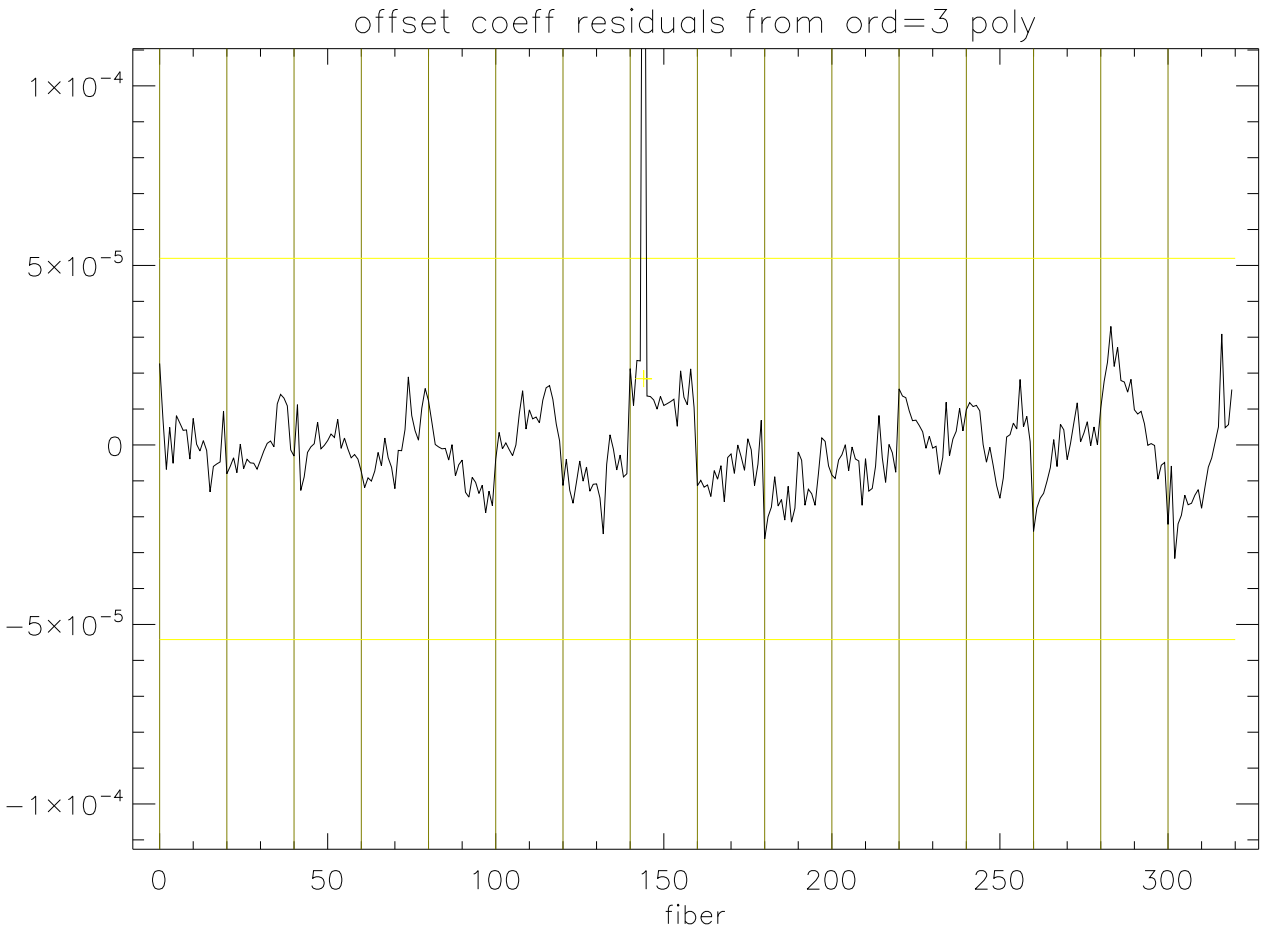
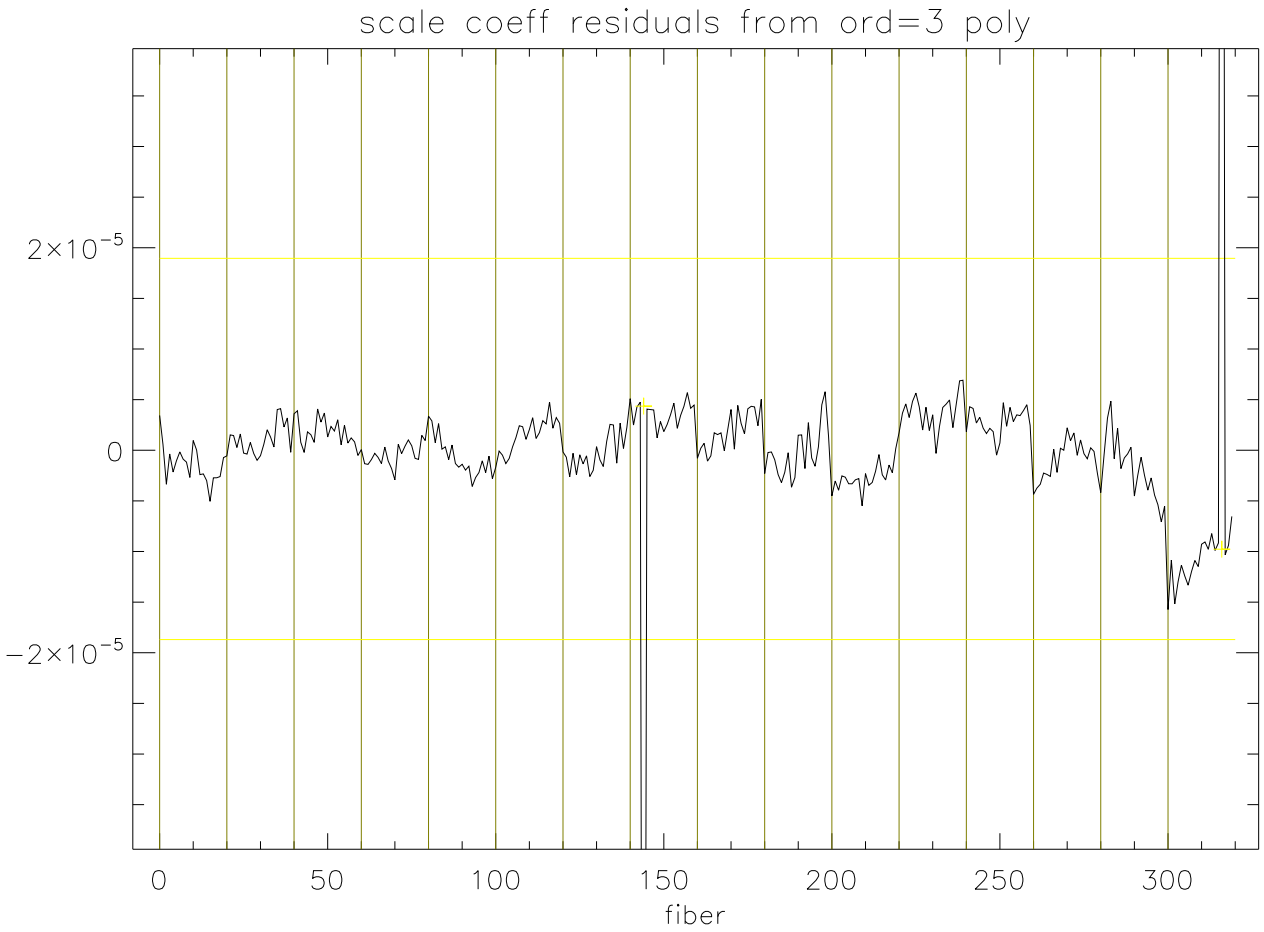
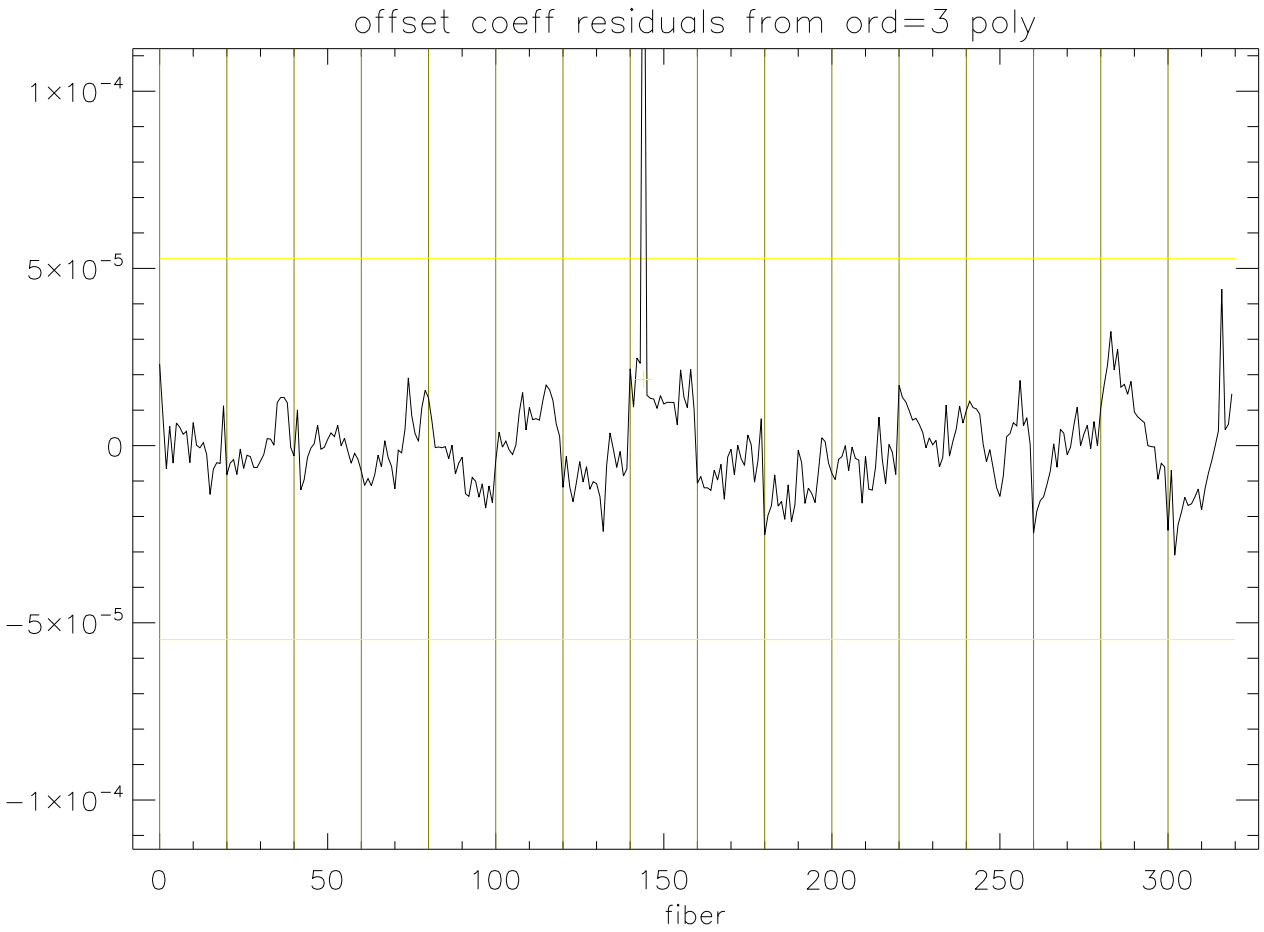
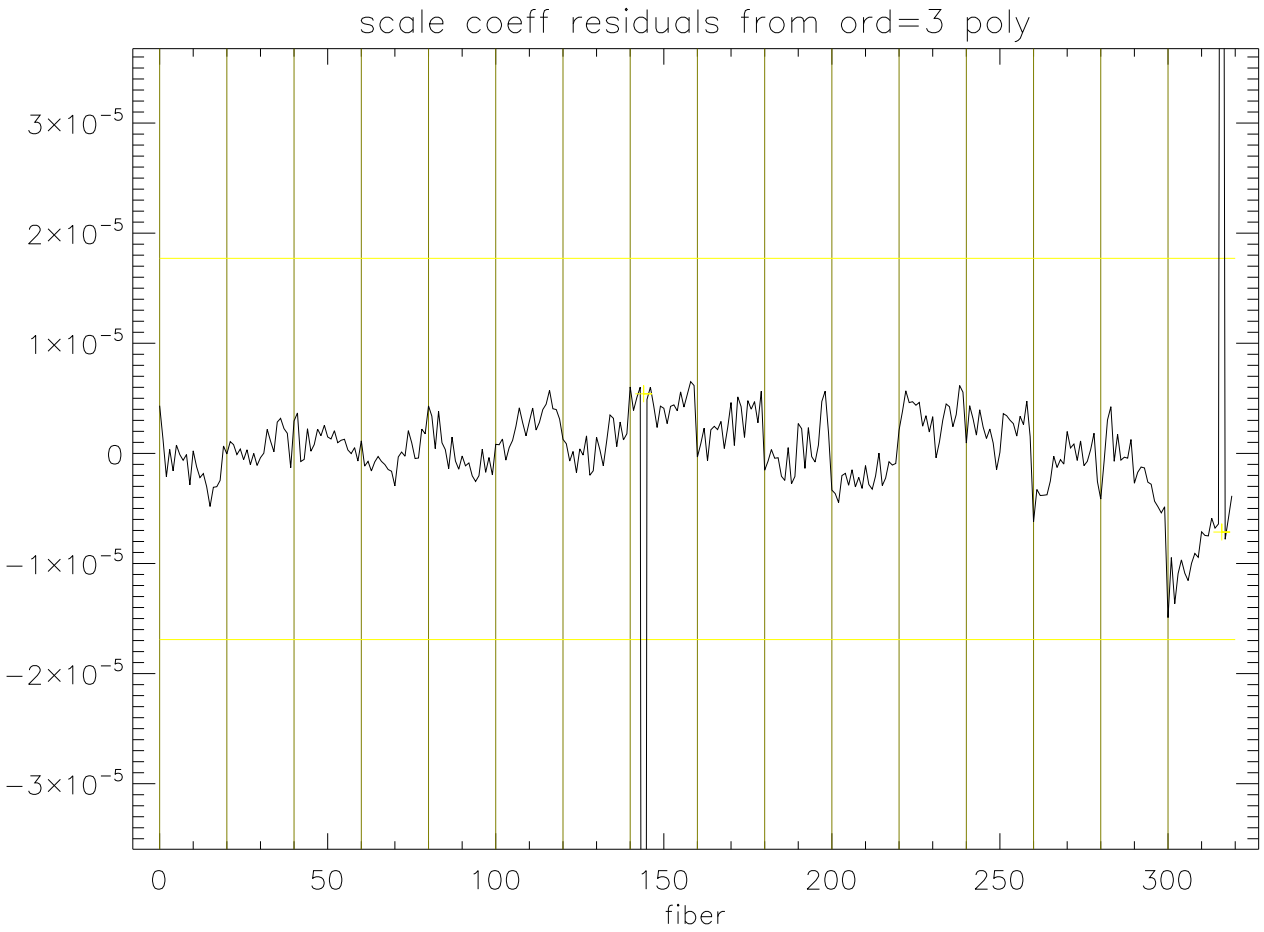
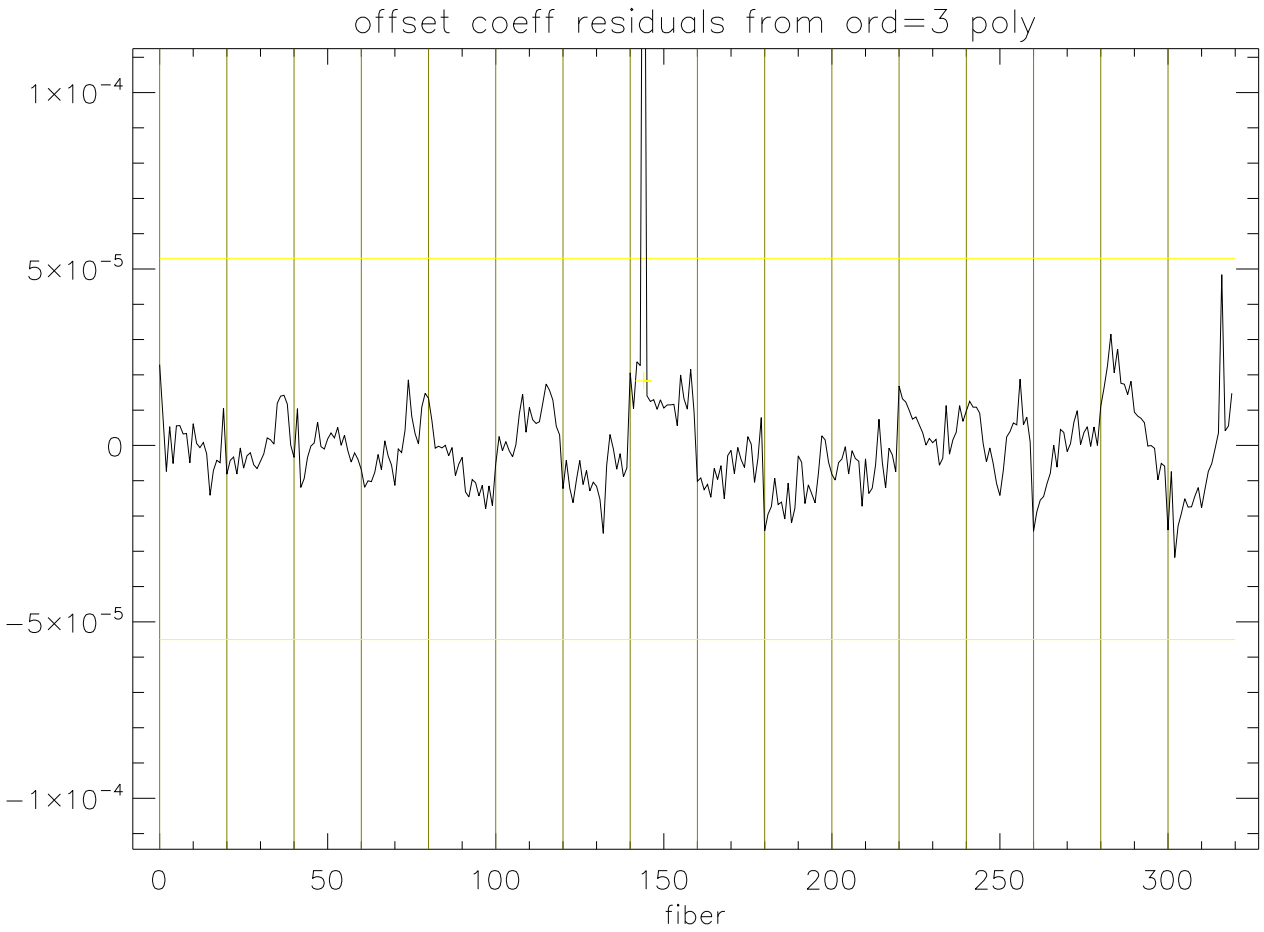
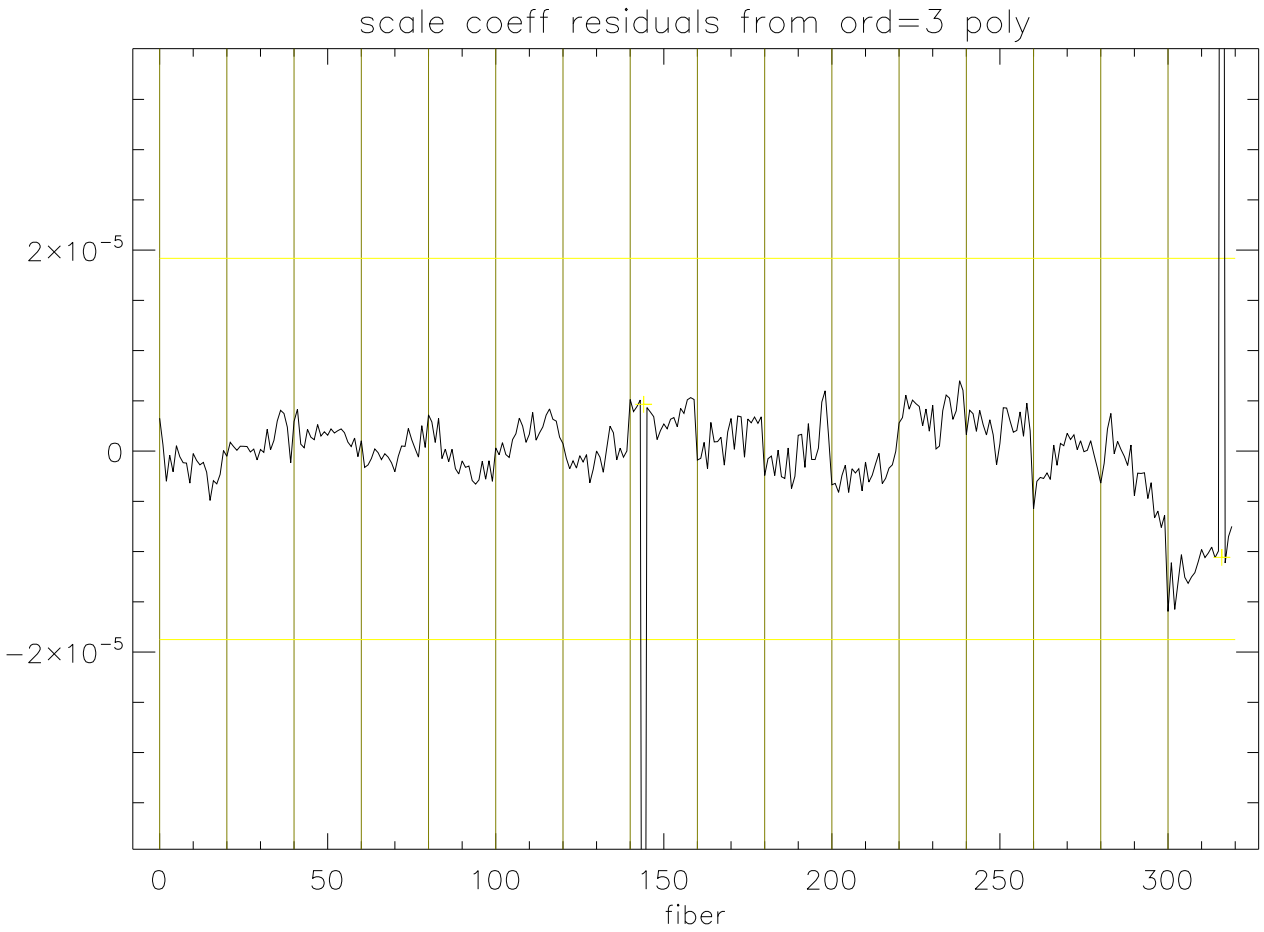

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

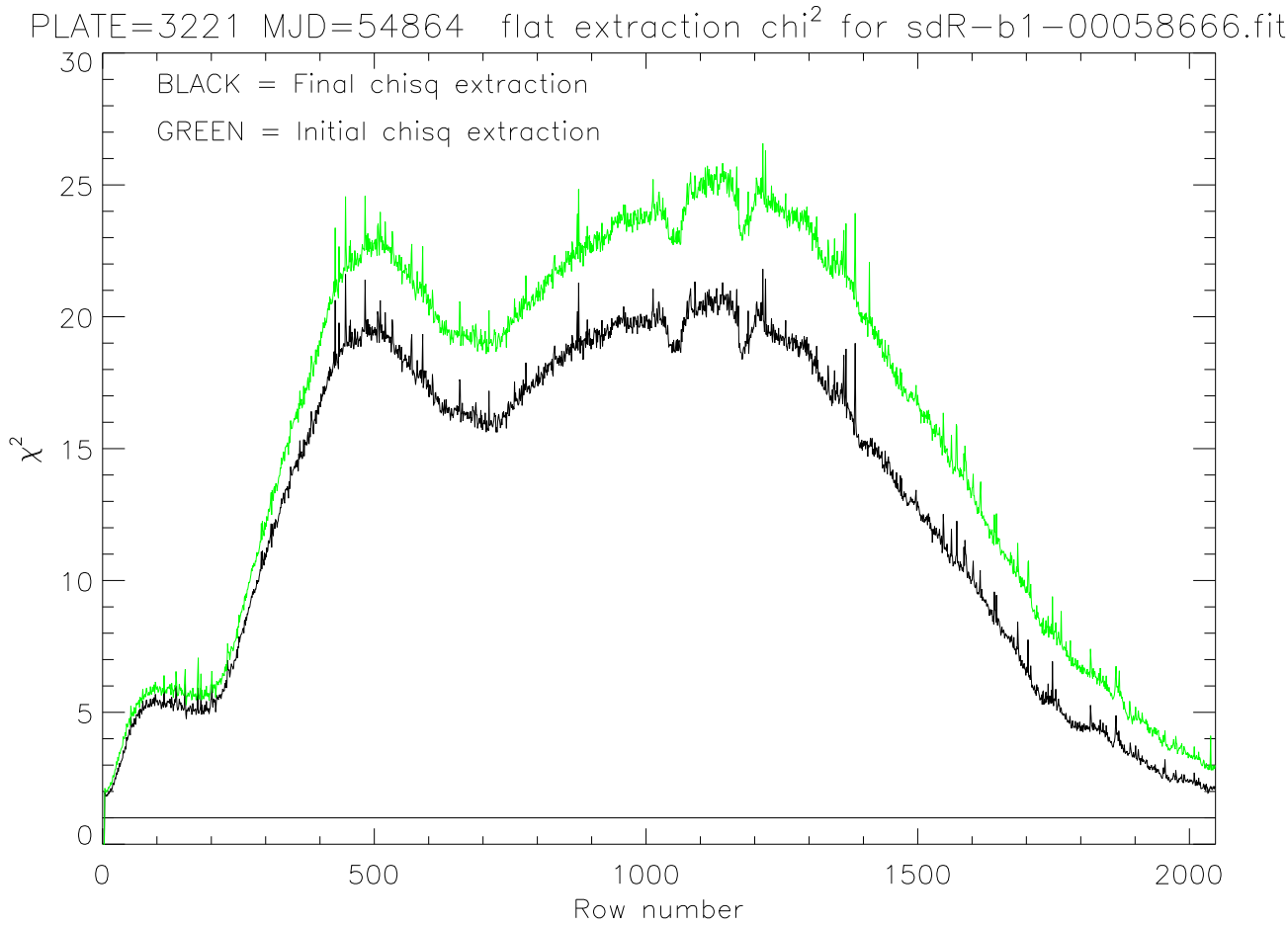

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

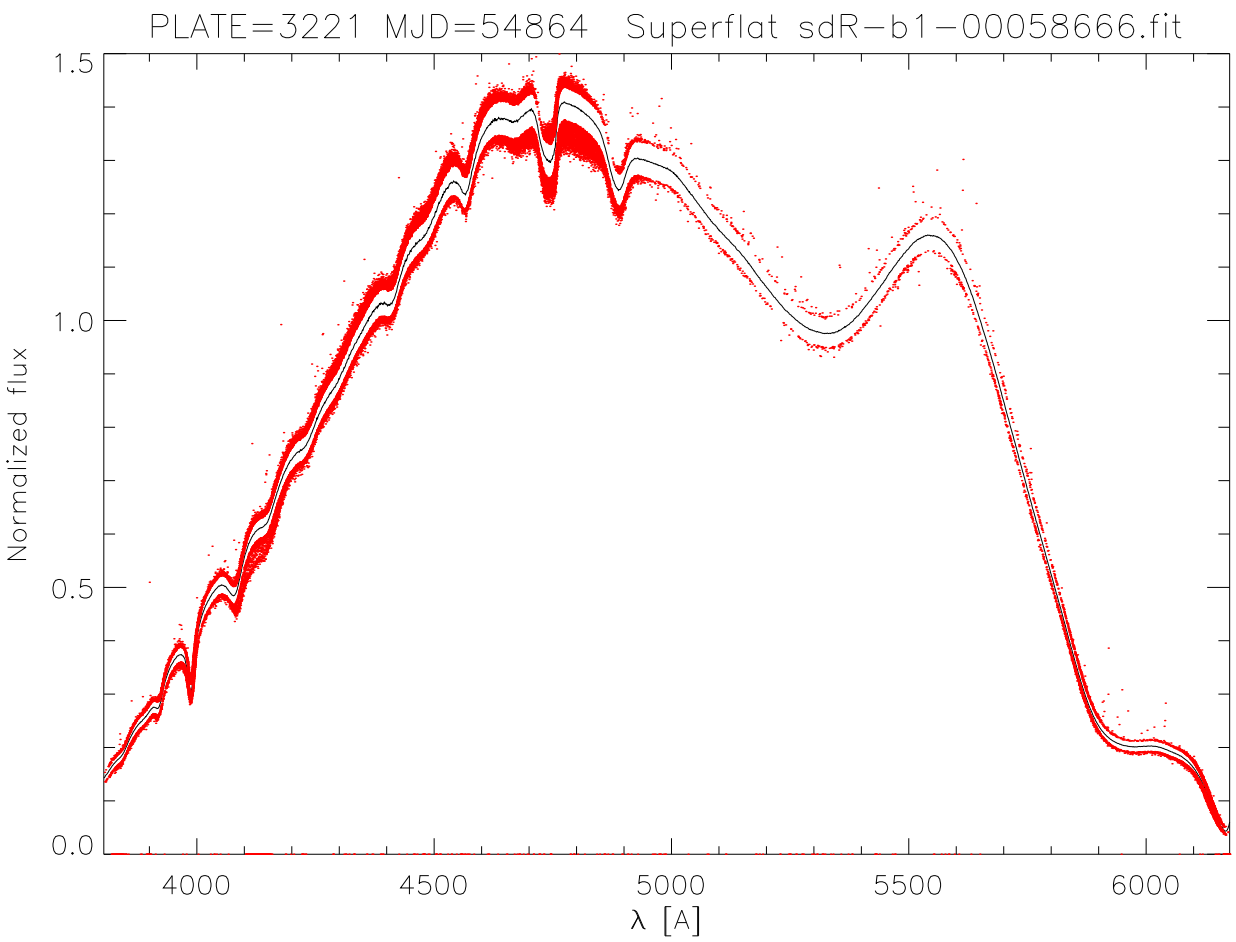

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

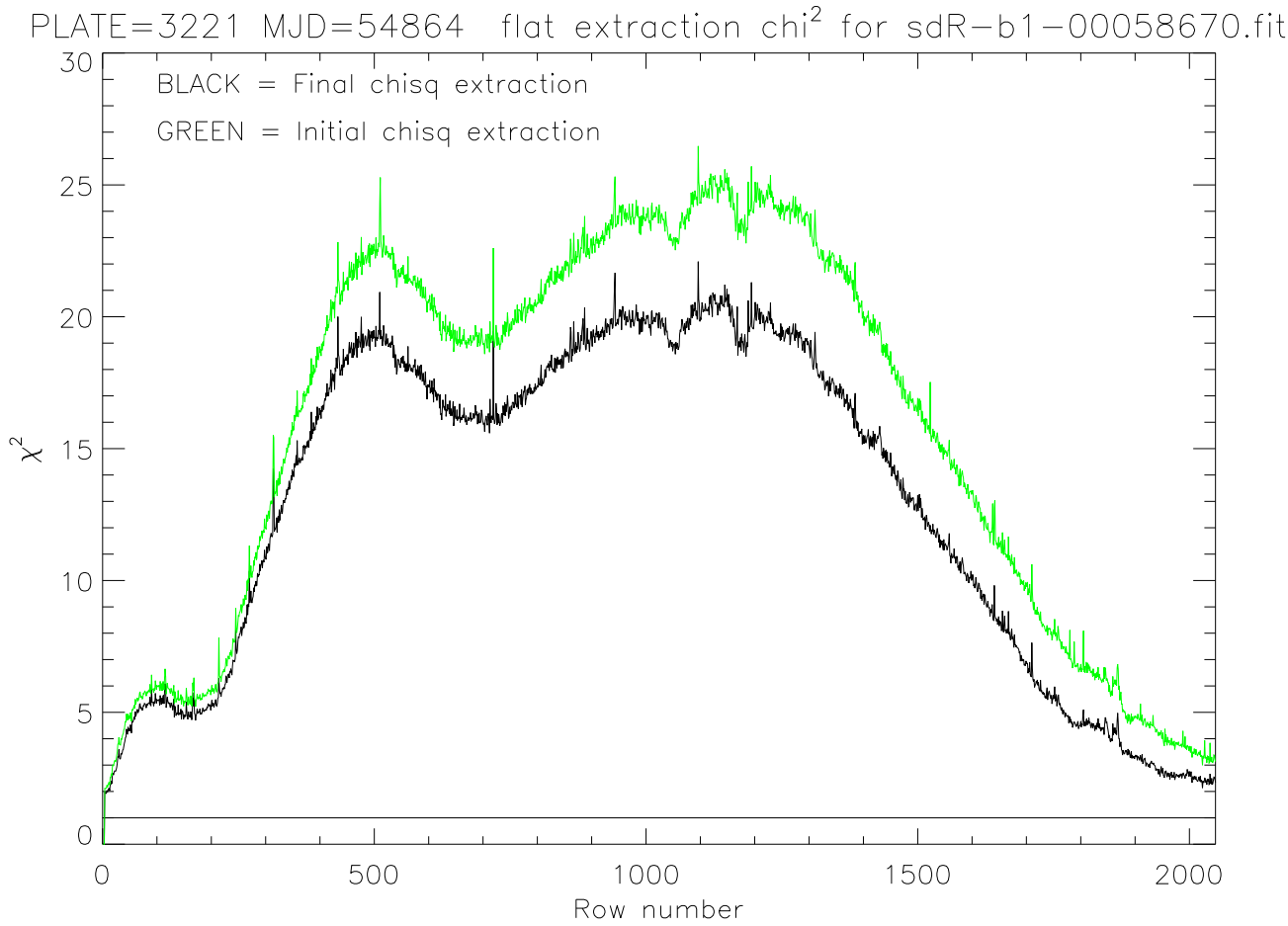

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

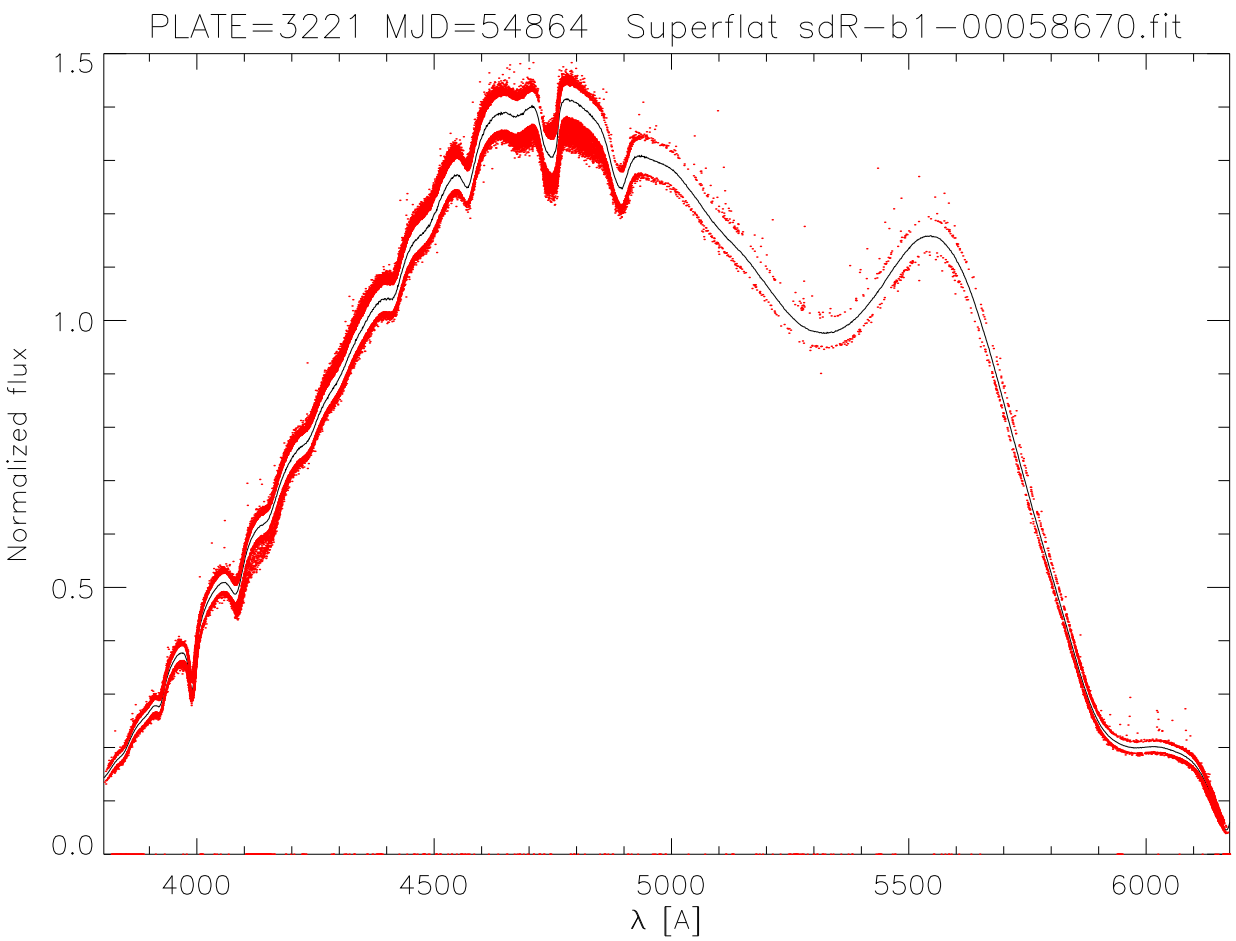

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

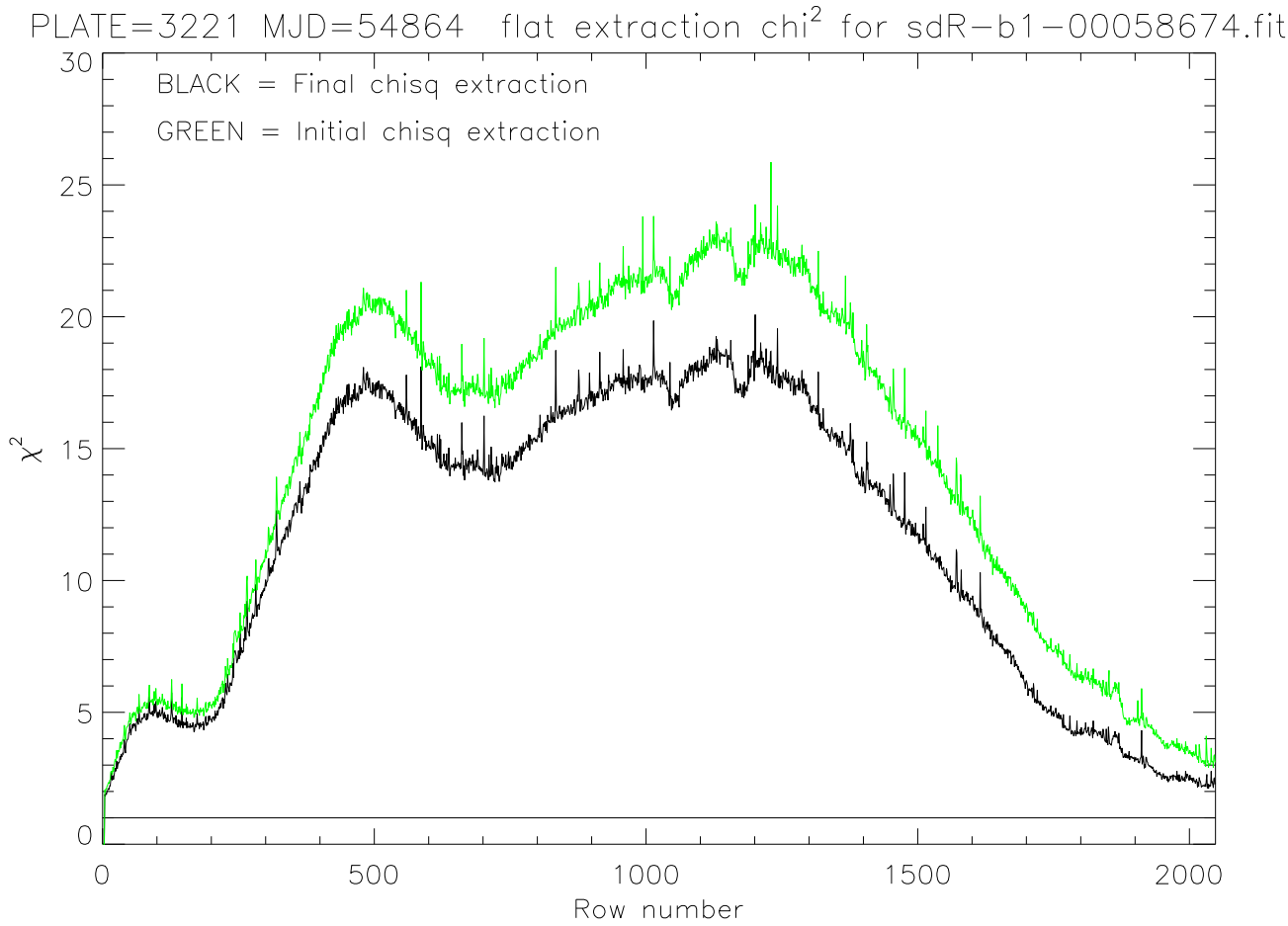

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

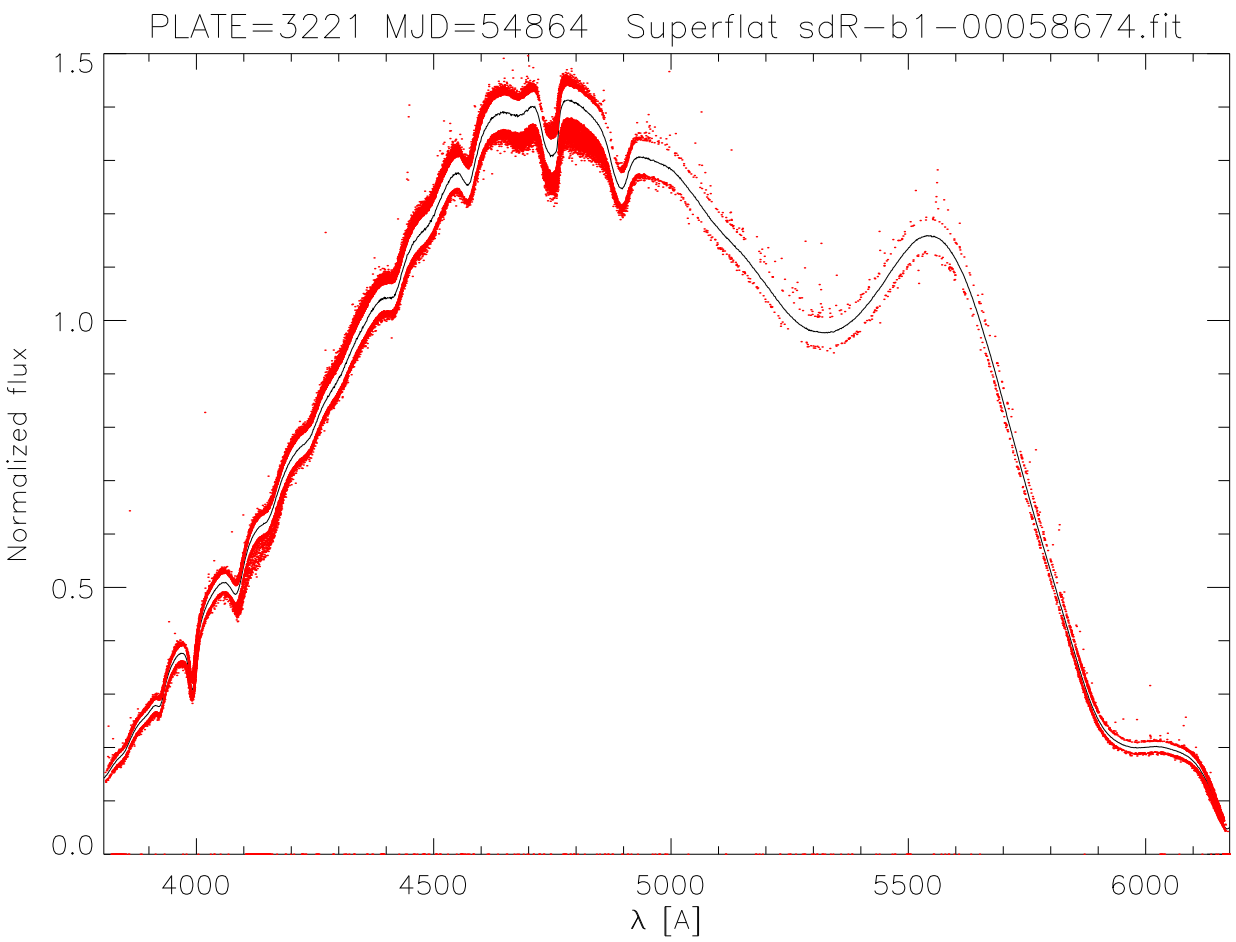

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−b1−00058666.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
30
0
500
1000
1500
2000

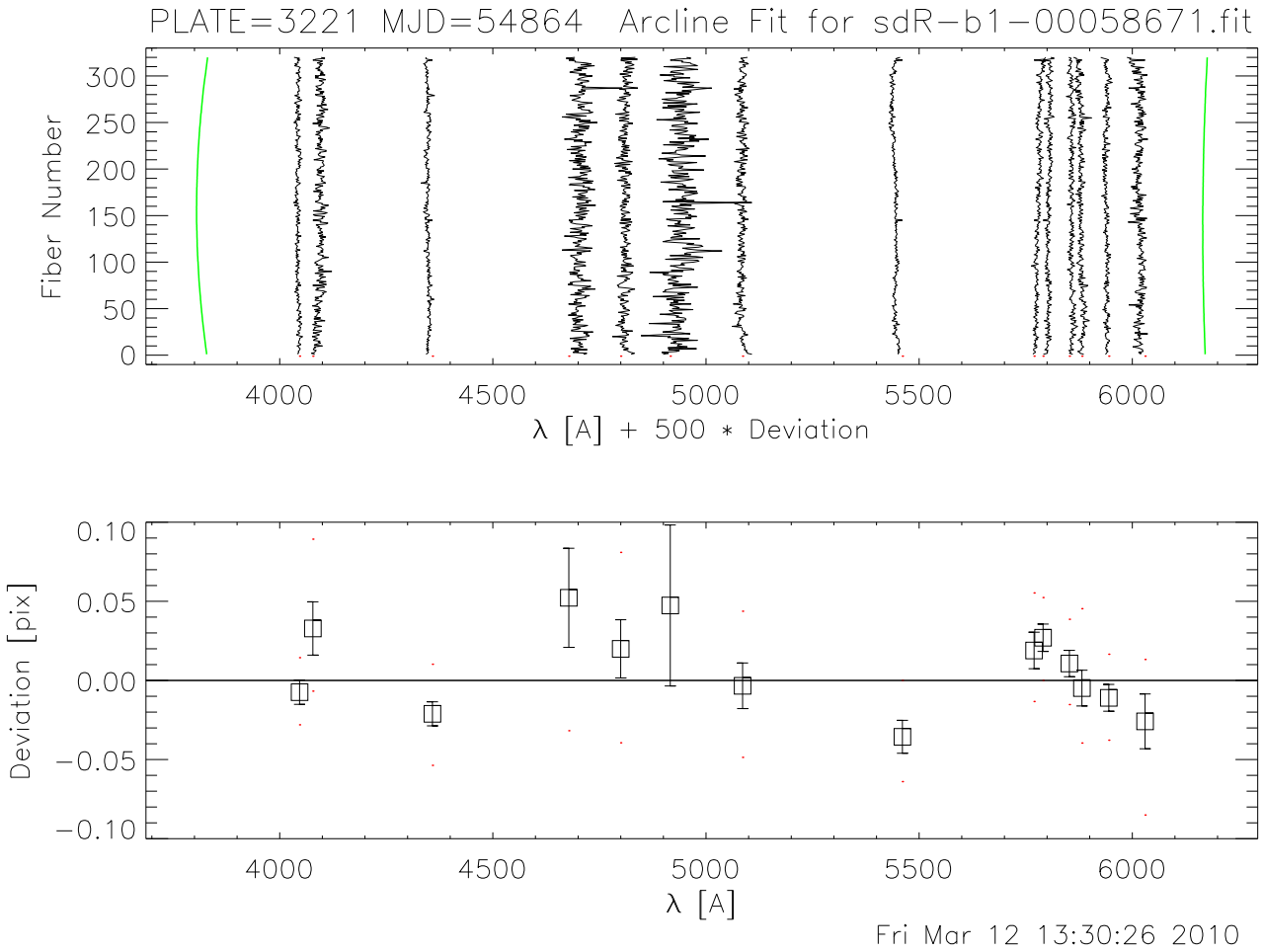

PLATE=3221 MJD=54864 Superflat sdR-b1-00058666.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

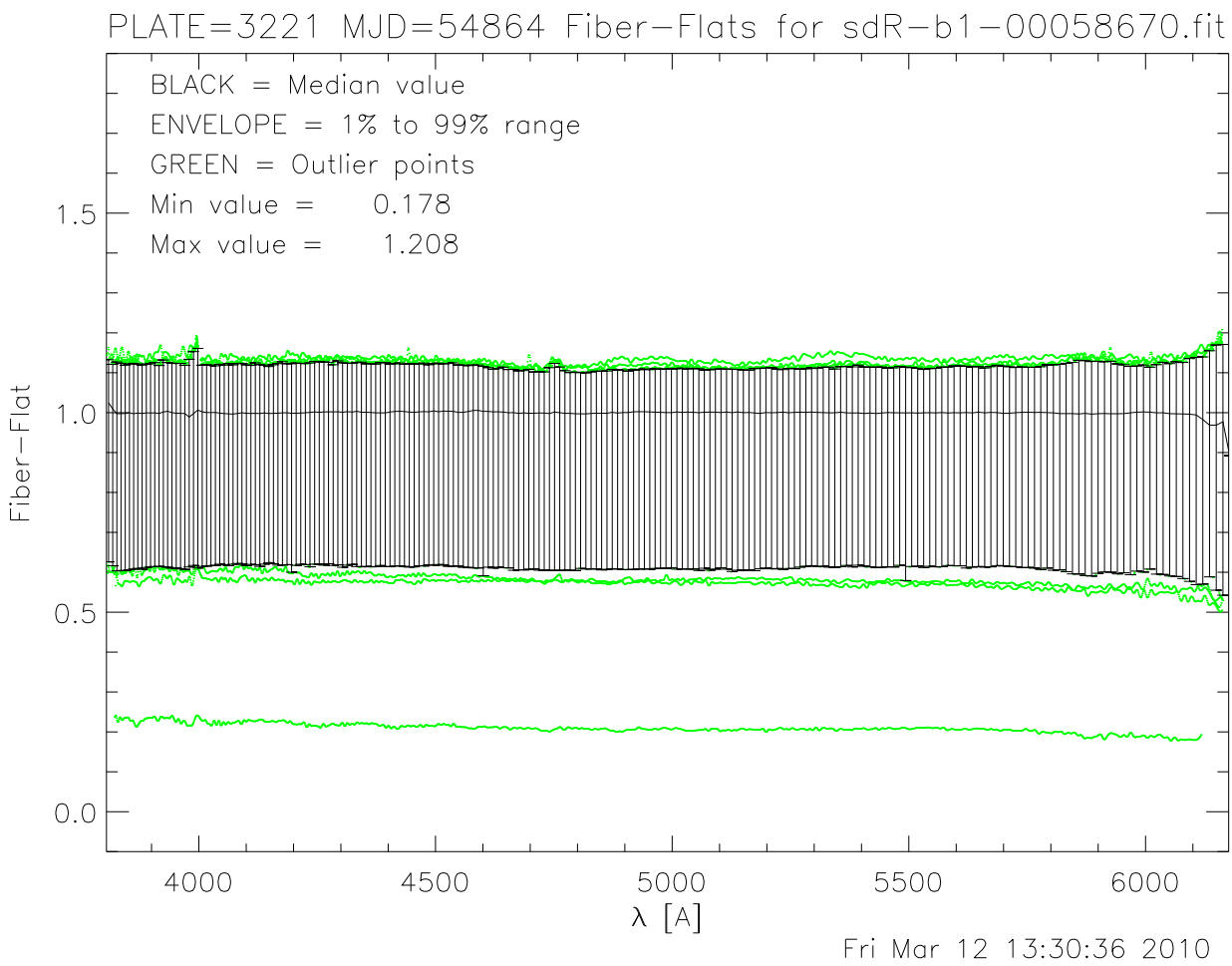

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−b1−00058670.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
30
0
500
1000
1500
2000

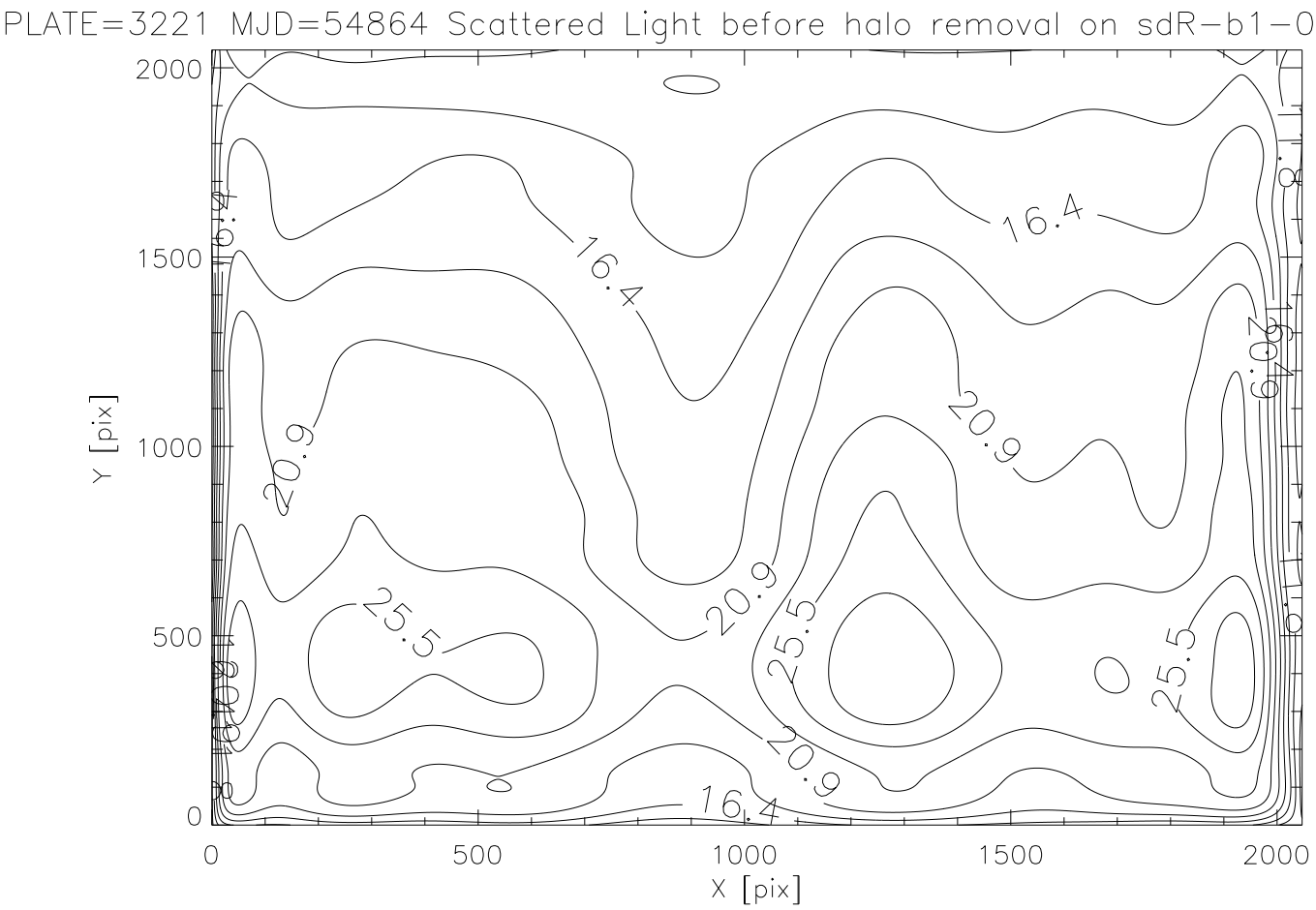

PLATE=3221 MJD=54864 Superflat sdR-b1-00058670.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

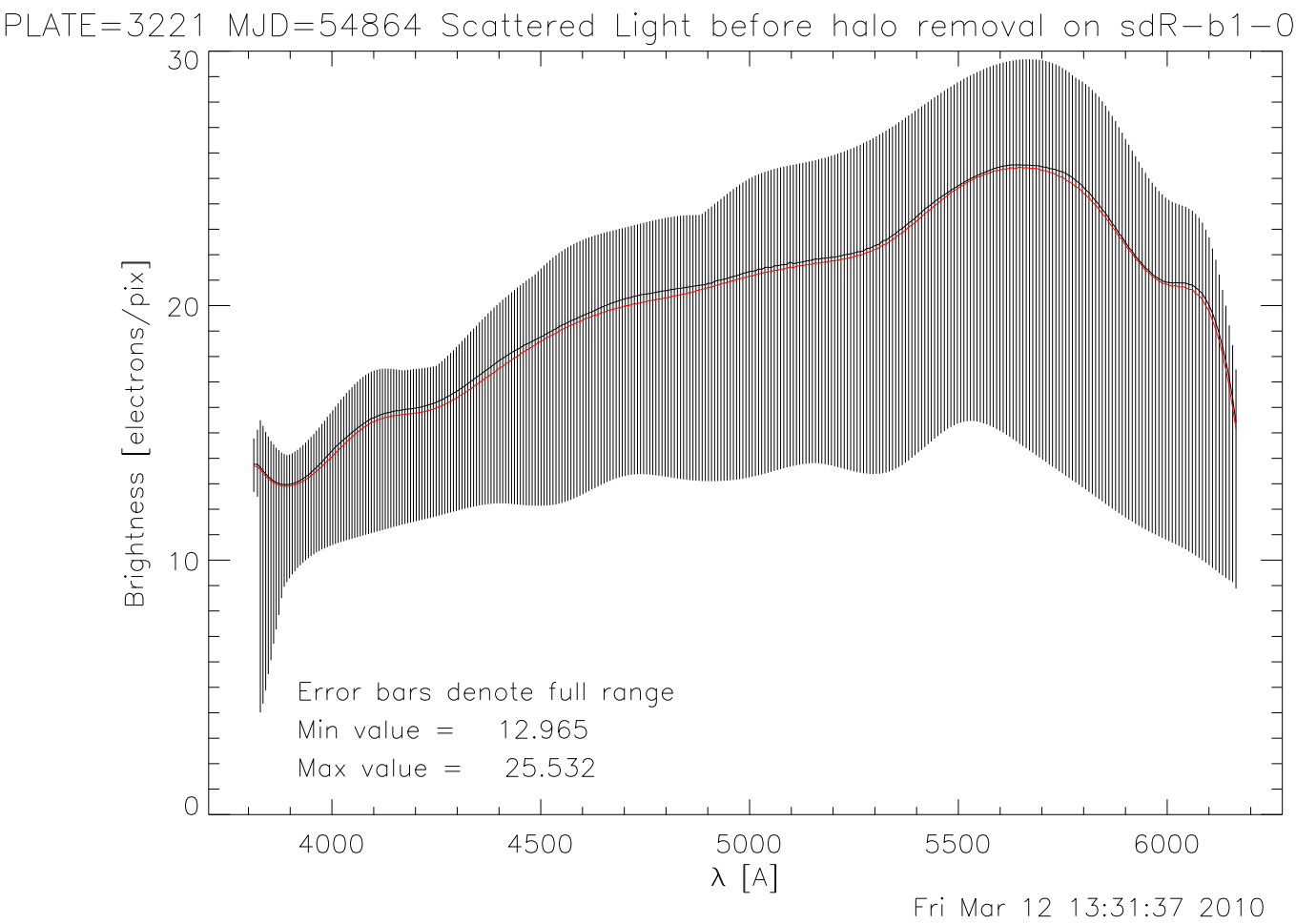

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−b1−00058674.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
30
0
500
1000
1500
2000

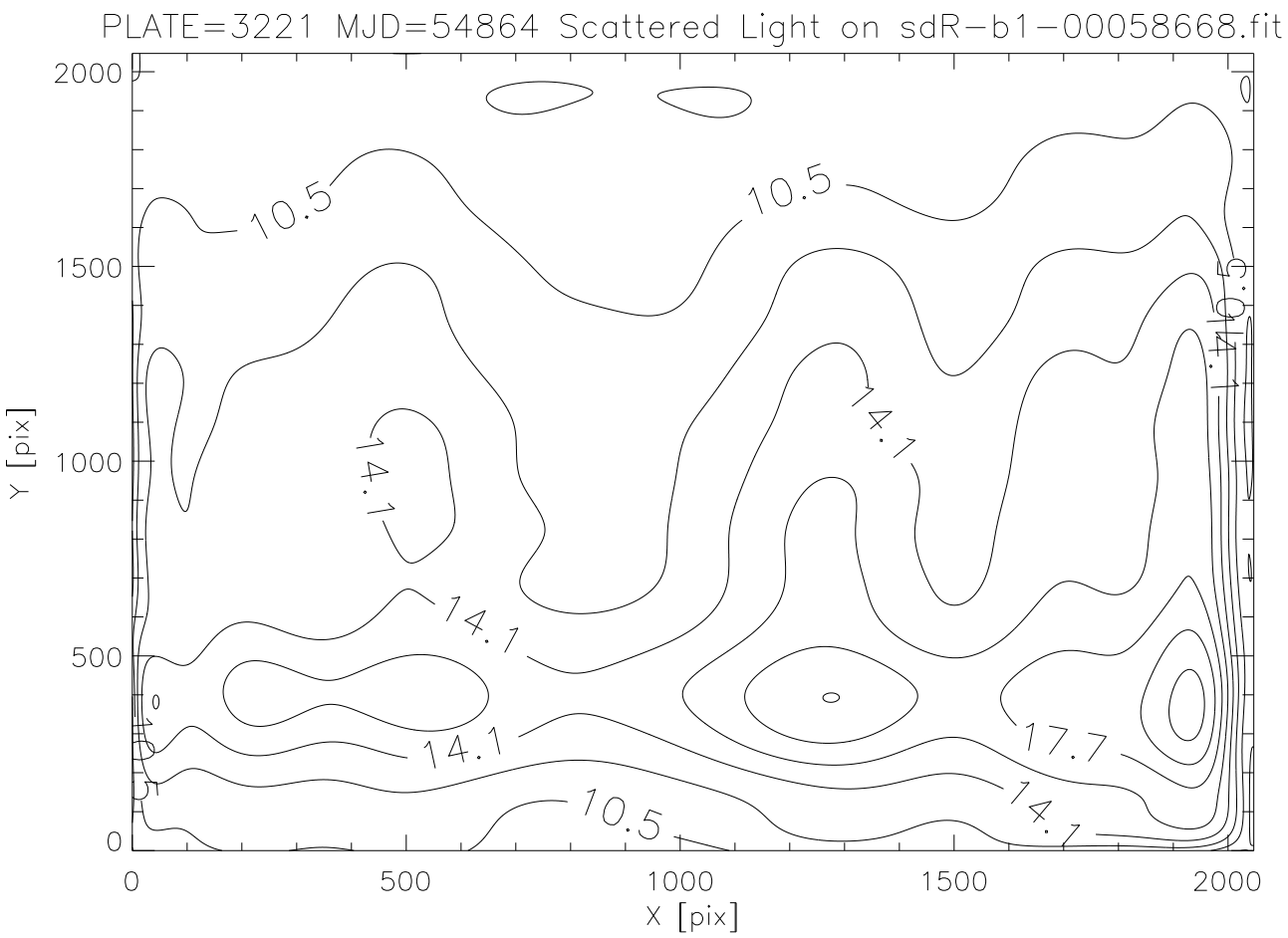

PLATE=3221 MJD=54864 Superflat sdR-b1-00058674.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

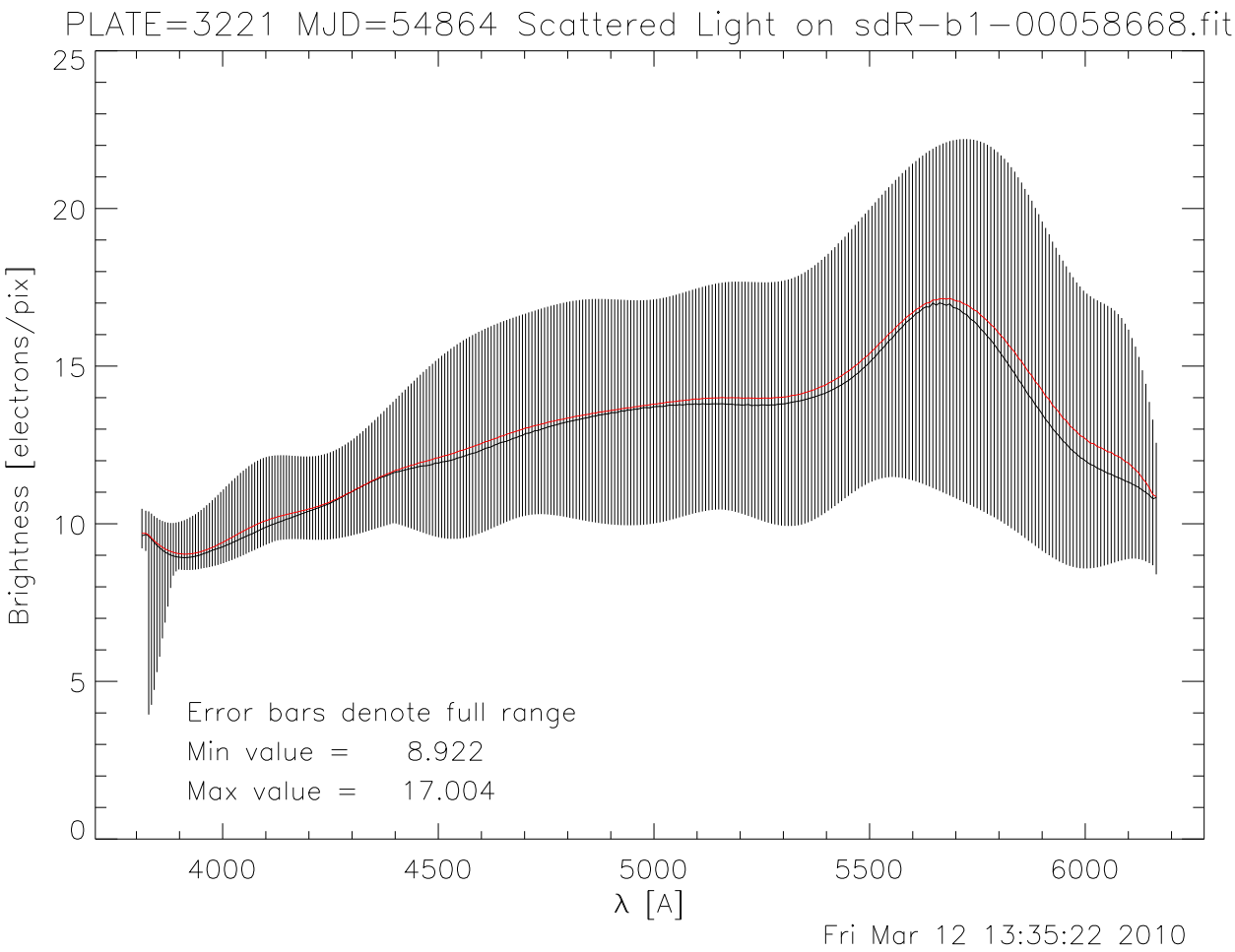

PLATE=3221 MJD=54864 Arcline Fit for sdR-b1-00058671.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 13:30:26 2010

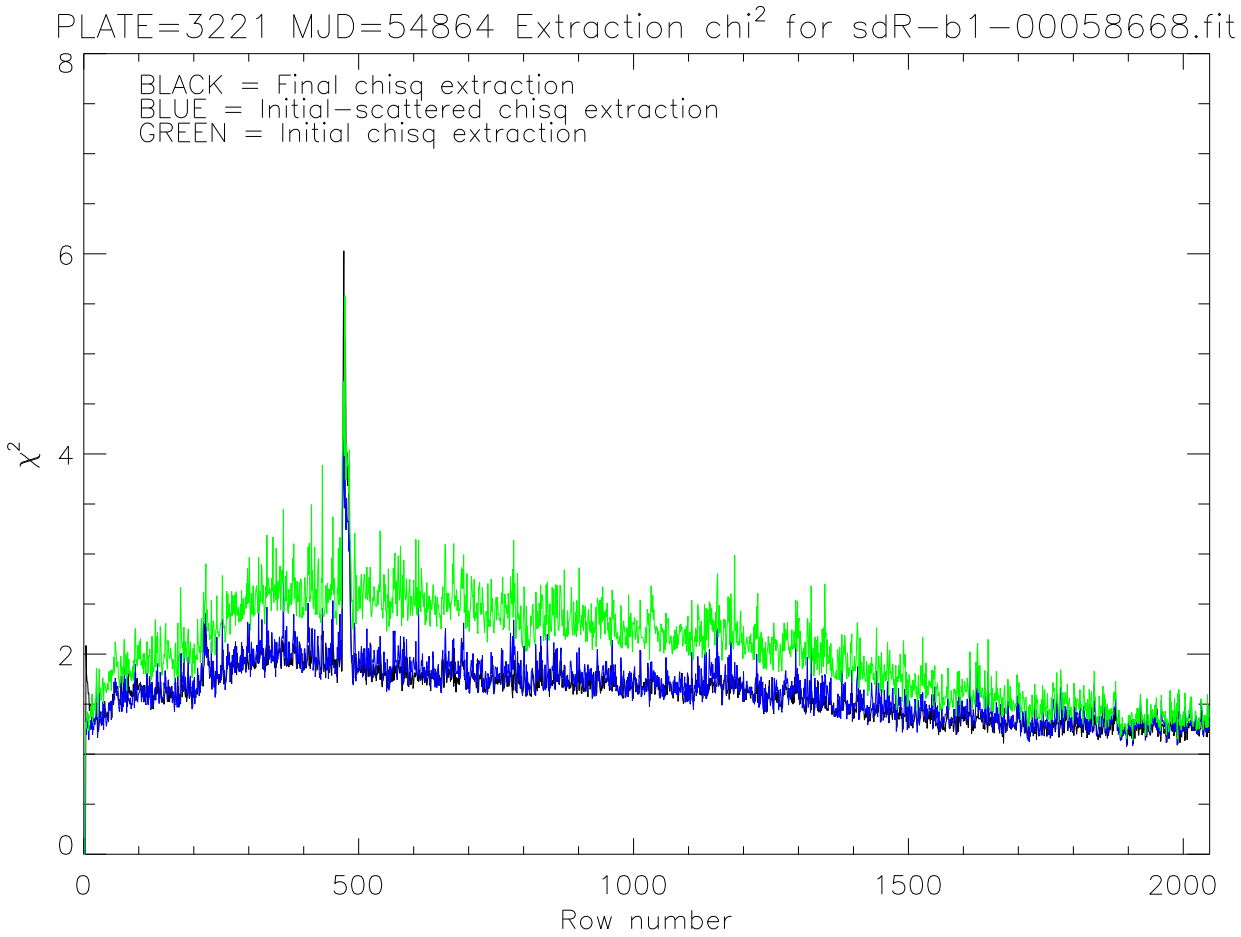

PLATE=3221 MJD=54864 Fiber-Flats for sdR-b1-00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.178
Max value = 1.208
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 13:30:36 2010

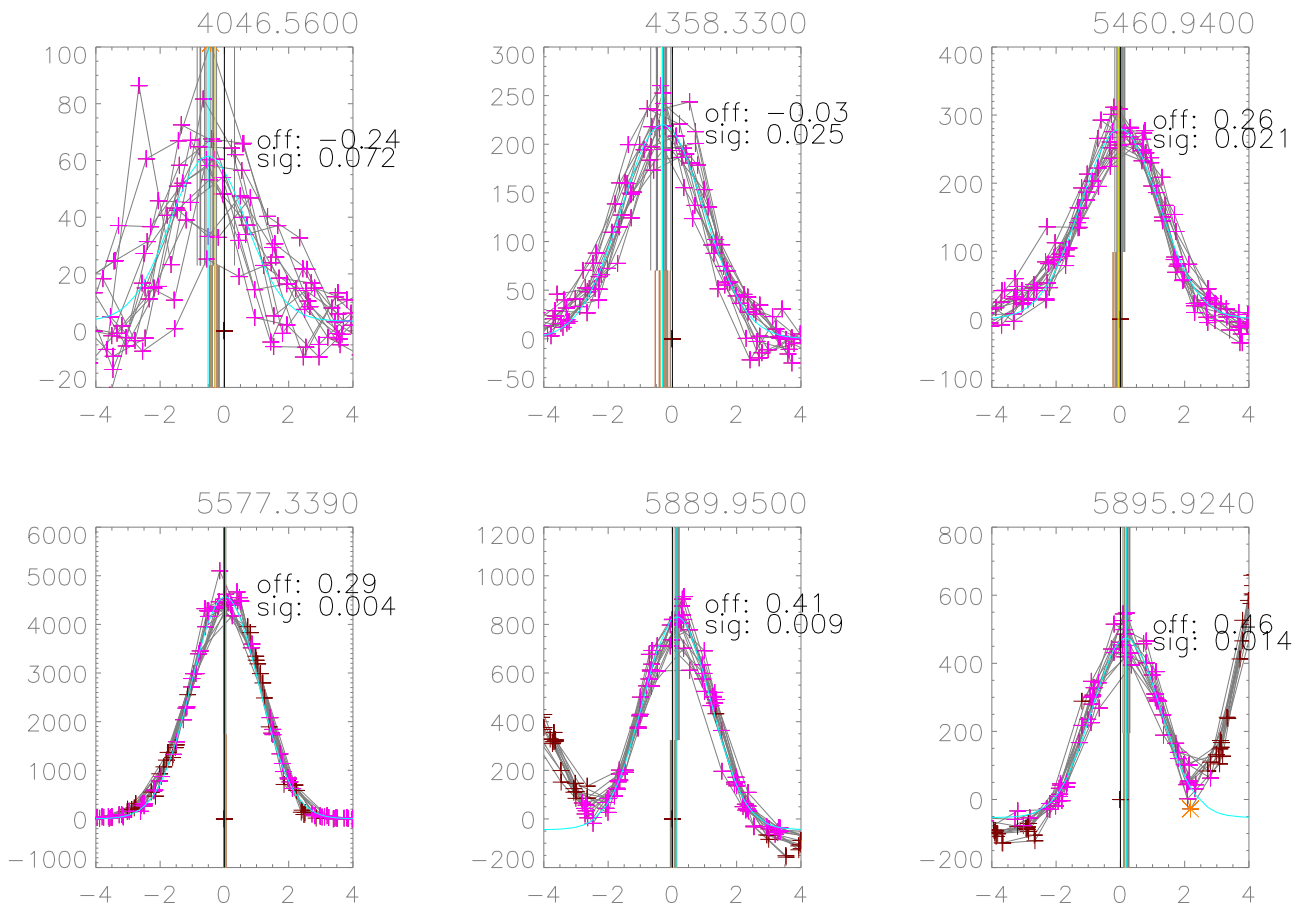

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR−b1−00058668.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
16.4
20.9
25.5

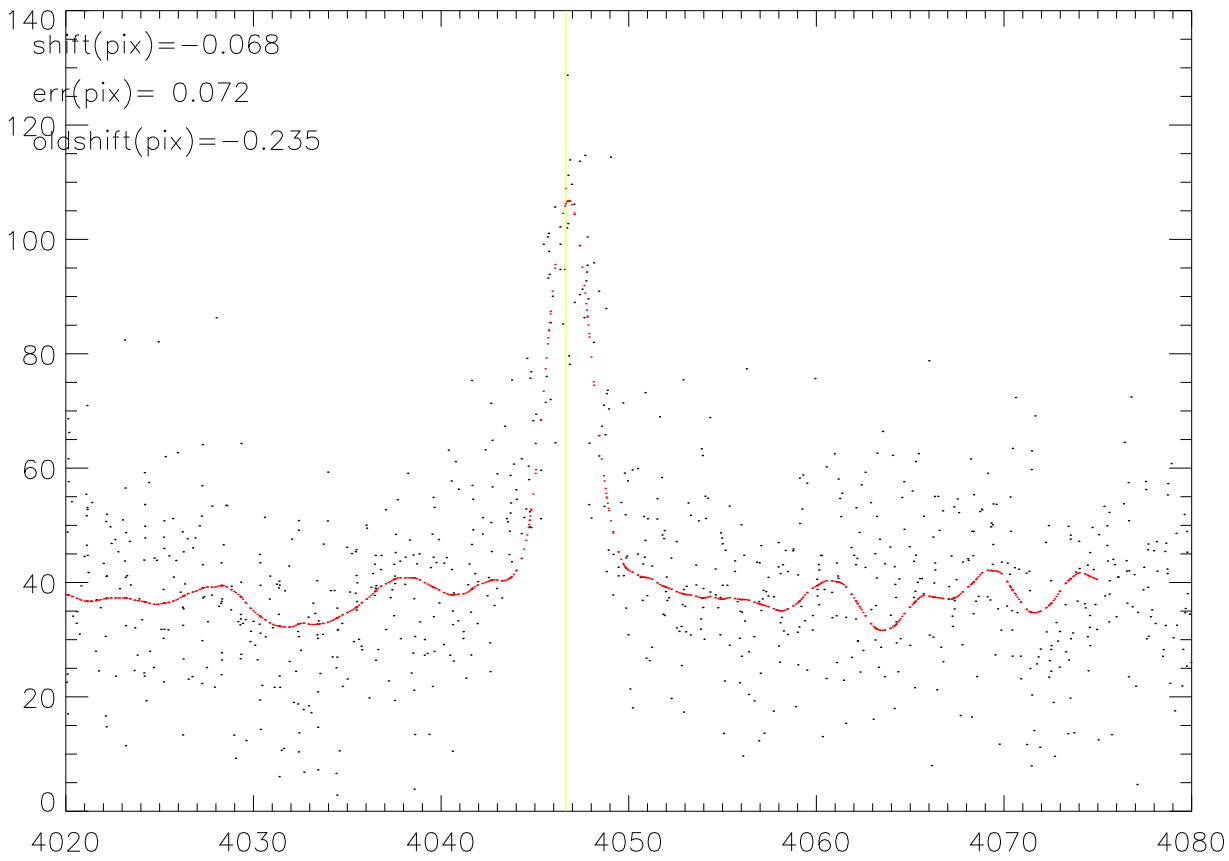

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b1-00058668.f
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 12.965
Max value = 25.532
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 13:31:37 2010

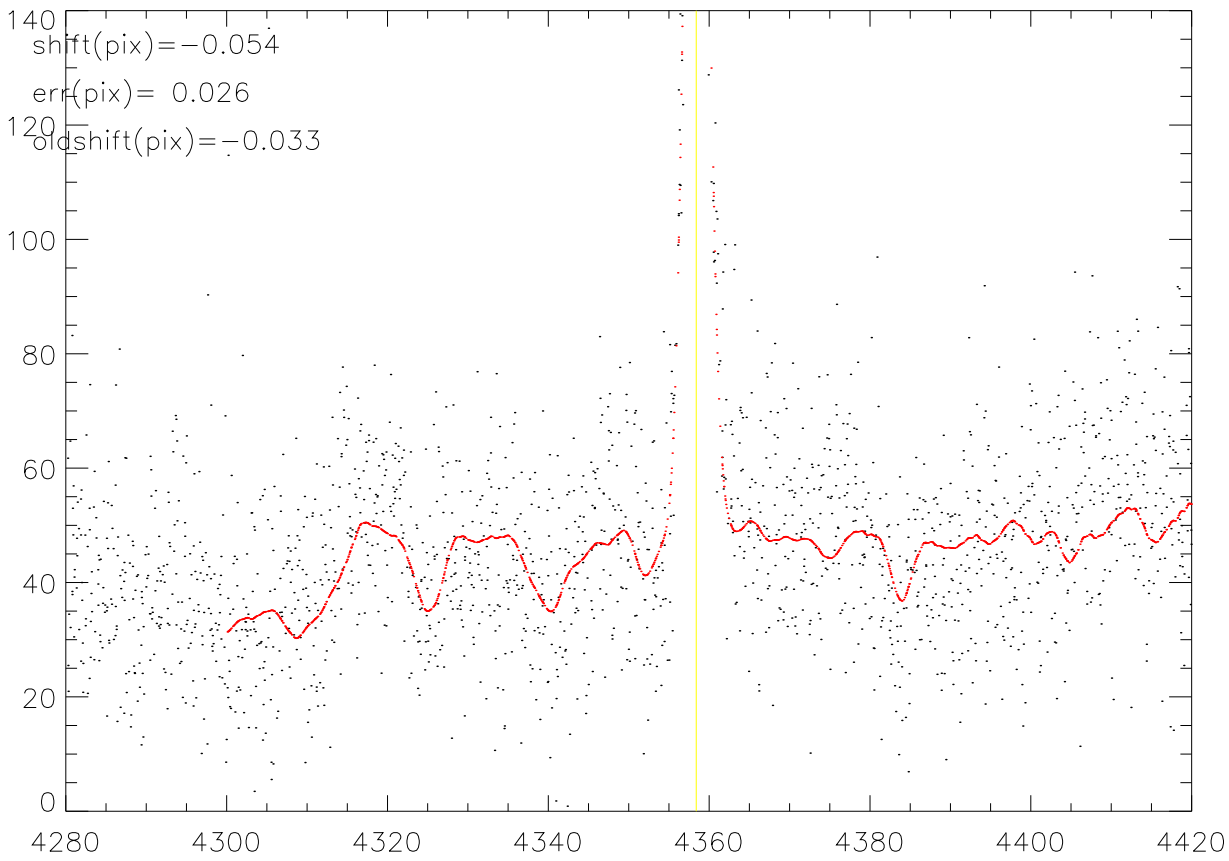

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058668.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
14.1
17.7

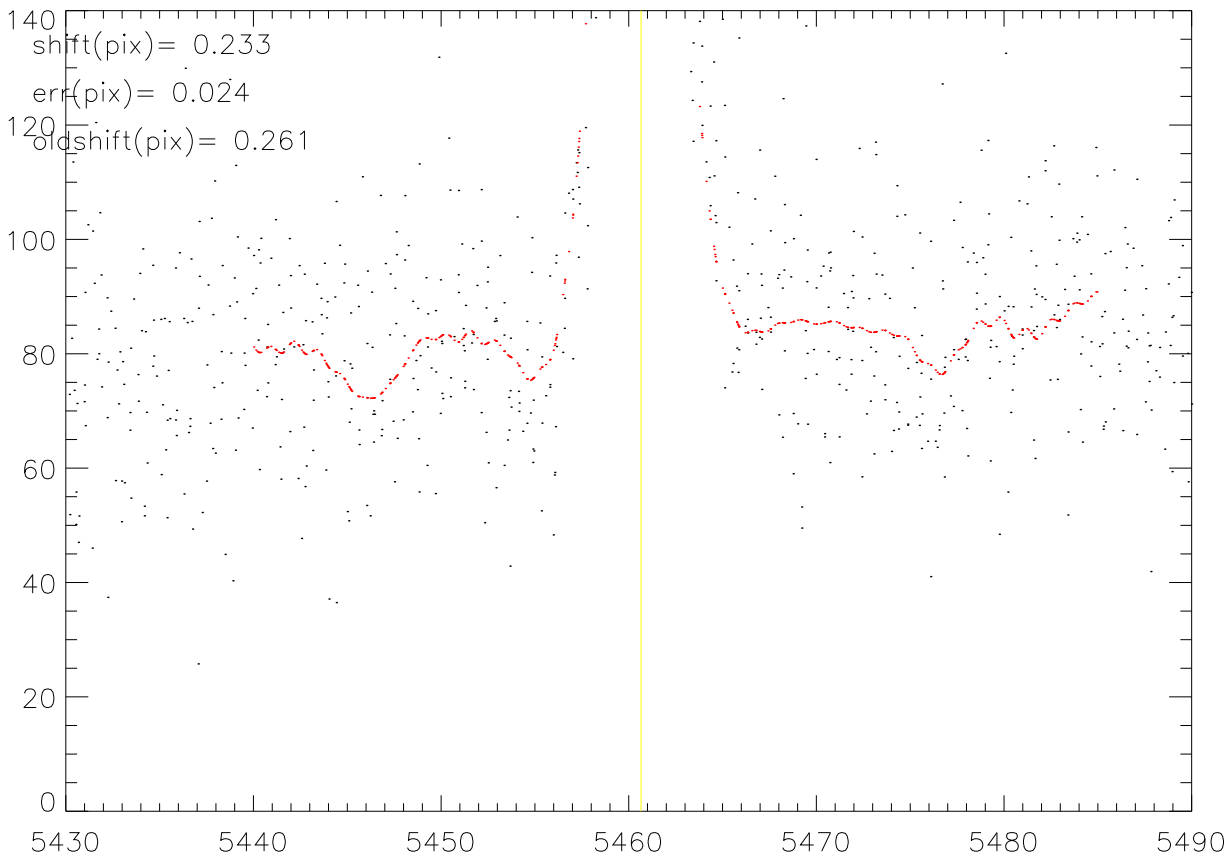

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058668.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.922
Max value = 17.004
Fri Mar 12 13:35:22 2010

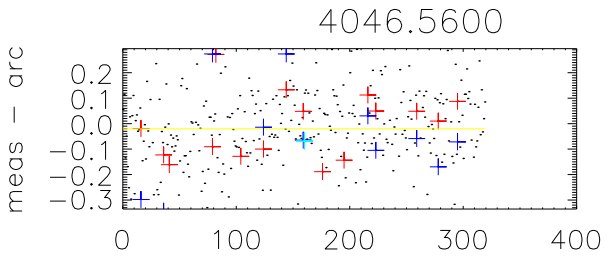

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b1-00058668.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

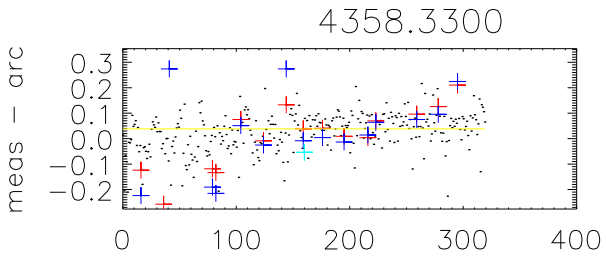

4046.5600
off: −0.24
sig: 0.072
4358.3300
off: −0.03
sig: 0.025
5460.9400
off: 0.26
sig: 0.021
5577.3390
off: 0.29
sig: 0.004
5889.9500
off: 0.41
sig: 0.009
5895.9240
off: 0.46
sig: 0.014

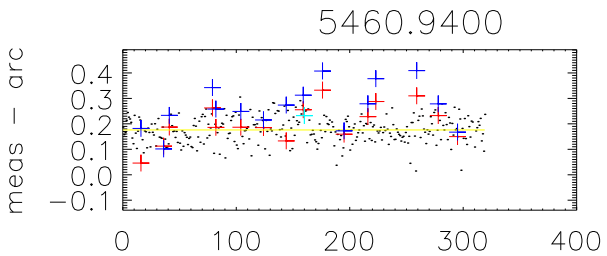

shift(pix)=−0.068
err(pix)= 0.072
oldshift(pix)=−0.235
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

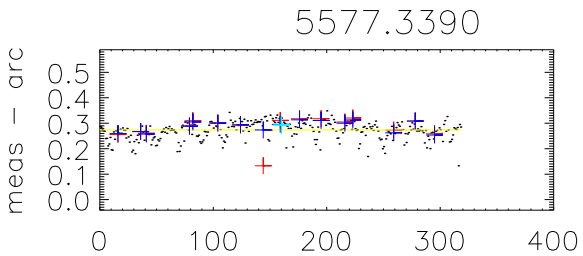

shift(pix)=−0.054
err(pix)= 0.026
oldshift(pix)=−0.033
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

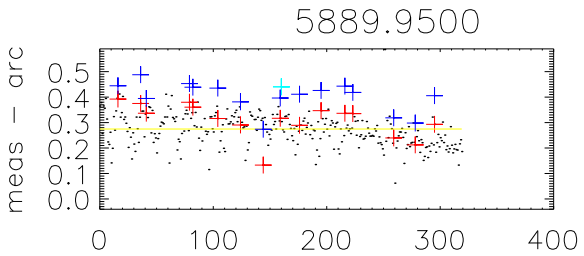

shift(pix)= 0.233
err(pix)= 0.024
oldshift(pix)= 0.261
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

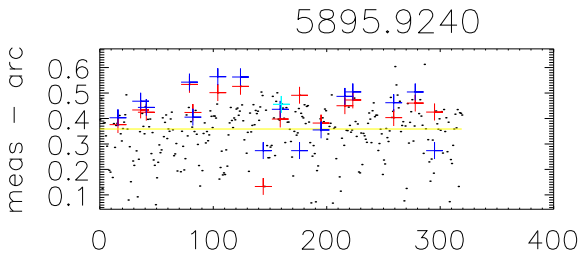

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

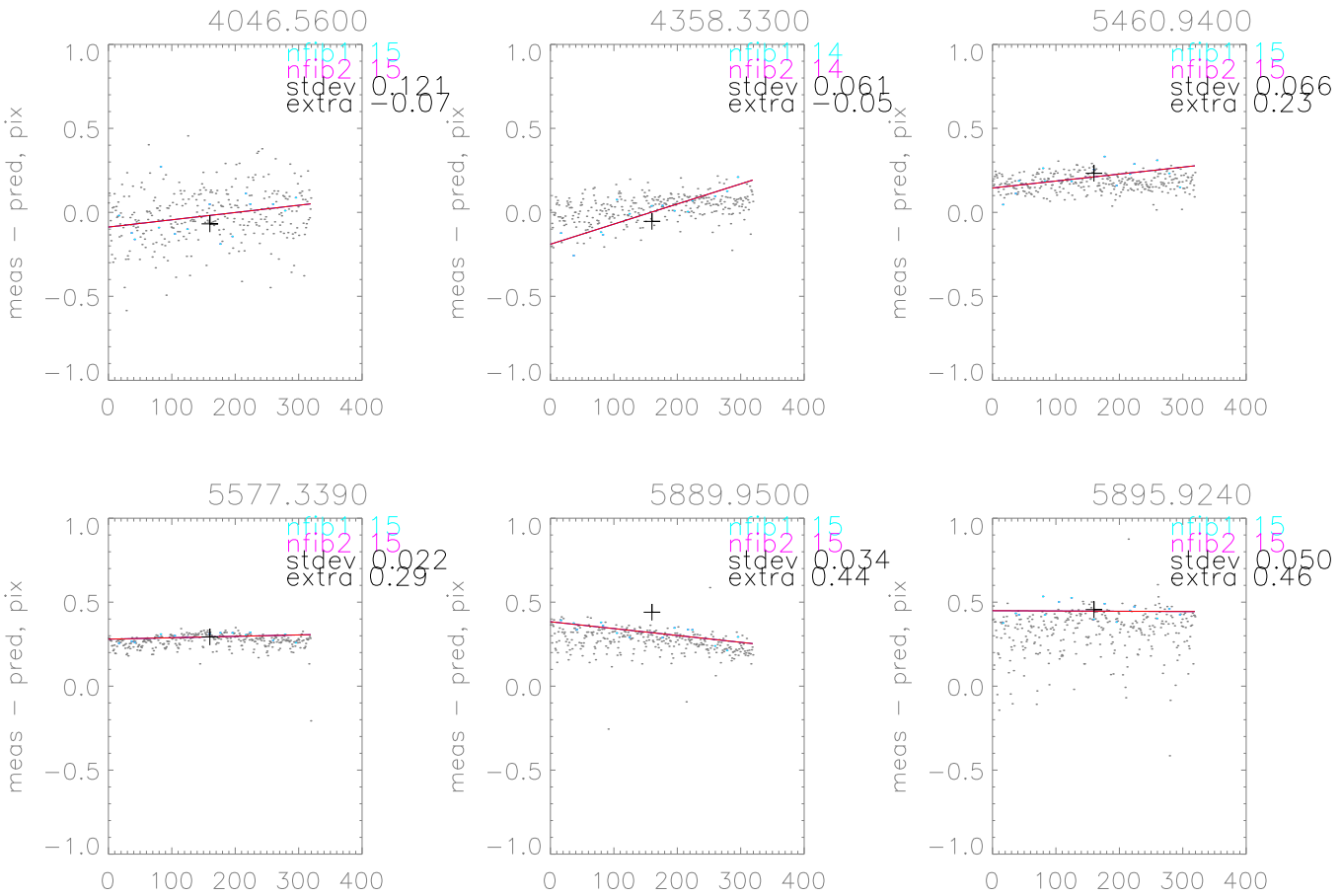

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

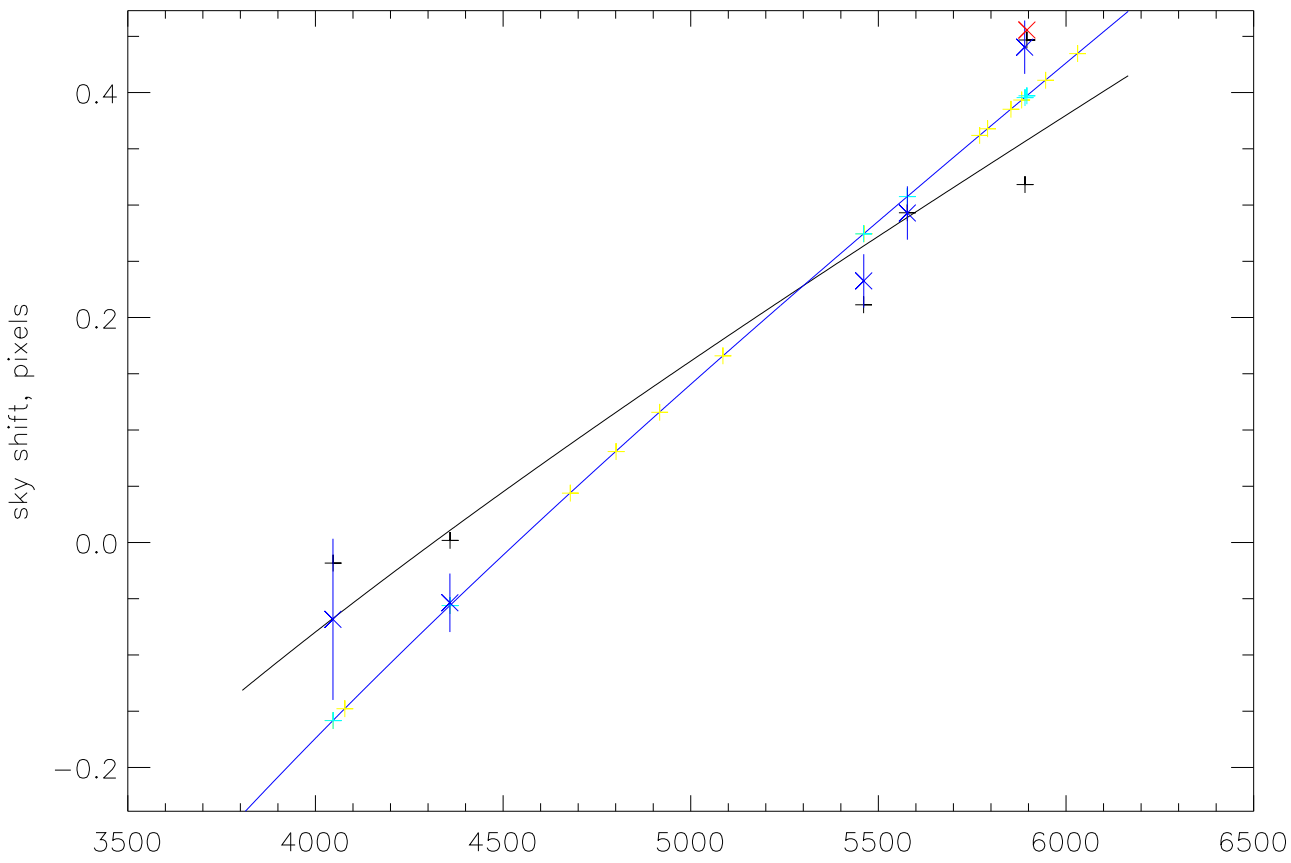

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

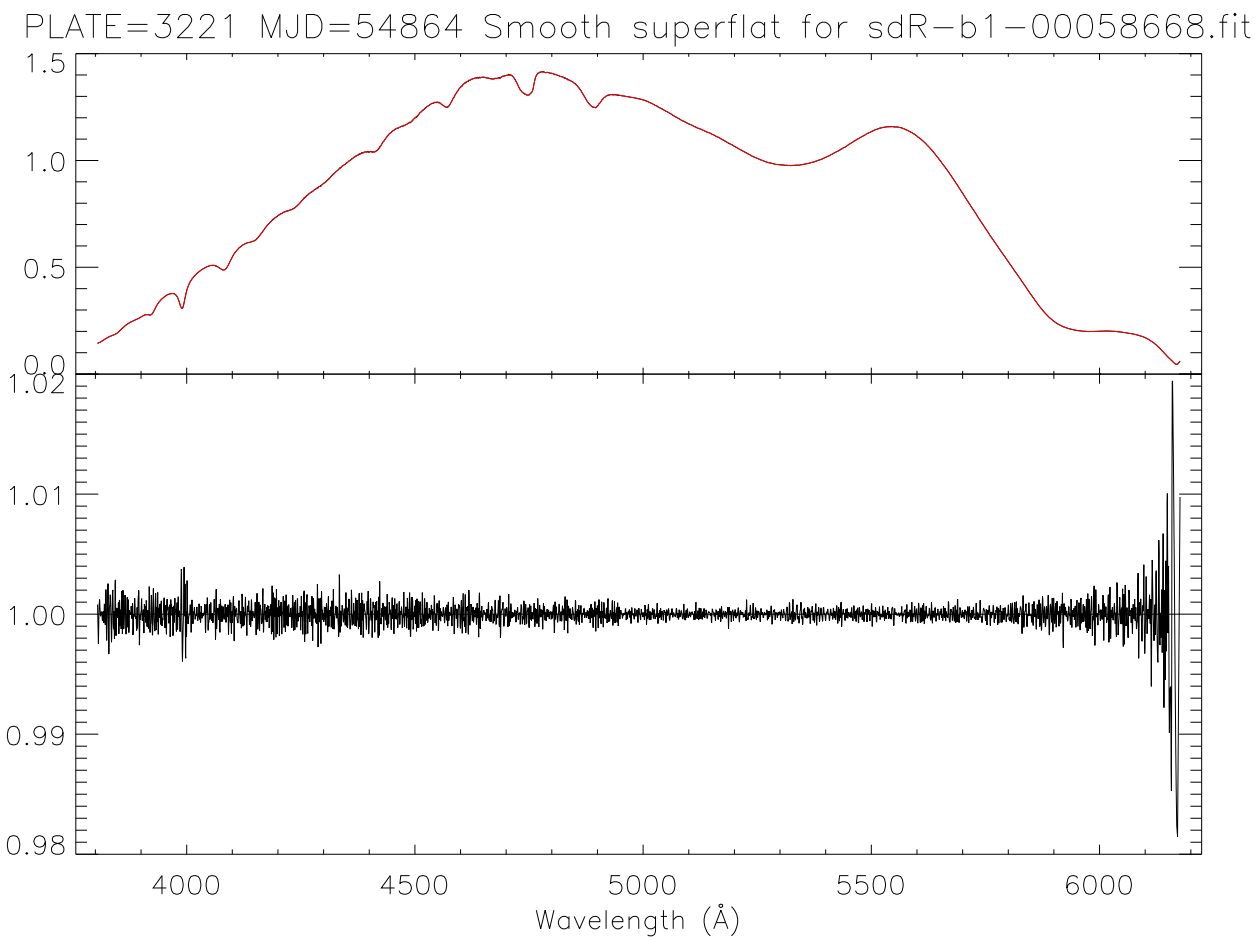

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

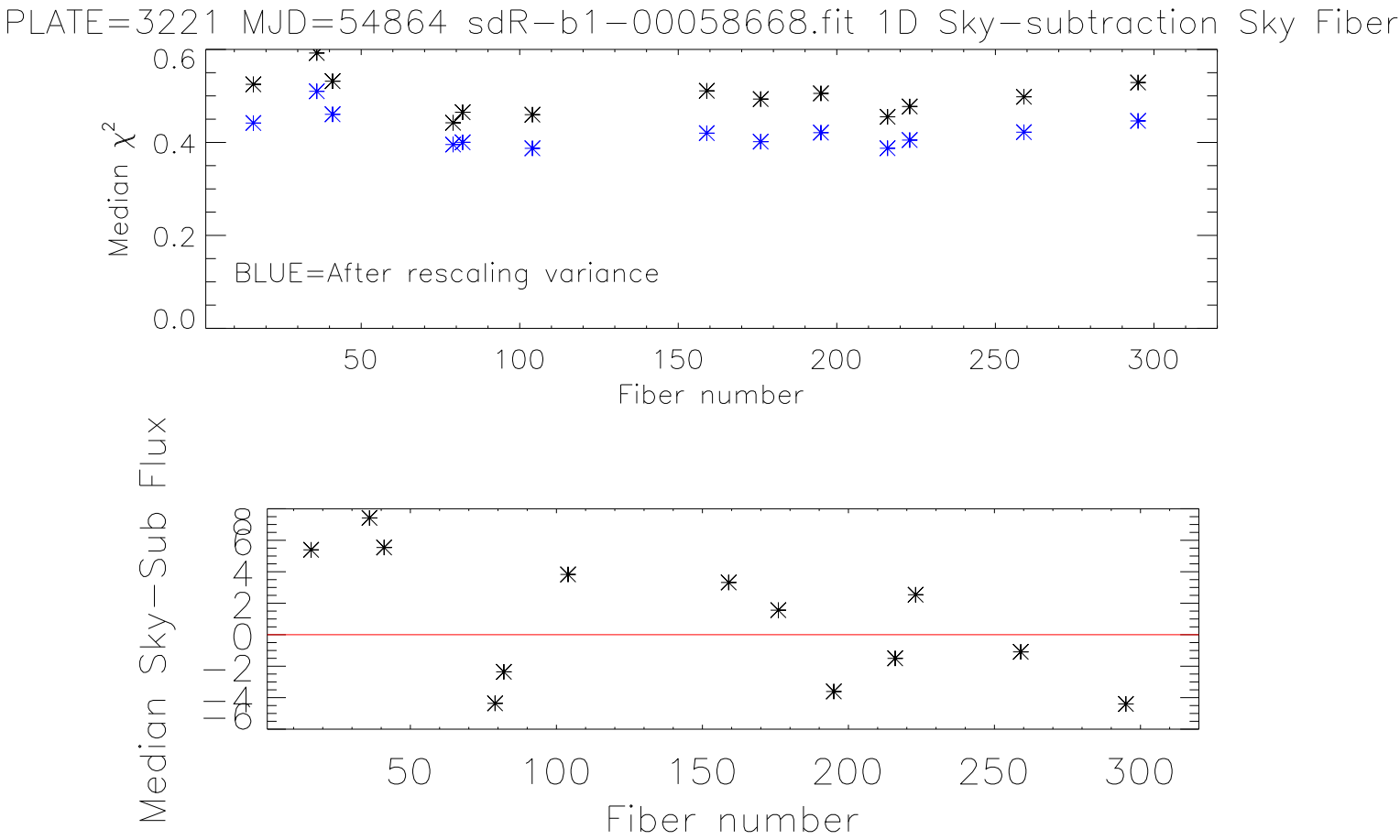

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

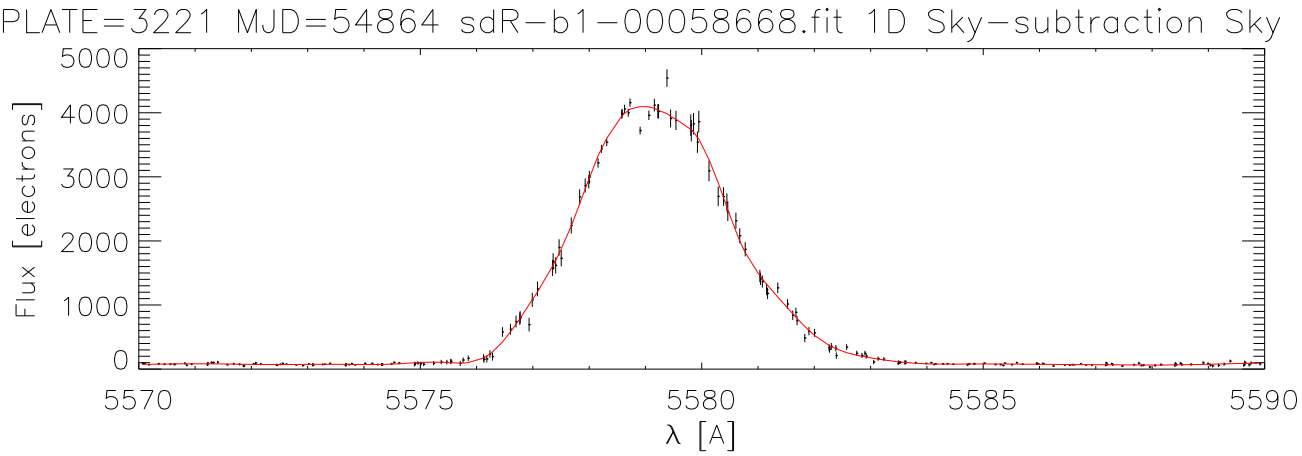

4046.5600
nfib1 15
nfib2 15
stdev 0.121
extra −0.07
4358.3300
nfib1 14
nfib2 14
stdev 0.061
extra −0.05
5460.9400
nfib1 15
nfib2 15
stdev 0.066
extra 0.23
5577.3390
nfib1 15
nfib2 15
stdev 0.022
extra 0.29
5889.9500
nfib1 15
nfib2 15
stdev 0.034
extra 0.44
5895.9240
nfib1 15
nfib2 15
stdev 0.050
extra 0.46
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

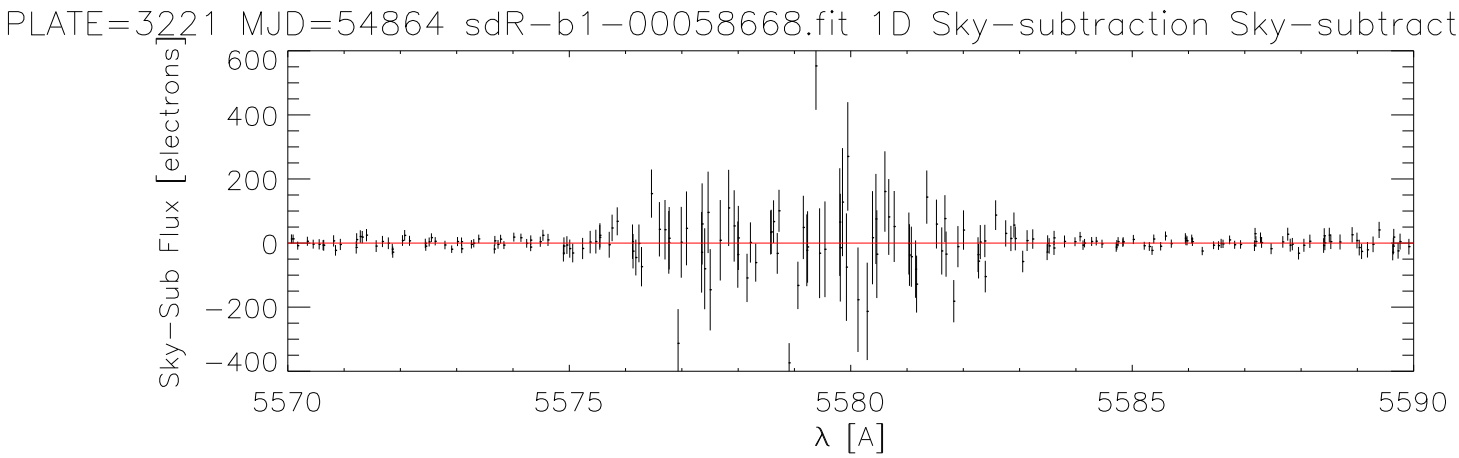

sky shift, pixels
0.4
0.2
0.0
−0.2
3500
4000
4500
5000
5500
6000
6500

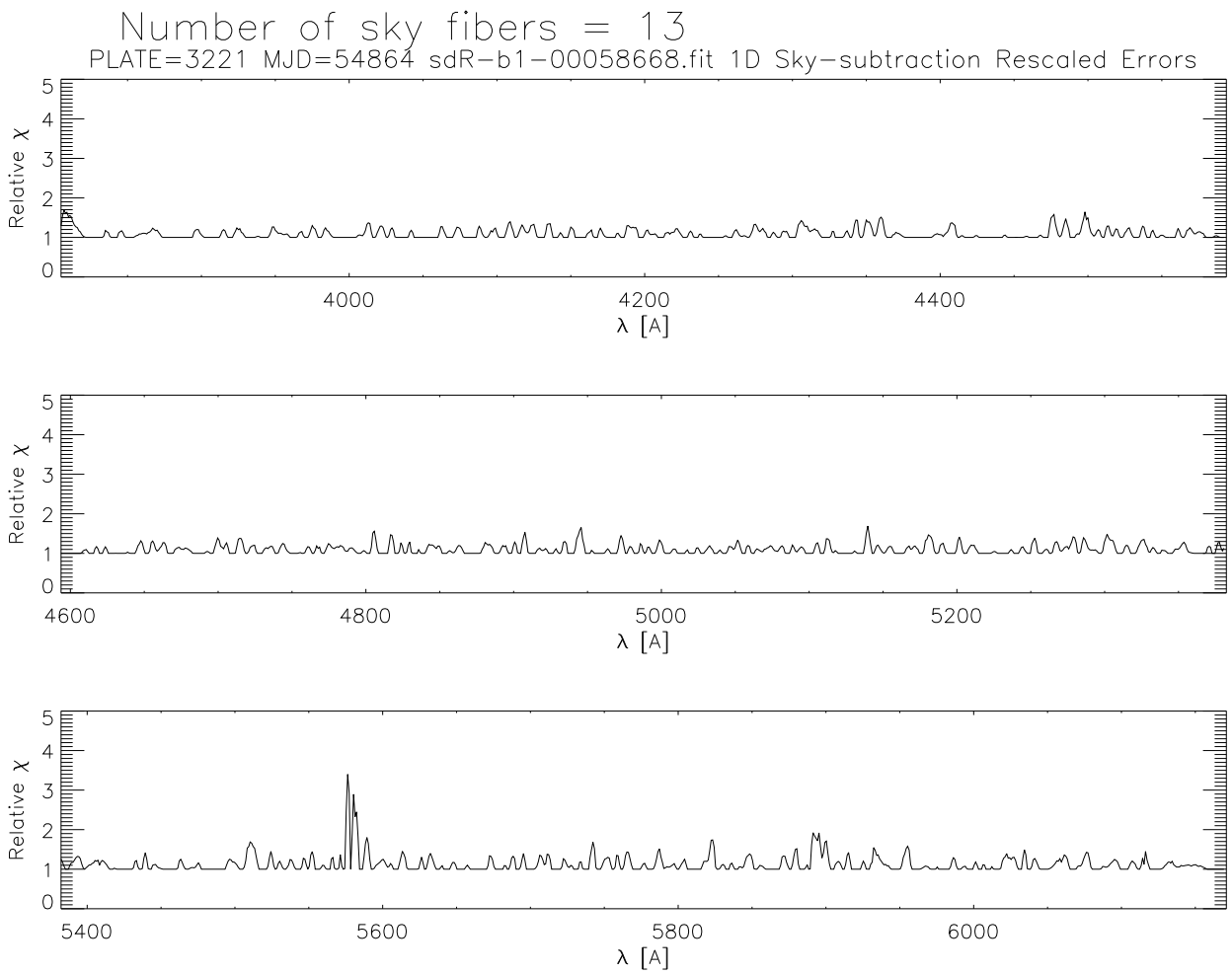
es= −0.0002

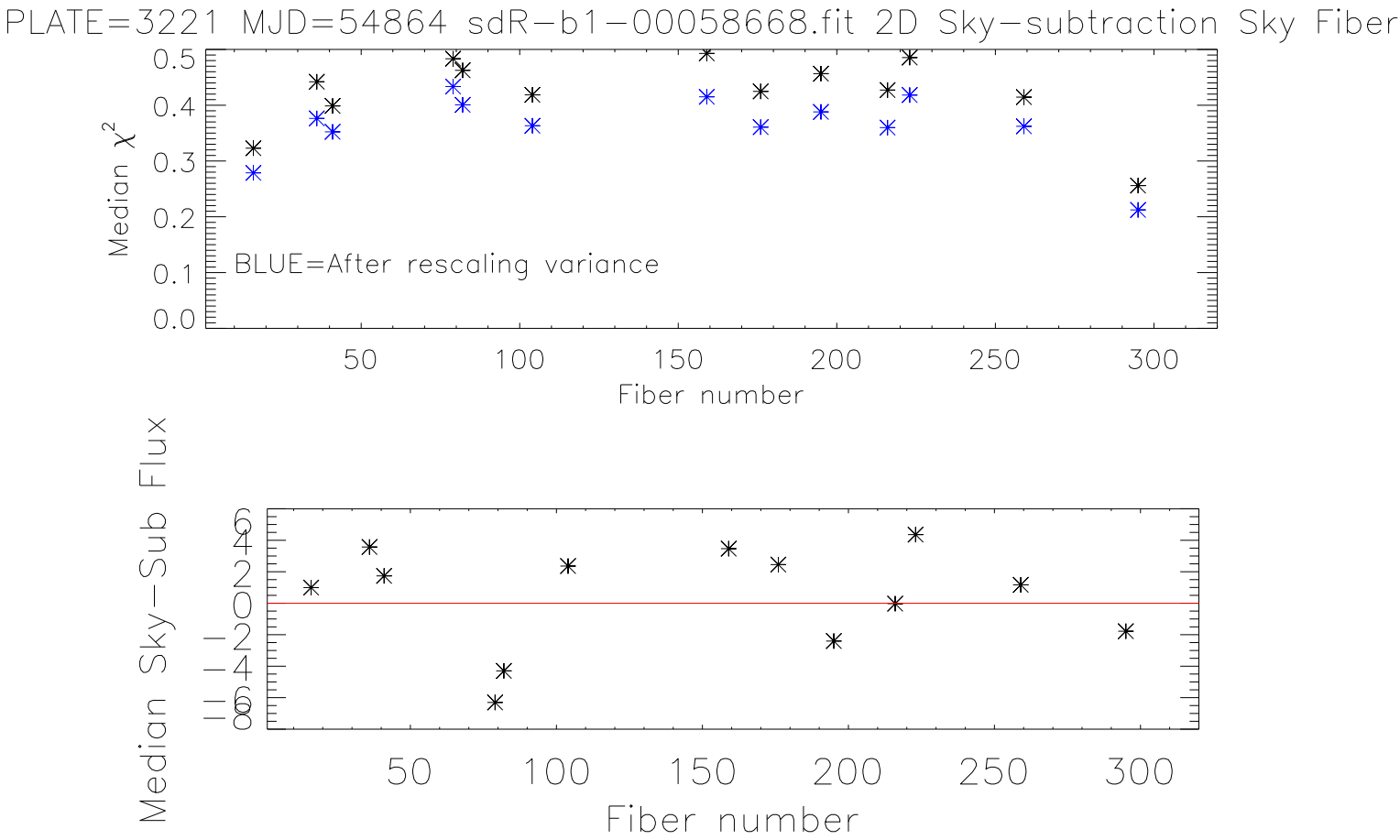

PLATE=3221 MJD=54864 Smooth superflat for sdR−b1−00058668.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

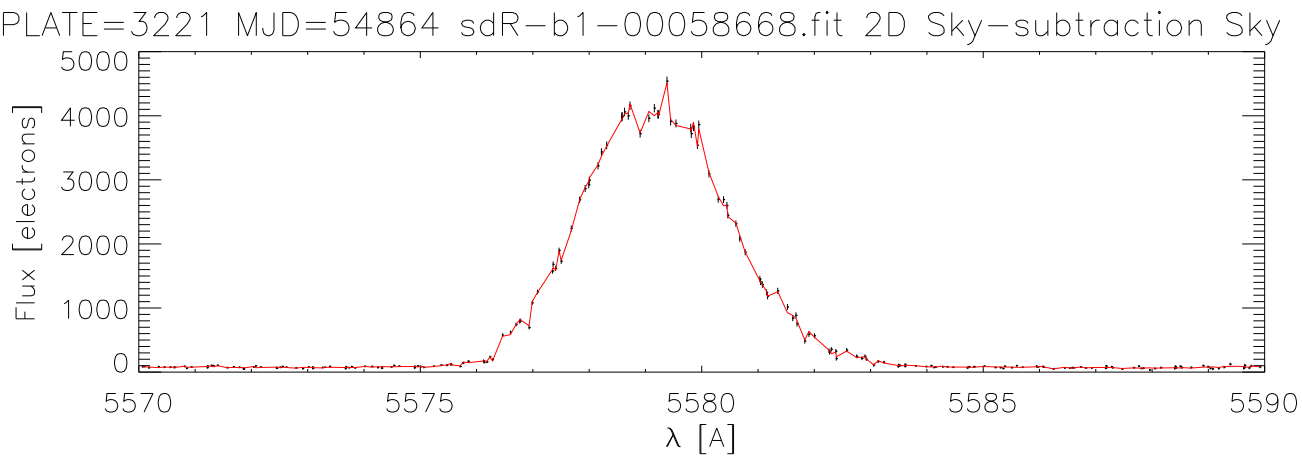

PLATE=3221 MJD=54864 sdR-b1-00058668.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

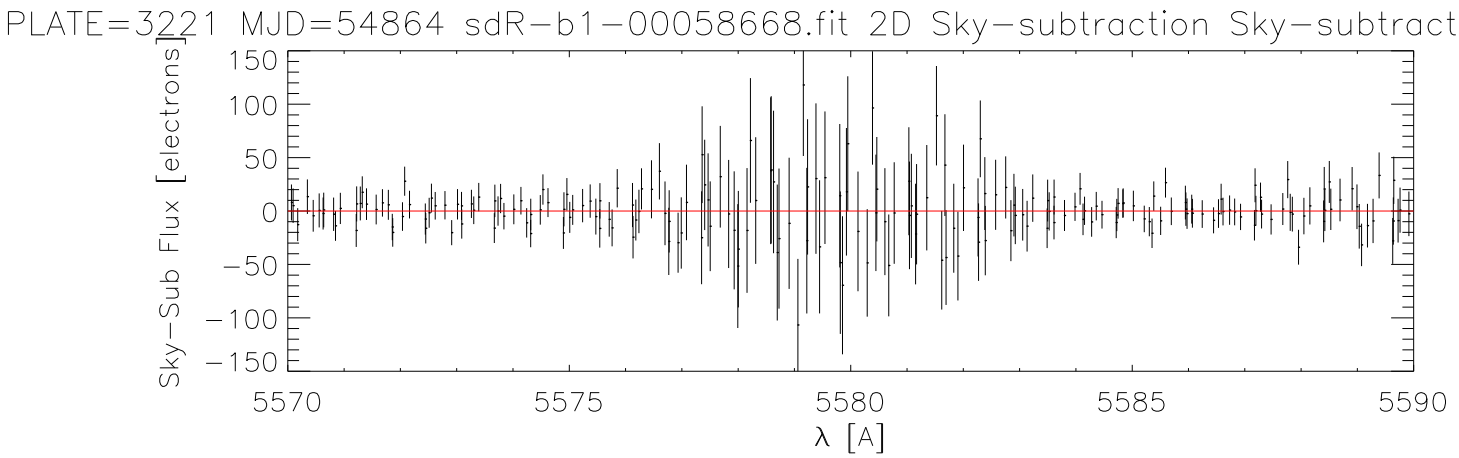

PLATE=3221 MJD=54864 sdR-b1-00058668.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

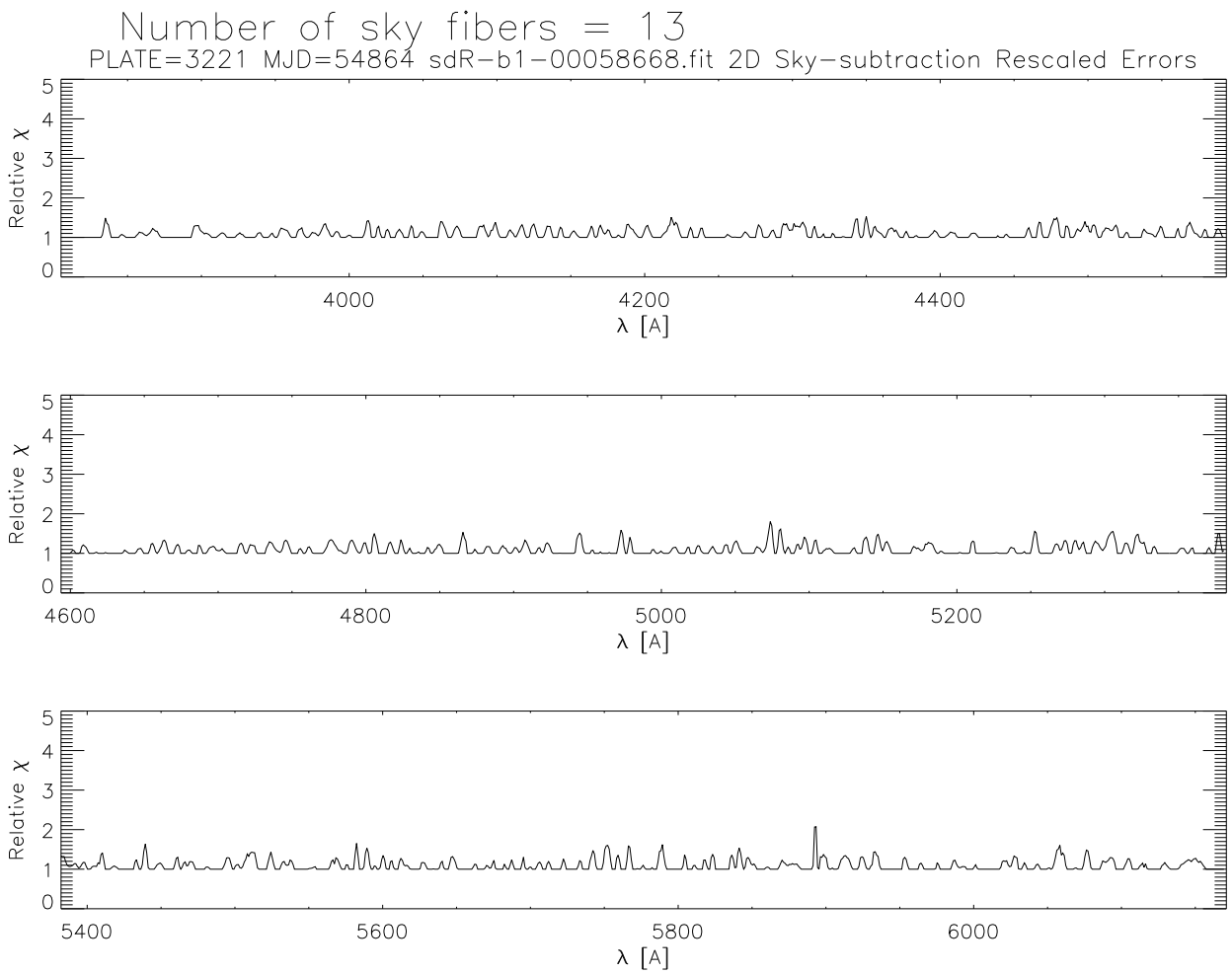

PLATE=3221 MJD=54864 sdR-b1-00058668.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

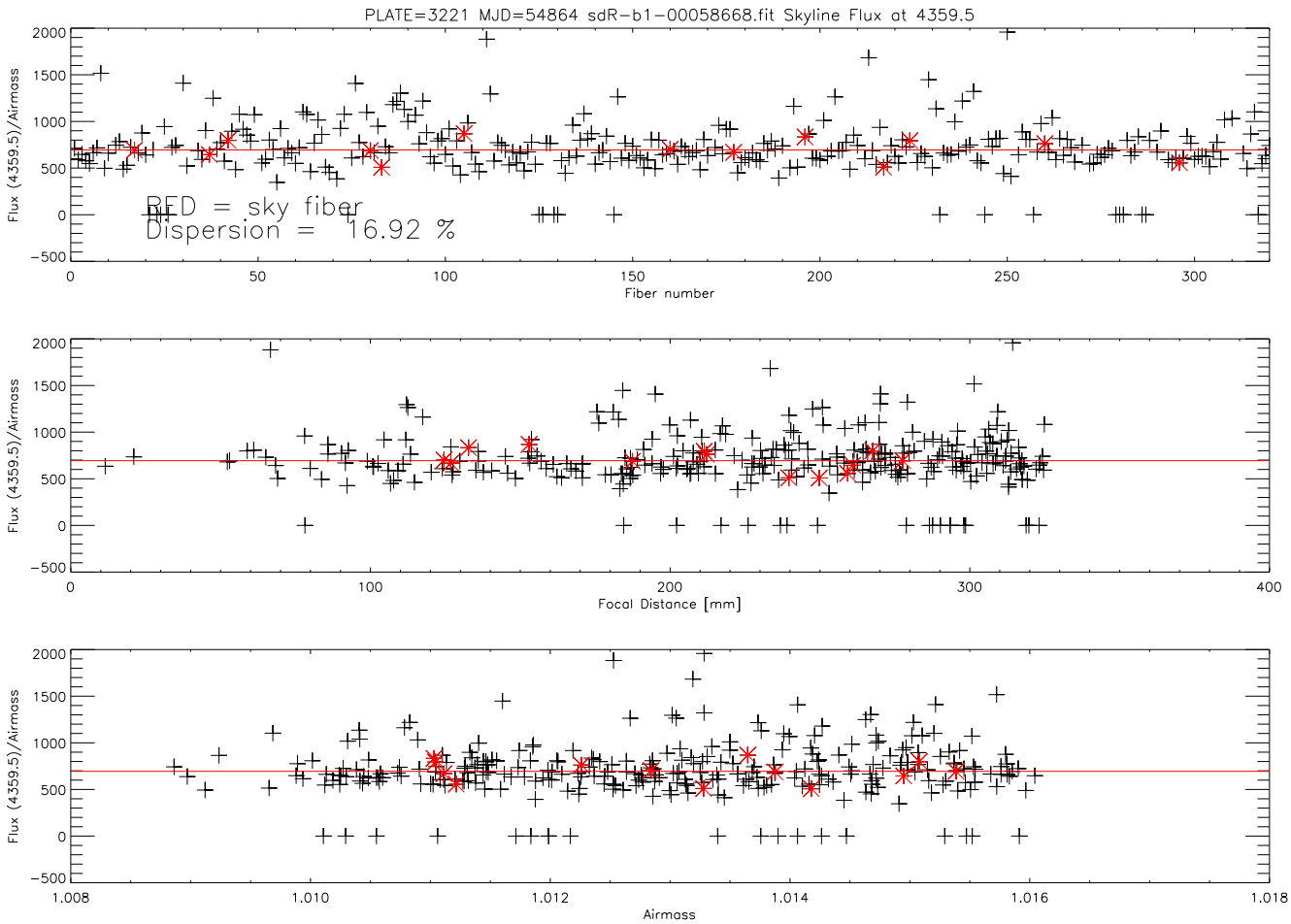

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058668.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

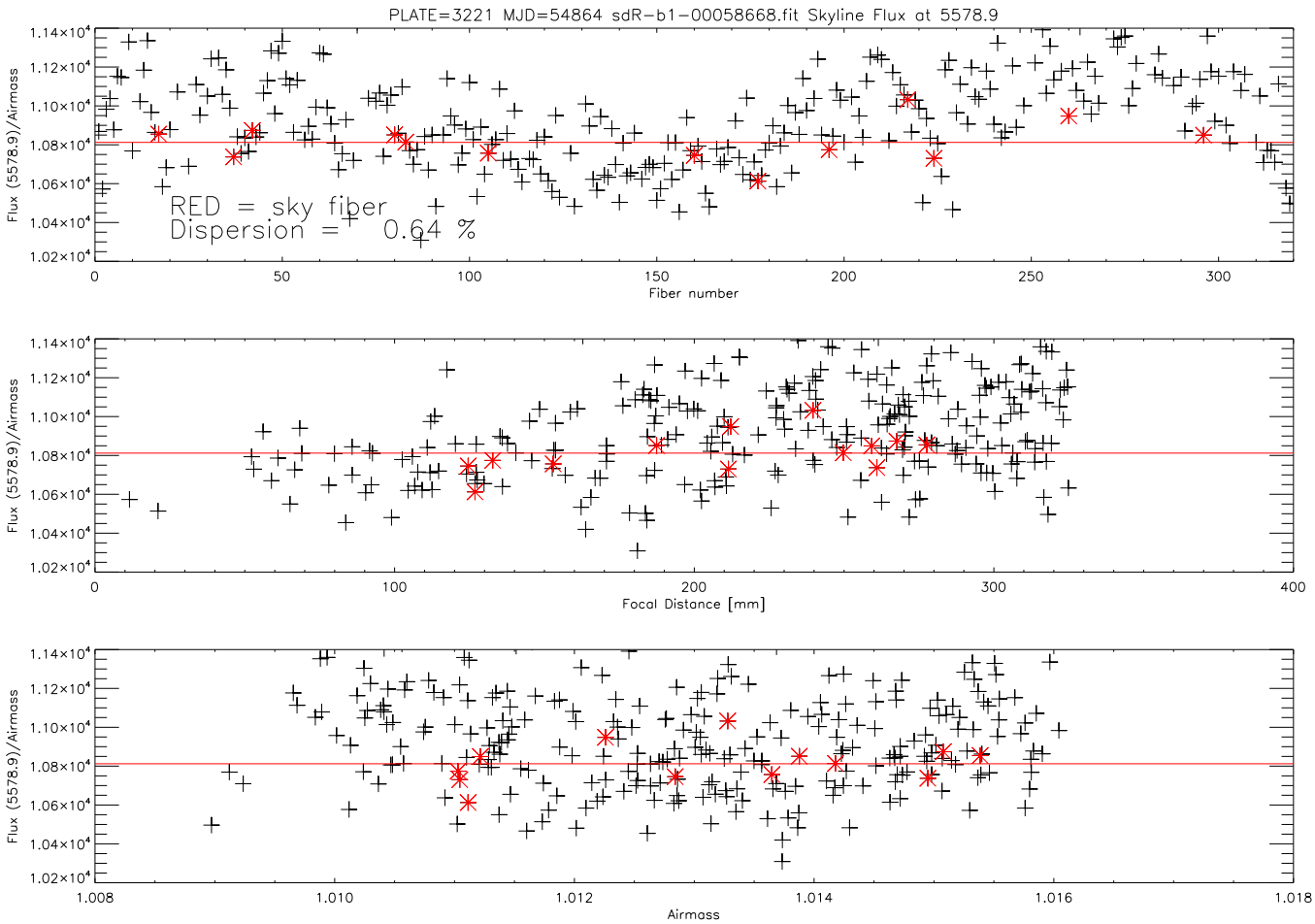

PLATE=3221 MJD=54864 sdR-b1-00058668.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.006
-0.004
-0.002
0.000
0.002
0.004
0.006
50
100
150
200
250
300
Fiber number

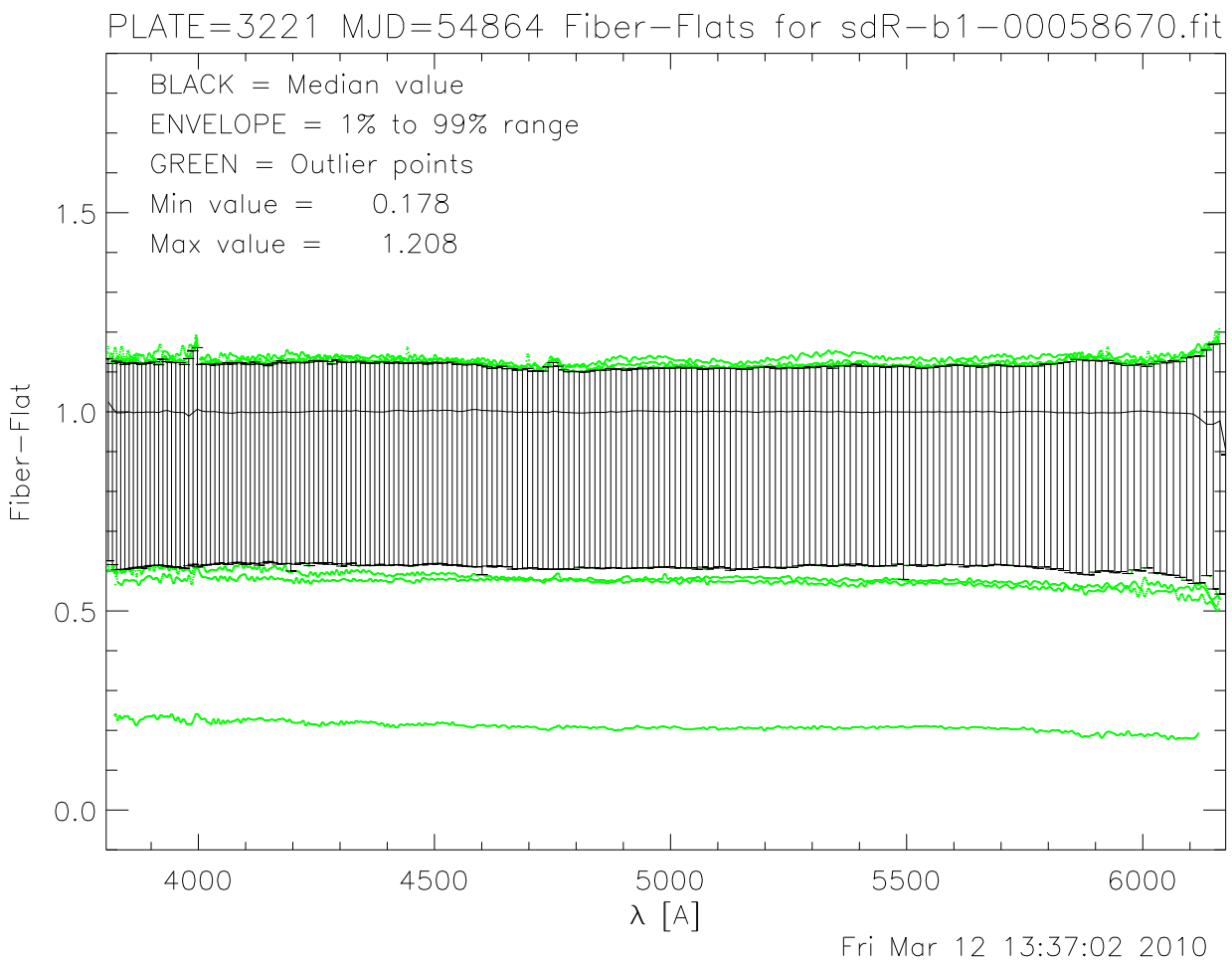

PLATE=3221 MJD=54864 sdR-b1-00058668.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

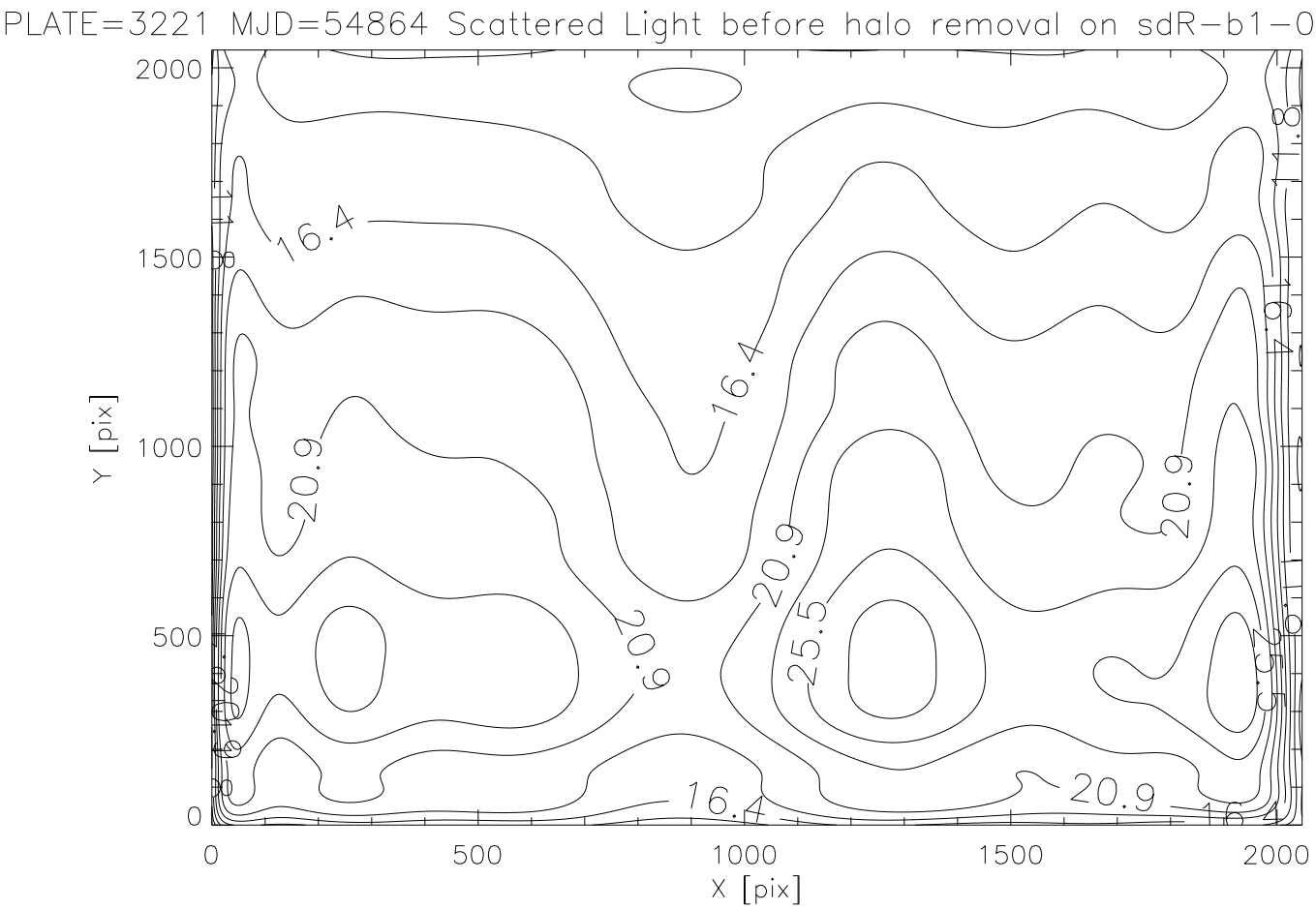

PLATE=3221 MJD=54864 sdR-b1-00058668.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

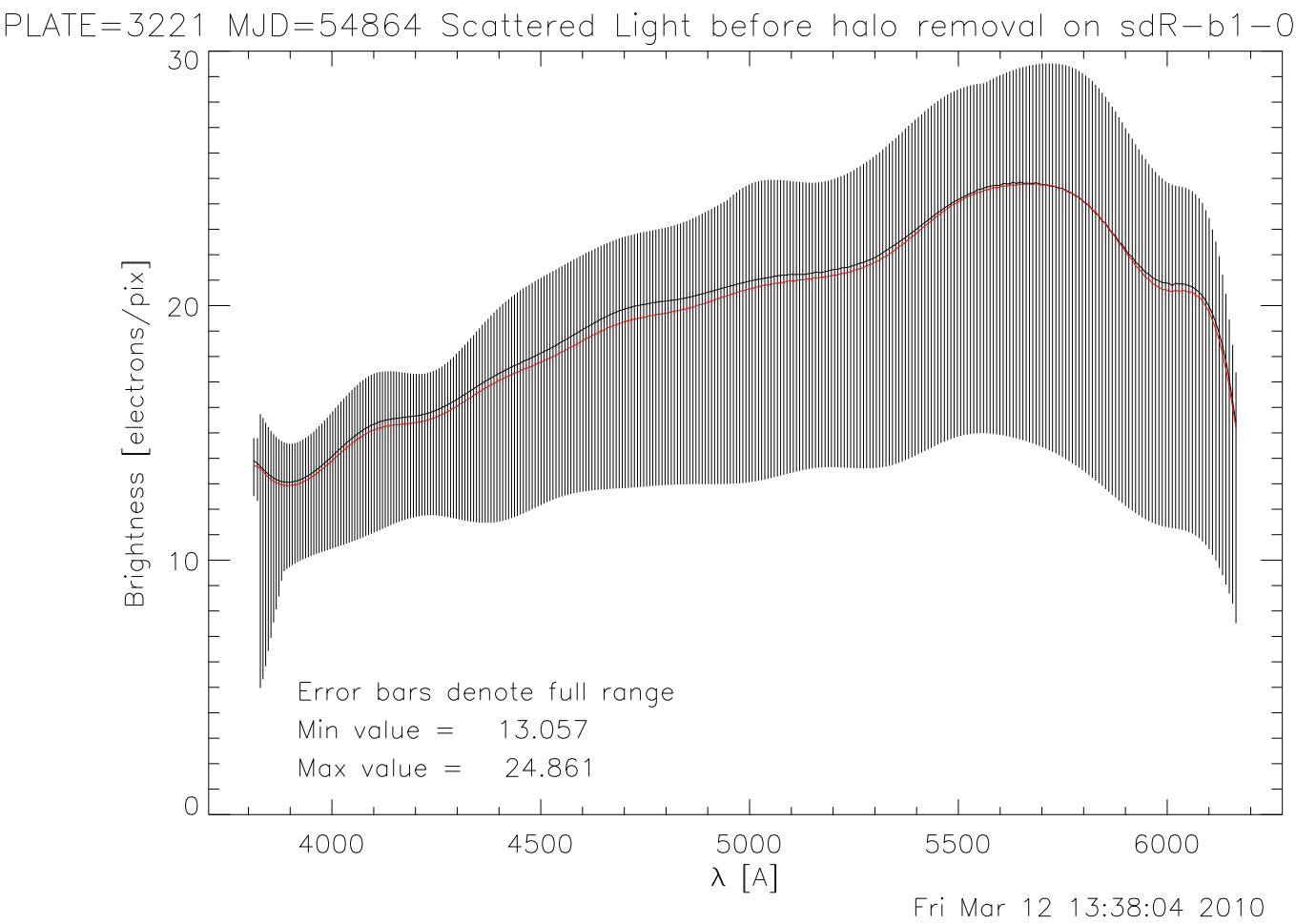

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058668.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

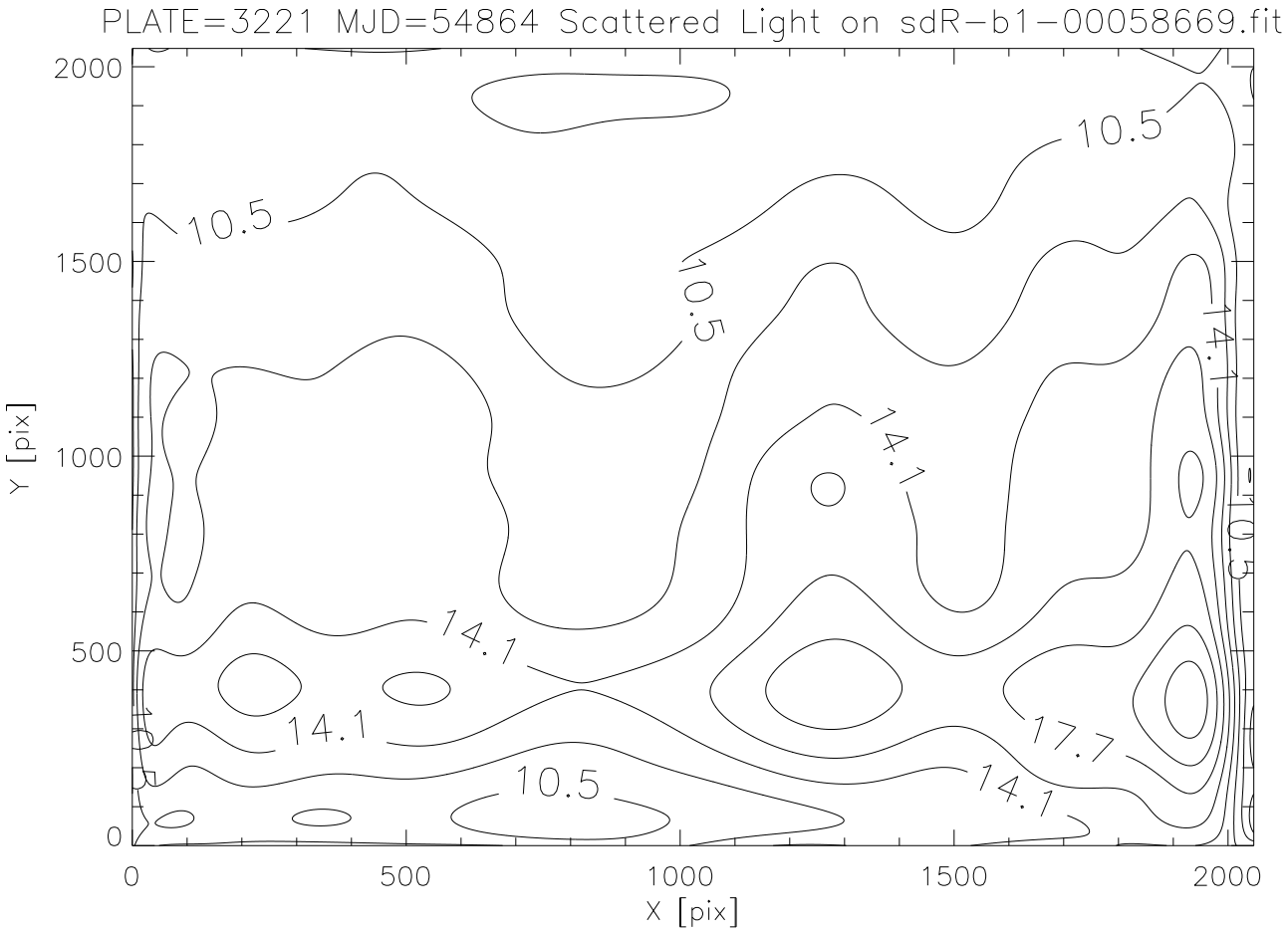

PLATE=3221 MJD=54864 sdR-b1-00058668.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 16.92 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

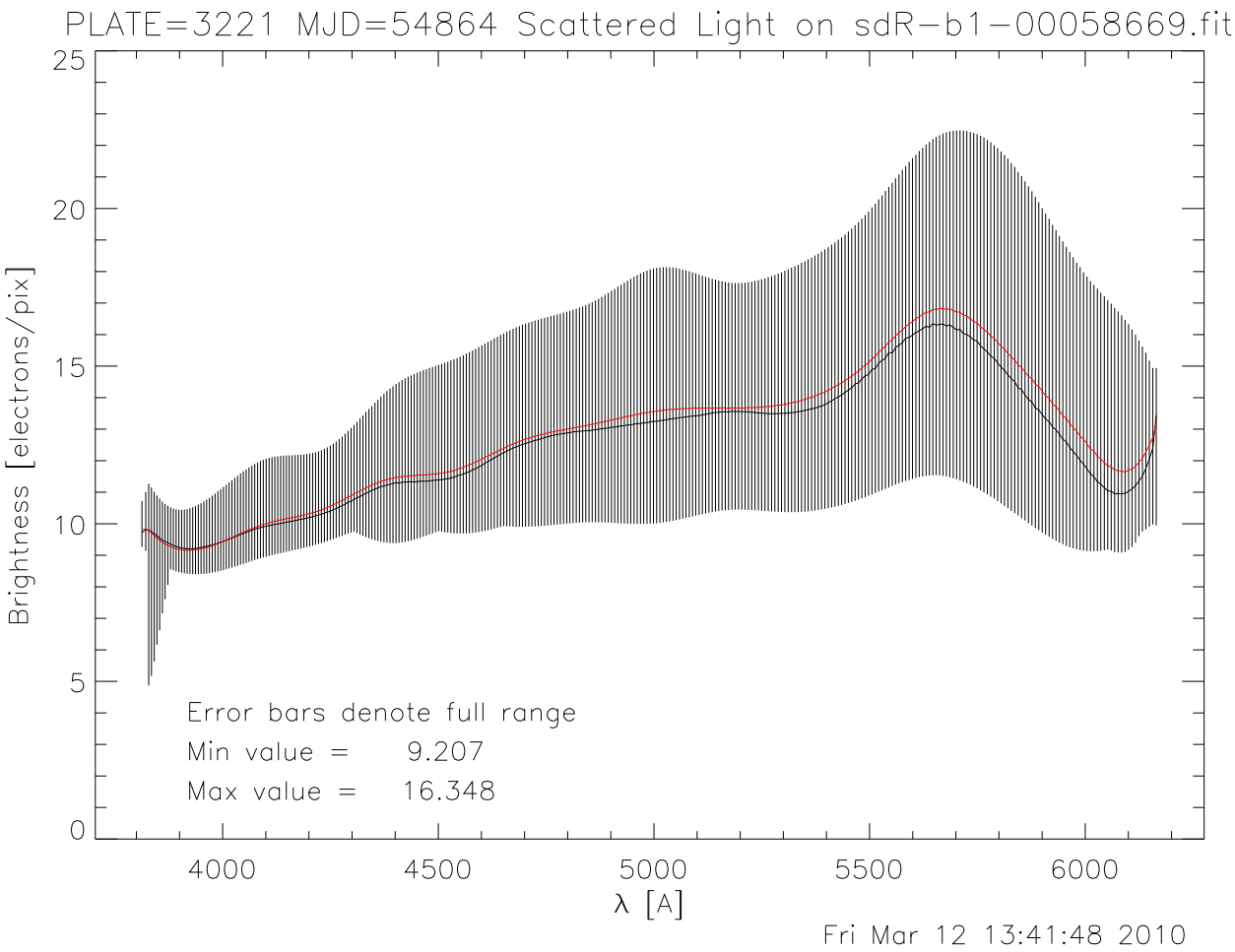

PLATE=3221 MJD=54864 sdR-b1-00058668.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 0.64 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

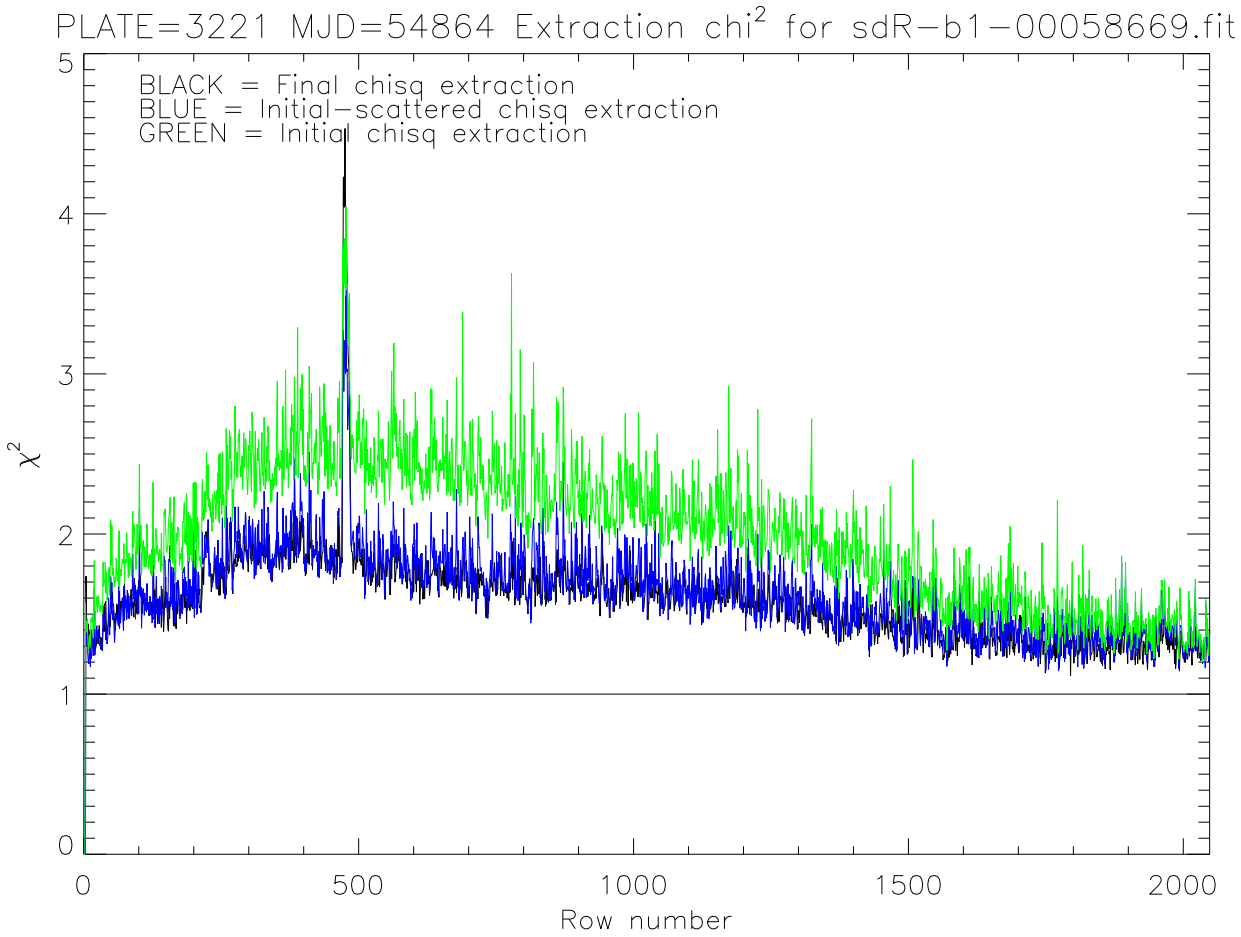

PLATE=3221 MJD=54864 Fiber−Flats for sdR−b1−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.178
Max value = 1.208
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 13:37:02 2010

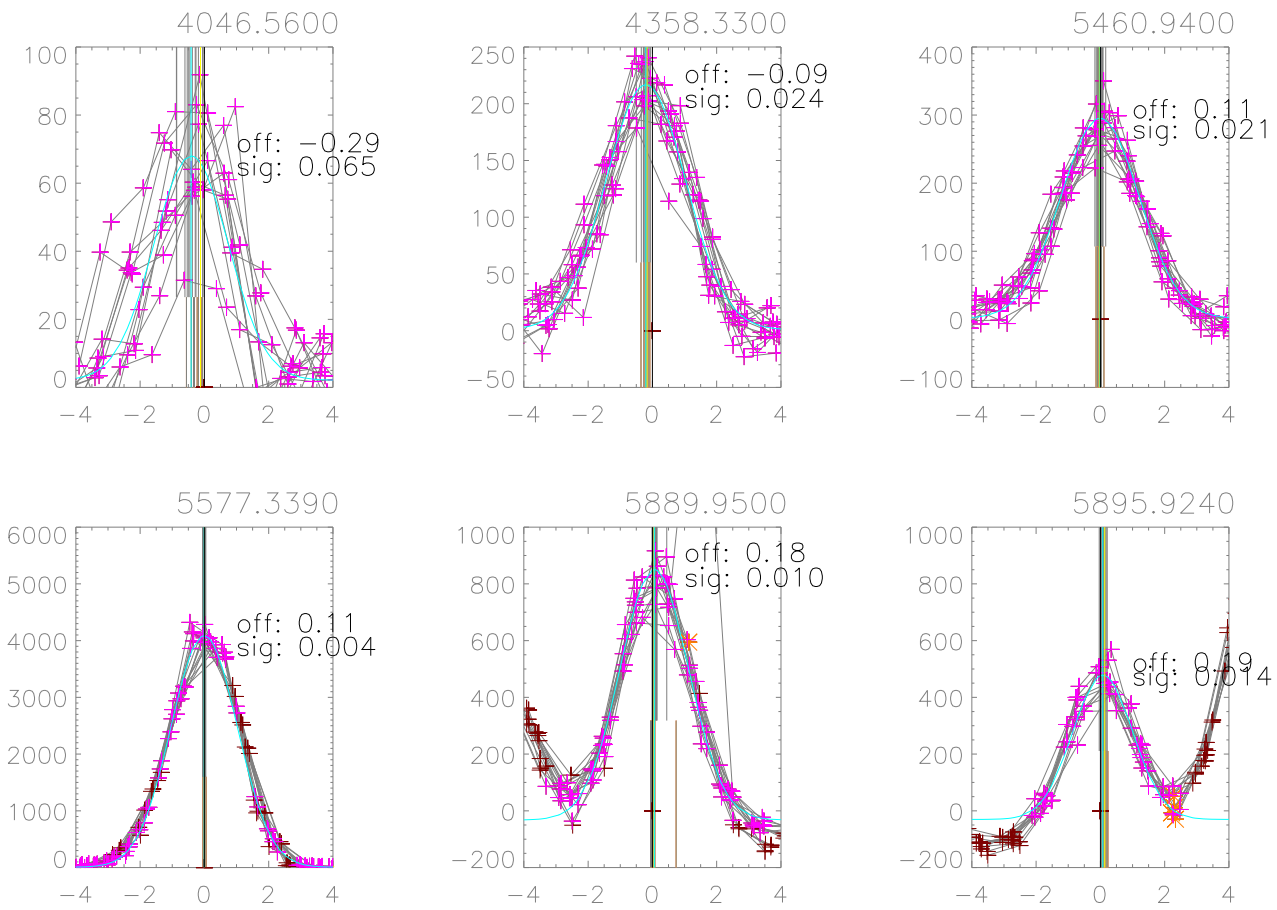

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR−b1−00058669.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
16.4
20.9
25.5

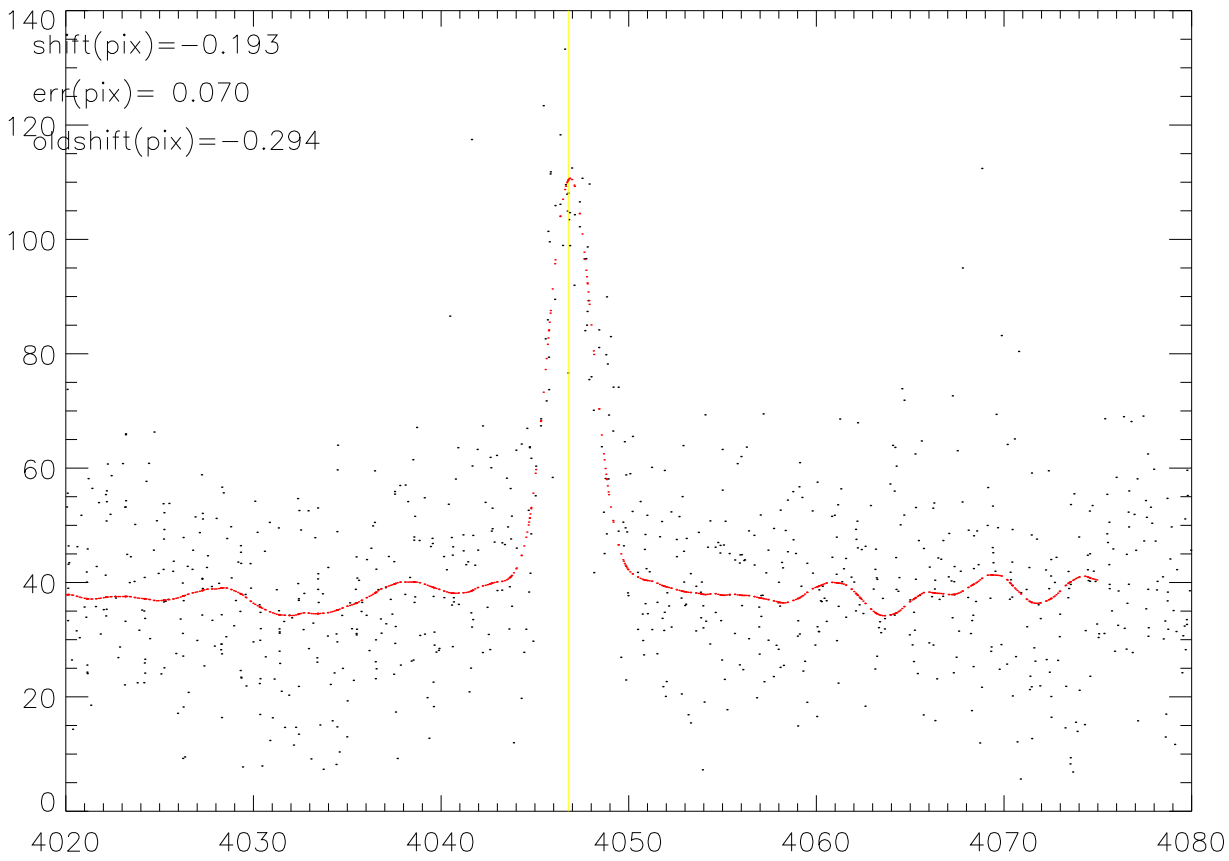

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b1-00058669.f
Brightness [electrons/pix]
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 13.057
Max value = 24.861
Fri Mar 12 13:38:04 2010

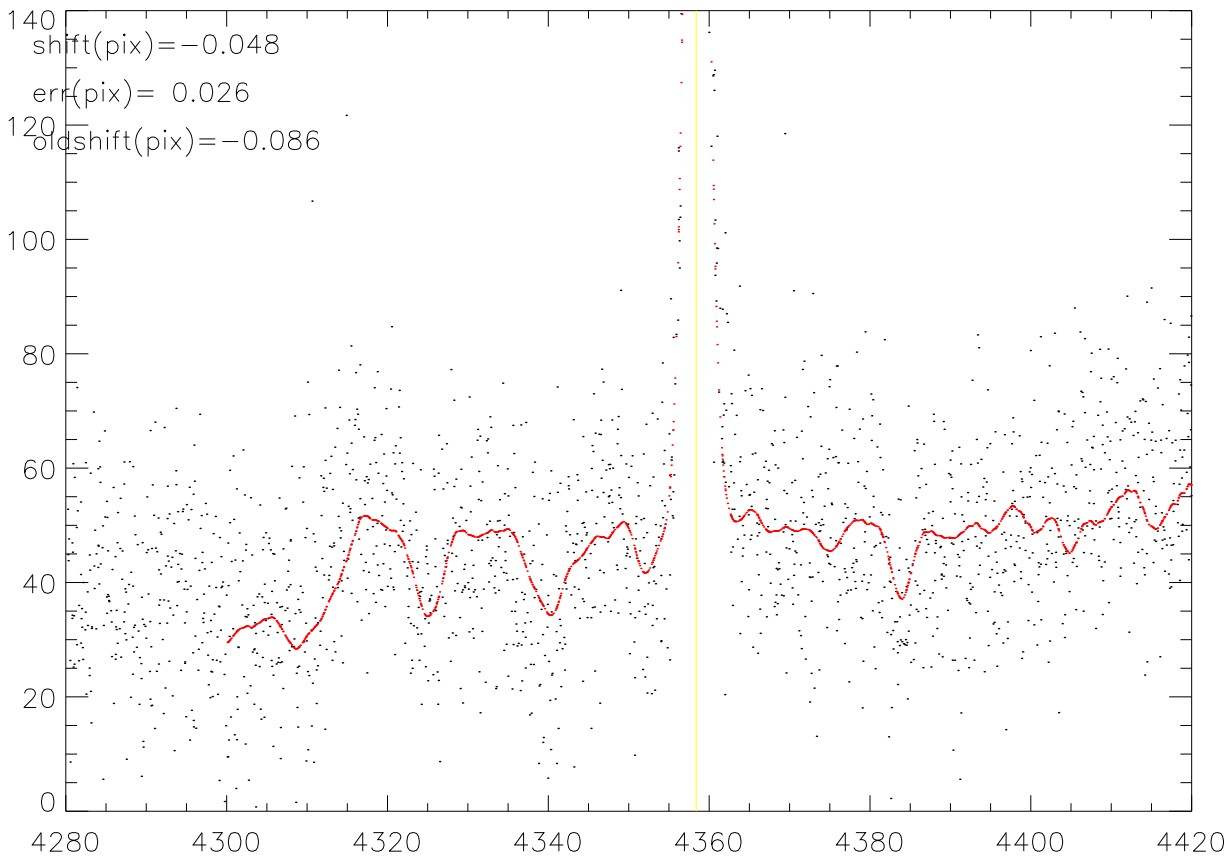

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058669.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
14.1
17.7

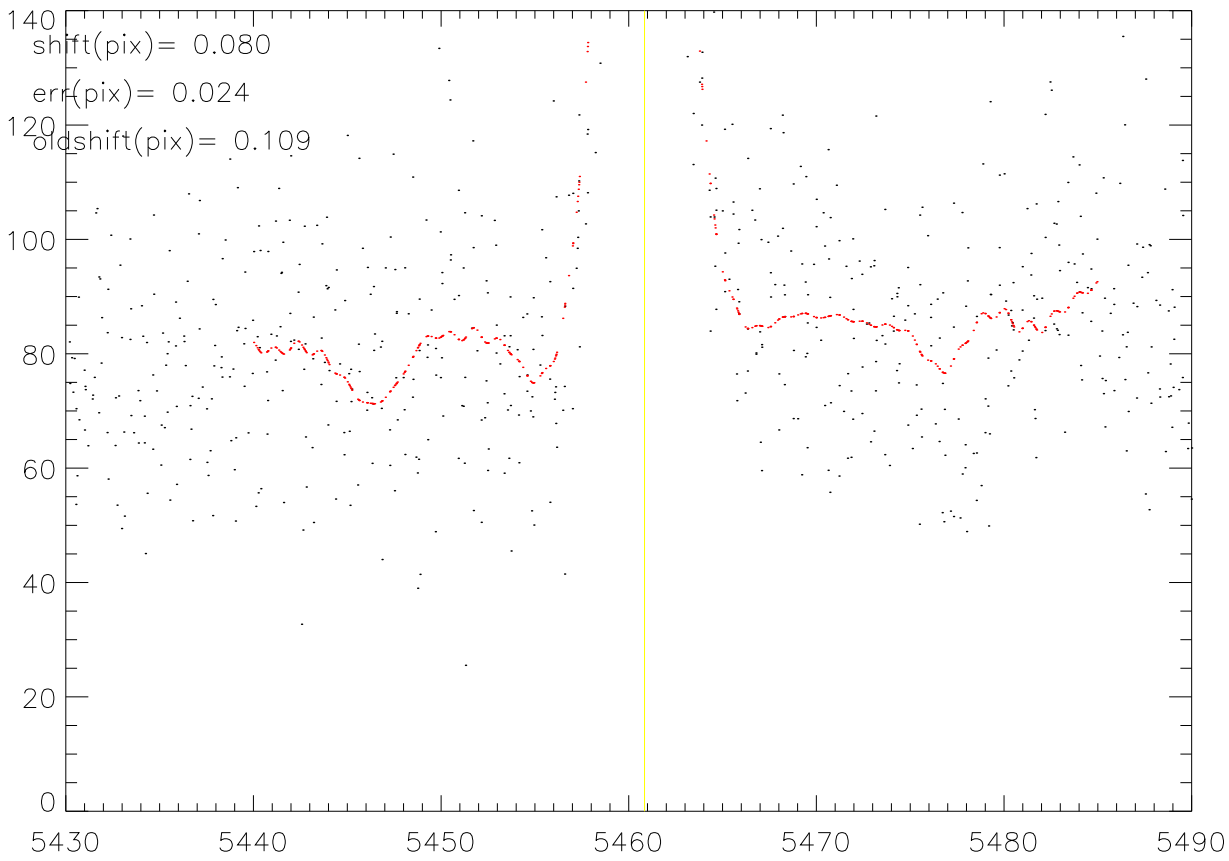

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058669.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 9.207
Max value = 16.348
Fri Mar 12 13:41:48 2010

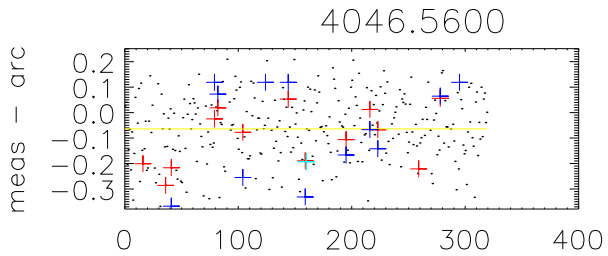

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b1-00058669.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

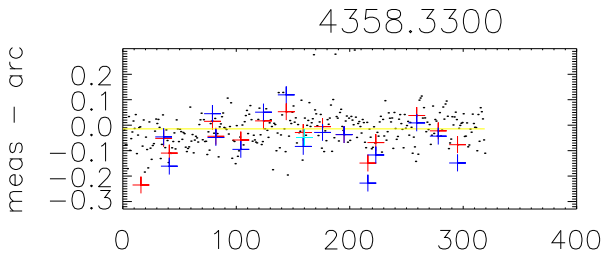

4046.5600
off: −0.29
sig: 0.065
4358.3300
off: −0.09
sig: 0.024
5460.9400
off: 0.11
sig: 0.021
5577.3390
off: 0.11
sig: 0.004
5889.9500
off: 0.18
sig: 0.010
5895.9240
off: 0.19
sig: 0.014

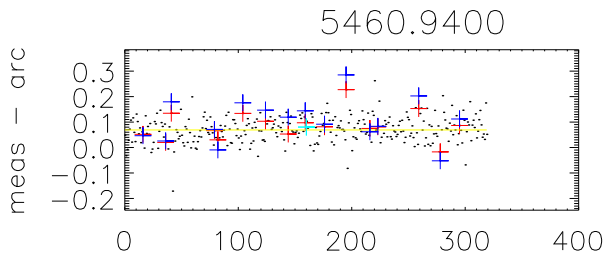

shift(pix)=−0.193
err(pix)= 0.070
oldshift(pix)=−0.294
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

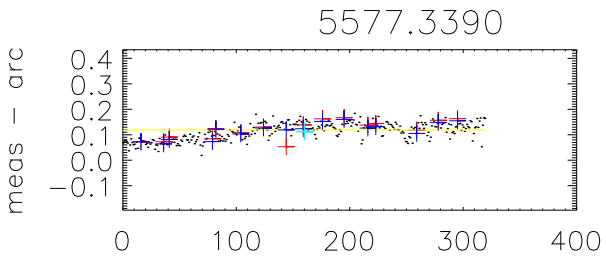

shift(pix)=−0.048
err(pix)= 0.026
oldshift(pix)=−0.086
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

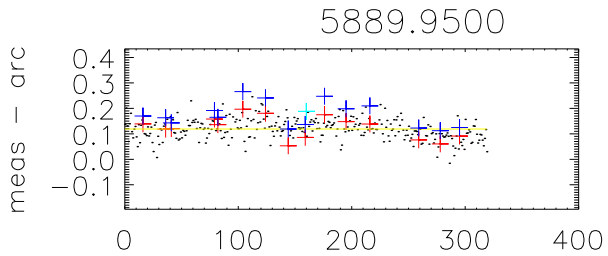

shift(pix)= 0.080
err(pix)= 0.024
oldshift(pix)= 0.109
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

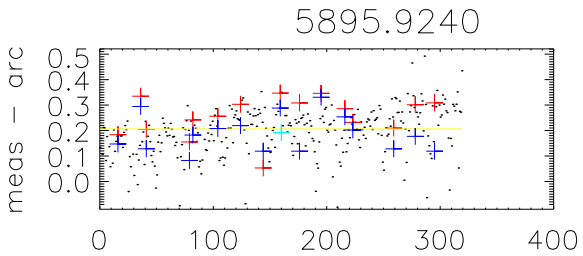

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

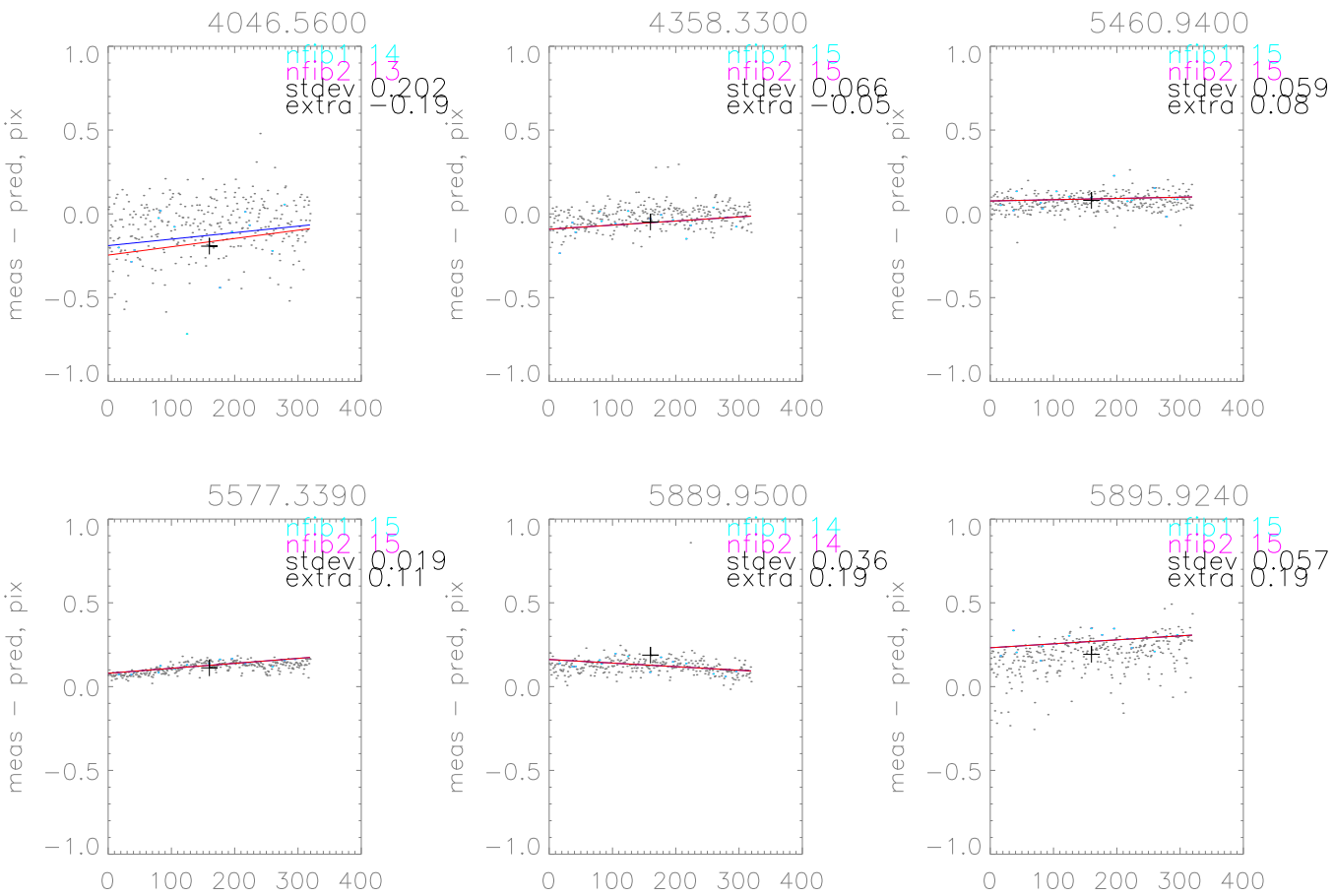

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

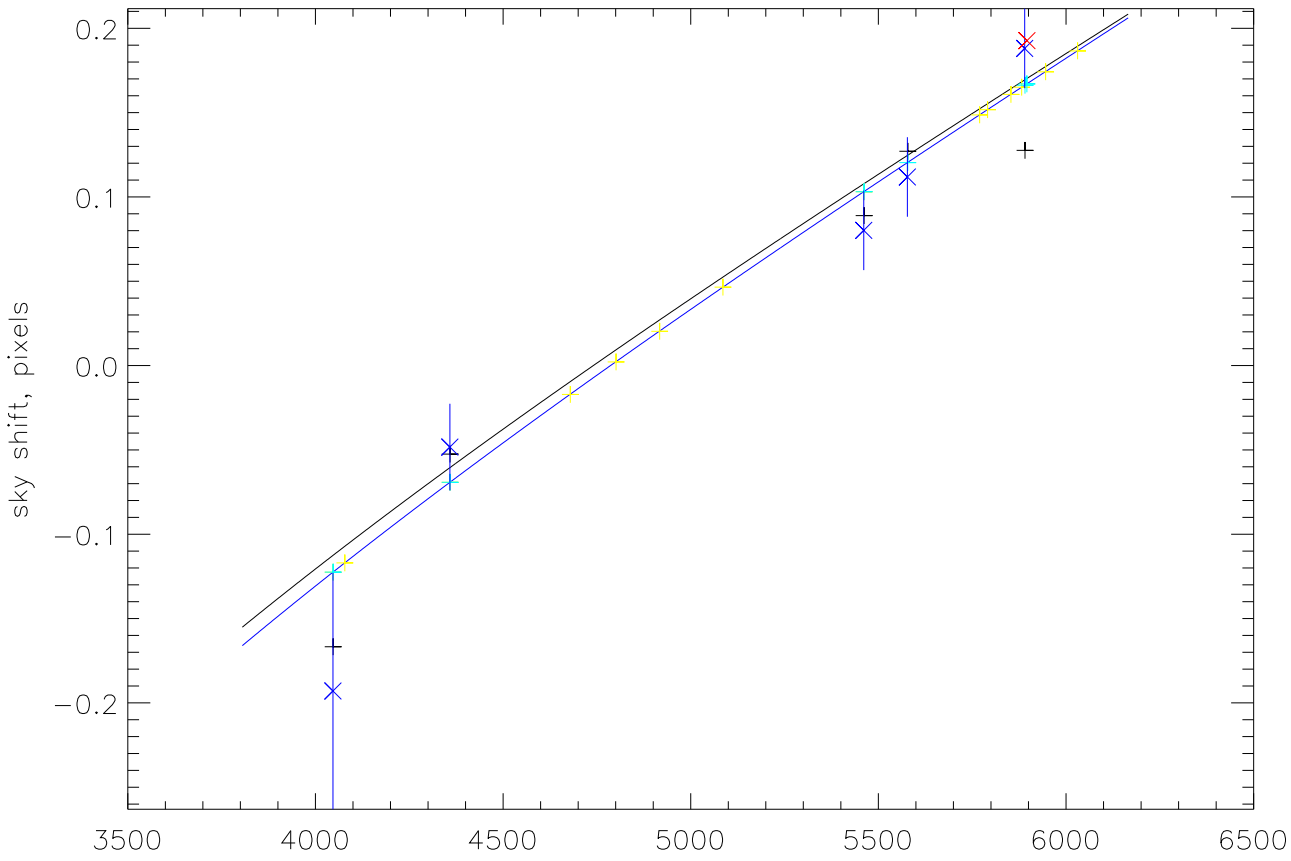

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

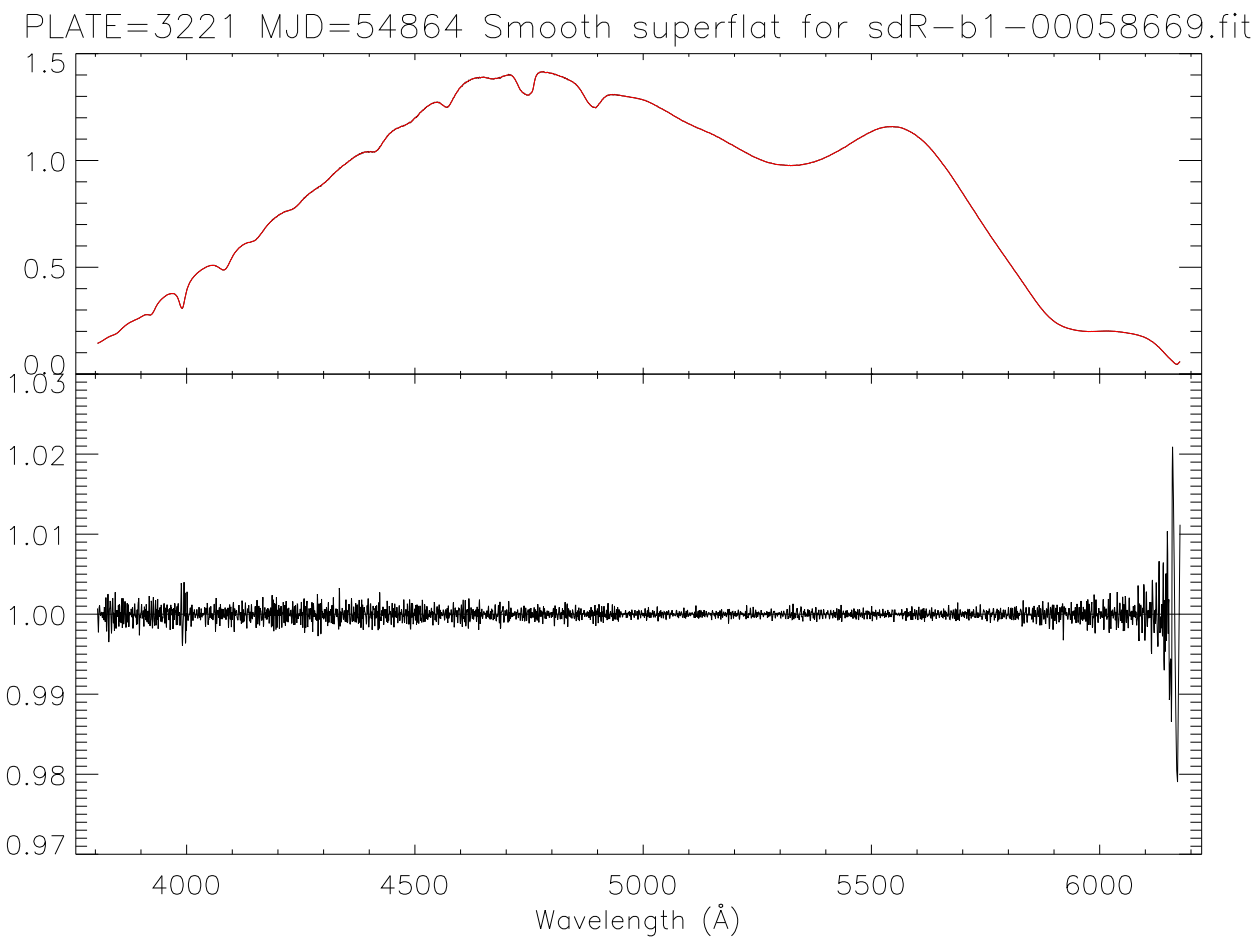

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

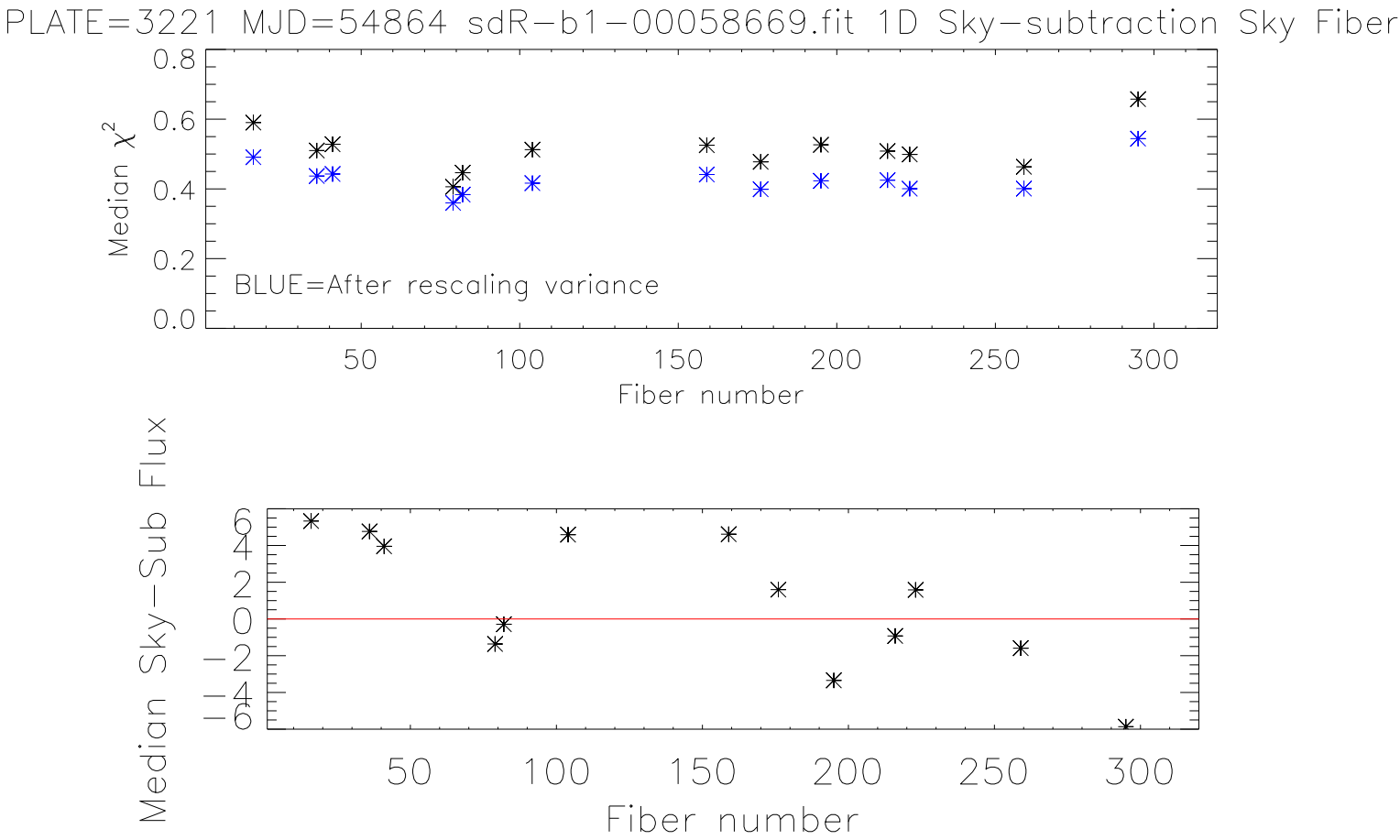

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

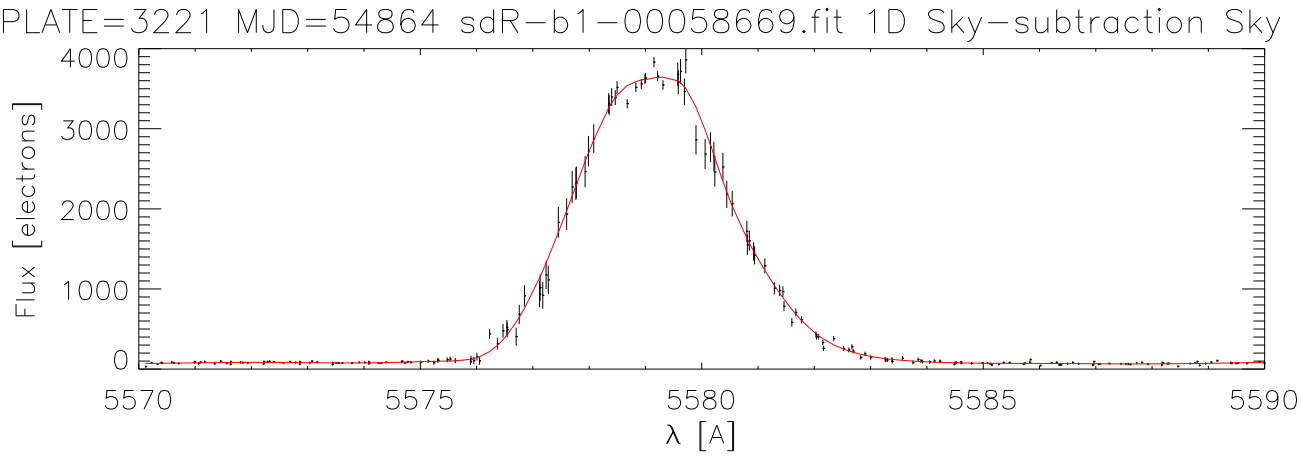

4046.5600
nfib1 14
nfib2 13
stdev 0.202
extra −0.19
4358.3300
nfib1 15
nfib2 15
stdev 0.066
extra −0.05
5460.9400
nfib1 15
nfib2 15
stdev 0.059
extra 0.08
5577.3390
nfib1 15
nfib2 15
stdev 0.019
extra 0.11
5889.9500
nfib1 14
nfib2 14
stdev 0.036
extra 0.19
5895.9240
nfib1 15
nfib2 15
stdev 0.057
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

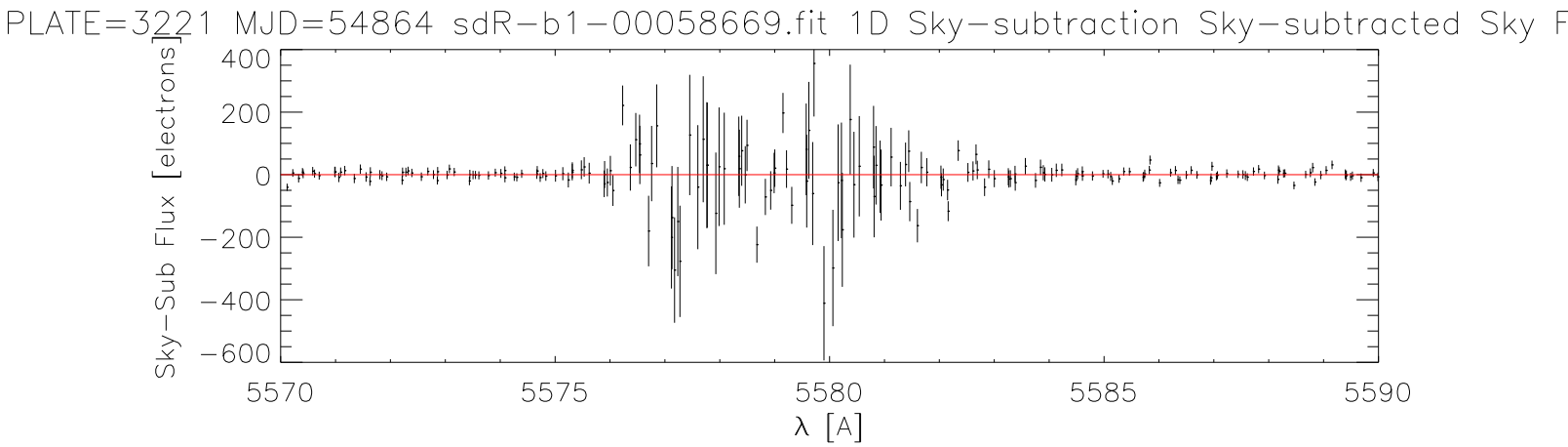

0.2
0.1
0.0
−0.1
−0.2
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

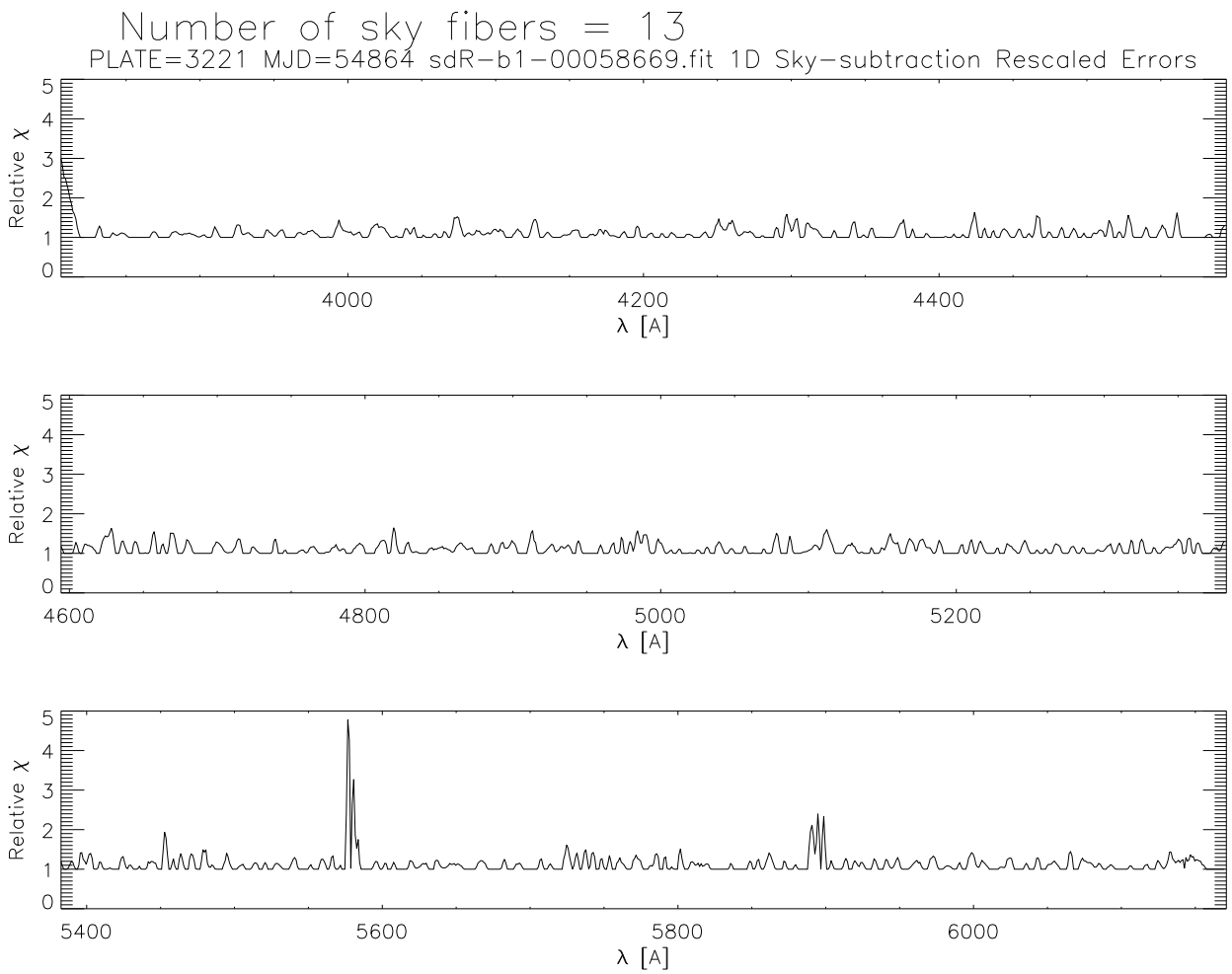
es= −0.0002

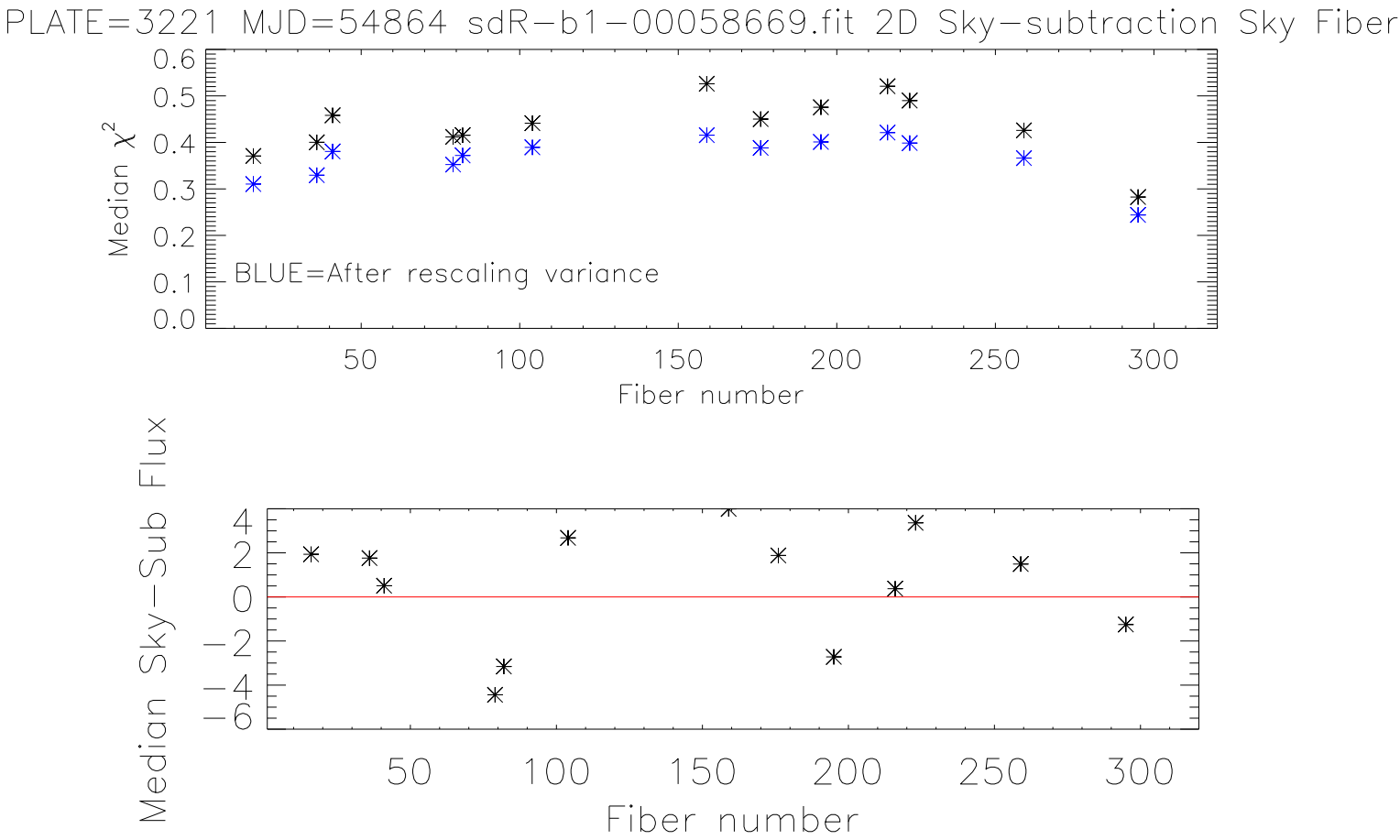

PLATE=3221 MJD=54864 Smooth superflat for sdR−b1−00058669.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

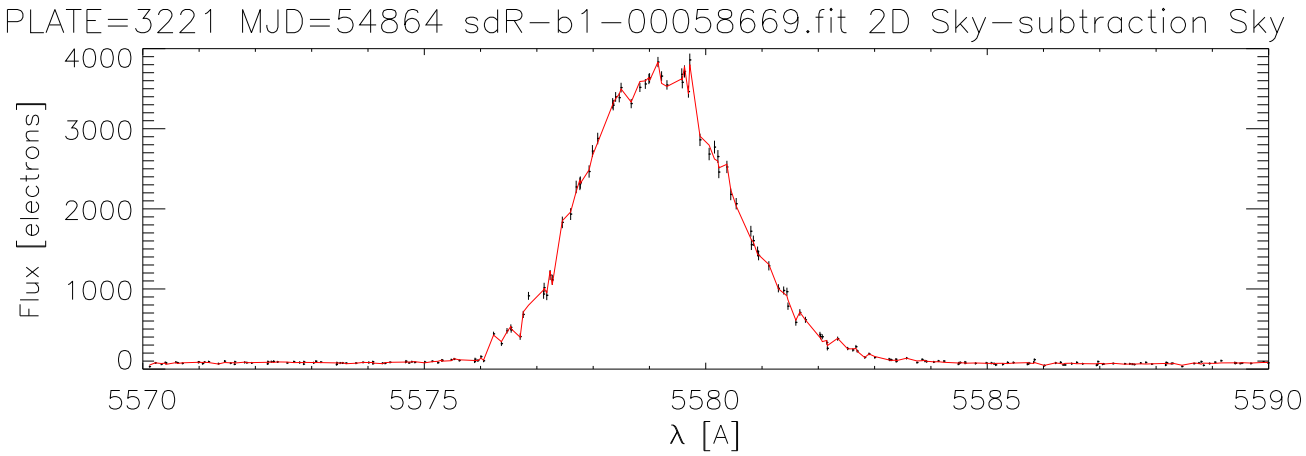

PLATE=3221 MJD=54864 sdR-b1-00058669.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

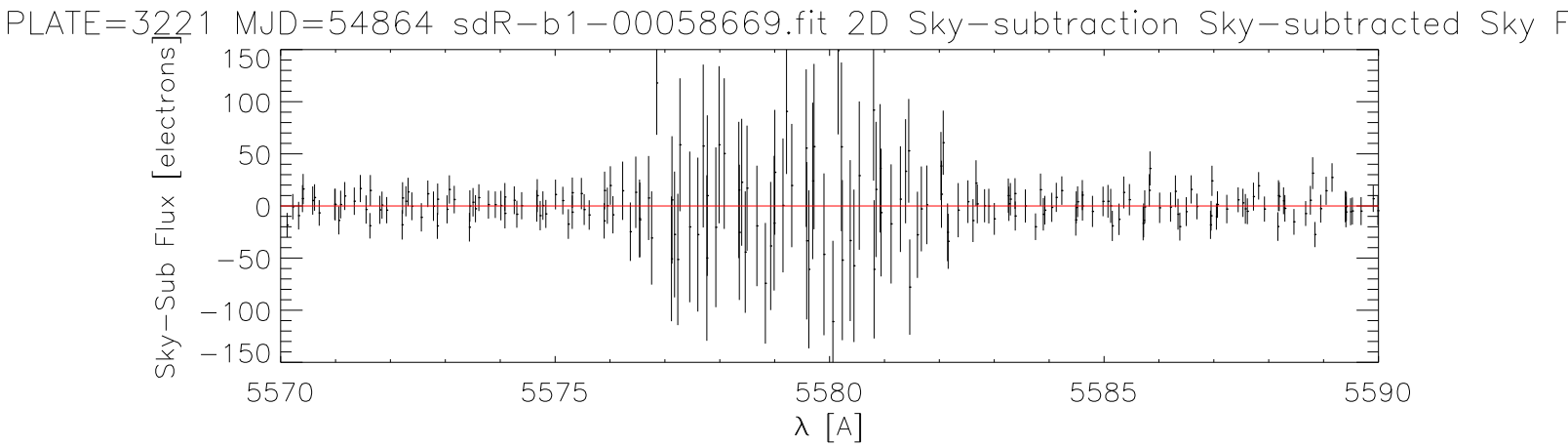

PLATE=3221 MJD=54864 sdR-b1-00058669.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

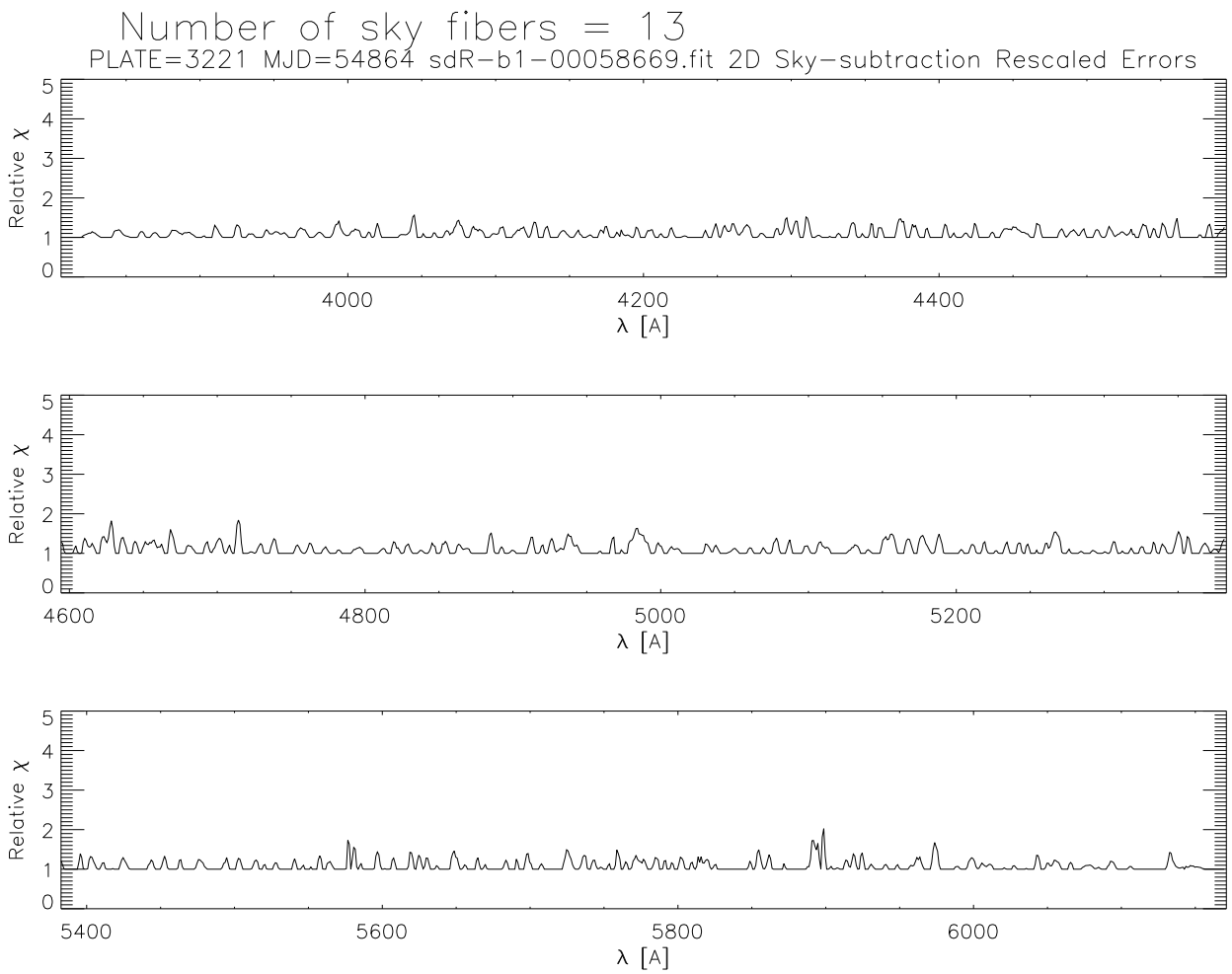

PLATE=3221 MJD=54864 sdR-b1-00058669.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

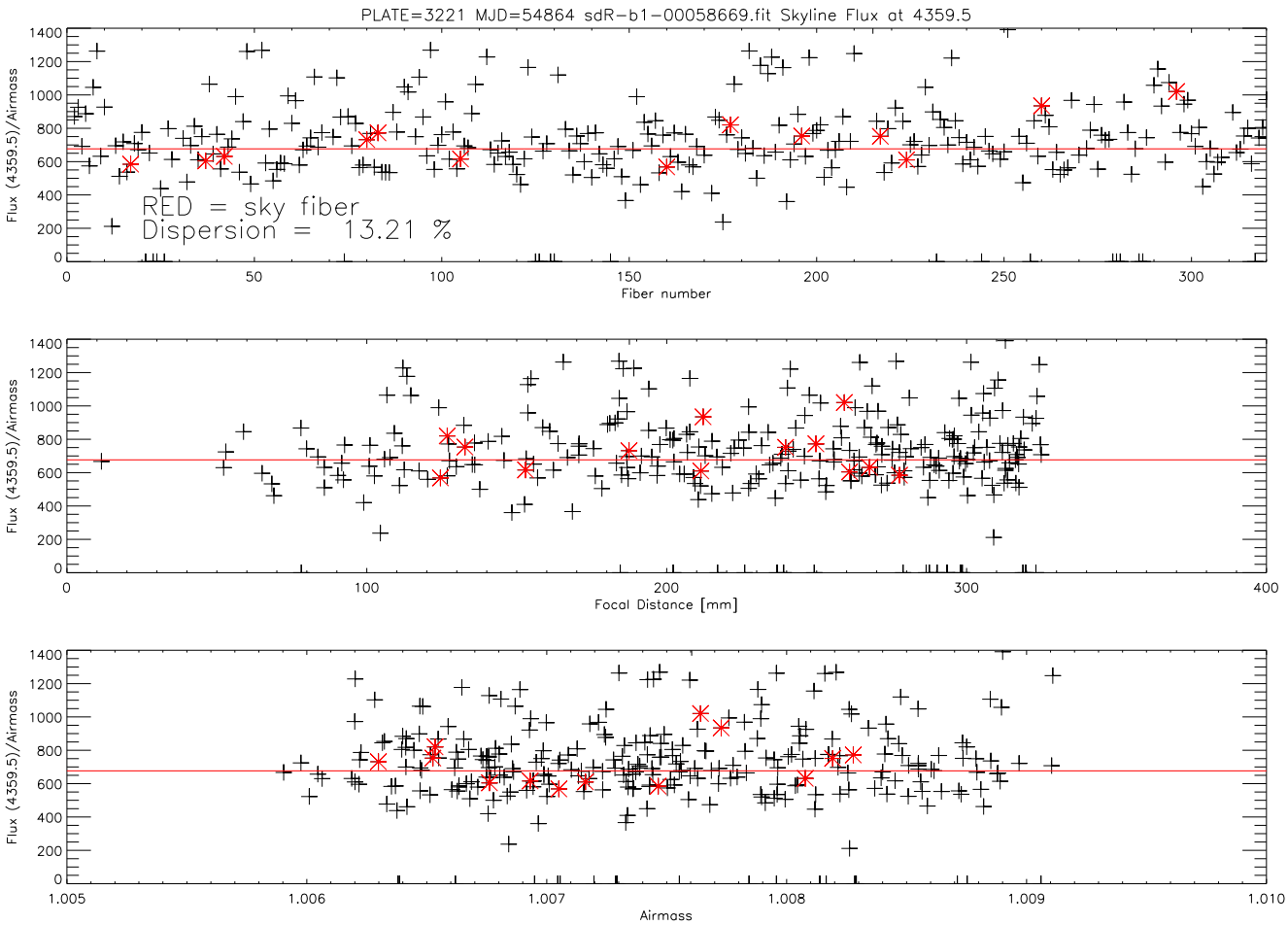

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058669.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

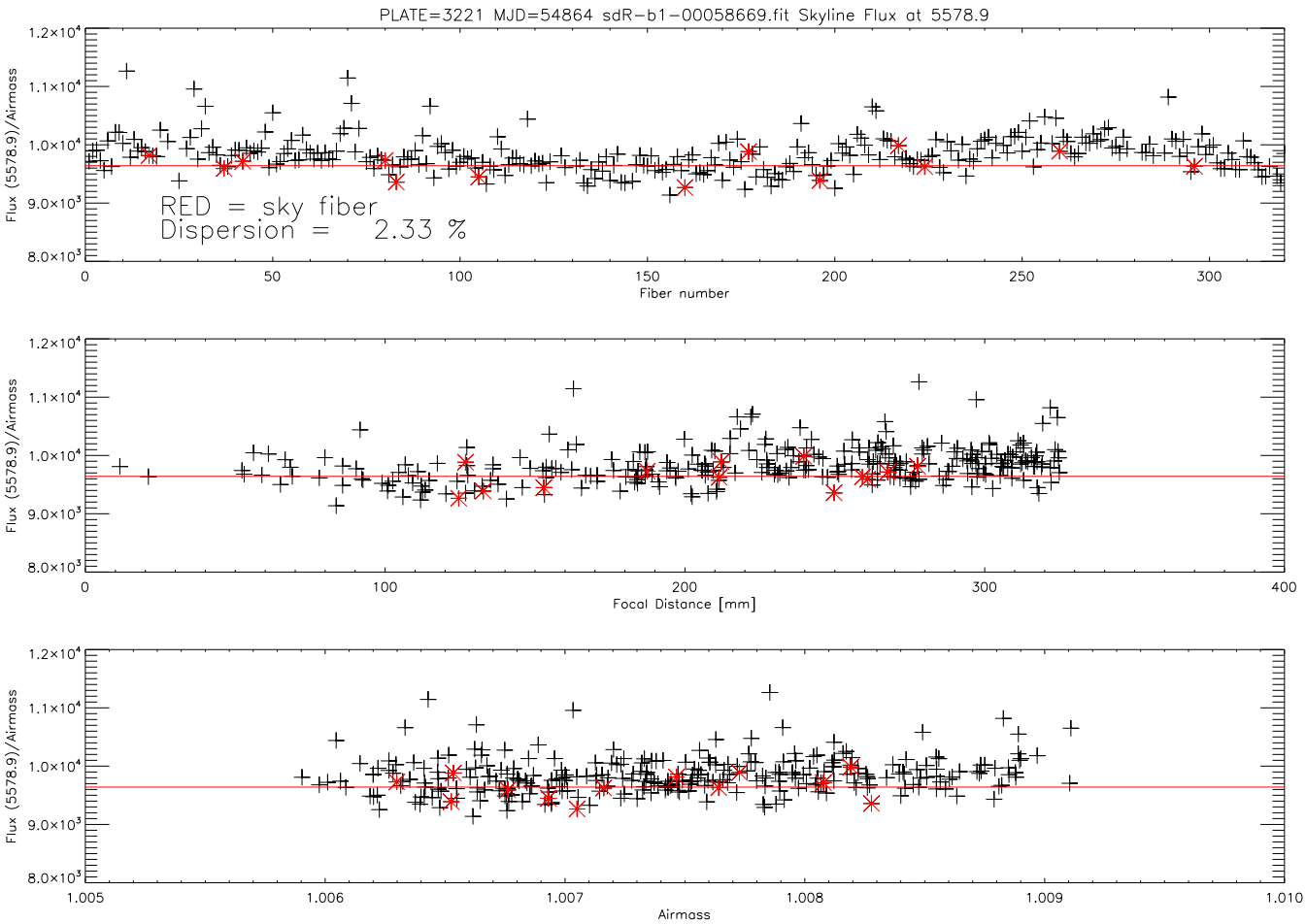

PLATE=3221 MJD=54864 sdR-b1-00058669.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

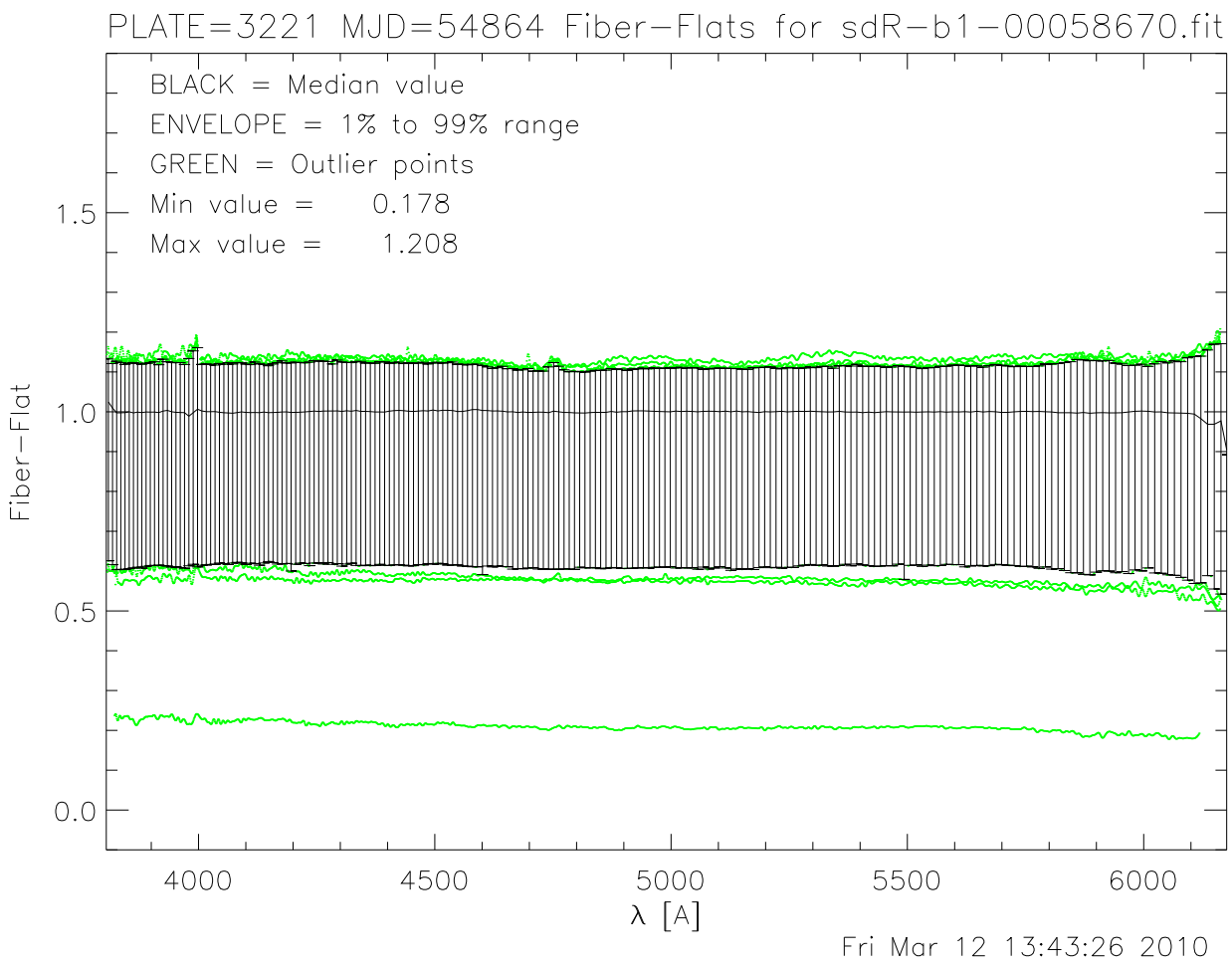

PLATE=3221 MJD=54864 sdR-b1-00058669.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

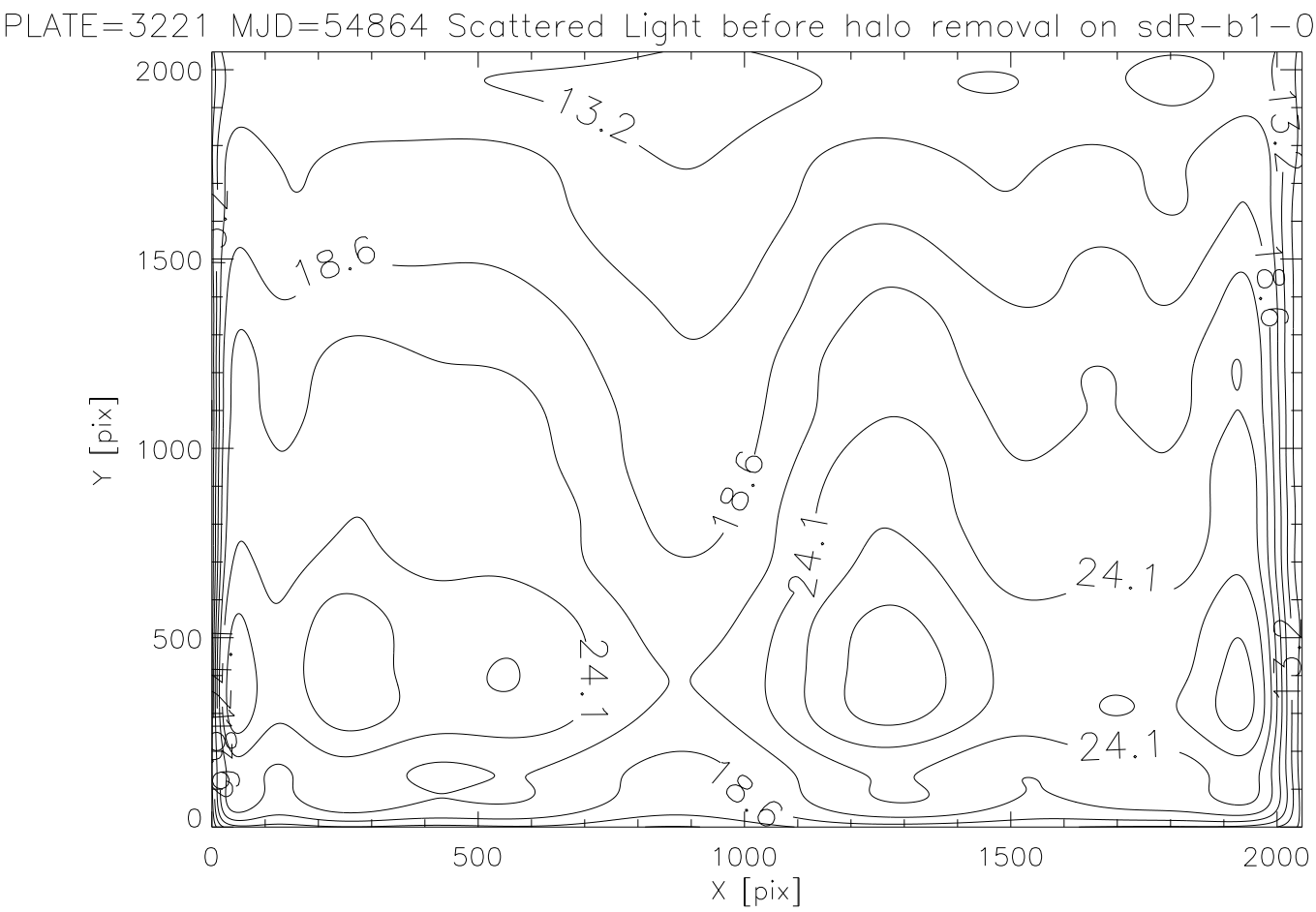

PLATE=3221 MJD=54864 sdR-b1-00058669.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

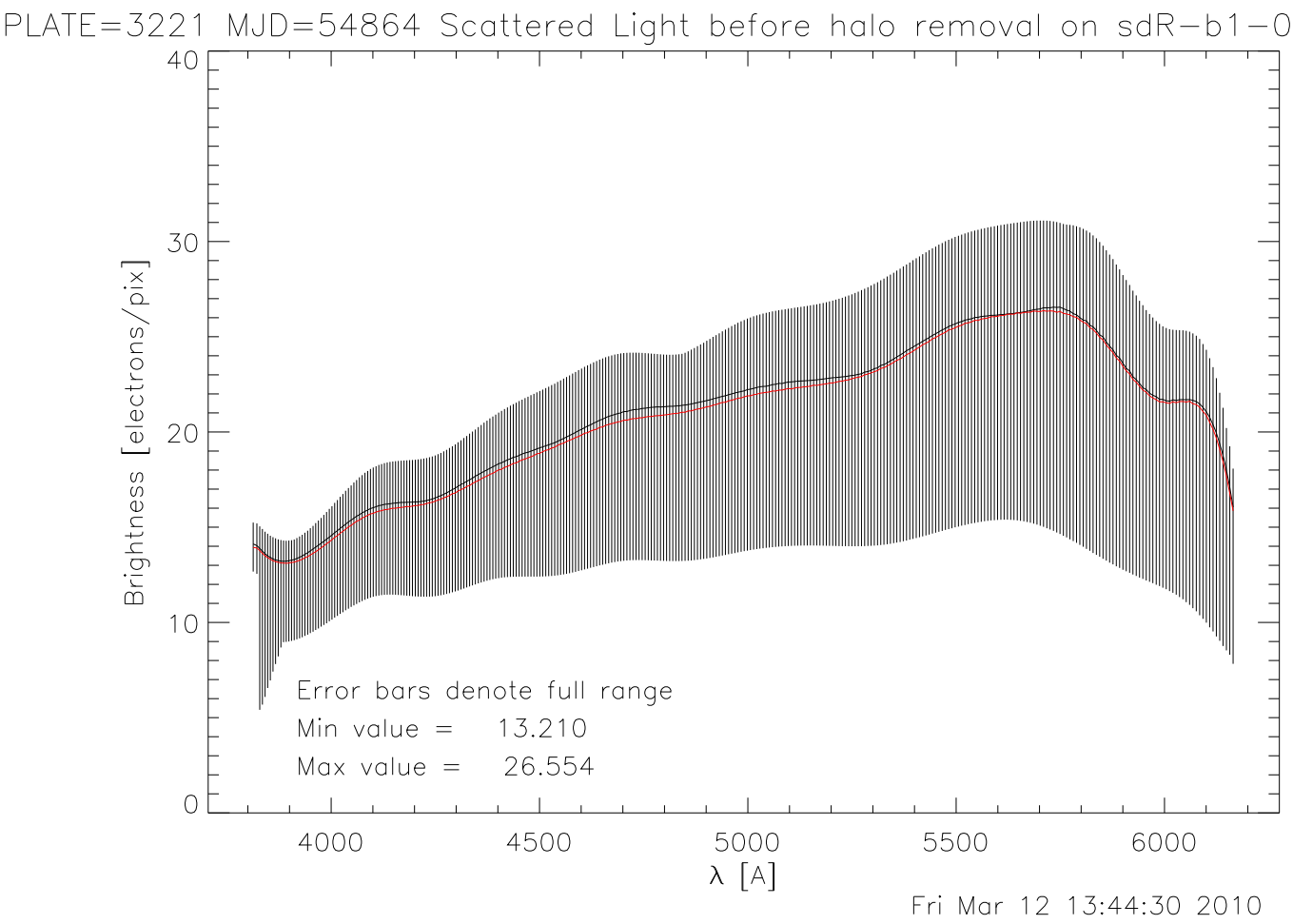

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058669.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

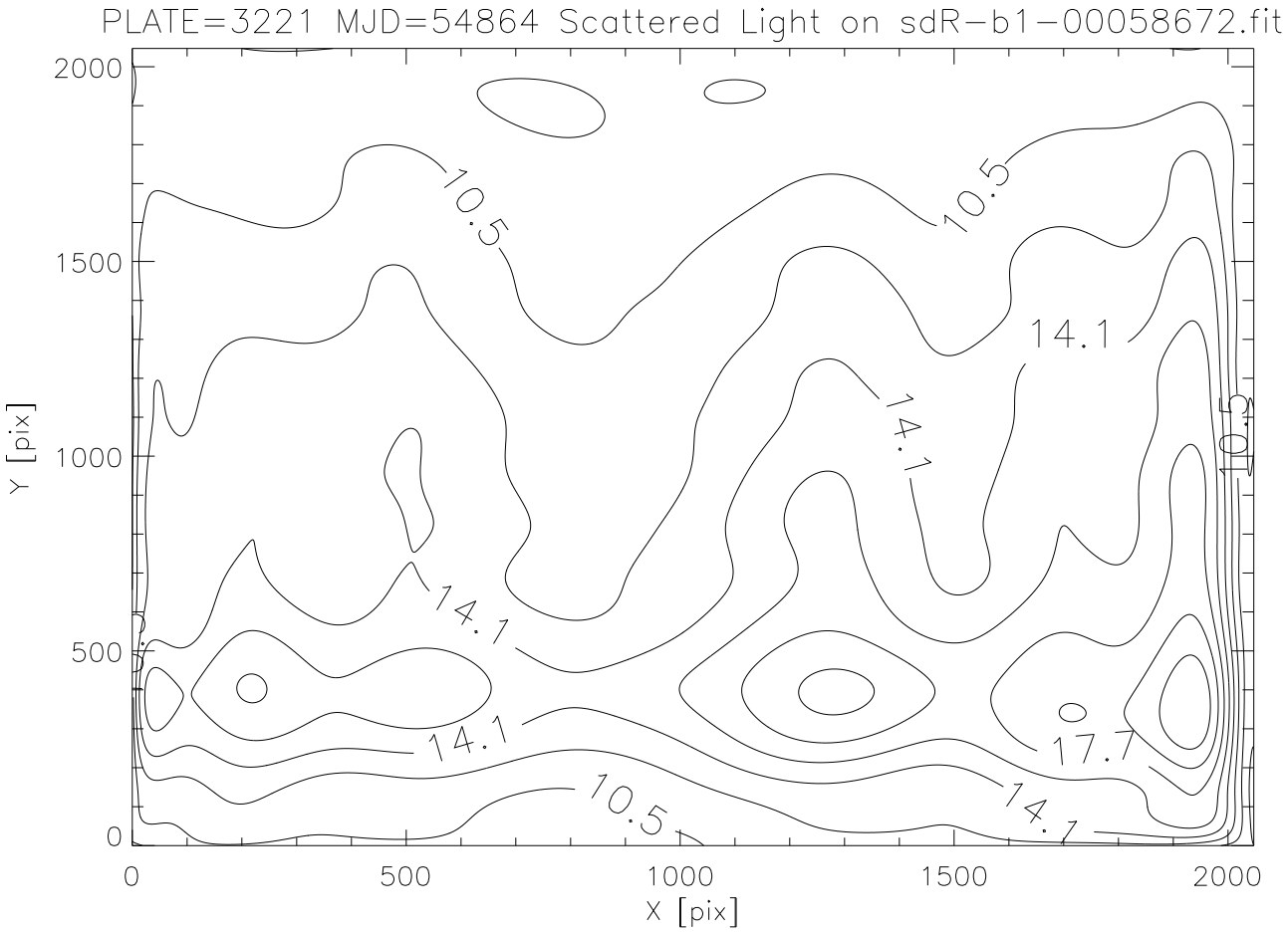

PLATE=3221 MJD=54864 sdR-b1-00058669.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.21 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

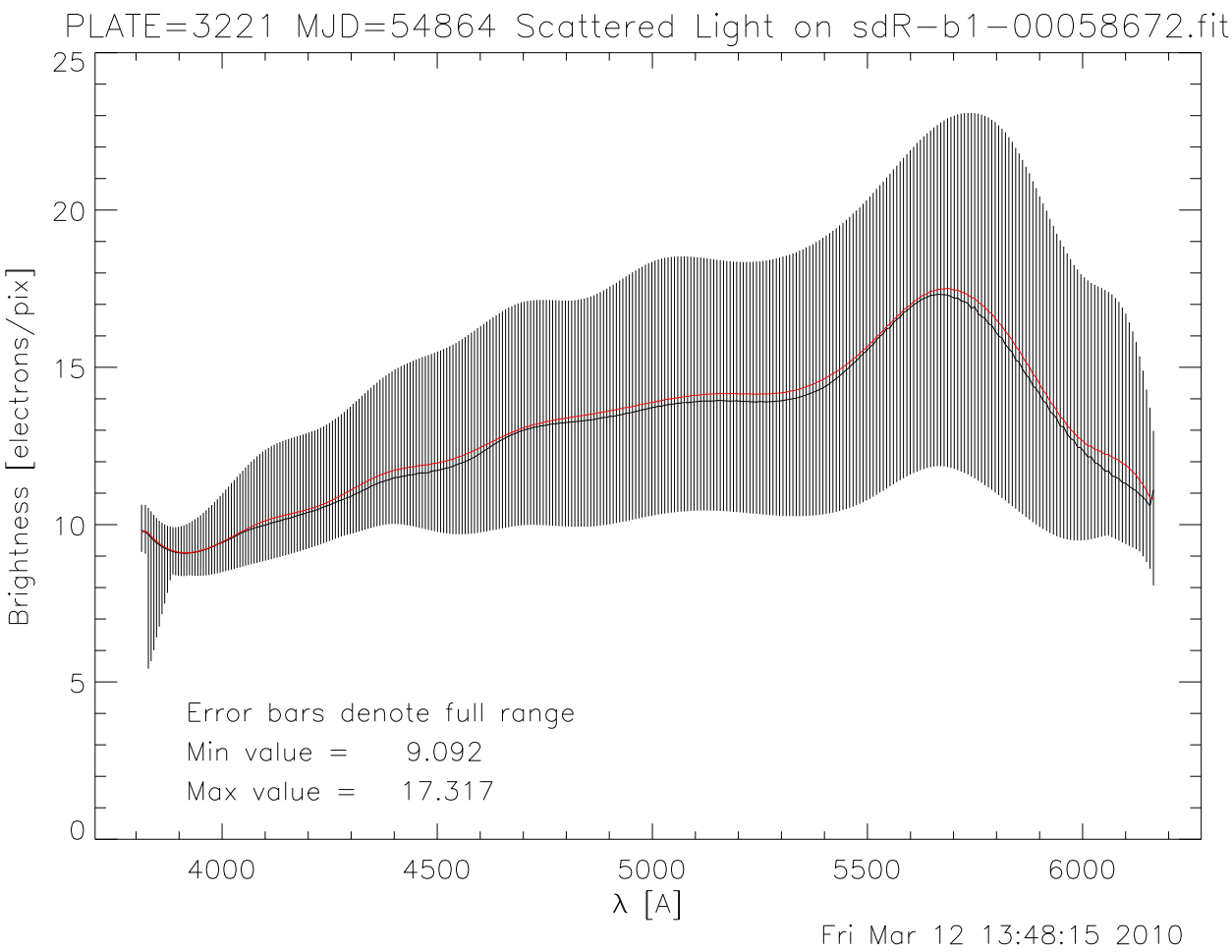

PLATE=3221 MJD=54864 sdR-b1-00058669.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.33 %
Fiber number
Focal Distance [mm]
Airmass

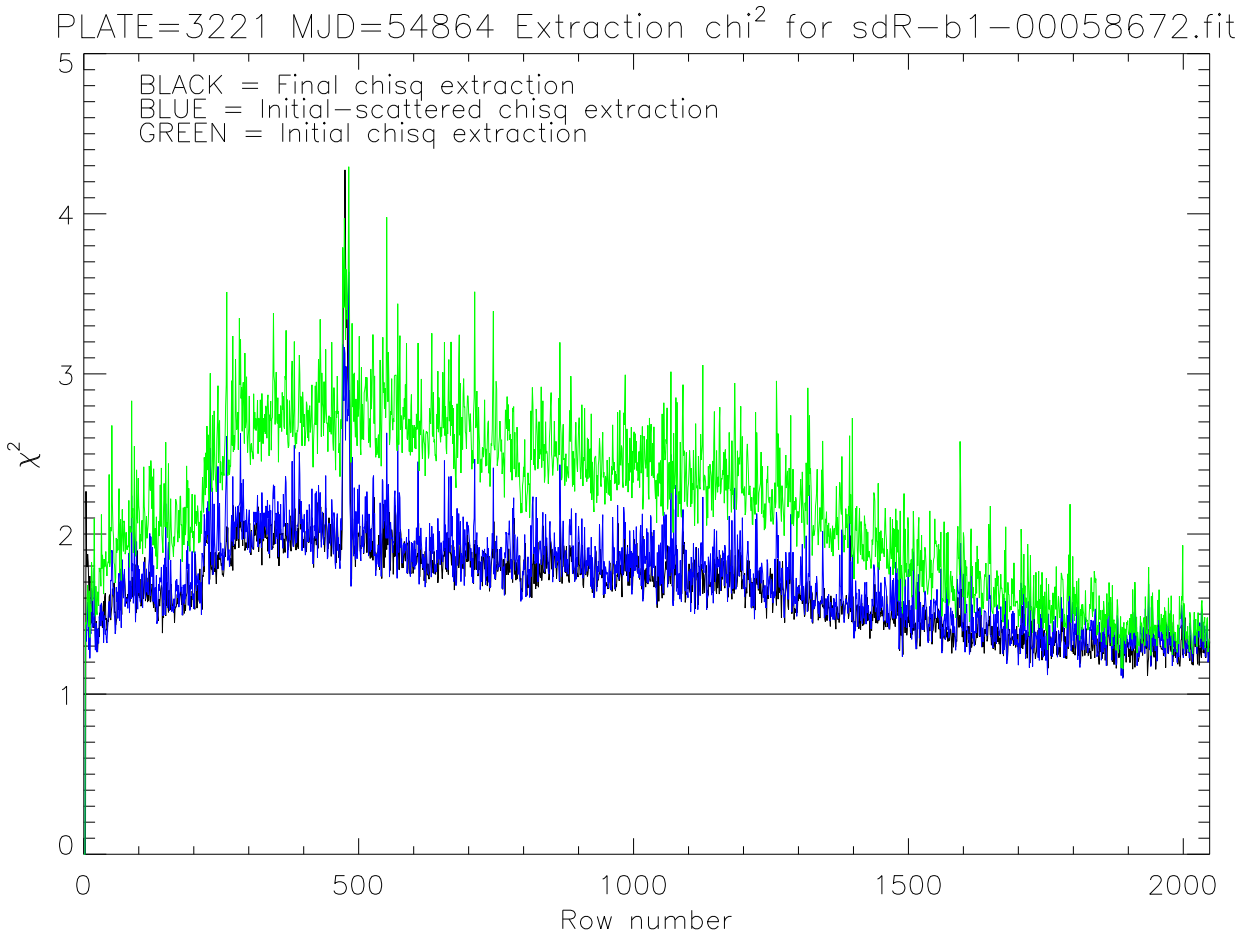

PLATE=3221 MJD=54864 Fiber−Flats for sdR−b1−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.178
Max value = 1.208
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 13:43:26 2010

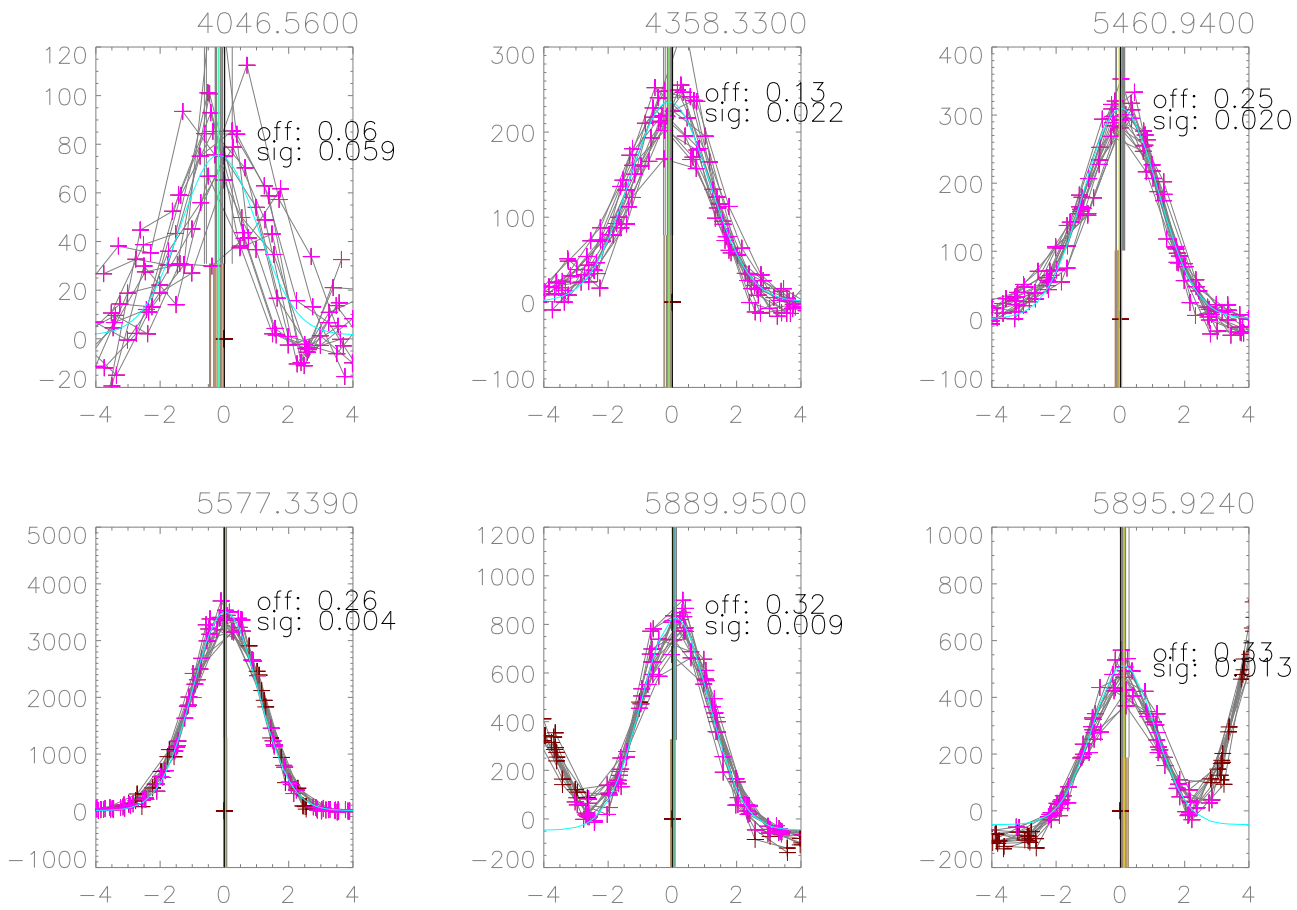

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR−b1−00058672.f
13.2
18.6
24.1
Y [pix]
X [pix]
0
500
1000
1500
2000

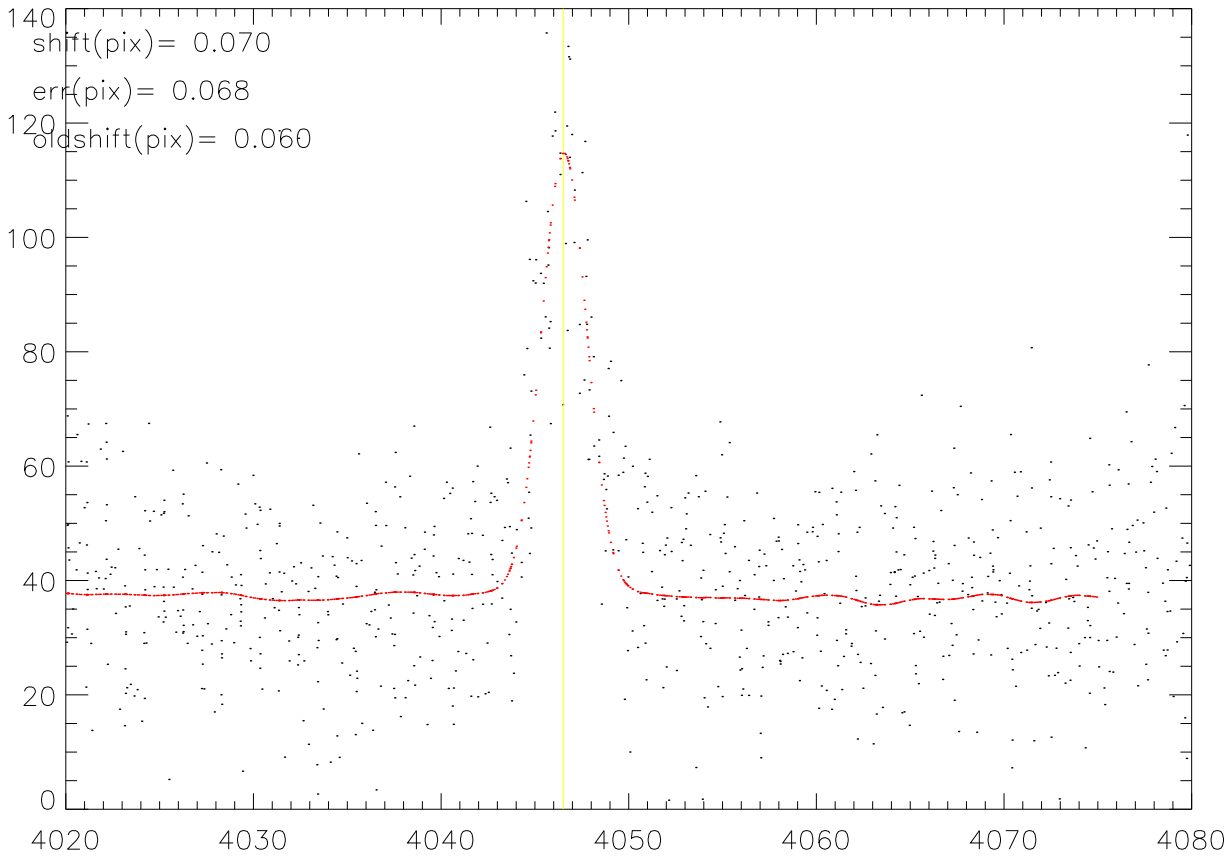

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b1-00058672.f
Brightness [electrons/pix]
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 13.210
Max value = 26.554
Fri Mar 12 13:44:30 2010

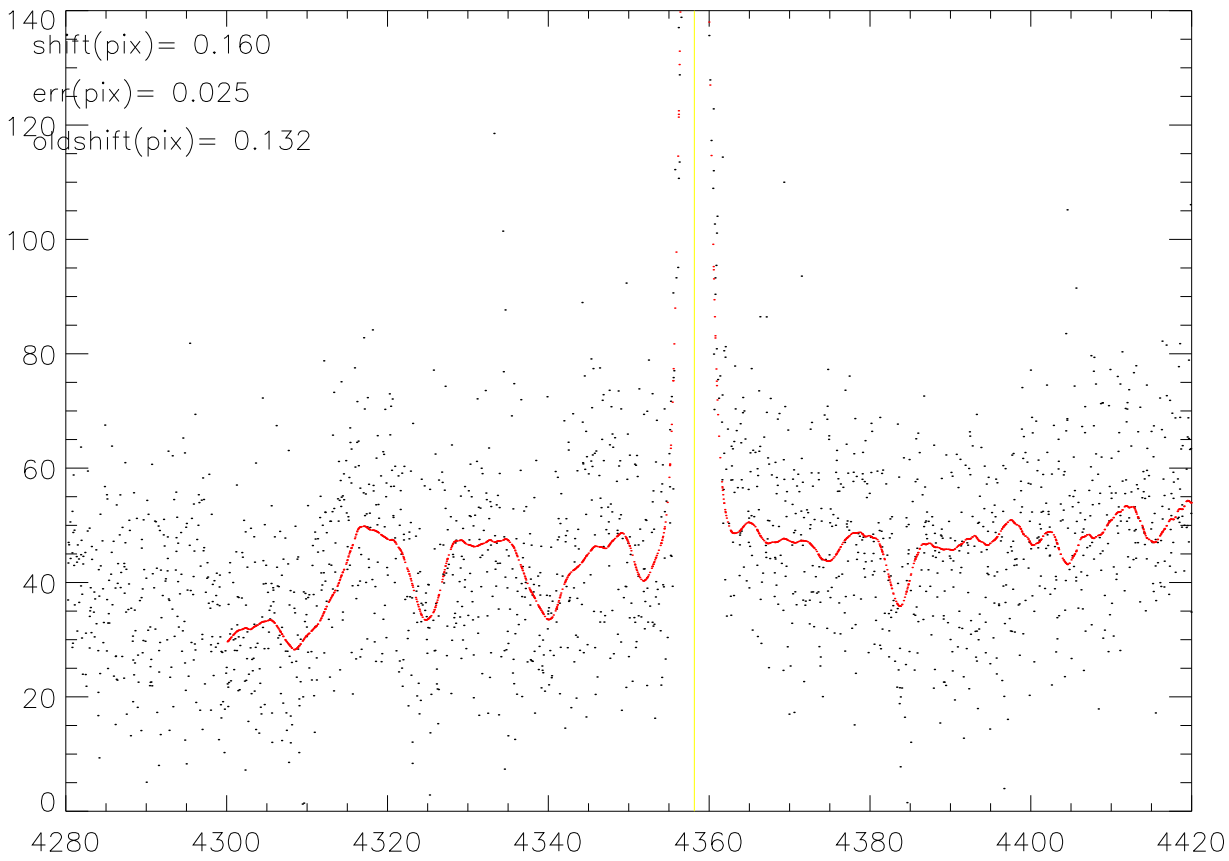

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058672.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
14.1
17.7

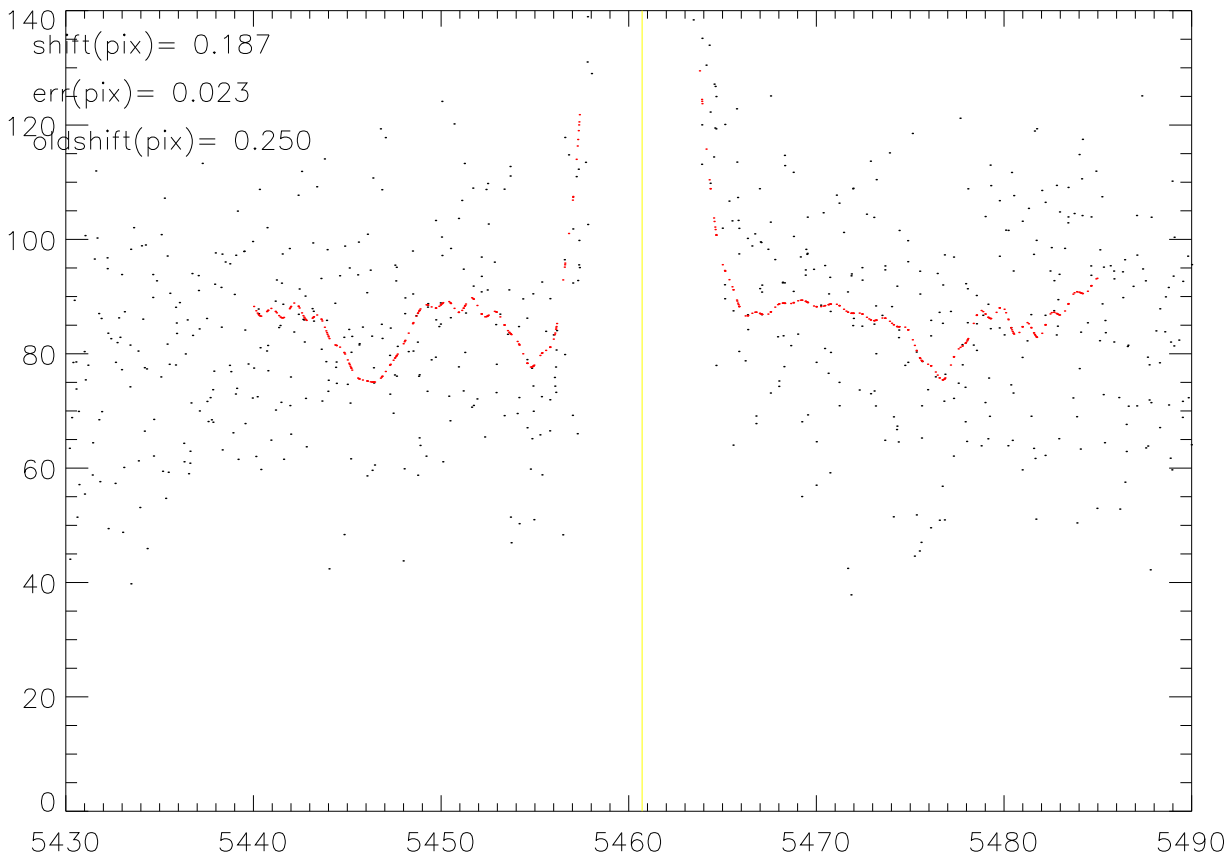

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058672.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 9.092
Max value = 17.317
Fri Mar 12 13:48:15 2010

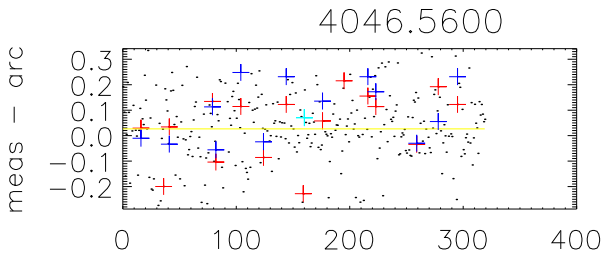

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b1-00058672.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

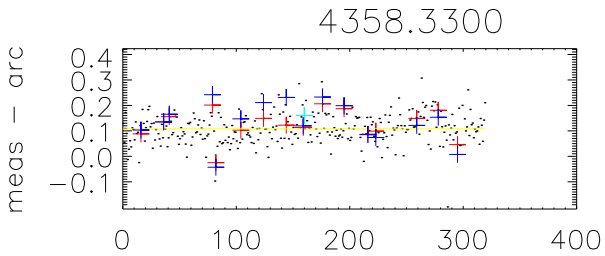

4046.5600
off: 0.06
sig: 0.059
4358.3300
off: 0.13
sig: 0.022
5460.9400
off: 0.25
sig: 0.020
5577.3390
off: 0.26
sig: 0.004
5889.9500
off: 0.32
sig: 0.009
5895.9240
off: 0.33
sig: 0.013

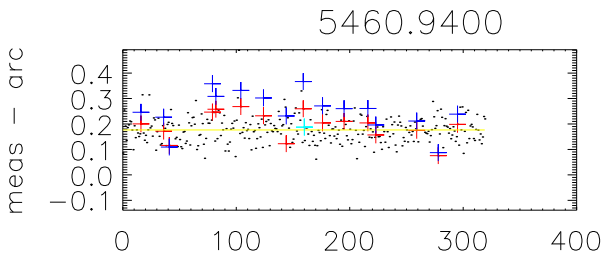

shift(pix)= 0.070
err(pix)= 0.068
oldshift(pix)= 0.060
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

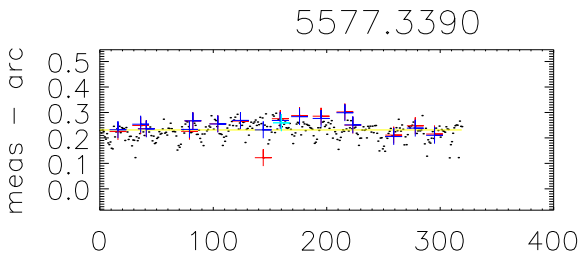

shift(pix)= 0.160
err(pix)= 0.025
oldshift(pix)= 0.132
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

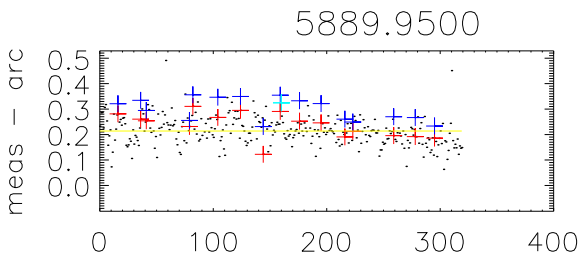

shift(pix)= 0.187
err(pix)= 0.023
oldshift(pix)= 0.250
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

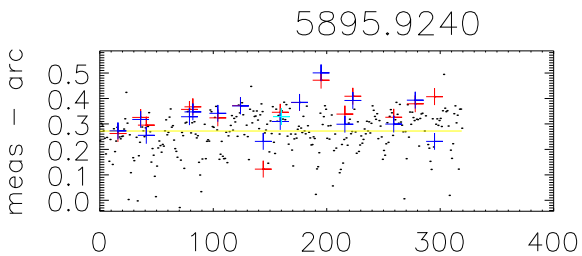

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

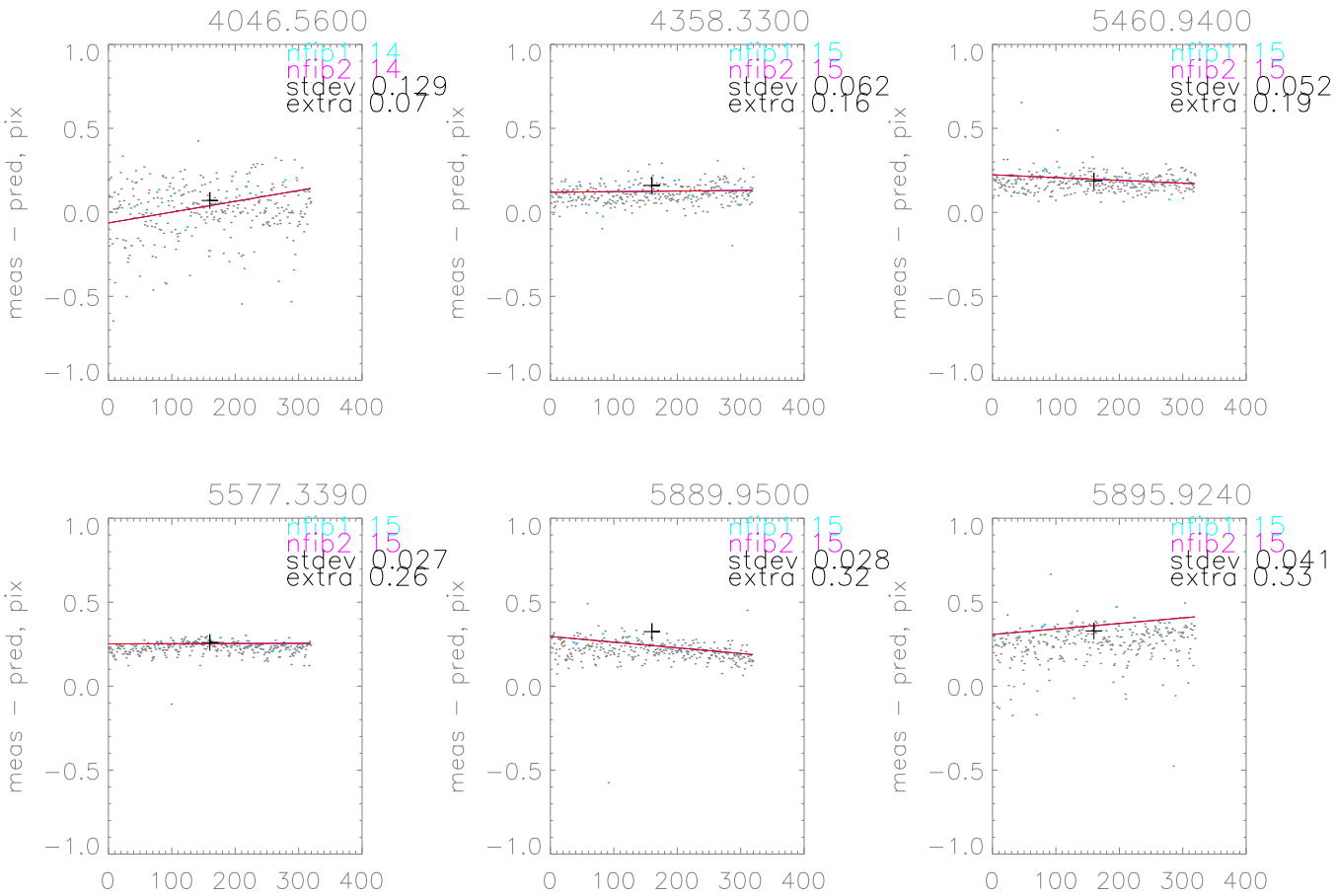

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

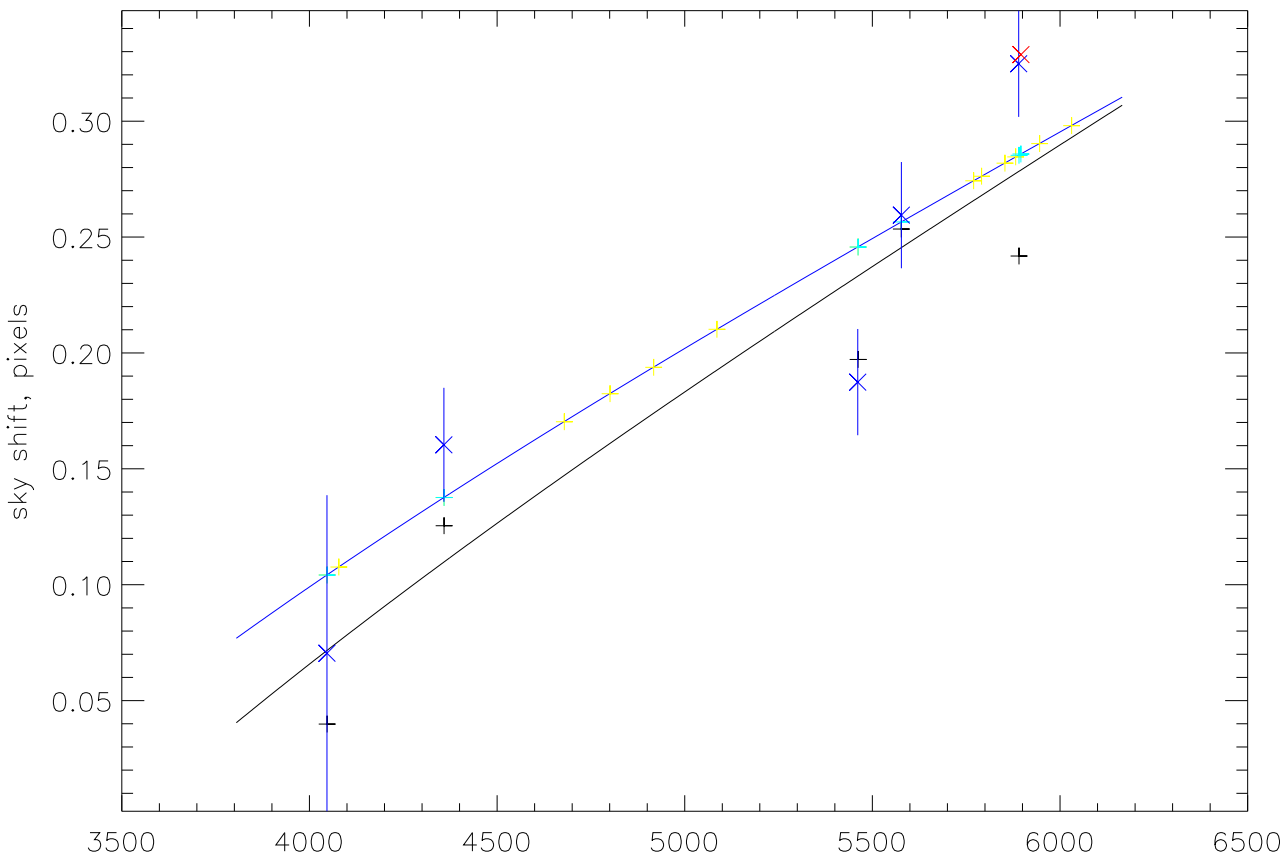

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

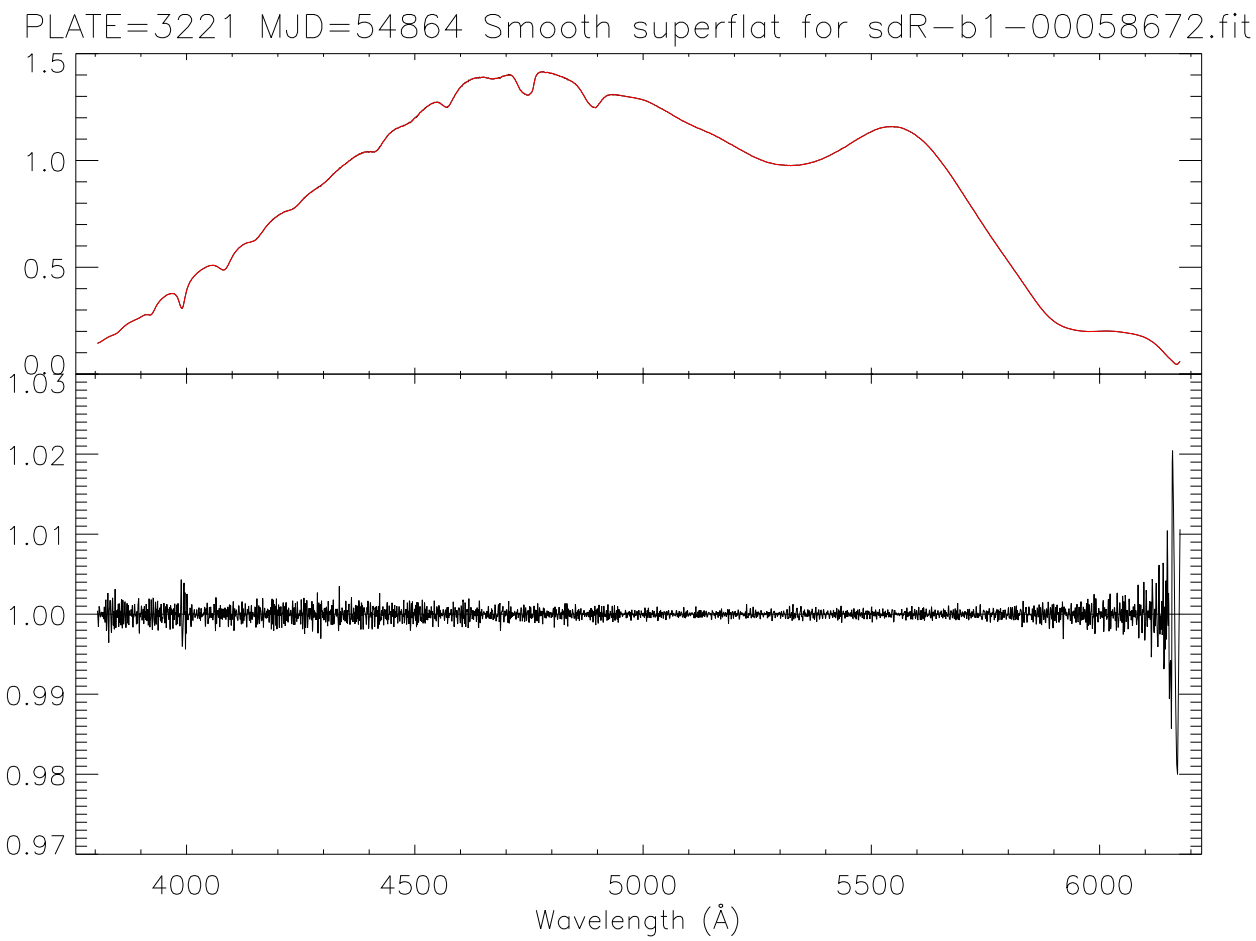

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

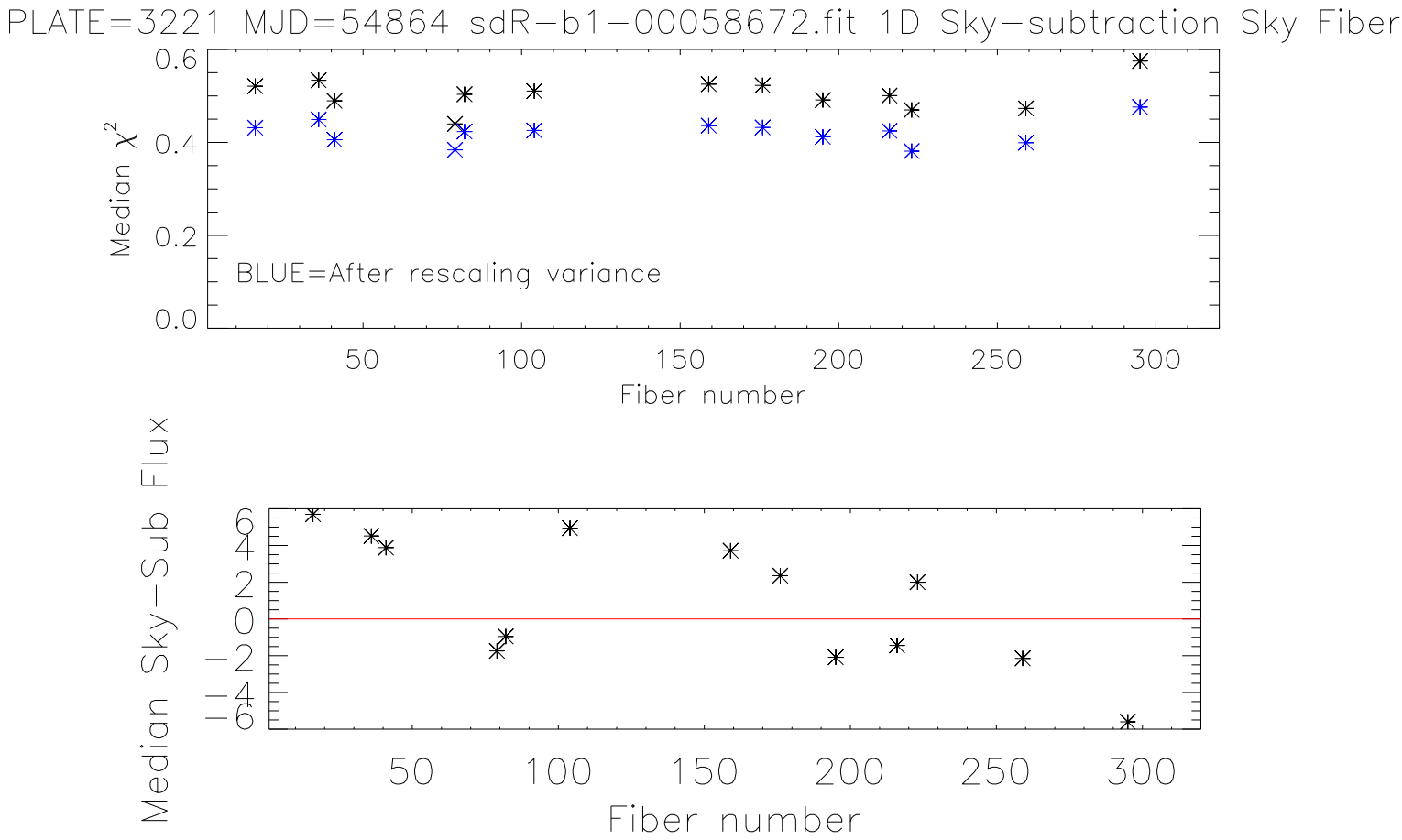

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

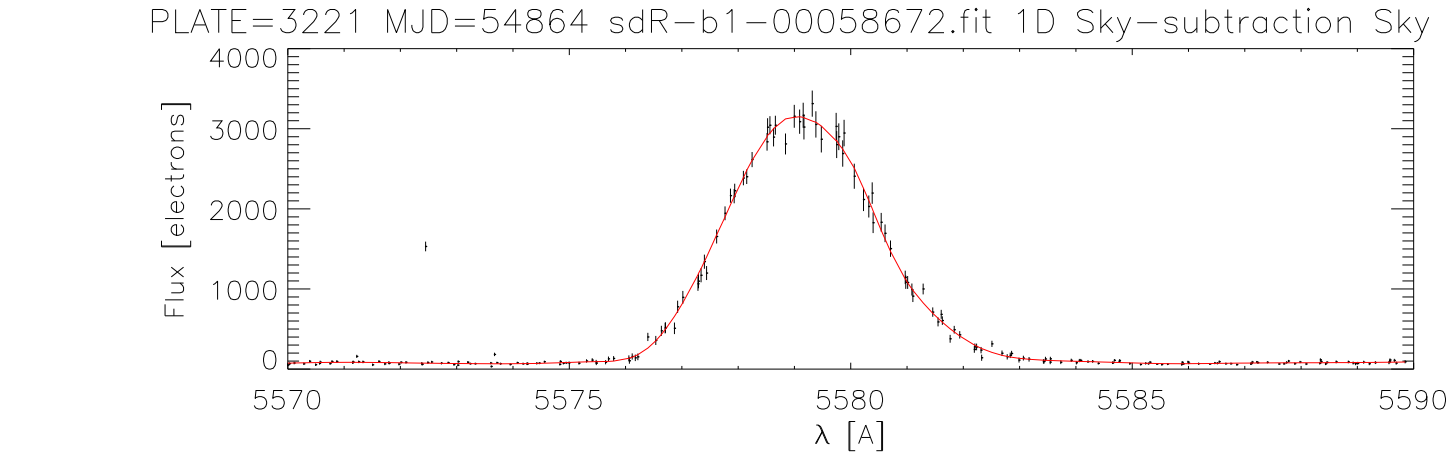

4046.5600
nfib1 14
nfib2 14
stdev 0.129
extra 0.07
4358.3300
nfib1 15
nfib2 15
stdev 0.062
extra 0.16
5460.9400
nfib1 15
nfib2 15
stdev 0.052
extra 0.19
5577.3390
nfib1 15
nfib2 15
stdev 0.027
extra 0.26
5889.9500
nfib1 15
nfib2 15
stdev 0.028
extra 0.32
5895.9240
nfib1 15
nfib2 15
stdev 0.041
extra 0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

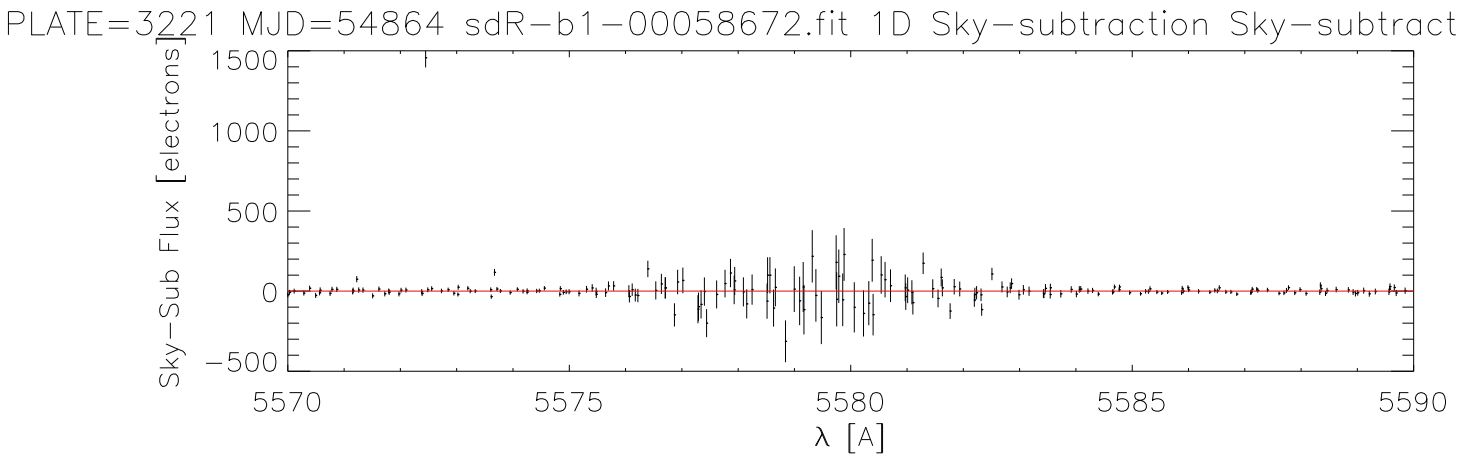

sky shift, pixels
0.30
0.25
0.20
0.15
0.10
0.05
3500
4000
4500
5000
5500
6000
6500

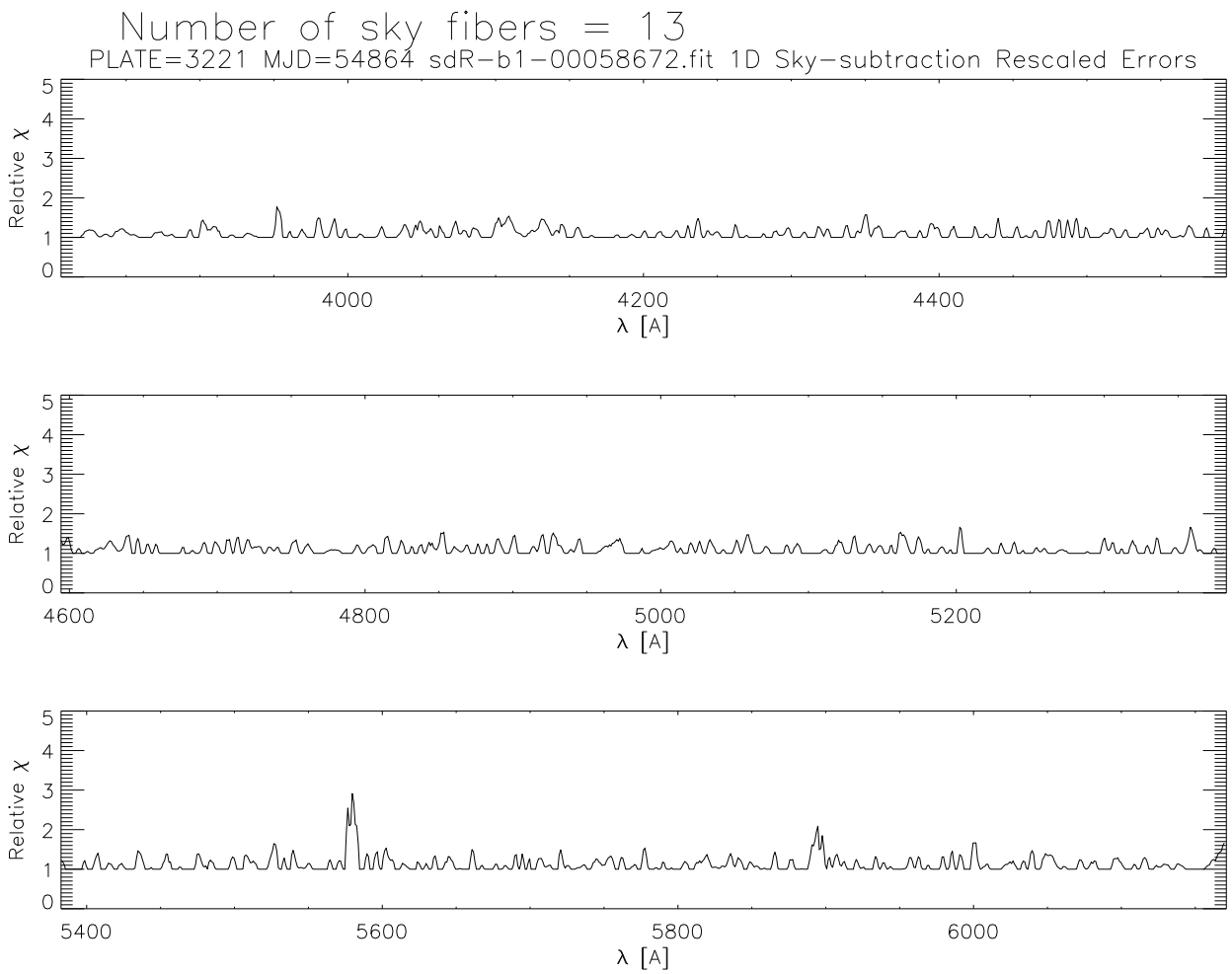
es= −0.0002

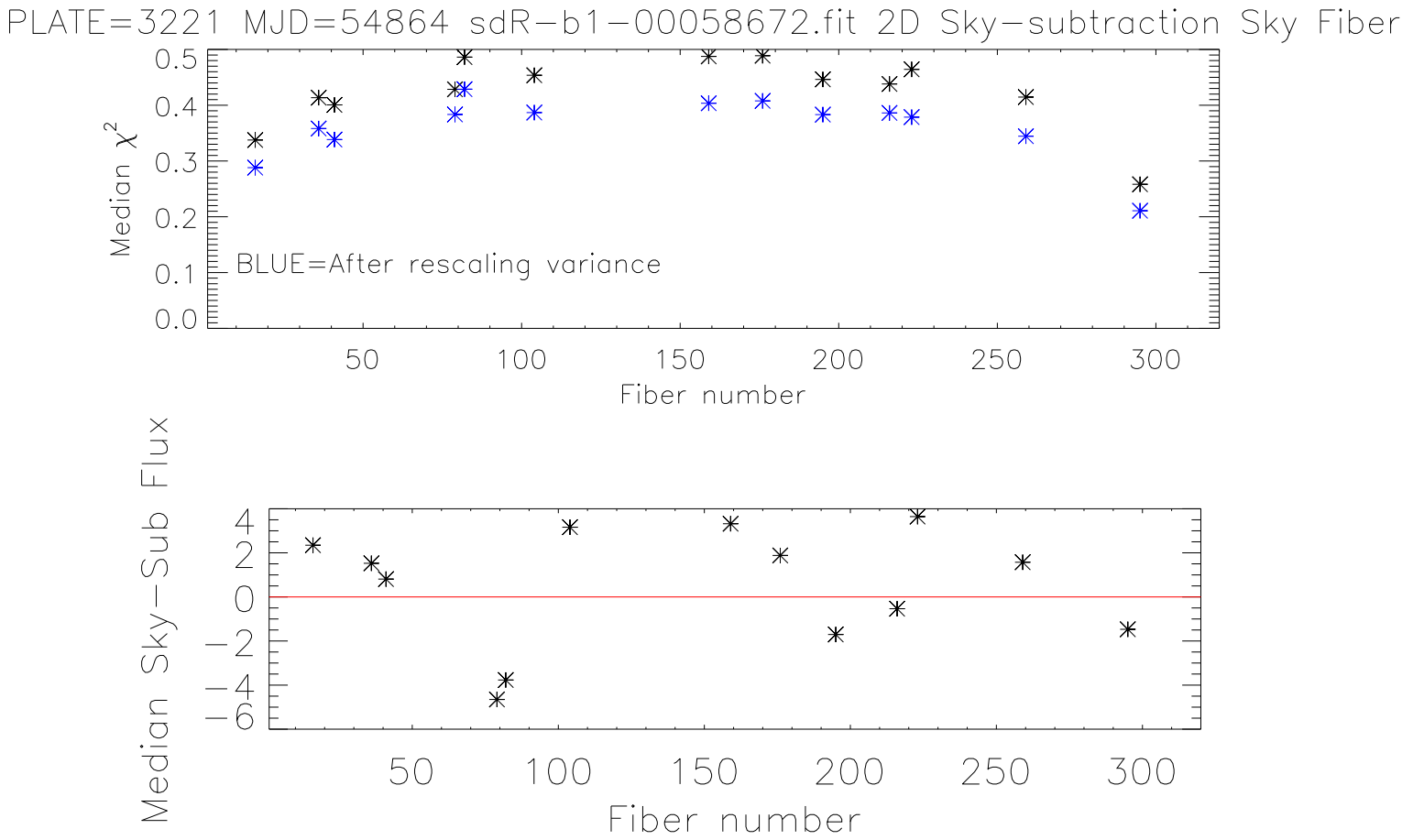

PLATE=3221 MJD=54864 Smooth superflat for sdR−b1−00058672.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

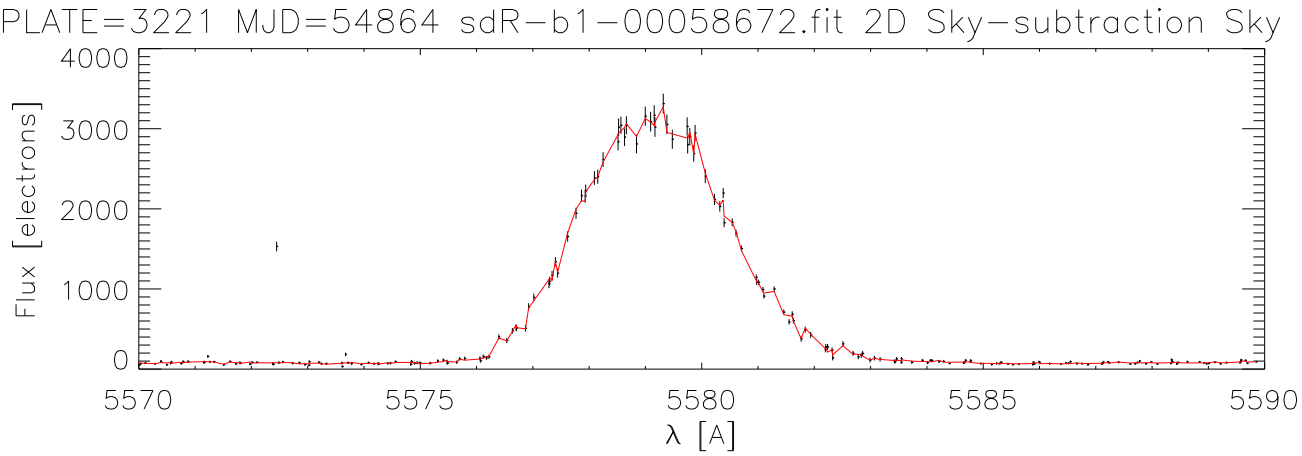

PLATE=3221 MJD=54864 sdR-b1-00058672.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

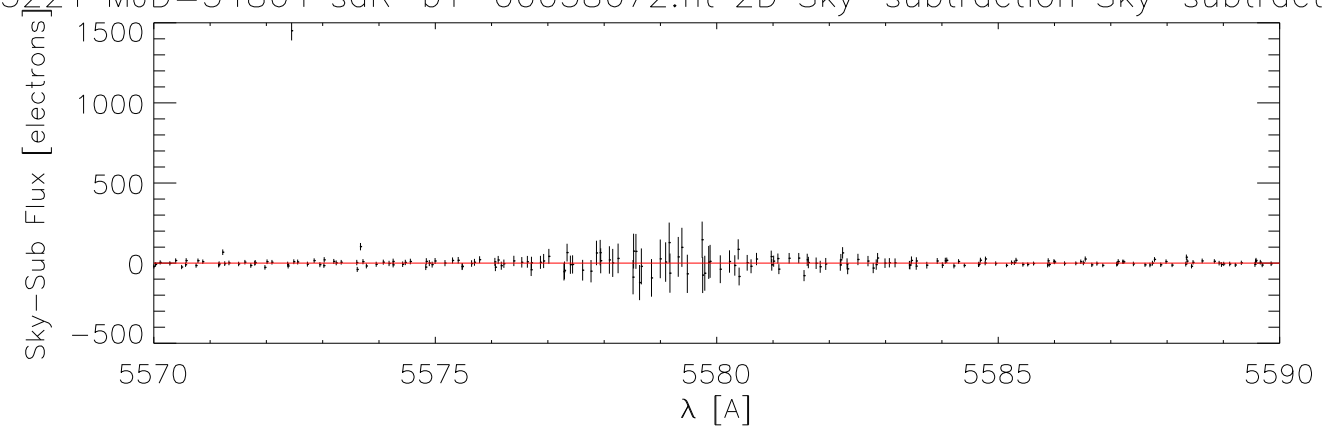

PLATE=3221 MJD=54864 sdR-b1-00058672.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

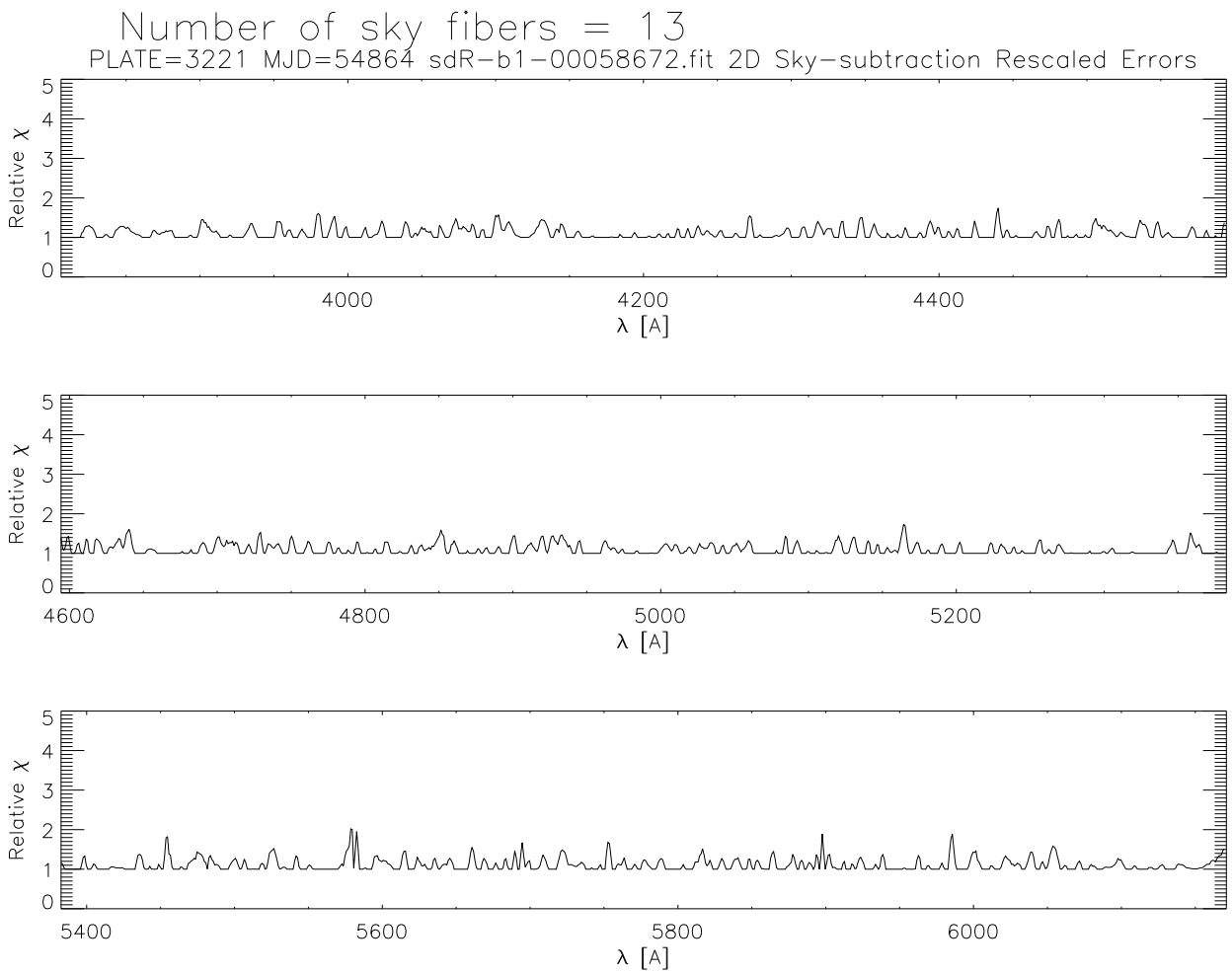

PLATE=3221 MJD=54864 sdR-b1-00058672.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

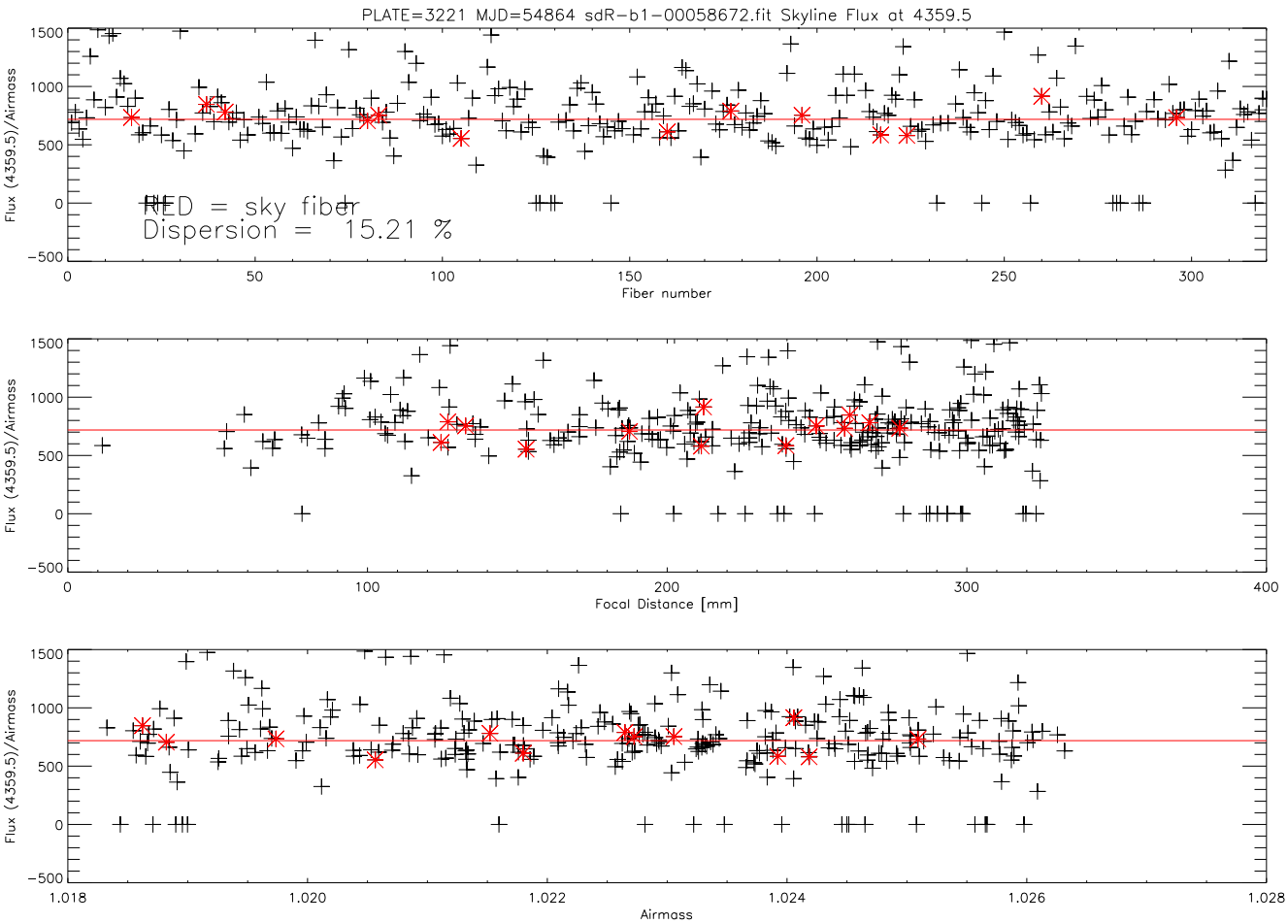

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058672.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

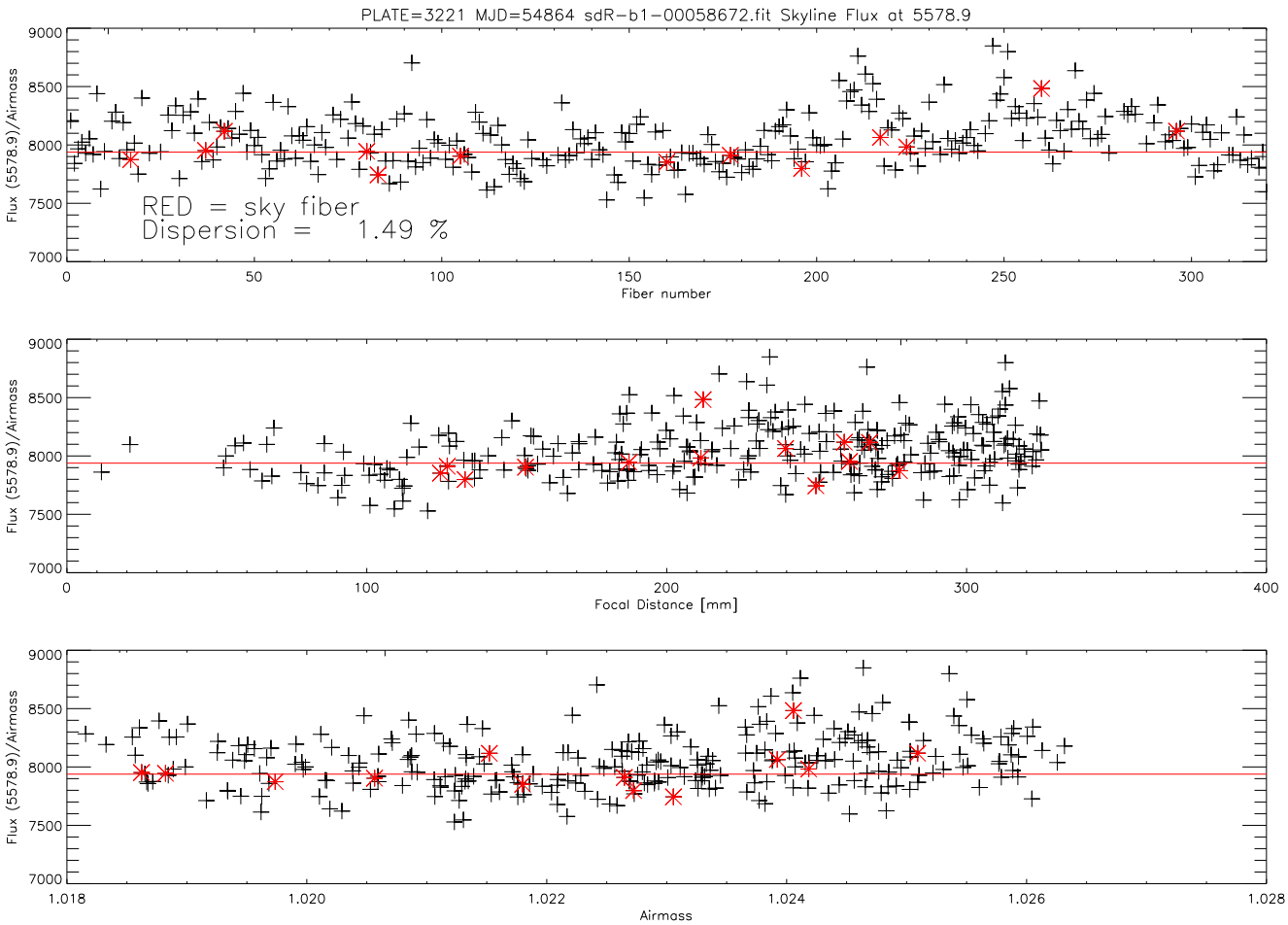

PLATE=3221 MJD=54864 sdR-b1-00058672.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

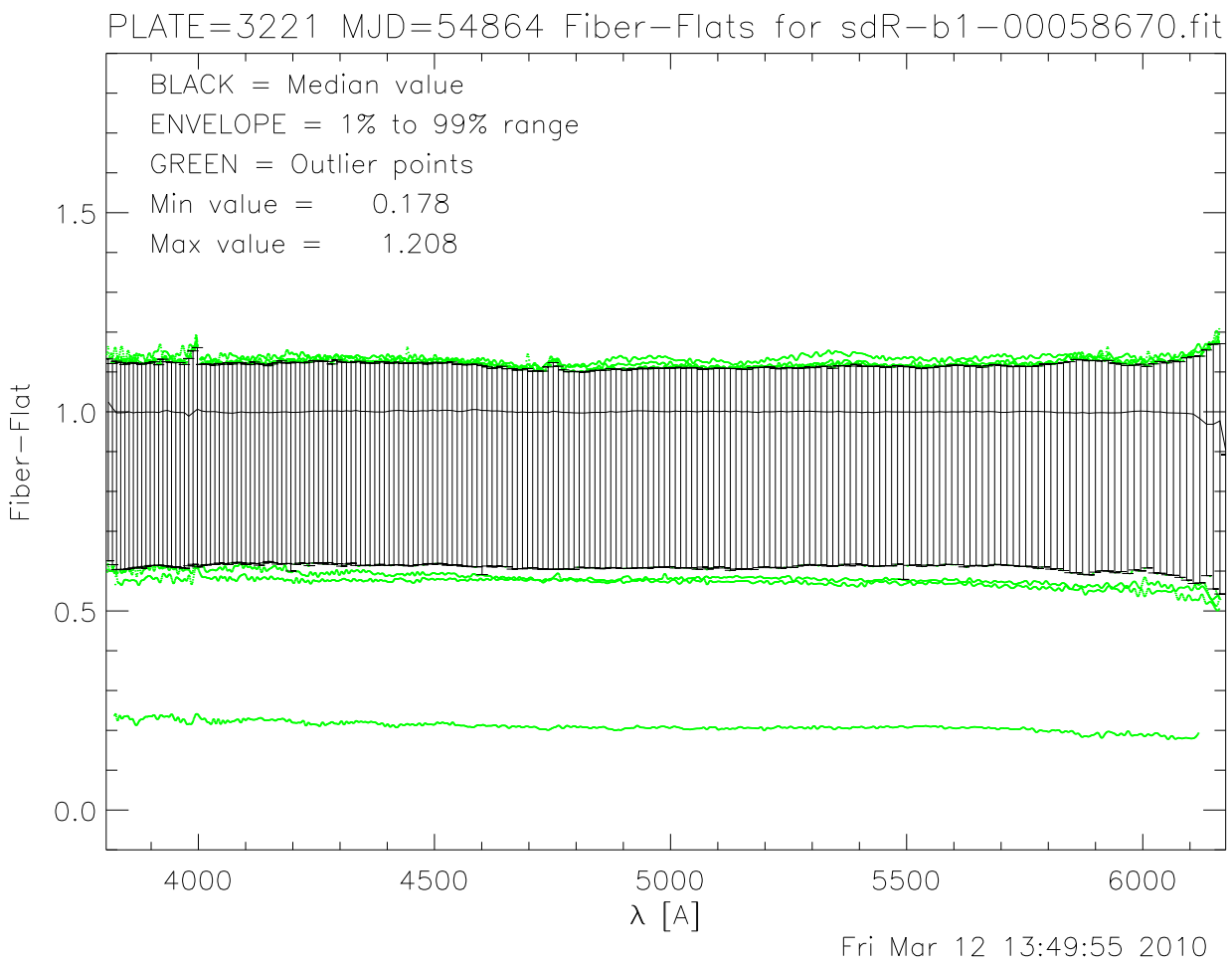

PLATE=3221 MJD=54864 sdR-b1-00058672.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

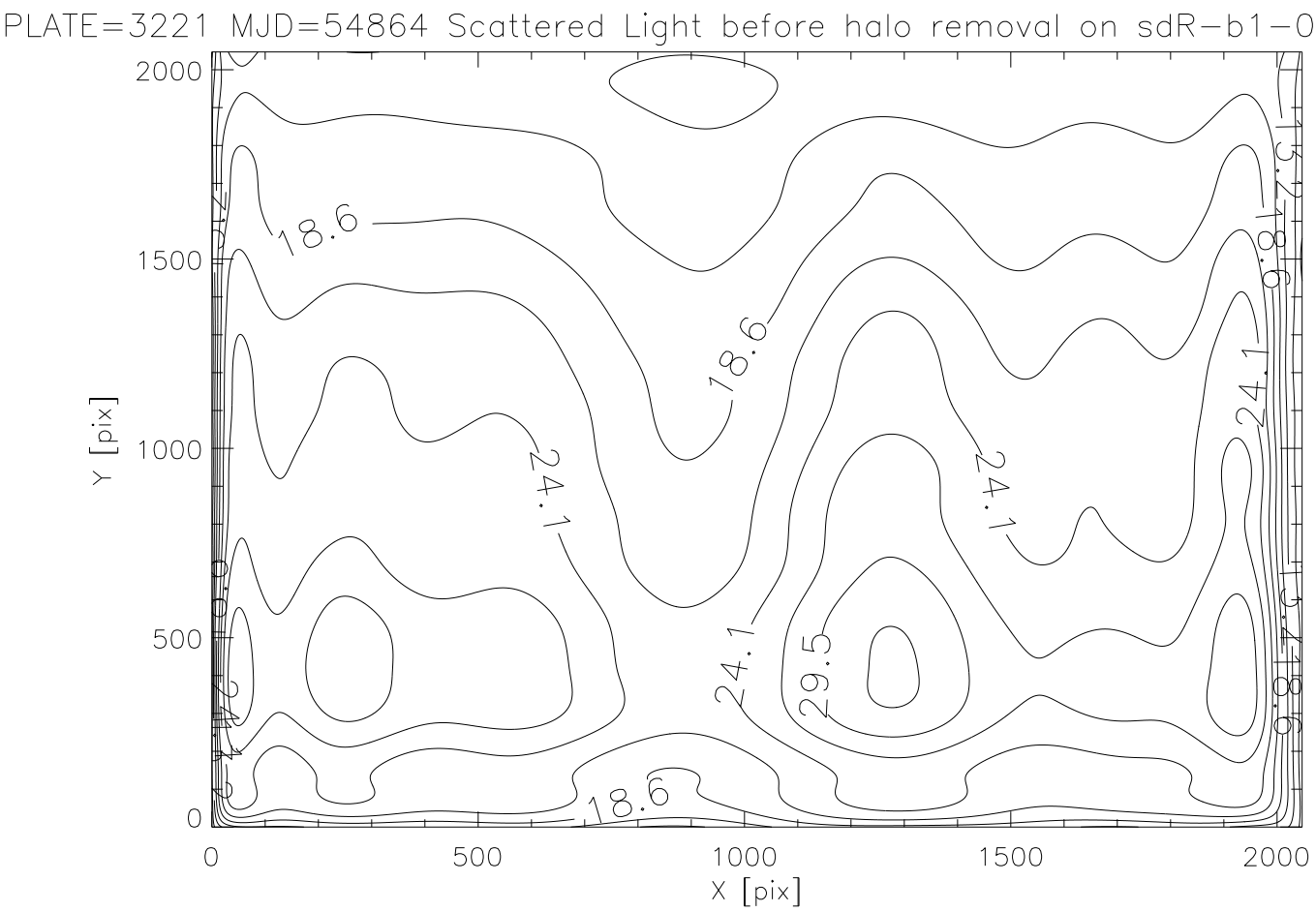

PLATE=3221 MJD=54864 sdR-b1-00058672.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

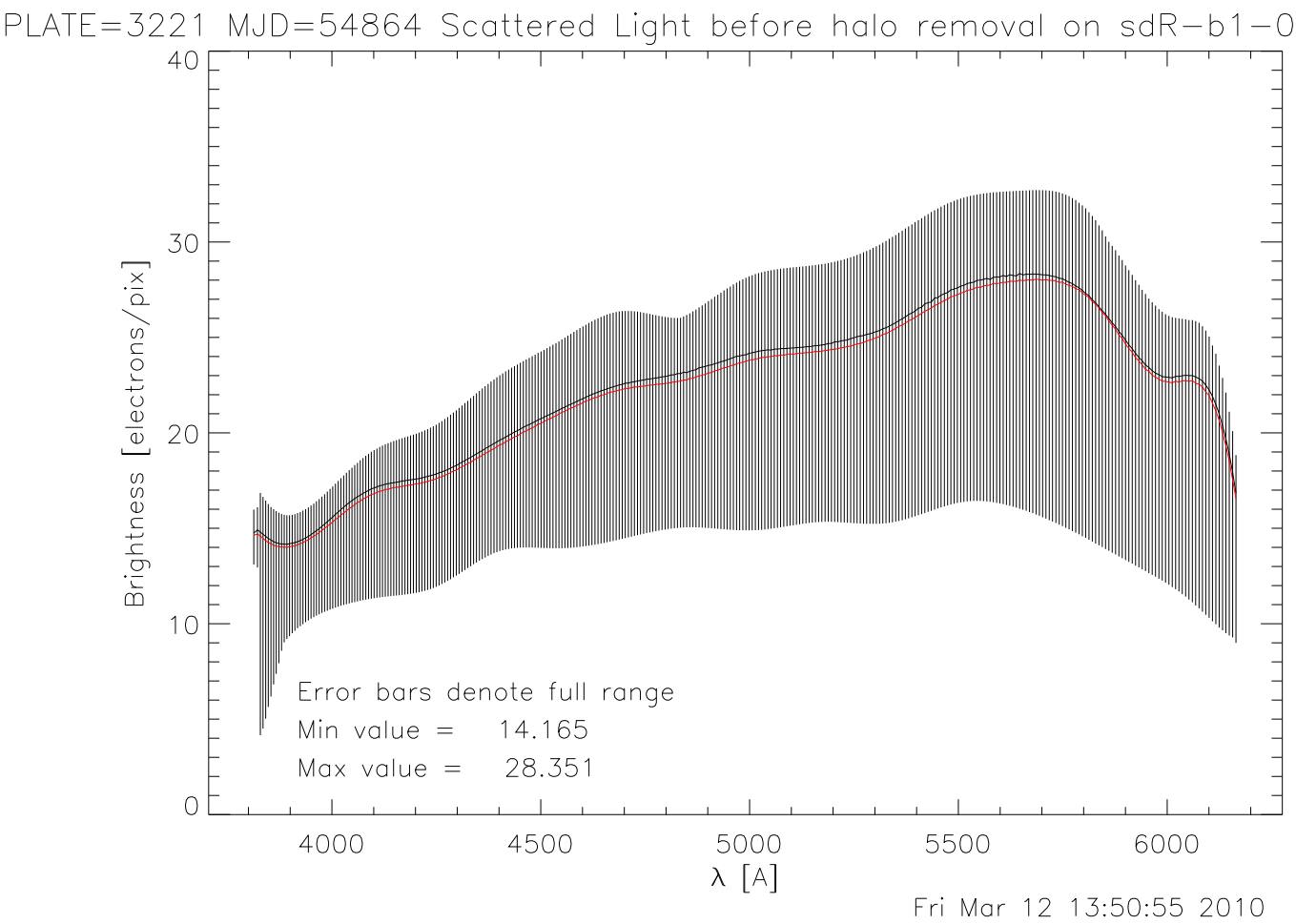

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058672.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

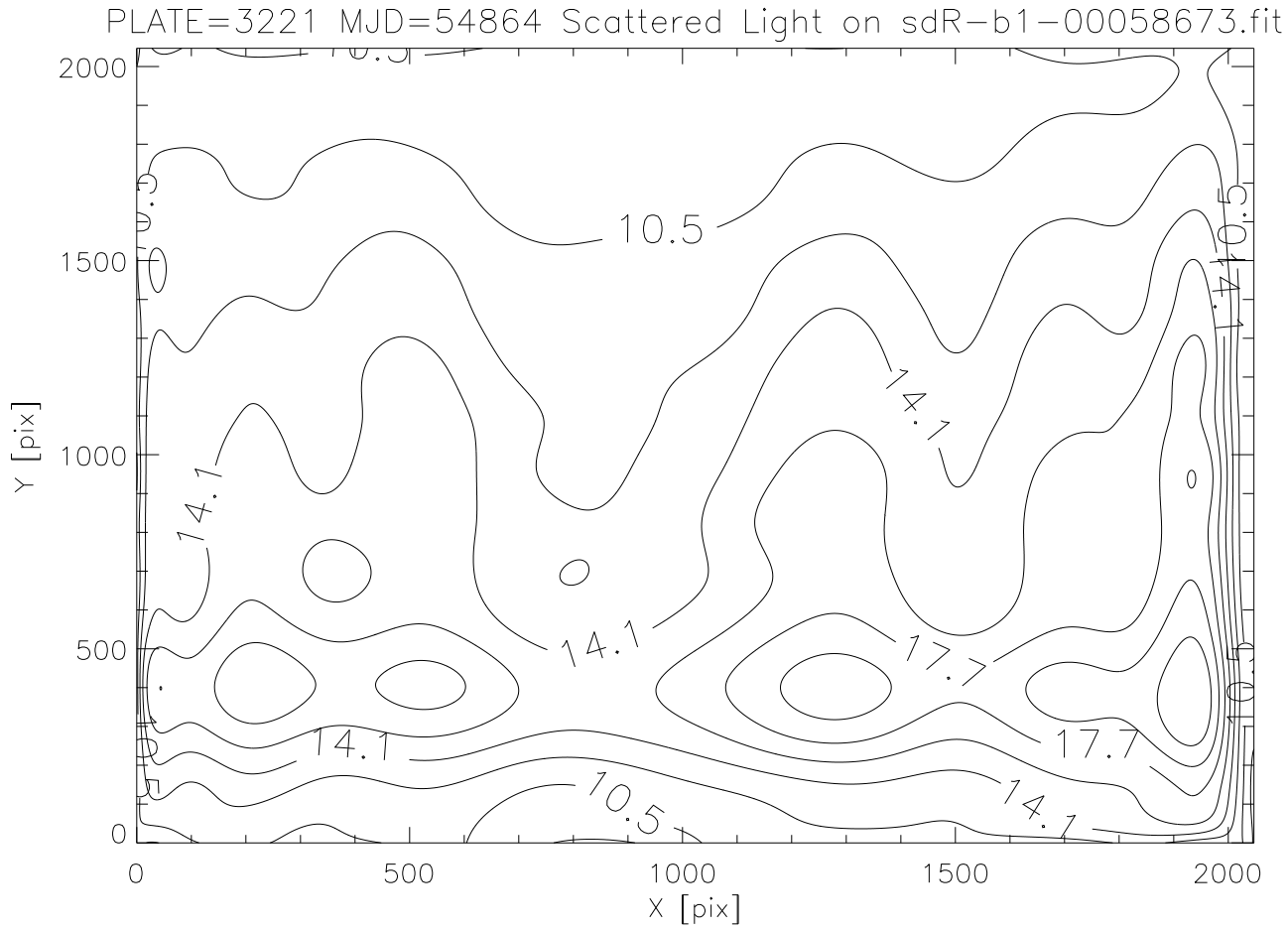

PLATE=3221 MJD=54864 sdR-b1-00058672.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 15.21 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

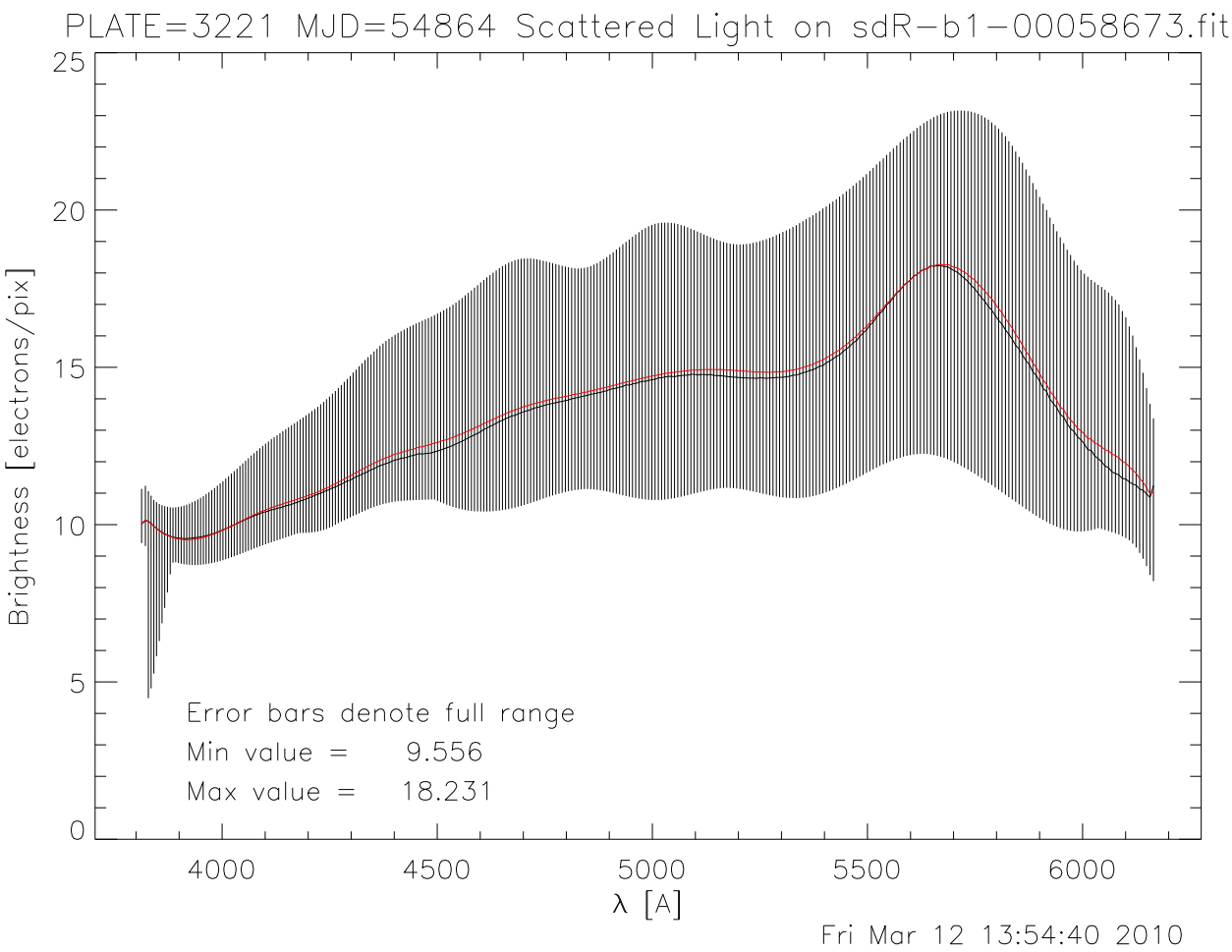

PLATE=3221 MJD=54864 sdR-b1-00058672.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.49 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

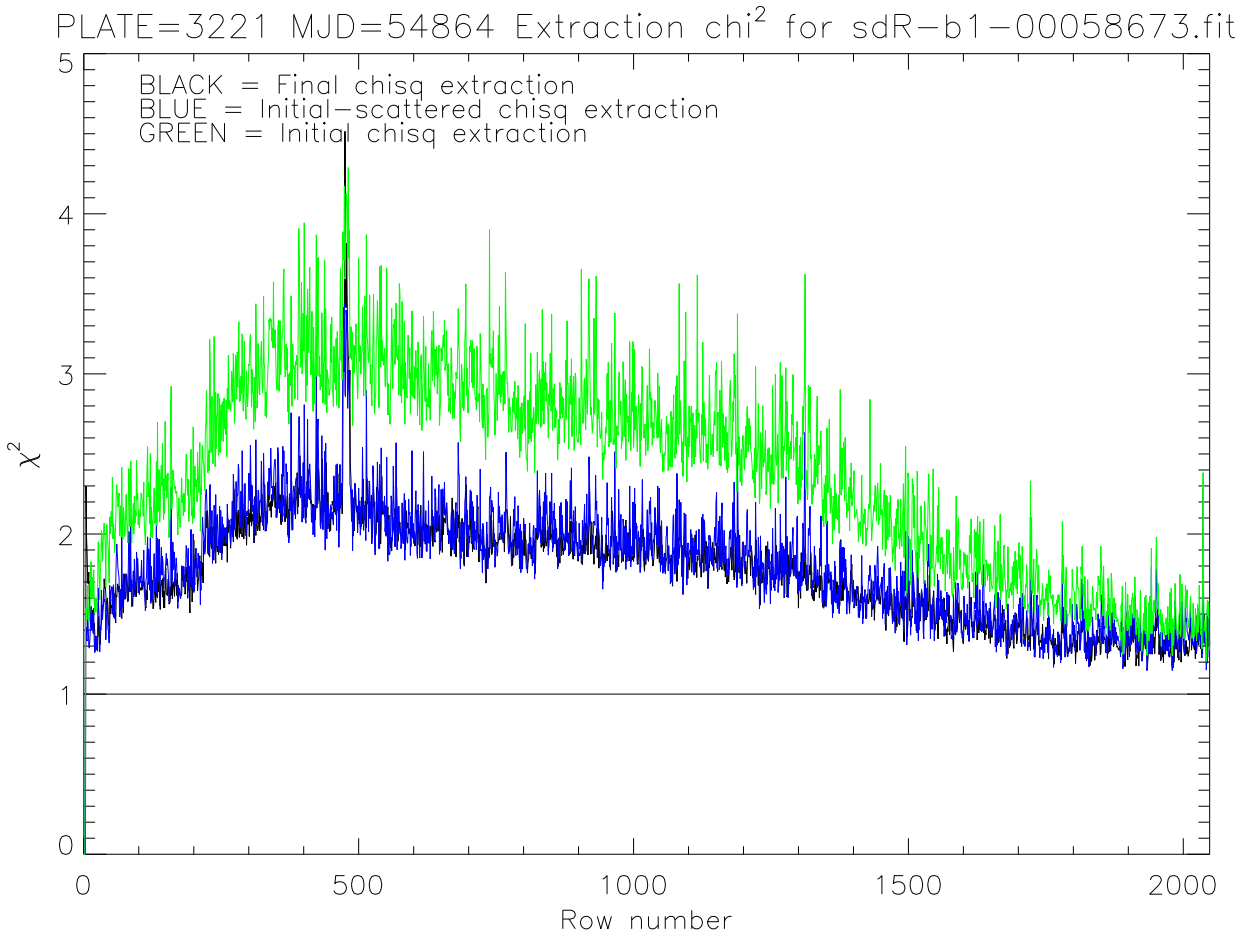

PLATE=3221 MJD=54864 Fiber-Flats for sdR-b1-00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.178
Max value = 1.208
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 13:49:55 2010

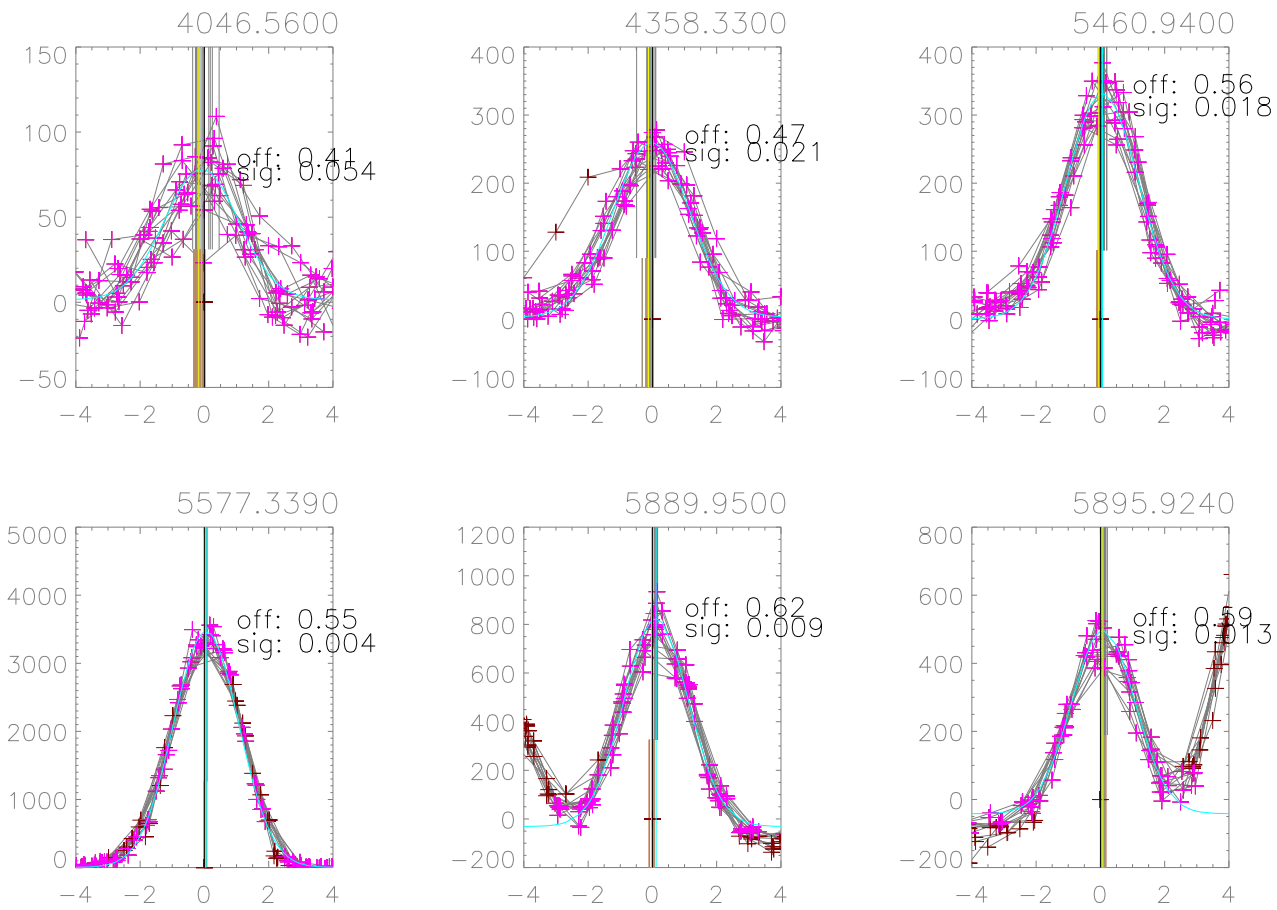

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR−b1−00058673.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
18.6
24.1
29.5

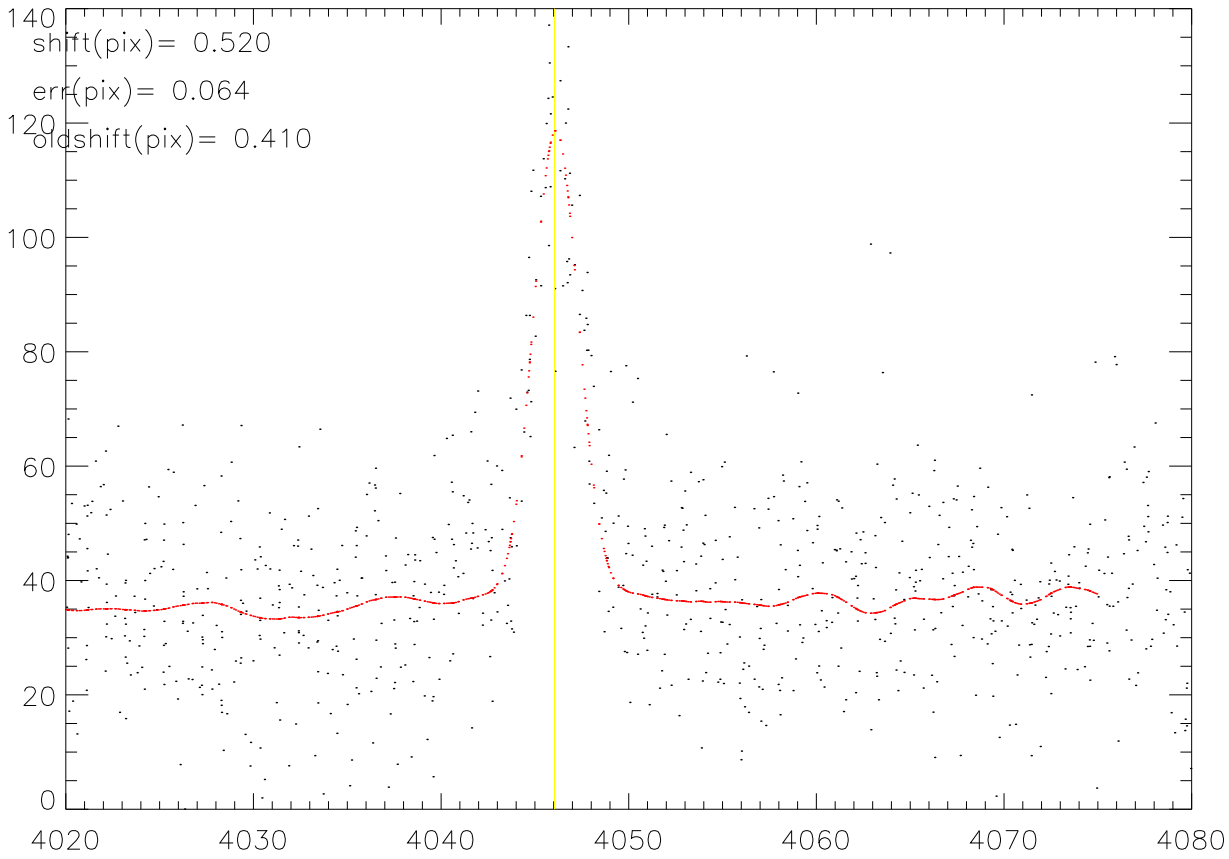

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b1-00058673.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 14.165
Max value = 28.351
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 13:50:55 2010

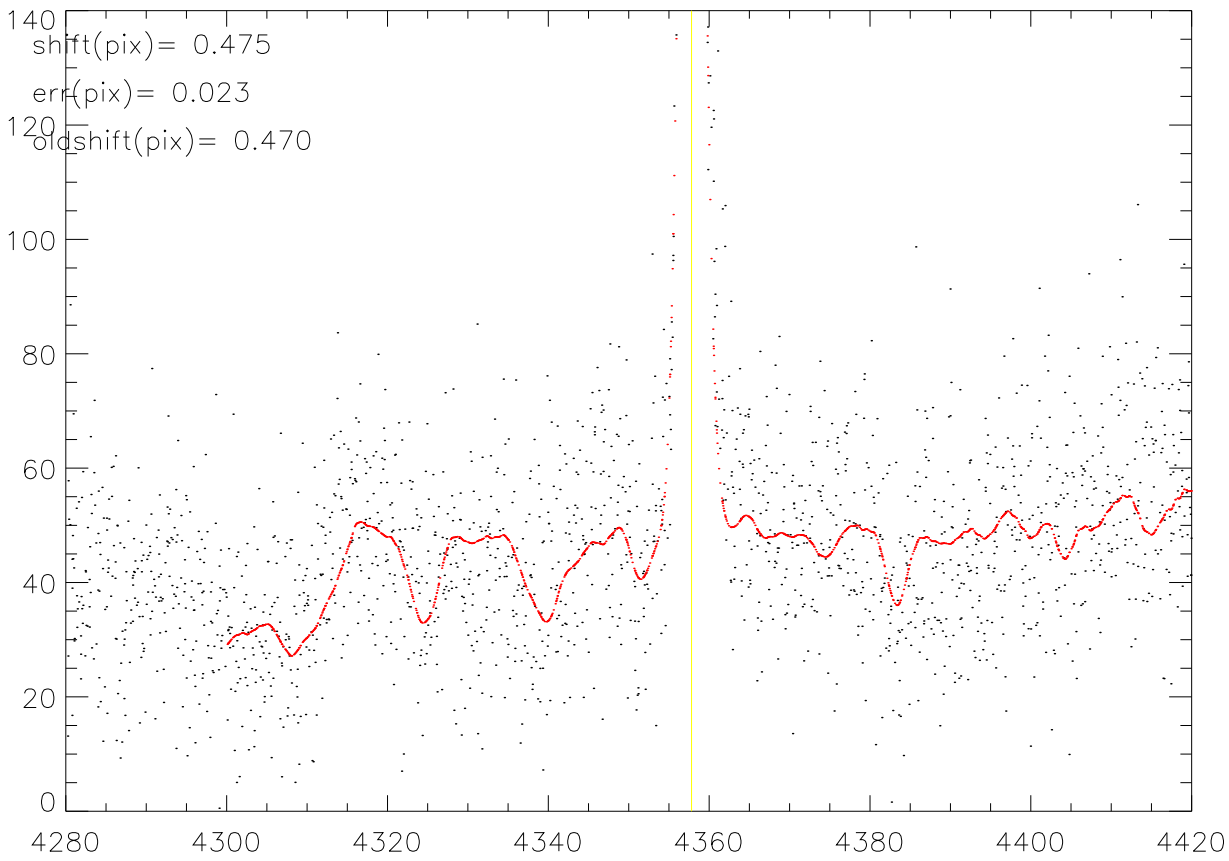

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058673.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
14.1
17.7
0

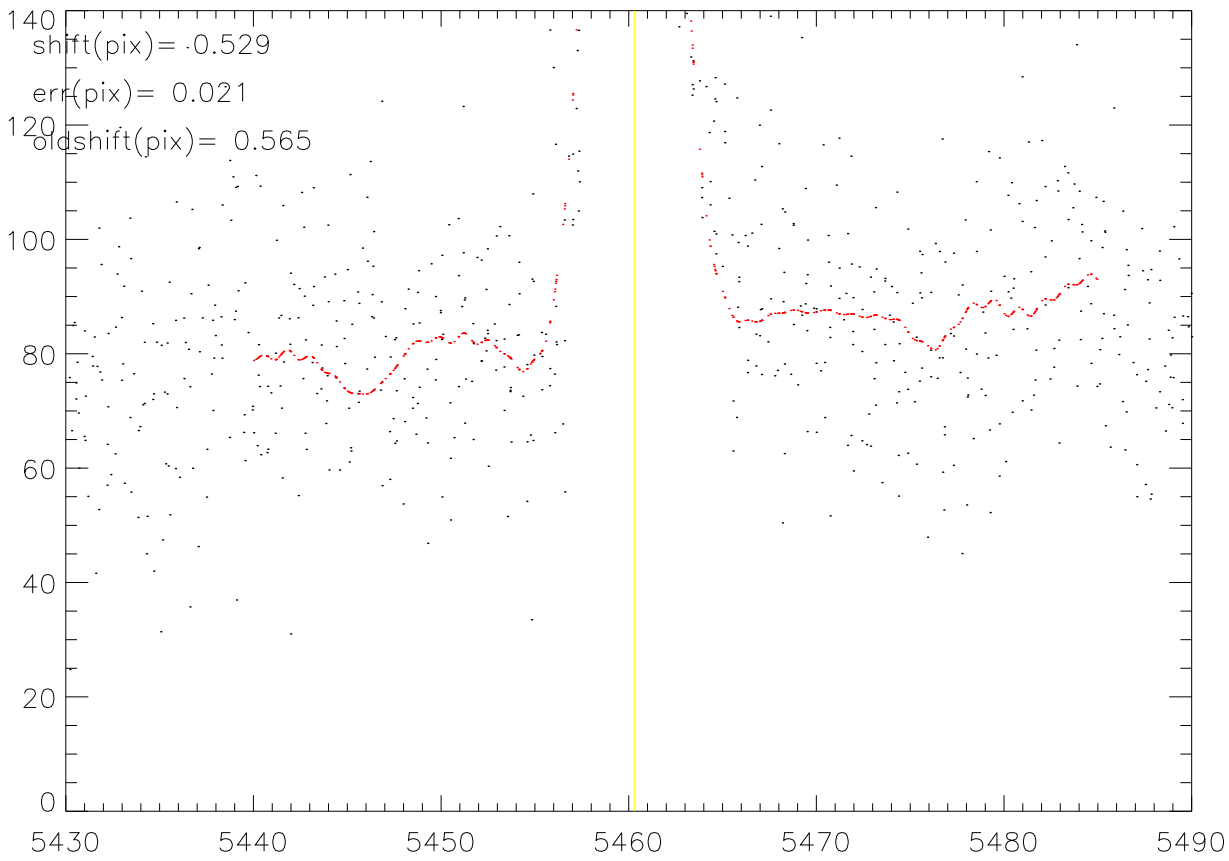

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058673.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 9.556
Max value = 18.231
Fri Mar 12 13:54:40 2010

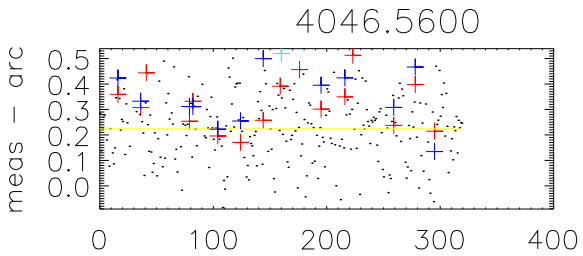

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b1-00058673.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

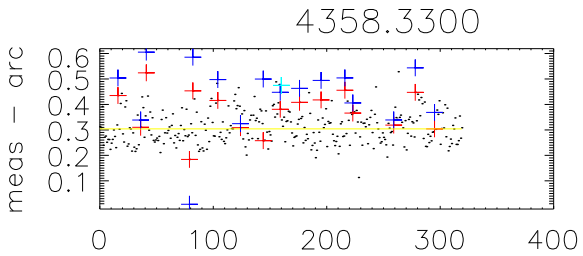

4046.5600
off: 0.41
sig: 0.054
4358.3300
off: 0.47
sig: 0.021
5460.9400
off: 0.56
sig: 0.018
5577.3390
off: 0.55
sig: 0.004
5889.9500
off: 0.62
sig: 0.009
5895.9240
off: 0.59
sig: 0.013

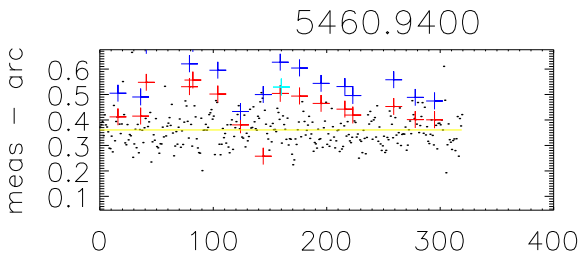

shift(pix)= 0.520
err(pix)= 0.064
oldshift(pix)= 0.410
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

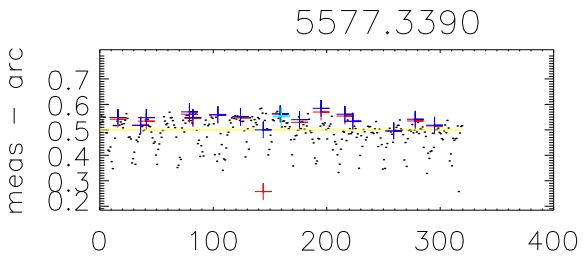

shift(pix)= 0.475
err(pix)= 0.023
oldshift(pix)= 0.470
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

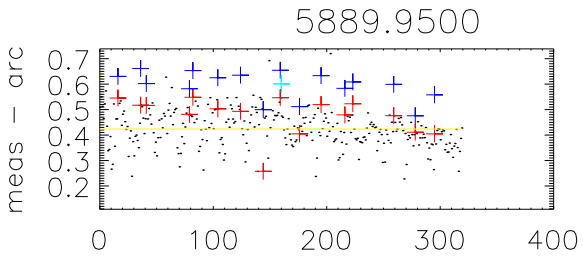

shift(pix)= 0.529
err(pix)= 0.021
oldshift(pix)= 0.565
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

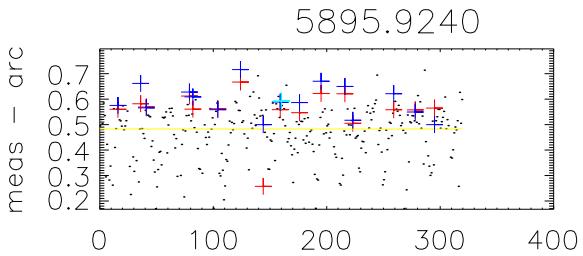

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

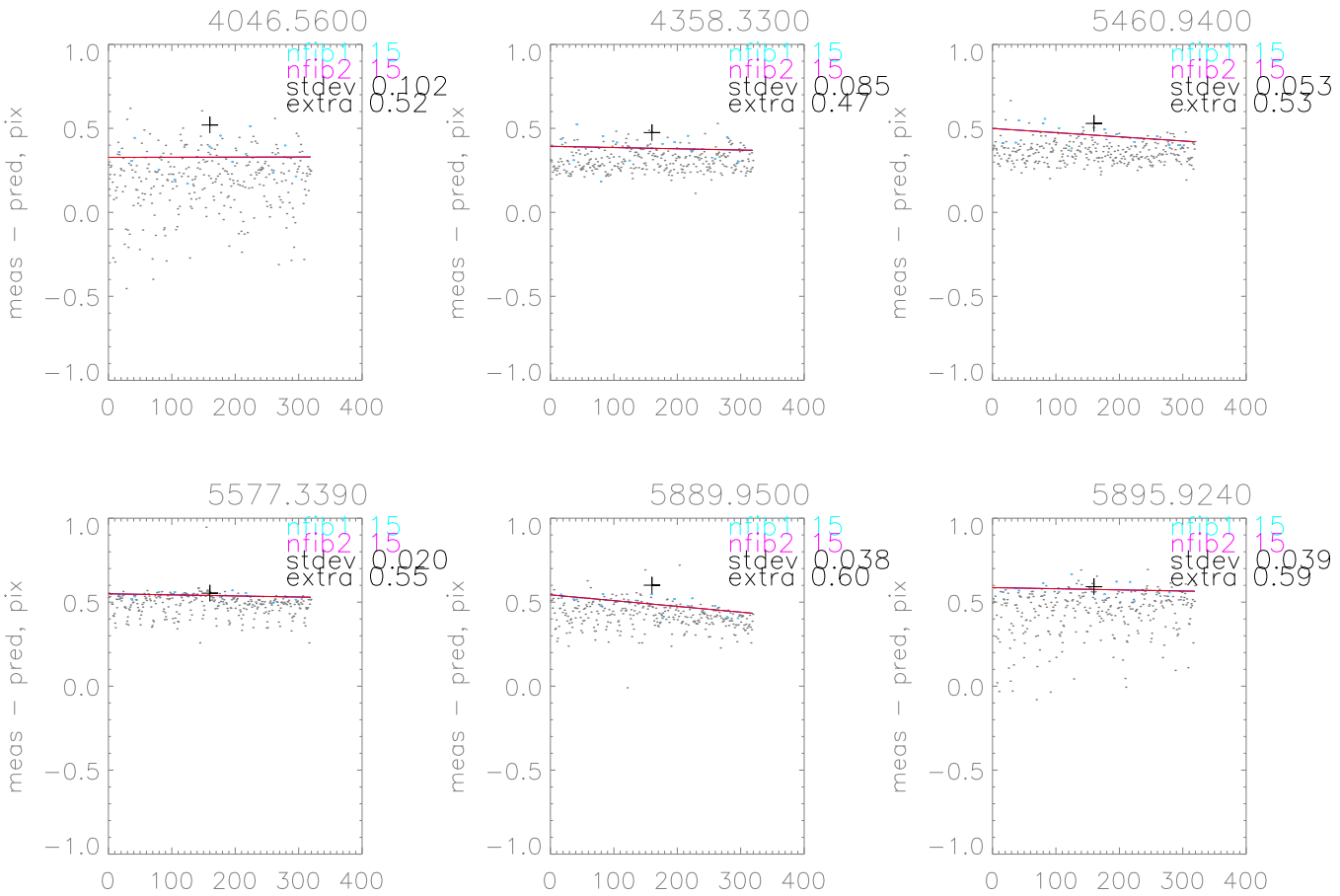

4358.3300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

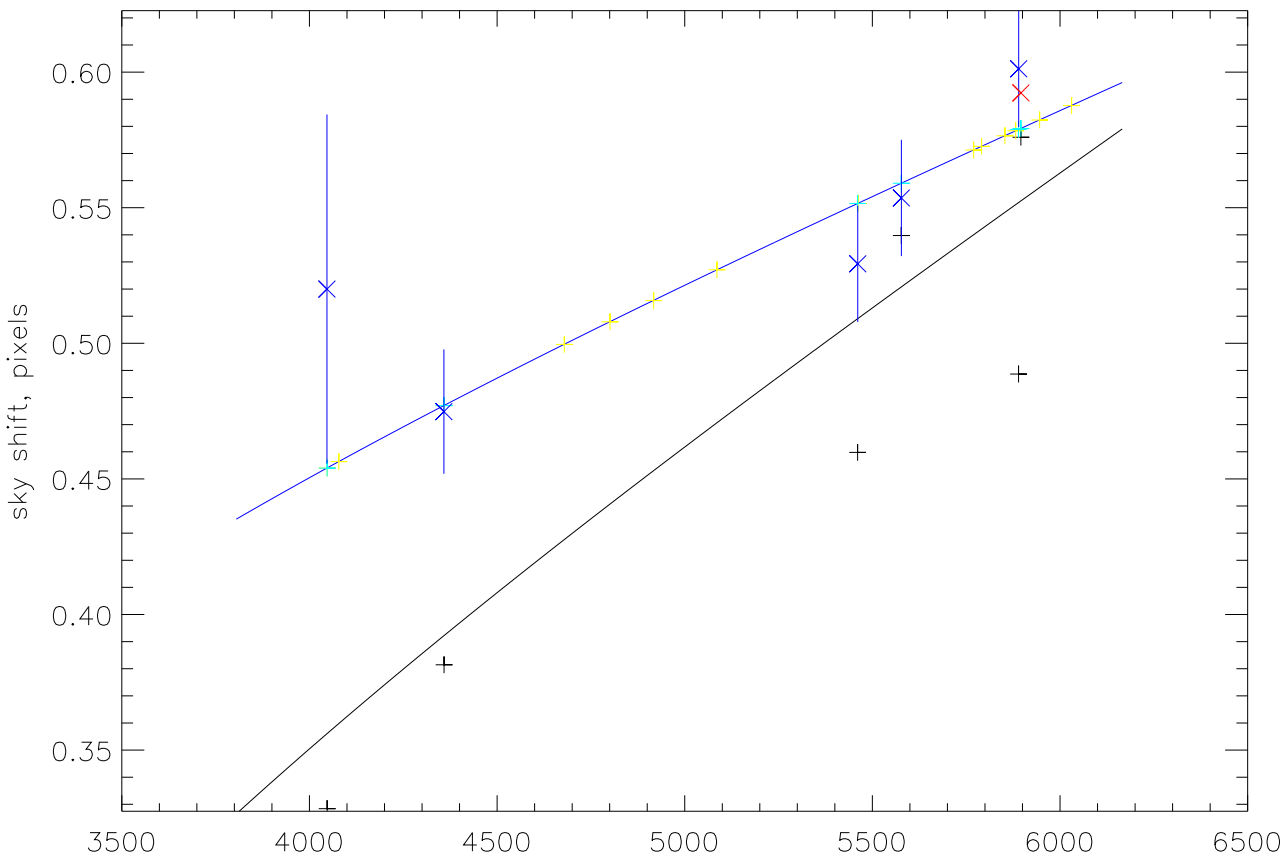

5460.9400
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


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

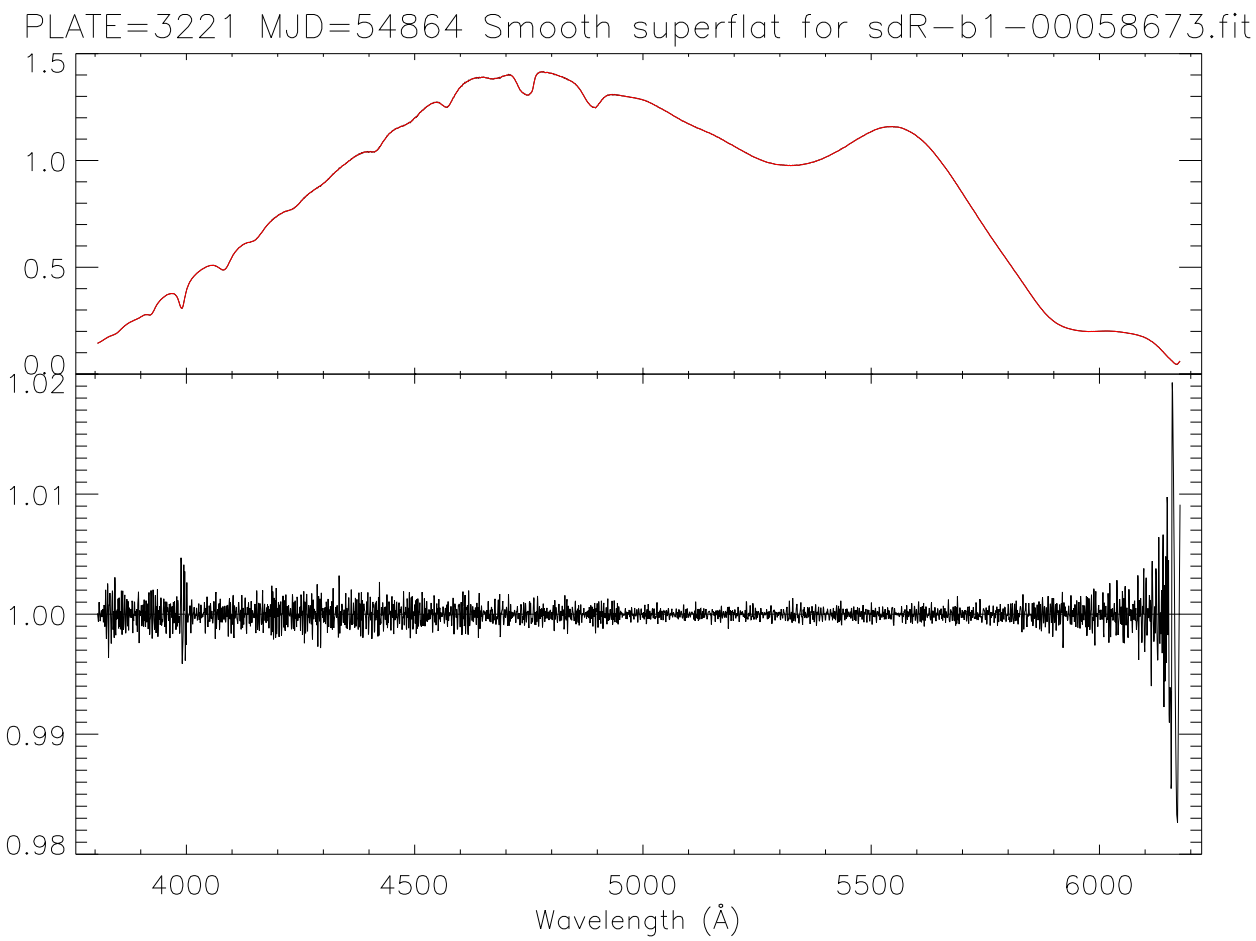

5889.9500
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

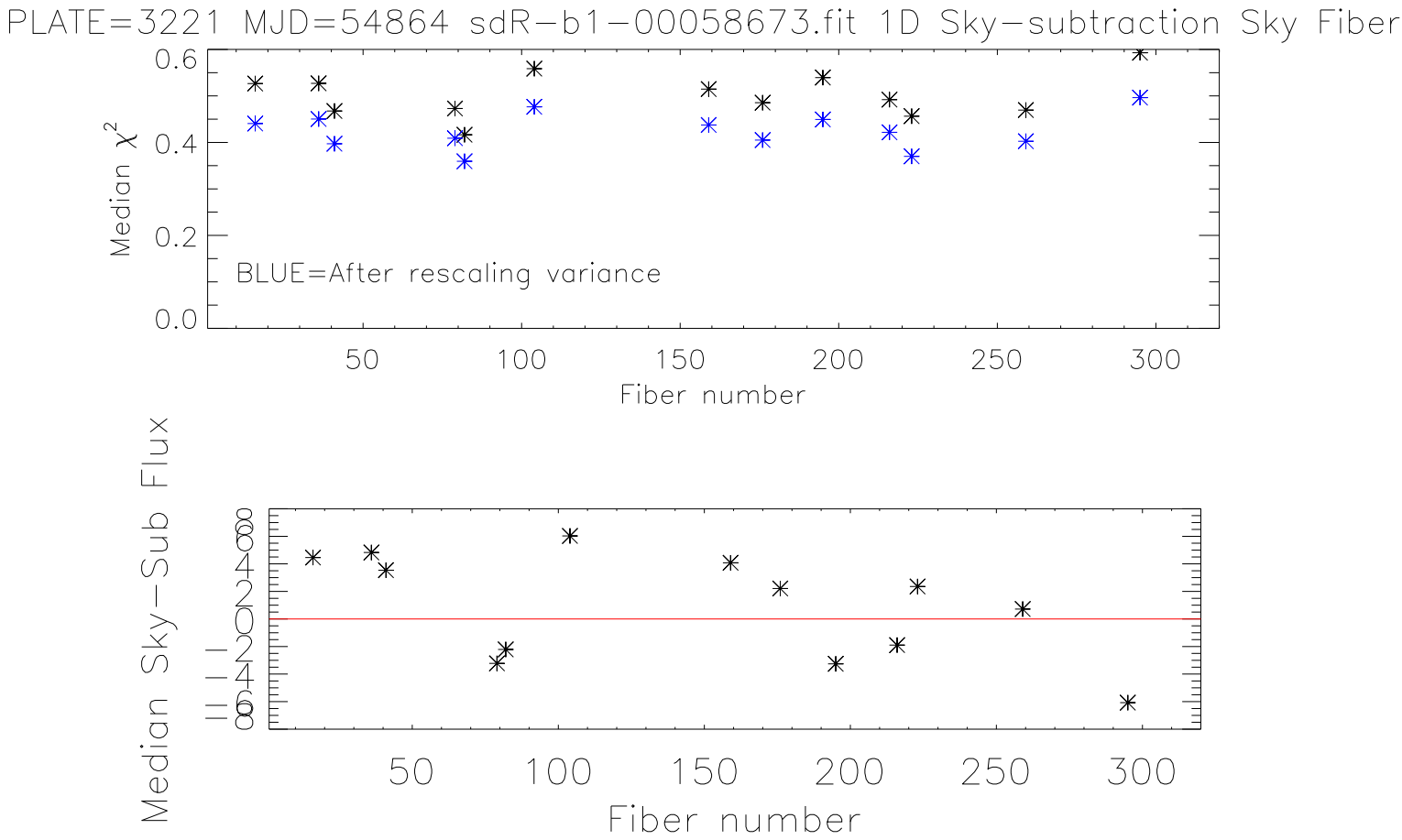

5895.9240
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

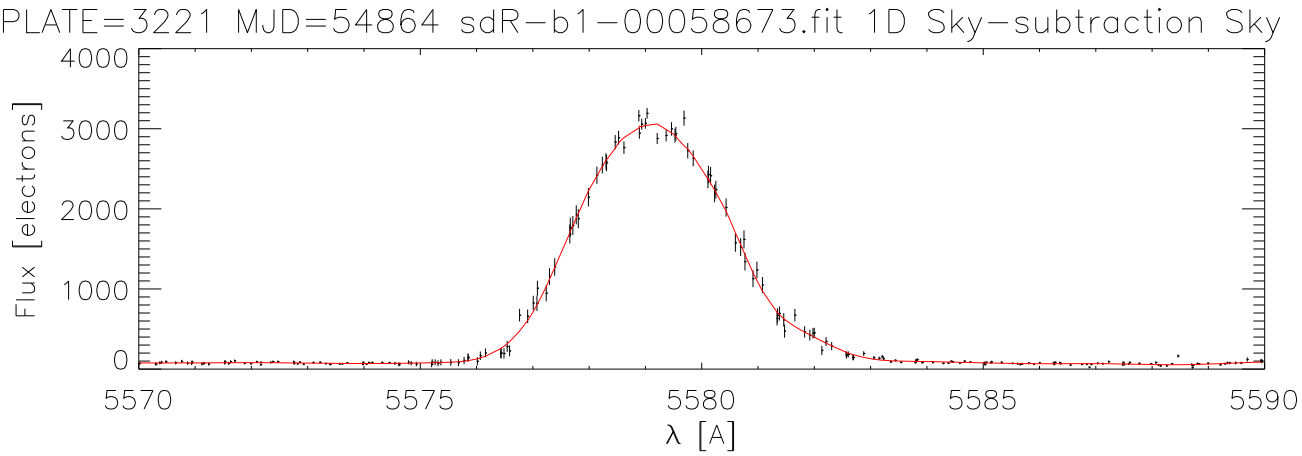

4046.5600
nfib1 15
nfib2 15
stdev 0.102
extra 0.52
4358.3300
nfib1 15
nfib2 15
stdev 0.085
extra 0.47
5460.9400
nfib1 15
nfib2 15
stdev 0.053
extra 0.53
5577.3390
nfib1 15
nfib2 15
stdev 0.020
extra 0.55
5889.9500
nfib1 15
nfib2 15
stdev 0.038
extra 0.60
5895.9240
nfib1 15
nfib2 15
stdev 0.039
extra 0.59
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

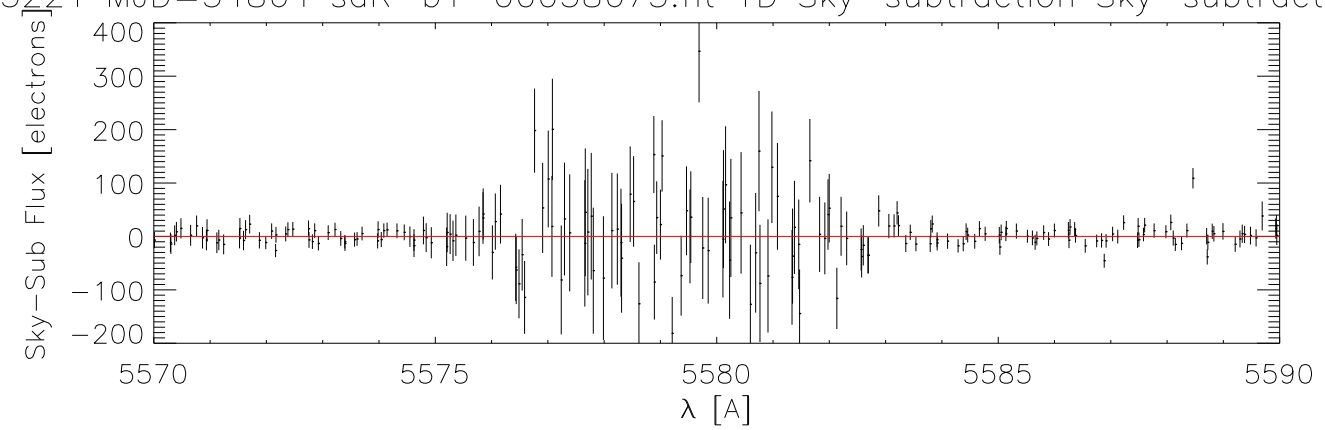

sky shift, pixels
0.60
0.55
0.50
0.45
0.40
0.35
3500
4000
4500
5000
5500
6000
6500

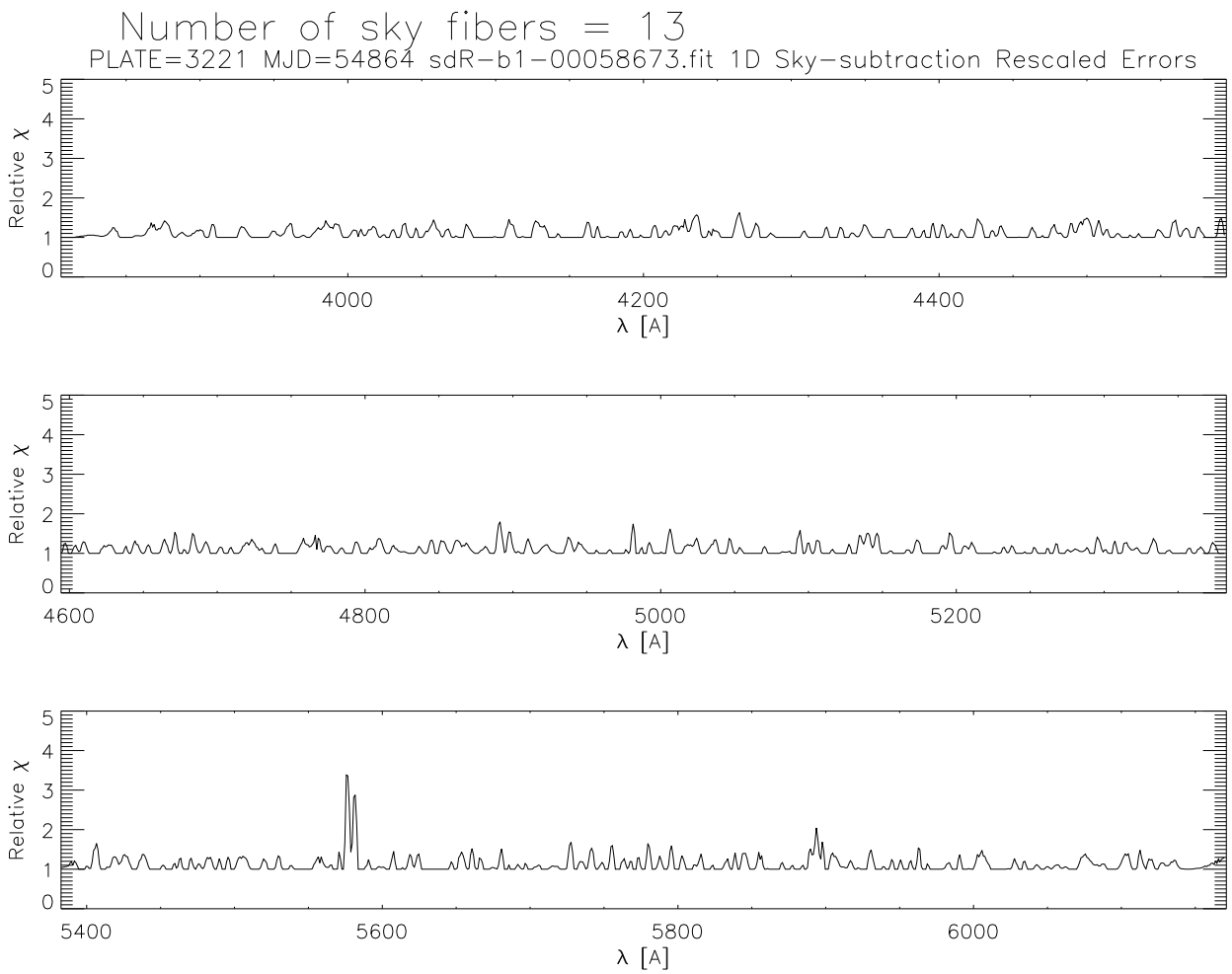
es= −0.0002

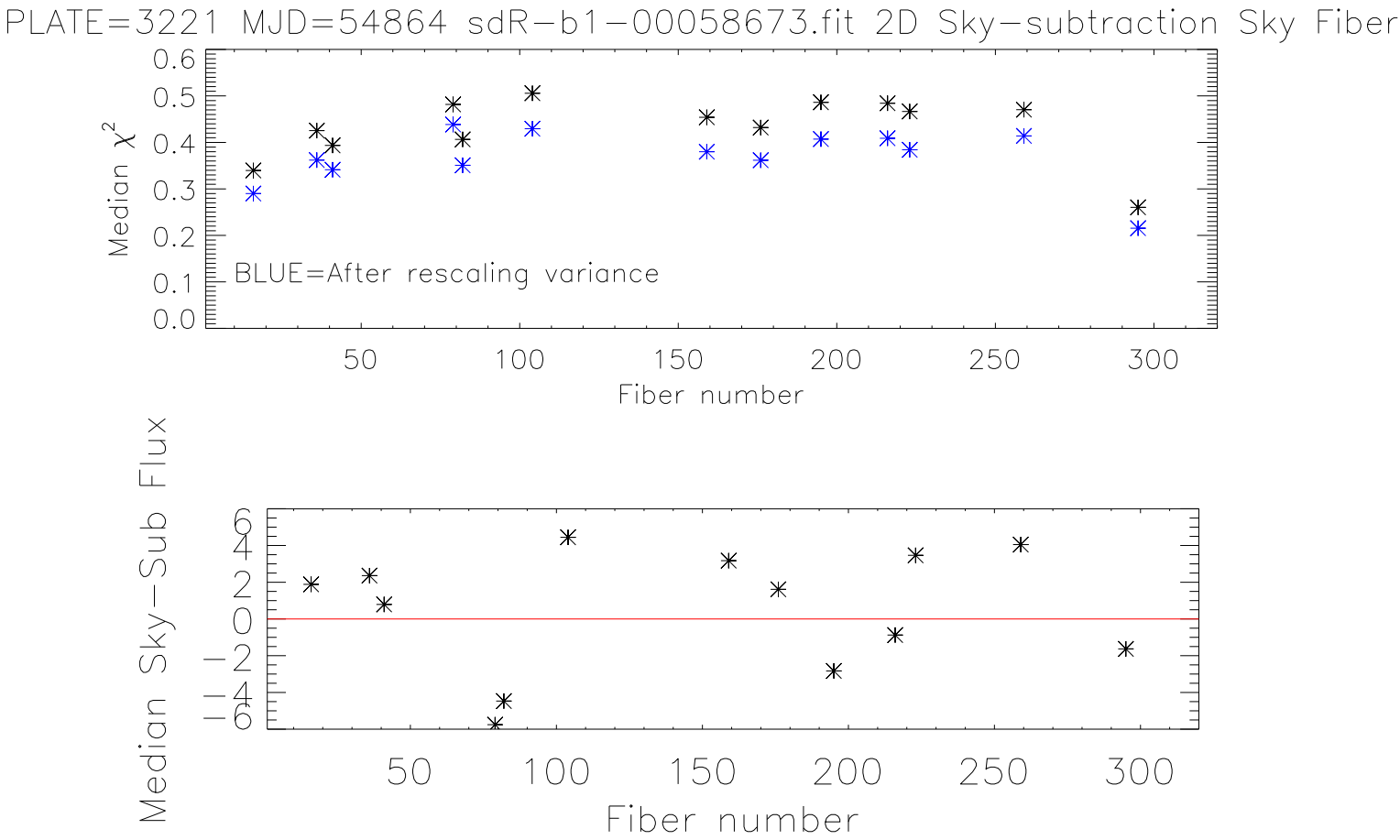

PLATE=3221 MJD=54864 Smooth superflat for sdR−b1−00058673.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

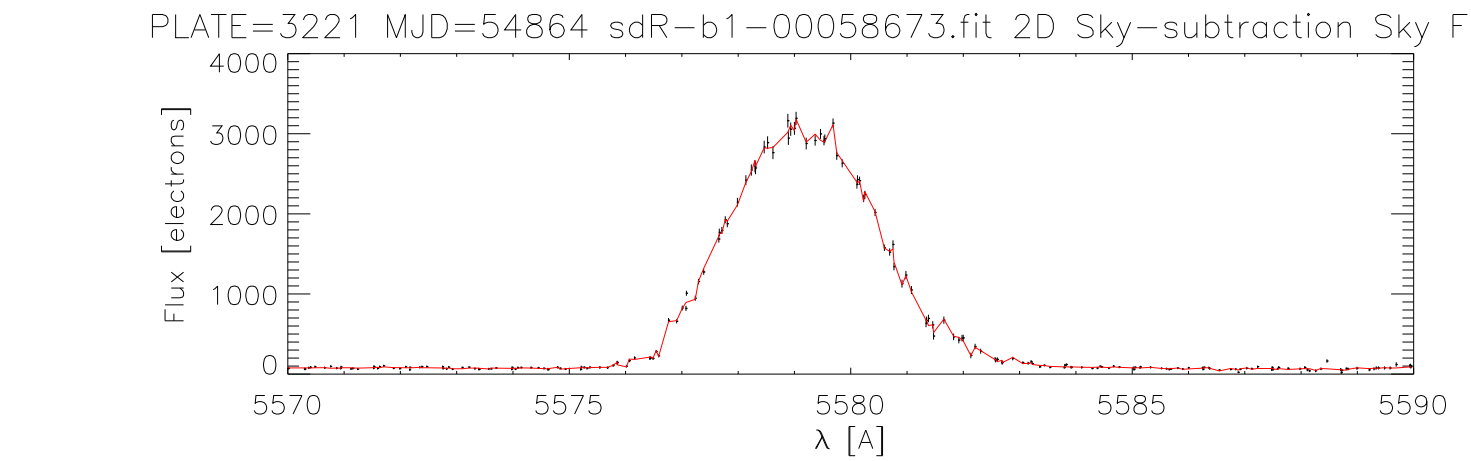

PLATE=3221 MJD=54864 sdR-b1-00058673.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
Fiber number

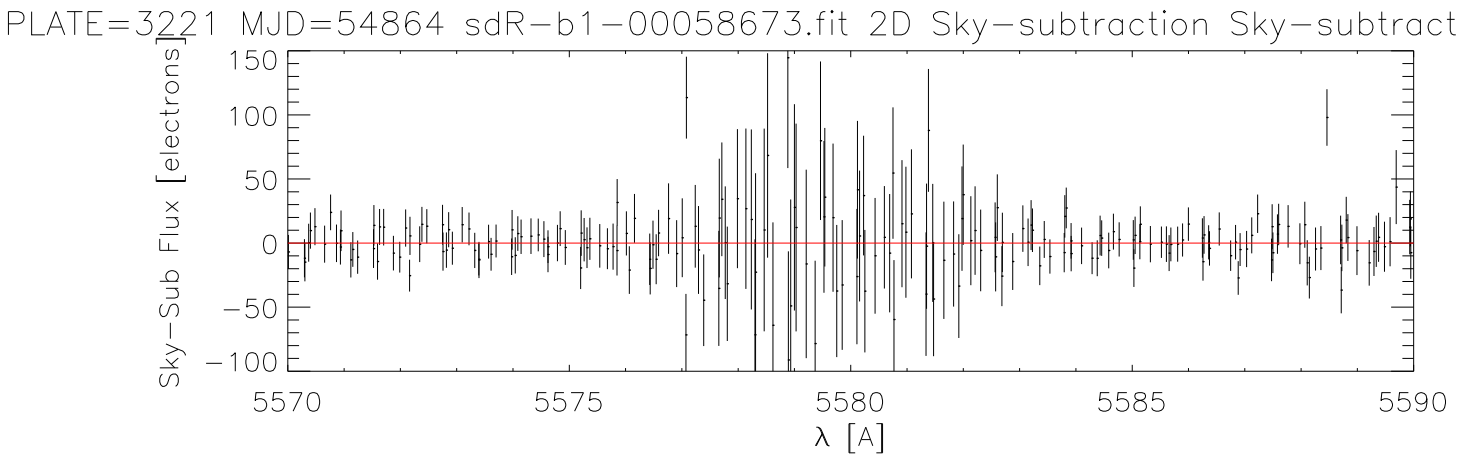

PLATE=3221 MJD=54864 sdR-b1-00058673.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

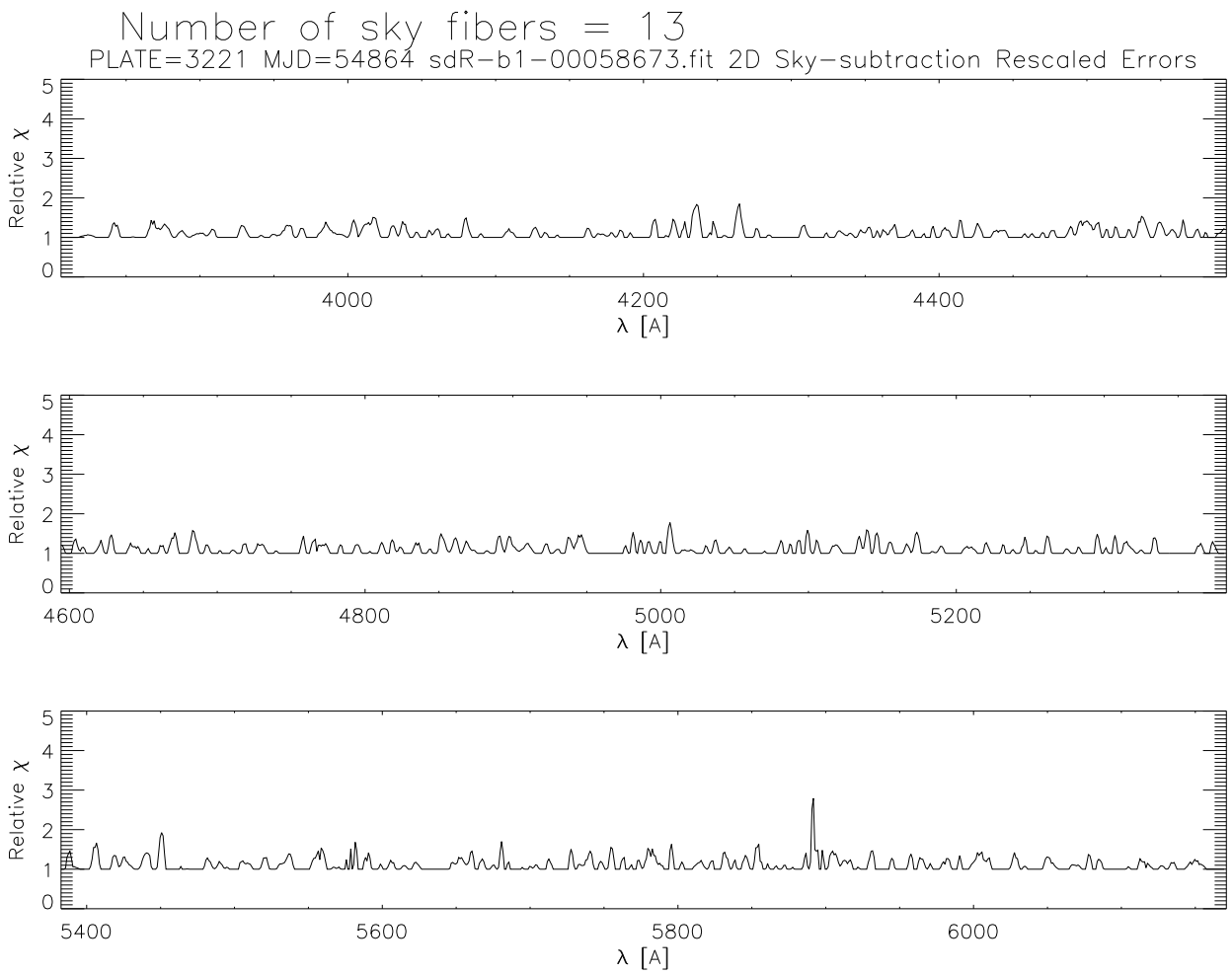

PLATE=3221 MJD=54864 sdR-b1-00058673.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

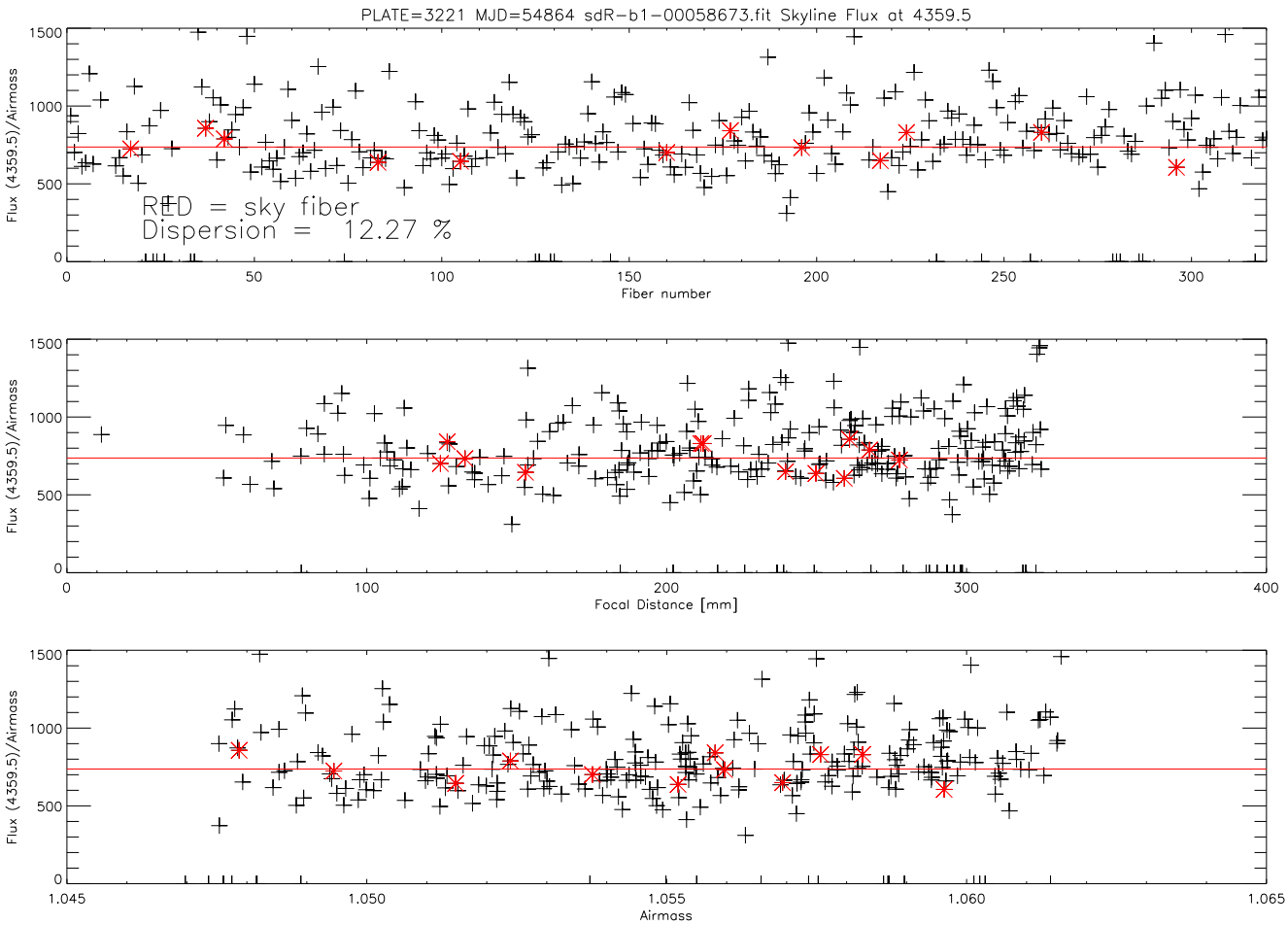

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058673.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

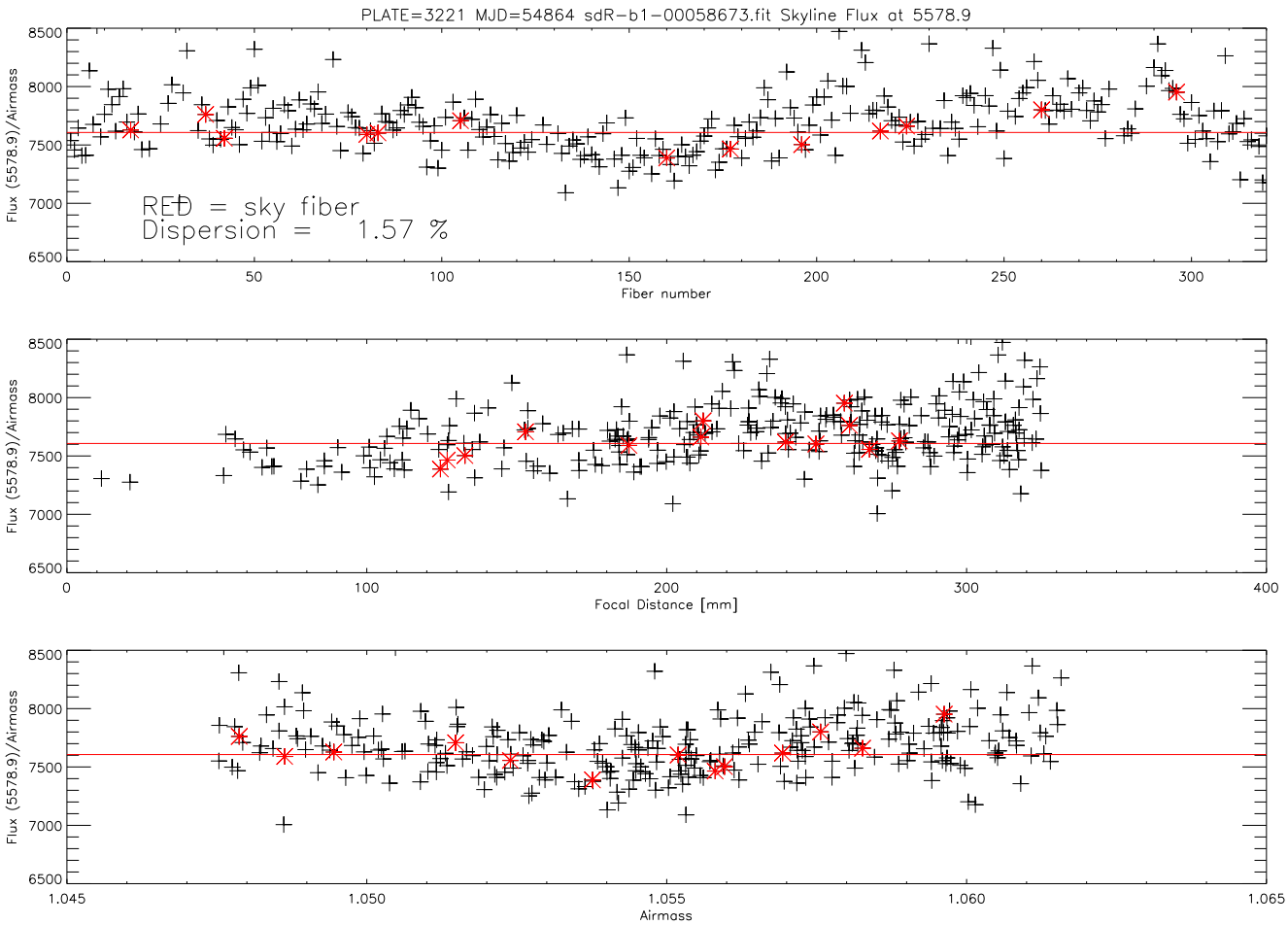

PLATE=3221 MJD=54864 sdR-b1-00058673.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

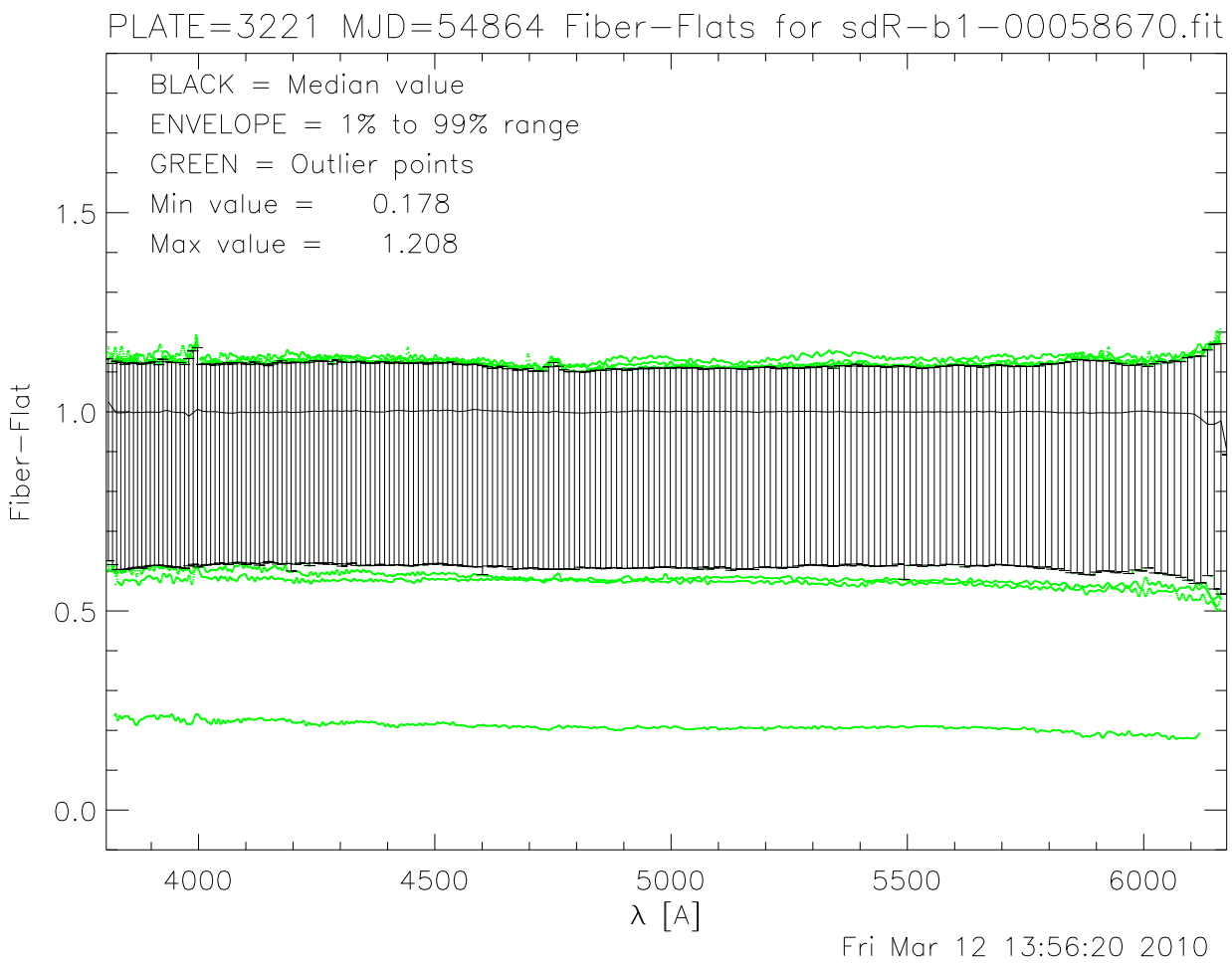

PLATE=3221 MJD=54864 sdR-b1-00058673.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

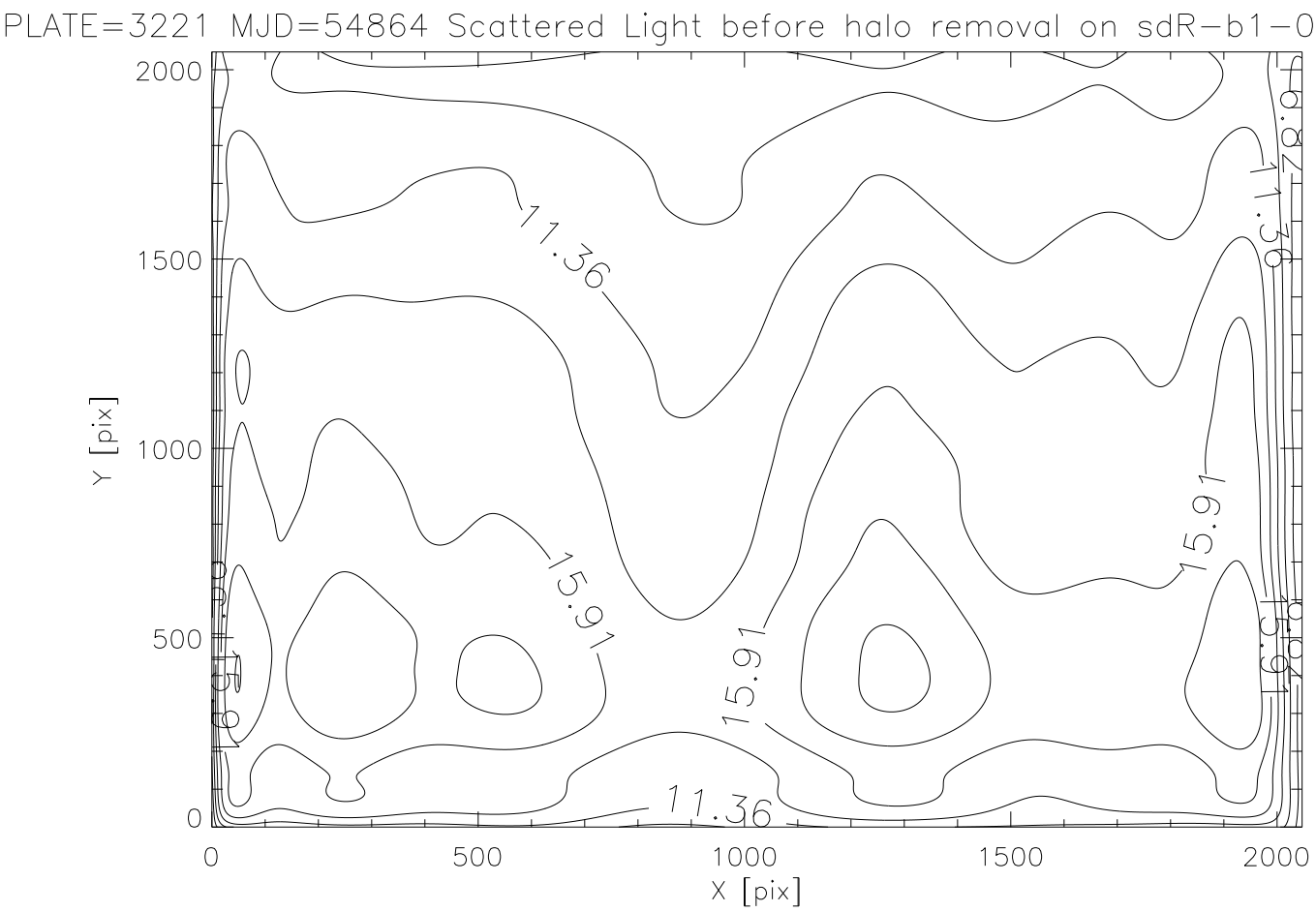

PLATE=3221 MJD=54864 sdR-b1-00058673.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

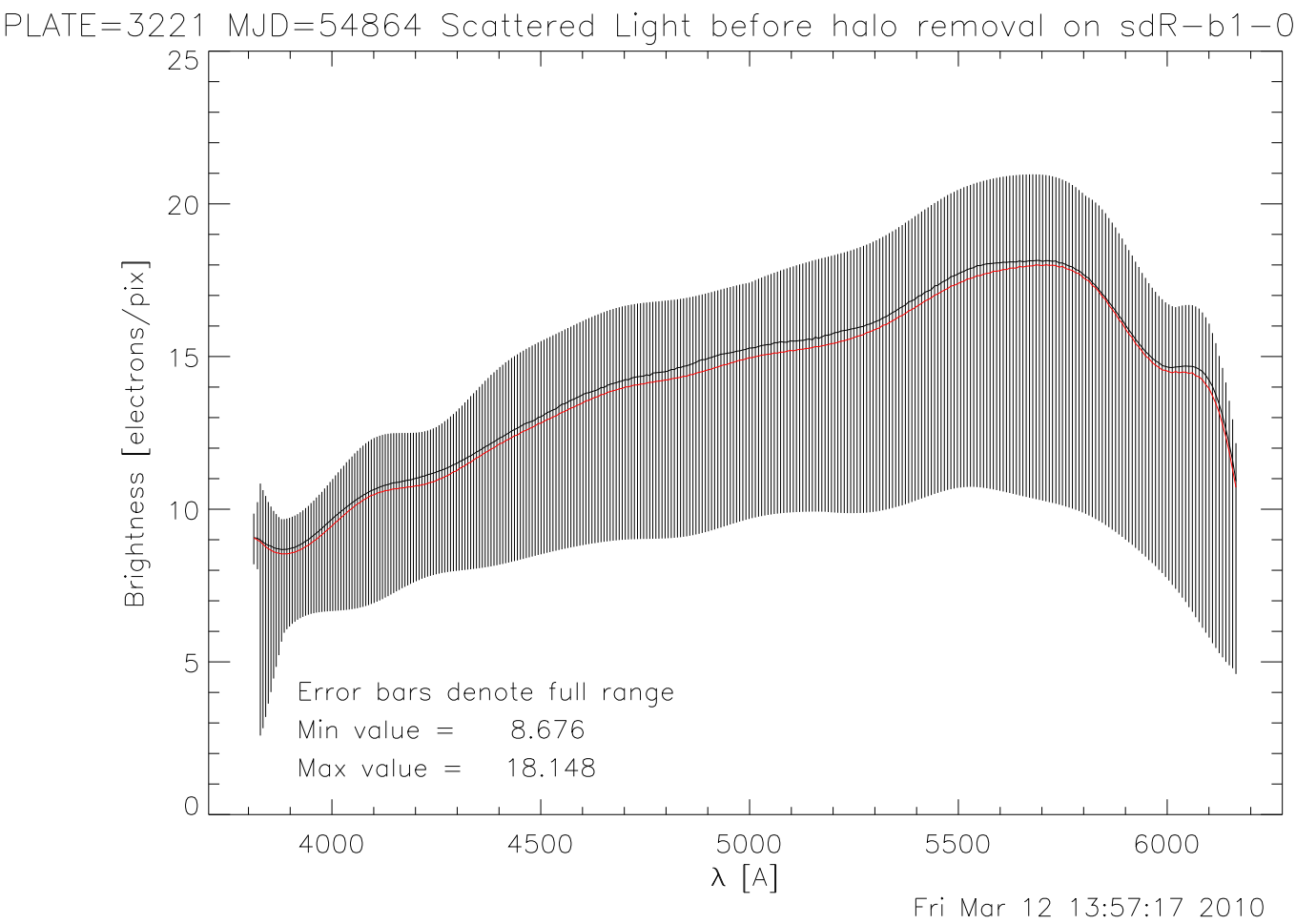

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058673.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

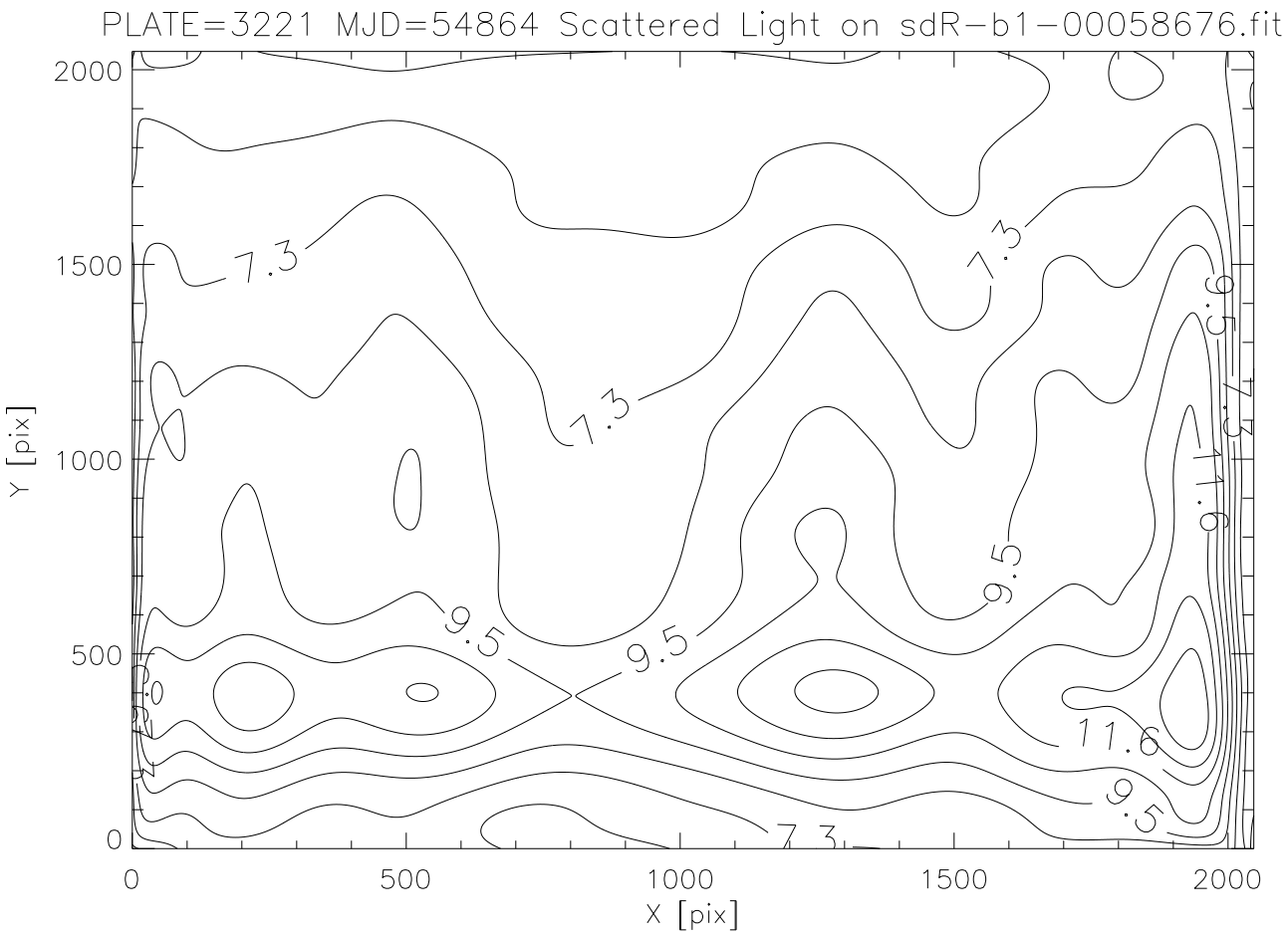

PLATE=3221 MJD=54864 sdR-b1-00058673.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 12.27 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

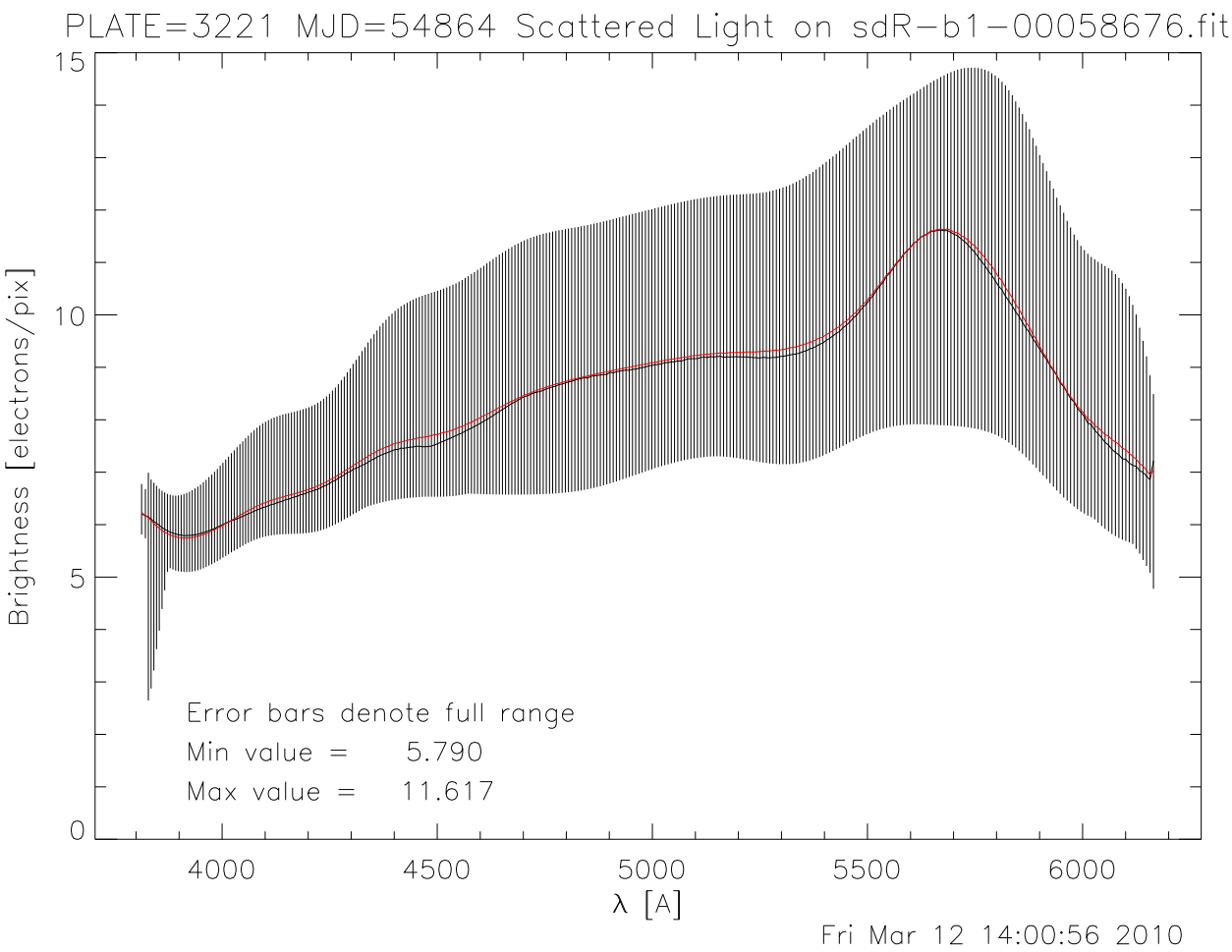

PLATE=3221 MJD=54864 sdR-b1-00058673.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.57 %
Fiber number
Focal Distance [mm]
Airmass

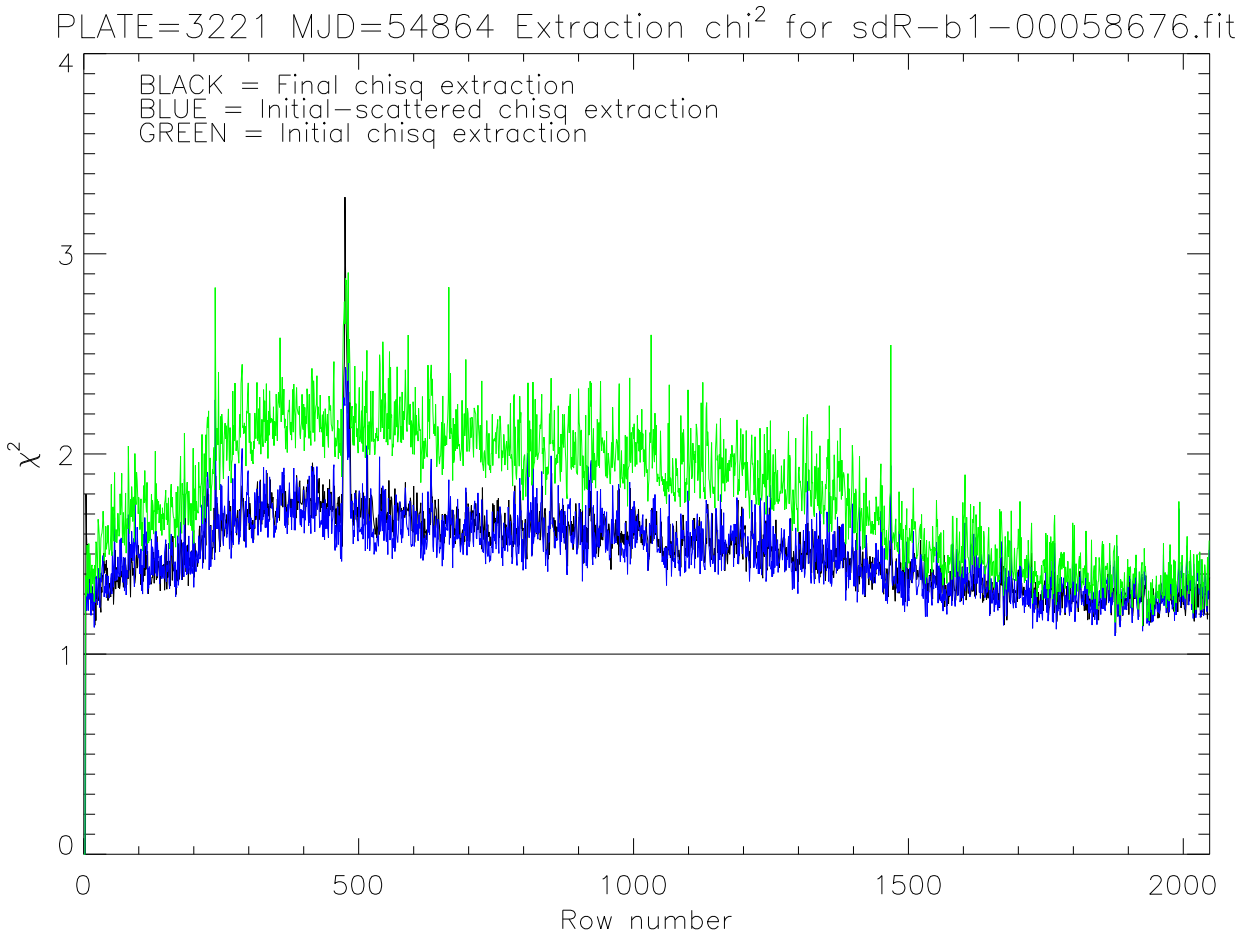

PLATE=3221 MJD=54864 Fiber-Flats for sdR-b1-00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.178
Max value = 1.208
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 13:56:20 2010

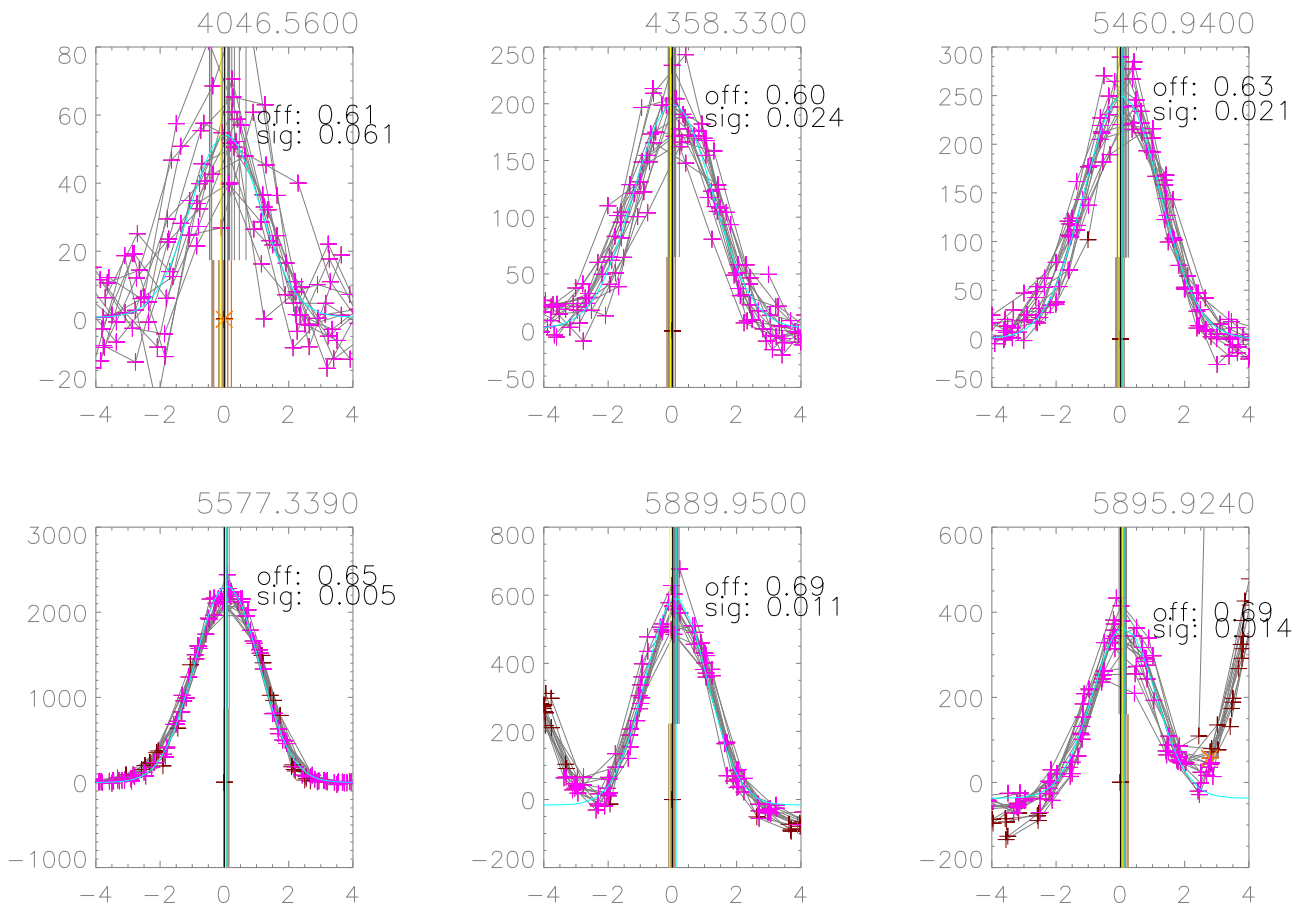

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b1-00058676.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
11.36
15.91
11.36
15.91
15.91
15.91
15.91
11.36

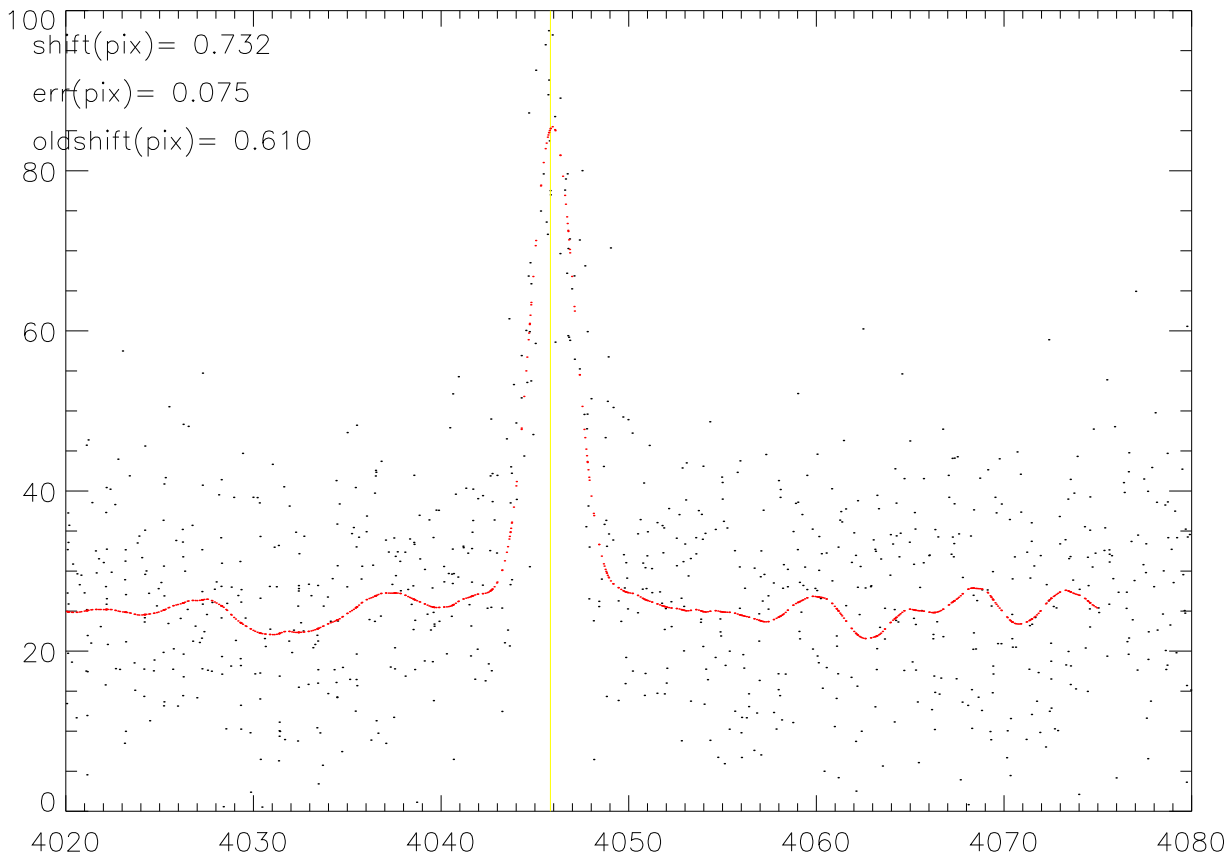

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b1-00058676.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.676
Max value = 18.148
Fri Mar 12 13:57:17 2010

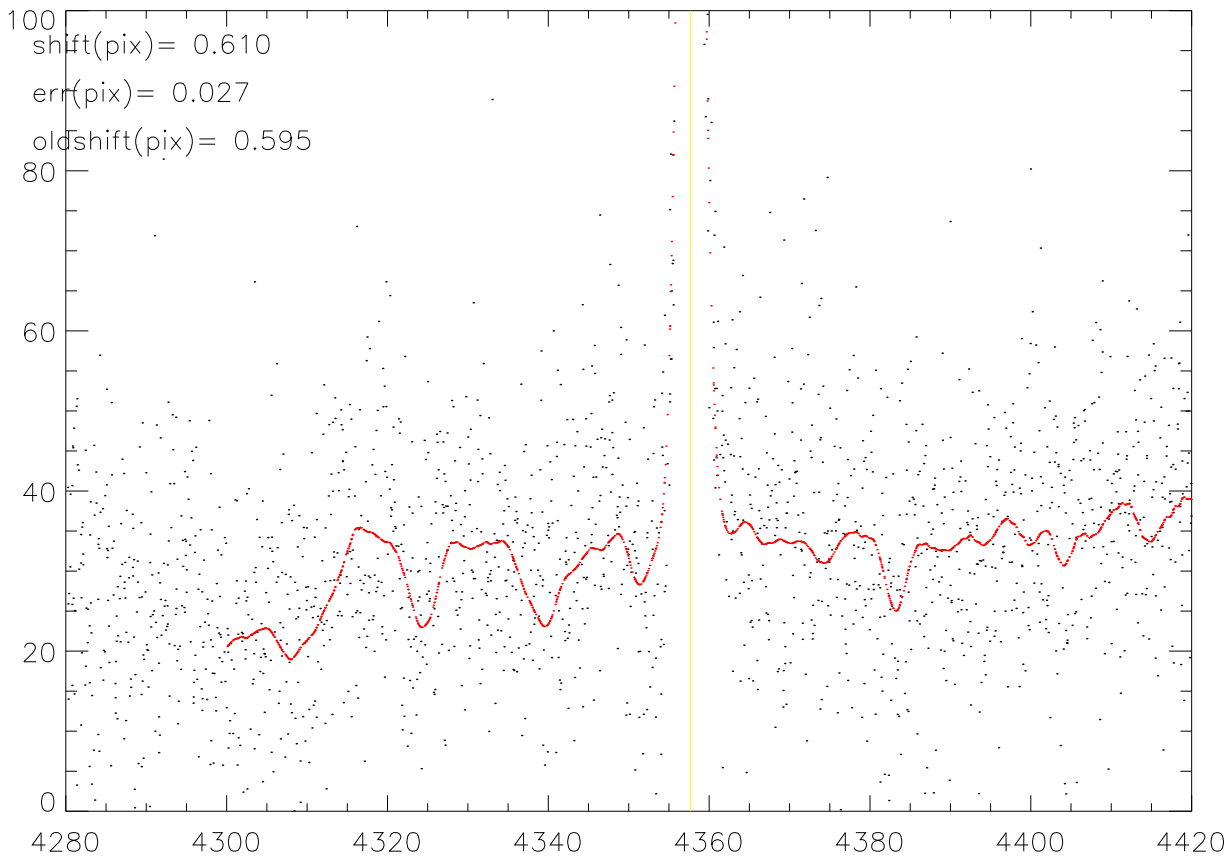

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058676.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.3
9.5
11.6

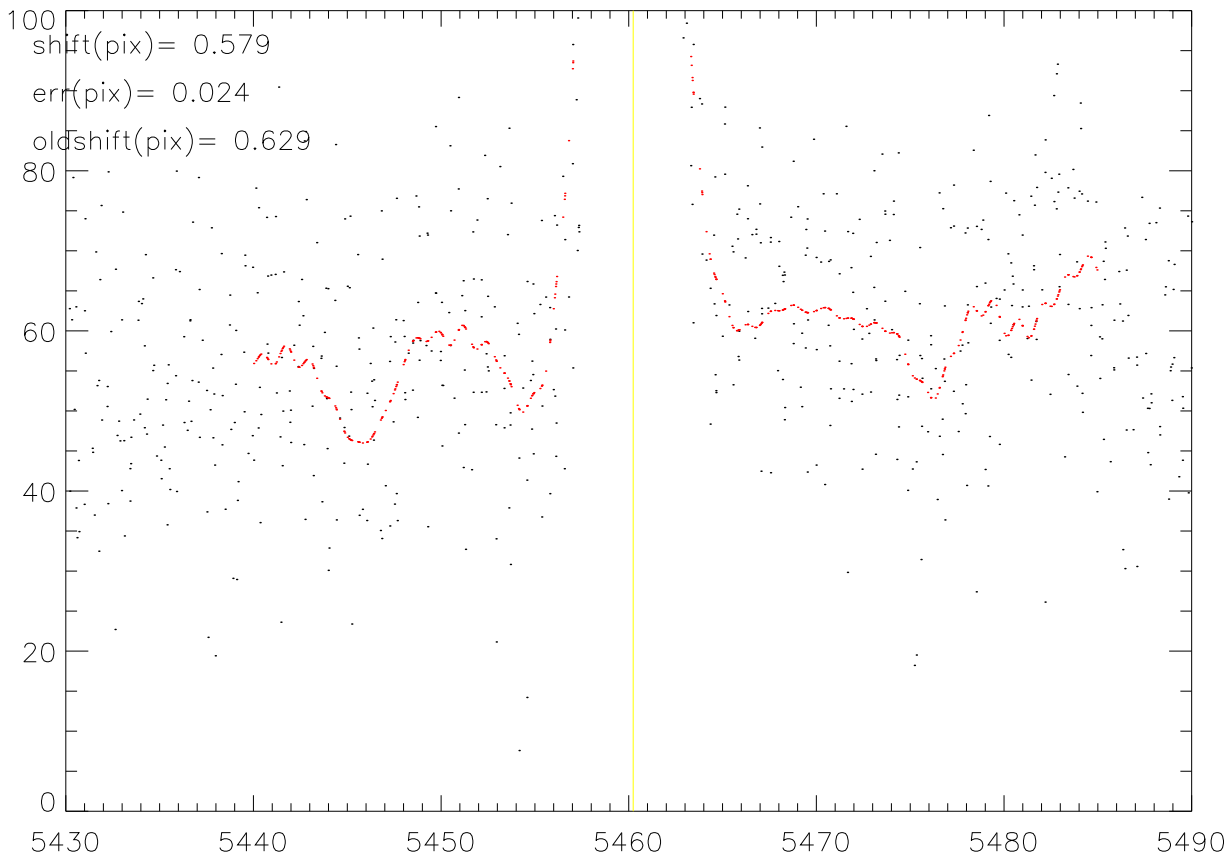

PLATE=3221 MJD=54864 Scattered Light on sdR-b1-00058676.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.790
Max value = 11.617
Fri Mar 12 14:00:56 2010

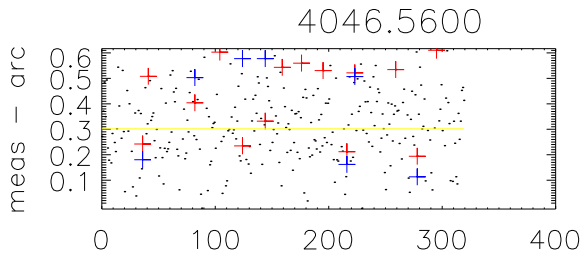

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b1-00058676.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

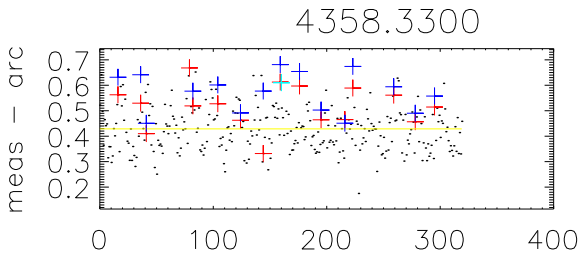

4046.5600
off: 0.61
sig: 0.061
4358.3300
off: 0.60
sig: 0.024
5460.9400
off: 0.63
sig: 0.021
5577.3390
off: 0.65
sig: 0.005
5889.9500
off: 0.69
sig: 0.011
5895.9240
off: 0.69
sig: 0.014

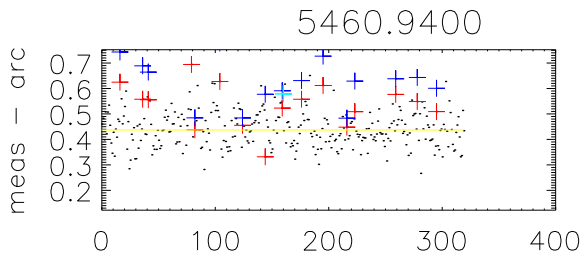

shift(pix)= 0.732
err(pix)= 0.075
oldshift(pix)= 0.610
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

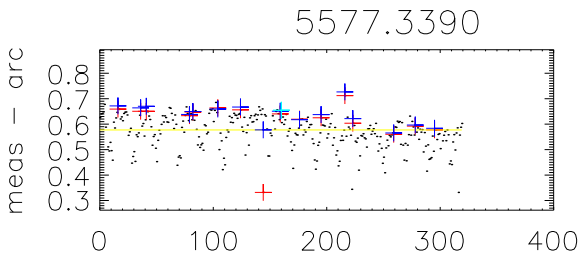

shift(pix)= 0.610
err(pix)= 0.027
oldshift(pix)= 0.595
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

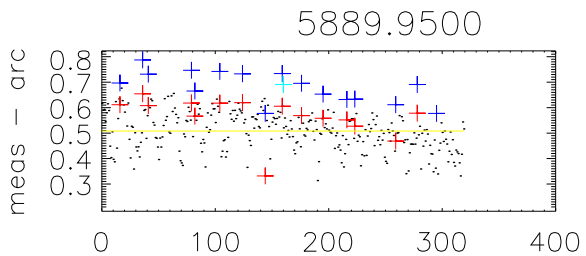

shift(pix)= 0.579
err(pix)= 0.024
oldshift(pix)= 0.629
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

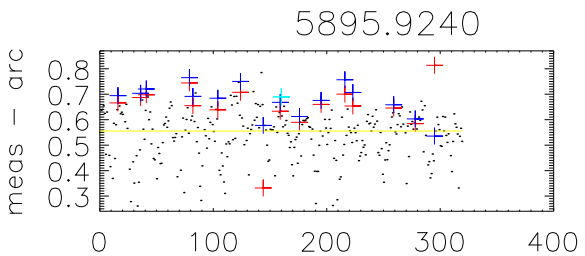

4046.5600
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

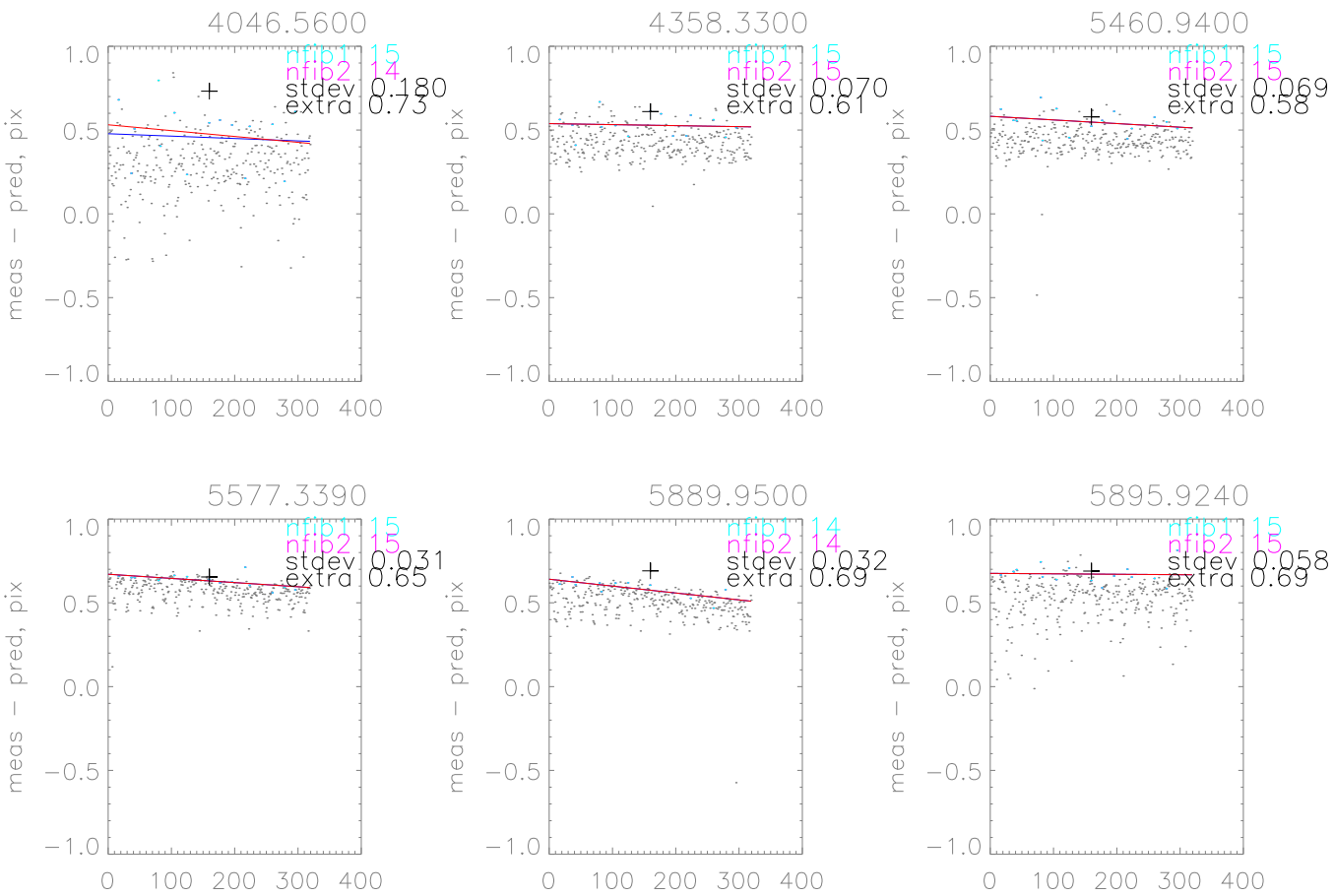

4358.3300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

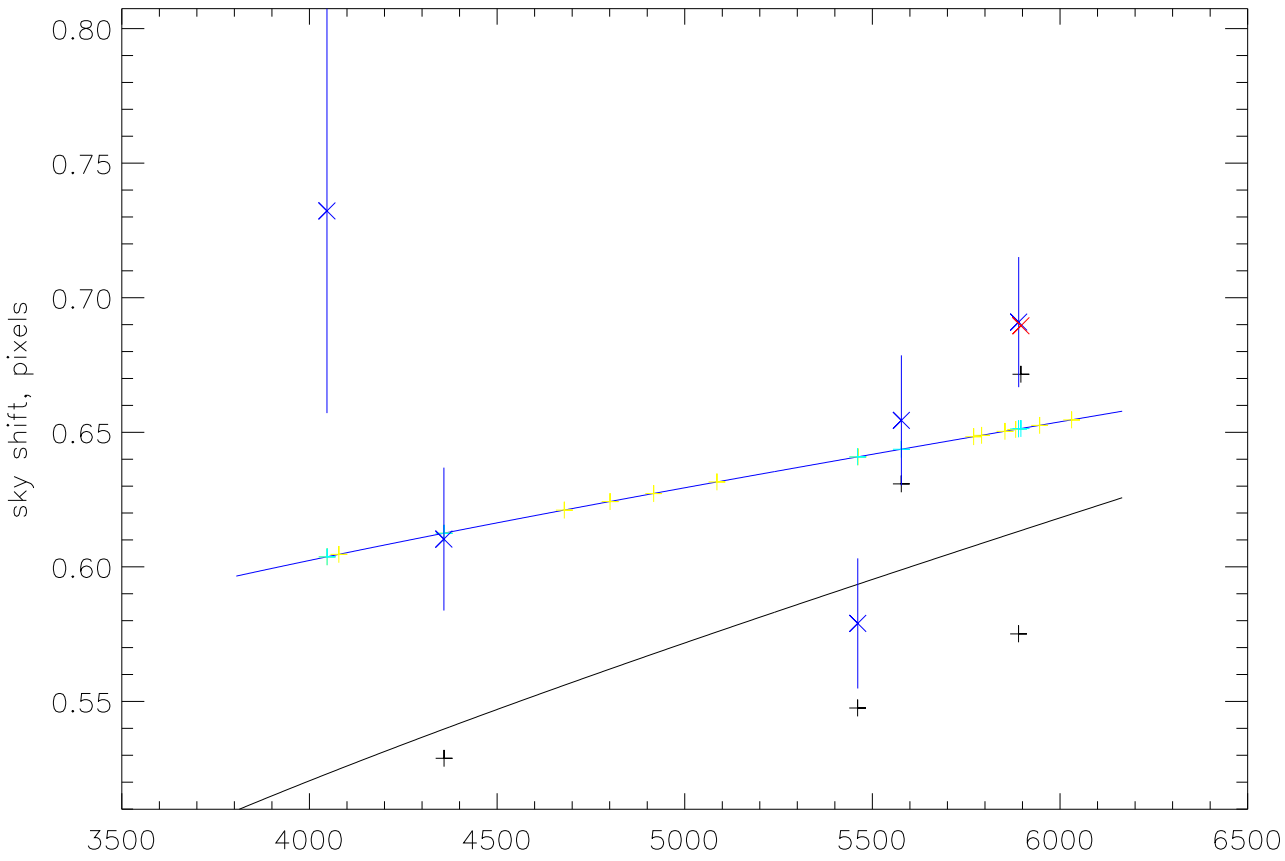

5460.9400
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


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

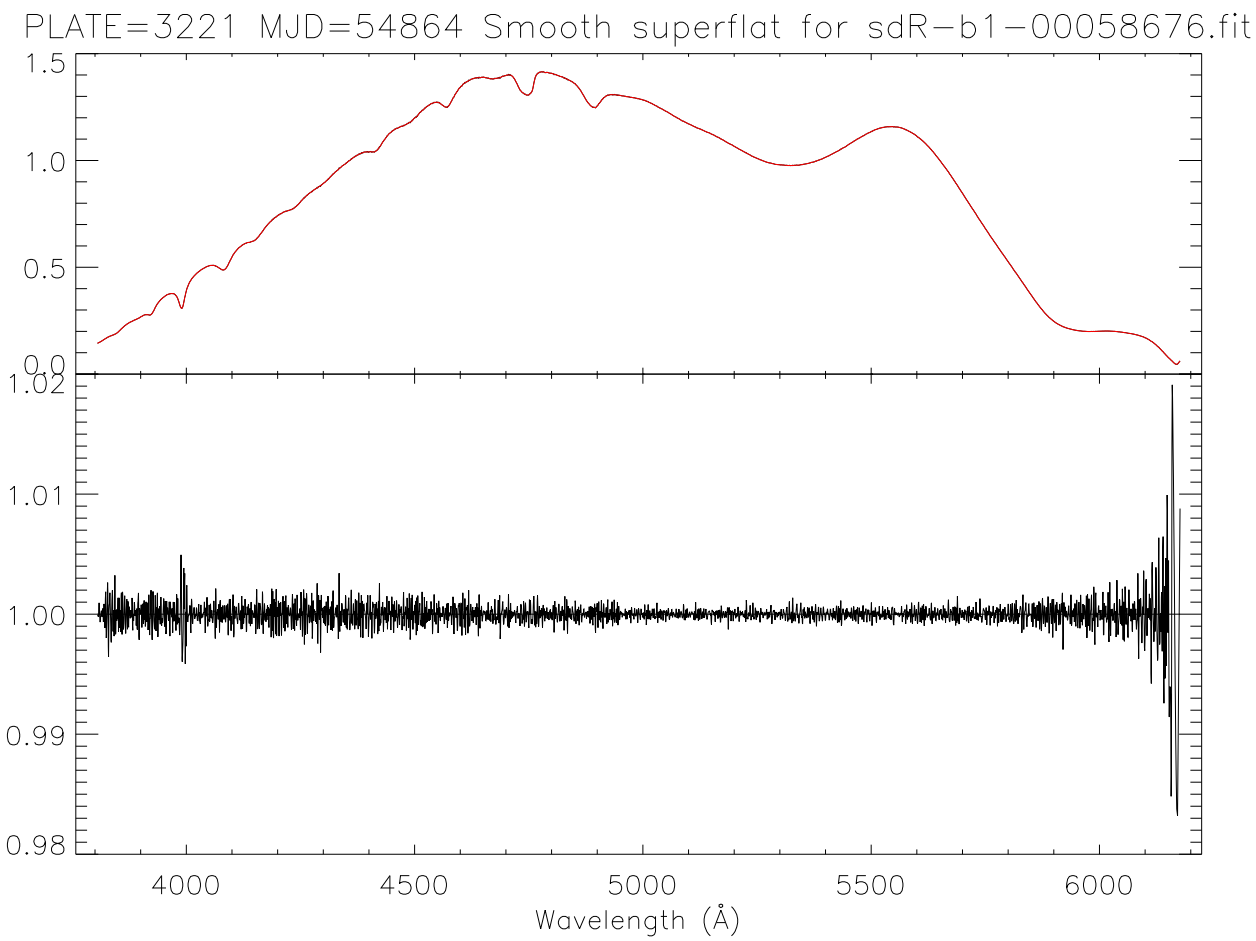

5889.9500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

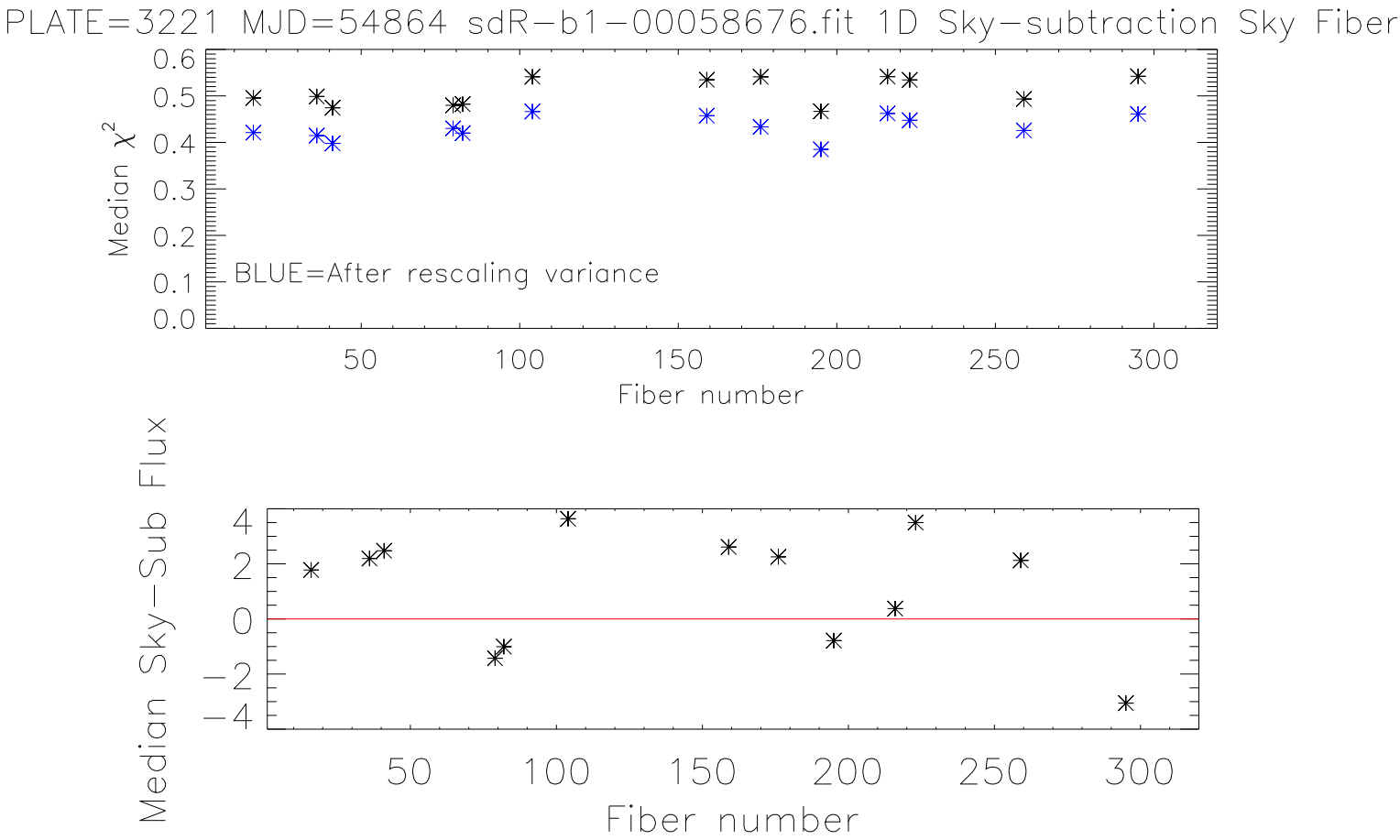

5895.9240
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

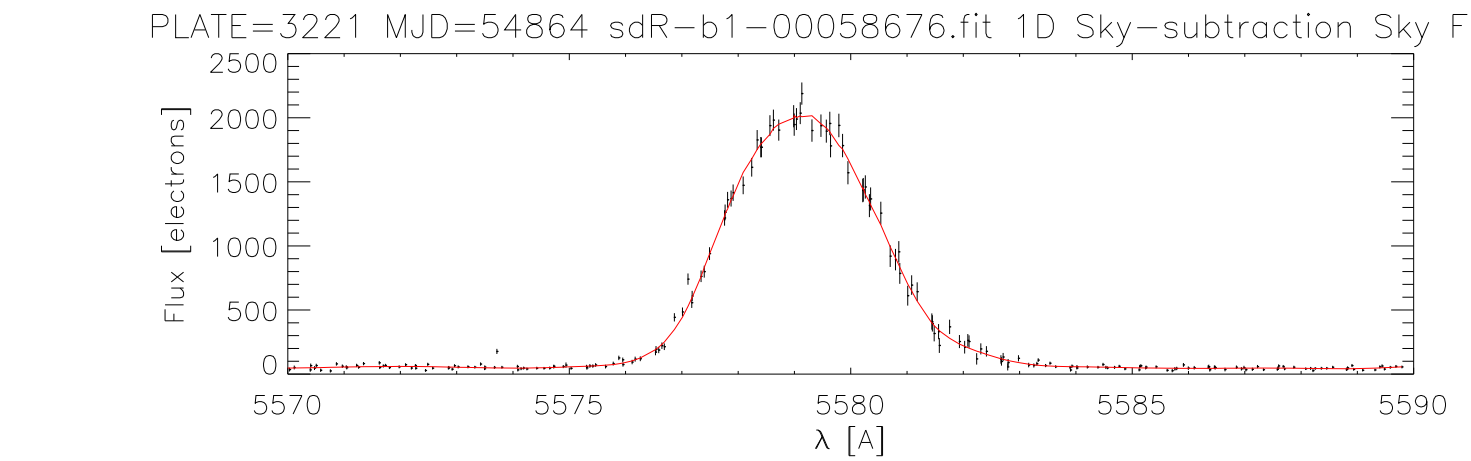

4046.5600
nfib1 15
nfib2 14
stdev 0.180
extra 0.73
4358.3300
nfib1 15
nfib2 15
stdev 0.070
extra 0.61
5460.9400
nfib1 15
nfib2 15
stdev 0.069
extra 0.58
5577.3390
nfib1 15
nfib2 15
stdev 0.031
extra 0.65
5889.9500
nfib1 14
nfib2 14
stdev 0.032
extra 0.69
5895.9240
nfib1 15
nfib2 15
stdev 0.058
extra 0.69
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

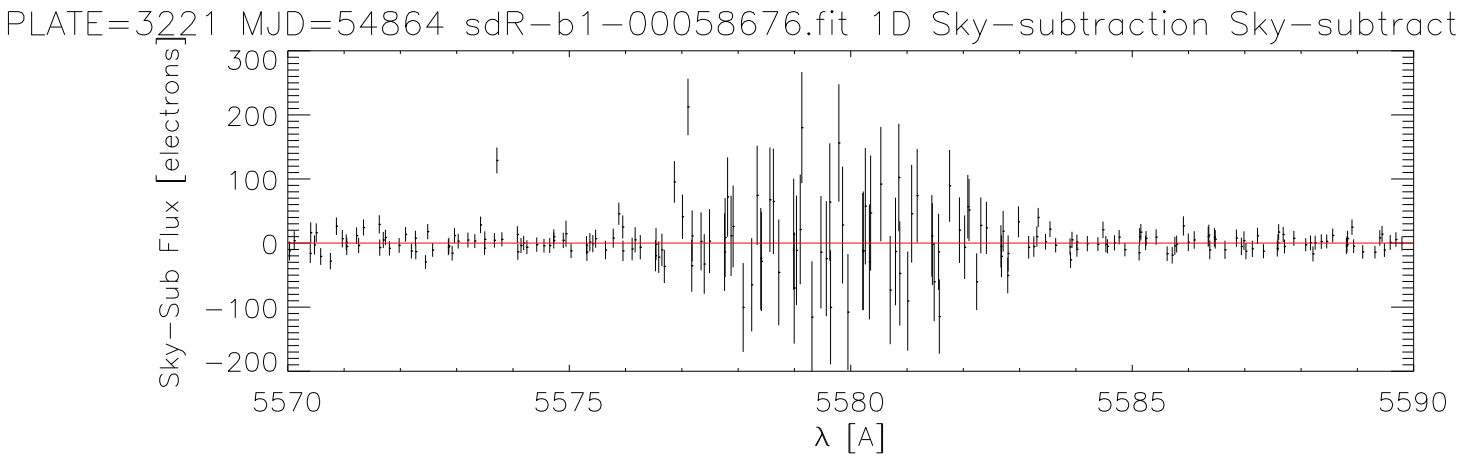

0.80
0.75
0.70
0.65
0.60
0.55
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

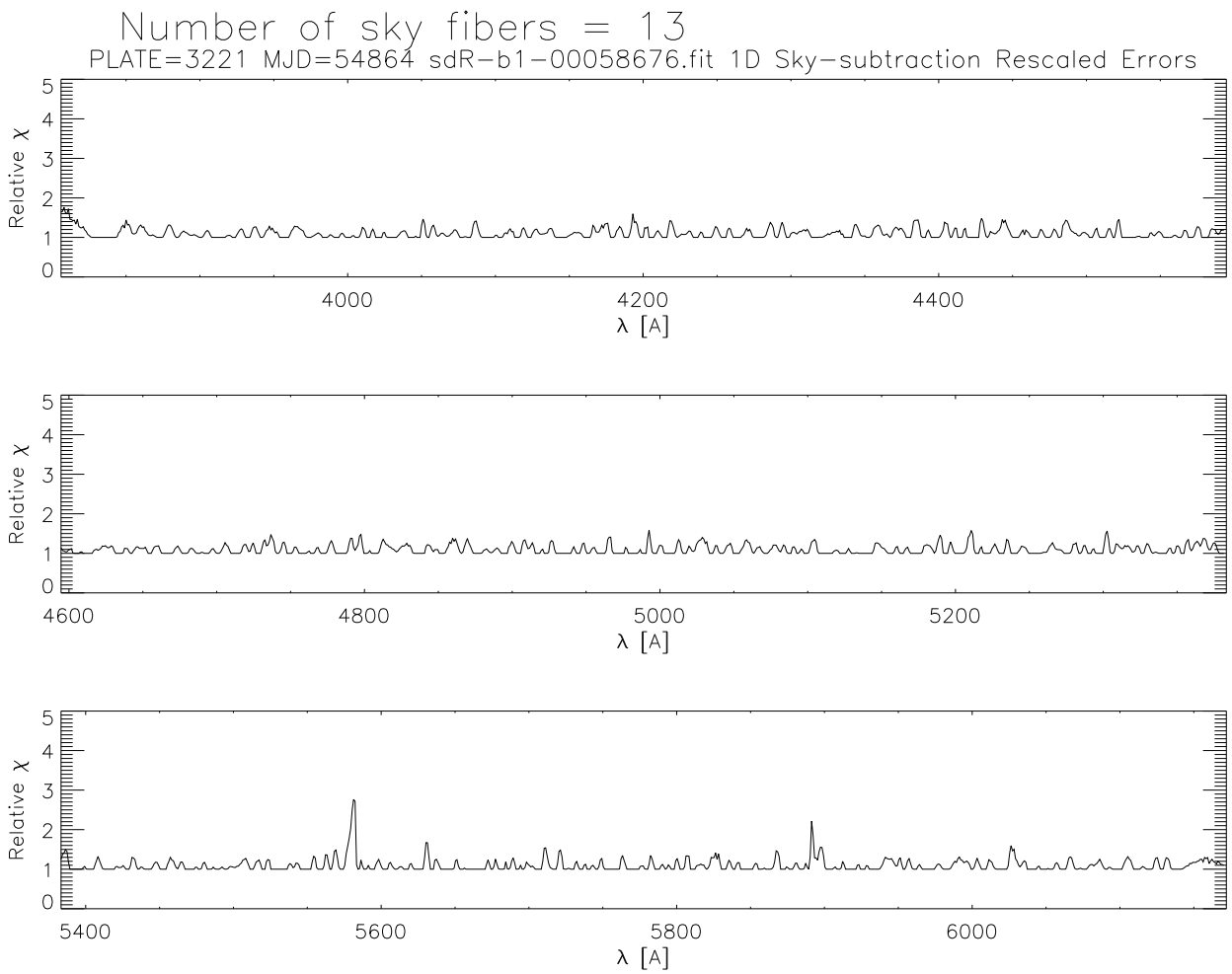
es= −0.0002

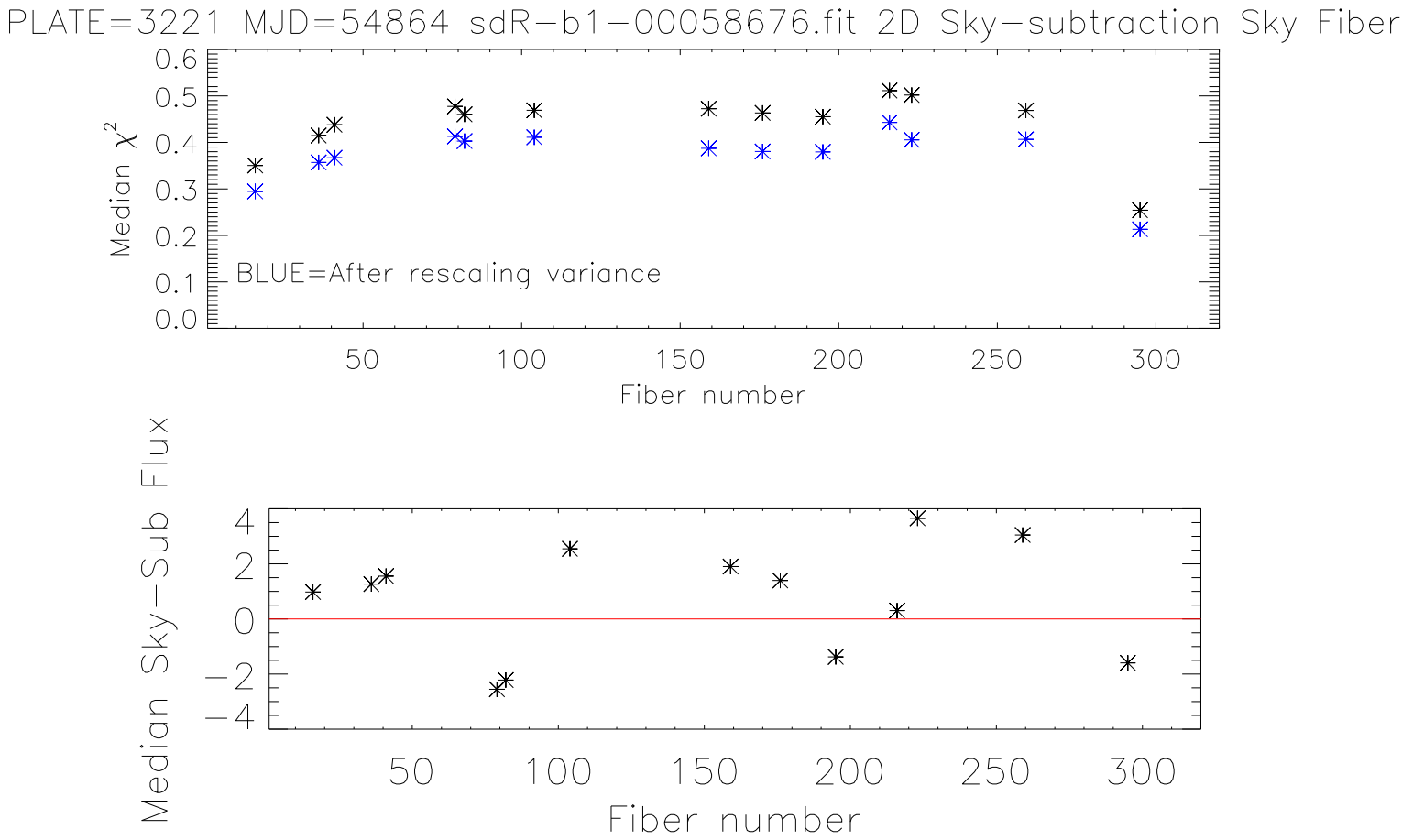

PLATE=3221 MJD=54864 Smooth superflat for sdR−b1−00058676.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

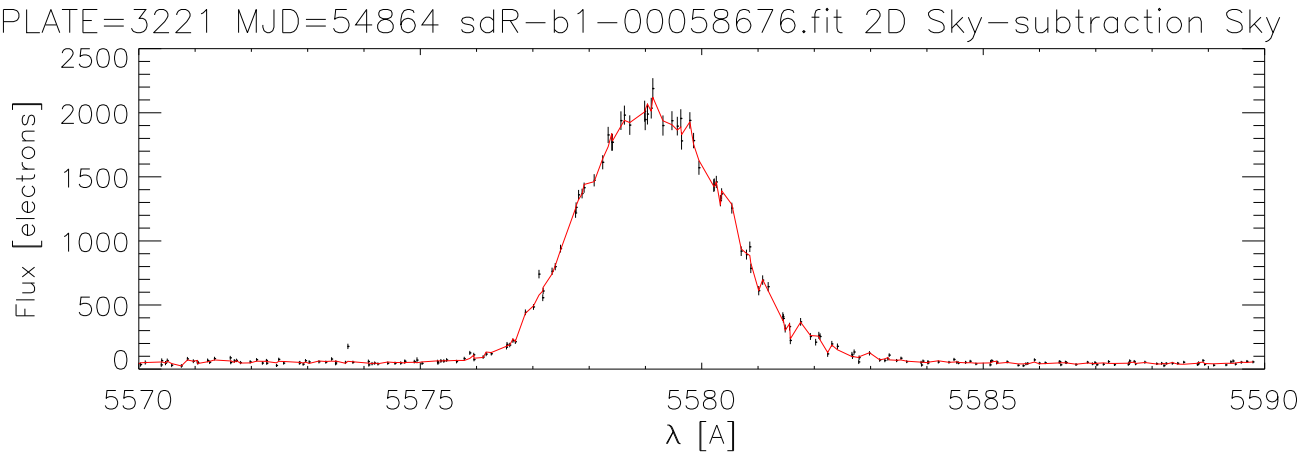

PLATE=3221 MJD=54864 sdR-b1-00058676.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

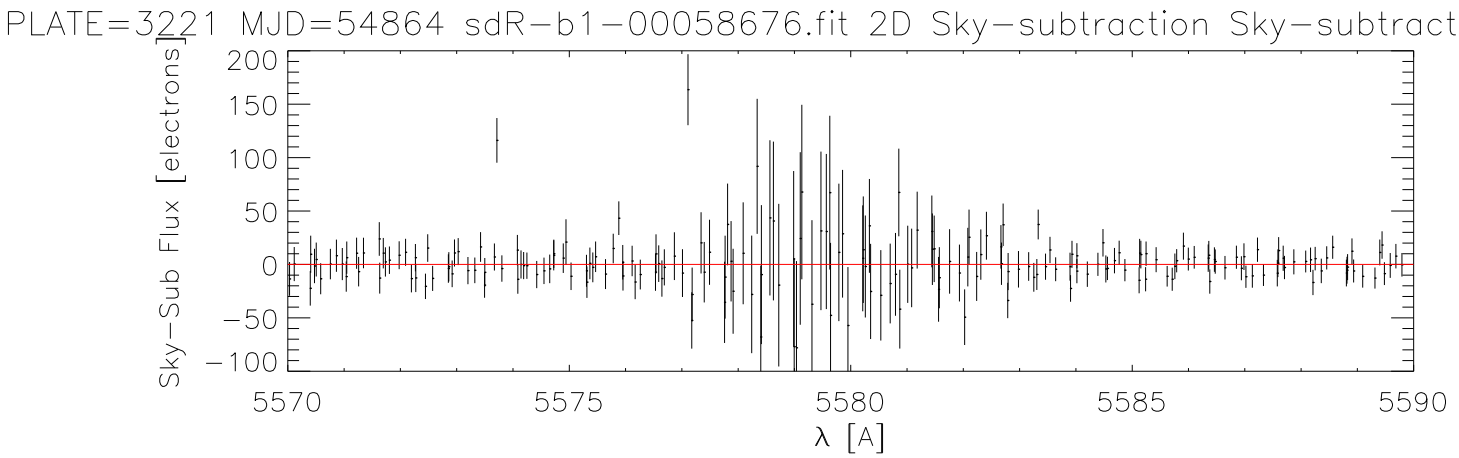

PLATE=3221 MJD=54864 sdR-b1-00058676.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

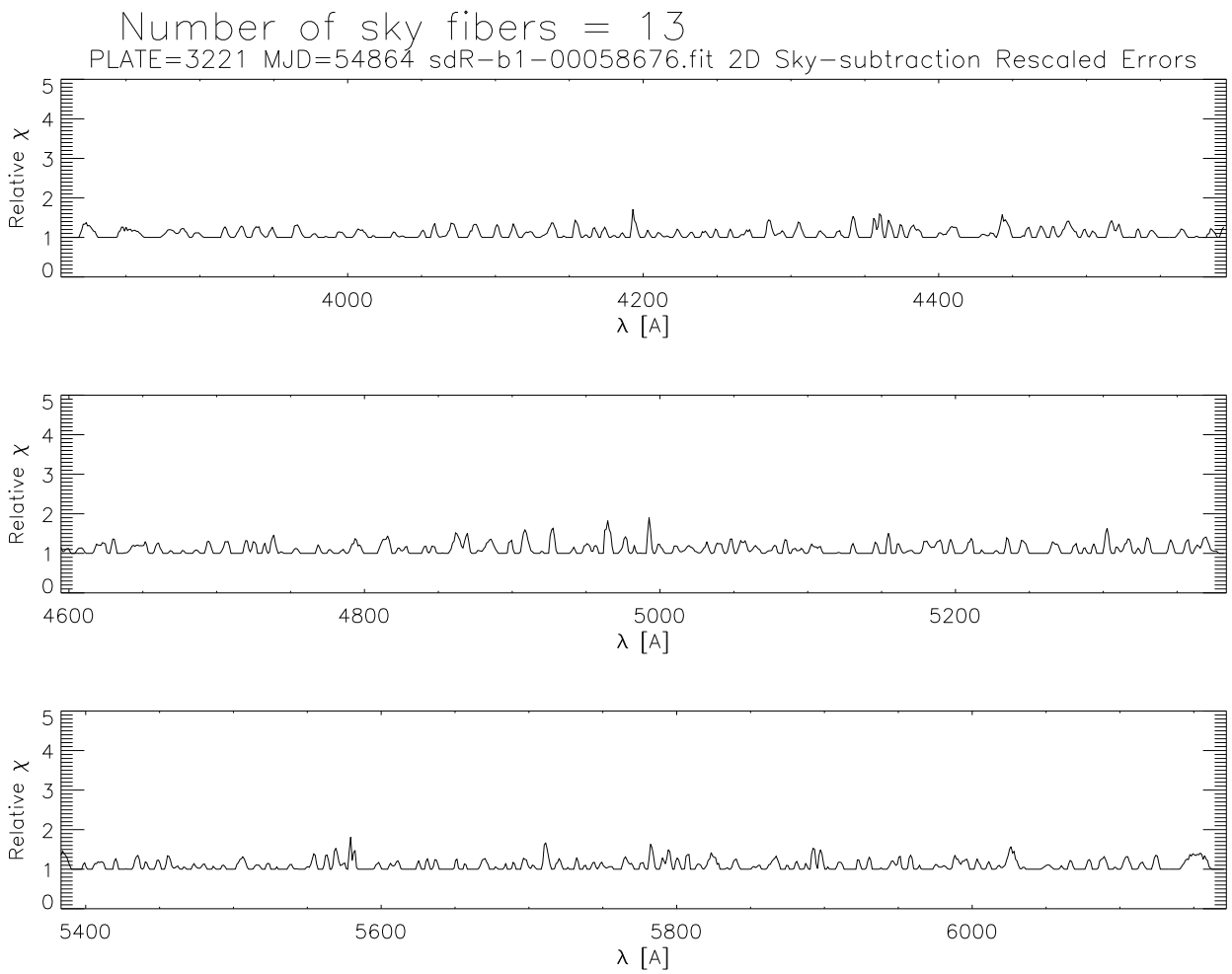

PLATE=3221 MJD=54864 sdR-b1-00058676.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

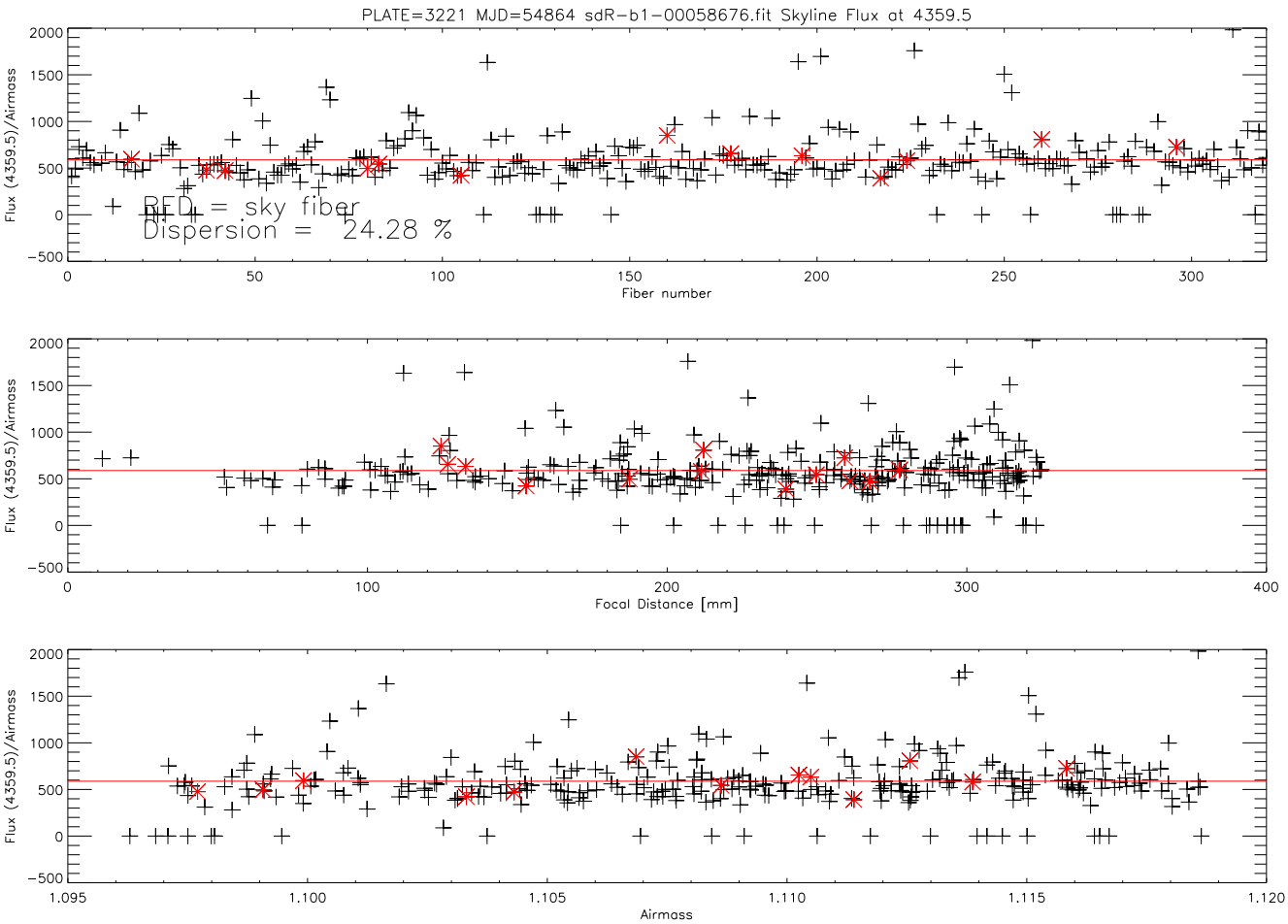

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058676.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

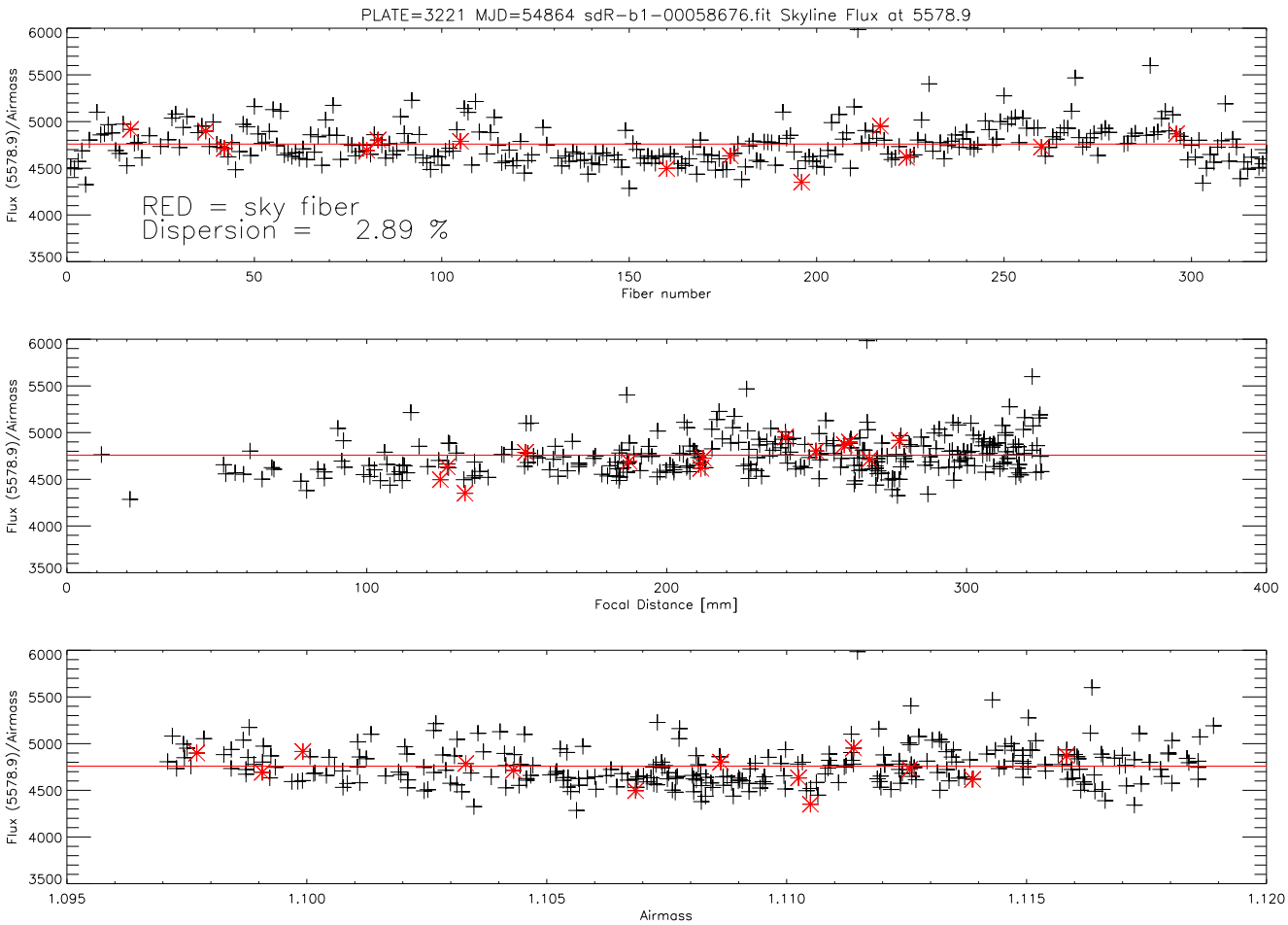

PLATE=3221 MJD=54864 sdR-b1-00058676.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

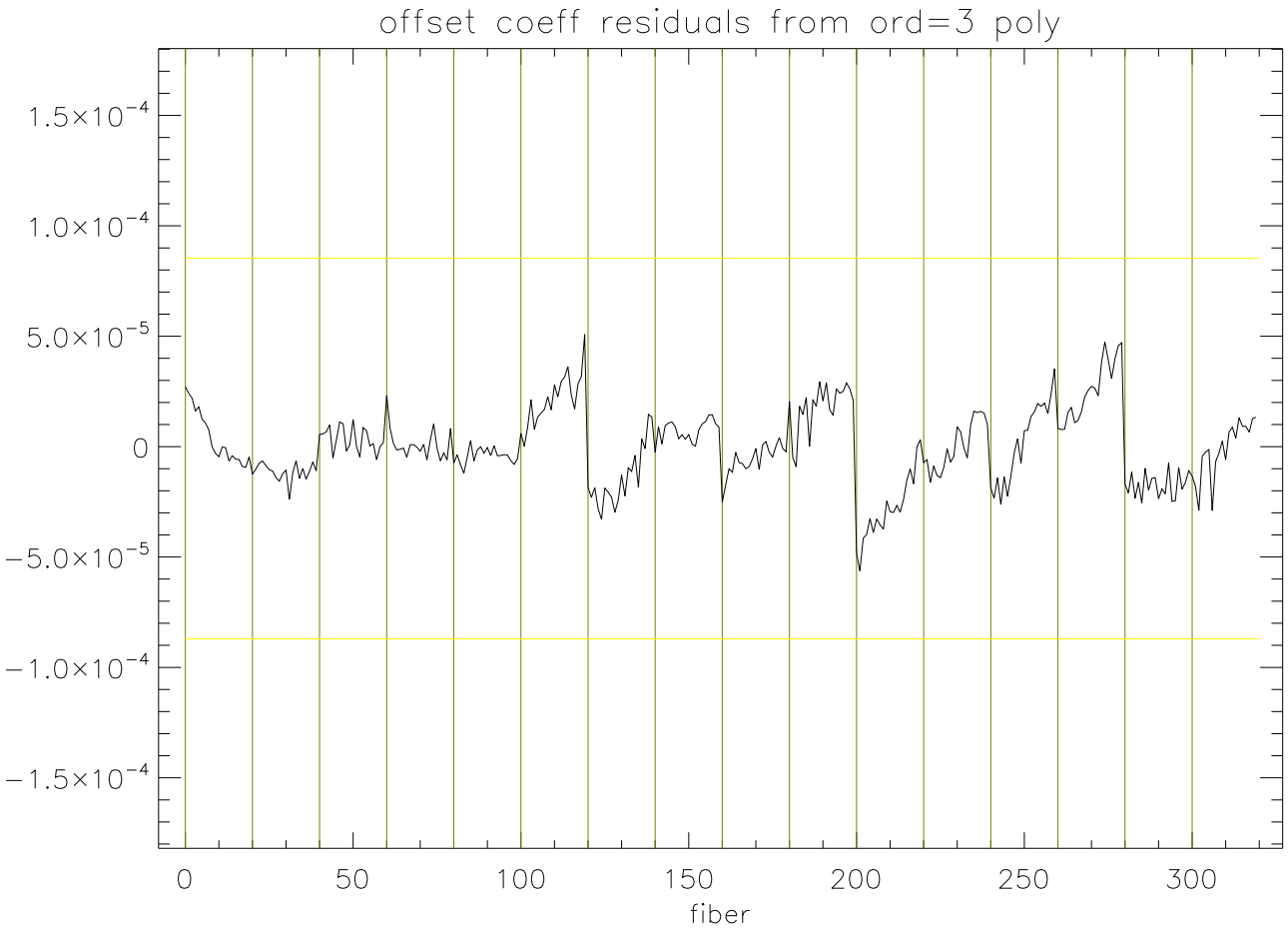

PLATE=3221 MJD=54864 sdR-b1-00058676.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

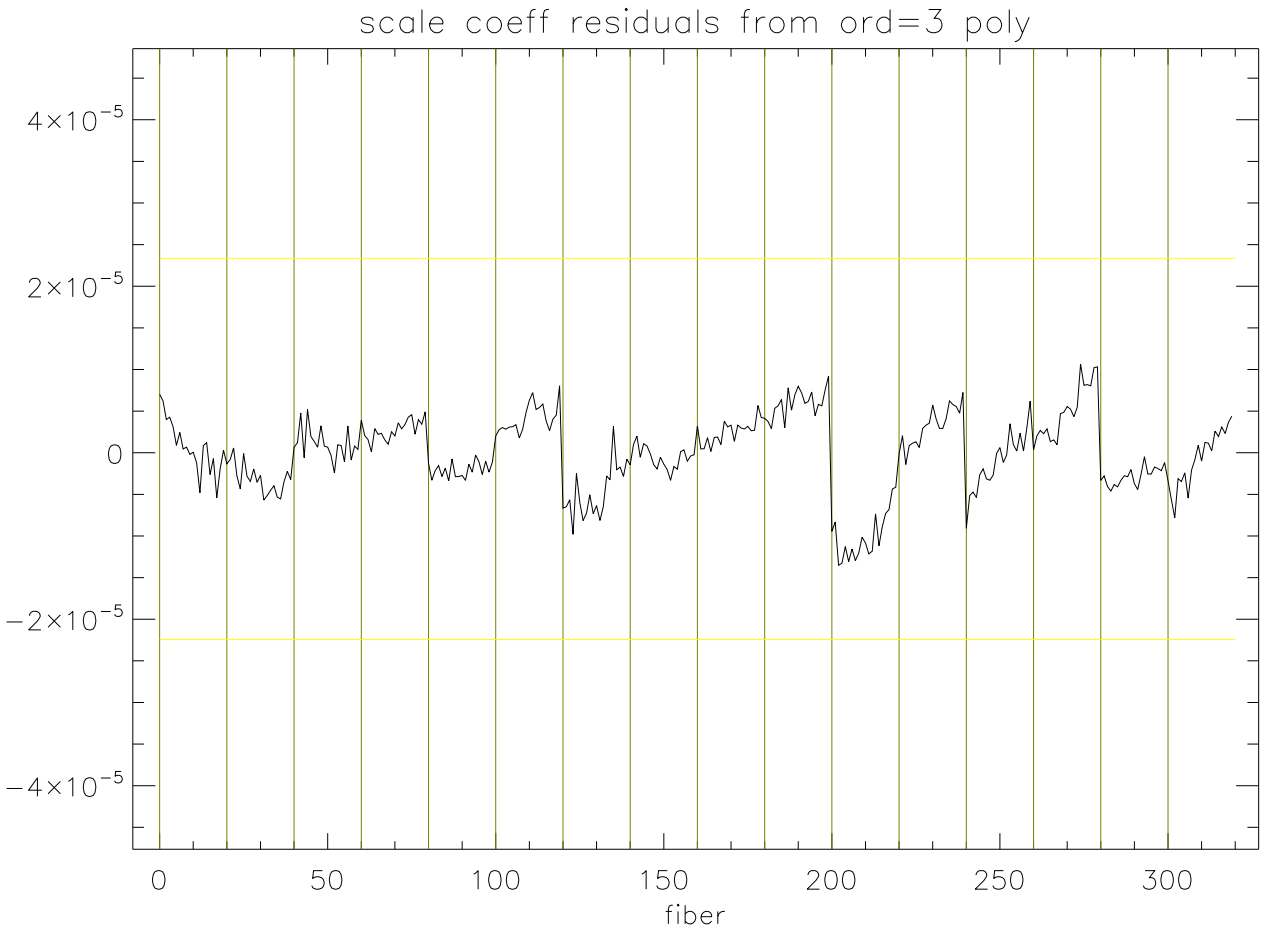

PLATE=3221 MJD=54864 sdR-b1-00058676.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

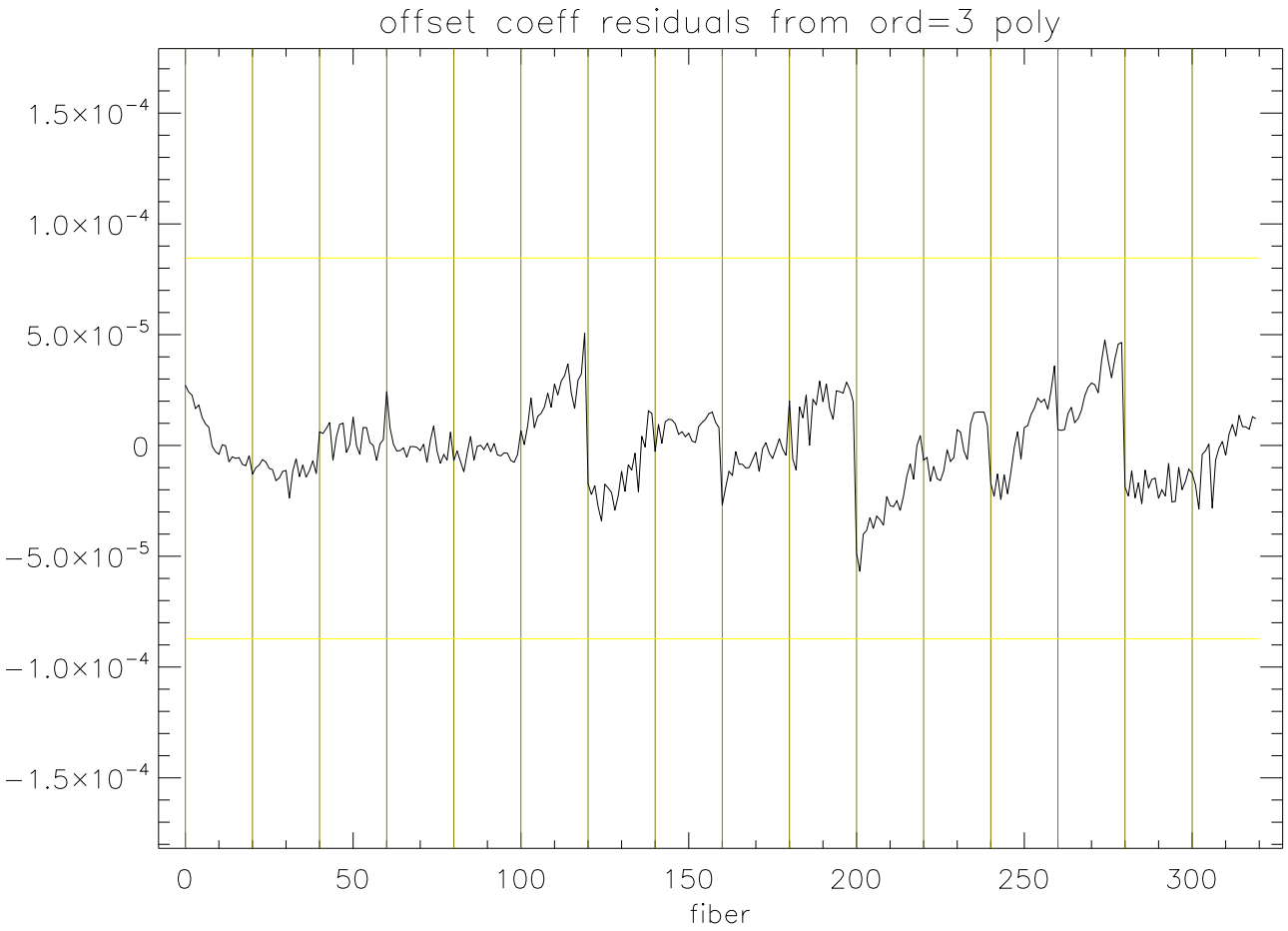

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-b1-00058676.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

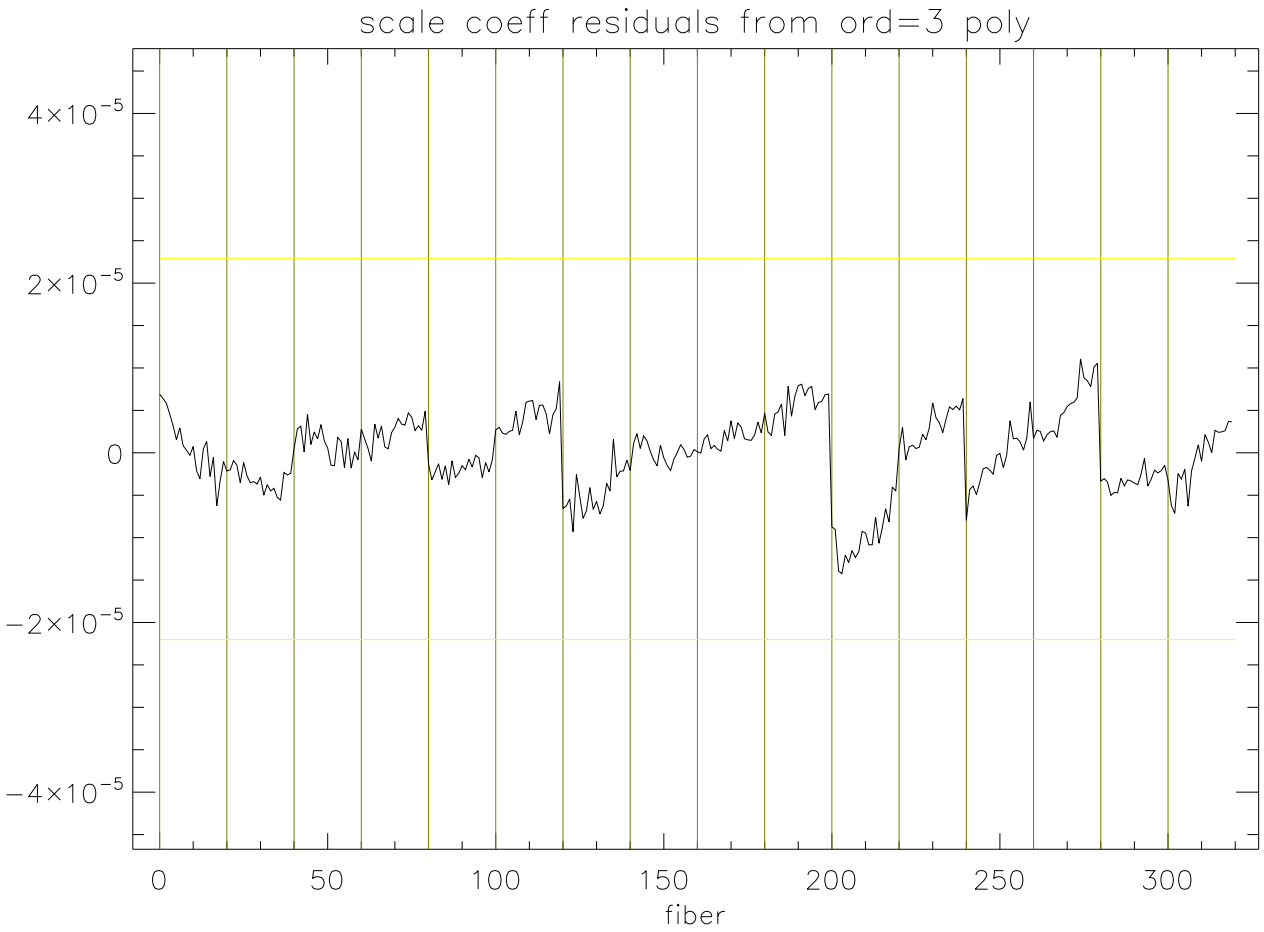

PLATE=3221 MJD=54864 sdR-b1-00058676.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 24.28 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

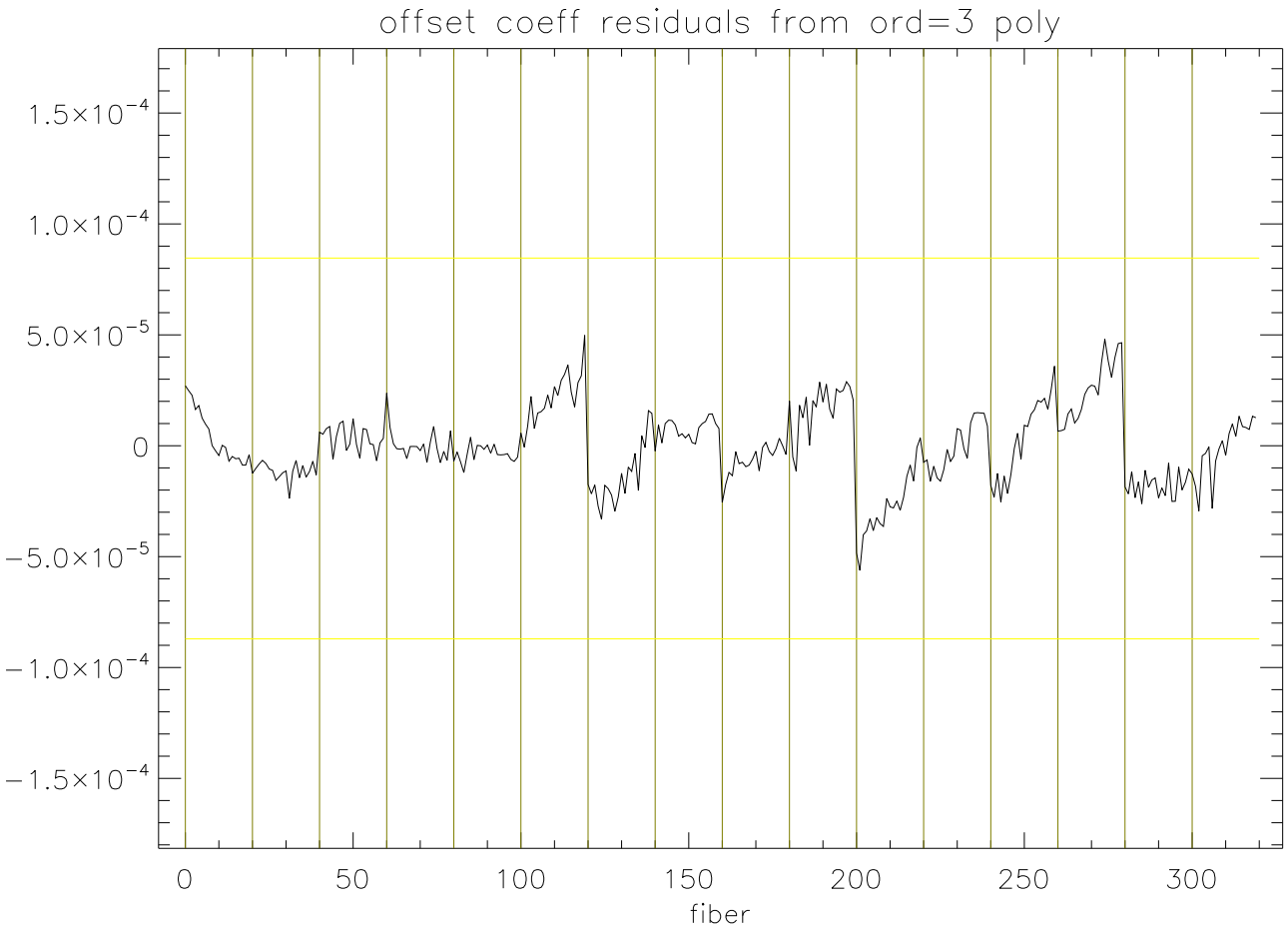

PLATE=3221 MJD=54864 sdR-b1-00058676.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.89 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

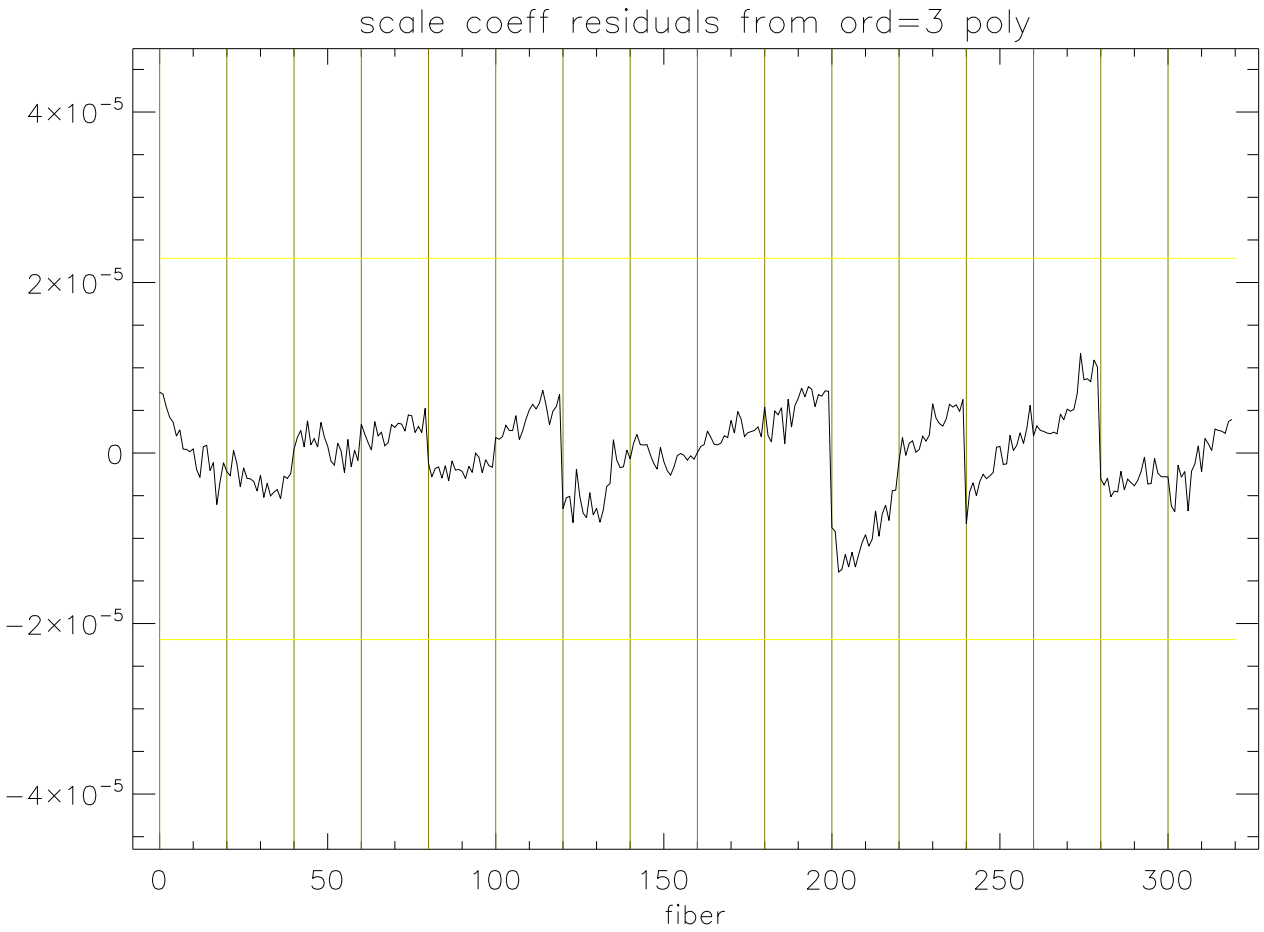

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

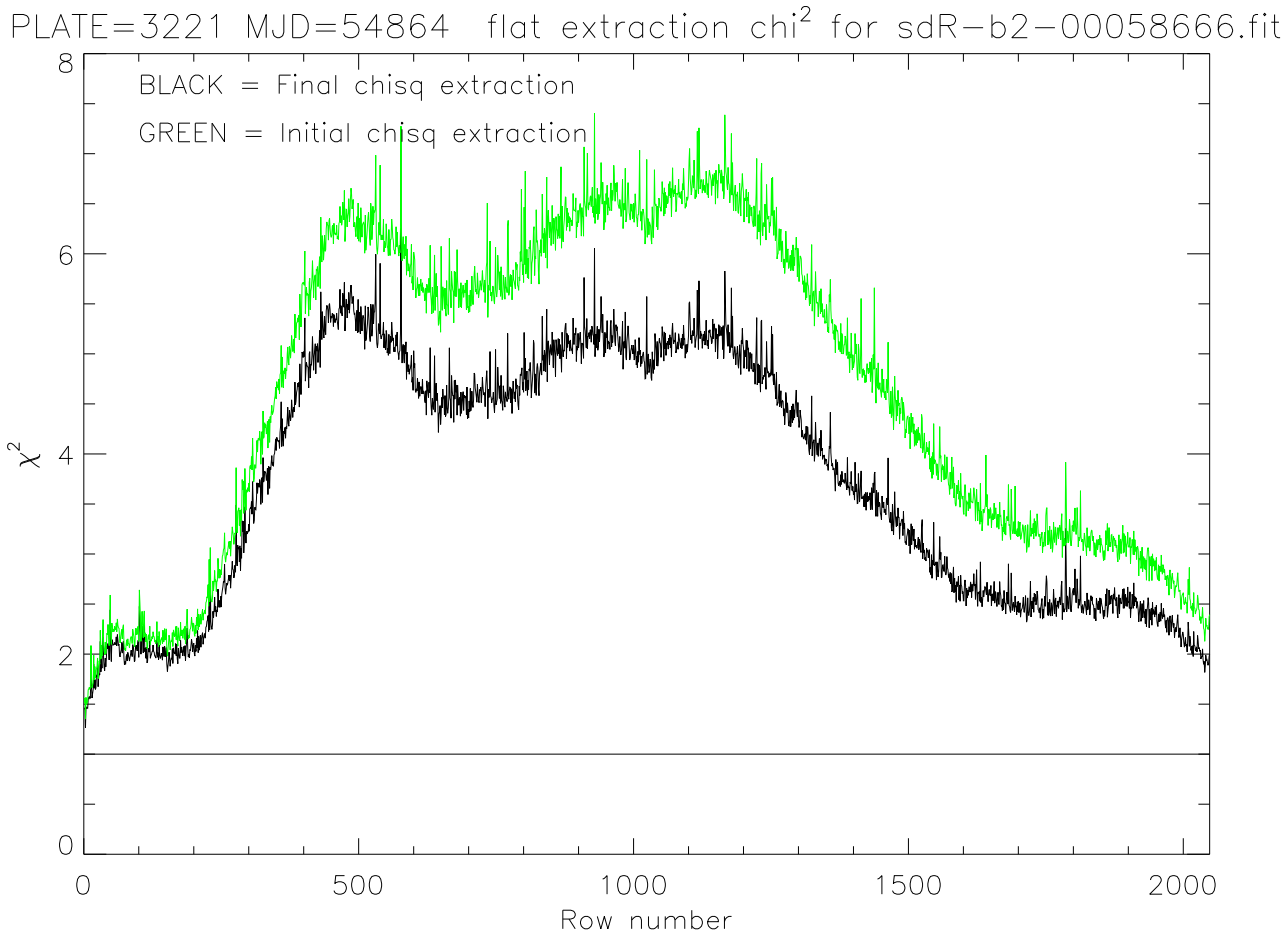

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

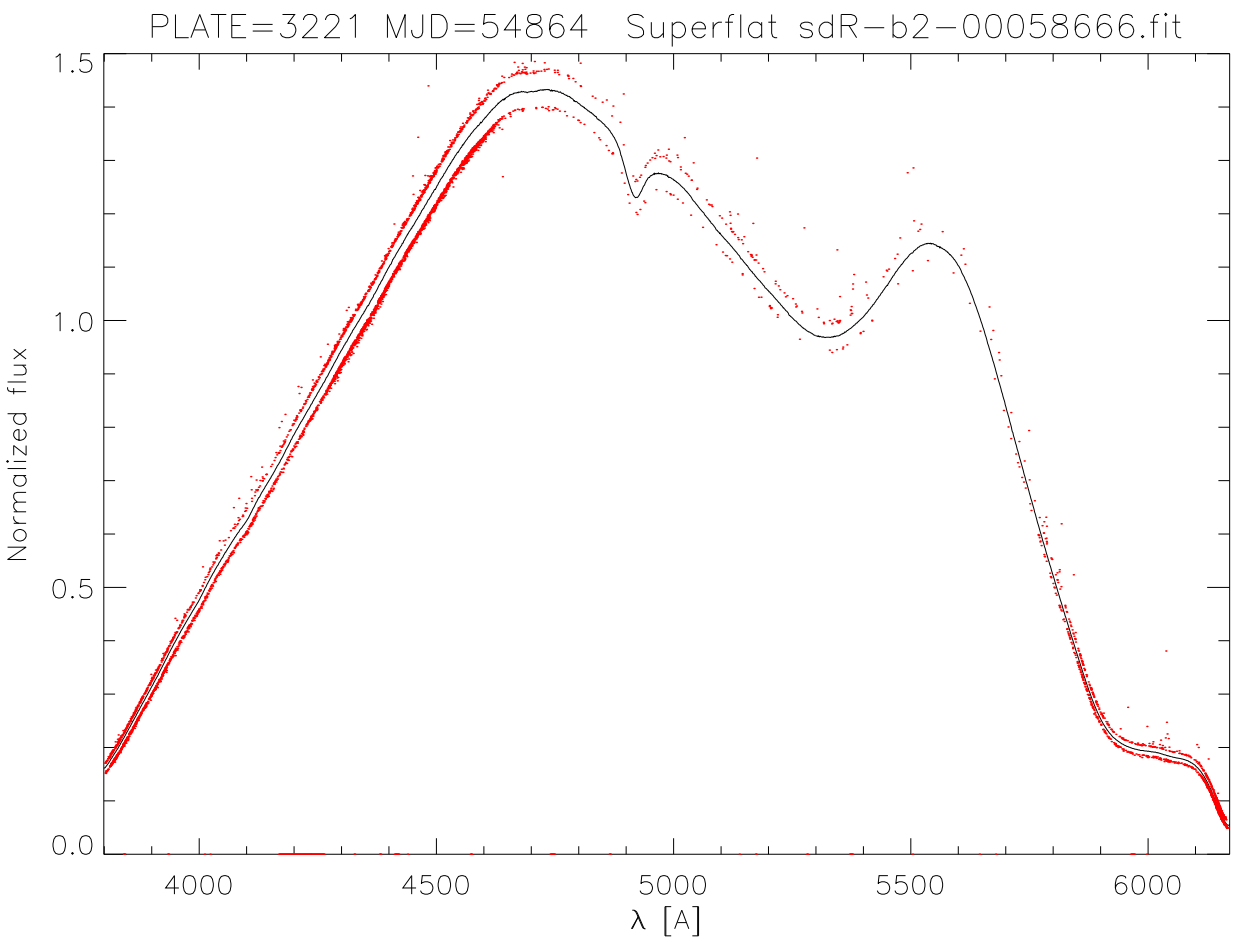

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

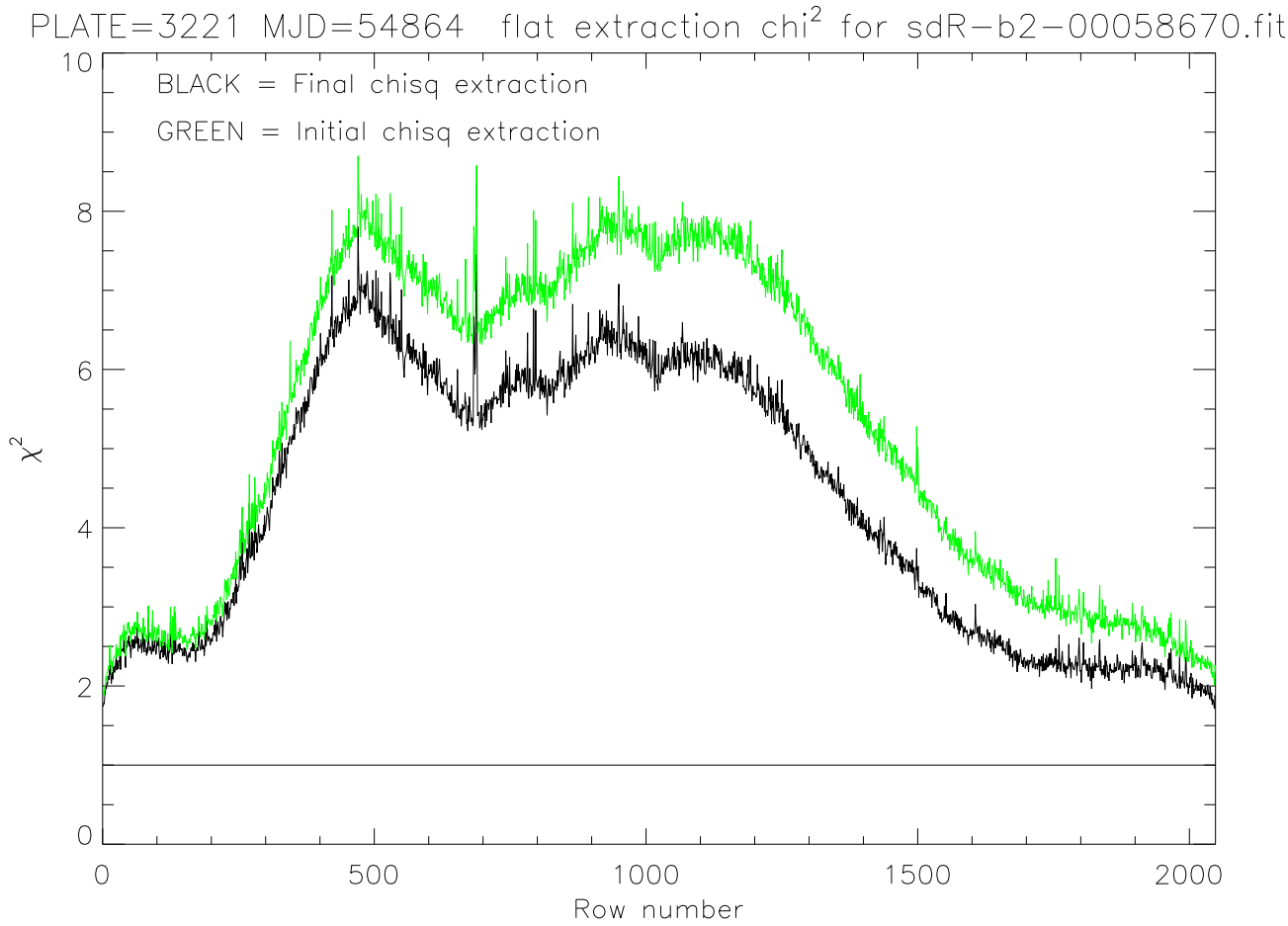

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

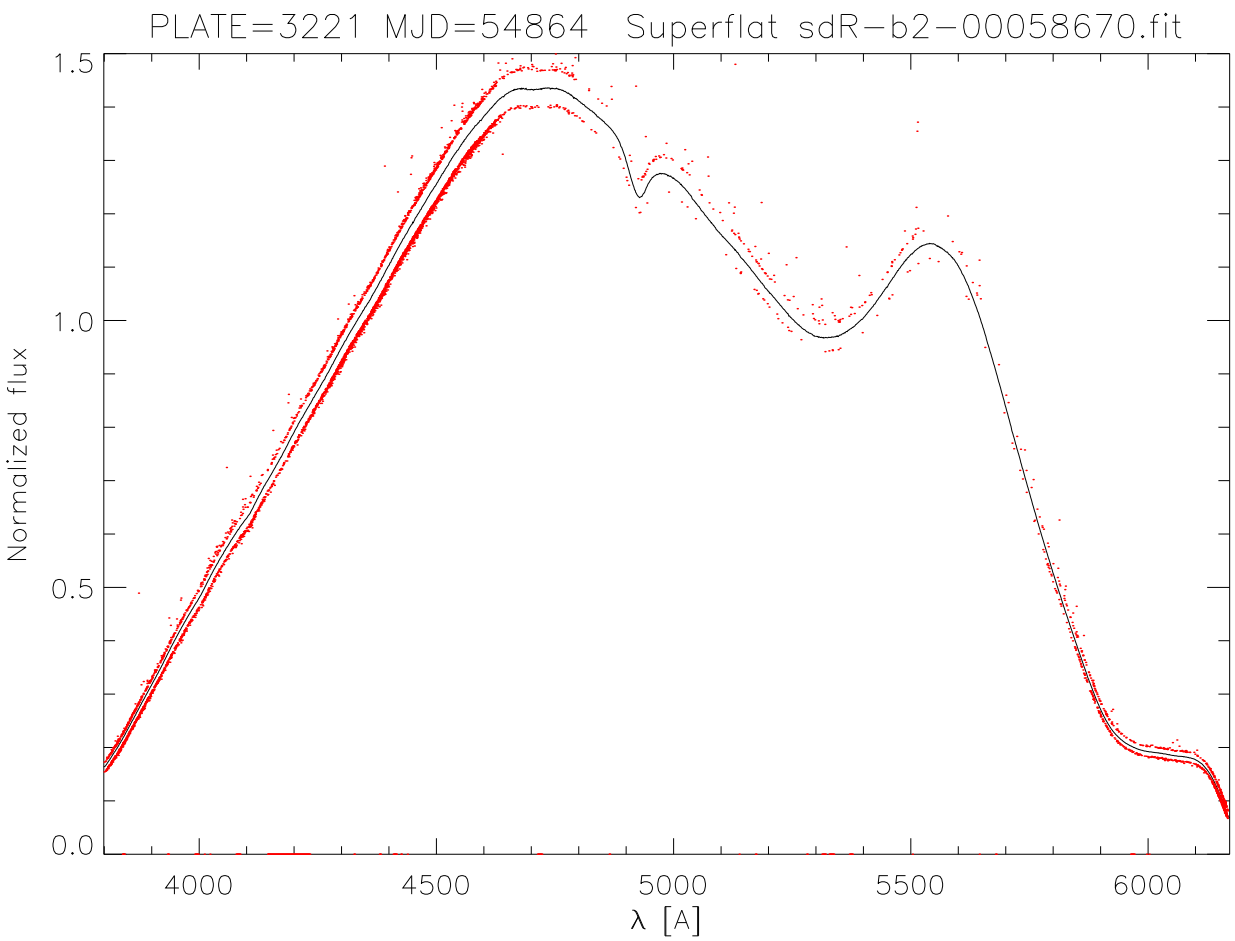

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

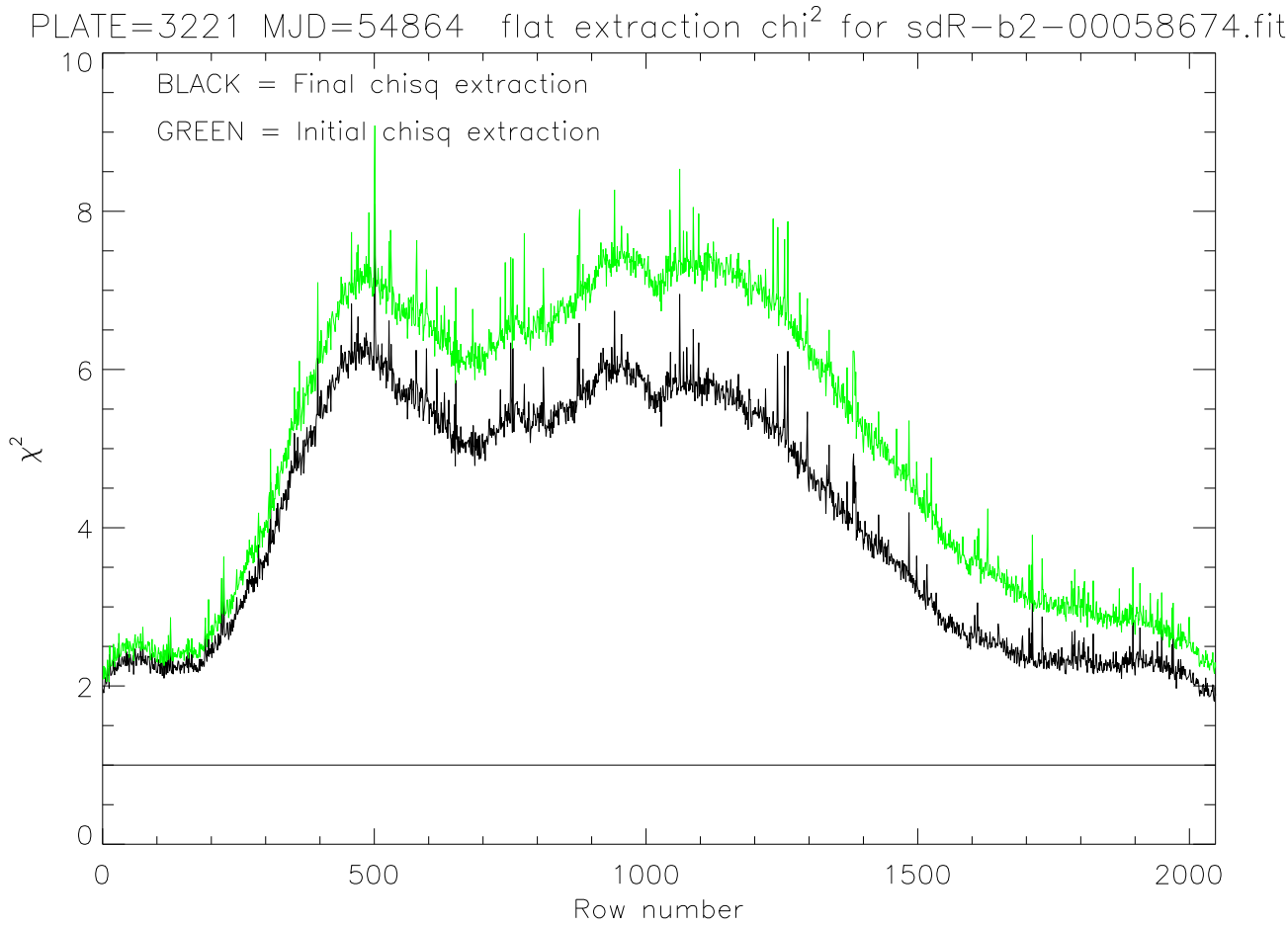

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

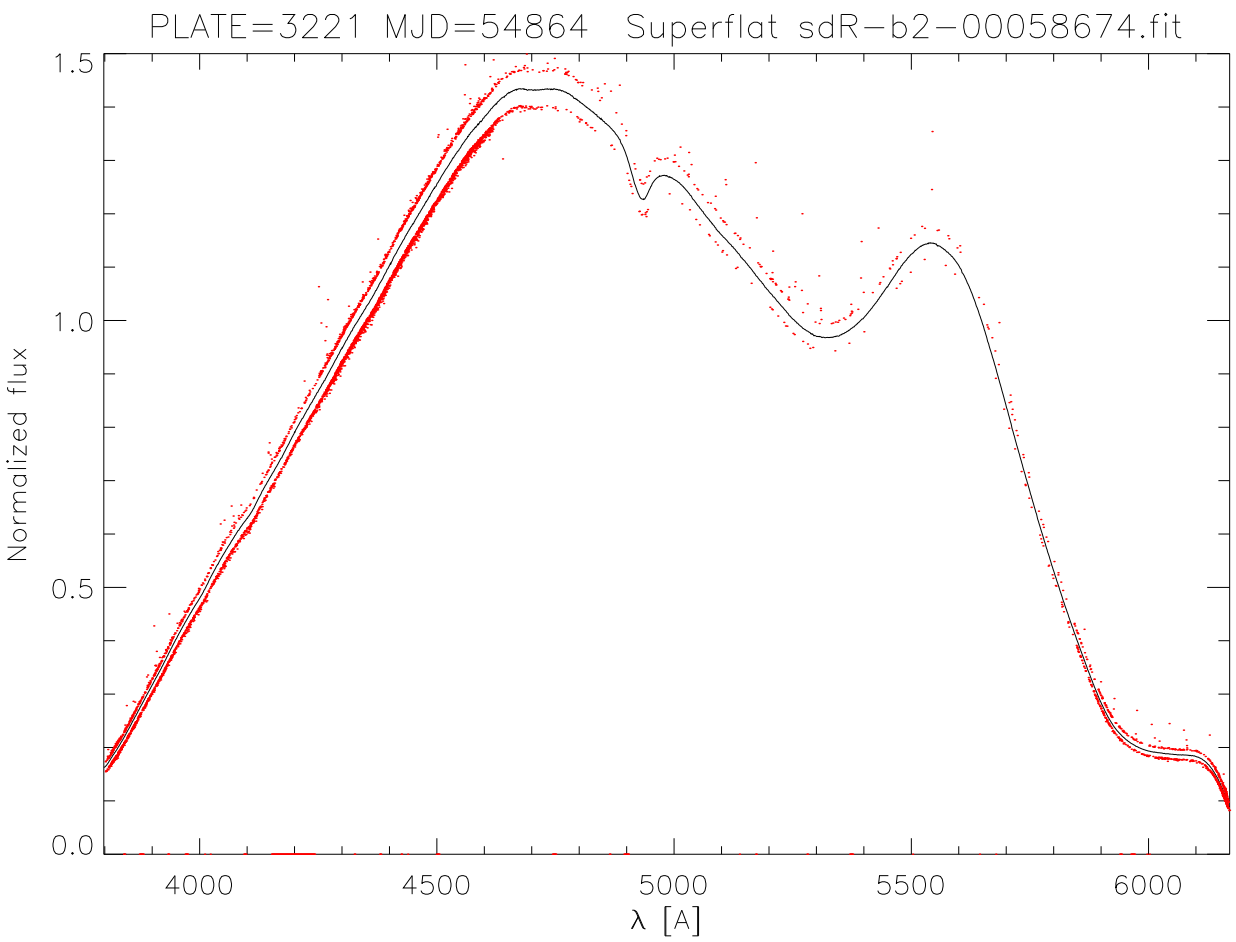

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−b2−00058666.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

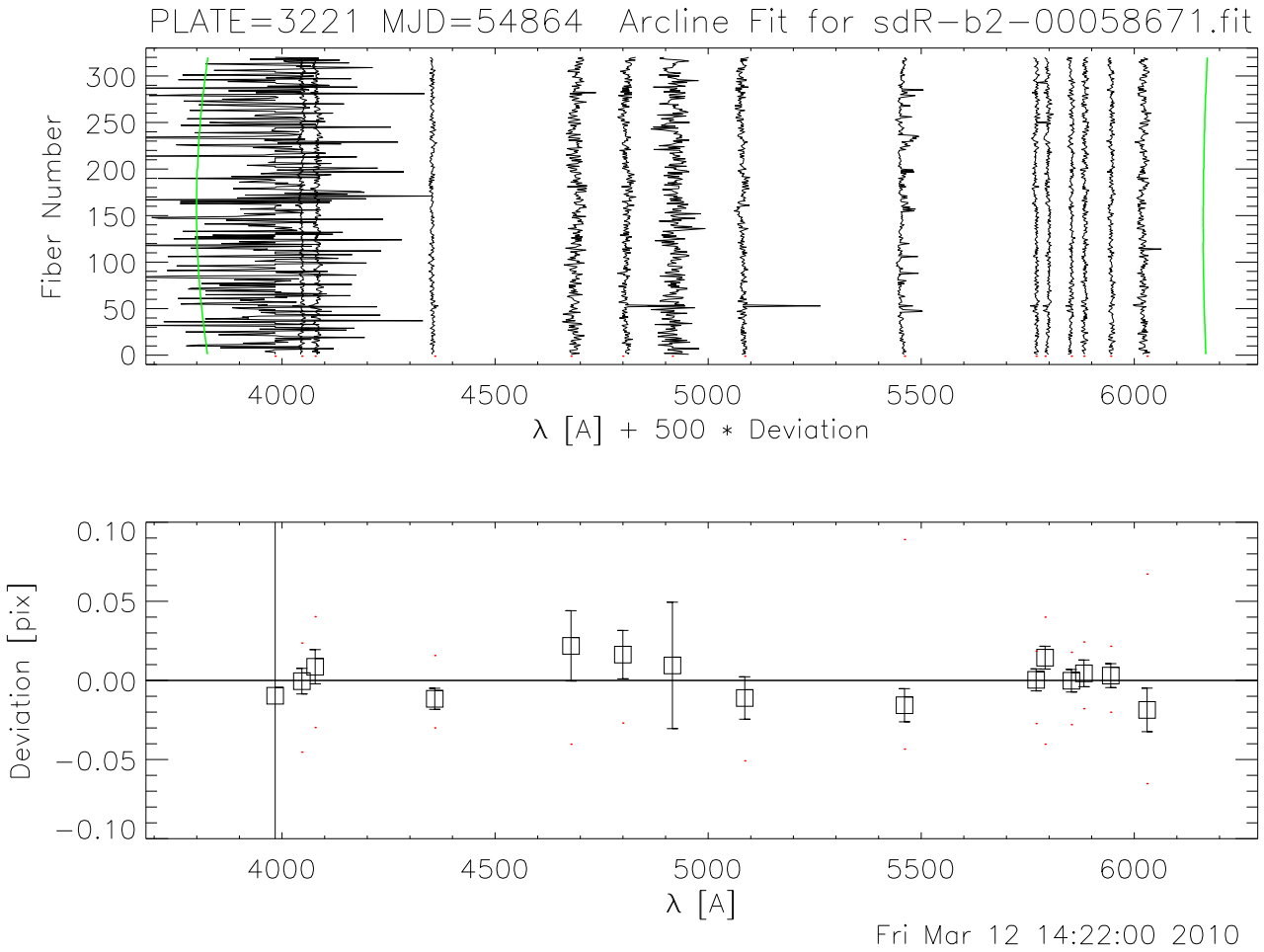

PLATE=3221 MJD=54864 Superflat sdR-b2-00058666.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

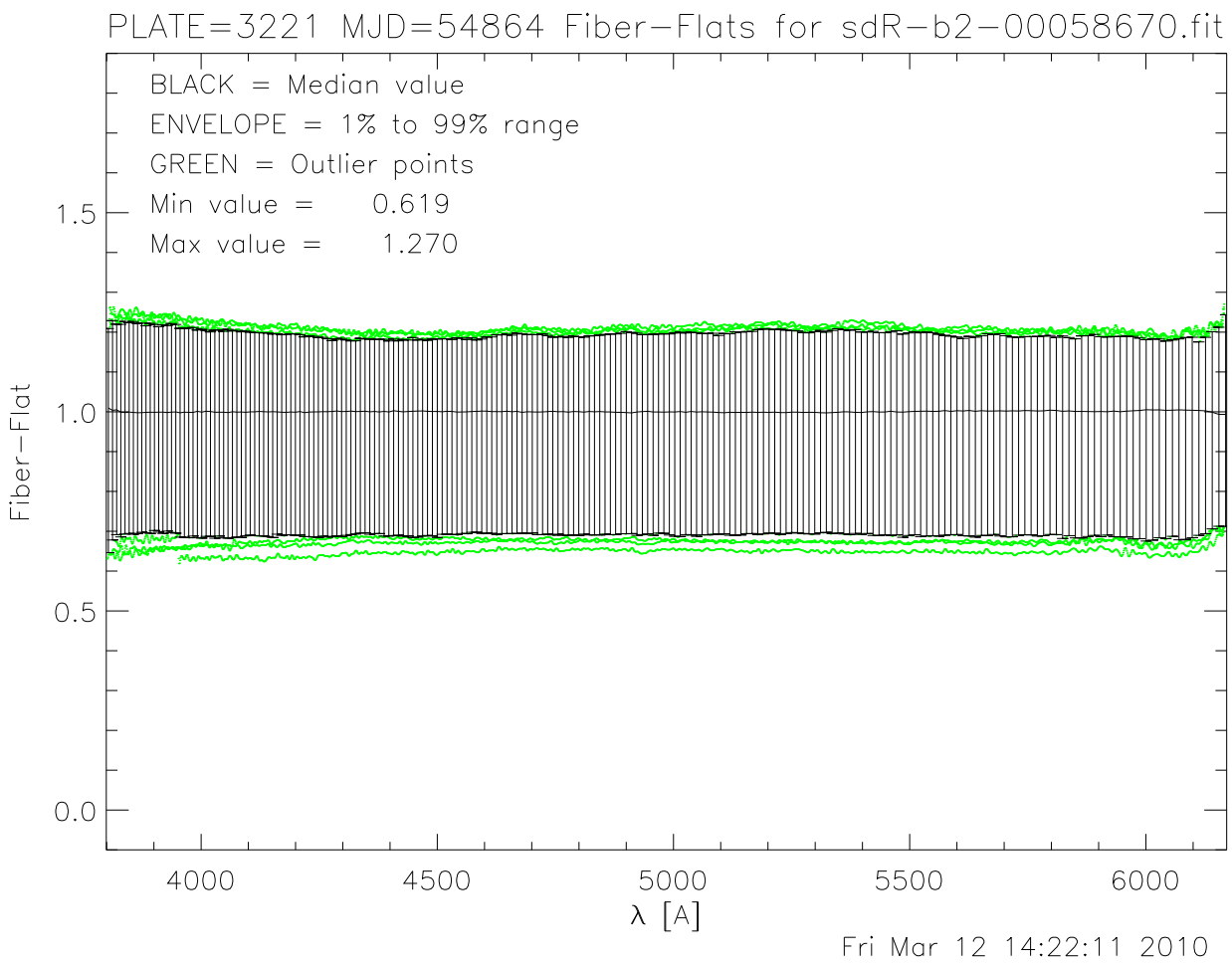

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−b2−00058670.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

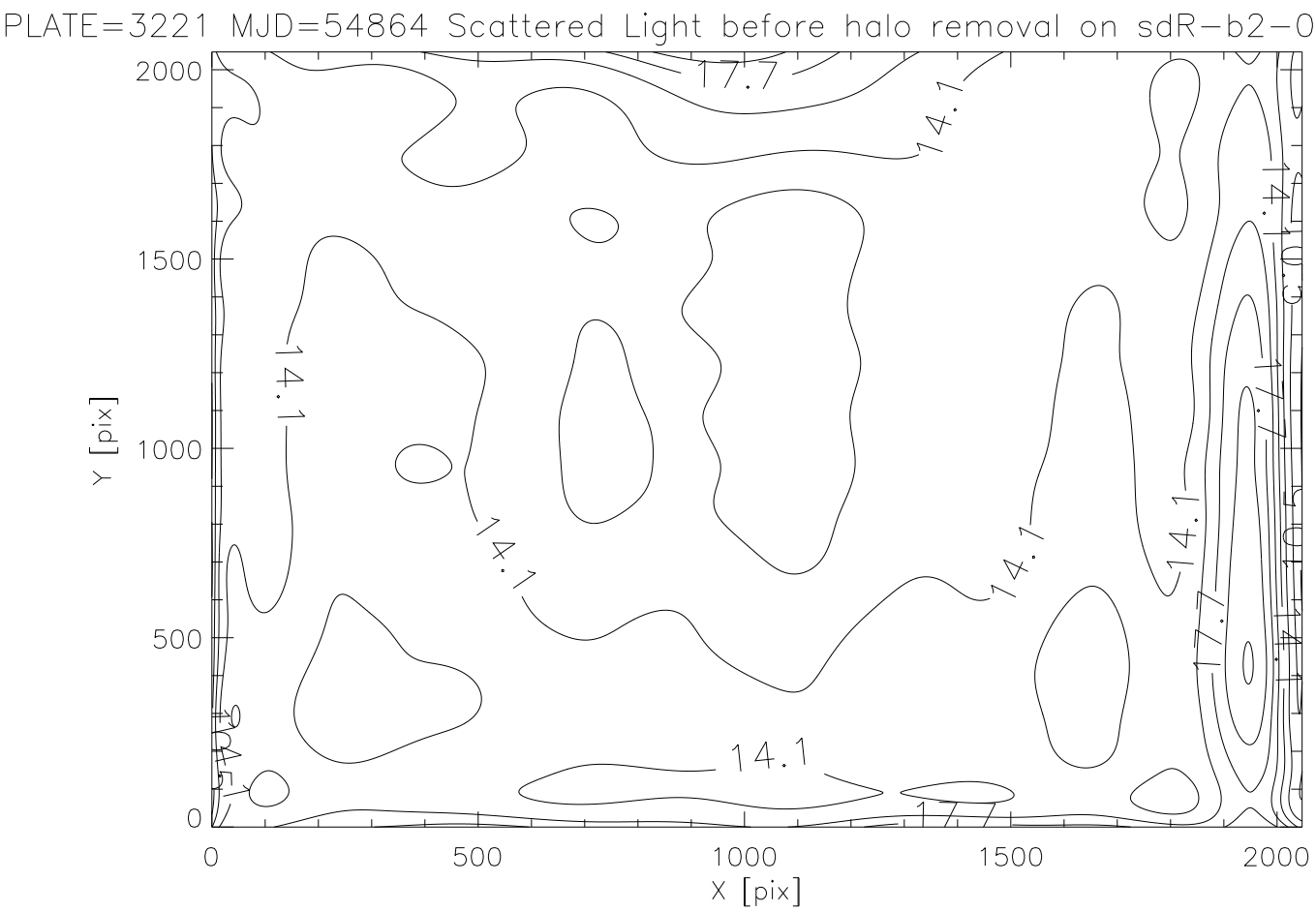

PLATE=3221 MJD=54864 Superflat sdR-b2-00058670.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

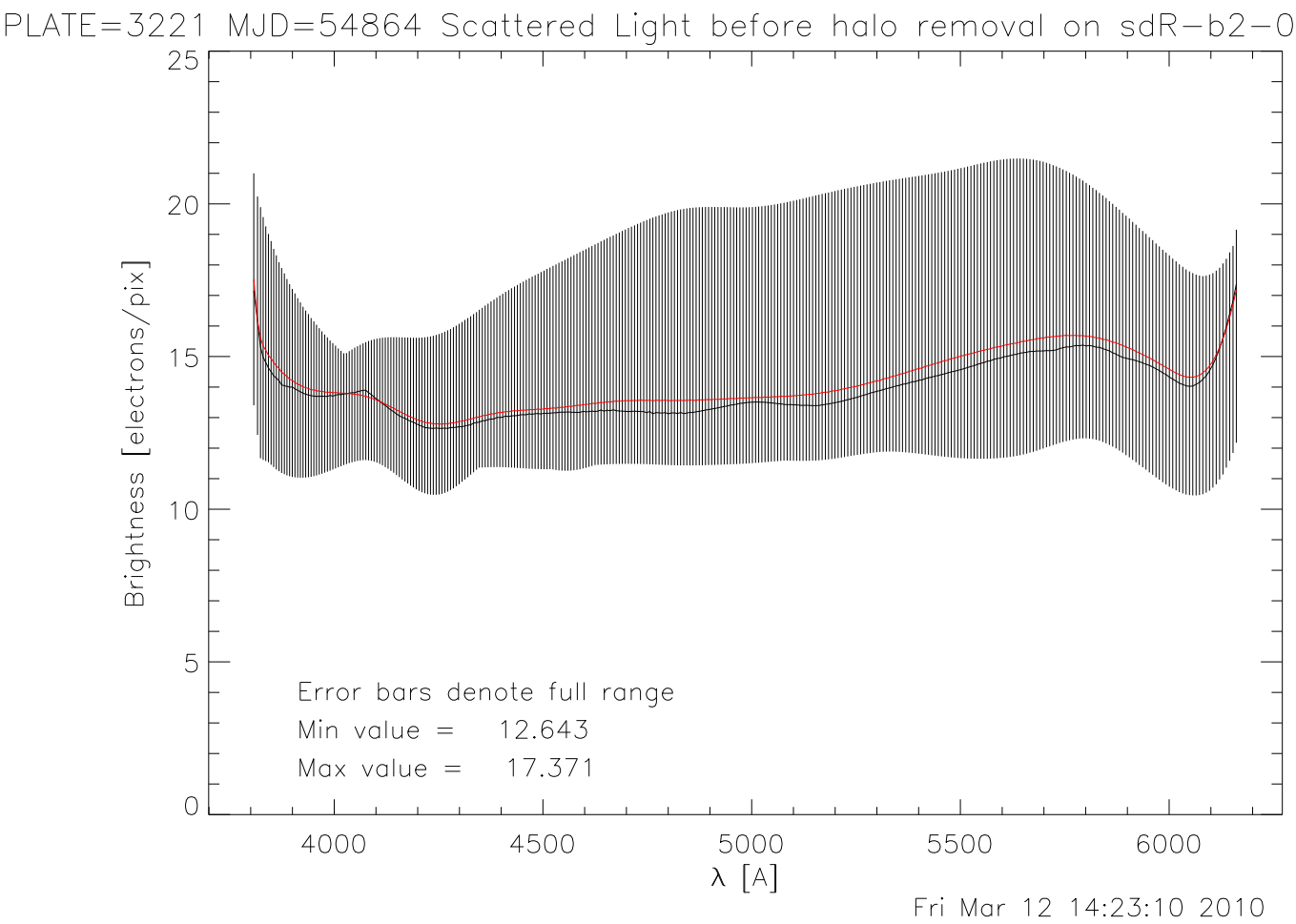

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−b2−00058674.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

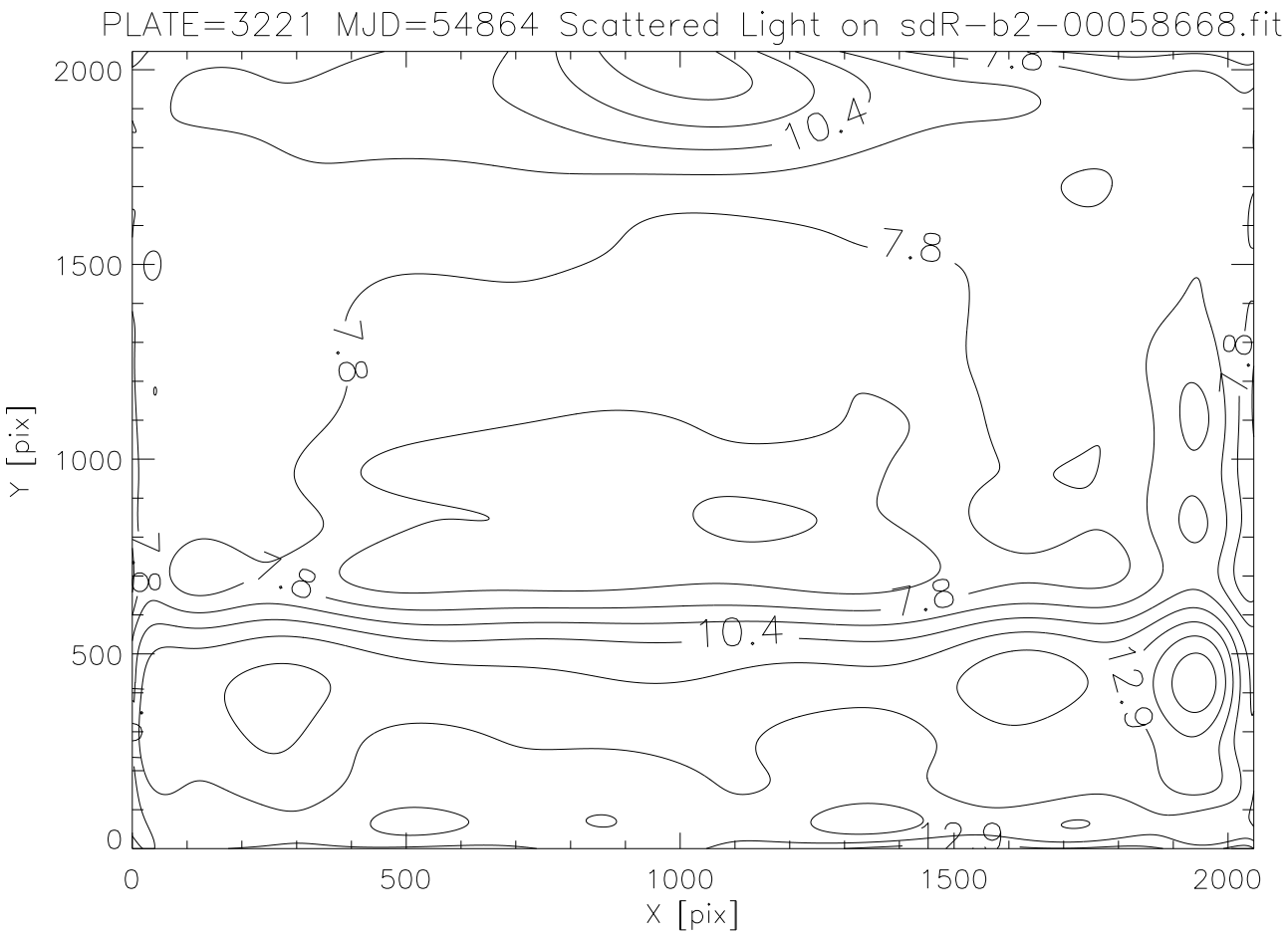

PLATE=3221 MJD=54864 Superflat sdR-b2-00058674.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

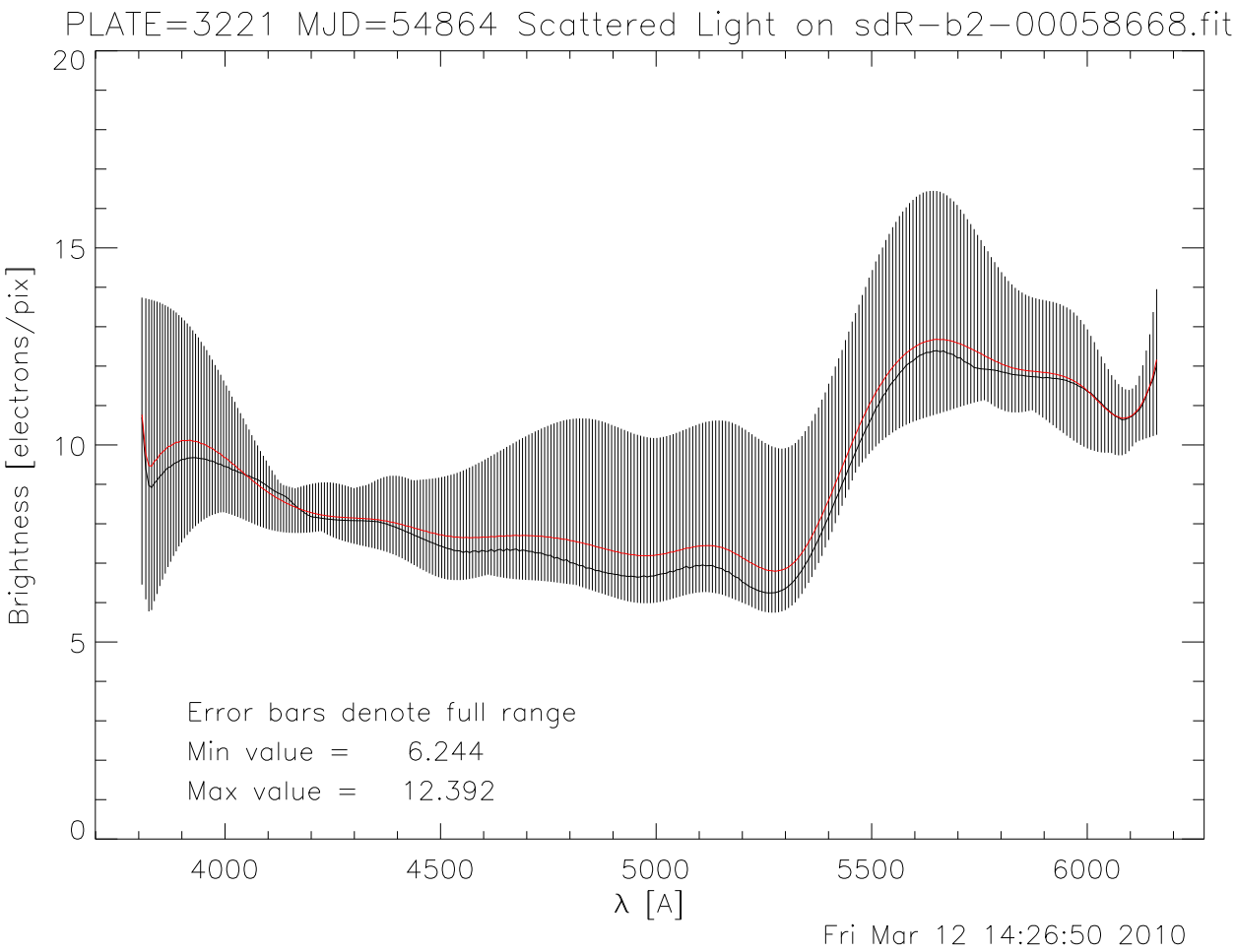

PLATE=3221 MJD=54864 Arcline Fit for sdR-b2-00058671.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:22:00 2010

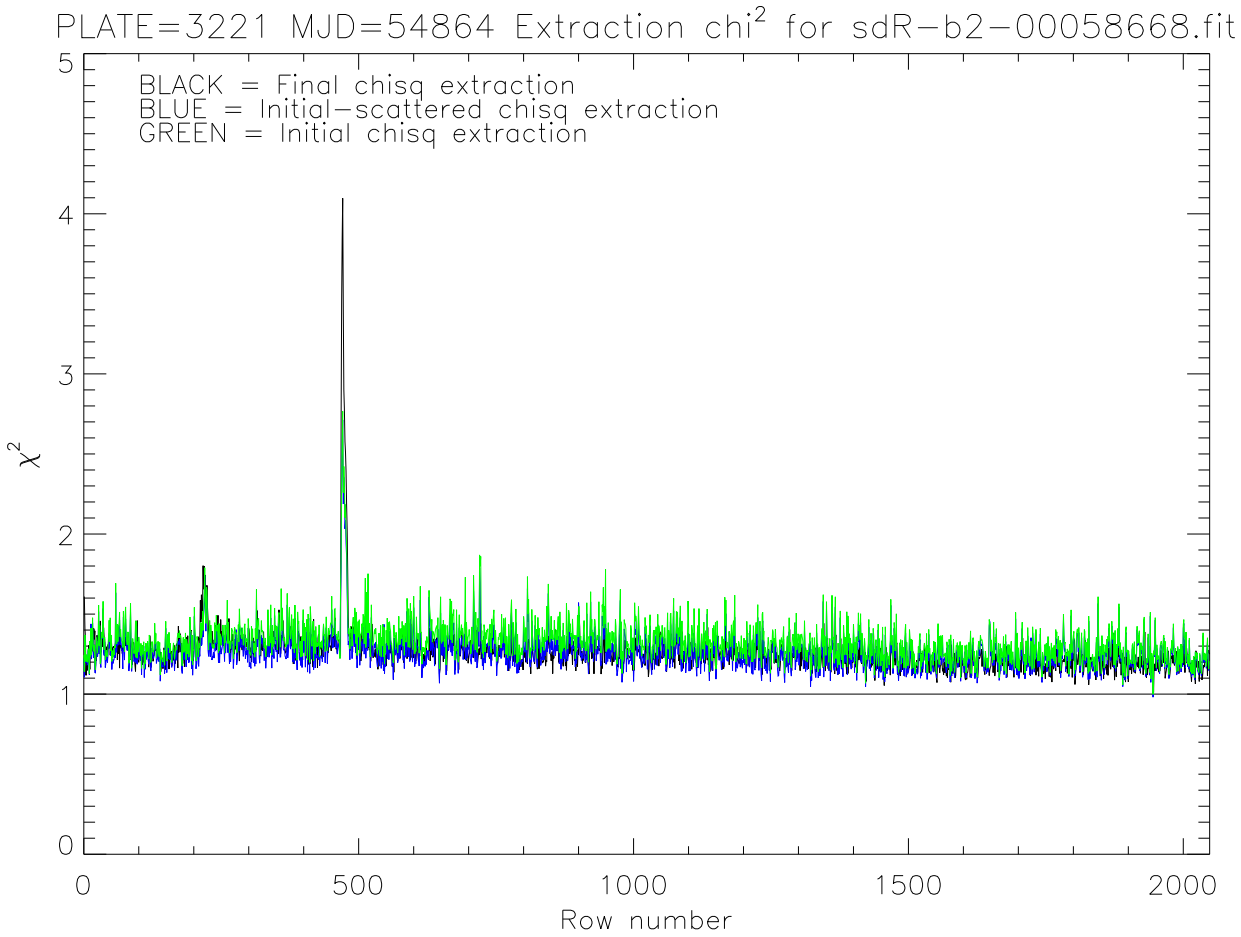

PLATE=3221 MJD=54864 Fiber-Flats for sdR-b2-00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.270
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:22:11 2010

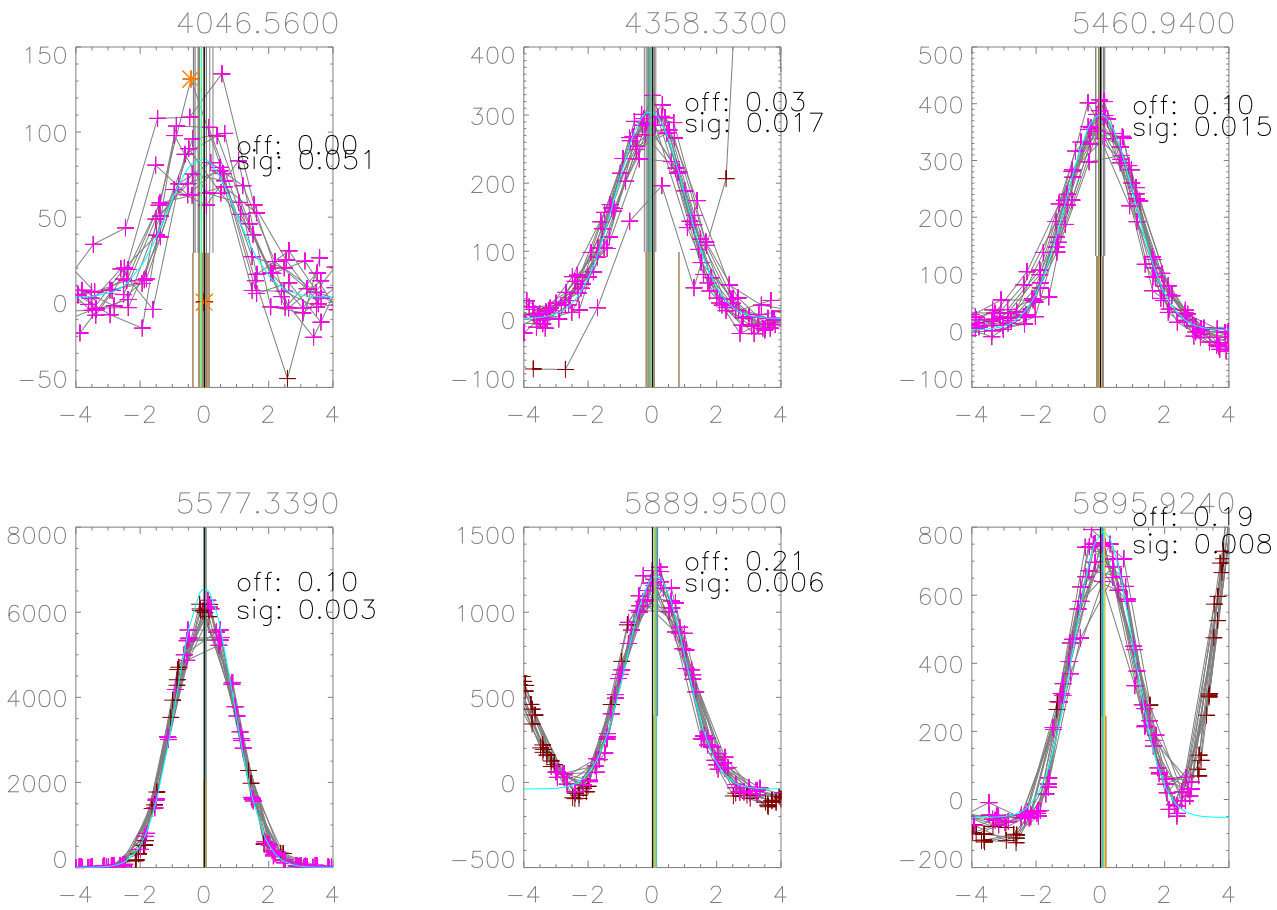

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058668.f
17.7
14.1
14.1
14.1
14.1
14.1
14.1
17.7
17.7
14.1
14.1
14.1
14.1
17.7
17.7
14.1
14.1
14.1
14.1
17.7
17.7

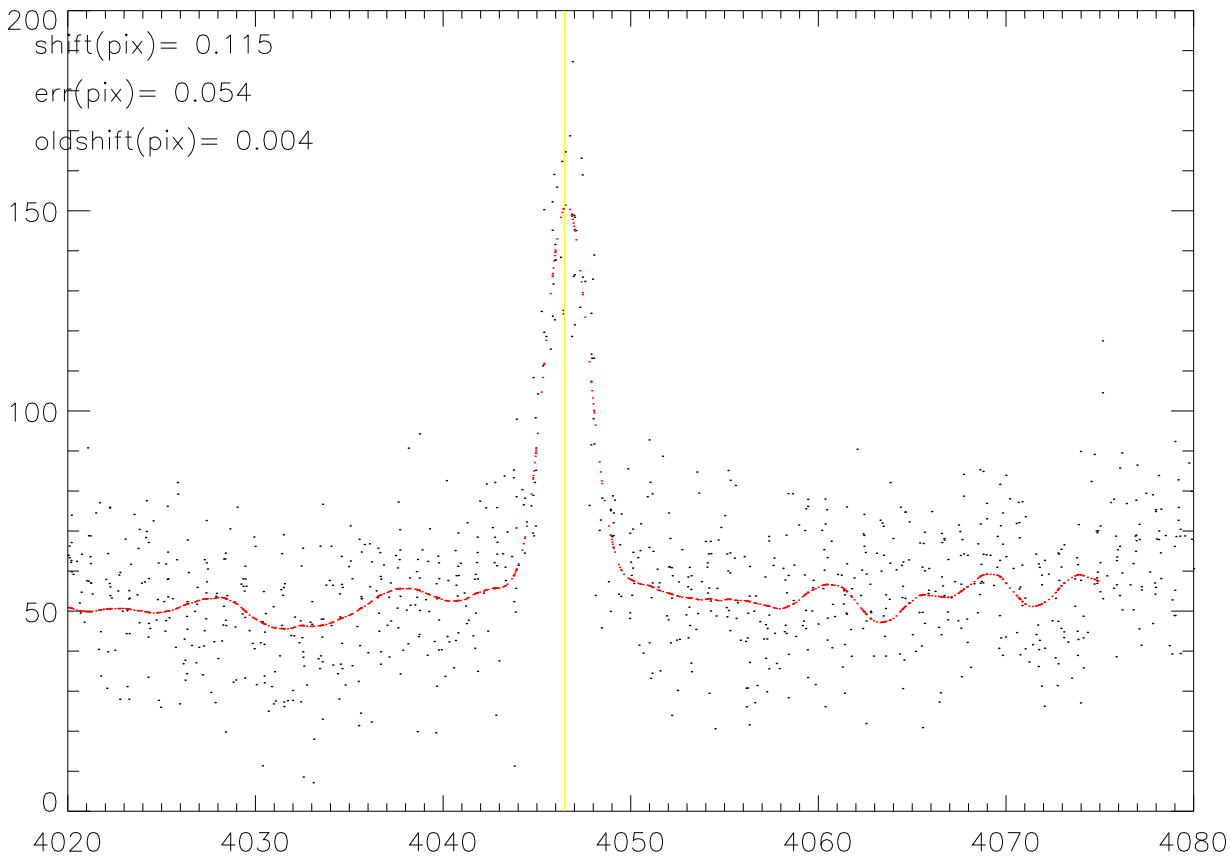

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058668.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.643
Max value = 17.371
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:23:10 2010

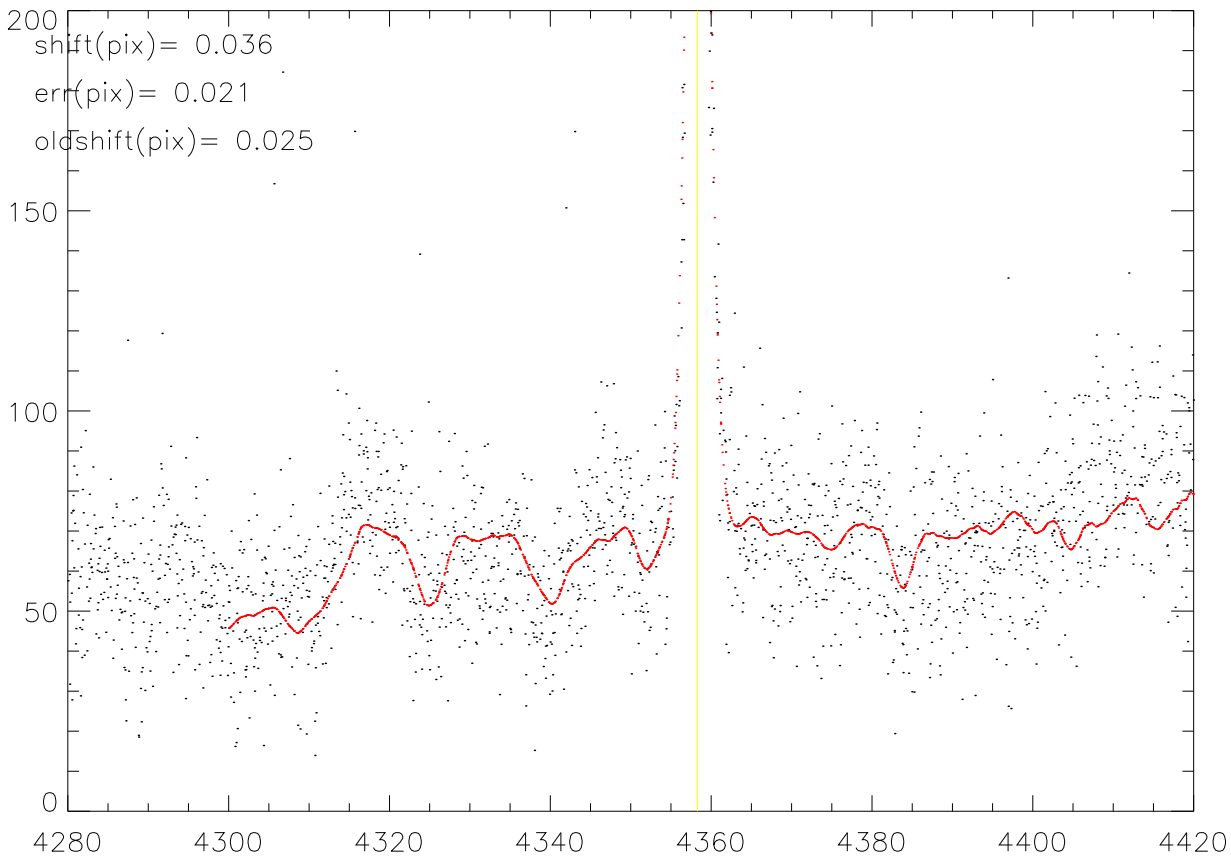

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058668.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.4
7.8
12.9

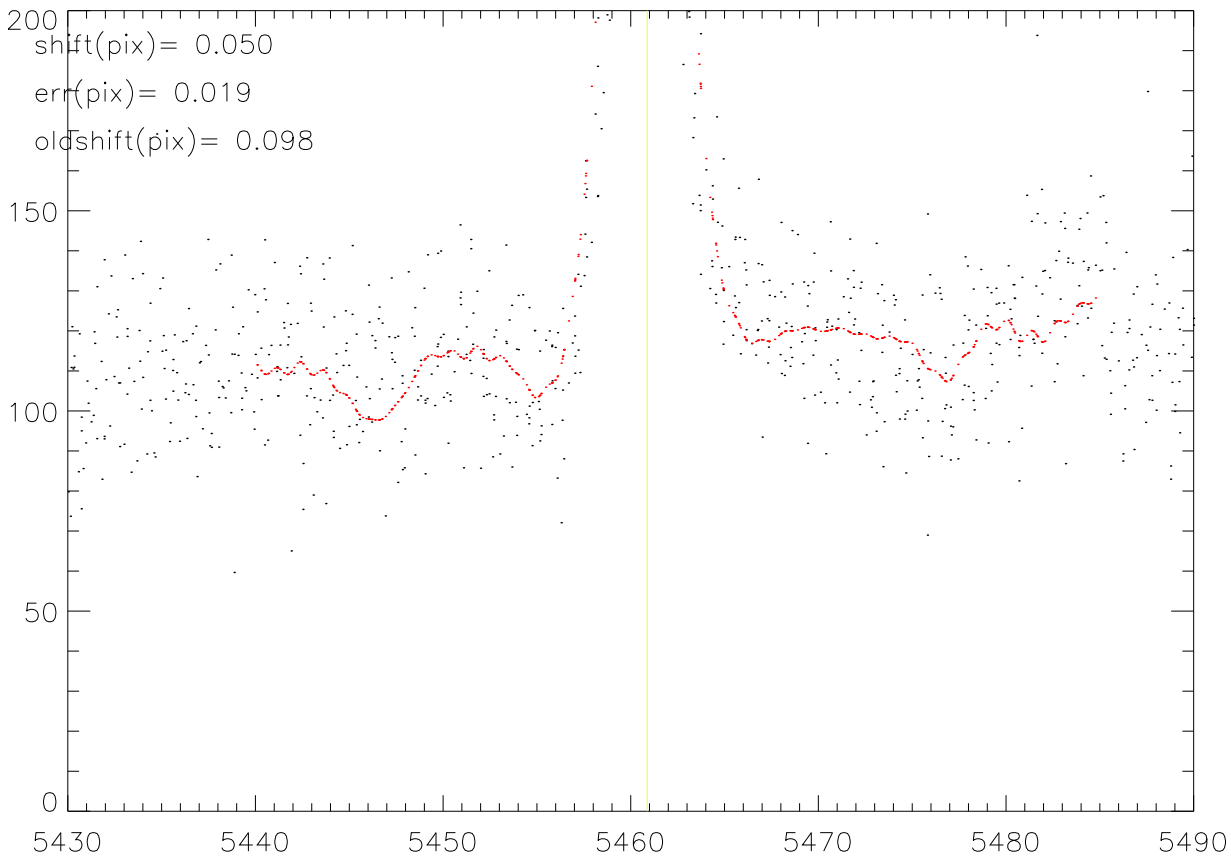

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058668.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.244
Max value = 12.392
Fri Mar 12 14:26:50 2010

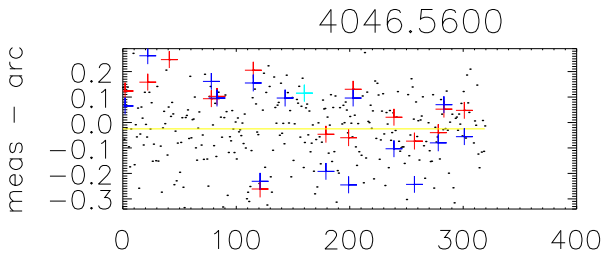

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b2-00058668.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

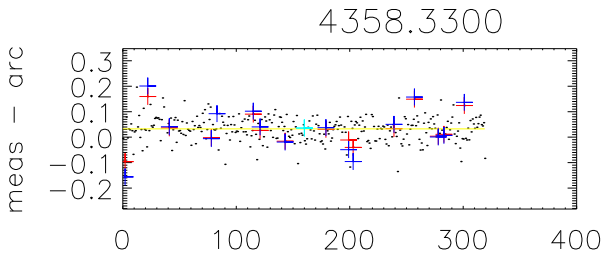

4046.5600
off: 0.00
sig: 0.051
4358.3300
off: 0.03
sig: 0.017
5460.9400
off: 0.10
sig: 0.015
5577.3390
off: 0.10
sig: 0.003
5889.9500
off: 0.21
sig: 0.006
5895.9240
off: 0.19
sig: 0.008

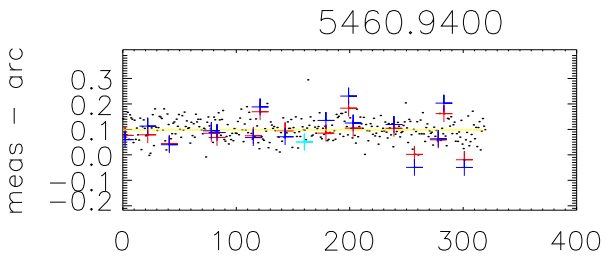

shift(pix)= 0.115
err(pix)= 0.054
oldshift(pix)= 0.004
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

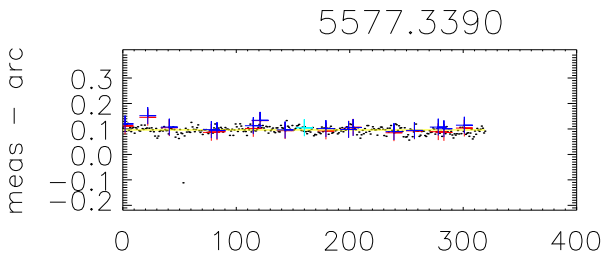

shift(pix)= 0.036
err(pix)= 0.021
oldshift(pix)= 0.025
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

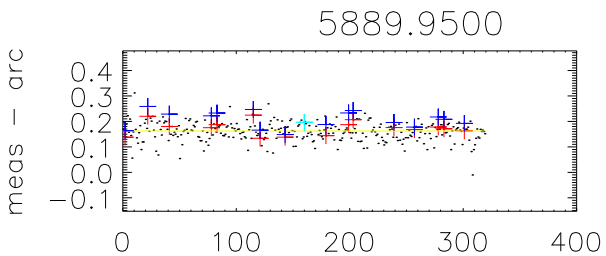

shift(pix)= 0.050
err(pix)= 0.019
oldshift(pix)= 0.098
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

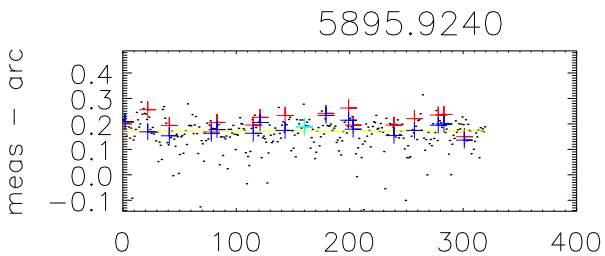

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

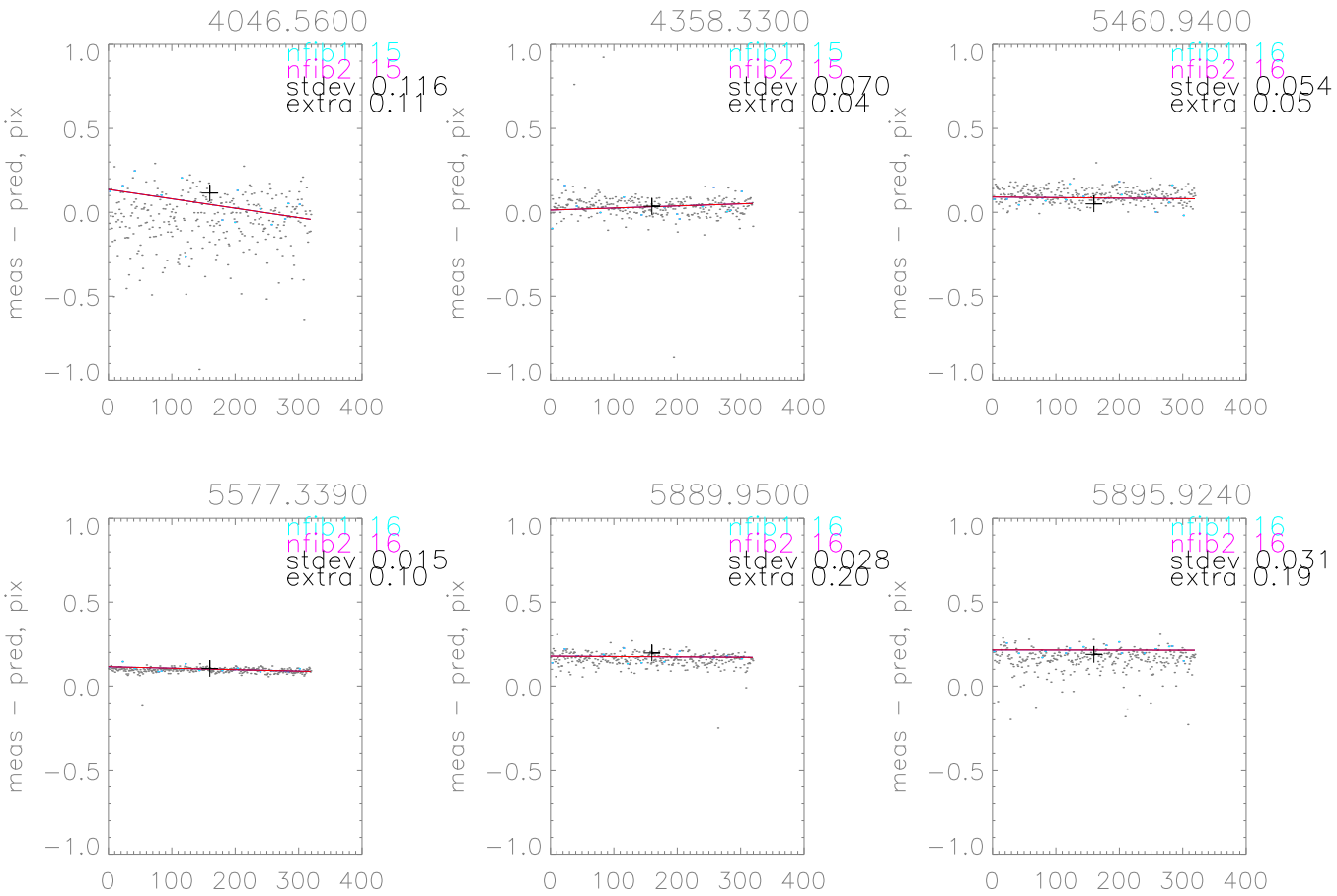

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

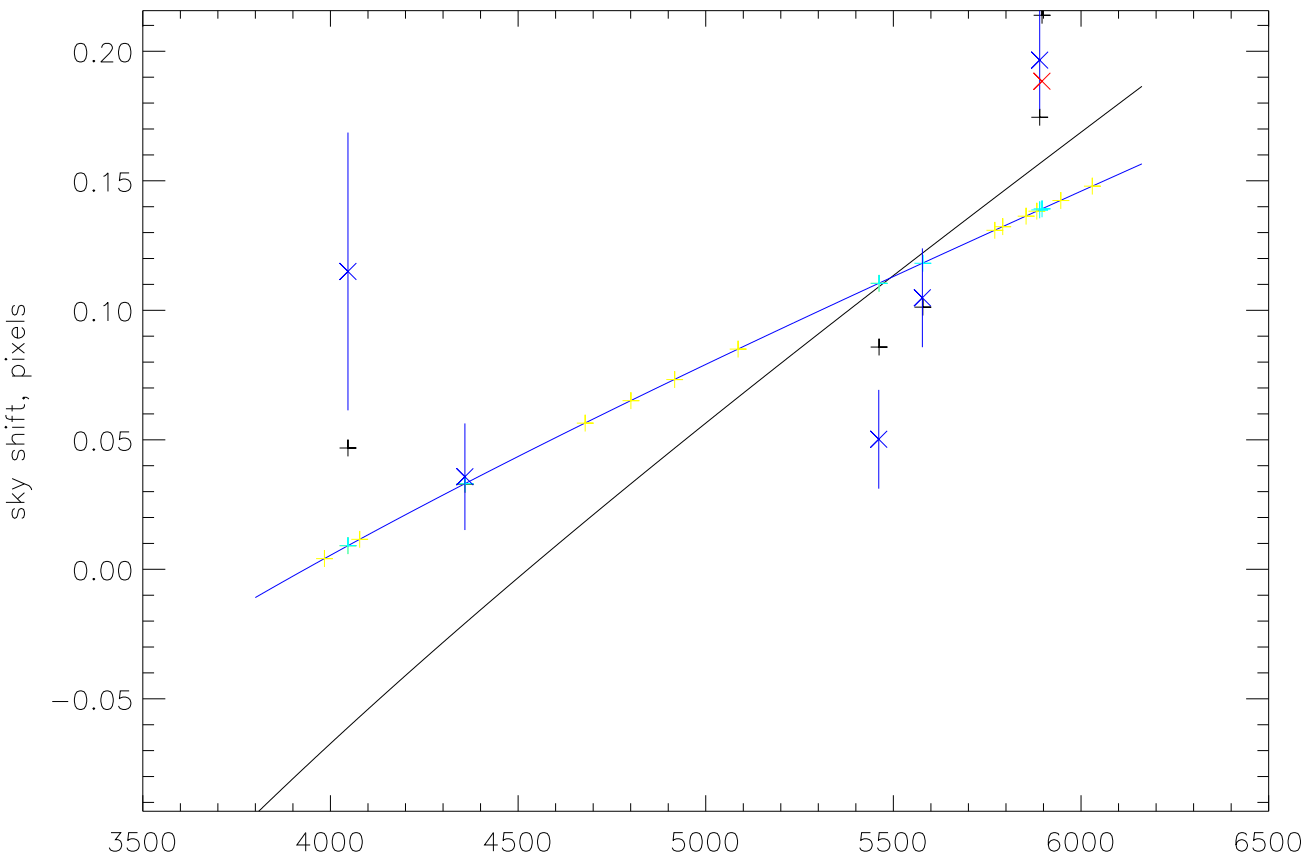

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

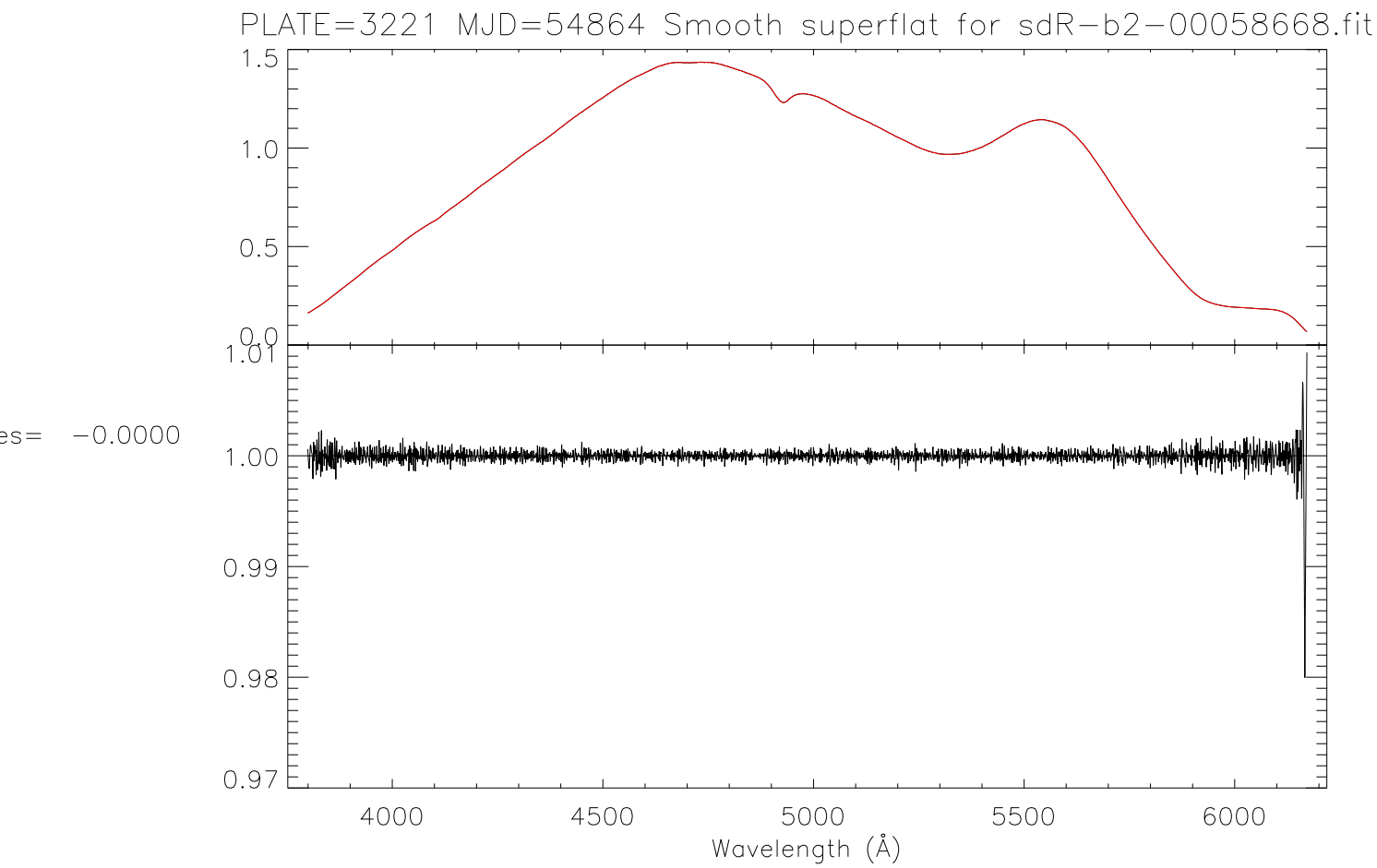

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

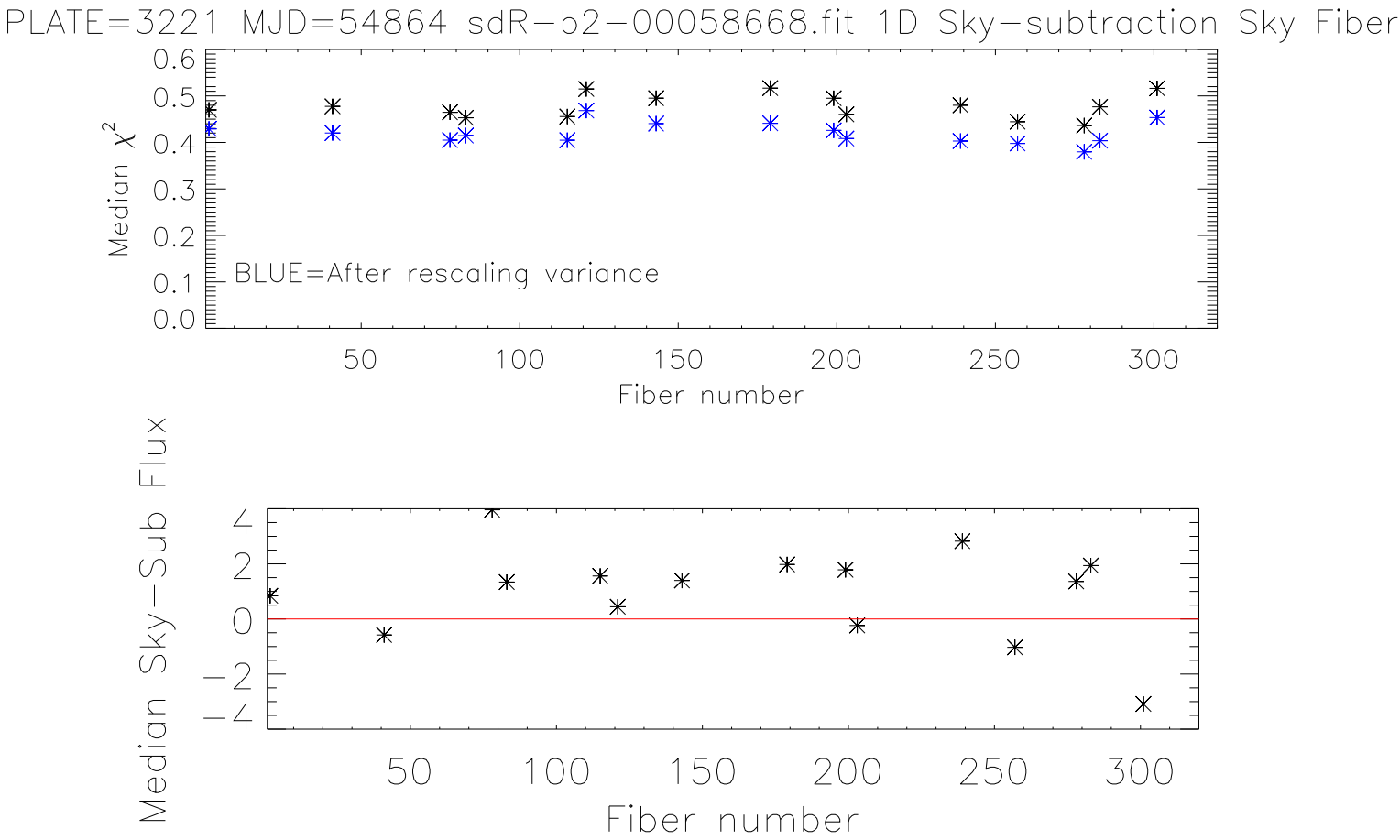

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

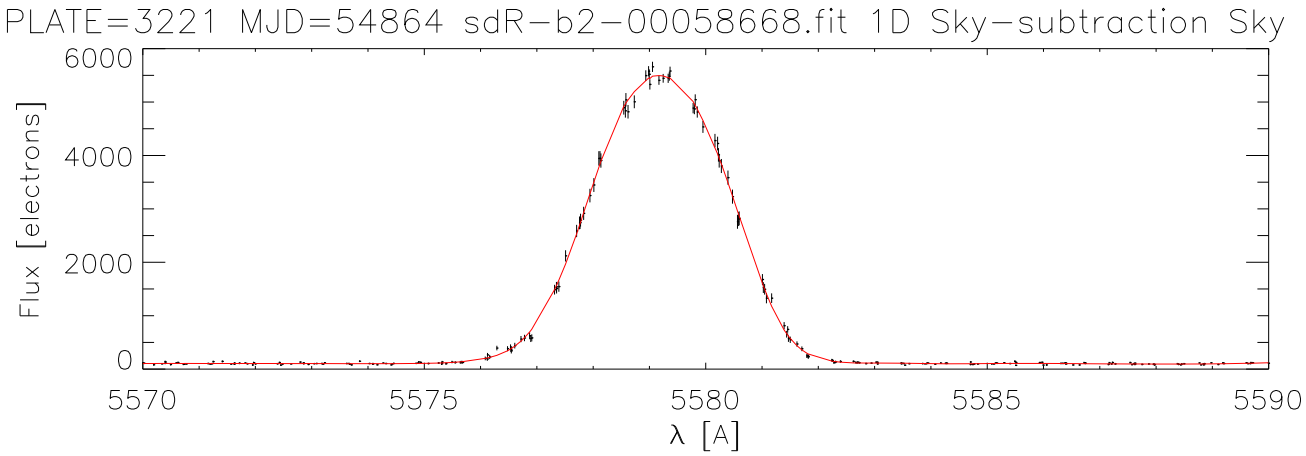

4046.5600
nfib1 15
nfib2 15
stdev 0.116
extra 0.11
4358.3300
nfib1 15
nfib2 15
stdev 0.070
extra 0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.054
extra 0.05
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.028
extra 0.20
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

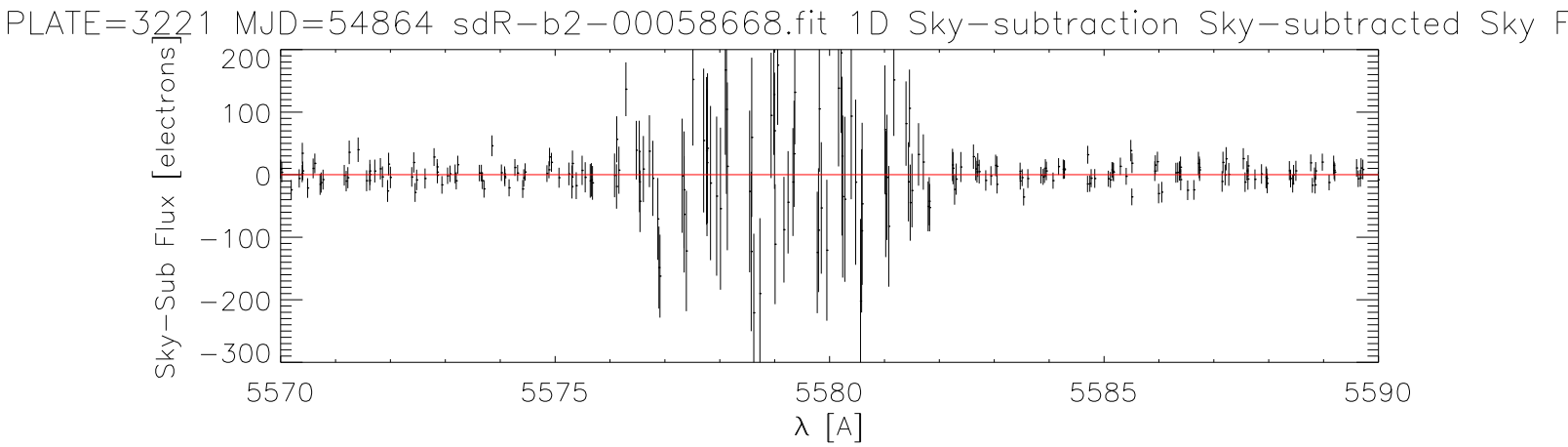

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

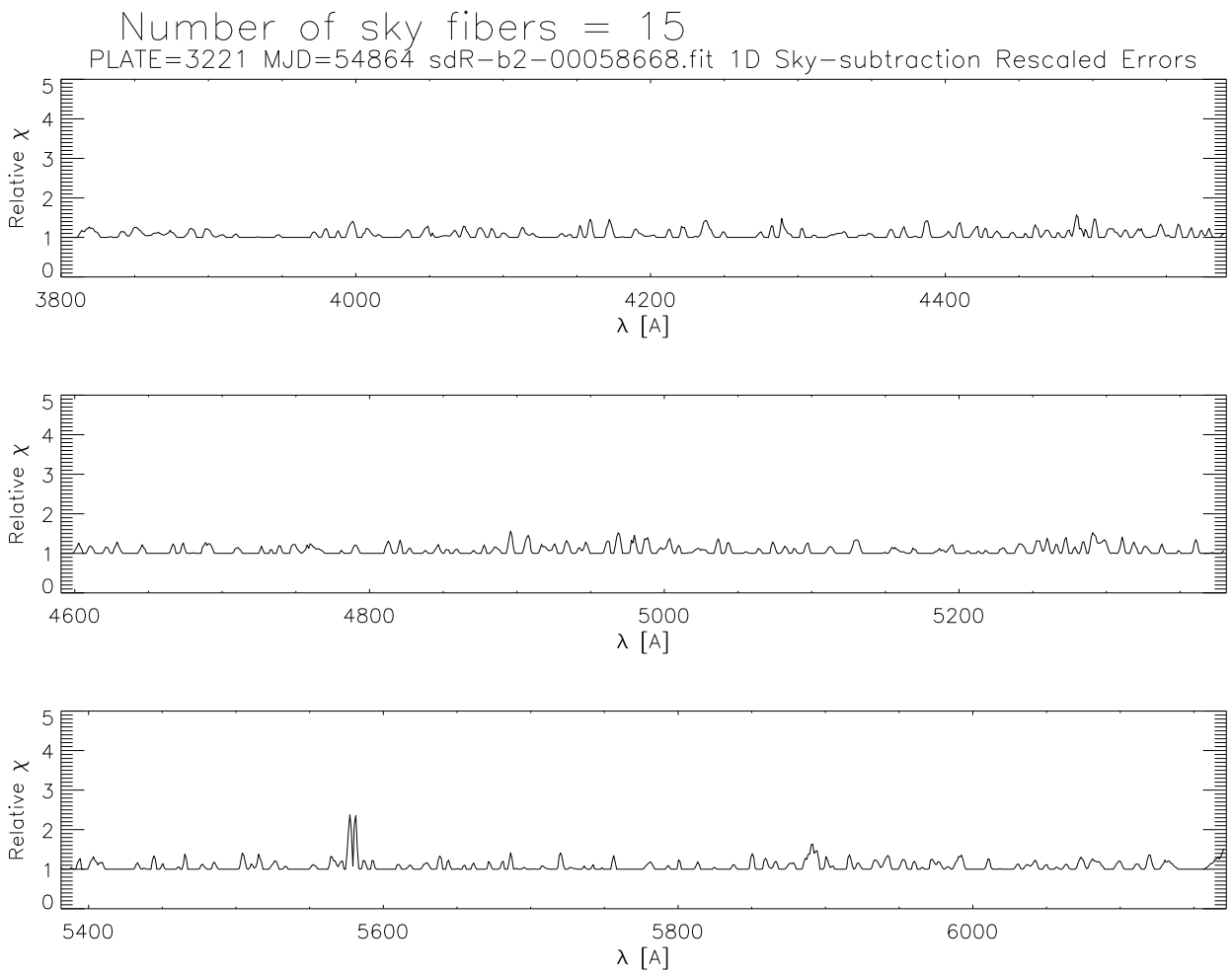

PLATE=3221 MJD=54864 Smooth superflat for sdR-b2-00058668.fit
1.5
1.0
0.5
0.0
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

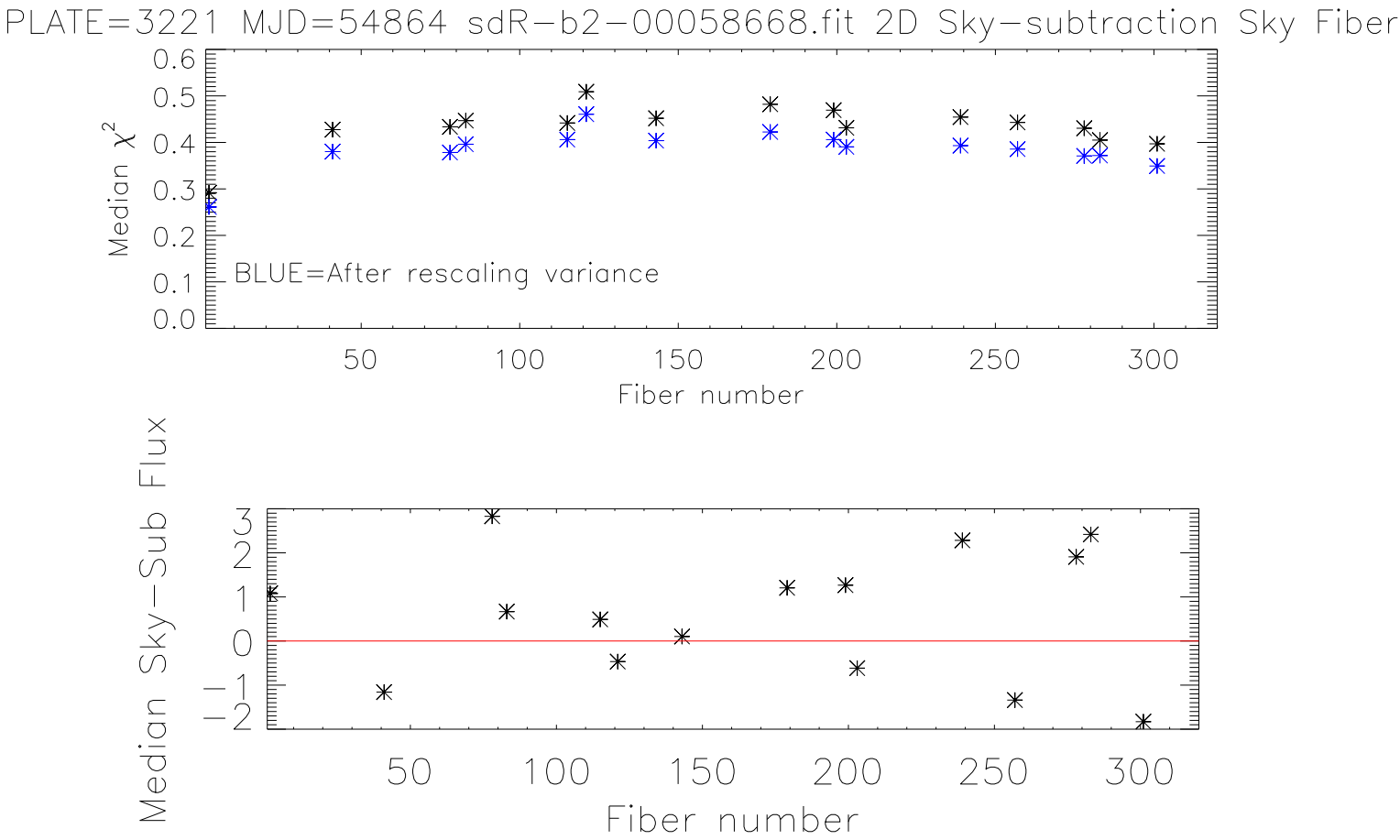
es= −0.0000

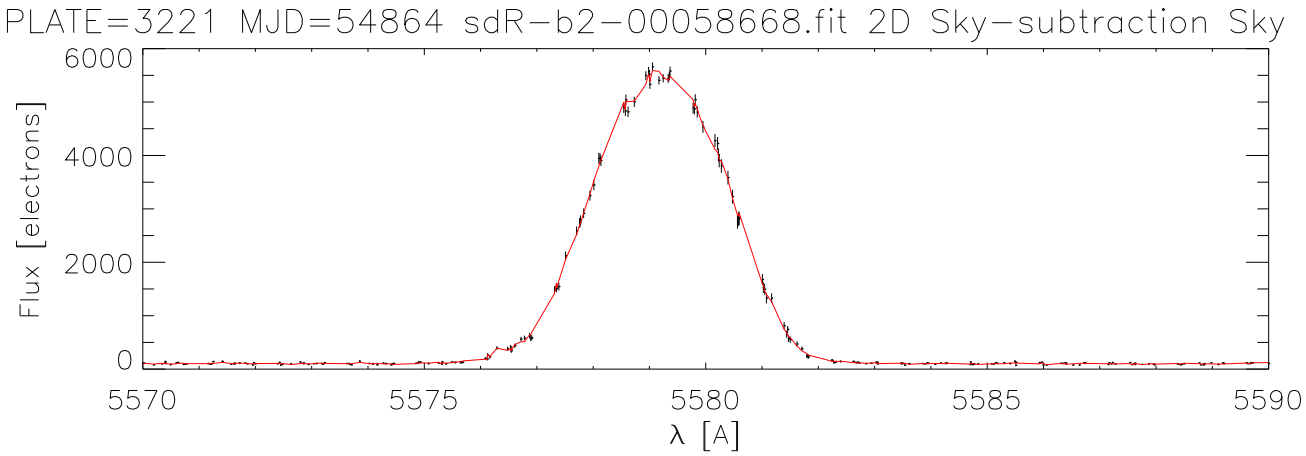

PLATE=3221 MJD=54864 sdR-b2-00058668.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

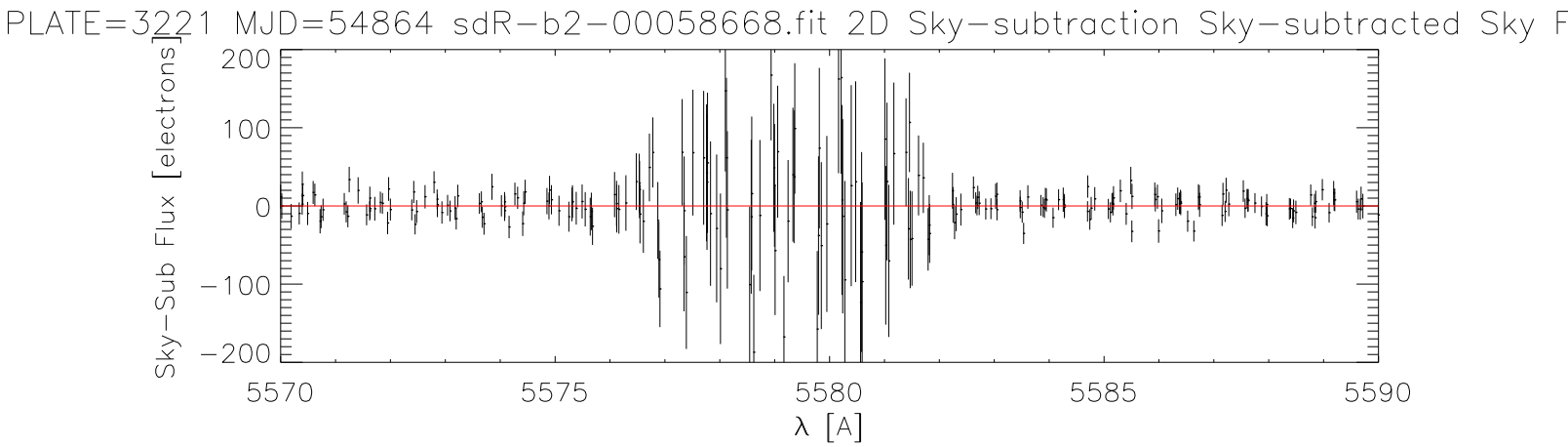

PLATE=3221 MJD=54864 sdR-b2-00058668.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

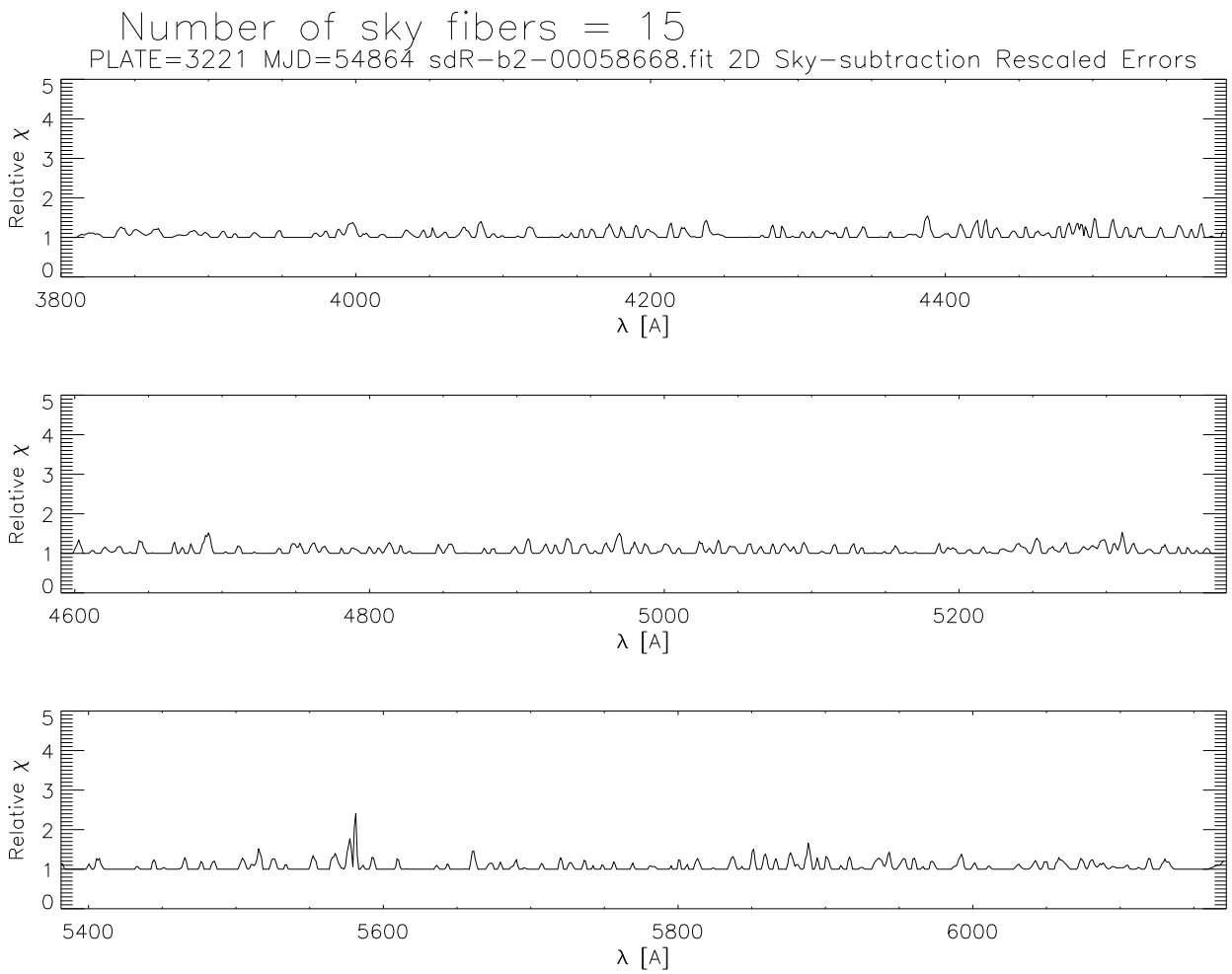

PLATE=3221 MJD=54864 sdR-b2-00058668.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

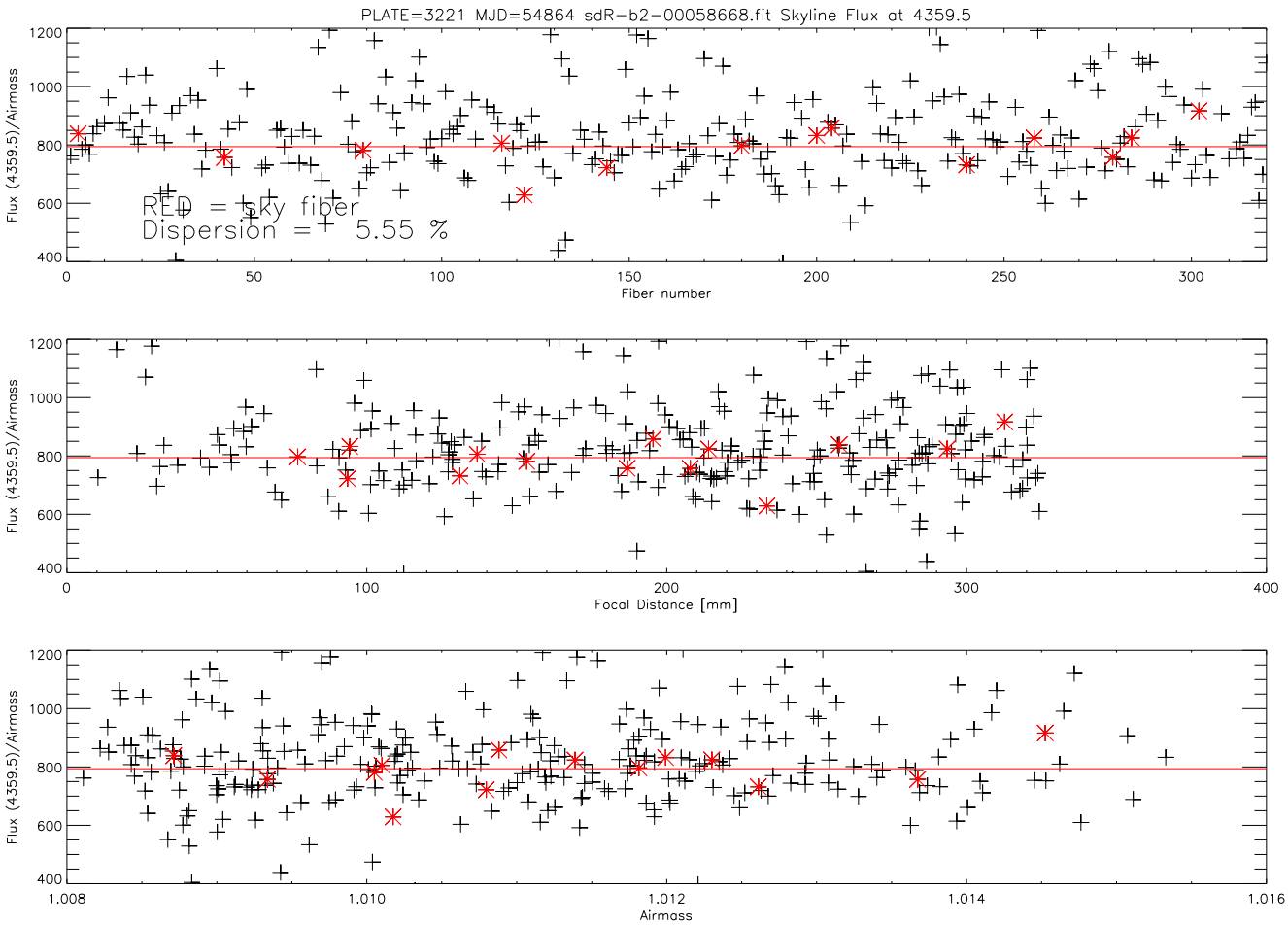

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058668.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

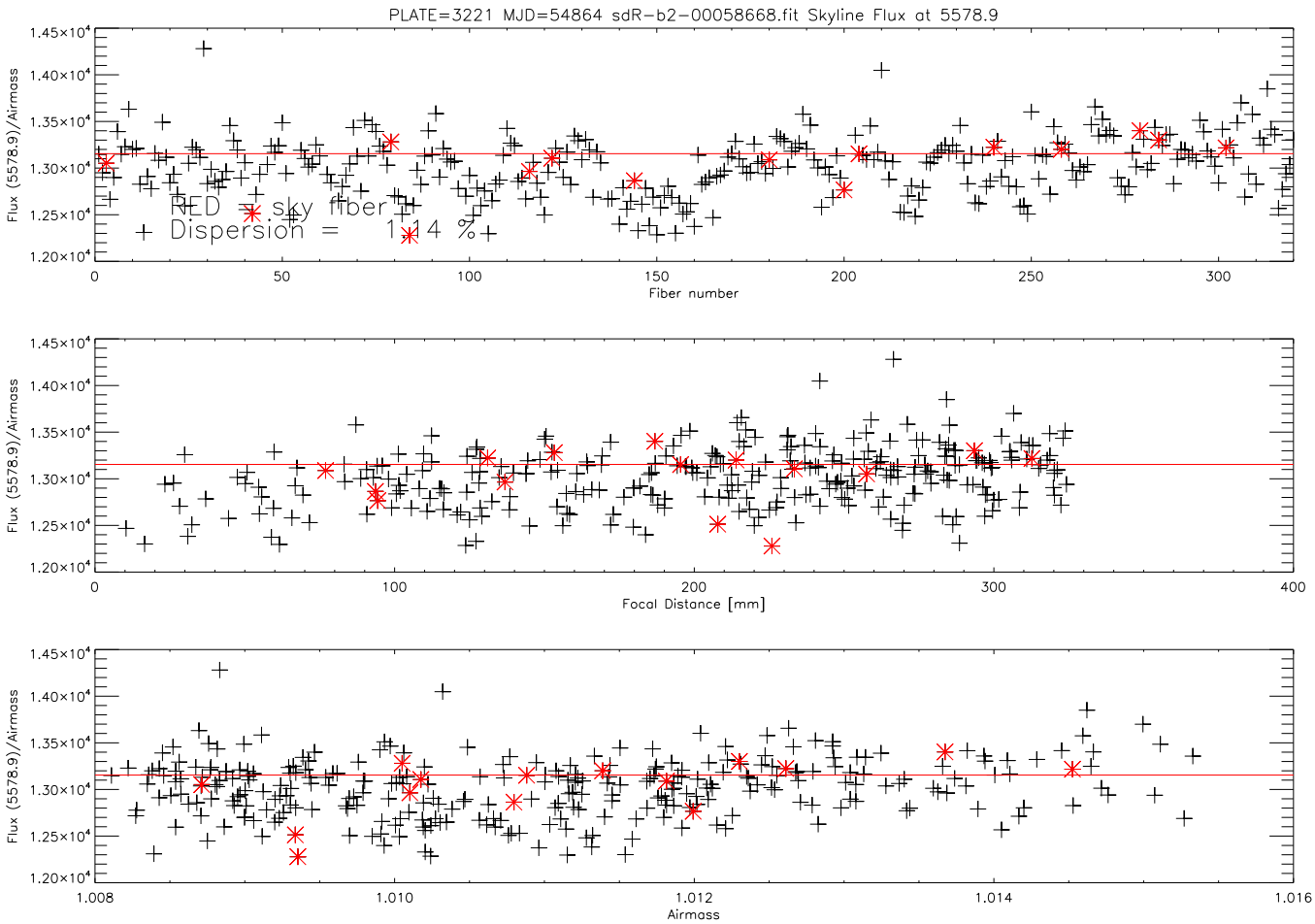

PLATE=3221 MJD=54864 sdR-b2-00058668.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

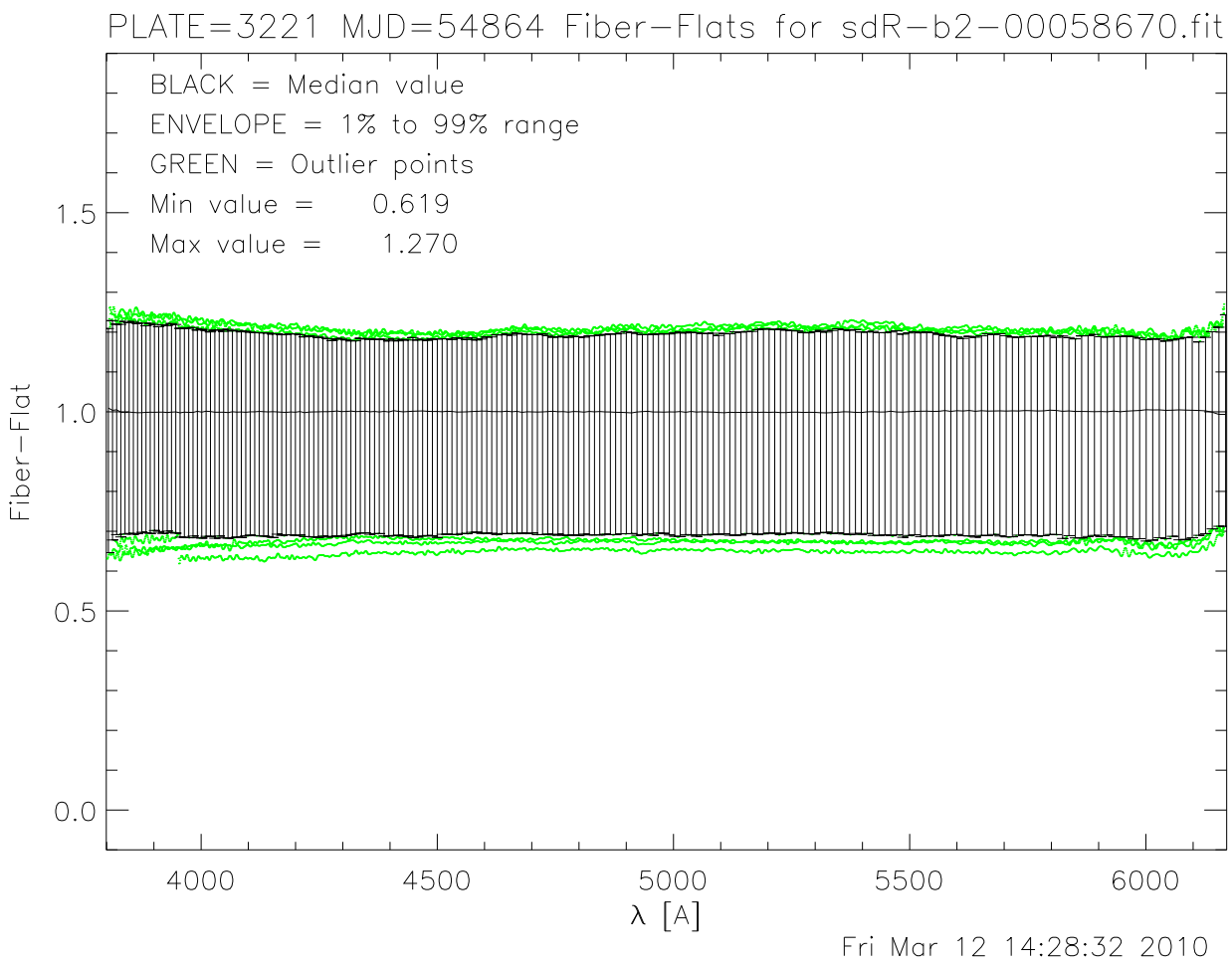

PLATE=3221 MJD=54864 sdR-b2-00058668.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

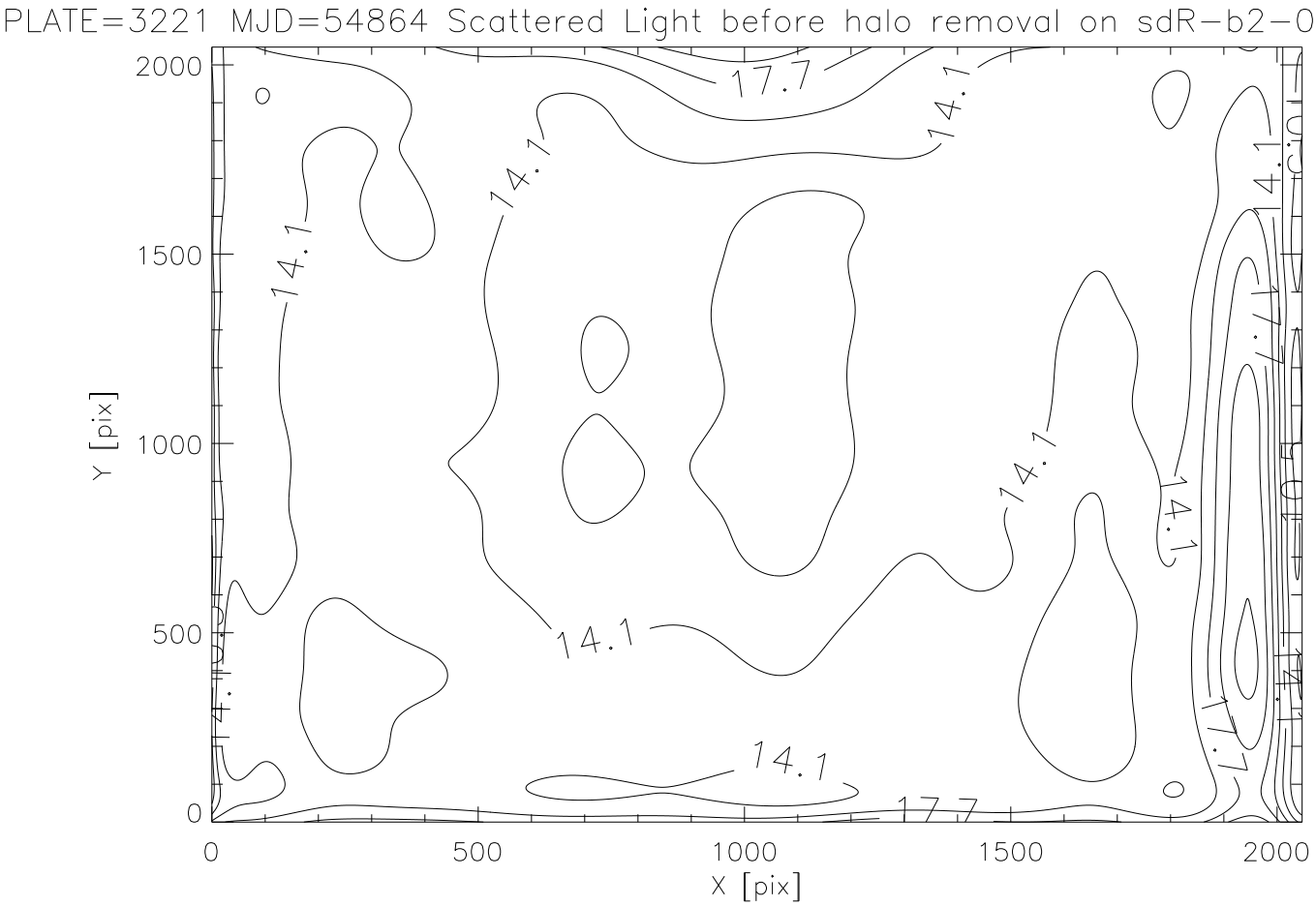

PLATE=3221 MJD=54864 sdR-b2-00058668.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

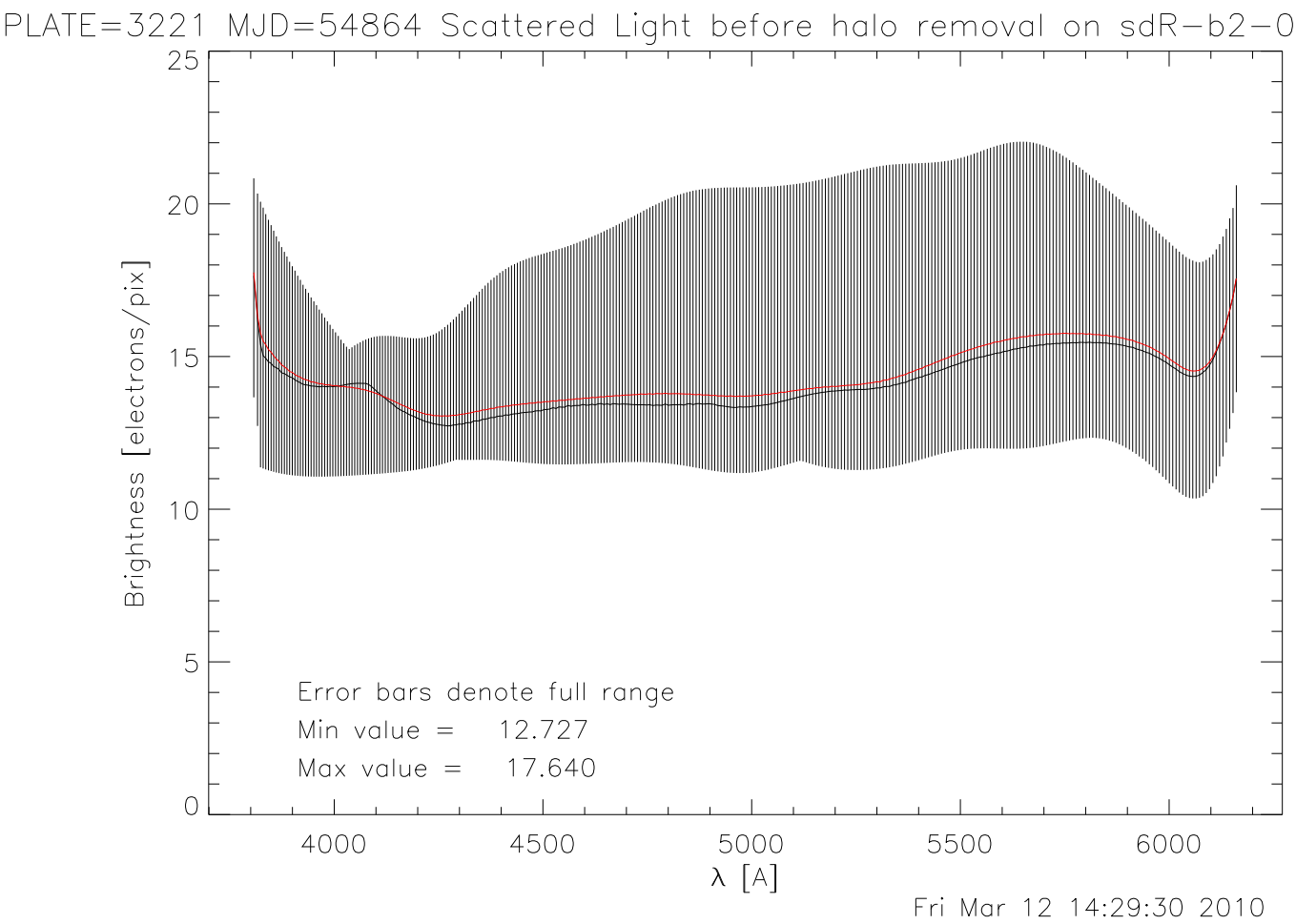

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058668.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

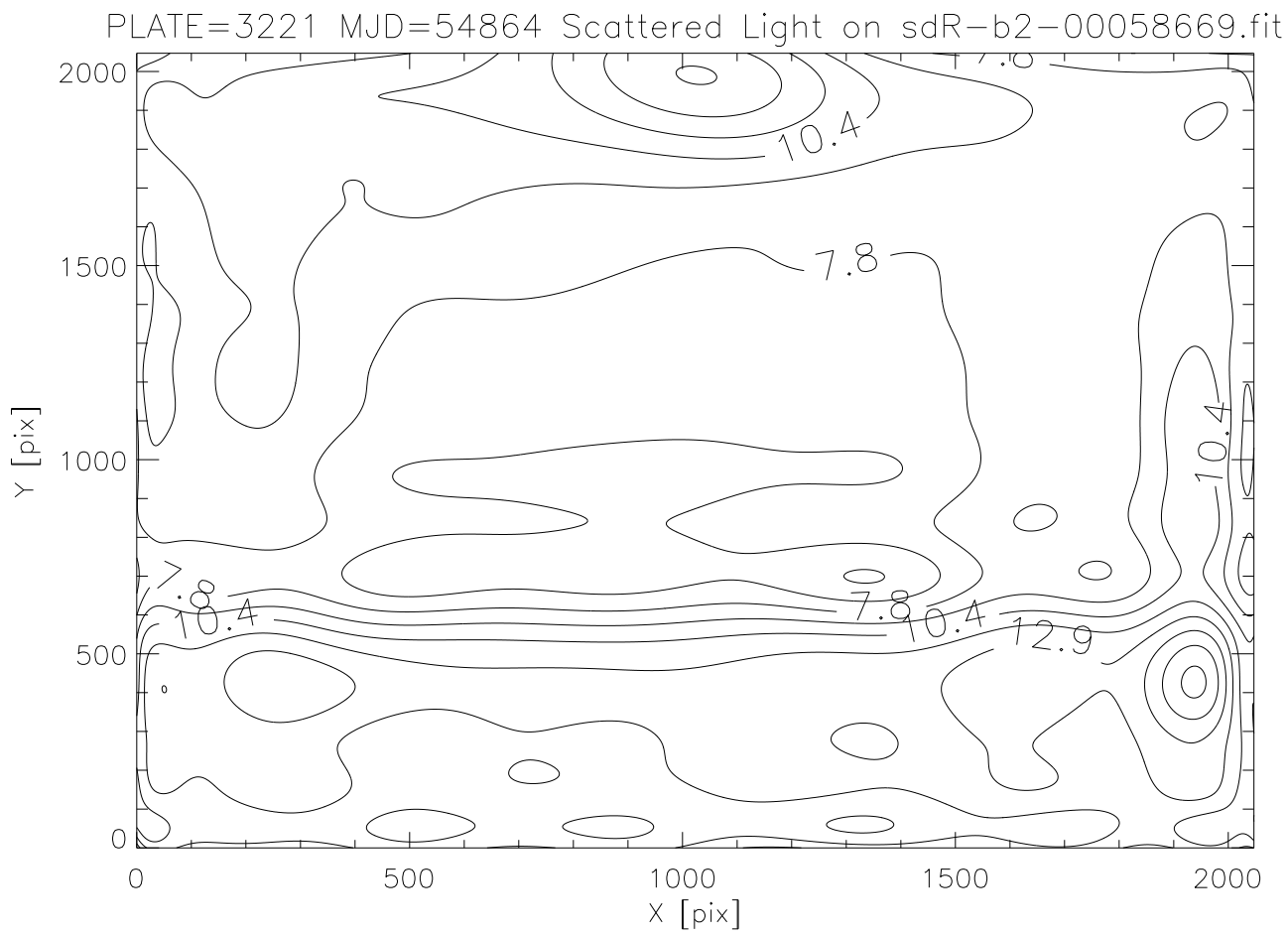

PLATE=3221 MJD=54864 sdR-b2-00058668.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 5.55 %
Flux (4359.5)/Airmass
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

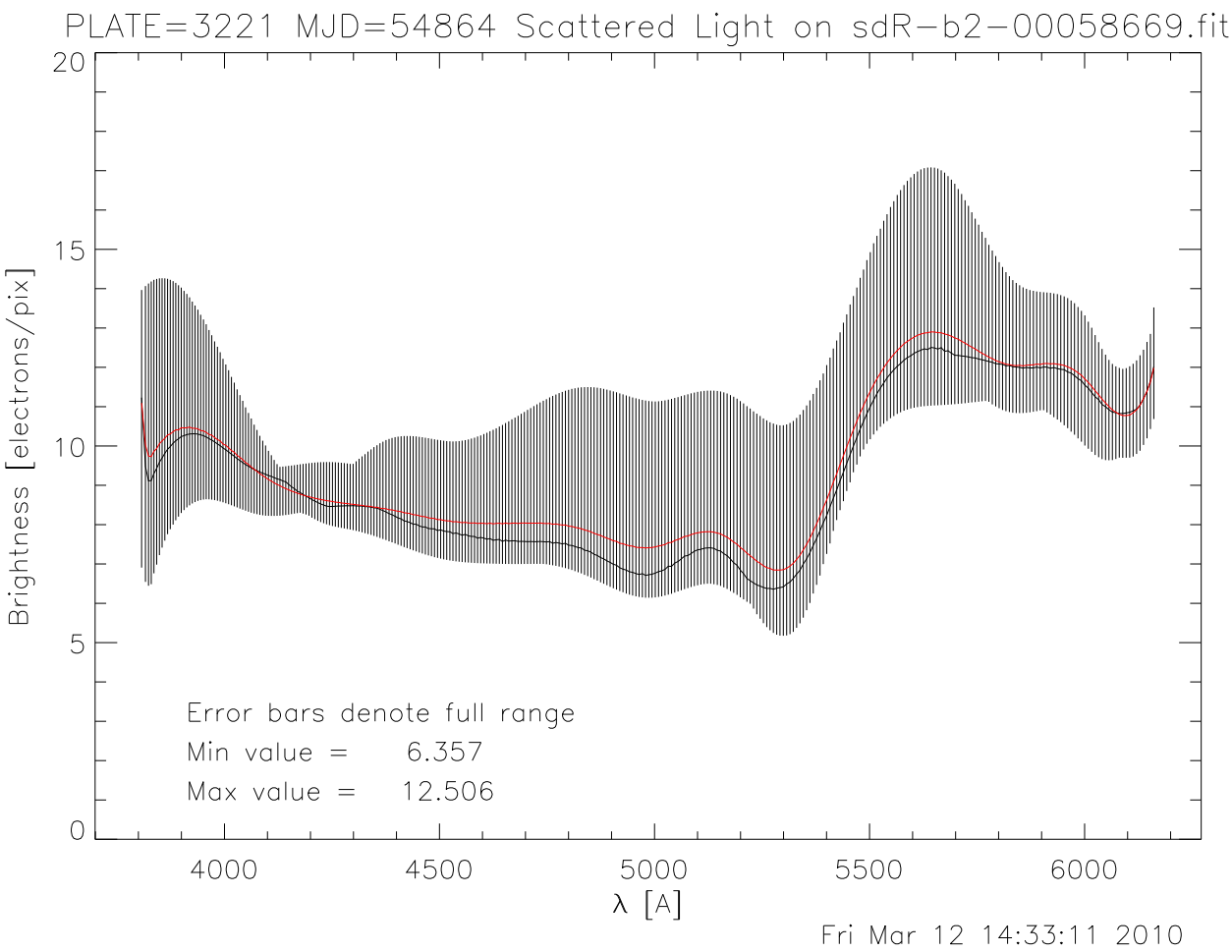

PLATE=3221 MJD=54864 sdR-b2-00058668.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.14 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

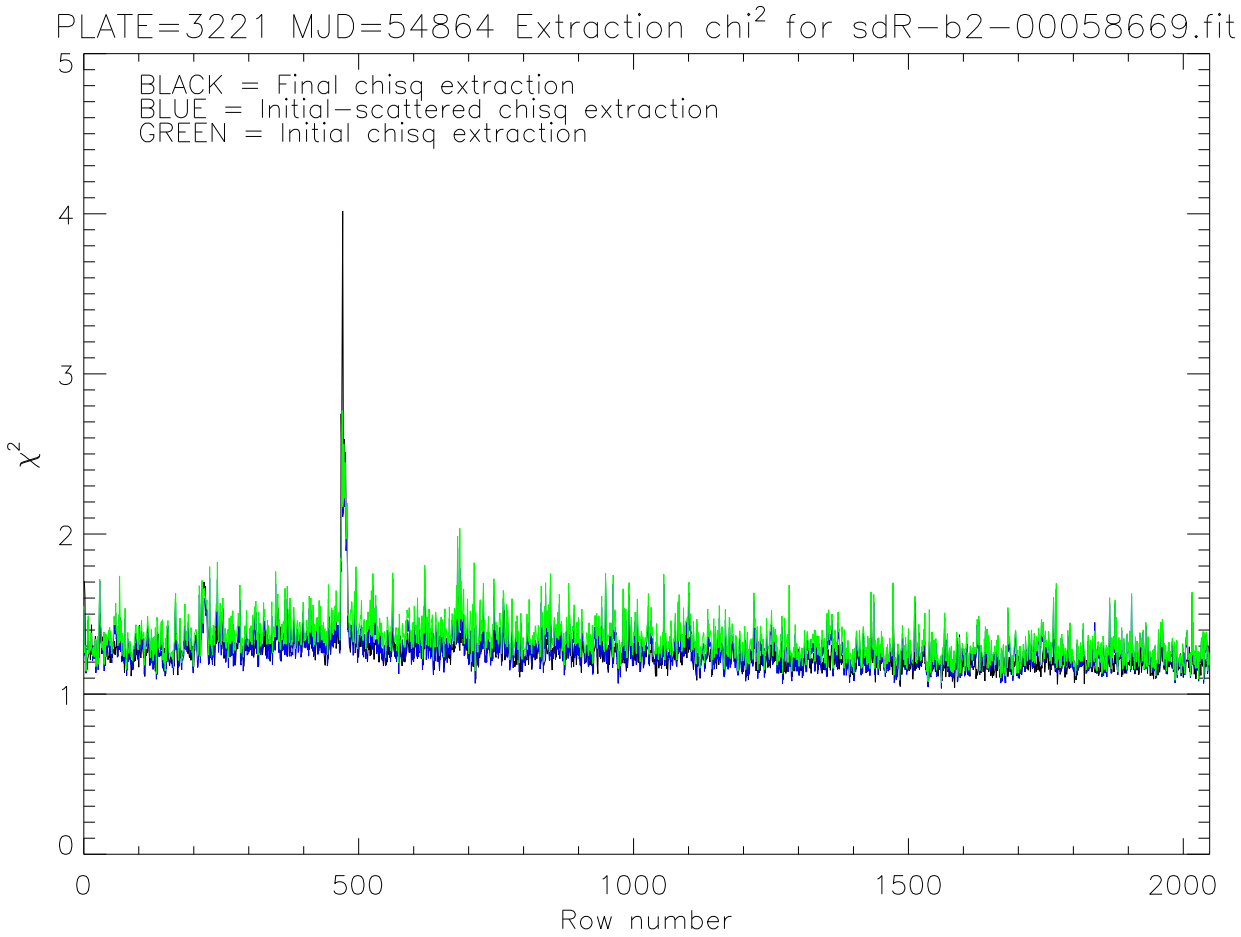

PLATE=3221 MJD=54864 Fiber-Flats for sdR-b2-00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.270
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:28:32 2010

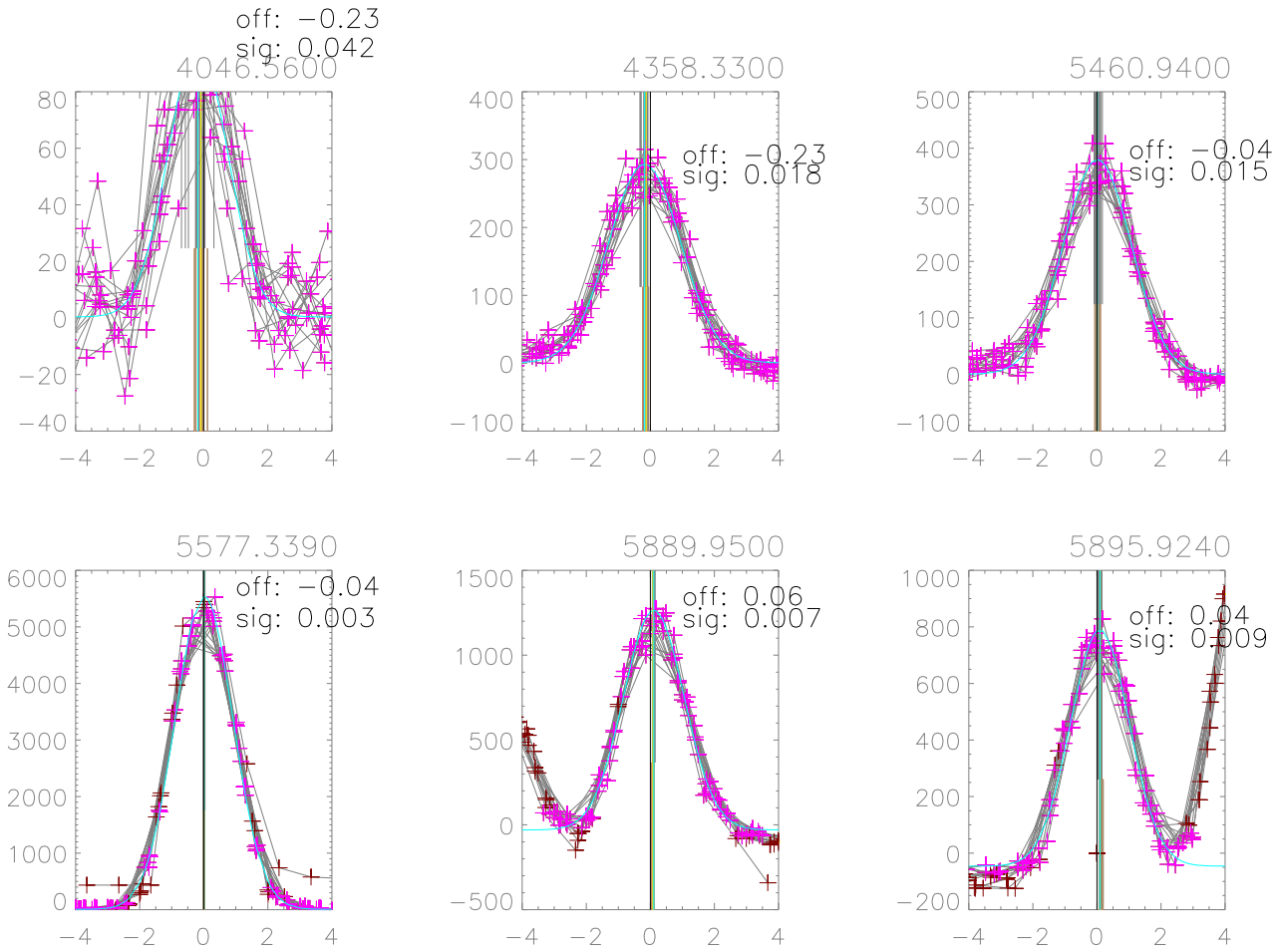

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058669.f
Y [pix]
X [pix]
0
500
1000
1500
2000
14.1
17.7

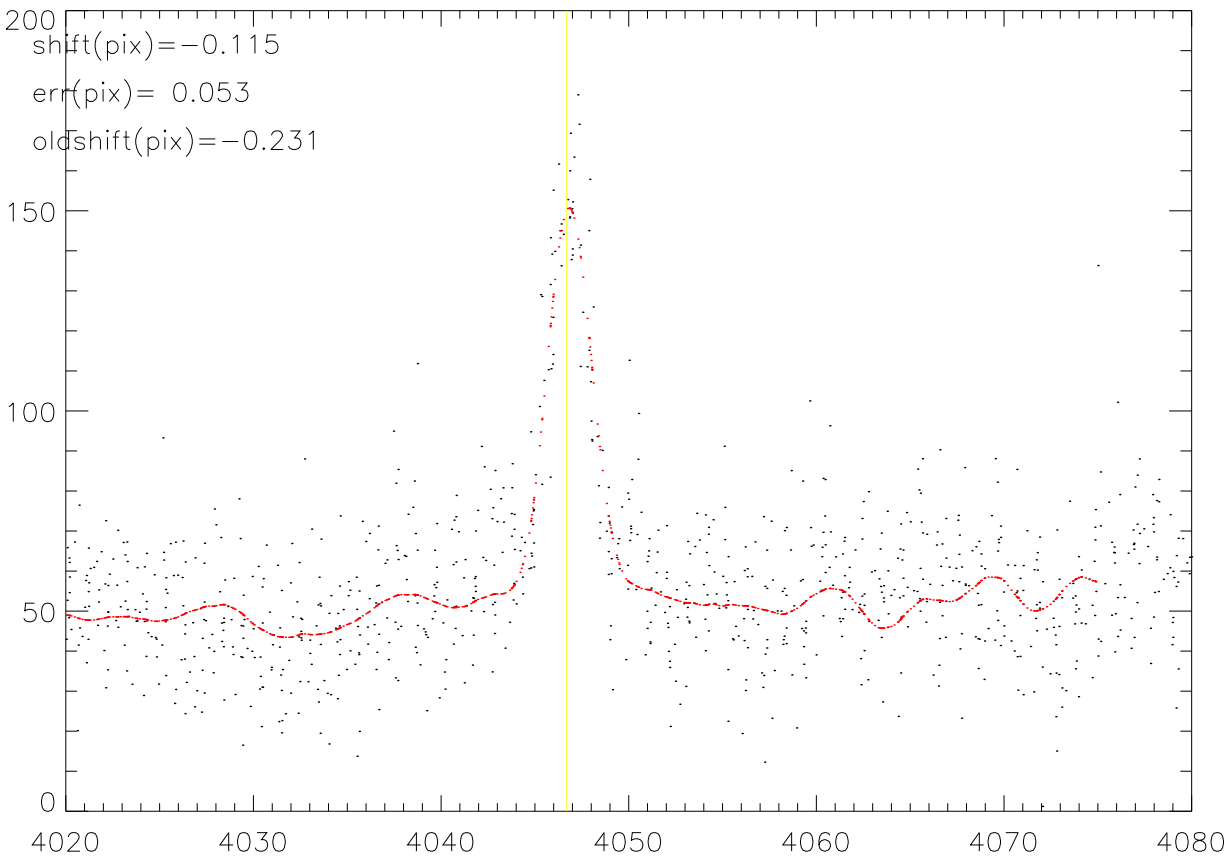

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058669.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.727
Max value = 17.640
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:29:30 2010

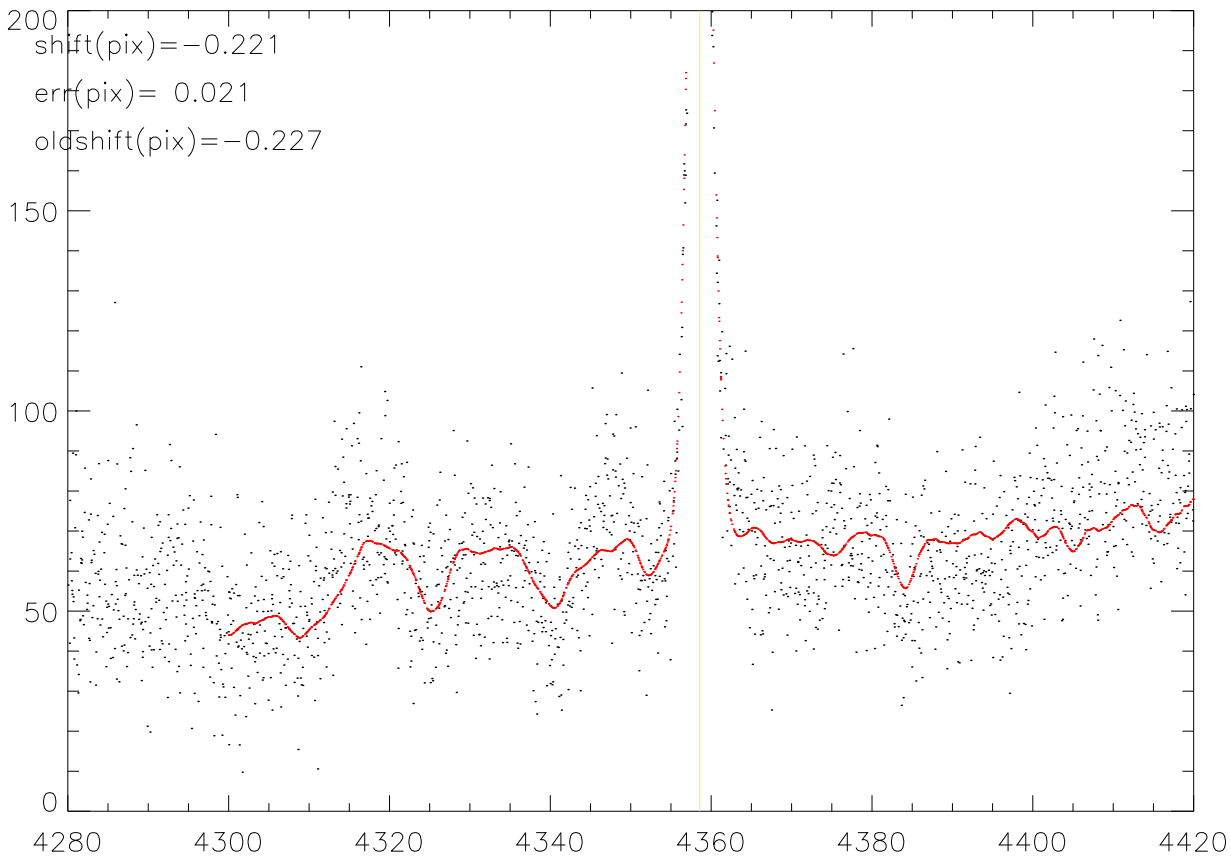

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058669.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.8
10.4
12.9

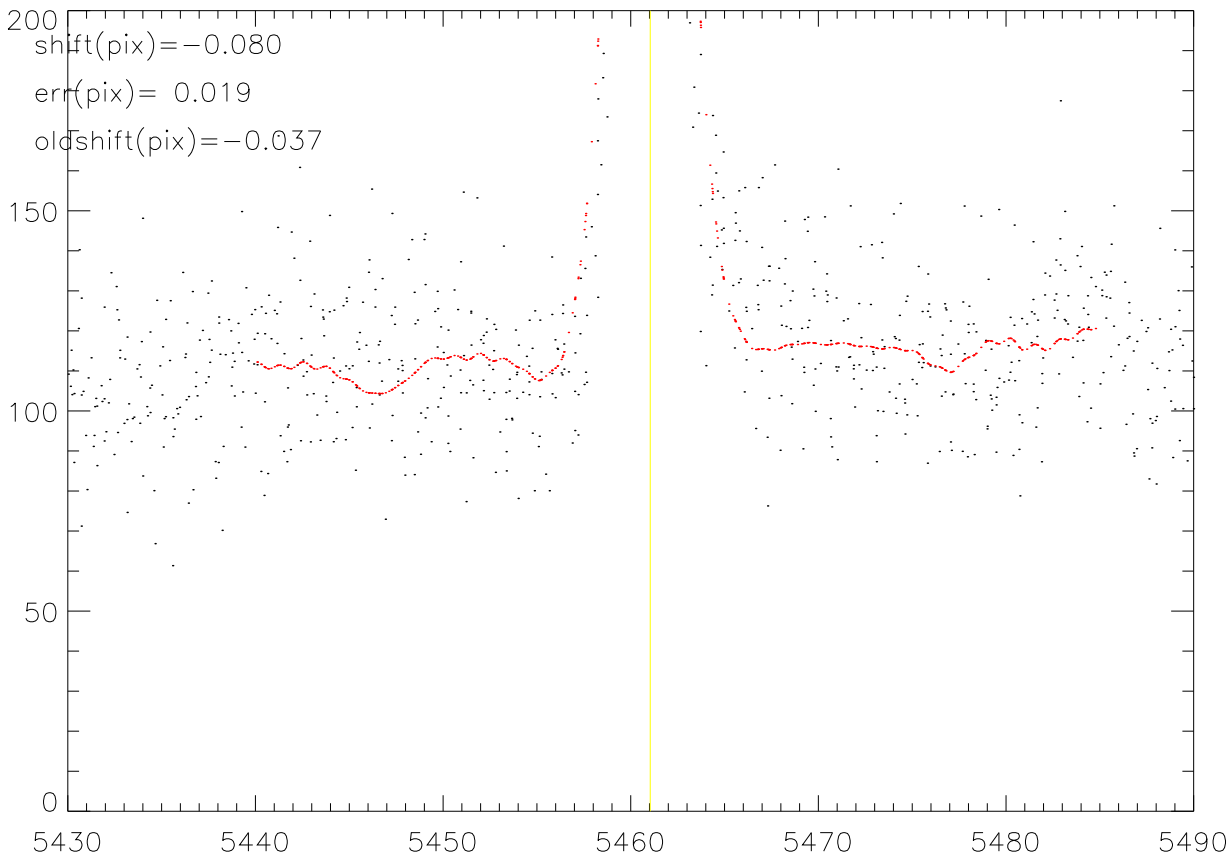

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058669.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.357
Max value = 12.506
Fri Mar 12 14:33:11 2010

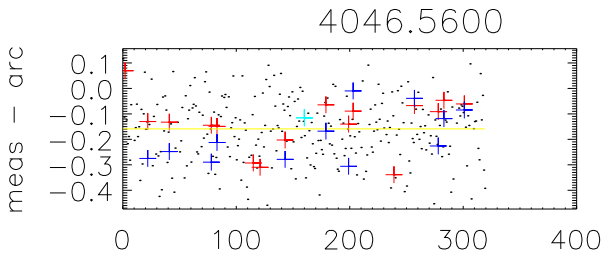

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b2-00058669.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

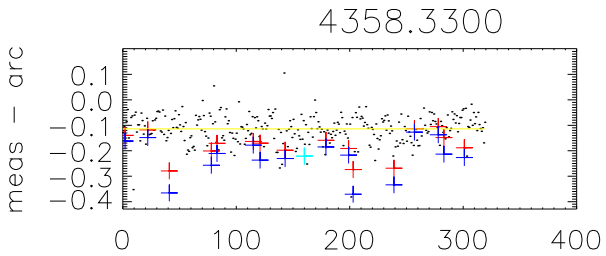

4046.5600
off: −0.23
sig: 0.042
4358.3300
off: −0.23
sig: 0.018
5460.9400
off: −0.04
sig: 0.015
5577.3390
off: −0.04
sig: 0.003
5889.9500
off: 0.06
sig: 0.007
5895.9240
off: 0.04
sig: 0.009

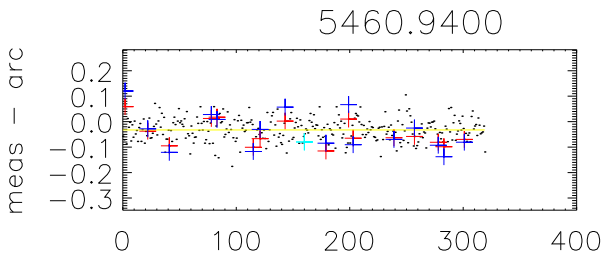

shift(pix)=−0.115
err(pix)= 0.053
oldshift(pix)=−0.231
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

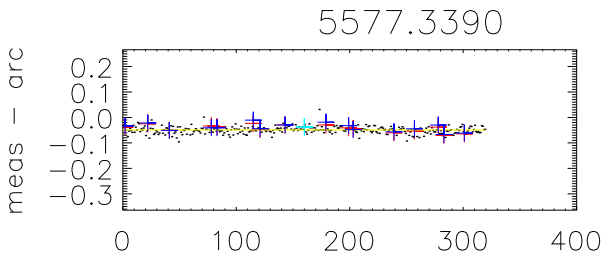

shift(pix)=−0.221
err(pix)= 0.021
oldshift(pix)=−0.227
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

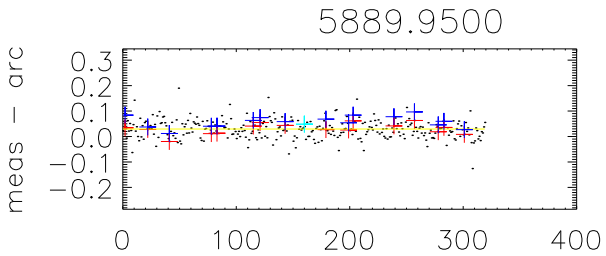

shift(pix)=−0.080
err(pix)= 0.019
oldshift(pix)=−0.037
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

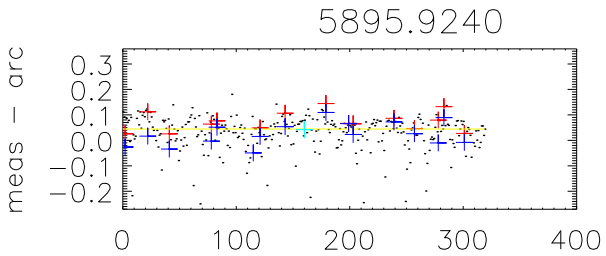

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

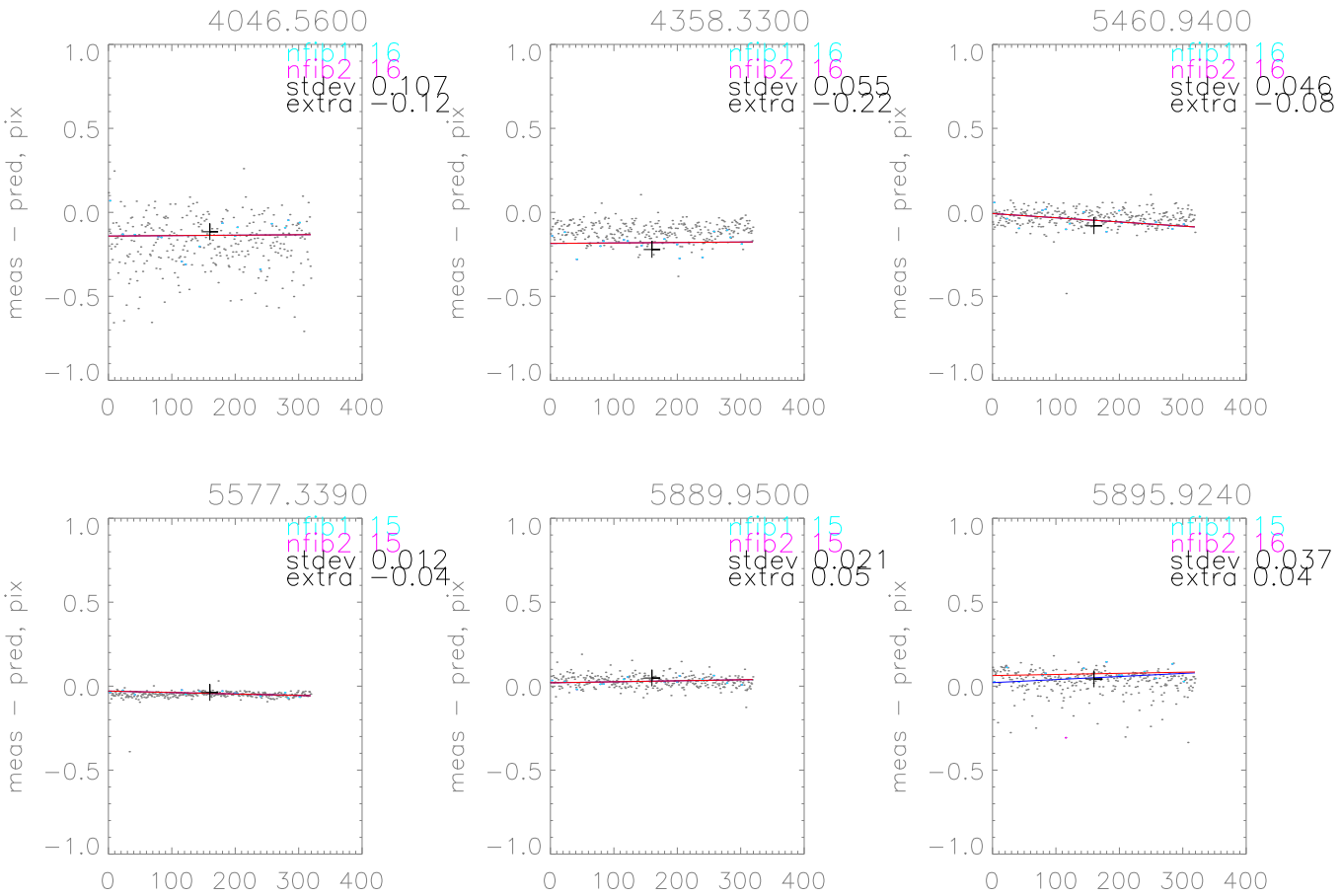

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

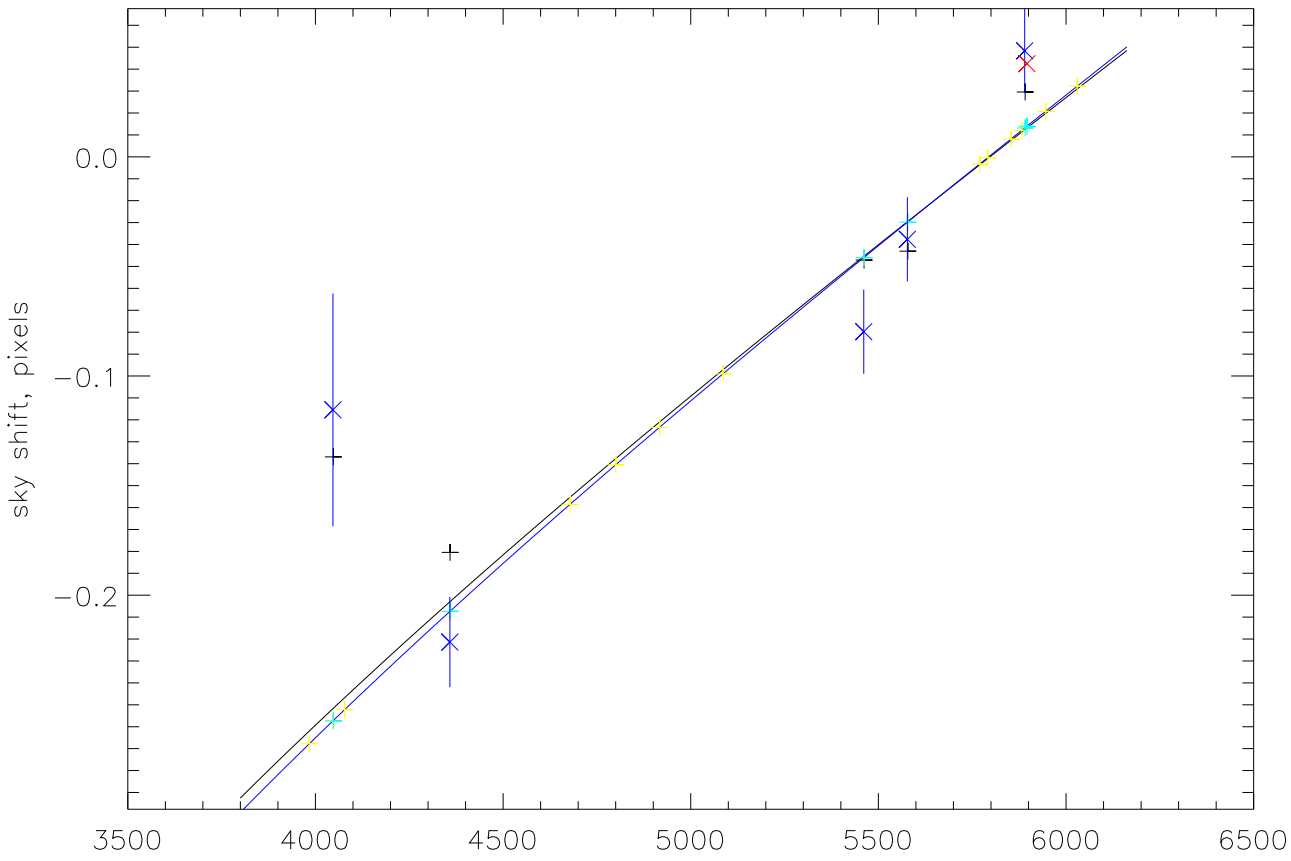

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

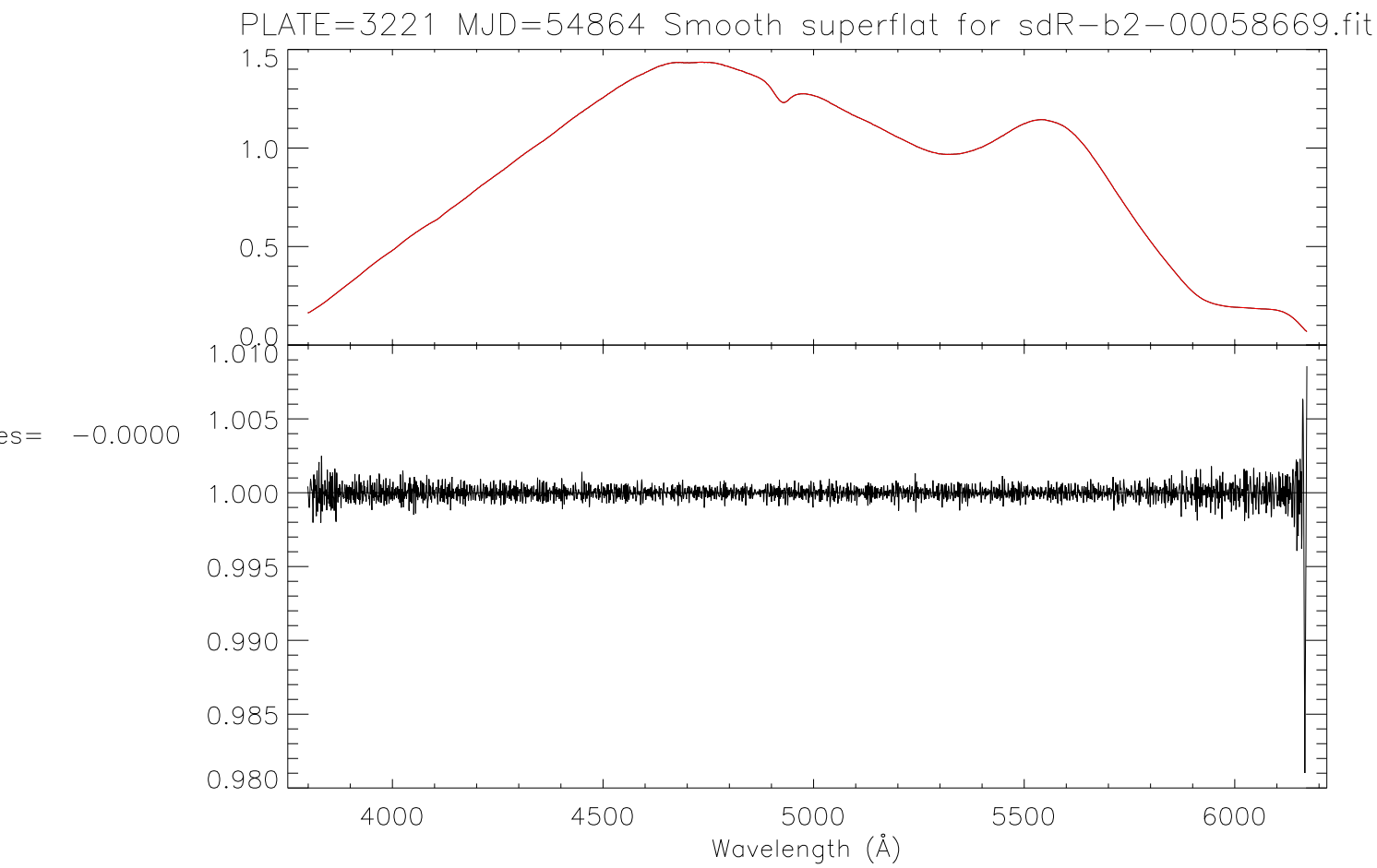

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

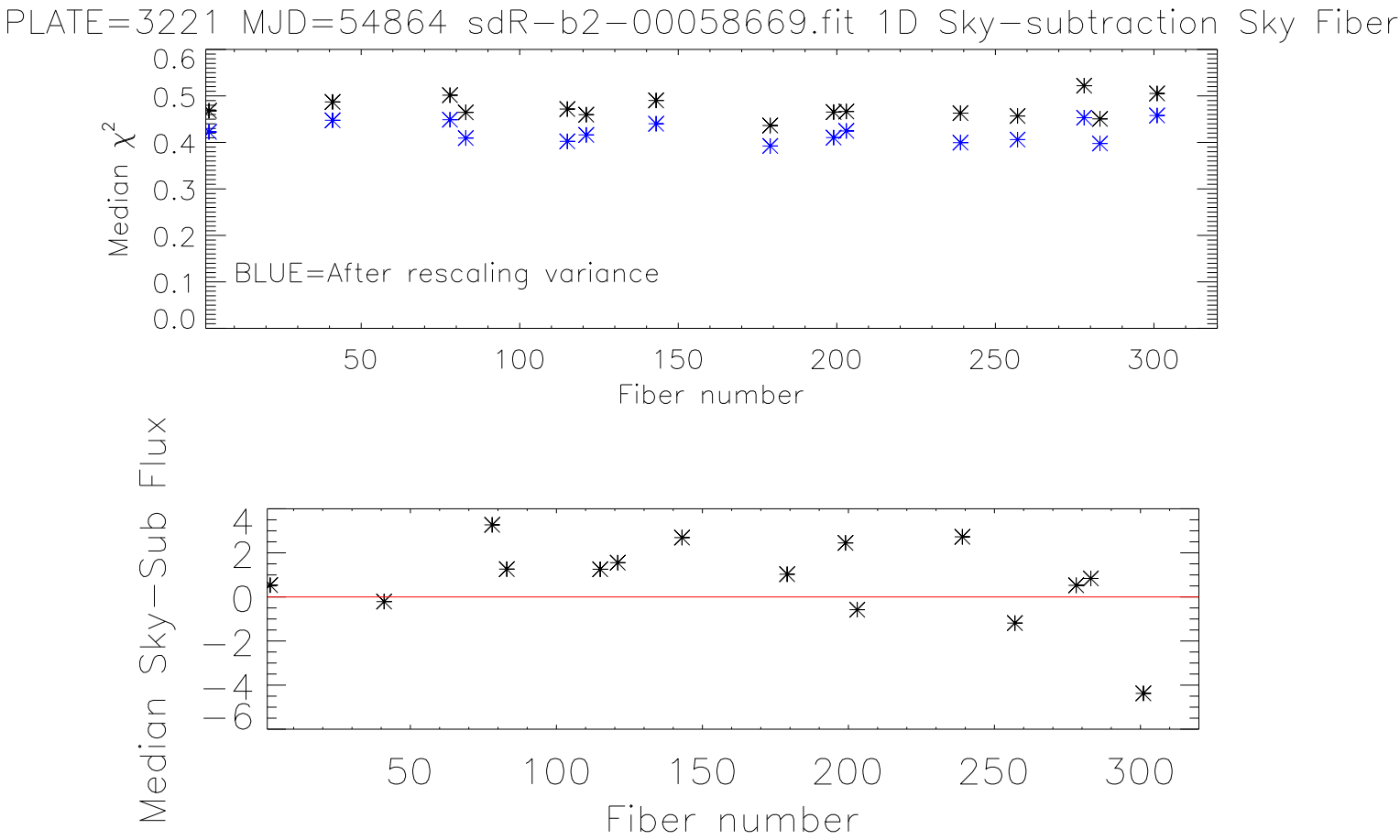

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

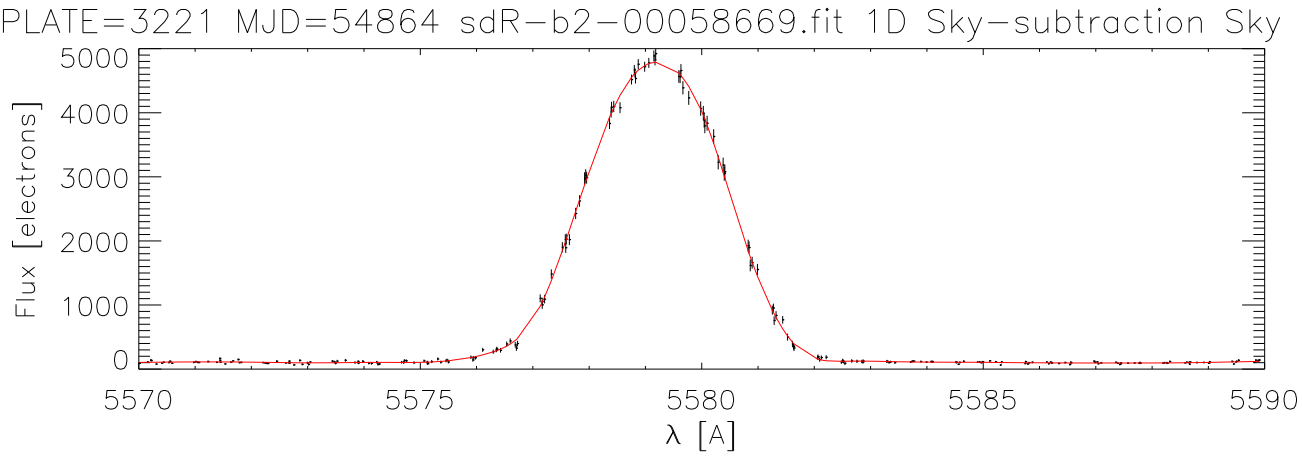

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

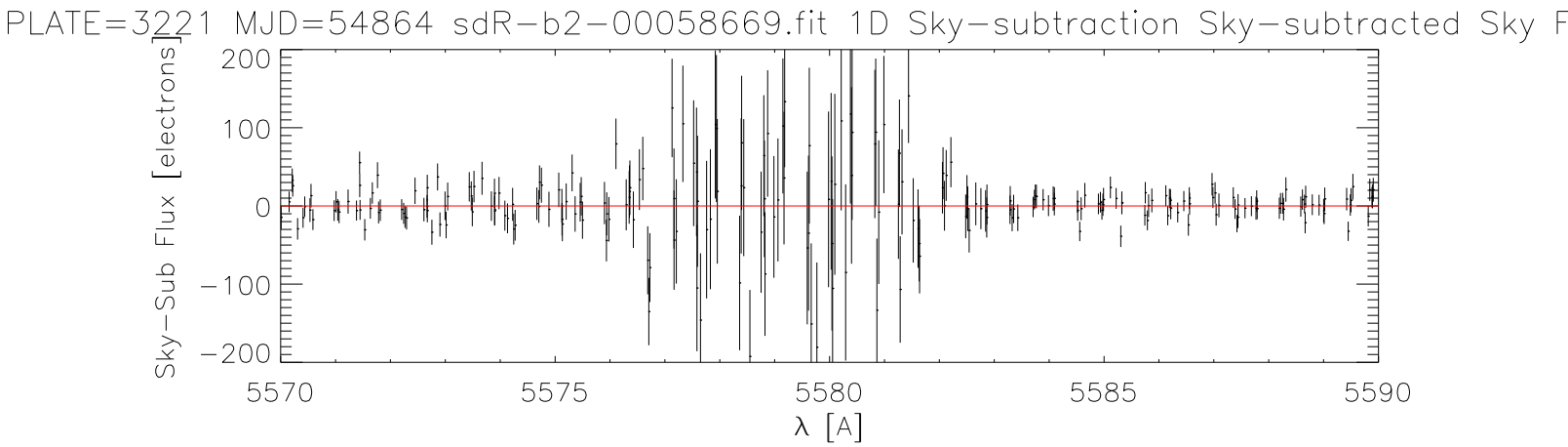

4046.5600
nfib1 16
nfib2 16
stdev 0.107
extra −0.12
4358.3300
nfib1 16
nfib2 16
stdev 0.055
extra −0.22
5460.9400
nfib1 16
nfib2 16
stdev 0.046
extra −0.08
5577.3390
nfib1 15
nfib2 15
stdev 0.012
extra −0.04
5889.9500
nfib1 15
nfib2 15
stdev 0.021
extra 0.05
5895.9240
nfib1 15
nfib2 16
stdev 0.037
extra 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

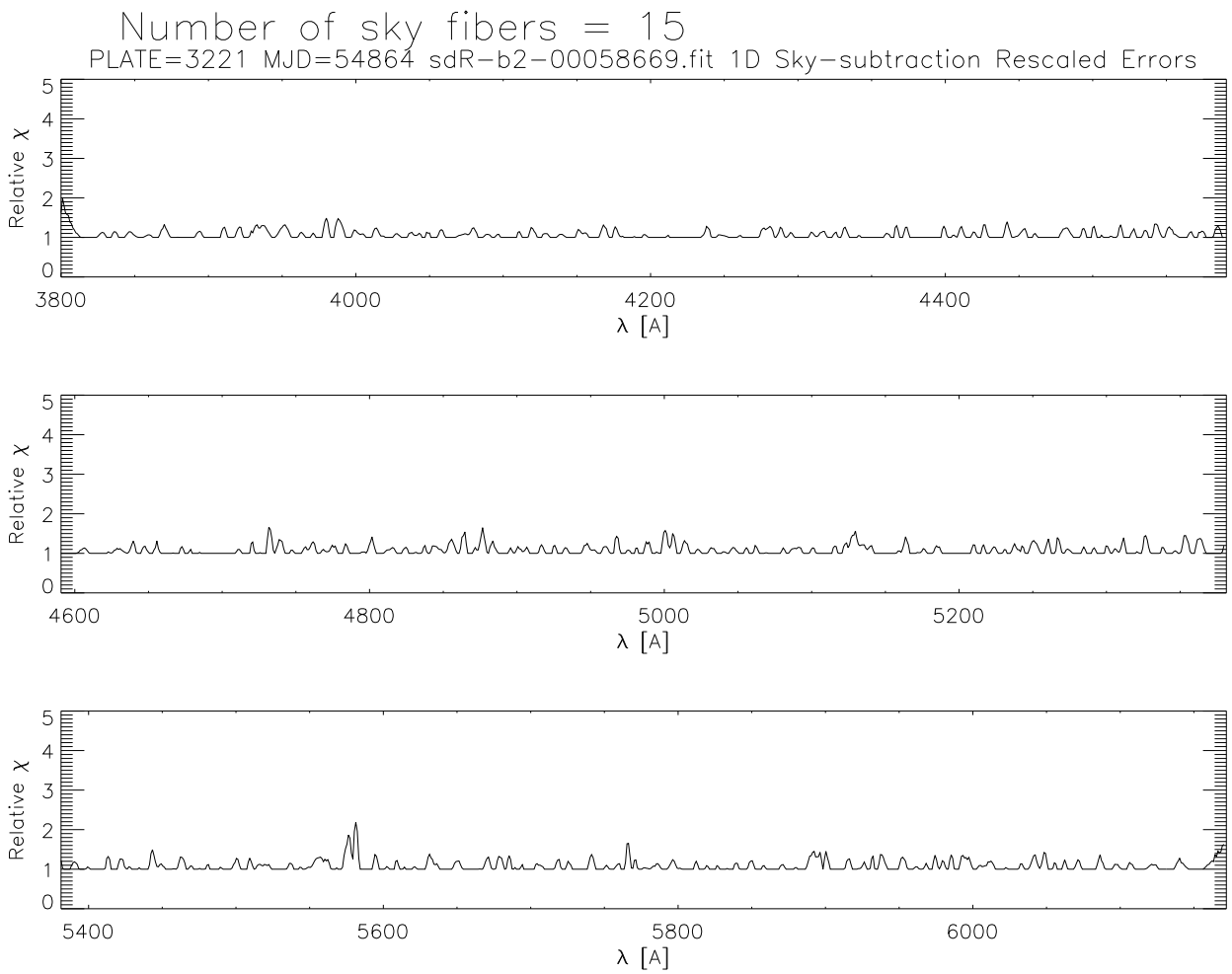

sky shift, pixels
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

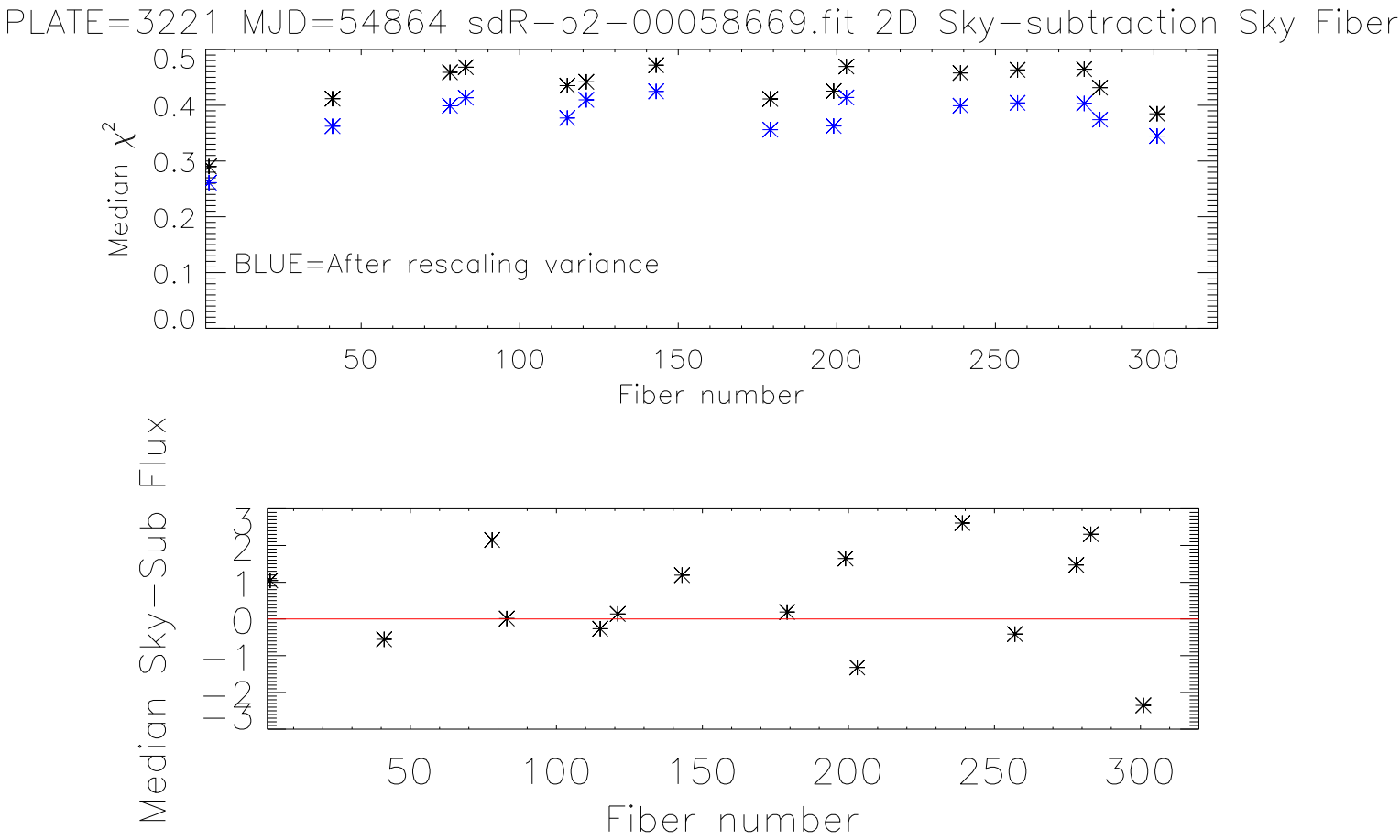

PLATE=3221 MJD=54864 Smooth superflat for sdR-b2-00058669.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

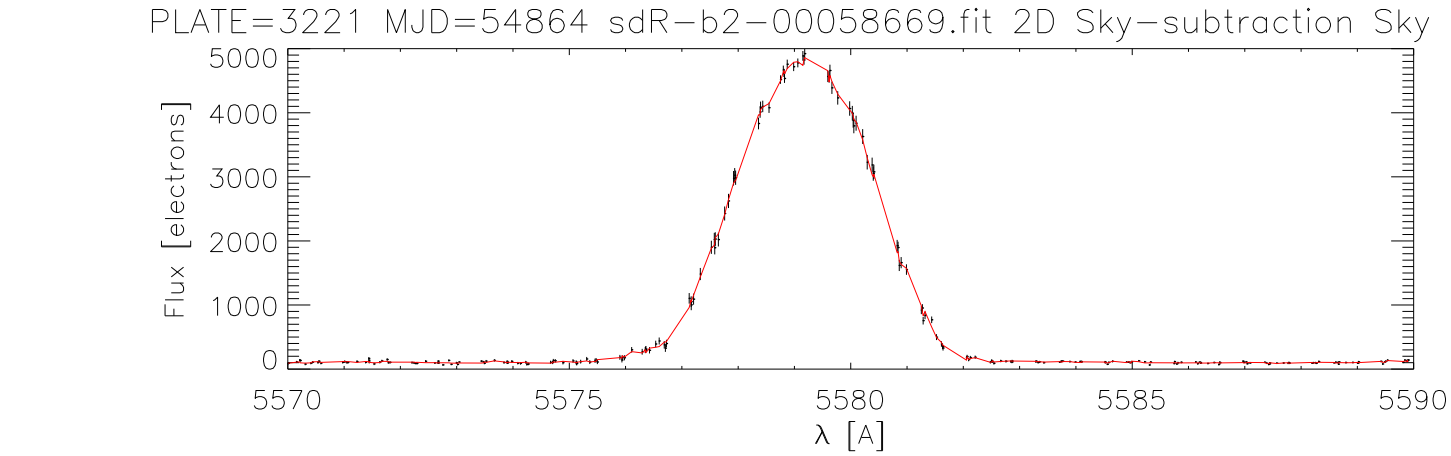

PLATE=3221 MJD=54864 sdR-b2-00058669.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

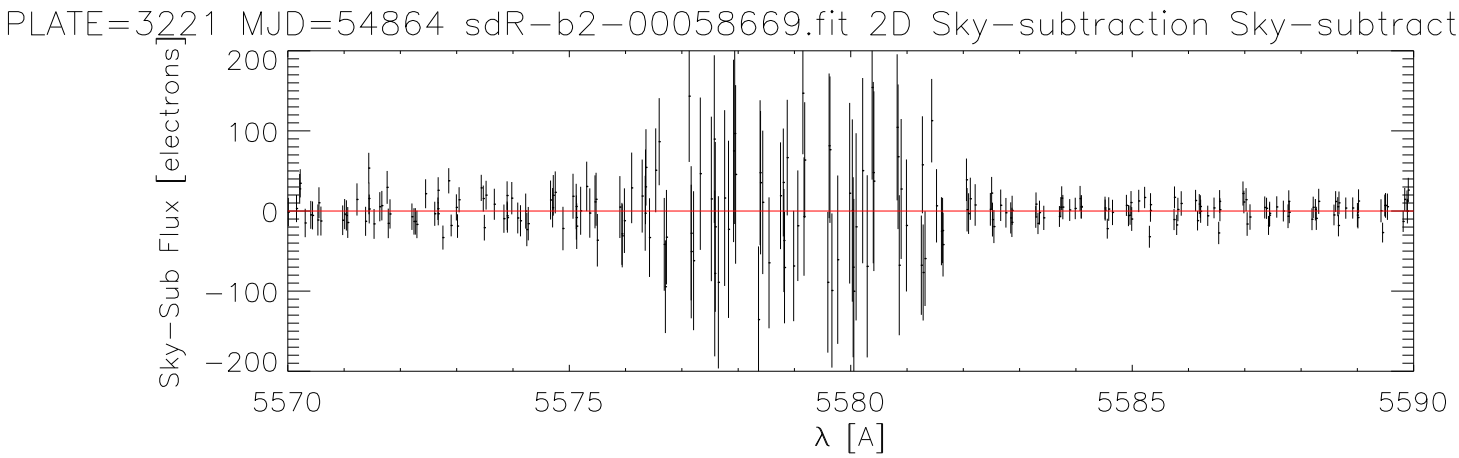

PLATE=3221 MJD=54864 sdR-b2-00058669.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

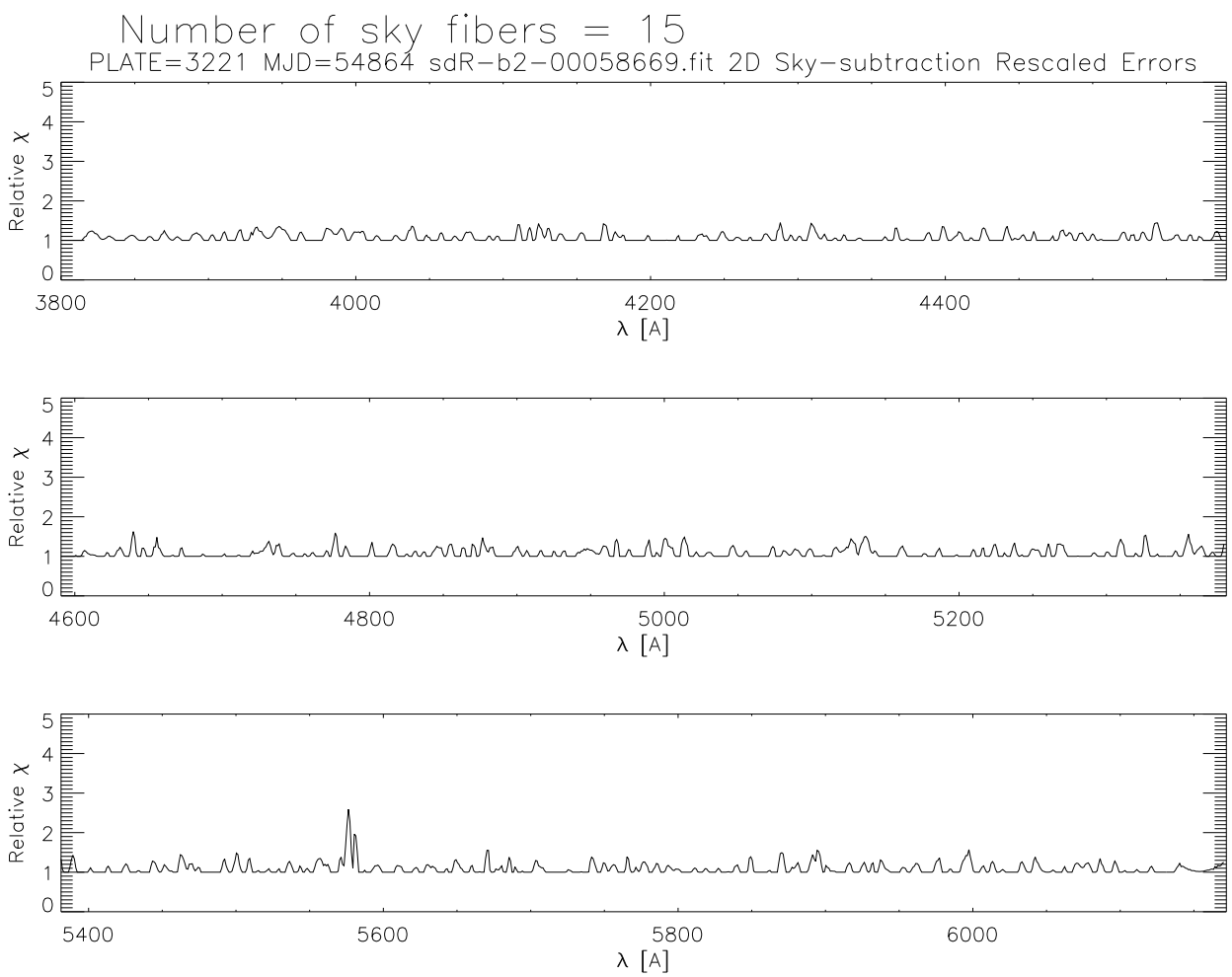

PLATE=3221 MJD=54864 sdR-b2-00058669.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

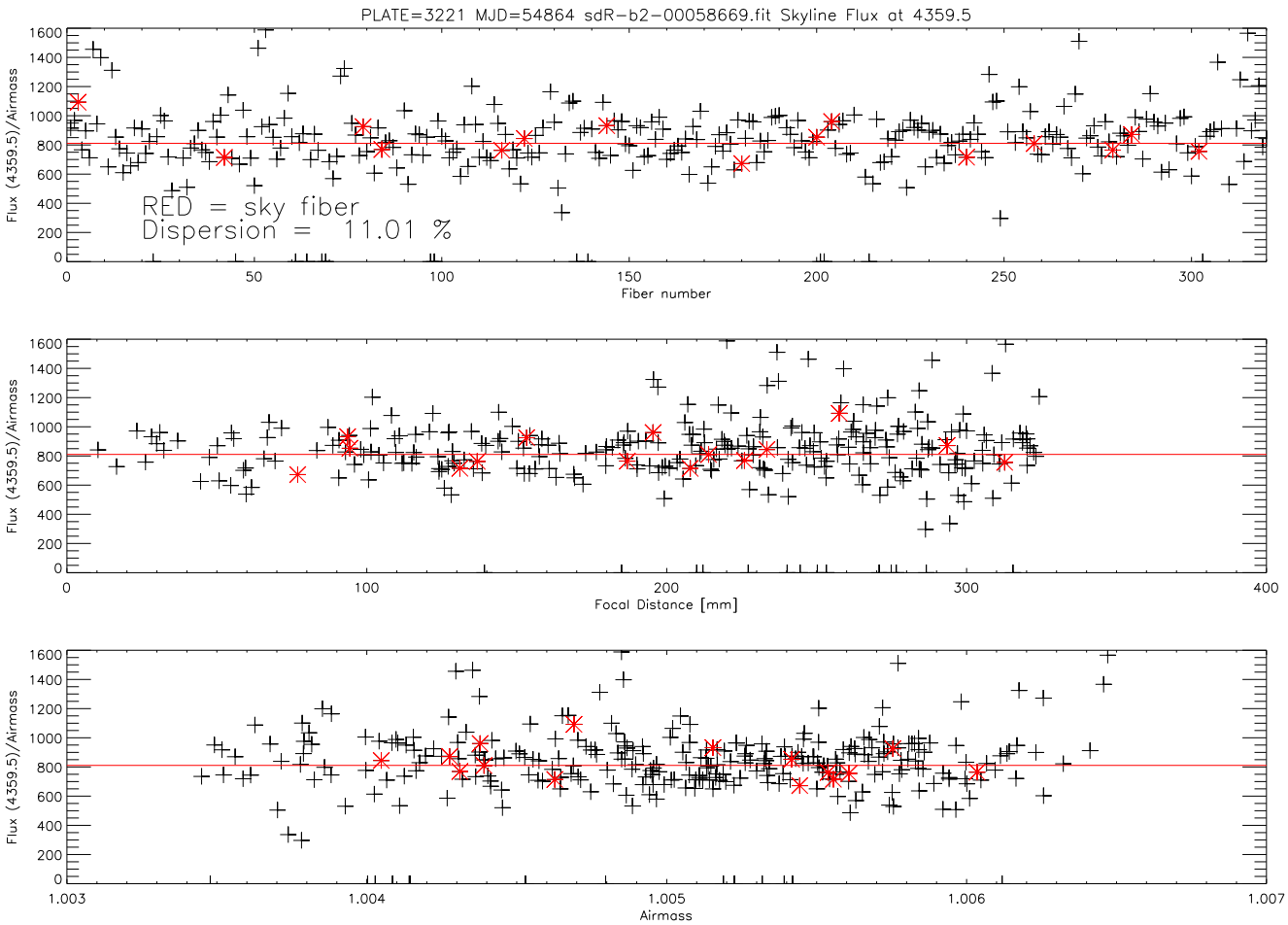

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058669.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

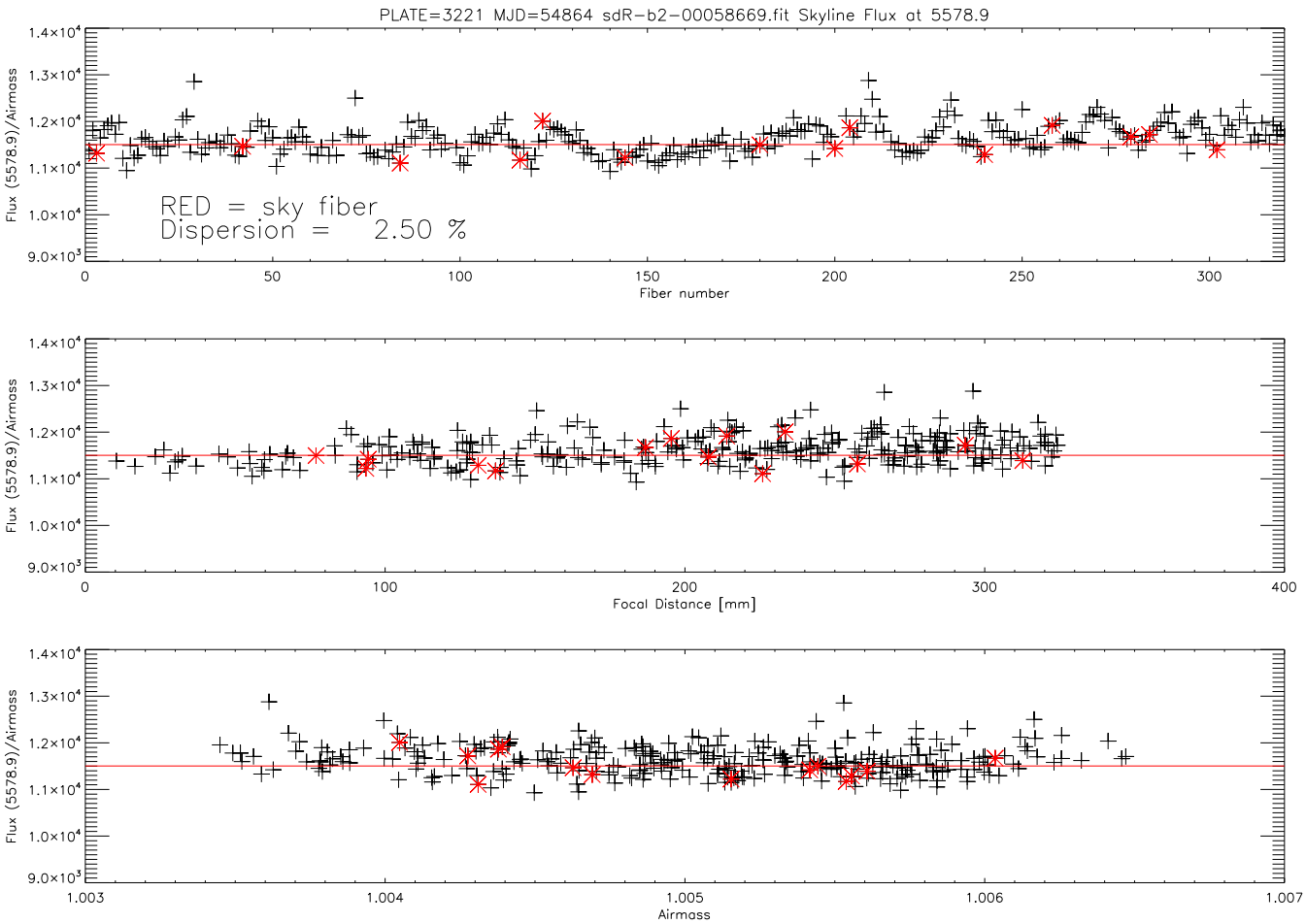

PLATE=3221 MJD=54864 sdR-b2-00058669.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

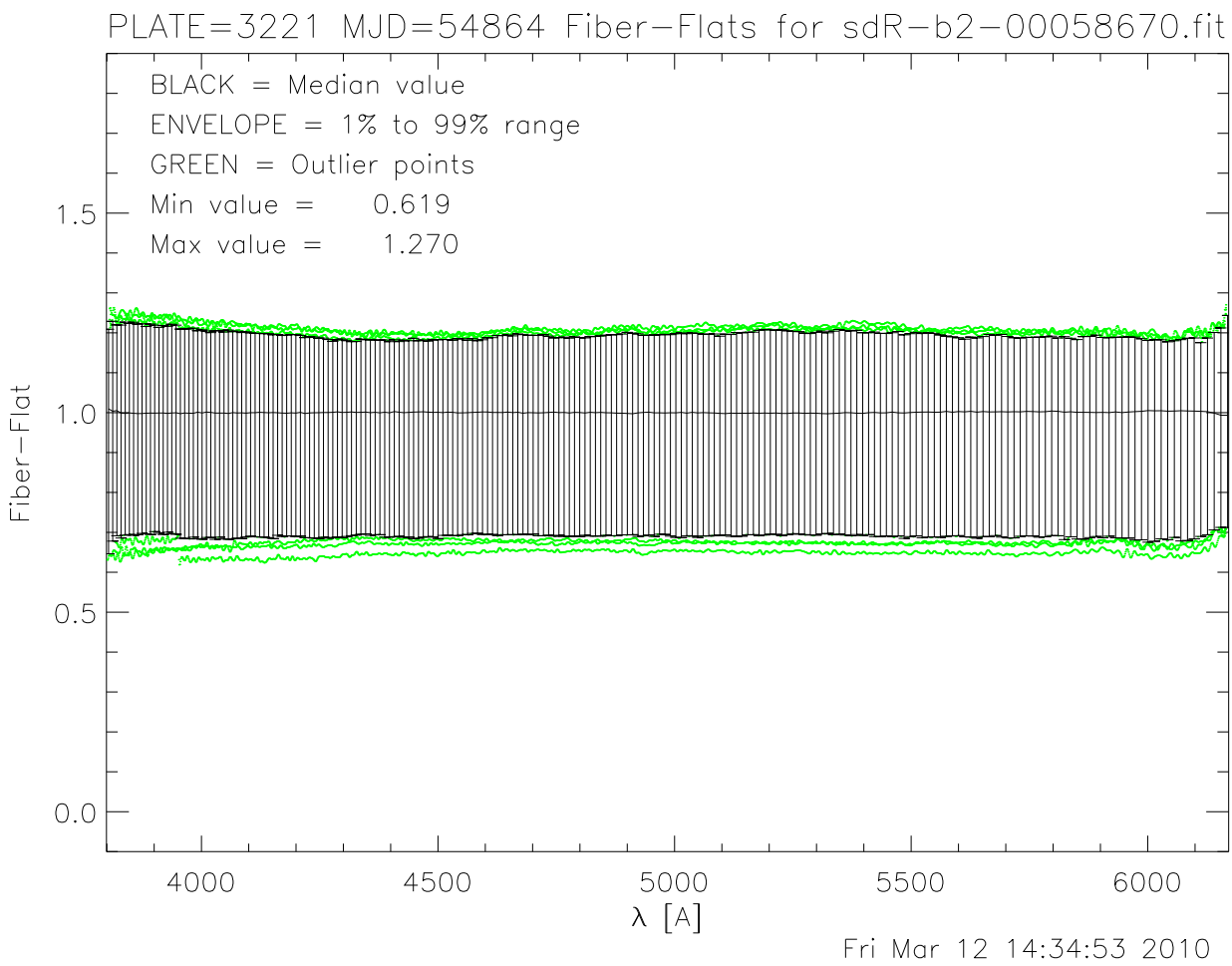

PLATE=3221 MJD=54864 sdR-b2-00058669.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

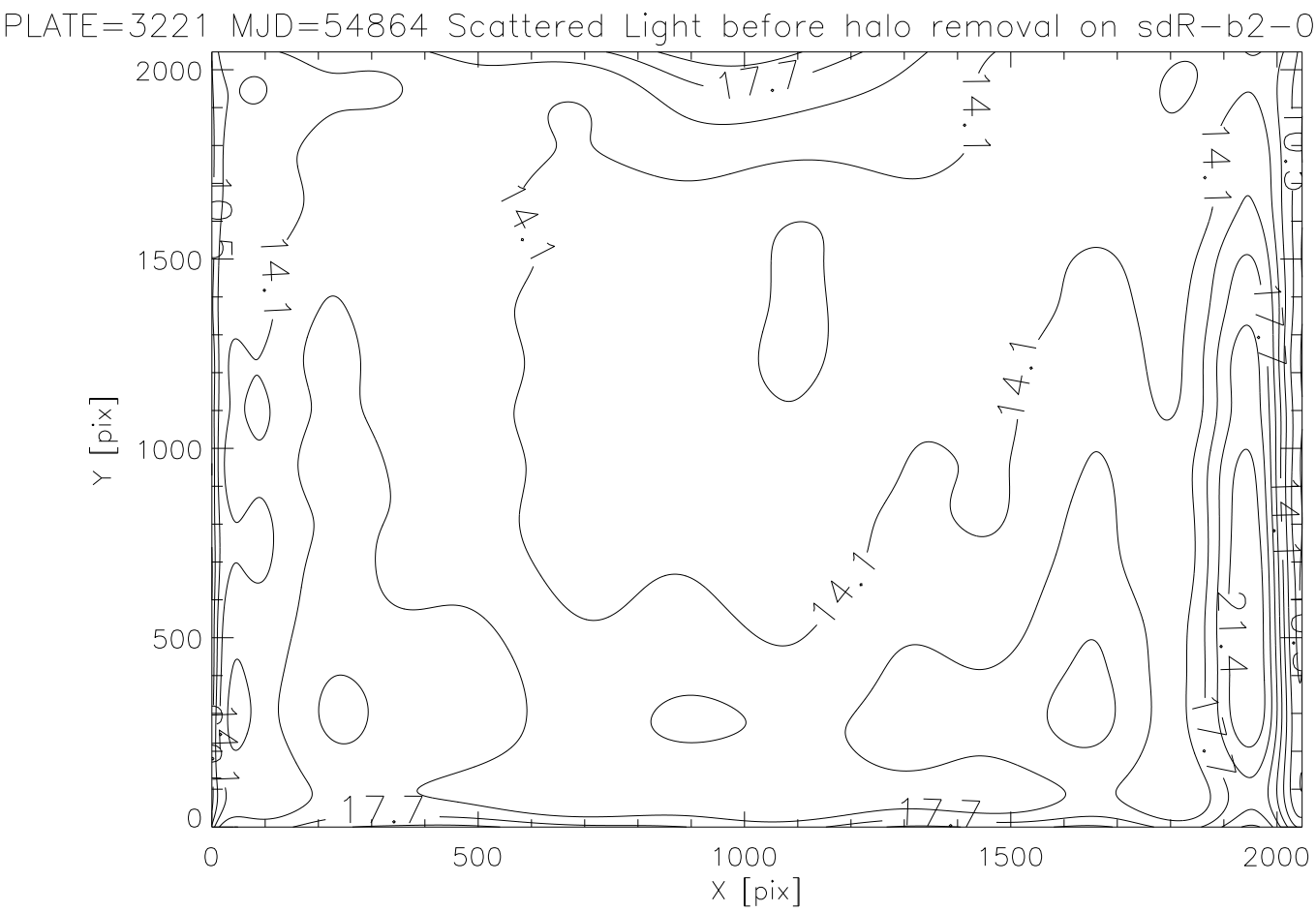

PLATE=3221 MJD=54864 sdR-b2-00058669.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

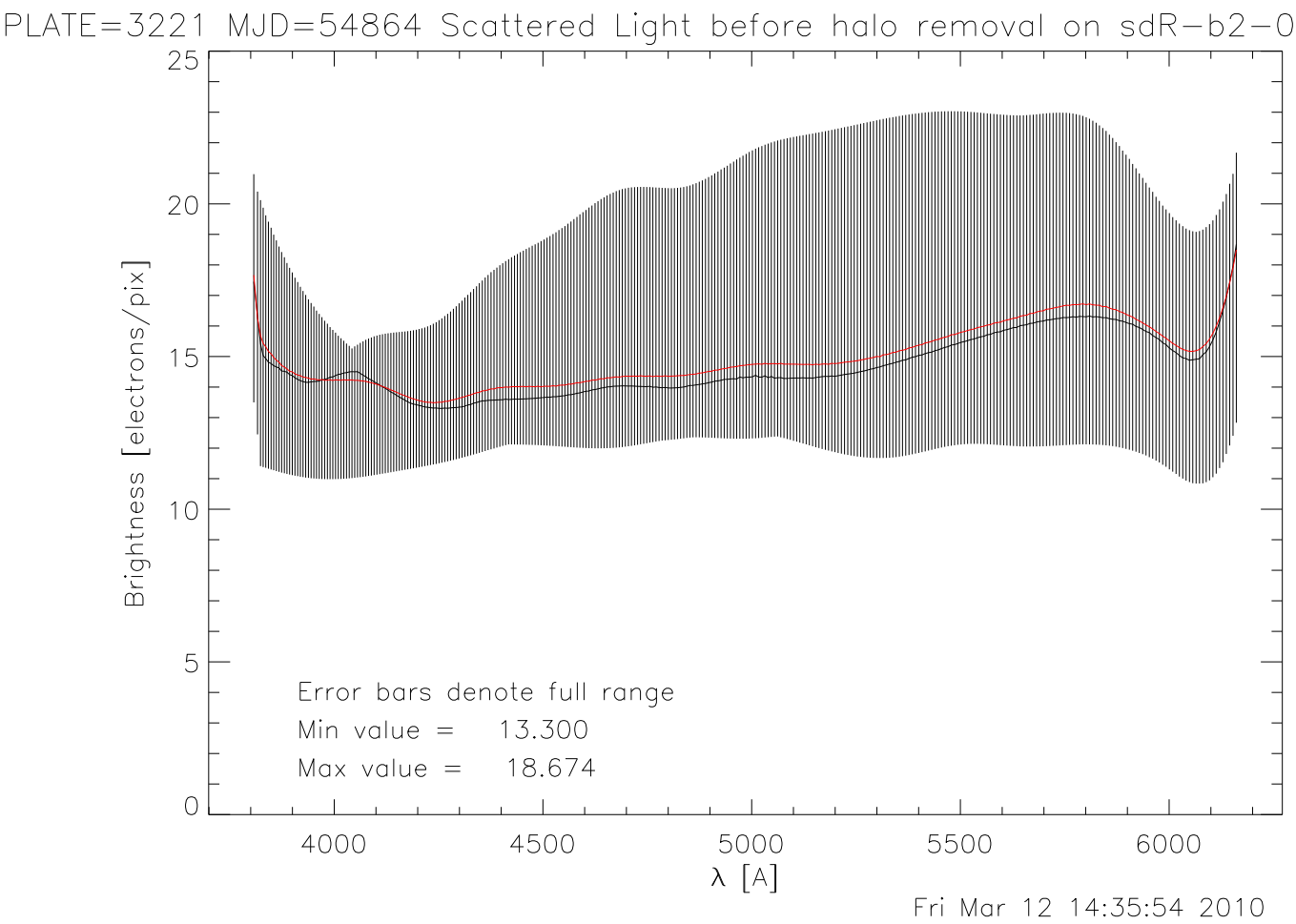

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058669.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

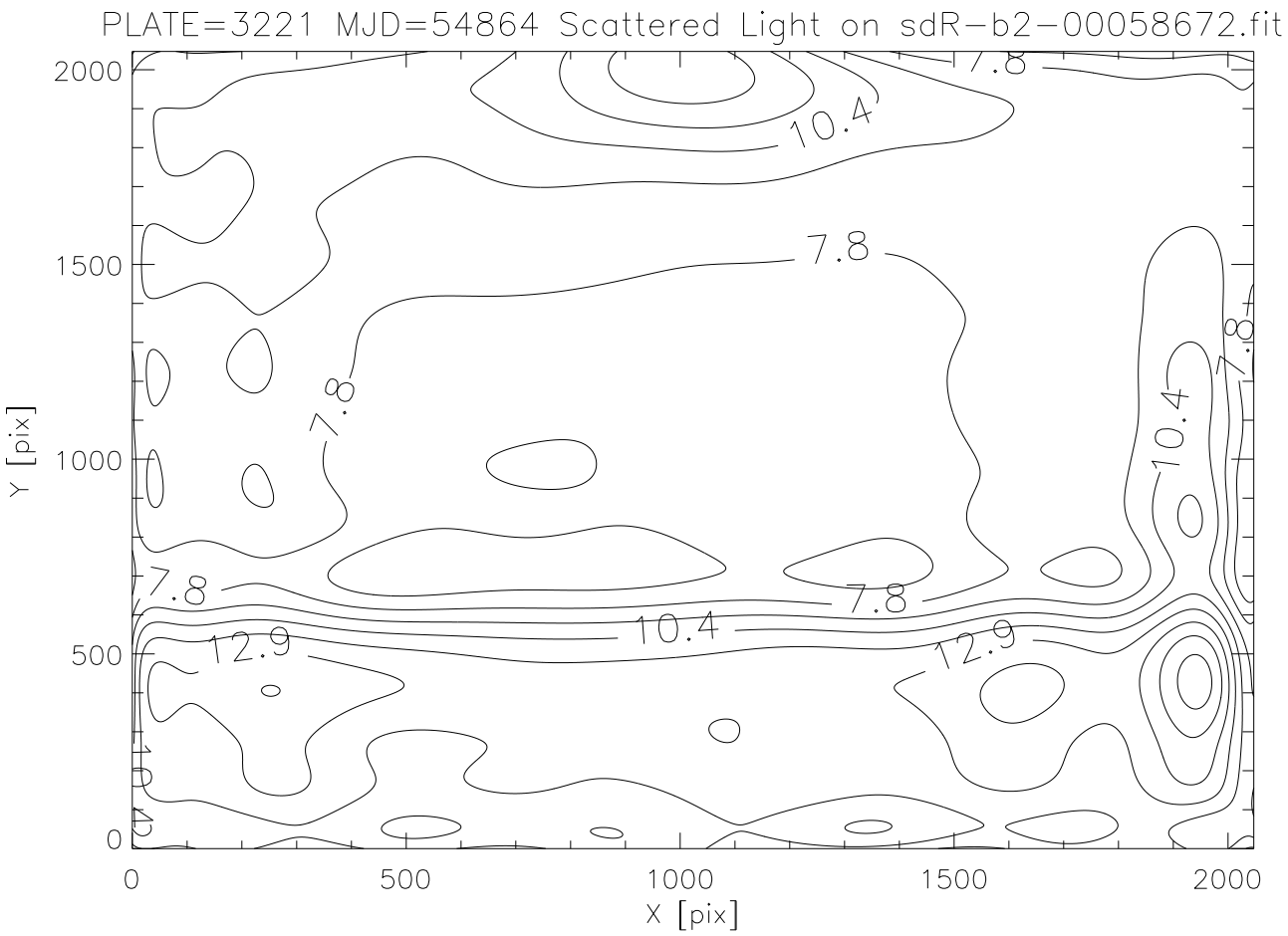

PLATE=3221 MJD=54864 sdR-b2-00058669.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.01 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

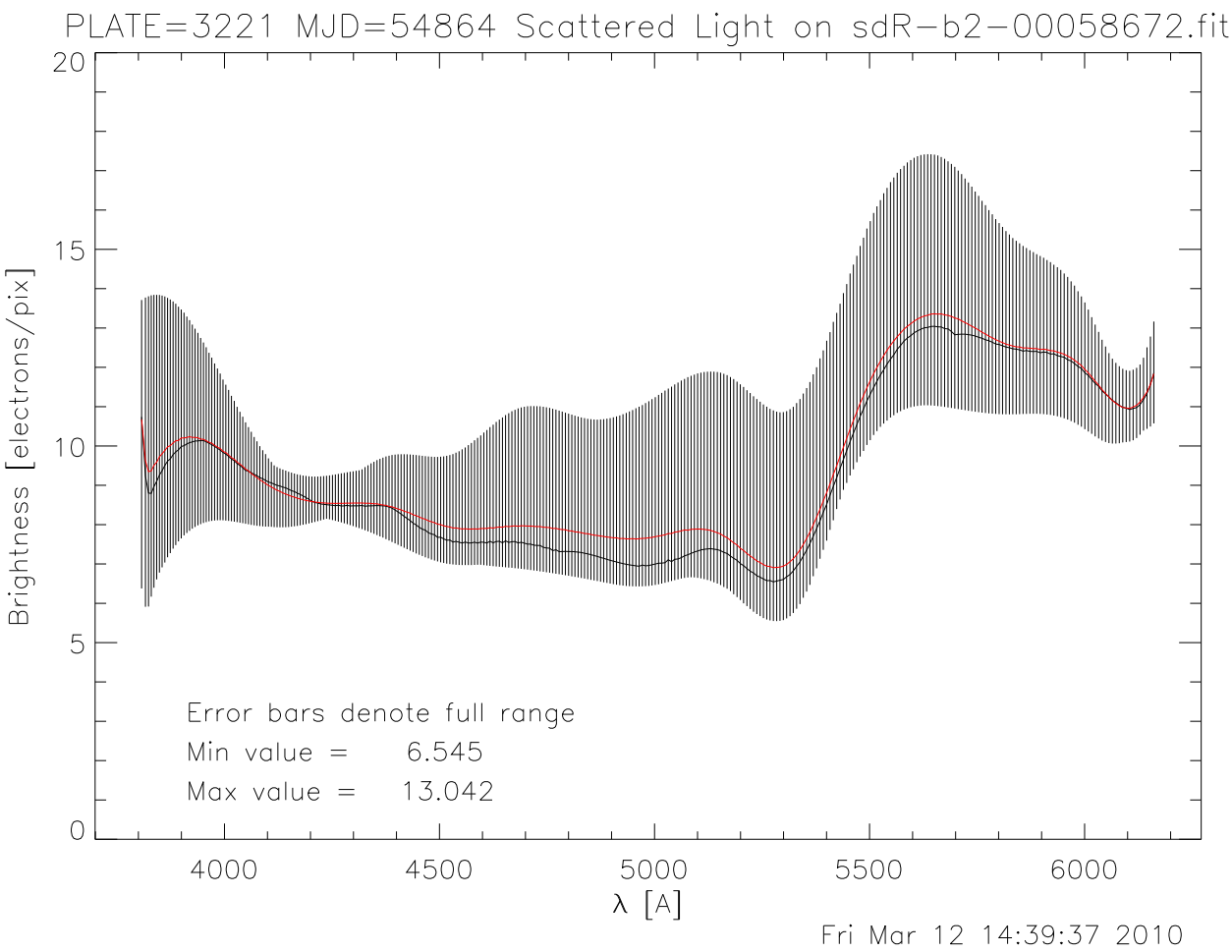

PLATE=3221 MJD=54864 sdR-b2-00058669.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.50 %
Fiber number
Focal Distance [mm]
Airmass

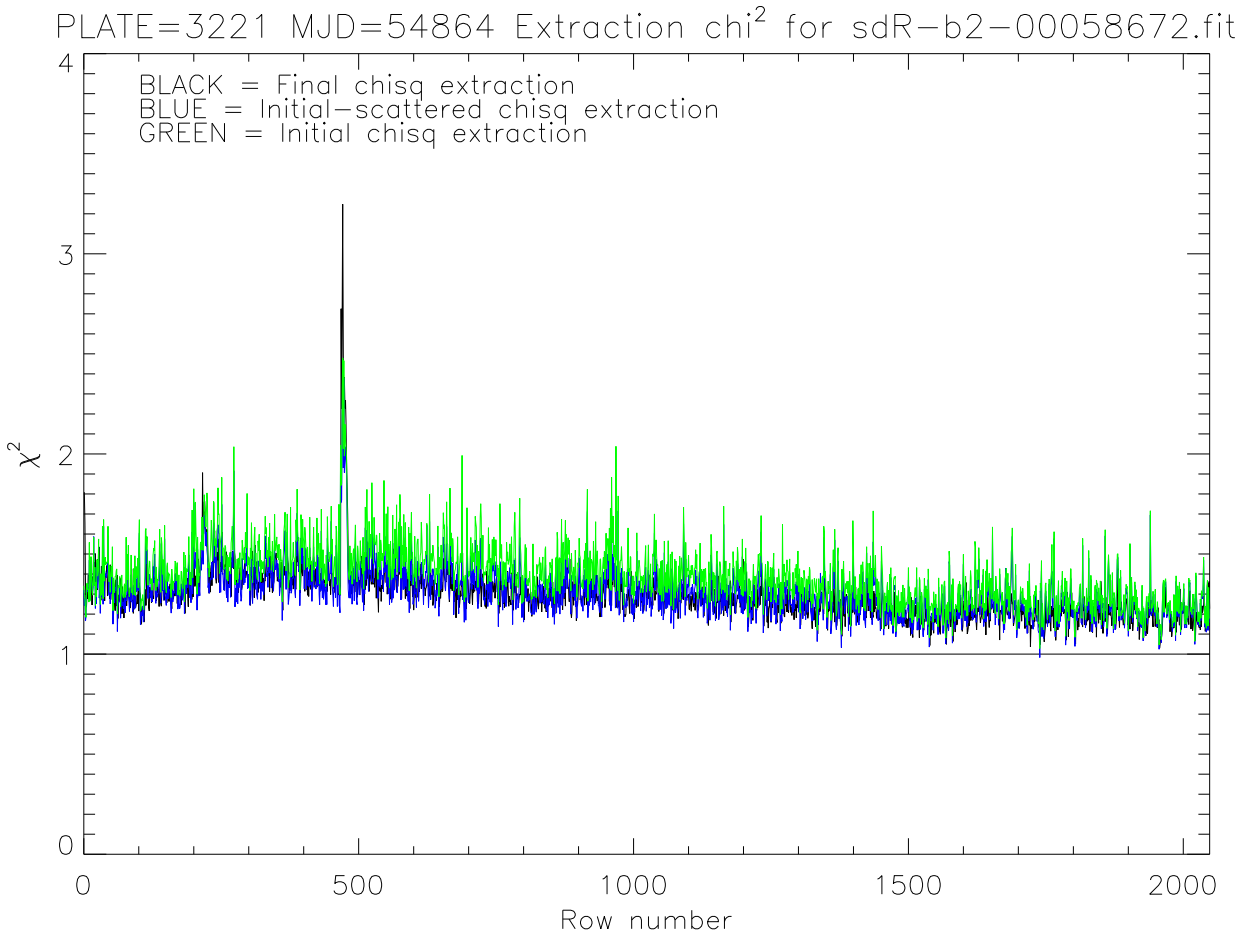

PLATE=3221 MJD=54864 Fiber-Flats for sdR-b2-00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.270
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:34:53 2010

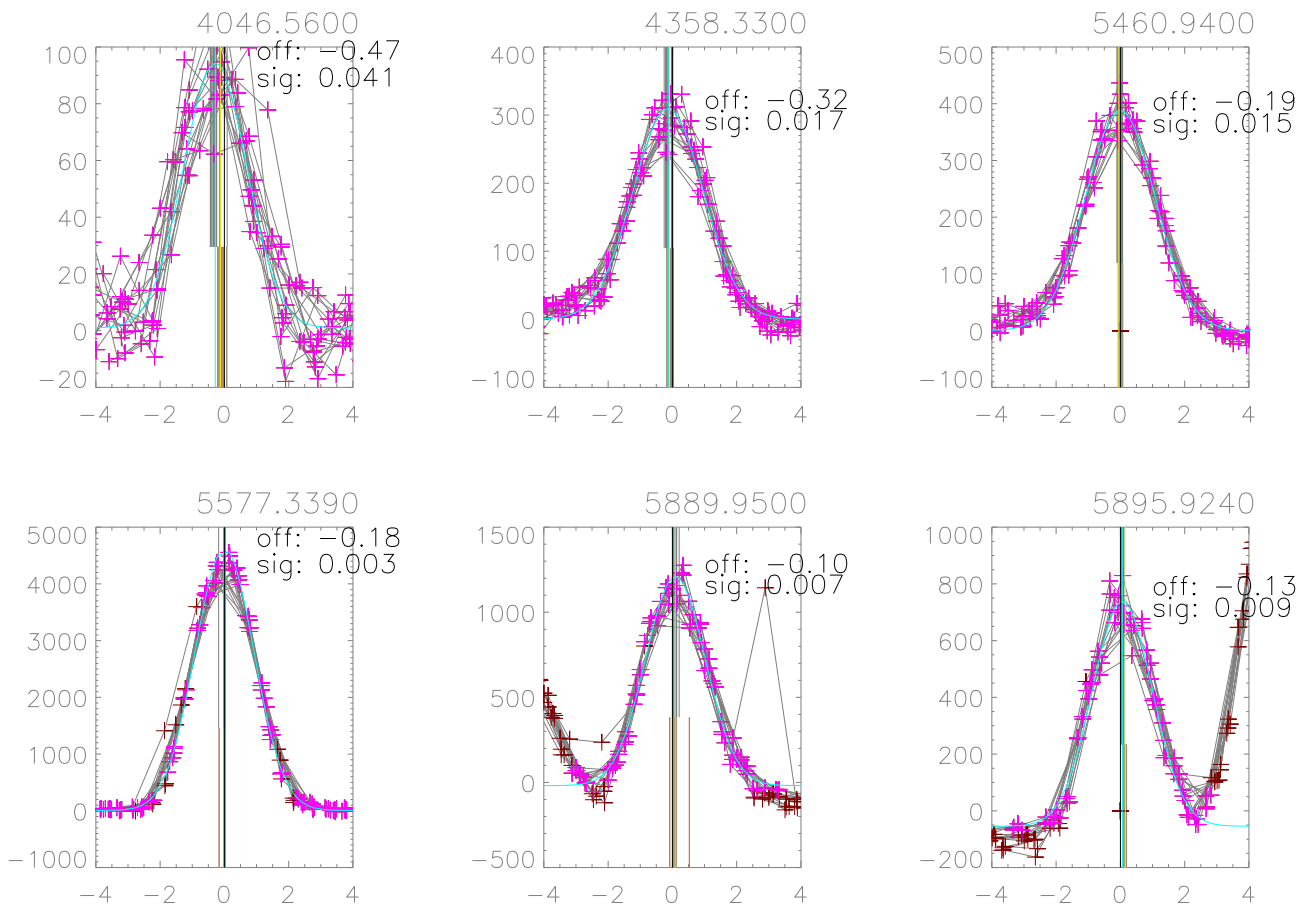

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058672.f
Y [pix]
X [pix]
0
500
1000
1500
2000
17.7
14.1
21.4

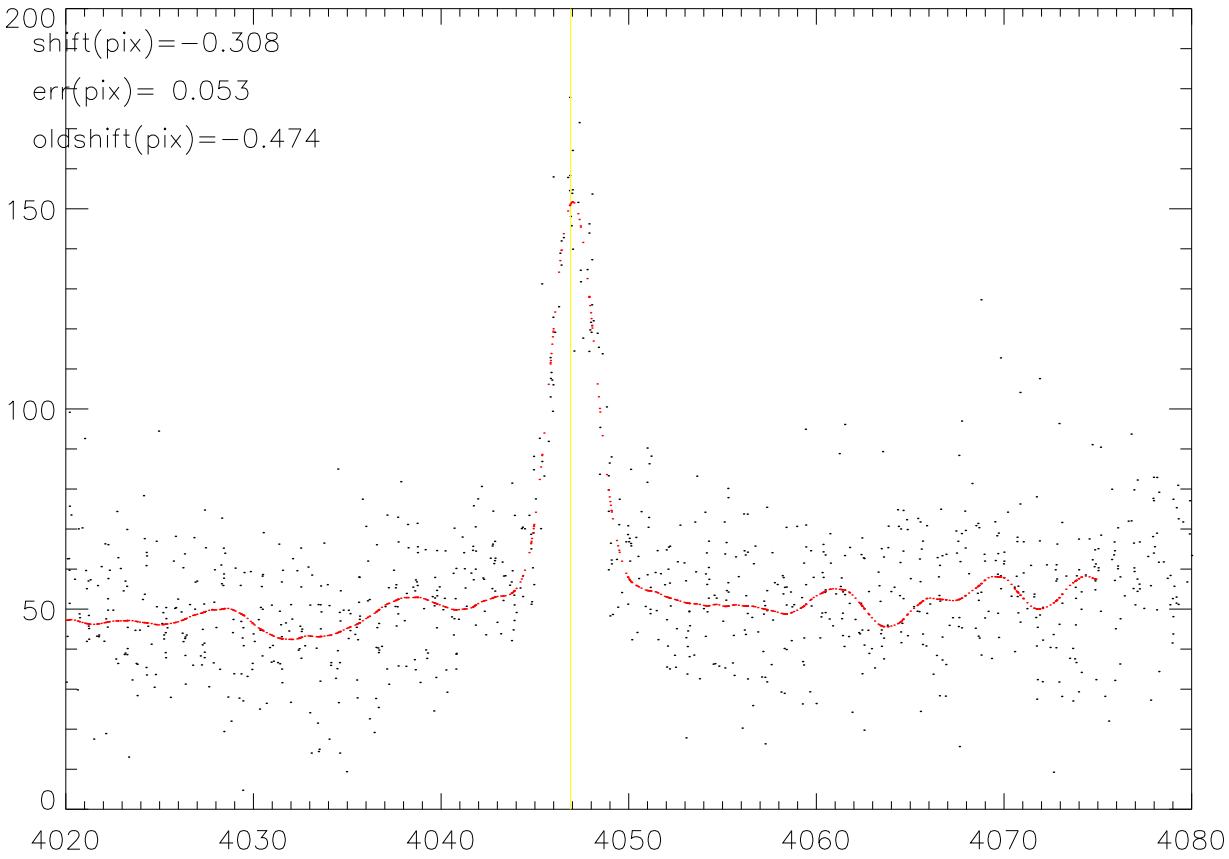

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058672.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 13.300
Max value = 18.674
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:35:54 2010

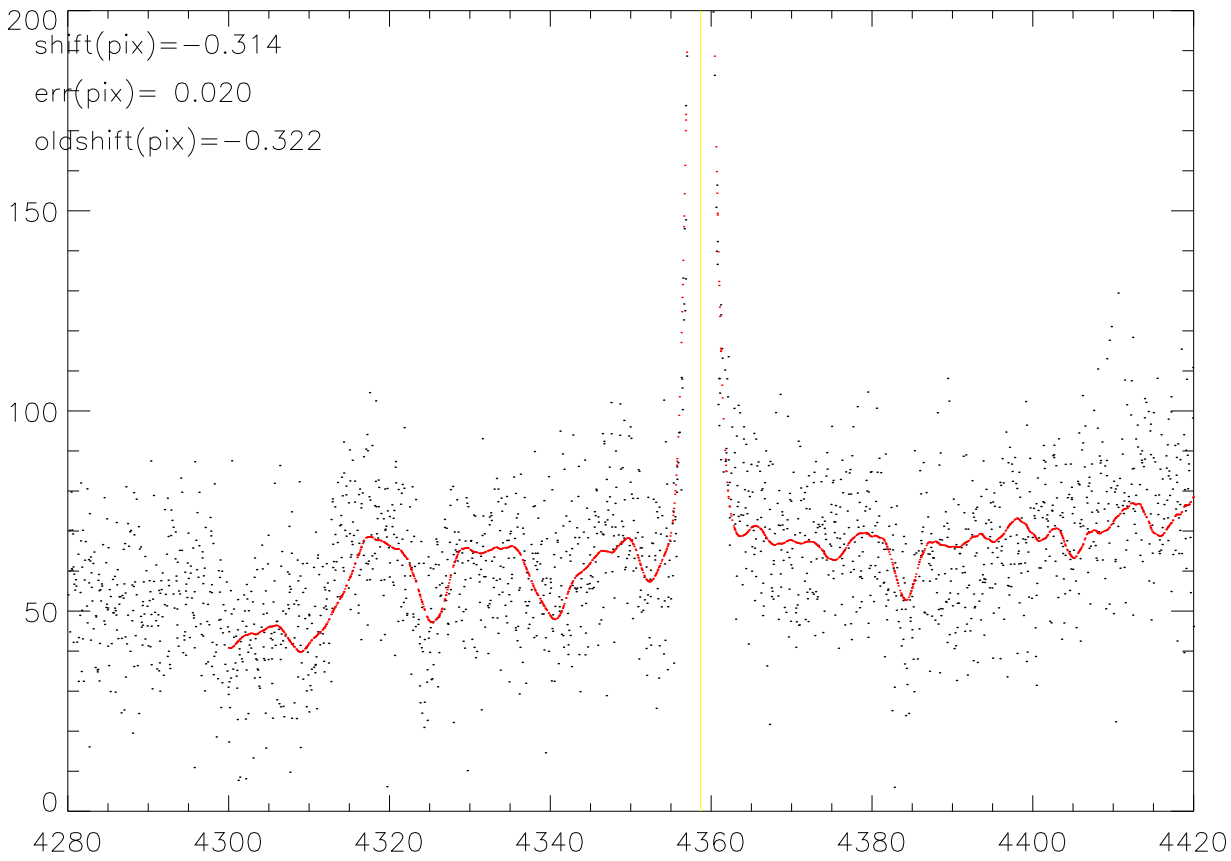

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058672.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.8
10.4
12.9

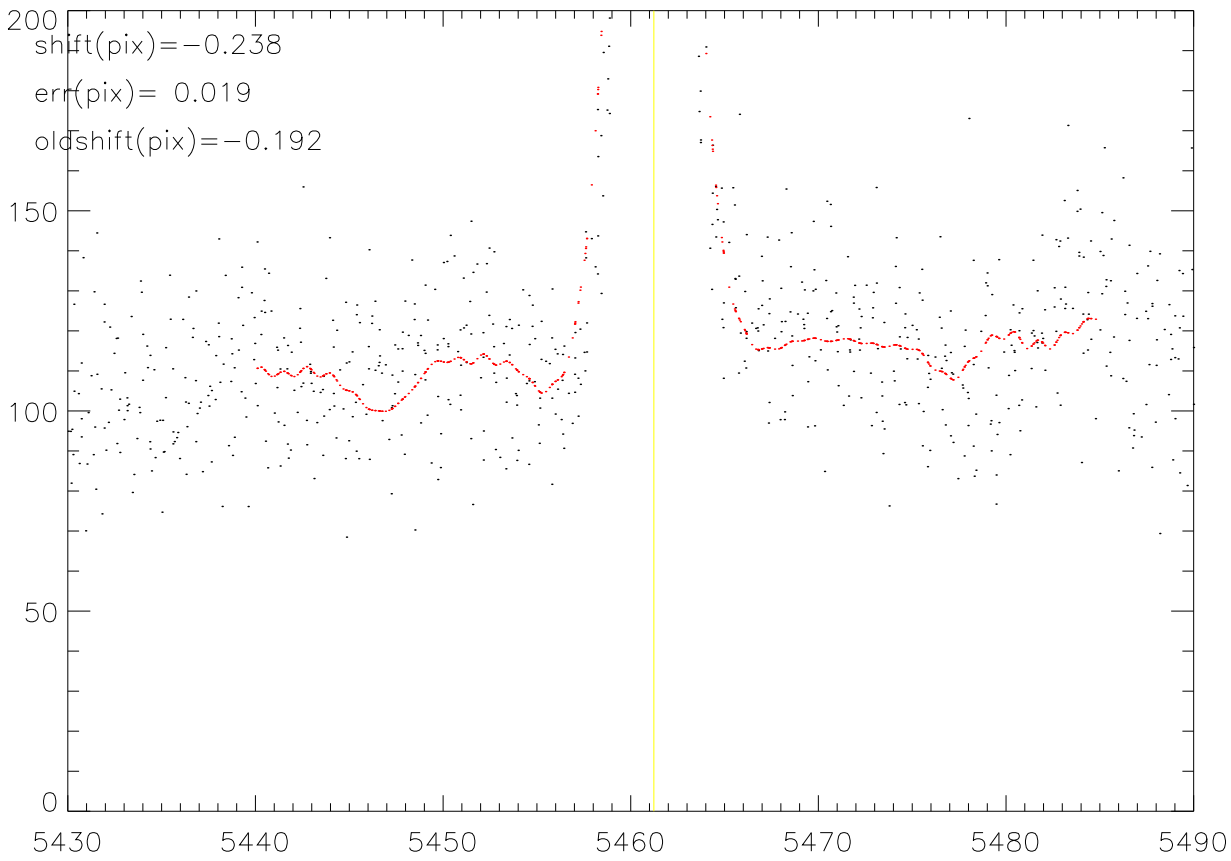

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058672.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.545
Max value = 13.042
Fri Mar 12 14:39:37 2010

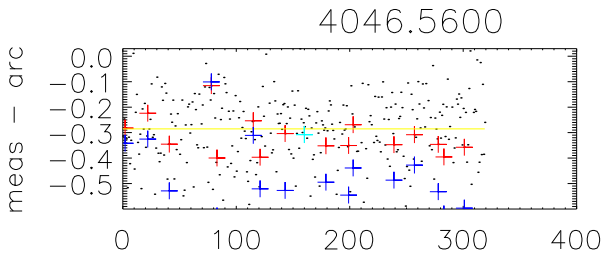

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b2-00058672.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

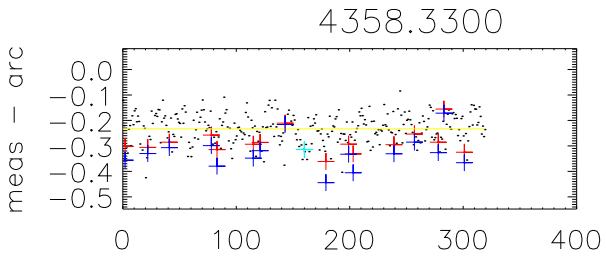

4046.5600
off: −0.47
sig: 0.041
4358.3300
off: −0.32
sig: 0.017
5460.9400
off: −0.19
sig: 0.015
5577.3390
off: −0.18
sig: 0.003
5889.9500
off: −0.10
sig: 0.007
5895.9240
off: −0.13
sig: 0.009

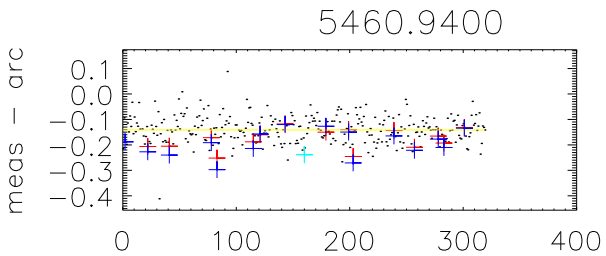

shift(pix)=−0.308
err(pix)= 0.053
oldshift(pix)=−0.474
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

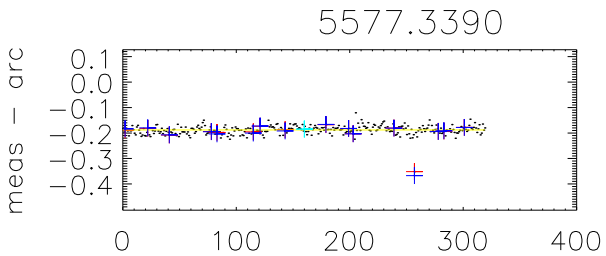

shift(pix)=−0.314
err(pix)= 0.020
oldshift(pix)=−0.322
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

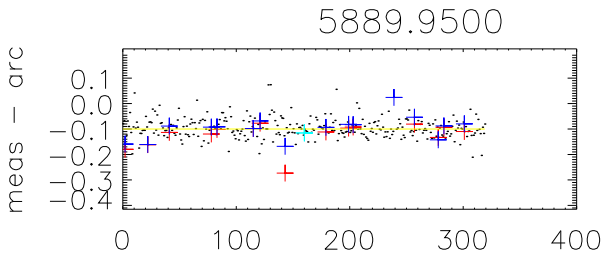

shift(pix)=−0.238
err(pix)= 0.019
oldshift(pix)=−0.192
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

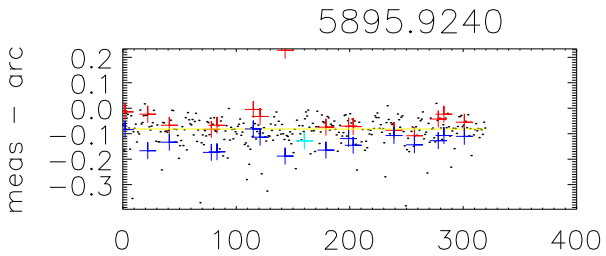

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

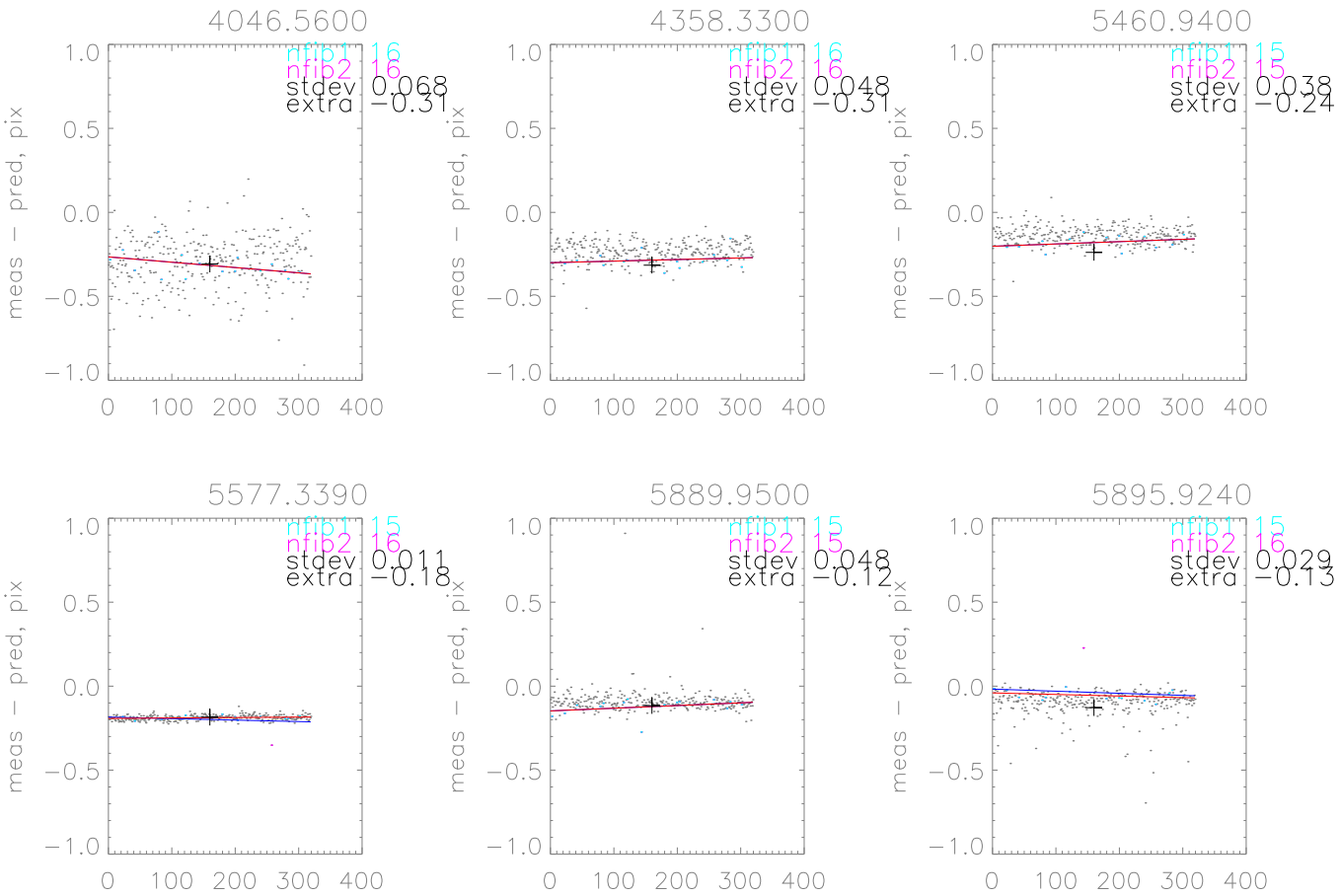

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

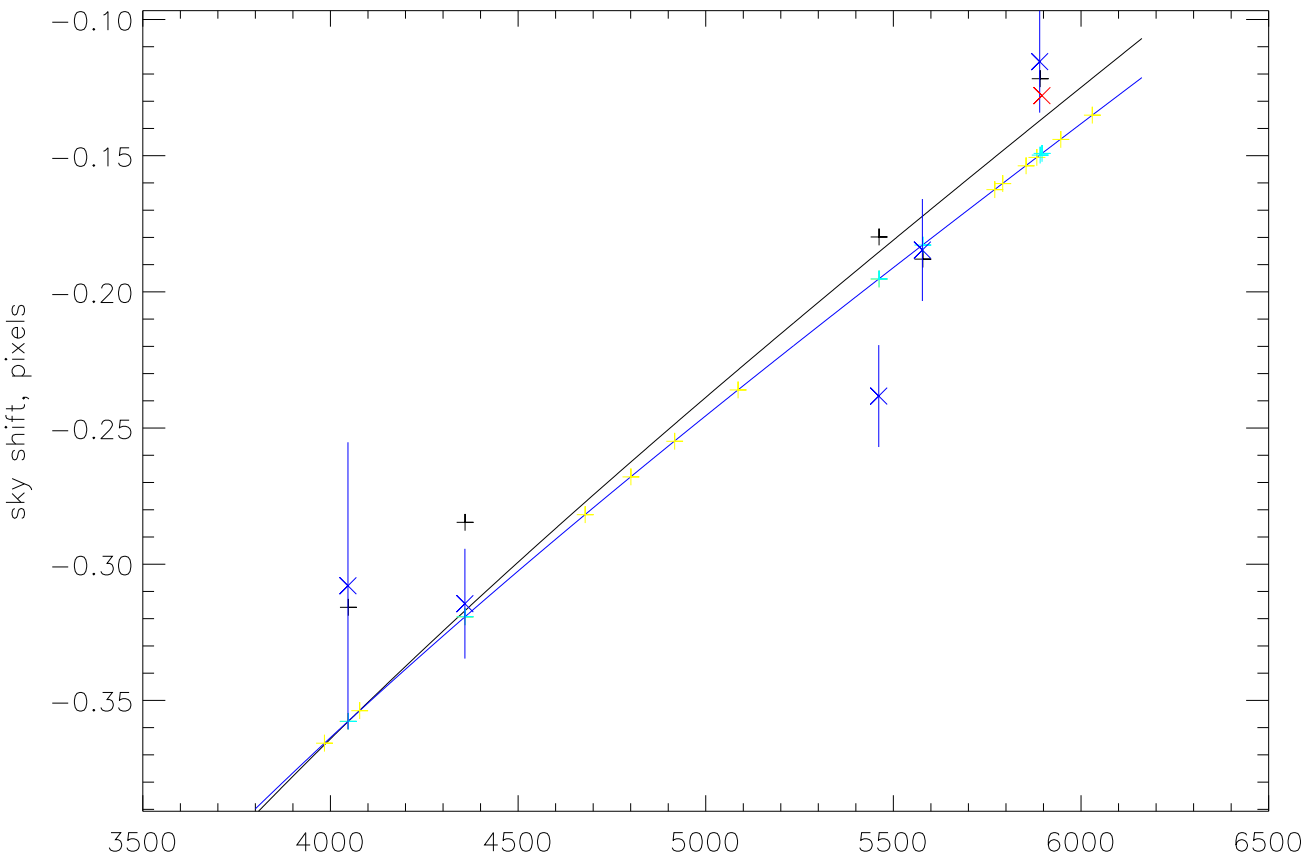

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

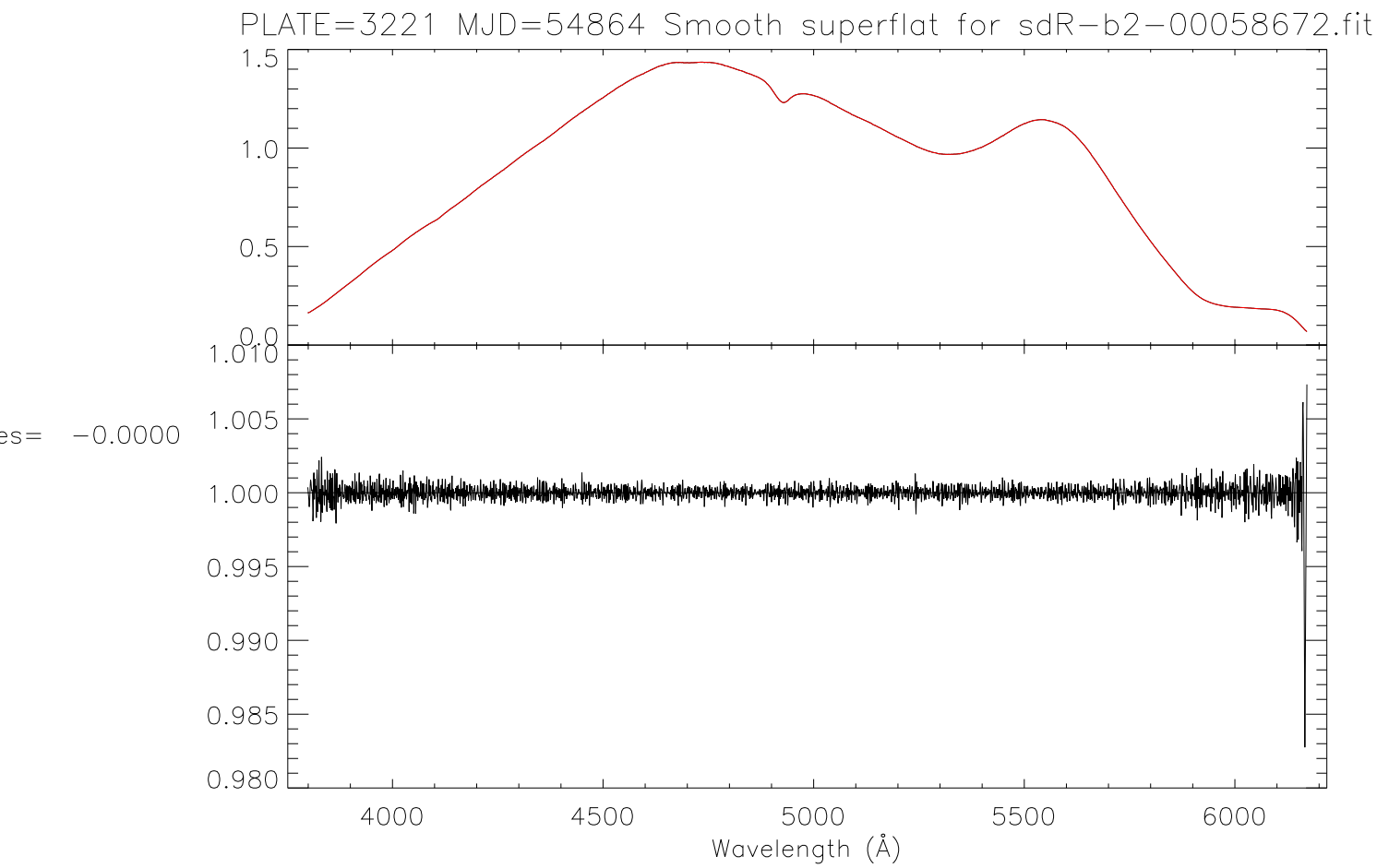

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

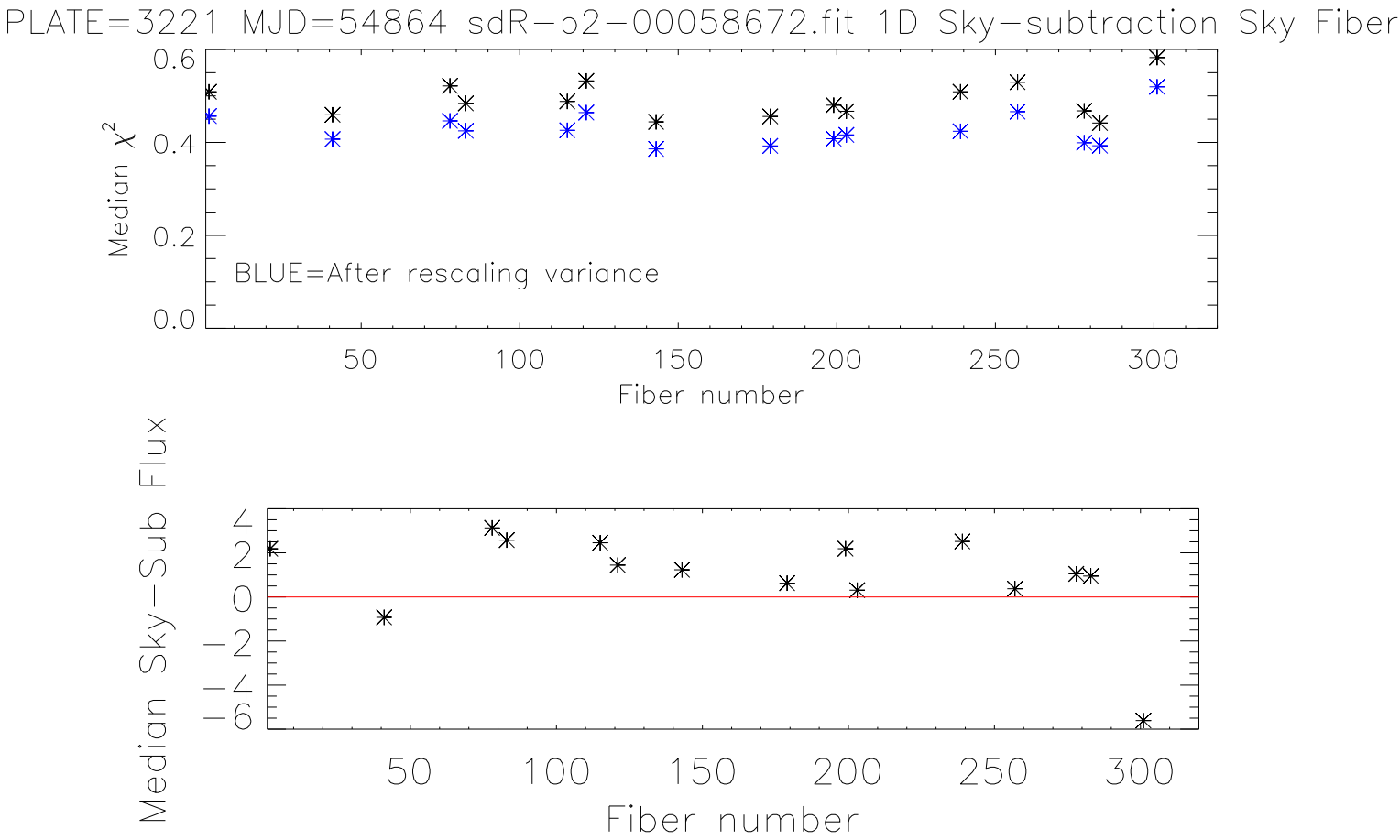

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

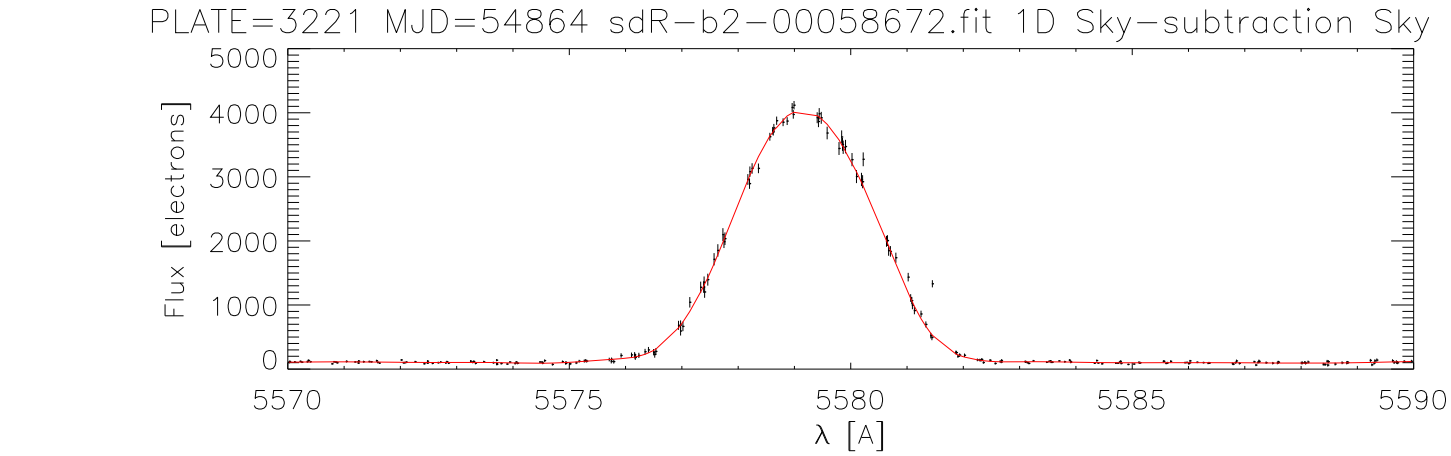

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

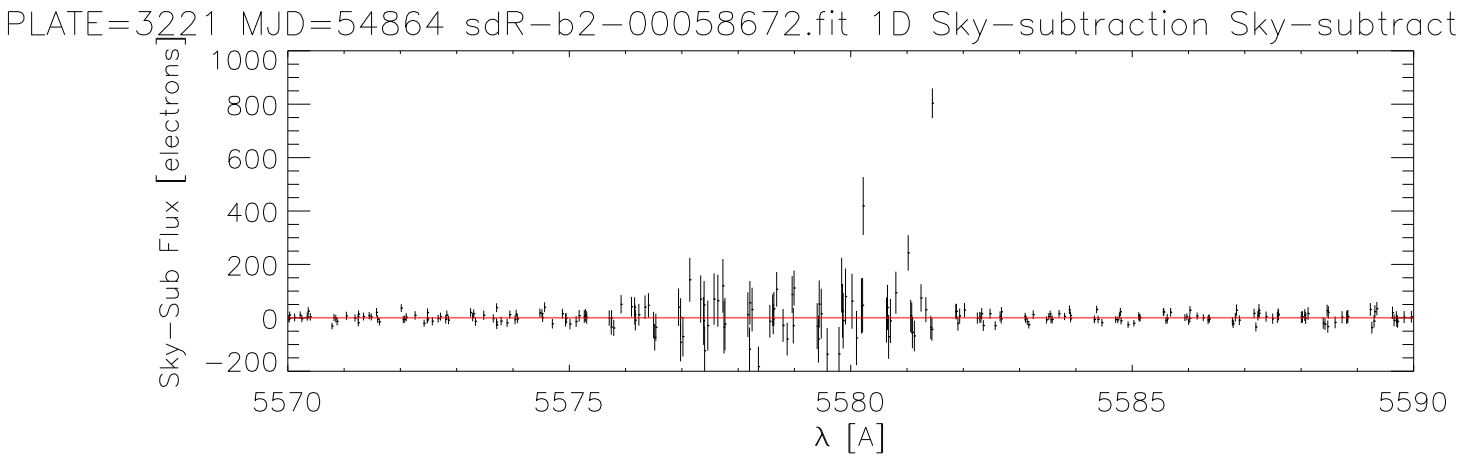

4046.5600
nfib1 16
nfib2 16
stdev 0.068
extra −0.31
4358.3300
nfib1 16
nfib2 16
stdev 0.048
extra −0.31
5460.9400
nfib1 15
nfib2 15
stdev 0.038
extra −0.24
5577.3390
nfib1 15
nfib2 16
stdev 0.011
extra −0.18
5889.9500
nfib1 15
nfib2 15
stdev 0.048
extra −0.12
5895.9240
nfib1 15
nfib2 16
stdev 0.029
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

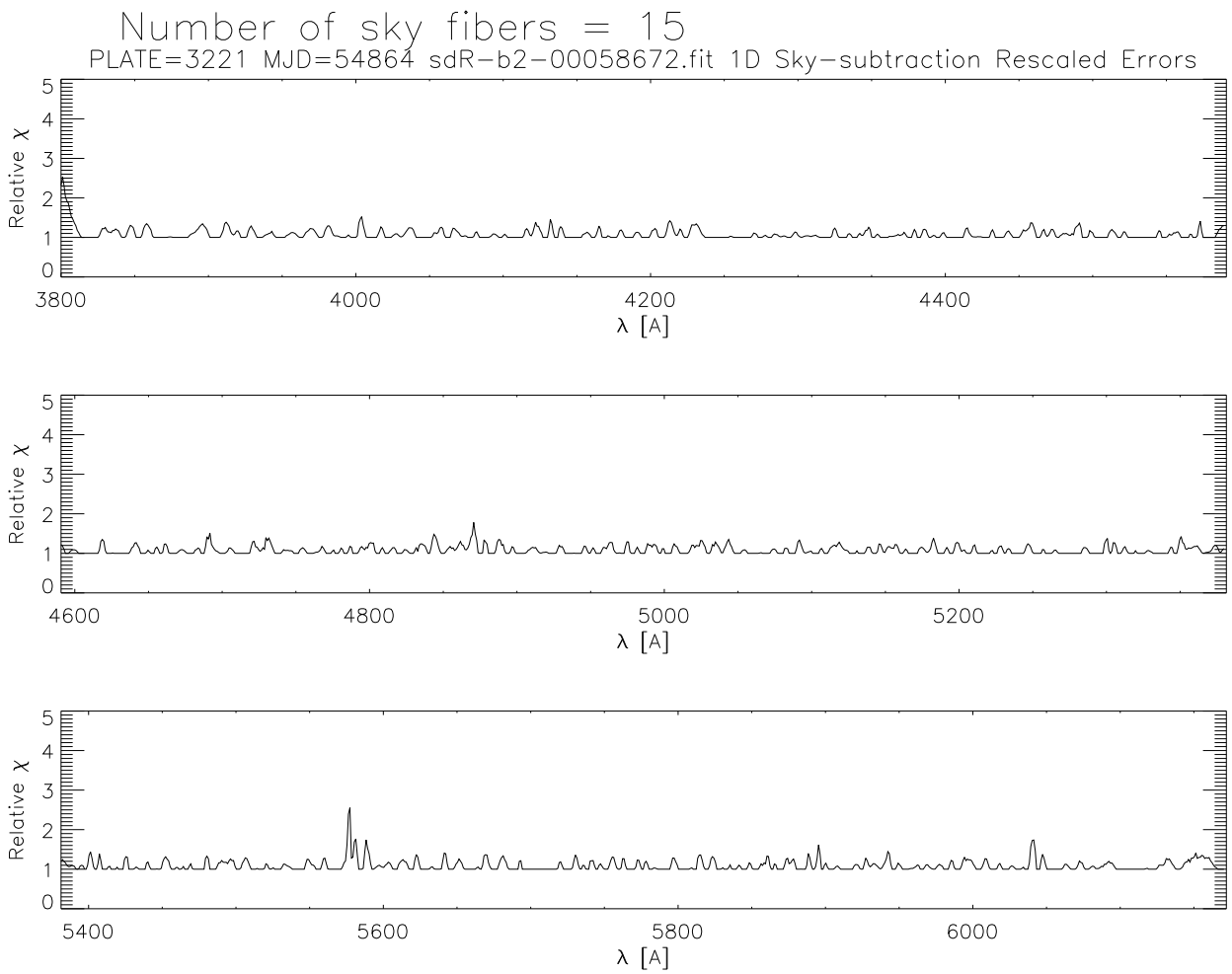

−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

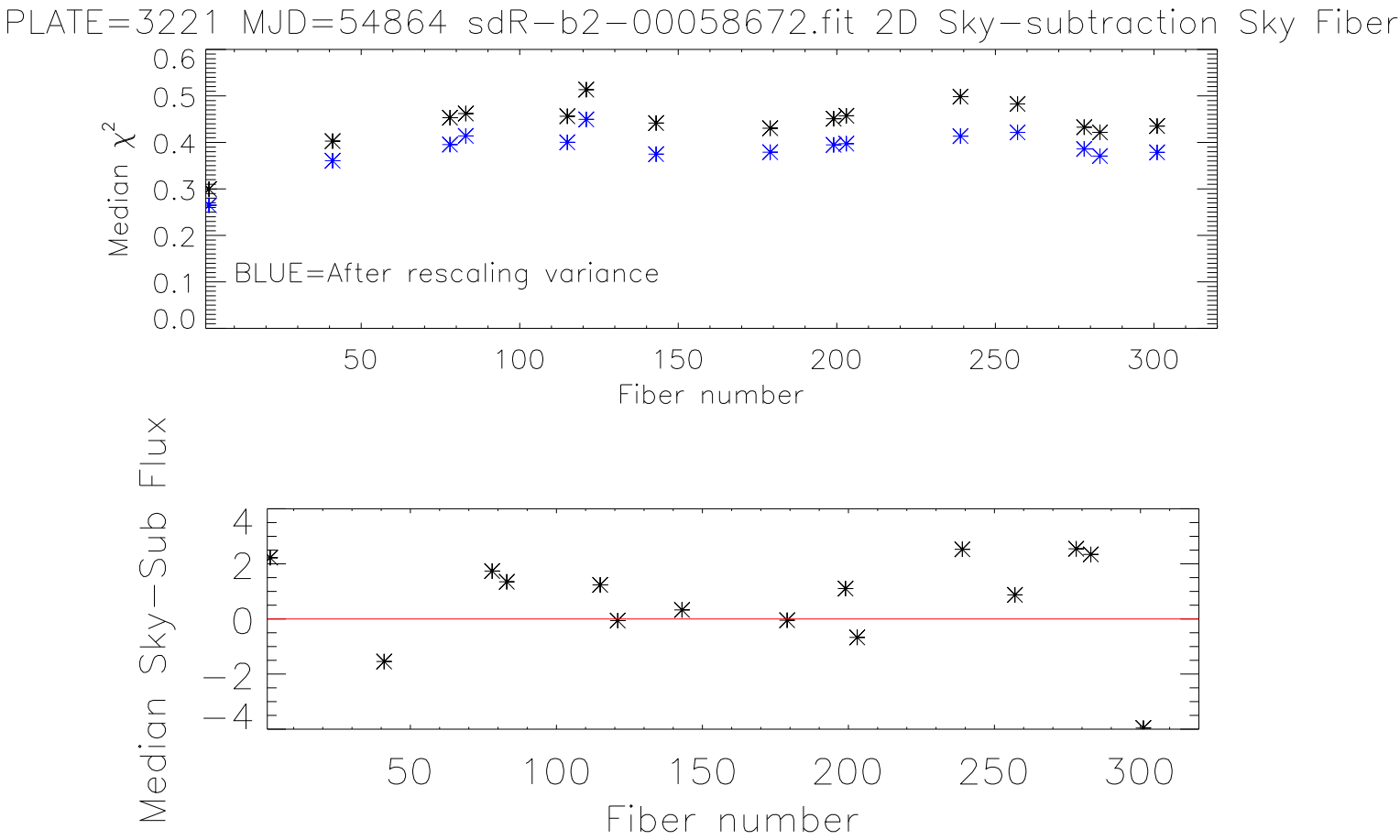

PLATE=3221 MJD=54864 Smooth superflat for sdR-b2-00058672.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

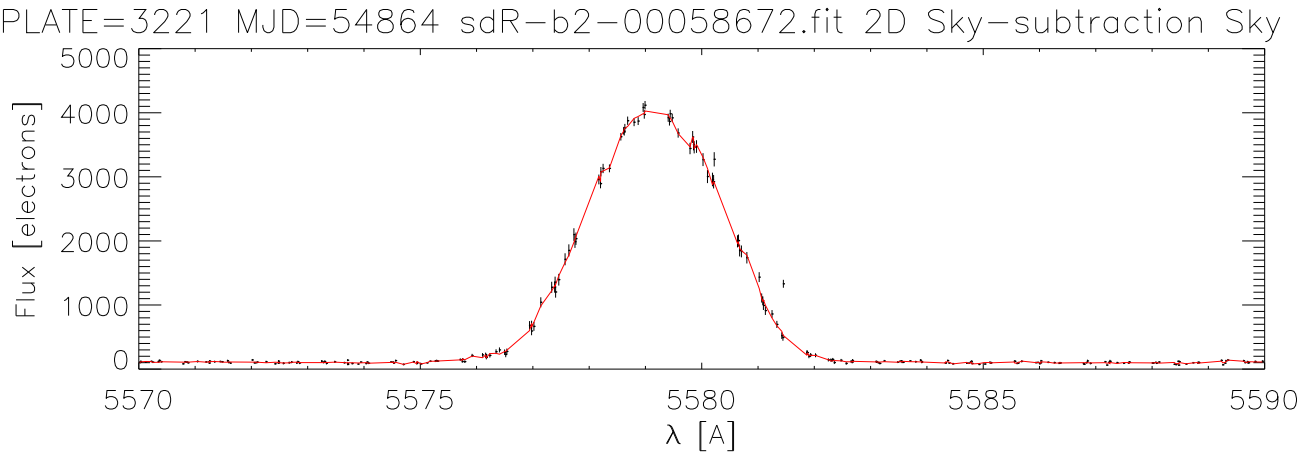

PLATE=3221 MJD=54864 sdR-b2-00058672.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

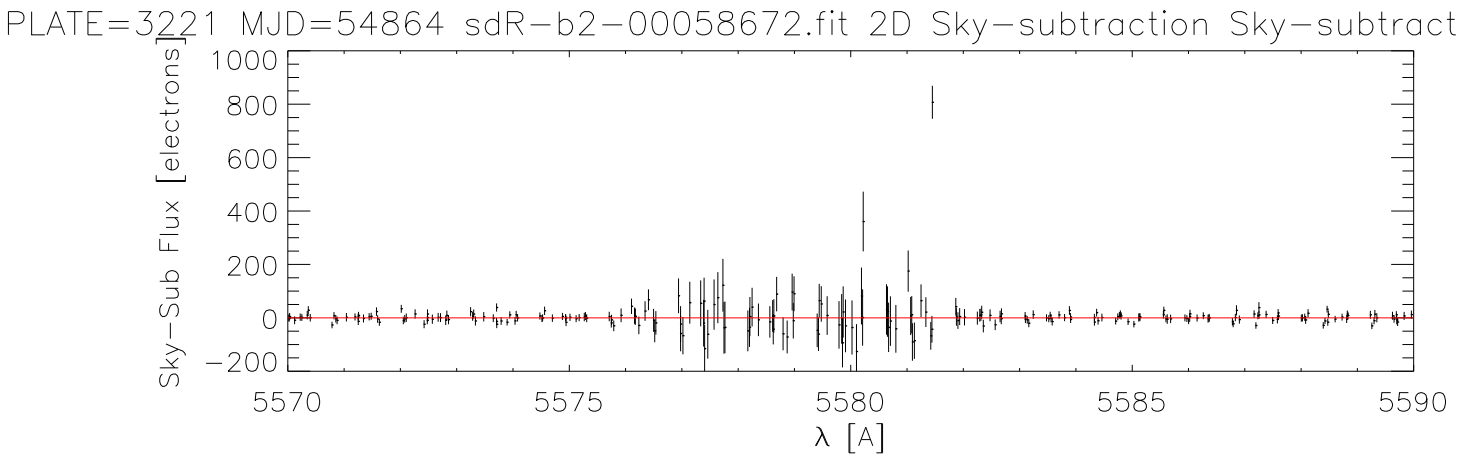

PLATE=3221 MJD=54864 sdR-b2-00058672.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

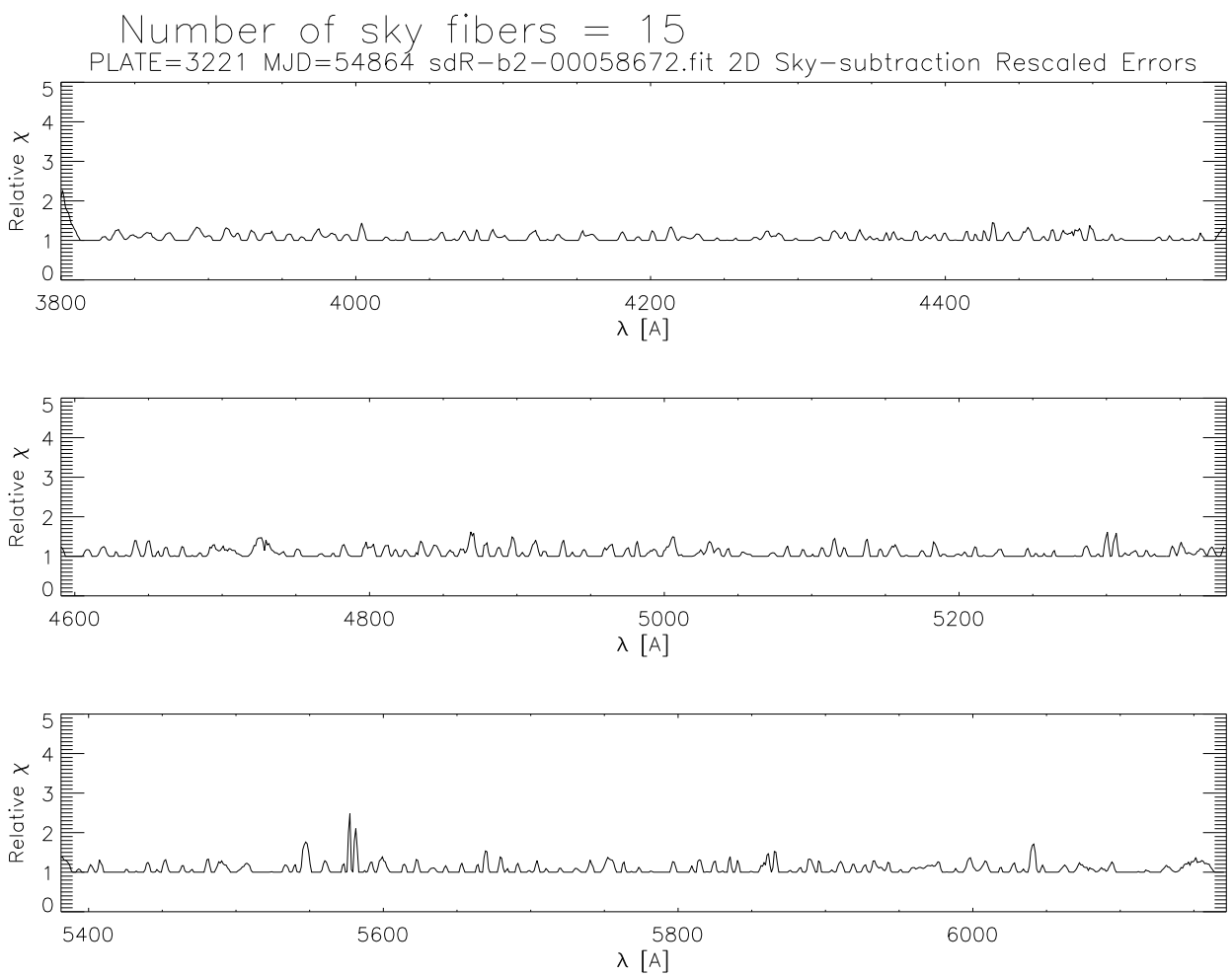

PLATE=3221 MJD=54864 sdR-b2-00058672.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

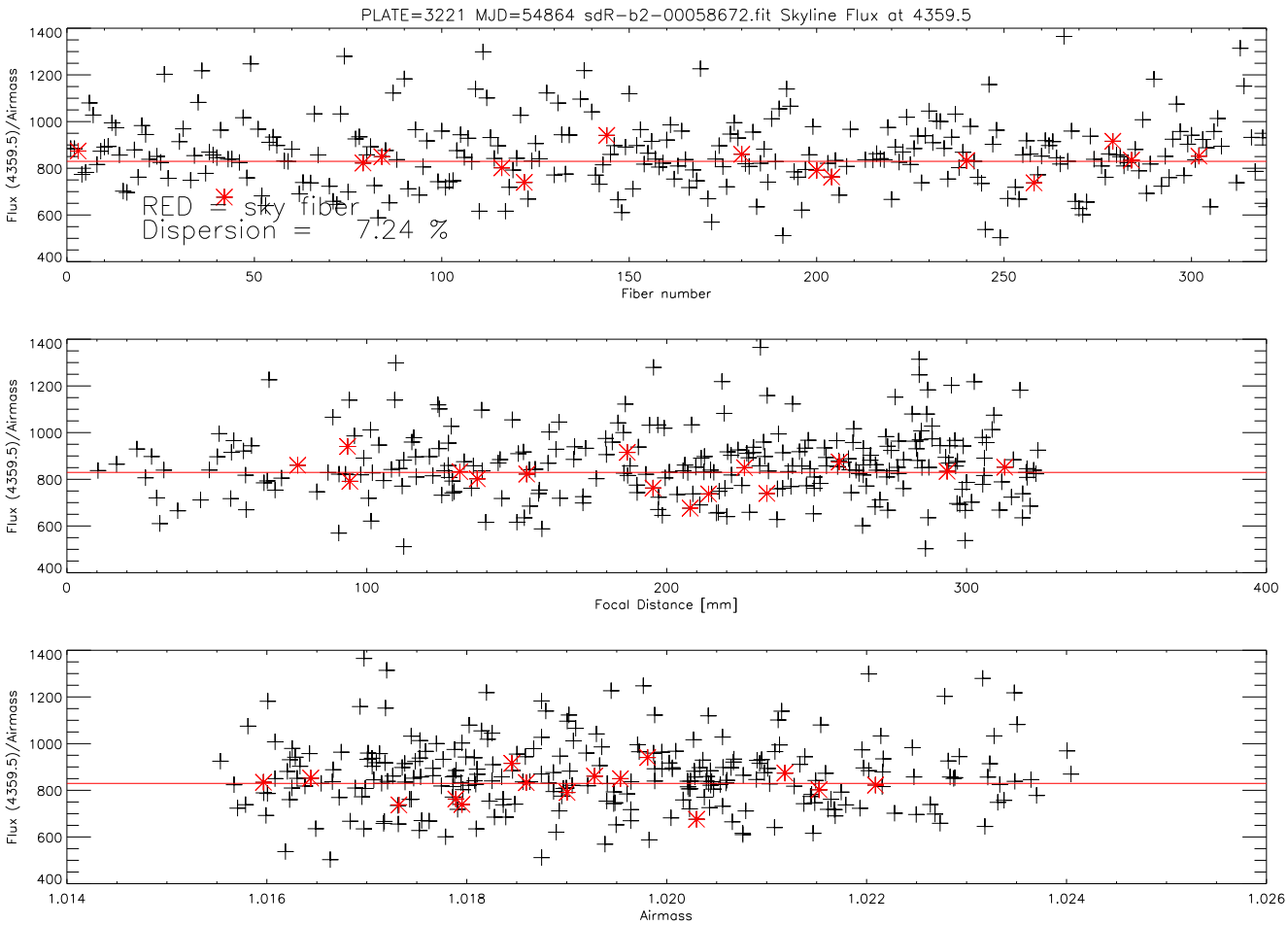

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058672.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

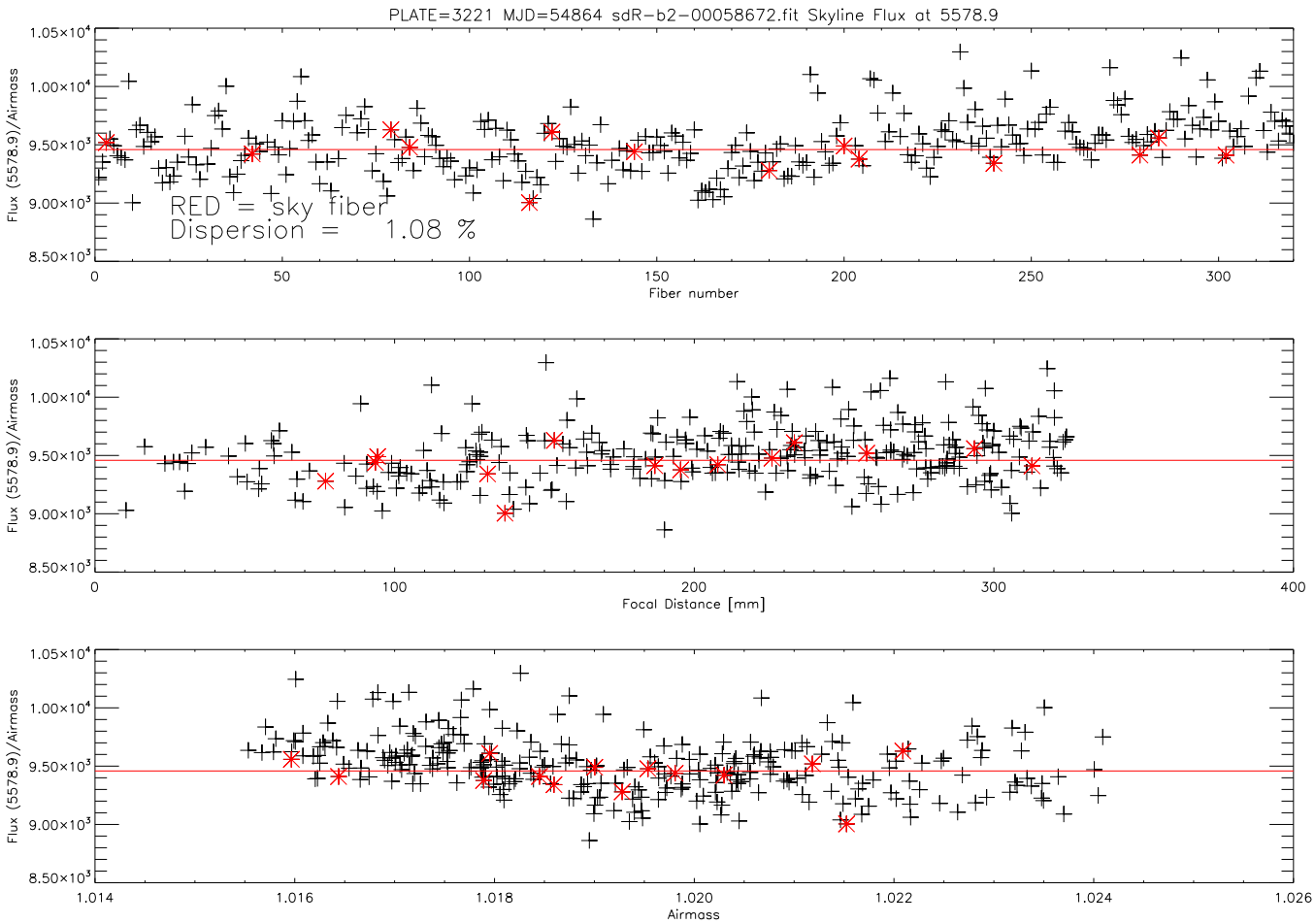

PLATE=3221 MJD=54864 sdR-b2-00058672.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

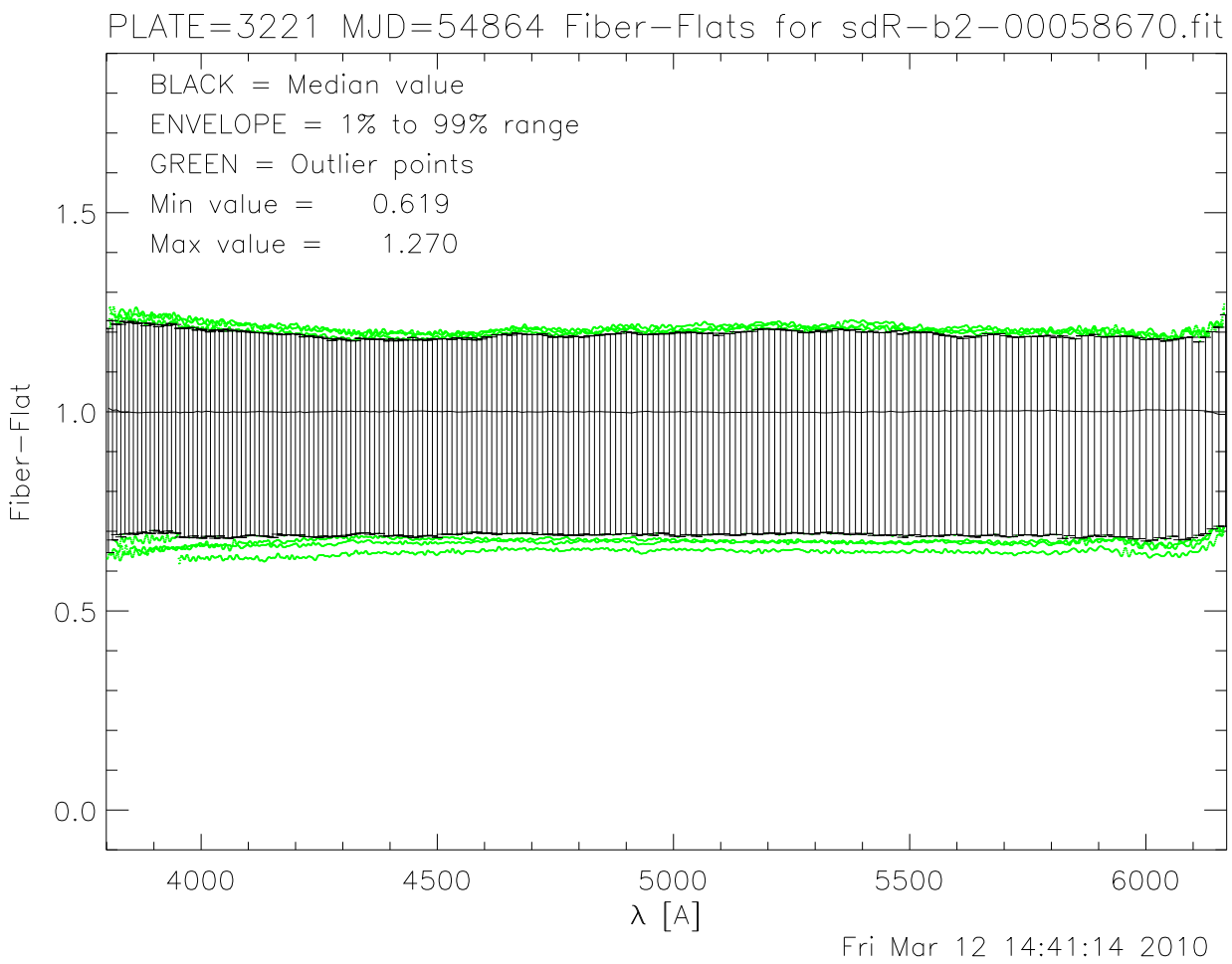

PLATE=3221 MJD=54864 sdR-b2-00058672.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

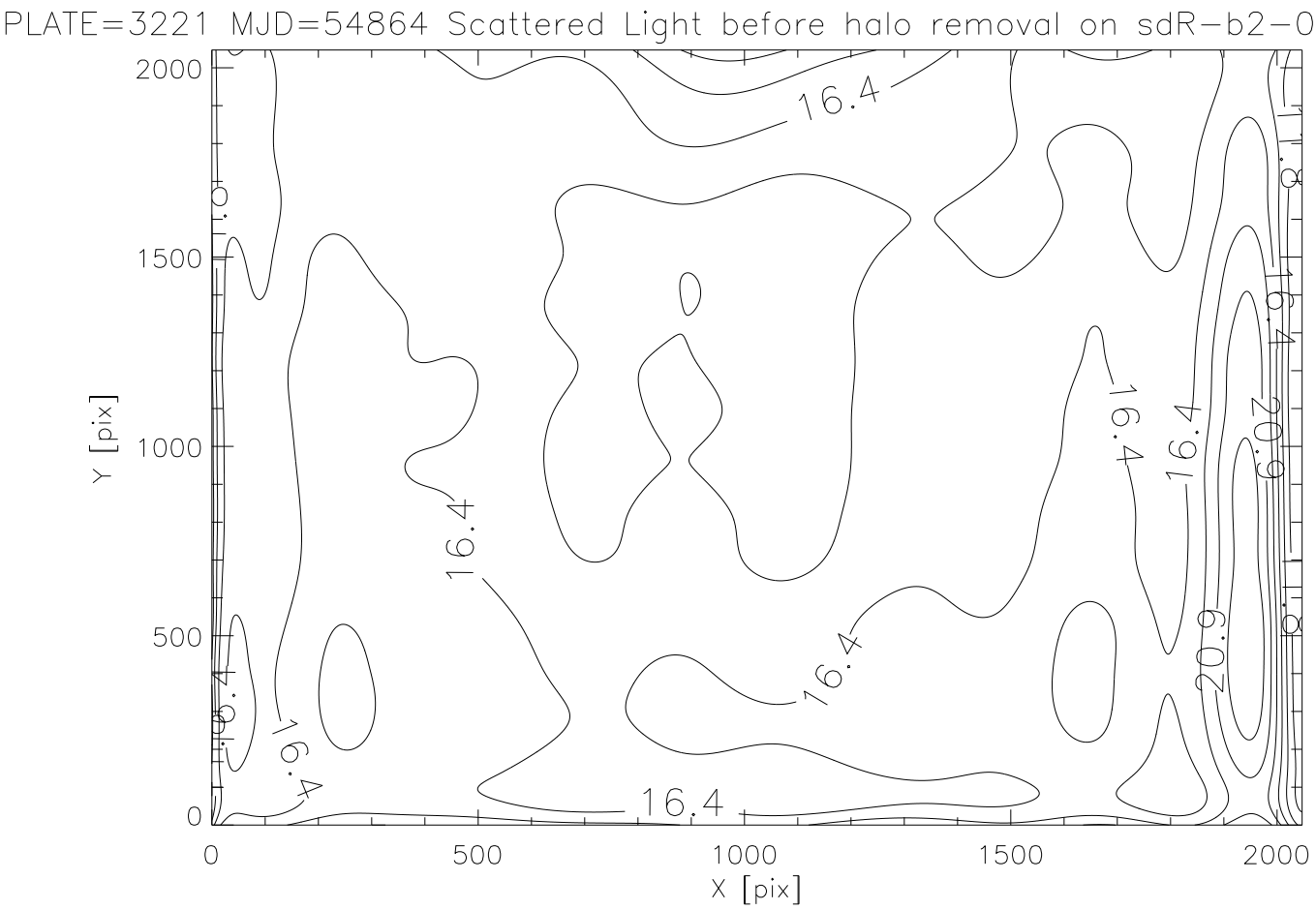

PLATE=3221 MJD=54864 sdR-b2-00058672.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

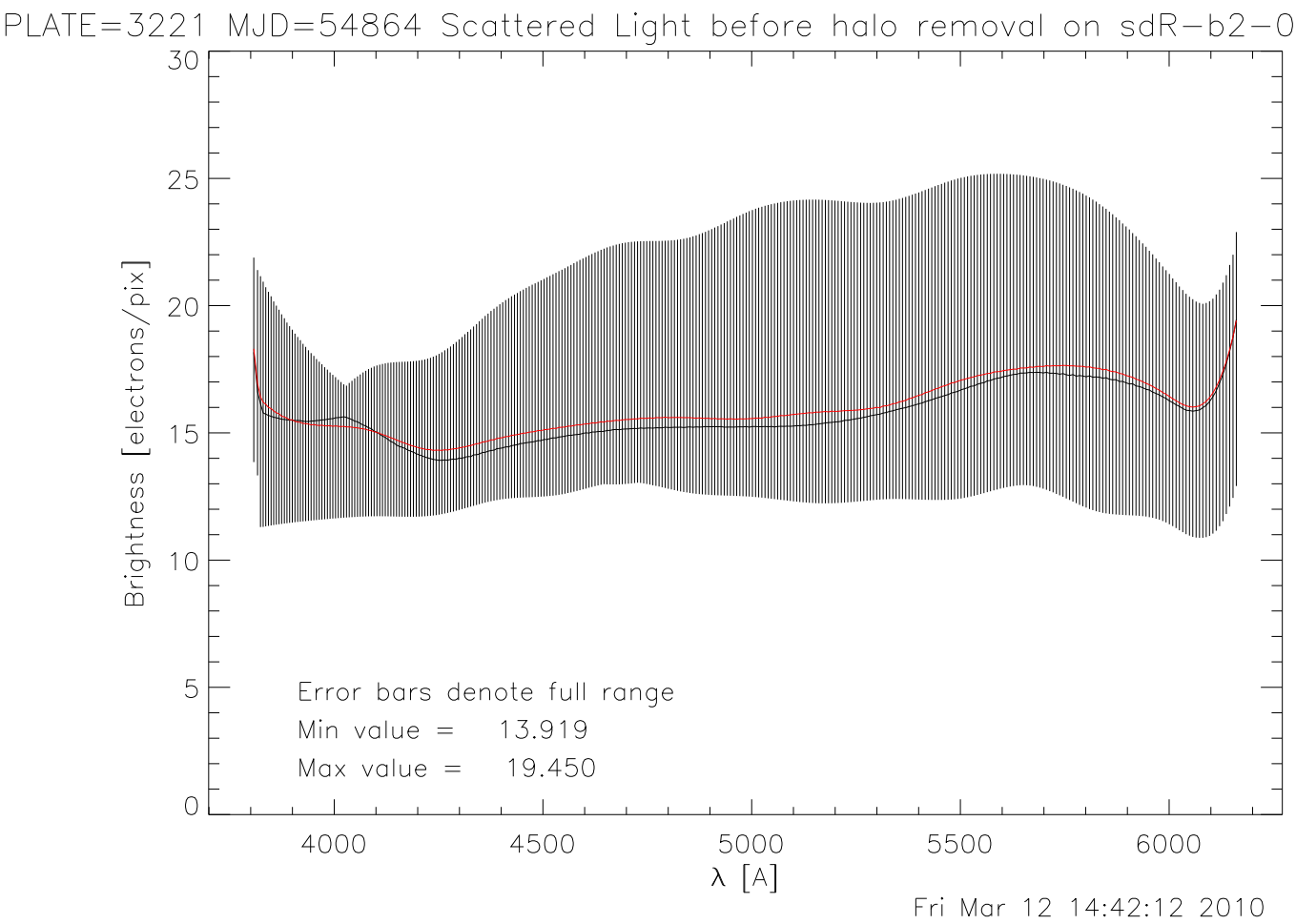

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058672.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

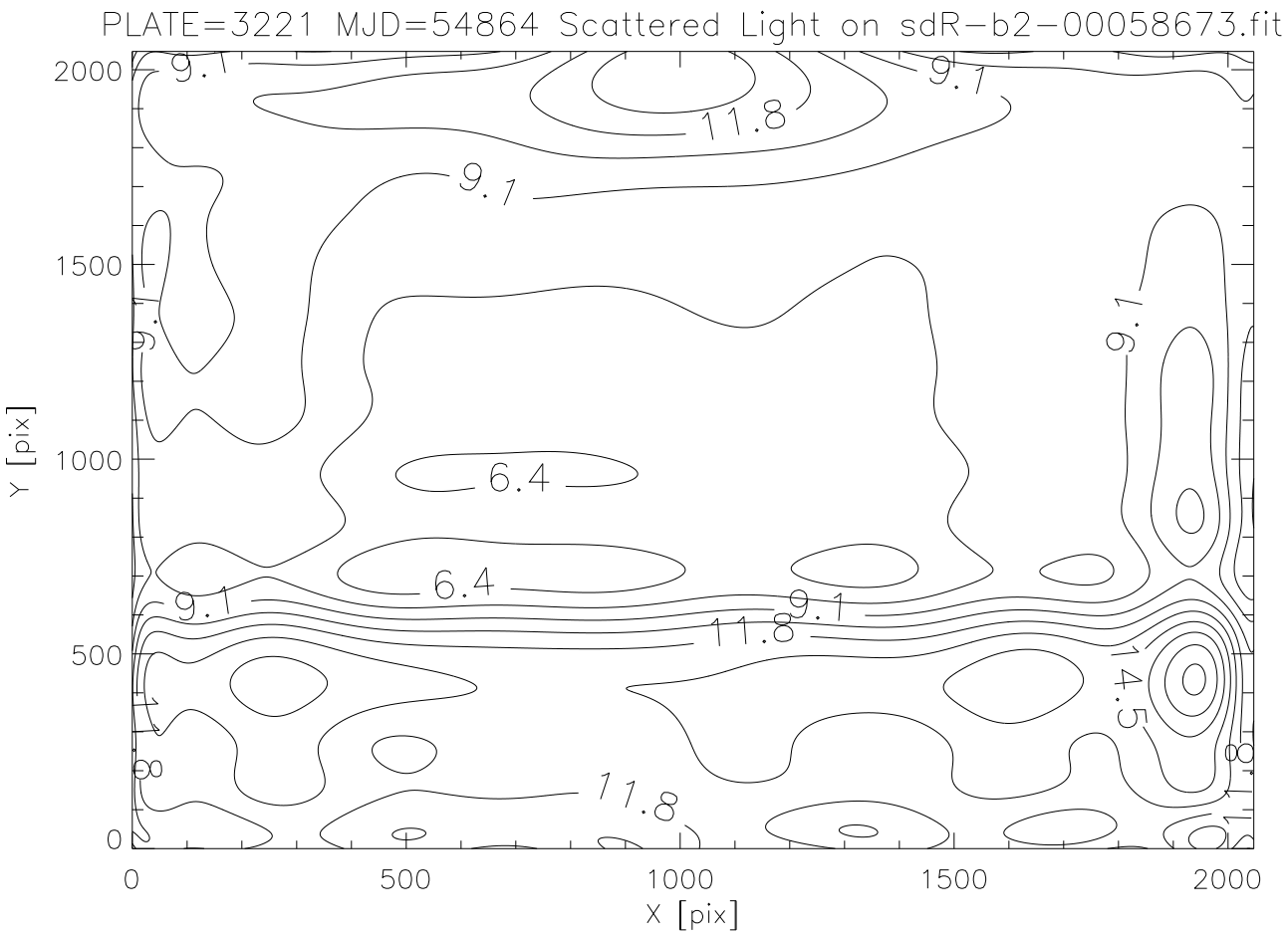

PLATE=3221 MJD=54864 sdR-b2-00058672.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 7.24 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

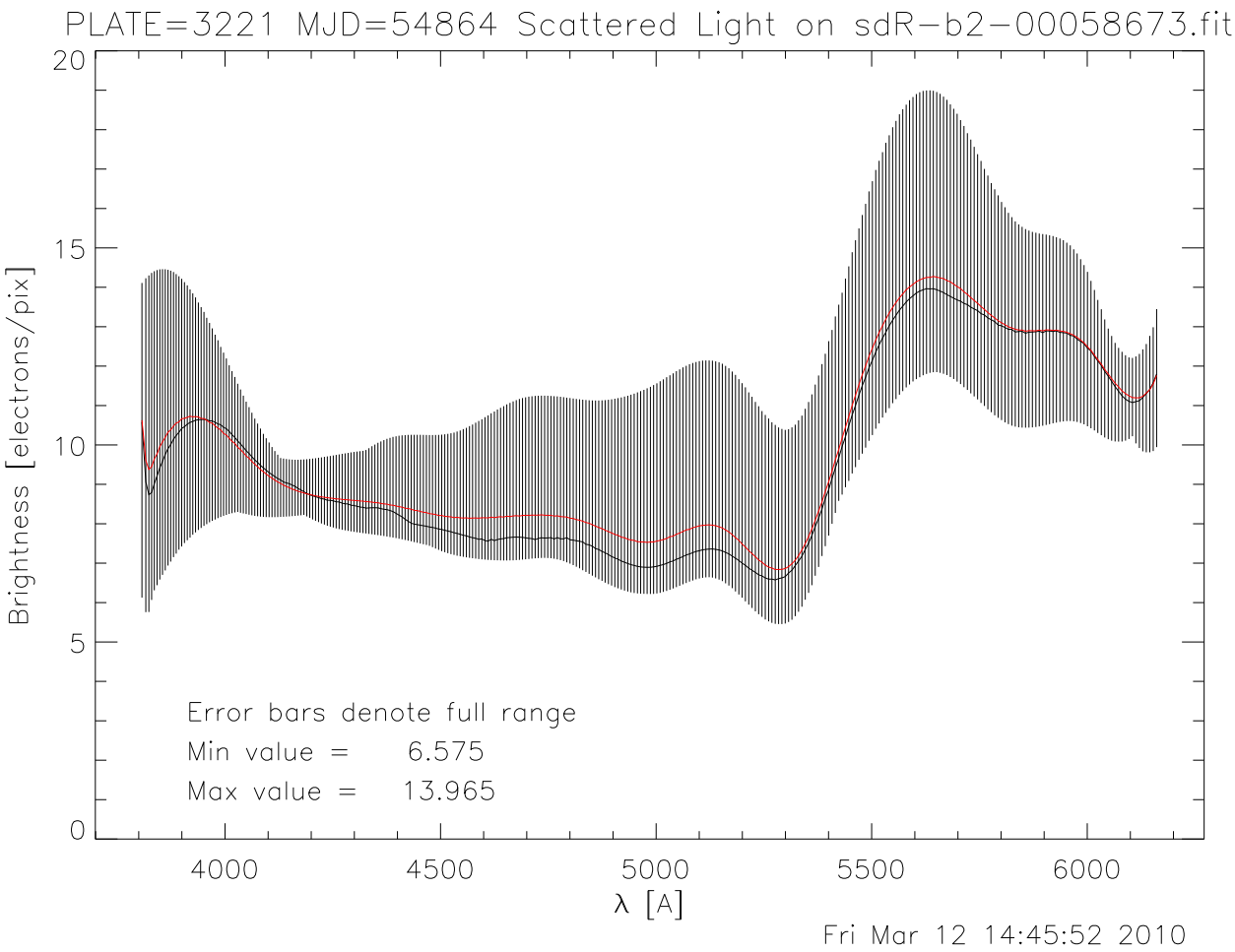

PLATE=3221 MJD=54864 sdR-b2-00058672.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.05×10⁴
1.00×10⁴
9.50×10³
9.00×10³
8.50×10³
RED = sky fiber
Dispersion = 1.08 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.05×10⁴
1.00×10⁴
9.50×10³
9.00×10³
8.50×10³
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.05×10⁴
1.00×10⁴
9.50×10³
9.00×10³
8.50×10³
1.014
1.016
1.018
1.020
1.022
1.024
1.026
Airmass

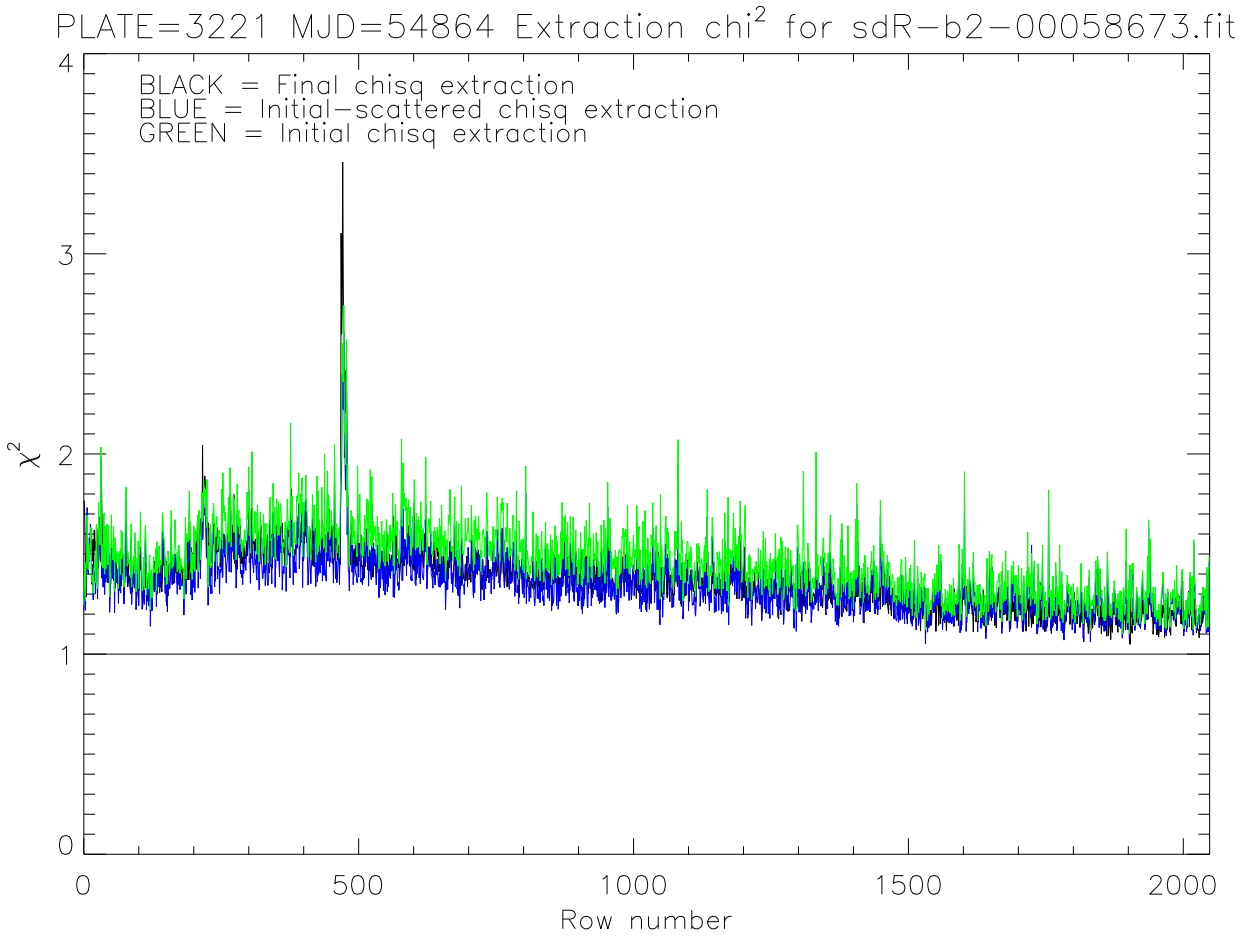

PLATE=3221 MJD=54864 Fiber−Flats for sdR−b2−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.270
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:41:14 2010

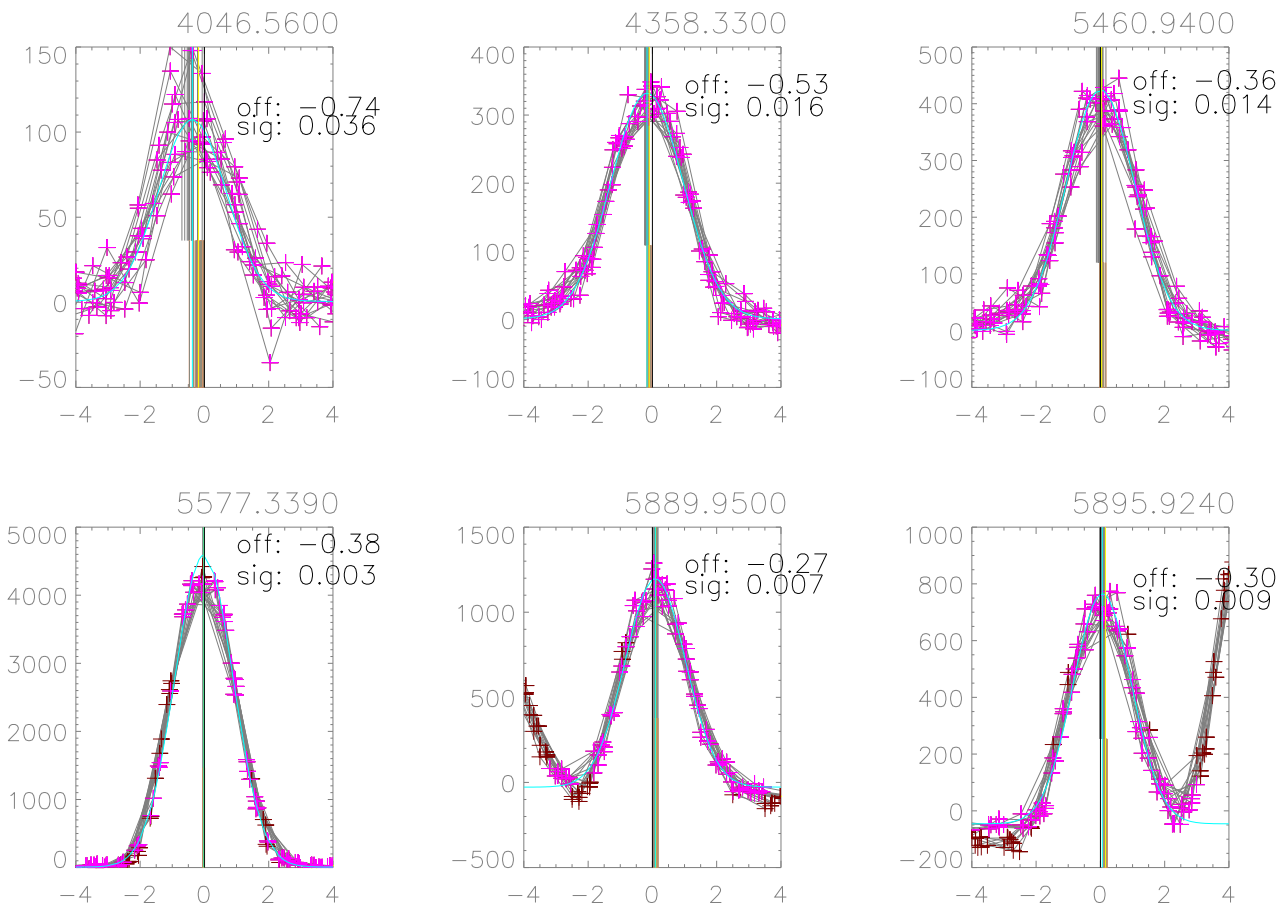

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR−b2−00058673.f
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
20.9

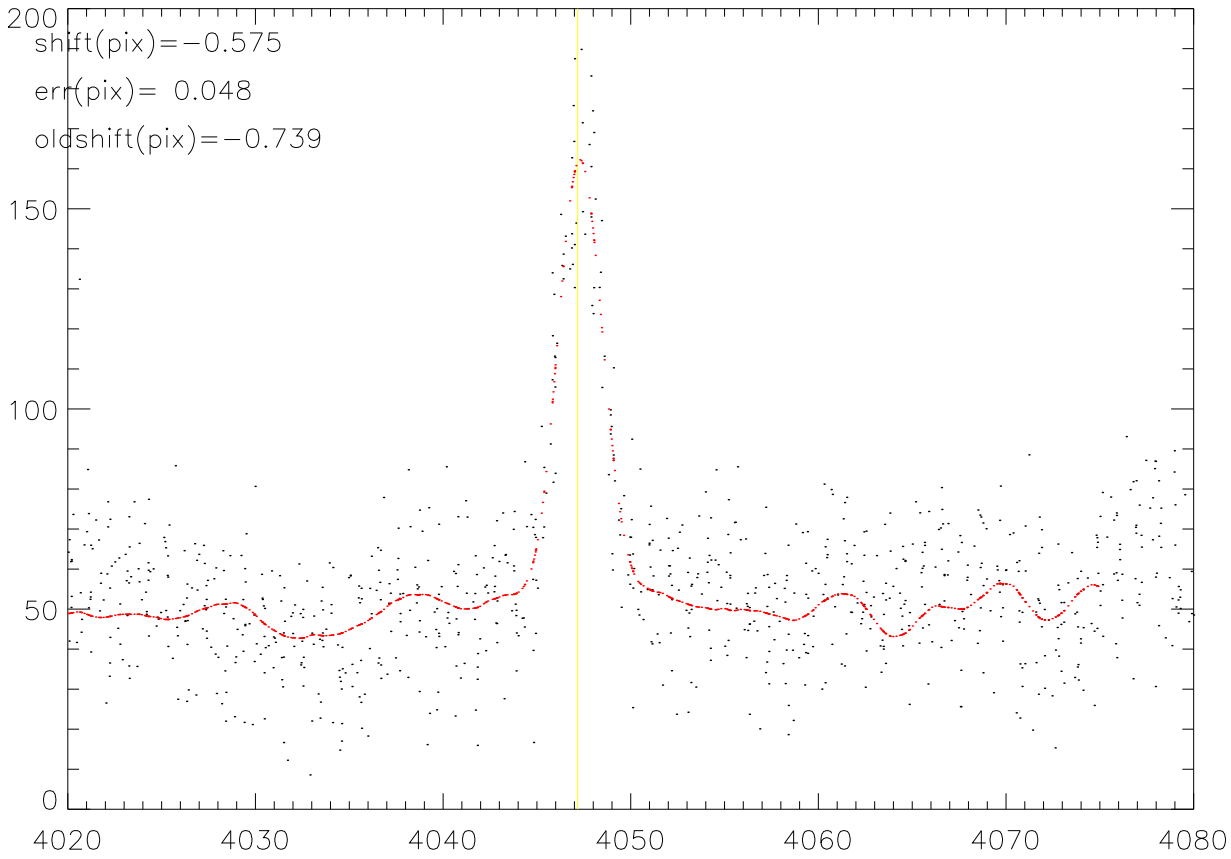

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058673.f
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 13.919
Max value = 19.450
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:42:12 2010

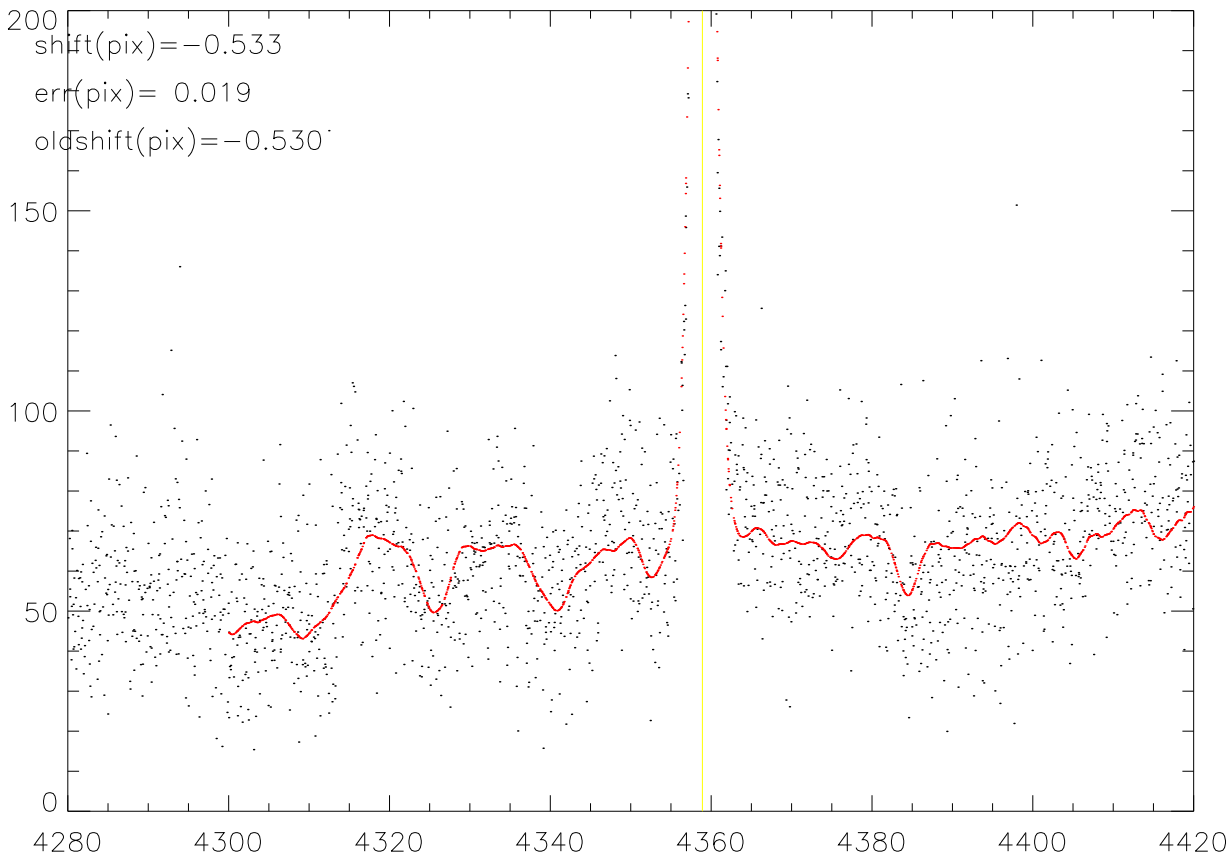

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058673.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
11.8
6.4
14.5

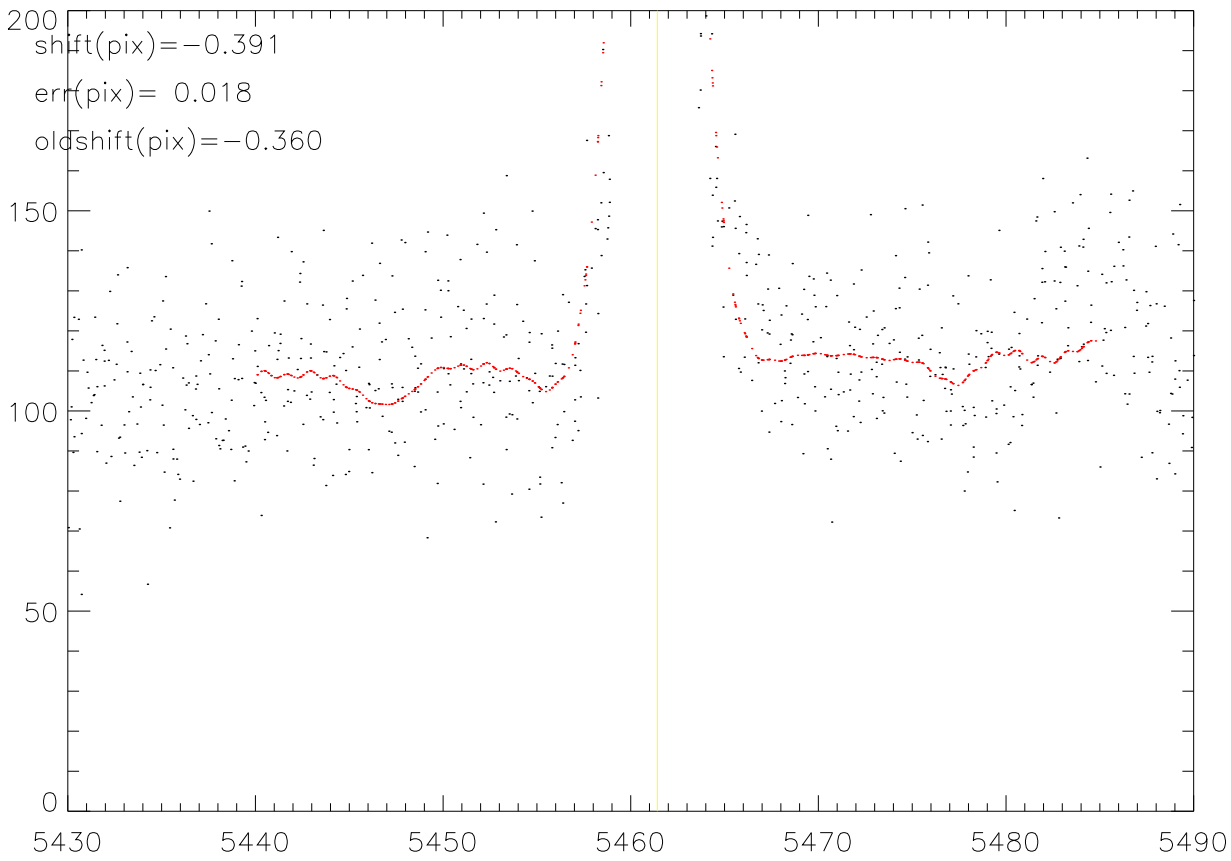

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058673.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.575
Max value = 13.965
Fri Mar 12 14:45:52 2010

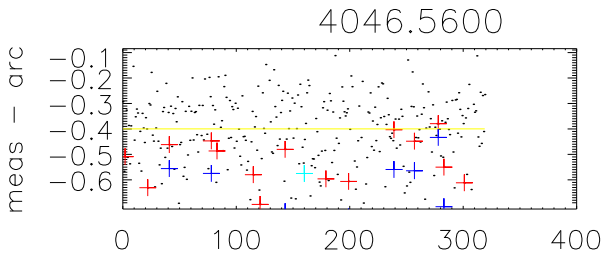

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b2-00058673.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

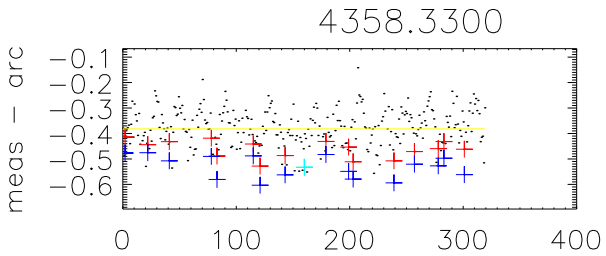

4046.5600
off: −0.74
sig: 0.036
4358.3300
off: −0.53
sig: 0.016
5460.9400
off: −0.36
sig: 0.014
5577.3390
off: −0.38
sig: 0.003
5889.9500
off: −0.27
sig: 0.007
5895.9240
off: −0.30
sig: 0.009

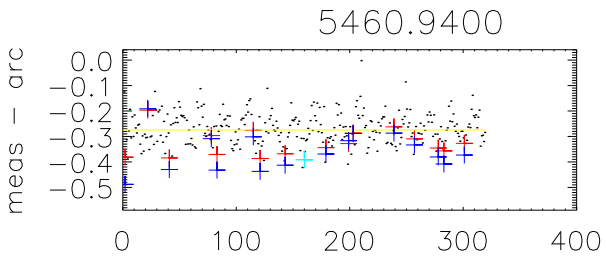

shift(pix)=−0.575
err(pix)= 0.048
oldshift(pix)=−0.739
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

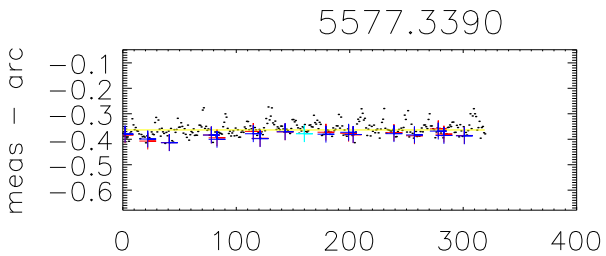

shift(pix)=−0.533
err(pix)= 0.019
oldshift(pix)=−0.530
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

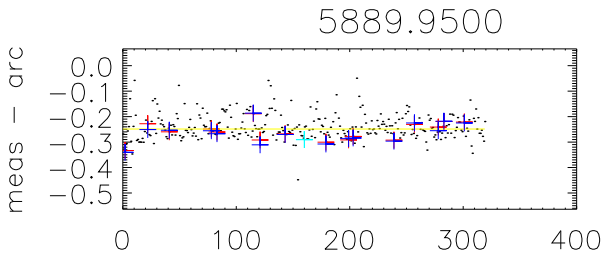

shift(pix)=−0.391
err(pix)= 0.018
oldshift(pix)=−0.360
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

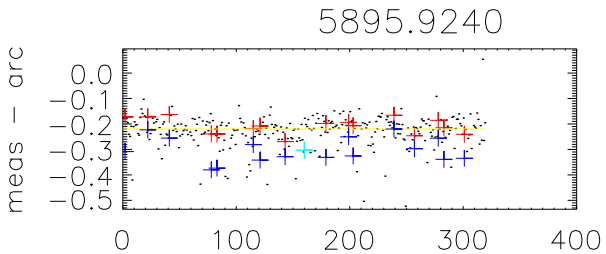

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

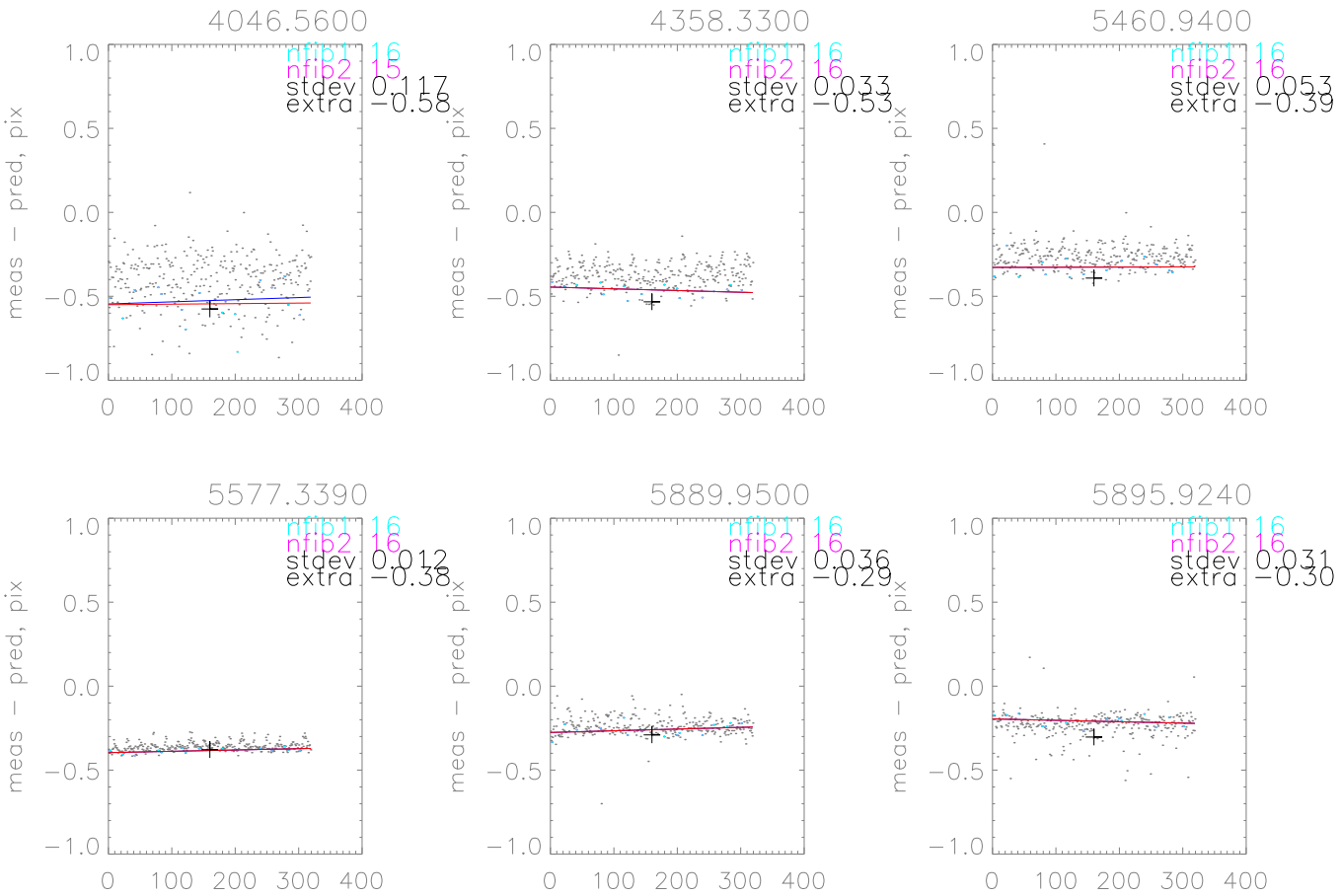

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

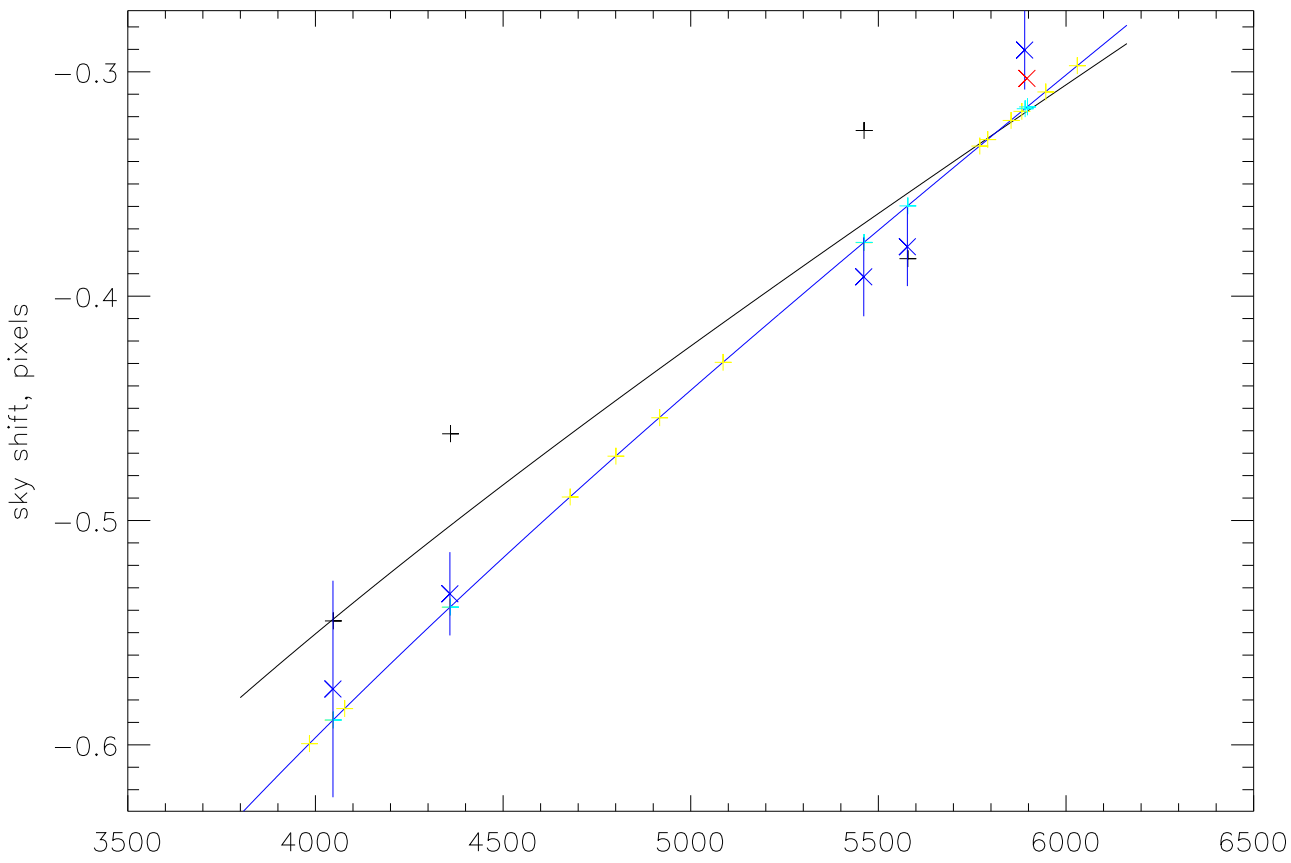

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

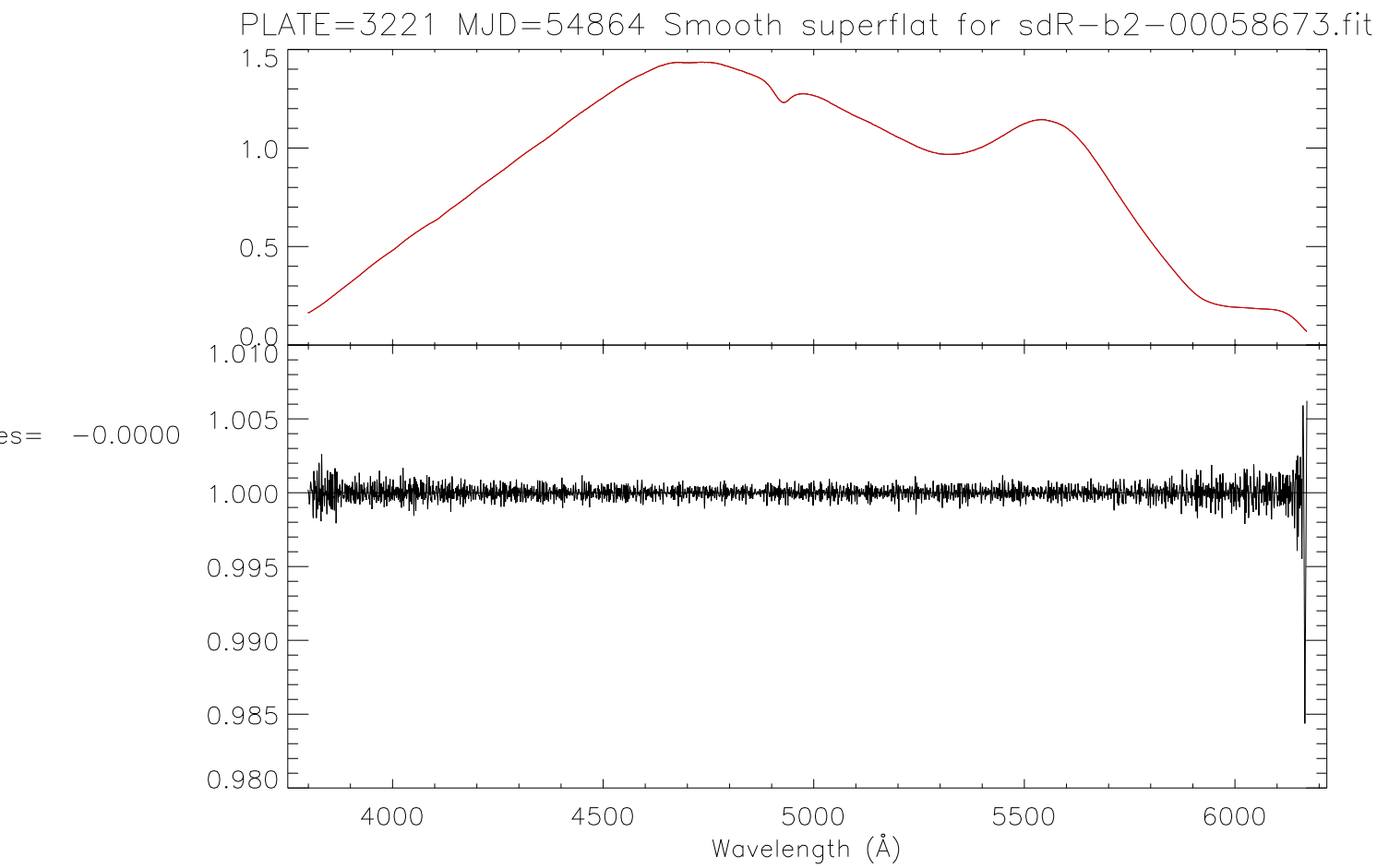

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

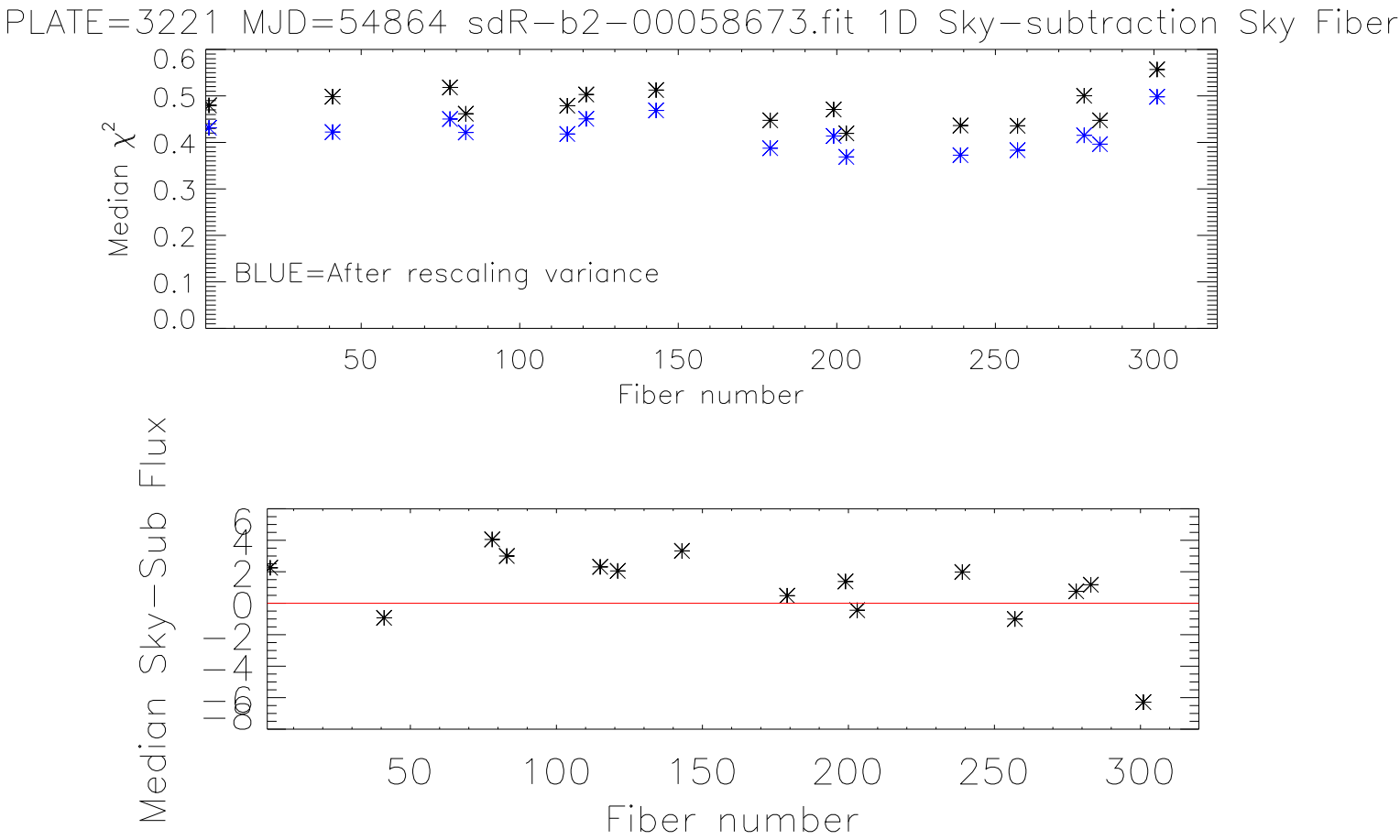

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

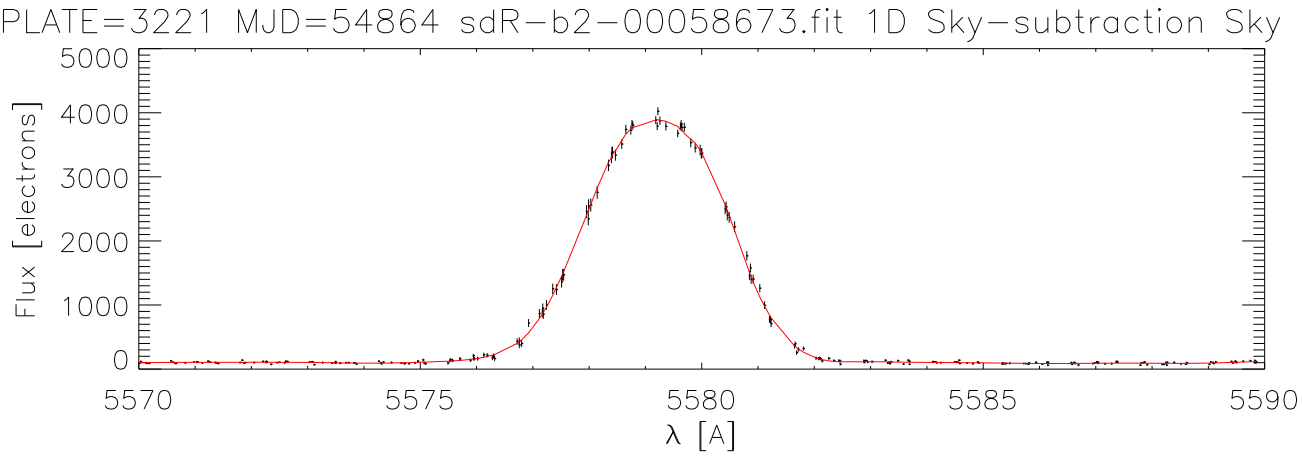

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

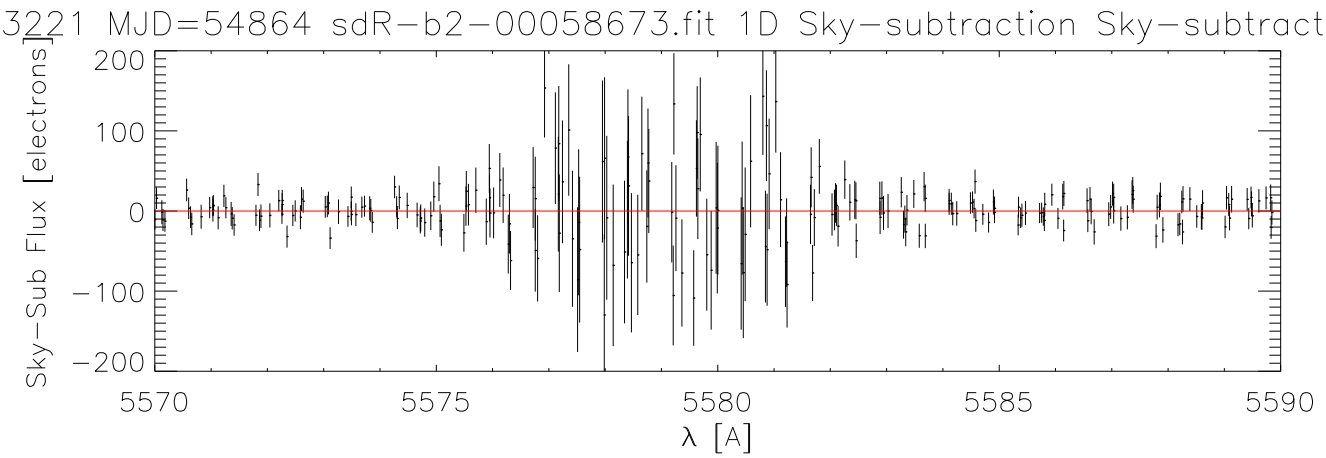

4046.5600
nfib1 16
nfib2 15
stdev 0.117
extra −0.58
4358.3300
nfib1 16
nfib2 16
stdev 0.033
extra −0.53
5460.9400
nfib1 16
nfib2 16
stdev 0.053
extra −0.39
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra −0.38
5889.9500
nfib1 16
nfib2 16
stdev 0.036
extra −0.29
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra −0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

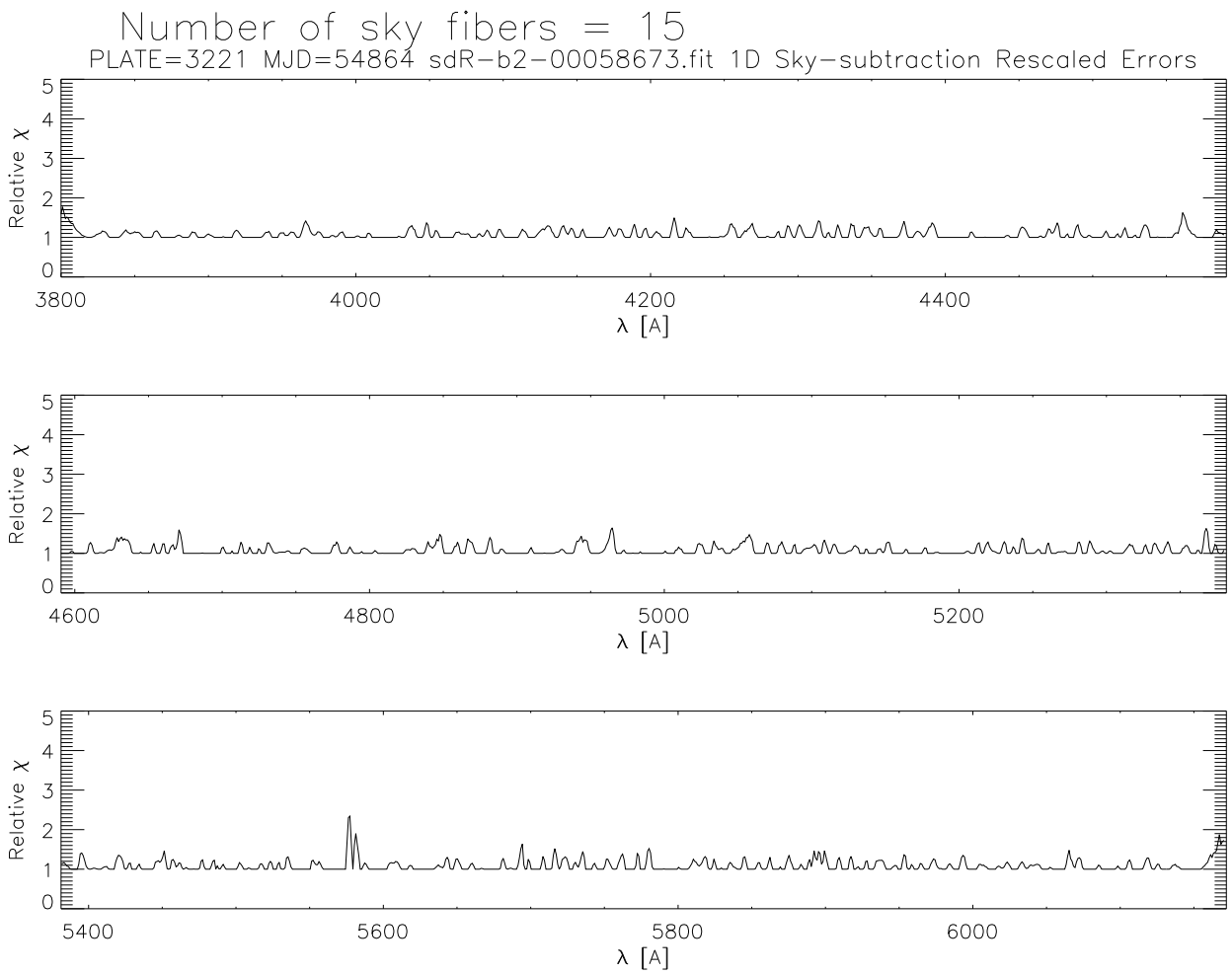

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500

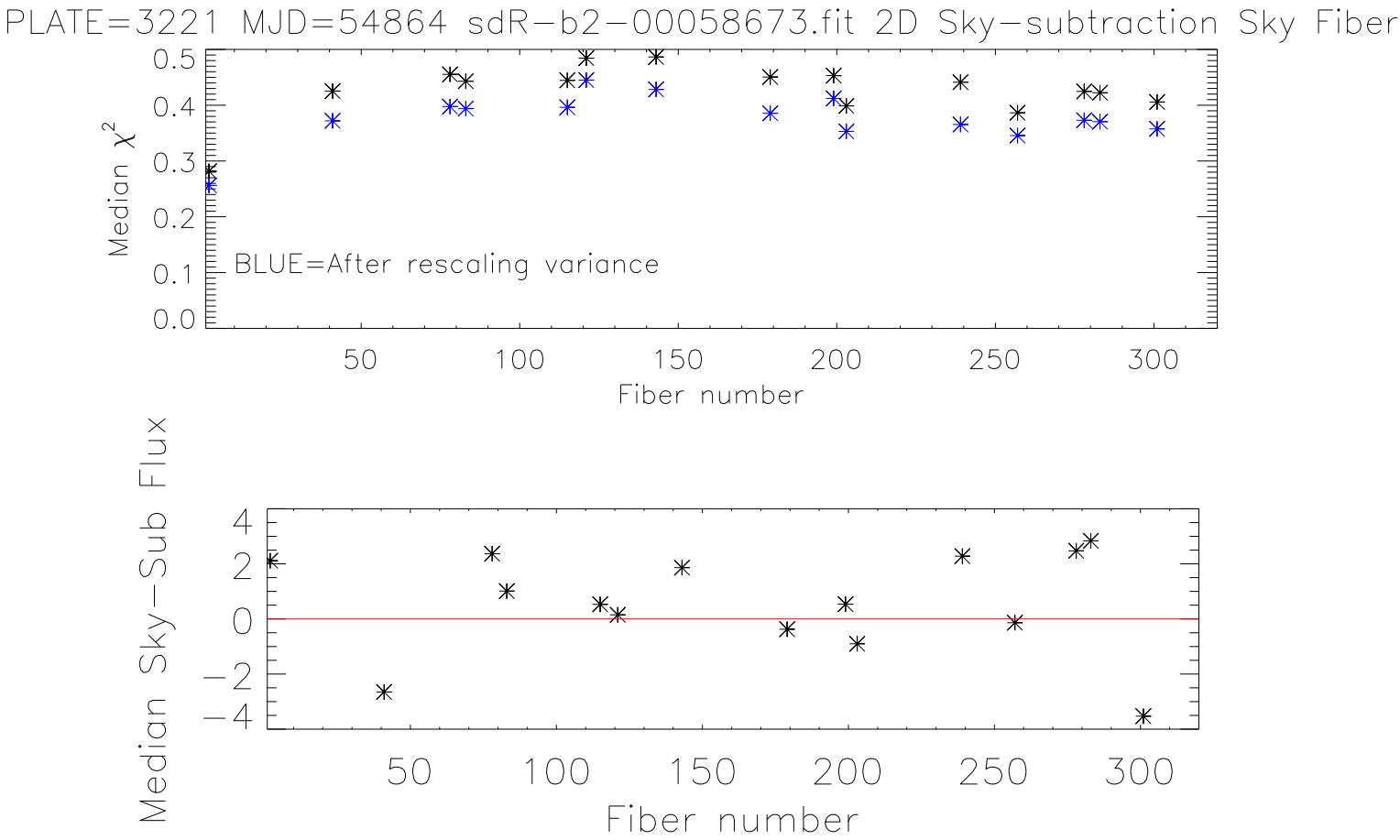

PLATE=3221 MJD=54864 Smooth superflat for sdR-b2-00058673.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

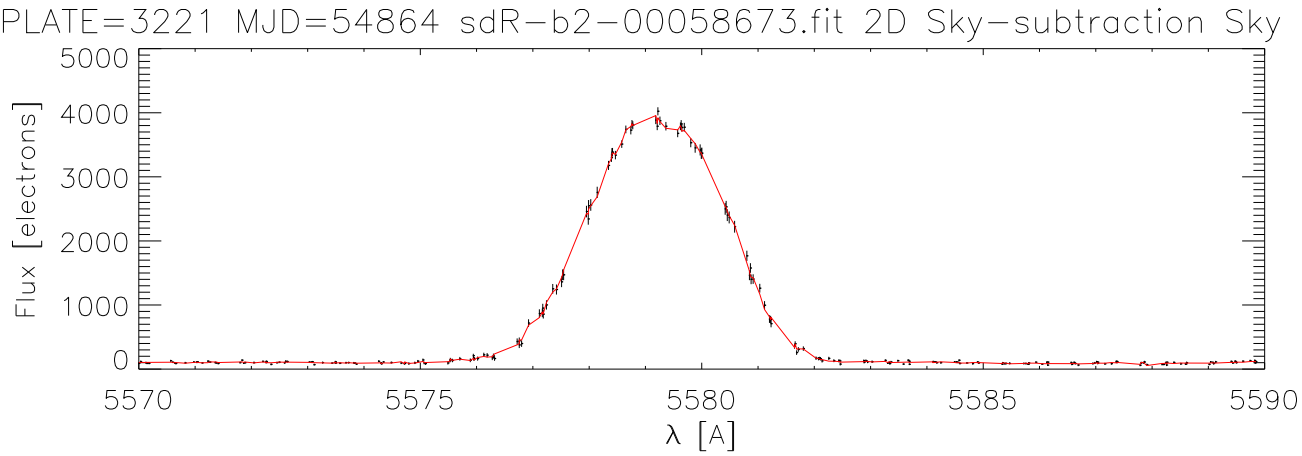

PLATE=3221 MJD=54864 sdR-b2-00058673.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-1.1142e-06
-1.1142e-06
-1.1142e-06
-1.1142e-06
-1.1142e-06
-1.1142e-06
-1.1142e-06
50
100
150
200
250
300
Fiber number

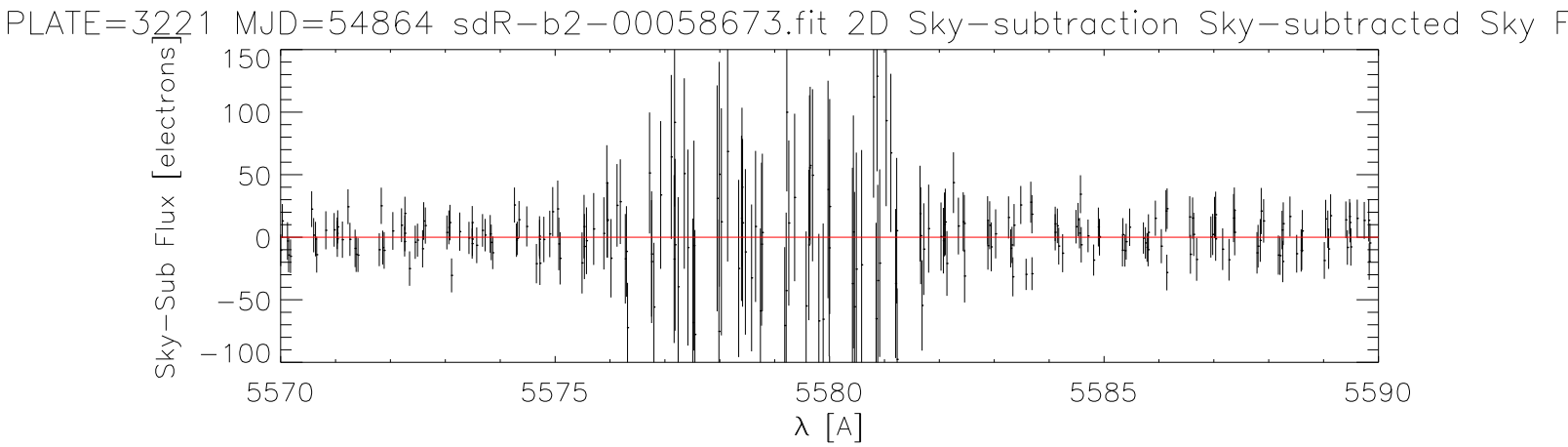

PLATE=3221 MJD=54864 sdR-b2-00058673.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

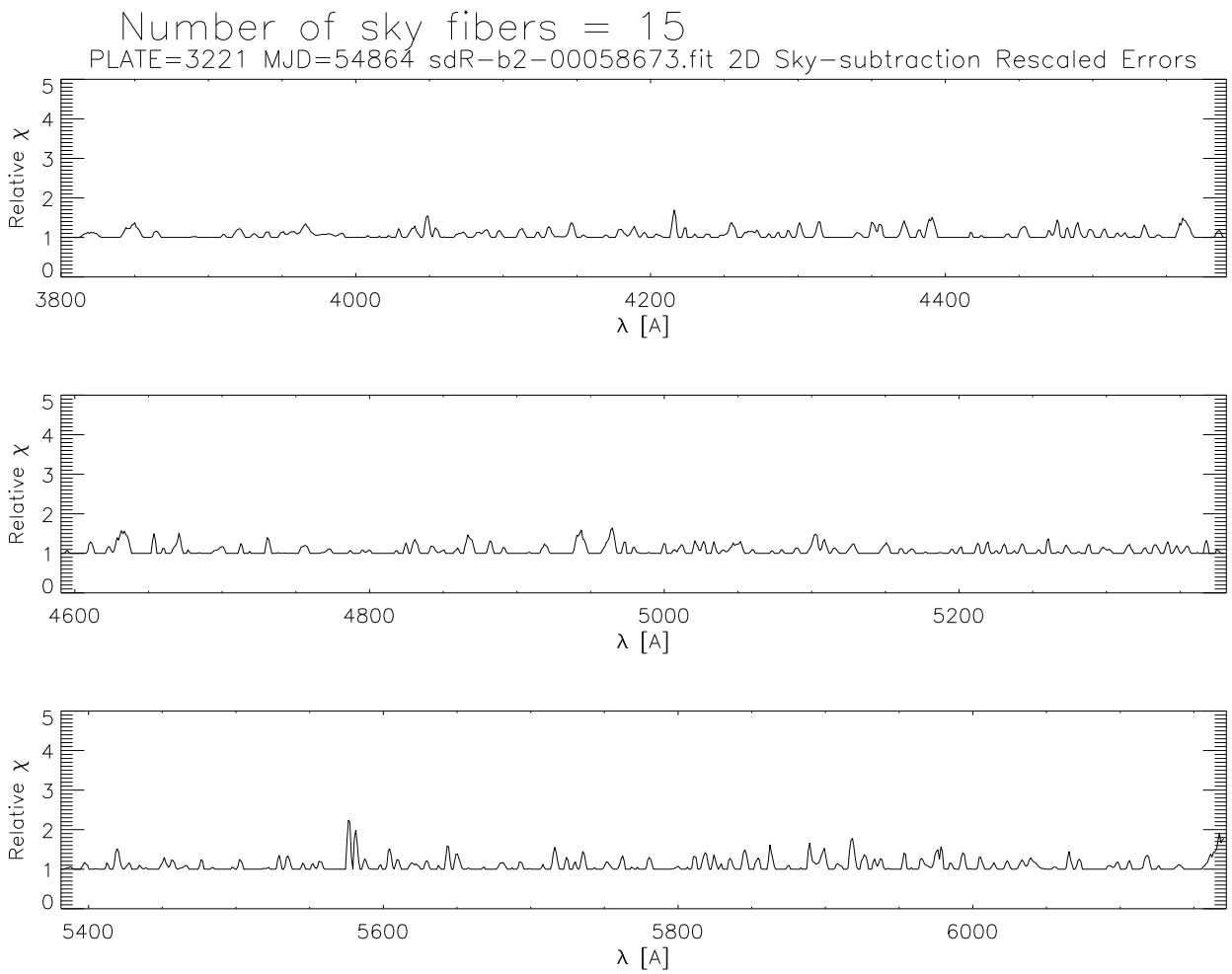

PLATE=3221 MJD=54864 sdR-b2-00058673.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

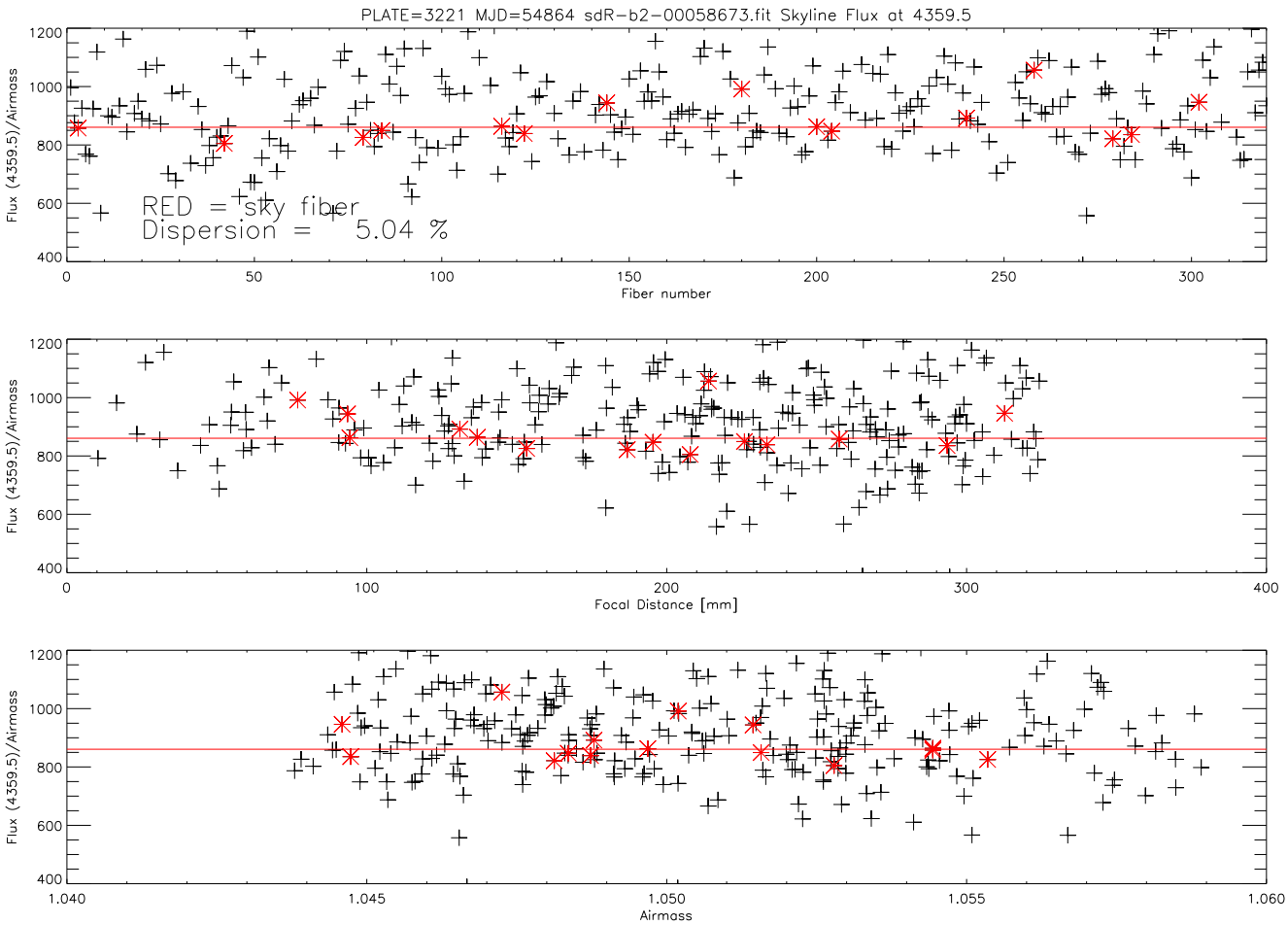

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058673.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

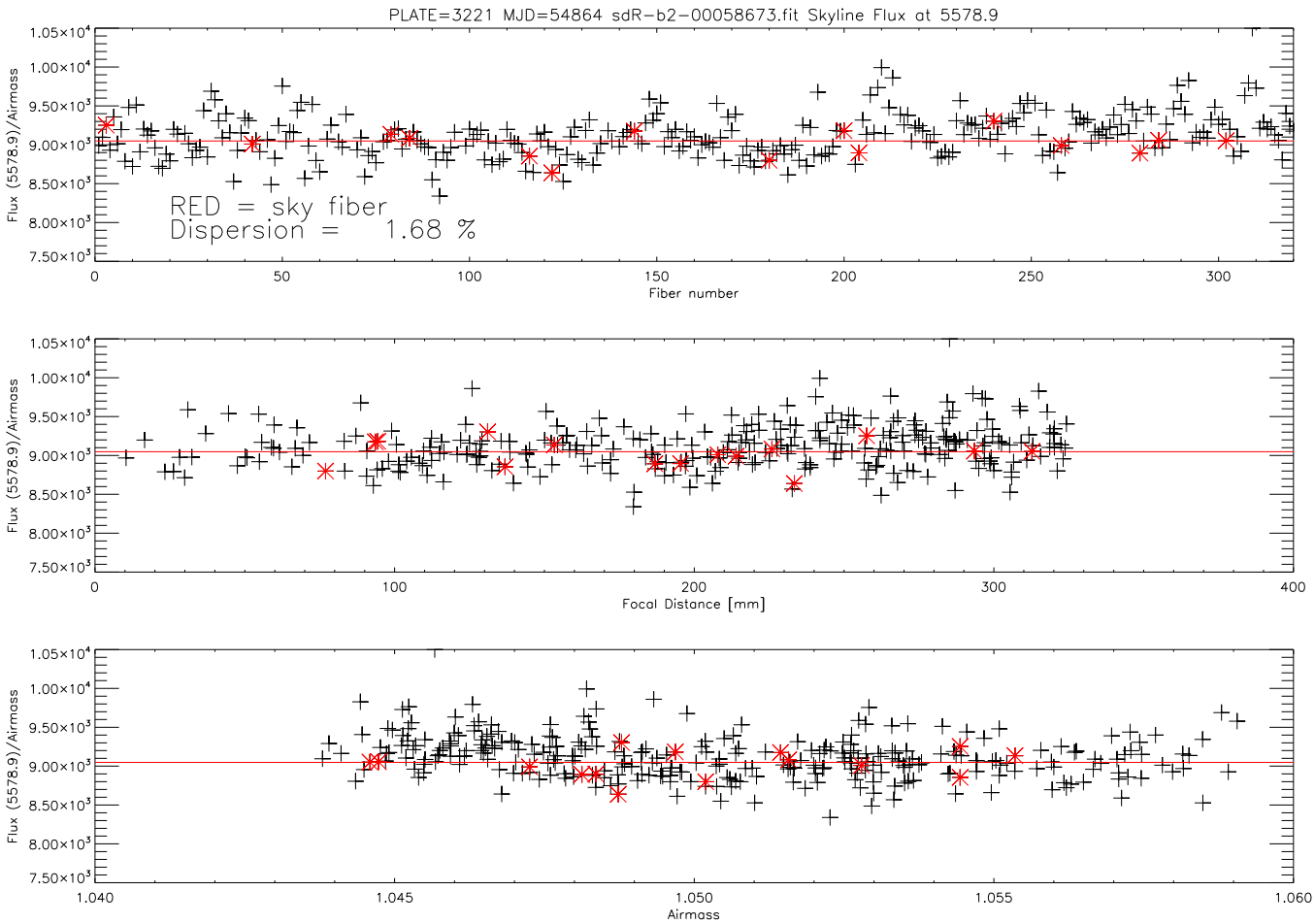

PLATE=3221 MJD=54864 sdR-b2-00058673.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

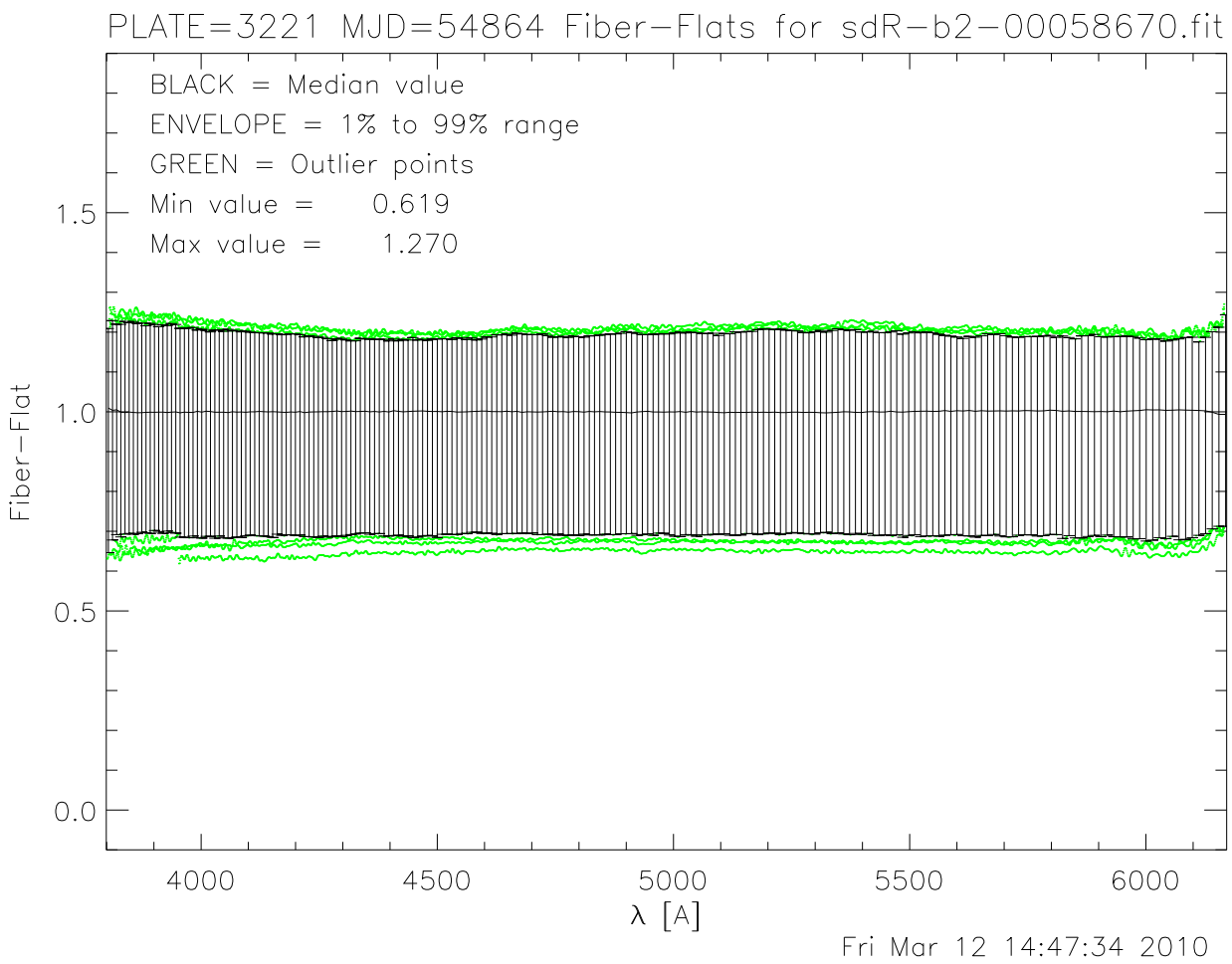

PLATE=3221 MJD=54864 sdR-b2-00058673.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

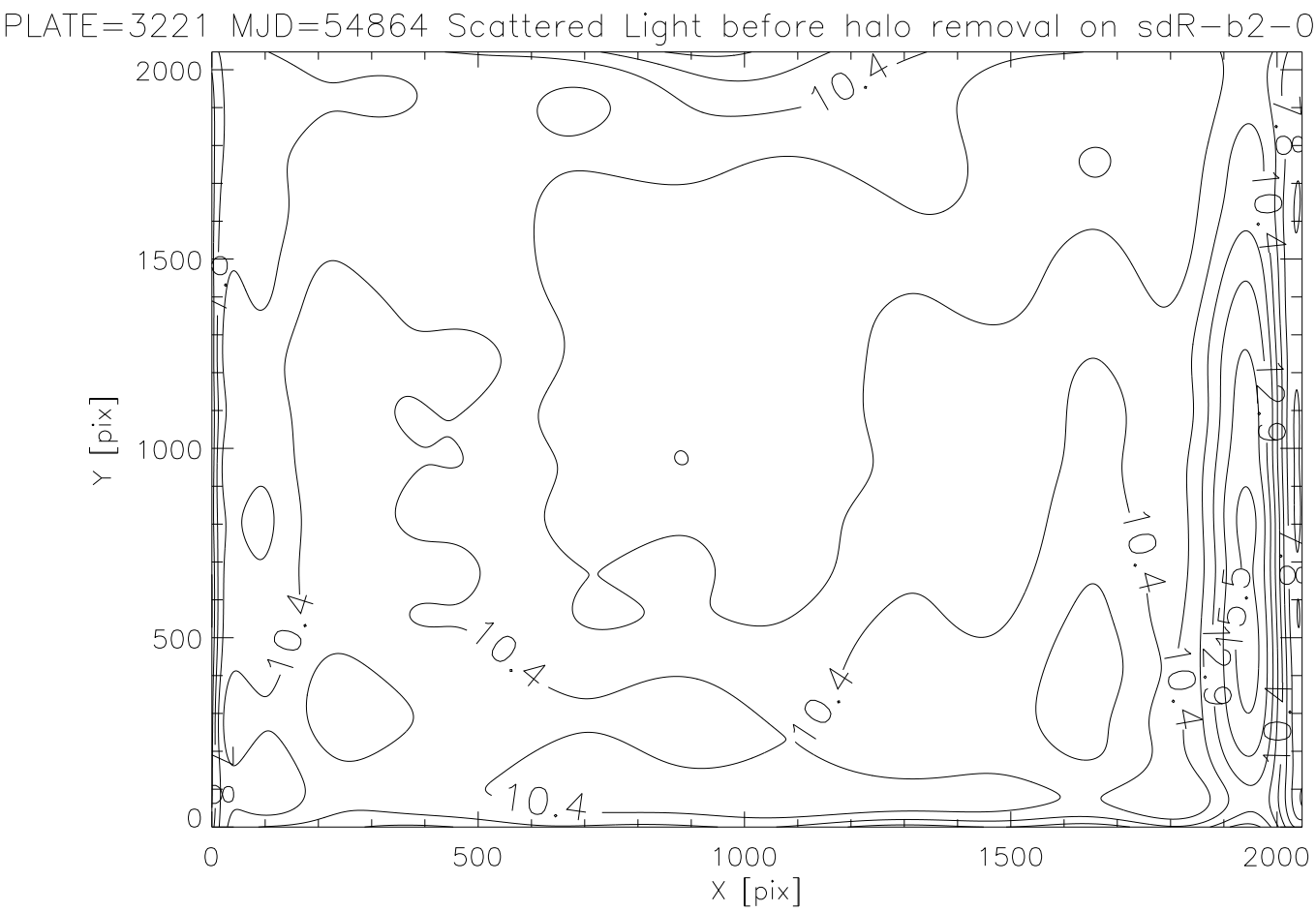

PLATE=3221 MJD=54864 sdR-b2-00058673.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

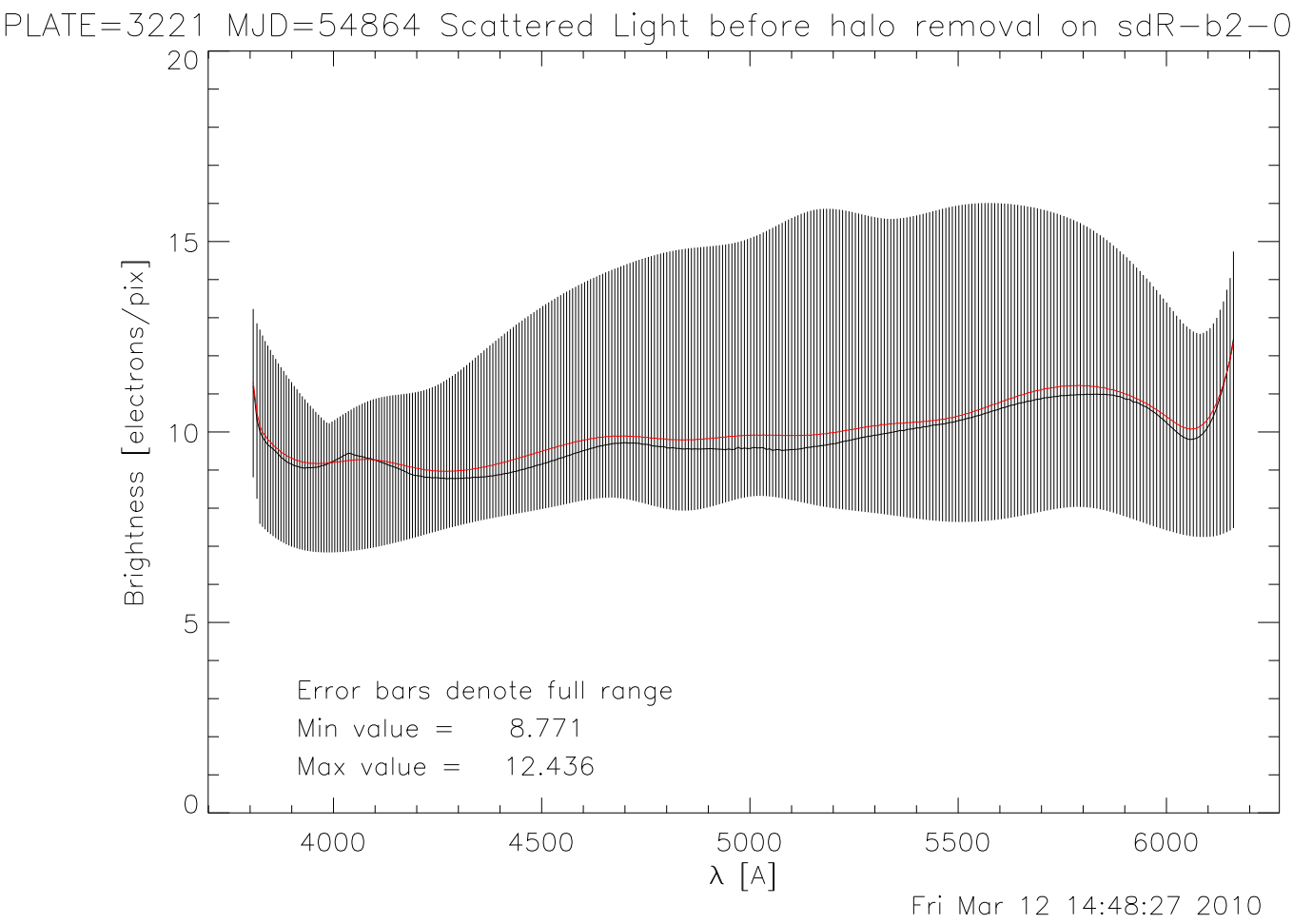

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058673.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

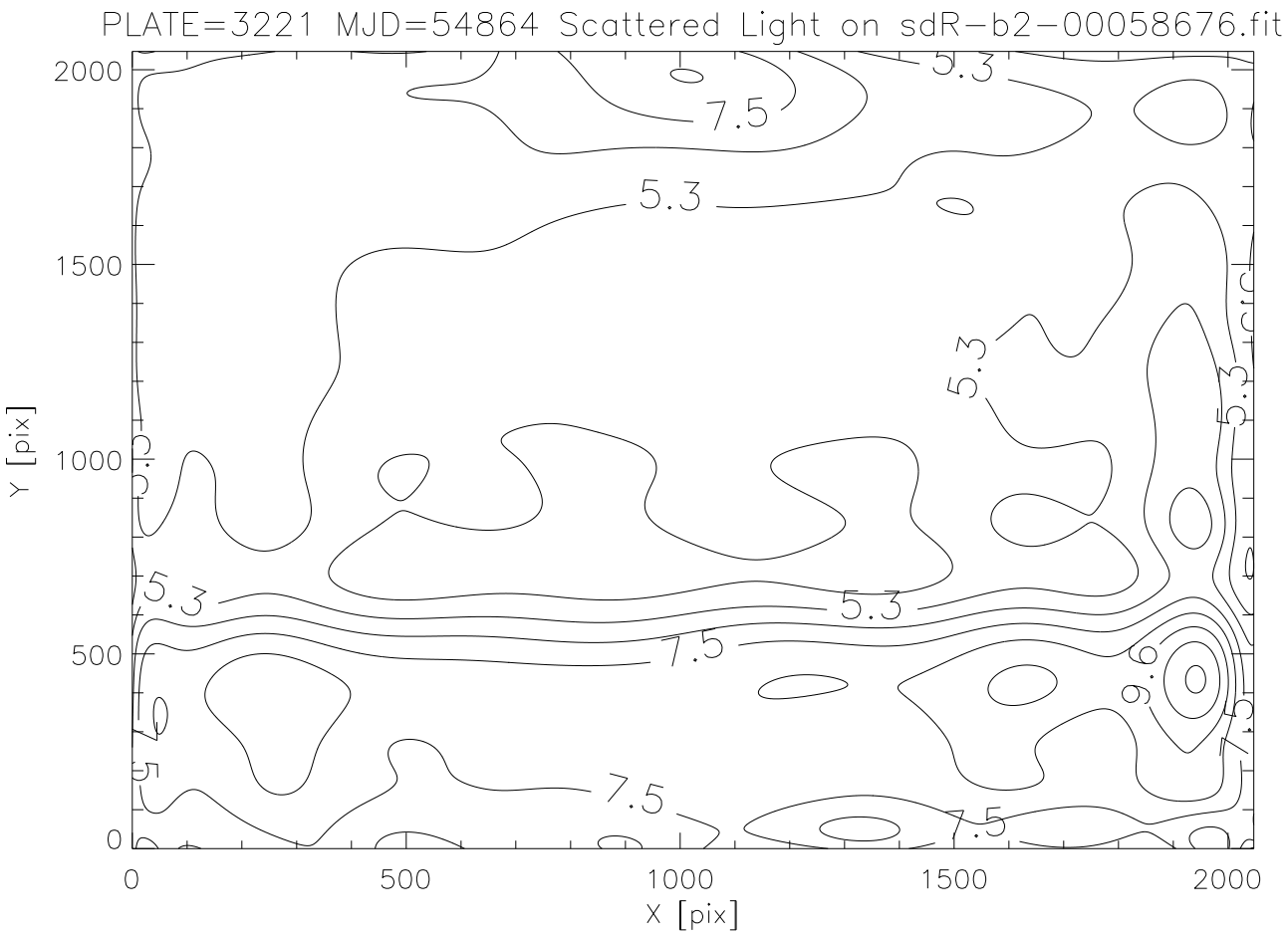

PLATE=3221 MJD=54864 sdR-b2-00058673.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.04 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

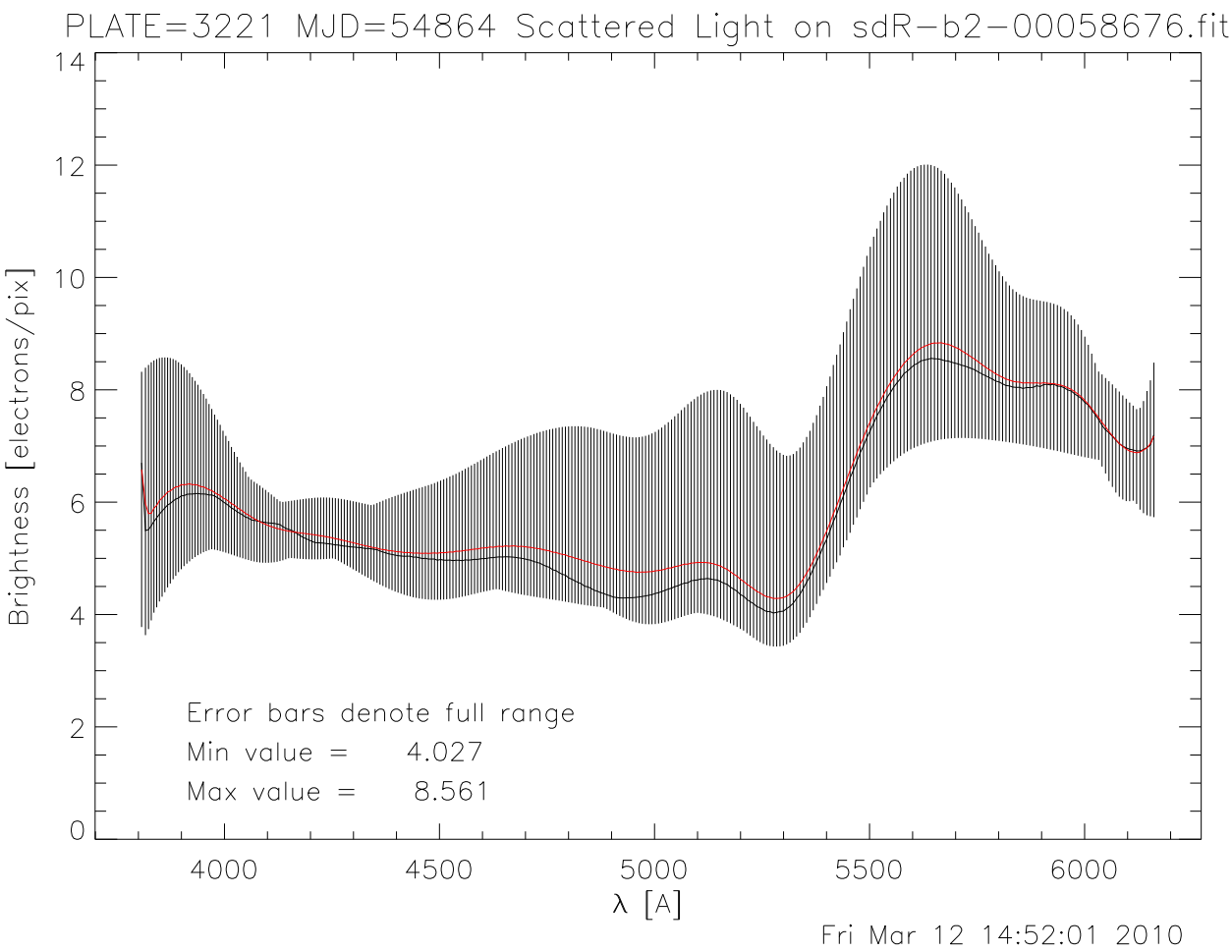

PLATE=3221 MJD=54864 sdR-b2-00058673.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.68 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

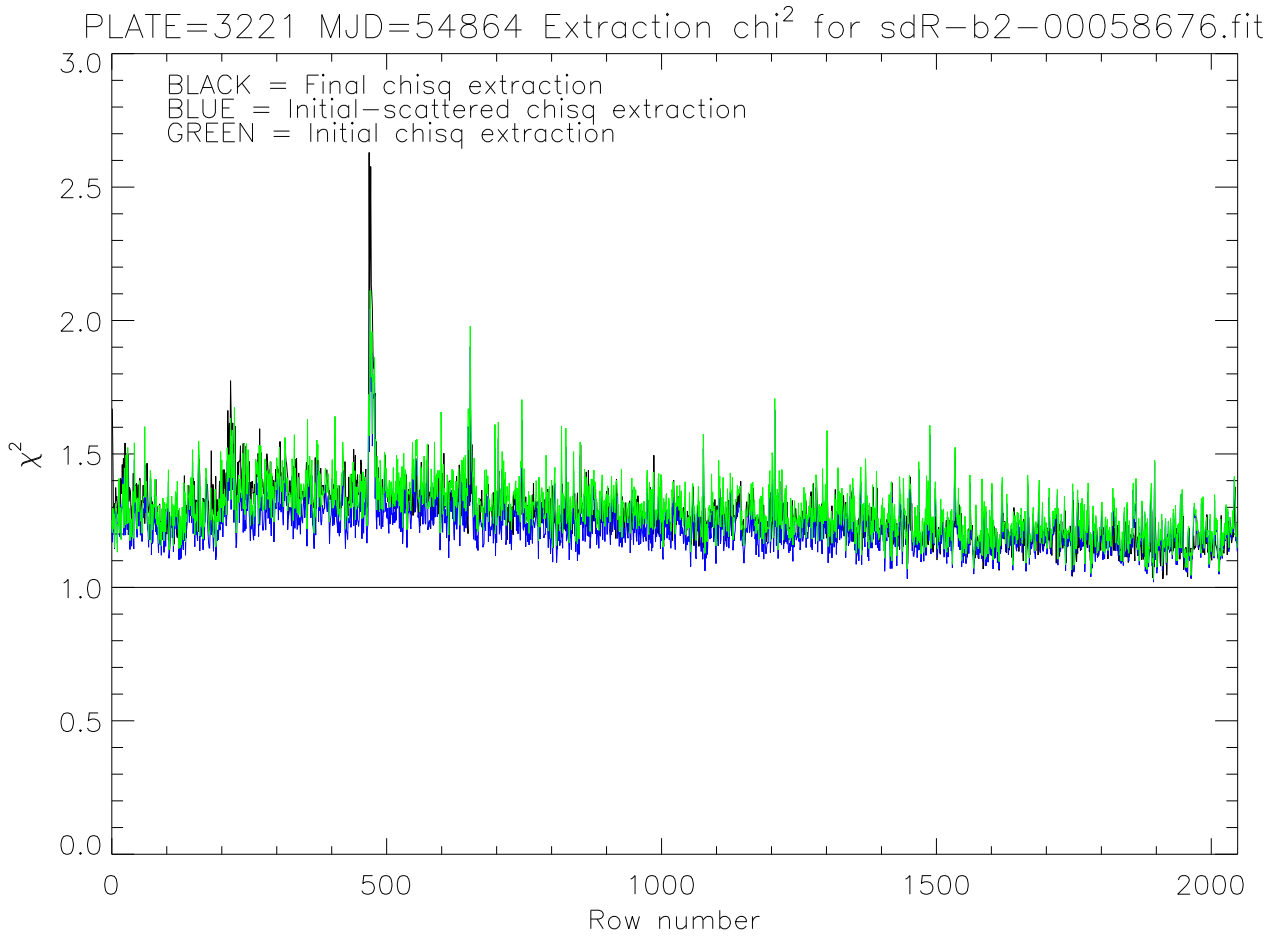

PLATE=3221 MJD=54864 Fiber-Flats for sdR-b2-00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.270
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:47:34 2010

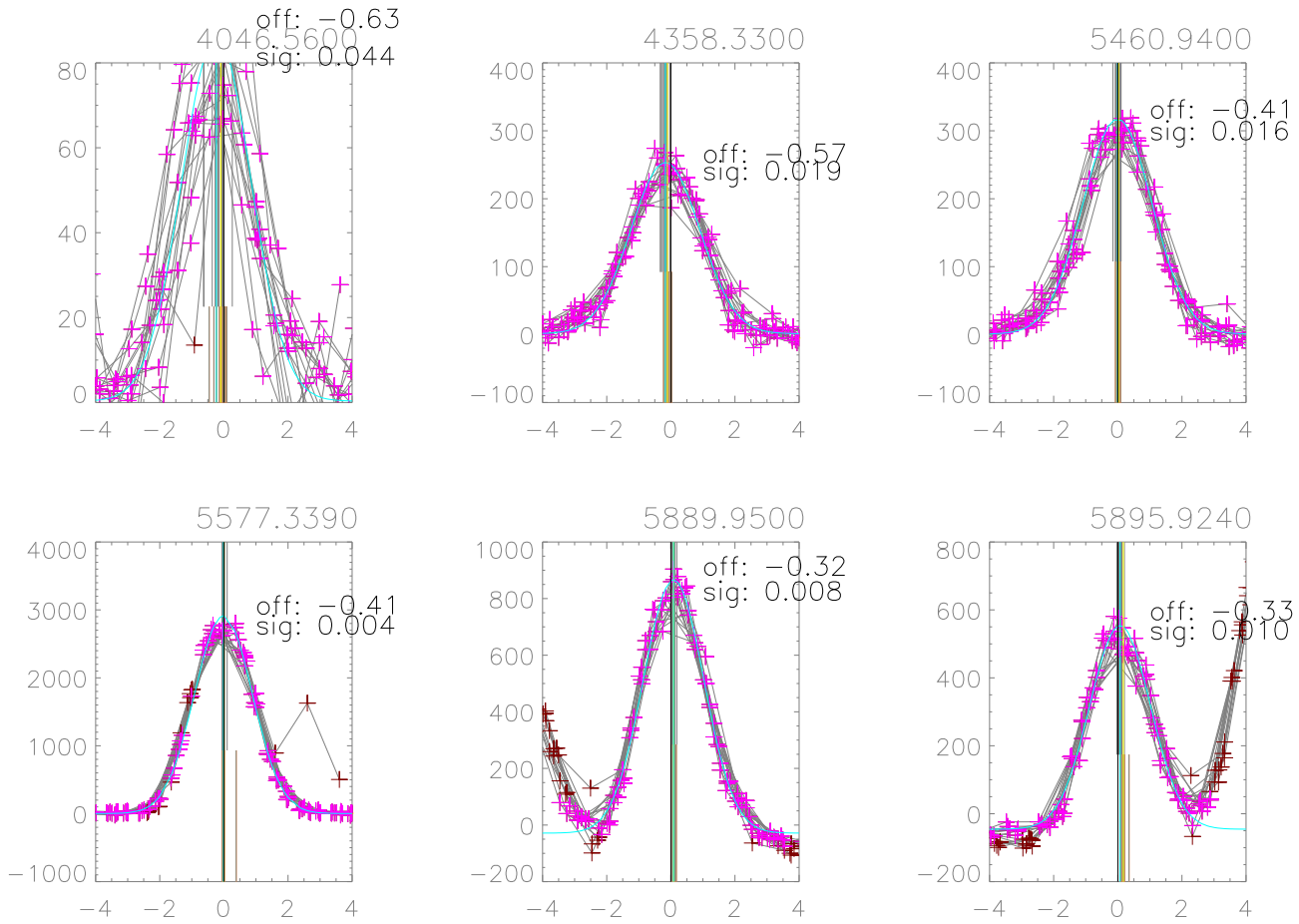

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058676.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.4
10.4
10.4

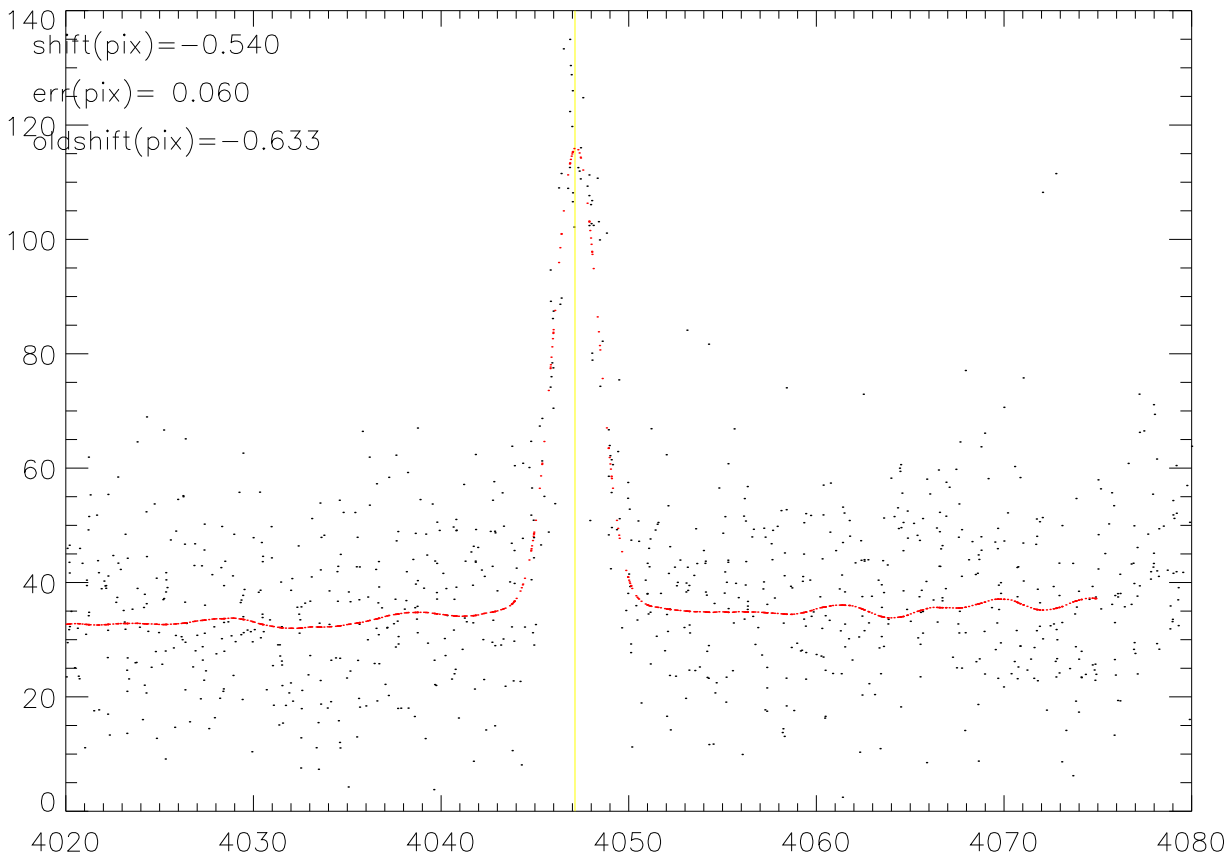

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-b2-00058676.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 8.771
Max value = 12.436
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 14:48:27 2010

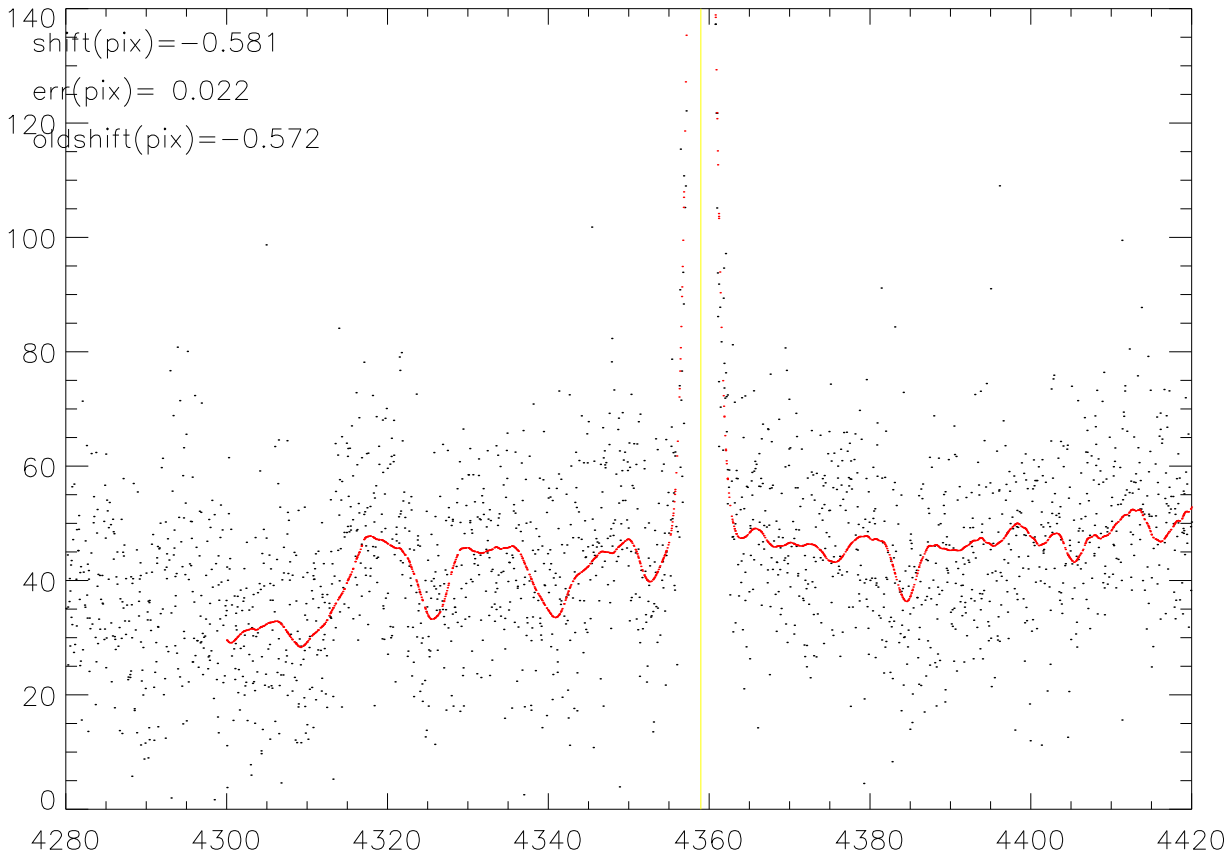

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058676.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3
7.5
9.6

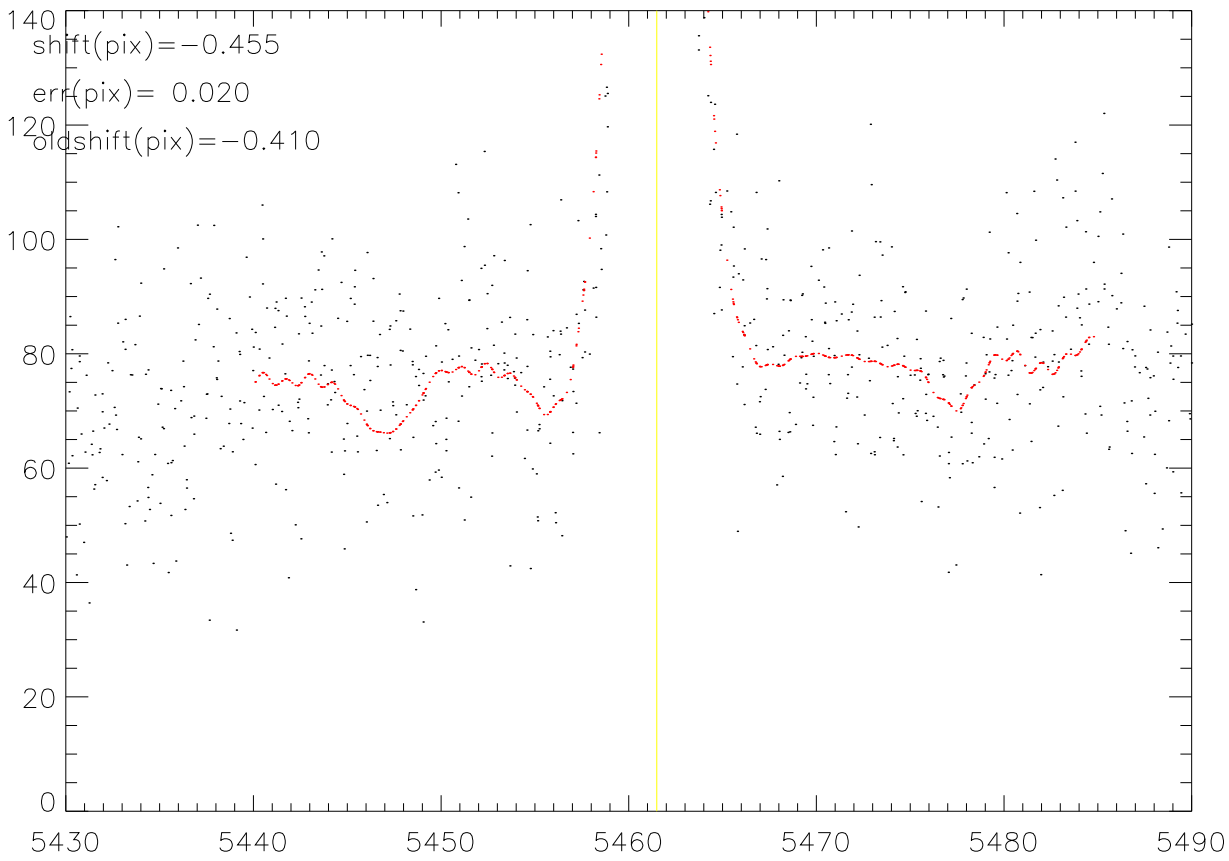

PLATE=3221 MJD=54864 Scattered Light on sdR-b2-00058676.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.027
Max value = 8.561
Fri Mar 12 14:52:01 2010

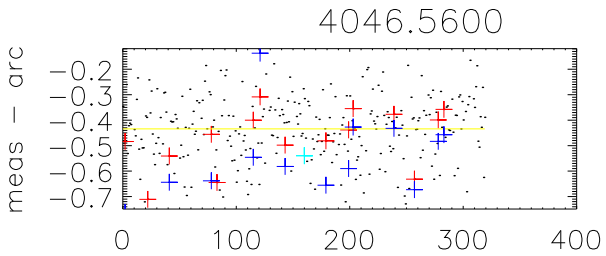

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-b2-00058676.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

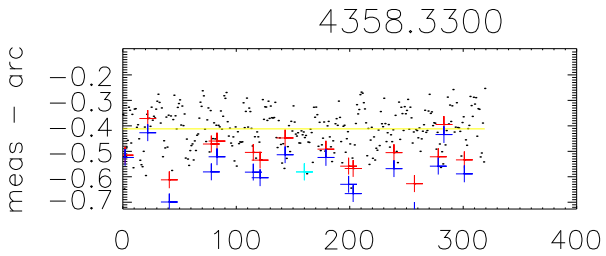

4046.5600
off: −0.63
sig: 0.044
4358.3300
off: −0.57
sig: 0.019
5460.9400
off: −0.41
sig: 0.016
5577.3390
off: −0.41
sig: 0.004
5889.9500
off: −0.32
sig: 0.008
5895.9240
off: −0.33
sig: 0.010

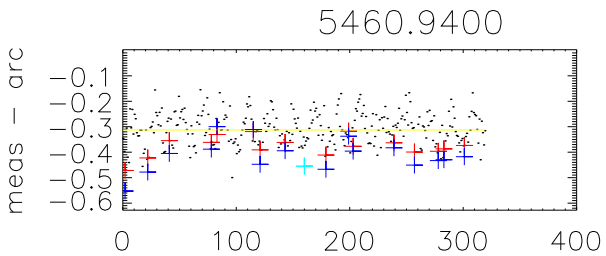

shift(pix)=−0.540
err(pix)= 0.060
oldshift(pix)=−0.633
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

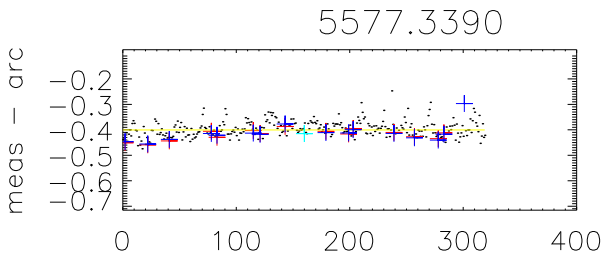

shift(pix)=−0.581
err(pix)= 0.022
oldshift(pix)=−0.572
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

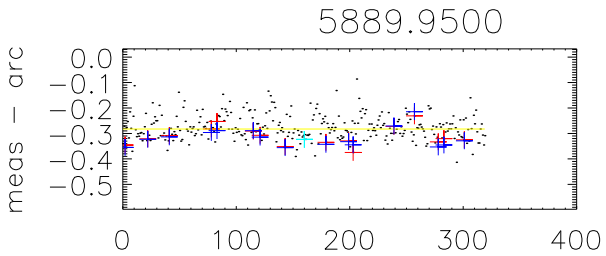

shift(pix)=−0.455
err(pix)= 0.020
oldshift(pix)=−0.410
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

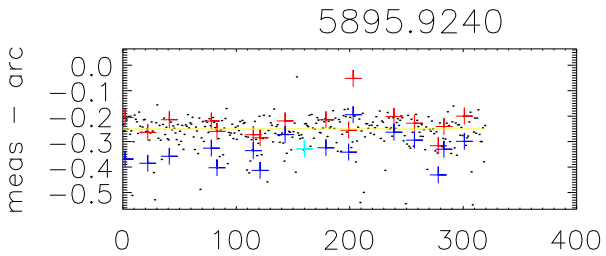

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

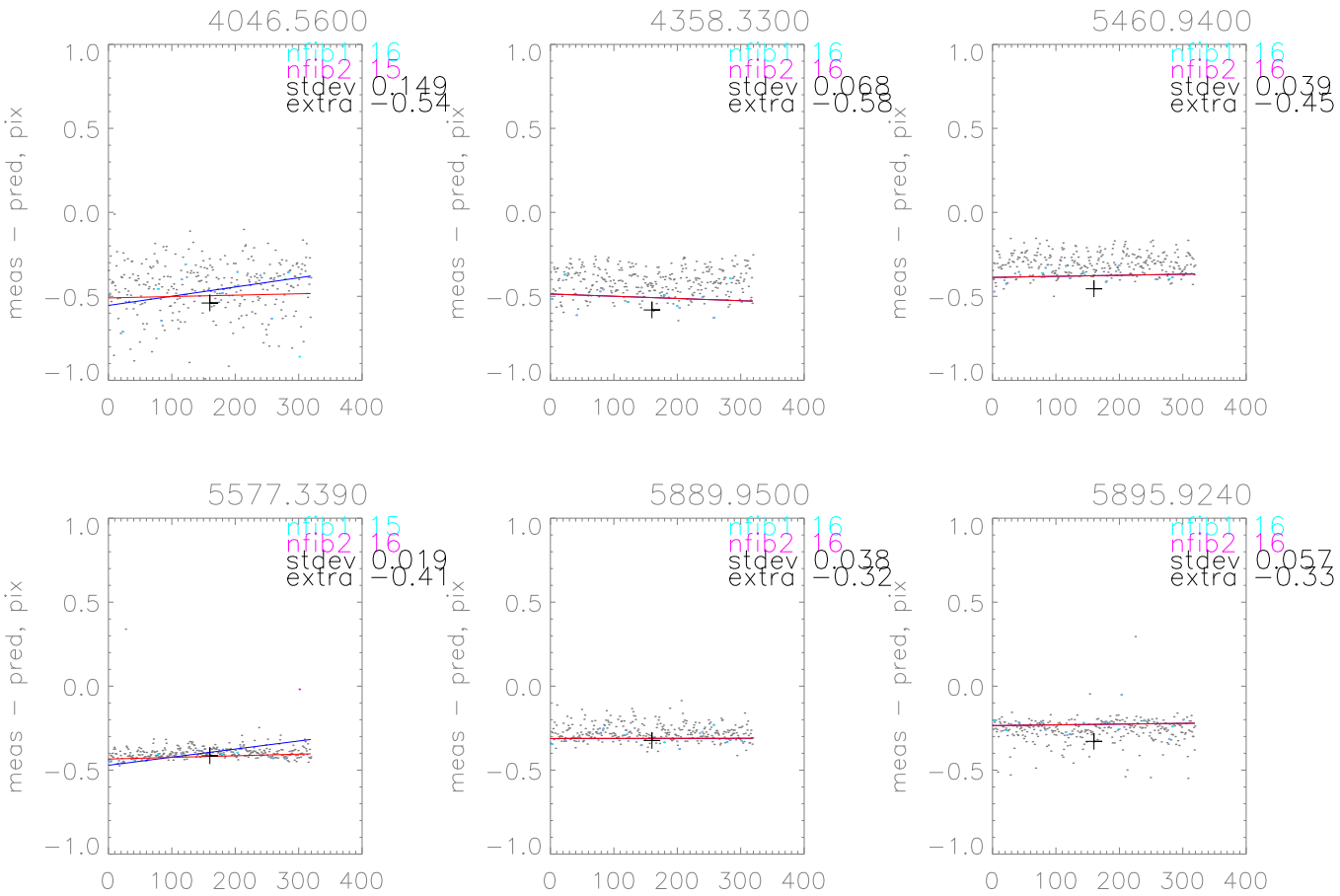

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

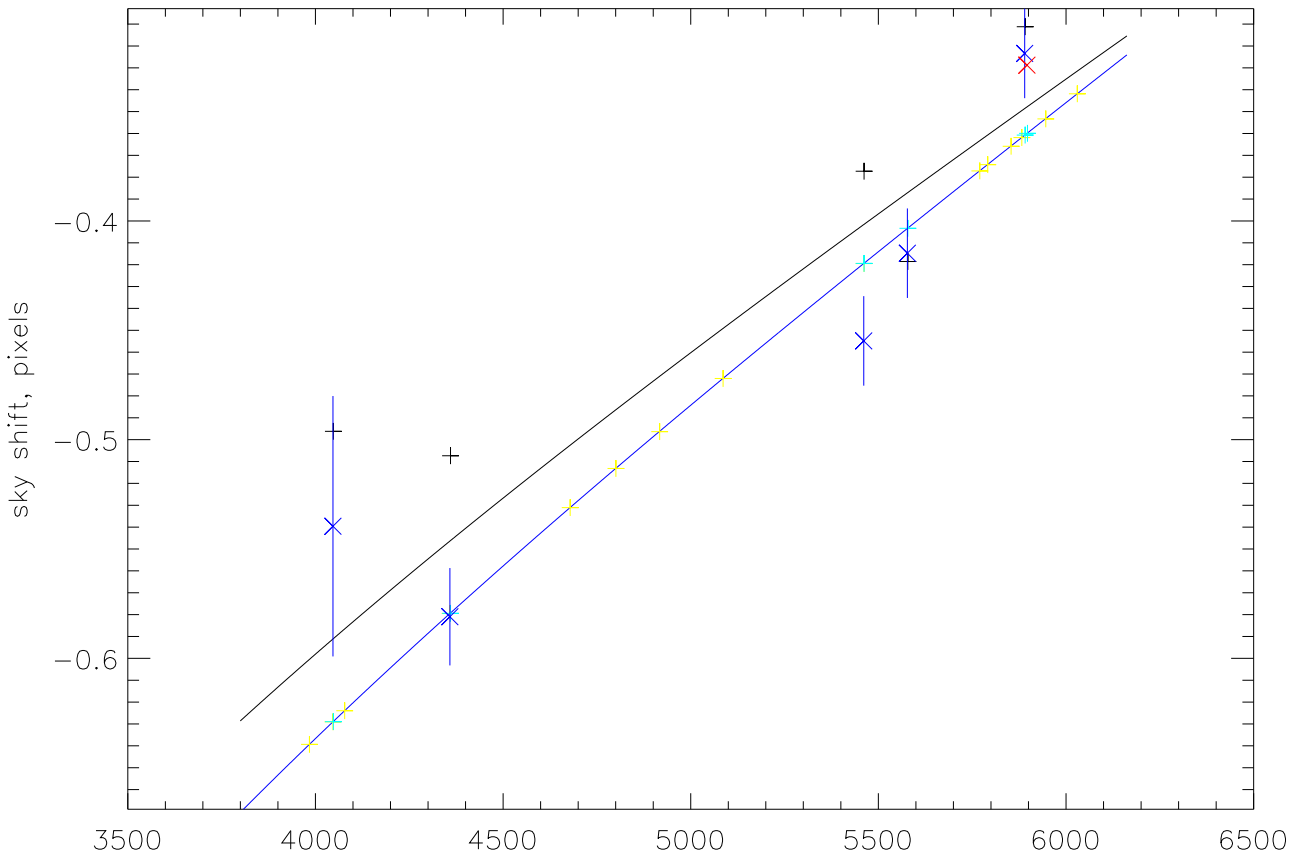

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

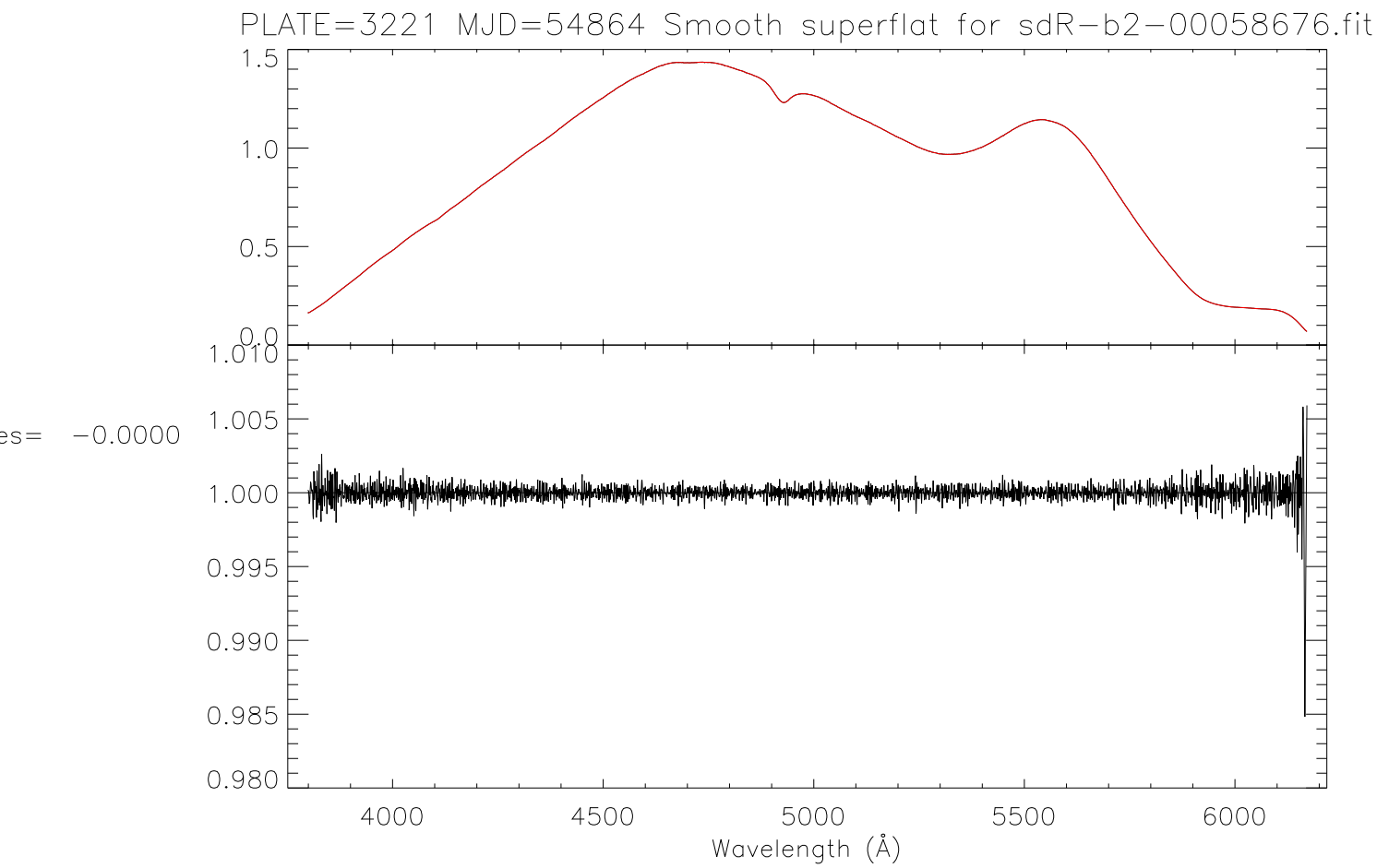

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

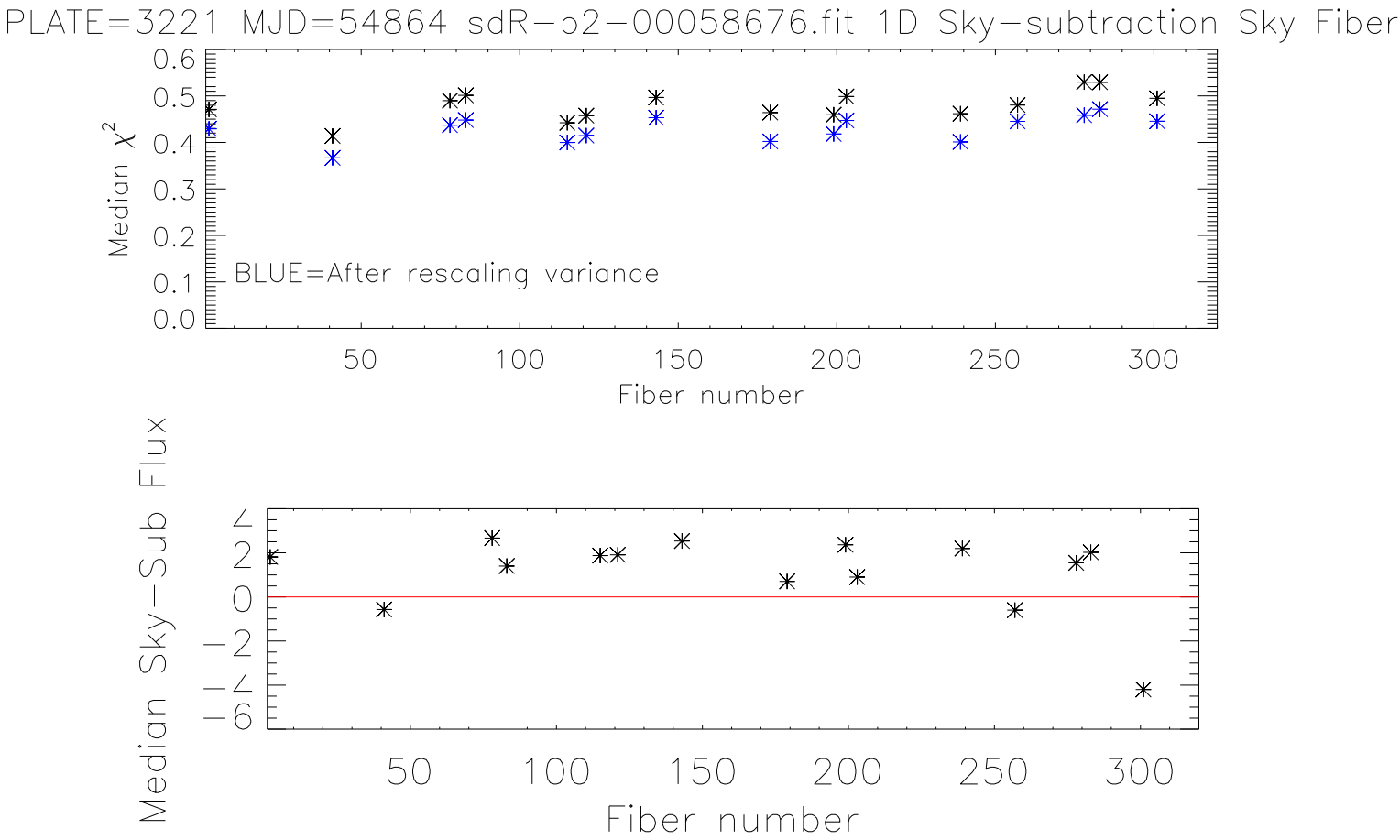

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

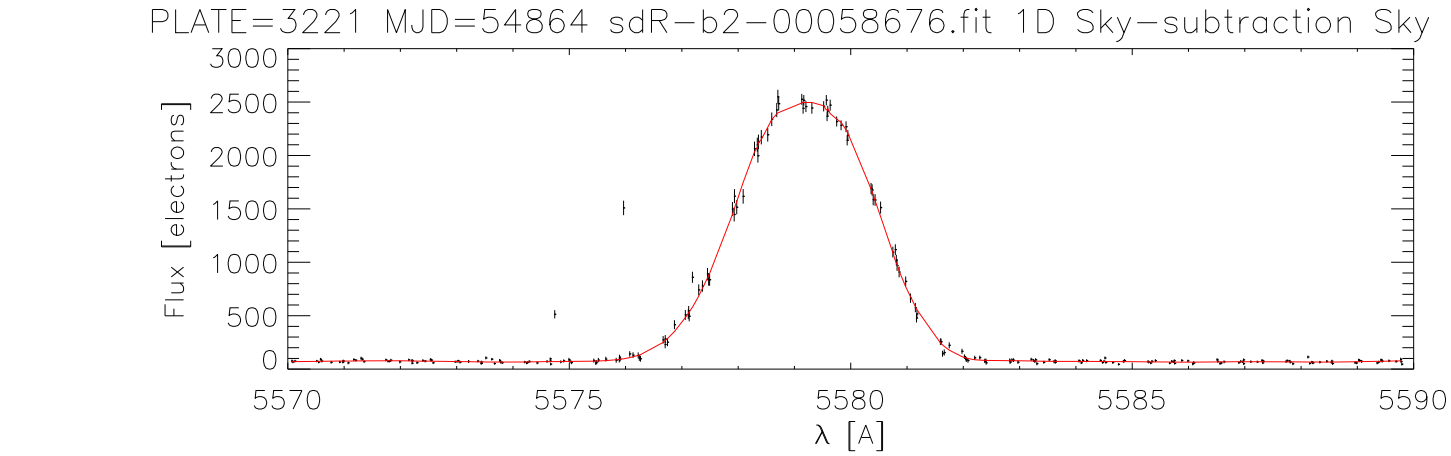

4046.5600
nfib1 16
nfib2 15
stdev 0.149
extra −0.54
4358.3300
nfib1 16
nfib2 16
stdev 0.068
extra −0.58
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra −0.45
5577.3390
nfib1 15
nfib2 16
stdev 0.019
extra −0.41
5889.9500
nfib1 16
nfib2 16
stdev 0.038
extra −0.32
5895.9240
nfib1 16
nfib2 16
stdev 0.057
extra −0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

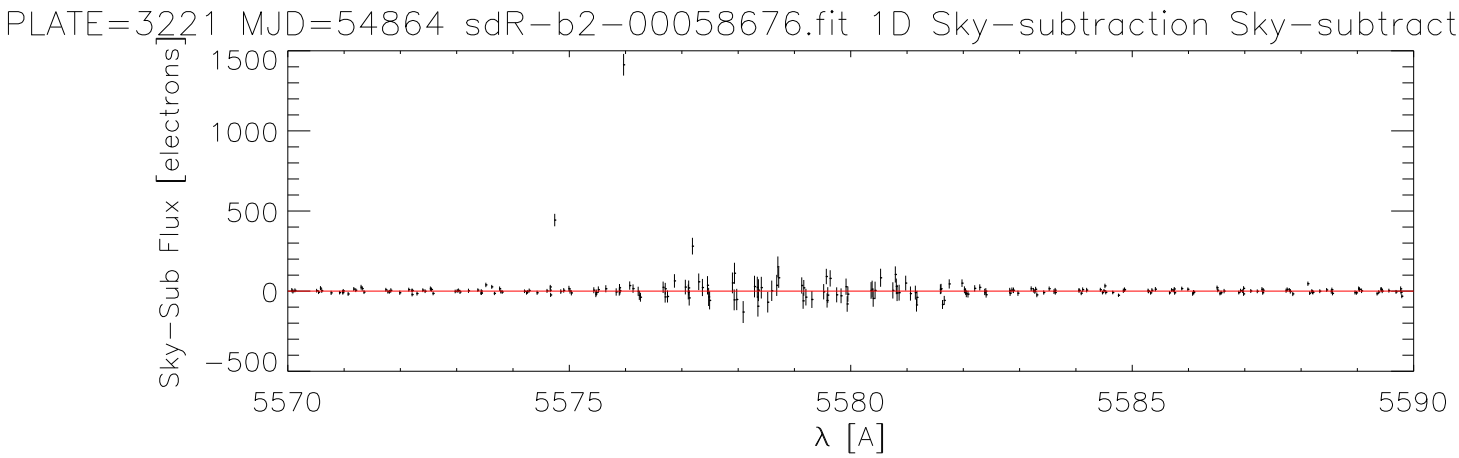

sky shift, pixels
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500

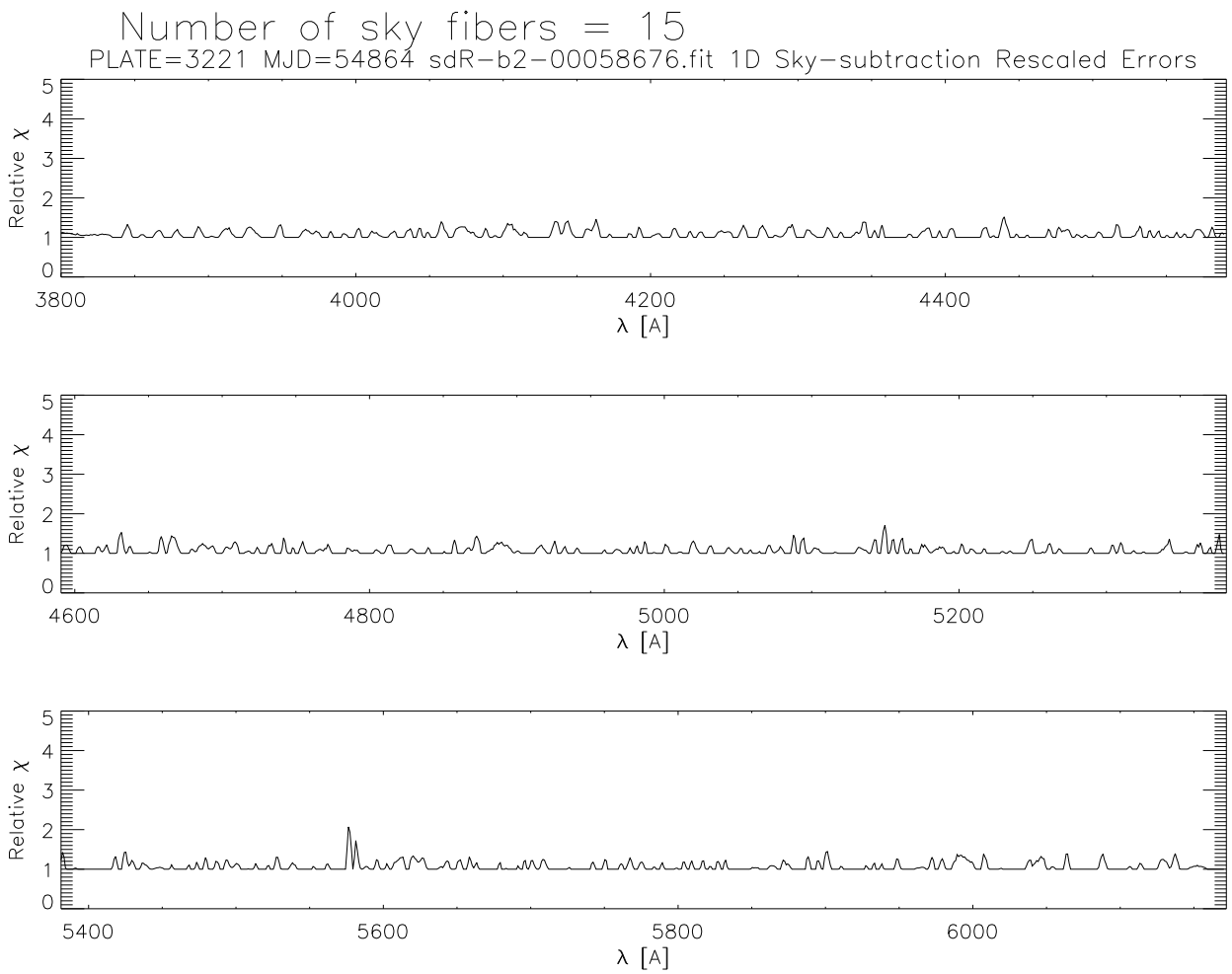

PLATE=3221 MJD=54864 Smooth superflat for sdR-b2-00058676.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

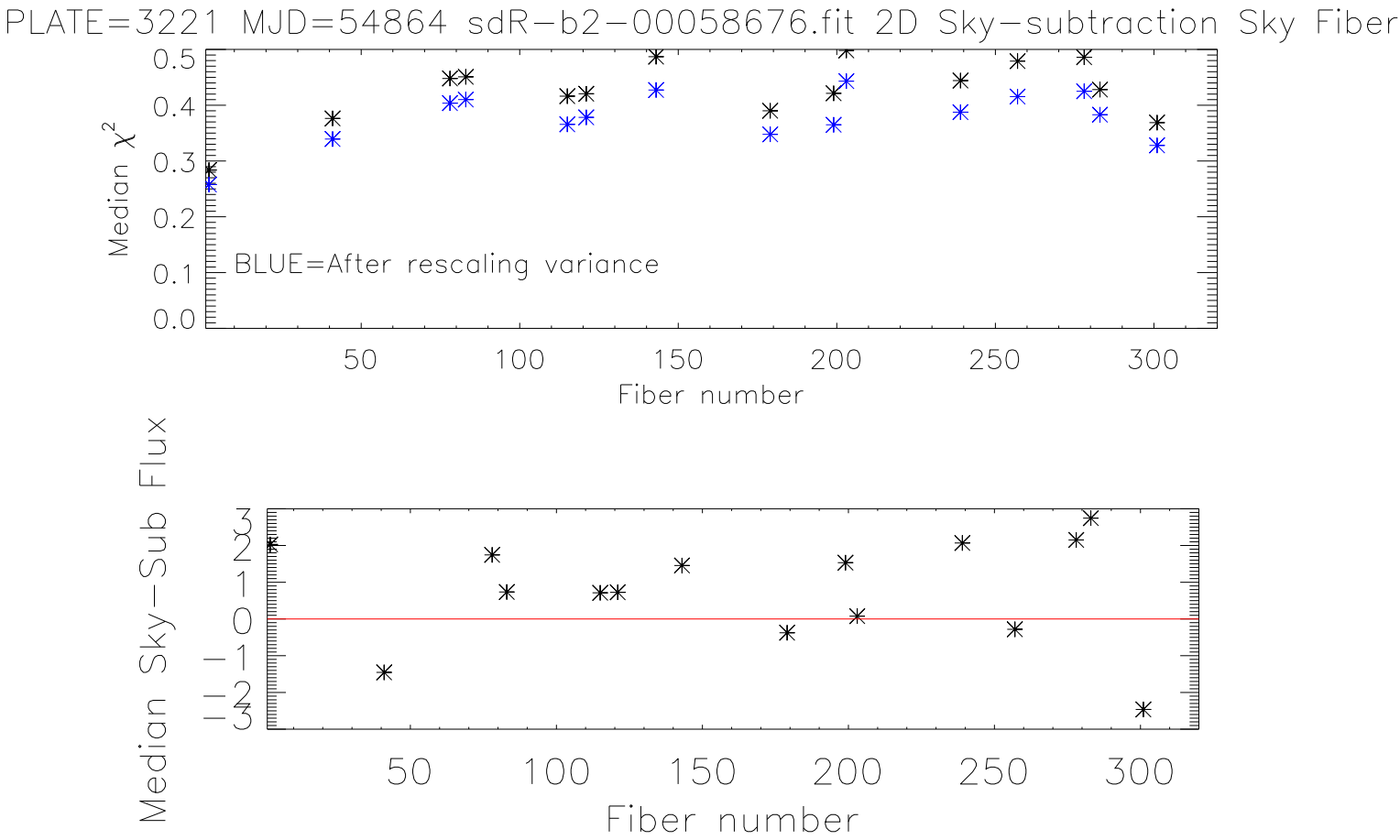
es= −0.0000

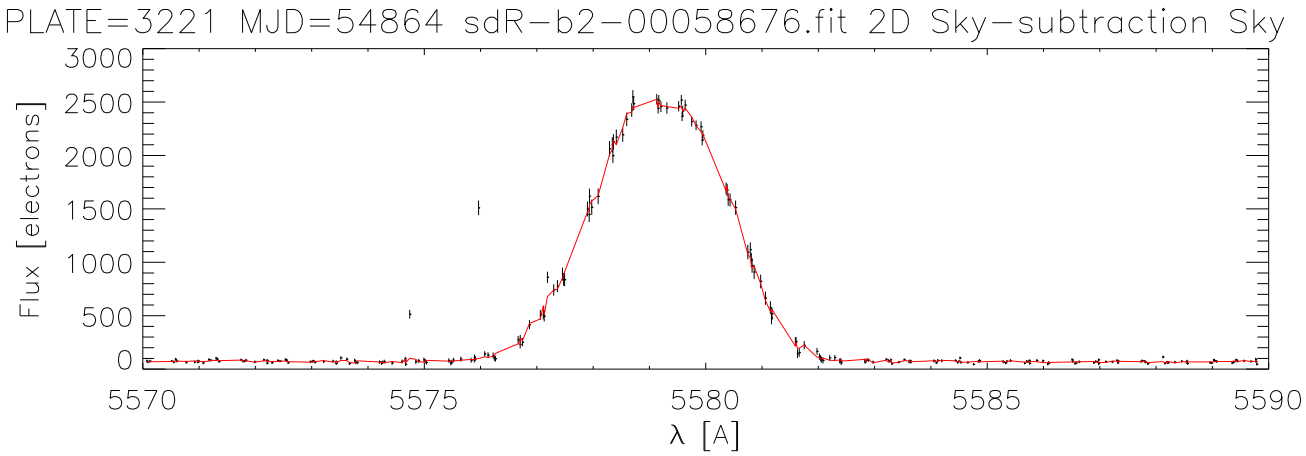

PLATE=3221 MJD=54864 sdR-b2-00058676.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

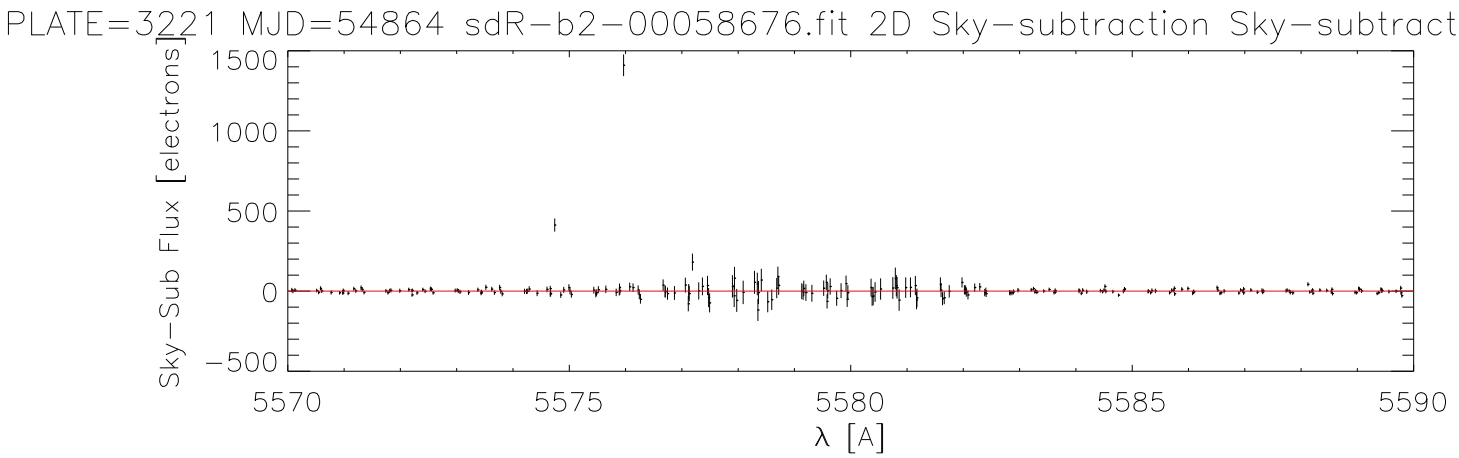

PLATE=3221 MJD=54864 sdR-b2-00058676.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

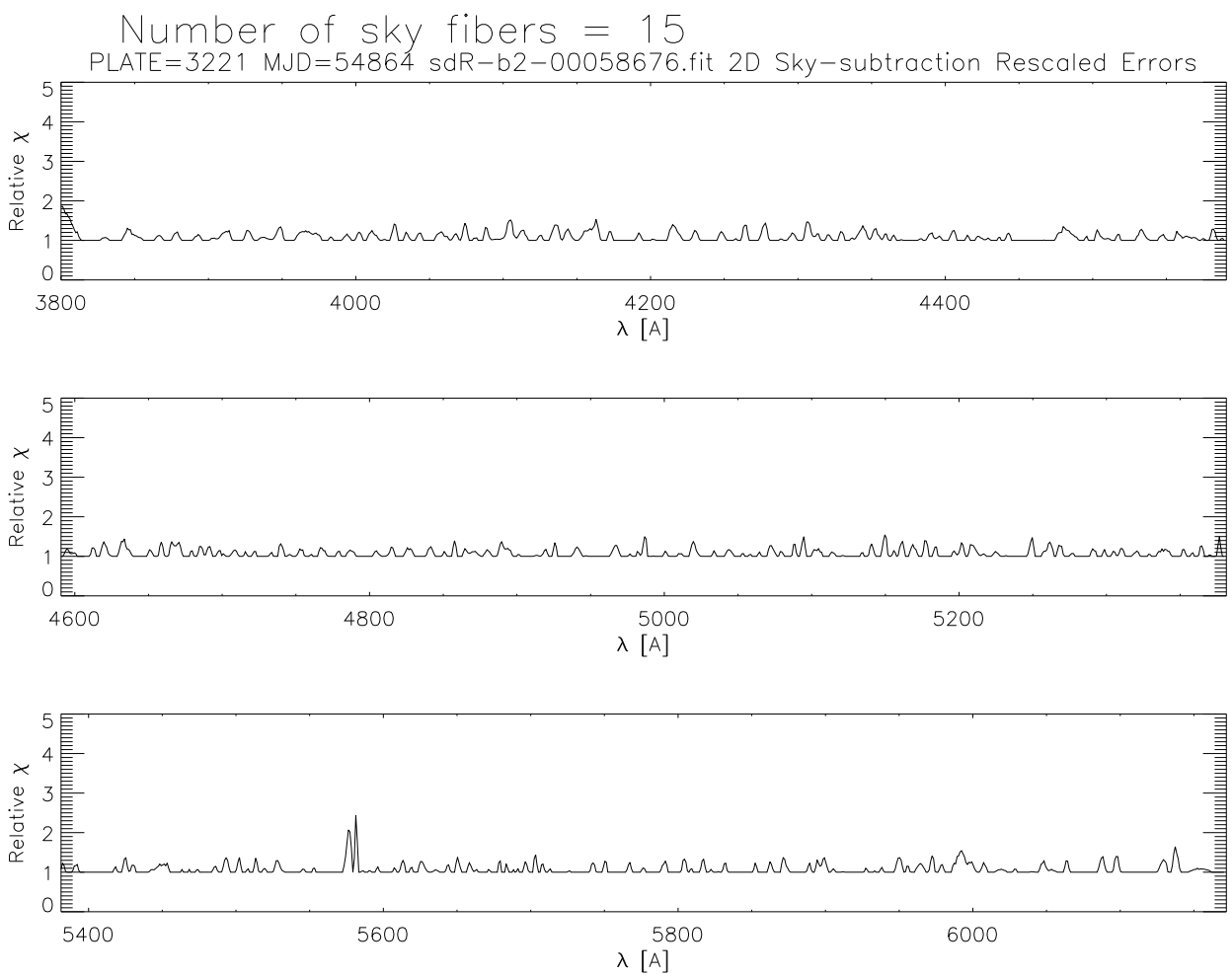

PLATE=3221 MJD=54864 sdR-b2-00058676.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

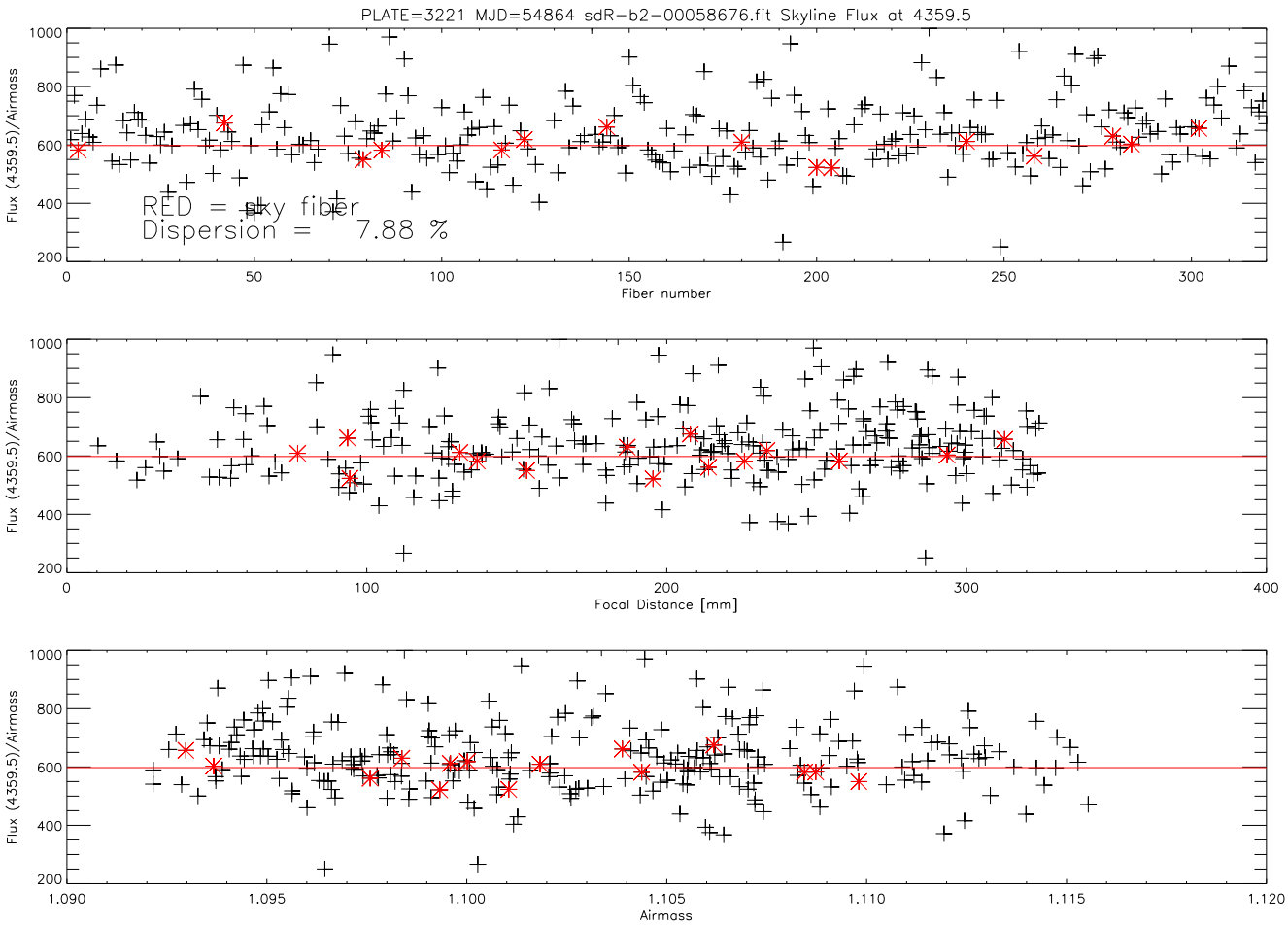

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058676.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

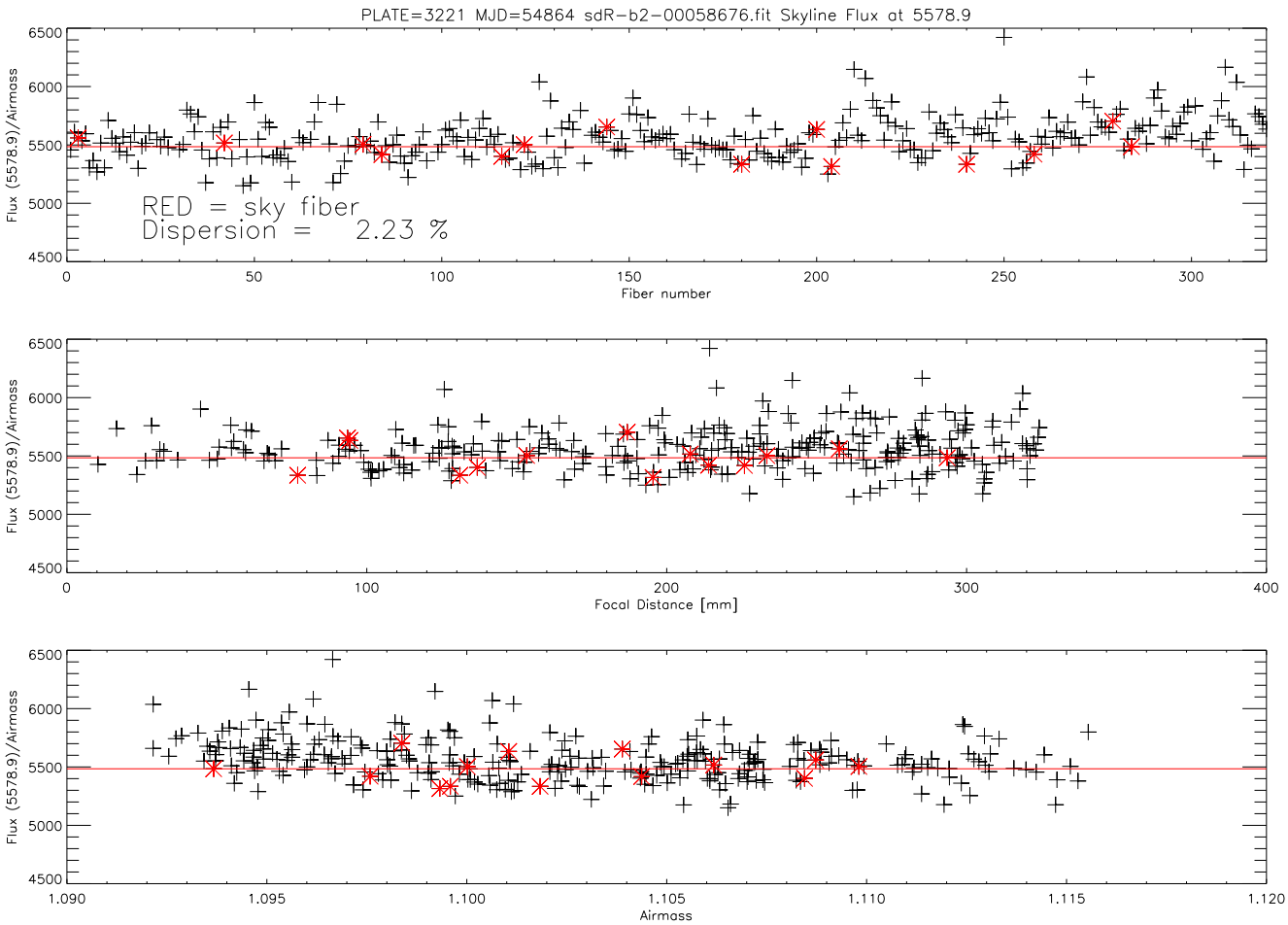

PLATE=3221 MJD=54864 sdR-b2-00058676.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

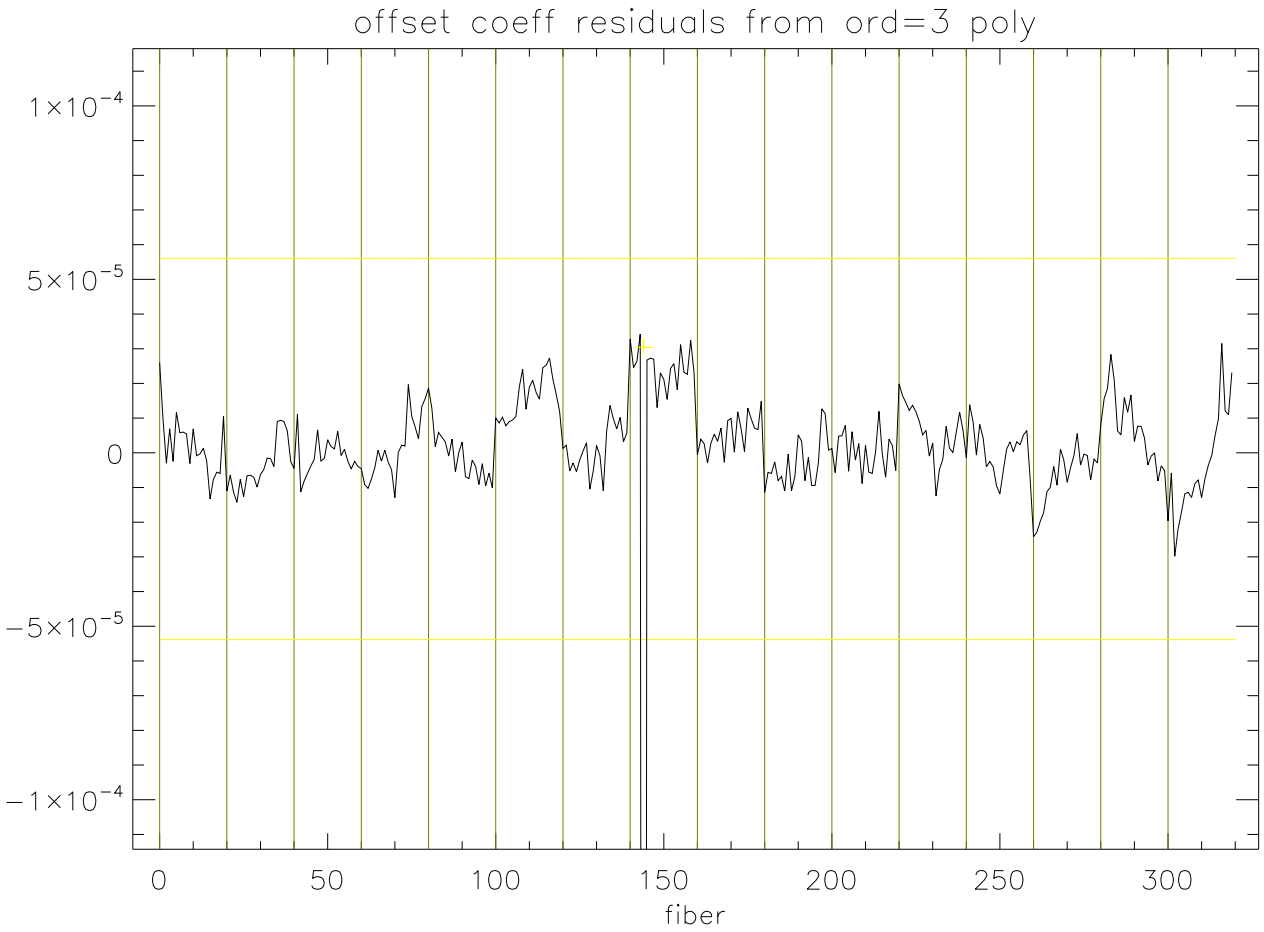

PLATE=3221 MJD=54864 sdR-b2-00058676.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

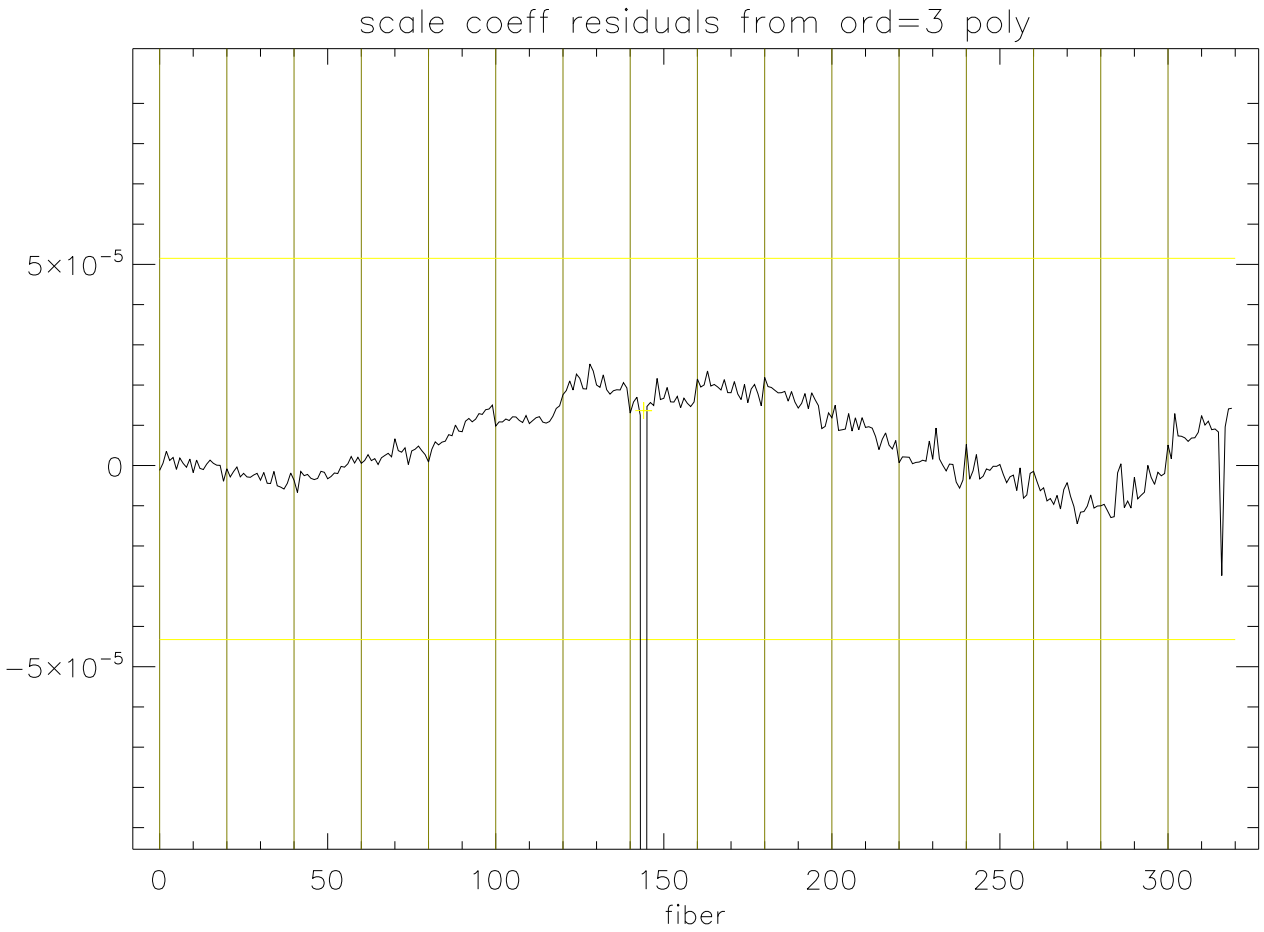

PLATE=3221 MJD=54864 sdR-b2-00058676.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

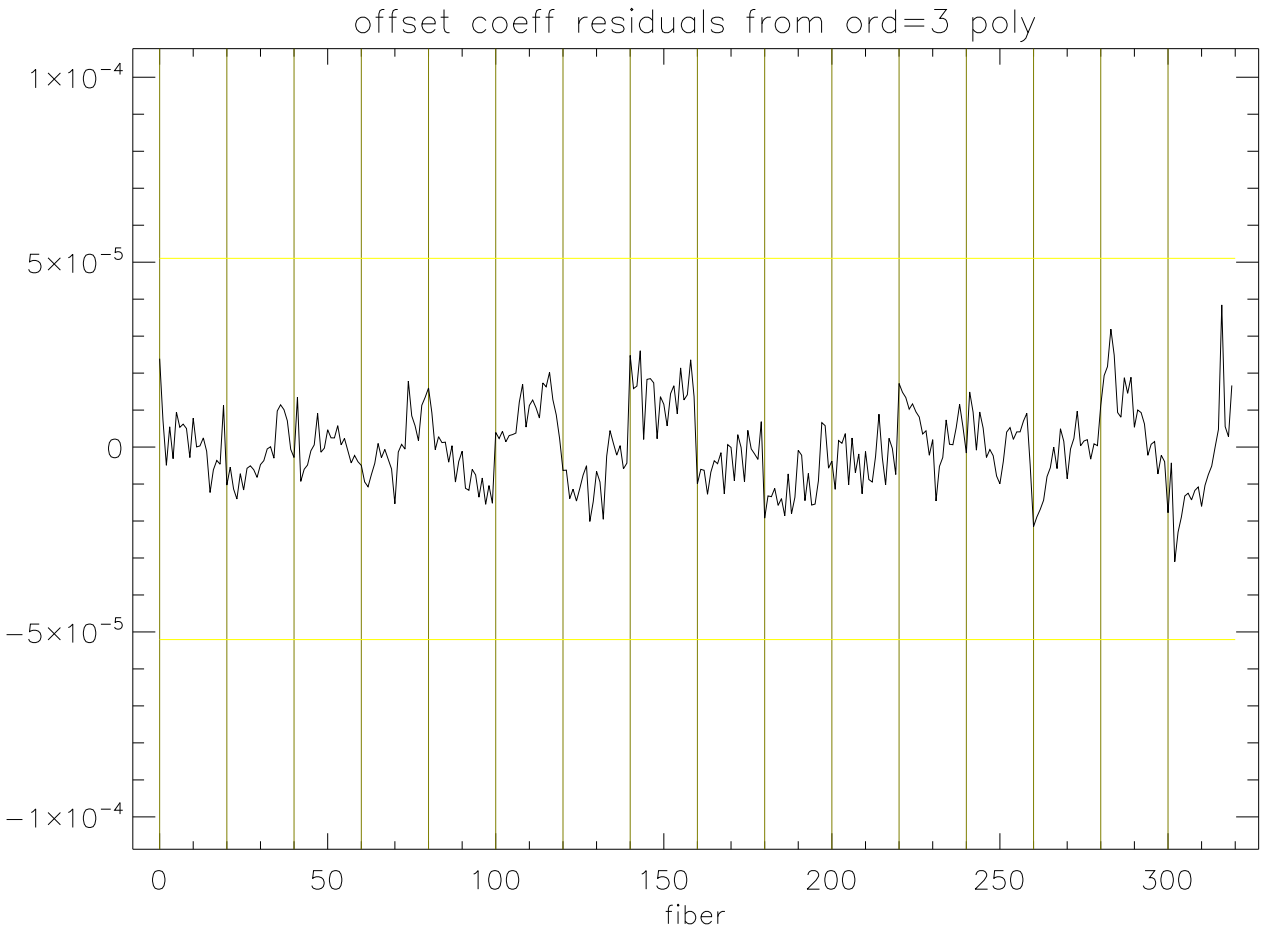

Number of sky fibers = 15
PLATE=3221 MJD=54864 sdR-b2-00058676.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

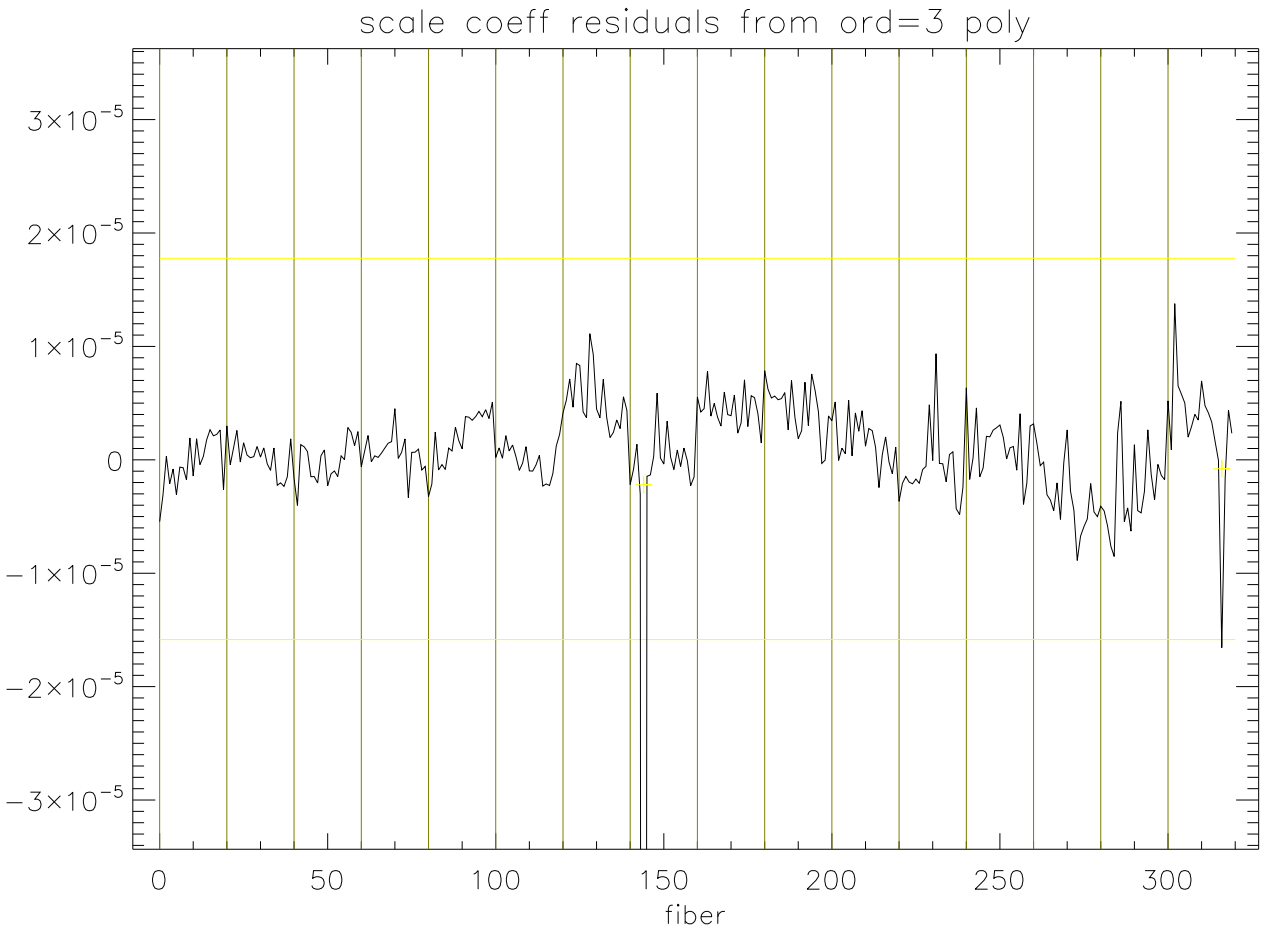

PLATE=3221 MJD=54864 sdR-b2-00058676.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 7.88 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

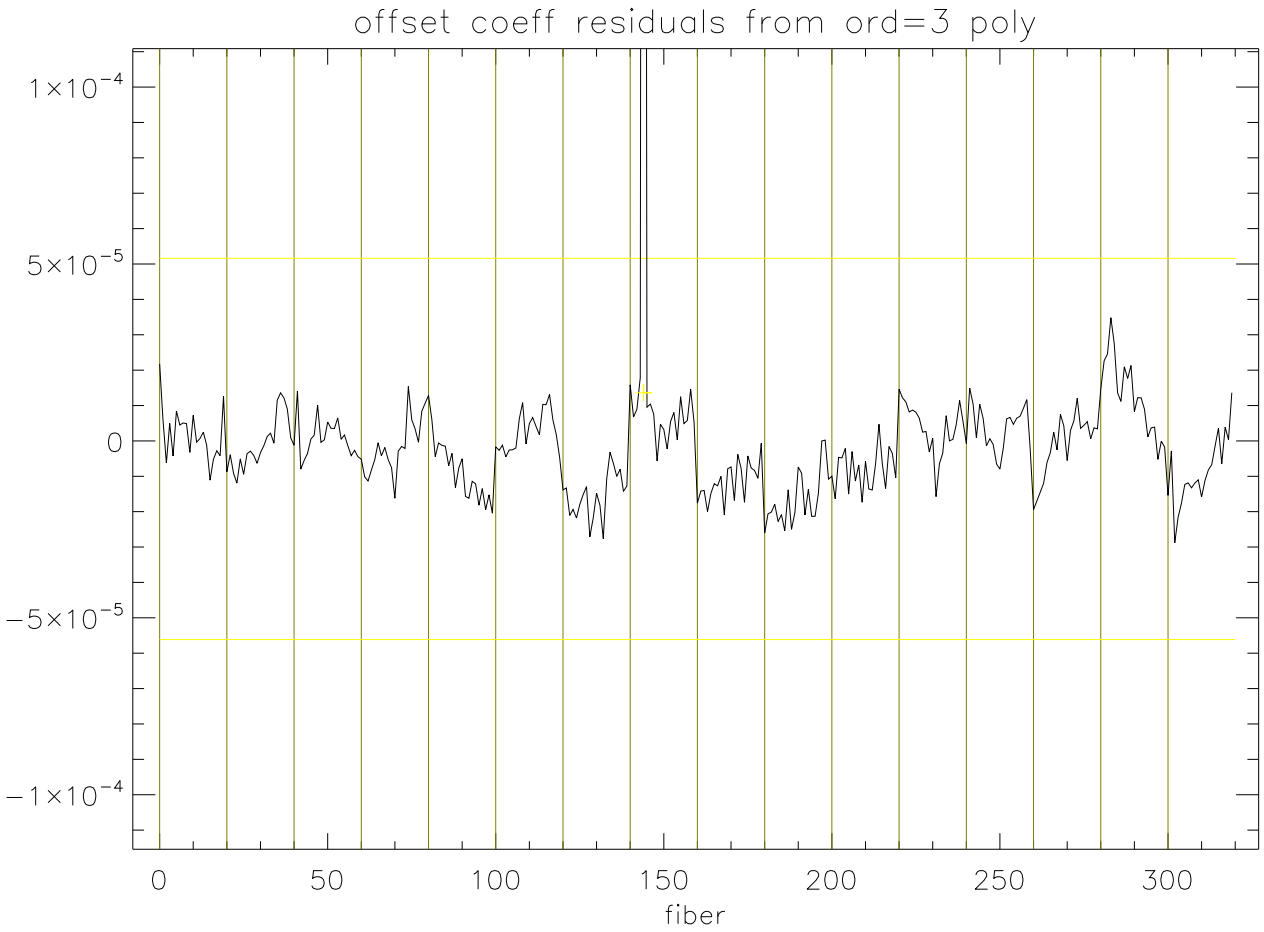

PLATE=3221 MJD=54864 sdR-b2-00058676.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.23 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

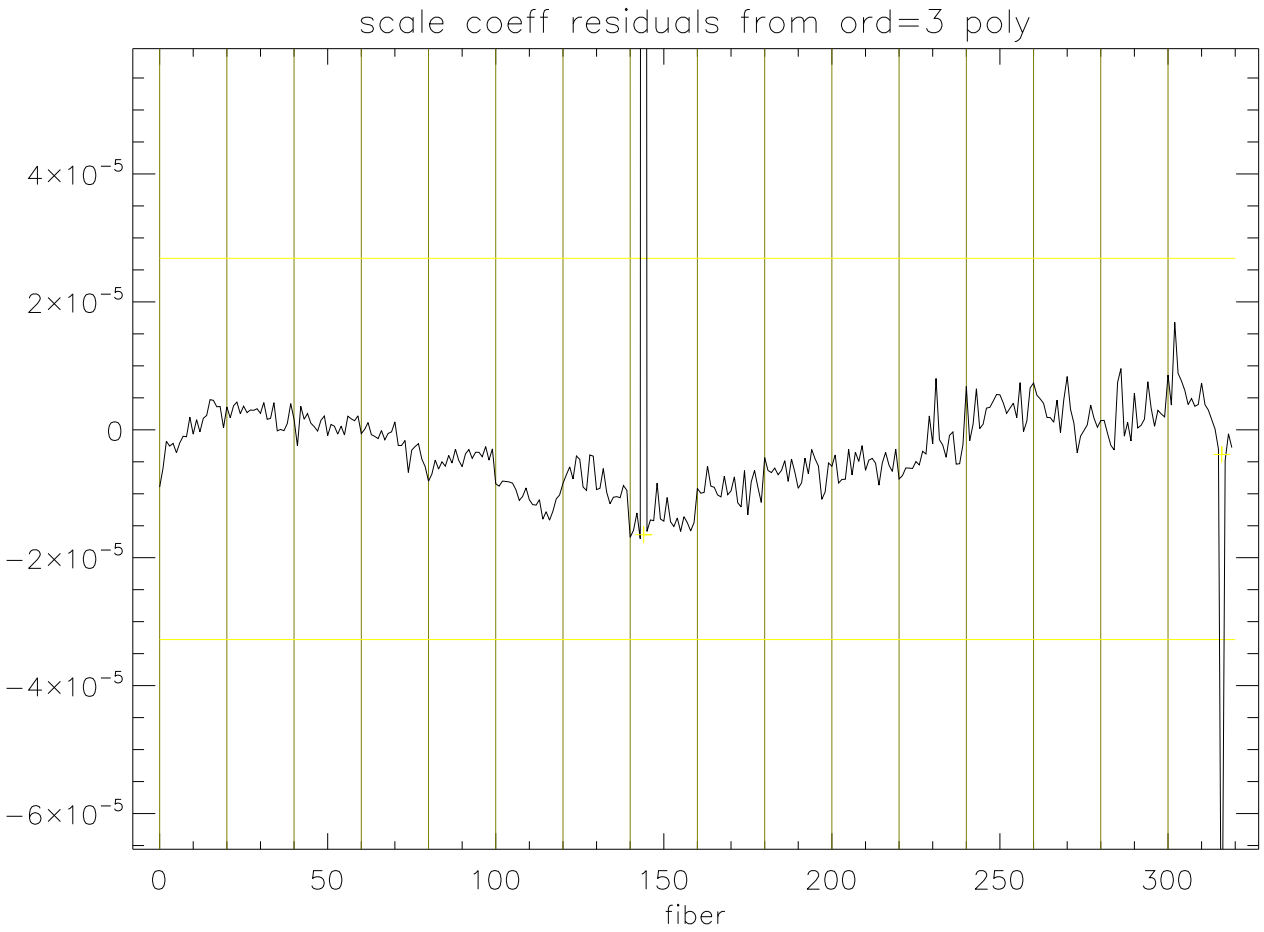

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

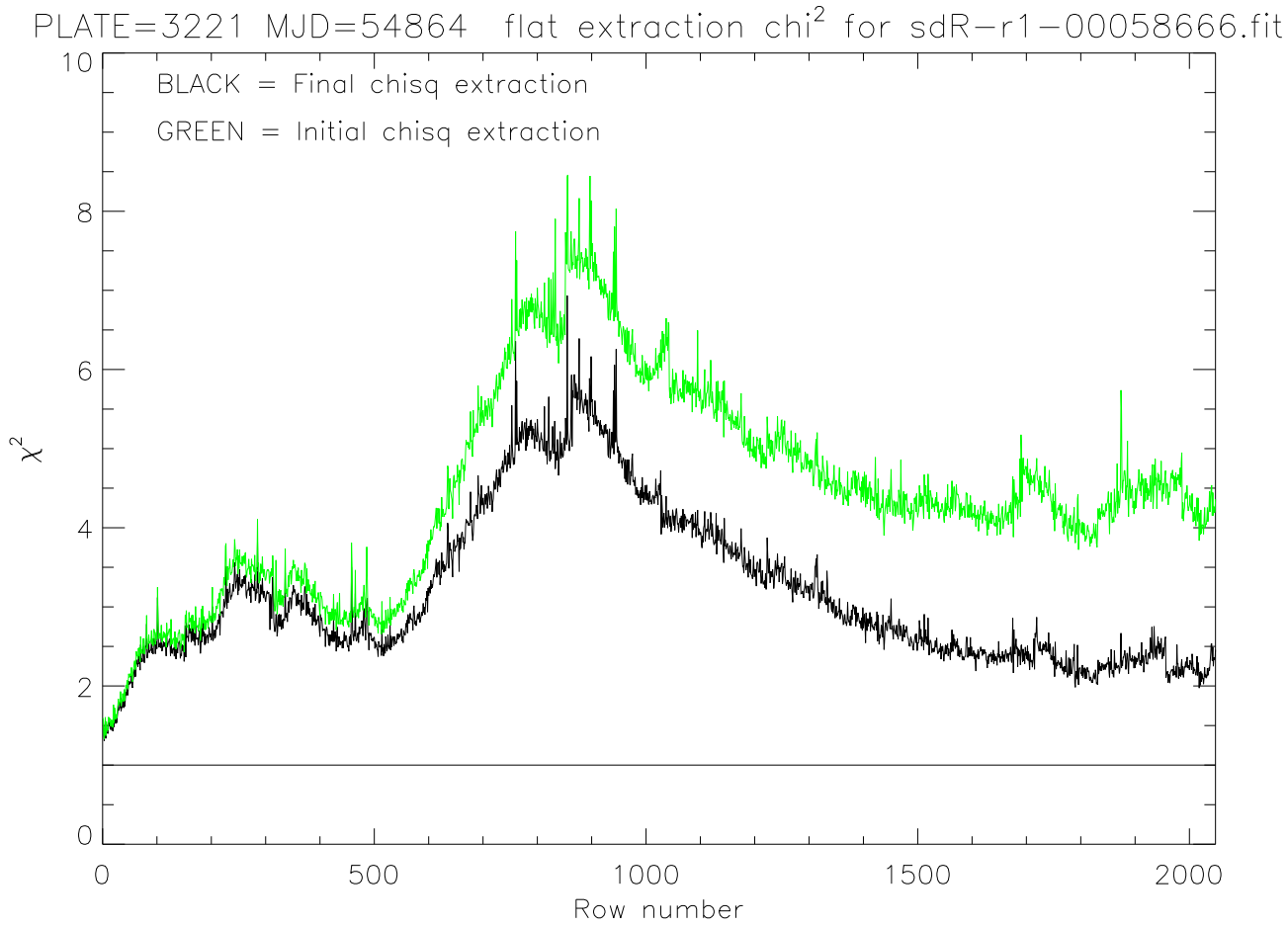

scale coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

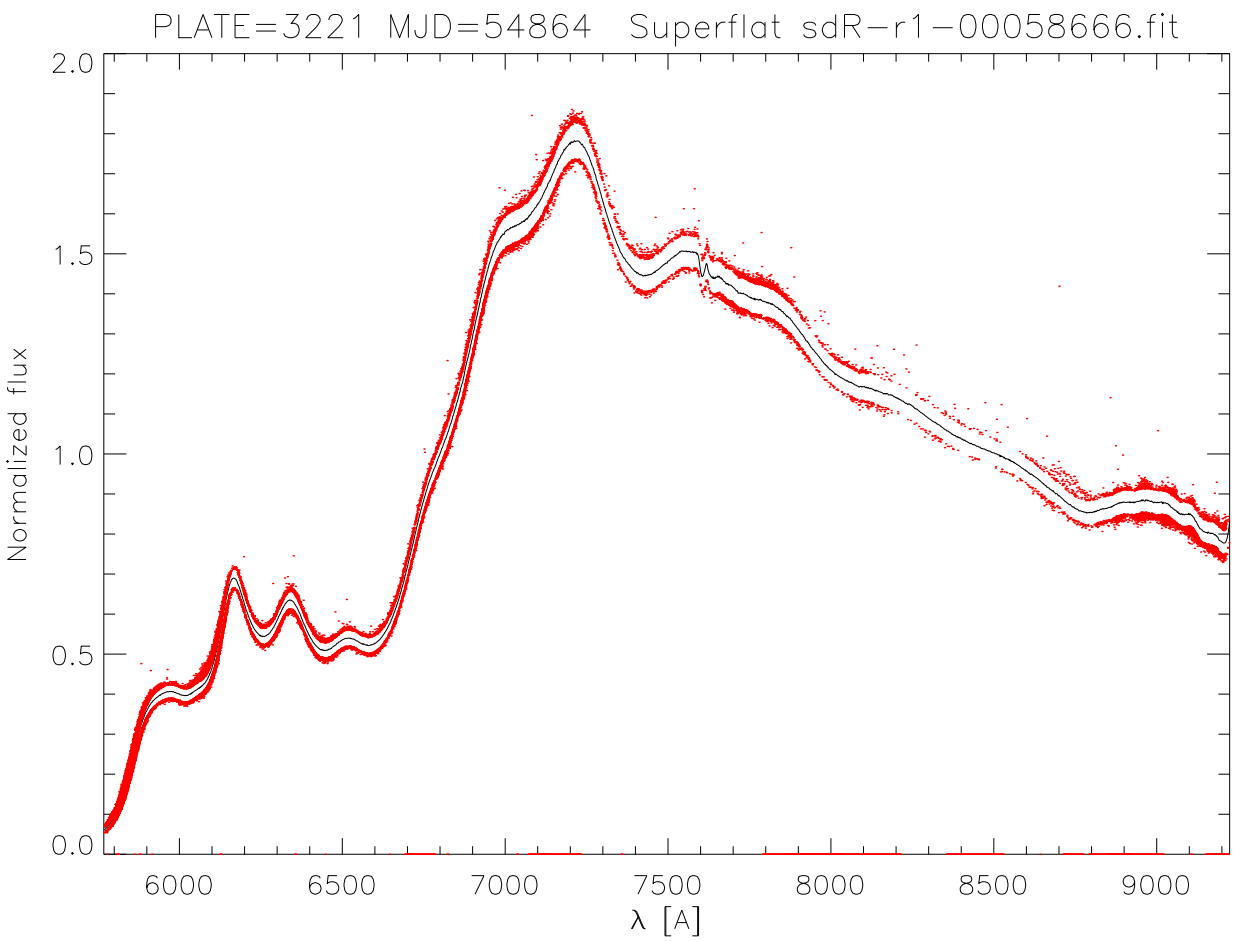

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

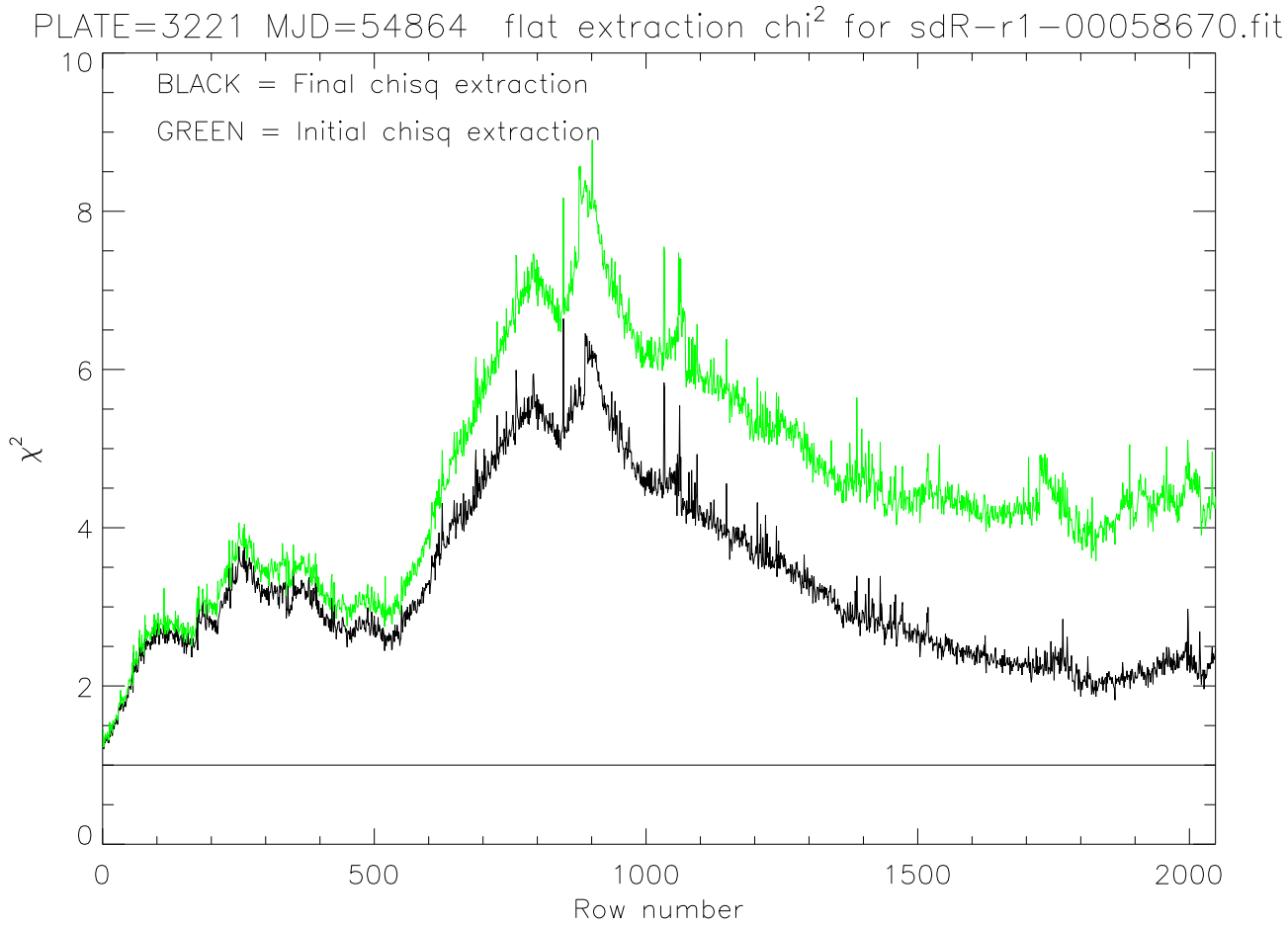

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

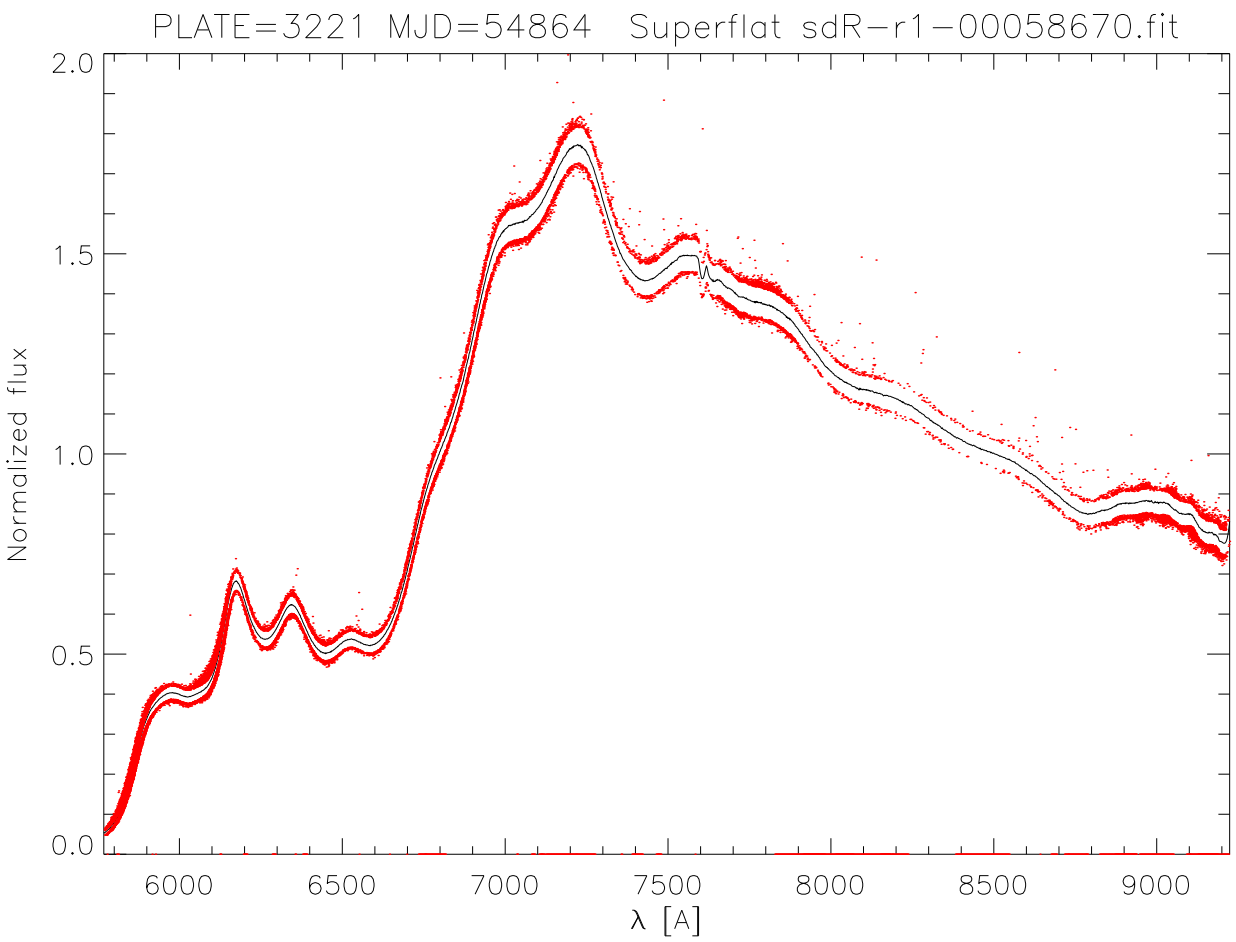

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

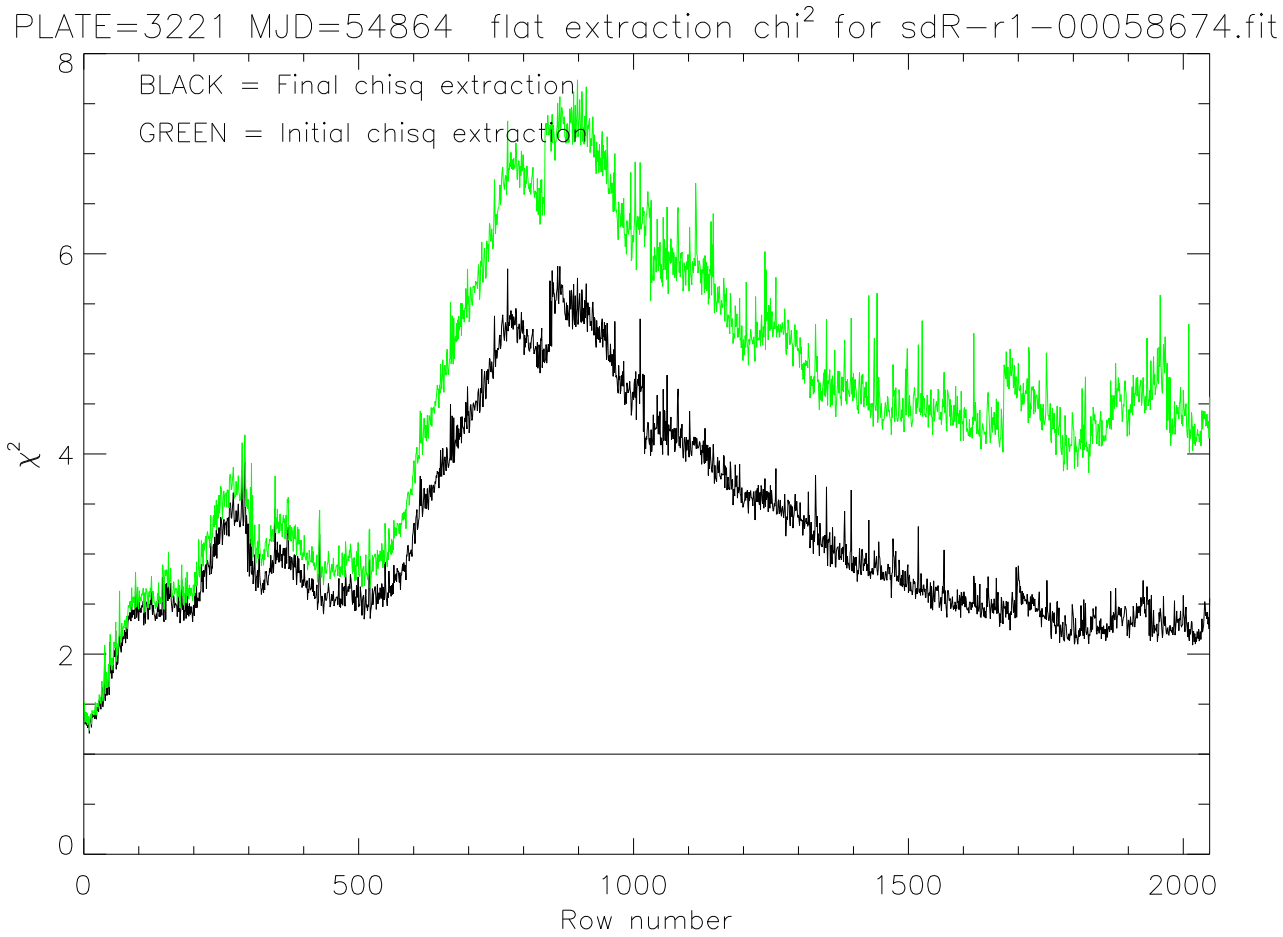

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

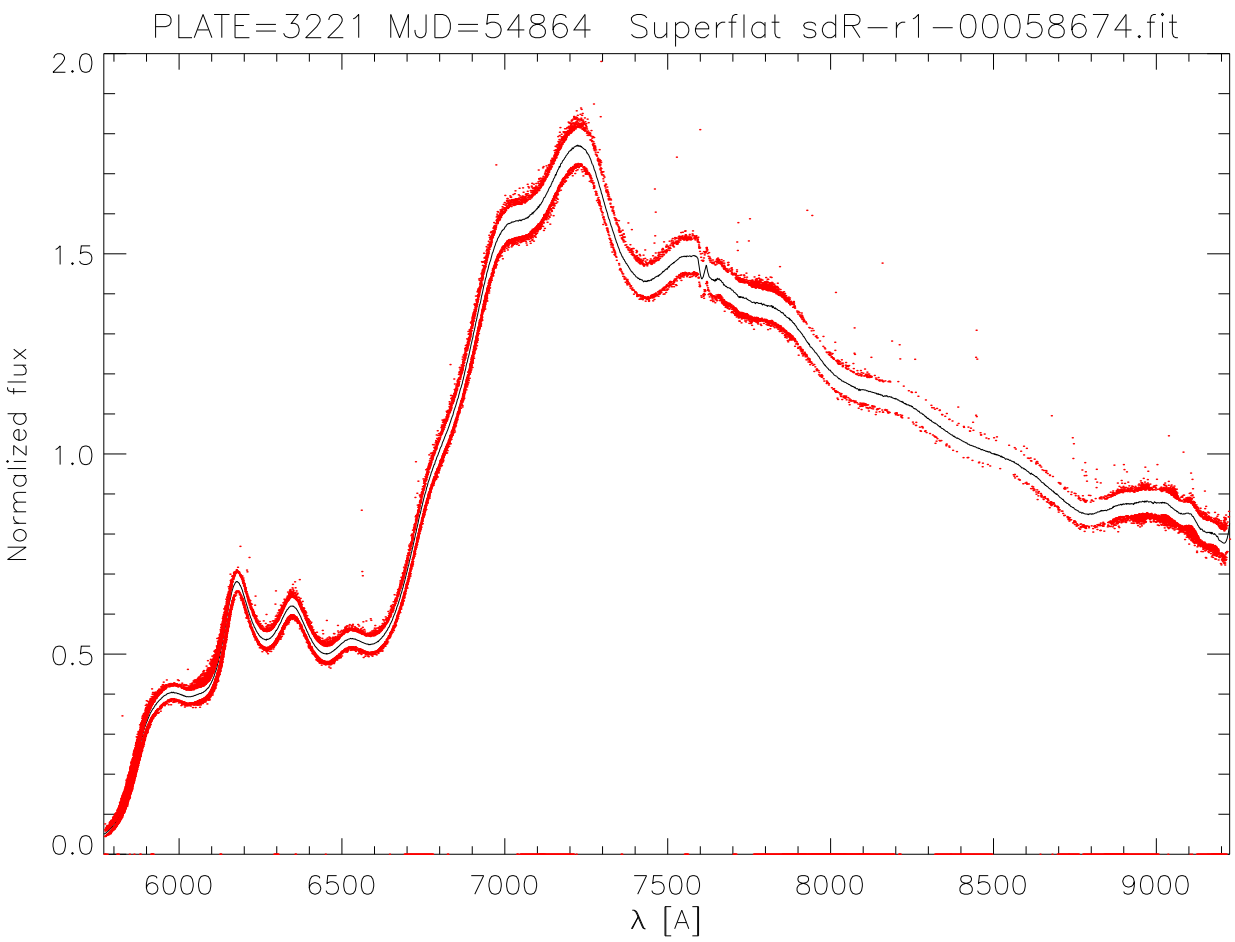

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−r1−00058666.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

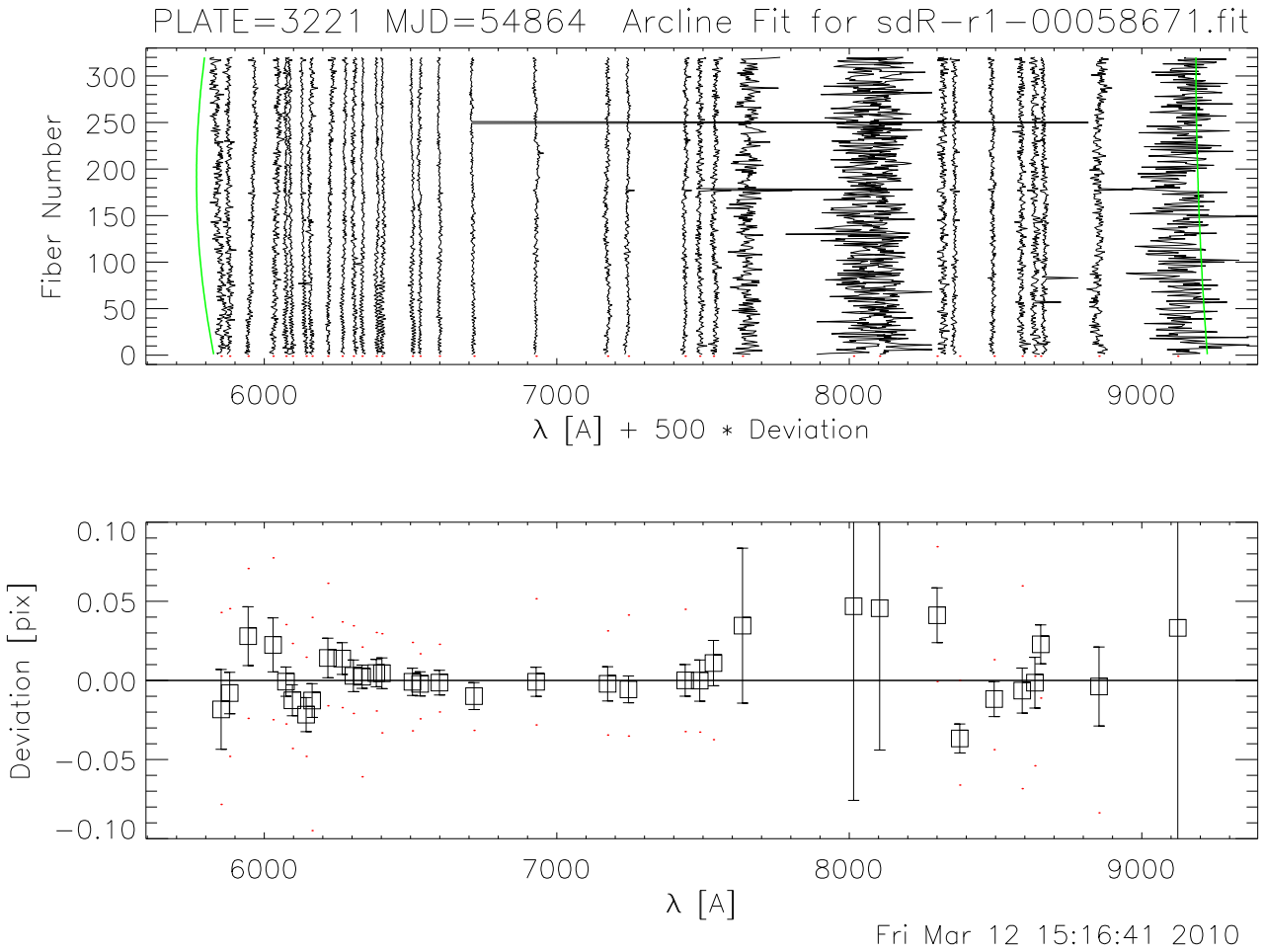

PLATE=3221 MJD=54864 Superflat sdR-r1-00058666.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

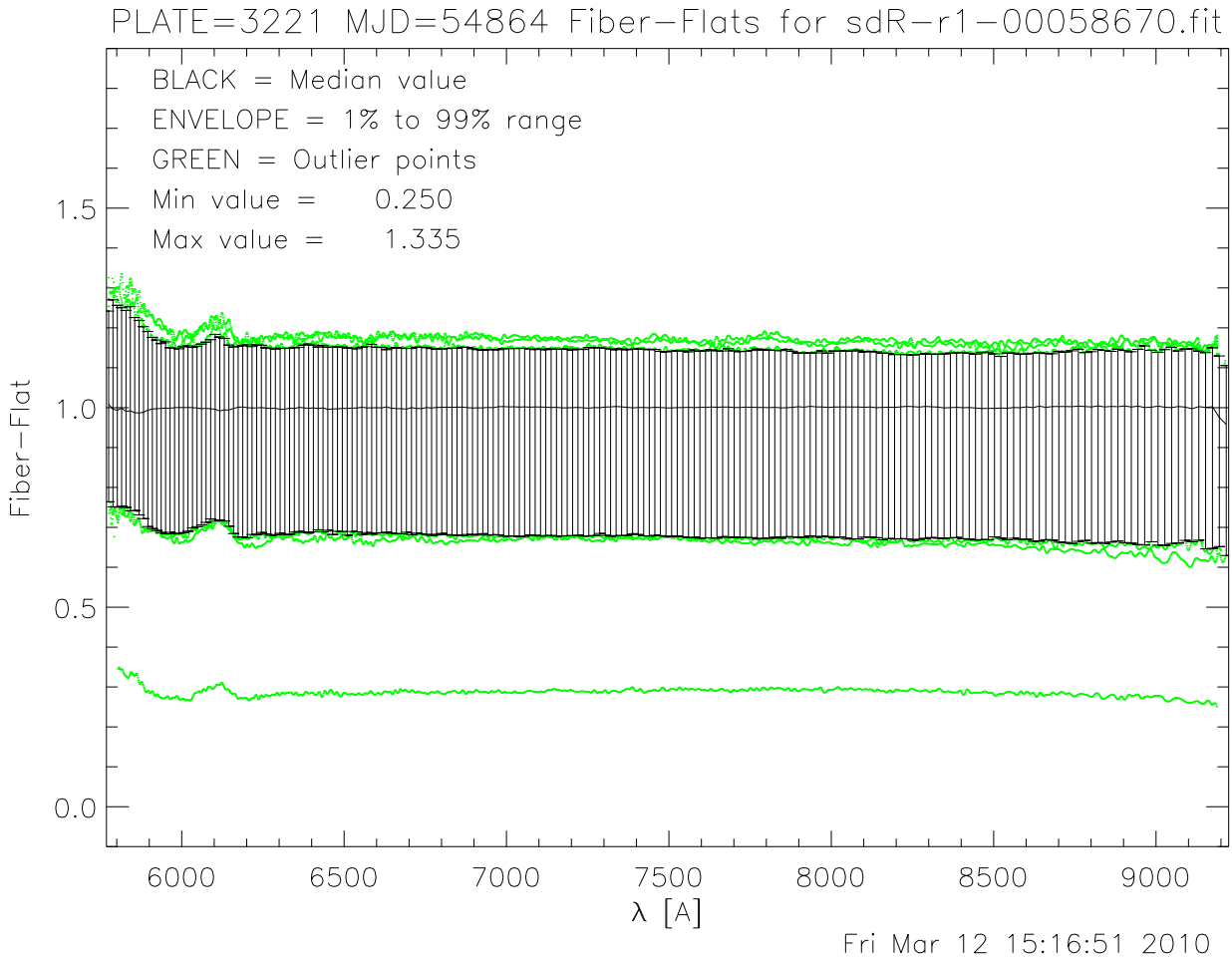

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−r1−00058670.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

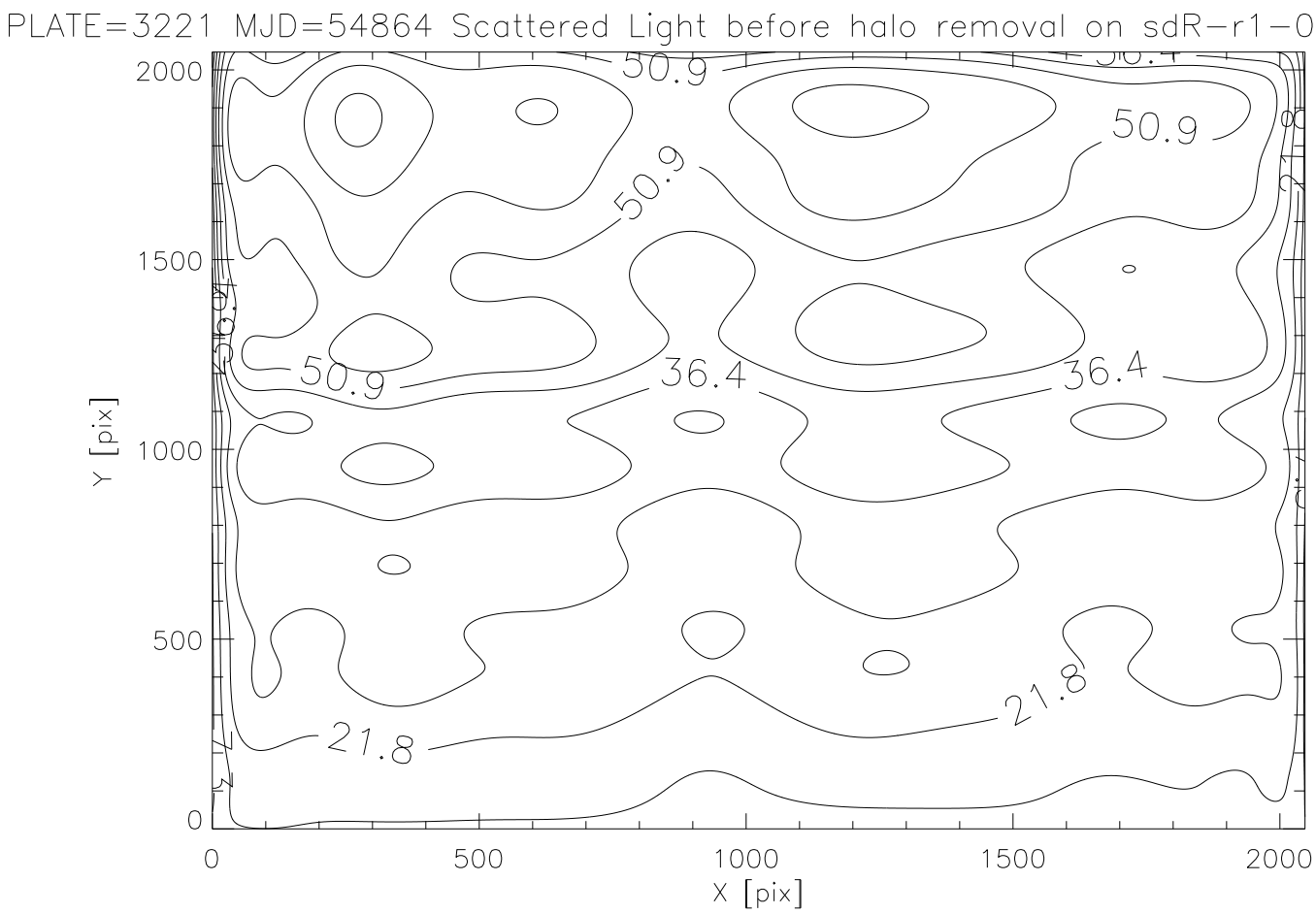

PLATE=3221 MJD=54864 Superflat sdR-r1-00058670.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

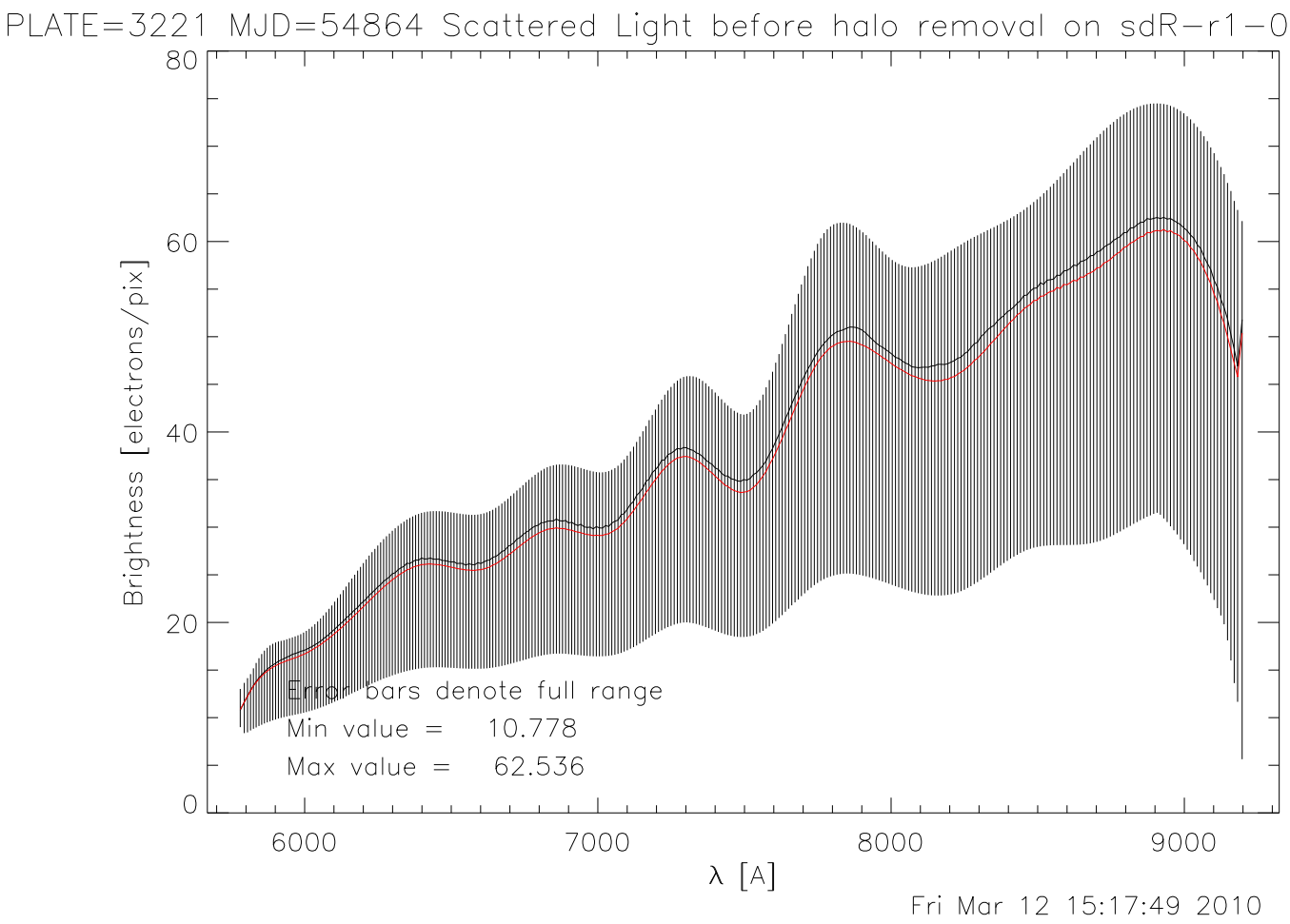

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−r1−00058674.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

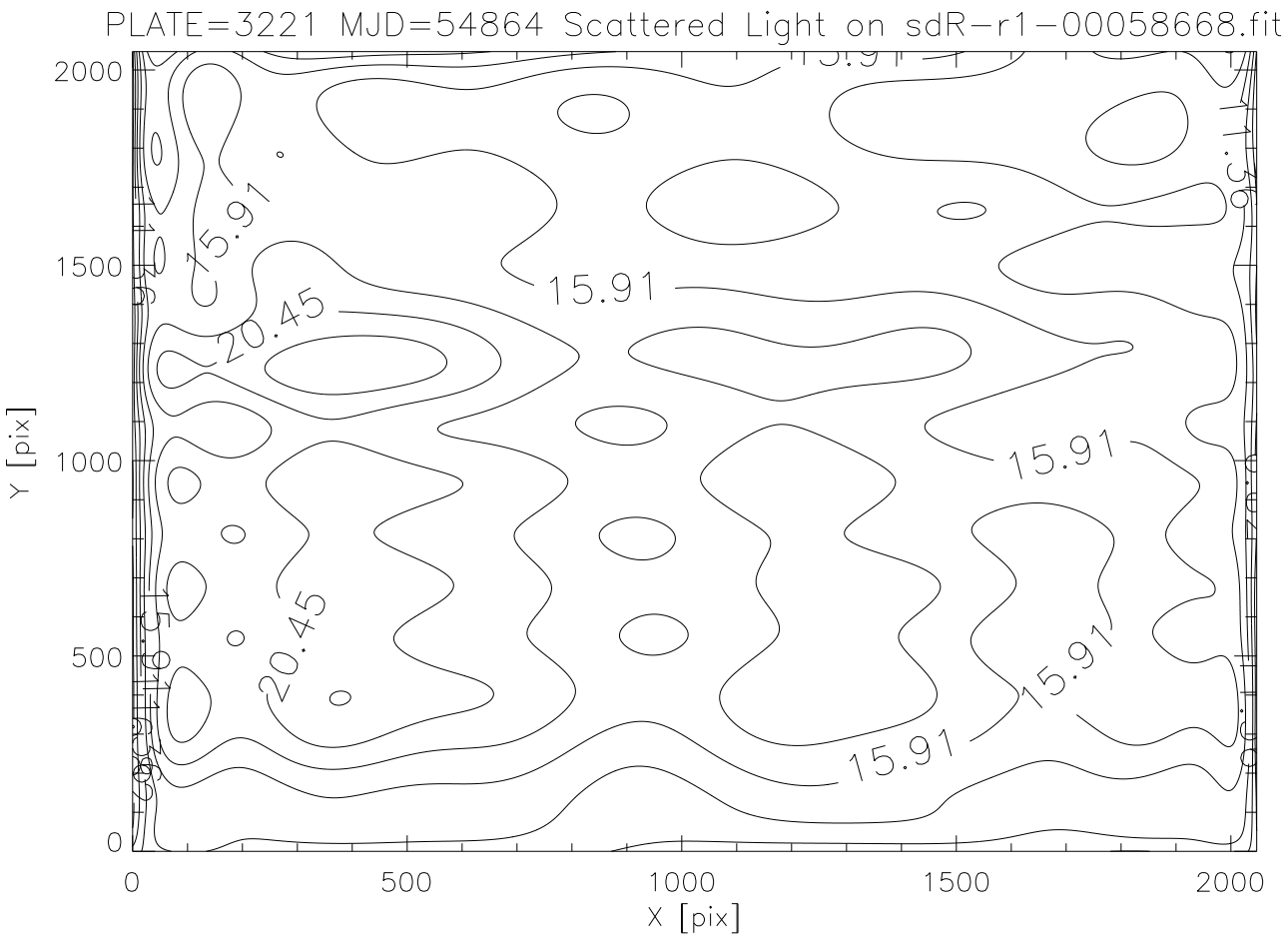

PLATE=3221 MJD=54864 Superflat sdR-r1-00058674.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

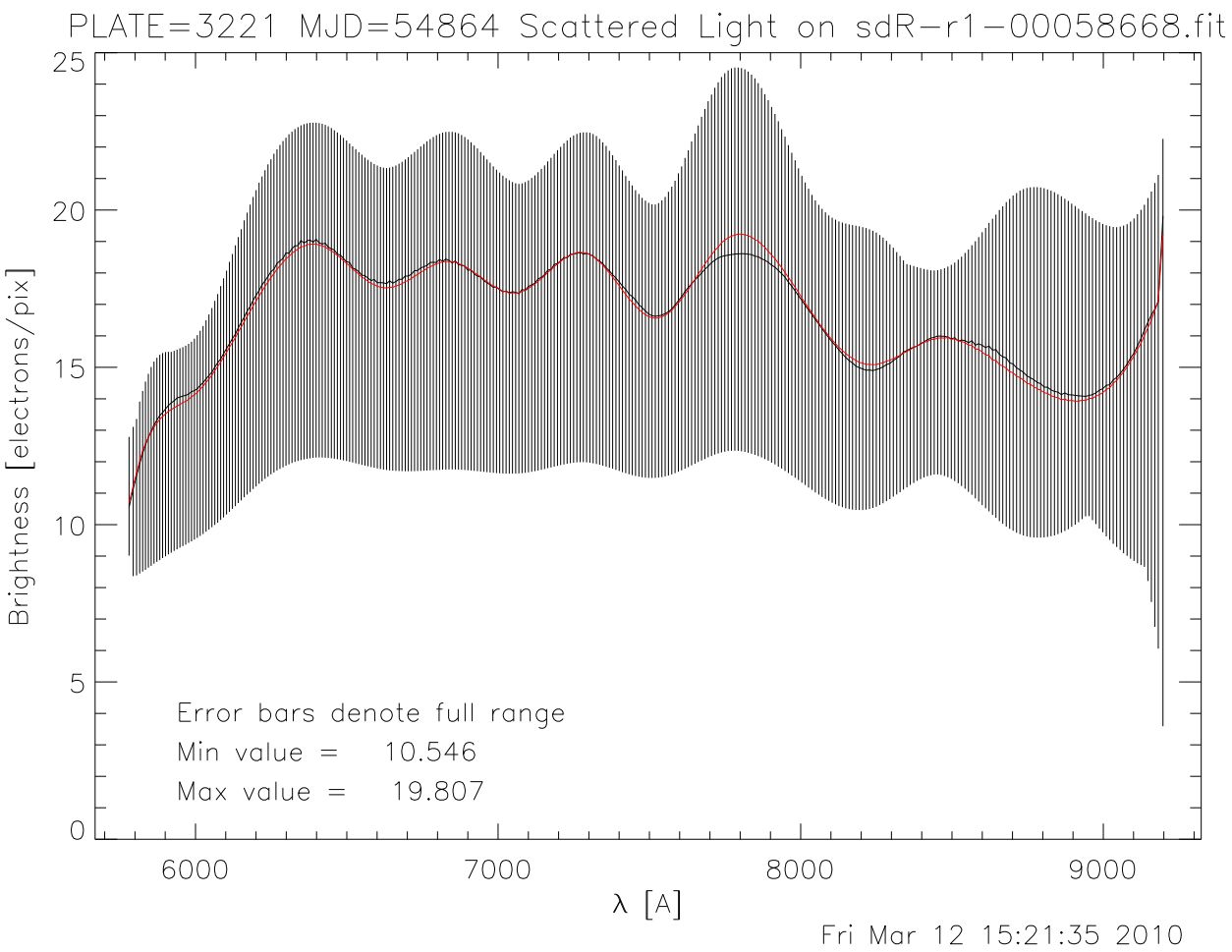

PLATE=3221 MJD=54864 Arcline Fit for sdR-r1-00058671.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Fri Mar 12 15:16:41 2010

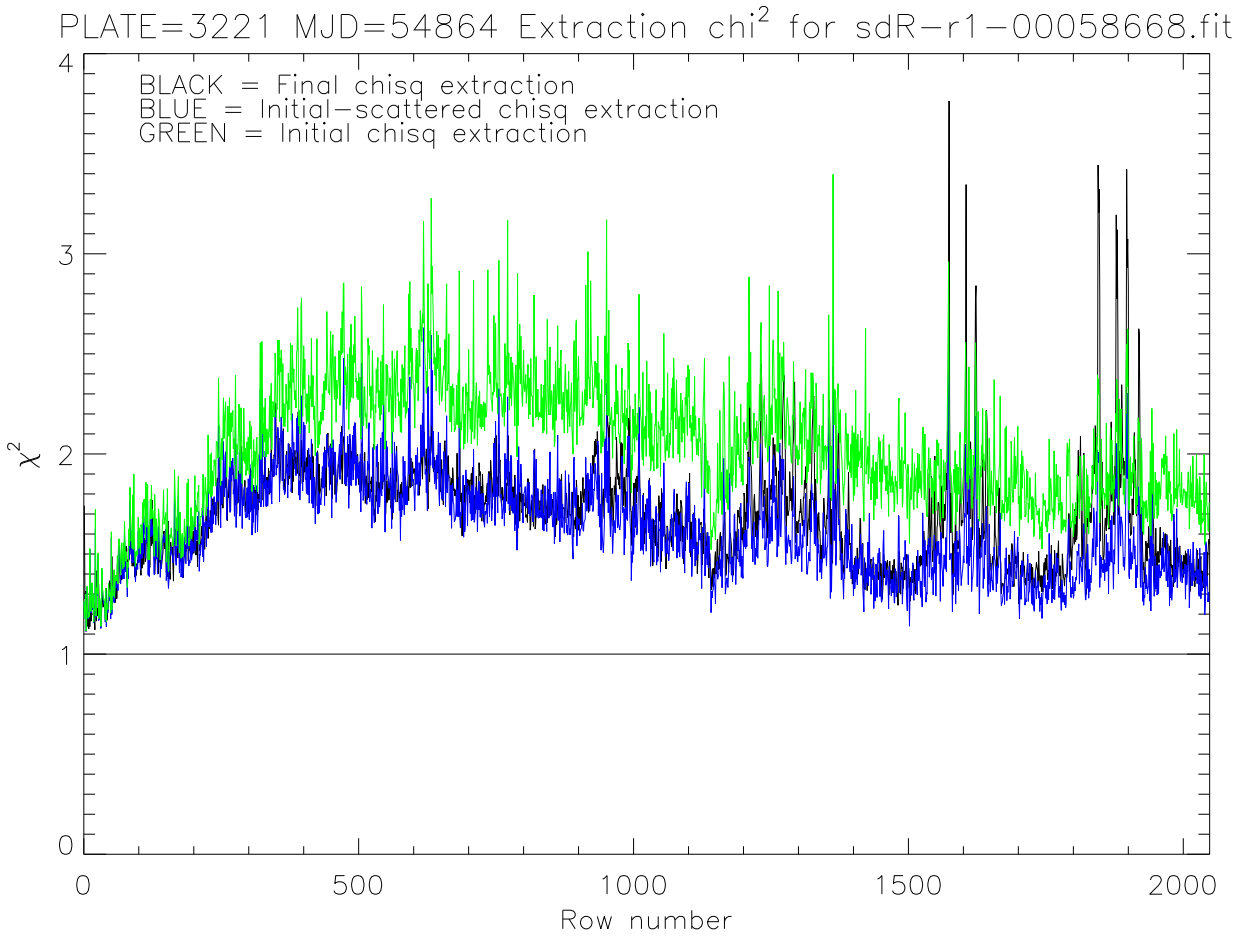

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r1−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.250
Max value = 1.335
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 15:16:51 2010

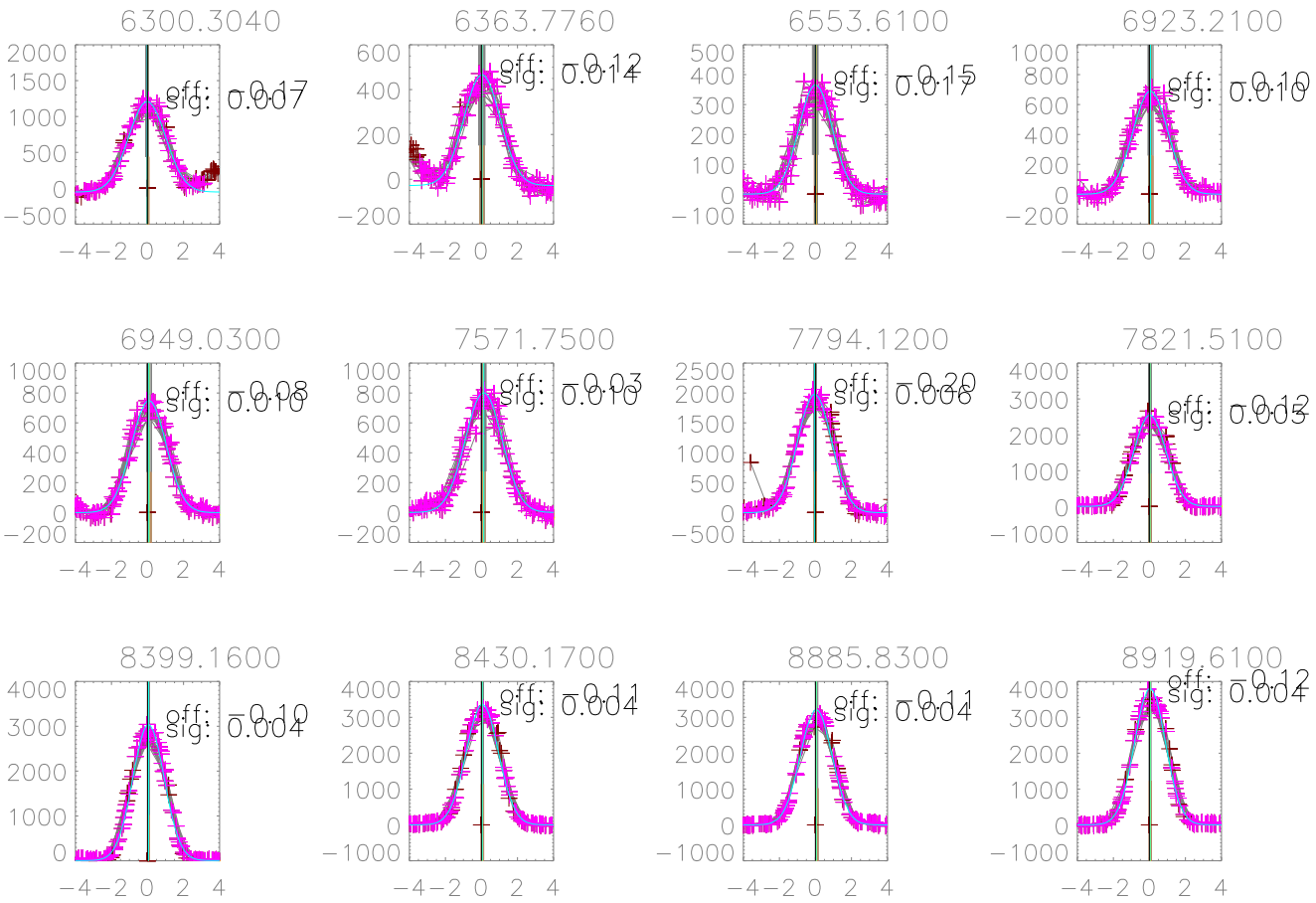

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058668.fi
50.9
50.9
50.9
50.9
36.4
36.4
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

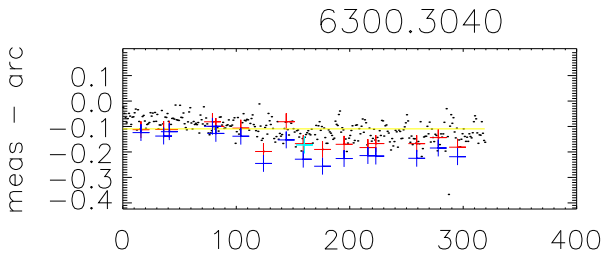

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058668.fi
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.778
Max value = 62.536
Fri Mar 12 15:17:49 2010

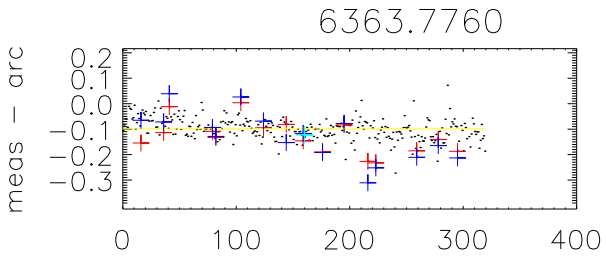

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058668.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
15.91
20.45

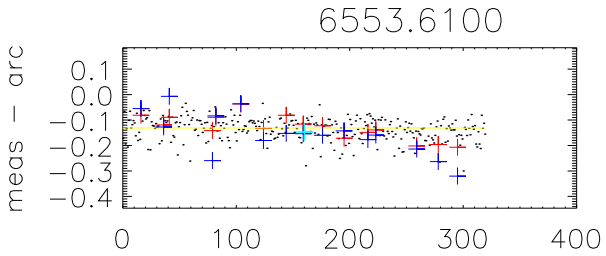

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058668.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.546
Max value = 19.807
Fri Mar 12 15:21:35 2010

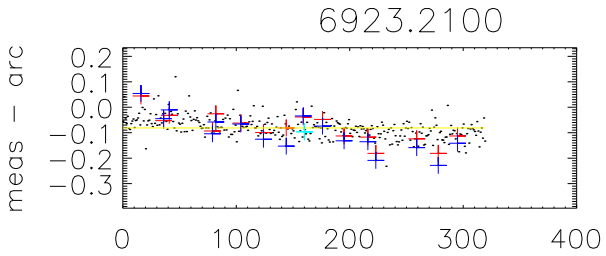

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-r1-00058668.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

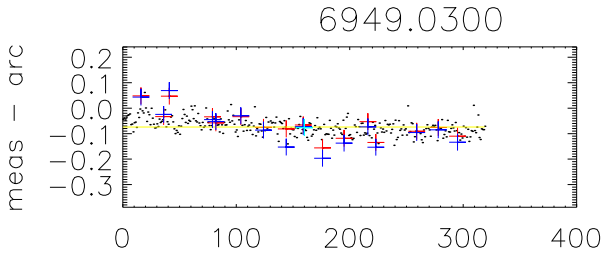

6300.3040
off: -0.17
sig: 0.007
6363.7760
off: -0.12
sig: 0.014
6553.6100
off: -0.15
sig: 0.017
6923.2100
off: -0.10
sig: 0.010
6949.0300
off: -0.08
sig: 0.010
7571.7500
off: -0.03
sig: 0.010
7794.1200
off: -0.20
sig: 0.006
7821.5100
off: -0.12
sig: 0.003
8399.1600
off: -0.10
sig: 0.004
8430.1700
off: -0.11
sig: 0.004
8885.8300
off: -0.11
sig: 0.004
8919.6100
off: -0.12
sig: 0.004

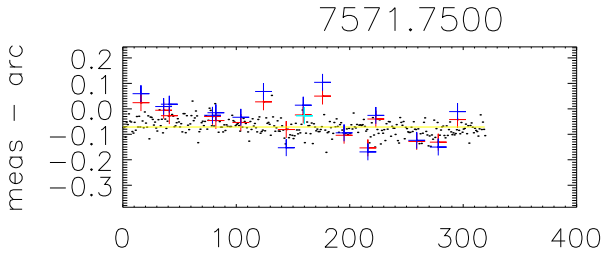

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

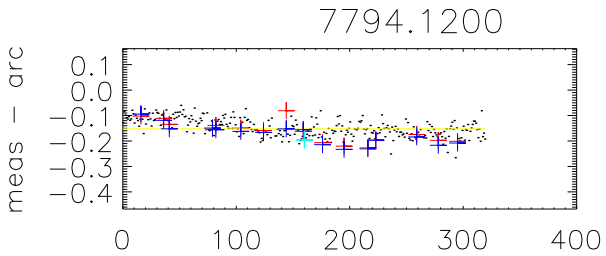

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

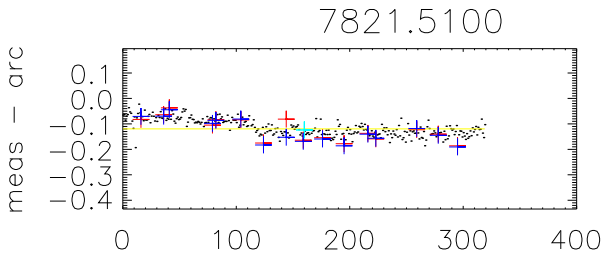

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

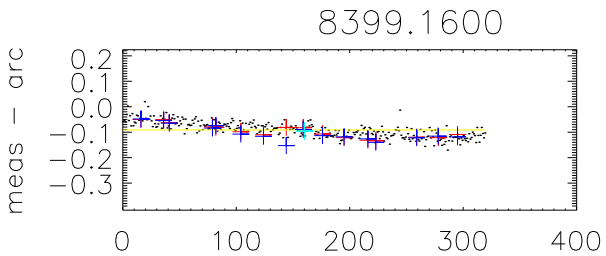

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

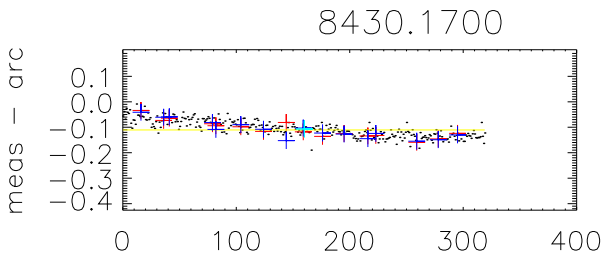

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

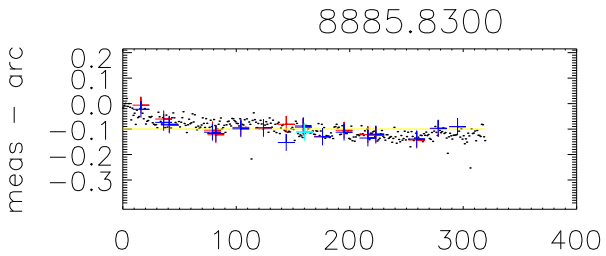

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

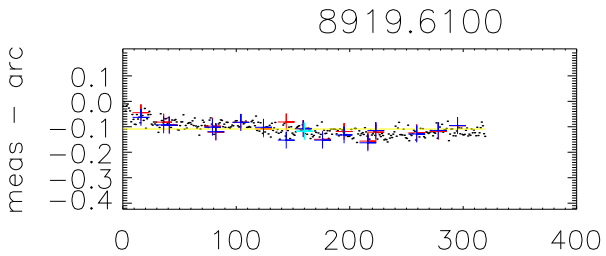

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

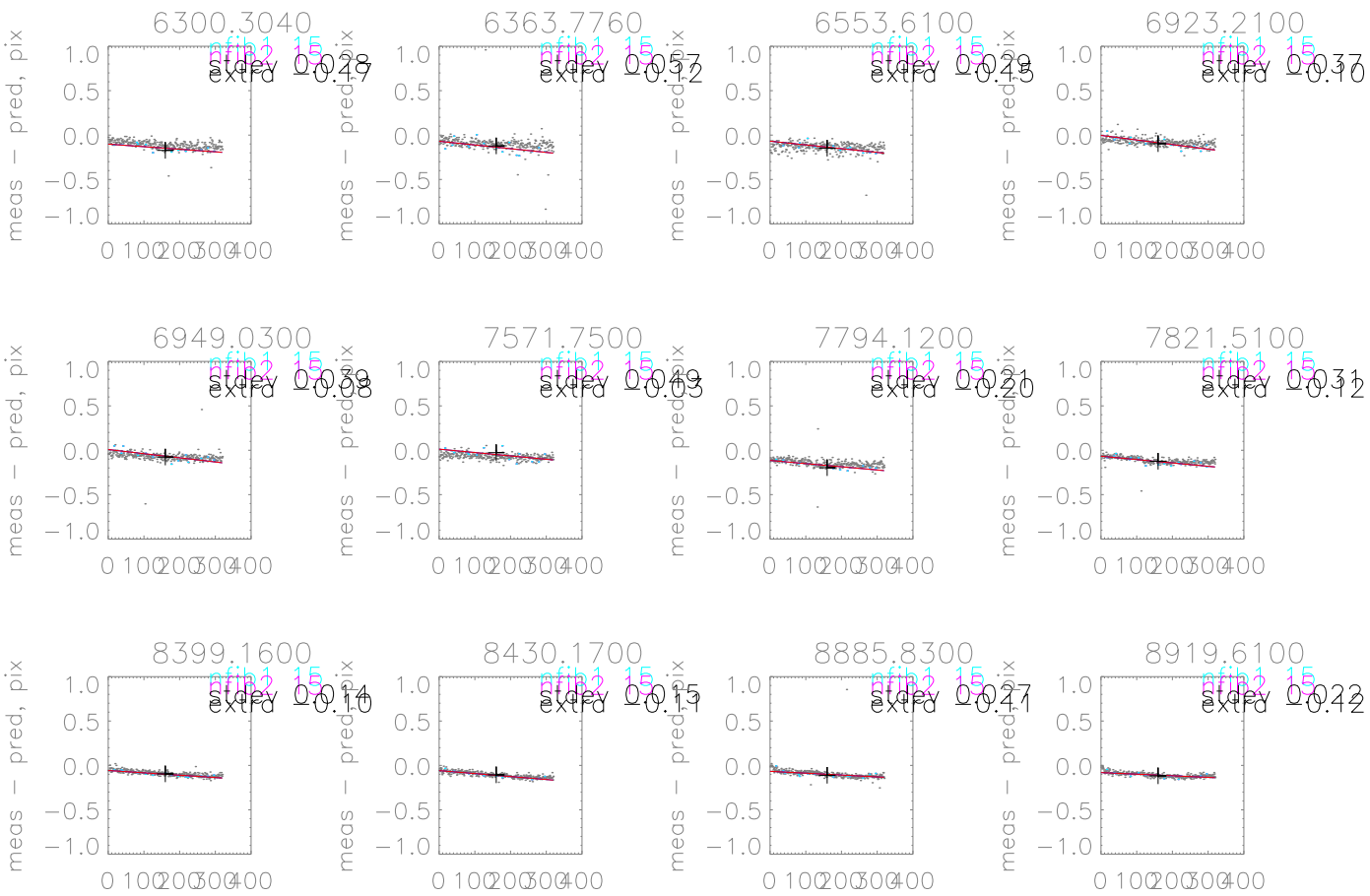

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

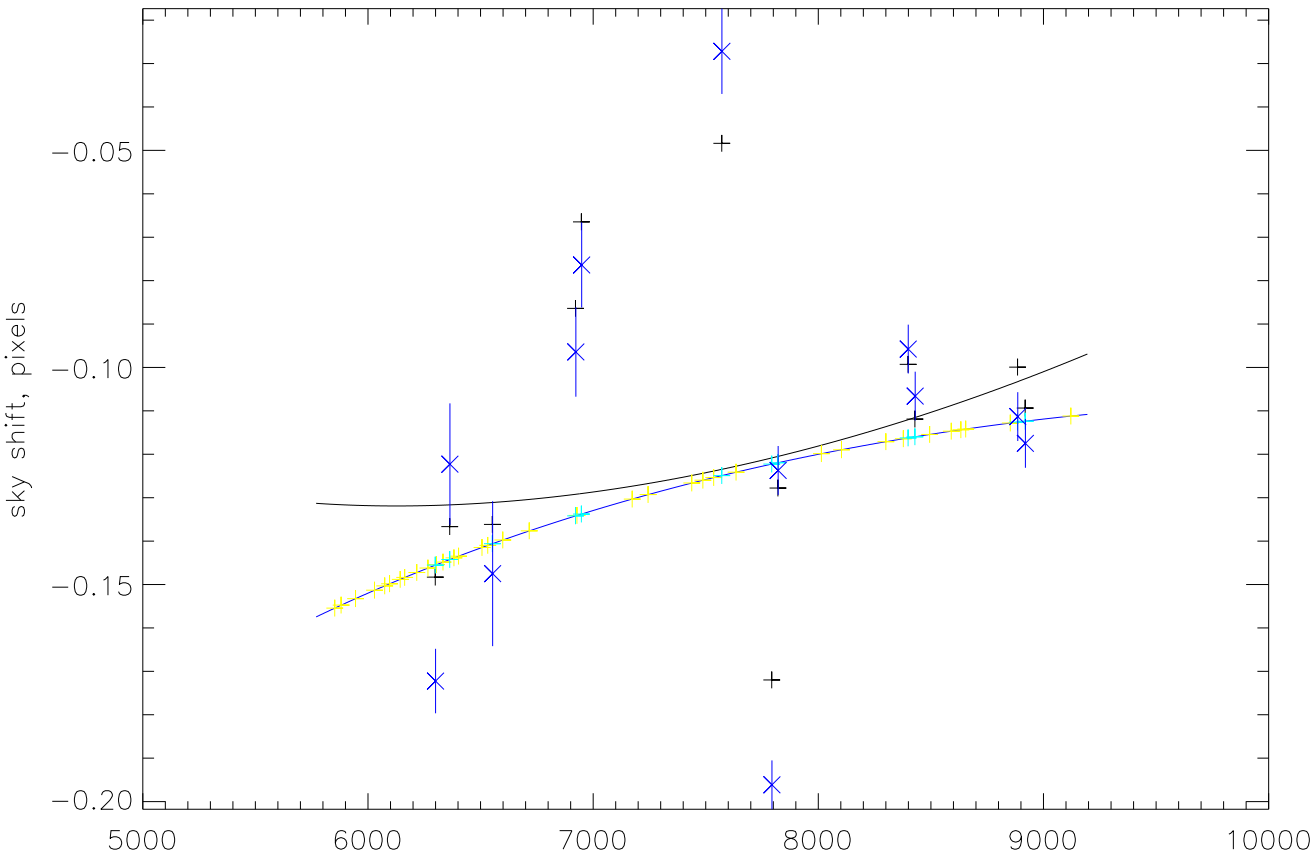

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

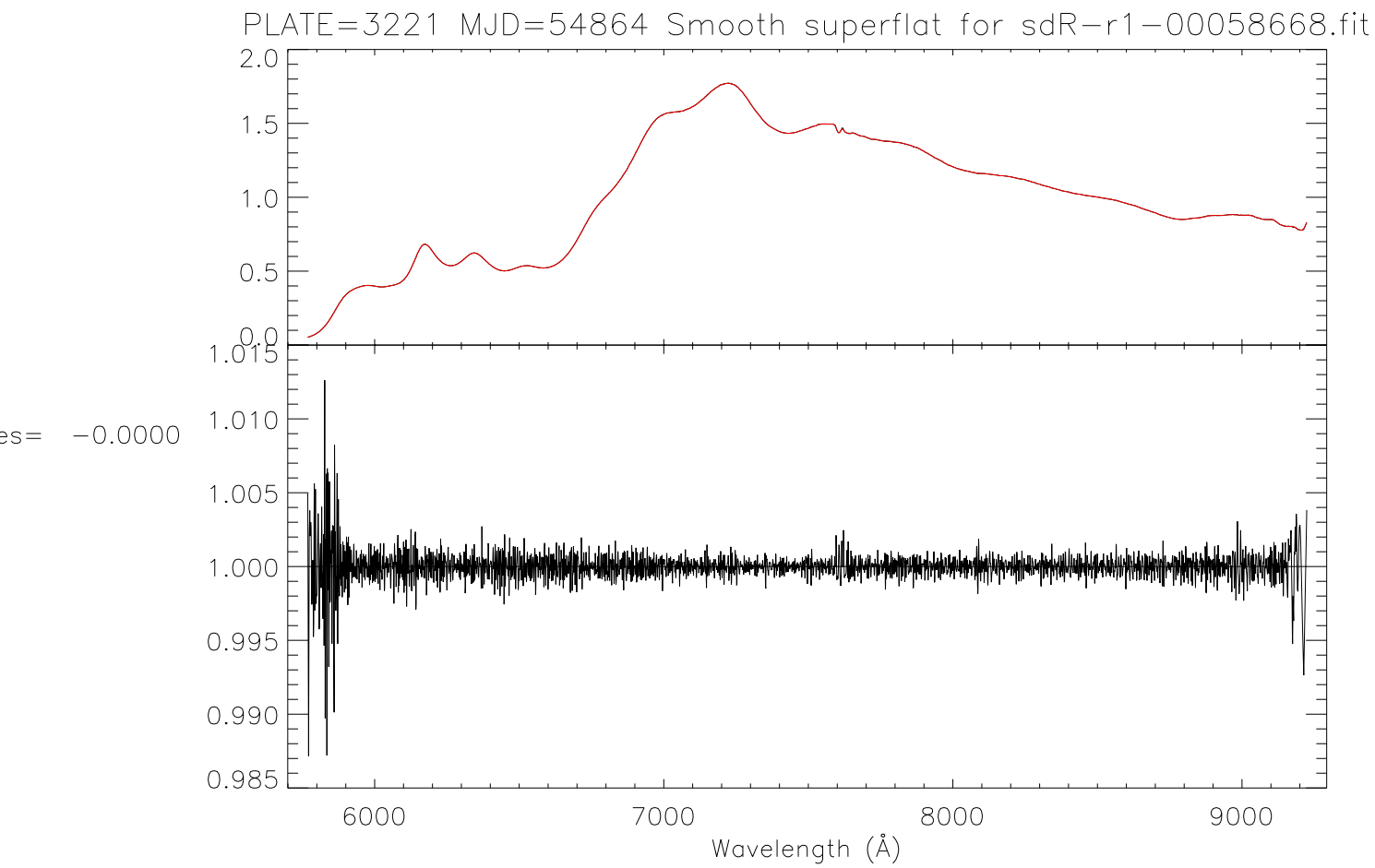

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

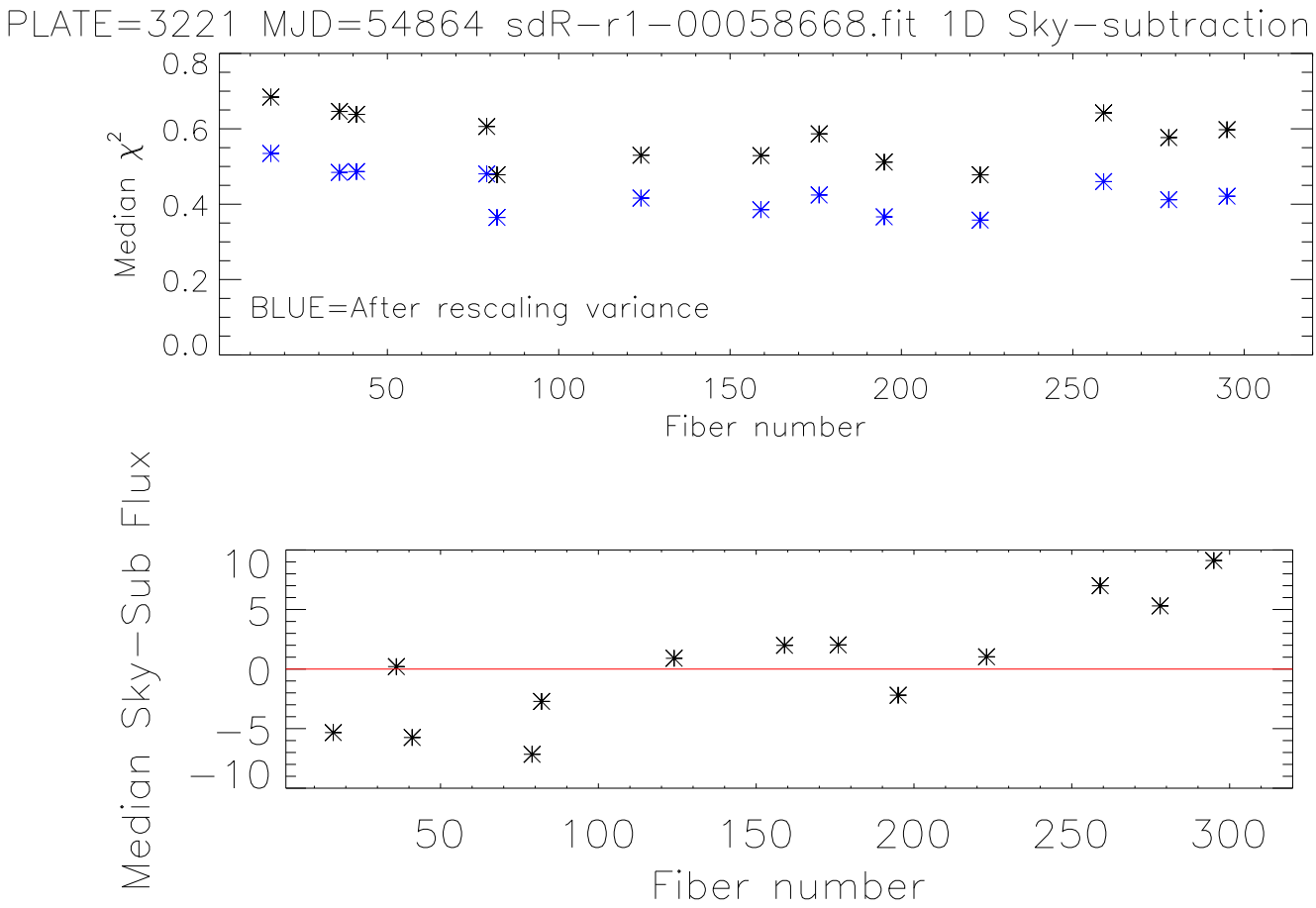

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

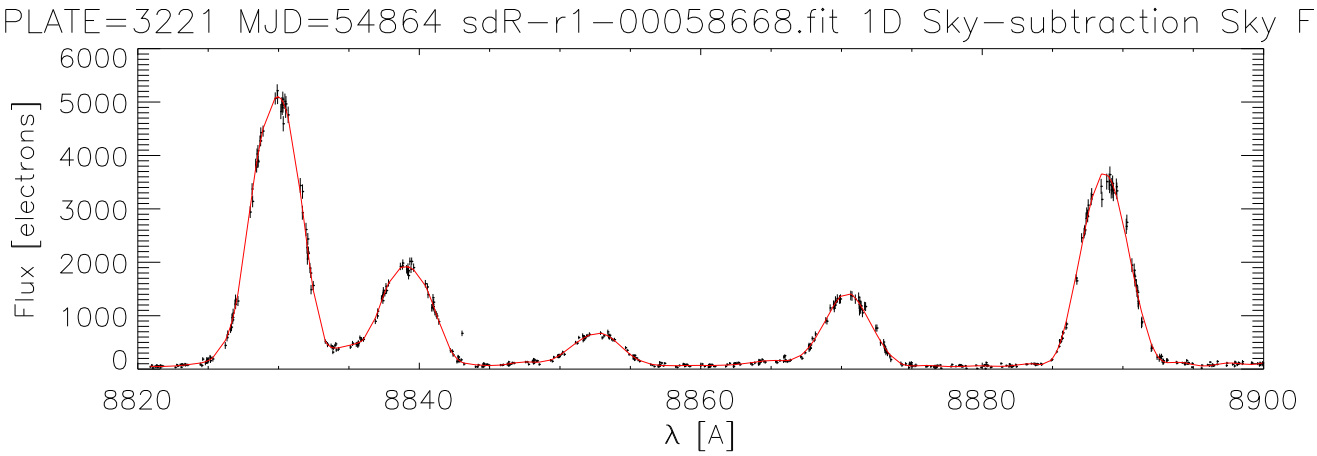

6300.3040
stdev 0.028
extra −0.47
6363.7760
stdev 0.057
extra −0.12
6553.6100
stdev 0.029
extra −0.45
6923.2100
stdev 0.037
extra −0.10
6949.0300
stdev 0.039
extra −0.08
7571.7500
stdev 0.049
extra −0.03
7794.1200
stdev 0.021
extra −0.20
7821.5100
stdev 0.031
extra −0.12
8399.1600
stdev 0.014
extra −0.10
8430.1700
stdev 0.015
extra −0.11
8885.8300
stdev 0.027
extra −0.41
8919.6100
stdev 0.022
extra −0.42
meas − pred, pix
mfhd2 15

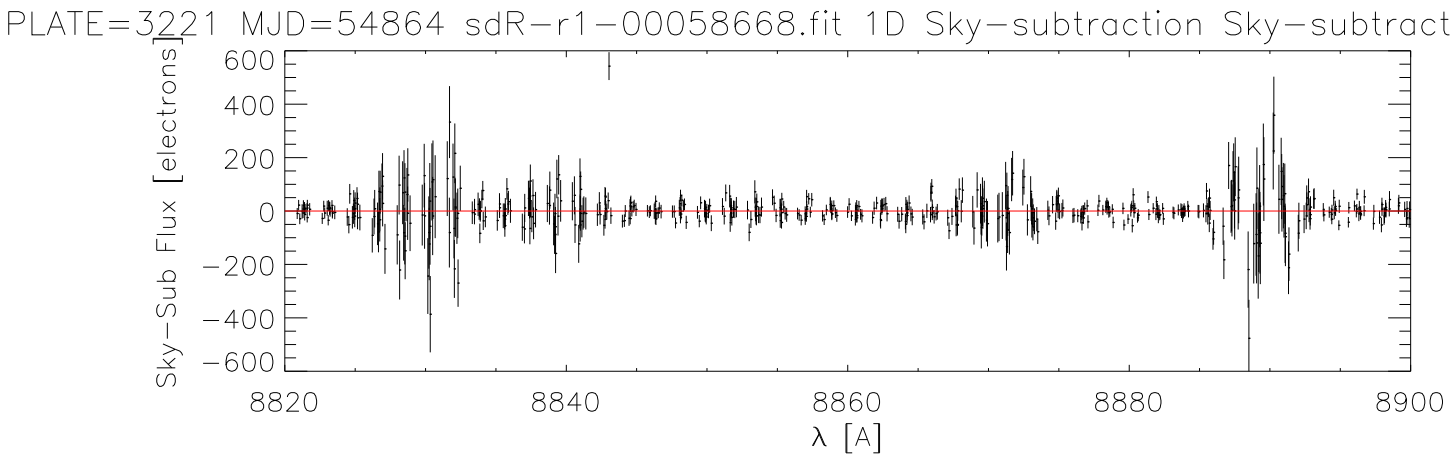

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
5000
6000
7000
8000
9000
10000

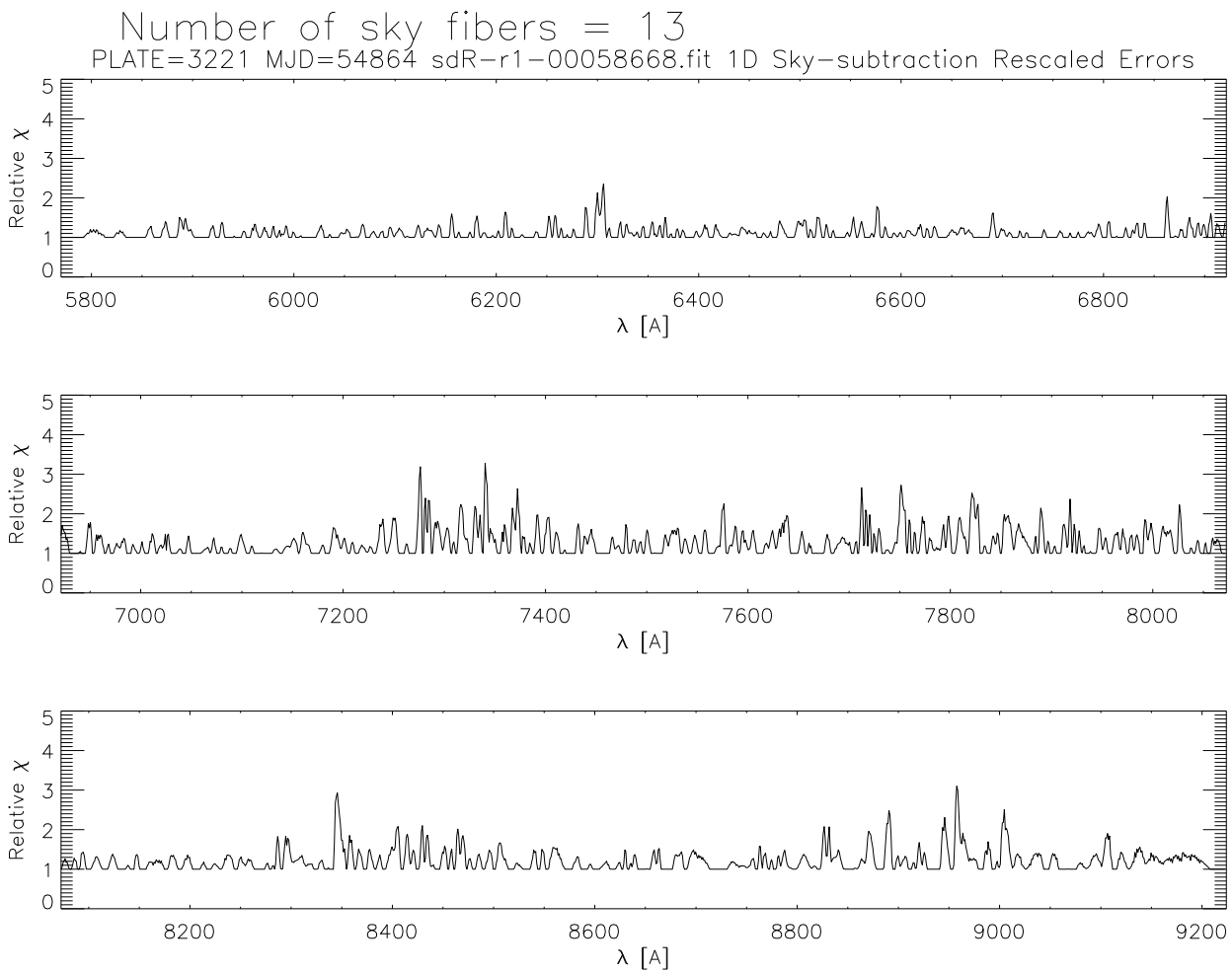

PLATE=3221 MJD=54864 Smooth superflat for sdR-r1-00058668.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

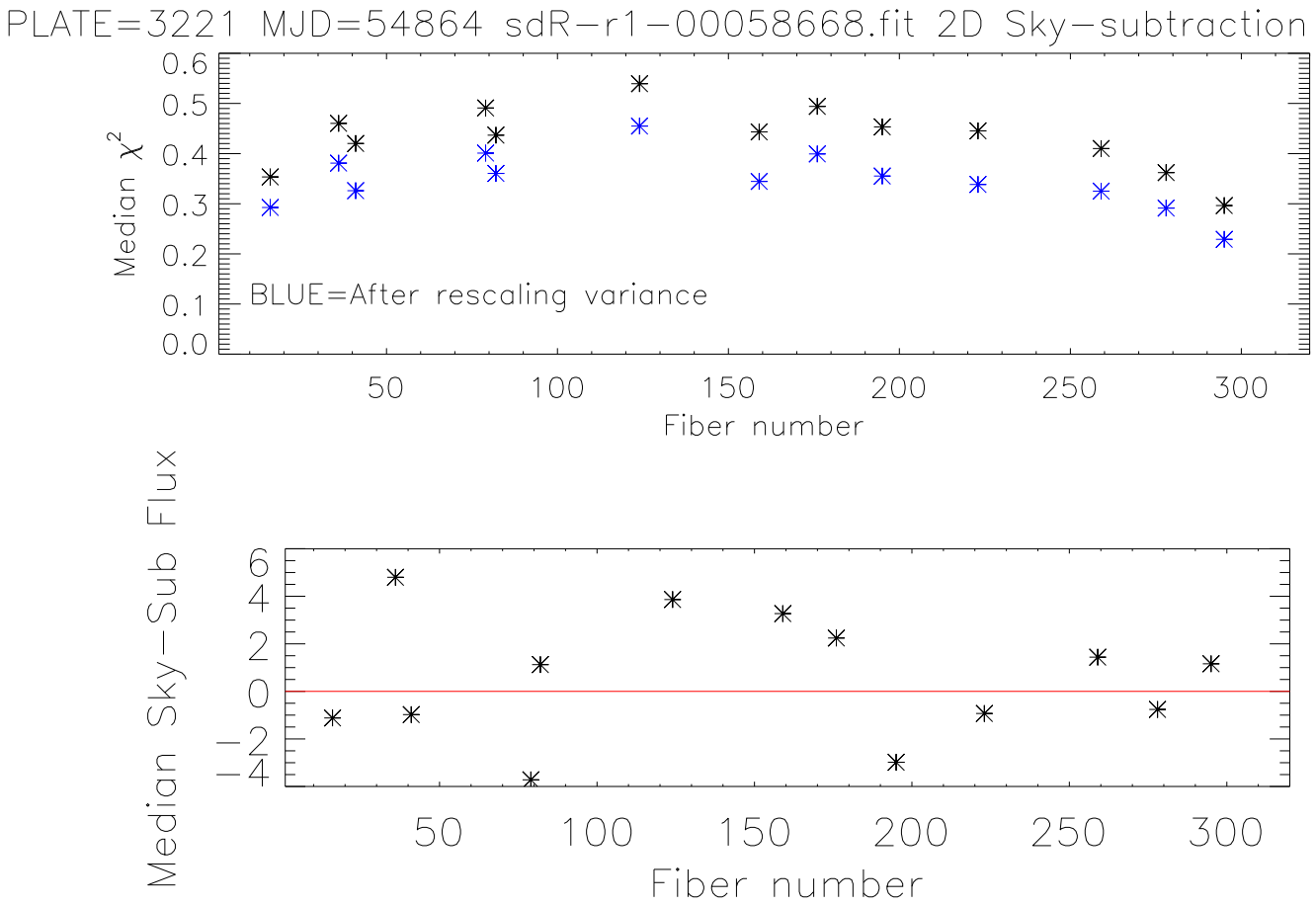
es= −0.0000

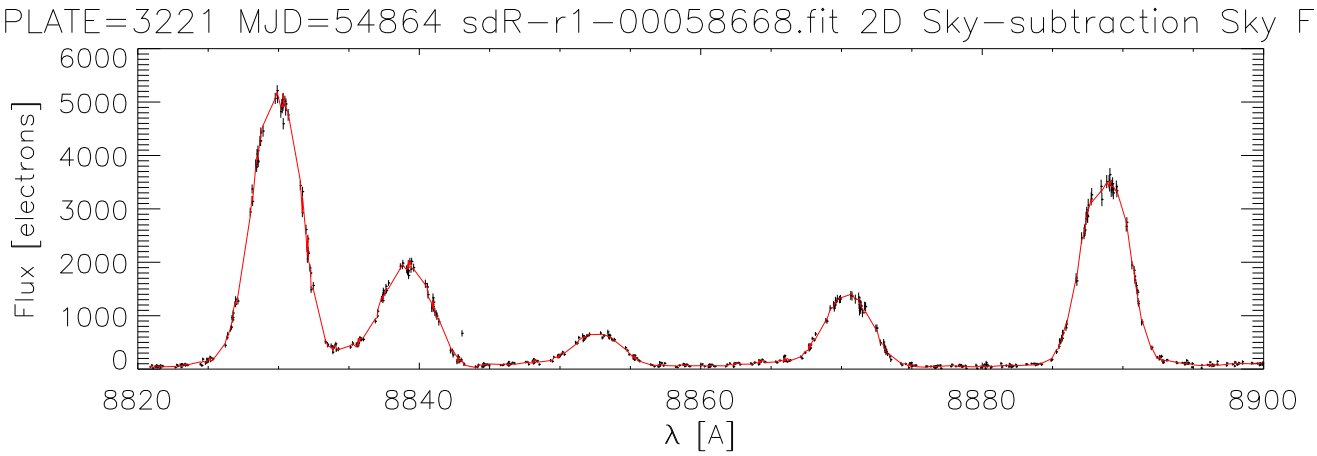

PLATE=3221 MJD=54864 sdR-r1-00058668.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

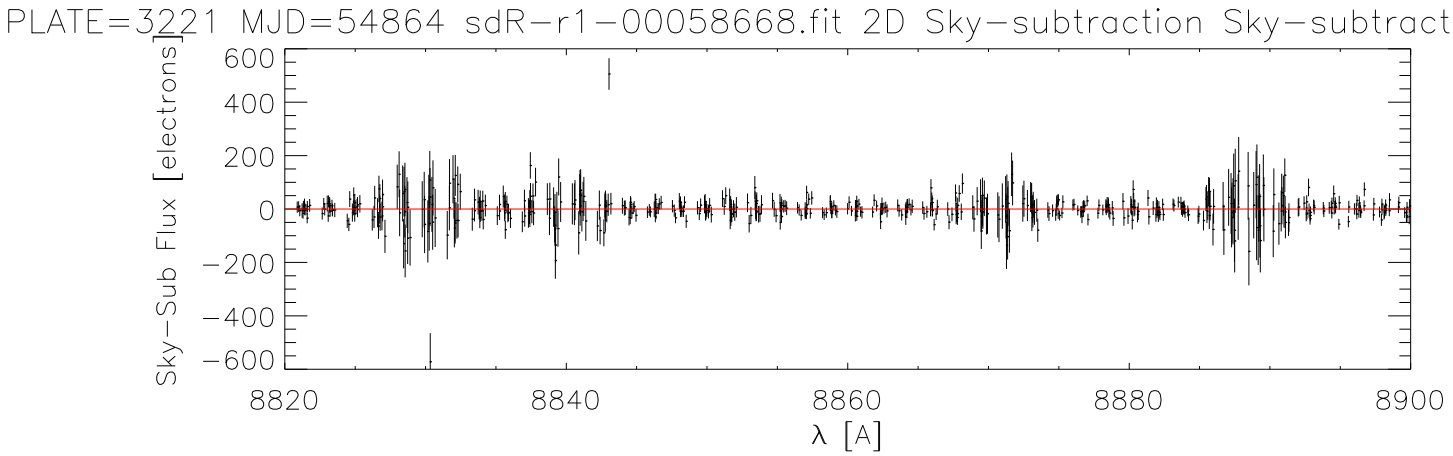

PLATE=3221 MJD=54864 sdR-r1-00058668.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

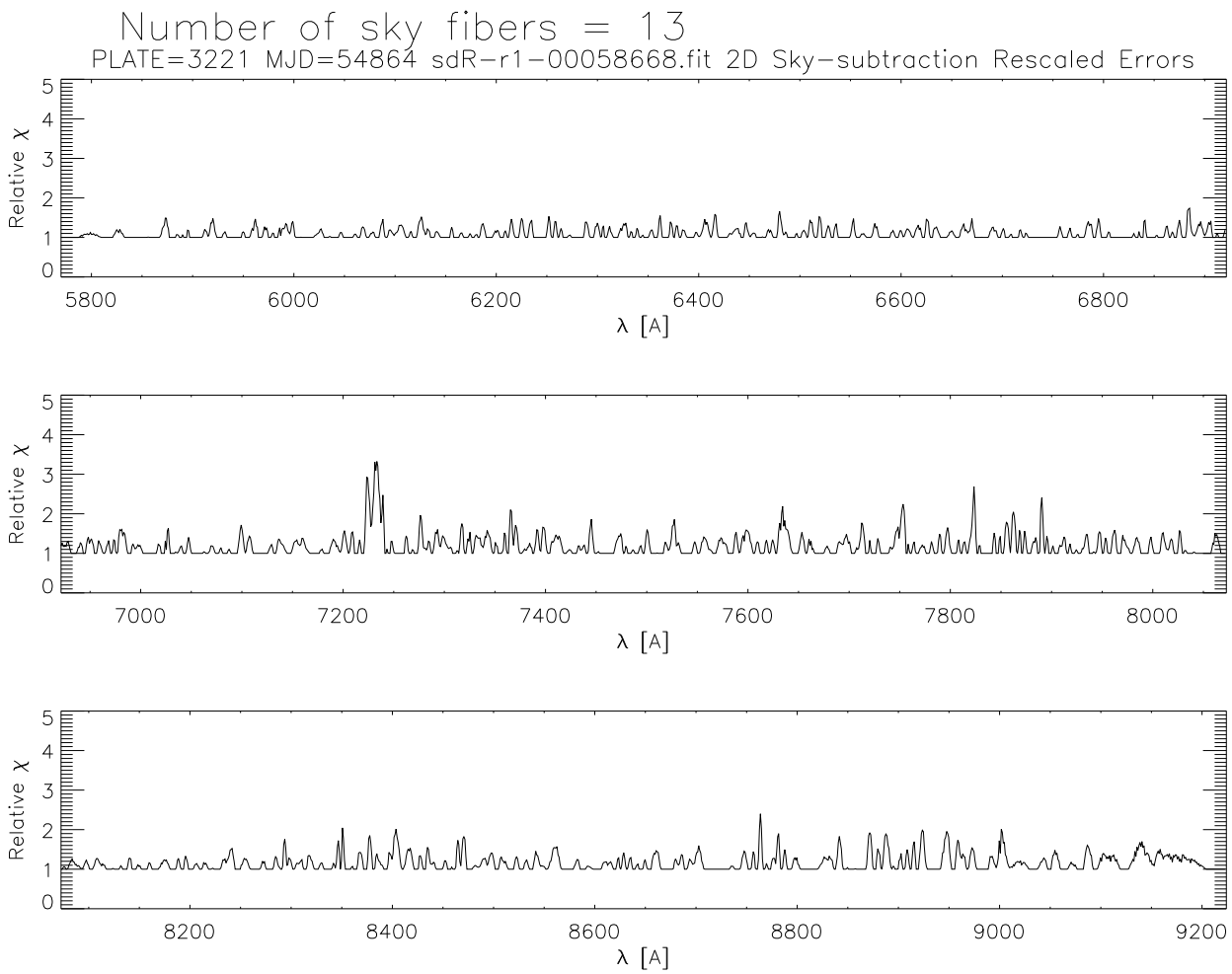

PLATE=3221 MJD=54864 sdR-r1-00058668.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

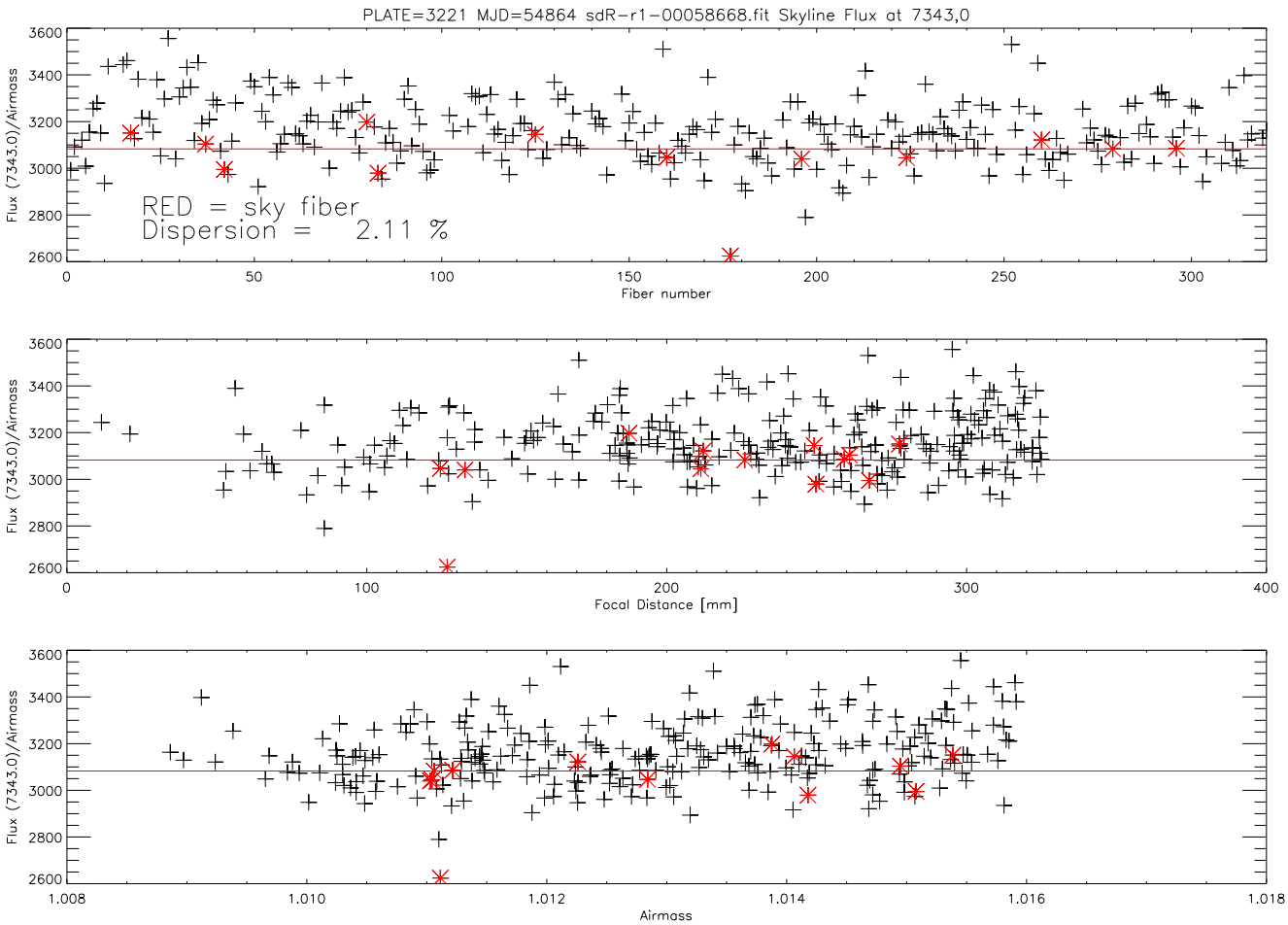

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058668.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

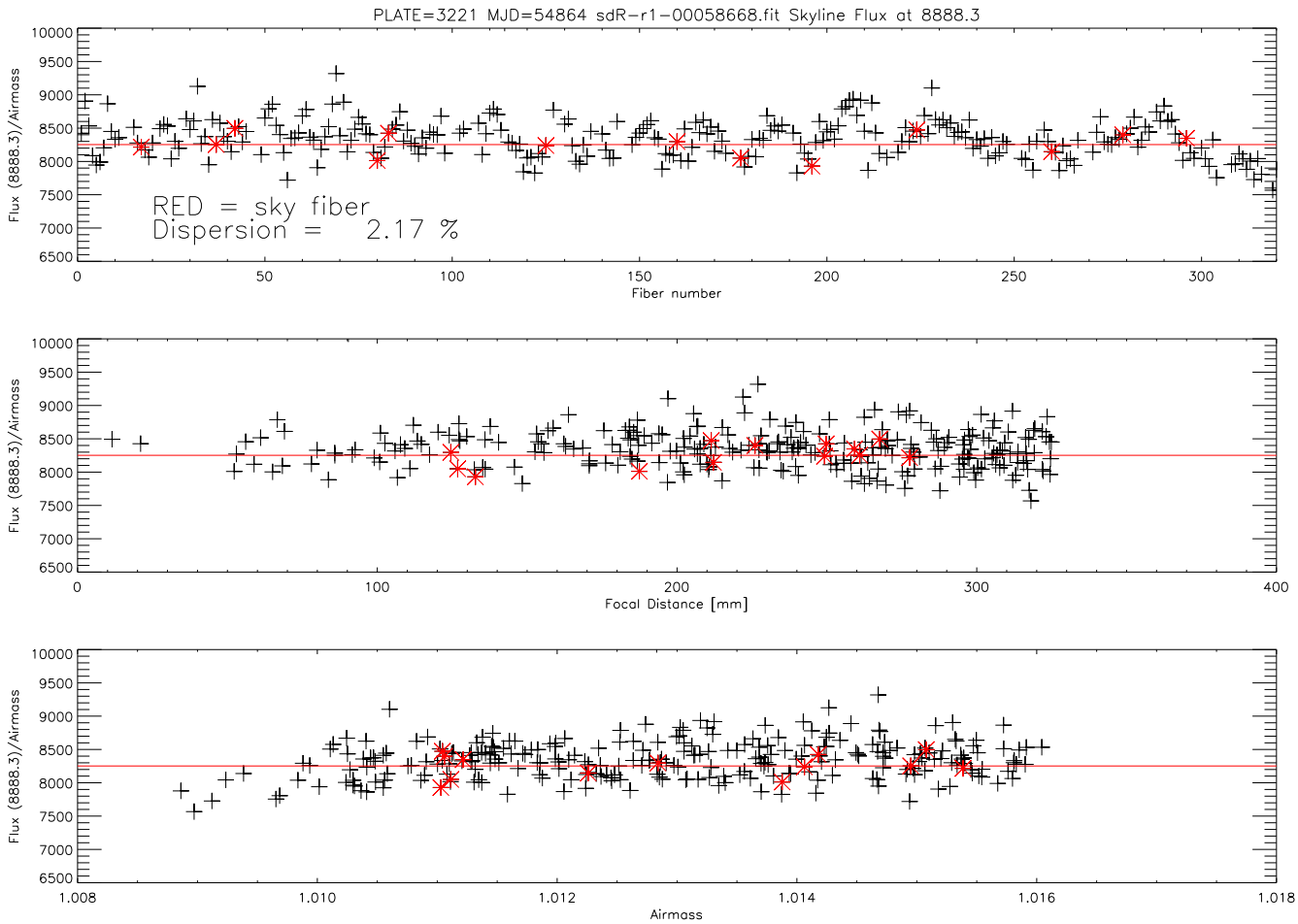

PLATE=3221 MJD=54864 sdR-r1-00058668.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

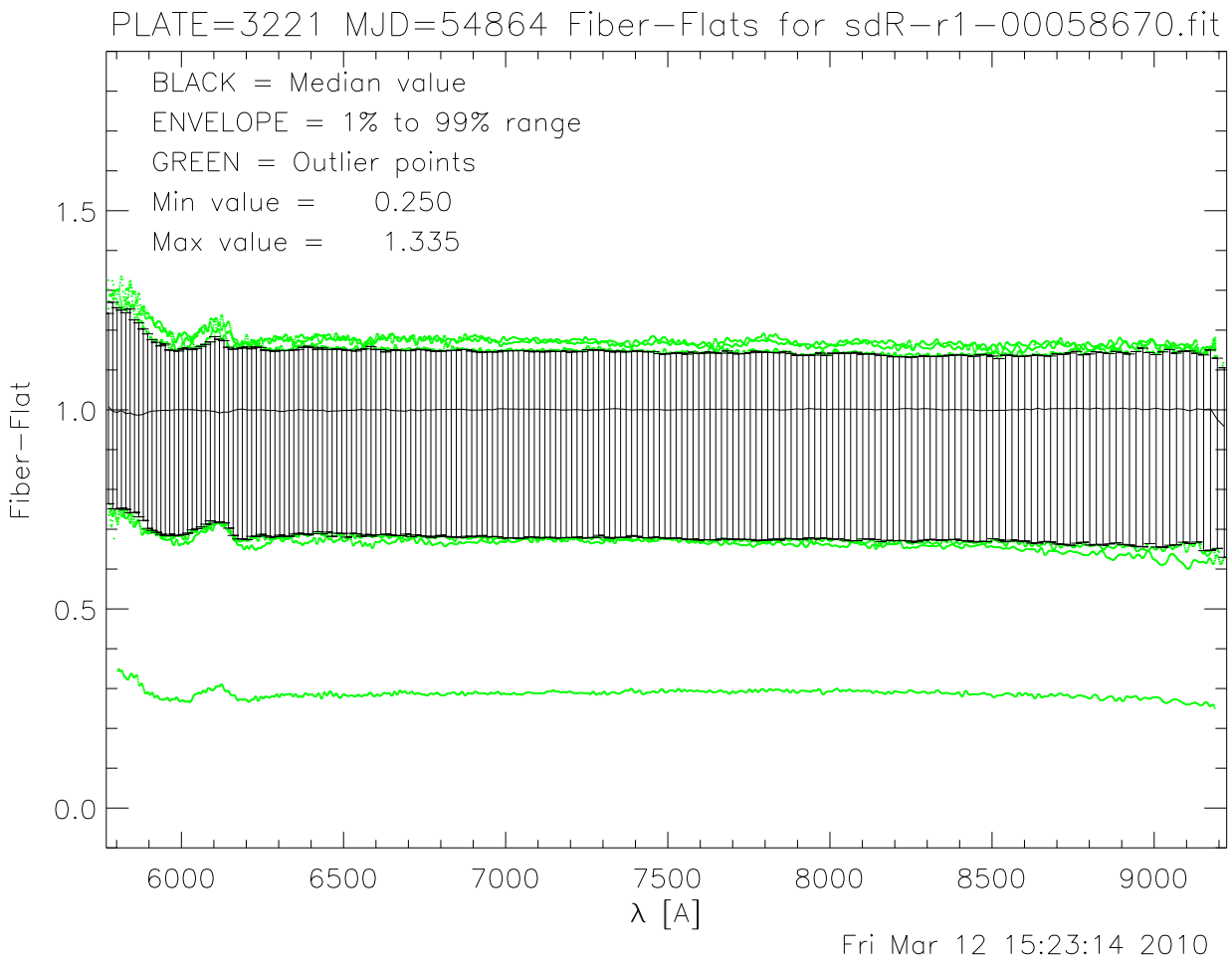

PLATE=3221 MJD=54864 sdR-r1-00058668.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

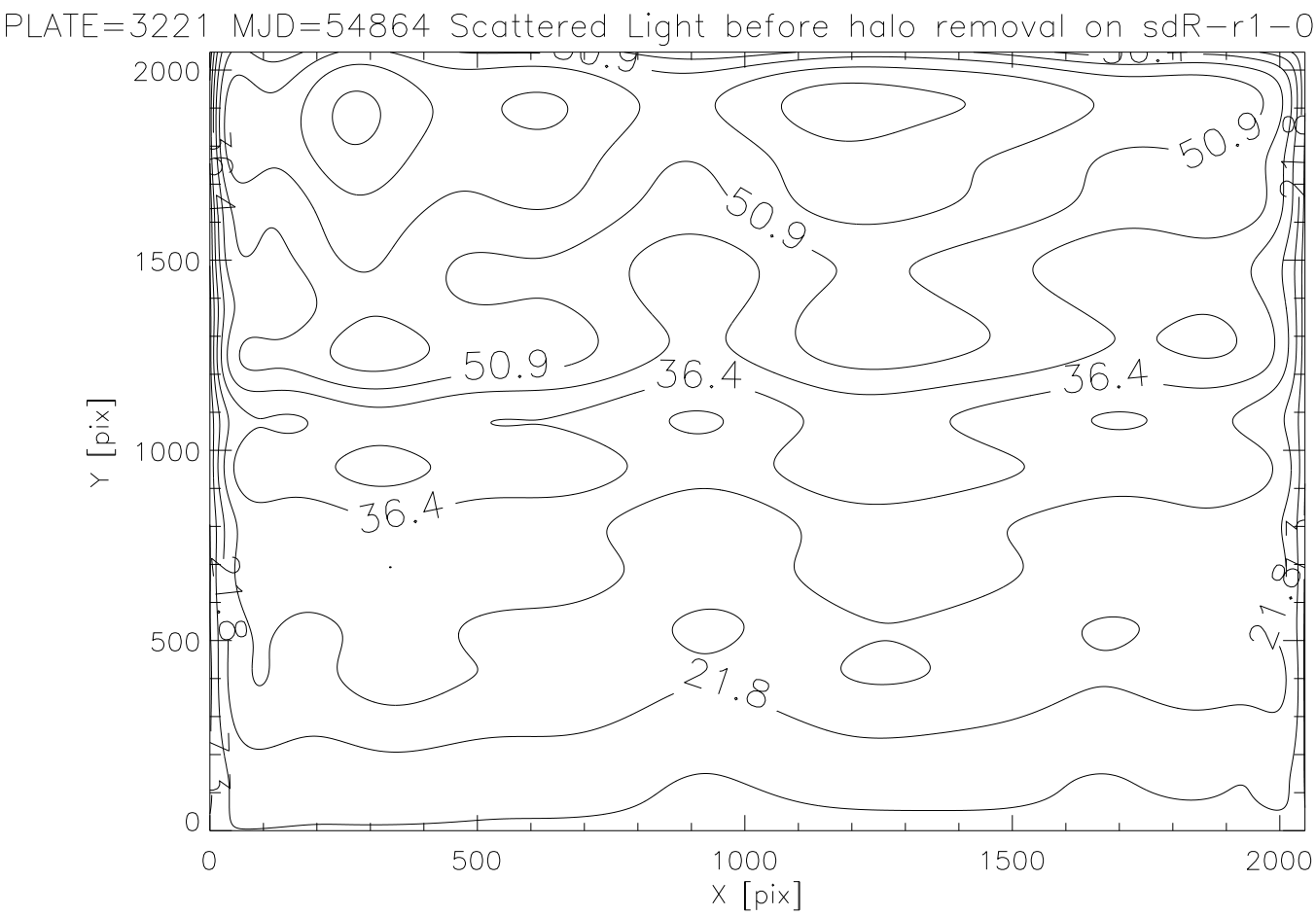

PLATE=3221 MJD=54864 sdR-r1-00058668.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

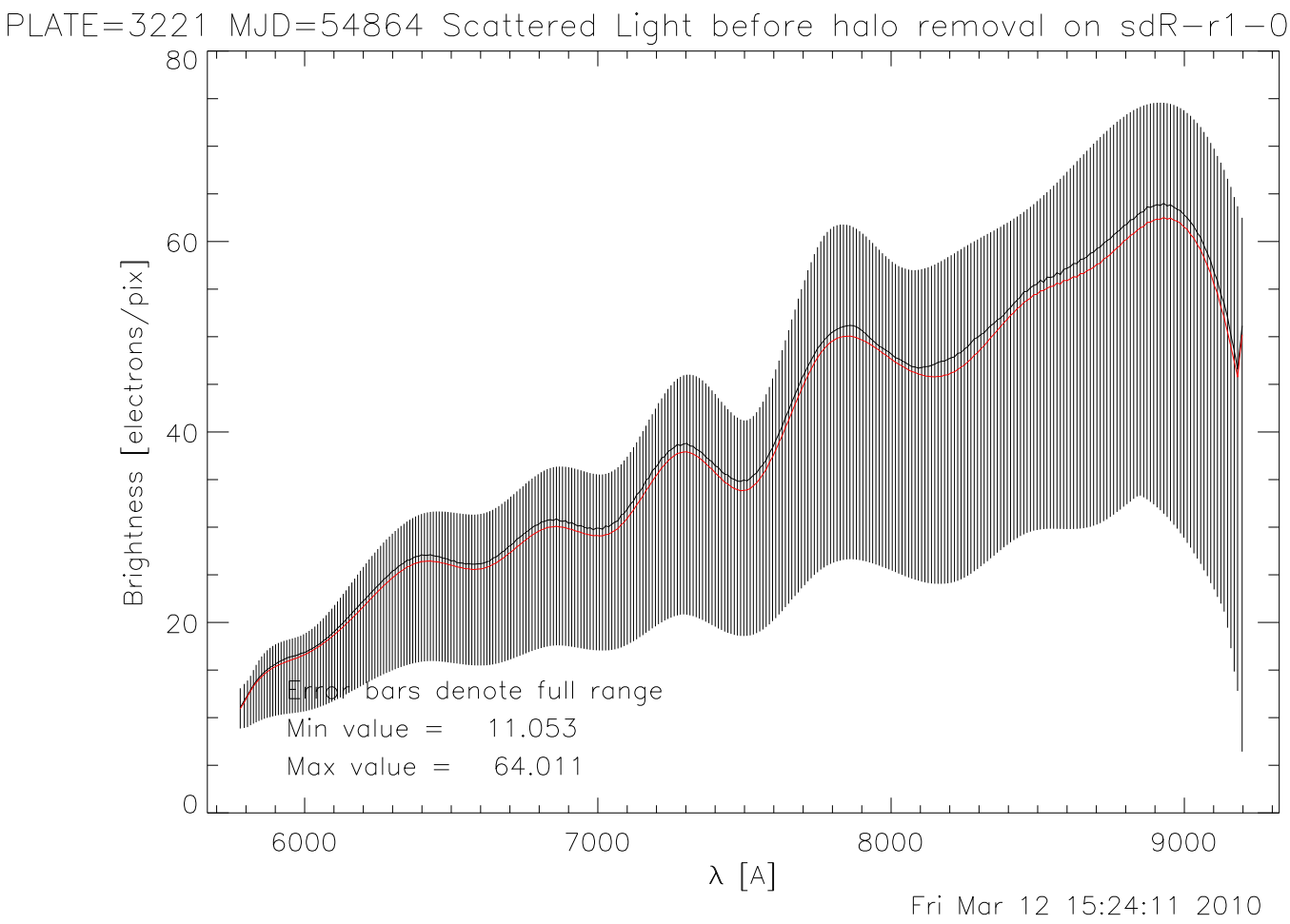

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058668.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

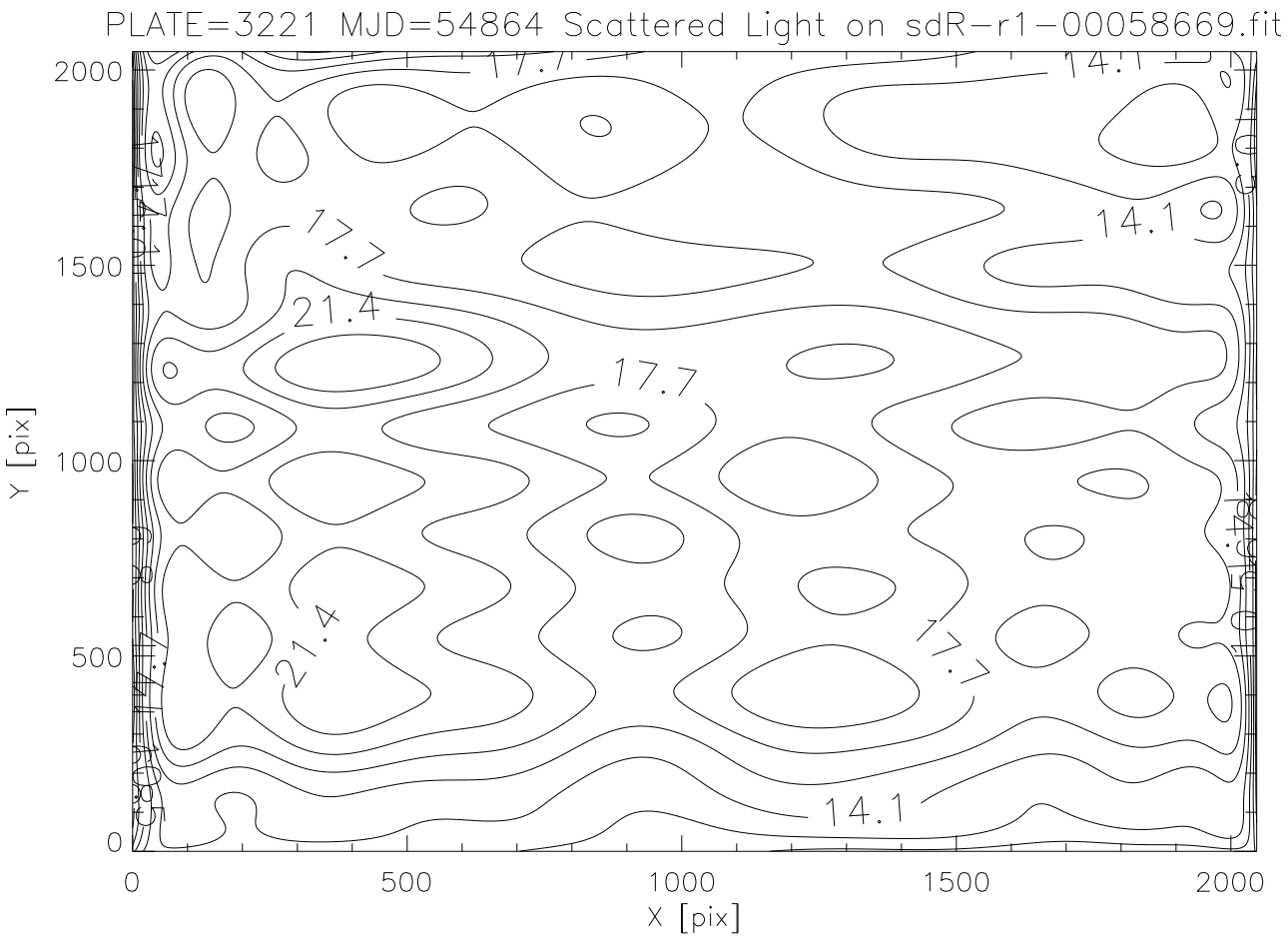

PLATE=3221 MJD=54864 sdR-r1-00058668.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.11 %
Fiber number
Focal Distance [mm]
Airmass

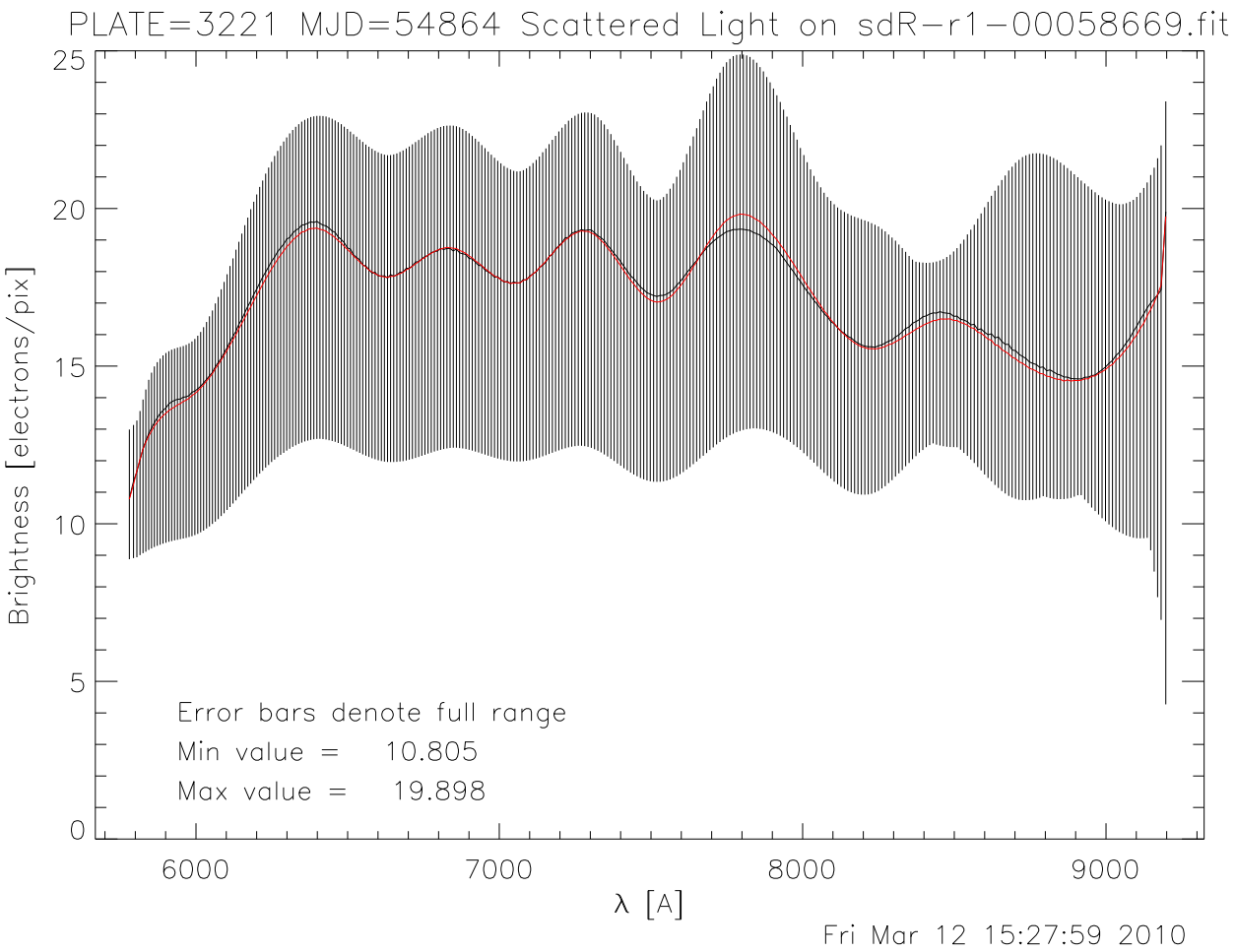

PLATE=3221 MJD=54864 sdR-r1-00058668.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.17 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

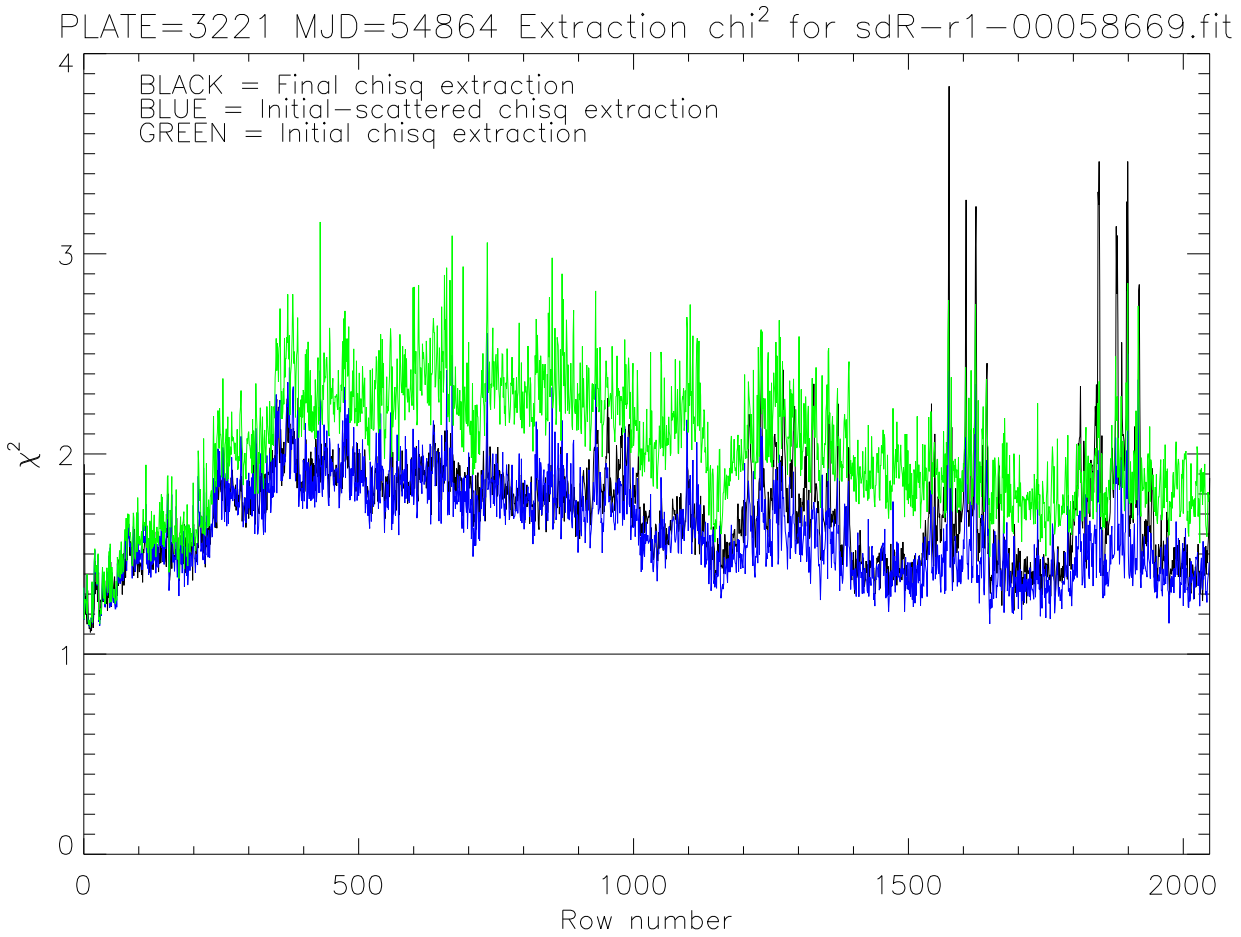

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r1−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.250
Max value = 1.335
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 15:23:14 2010

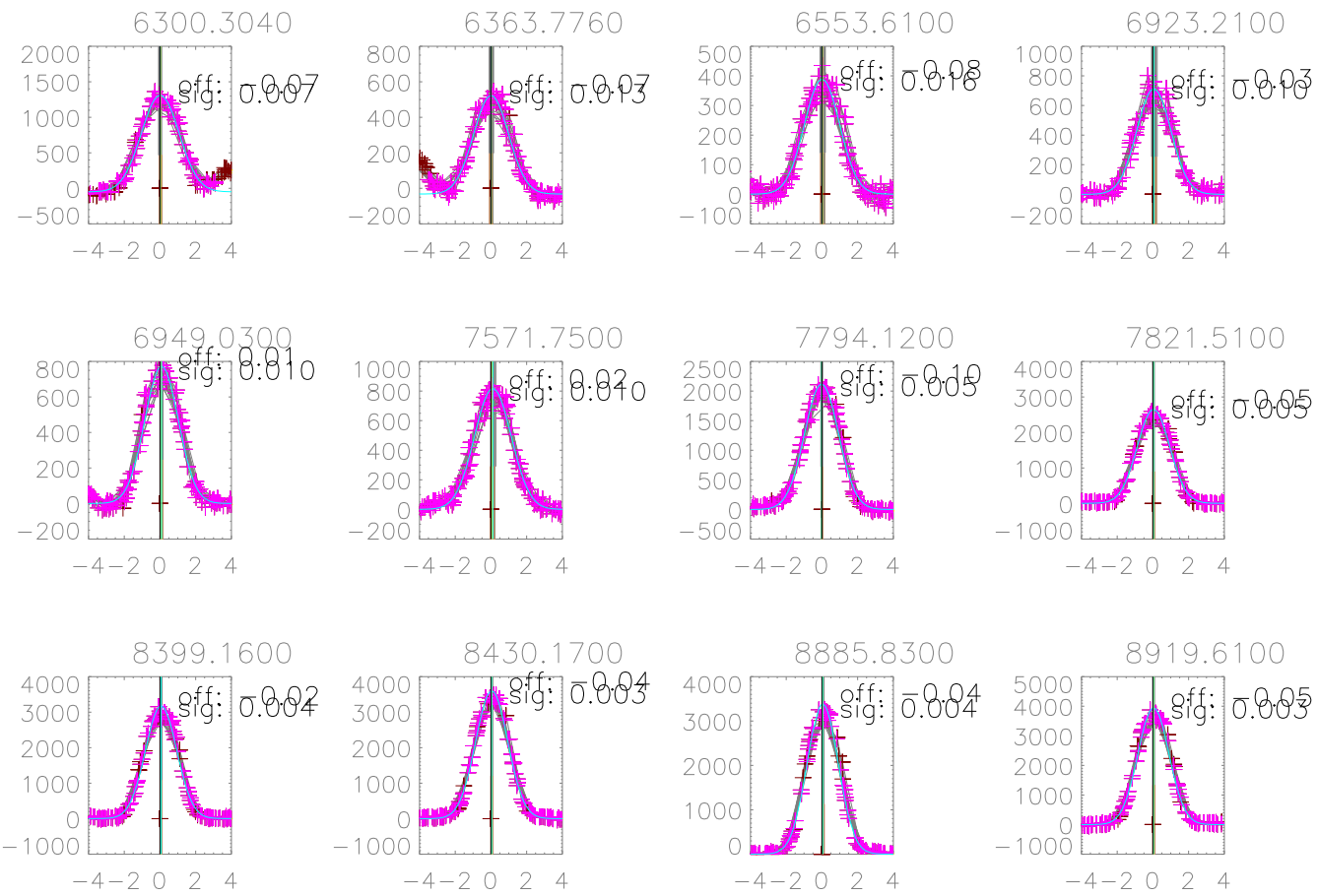

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058669.fi
50.9
36.4
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

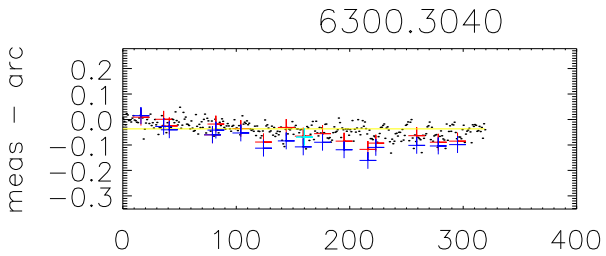

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058669.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.053
Max value = 64.011
Fri Mar 12 15:24:11 2010

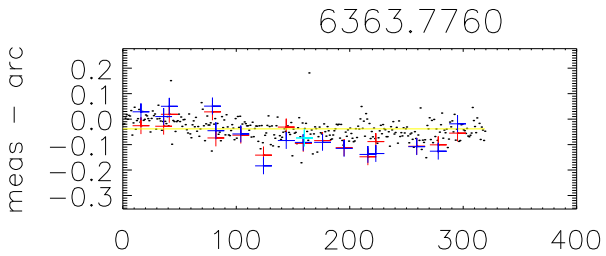

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058669.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
14.1
17.7
21.4

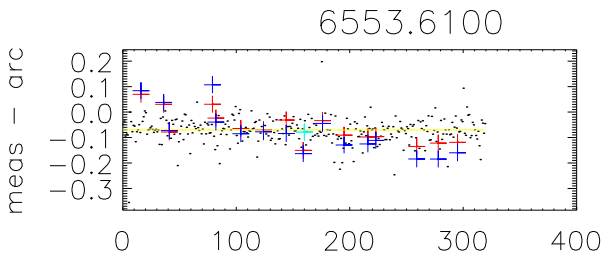

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058669.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.805
Max value = 19.898
Fri Mar 12 15:27:59 2010

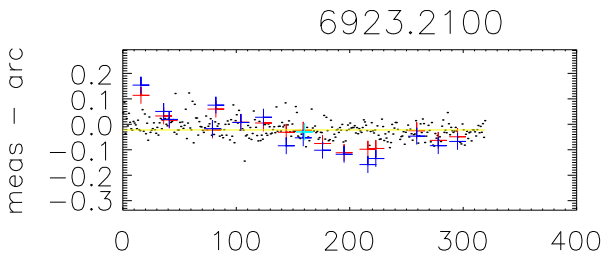

PLATE=3221 MJD=54864 Extraction chi^2 for sdR−r1−00058669.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

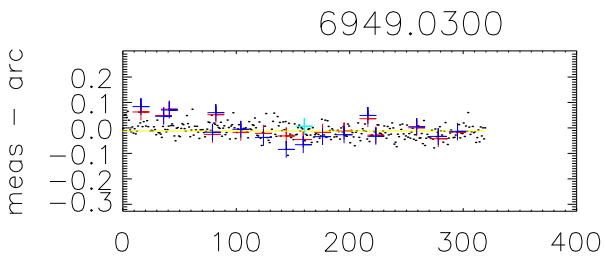

6300.3040
off: −0.07
sig: 0.007
6363.7760
off: −0.07
sig: 0.013
6553.6100
off: −0.08
sig: 0.016
6923.2100
off: −0.03
sig: 0.010
6949.0300
off: −0.01
sig: 0.010
7571.7500
off: −0.02
sig: 0.010
7794.1200
off: −0.10
sig: 0.005
7821.5100
off: −0.05
sig: 0.005
8399.1600
off: −0.02
sig: 0.004
8430.1700
off: −0.04
sig: 0.003
8885.8300
off: −0.04
sig: 0.004
8919.6100
off: −0.05
sig: 0.003

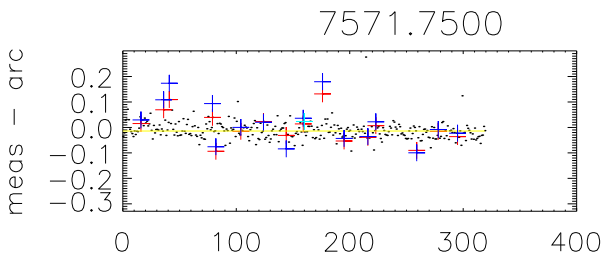

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

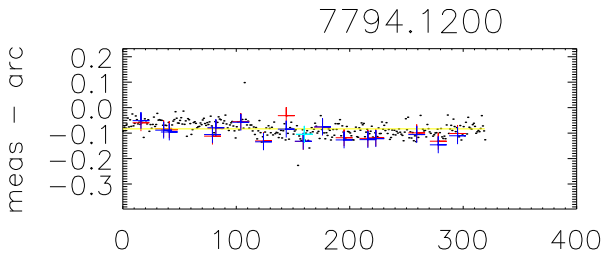

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

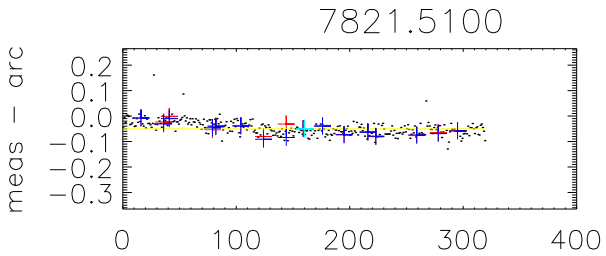

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

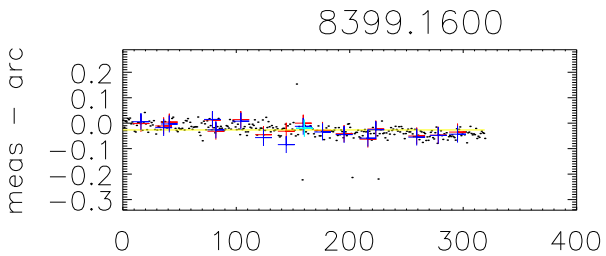

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

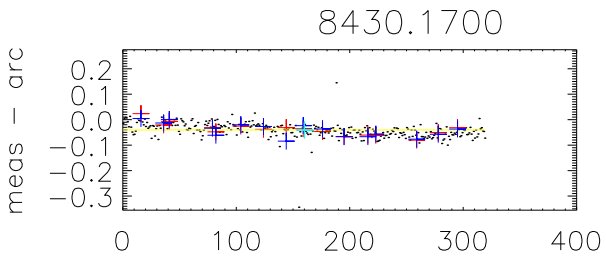

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

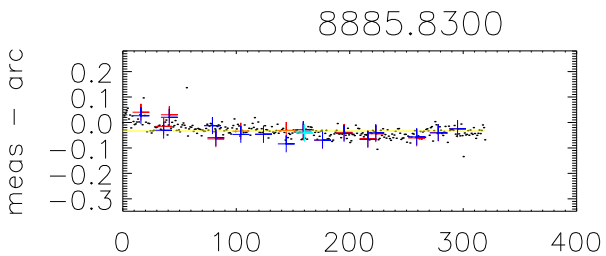

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

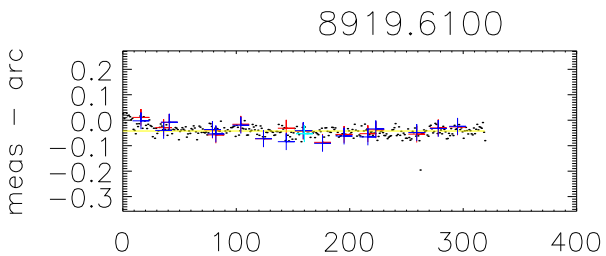

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

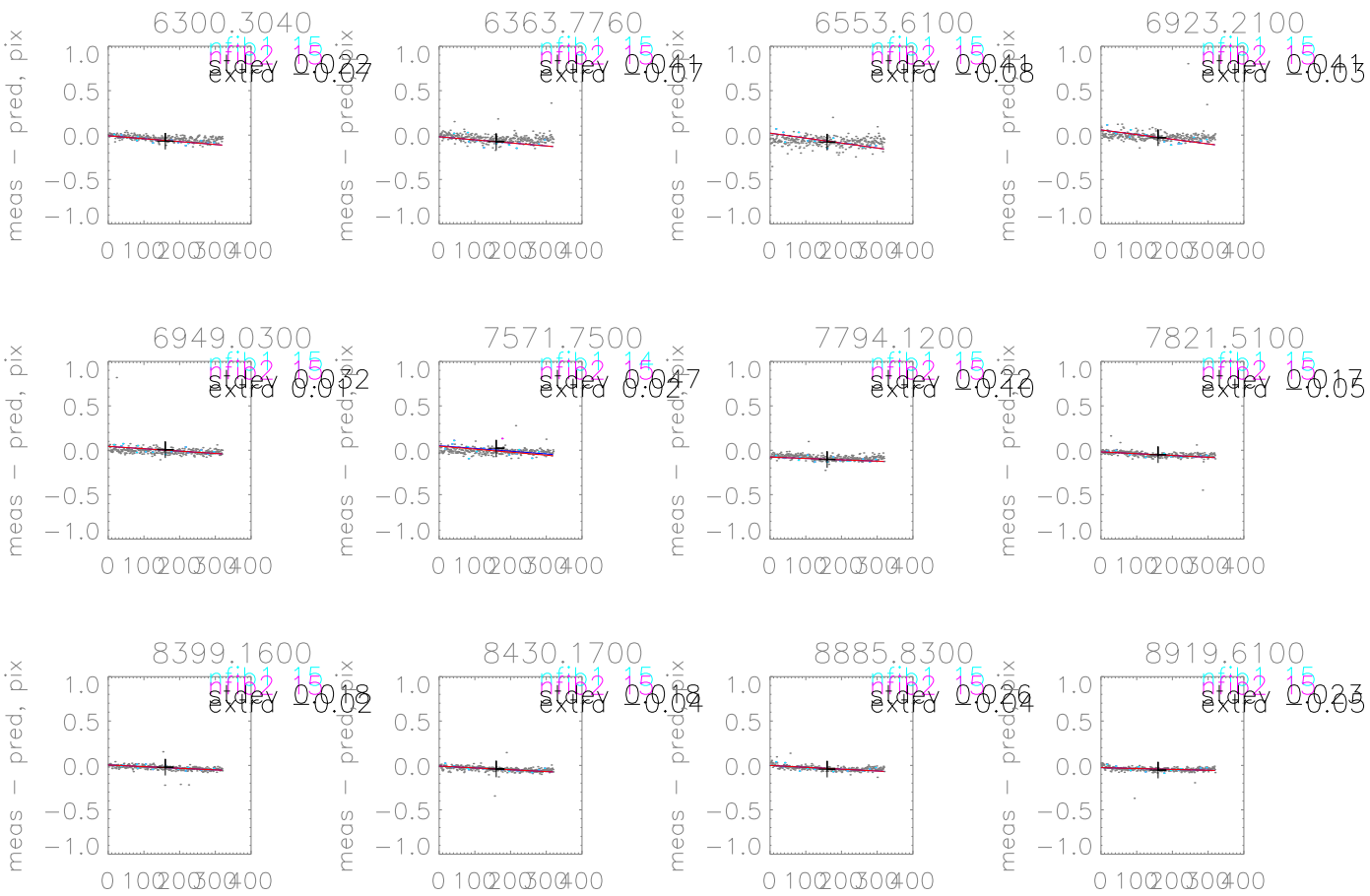

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

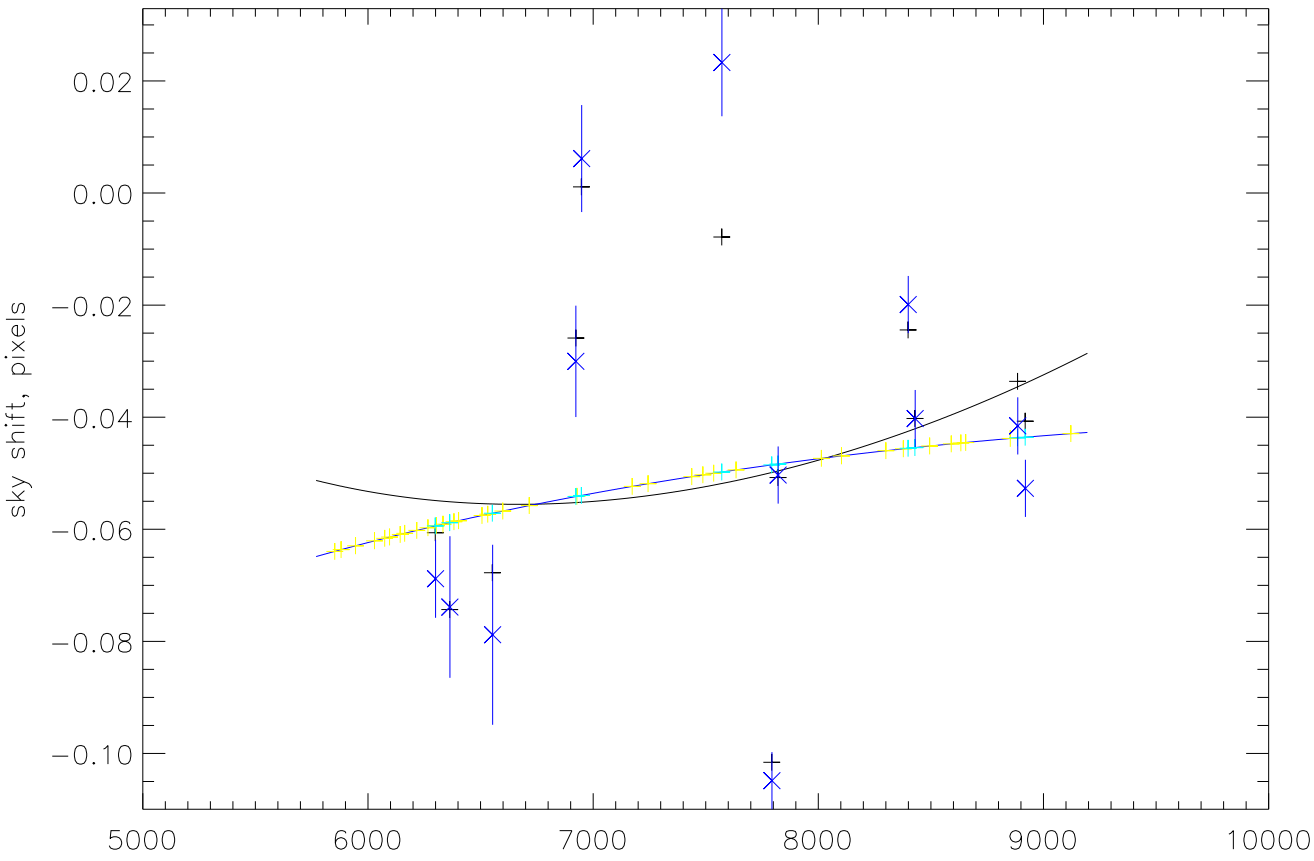

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

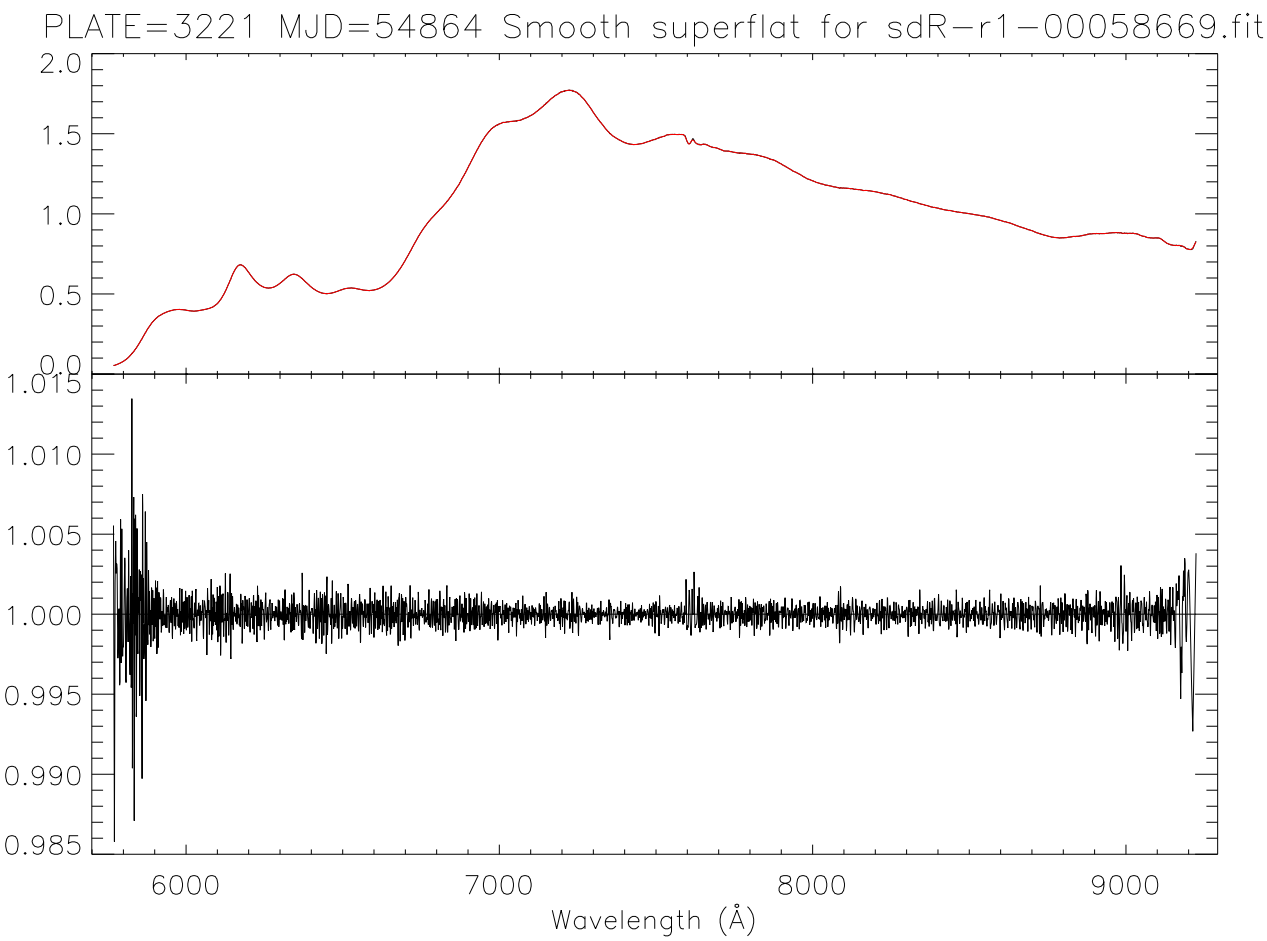

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

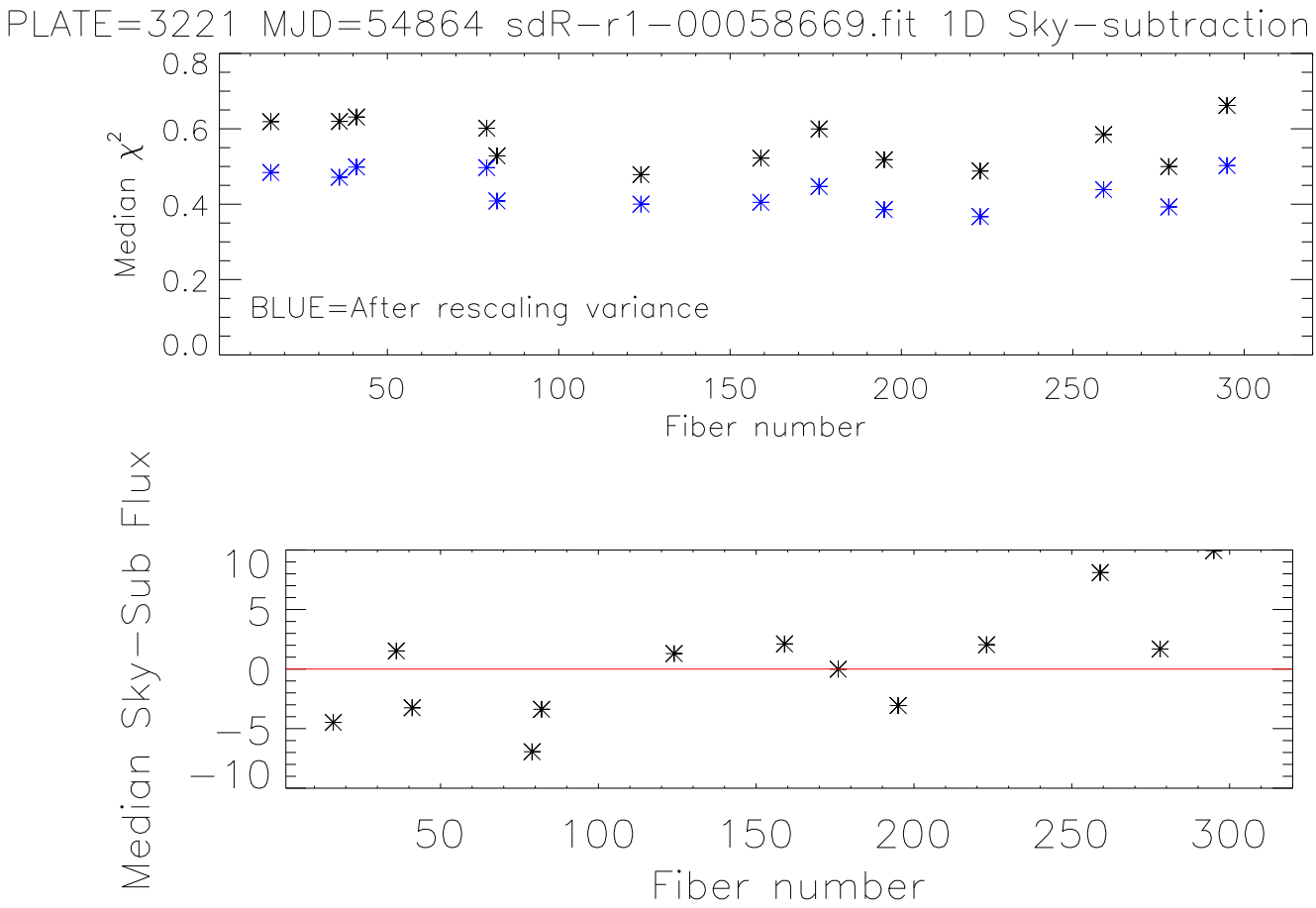

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

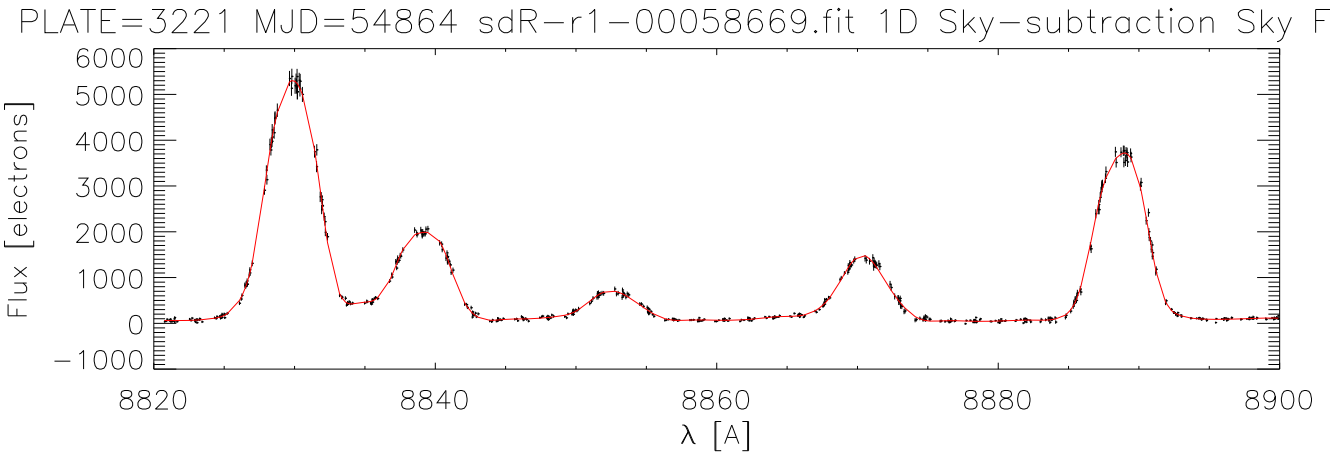

6300.3040
mfhi1 15
mfhi2 15
stdev 0.022
extra 0.07
6363.7760
mfhi1 15
mfhi2 15
stdev 0.041
extra 0.07
6553.6100
mfhi1 15
mfhi2 15
stdev 0.041
extra 0.08
6923.2100
mfhi1 15
mfhi2 15
stdev 0.041
extra 0.03
6949.0300
mfhi1 15
mfhi2 15
stdev 0.032
extra 0.012
7571.7500
mfhi1 14
mfhi2 15
stdev 0.047
extra 0.02
7794.1200
mfhi1 15
mfhi2 15
stdev 0.022
extra 0.46
7821.5100
mfhi1 15
mfhi2 15
stdev 0.017
extra 0.05
8399.1600
mfhi1 15
mfhi2 15
stdev 0.018
extra 0.02
8430.1700
mfhi1 15
mfhi2 15
stdev 0.018
extra 0.04
8885.8300
mfhi1 15
mfhi2 15
stdev 0.026
extra 0.04
8919.6100
mfhi1 15
mfhi2 15
stdev 0.023
extra 0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

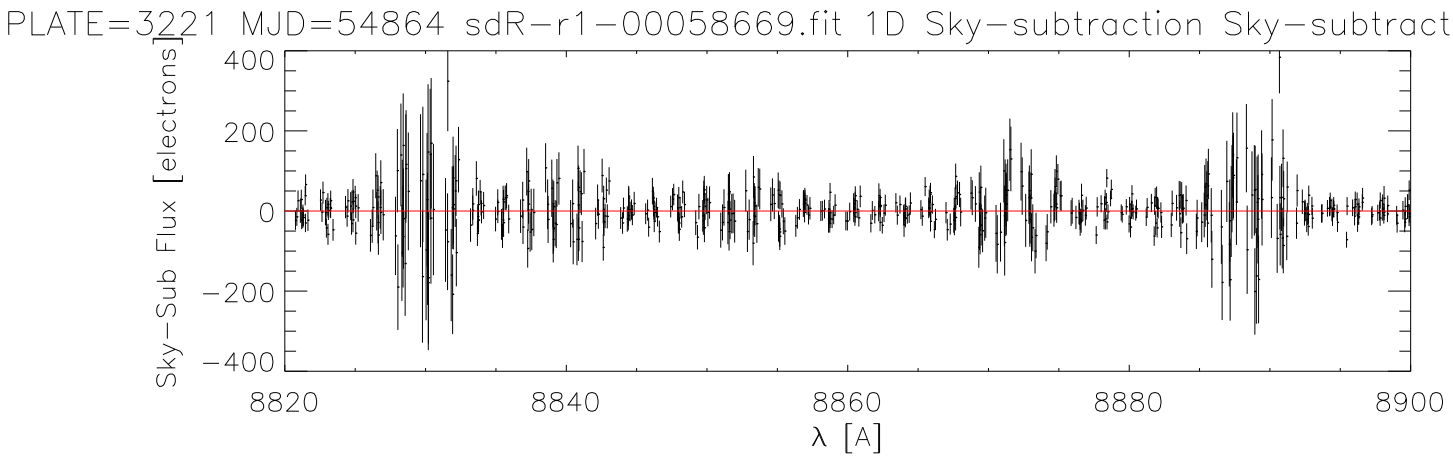

sky shift, pixels
0.02
0.00
−0.02
−0.04
−0.06
−0.08
−0.10
5000
6000
7000
8000
9000
10000

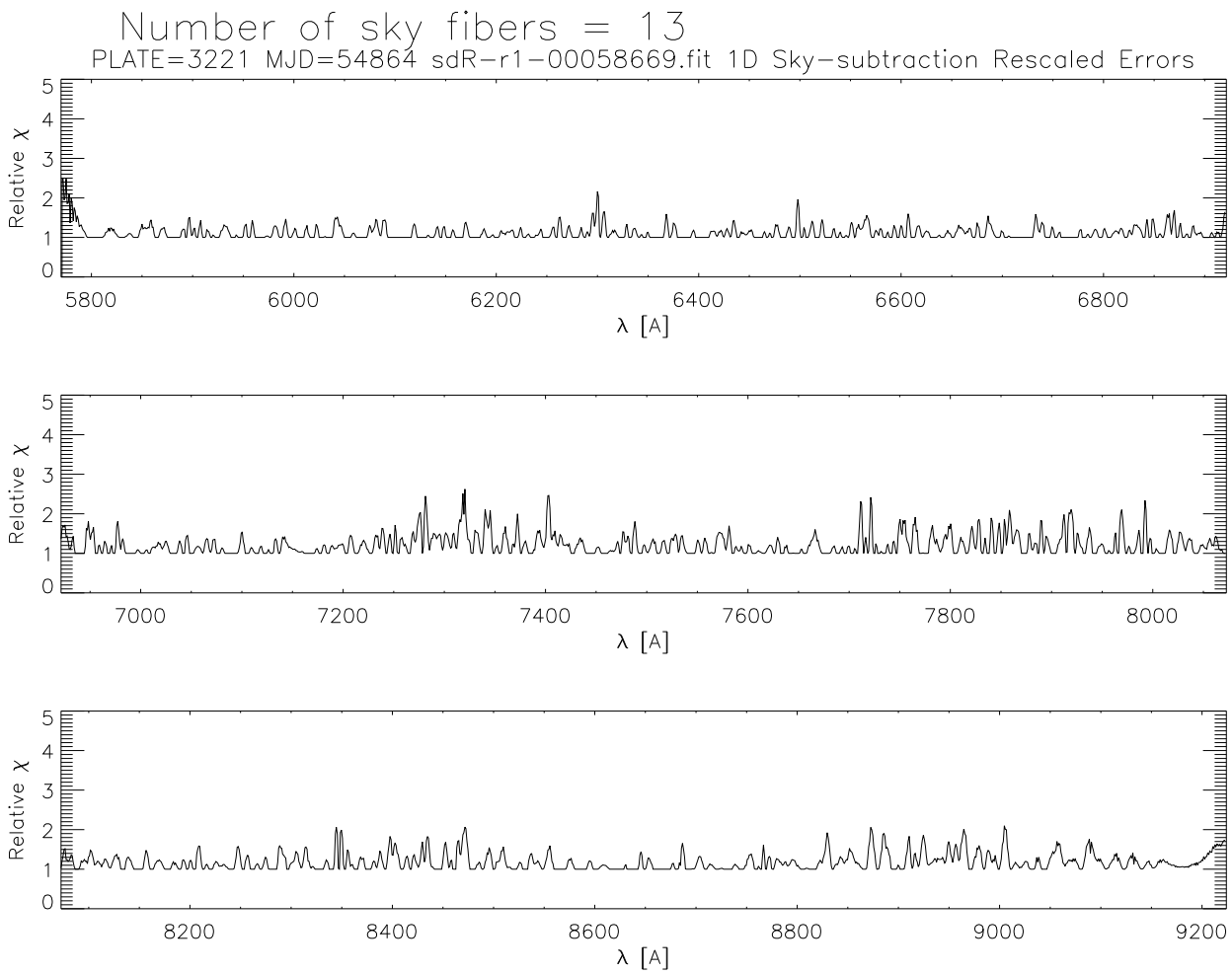
es= −0.0000

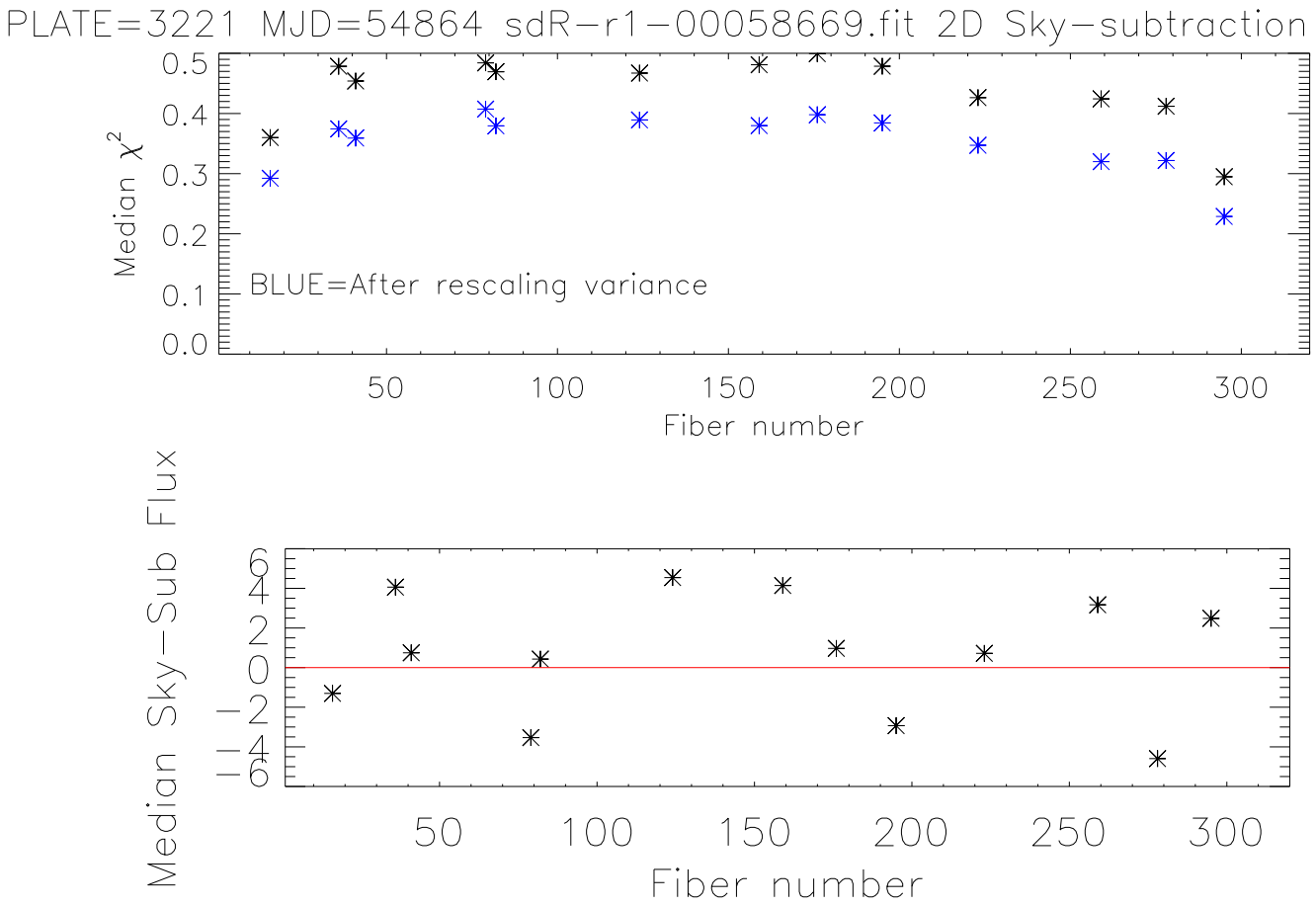

PLATE=3221 MJD=54864 Smooth superflat for sdR−r1−00058669.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

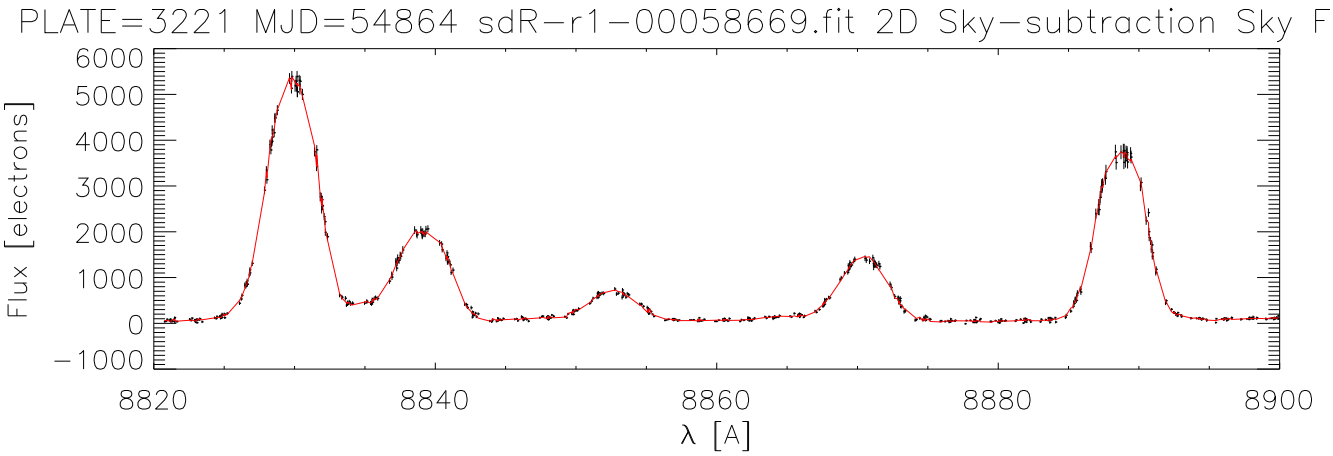

PLATE=3221 MJD=54864 sdR-r1-00058669.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

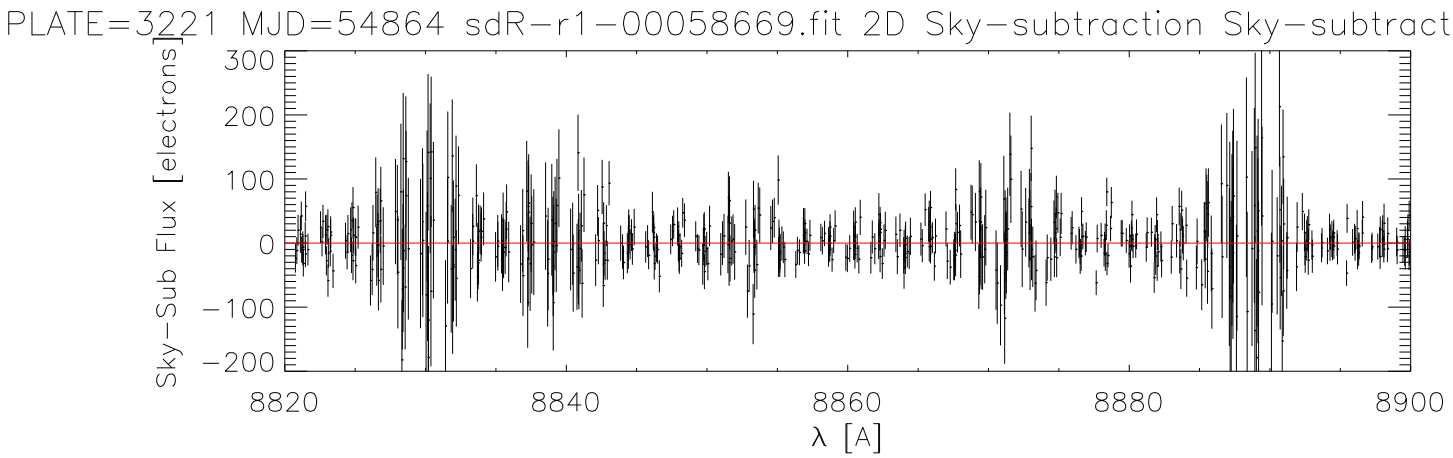

PLATE=3221 MJD=54864 sdR-r1-00058669.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

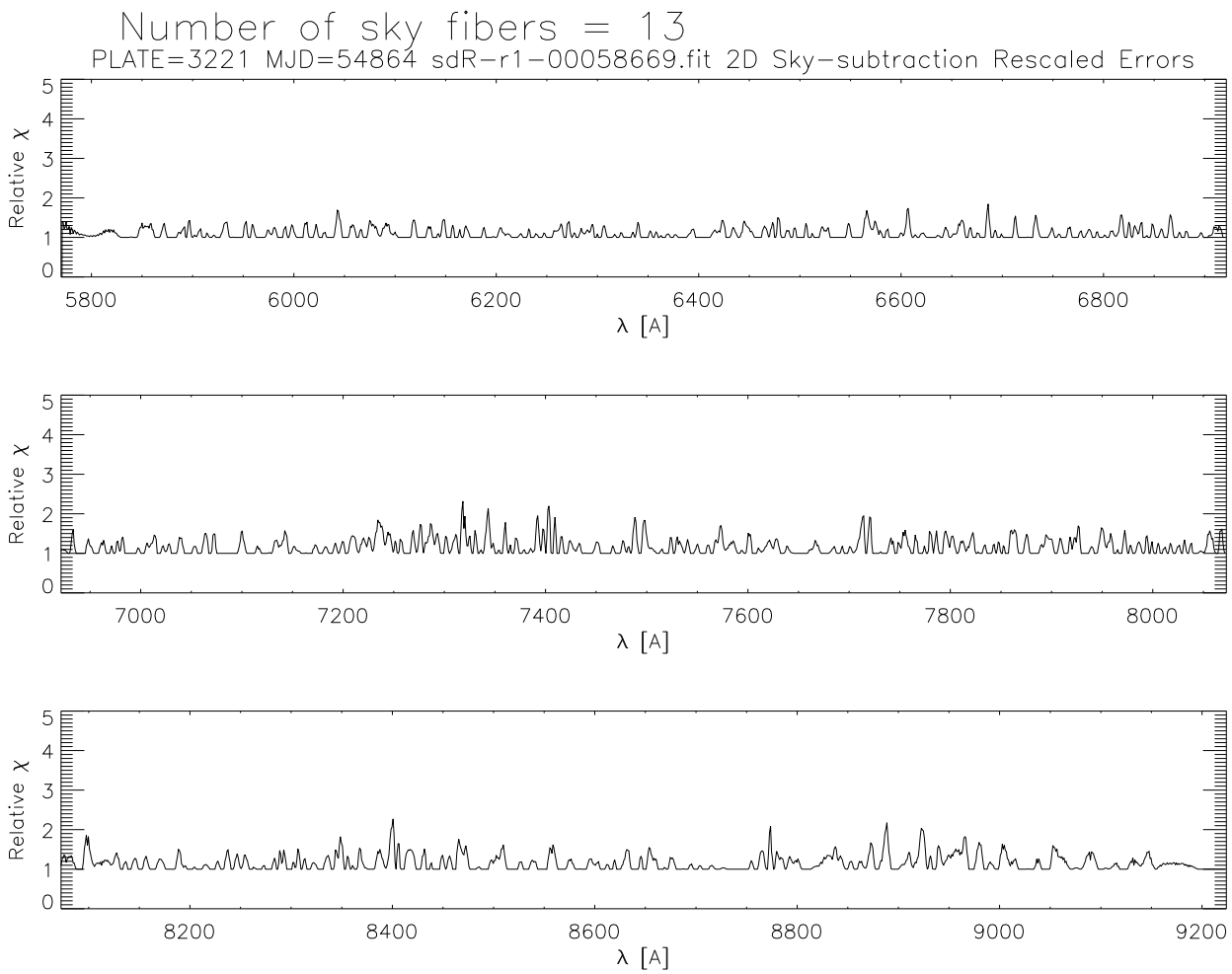

PLATE=3221 MJD=54864 sdR-r1-00058669.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

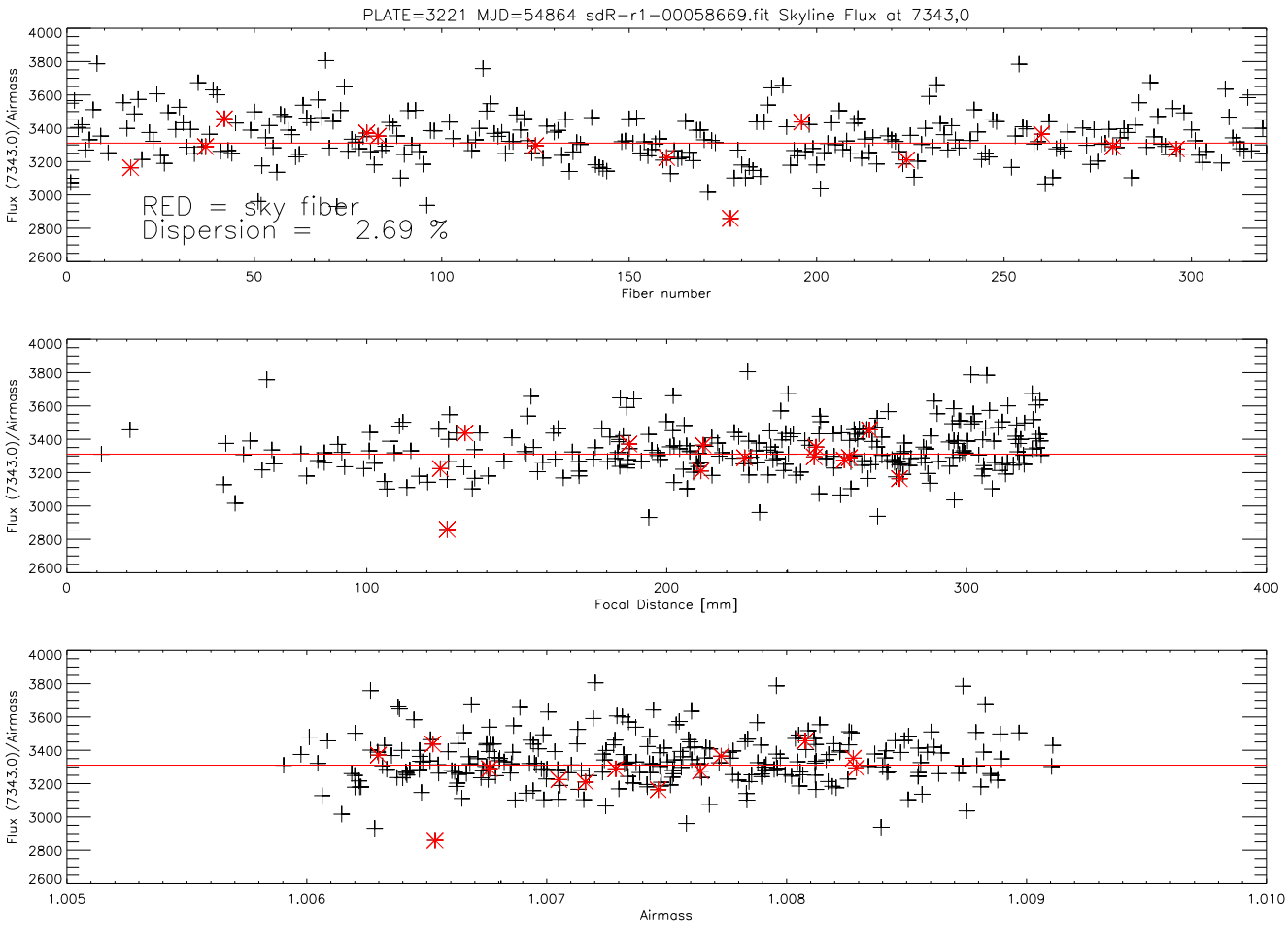

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058669.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

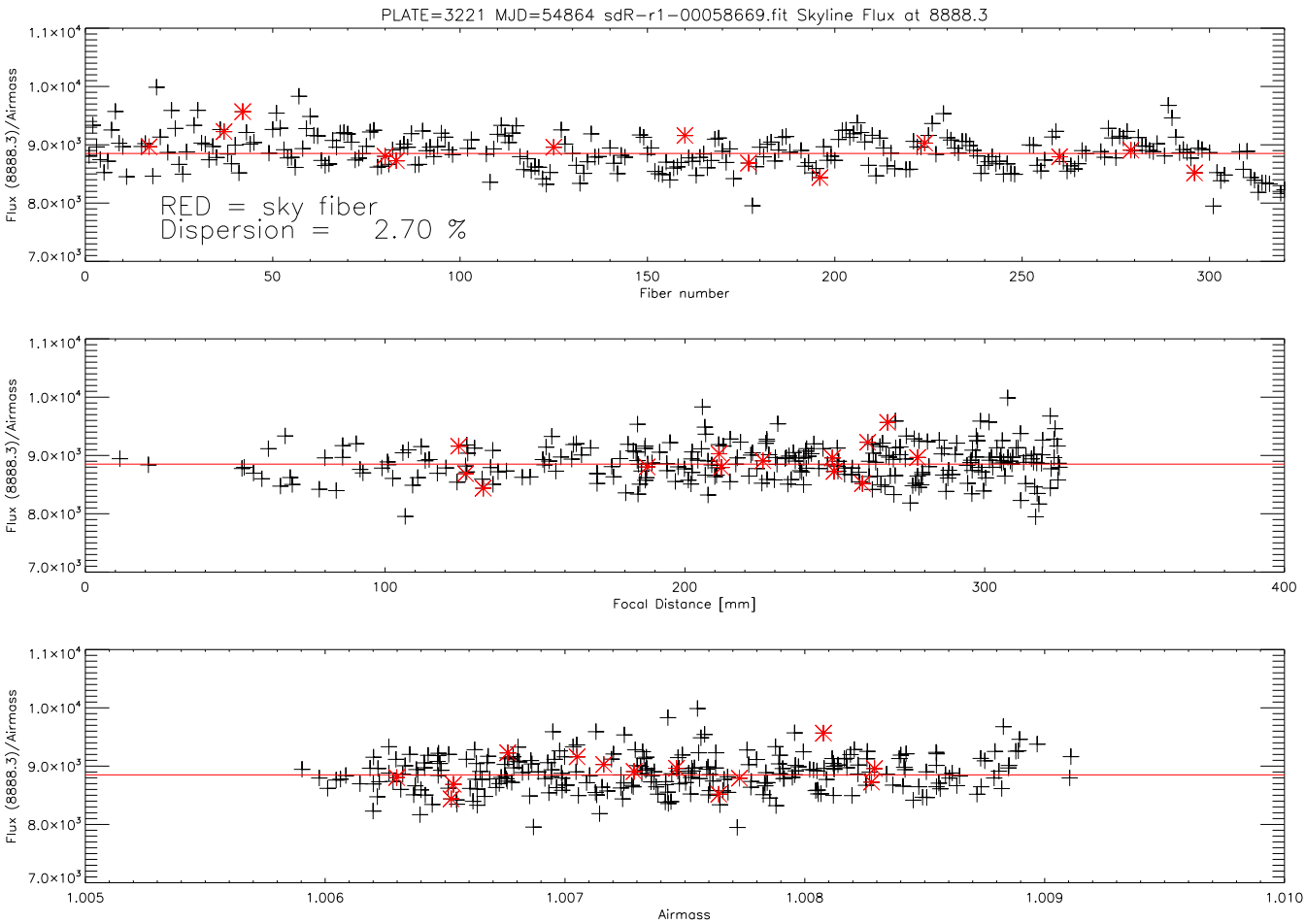

PLATE=3221 MJD=54864 sdR-r1-00058669.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

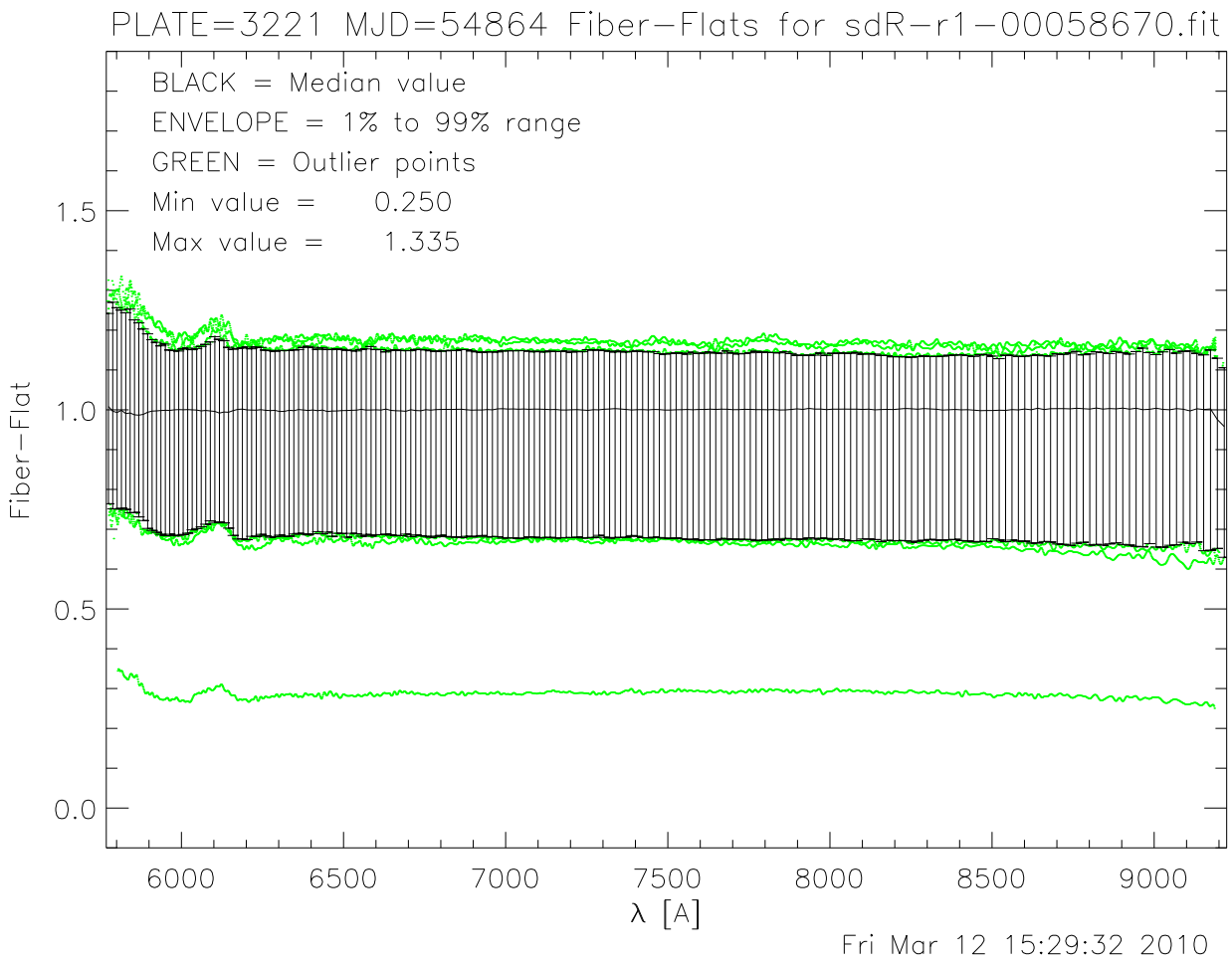

PLATE=3221 MJD=54864 sdR-r1-00058669.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

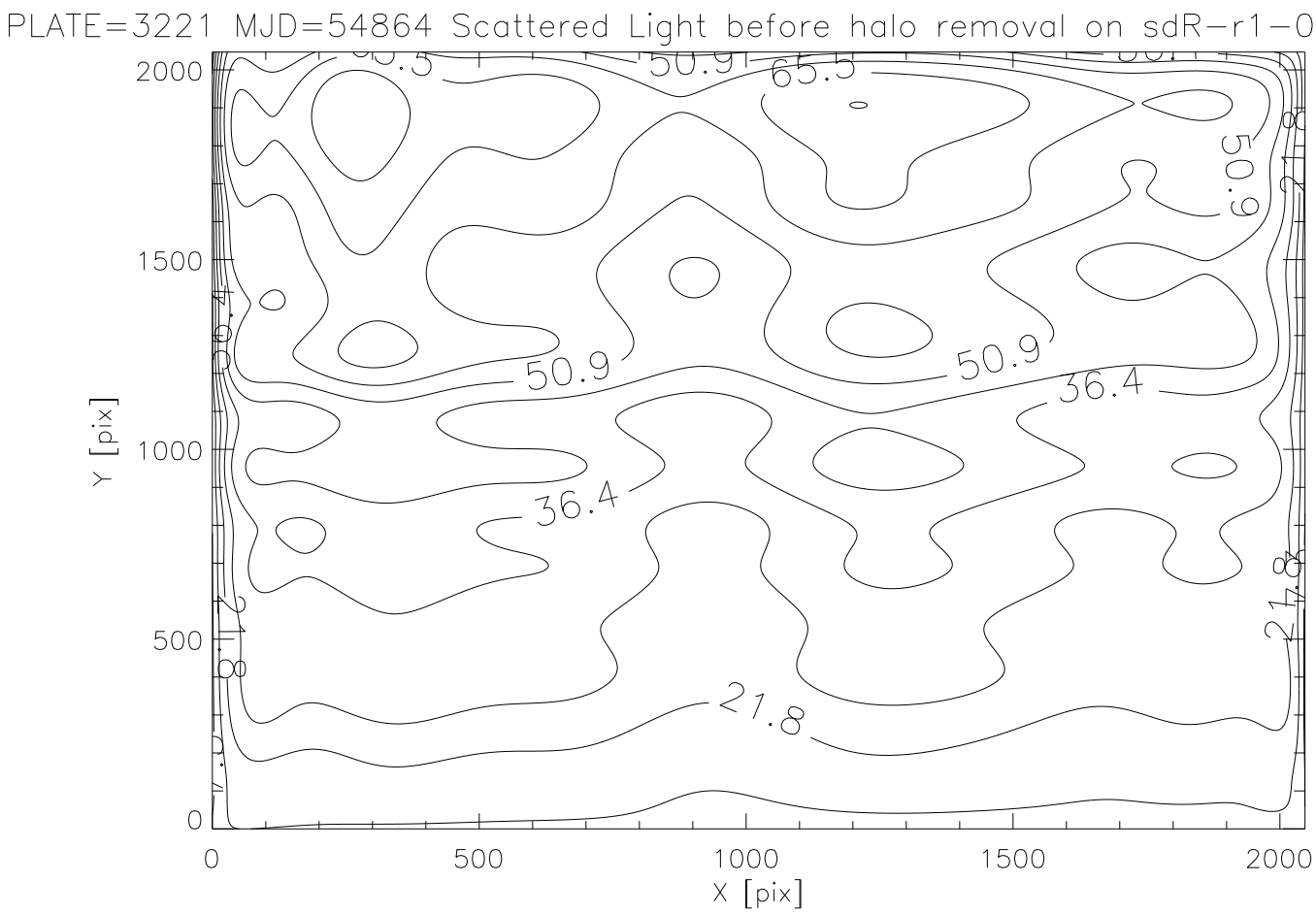

PLATE=3221 MJD=54864 sdR-r1-00058669.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

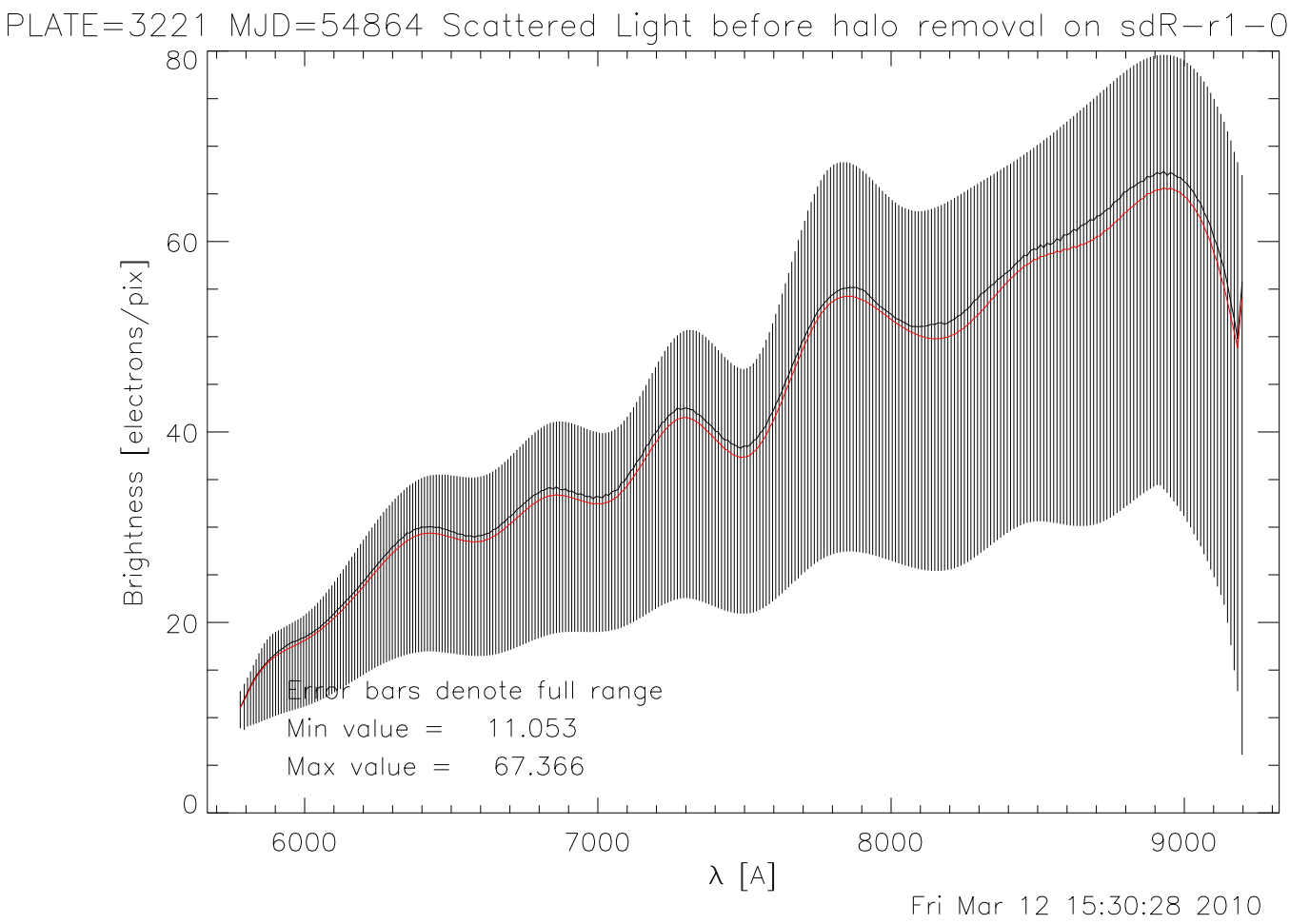

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058669.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

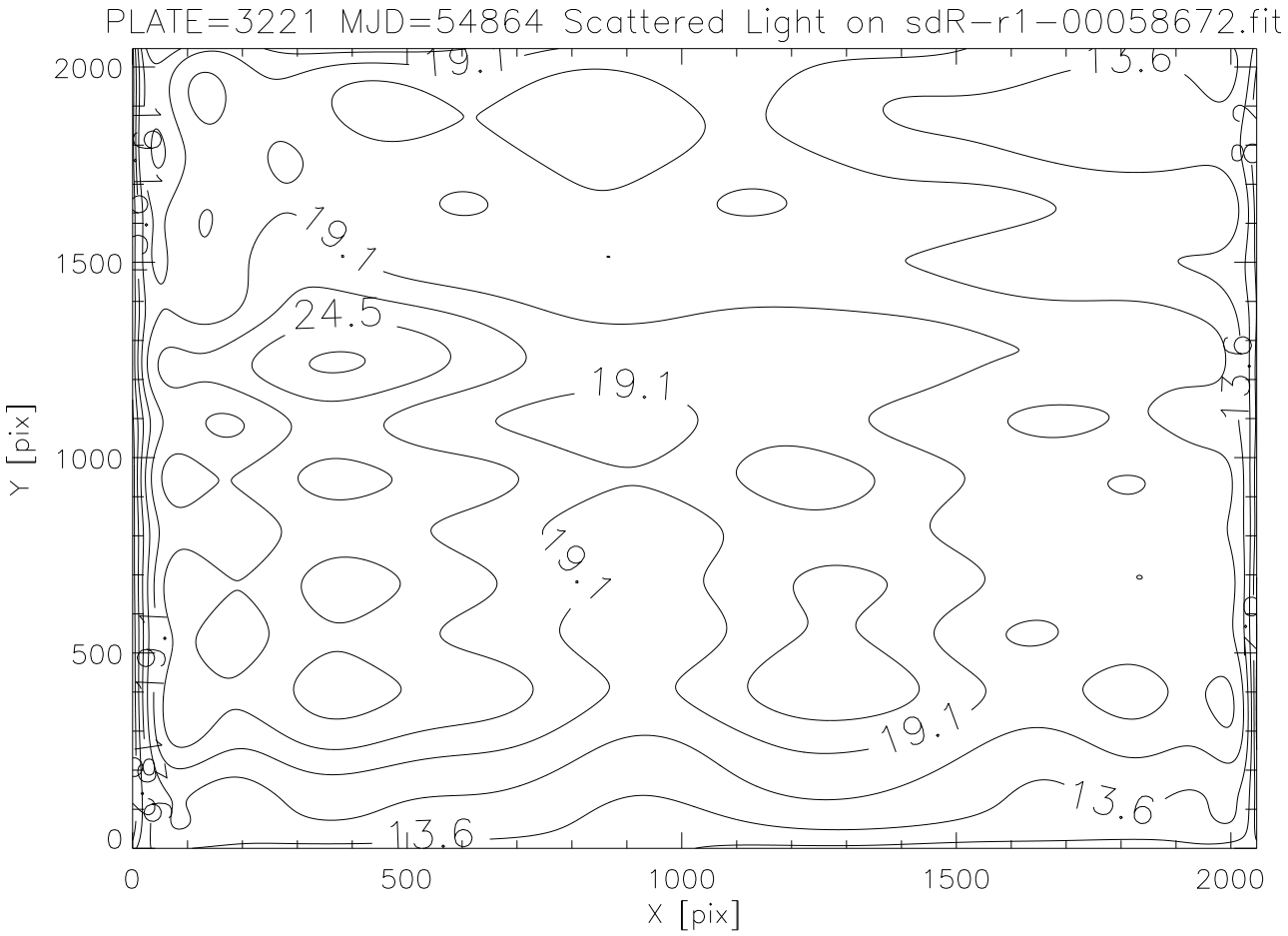

PLATE=3221 MJD=54864 sdR-r1-00058669.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.69 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

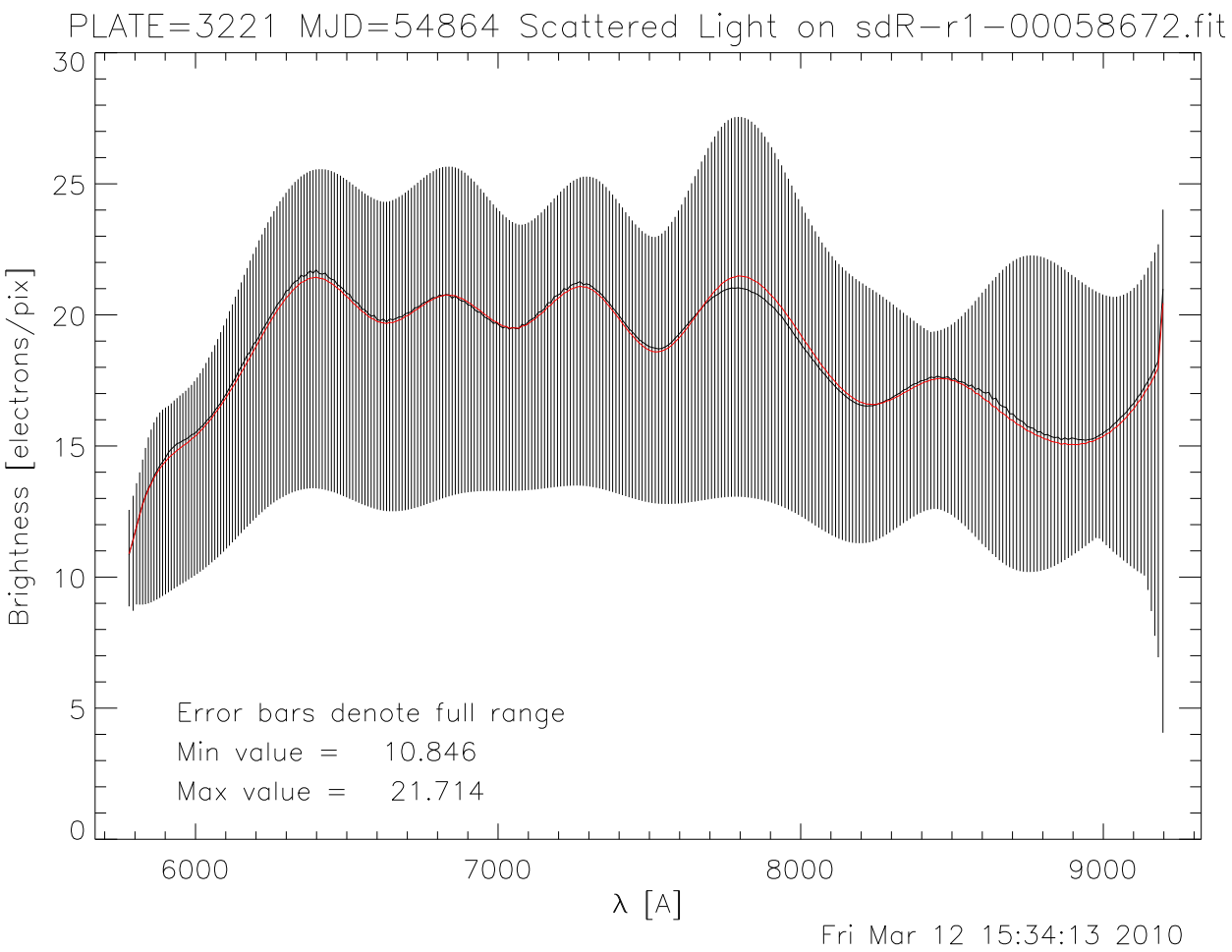

PLATE=3221 MJD=54864 sdR-r1-00058669.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.70 %
Fiber number
Focal Distance [mm]
Airmass

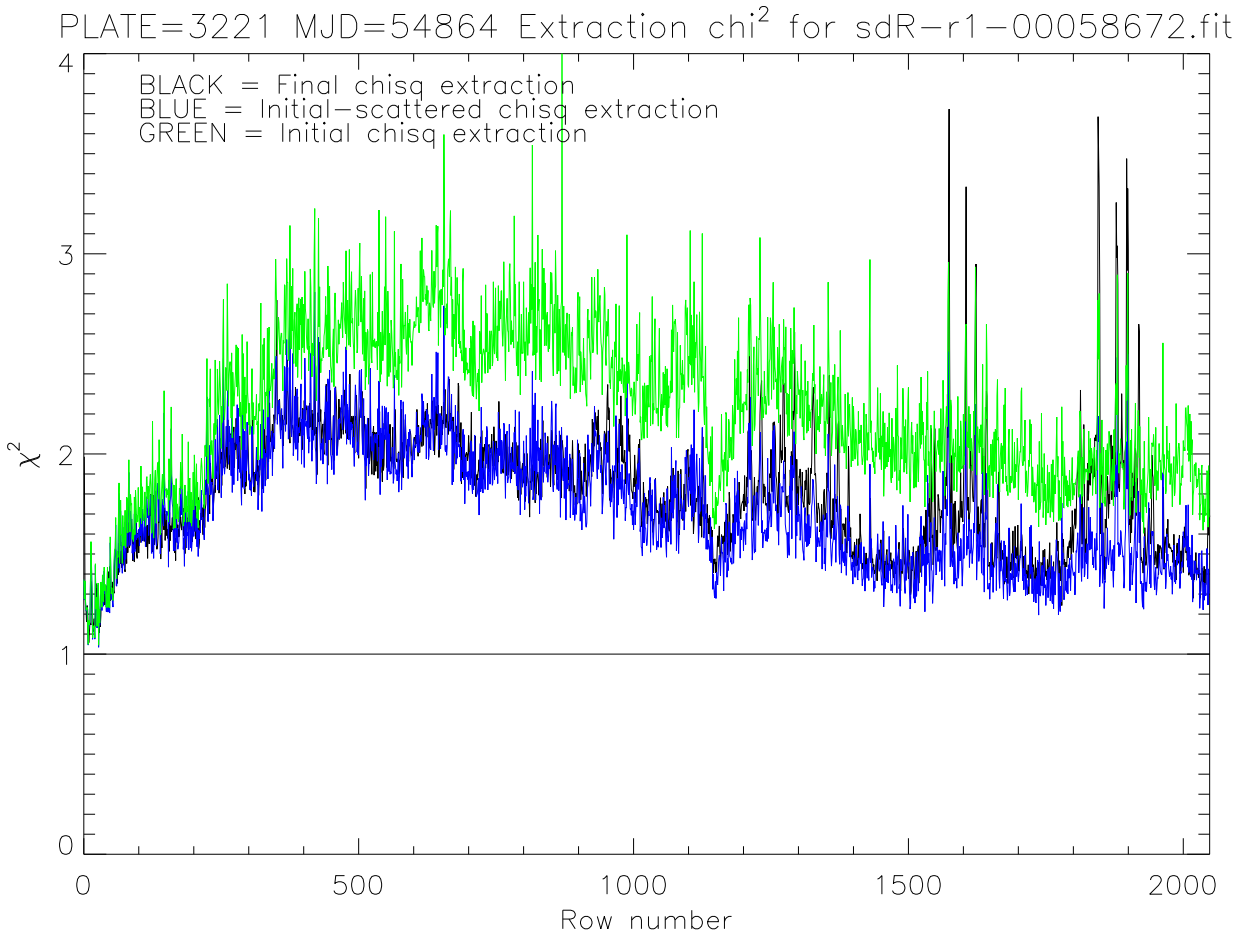

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r1−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.250
Max value = 1.335
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 15:29:32 2010

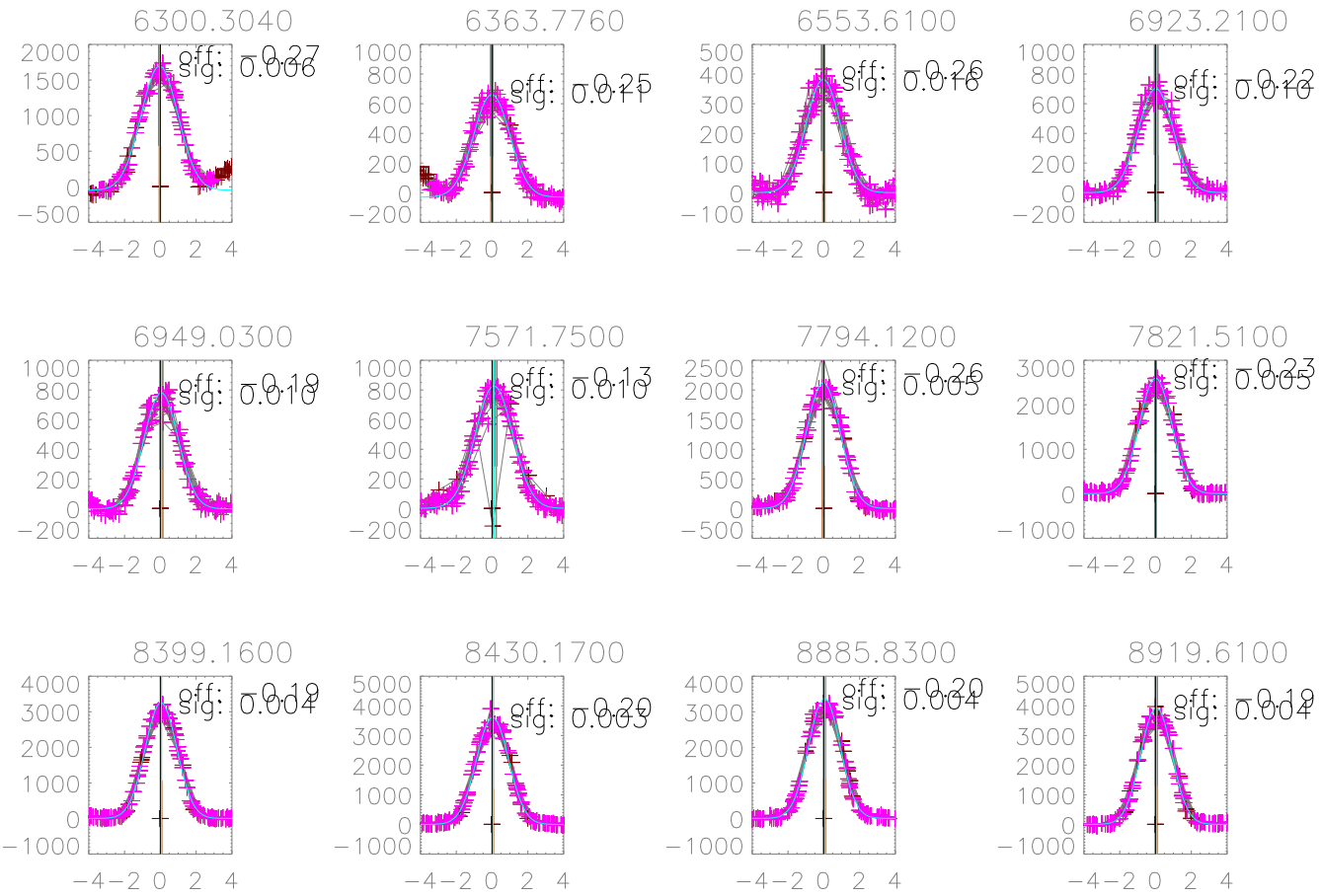

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058672.fi
65.5
50.9
36.4
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

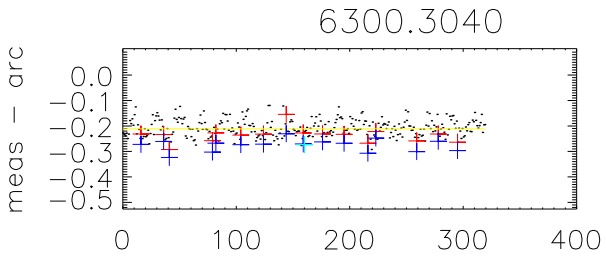

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058672.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.053
Max value = 67.366
Fri Mar 12 15:30:28 2010

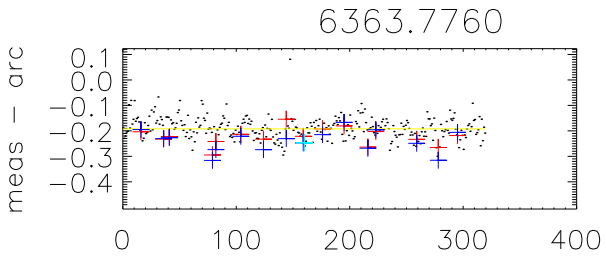

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058672.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
19.1
13.6
24.5

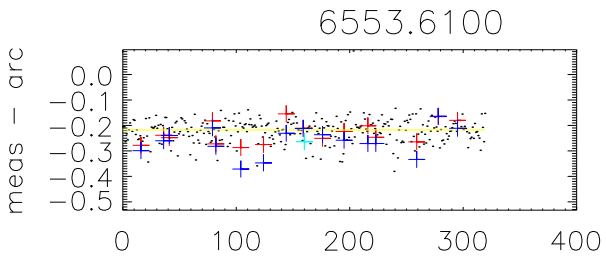

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058672.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.846
Max value = 21.714
Fri Mar 12 15:34:13 2010

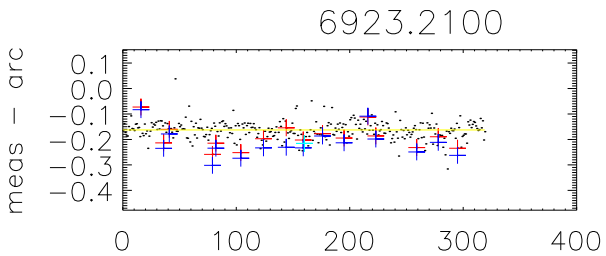

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-r1-00058672.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

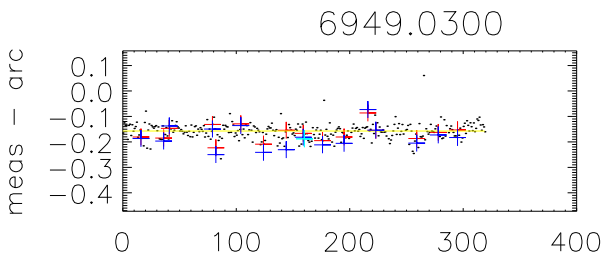

6300.3040
off: −0.27
sig: 0.006
6363.7760
off: −0.25
sig: 0.011
6553.6100
off: −0.26
sig: 0.016
6923.2100
off: −0.22
sig: 0.010
6949.0300
off: −0.19
sig: 0.010
7571.7500
off: −0.13
sig: 0.010
7794.1200
off: −0.26
sig: 0.005
7821.5100
off: −0.23
sig: 0.005
8399.1600
off: −0.19
sig: 0.004
8430.1700
off: −0.20
sig: 0.003
8885.8300
off: −0.20
sig: 0.004
8919.6100
off: −0.19
sig: 0.004

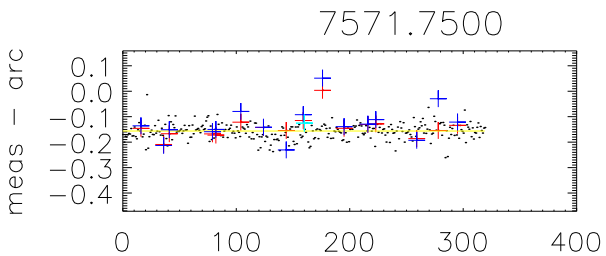

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

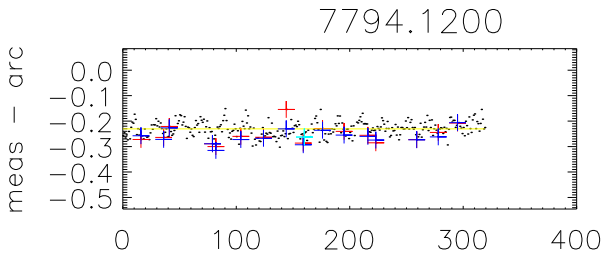

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

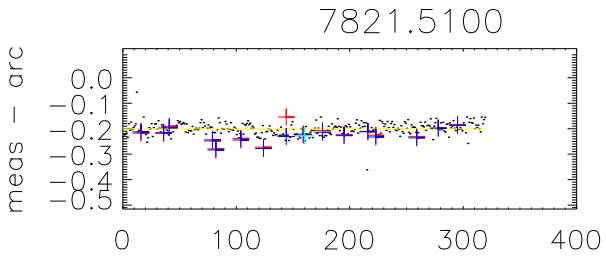

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

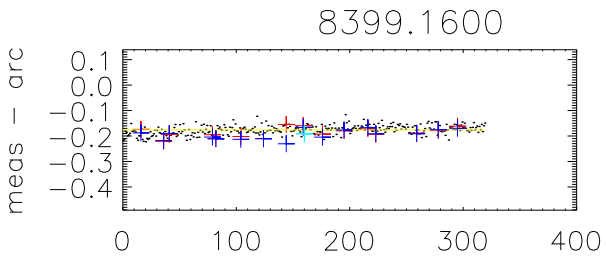

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

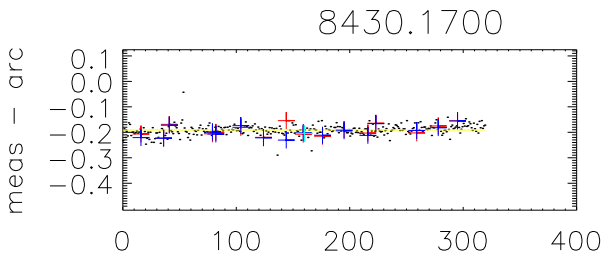

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

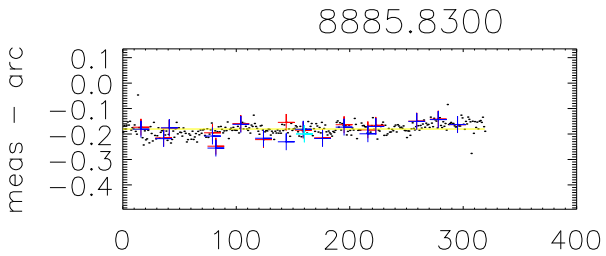

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

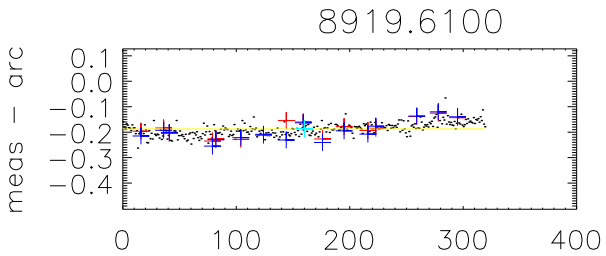

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

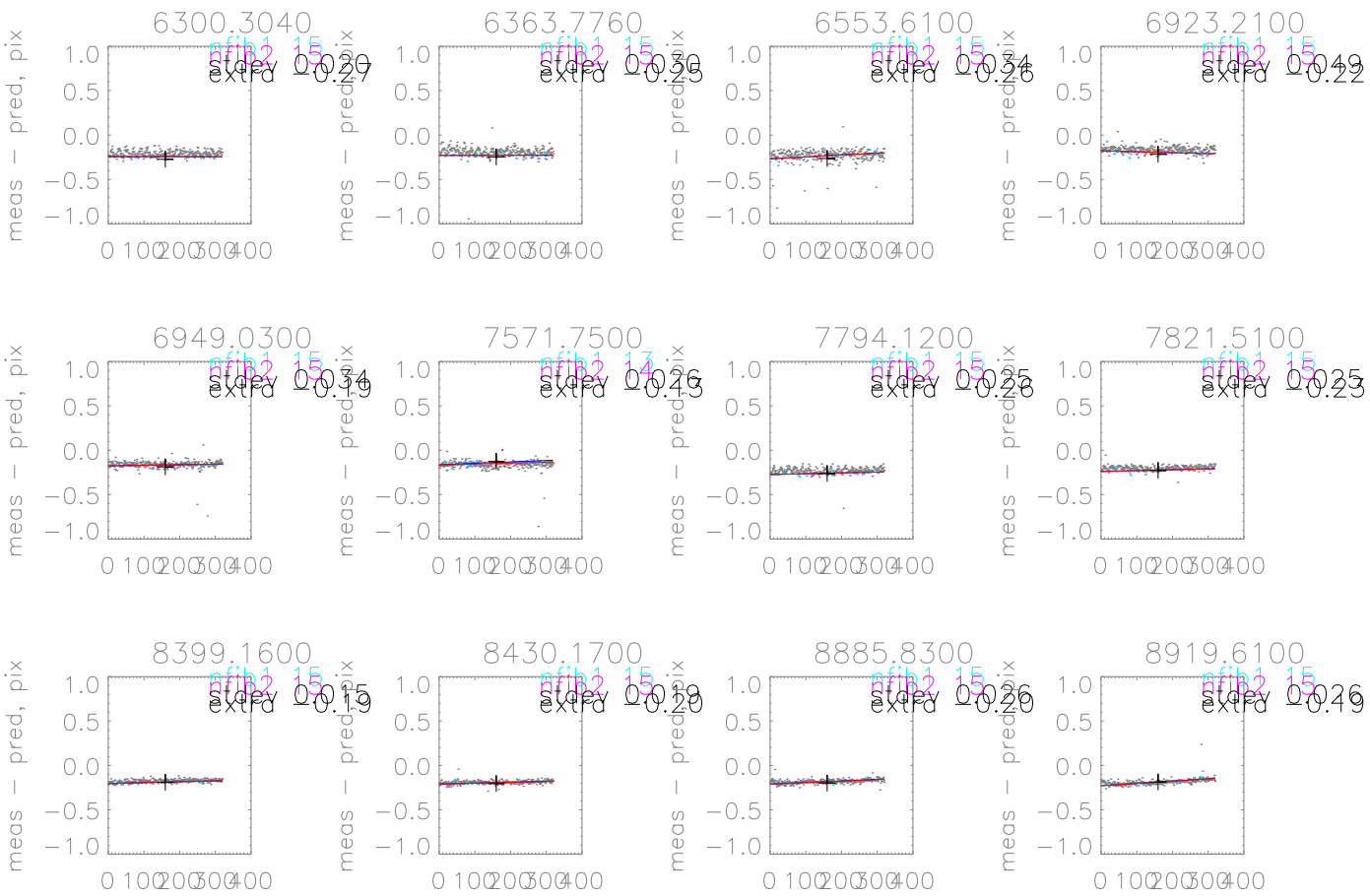

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

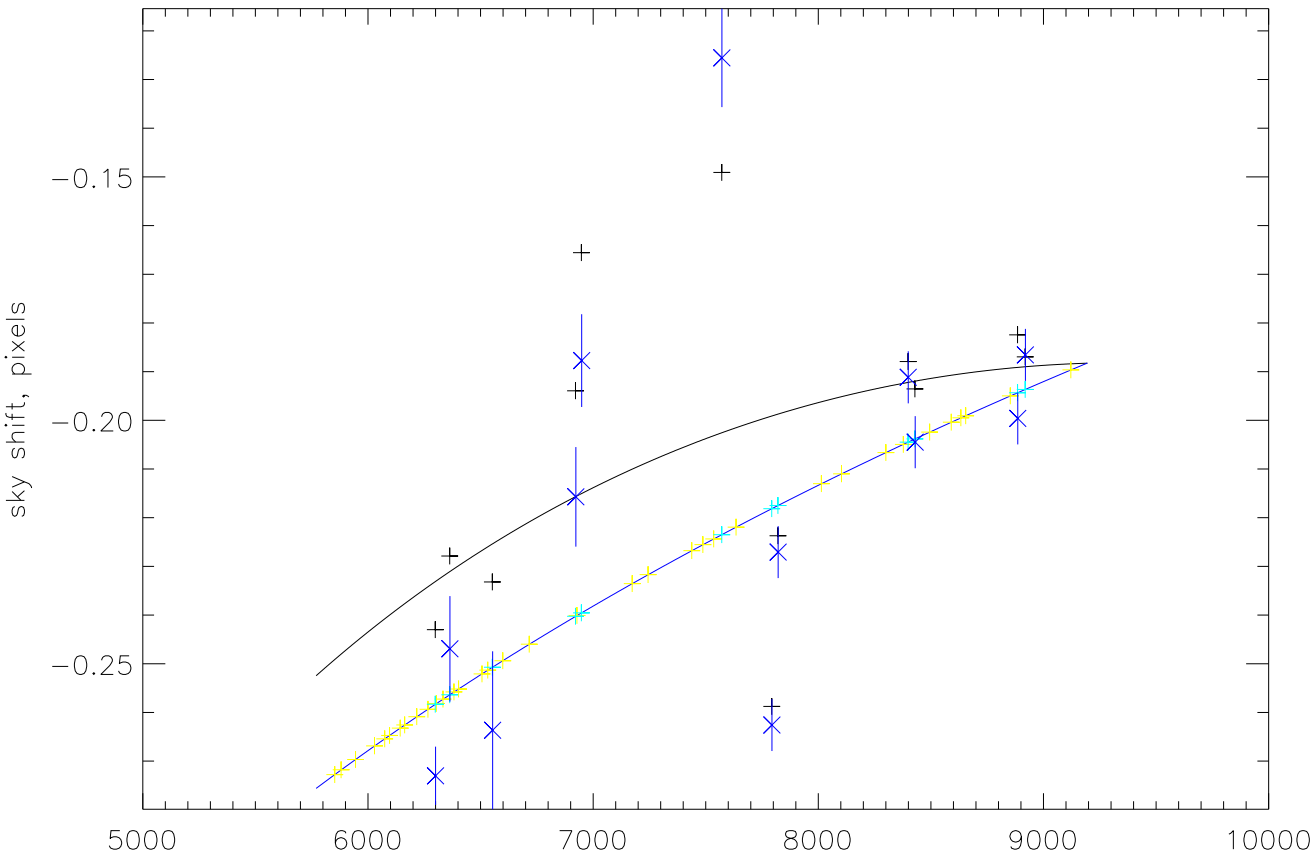

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

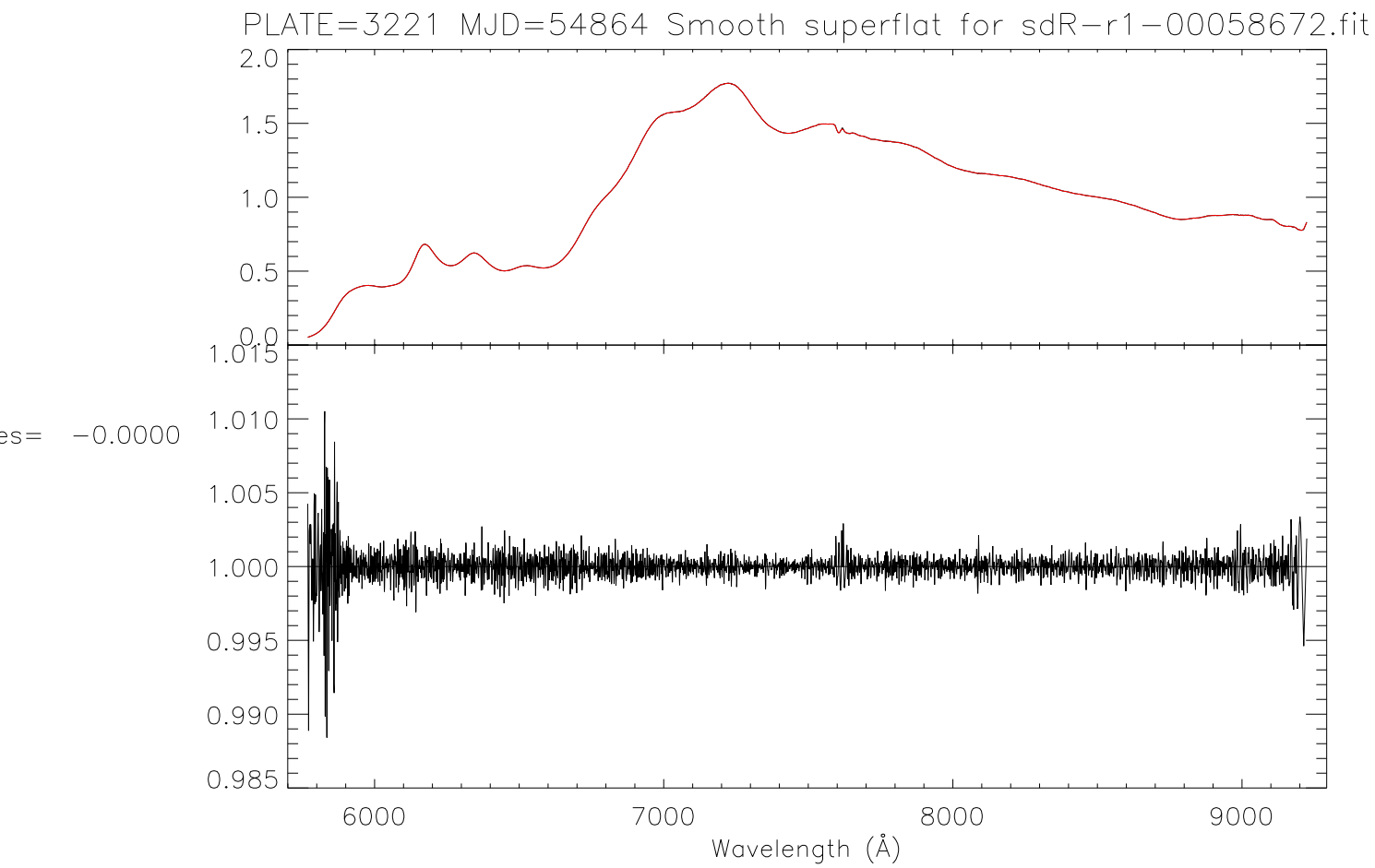

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

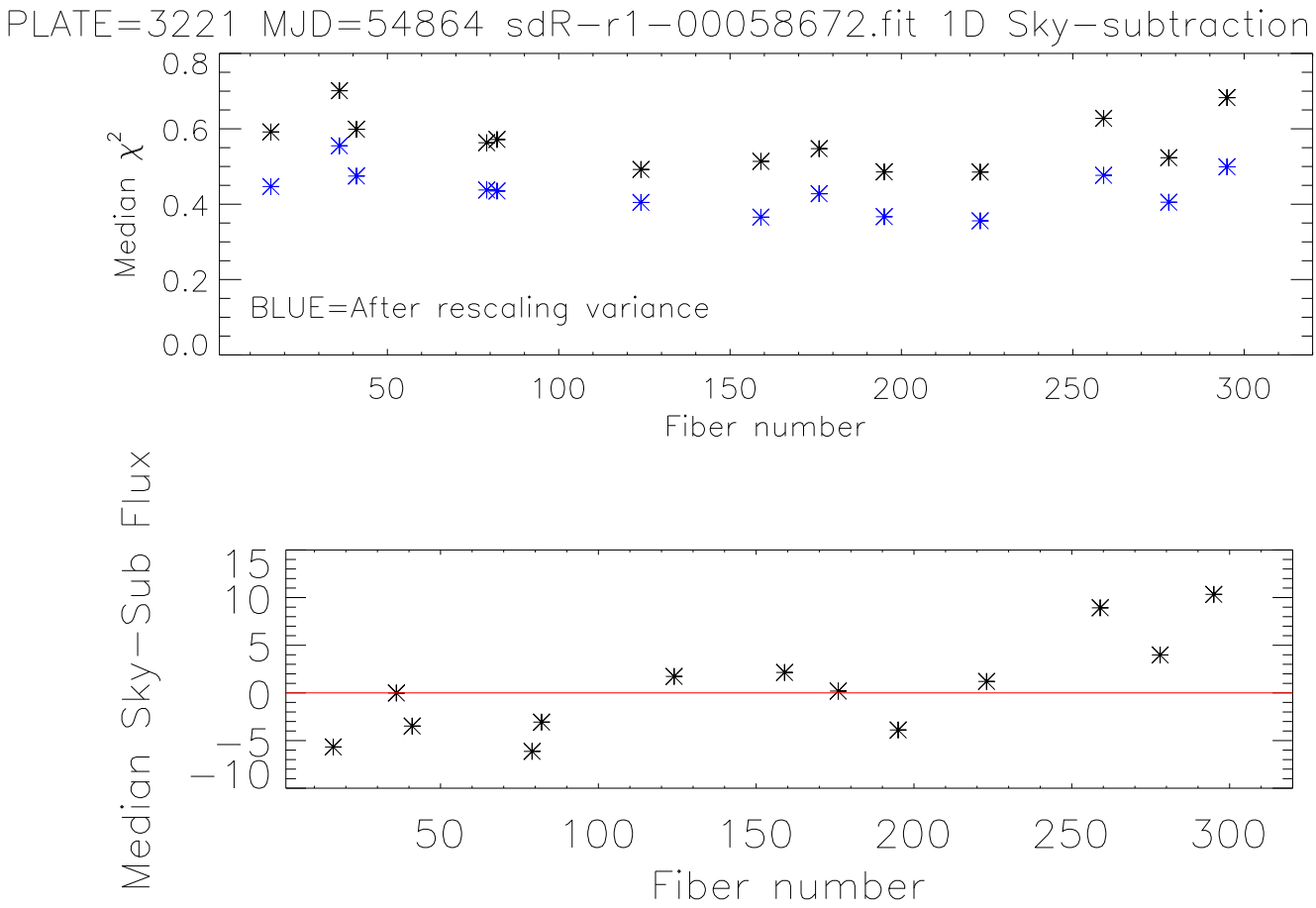

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

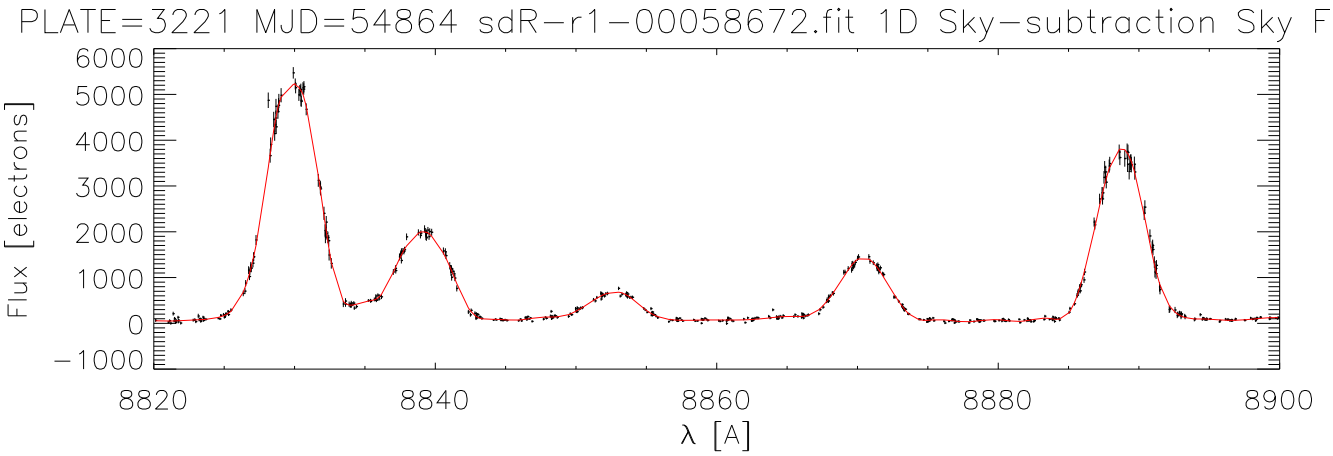

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhi1 15
mfhi2 15
stdev 0.20
extrd 0.27
stdev 0.30
extrd 0.25
stdev 0.34
extrd 0.26
stdev 0.49
extrd 0.22
stdev 0.34
extrd 0.19
stdev 0.26
extrd 0.43
stdev 0.25
extrd 0.28
stdev 0.25
extrd 0.23
stdev 0.15
extrd 0.19
stdev 0.19
extrd 0.20
stdev 0.26
extrd 0.20
stdev 0.26
extrd 0.49

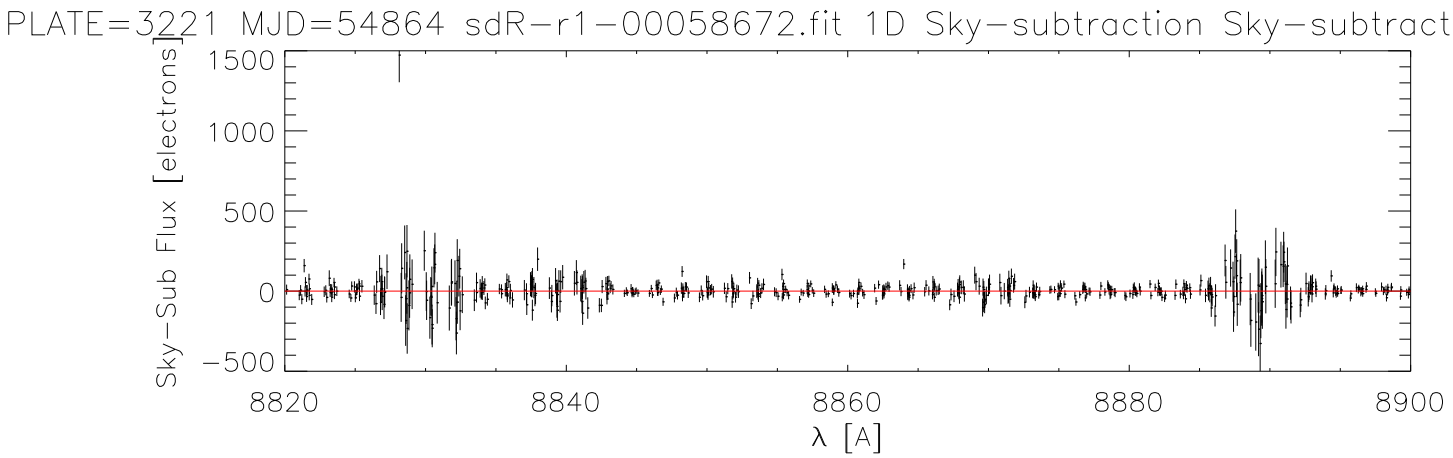

sky shift, pixels
−0.15
−0.20
−0.25
5000
6000
7000
8000
9000
10000

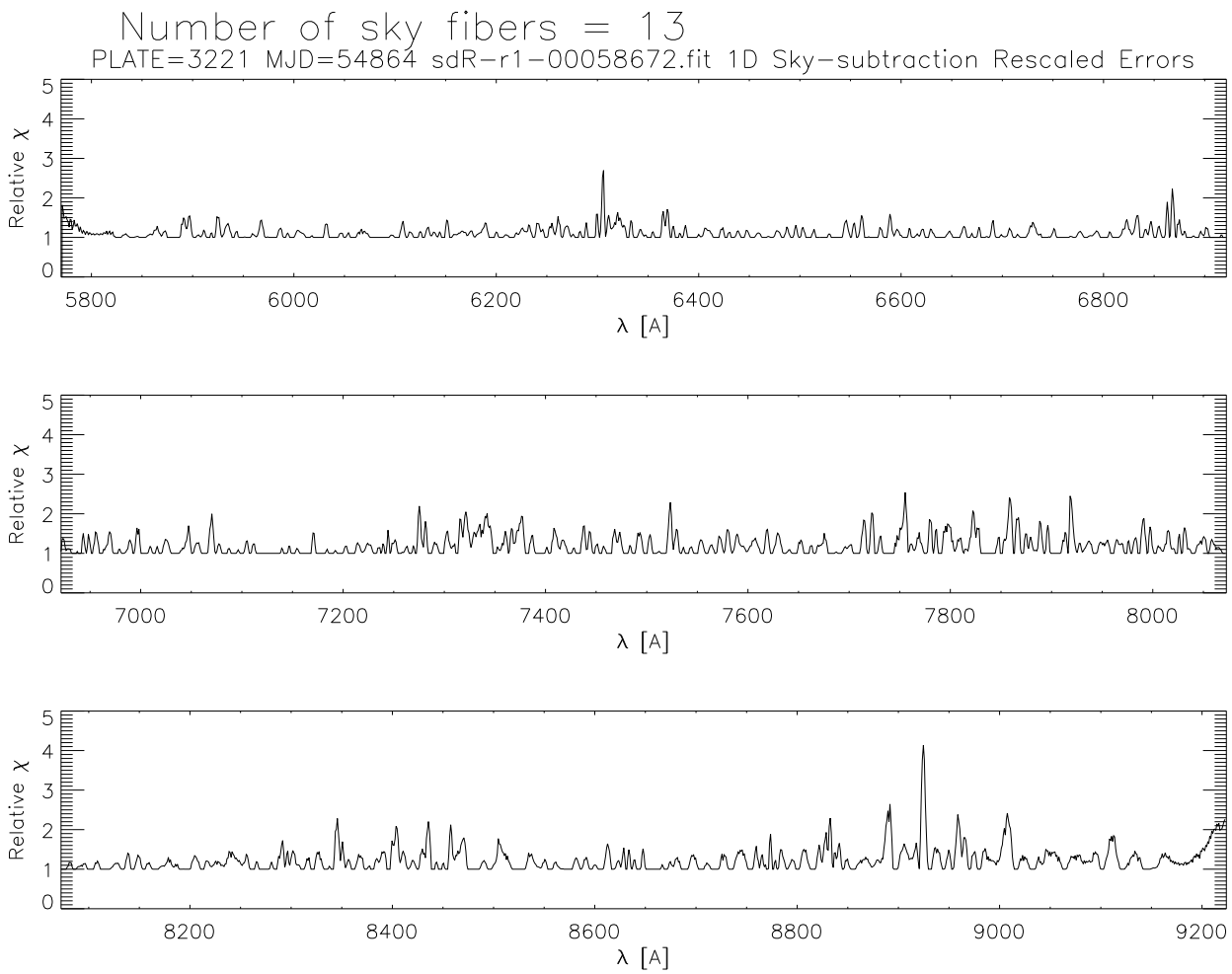

PLATE=3221 MJD=54864 Smooth superflat for sdR-r1-00058672.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

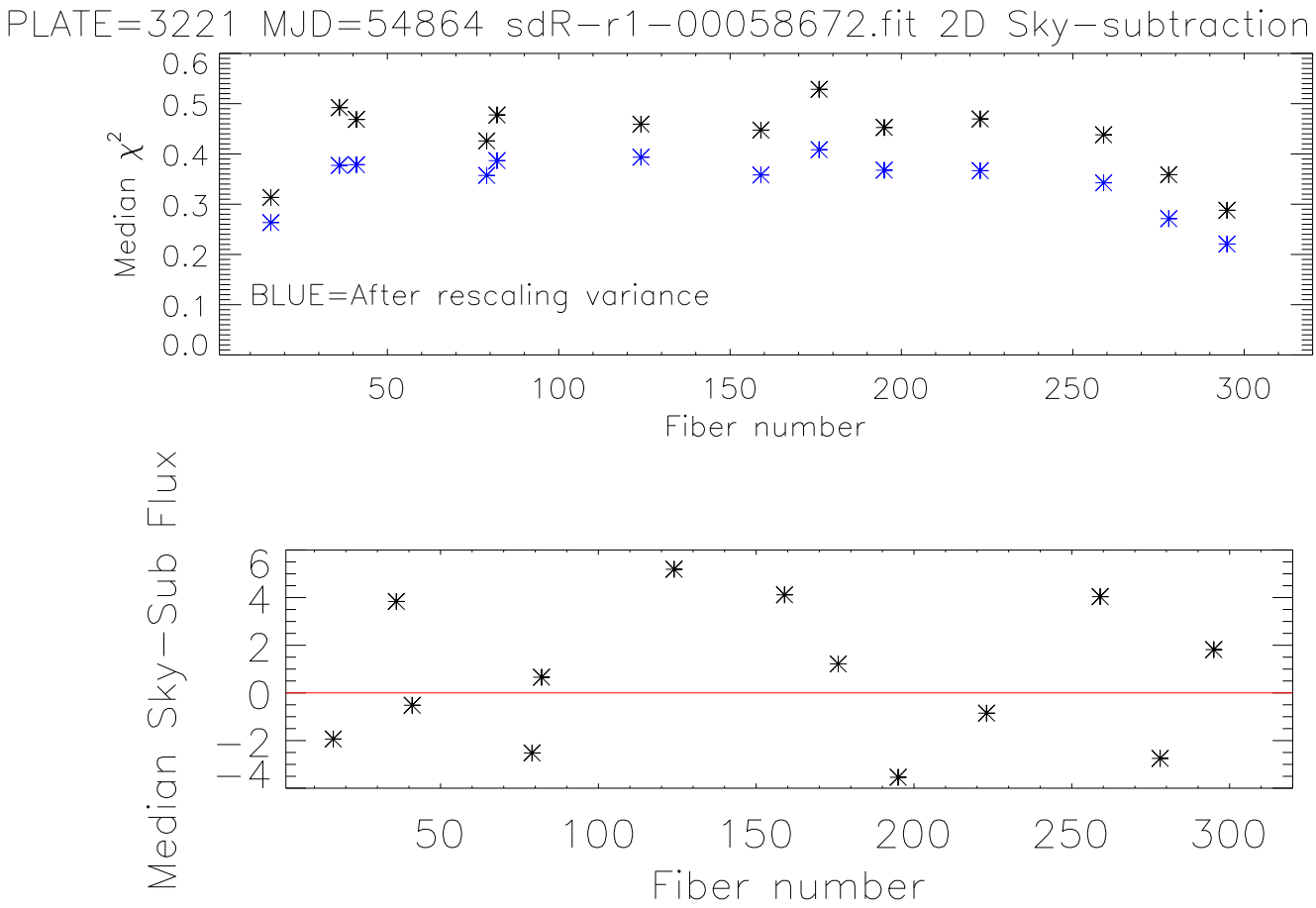
es= −0.0000

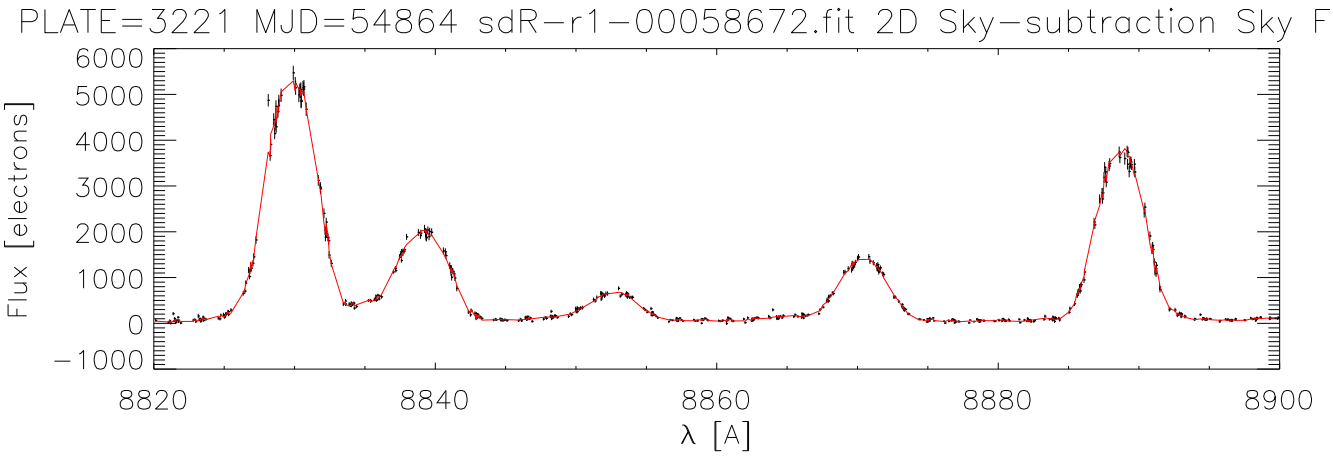

PLATE=3221 MJD=54864 sdR-r1-00058672.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

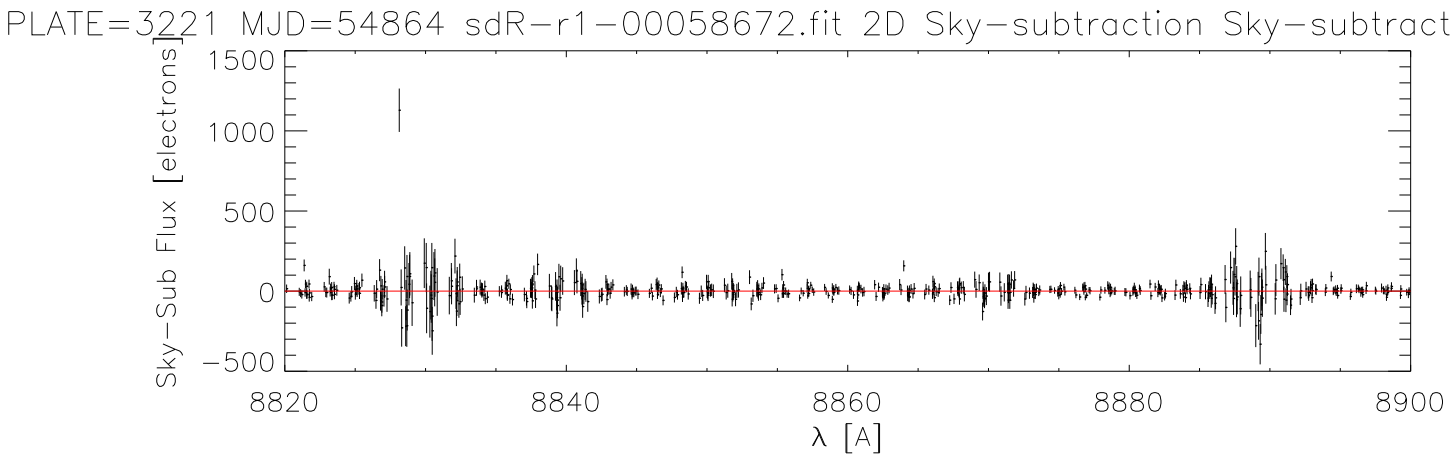

PLATE=3221 MJD=54864 sdR-r1-00058672.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

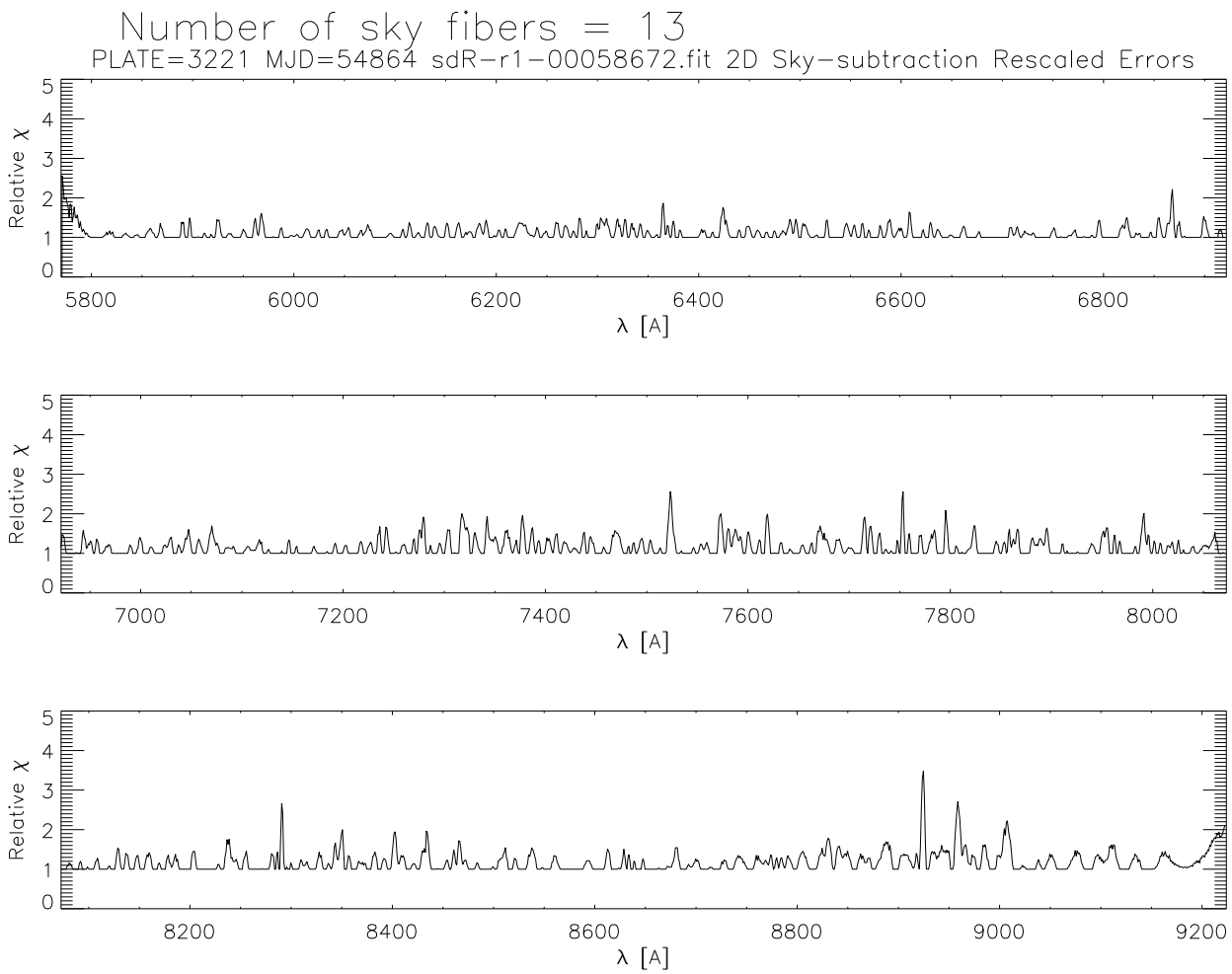

PLATE=3221 MJD=54864 sdR-r1-00058672.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

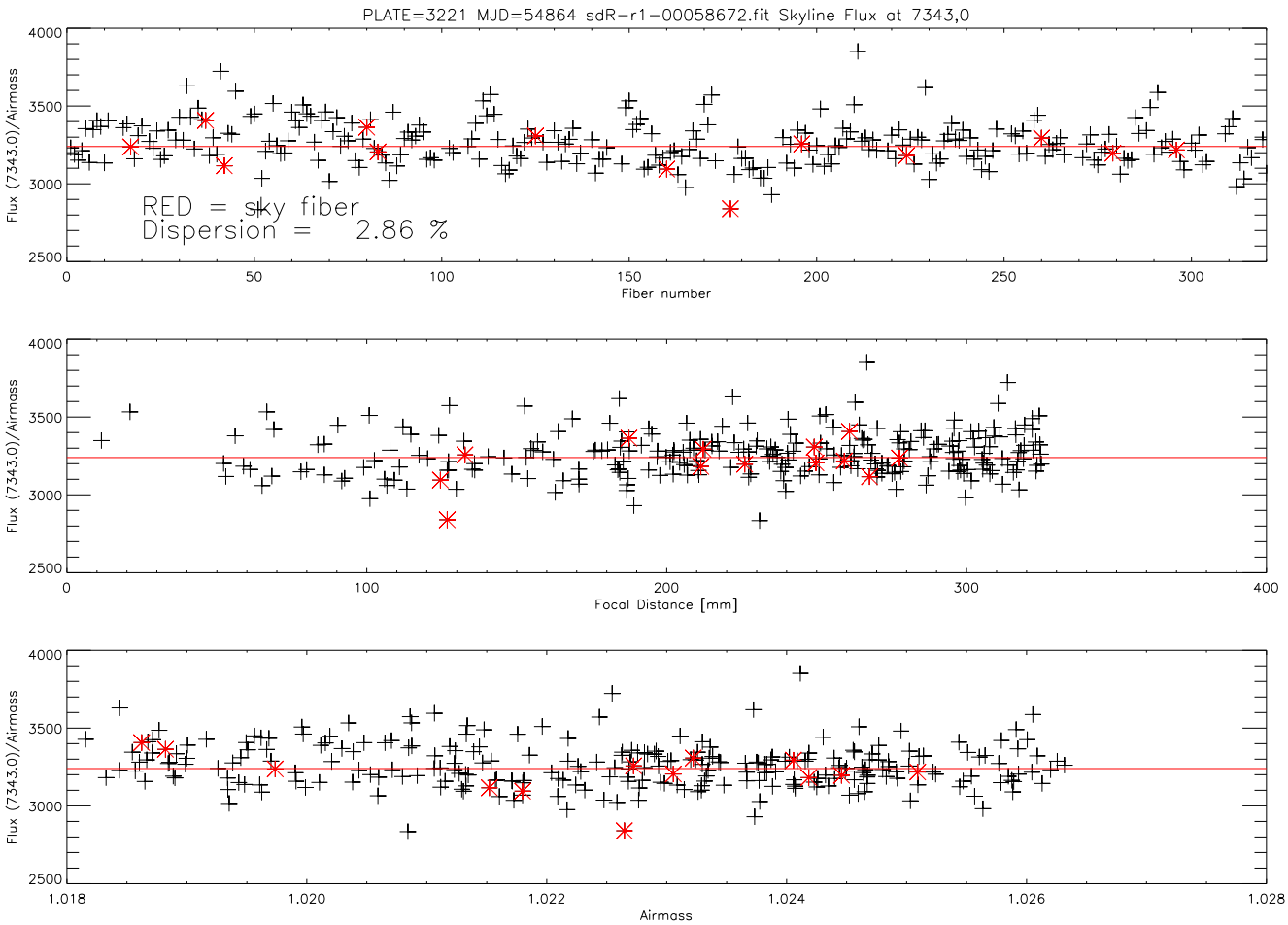

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058672.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

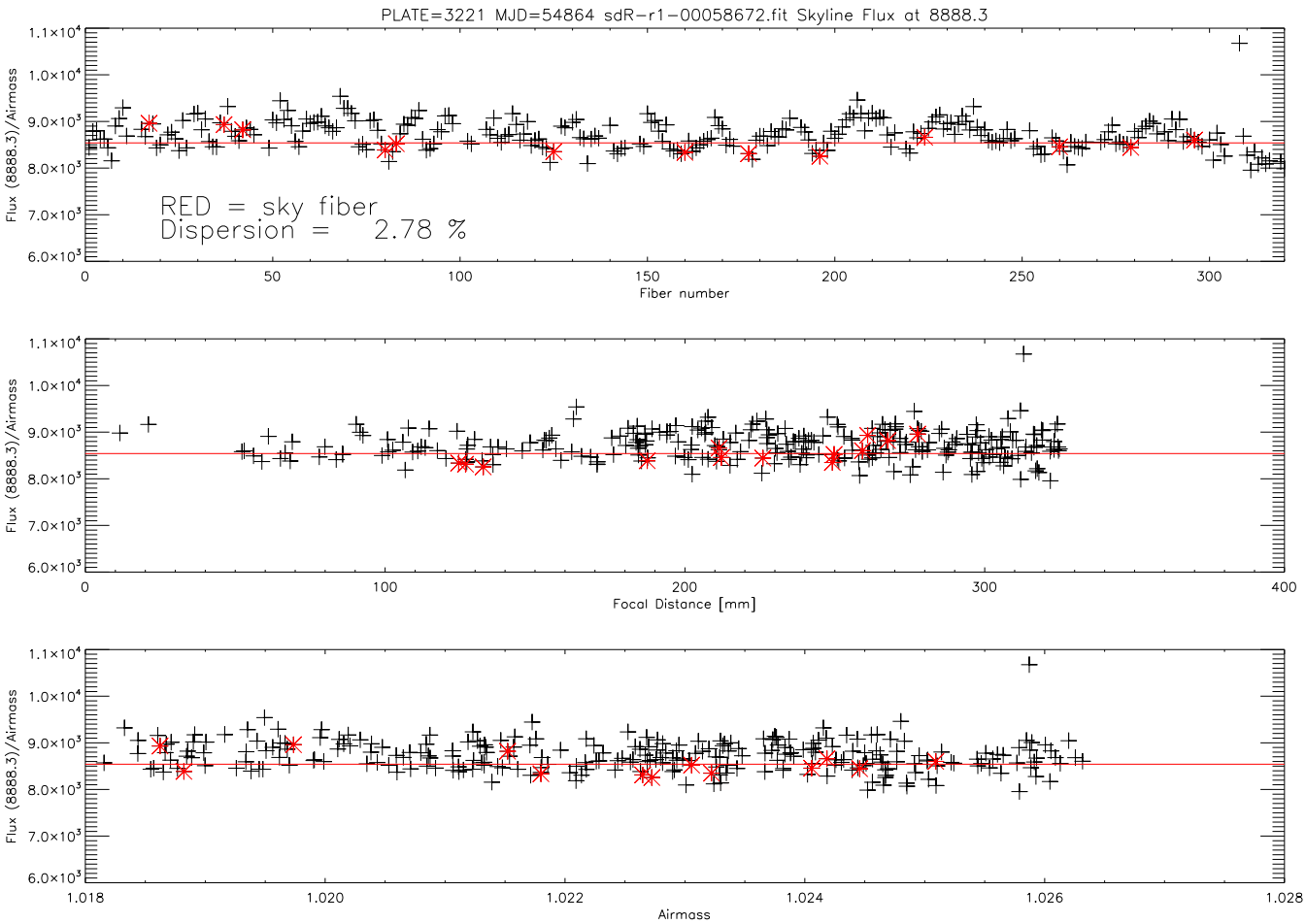

PLATE=3221 MJD=54864 sdR-r1-00058672.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

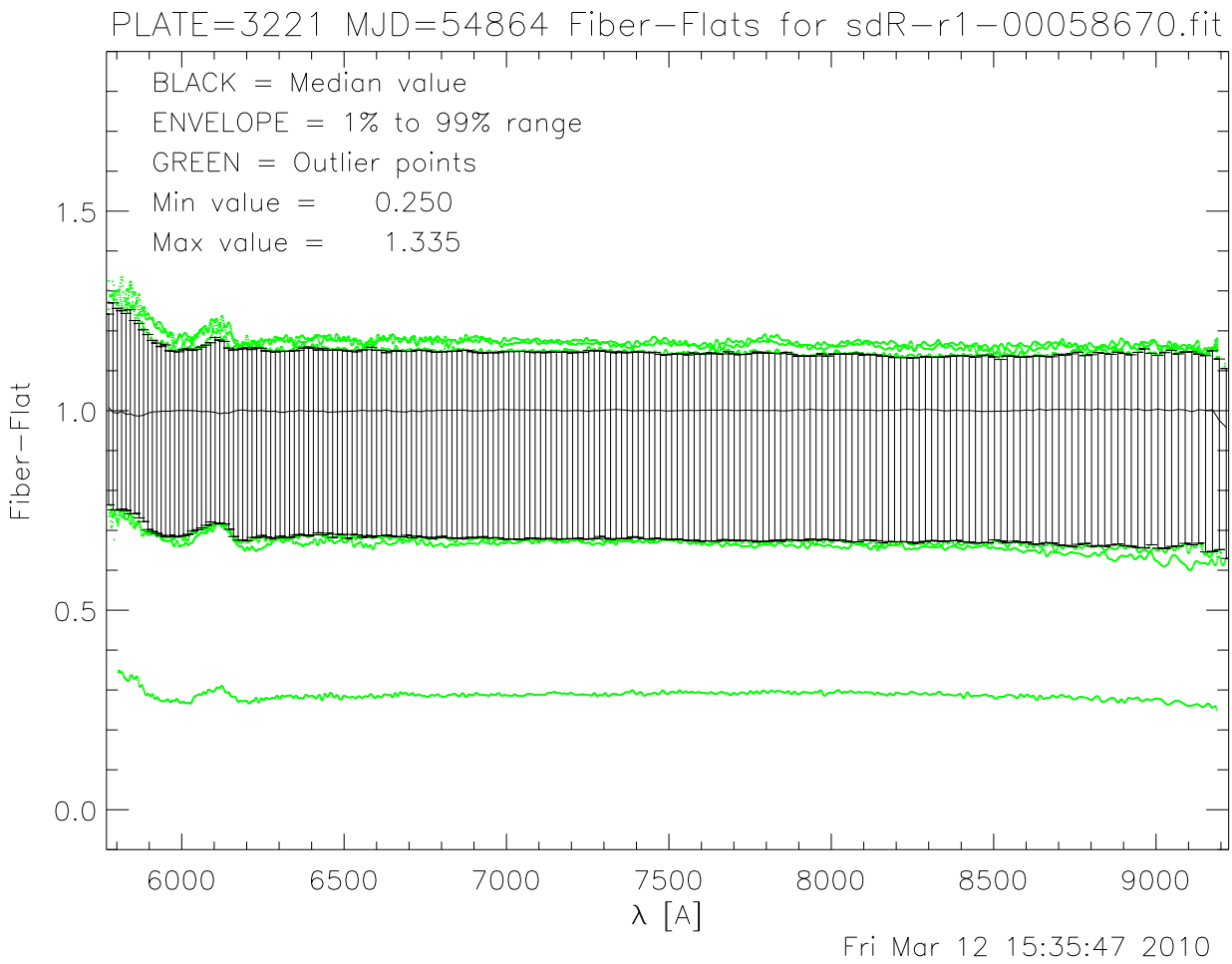

PLATE=3221 MJD=54864 sdR-r1-00058672.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

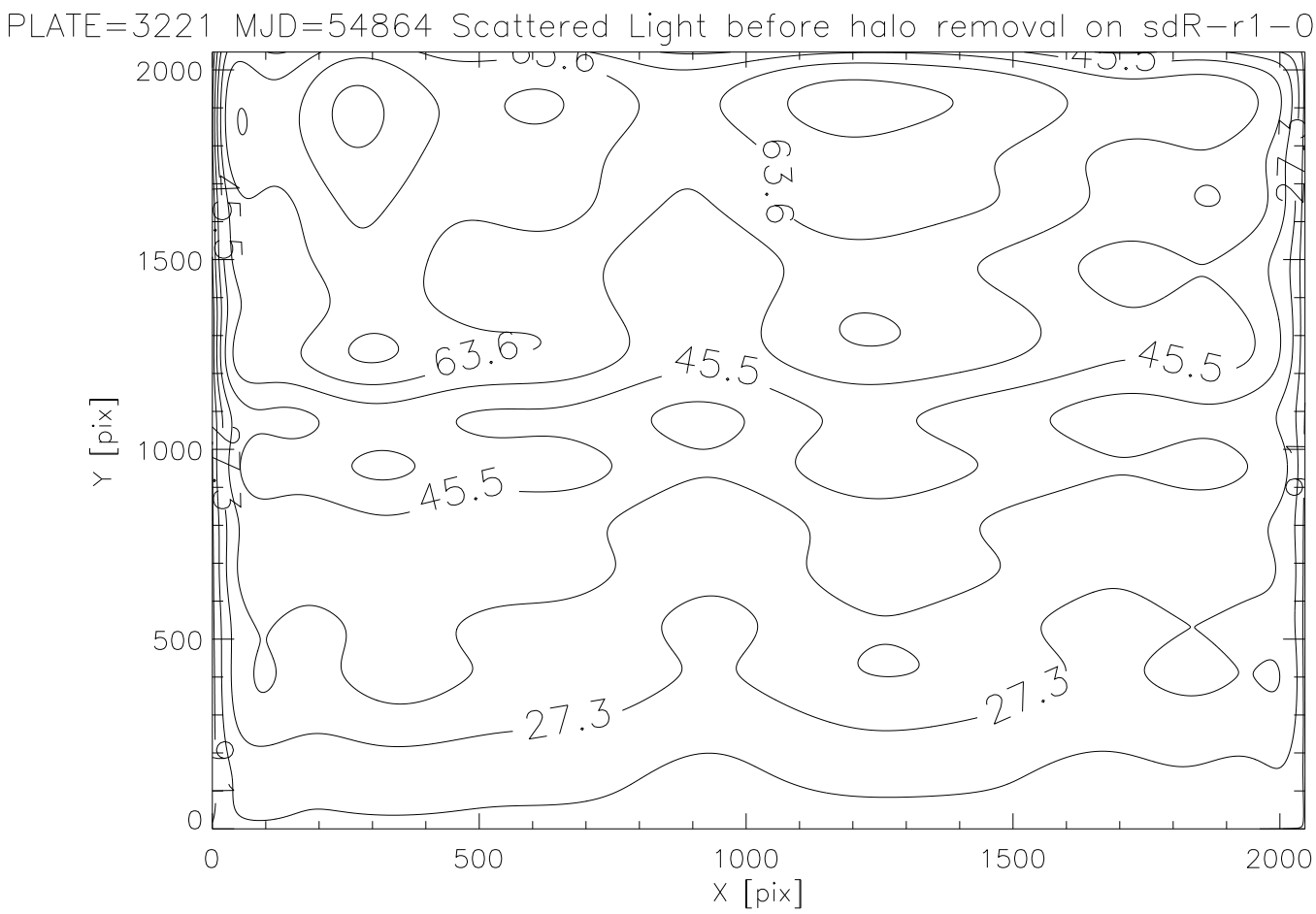

PLATE=3221 MJD=54864 sdR-r1-00058672.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

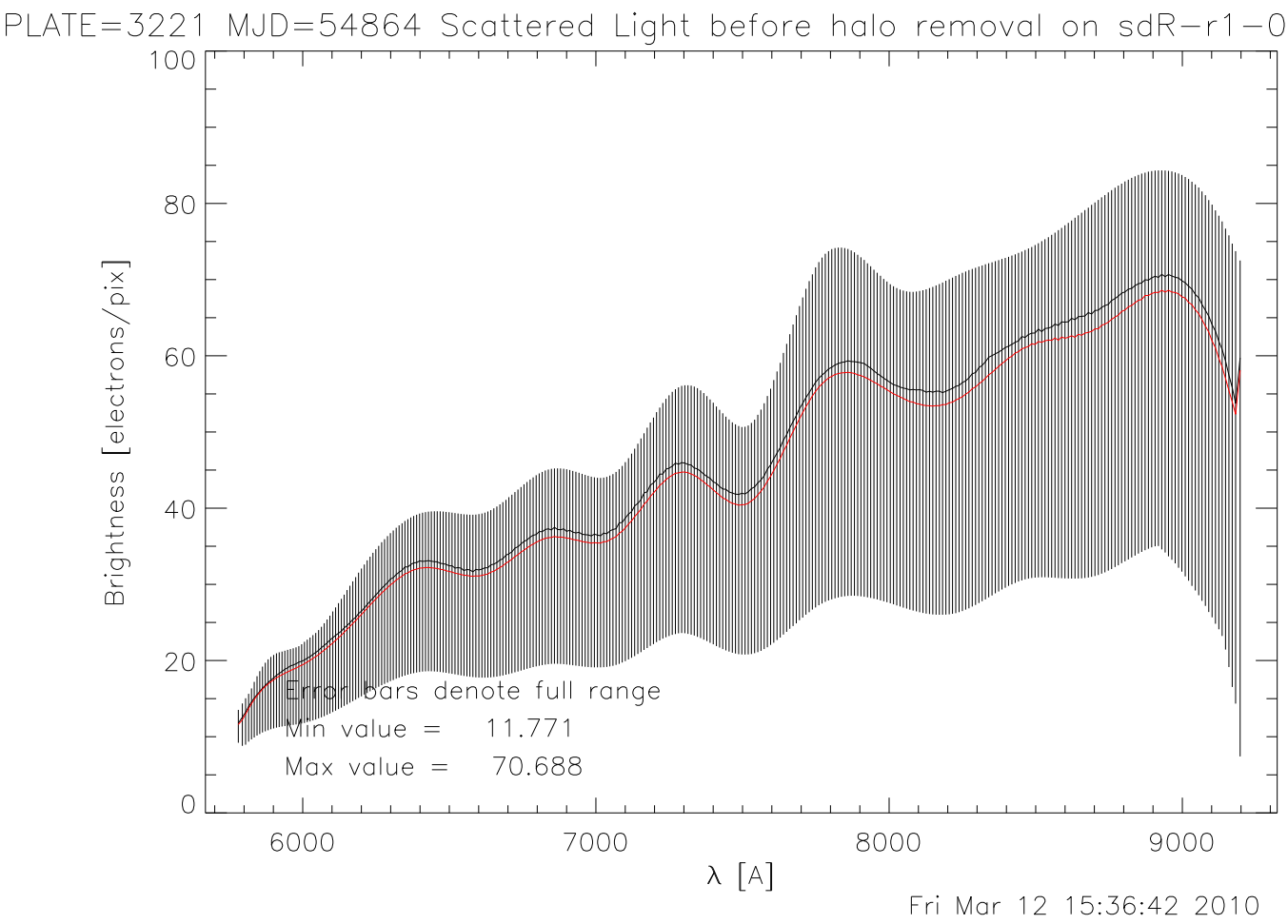

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058672.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

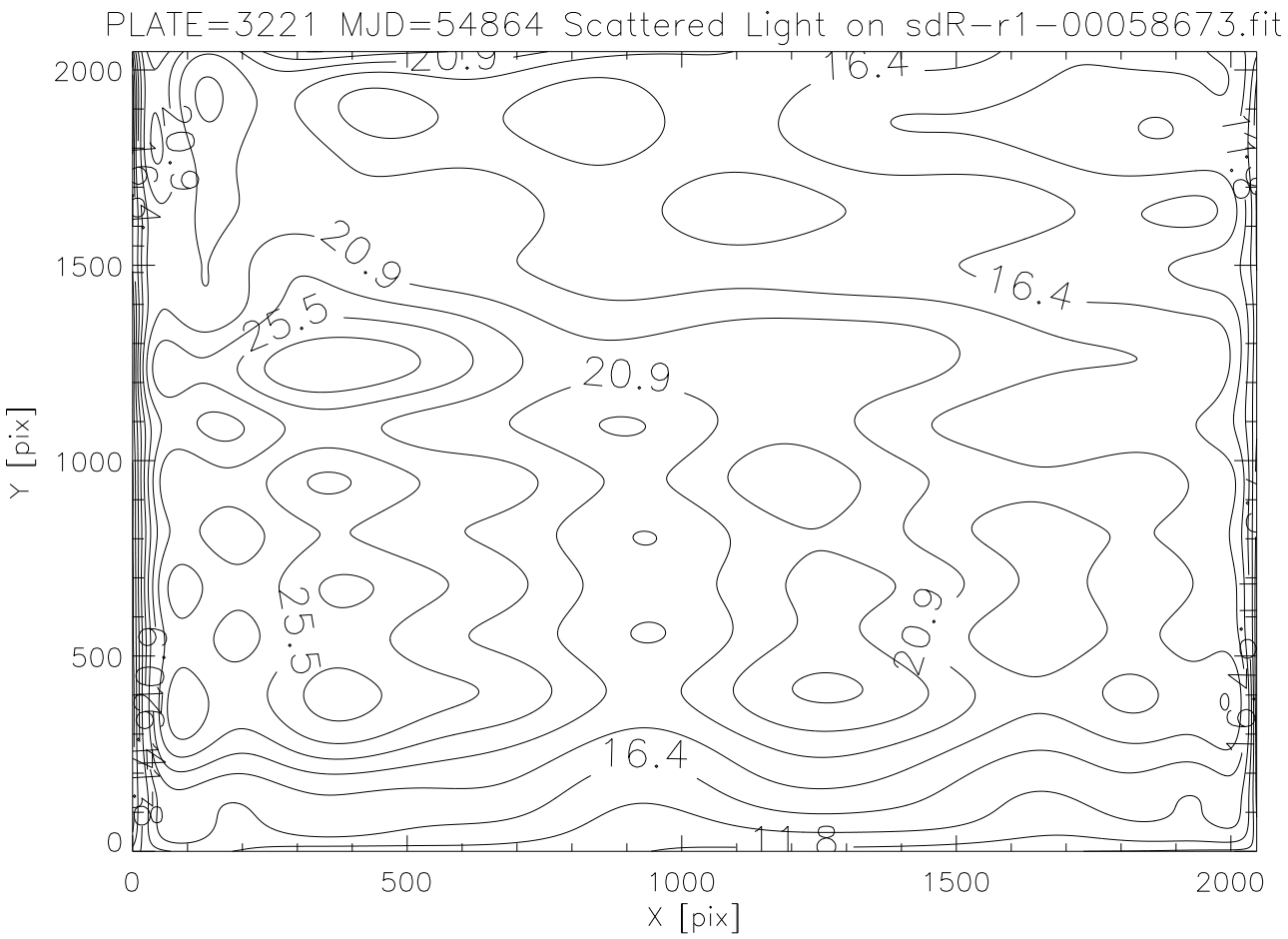

PLATE=3221 MJD=54864 sdR-r1-00058672.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.86 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

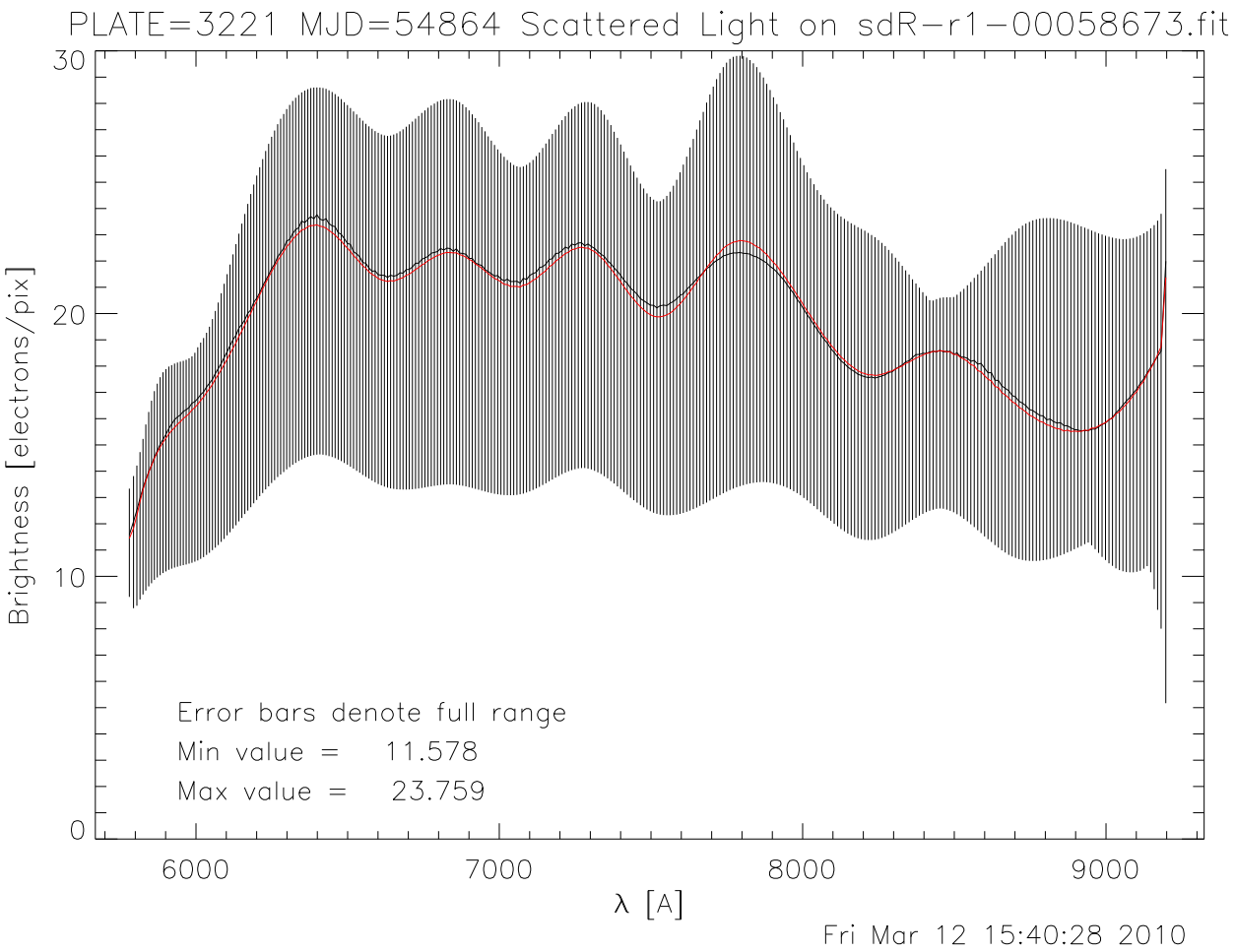

PLATE=3221 MJD=54864 sdR-r1-00058672.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.78 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

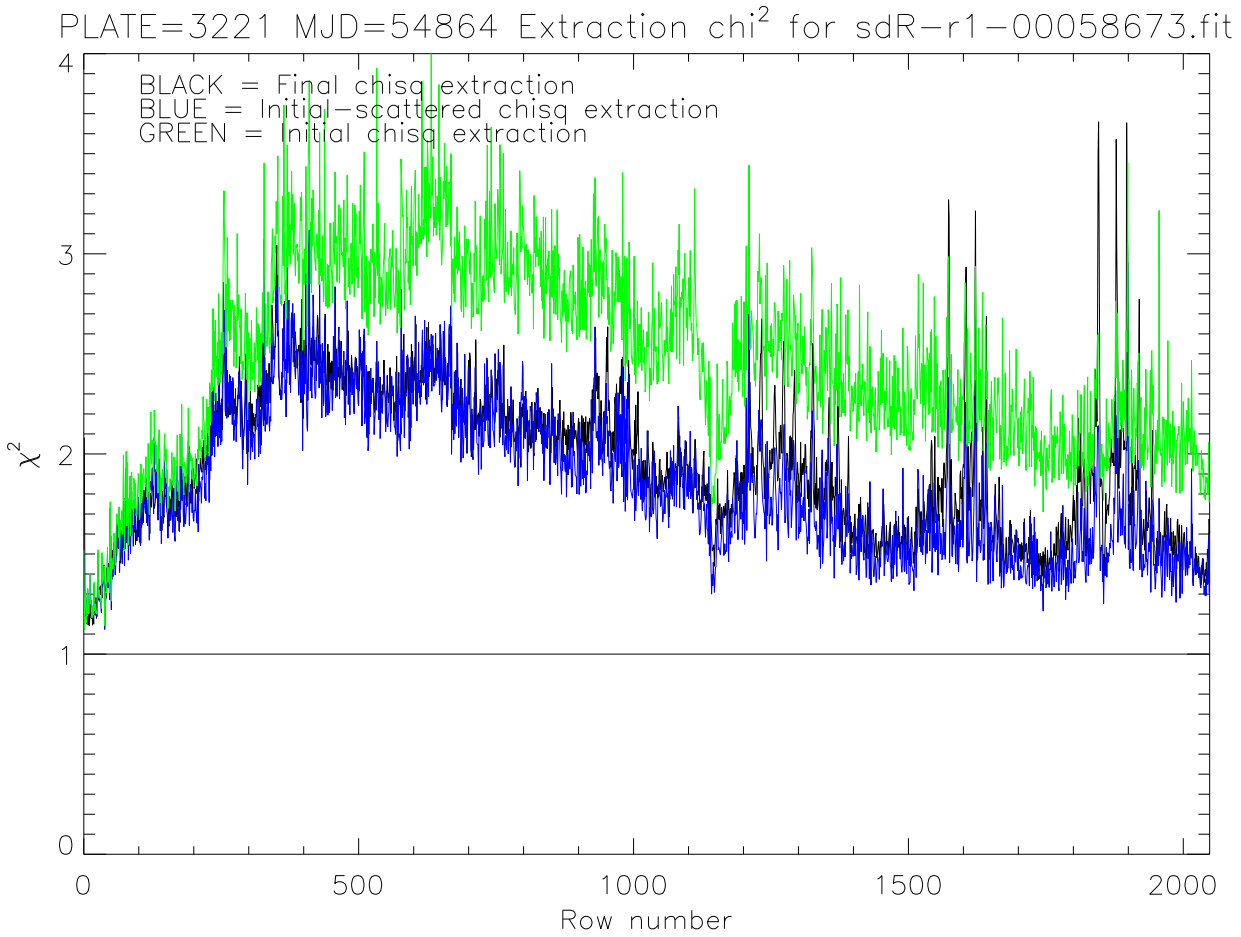

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r1−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.250
Max value = 1.335
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 15:35:47 2010

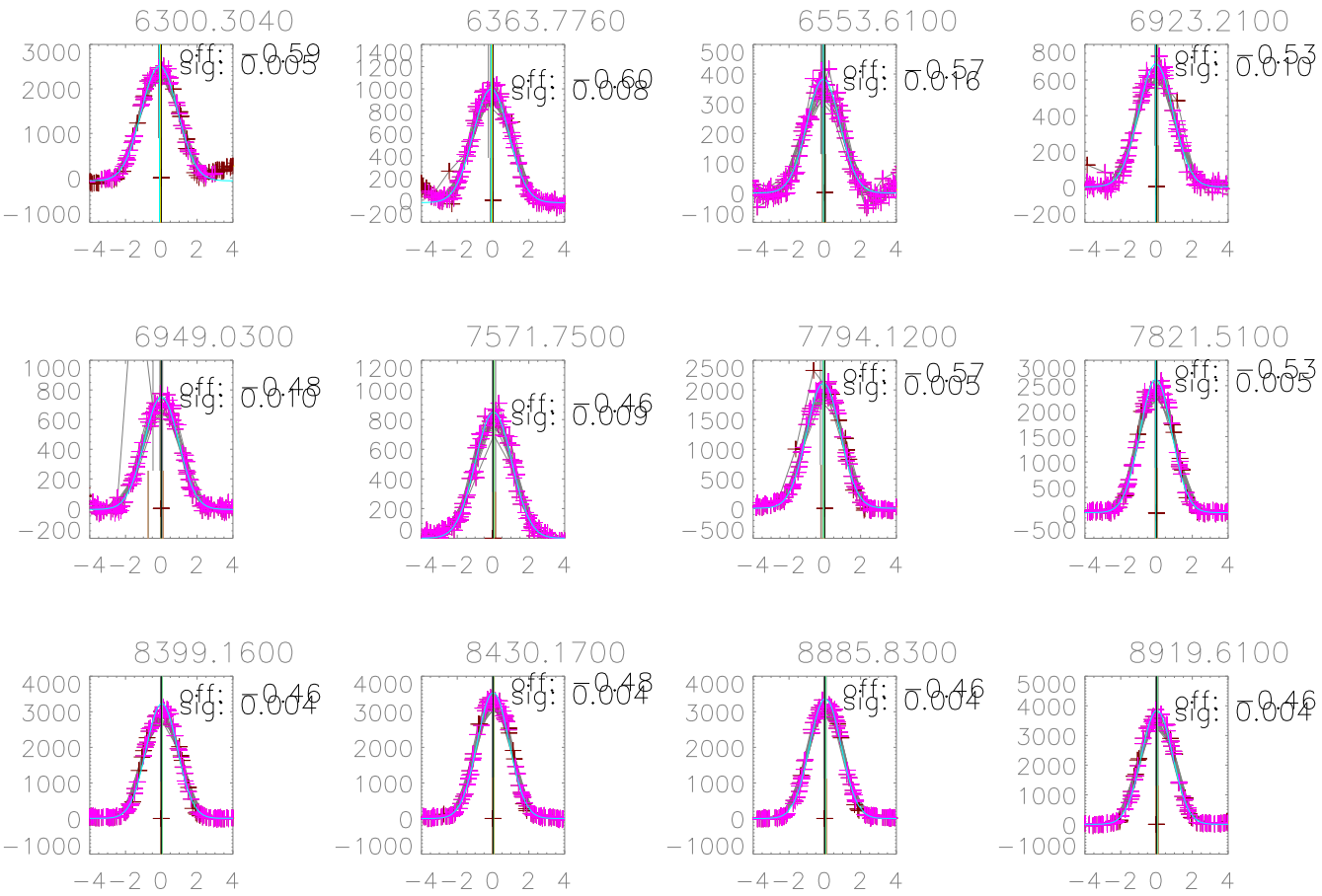

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058673.fi
63.6
45.5
27.3
0
Y [pix]
X [pix]
0
500
1000
1500
2000

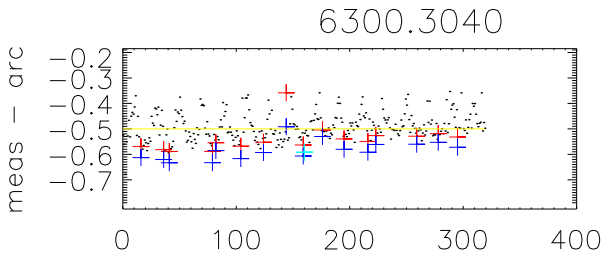

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058673.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.771
Max value = 70.688
Fri Mar 12 15:36:42 2010

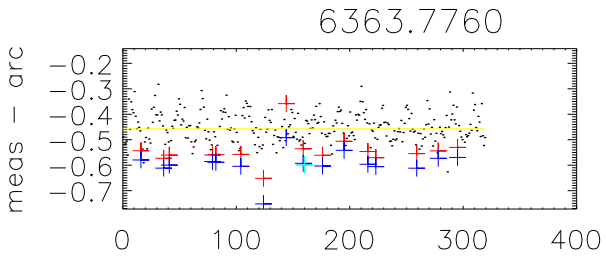

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058673.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
20.9
16.4
25.5
11.8

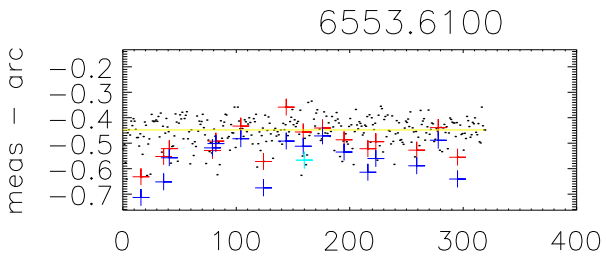

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058673.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.578
Max value = 23.759
Fri Mar 12 15:40:28 2010

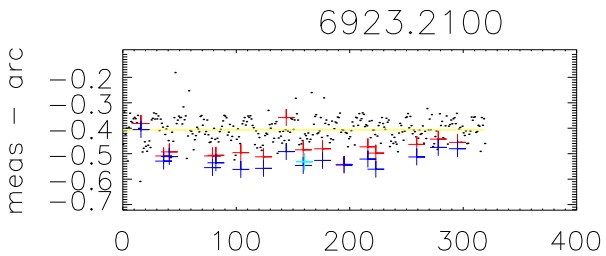

PLATE=3221 MJD=54864 Extraction chi^2 for sdR−r1−00058673.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

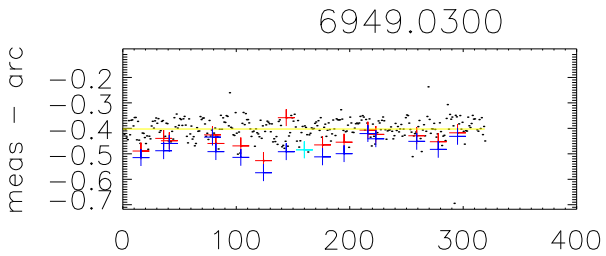

6300.3040
off: -0.59
sig: 0.005
6363.7760
off: -0.60
sig: 0.008
6553.6100
off: -0.57
sig: 0.016
6923.2100
off: -0.53
sig: 0.010
6949.0300
off: -0.48
sig: 0.010
7571.7500
off: -0.46
sig: 0.009
7794.1200
off: -0.57
sig: 0.005
7821.5100
off: -0.53
sig: 0.005
8399.1600
off: -0.46
sig: 0.004
8430.1700
off: -0.48
sig: 0.004
8885.8300
off: -0.46
sig: 0.004
8919.6100
off: -0.46
sig: 0.004

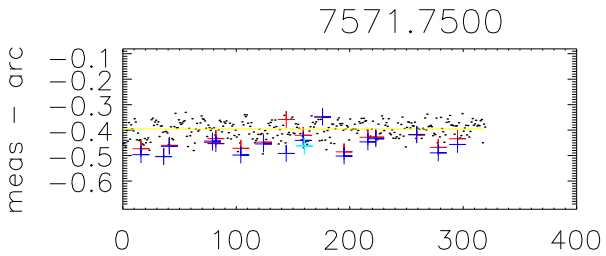

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

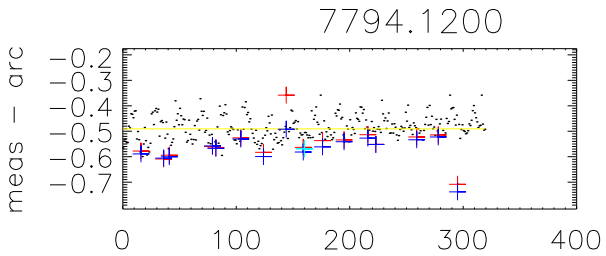

6363.7760
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

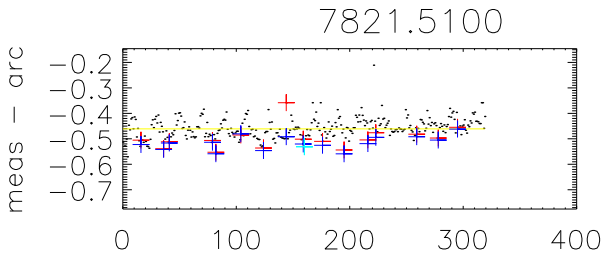

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

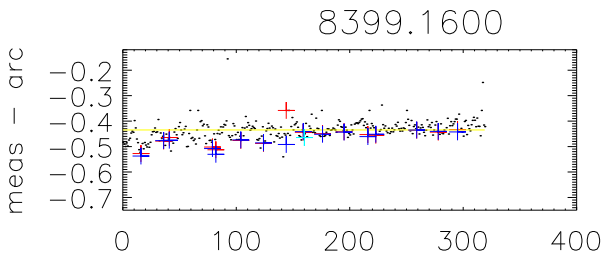

6923.2100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

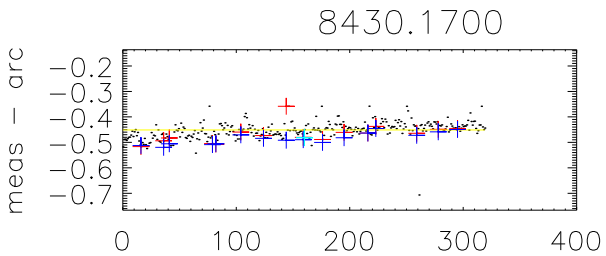

6949.0300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

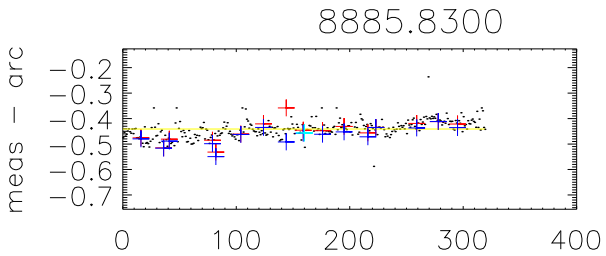

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

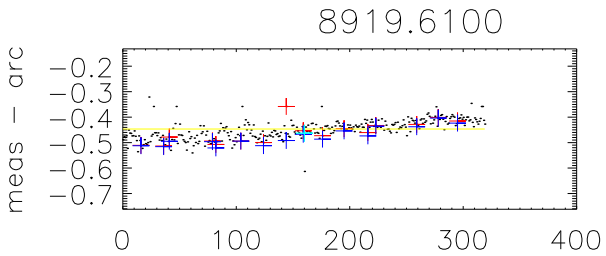

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

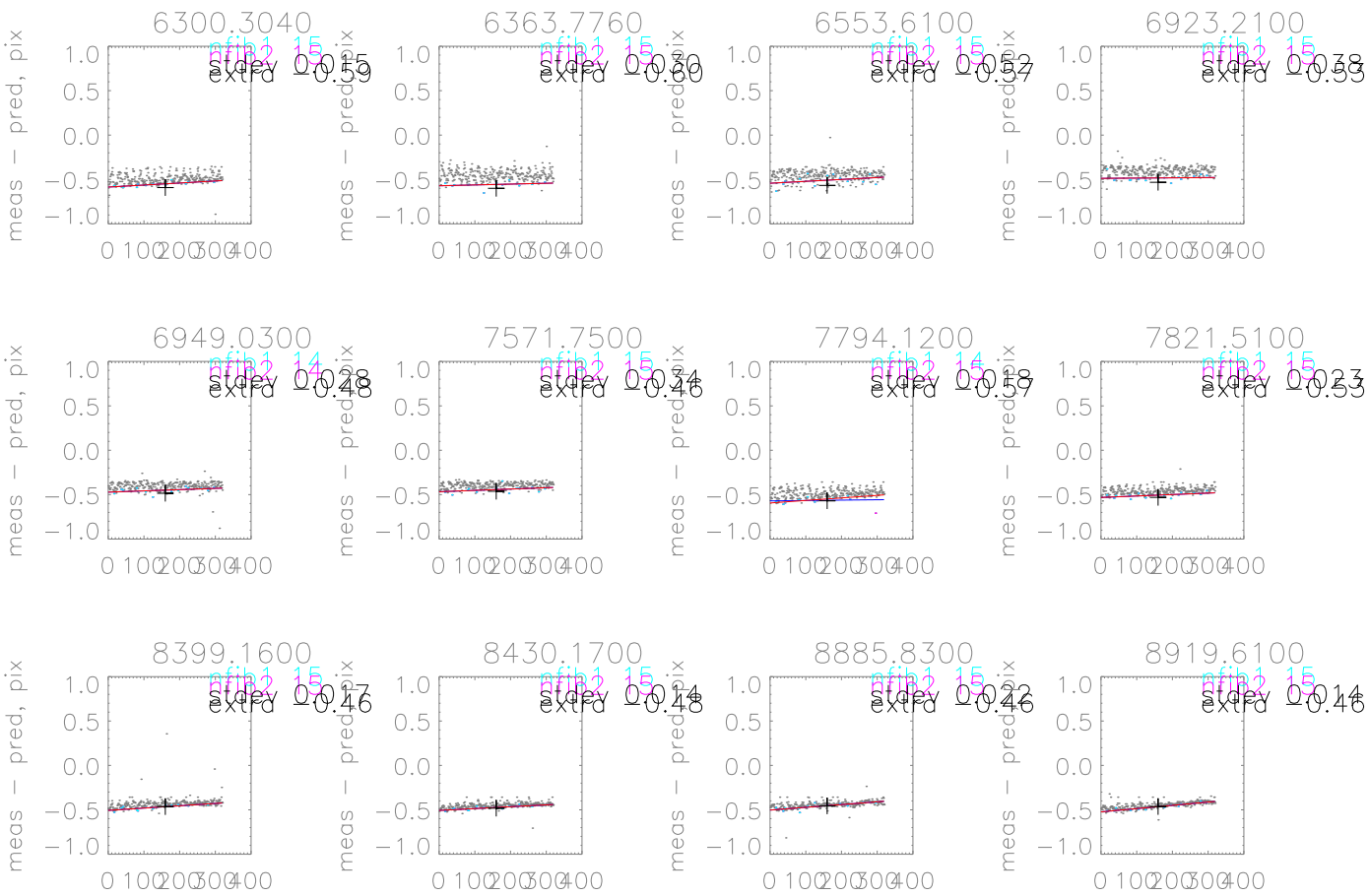

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

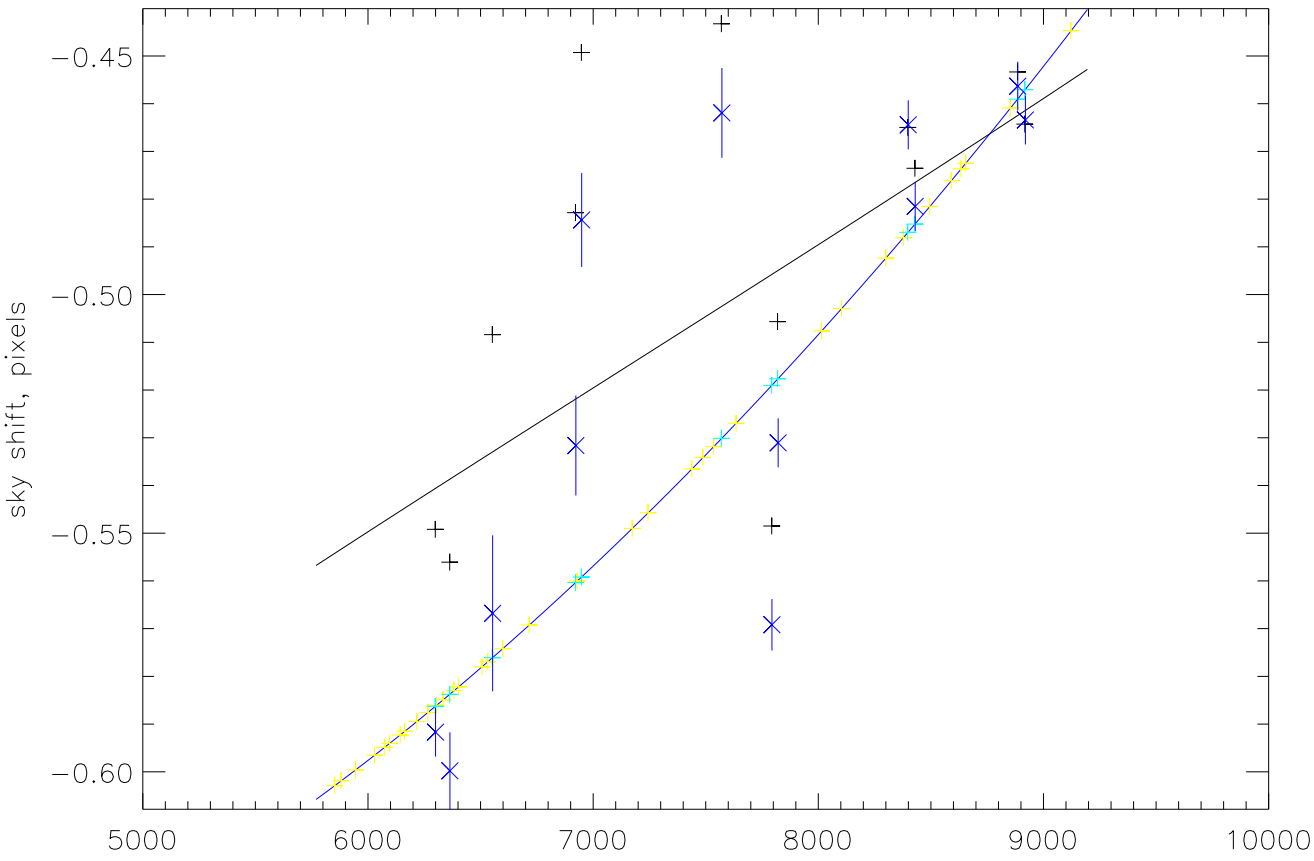

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

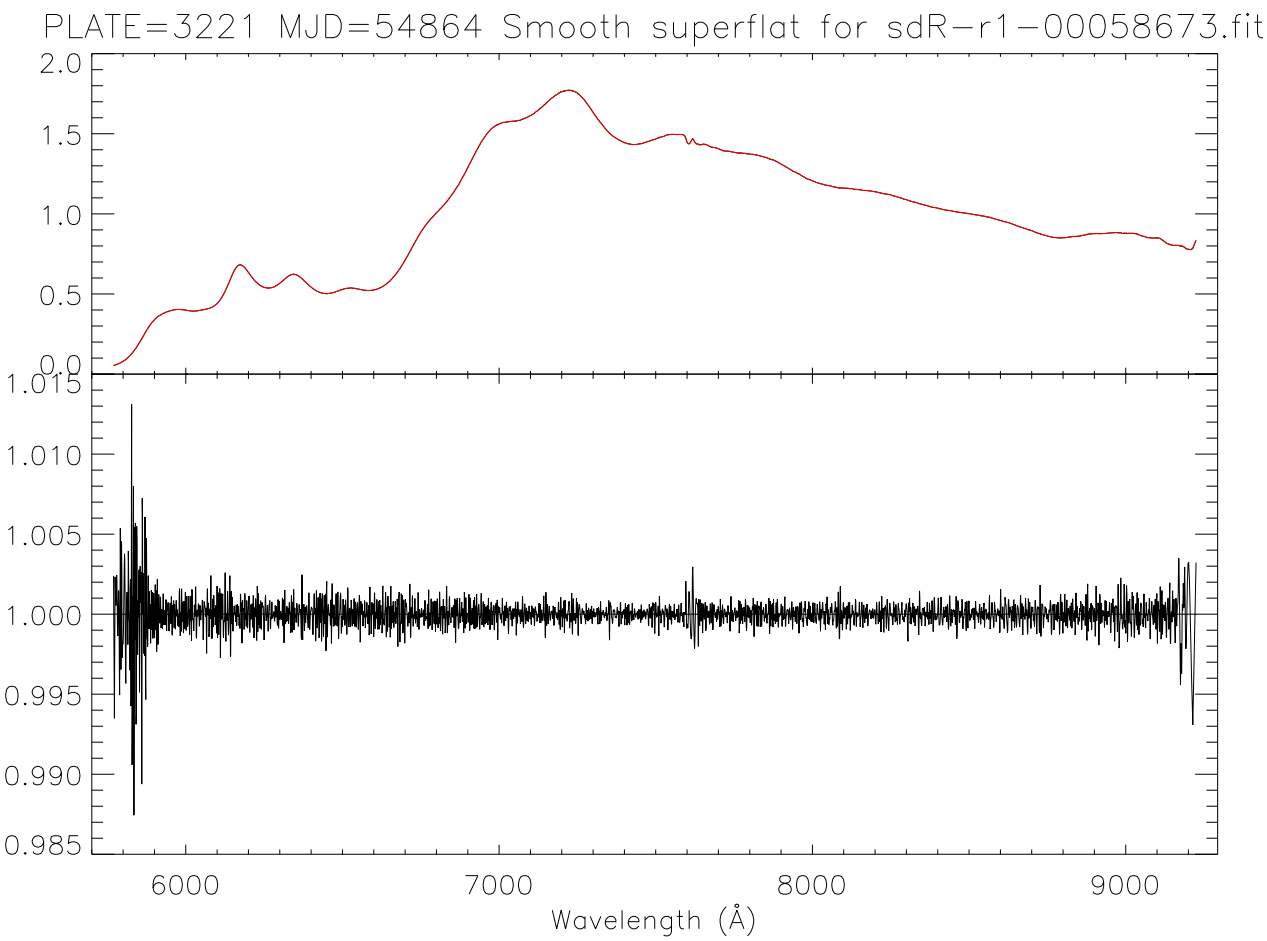

8885.8300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

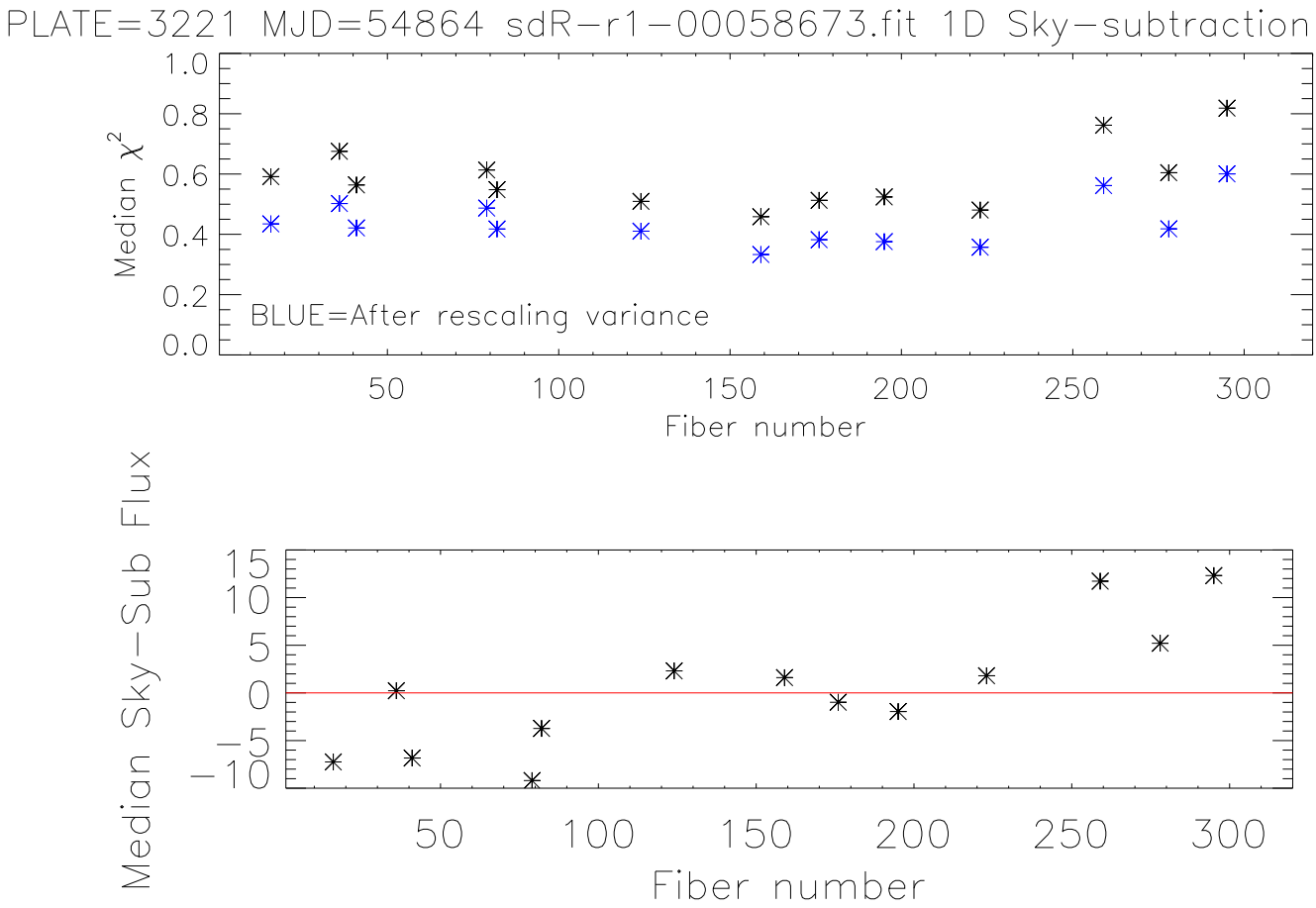

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

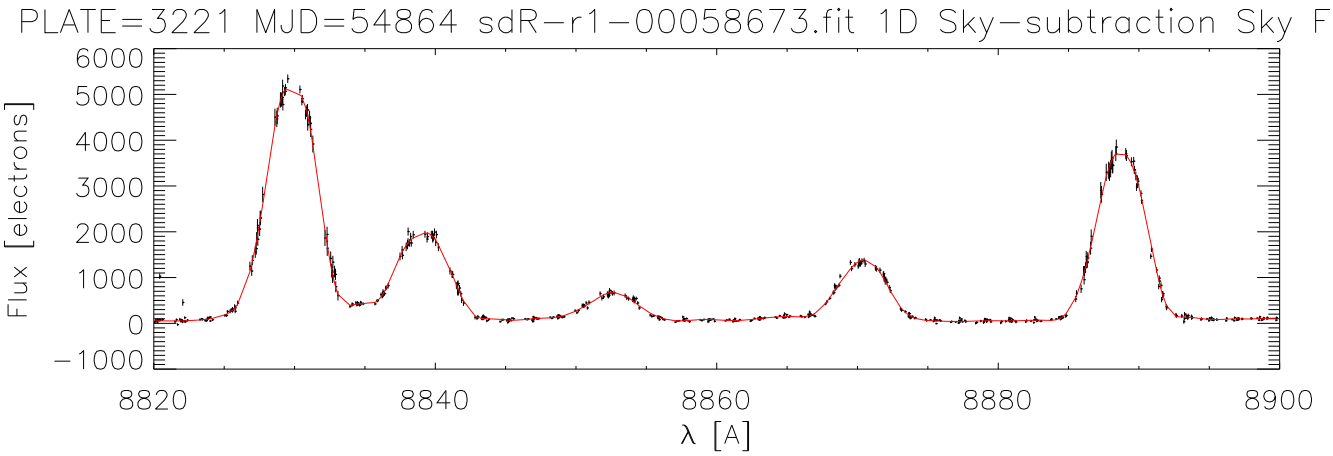

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhi2 15
mflo2 14
mflo2 15
stdev 0.48
stdev 0.46
stdev 0.57
stdev 0.53
stdev 0.46
stdev 0.48
stdev 0.46
stdev 0.46
extra −0.48
extra −0.46
extra −0.57
extra −0.53
extra −0.46
extra −0.48
extra −0.46
extra −0.46
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

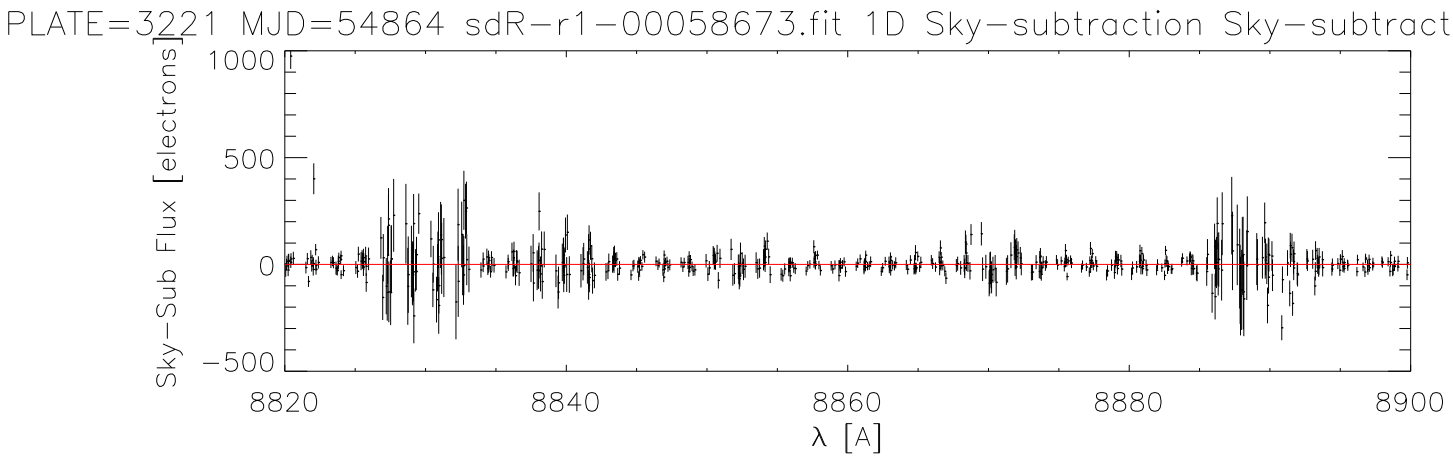

−0.45
−0.50
−0.55
−0.60
sky shift, pixels
5000
6000
7000
8000
9000
10000

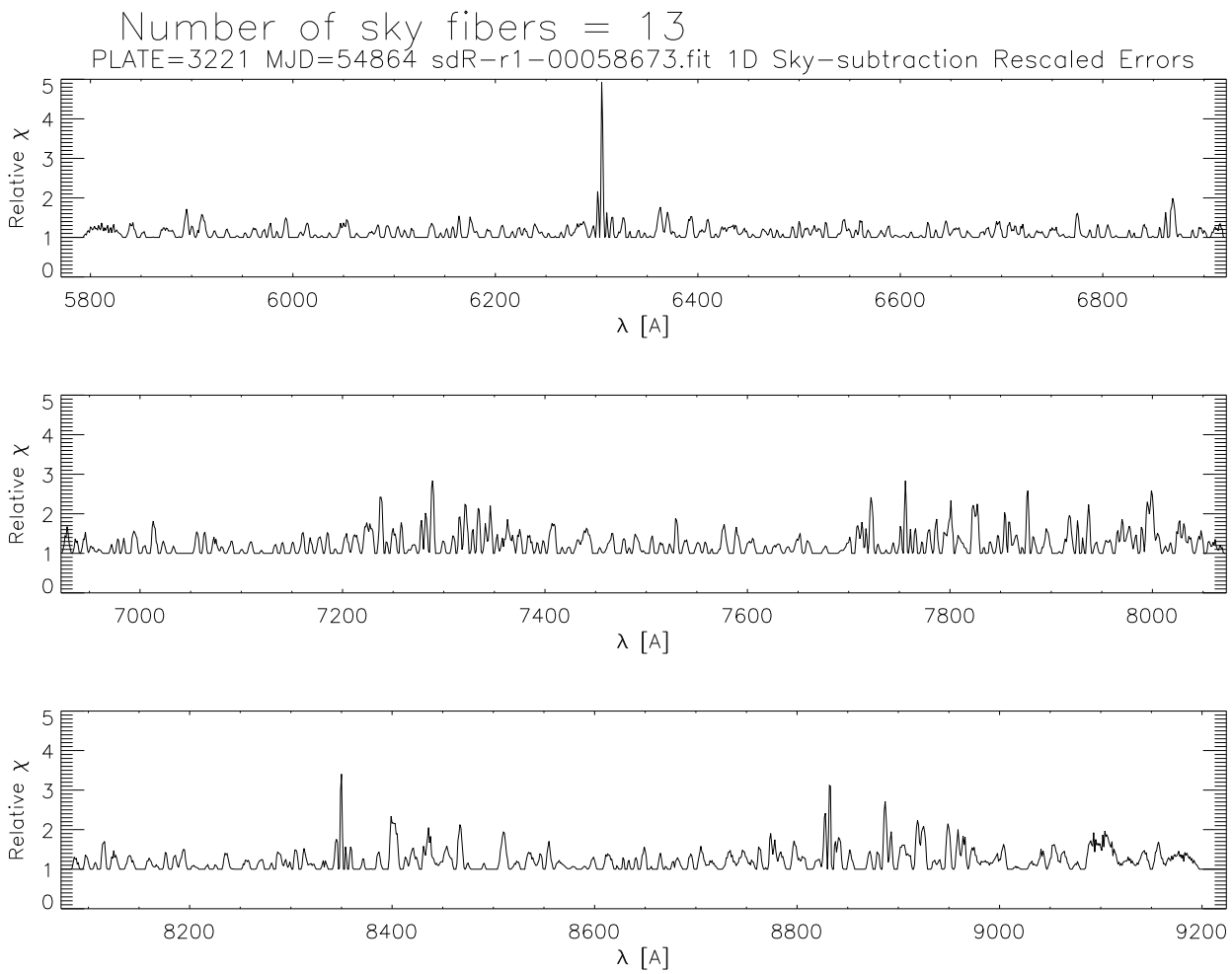
es= 0.0000

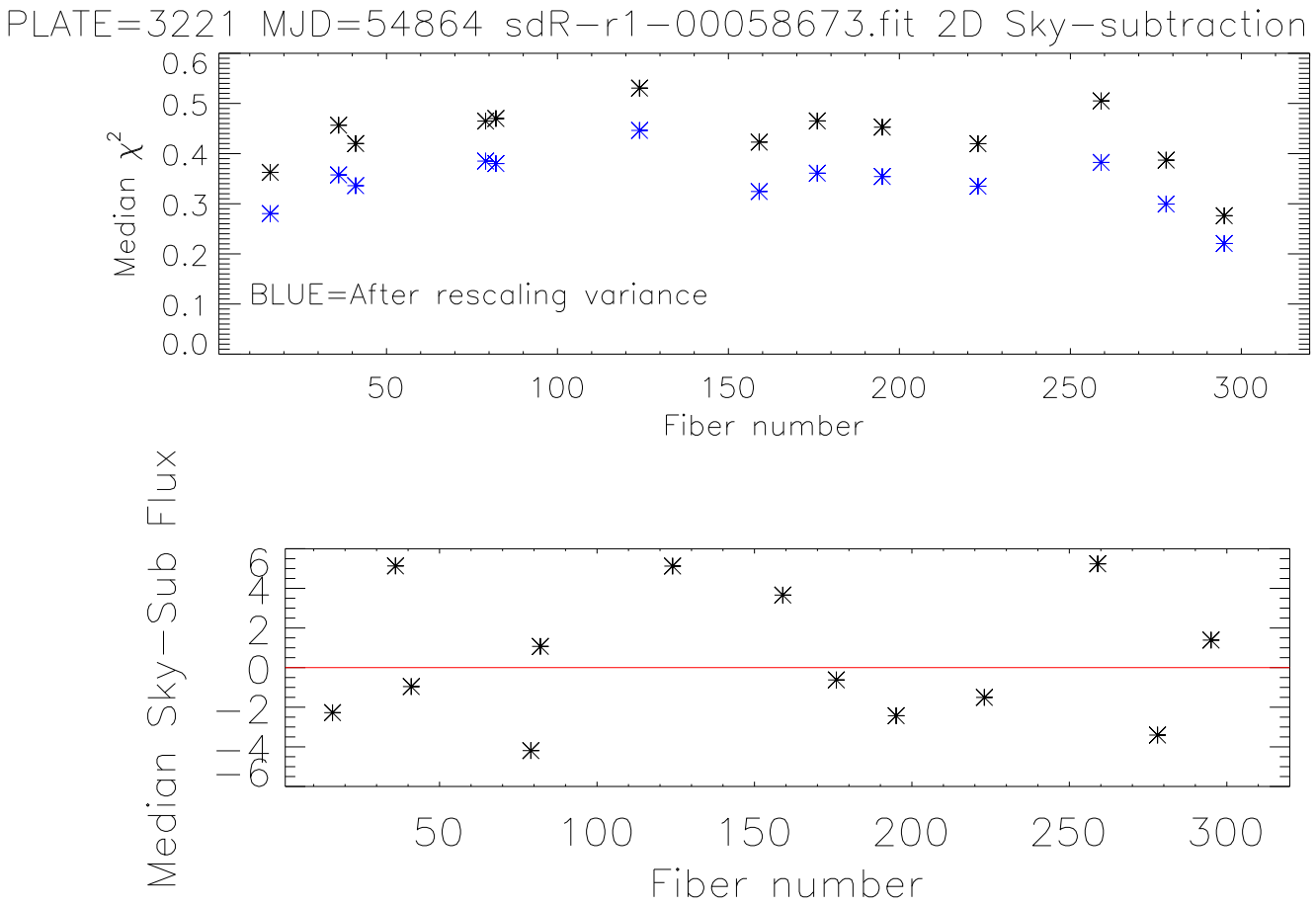

PLATE=3221 MJD=54864 Smooth superflat for sdR-r1-00058673.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

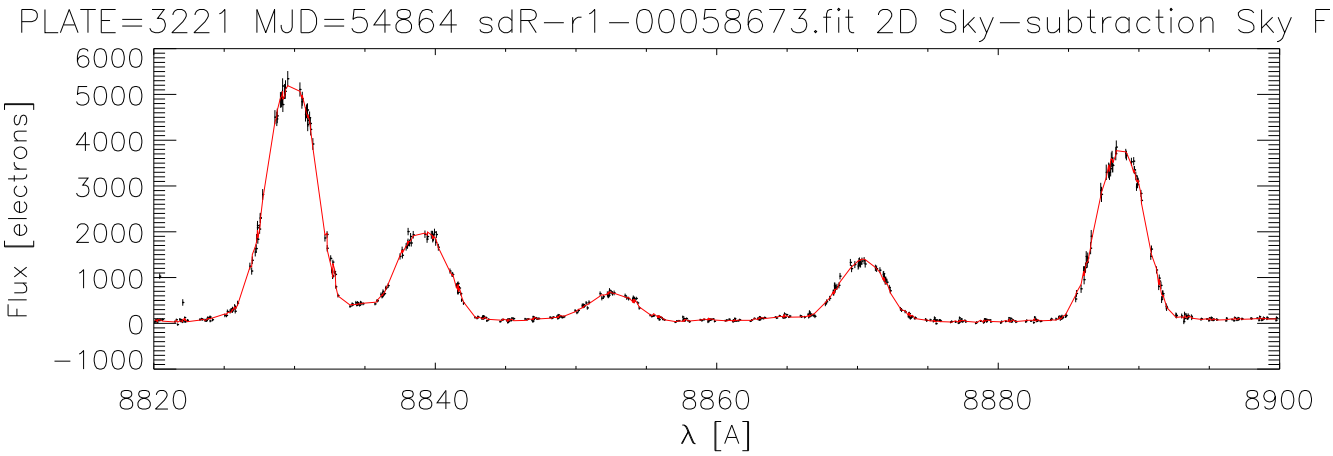

PLATE=3221 MJD=54864 sdR-r1-00058673.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

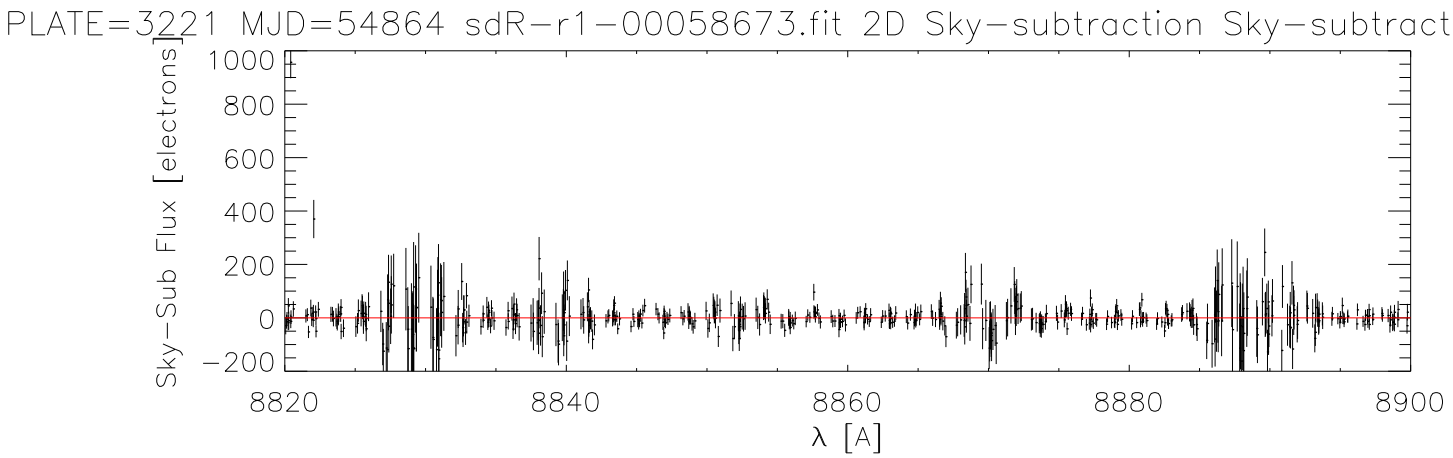

PLATE=3221 MJD=54864 sdR-r1-00058673.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

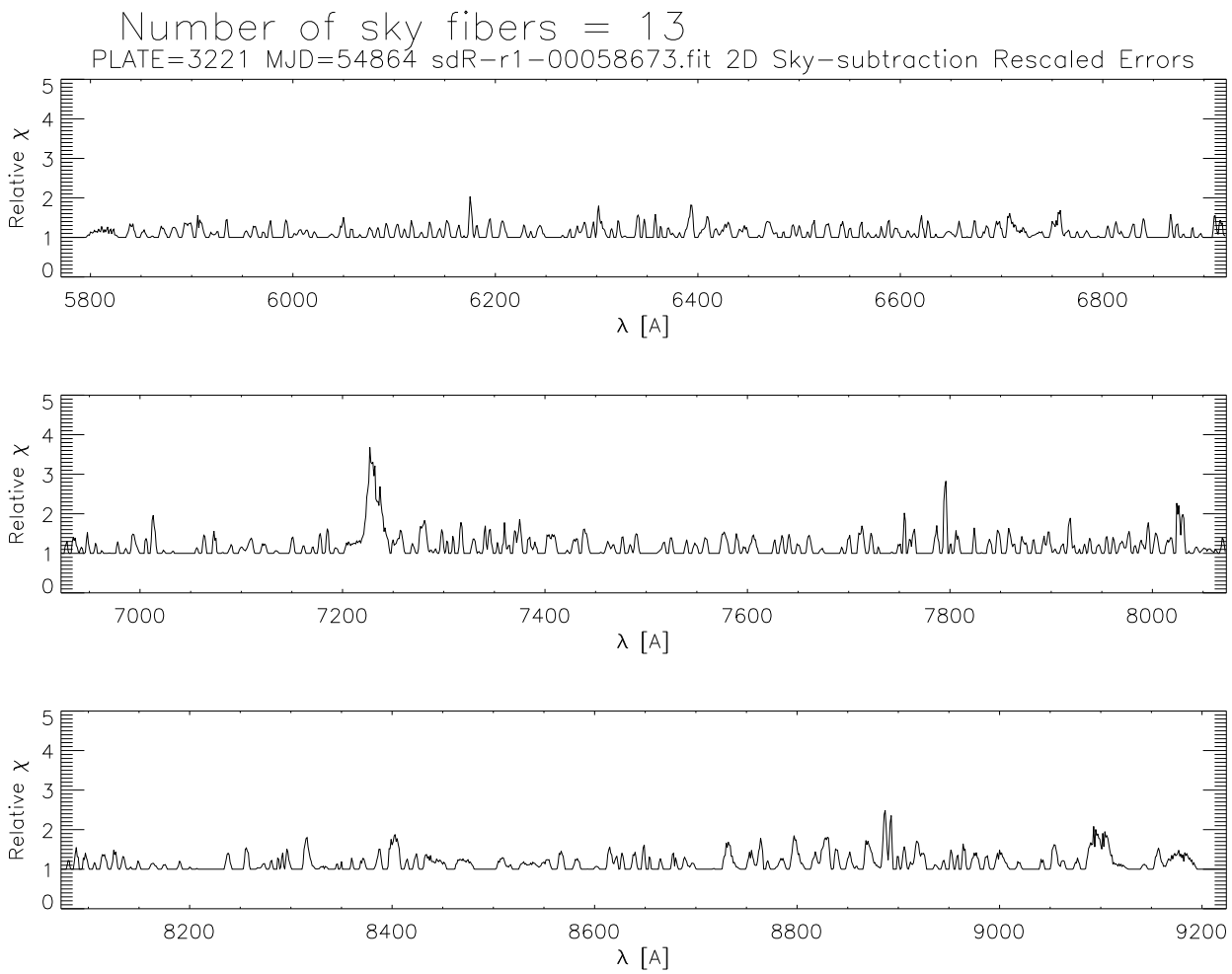

PLATE=3221 MJD=54864 sdR-r1-00058673.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

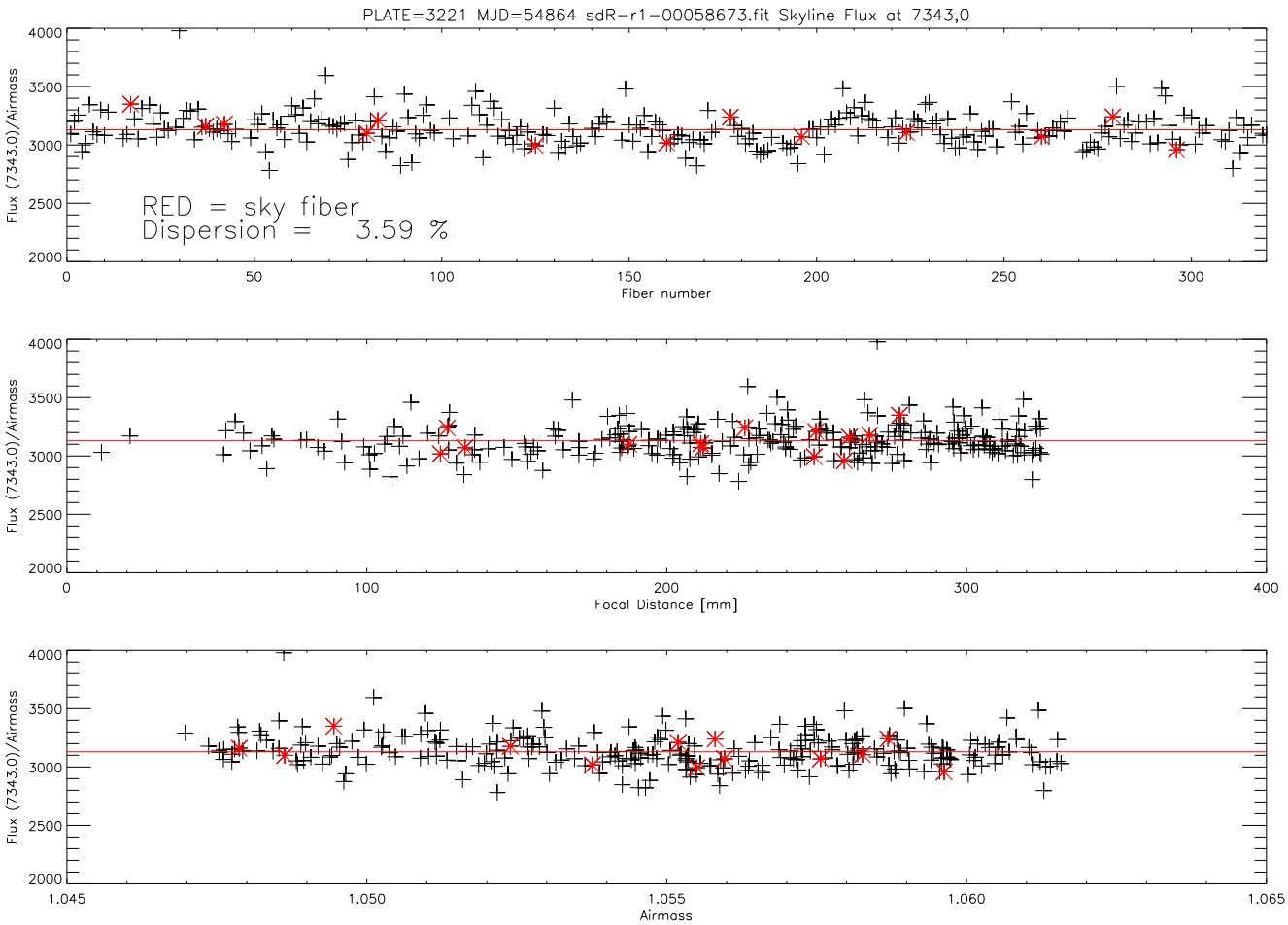

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058673.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

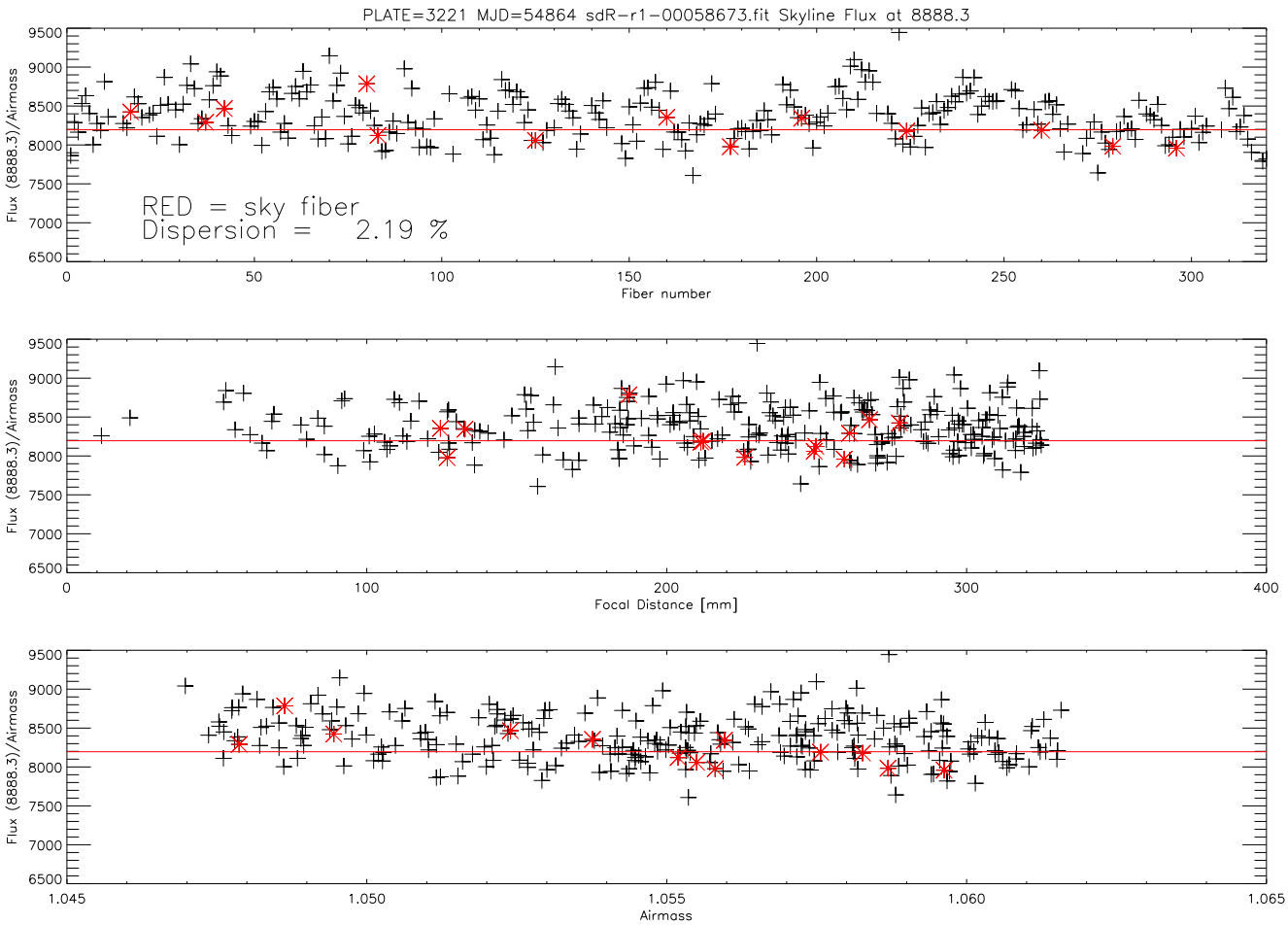

PLATE=3221 MJD=54864 sdR-r1-00058673.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

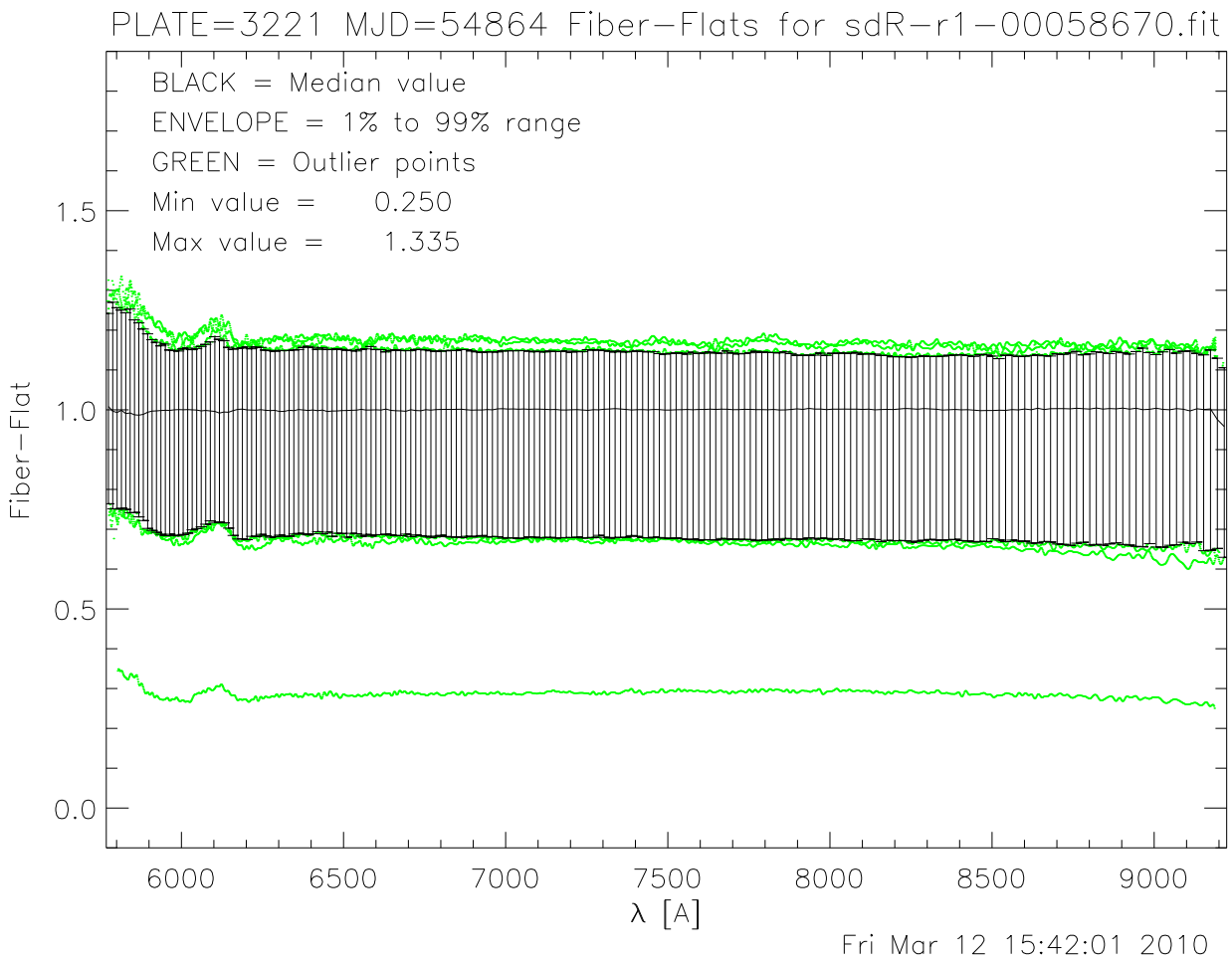

PLATE=3221 MJD=54864 sdR-r1-00058673.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

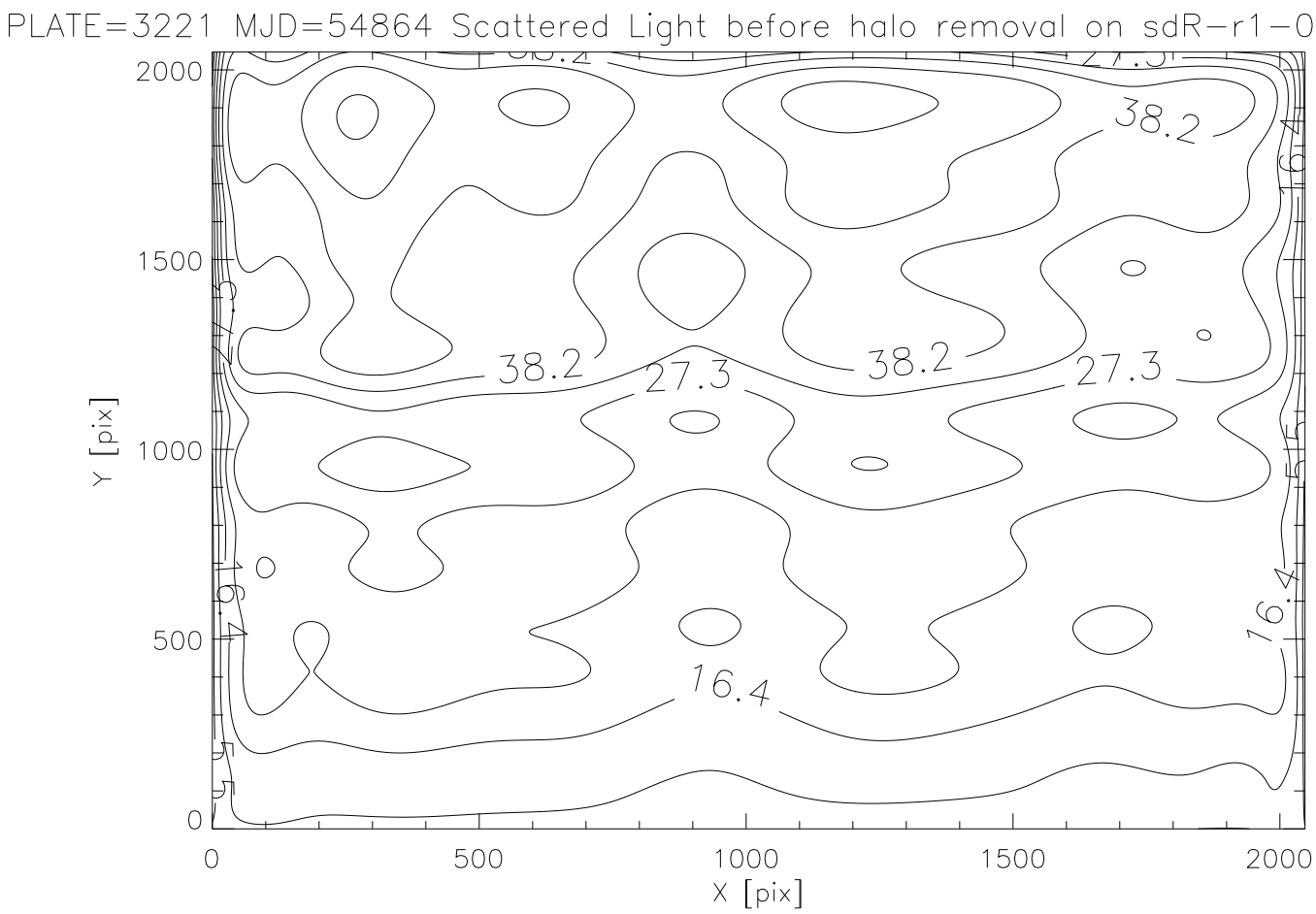

PLATE=3221 MJD=54864 sdR-r1-00058673.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

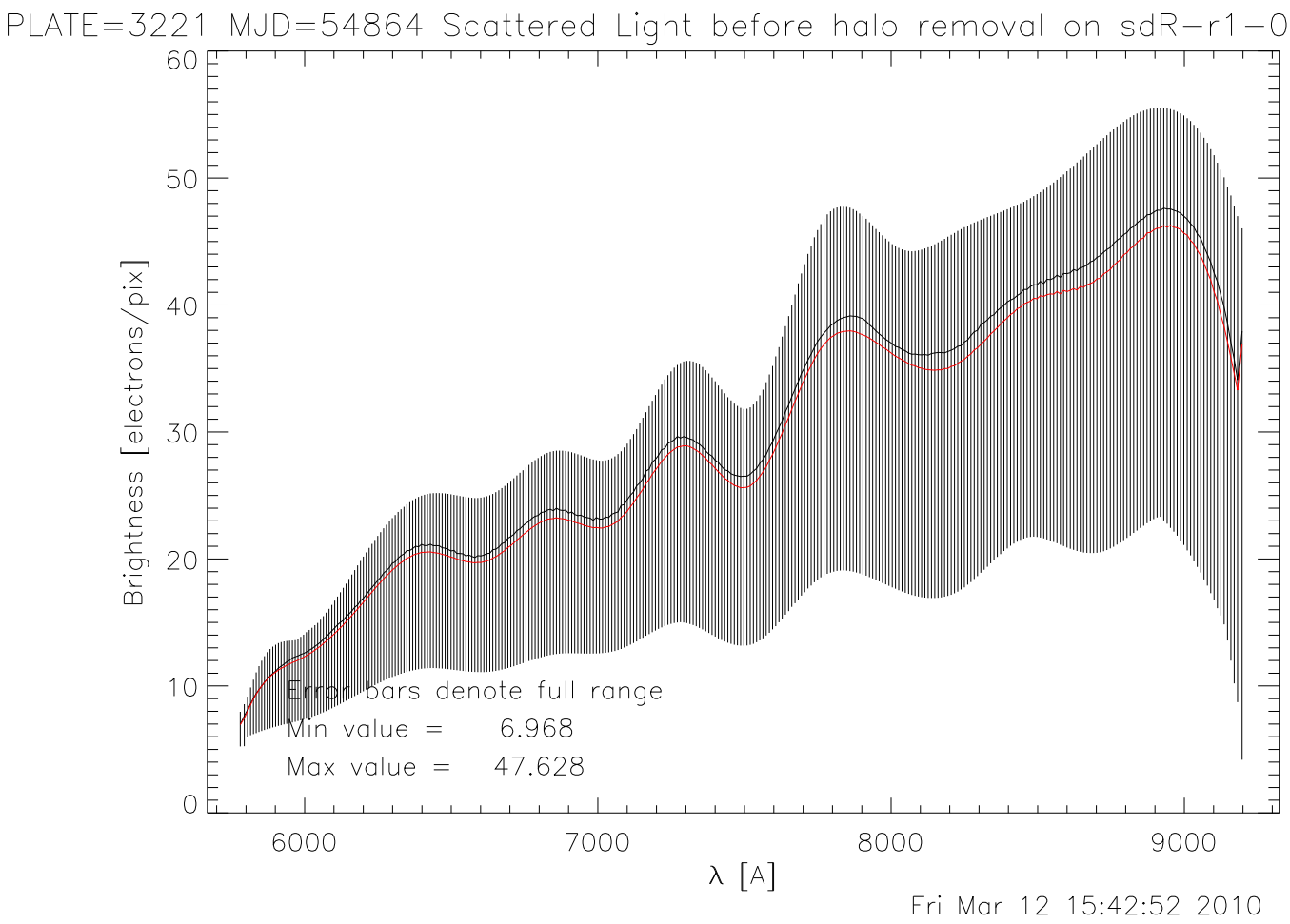

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058673.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

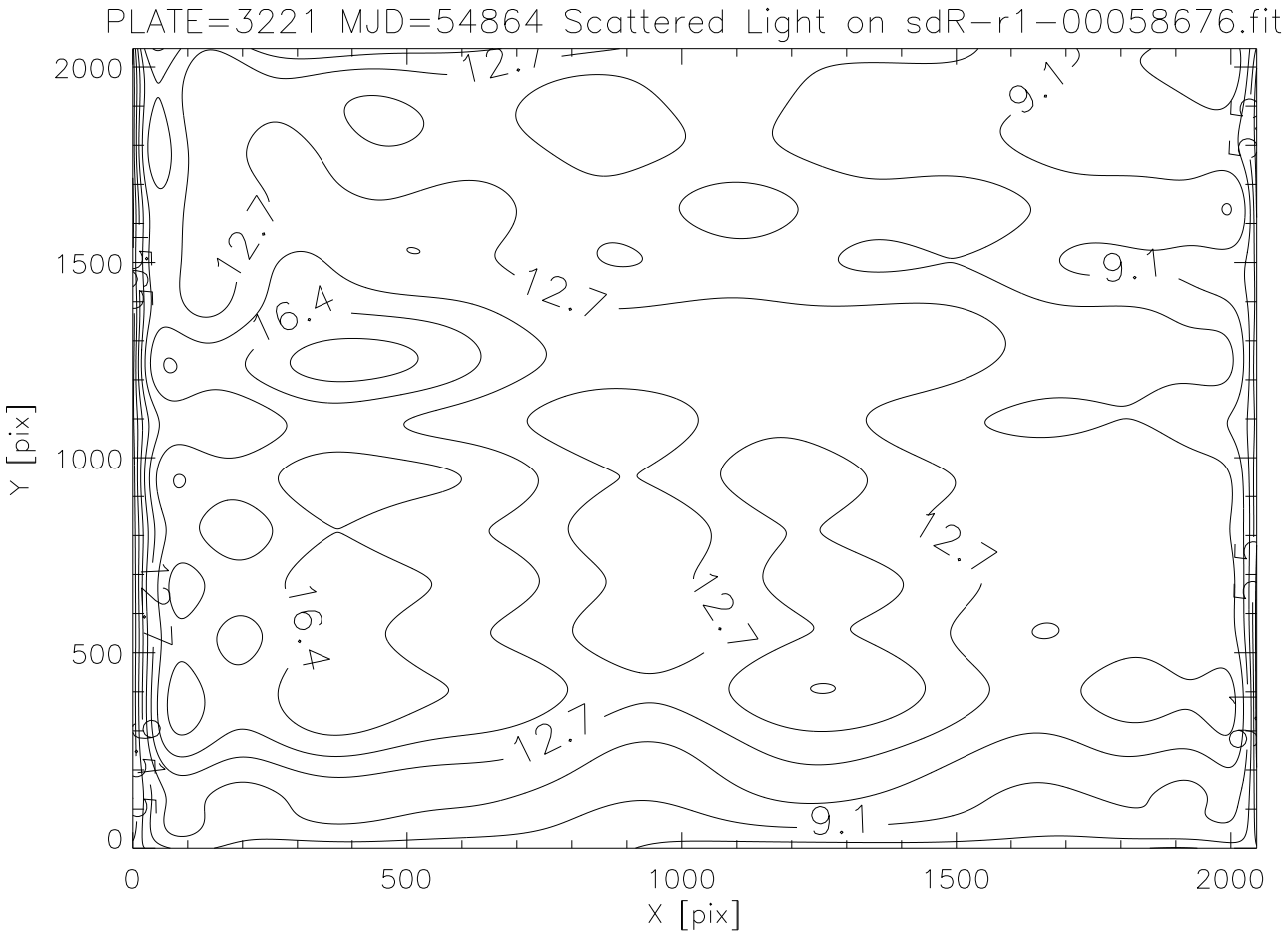

PLATE=3221 MJD=54864 sdR-r1-00058673.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.59 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

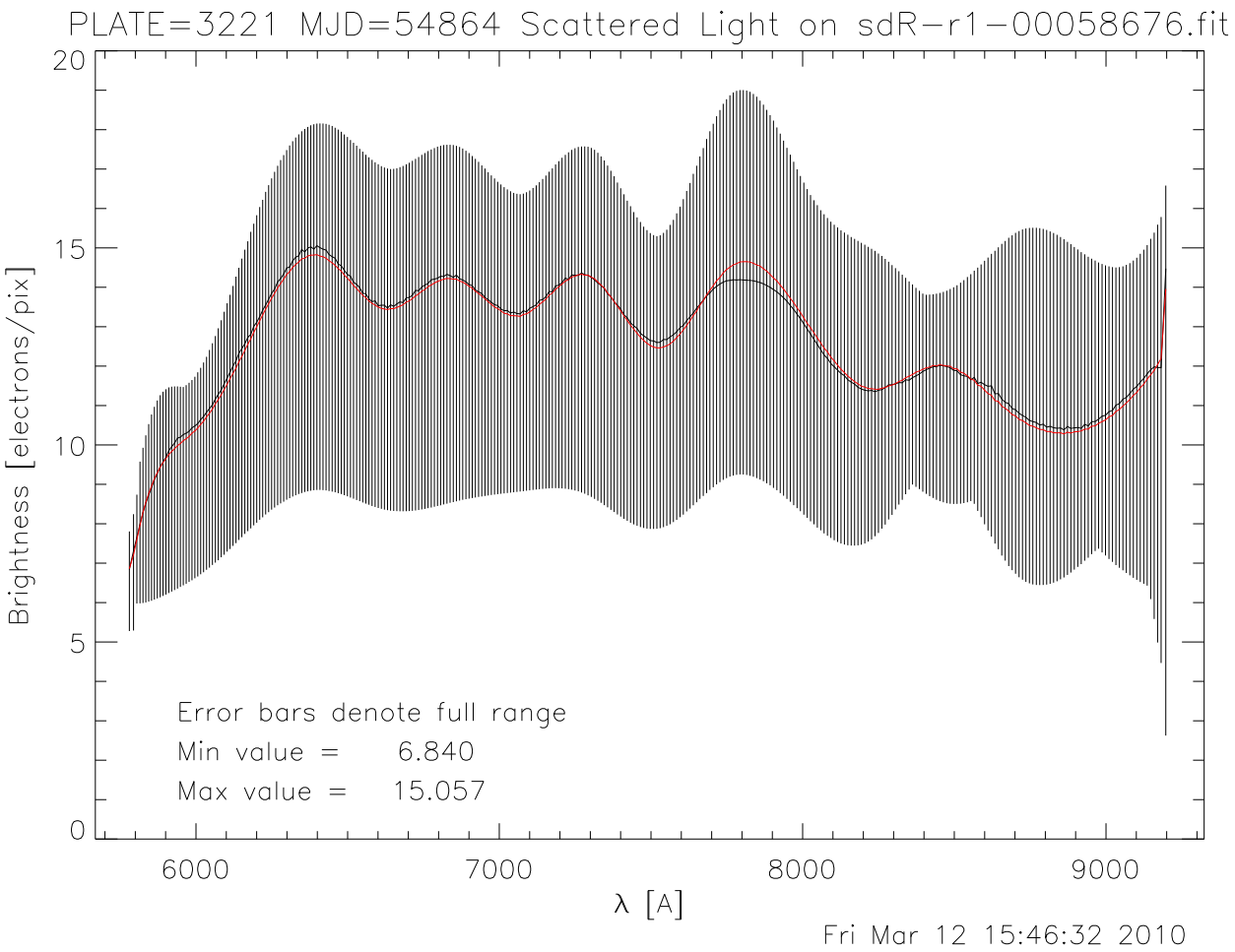

PLATE=3221 MJD=54864 sdR-r1-00058673.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.19 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

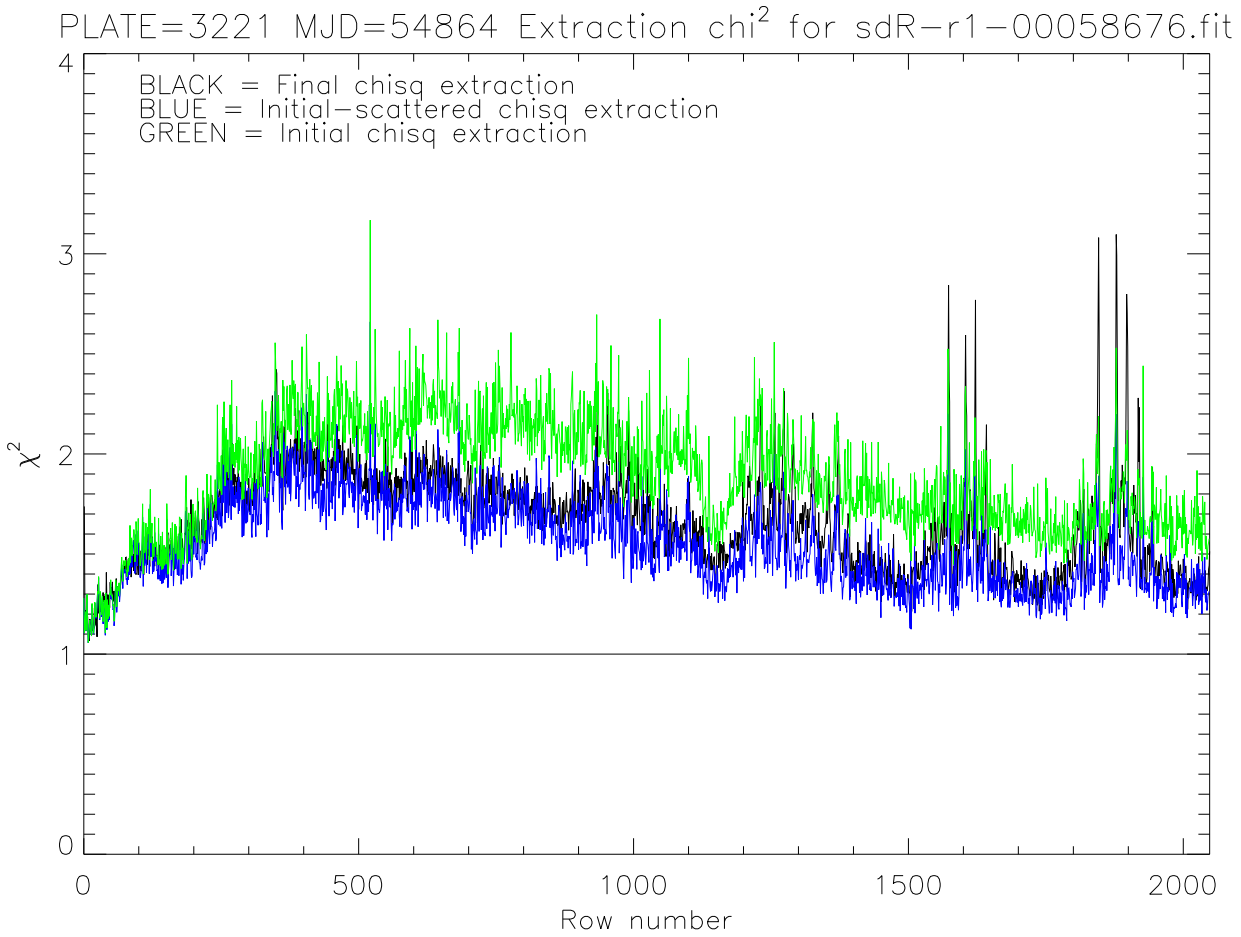

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r1−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.250
Max value = 1.335
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 15:42:01 2010

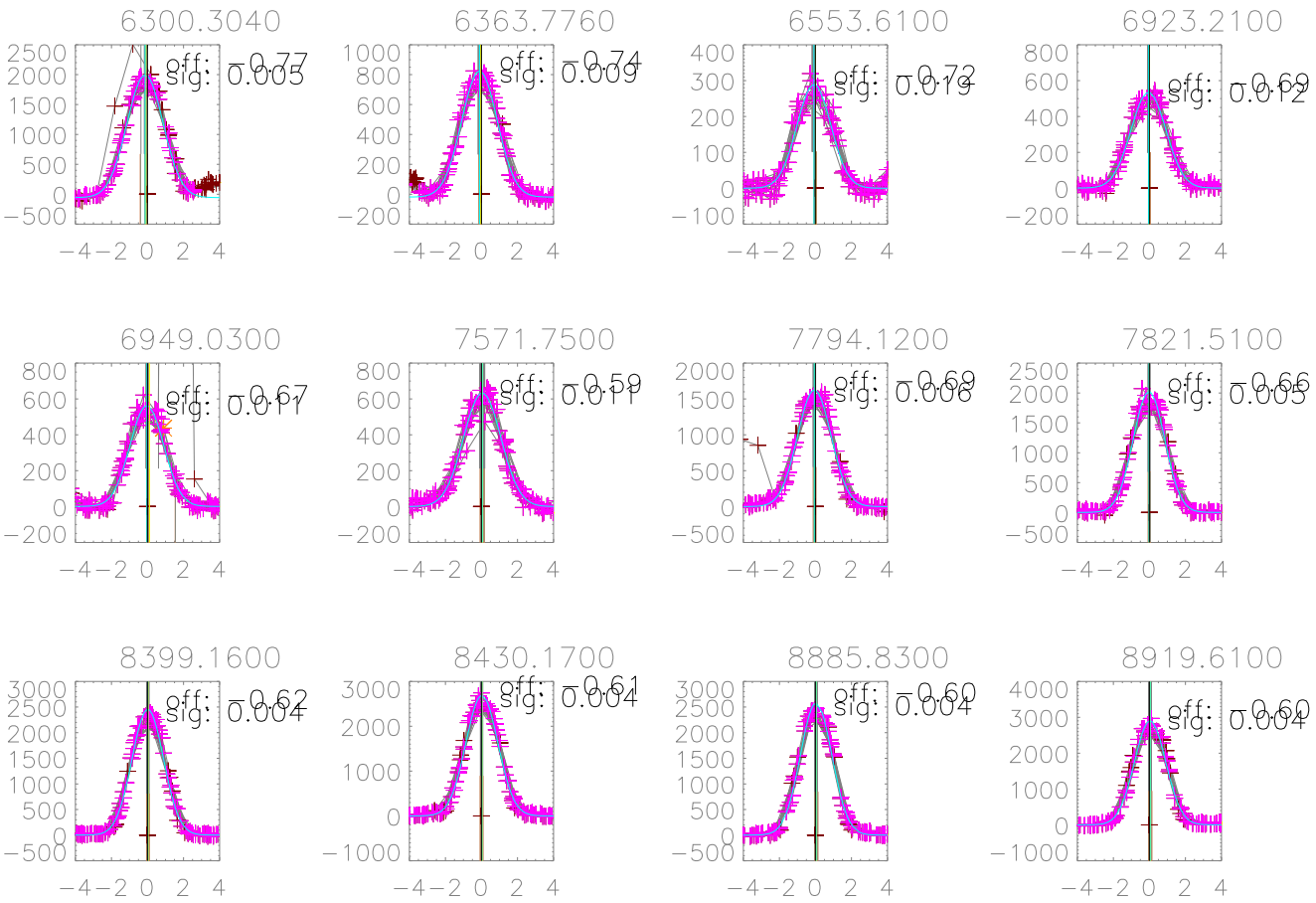

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058676.fi
38.2
27.3
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

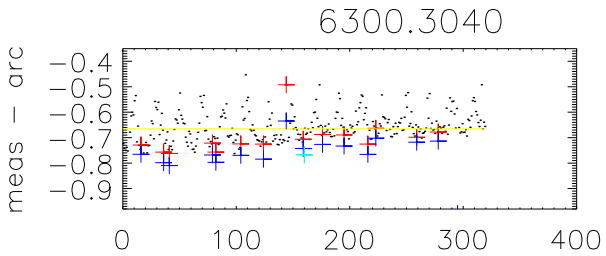

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r1-00058676.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.968
Max value = 47.628
Fri Mar 12 15:42:52 2010

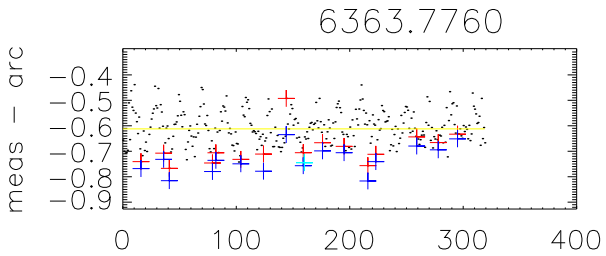

PLATE=3221 MJD=54864 Scattered Light on sdR−r1−00058676.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
16.4
9.1

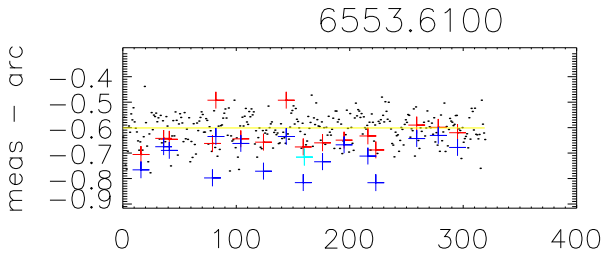

PLATE=3221 MJD=54864 Scattered Light on sdR-r1-00058676.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.840
Max value = 15.057
Fri Mar 12 15:46:32 2010

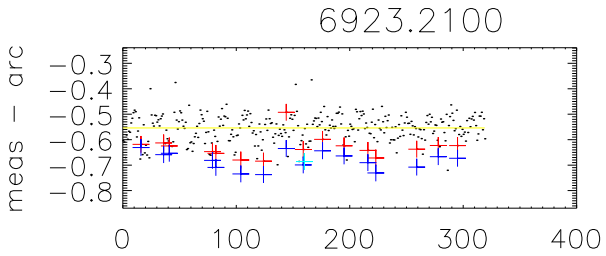

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-r1-00058676.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

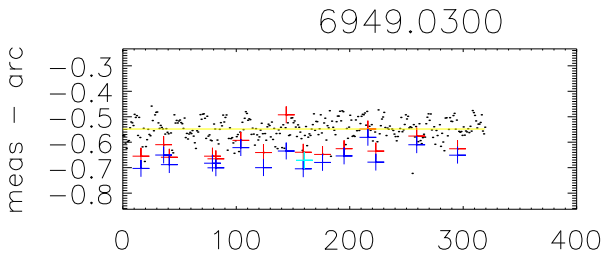

6300.3040
off: 0.77
sig: 0.005
6363.7760
off: 0.74
sig: 0.009
6553.6100
off: 0.72
sig: 0.013
6923.2100
off: 0.69
sig: 0.012
6949.0300
off: 0.67
sig: 0.011
7571.7500
off: 0.59
sig: 0.011
7794.1200
off: 0.68
sig: 0.006
7821.5100
off: 0.66
sig: 0.005
8399.1600
off: 0.62
sig: 0.004
8430.1700
off: 0.61
sig: 0.004
8885.8300
off: 0.60
sig: 0.004
8919.6100
off: 0.60
sig: 0.004

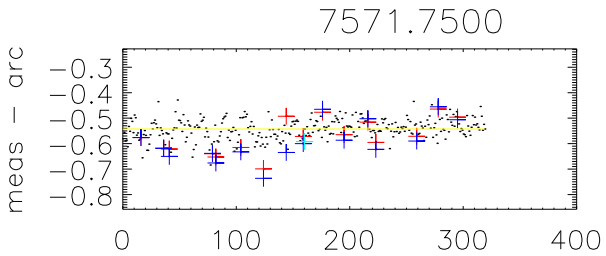

6300.3040
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

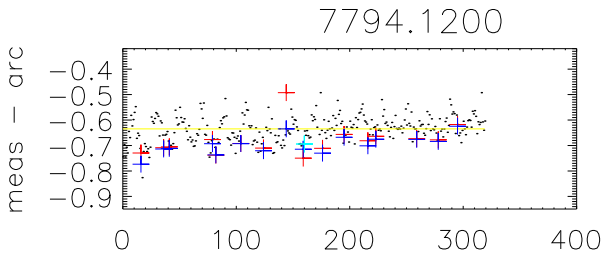

6363.7760
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

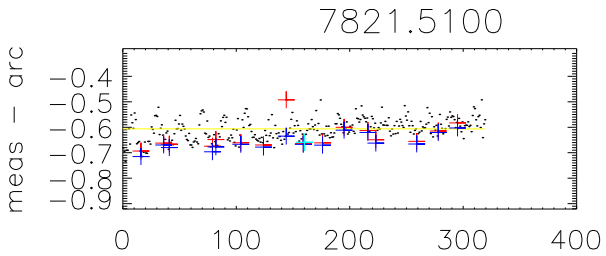

6553.6100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

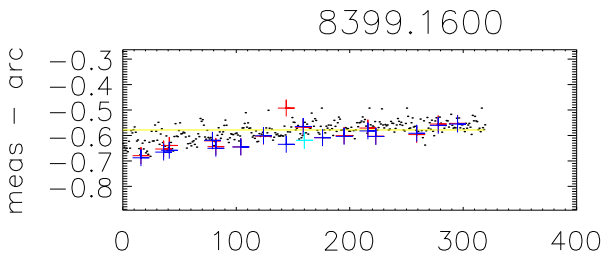

6923.2100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

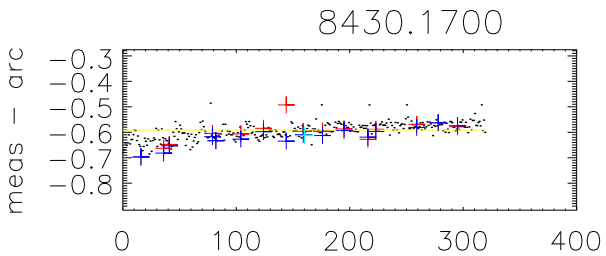

6949.0300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

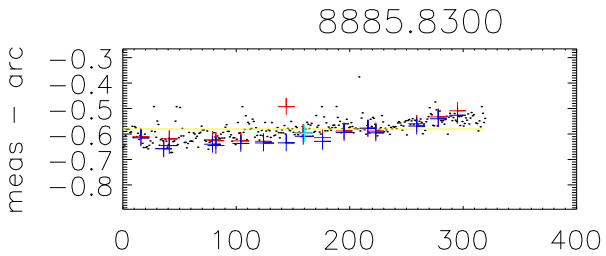

7571.7500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

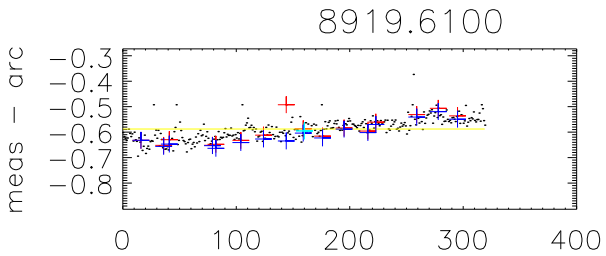

7794.1200
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

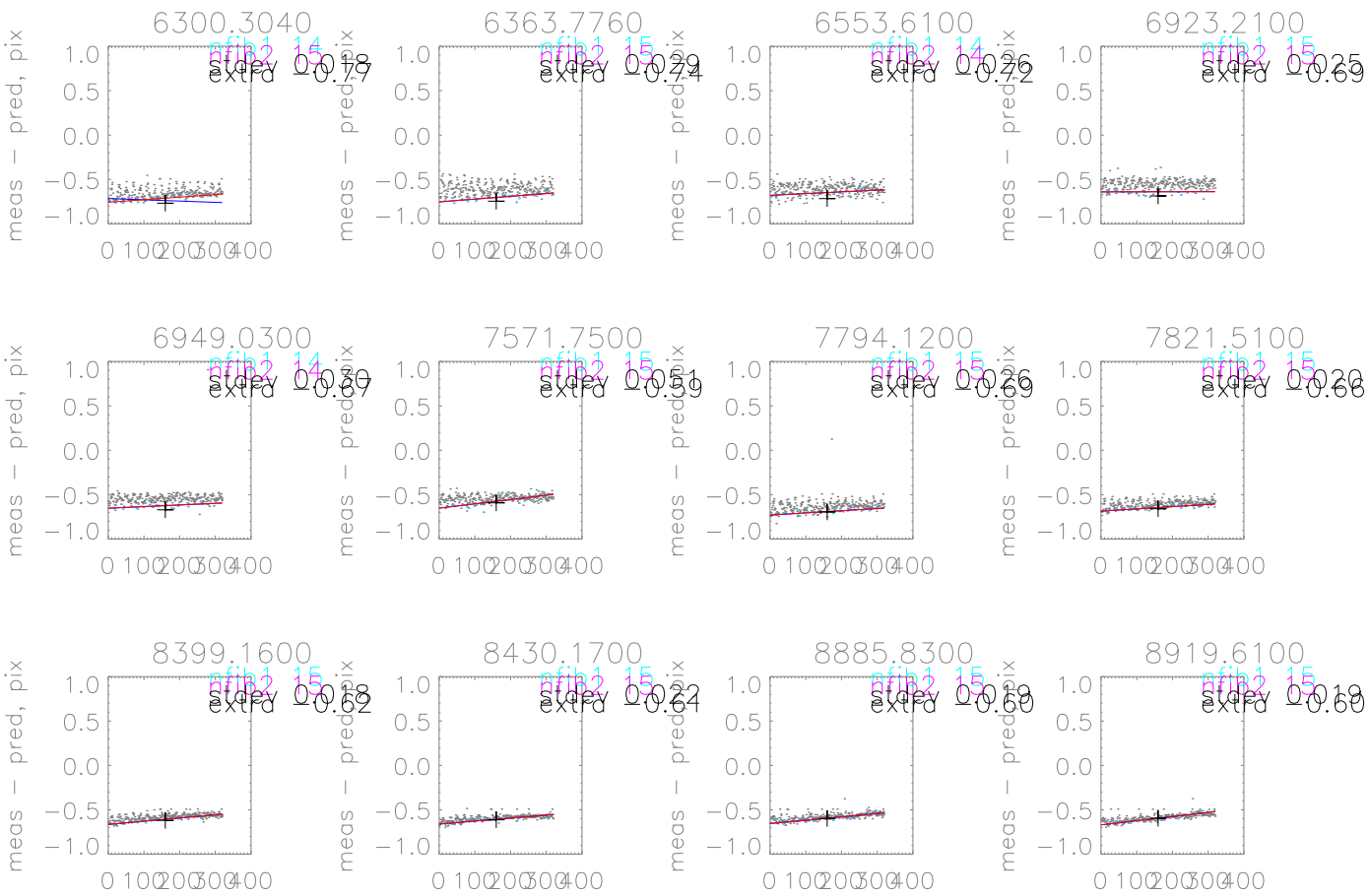

7821.5100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

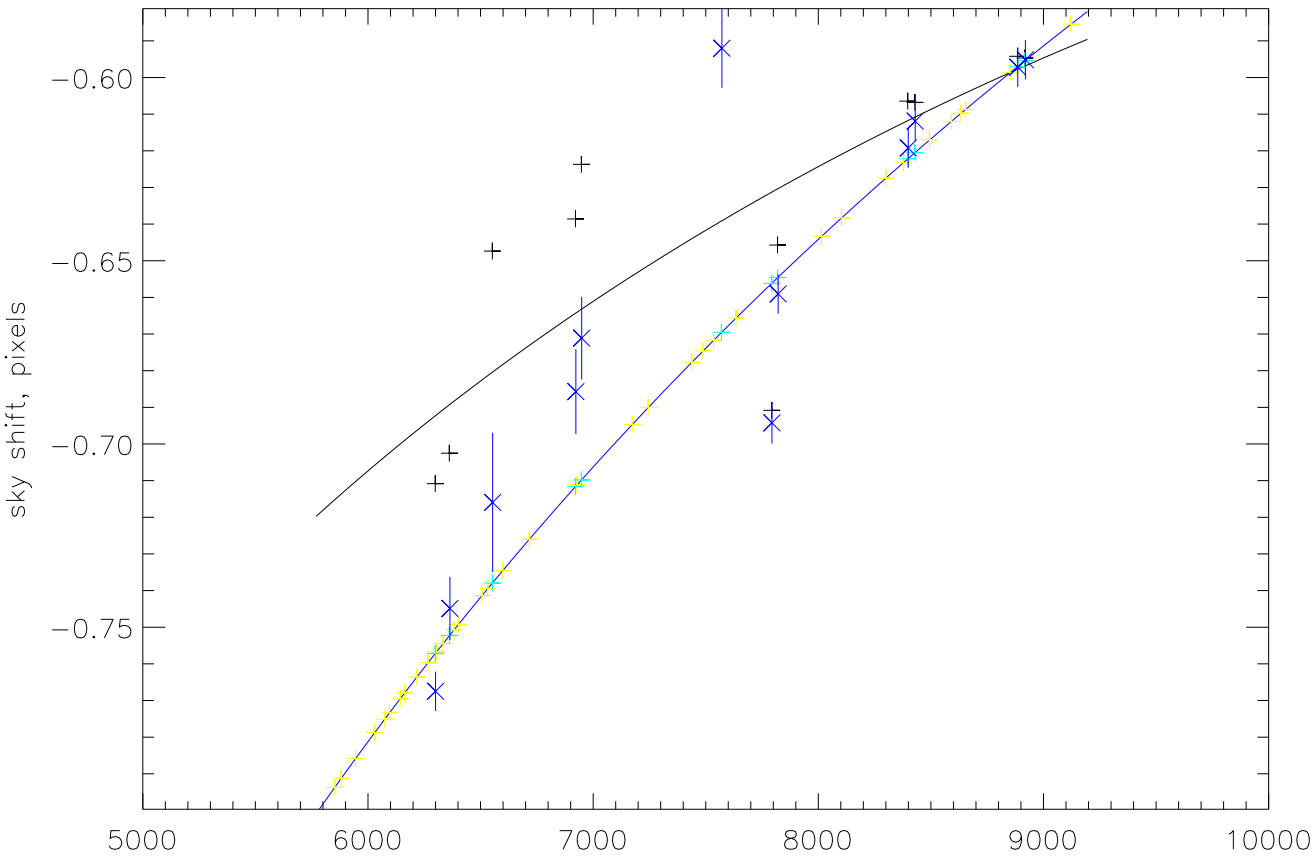

8399.1600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400


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

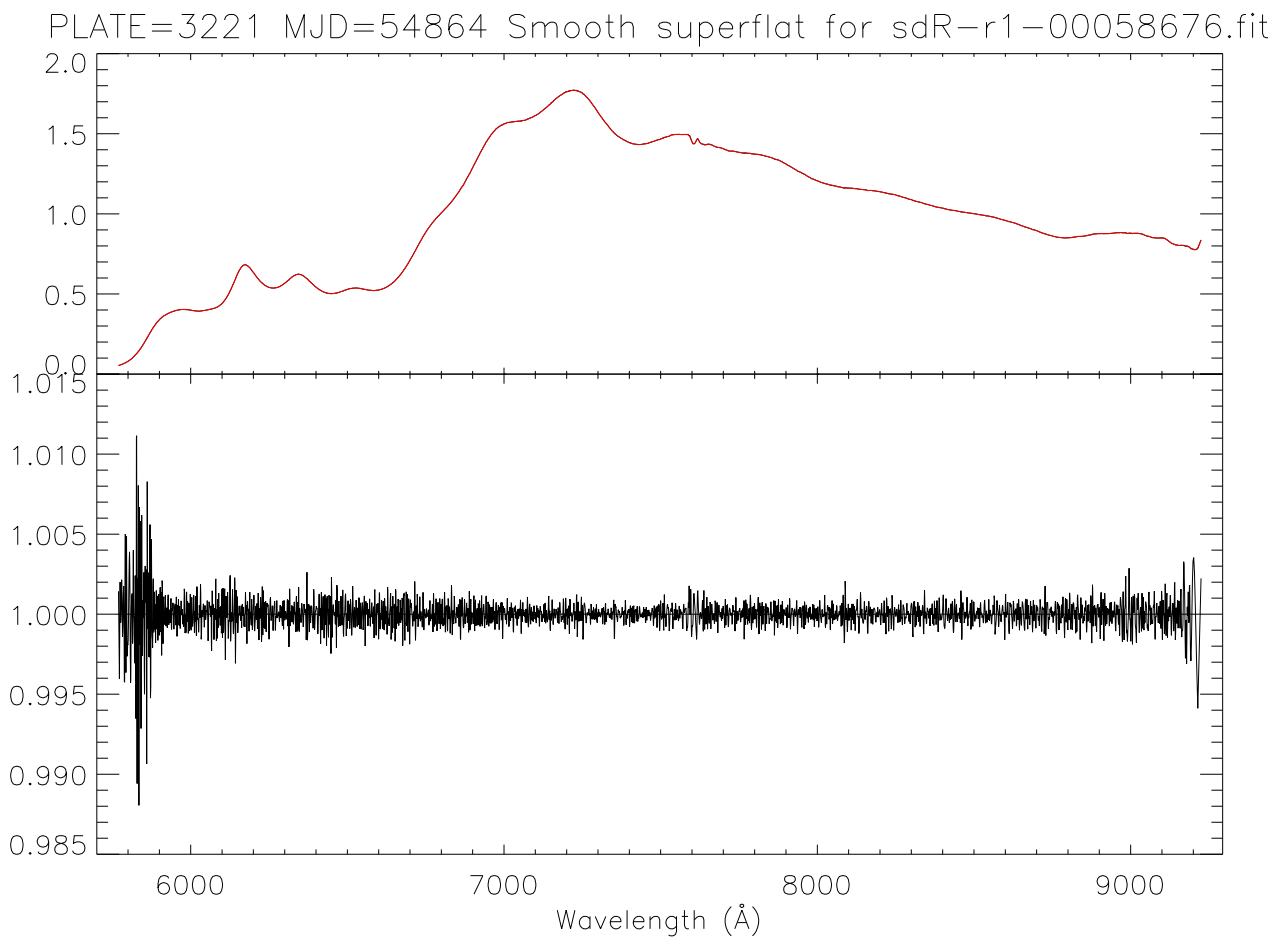

8885.8300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

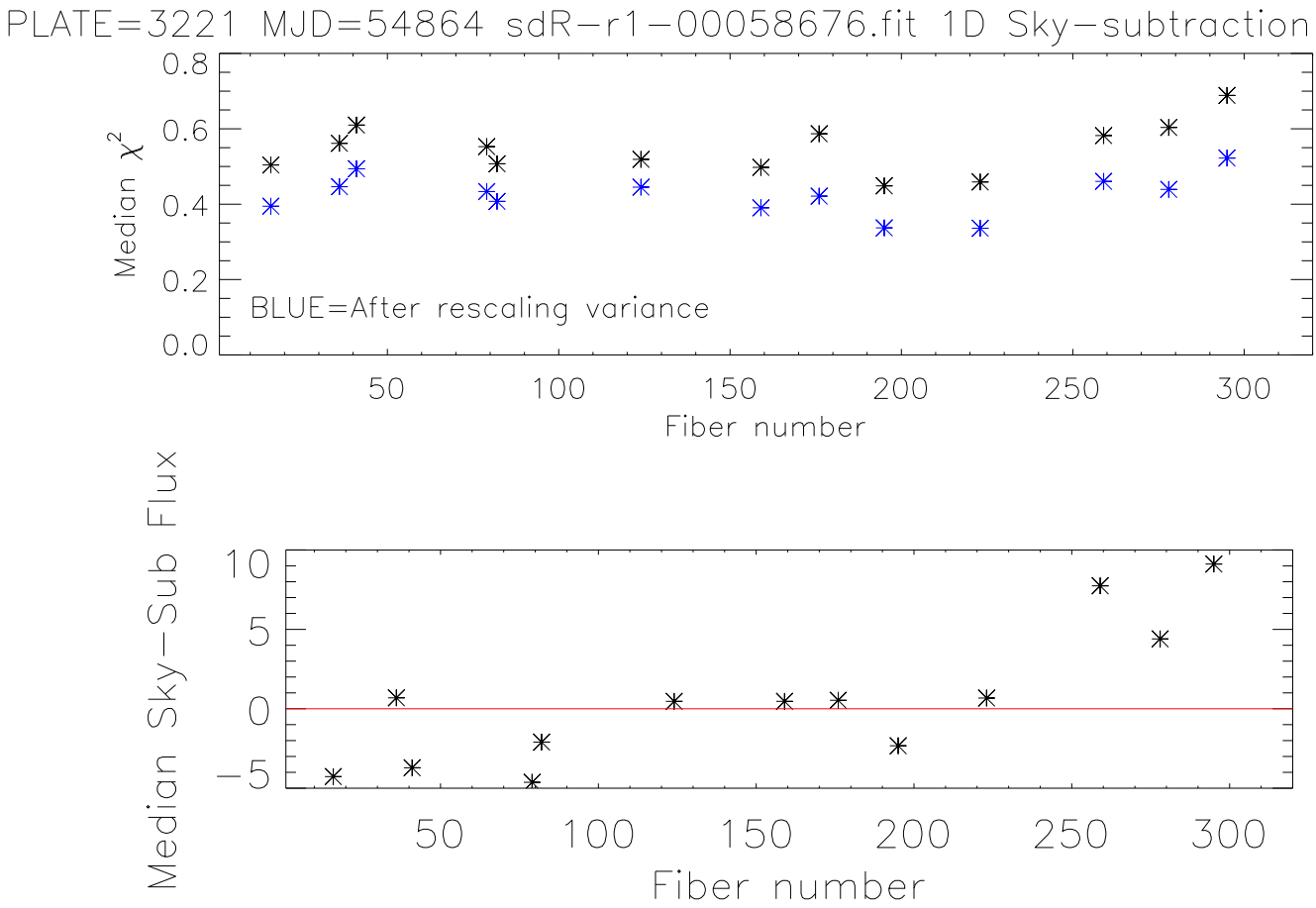

8919.6100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

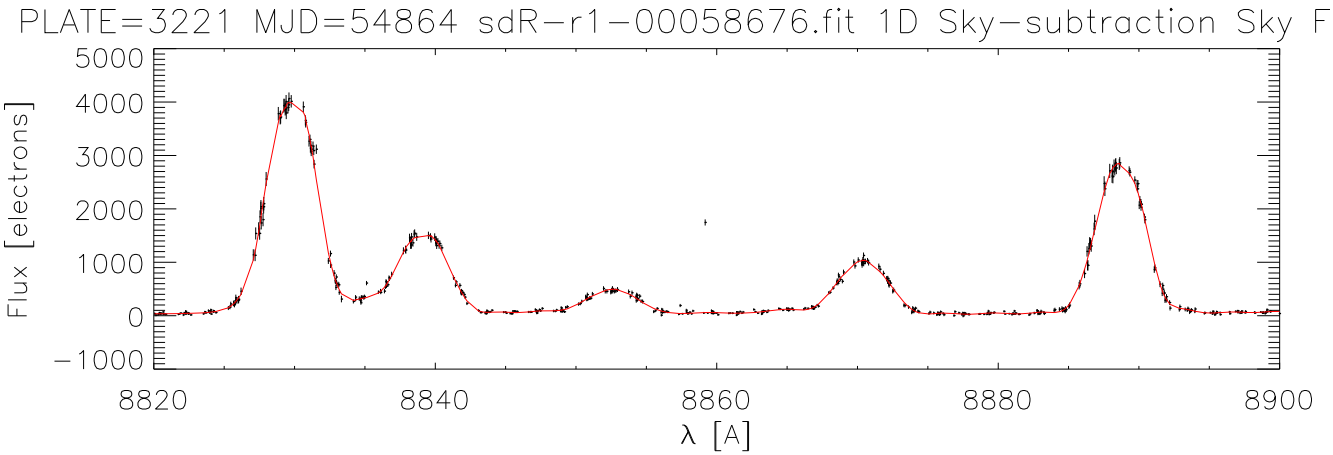

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 14
mfib2 15
stdev 0.018
extrd 0.77
stdev 0.029
extrd 0.74
stdev 0.026
extrd 0.72
stdev 0.025
extrd 0.69
stdev 0.030
extrd 0.67
stdev 0.051
extrd 0.59
stdev 0.026
extrd 0.69
stdev 0.020
extrd 0.66
stdev 0.018
extrd 0.62
stdev 0.022
extrd 0.64
stdev 0.019
extrd 0.60
stdev 0.019
extrd 0.60
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

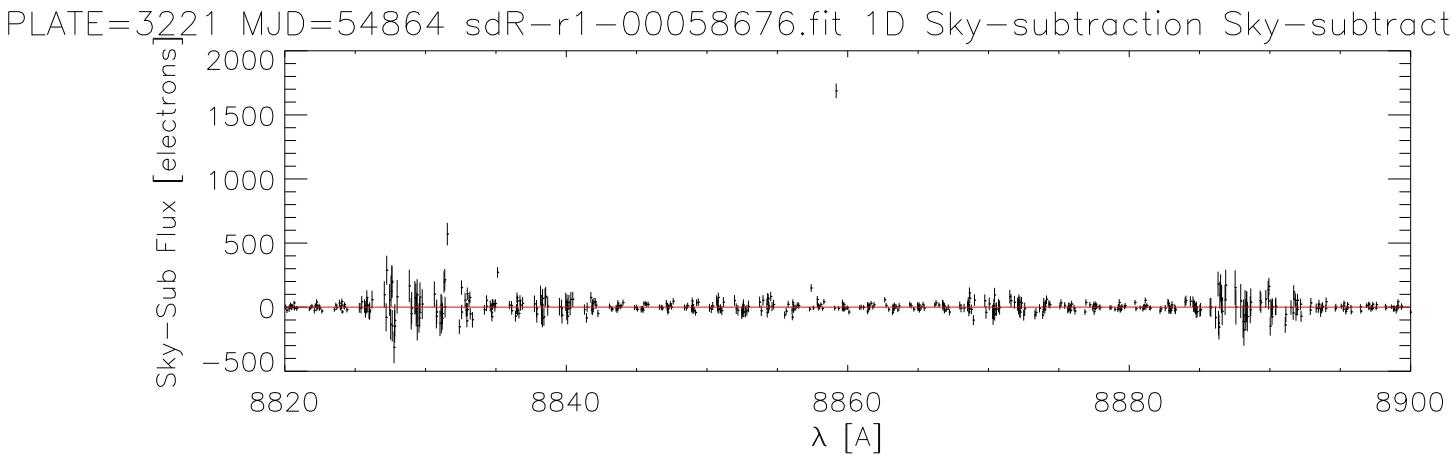

−0.60
−0.65
−0.70
−0.75
sky shift, pixels
5000
6000
7000
8000
9000
10000

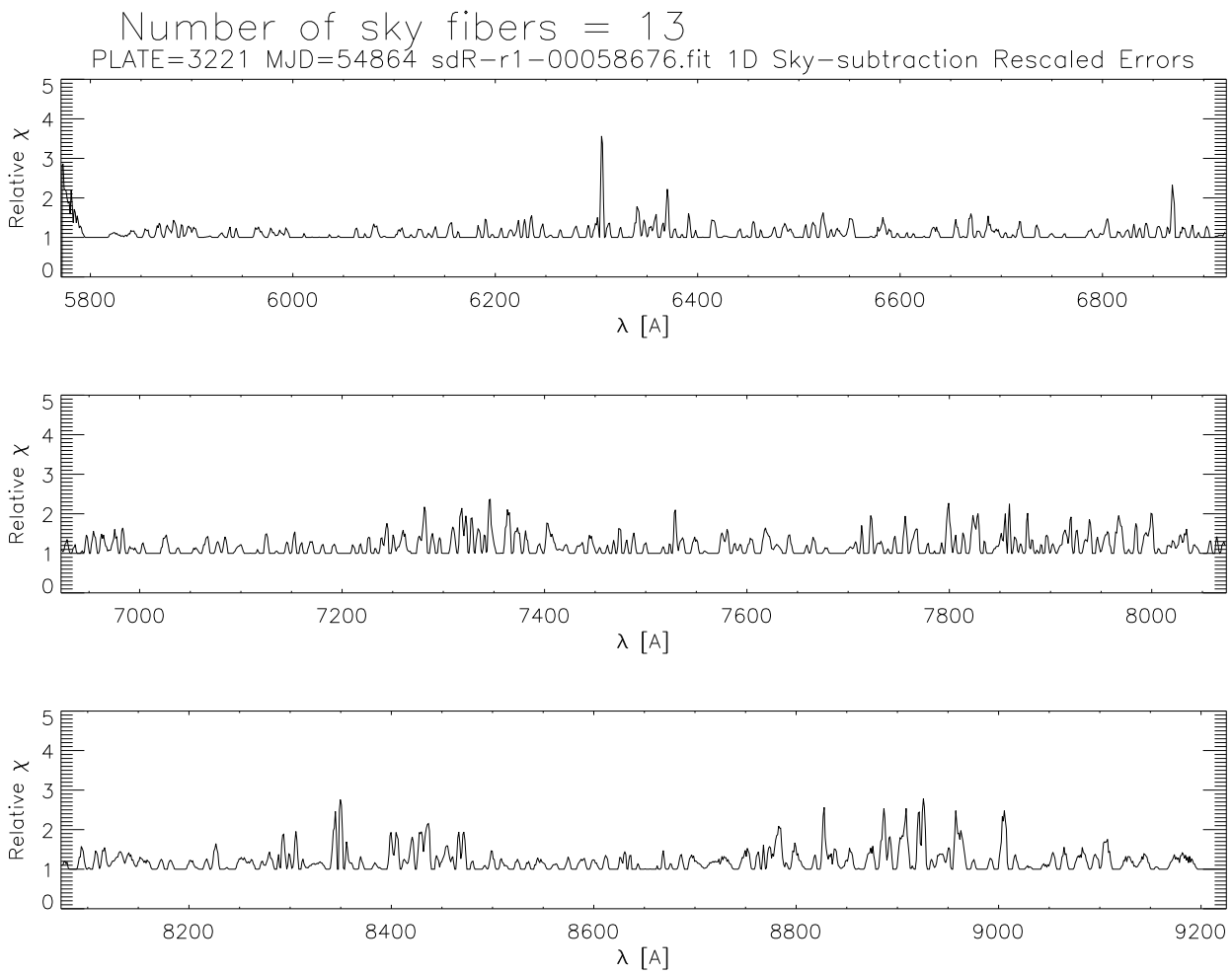
es= 0.0000

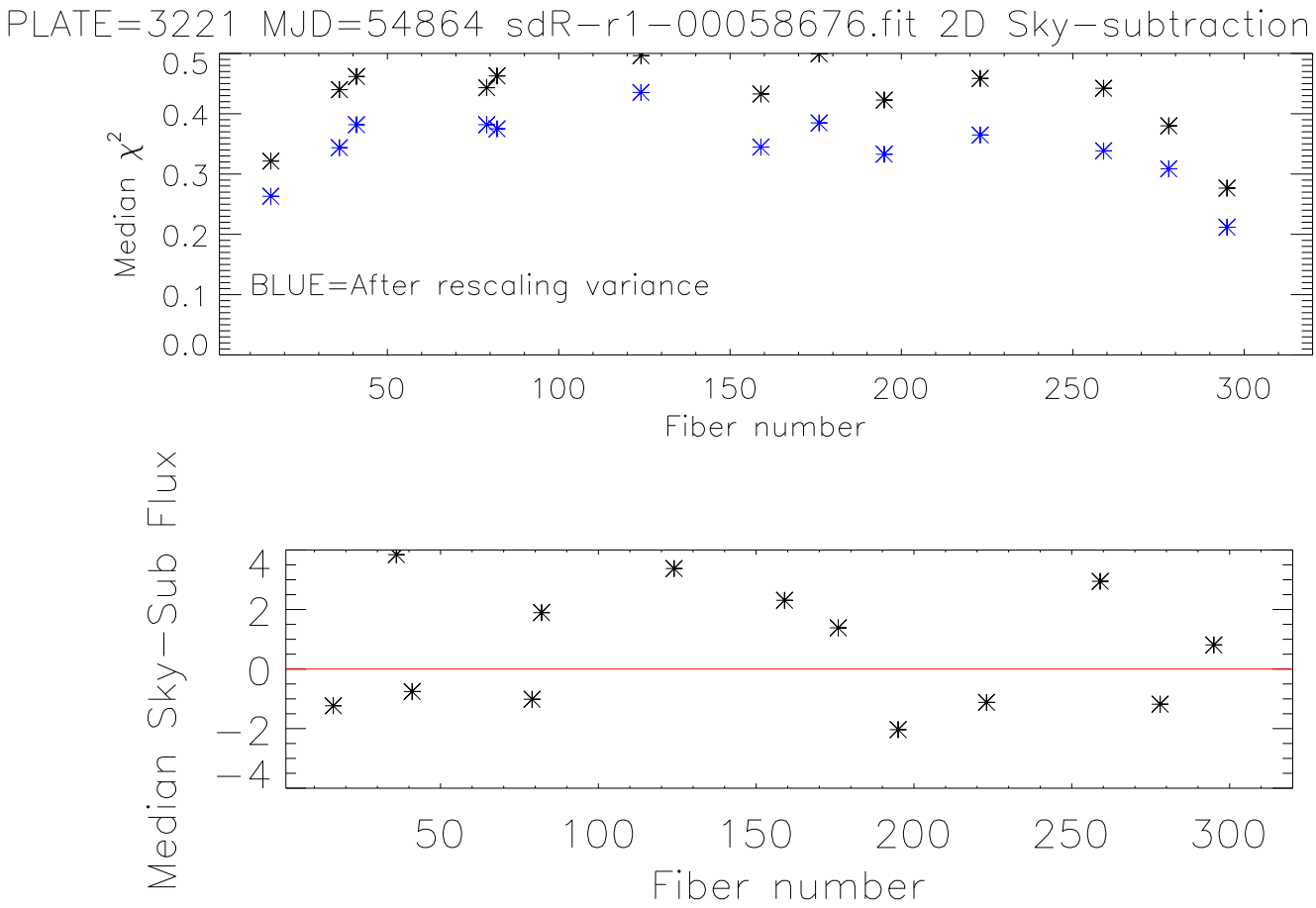

PLATE=3221 MJD=54864 Smooth superflat for sdR-r1-00058676.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

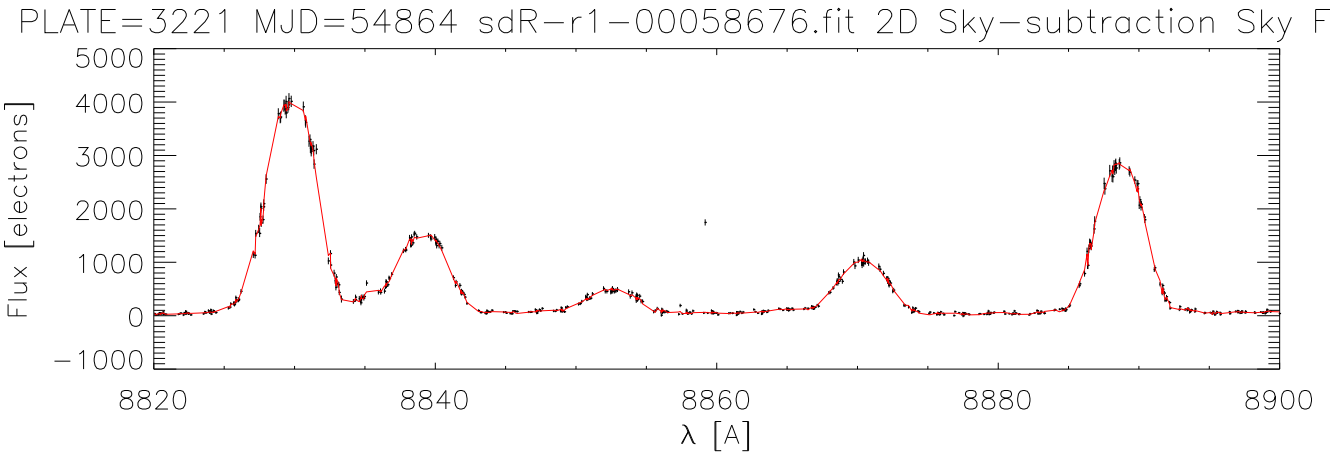

PLATE=3221 MJD=54864 sdR-r1-00058676.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
50
100
150
200
250
300
Fiber number

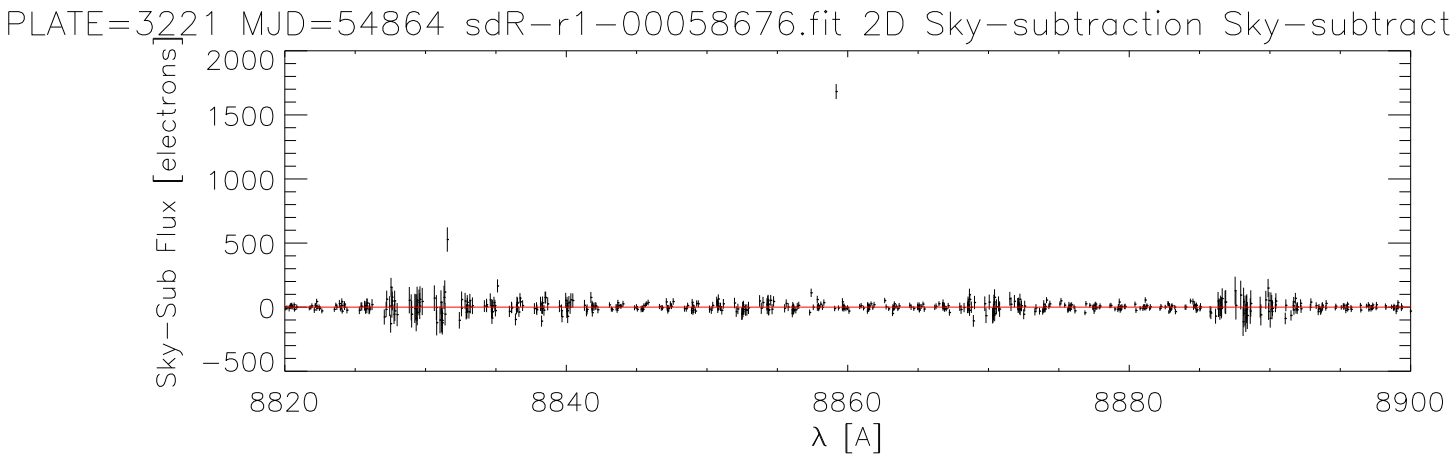

PLATE=3221 MJD=54864 sdR-r1-00058676.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

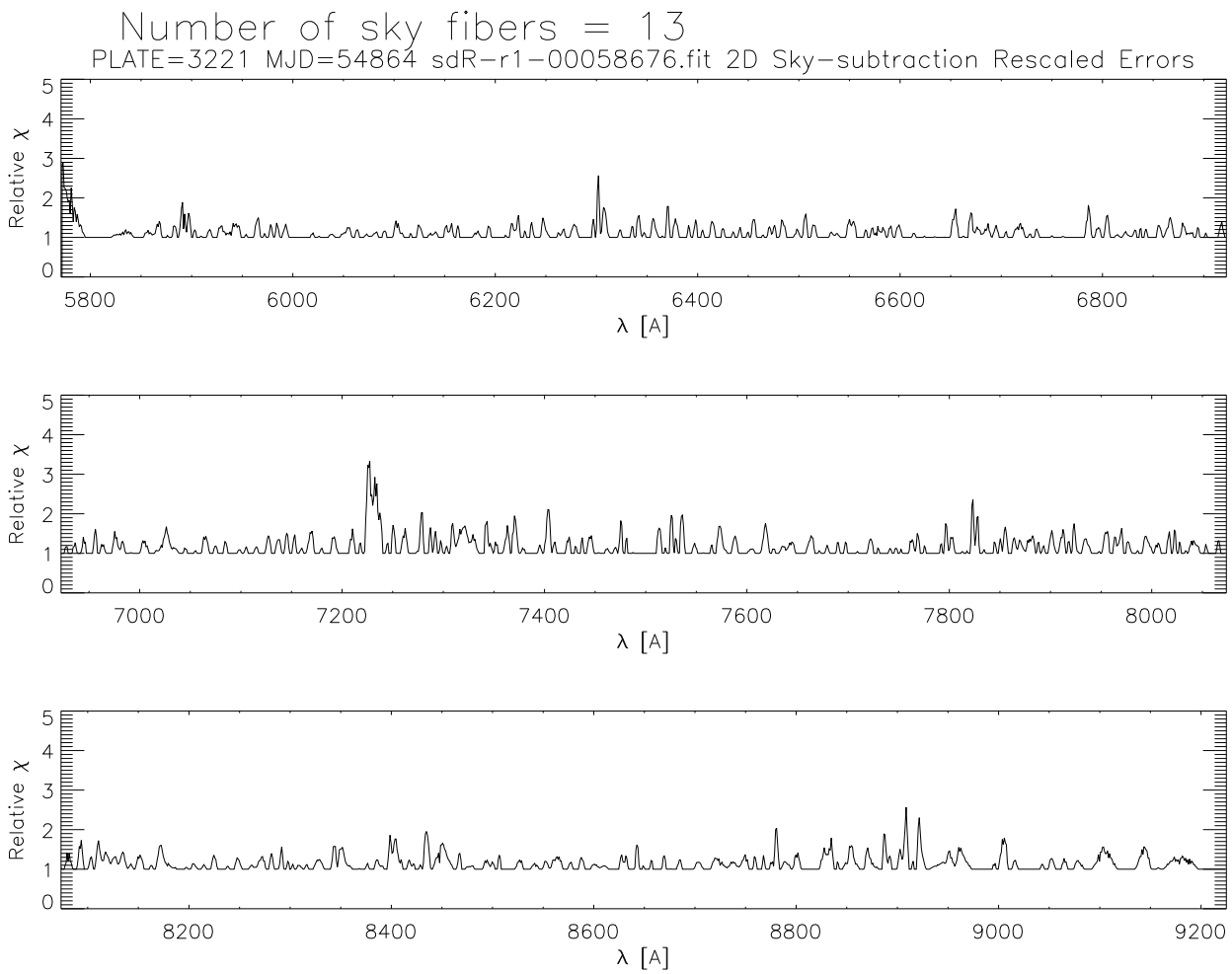

PLATE=3221 MJD=54864 sdR-r1-00058676.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

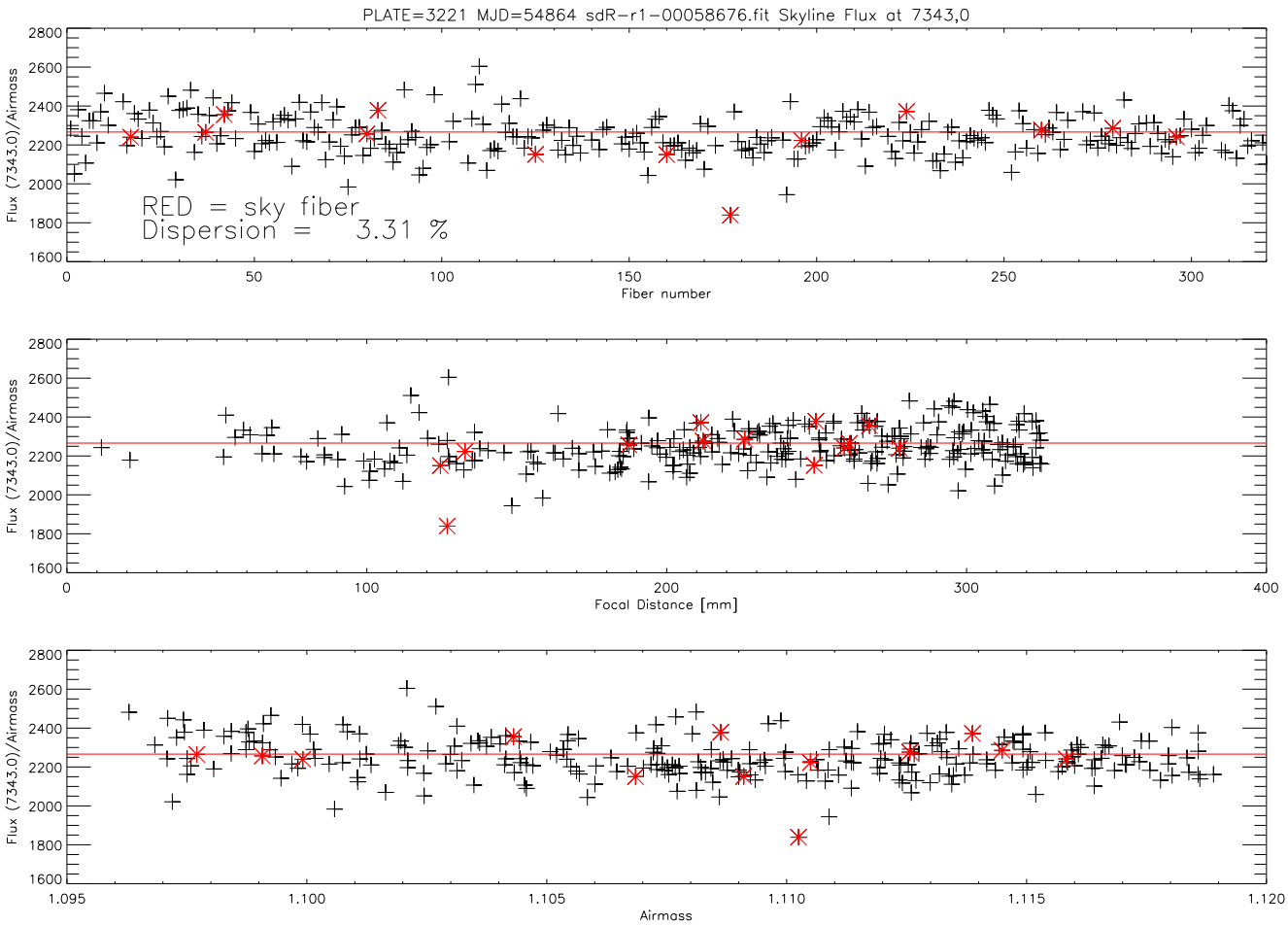

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058676.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

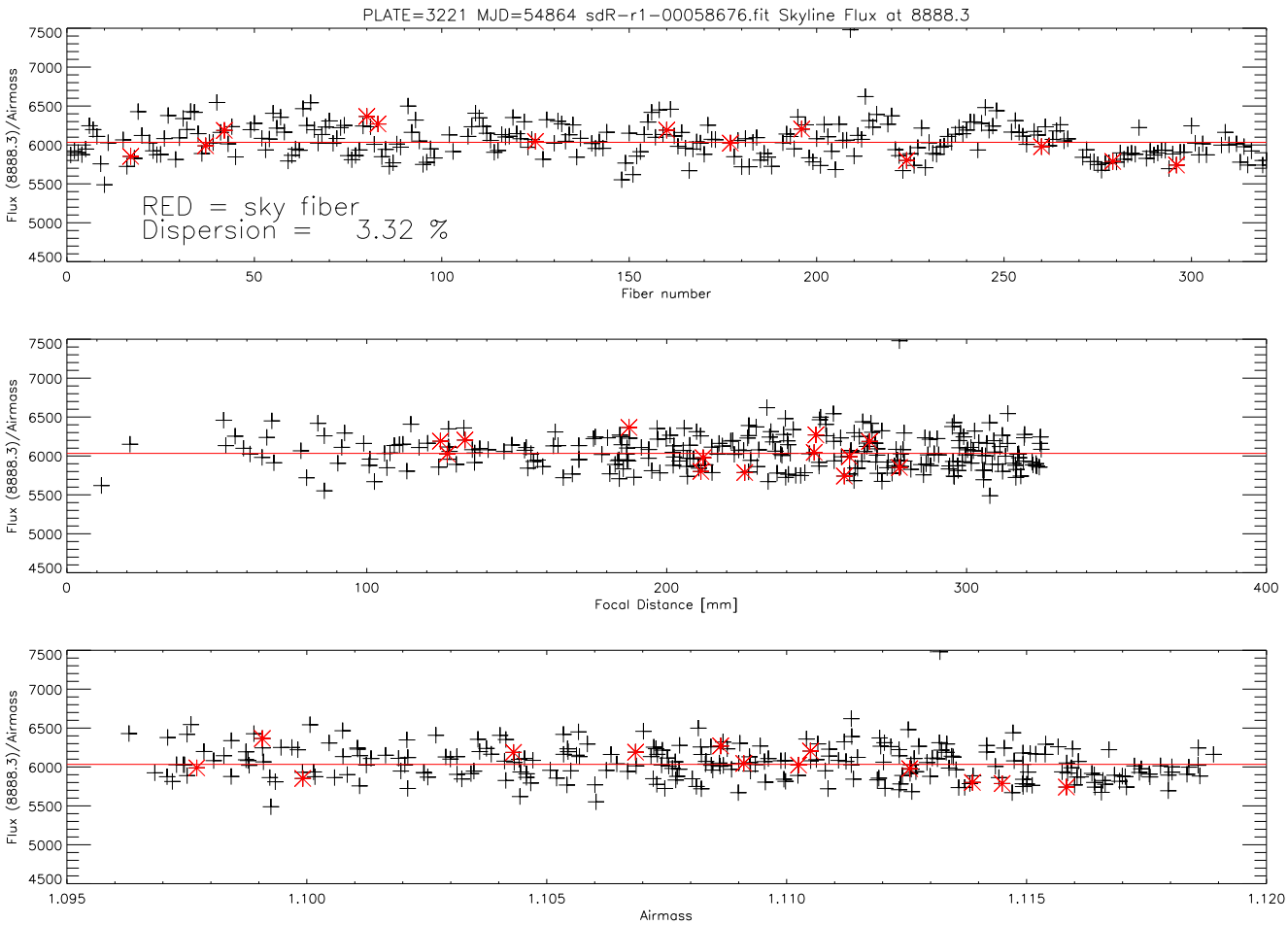

PLATE=3221 MJD=54864 sdR-r1-00058676.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

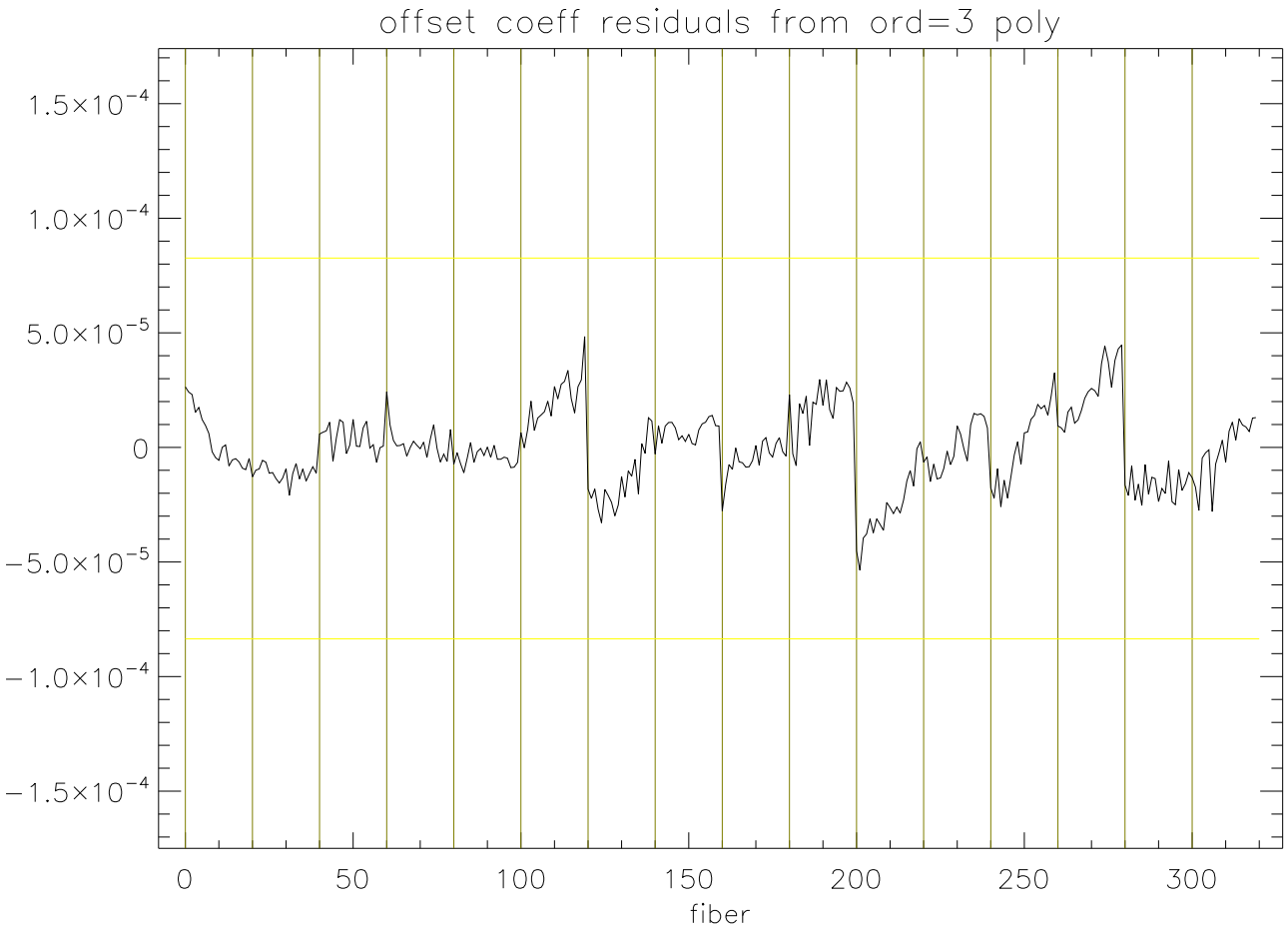

PLATE=3221 MJD=54864 sdR-r1-00058676.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

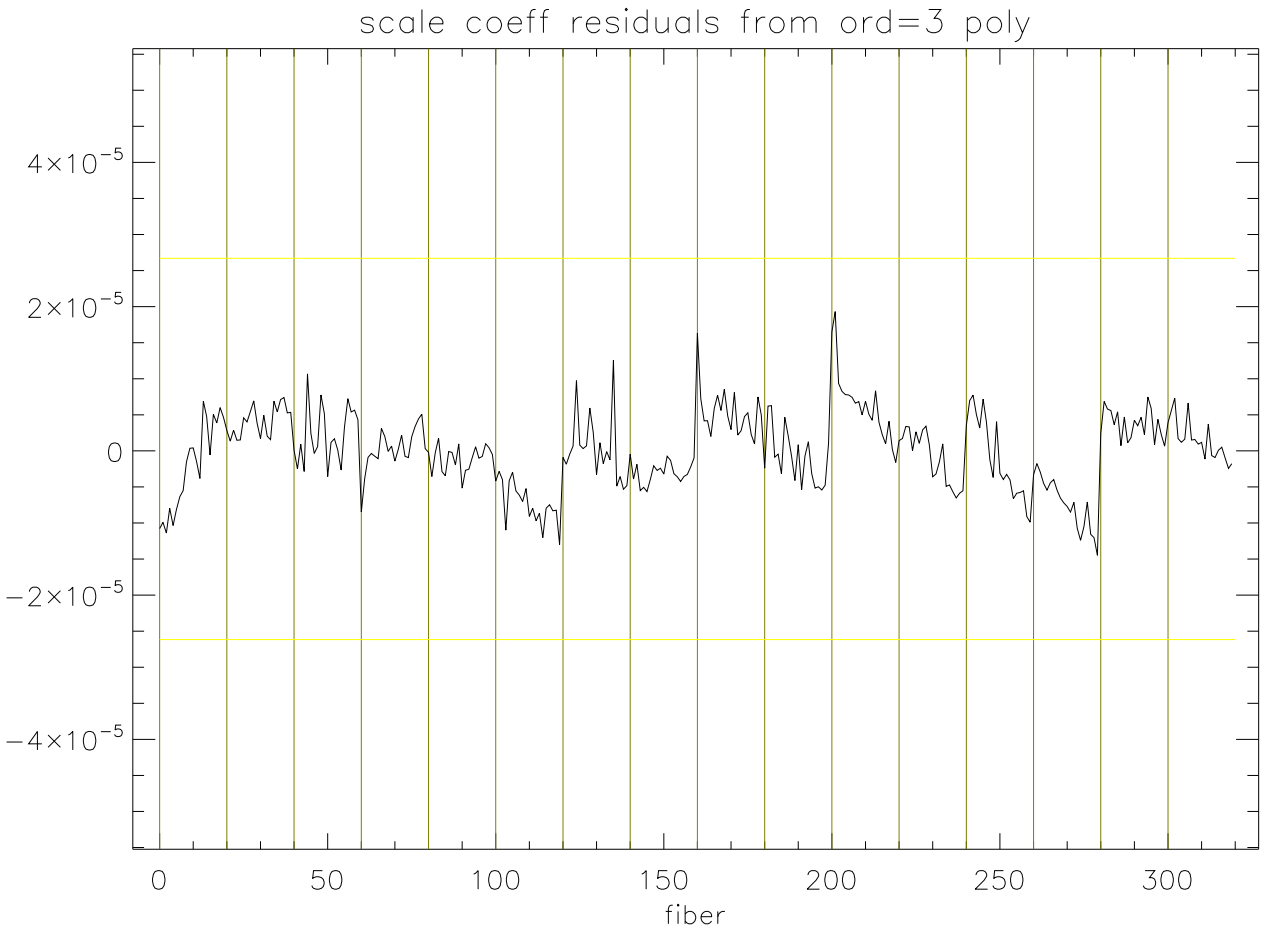

PLATE=3221 MJD=54864 sdR-r1-00058676.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

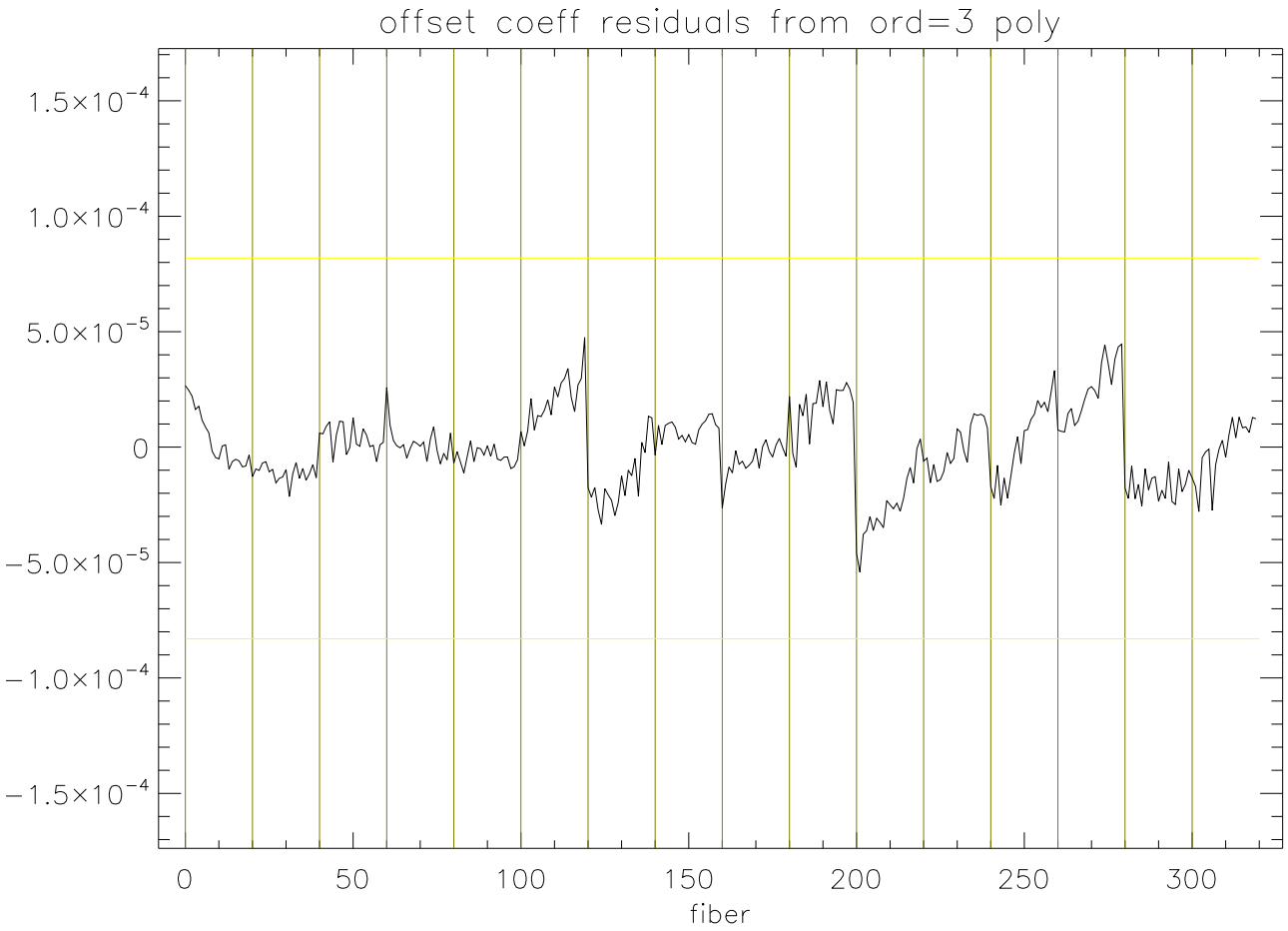

Number of sky fibers = 13
PLATE=3221 MJD=54864 sdR-r1-00058676.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

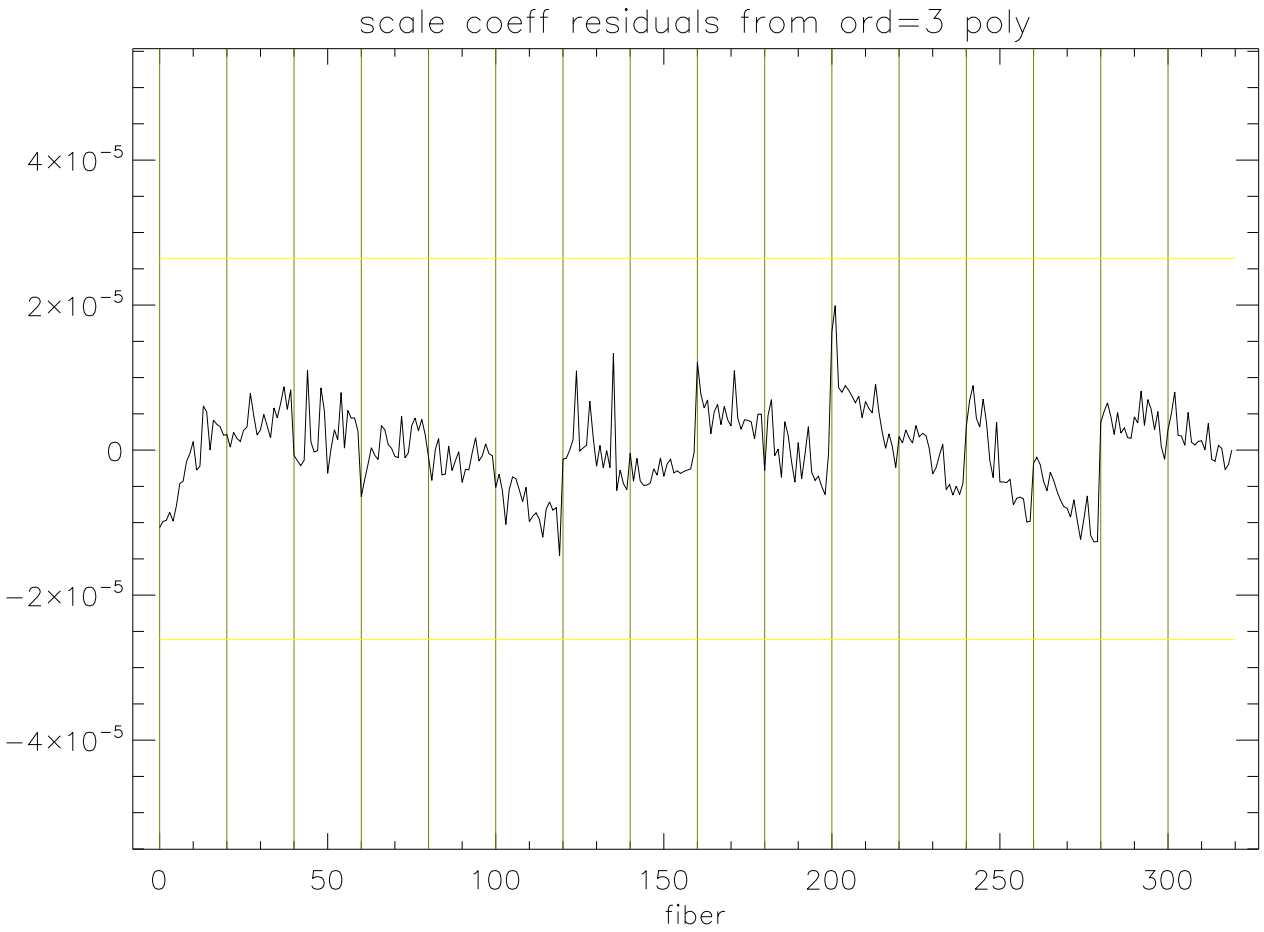

PLATE=3221 MJD=54864 sdR-r1-00058676.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.31 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

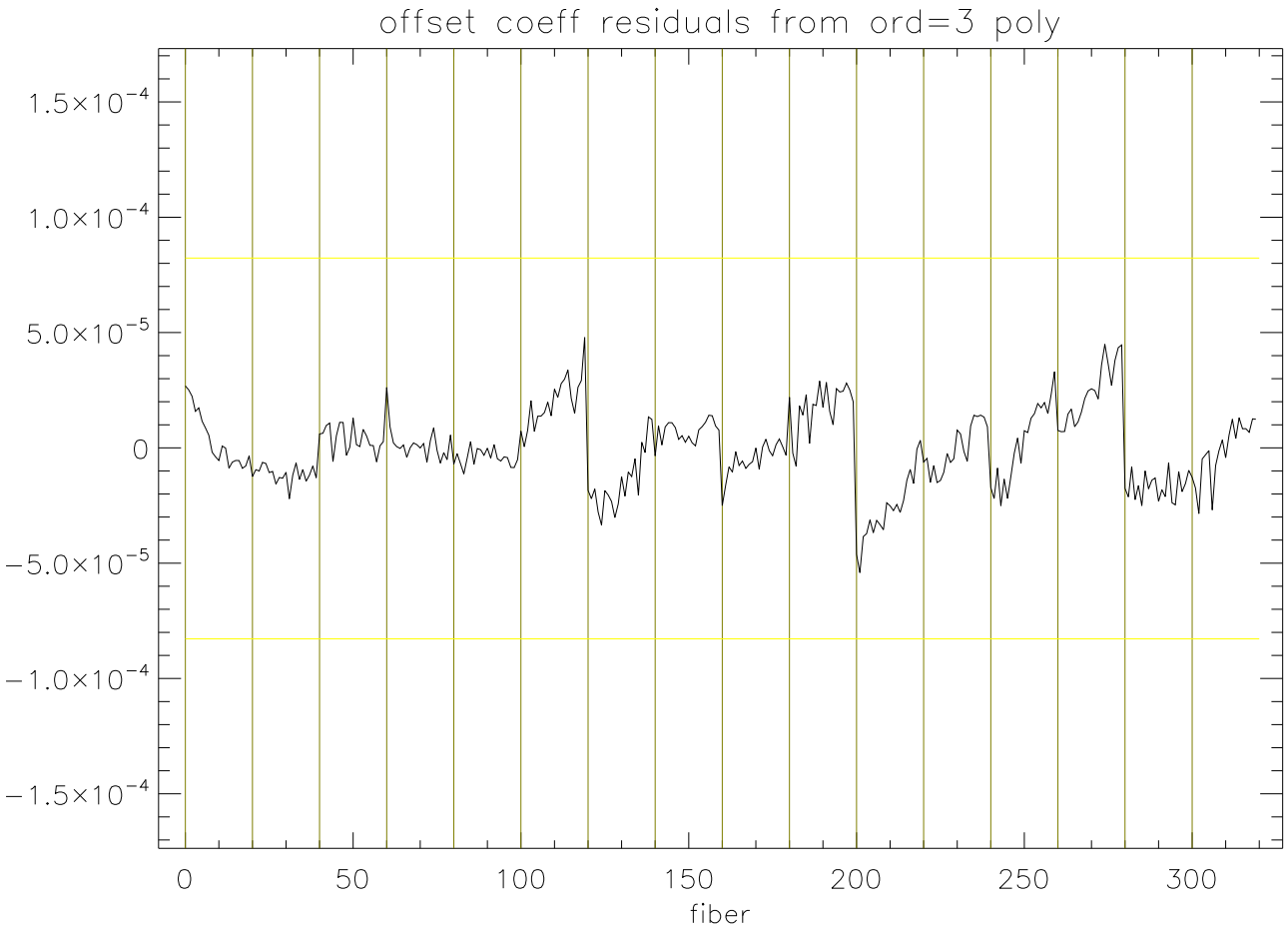

PLATE=3221 MJD=54864 sdR-r1-00058676.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.32 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

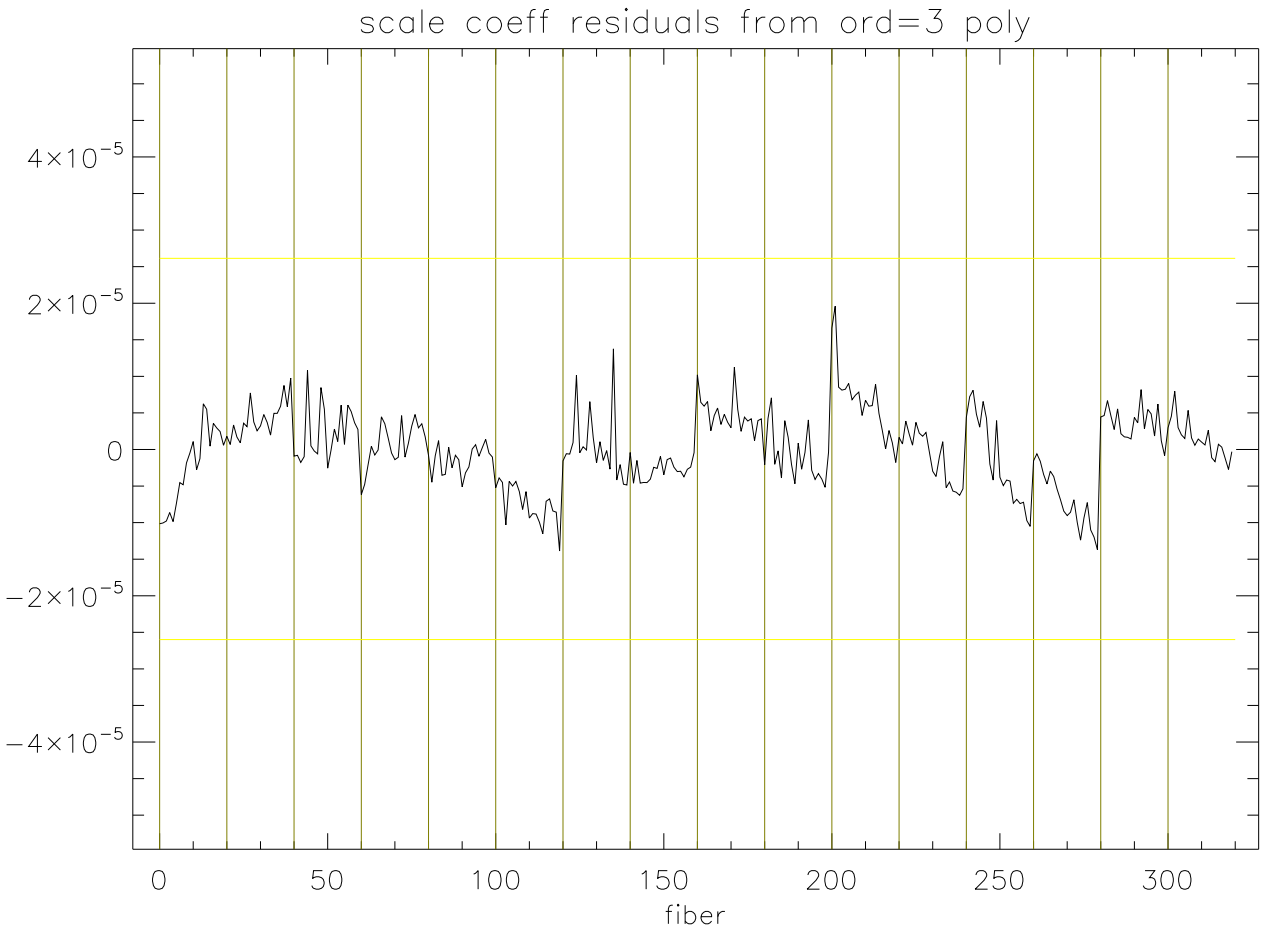

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

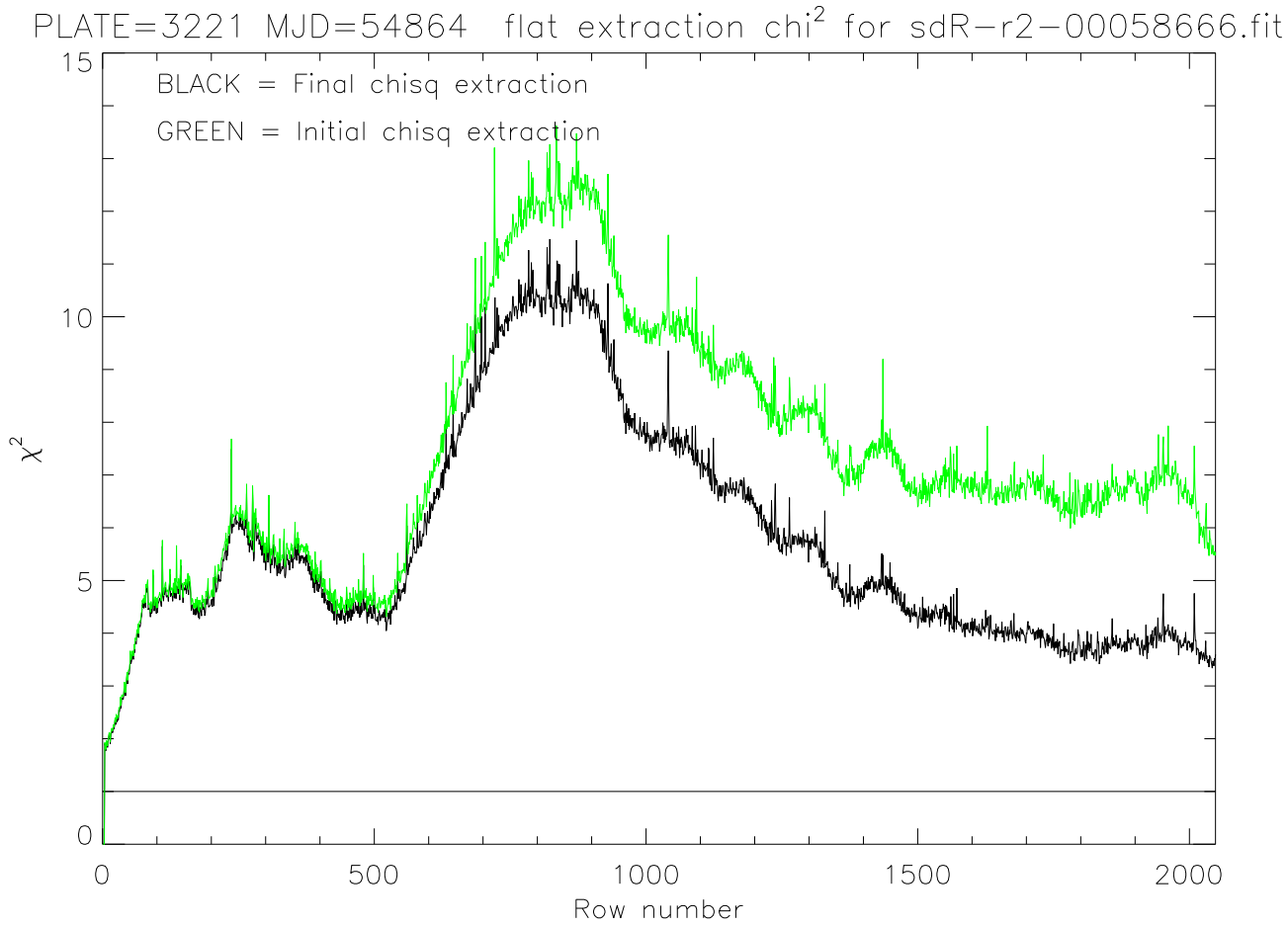

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

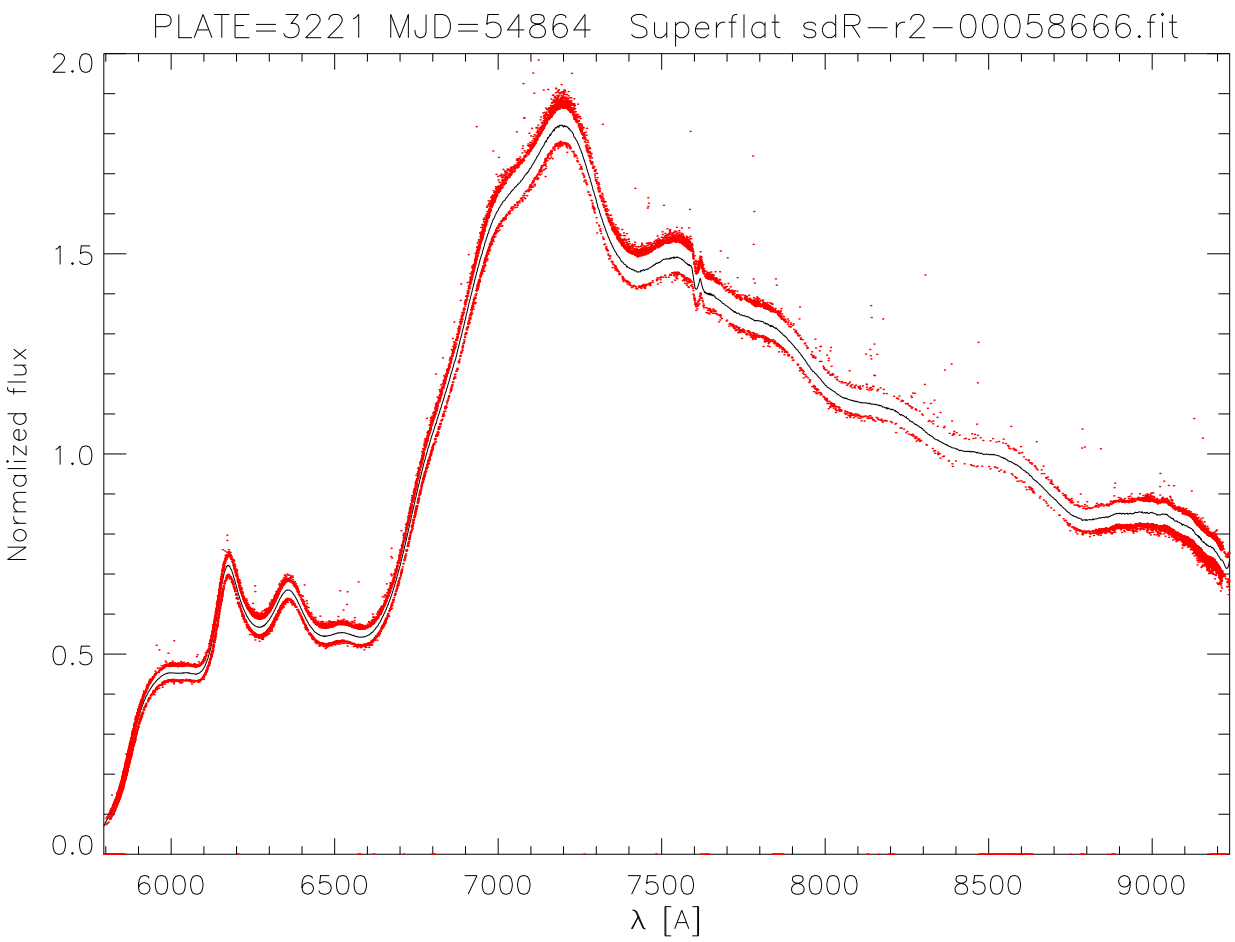

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

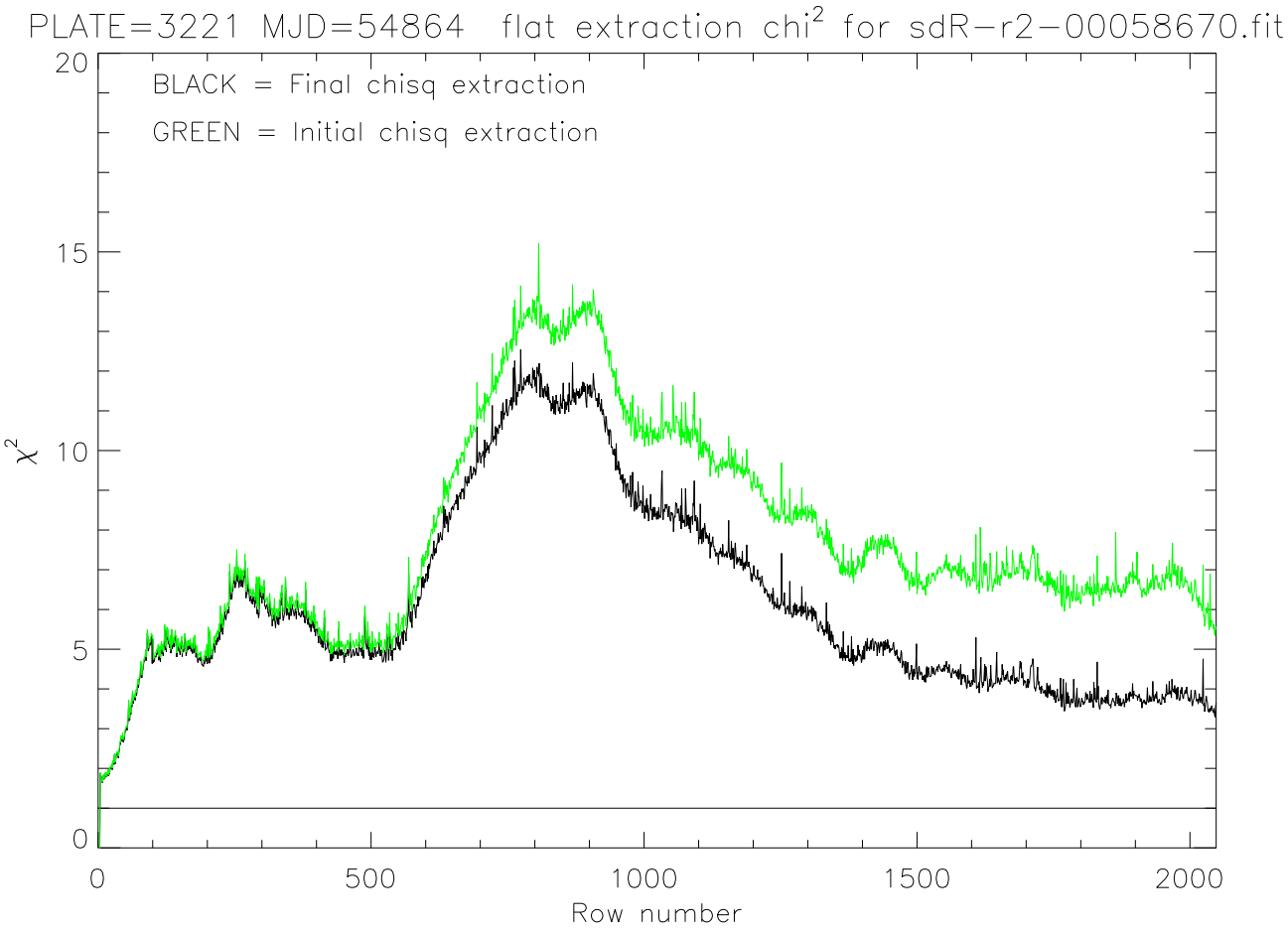

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

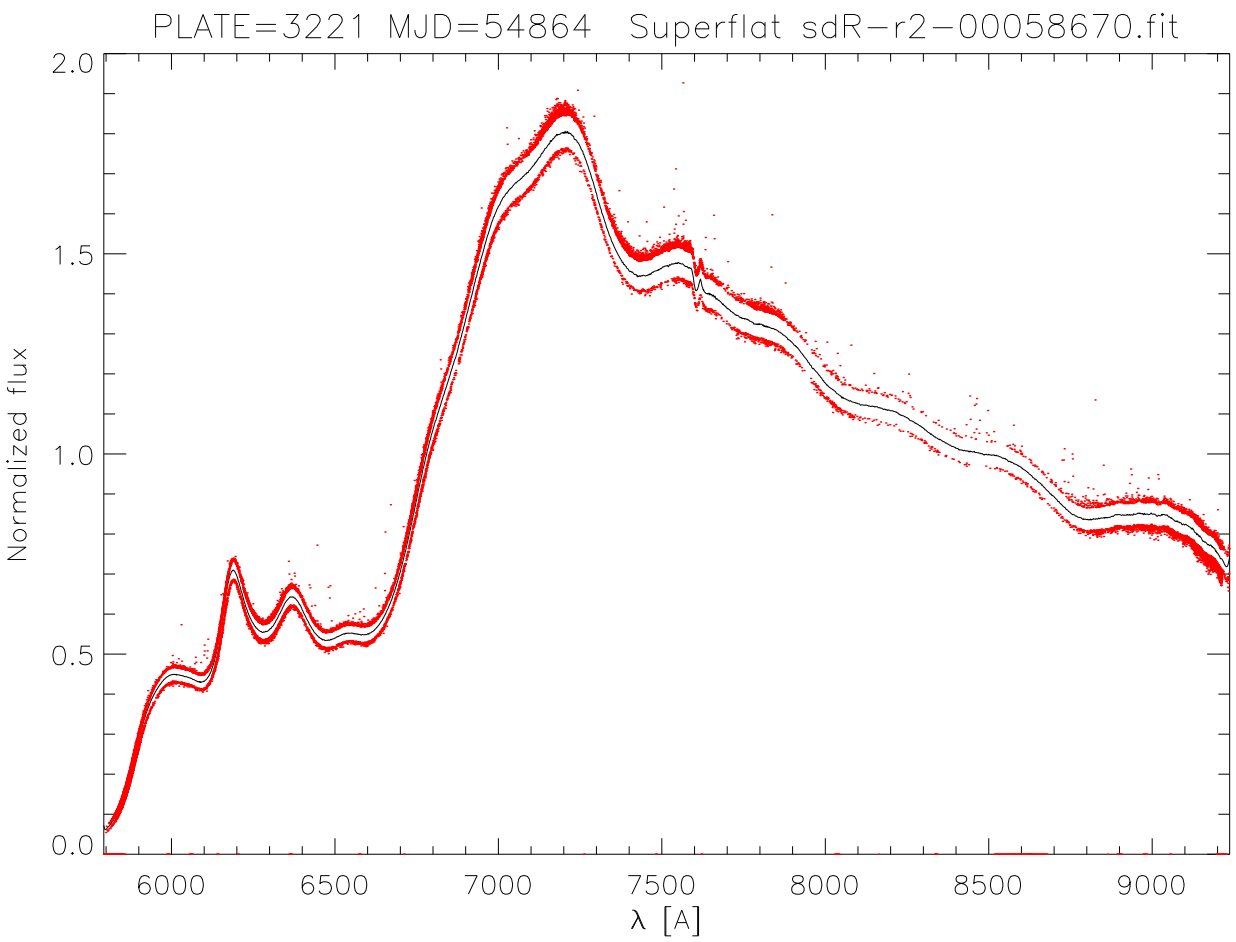

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

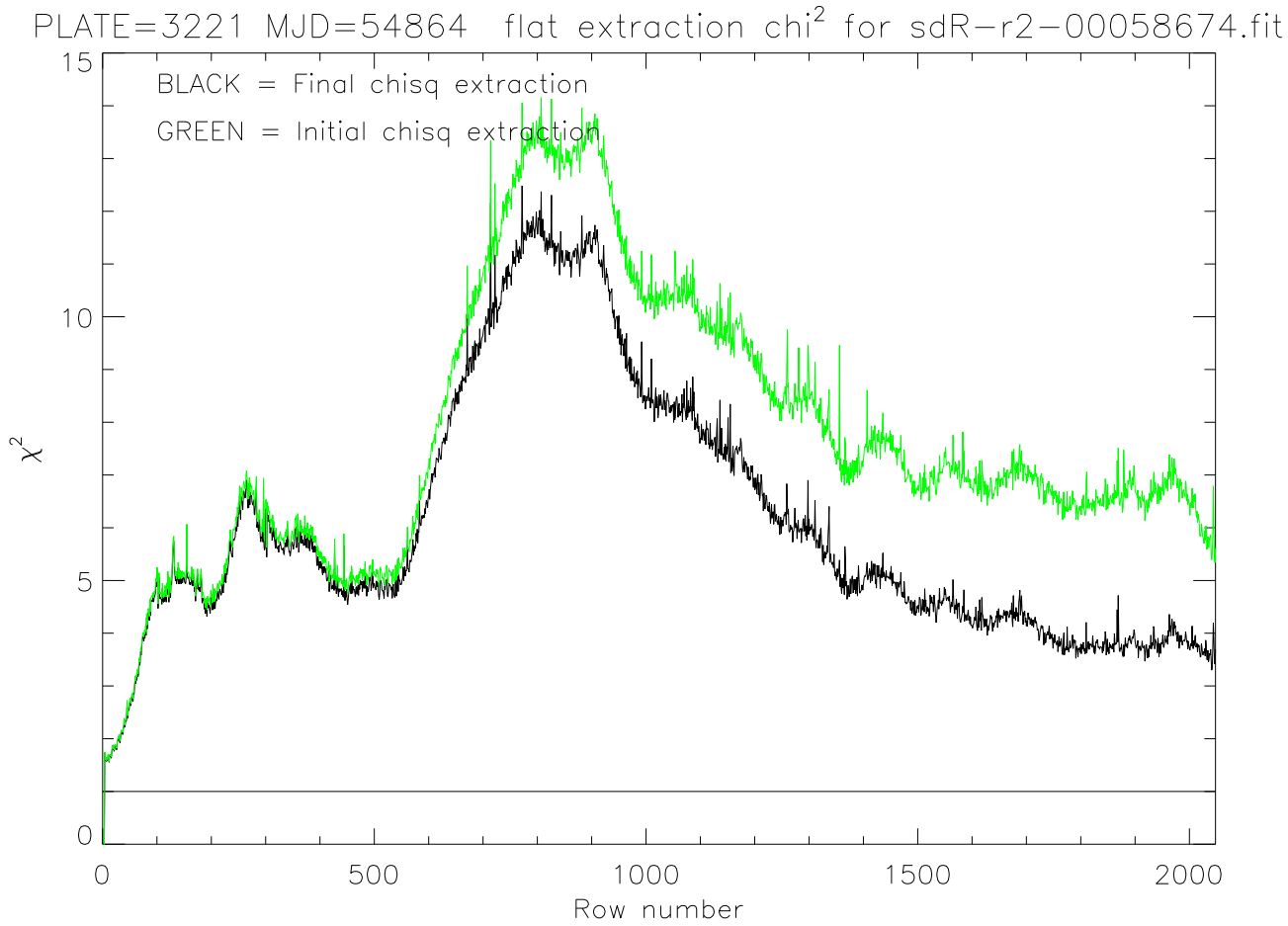

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

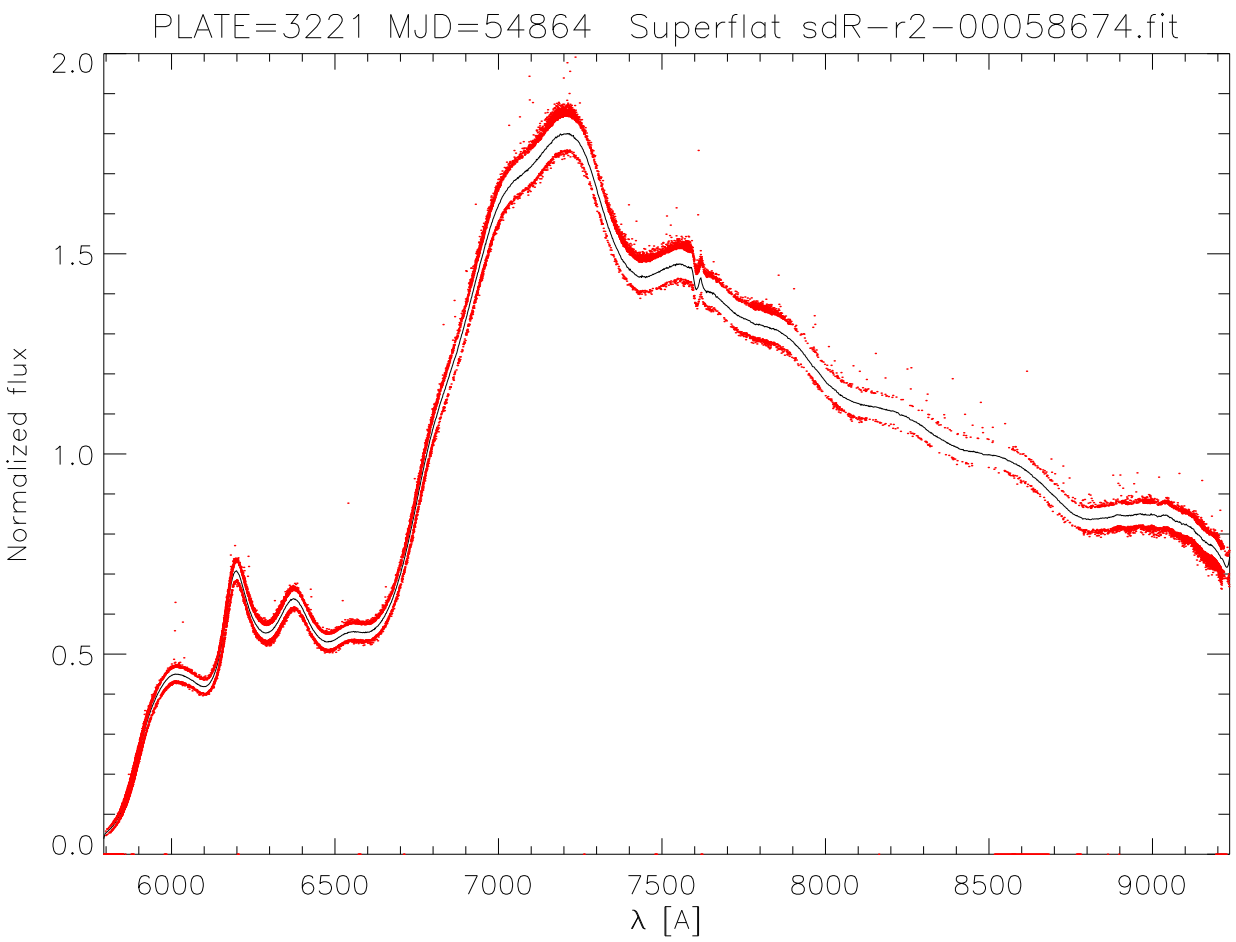

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−r2−00058666.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

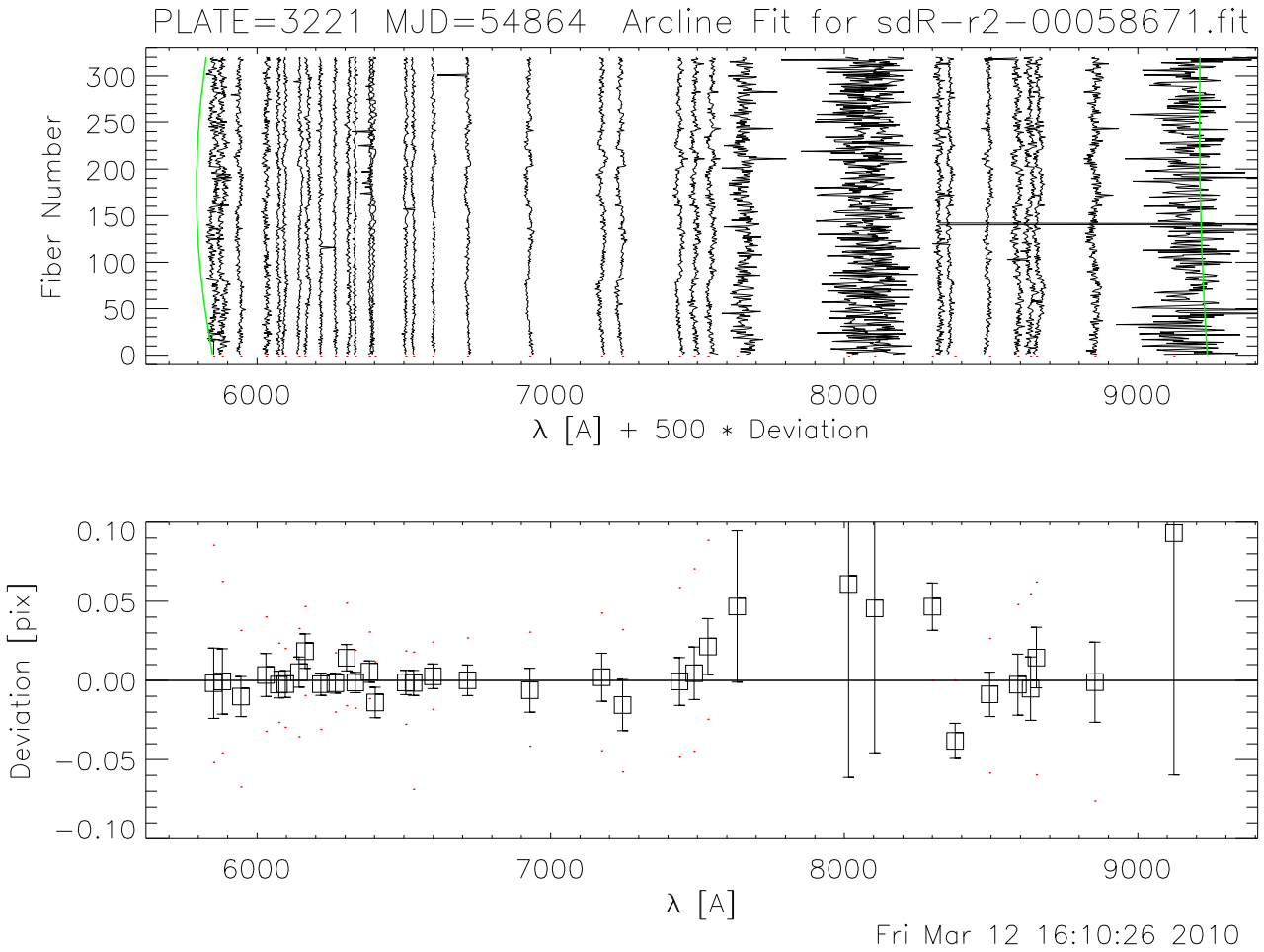

PLATE=3221 MJD=54864 Superflat sdR-r2-00058666.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

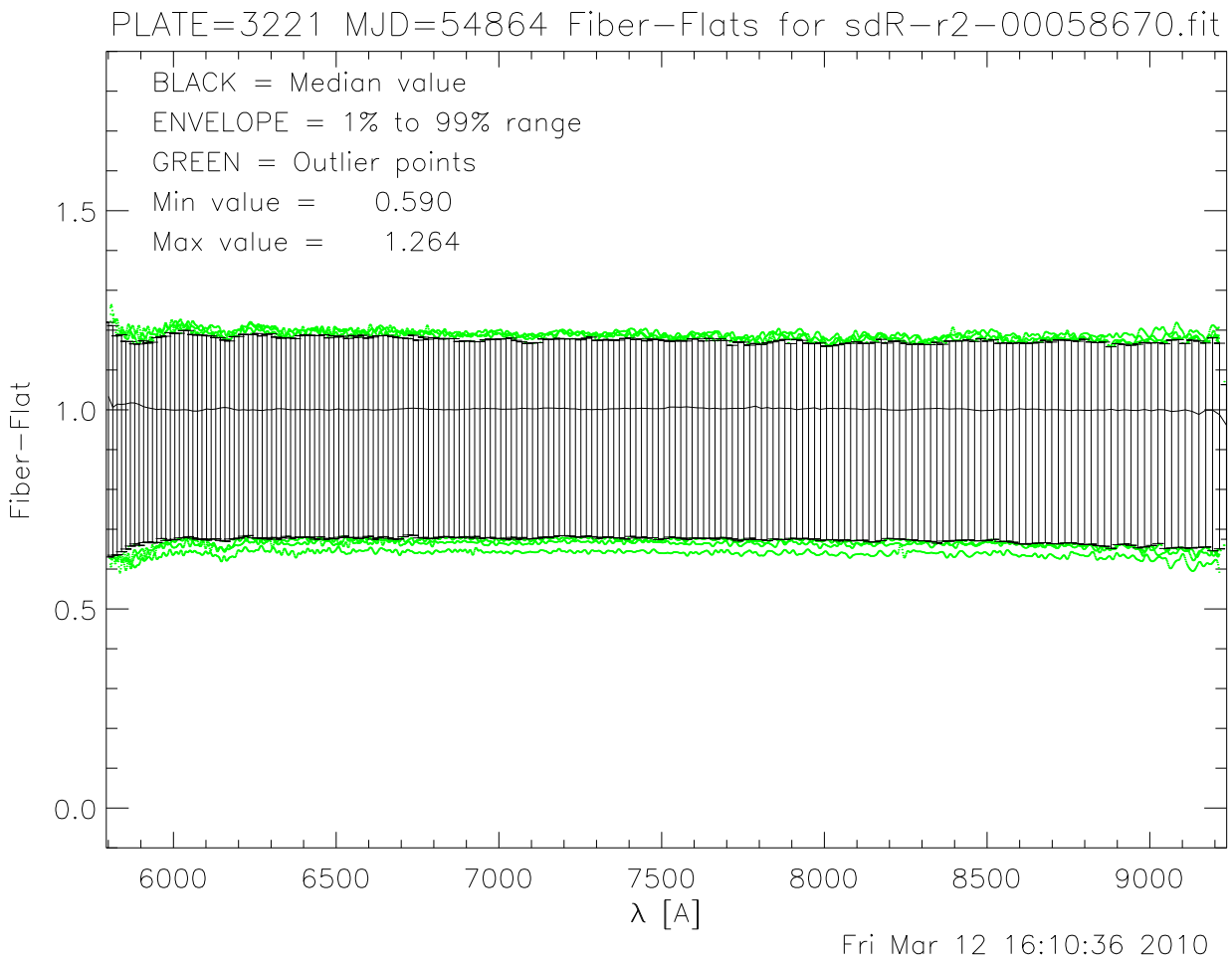

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−r2−00058670.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

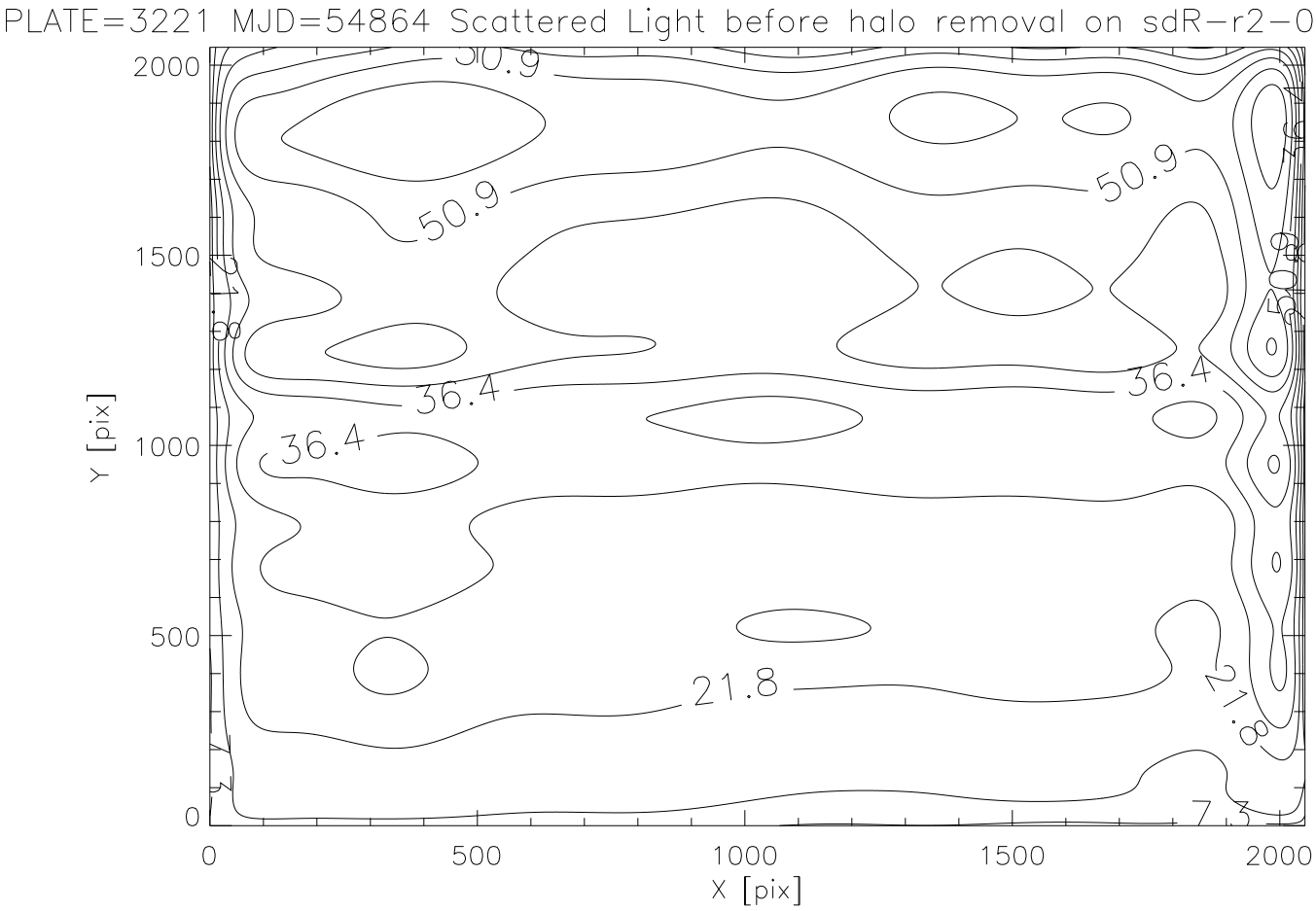

PLATE=3221 MJD=54864 Superflat sdR-r2-00058670.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

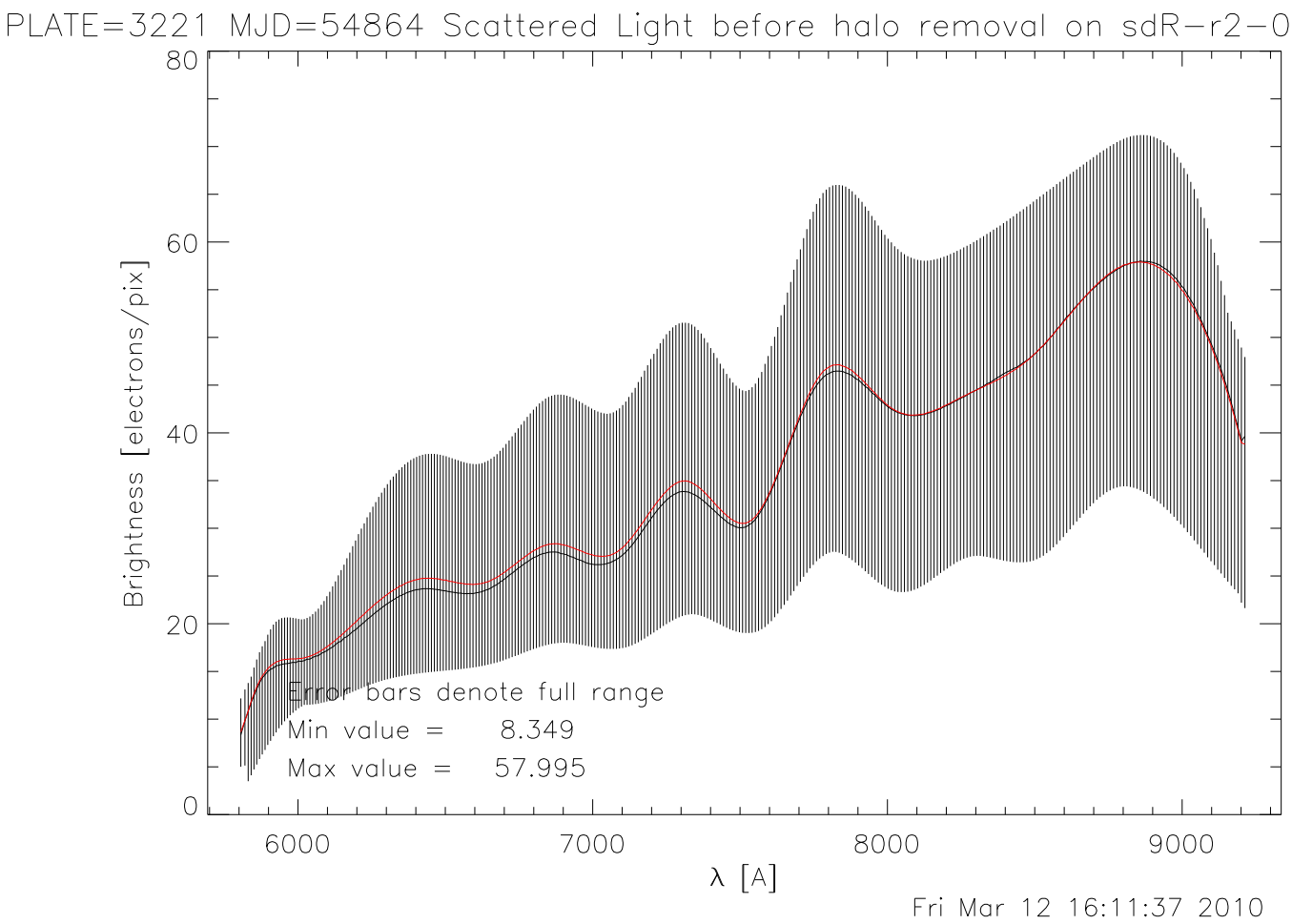

PLATE=3221 MJD=54864 flat extraction chi^2 for sdR−r2−00058674.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

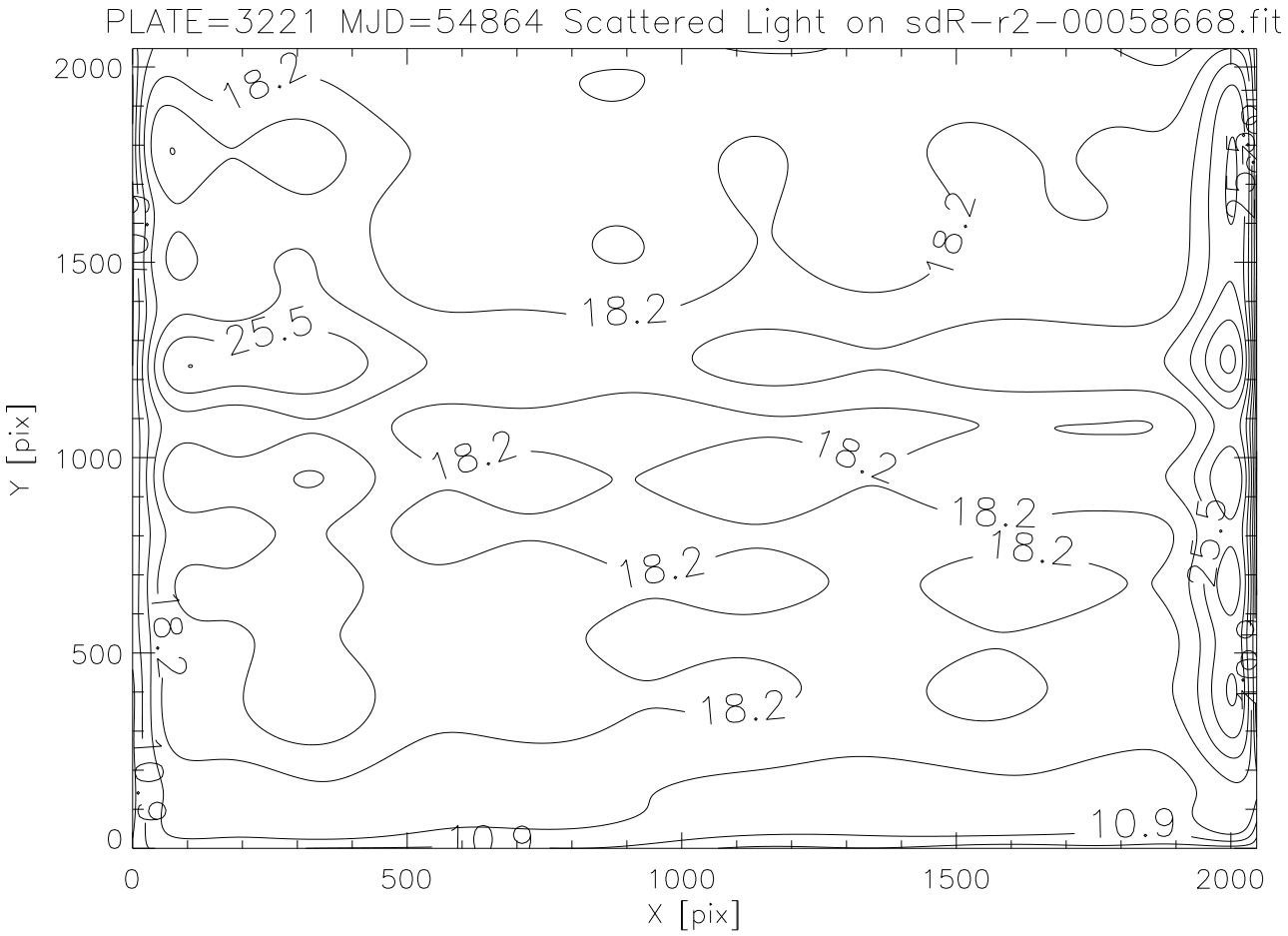

PLATE=3221 MJD=54864 Superflat sdR-r2-00058674.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

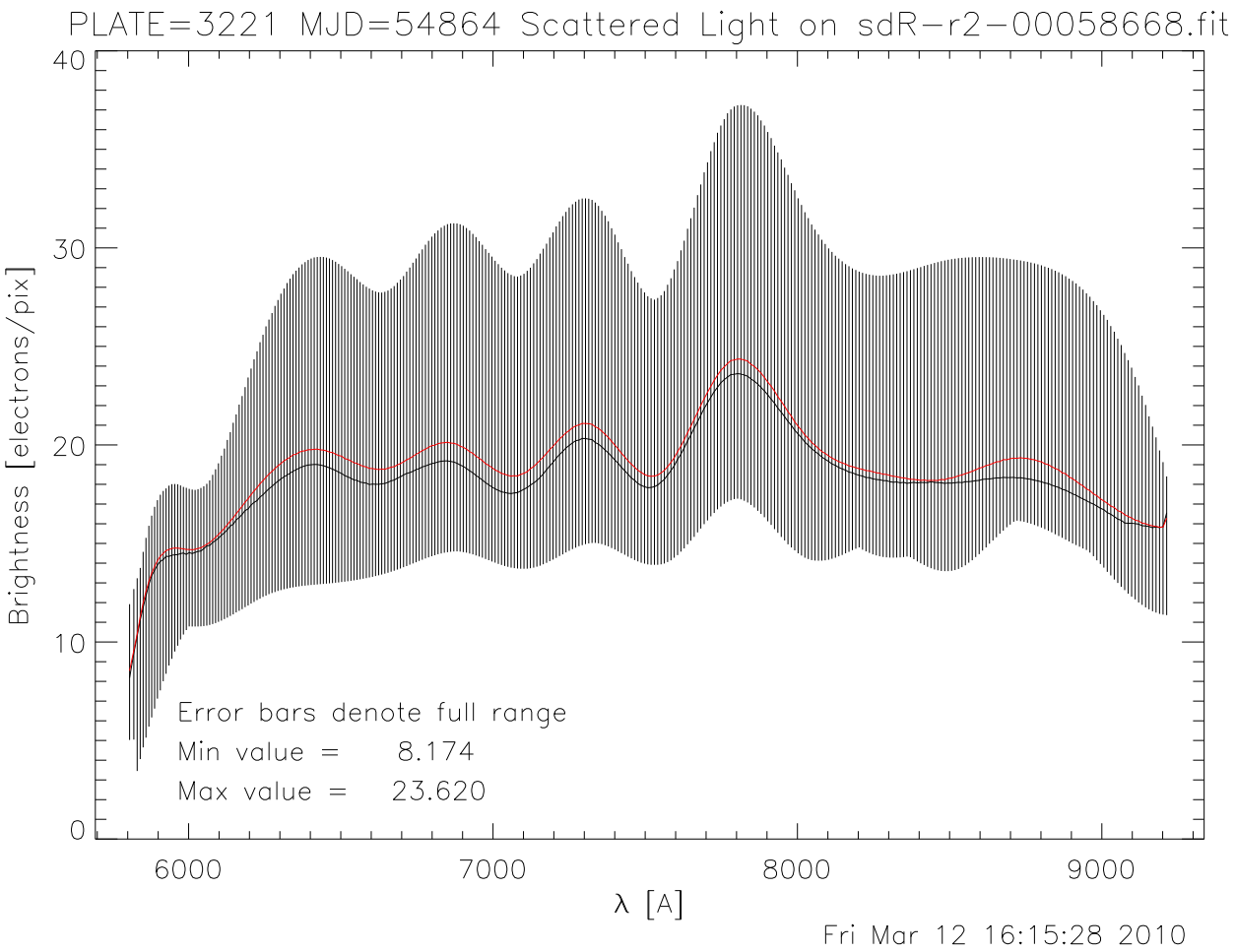

PLATE=3221 MJD=54864 Arcline Fit for sdR-r2-00058671.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Fri Mar 12 16:10:26 2010

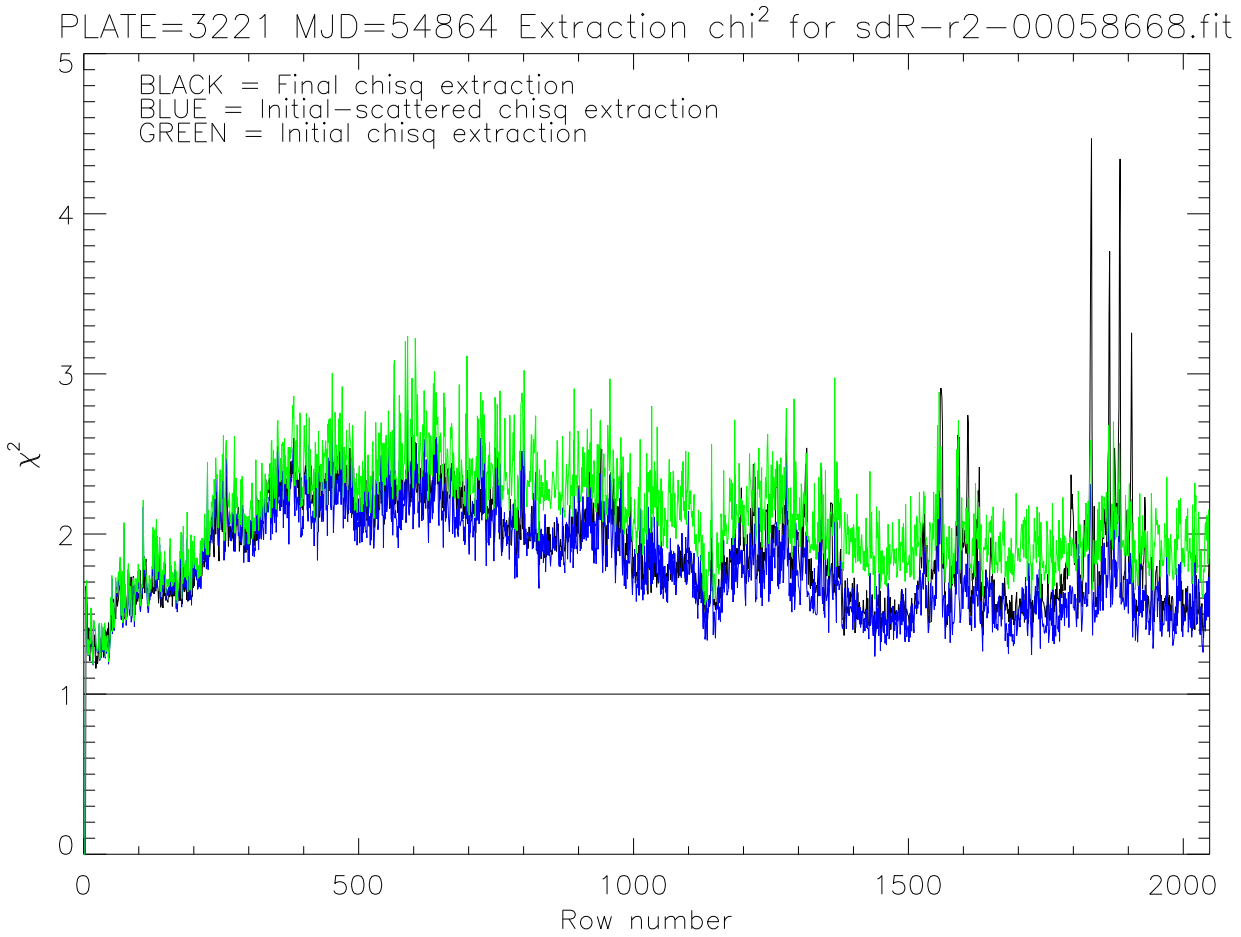

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r2−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.590
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 16:10:36 2010

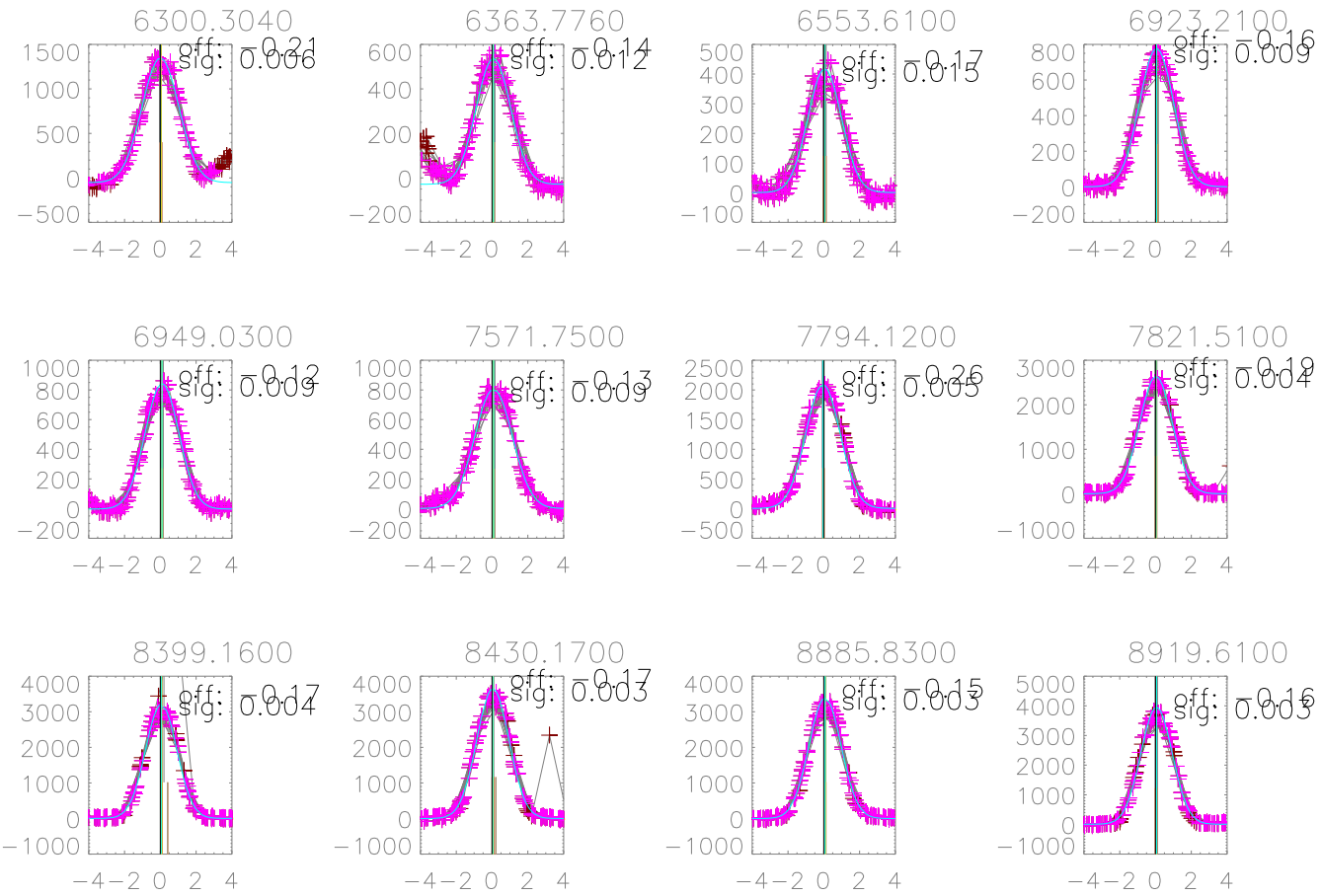

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058668.fi
50.9
50.9
50.9
36.4
36.4
36.4
21.8
21.8
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

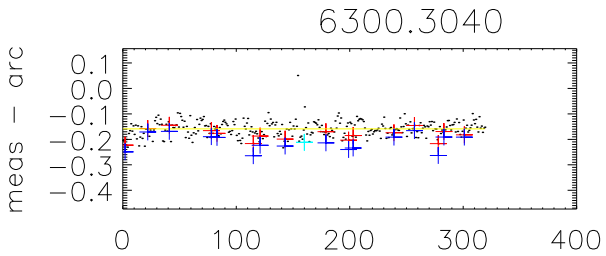

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058668.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.349
Max value = 57.995
Fri Mar 12 16:11:37 2010

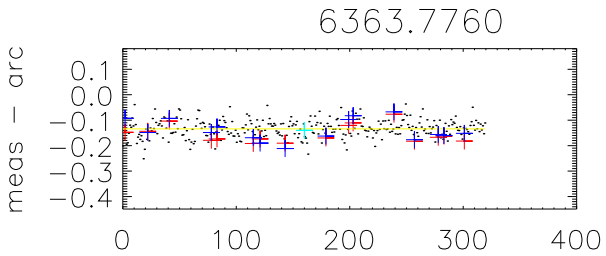

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058668.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
18.2
25.5
10.9

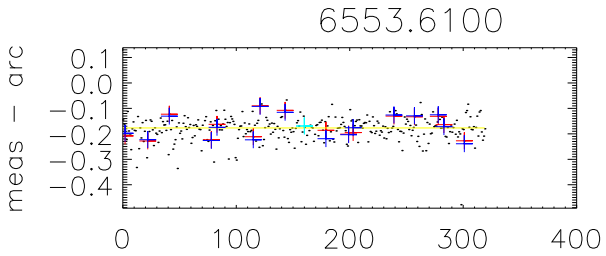

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058668.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.174
Max value = 23.620
Fri Mar 12 16:15:28 2010

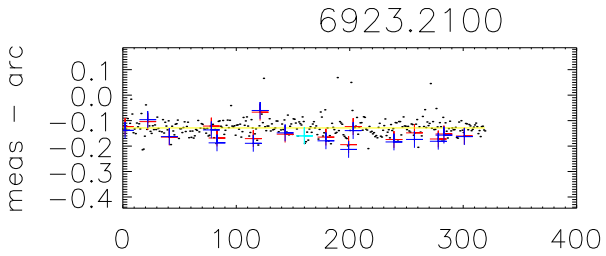

PLATE=3221 MJD=54864 Extraction chi^2 for sdR−r2−00058668.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

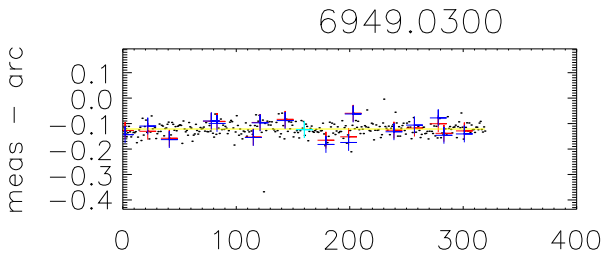

6300.3040
off: −0.21
sig: 0.066
6363.7760
off: −0.14
sig: 0.012
6553.6100
off: −0.17
sig: 0.015
6923.2100
off: −0.16
sig: 0.009
6949.0300
off: −0.12
sig: 0.009
7571.7500
off: −0.13
sig: 0.009
7794.1200
off: −0.26
sig: 0.005
7821.5100
off: −0.19
sig: 0.004
8399.1600
off: −0.17
sig: 0.004
8430.1700
off: −0.17
sig: 0.003
8885.8300
off: −0.15
sig: 0.003
8919.6100
off: −0.16
sig: 0.003

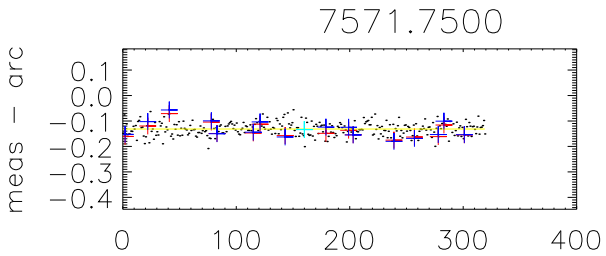

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

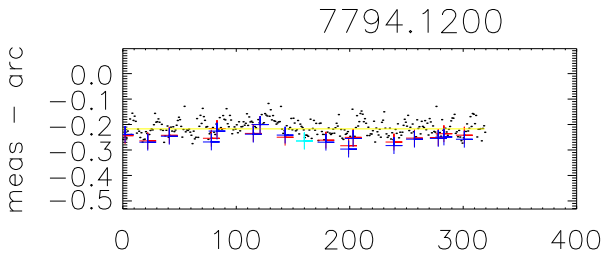

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

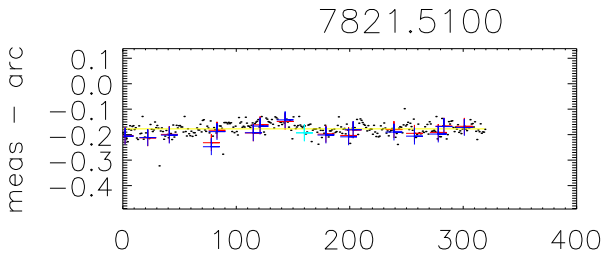

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

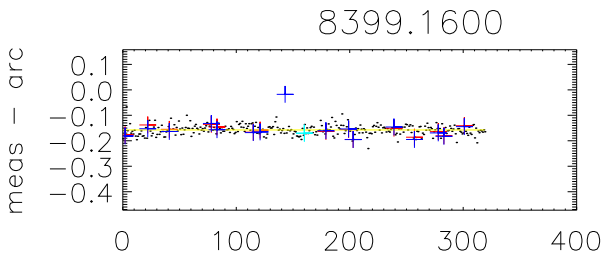

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

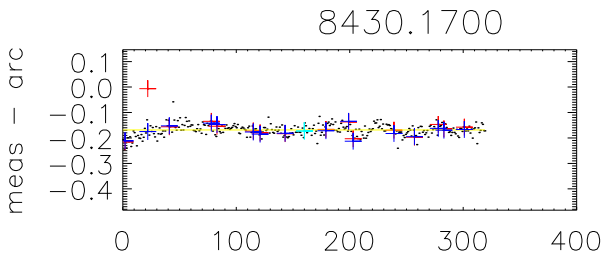

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

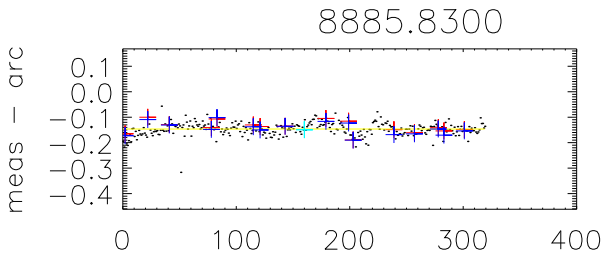

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

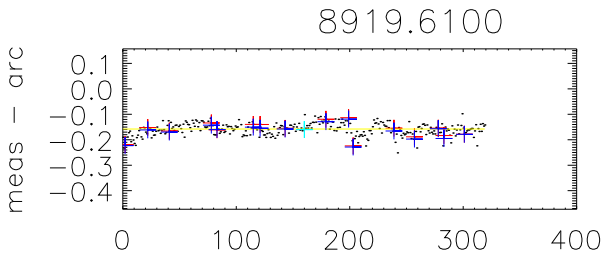

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

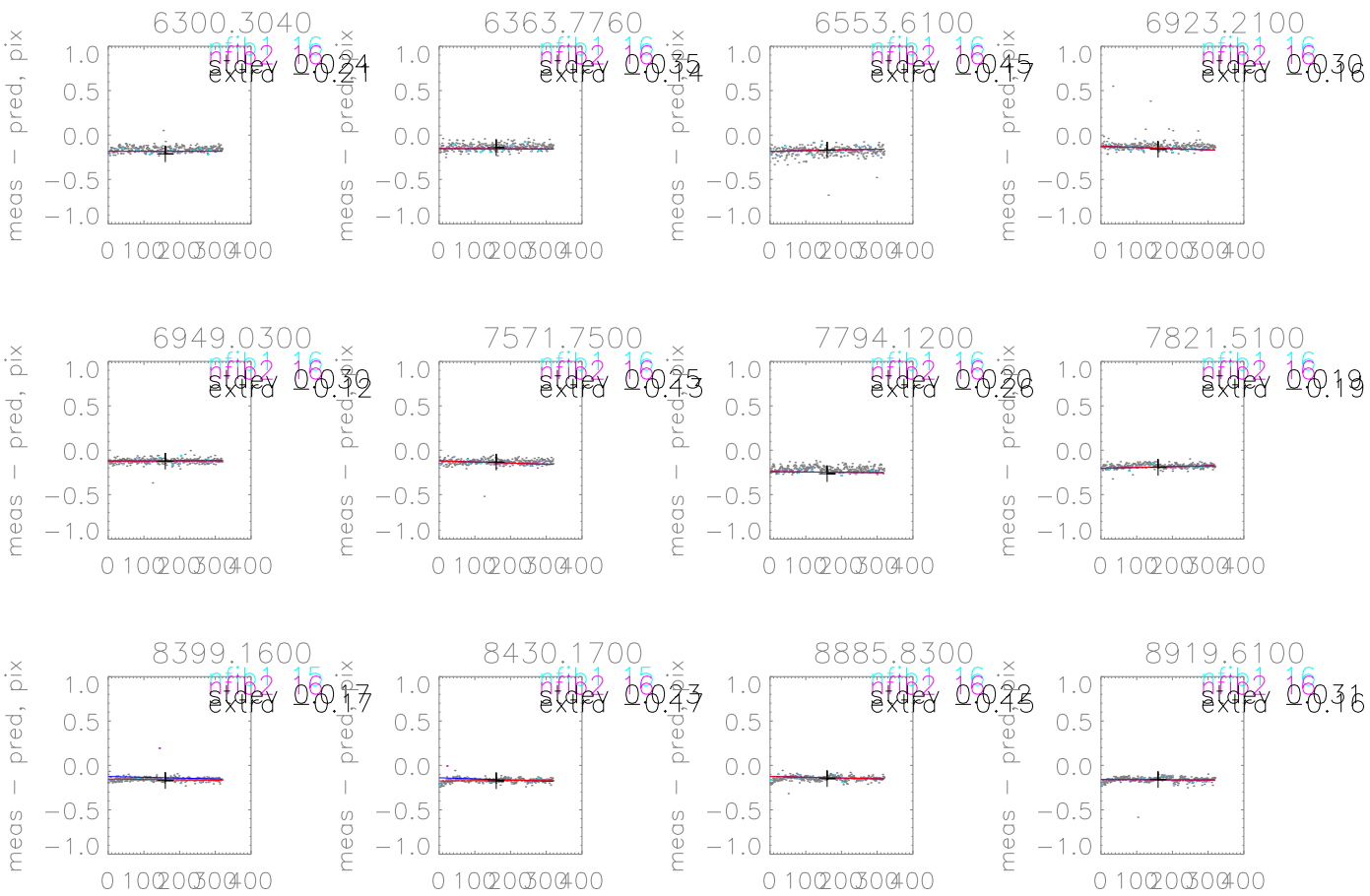

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

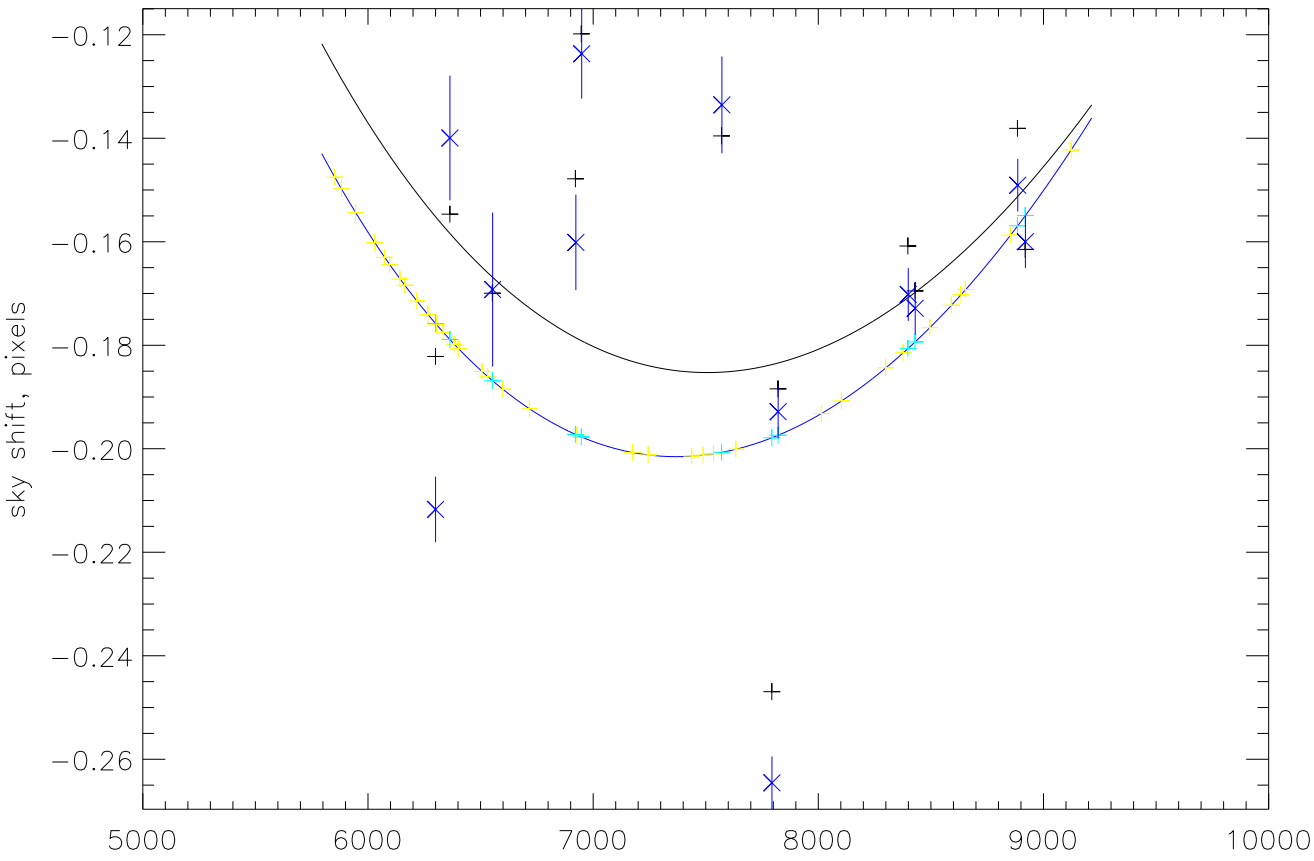

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

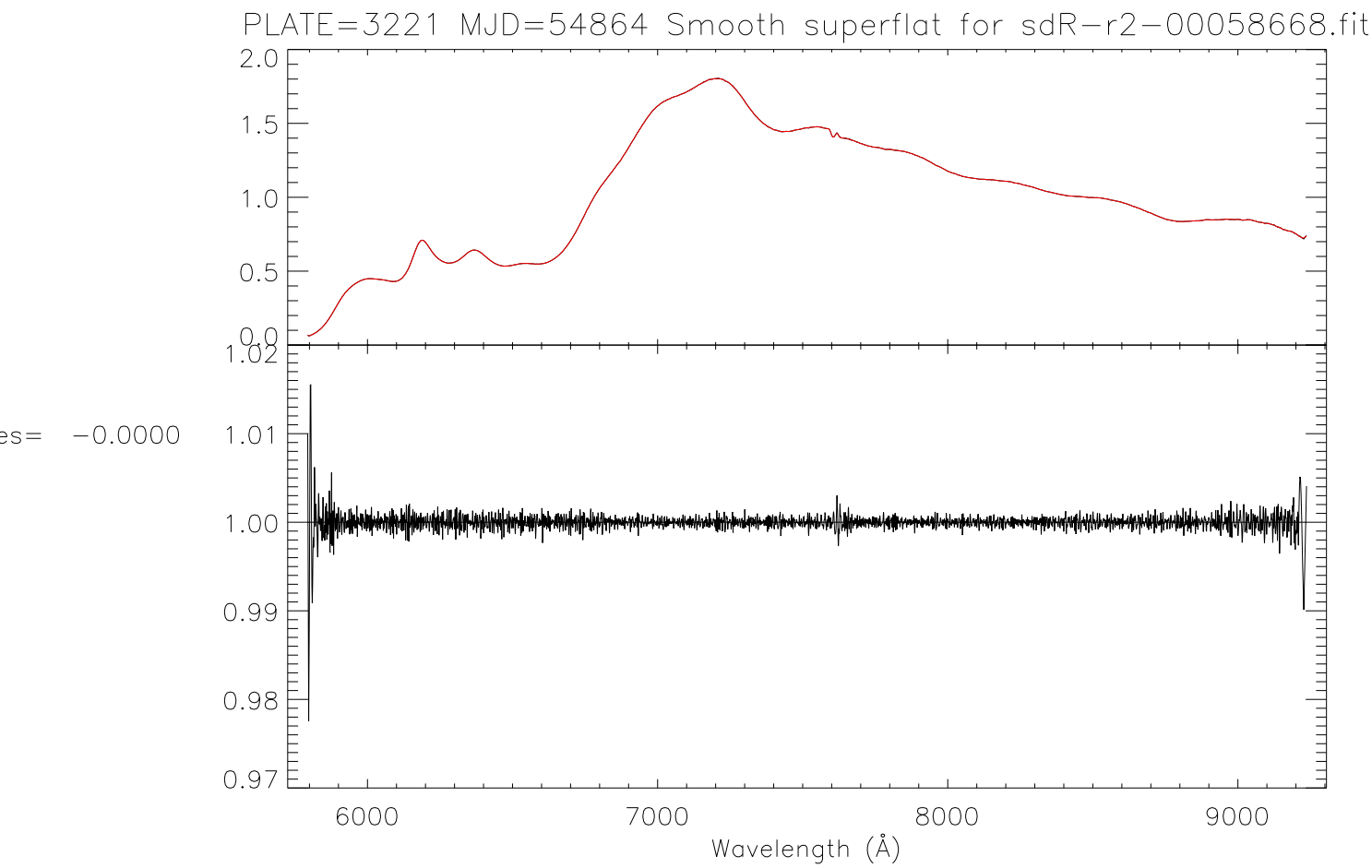

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

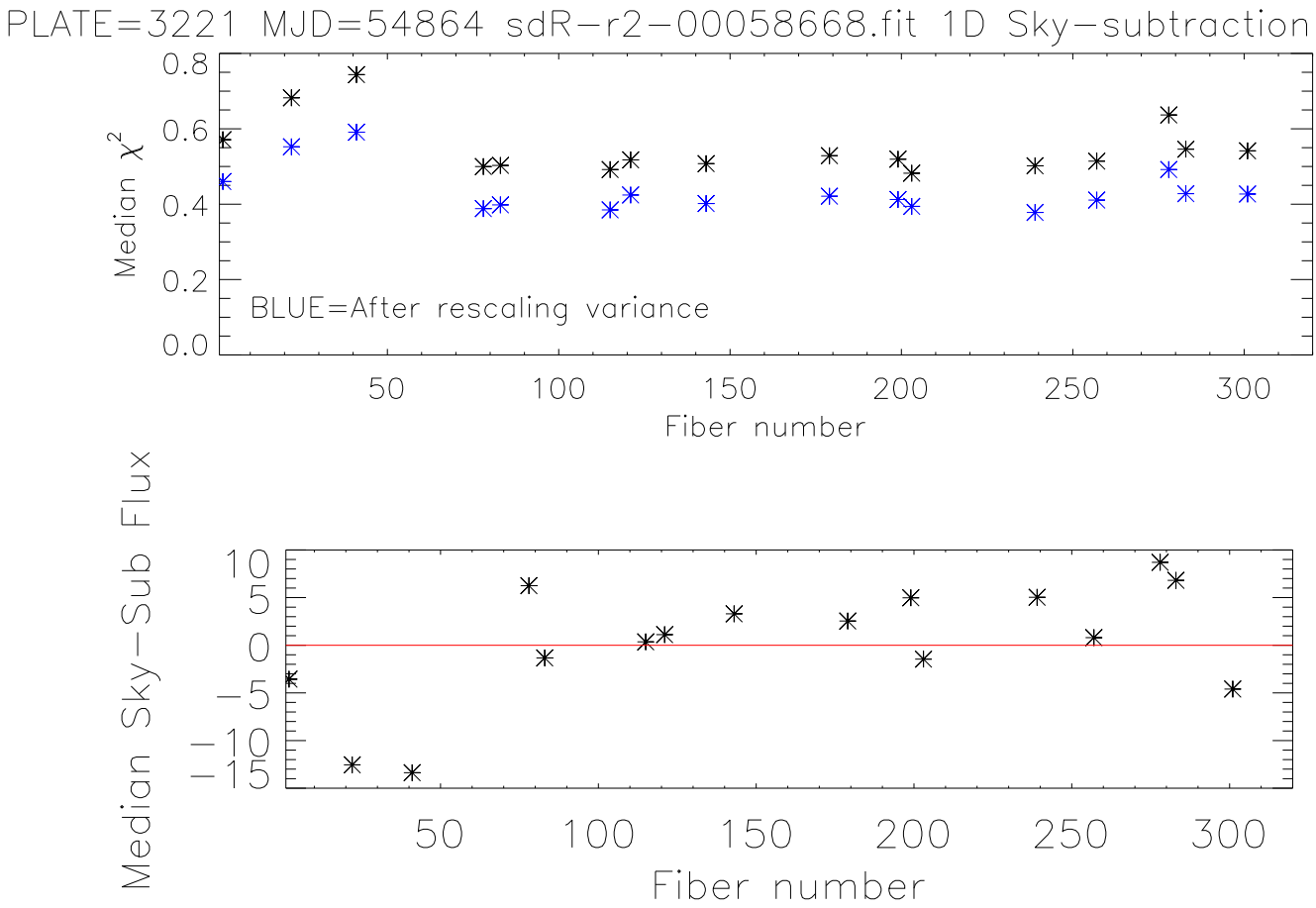

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

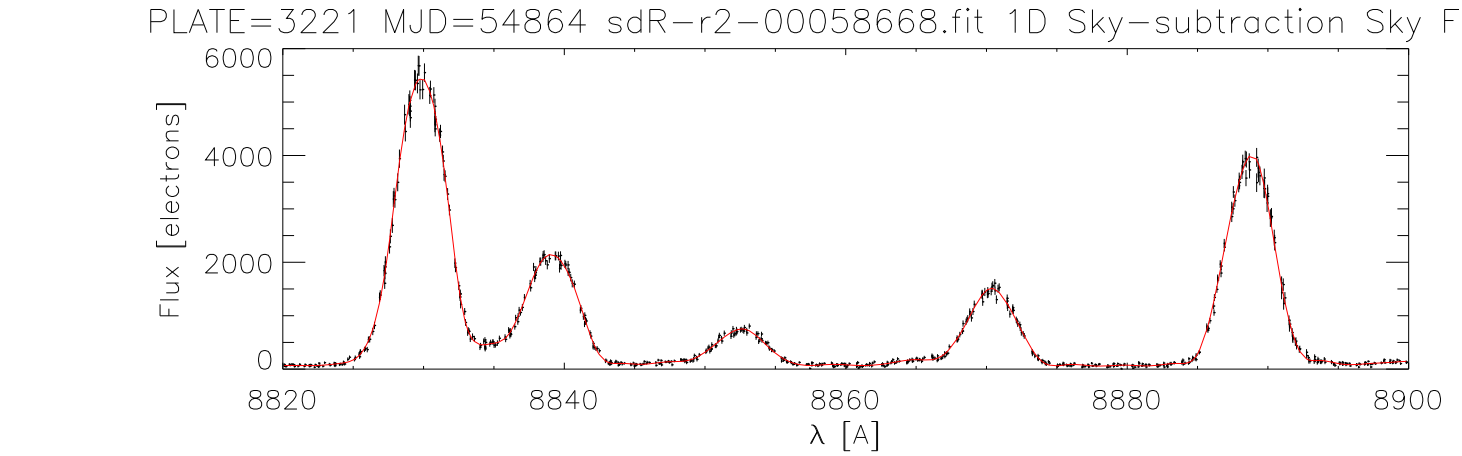

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 16
mfib2 16
stdev 0.024
extra 0.21
stdev 0.035
extra 0.14
stdev 0.045
extra 0.17
stdev 0.030
extra 0.16
stdev 0.030
extra 0.12
stdev 0.025
extra 0.13
stdev 0.020
extra 0.26
stdev 0.019
extra 0.19
stdev 0.017
extra 0.17
stdev 0.023
extra 0.17
stdev 0.022
extra 0.45
stdev 0.031
extra 0.16

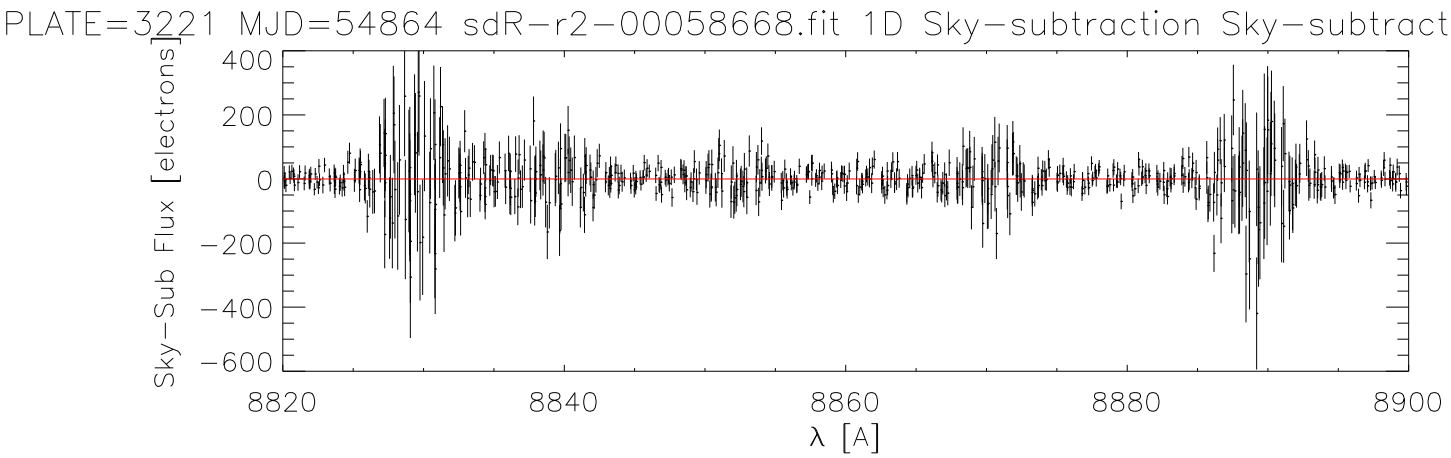

−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
−0.24
−0.26
sky shift, pixels
5000
6000
7000
8000
9000
10000

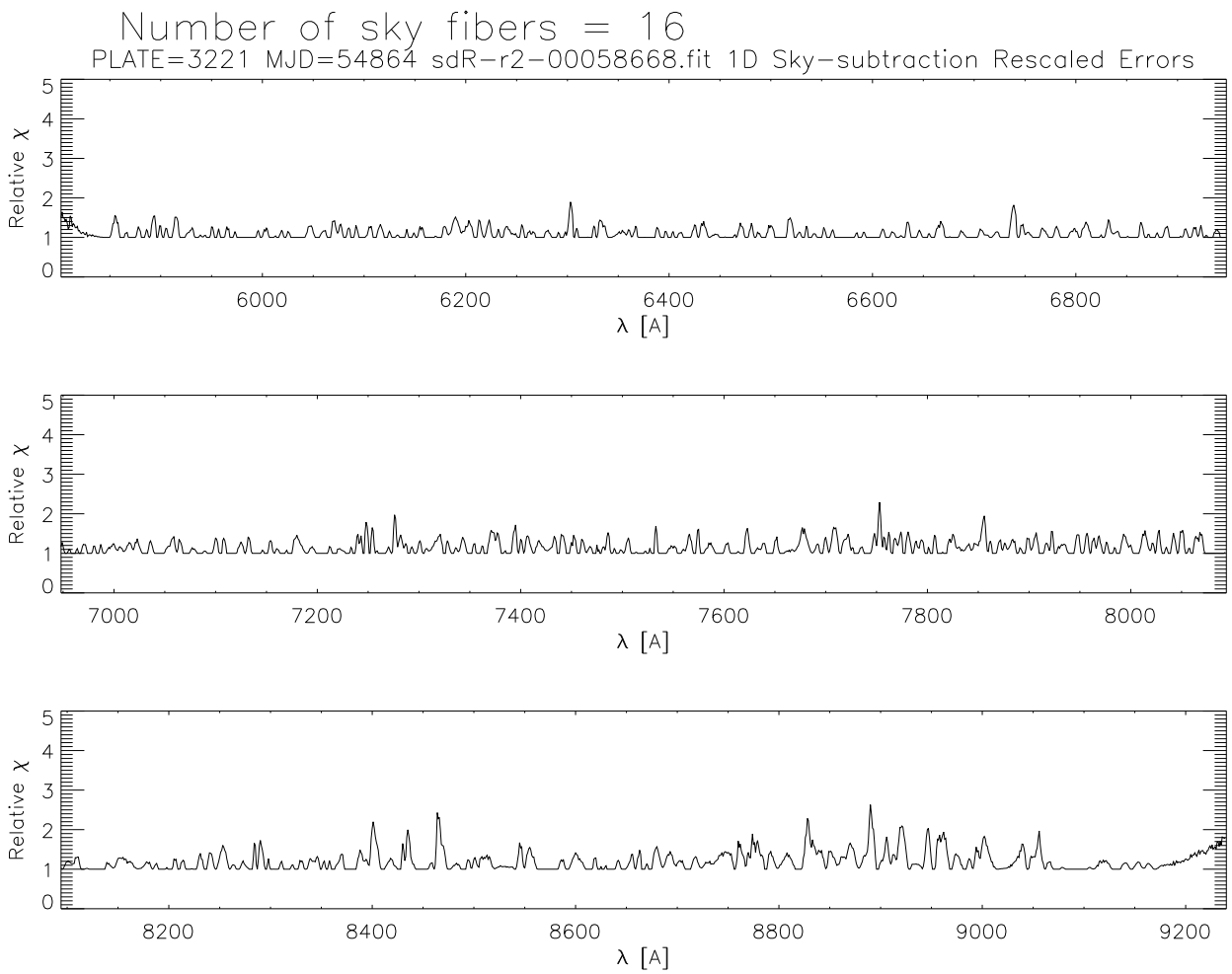

PLATE=3221 MJD=54864 Smooth superflat for sdR-r2-00058668.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

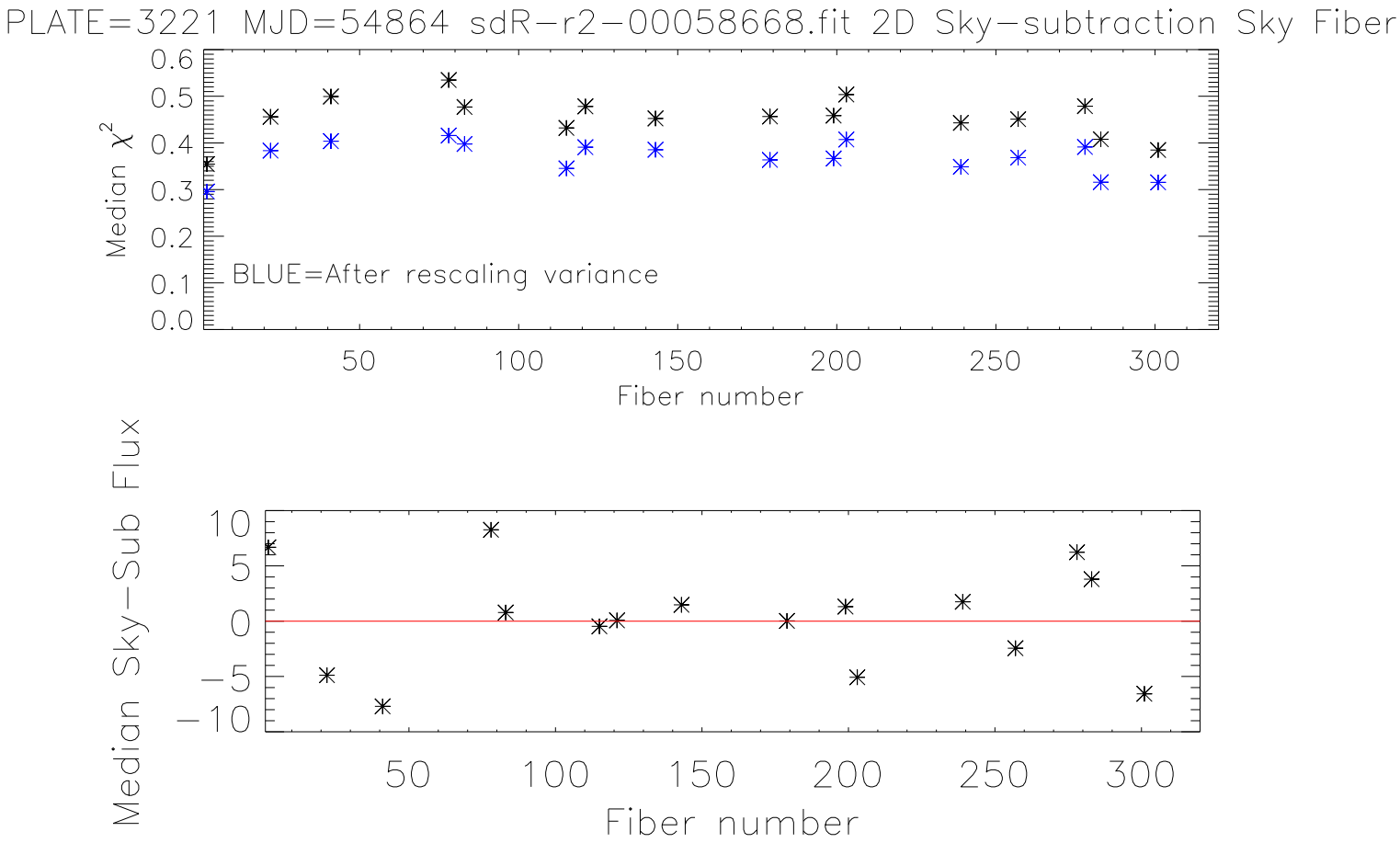
es= −0.0000

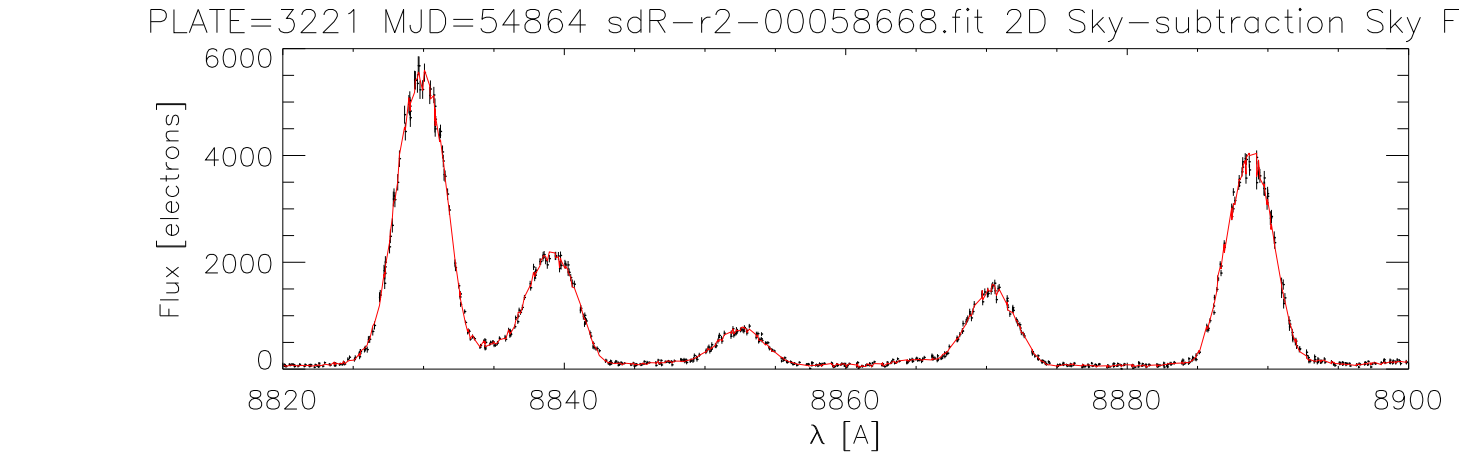

PLATE=3221 MJD=54864 sdR-r2-00058668.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

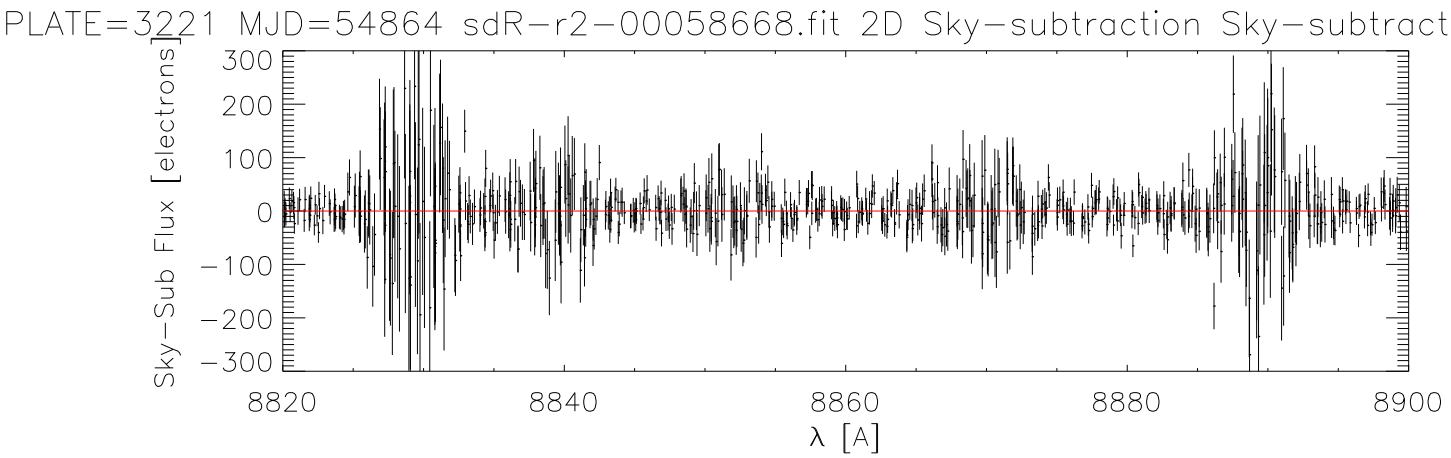

PLATE=3221 MJD=54864 sdR-r2-00058668.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

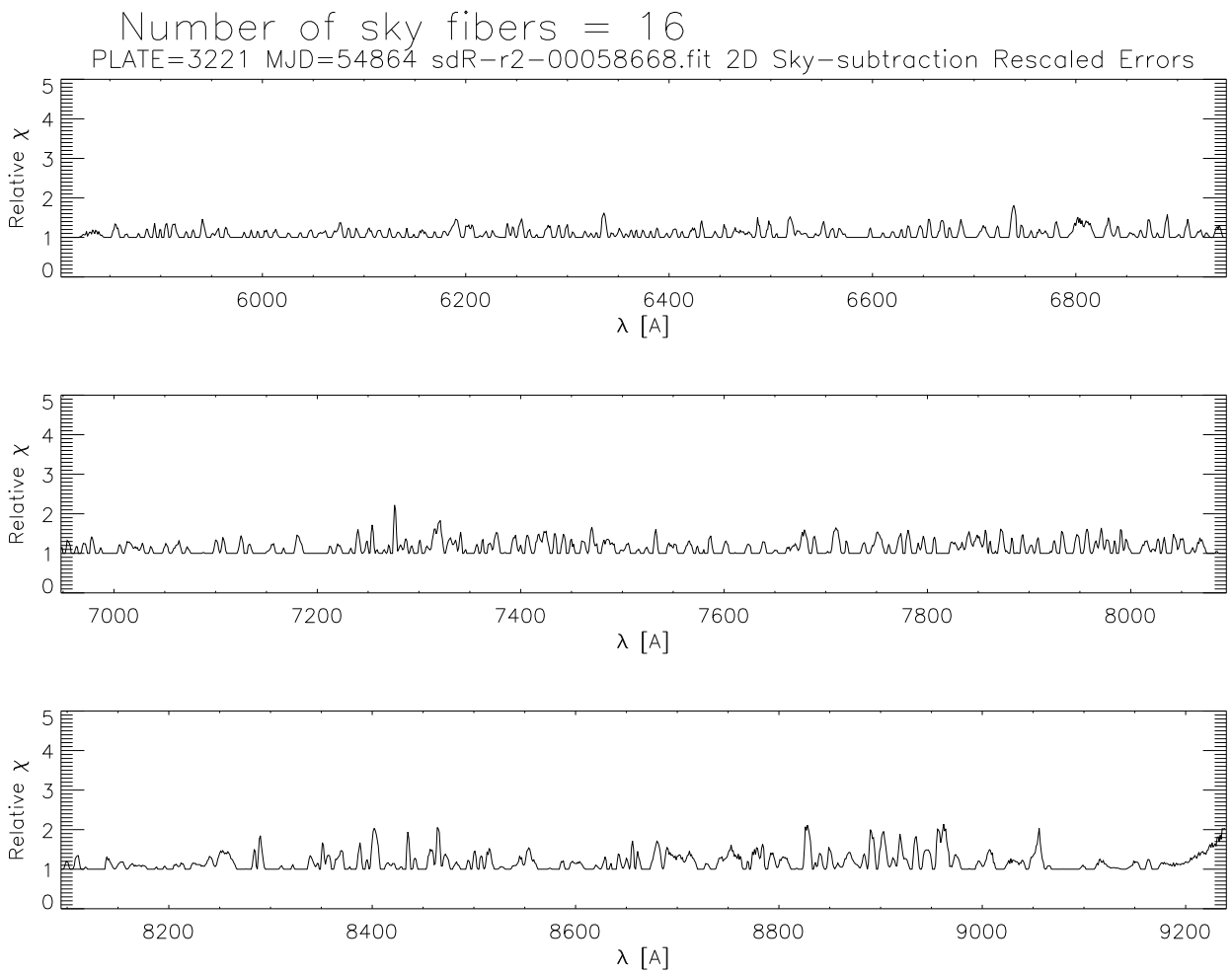

PLATE=3221 MJD=54864 sdR-r2-00058668.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

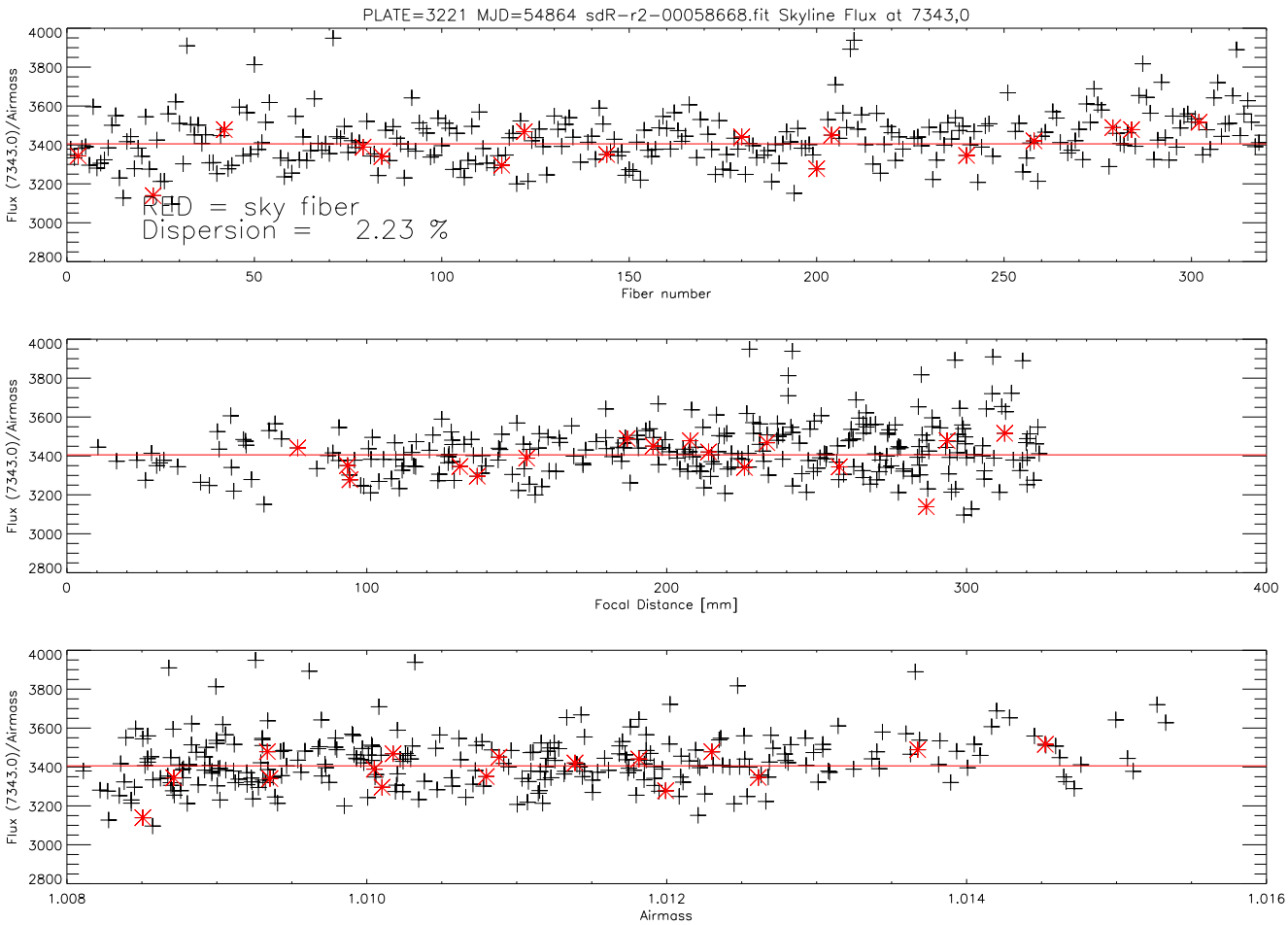

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058668.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

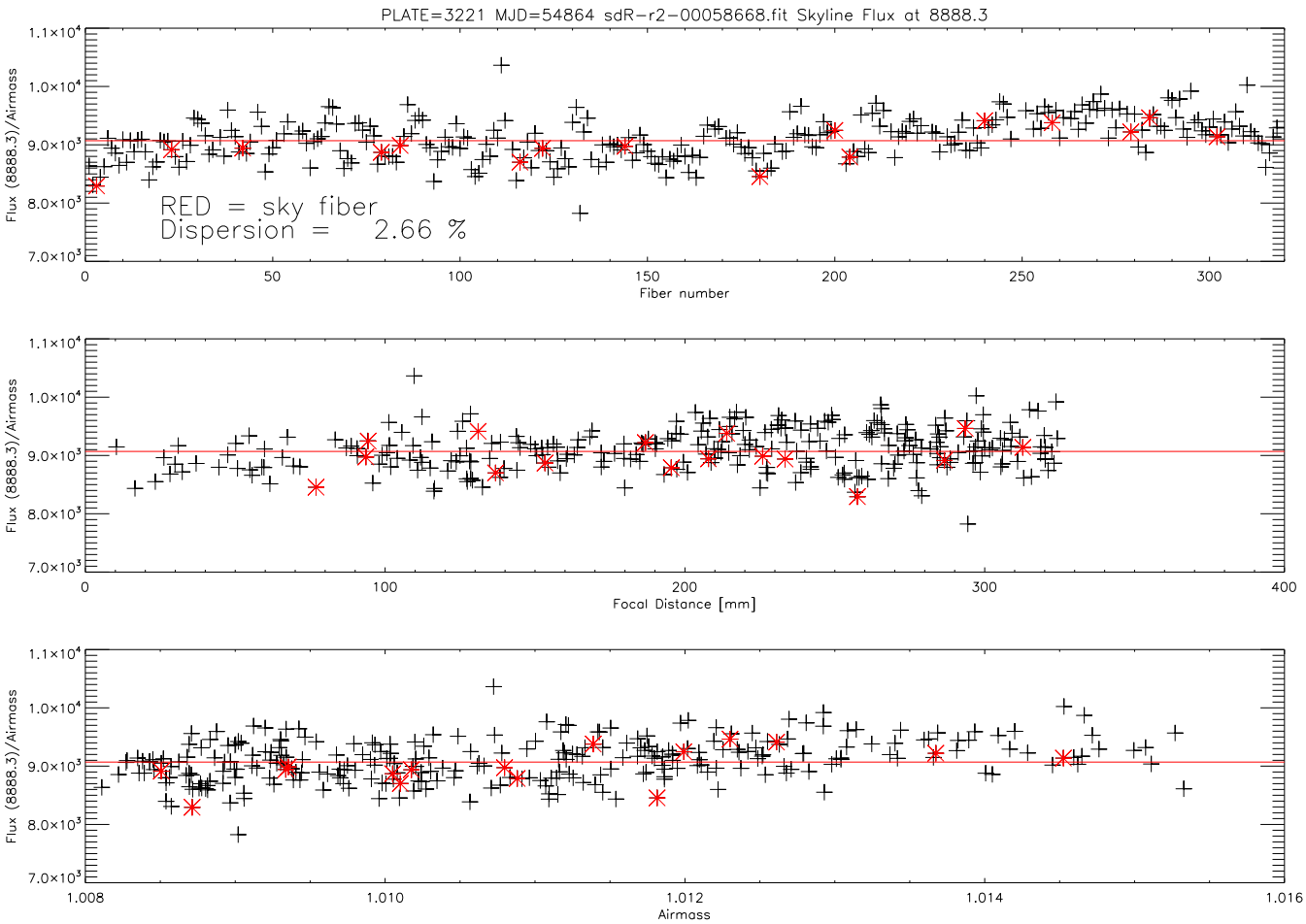

PLATE=3221 MJD=54864 sdR-r2-00058668.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

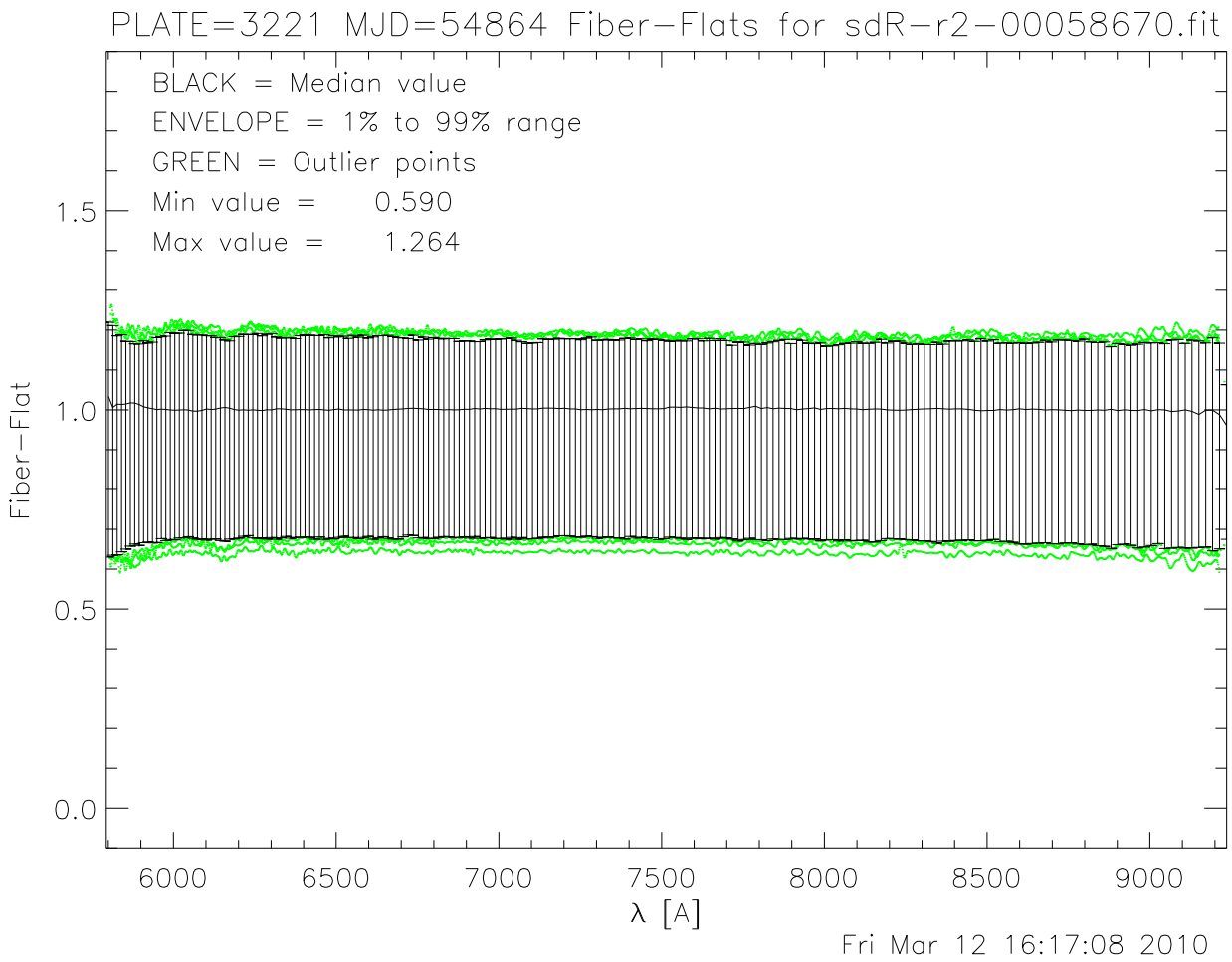

PLATE=3221 MJD=54864 sdR-r2-00058668.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

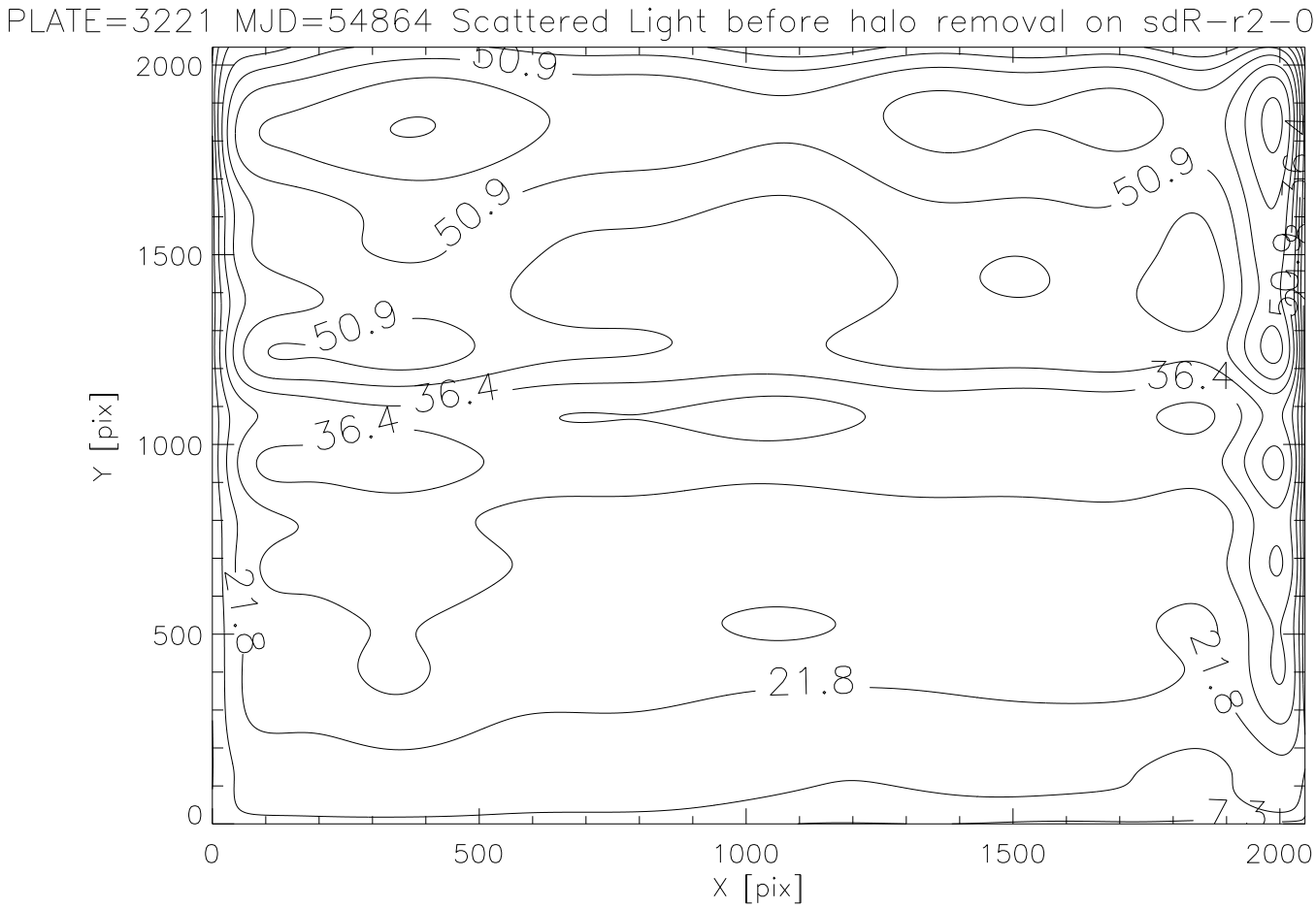

PLATE=3221 MJD=54864 sdR-r2-00058668.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

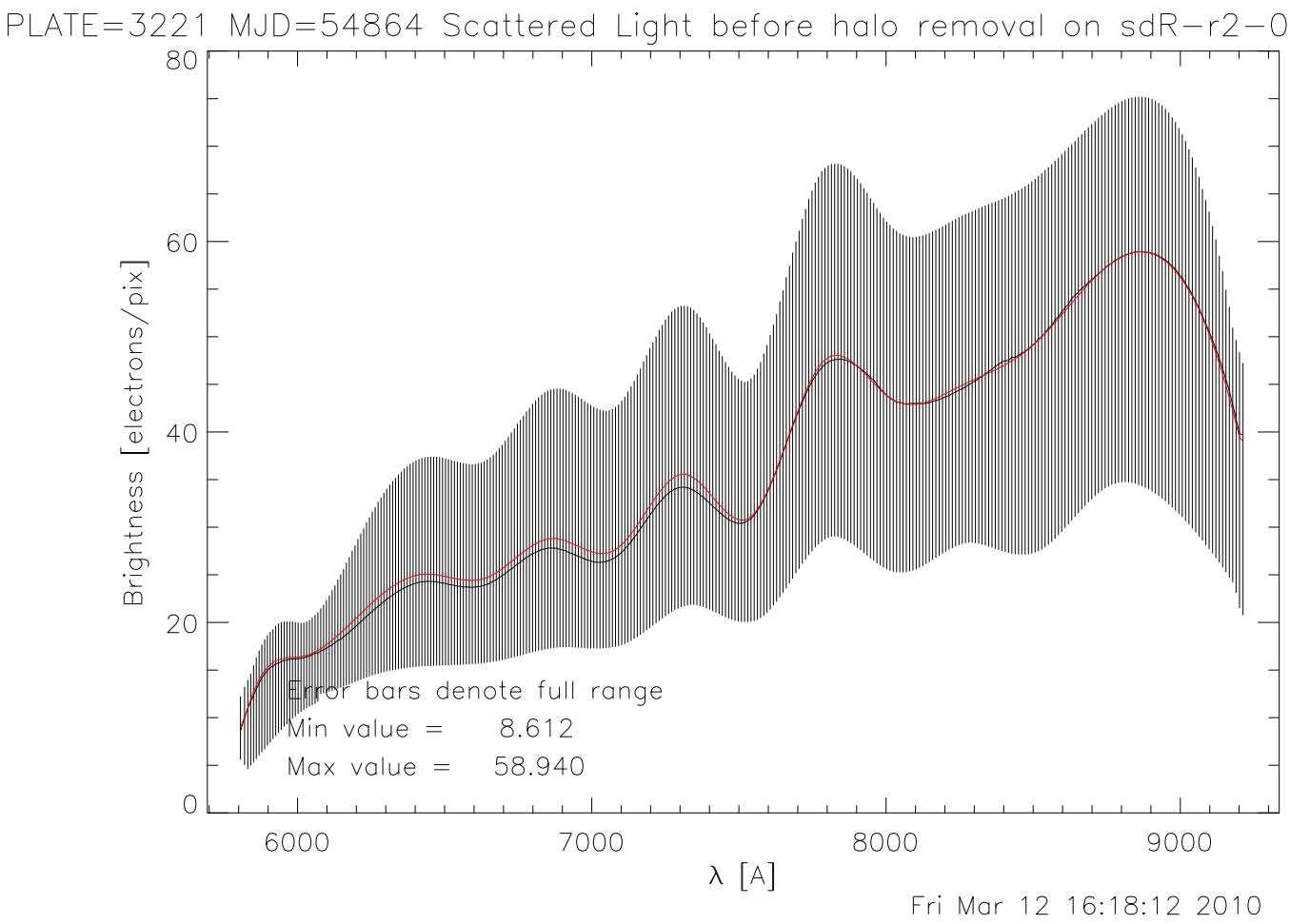

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058668.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

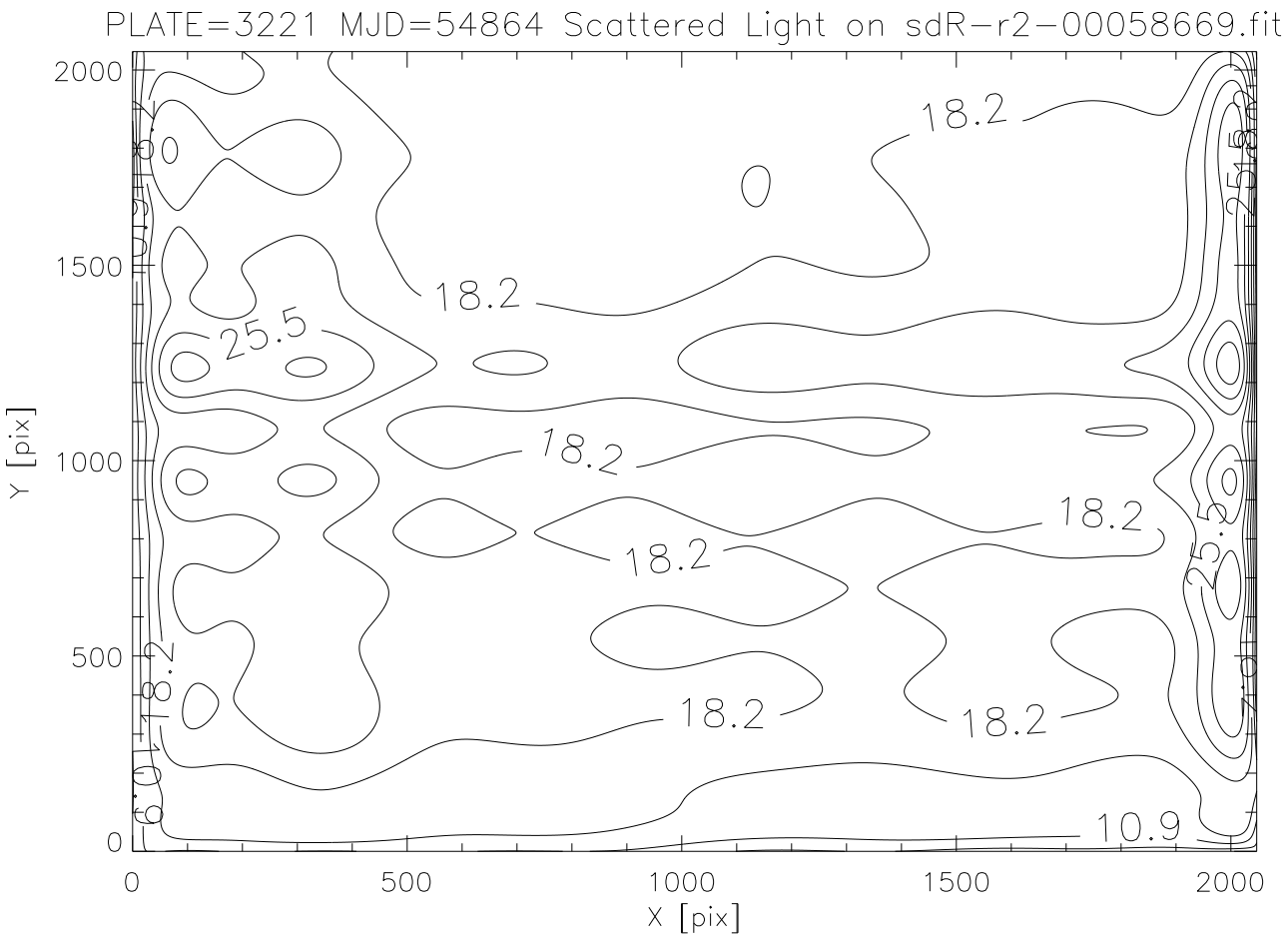

PLATE=3221 MJD=54864 sdR-r2-00058668.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.23 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

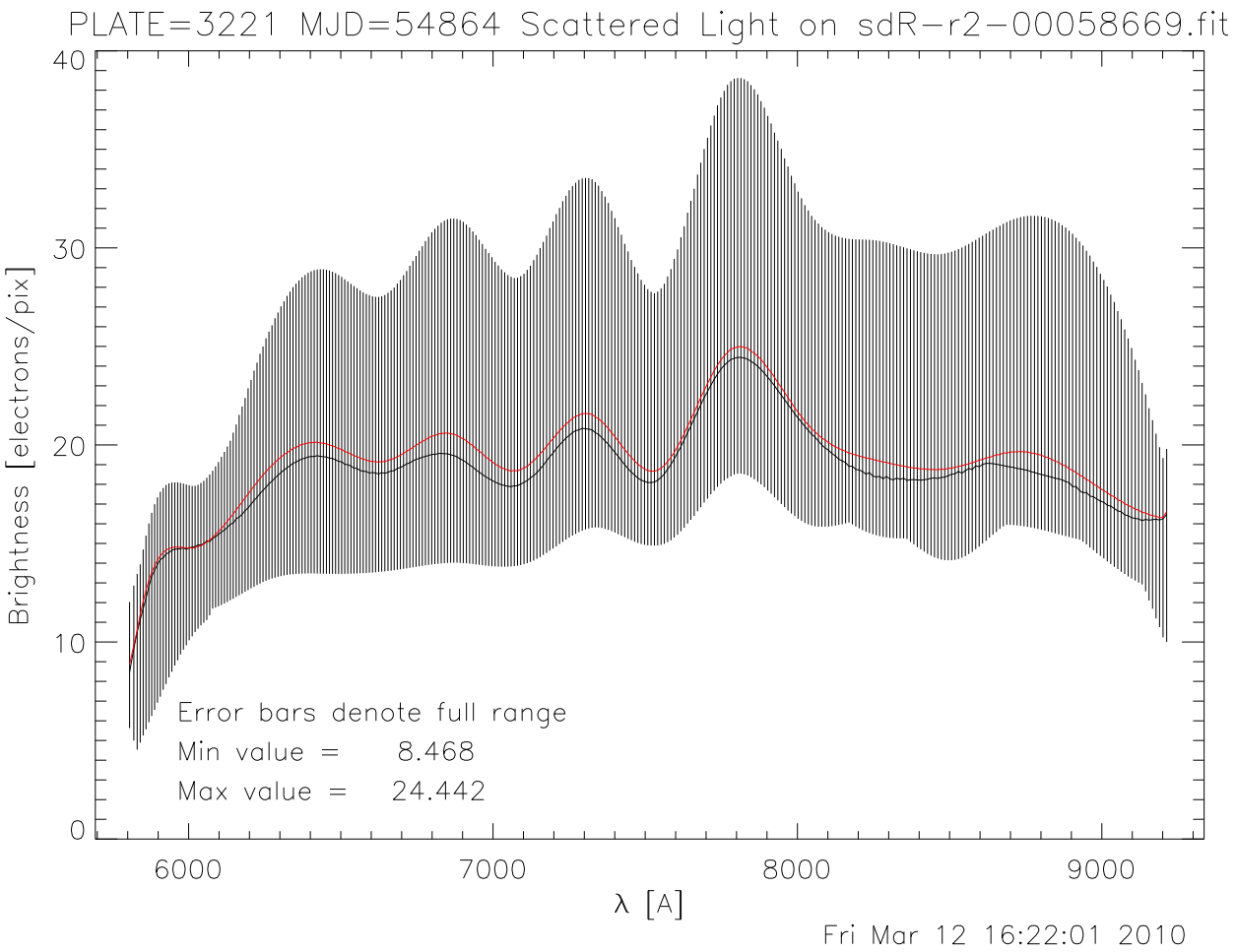

PLATE=3221 MJD=54864 sdR-r2-00058668.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.66 %
Fiber number
Focal Distance [mm]
Airmass

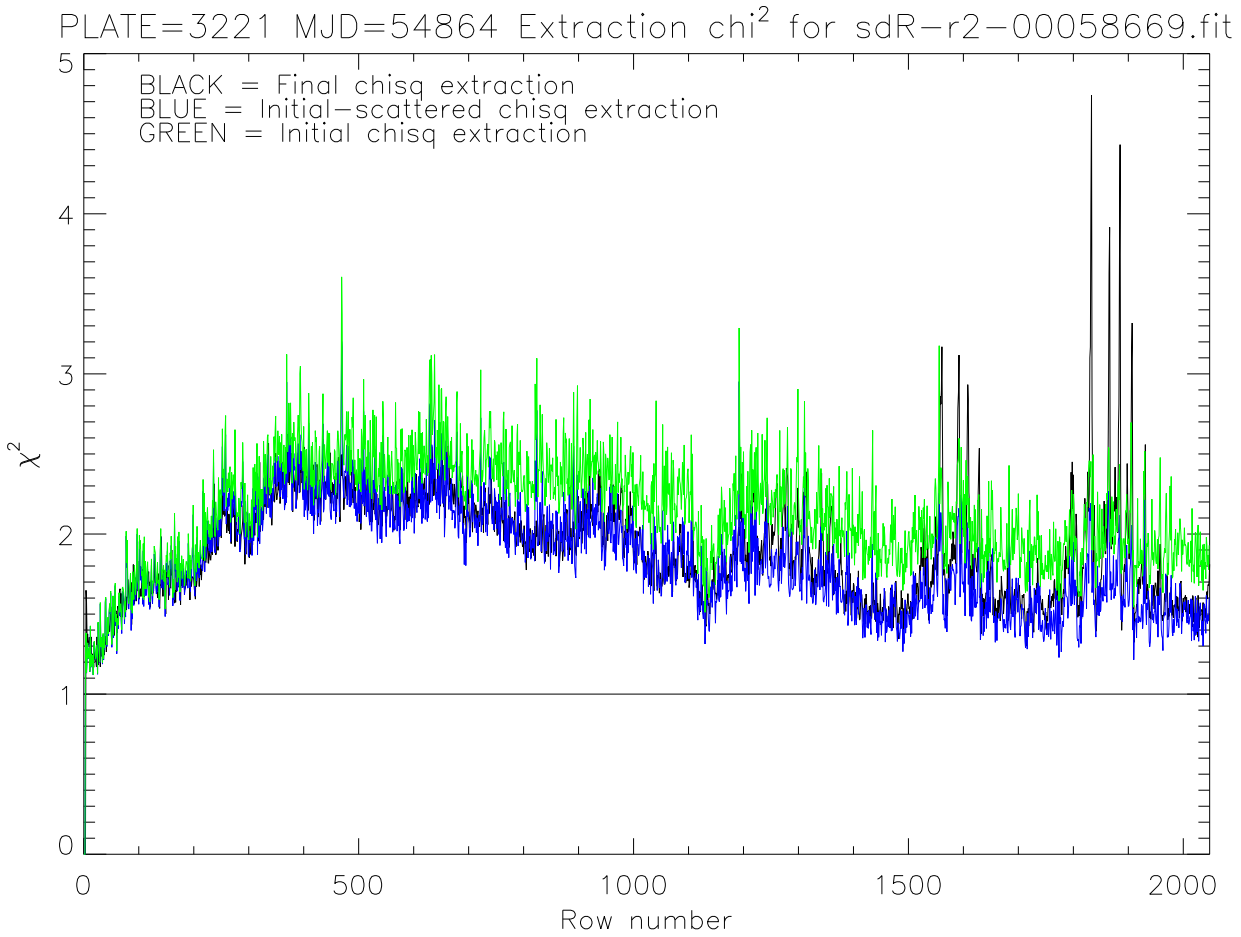

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r2−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.590
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 16:17:08 2010

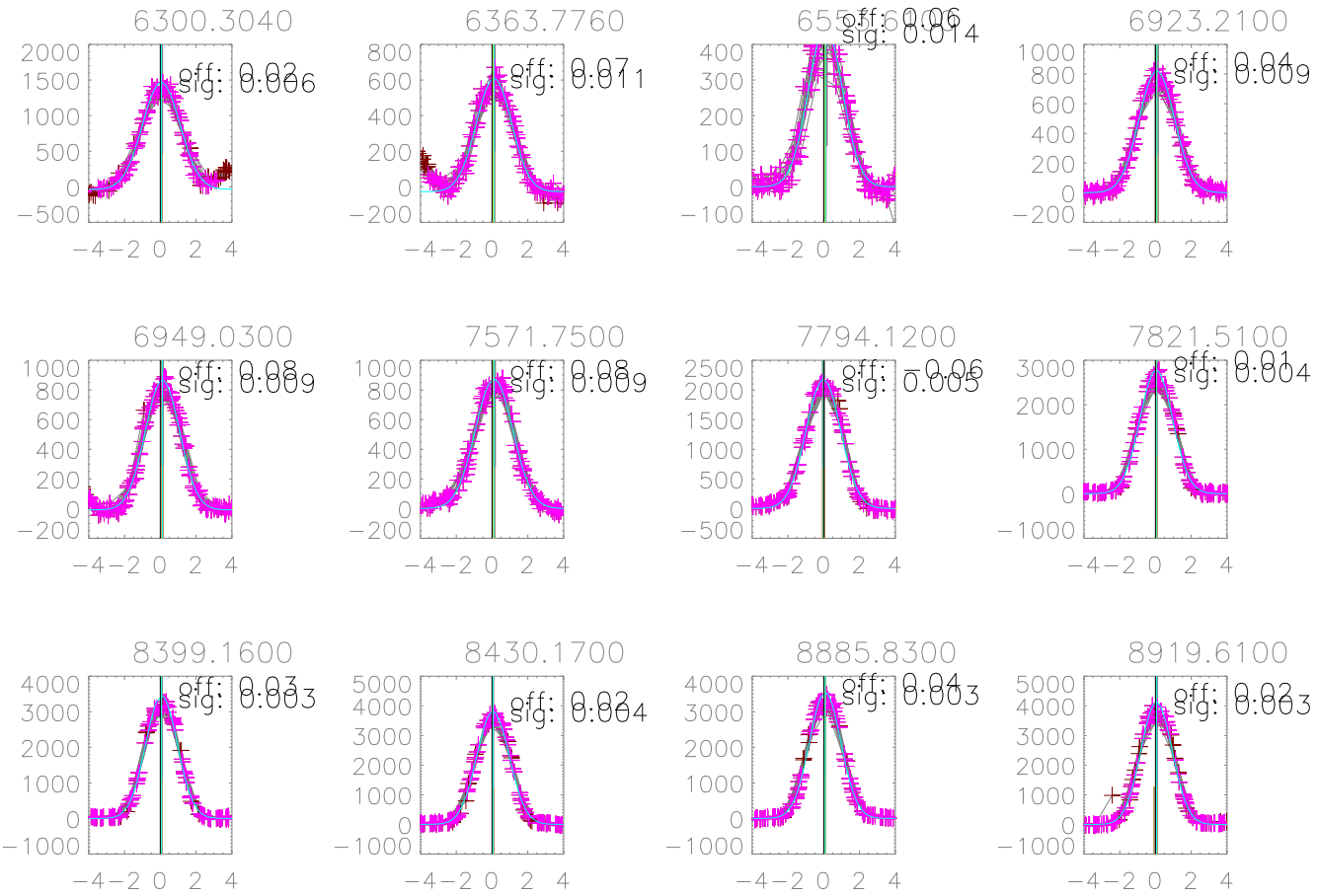

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058669.fi
50.9
50.9
50.9
36.4
36.4
36.4
21.8
21.8
21.8
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

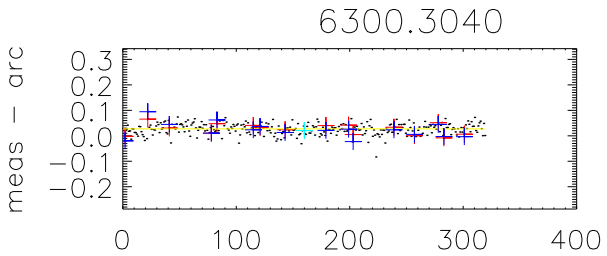

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058669.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.612
Max value = 58.940
Fri Mar 12 16:18:12 2010

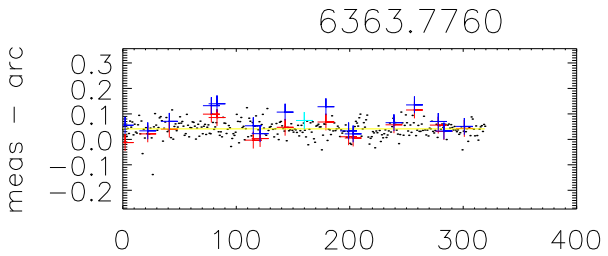

PLATE=3221 MJD=54864 Scattered Light on sdR−r2−00058669.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
18.2
25.5
10.9

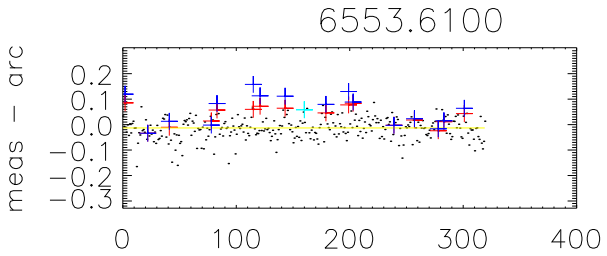

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058669.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.468
Max value = 24.442
Fri Mar 12 16:22:01 2010

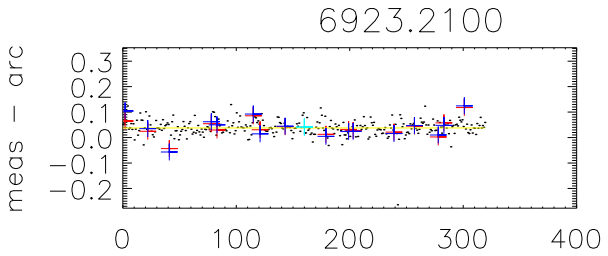

PLATE=3221 MJD=54864 Extraction chi^2 for sdR−r2−00058669.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

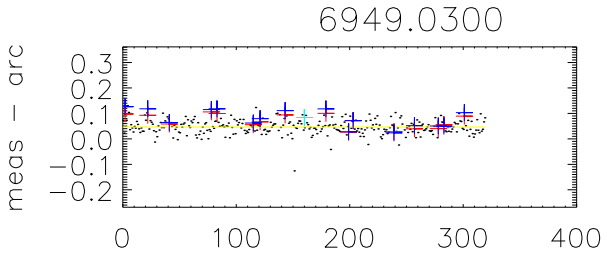

6300.3040
off: 0.02
sig: 0.006
6363.7760
off: 0.07
sig: 0.011
6555.6000
off: 0.06
sig: 0.014
6923.2100
off: 0.04
sig: 0.009
6949.0300
off: 0.08
sig: 0.009
7571.7500
off: 0.08
sig: 0.009
7794.1200
off: −0.06
sig: 0.005
7821.5100
off: 0.01
sig: 0.004
8399.1600
off: 0.03
sig: 0.003
8430.1700
off: 0.02
sig: 0.004
8885.8300
off: 0.04
sig: 0.003
8919.6100
off: 0.02
sig: 0.003

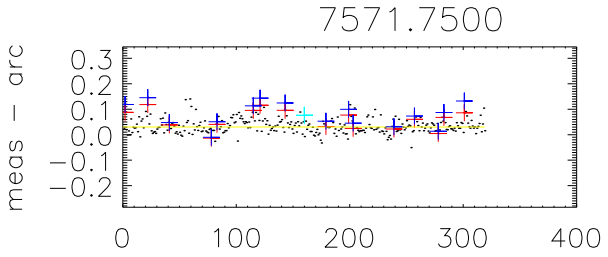

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

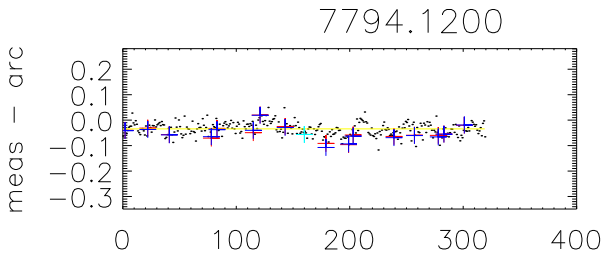

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

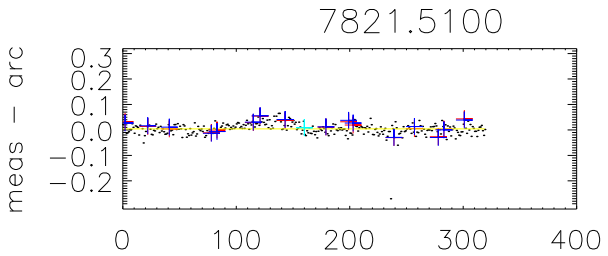

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

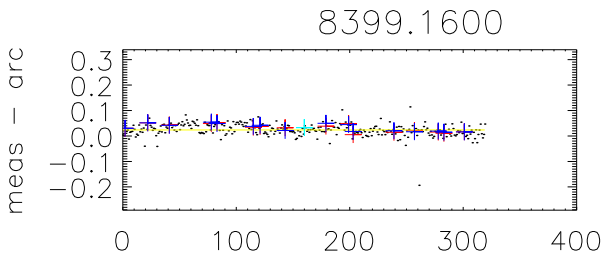

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

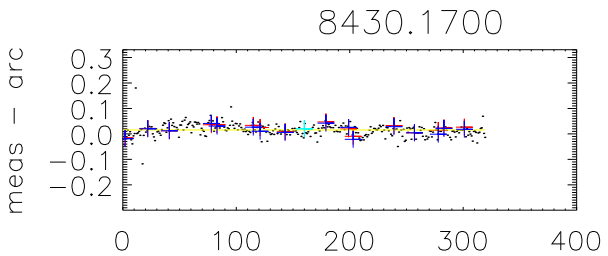

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

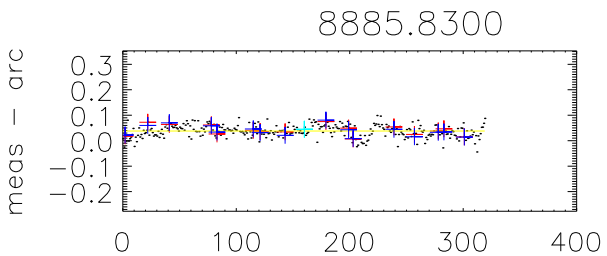

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

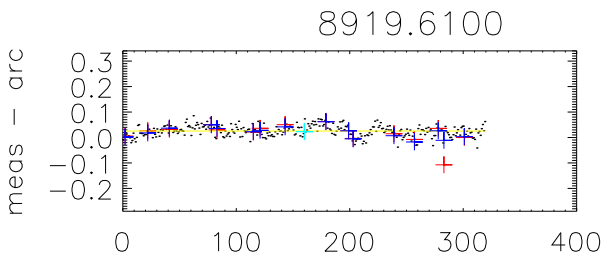

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

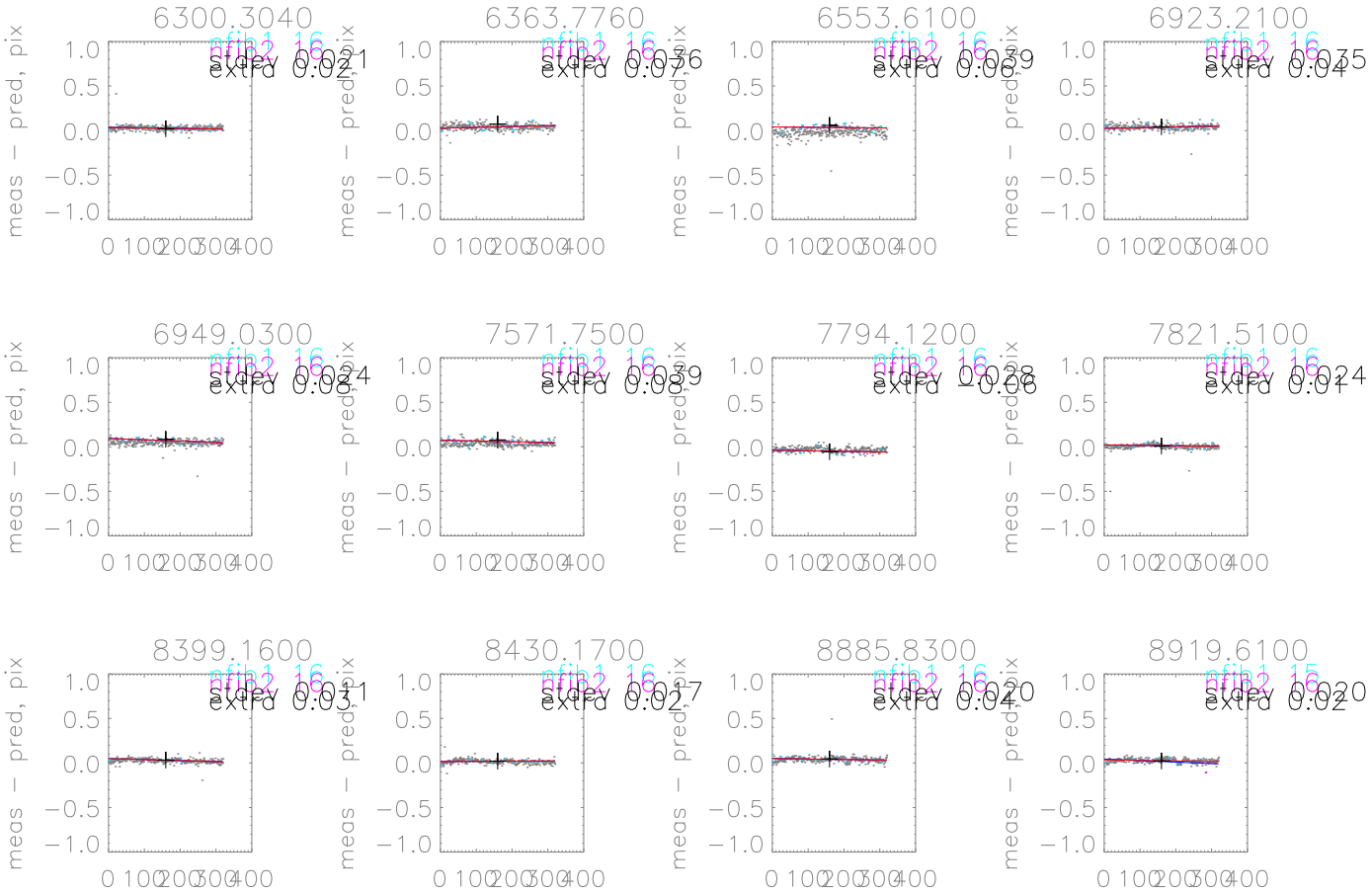

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

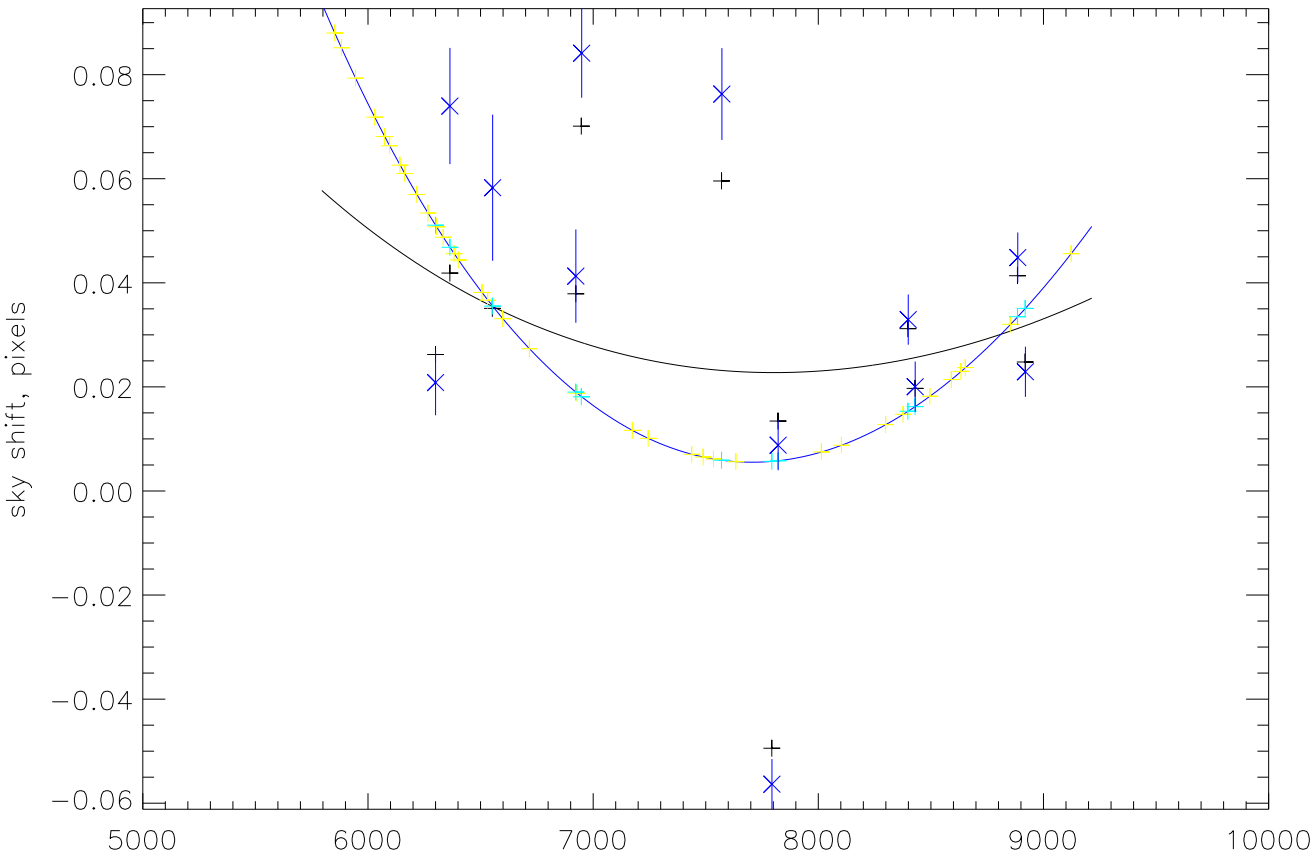

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

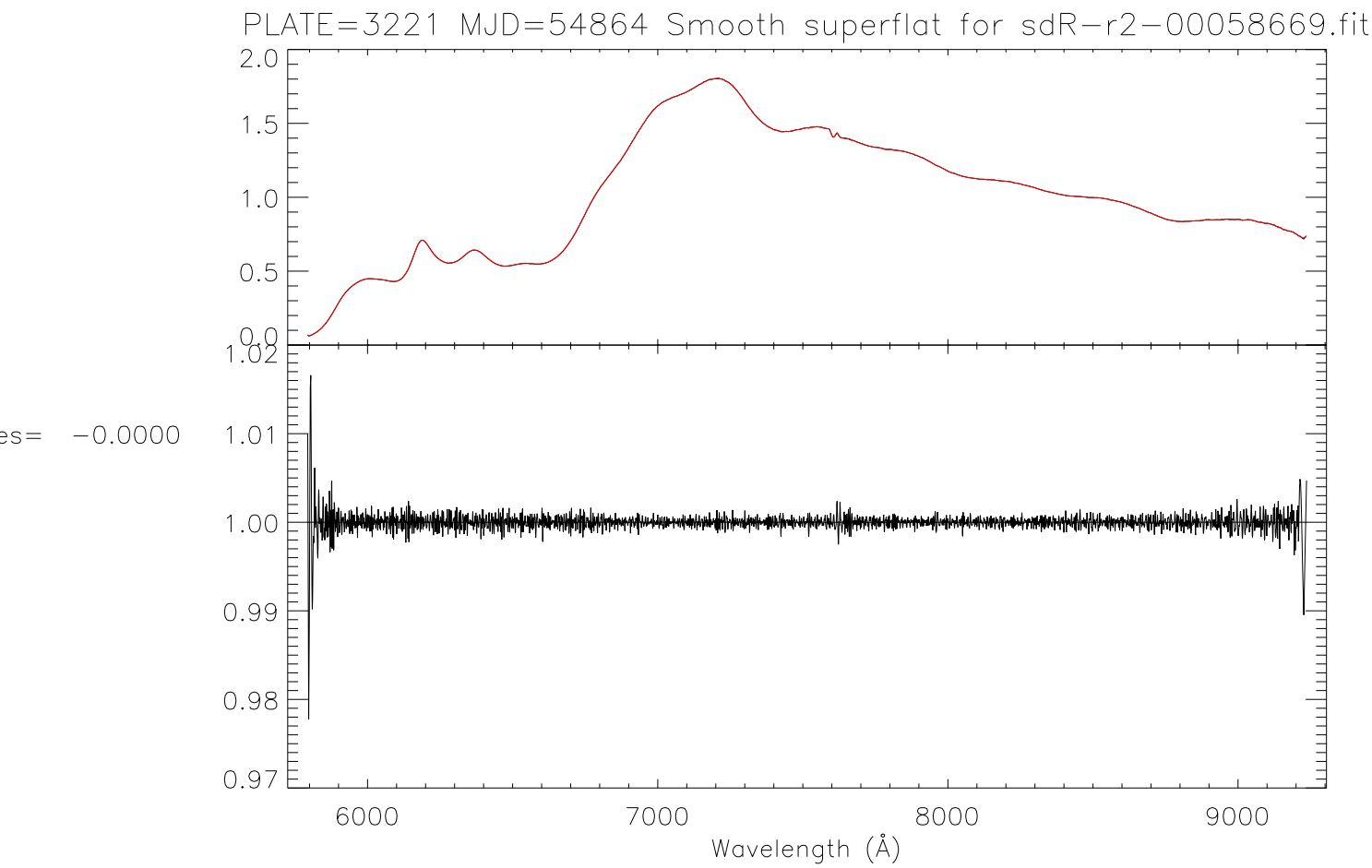

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

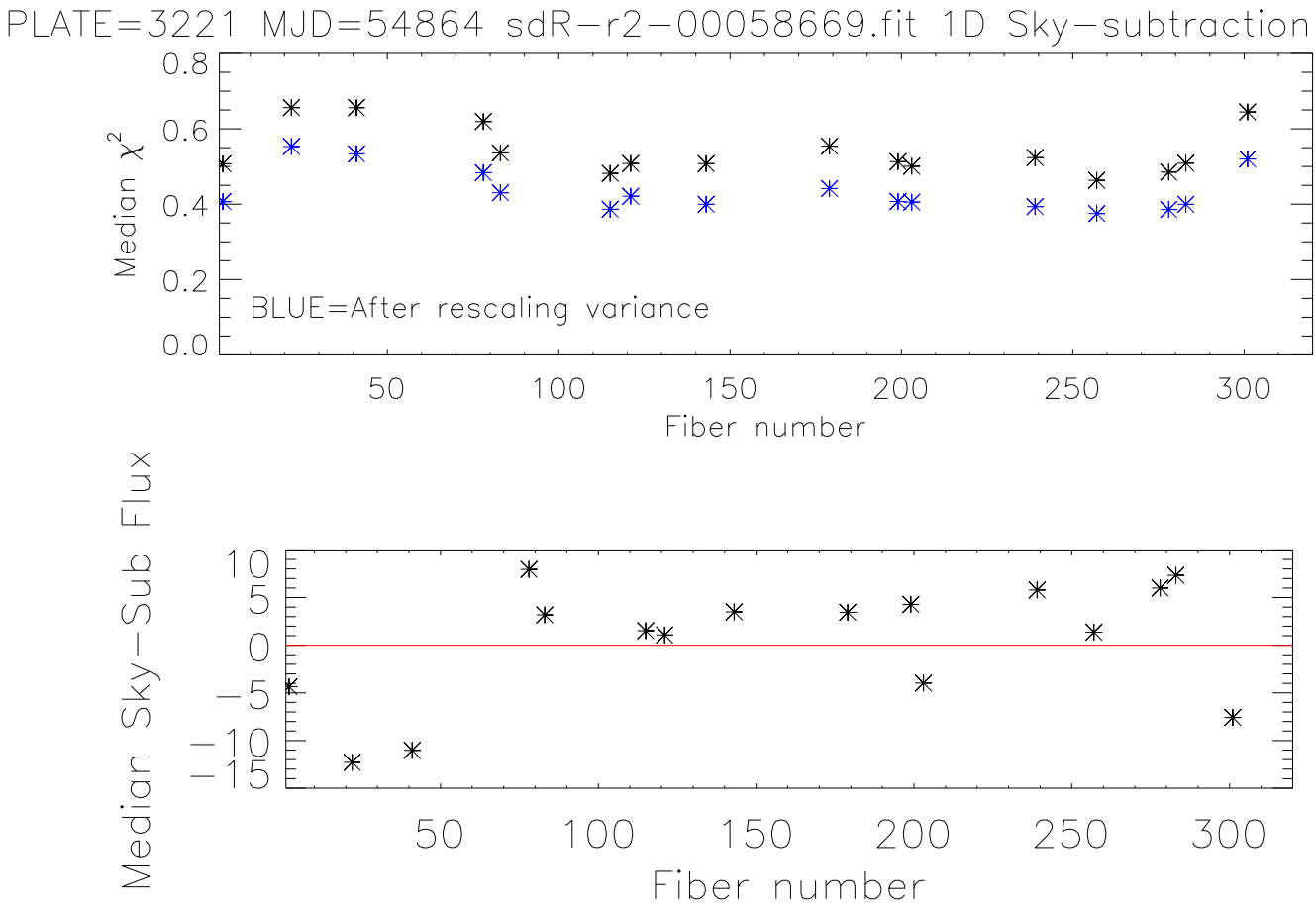

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

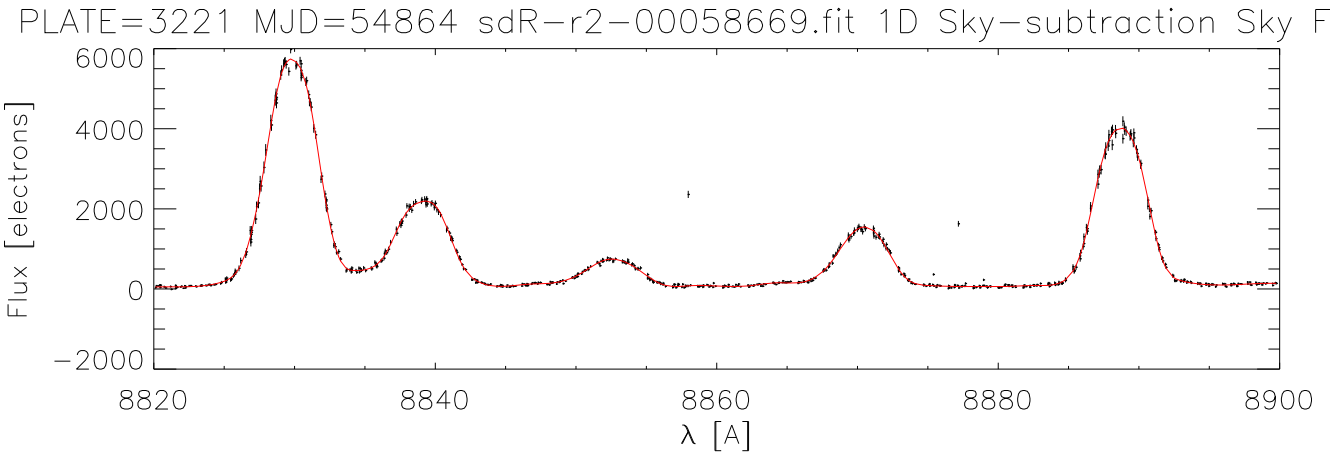

6300.3040
stdev 0.021
extra 0.02
6363.7760
stdev 0.036
extra 0.07
6553.6100
stdev 0.039
extra 0.06
6923.2100
stdev 0.035
extra 0.04
6949.0300
stdev 0.024
extra 0.08
7571.7500
stdev 0.039
extra 0.08
7794.1200
stdev 0.028
extra −0.06
7821.5100
stdev 0.024
extra 0.01
8399.1600
stdev 0.021
extra 0.03
8430.1700
stdev 0.017
extra 0.02
8885.8300
stdev 0.020
extra 0.04
8919.6100
stdev 0.020
extra 0.02
meas − pred, pix
mfib2 16
mfib1 16
mfib1 15

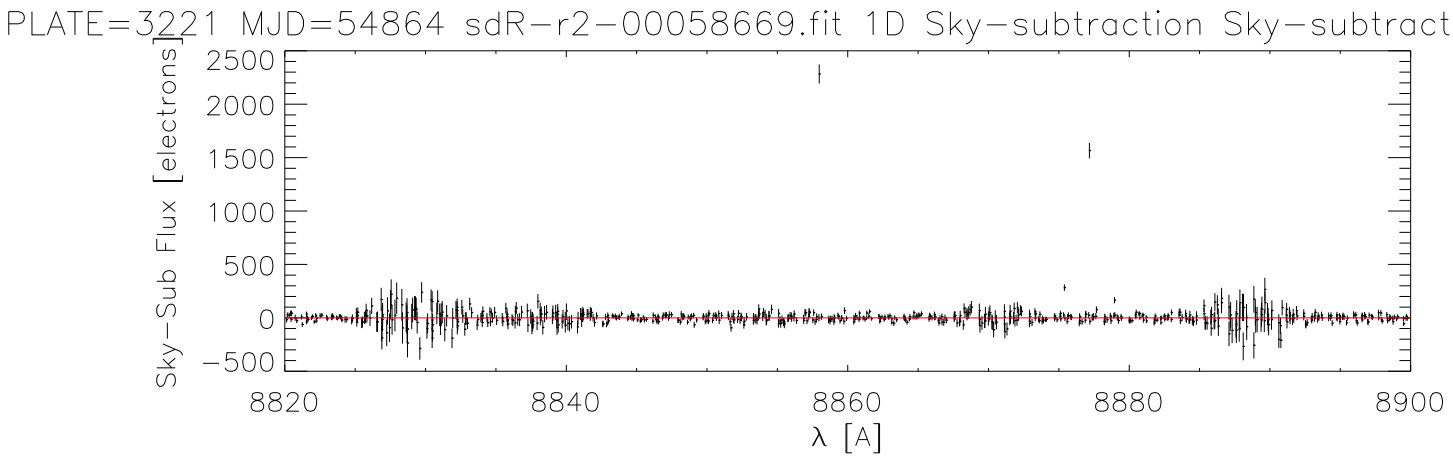

sky shift, pixels
0.08
0.06
0.04
0.02
0.00
−0.02
−0.04
−0.06
5000
6000
7000
8000
9000
10000

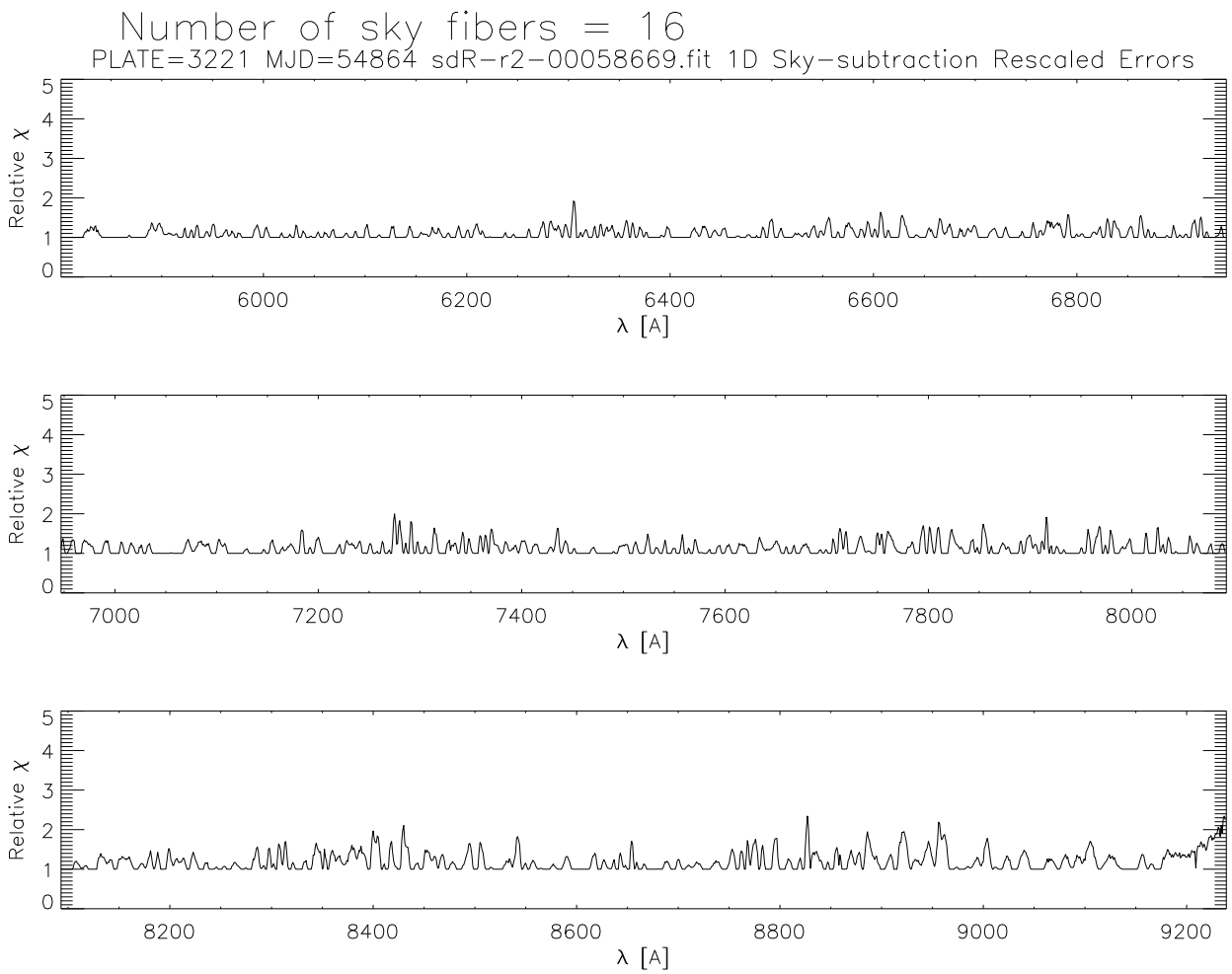

PLATE=3221 MJD=54864 Smooth superflat for sdR-r2-00058669.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

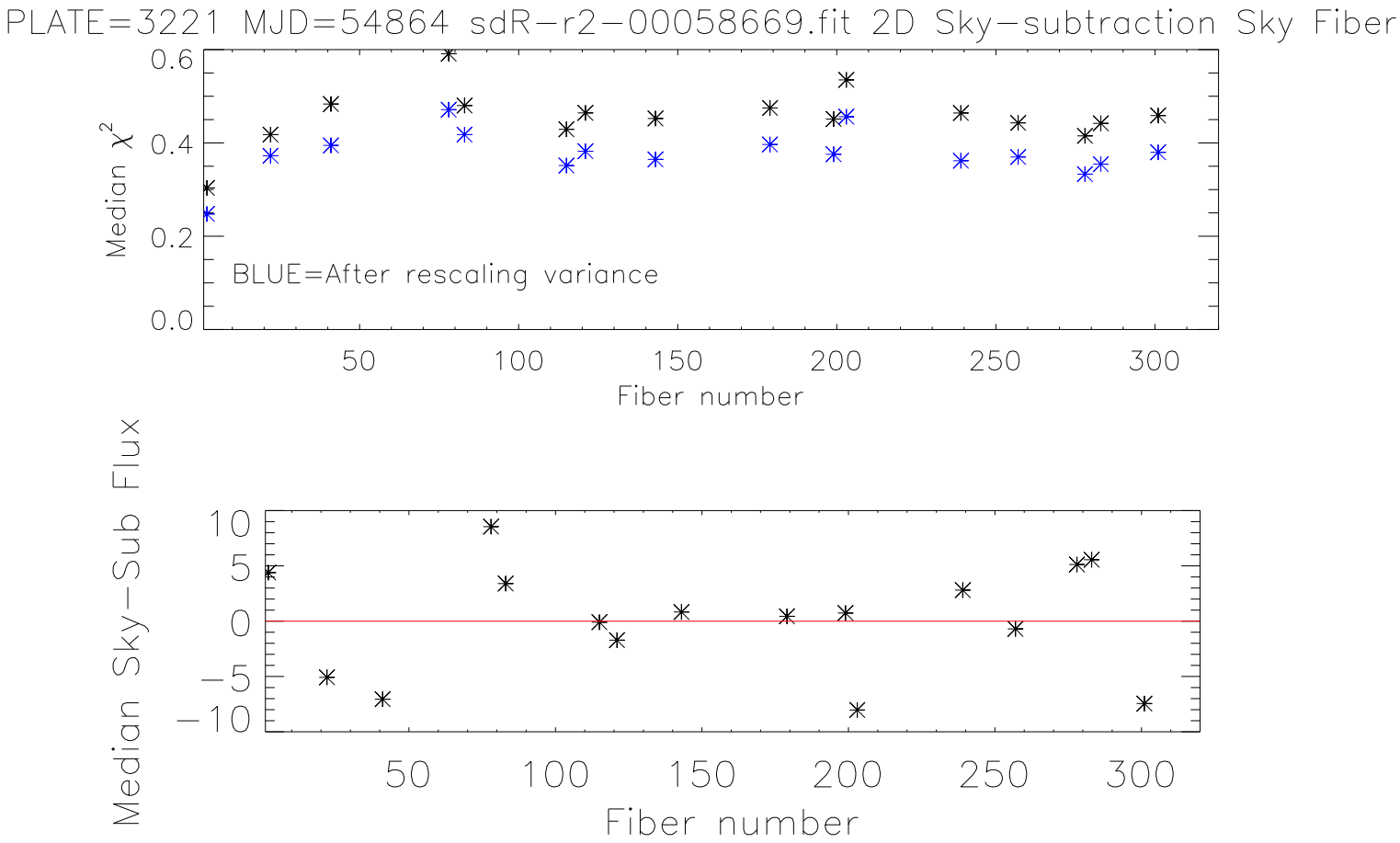
es= −0.0000

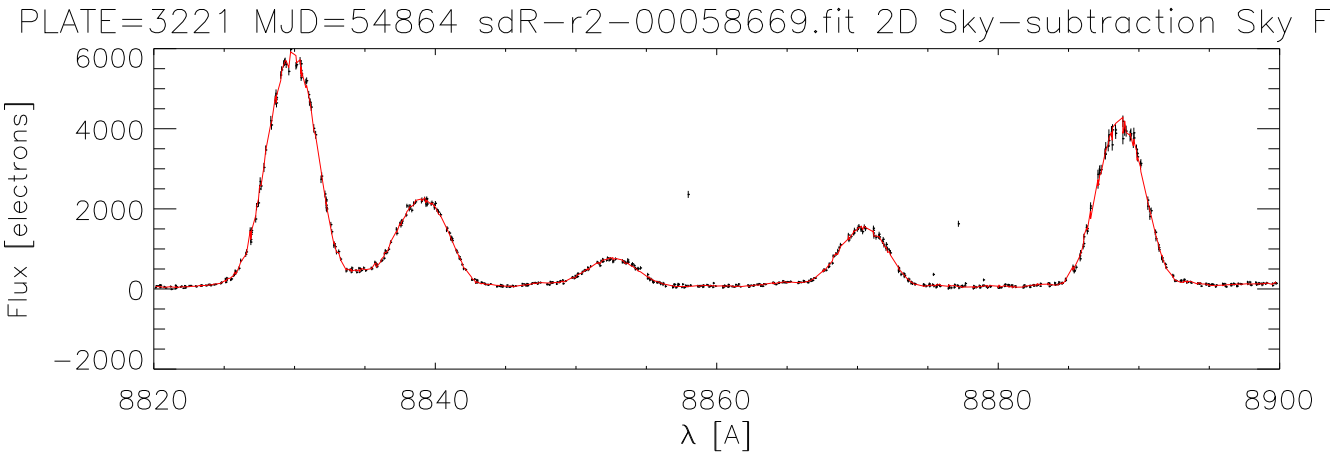

PLATE=3221 MJD=54864 sdR-r2-00058669.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

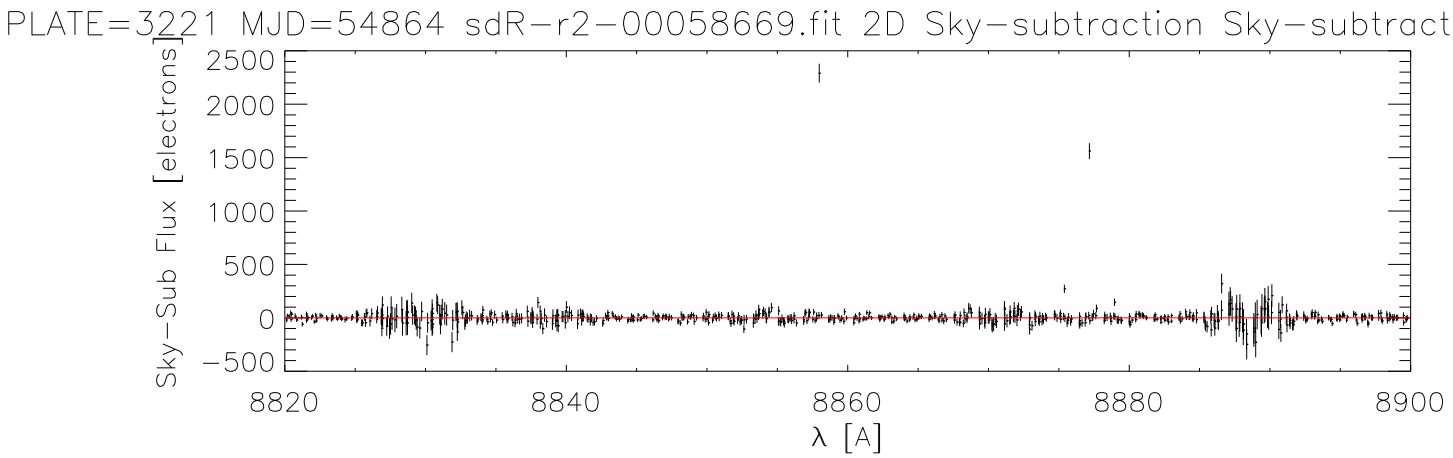

PLATE=3221 MJD=54864 sdR-r2-00058669.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

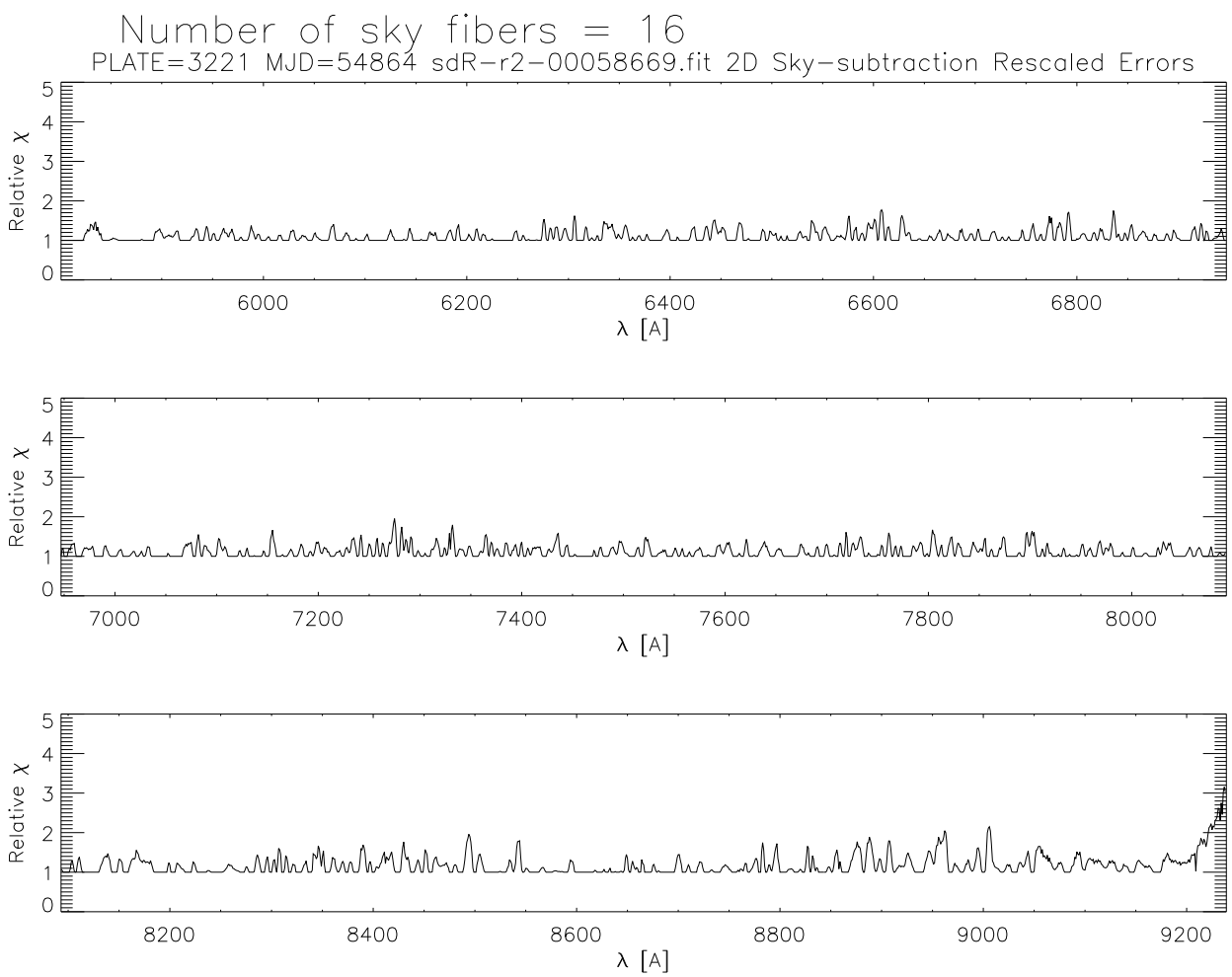

PLATE=3221 MJD=54864 sdR-r2-00058669.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

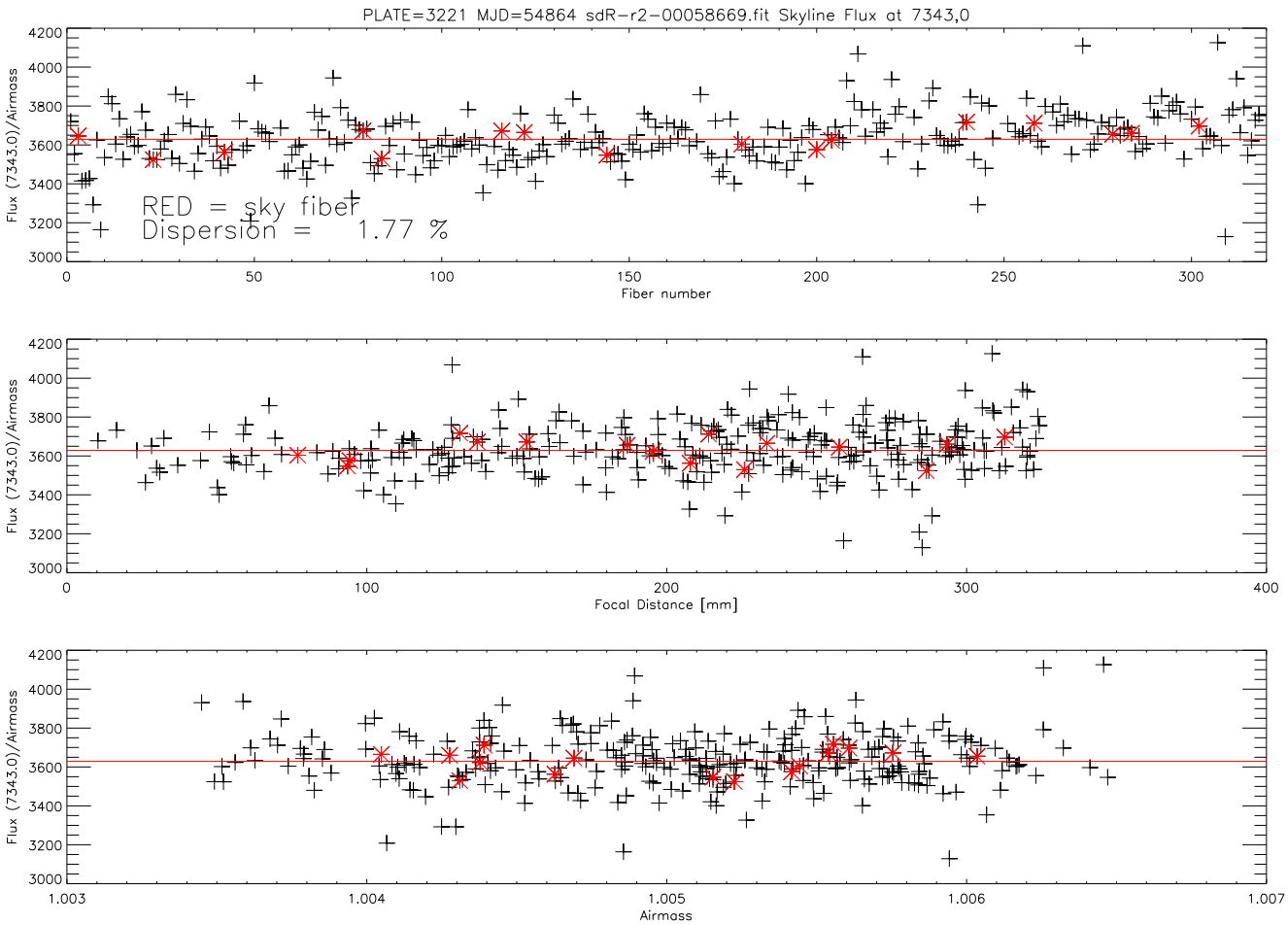

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058669.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

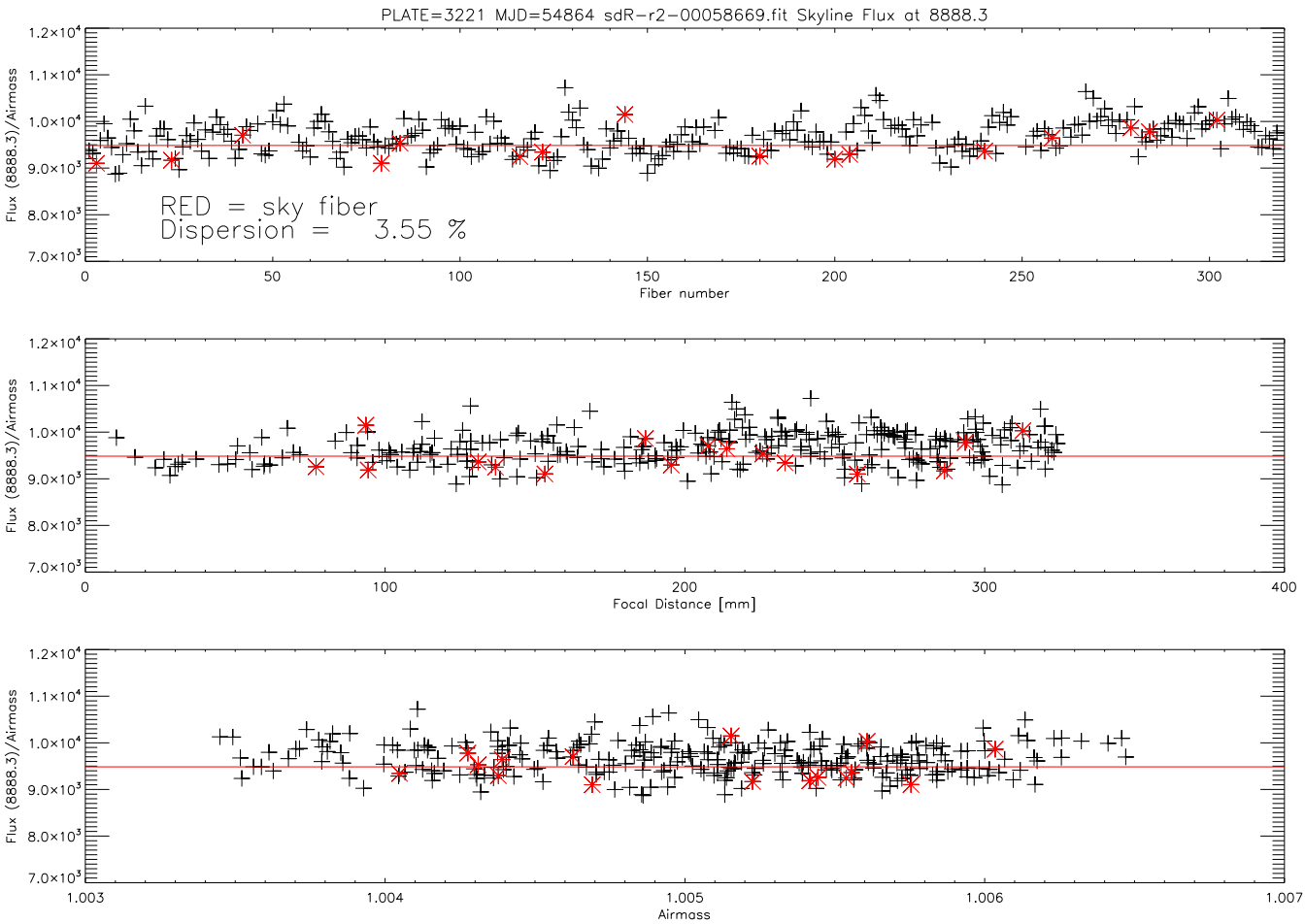

PLATE=3221 MJD=54864 sdR-r2-00058669.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

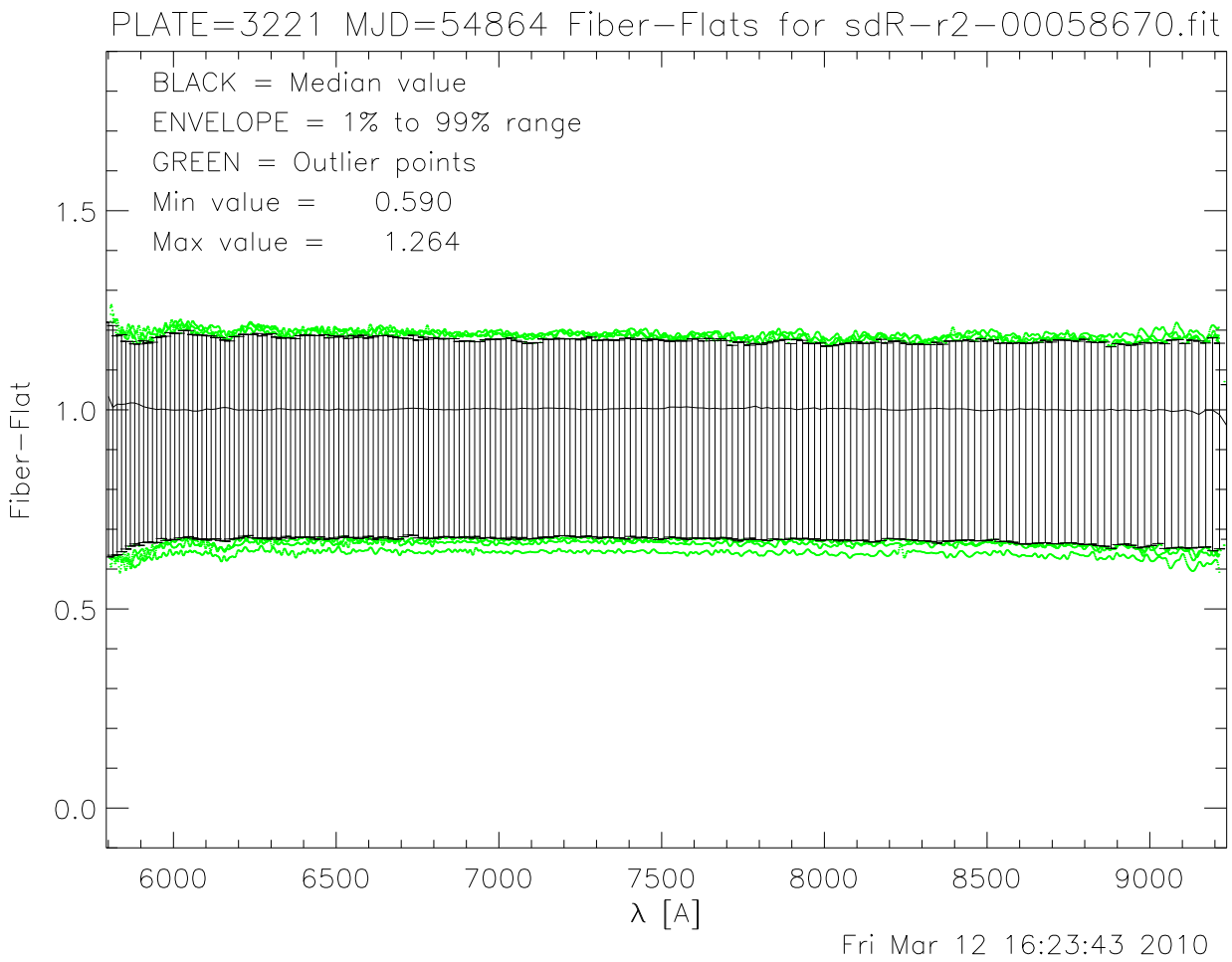

PLATE=3221 MJD=54864 sdR-r2-00058669.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

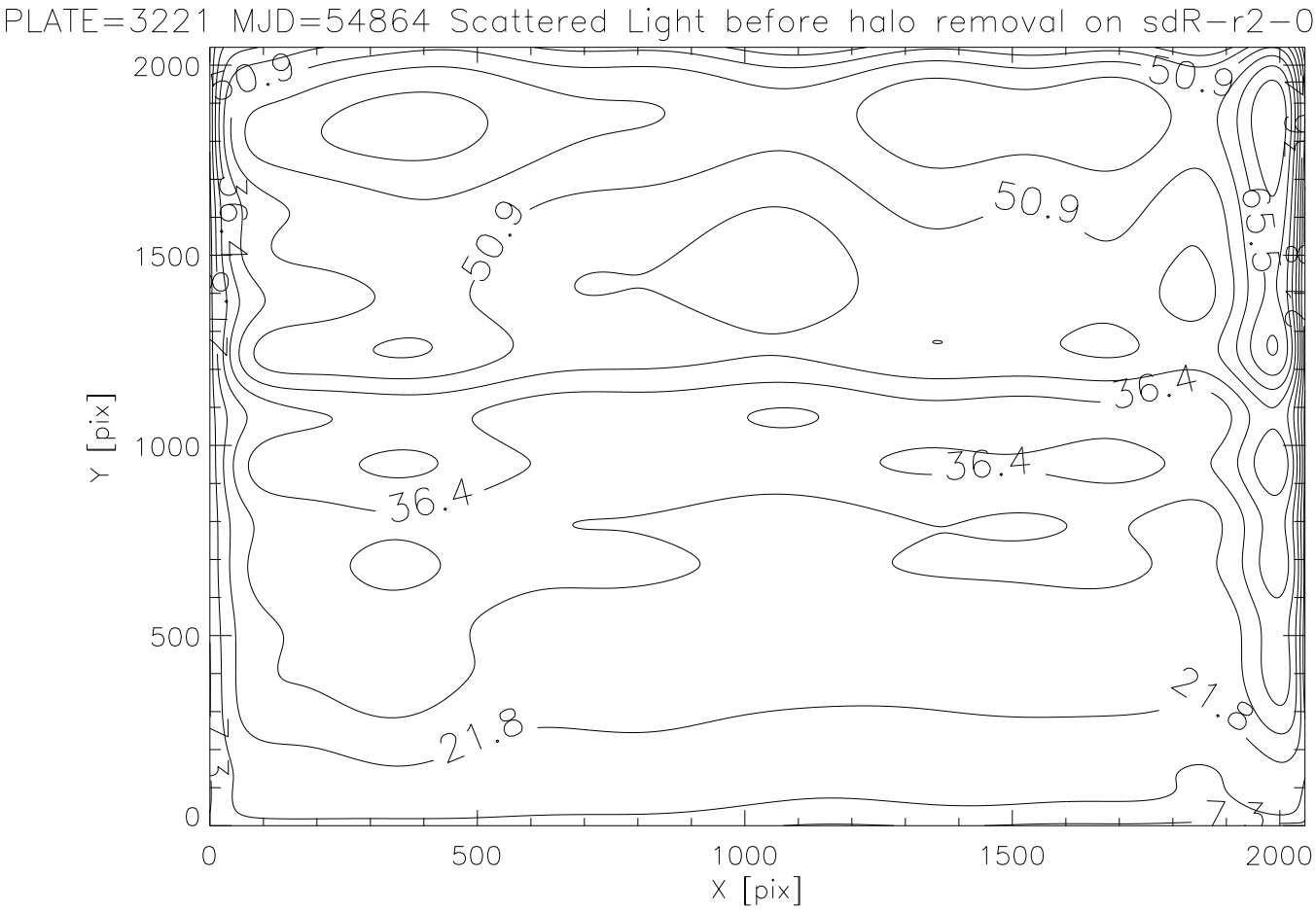

PLATE=3221 MJD=54864 sdR-r2-00058669.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

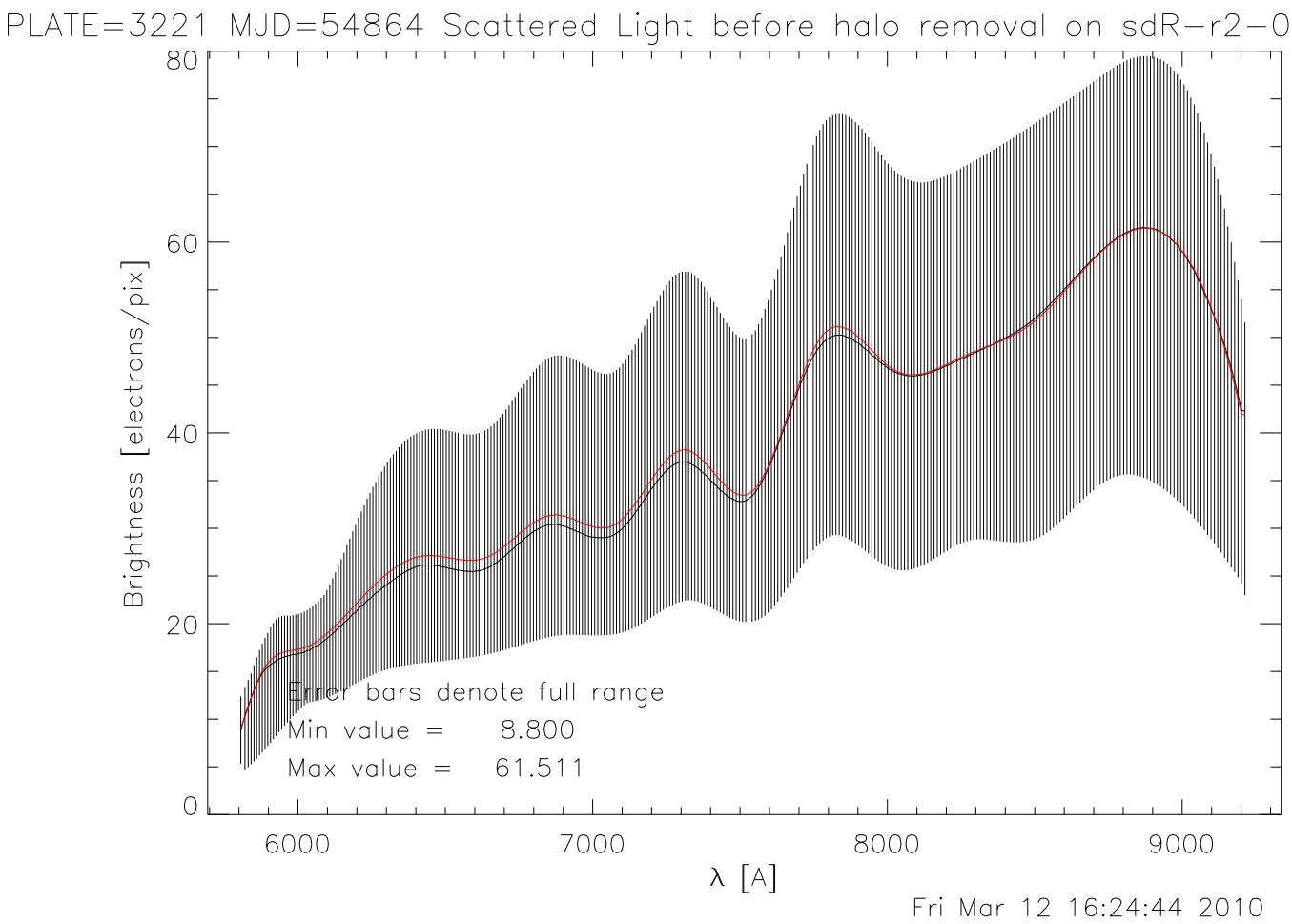

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058669.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

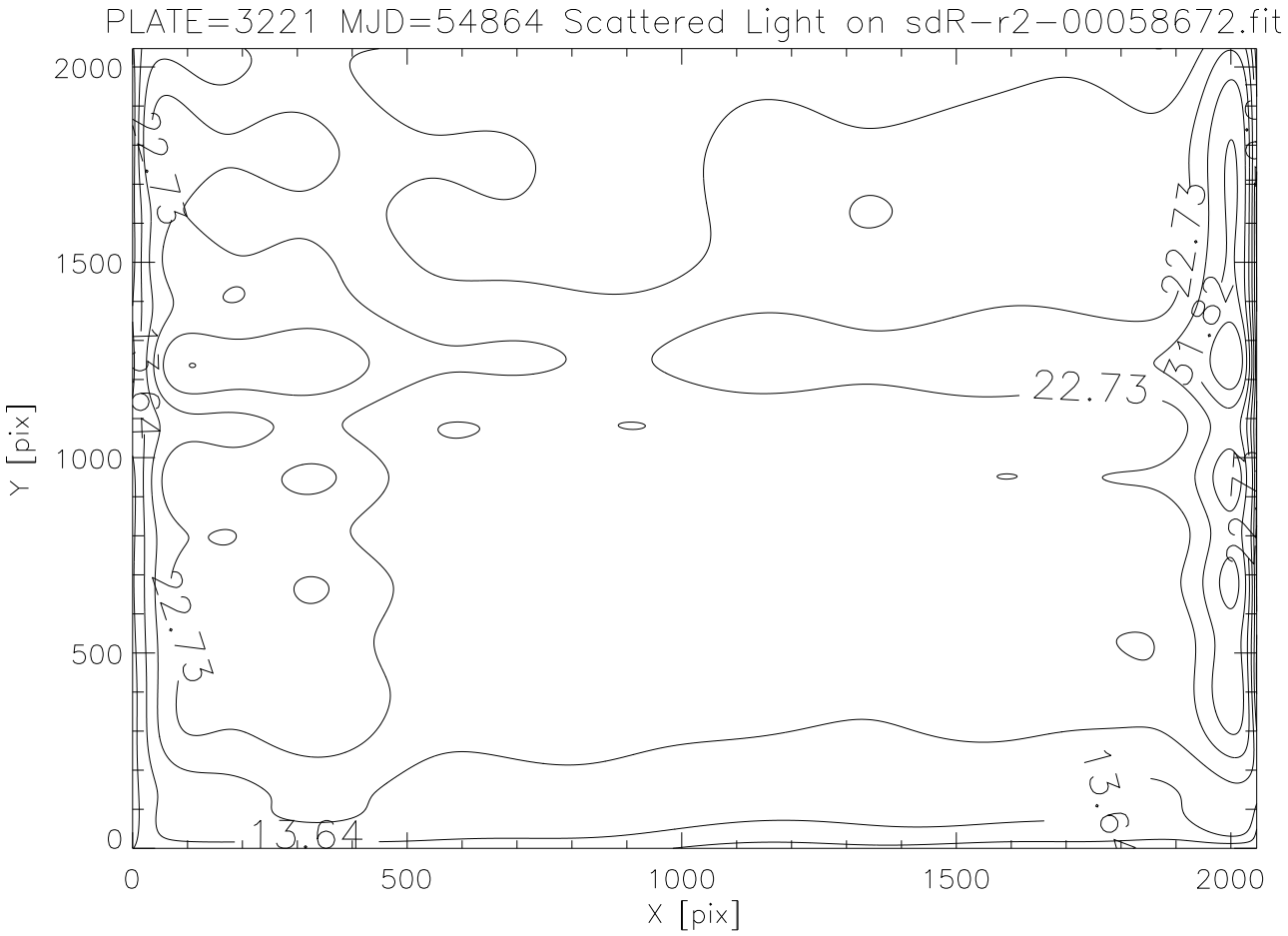

PLATE=3221 MJD=54864 sdR-r2-00058669.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.77 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

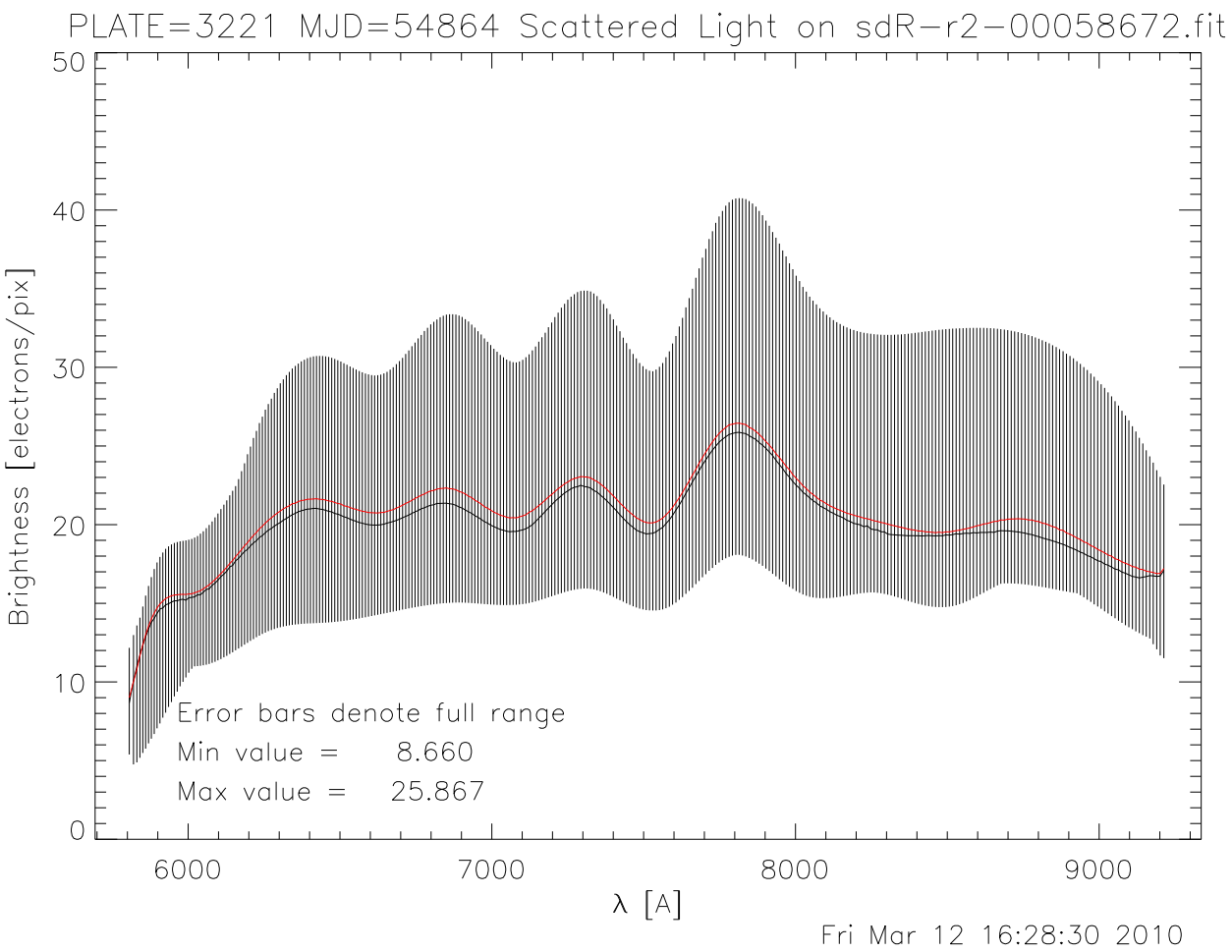

PLATE=3221 MJD=54864 sdR-r2-00058669.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.55 %
Fiber number
Focal Distance [mm]
Airmass

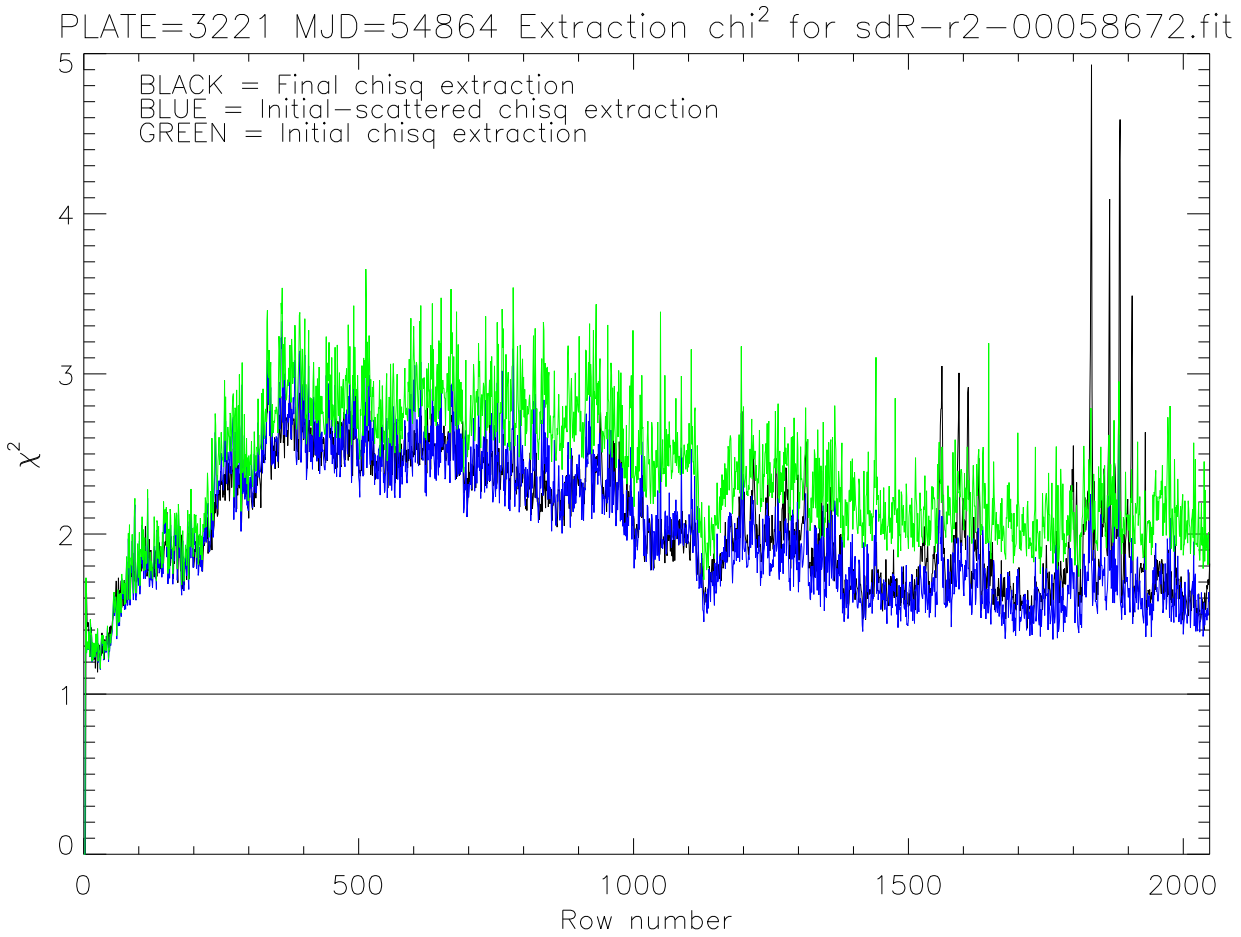

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r2−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.590
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 16:23:43 2010

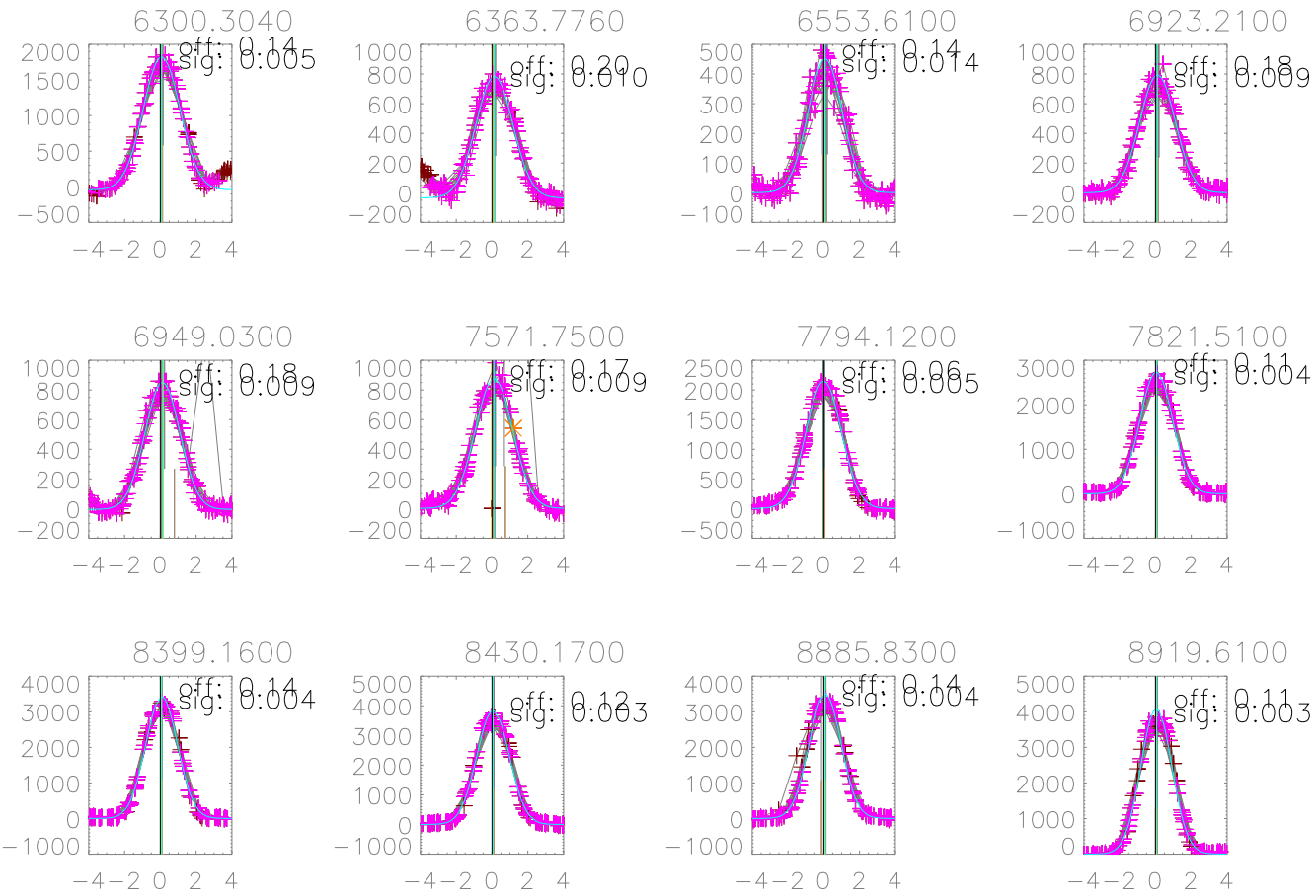

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058672.fi
50.9
36.4
21.8
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

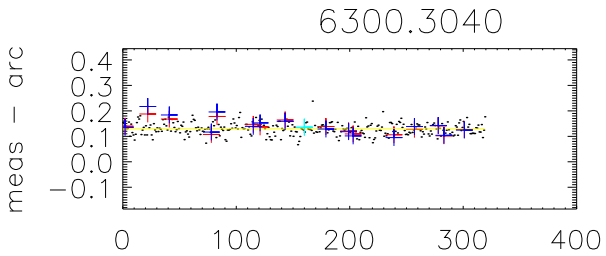

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058672.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.800
Max value = 61.511
Fri Mar 12 16:24:44 2010

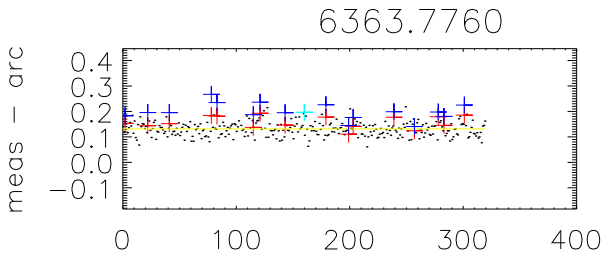

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058672.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
22.73
13.64
31.82

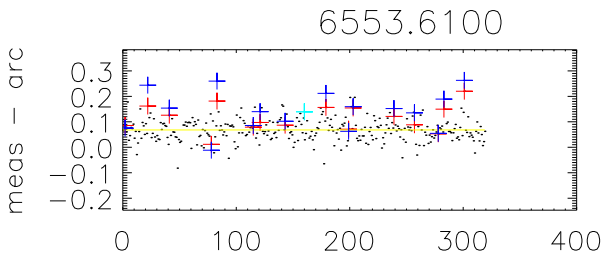

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058672.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.660
Max value = 25.867
Fri Mar 12 16:28:30 2010

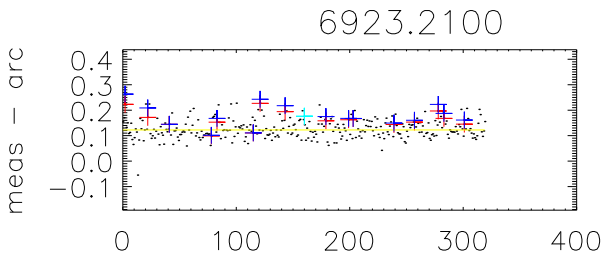

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-r2-00058672.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

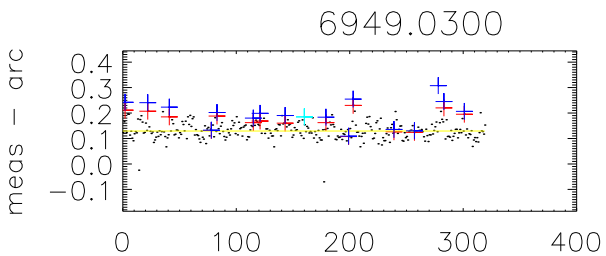

6300.3040
off: 0.14
sig: 0.005
6363.7760
off: 0.20
sig: 0.010
6553.6100
off: 0.14
sig: 0.014
6923.2100
off: 0.18
sig: 0.009
6949.0300
off: 0.18
sig: 0.009
7571.7500
off: 0.17
sig: 0.009
7794.1200
off: 0.06
sig: 0.005
7821.5100
off: 0.11
sig: 0.004
8399.1600
off: 0.14
sig: 0.004
8430.1700
off: 0.12
sig: 0.003
8885.8300
off: 0.14
sig: 0.004
8919.6100
off: 0.11
sig: 0.003

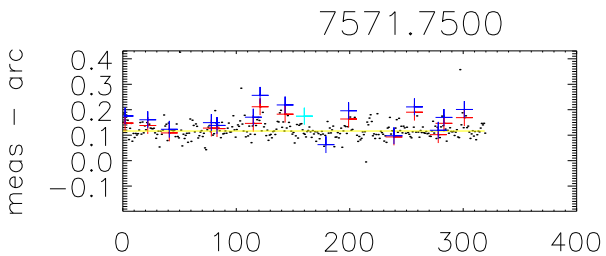

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

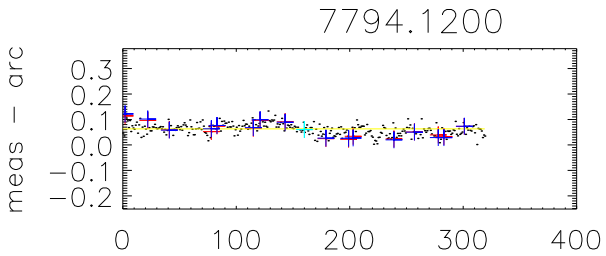

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

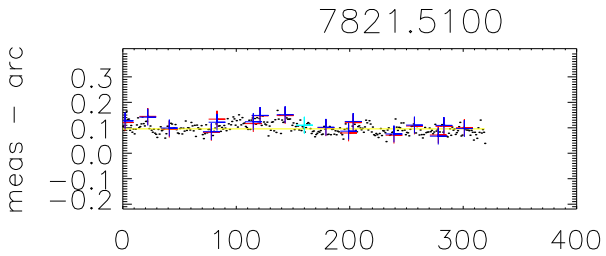

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

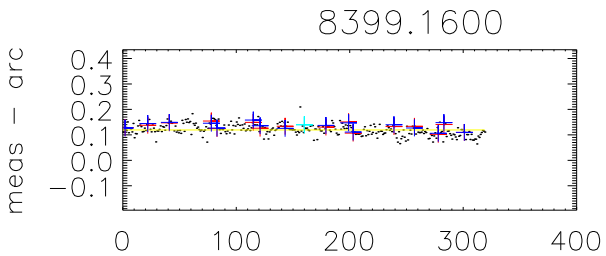

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

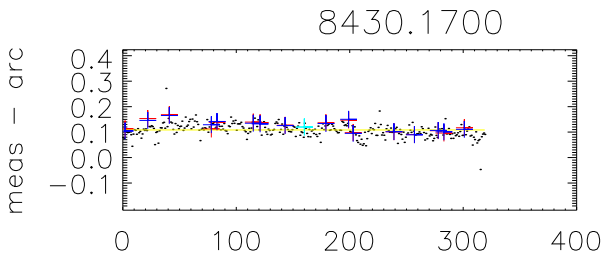

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

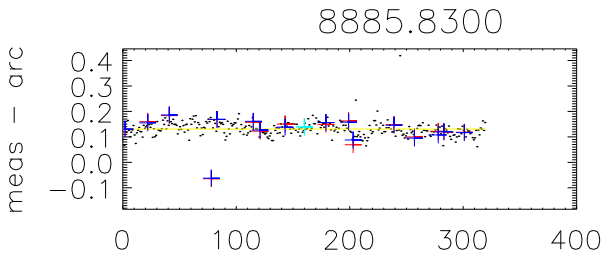

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

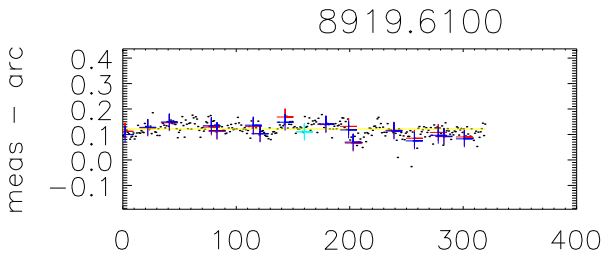

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

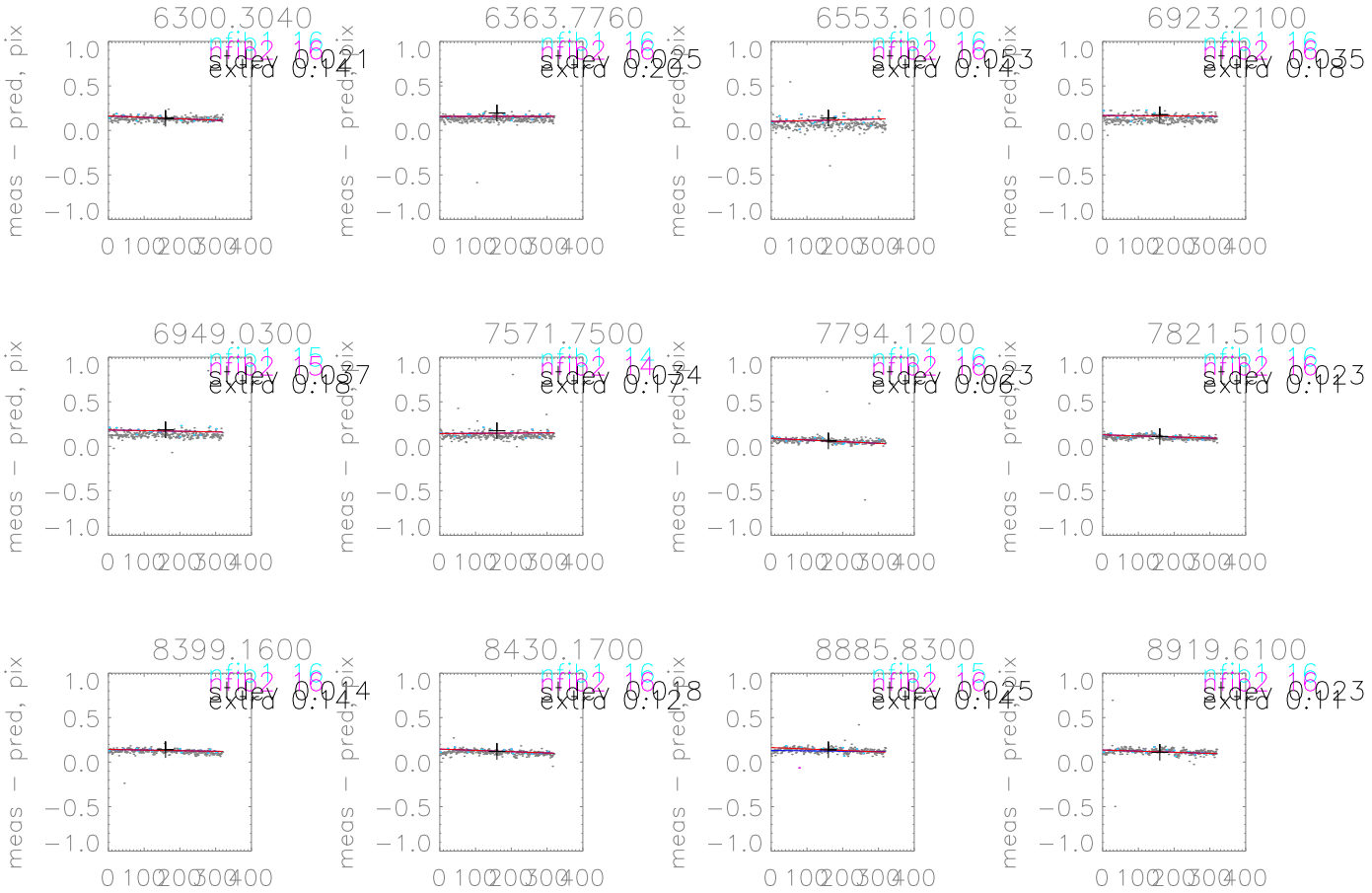

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

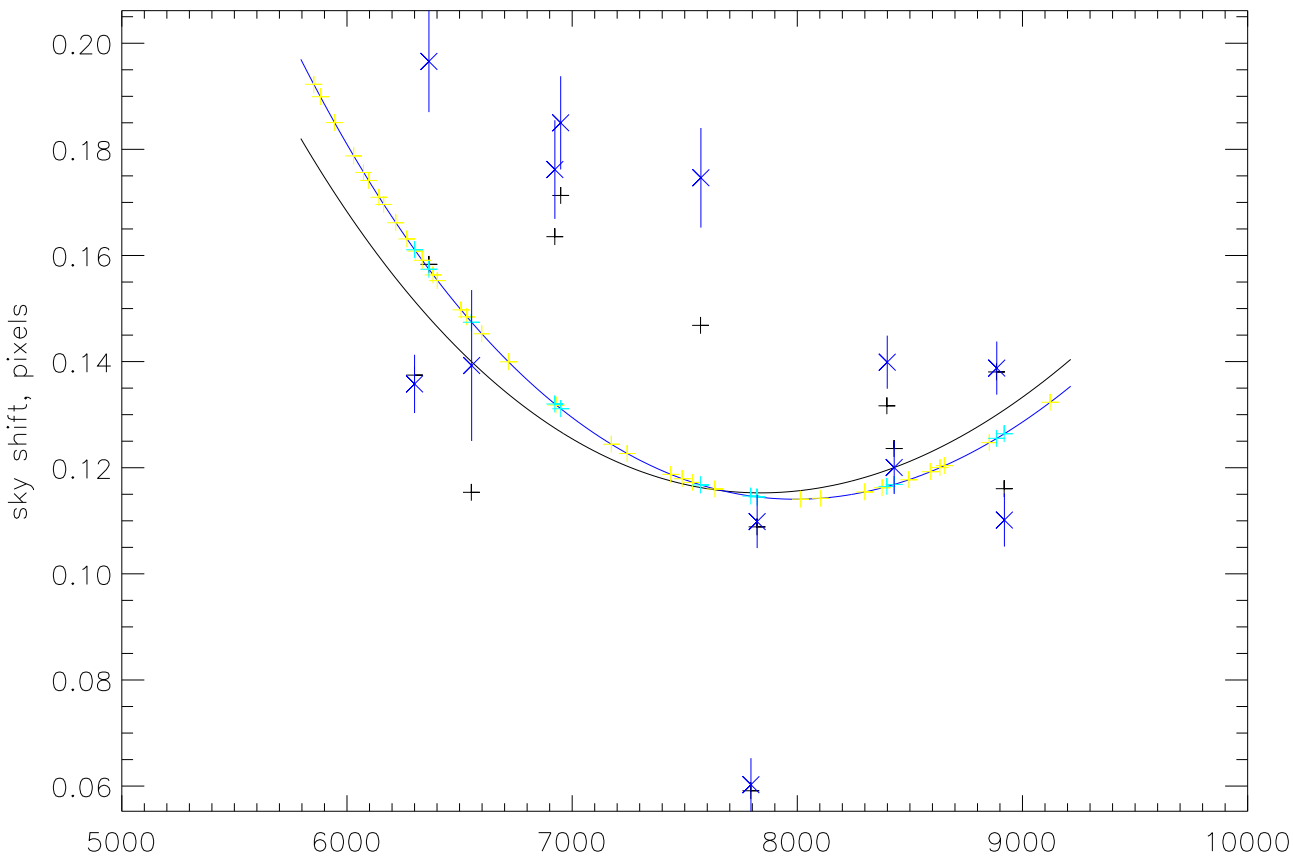

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

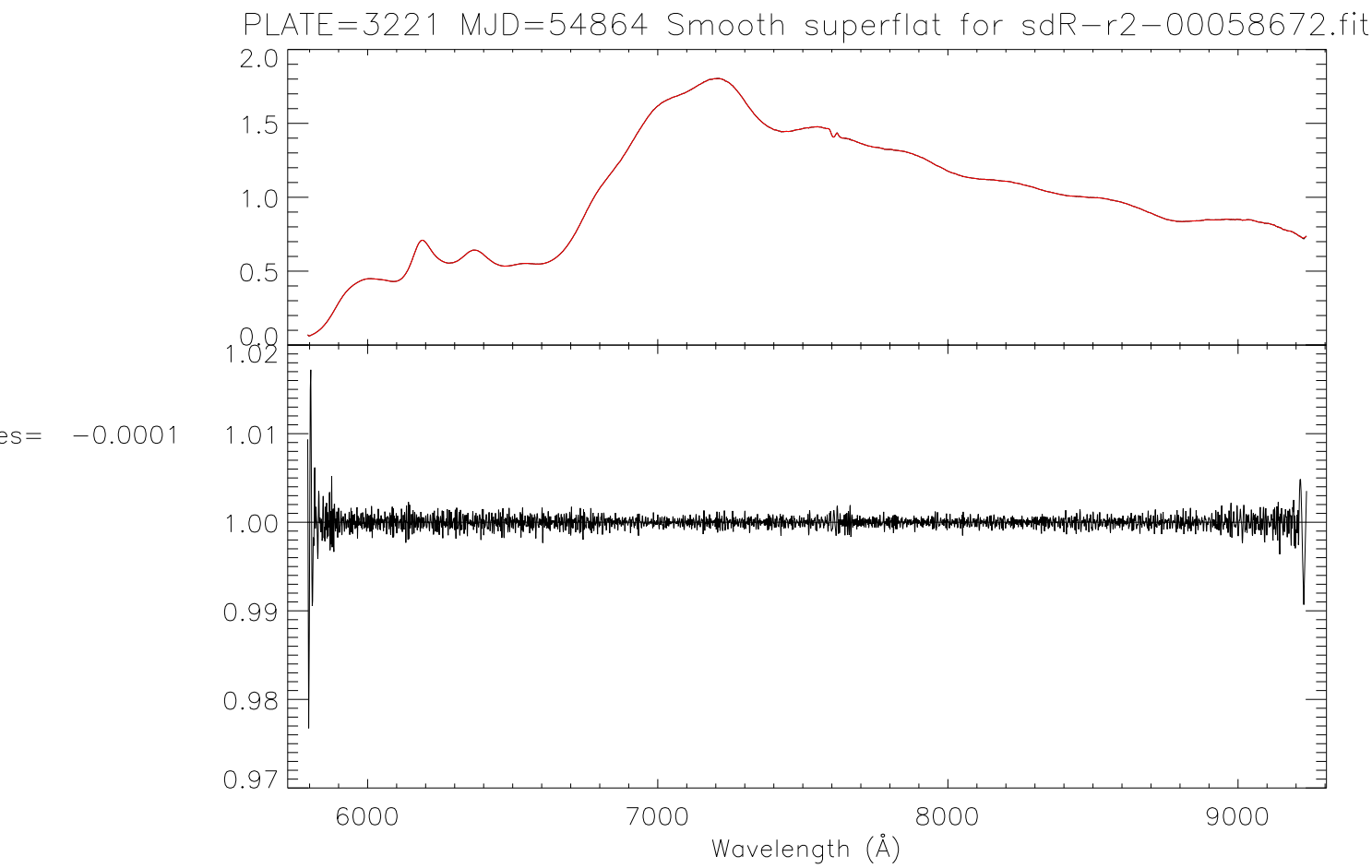

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

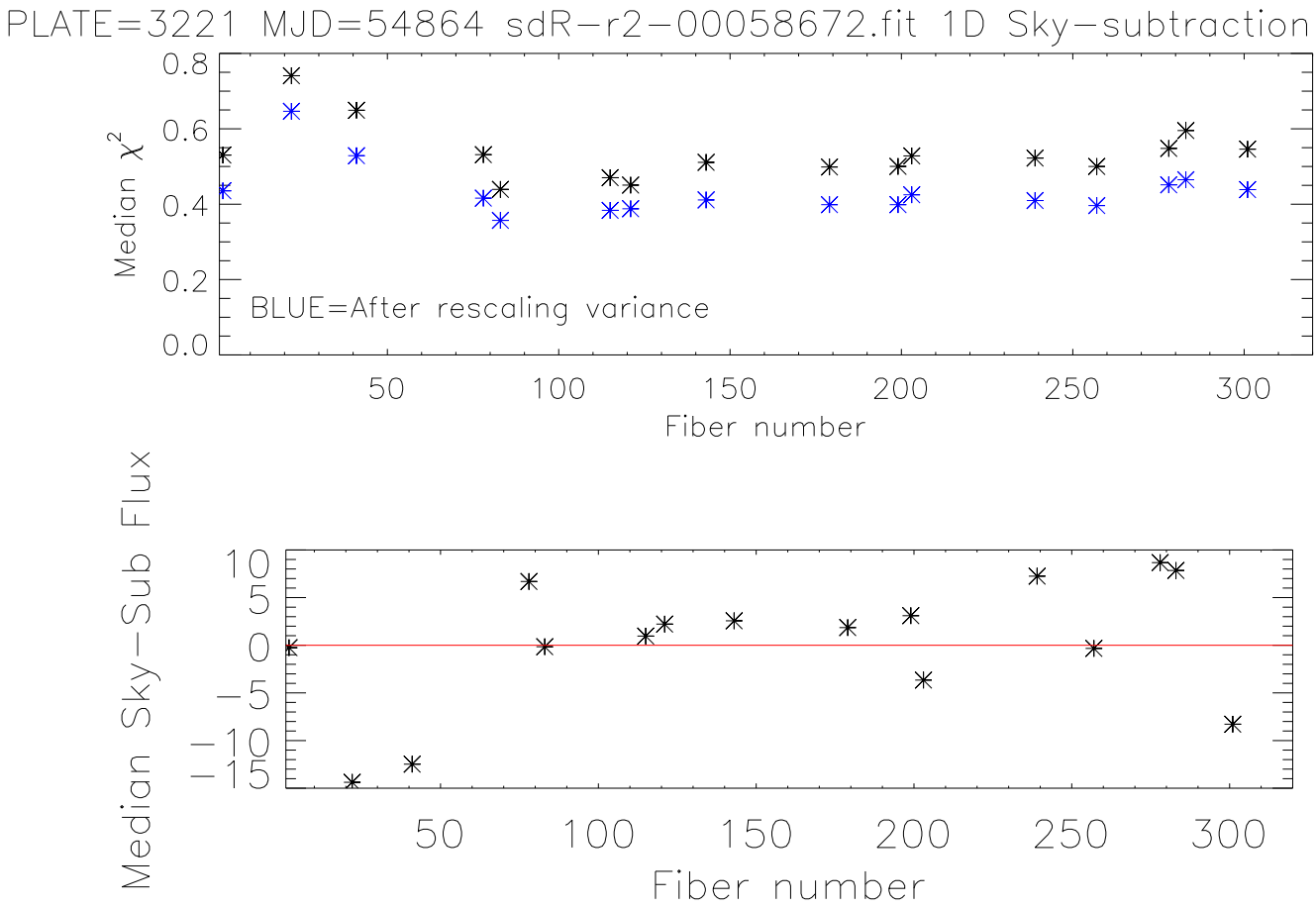

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

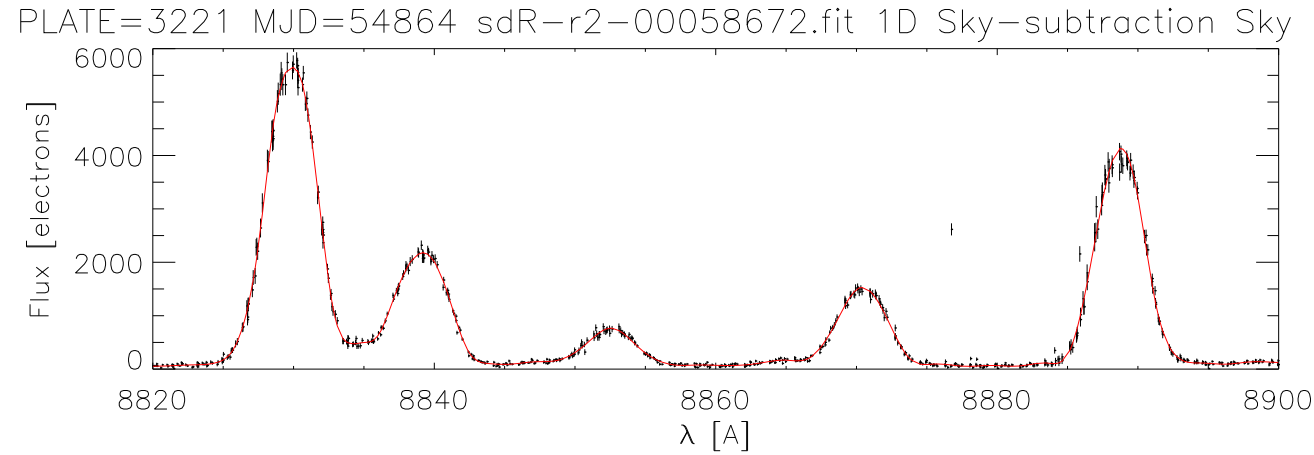

6300.3040
stdev 0.021
extra 0.14
6363.7760
stdev 0.025
extra 0.26
6553.6100
stdev 0.053
extra 0.14
6923.2100
stdev 0.035
extra 0.18
6949.0300
stdev 0.037
extra 0.18
7571.7500
stdev 0.034
extra 0.17
7794.1200
stdev 0.023
extra 0.06
7821.5100
stdev 0.023
extra 0.11
8399.1600
stdev 0.014
extra 0.14
8430.1700
stdev 0.018
extra 0.12
8885.8300
stdev 0.025
extra 0.14
8919.6100
stdev 0.023
extra 0.11
meas − pred, pix

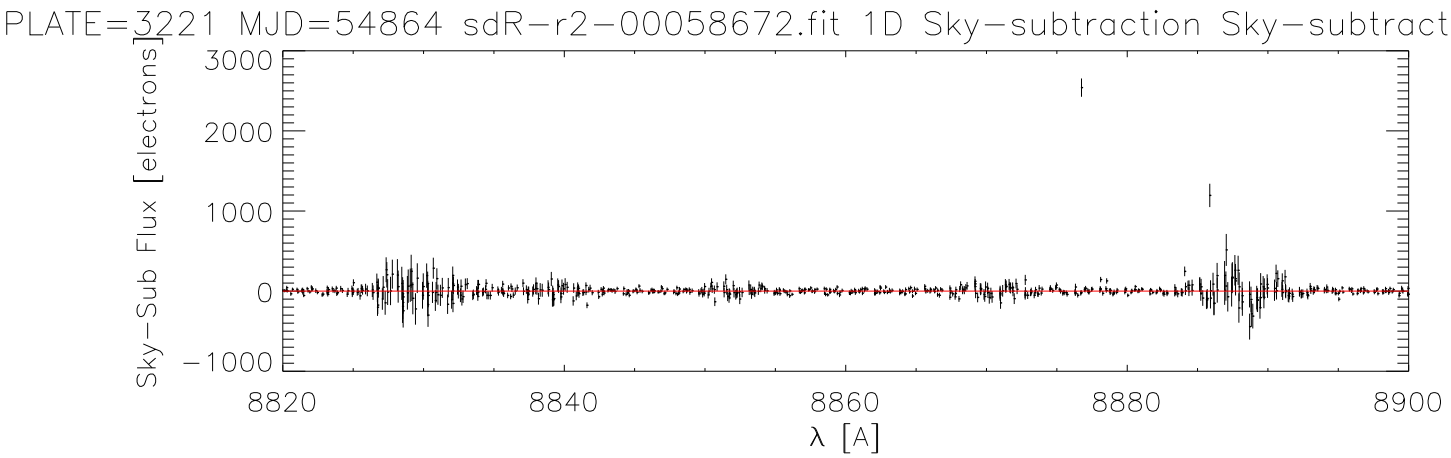

sky shift, pixels
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
5000
6000
7000
8000
9000
10000

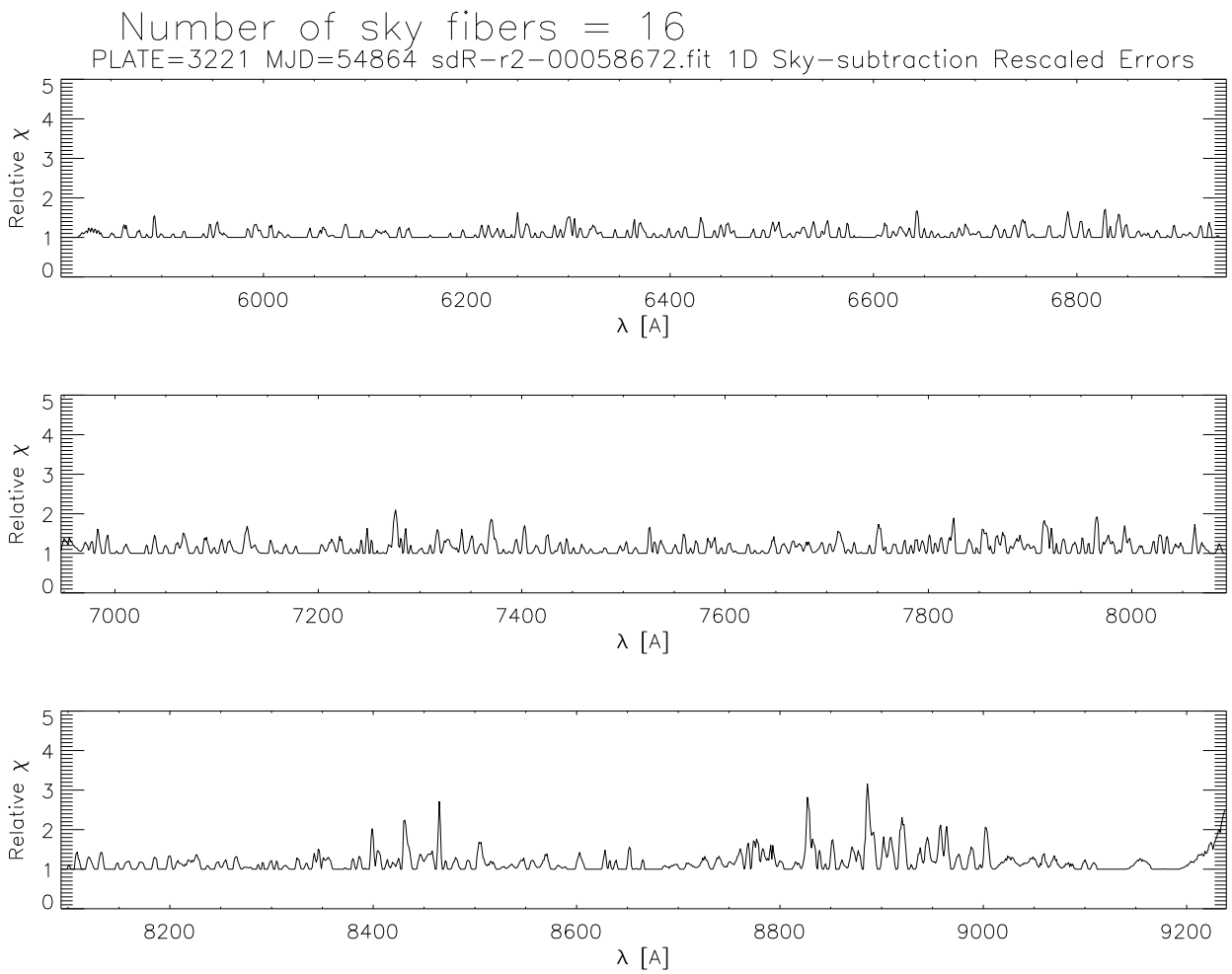

PLATE=3221 MJD=54864 Smooth superflat for sdR-r2-00058672.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

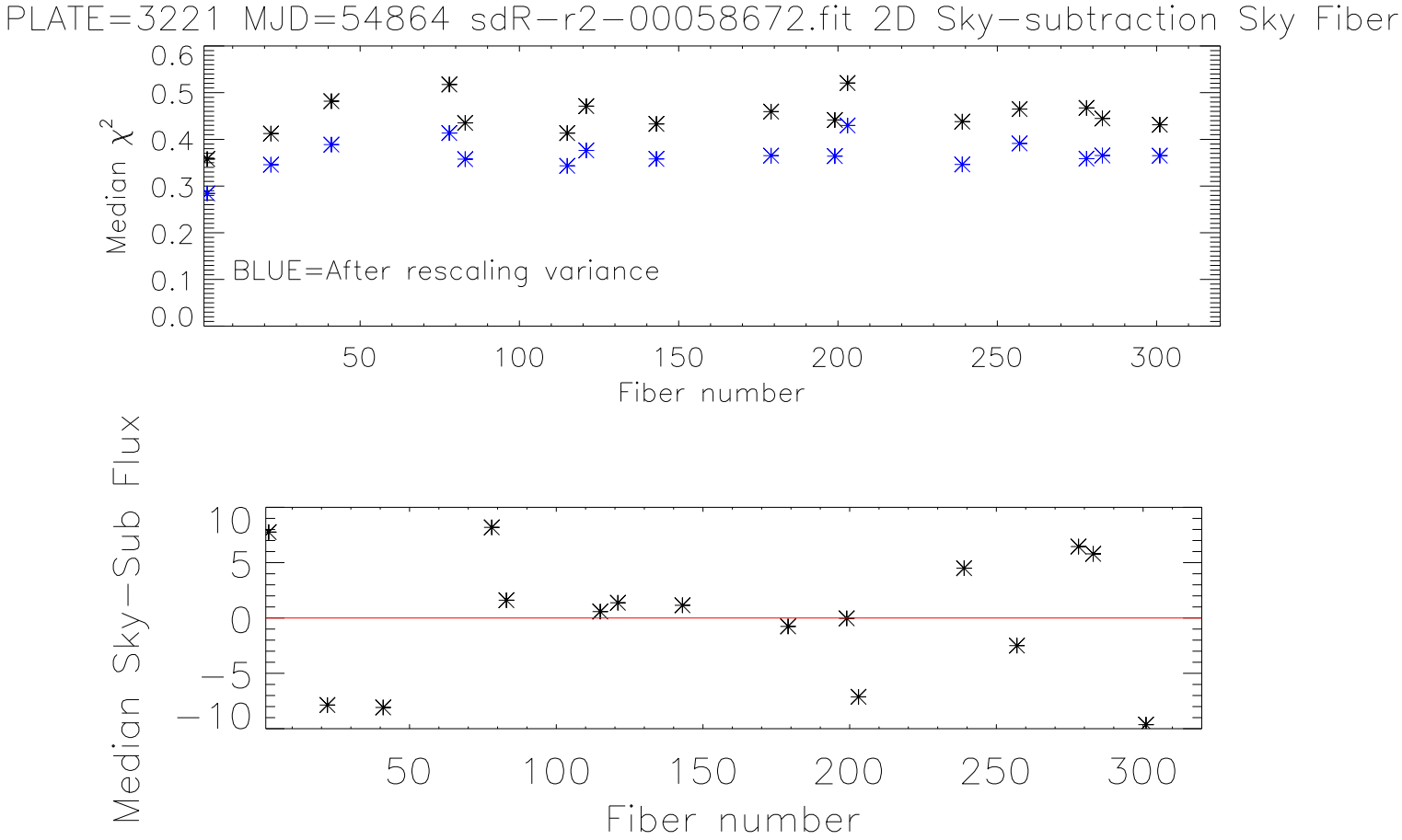
es= −0.0001

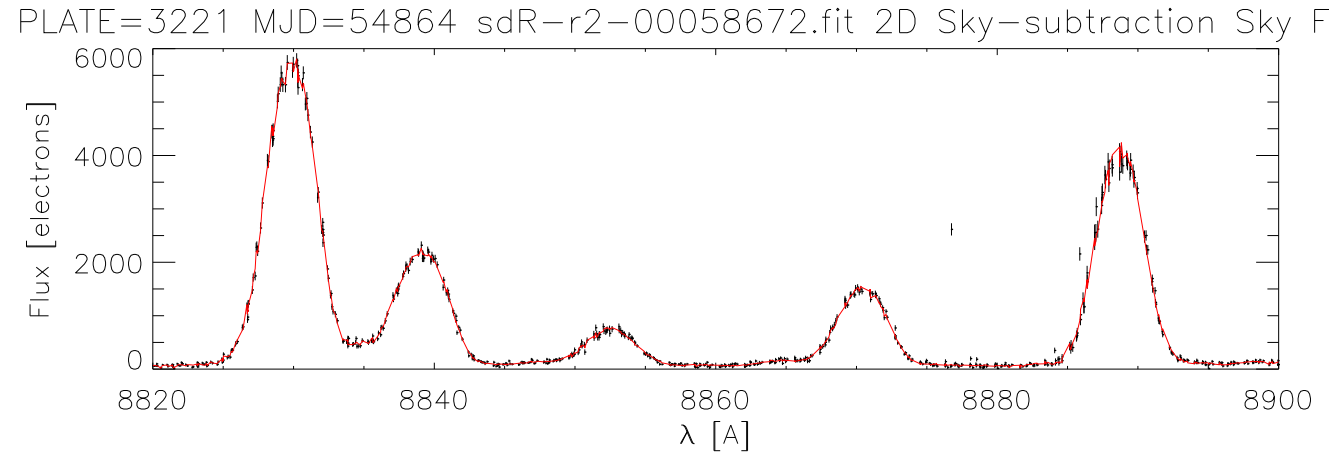

PLATE=3221 MJD=54864 sdR-r2-00058672.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

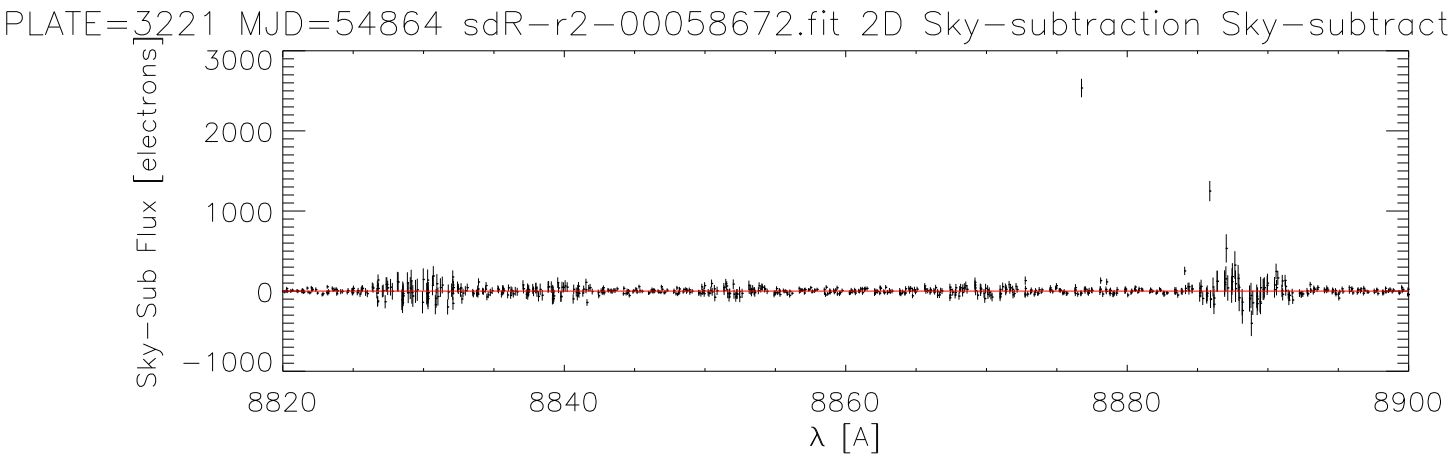

PLATE=3221 MJD=54864 sdR-r2-00058672.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

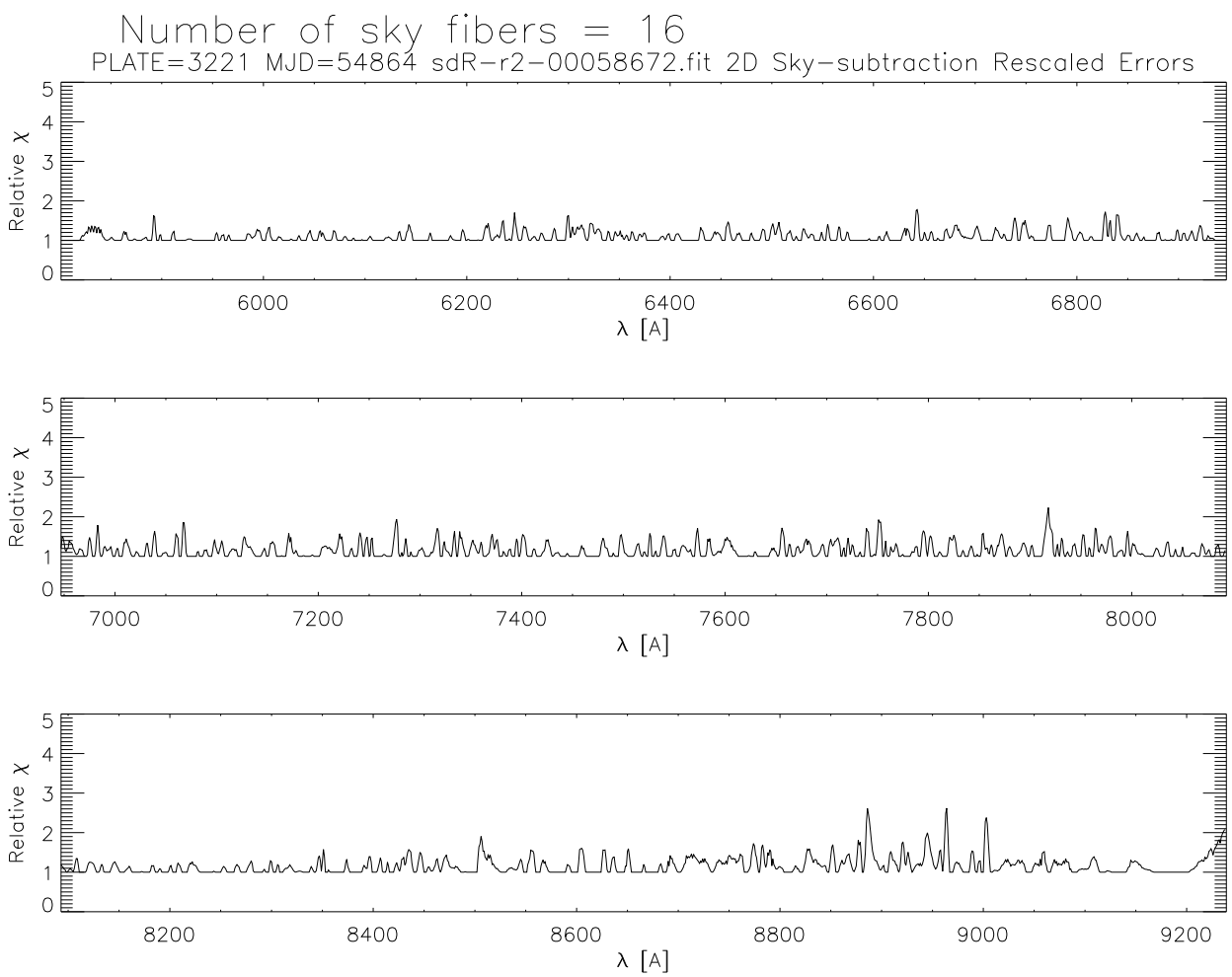

PLATE=3221 MJD=54864 sdR-r2-00058672.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

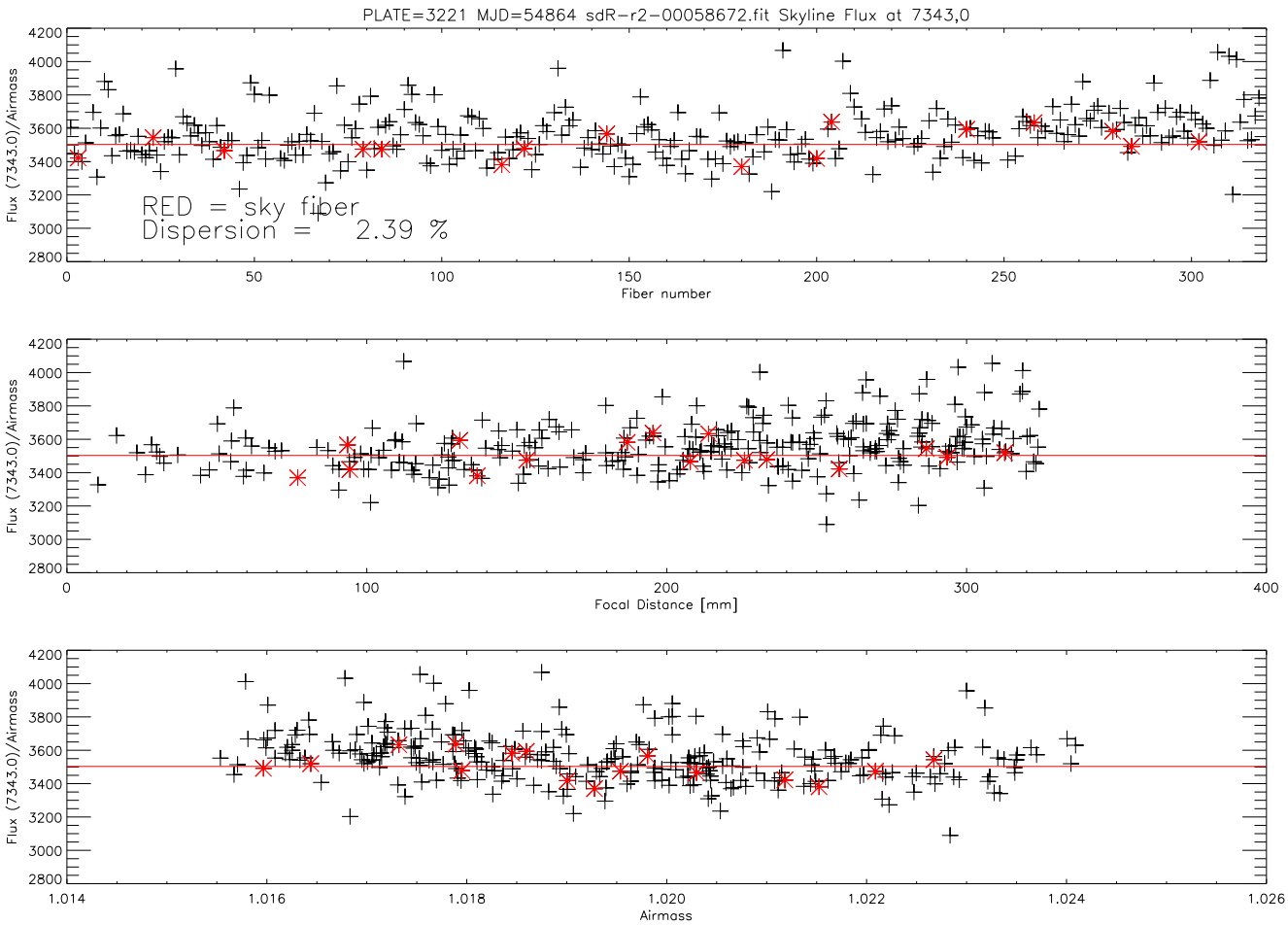

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058672.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

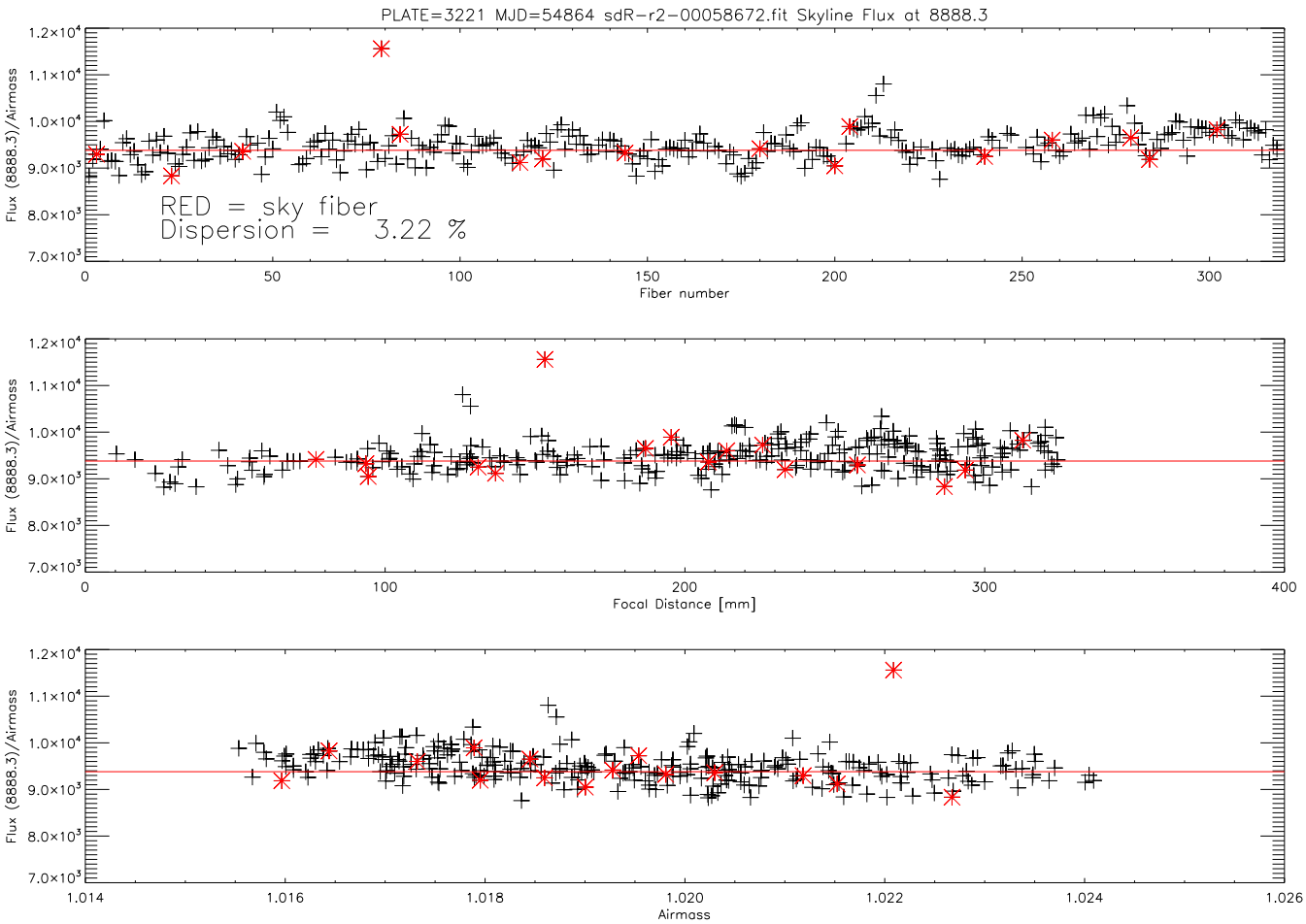

PLATE=3221 MJD=54864 sdR-r2-00058672.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

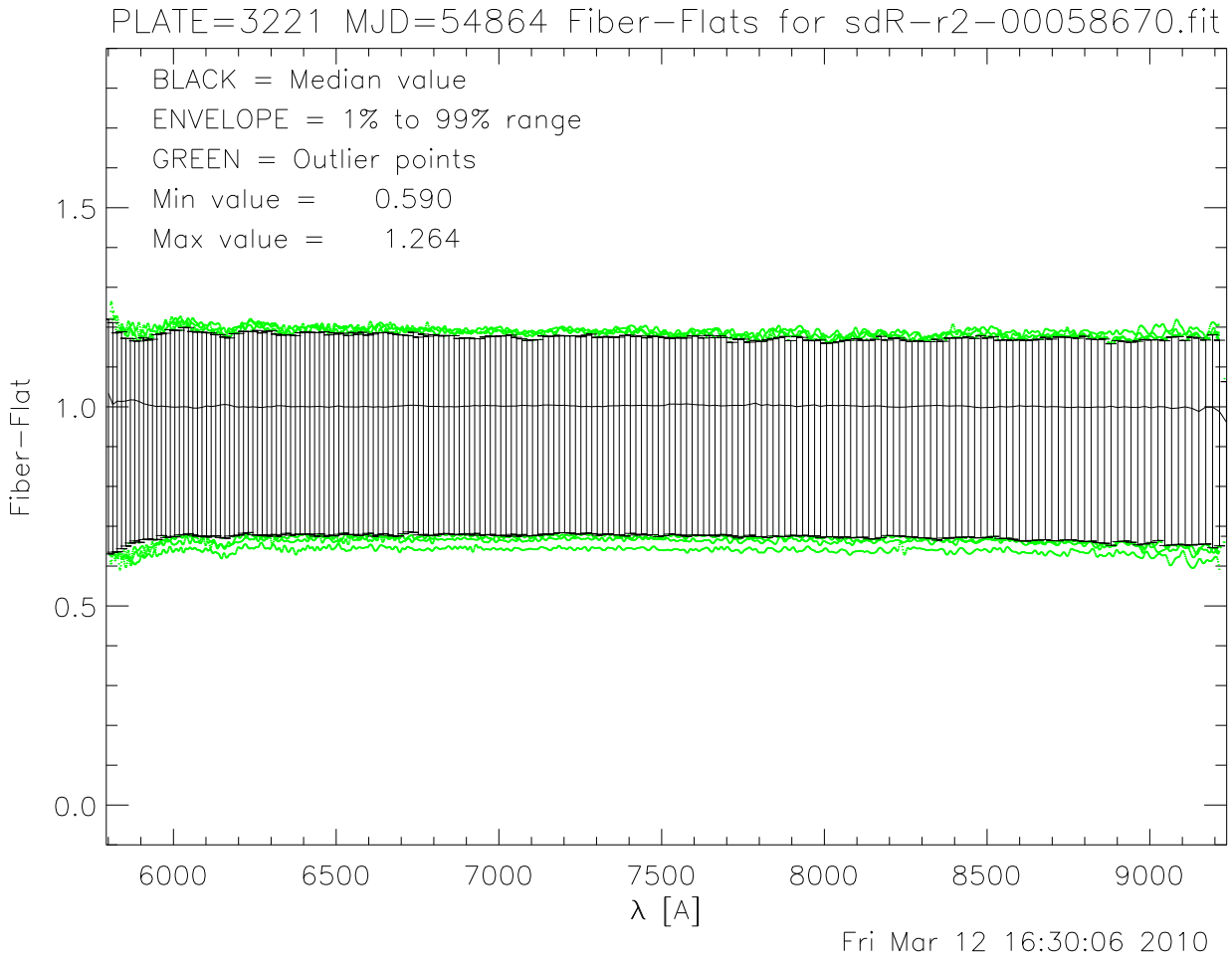

PLATE=3221 MJD=54864 sdR-r2-00058672.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

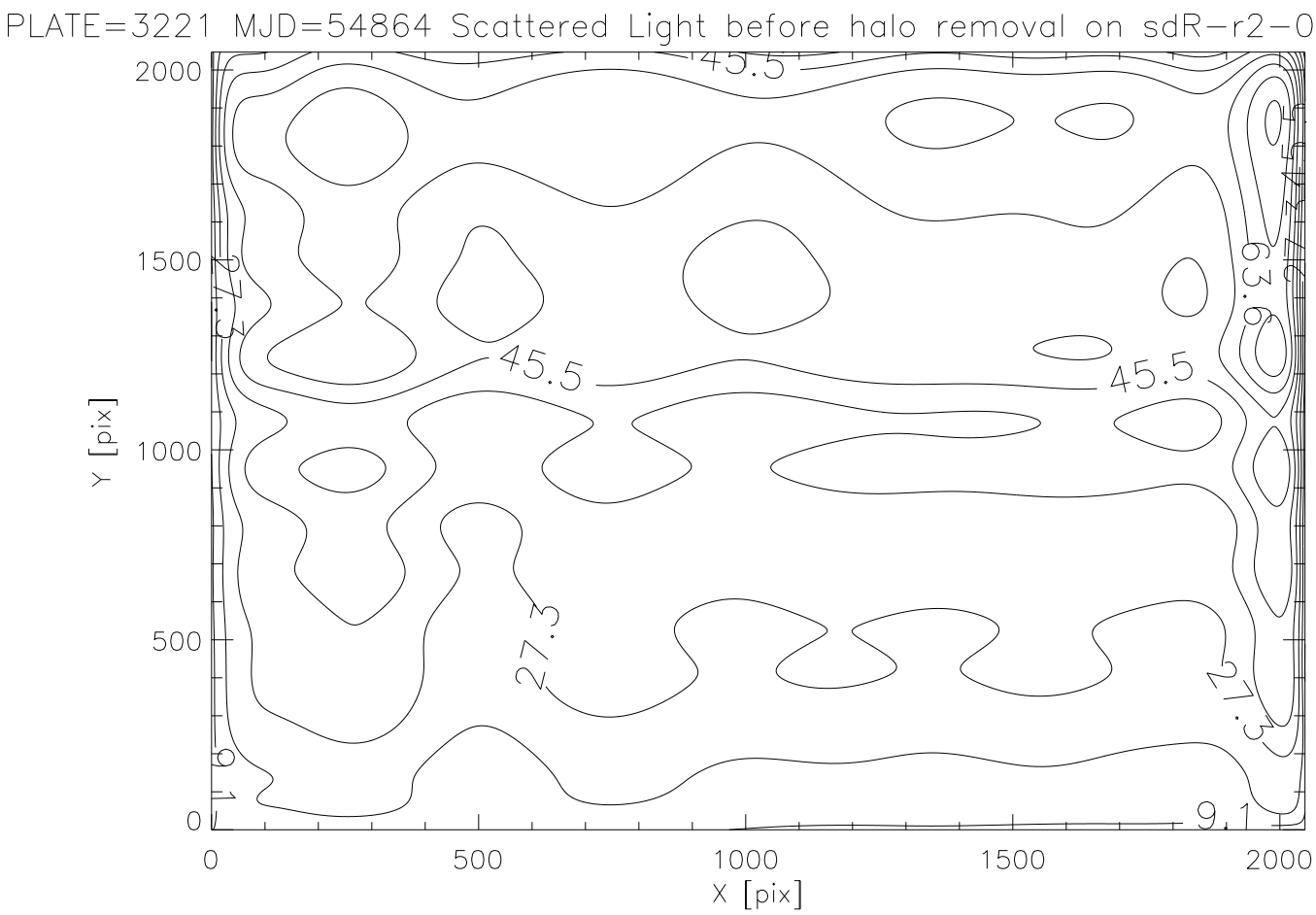

PLATE=3221 MJD=54864 sdR-r2-00058672.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

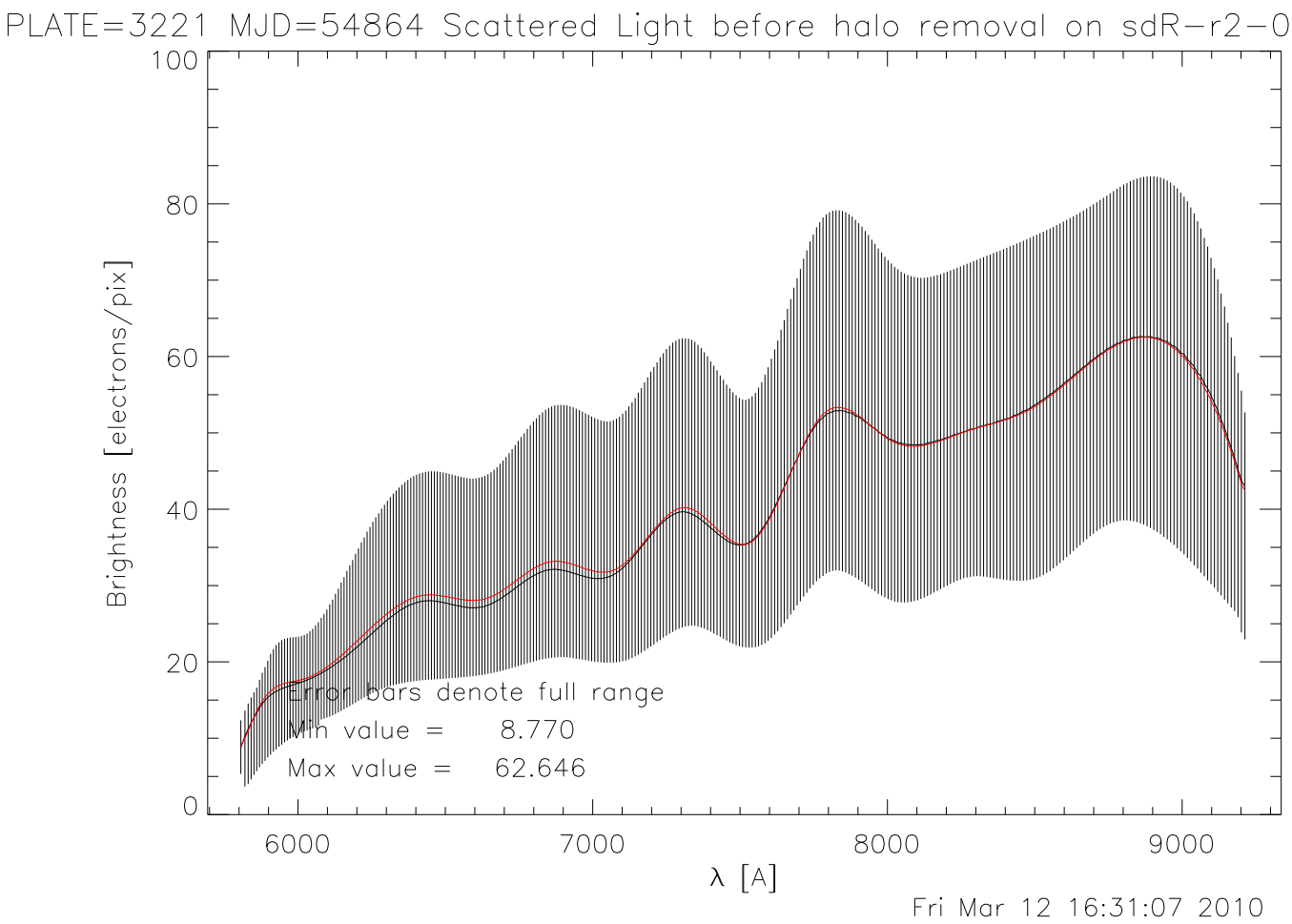

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058672.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

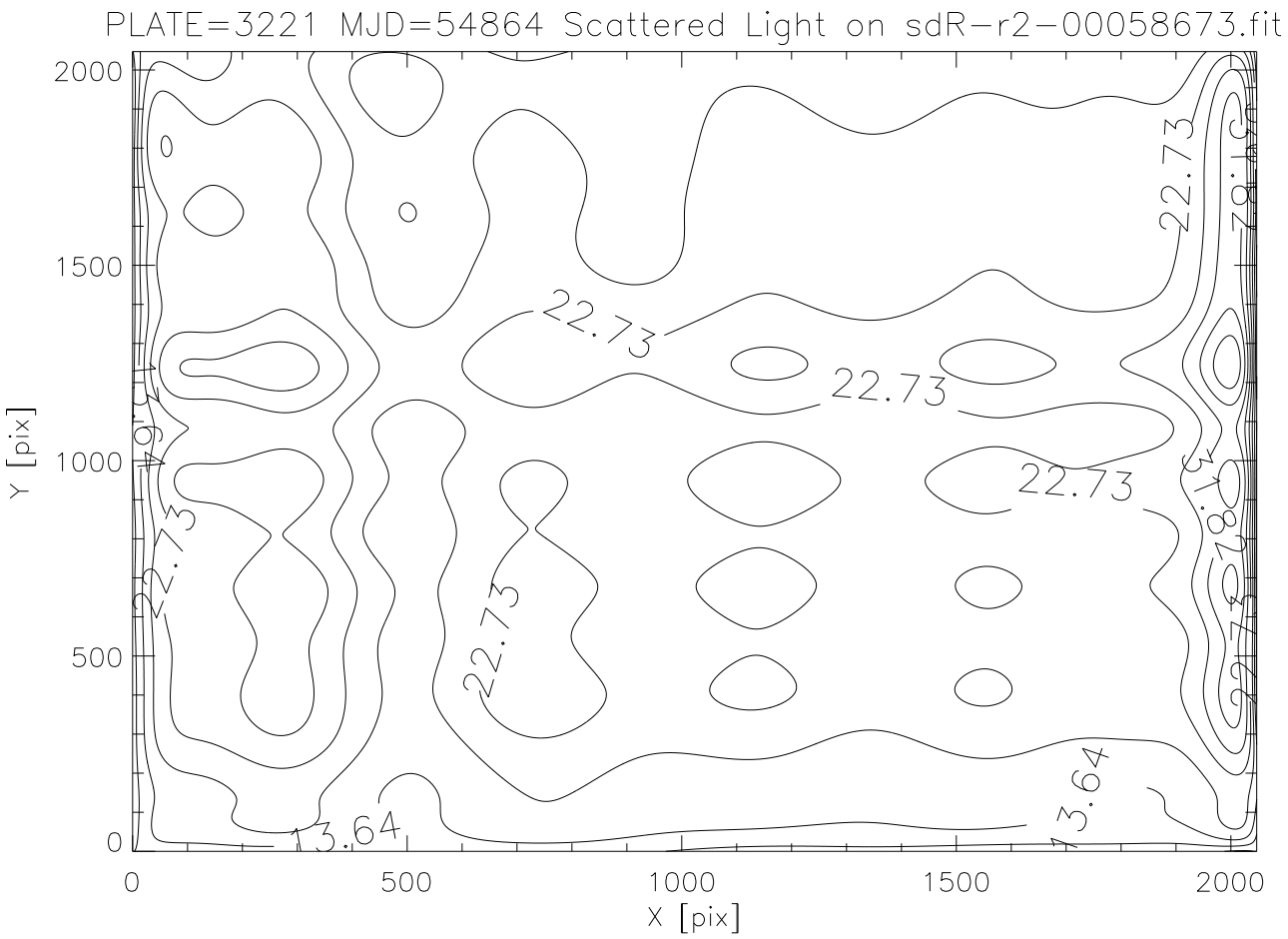

PLATE=3221 MJD=54864 sdR-r2-00058672.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.39 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

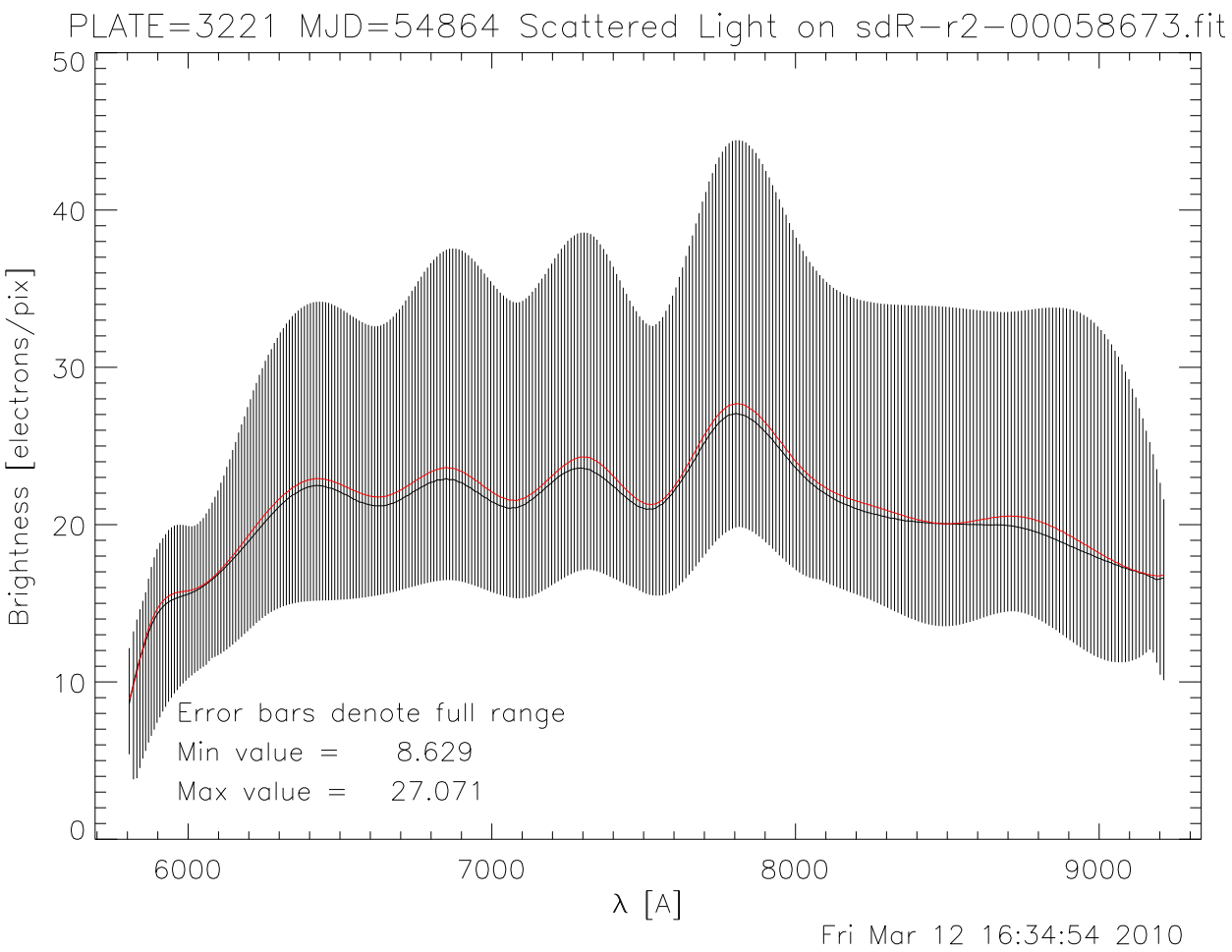

PLATE=3221 MJD=54864 sdR-r2-00058672.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.22 %
Fiber number
Focal Distance [mm]
Airmass

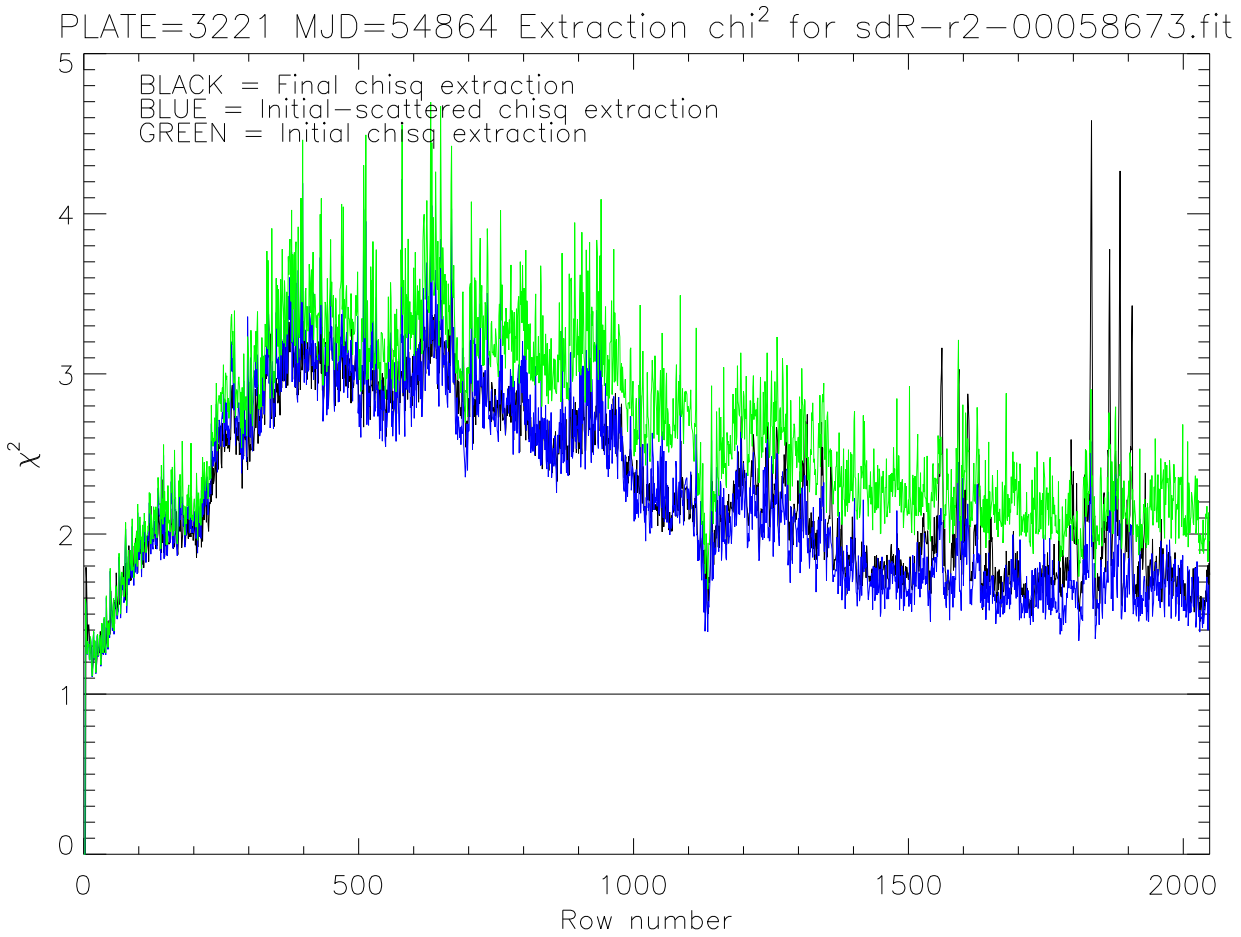

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r2−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.590
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 16:30:06 2010

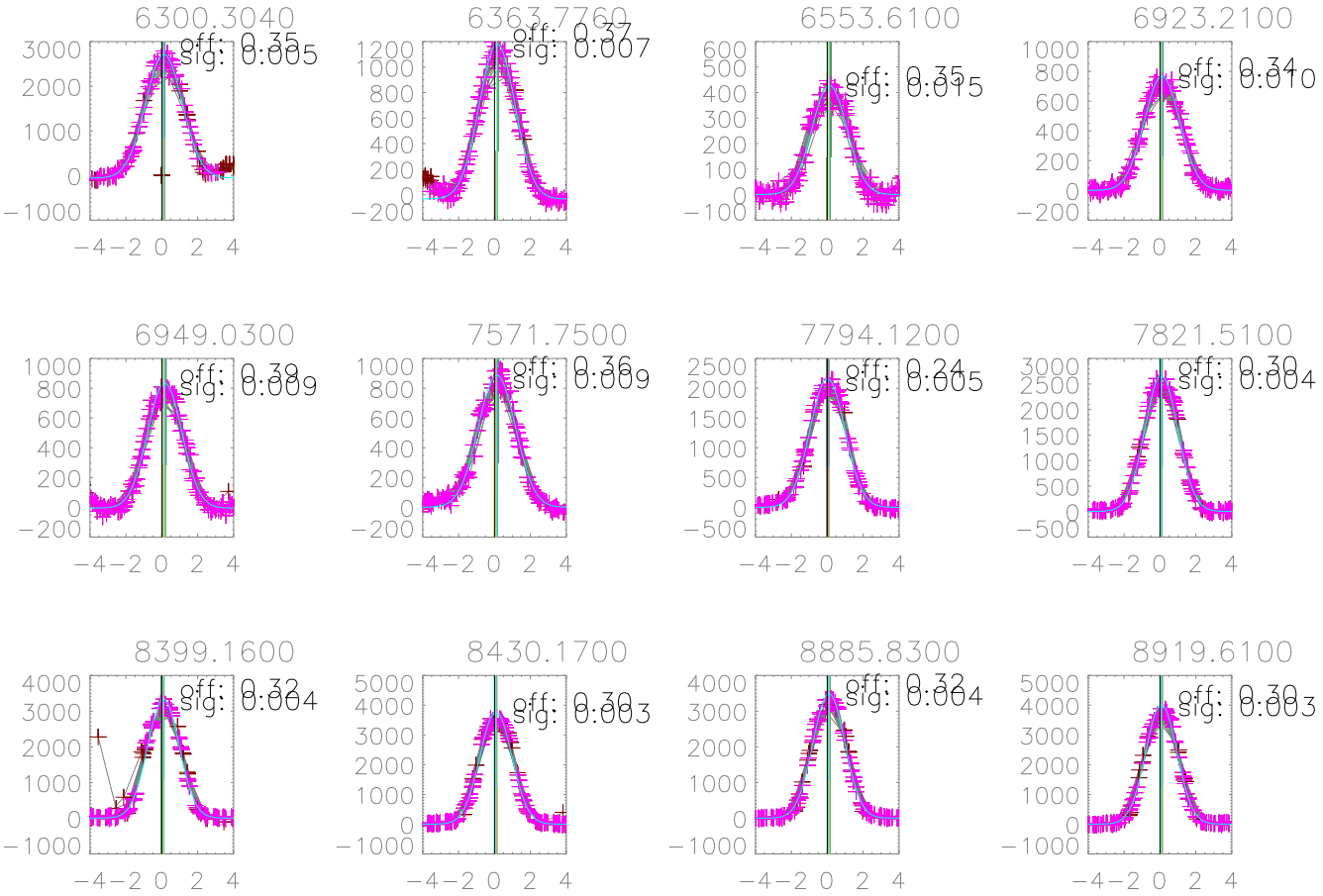

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058673.fi
45.5
63.8
27.3
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

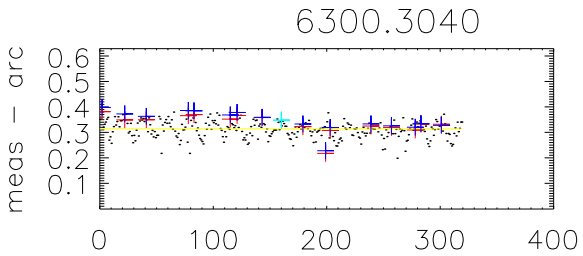

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058673.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.770
Max value = 62.646
Fri Mar 12 16:31:07 2010

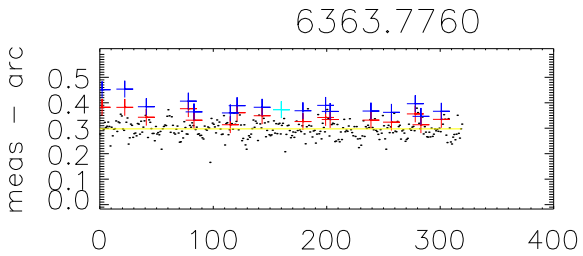

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058673.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
22.73
3.64

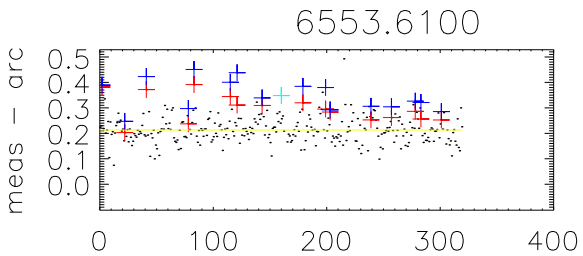

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058673.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.629
Max value = 27.071
Fri Mar 12 16:34:54 2010

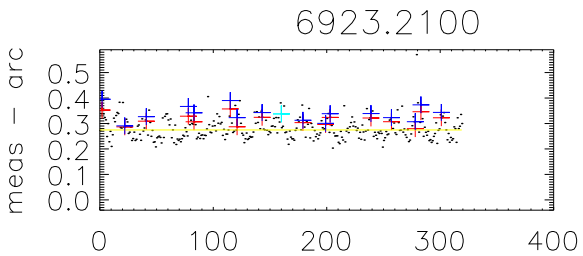

PLATE=3221 MJD=54864 Extraction chi^2 for sdR−r2−00058673.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

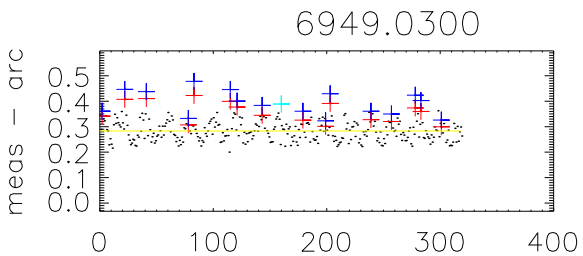

6300.3040
off: 0.35
sig: 0.005
6363.7760
off: 0.37
sig: 0.007
6553.6100
off: 0.35
sig: 0.015
6923.2100
off: 0.34
sig: 0.010
6949.0300
off: 0.38
sig: 0.009
7571.7500
off: 0.36
sig: 0.009
7794.1200
off: 0.24
sig: 0.005
7821.5100
off: 0.30
sig: 0.004
8399.1600
off: 0.32
sig: 0.004
8430.1700
off: 0.30
sig: 0.003
8885.8300
off: 0.32
sig: 0.004
8919.6100
off: 0.30
sig: 0.003

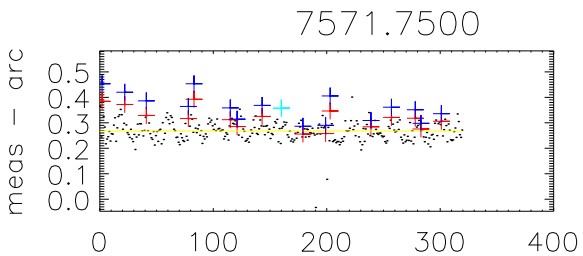

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

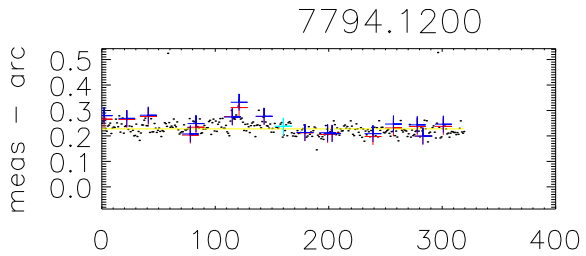

6363.7760
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

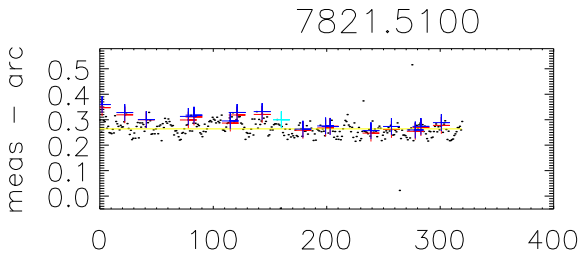

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

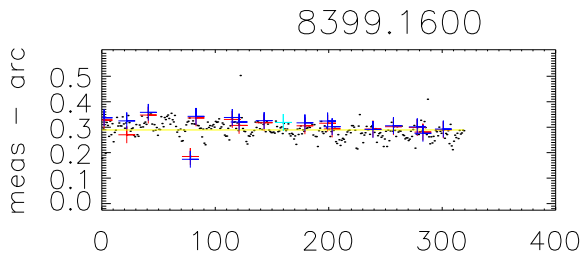

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

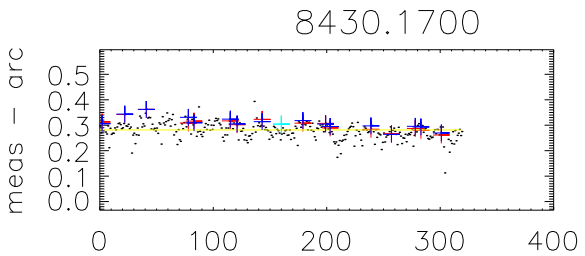

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

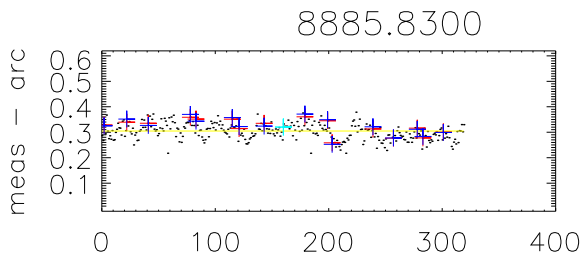

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

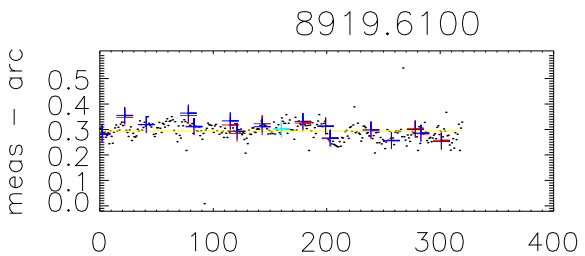

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

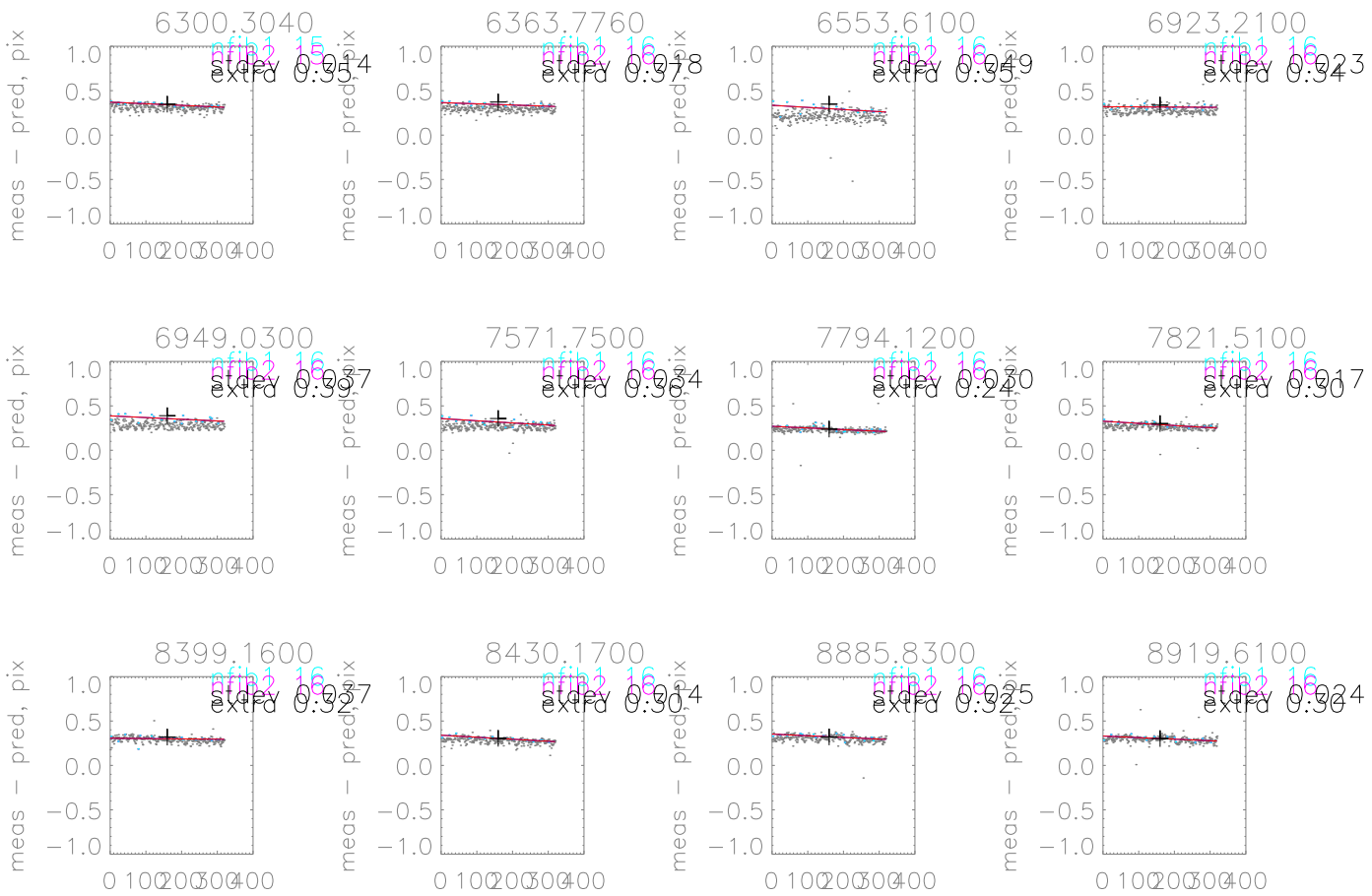

7821.5100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

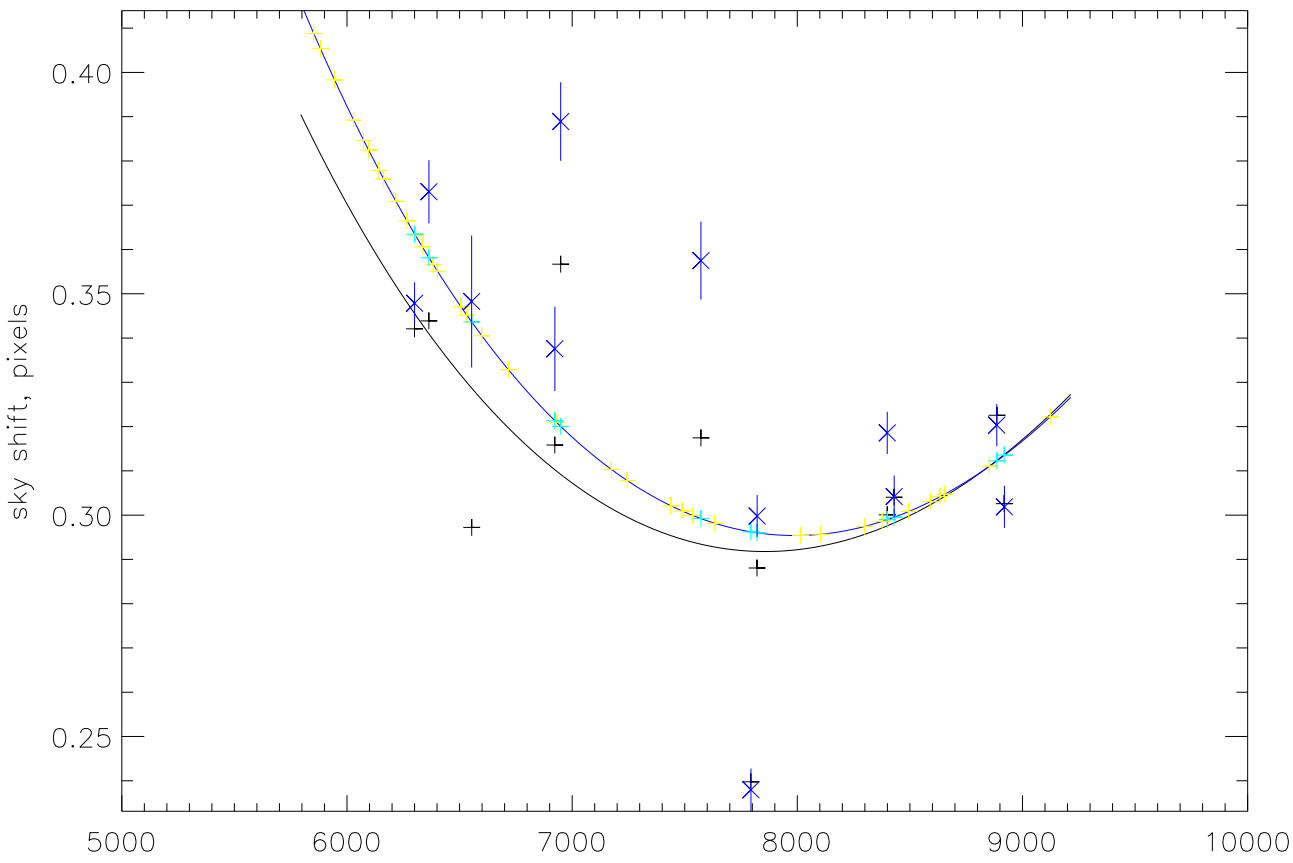

8399.1600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

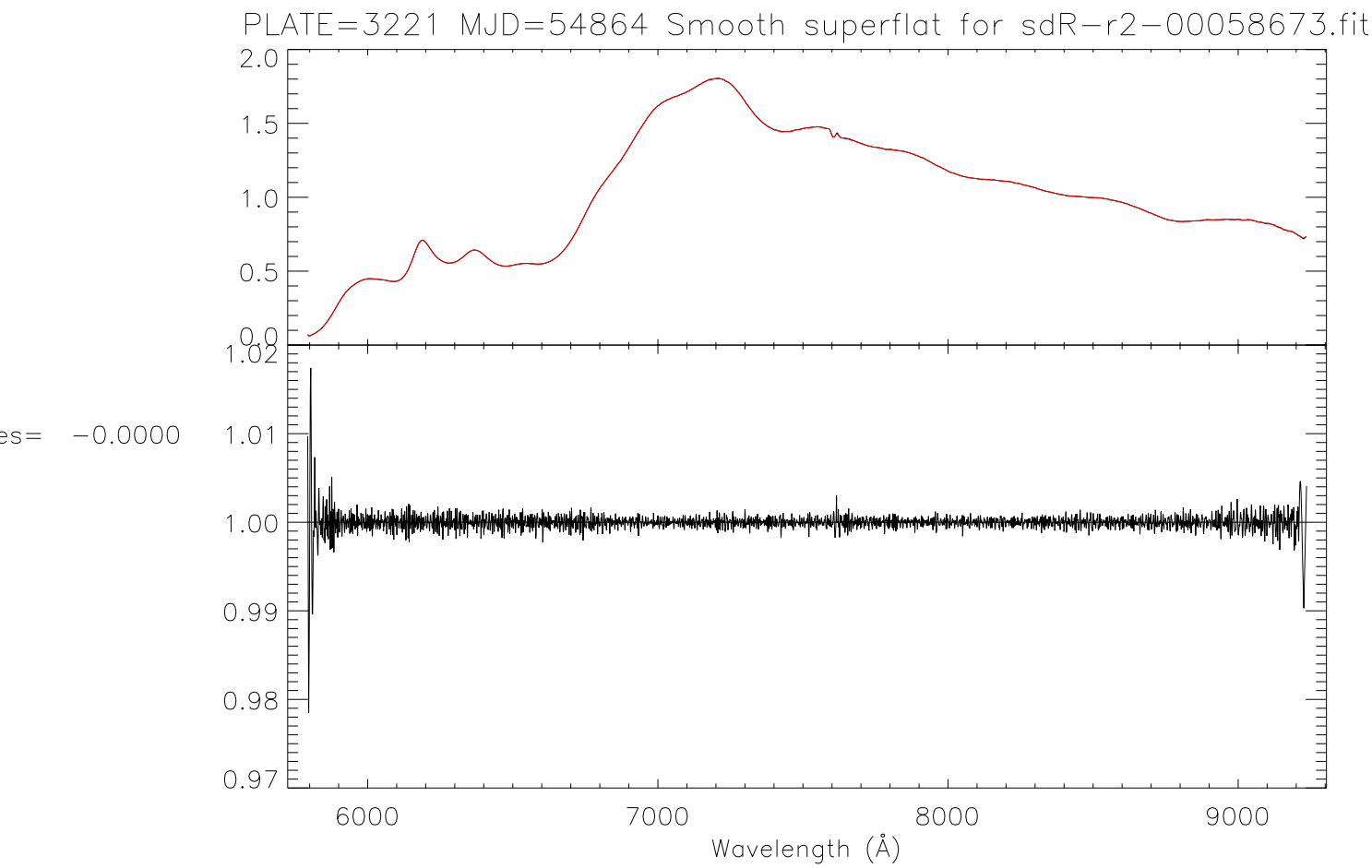

8430.1700
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400


8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

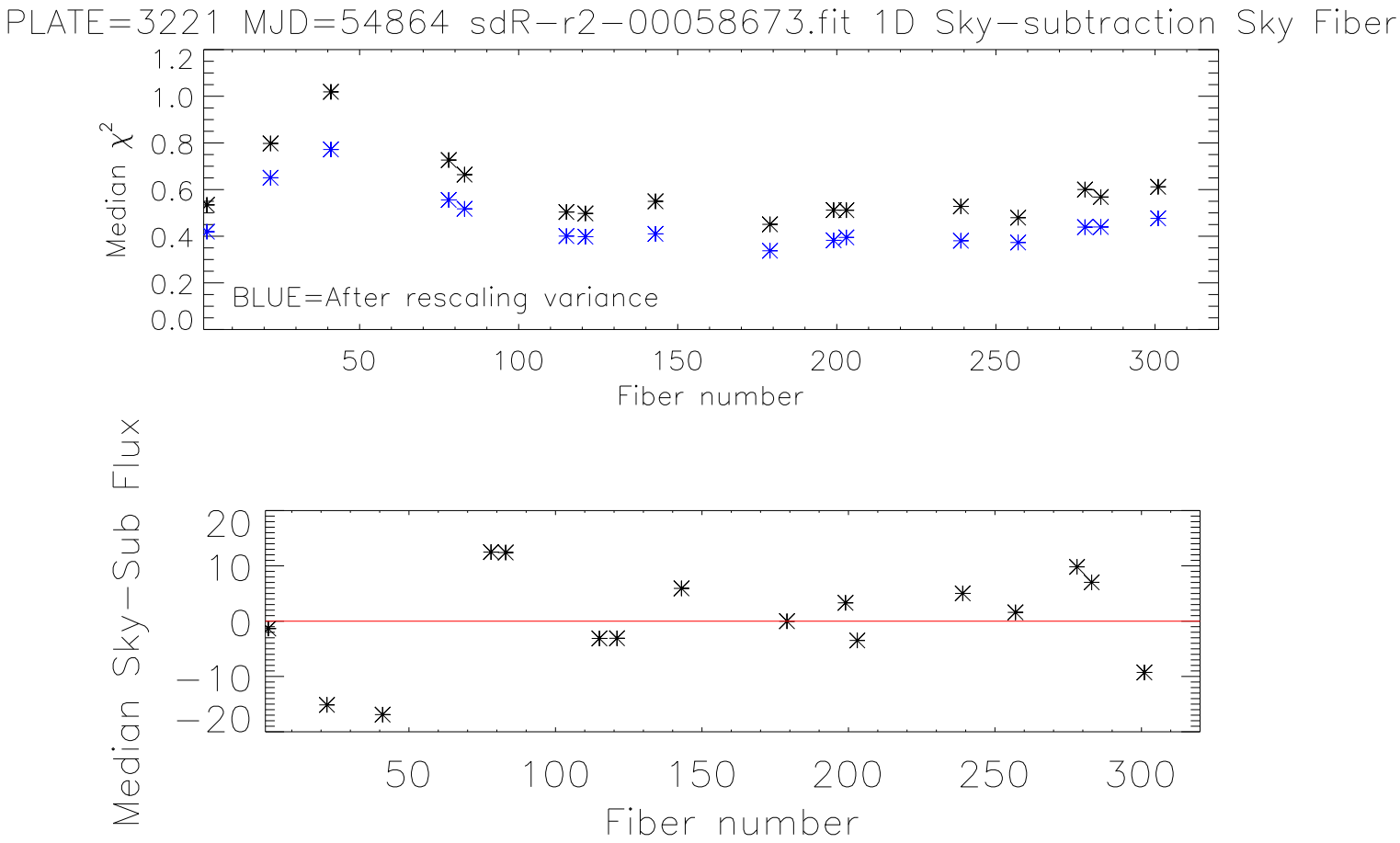

8919.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

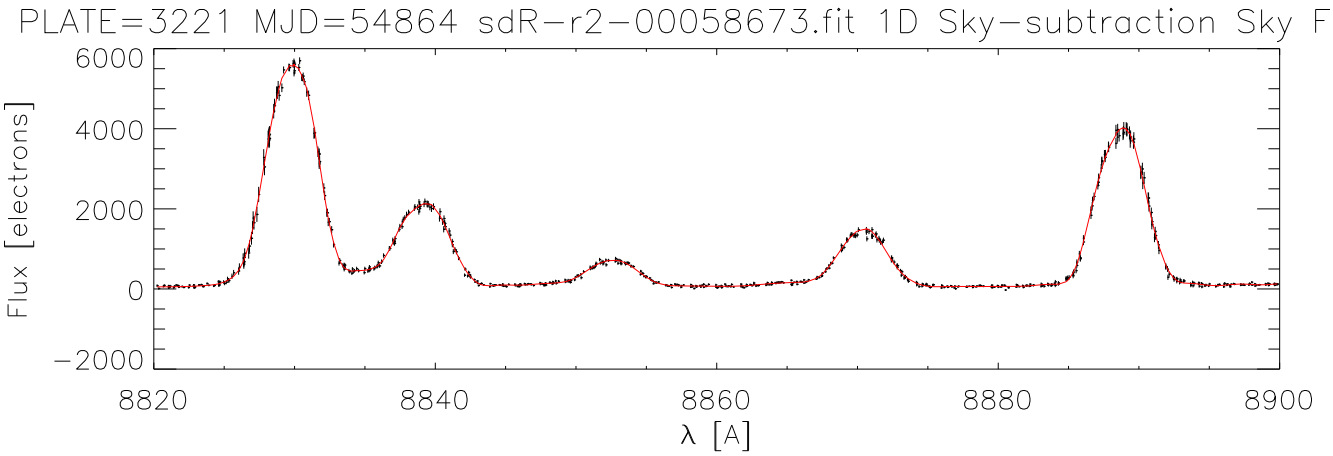

6300.3040
mfhi2 15
stdev 0.014
extra 0.35
6363.7760
mfhi2 16
stdev 0.018
extra 0.37
6553.6100
mfhi2 16
stdev 0.049
extra 0.35
6923.2100
mfhi2 16
stdev 0.023
extra 0.34
6949.0300
mfhi2 16
stdev 0.037
extra 0.39
7571.7500
mfhi2 16
stdev 0.034
extra 0.36
7794.1200
mfhi2 16
stdev 0.030
extra 0.24
7821.5100
mfhi2 16
stdev 0.017
extra 0.30
8399.1600
mfhi2 16
stdev 0.037
extra 0.32
8430.1700
mfhi2 16
stdev 0.014
extra 0.30
8885.8300
mfhi2 16
stdev 0.025
extra 0.32
8919.6100
mfhi2 16
stdev 0.024
extra 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

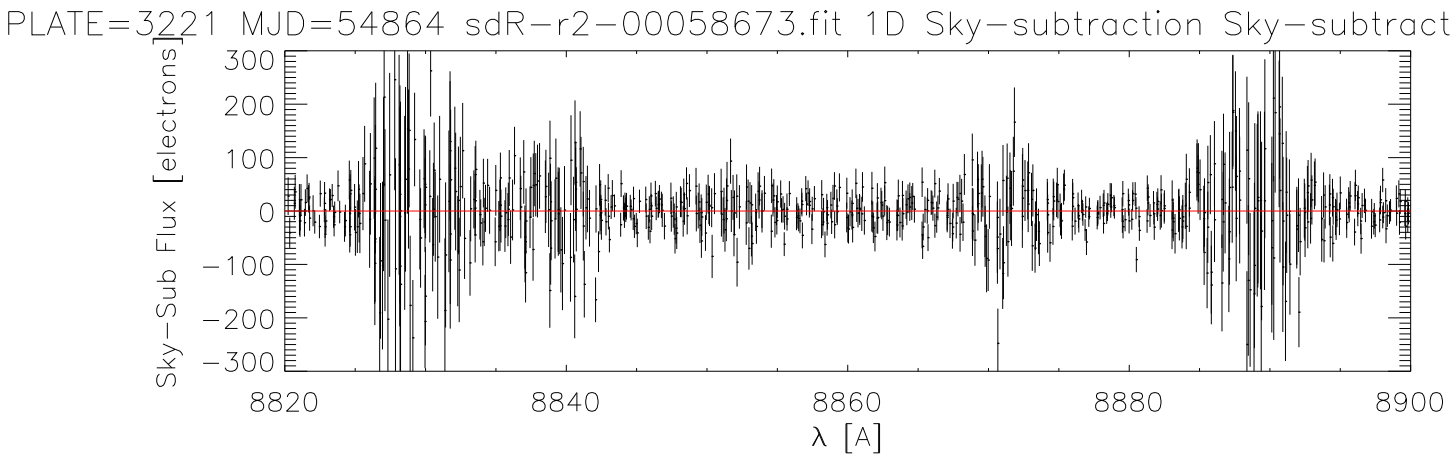

sky shift, pixels
0.40
0.35
0.30
0.25
5000
6000
7000
8000
9000
10000

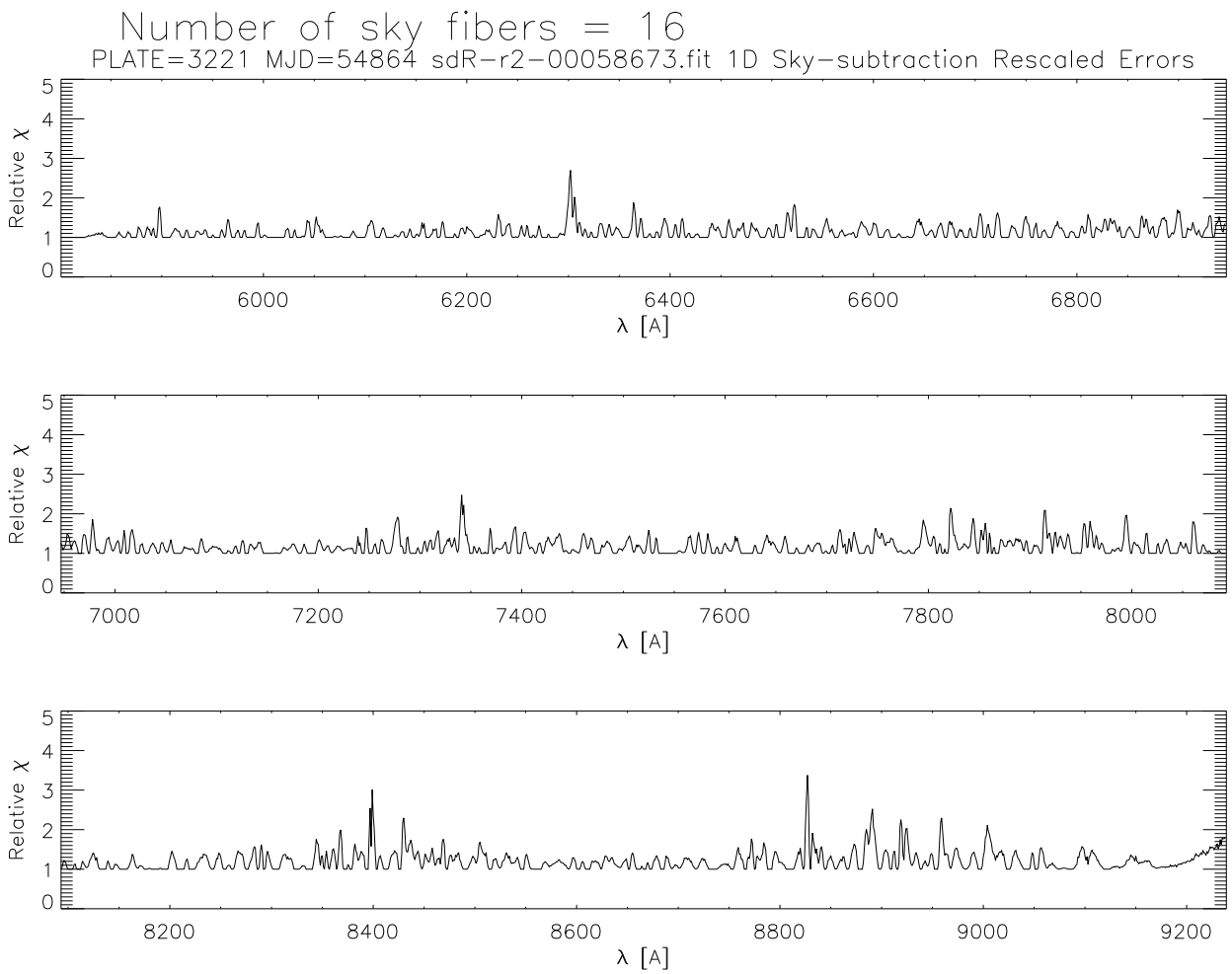

PLATE=3221 MJD=54864 Smooth superflat for sdR-r2-00058673.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

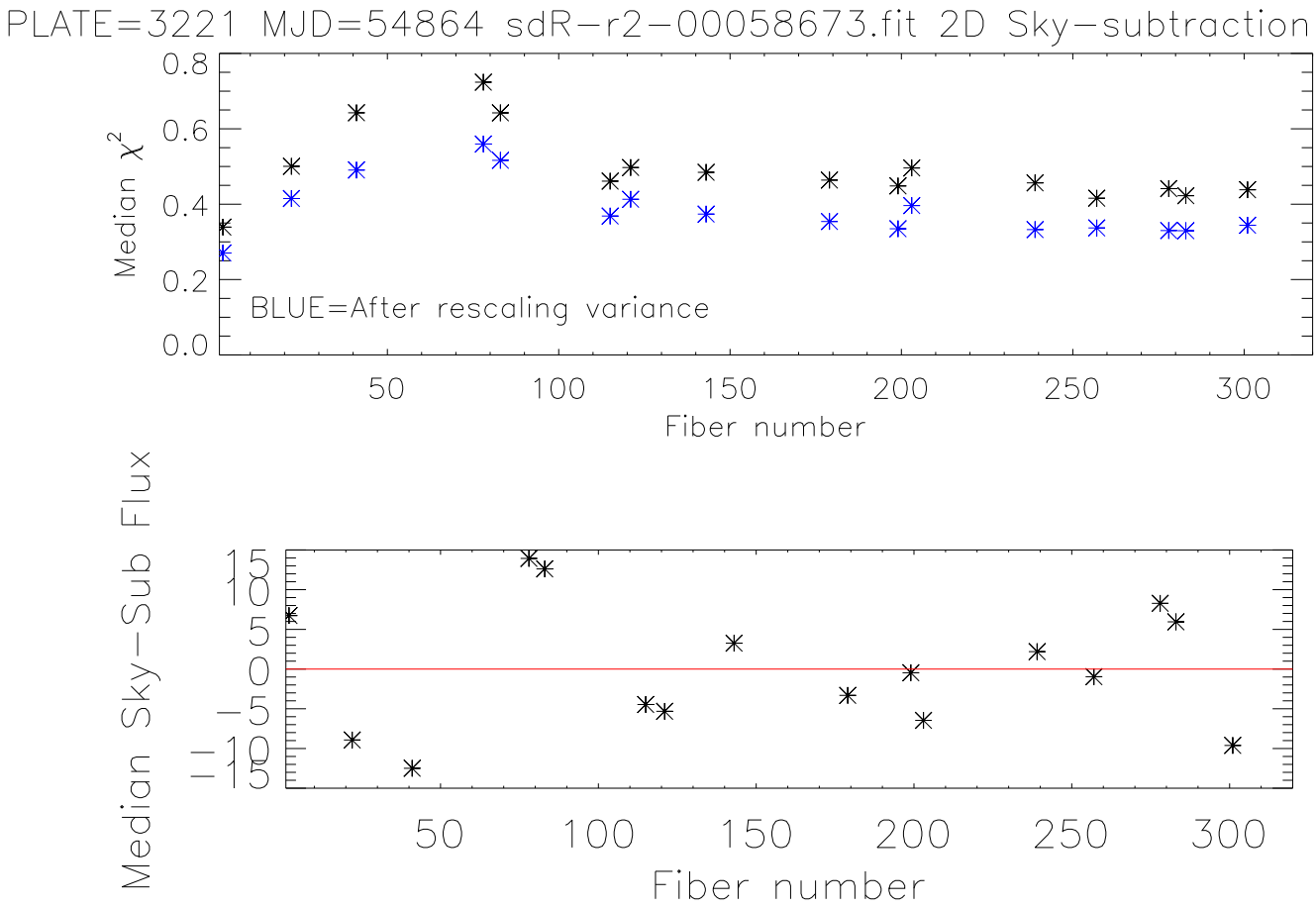
es= −0.0000

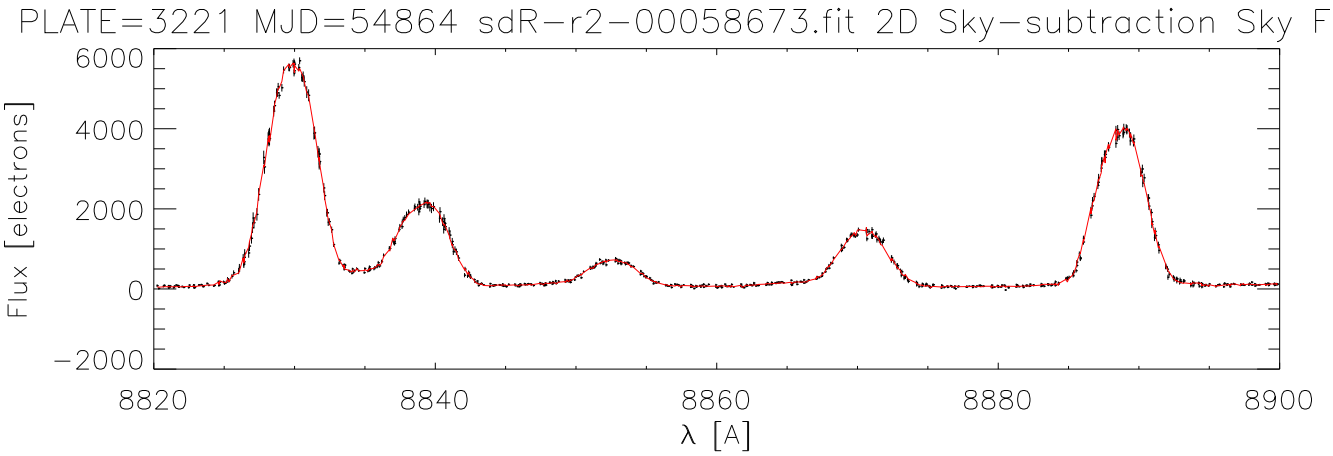

PLATE=3221 MJD=54864 sdR-r2-00058673.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

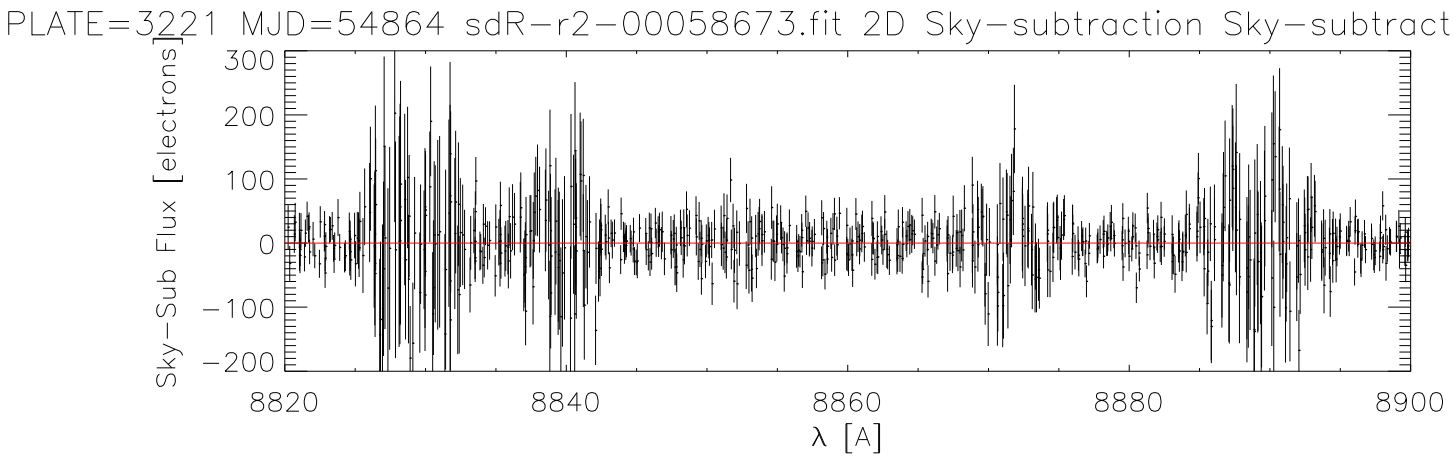

PLATE=3221 MJD=54864 sdR-r2-00058673.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

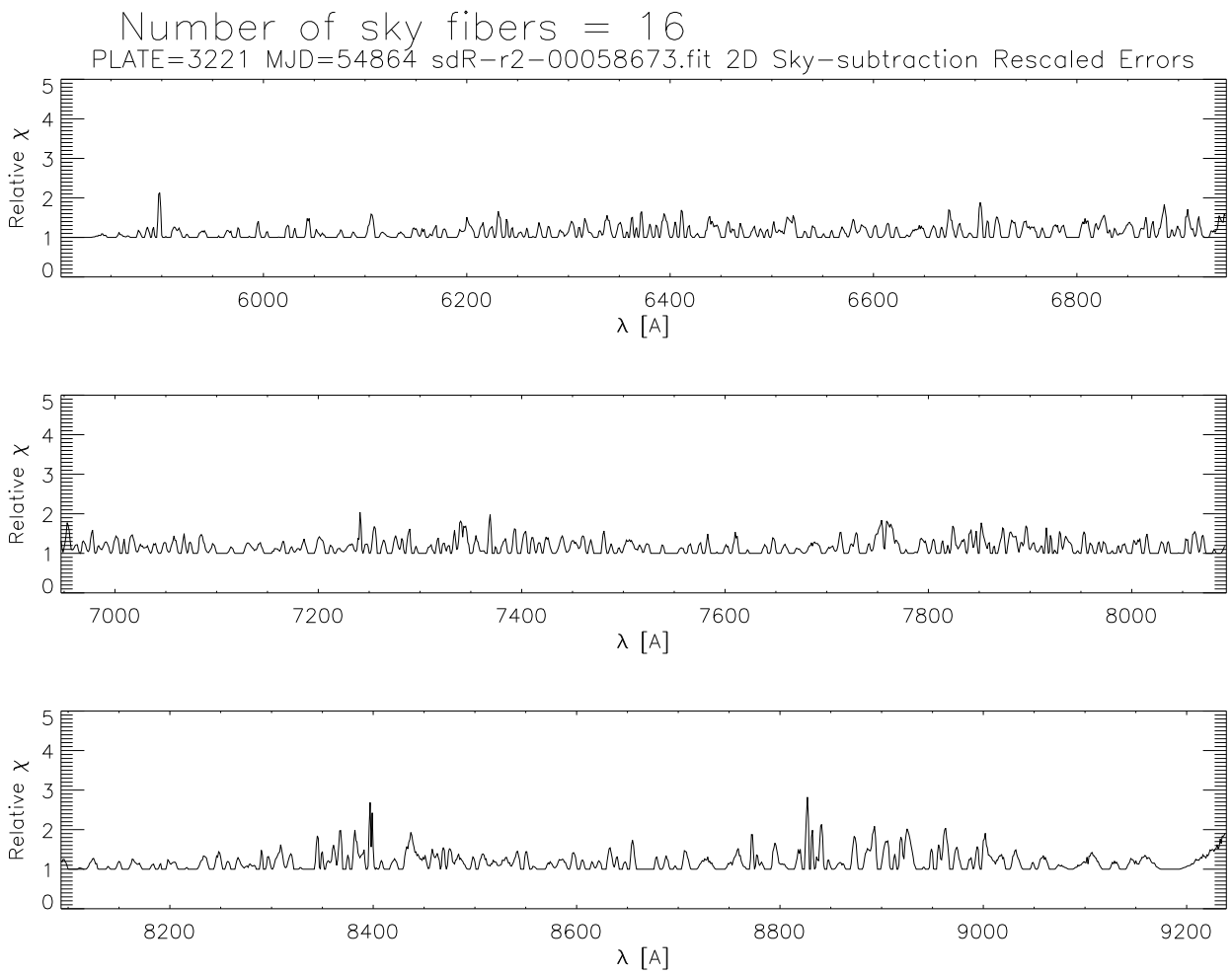

PLATE=3221 MJD=54864 sdR-r2-00058673.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

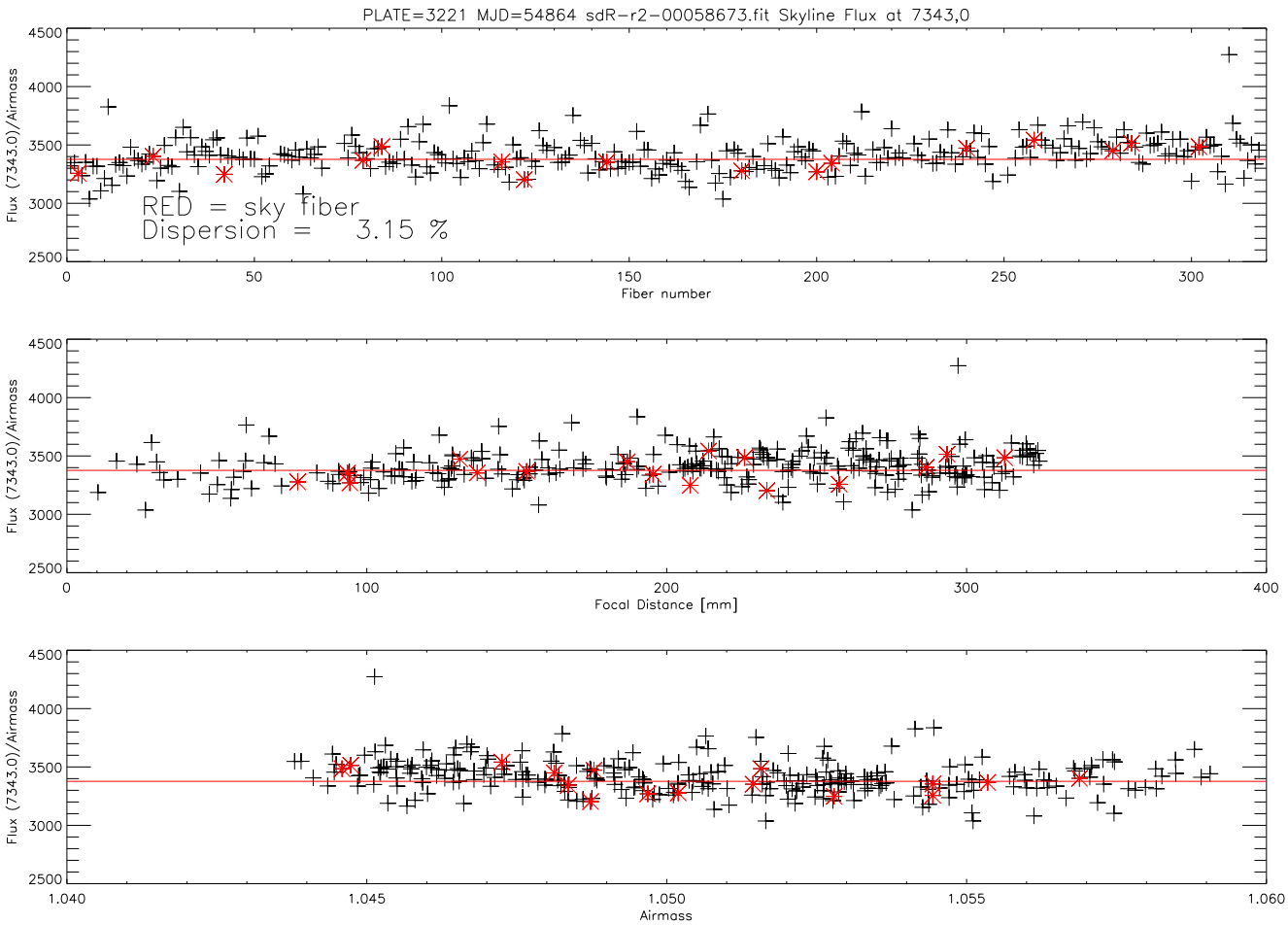

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058673.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

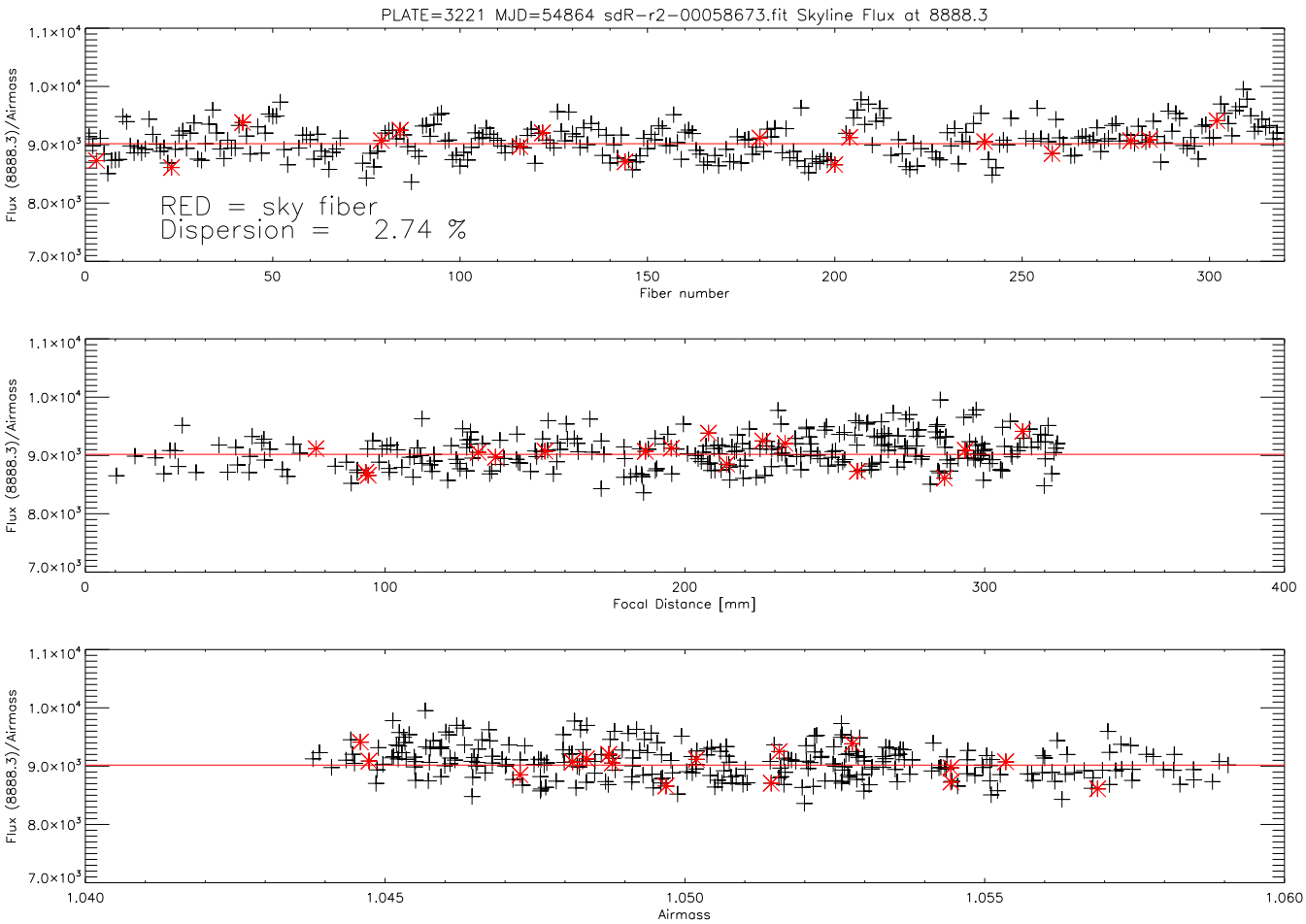

PLATE=3221 MJD=54864 sdR-r2-00058673.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

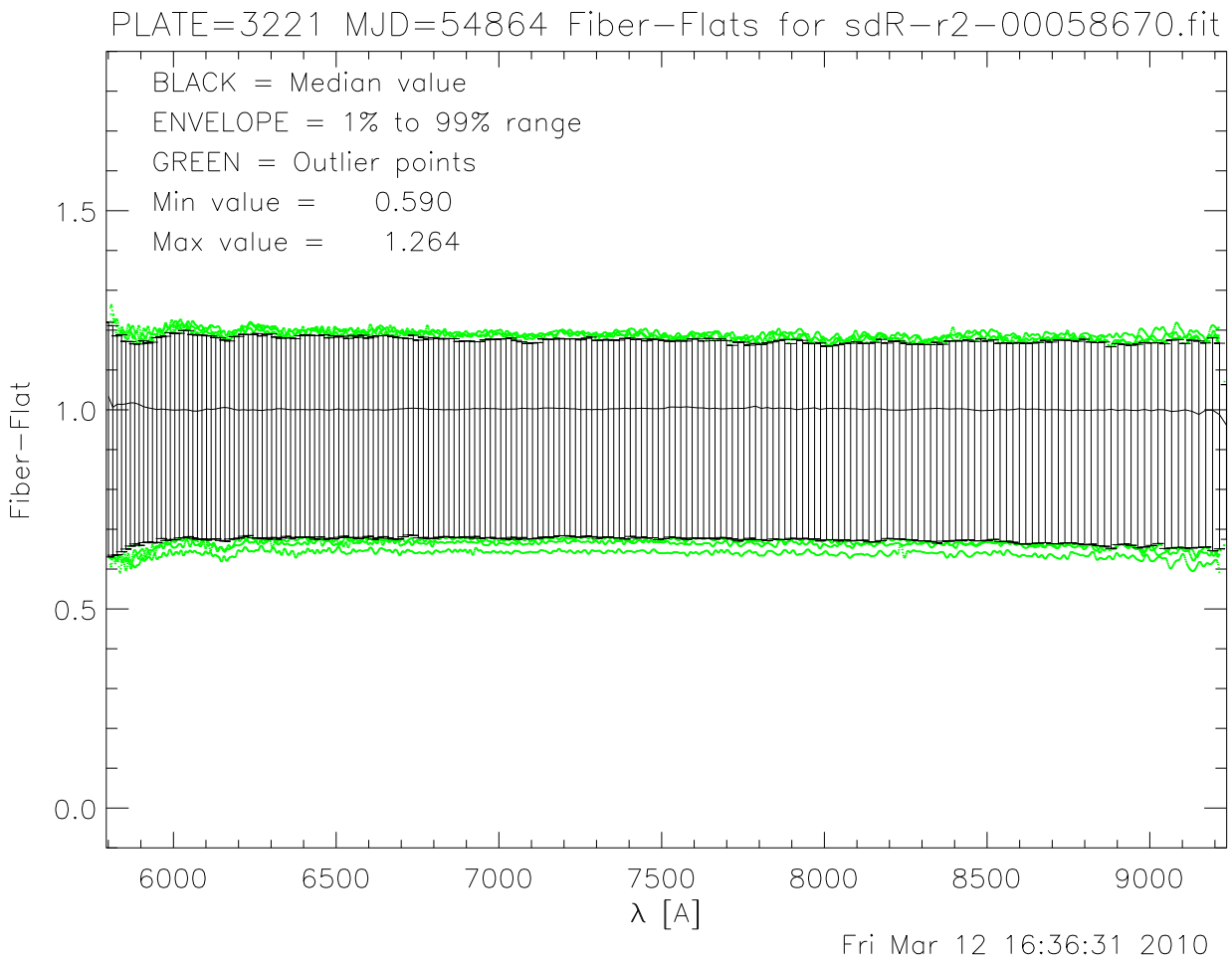

PLATE=3221 MJD=54864 sdR-r2-00058673.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

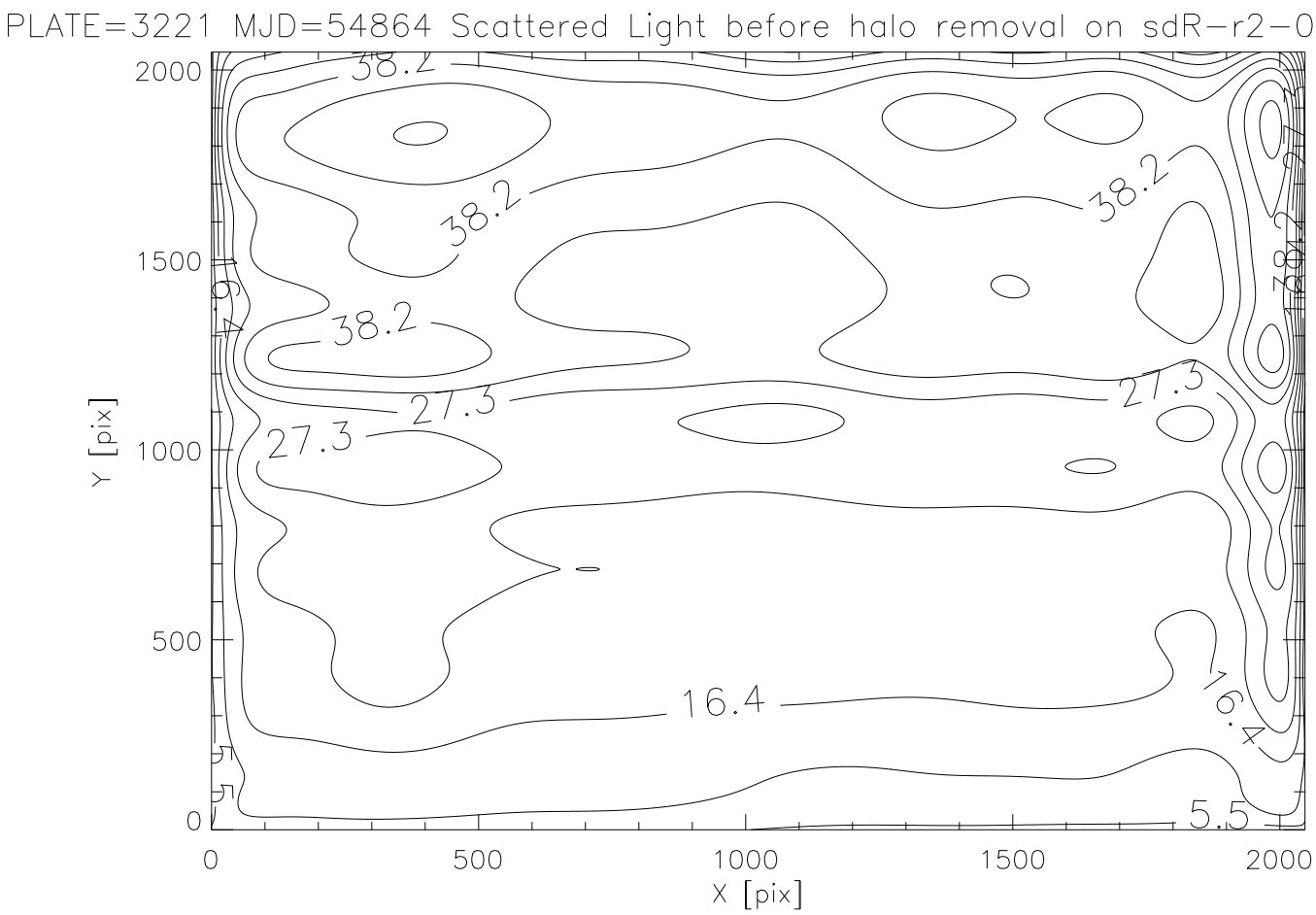

PLATE=3221 MJD=54864 sdR-r2-00058673.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

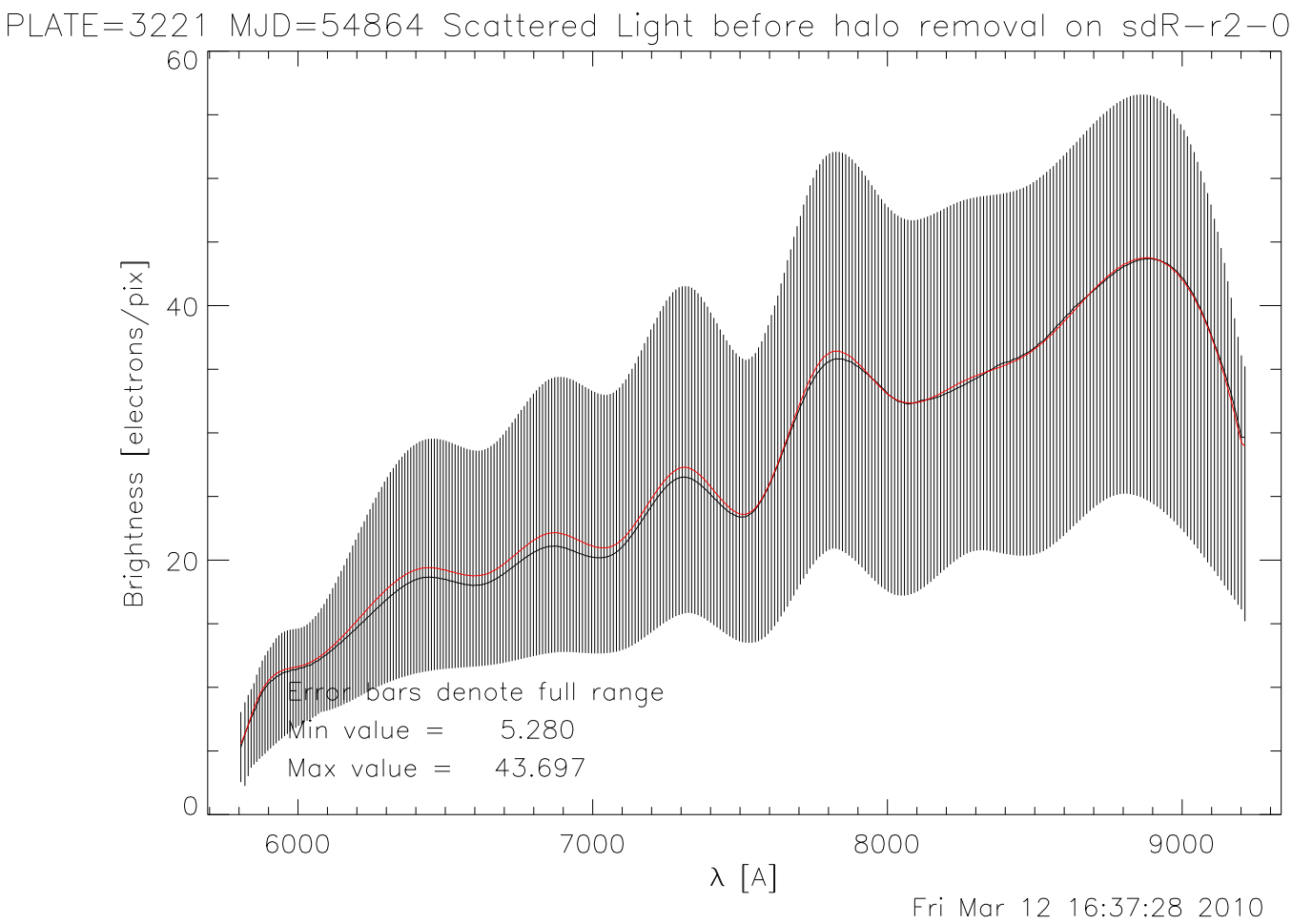

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058673.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

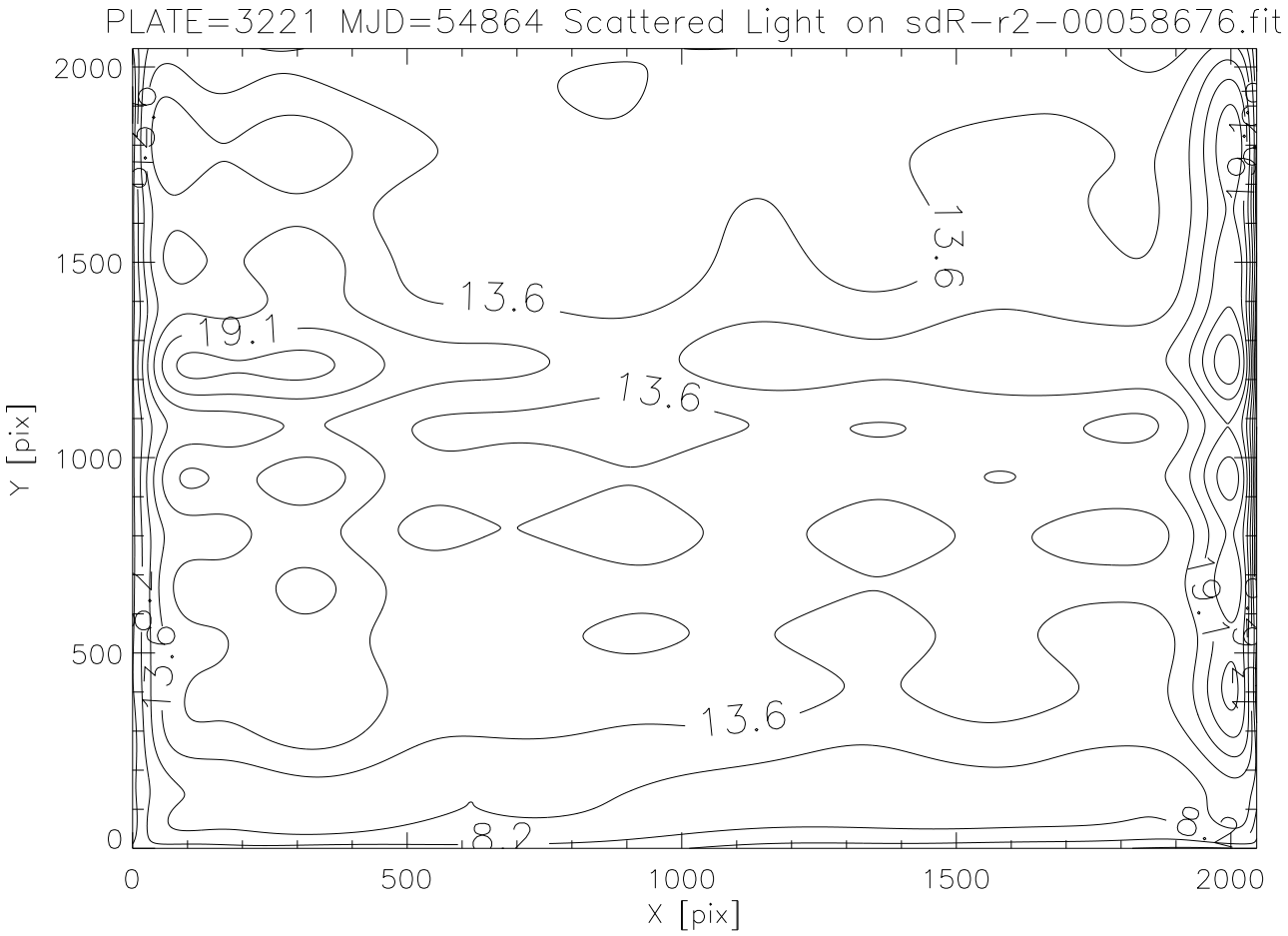

PLATE=3221 MJD=54864 sdR-r2-00058673.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.15 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

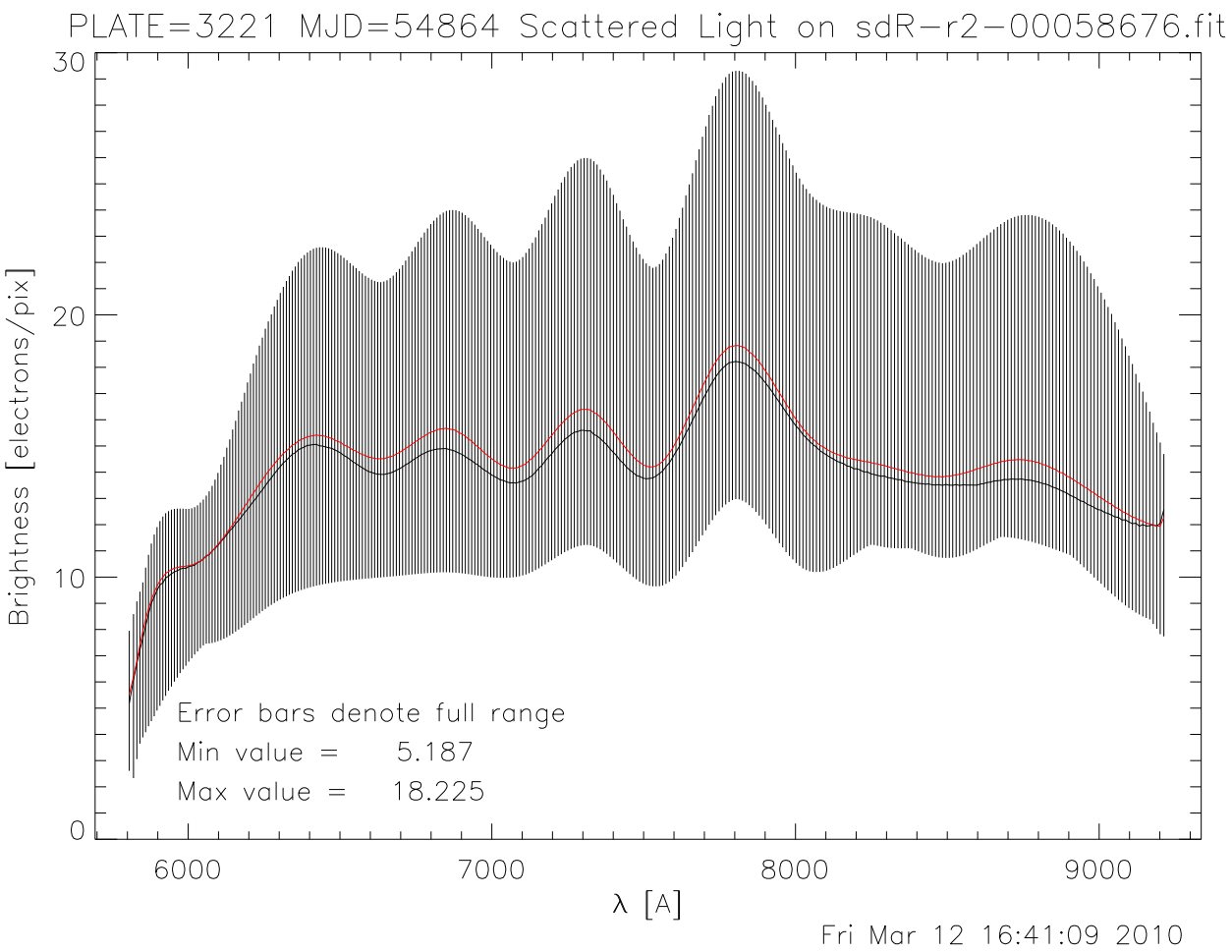

PLATE=3221 MJD=54864 sdR-r2-00058673.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.74 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

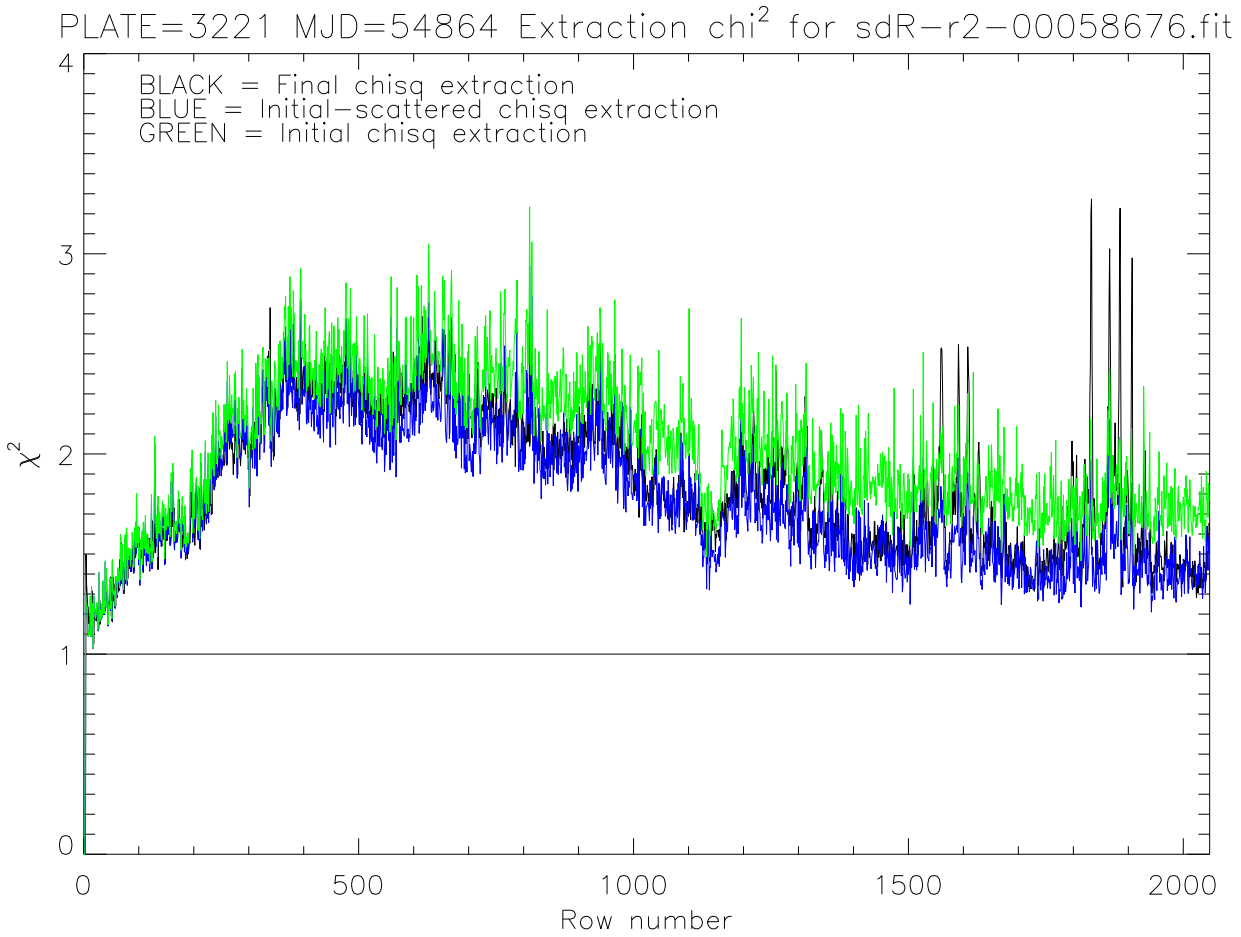

PLATE=3221 MJD=54864 Fiber−Flats for sdR−r2−00058670.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.590
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 16:36:31 2010

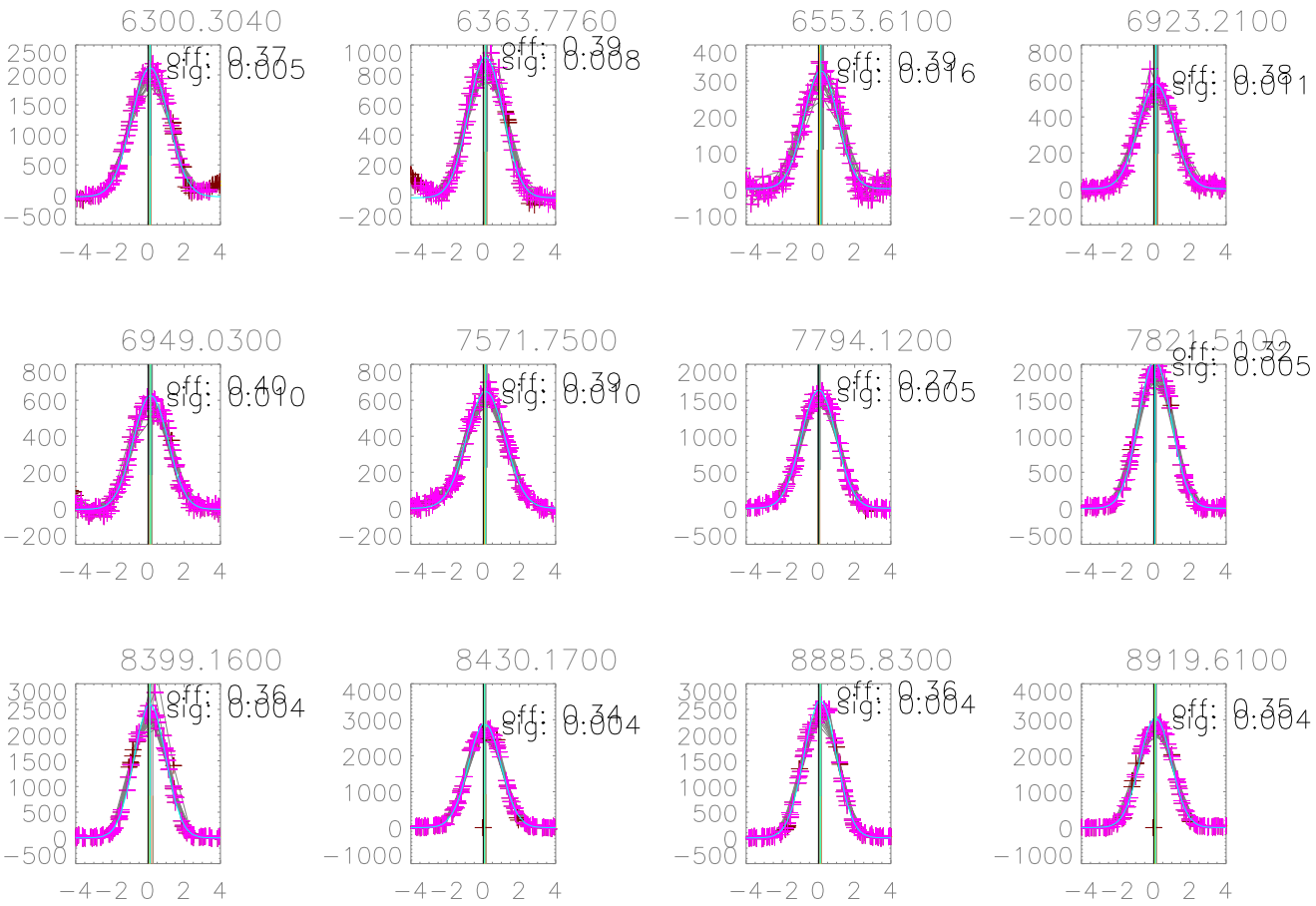

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058676.fi
38.2
38.2
38.2
38.2
27.3
27.3
27.3
16.4
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

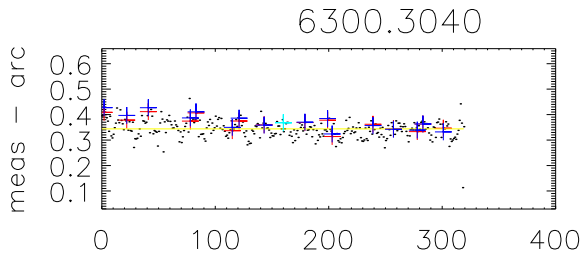

PLATE=3221 MJD=54864 Scattered Light before halo removal on sdR-r2-00058676.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.280
Max value = 43.697
Fri Mar 12 16:37:28 2010

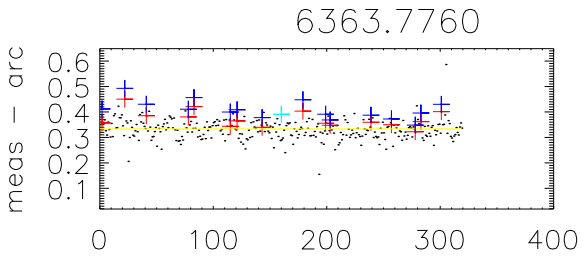

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058676.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1
8.2

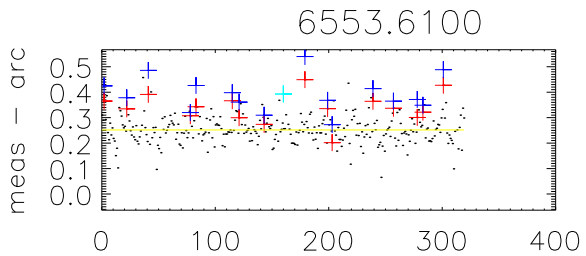

PLATE=3221 MJD=54864 Scattered Light on sdR-r2-00058676.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.187
Max value = 18.225
Fri Mar 12 16:41:09 2010

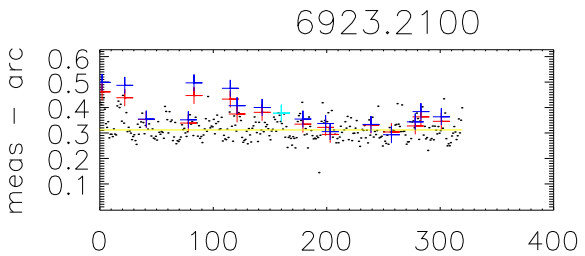

PLATE=3221 MJD=54864 Extraction chi^2 for sdR-r2-00058676.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

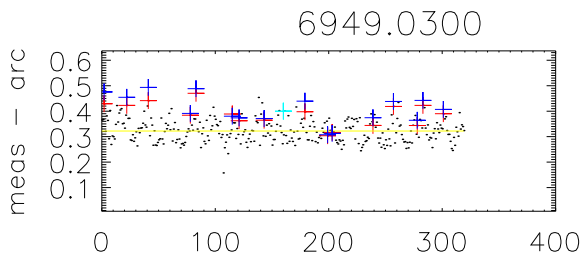

6300.3040
off: 0.37
sig: 0.005
6363.7760
off: 0.39
sig: 0.008
6553.6100
off: 0.39
sig: 0.016
6923.2100
off: 0.38
sig: 0.011
6949.0300
off: 0.40
sig: 0.010
7571.7500
off: 0.39
sig: 0.010
7794.1200
off: 0.27
sig: 0.005
7821.5100
off: 0.32
sig: 0.005
8399.1600
off: 0.36
sig: 0.004
8430.1700
off: 0.34
sig: 0.004
8885.8300
off: 0.36
sig: 0.004
8919.6100
off: 0.35
sig: 0.004

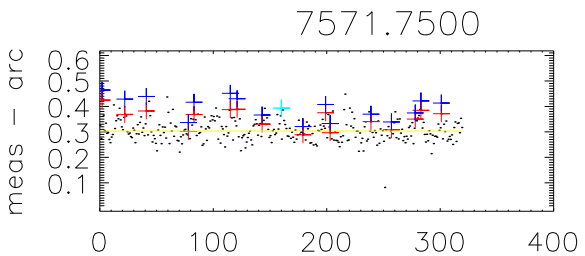

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

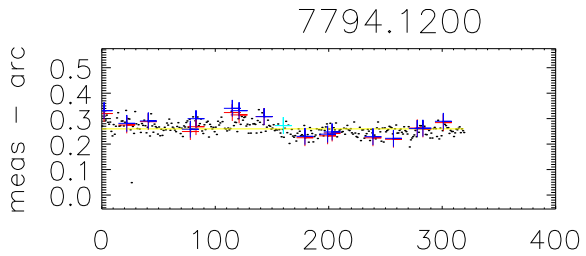

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

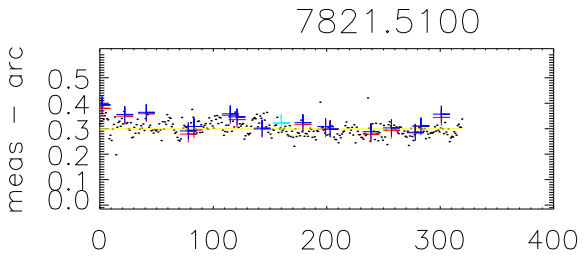

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

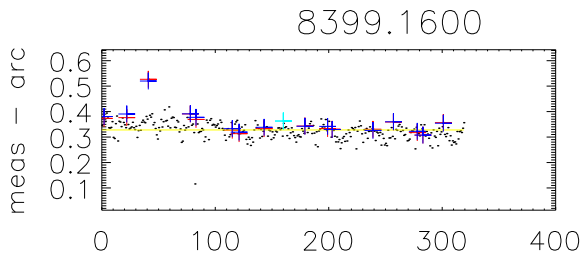

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

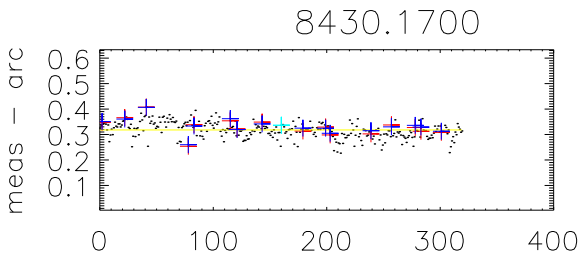

6949.0300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

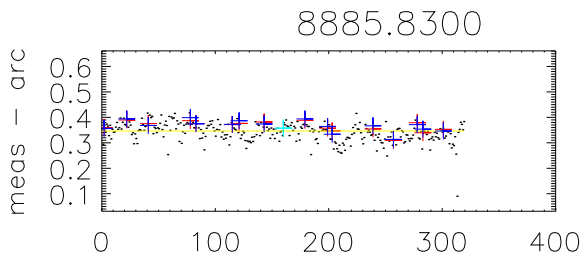

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

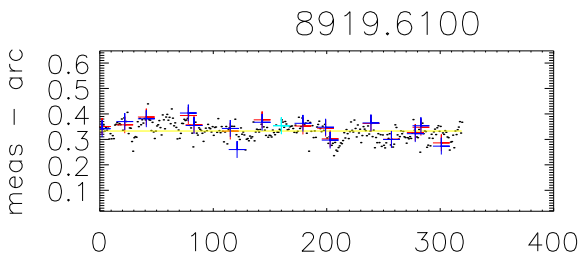

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

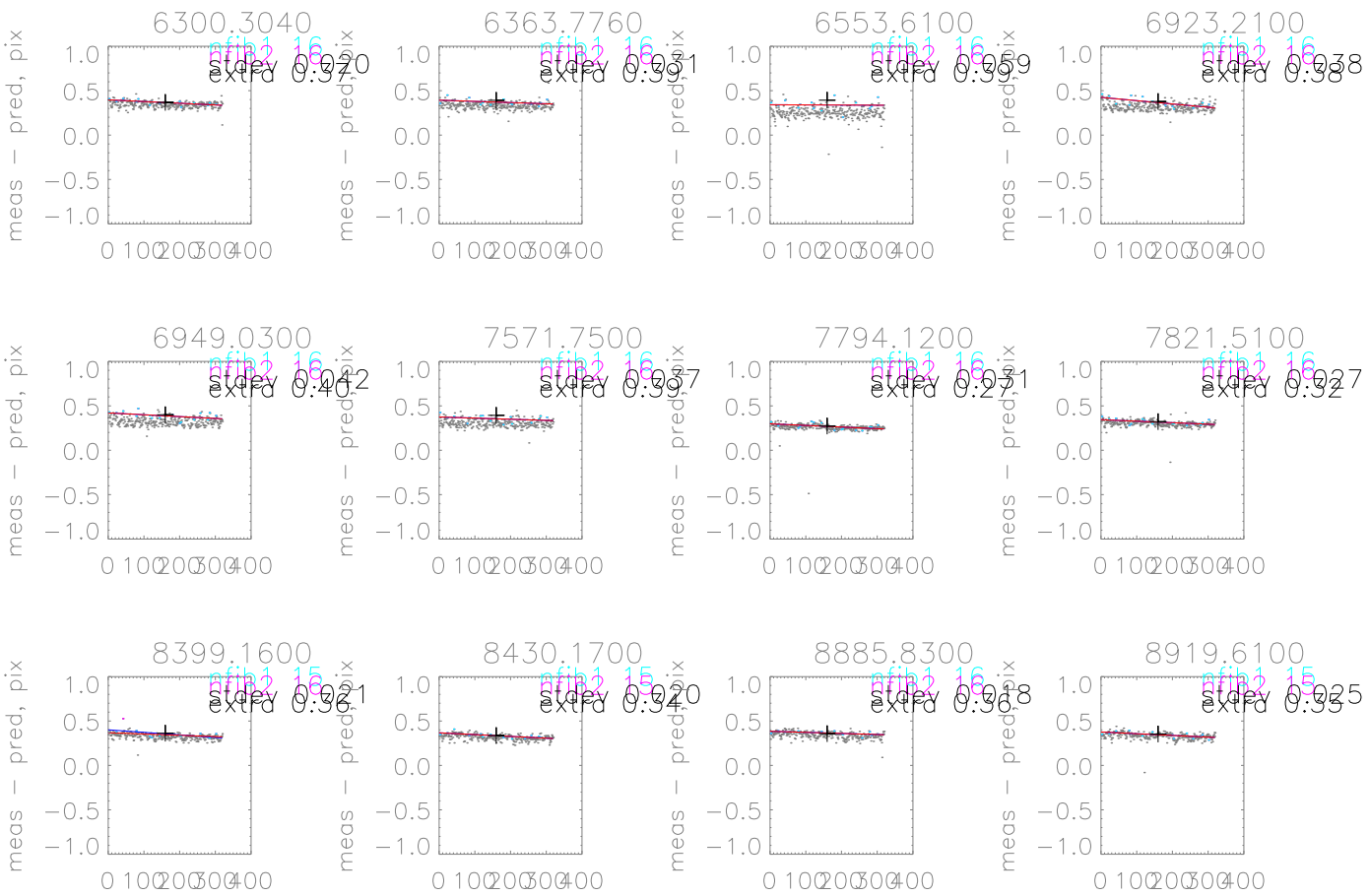

7821.5100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

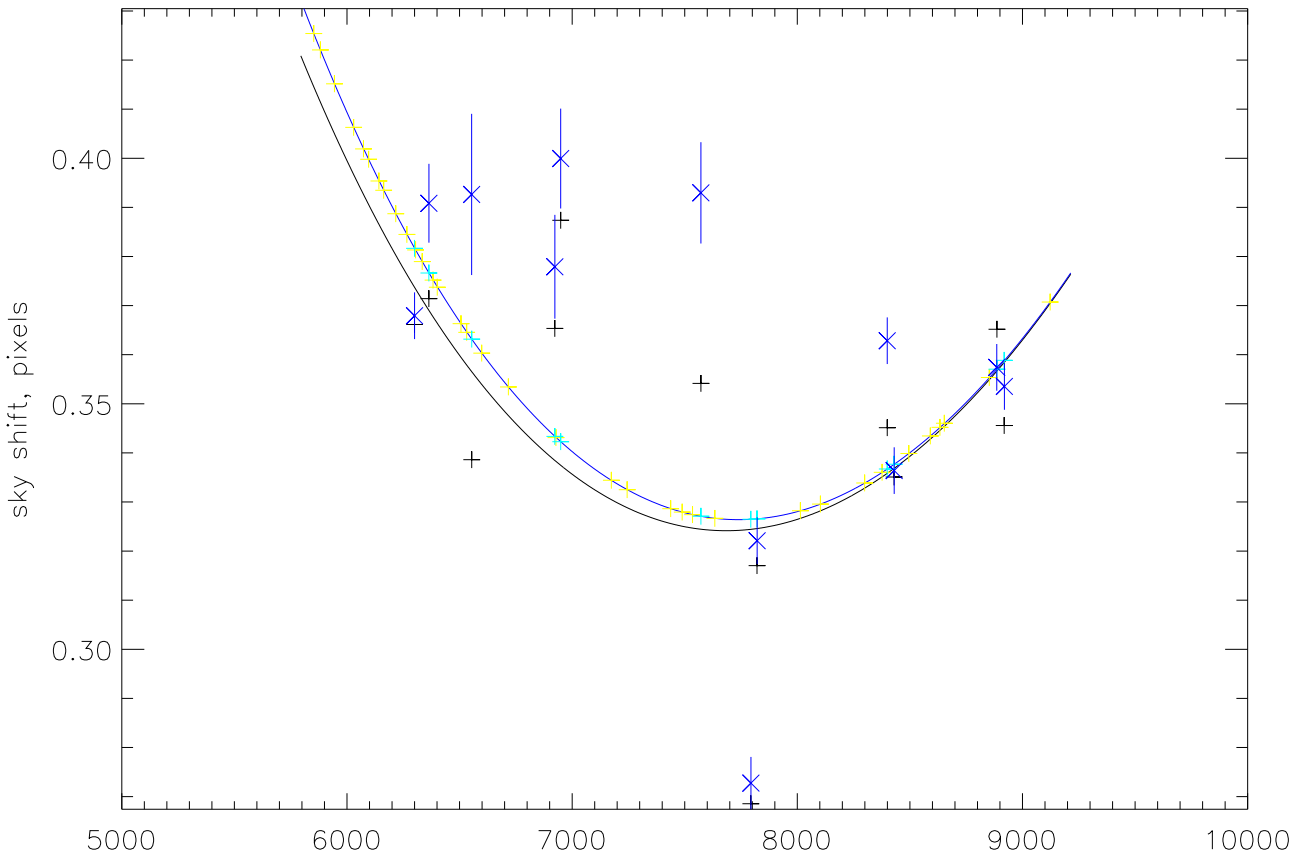

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

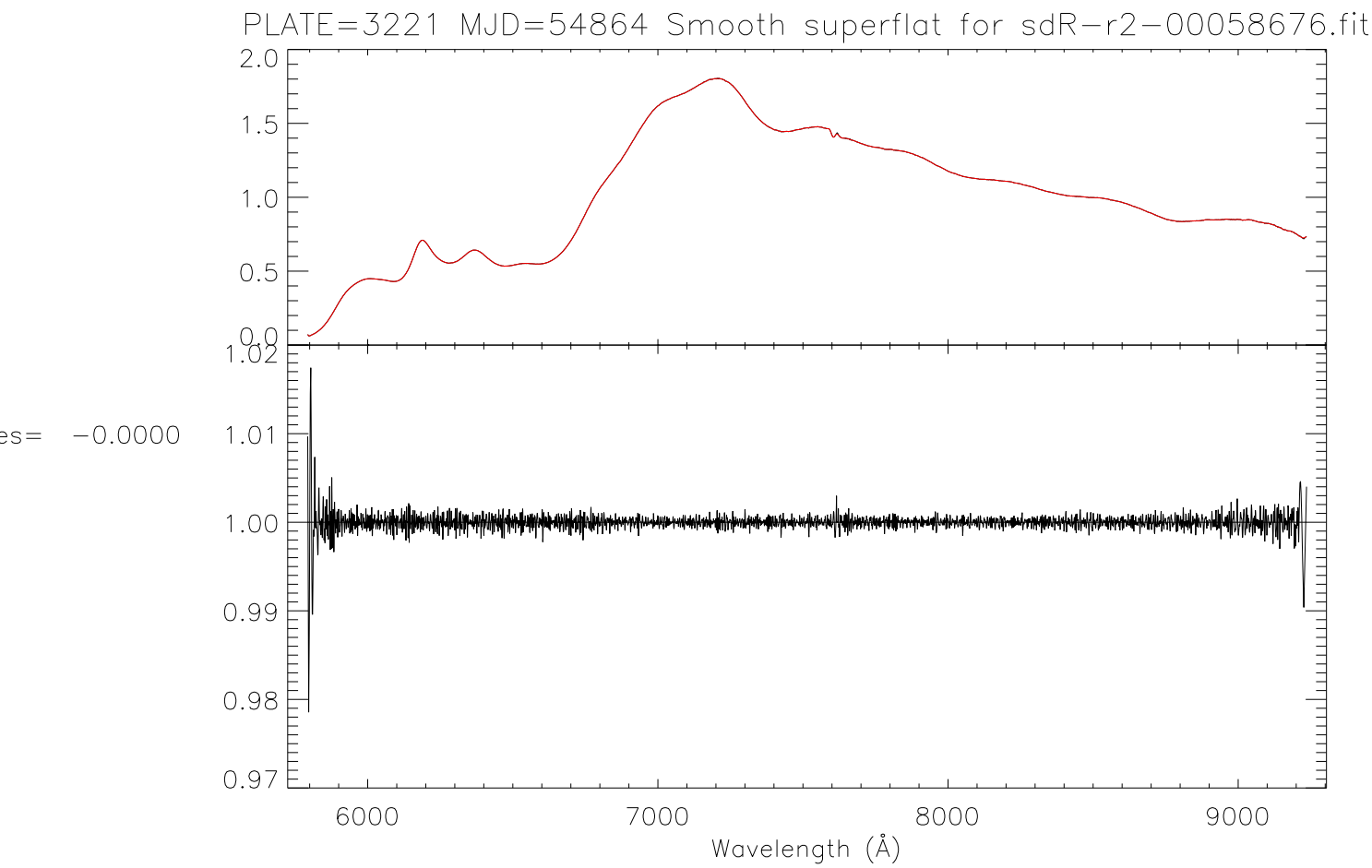

8430.1700
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

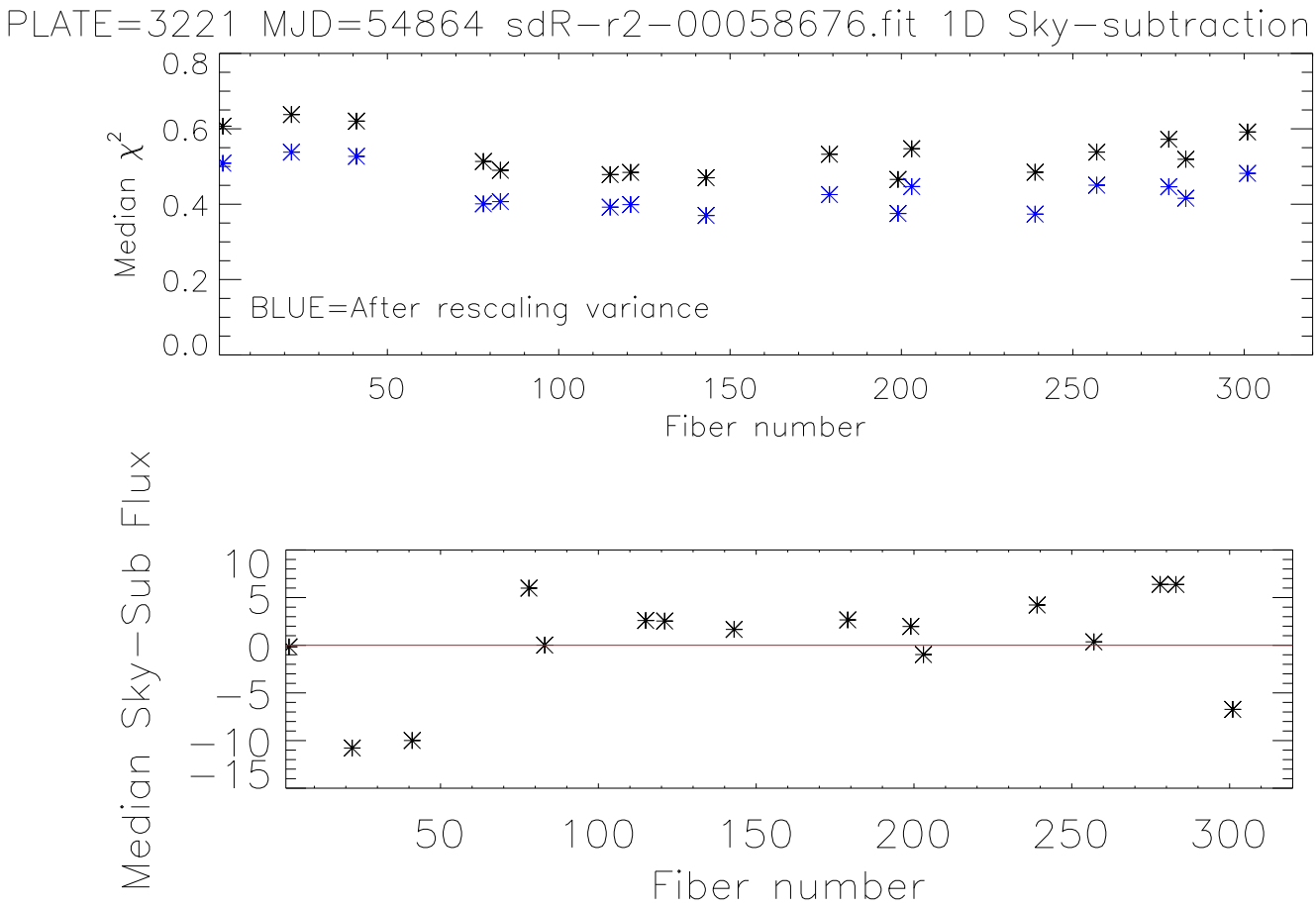

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

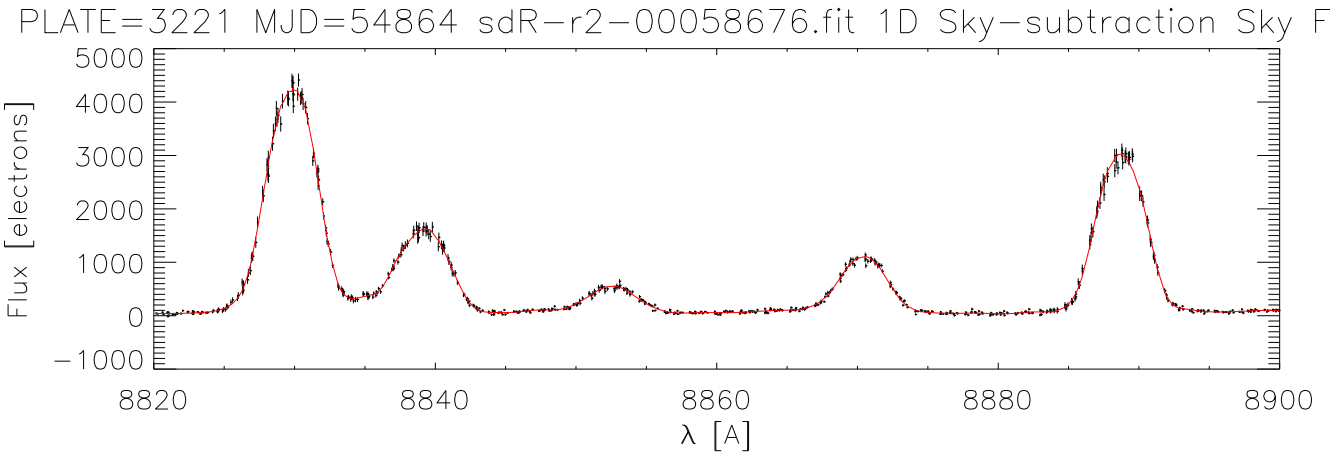

6300.3040
stdev 0.020
extra 0.37
6363.7760
stdev 0.031
extra 0.39
6553.6100
stdev 0.059
extra 0.39
6923.2100
stdev 0.038
extra 0.38
6949.0300
stdev 0.042
extra 0.40
7571.7500
stdev 0.037
extra 0.39
7794.1200
stdev 0.071
extra 0.27
7821.5100
stdev 0.027
extra 0.32
8399.1600
stdev 0.021
extra 0.36
8430.1700
stdev 0.020
extra 0.34
8885.8300
stdev 0.048
extra 0.36
8919.6100
stdev 0.025
extra 0.33
meas − pred, pix
mfib1 16
mfib2 16
mfib1 15
mfib2 15

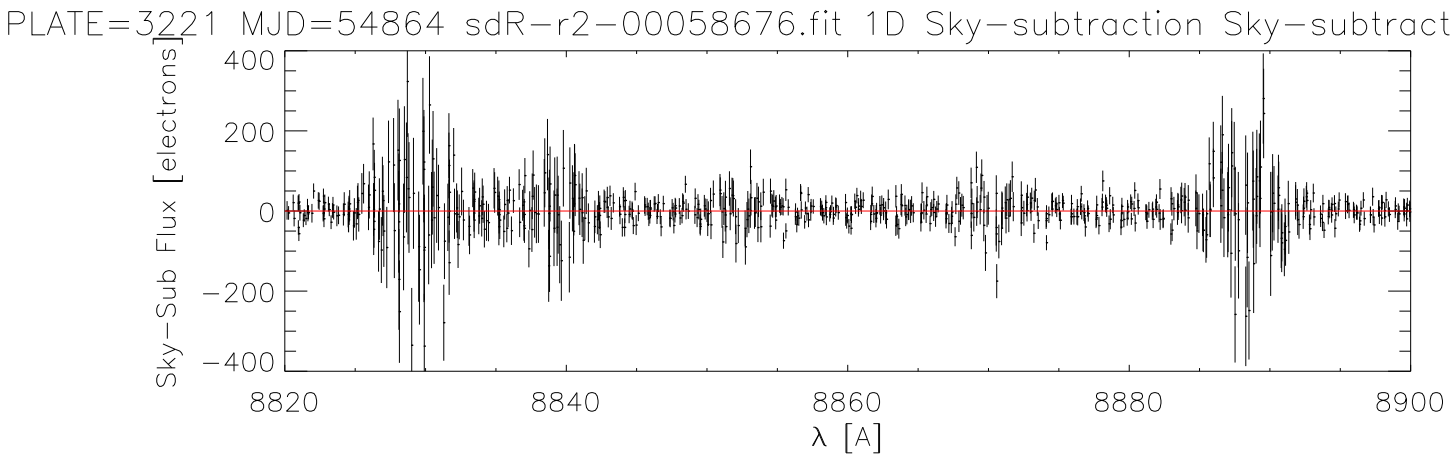

sky shift, pixels
0.40
0.35
0.30
5000
6000
7000
8000
9000
10000

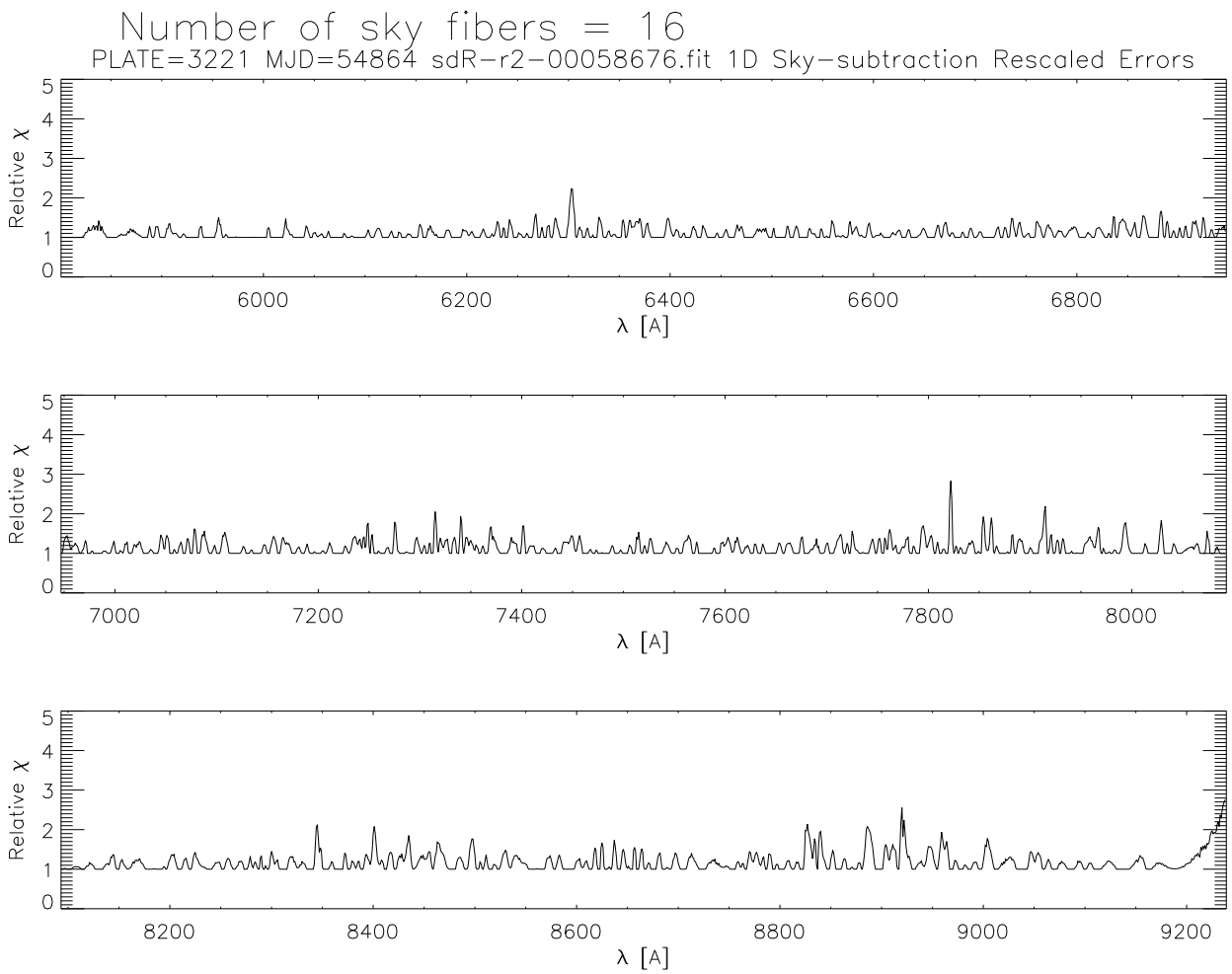

PLATE=3221 MJD=54864 Smooth superflat for sdR-r2-00058676.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

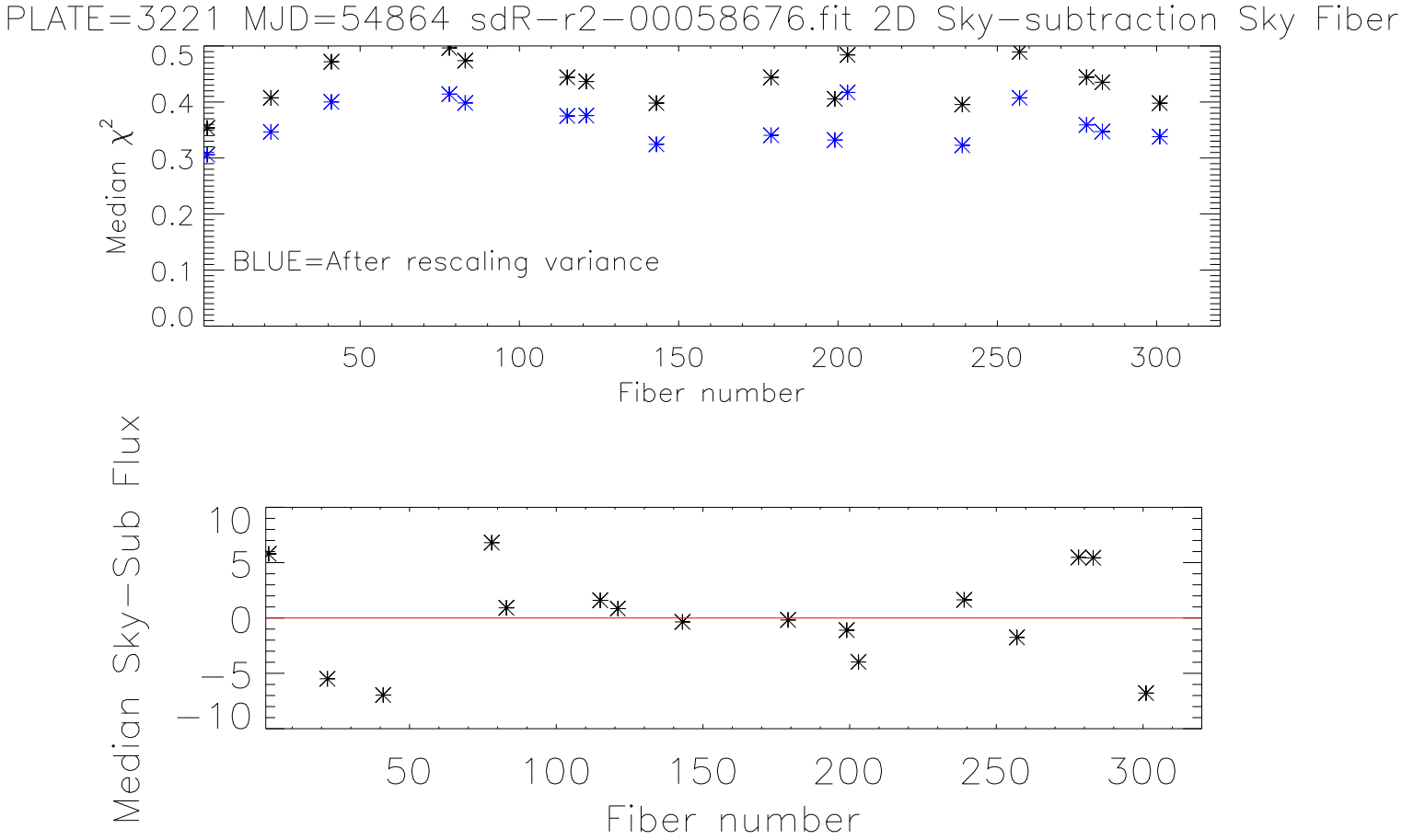
es= −0.0000

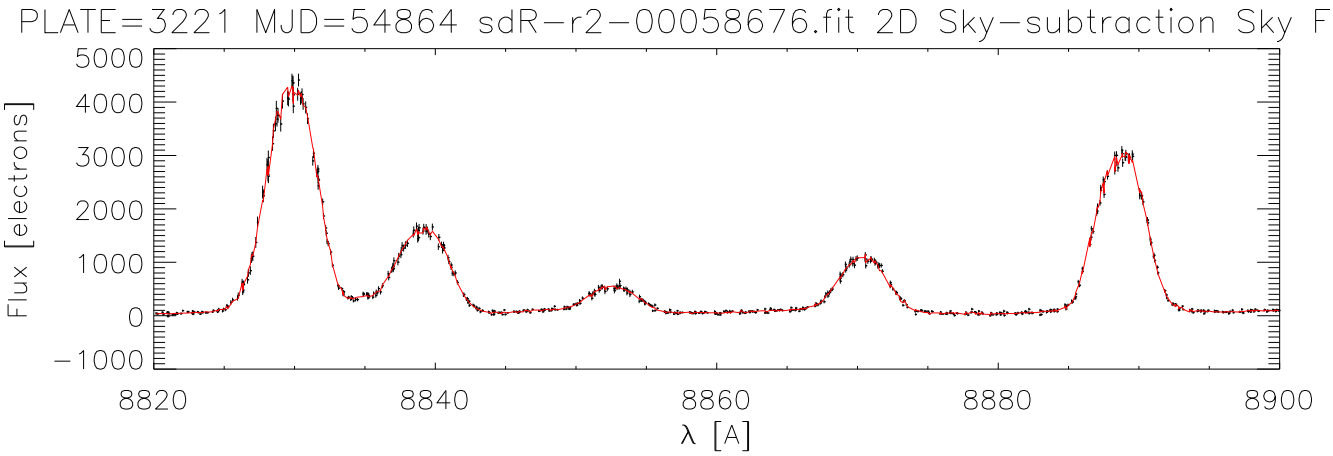

PLATE=3221 MJD=54864 sdR-r2-00058676.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

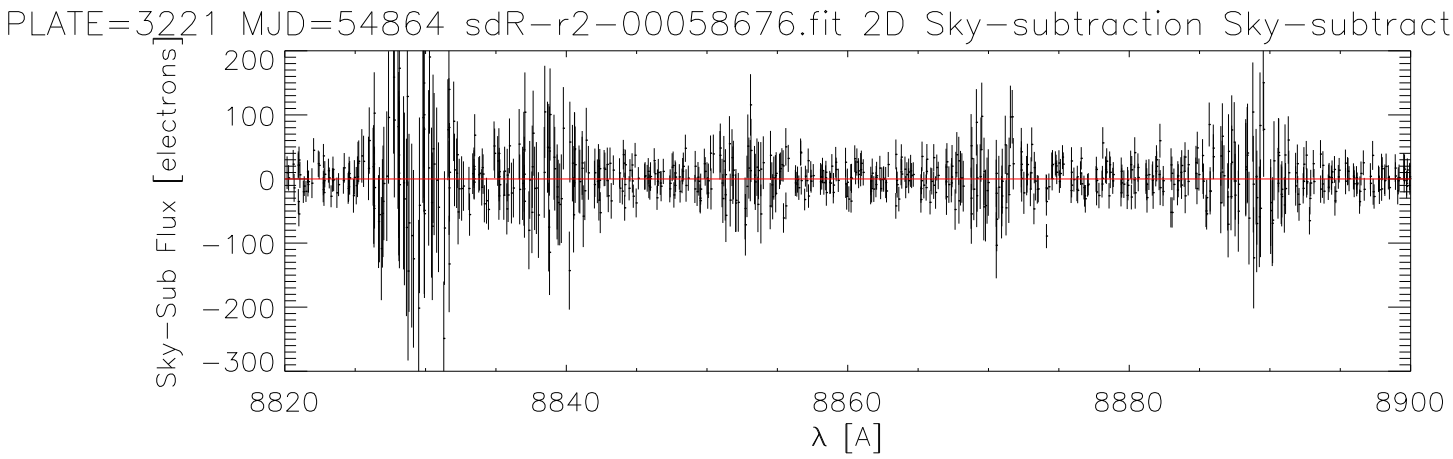

PLATE=3221 MJD=54864 sdR-r2-00058676.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

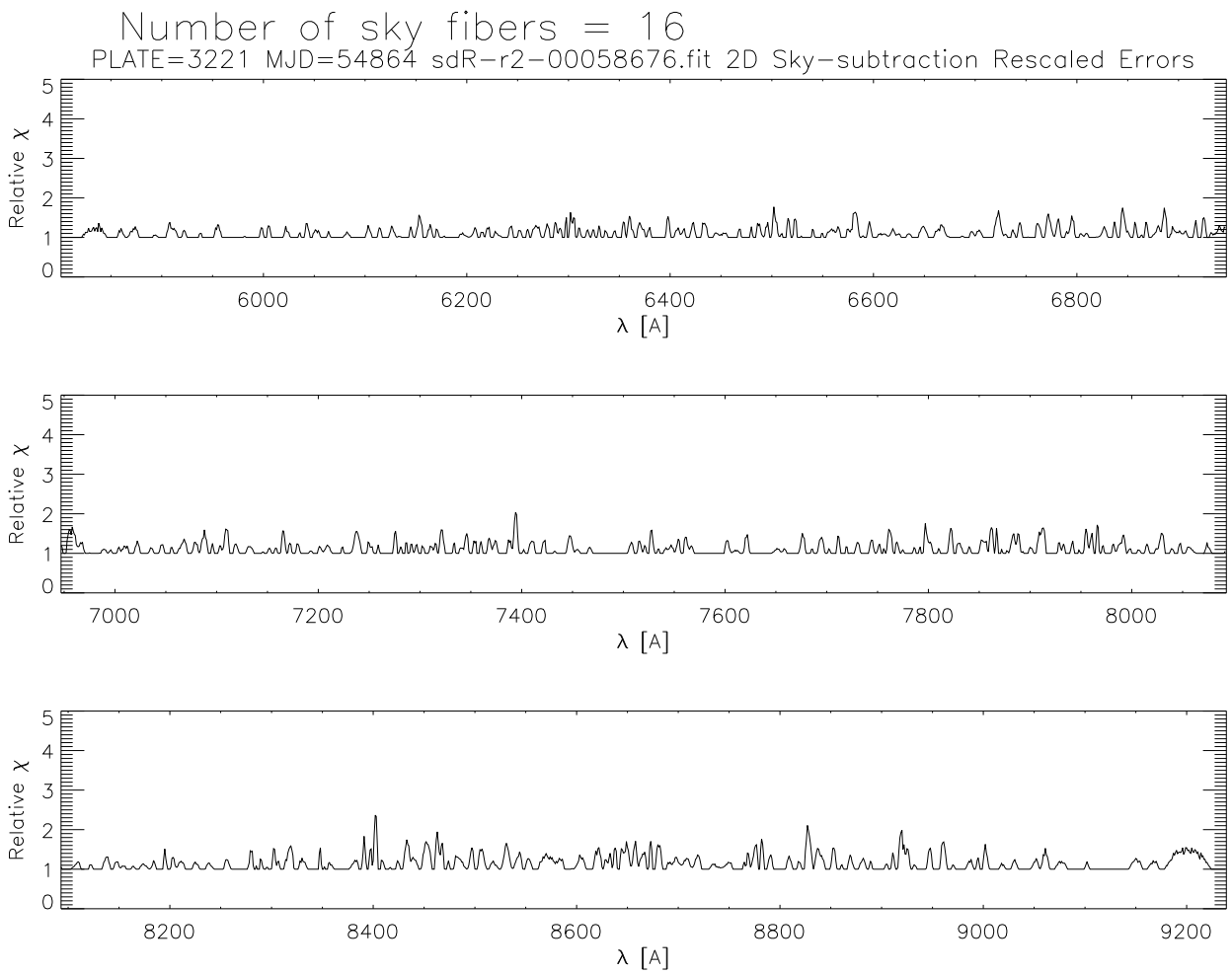

PLATE=3221 MJD=54864 sdR-r2-00058676.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

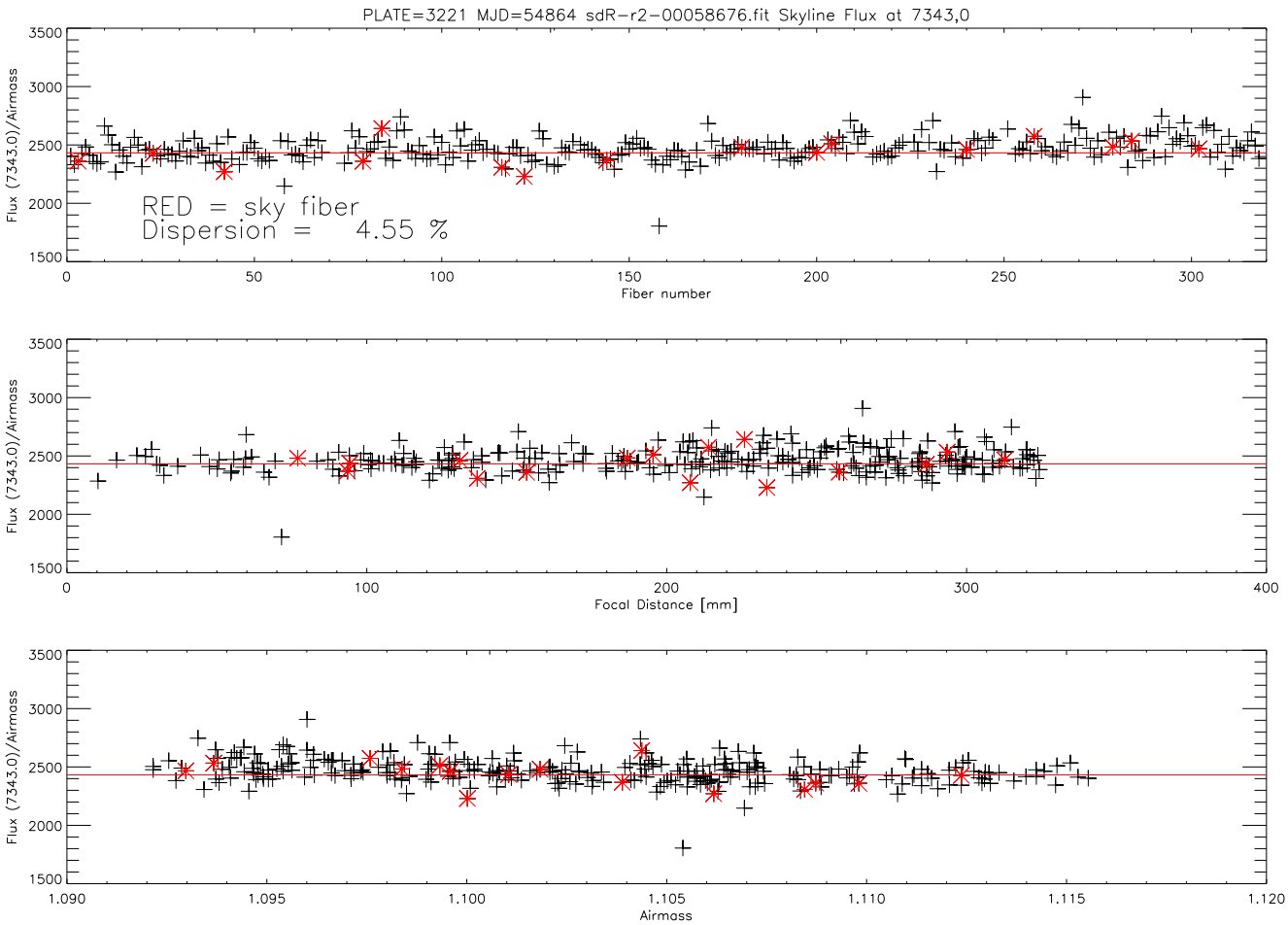

Number of sky fibers = 16
PLATE=3221 MJD=54864 sdR-r2-00058676.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

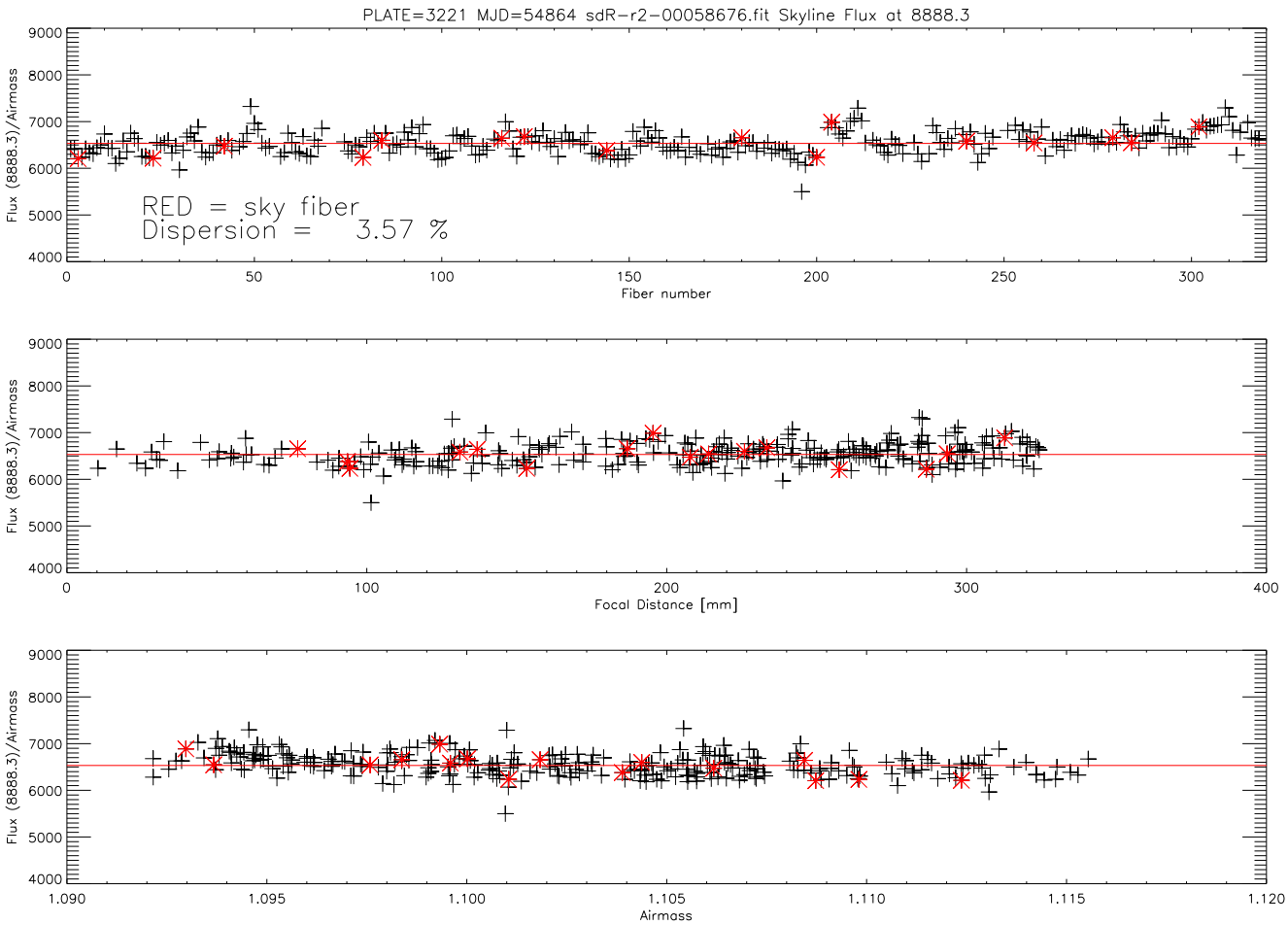

PLATE=3221 MJD=54864 sdR-r2-00058676.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number


PLATE=3221 MJD=54864 sdR-r2-00058676.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


PLATE=3221 MJD=54864 sdR-r2-00058676.fit 2D 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 = 16
PLATE=3221 MJD=54864 sdR-r2-00058676.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=3221 MJD=54864 sdR-r2-00058676.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.55 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=3221 MJD=54864 sdR-r2-00058676.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.57 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass