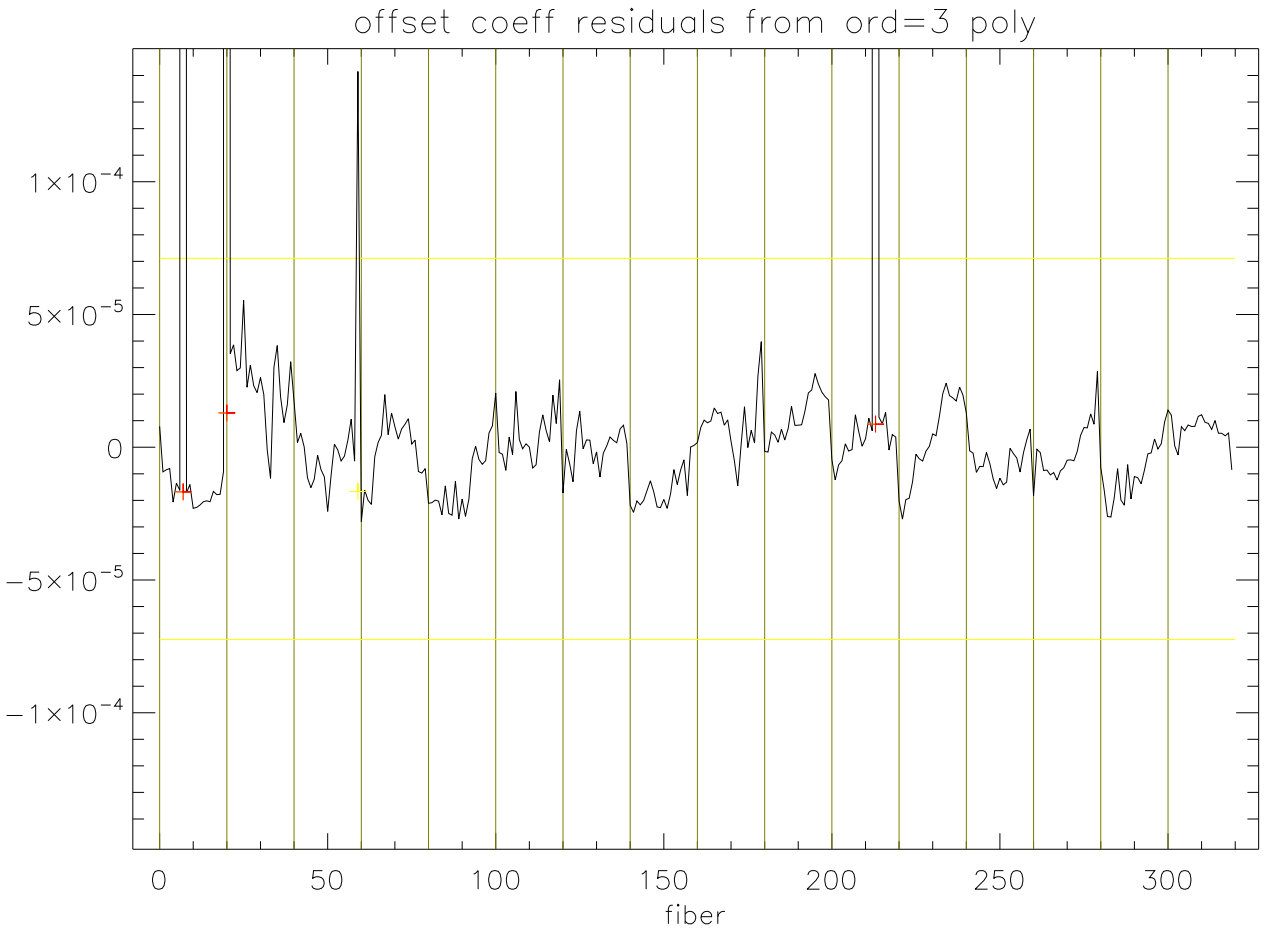
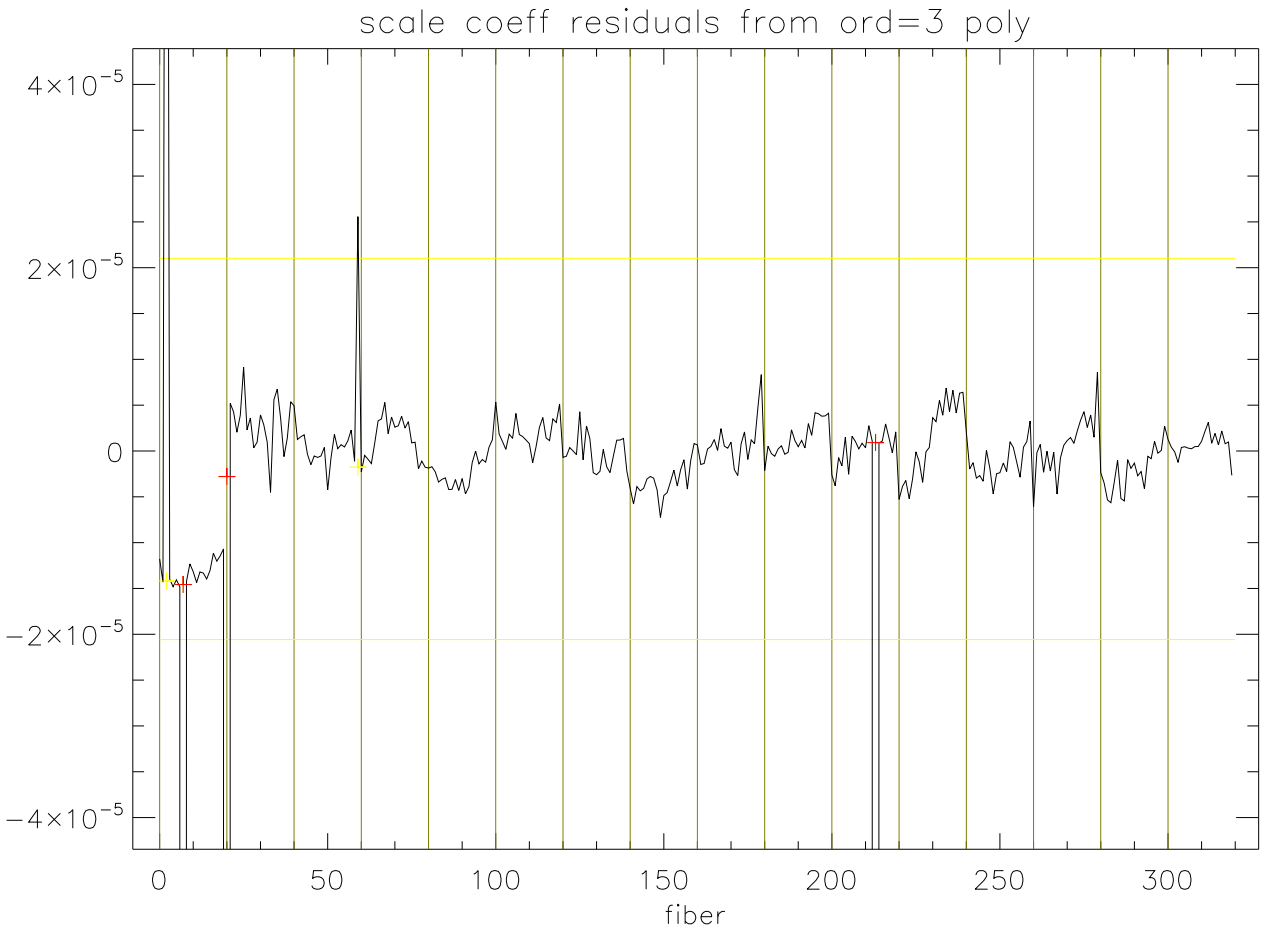
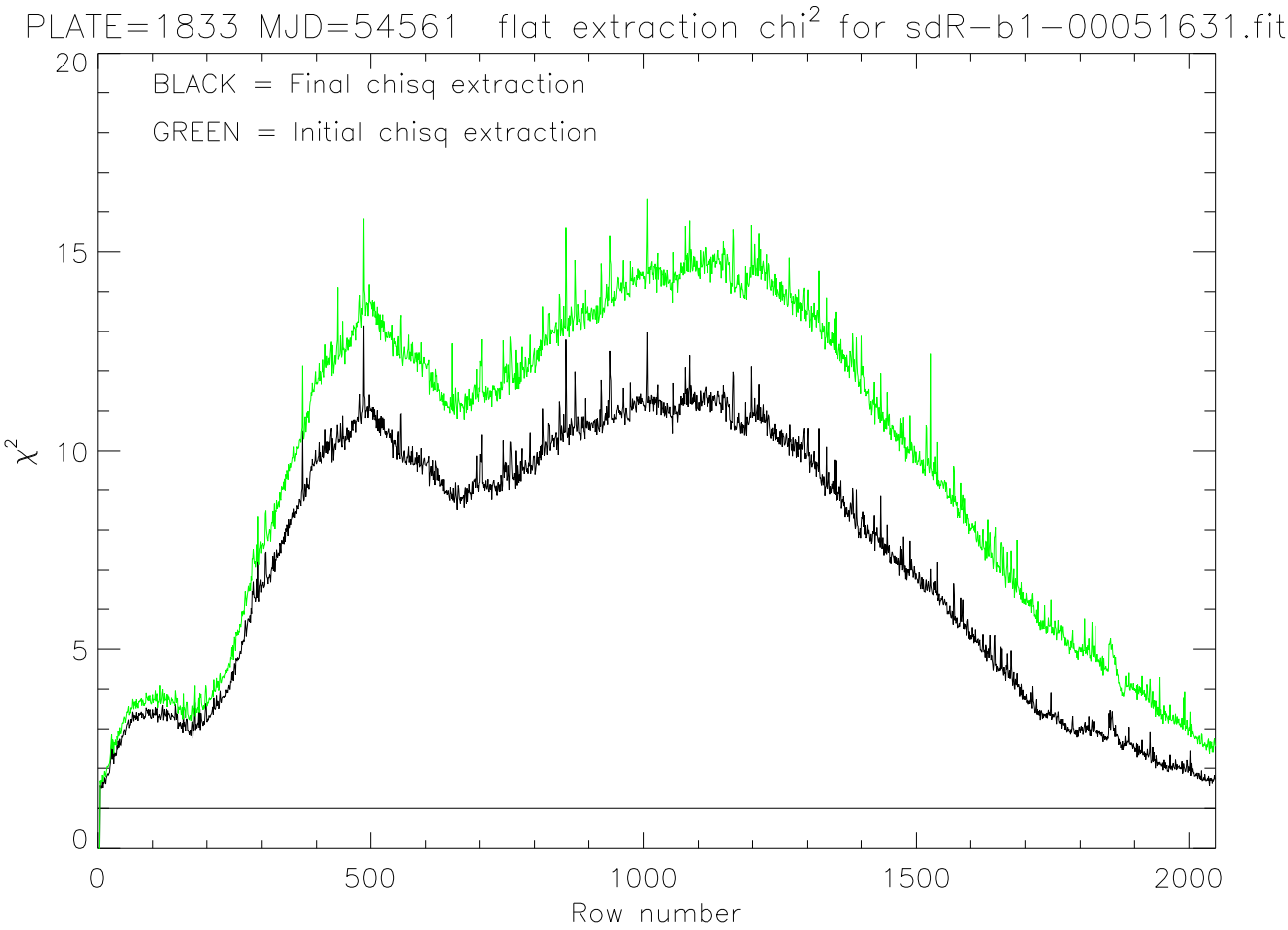
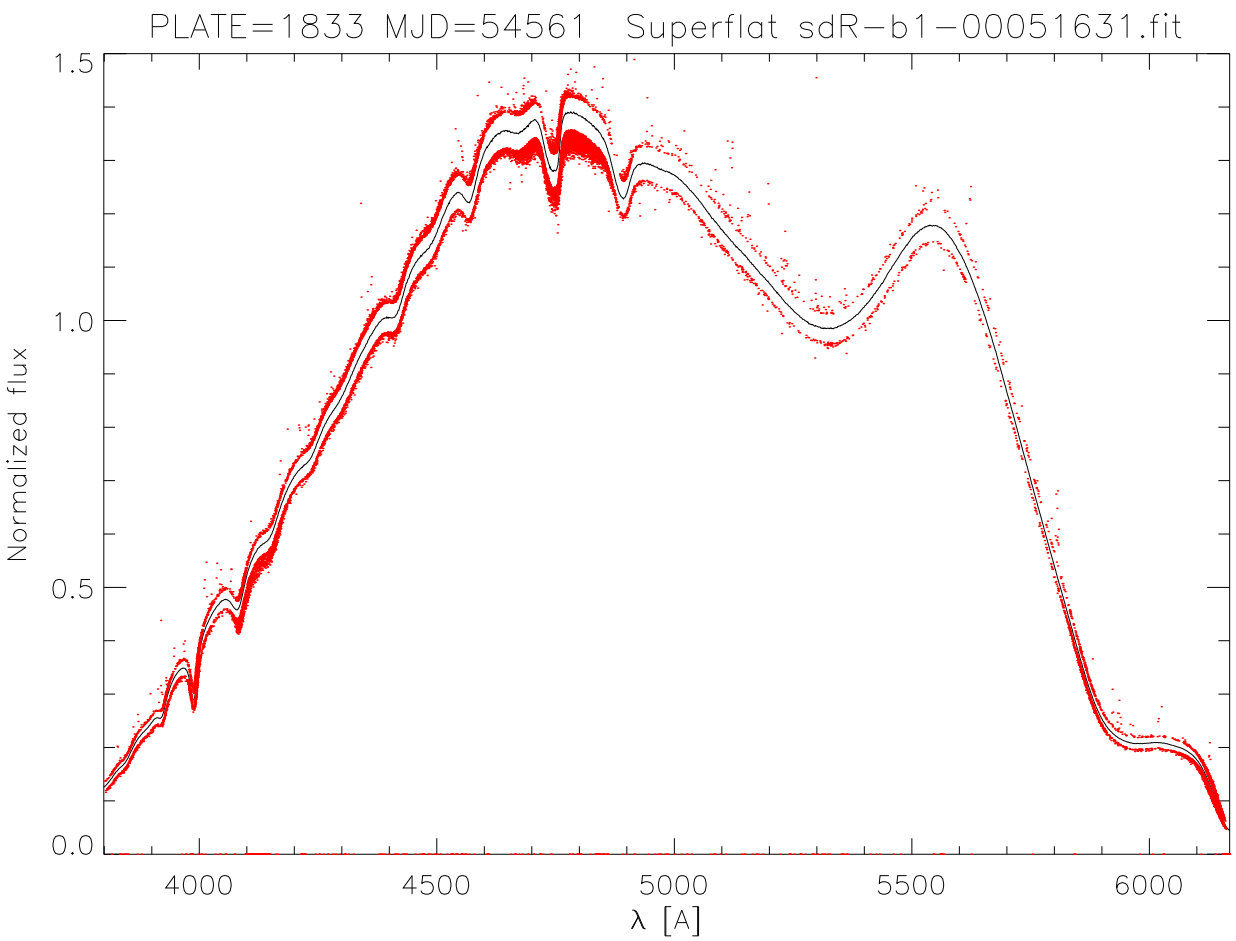
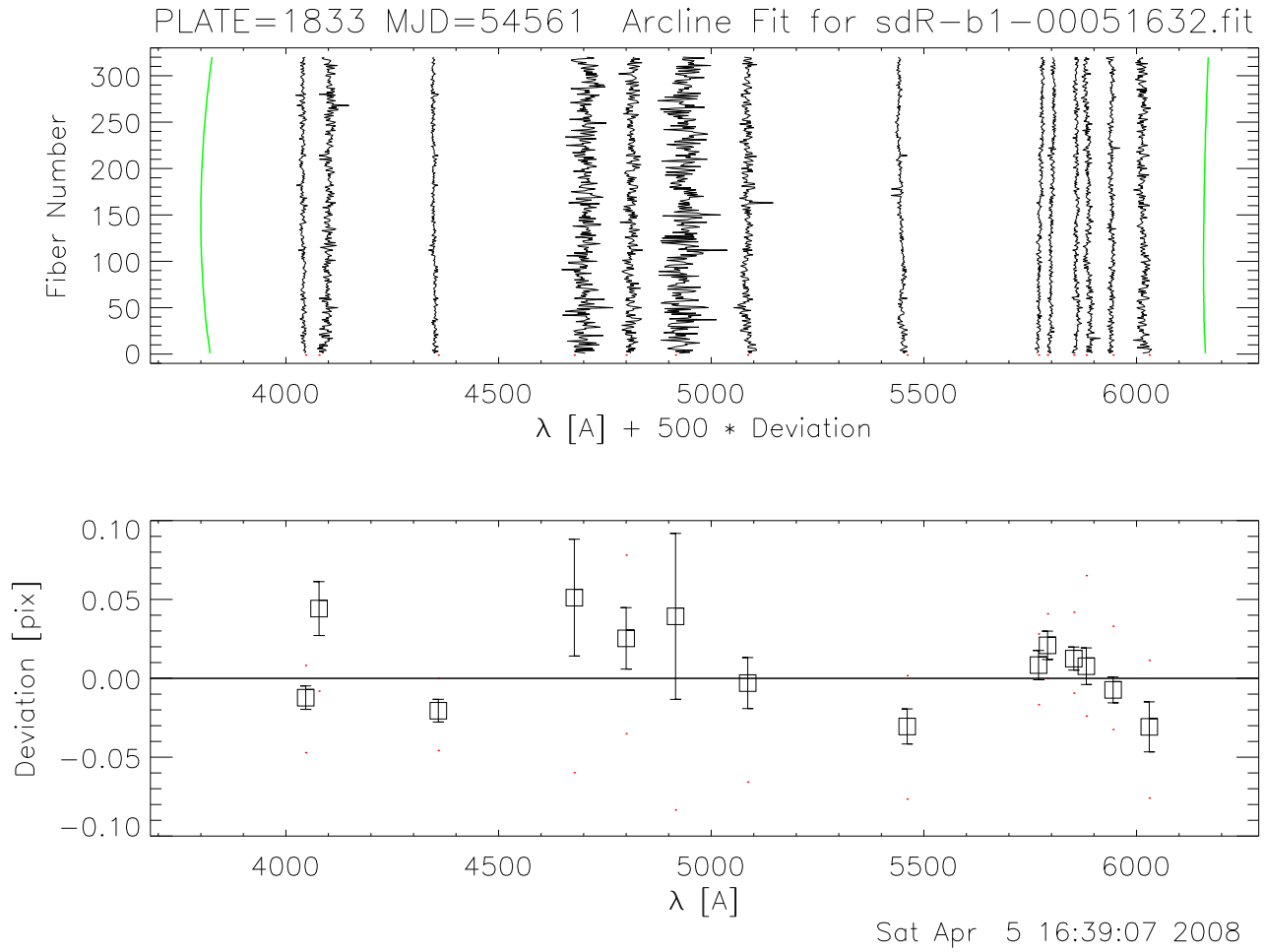

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

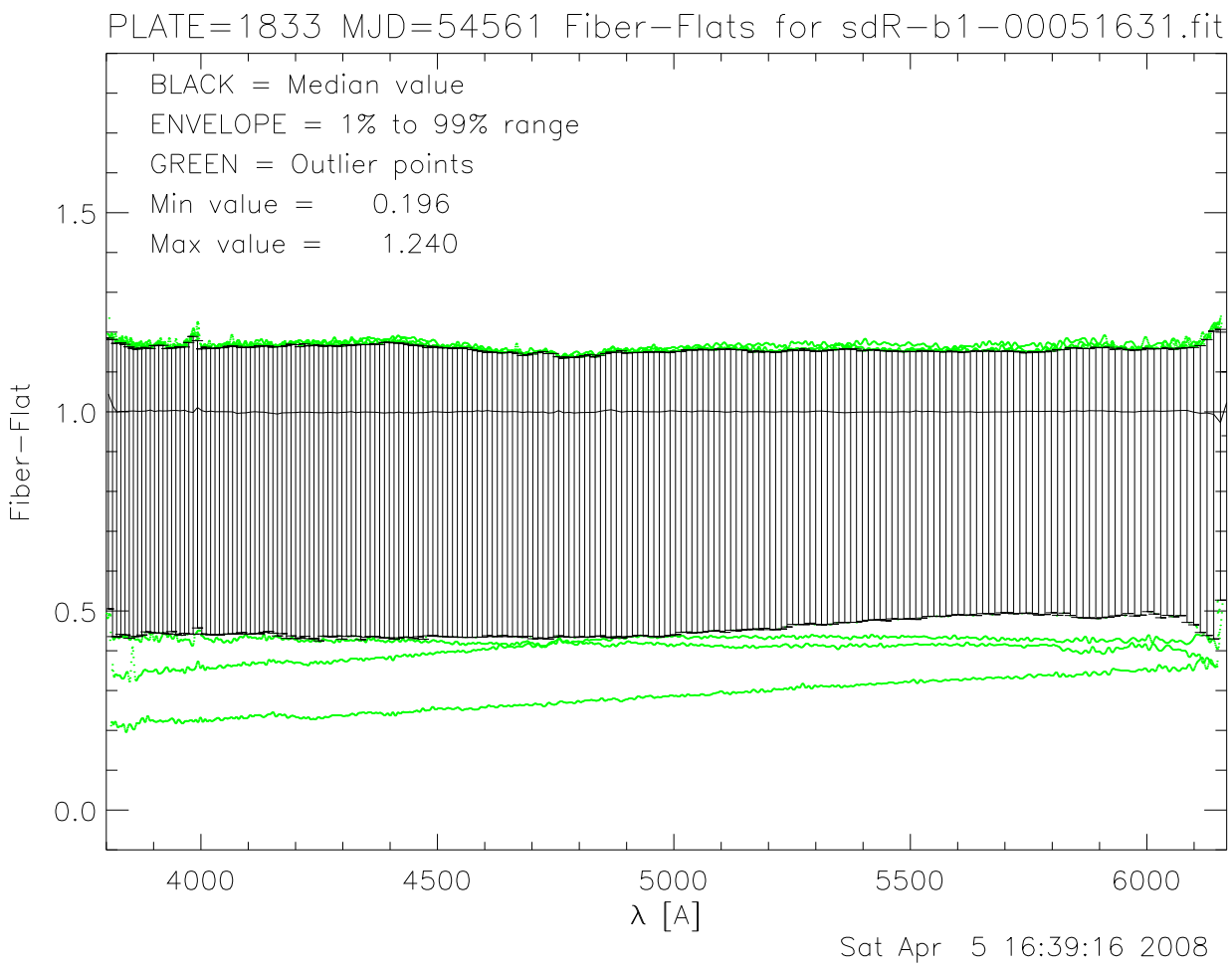

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

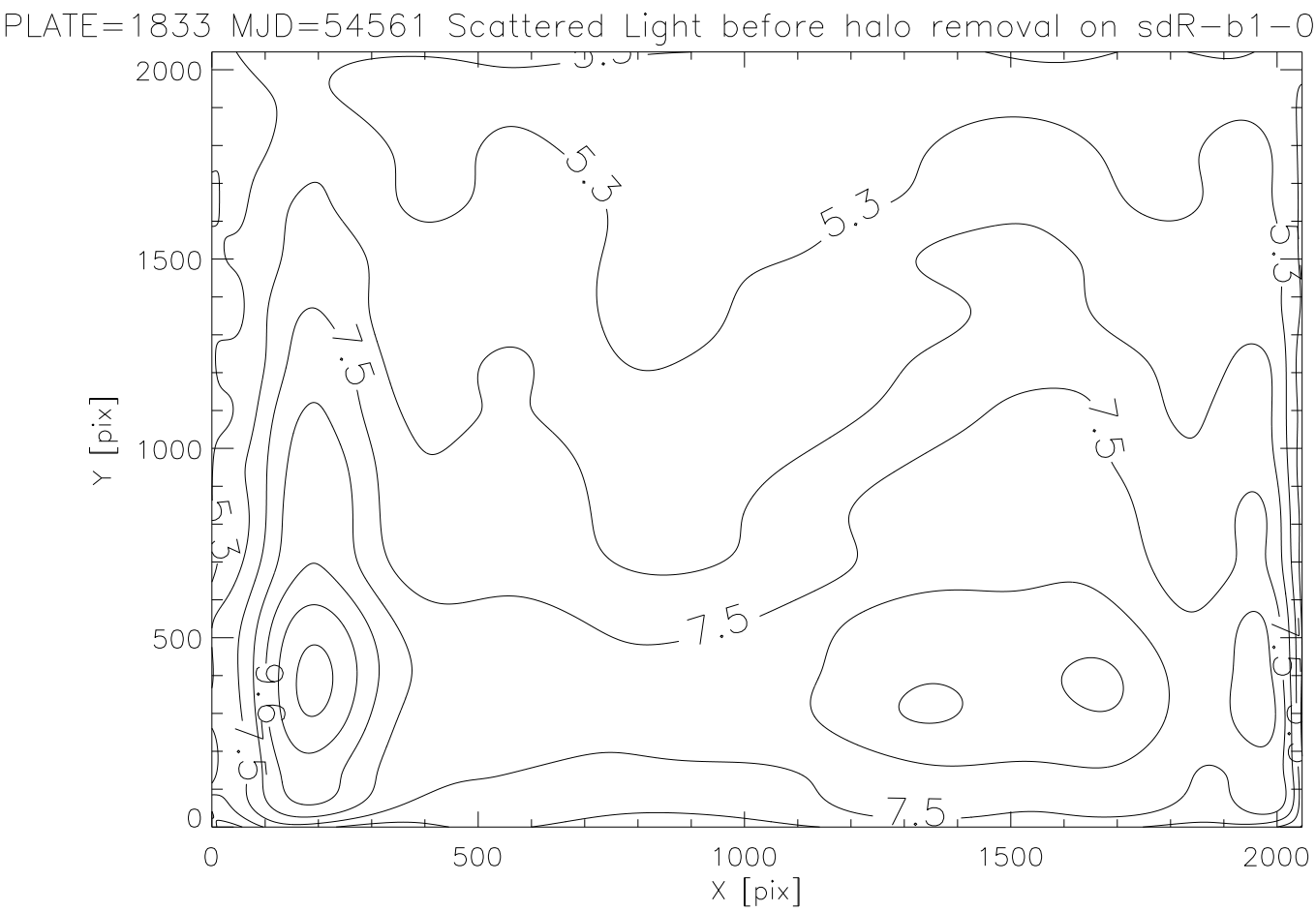

PLATE=1833 MJD=54561 flat extraction chi^2 for sdR−b1−00051631.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

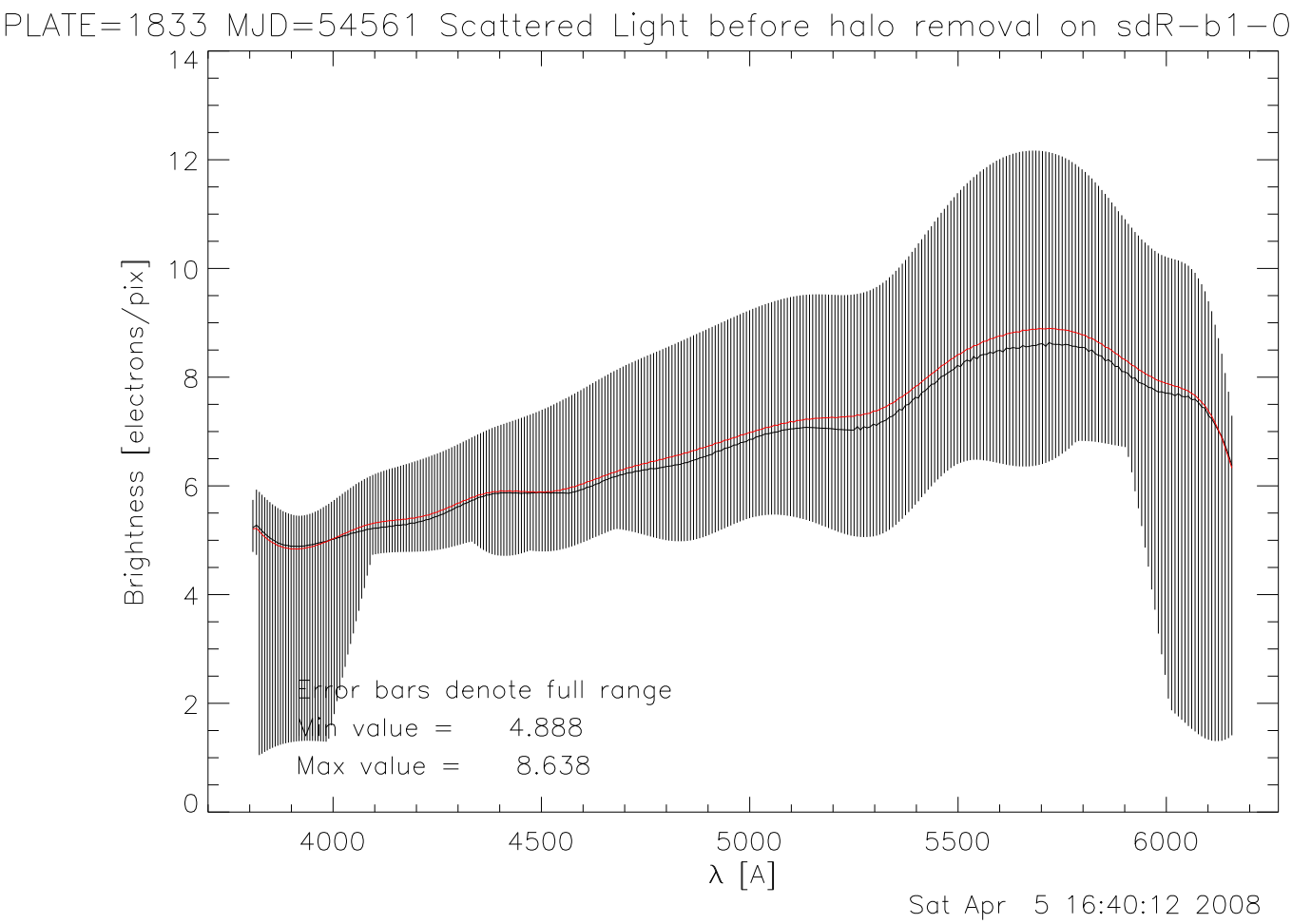

PLATE=1833 MJD=54561 Superflat sdR-b1-00051631.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

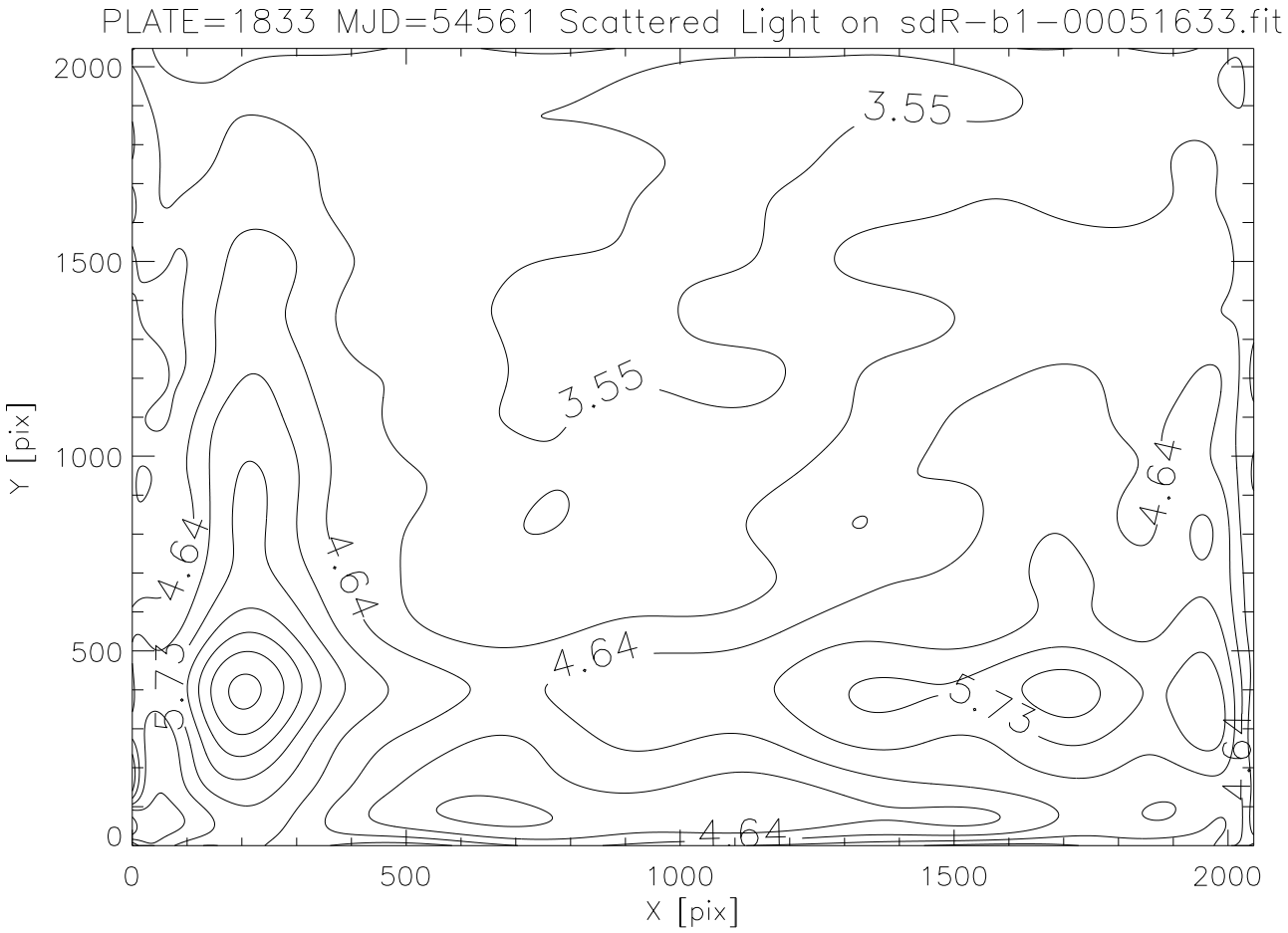

PLATE=1833 MJD=54561 Arcline Fit for sdR-b1-00051632.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation

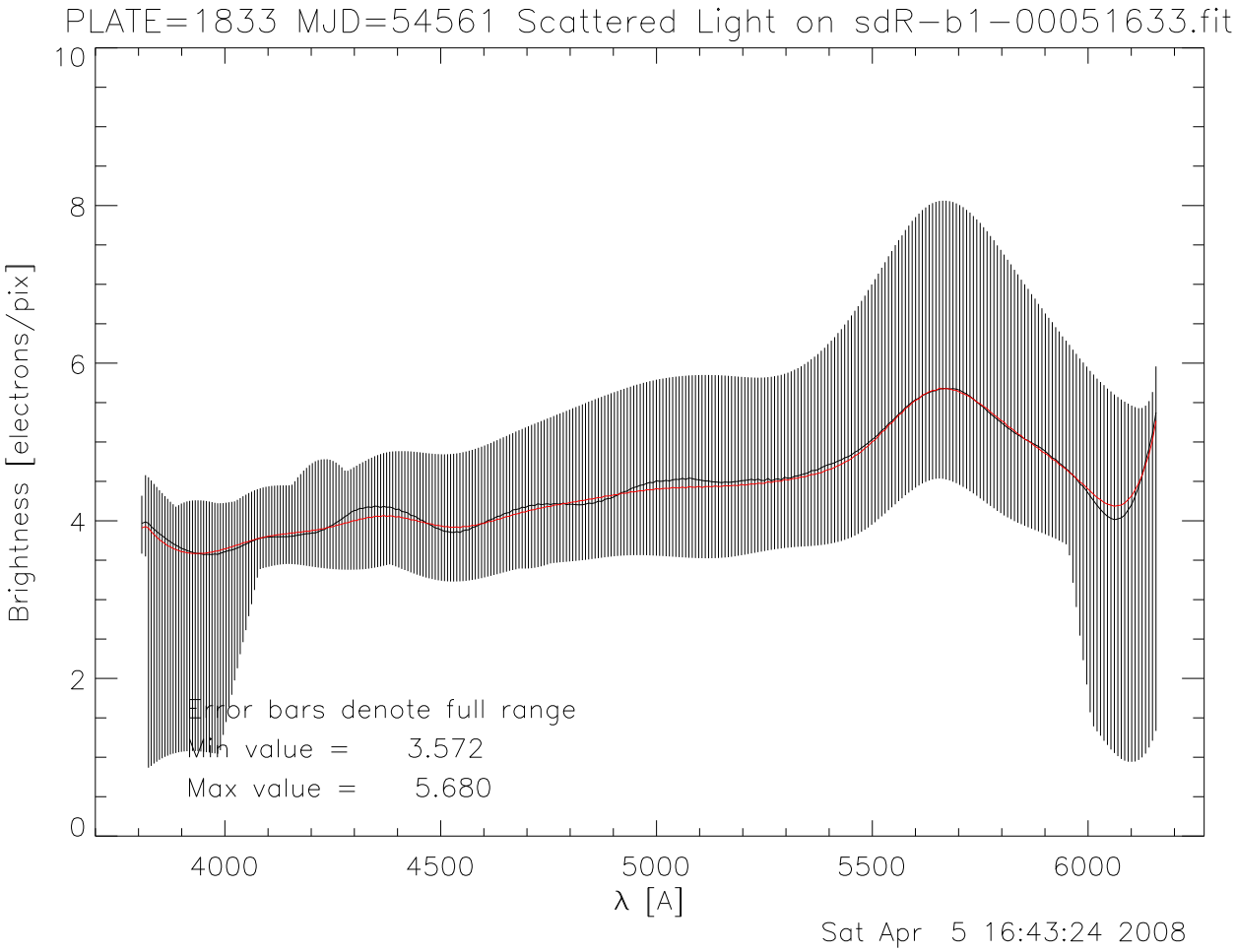
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Apr 5 16:39:07 2008

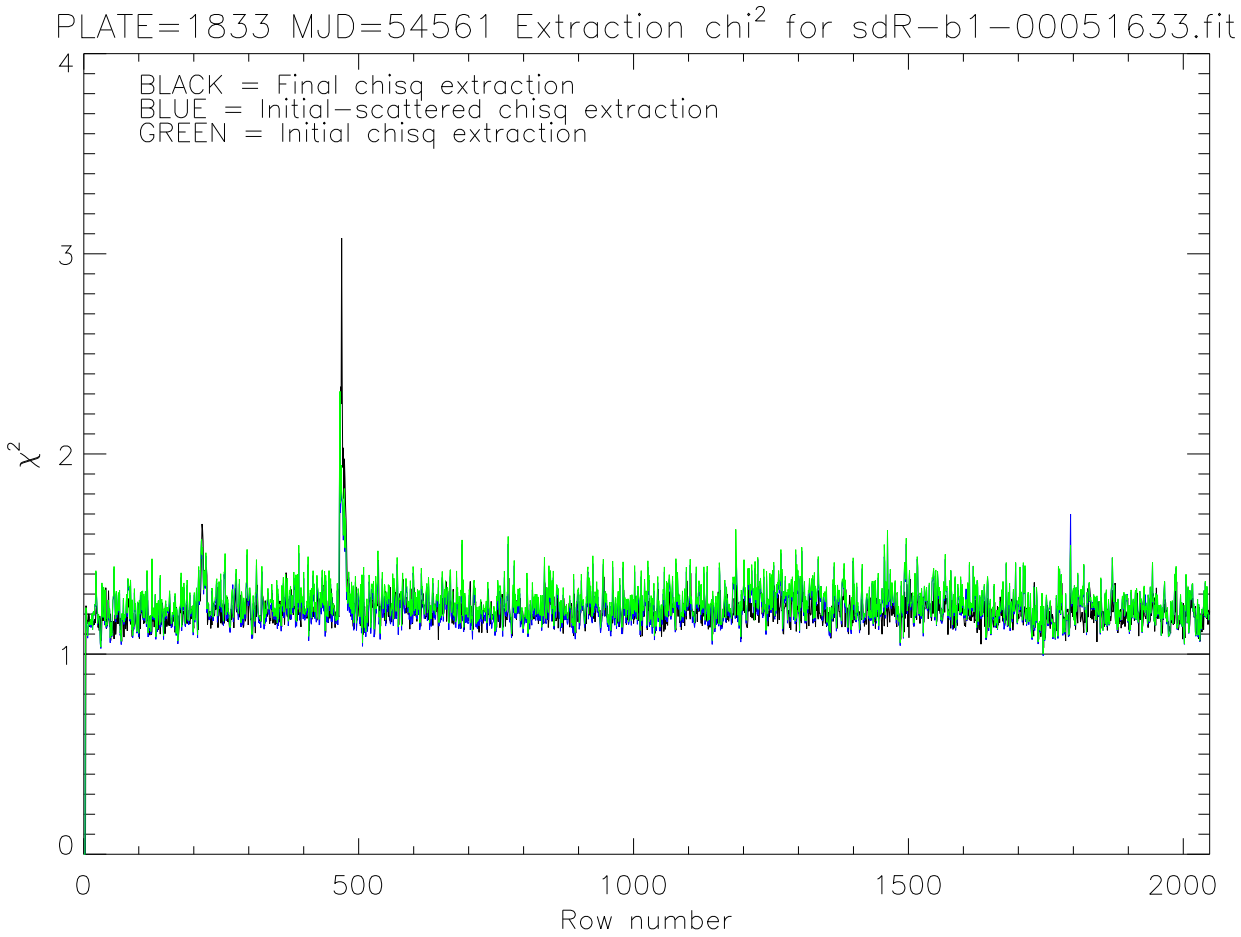

PLATE=1833 MJD=54561 Fiber-Flats for sdR-b1-00051631.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.196
Max value = 1.240
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Apr 5 16:39:16 2008

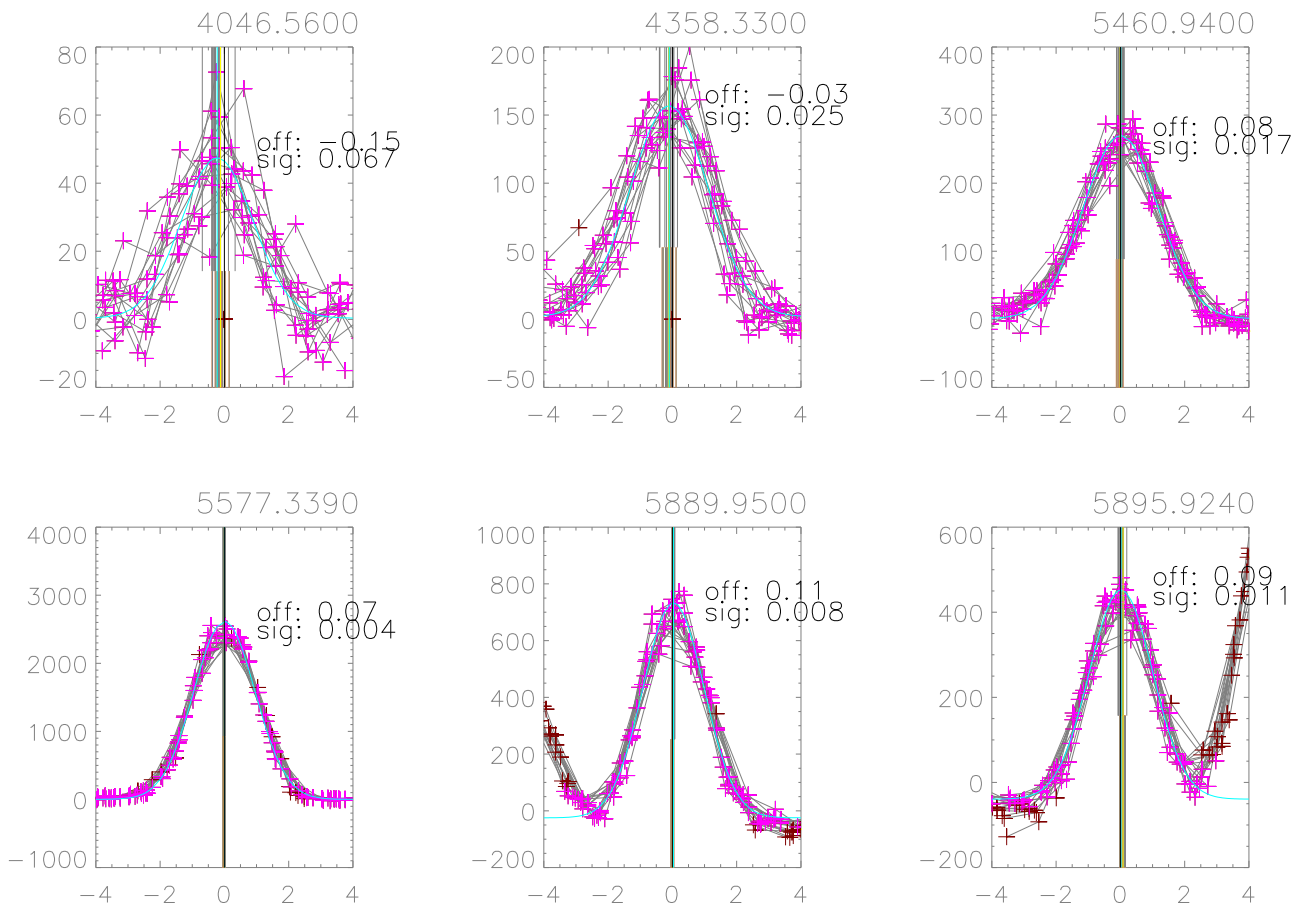

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR−b1−00051633.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.3
5.3
5.3
7.5
7.5
7.5
7.5
9.6
9.6
7.5

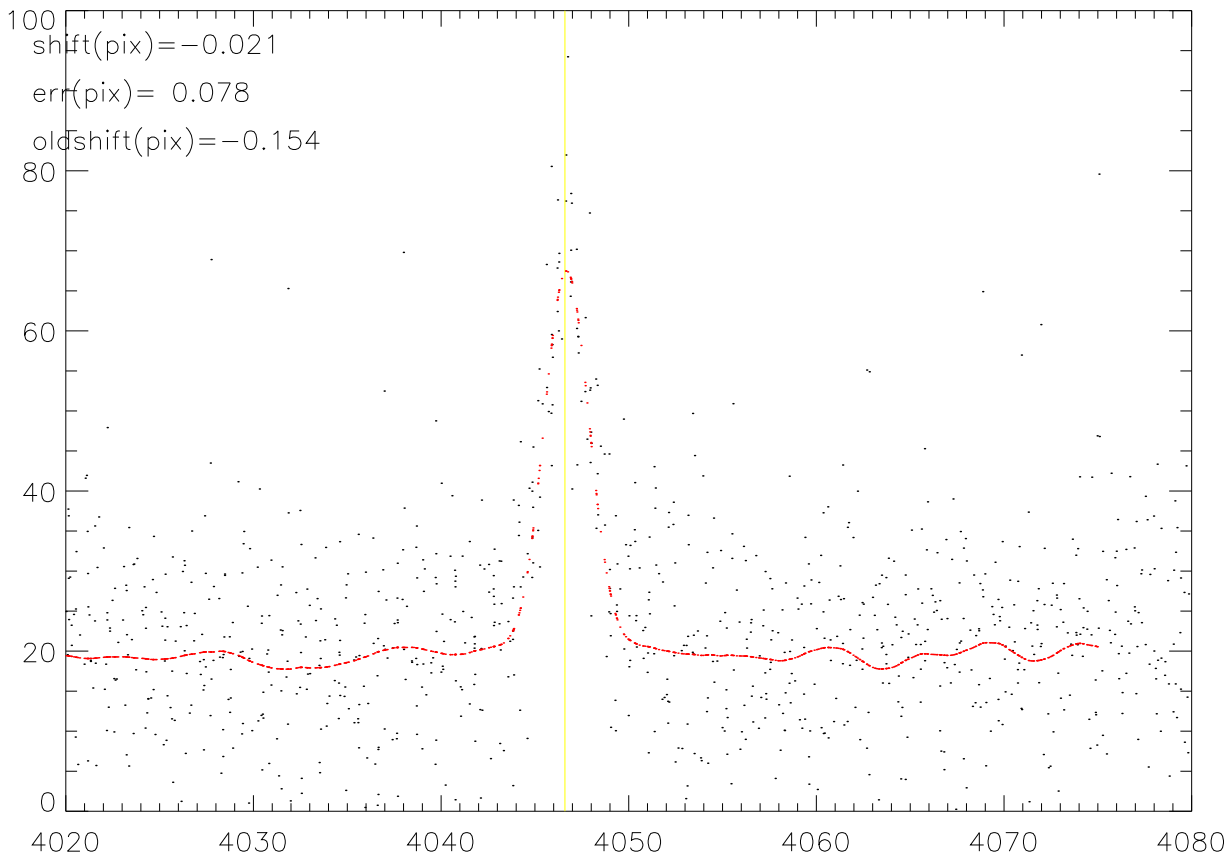

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-b1-00051633.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.888
Max value = 8.638
Sat Apr 5 16:40:12 2008

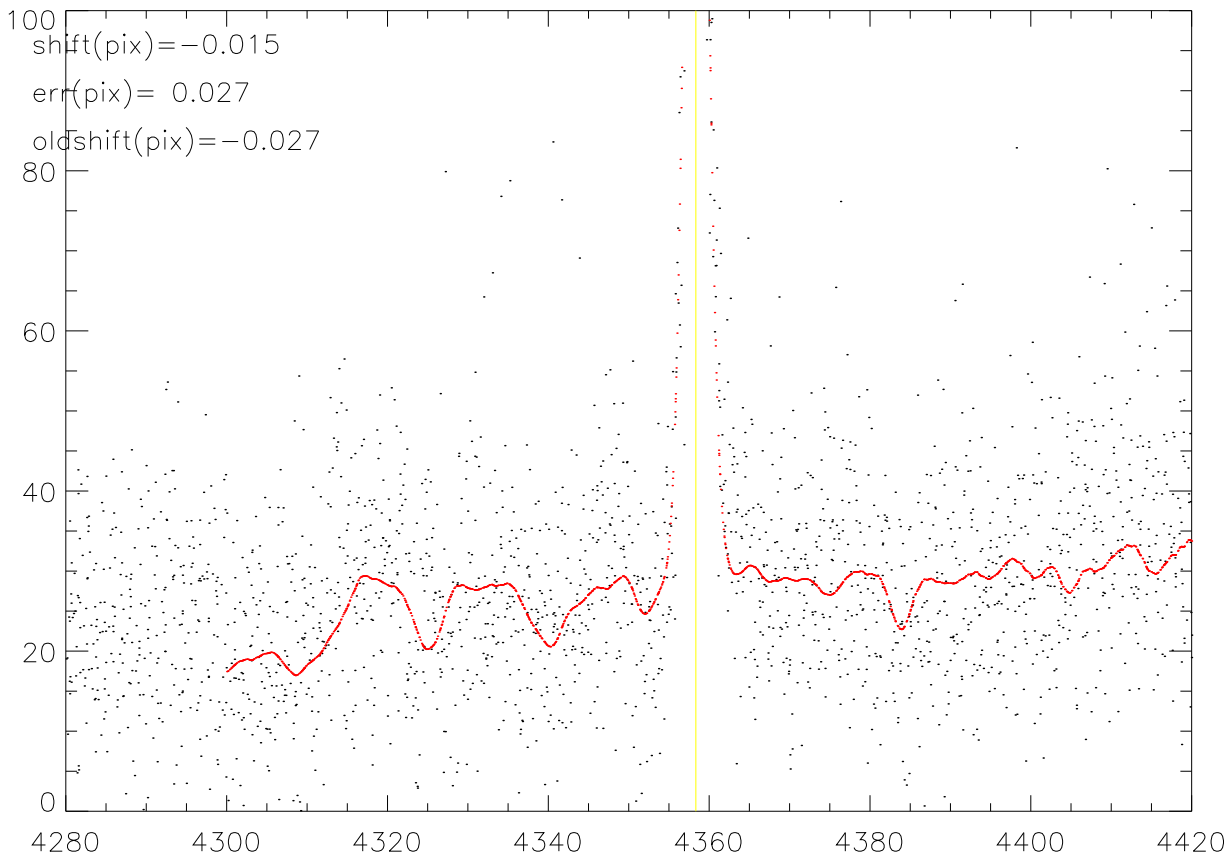

PLATE=1833 MJD=54561 Scattered Light on sdR-b1-00051633.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.55
4.64
5.73

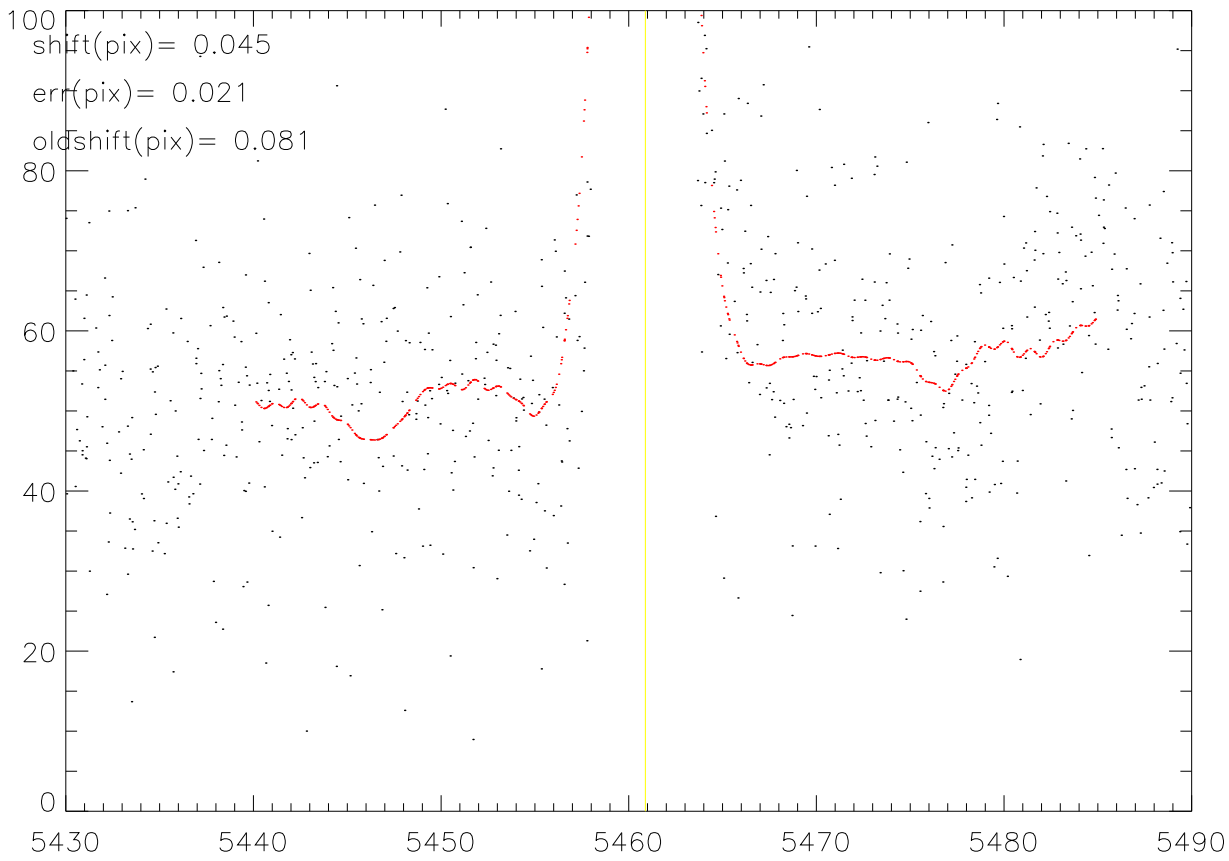

PLATE=1833 MJD=54561 Scattered Light on sdR-b1-00051633.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.572
Max value = 5.680
Sat Apr 5 16:43:24 2008

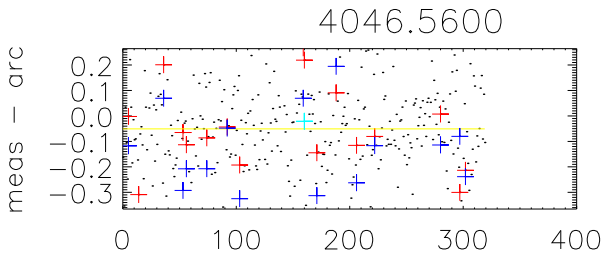

PLATE=1833 MJD=54561 Extraction chi^2 for sdR-b1-00051633.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

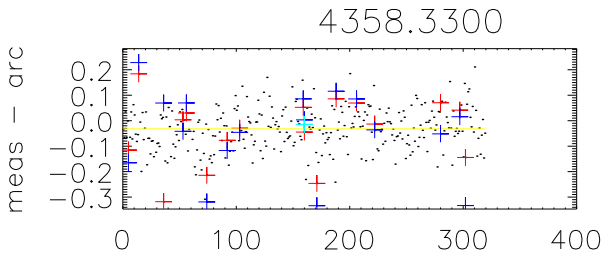

4046.5600
off: −0.15
sig: 0.067
4358.3300
off: −0.03
sig: 0.025
5460.9400
off: 0.08
sig: 0.017
5577.3390
off: 0.07
sig: 0.004
5889.9500
off: 0.11
sig: 0.008
5895.9240
off: 0.09
sig: 0.011

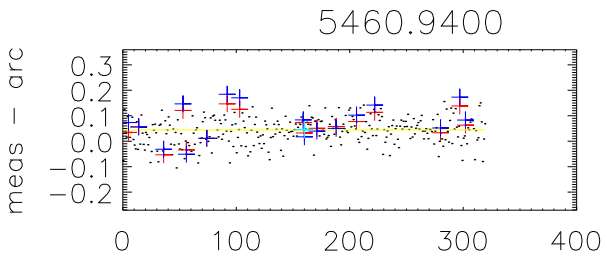

shift(pix)=−0.021
err(pix)= 0.078
oldshift(pix)=−0.154
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

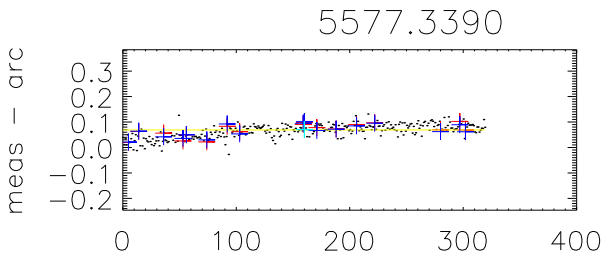

shift(pix)=−0.015
err(pix)= 0.027
oldshift(pix)=−0.027
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

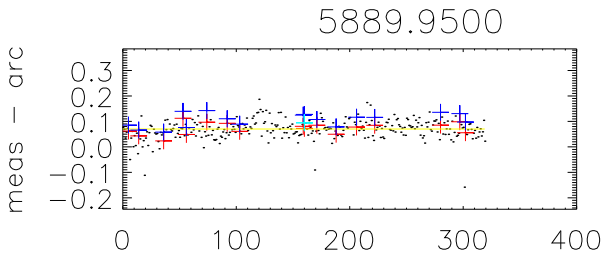

shift(pix)= 0.045
err(pix)= 0.021
oldshift(pix)= 0.081
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

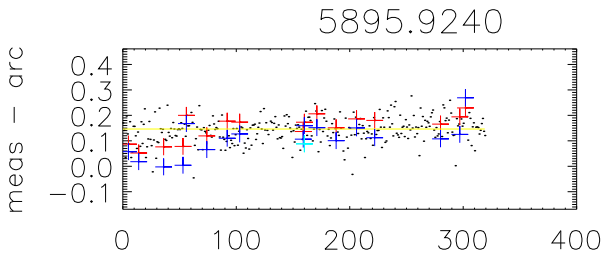

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

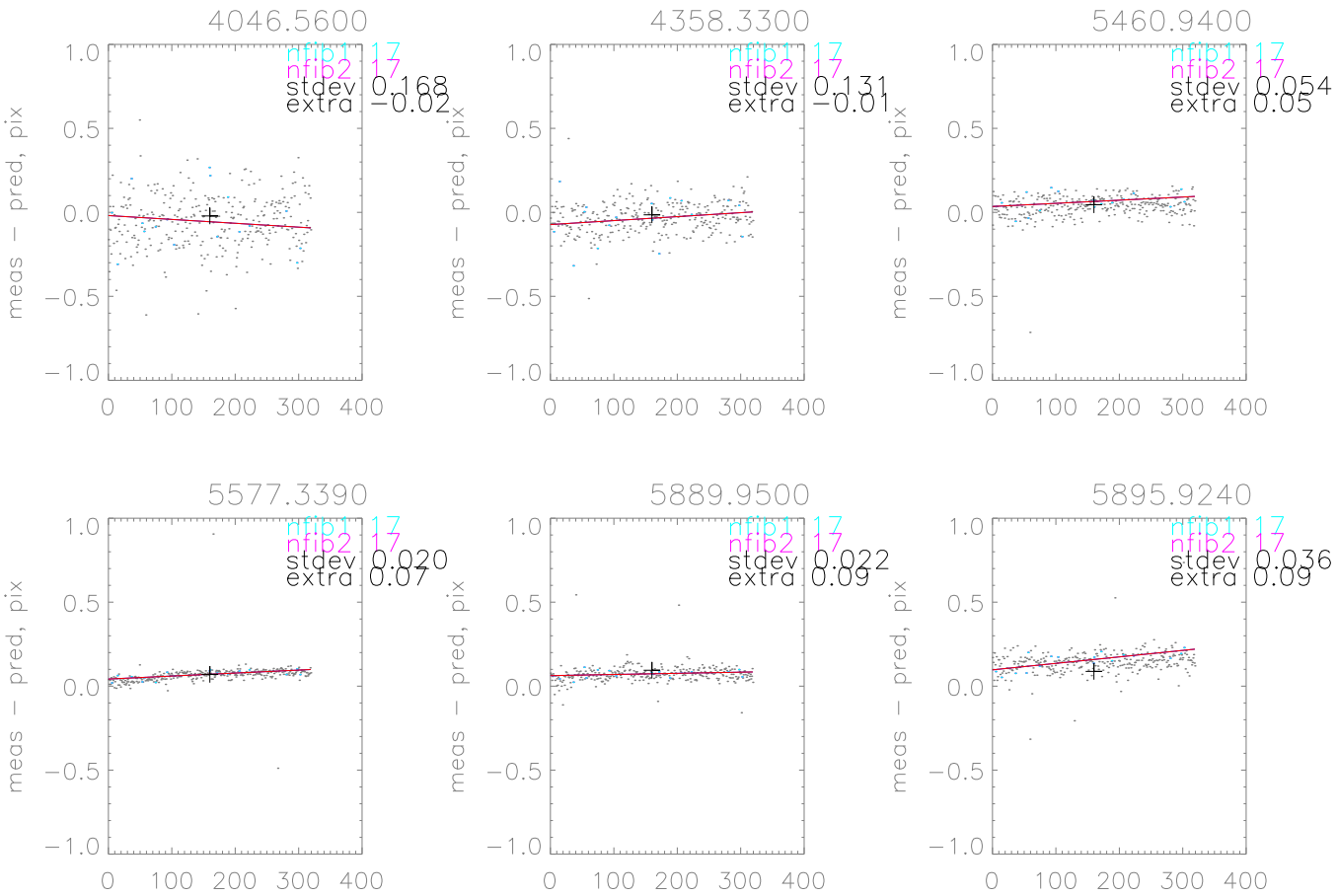

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

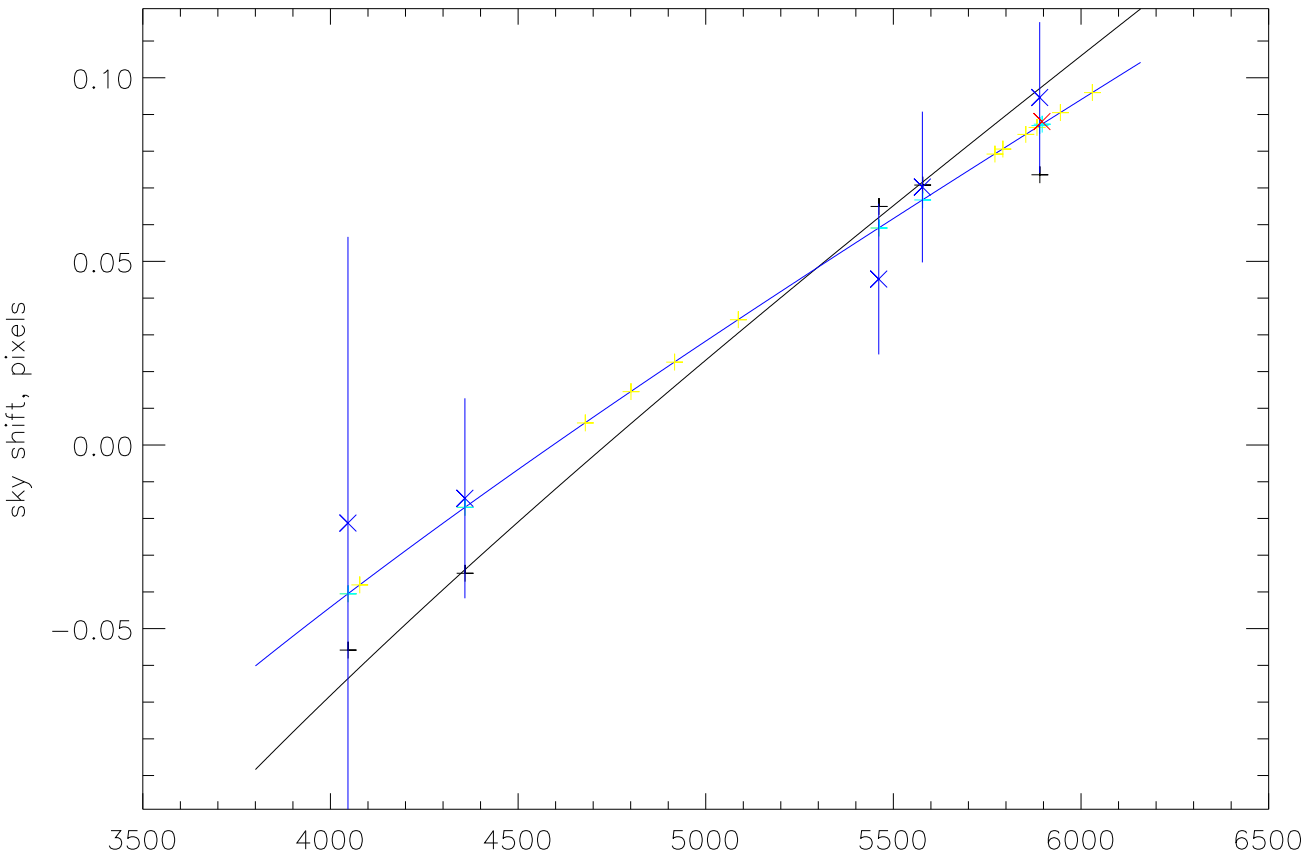

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

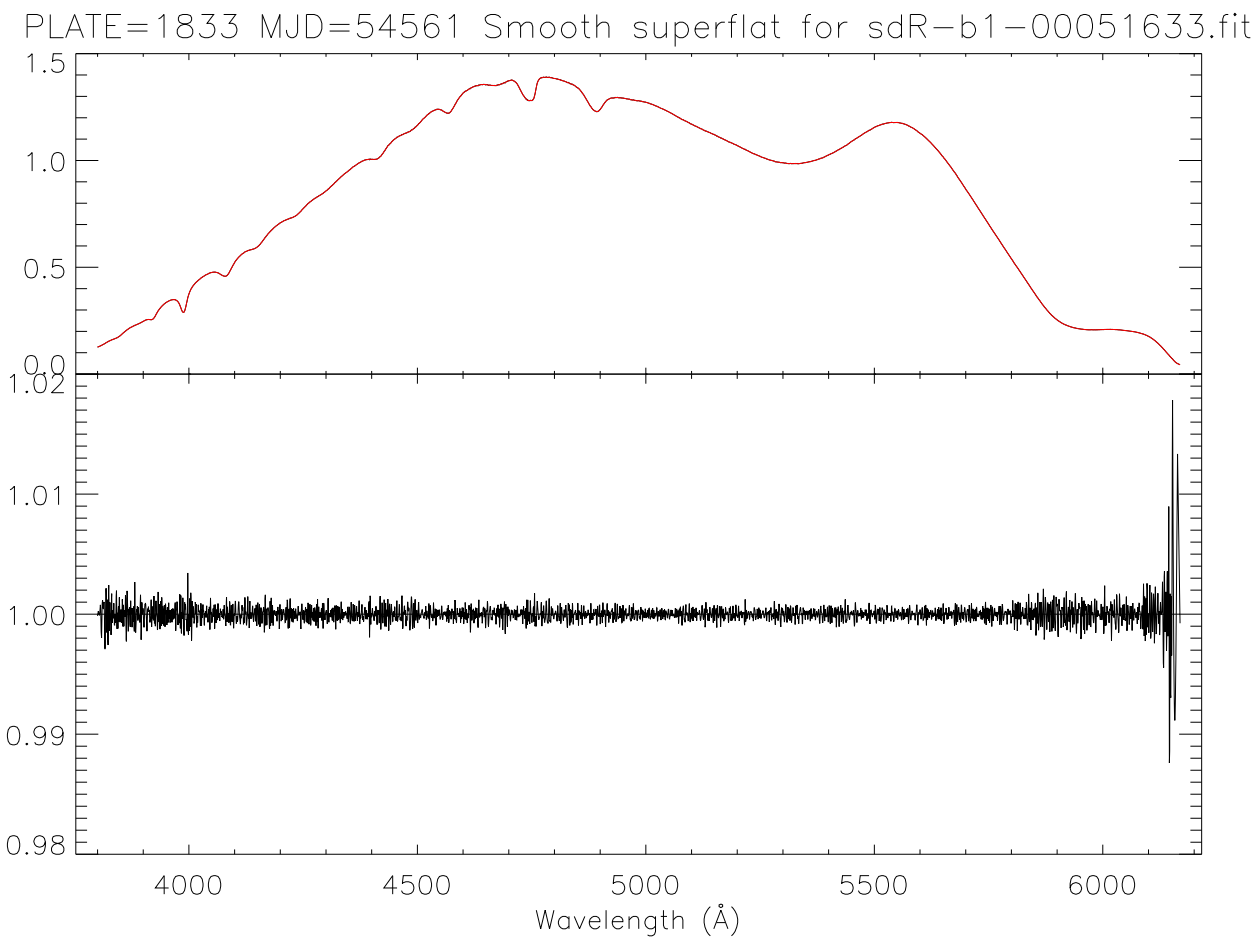

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

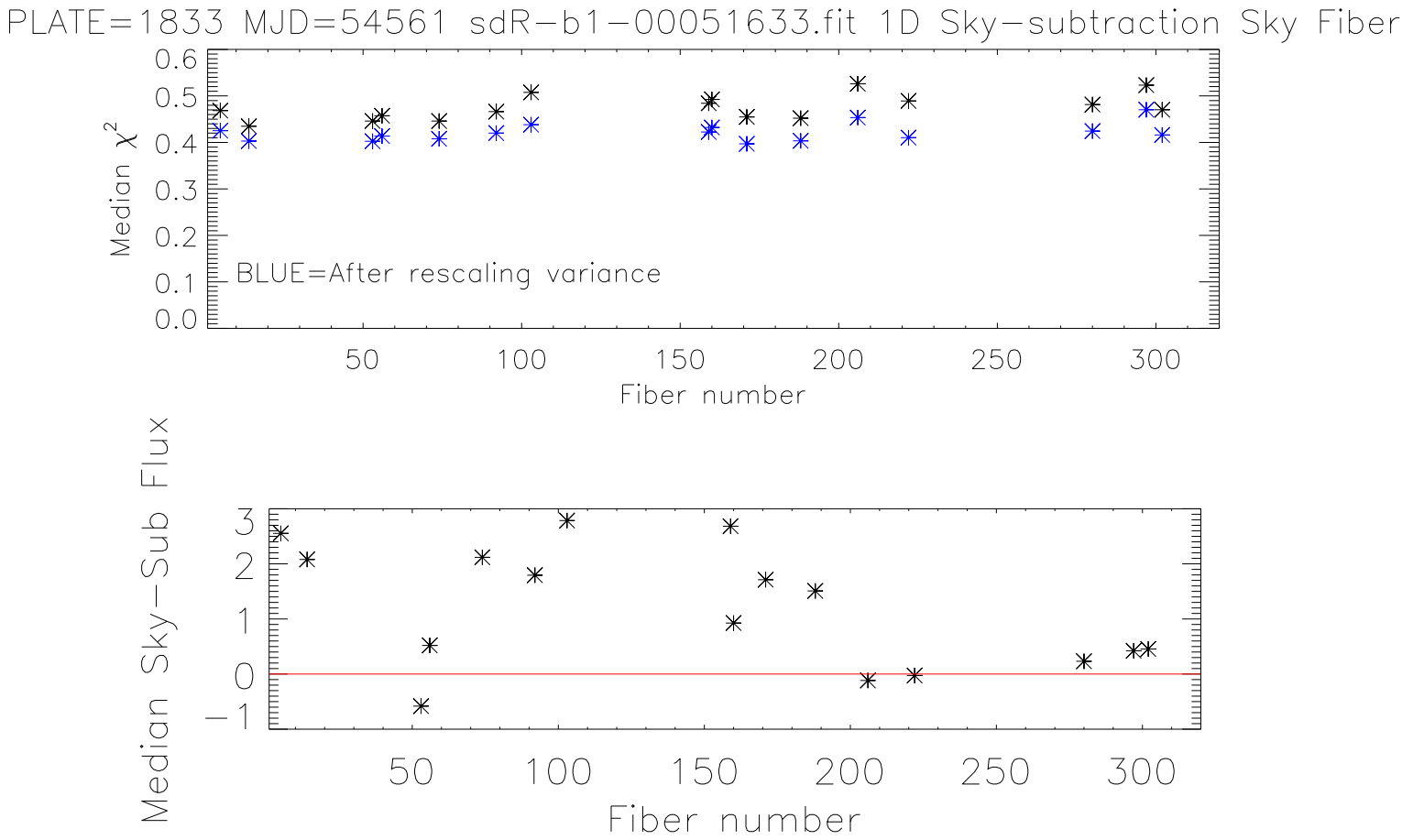

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

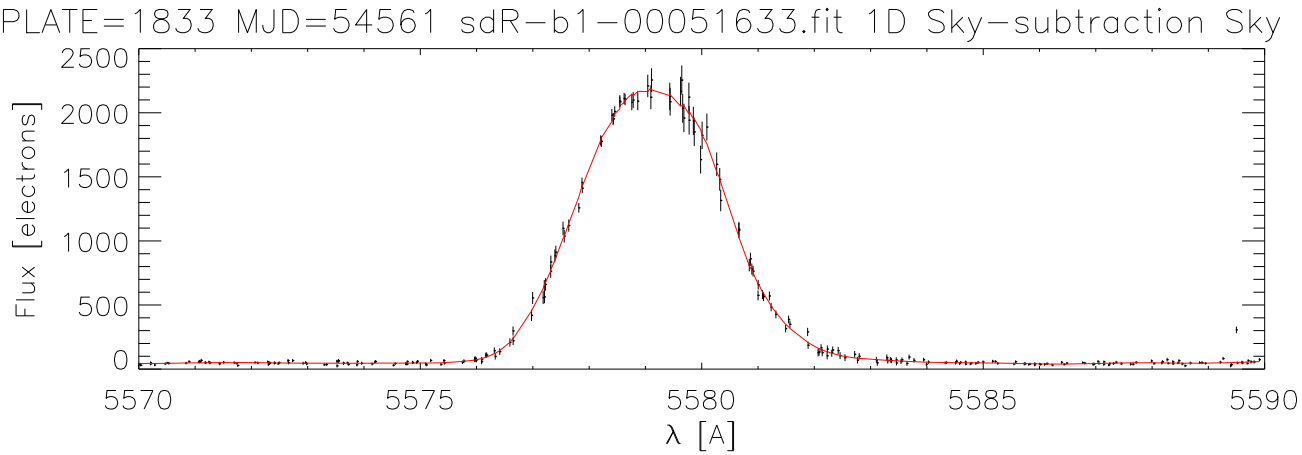

4046.5600
nfib1 17
nfib2 17
stdev 0.168
extra −0.02
4358.3300
nfib1 17
nfib2 17
stdev 0.131
extra −0.01
5460.9400
nfib1 17
nfib2 17
stdev 0.054
extra 0.05
5577.3390
nfib1 17
nfib2 17
stdev 0.020
extra 0.07
5889.9500
nfib1 17
nfib2 17
stdev 0.022
extra 0.09
5895.9240
nfib1 17
nfib2 17
stdev 0.036
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

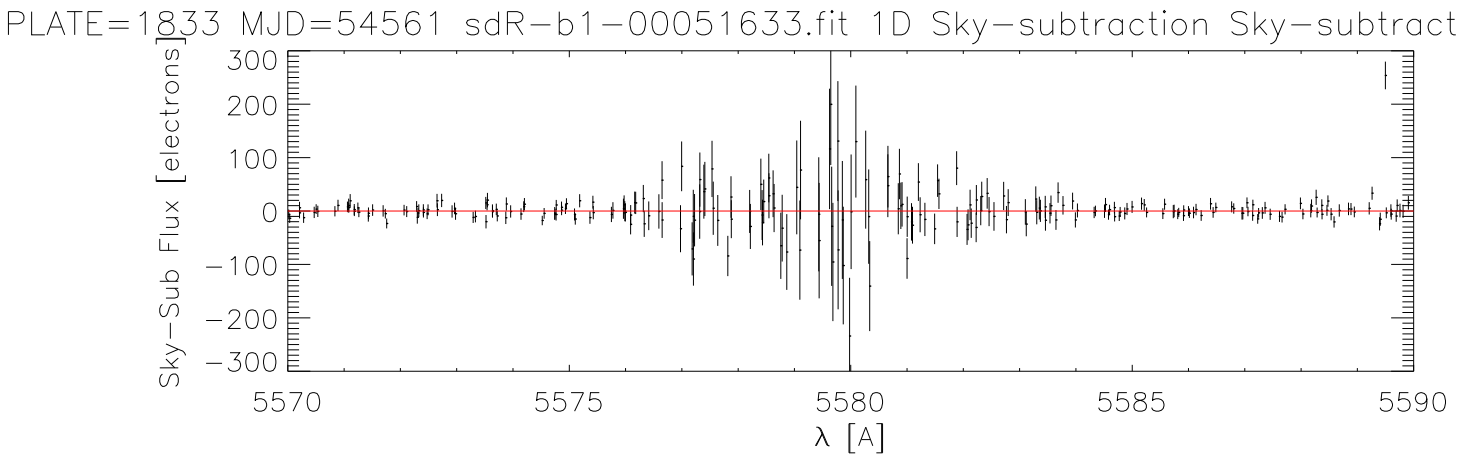

0.10
0.05
0.00
−0.05
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

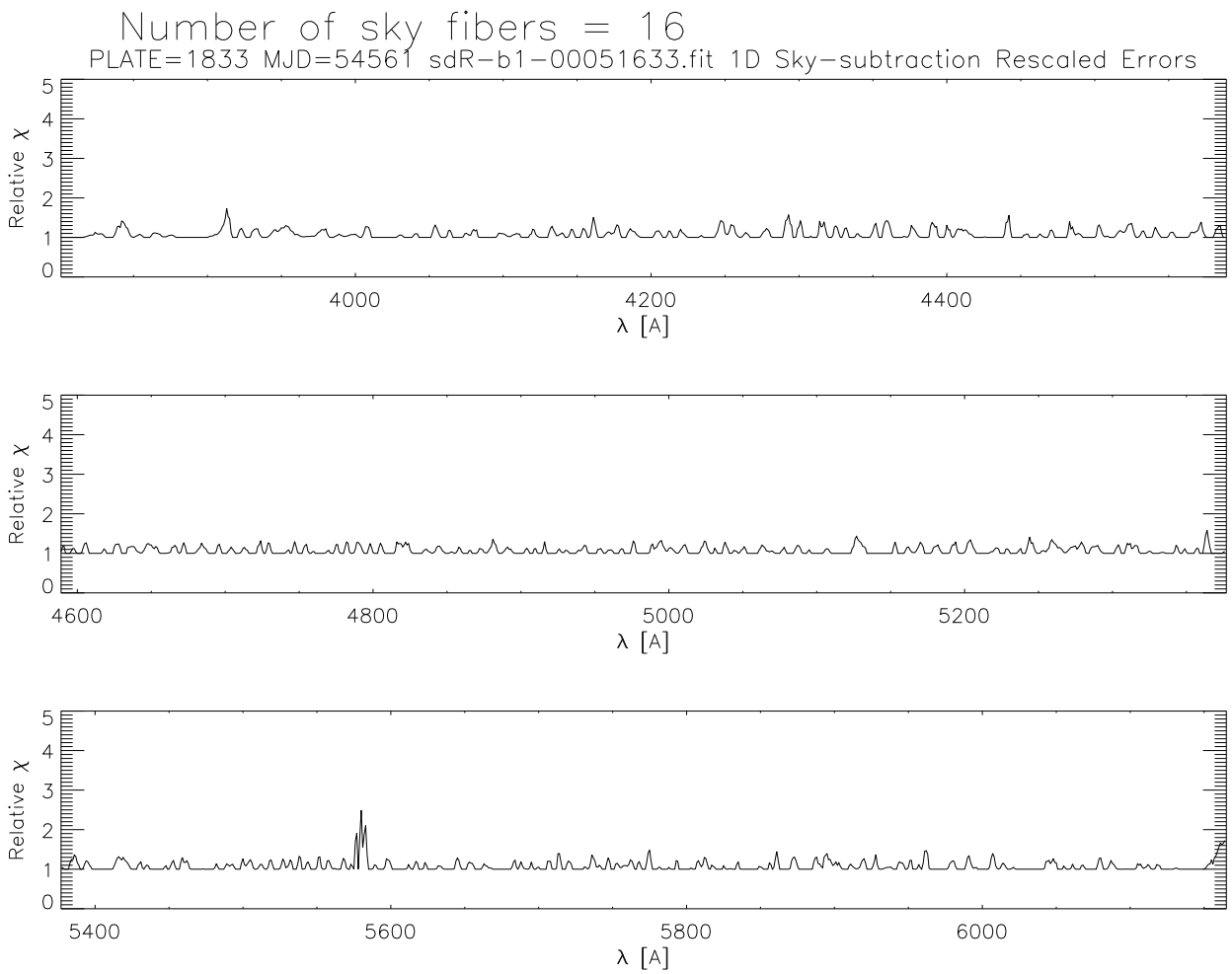
es= −0.0001

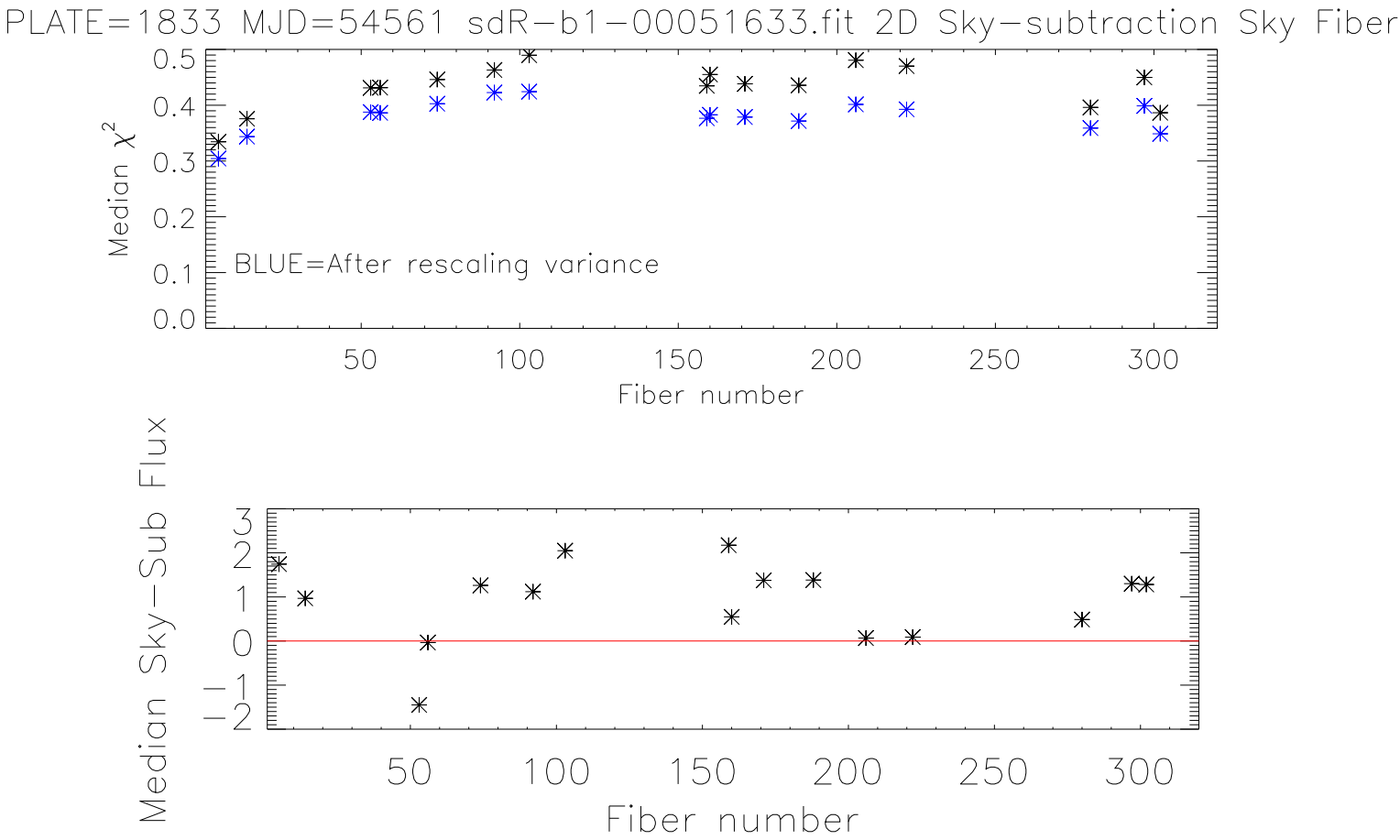

PLATE=1833 MJD=54561 Smooth superflat for sdR−b1−00051633.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

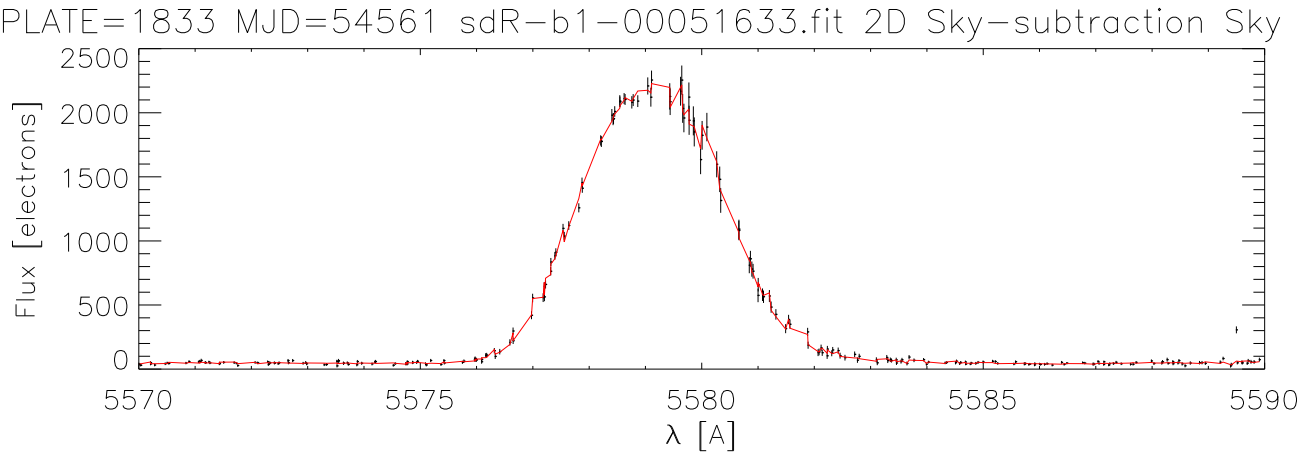

PLATE=1833 MJD=54561 sdR-b1-00051633.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

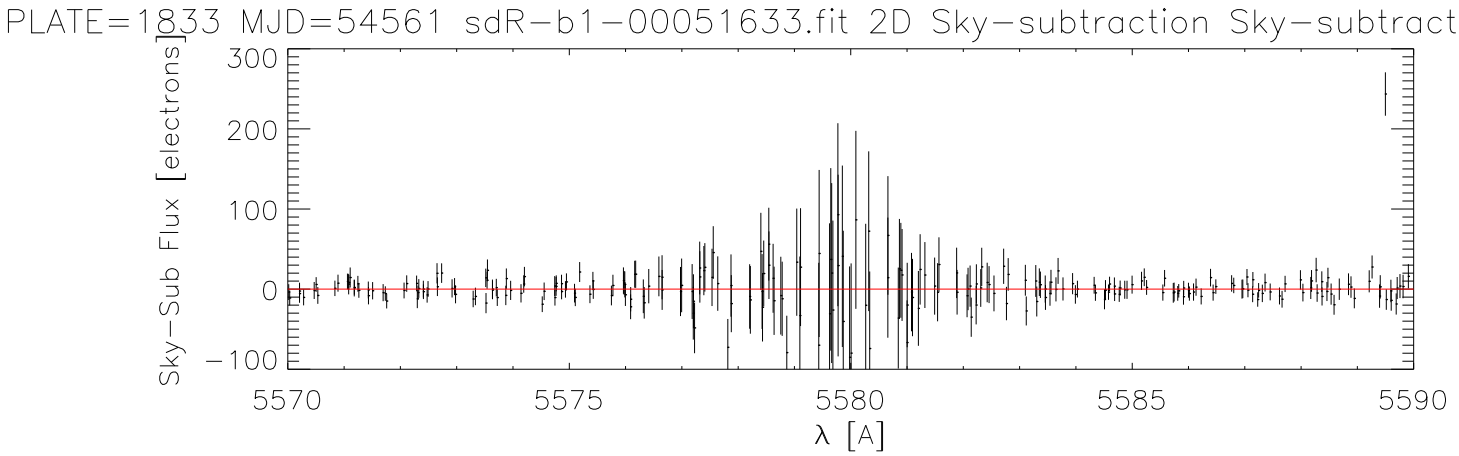

PLATE=1833 MJD=54561 sdR-b1-00051633.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

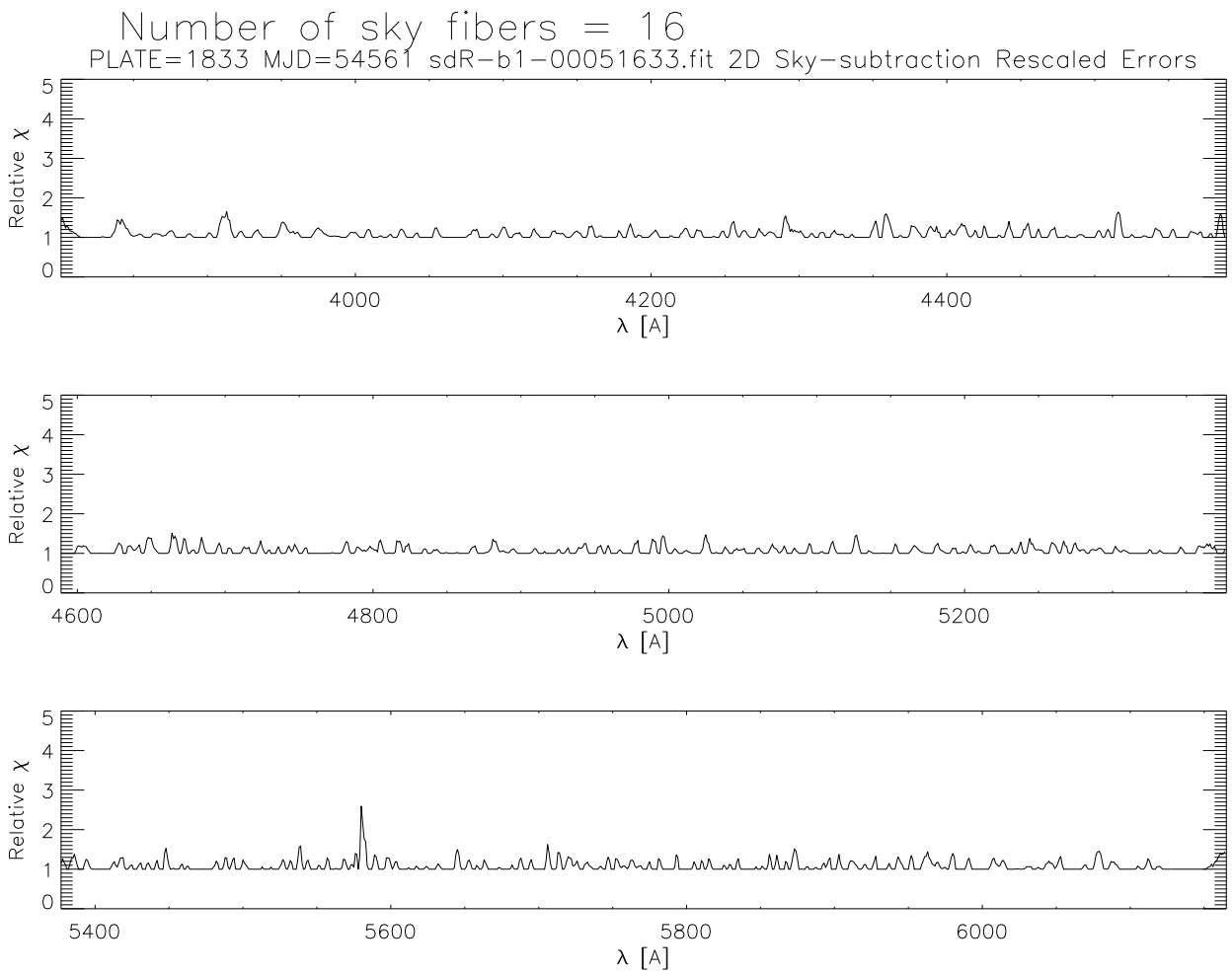

PLATE=1833 MJD=54561 sdR-b1-00051633.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

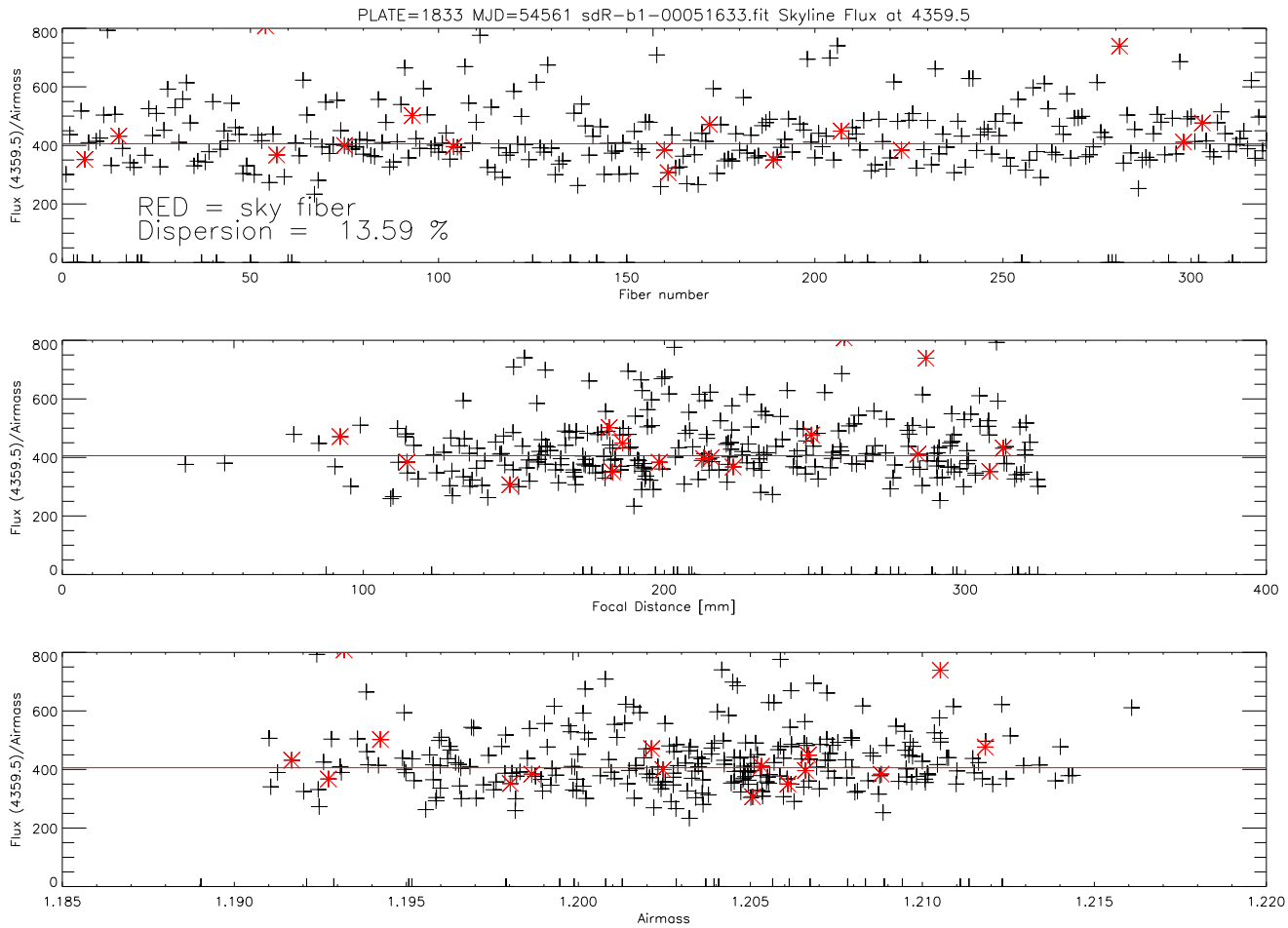

Number of sky fibers = 16
PLATE=1833 MJD=54561 sdR-b1-00051633.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

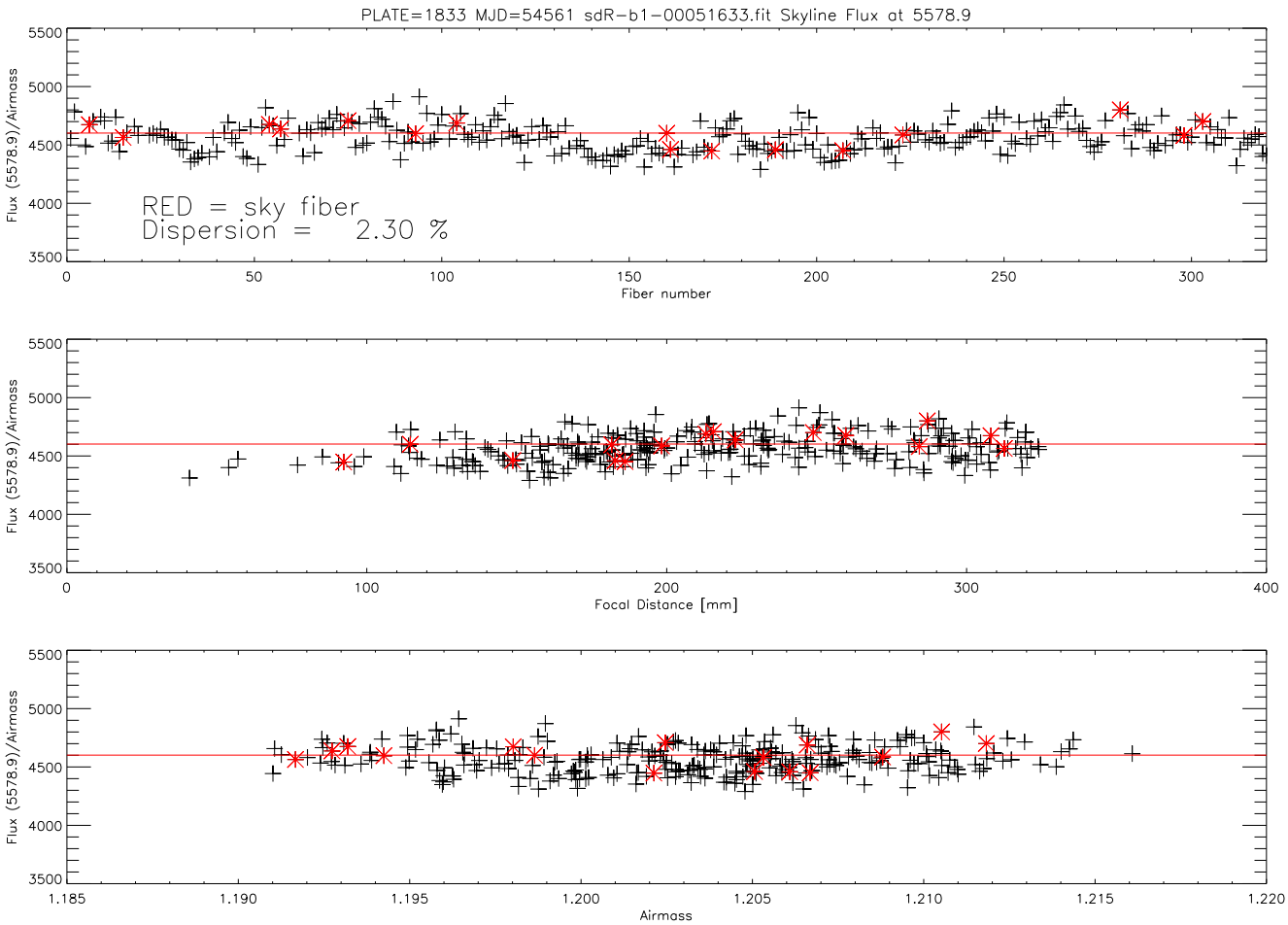

PLATE=1833 MJD=54561 sdR-b1-00051633.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

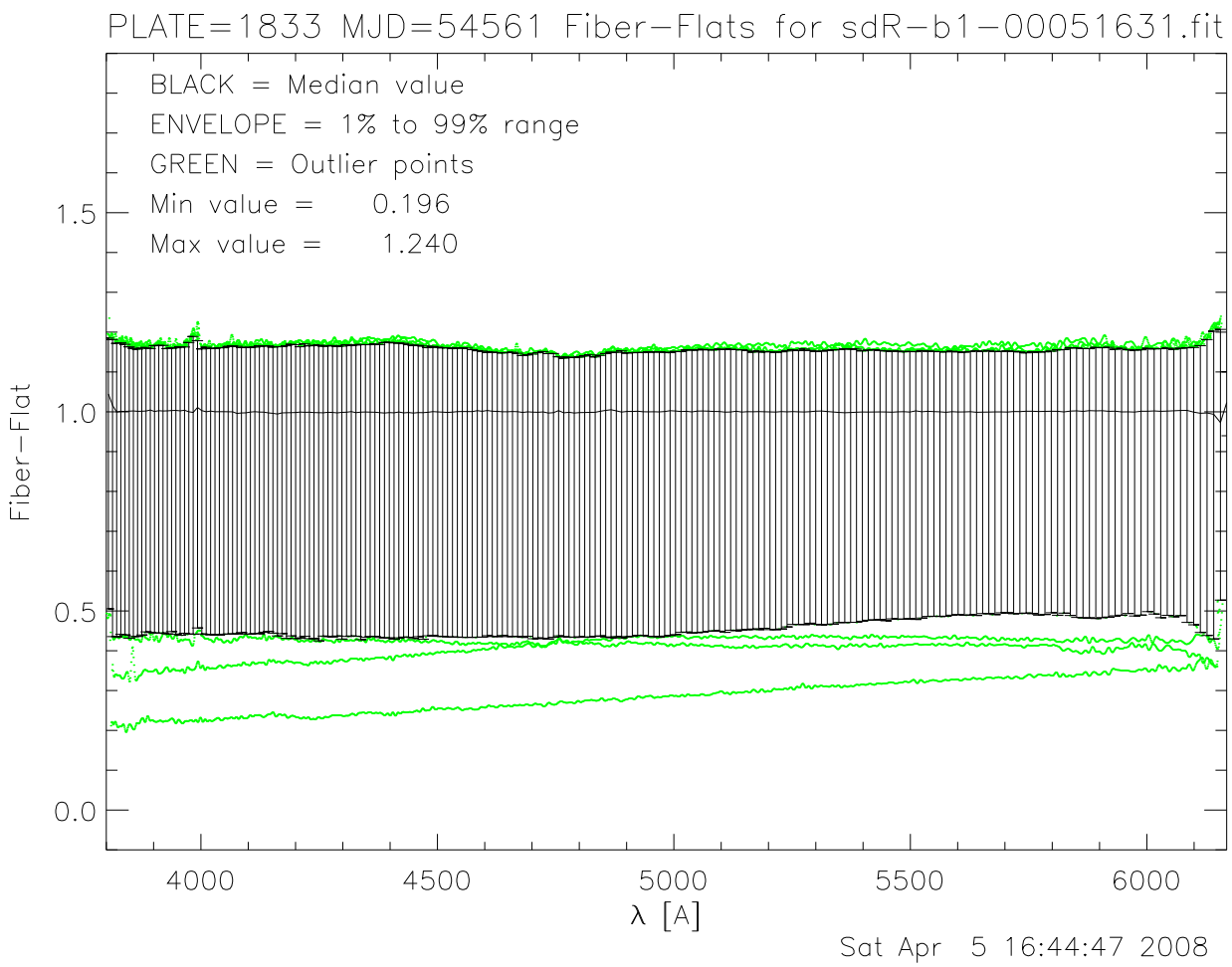

PLATE=1833 MJD=54561 sdR-b1-00051633.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

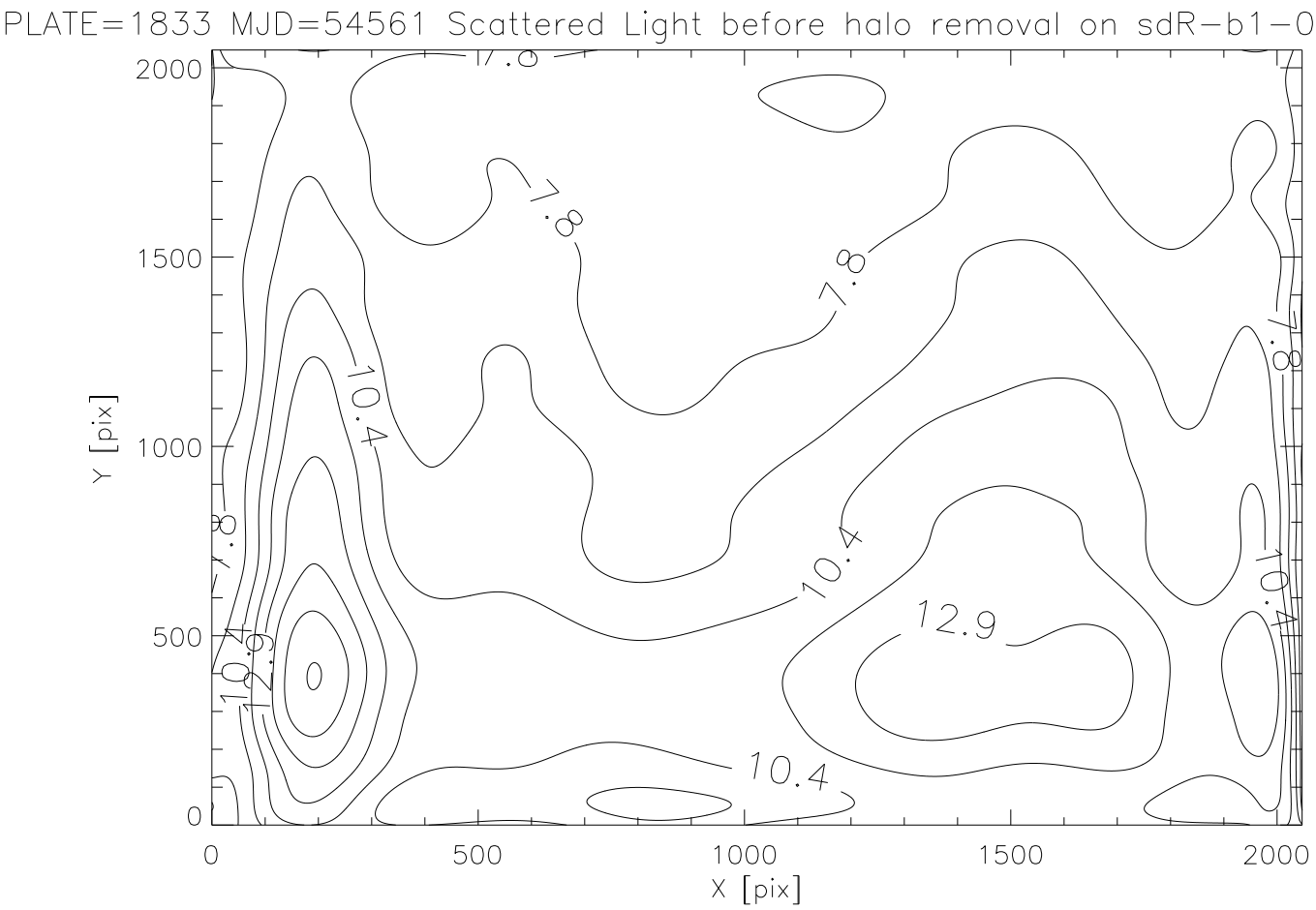

PLATE=1833 MJD=54561 sdR-b1-00051633.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
5570
5575
5580
5585
5590
λ [A]

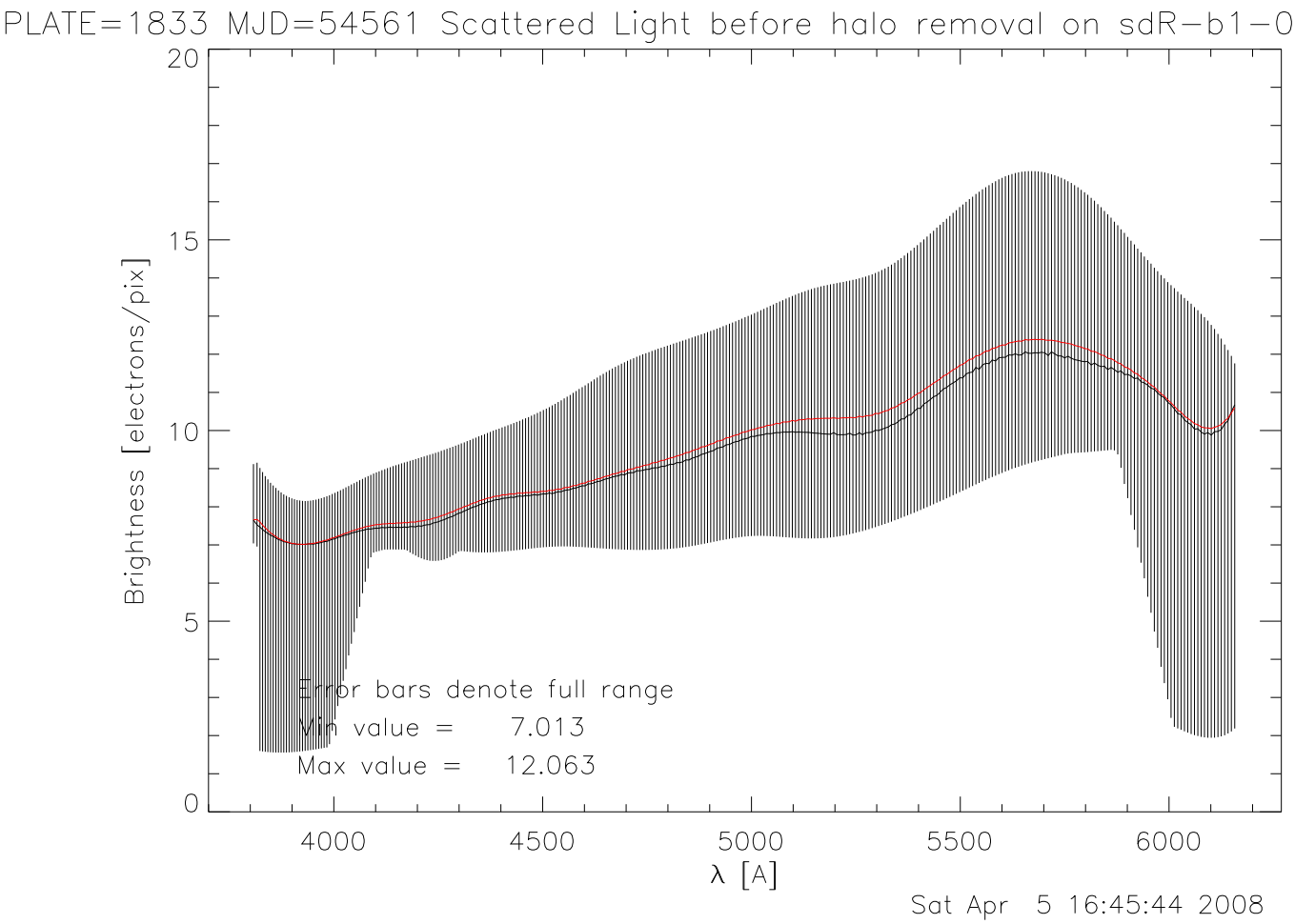

Number of sky fibers = 16
PLATE=1833 MJD=54561 sdR-b1-00051633.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

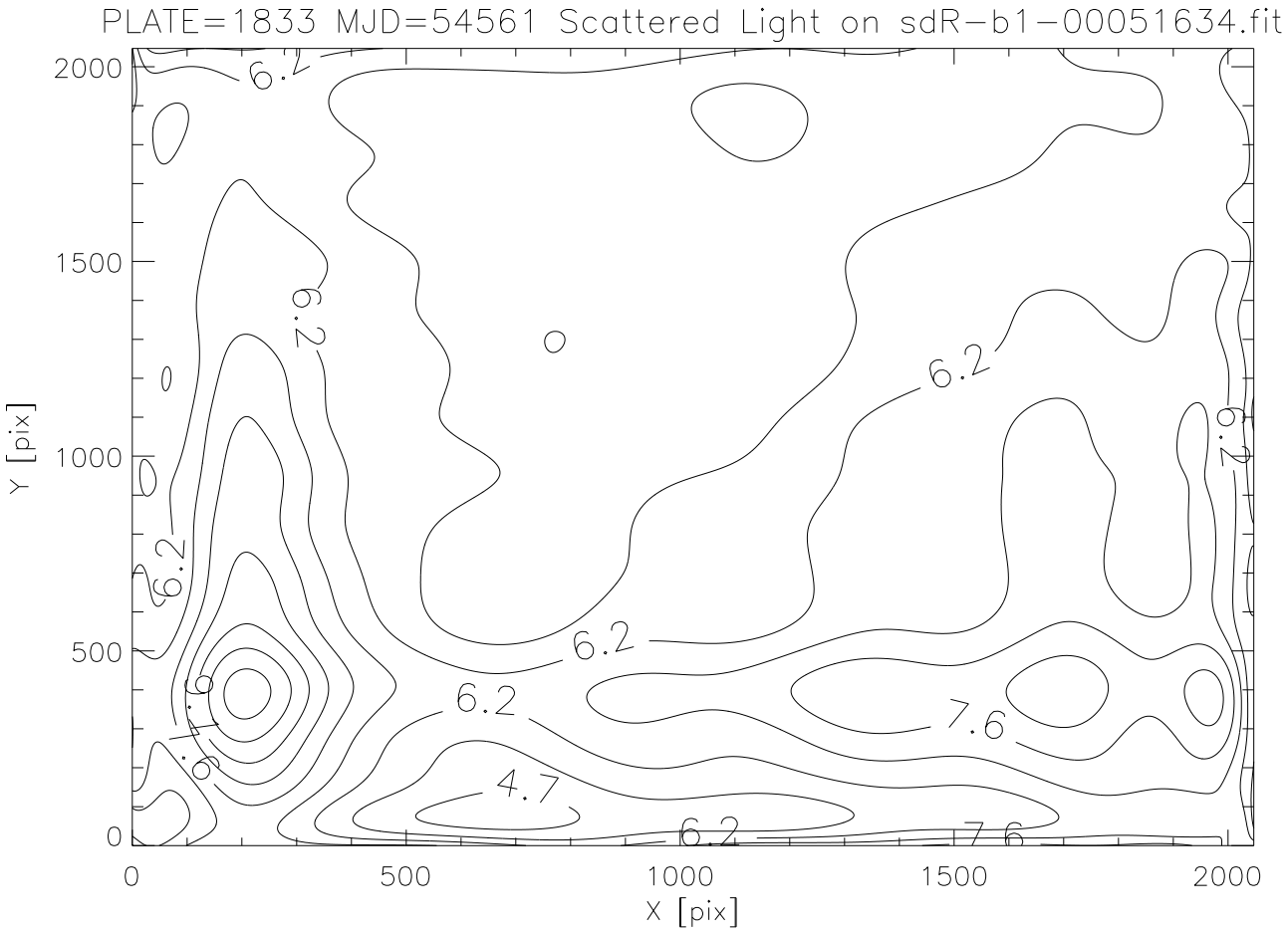

PLATE=1833 MJD=54561 sdR-b1-00051633.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.59 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

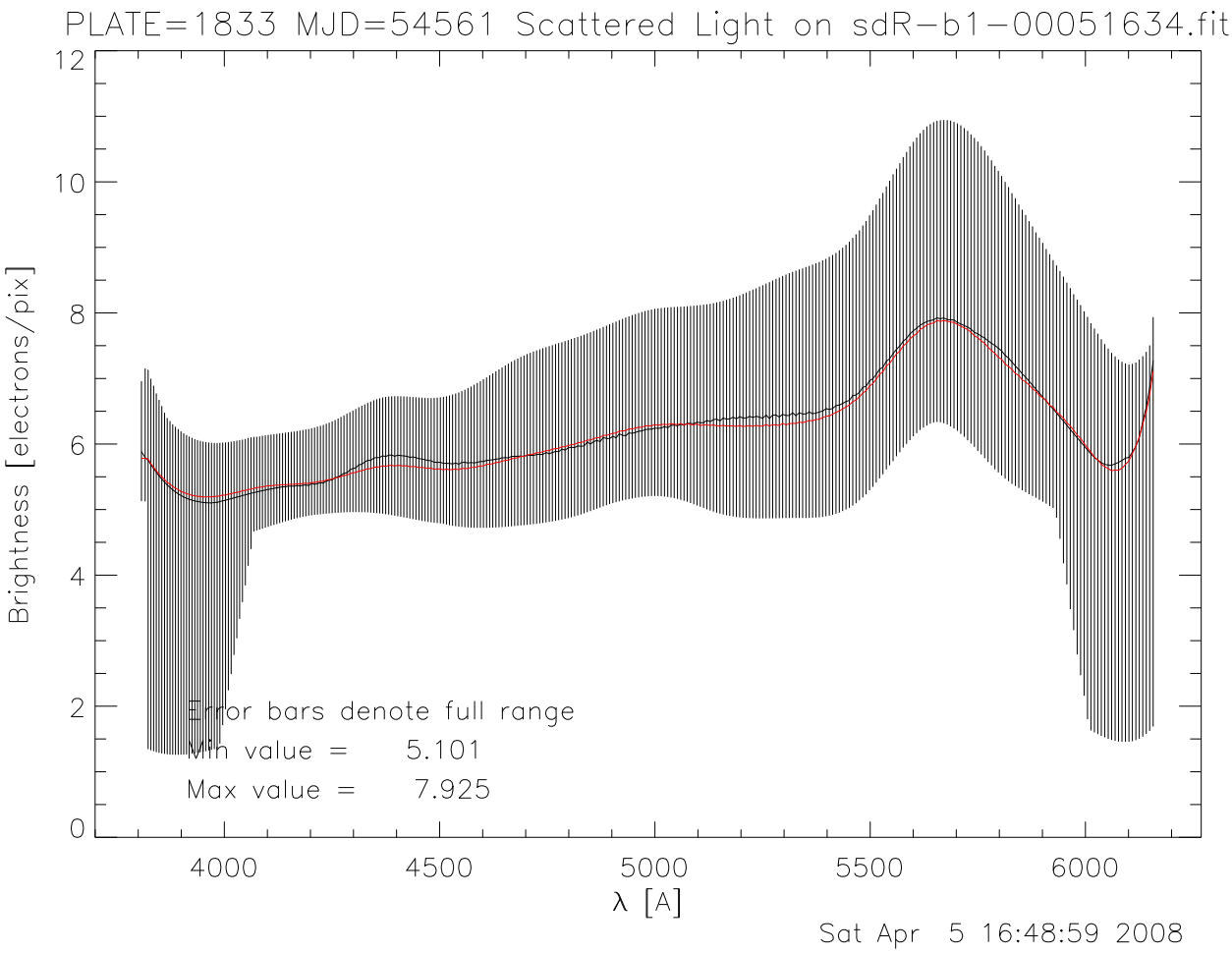

PLATE=1833 MJD=54561 sdR-b1-00051633.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.30 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

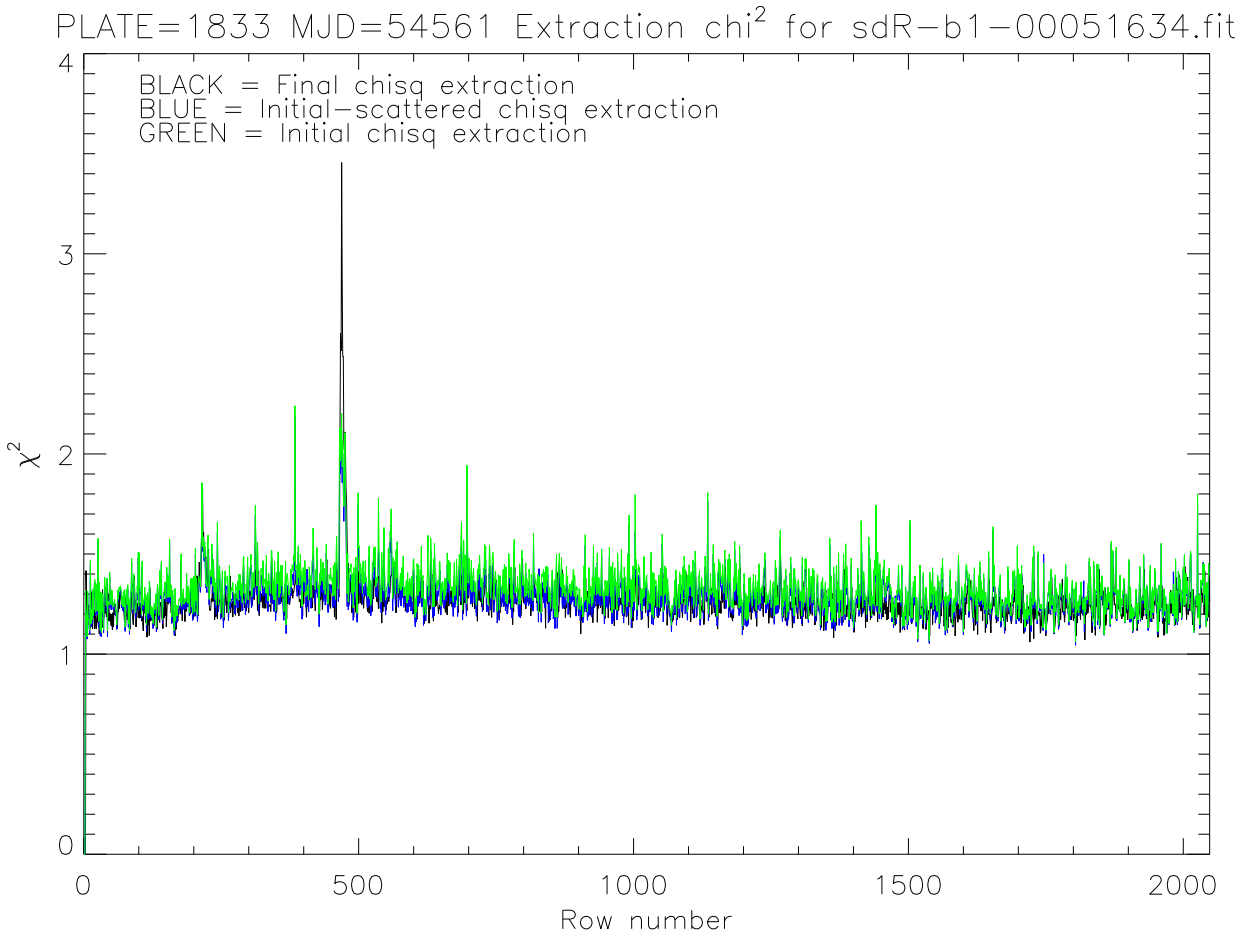

PLATE=1833 MJD=54561 Fiber-Flats for sdR-b1-00051631.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.196
Max value = 1.240
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Apr 5 16:44:47 2008

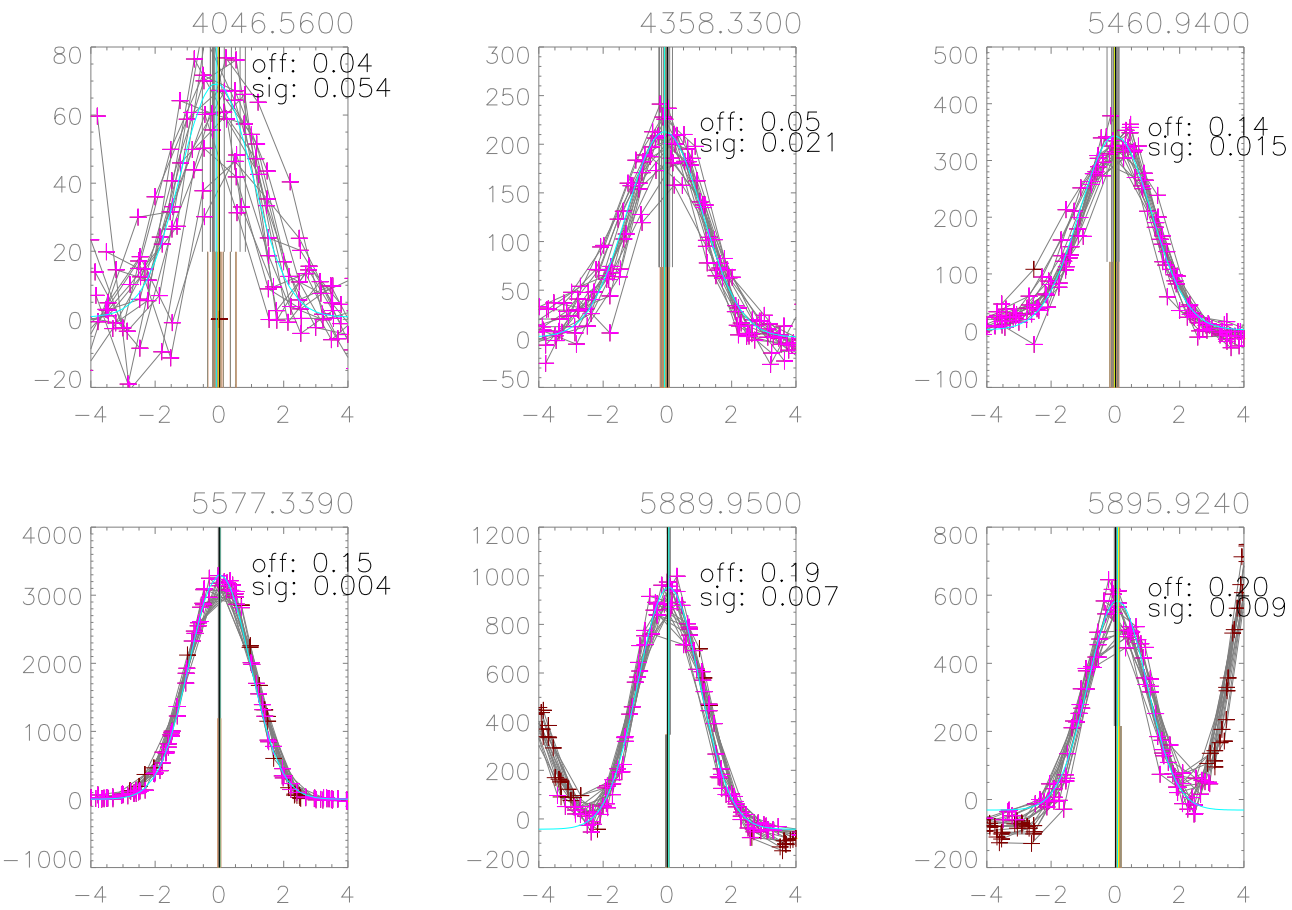

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR−b1−00051634.f
7.8
10.4
12.9
0
Y [pix]
X [pix]
0
500
1000
1500
2000

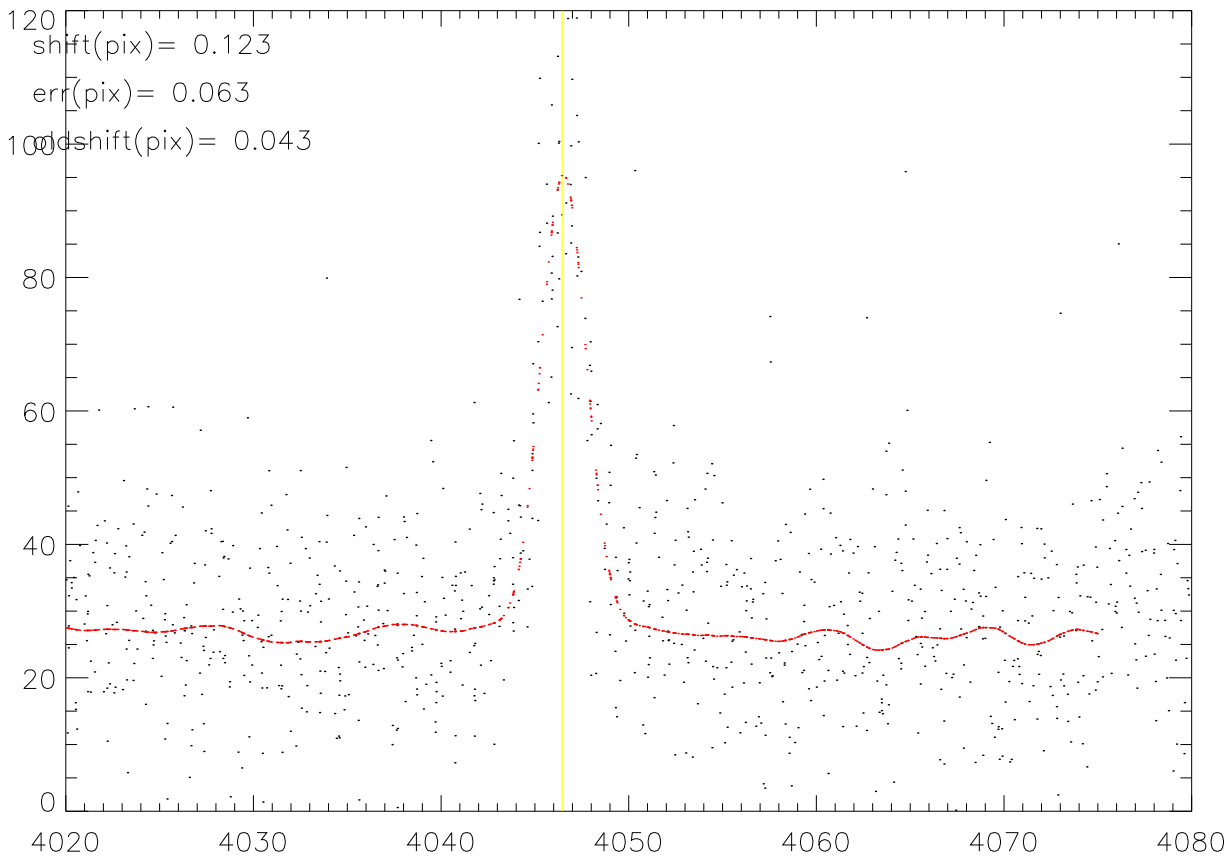

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-b1-00051634.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.013
Max value = 12.063
Sat Apr 5 16:45:44 2008

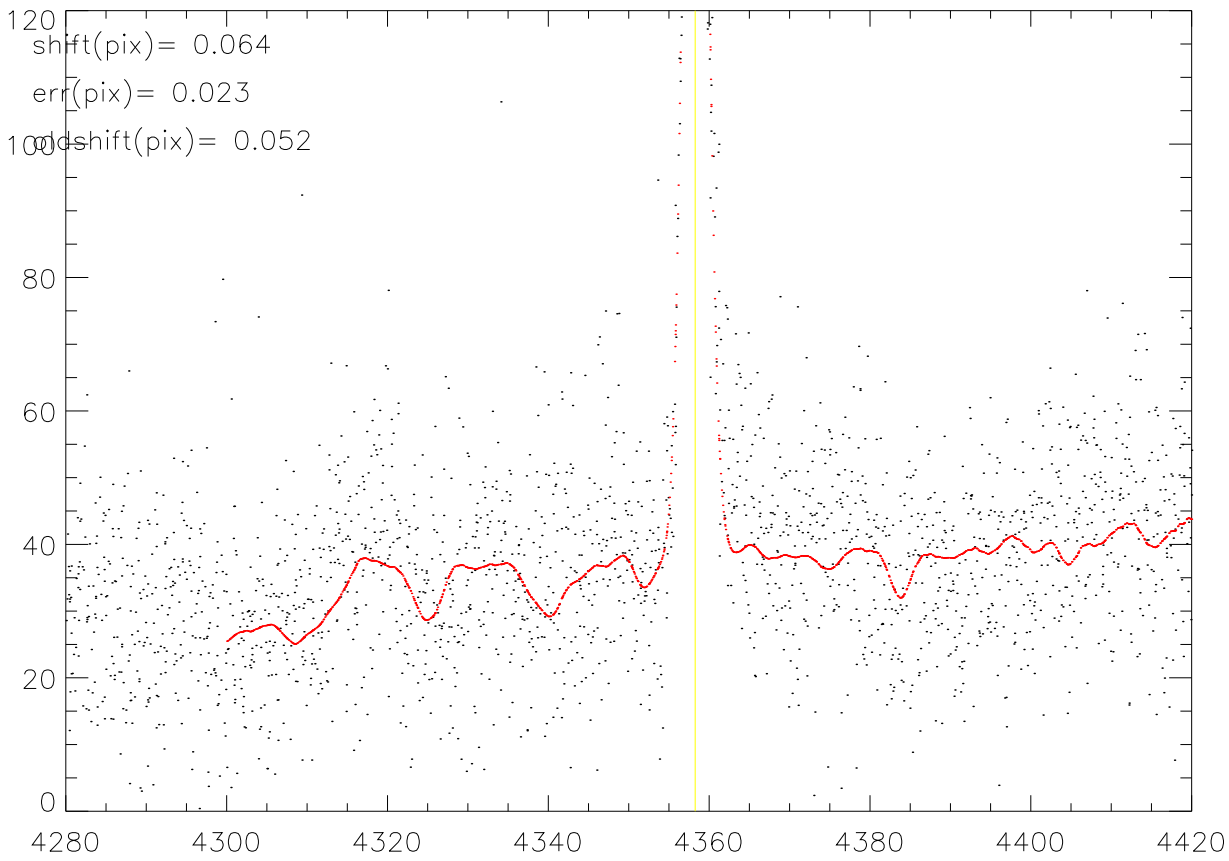

PLATE=1833 MJD=54561 Scattered Light on sdR-b1-00051634.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.2
7.6
4.7

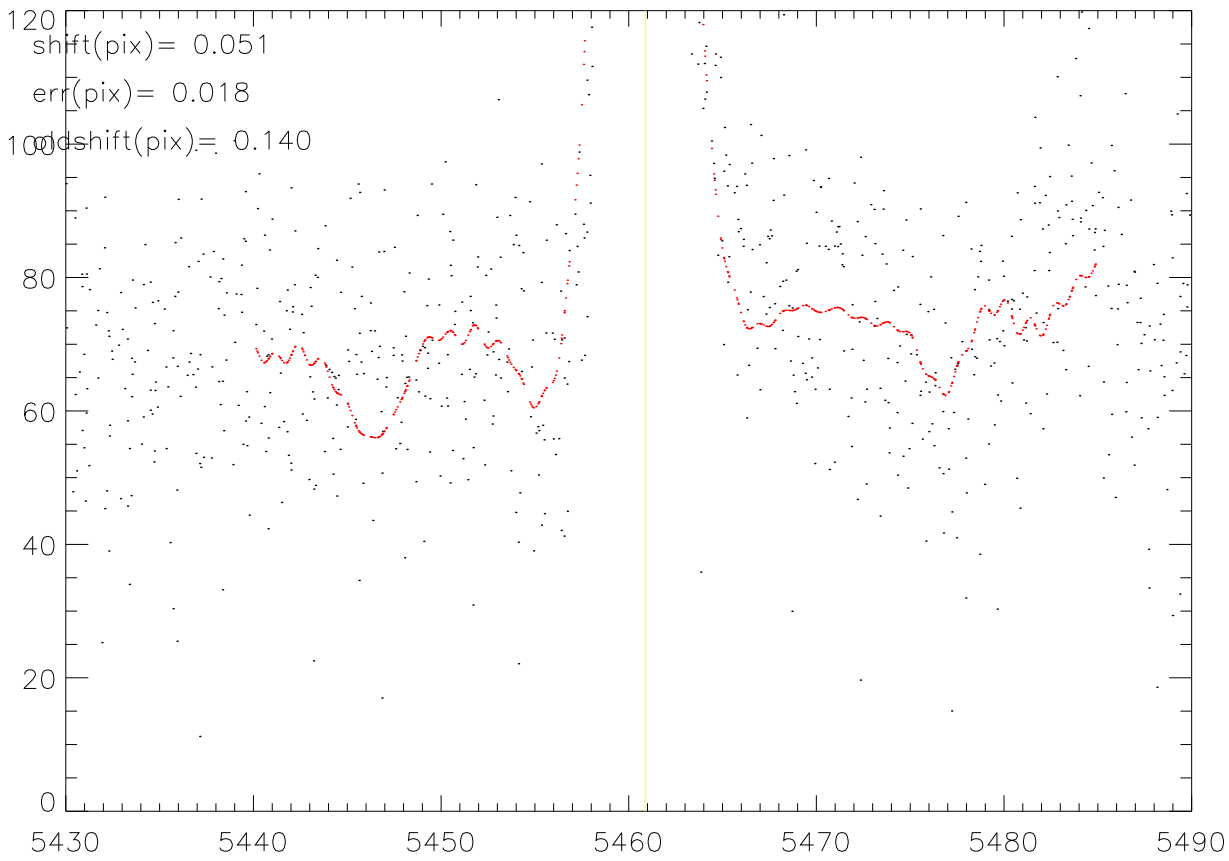

PLATE=1833 MJD=54561 Scattered Light on sdR-b1-00051634.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.101
Max value = 7.925
Sat Apr 5 16:48:59 2008

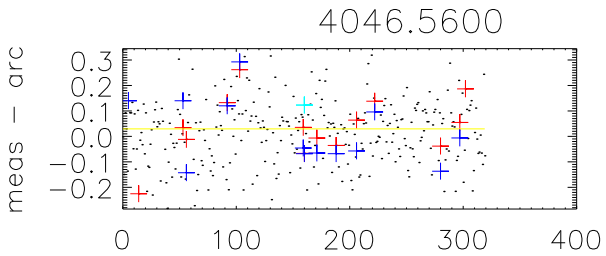

PLATE=1833 MJD=54561 Extraction chi^2 for sdR−b1−00051634.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

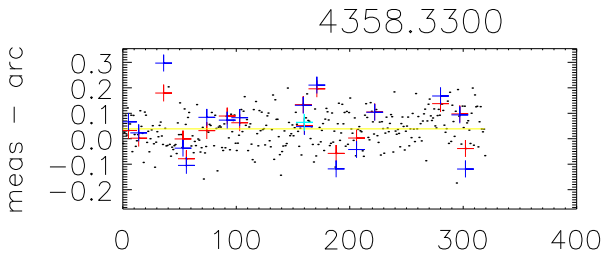

4046.5600
off: 0.04
sig: 0.054
4358.3300
off: 0.05
sig: 0.021
5460.9400
off: 0.14
sig: 0.015
5577.3390
off: 0.15
sig: 0.004
5889.9500
off: 0.19
sig: 0.007
5895.9240
off: 0.20
sig: 0.009

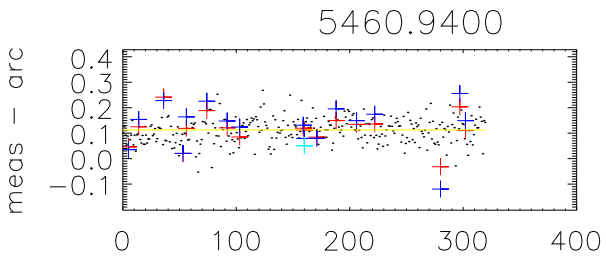

shift(pix)= 0.123
err(pix)= 0.063
oldshift(pix)= 0.043
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

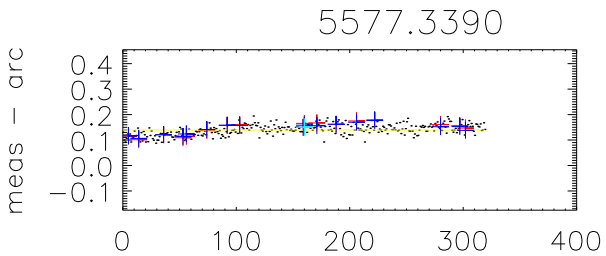

shift(pix)= 0.064
err(pix)= 0.023
oldshift(pix)= 0.052
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

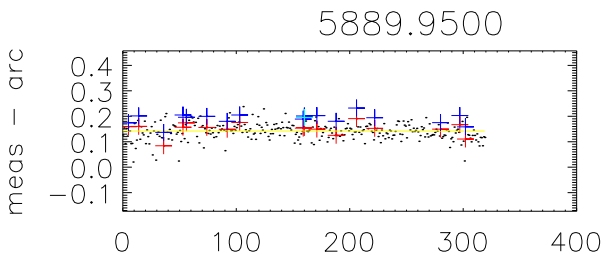

shift(pix)= 0.051
err(pix)= 0.018
oldshift(pix)= 0.140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

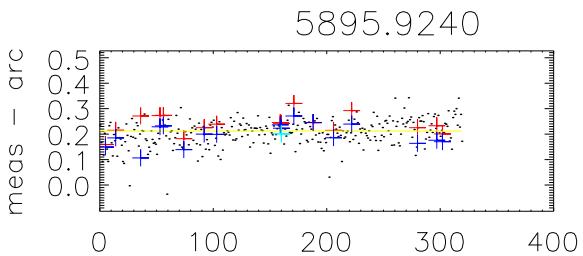

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

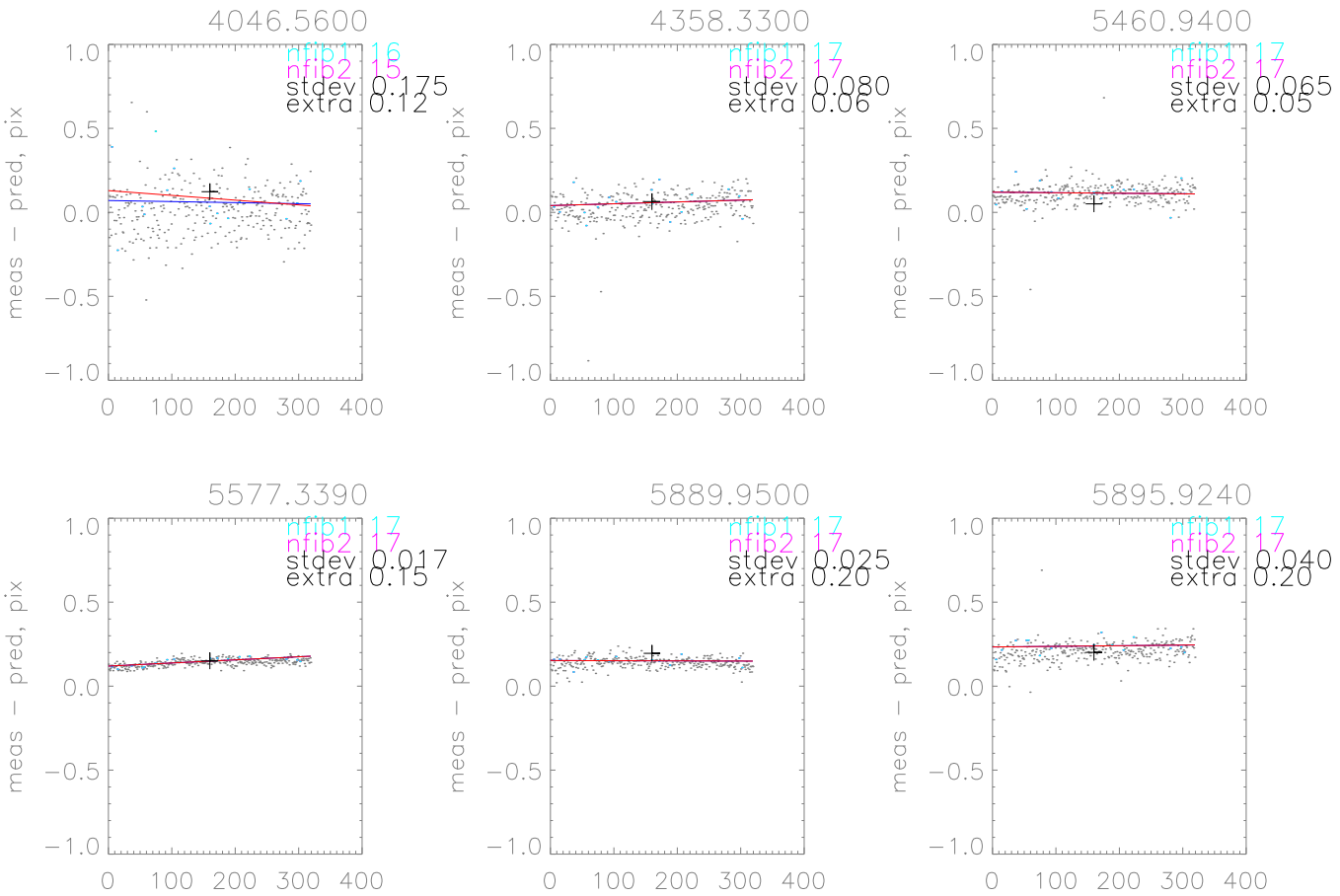

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

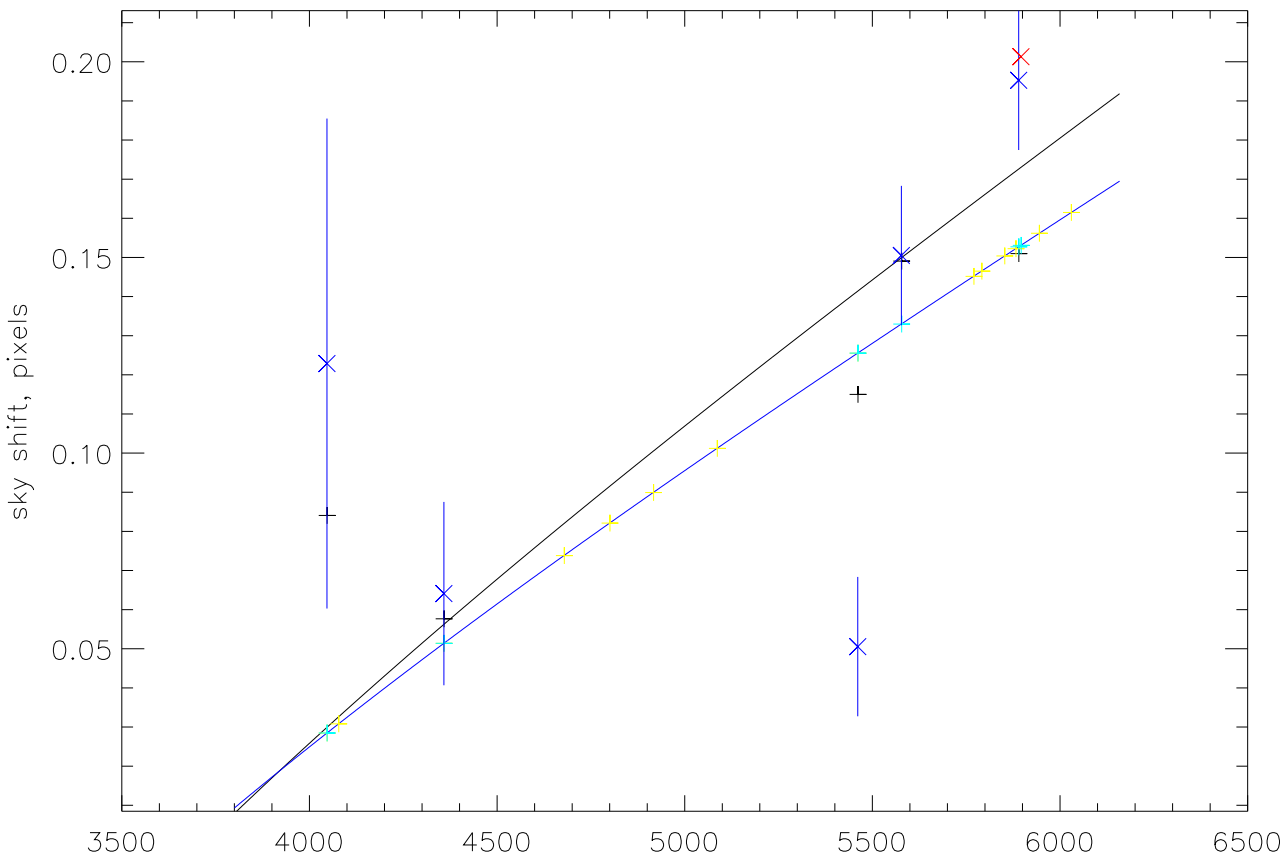

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

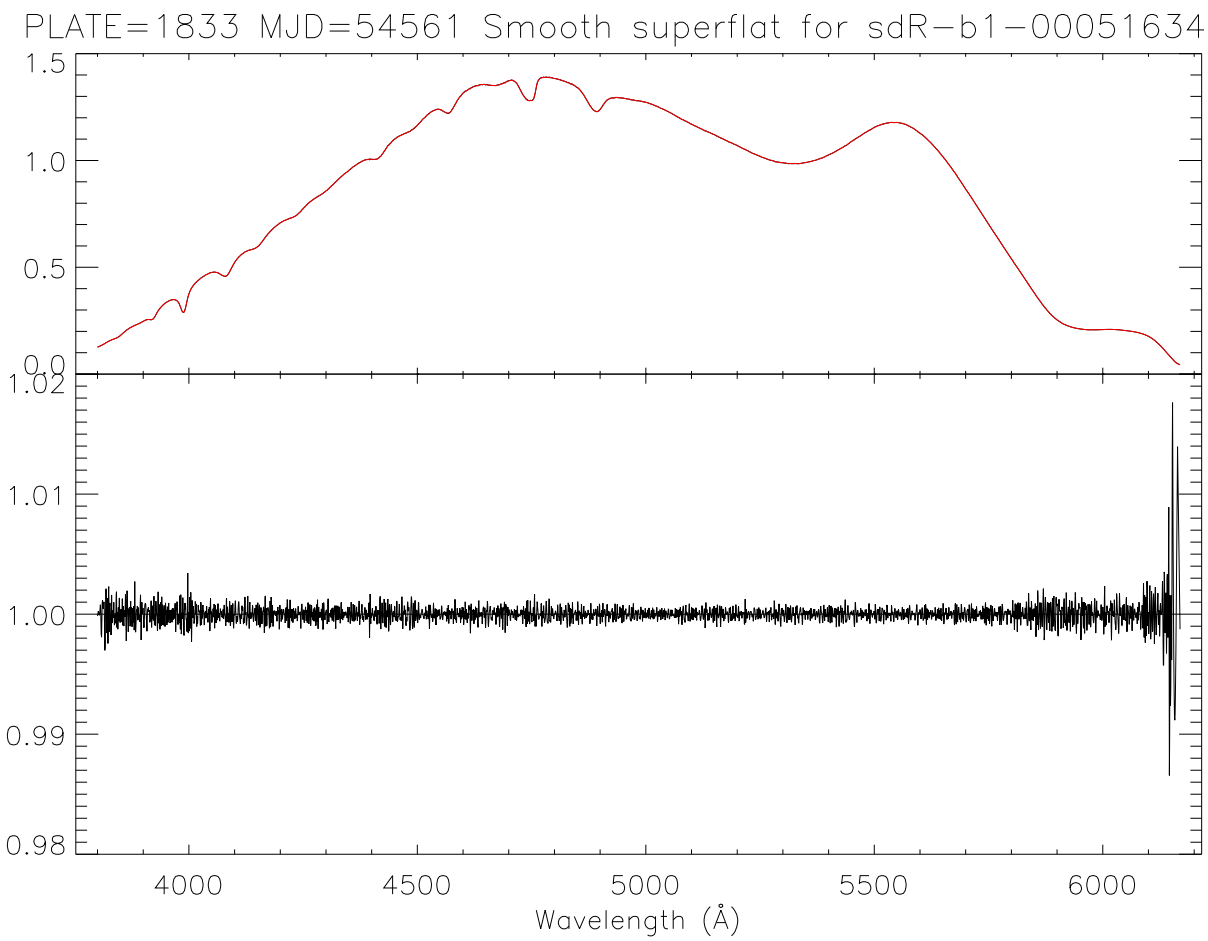

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

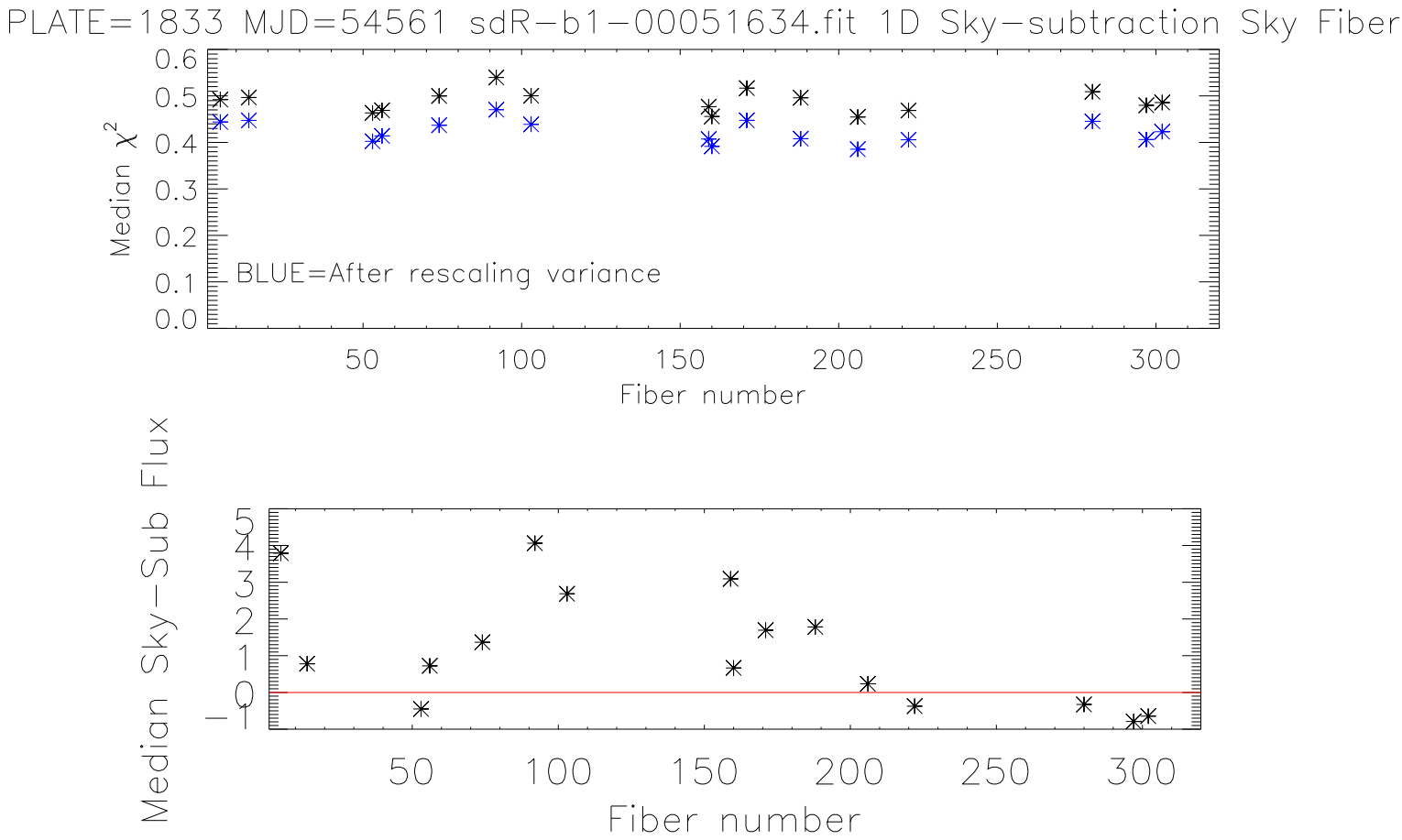

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

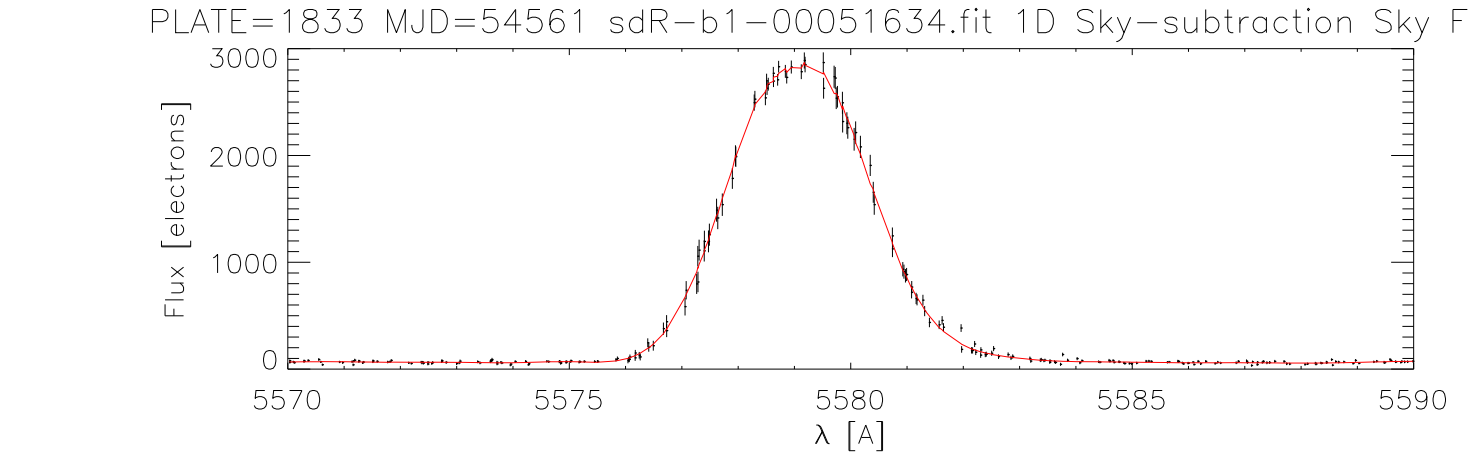

4046.5600
nfib1 16
nfib2 15
stdev 0.175
extra 0.12
4358.3300
nfib1 17
nfib2 17
stdev 0.080
extra 0.06
5460.9400
nfib1 17
nfib2 17
stdev 0.065
extra 0.05
5577.3390
nfib1 17
nfib2 17
stdev 0.017
extra 0.15
5889.9500
nfib1 17
nfib2 17
stdev 0.025
extra 0.20
5895.9240
nfib1 17
nfib2 17
stdev 0.040
extra 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

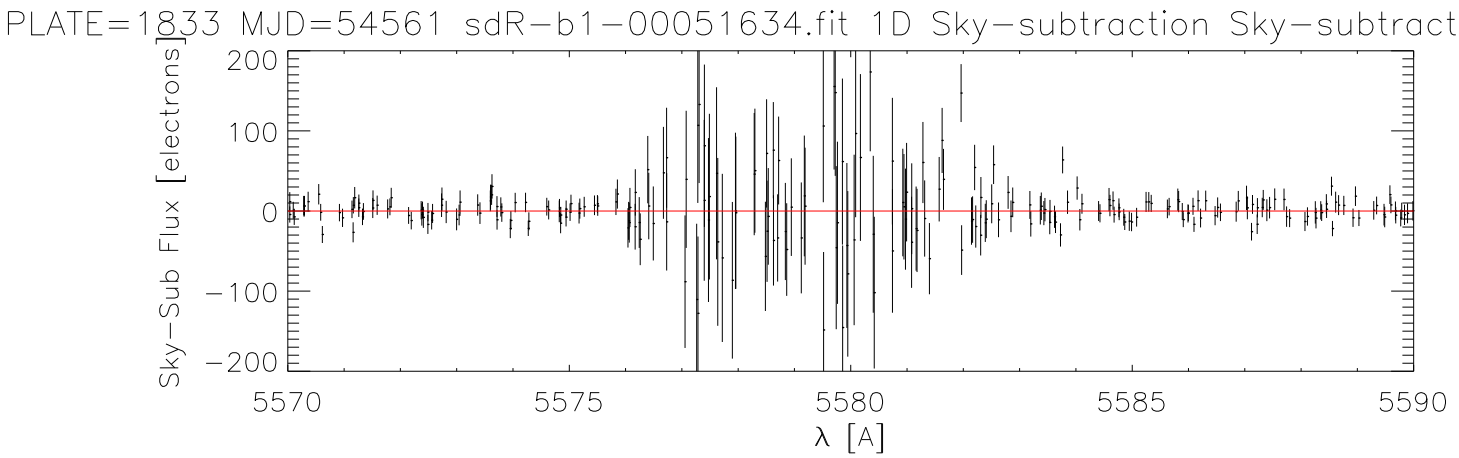

sky shift, pixels
0.20
0.15
0.10
0.05
3500
4000
4500
5000
5500
6000
6500

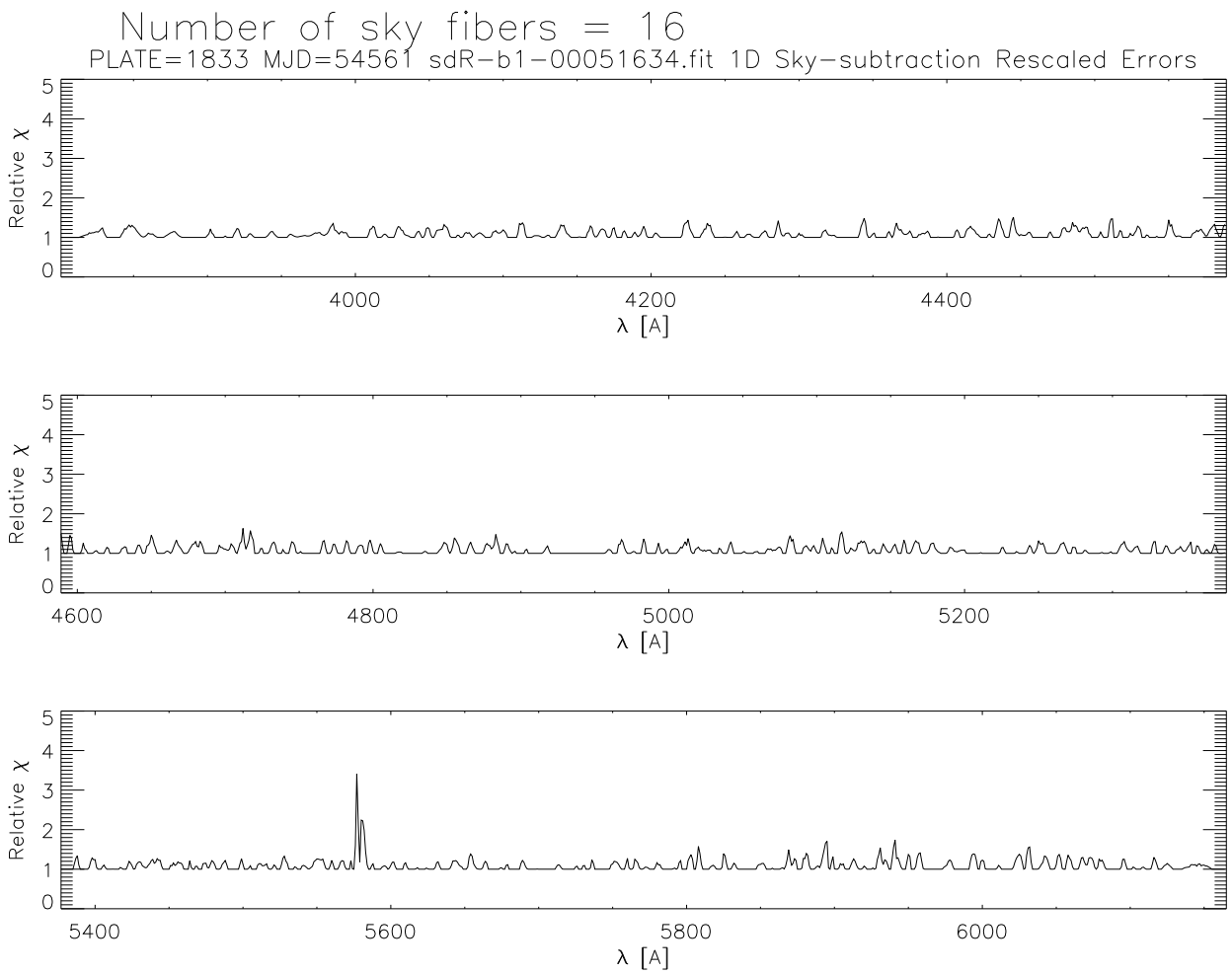
es= −0.0001

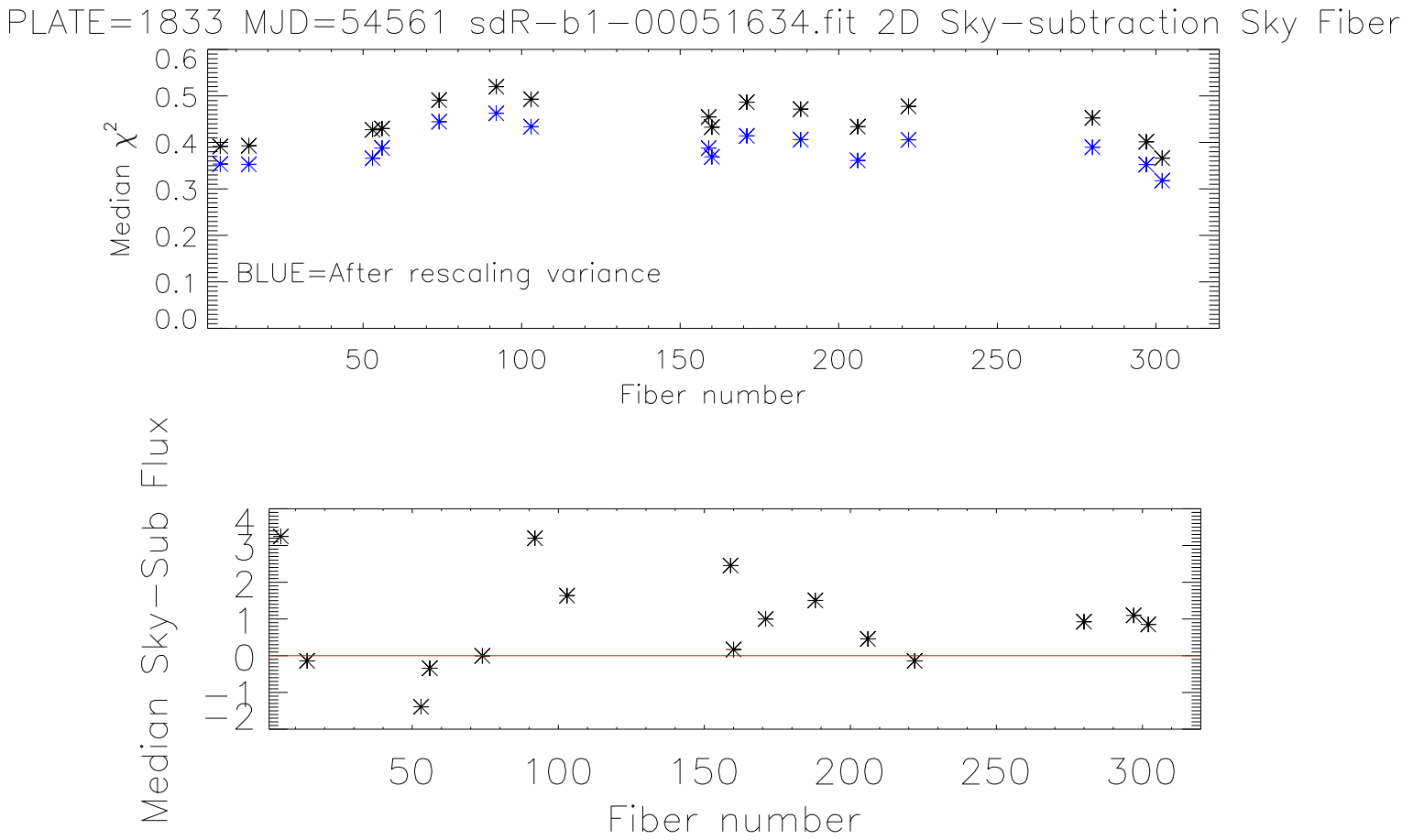

PLATE=1833 MJD=54561 Smooth superflat for sdR−b1−00051634.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

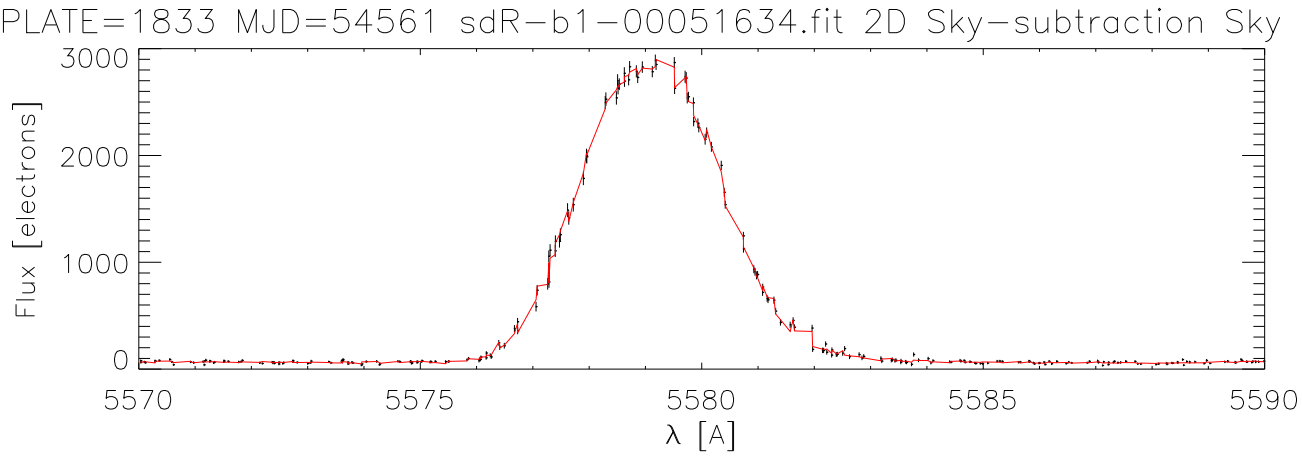

PLATE=1833 MJD=54561 sdR-b1-00051634.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

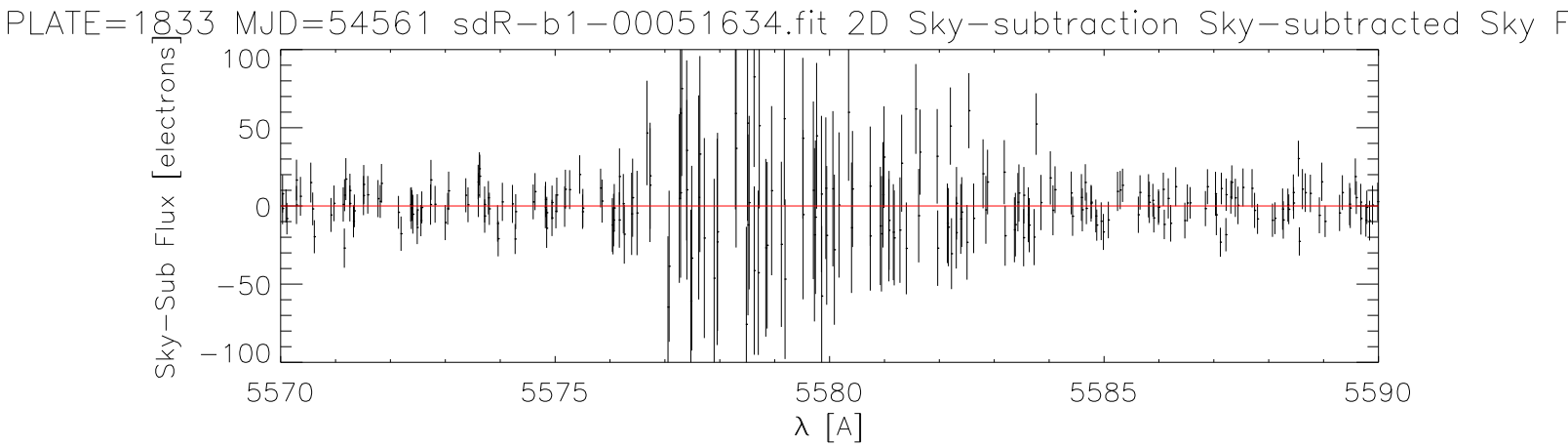

PLATE=1833 MJD=54561 sdR-b1-00051634.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

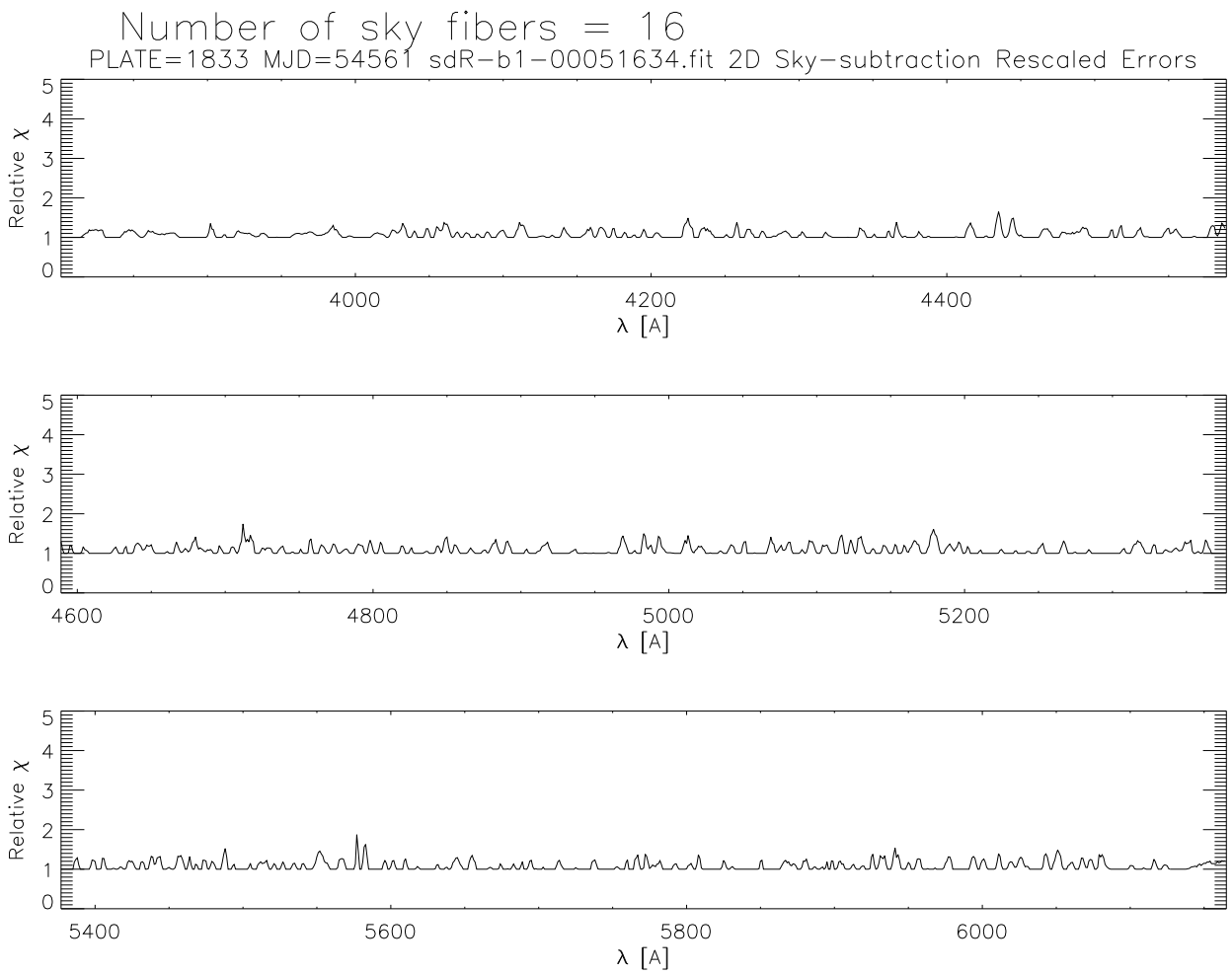

PLATE=1833 MJD=54561 sdR-b1-00051634.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

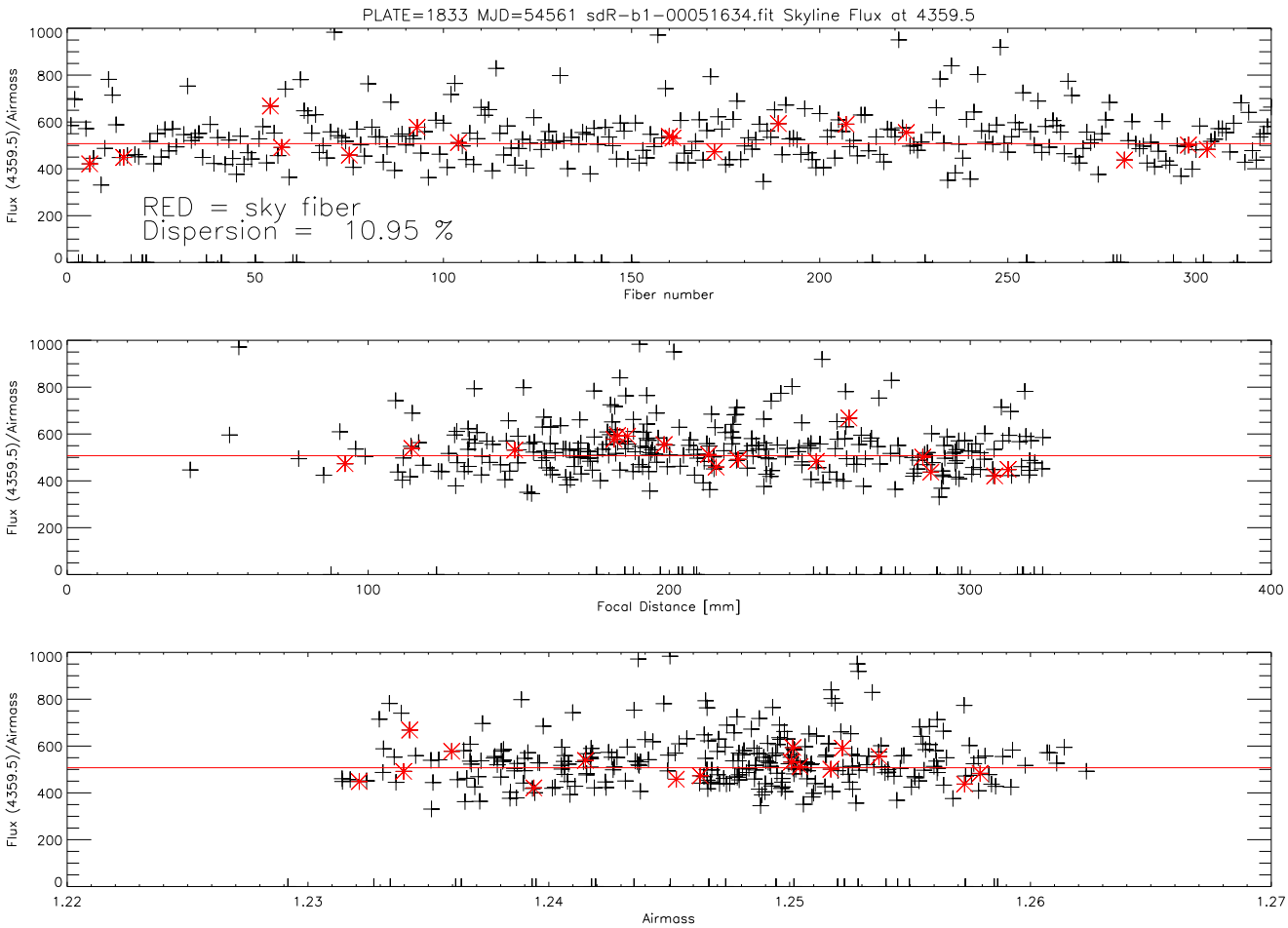

Number of sky fibers = 16
PLATE=1833 MJD=54561 sdR-b1-00051634.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

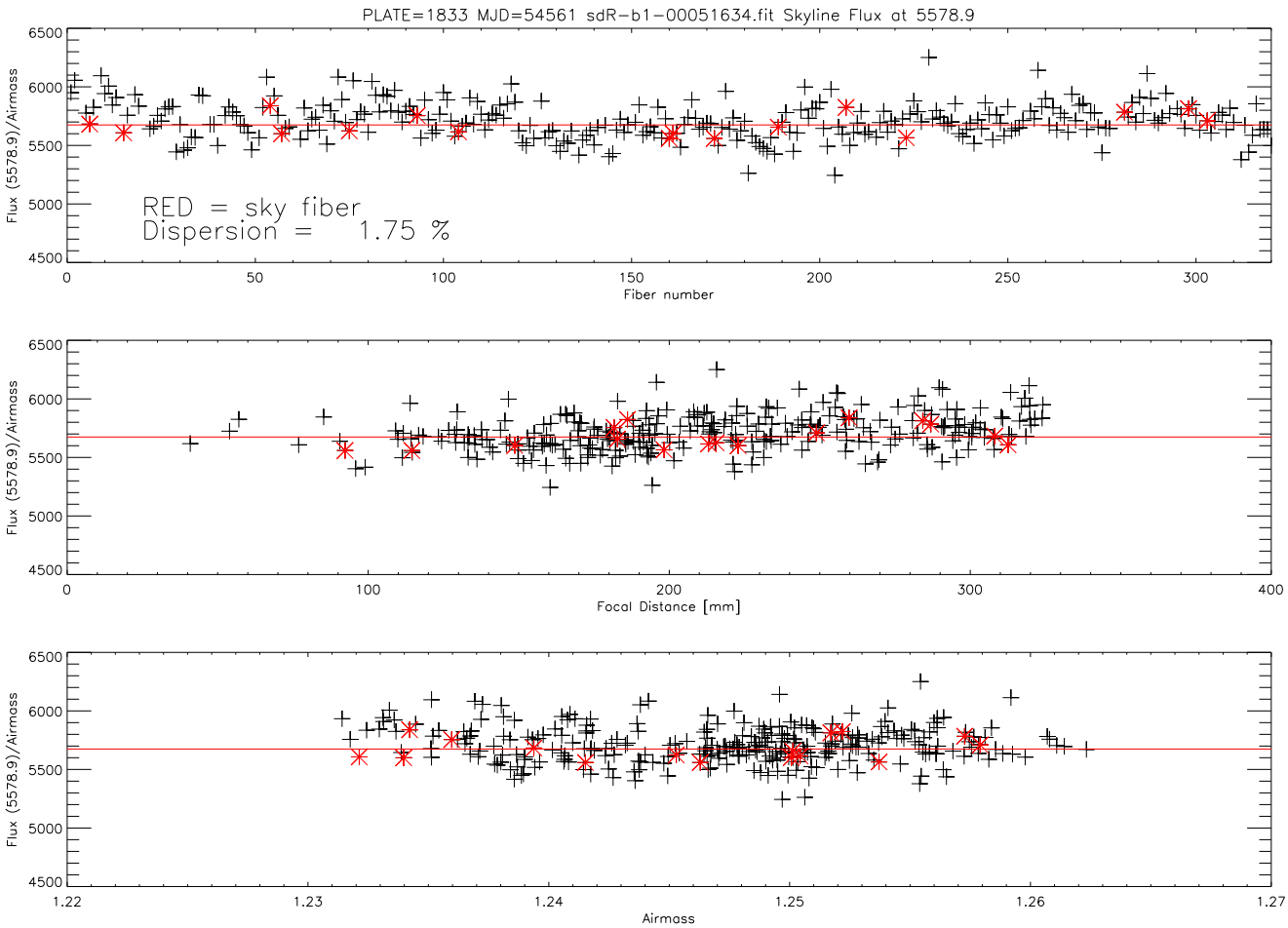

PLATE=1833 MJD=54561 sdR-b1-00051634.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

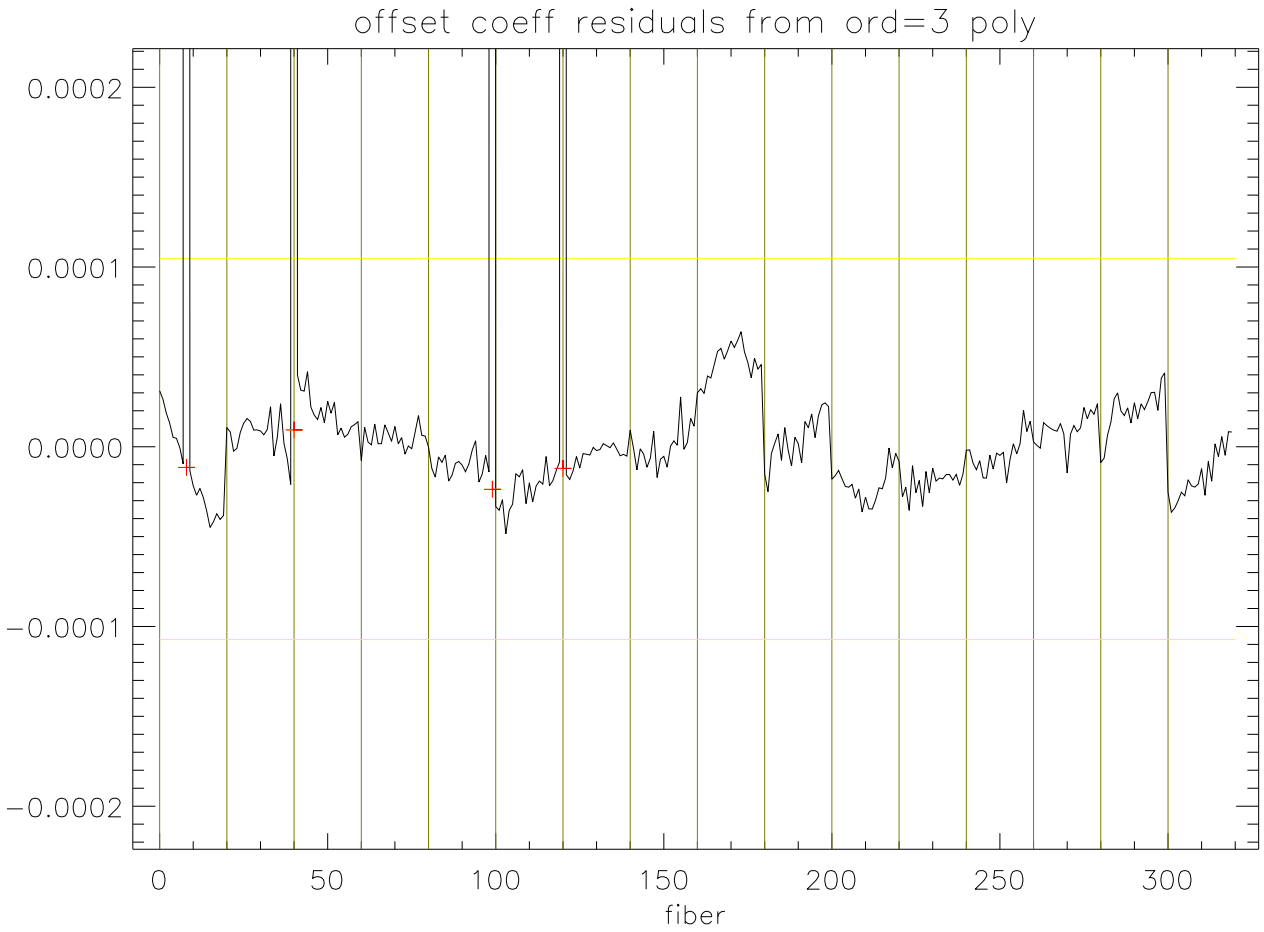

PLATE=1833 MJD=54561 sdR-b1-00051634.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

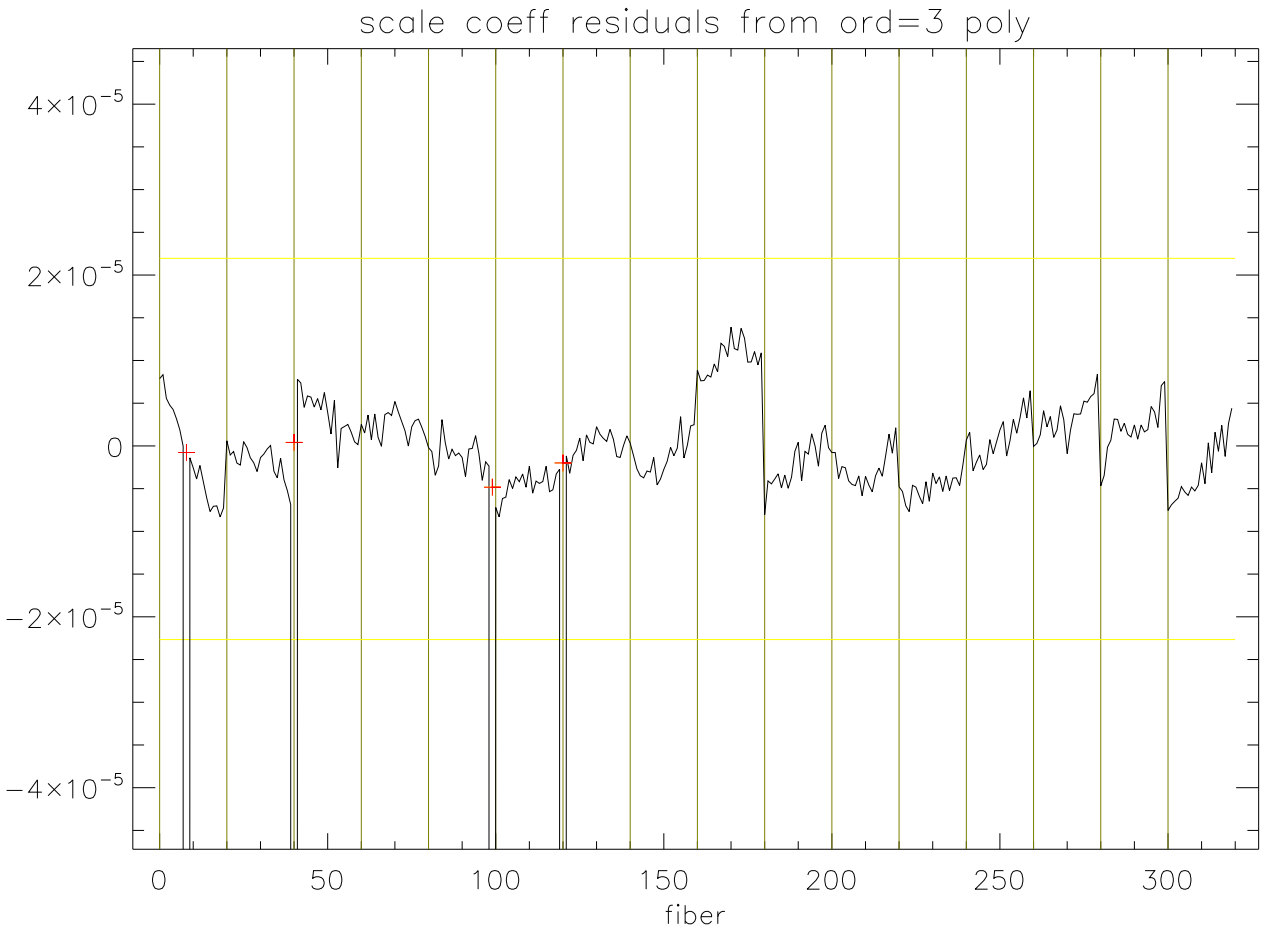

PLATE=1833 MJD=54561 sdR-b1-00051634.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

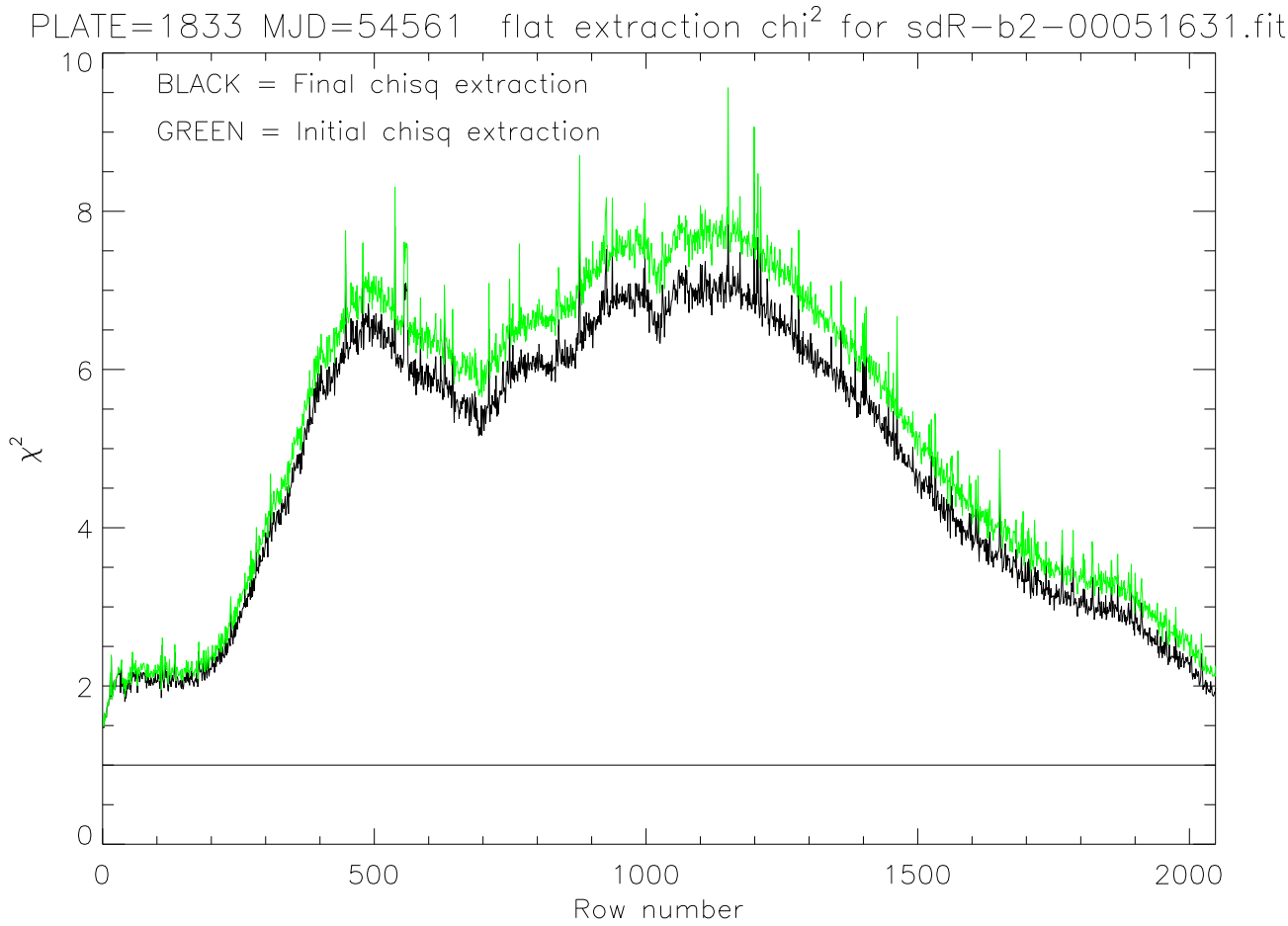

Number of sky fibers = 16
PLATE=1833 MJD=54561 sdR-b1-00051634.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

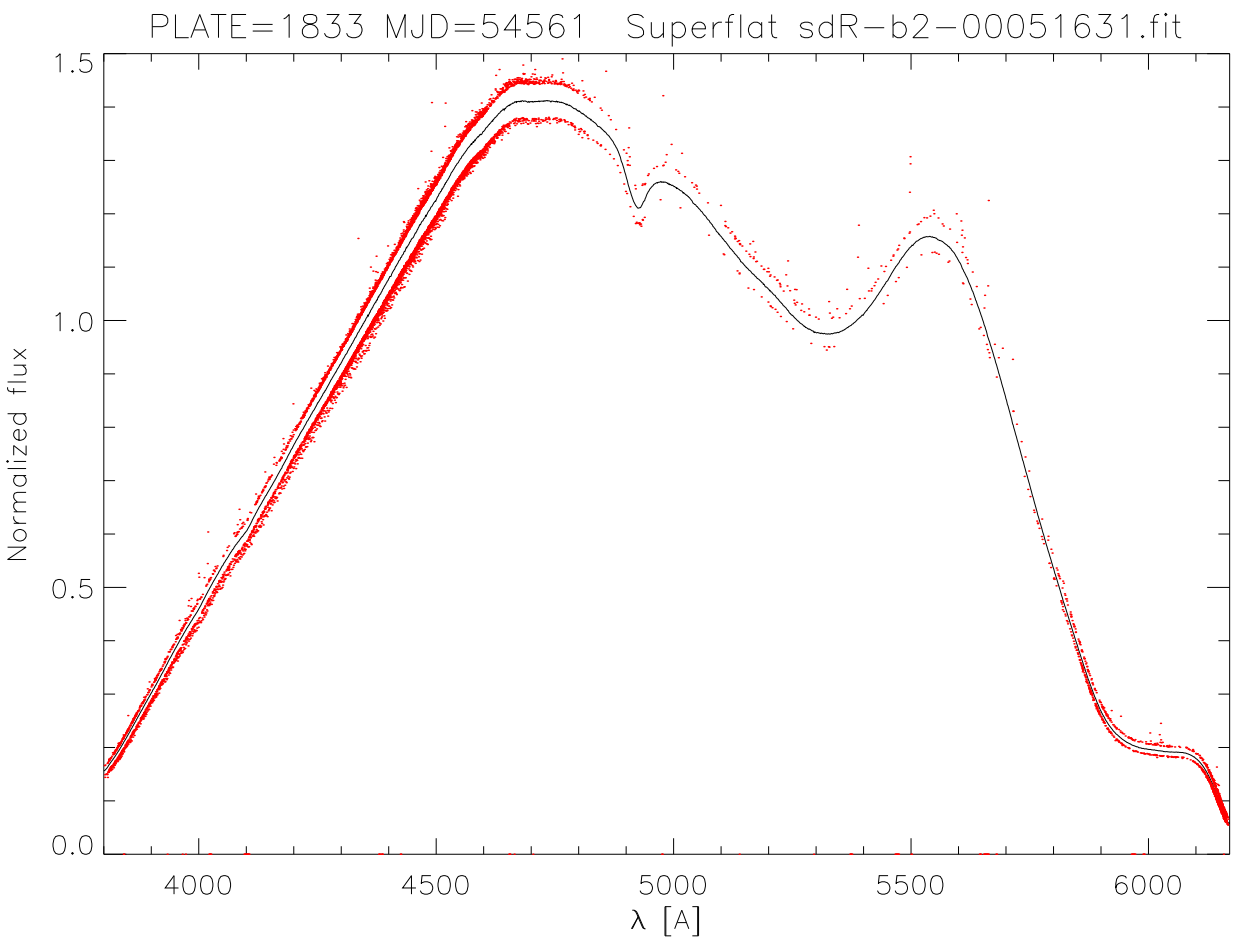

PLATE=1833 MJD=54561 sdR-b1-00051634.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.95 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

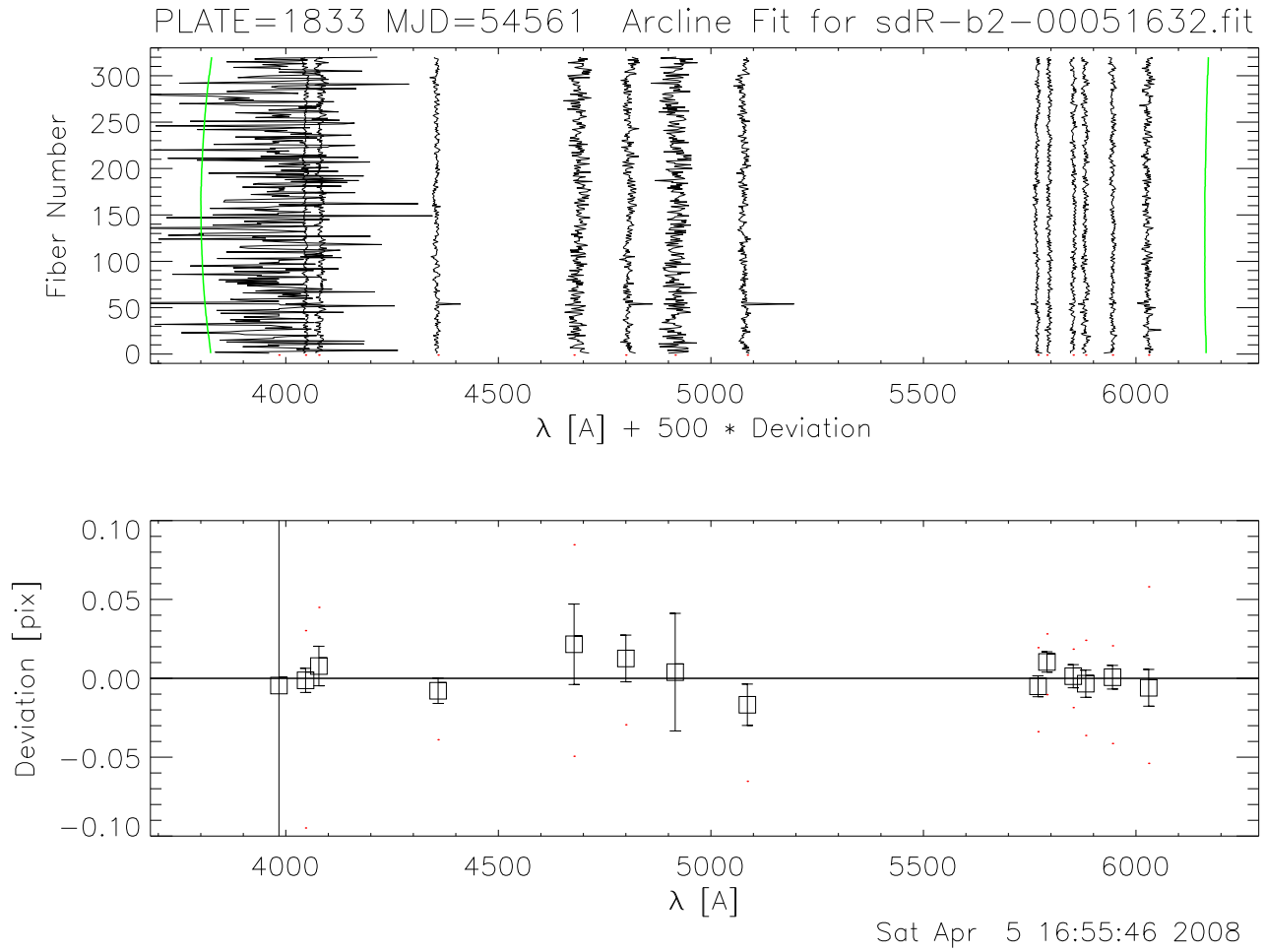

PLATE=1833 MJD=54561 sdR-b1-00051634.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.75 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

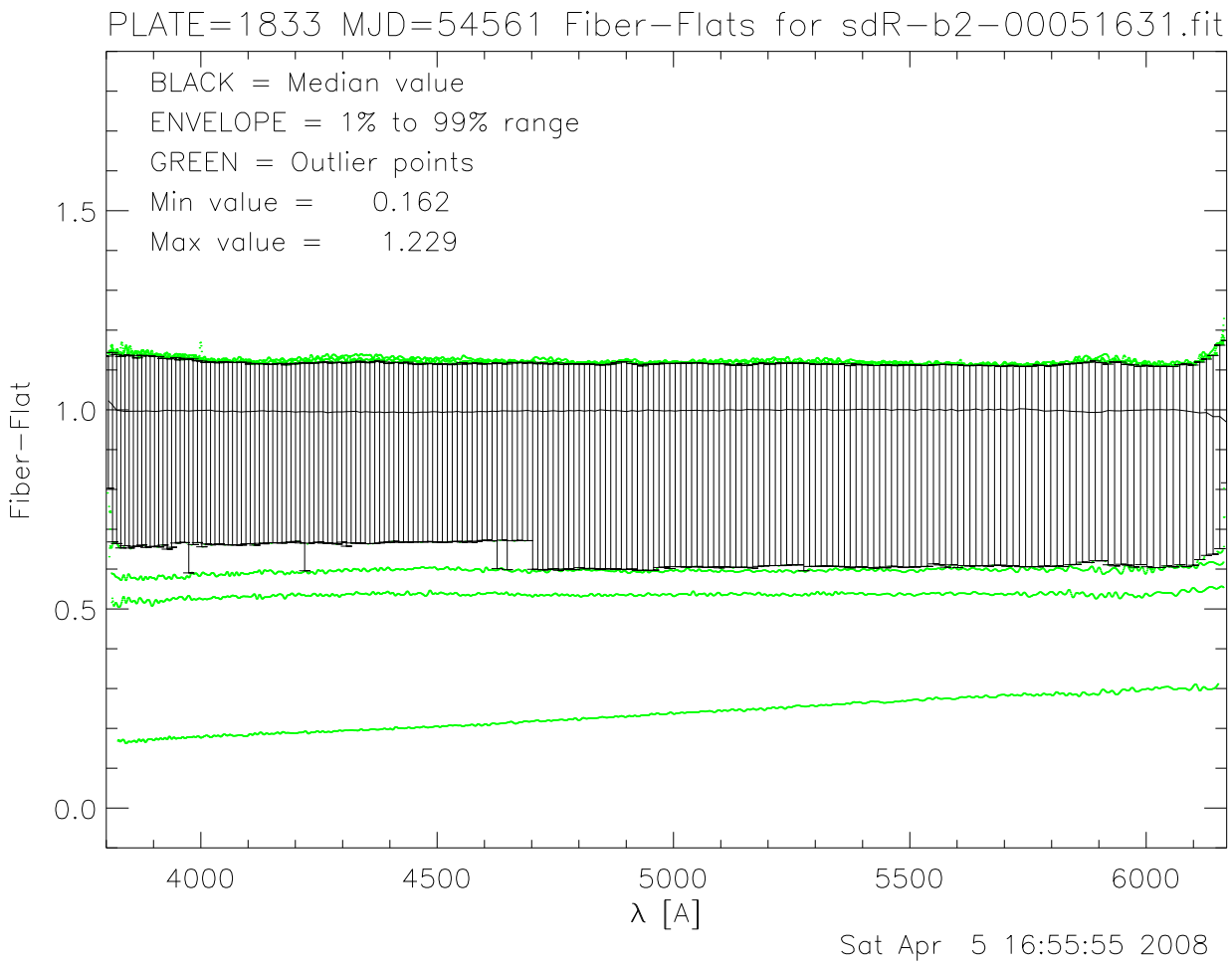

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

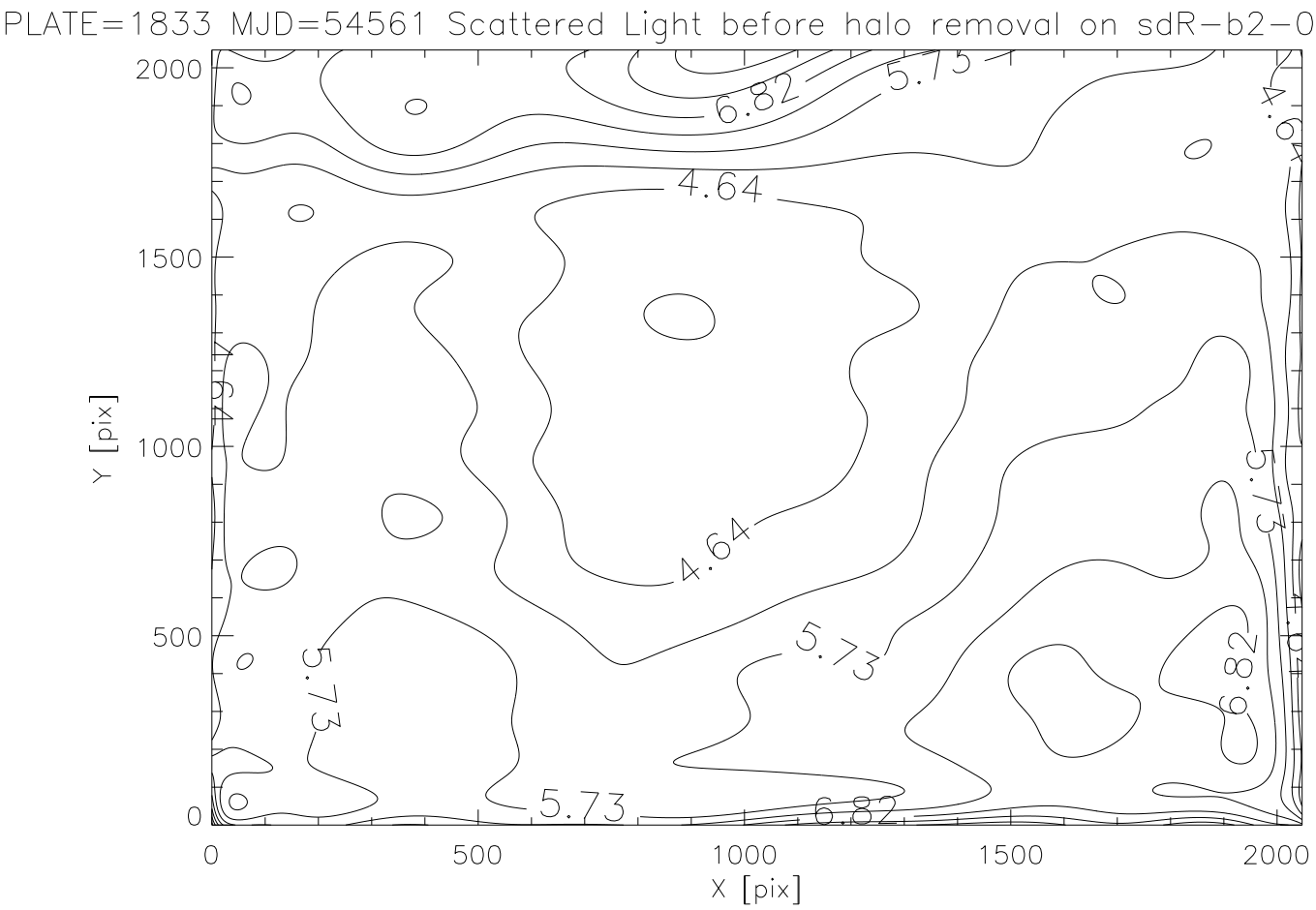

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

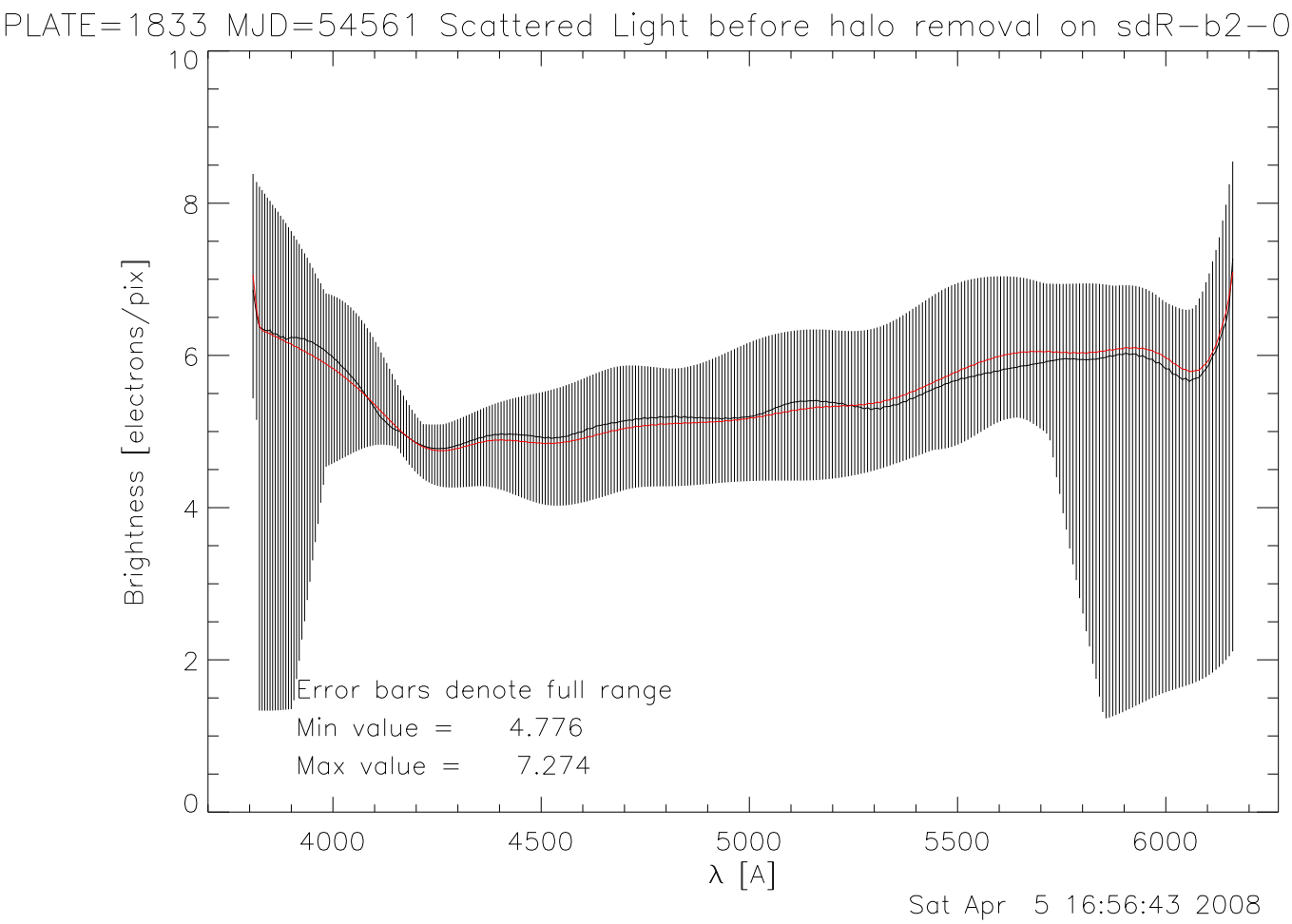

PLATE=1833 MJD=54561 flat extraction chi^2 for sdR−b2−00051631.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

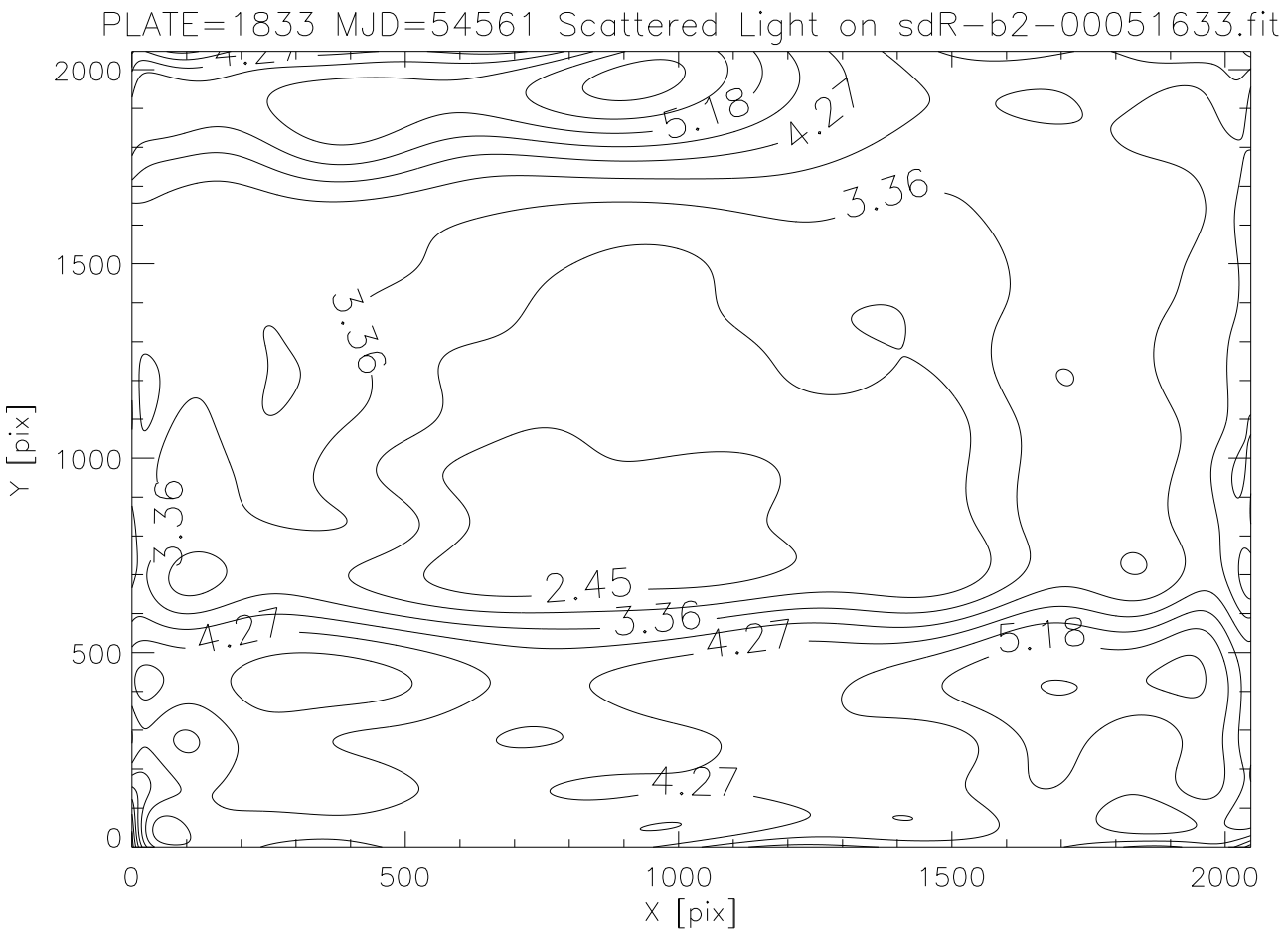

PLATE=1833 MJD=54561 Superflat sdR-b2-00051631.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

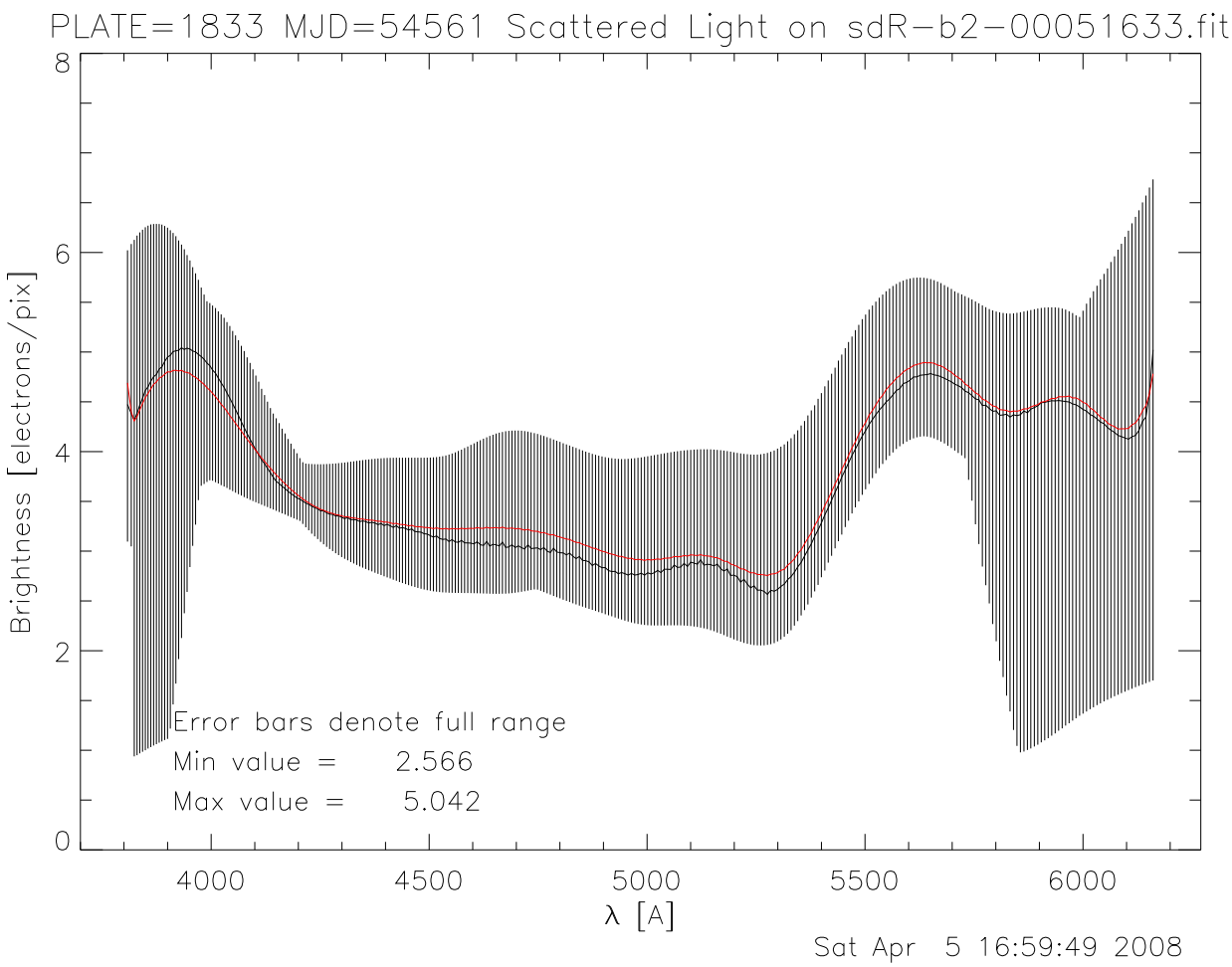

PLATE=1833 MJD=54561 Arcline Fit for sdR-b2-00051632.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Apr 5 16:55:46 2008

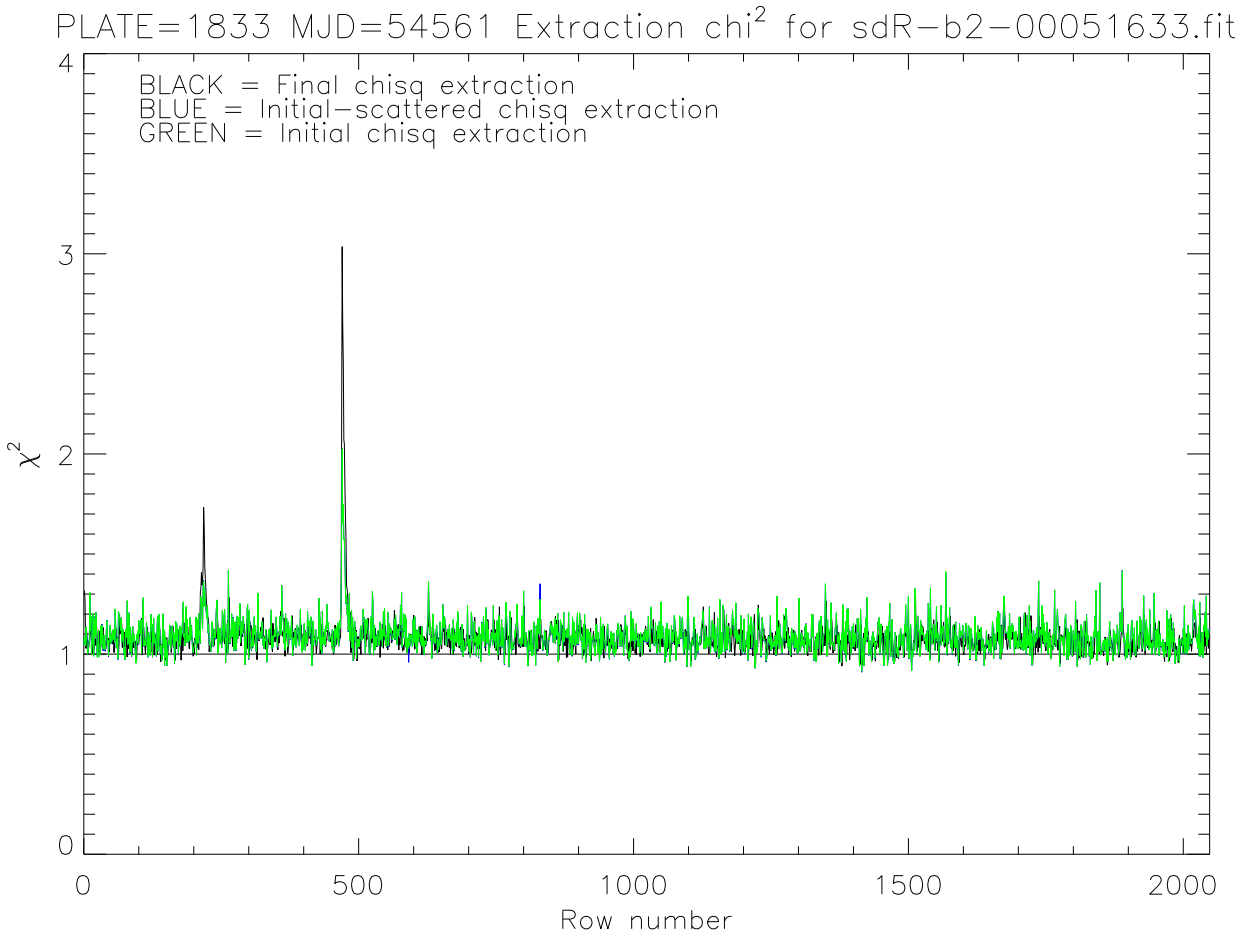

PLATE=1833 MJD=54561 Fiber-Flats for sdR-b2-00051631.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.162
Max value = 1.229
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Apr 5 16:55:55 2008

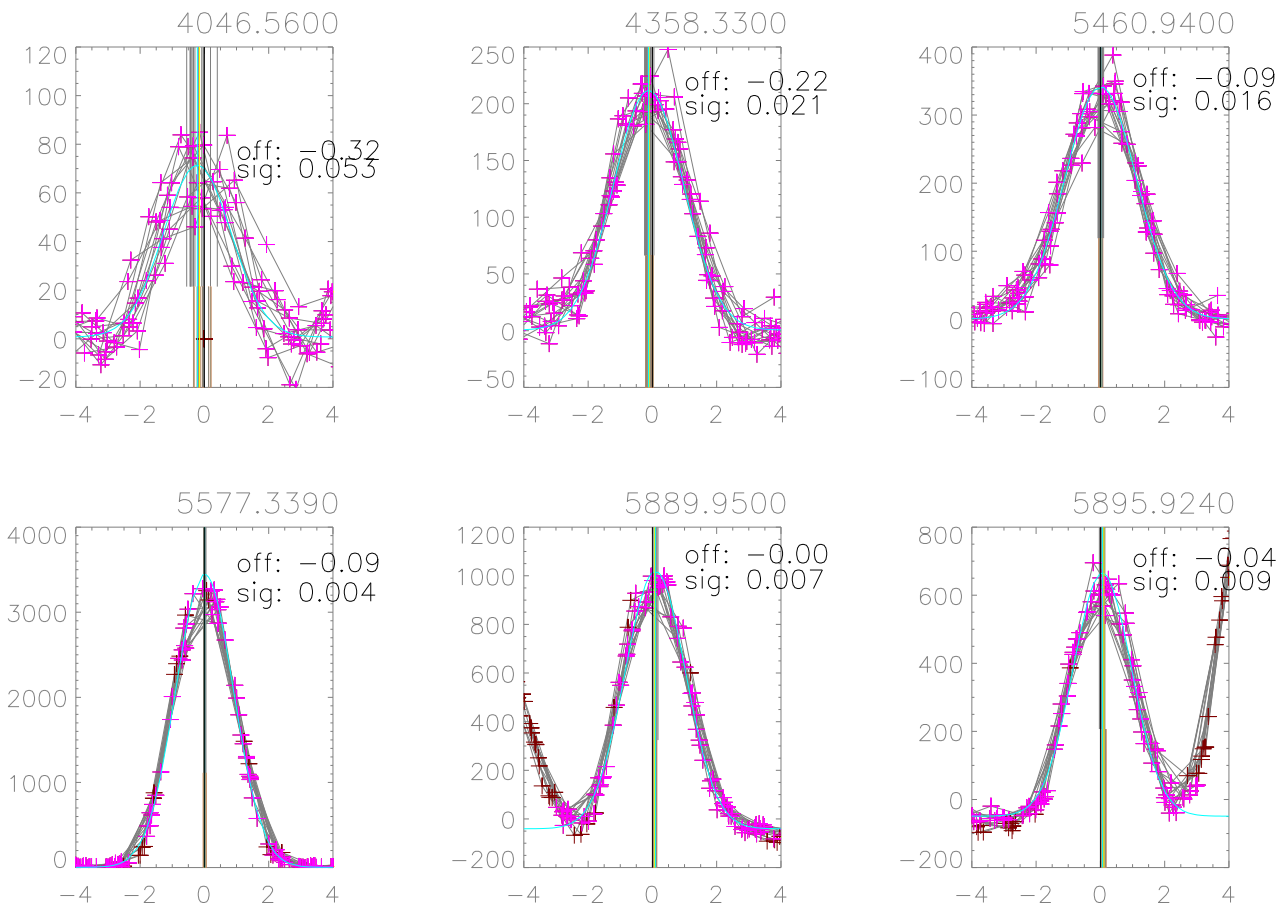

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR−b2−00051633.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.82
5.73
4.64
4.64
5.73
5.73
6.82
5.73
6.82
4.64
4.64
5.73
6.82

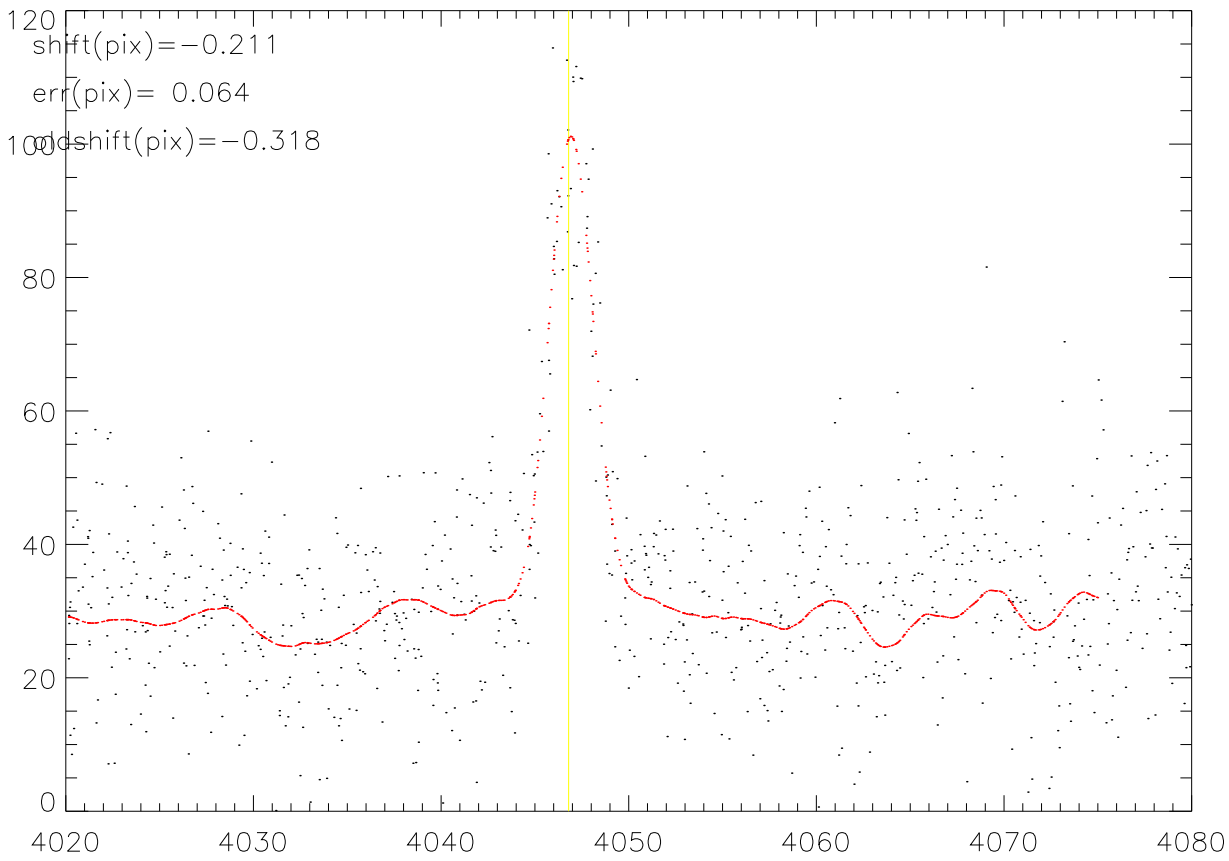

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-b2-00051633.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.776
Max value = 7.274
Sat Apr 5 16:56:43 2008

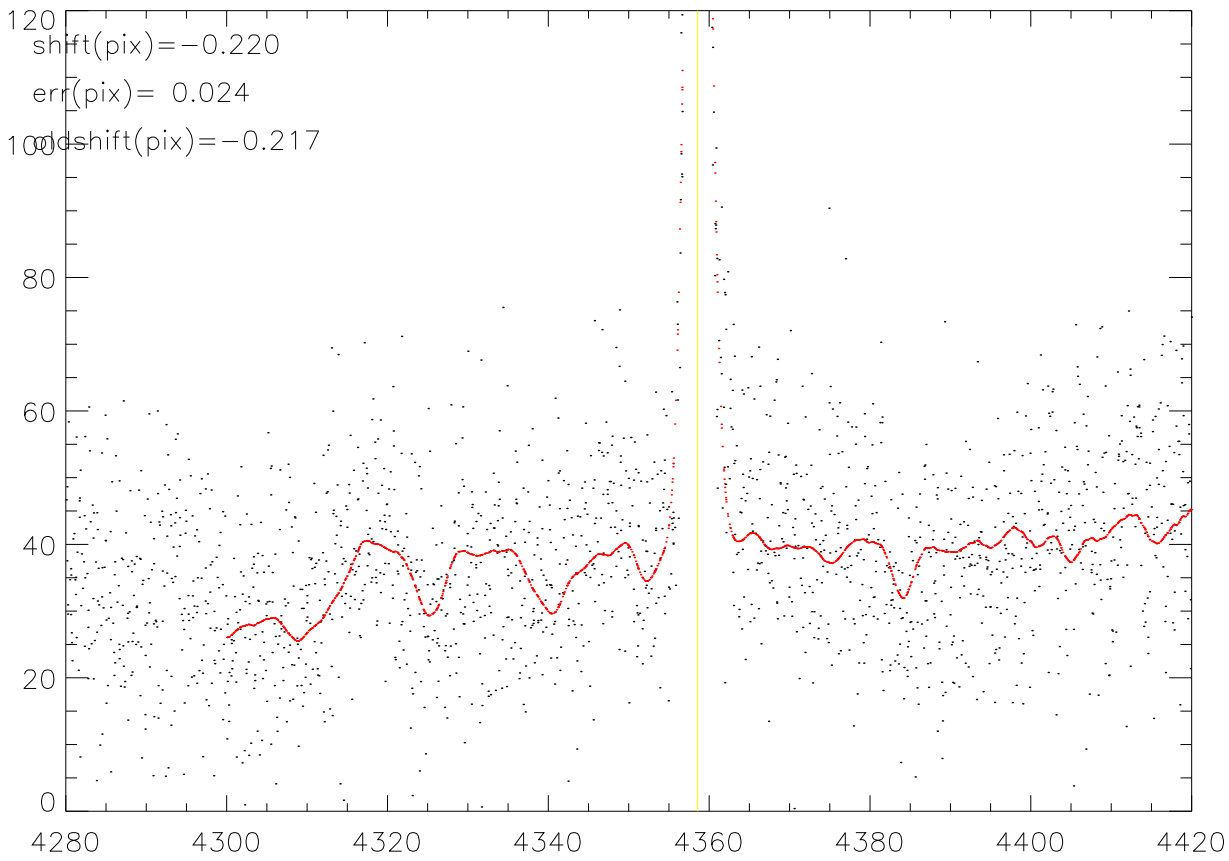

PLATE=1833 MJD=54561 Scattered Light on sdR-b2-00051633.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.18
4.27
3.36
2.45

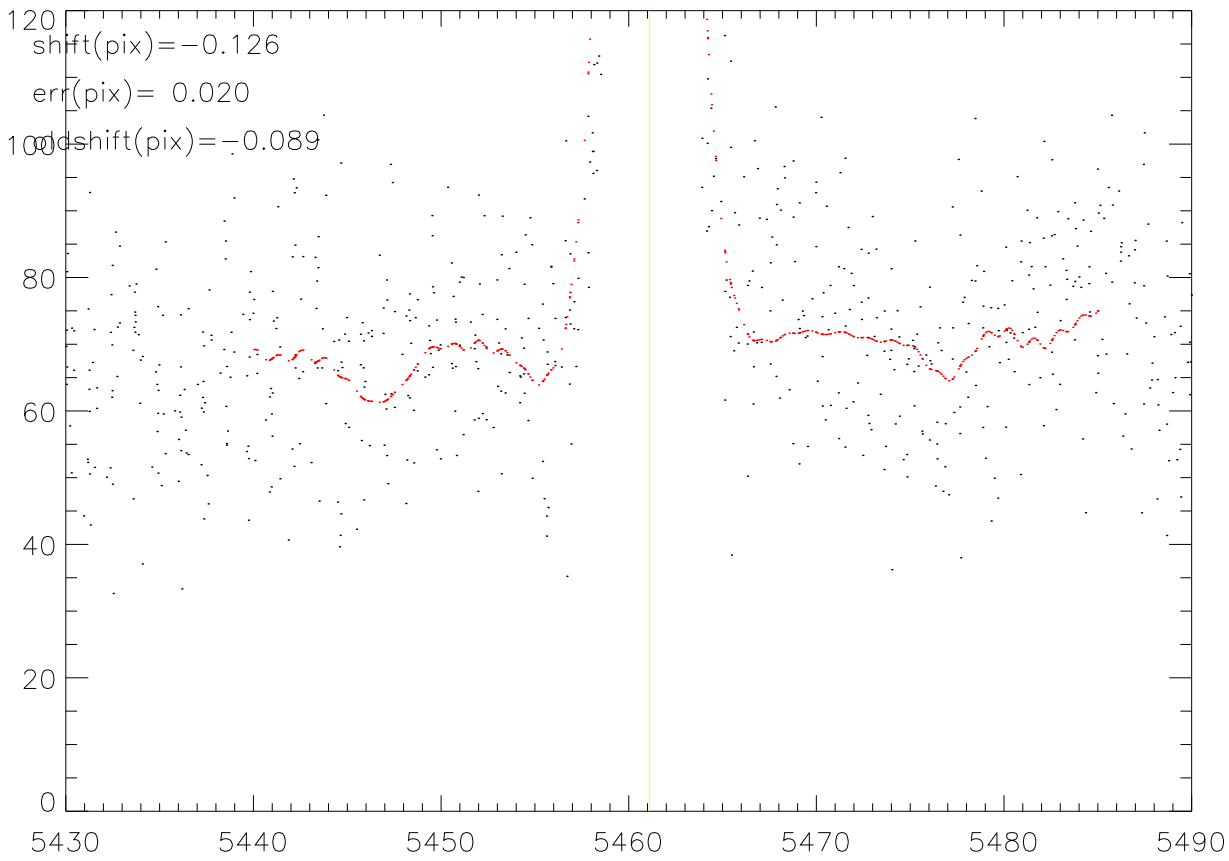

PLATE=1833 MJD=54561 Scattered Light on sdR-b2-00051633.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.566
Max value = 5.042
Sat Apr 5 16:59:49 2008

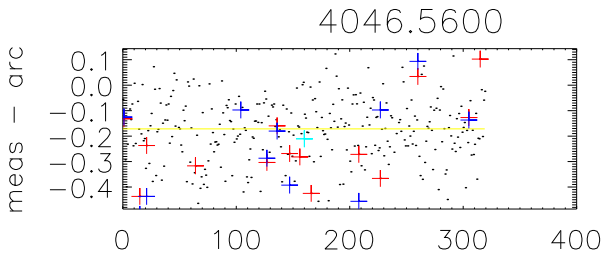

PLATE=1833 MJD=54561 Extraction chi^2 for sdR−b2−00051633.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

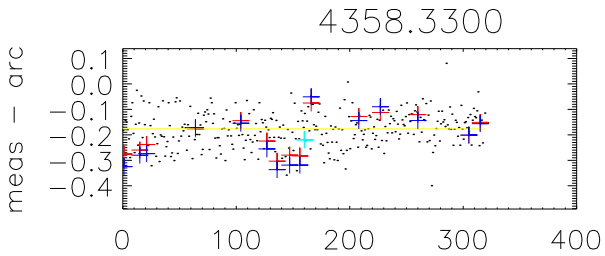

4046.5600
off: −0.32
sig: 0.053
4358.3300
off: −0.22
sig: 0.021
5460.9400
off: −0.09
sig: 0.016
5577.3390
off: −0.09
sig: 0.004
5889.9500
off: −0.00
sig: 0.007
5895.9240
off: −0.04
sig: 0.009

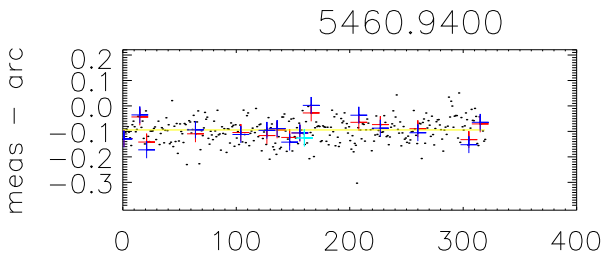

shift(pix)=−0.211
err(pix)= 0.064
oldshift(pix)=−0.318
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

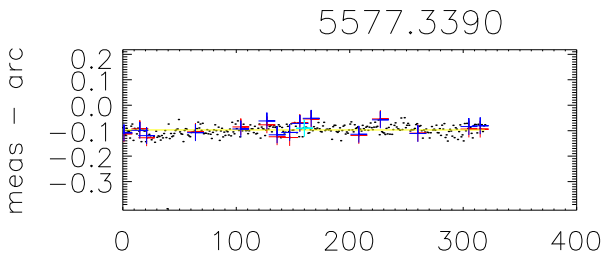

shift(pix)=−0.220
err(pix)= 0.024
oldshift(pix)=−0.217
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

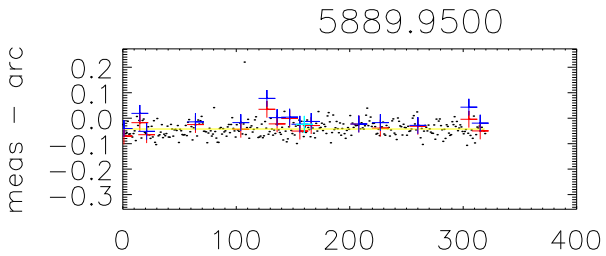

shift(pix)=−0.126
err(pix)= 0.020
oldshift(pix)=−0.089
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

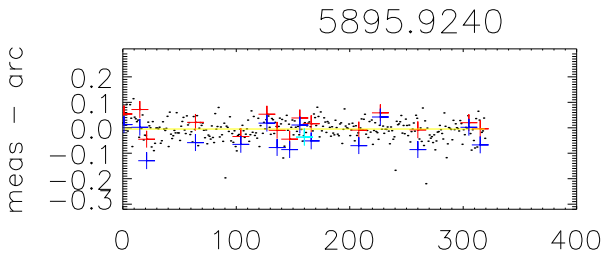

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

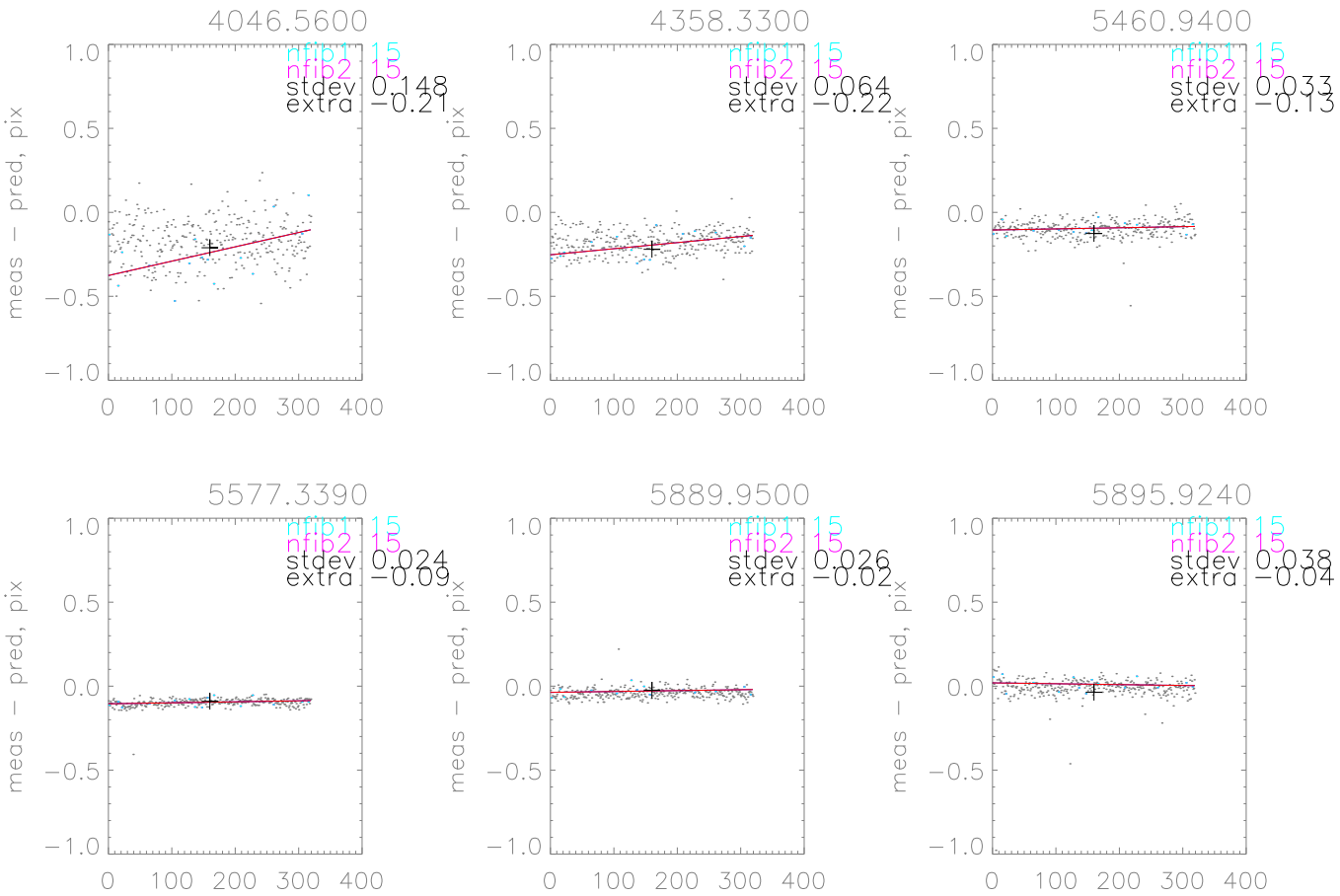

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

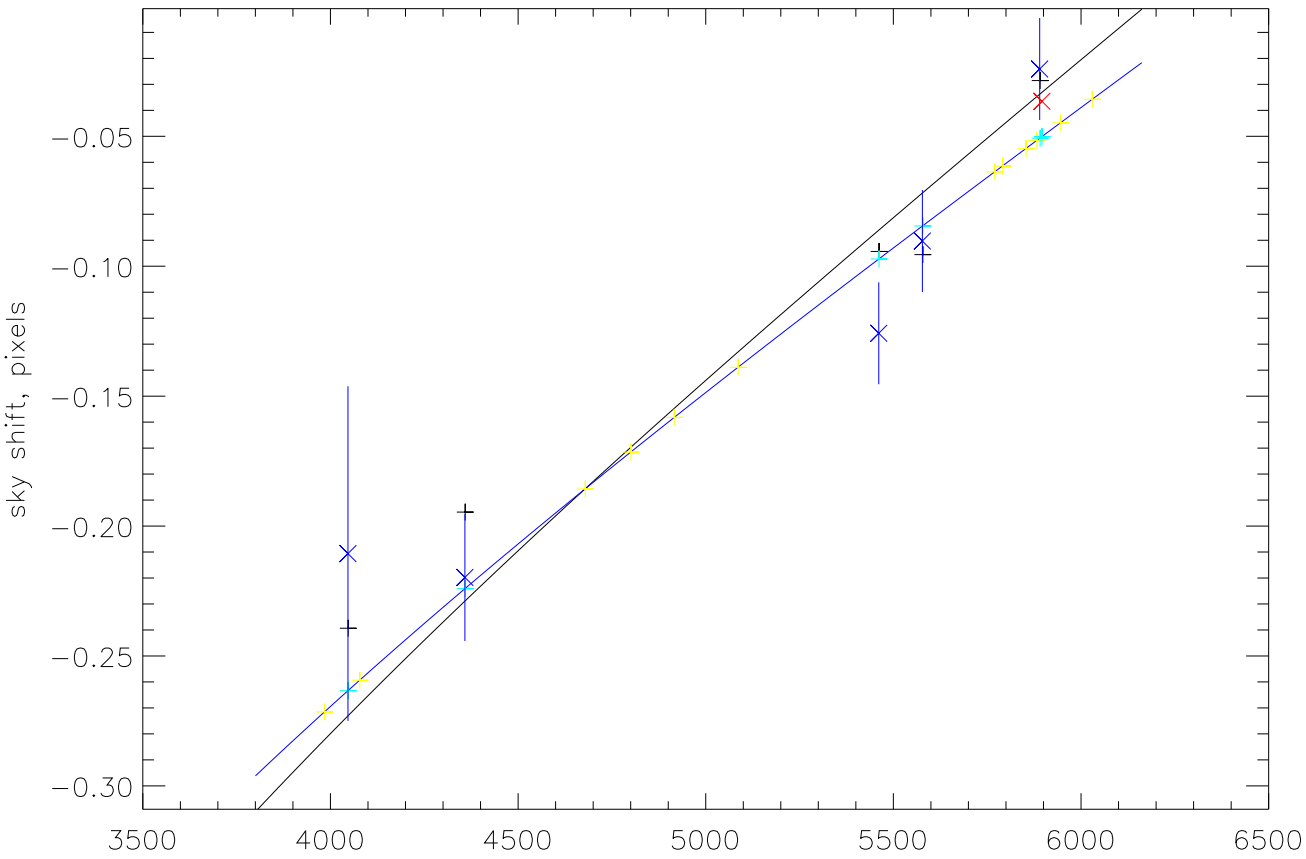

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

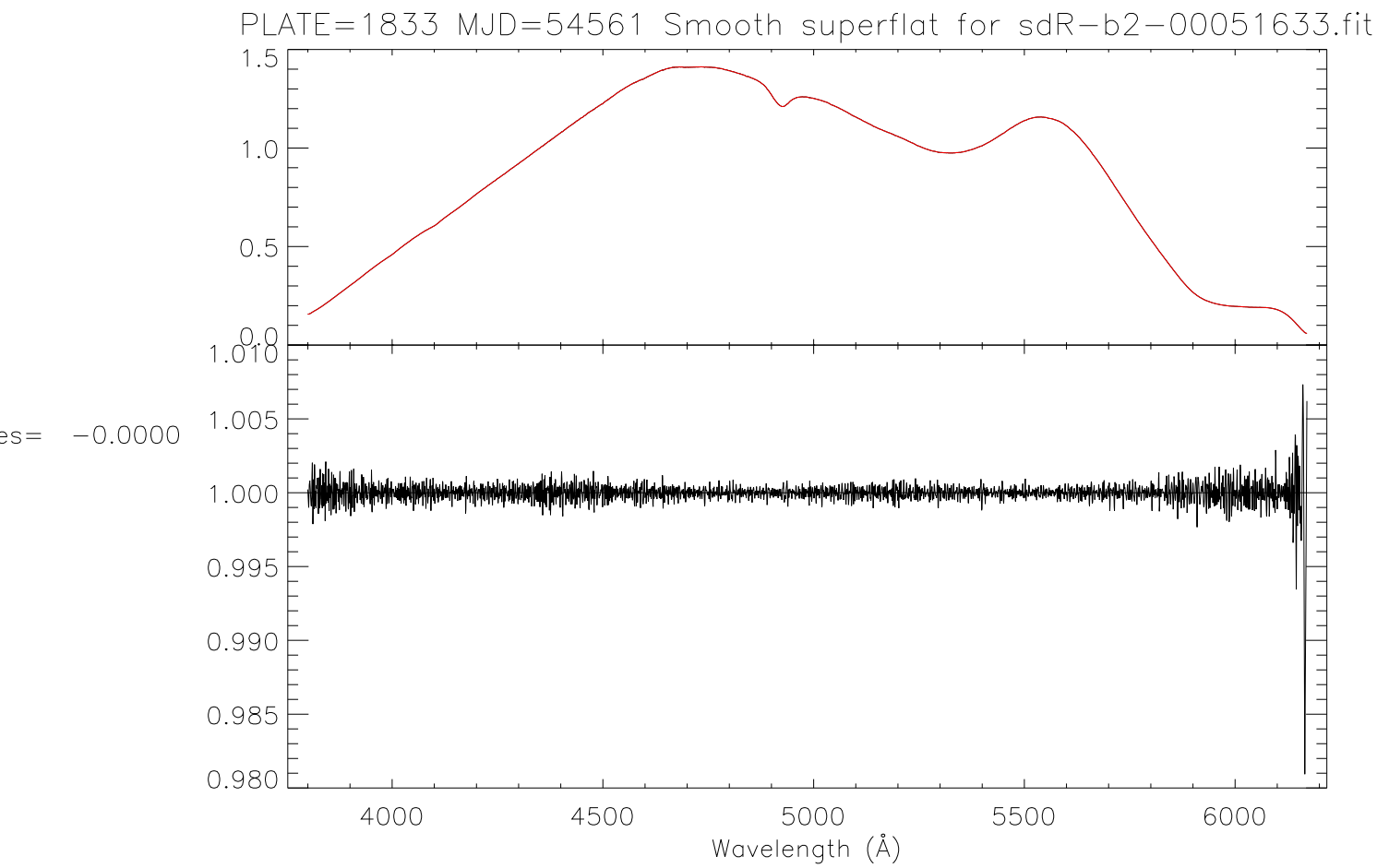

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

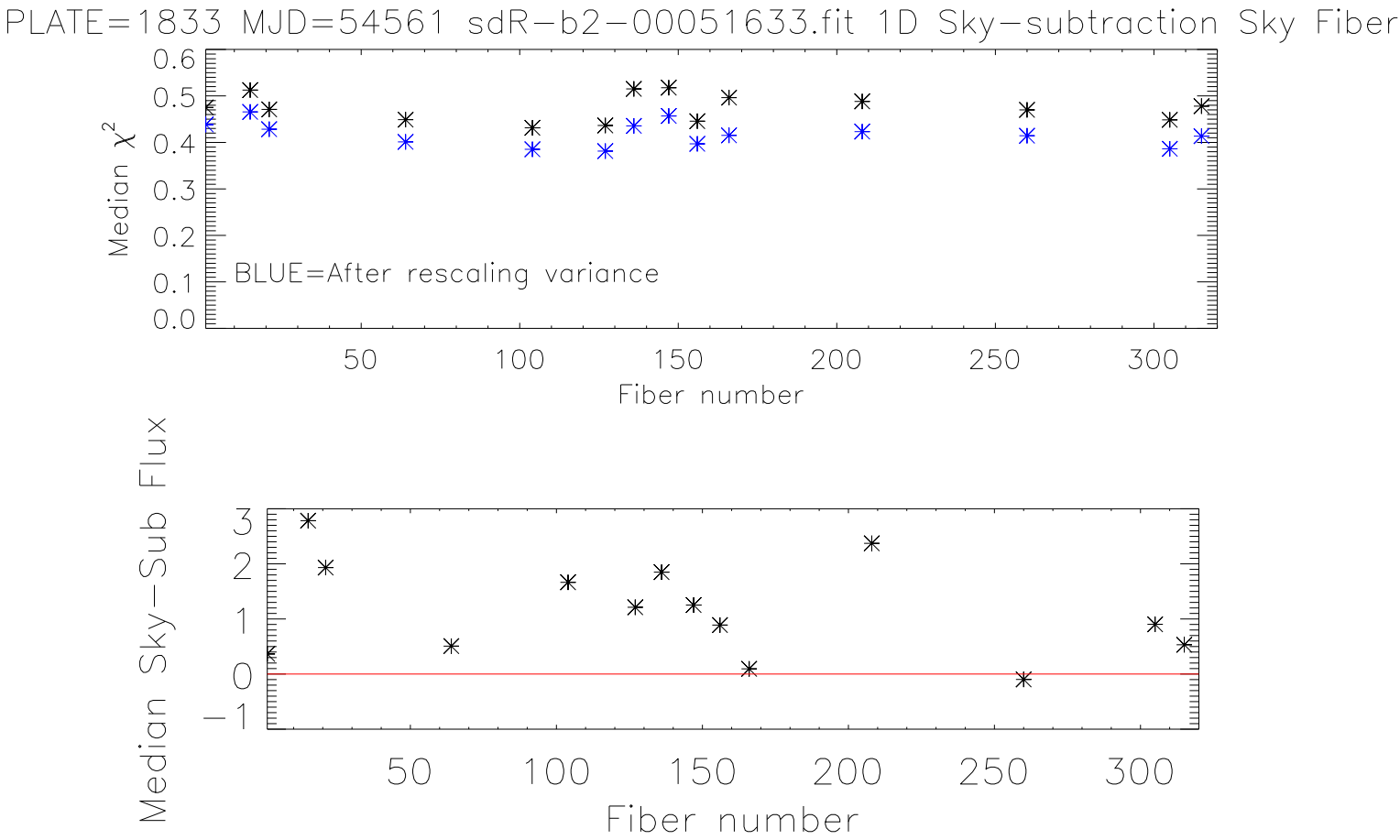

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

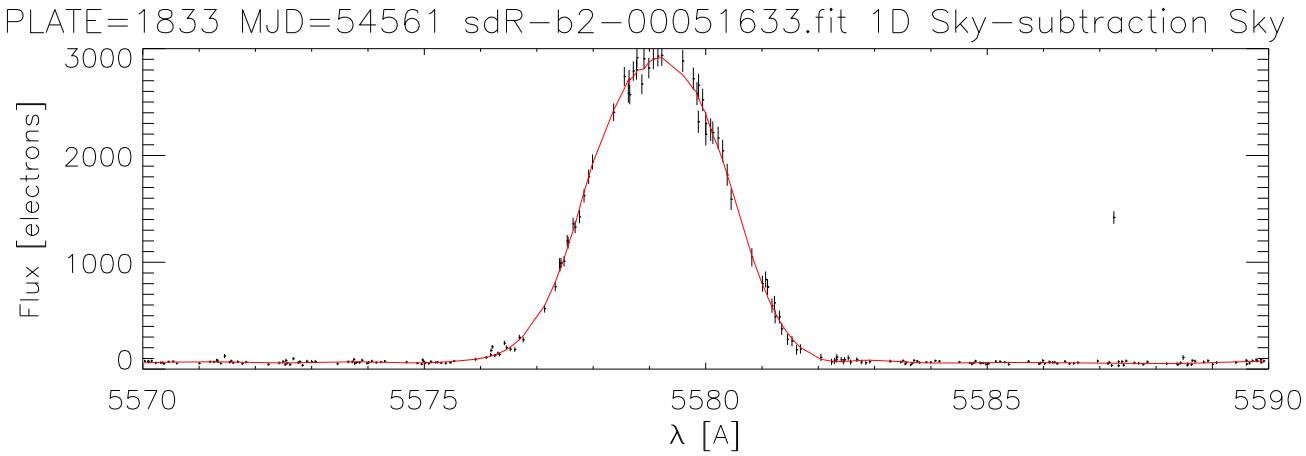

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

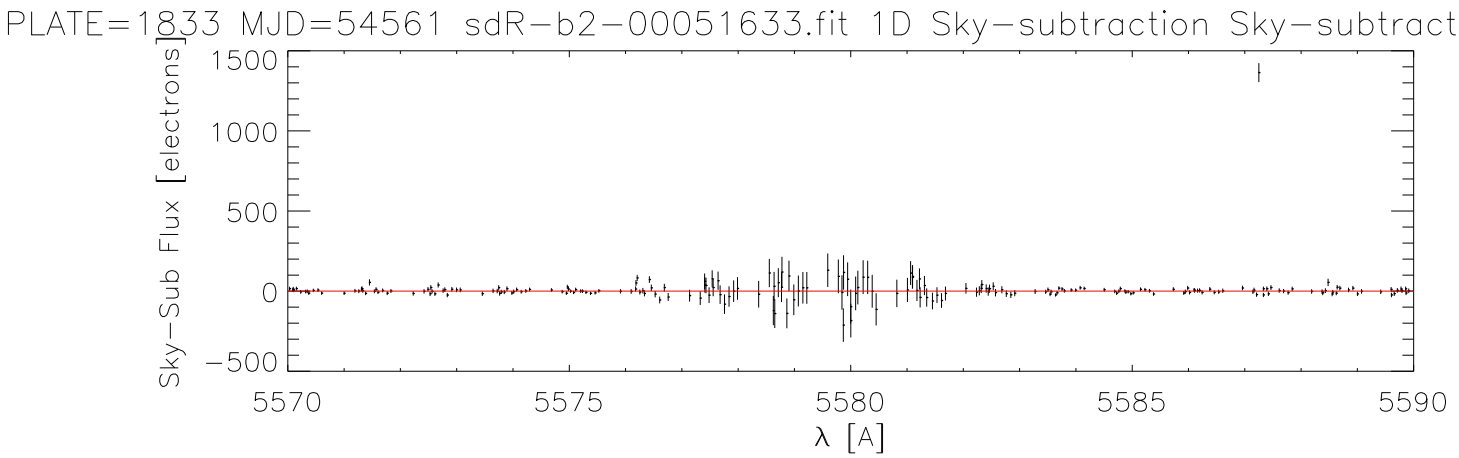

4046.5600
nfib1 15
nfib2 15
stdev 0.148
extra −0.21
4358.3300
nfib1 15
nfib2 15
stdev 0.064
extra −0.22
5460.9400
nfib1 15
nfib2 15
stdev 0.033
extra −0.13
5577.3390
nfib1 15
nfib2 15
stdev 0.024
extra −0.09
5889.9500
nfib1 15
nfib2 15
stdev 0.026
extra −0.02
5895.9240
nfib1 15
nfib2 15
stdev 0.038
extra −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

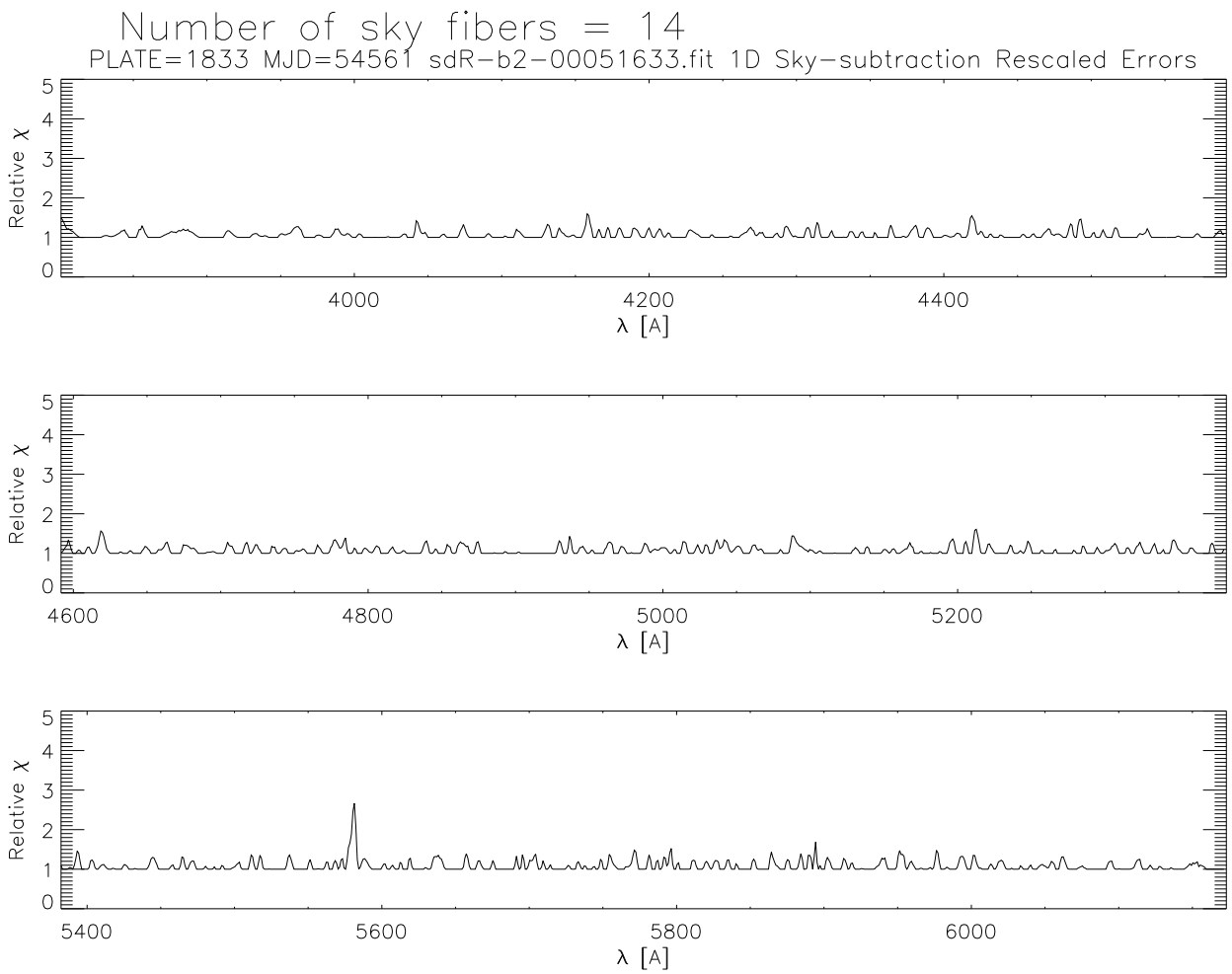

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500

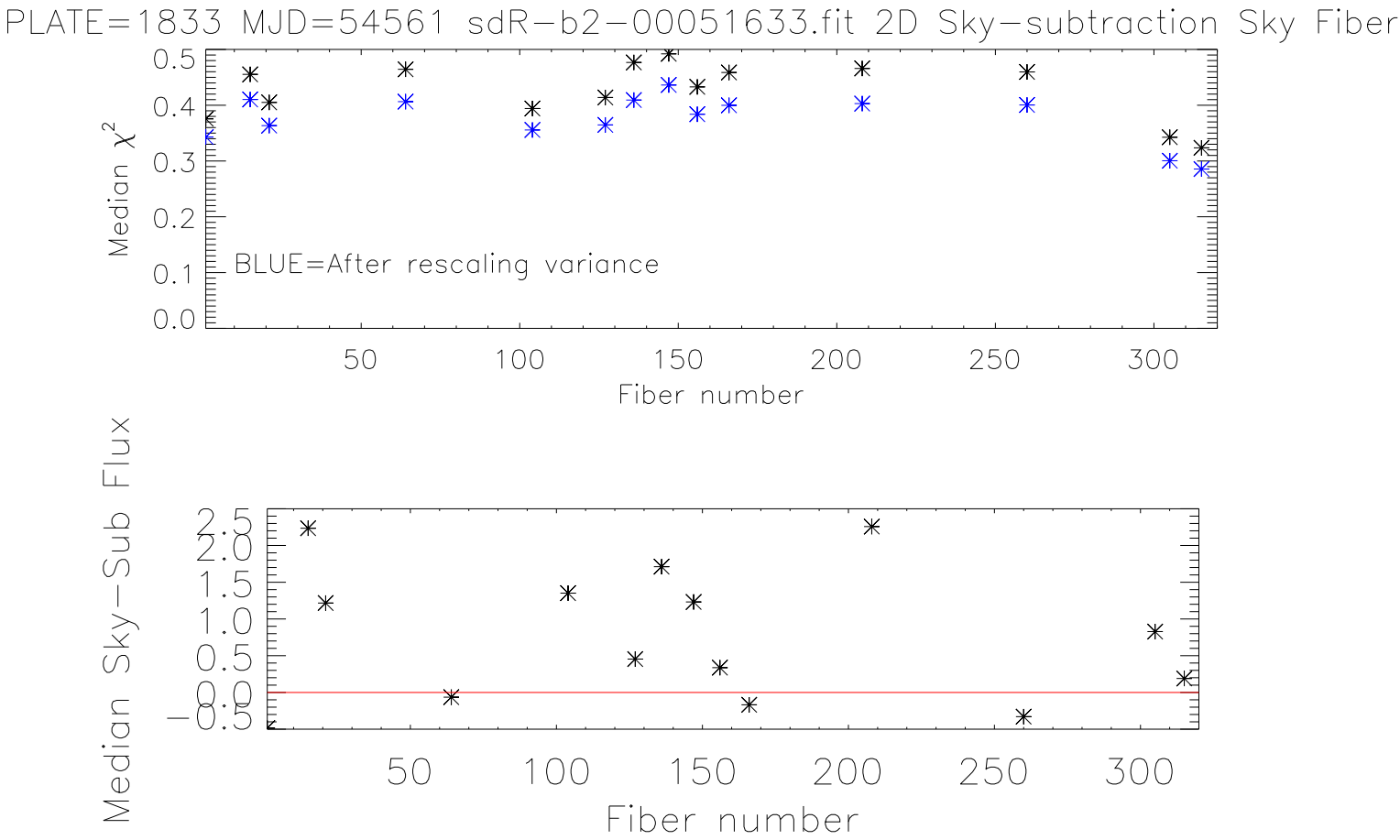

PLATE=1833 MJD=54561 Smooth superflat for sdR-b2-00051633.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

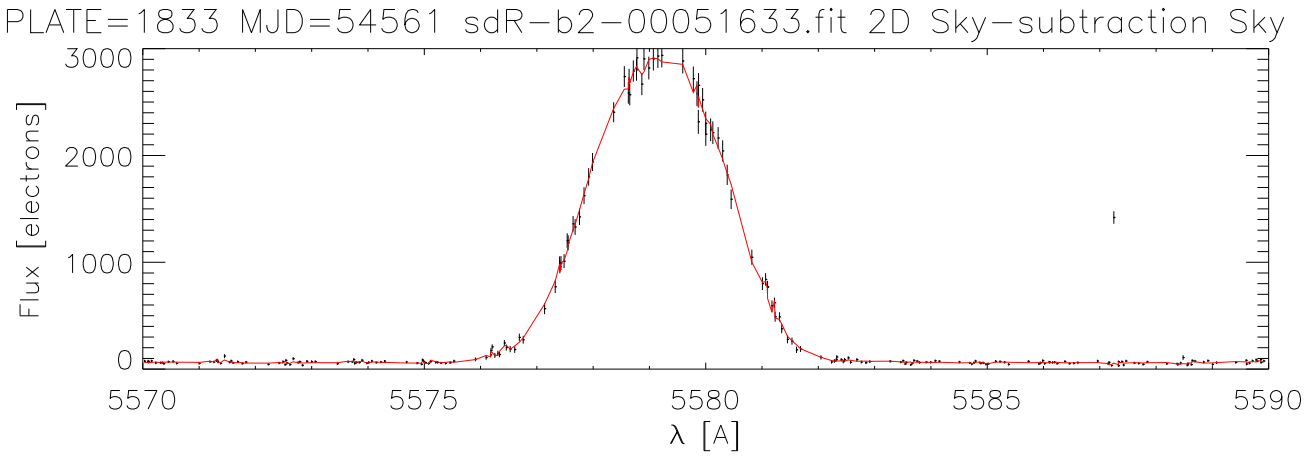

PLATE=1833 MJD=54561 sdR-b2-00051633.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

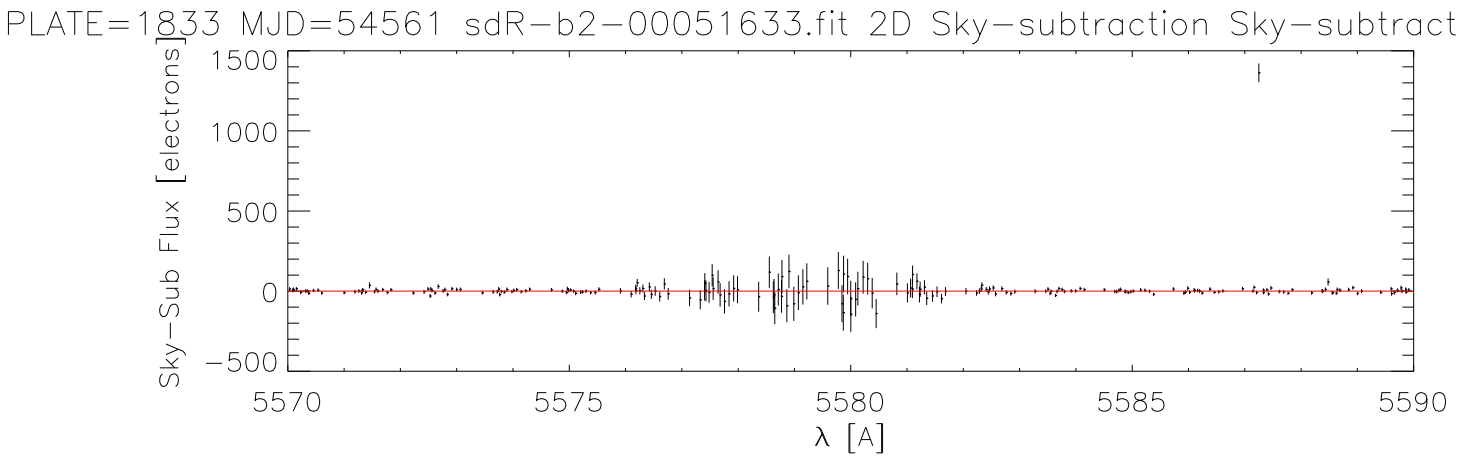

PLATE=1833 MJD=54561 sdR-b2-00051633.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

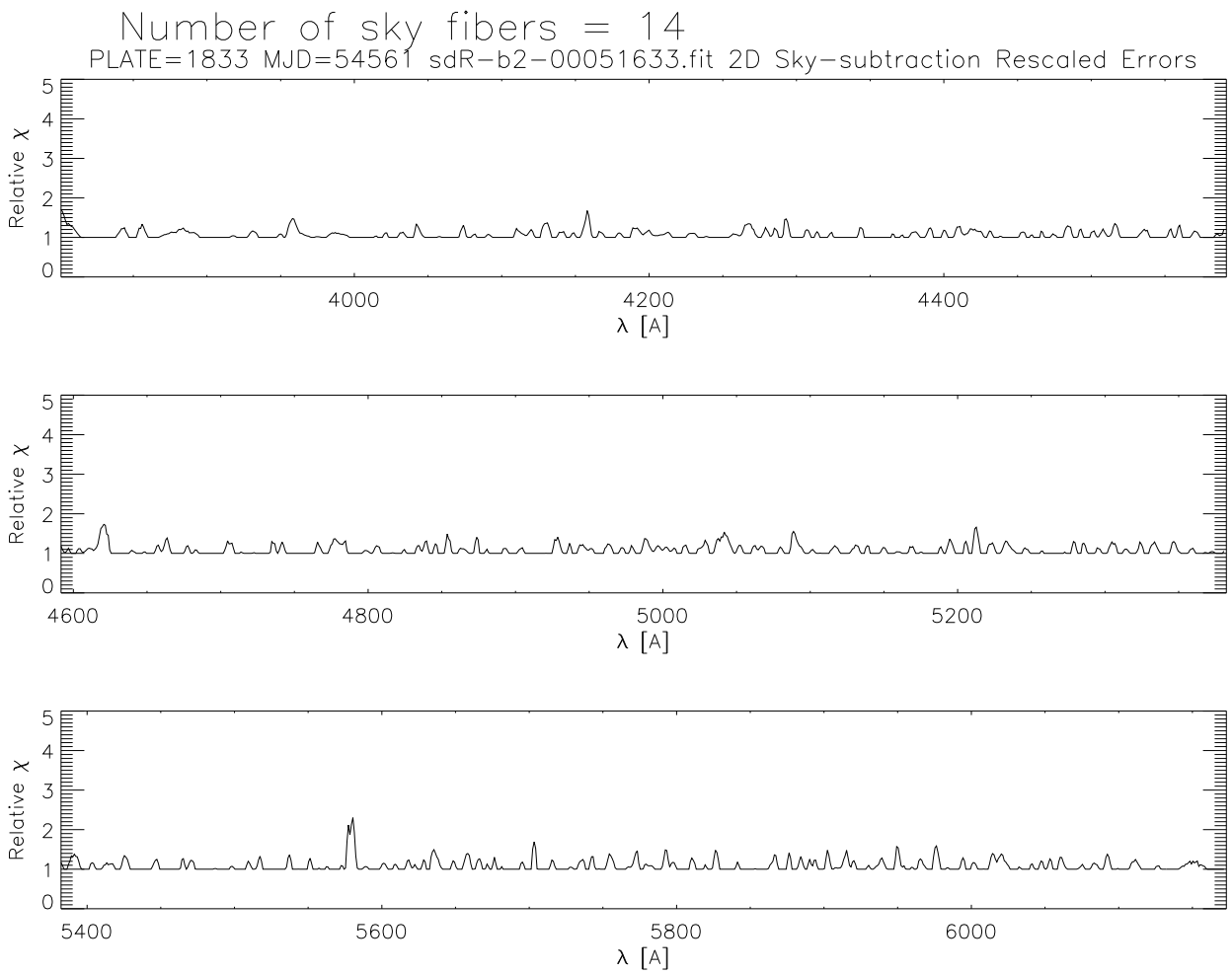

PLATE=1833 MJD=54561 sdR-b2-00051633.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

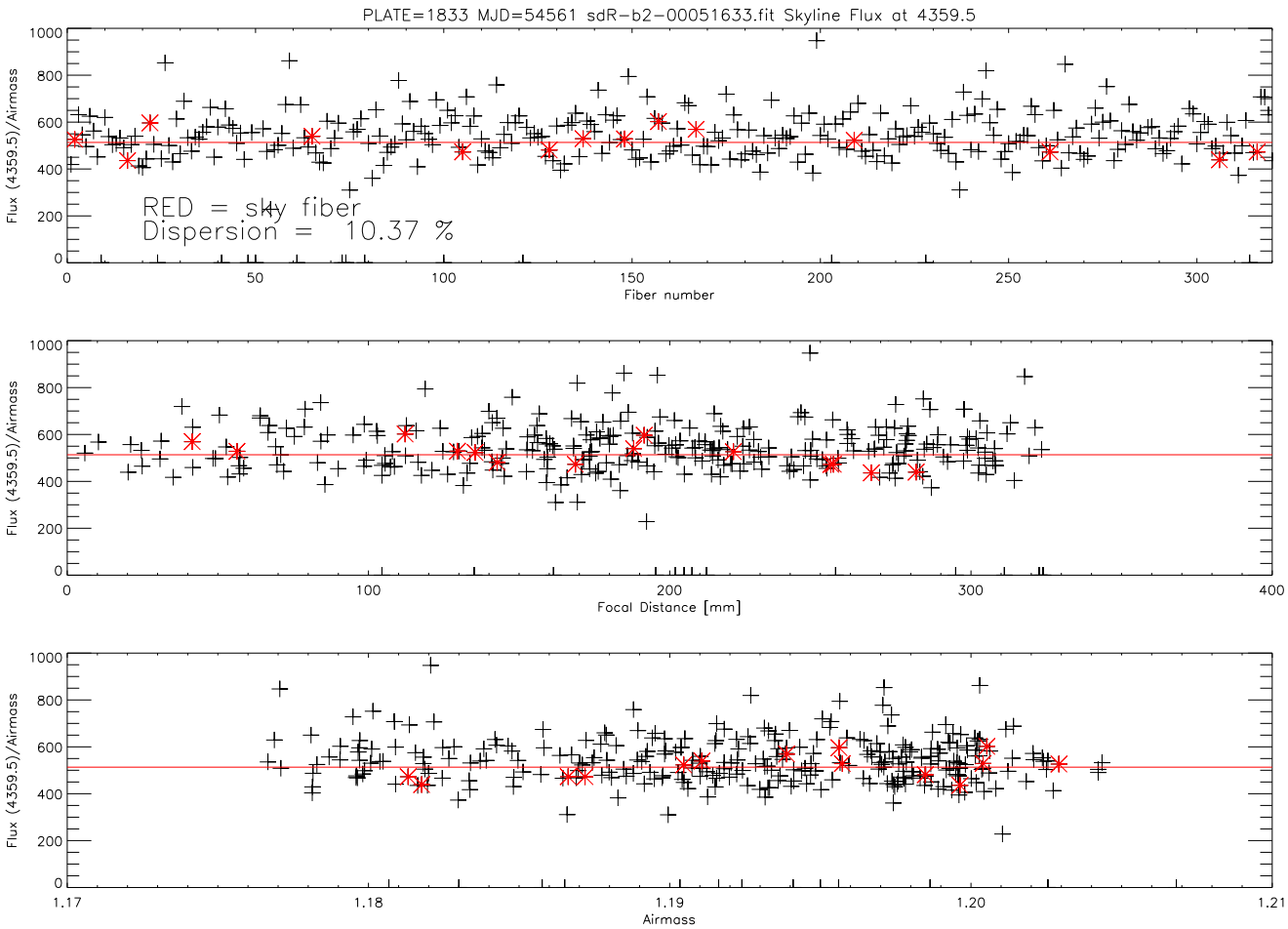

Number of sky fibers = 14
PLATE=1833 MJD=54561 sdR-b2-00051633.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

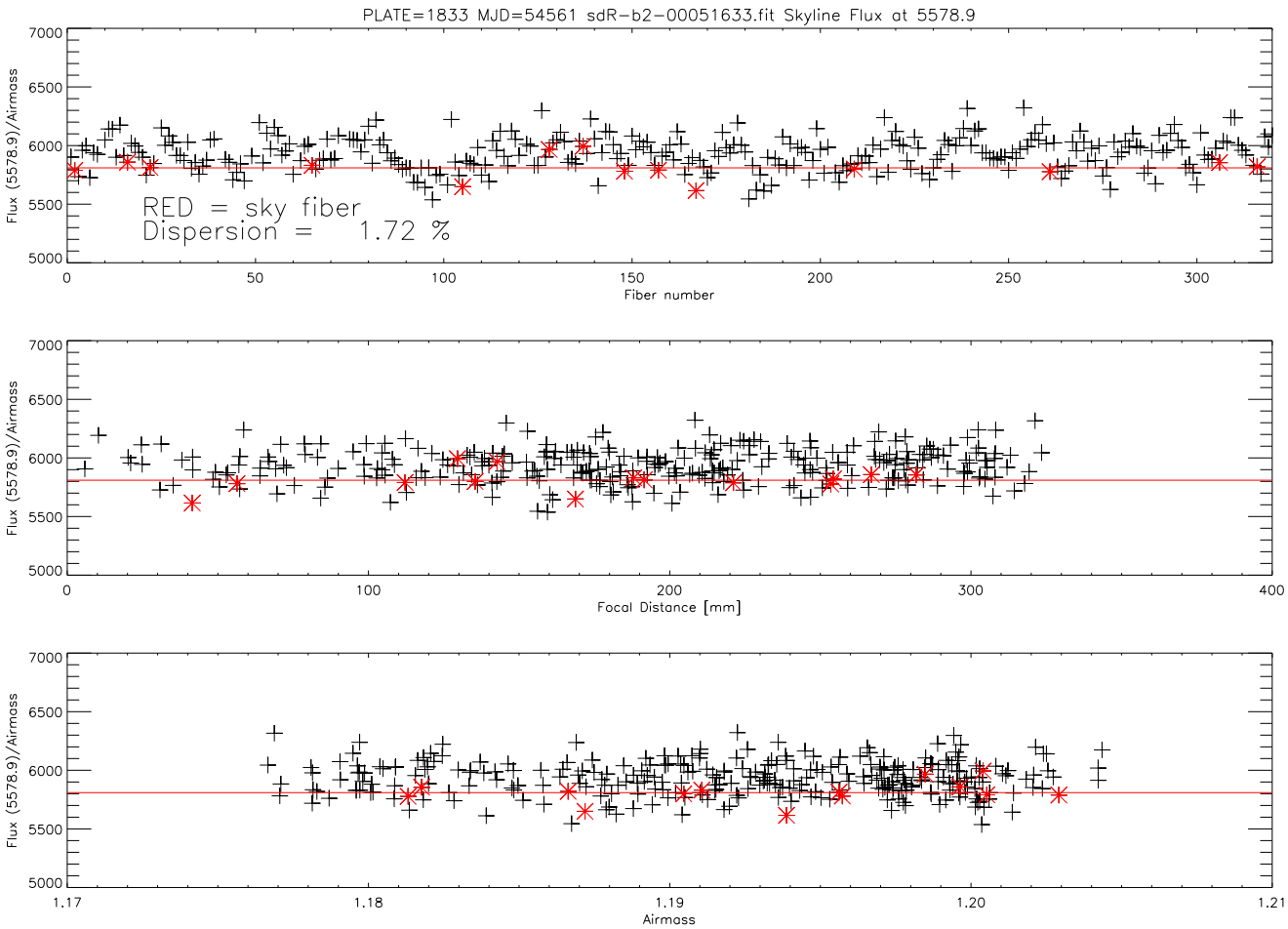

PLATE=1833 MJD=54561 sdR-b2-00051633.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

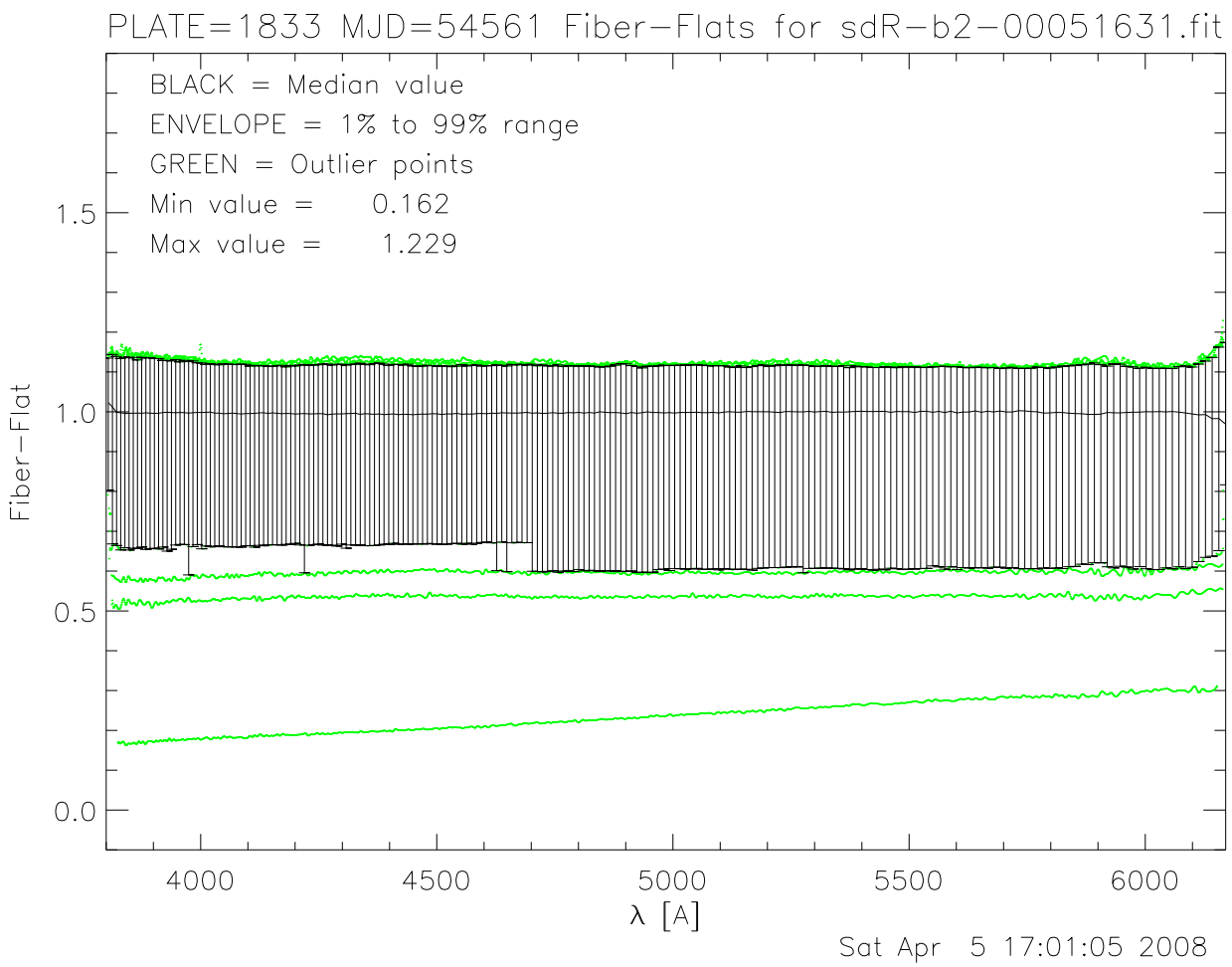

PLATE=1833 MJD=54561 sdR-b2-00051633.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

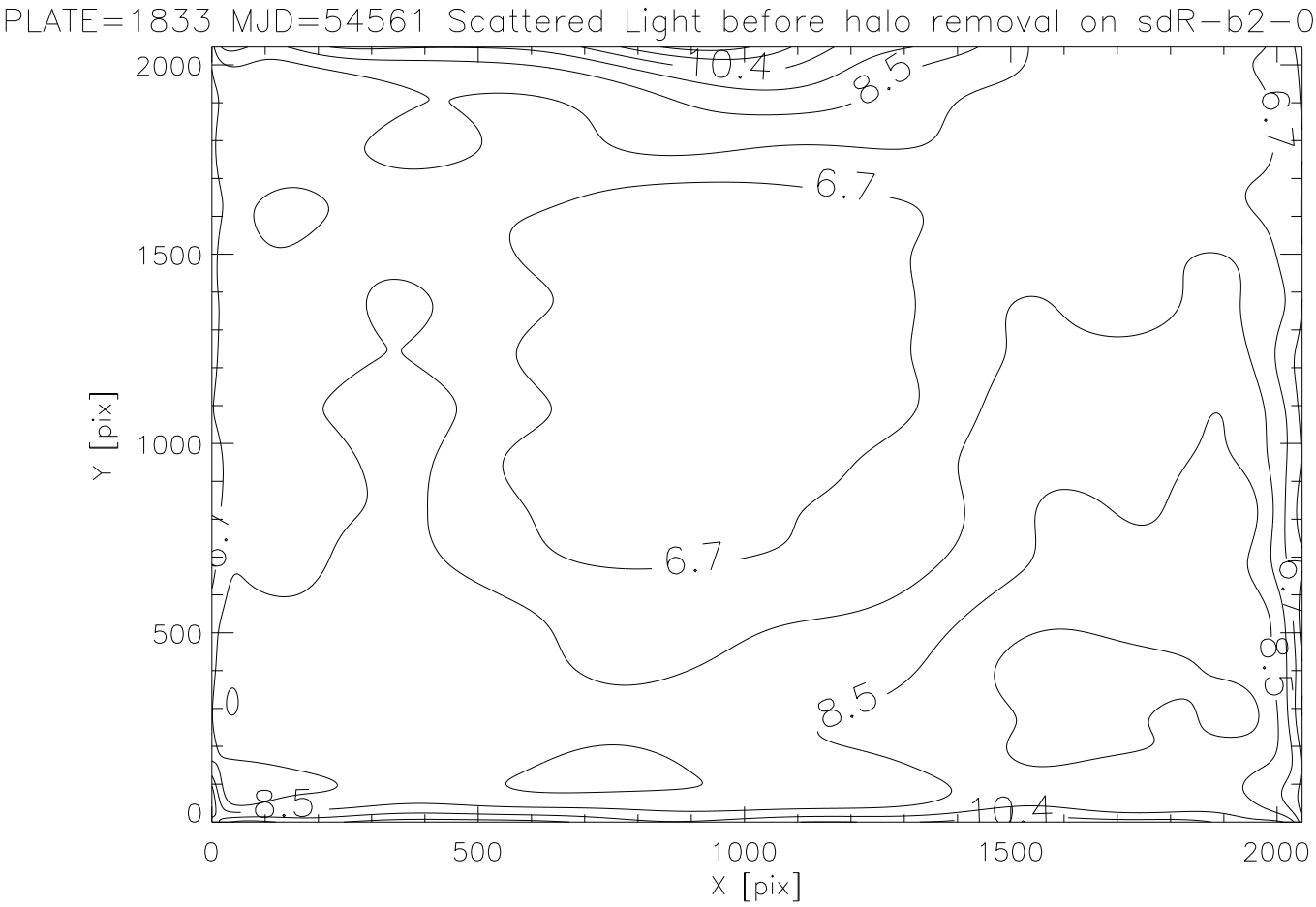

PLATE=1833 MJD=54561 sdR-b2-00051633.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

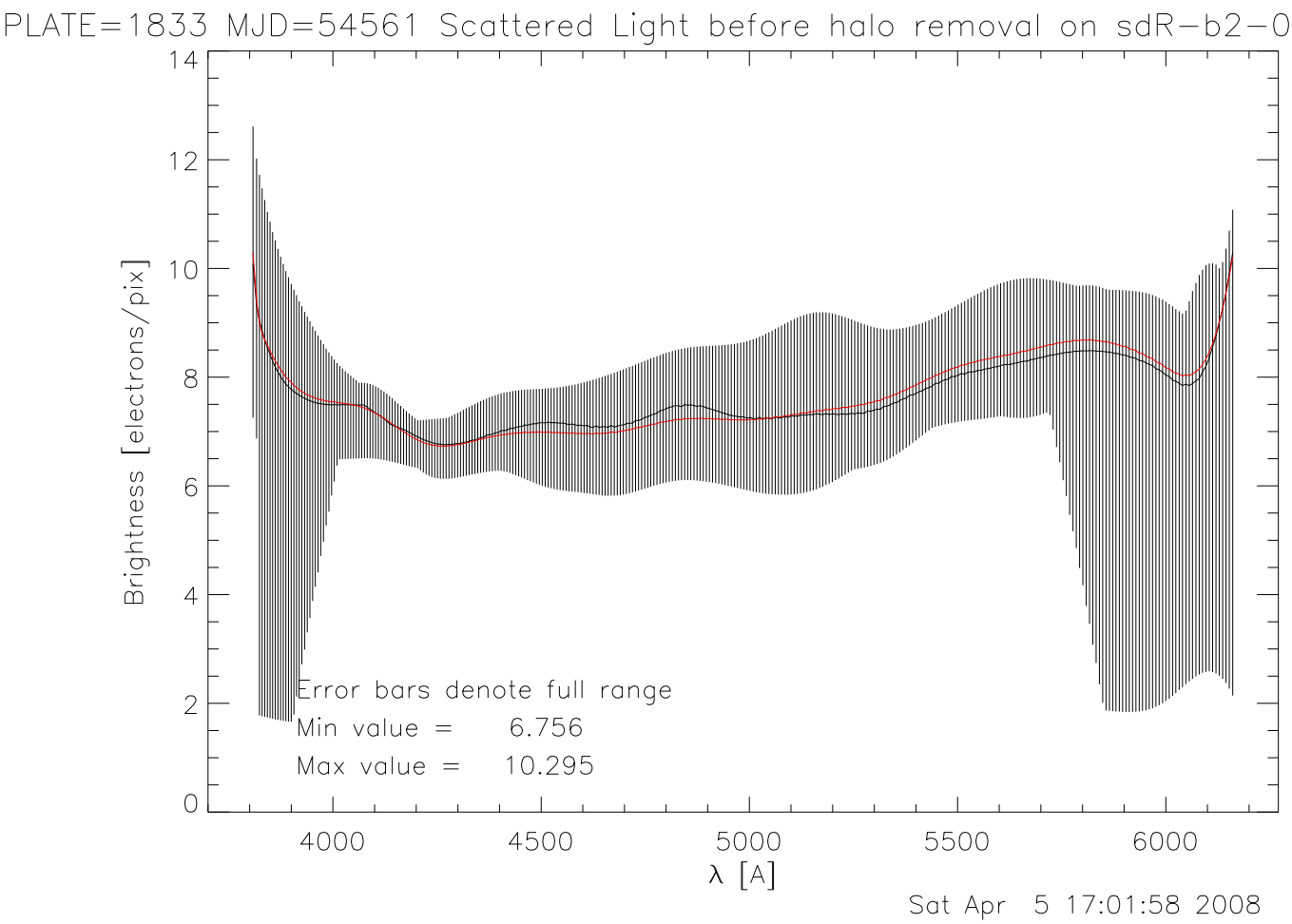

Number of sky fibers = 14
PLATE=1833 MJD=54561 sdR-b2-00051633.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

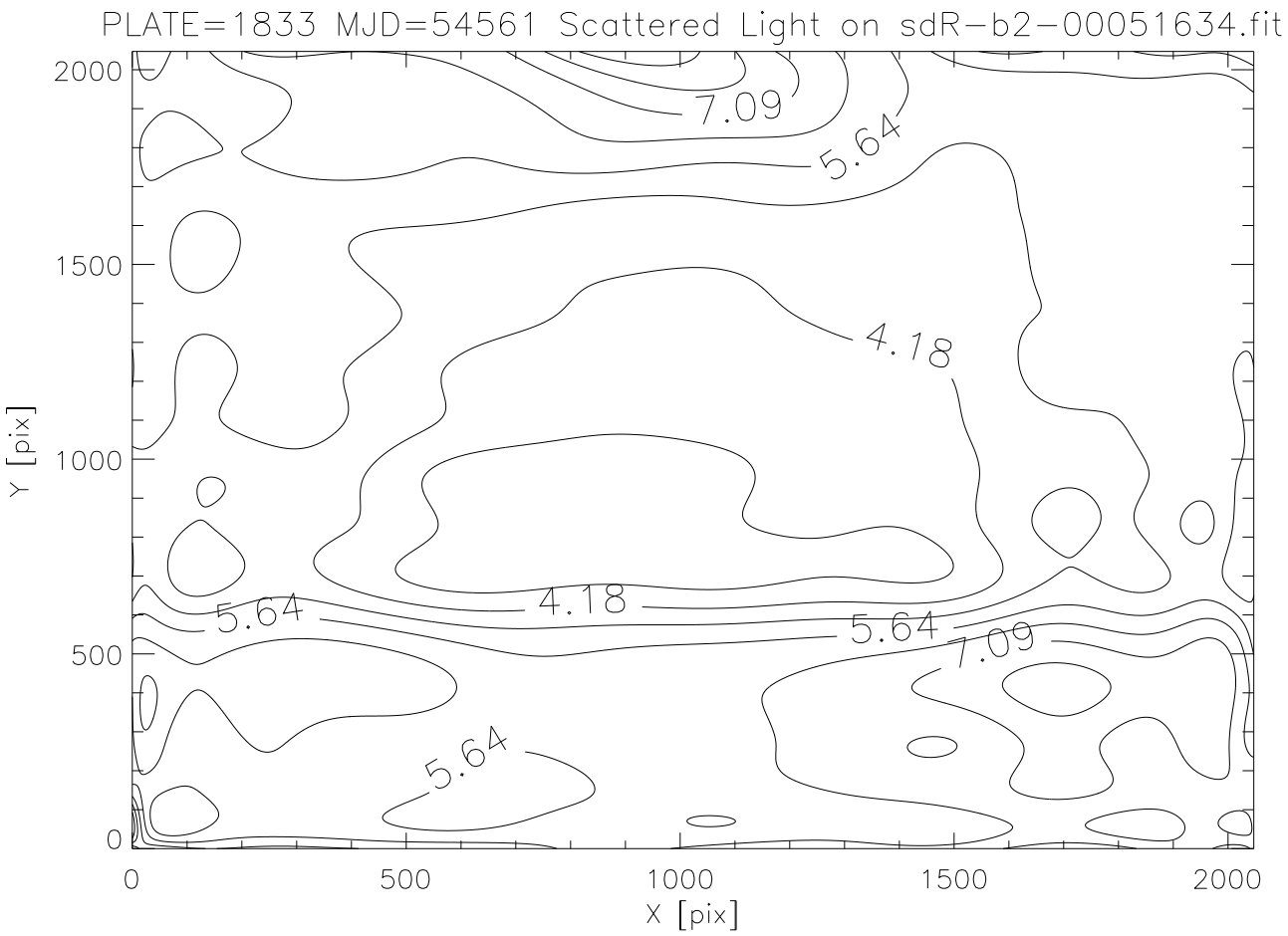

PLATE=1833 MJD=54561 sdR-b2-00051633.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.37 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

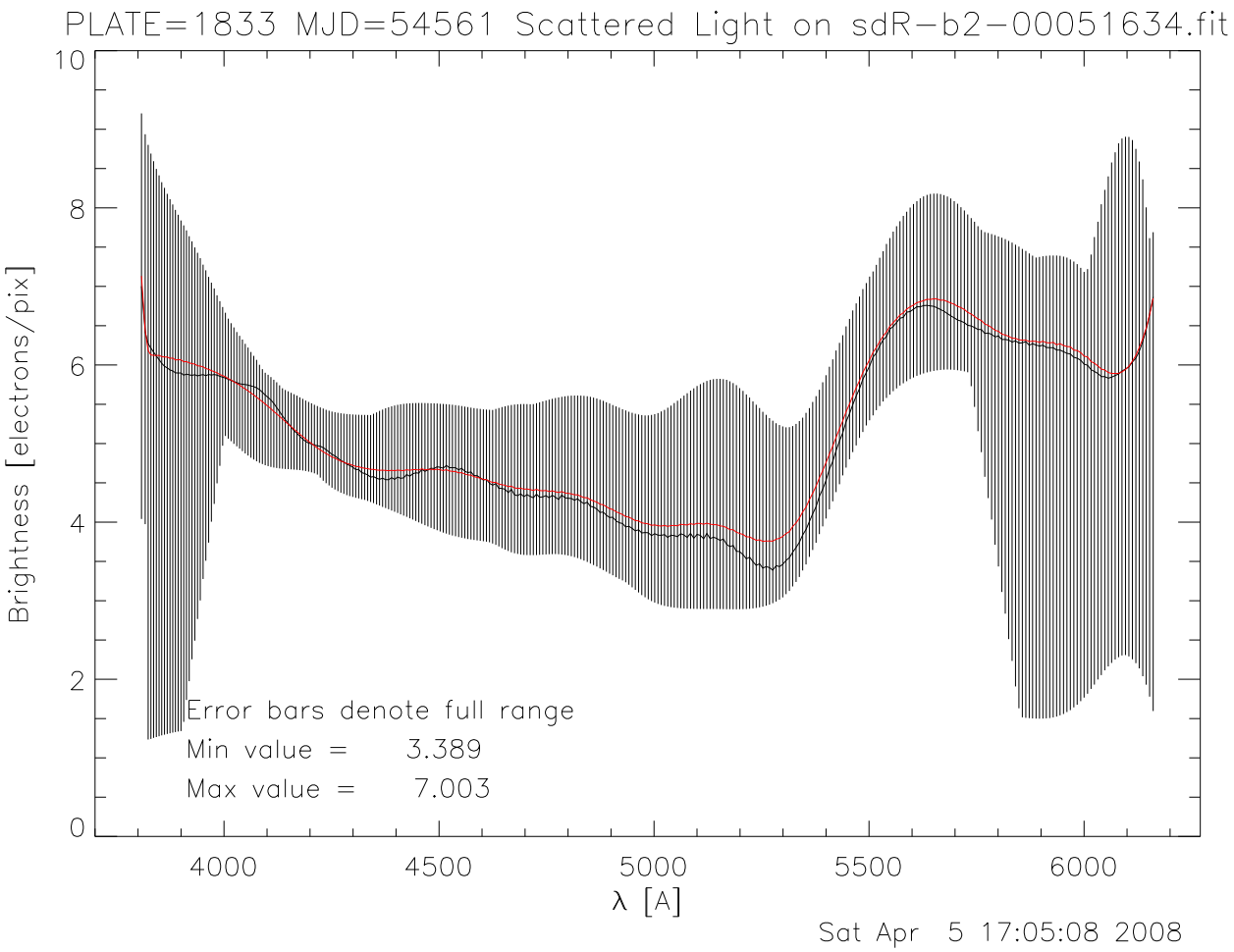

PLATE=1833 MJD=54561 sdR-b2-00051633.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.72 %
Fiber number
Focal Distance [mm]
Airmass

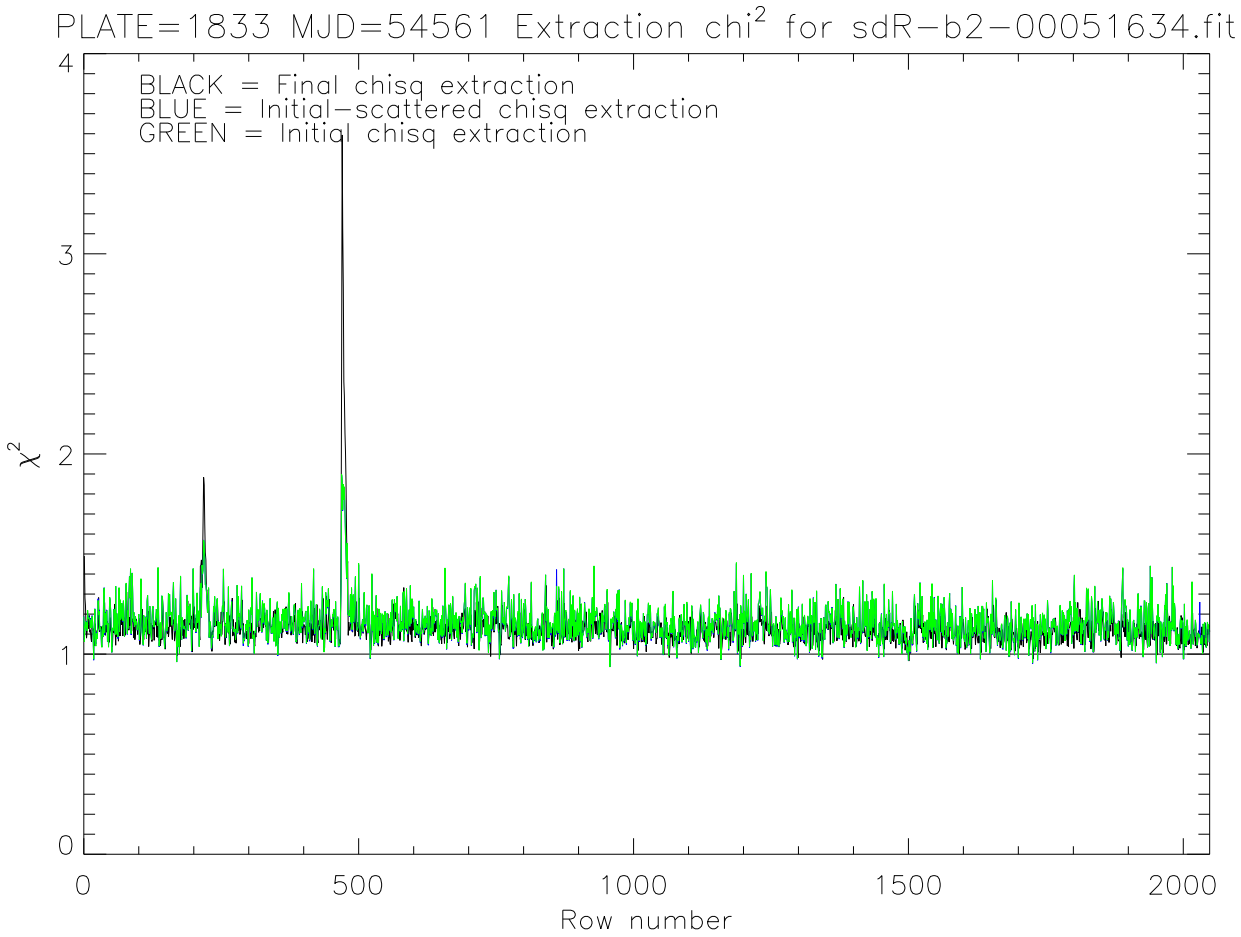

PLATE=1833 MJD=54561 Fiber-Flats for sdR-b2-00051631.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.162
Max value = 1.229
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Apr 5 17:01:05 2008

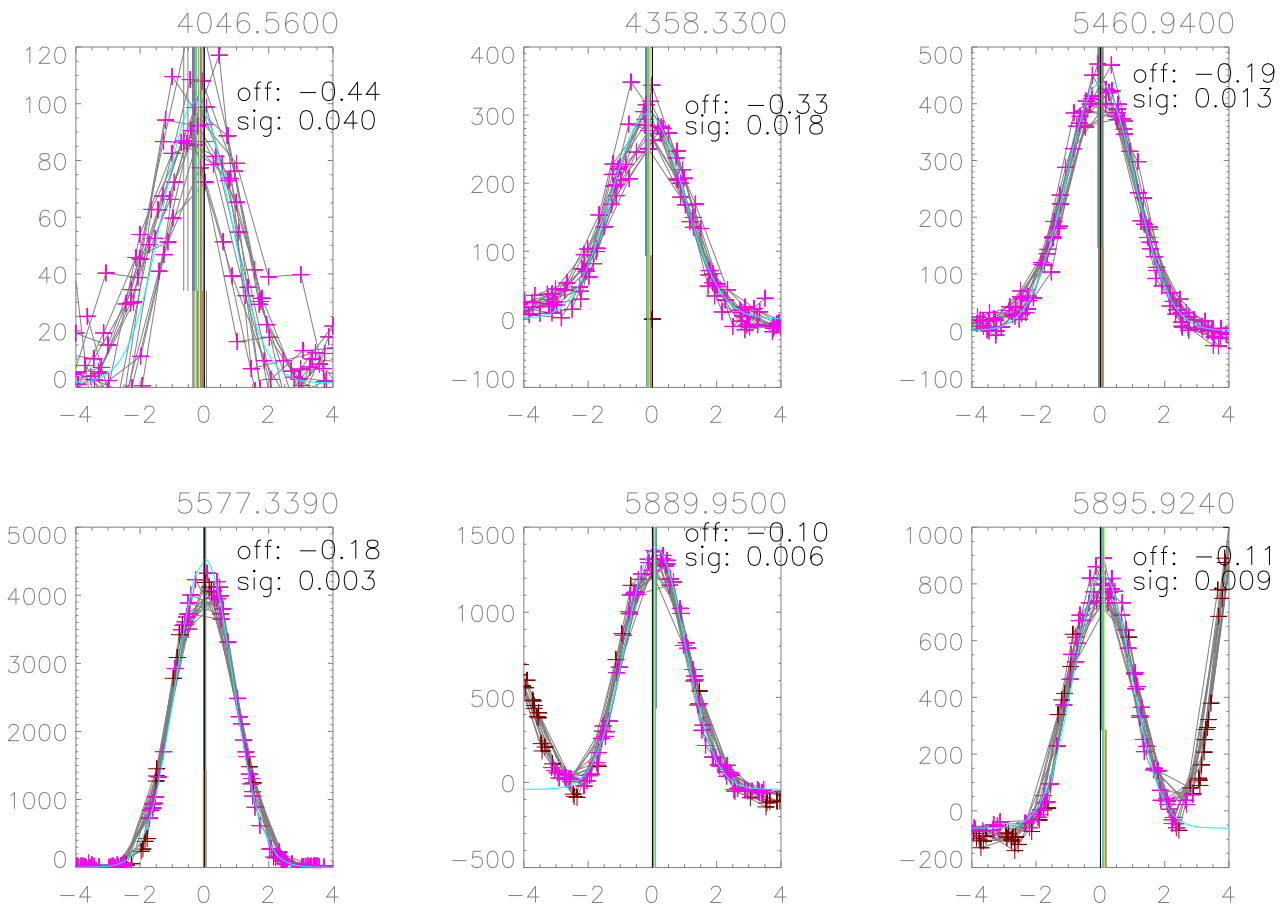

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR−b2−00051634.f
10.4
8.5
6.7
6.7
8.5
10.4
0
Y [pix]
X [pix]
0
500
1000
1500
2000

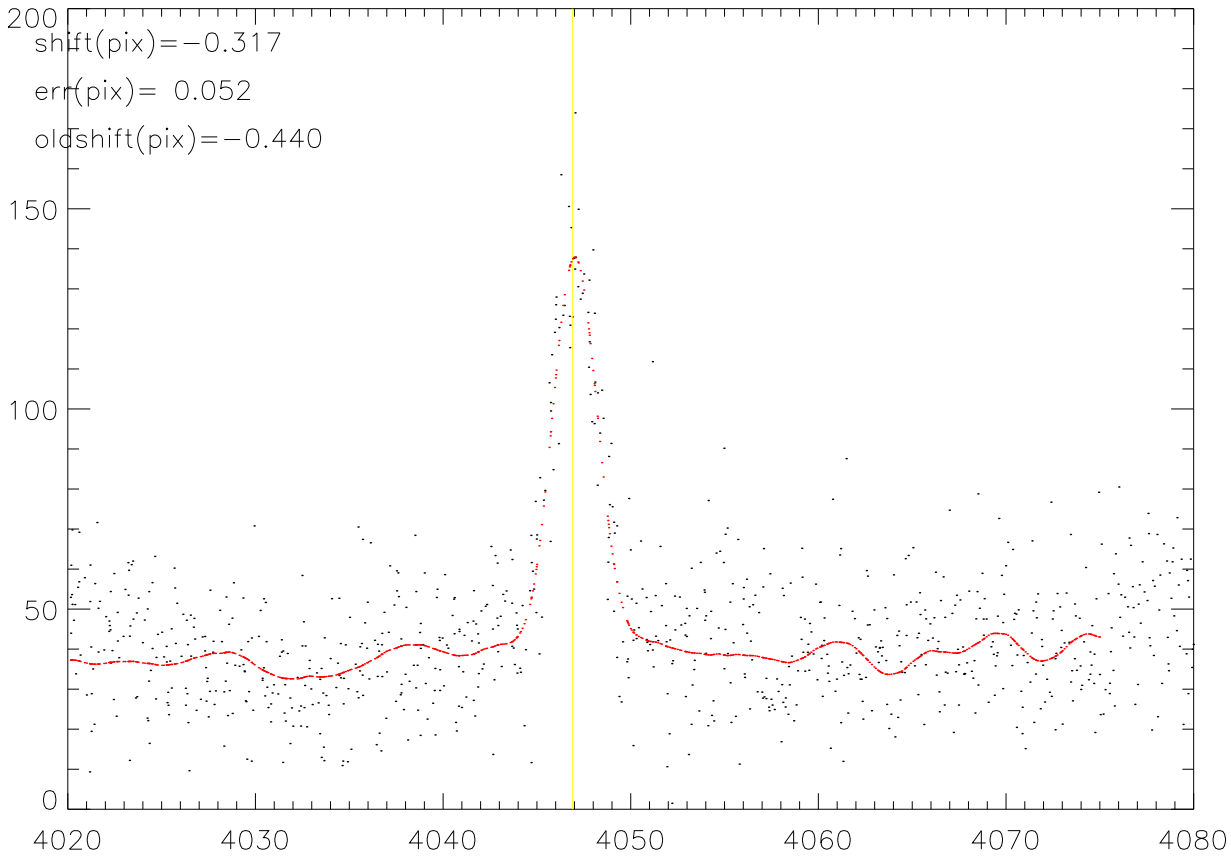

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-b2-00051634.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.756
Max value = 10.295
Sat Apr 5 17:01:58 2008

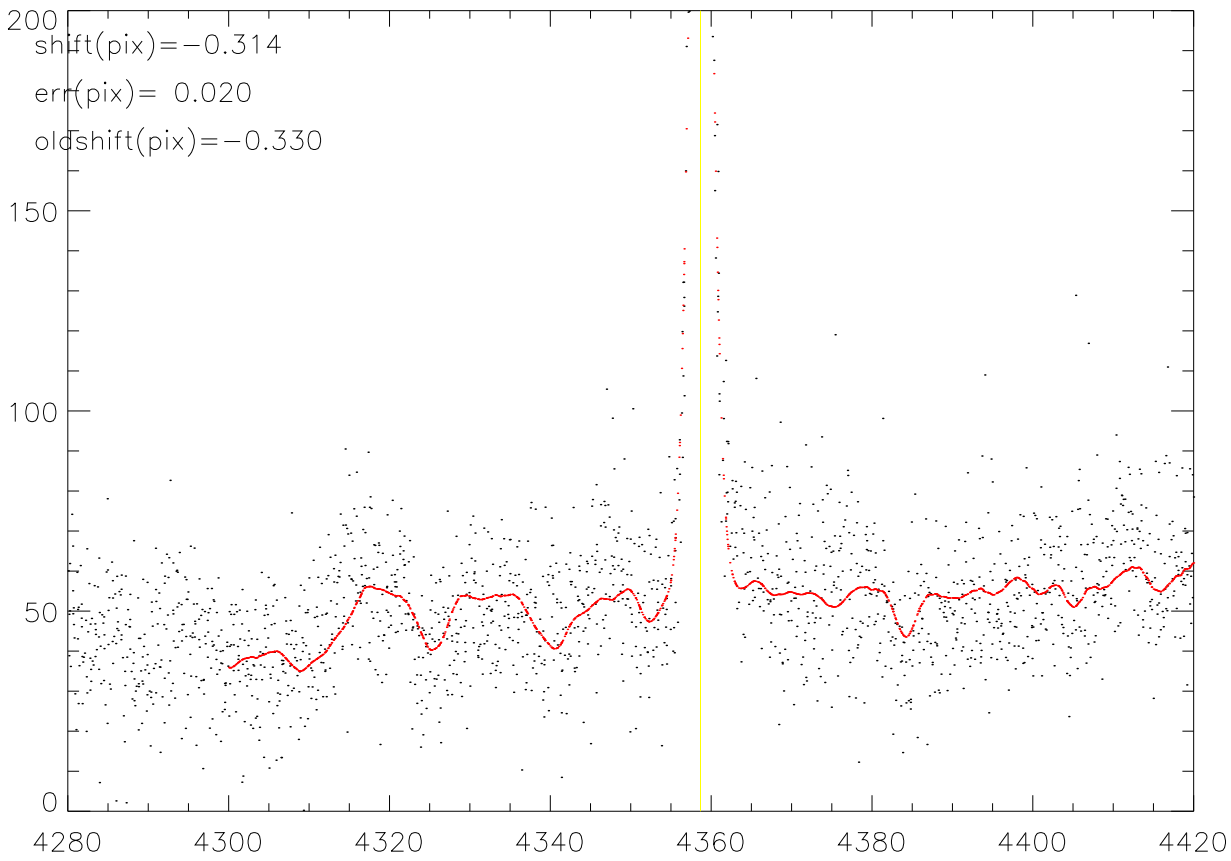

PLATE=1833 MJD=54561 Scattered Light on sdR-b2-00051634.fit
7.09
5.64
4.18
5.64
4.18
5.64
7.09
5.64
Y [pix]
X [pix]
0
500
1000
1500
2000

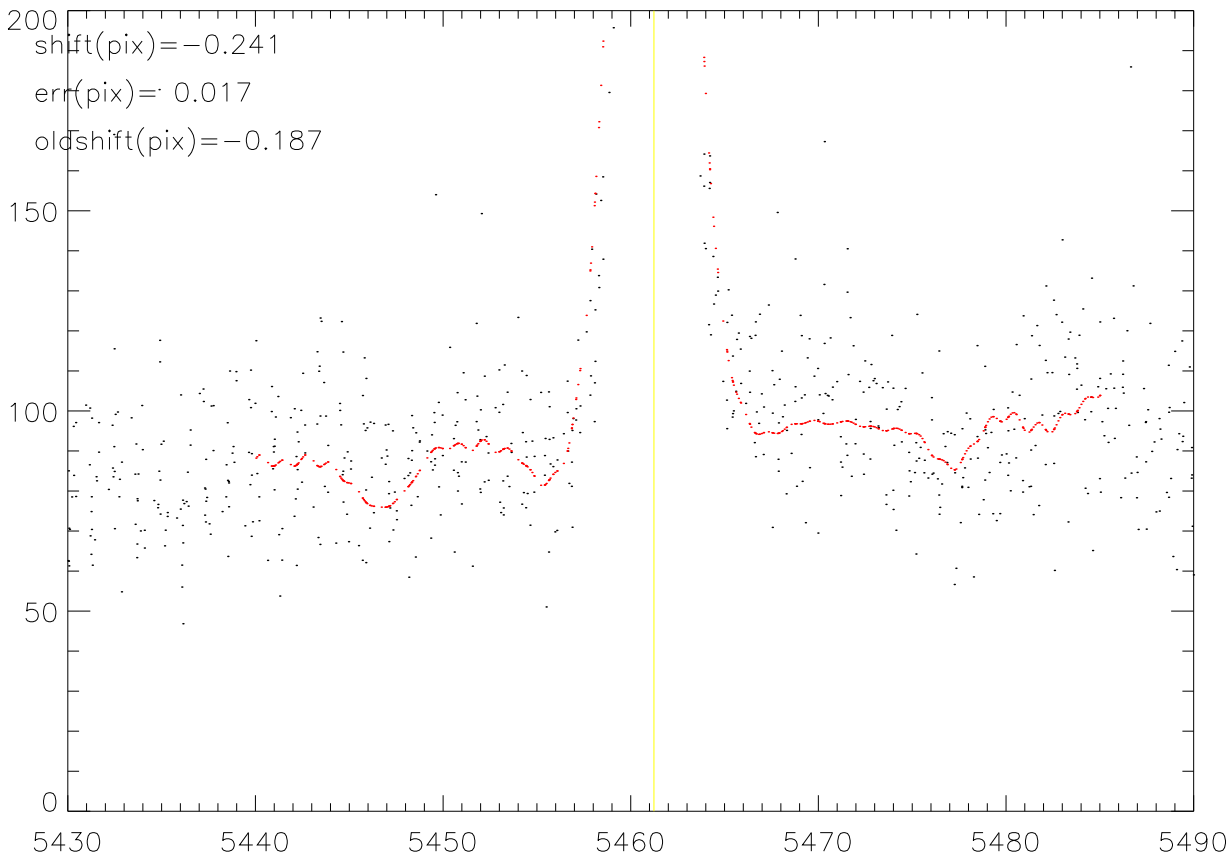

PLATE=1833 MJD=54561 Scattered Light on sdR-b2-00051634.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 3.389
Max value = 7.003
4000
4500
5000
5500
6000
λ [A]
Sat Apr 5 17:05:08 2008

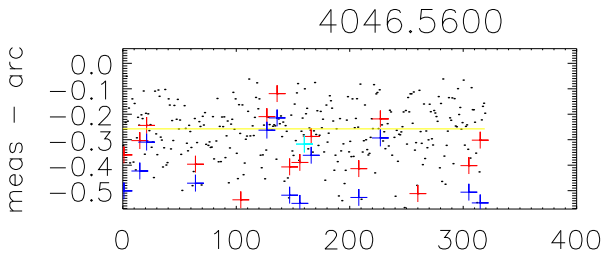

PLATE=1833 MJD=54561 Extraction chi^2 for sdR-b2-00051634.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

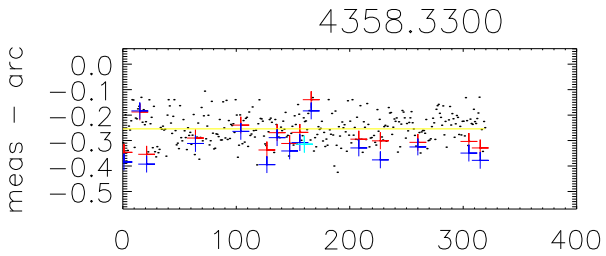

4046.5600
off: −0.44
sig: 0.040
4358.3300
off: −0.33
sig: 0.018
5460.9400
off: −0.19
sig: 0.013
5577.3390
off: −0.18
sig: 0.003
5889.9500
off: −0.10
sig: 0.006
5895.9240
off: −0.11
sig: 0.009

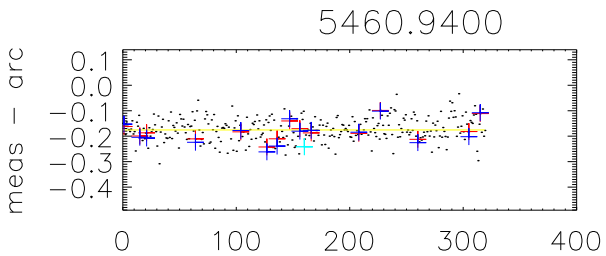

shift(pix)=−0.317
err(pix)= 0.052
oldshift(pix)=−0.440
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

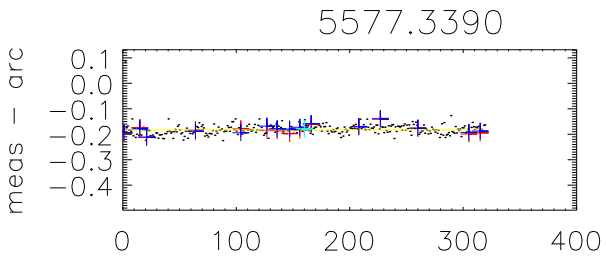

shift(pix)=−0.314
err(pix)= 0.020
oldshift(pix)=−0.330
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

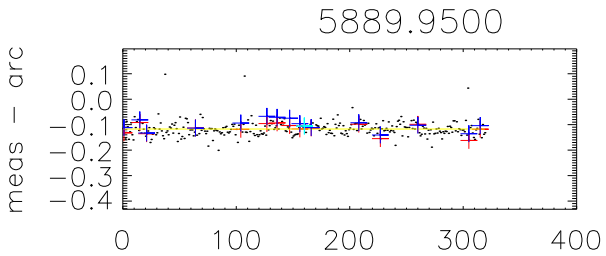

shift(pix)=−0.241
err(pix)= 0.017
oldshift(pix)=−0.187
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

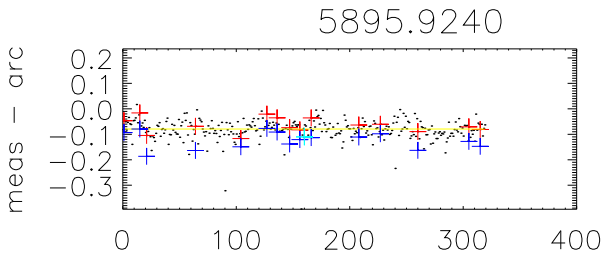

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

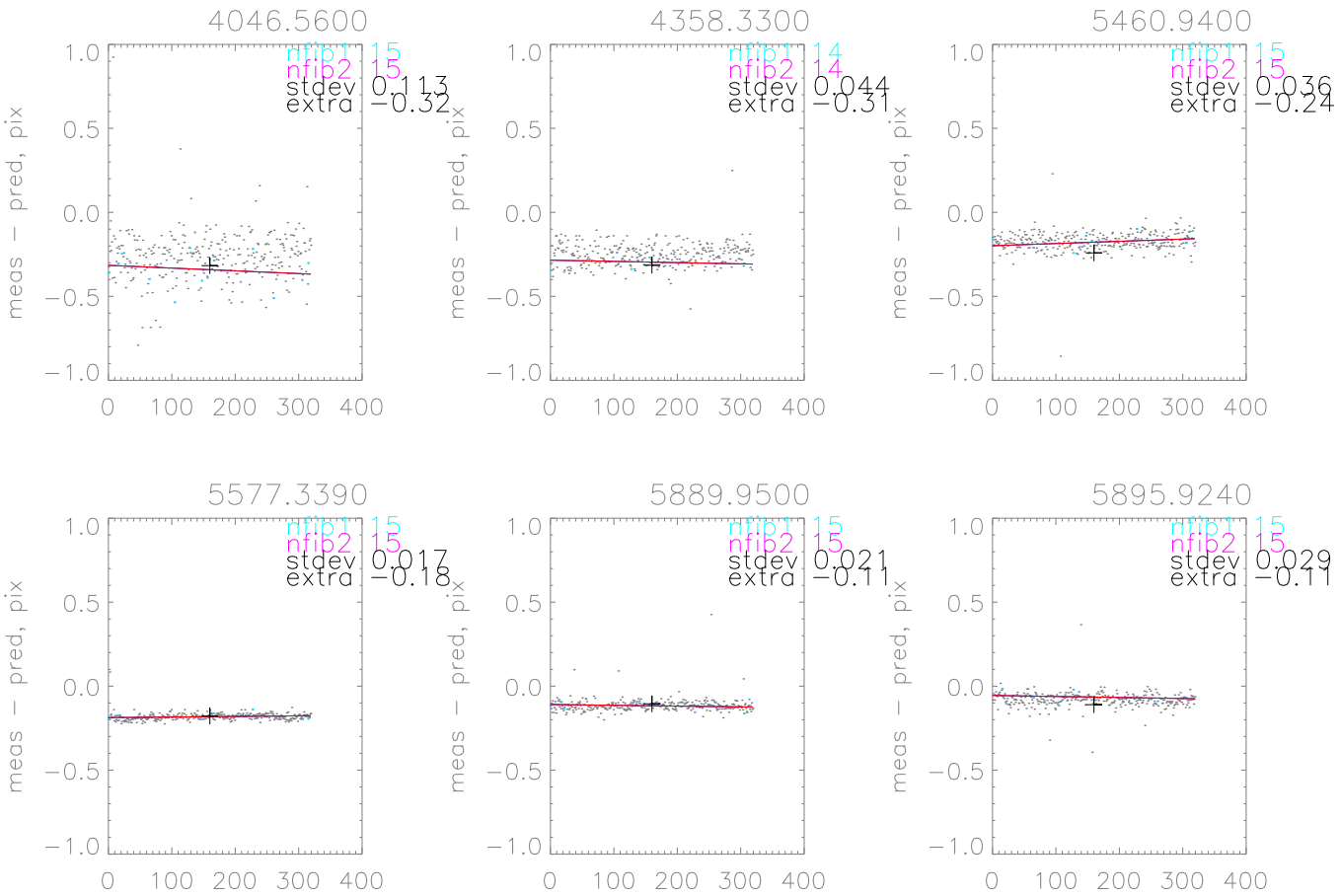

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

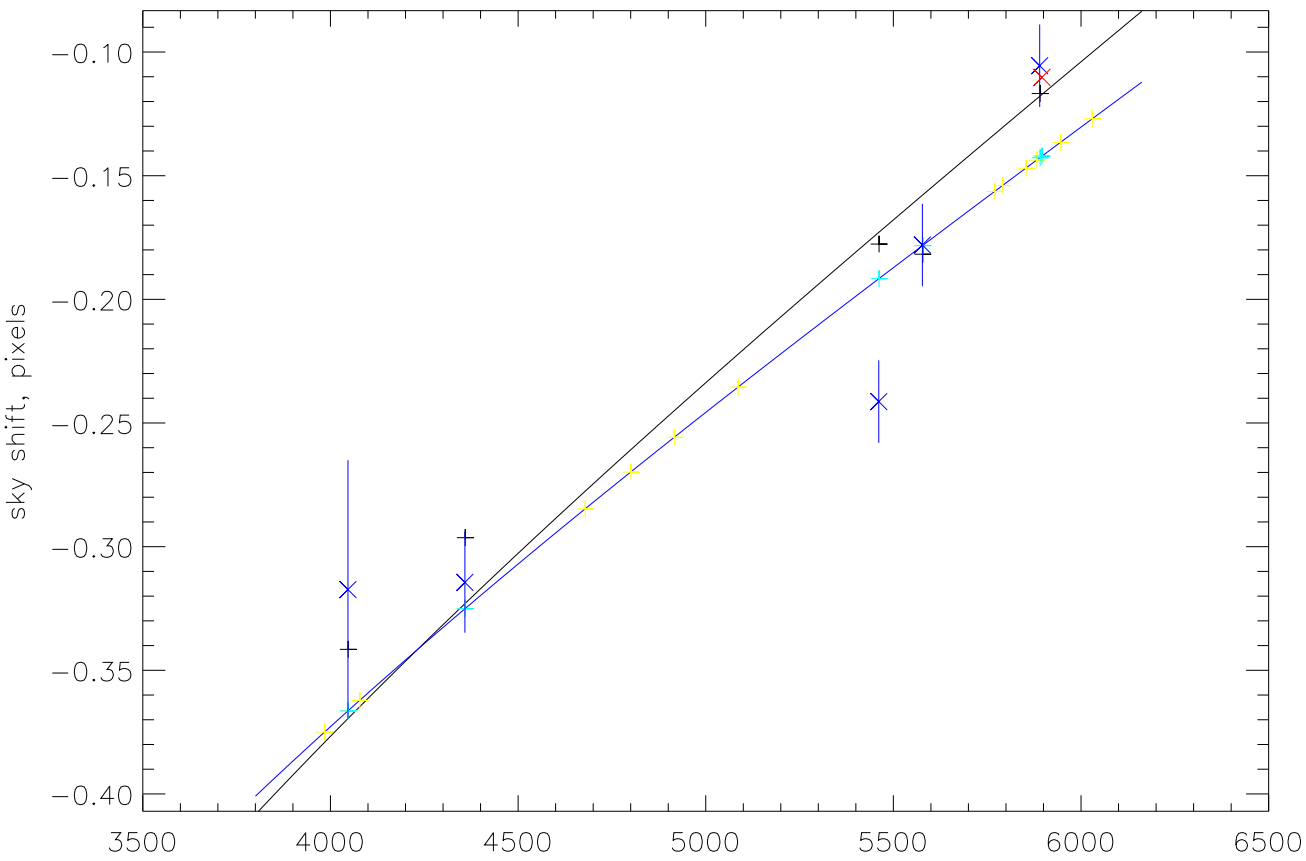

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

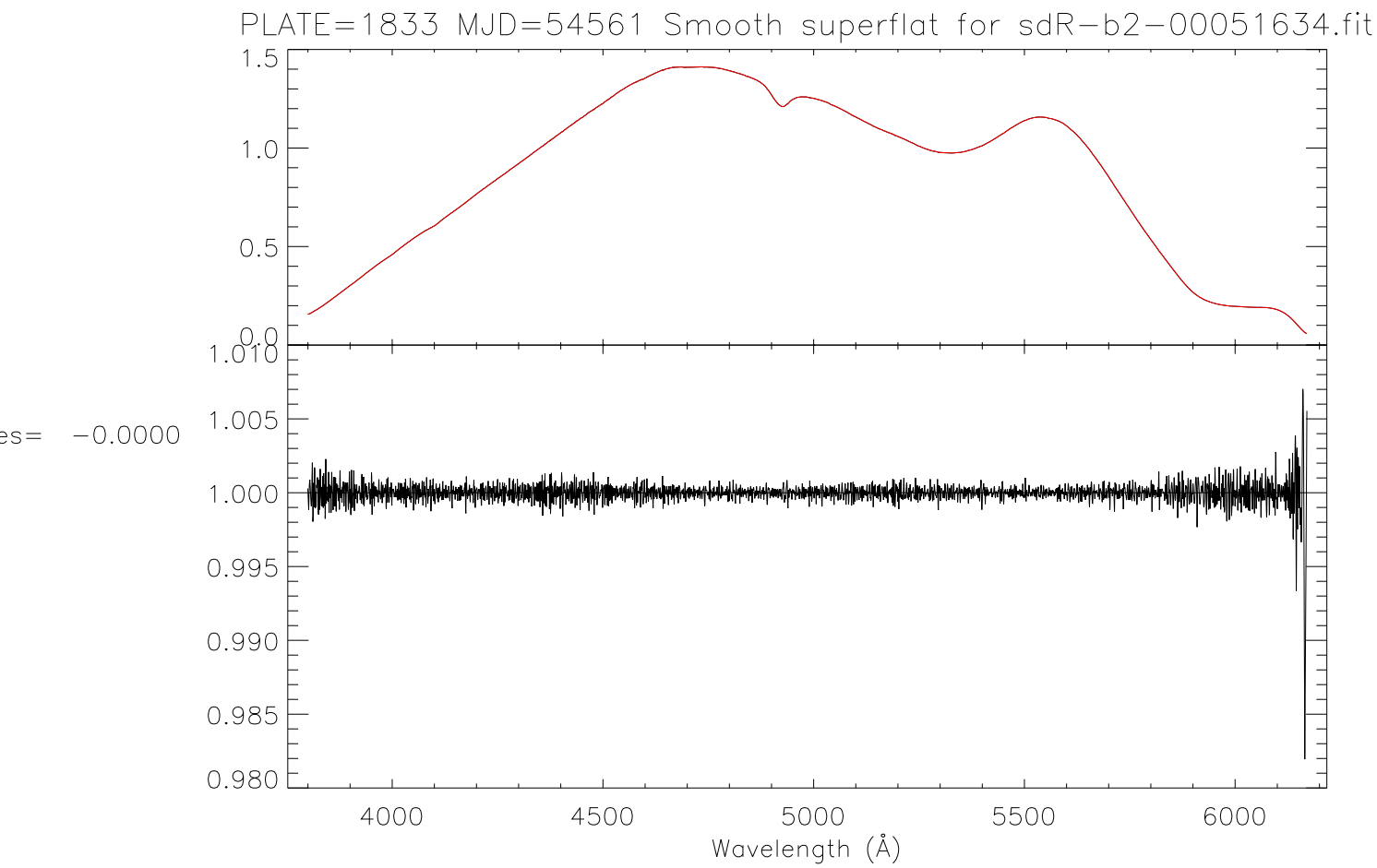

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

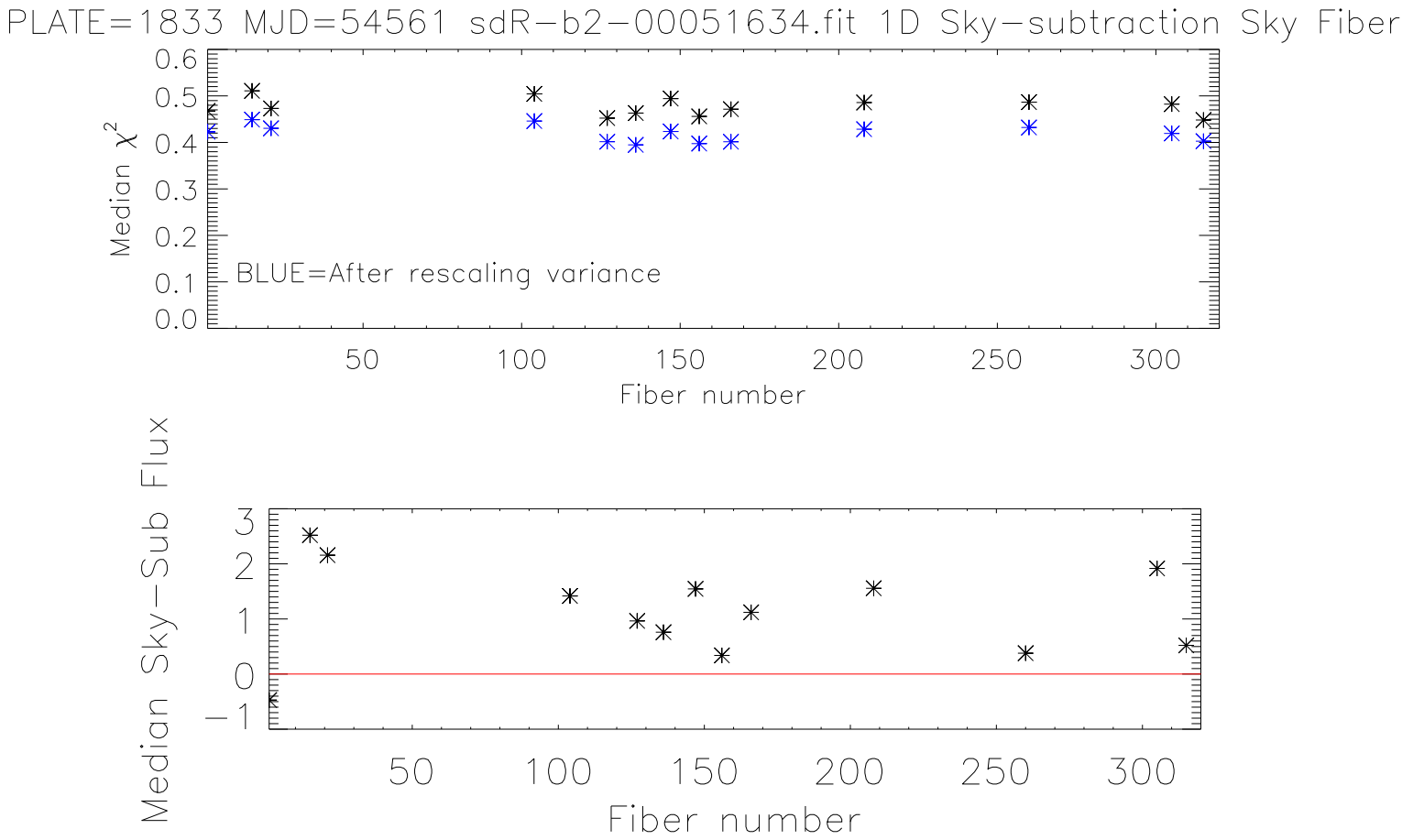

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

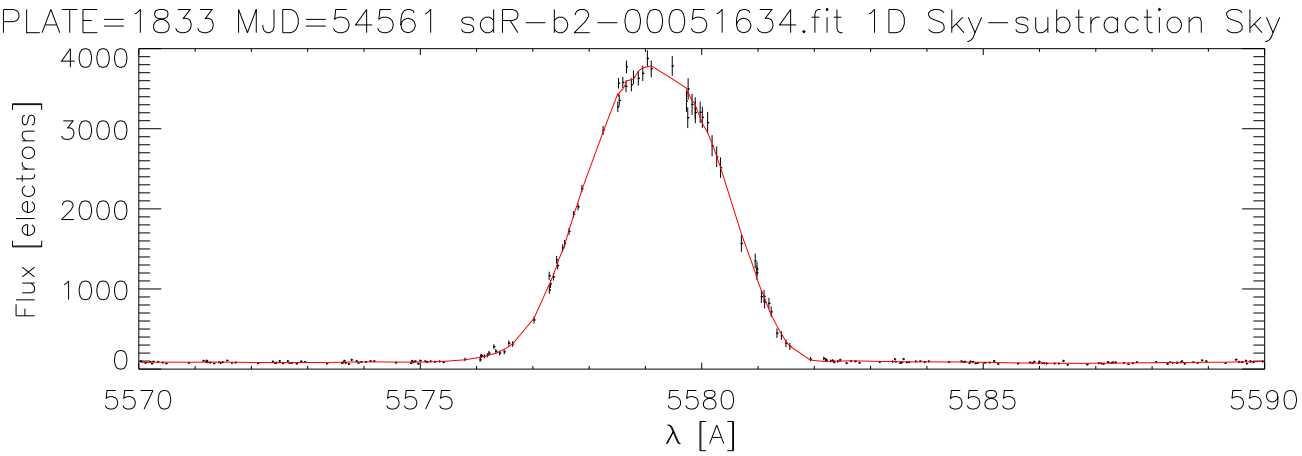

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

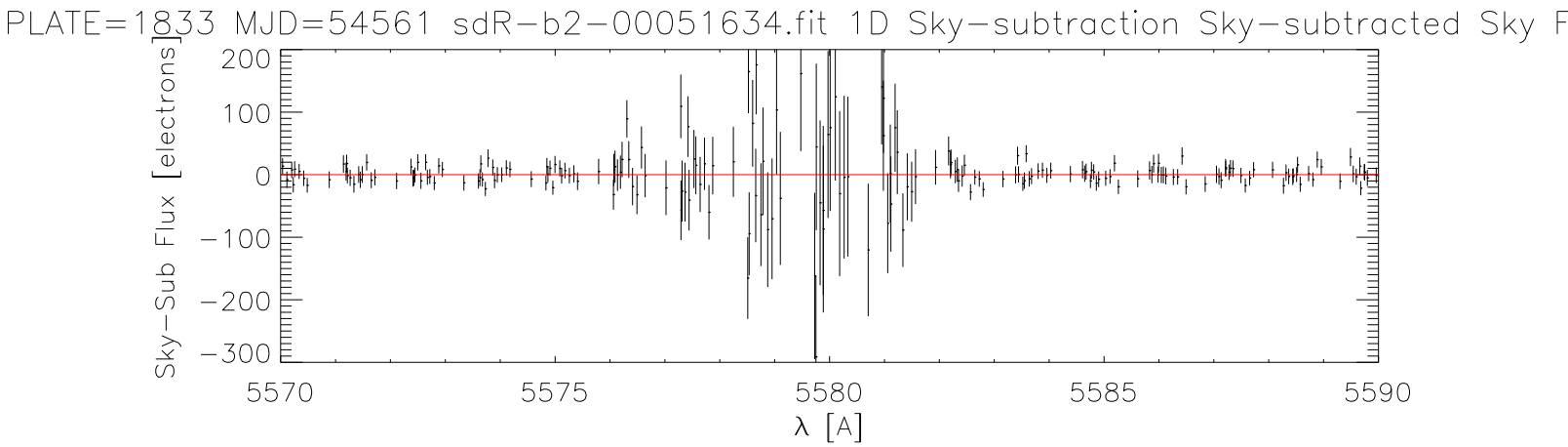

4046.5600
nfib1 15
nfib2 15
stdev 0.113
extra −0.32
4358.3300
nfib1 14
nfib2 14
stdev 0.044
extra −0.31
5460.9400
nfib1 15
nfib2 15
stdev 0.036
extra −0.24
5577.3390
nfib1 15
nfib2 15
stdev 0.017
extra −0.18
5889.9500
nfib1 15
nfib2 15
stdev 0.021
extra −0.11
5895.9240
nfib1 15
nfib2 15
stdev 0.029
extra −0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

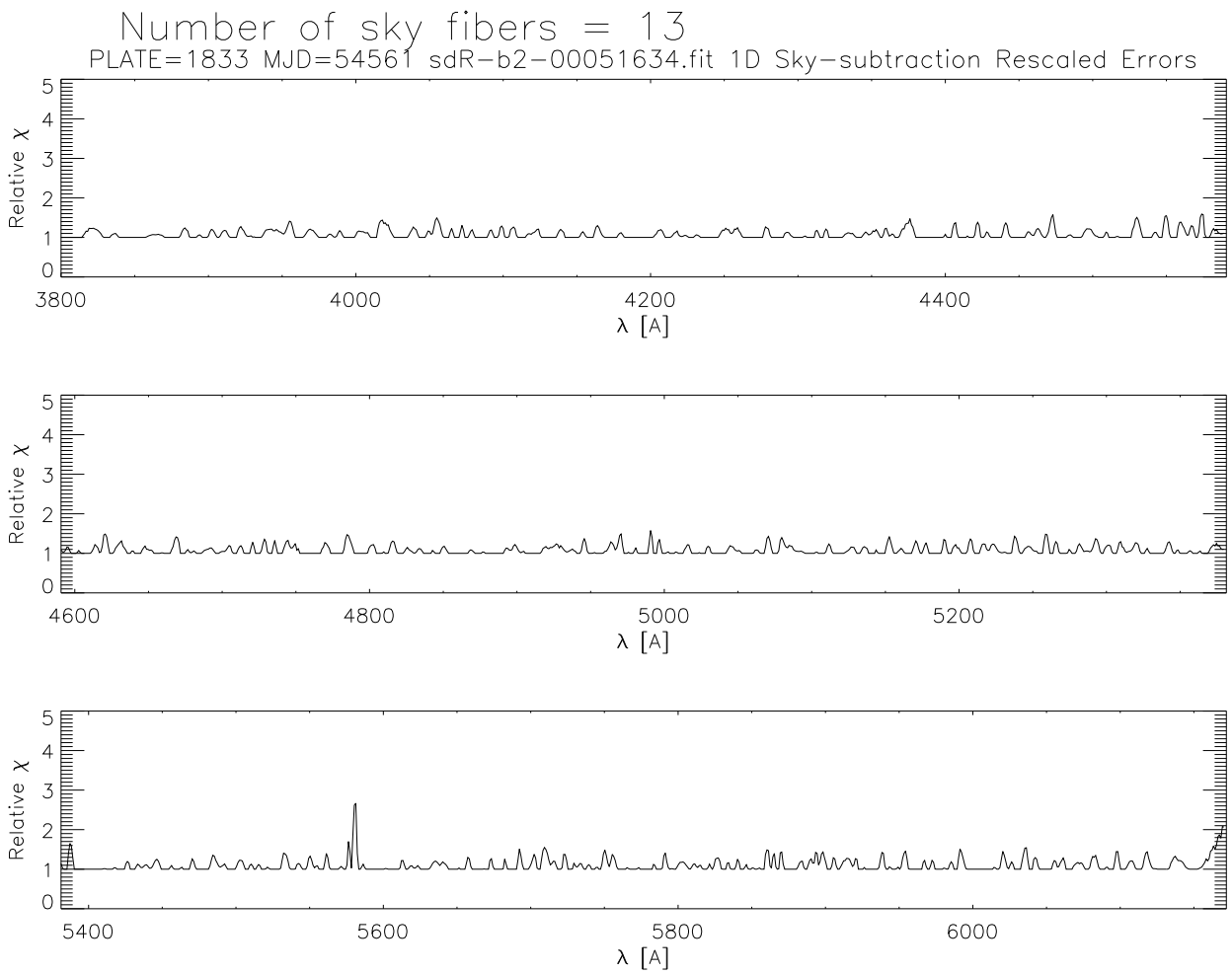

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
−0.40
3500
4000
4500
5000
5500
6000
6500

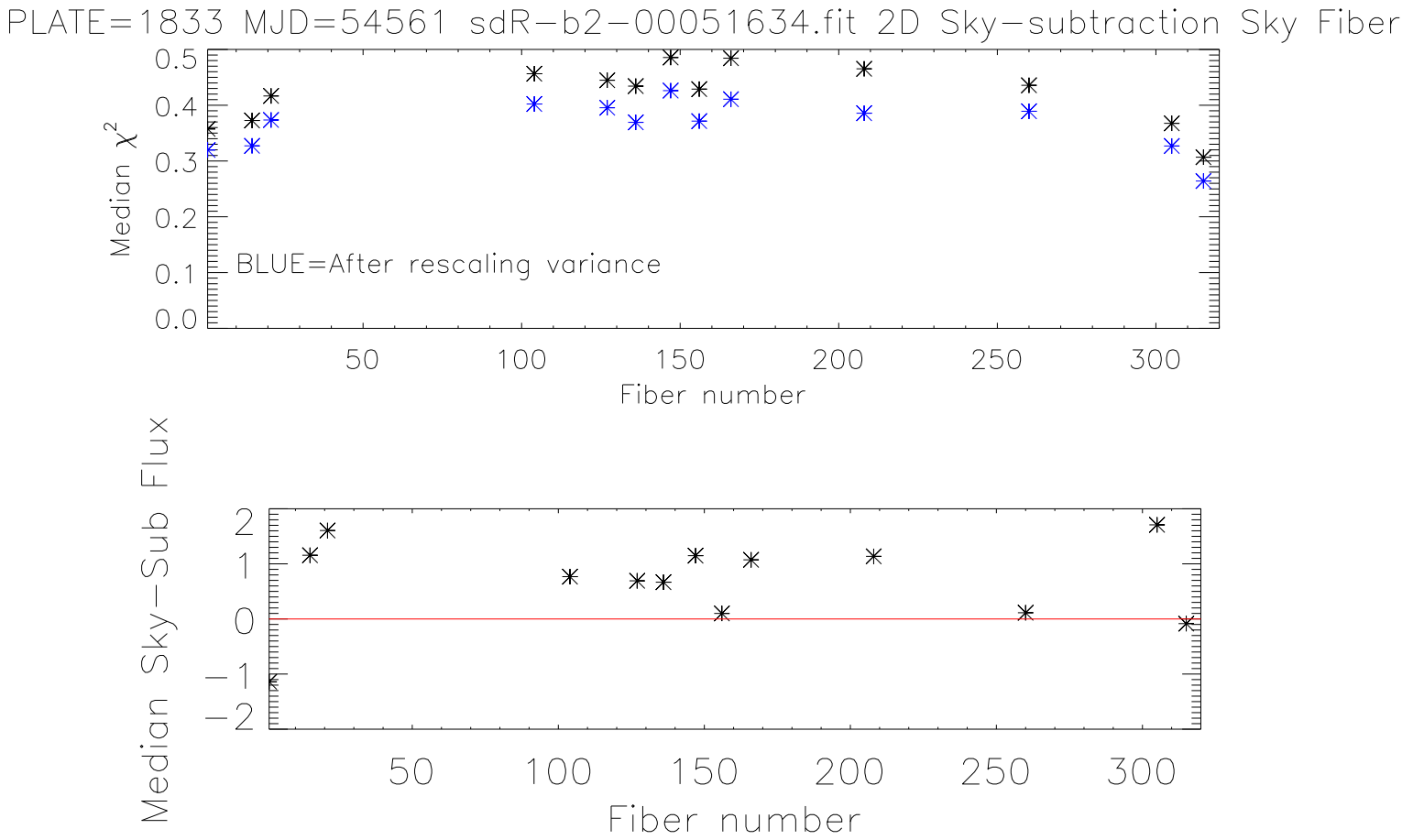

PLATE=1833 MJD=54561 Smooth superflat for sdR-b2-00051634.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

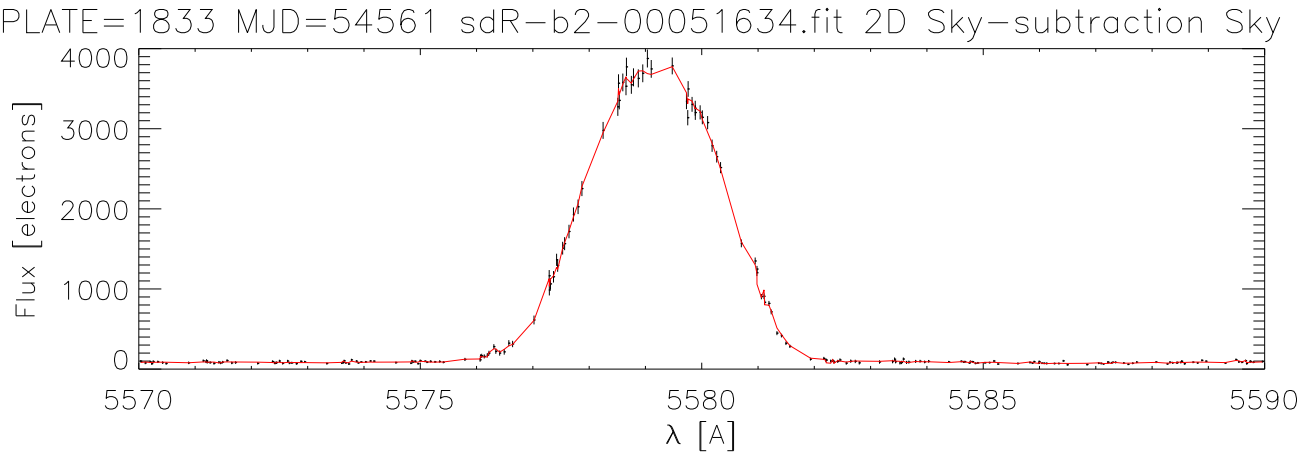

PLATE=1833 MJD=54561 sdR-b2-00051634.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

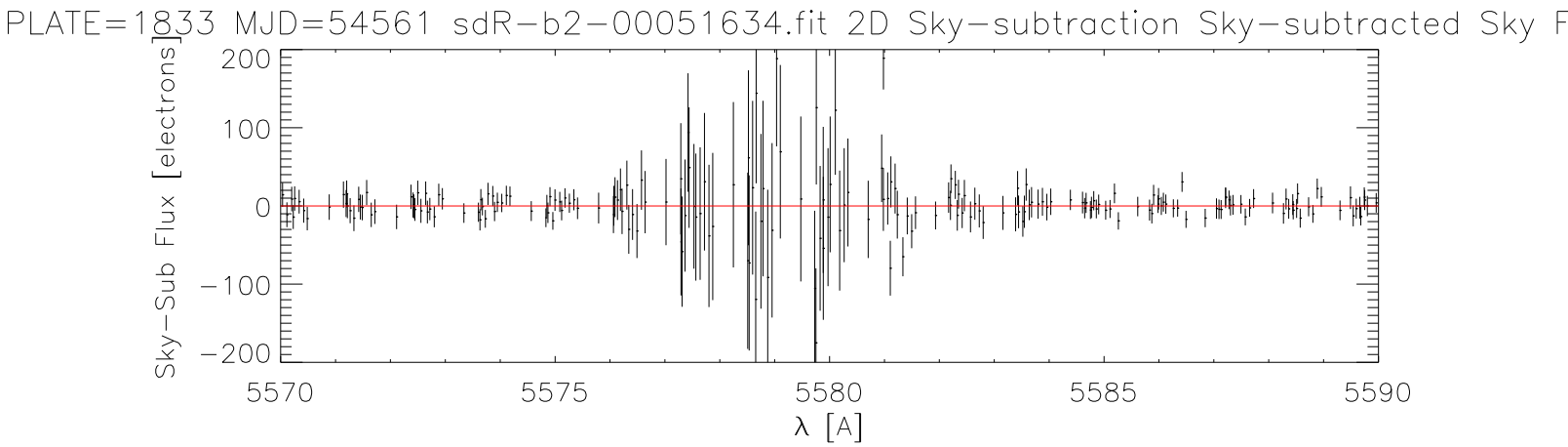

PLATE=1833 MJD=54561 sdR-b2-00051634.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

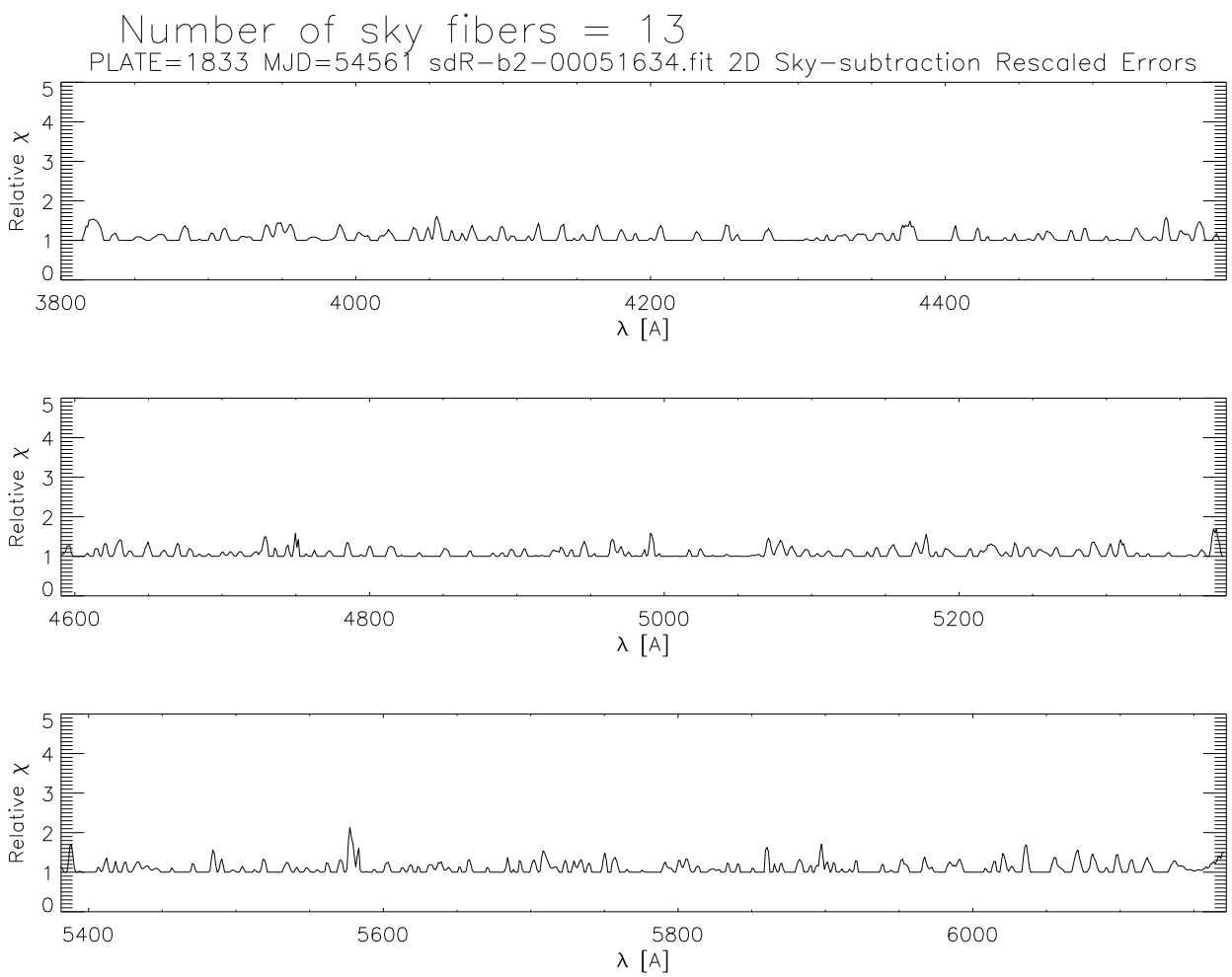

PLATE=1833 MJD=54561 sdR-b2-00051634.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

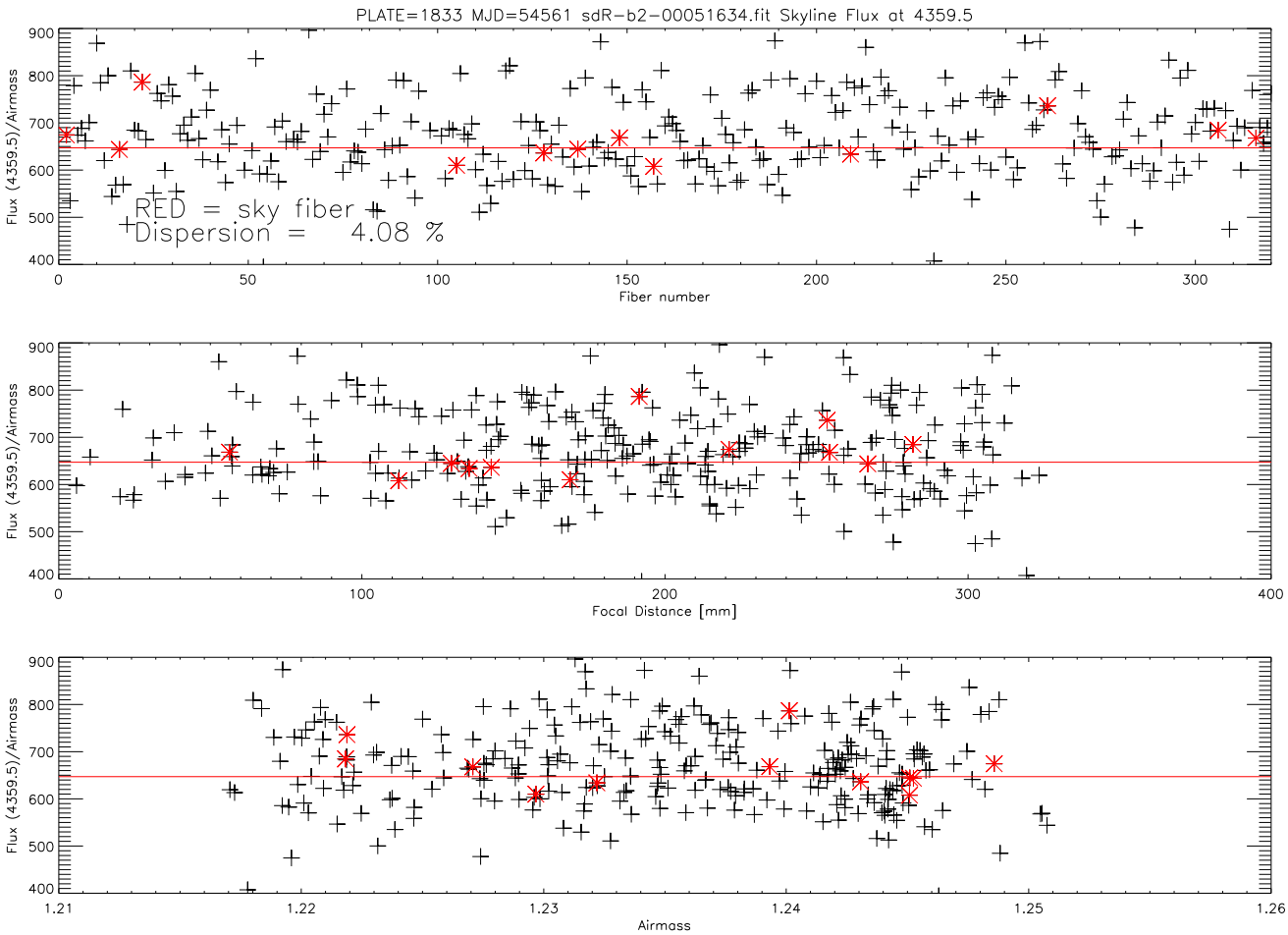

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-b2-00051634.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

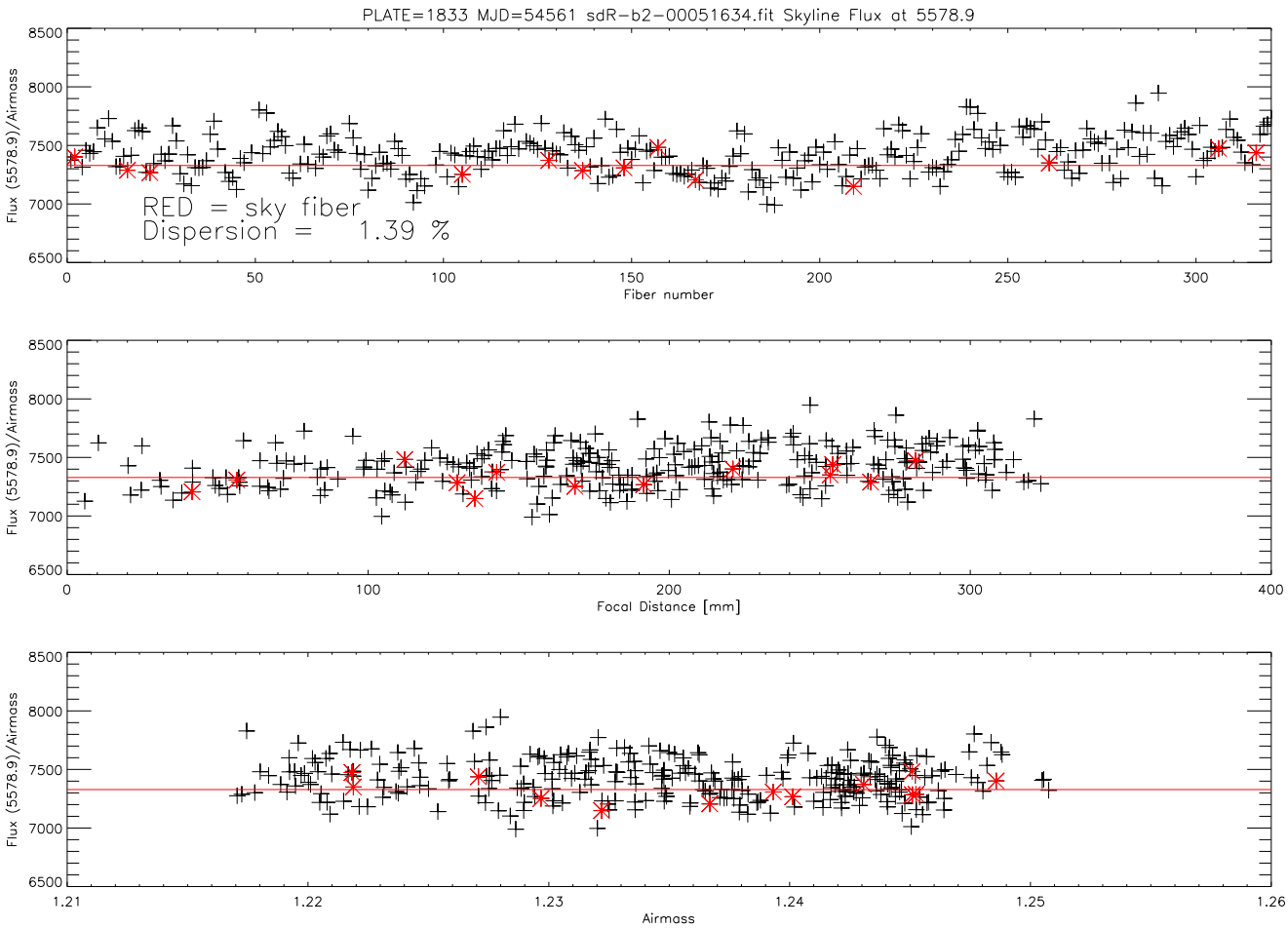

PLATE=1833 MJD=54561 sdR-b2-00051634.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

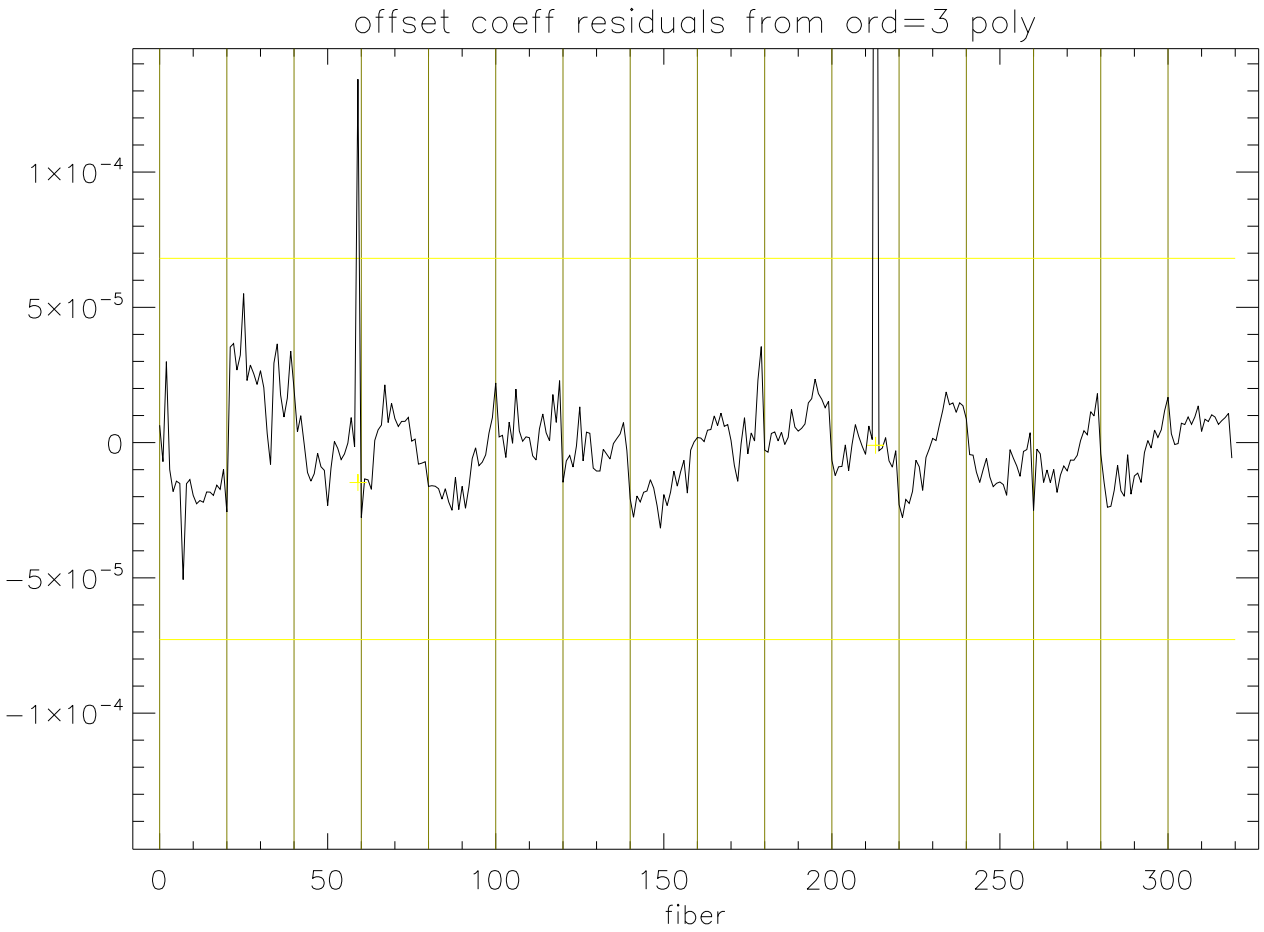

PLATE=1833 MJD=54561 sdR-b2-00051634.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

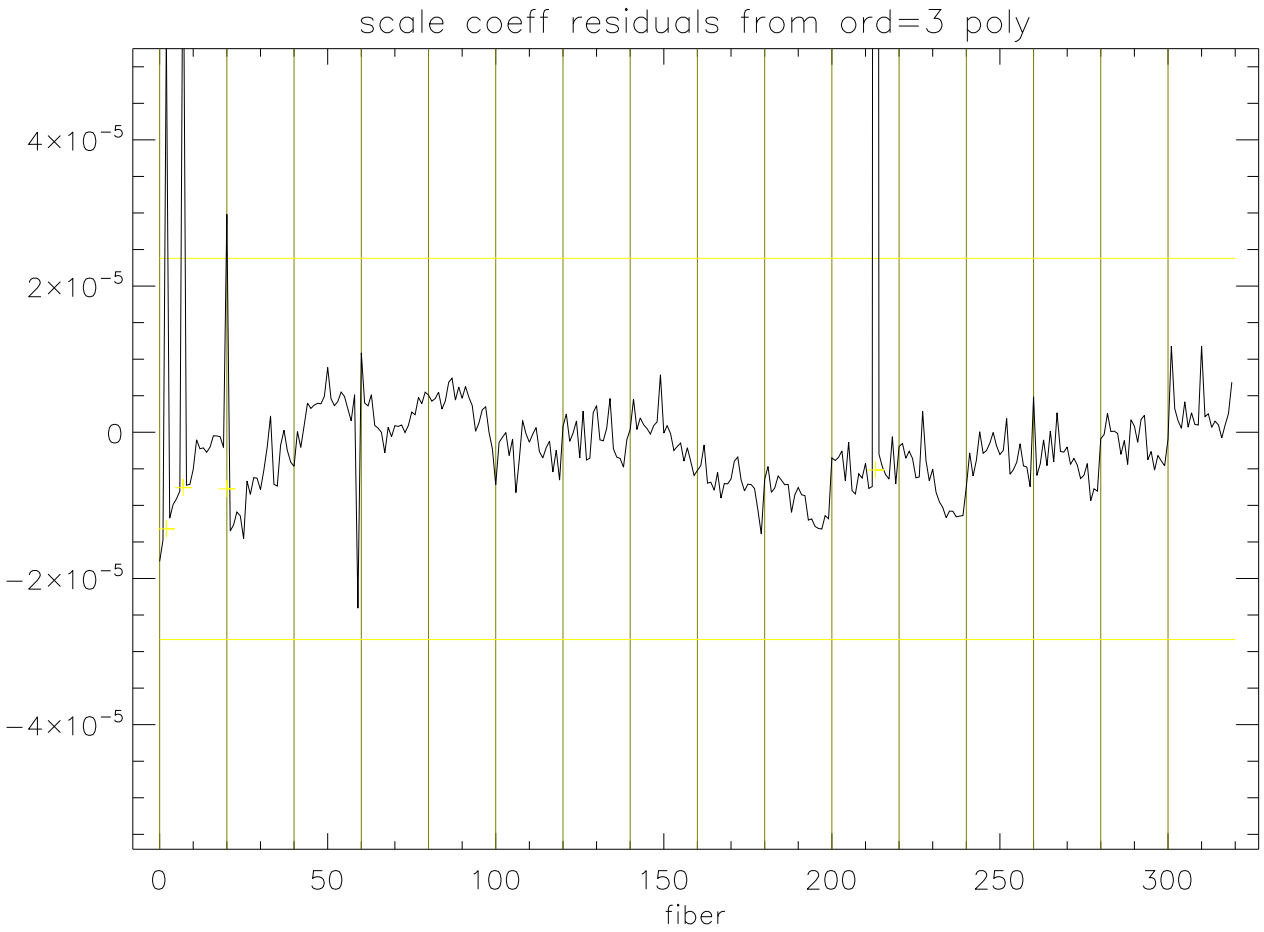

PLATE=1833 MJD=54561 sdR-b2-00051634.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

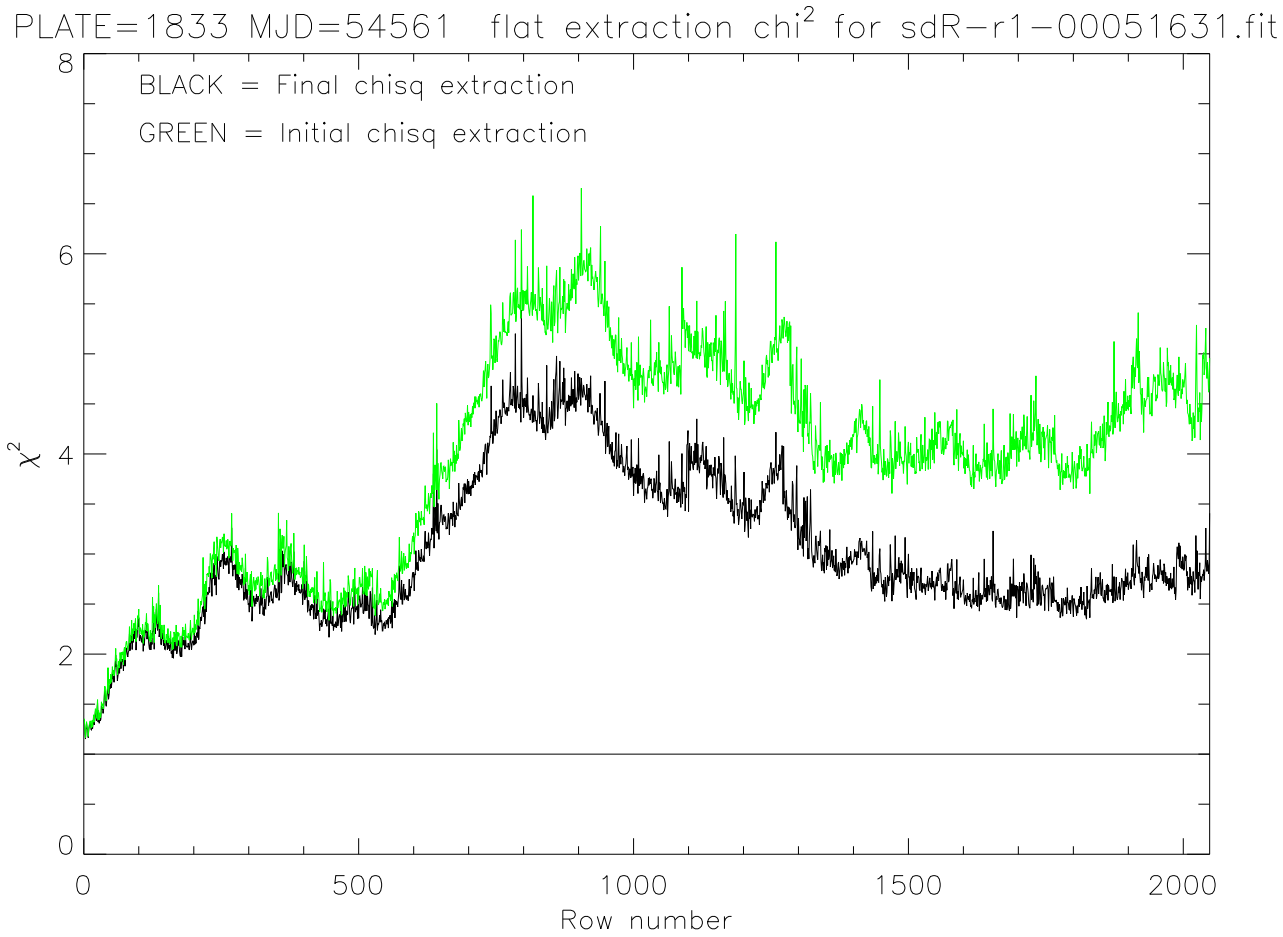

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-b2-00051634.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

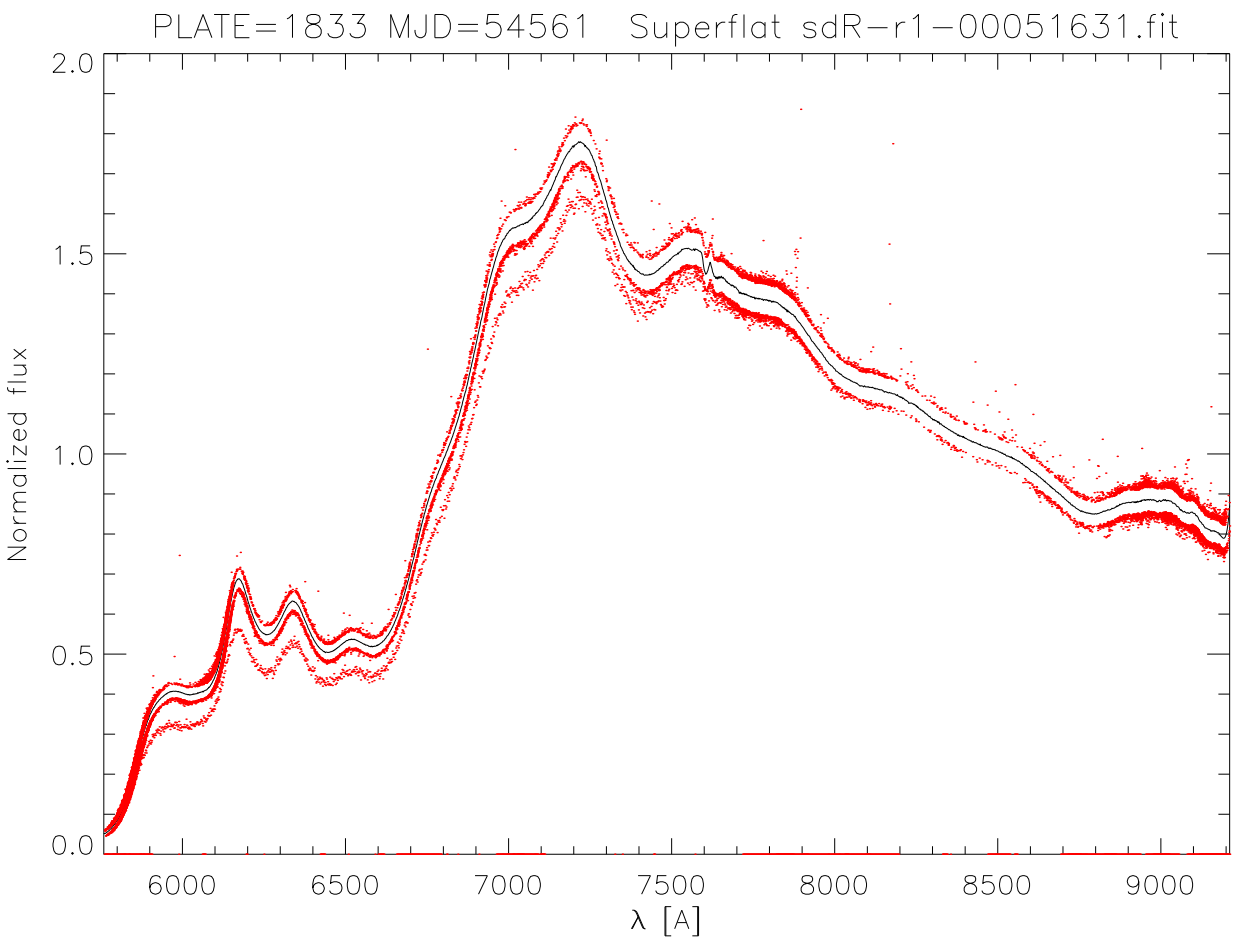

PLATE=1833 MJD=54561 sdR-b2-00051634.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.08 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

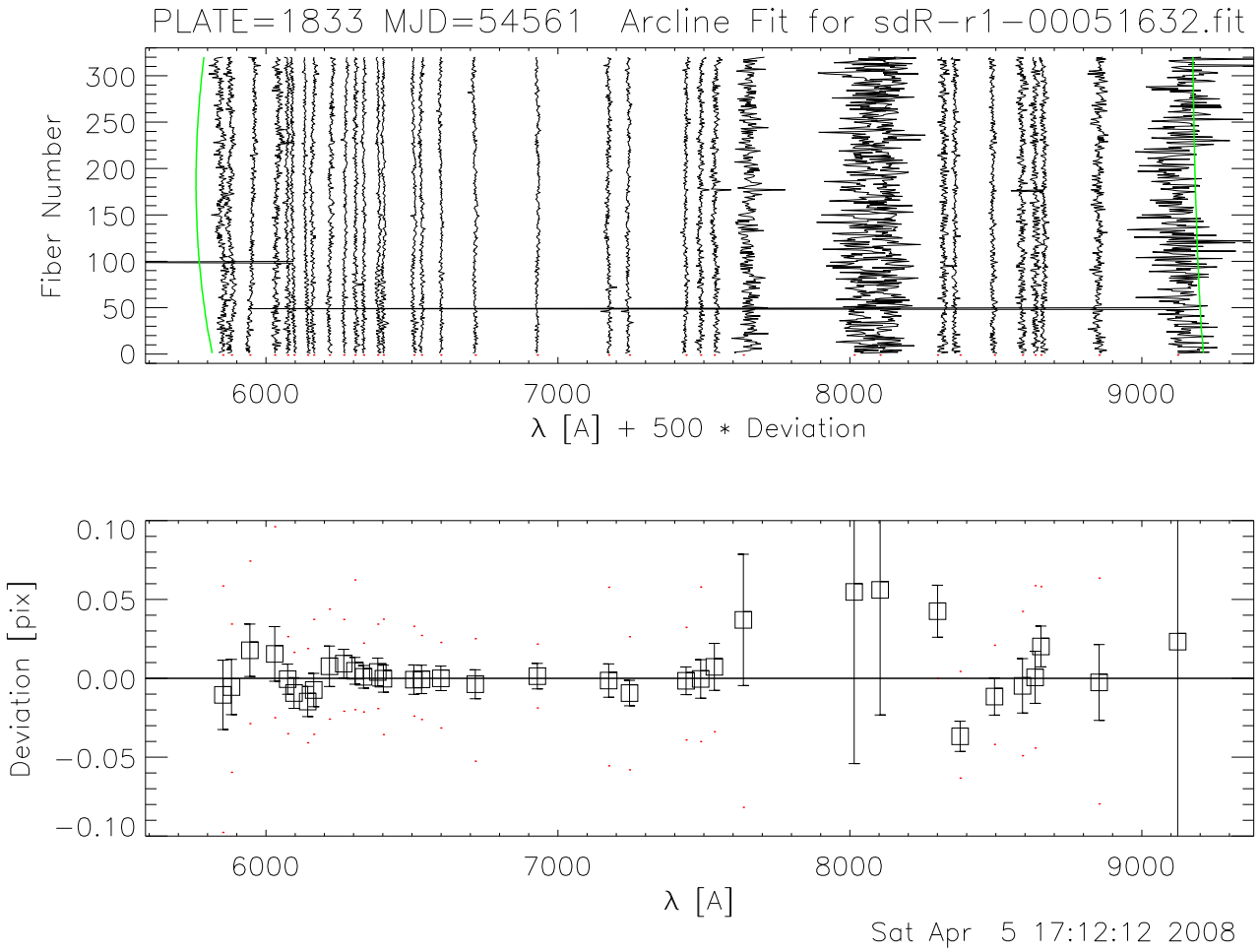

PLATE=1833 MJD=54561 sdR-b2-00051634.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.39 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

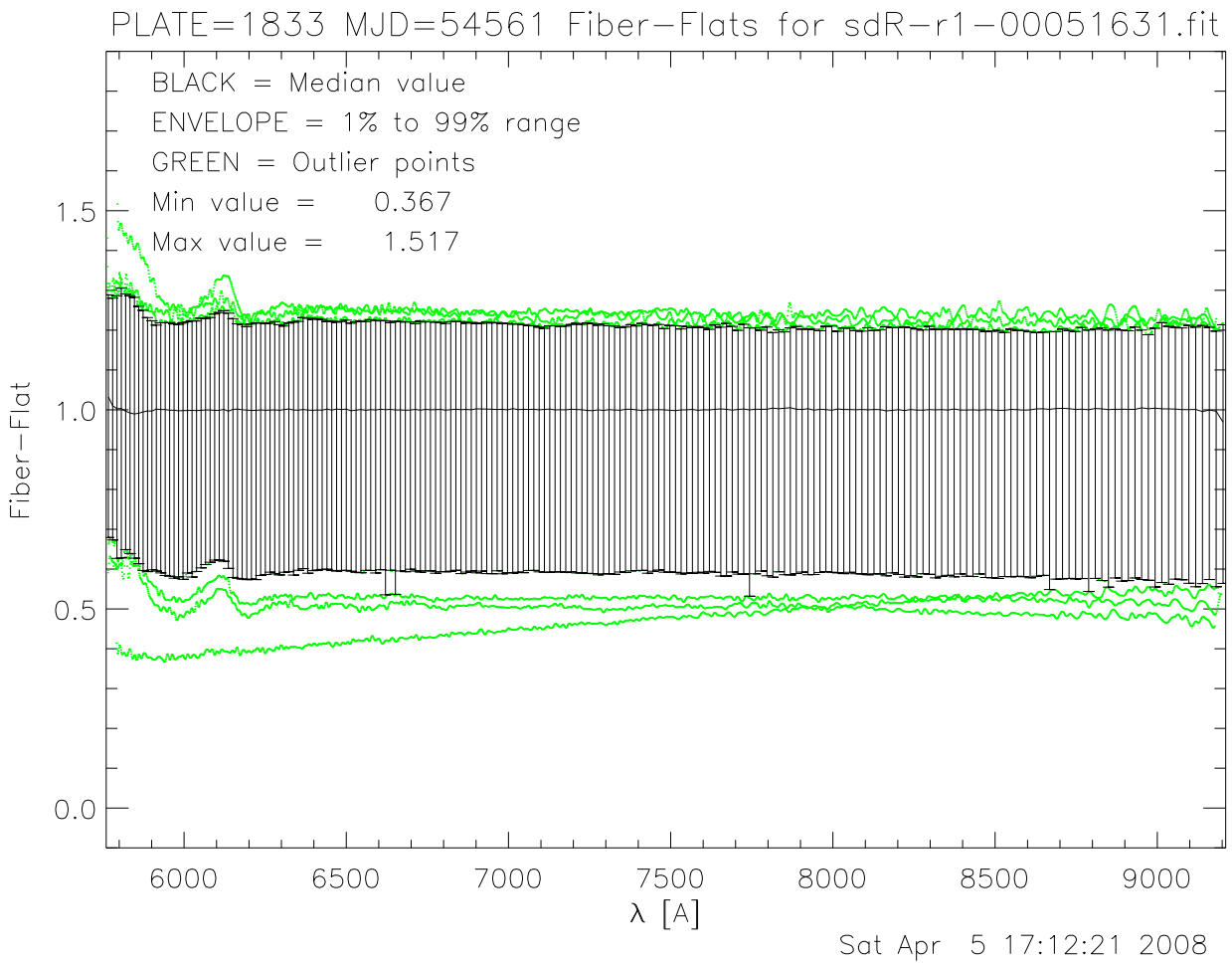

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

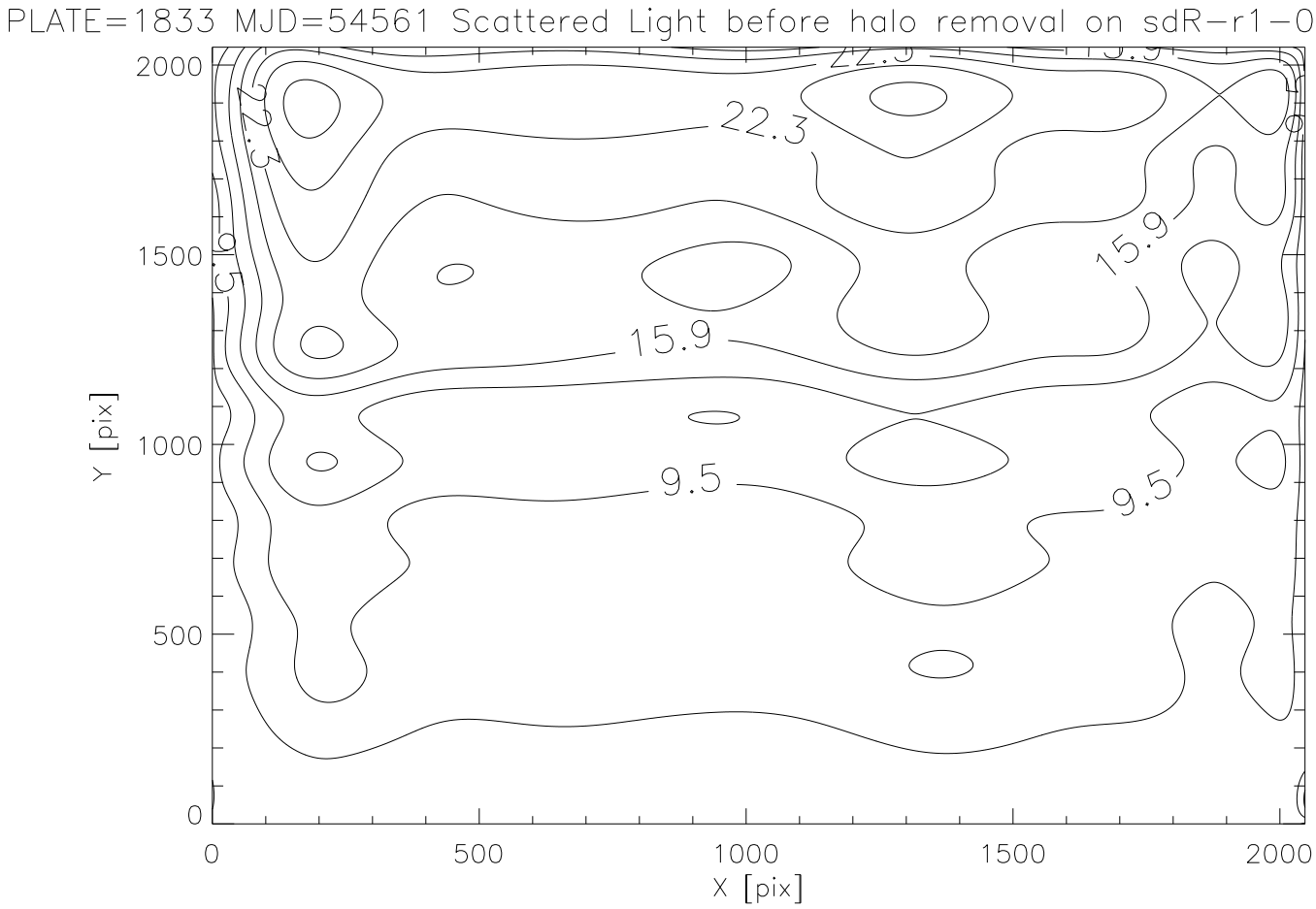

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

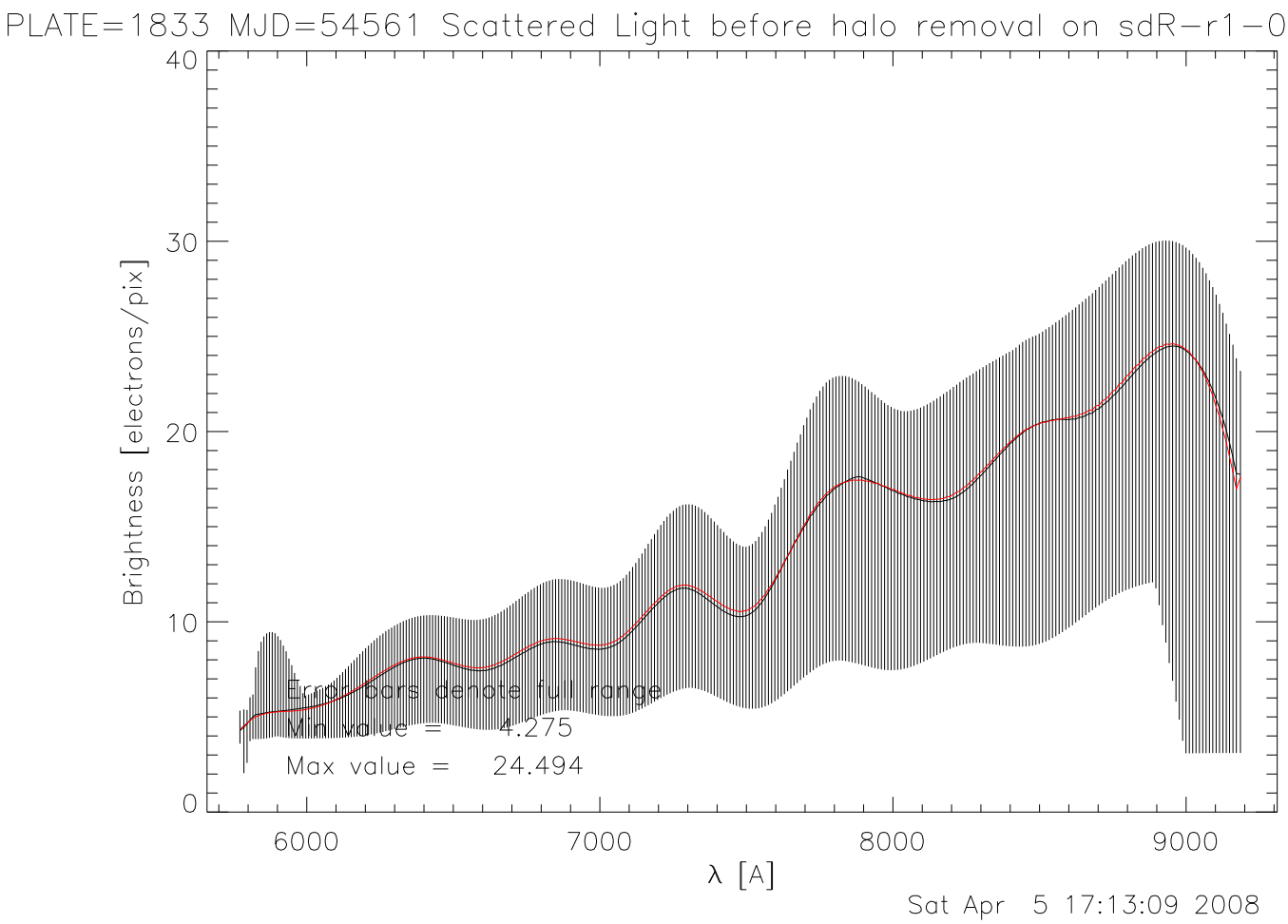

PLATE=1833 MJD=54561 flat extraction chi^2 for sdR−r1−00051631.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

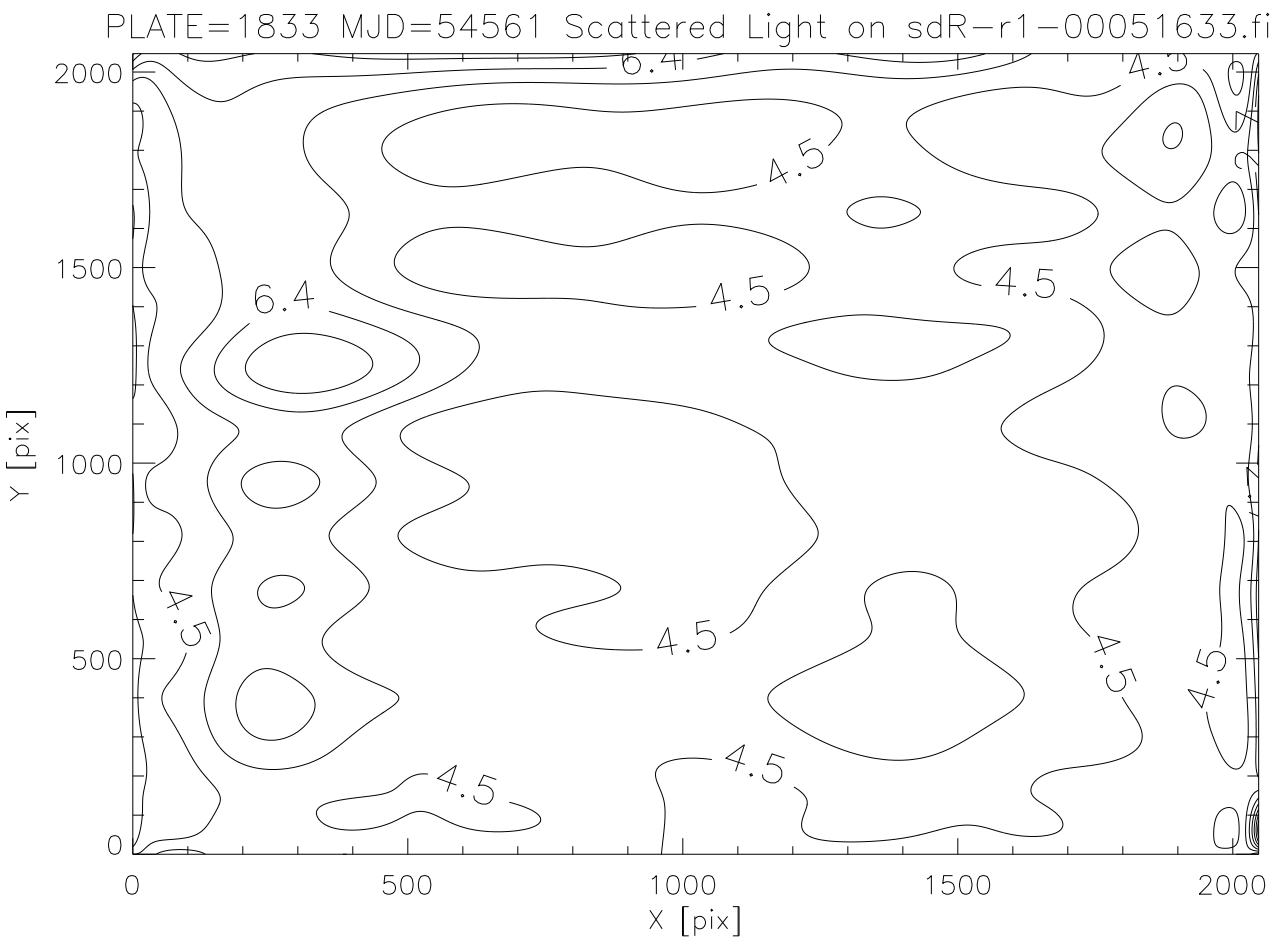

PLATE=1833 MJD=54561 Superflat sdR-r1-00051631.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

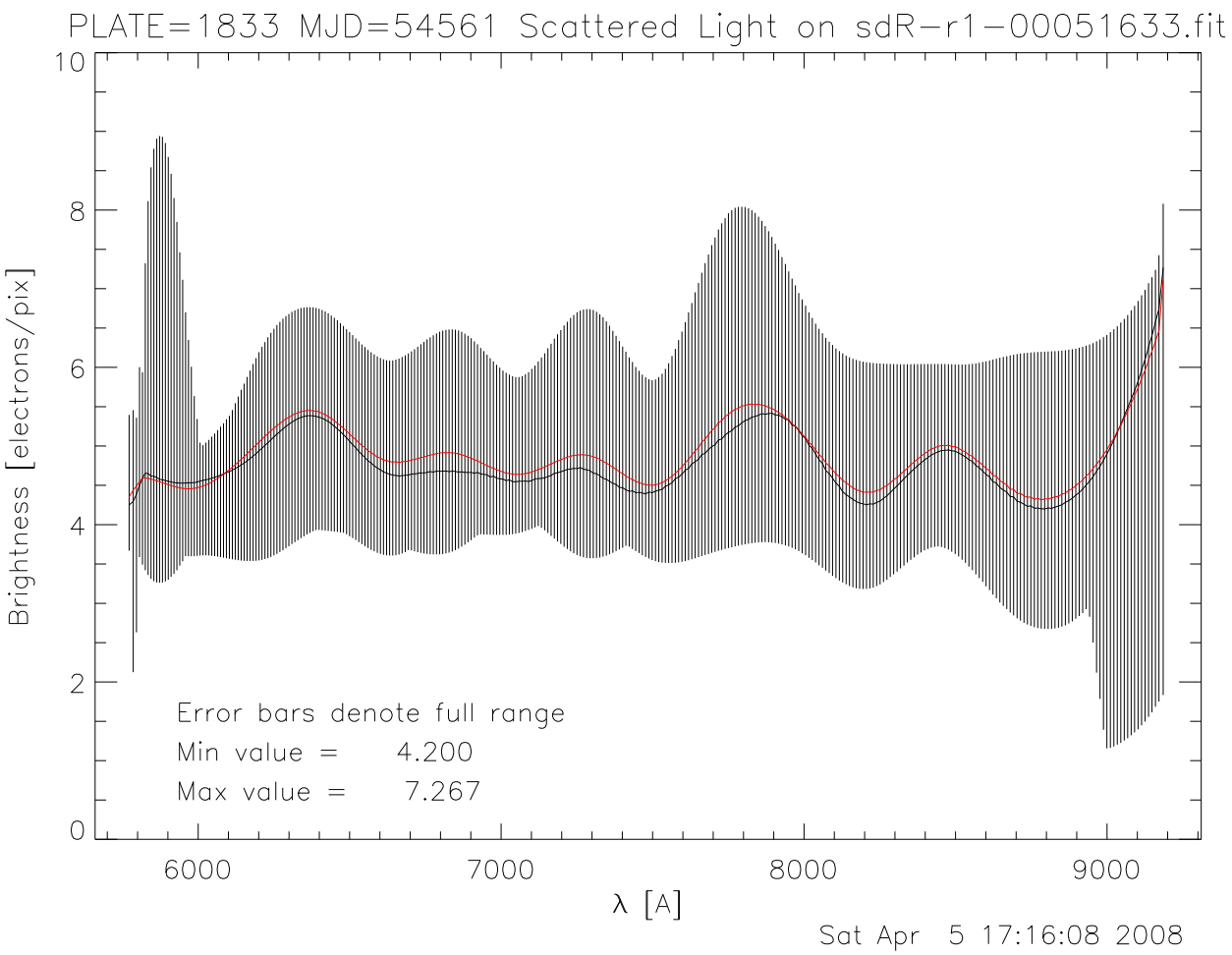

PLATE=1833 MJD=54561 Arcline Fit for sdR-r1-00051632.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Apr 5 17:12:12 2008

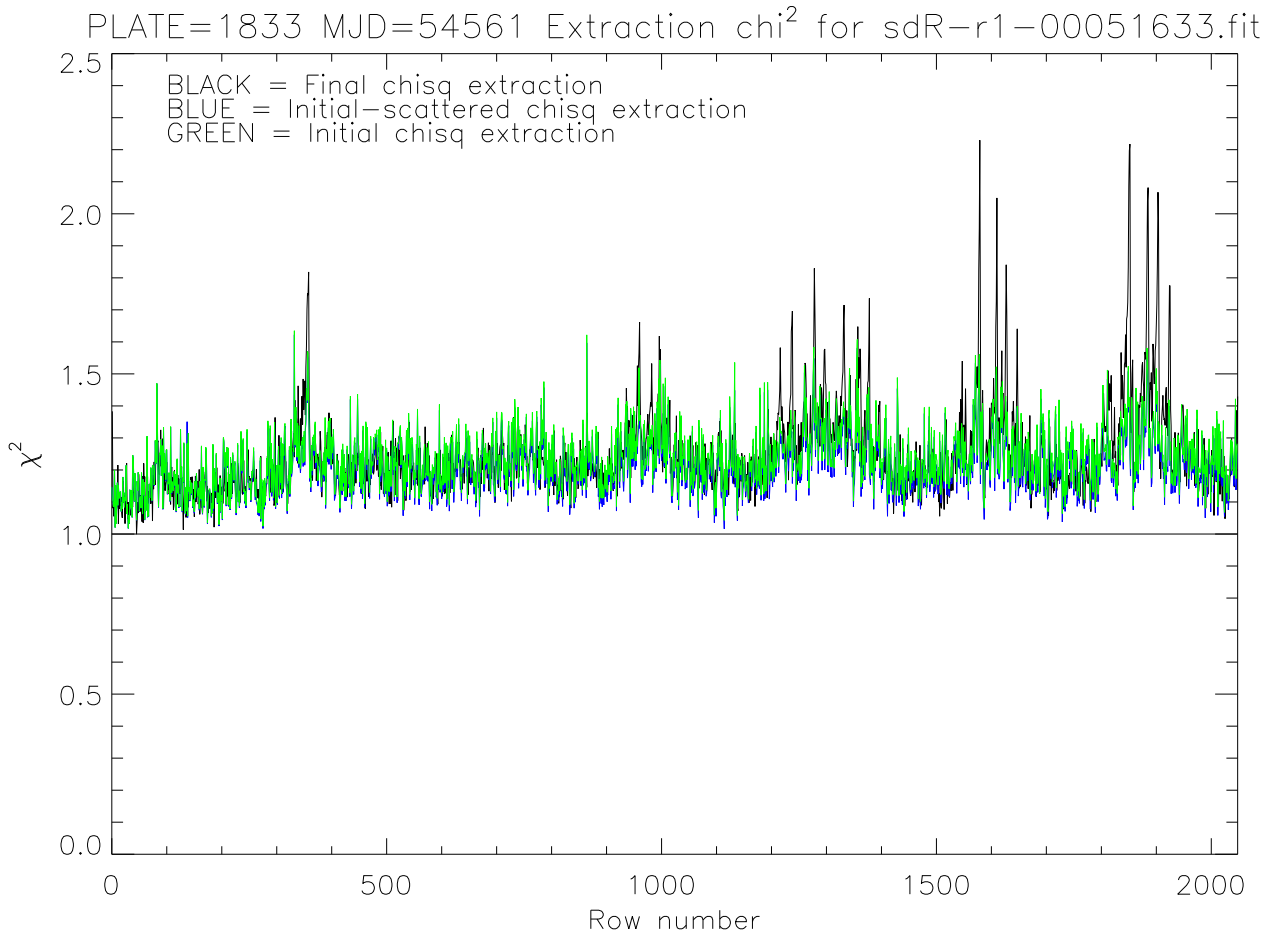

PLATE=1833 MJD=54561 Fiber−Flats for sdR−r1−00051631.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.367
Max value = 1.517
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Apr 5 17:12:21 2008

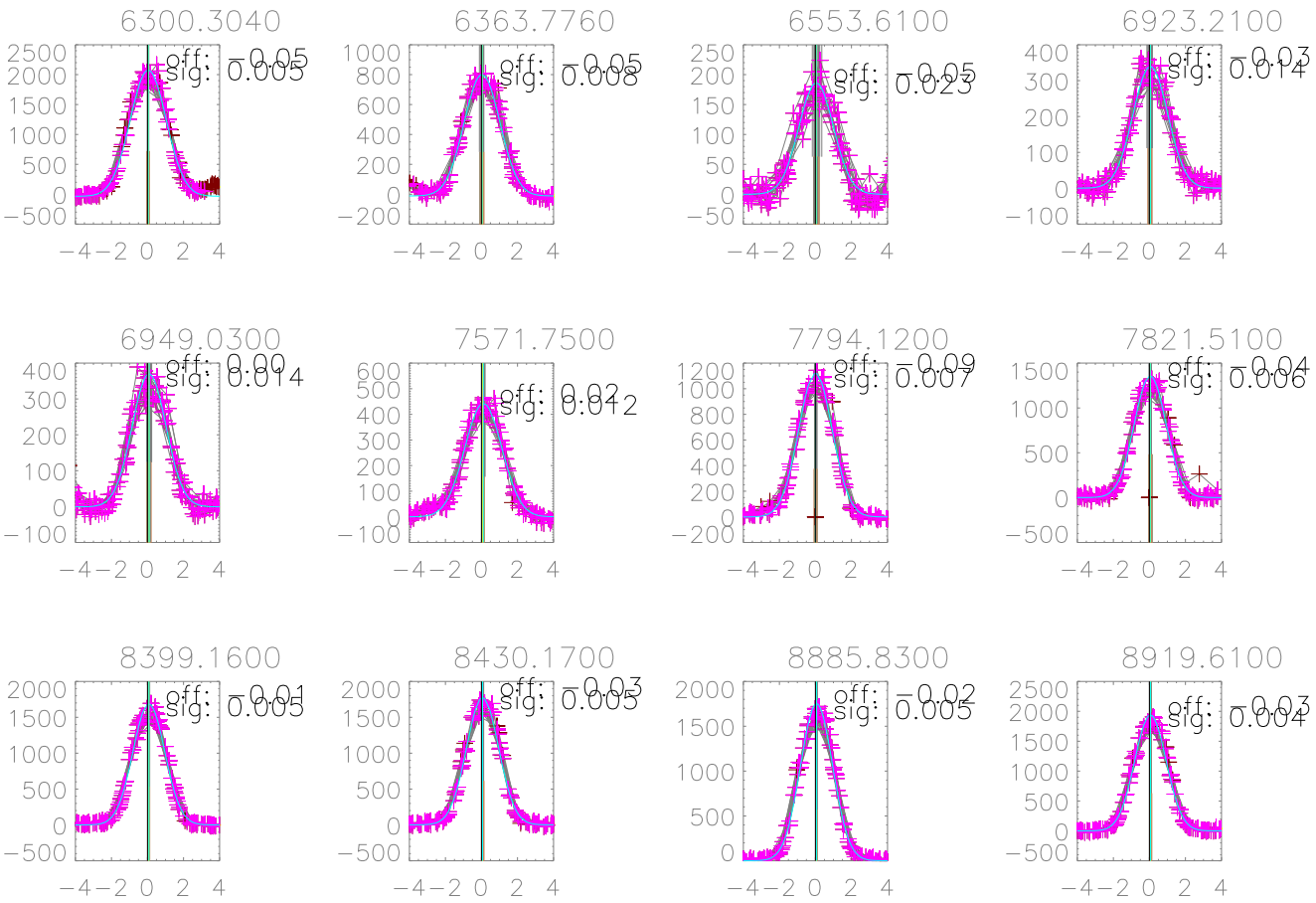

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-r1-00051633.fi
22.3
15.9
9.5
Y [pix]
X [pix]
0
500
1000
1500
2000

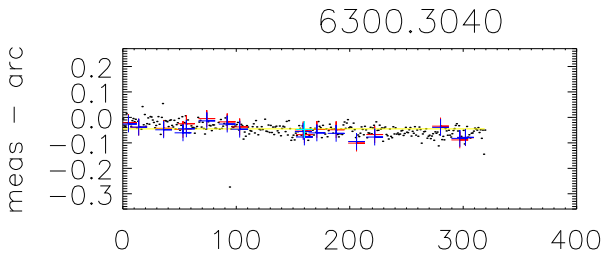

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-r1-00051633.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.275
Max value = 24.494
Sat Apr 5 17:13:09 2008

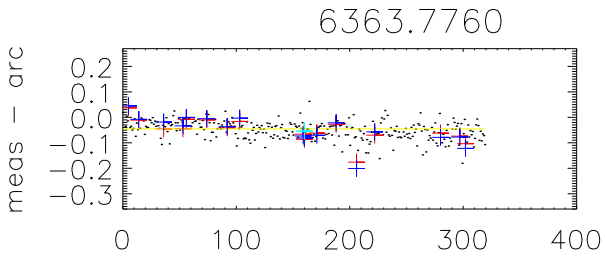

PLATE=1833 MJD=54561 Scattered Light on sdR−r1−00051633.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.4
4.5

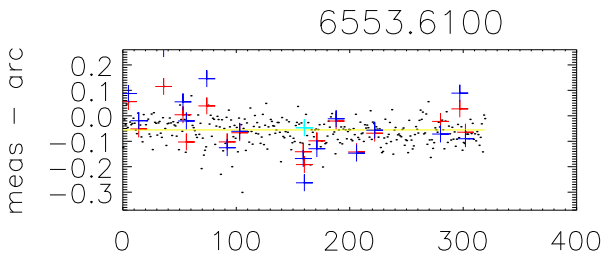

PLATE=1833 MJD=54561 Scattered Light on sdR-r1-00051633.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.200
Max value = 7.267
Sat Apr 5 17:16:08 2008

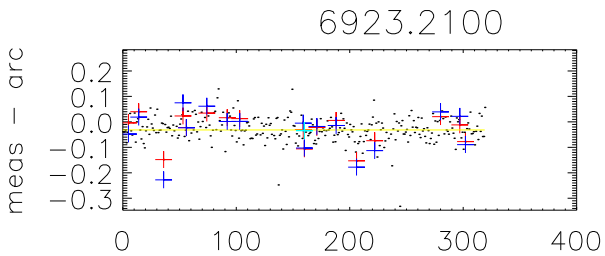

PLATE=1833 MJD=54561 Extraction chi^2 for sdR−r1−00051633.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

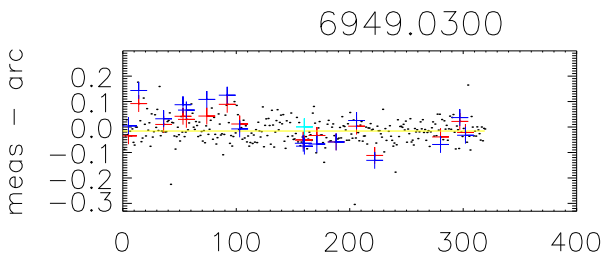

6300.3040
off: −0.05
sig: 0.005
6363.7760
off: −0.05
sig: 0.008
6553.6100
off: −0.05
sig: 0.023
6923.2100
off: −0.03
sig: 0.014
6949.0300
off: 0.00
sig: 0.014
7571.7500
off: 0.02
sig: 0.012
7794.1200
off: −0.09
sig: 0.007
7821.5100
off: −0.04
sig: 0.006
8399.1600
off: −0.01
sig: 0.005
8430.1700
off: −0.03
sig: 0.005
8885.8300
off: −0.02
sig: 0.005
8919.6100
off: −0.03
sig: 0.004

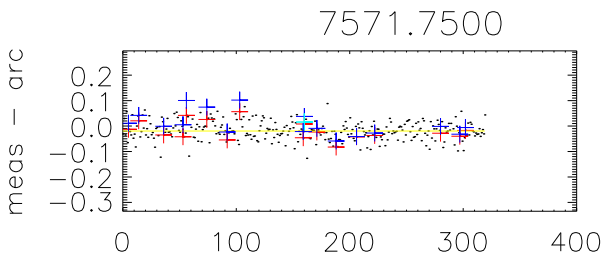

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

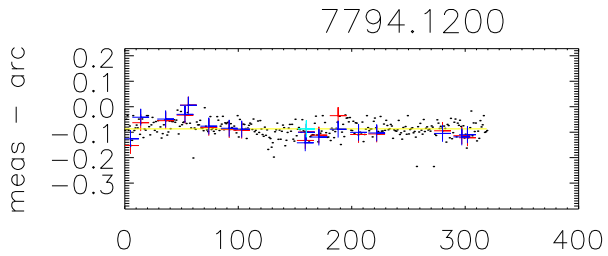

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

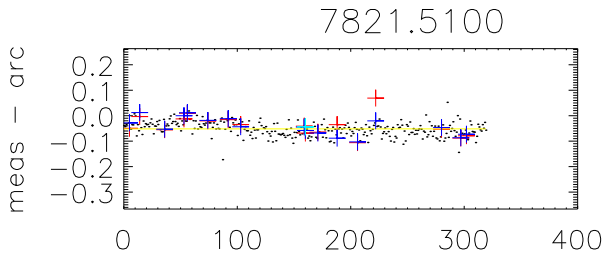

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

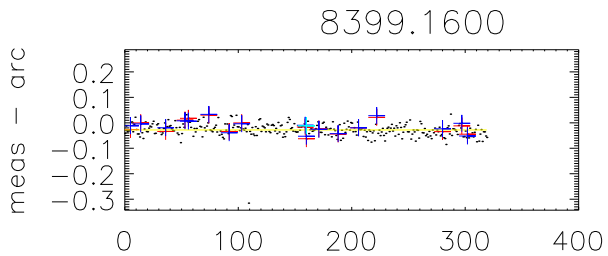

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

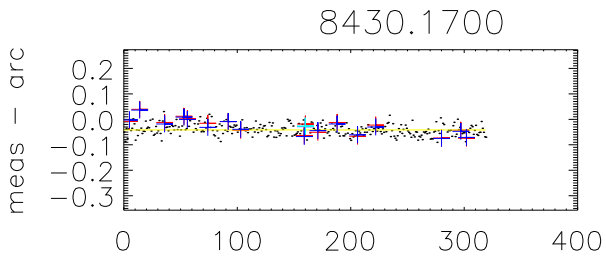

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

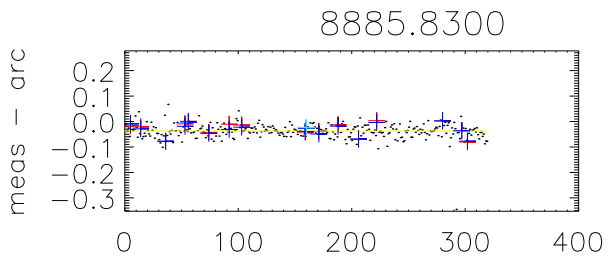

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

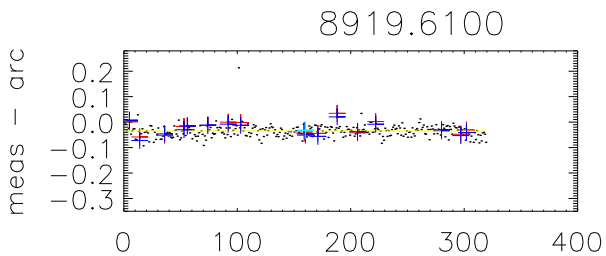

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

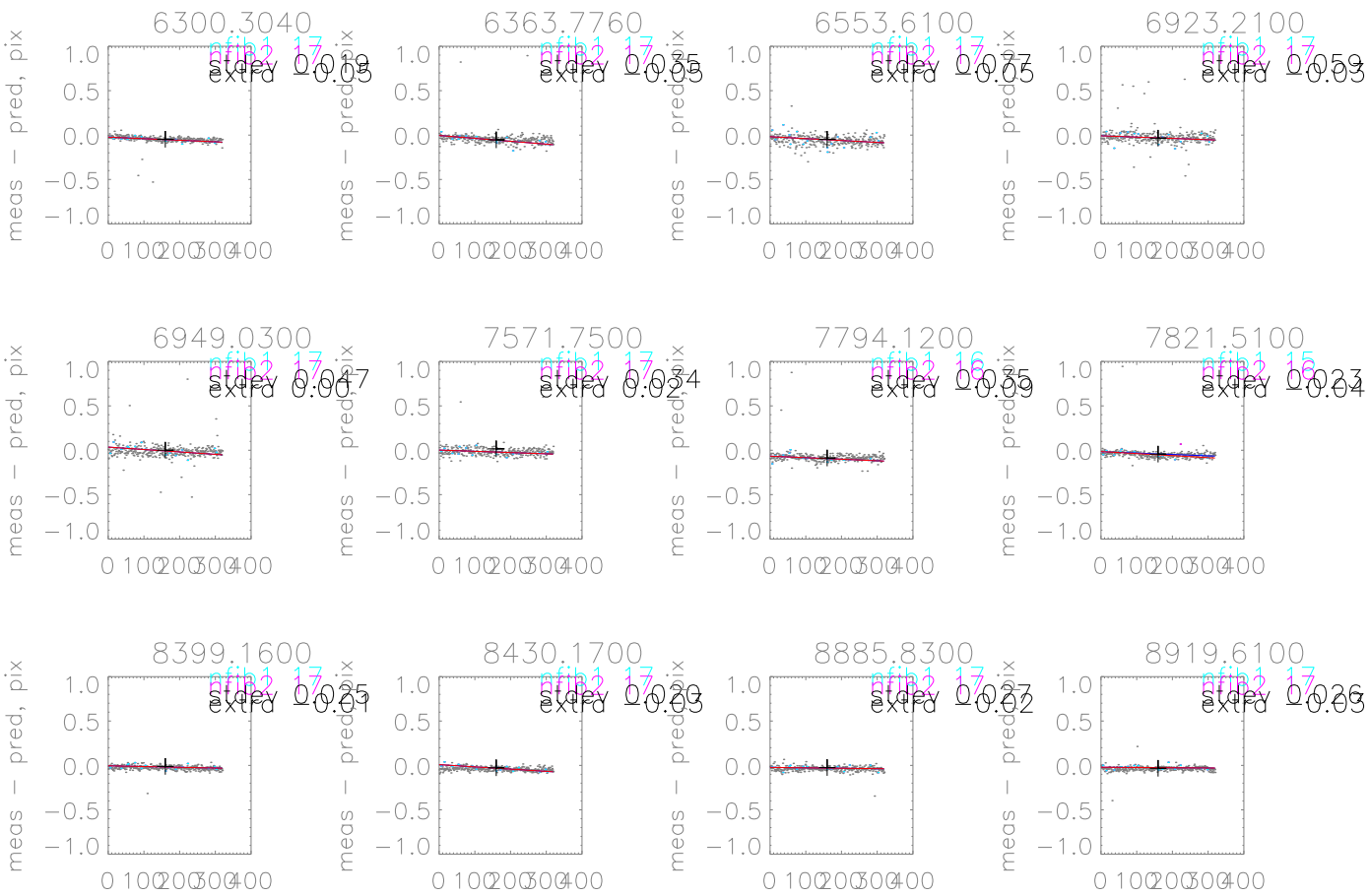

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

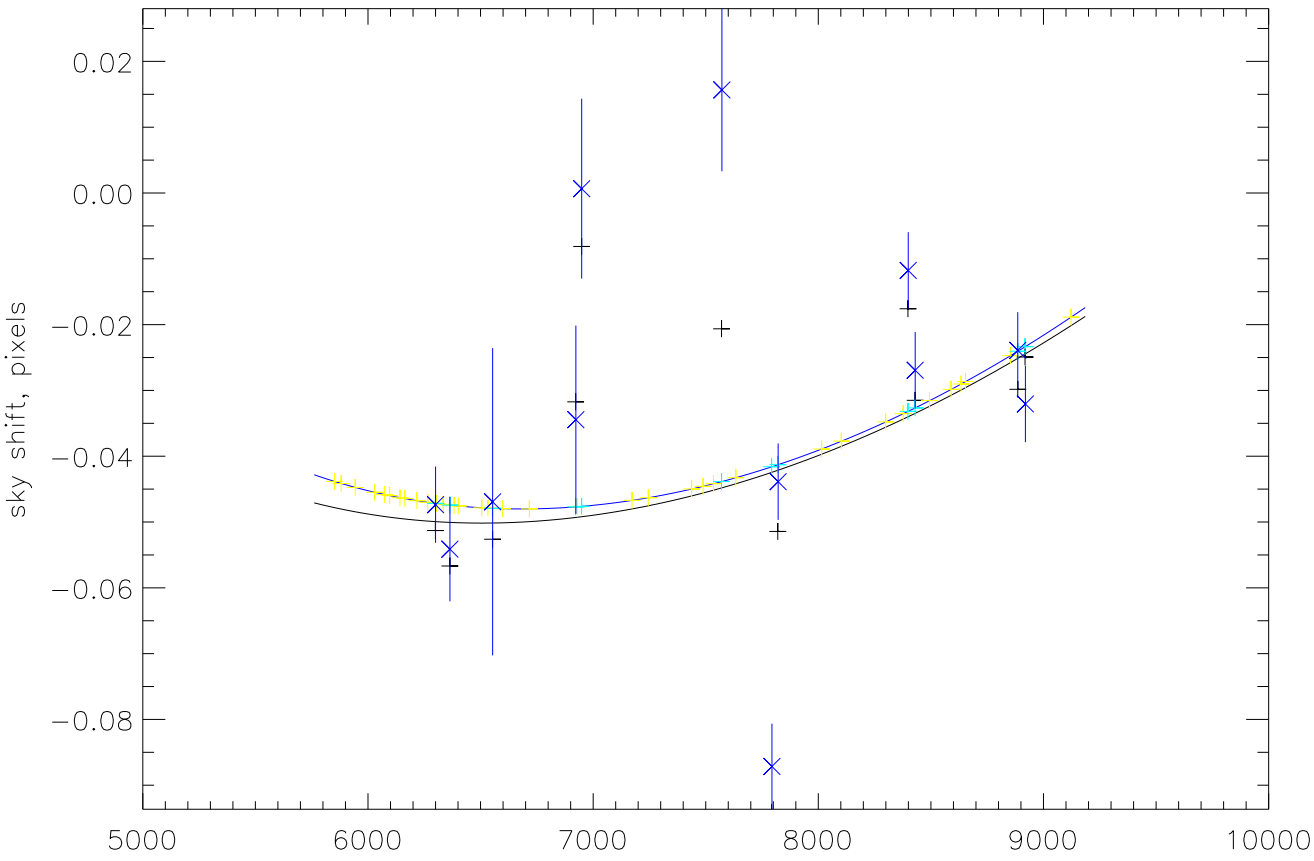

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

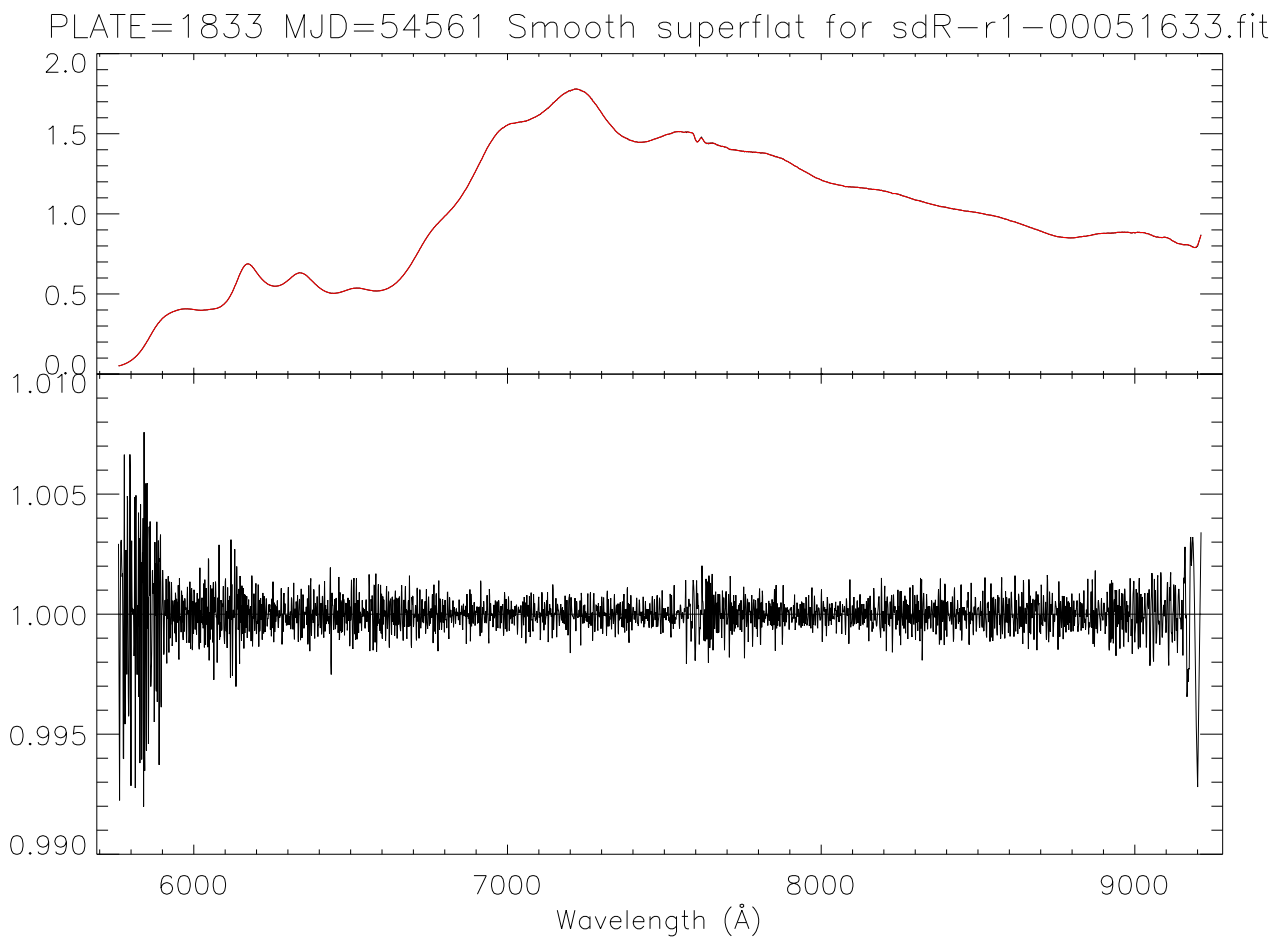

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

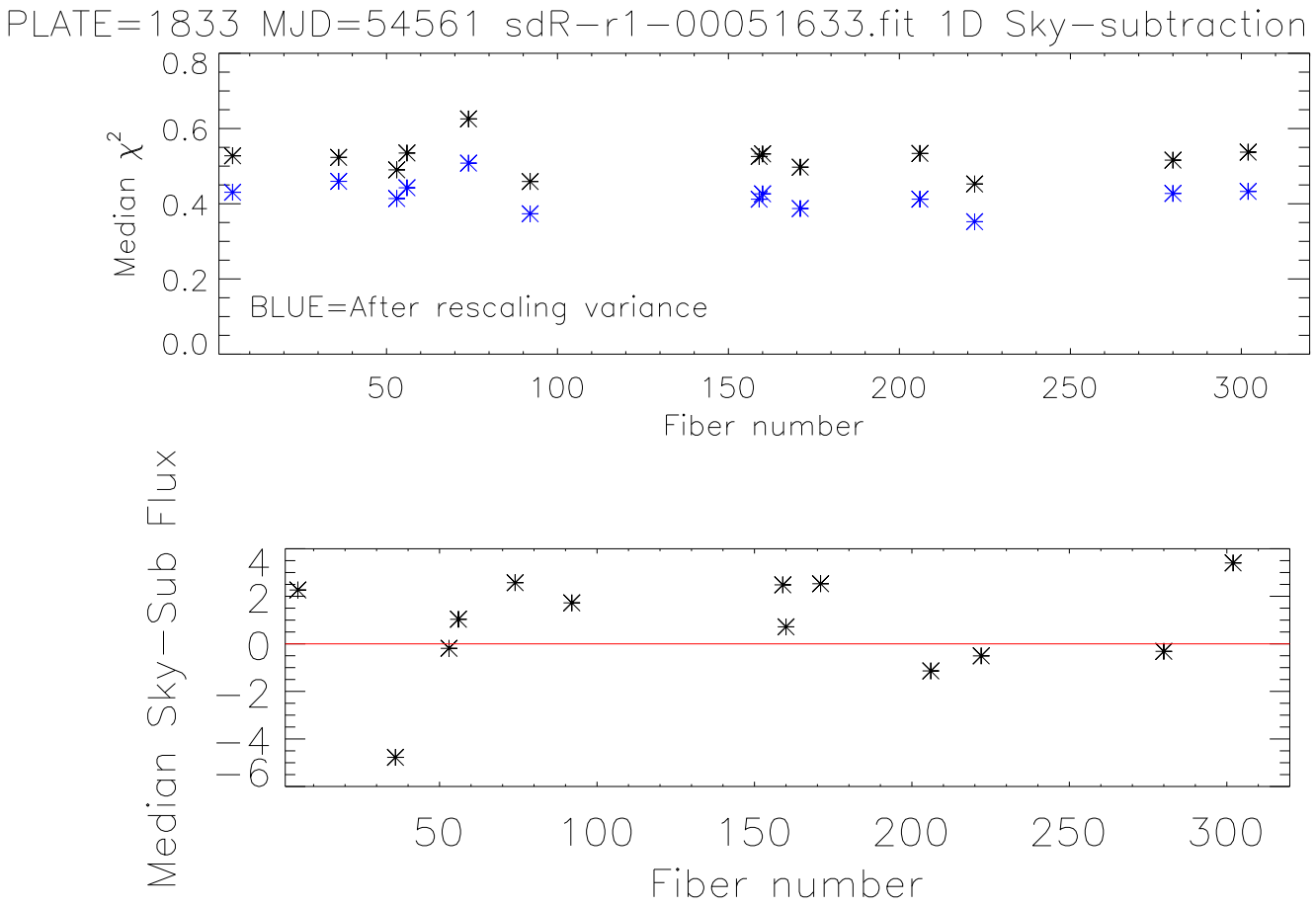

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


6300.3040
mfib1 17
mfib2 17
stdev 0.019
extra 0.05
6363.7760
mfib1 17
mfib2 17
stdev 0.035
extra 0.05
6553.6100
mfib1 17
mfib2 17
stdev 0.027
extra 0.05
6923.2100
mfib1 17
mfib2 17
stdev 0.059
extra 0.03
6949.0300
mfib1 17
mfib2 17
stdev 0.047
extra 0.00
7571.7500
mfib1 17
mfib2 17
stdev 0.034
extra 0.02
7794.1200
mfib1 16
mfib2 16
stdev 0.035
extra 0.09
7821.5100
mfib1 15
mfib2 16
stdev 0.023
extra 0.04
8399.1600
mfib1 17
mfib2 17
stdev 0.025
extra 0.01
8430.1700
mfib1 17
mfib2 17
stdev 0.020
extra 0.03
8885.8300
mfib1 17
mfib2 17
stdev 0.027
extra 0.02
8919.6100
mfib1 17
mfib2 17
stdev 0.026
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

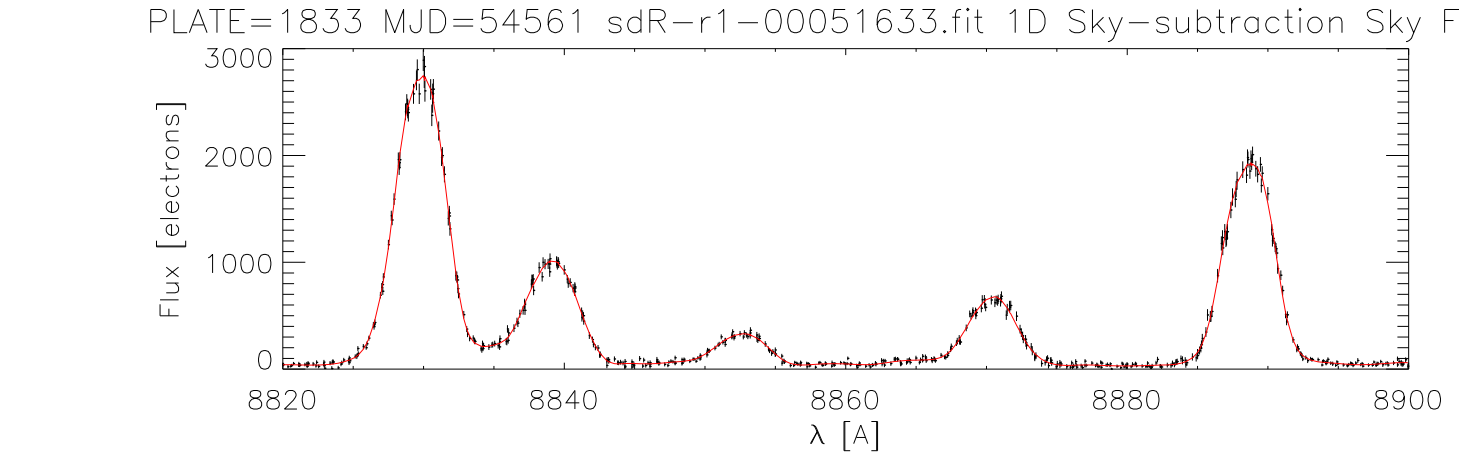

0.02
0.00
−0.02
−0.04
−0.06
−0.08
sky shift, pixels
5000
6000
7000
8000
9000
10000

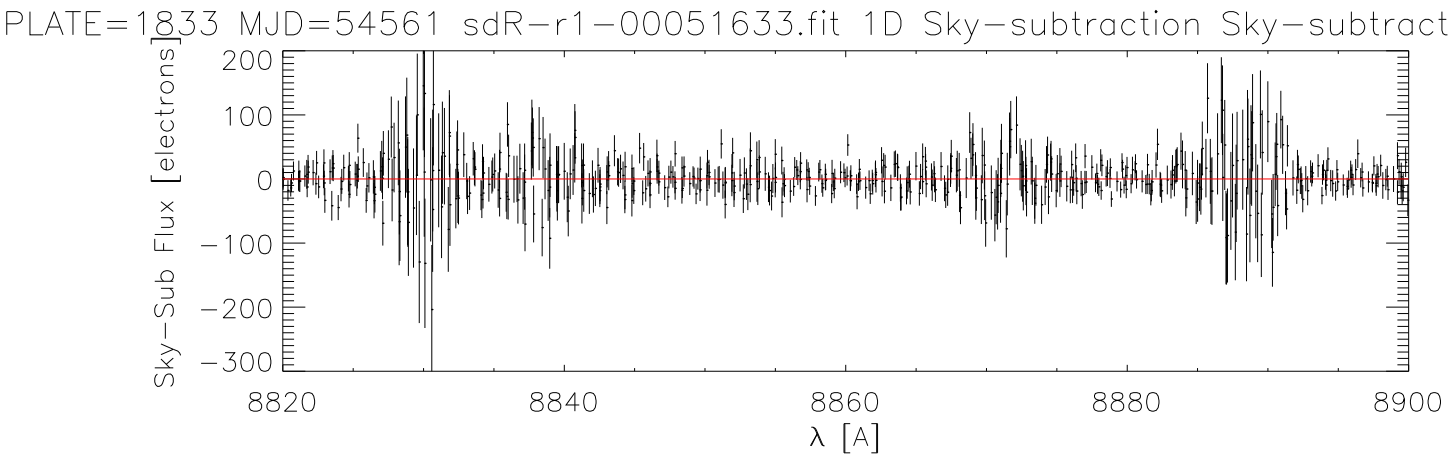
es= 0.0000

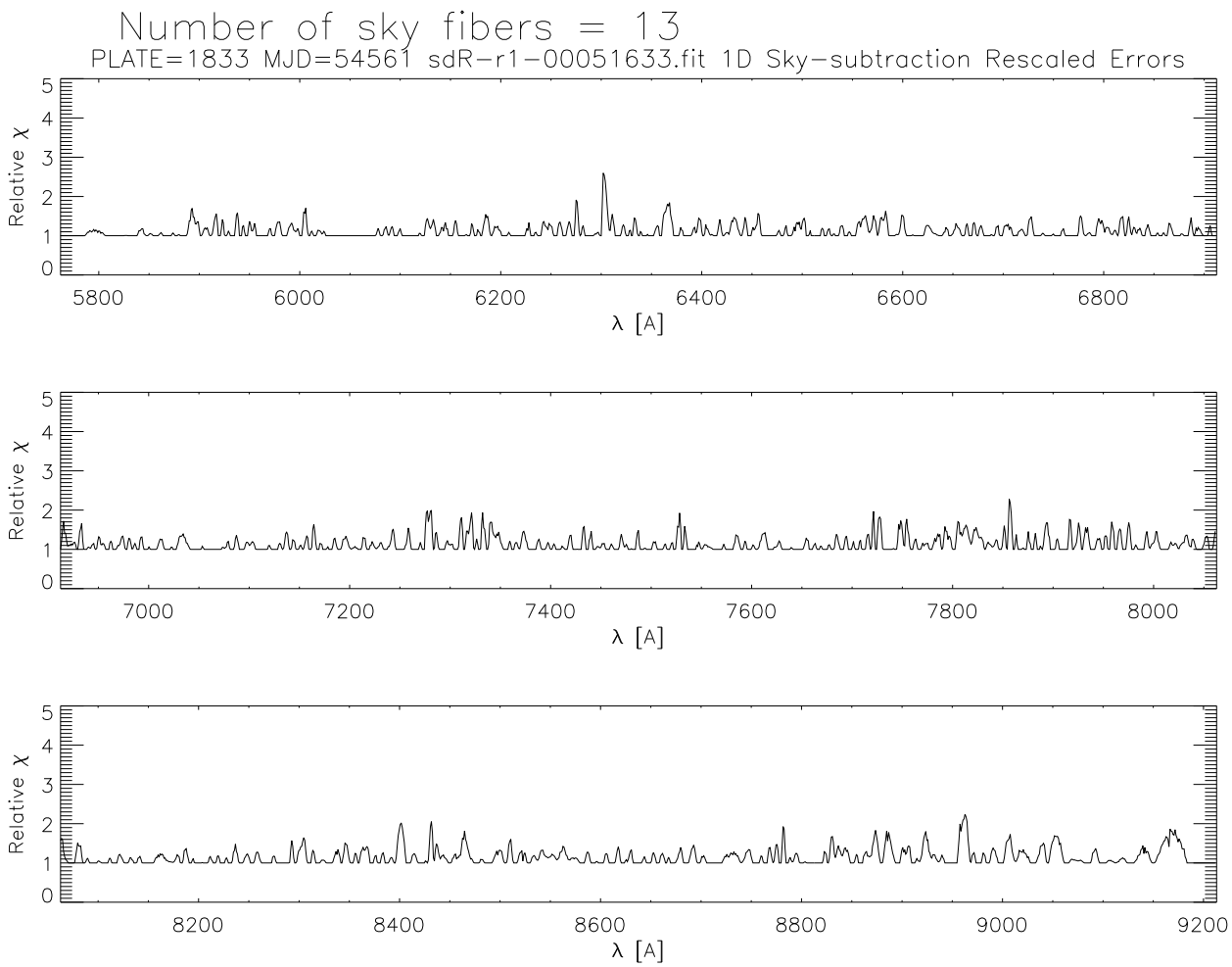

PLATE=1833 MJD=54561 Smooth superflat for sdR-r1-00051633.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

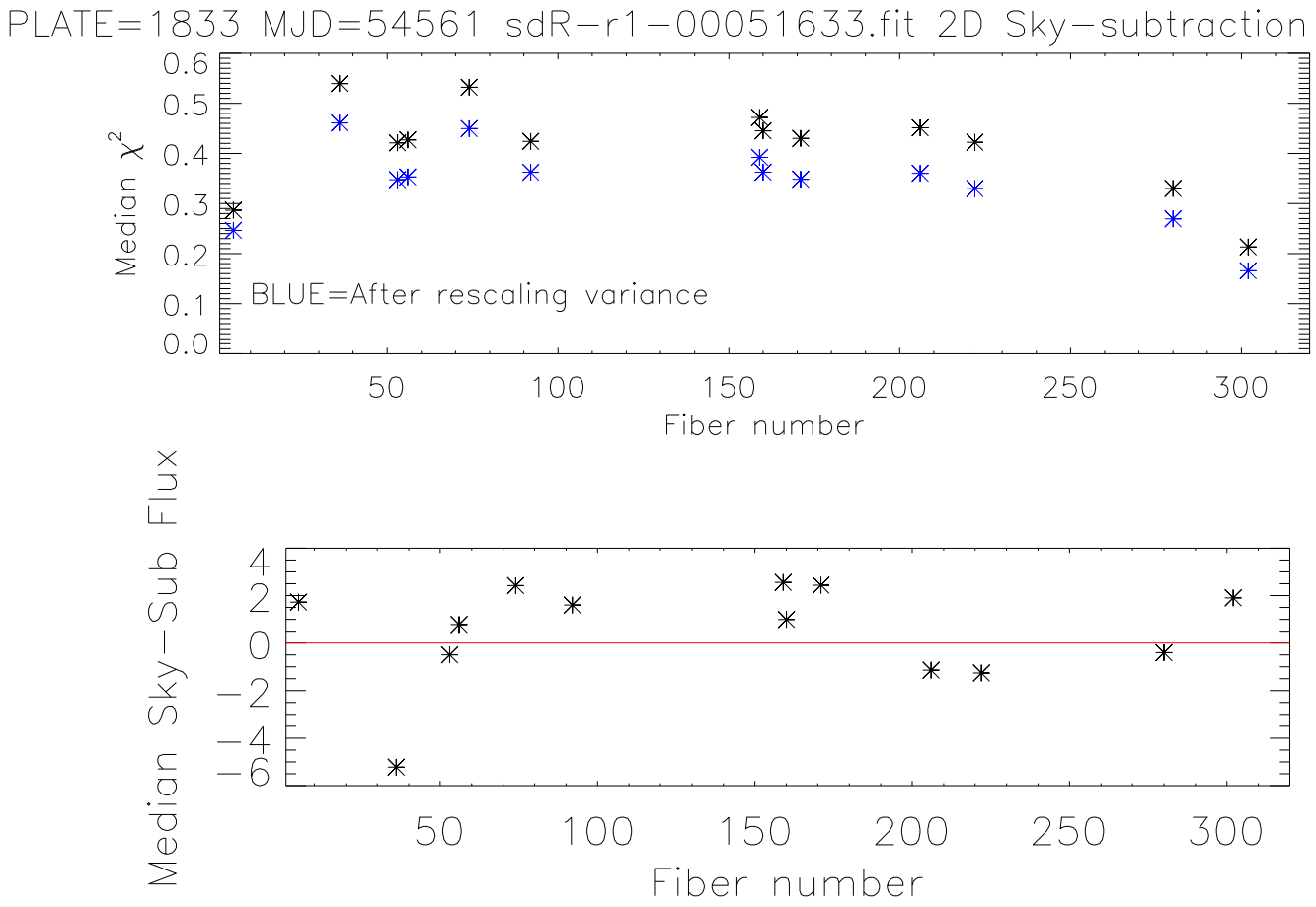

PLATE=1833 MJD=54561 sdR-r1-00051633.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

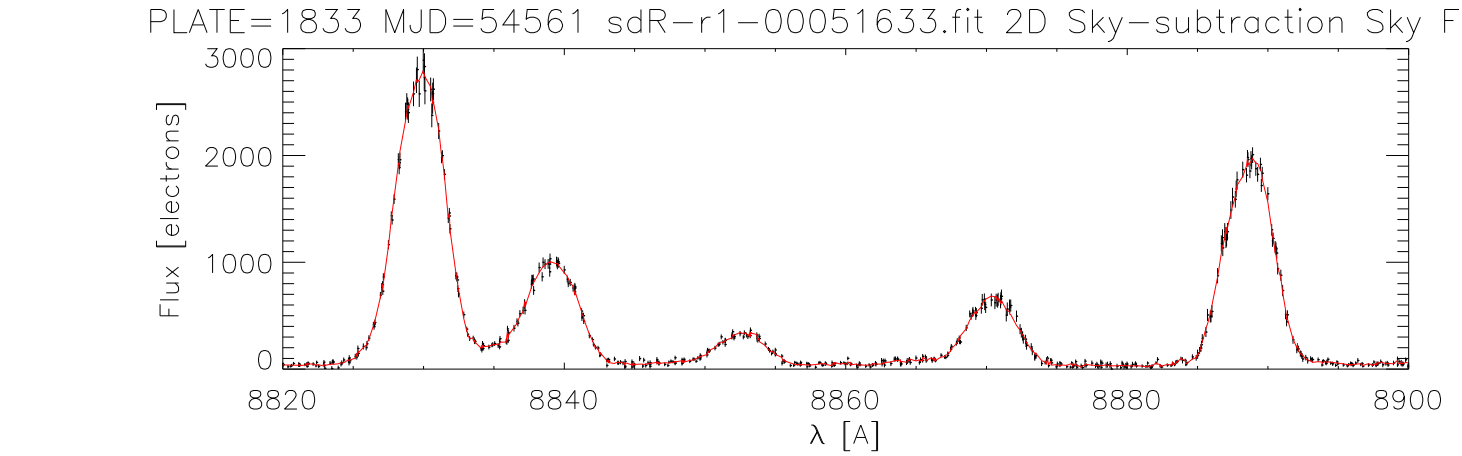
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

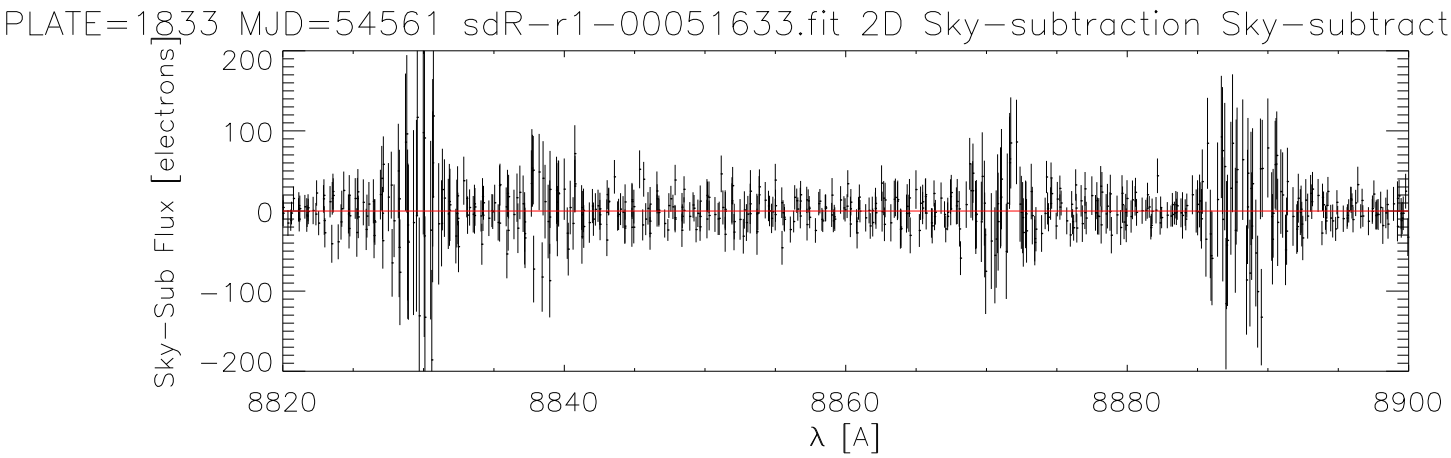

PLATE=1833 MJD=54561 sdR-r1-00051633.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

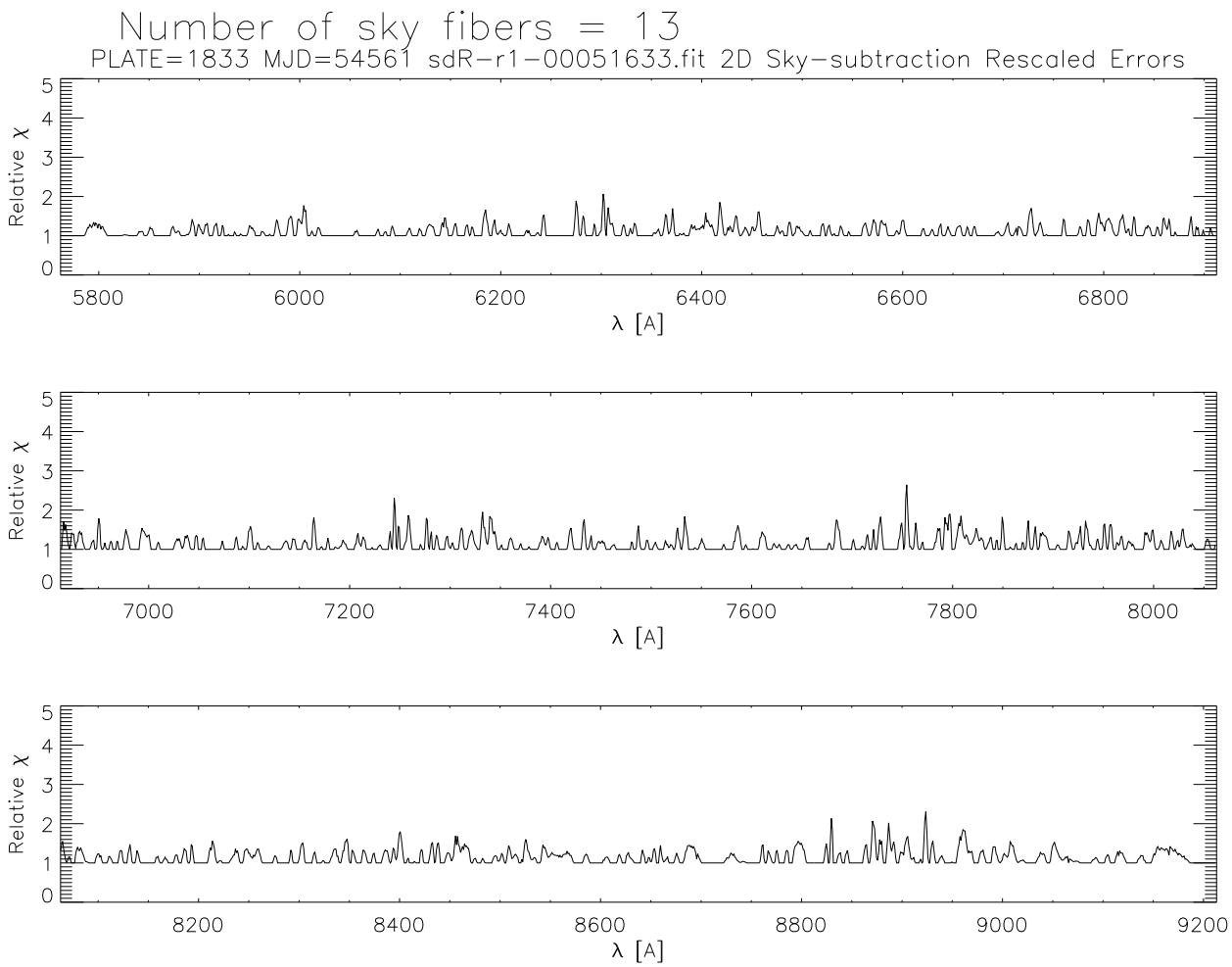

PLATE=1833 MJD=54561 sdR-r1-00051633.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

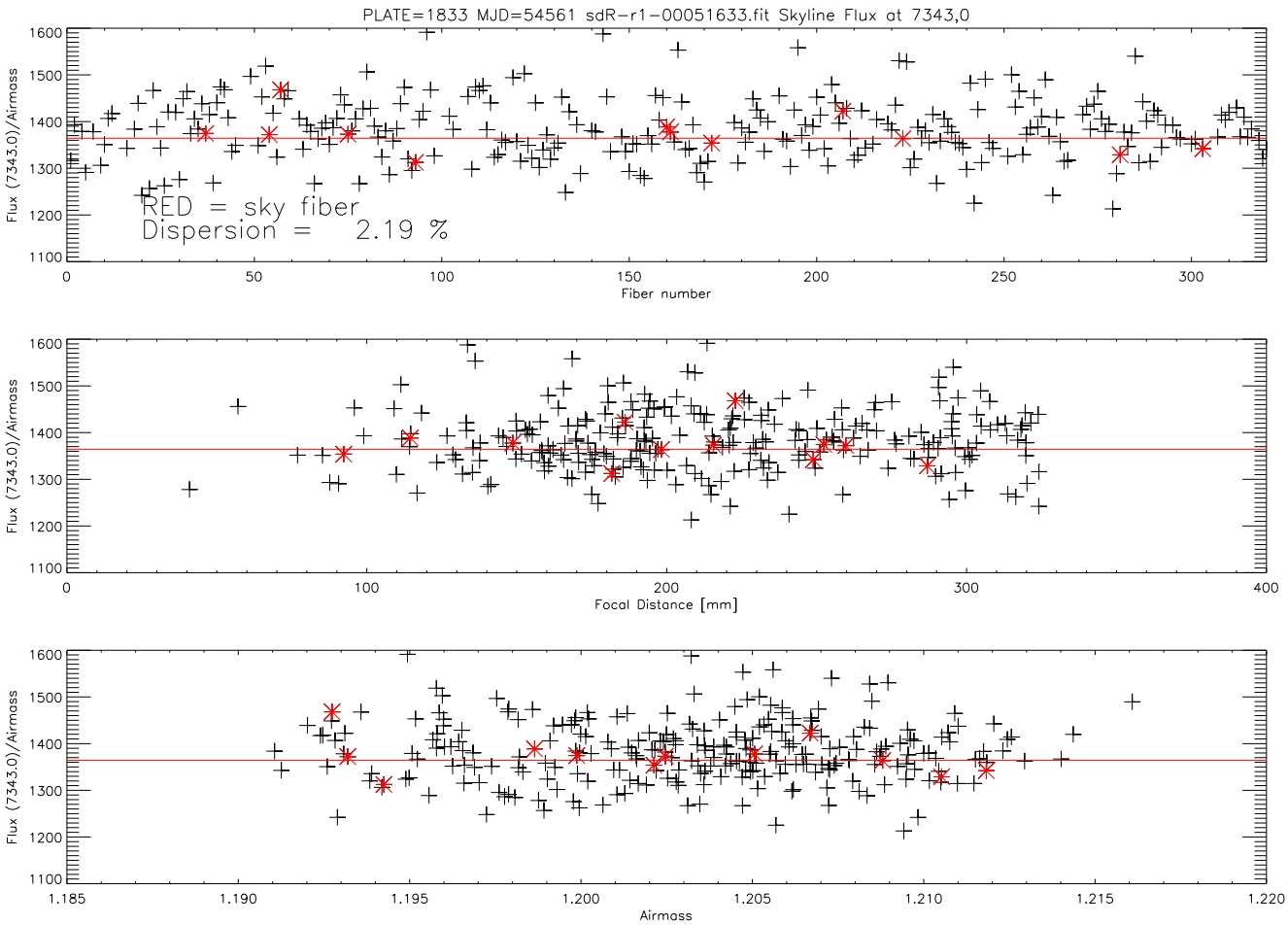

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-r1-00051633.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

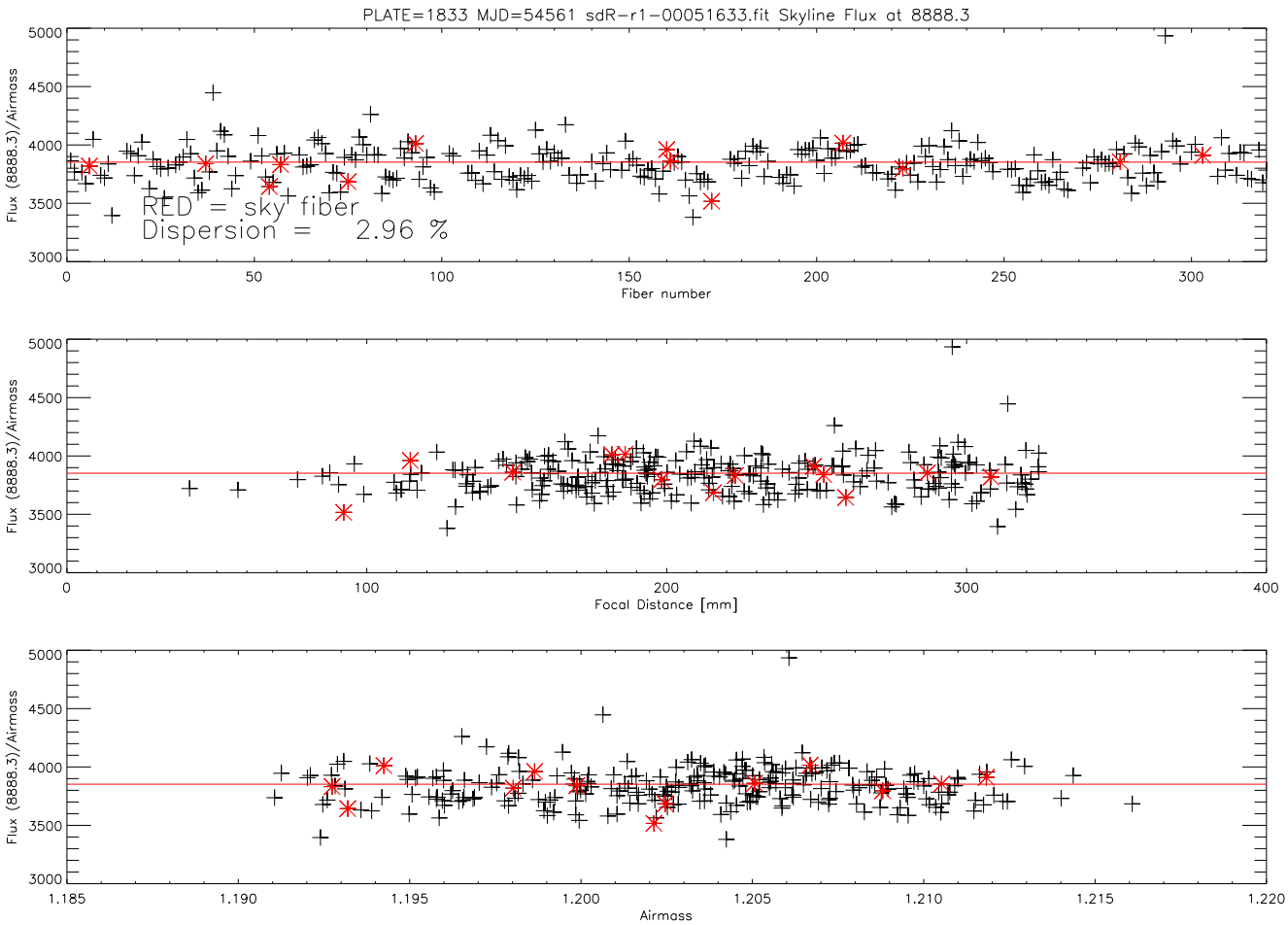

PLATE=1833 MJD=54561 sdR-r1-00051633.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

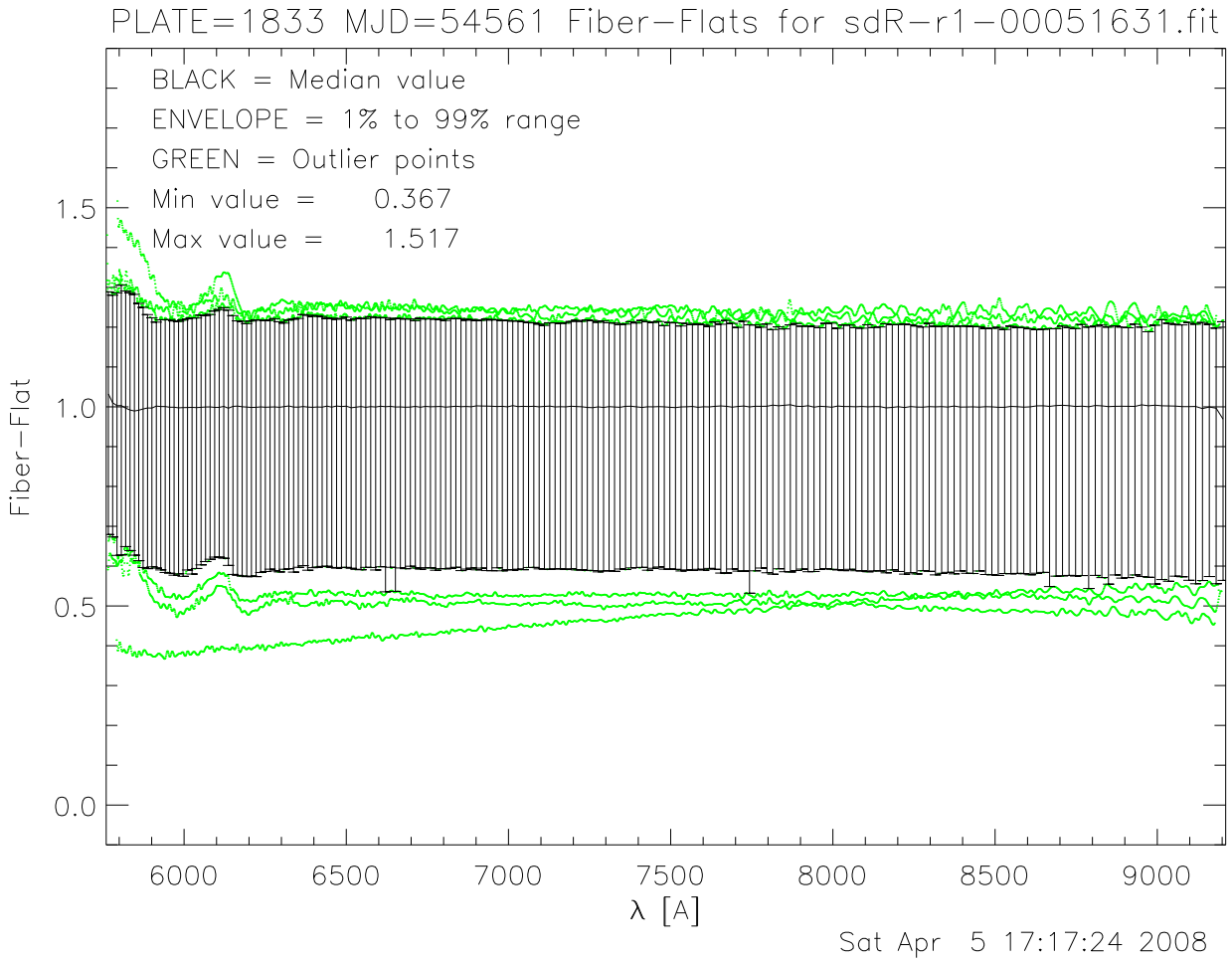

PLATE=1833 MJD=54561 sdR-r1-00051633.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

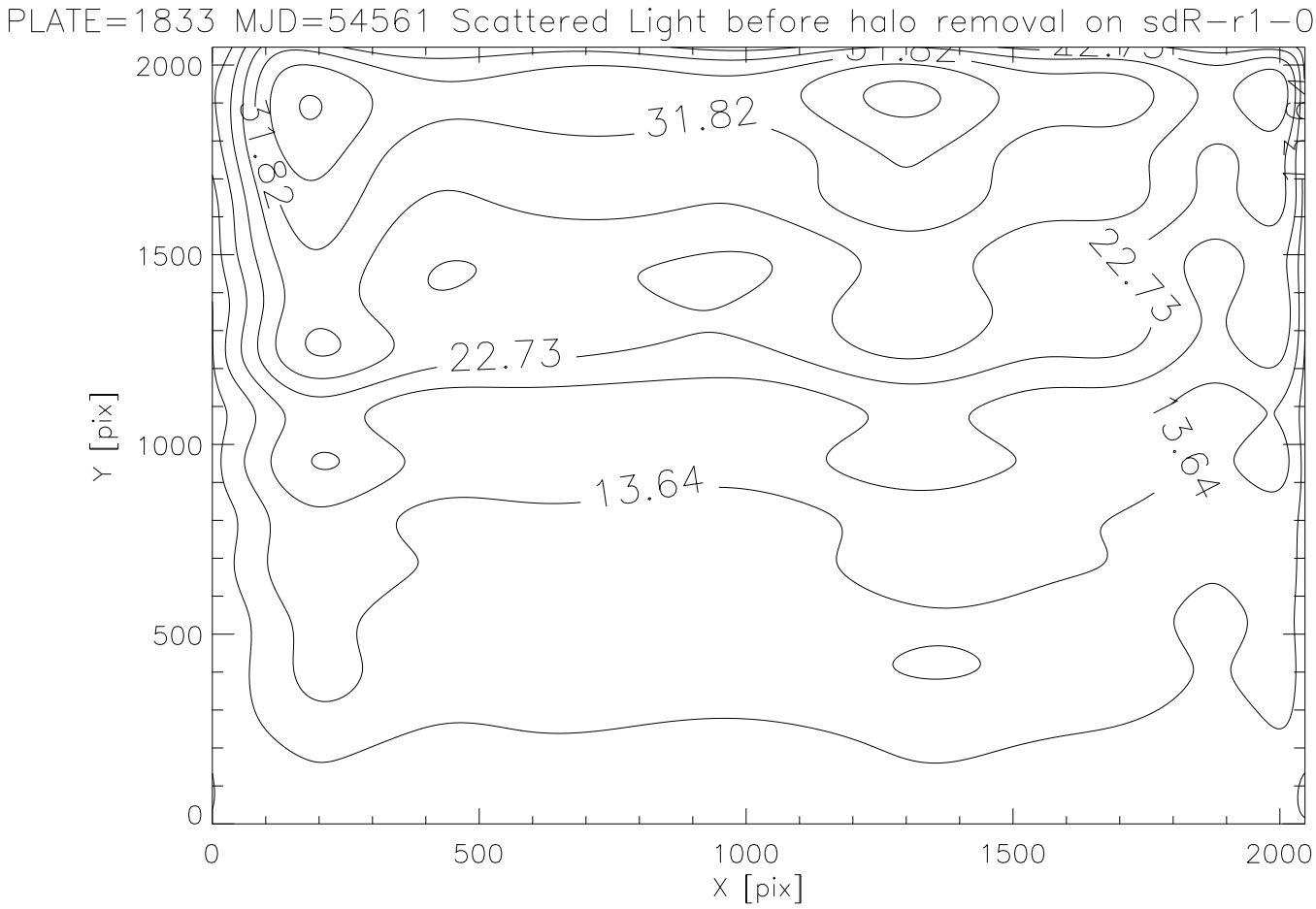

PLATE=1833 MJD=54561 sdR-r1-00051633.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

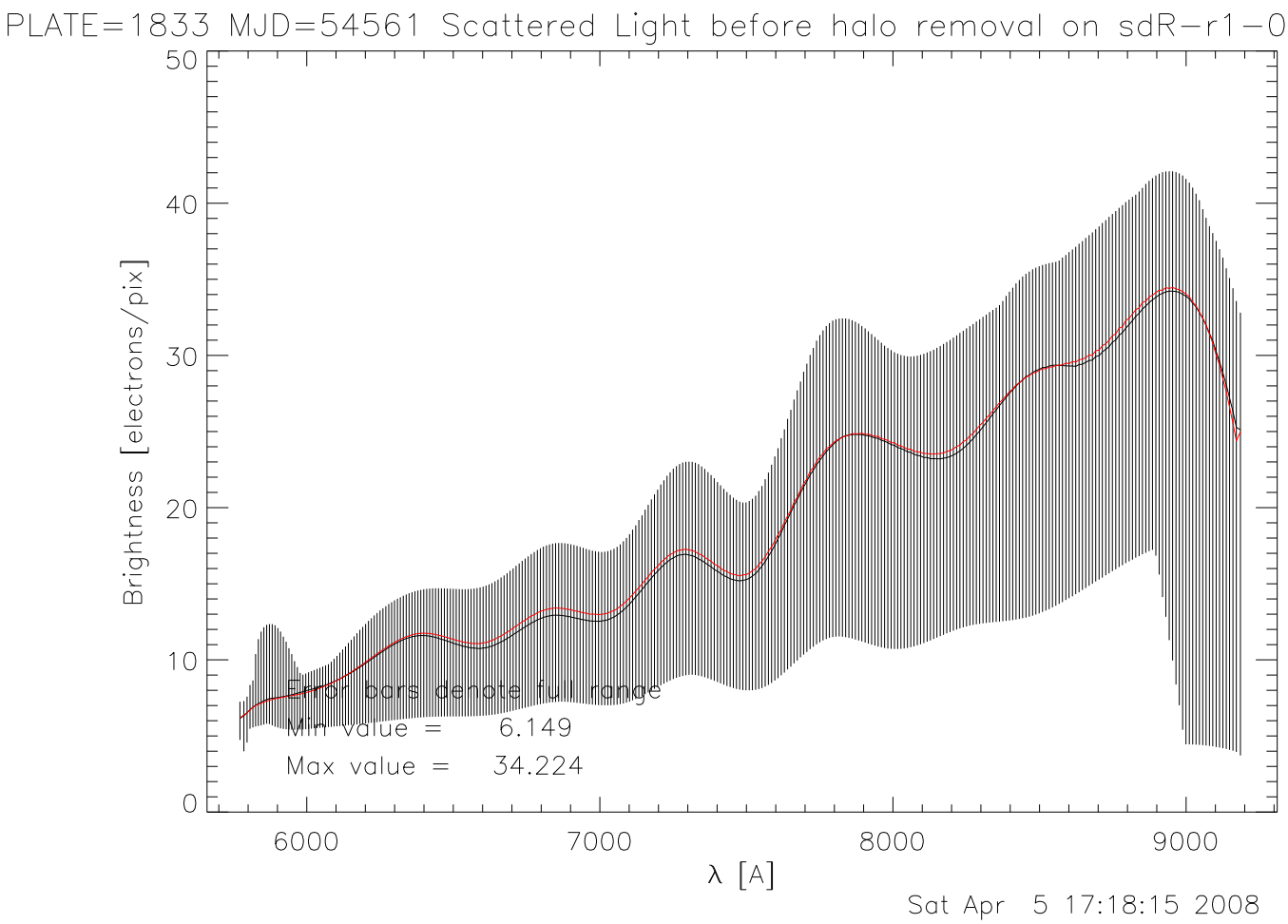

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-r1-00051633.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

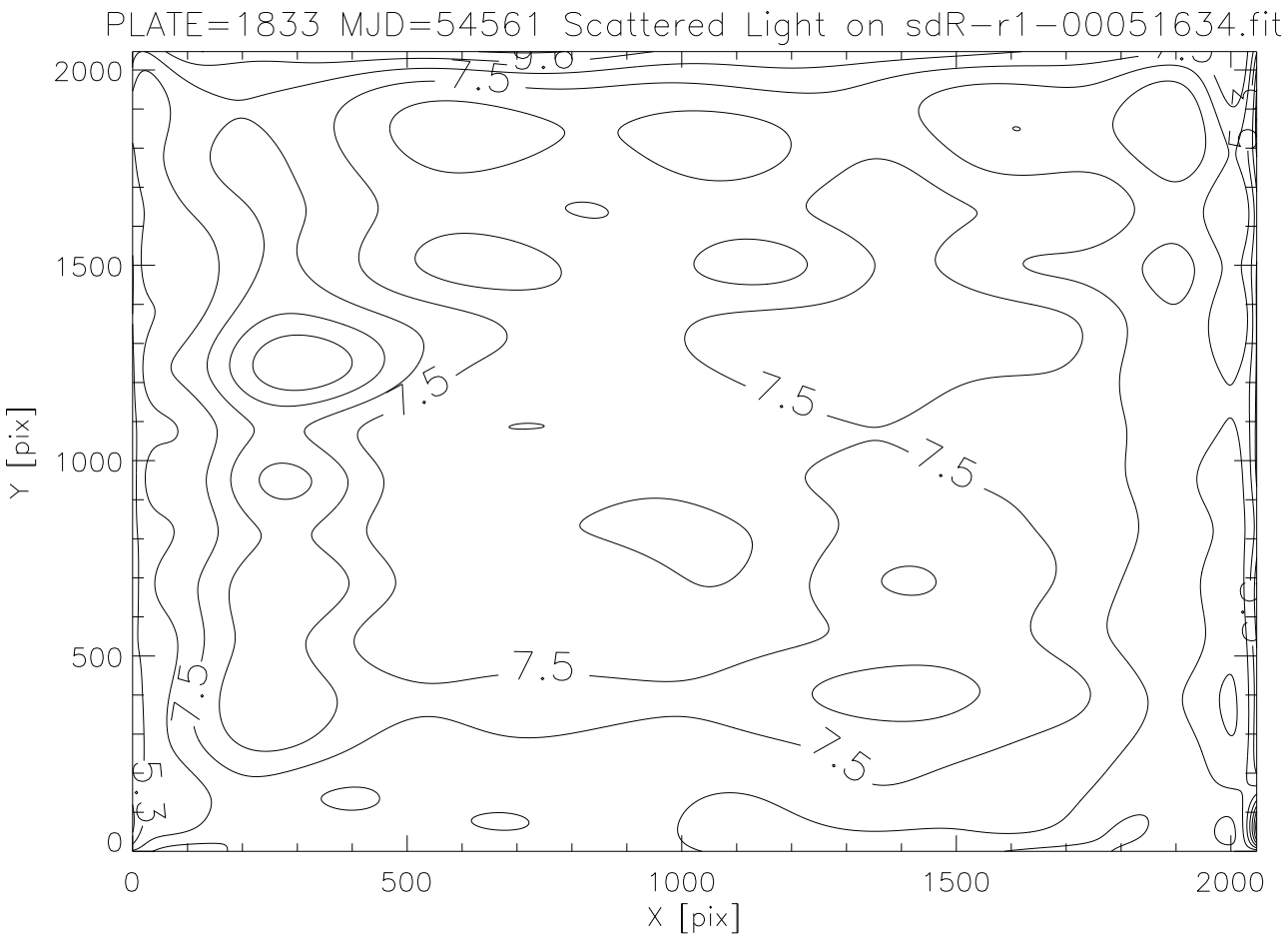

PLATE=1833 MJD=54561 sdR-r1-00051633.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.19 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

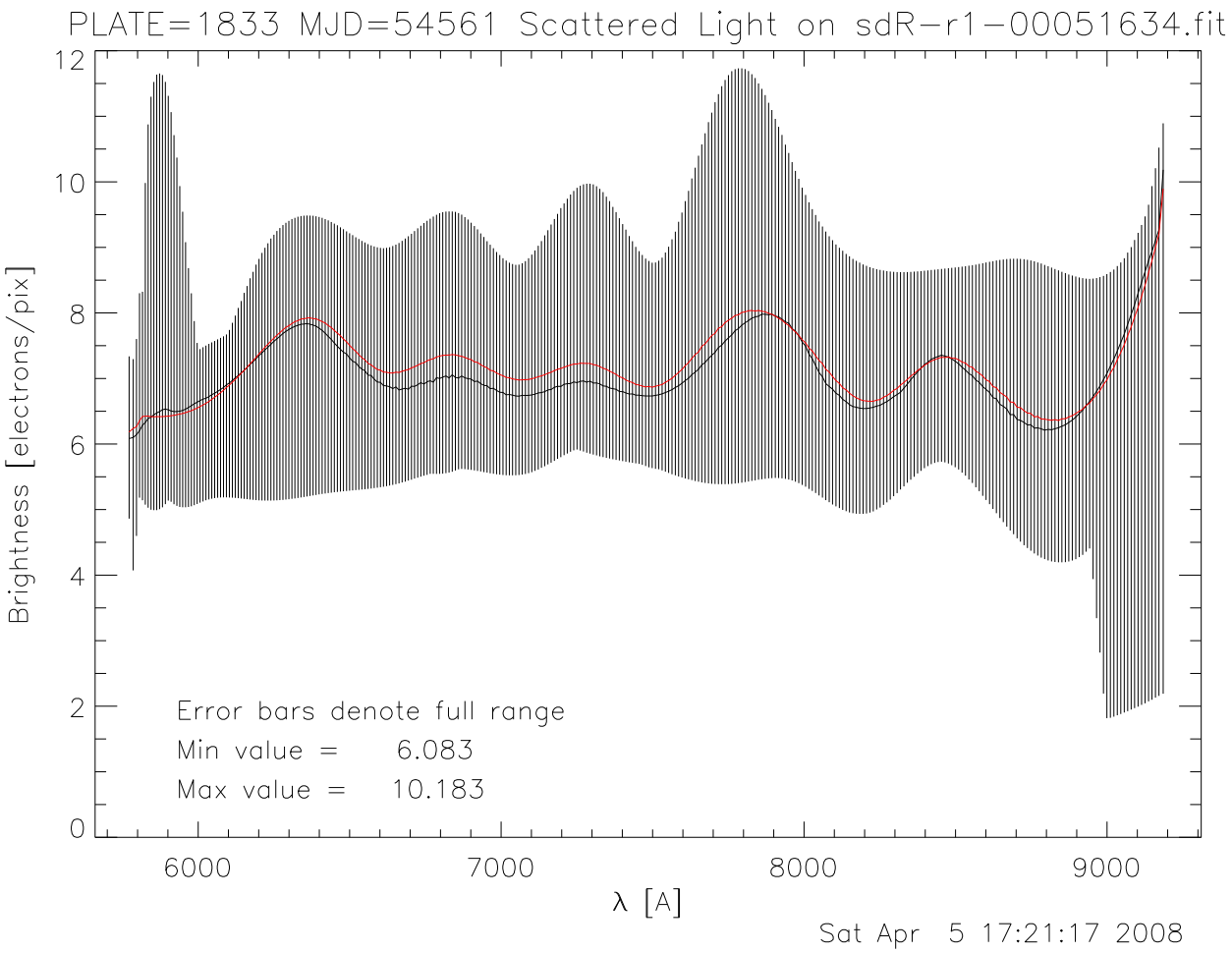

PLATE=1833 MJD=54561 sdR-r1-00051633.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.96 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

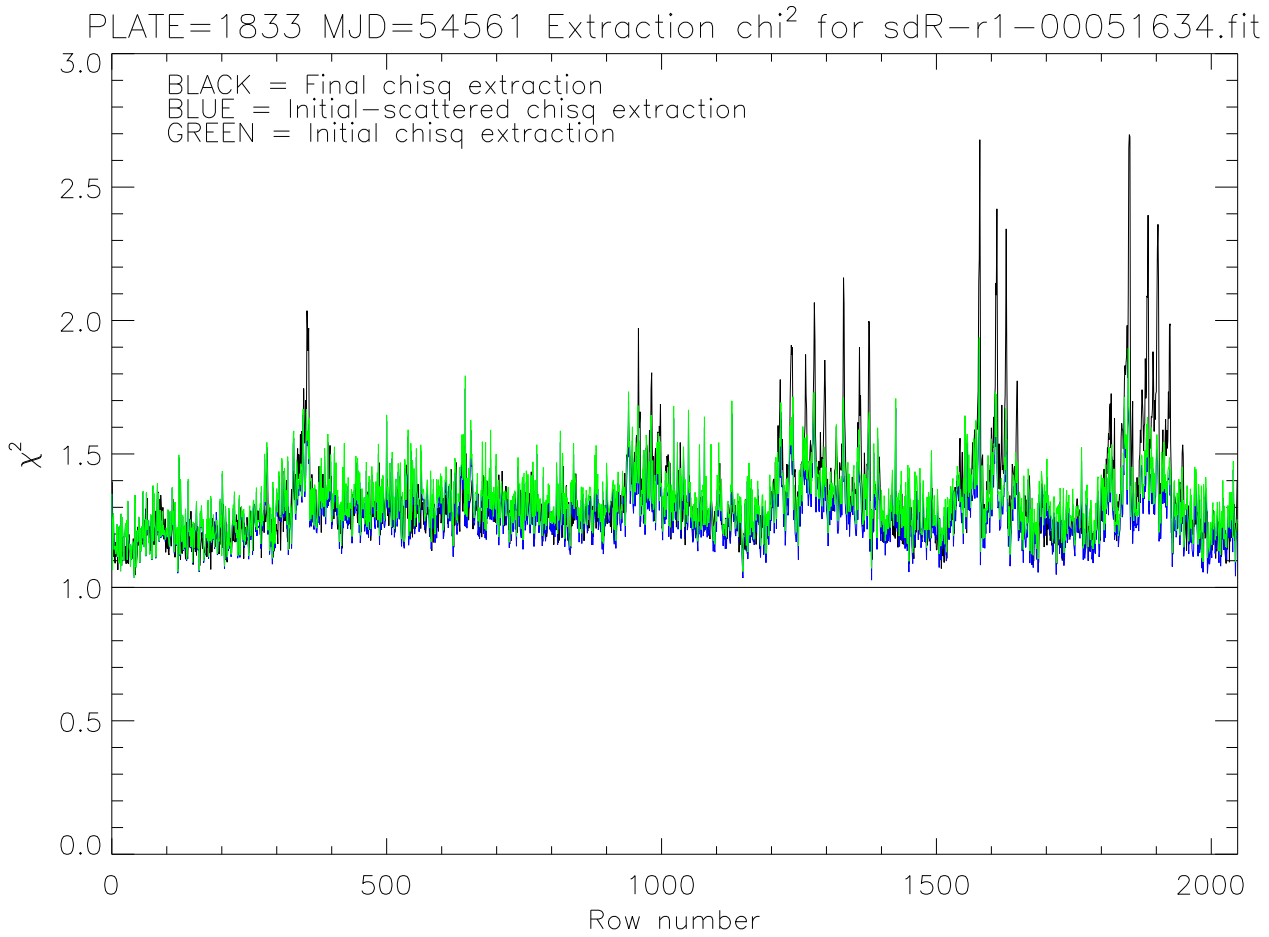

PLATE=1833 MJD=54561 Fiber−Flats for sdR−r1−00051631.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.367
Max value = 1.517
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Apr 5 17:17:24 2008

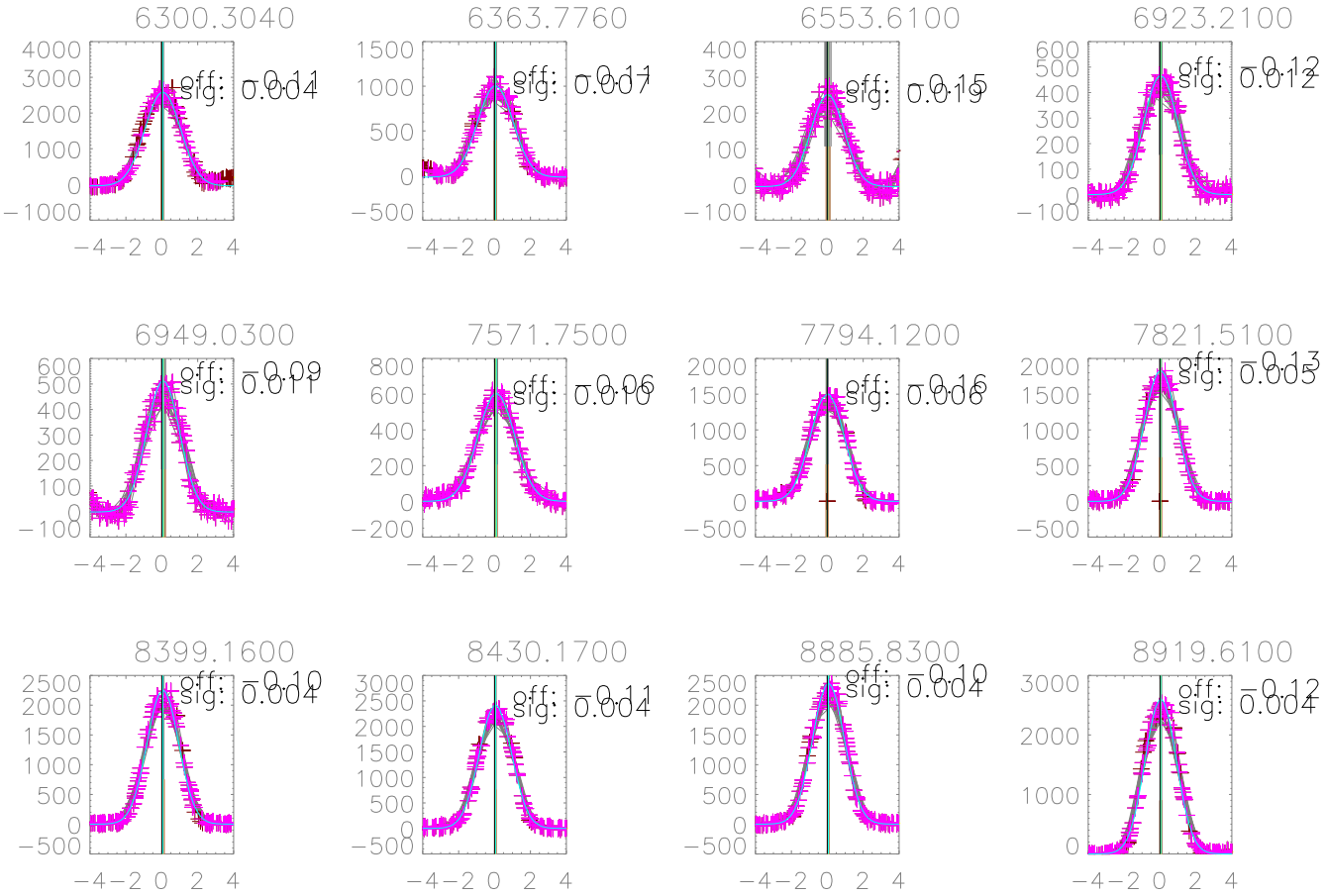

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-r1-00051634.fi
31.82
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

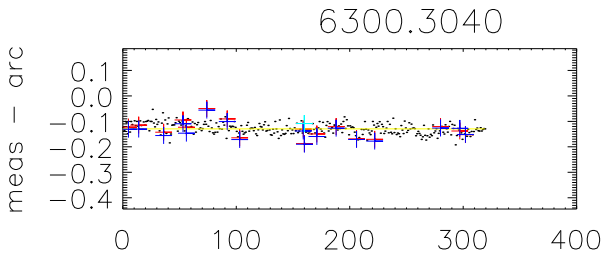

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-r1-00051634.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.149
Max value = 34.224
Sat Apr 5 17:18:15 2008

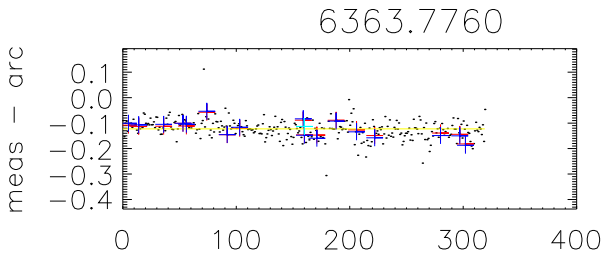

PLATE=1833 MJD=54561 Scattered Light on sdR−r1−00051634.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5
5.3

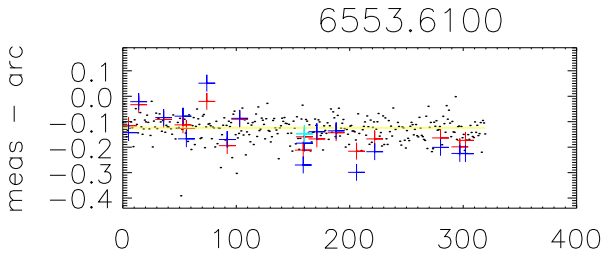

PLATE=1833 MJD=54561 Scattered Light on sdR-r1-00051634.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.083
Max value = 10.183
Sat Apr 5 17:21:17 2008

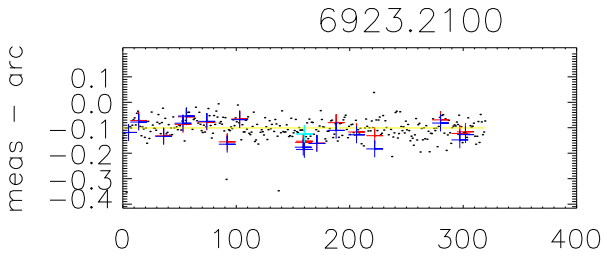

PLATE=1833 MJD=54561 Extraction chi^2 for sdR−r1−00051634.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

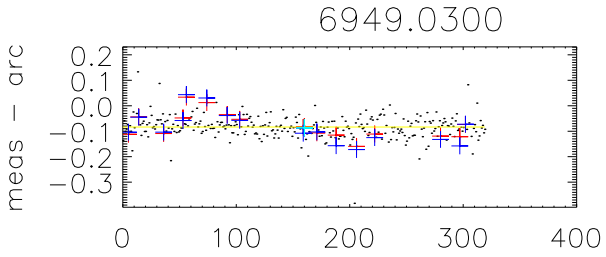

6300.3040
off: −0.11
sig: 0.004
6363.7760
off: −0.11
sig: 0.007
6553.6100
off: −0.15
sig: 0.019
6923.2100
off: −0.12
sig: 0.012
6949.0300
off: −0.09
sig: 0.011
7571.7500
off: −0.06
sig: 0.010
7794.1200
off: −0.16
sig: 0.006
7821.5100
off: −0.13
sig: 0.005
8399.1600
off: −0.10
sig: 0.004
8430.1700
off: −0.11
sig: 0.004
8885.8300
off: −0.10
sig: 0.004
8919.6100
off: −0.12
sig: 0.004

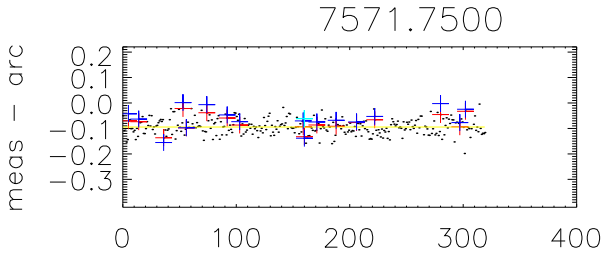

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

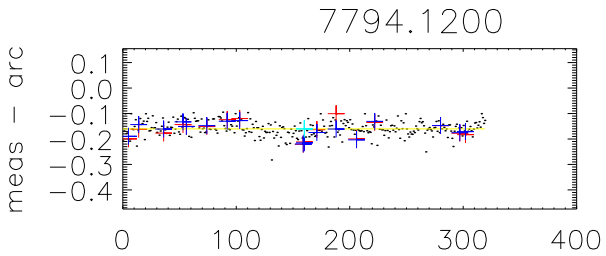

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

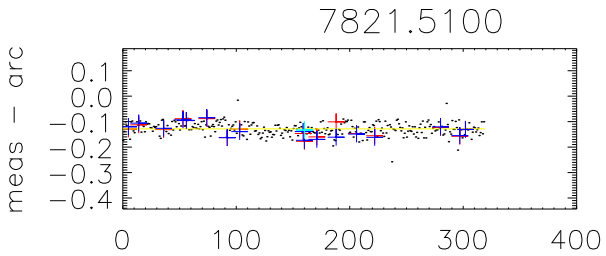

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

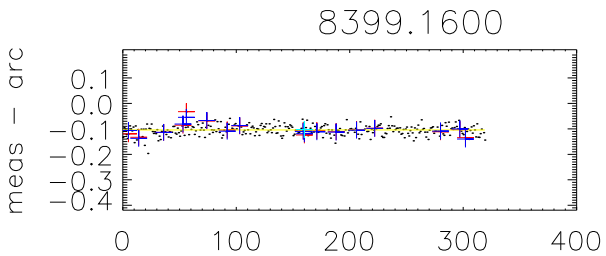

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

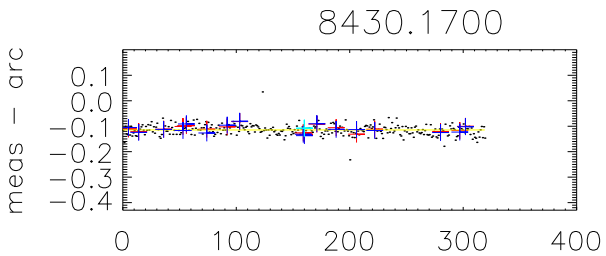

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

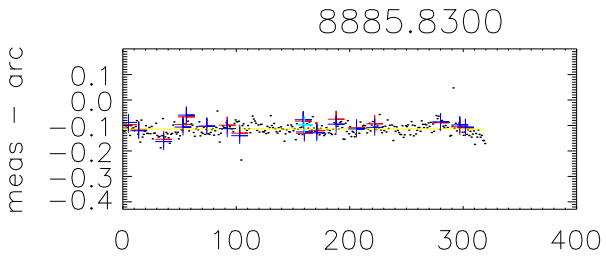

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

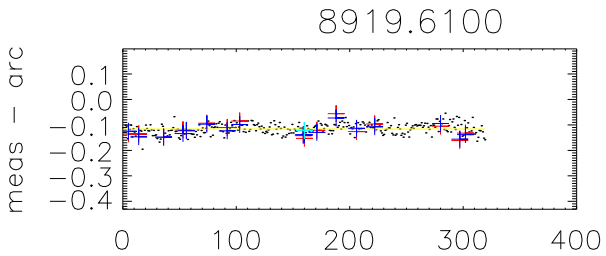

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

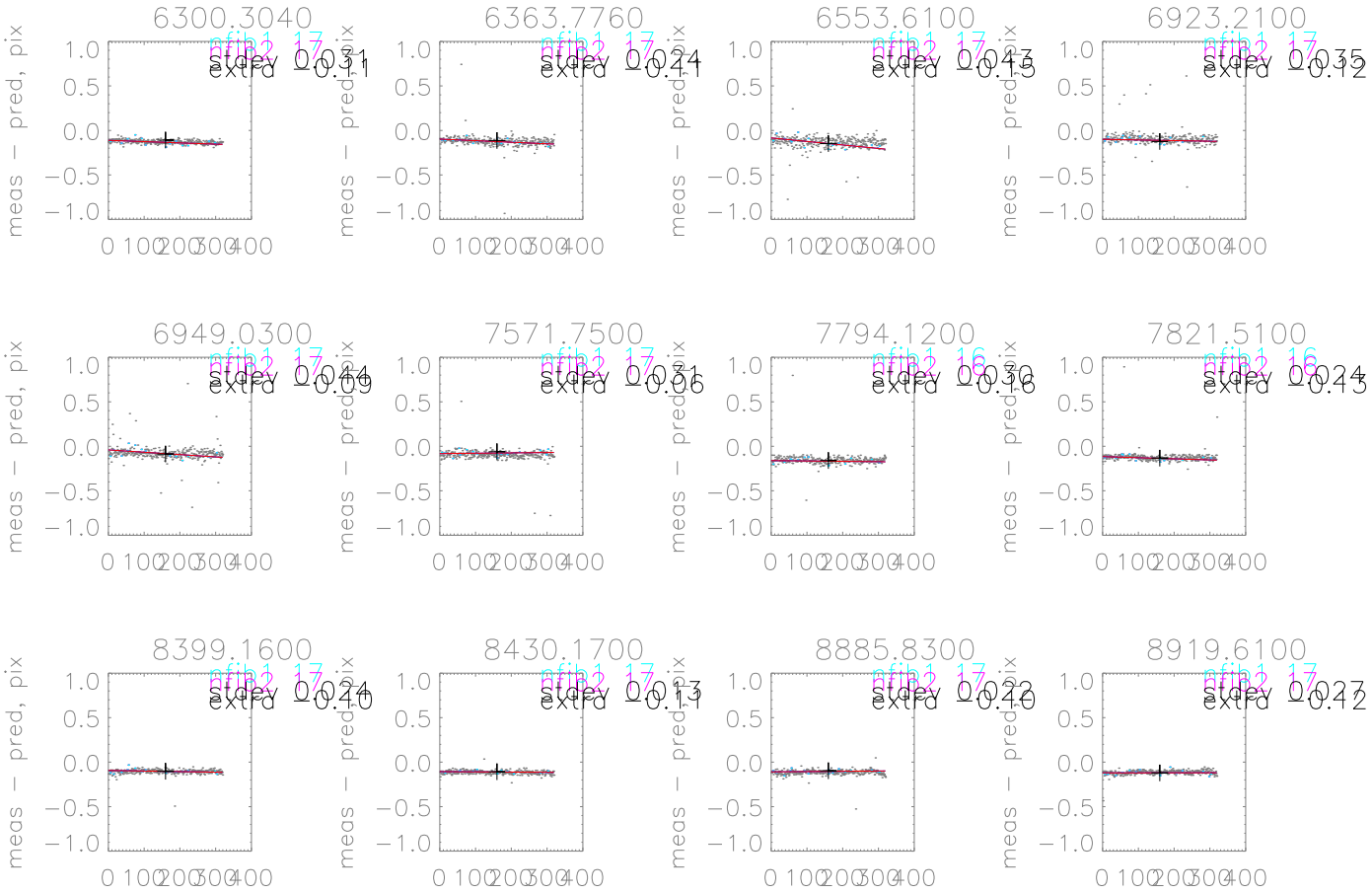

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

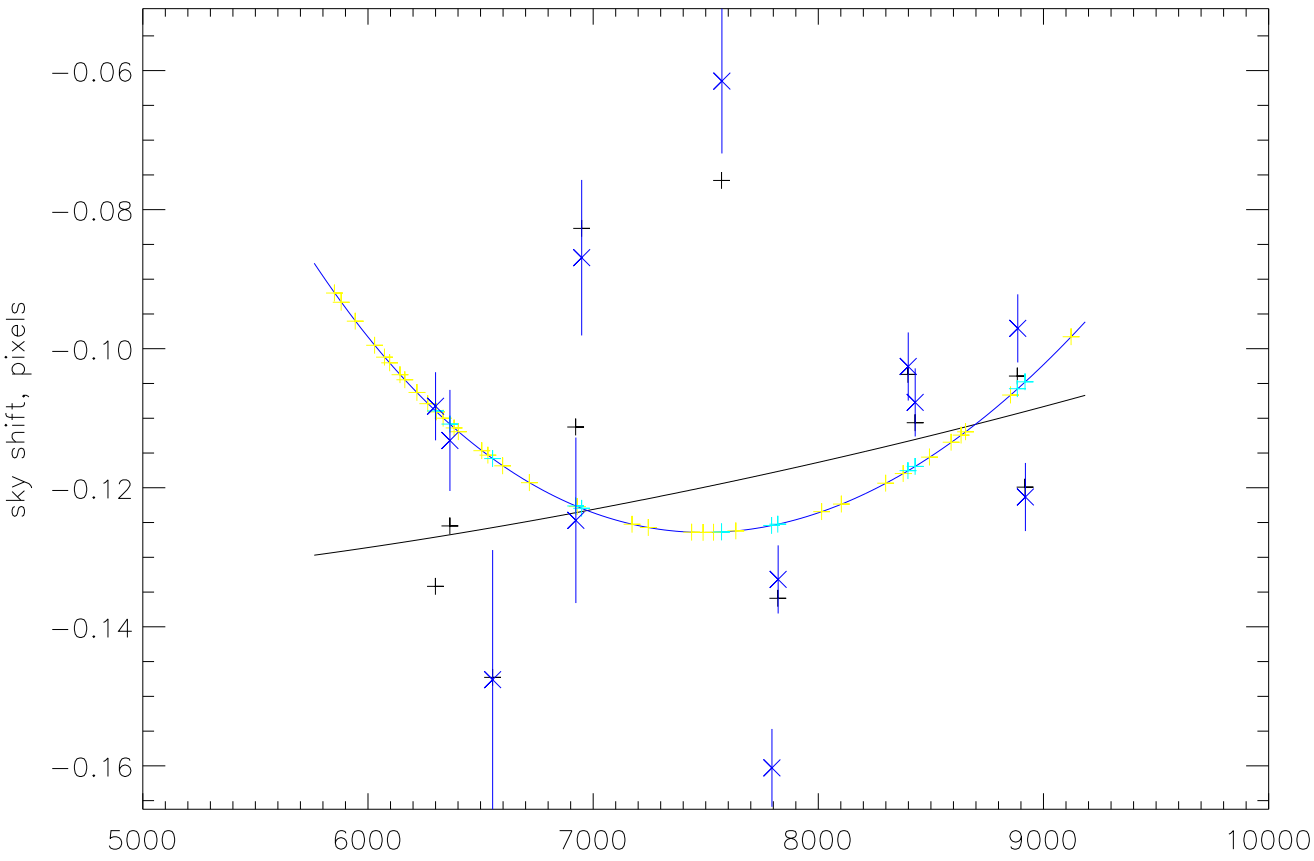

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

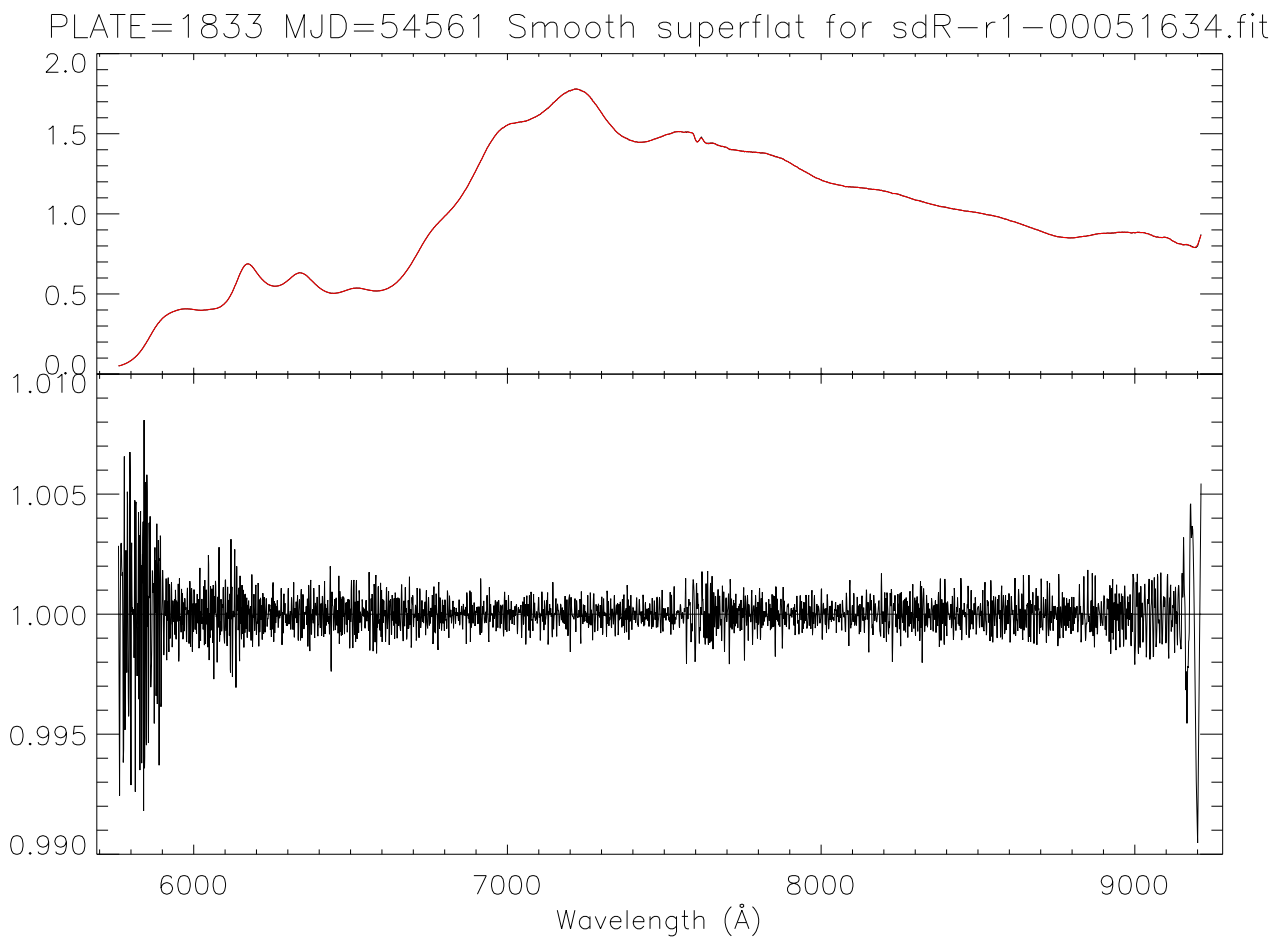

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

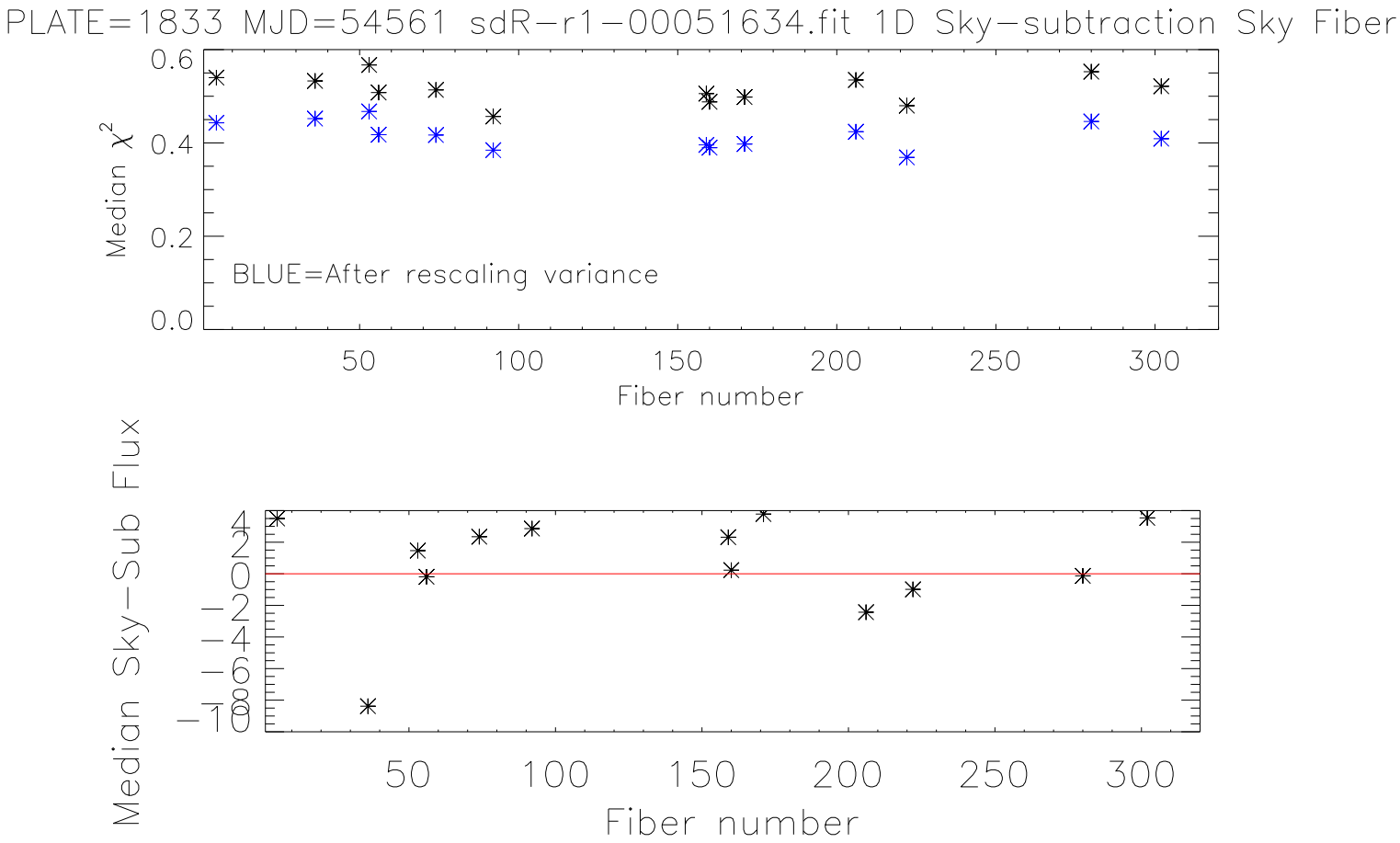

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

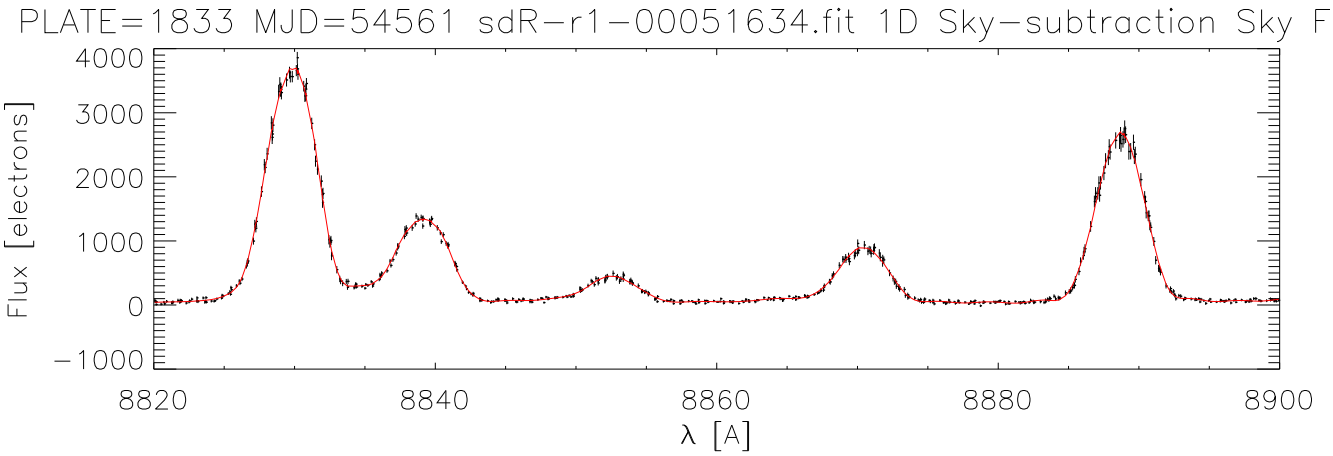

6300.3040
stdev 0.031
extra 0.11
6363.7760
stdev 0.024
extra 0.41
6553.6100
stdev 0.043
extra 0.15
6923.2100
stdev 0.035
extra 0.12
6949.0300
stdev 0.044
extra 0.09
7571.7500
stdev 0.031
extra 0.06
7794.1200
stdev 0.030
extra 0.16
7821.5100
stdev 0.024
extra 0.43
8399.1600
stdev 0.024
extra 0.40
8430.1700
stdev 0.013
extra 0.11
8885.8300
stdev 0.022
extra 0.40
8919.6100
stdev 0.027
extra 0.42
meas − pred, pix
mfhi32 17
mflo32 17

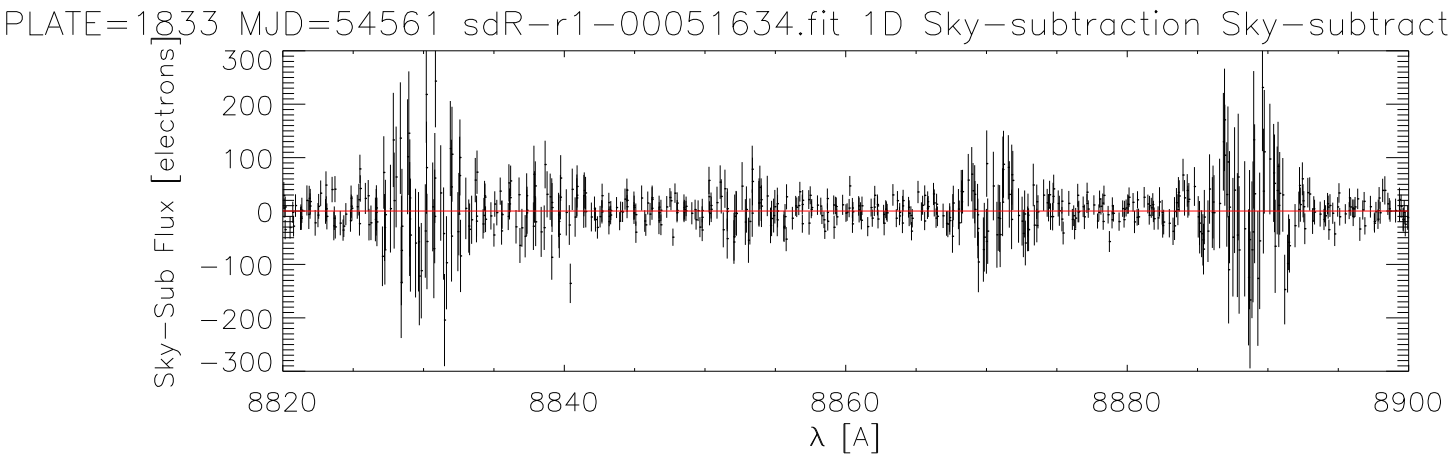

−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
sky shift, pixels
5000
6000
7000
8000
9000
10000

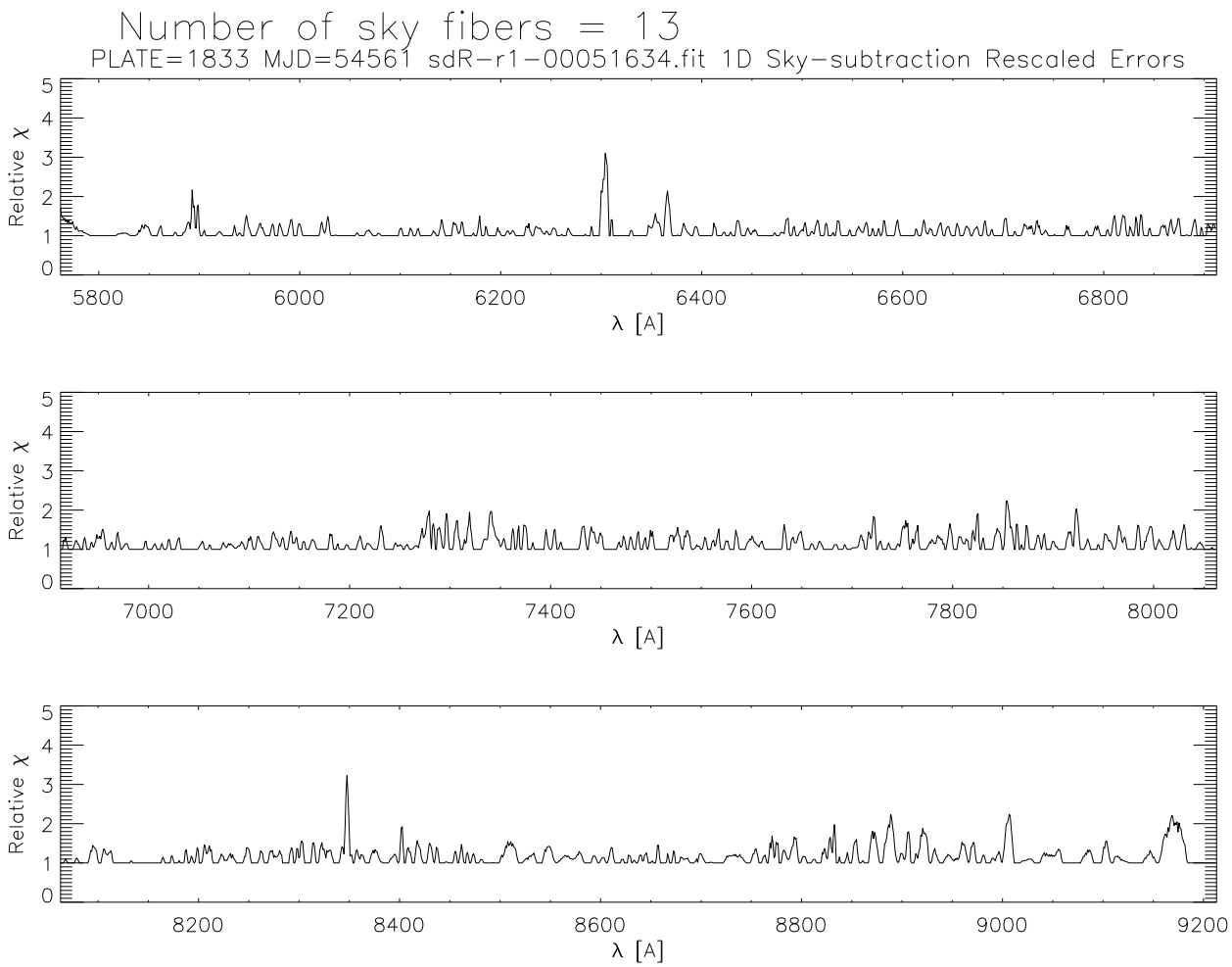
es= 0.0000

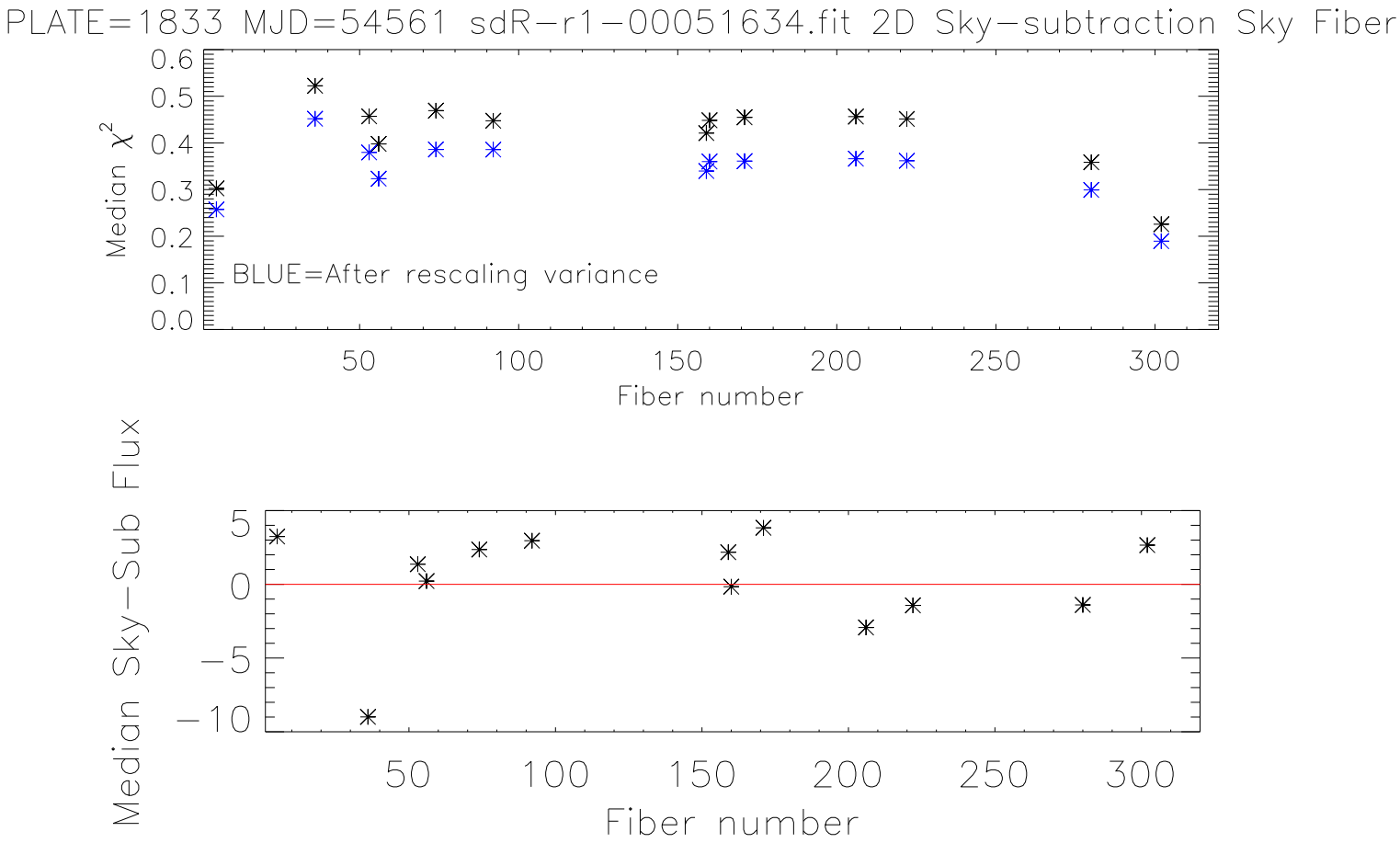

PLATE=1833 MJD=54561 Smooth superflat for sdR-r1-00051634.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

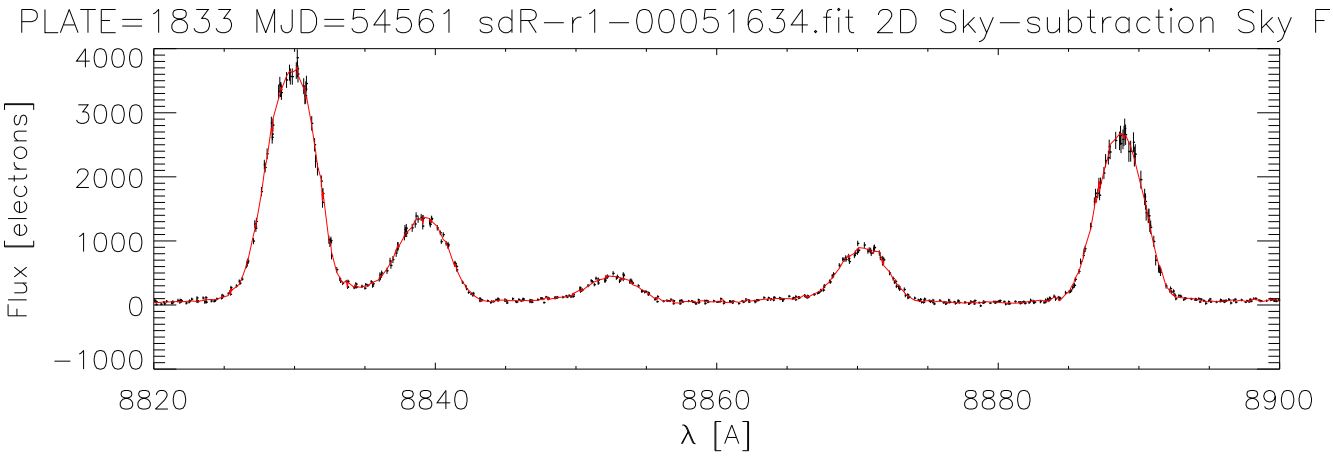

PLATE=1833 MJD=54561 sdR-r1-00051634.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−8
−6
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number

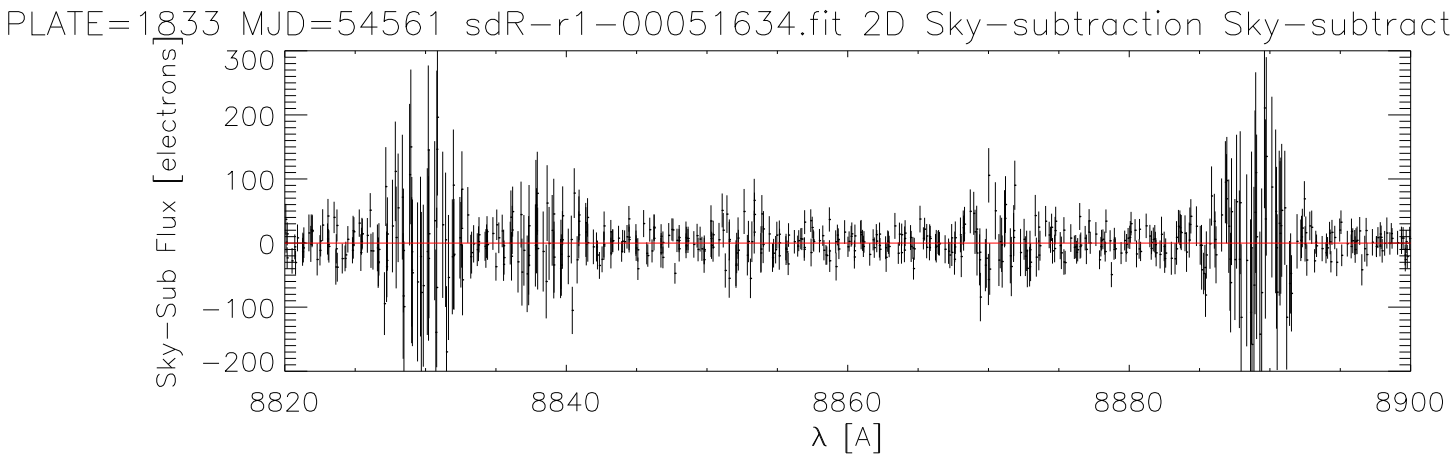

PLATE=1833 MJD=54561 sdR-r1-00051634.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

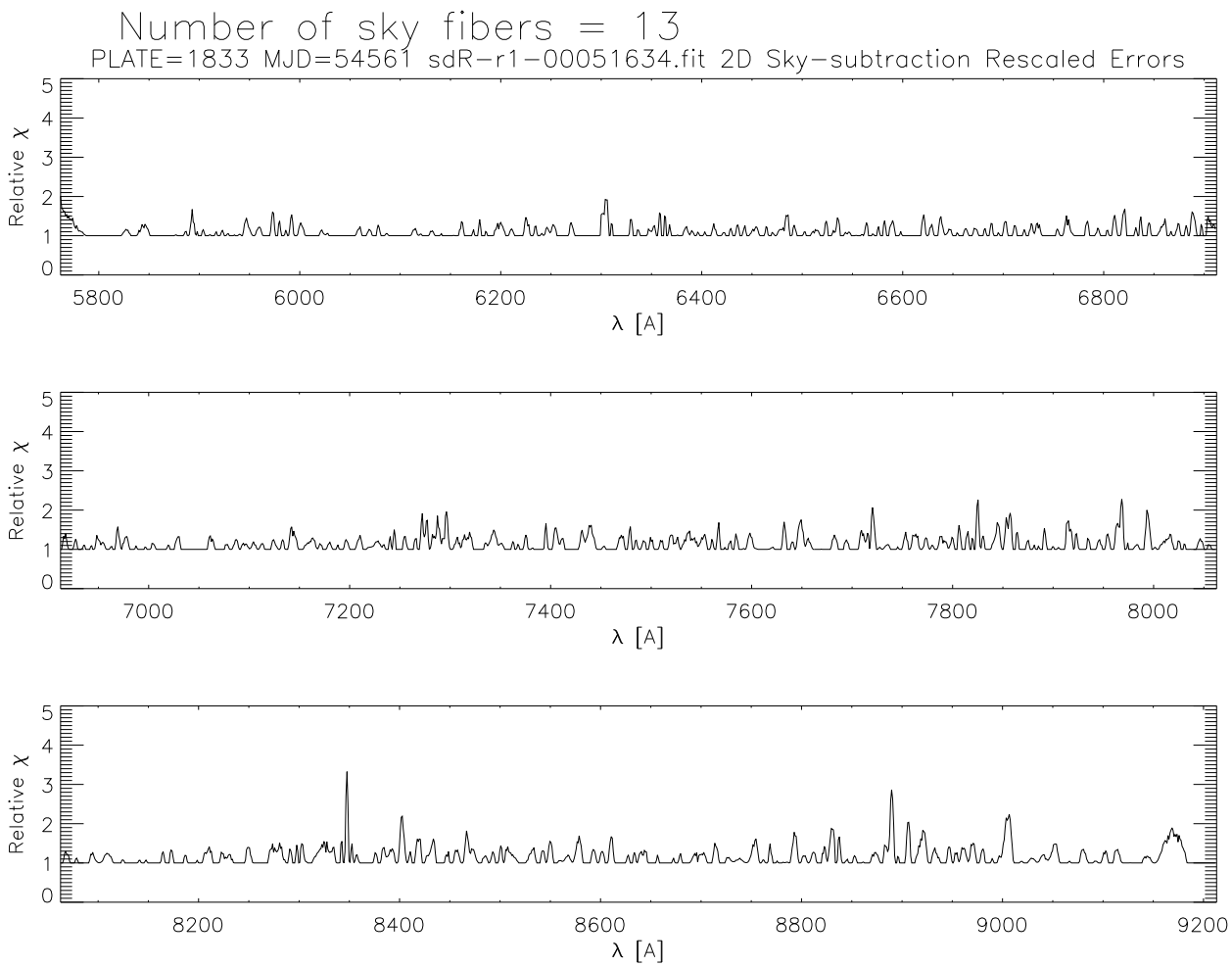

PLATE=1833 MJD=54561 sdR-r1-00051634.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

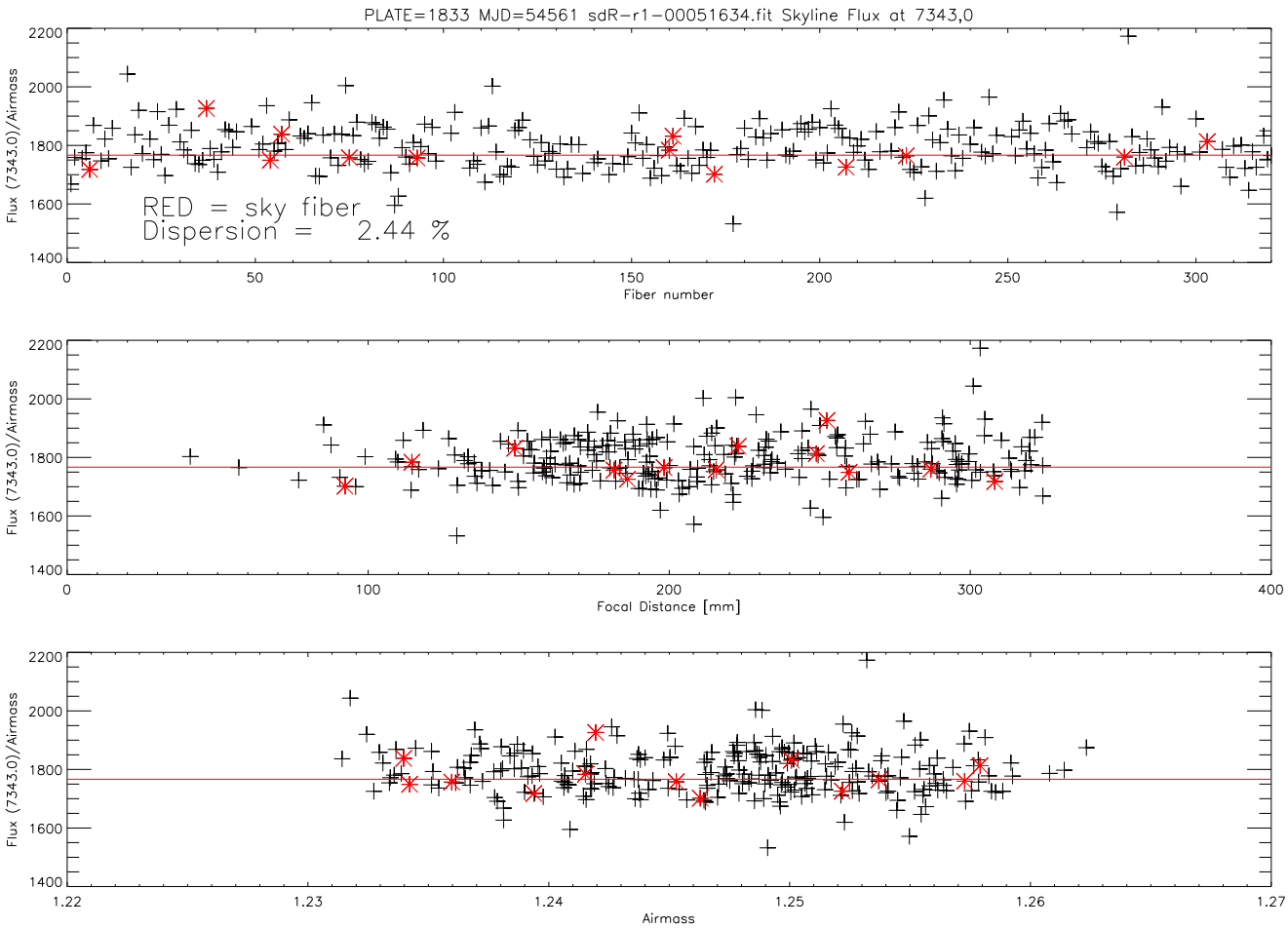

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-r1-00051634.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

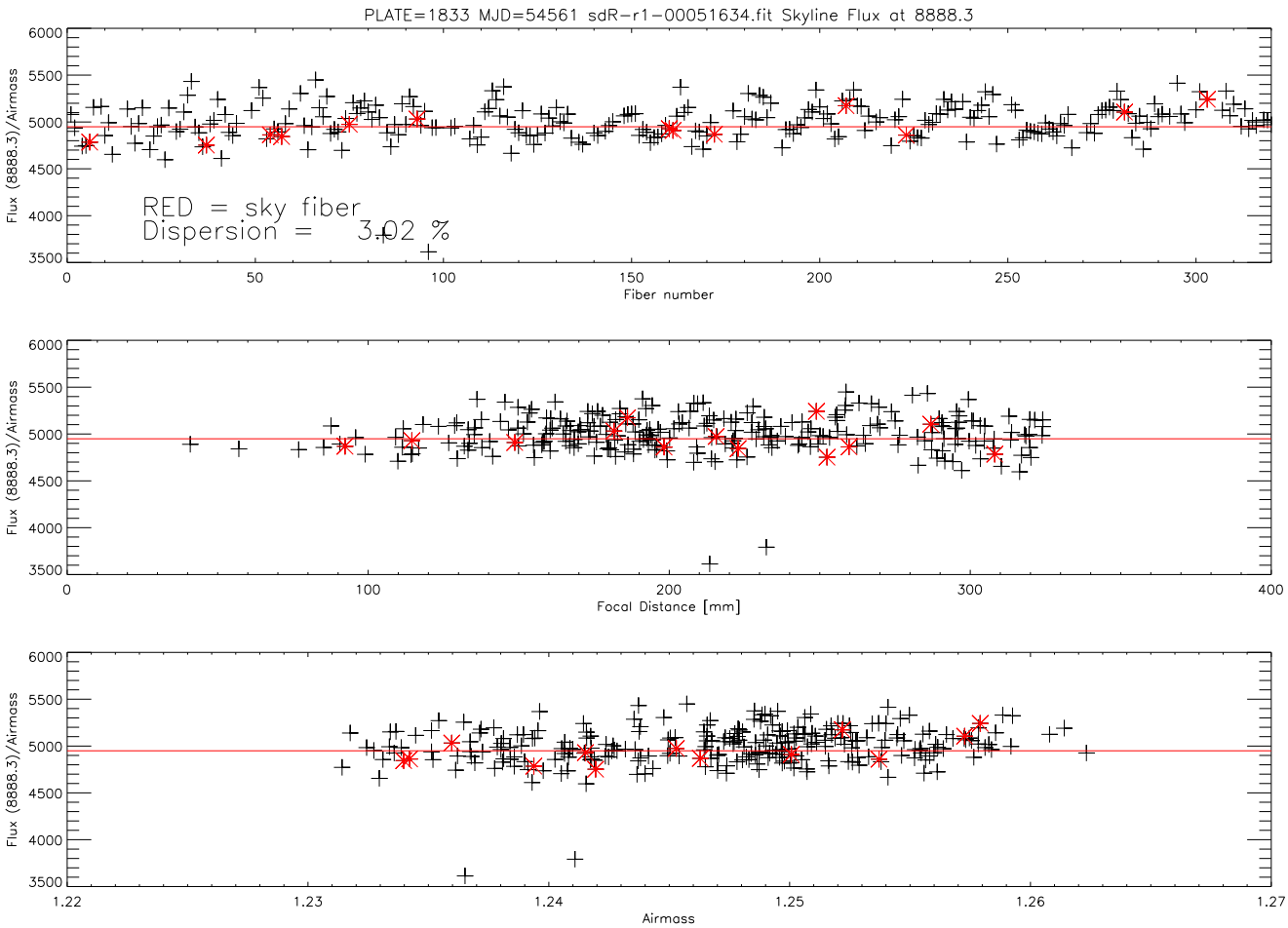

PLATE=1833 MJD=54561 sdR-r1-00051634.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

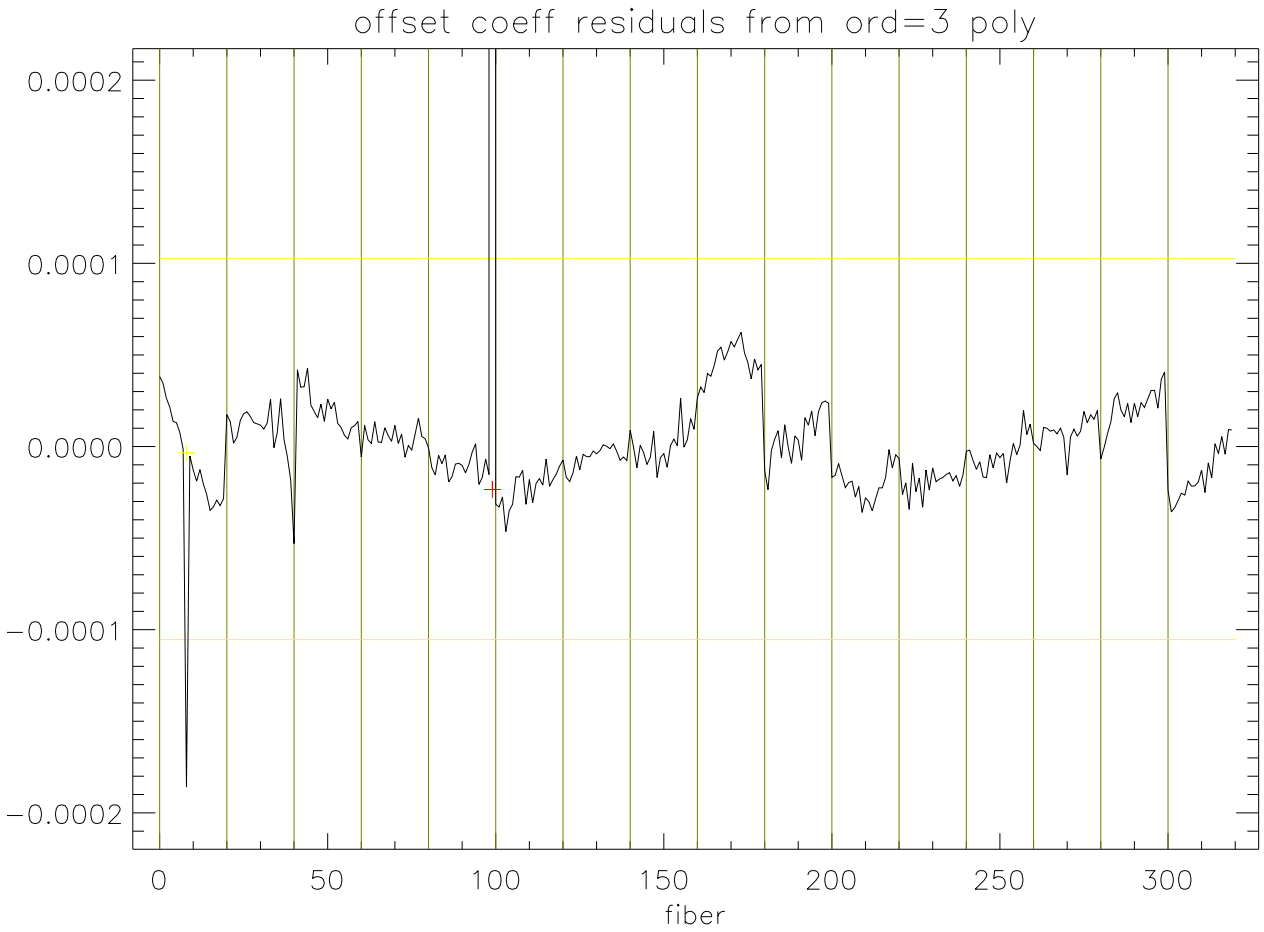

PLATE=1833 MJD=54561 sdR-r1-00051634.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

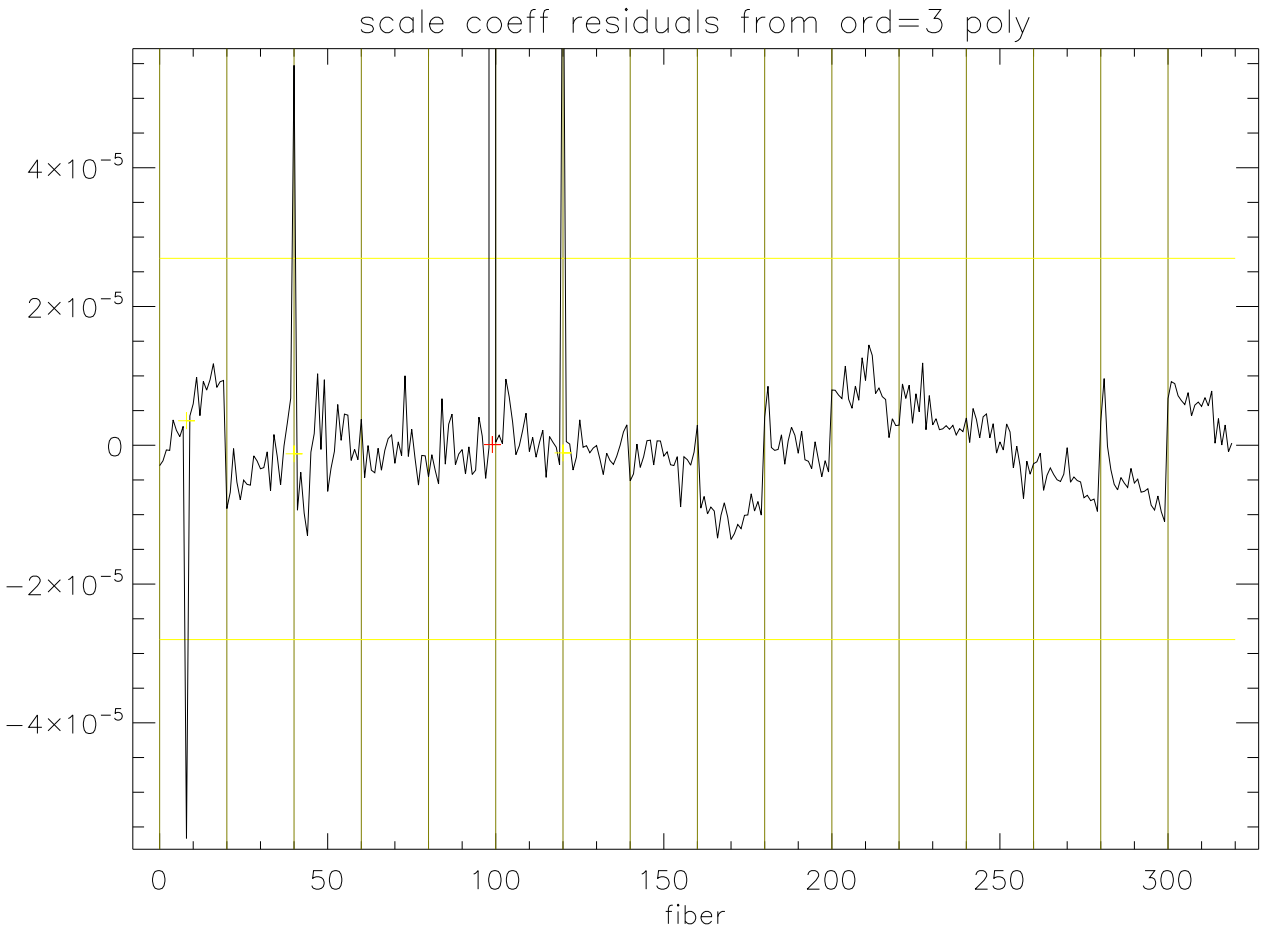

PLATE=1833 MJD=54561 sdR-r1-00051634.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

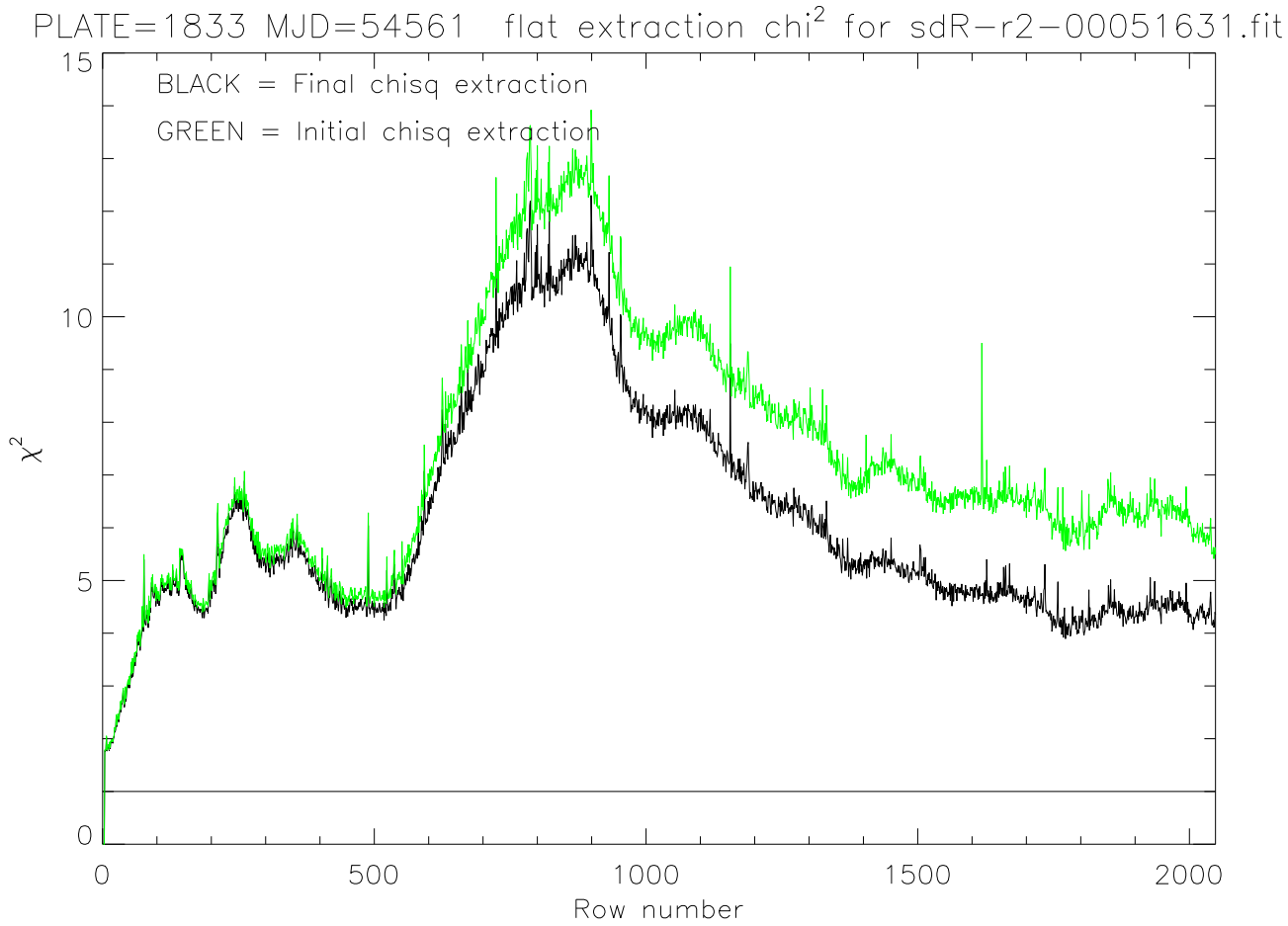

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-r1-00051634.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

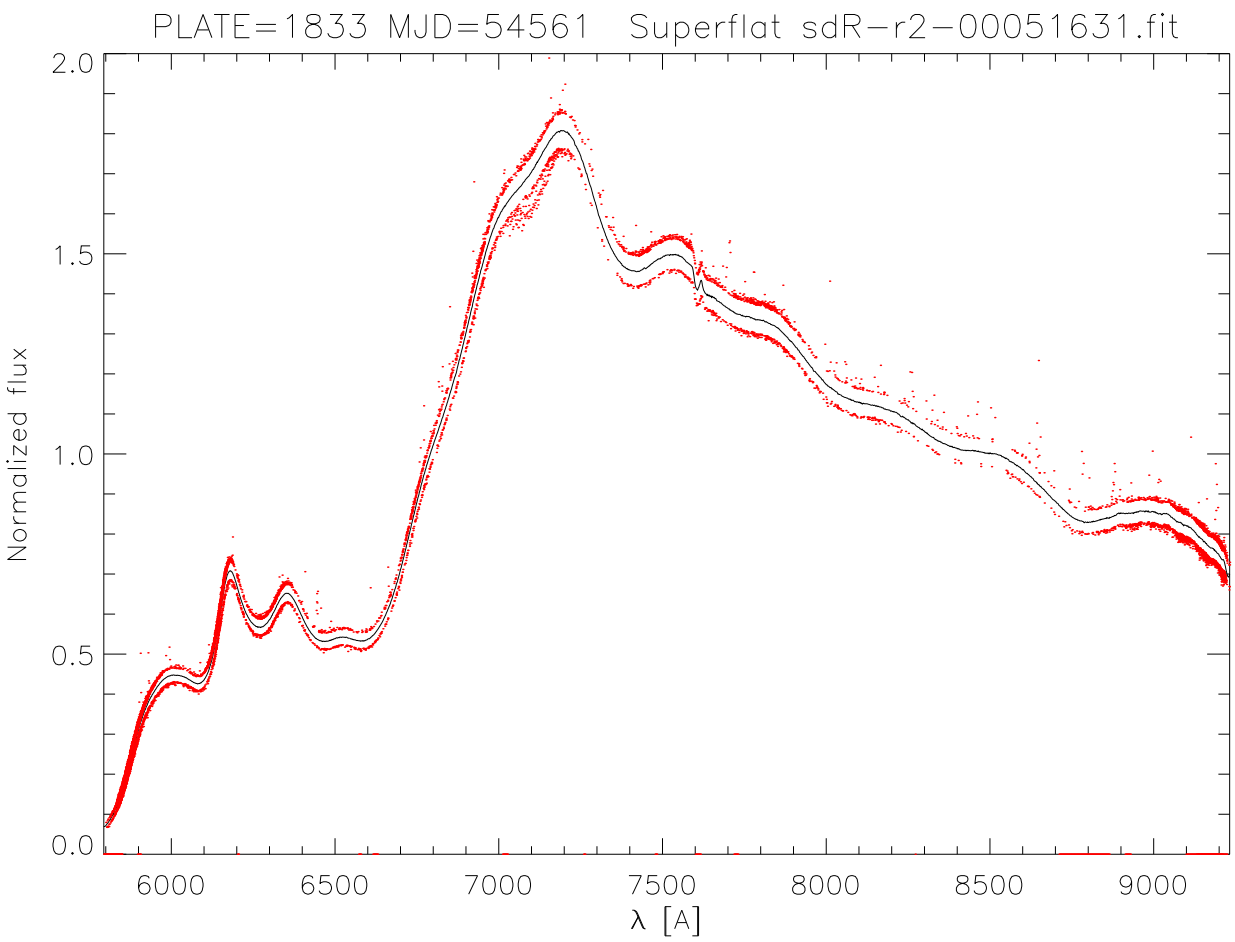

PLATE=1833 MJD=54561 sdR-r1-00051634.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.44 %
Fiber number
Focal Distance [mm]
Airmass

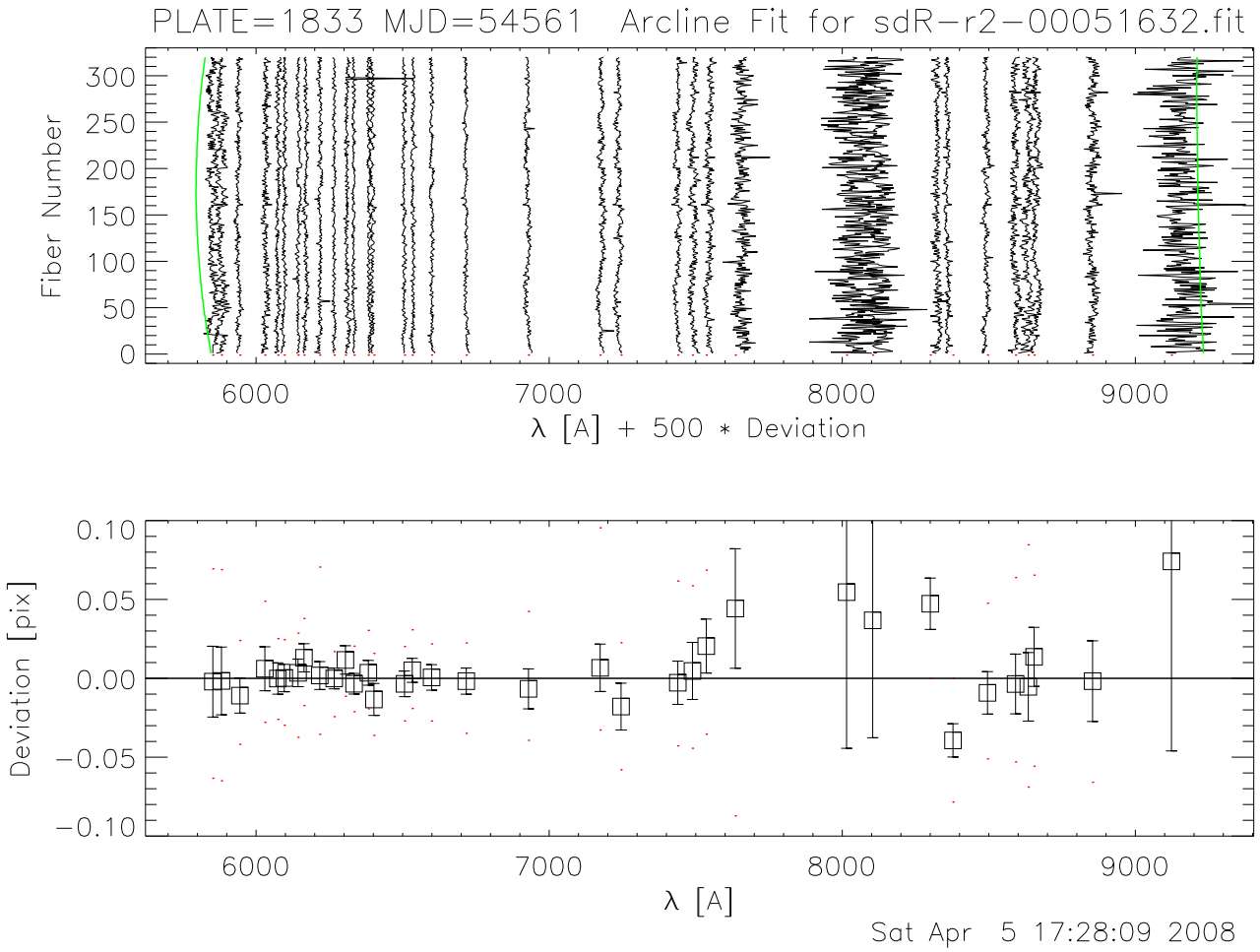

PLATE=1833 MJD=54561 sdR-r1-00051634.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.02 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

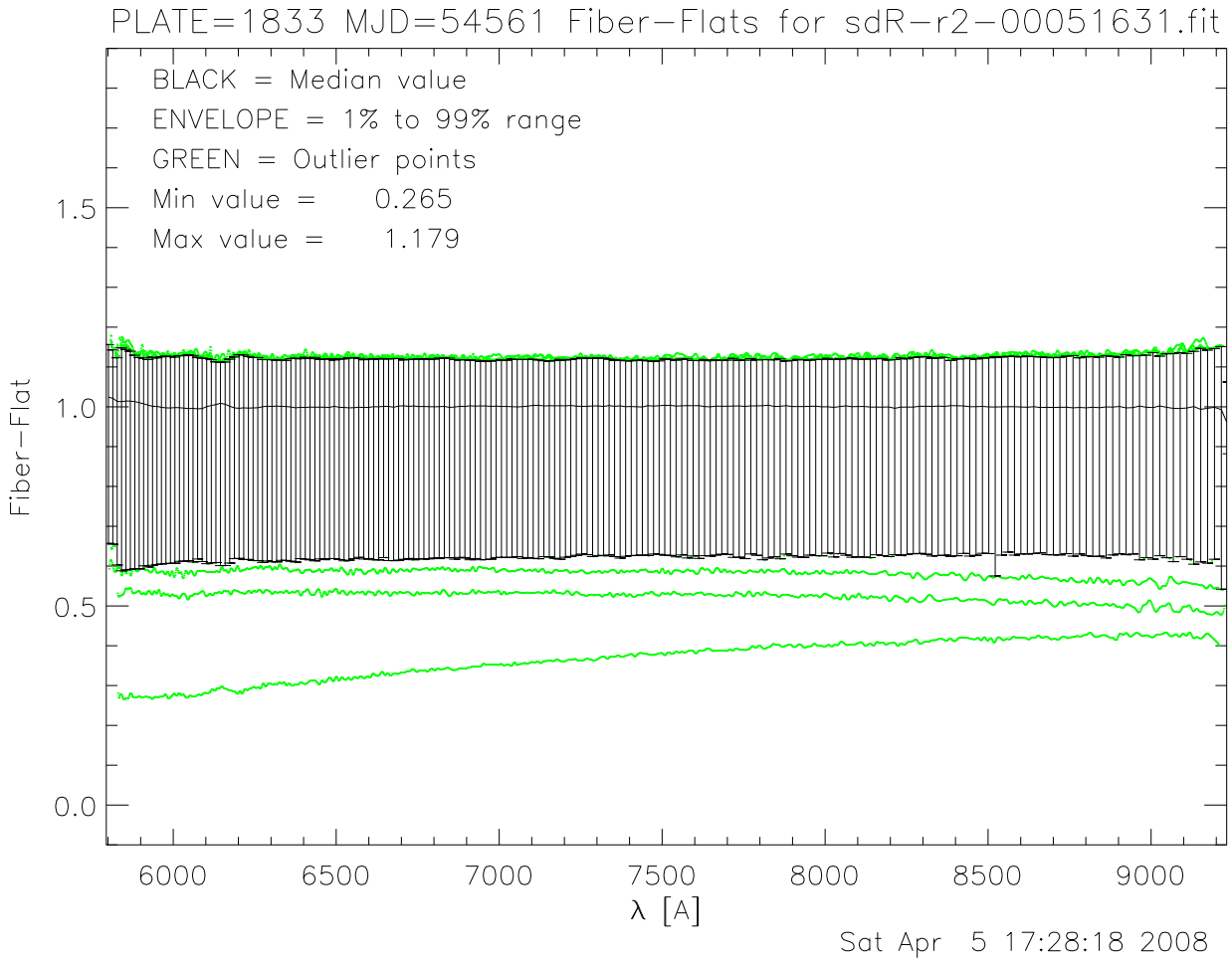

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

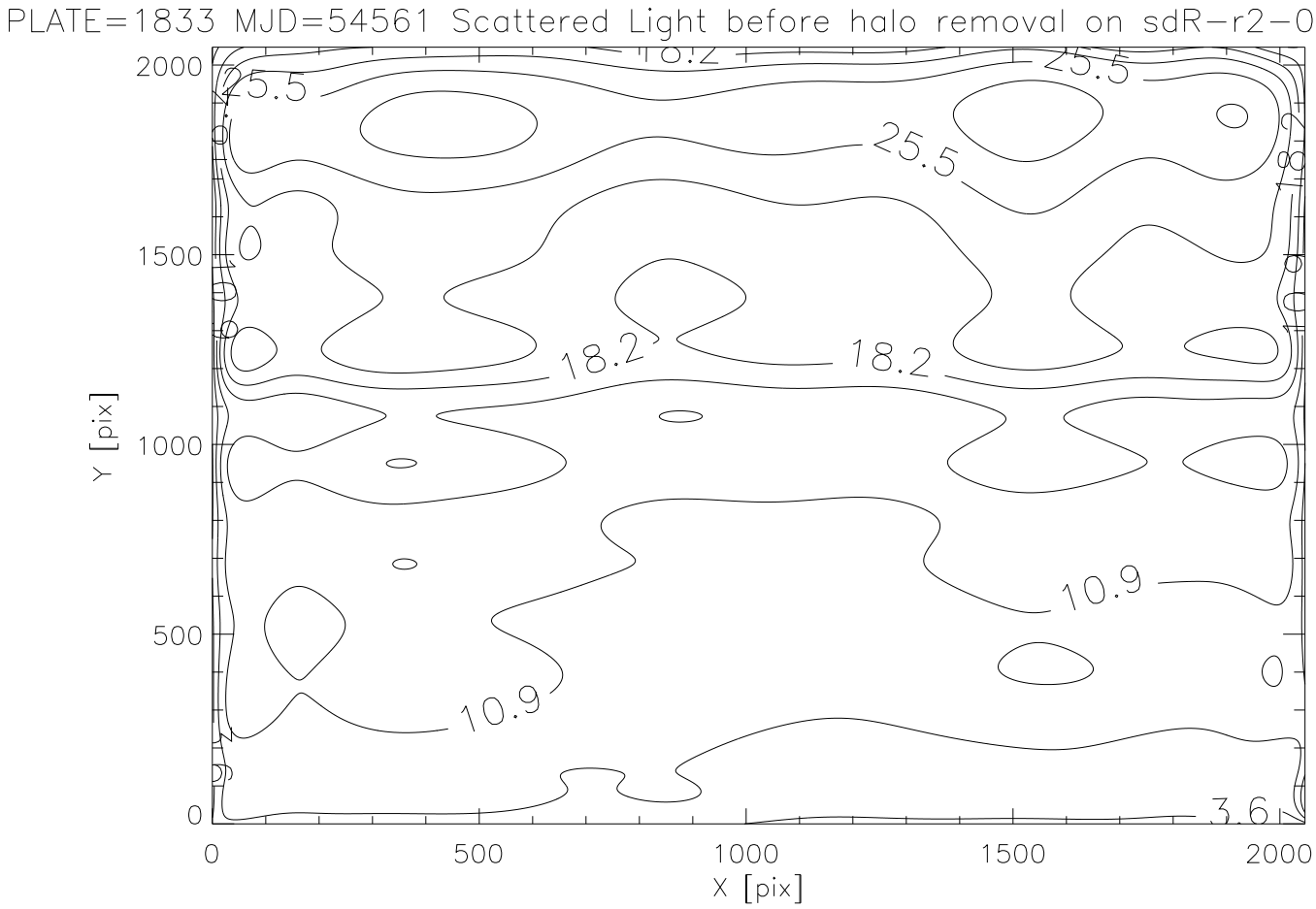

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

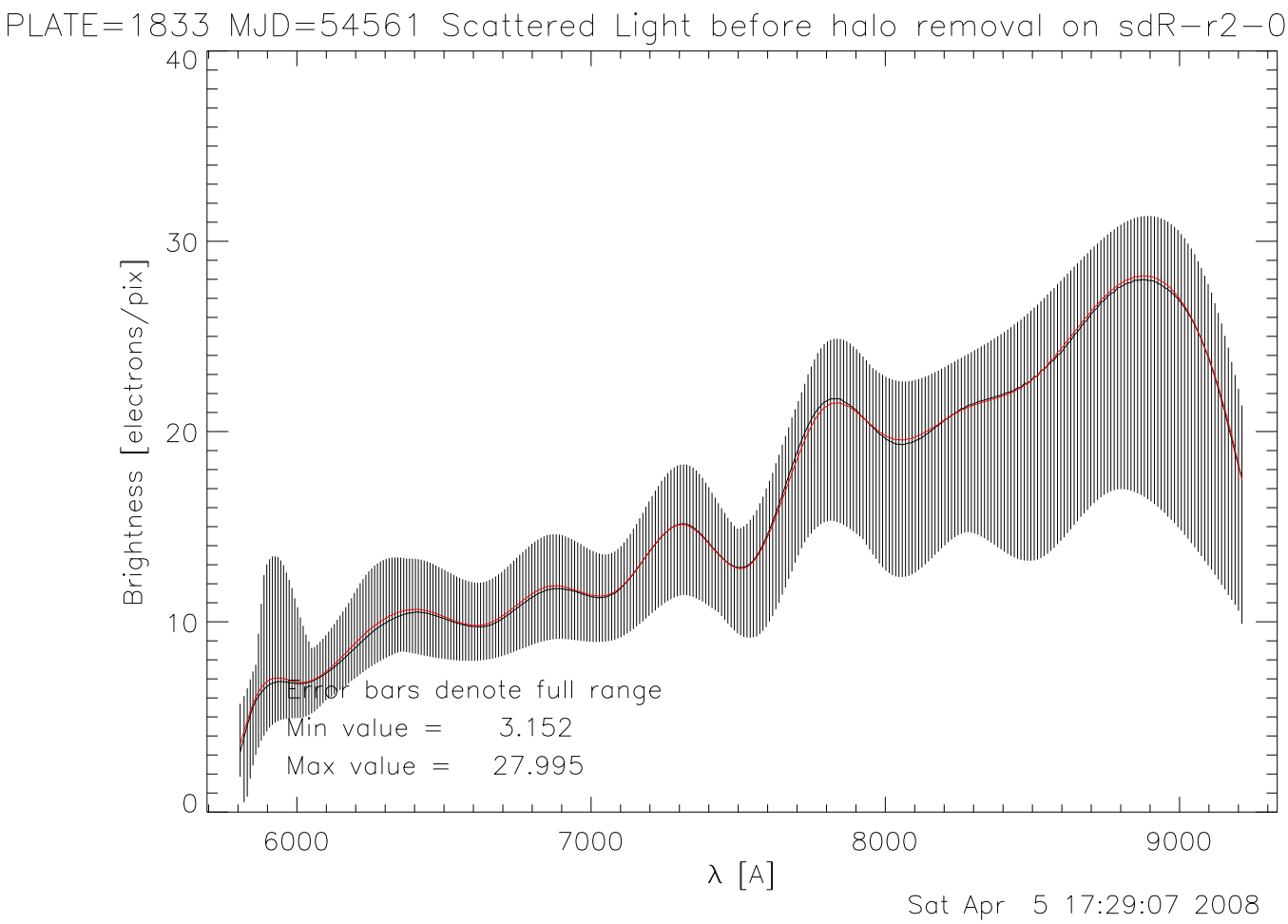

PLATE=1833 MJD=54561 flat extraction chi^2 for sdR−r2−00051631.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

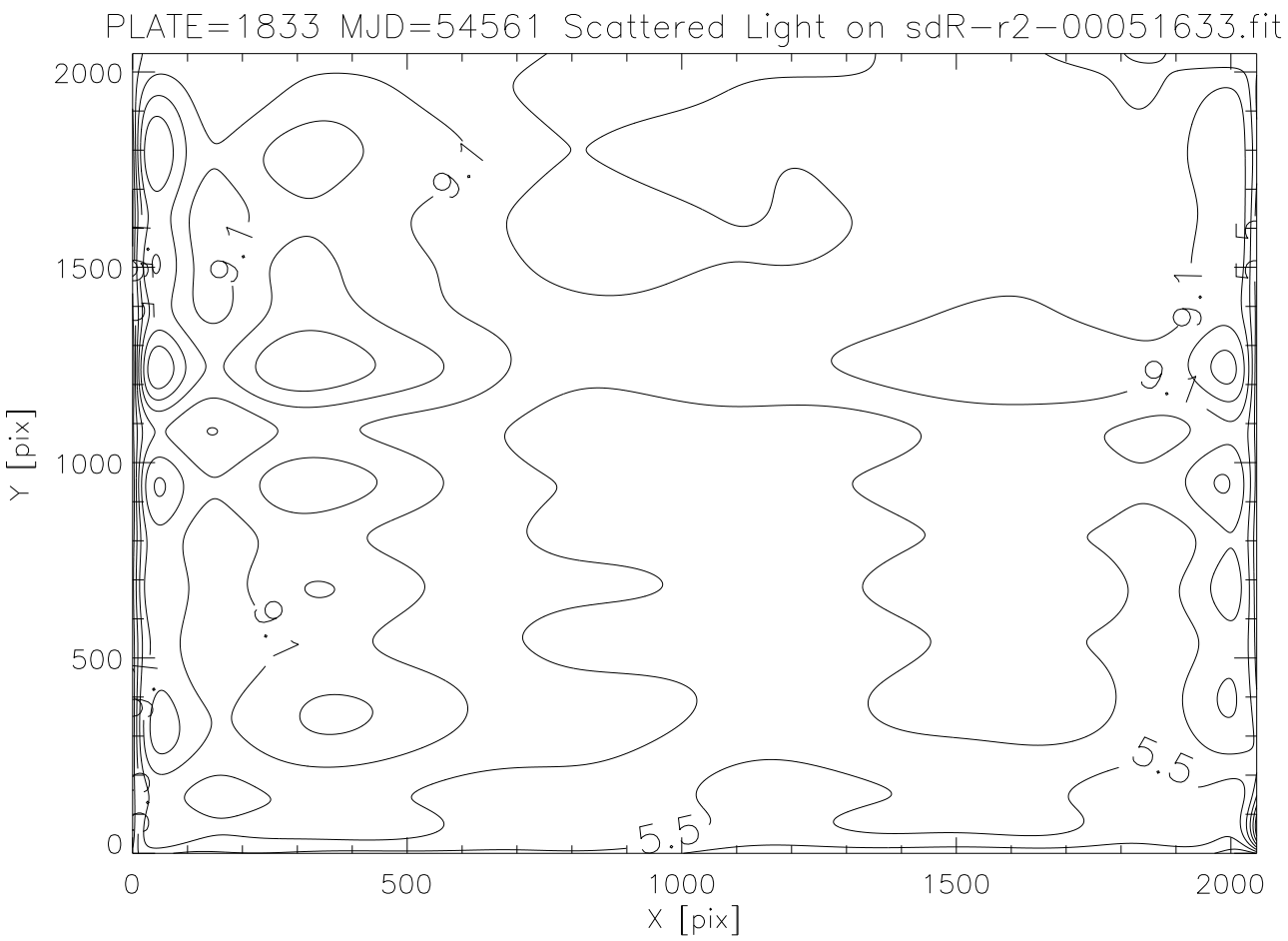

PLATE=1833 MJD=54561 Superflat sdR-r2-00051631.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

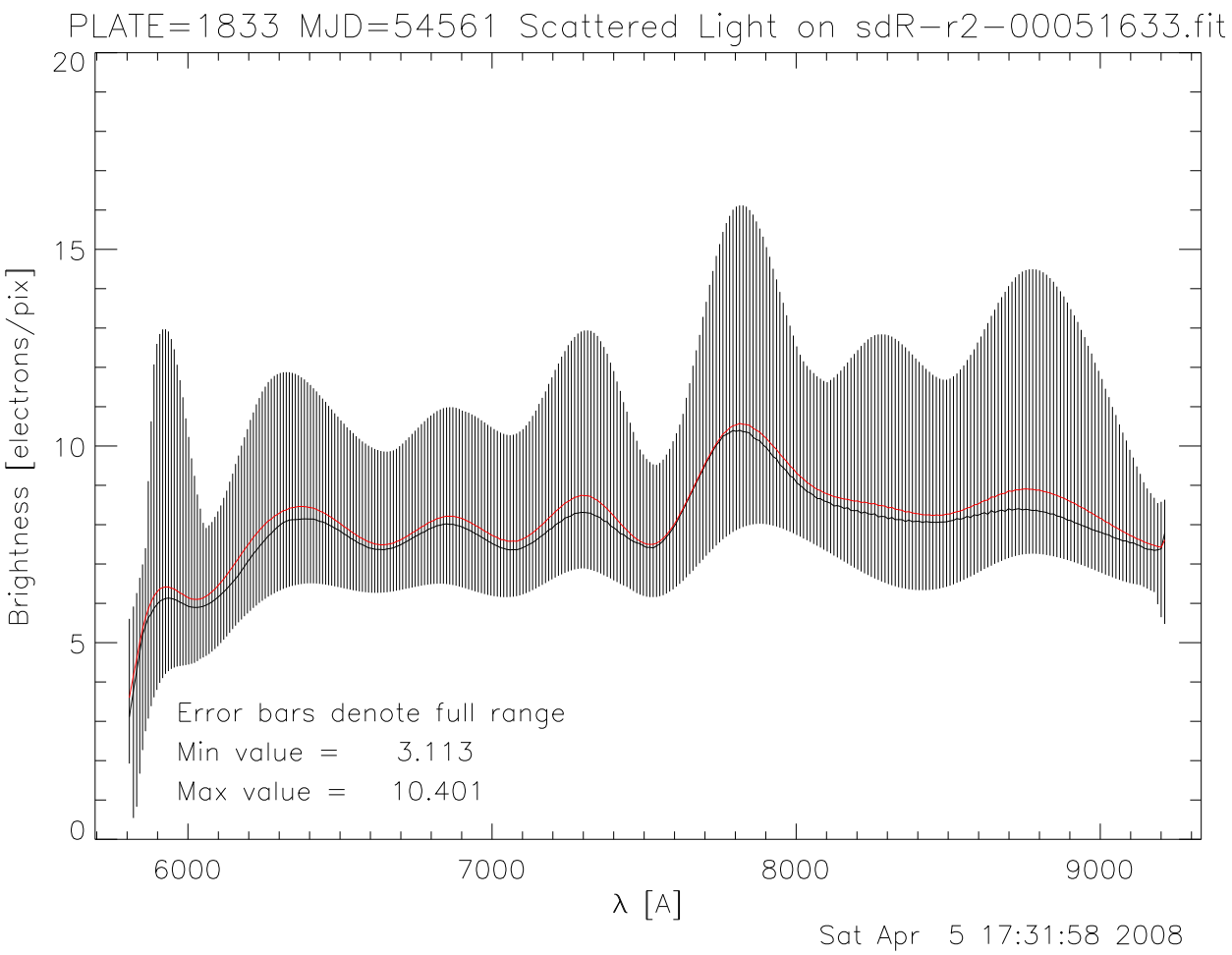

PLATE=1833 MJD=54561 Arcline Fit for sdR-r2-00051632.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Apr 5 17:28:09 2008

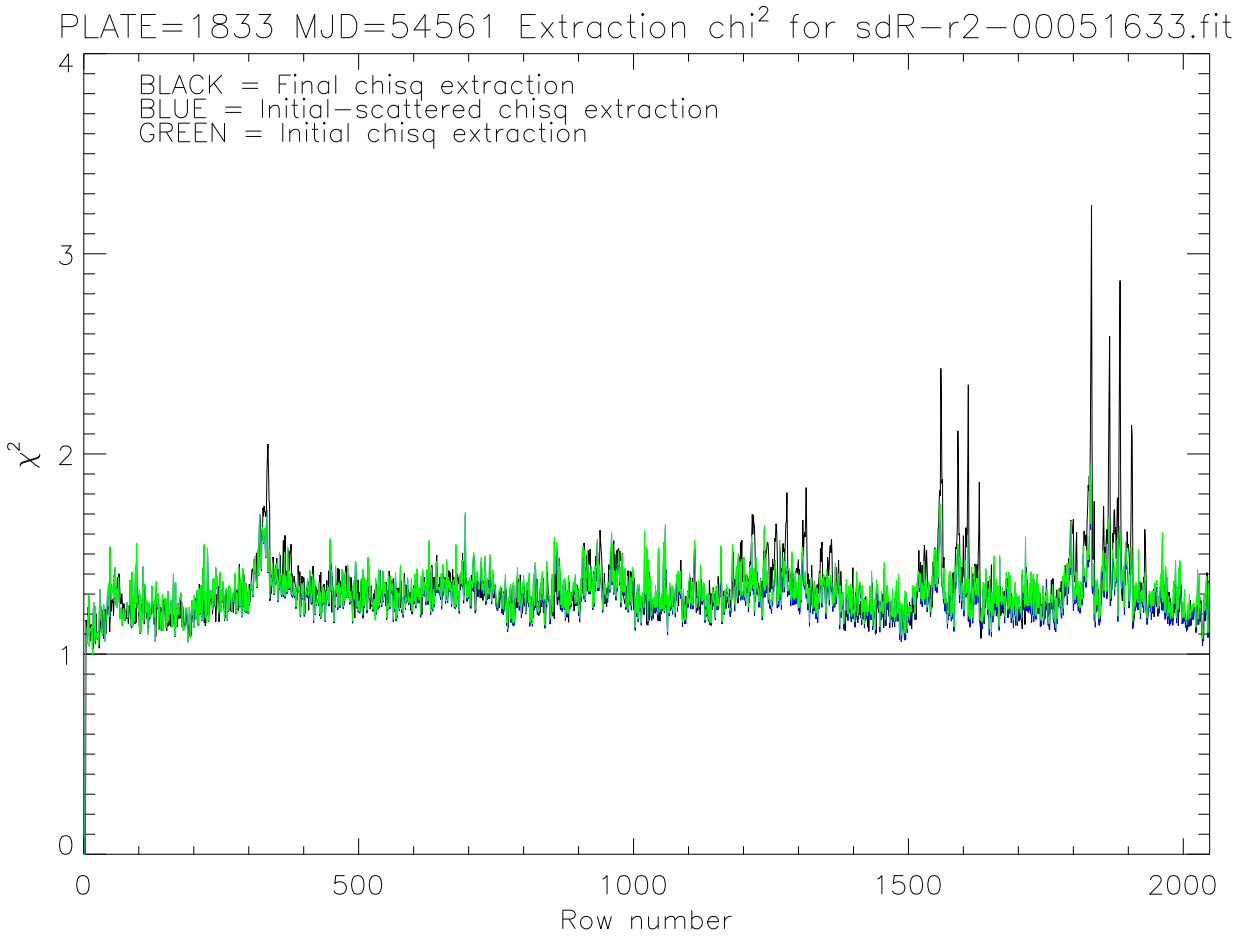

PLATE=1833 MJD=54561 Fiber−Flats for sdR−r2−00051631.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.265
Max value = 1.179
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Apr 5 17:28:18 2008

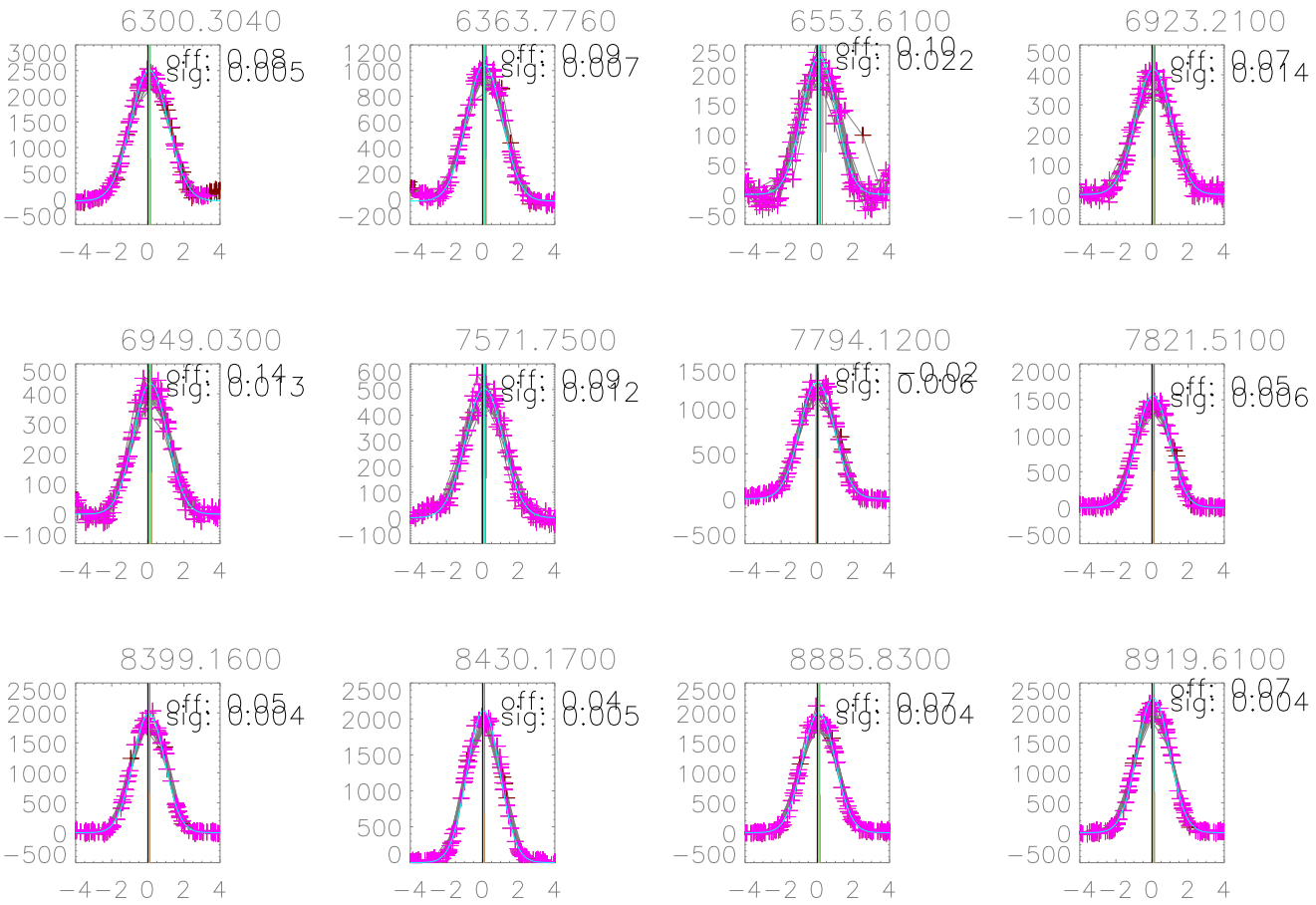

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-r2-00051633.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
0
0
3.6
Y [pix]
X [pix]
0
500
1000
1500
2000

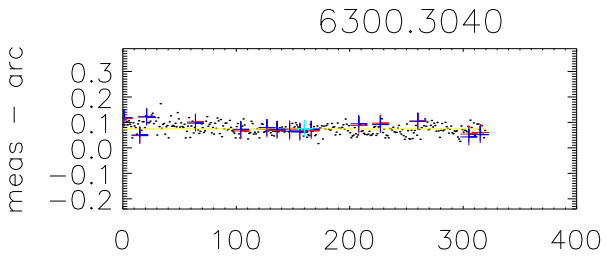

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-r2-00051633.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.152
Max value = 27.995
Sat Apr 5 17:29:07 2008

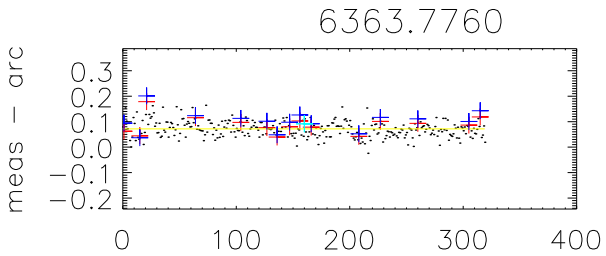

PLATE=1833 MJD=54561 Scattered Light on sdR-r2-00051633.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
9.1
9.1
9.1
5.5
5.5

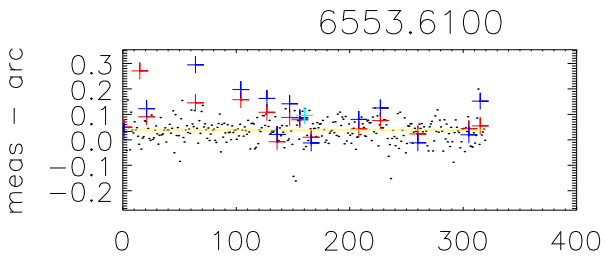

PLATE=1833 MJD=54561 Scattered Light on sdR-r2-00051633.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.113
Max value = 10.401
Sat Apr 5 17:31:58 2008

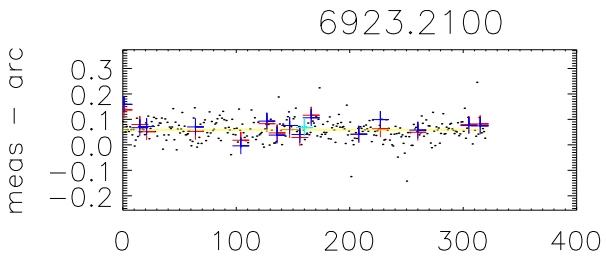

PLATE=1833 MJD=54561 Extraction chi^2 for sdR−r2−00051633.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

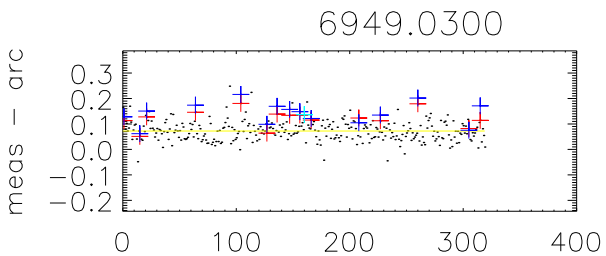

6300.3040
off: 0.08
sig: 0.005
6363.7760
off: 0.09
sig: 0.007
6553.6100
off: 0.10
sig: 0.022
6923.2100
off: 0.07
sig: 0.014
6949.0300
off: 0.14
sig: 0.013
7571.7500
off: 0.09
sig: 0.012
7794.1200
off: -0.02
sig: 0.006
7821.5100
off: 0.05
sig: 0.006
8399.1600
off: 0.05
sig: 0.004
8430.1700
off: 0.04
sig: 0.005
8885.8300
off: 0.07
sig: 0.004
8919.6100
off: 0.07
sig: 0.004

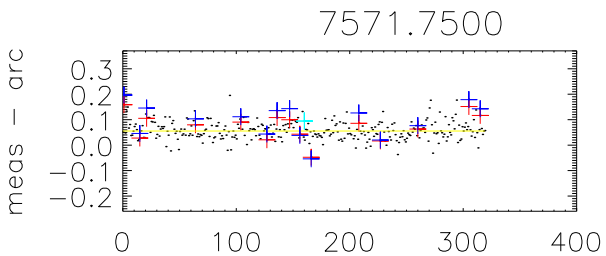

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

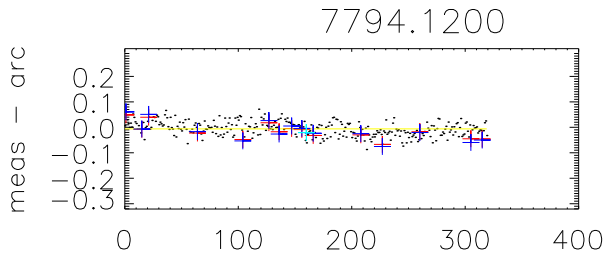

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

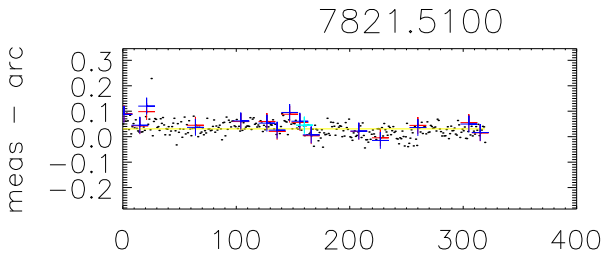

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

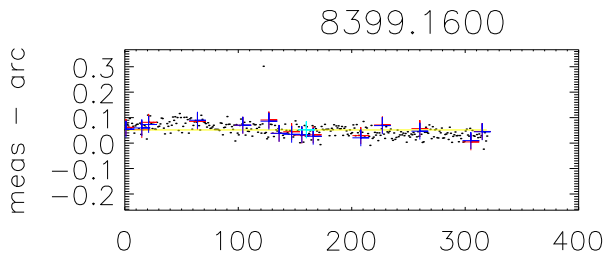

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

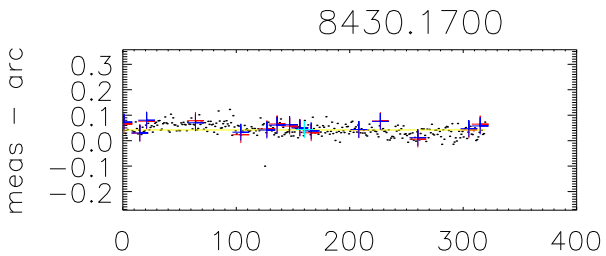

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

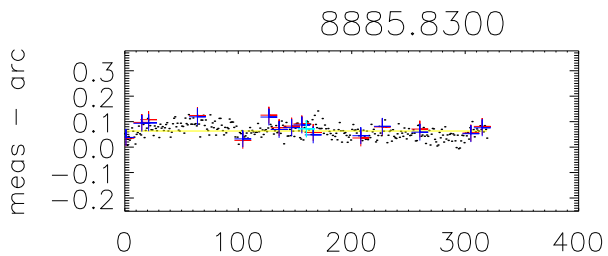

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

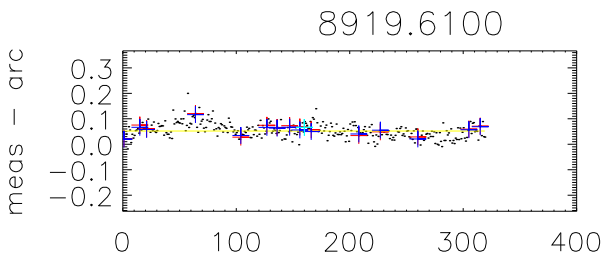

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

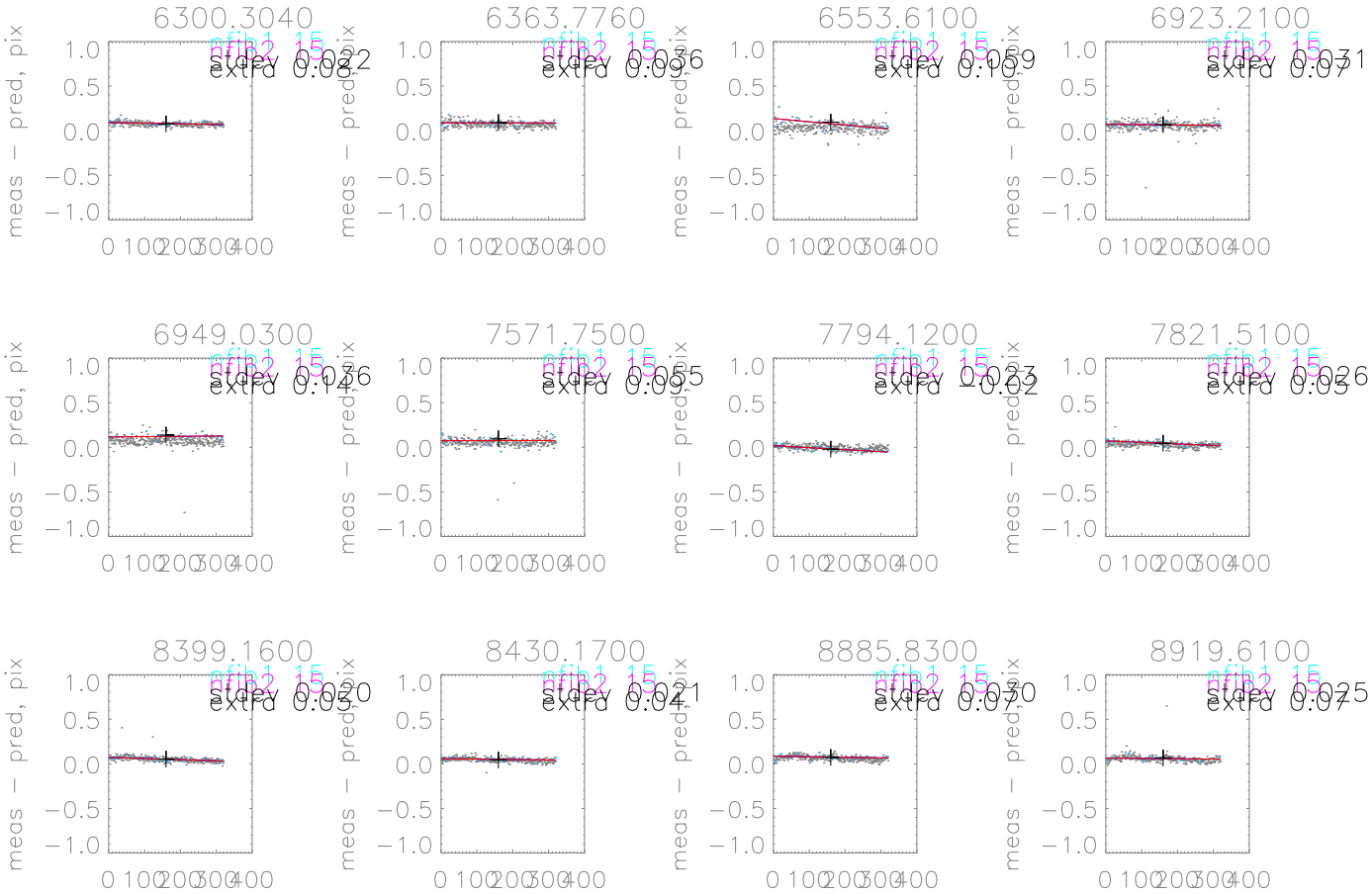

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

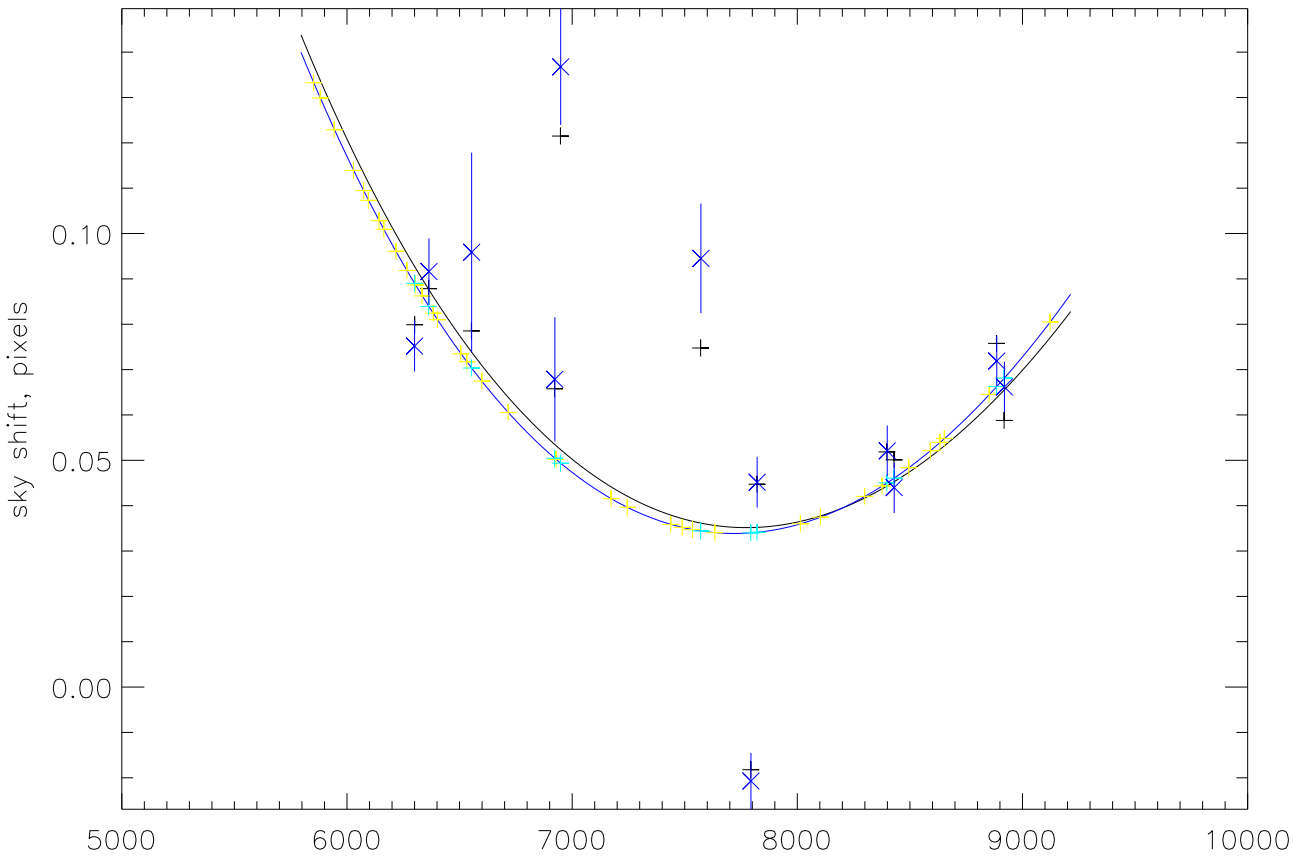

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

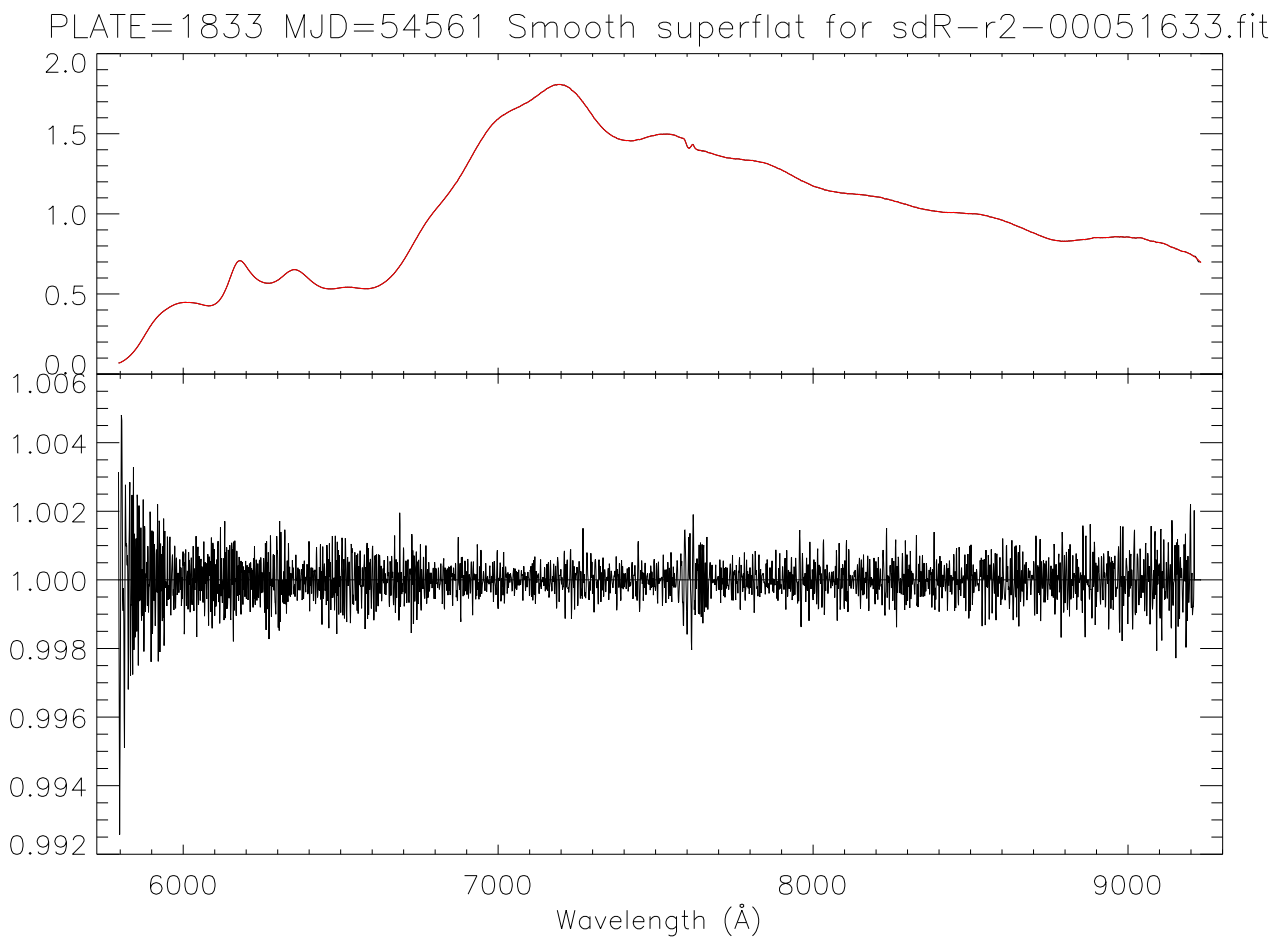

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

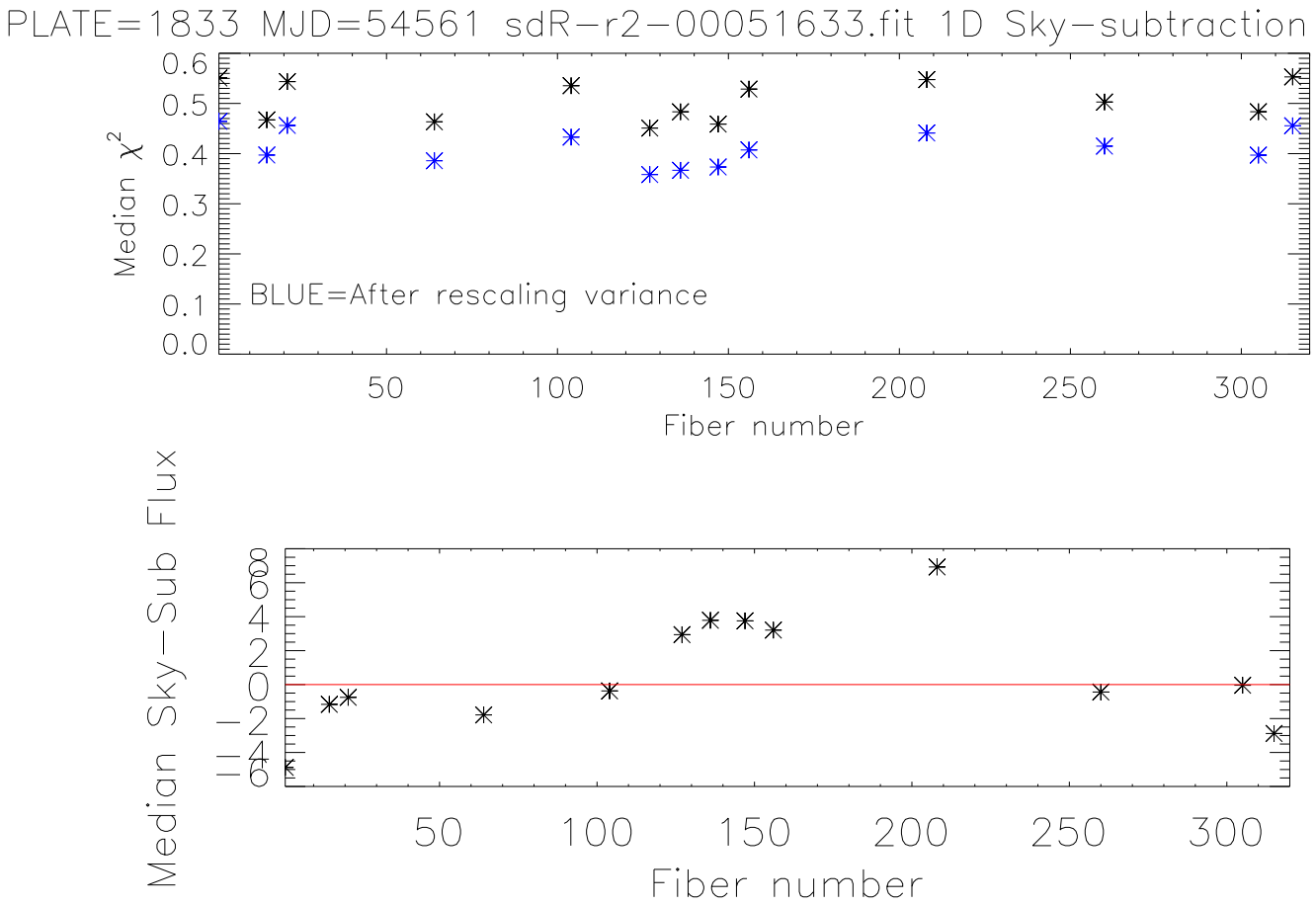

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

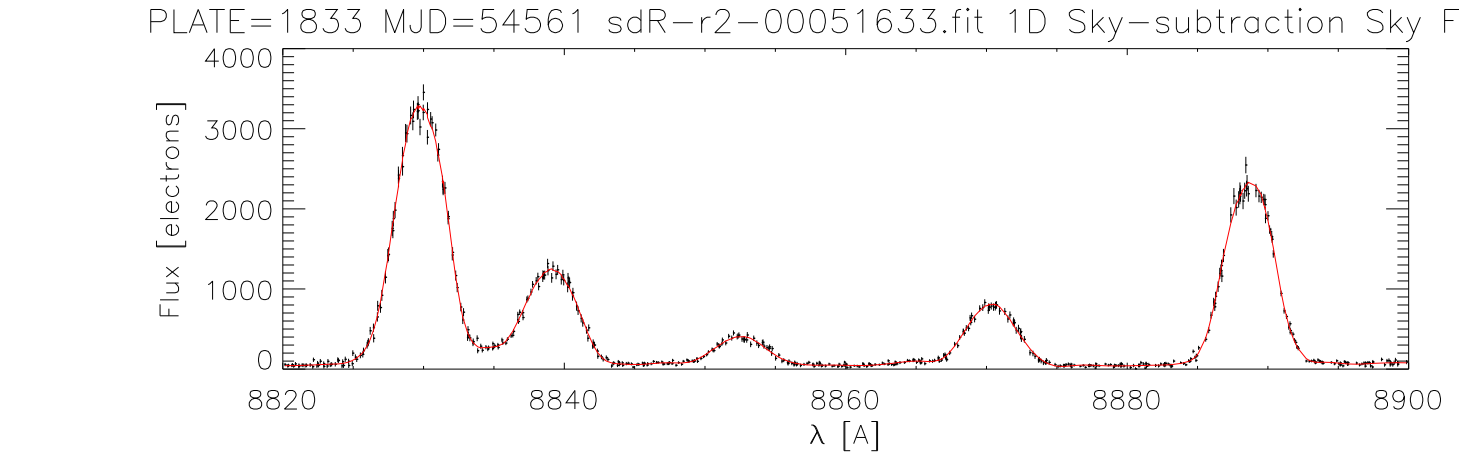

6300.3040
stdev 0.022
extra 0.082
6363.7760
stdev 0.036
extra 0.096
6553.6100
stdev 0.059
extra 0.109
6923.2100
stdev 0.031
extra 0.077
6949.0300
stdev 0.036
extra 0.146
7571.7500
stdev 0.055
extra 0.095
7794.1200
stdev 0.033
extra −0.02
7821.5100
stdev 0.026
extra 0.095
8399.1600
stdev 0.020
extra 0.053
8430.1700
stdev 0.021
extra 0.044
8885.8300
stdev 0.030
extra 0.077
8919.6100
stdev 0.025
extra 0.077
meas − pred, pix
mfh32 15

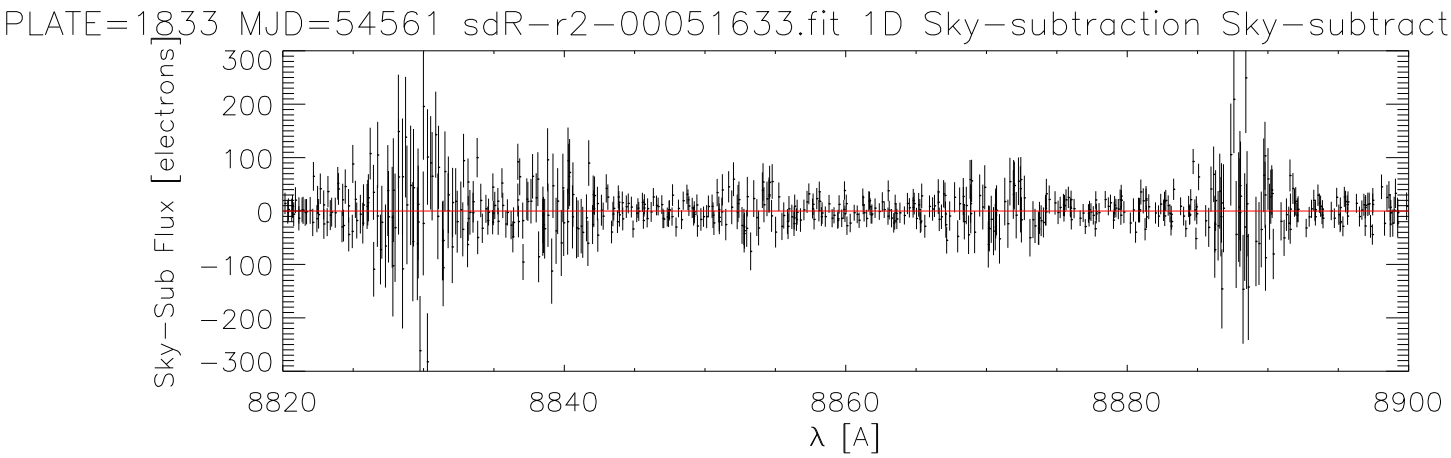

sky shift, pixels
0.10
0.05
0.00
5000
6000
7000
8000
9000
10000

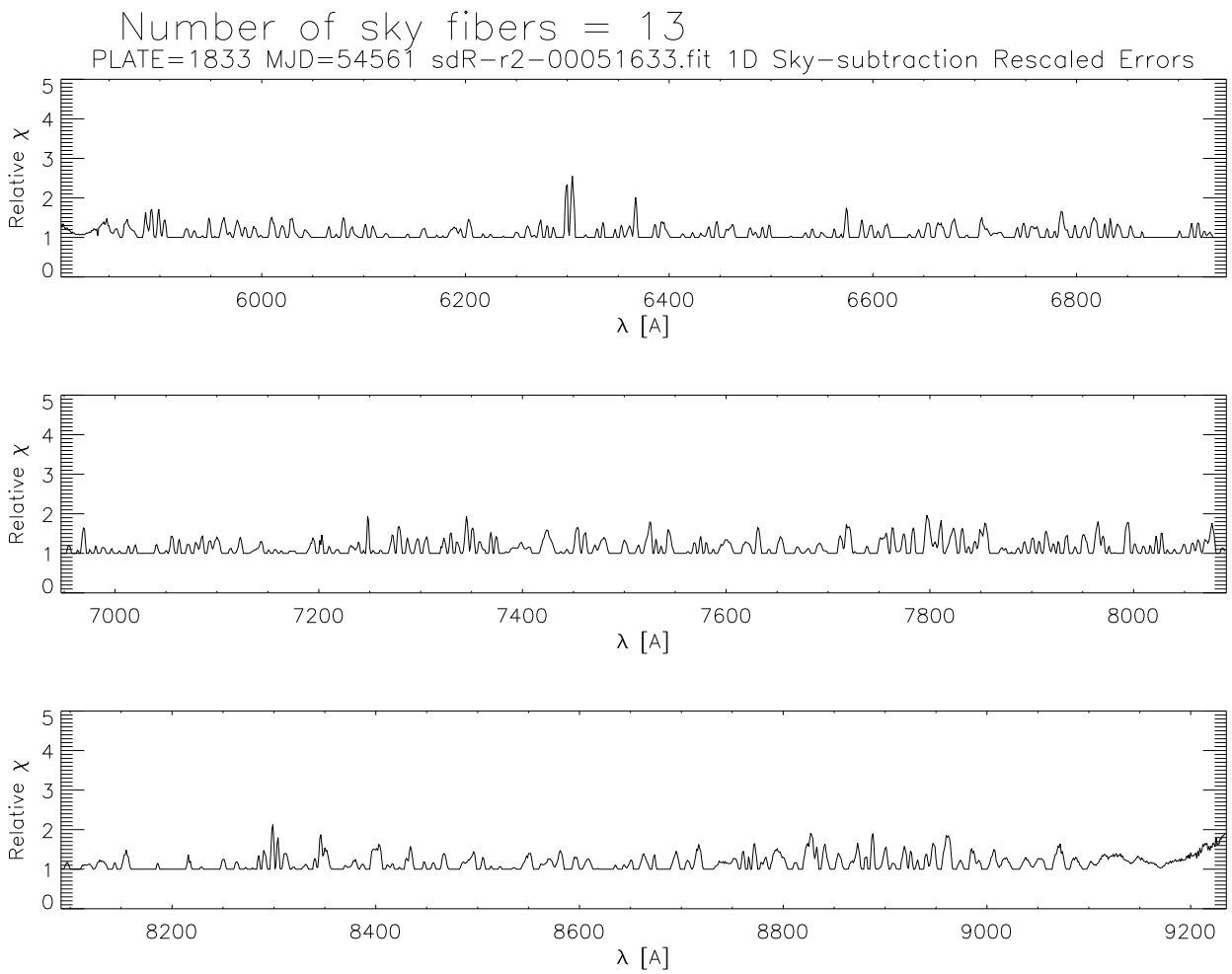
es= −0.0000

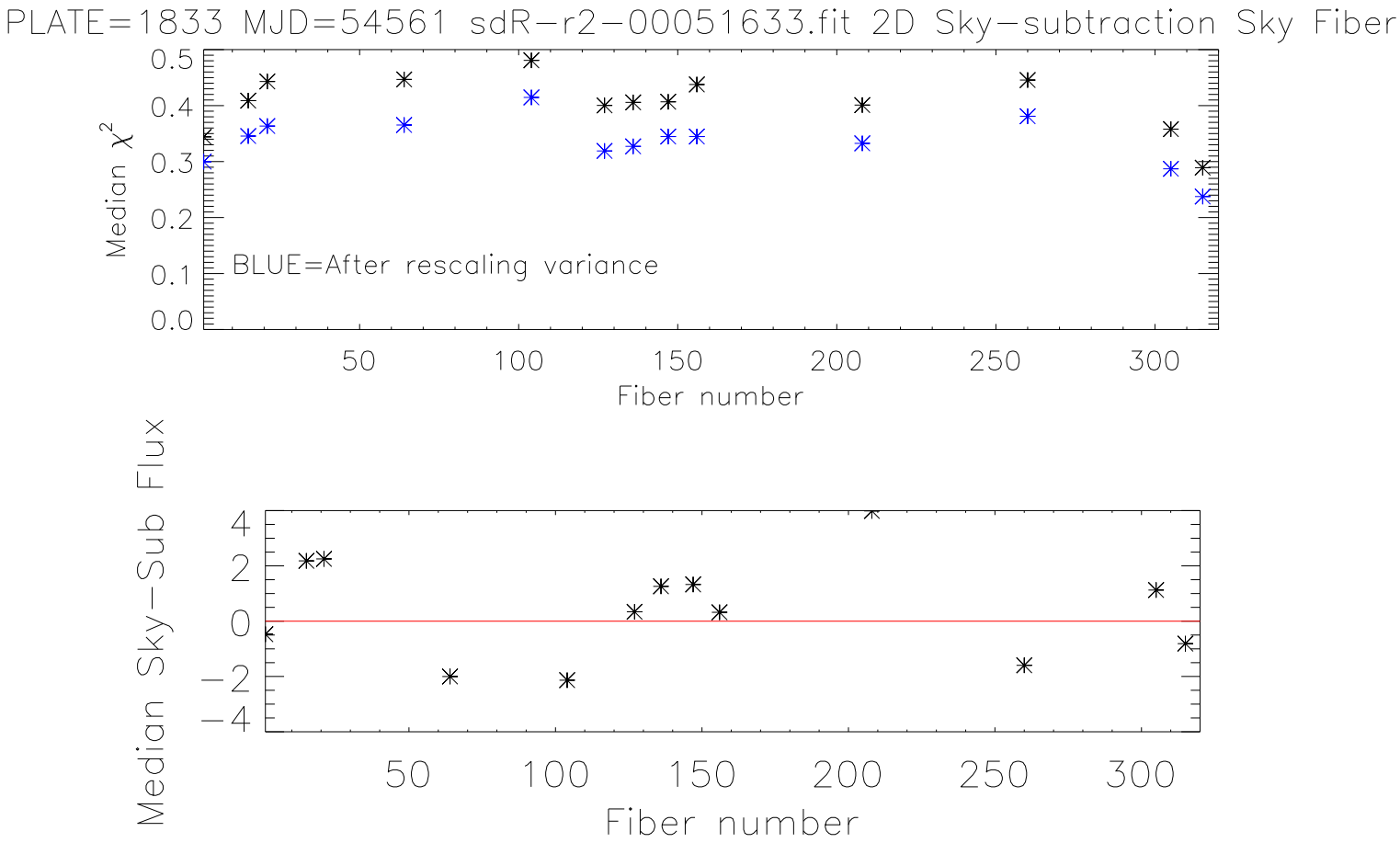

PLATE=1833 MJD=54561 Smooth superflat for sdR−r2−00051633.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

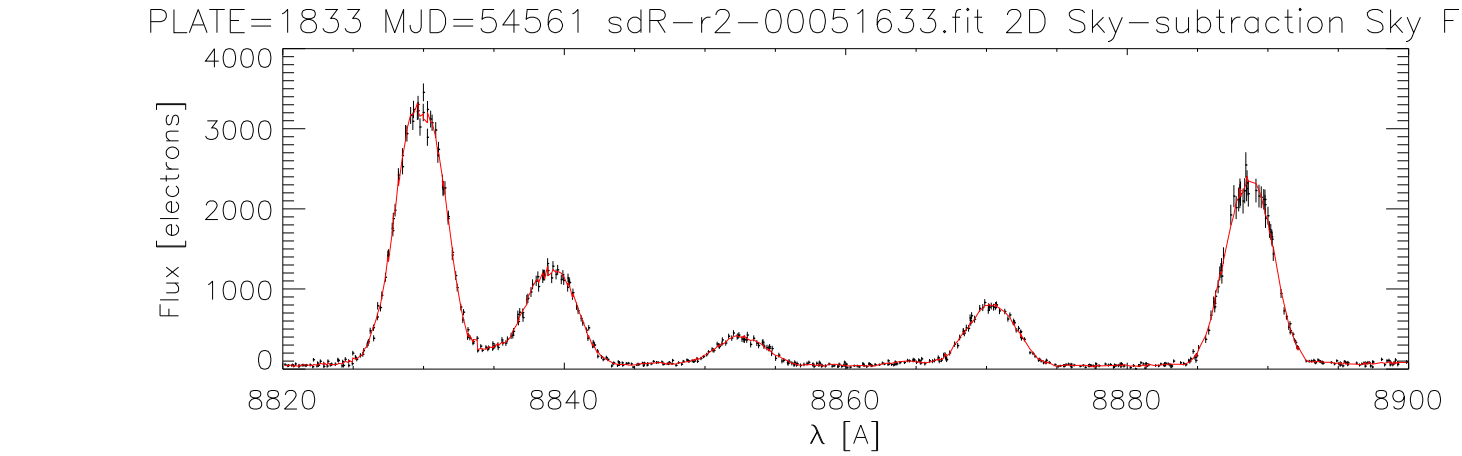

PLATE=1833 MJD=54561 sdR-r2-00051633.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

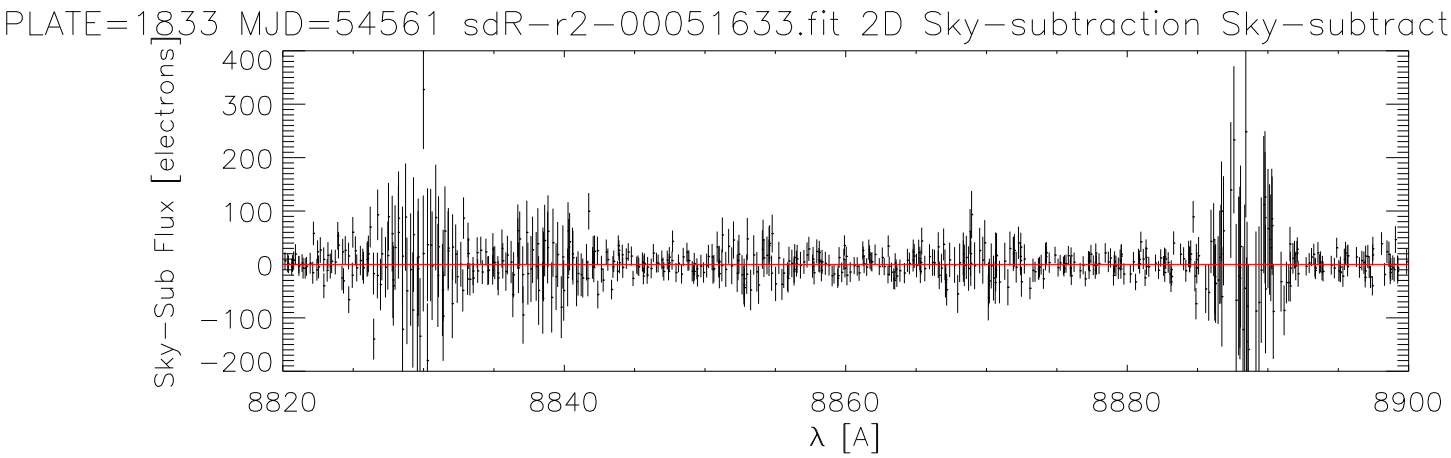

PLATE=1833 MJD=54561 sdR-r2-00051633.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

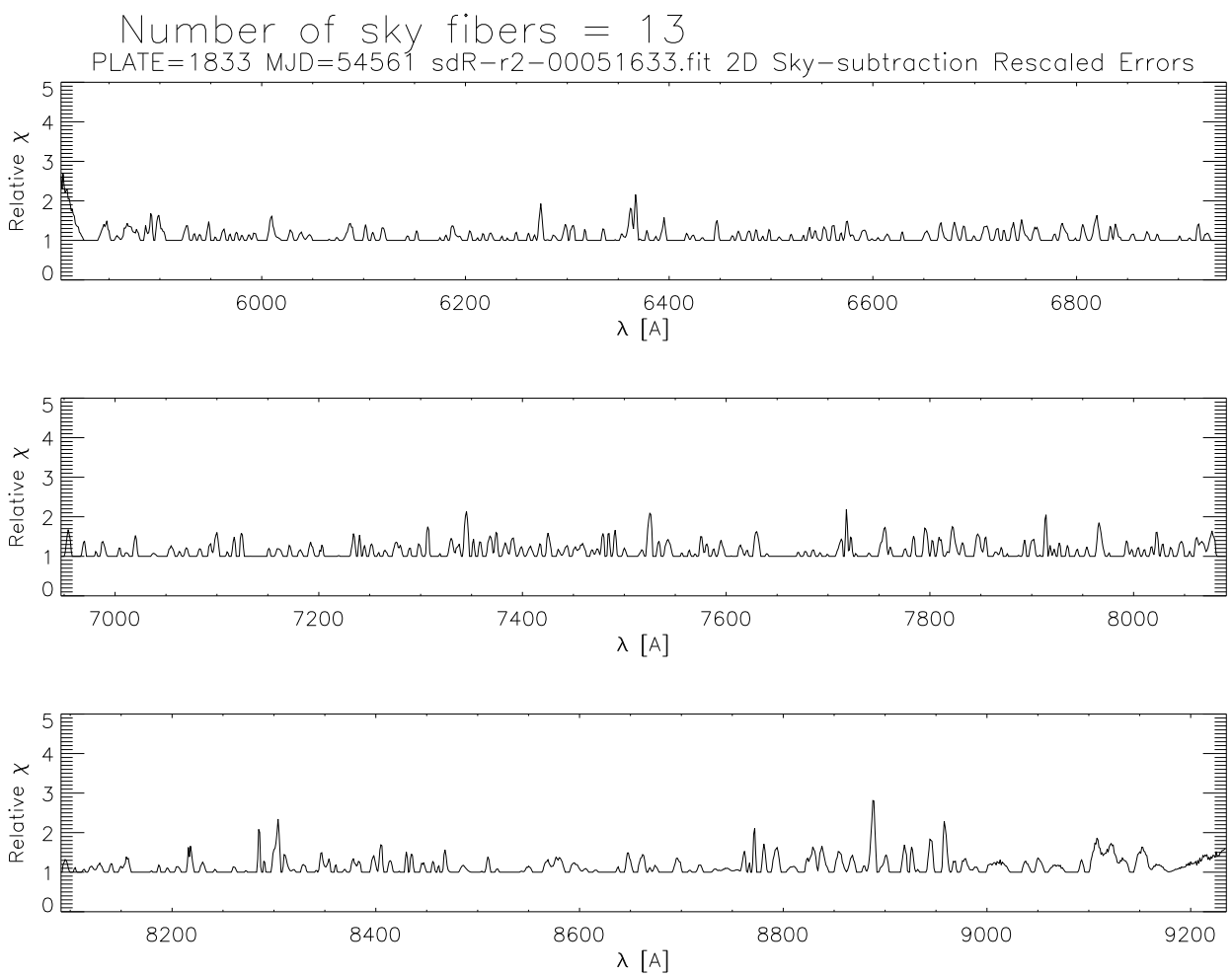

PLATE=1833 MJD=54561 sdR-r2-00051633.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

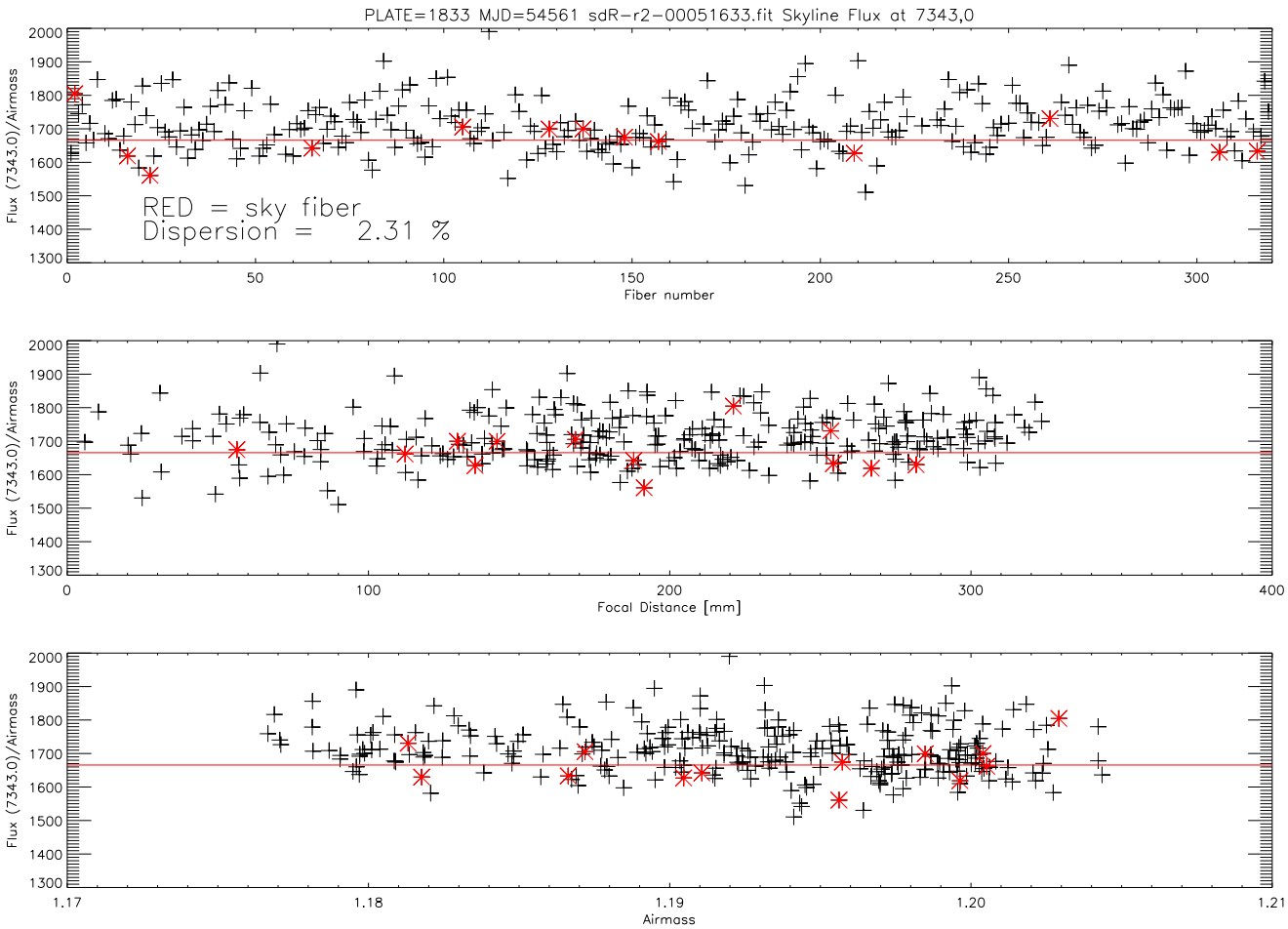

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-r2-00051633.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

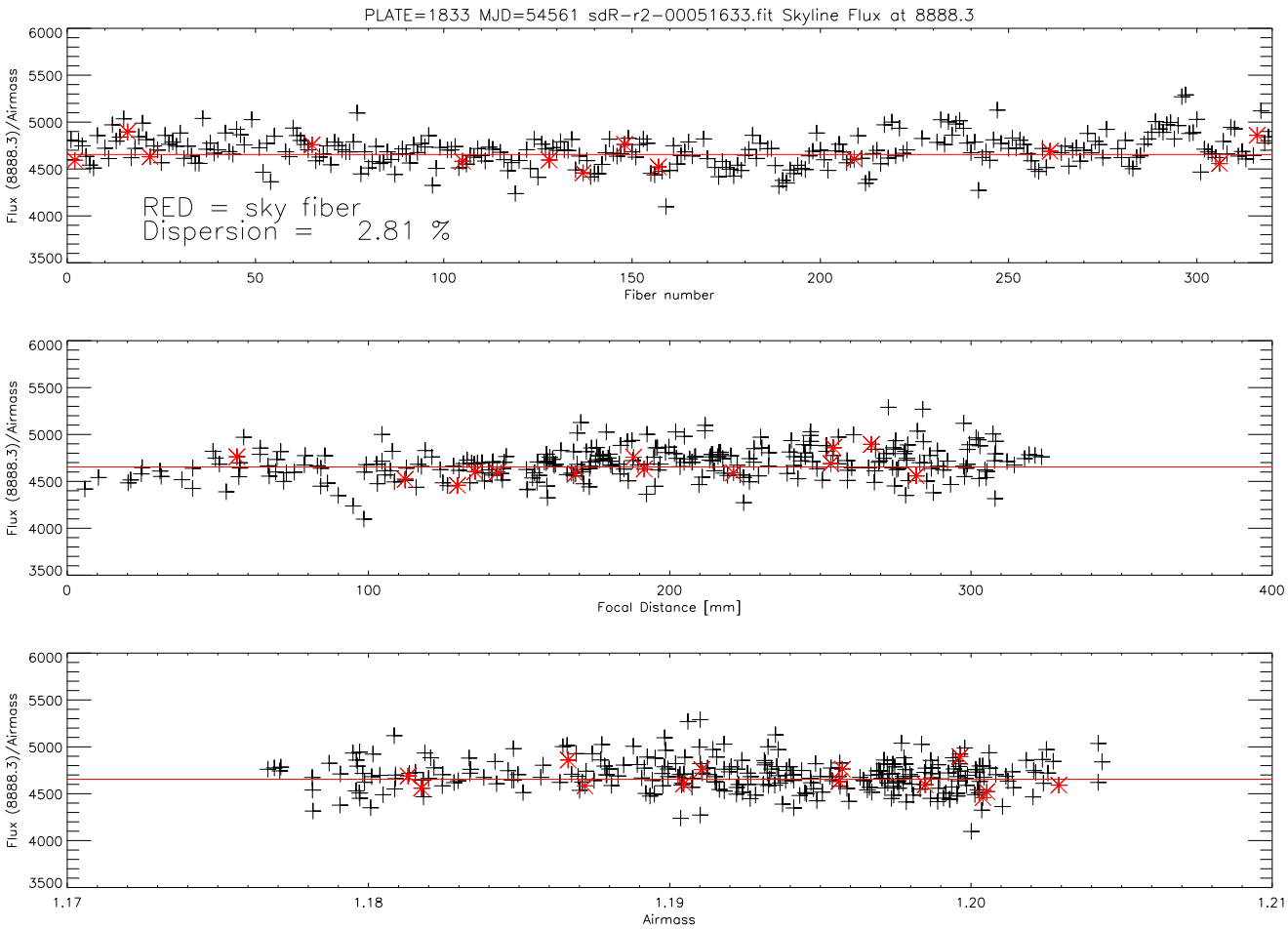

PLATE=1833 MJD=54561 sdR-r2-00051633.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

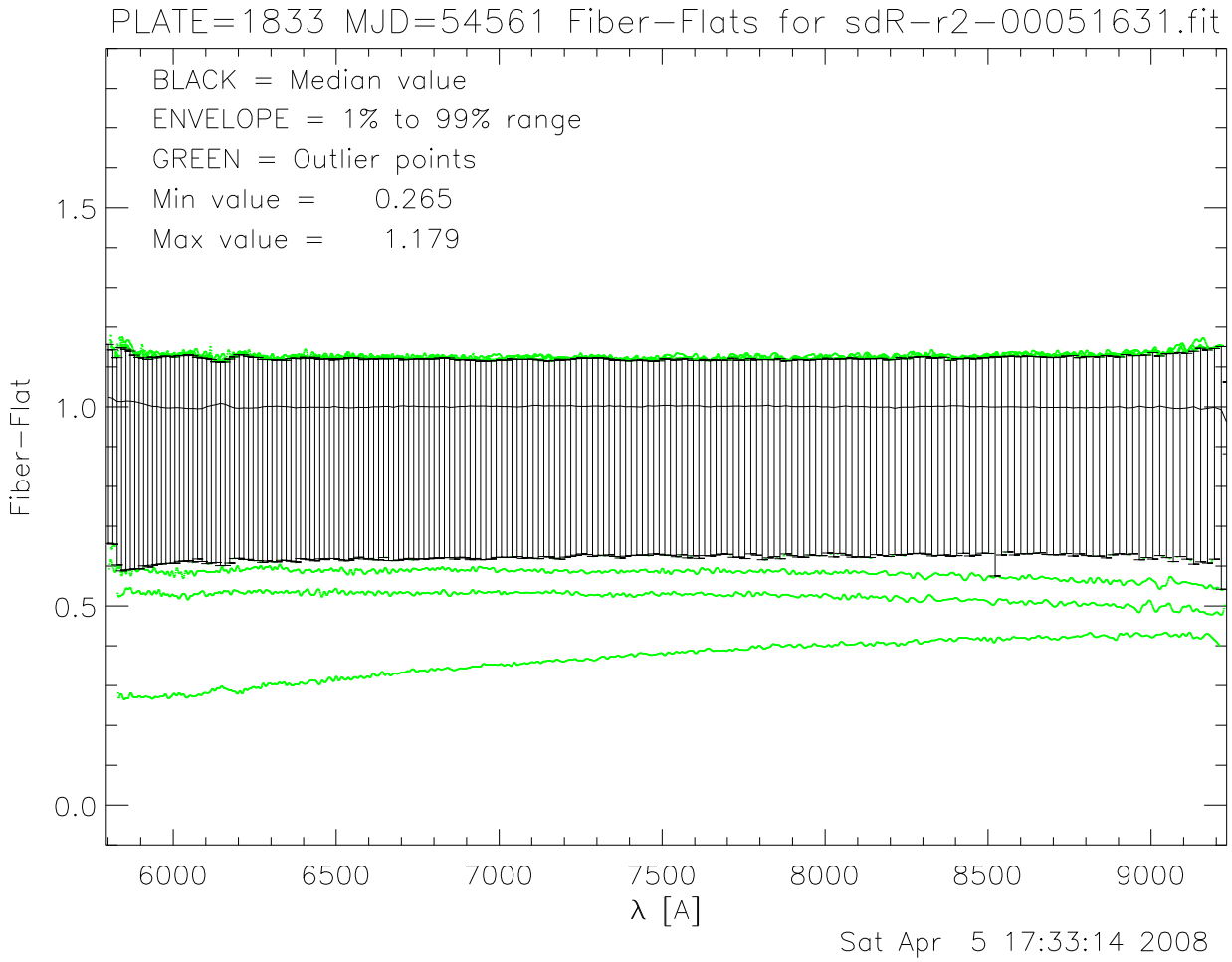

PLATE=1833 MJD=54561 sdR-r2-00051633.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

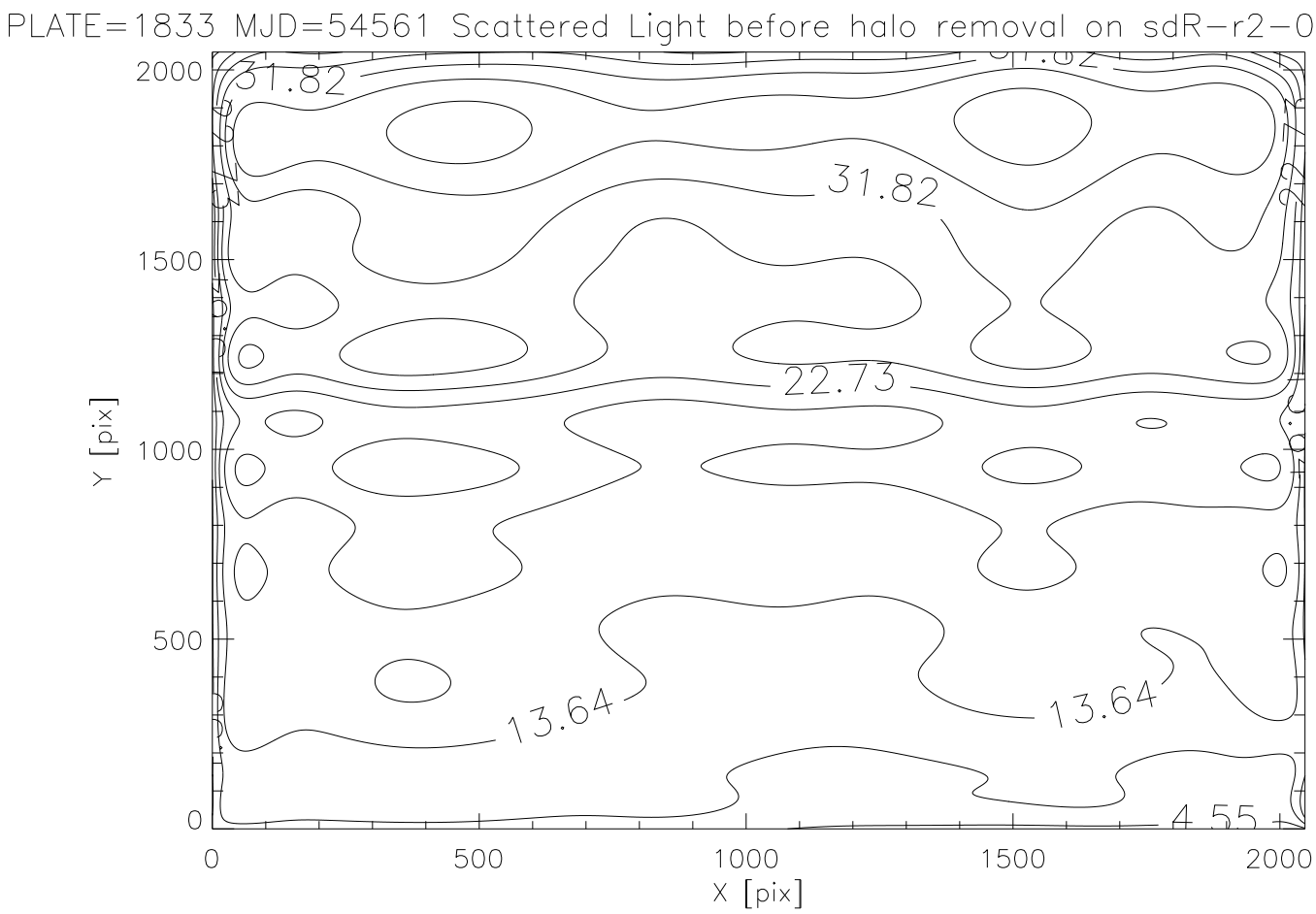

PLATE=1833 MJD=54561 sdR-r2-00051633.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

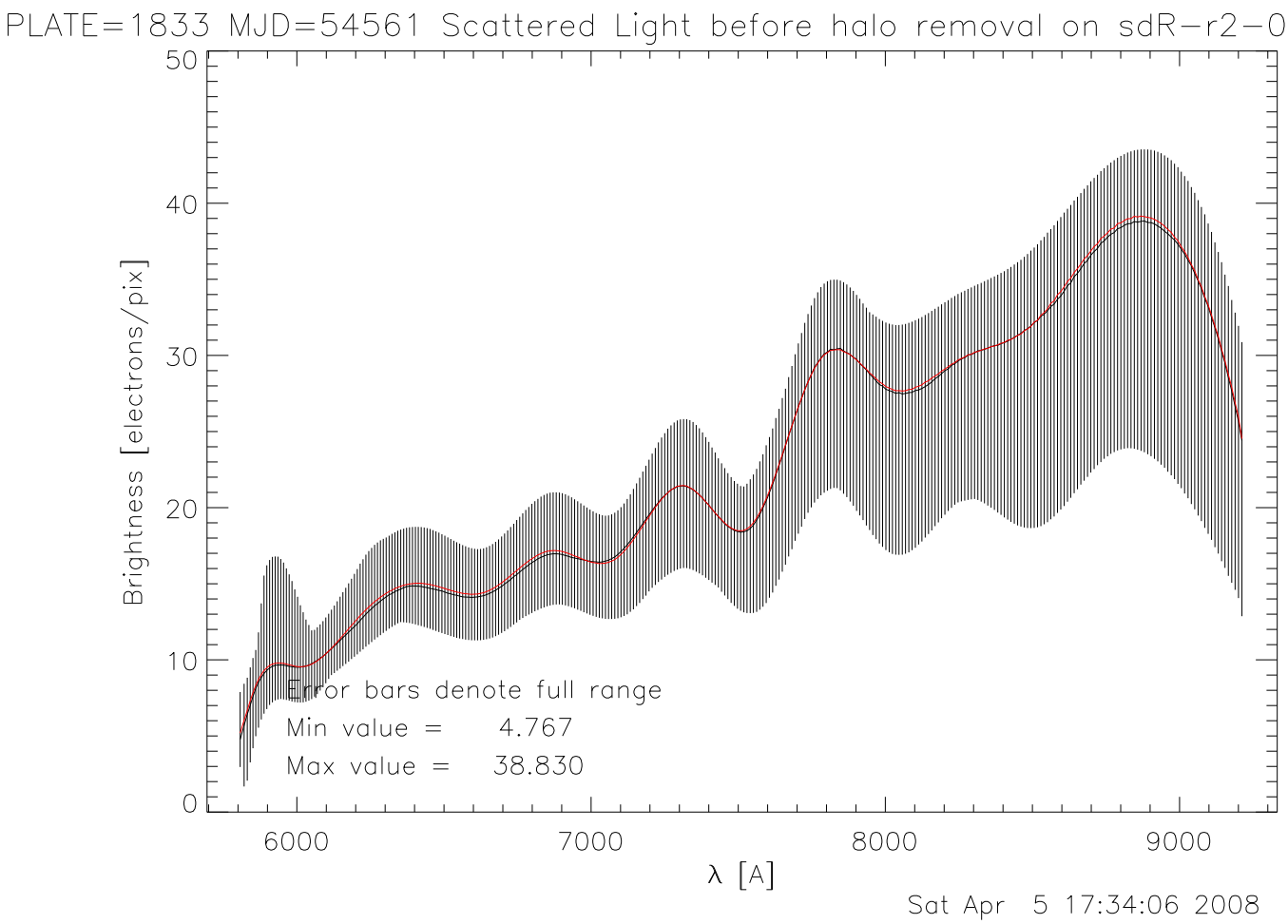

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-r2-00051633.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

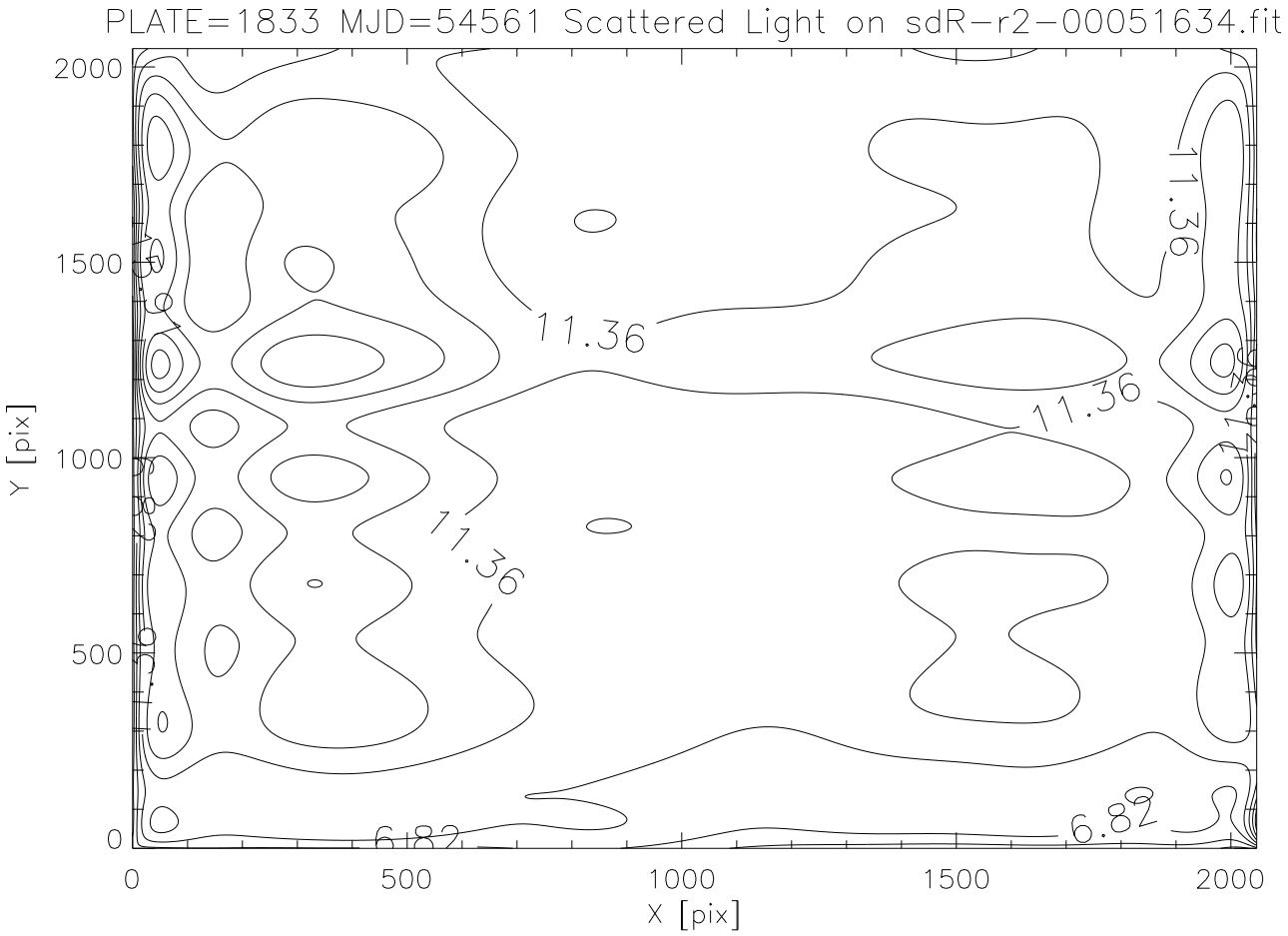

PLATE=1833 MJD=54561 sdR-r2-00051633.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.31 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

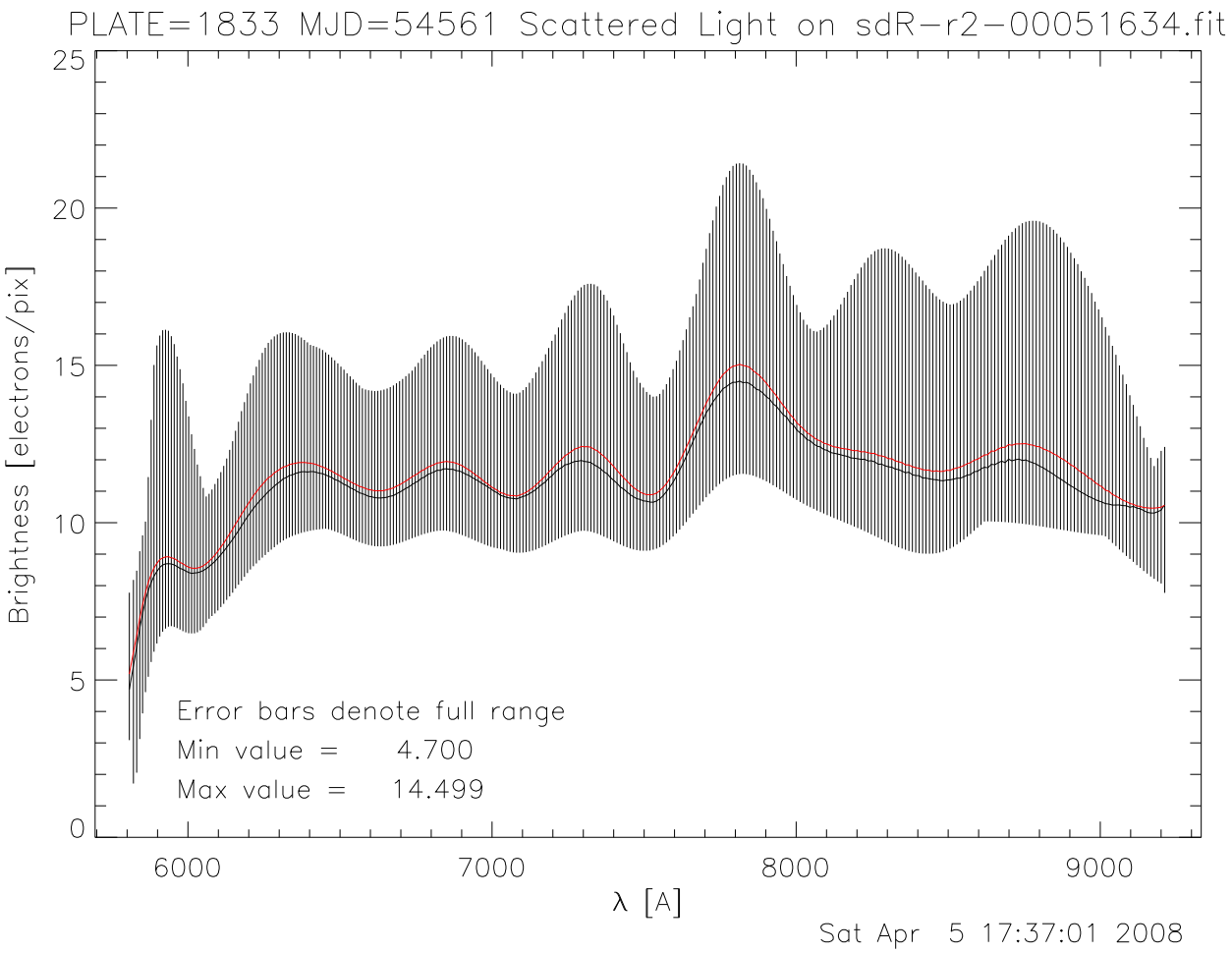

PLATE=1833 MJD=54561 sdR-r2-00051633.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.81 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

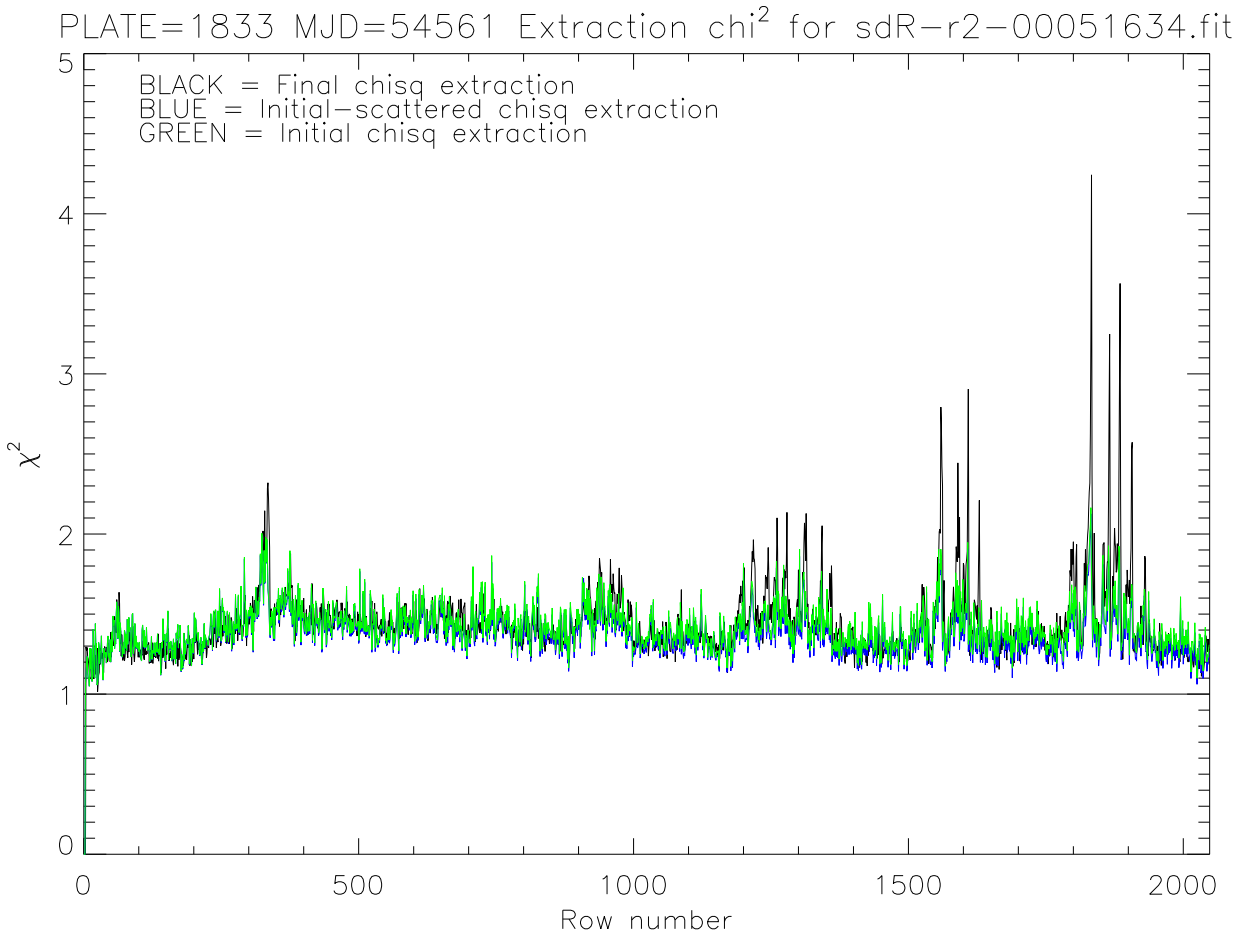

PLATE=1833 MJD=54561 Fiber−Flats for sdR−r2−00051631.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.265
Max value = 1.179
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Apr 5 17:33:14 2008

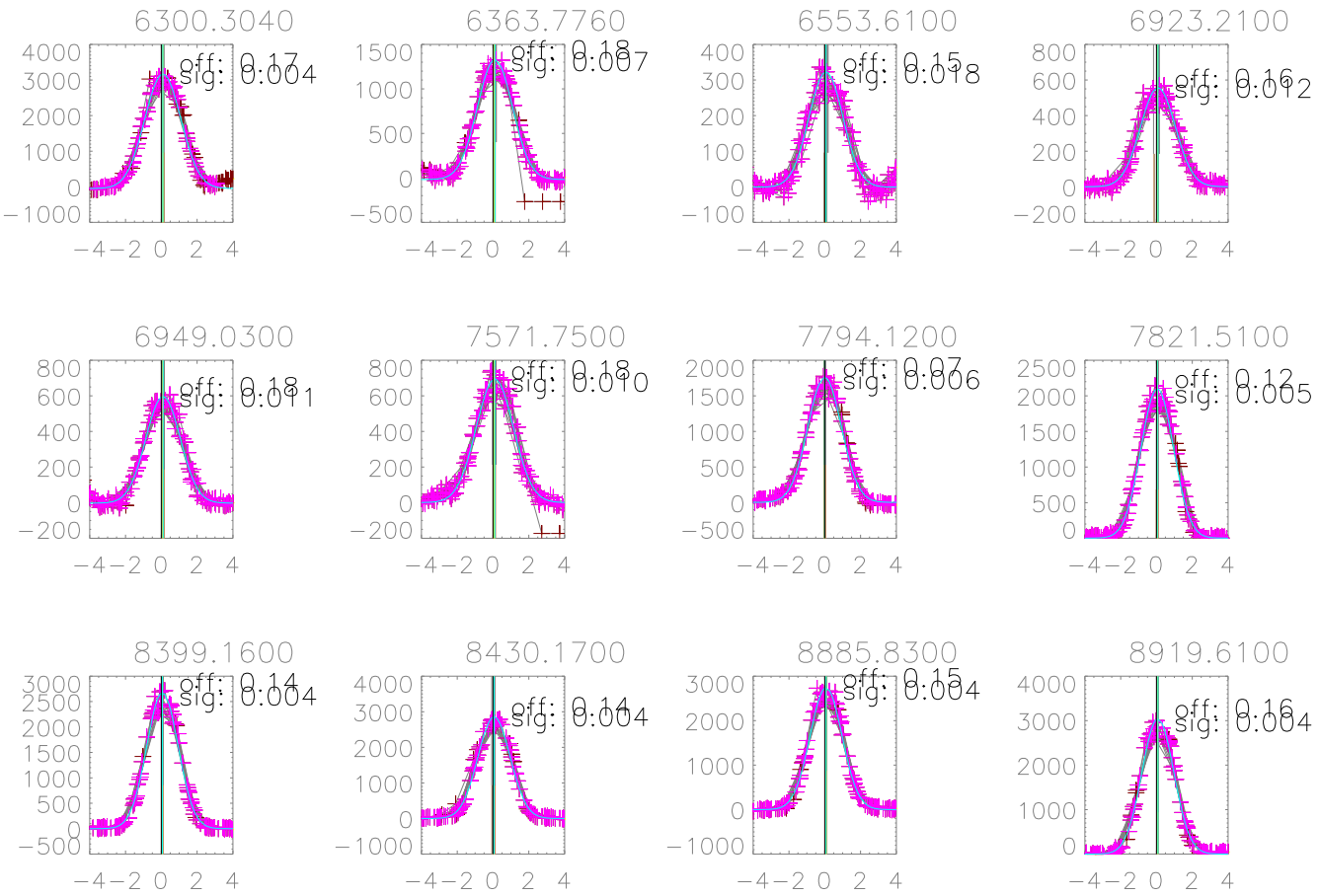

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-r2-00051634.fi
31.82
31.82
22.73
13.64
13.64
4.55
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

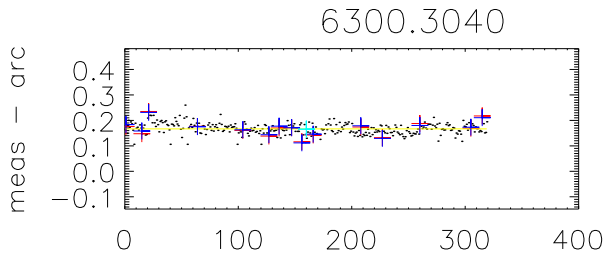

PLATE=1833 MJD=54561 Scattered Light before halo removal on sdR-r2-00051634.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.767
Max value = 38.830
Sat Apr 5 17:34:06 2008

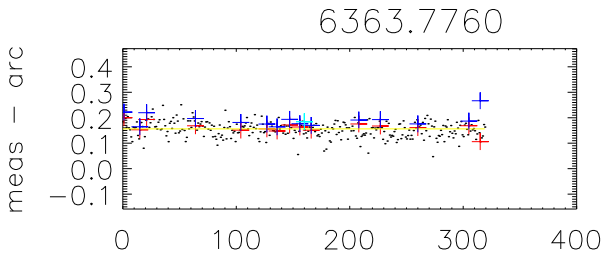

PLATE=1833 MJD=54561 Scattered Light on sdR-r2-00051634.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
6.82

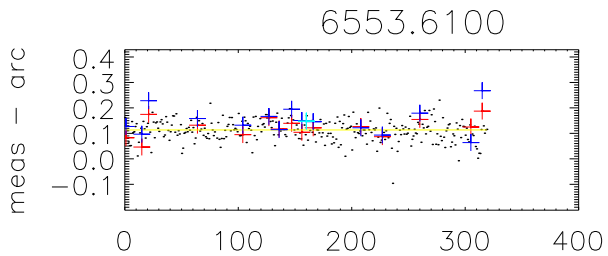

PLATE=1833 MJD=54561 Scattered Light on sdR-r2-00051634.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.700
Max value = 14.499
Sat Apr 5 17:37:01 2008

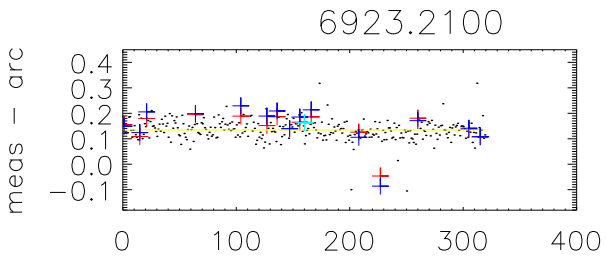

PLATE=1833 MJD=54561 Extraction chi^2 for sdR−r2−00051634.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

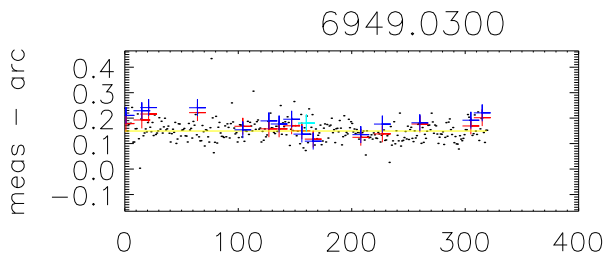

6300.3040
off: 0.17
sig: 0.004
6363.7760
off: 0.18
sig: 0.007
6553.6100
off: 0.15
sig: 0.018
6923.2100
off: 0.16
sig: 0.012
6949.0300
off: 0.18
sig: 0.011
7571.7500
off: 0.18
sig: 0.010
7794.1200
off: 0.07
sig: 0.006
7821.5100
off: 0.12
sig: 0.005
8399.1600
off: 0.14
sig: 0.004
8430.1700
off: 0.14
sig: 0.004
8885.8300
off: 0.15
sig: 0.004
8919.6100
off: 0.16
sig: 0.004

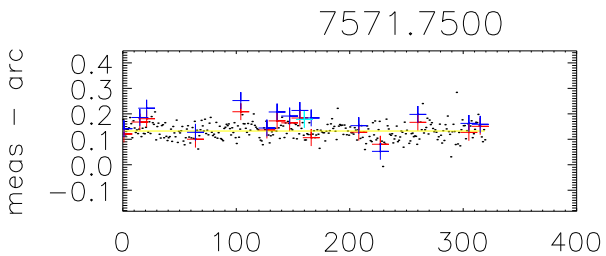

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

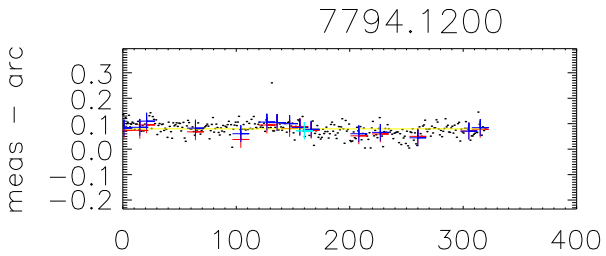

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

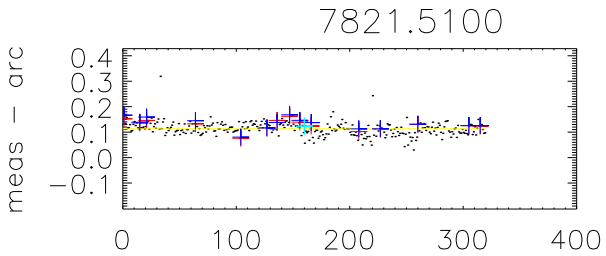

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

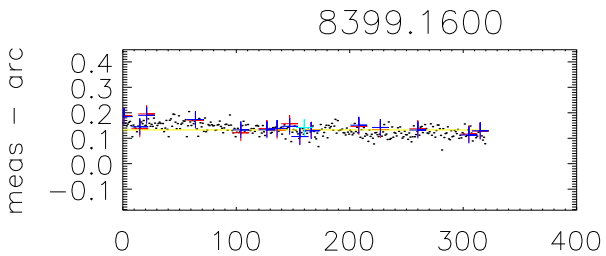

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

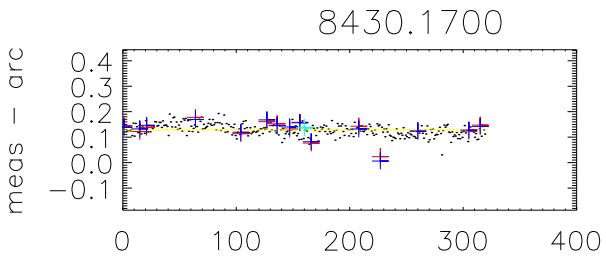

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

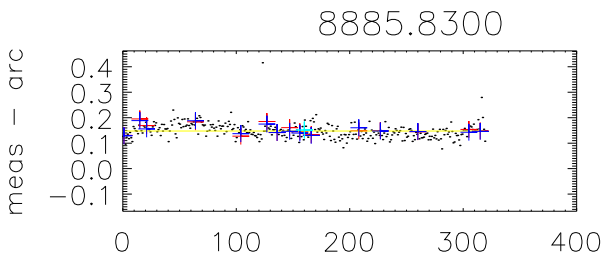

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

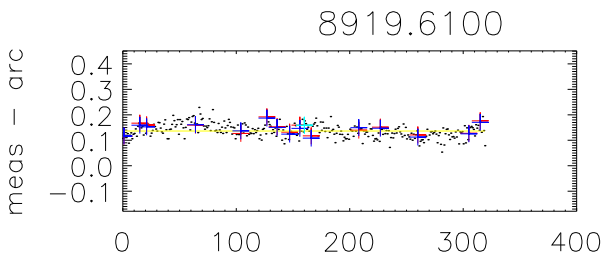

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

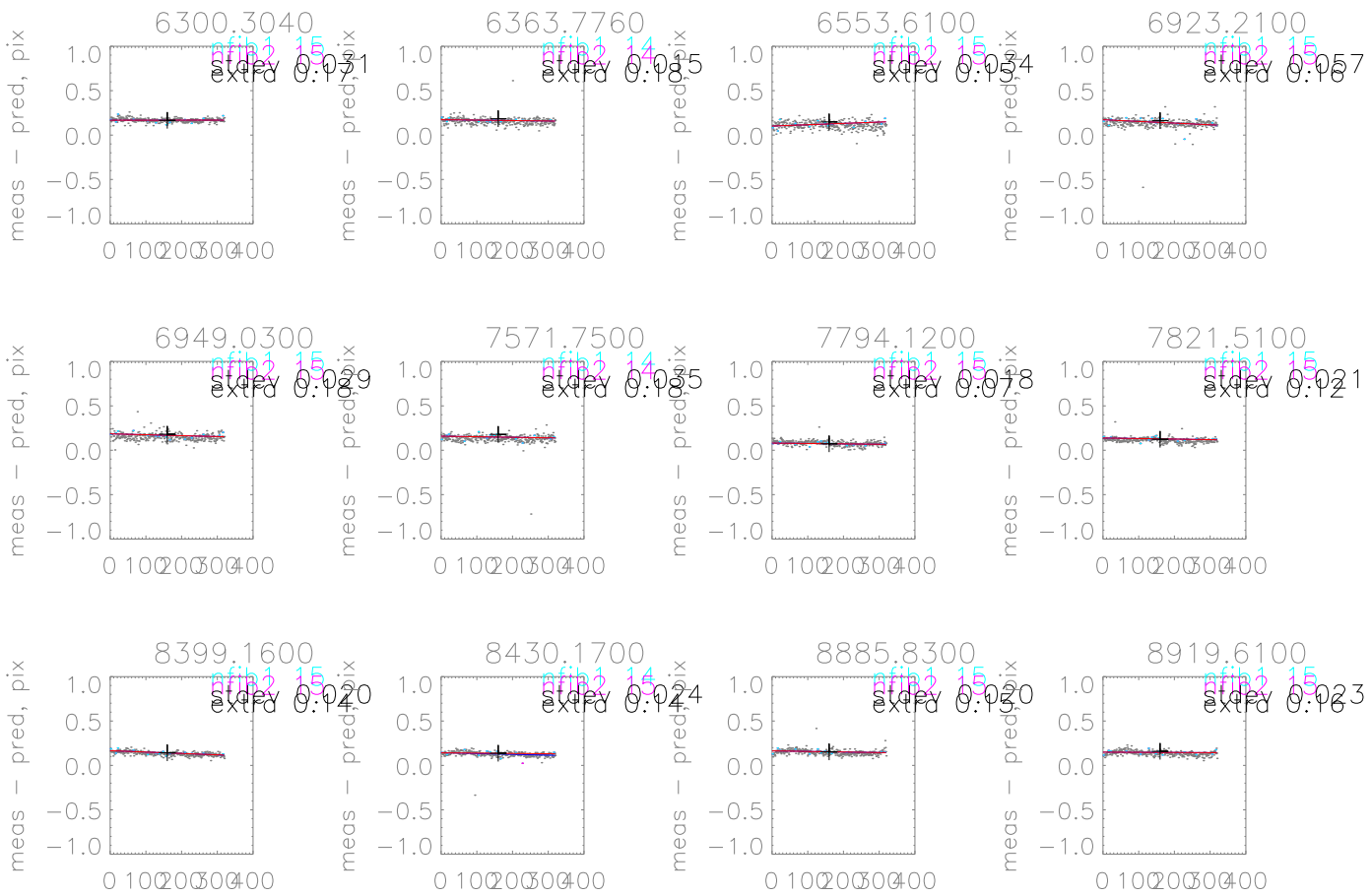

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

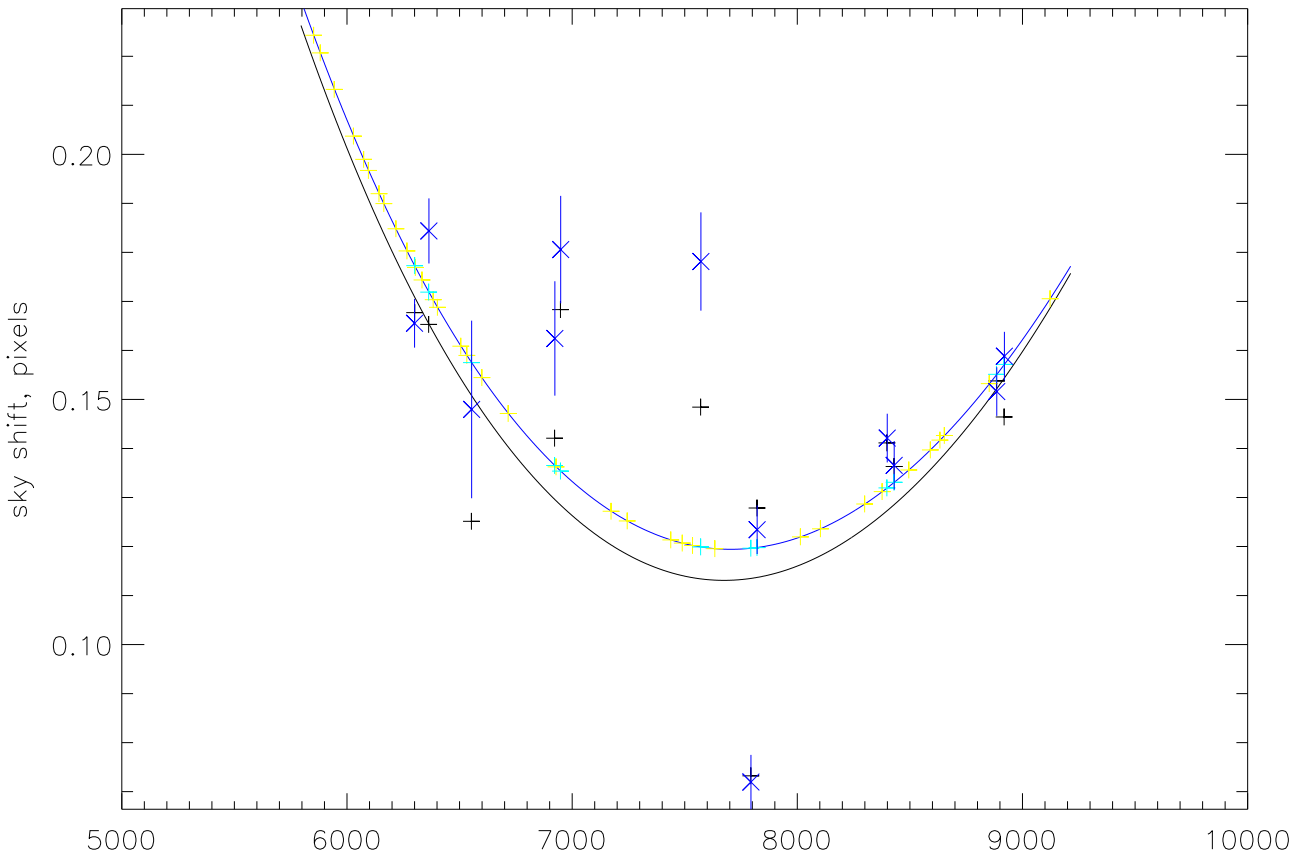

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

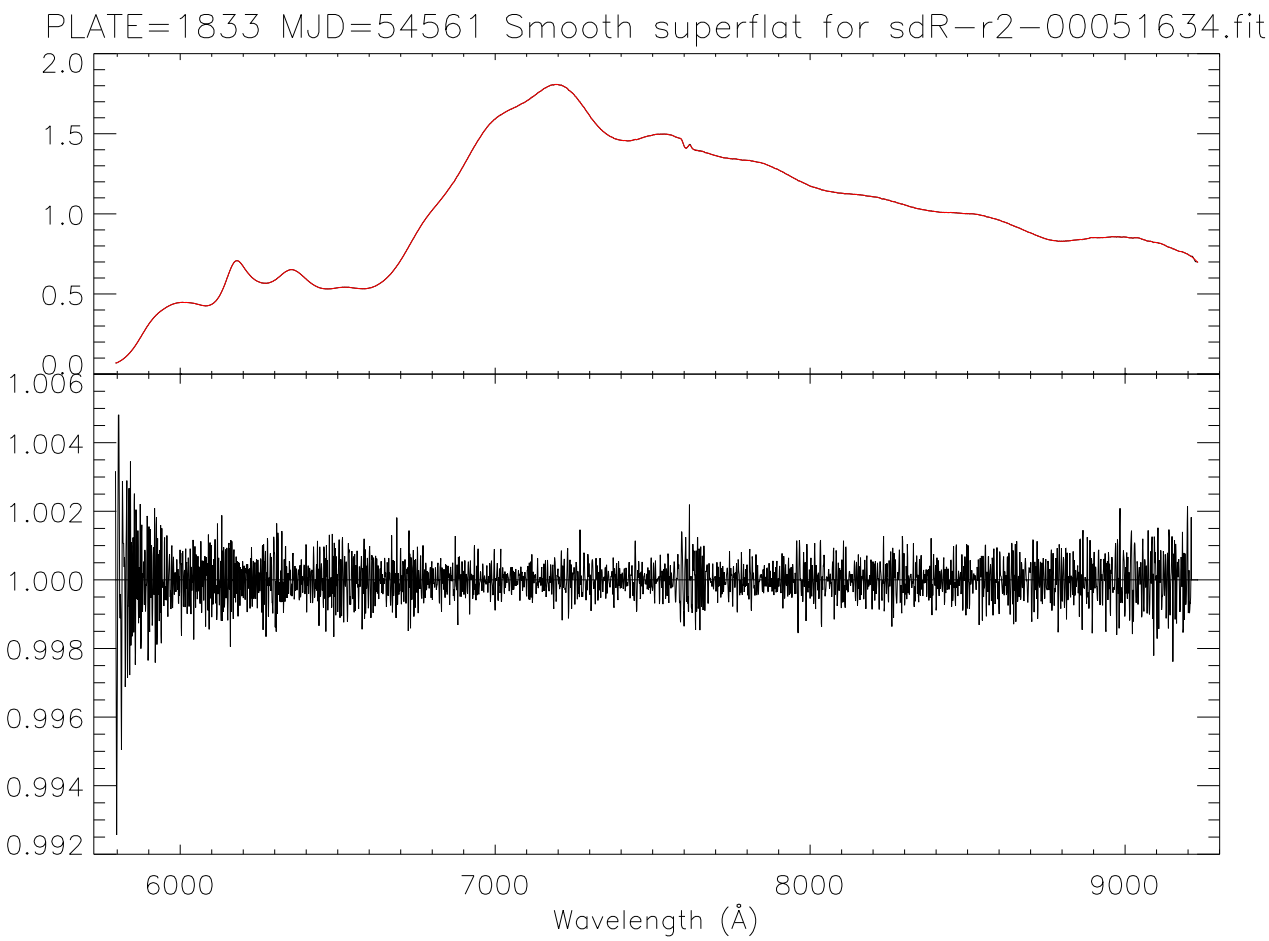

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

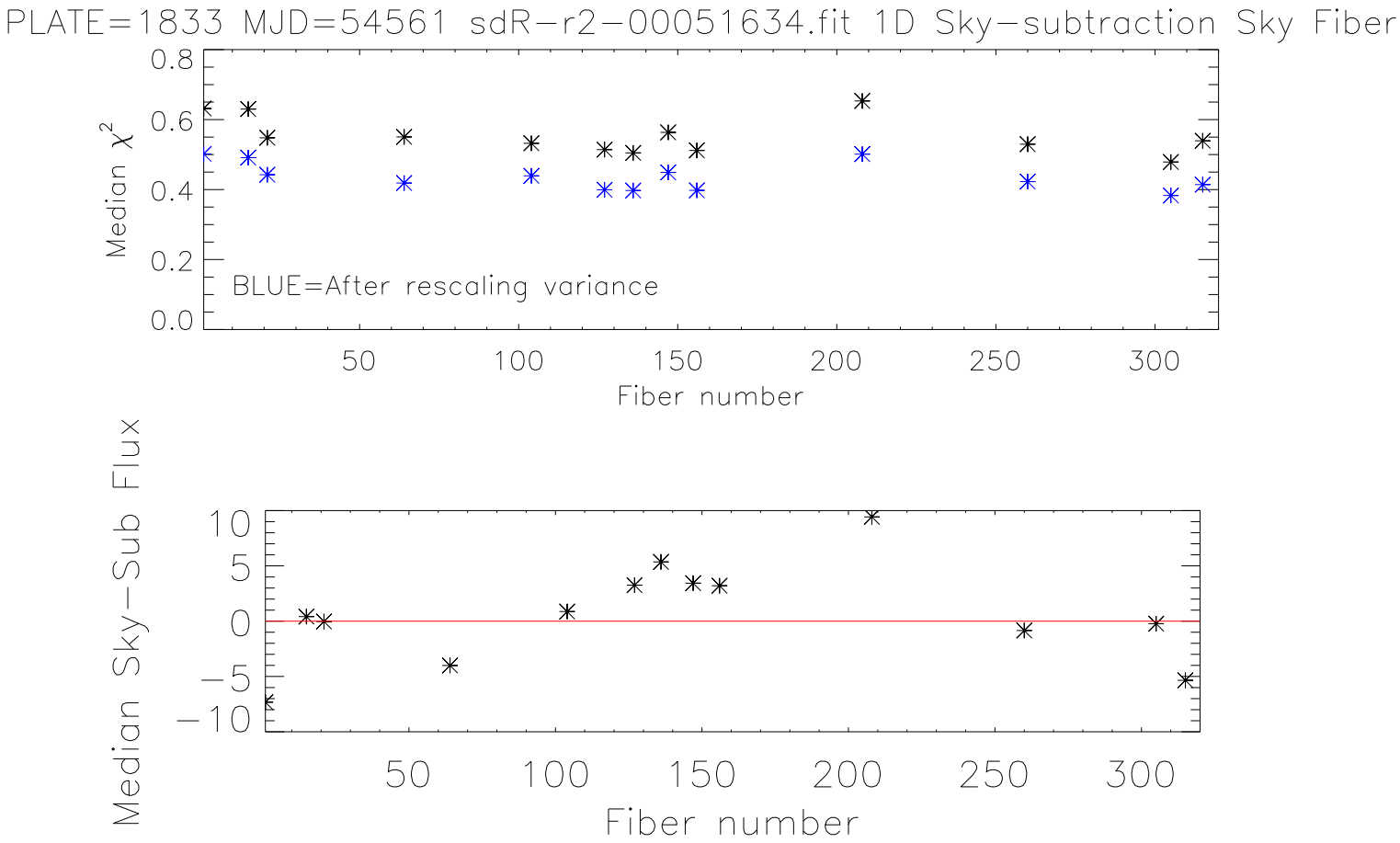

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

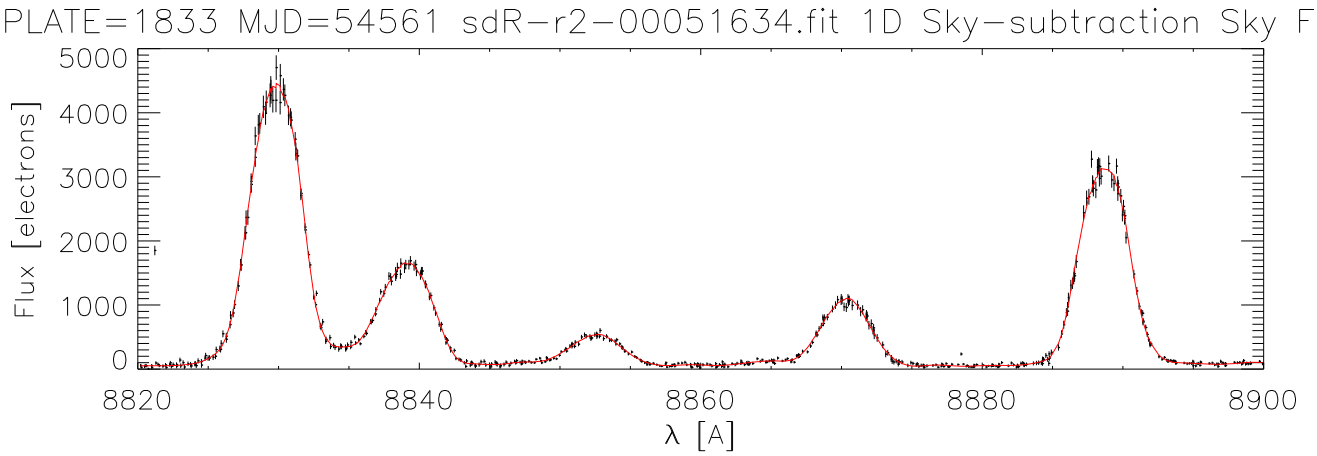

6300.3040
stdev 0.031
extra 0.17
6363.7760
stdev 0.035
extra 0.18
6553.6100
stdev 0.034
extra 0.15
6923.2100
stdev 0.057
extra 0.16
6949.0300
stdev 0.029
extra 0.18
7571.7500
stdev 0.035
extra 0.18
7794.1200
stdev 0.018
extra 0.07
7821.5100
stdev 0.021
extra 0.12
8399.1600
stdev 0.020
extra 0.14
8430.1700
stdev 0.024
extra 0.14
8885.8300
stdev 0.020
extra 0.13
8919.6100
stdev 0.023
extra 0.16
meas − pred, pix
mfb1 15
mfb2 15
mfb1 14
mfb2 14

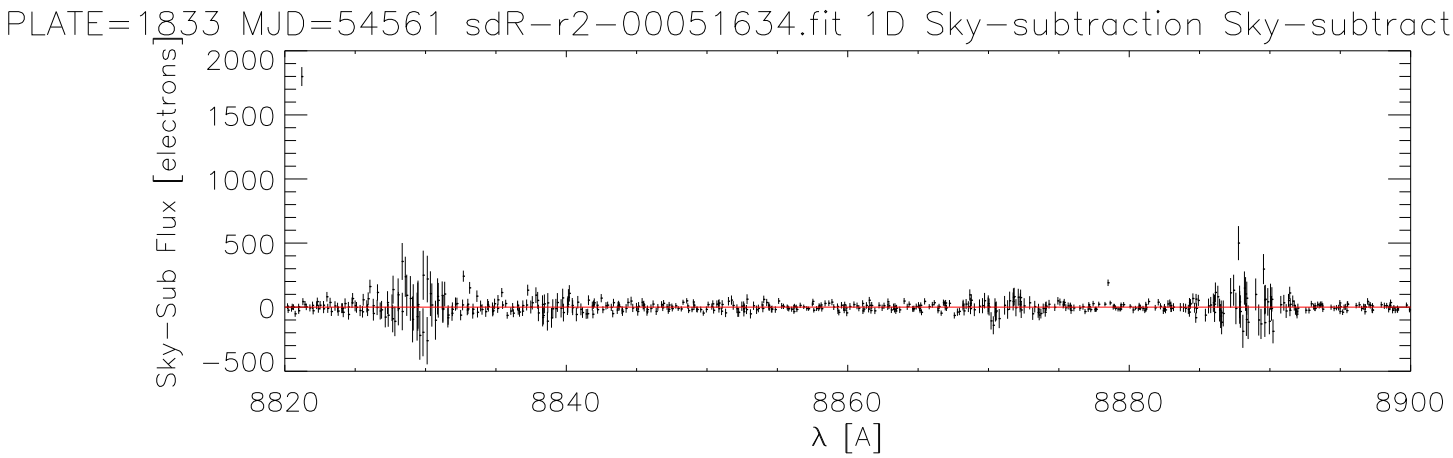

sky shift, pixels
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

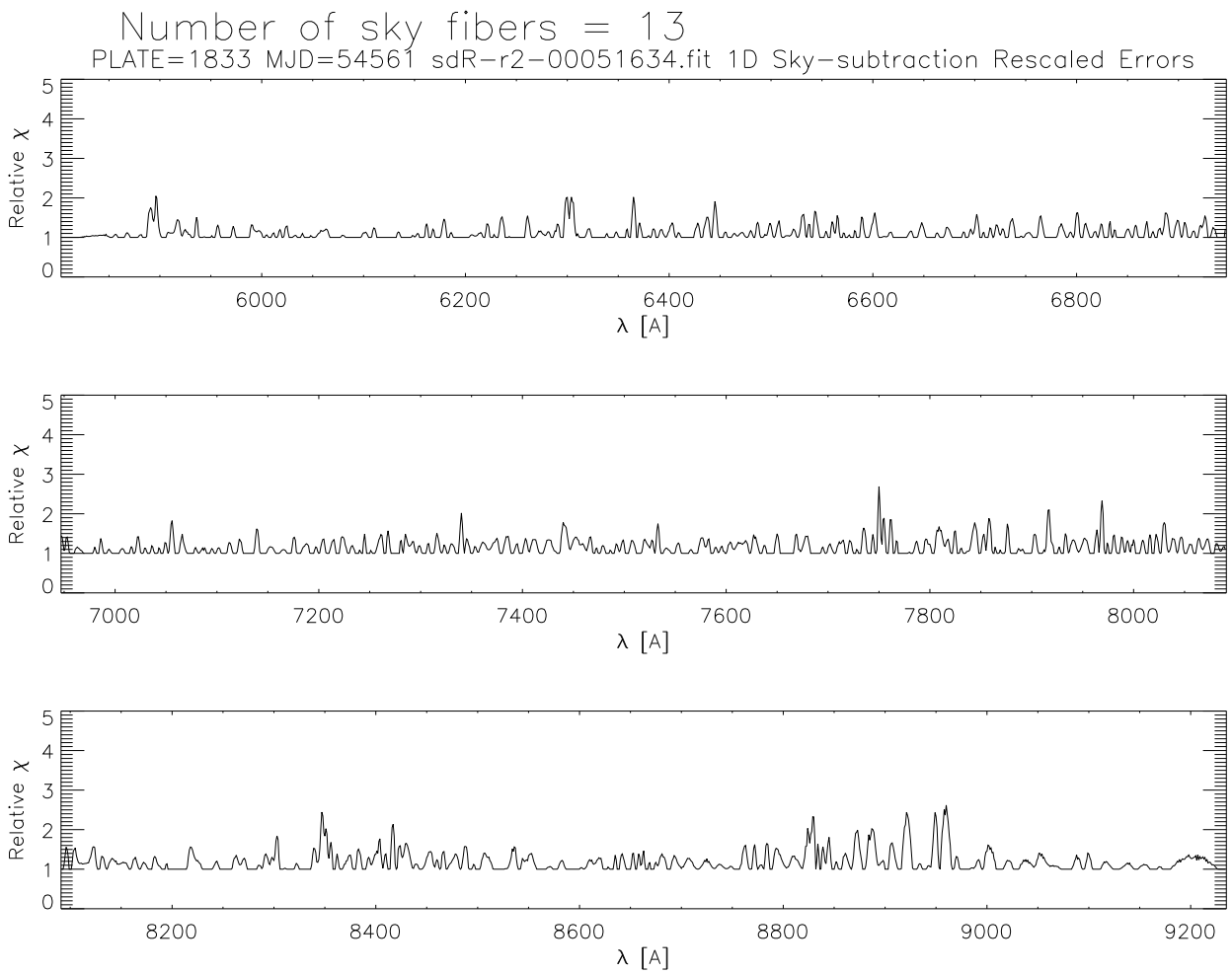
es= −0.0000

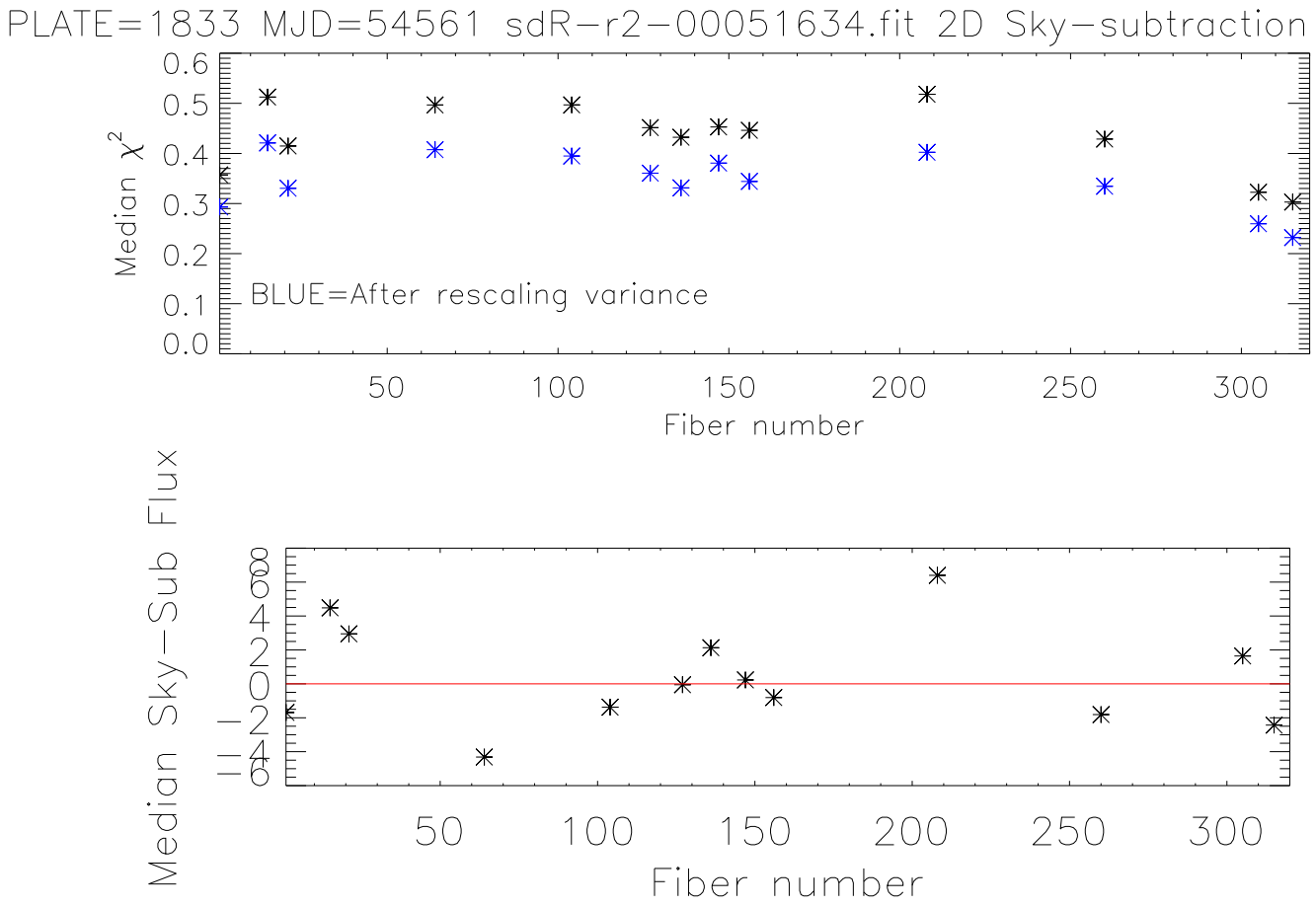

PLATE=1833 MJD=54561 Smooth superflat for sdR−r2−00051634.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

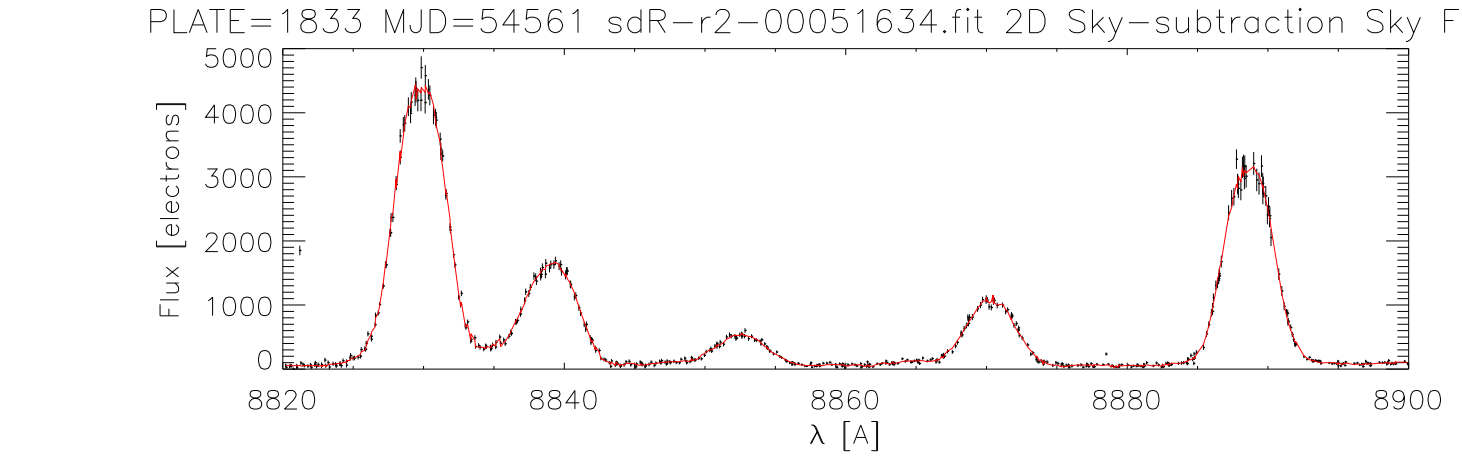

PLATE=1833 MJD=54561 sdR-r2-00051634.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

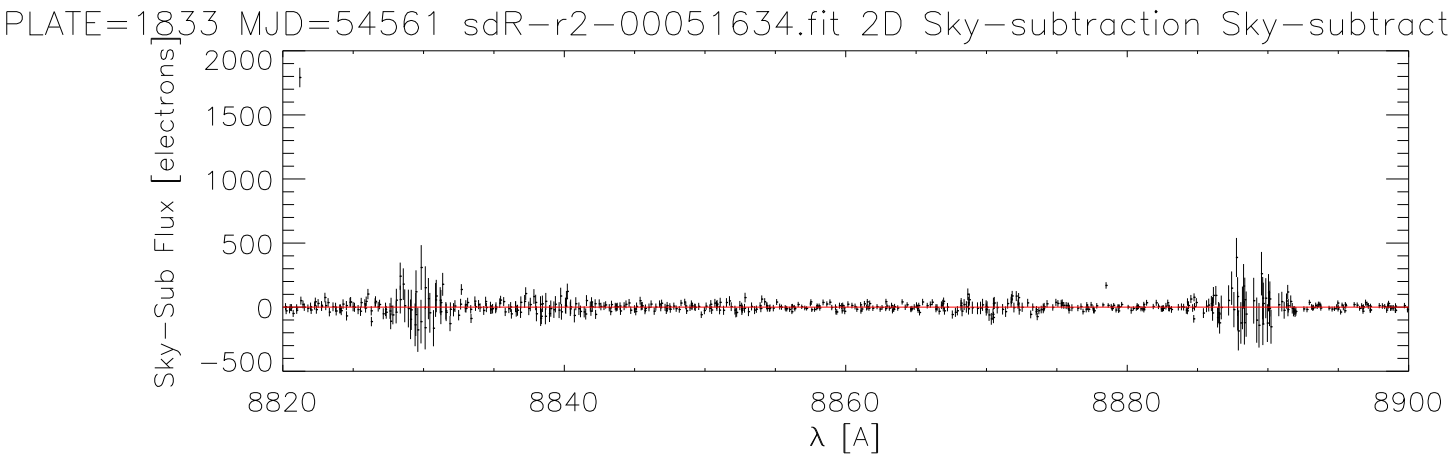

PLATE=1833 MJD=54561 sdR-r2-00051634.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

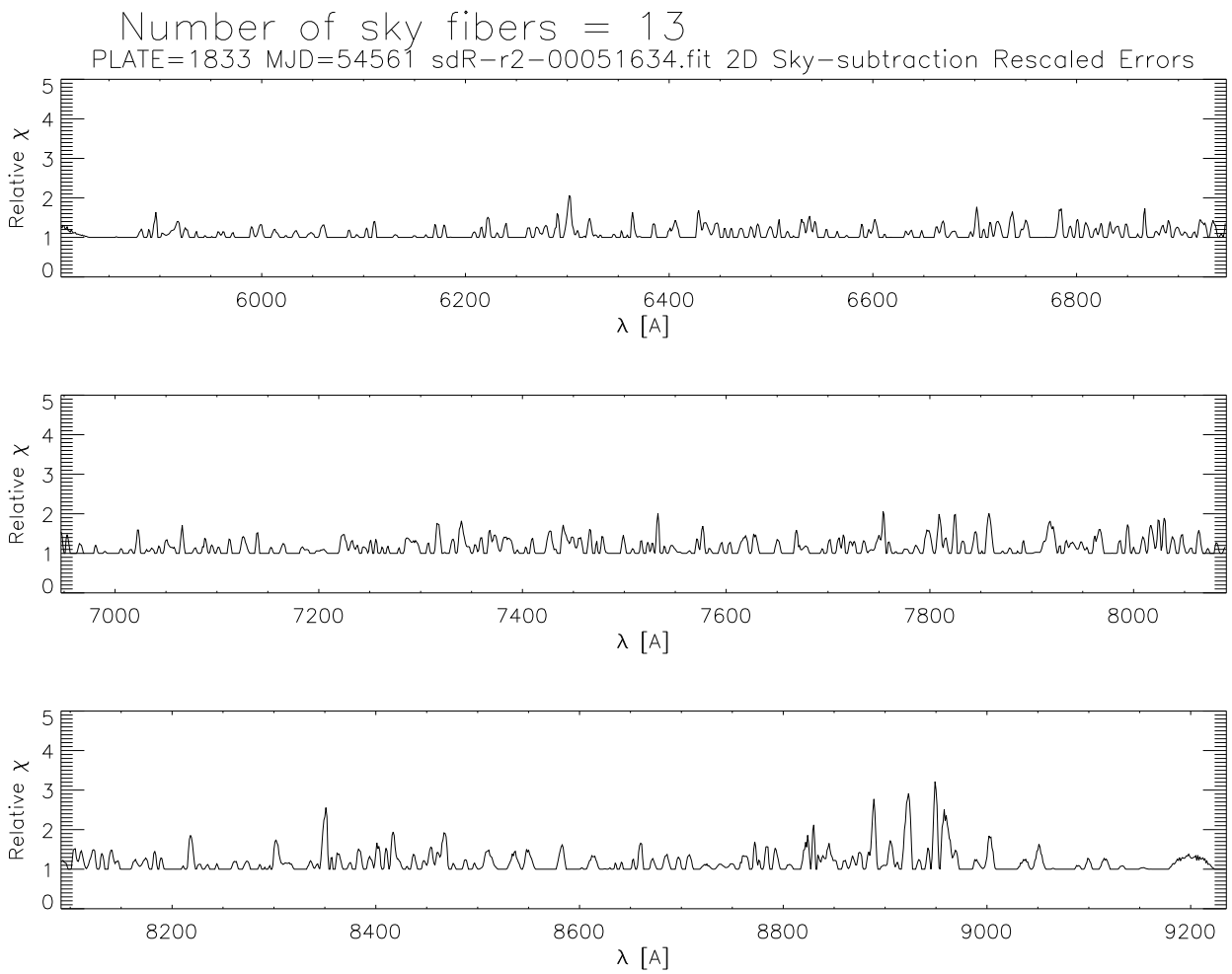

PLATE=1833 MJD=54561 sdR-r2-00051634.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

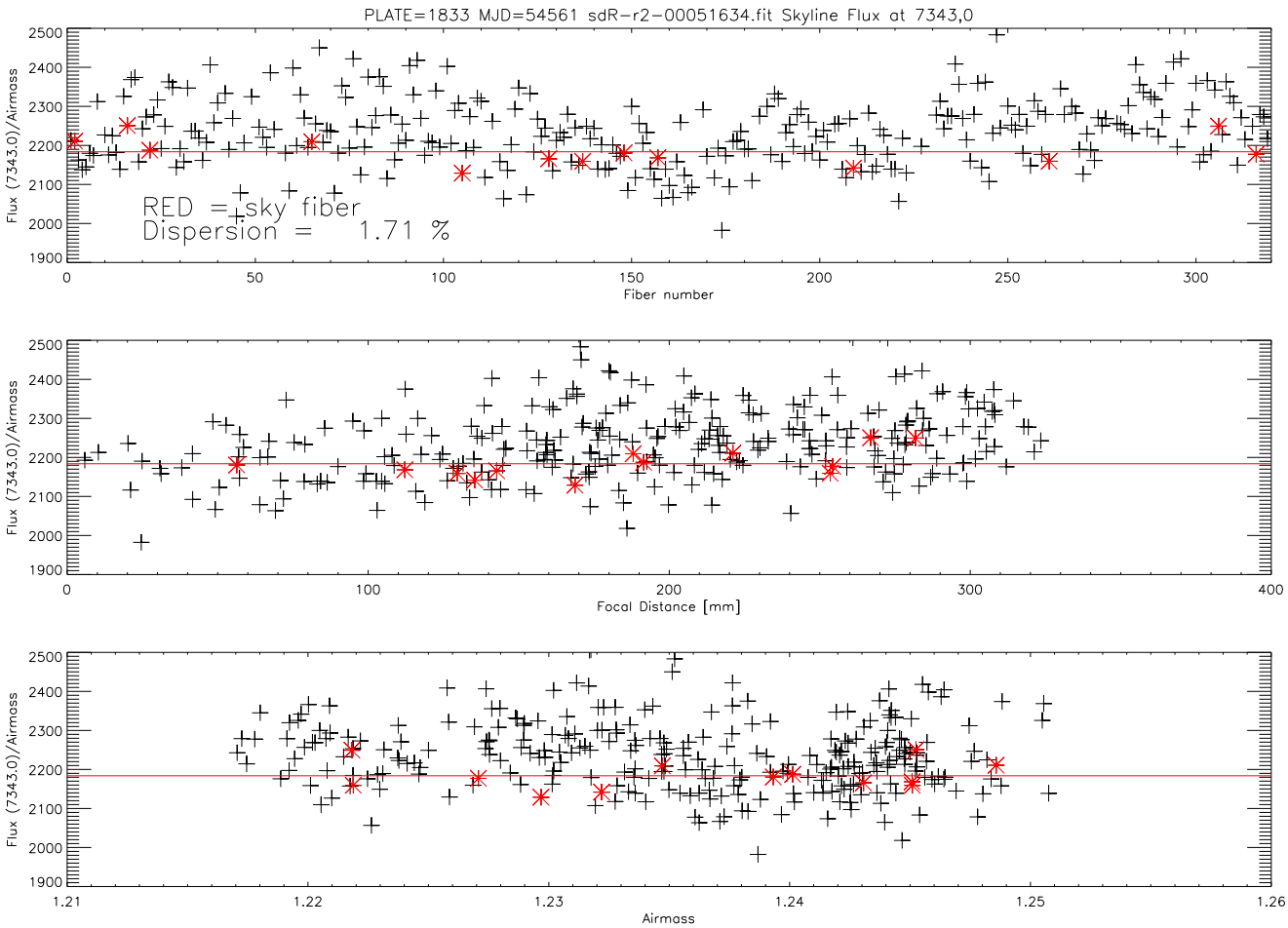

Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-r2-00051634.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

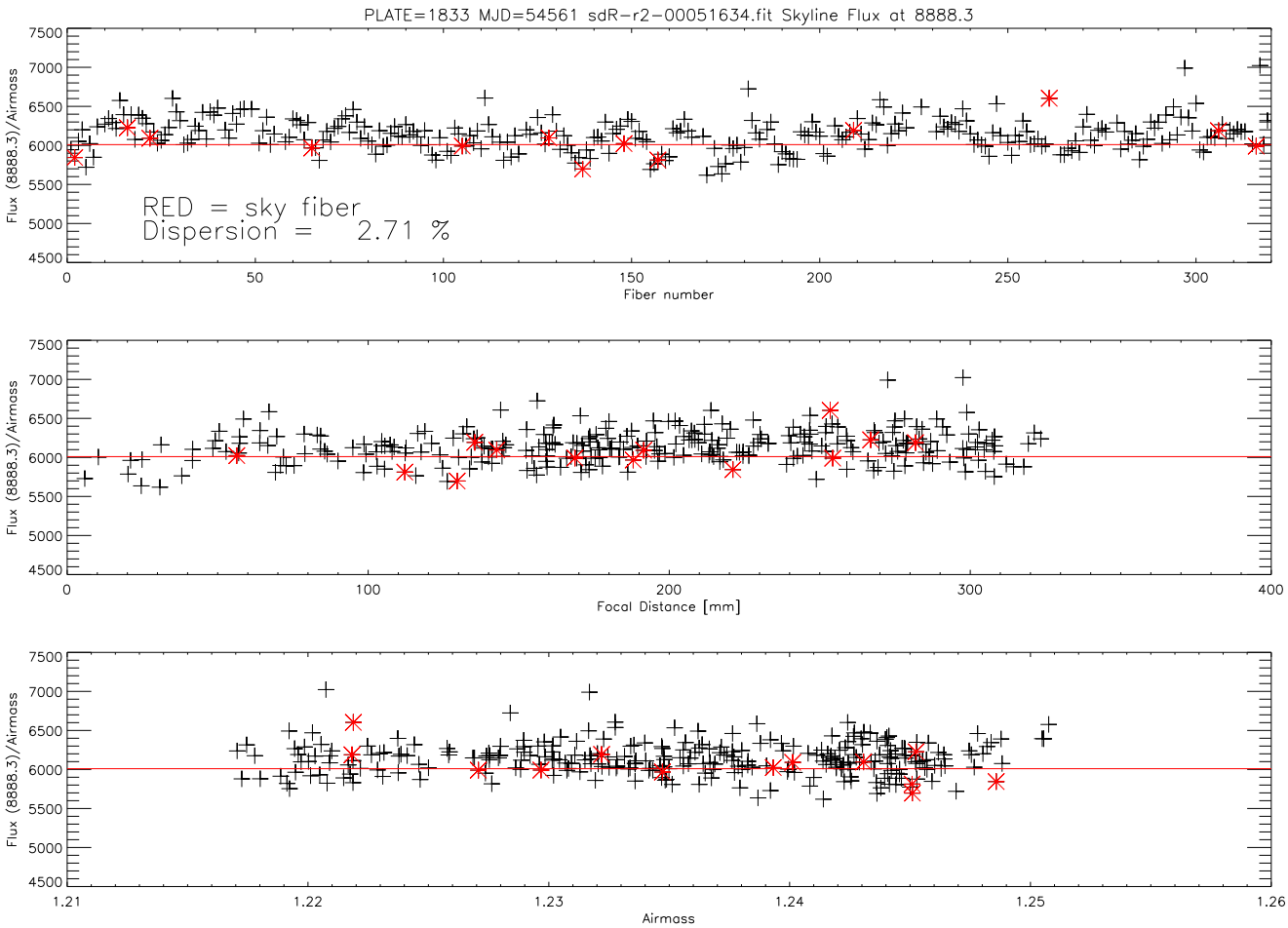

PLATE=1833 MJD=54561 sdR-r2-00051634.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number


PLATE=1833 MJD=54561 sdR-r2-00051634.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1833 MJD=54561 sdR-r2-00051634.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 13
PLATE=1833 MJD=54561 sdR-r2-00051634.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=1833 MJD=54561 sdR-r2-00051634.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=1833 MJD=54561 sdR-r2-00051634.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.71 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass