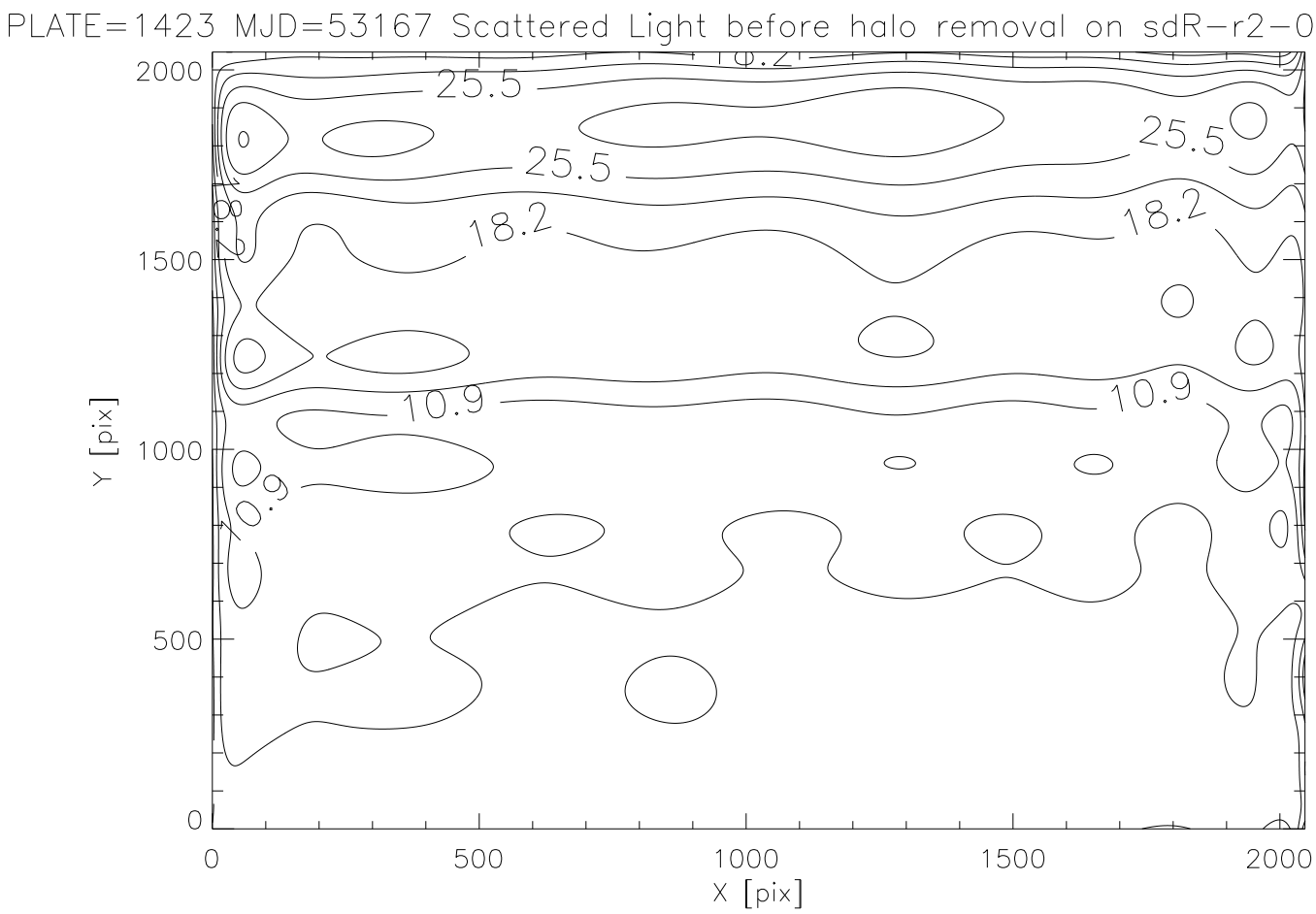

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

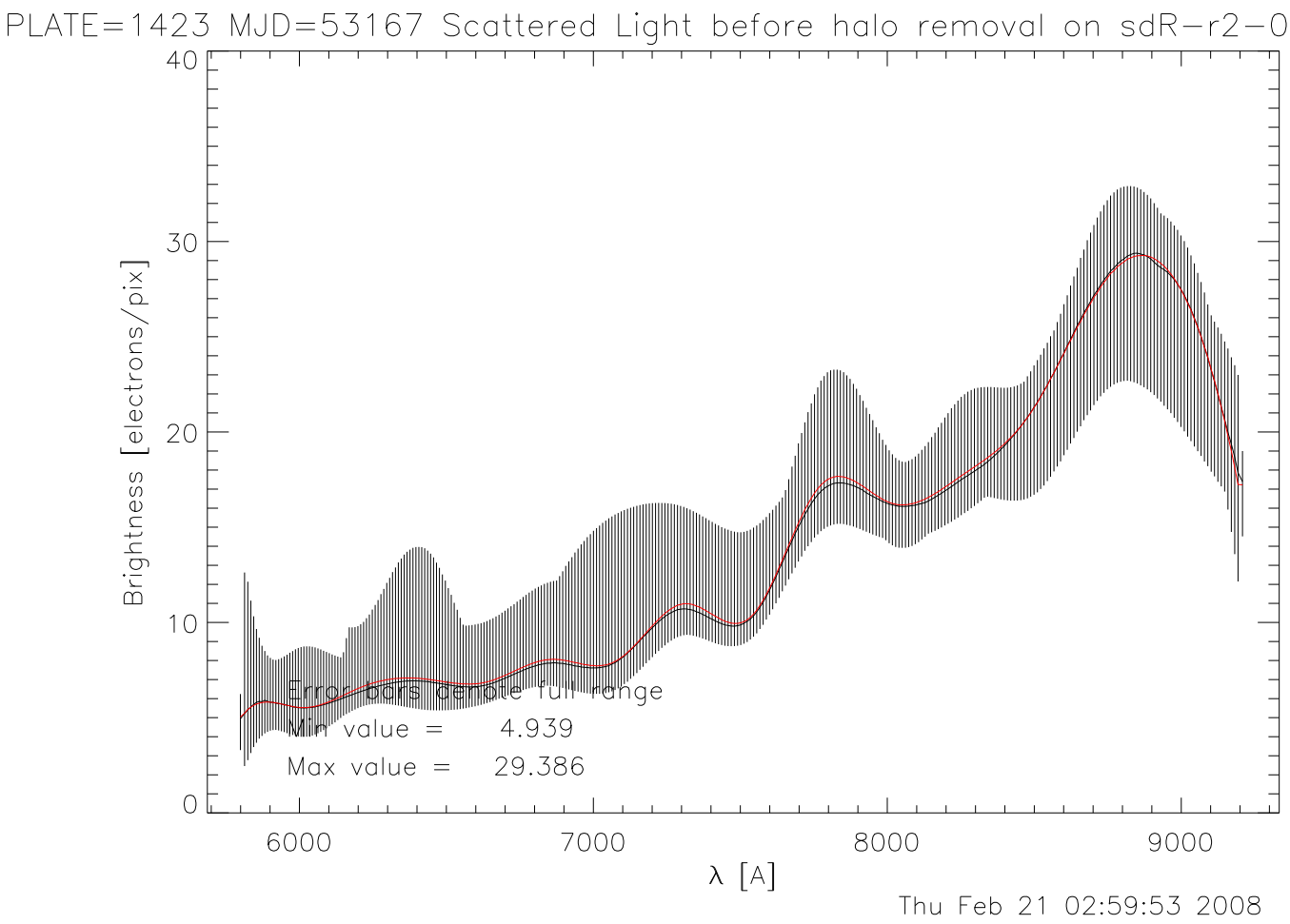

PLATE=1423 MJD=53167 flat extraction chi^2 for sdR−r2−00027115.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

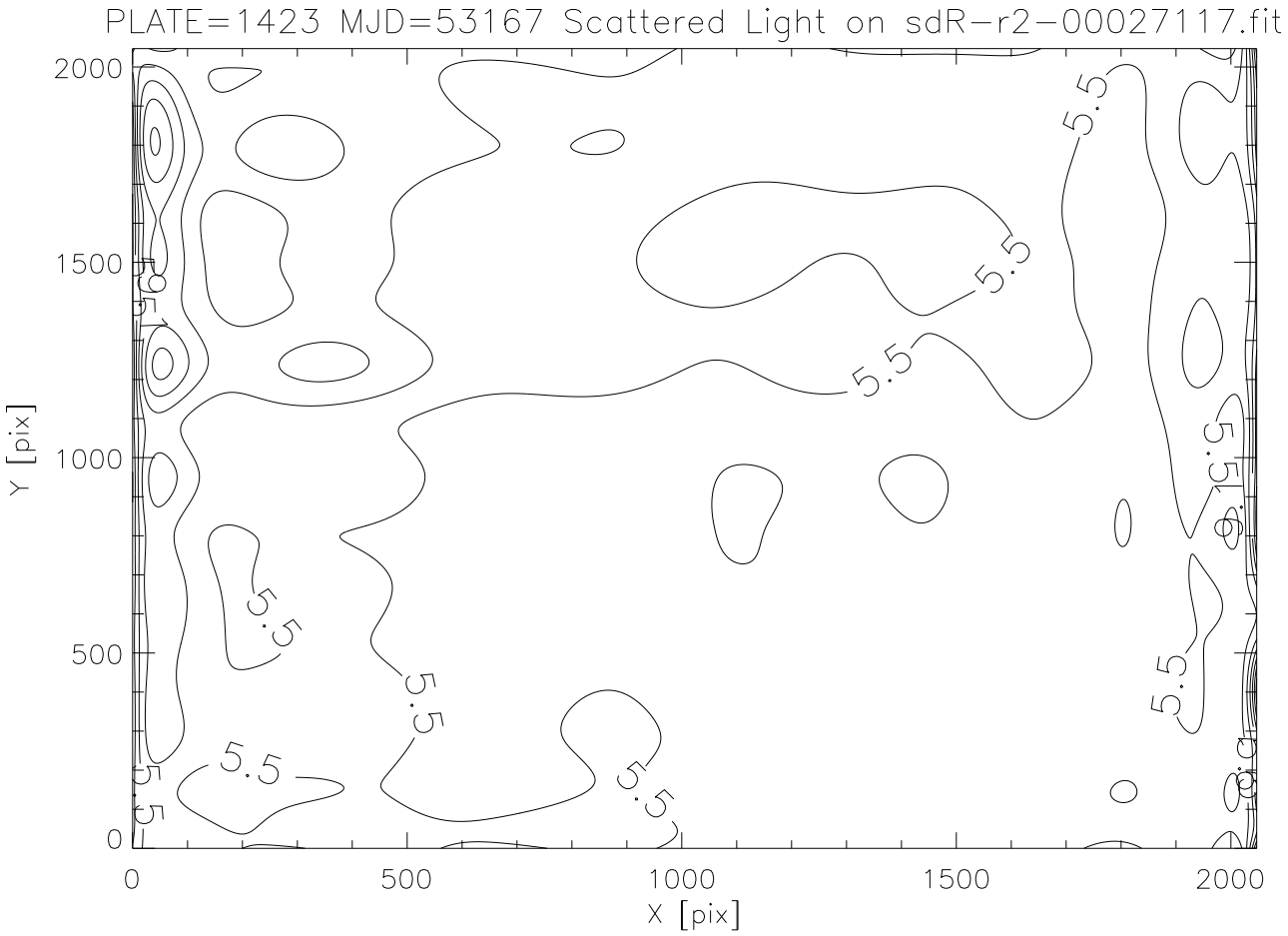

PLATE=1423 MJD=53167 Superflat sdR-r2-00027115.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

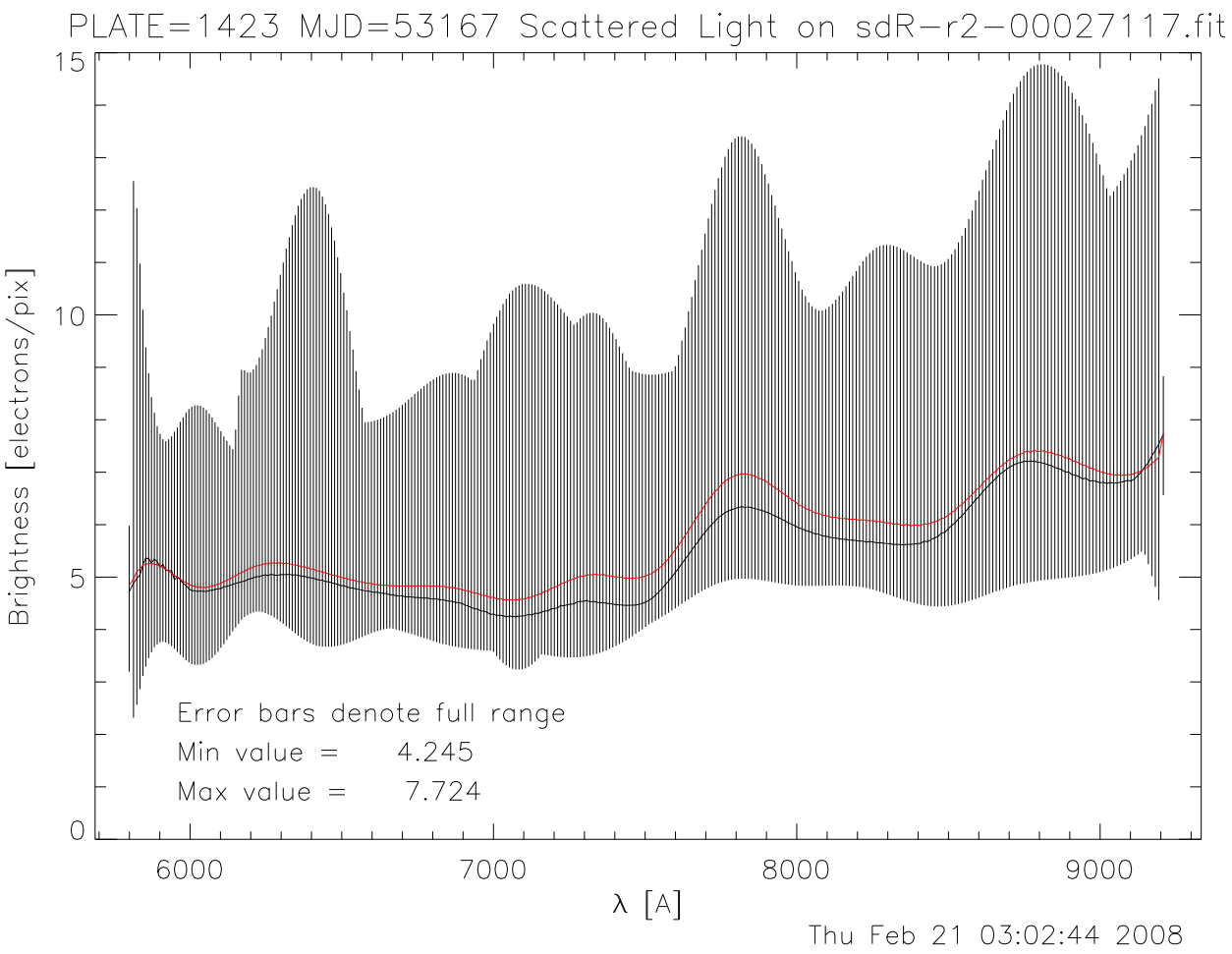

PLATE=1423 MJD=53167 Arcline Fit for sdR-r2-00027116.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu Feb 21 02:58:54 2008

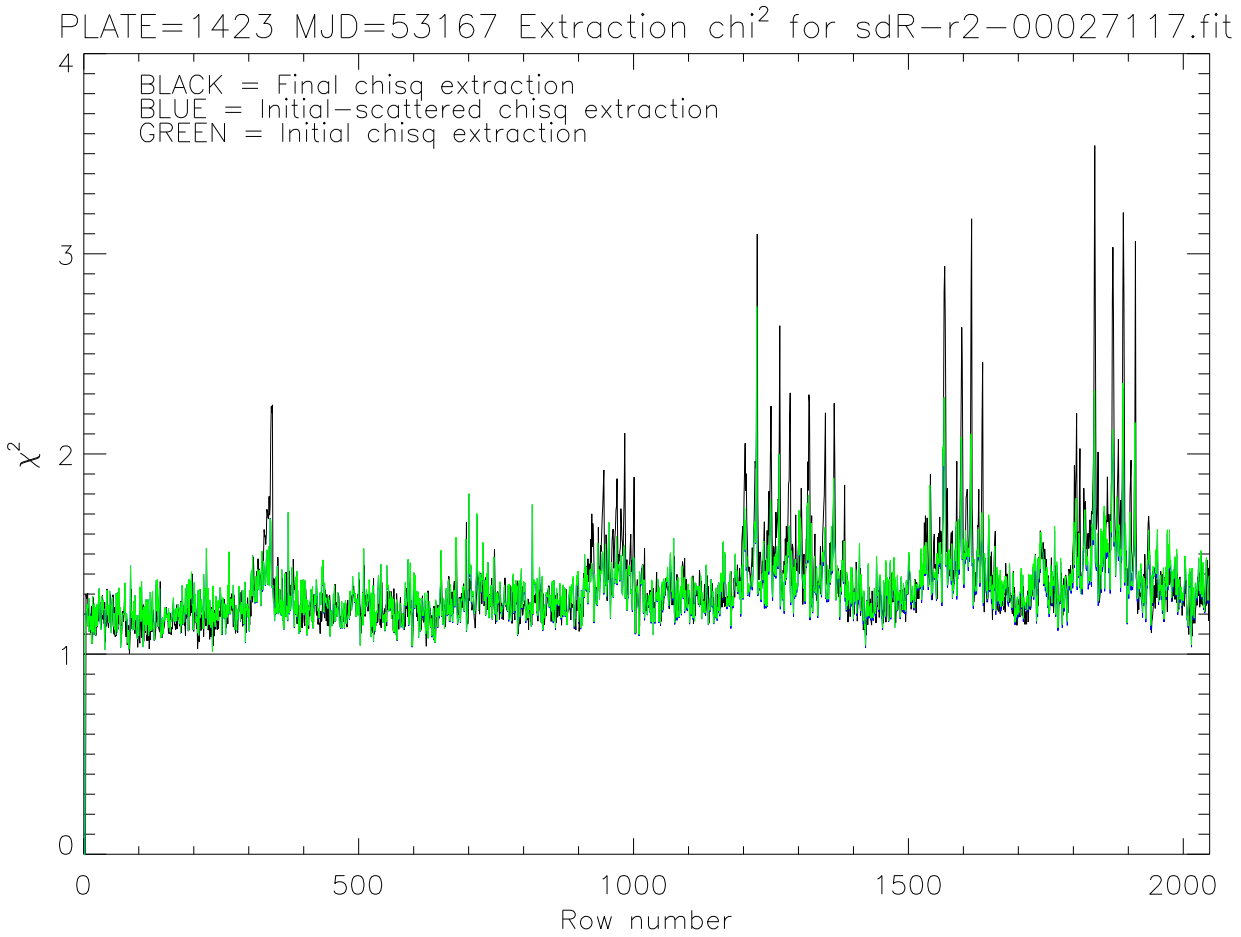

PLATE=1423 MJD=53167 Fiber−Flats for sdR−r2−00027115.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.470
Max value = 1.174
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 21 02:59:04 2008

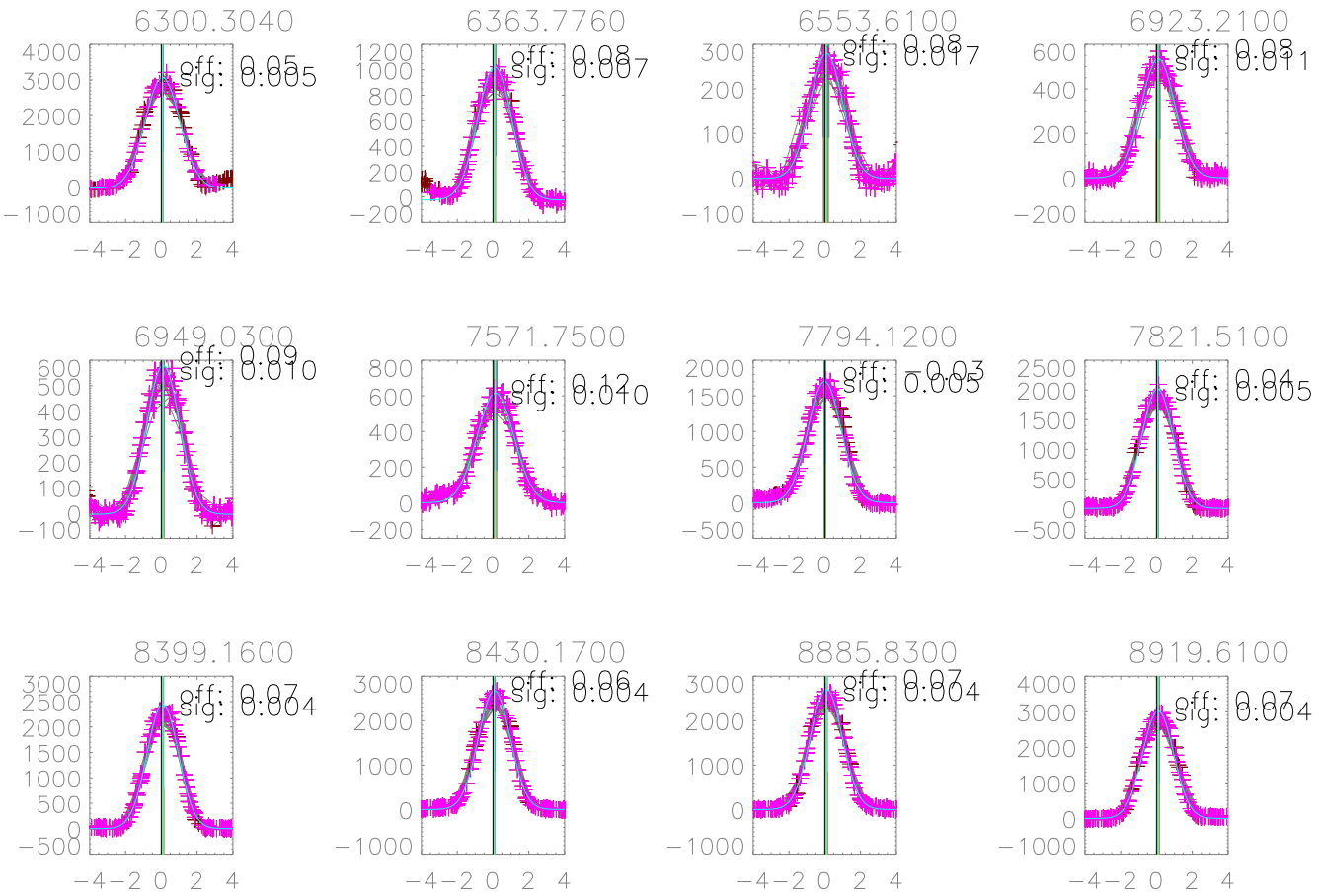

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-r2-00027117.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
10.9
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

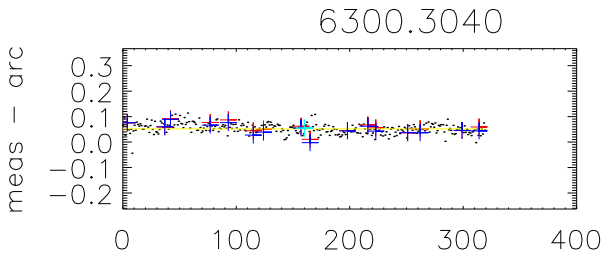

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-r2-00027117.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.939
Max value = 29.386
Thu Feb 21 02:59:53 2008

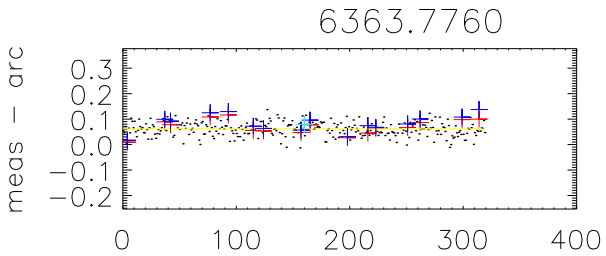

PLATE=1423 MJD=53167 Scattered Light on sdR-r2-00027117.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
0

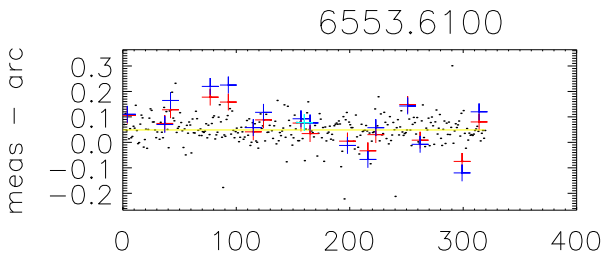

PLATE=1423 MJD=53167 Scattered Light on sdR-r2-00027117.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.245
Max value = 7.724
Thu Feb 21 03:02:44 2008

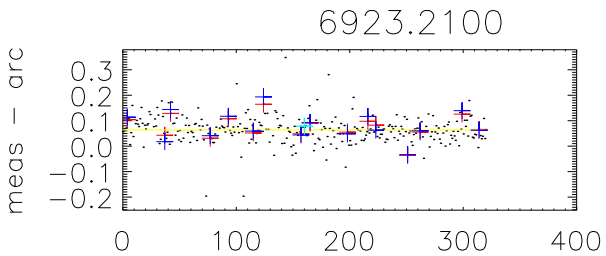

PLATE=1423 MJD=53167 Extraction chi^2 for sdR−r2−00027117.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

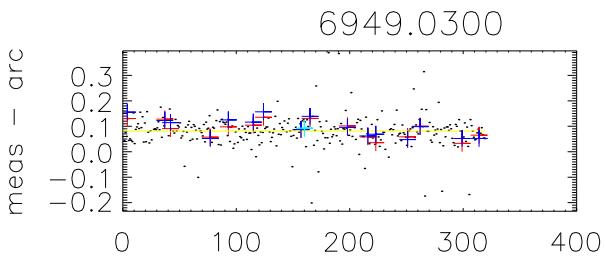

6300.3040
off: 0.05
sig: 0.005
6363.7760
off: 0.08
sig: 0.007
6553.6100
off: 0.08
sig: 0.017
6923.2100
off: 0.08
sig: 0.011
6949.0300
off: 0.09
sig: 0.010
7571.7500
off: 0.12
sig: 0.010
7794.1200
off: −0.03
sig: 0.005
7821.5100
off: 0.04
sig: 0.005
8399.1600
off: 0.07
sig: 0.004
8430.1700
off: 0.06
sig: 0.004
8885.8300
off: 0.07
sig: 0.004
8919.6100
off: 0.07
sig: 0.004

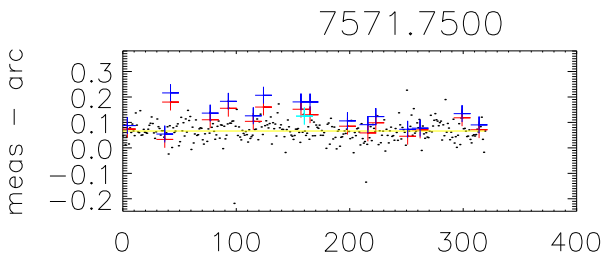

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

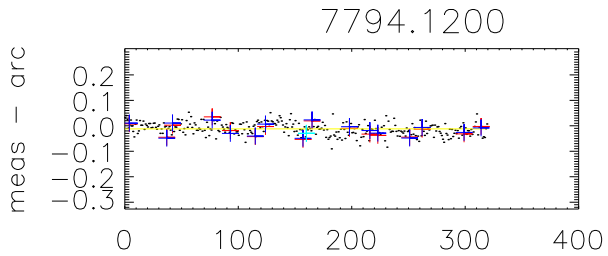

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

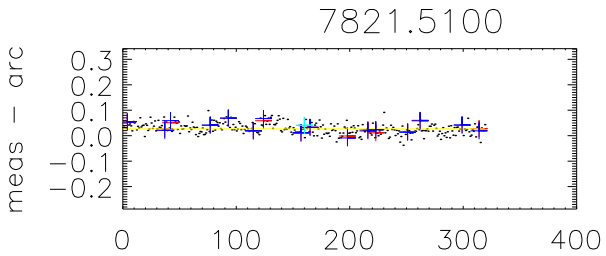

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

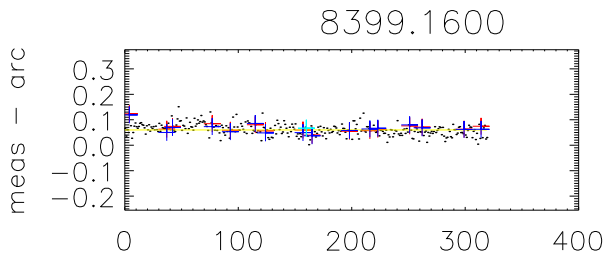

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

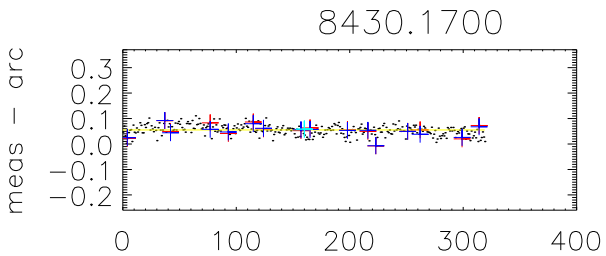

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

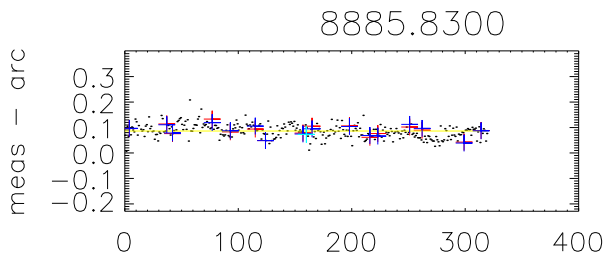

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

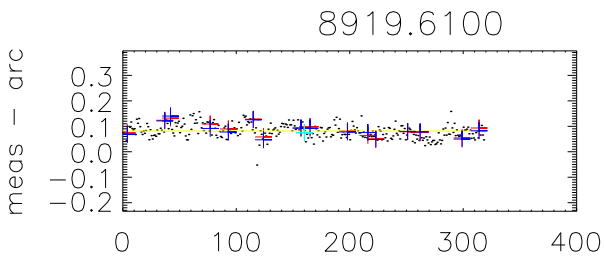

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

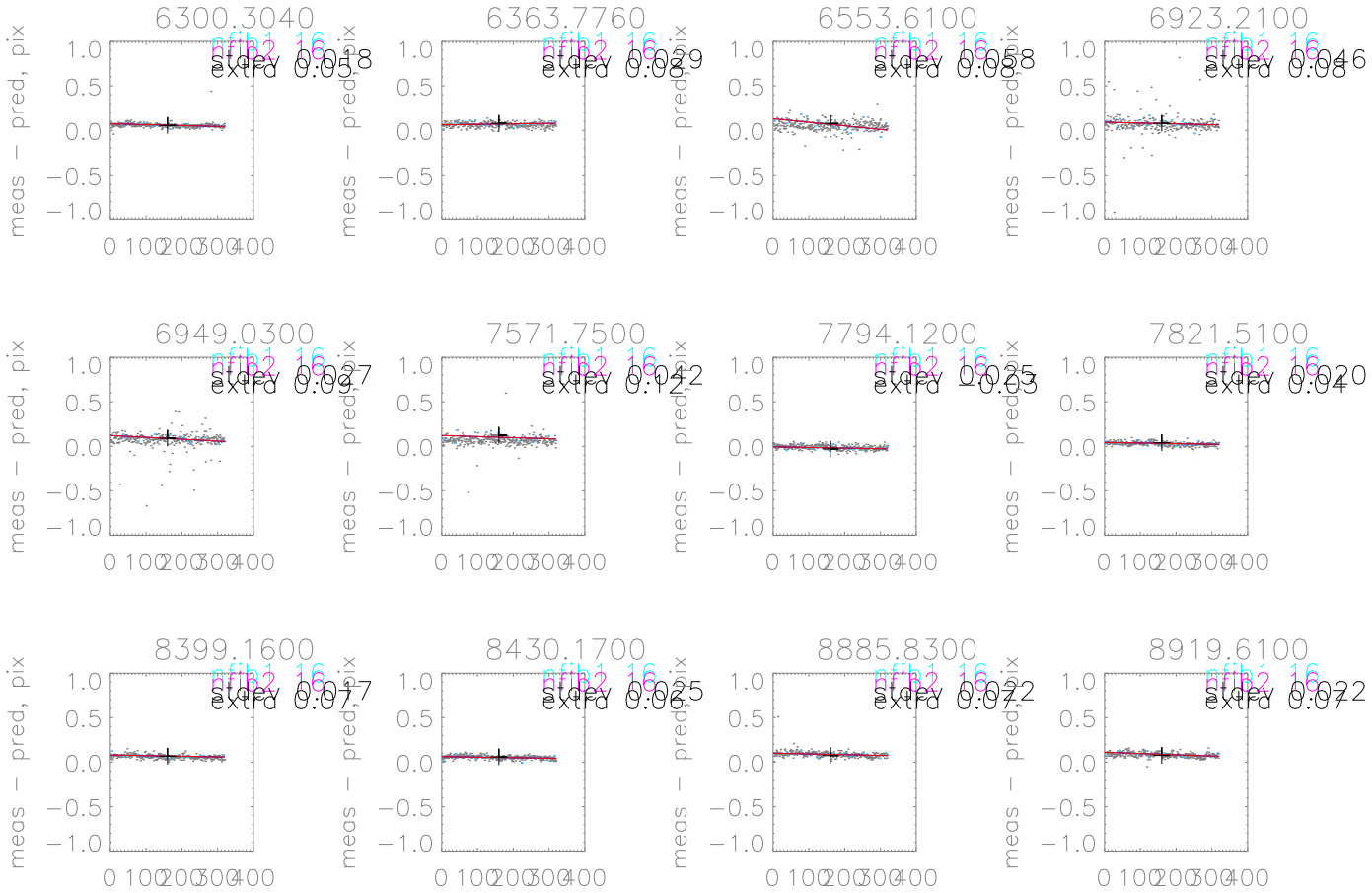

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

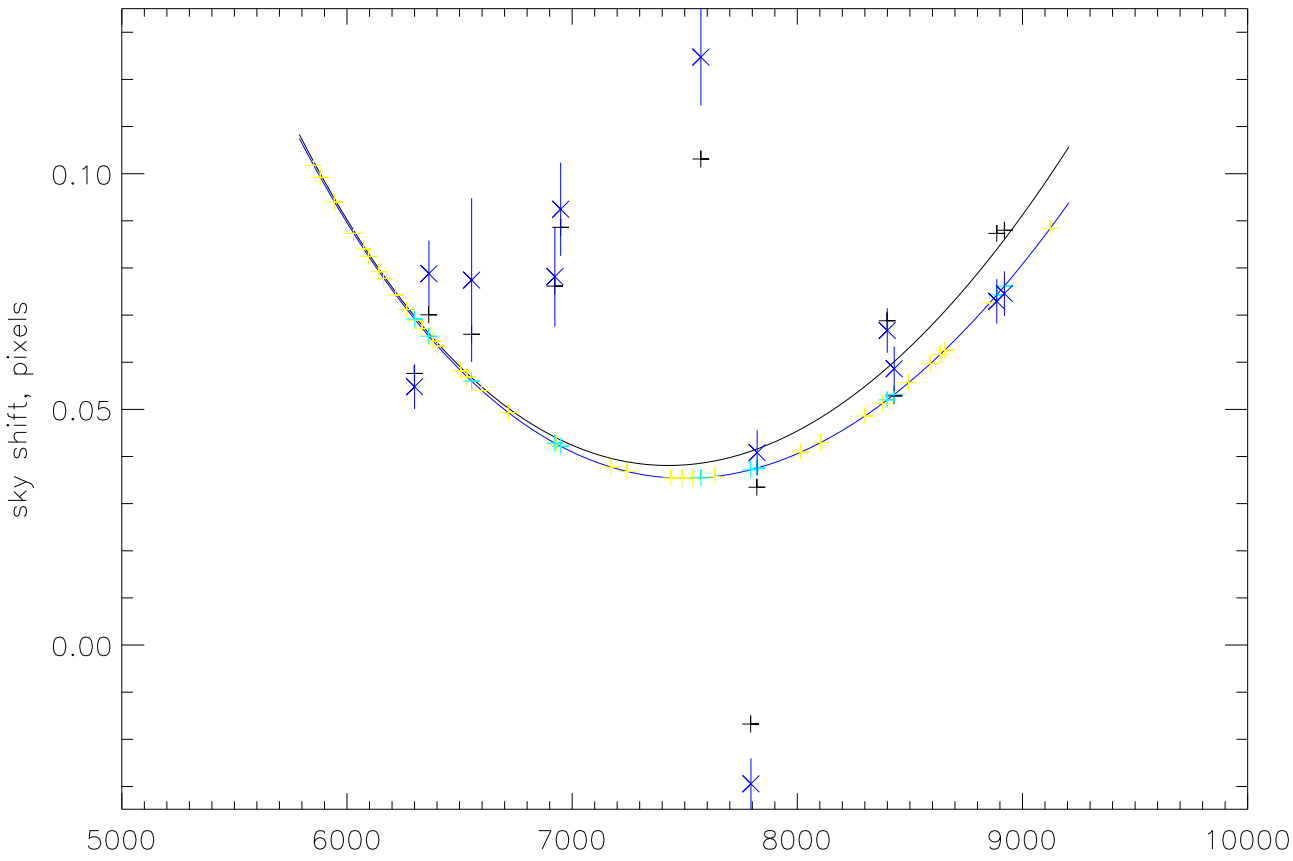

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

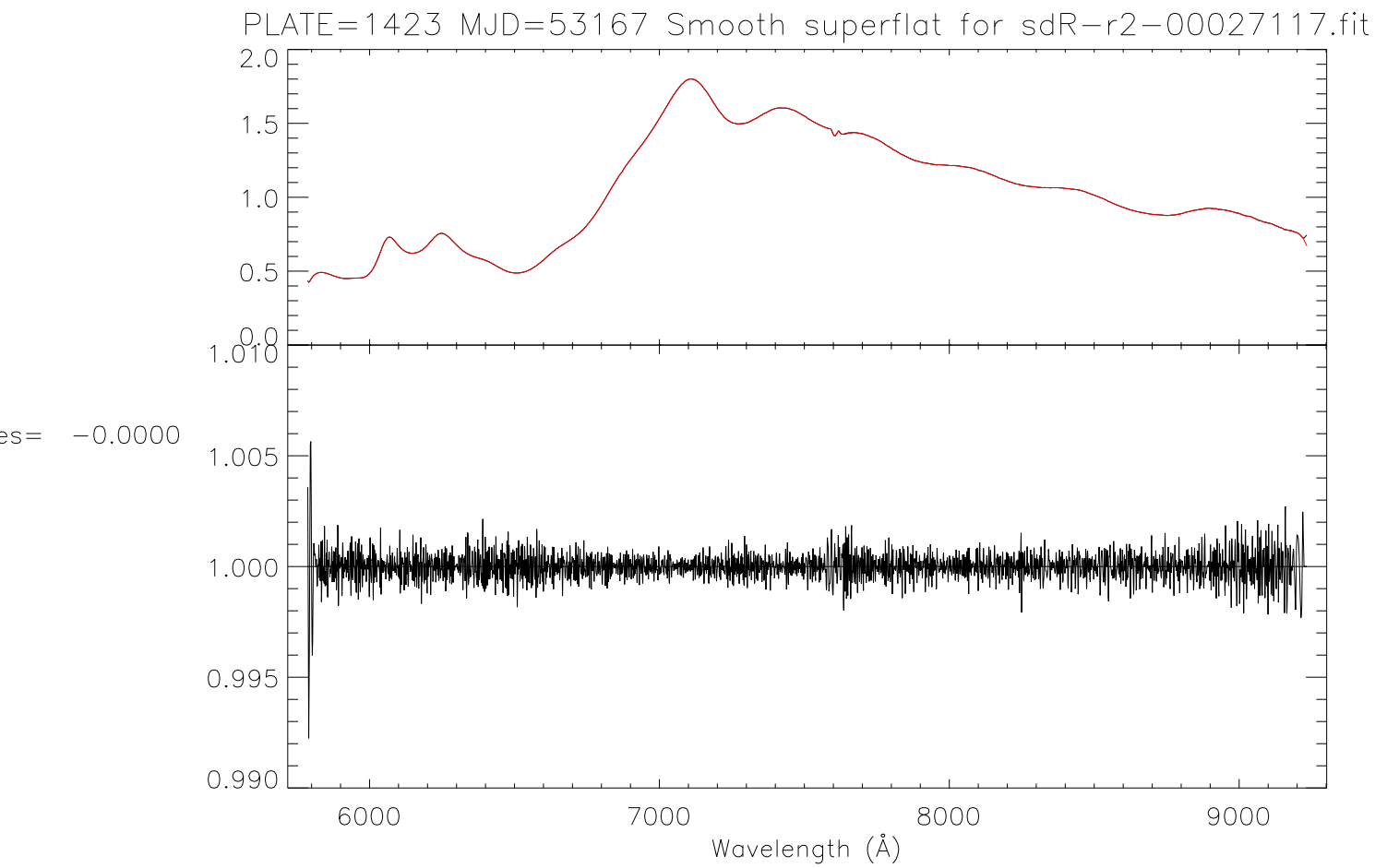

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

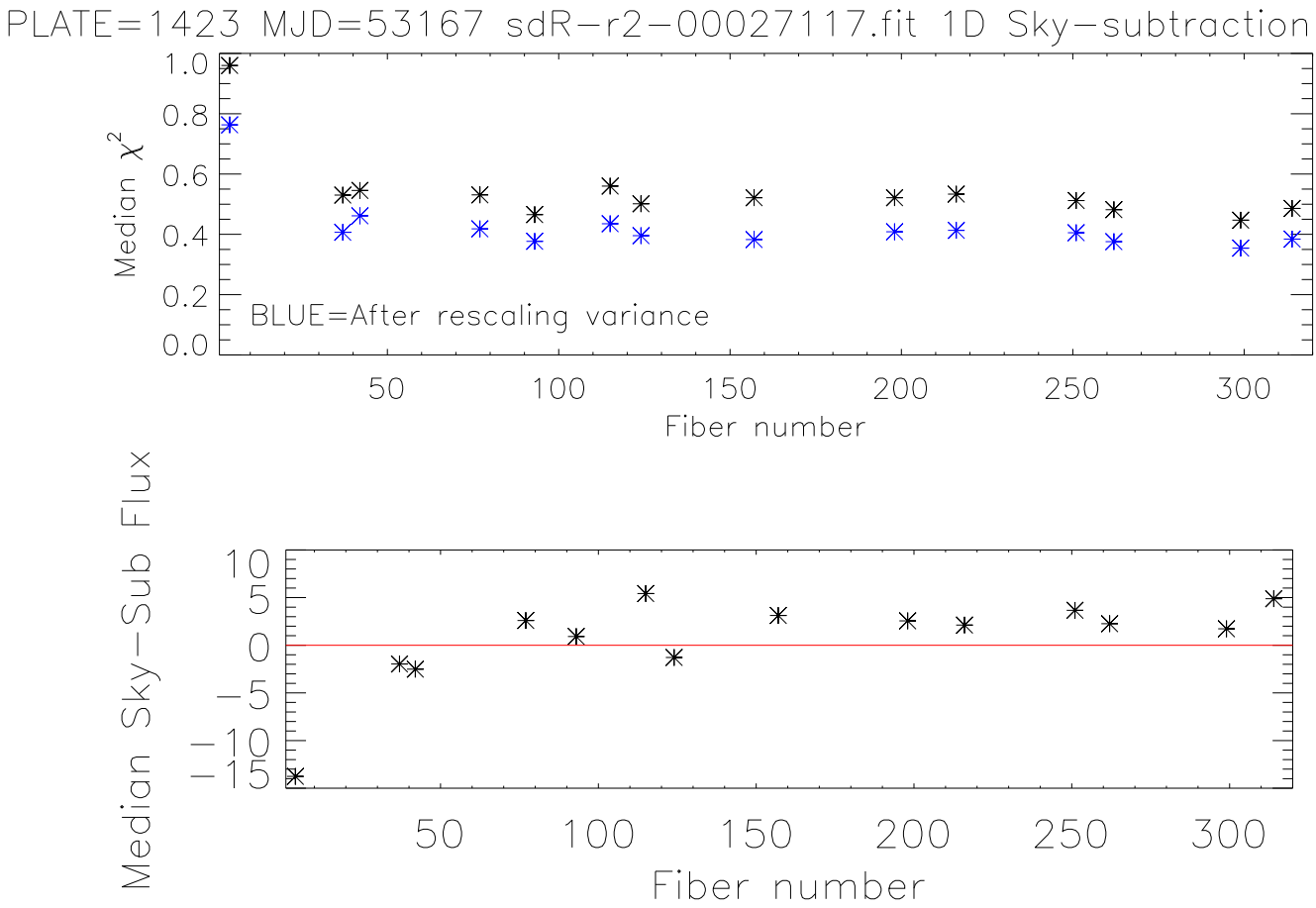

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

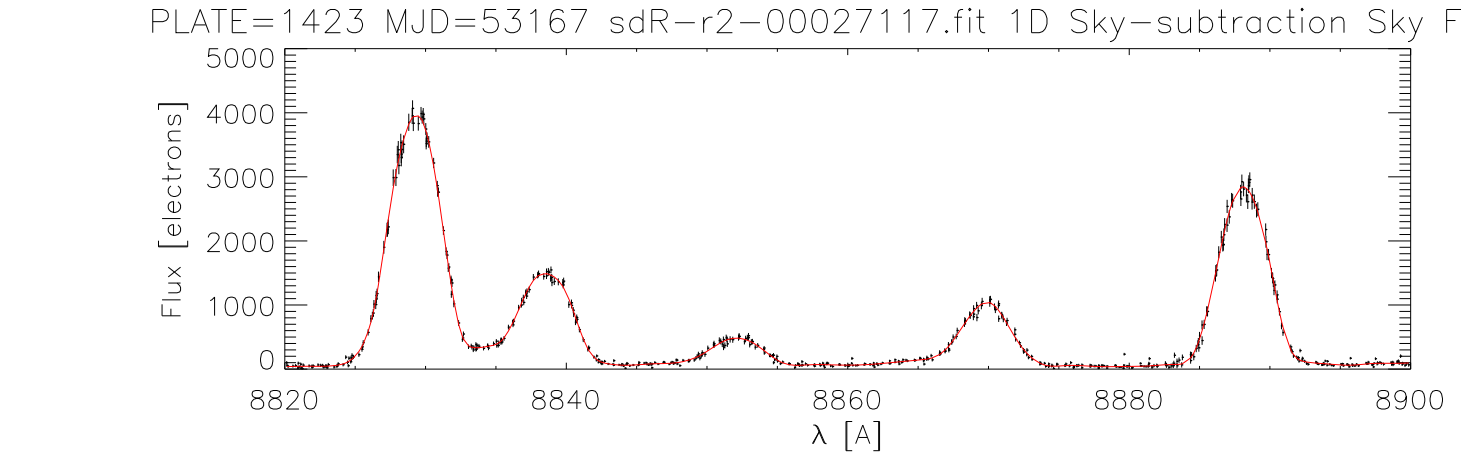

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

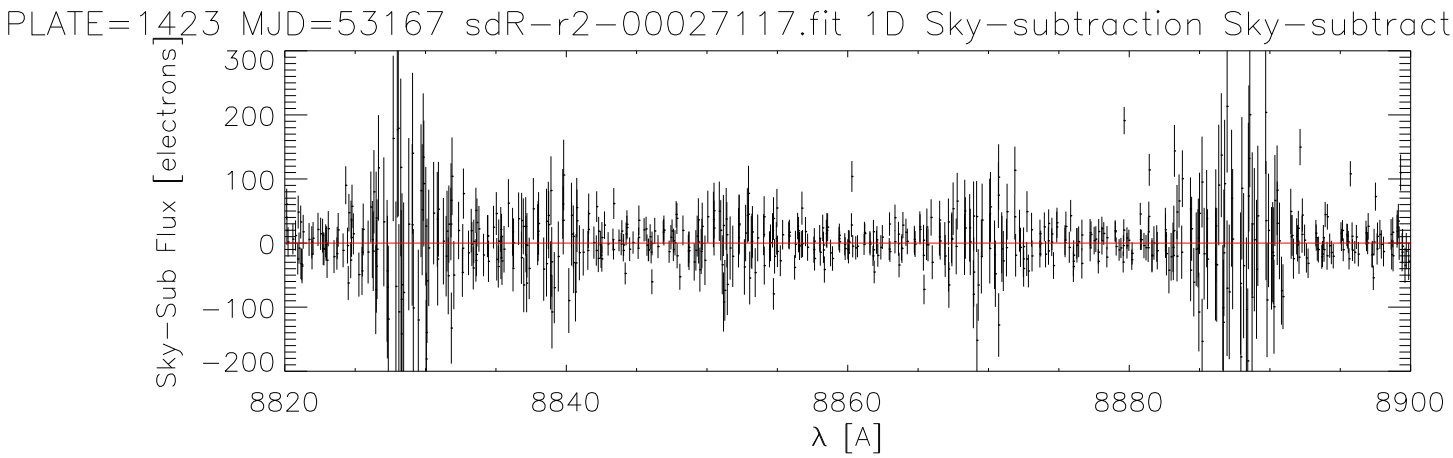

6300.3040
stdev 0.058
extra 0.08
6363.7760
stdev 0.029
extra 0.08
6553.6100
stdev 0.058
extra 0.08
6923.2100
stdev 0.046
extra 0.08
6949.0300
stdev 0.027
extra 0.04
7571.7500
stdev 0.042
extra 0.12
7794.1200
stdev 0.025
extra −0.03
7821.5100
stdev 0.020
extra 0.04
8399.1600
stdev 0.017
extra 0.07
8430.1700
stdev 0.025
extra 0.06
8885.8300
stdev 0.022
extra 0.07
8919.6100
stdev 0.022
extra 0.07
meas − pred, pix
mfb2 16

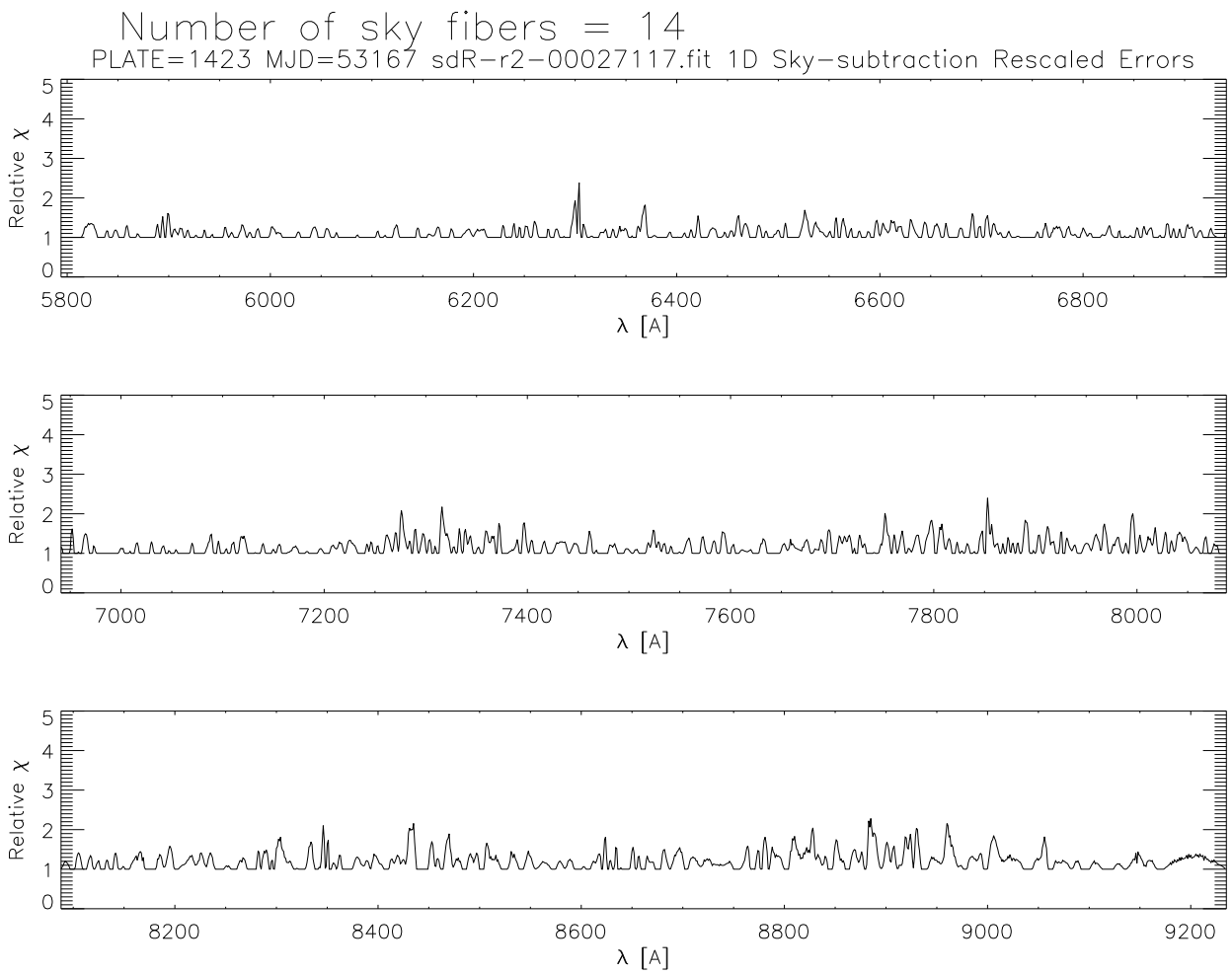

sky shift, pixels
0.10
0.05
0.00
5000
6000
7000
8000
9000
10000

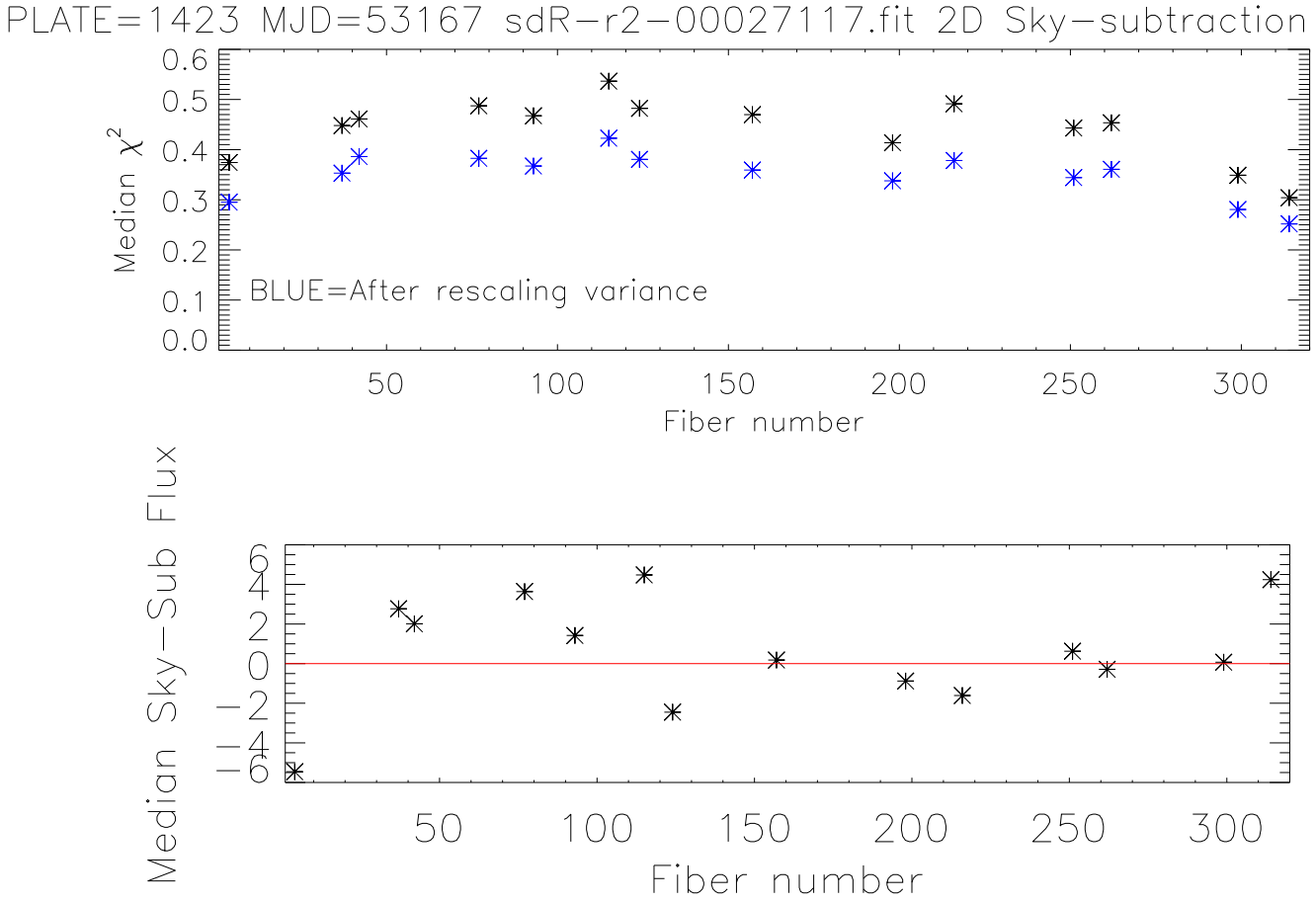

PLATE=1423 MJD=53167 Smooth superflat for sdR-r2-00027117.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

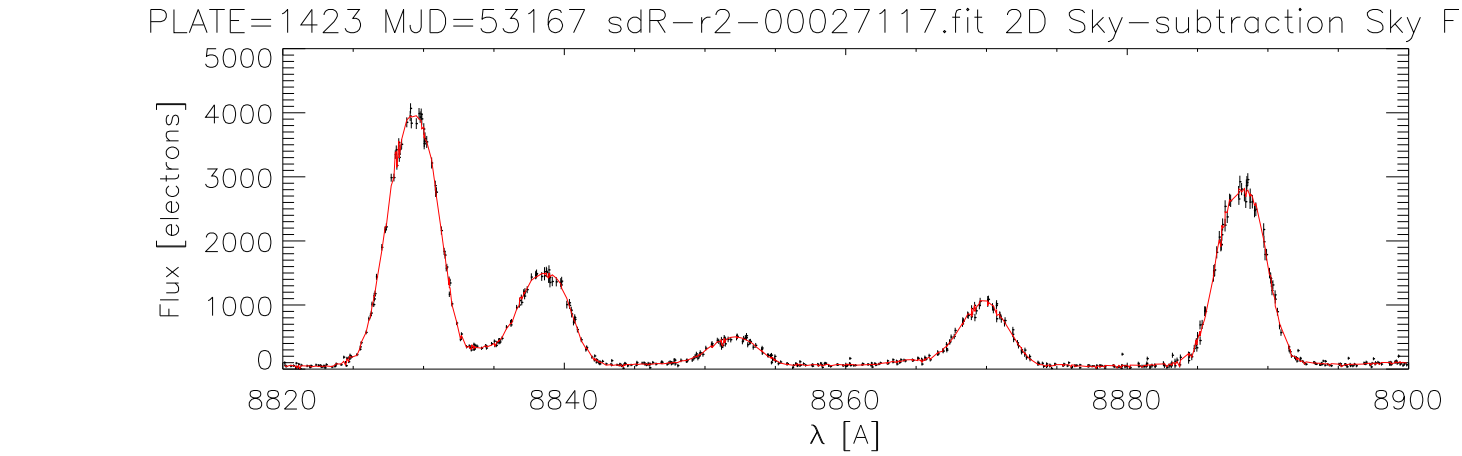

PLATE=1423 MJD=53167 sdR-r2-00027117.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

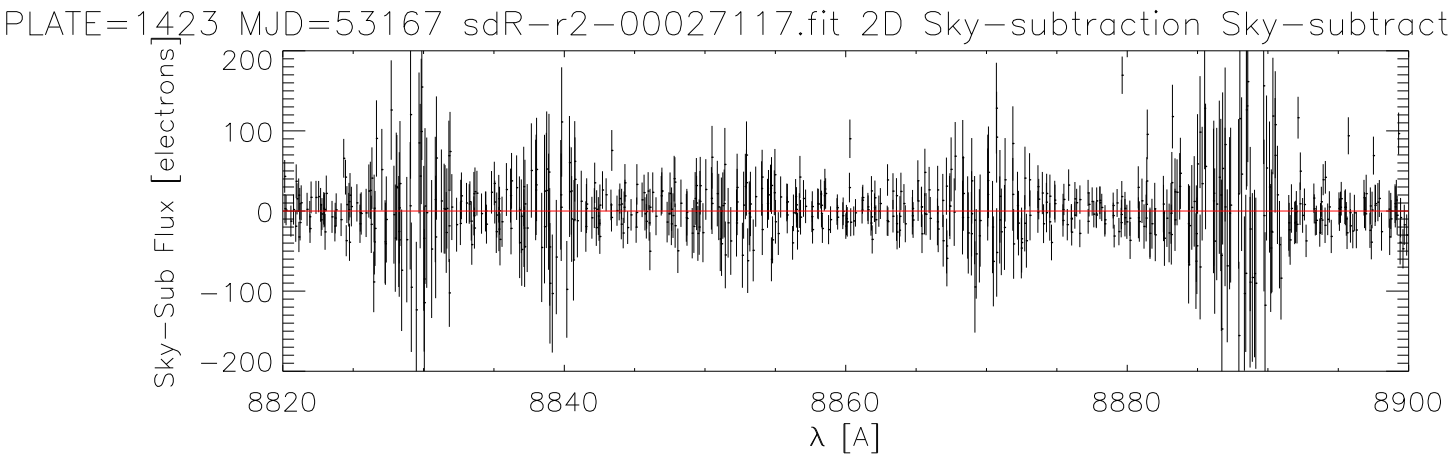

PLATE=1423 MJD=53167 sdR-r2-00027117.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

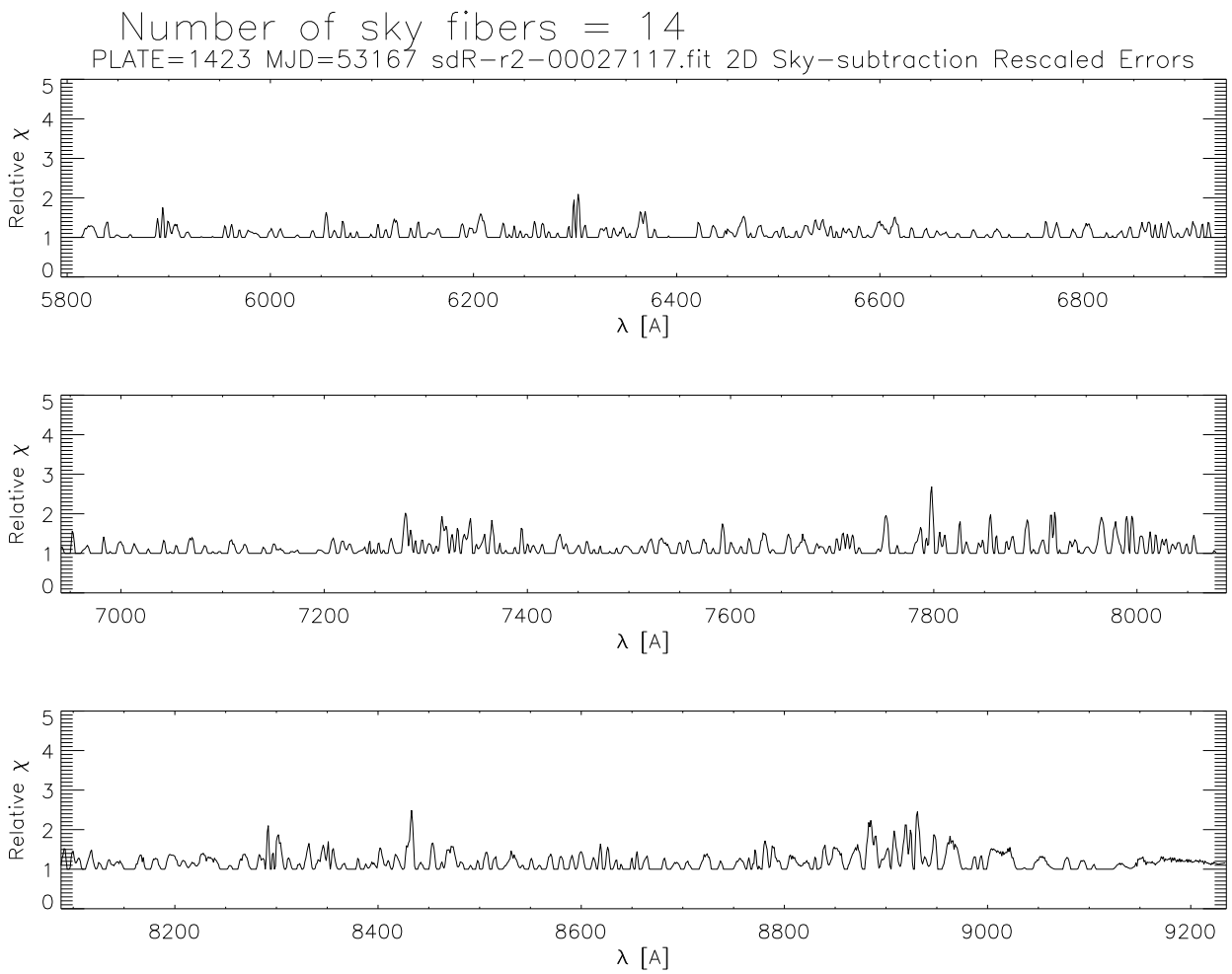

PLATE=1423 MJD=53167 sdR-r2-00027117.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

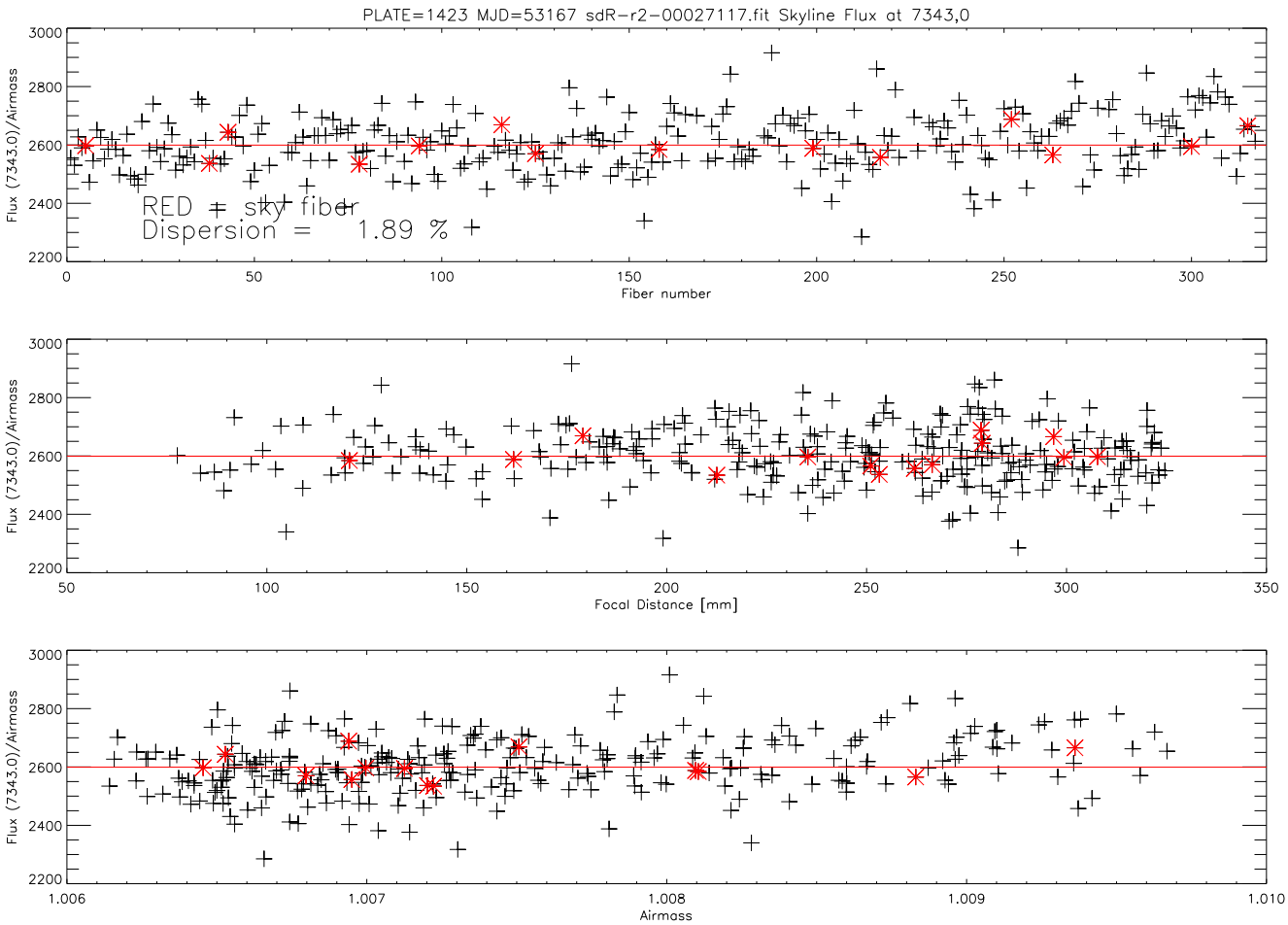

Number of sky fibers = 14
PLATE=1423 MJD=53167 sdR-r2-00027117.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

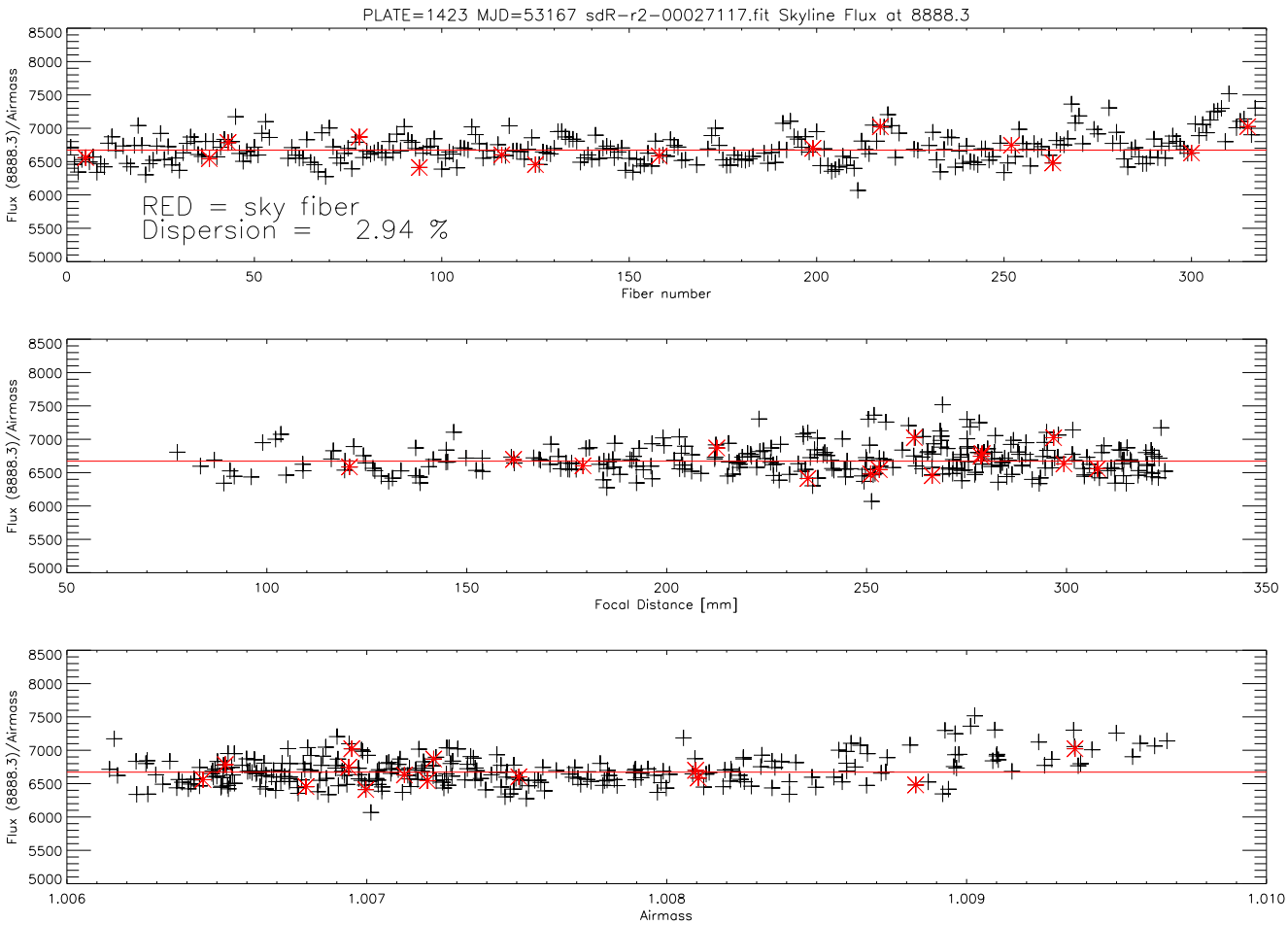

PLATE=1423 MJD=53167 sdR-r2-00027117.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

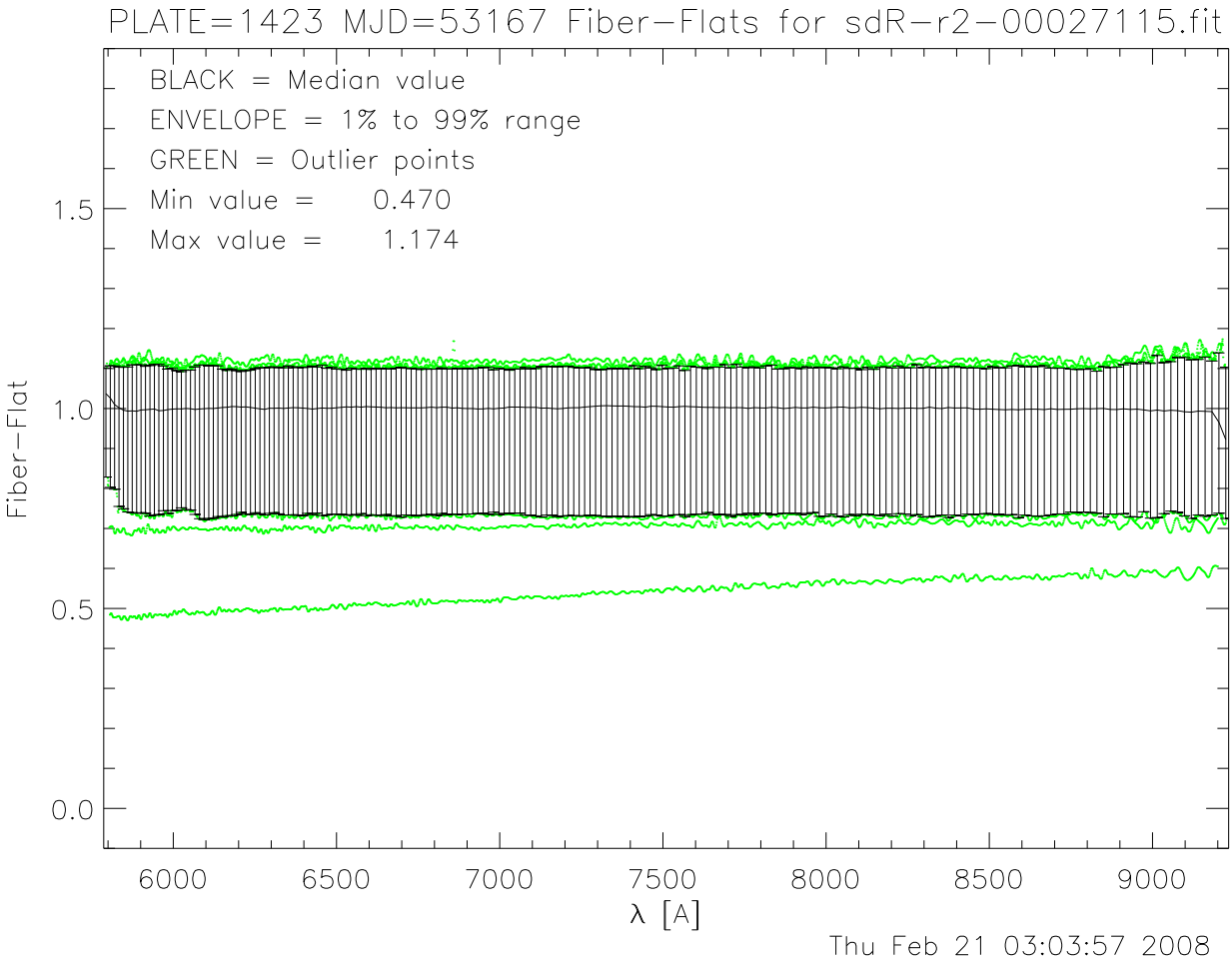

PLATE=1423 MJD=53167 sdR-r2-00027117.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

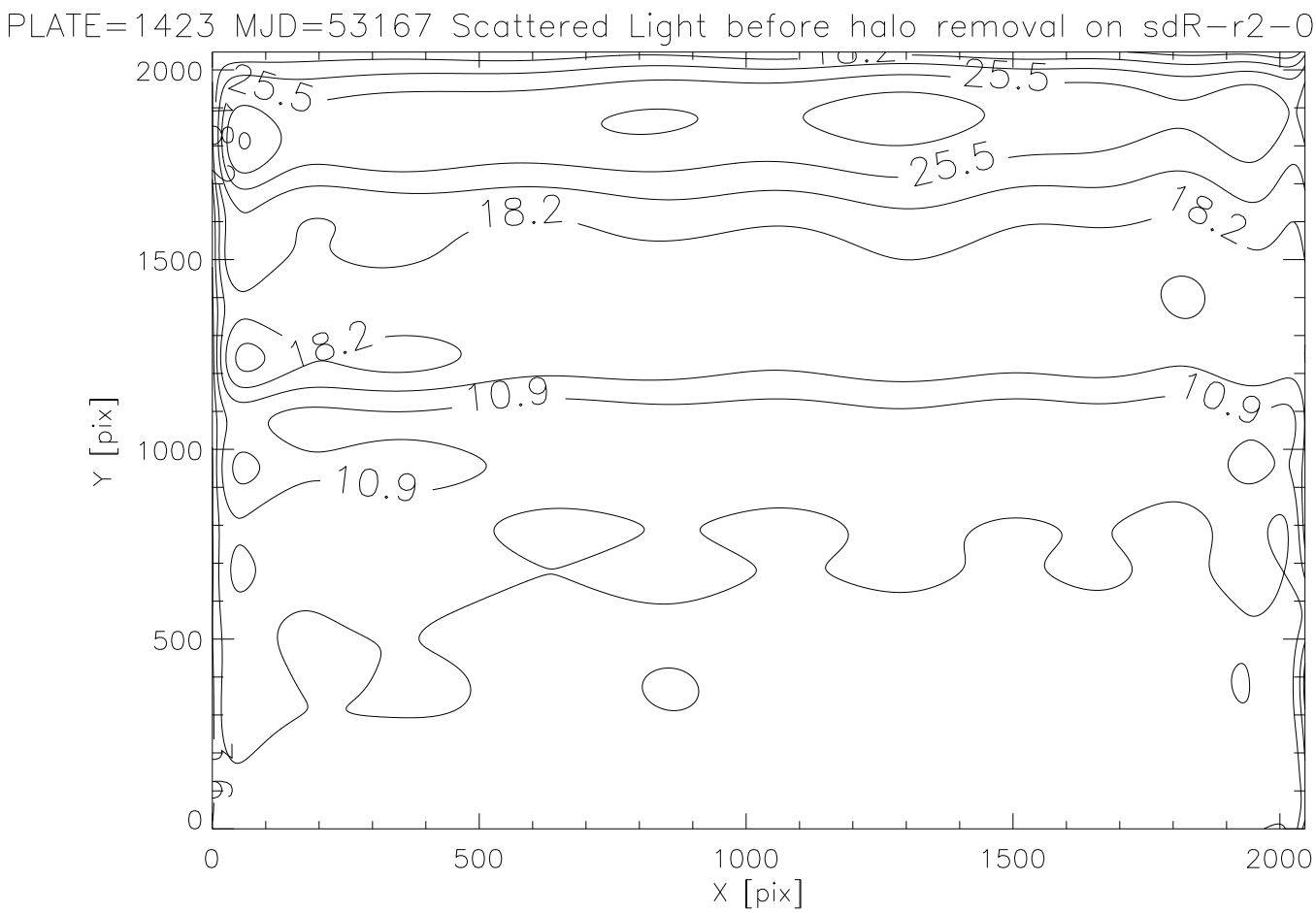

PLATE=1423 MJD=53167 sdR-r2-00027117.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

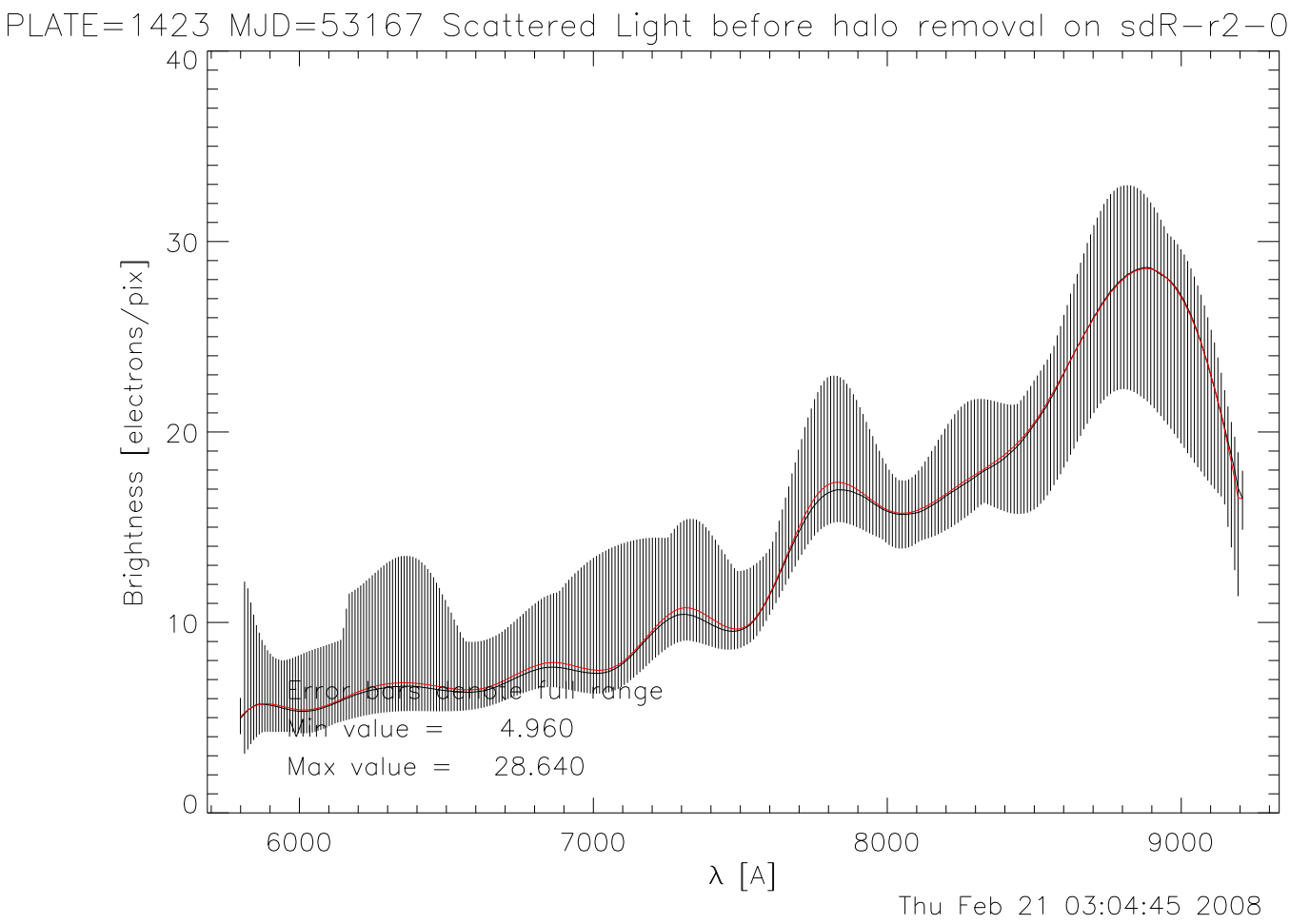

Number of sky fibers = 14
PLATE=1423 MJD=53167 sdR-r2-00027117.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

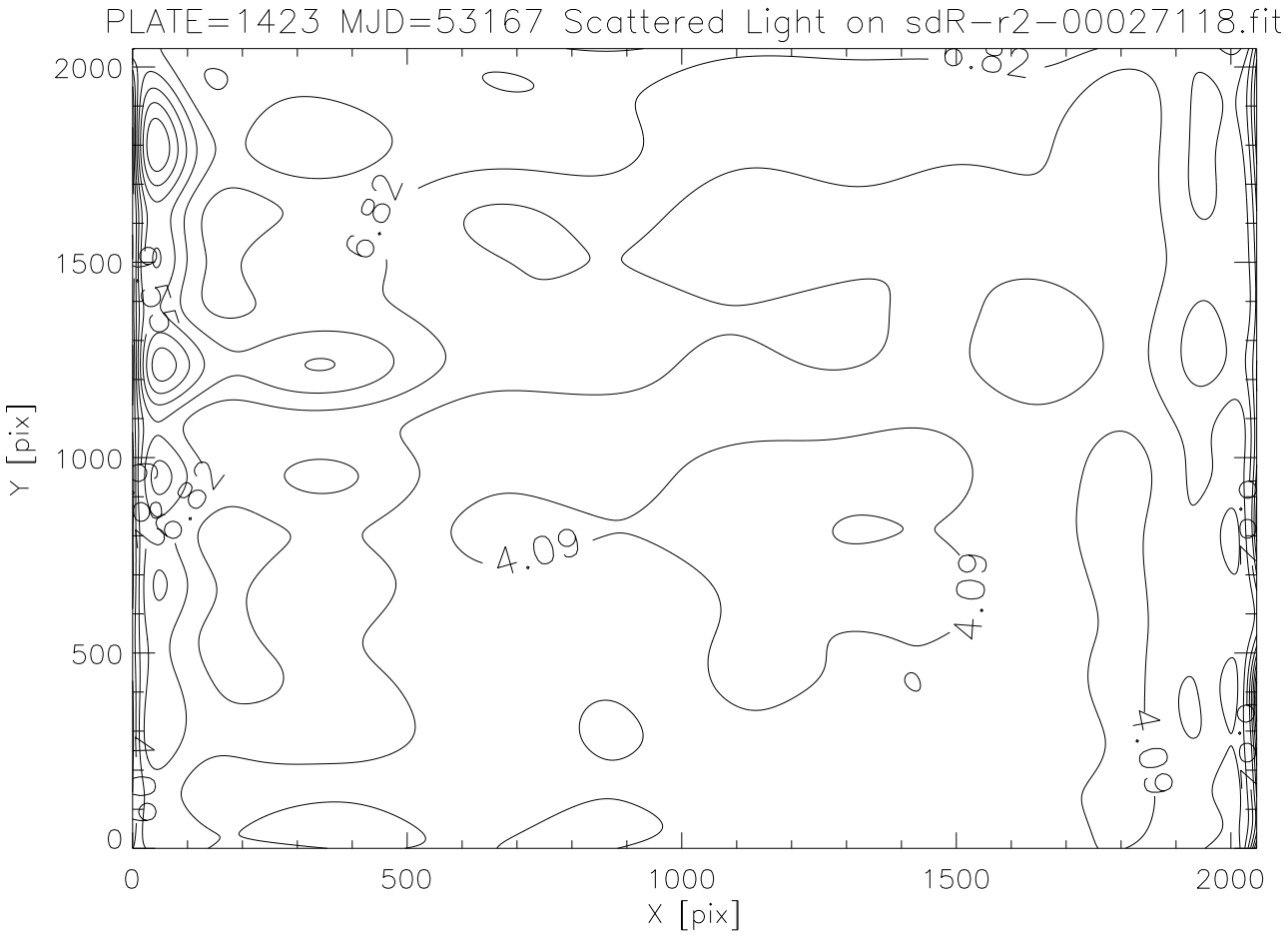

PLATE=1423 MJD=53167 sdR-r2-00027117.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.89 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

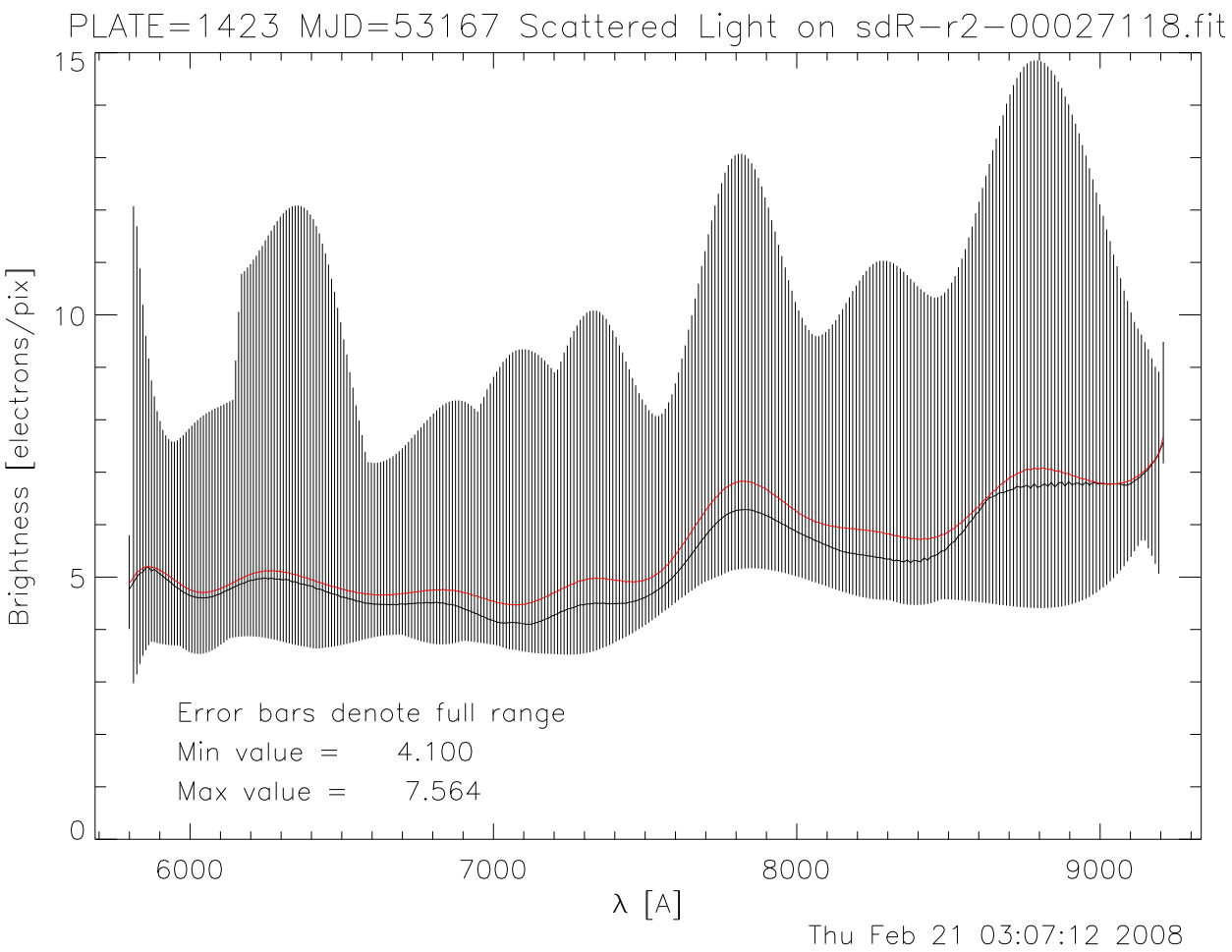

PLATE=1423 MJD=53167 sdR-r2-00027117.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.94 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

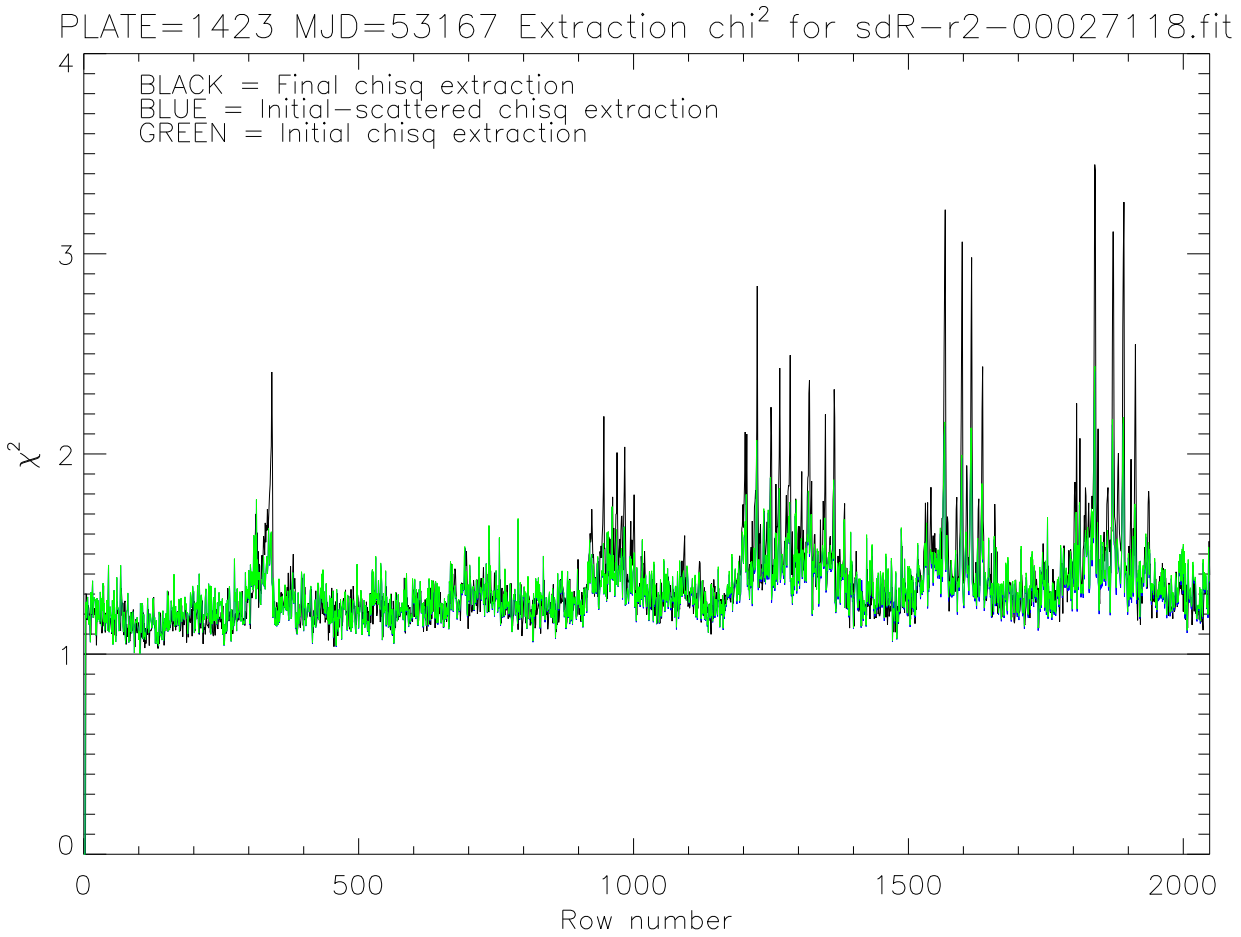

PLATE=1423 MJD=53167 Fiber−Flats for sdR−r2−00027115.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.470
Max value = 1.174
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 21 03:03:57 2008

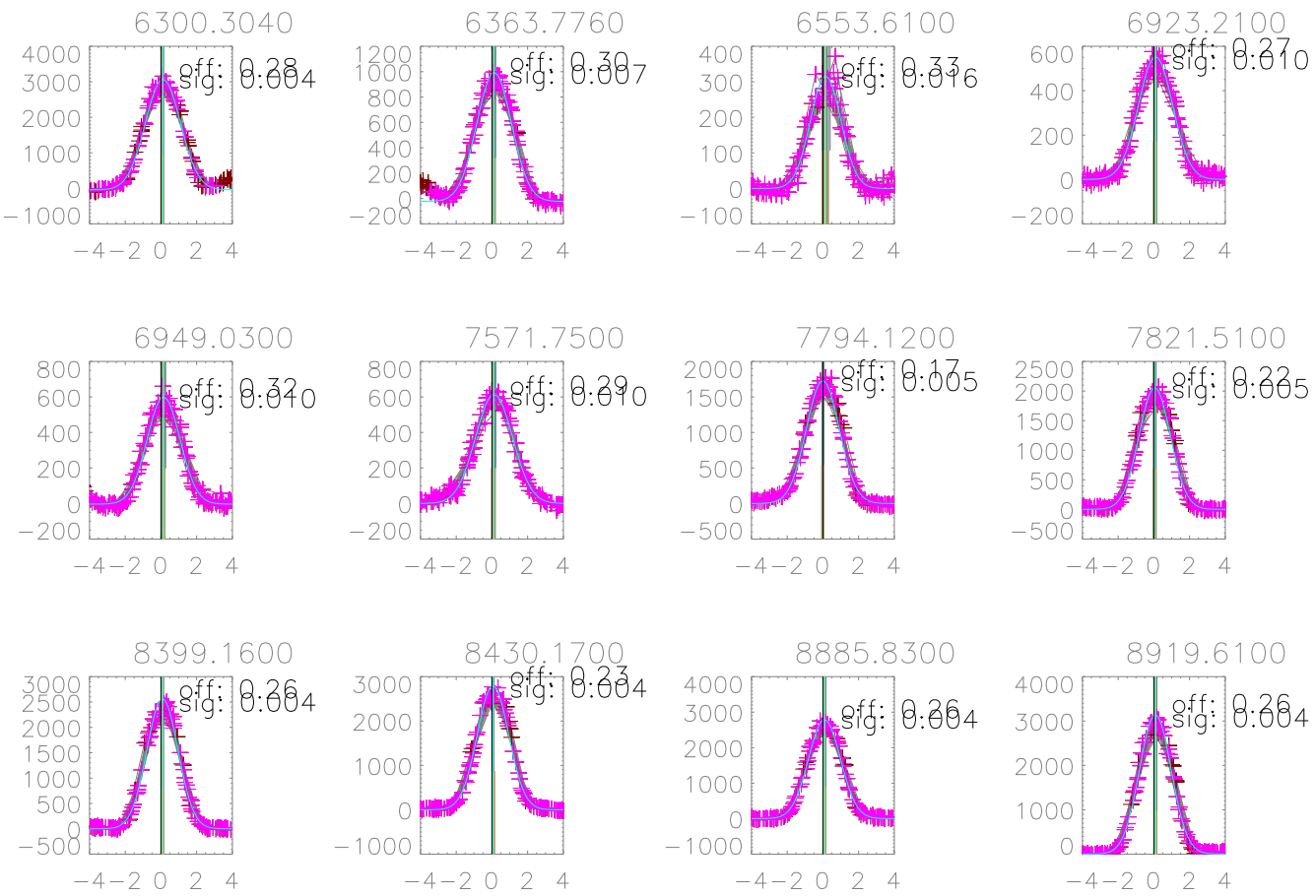

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-r2-00027118.fi
25.5
25.5
25.5
18.2
18.2
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

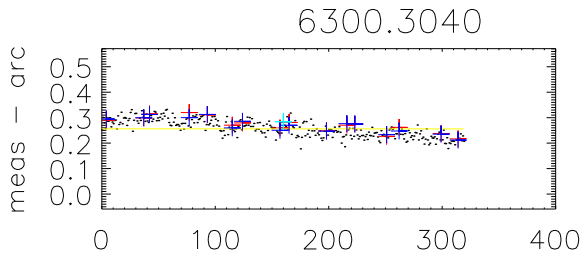

PLATE=1423 MJD=53167 Scattered Light before halo removal on sdR-r2-00027118.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.960
Max value = 28.640
Thu Feb 21 03:04:45 2008

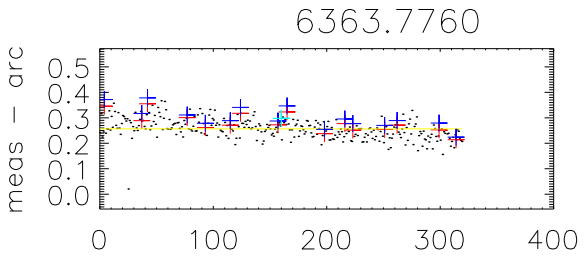

PLATE=1423 MJD=53167 Scattered Light on sdR-r2-00027118.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.82
4.09

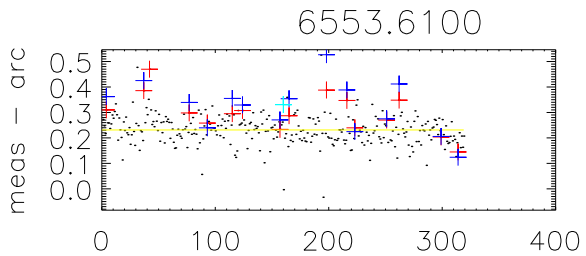

PLATE=1423 MJD=53167 Scattered Light on sdR-r2-00027118.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.100
Max value = 7.564
Thu Feb 21 03:07:12 2008

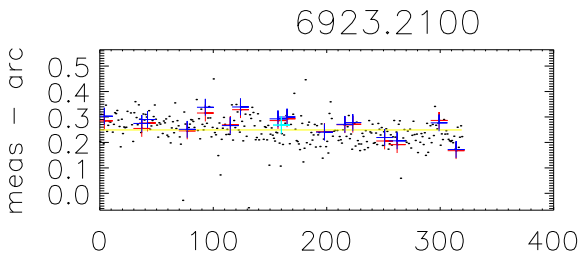

PLATE=1423 MJD=53167 Extraction chi^2 for sdR−r2−00027118.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

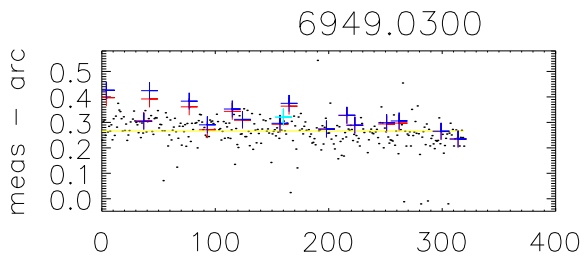

6300.3040
off: 0.28
sig: 0.004
6363.7760
off: 0.30
sig: 0.007
6553.6100
off: 0.33
sig: 0.016
6923.2100
off: 0.27
sig: 0.010
6949.0300
off: 0.32
sig: 0.010
7571.7500
off: 0.29
sig: 0.010
7794.1200
off: 0.17
sig: 0.005
7821.5100
off: 0.22
sig: 0.005
8399.1600
off: 0.26
sig: 0.004
8430.1700
off: 0.23
sig: 0.004
8885.8300
off: 0.26
sig: 0.004
8919.6100
off: 0.26
sig: 0.004

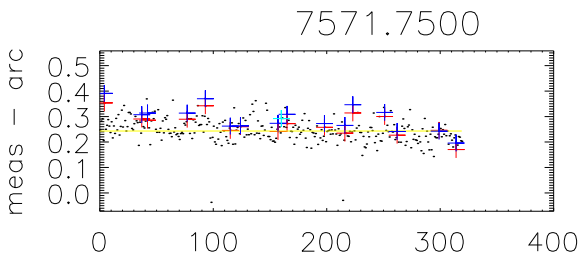

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

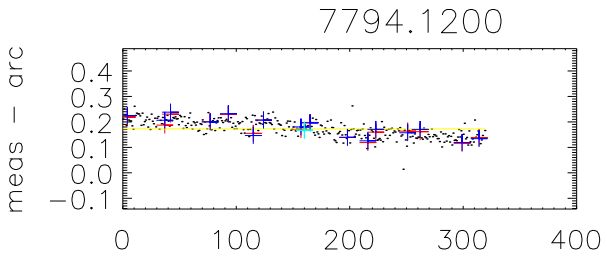

6363.7760
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

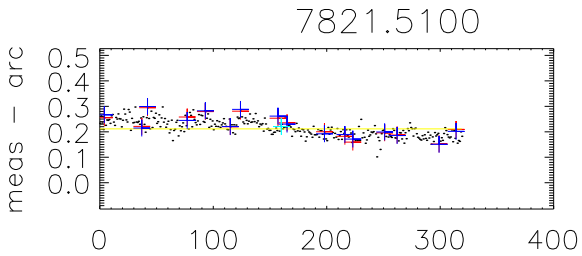

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

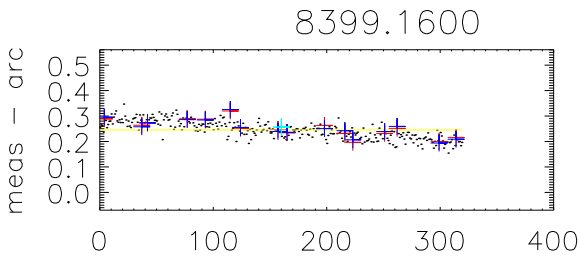

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

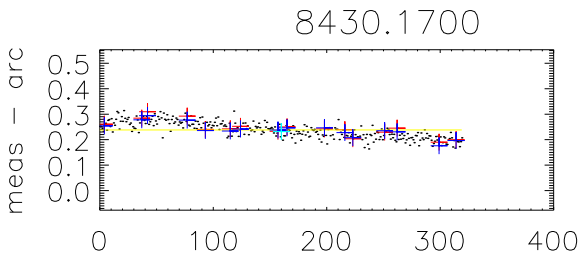

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

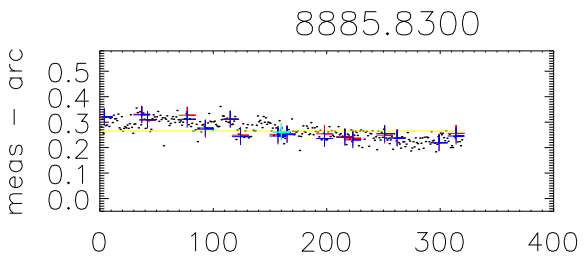

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

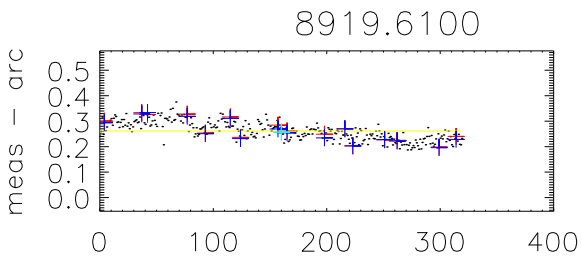

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

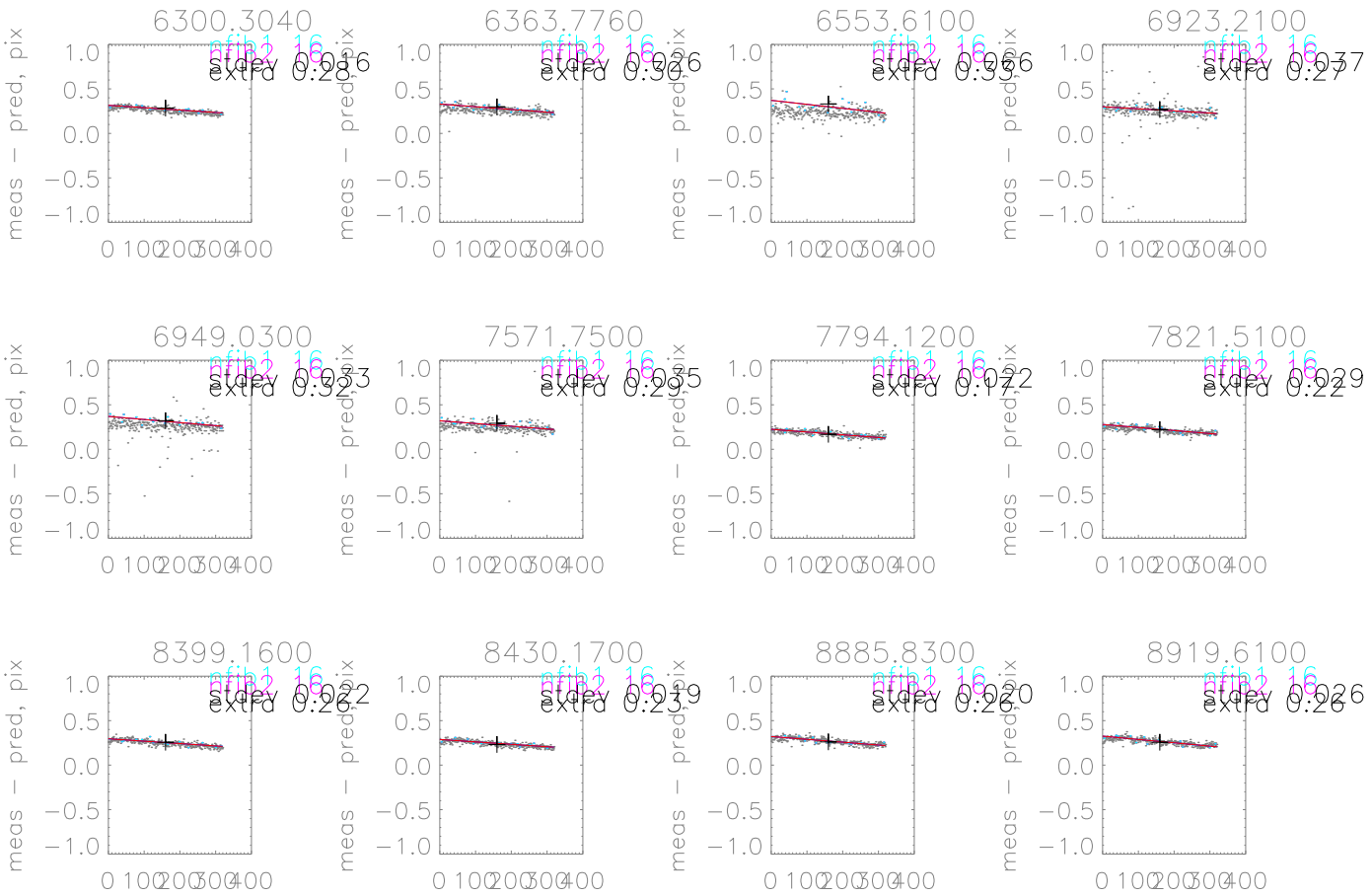

7821.5100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

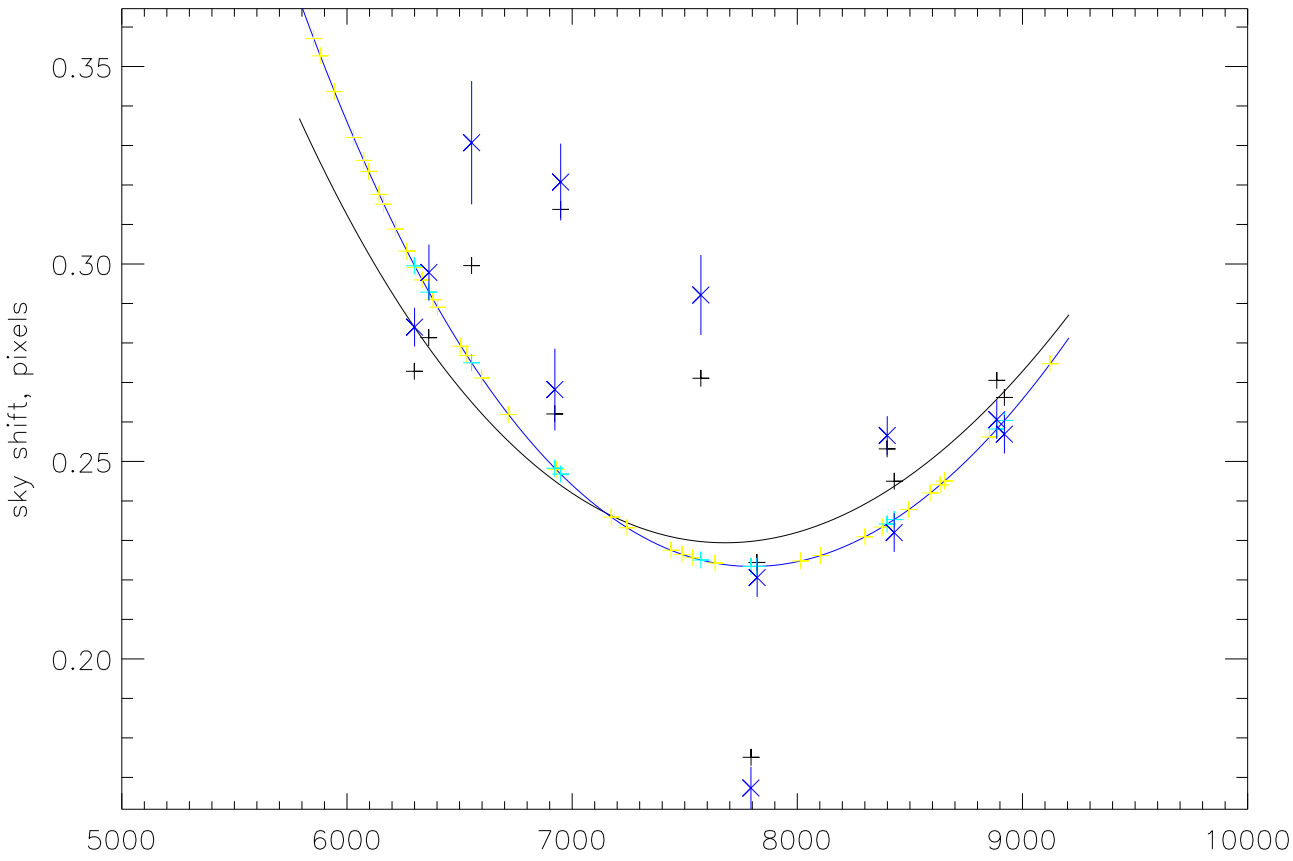

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

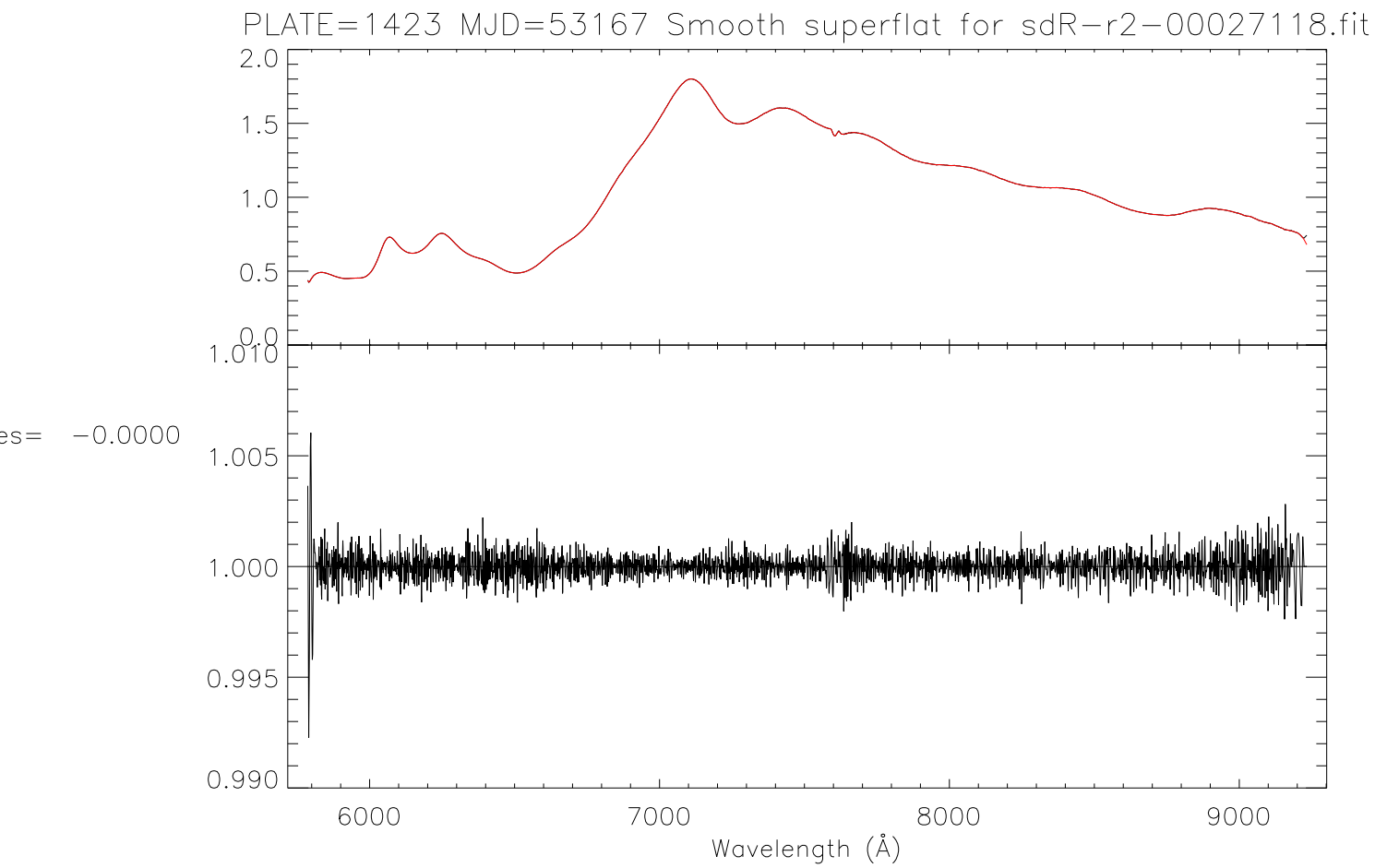

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

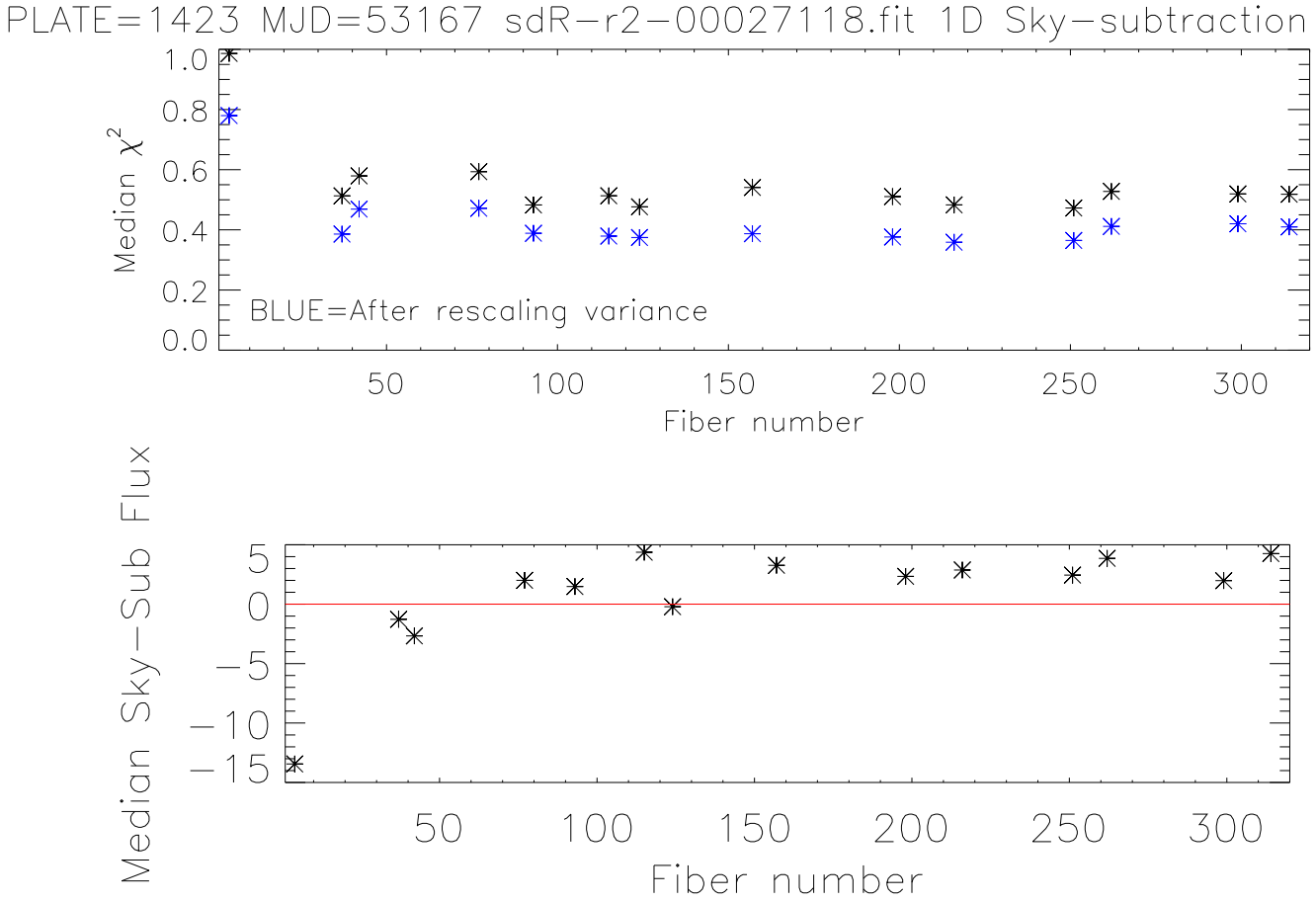

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

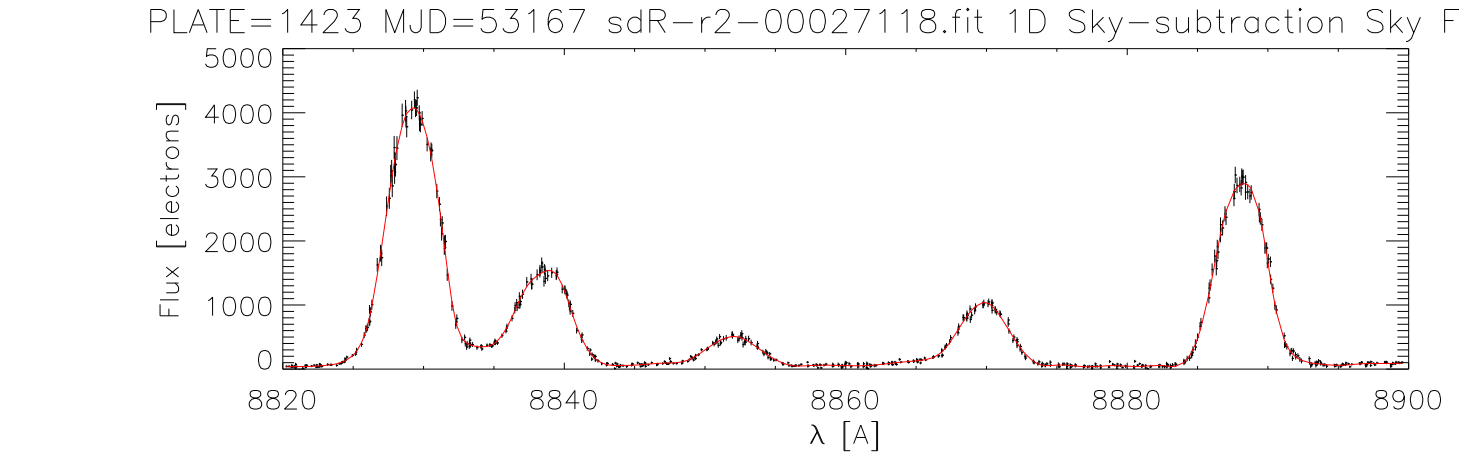

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

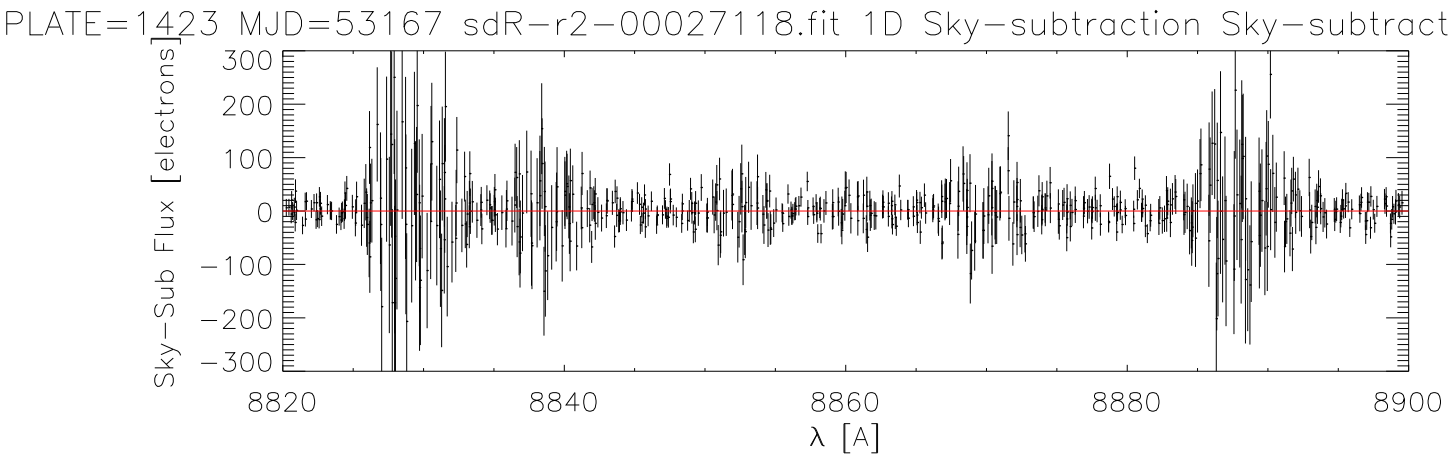

6300.3040
stdev 0.286
extra 0.28
6363.7760
stdev 0.326
extra 0.36
6553.6100
stdev 0.356
extra 0.35
6923.2100
stdev 0.37
extra 0.27
6949.0300
stdev 0.333
extra 0.32
7571.7500
stdev 0.335
extra 0.29
7794.1200
stdev 0.322
extra 0.17
7821.5100
stdev 0.229
extra 0.22
8399.1600
stdev 0.322
extra 0.26
8430.1700
stdev 0.319
extra 0.23
8885.8300
stdev 0.320
extra 0.26
8919.6100
stdev 0.326
extra 0.26
meas − pred, pix
mfhd2 16
mfhd1 16

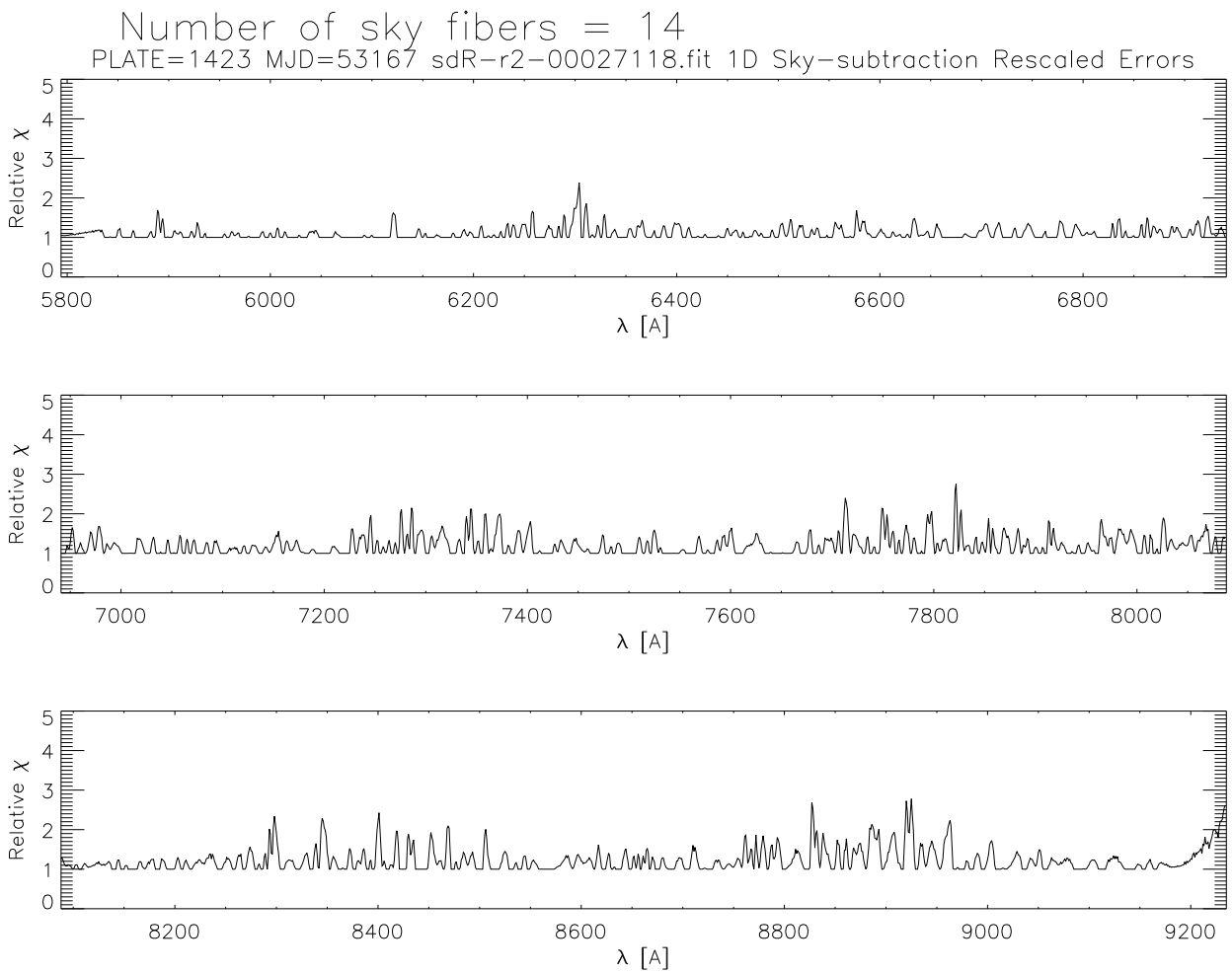

sky shift, pixels
0.35
0.30
0.25
0.20
5000
6000
7000
8000
9000
10000

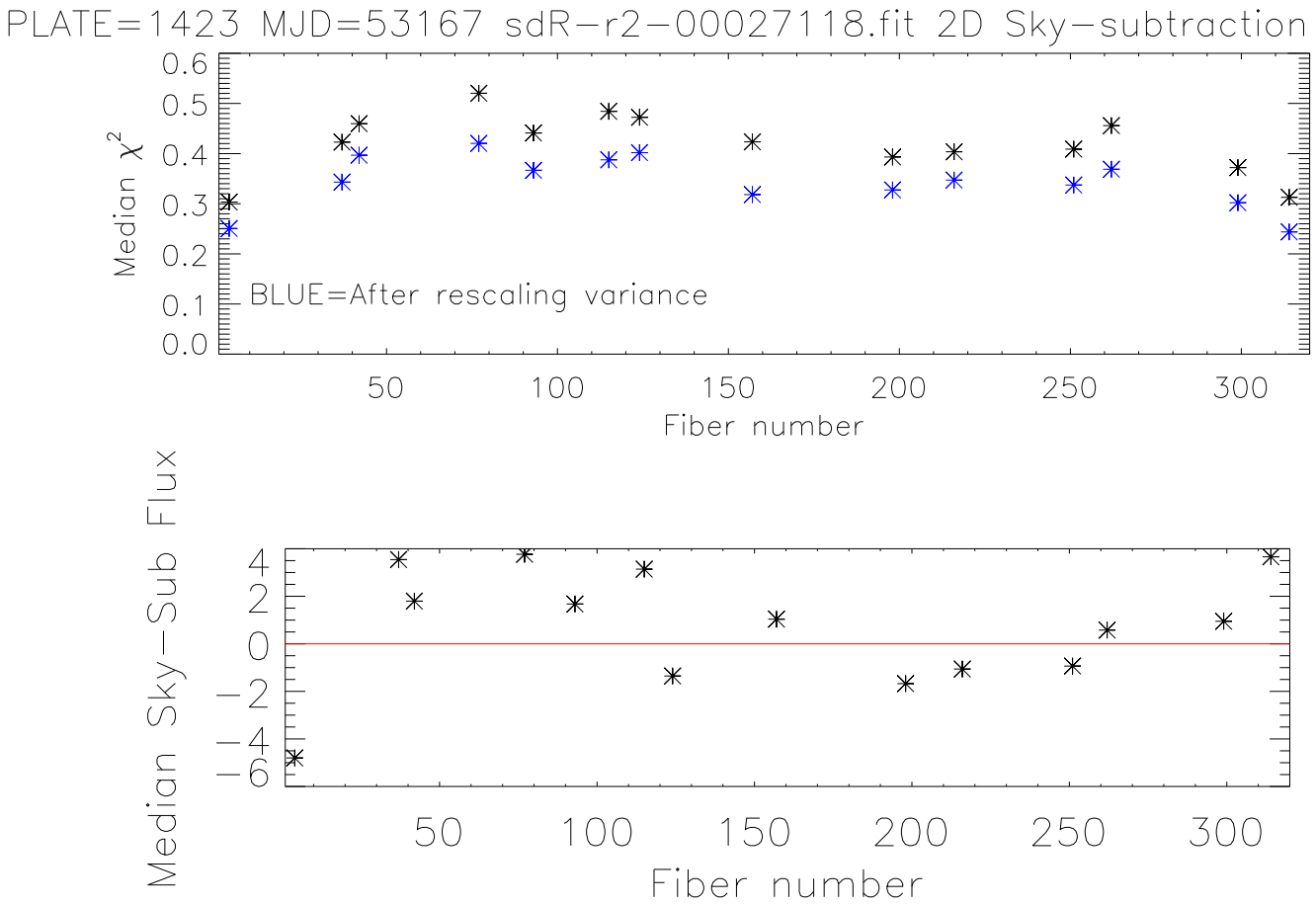

PLATE=1423 MJD=53167 Smooth superflat for sdR-r2-00027118.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

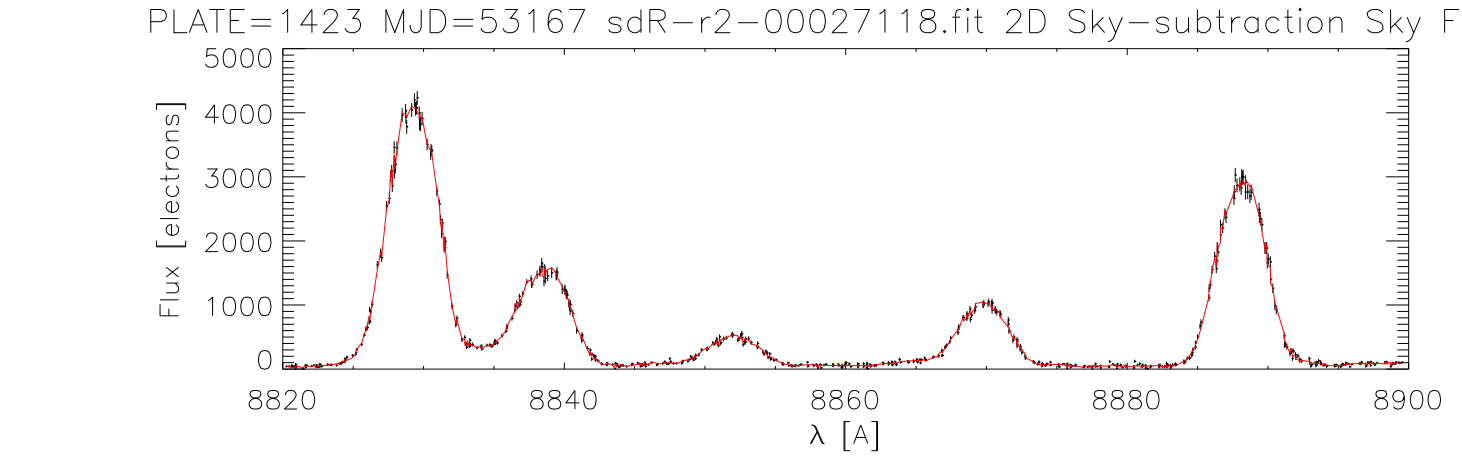

PLATE=1423 MJD=53167 sdR-r2-00027118.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

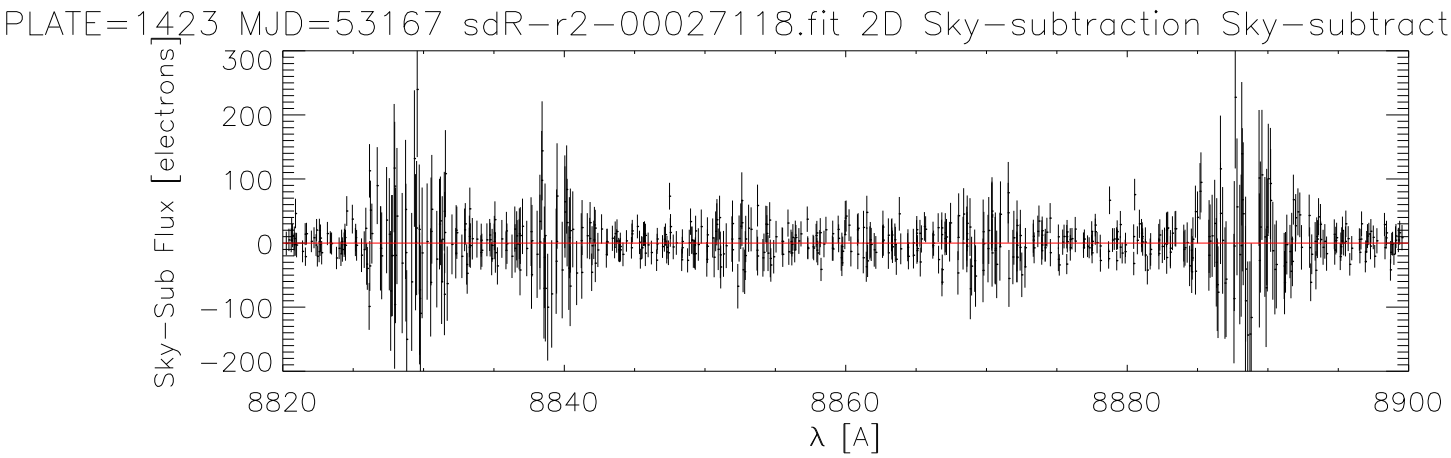

PLATE=1423 MJD=53167 sdR-r2-00027118.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

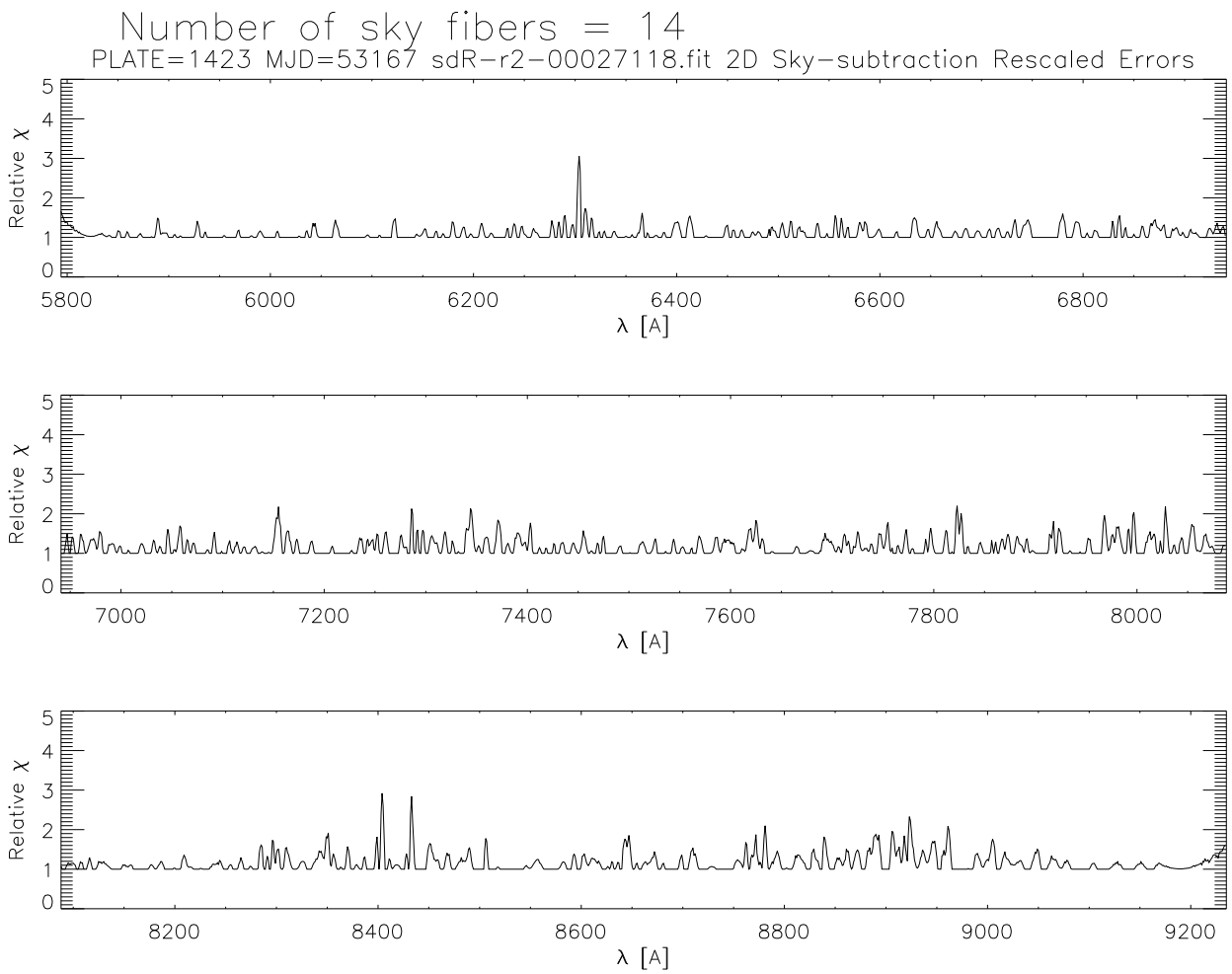

PLATE=1423 MJD=53167 sdR-r2-00027118.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

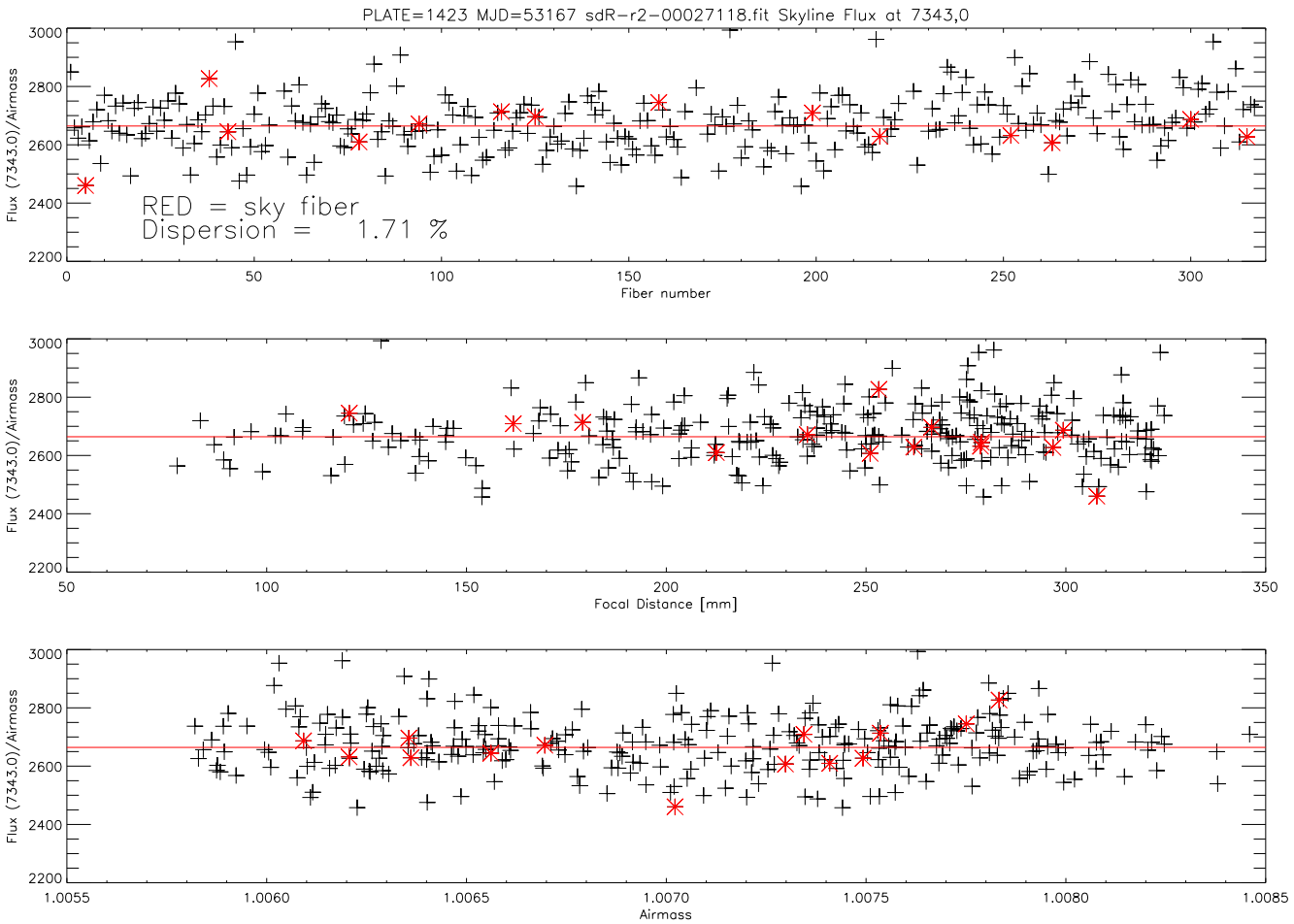

Number of sky fibers = 14
PLATE=1423 MJD=53167 sdR-r2-00027118.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

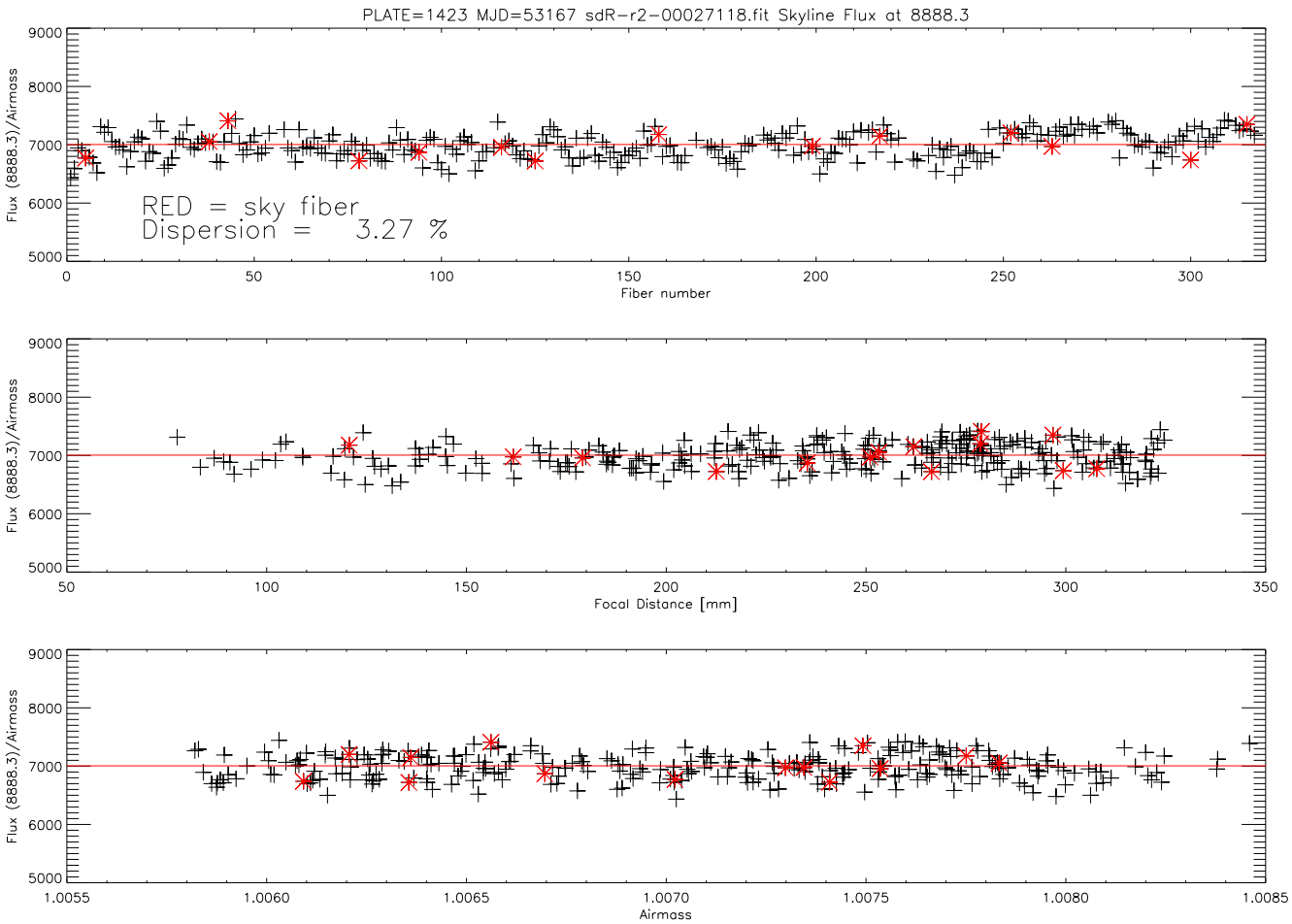

PLATE=1423 MJD=53167 sdR-r2-00027118.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number


PLATE=1423 MJD=53167 sdR-r2-00027118.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1423 MJD=53167 sdR-r2-00027118.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 = 14
PLATE=1423 MJD=53167 sdR-r2-00027118.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=1423 MJD=53167 sdR-r2-00027118.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.71 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1423 MJD=53167 sdR-r2-00027118.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.27 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass