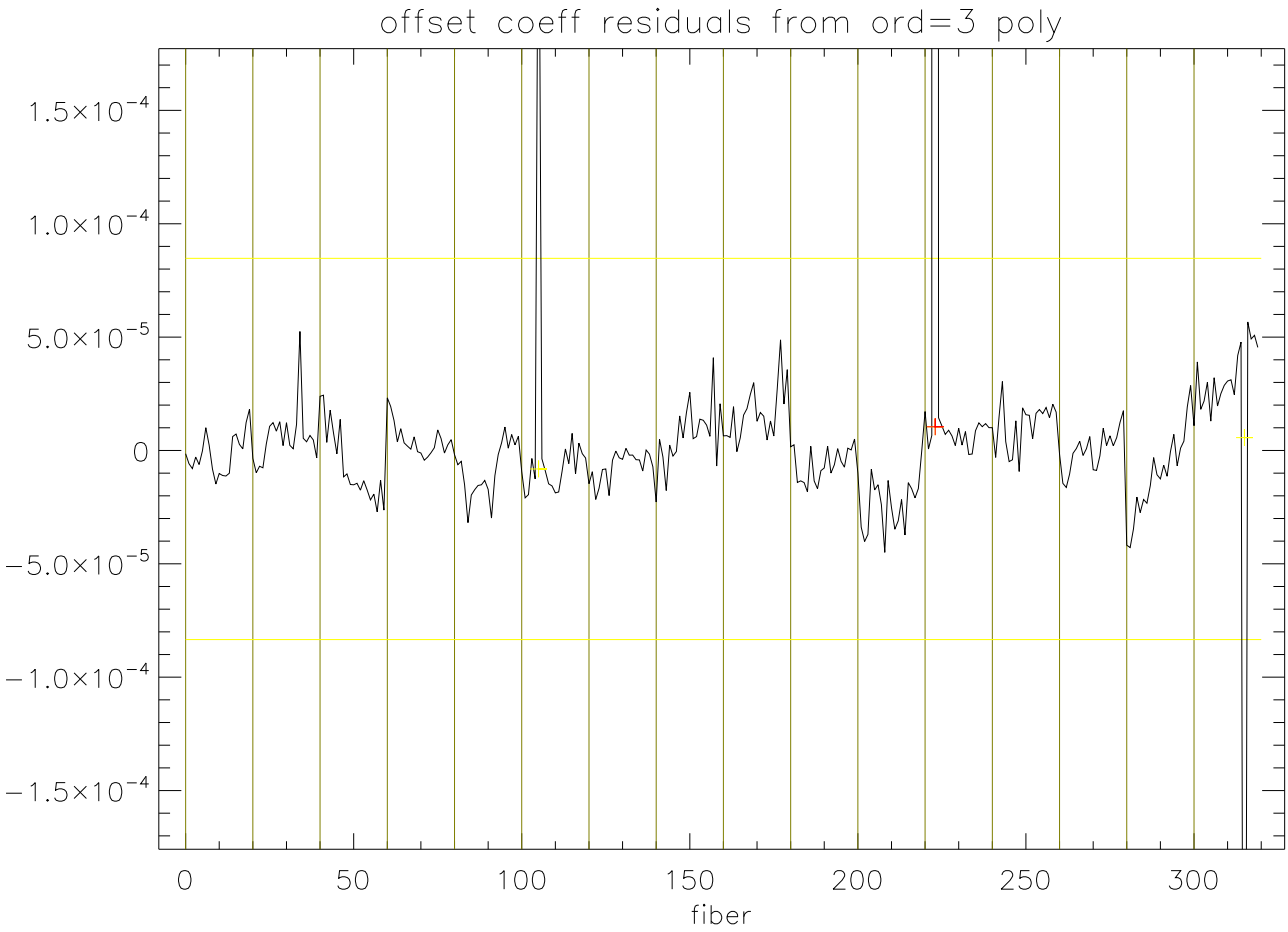
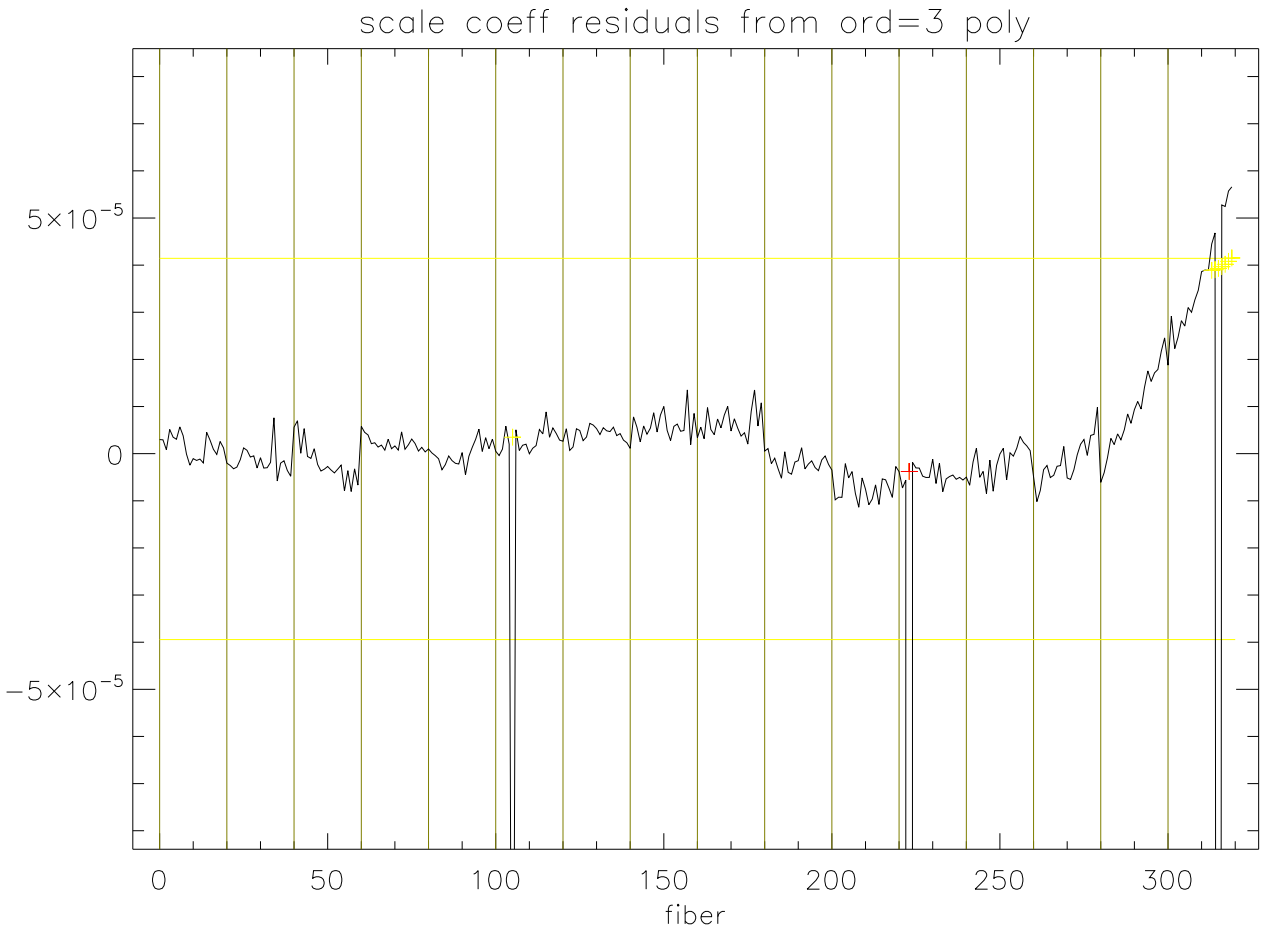
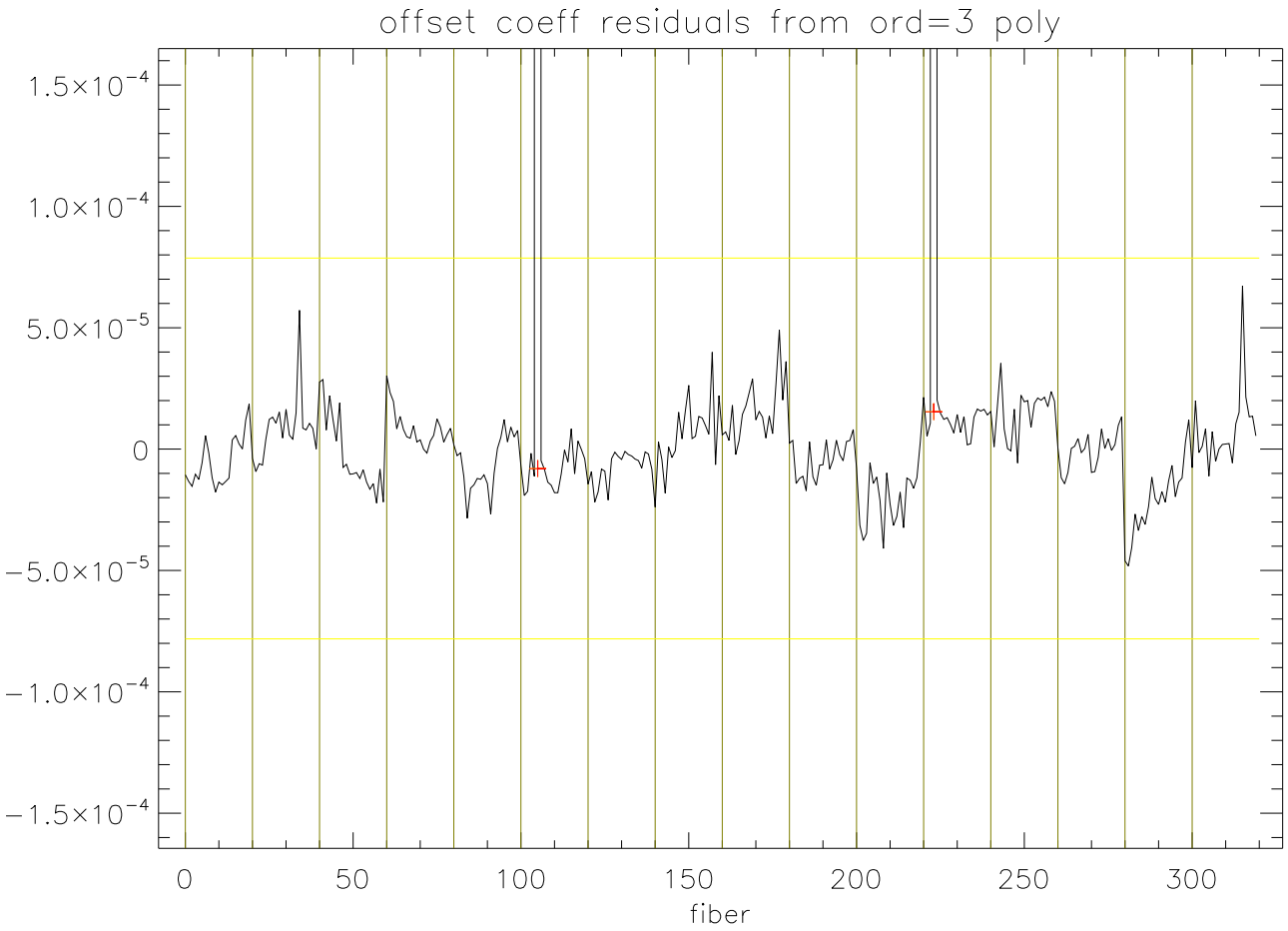
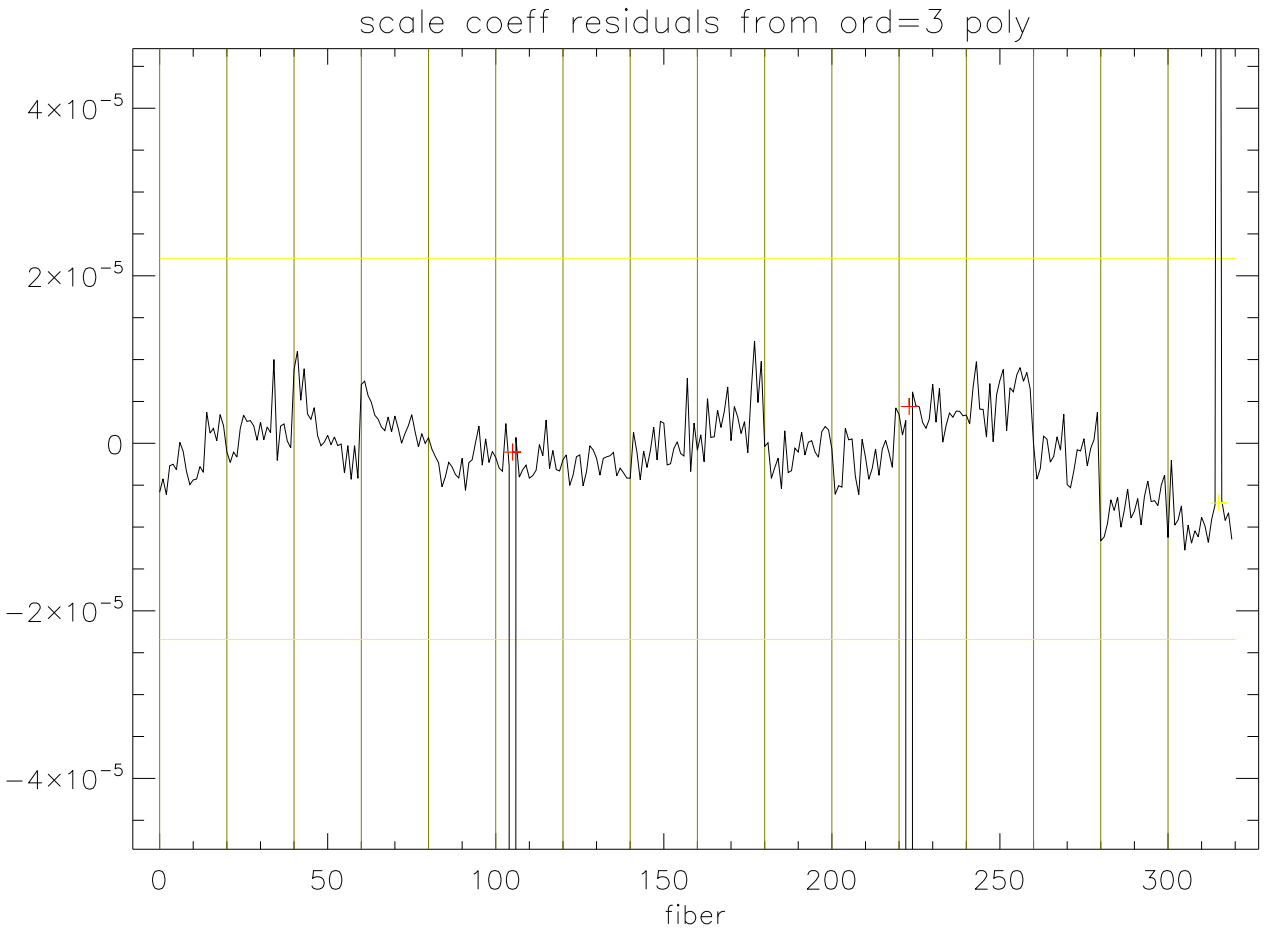
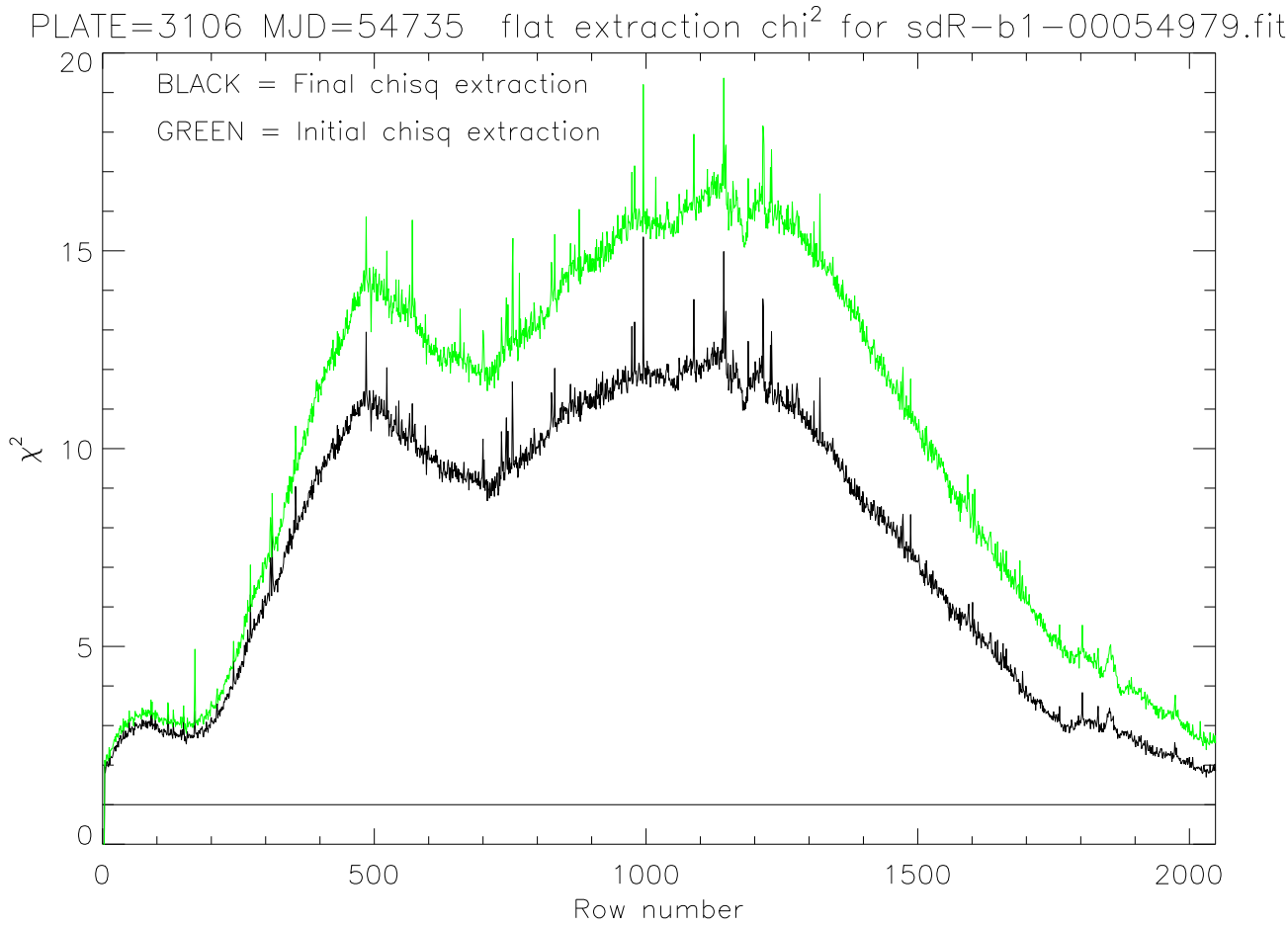
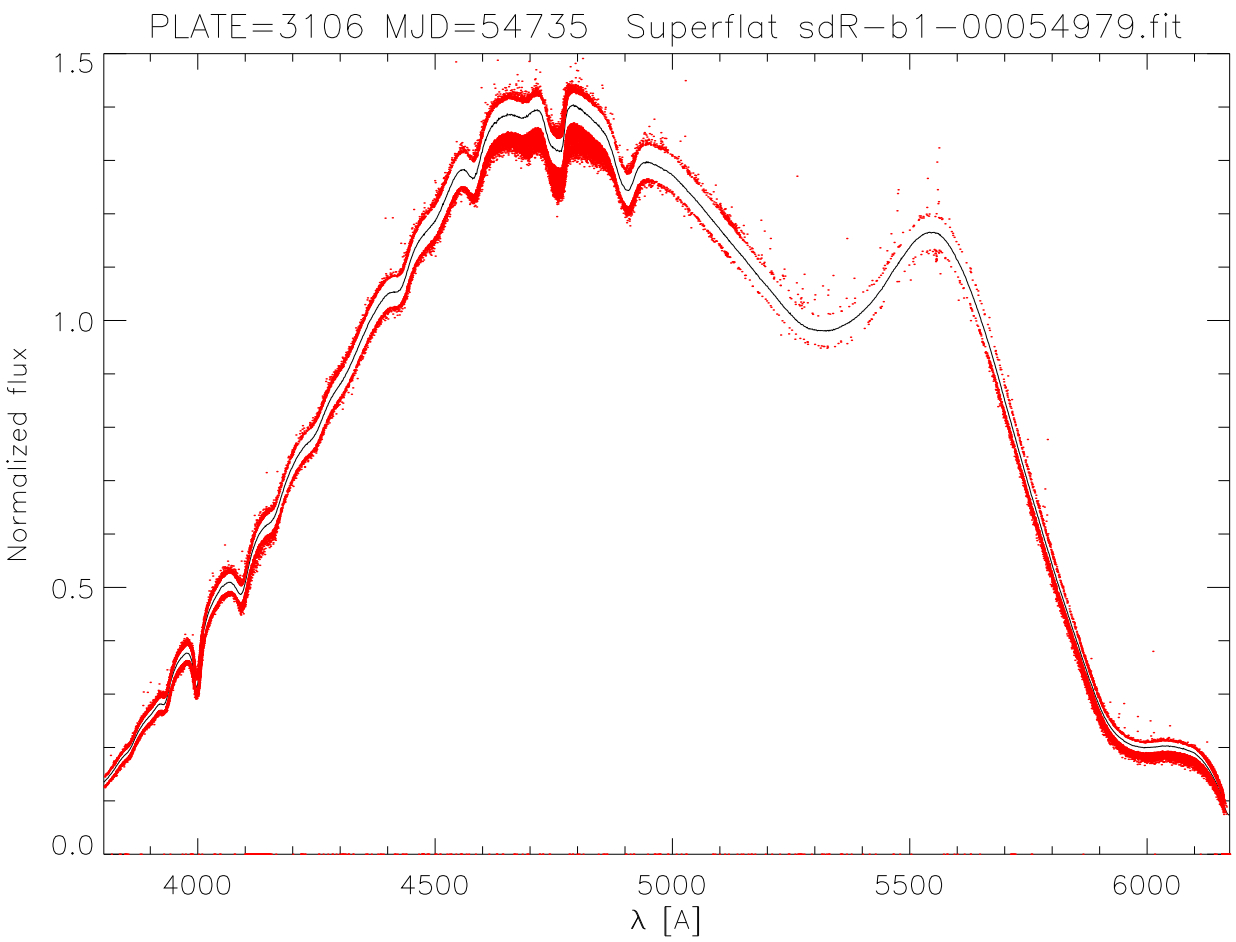

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

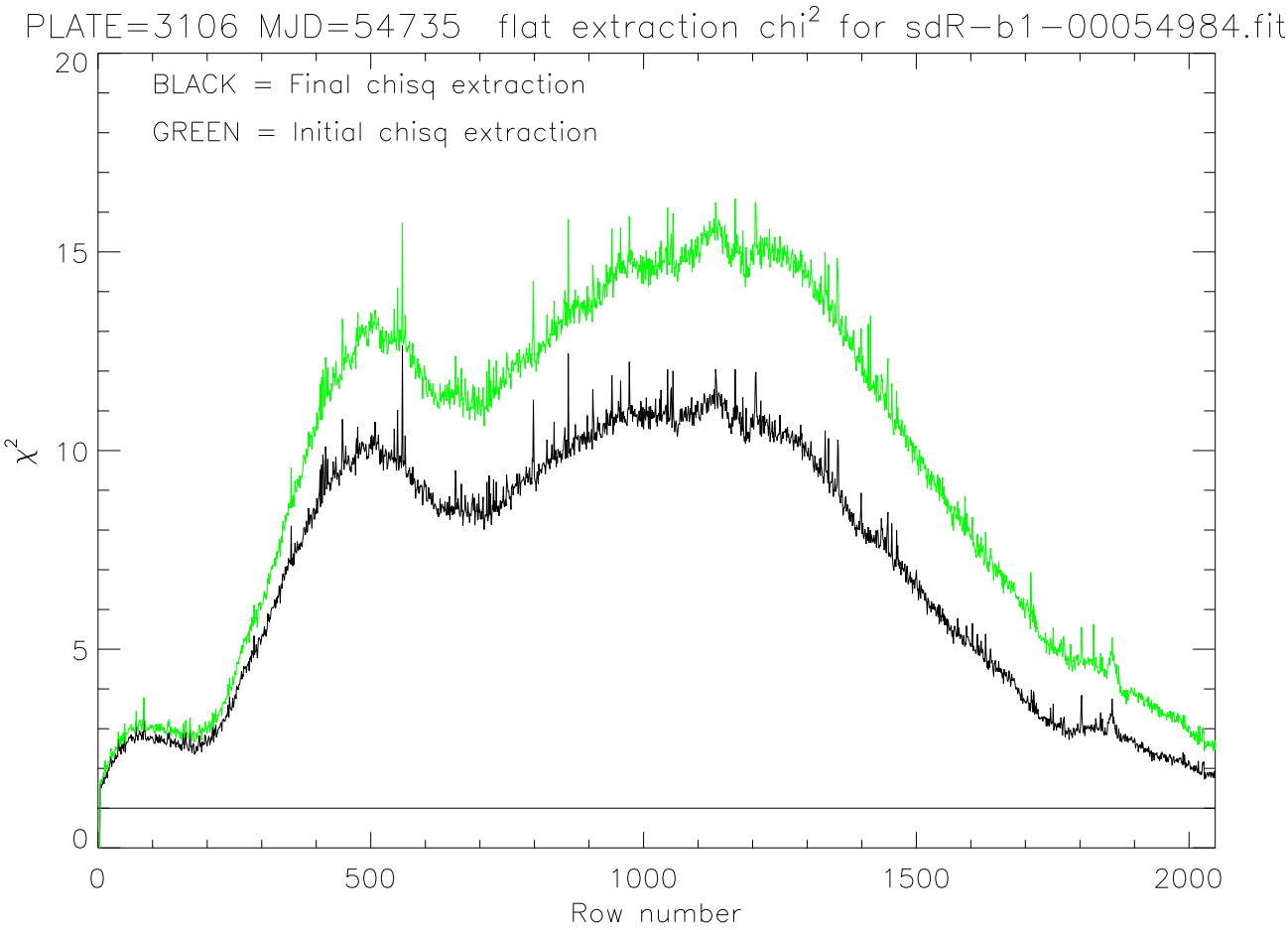

scale coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

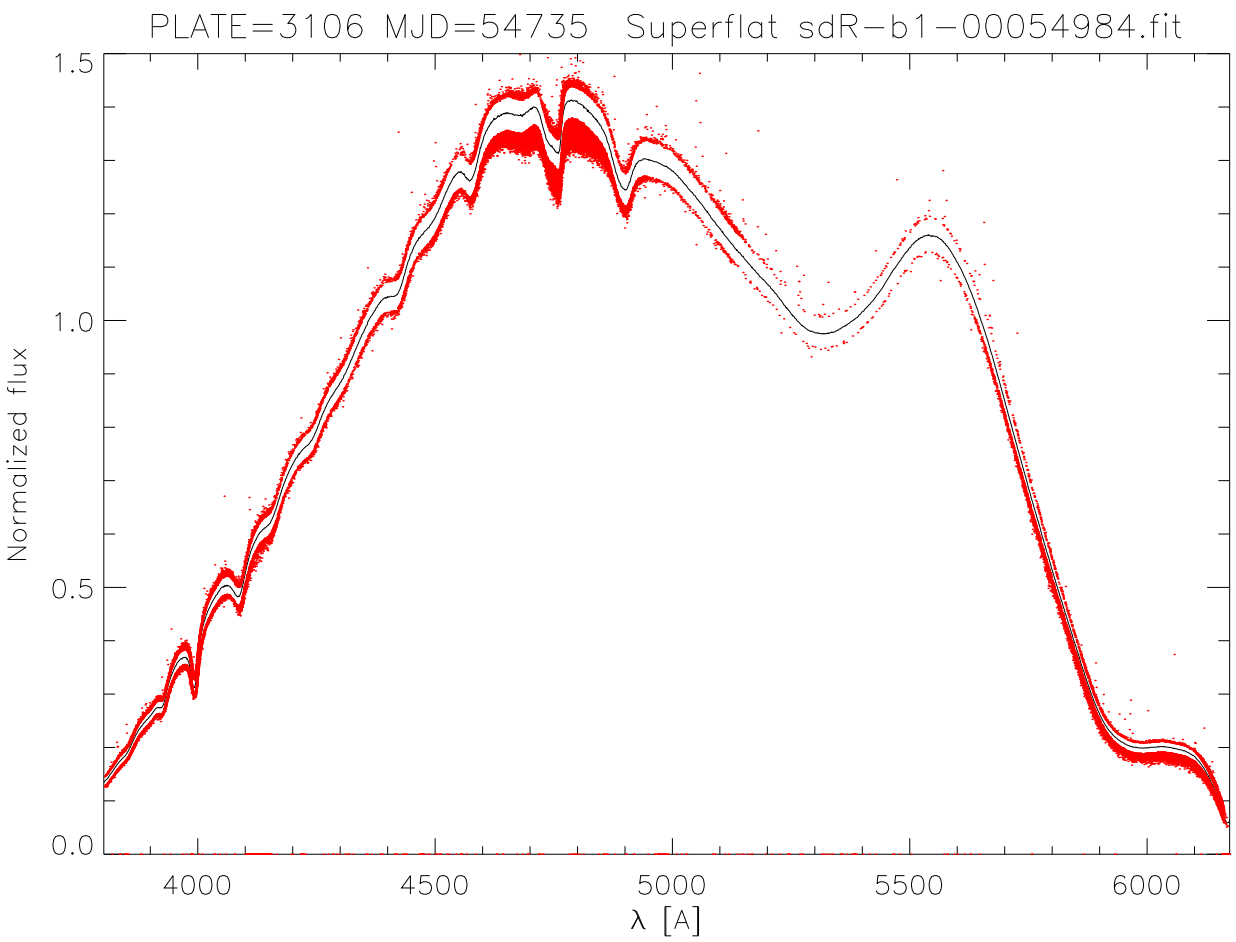

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

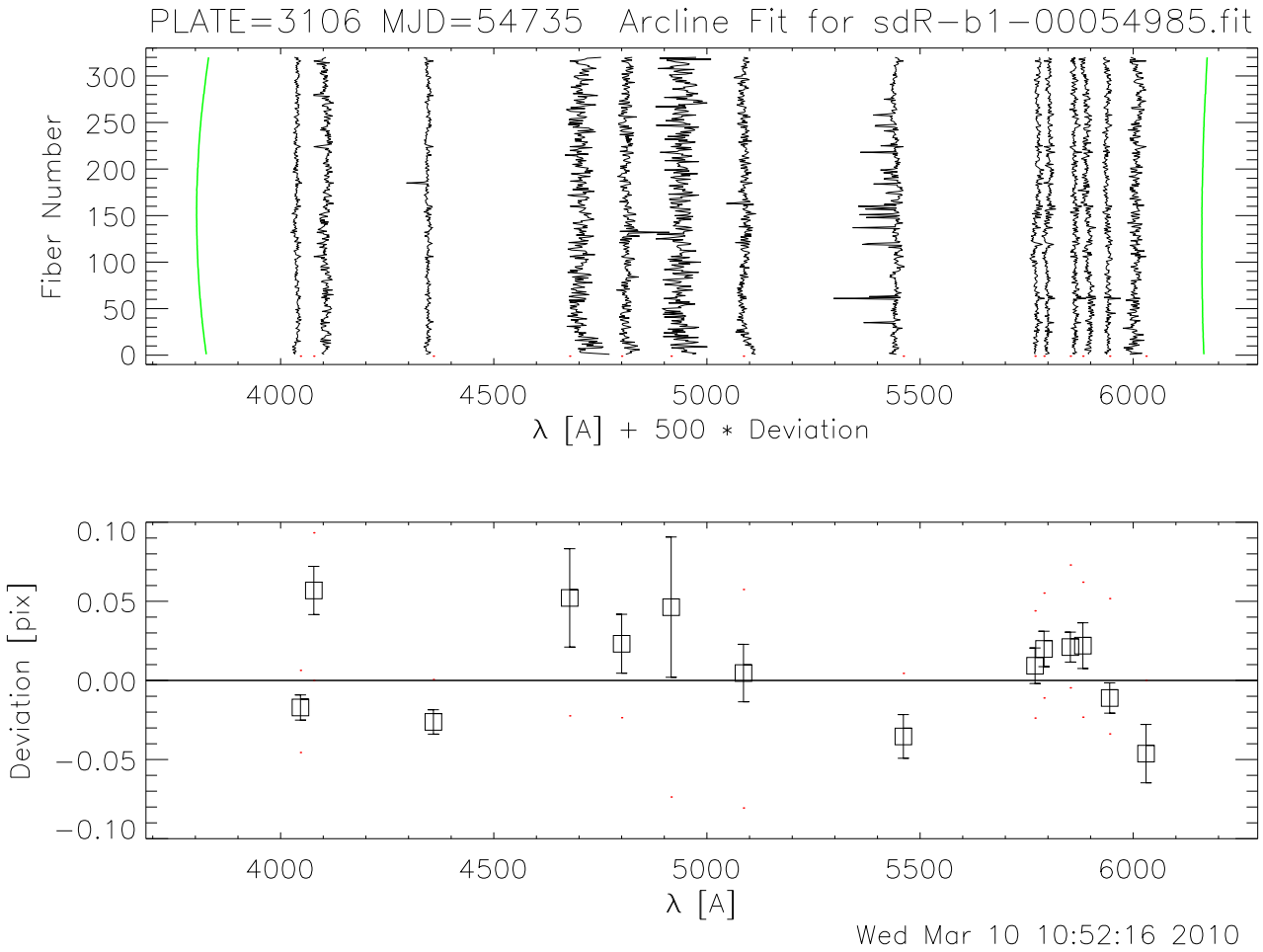

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

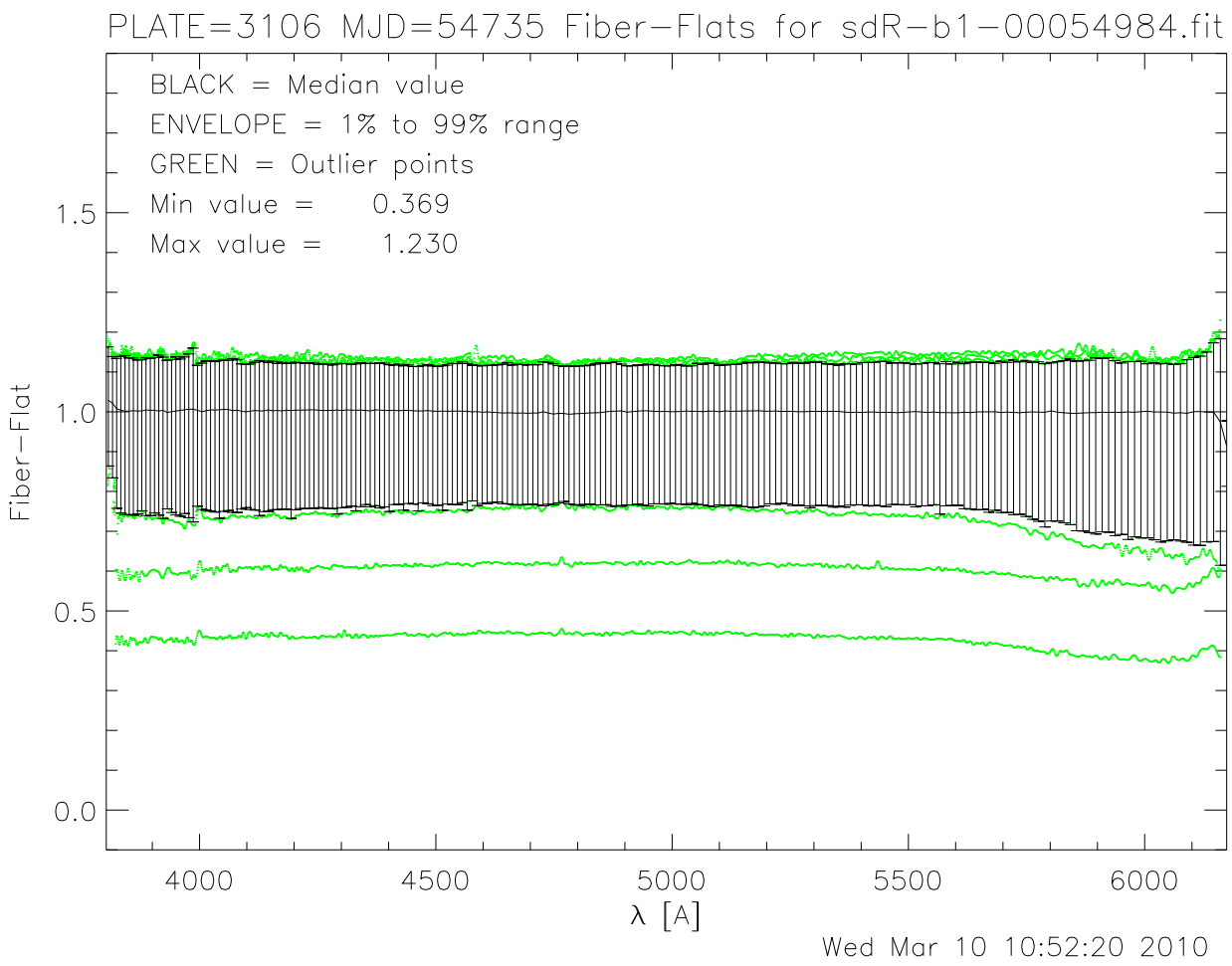

PLATE=3106 MJD=54735 flat extraction chi^2 for sdR−b1−00054979.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

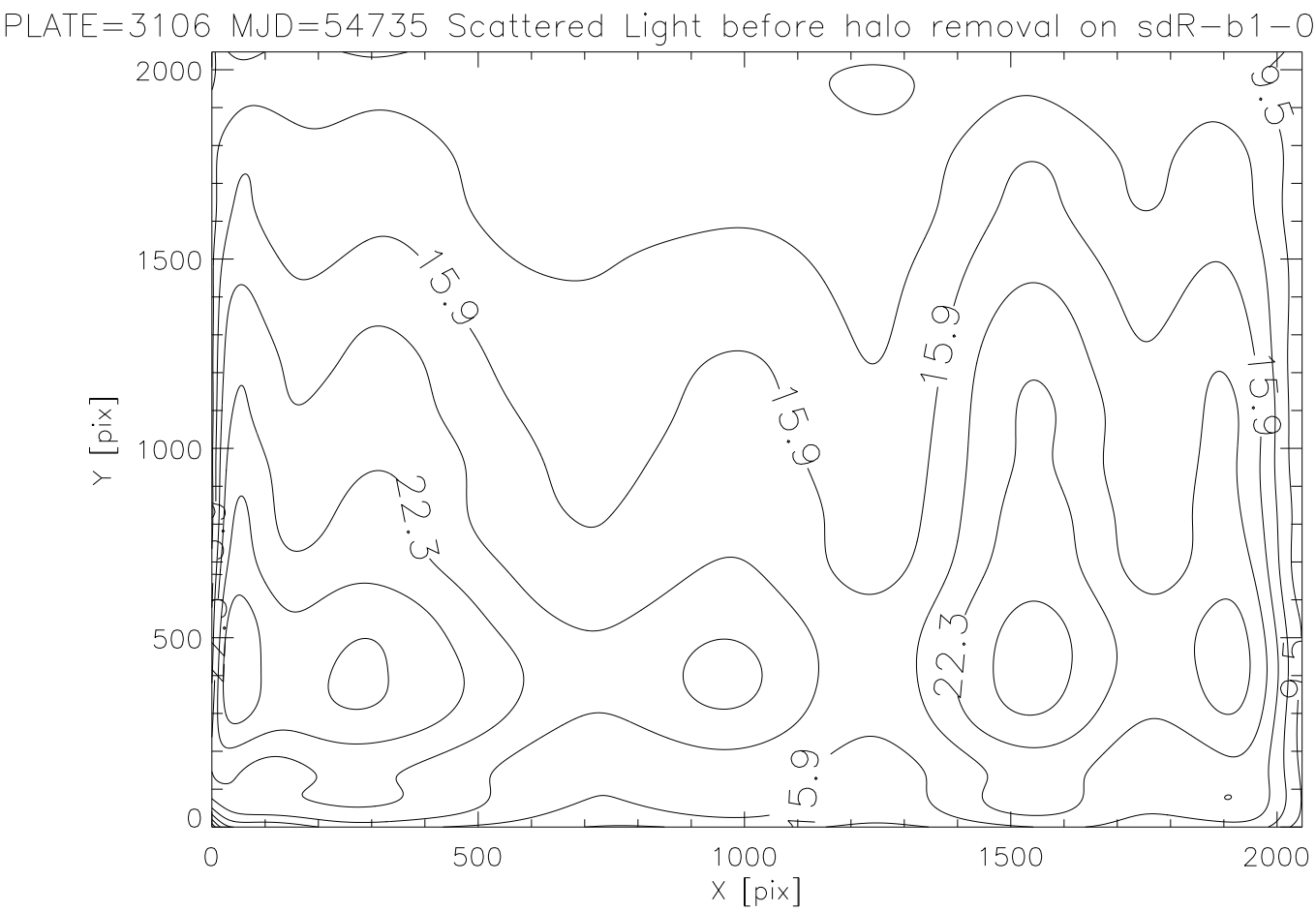

PLATE=3106 MJD=54735 Superflat sdR-b1-00054979.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

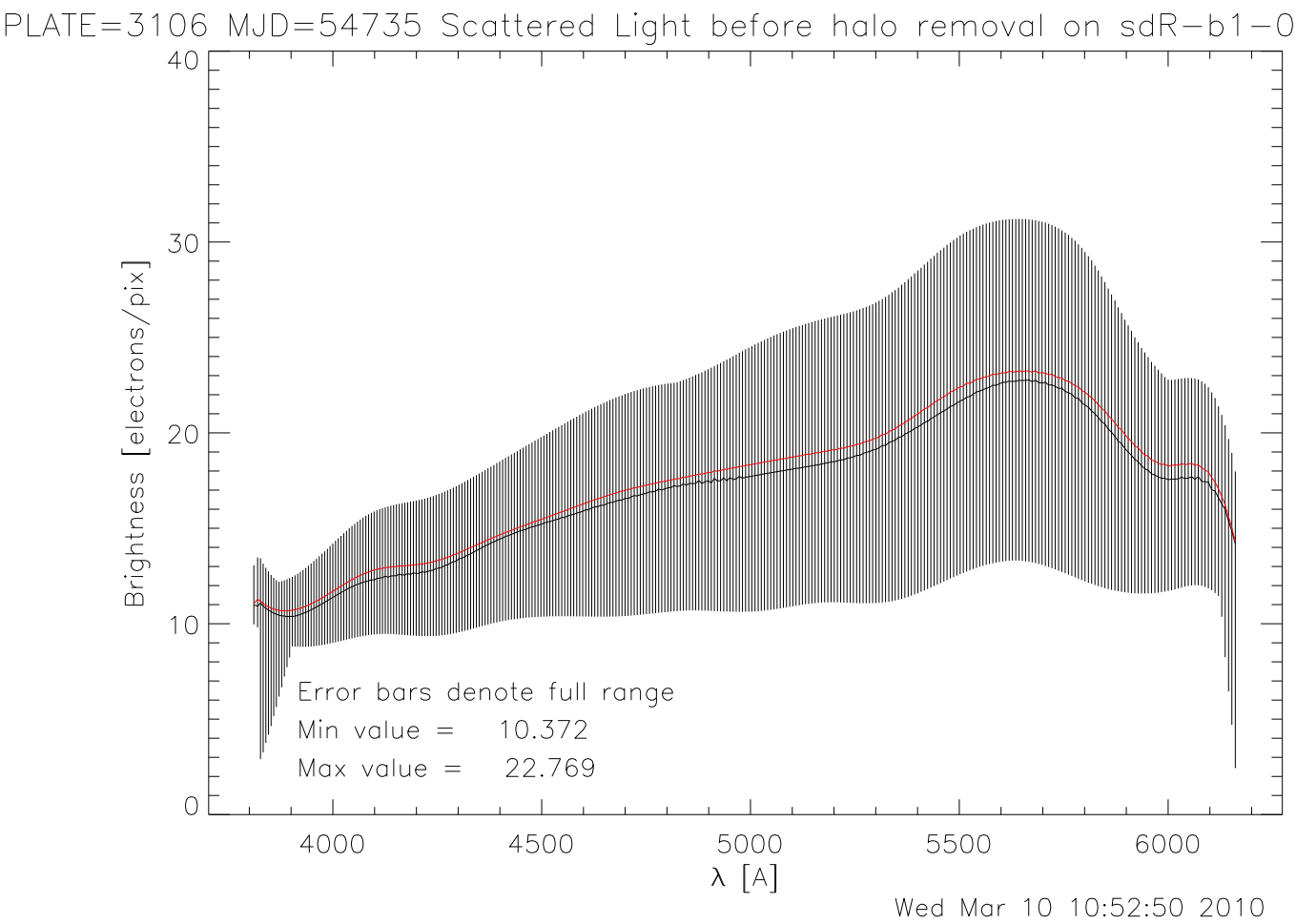

PLATE=3106 MJD=54735 flat extraction chi^2 for sdR−b1−00054984.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

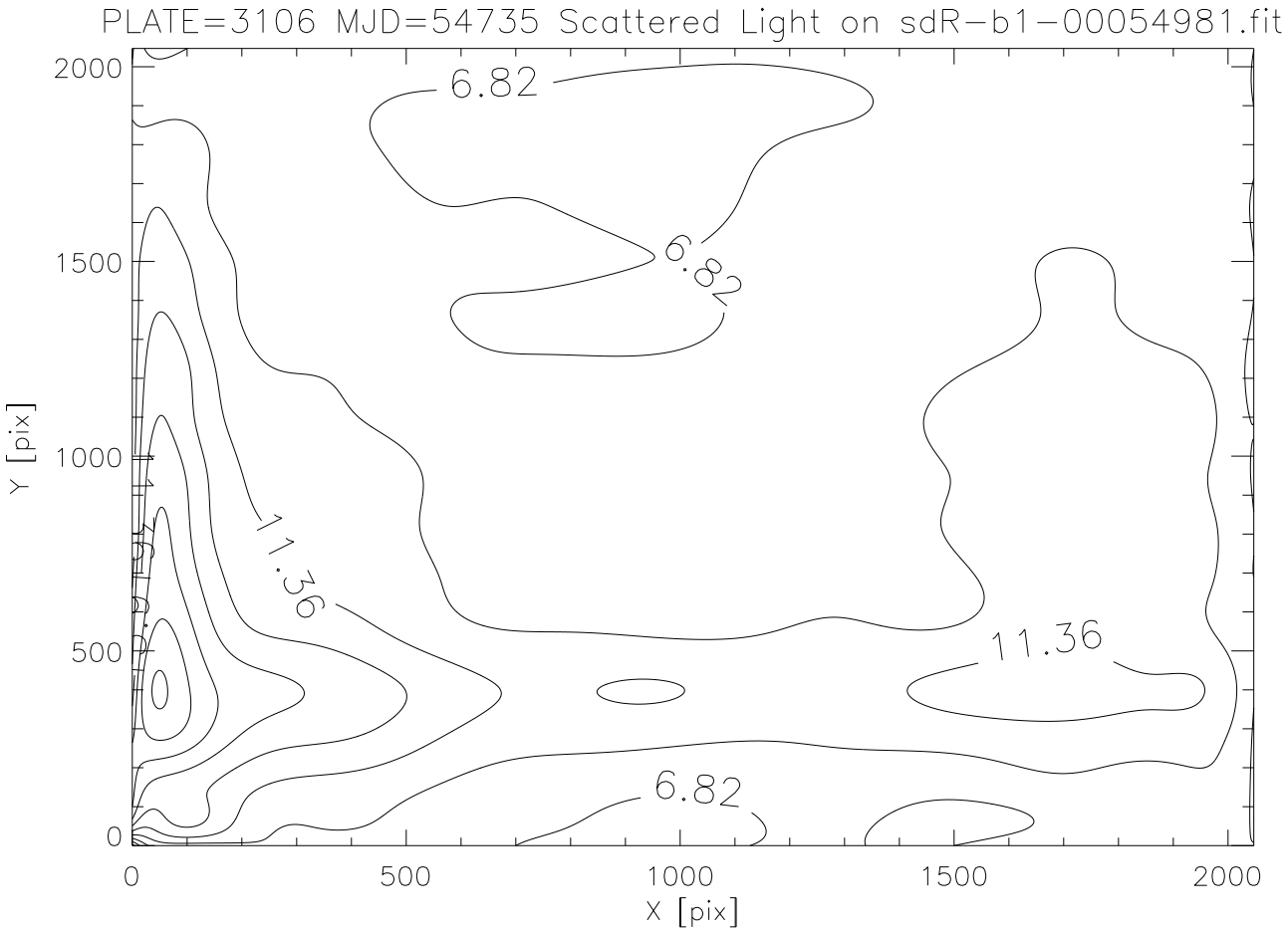

PLATE=3106 MJD=54735 Superflat sdR-b1-00054984.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

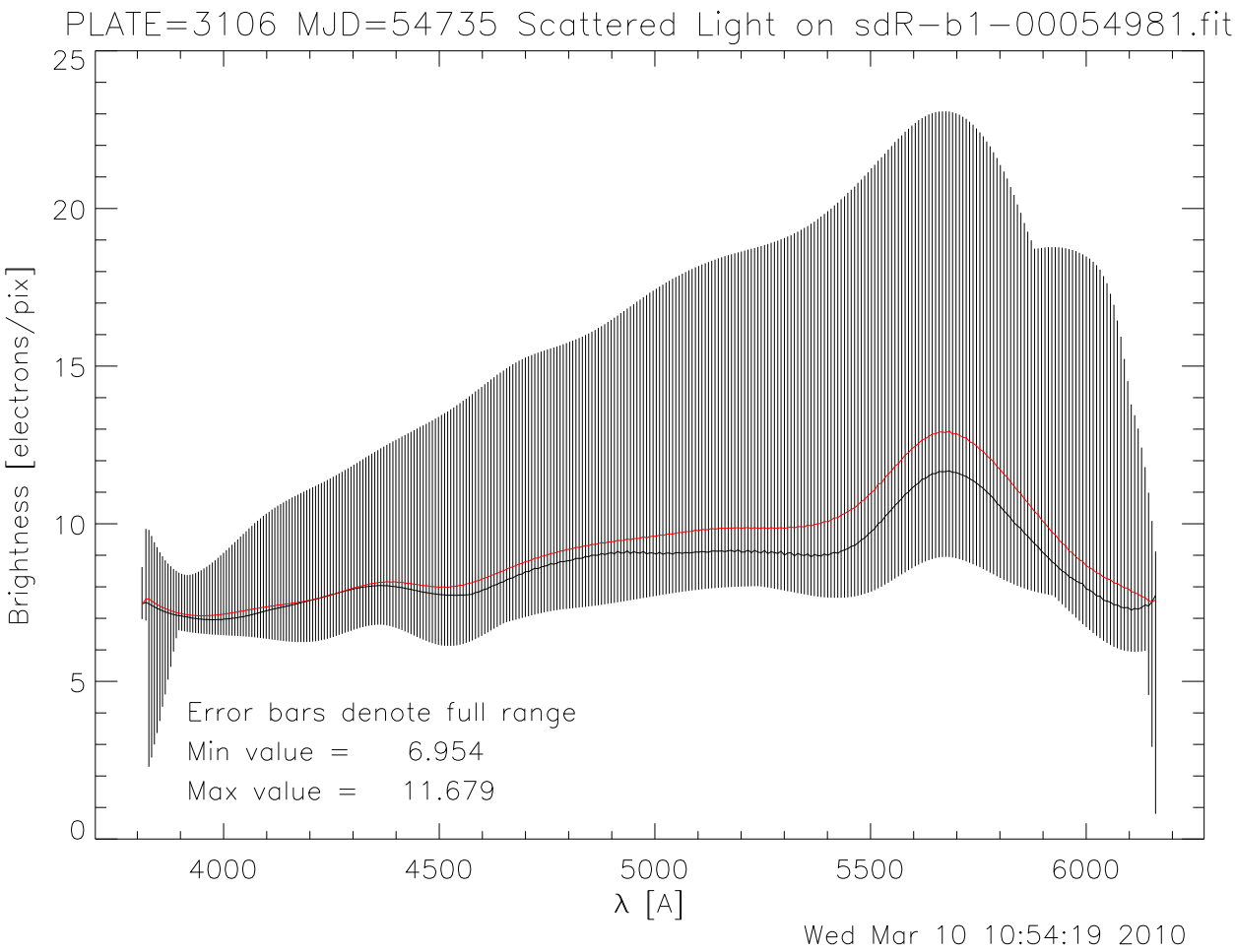

PLATE=3106 MJD=54735 Arcline Fit for sdR-b1-00054985.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 10:52:16 2010

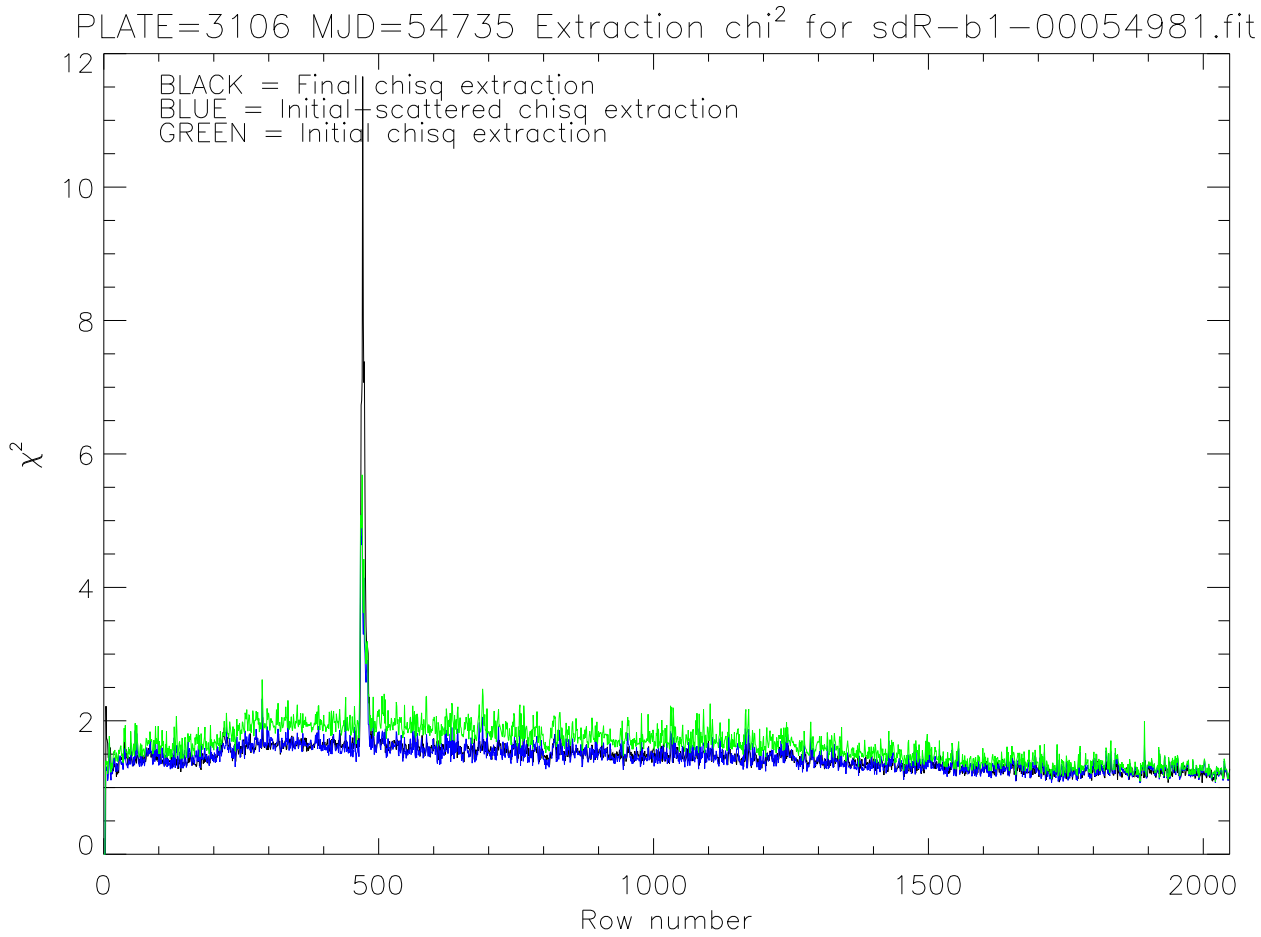

PLATE=3106 MJD=54735 Fiber-Flats for sdR-b1-00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.369
Max value = 1.230
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 10:52:20 2010

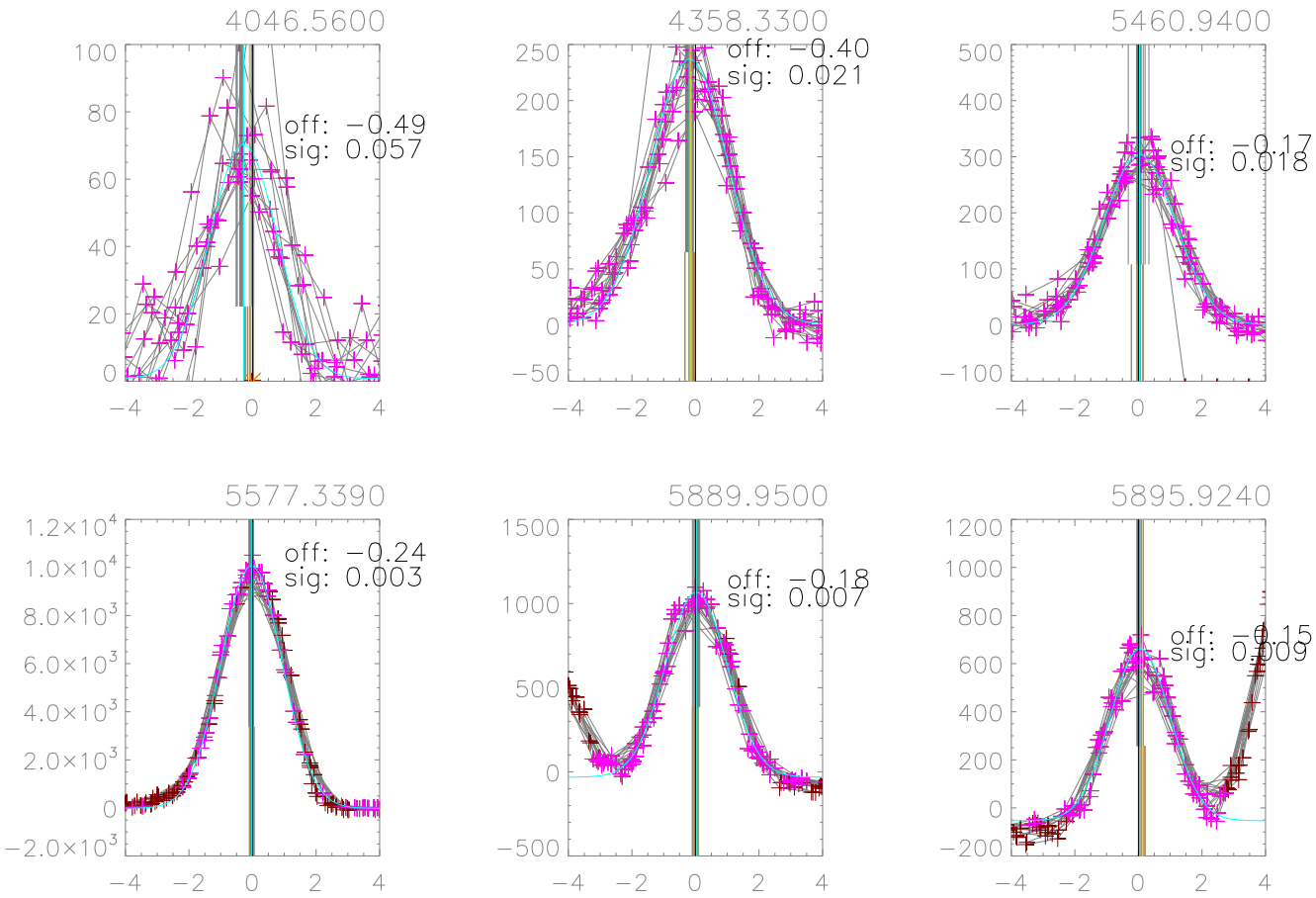

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR−b1−00054981.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
15.9
15.9
15.9
15.9
22.3
22.3
15.9

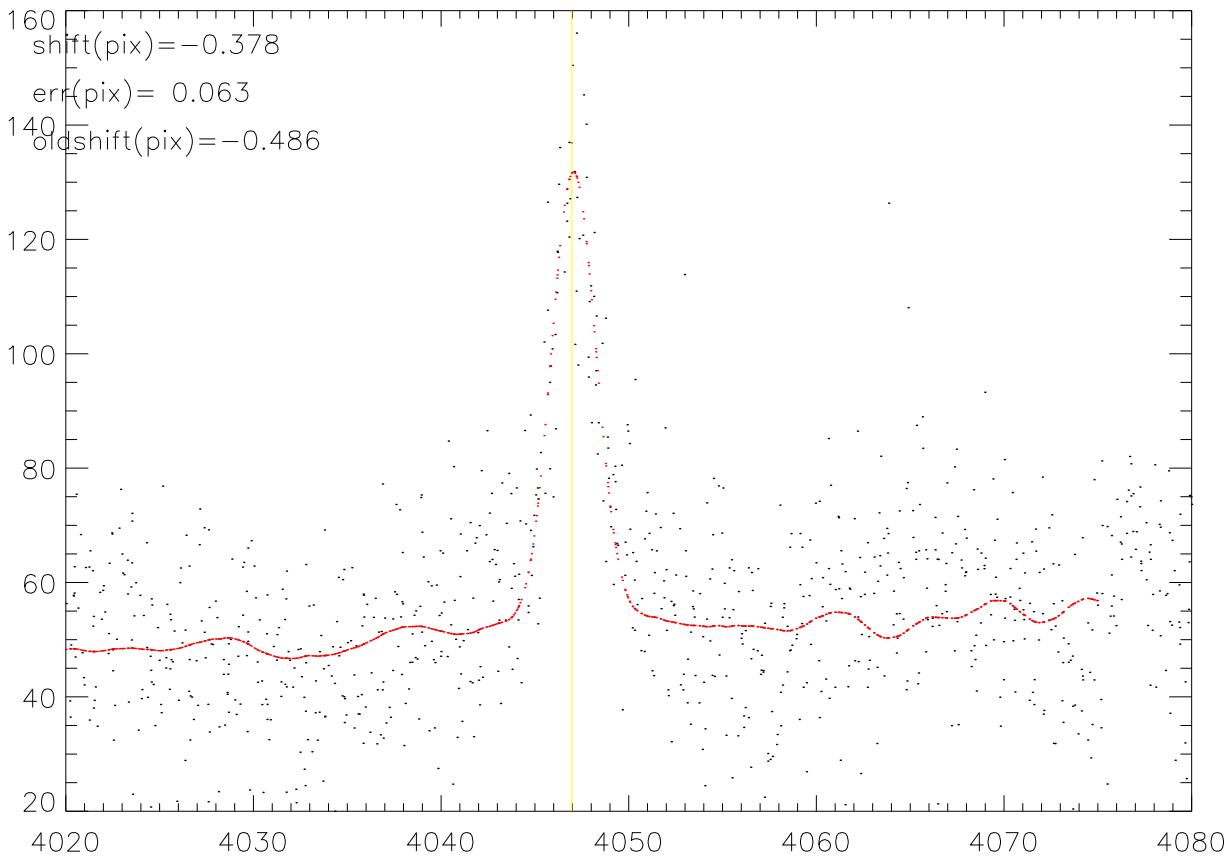

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-b1-00054981.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.372
Max value = 22.769
Wed Mar 10 10:52:50 2010

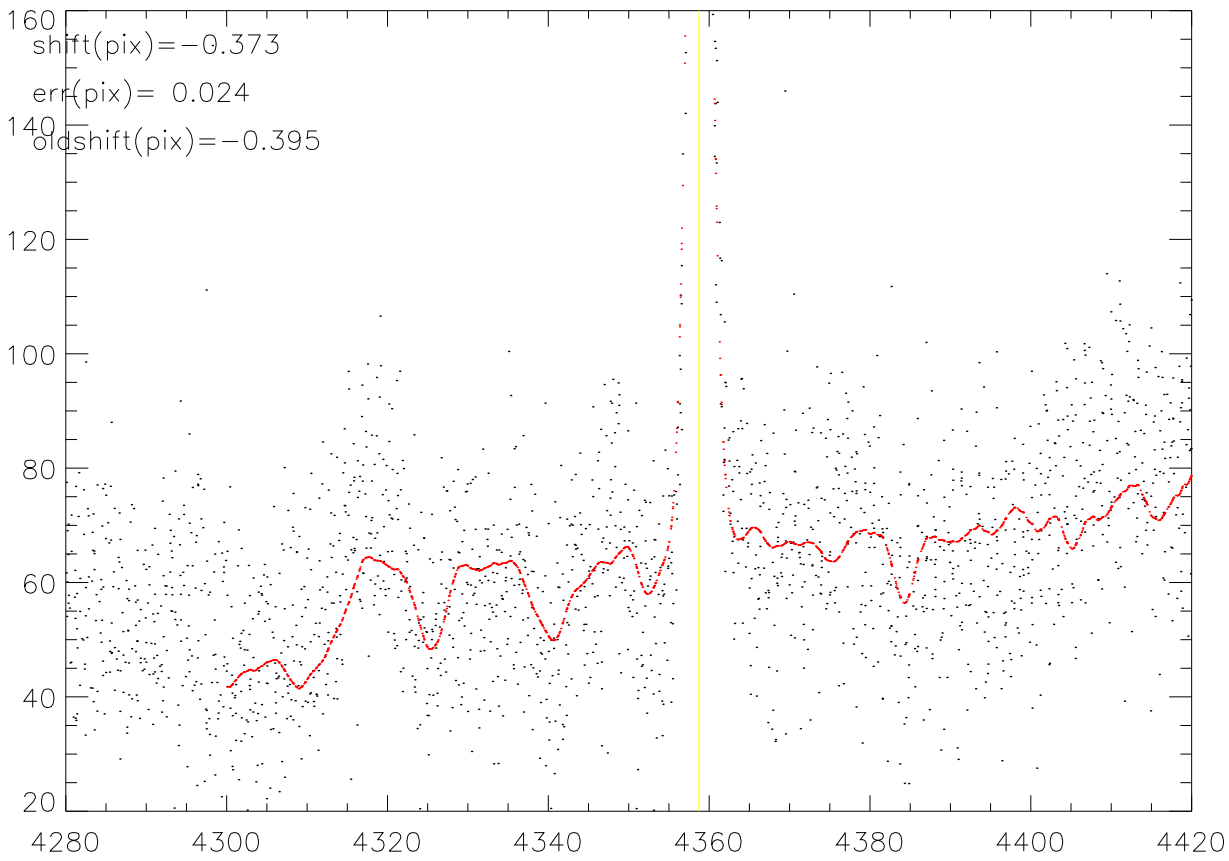

PLATE=3106 MJD=54735 Scattered Light on sdR-b1-00054981.fit
6.82
6.82
11.36
11.36
6.82
0
500
1000
1500
2000
Y [pix]
X [pix]

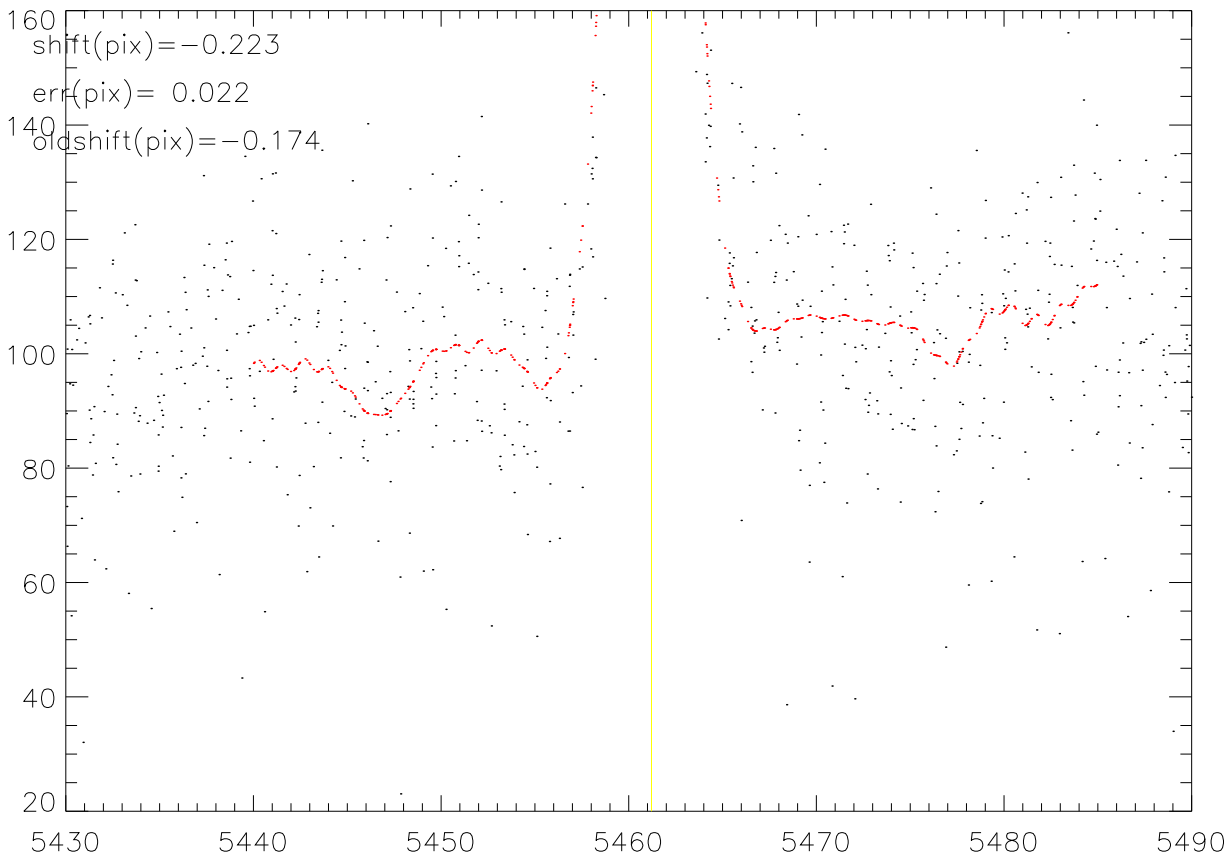

PLATE=3106 MJD=54735 Scattered Light on sdR-b1-00054981.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.954
Max value = 11.679
Wed Mar 10 10:54:19 2010

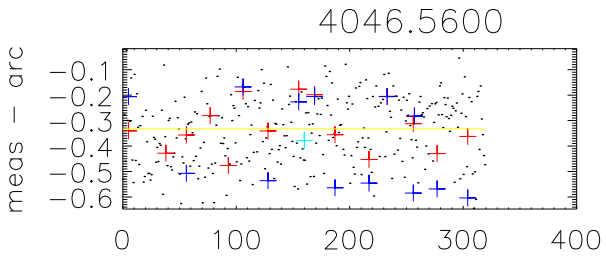

PLATE=3106 MJD=54735 Extraction chi^2 for sdR-b1-00054981.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

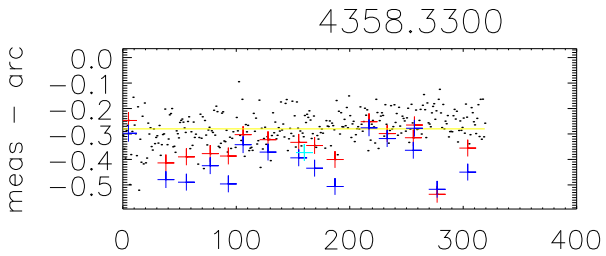

4046.5600
off: −0.49
sig: 0.057
4358.3300
off: −0.40
sig: 0.021
5460.9400
off: −0.17
sig: 0.018
5577.3390
off: −0.24
sig: 0.003
5889.9500
off: −0.18
sig: 0.007
5895.9240
off: −0.15
sig: 0.009

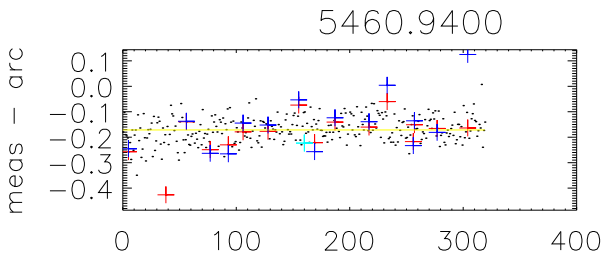

shift(pix)=−0.378
err(pix)= 0.063
oldshift(pix)=−0.486
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

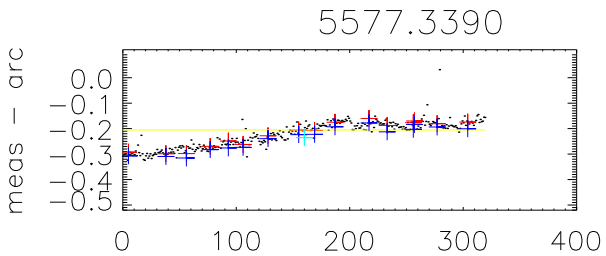

shift(pix)=−0.373
err(pix)= 0.024
oldshift(pix)=−0.395
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

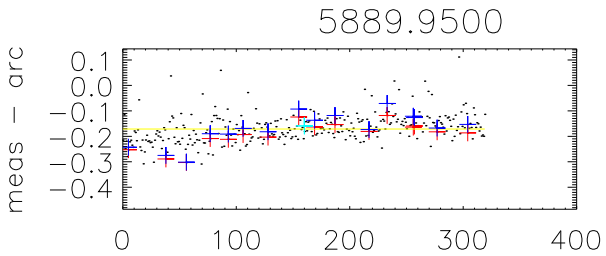

shift(pix)=−0.223
err(pix)= 0.022
oldshift(pix)=−0.174
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

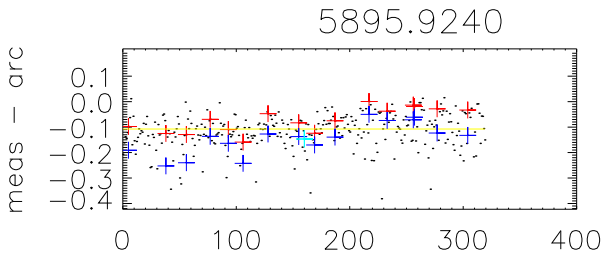

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

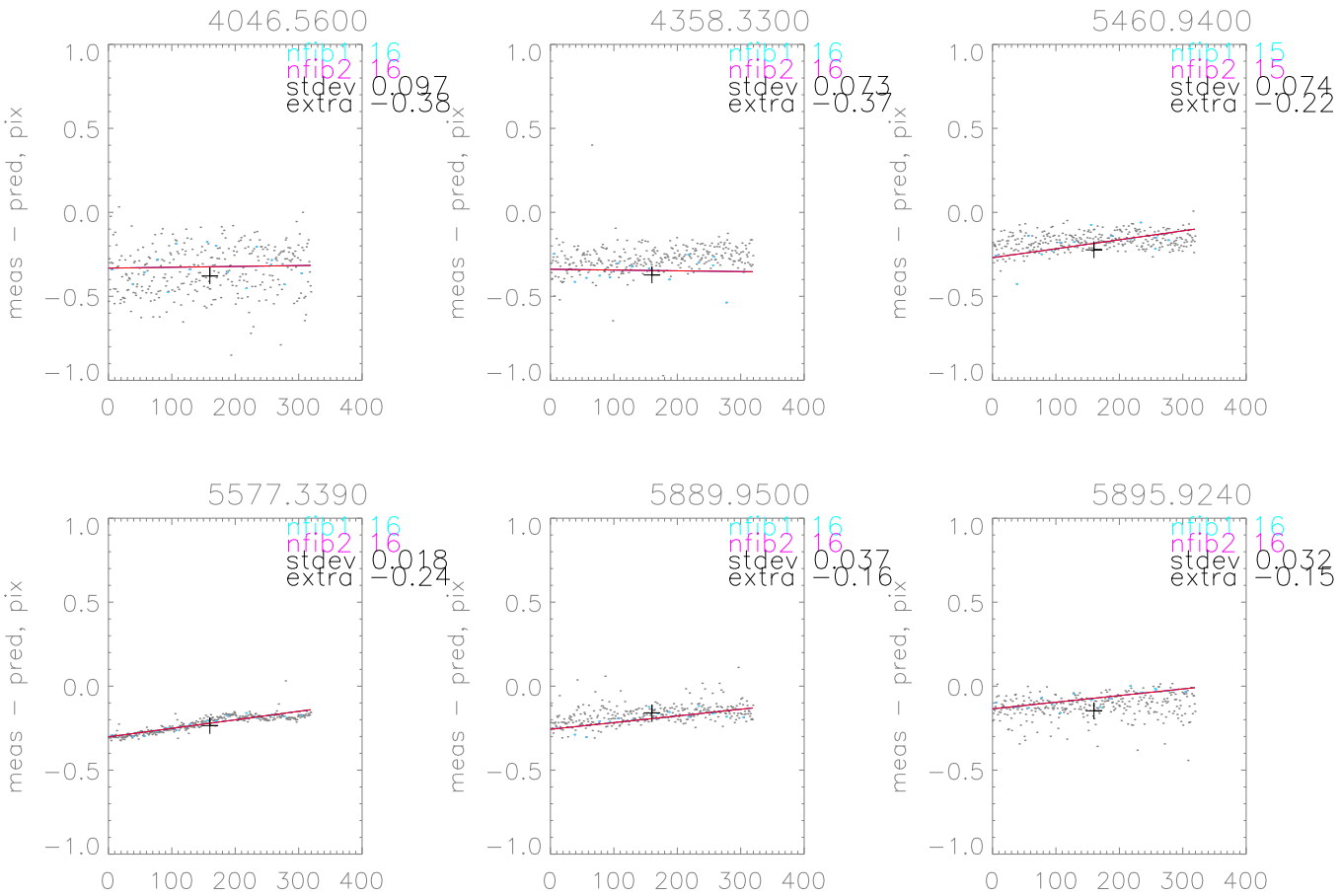

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

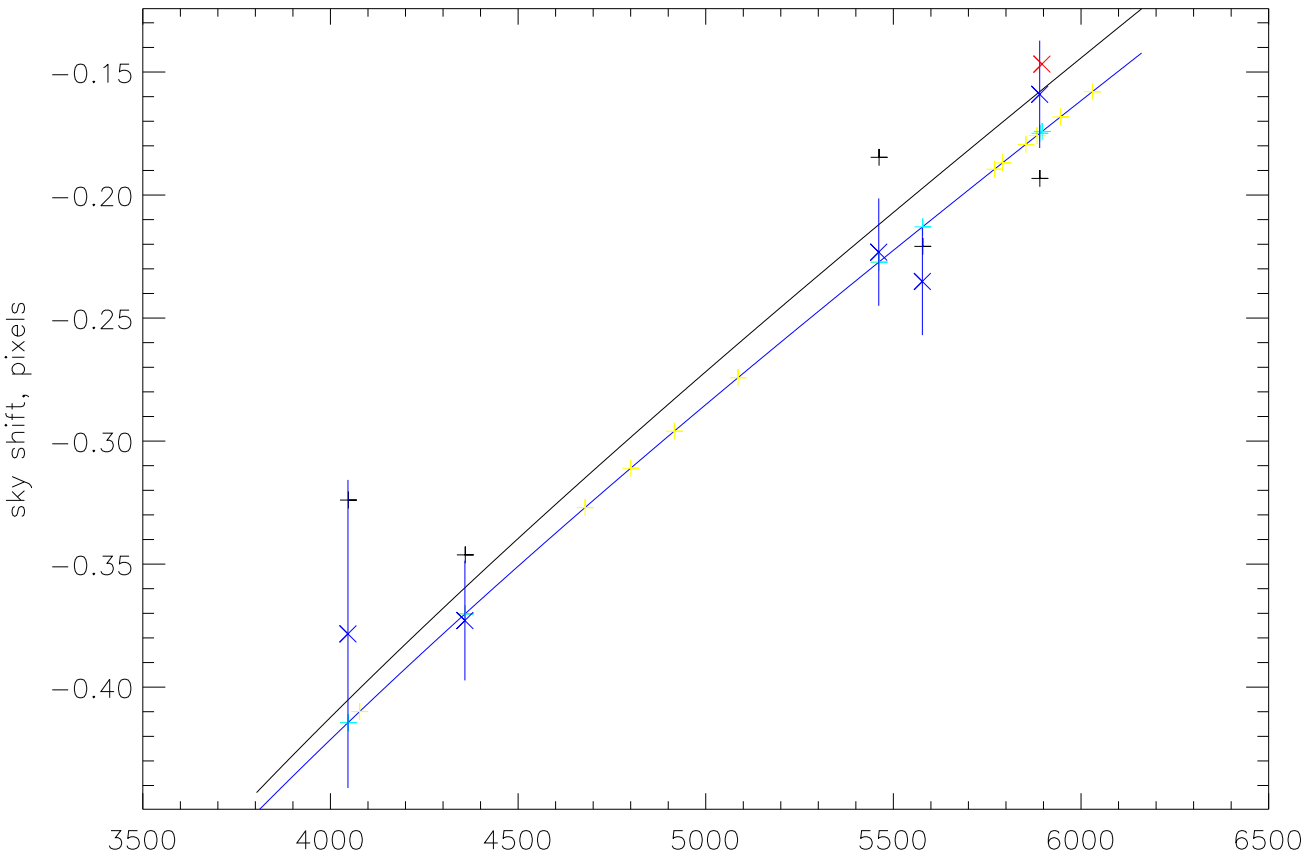

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

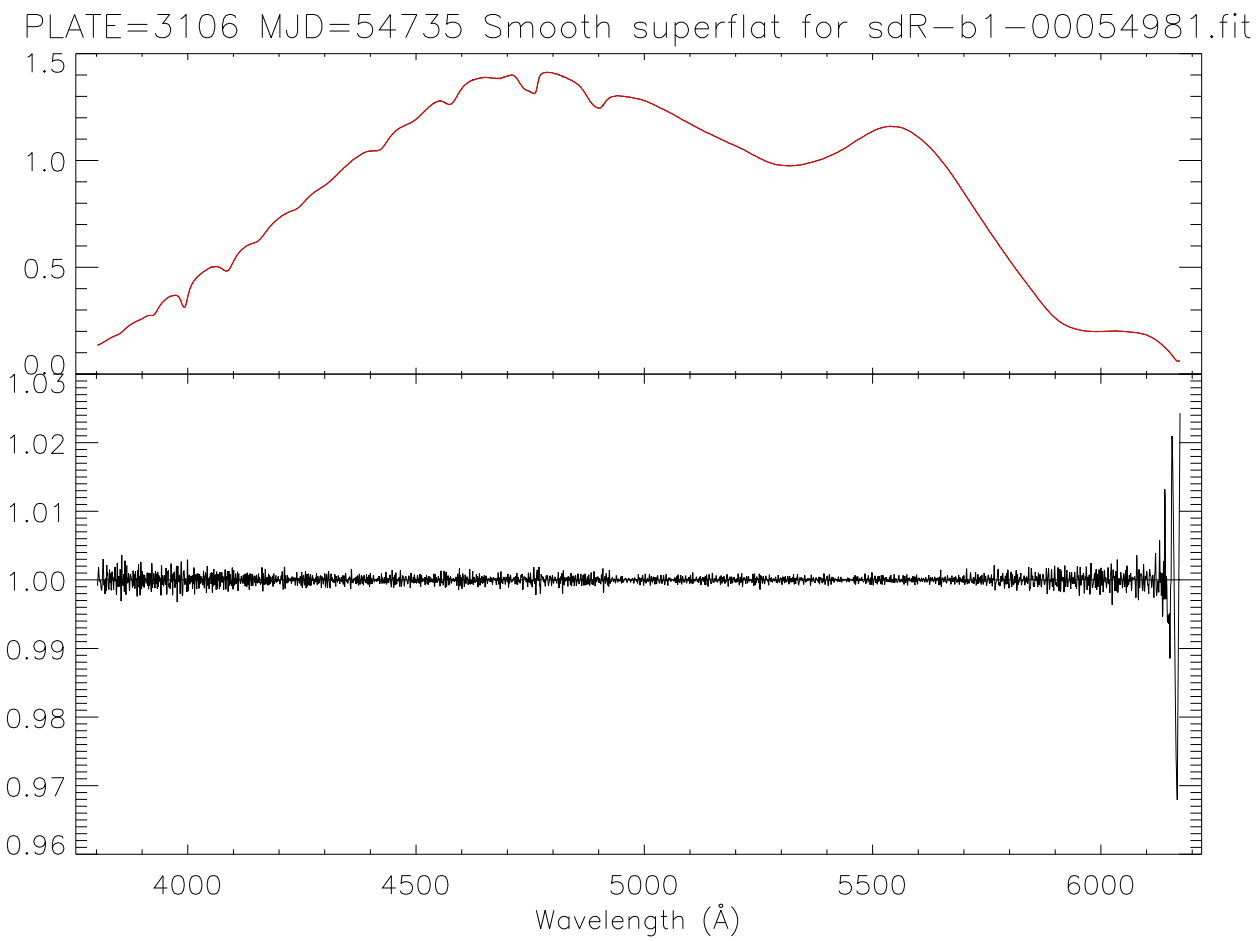

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

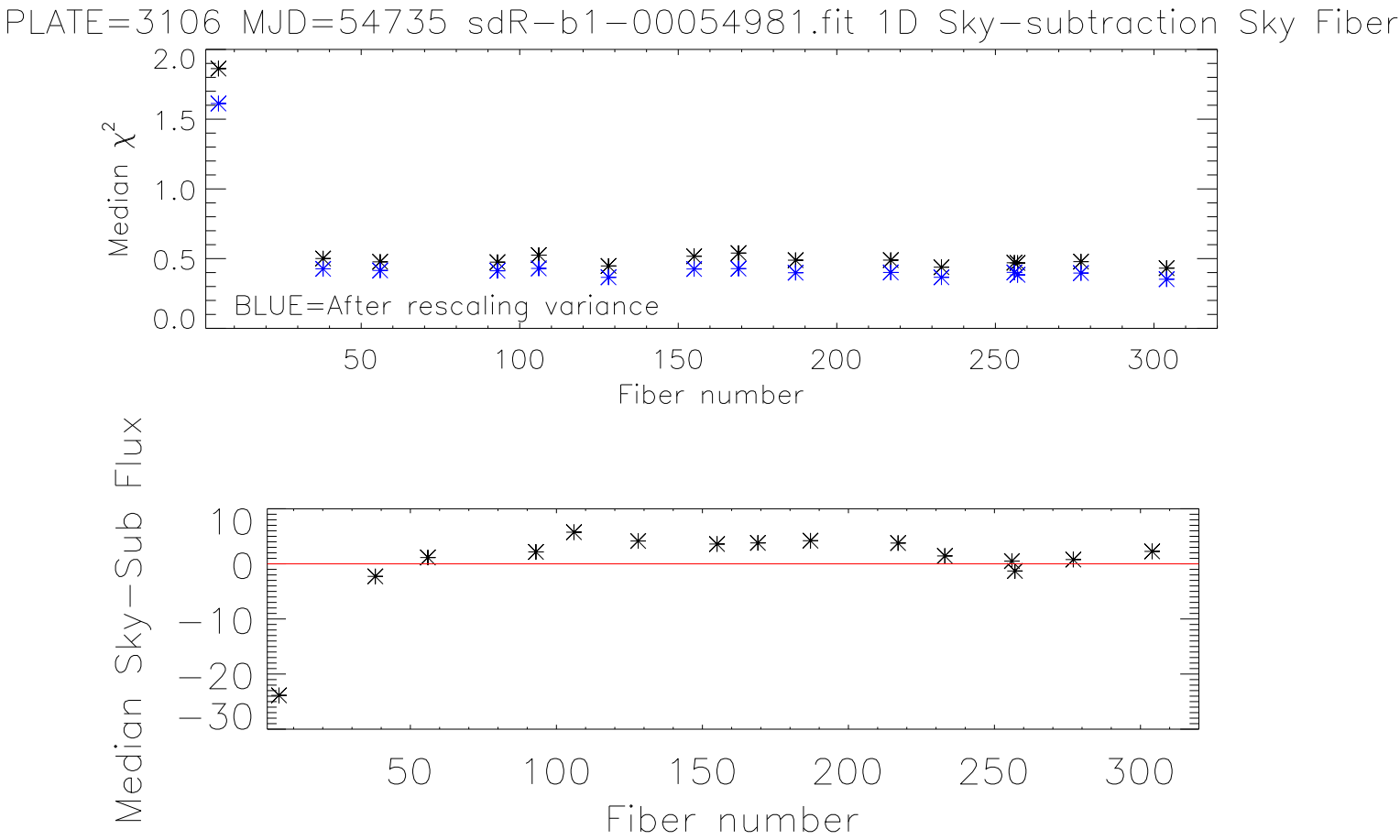

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

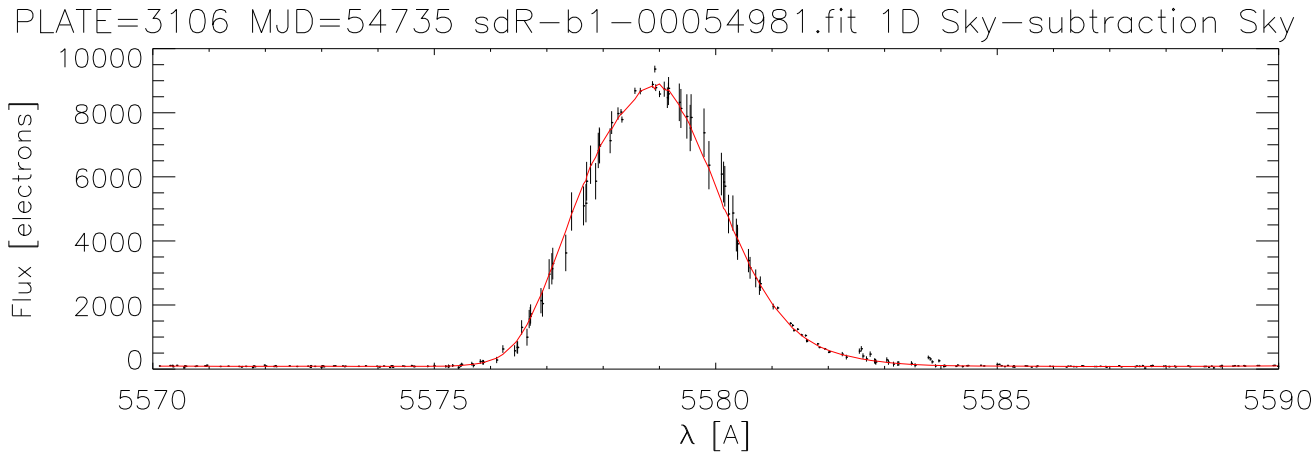

4046.5600
nfib1 16
nfib2 16
stdev 0.097
extra −0.38
4358.3300
nfib1 16
nfib2 16
stdev 0.073
extra −0.37
5460.9400
nfib1 15
nfib2 15
stdev 0.074
extra −0.22
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.24
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra −0.16
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra −0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

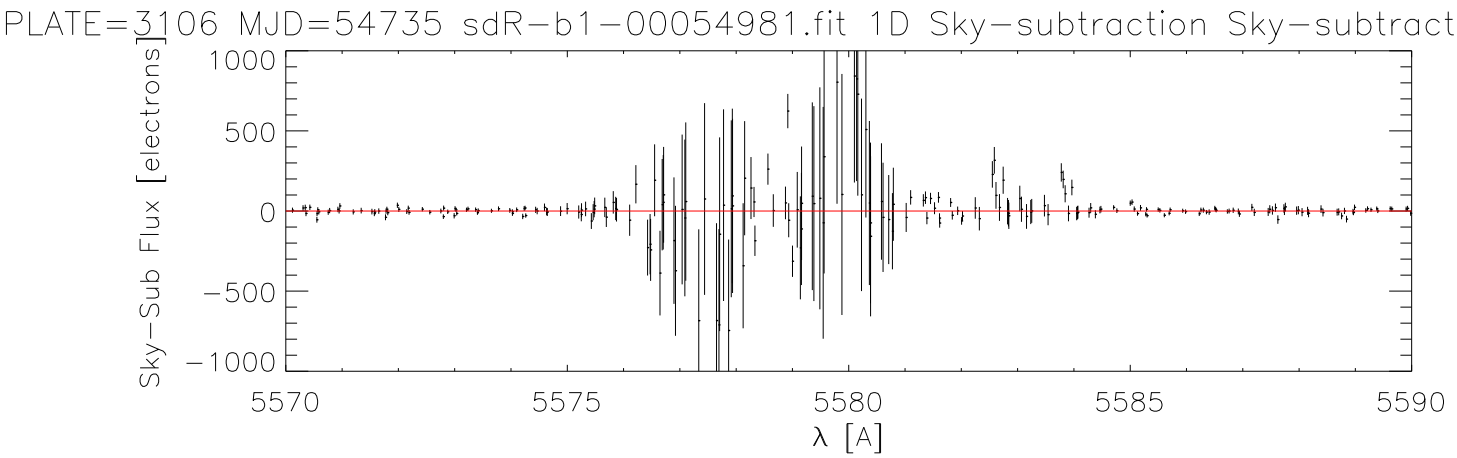

sky shift, pixels
−0.15
−0.20
−0.25
−0.30
−0.35
−0.40
3500
4000
4500
5000
5500
6000
6500

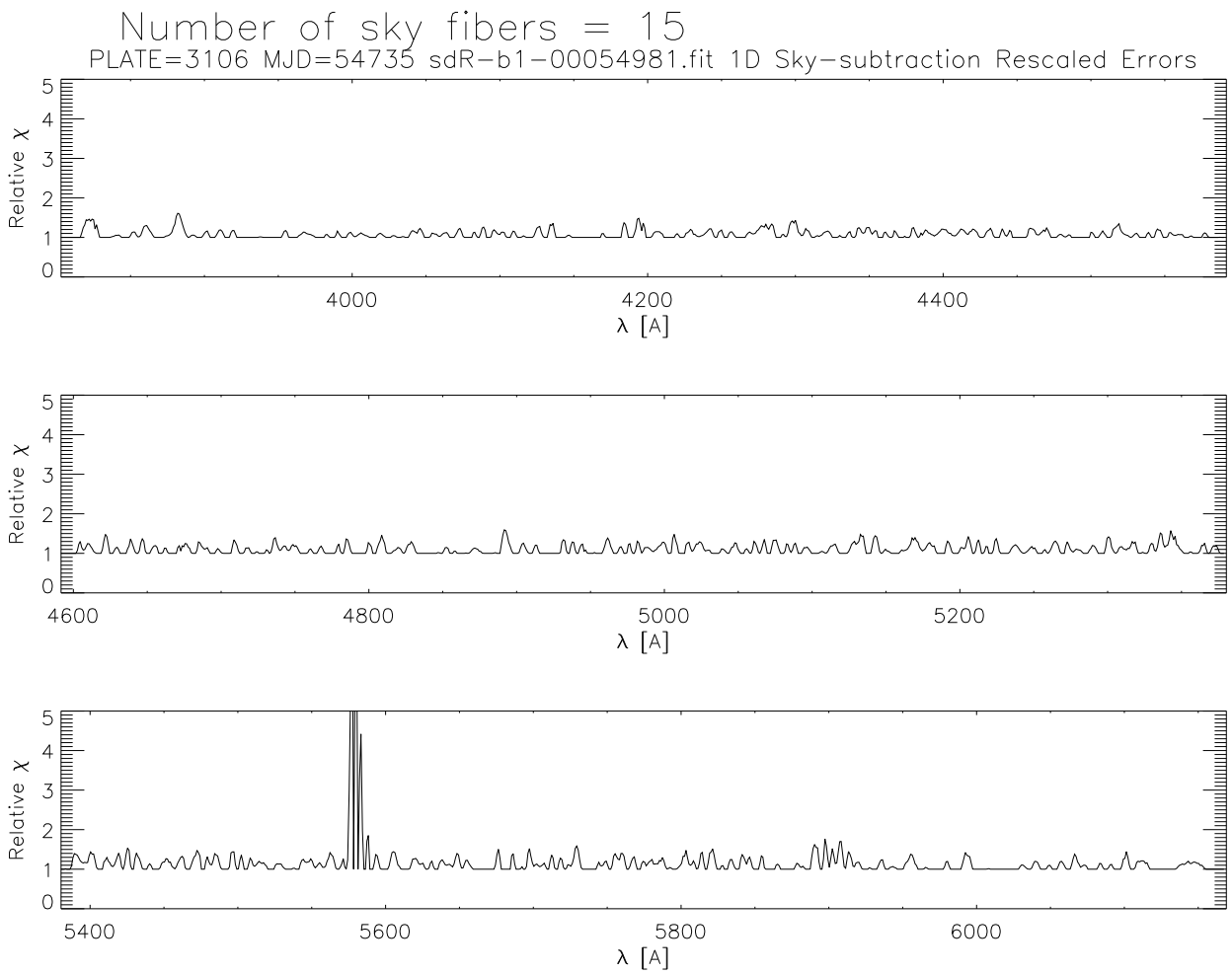
es= −0.0001

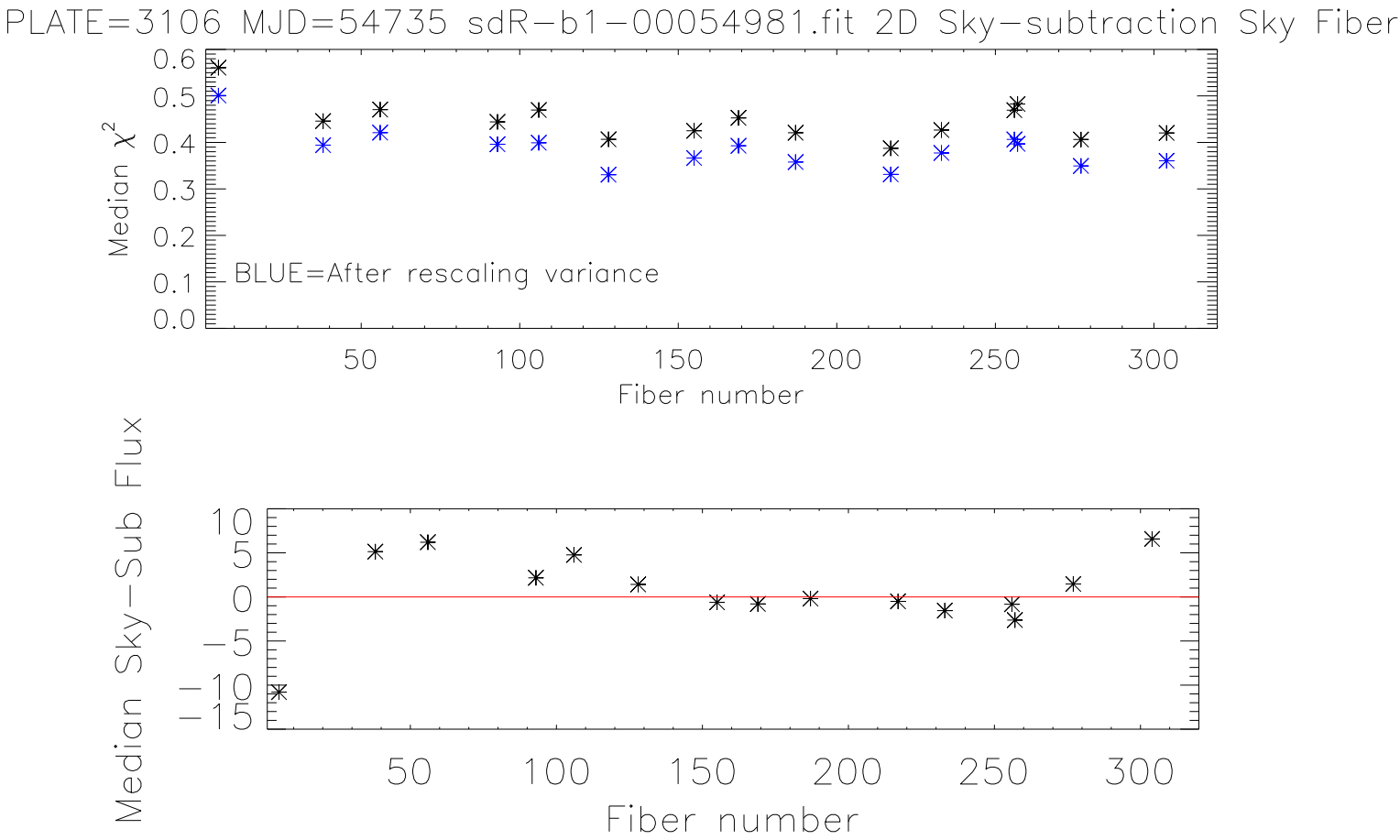

PLATE=3106 MJD=54735 Smooth superflat for sdR−b1−00054981.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

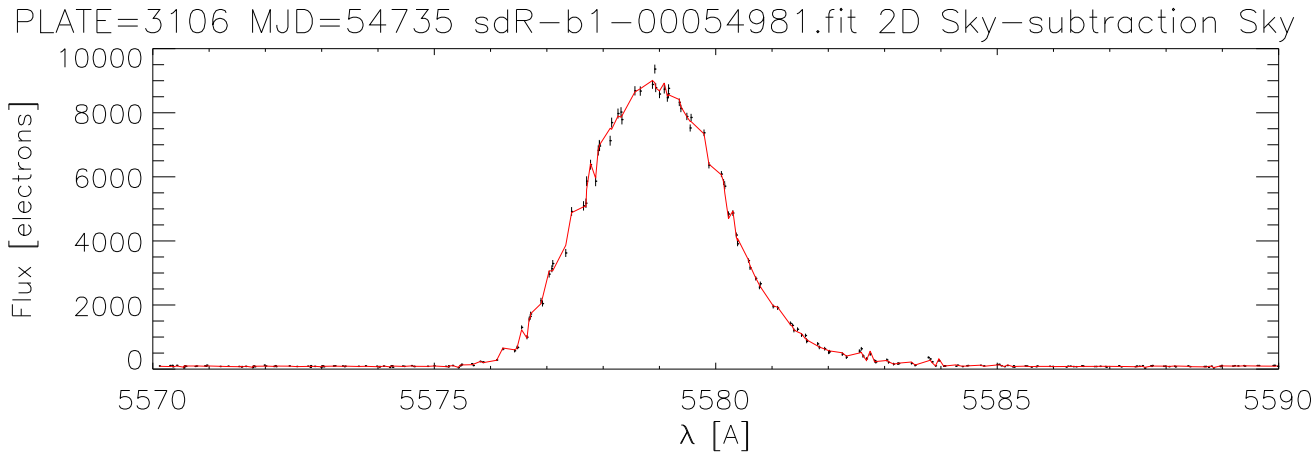

PLATE=3106 MJD=54735 sdR-b1-00054981.fit 1D Sky-subtraction Sky Fiber
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

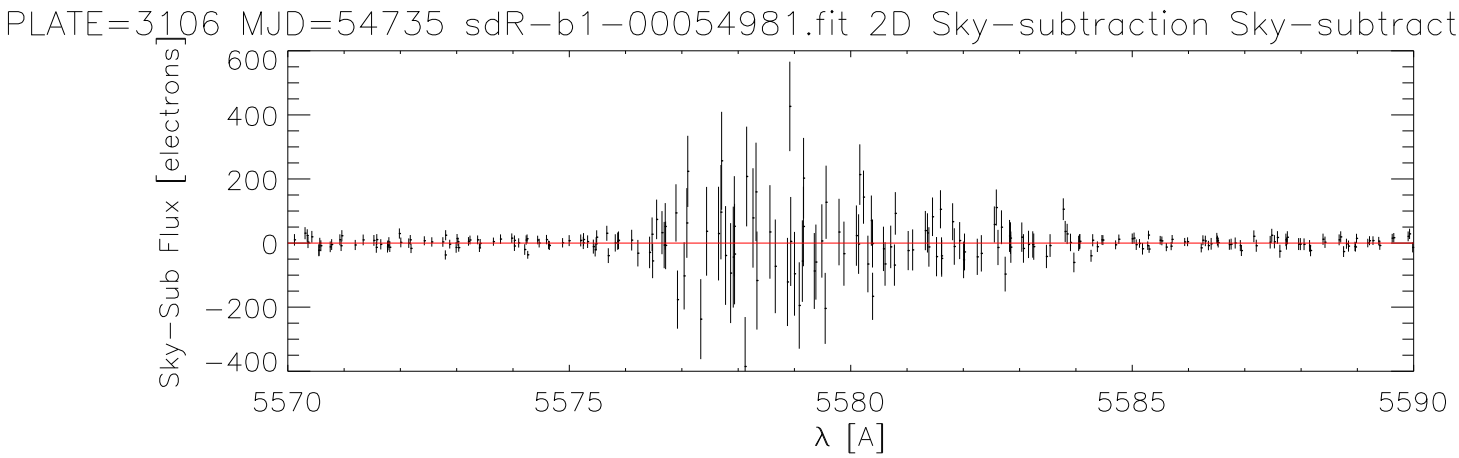

PLATE=3106 MJD=54735 sdR-b1-00054981.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

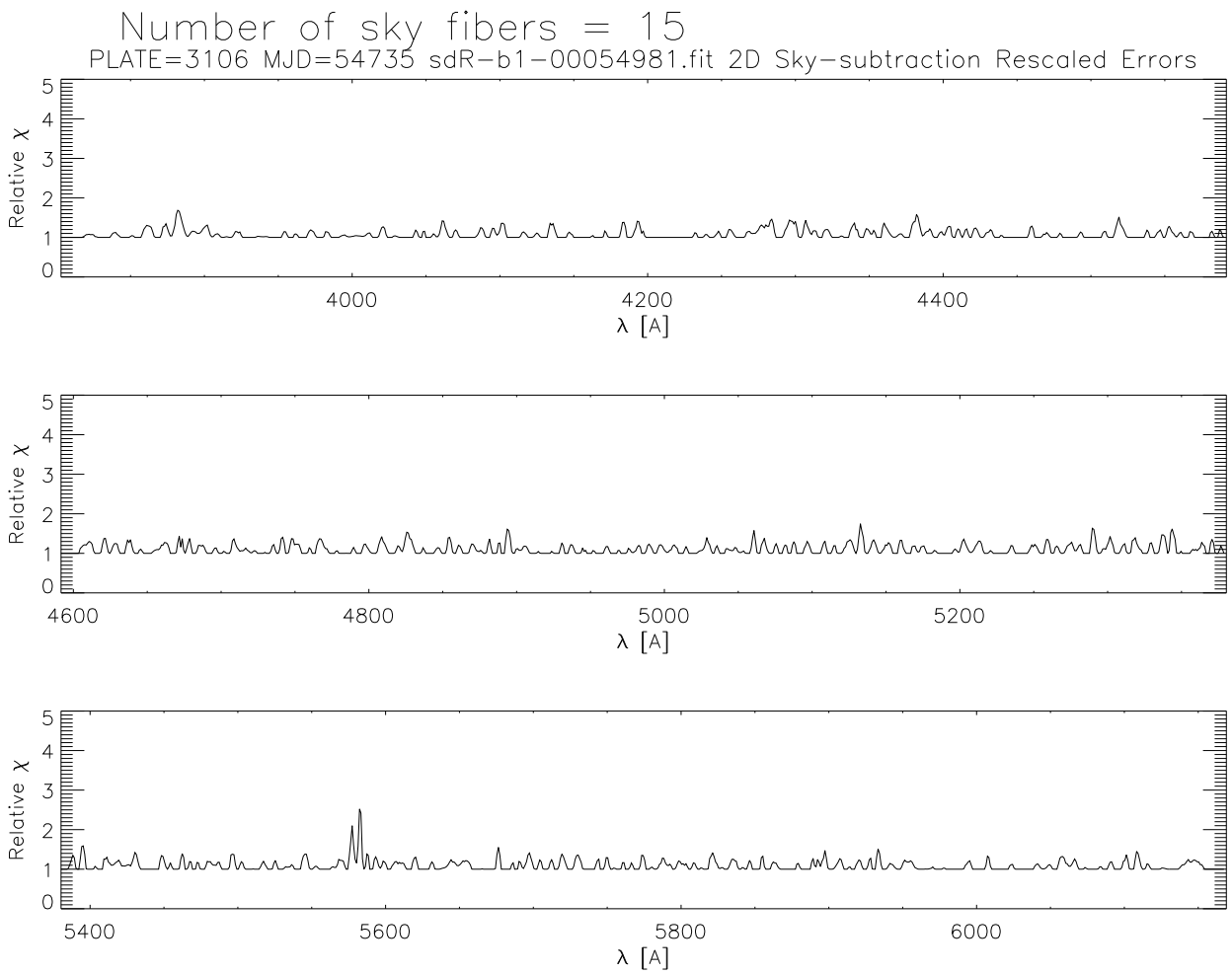

PLATE=3106 MJD=54735 sdR-b1-00054981.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

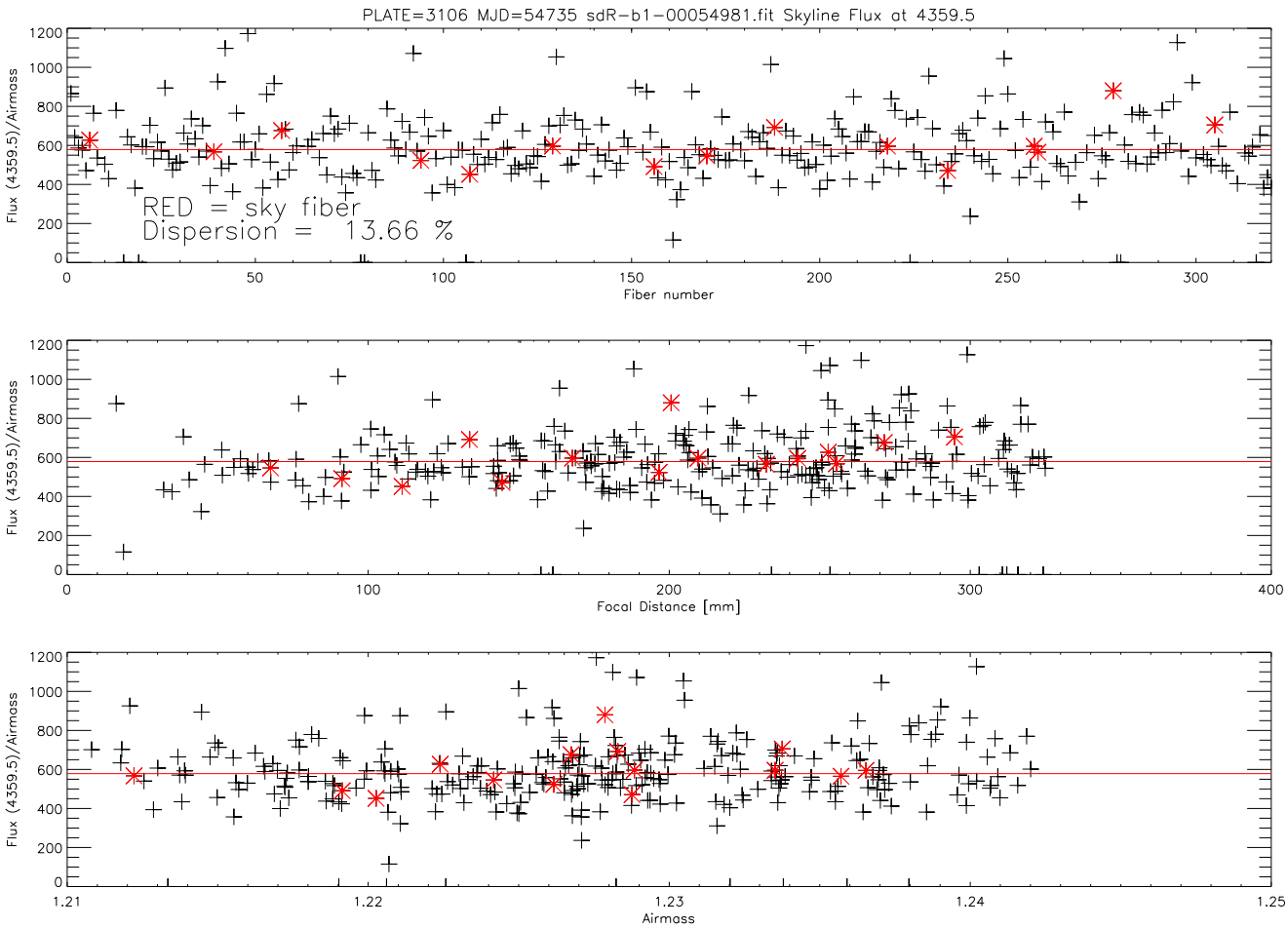

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b1-00054981.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

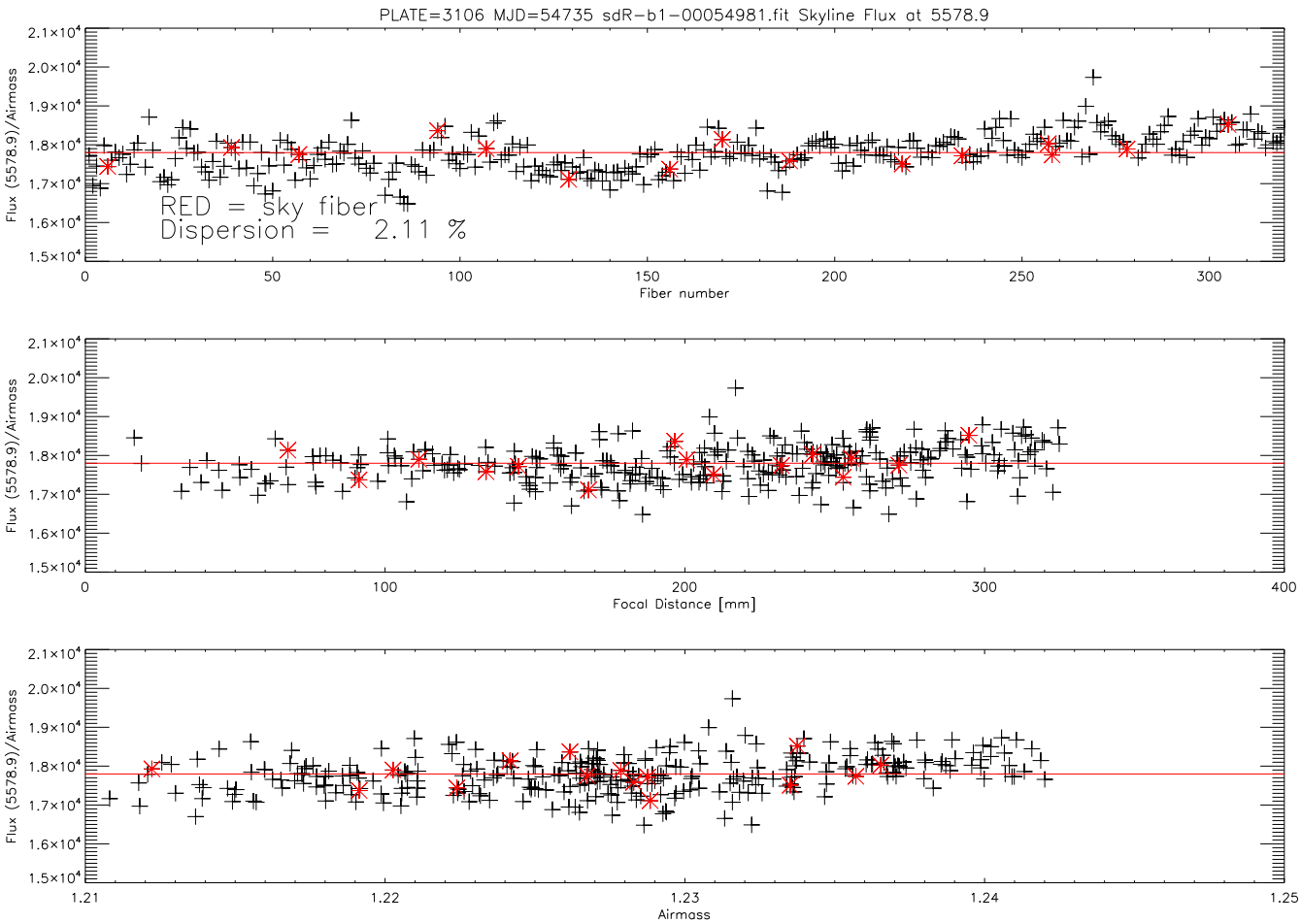

PLATE=3106 MJD=54735 sdR-b1-00054981.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

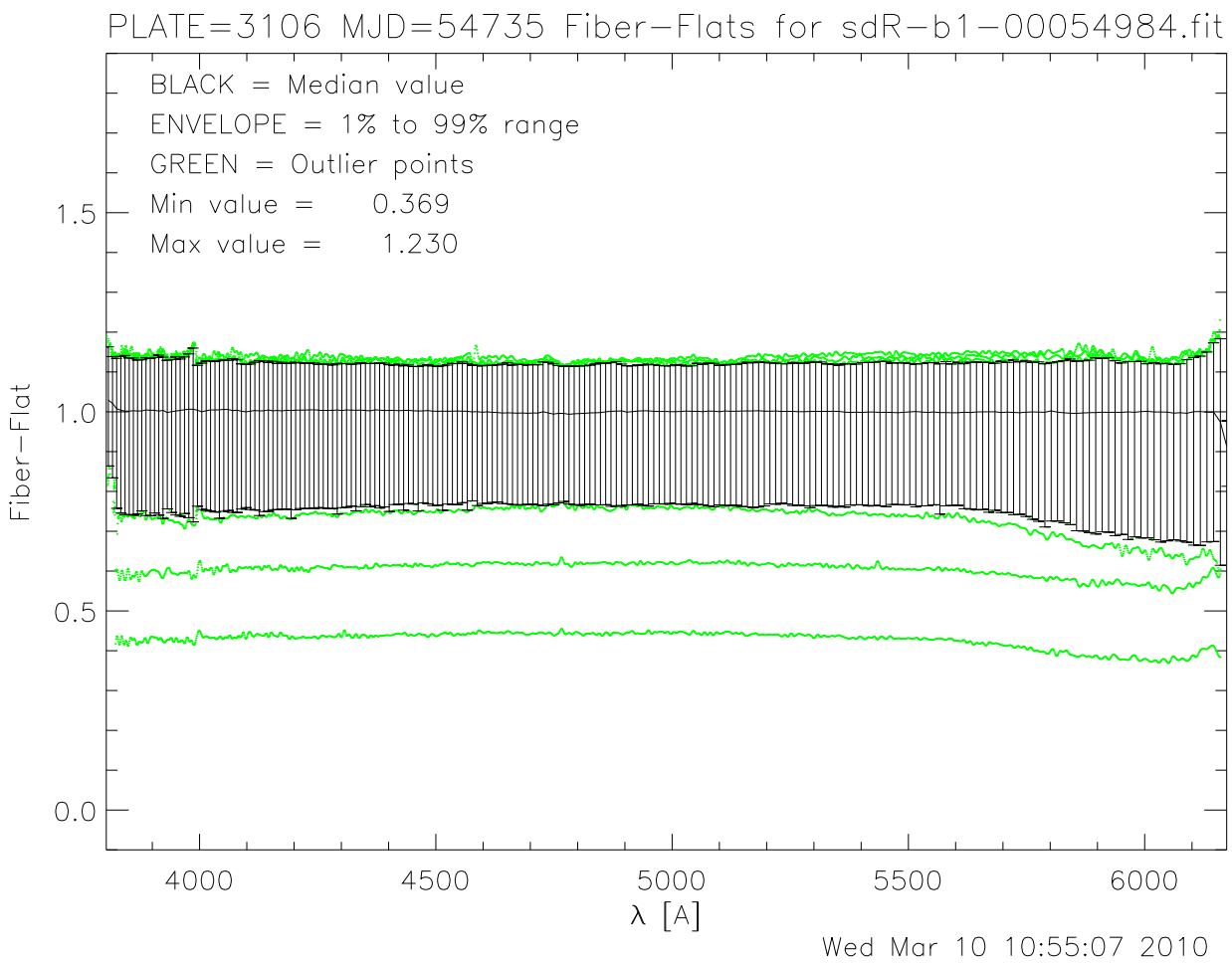

PLATE=3106 MJD=54735 sdR-b1-00054981.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

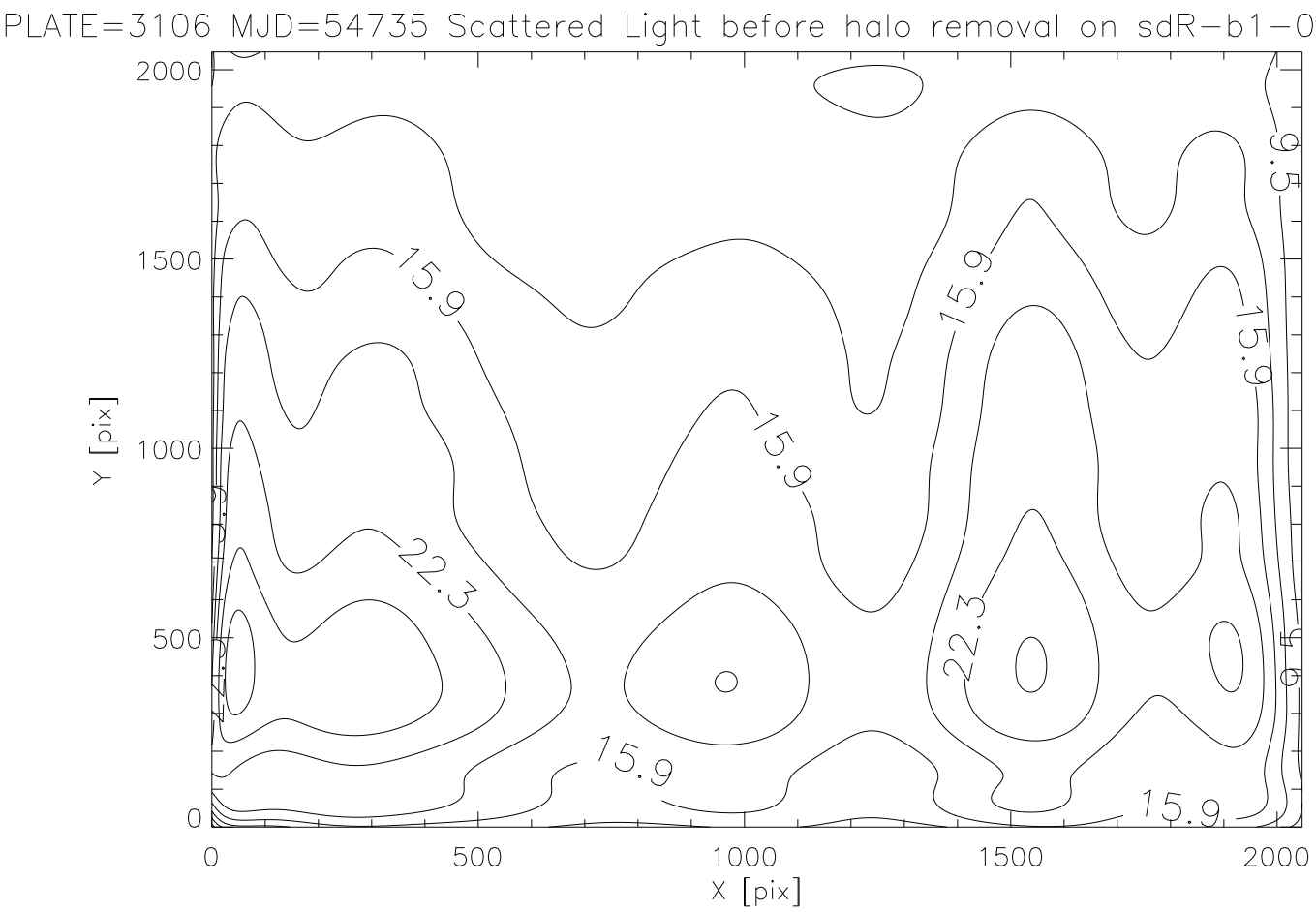

PLATE=3106 MJD=54735 sdR-b1-00054981.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

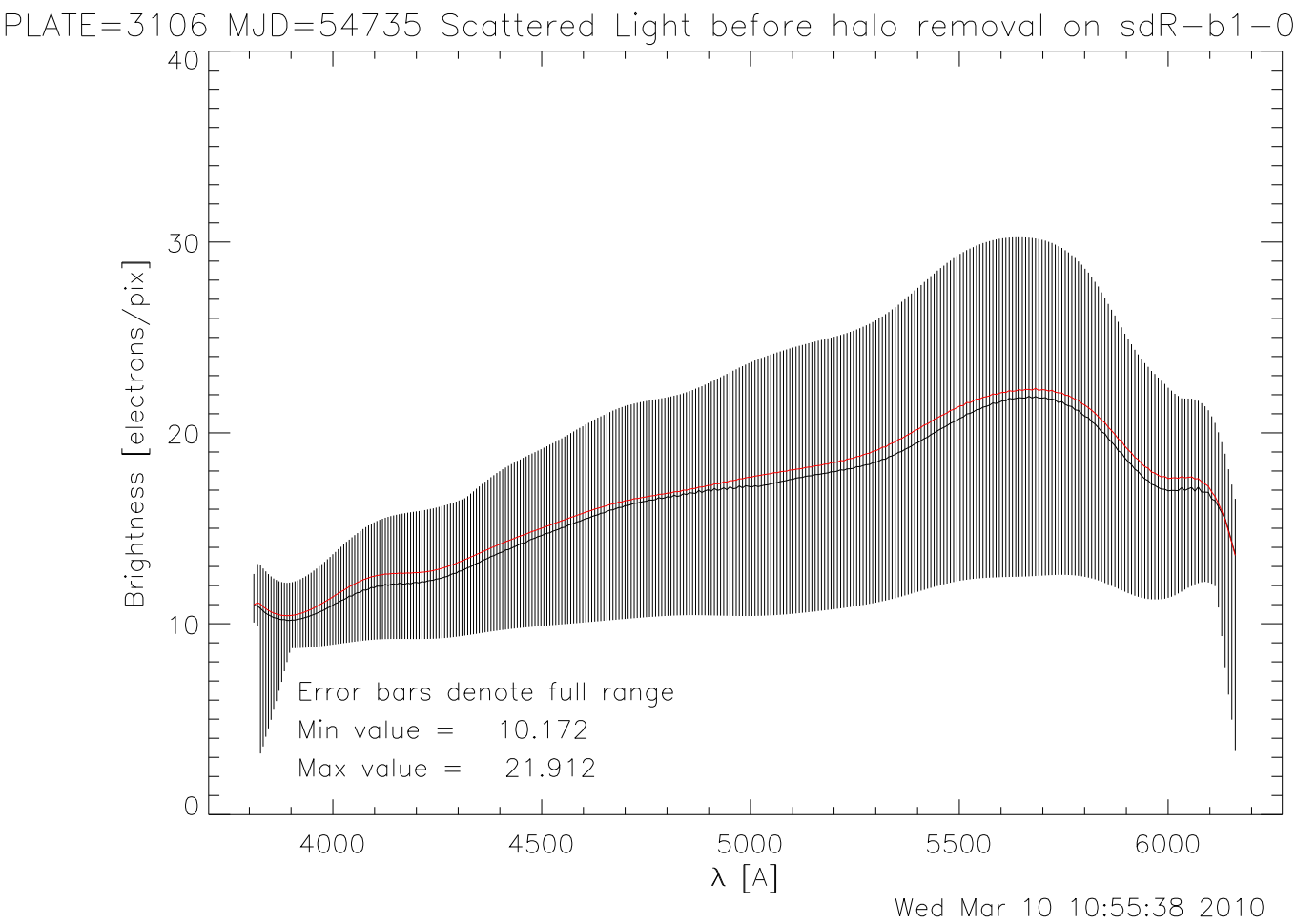

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b1-00054981.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

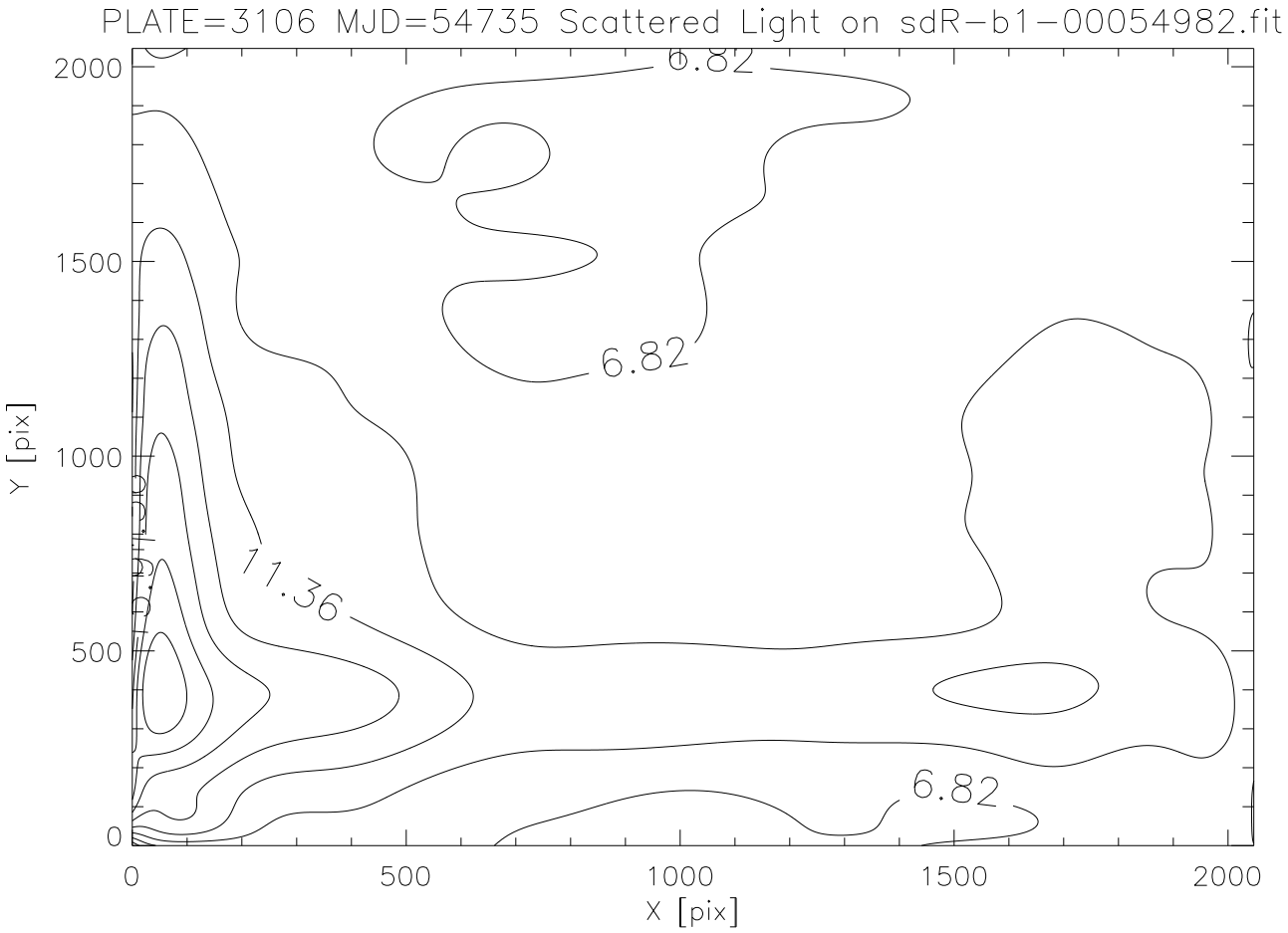

PLATE=3106 MJD=54735 sdR-b1-00054981.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.66 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

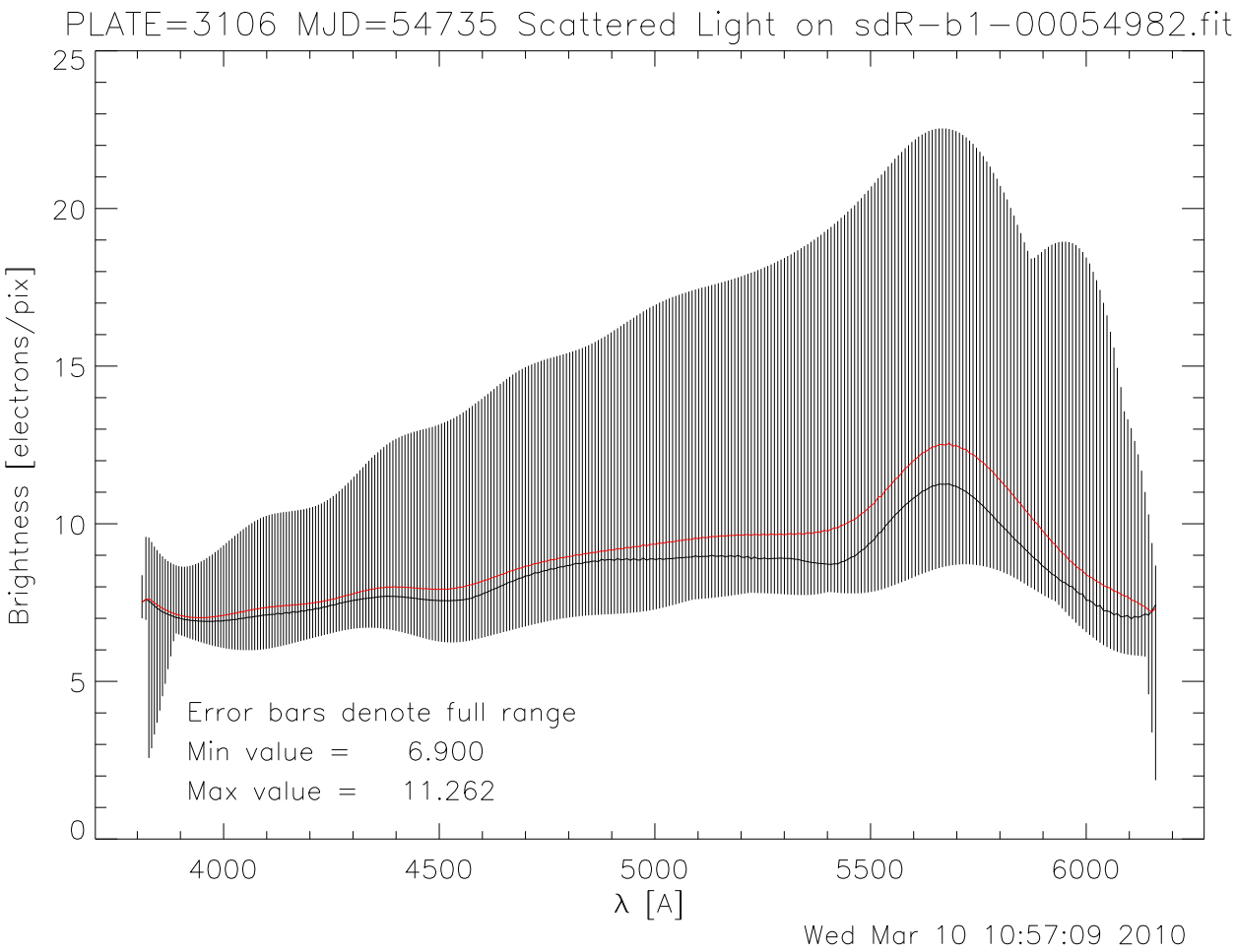

PLATE=3106 MJD=54735 sdR-b1-00054981.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.11 %
Fiber number
Focal Distance [mm]
Airmass

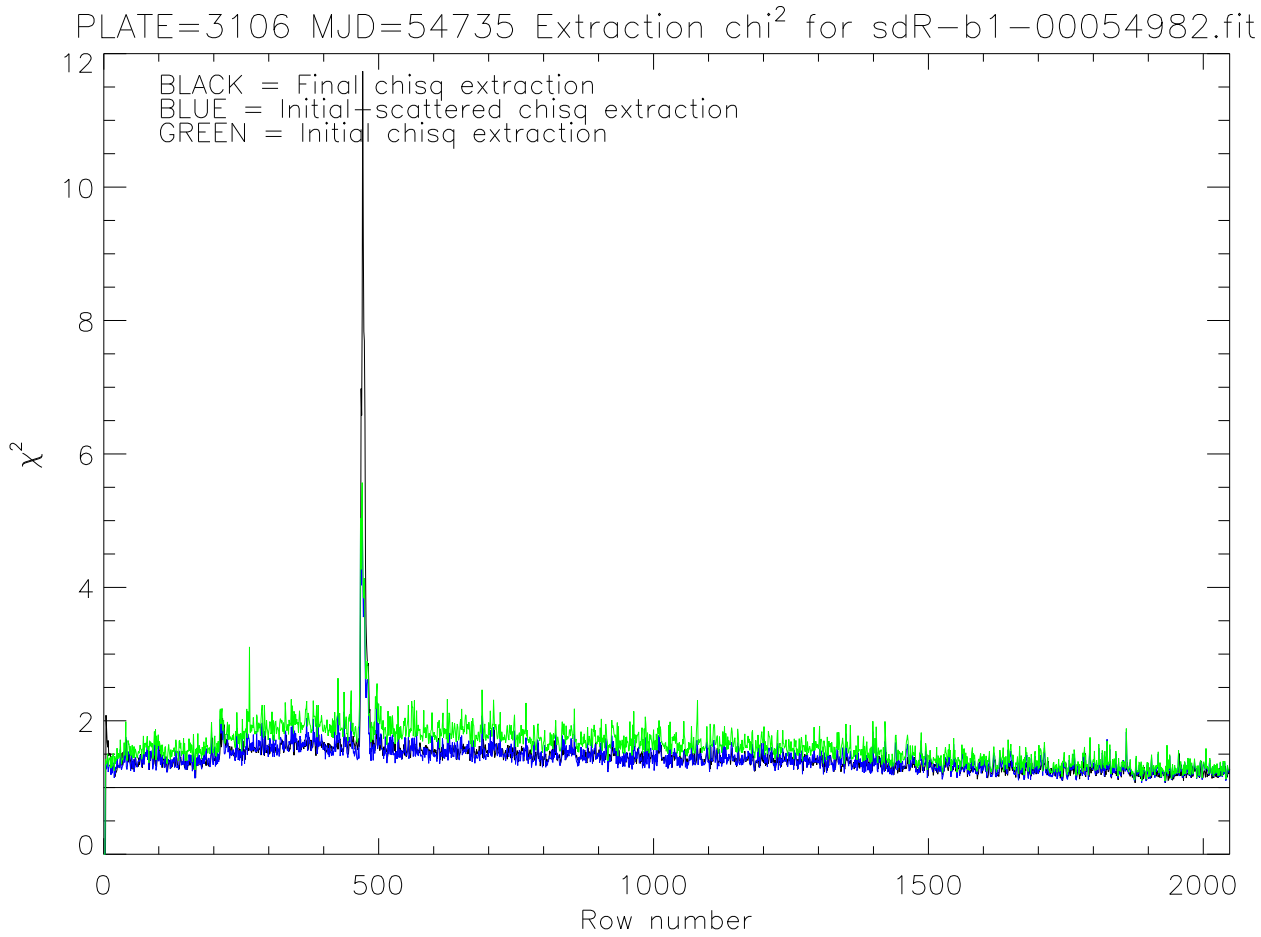

PLATE=3106 MJD=54735 Fiber−Flats for sdR−b1−00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.369
Max value = 1.230
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 10:55:07 2010

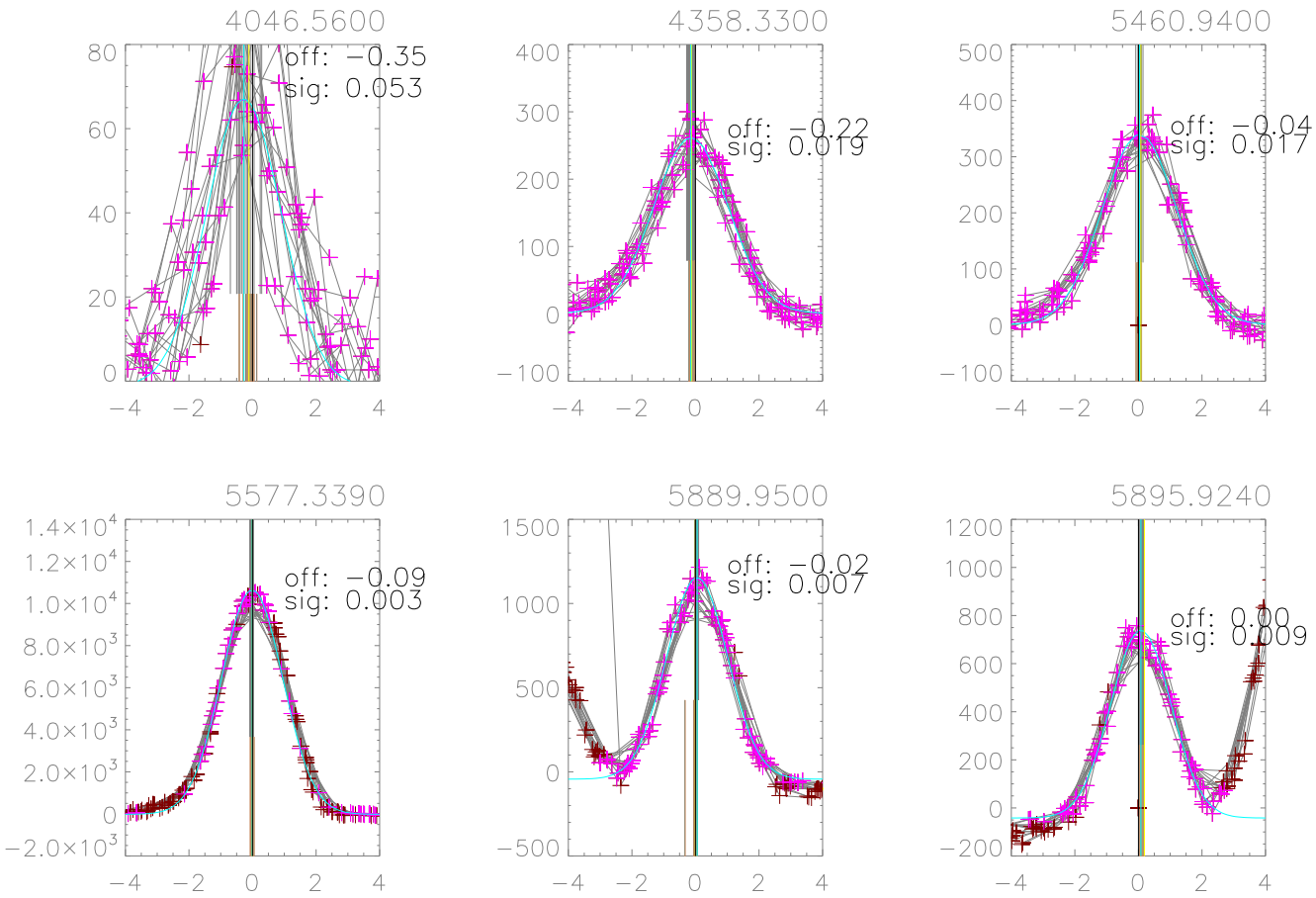

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR−b1−00054982.f
Y [pix]
X [pix]
0
500
1000
1500
2000
15.9
22.3

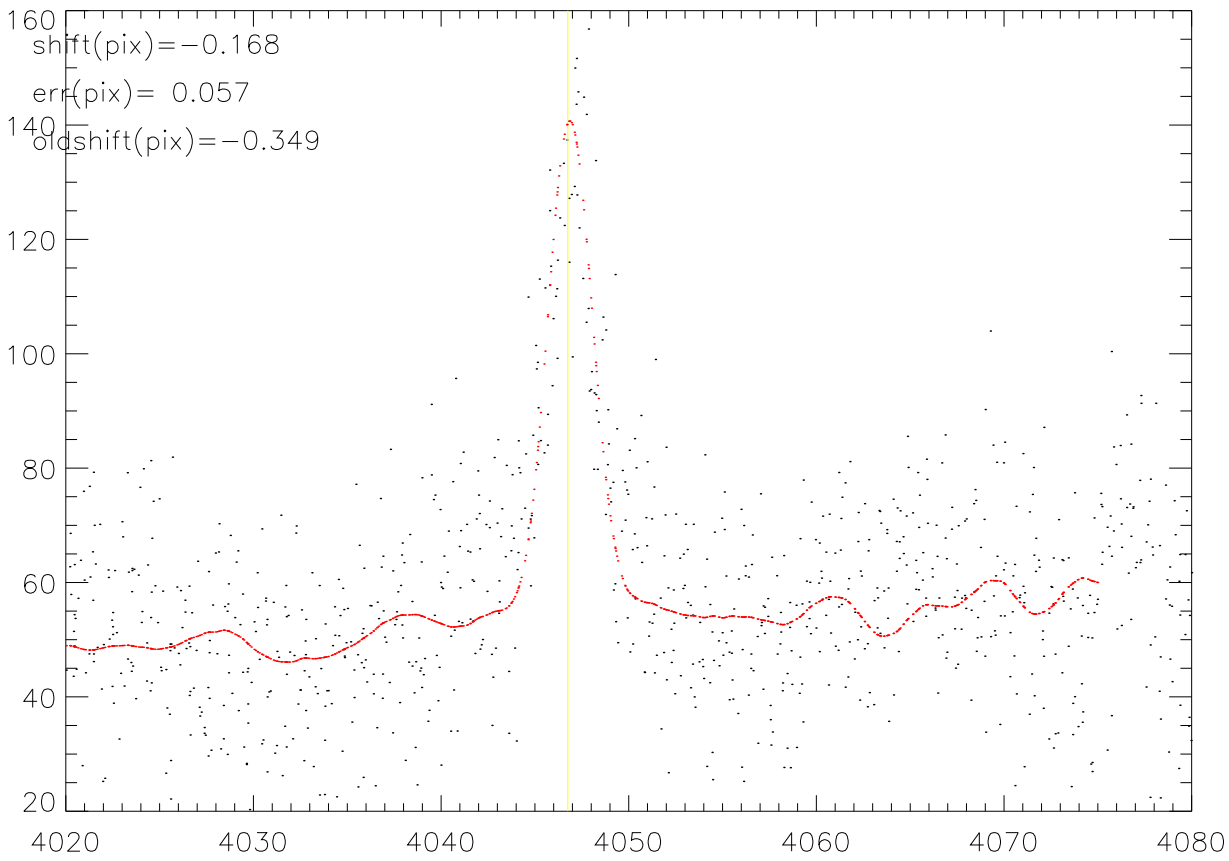

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR−b1−00054982.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.172
Max value = 21.912
Wed Mar 10 10:55:38 2010

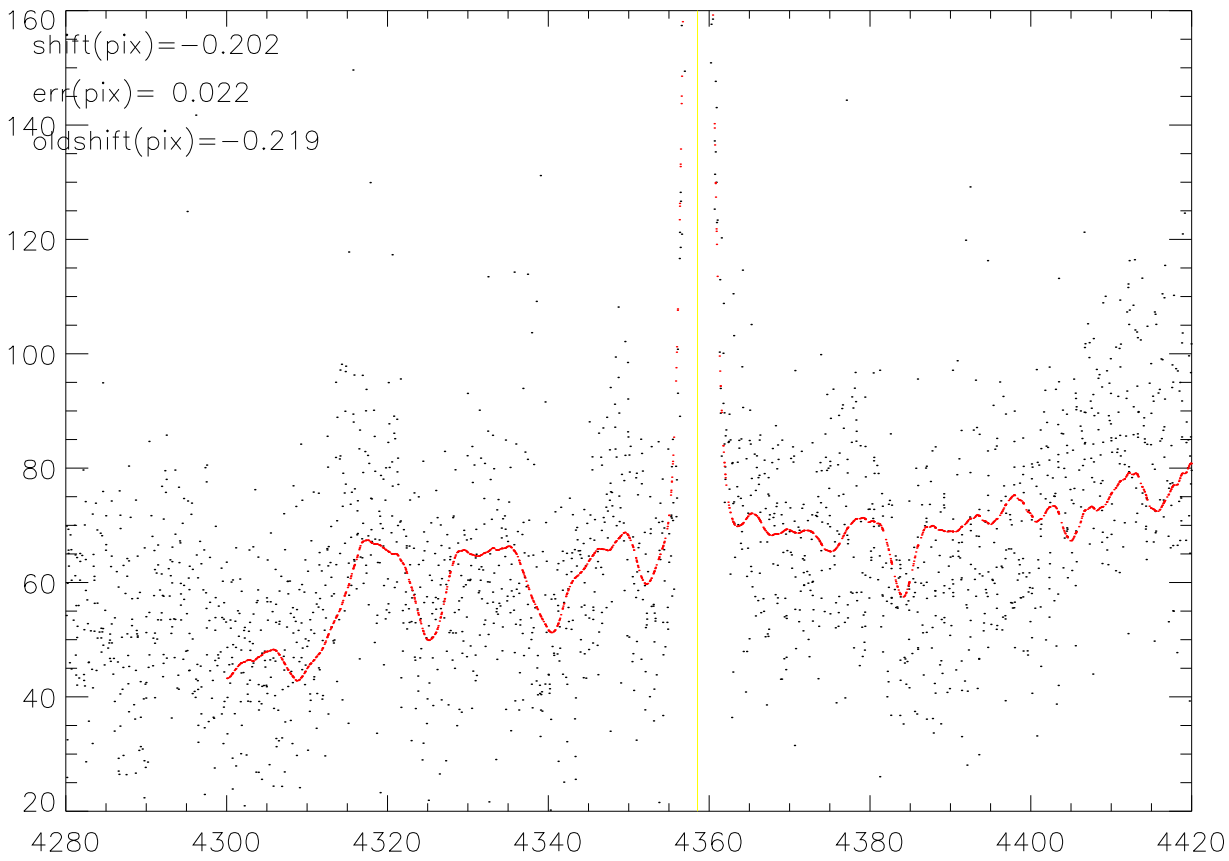

PLATE=3106 MJD=54735 Scattered Light on sdR-b1-00054982.fit
6.82
6.82
11.36
6.82
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

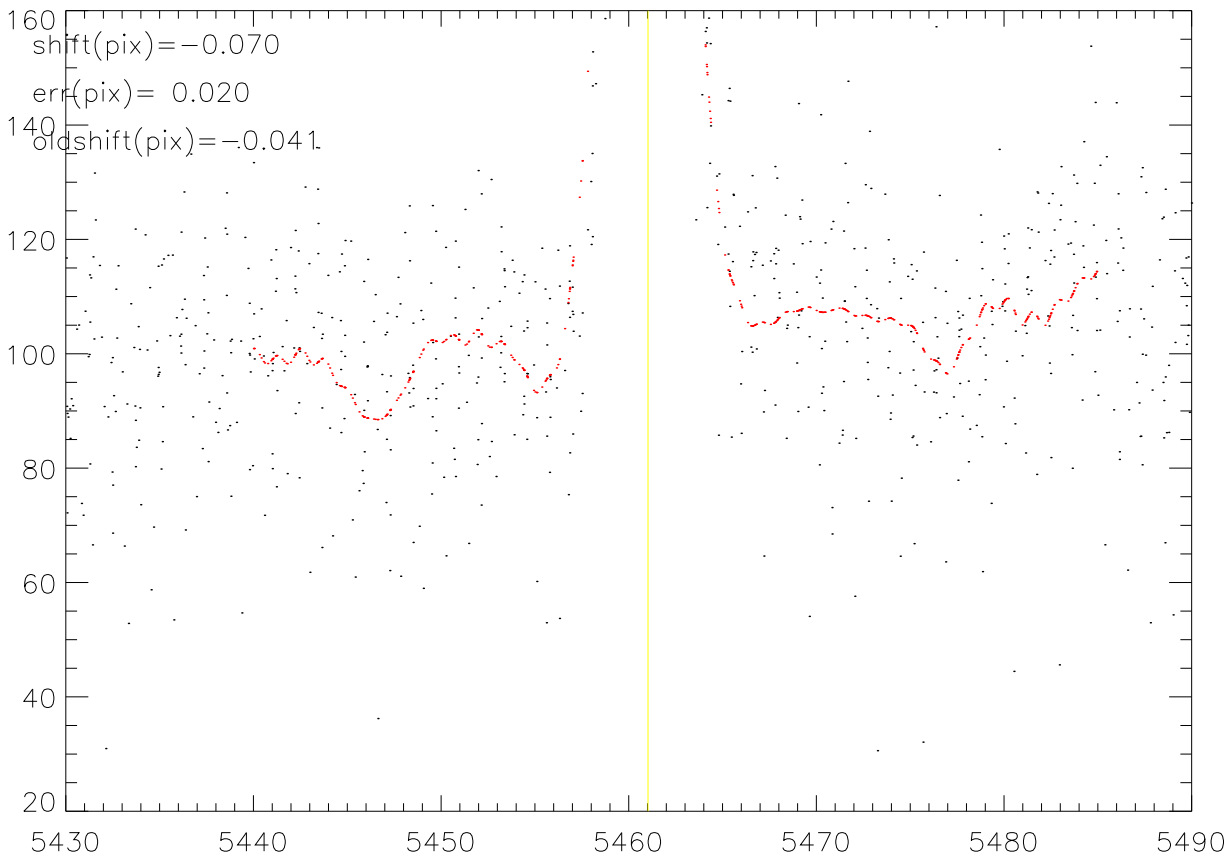

PLATE=3106 MJD=54735 Scattered Light on sdR-b1-00054982.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.900
Max value = 11.262
Wed Mar 10 10:57:09 2010

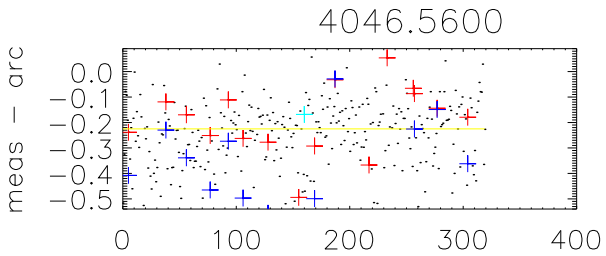

PLATE=3106 MJD=54735 Extraction chi^2 for sdR-b1-00054982.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

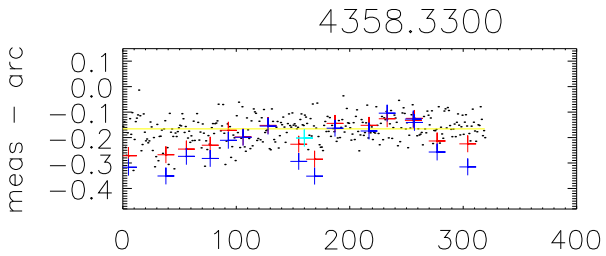

4046.5600
off: −0.35
sig: 0.053
4358.3300
off: −0.22
sig: 0.019
5460.9400
off: −0.04
sig: 0.017
5577.3390
off: −0.09
sig: 0.003
5889.9500
off: −0.02
sig: 0.007
5895.9240
off: 0.00
sig: 0.009

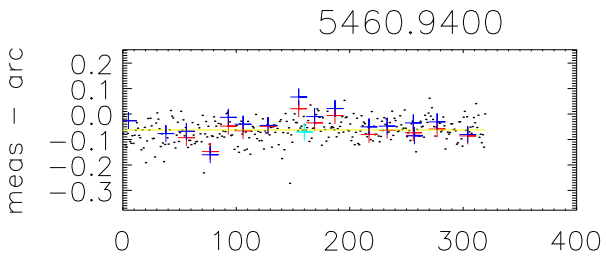

shift(pix)=−0.168
err(pix)= 0.057
oldshift(pix)=−0.349
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

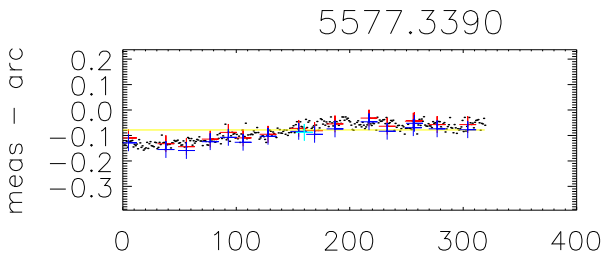

shift(pix)=−0.202
err(pix)= 0.022
oldshift(pix)=−0.219
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

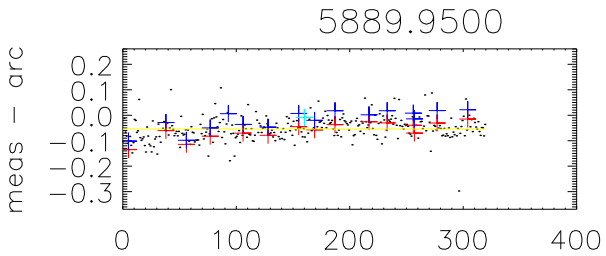

shift(pix)=−0.070
err(pix)= 0.020
oldshift(pix)=−0.041
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

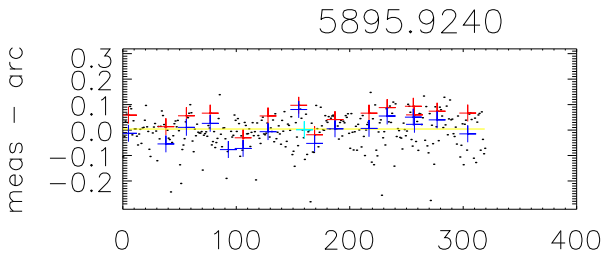

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

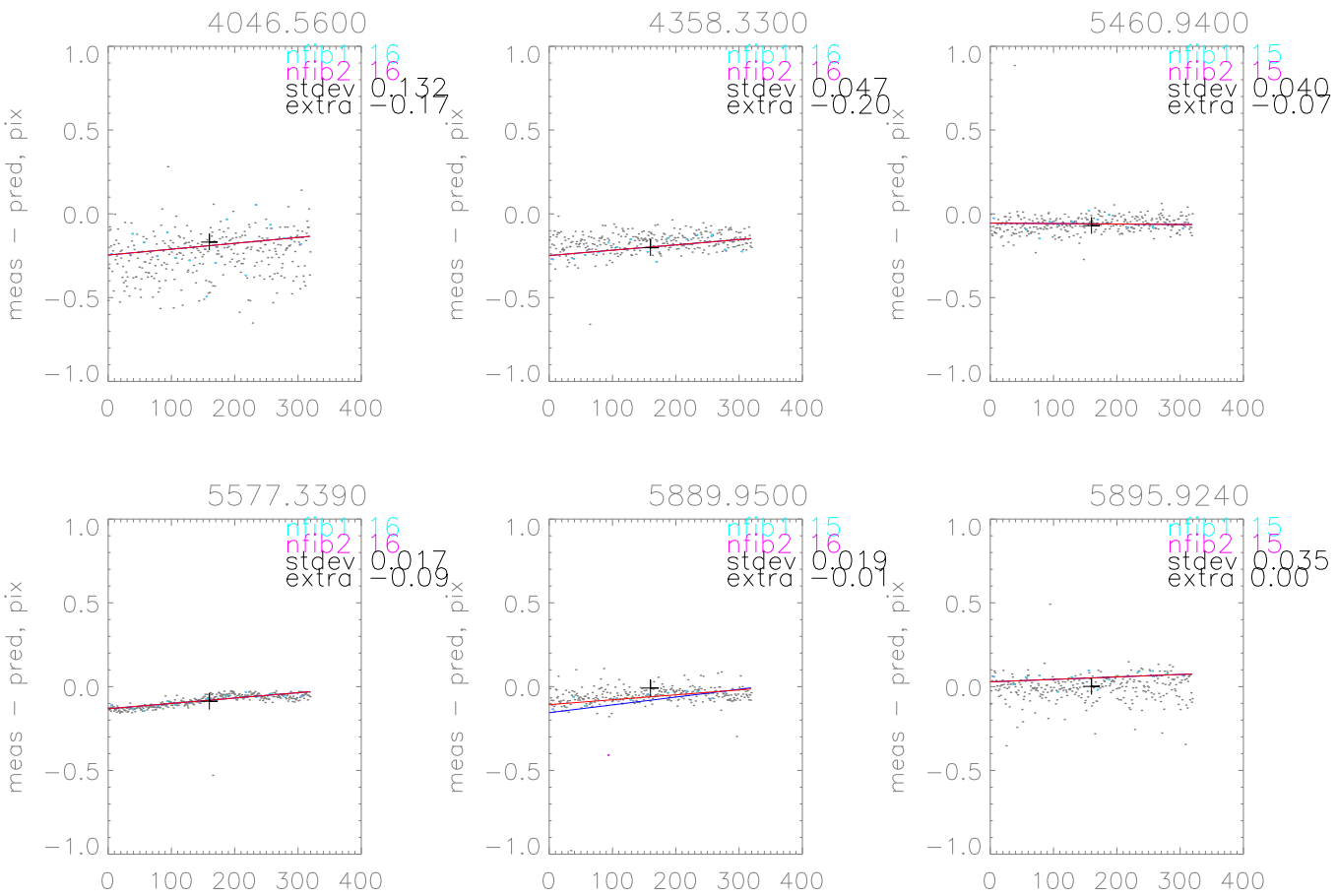

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

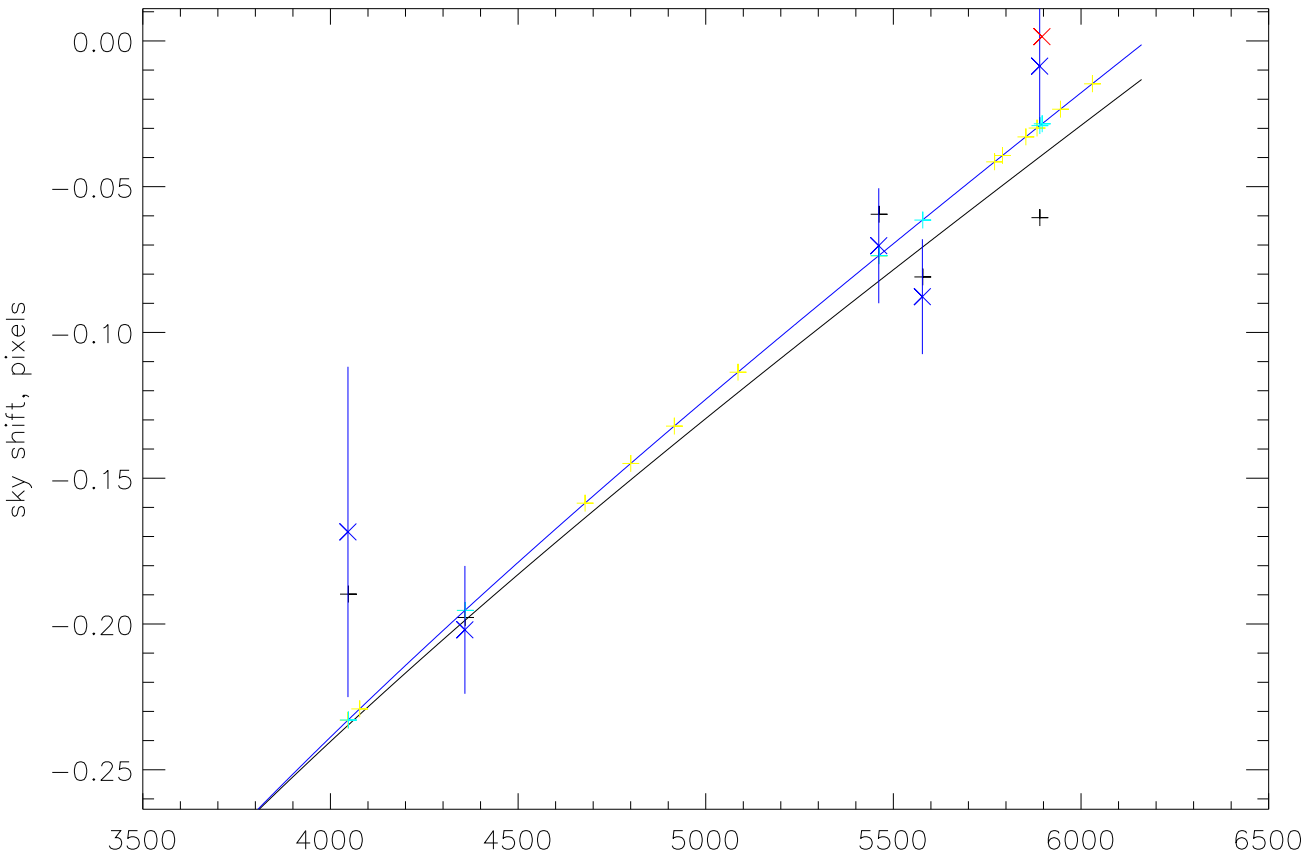

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

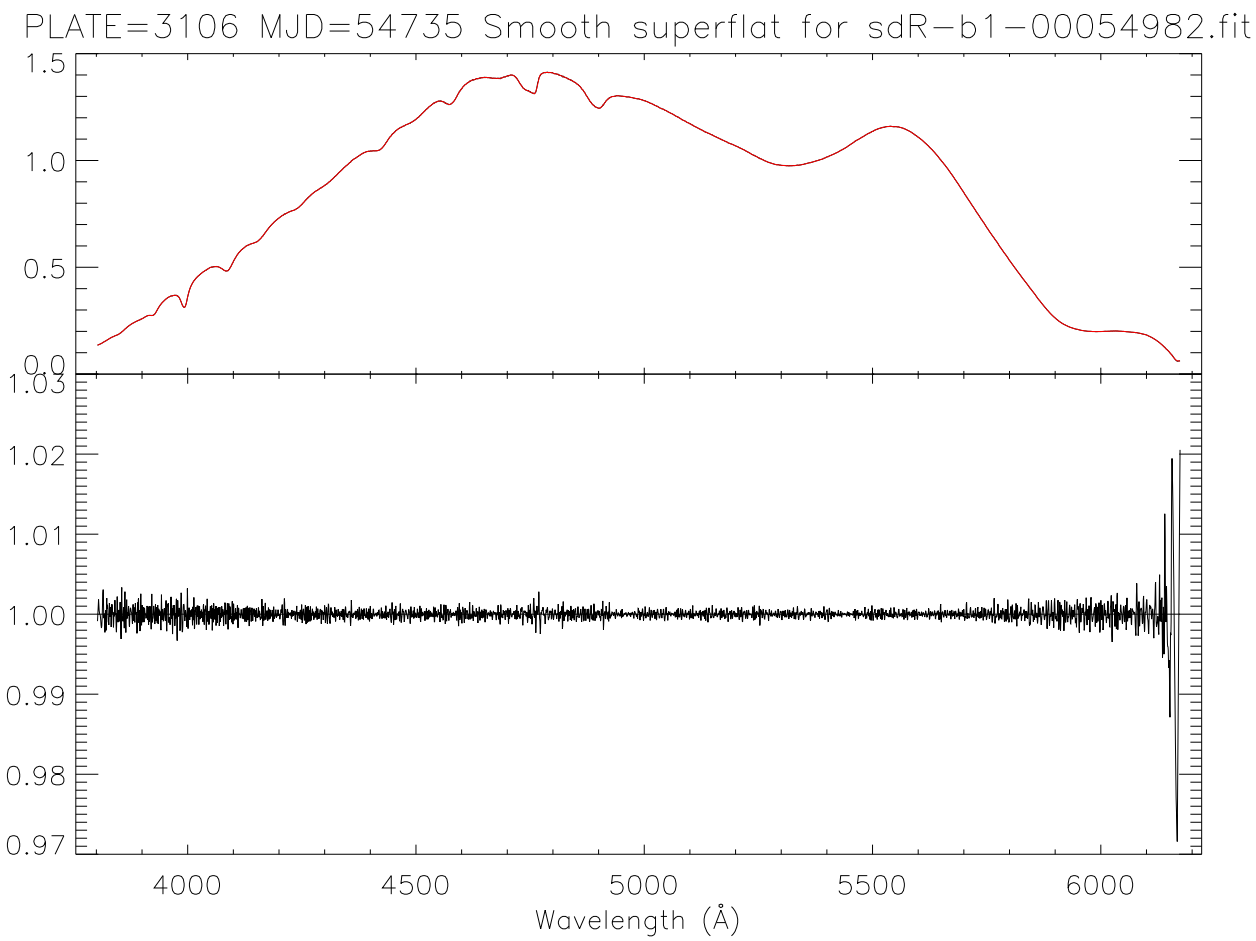

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

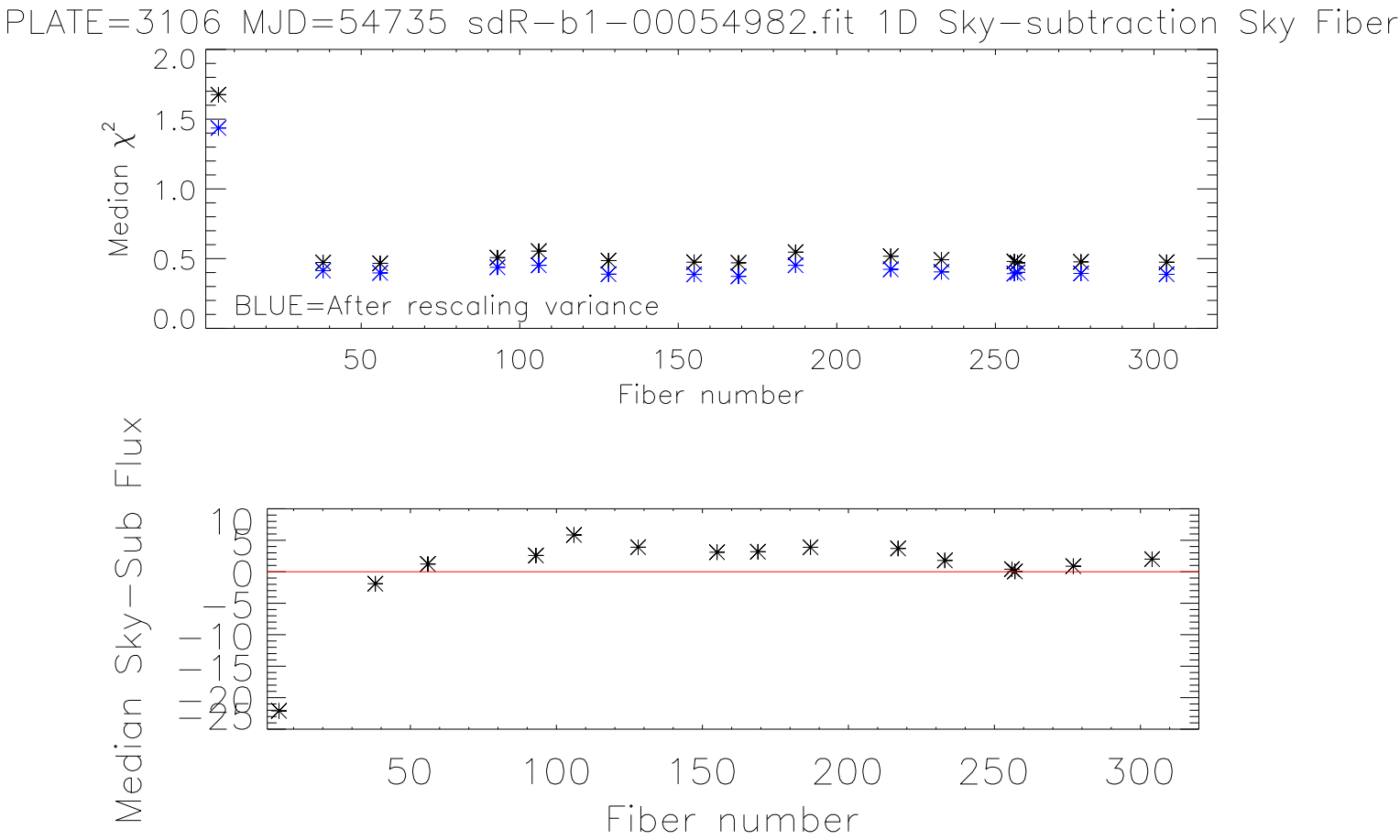

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

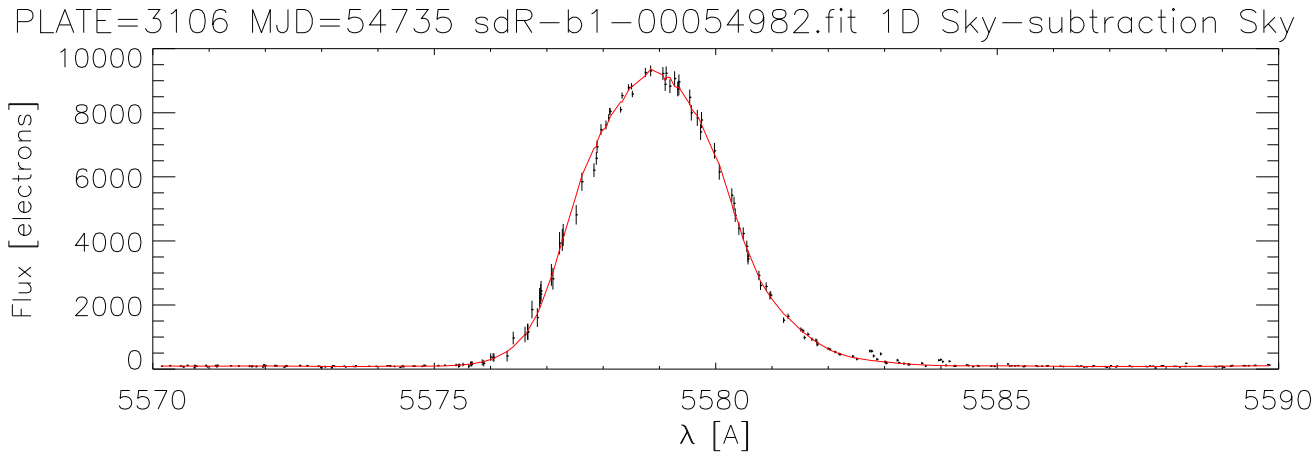

4046.5600
nfib1 16
nfib2 16
stdev 0.132
extra −0.17
4358.3300
nfib1 16
nfib2 16
stdev 0.047
extra −0.20
5460.9400
nfib1 15
nfib2 15
stdev 0.040
extra −0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra −0.09
5889.9500
nfib1 15
nfib2 16
stdev 0.019
extra −0.01
5895.9240
nfib1 15
nfib2 15
stdev 0.035
extra 0.00
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

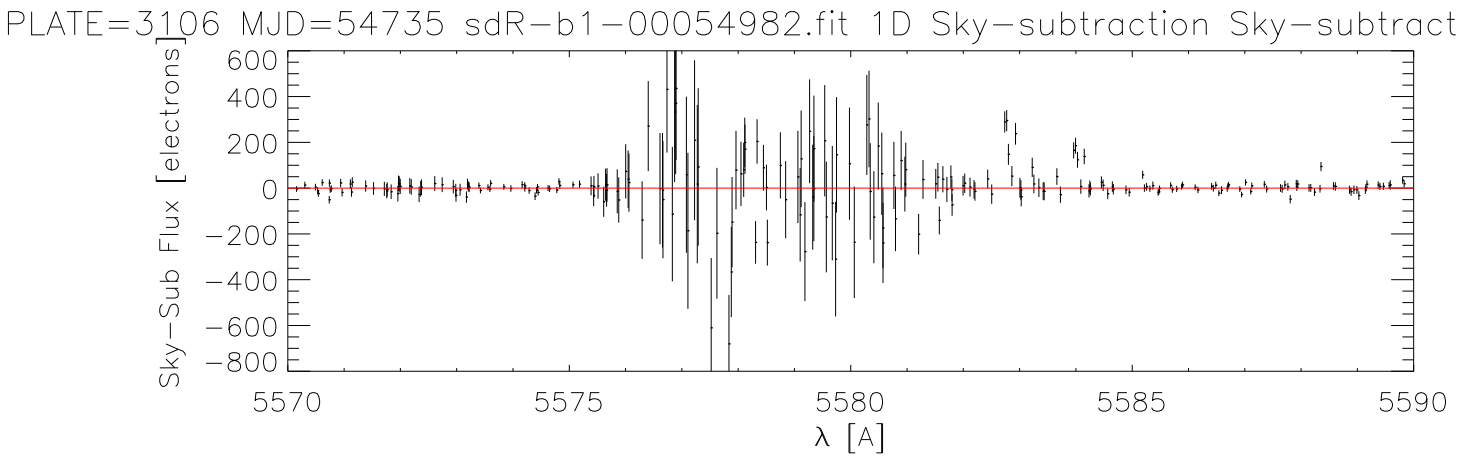

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

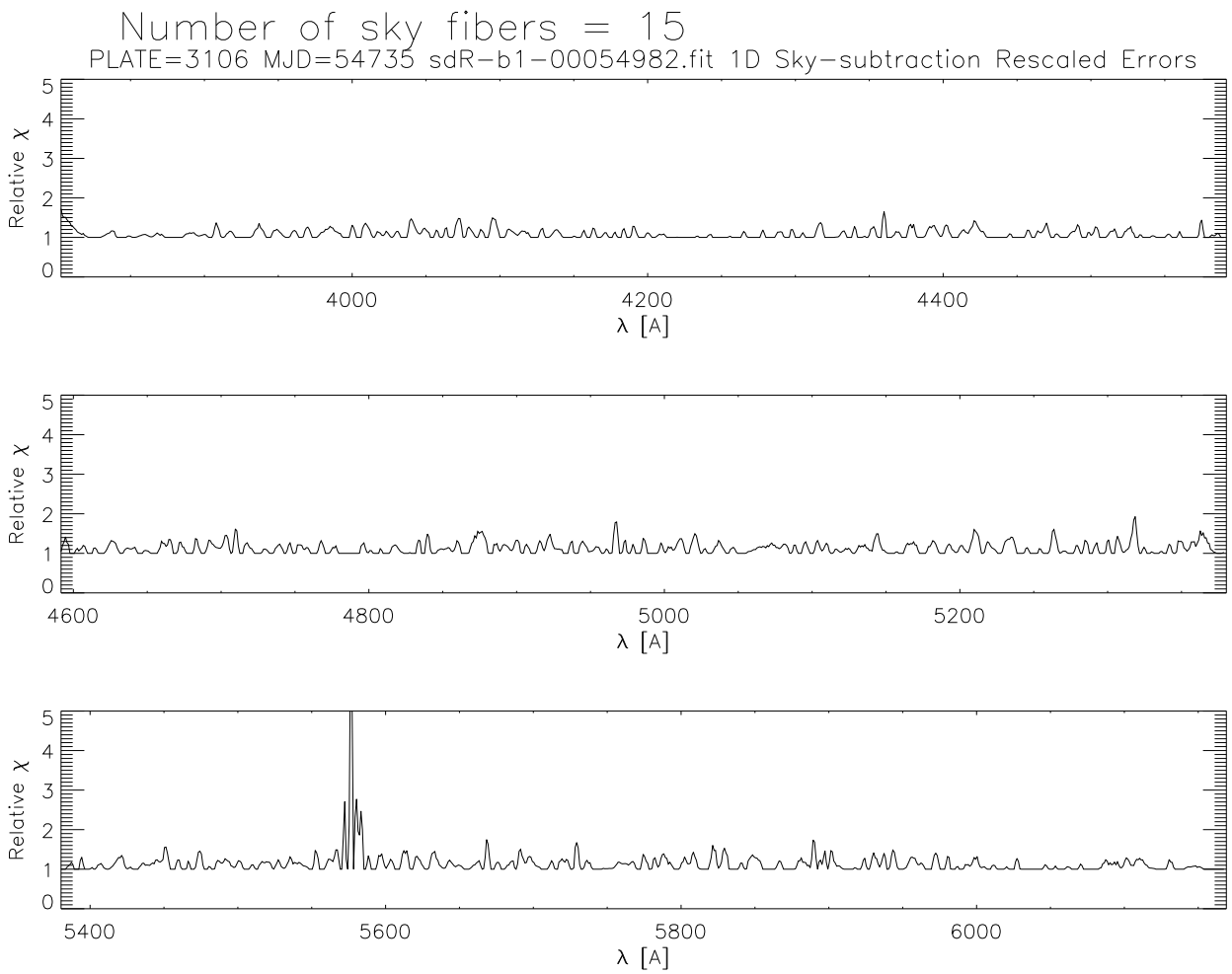
es= −0.0001

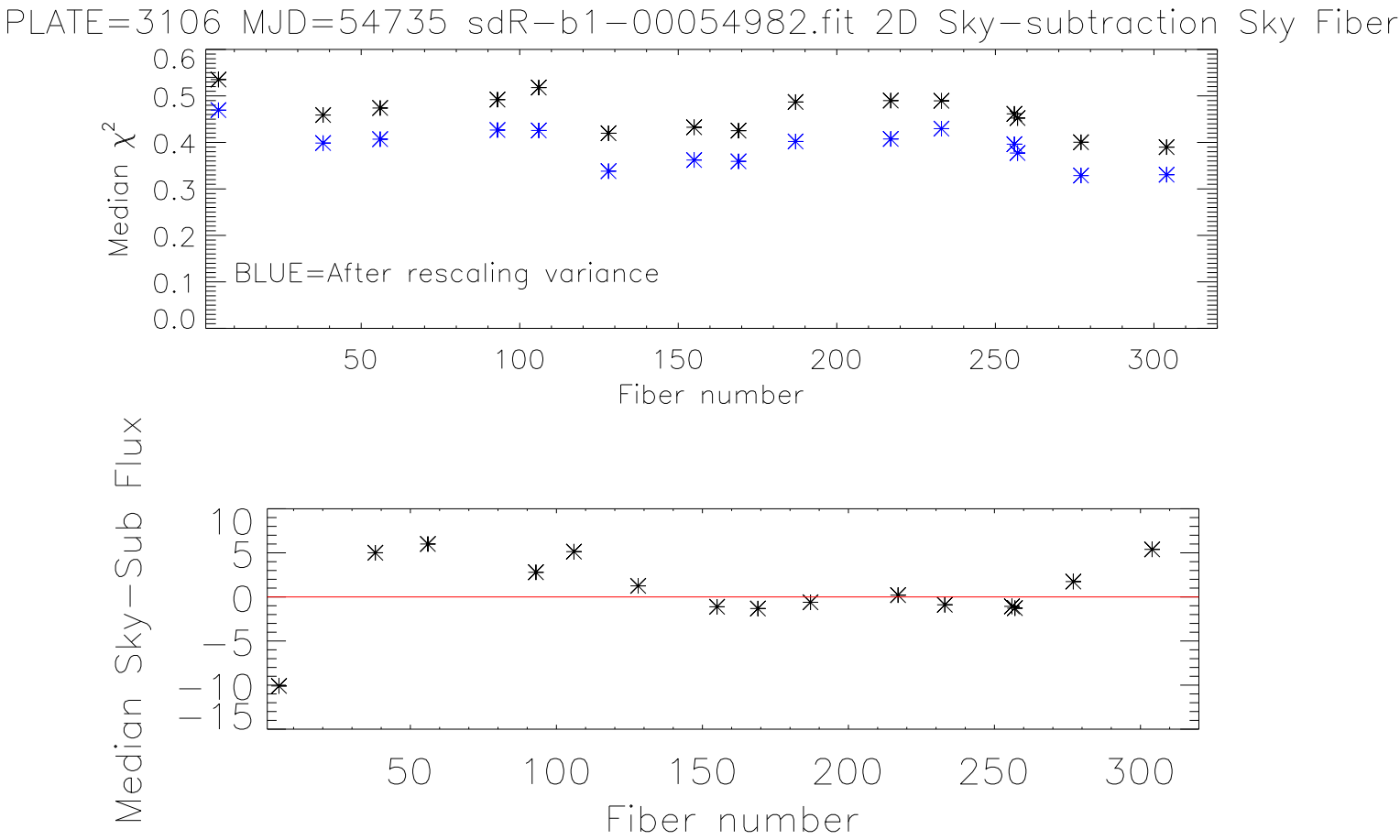

PLATE=3106 MJD=54735 Smooth superflat for sdR−b1−00054982.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

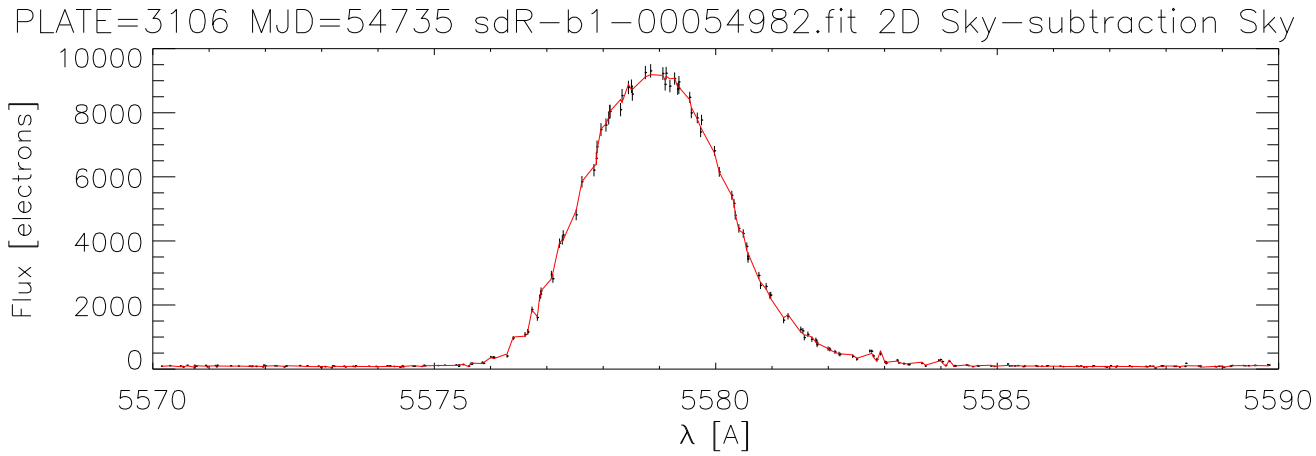

PLATE=3106 MJD=54735 sdR-b1-00054982.fit 1D Sky-subtraction Sky Fiber
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
-25
50
100
150
200
250
300
Fiber number

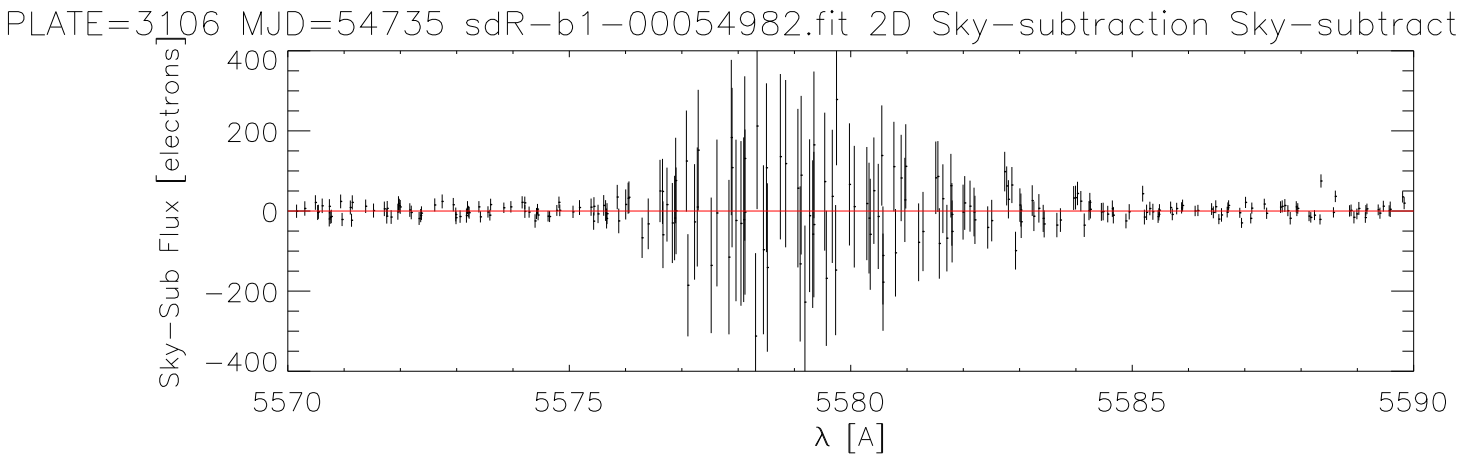

PLATE=3106 MJD=54735 sdR-b1-00054982.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

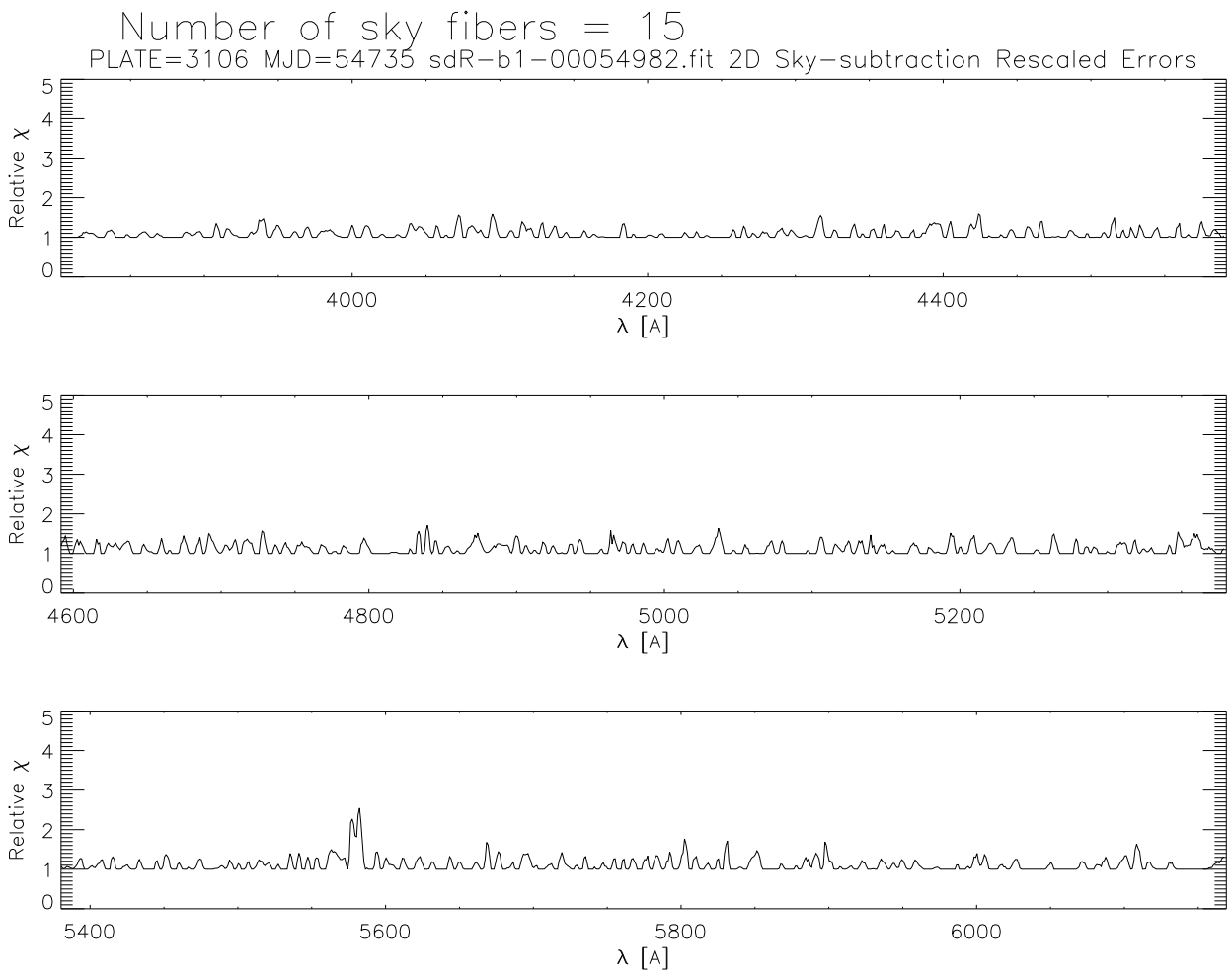

PLATE=3106 MJD=54735 sdR-b1-00054982.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
-800
5570
5575
5580
5585
5590
λ [A]

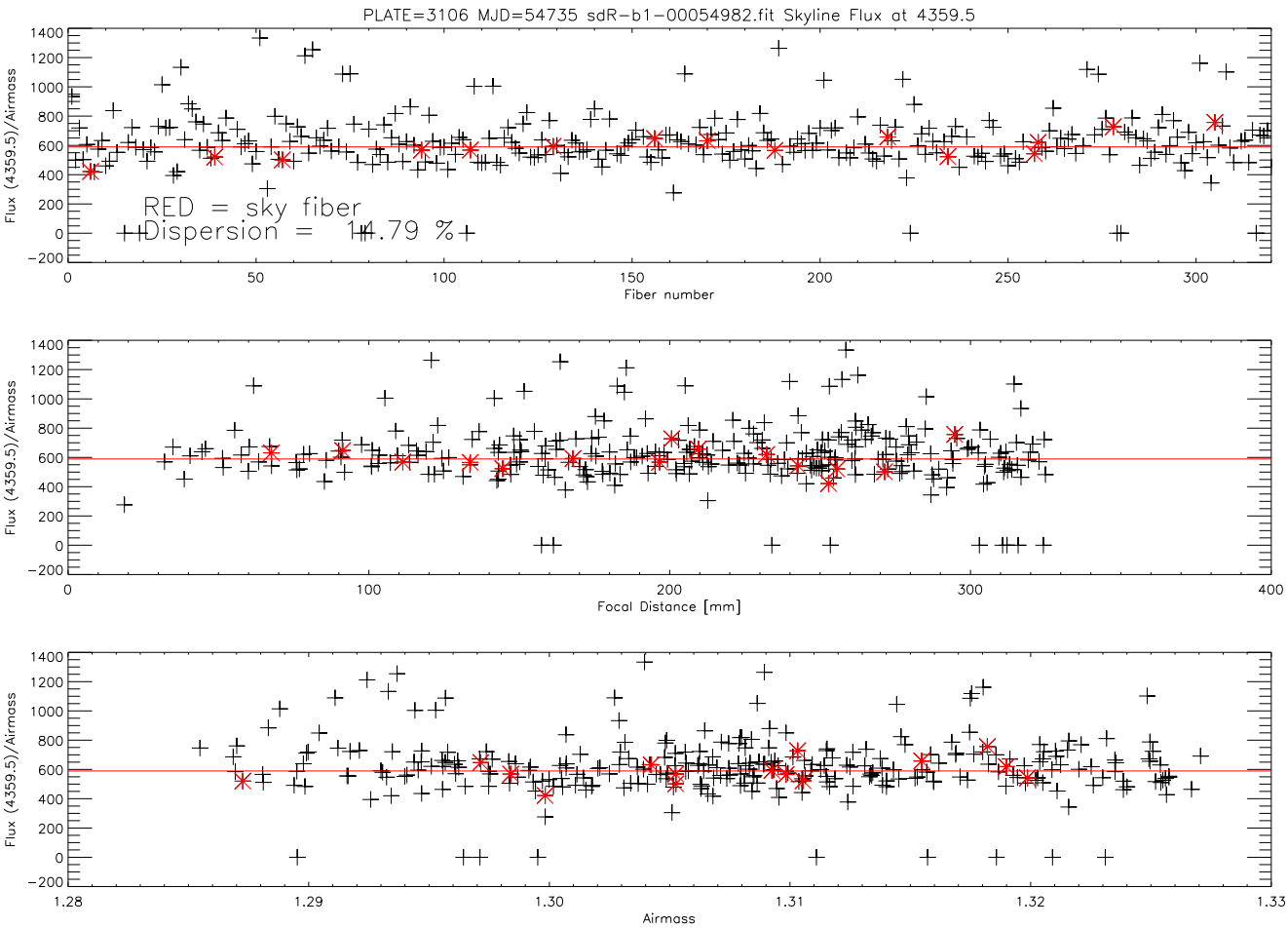

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b1-00054982.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

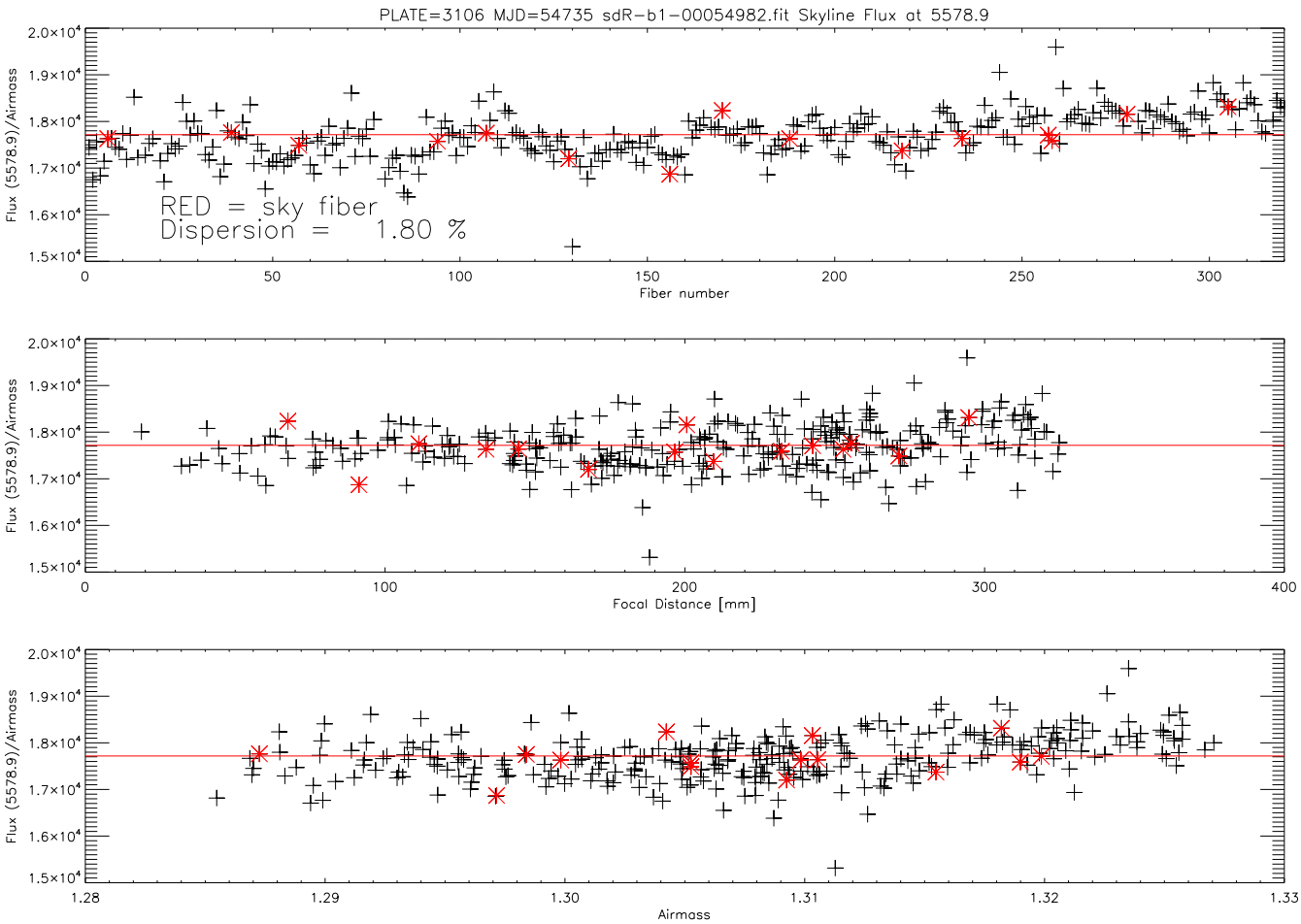

PLATE=3106 MJD=54735 sdR-b1-00054982.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

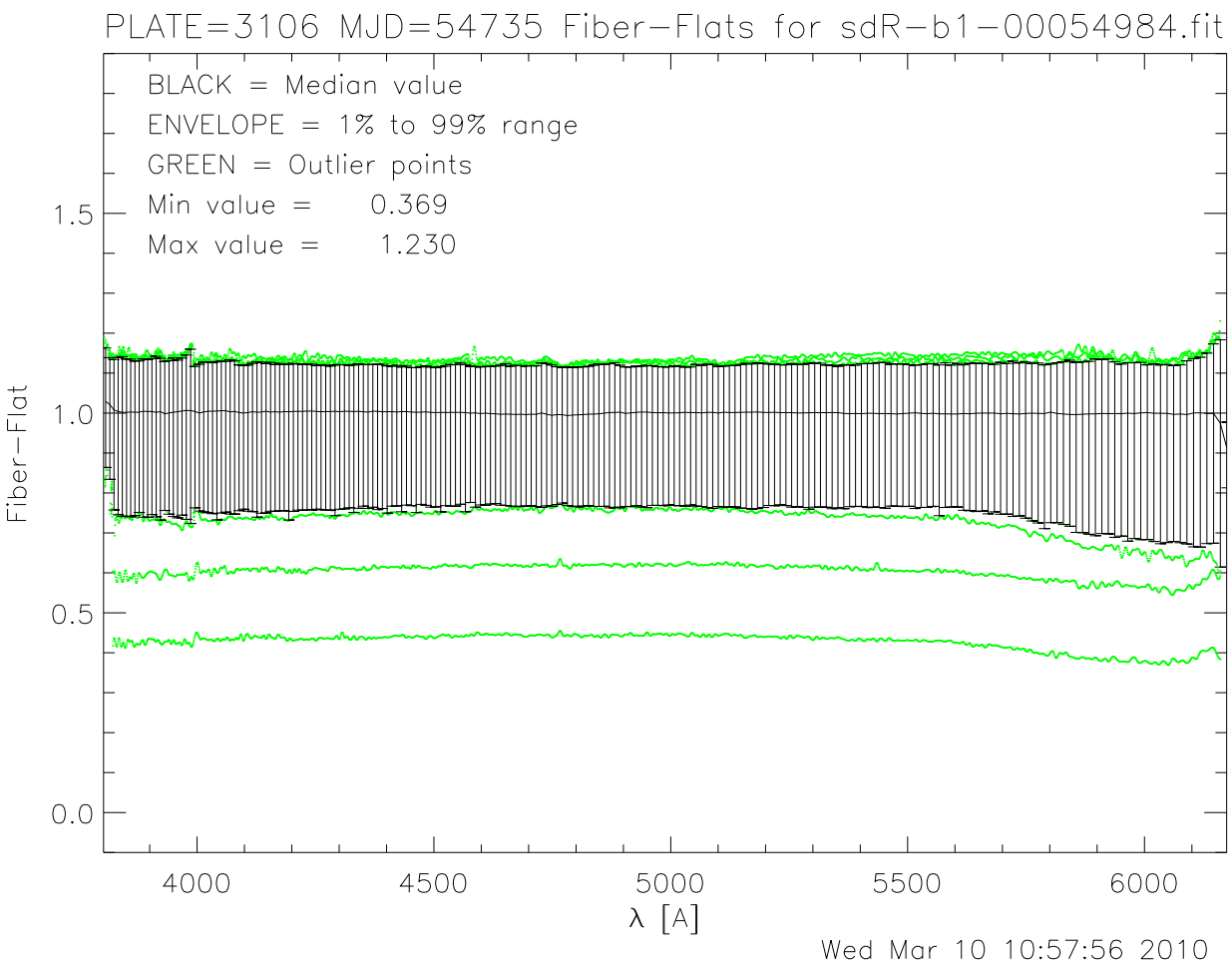

PLATE=3106 MJD=54735 sdR-b1-00054982.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

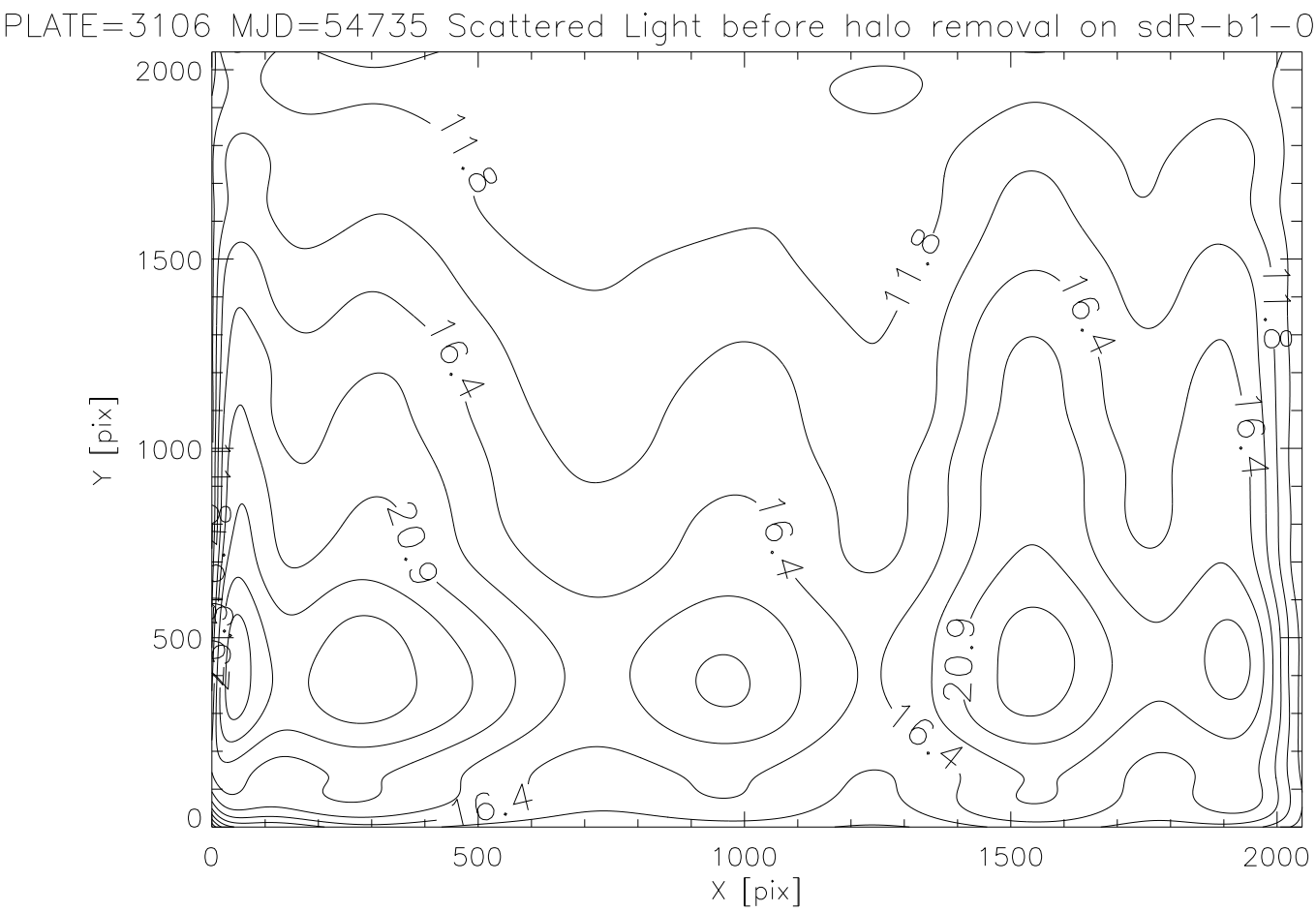

PLATE=3106 MJD=54735 sdR-b1-00054982.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

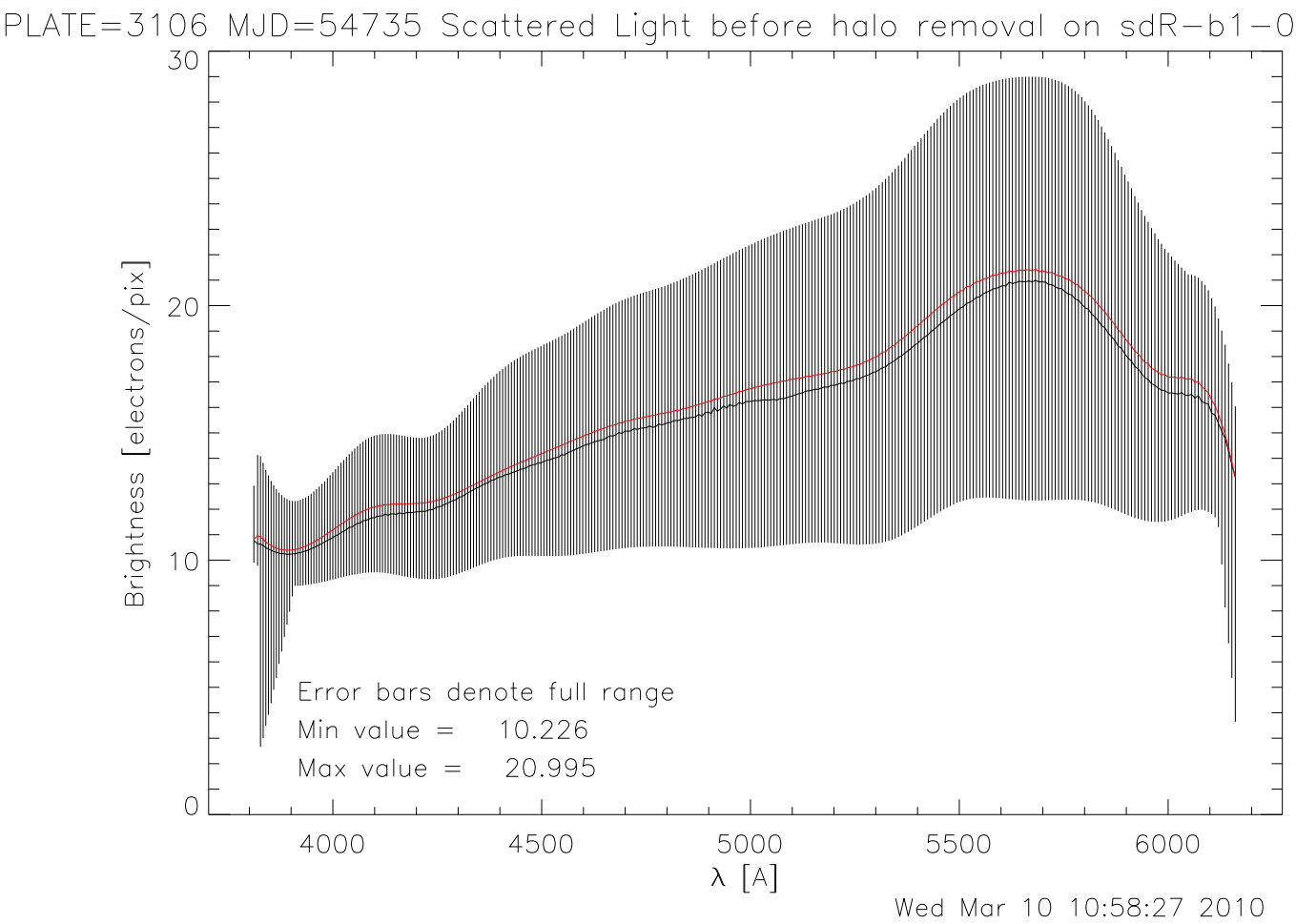

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b1-00054982.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

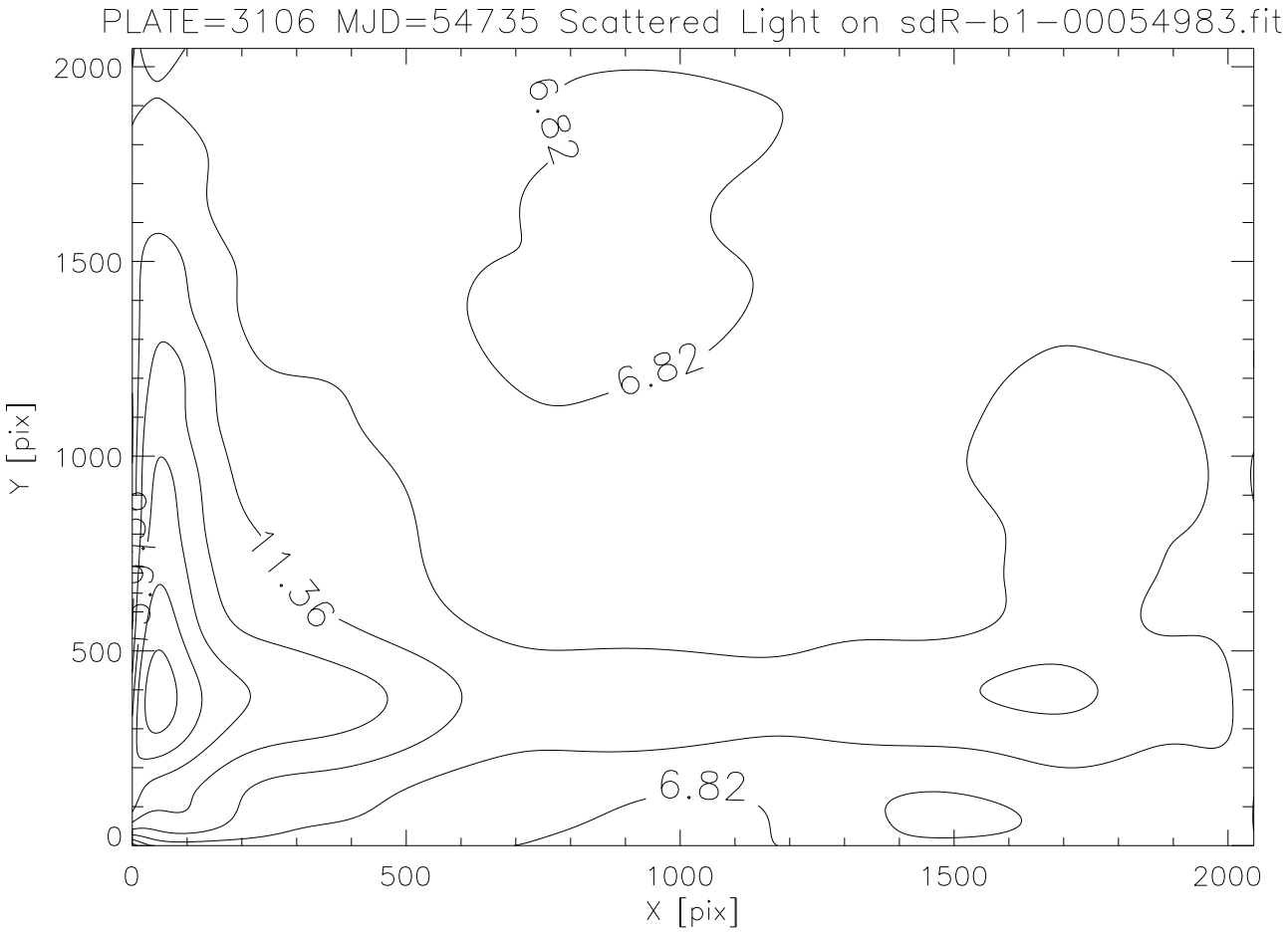

PLATE=3106 MJD=54735 sdR-b1-00054982.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 14.79 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

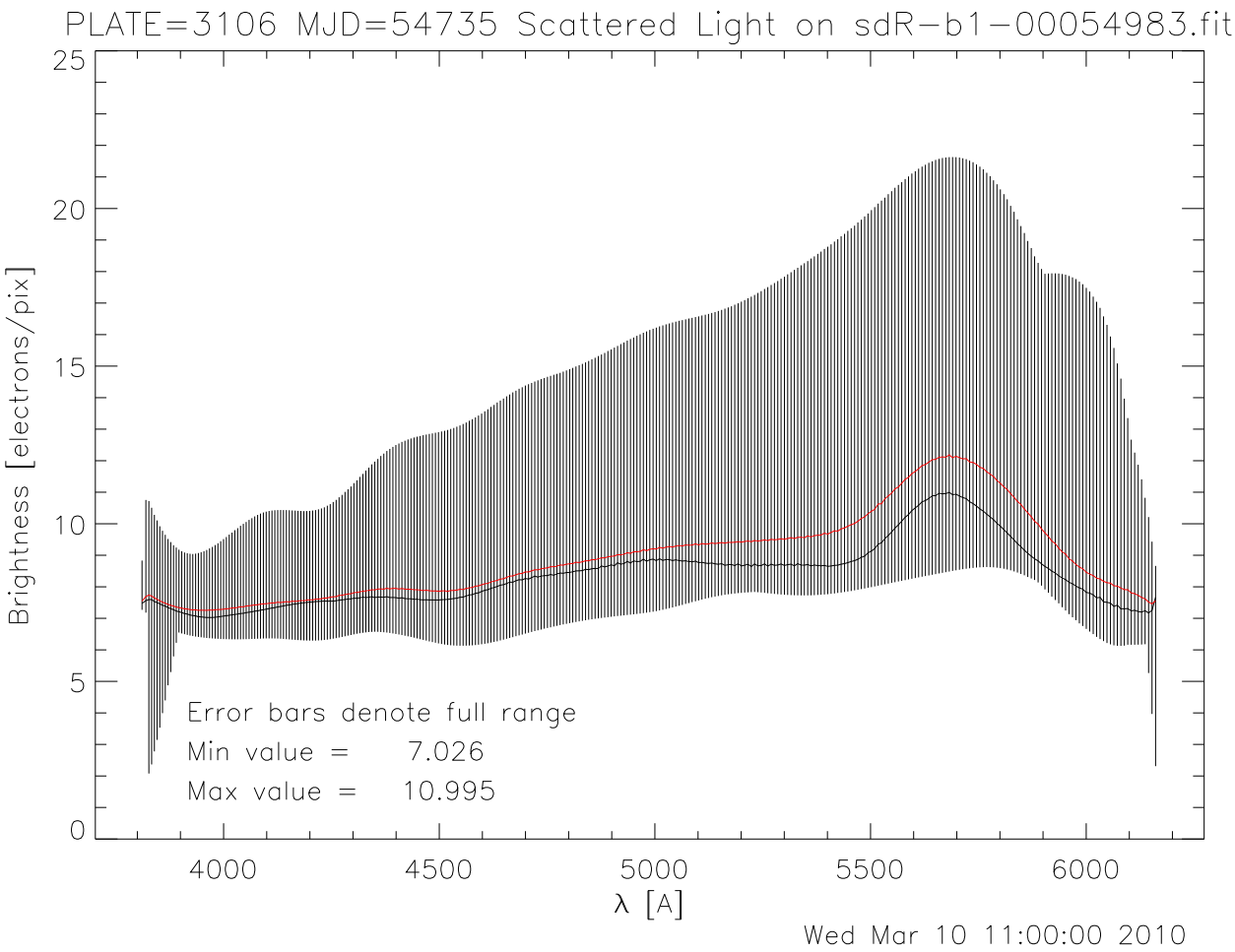

PLATE=3106 MJD=54735 sdR-b1-00054982.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.80 %
Fiber number
Focal Distance [mm]
Airmass

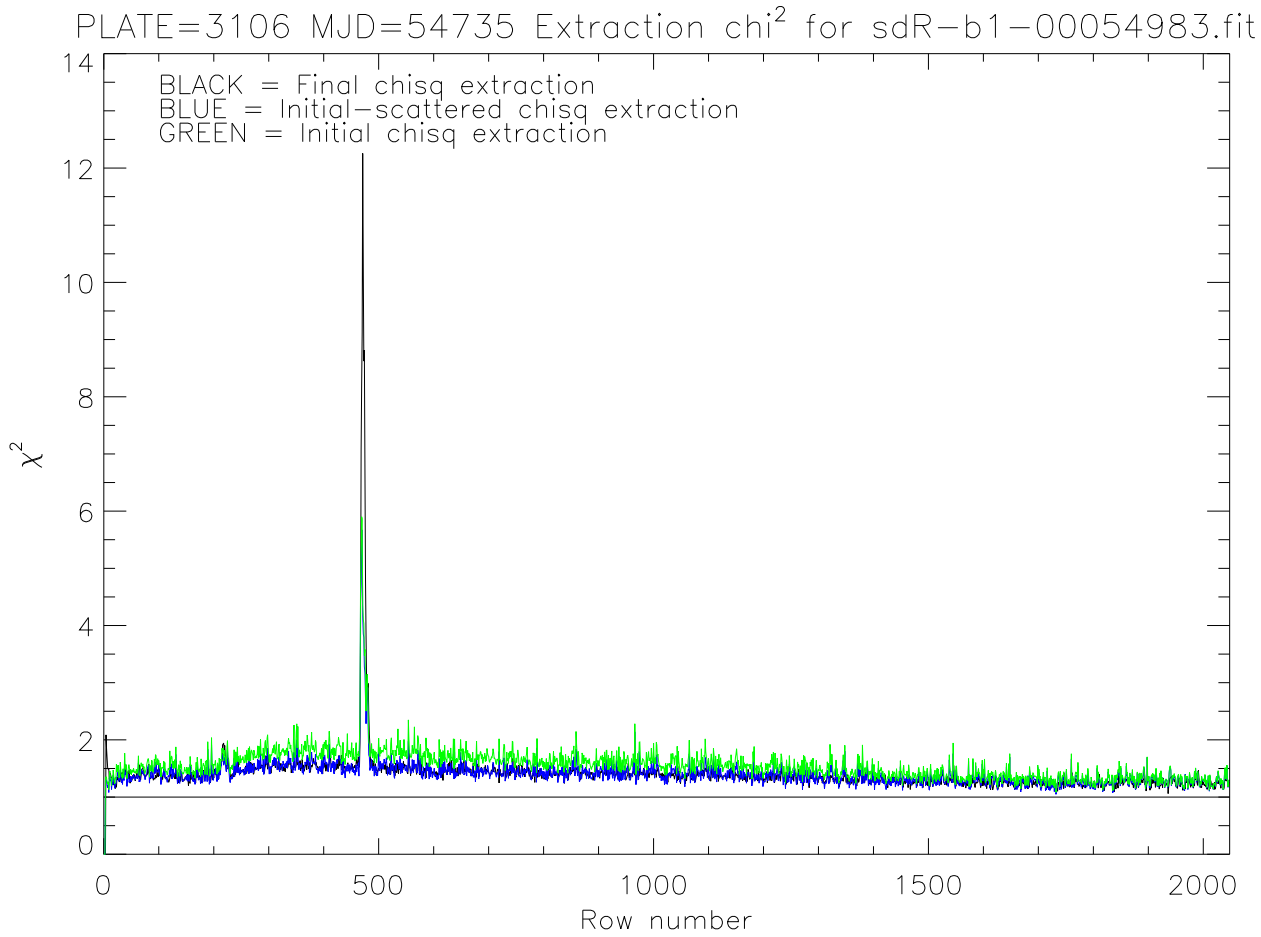

PLATE=3106 MJD=54735 Fiber-Flats for sdR-b1-00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.369
Max value = 1.230
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 10:57:56 2010

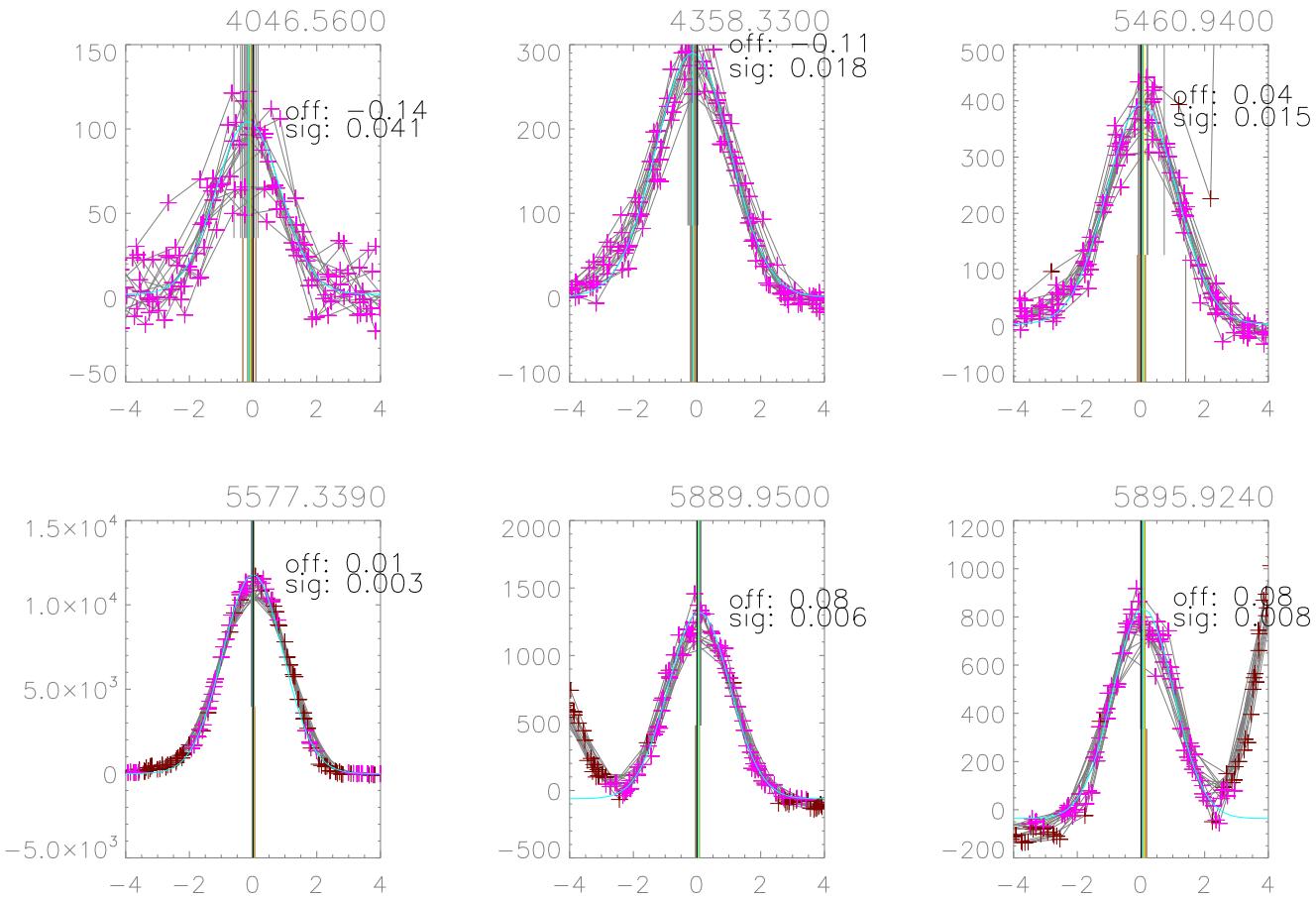

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR−b1−00054983.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
11.8
16.4
20.9

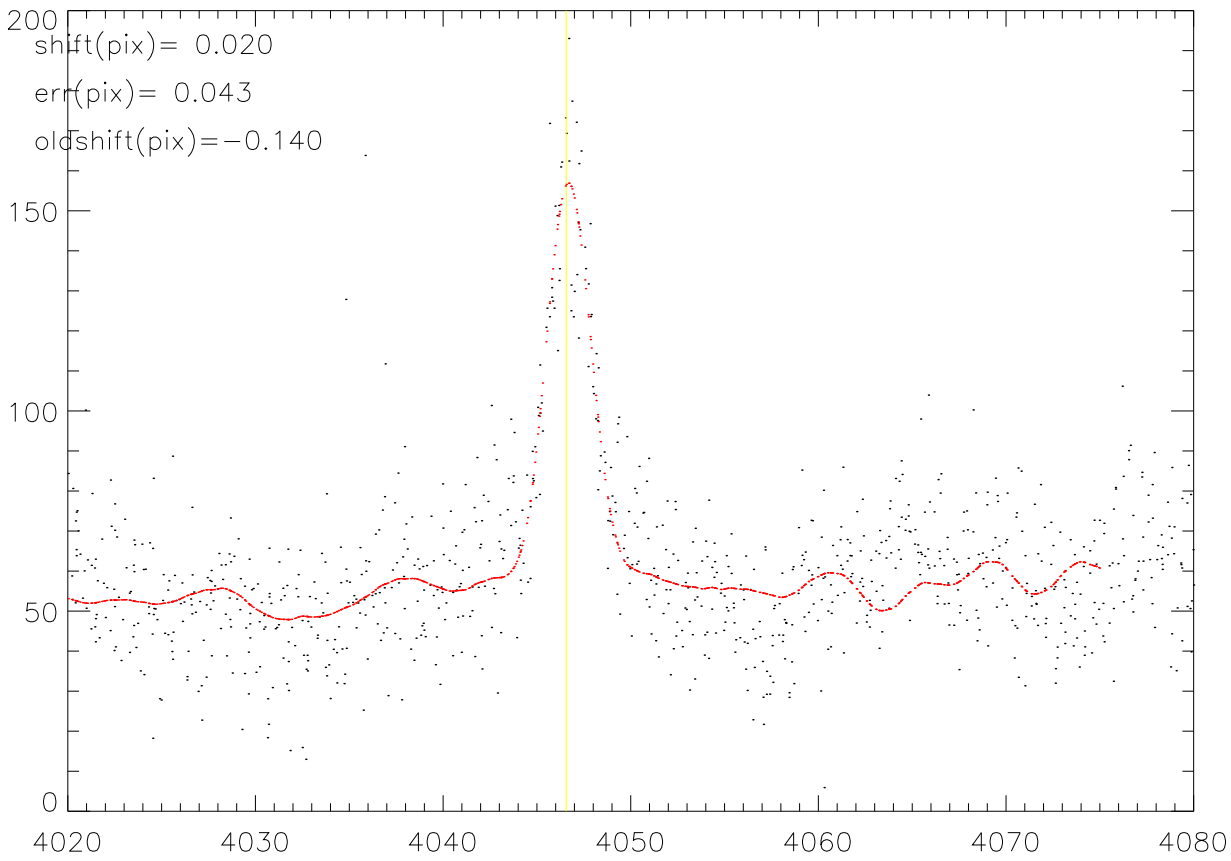

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-b1-00054983.f
Brightness [electrons/pix]
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 10.226
Max value = 20.995
Wed Mar 10 10:58:27 2010

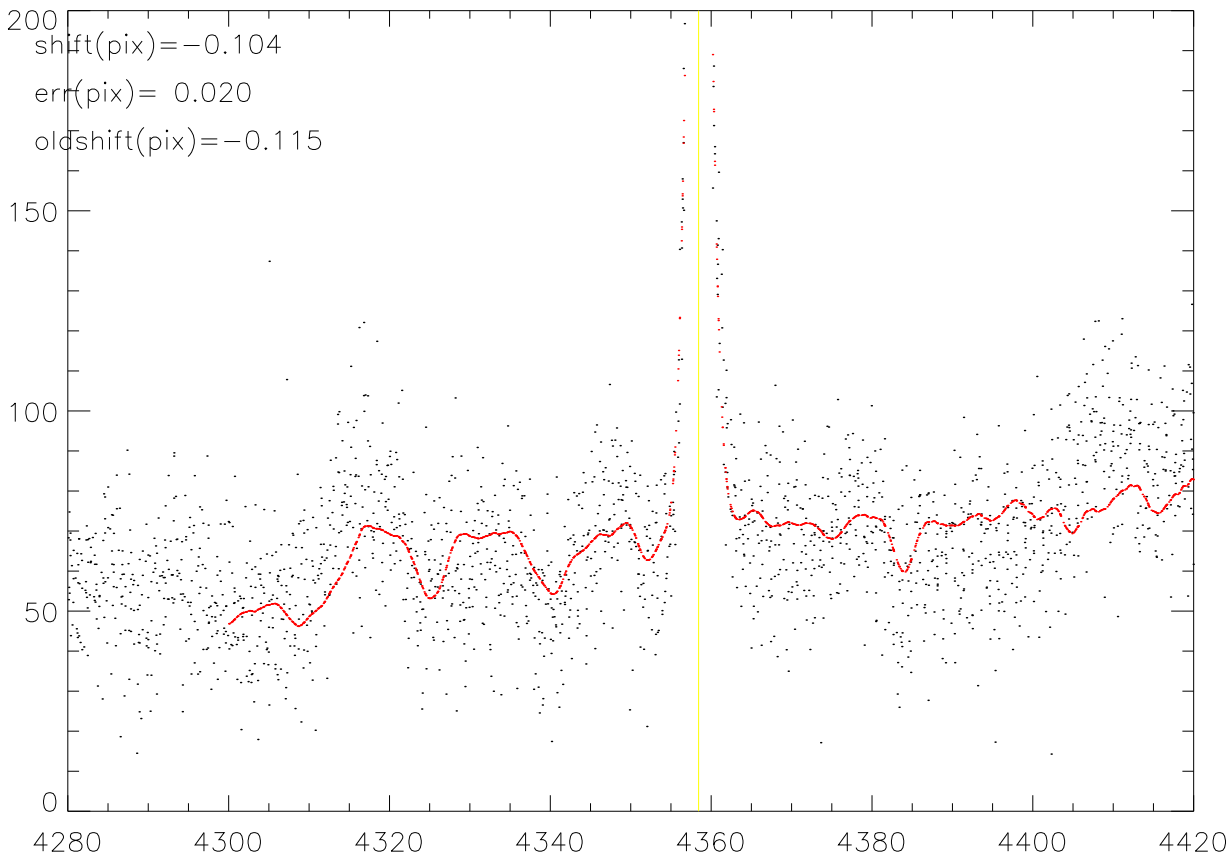

PLATE=3106 MJD=54735 Scattered Light on sdR-b1-00054983.fit
6.82
11.36
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

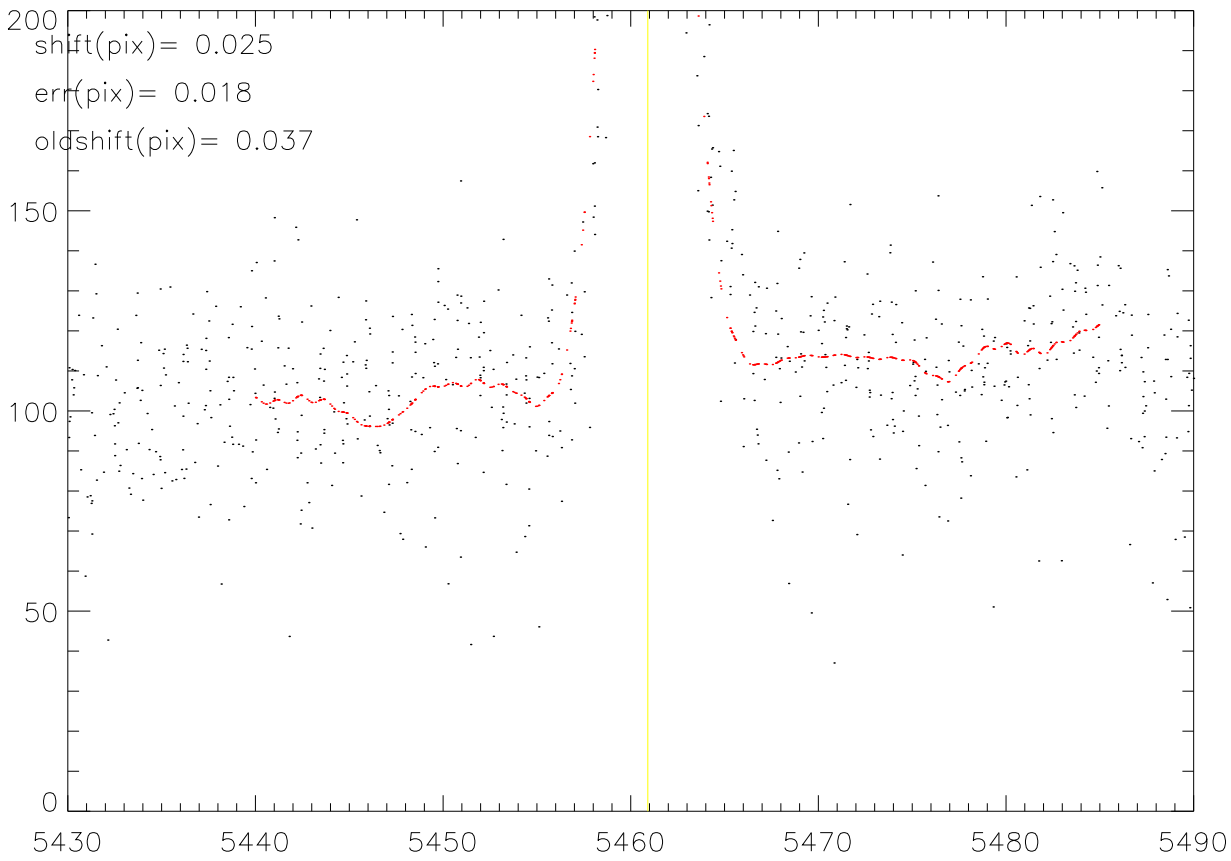

PLATE=3106 MJD=54735 Scattered Light on sdR-b1-00054983.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.026
Max value = 10.995
Wed Mar 10 11:00:00 2010

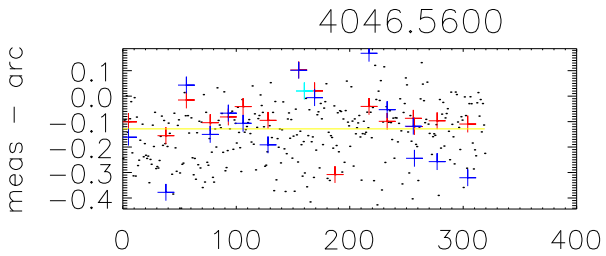

PLATE=3106 MJD=54735 Extraction chi^2 for sdR-b1-00054983.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

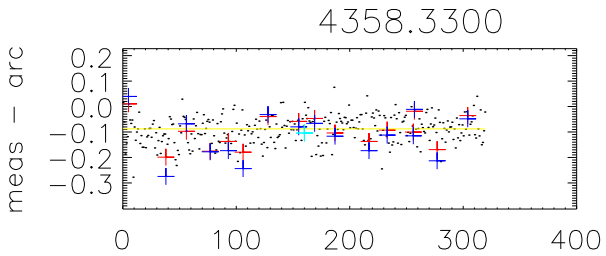

4046.5600
off: −0.14
sig: 0.041
4358.3300
off: −0.11
sig: 0.018
5460.9400
off: 0.04
sig: 0.015
5577.3390
off: 0.01
sig: 0.003
5889.9500
off: 0.08
sig: 0.006
5895.9240
off: 0.08
sig: 0.008

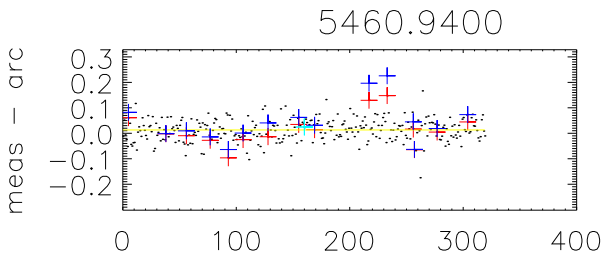

shift(pix)= 0.020
err(pix)= 0.043
oldshift(pix)=−0.140
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

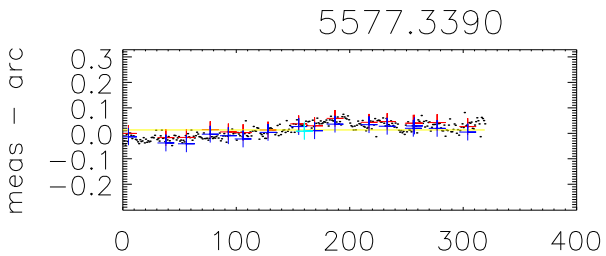

shift(pix)=−0.104
err(pix)= 0.020
oldshift(pix)=−0.115
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

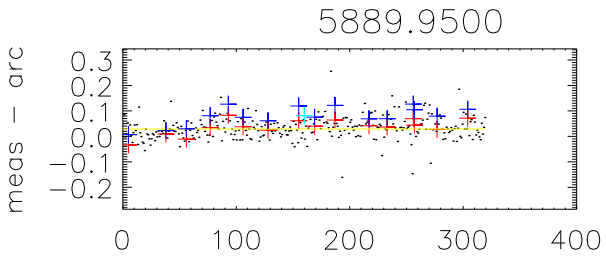

shift(pix)= 0.025
err(pix)= 0.018
oldshift(pix)= 0.037
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

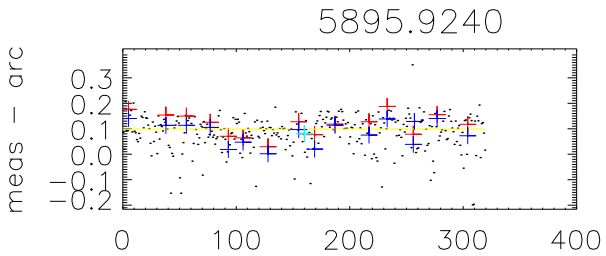

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

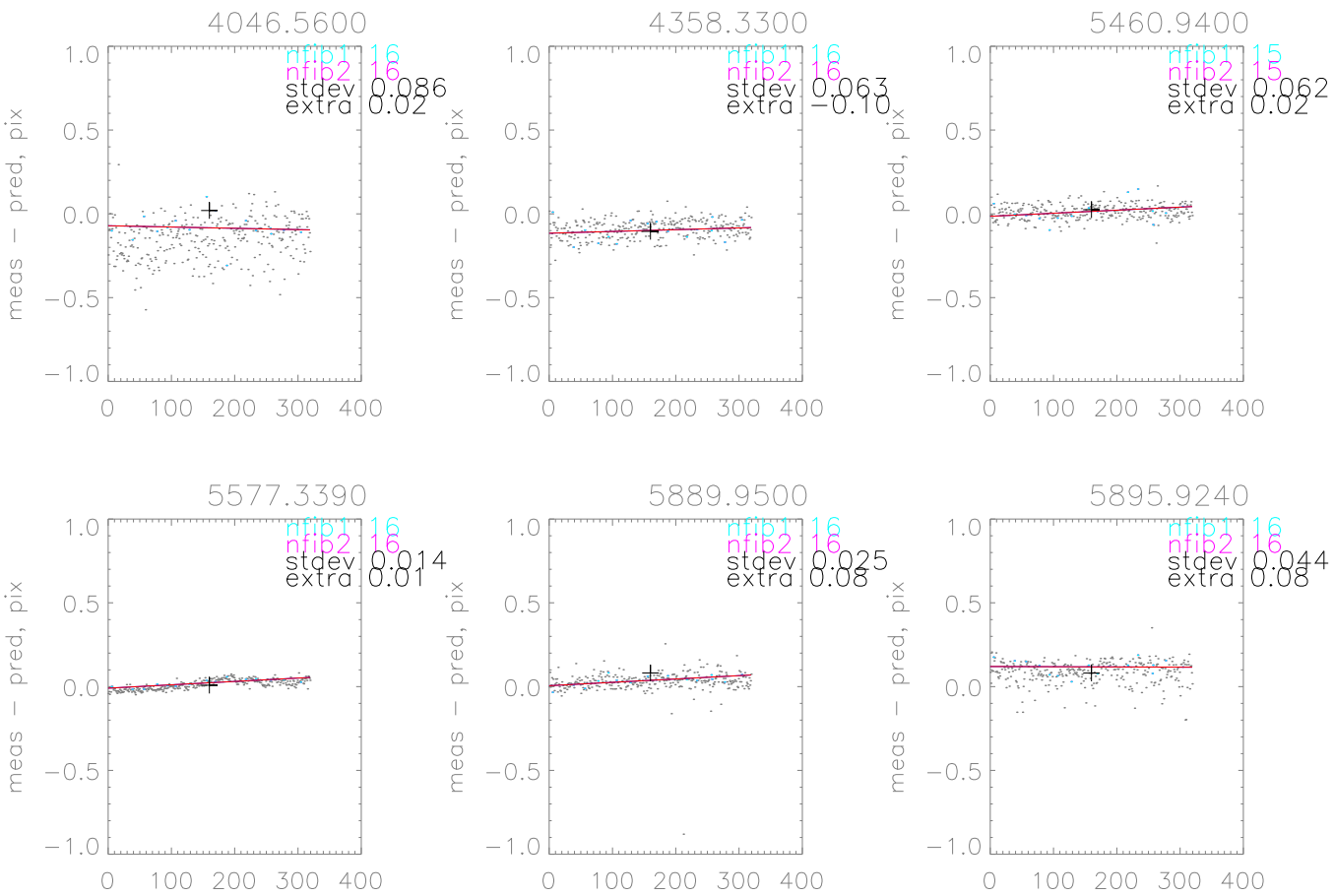

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

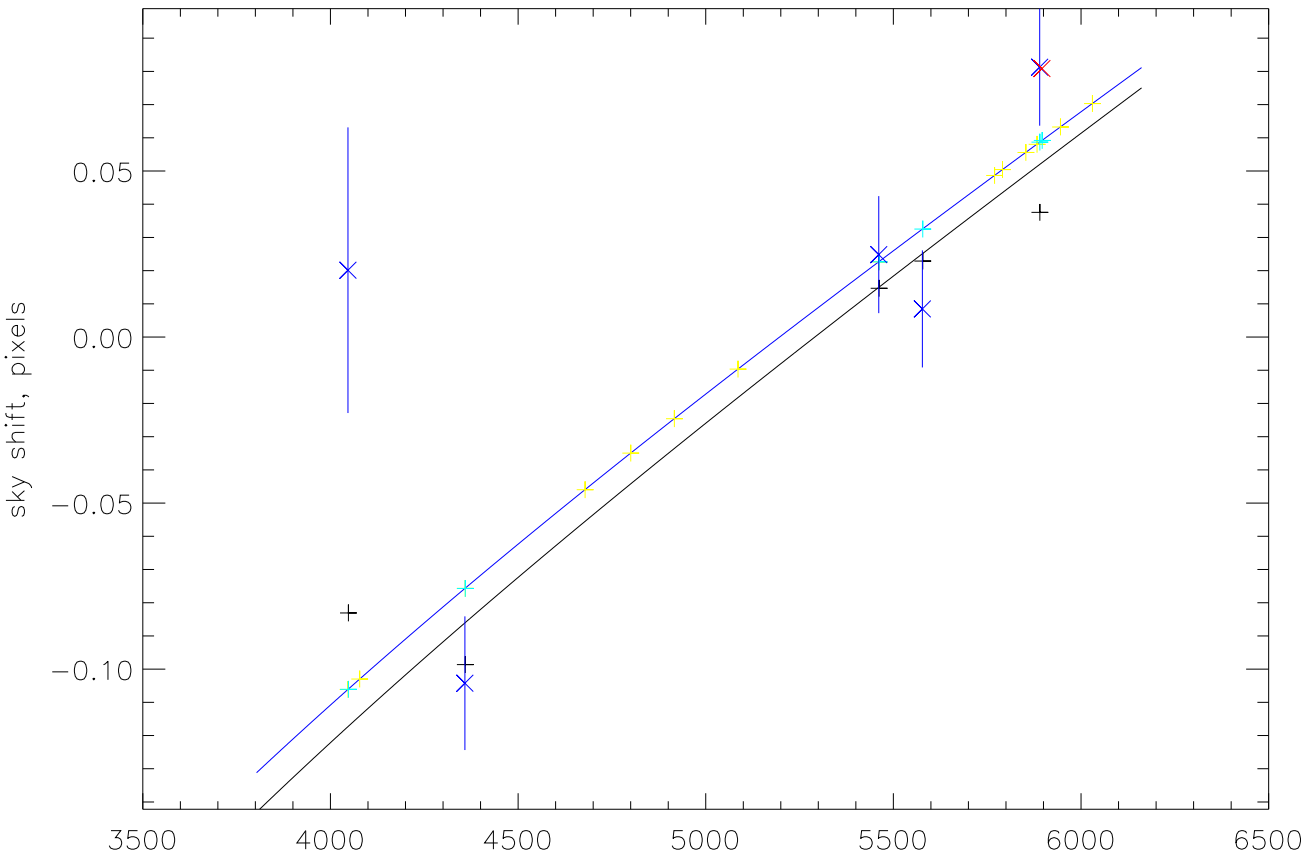

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

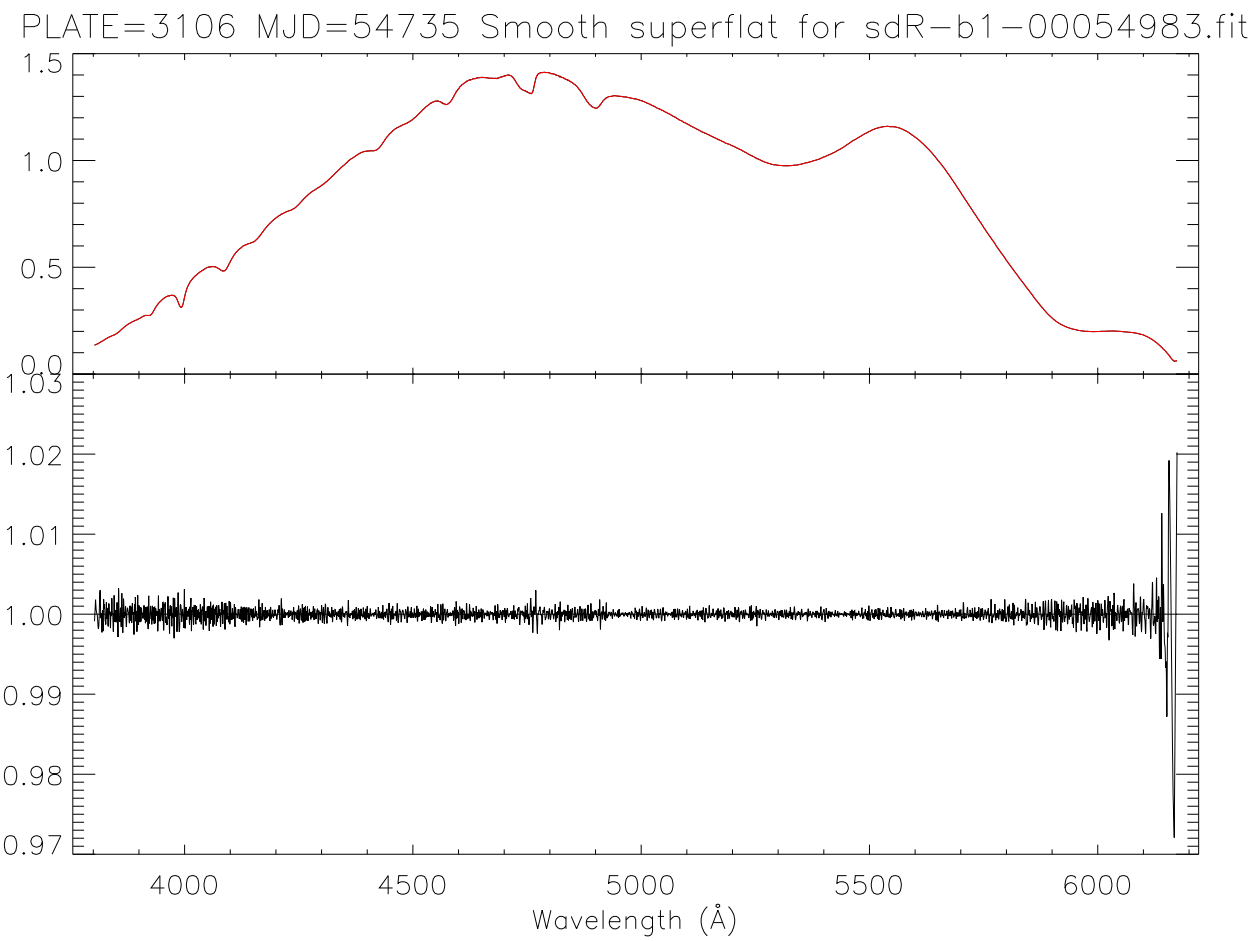

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

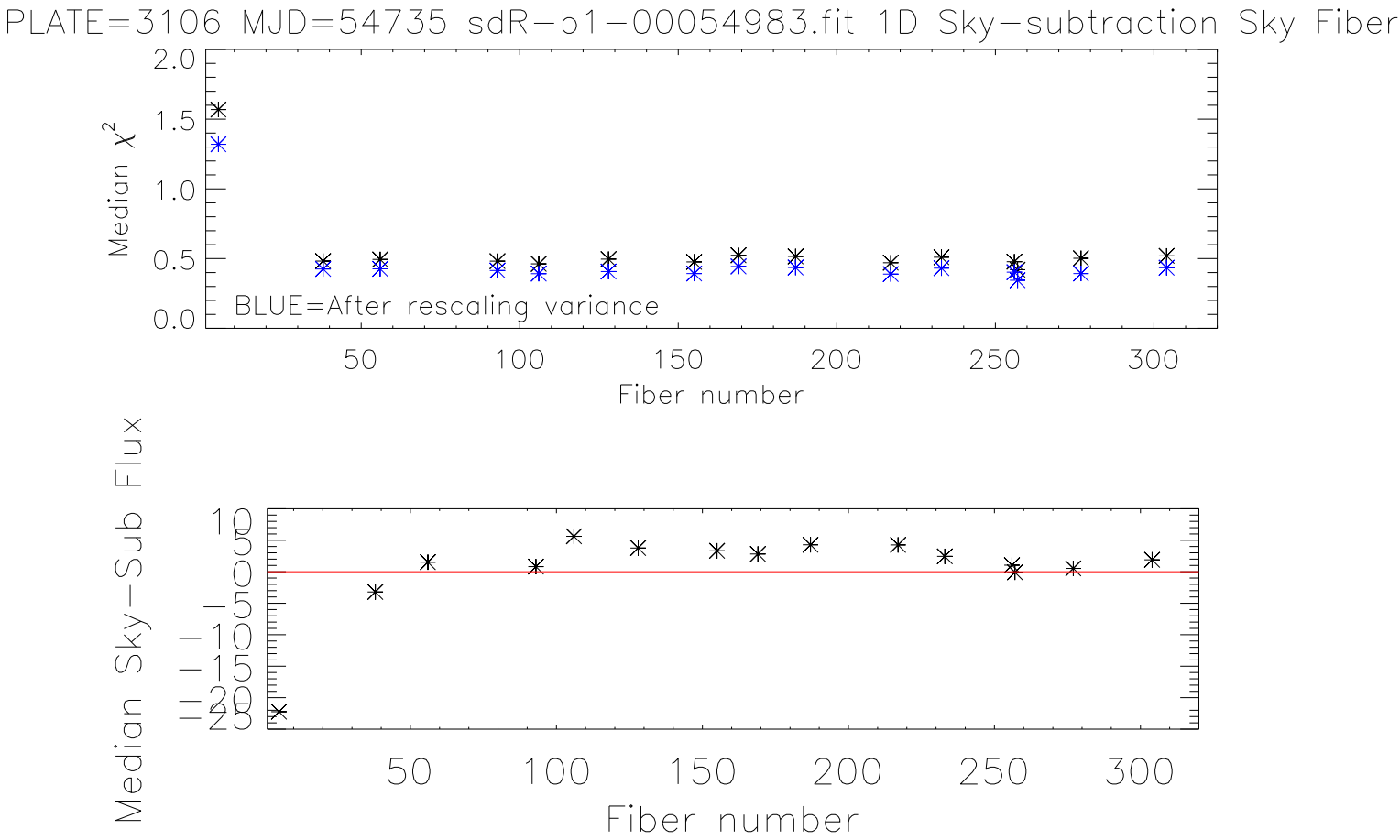

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

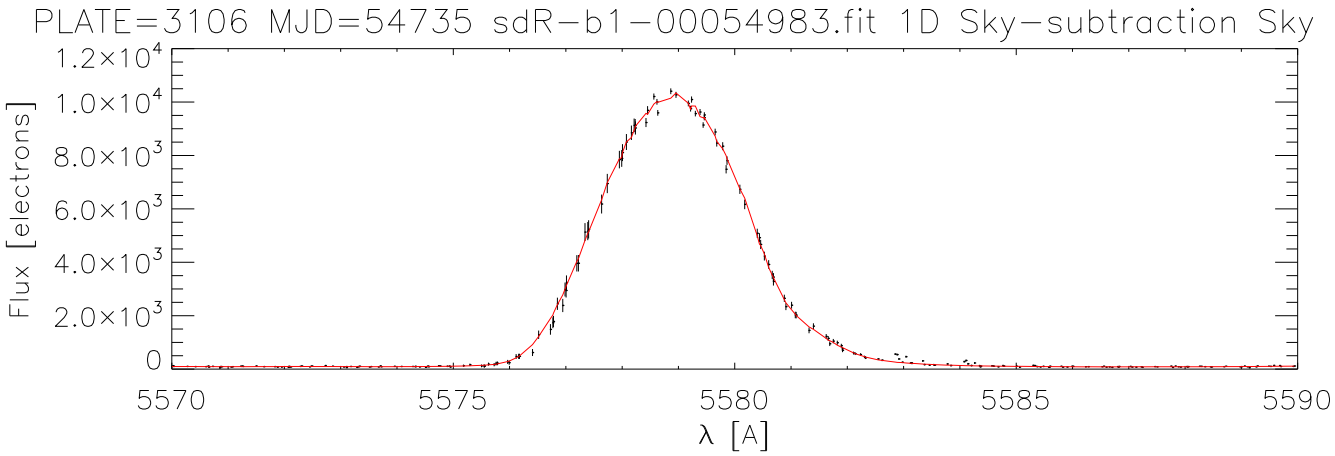

4046.5600
nfib1 16
nfib2 16
stdev 0.086
extra 0.02
4358.3300
nfib1 16
nfib2 16
stdev 0.063
extra −0.10
5460.9400
nfib1 15
nfib2 15
stdev 0.062
extra 0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra 0.08
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

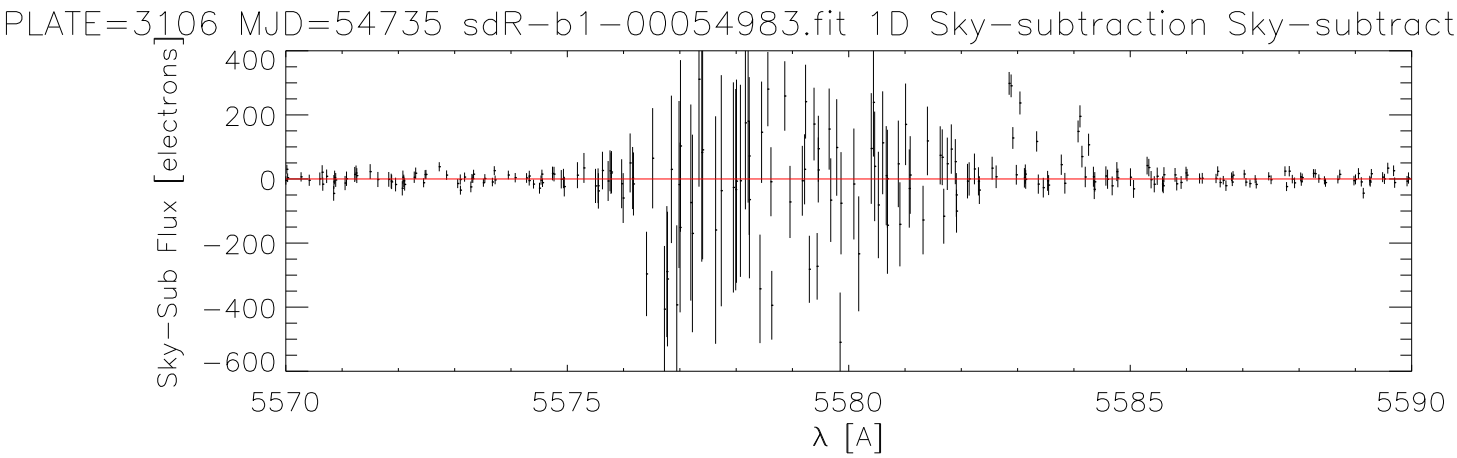

sky shift, pixels
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

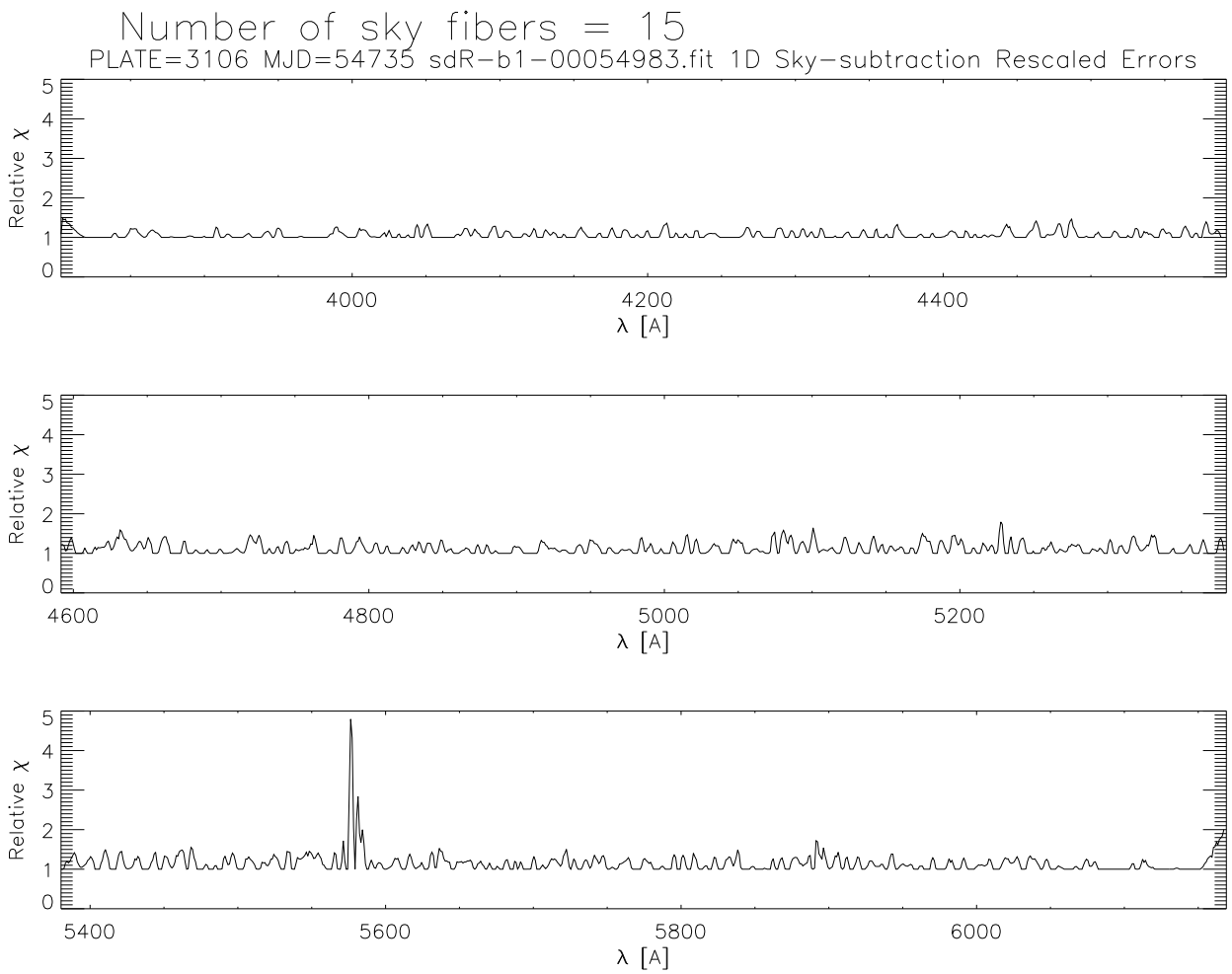
es= −0.0001

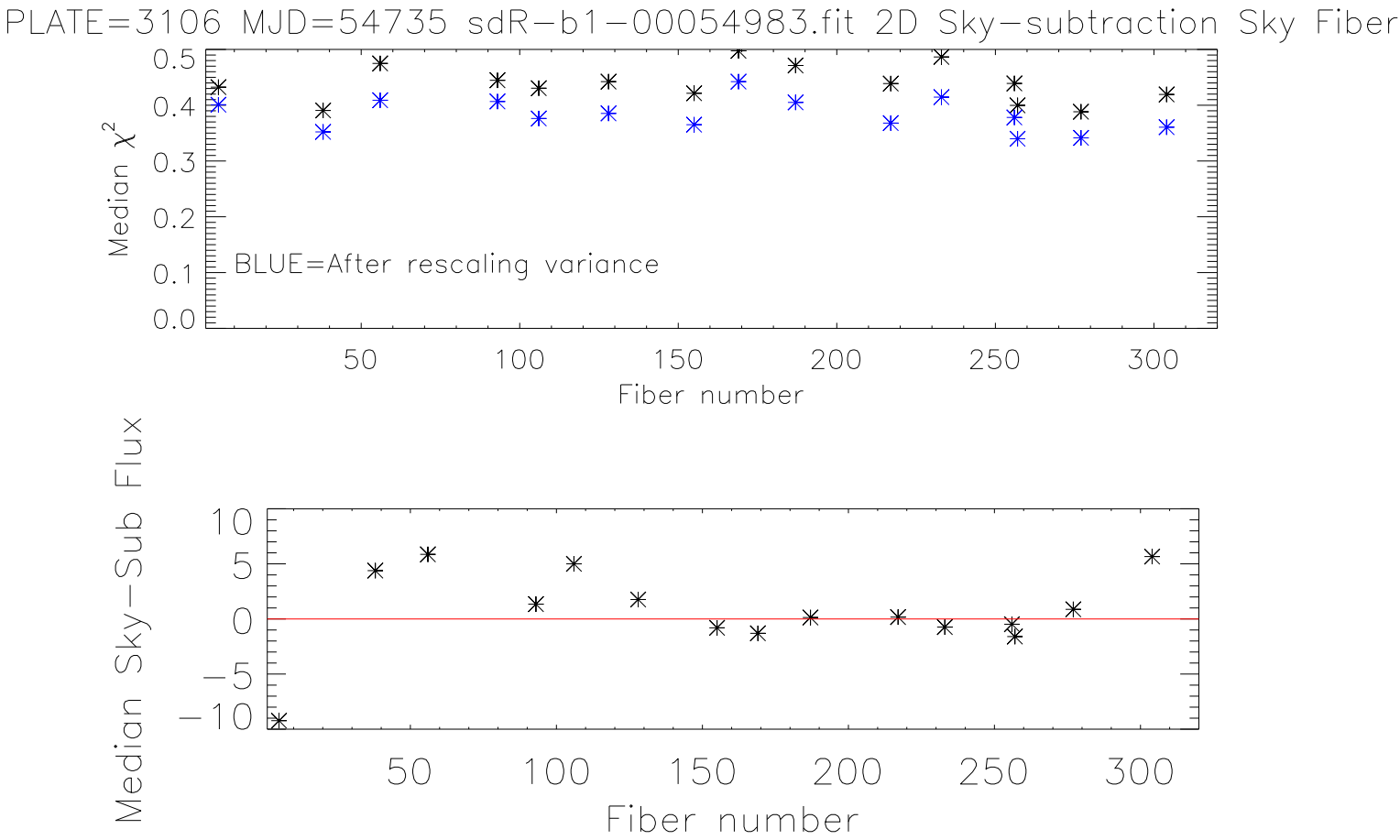

PLATE=3106 MJD=54735 Smooth superflat for sdR−b1−00054983.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

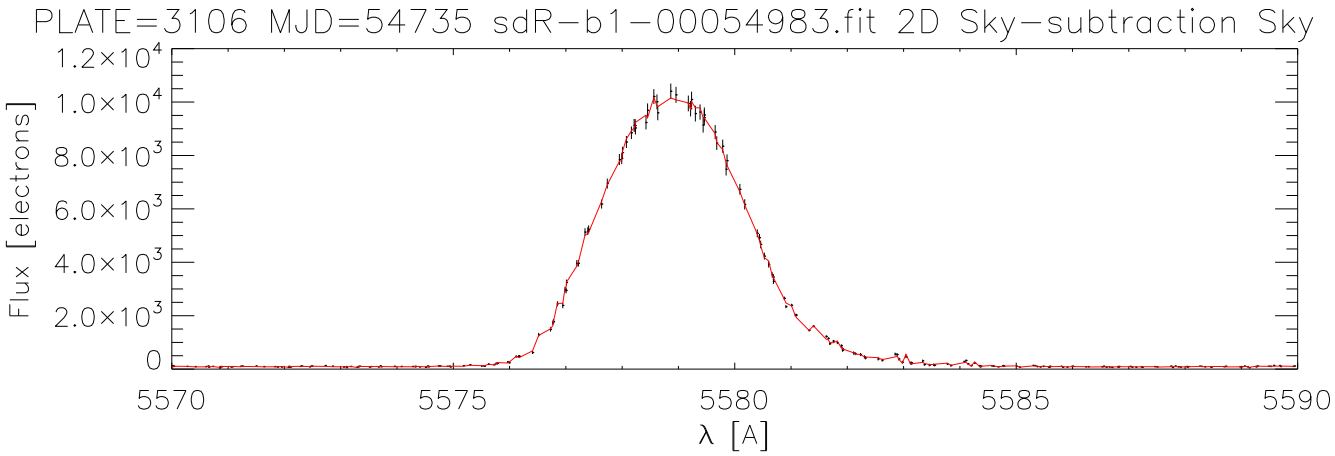

PLATE=3106 MJD=54735 sdR-b1-00054983.fit 1D Sky-subtraction Sky Fiber
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
-25
50
100
150
200
250
300
Fiber number

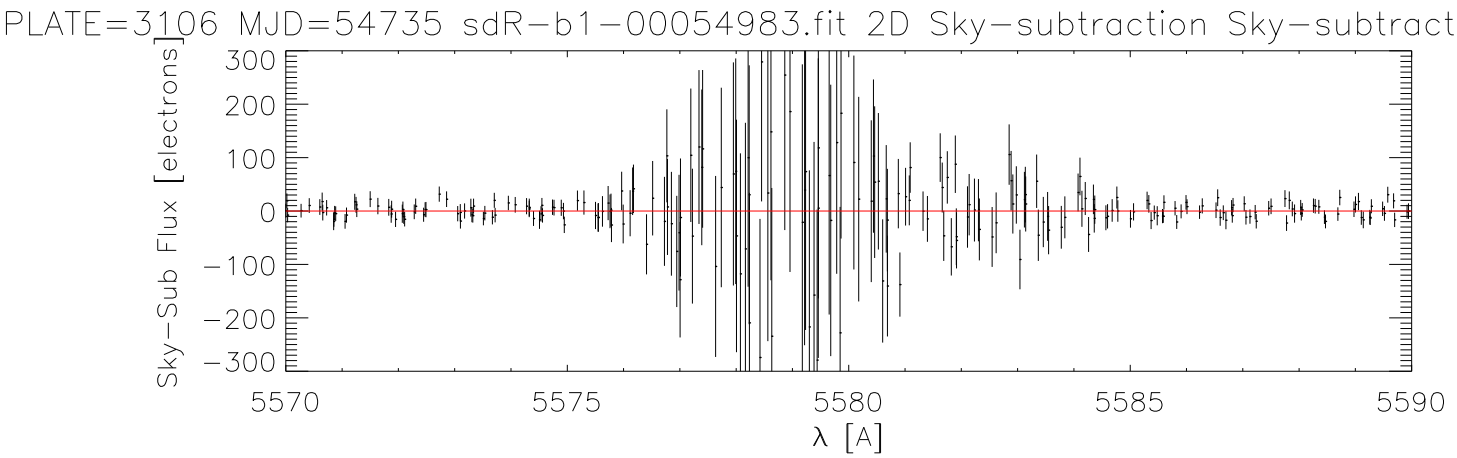

PLATE=3106 MJD=54735 sdR-b1-00054983.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

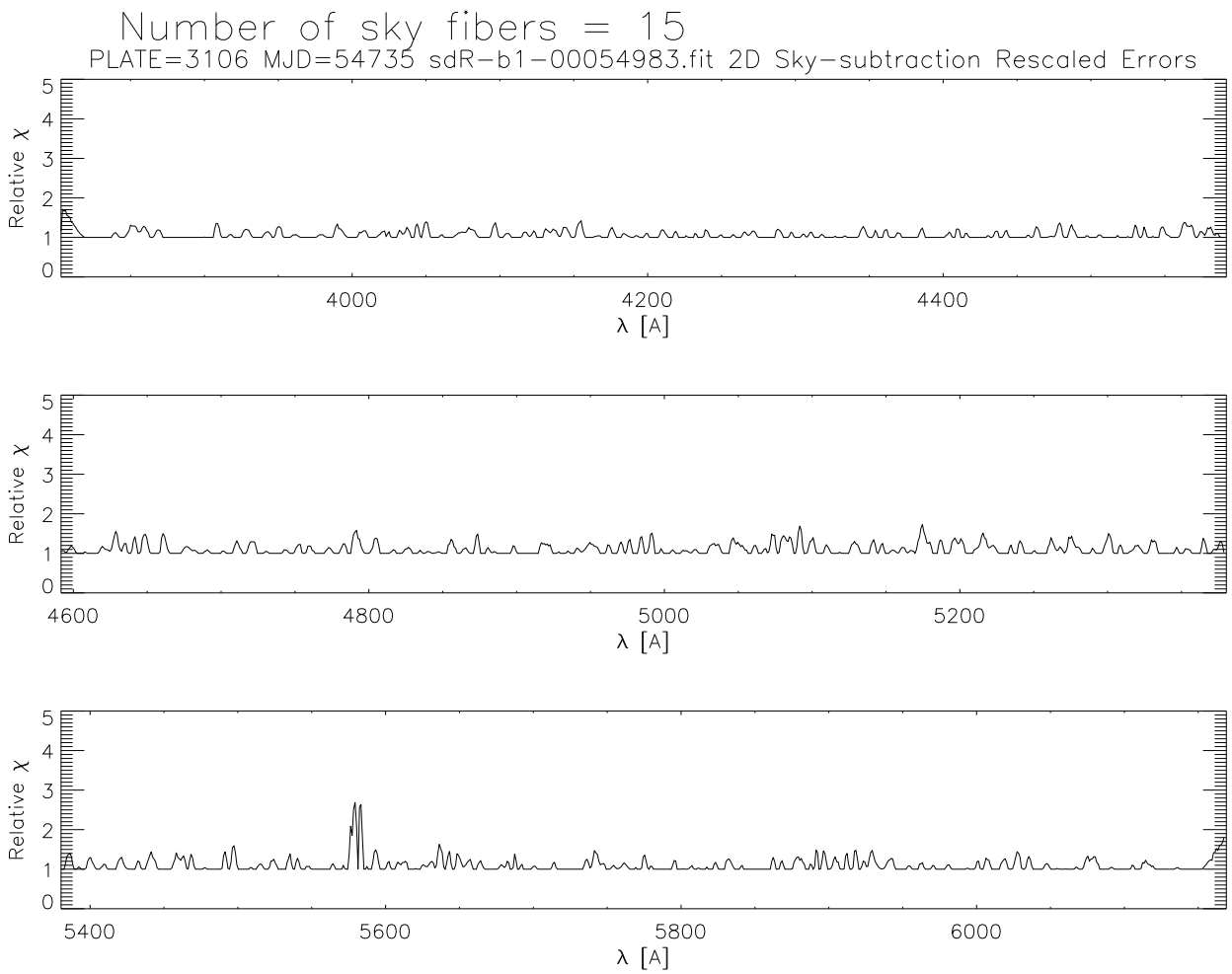

PLATE=3106 MJD=54735 sdR-b1-00054983.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

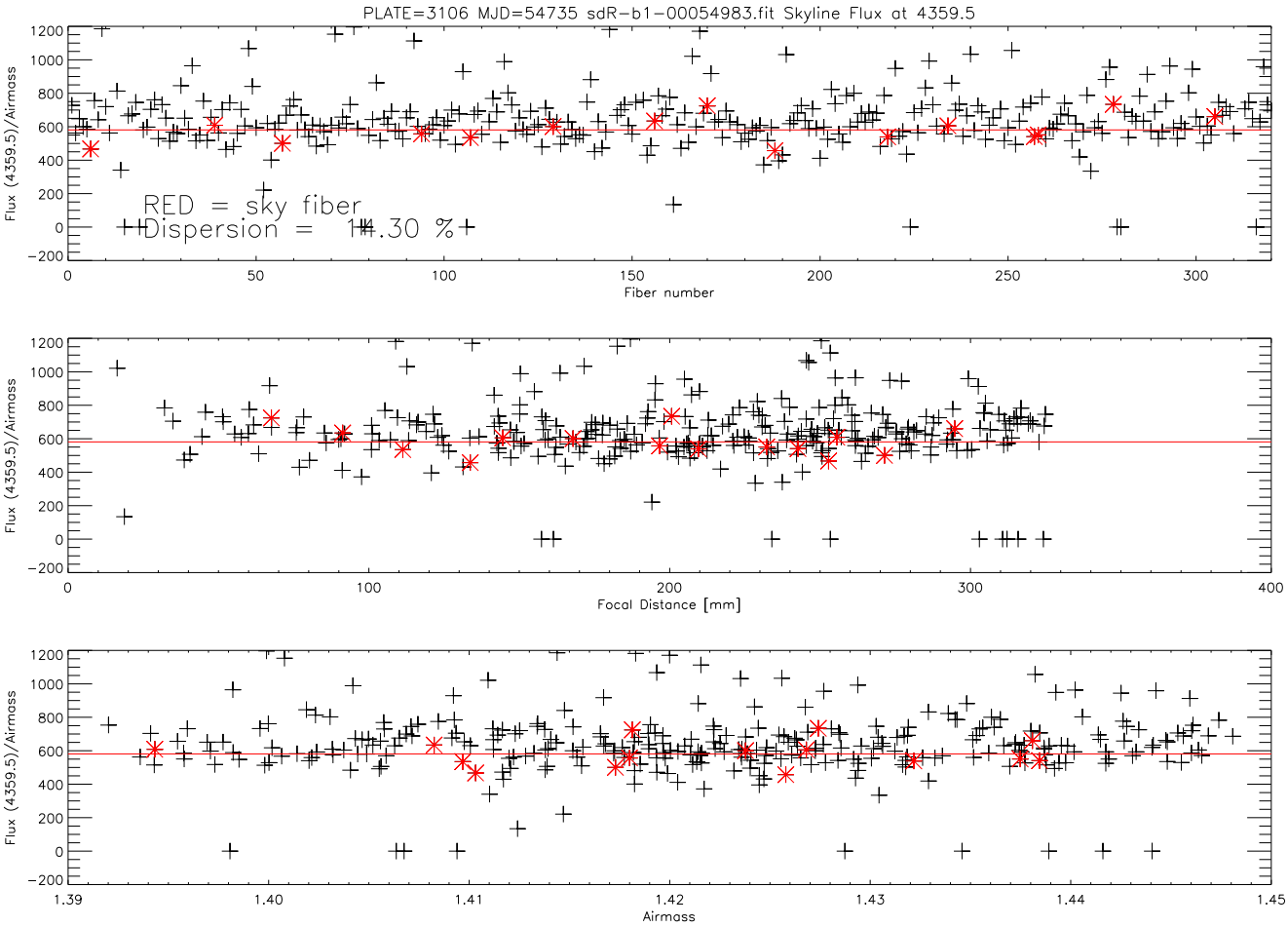

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b1-00054983.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

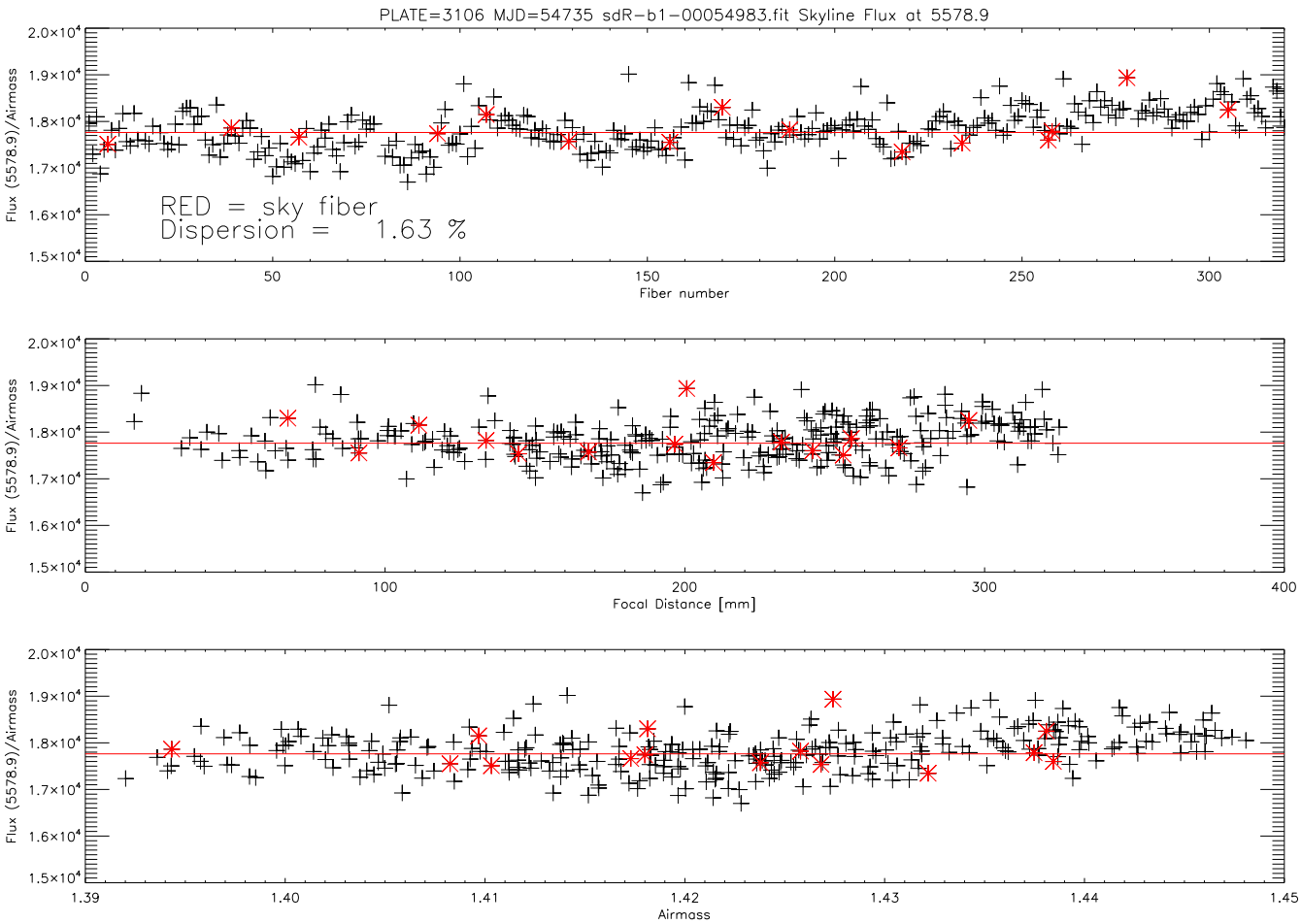

PLATE=3106 MJD=54735 sdR-b1-00054983.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

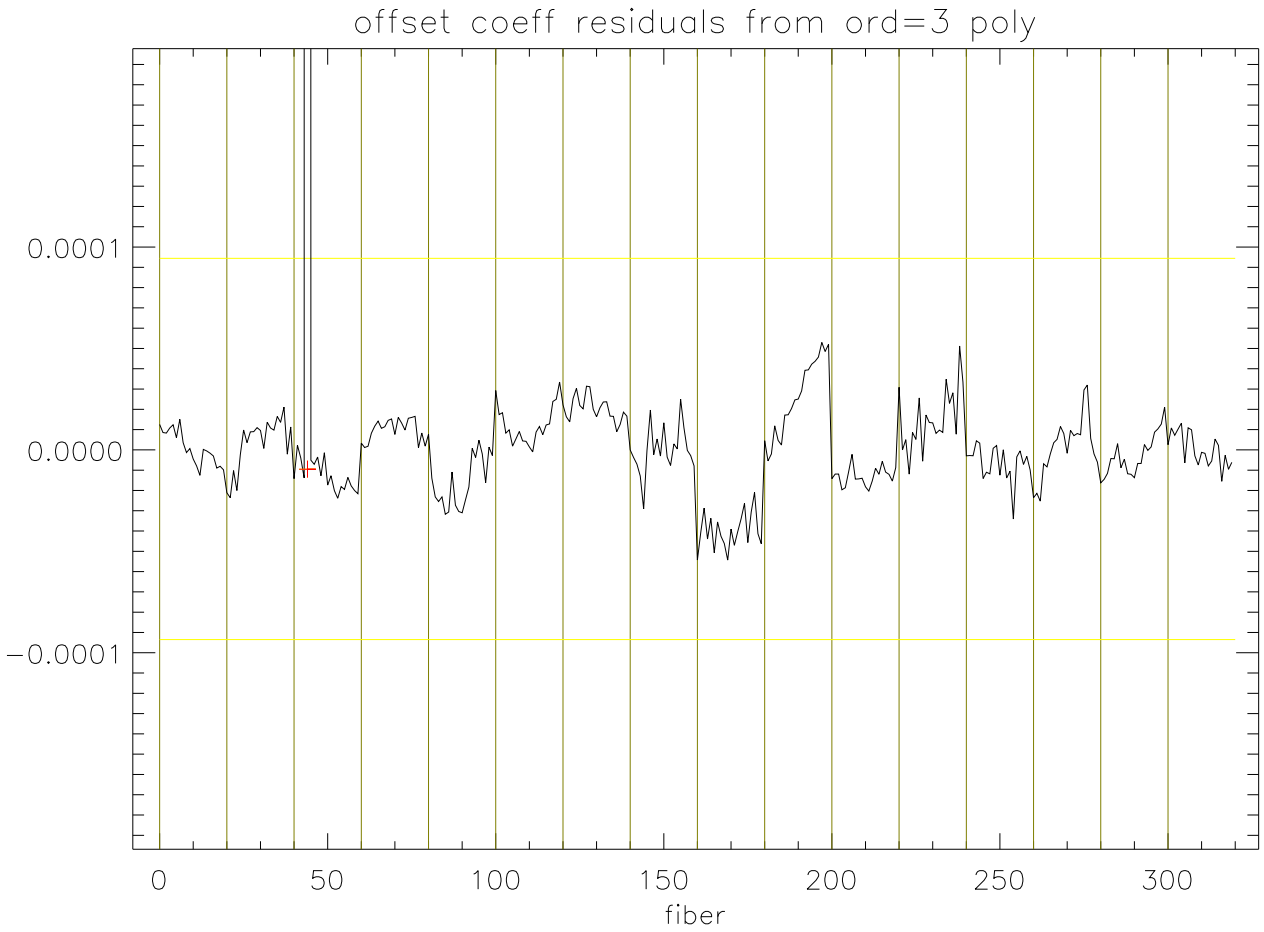

PLATE=3106 MJD=54735 sdR-b1-00054983.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

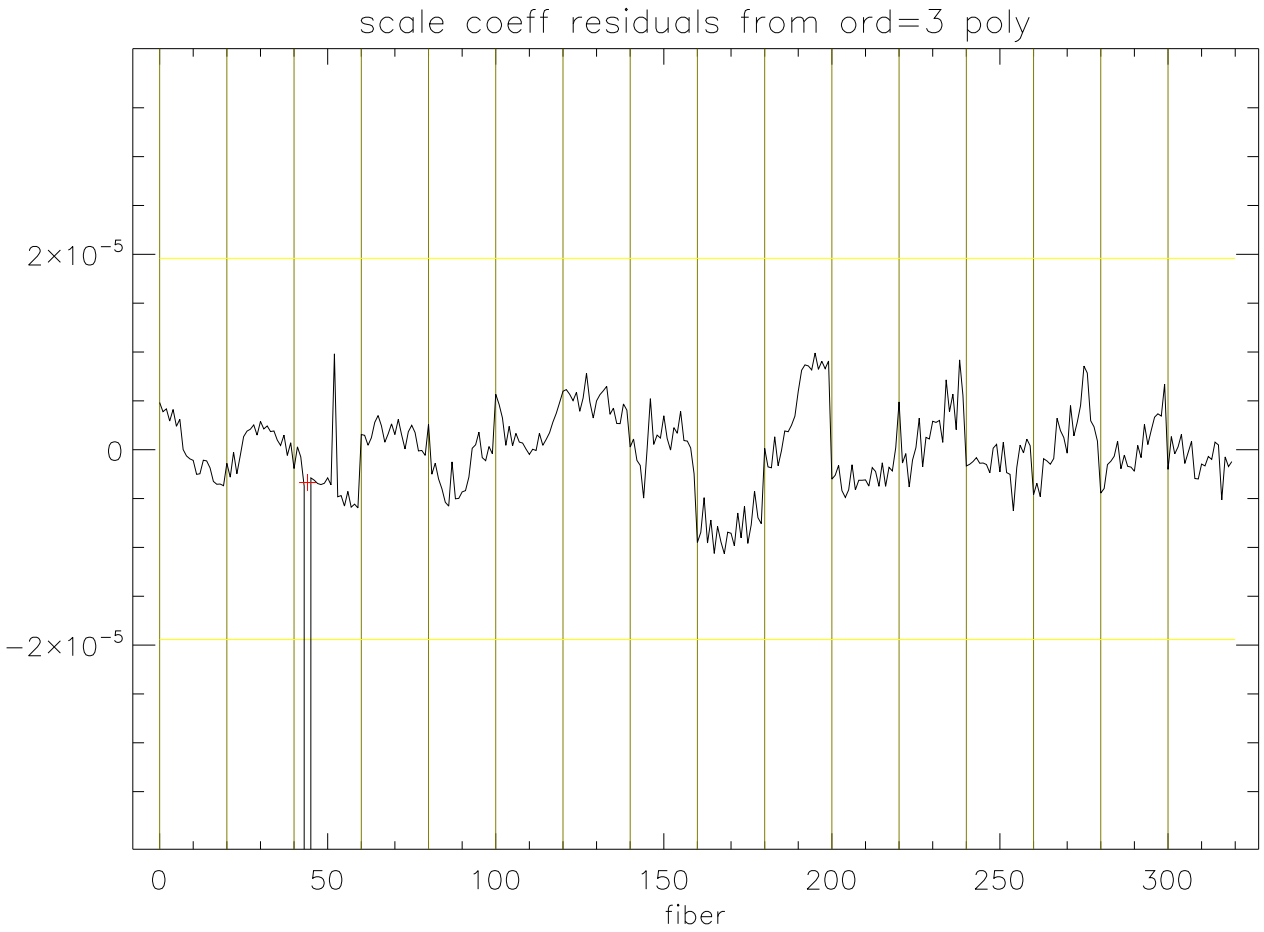

PLATE=3106 MJD=54735 sdR-b1-00054983.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

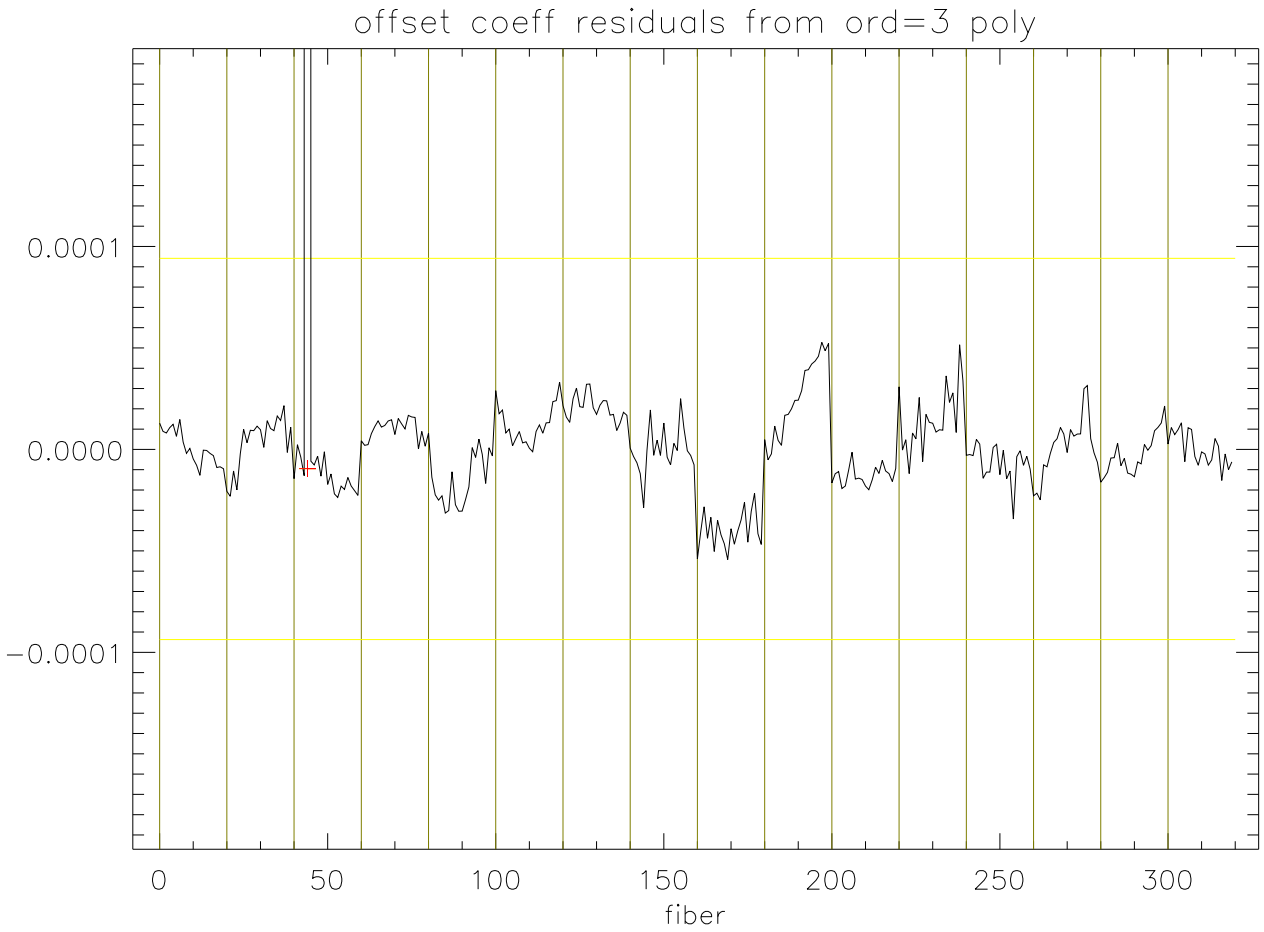

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b1-00054983.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

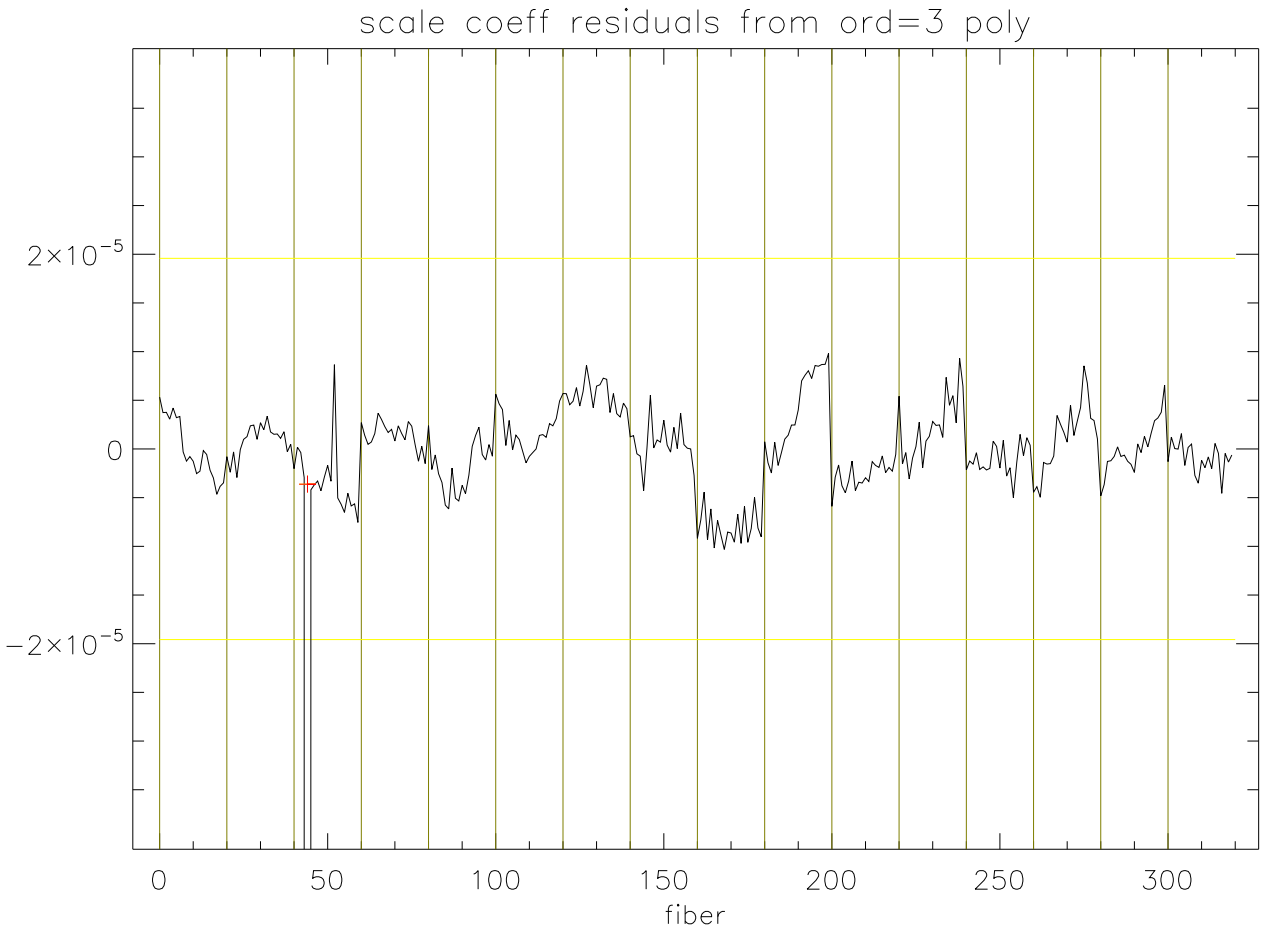

PLATE=3106 MJD=54735 sdR-b1-00054983.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.30 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

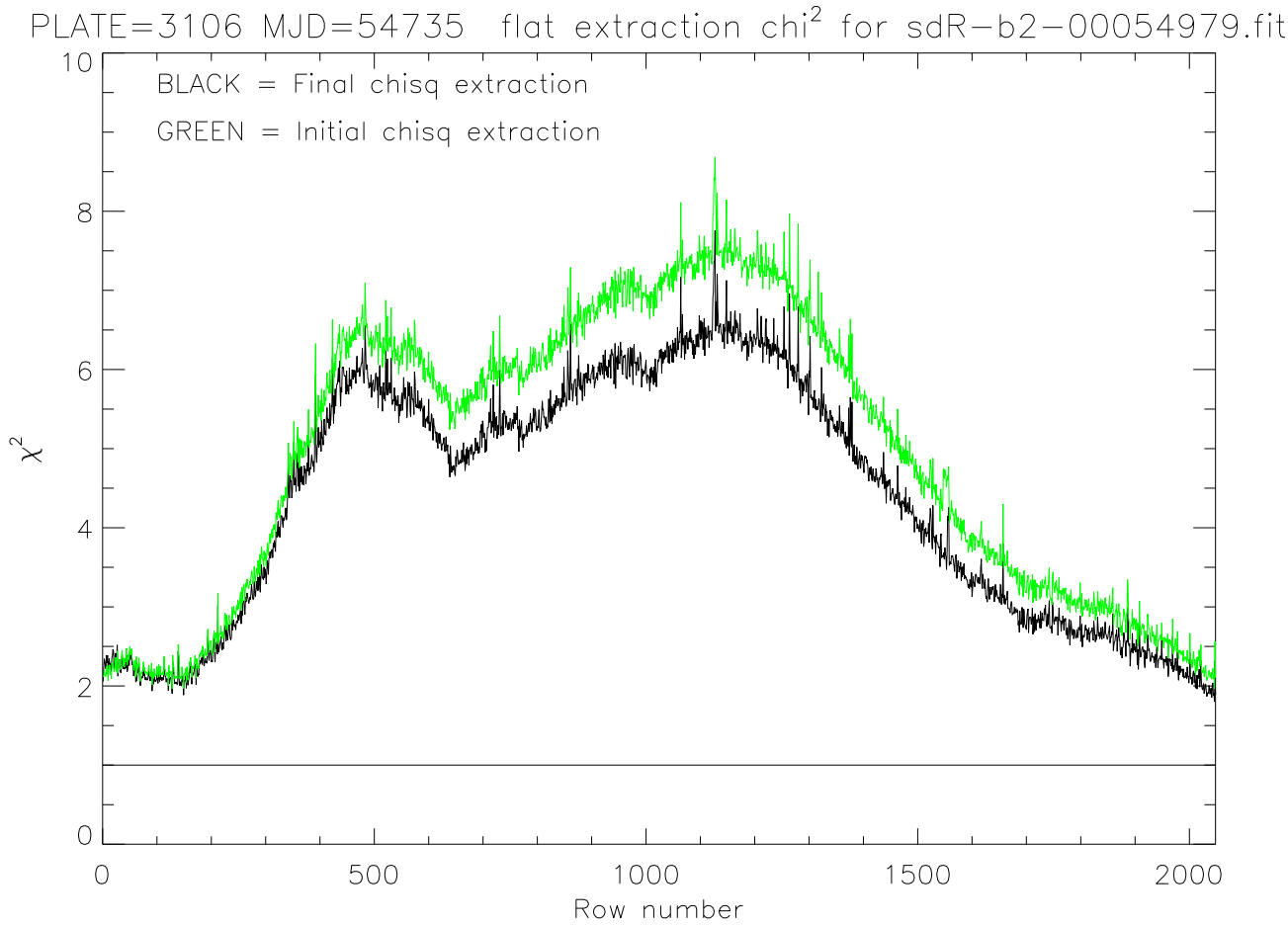

PLATE=3106 MJD=54735 sdR-b1-00054983.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.63 %
Fiber number
Focal Distance [mm]
Airmass

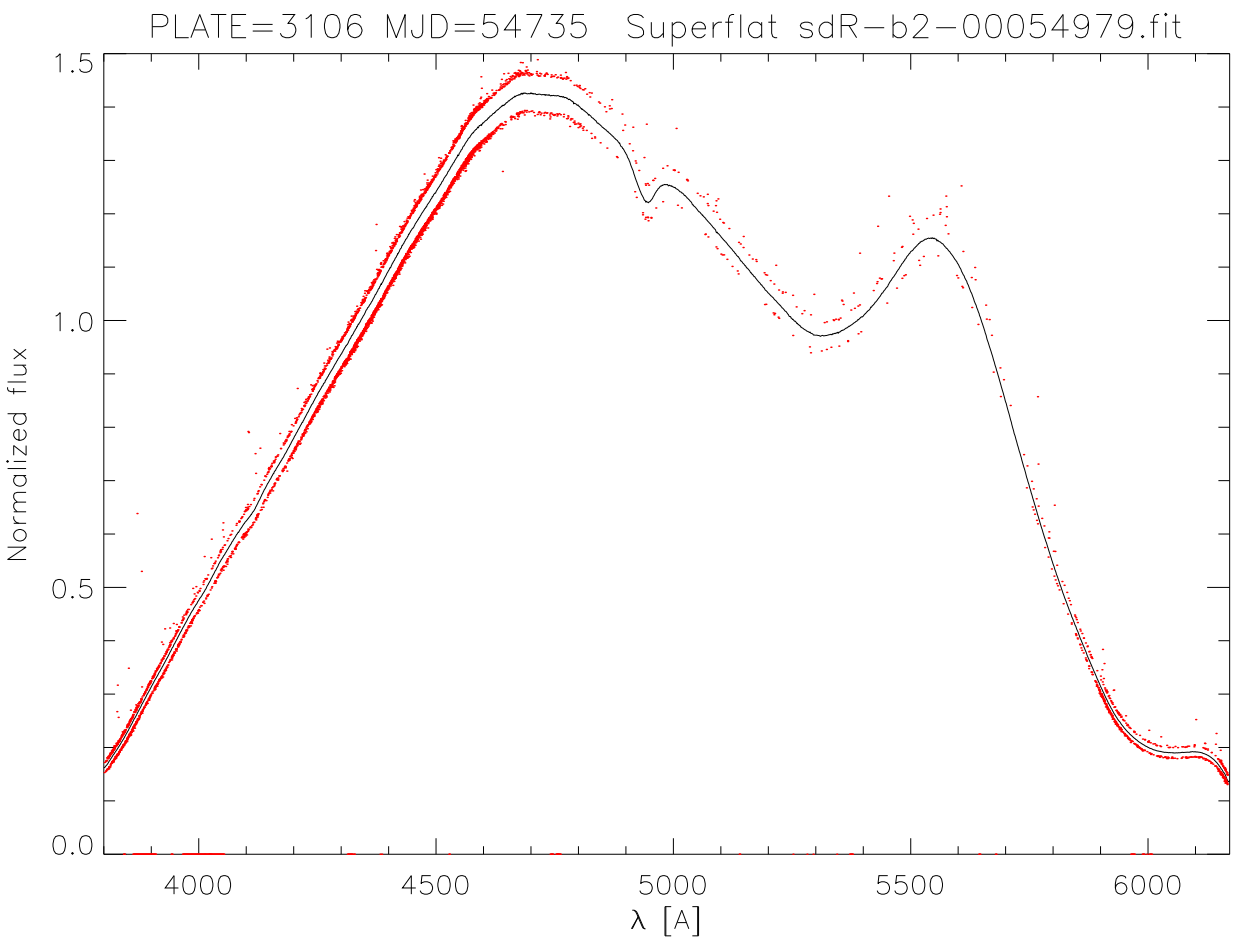

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

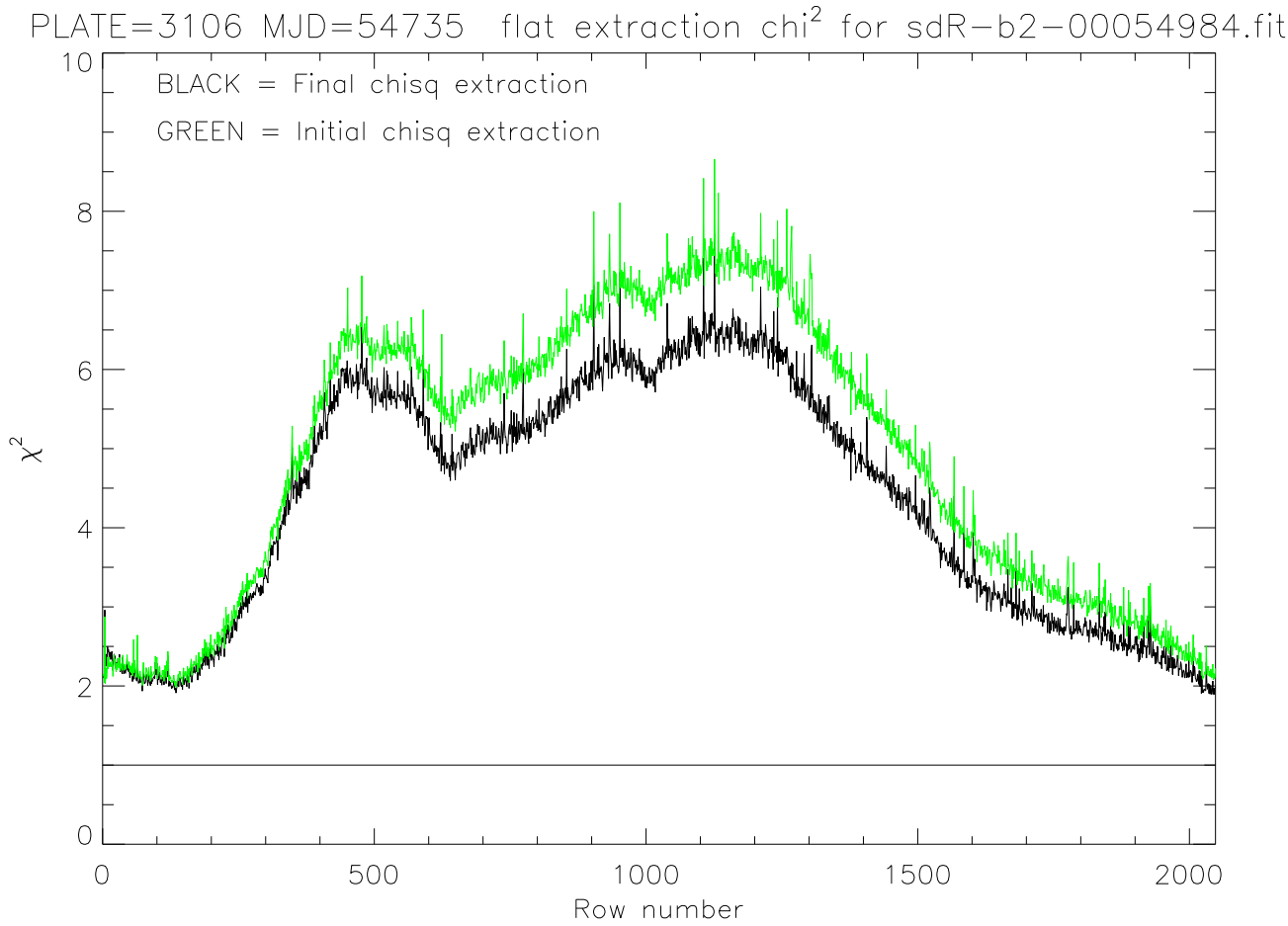

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

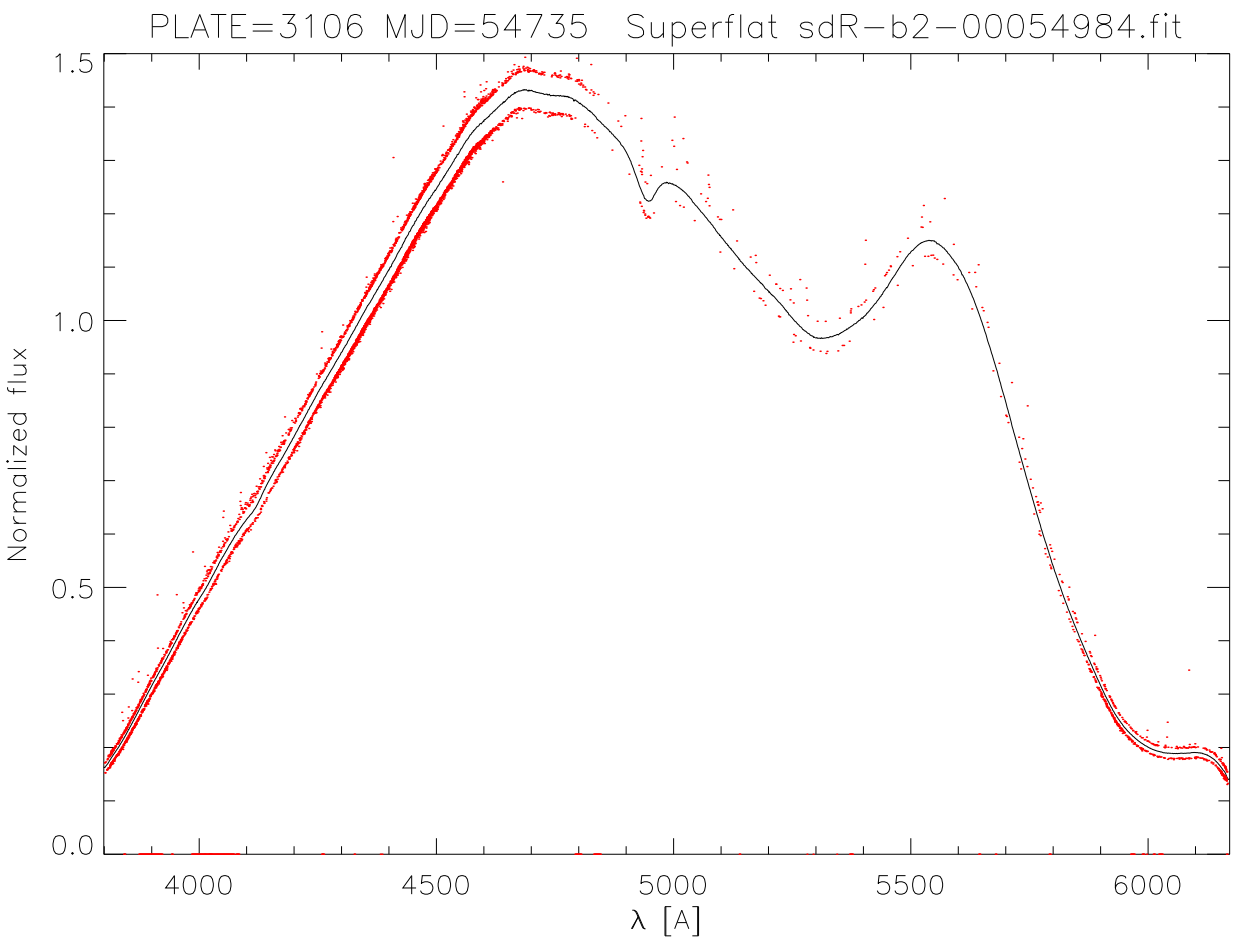

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

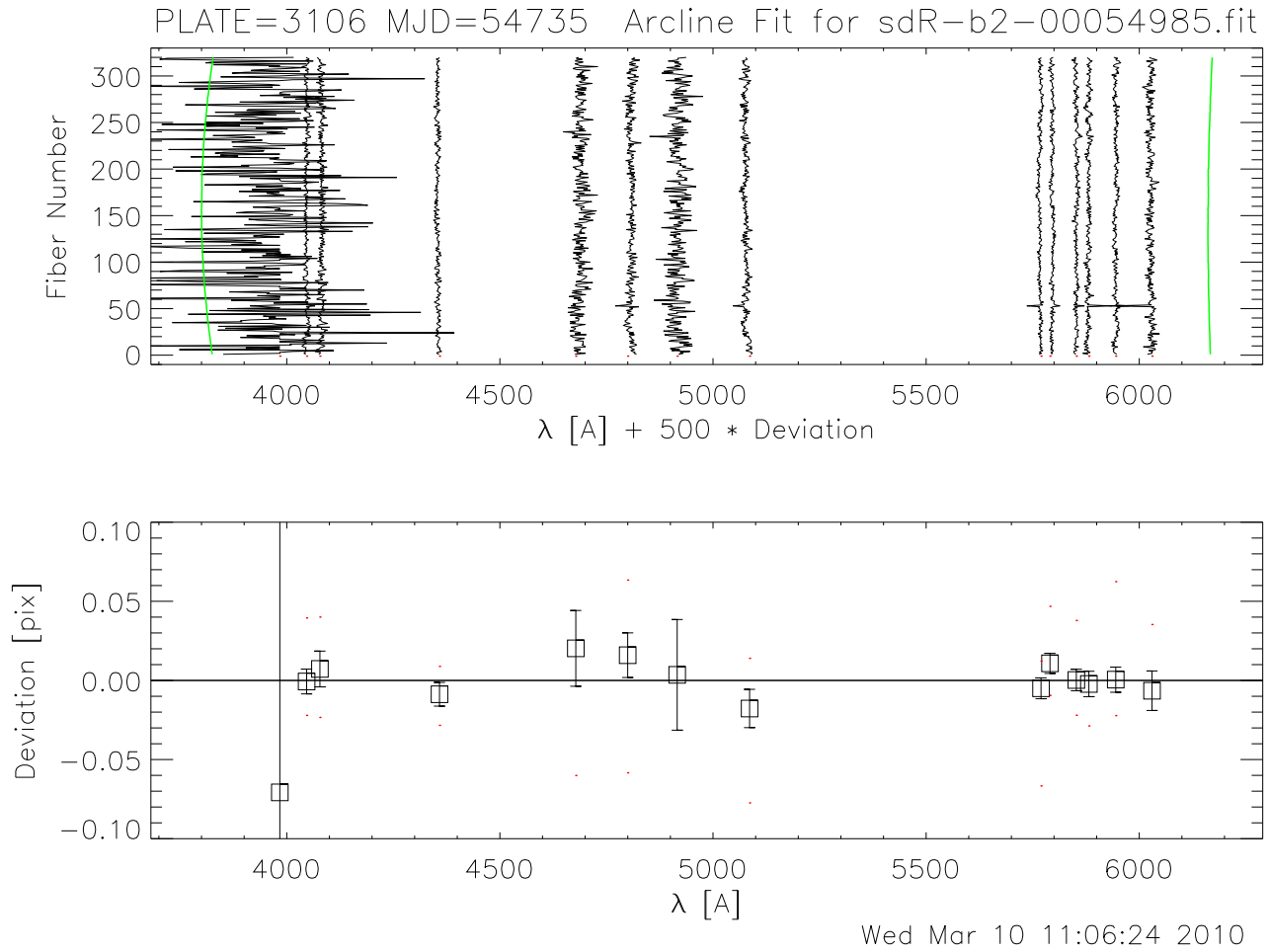

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=3106 MJD=54735 flat extraction chi^2 for sdR−b2−00054979.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=3106 MJD=54735 Superflat sdR-b2-00054979.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]


PLATE=3106 MJD=54735 flat extraction chi^2 for sdR−b2−00054984.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=3106 MJD=54735 Superflat sdR-b2-00054984.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]


PLATE=3106 MJD=54735 Arcline Fit for sdR-b2-00054985.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]
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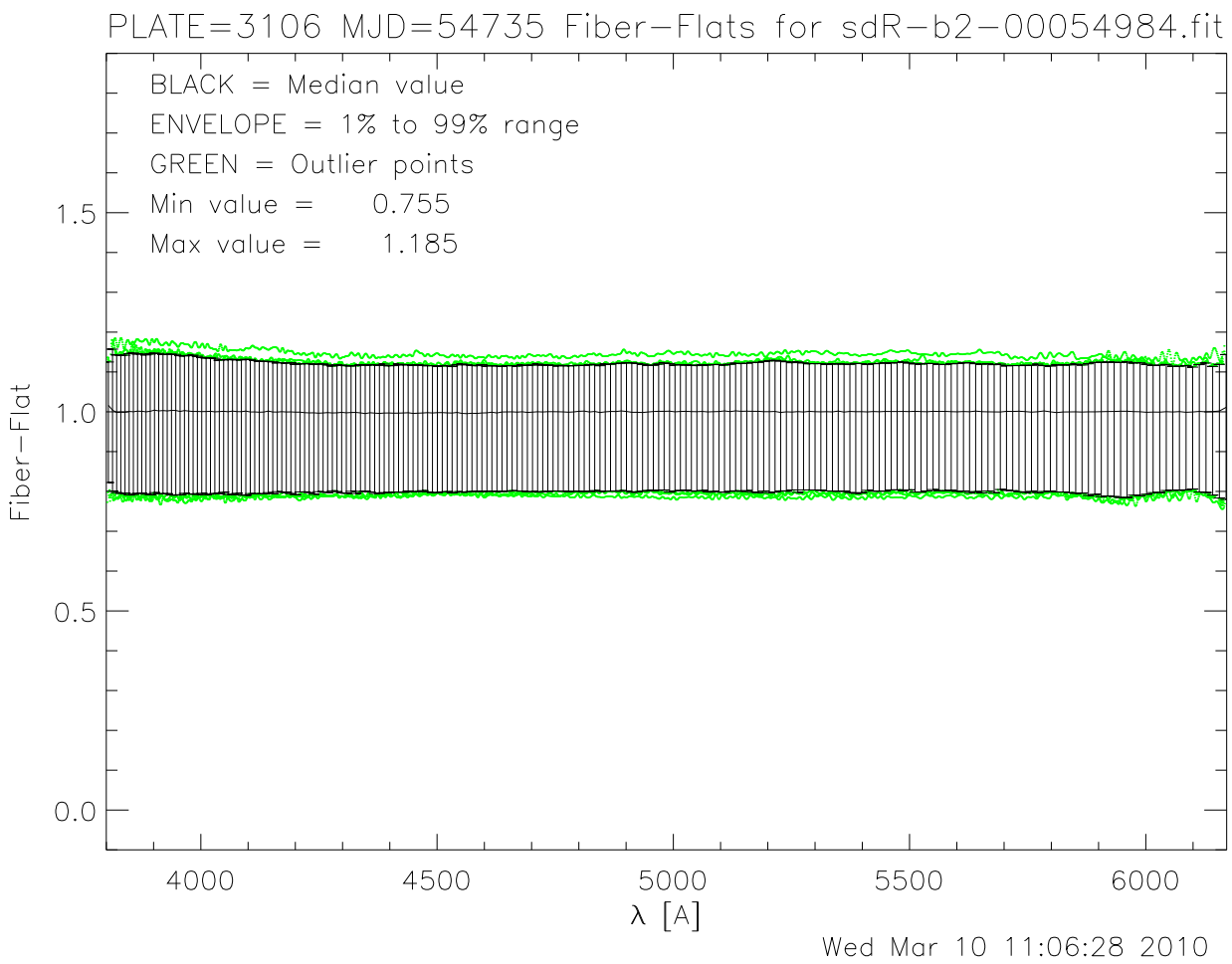
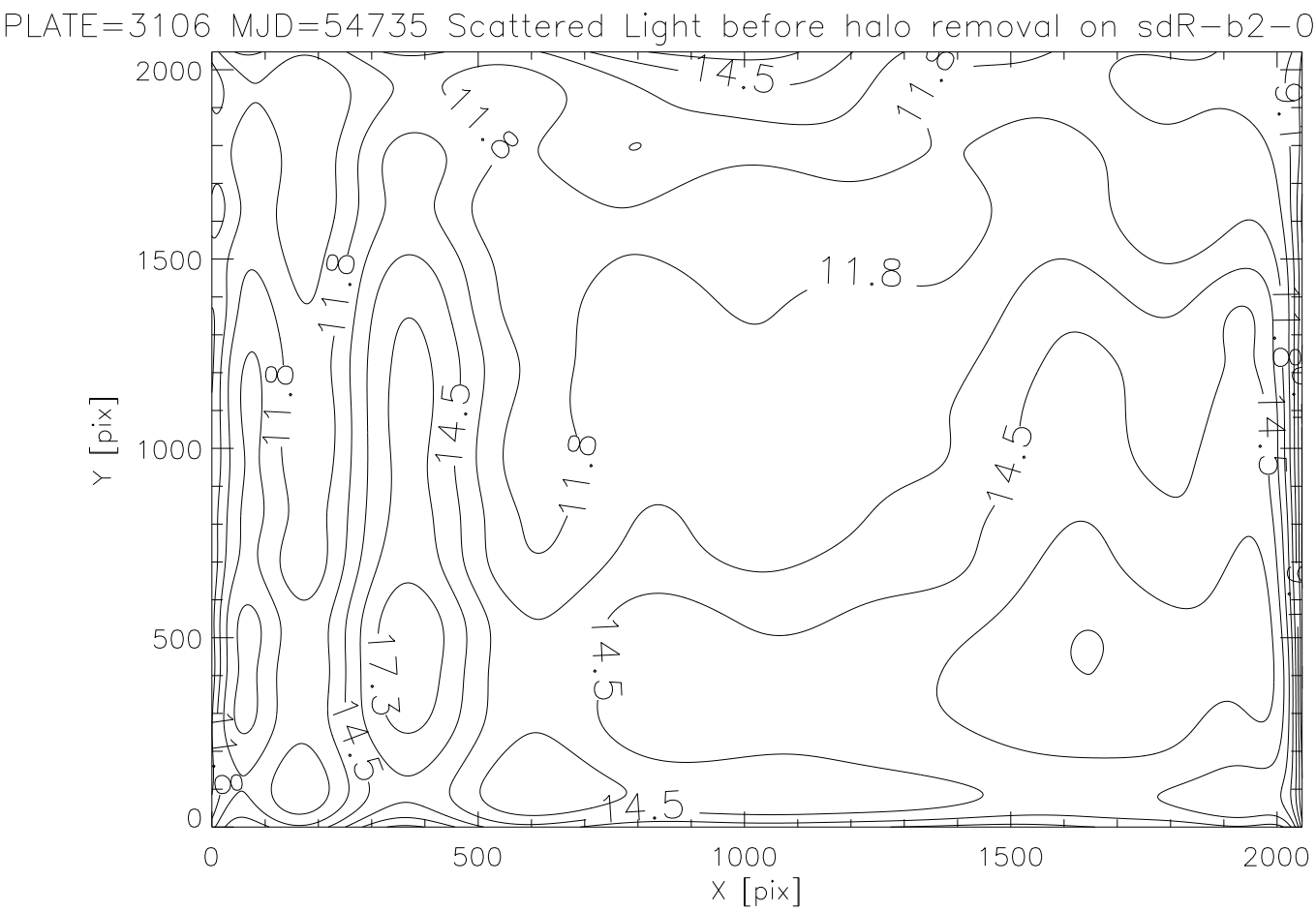
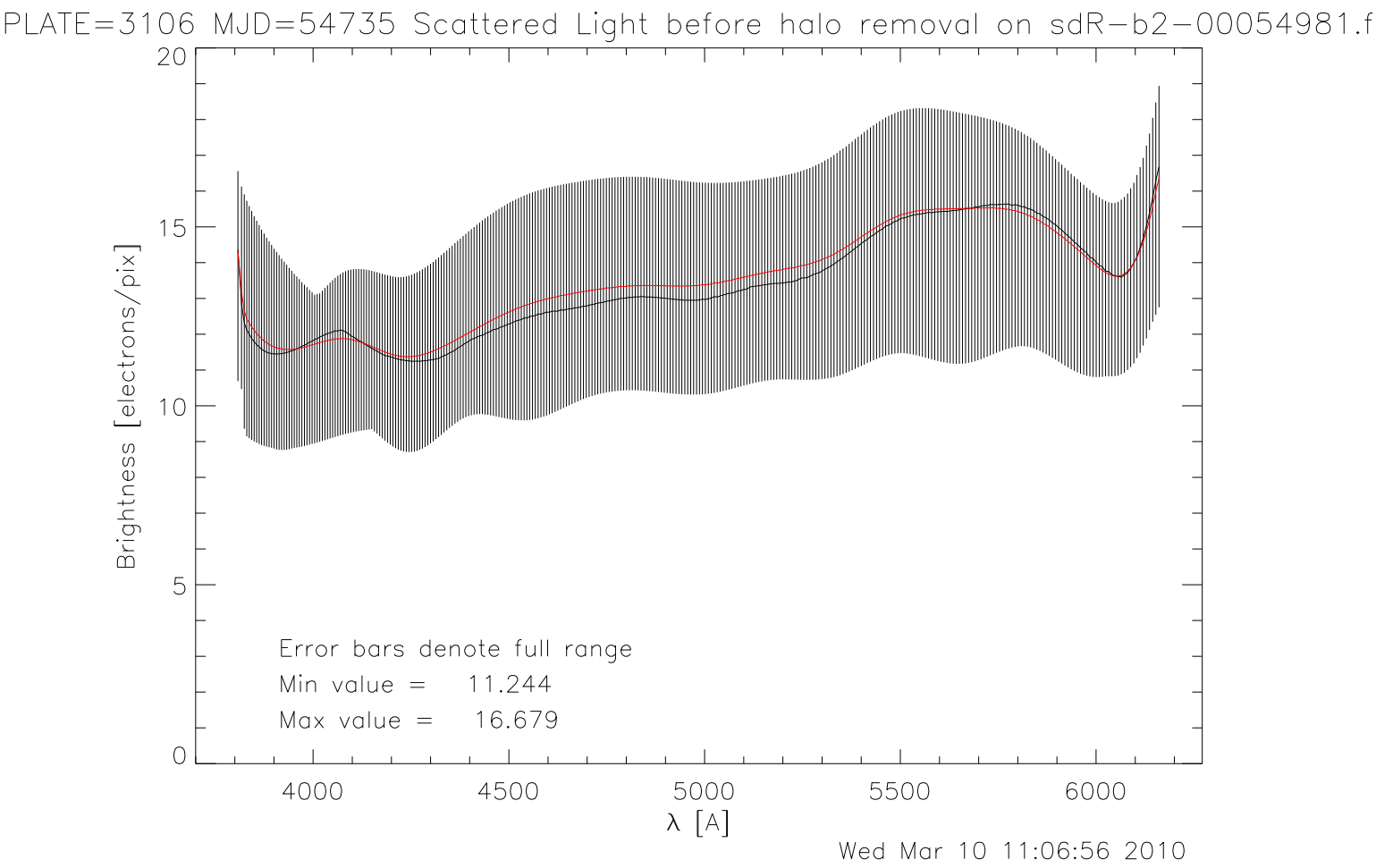
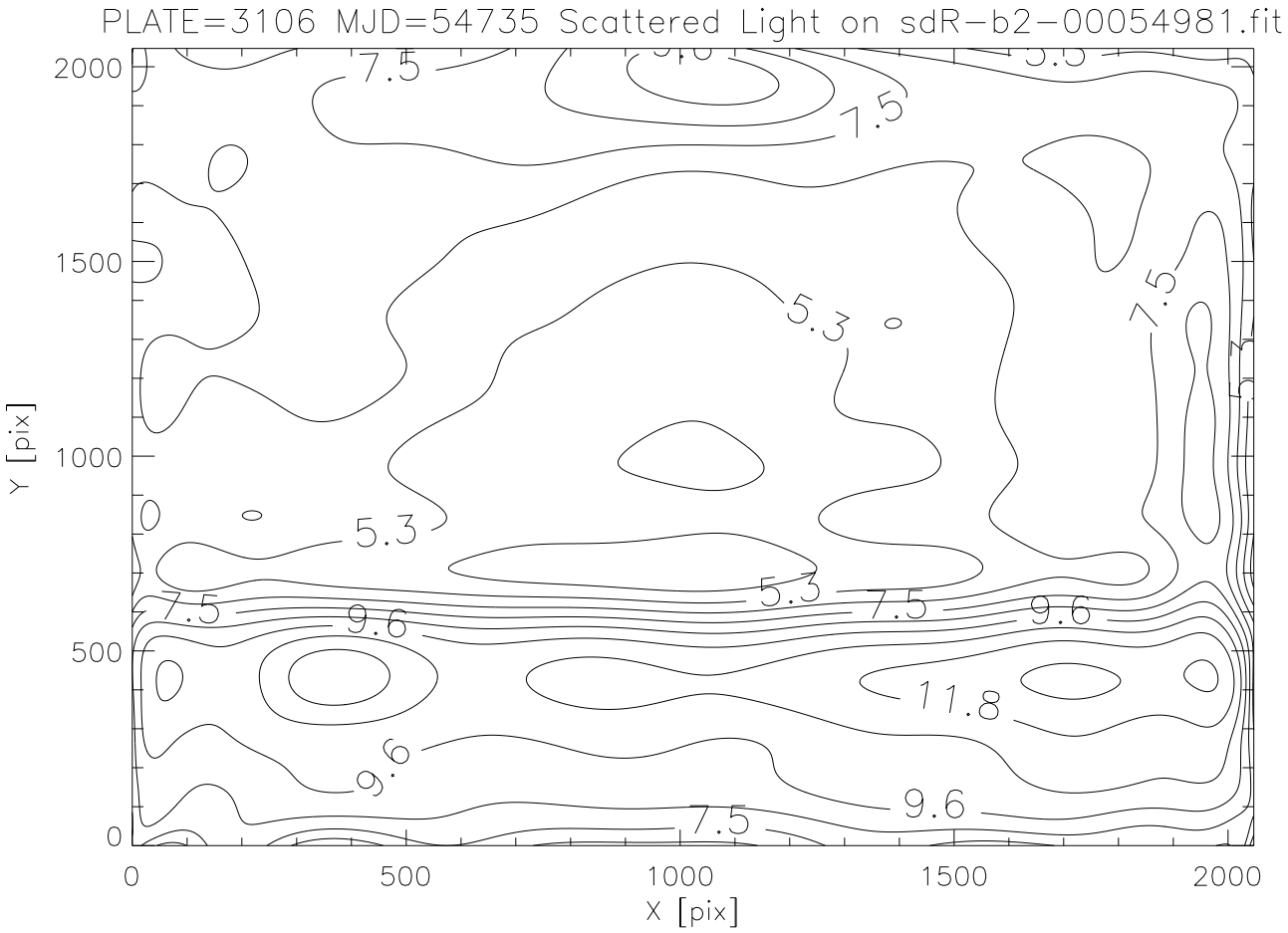
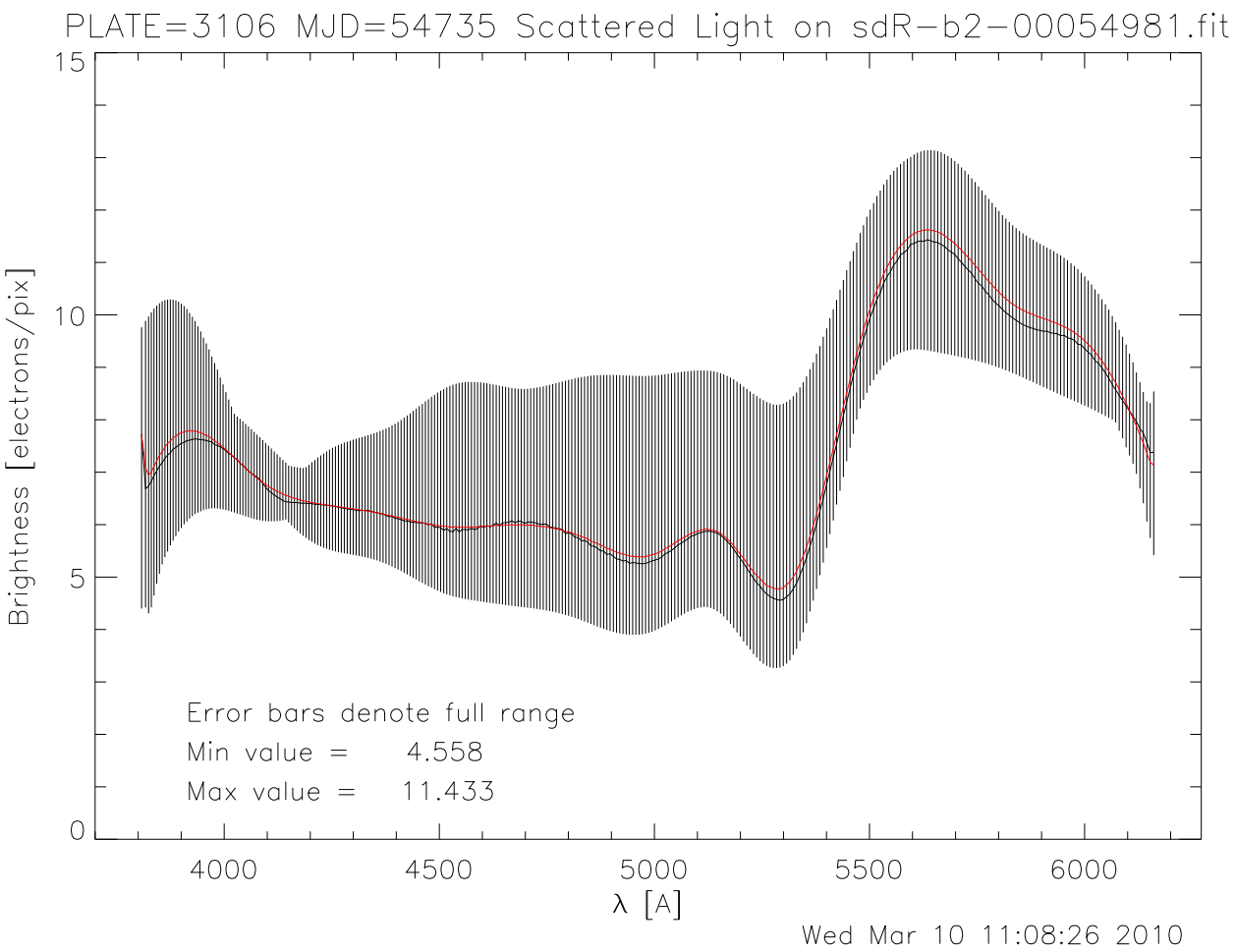
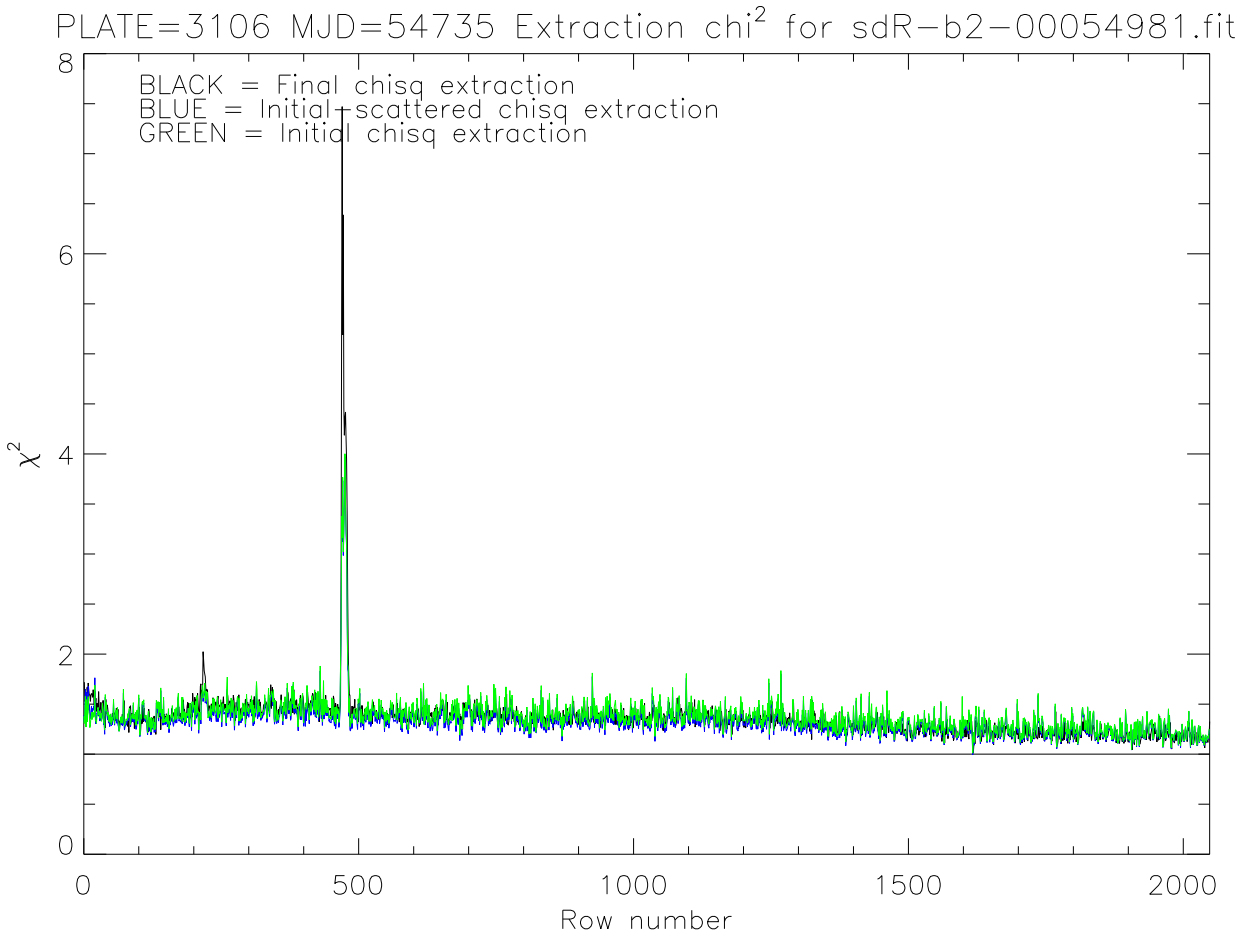

PLATE=3106 MJD=54735 Fiber-Flats for sdR-b2-00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.755
Max value = 1.185
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 11:06:28 2010

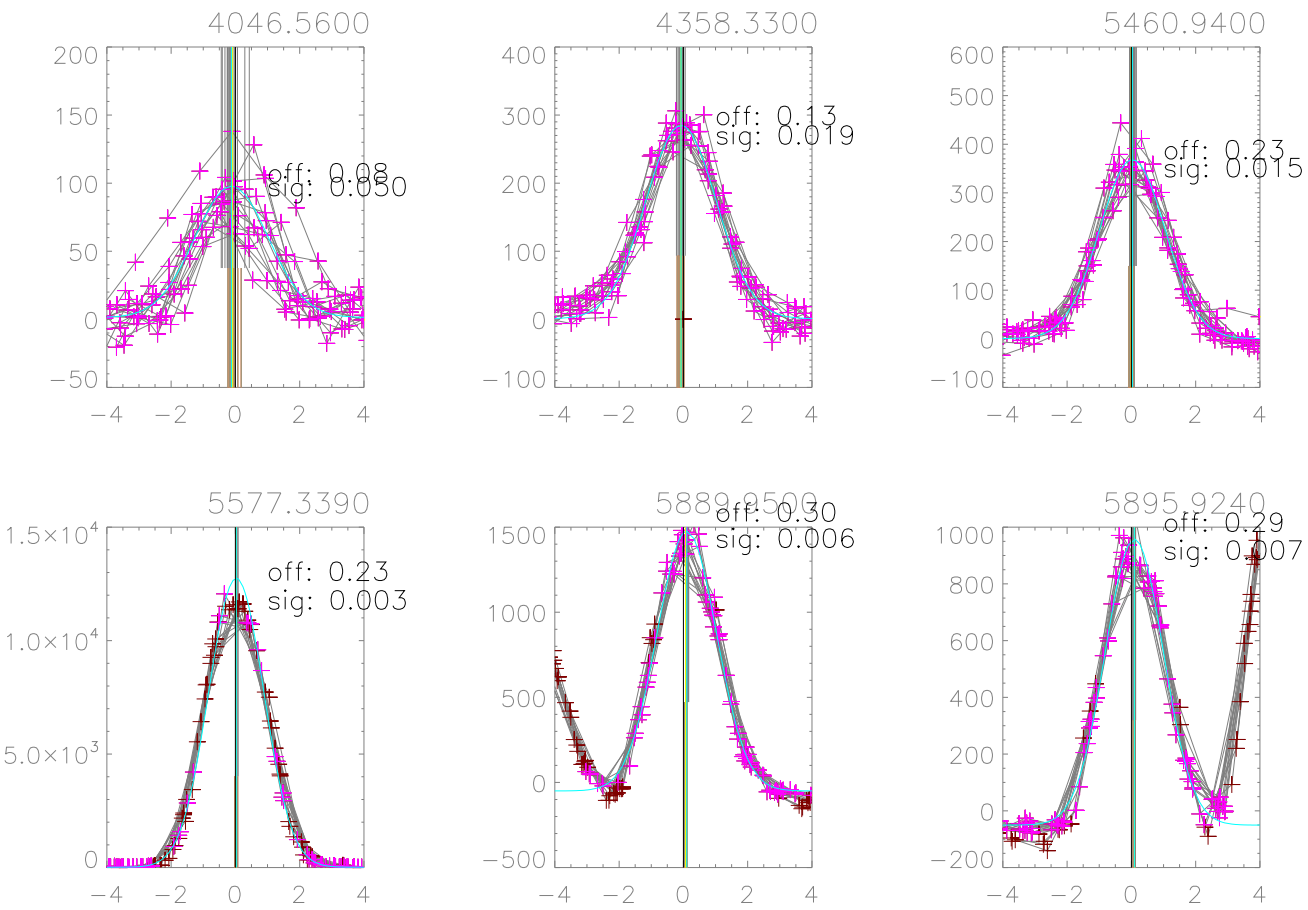

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR−b2−00054981.f
Y [pix]
X [pix]
0
500
1000
1500
2000
11.8
14.5
17.3

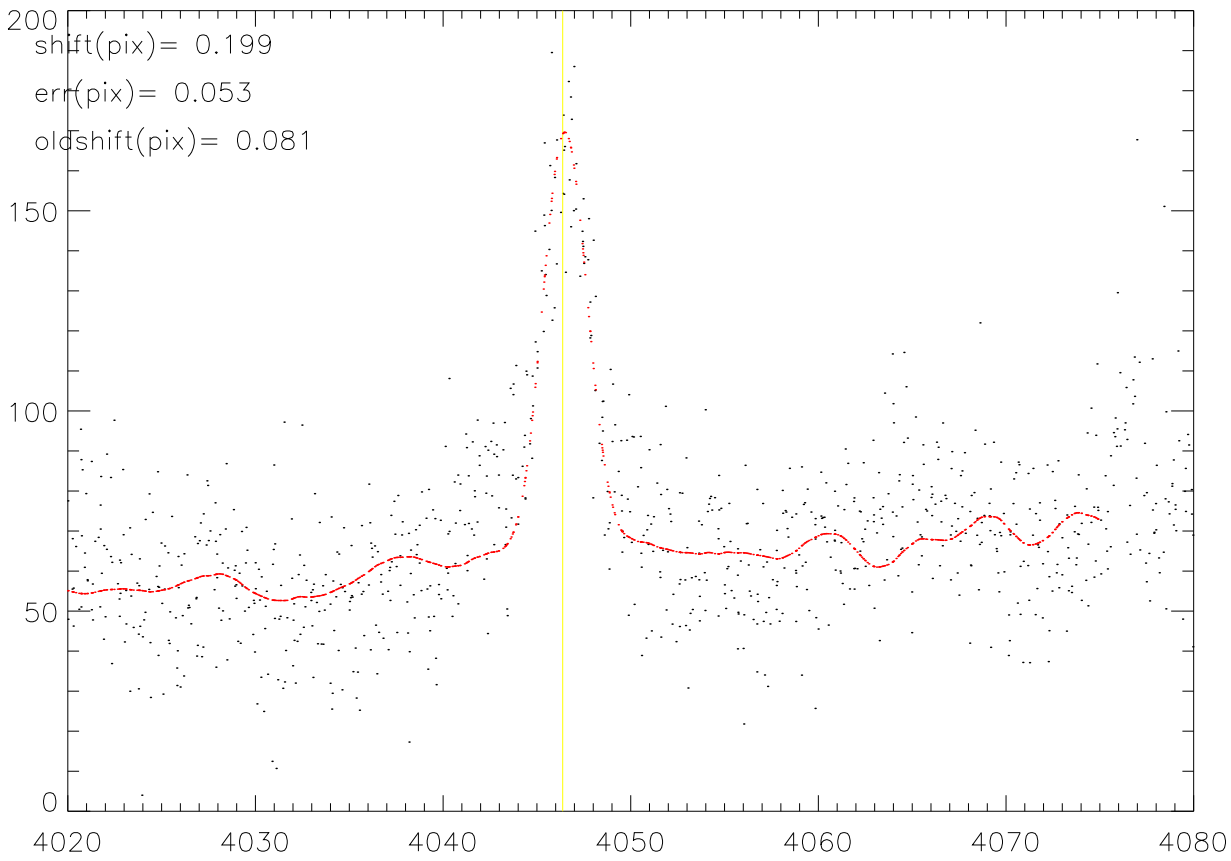

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-b2-00054981.f
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 11.244
Max value = 16.679
Wed Mar 10 11:06:56 2010

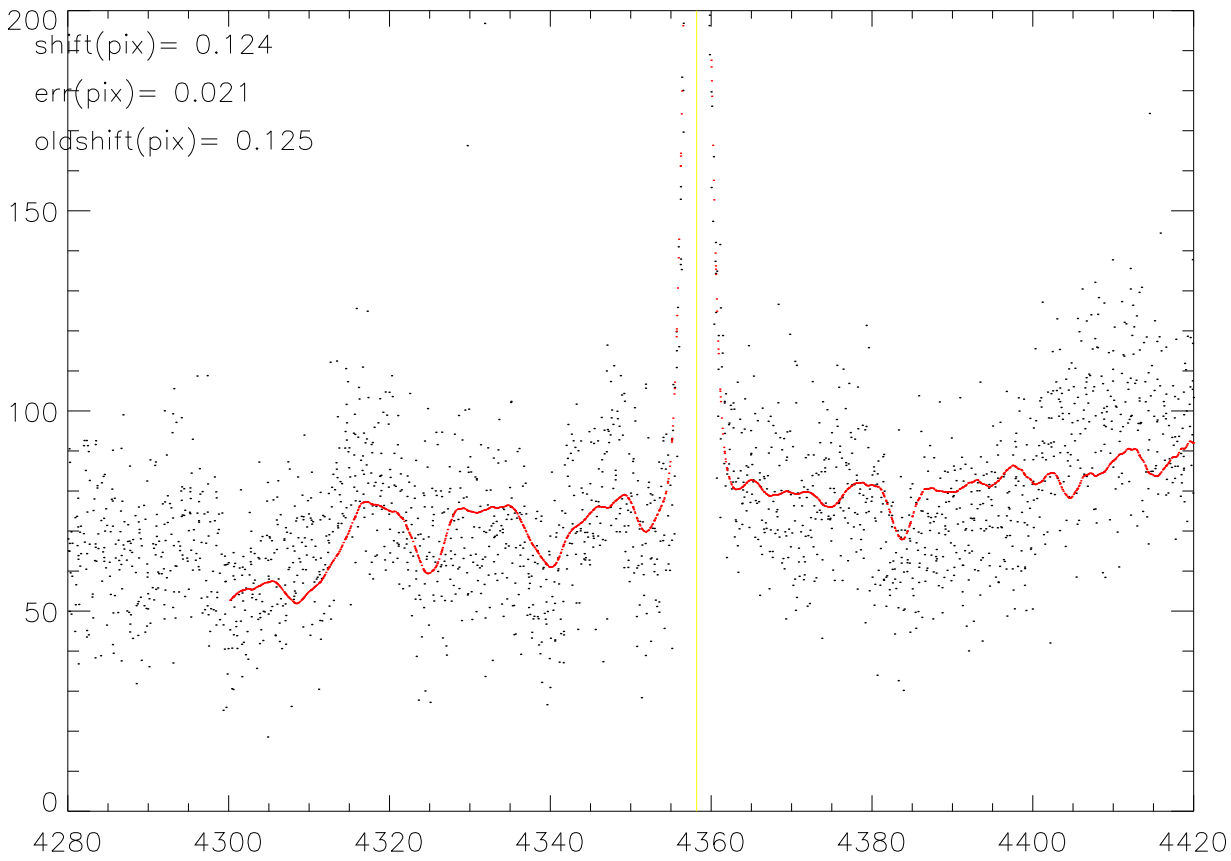

PLATE=3106 MJD=54735 Scattered Light on sdR-b2-00054981.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5
1.5
5.3
9.6
11.8

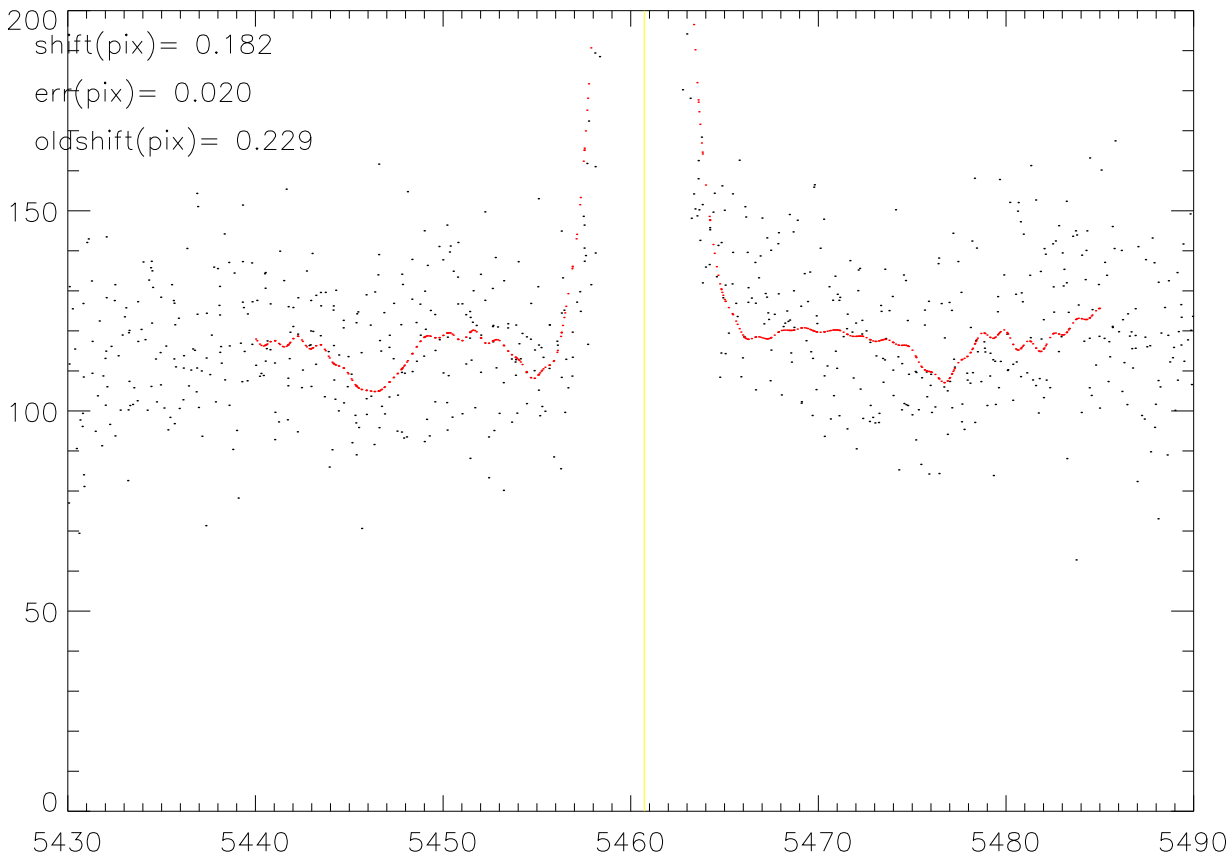

PLATE=3106 MJD=54735 Scattered Light on sdR-b2-00054981.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.558
Max value = 11.433
Wed Mar 10 11:08:26 2010

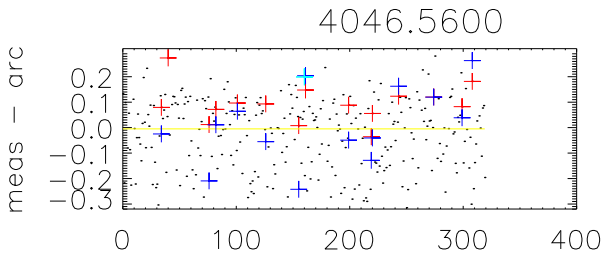

PLATE=3106 MJD=54735 Extraction chi^2 for sdR-b2-00054981.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

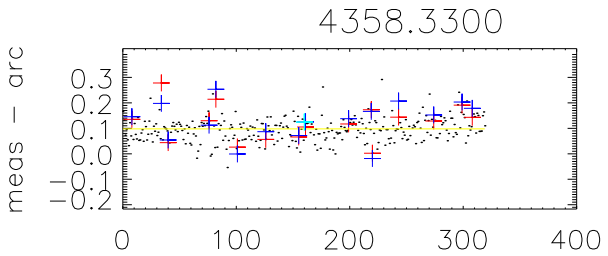

4046.5600
off: 0.08
sig: 0.050
4358.3300
off: 0.13
sig: 0.019
5460.9400
off: 0.23
sig: 0.015
5577.3390
off: 0.23
sig: 0.003
5889.9500
off: 0.30
sig: 0.006
5895.9240
off: 0.29
sig: 0.007

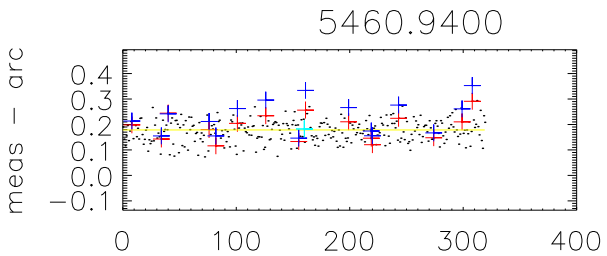

shift(pix)= 0.199
err(pix)= 0.053
oldshift(pix)= 0.081
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

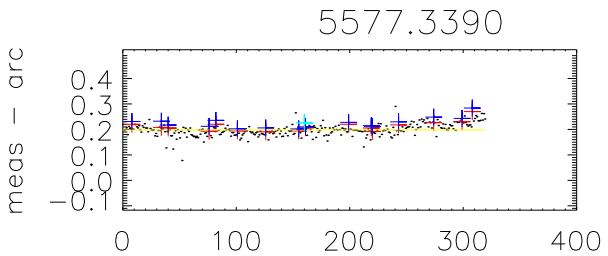

shift(pix)= 0.124
err(pix)= 0.021
oldshift(pix)= 0.125
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

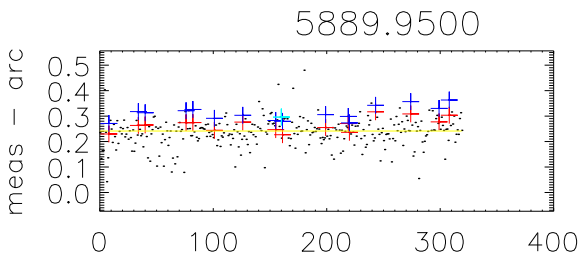

shift(pix)= 0.182
err(pix)= 0.020
oldshift(pix)= 0.229
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

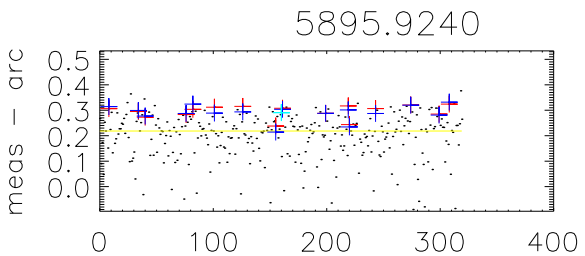

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

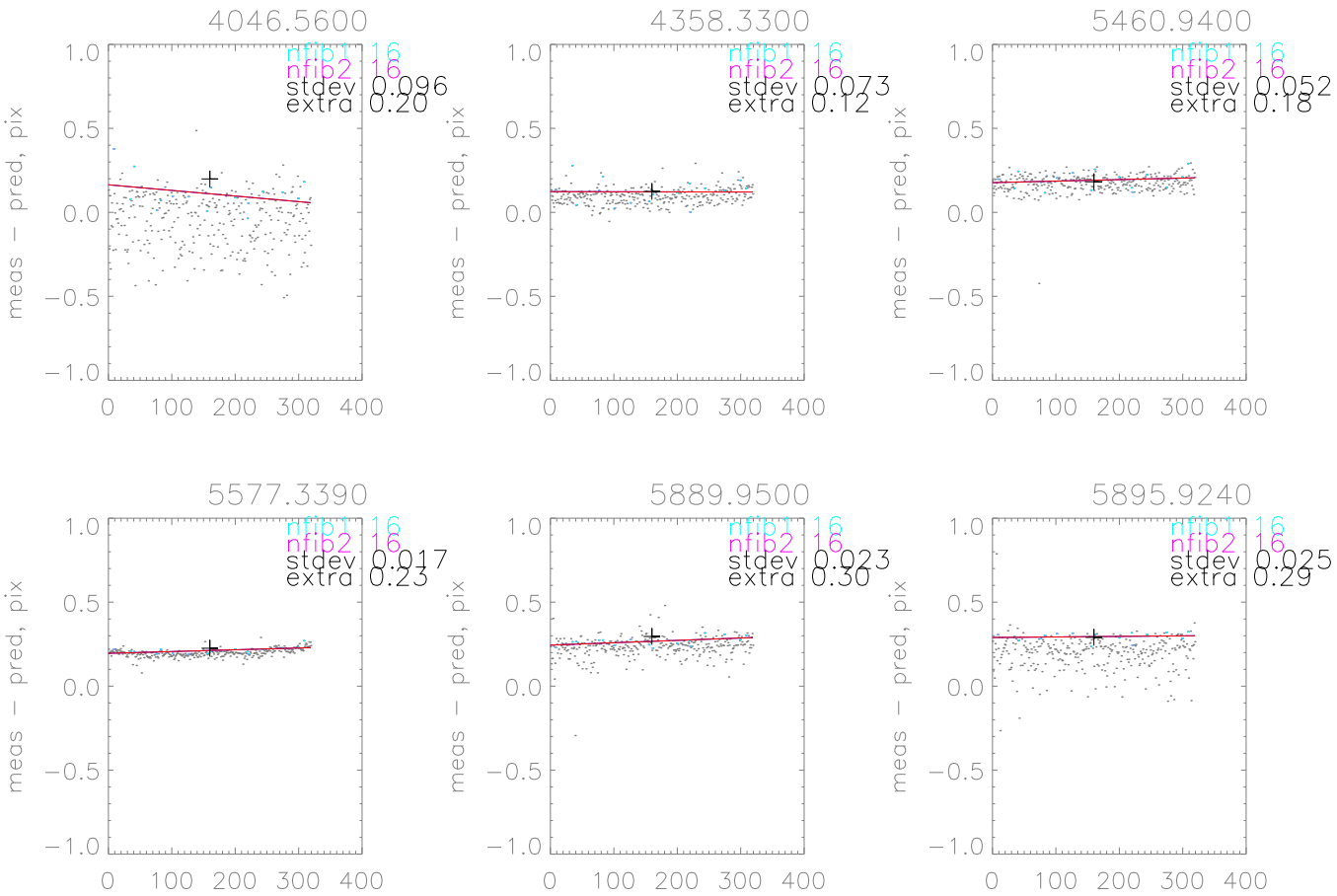

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

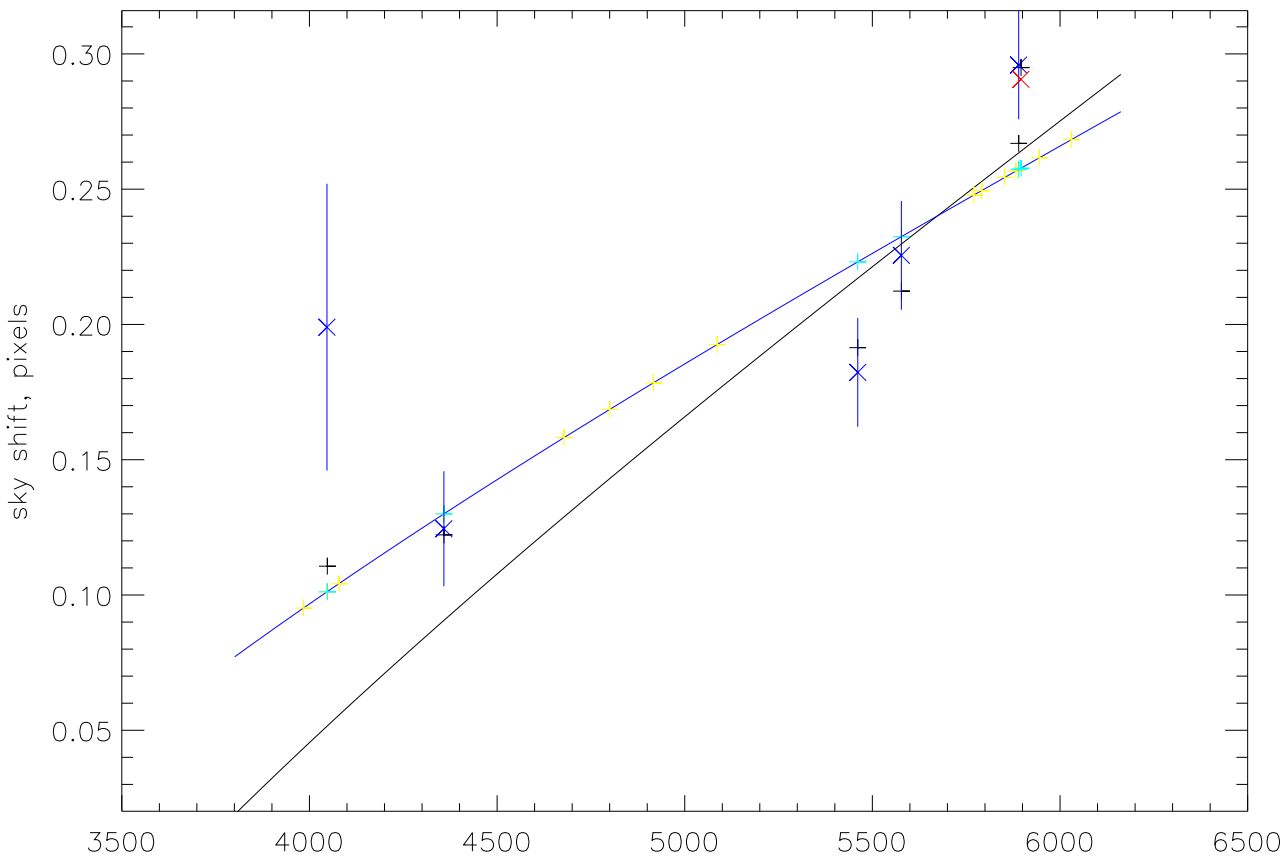

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

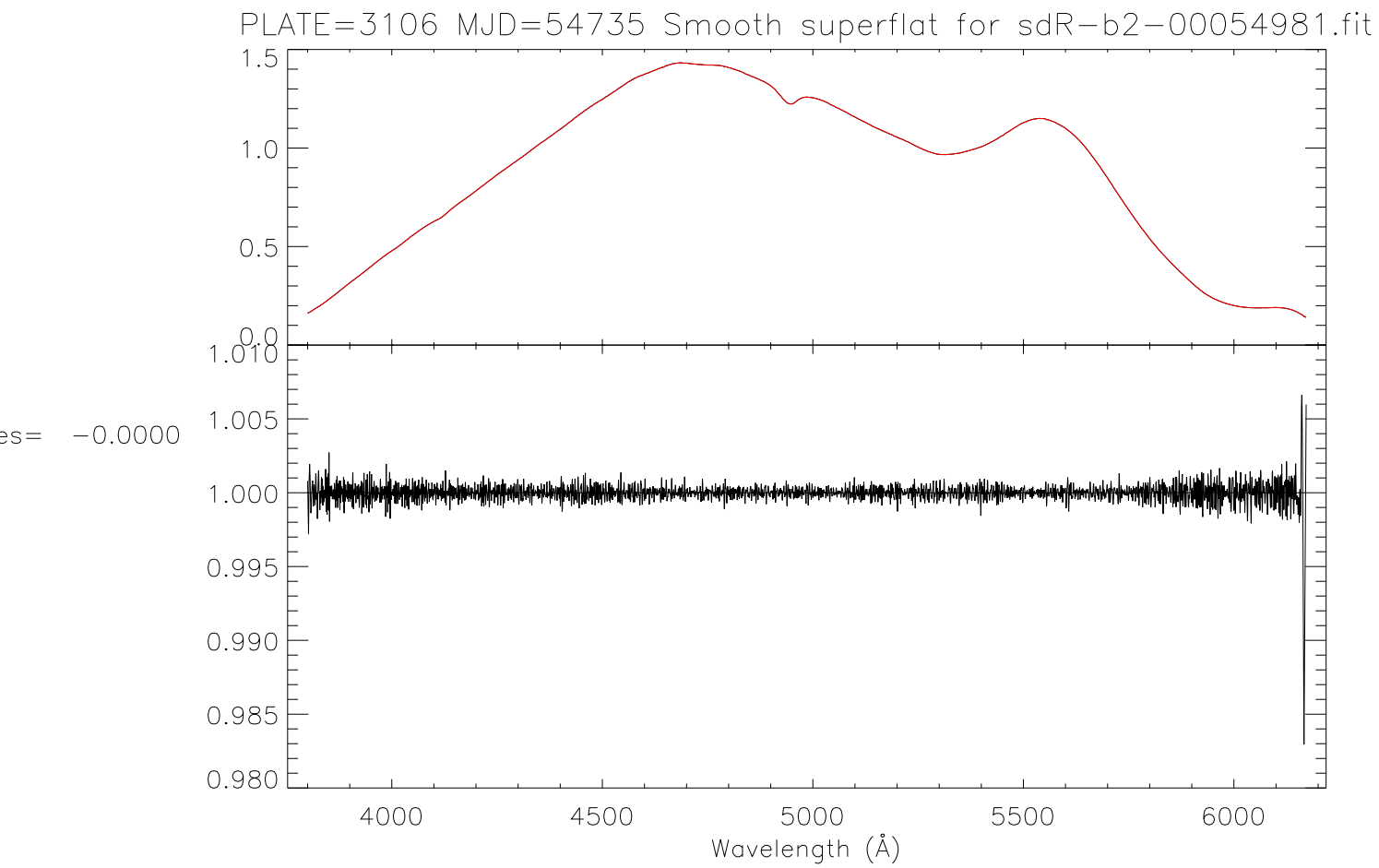

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

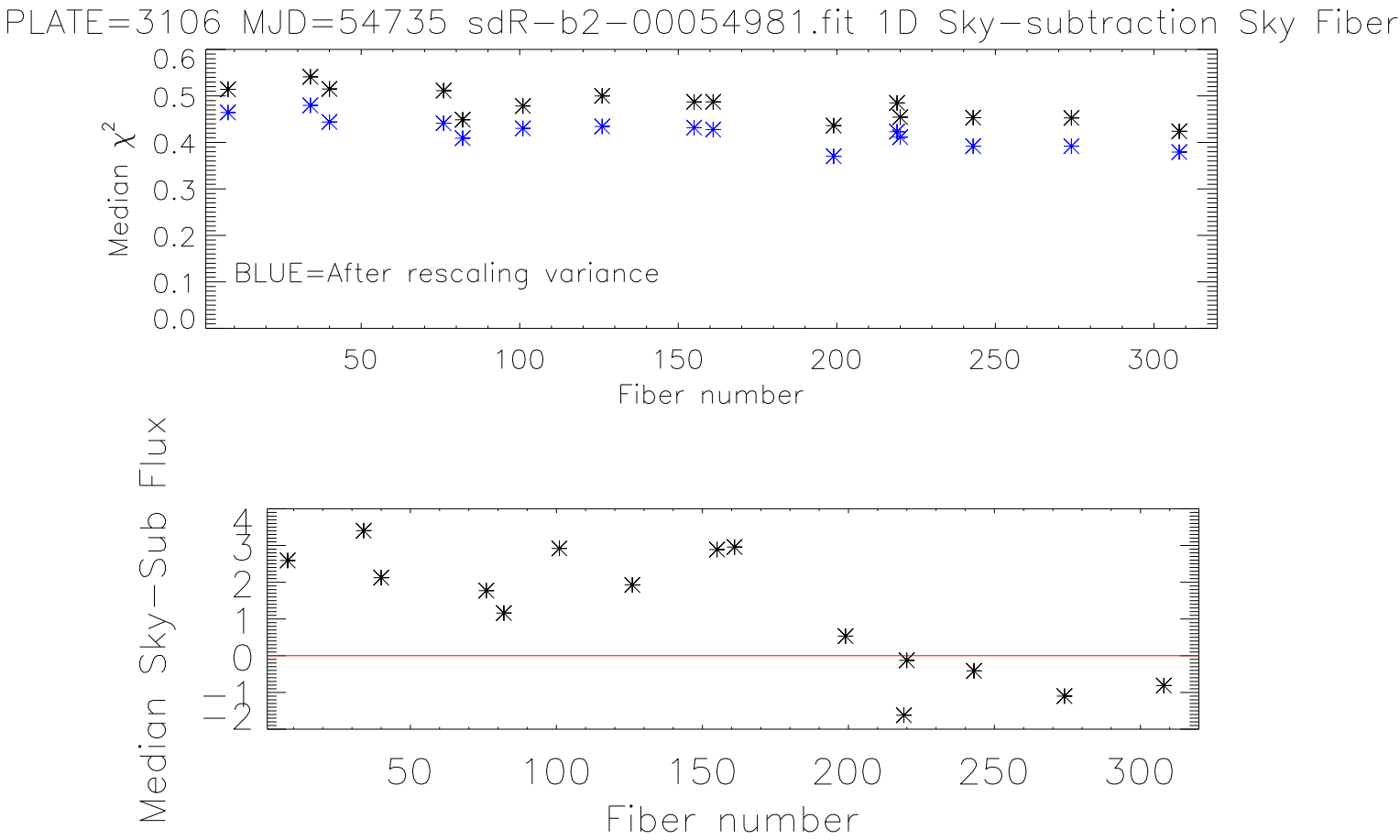

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

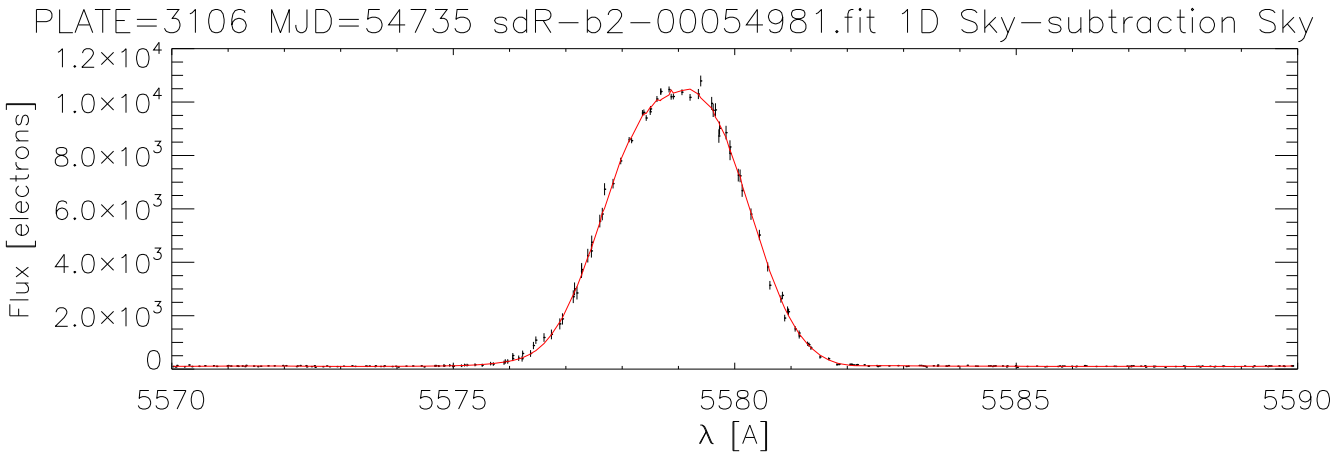

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

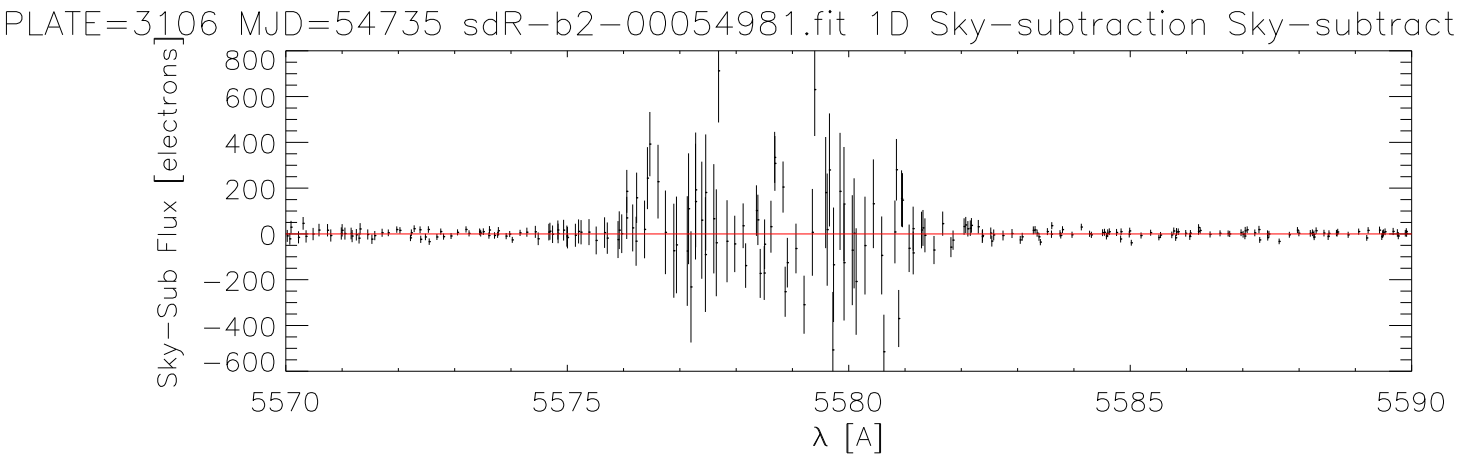

4046.5600
nfib1 16
nfib2 16
stdev 0.096
extra 0.20
4358.3300
nfib1 16
nfib2 16
stdev 0.073
extra 0.12
5460.9400
nfib1 16
nfib2 16
stdev 0.052
extra 0.18
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.23
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra 0.30
5895.9240
nfib1 16
nfib2 16
stdev 0.025
extra 0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

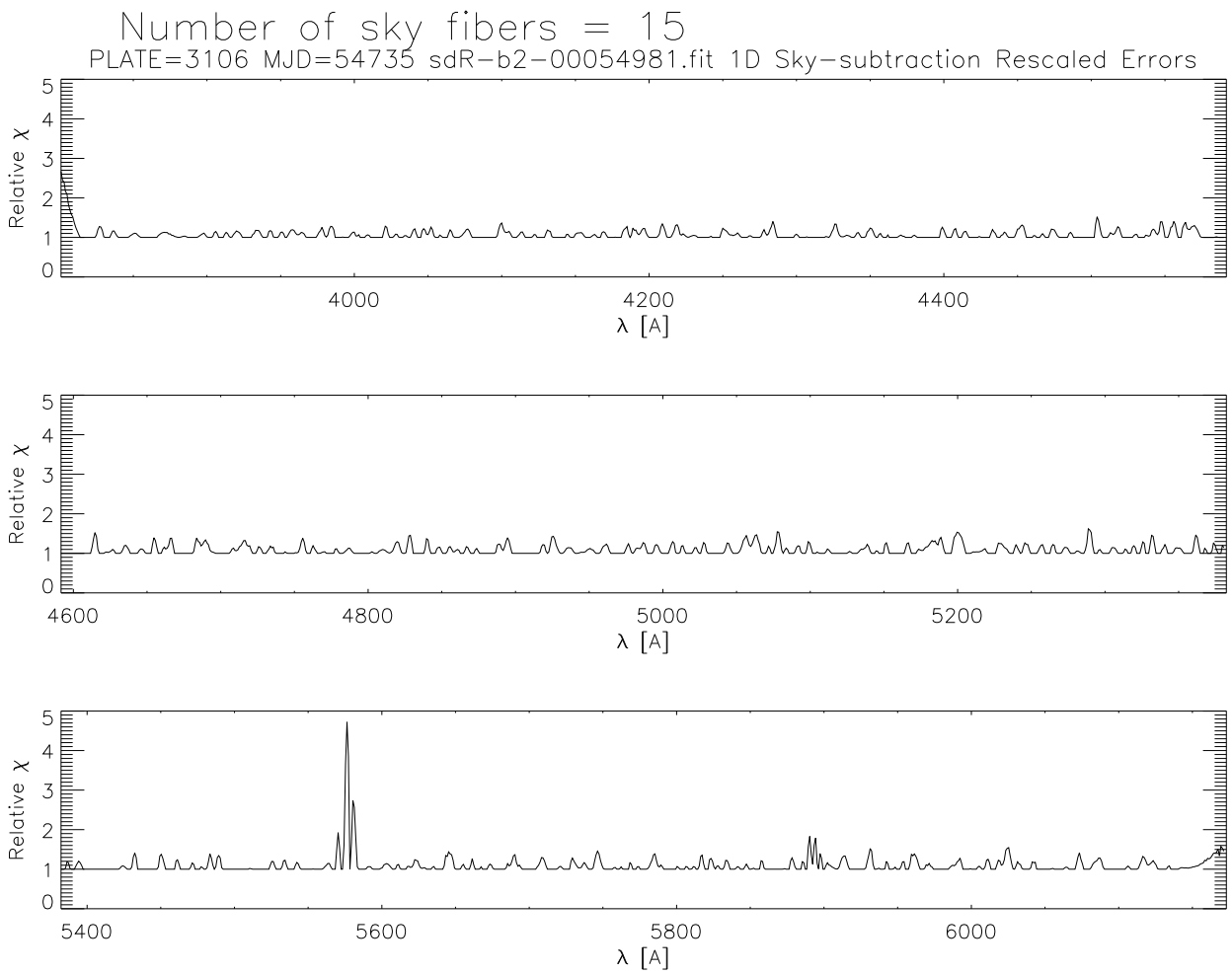

sky shift, pixels
0.30
0.25
0.20
0.15
0.10
0.05
3500
4000
4500
5000
5500
6000
6500

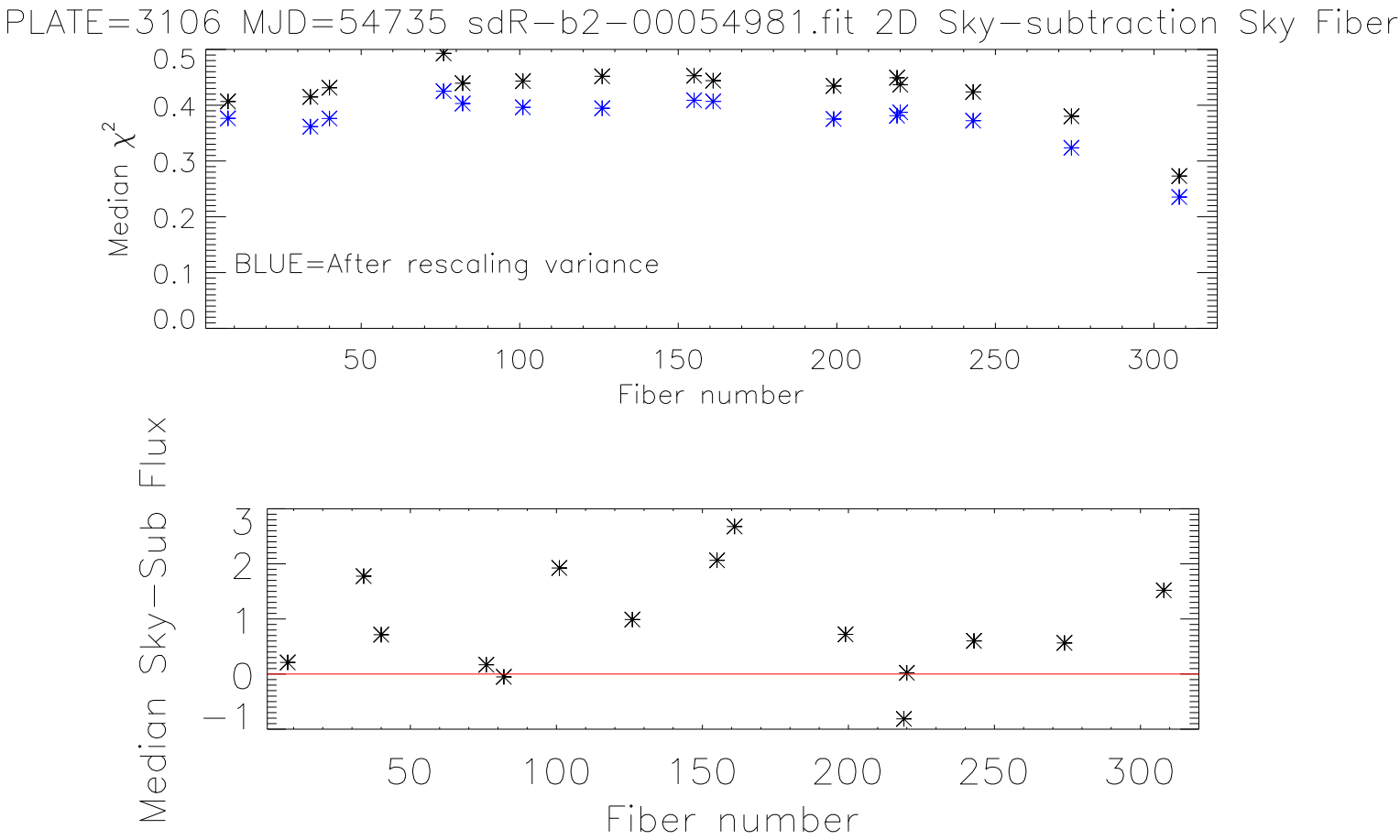

PLATE=3106 MJD=54735 Smooth superflat for sdR-b2-00054981.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

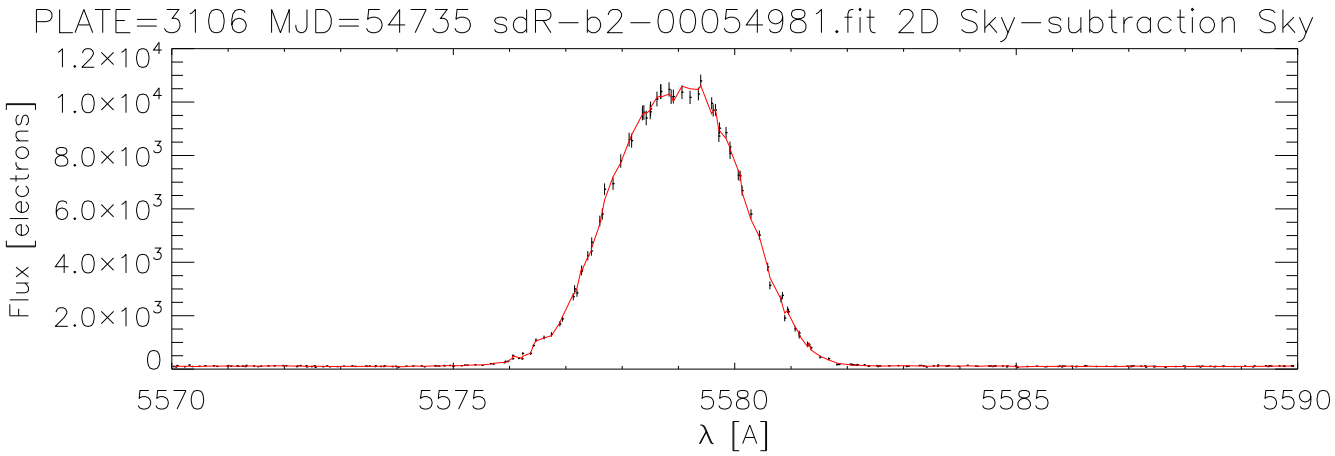

PLATE=3106 MJD=54735 sdR-b2-00054981.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

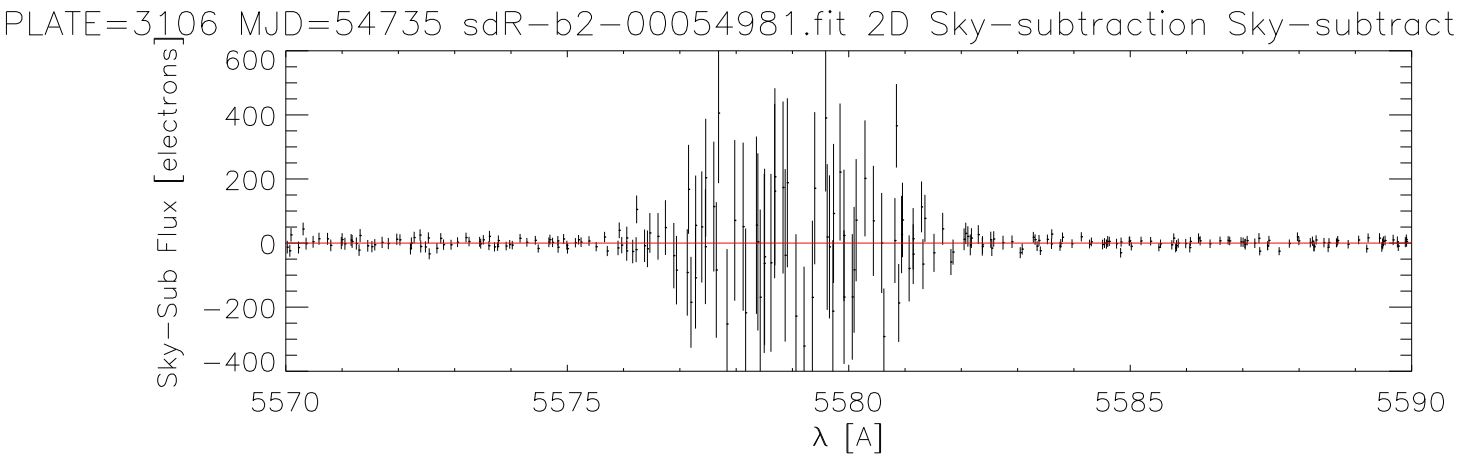

PLATE=3106 MJD=54735 sdR-b2-00054981.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

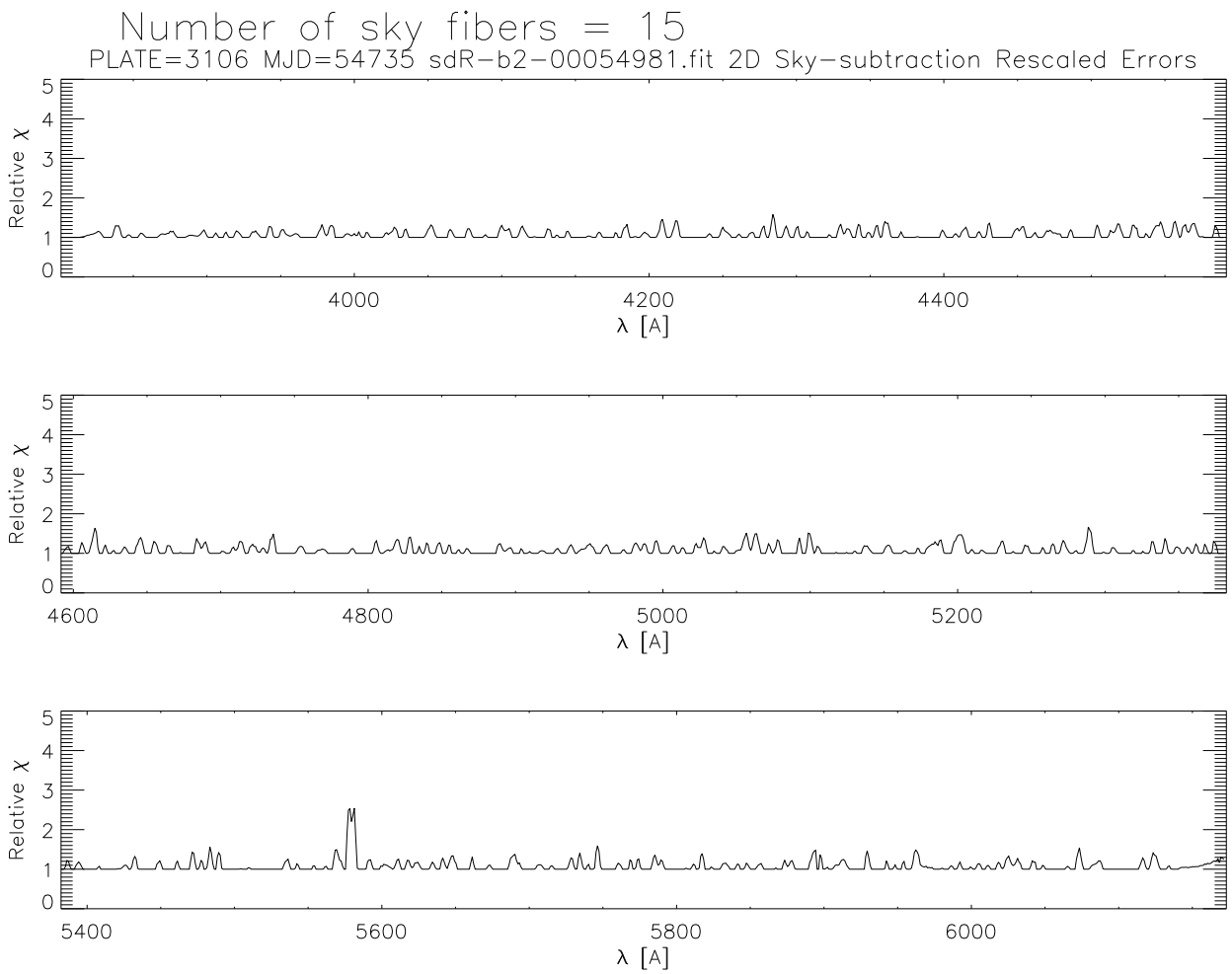

PLATE=3106 MJD=54735 sdR-b2-00054981.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

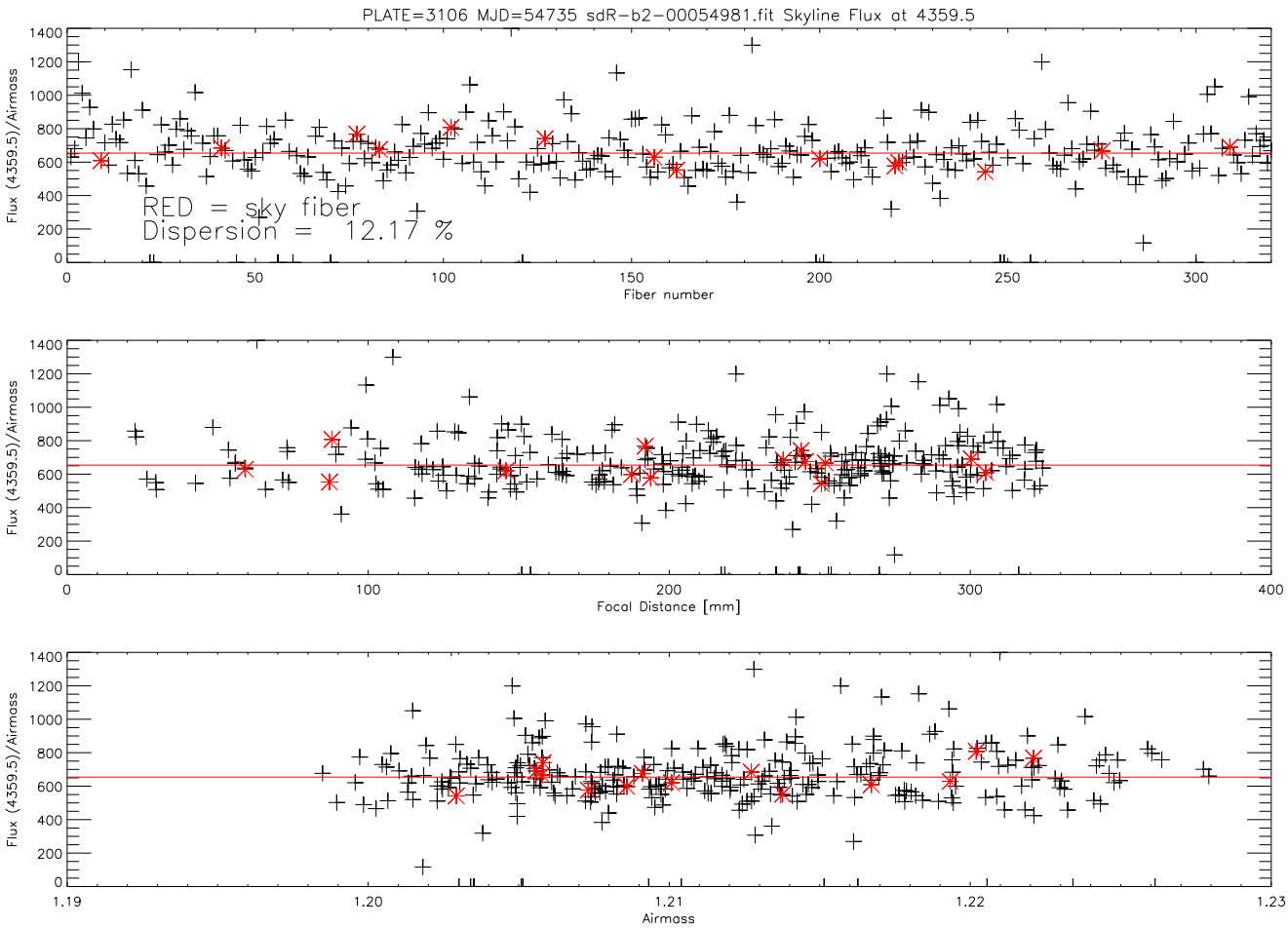

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b2-00054981.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

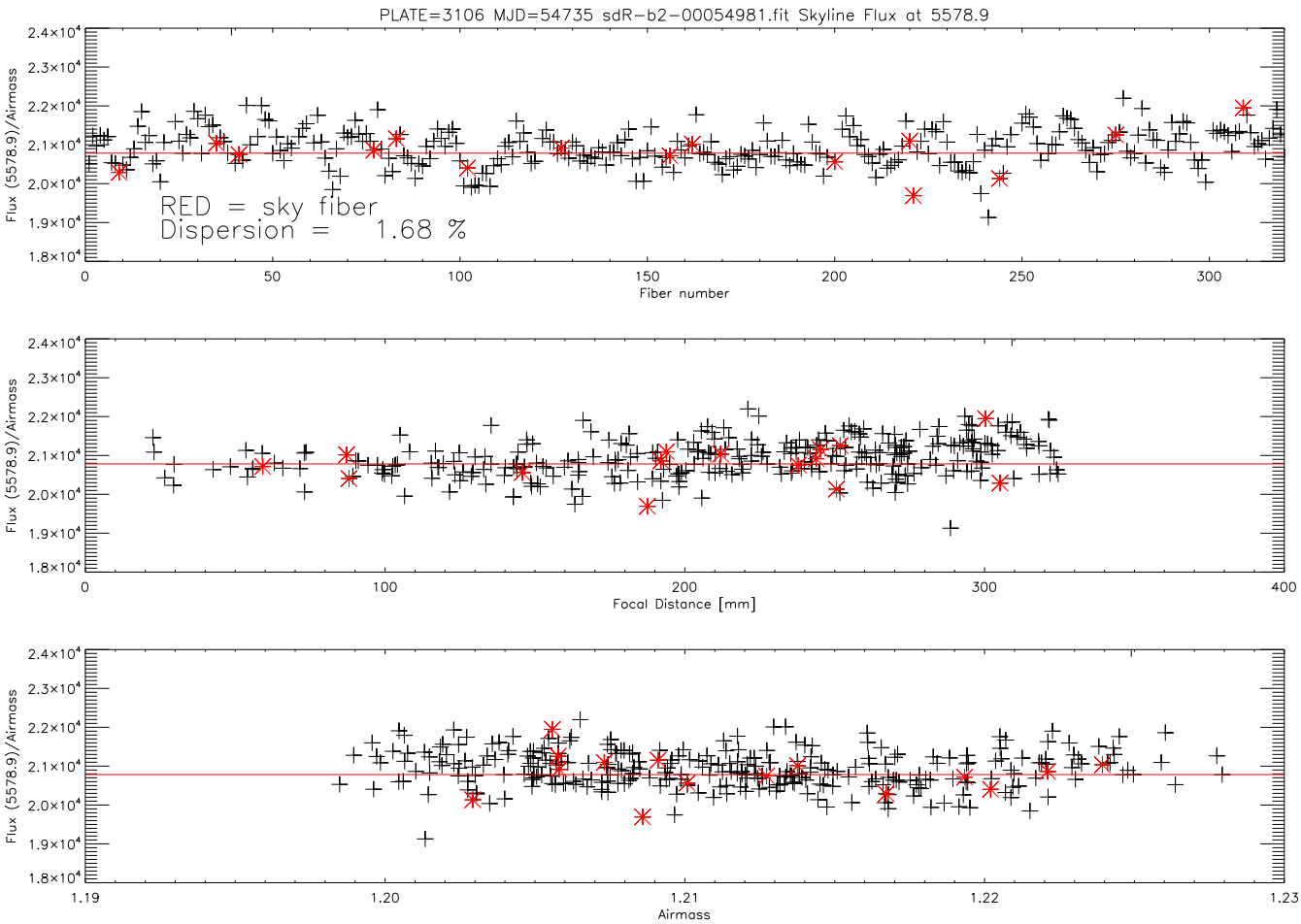

PLATE=3106 MJD=54735 sdR-b2-00054981.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

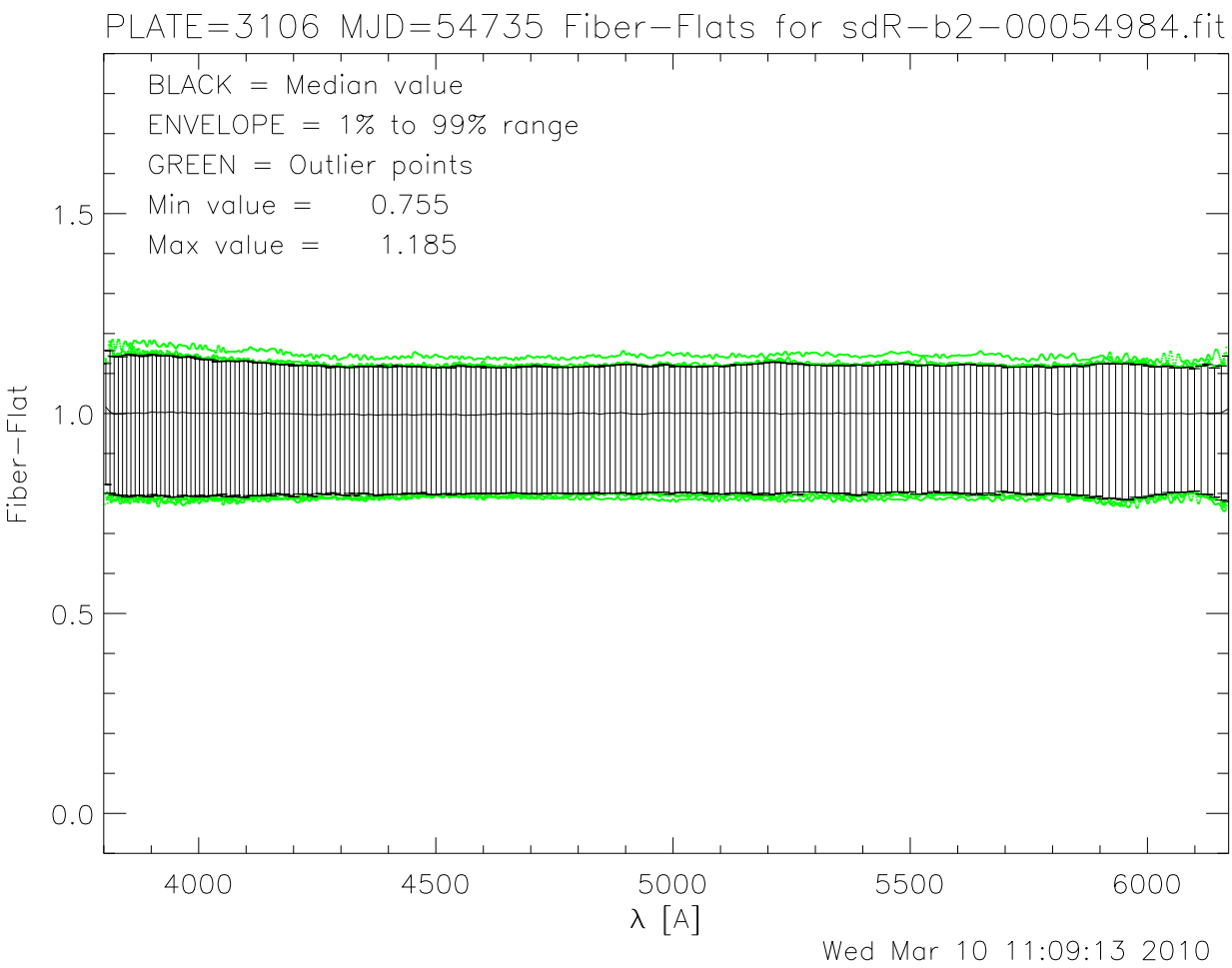

PLATE=3106 MJD=54735 sdR-b2-00054981.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

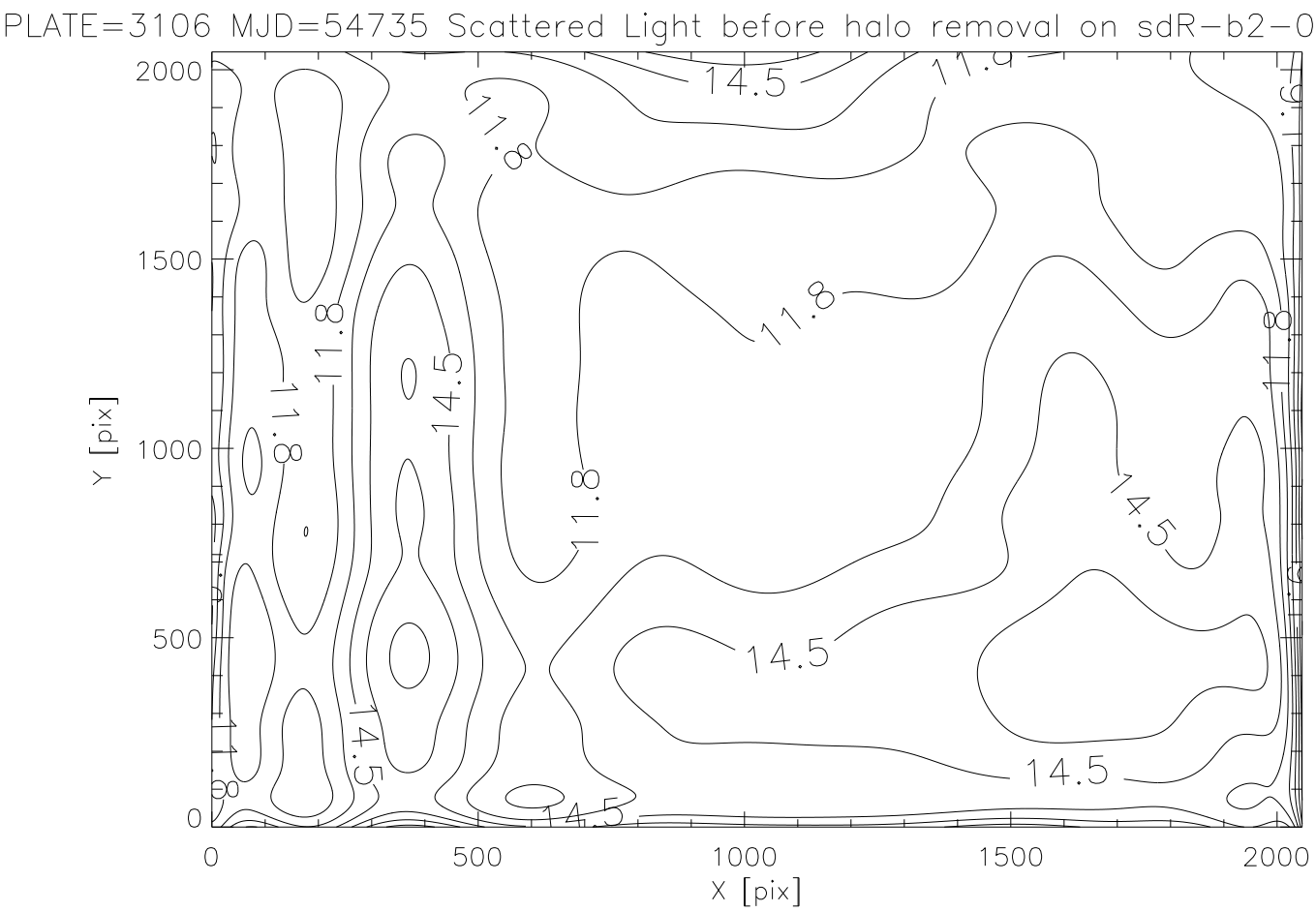

PLATE=3106 MJD=54735 sdR-b2-00054981.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

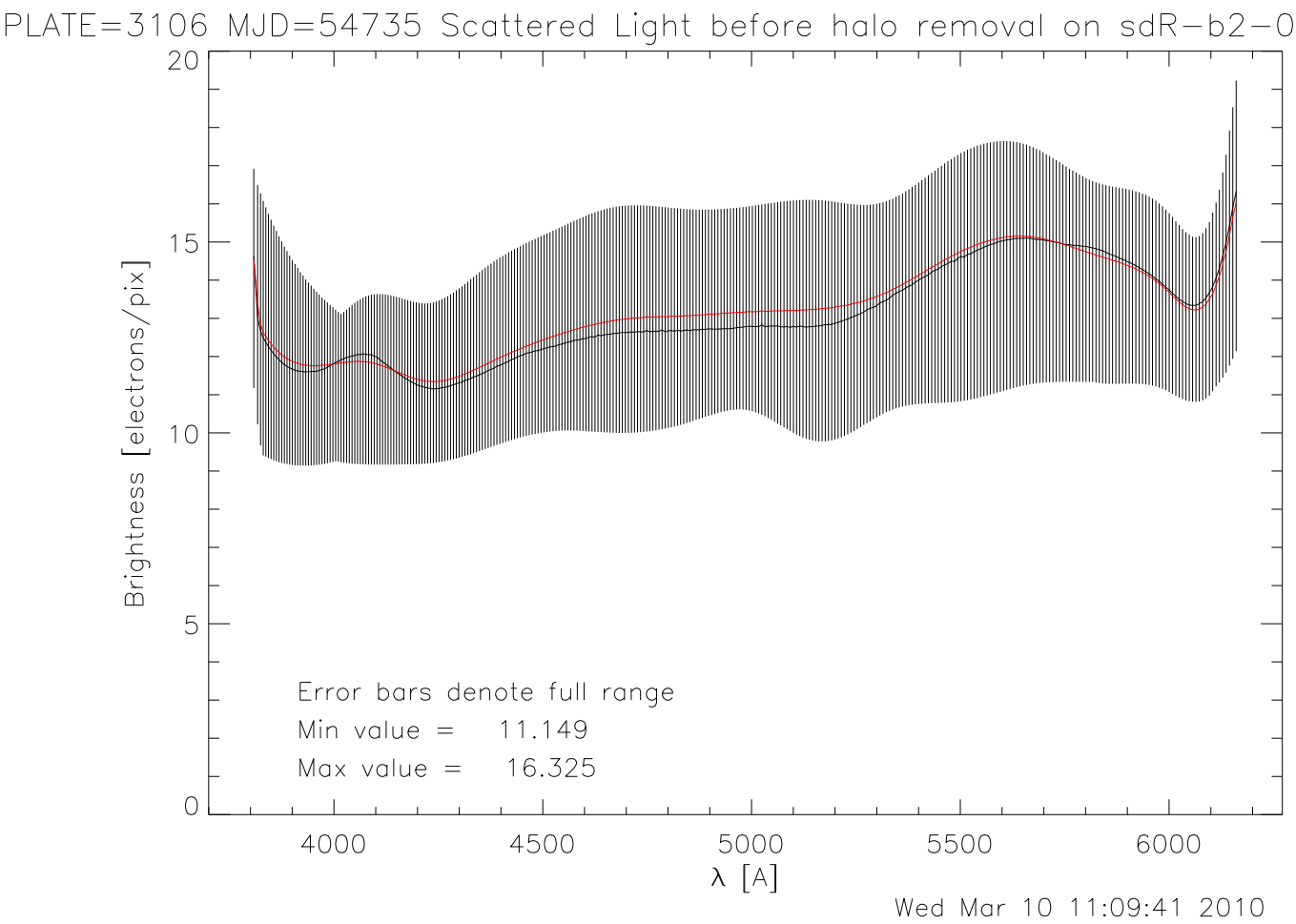

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b2-00054981.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

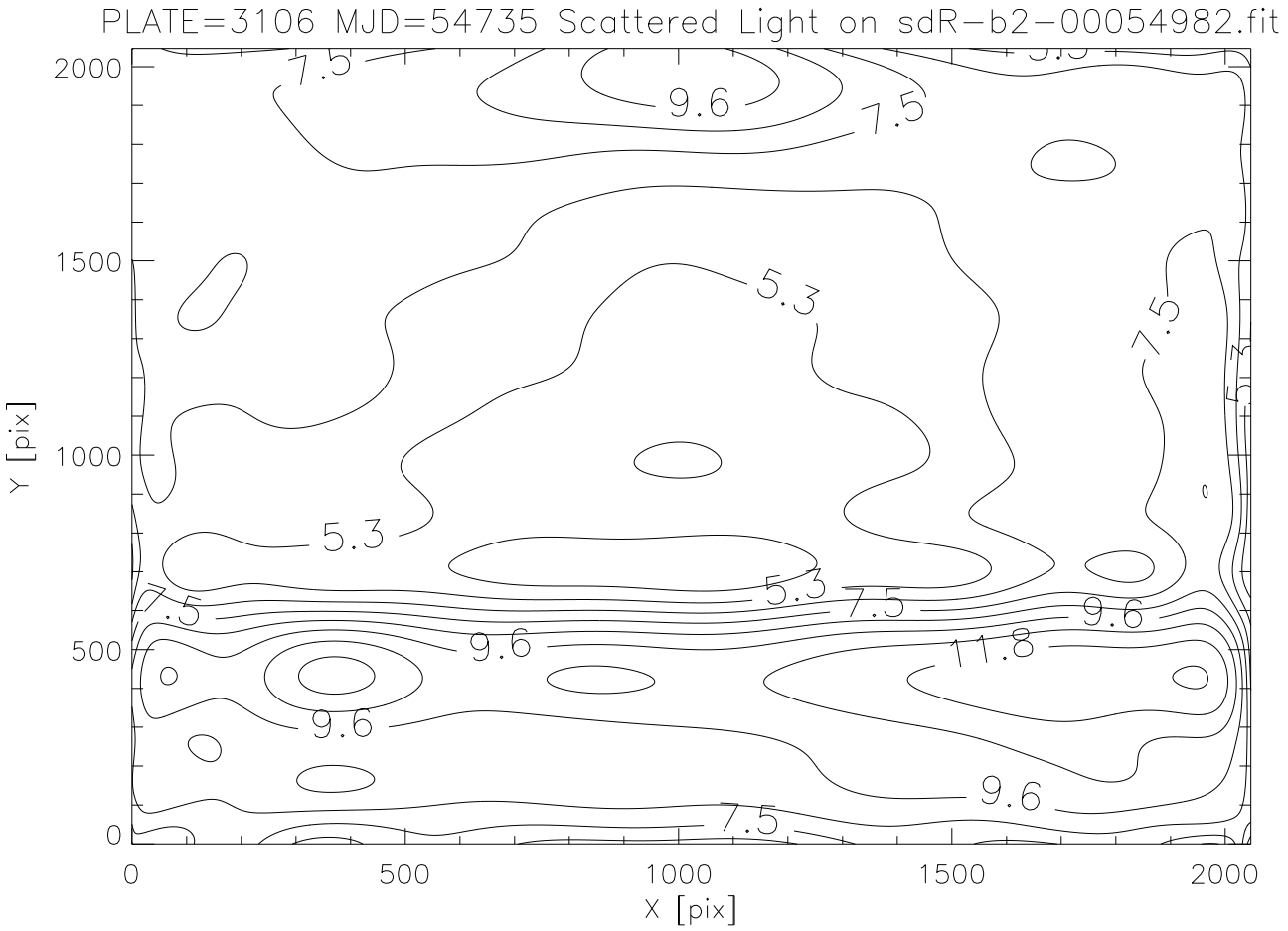

PLATE=3106 MJD=54735 sdR-b2-00054981.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.17 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

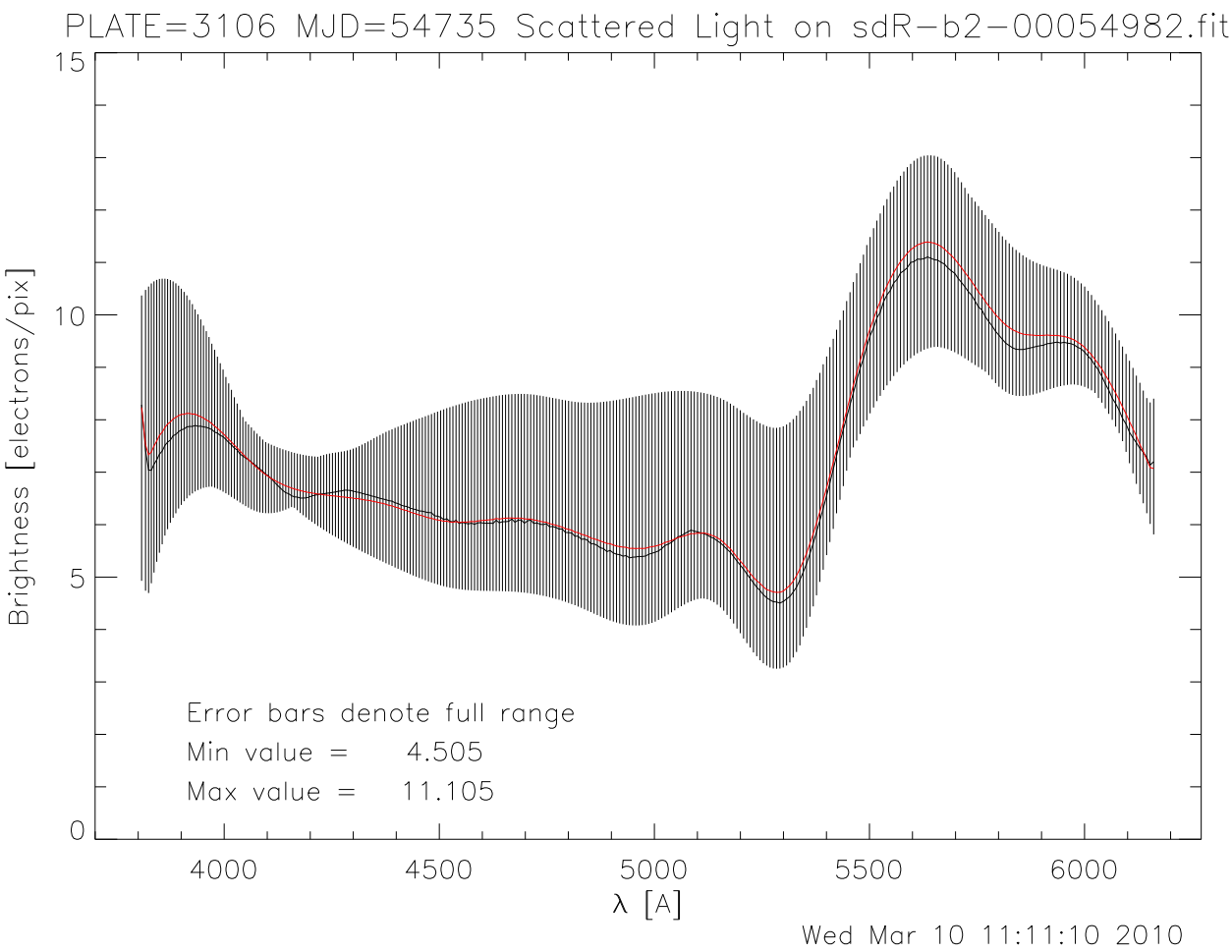

PLATE=3106 MJD=54735 sdR-b2-00054981.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.68 %
Fiber number
Focal Distance [mm]
Airmass

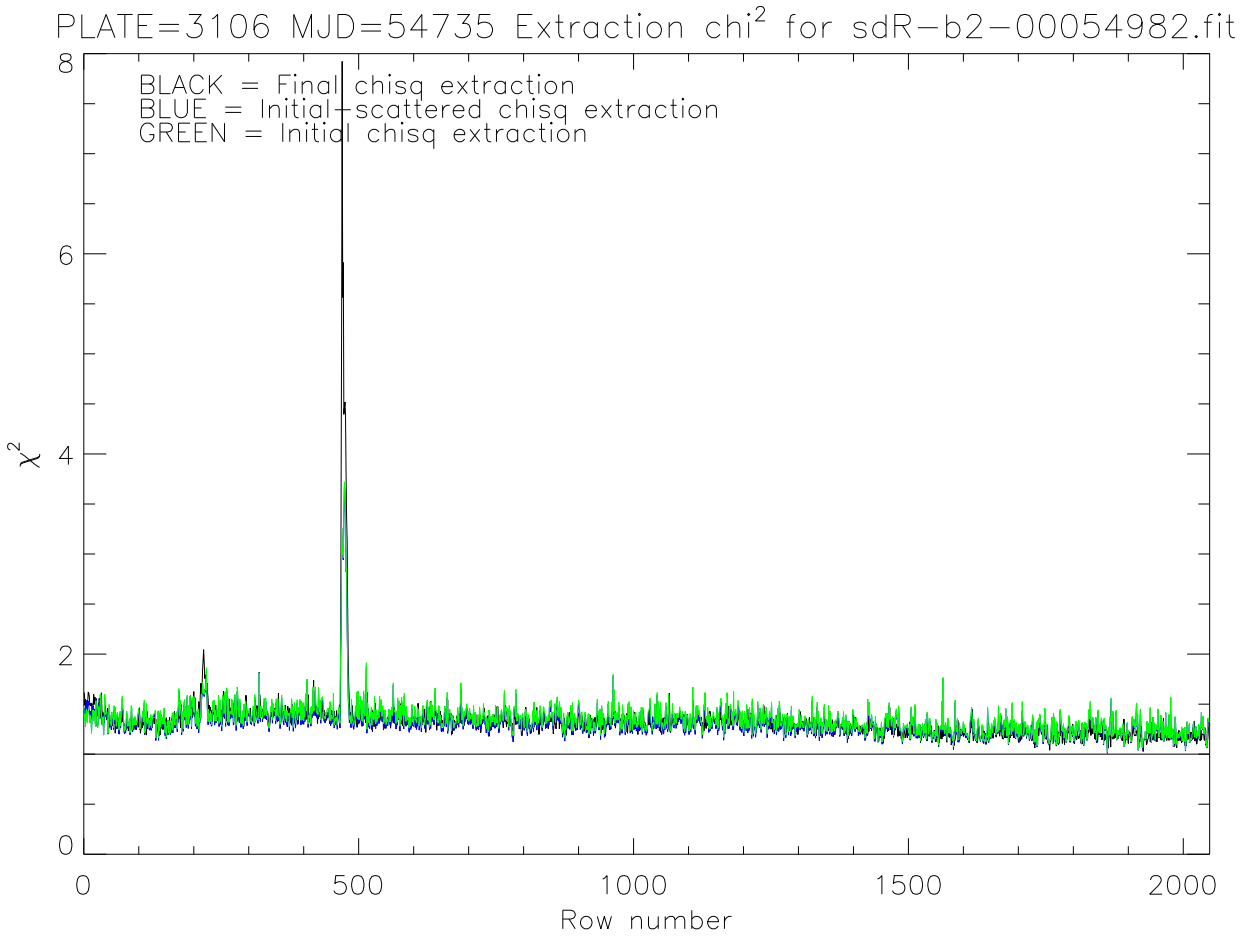

PLATE=3106 MJD=54735 Fiber-Flats for sdR-b2-00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.755
Max value = 1.185
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 11:09:13 2010

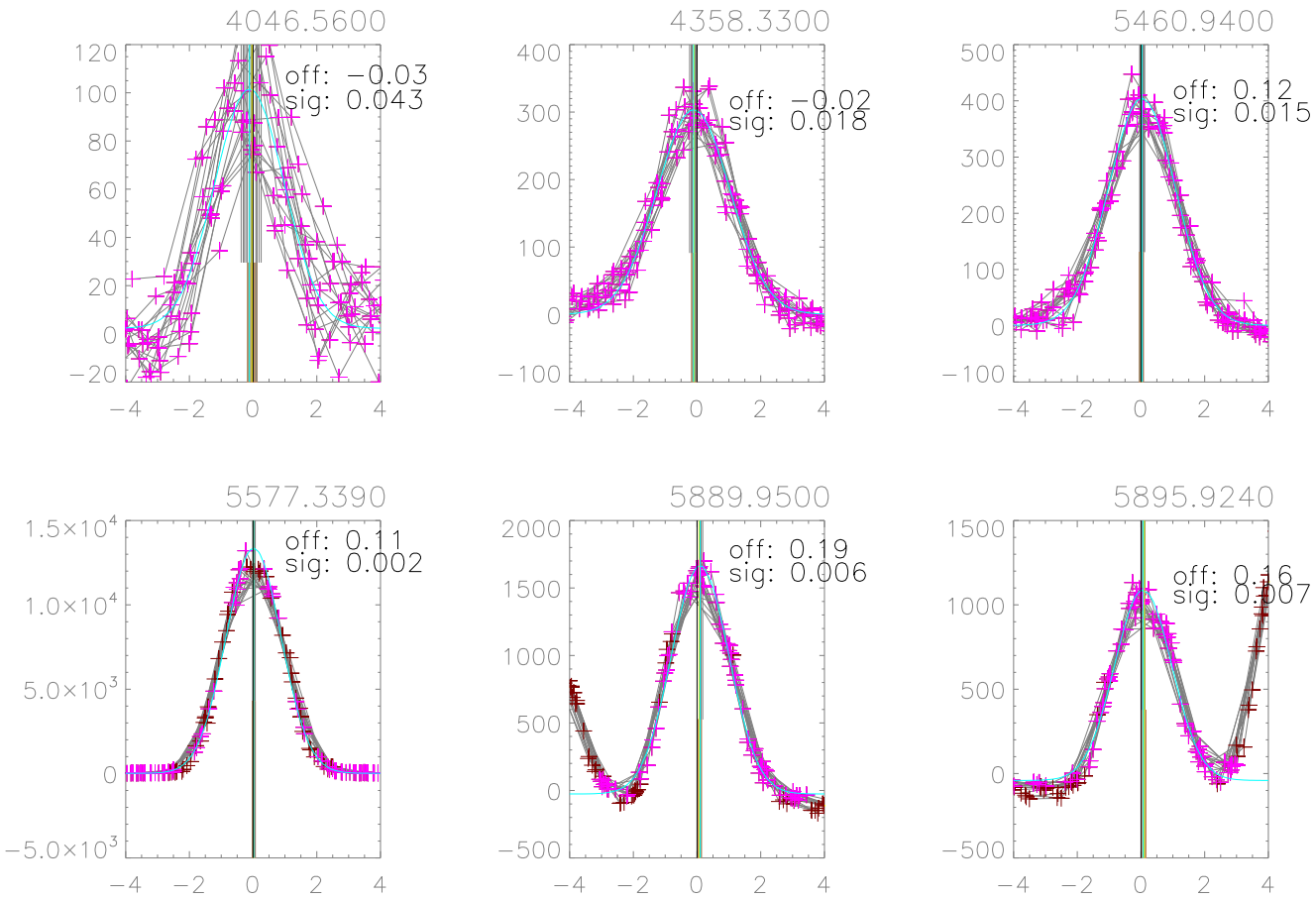

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR−b2−00054982.f
Y [pix]
X [pix]
0
500
1000
1500
2000
14.5
11.8

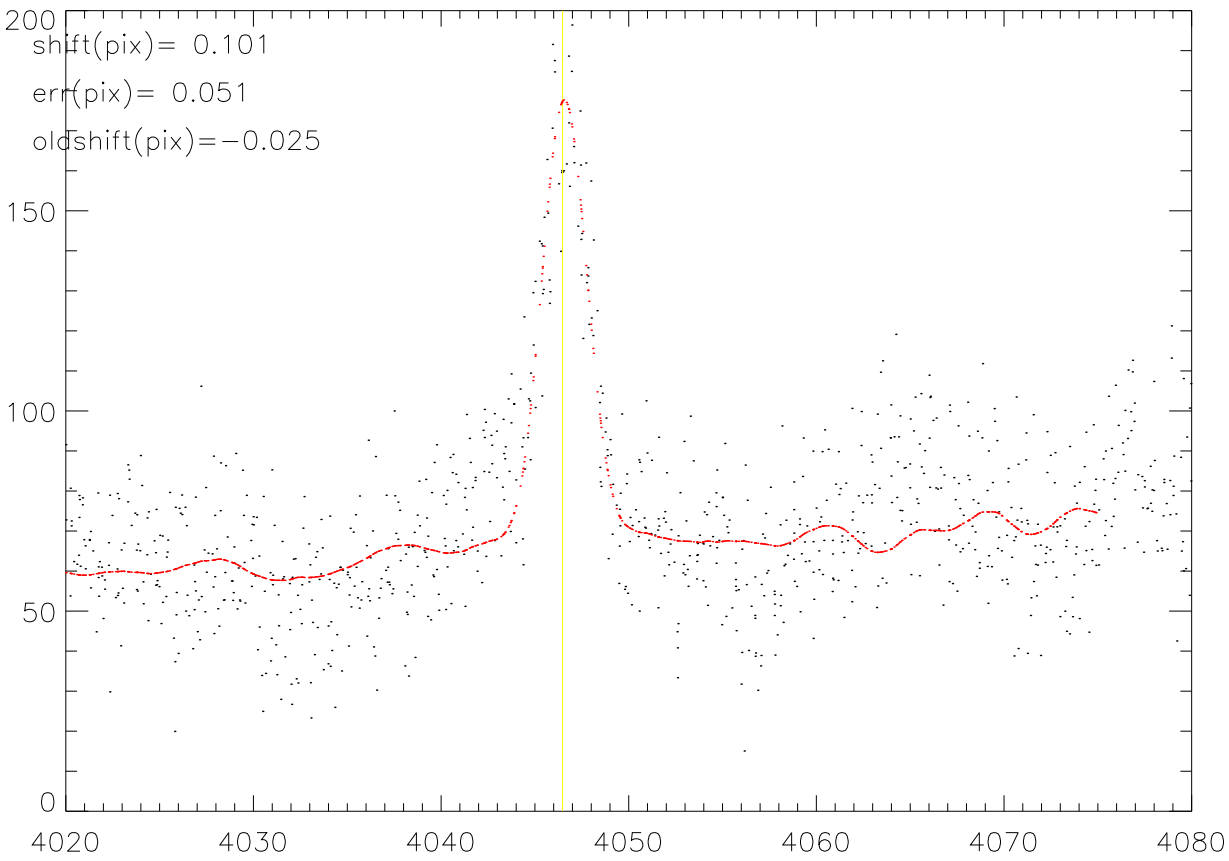

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-b2-00054982.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.149
Max value = 16.325
Wed Mar 10 11:09:41 2010

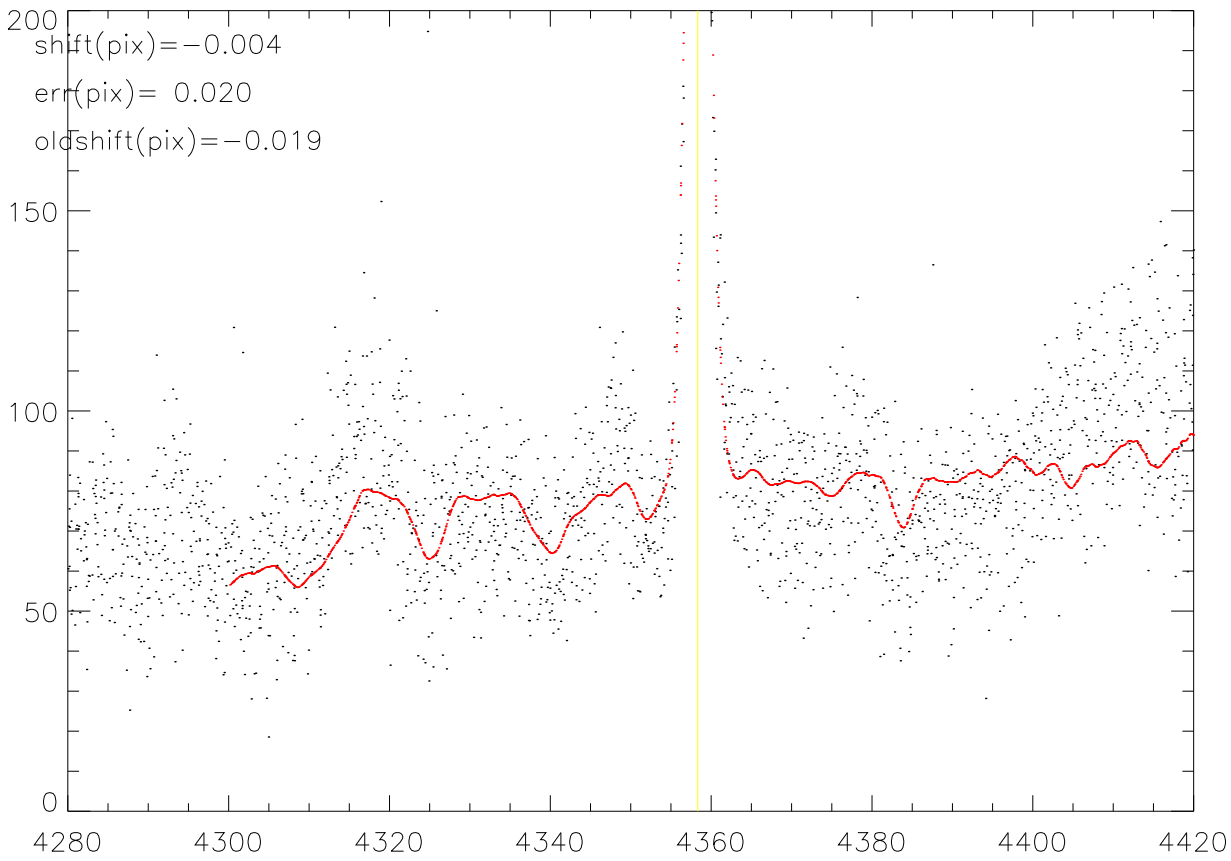

PLATE=3106 MJD=54735 Scattered Light on sdR-b2-00054982.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5
9.6
5.3
11.8

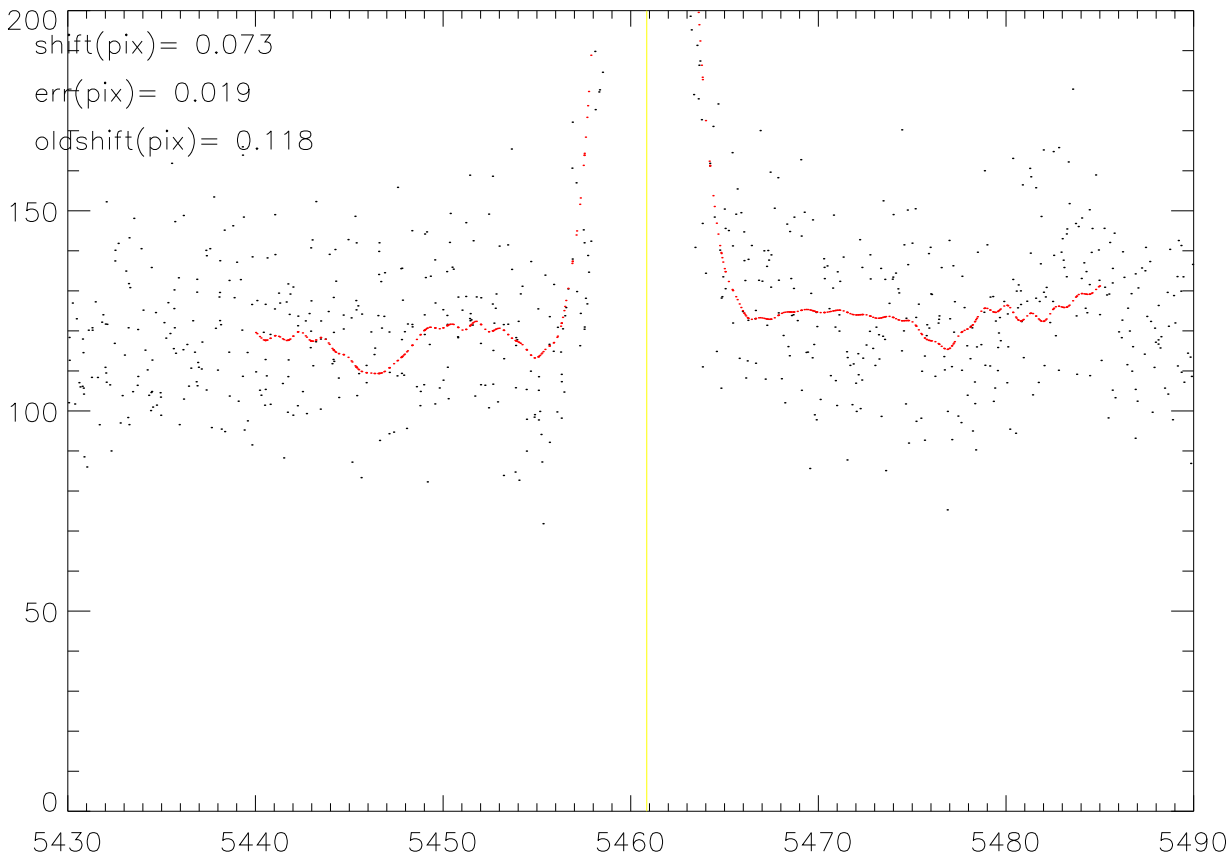

PLATE=3106 MJD=54735 Scattered Light on sdR-b2-00054982.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.505
Max value = 11.105
Wed Mar 10 11:11:10 2010

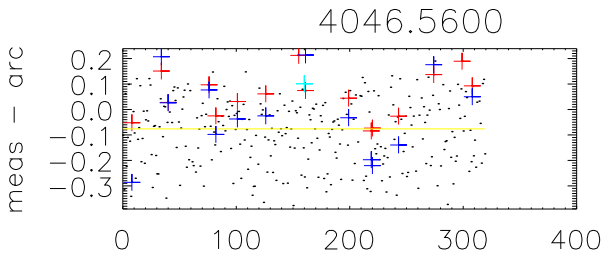

PLATE=3106 MJD=54735 Extraction chi^2 for sdR-b2-00054982.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

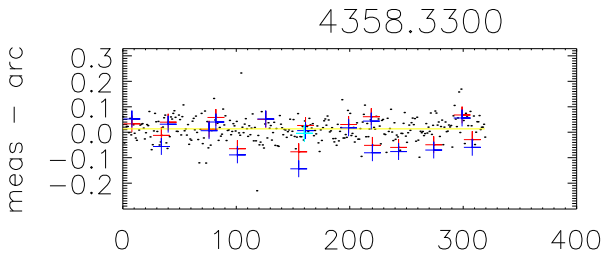

4046.5600
off: −0.03
sig: 0.043
4358.3300
off: −0.02
sig: 0.018
5460.9400
off: 0.12
sig: 0.015
5577.3390
off: 0.11
sig: 0.002
5889.9500
off: 0.19
sig: 0.006
5895.9240
off: 0.16
sig: 0.007

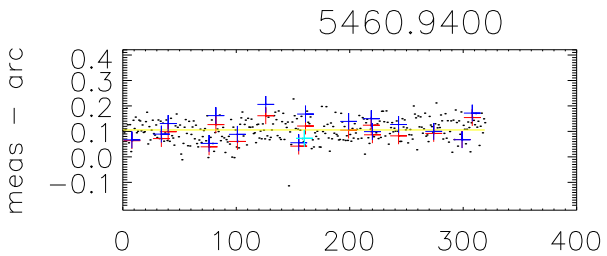

shift(pix)= 0.101
err(pix)= 0.051
oldshift(pix)=−0.025
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

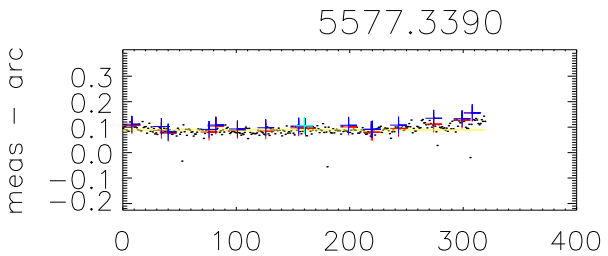

shift(pix)=−0.004
err(pix)= 0.020
oldshift(pix)=−0.019
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

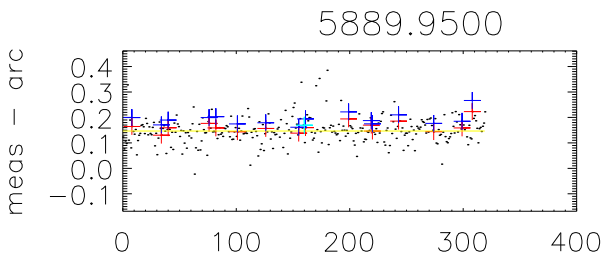

shift(pix)= 0.073
err(pix)= 0.019
oldshift(pix)= 0.118
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

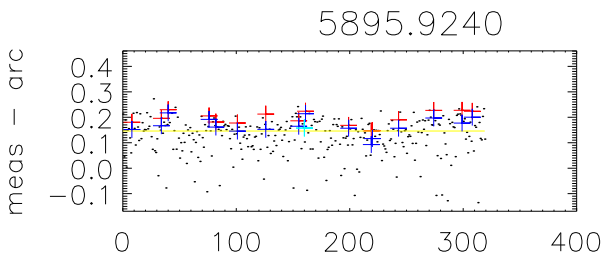

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

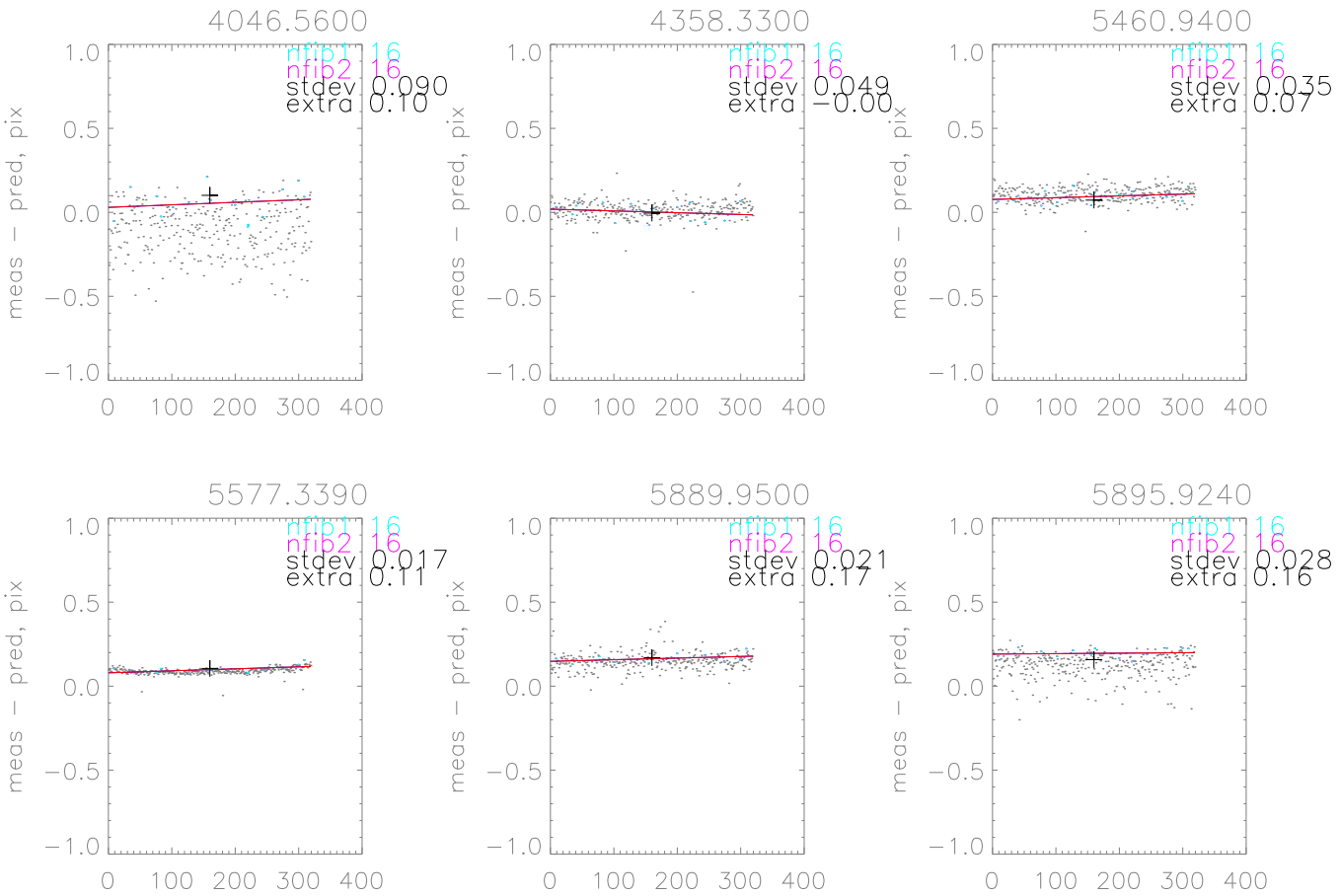

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

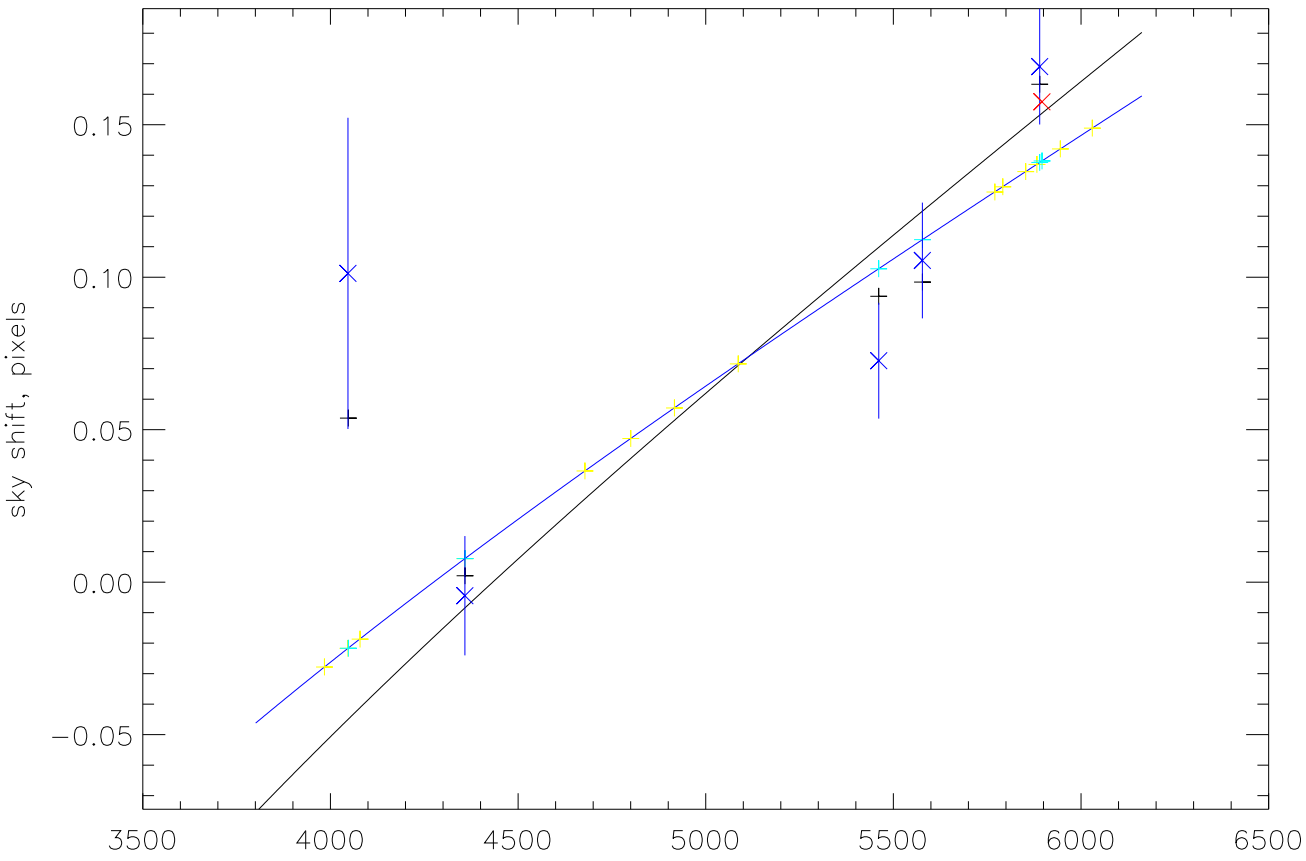

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

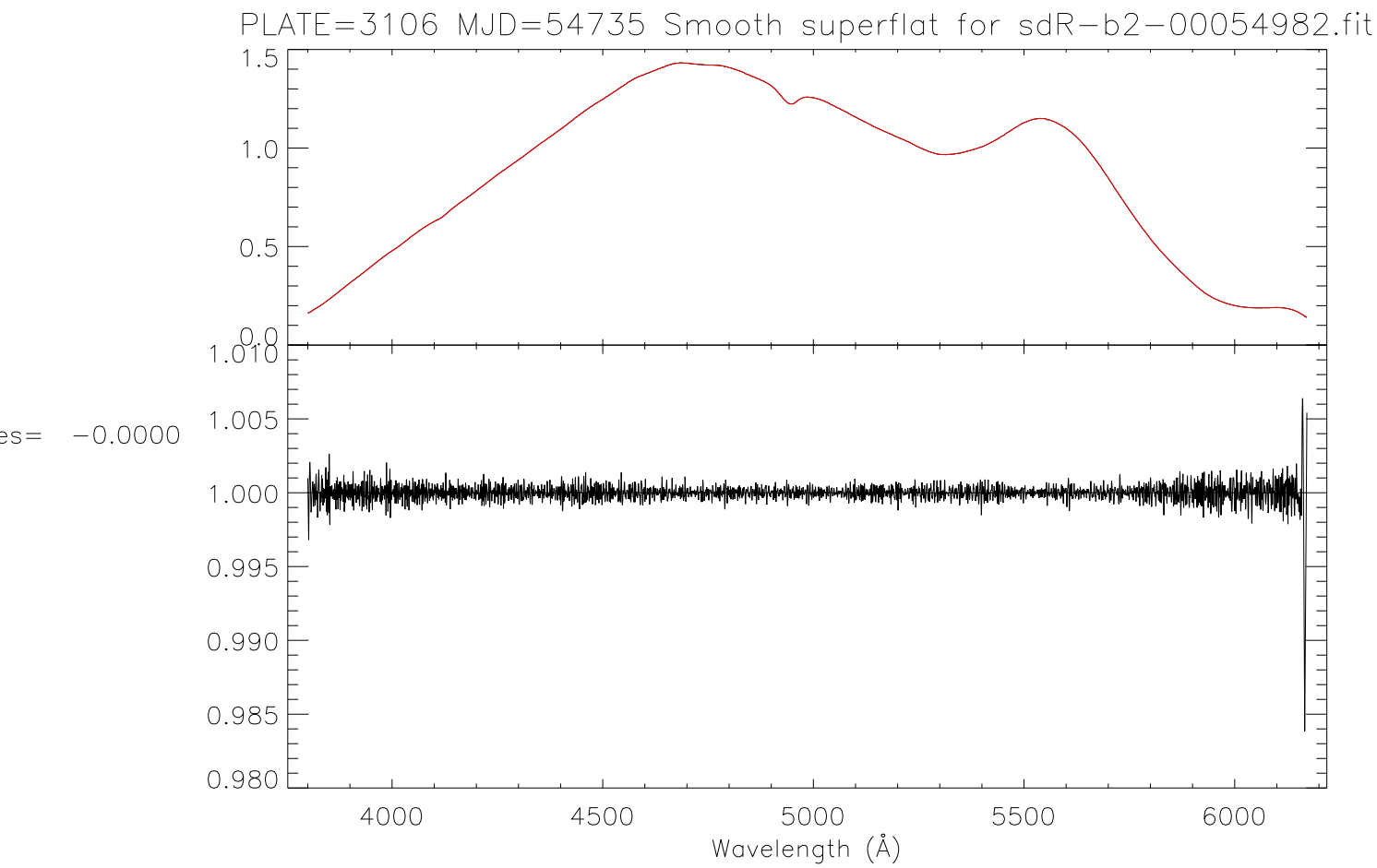

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

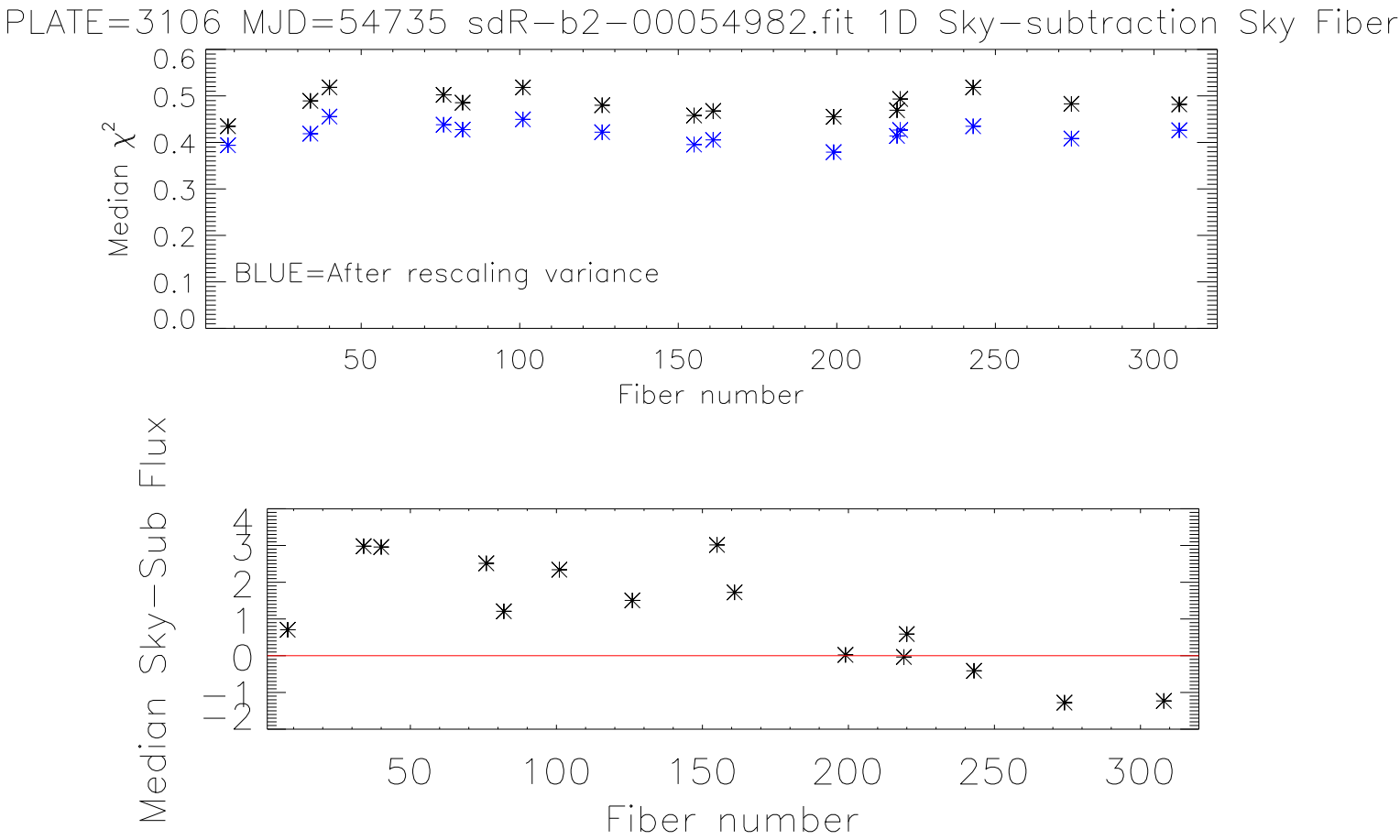

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

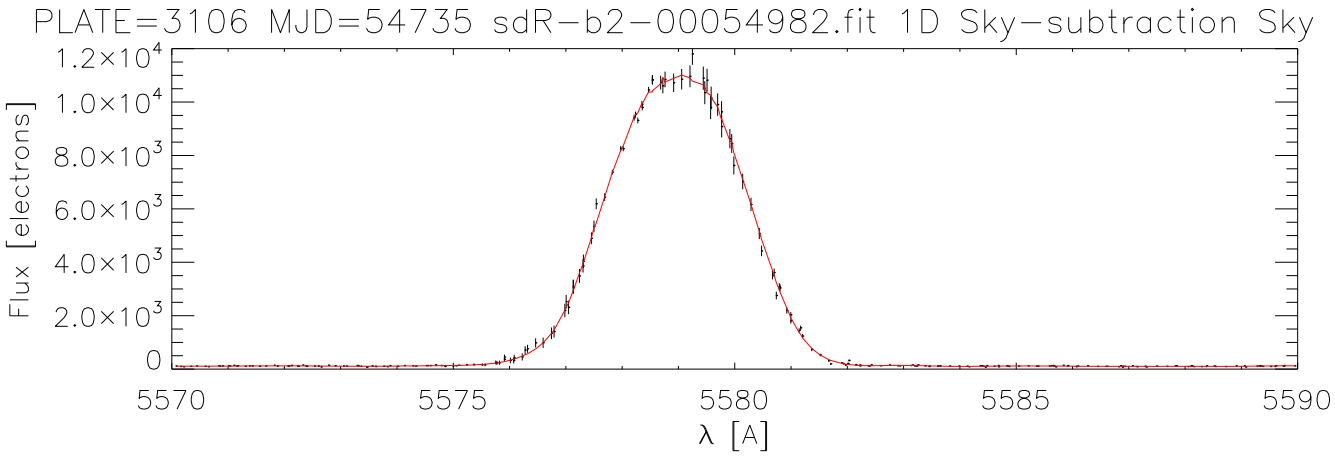

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

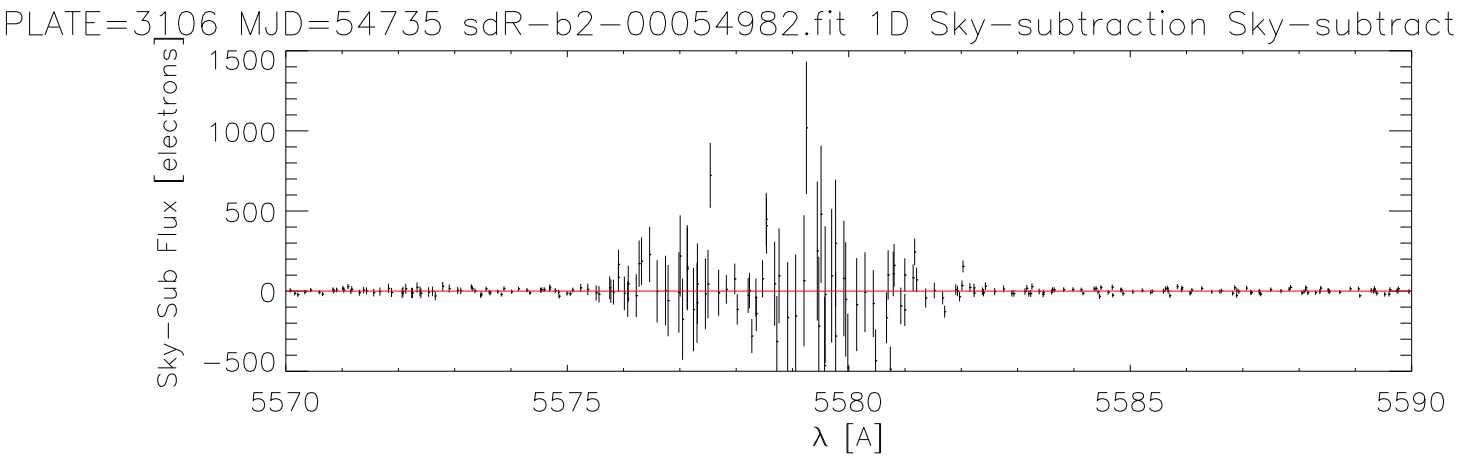

4046.5600
nfib1 16
nfib2 16
stdev 0.090
extra 0.10
4358.3300
nfib1 16
nfib2 16
stdev 0.049
extra −0.00
5460.9400
nfib1 16
nfib2 16
stdev 0.035
extra 0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra 0.17
5895.9240
nfib1 16
nfib2 16
stdev 0.028
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

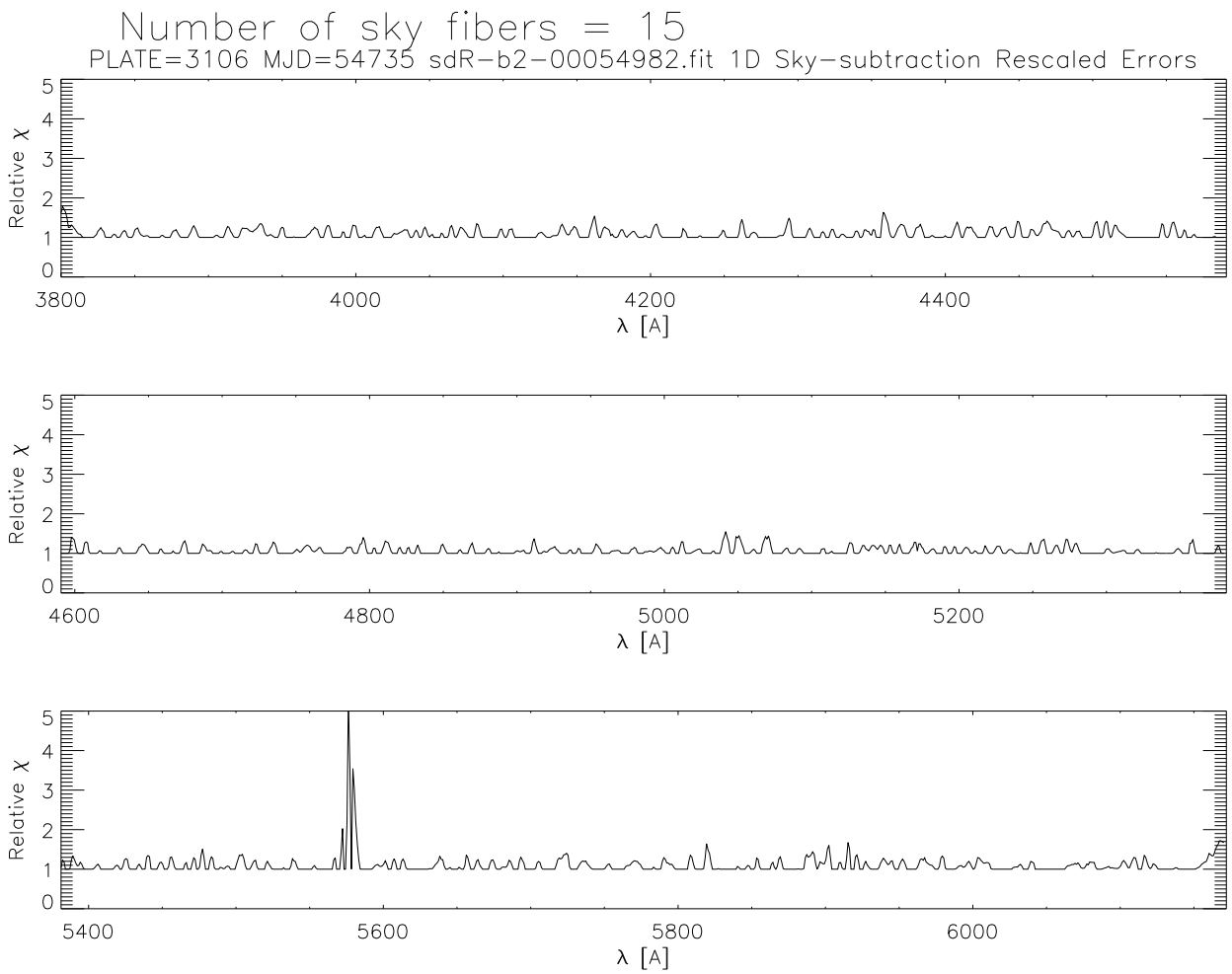

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

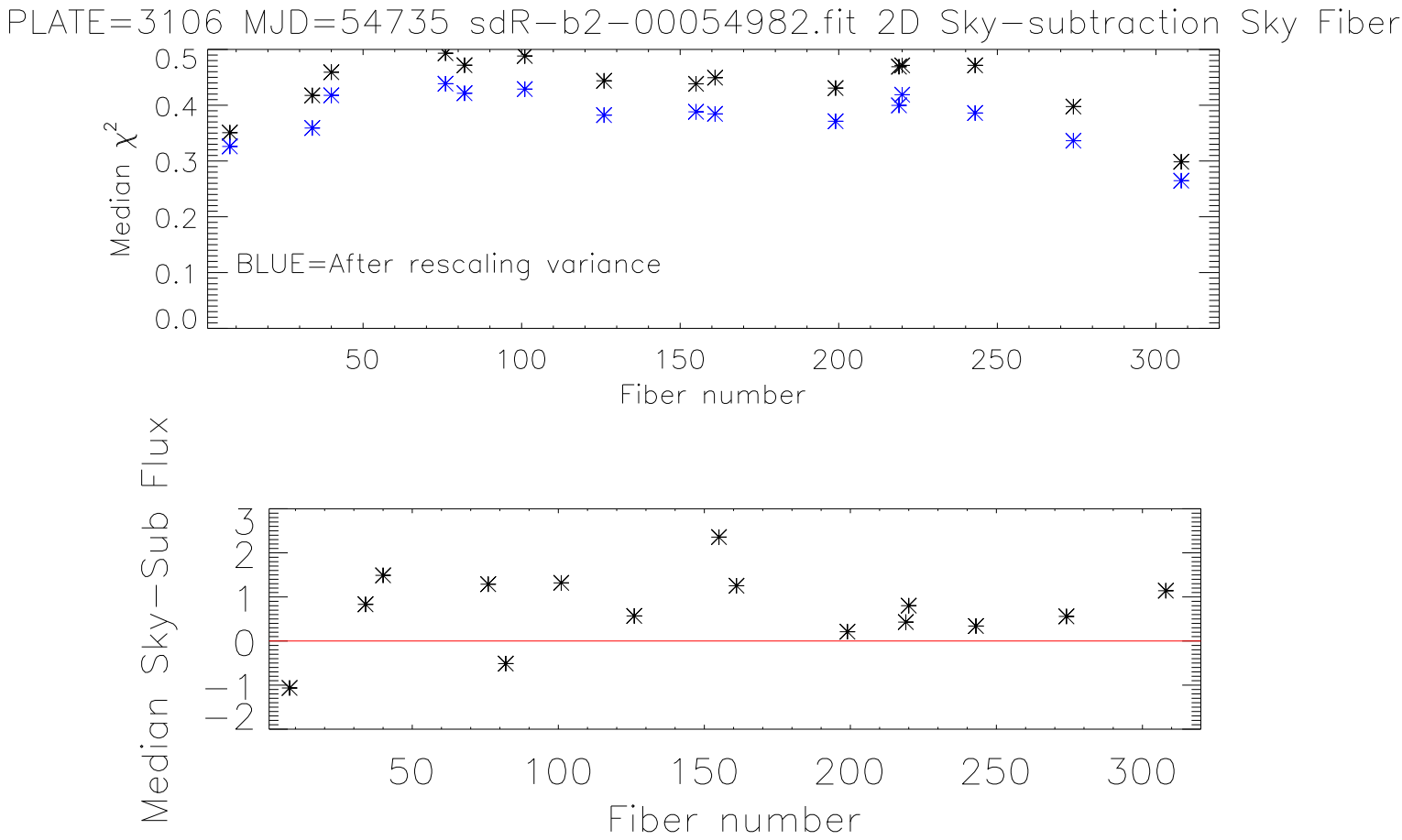

PLATE=3106 MJD=54735 Smooth superflat for sdR-b2-00054982.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

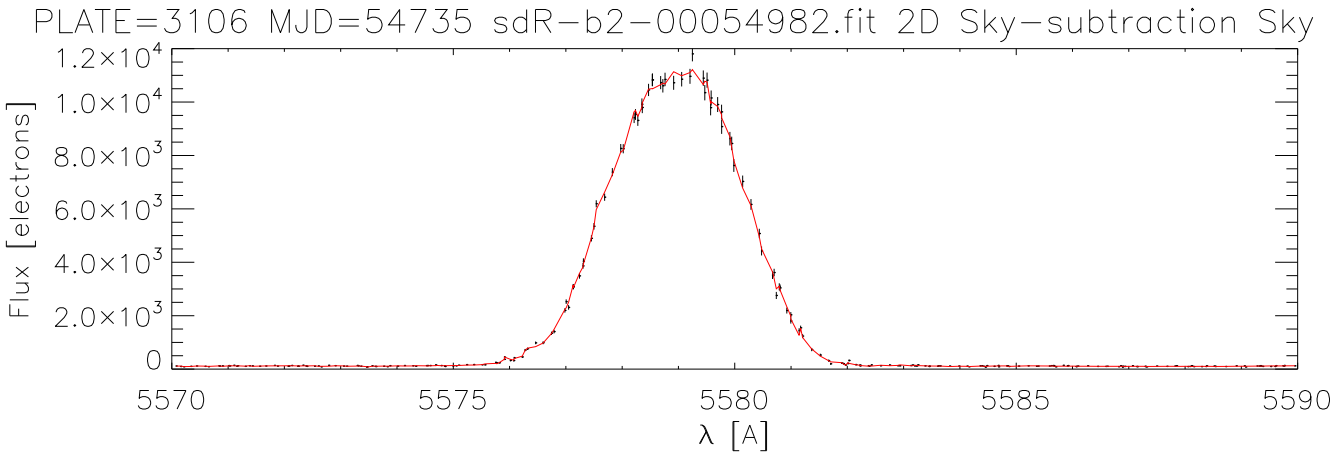

PLATE=3106 MJD=54735 sdR-b2-00054982.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

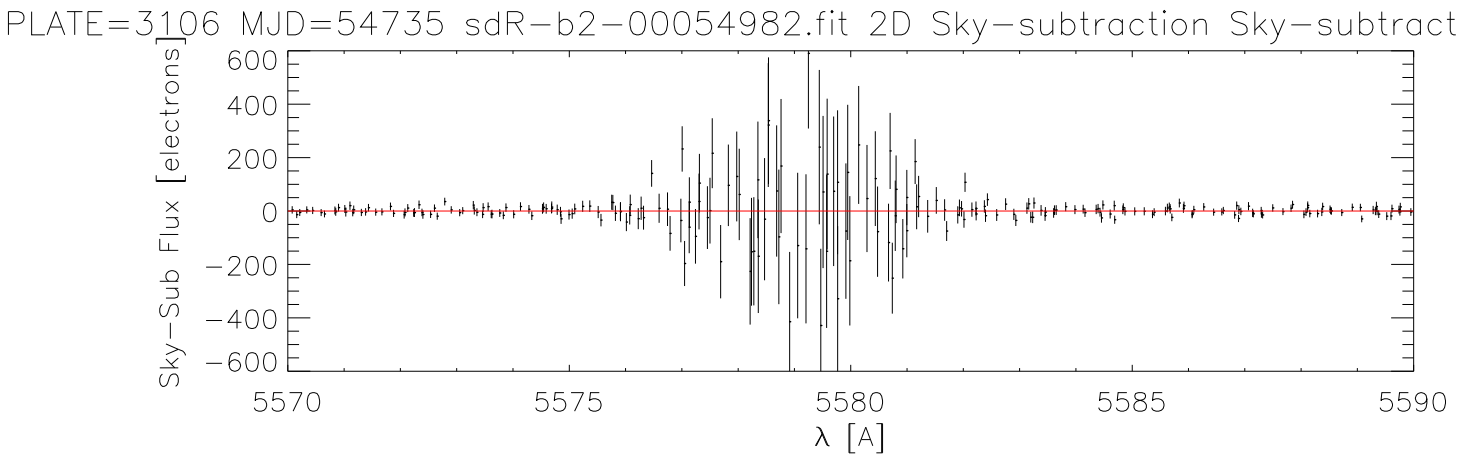

PLATE=3106 MJD=54735 sdR-b2-00054982.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

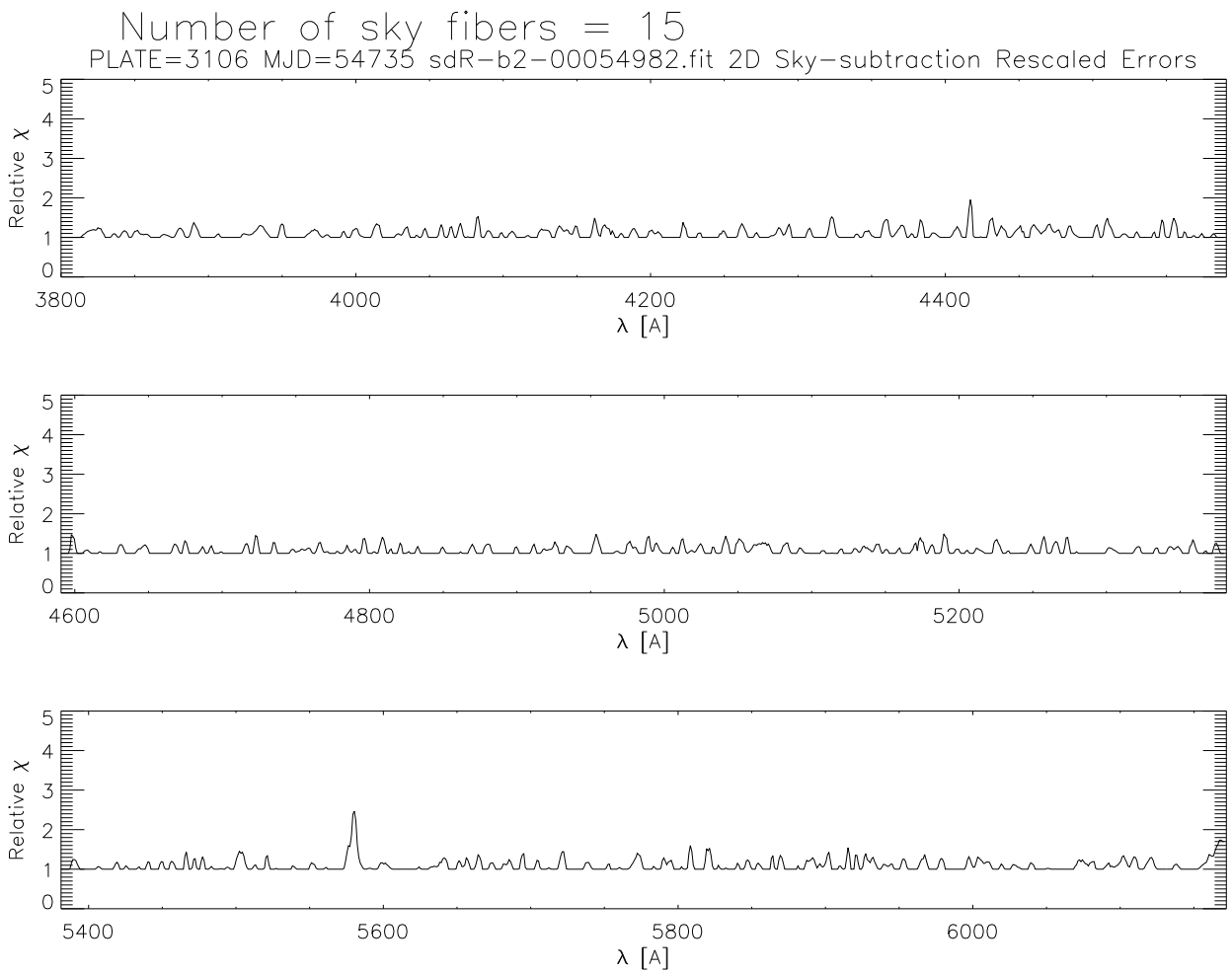

PLATE=3106 MJD=54735 sdR-b2-00054982.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

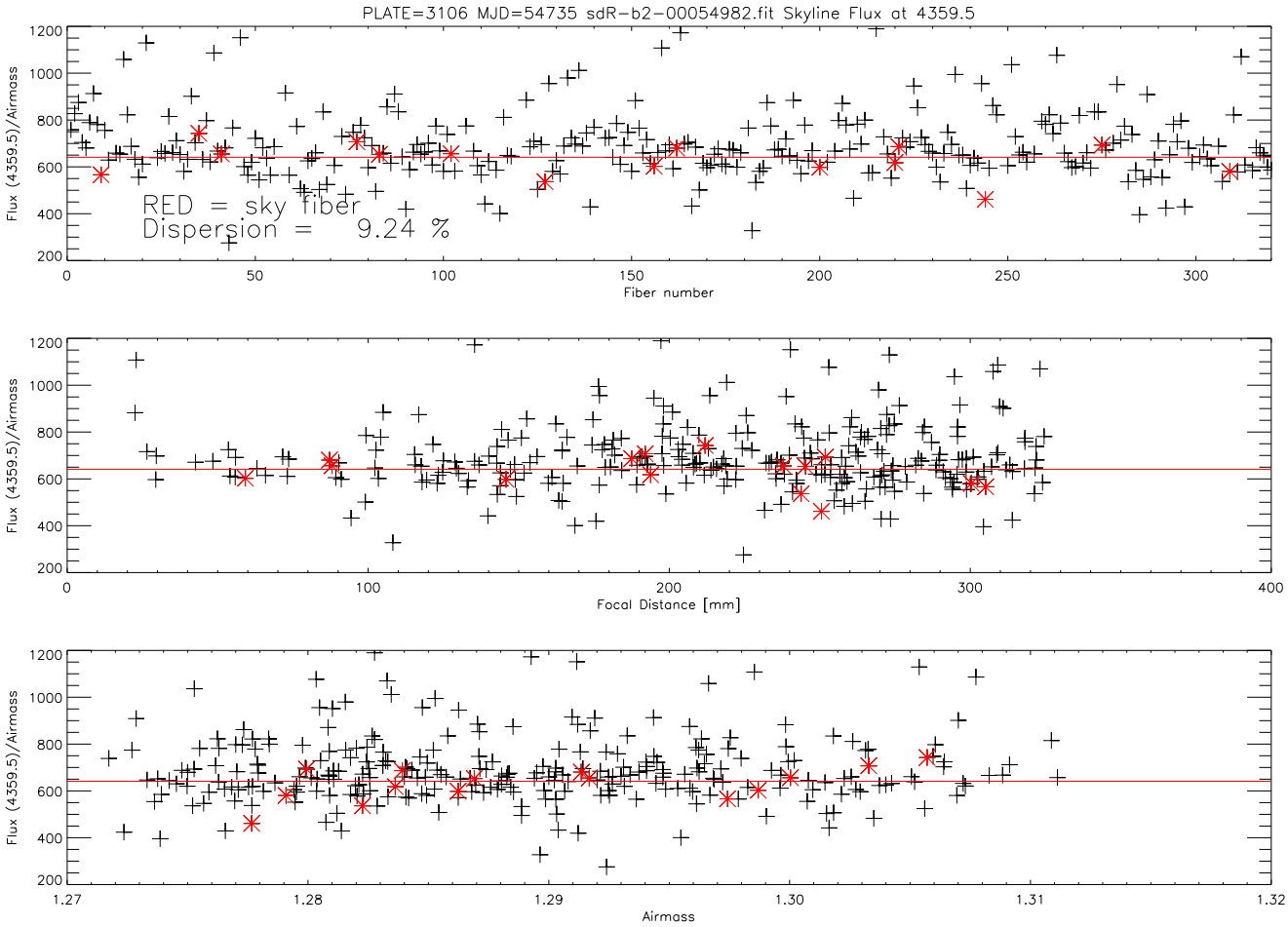

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b2-00054982.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

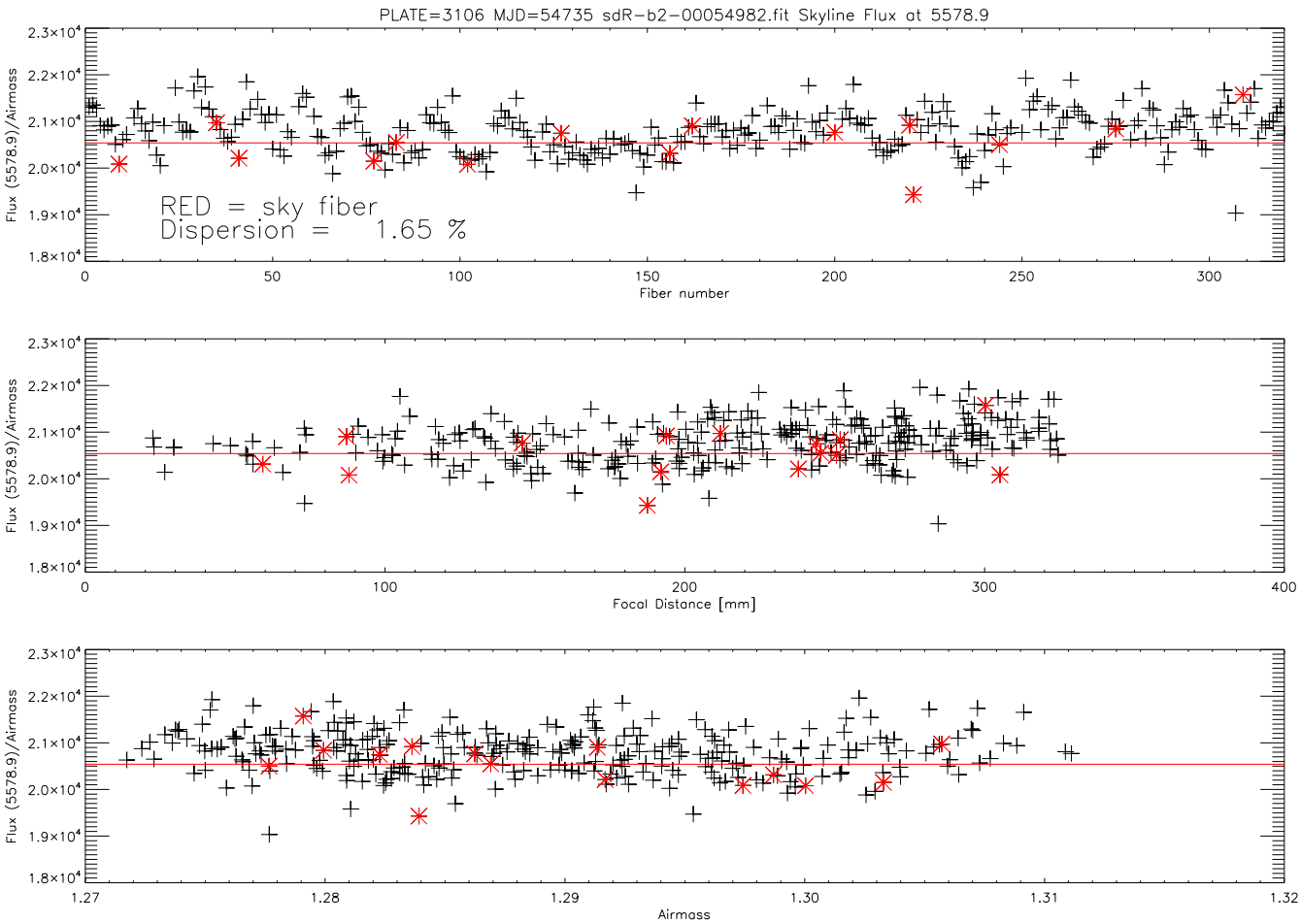

PLATE=3106 MJD=54735 sdR-b2-00054982.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

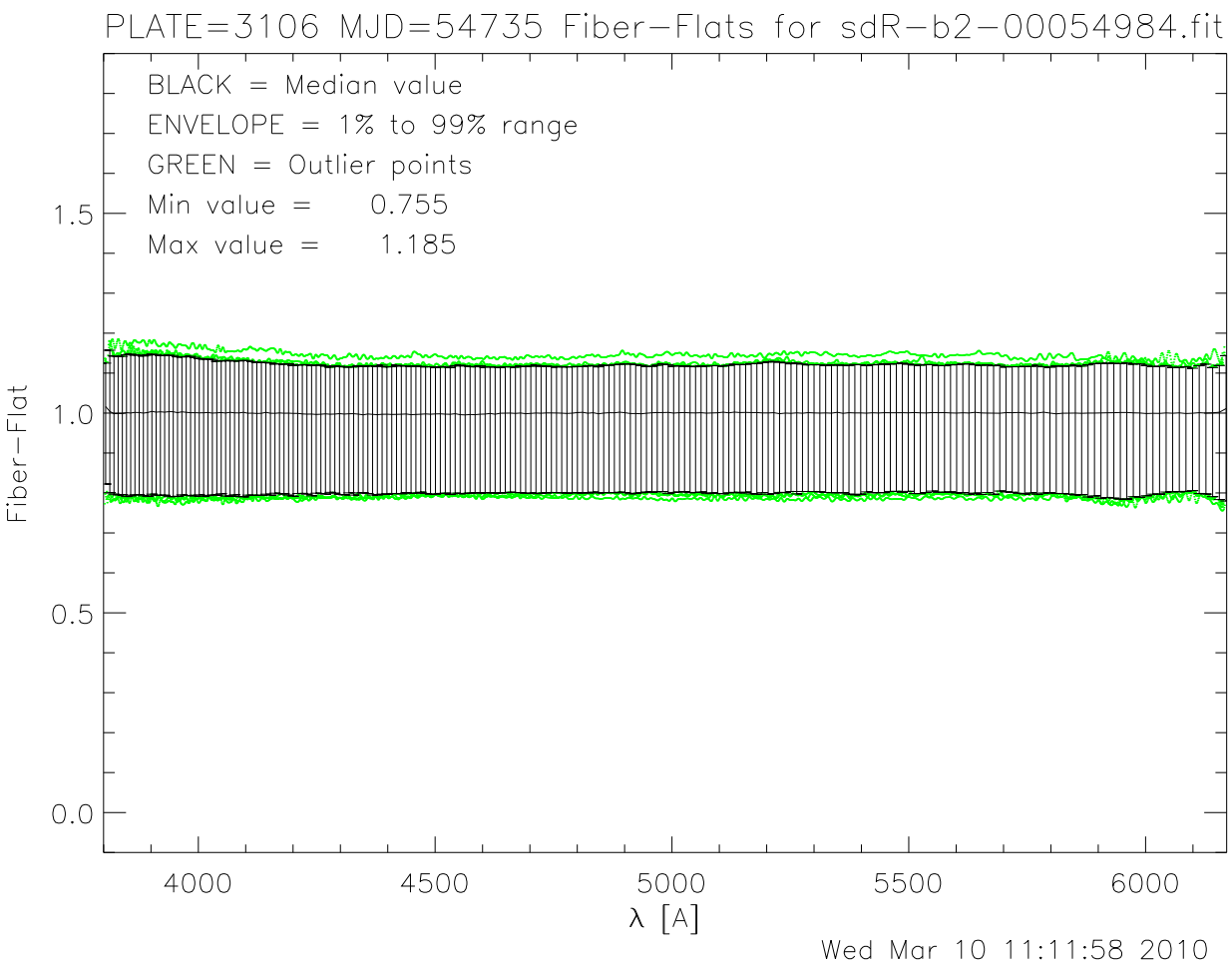

PLATE=3106 MJD=54735 sdR-b2-00054982.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

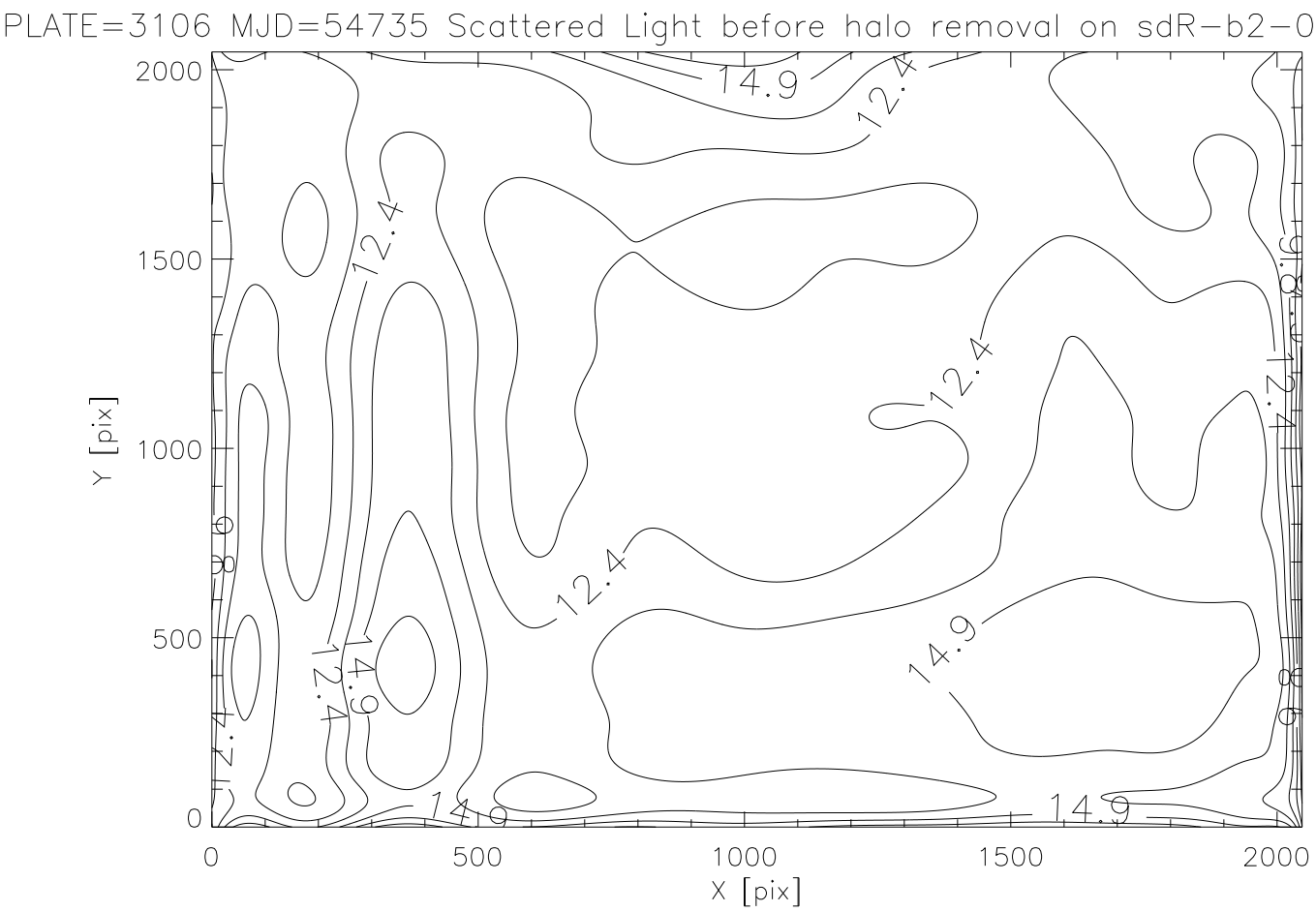

PLATE=3106 MJD=54735 sdR-b2-00054982.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

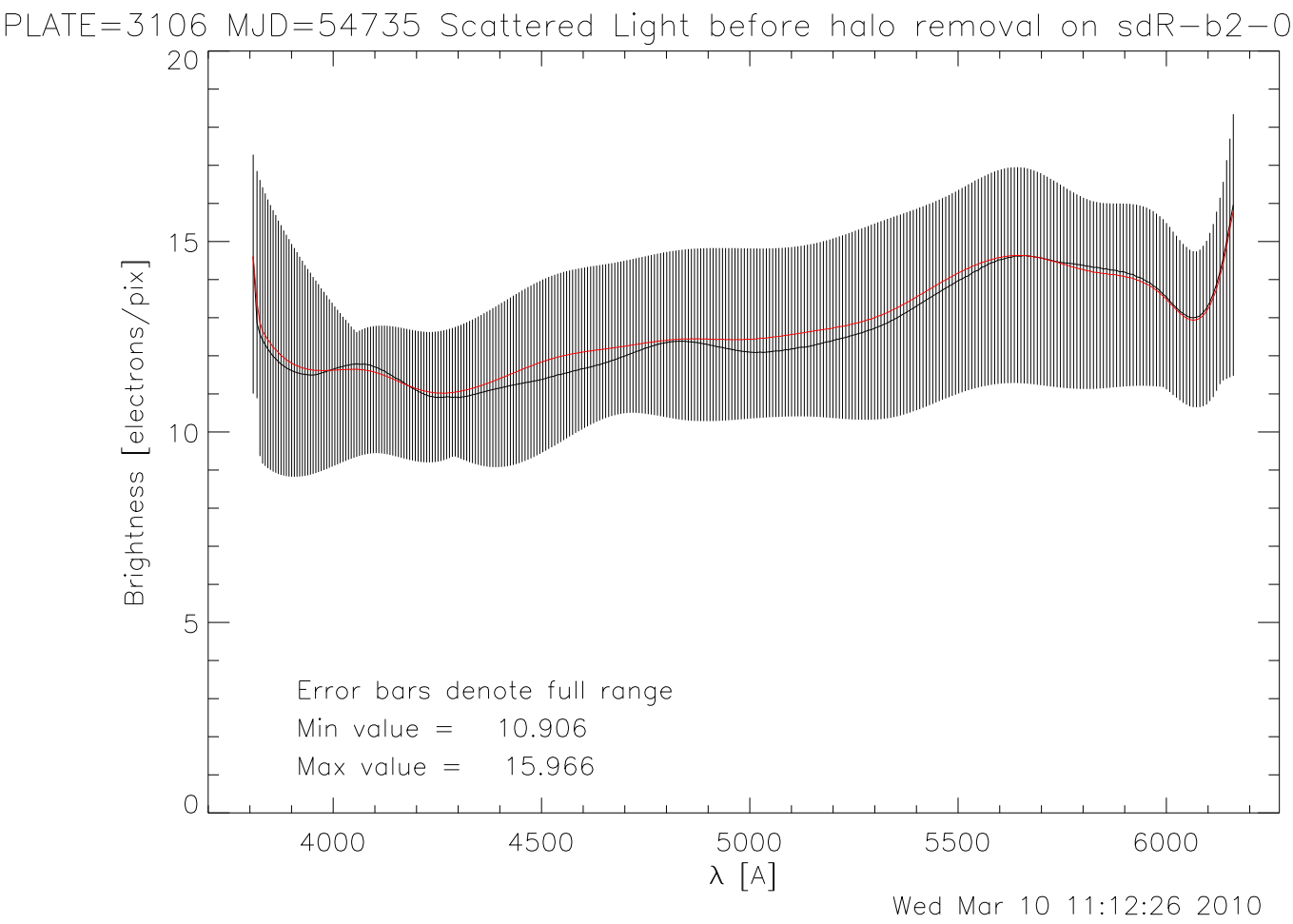

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b2-00054982.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

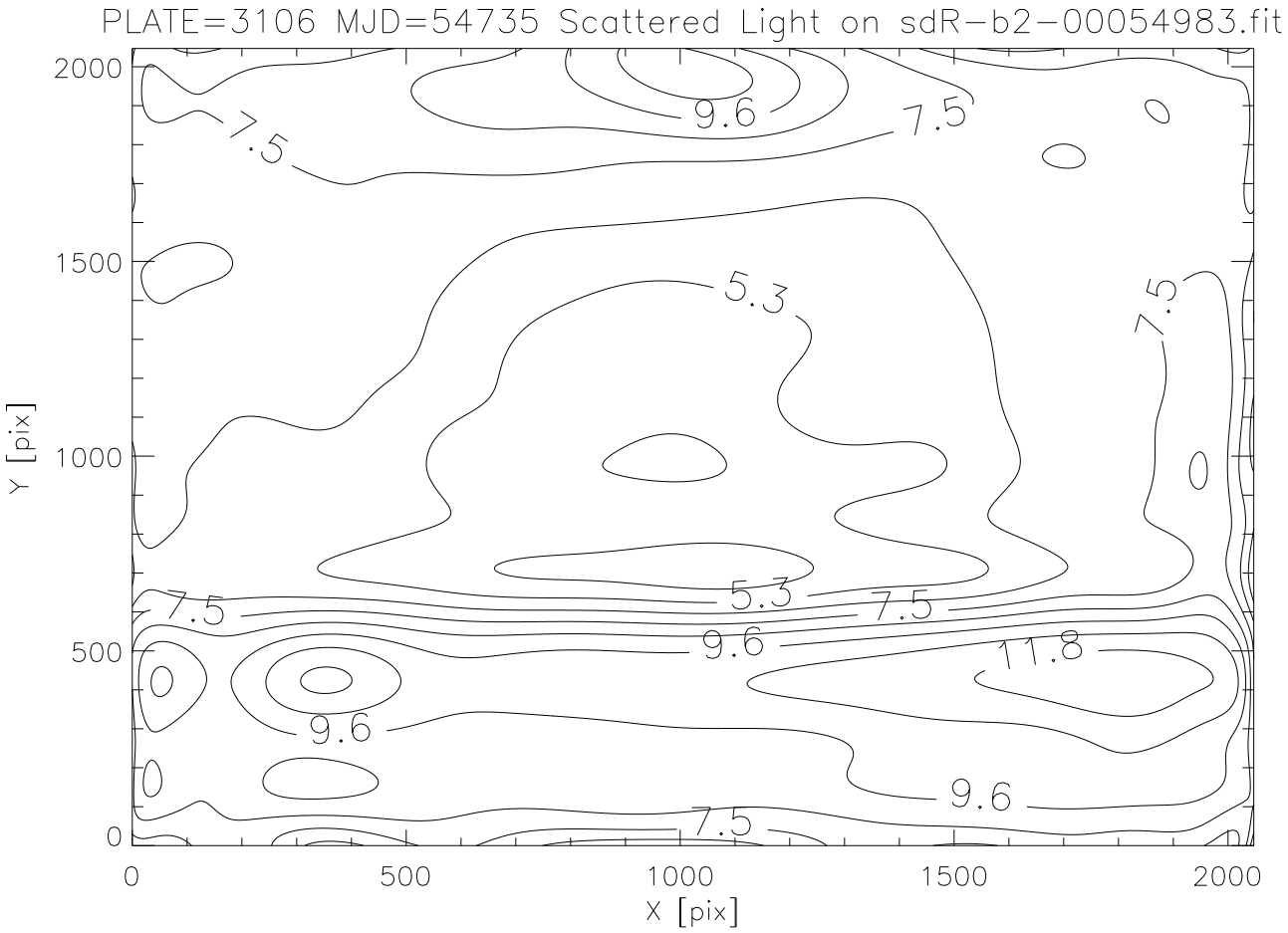

PLATE=3106 MJD=54735 sdR-b2-00054982.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.24 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

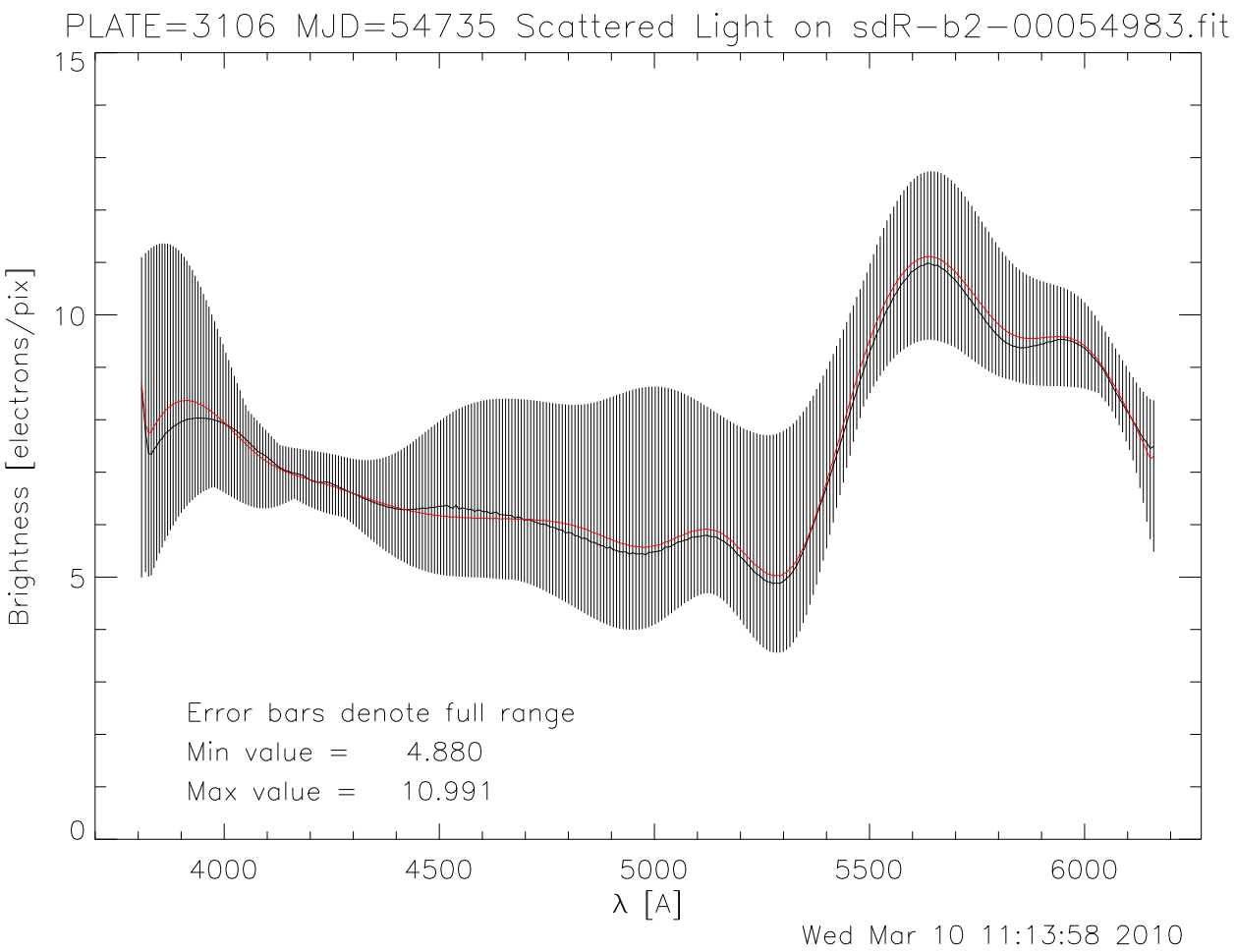

PLATE=3106 MJD=54735 sdR-b2-00054982.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.65 %
Fiber number
Focal Distance [mm]
Airmass

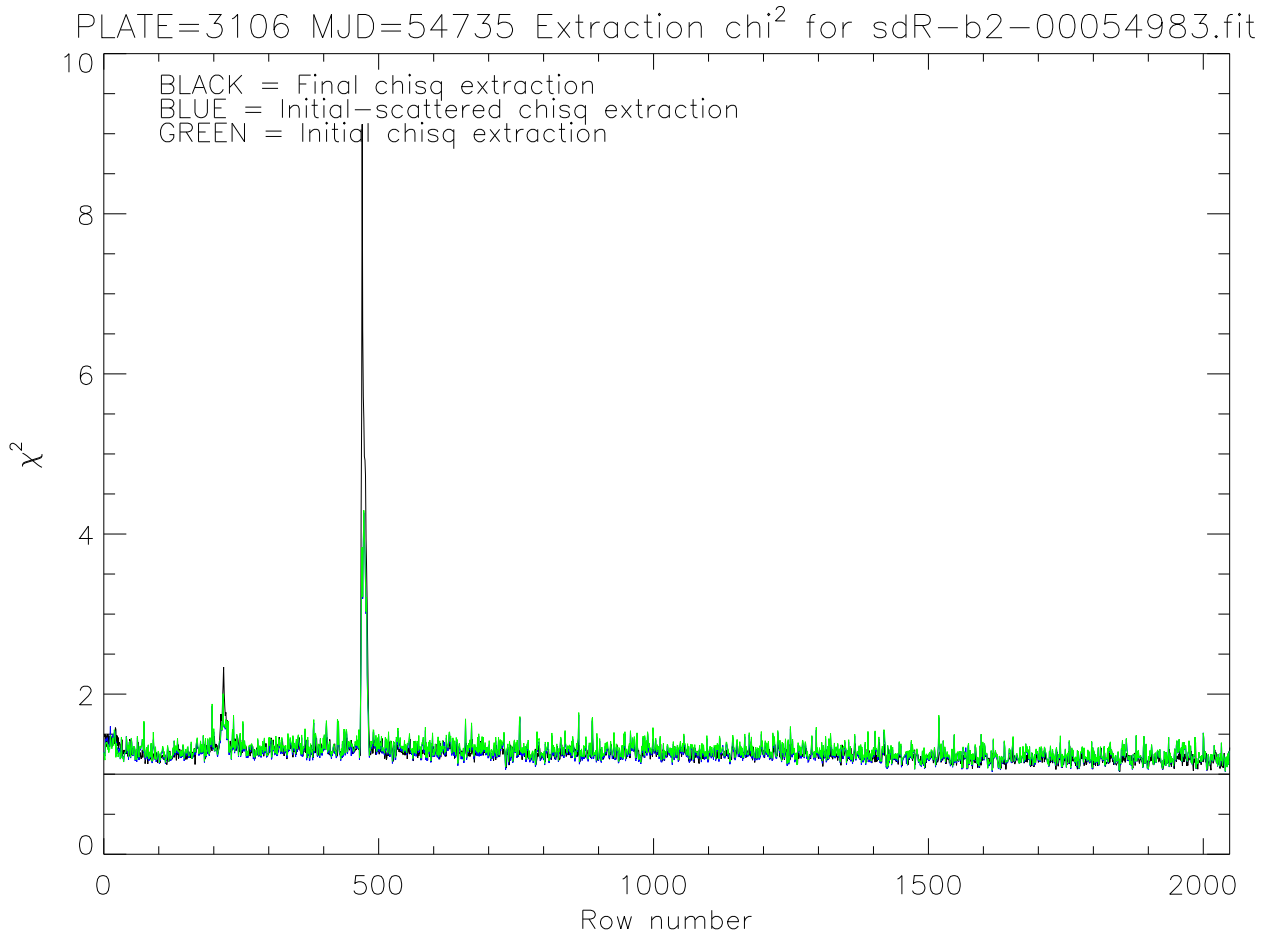

PLATE=3106 MJD=54735 Fiber-Flats for sdR-b2-00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.755
Max value = 1.185
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 11:11:58 2010

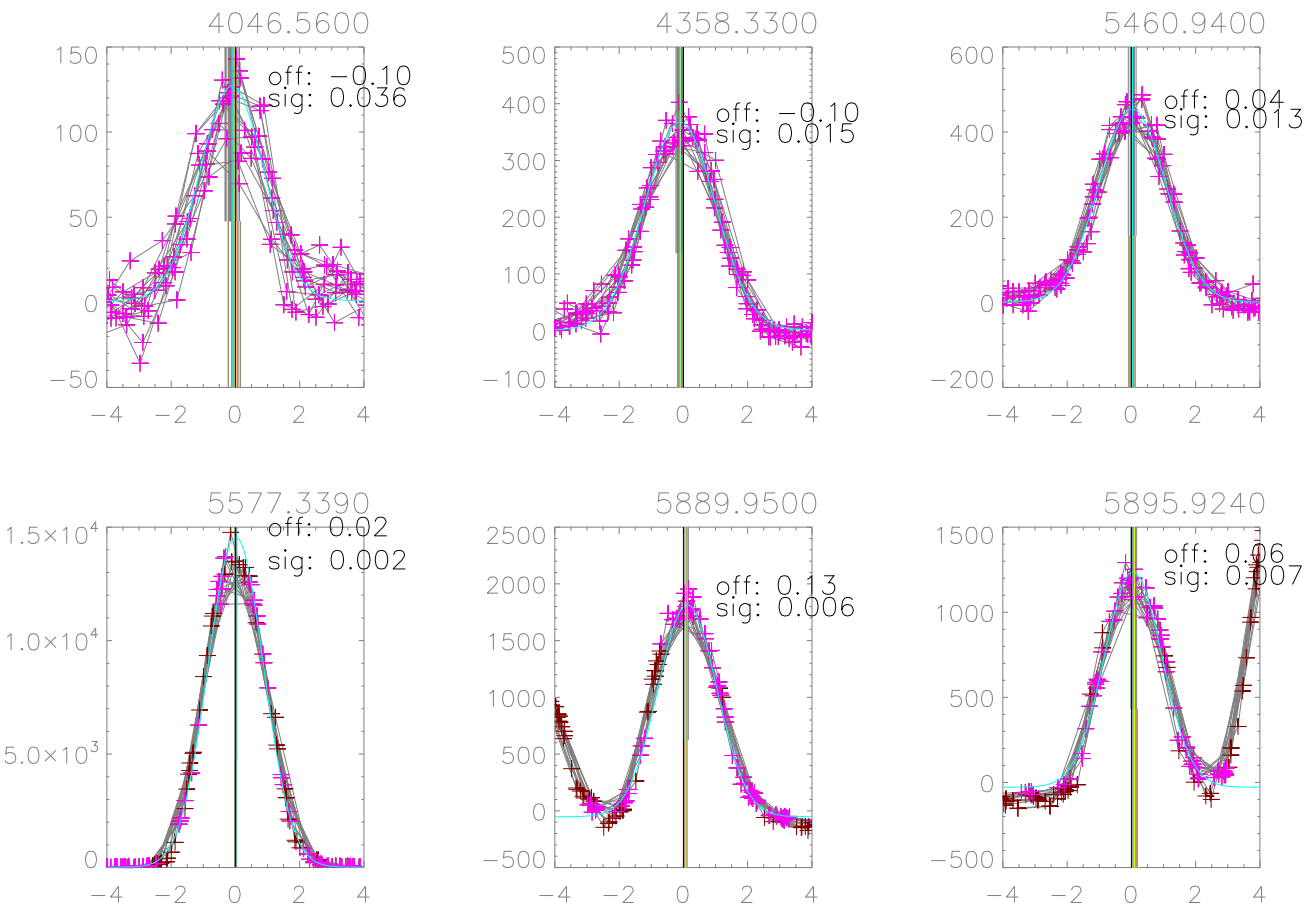

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-b2-00054983.f
Y [pix]
X [pix]
0
500
1000
1500
2000
14.9
12.4

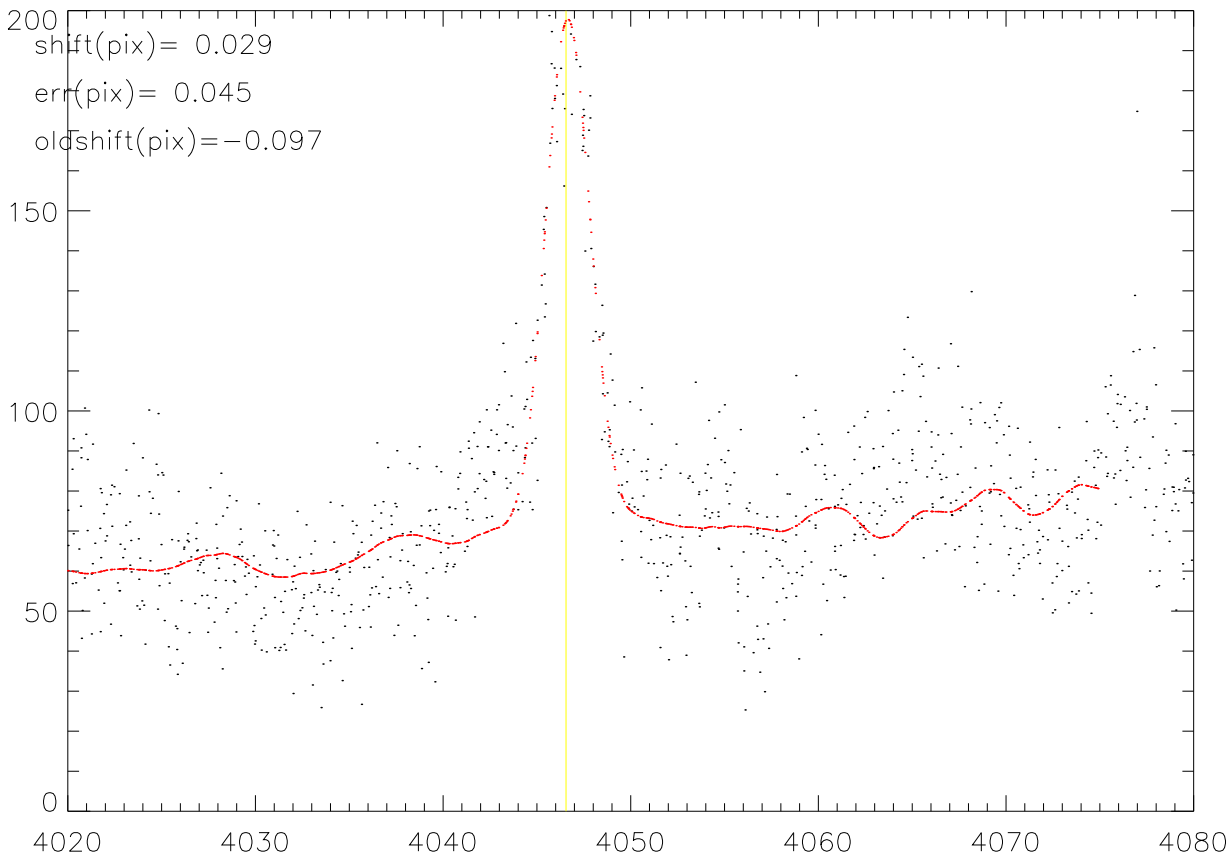

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-b2-00054983.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 10.906
Max value = 15.966
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 11:12:26 2010

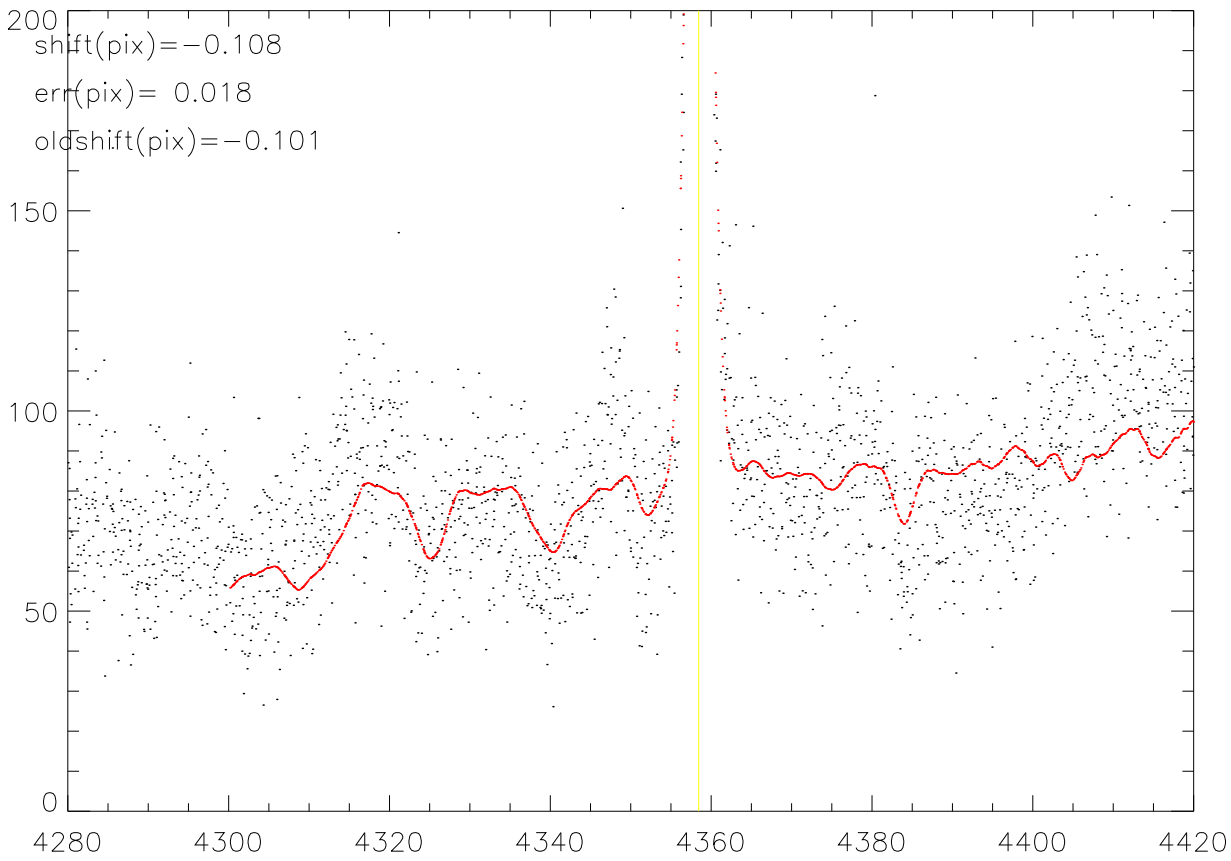

PLATE=3106 MJD=54735 Scattered Light on sdR-b2-00054983.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.6
7.5
5.3
11.8

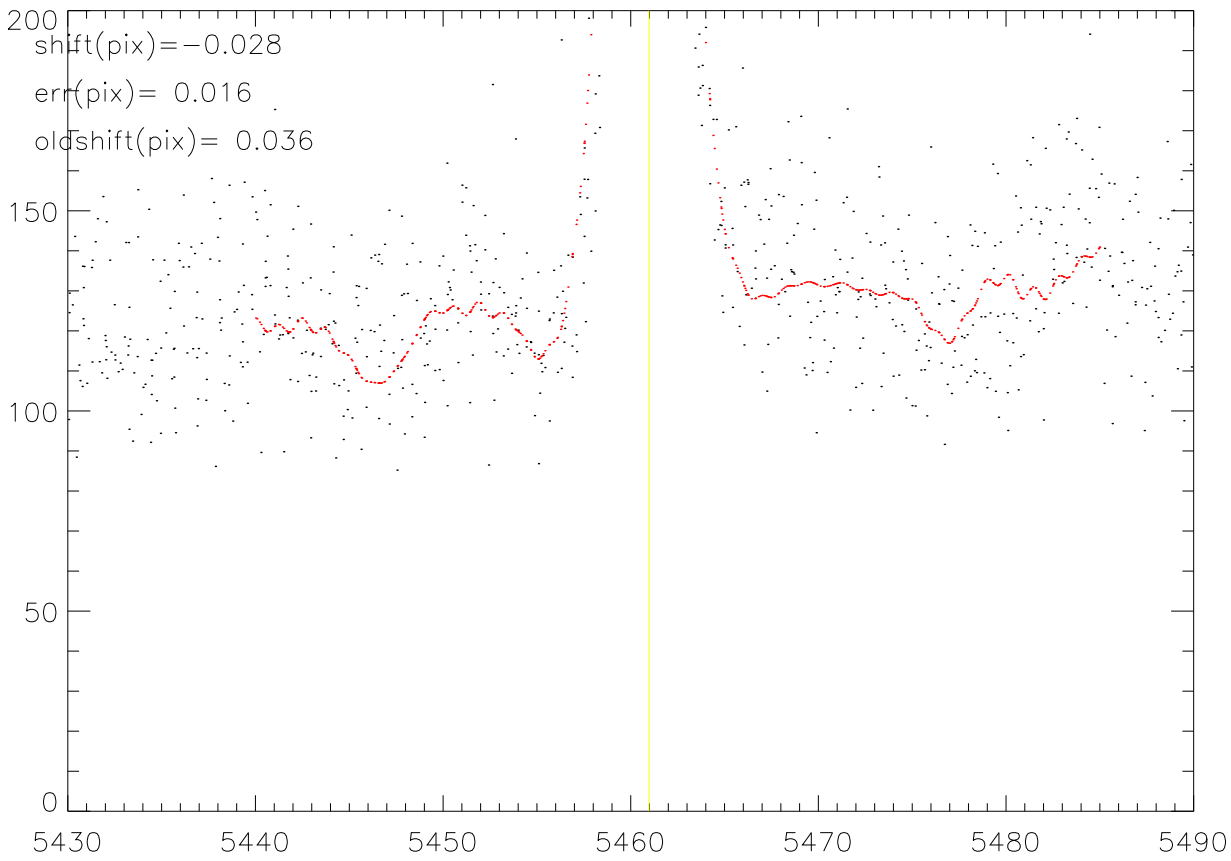

PLATE=3106 MJD=54735 Scattered Light on sdR-b2-00054983.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.880
Max value = 10.991
Wed Mar 10 11:13:58 2010

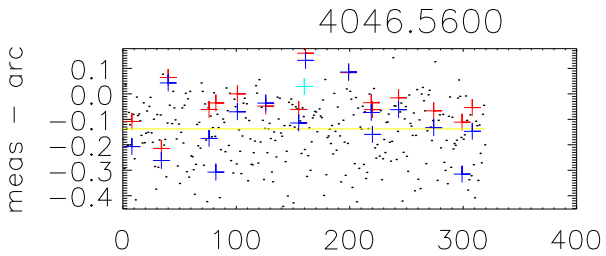

PLATE=3106 MJD=54735 Extraction chi^2 for sdR-b2-00054983.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

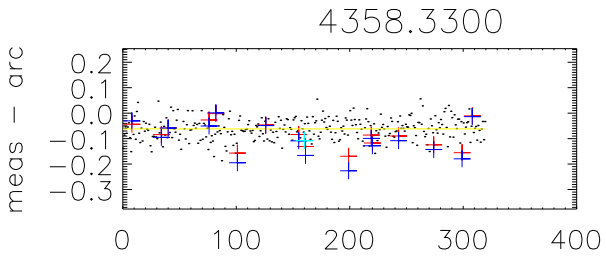

4046.5600
off: −0.10
sig: 0.036
4358.3300
off: −0.10
sig: 0.015
5460.9400
off: 0.04
sig: 0.013
5577.3390
off: 0.02
sig: 0.002
5889.9500
off: 0.13
sig: 0.006
5895.9240
off: 0.06
sig: 0.007

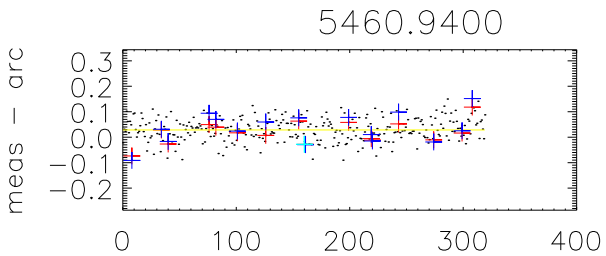

shift(pix)= 0.029
err(pix)= 0.045
oldshift(pix)=-0.097
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

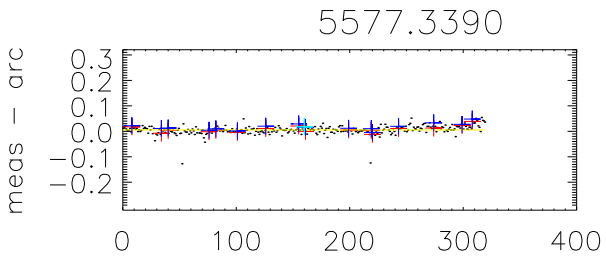

shift(pix)=−0.108
err(pix)= 0.018
oldshift(pix)=−0.101
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

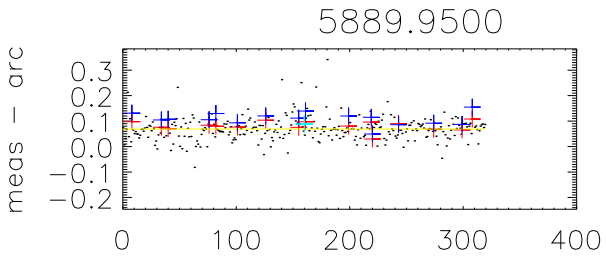

shift(pix)=−0.028
err(pix)= 0.016
oldshift(pix)= 0.036
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

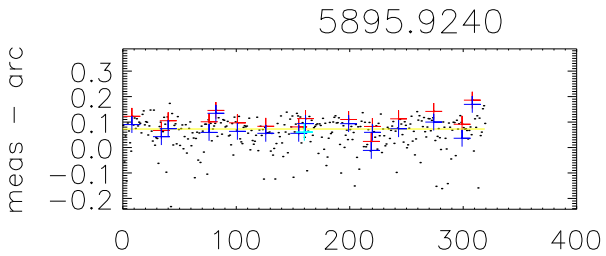

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

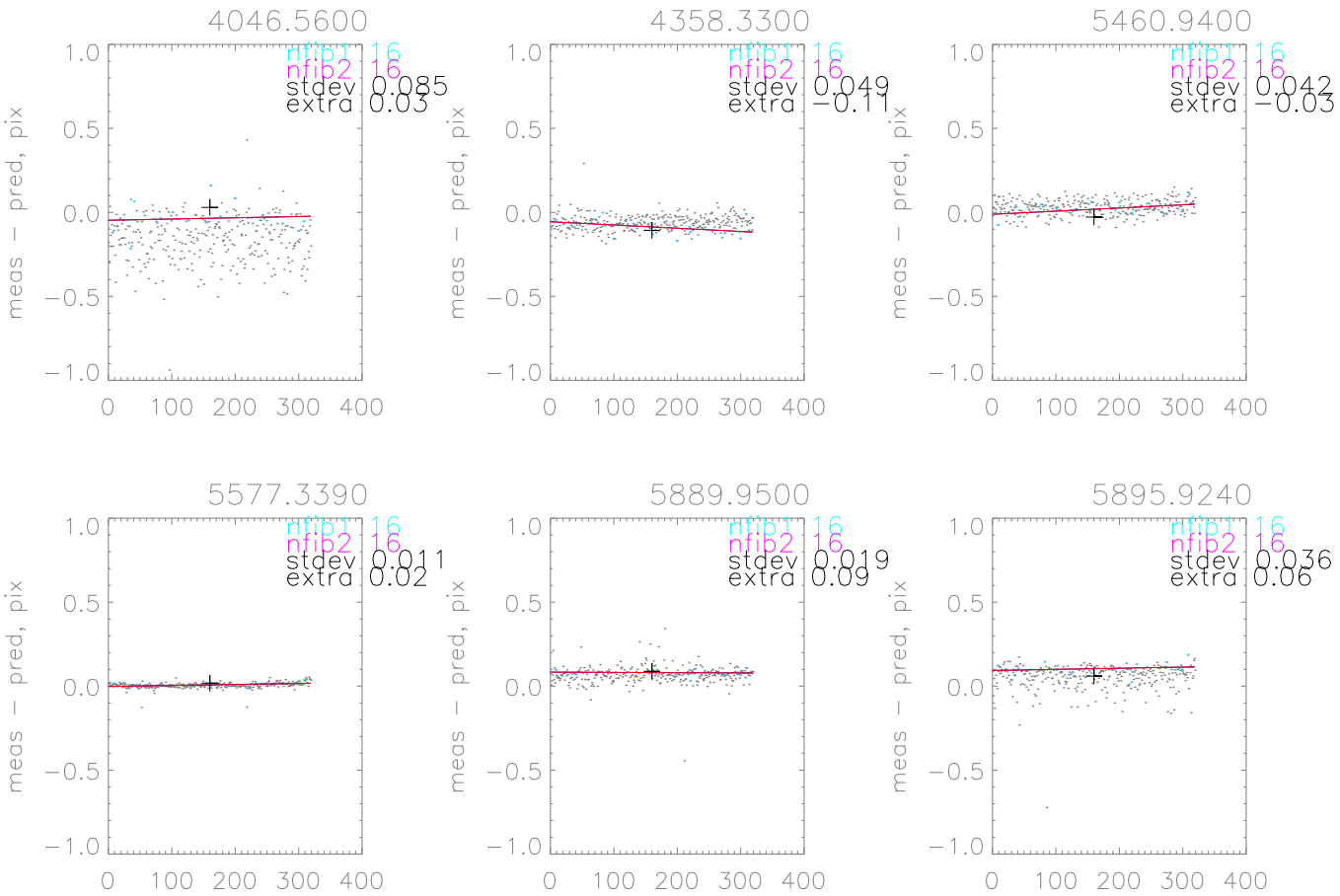

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

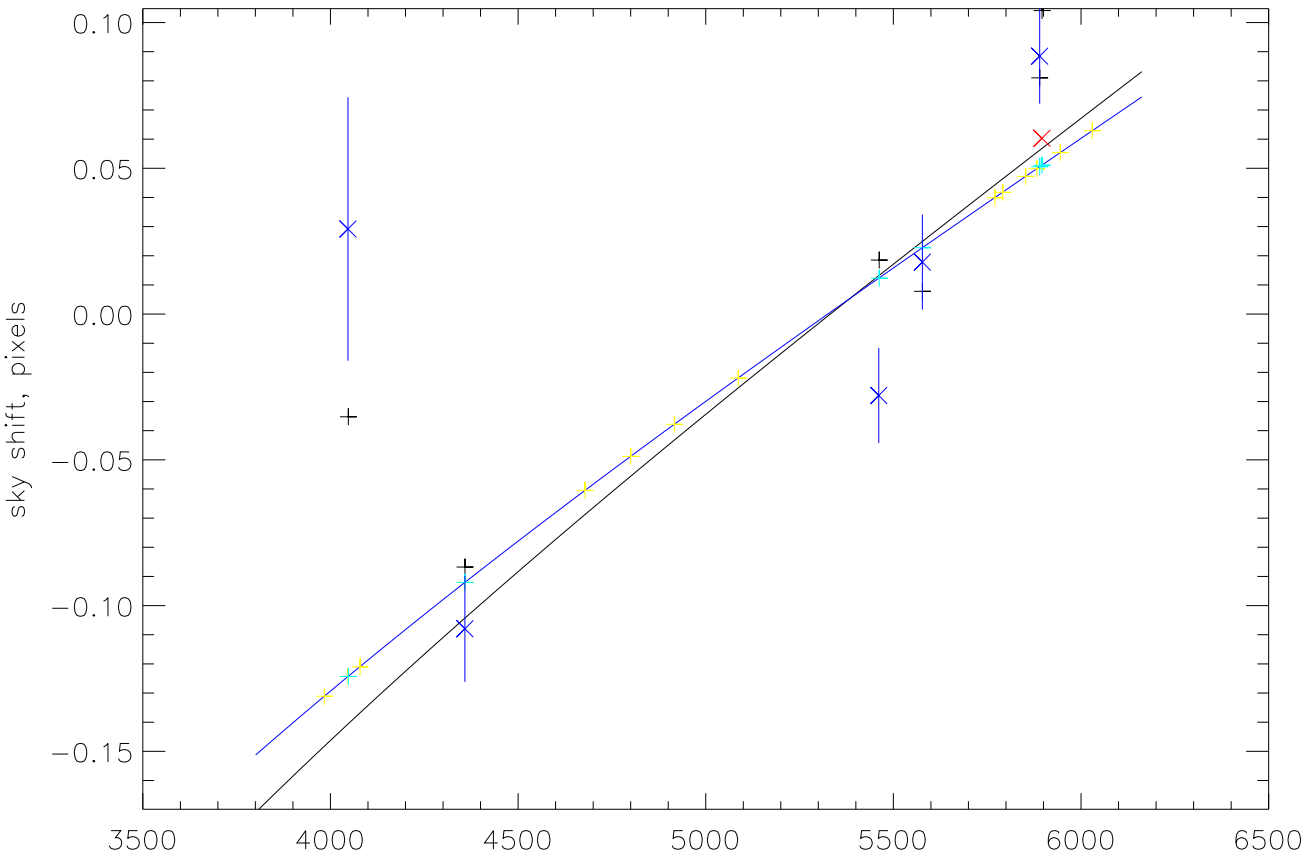

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

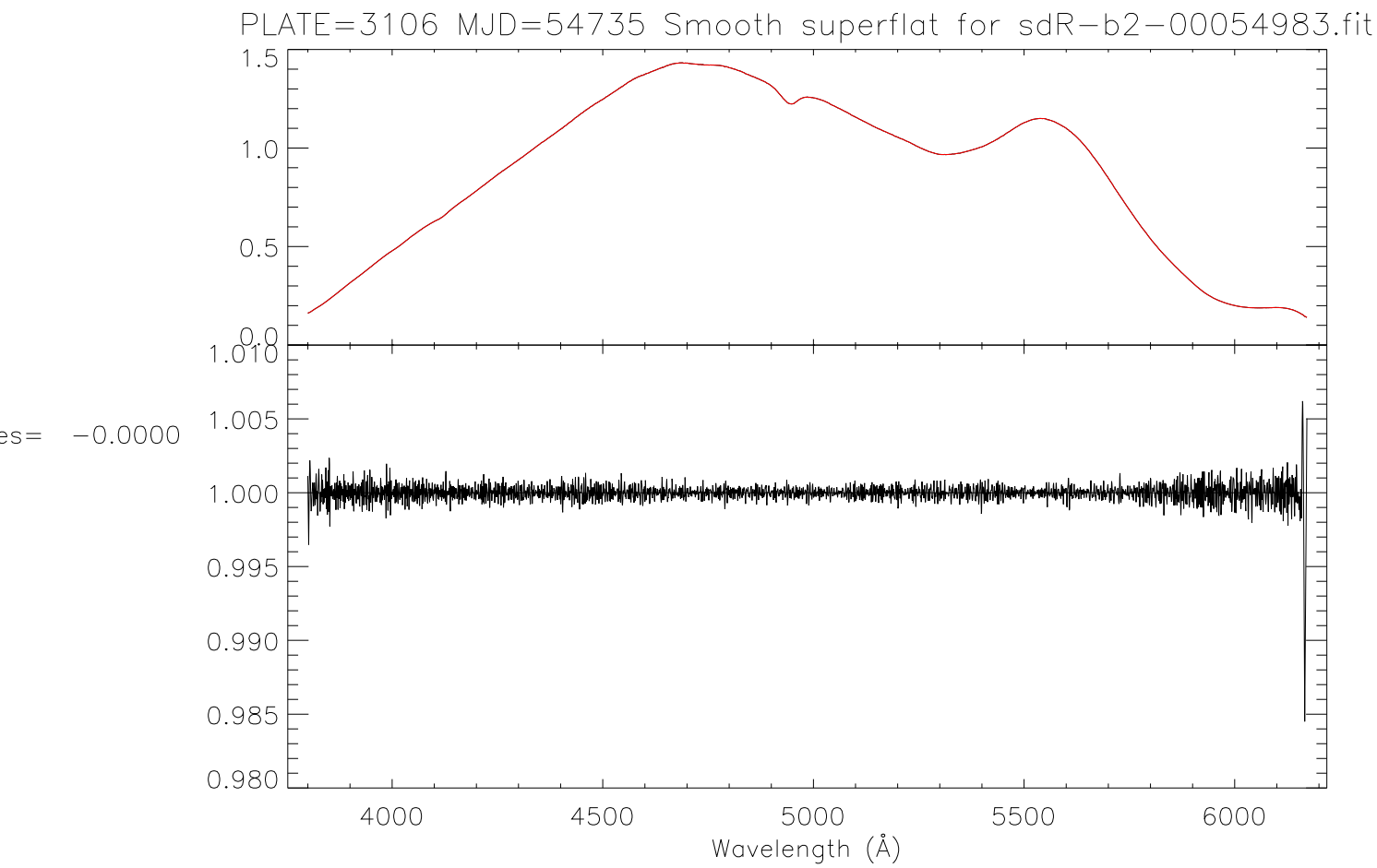

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

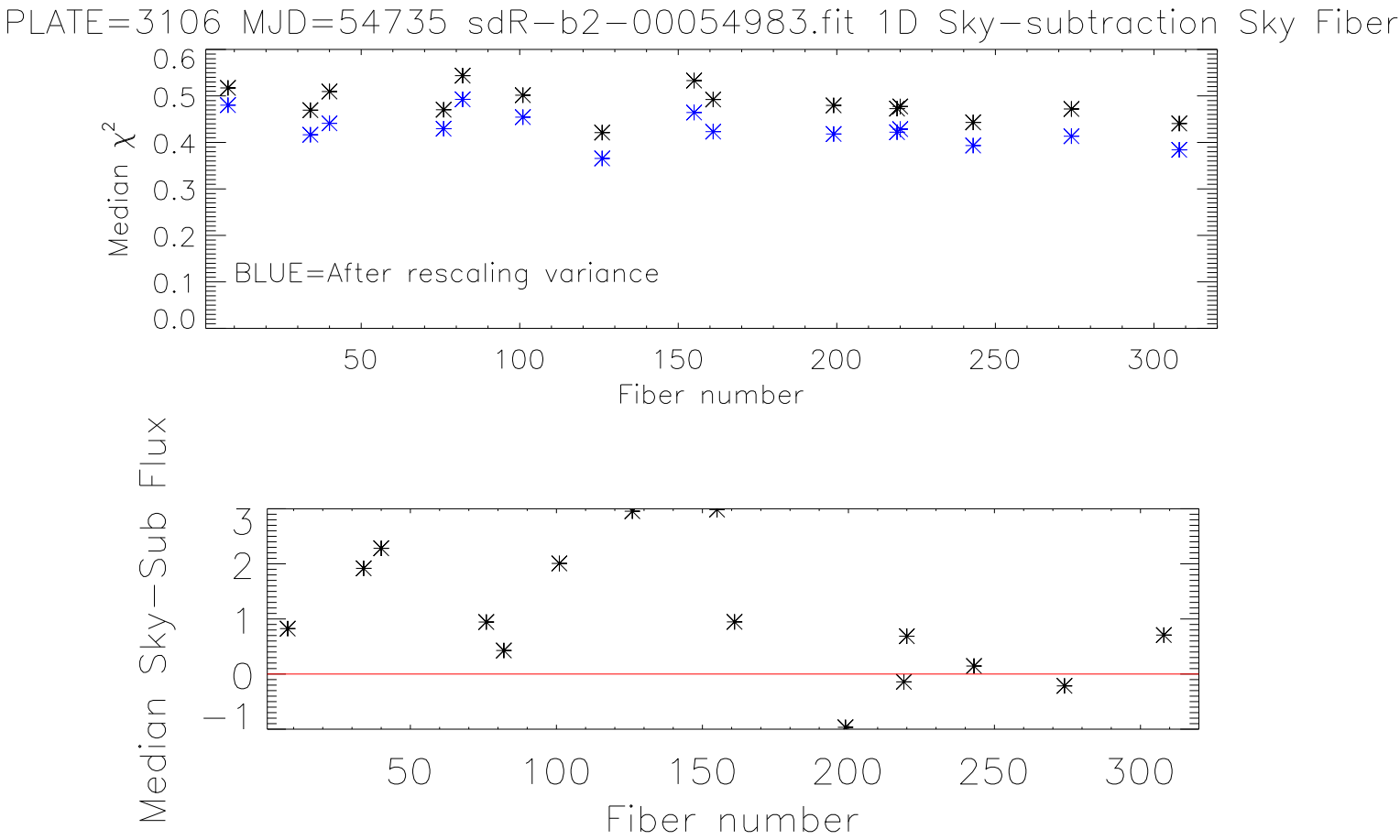

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

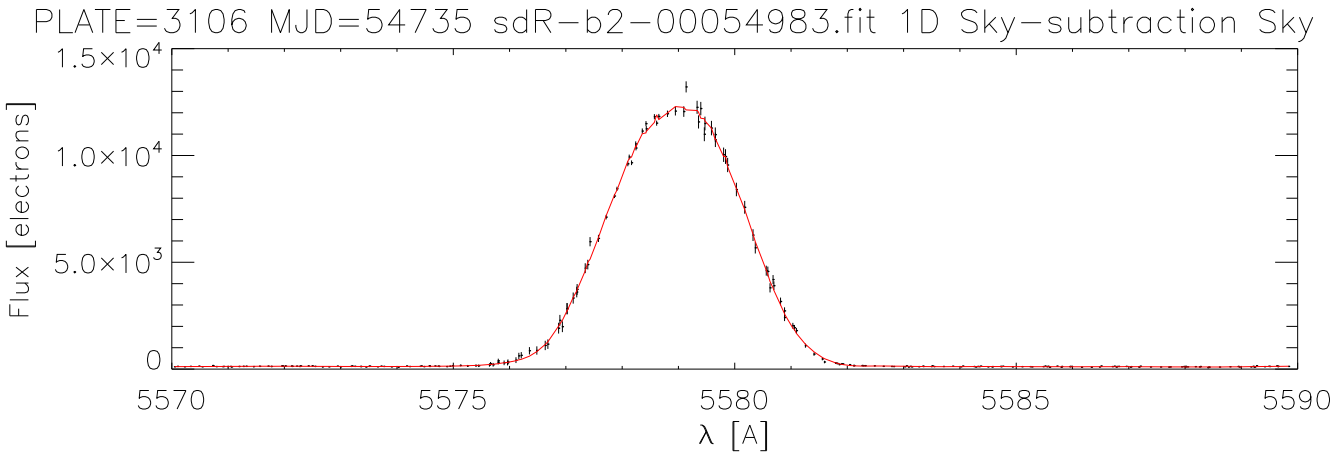

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

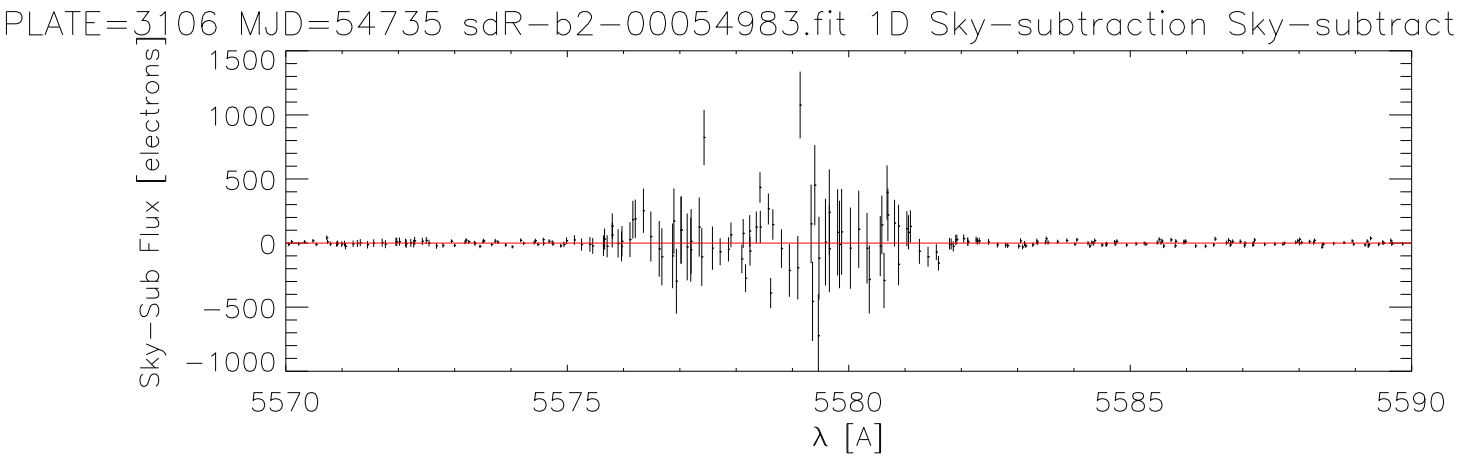

4046.5600
nfib1 16
nfib2 16
stdev 0.085
extra 0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.049
extra −0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.042
extra −0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra 0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.019
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.036
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

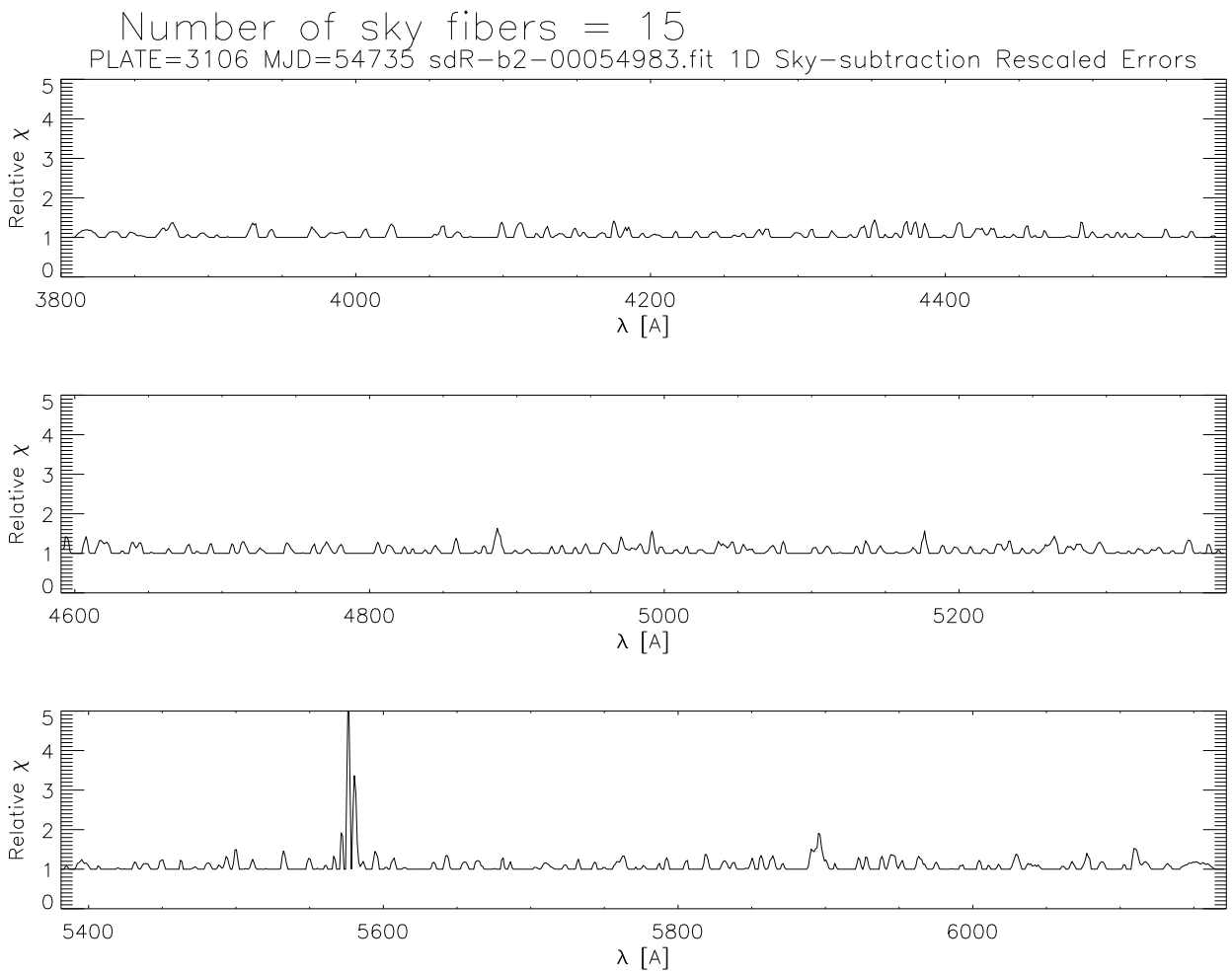

0.10
0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

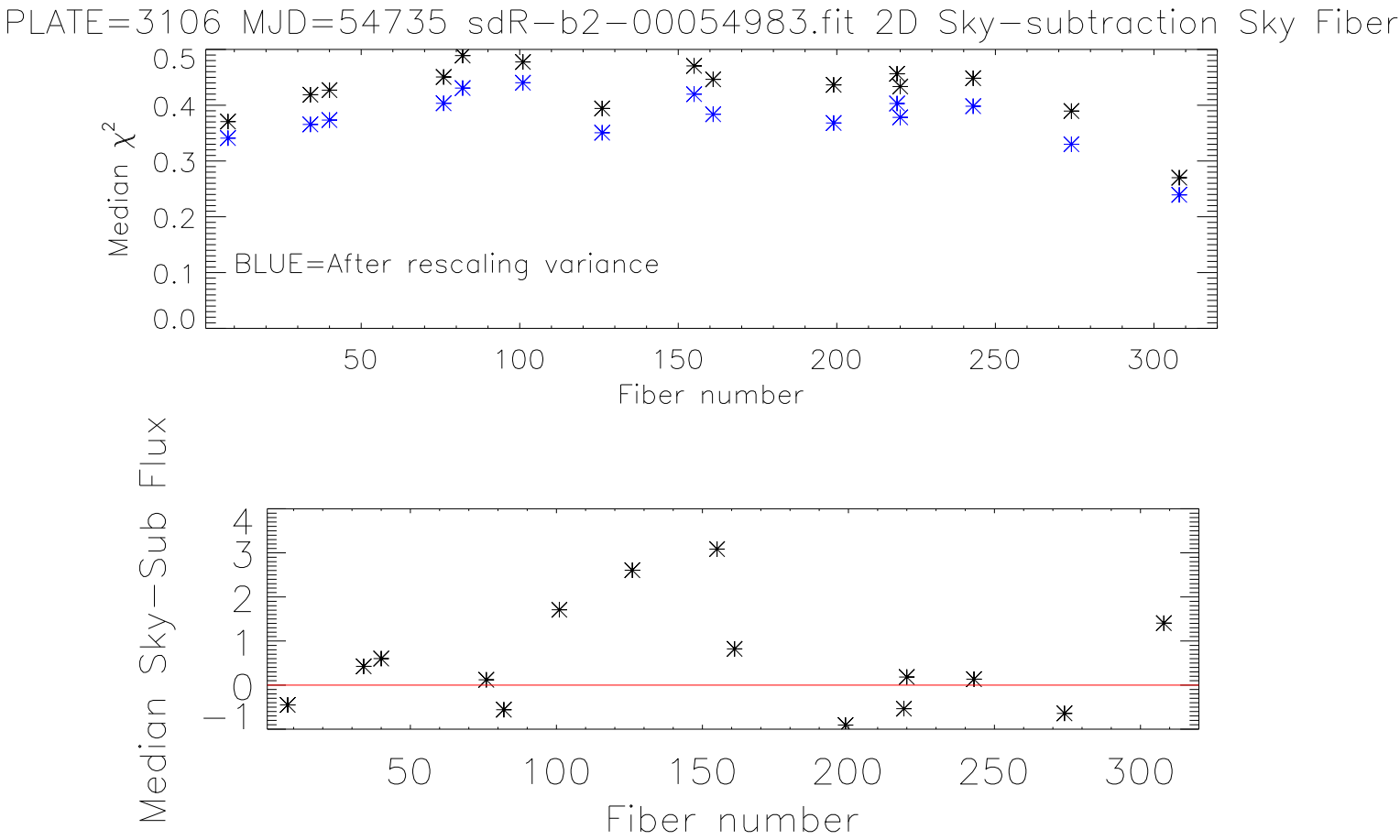

PLATE=3106 MJD=54735 Smooth superflat for sdR-b2-00054983.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

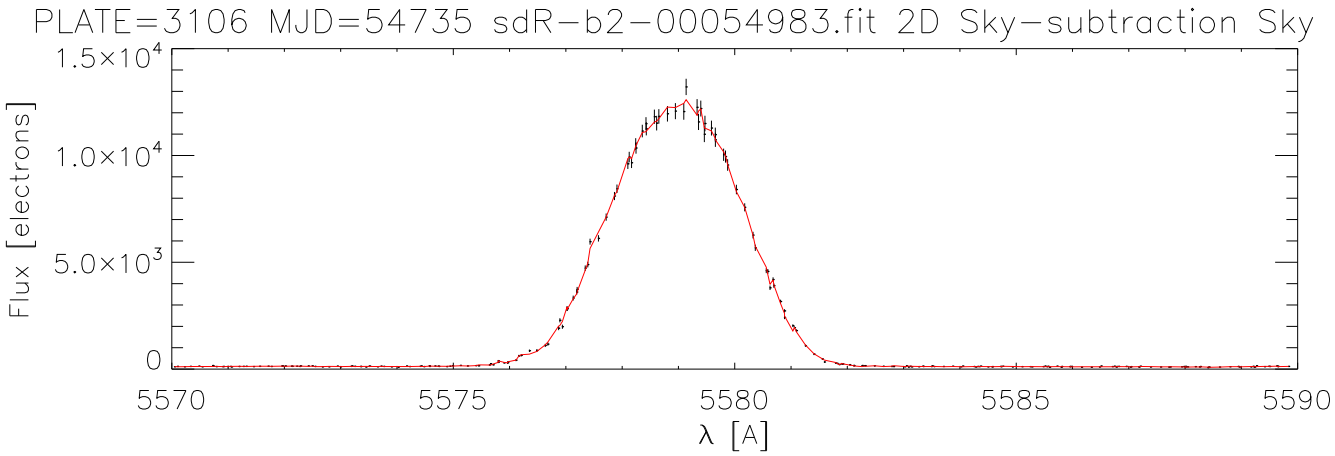

PLATE=3106 MJD=54735 sdR-b2-00054983.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

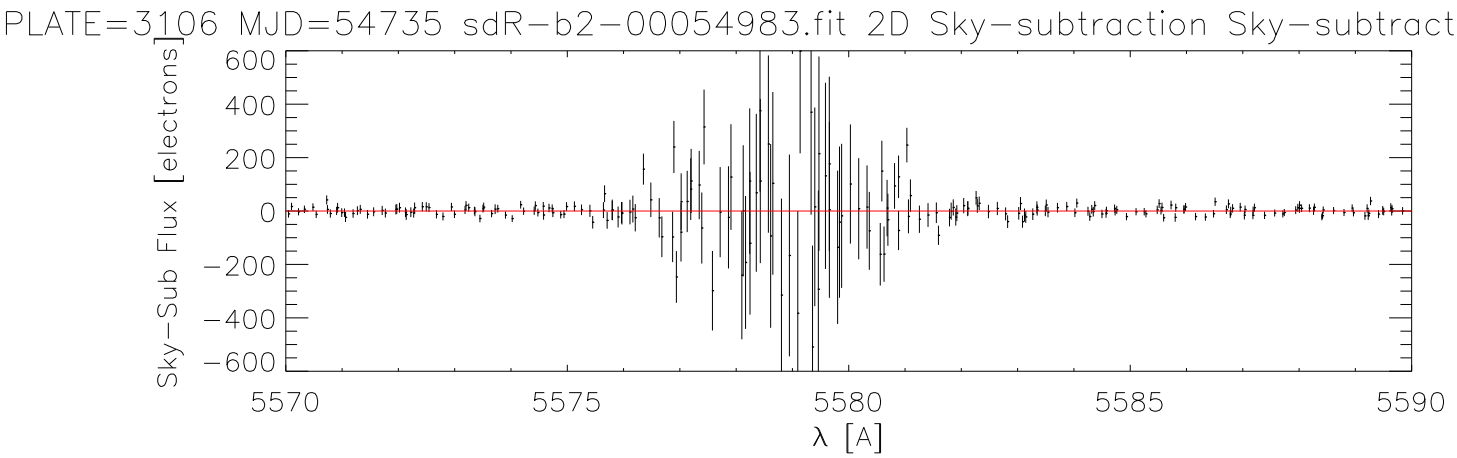

PLATE=3106 MJD=54735 sdR-b2-00054983.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

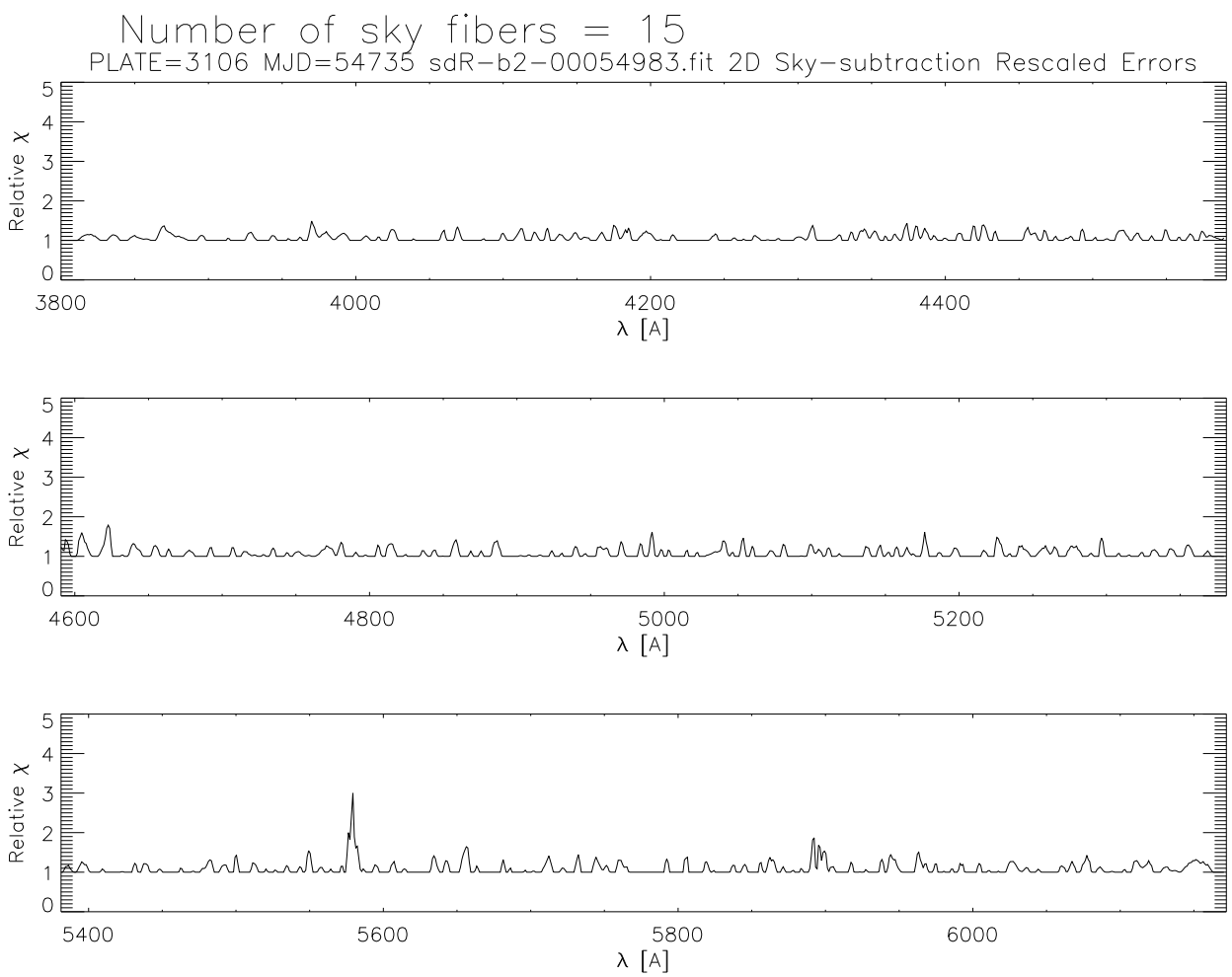

PLATE=3106 MJD=54735 sdR-b2-00054983.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

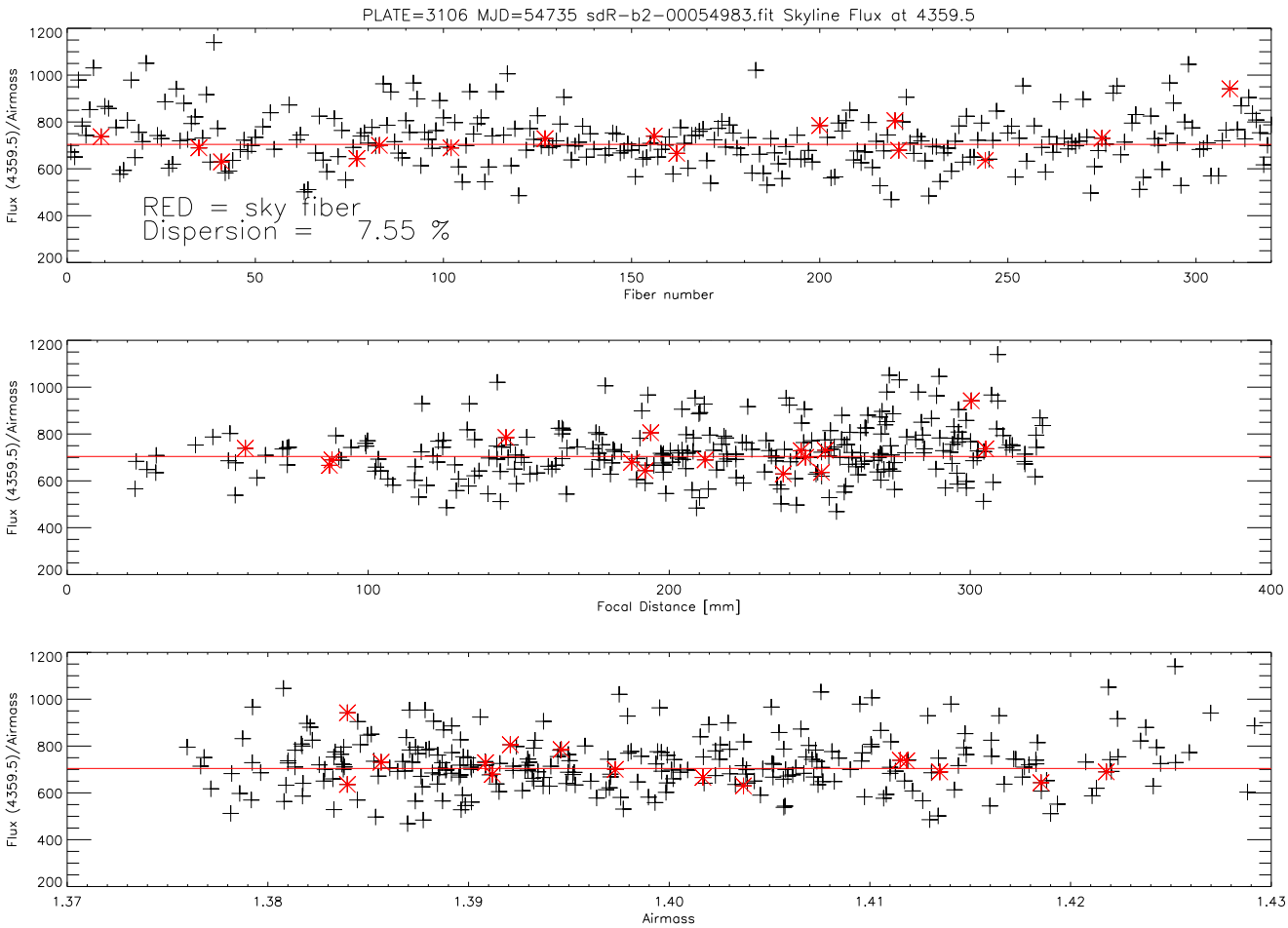

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b2-00054983.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

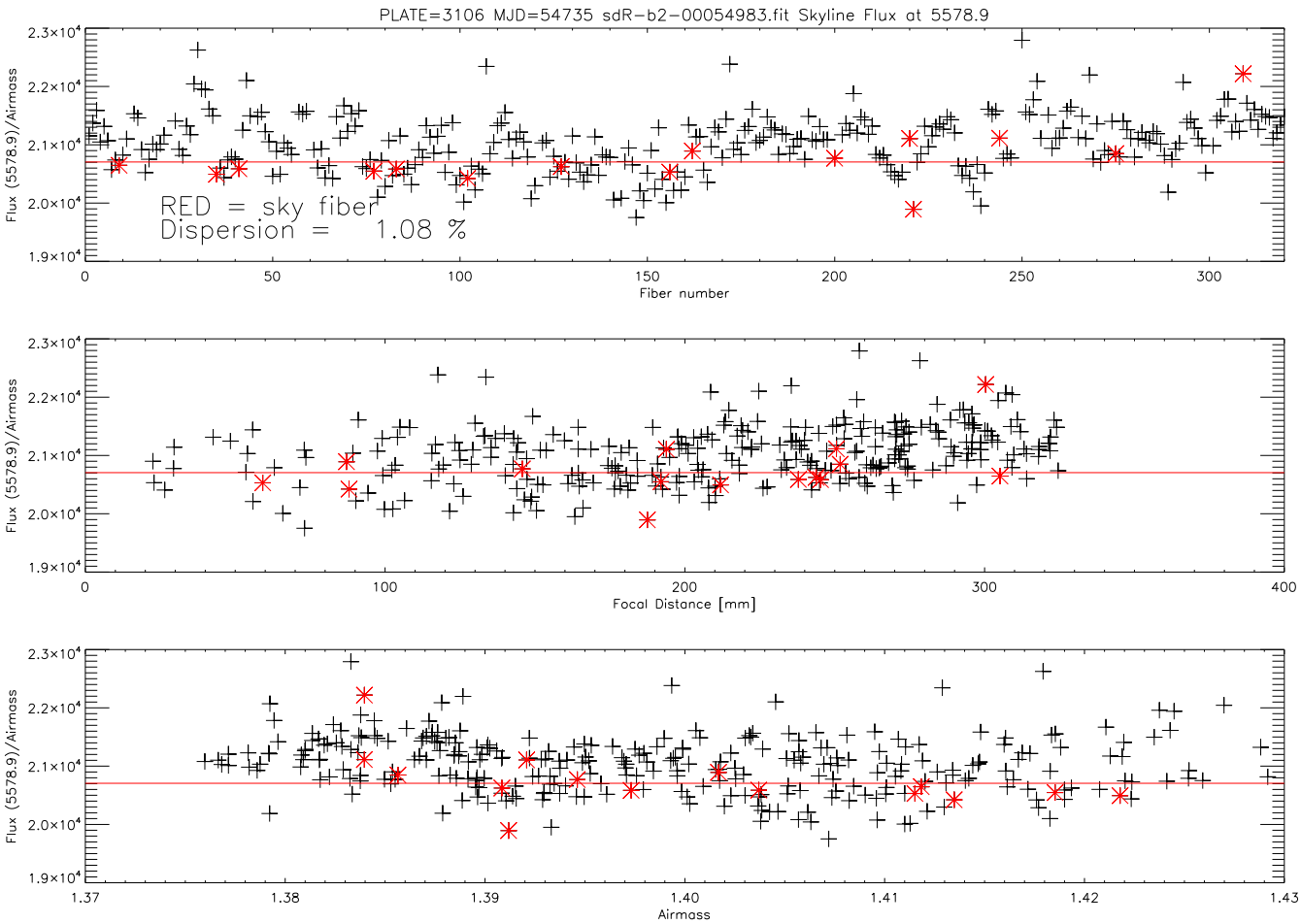

PLATE=3106 MJD=54735 sdR-b2-00054983.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

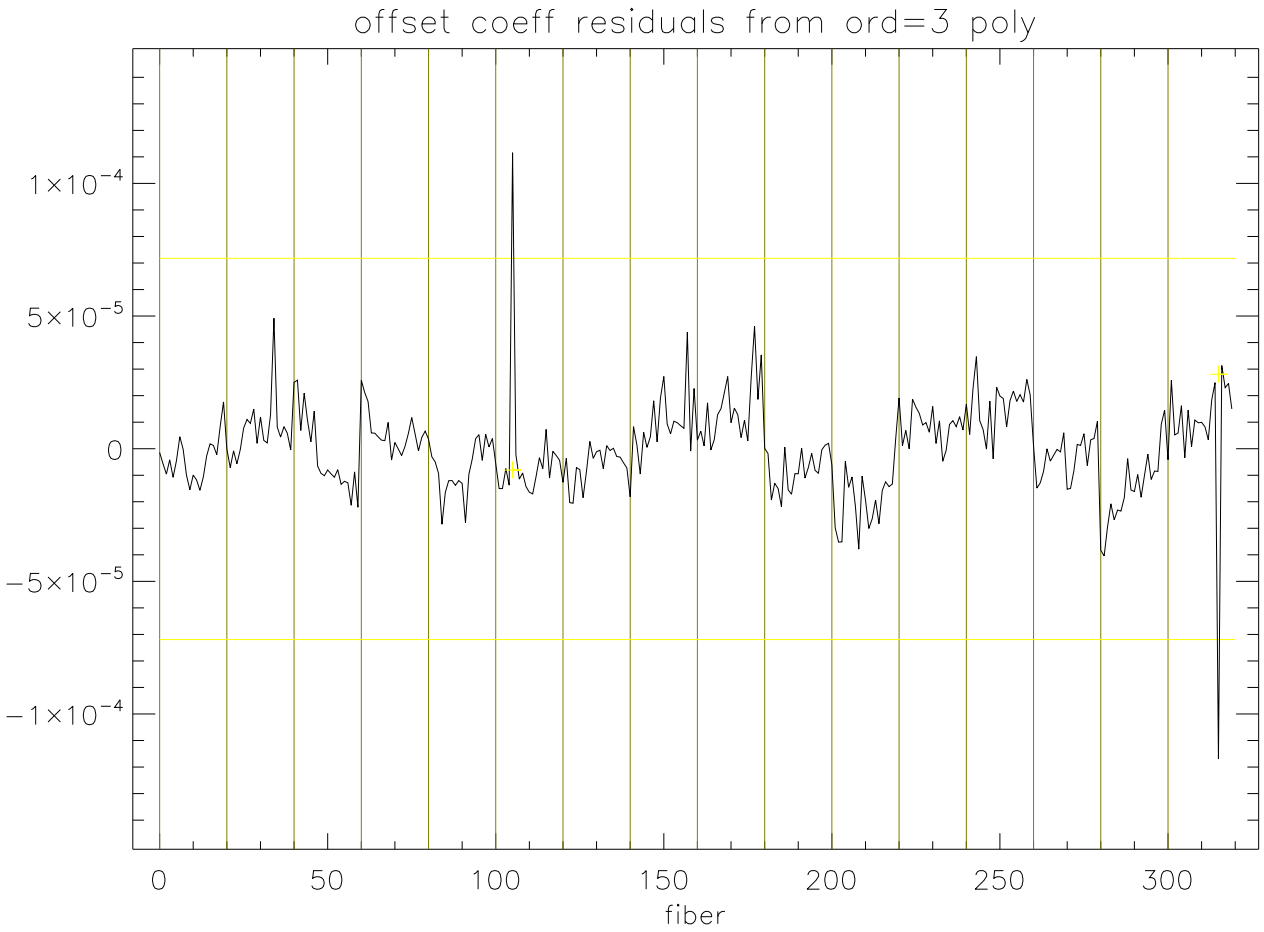

PLATE=3106 MJD=54735 sdR-b2-00054983.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

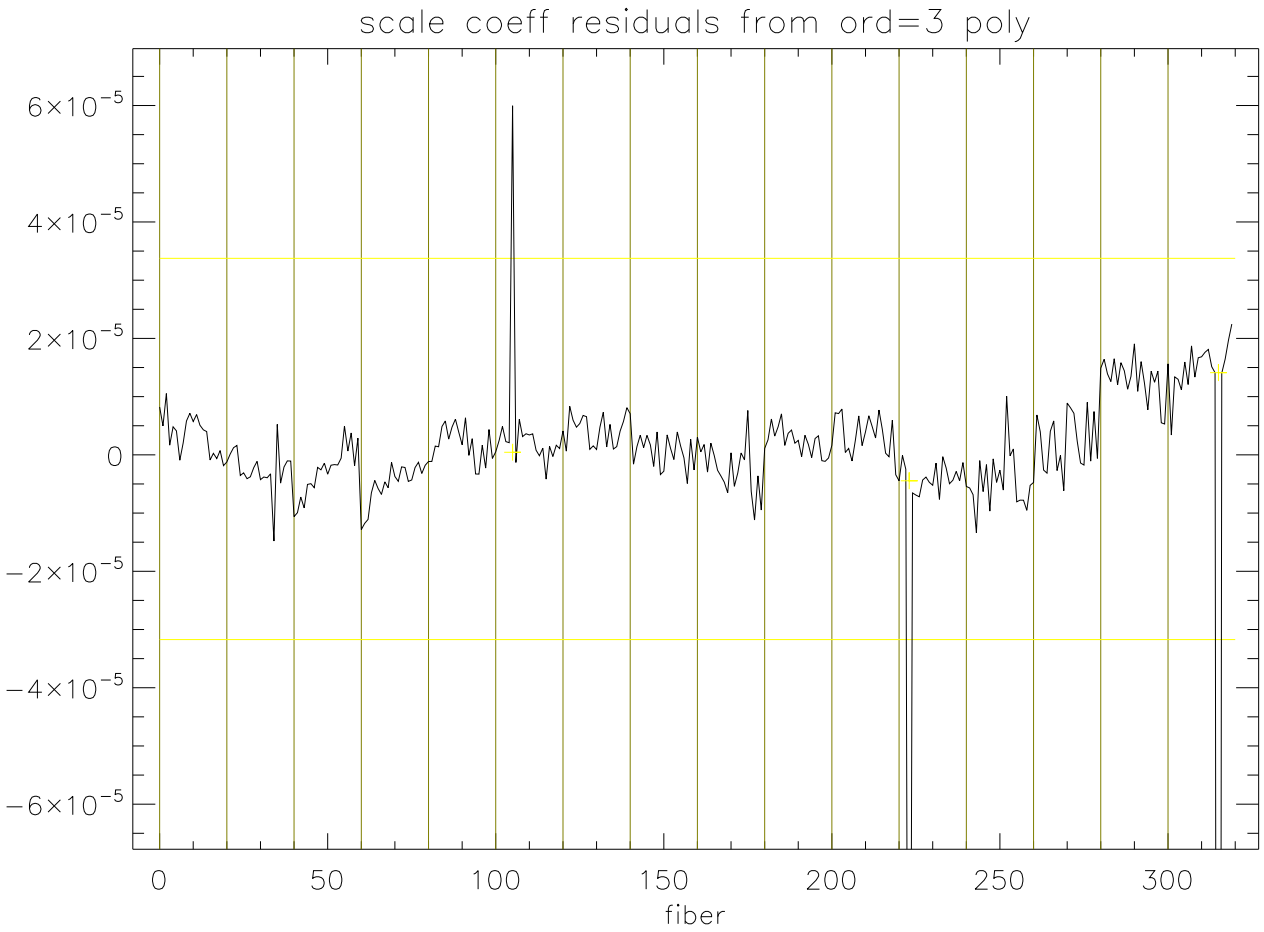

PLATE=3106 MJD=54735 sdR-b2-00054983.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

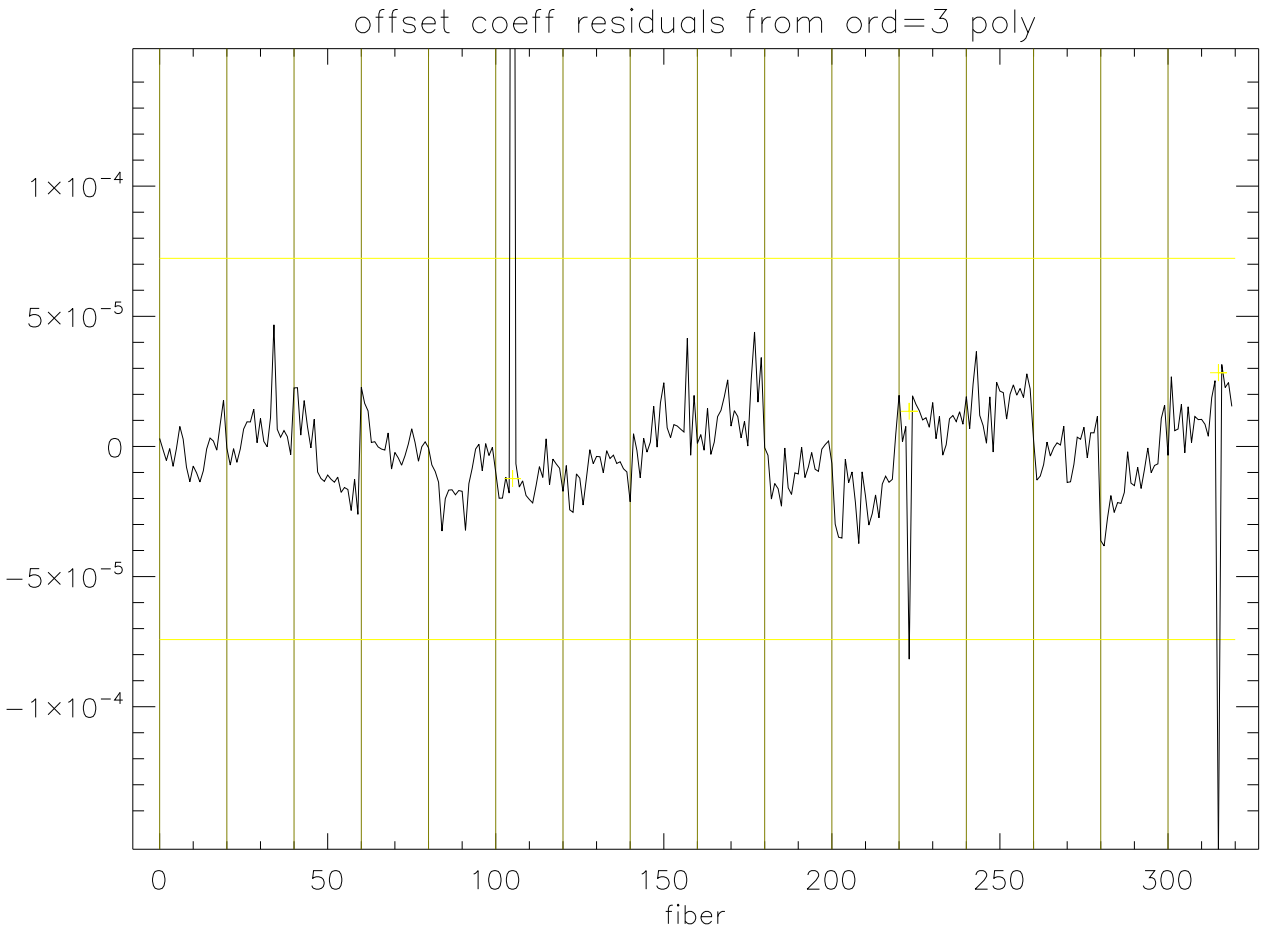

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-b2-00054983.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

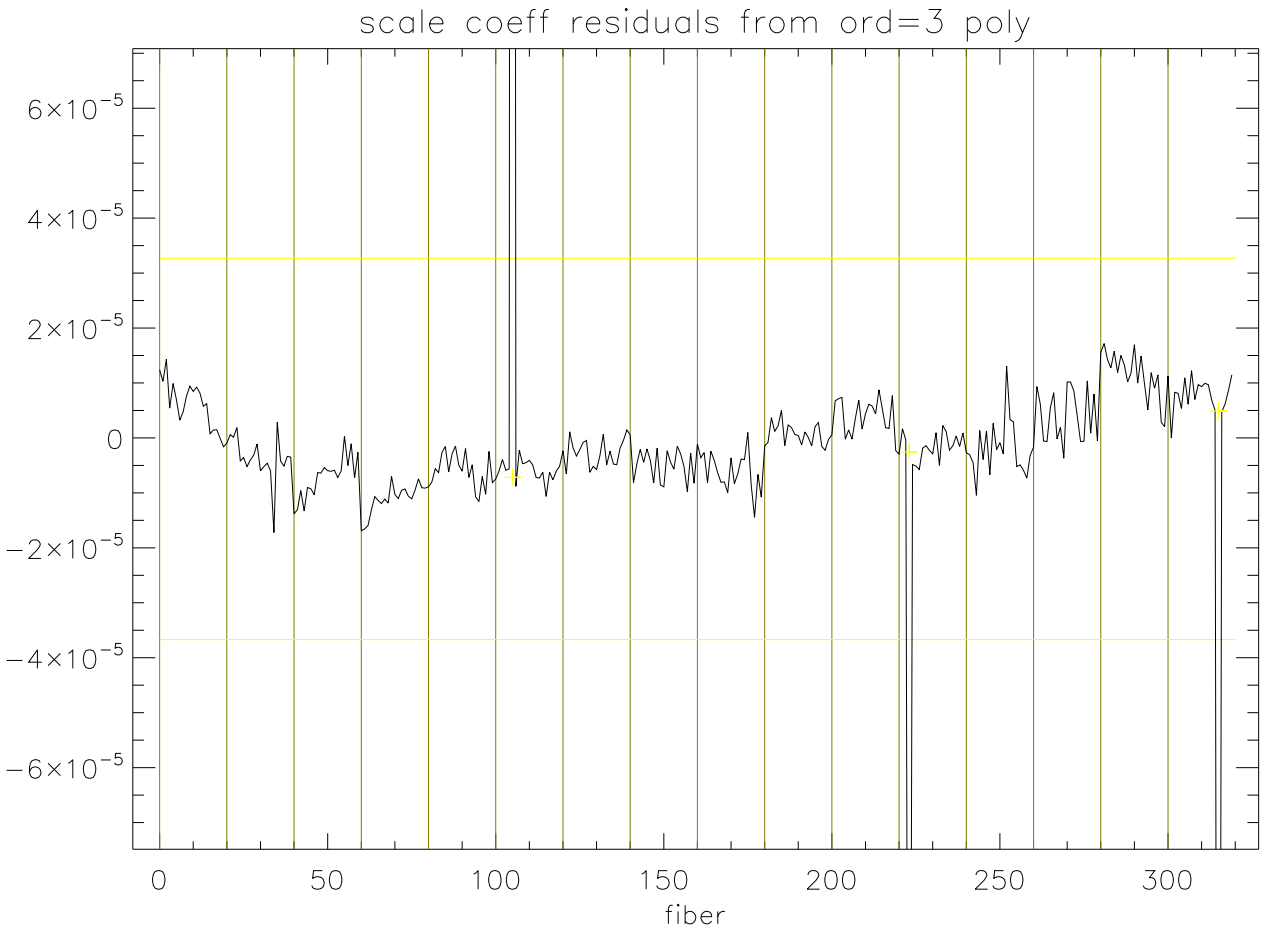

PLATE=3106 MJD=54735 sdR-b2-00054983.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.55 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

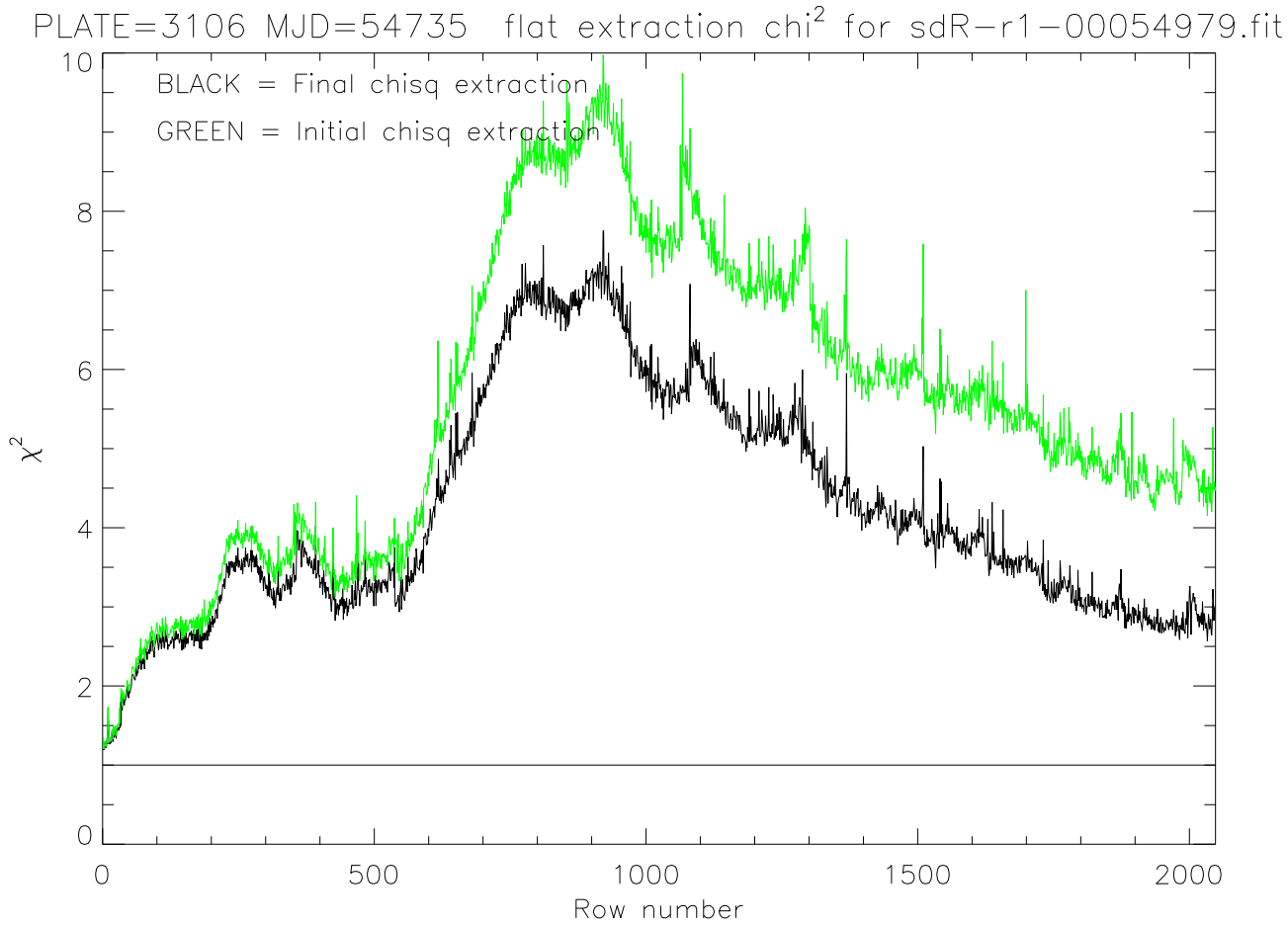

PLATE=3106 MJD=54735 sdR-b2-00054983.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.08 %
Fiber number
Focal Distance [mm]
Airmass

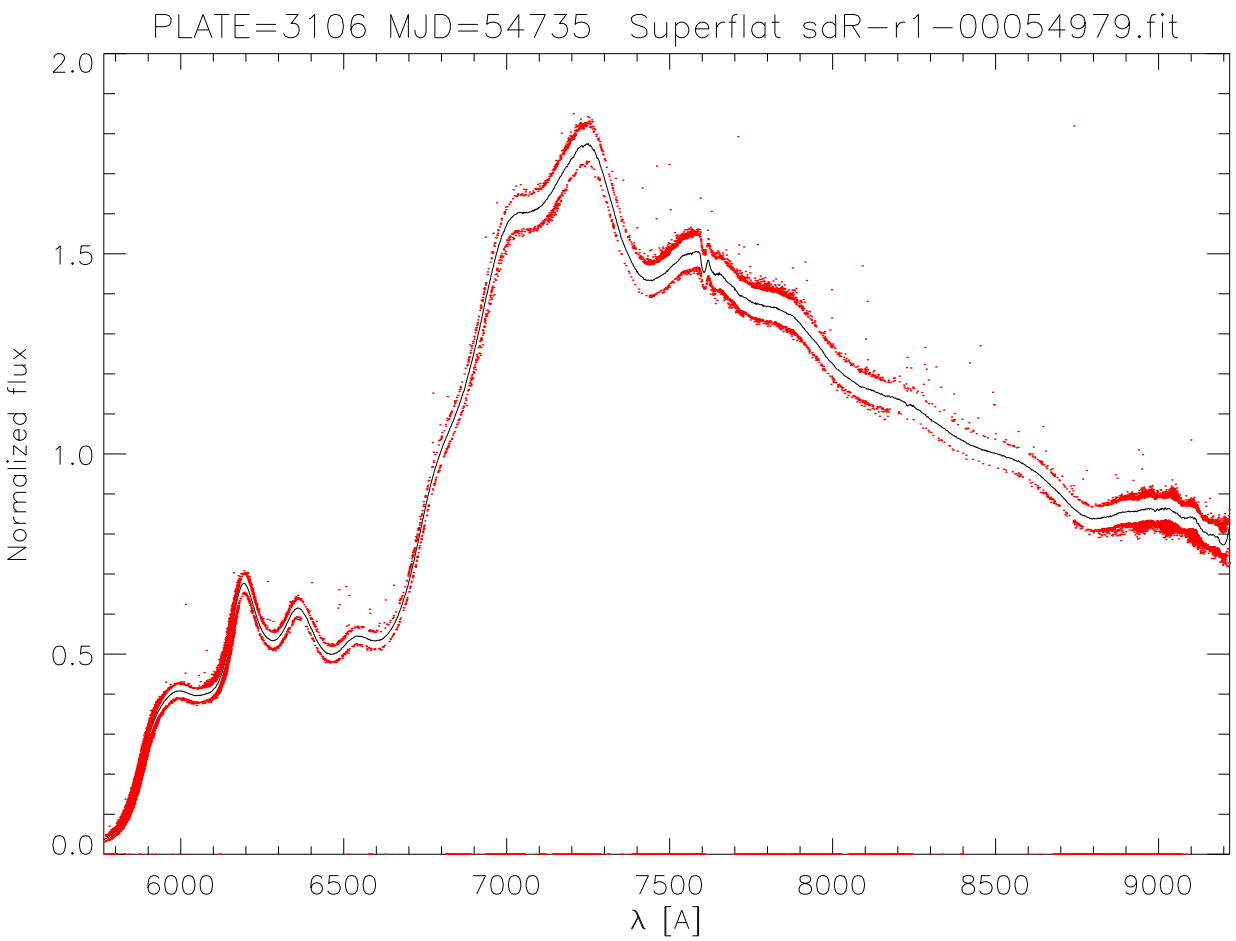

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

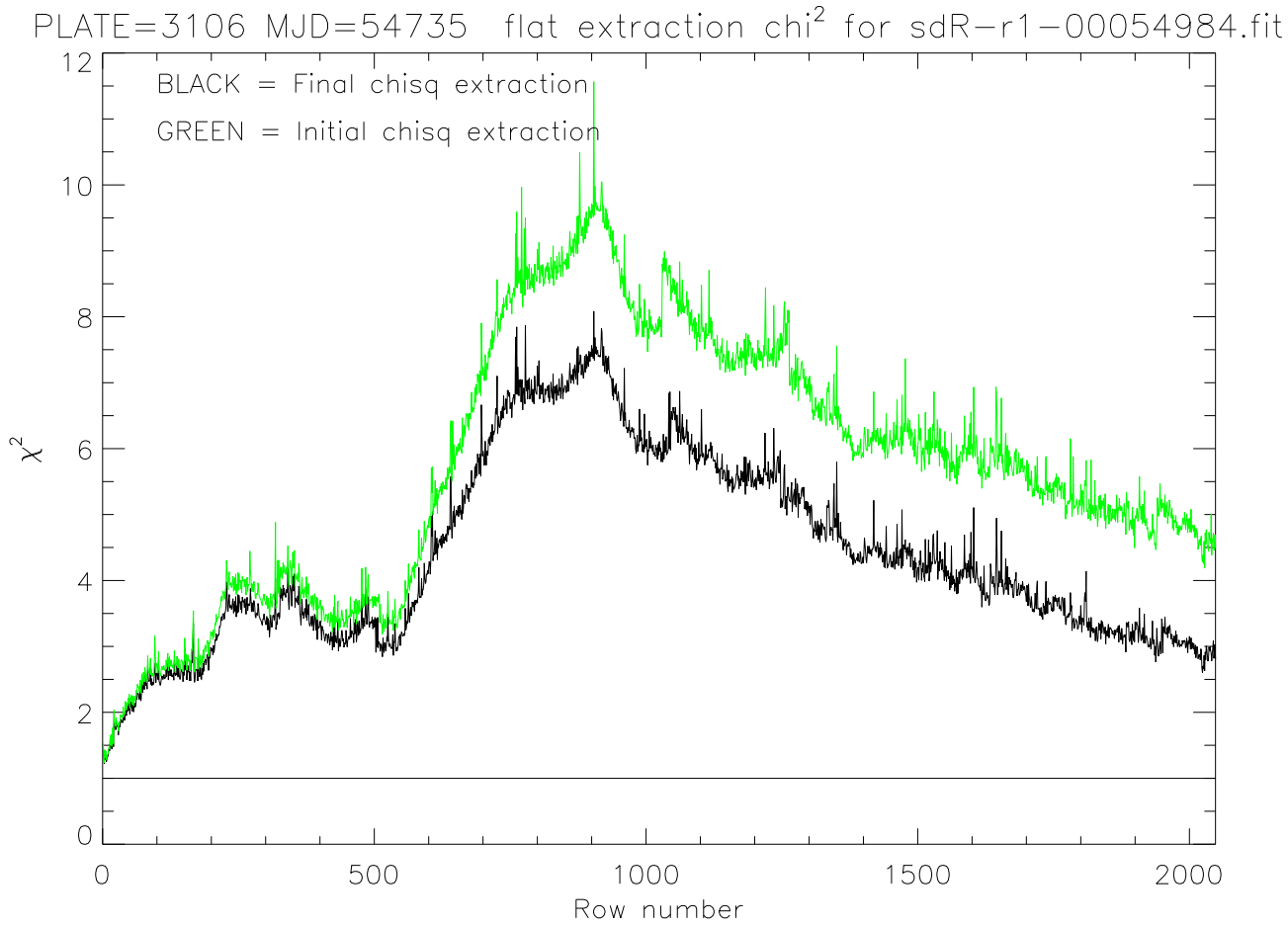

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

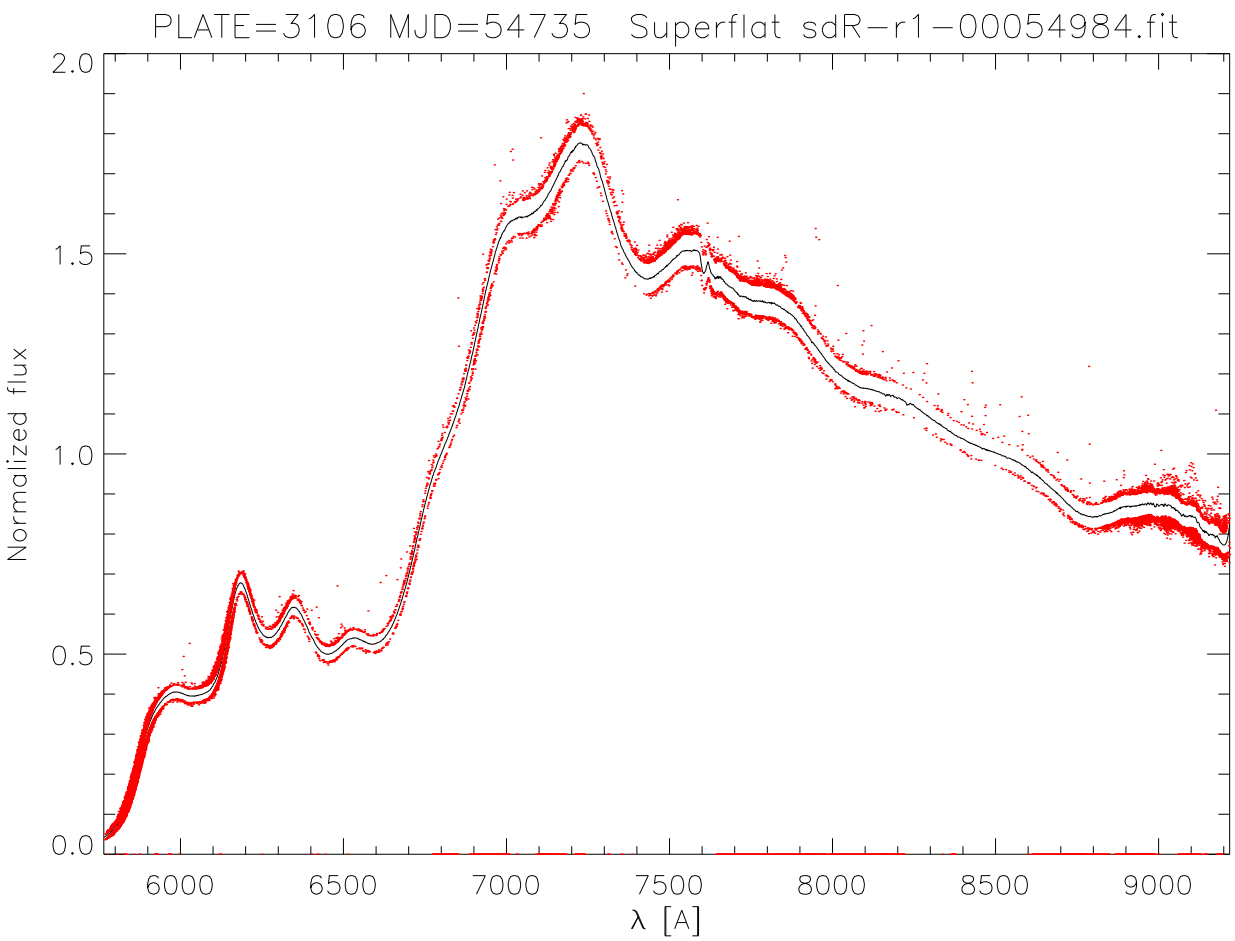

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

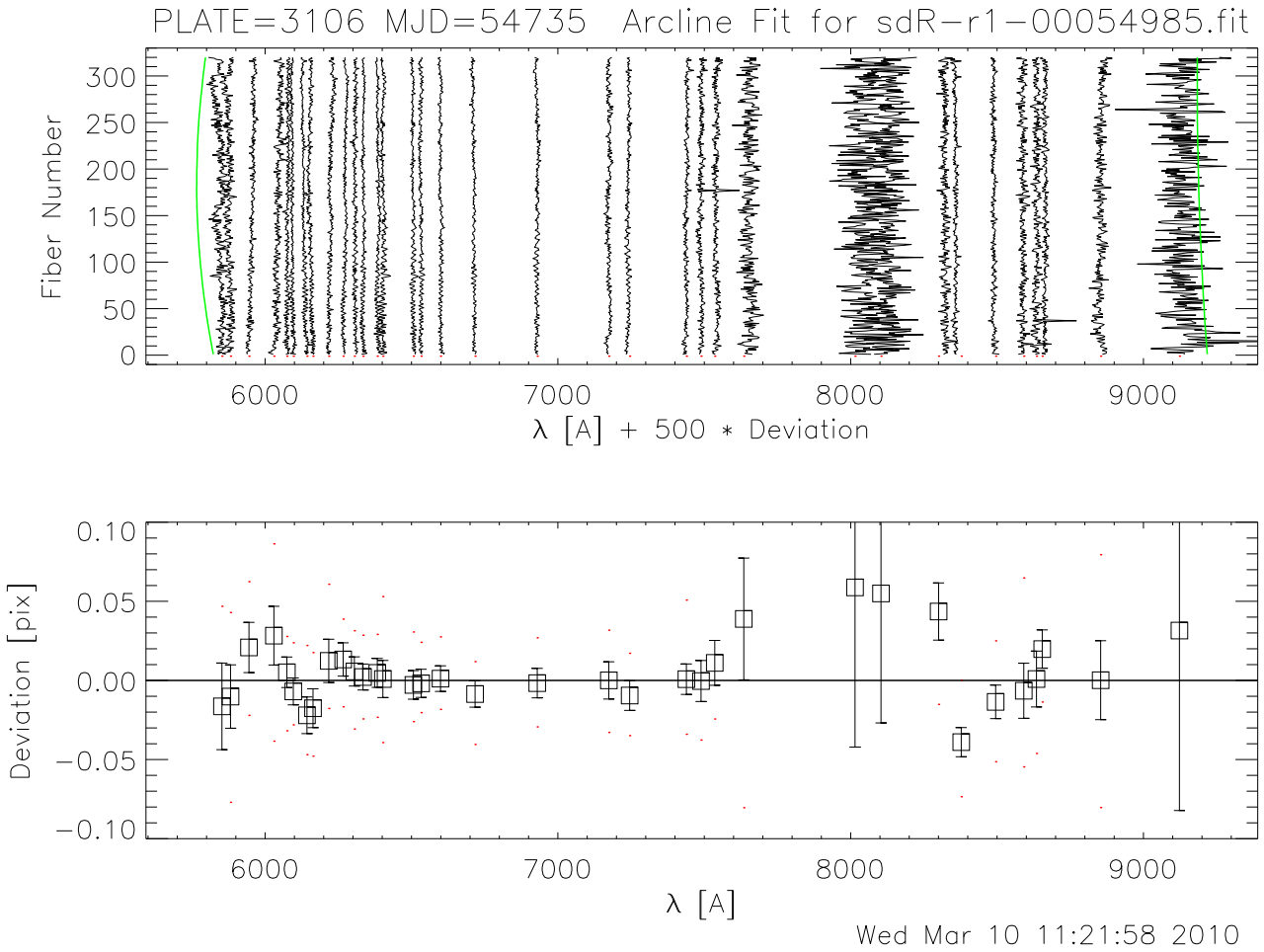

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

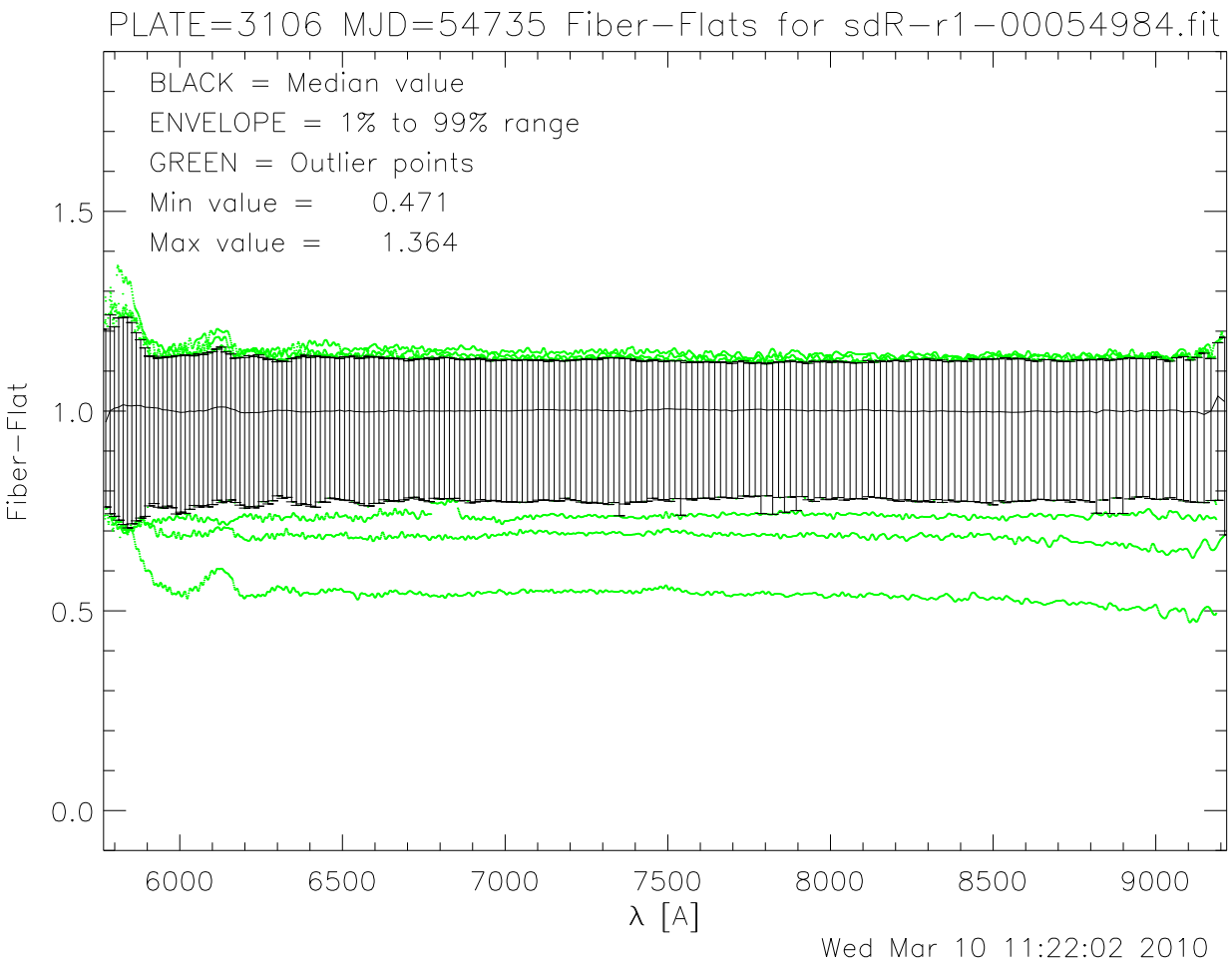

PLATE=3106 MJD=54735 flat extraction chi^2 for sdR−r1−00054979.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

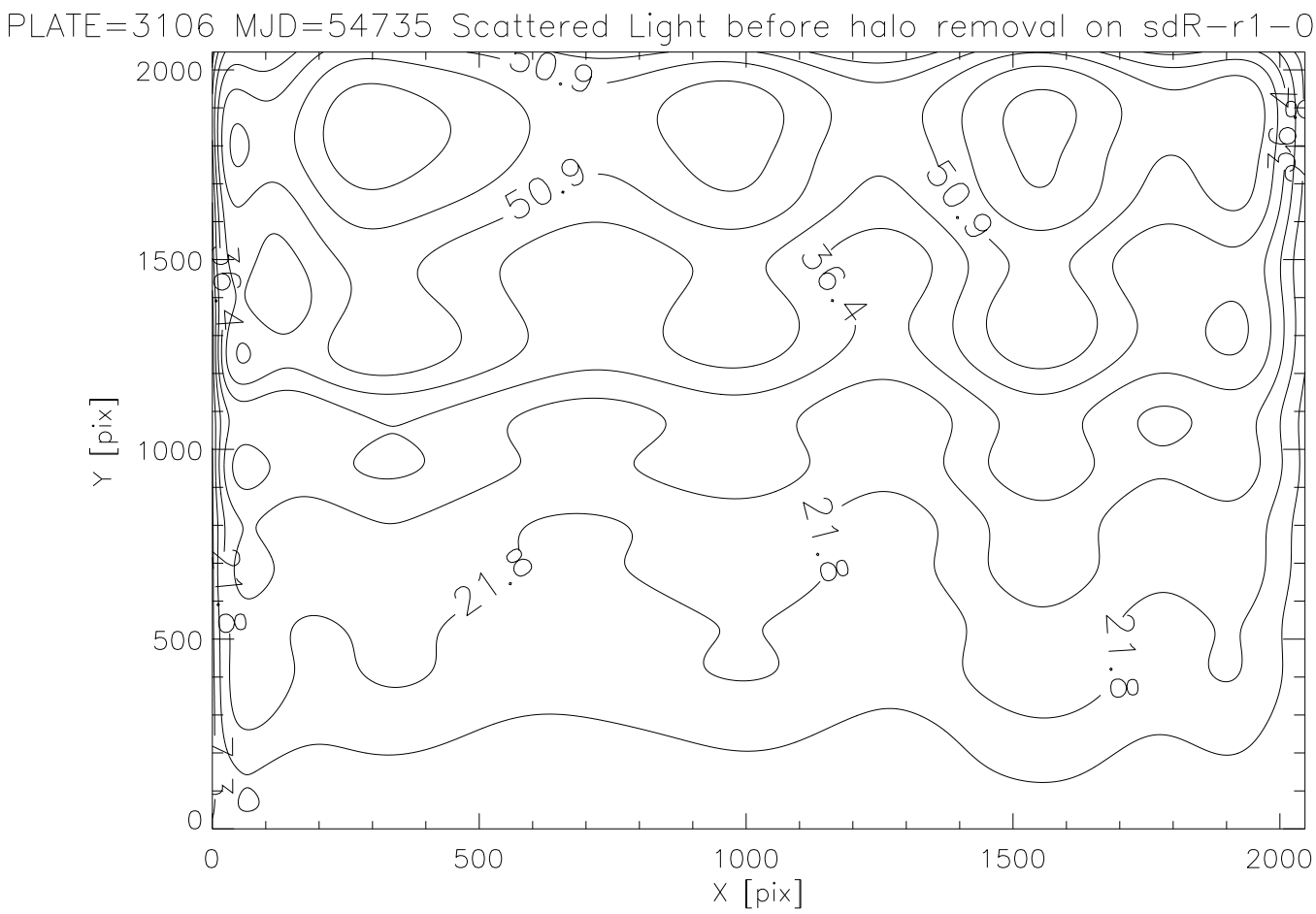

PLATE=3106 MJD=54735 Superflat sdR-r1-00054979.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

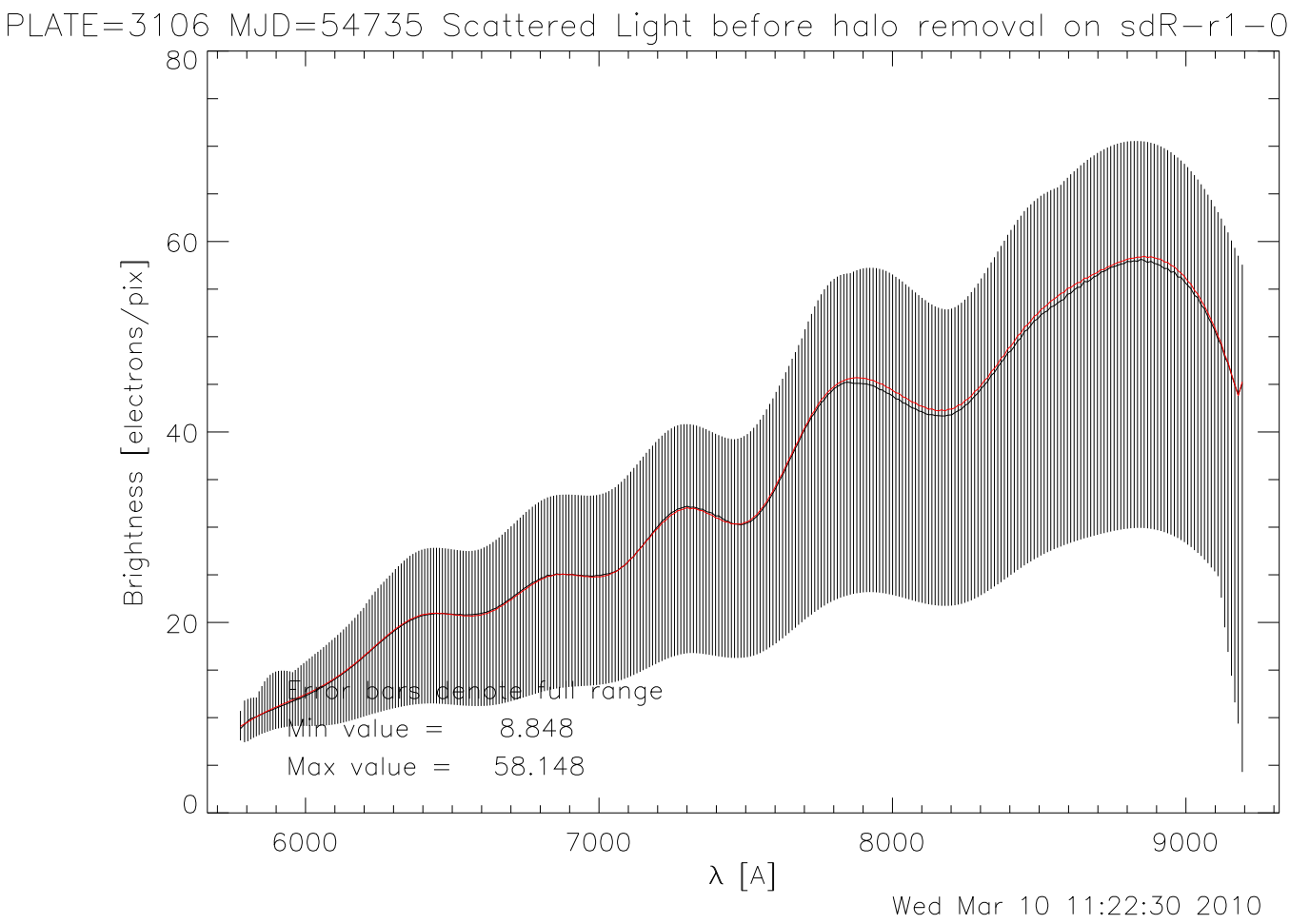

PLATE=3106 MJD=54735 flat extraction chi^2 for sdR−r1−00054984.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

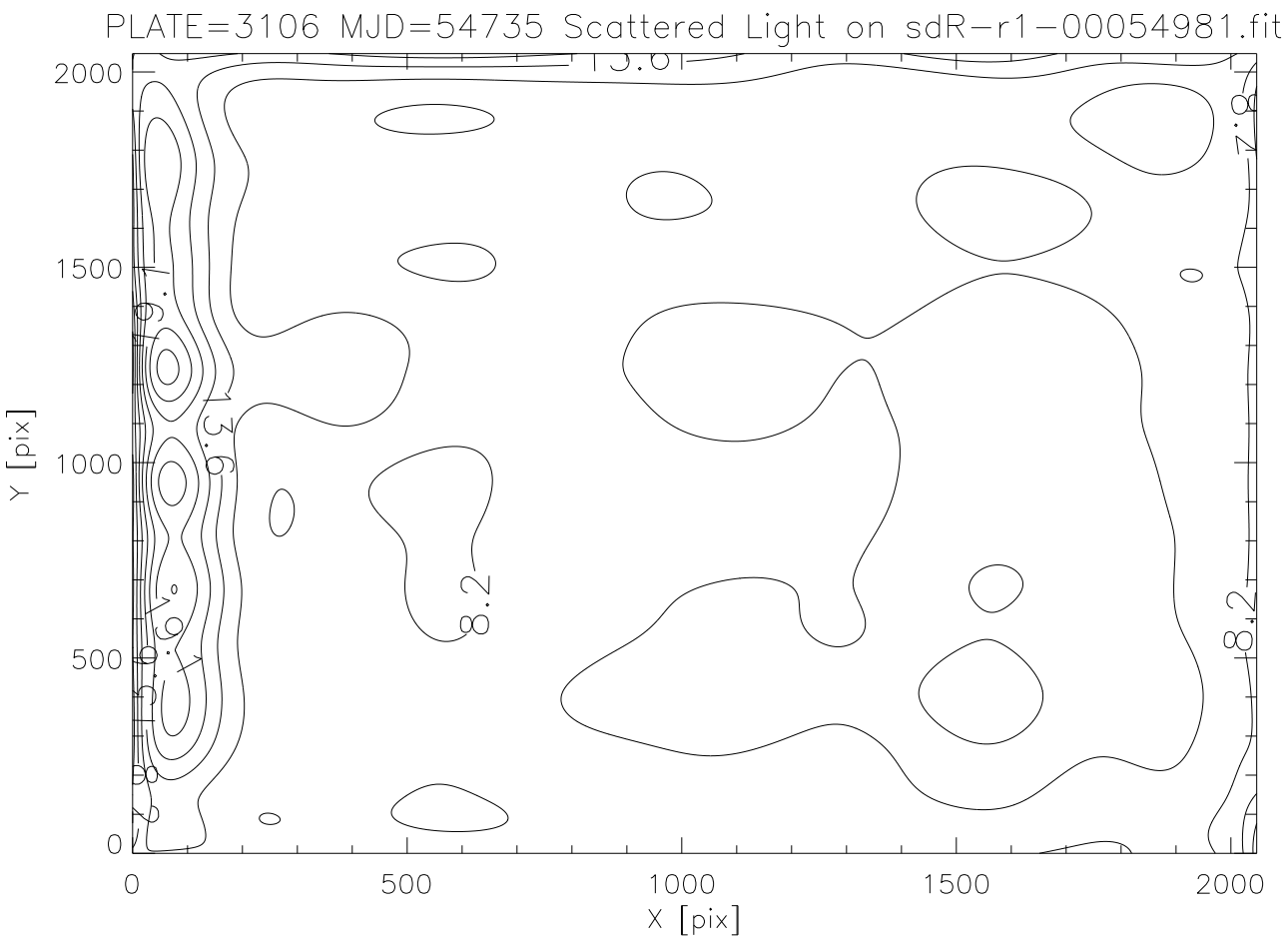

PLATE=3106 MJD=54735 Superflat sdR-r1-00054984.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

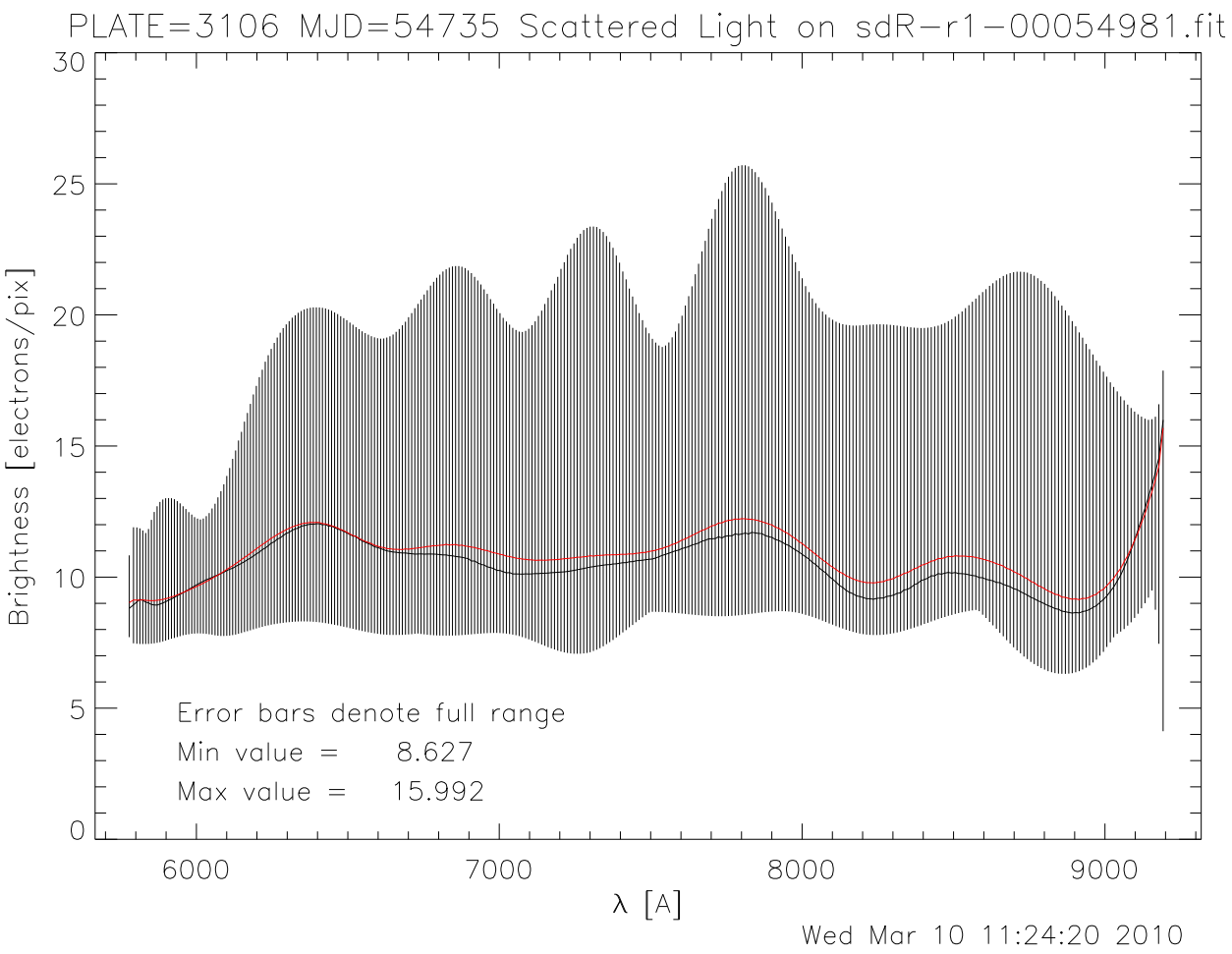

PLATE=3106 MJD=54735 Arcline Fit for sdR-r1-00054985.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Mar 10 11:21:58 2010

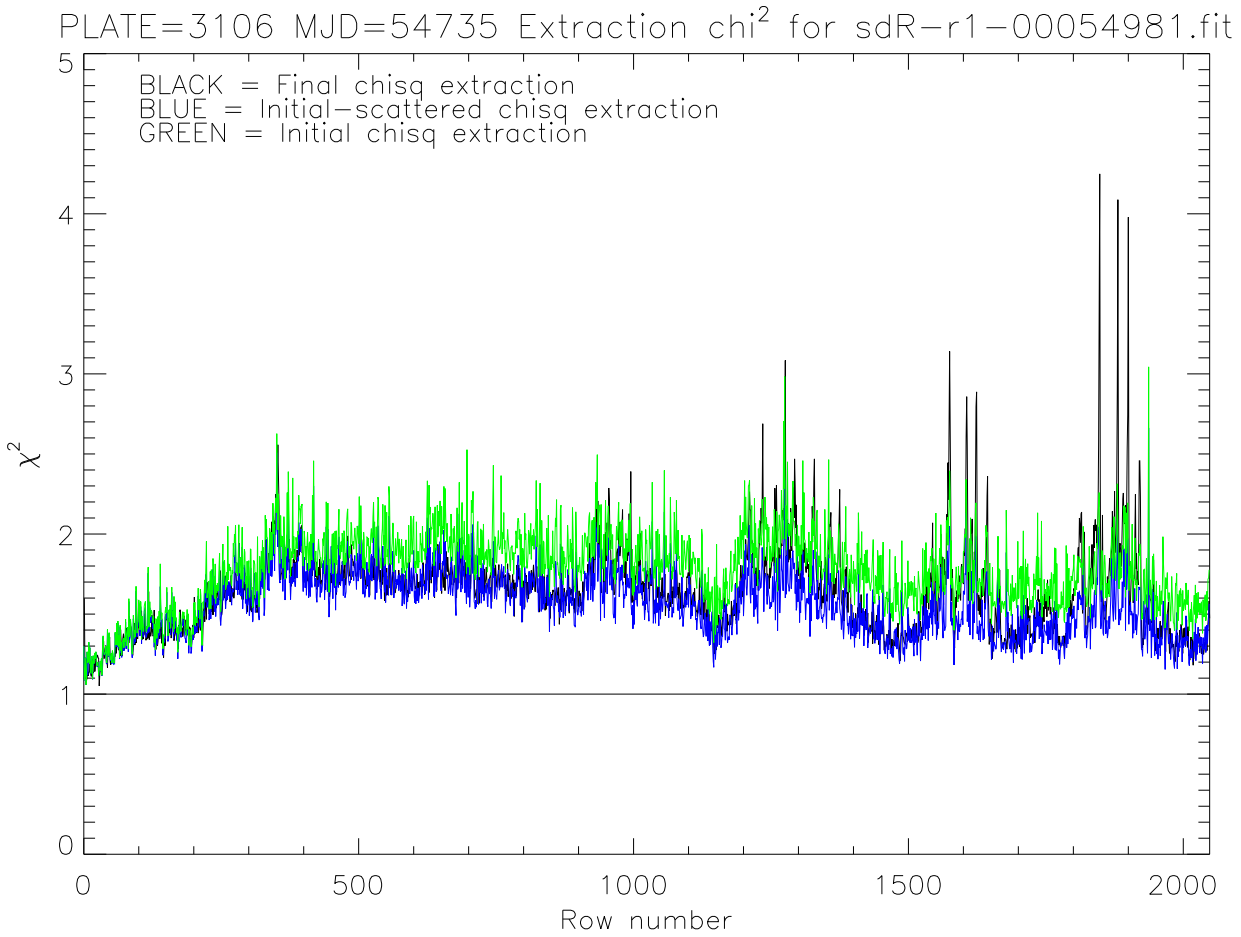

PLATE=3106 MJD=54735 Fiber−Flats for sdR−r1−00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.471
Max value = 1.364
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 11:22:02 2010

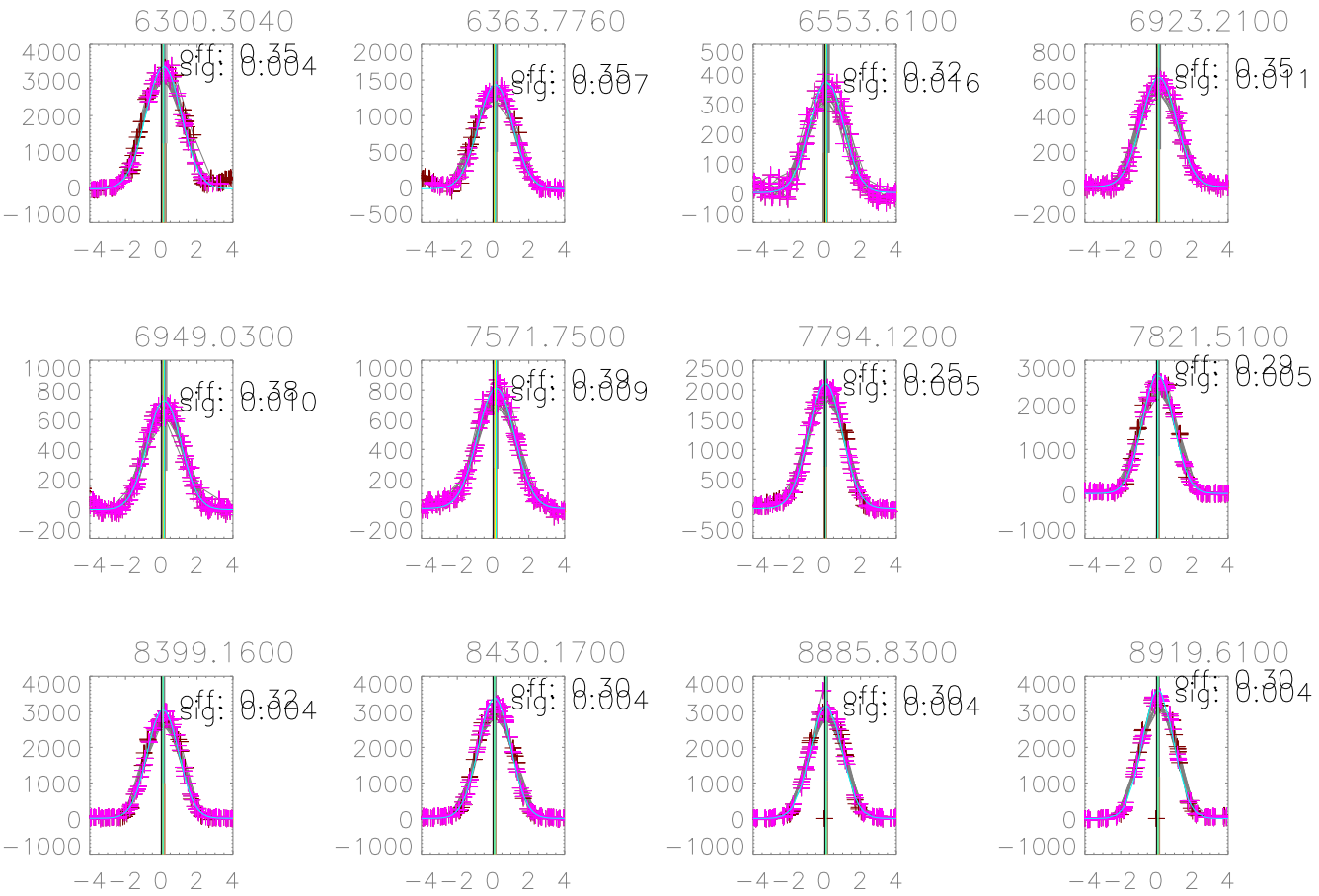

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR−r1−00054981.fi
50.9
50.9
50.9
36.4
36.4
21.8
21.8
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

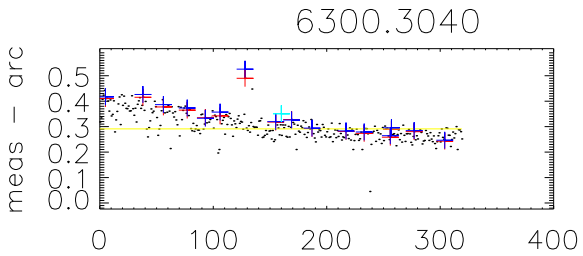

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r1-00054981.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.848
Max value = 58.148
Wed Mar 10 11:22:30 2010

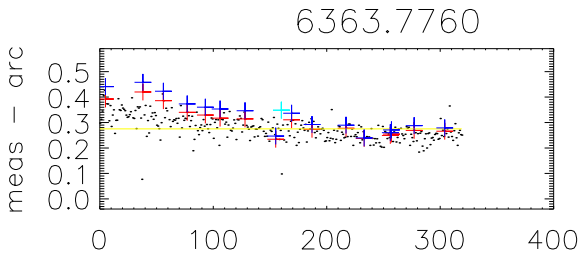

PLATE=3106 MJD=54735 Scattered Light on sdR-r1-00054981.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
8.2
0

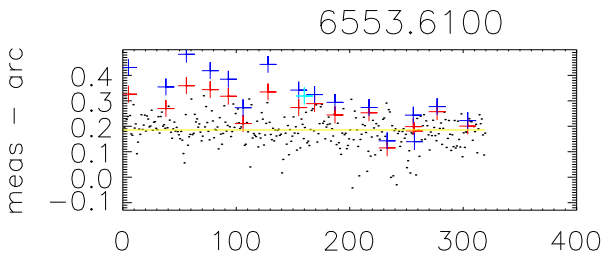

PLATE=3106 MJD=54735 Scattered Light on sdR-r1-00054981.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.627
Max value = 15.992
Wed Mar 10 11:24:20 2010

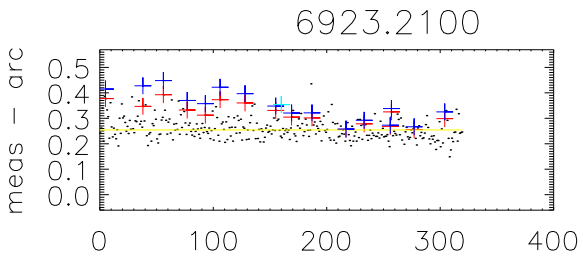

PLATE=3106 MJD=54735 Extraction chi^2 for sdR−r1−00054981.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

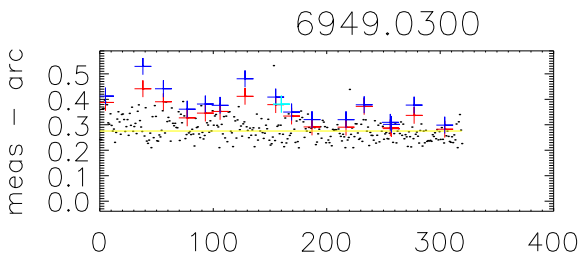

6300.3040
off: 0.35
sig: 0.004
6363.7760
off: 0.35
sig: 0.007
6553.6100
off: 0.32
sig: 0.016
6923.2100
off: 0.35
sig: 0.011
6949.0300
off: 0.38
sig: 0.010
7571.7500
off: 0.38
sig: 0.009
7794.1200
off: 0.25
sig: 0.005
7821.5100
off: 0.28
sig: 0.005
8399.1600
off: 0.32
sig: 0.004
8430.1700
off: 0.30
sig: 0.004
8885.8300
off: 0.30
sig: 0.004
8919.6100
off: 0.30
sig: 0.004

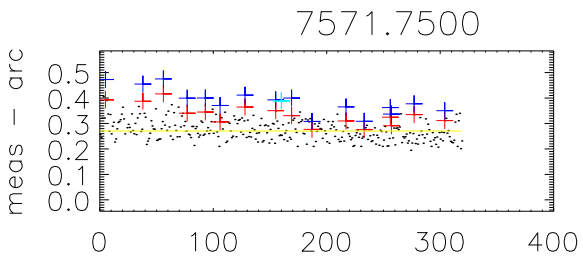

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

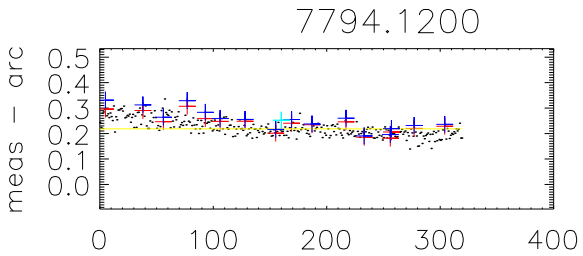

6363.7760
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

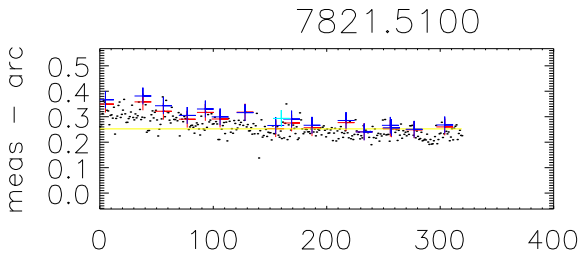

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

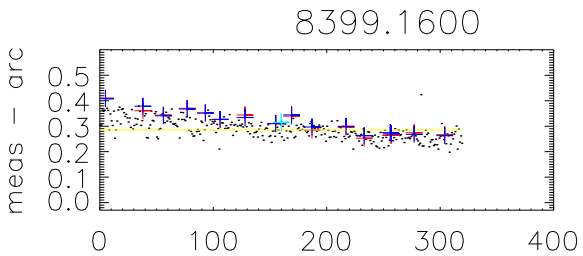

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

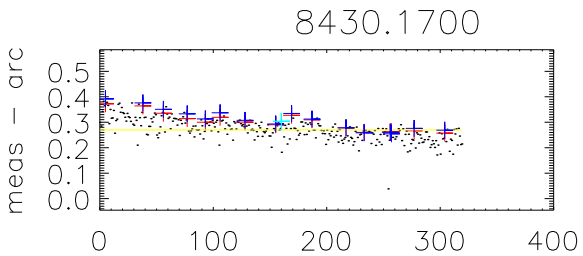

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

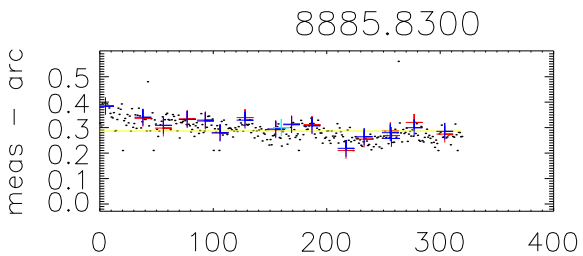

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

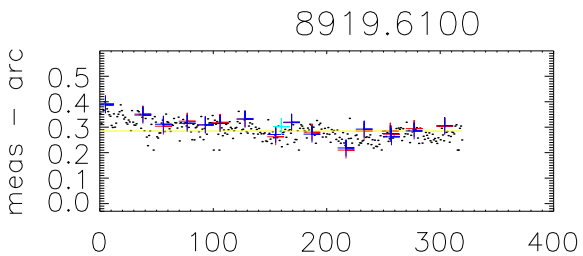

7794.1200
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

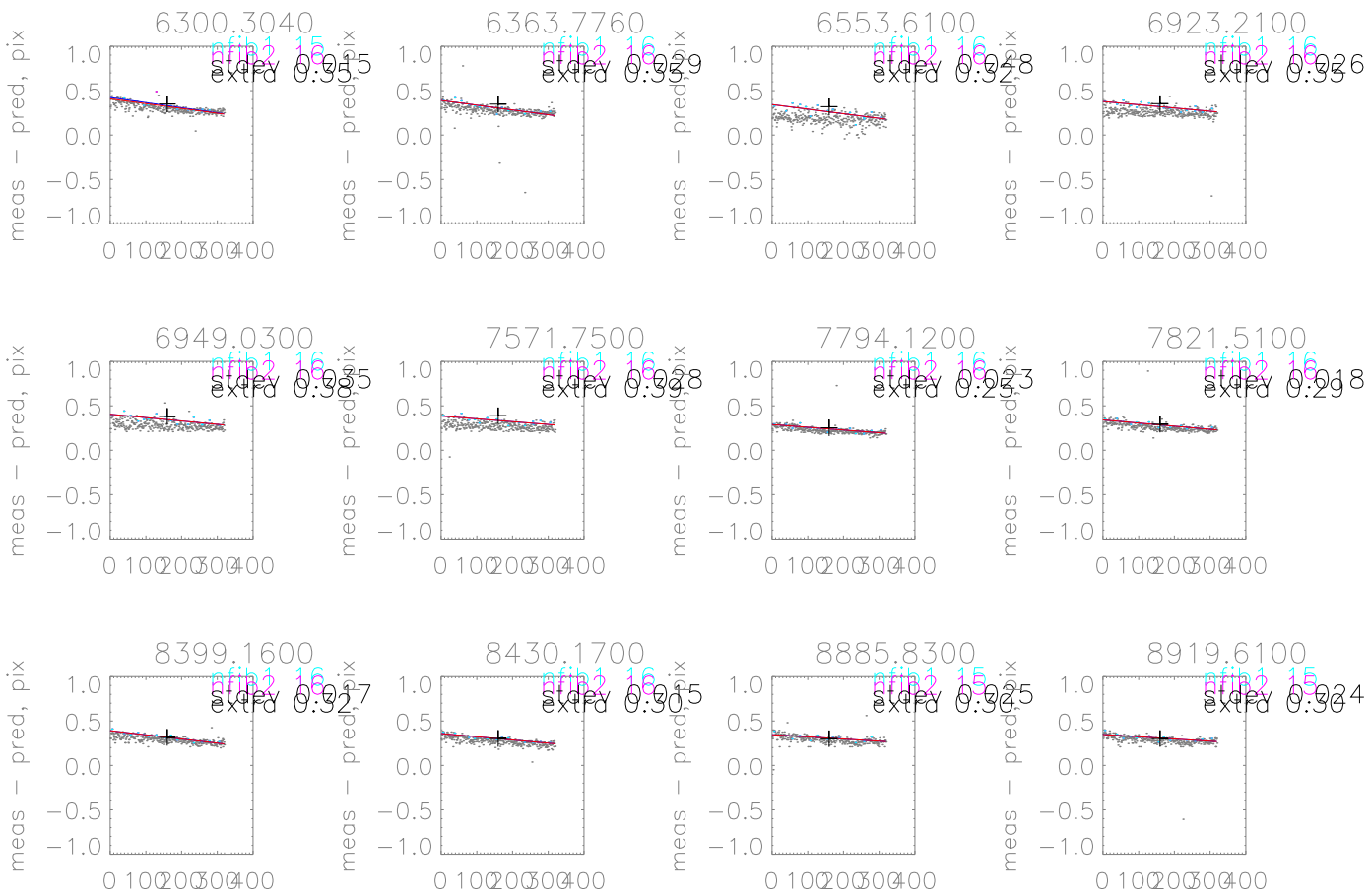

7821.5100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

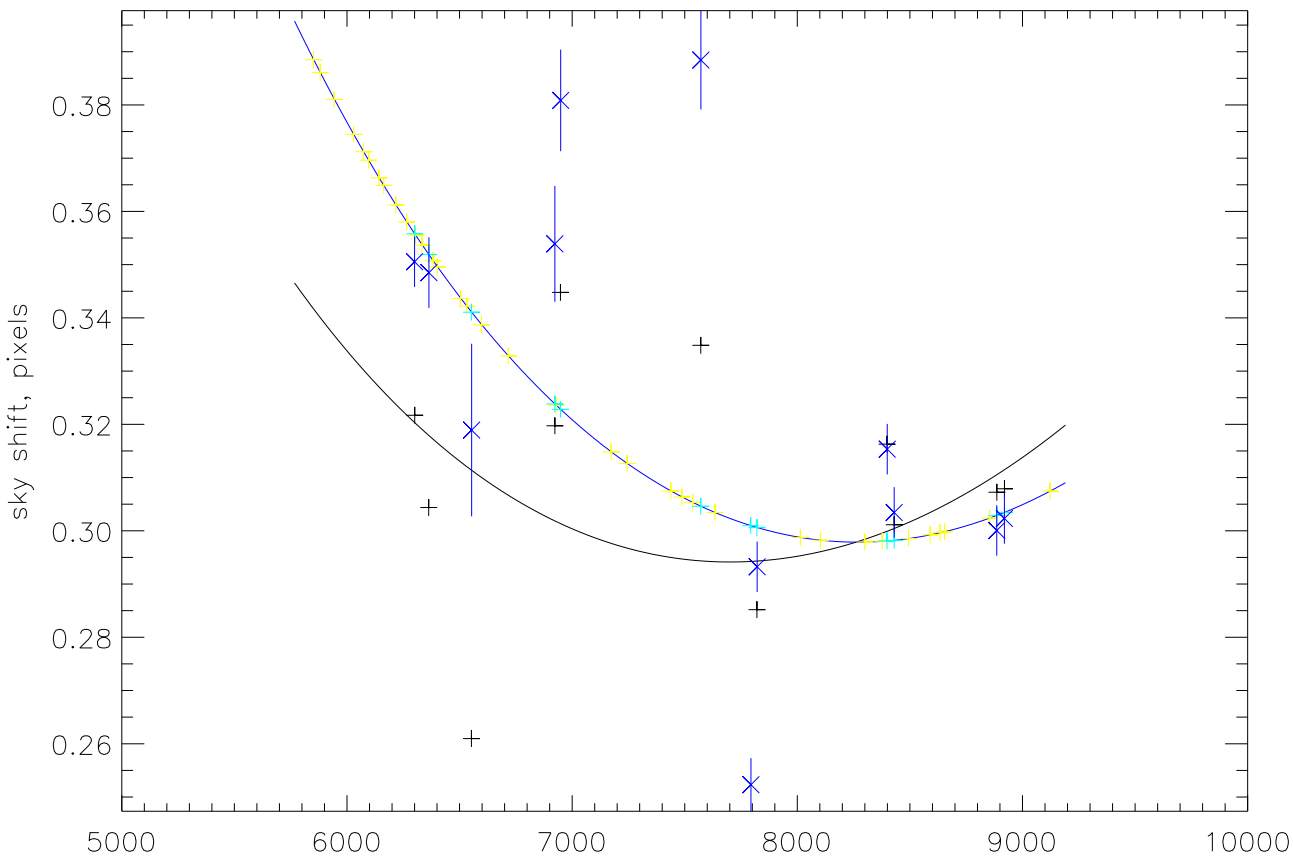

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

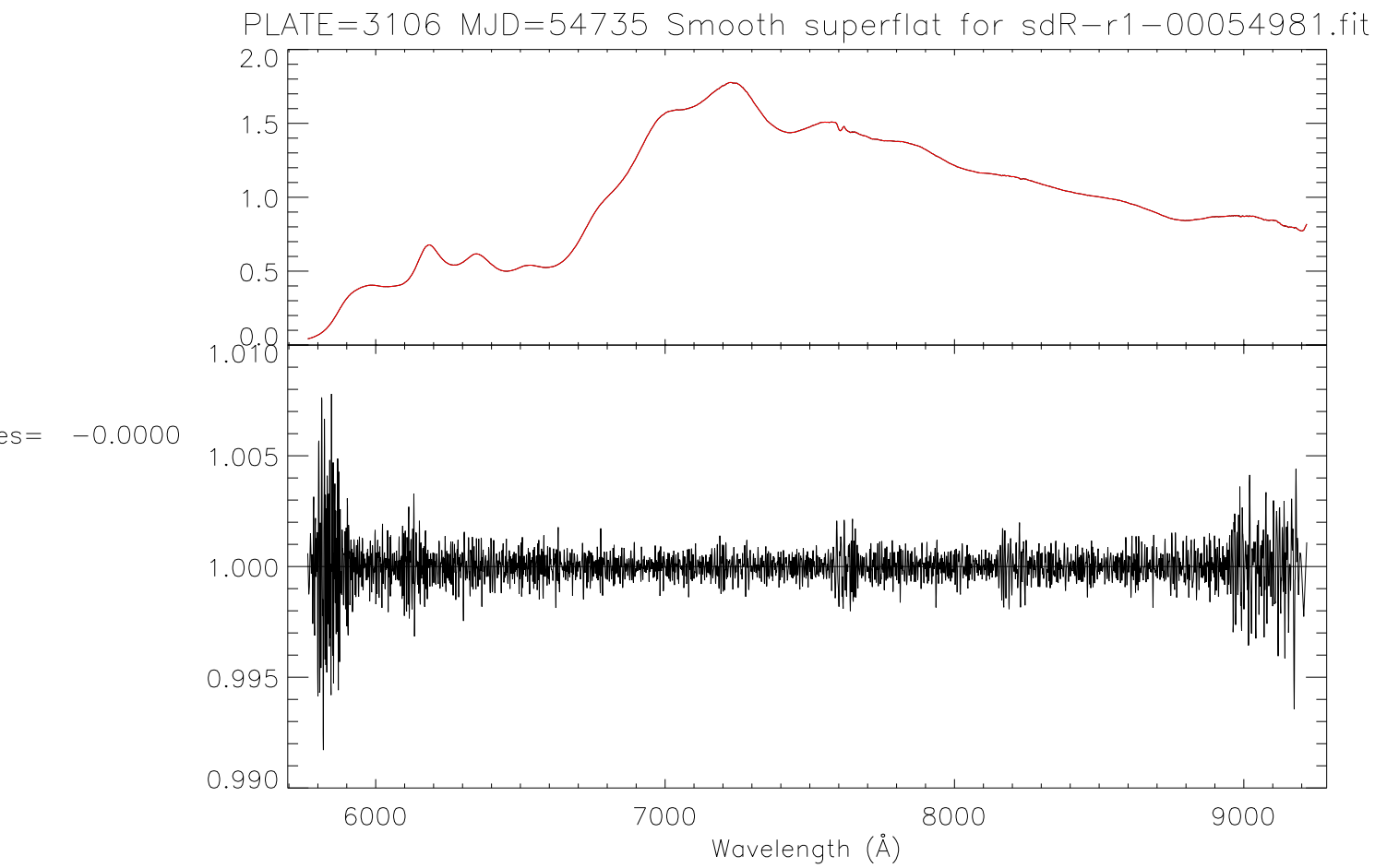

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

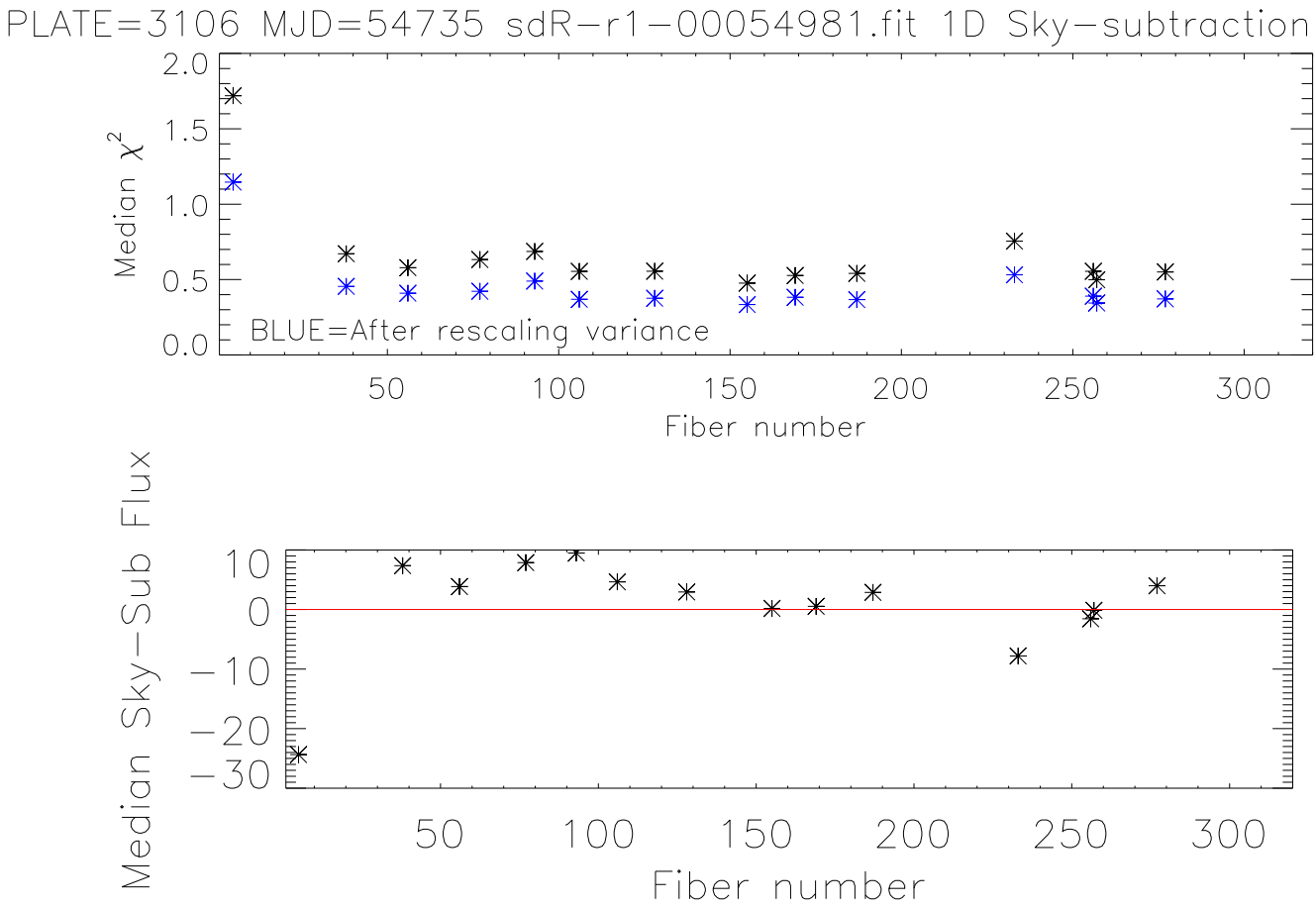

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

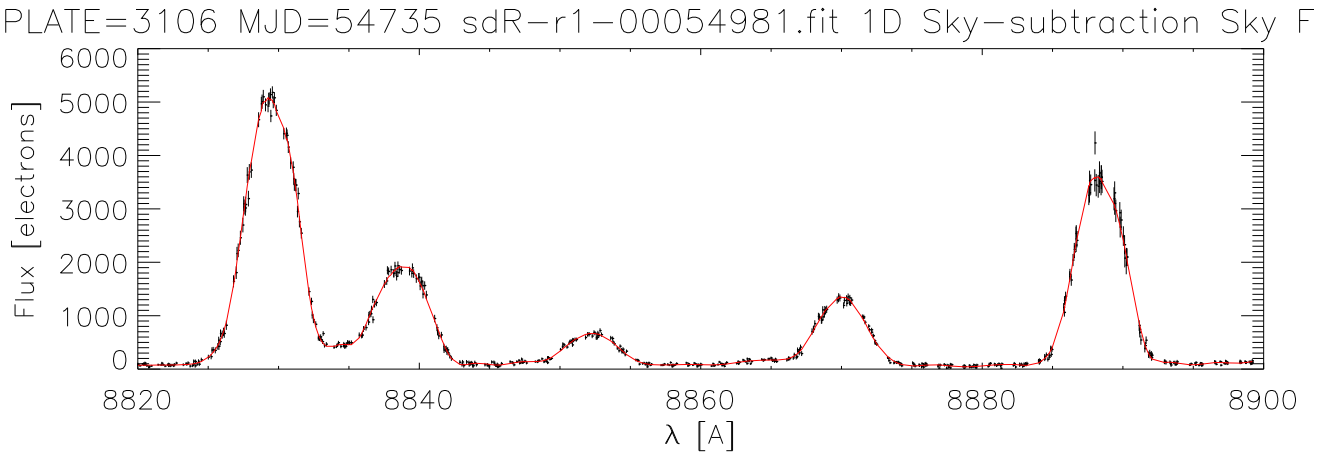

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

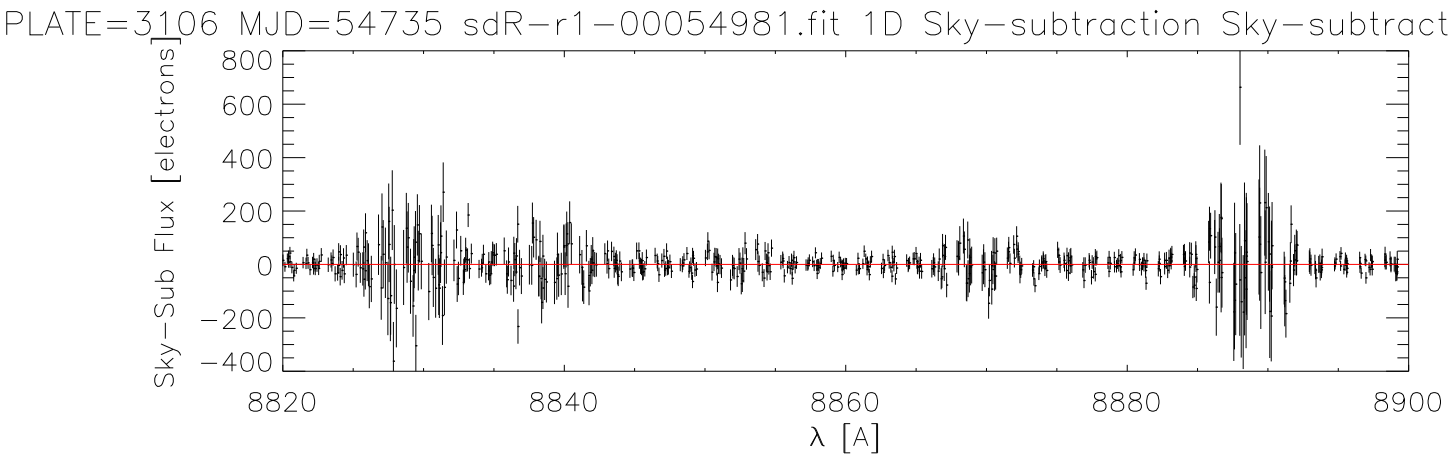

6300.3040
stdev 0.035
extra 0.35
6363.7760
stdev 0.029
extra 0.35
6553.6100
stdev 0.048
extra 0.32
6923.2100
stdev 0.026
extra 0.35
6949.0300
stdev 0.035
extra 0.38
7571.7500
stdev 0.028
extra 0.34
7794.1200
stdev 0.023
extra 0.25
7821.5100
stdev 0.018
extra 0.29
8399.1600
stdev 0.017
extra 0.32
8430.1700
stdev 0.015
extra 0.30
8885.8300
stdev 0.025
extra 0.34
8919.6100
stdev 0.024
extra 0.36
meas − pred, pix

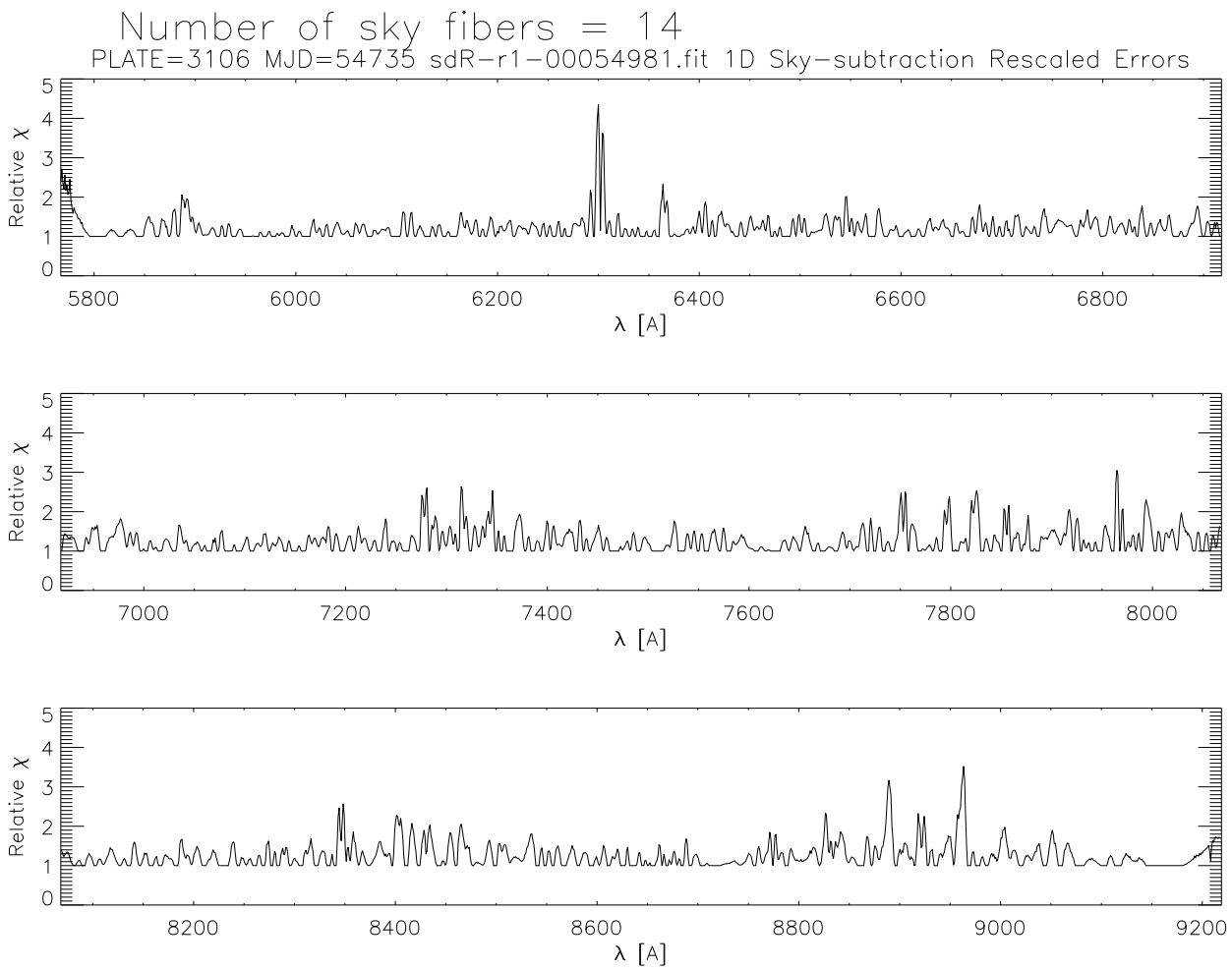

sky shift, pixels
0.38
0.36
0.34
0.32
0.30
0.28
0.26
5000
6000
7000
8000
9000
10000

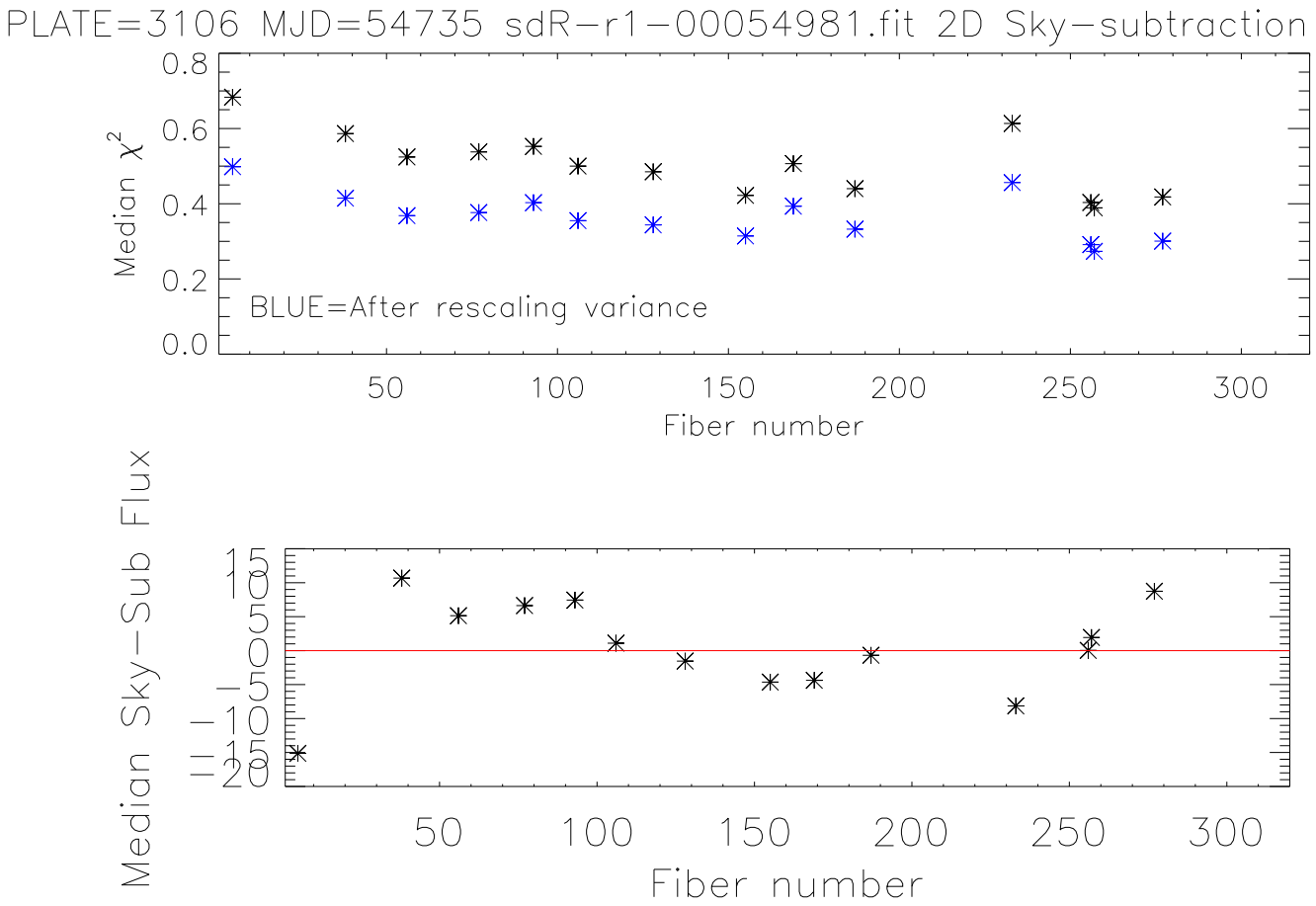

PLATE=3106 MJD=54735 Smooth superflat for sdR-r1-00054981.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

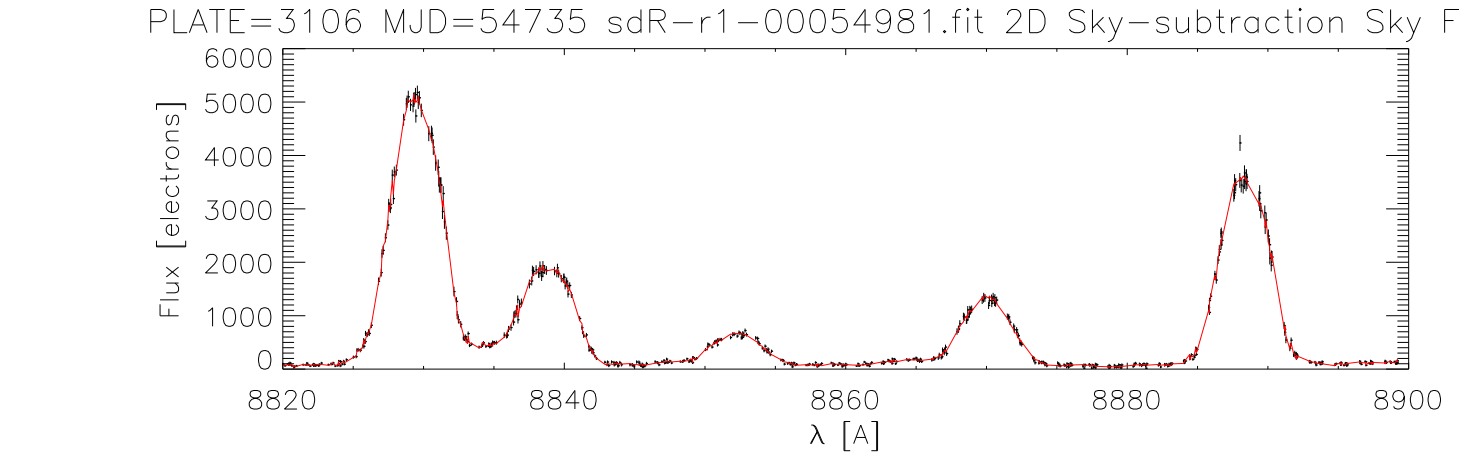

PLATE=3106 MJD=54735 sdR-r1-00054981.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

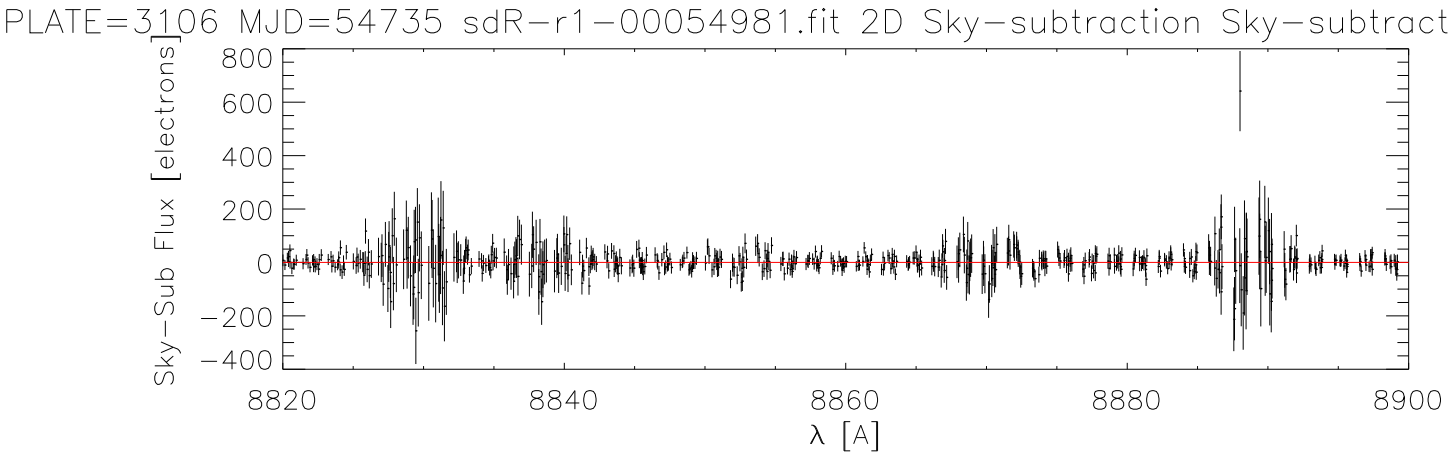

PLATE=3106 MJD=54735 sdR-r1-00054981.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

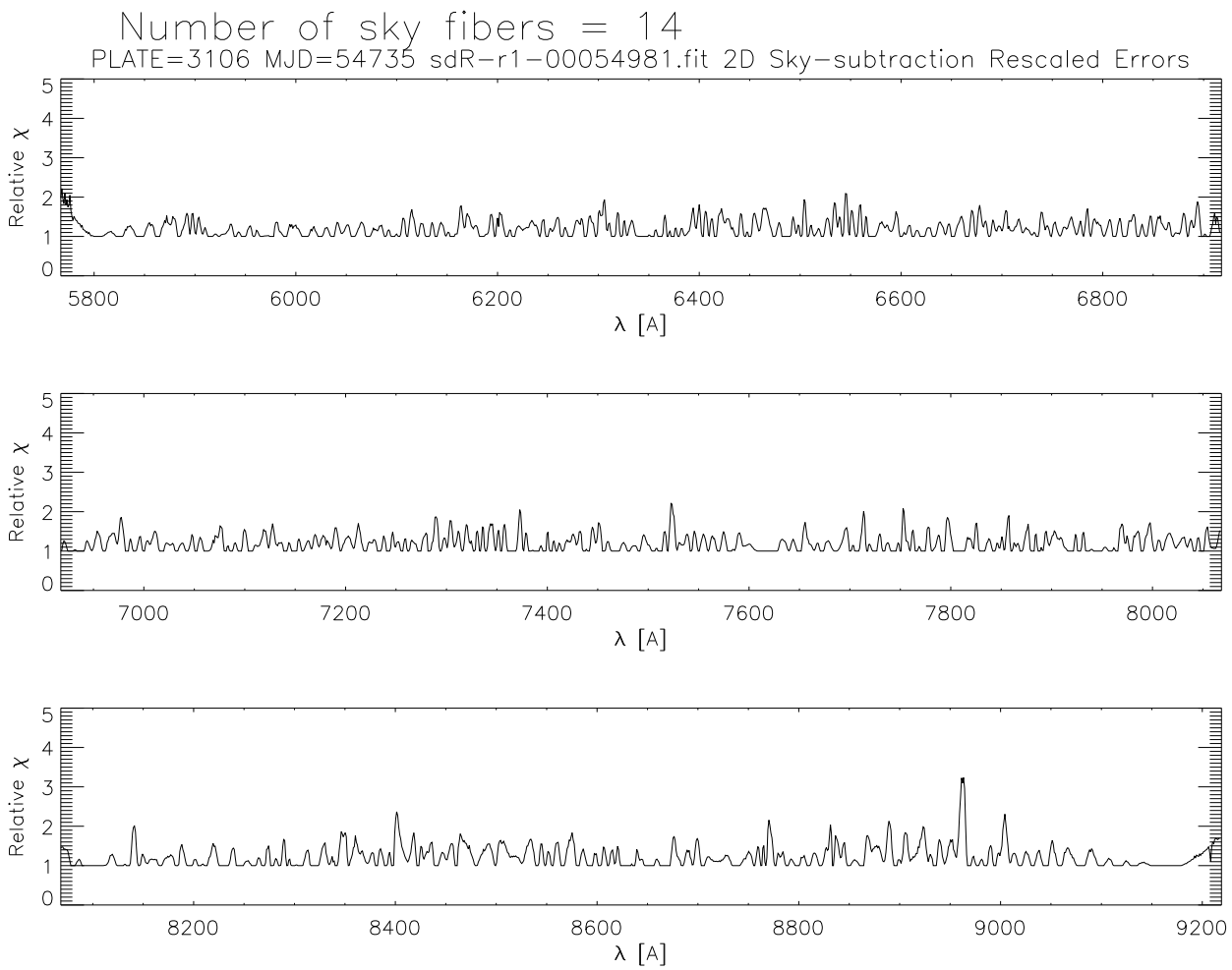

PLATE=3106 MJD=54735 sdR-r1-00054981.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

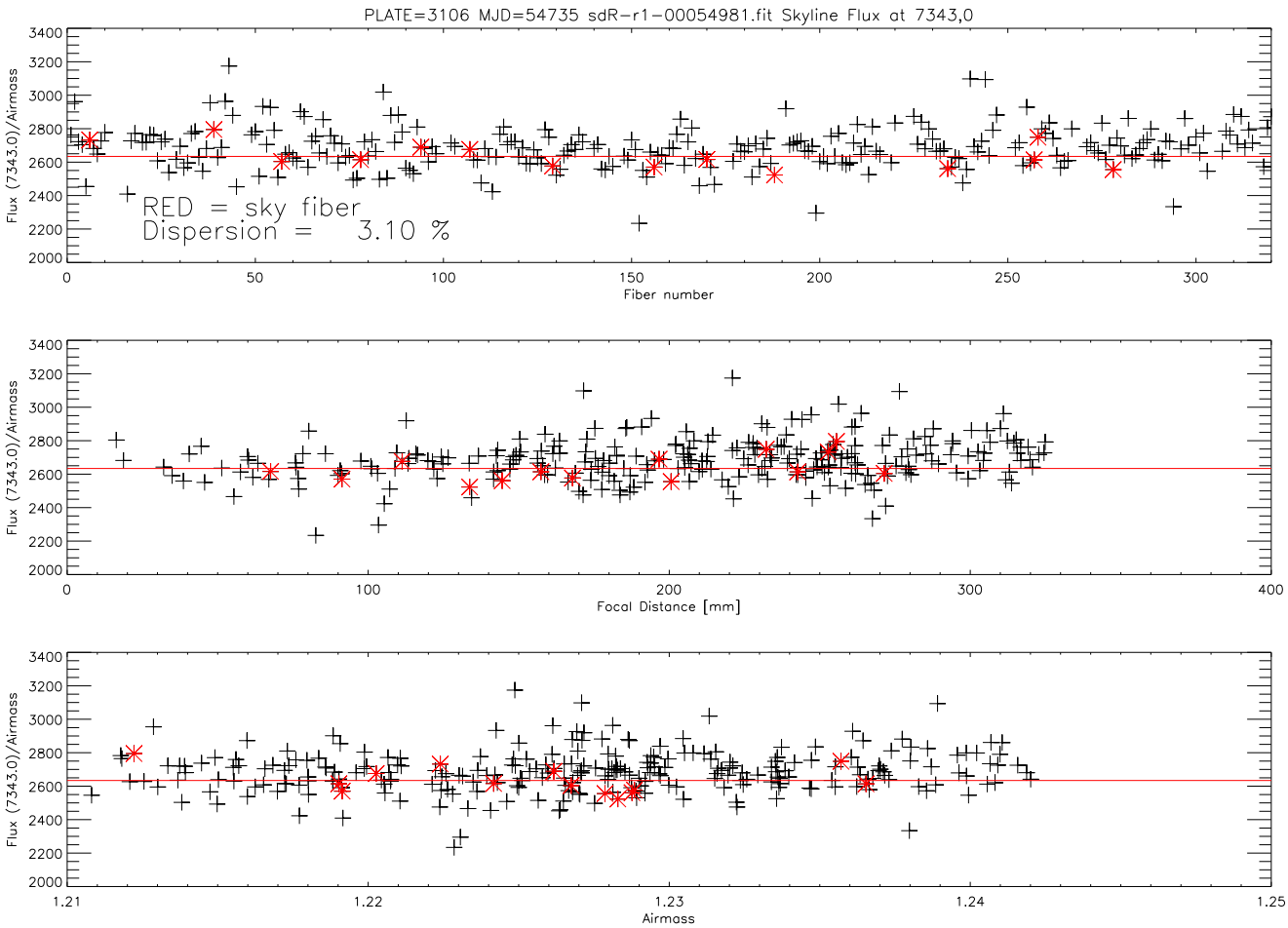

Number of sky fibers = 14
PLATE=3106 MJD=54735 sdR-r1-00054981.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

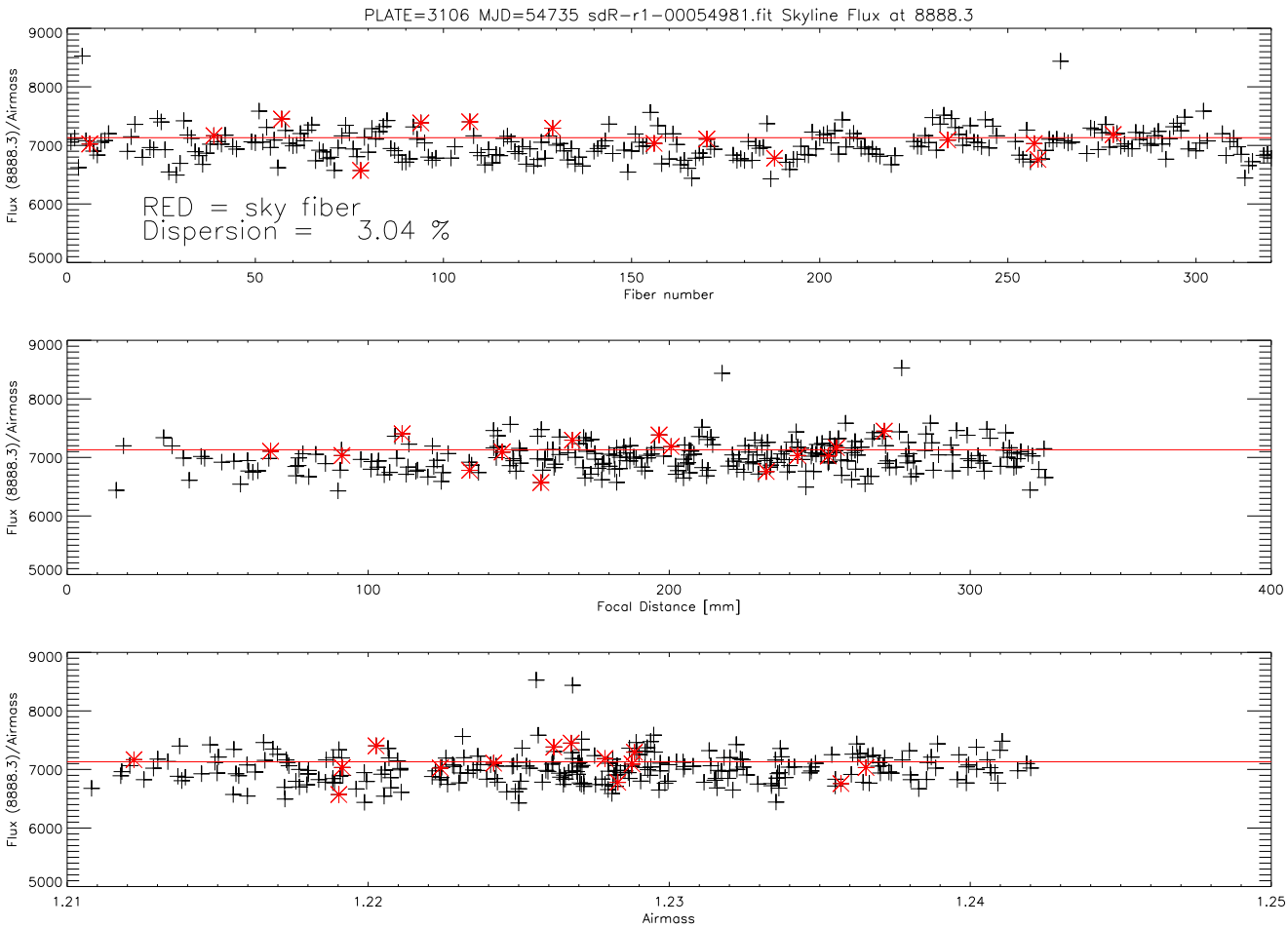

PLATE=3106 MJD=54735 sdR-r1-00054981.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
Fiber number

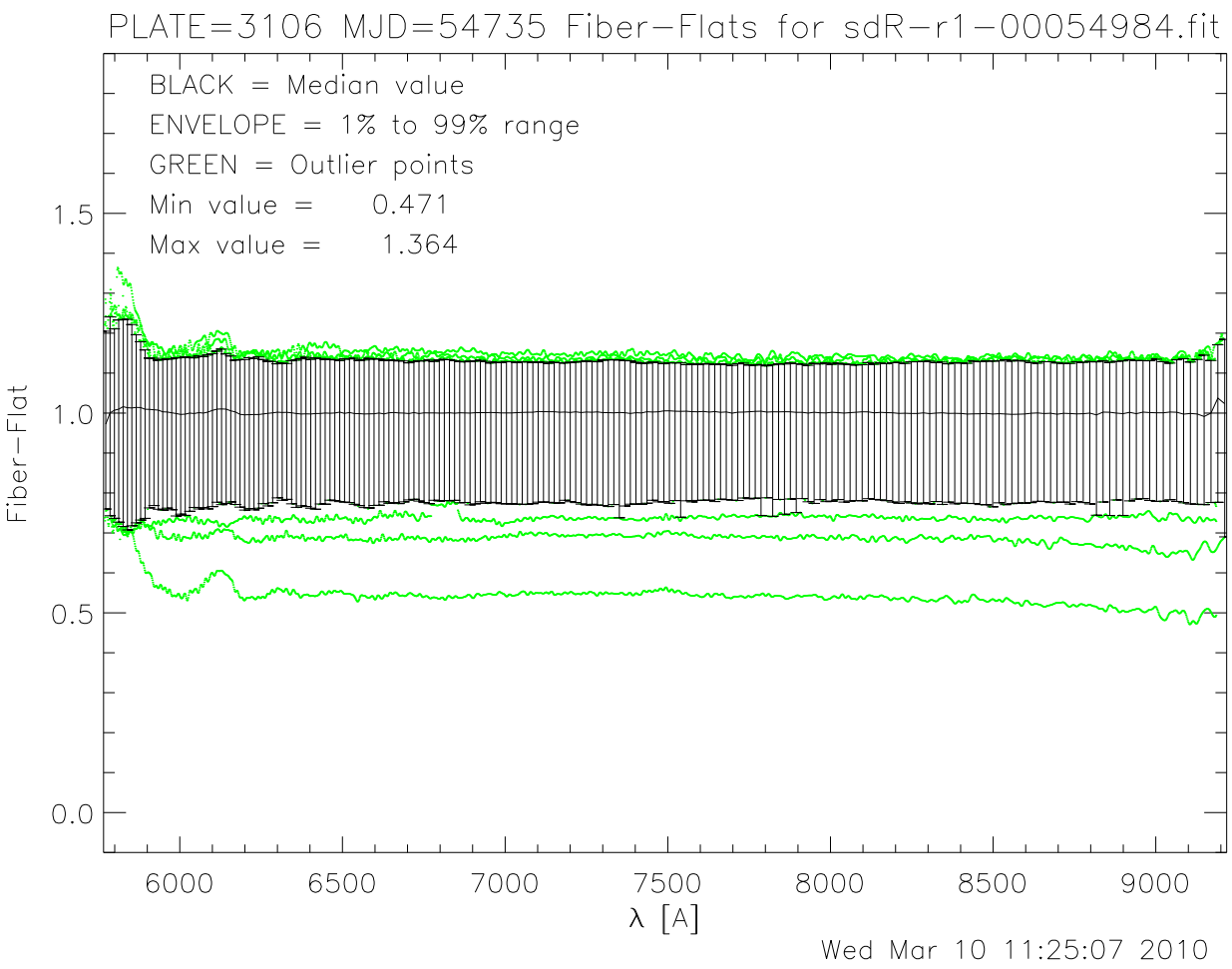

PLATE=3106 MJD=54735 sdR-r1-00054981.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

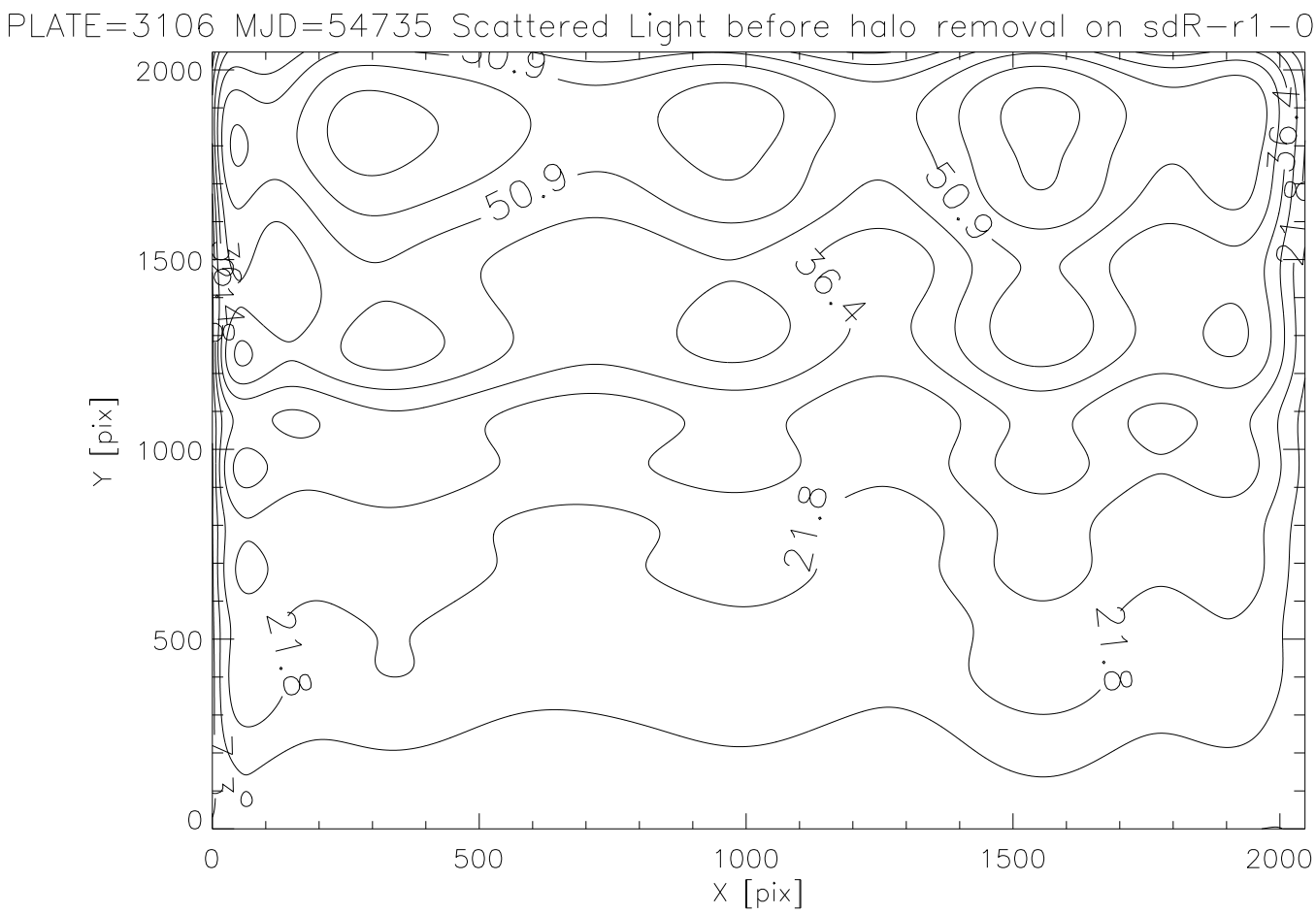

PLATE=3106 MJD=54735 sdR-r1-00054981.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

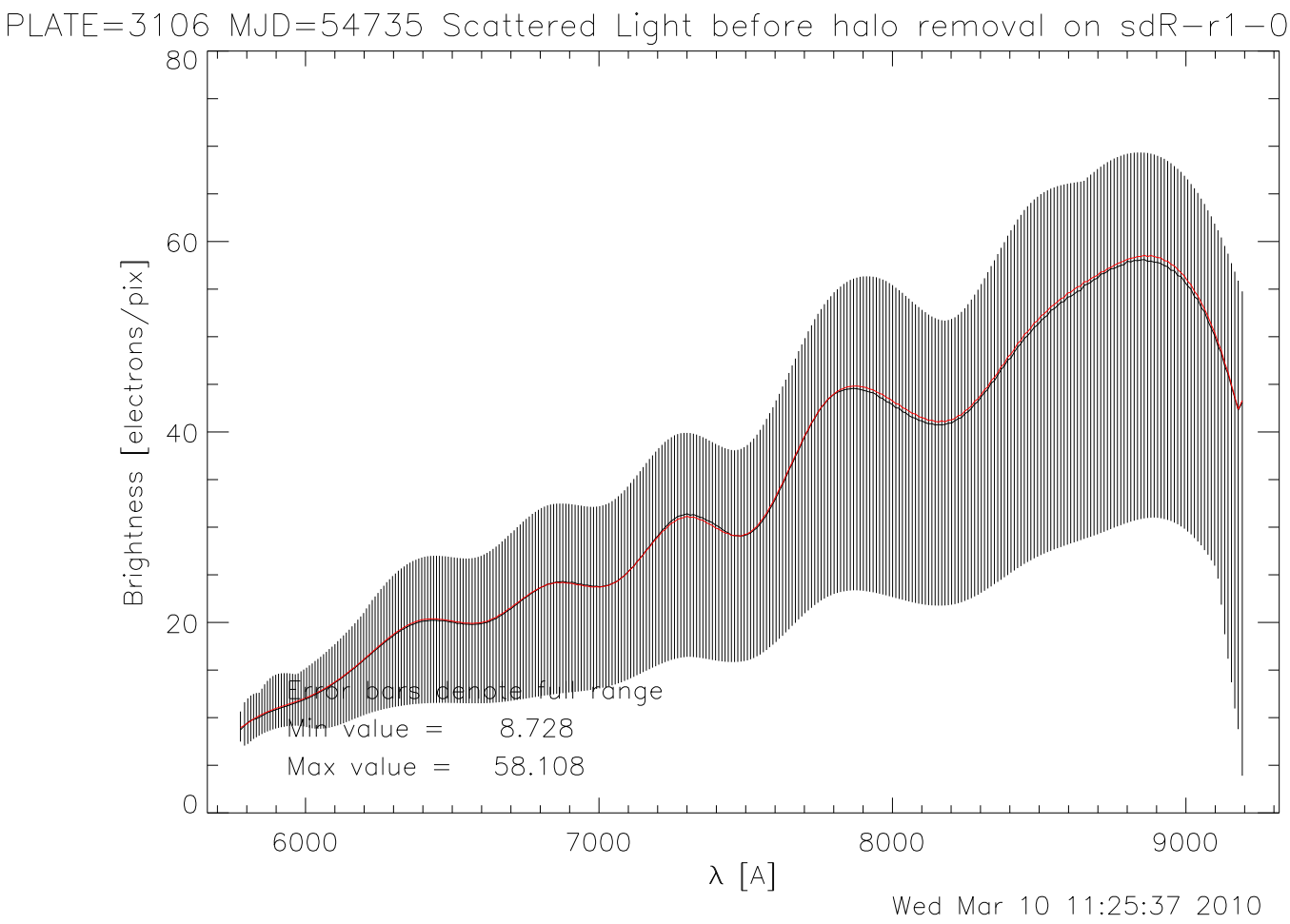

Number of sky fibers = 14
PLATE=3106 MJD=54735 sdR-r1-00054981.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

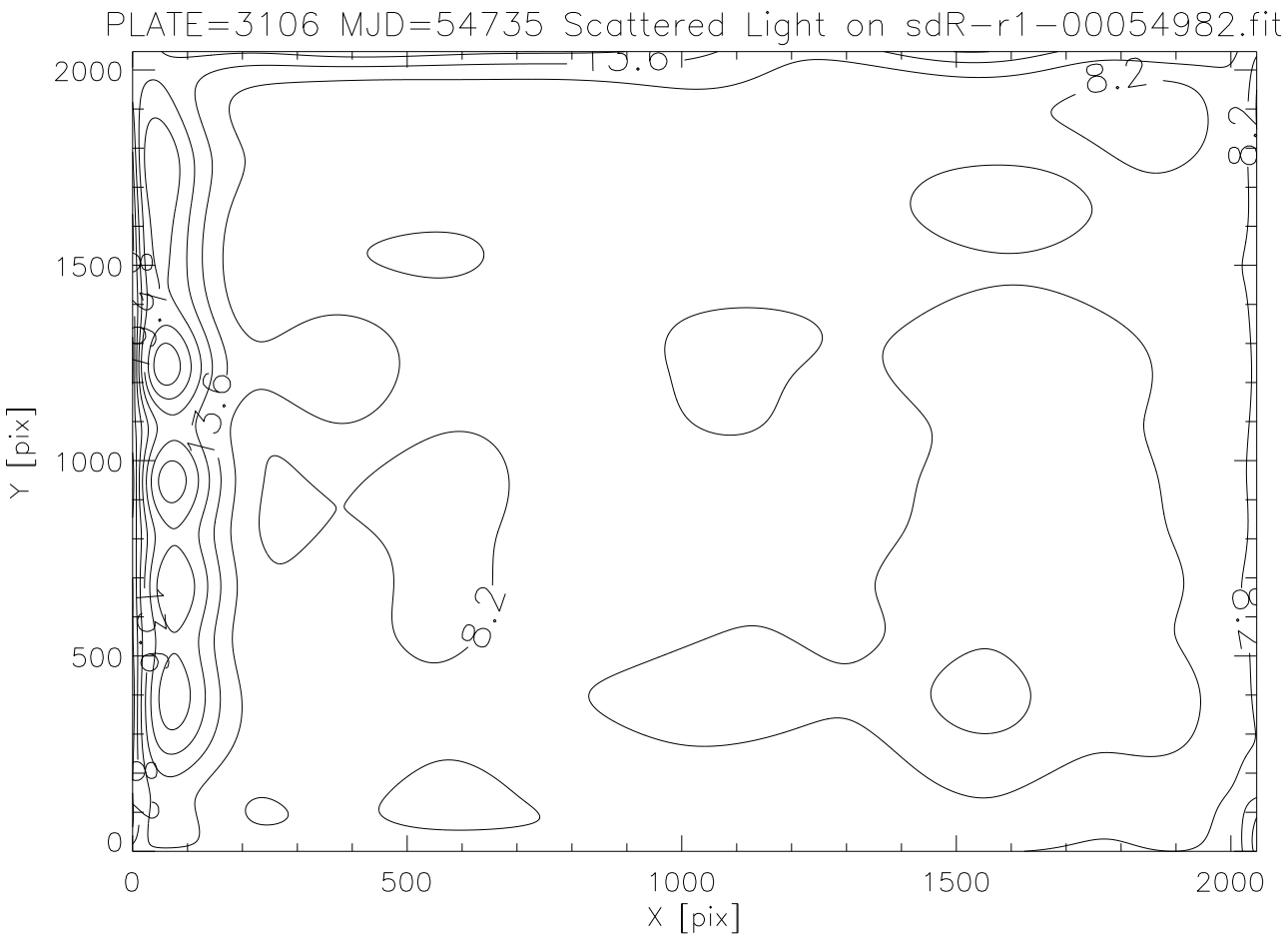

PLATE=3106 MJD=54735 sdR-r1-00054981.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.10 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

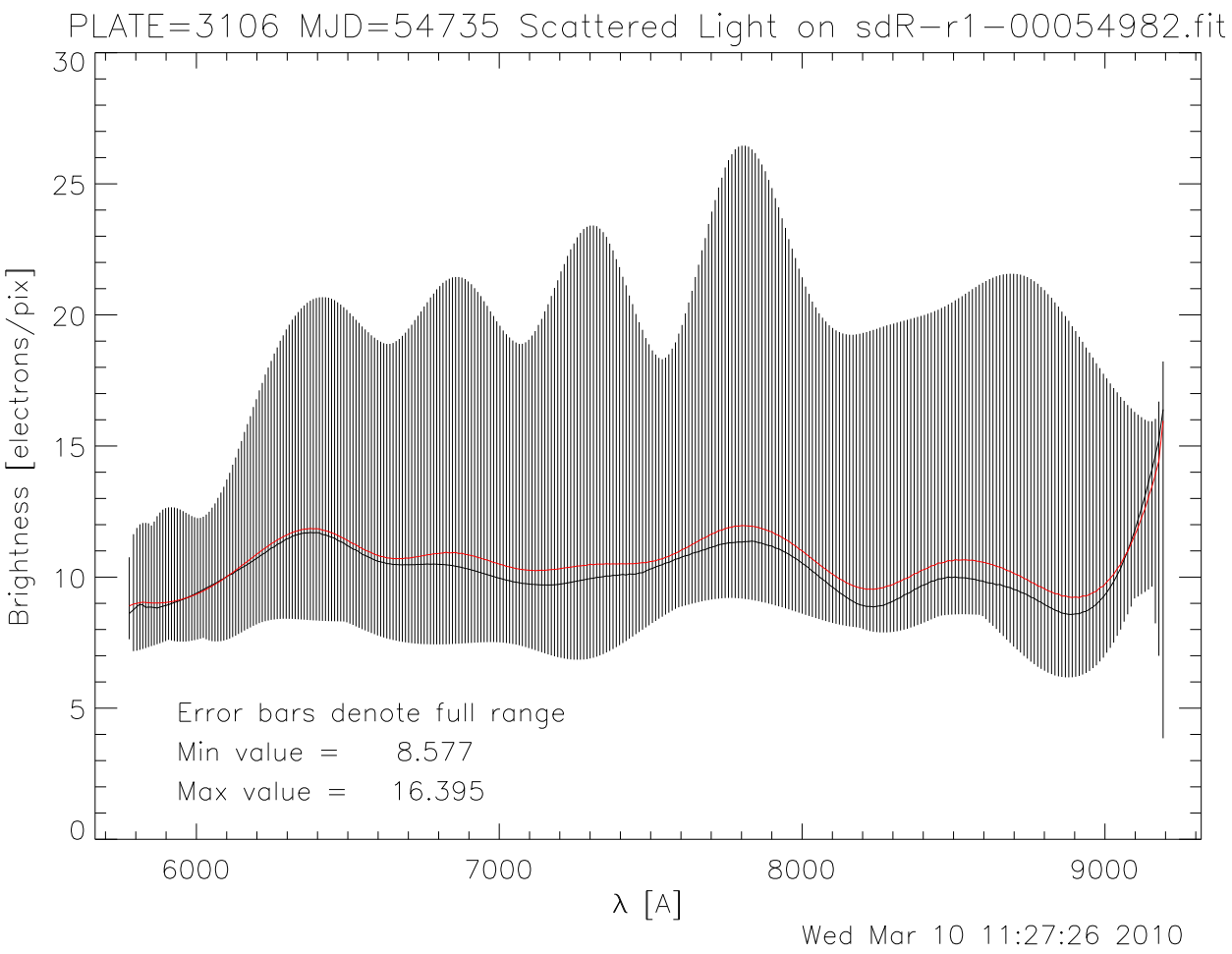

PLATE=3106 MJD=54735 sdR-r1-00054981.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.04 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

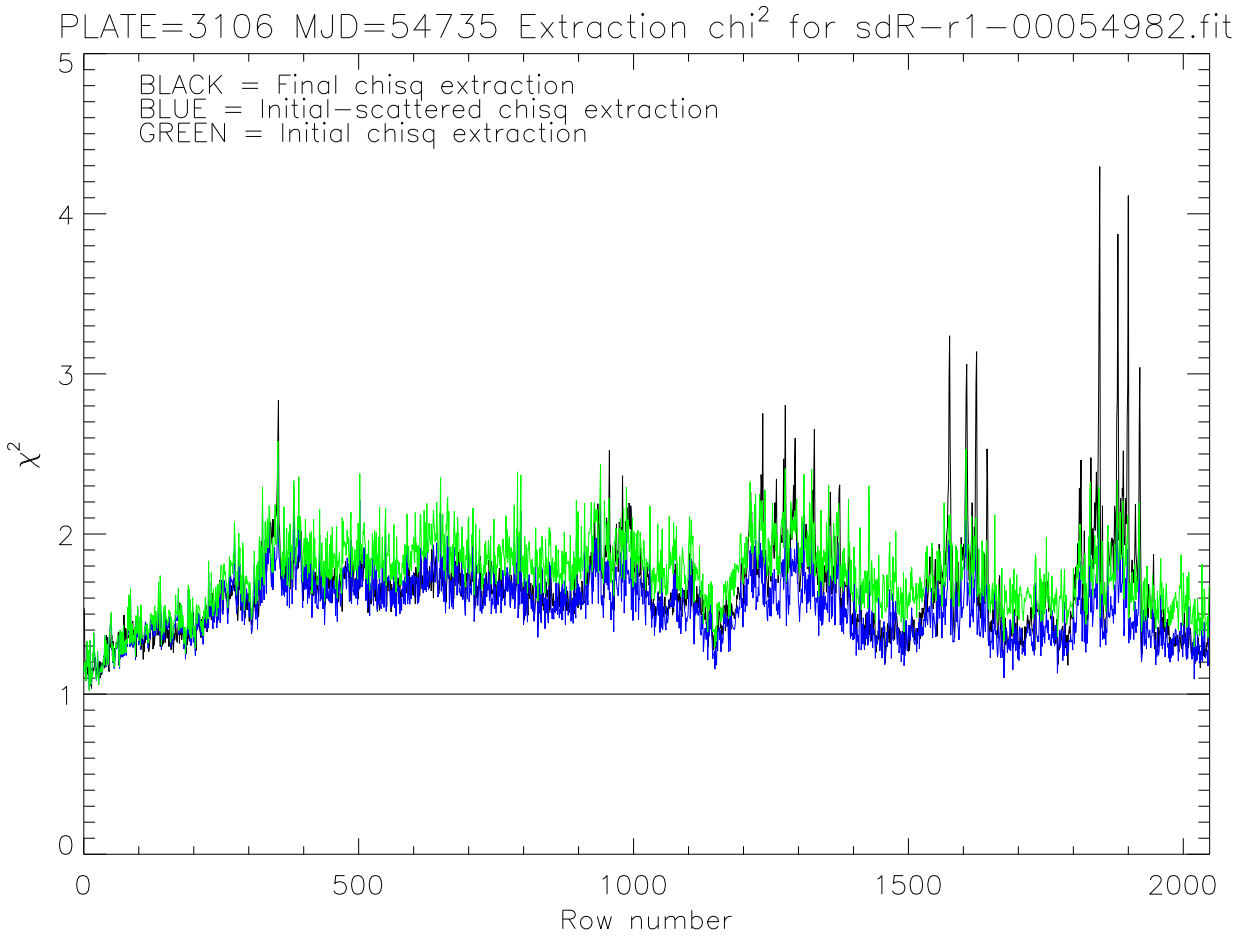

PLATE=3106 MJD=54735 Fiber-Flats for sdR-r1-00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.471
Max value = 1.364
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 11:25:07 2010

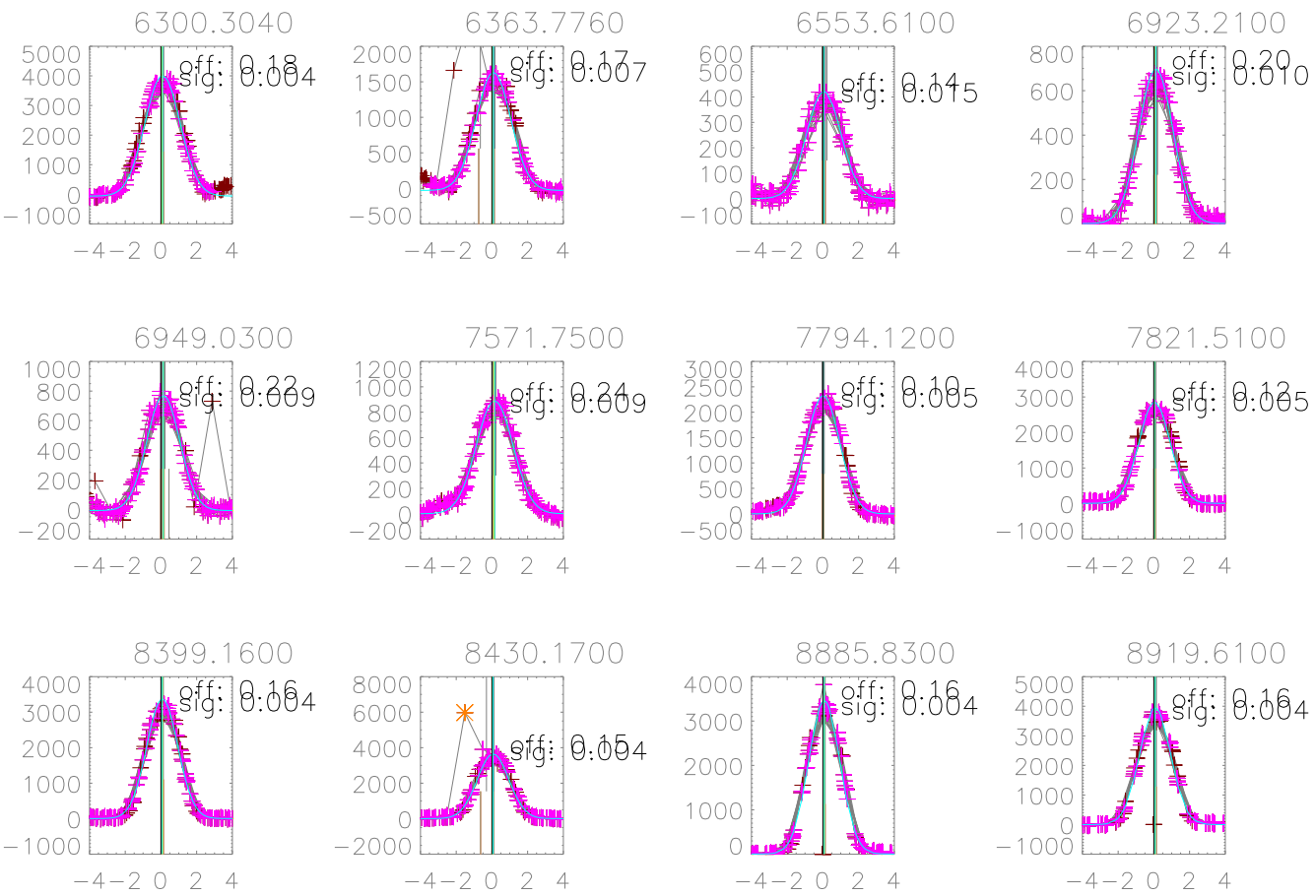

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r1-00054982.fi
50.9
50.9
50.9
36.4
36.4
21.8
21.8
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

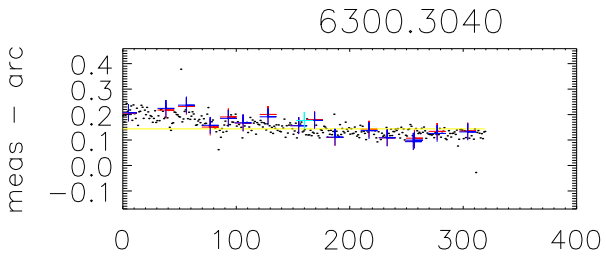

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r1-00054982.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.728
Max value = 58.108
Wed Mar 10 11:25:37 2010

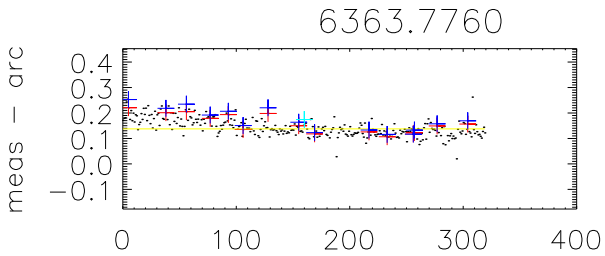

PLATE=3106 MJD=54735 Scattered Light on sdR-r1-00054982.fit
15.6
8.2
13.6
8.2
17.8
Y [pix]
X [pix]
0
500
1000
1500
2000

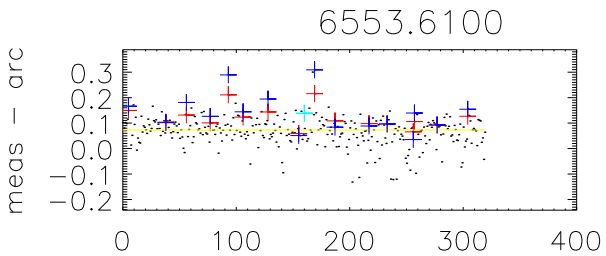

PLATE=3106 MJD=54735 Scattered Light on sdR-r1-00054982.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.577
Max value = 16.395
Wed Mar 10 11:27:26 2010

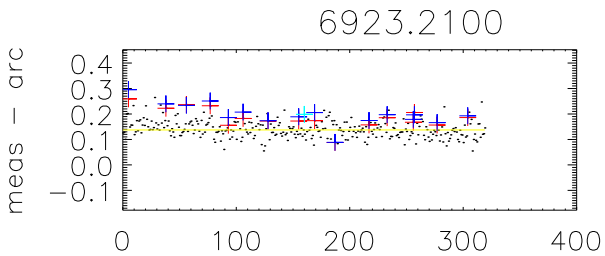

PLATE=3106 MJD=54735 Extraction chi^2 for sdR−r1−00054982.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

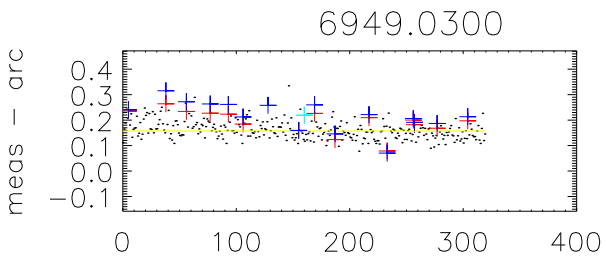

6300.3040
off: 0.18
sig: 0.004
6363.7760
off: 0.17
sig: 0.007
6553.6100
off: 0.14
sig: 0.015
6923.2100
off: 0.20
sig: 0.010
6949.0300
off: 0.22
sig: 0.009
7571.7500
off: 0.24
sig: 0.009
7794.1200
off: 0.10
sig: 0.005
7821.5100
off: 0.12
sig: 0.005
8399.1600
off: 0.16
sig: 0.004
8430.1700
off: 0.15
sig: 0.004
8885.8300
off: 0.16
sig: 0.004
8919.6100
off: 0.16
sig: 0.004

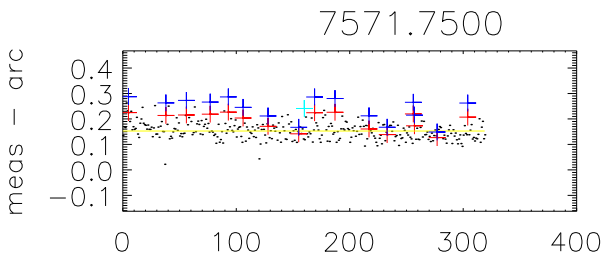

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

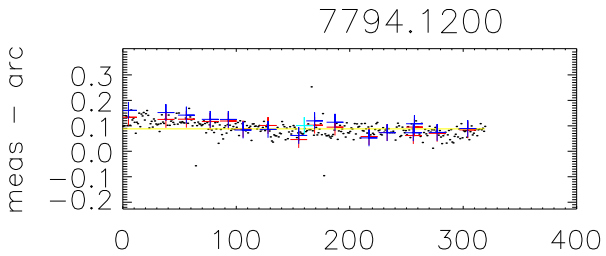

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

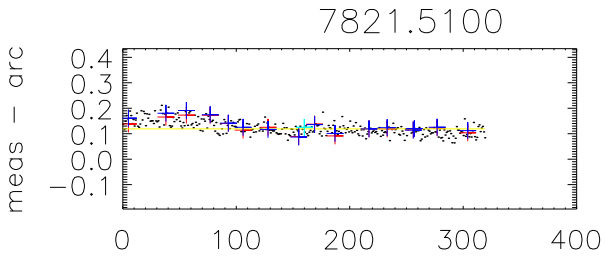

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

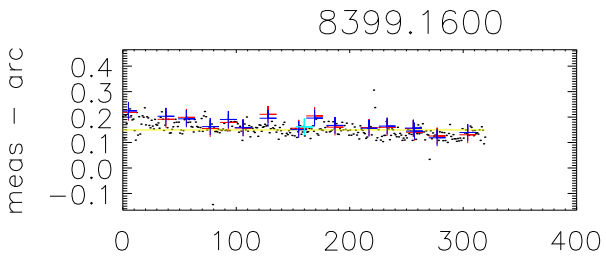

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

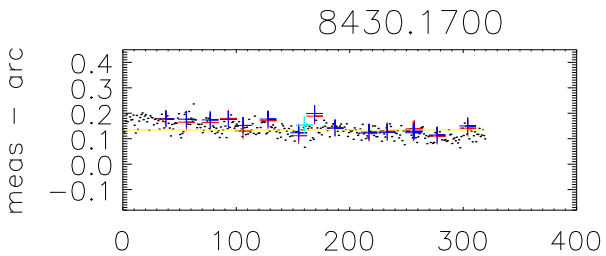

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

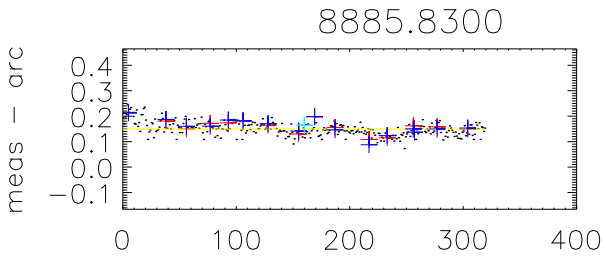

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

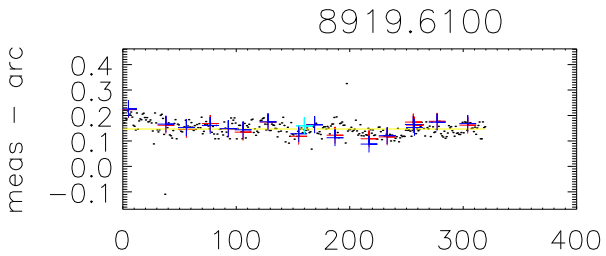

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

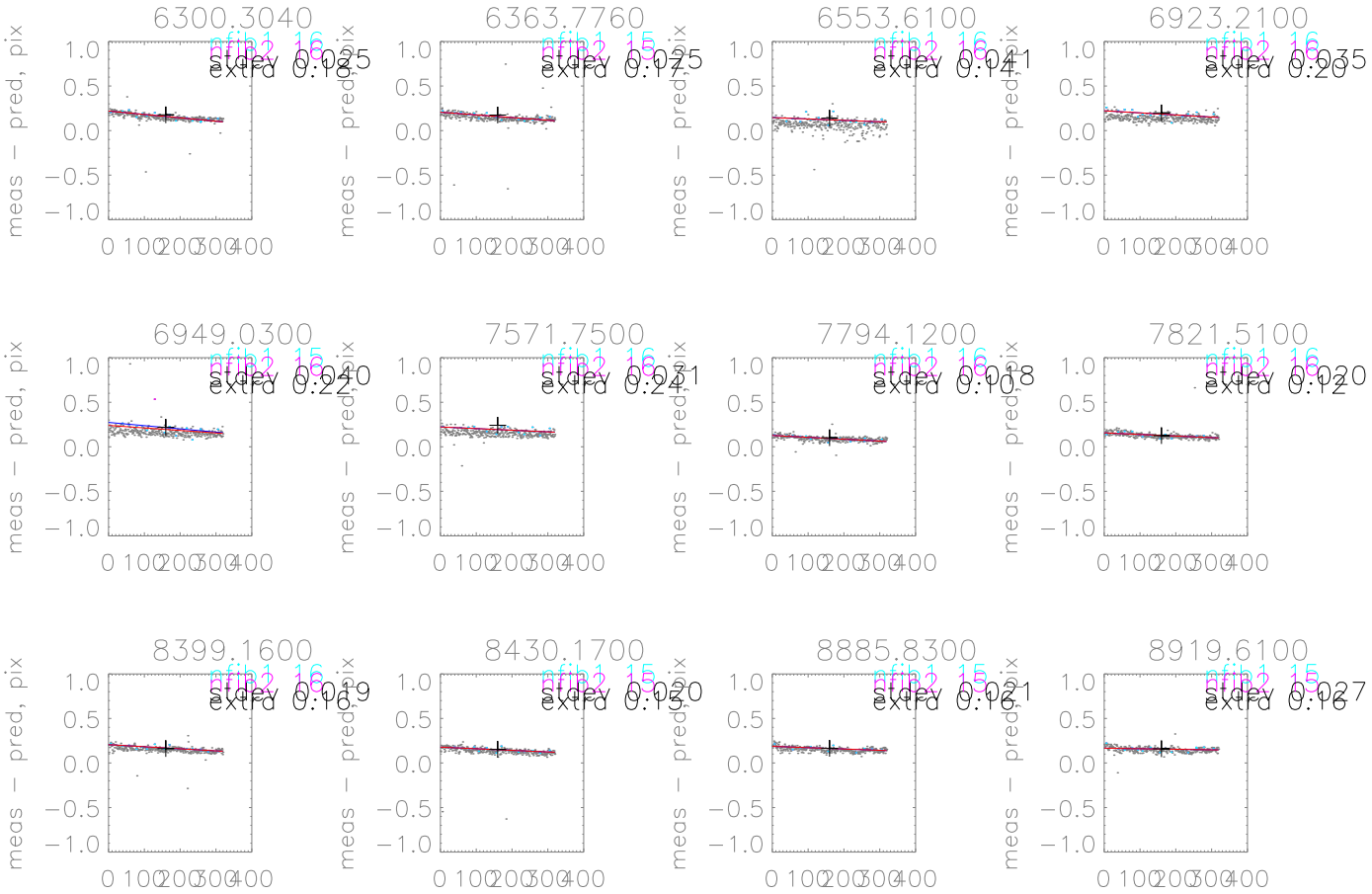

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

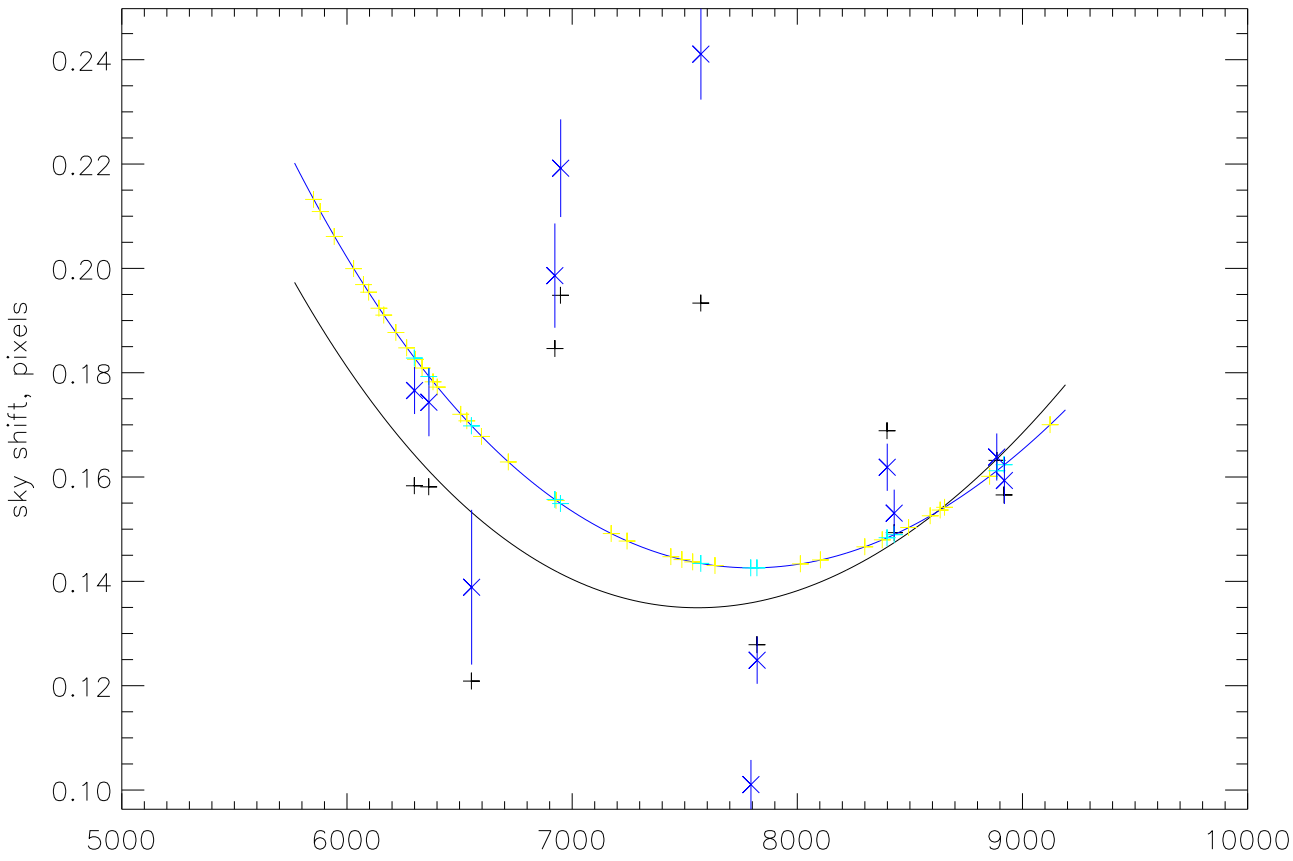

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

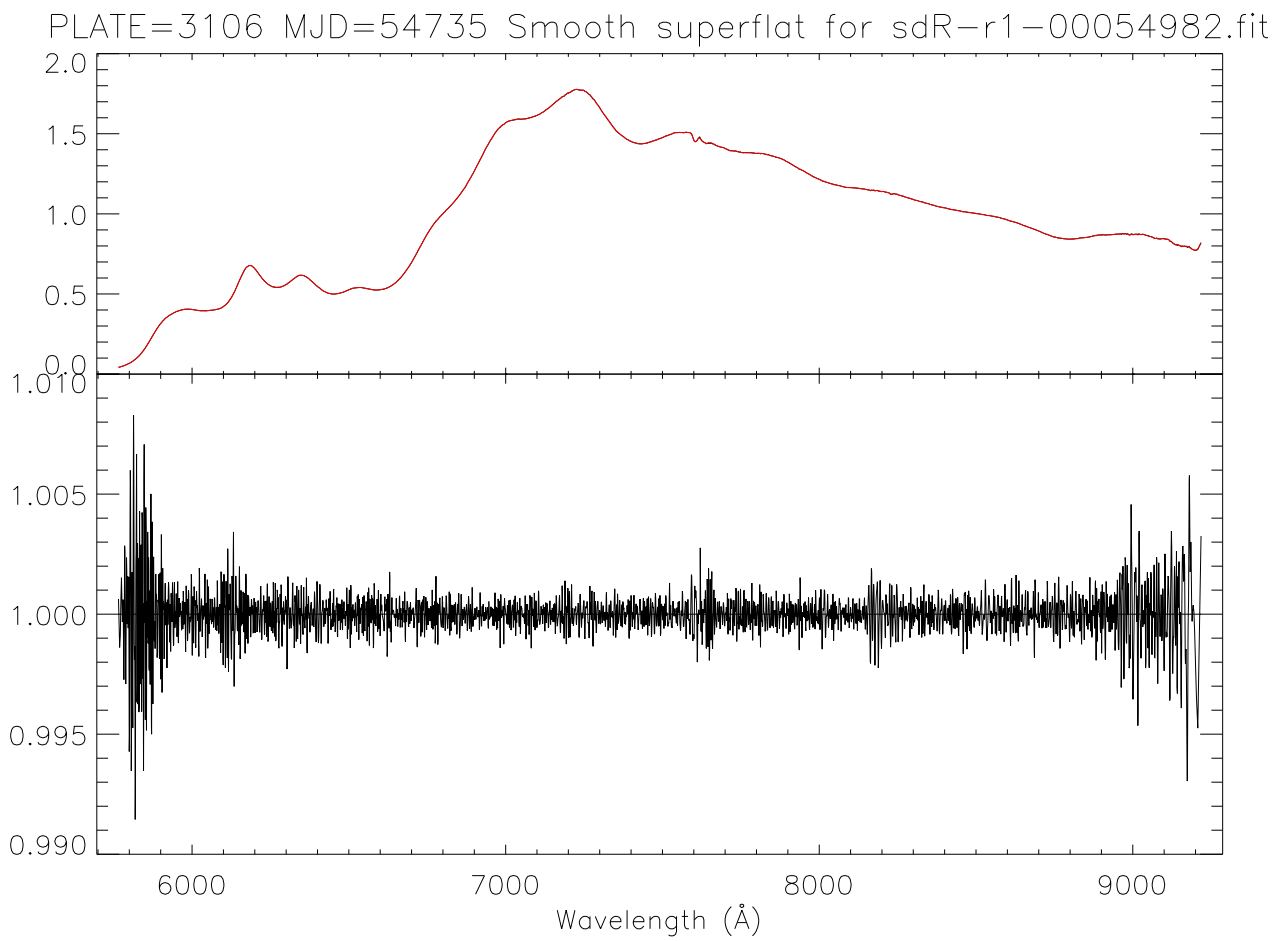

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

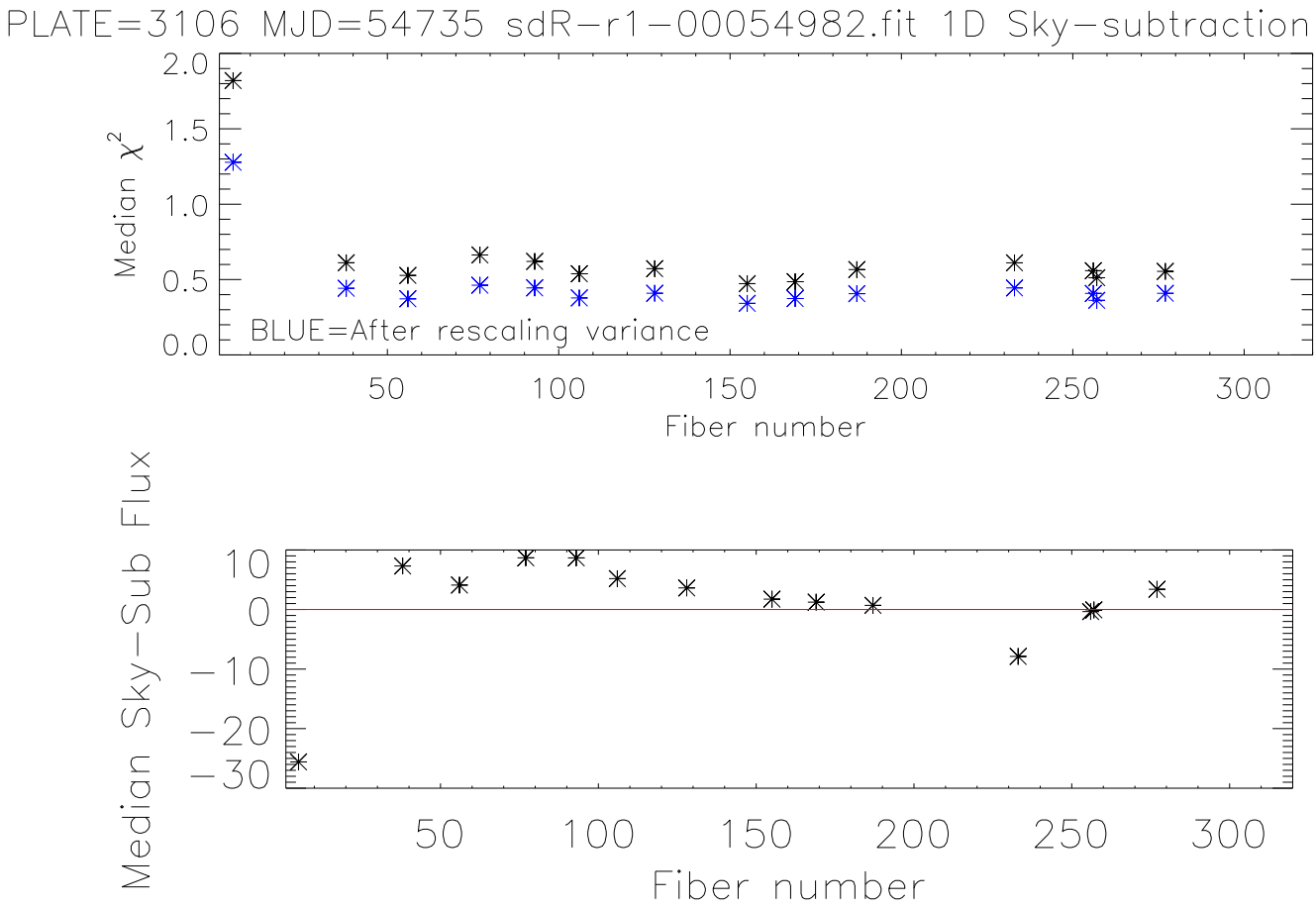

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

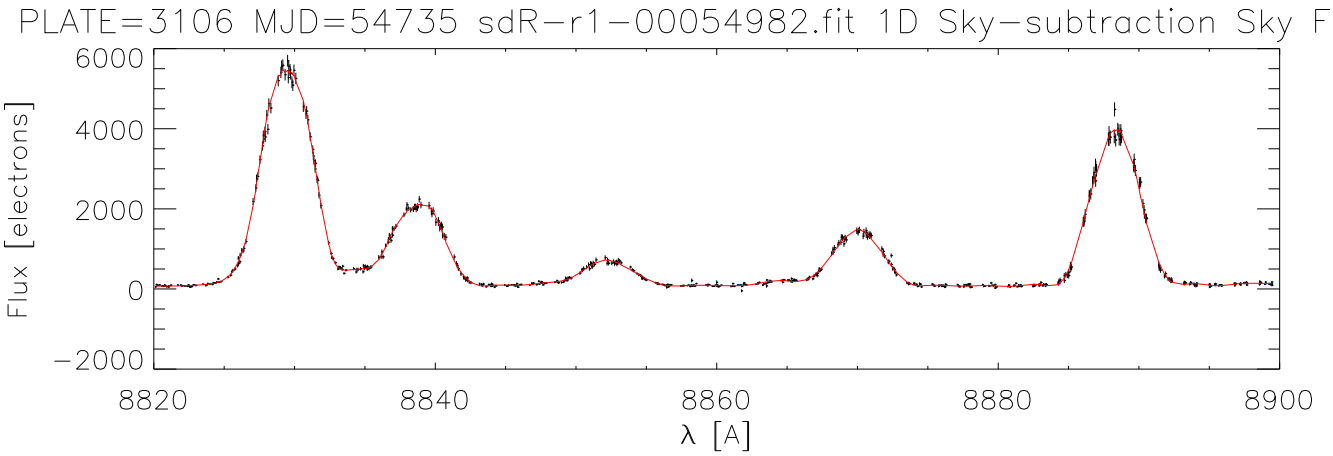

6300.3040
stdev 0.025
extra 0.18
6363.7760
stdev 0.025
extra 0.17
6553.6100
stdev 0.041
extra 0.14
6923.2100
stdev 0.035
extra 0.20
6949.0300
stdev 0.040
extra 0.22
7571.7500
stdev 0.031
extra 0.24
7794.1200
stdev 0.018
extra 0.10
7821.5100
stdev 0.020
extra 0.12
8399.1600
stdev 0.049
extra 0.16
8430.1700
stdev 0.020
extra 0.13
8885.8300
stdev 0.021
extra 0.16
8919.6100
stdev 0.027
extra 0.16
meas − pred, pix
mfib1 16
mfib2 15

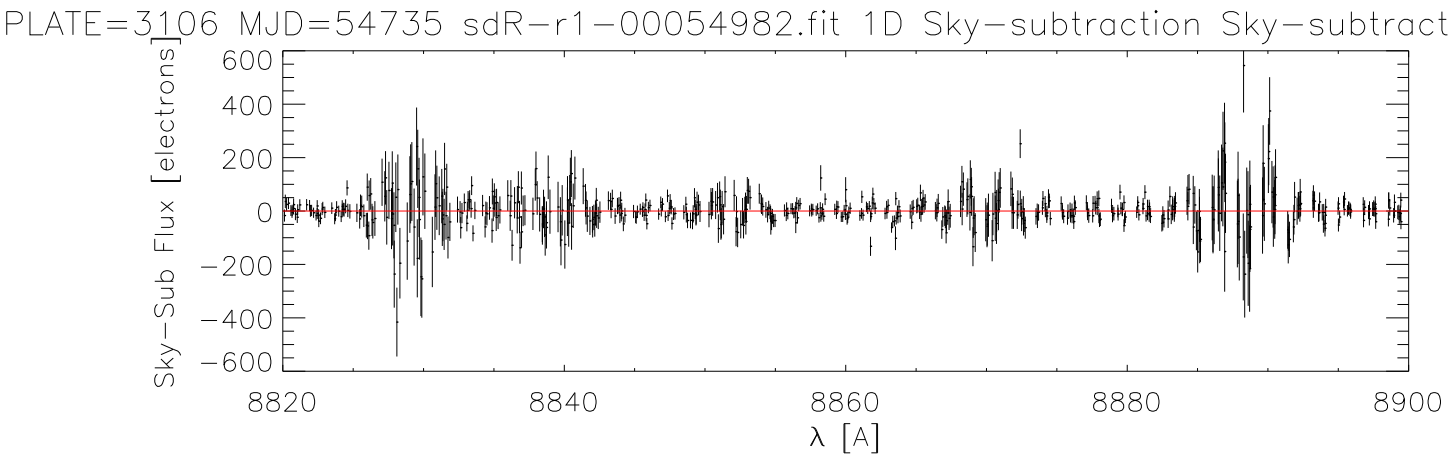

sky shift, pixels
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
5000
6000
7000
8000
9000
10000

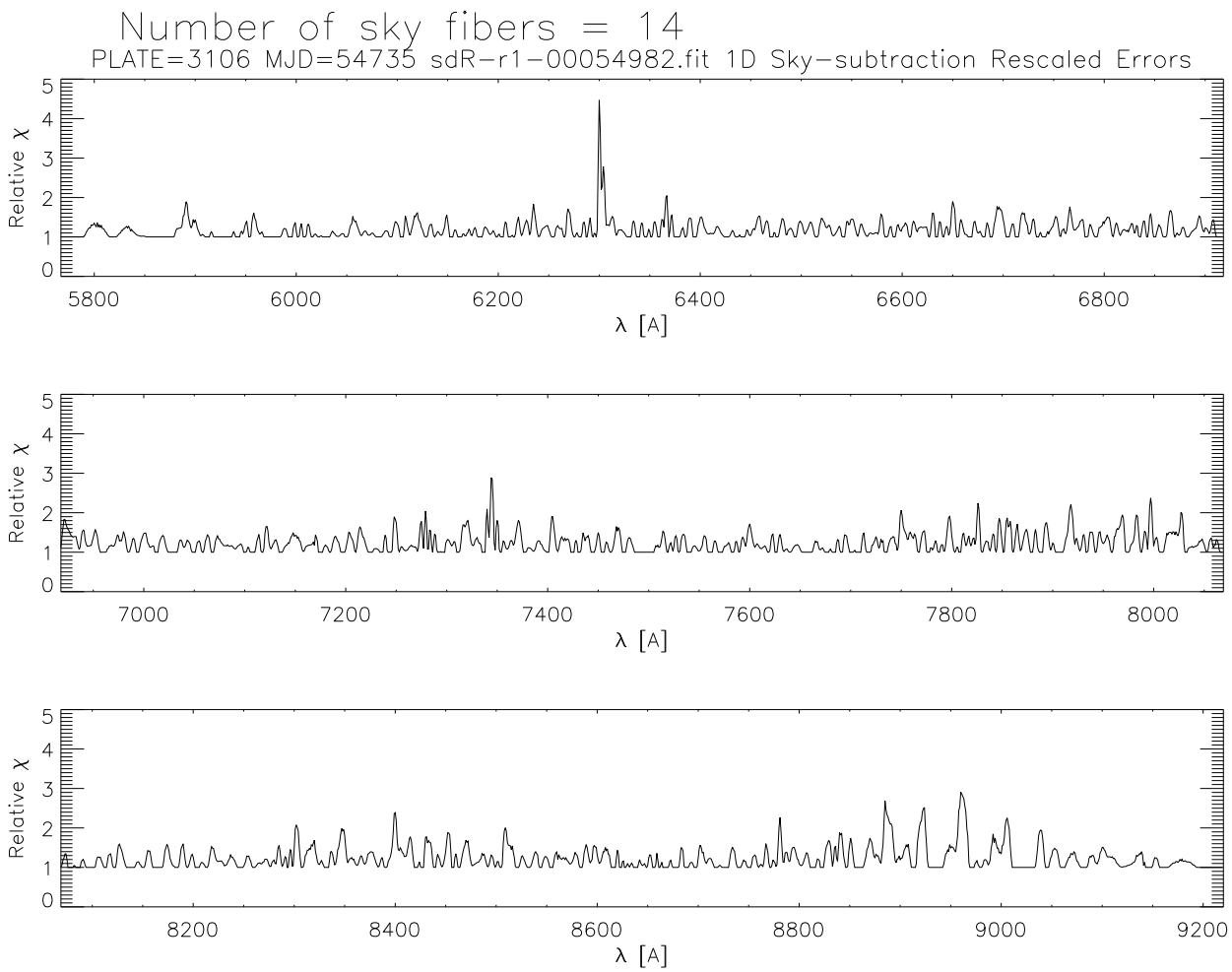
es= 0.0000

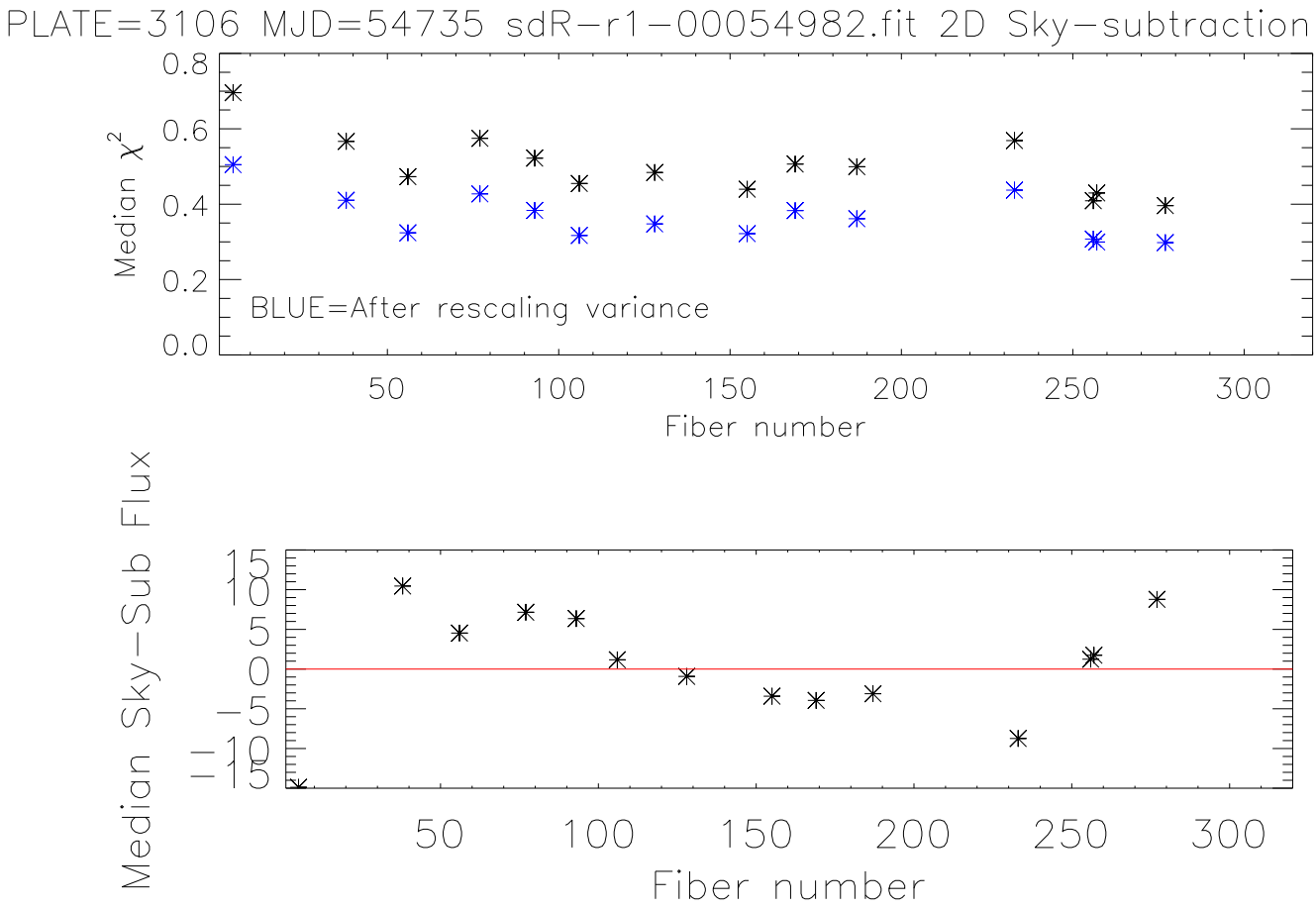

PLATE=3106 MJD=54735 Smooth superflat for sdR-r1-00054982.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

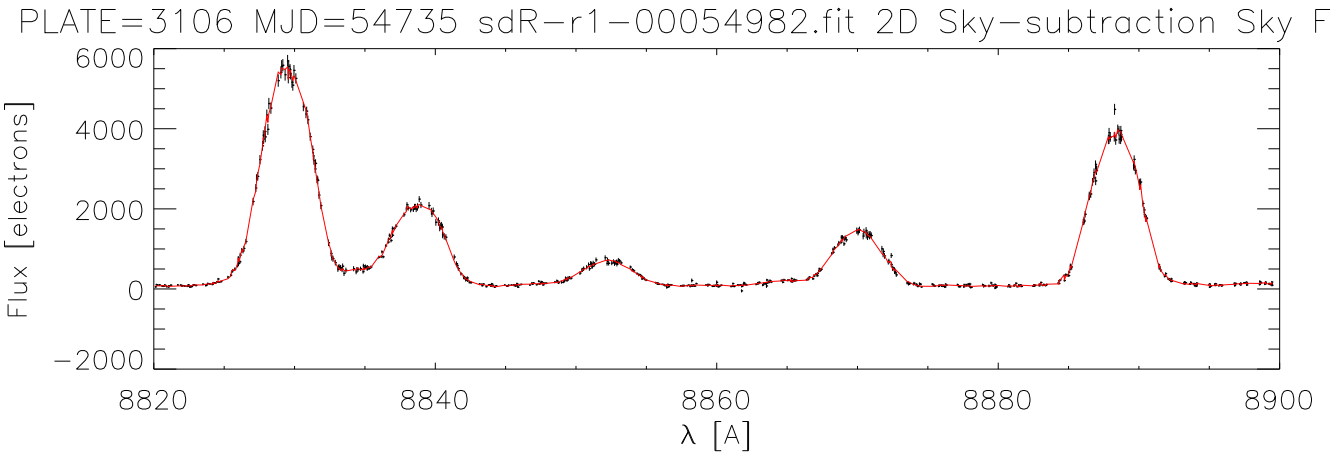

PLATE=3106 MJD=54735 sdR-r1-00054982.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

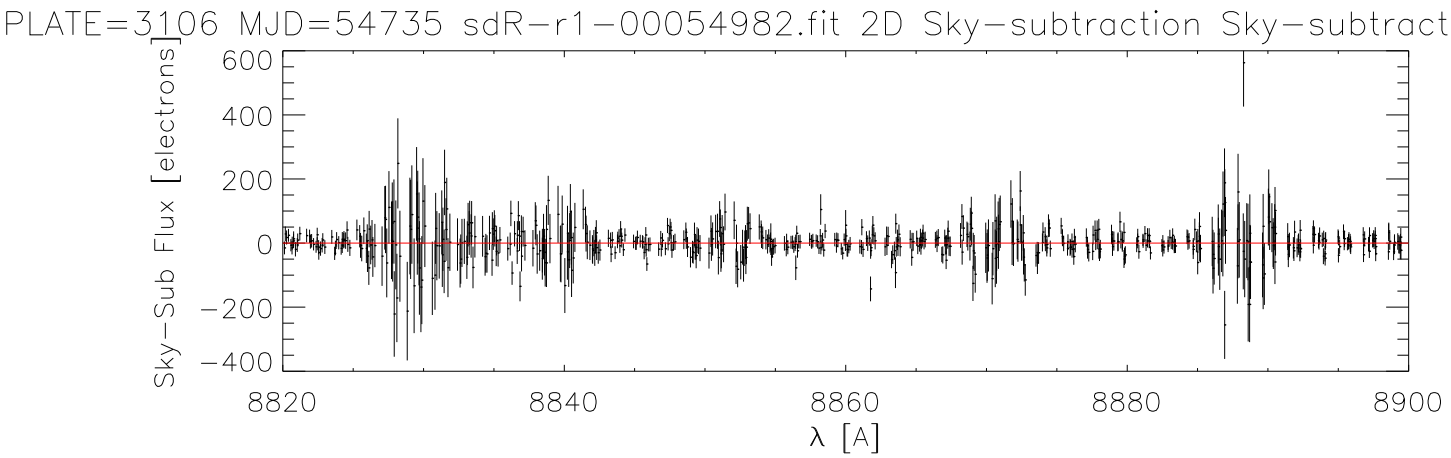

PLATE=3106 MJD=54735 sdR-r1-00054982.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

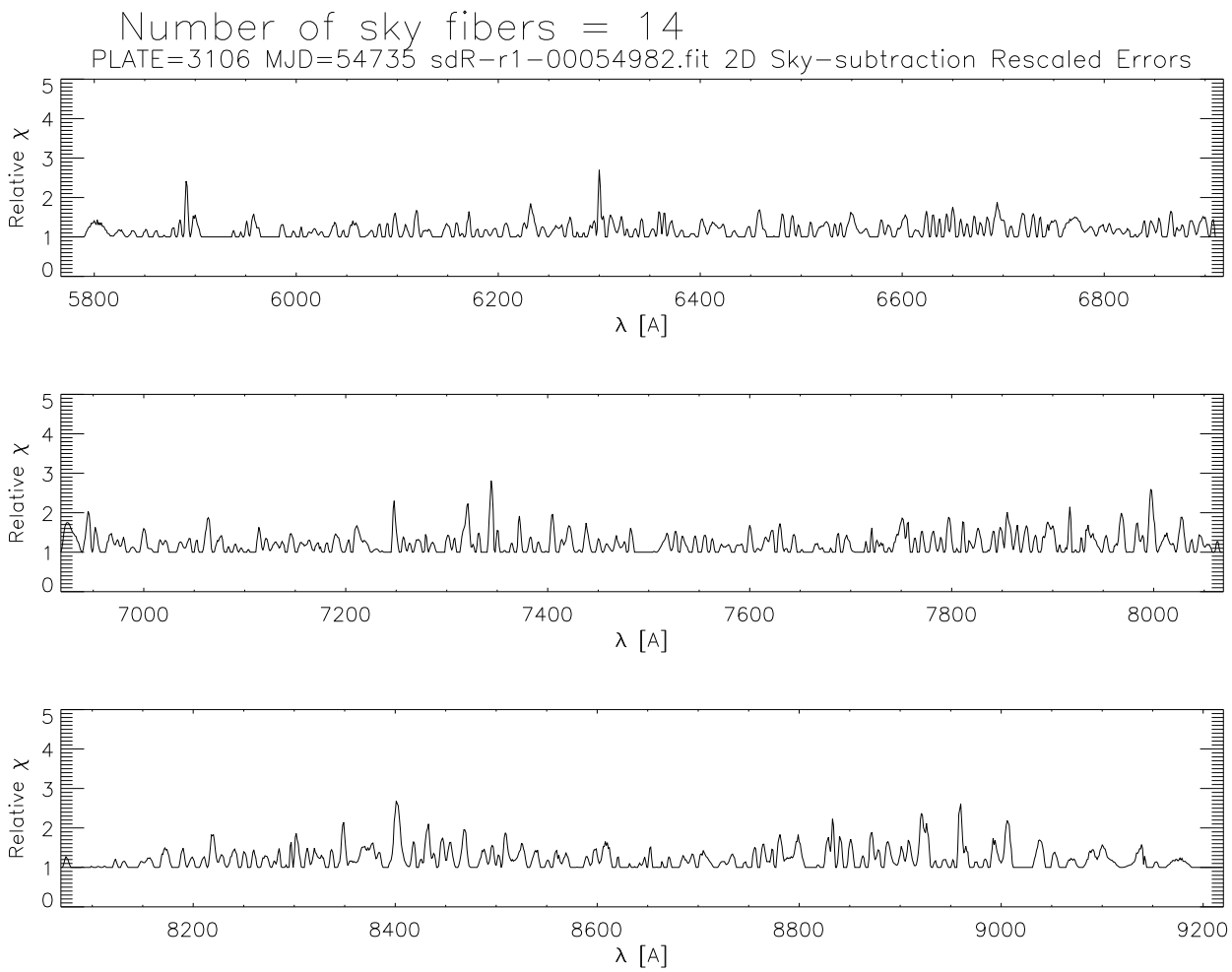

PLATE=3106 MJD=54735 sdR-r1-00054982.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
8820
8840
8860
8880
8900
λ [A]

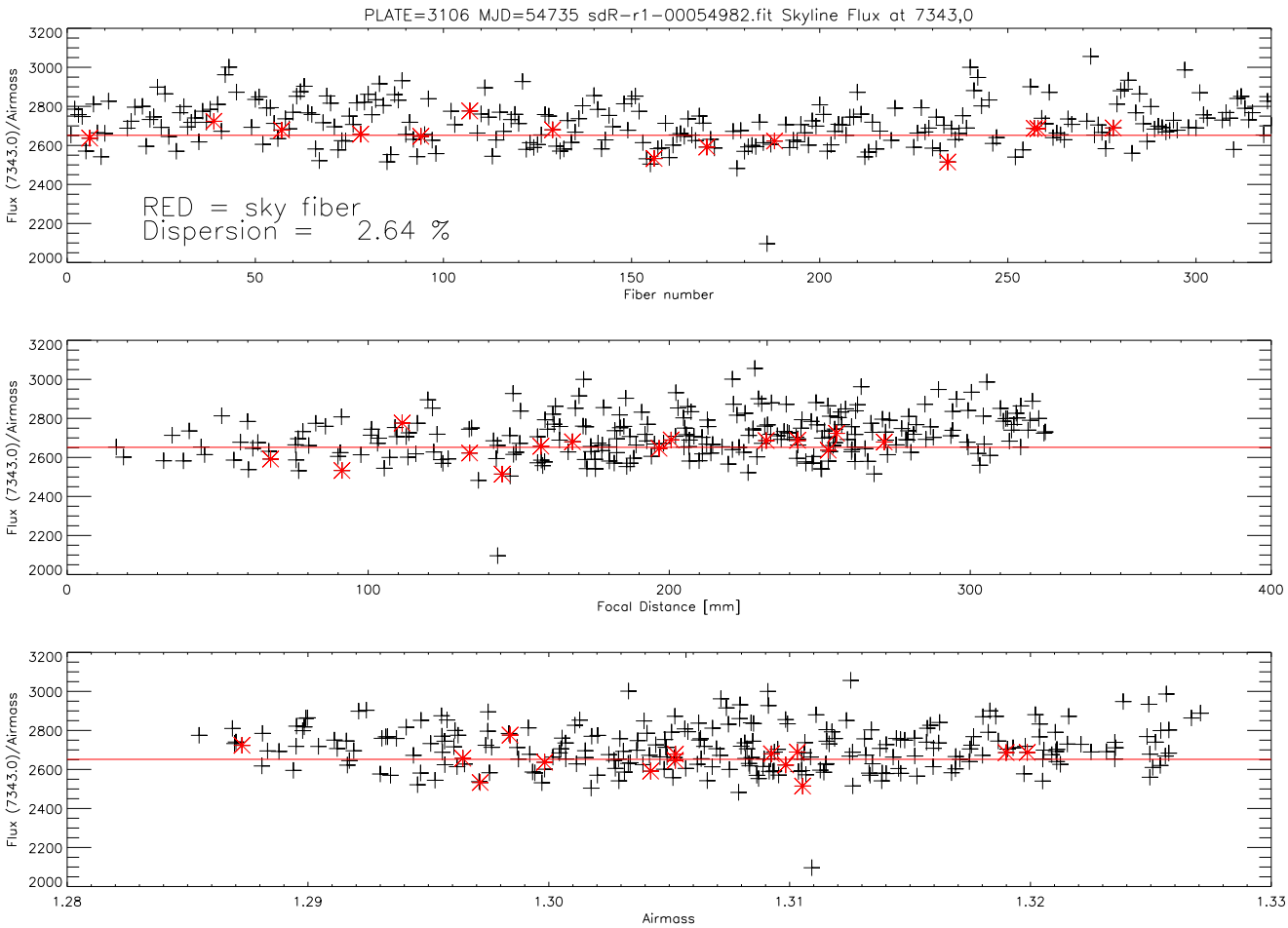

Number of sky fibers = 14
PLATE=3106 MJD=54735 sdR-r1-00054982.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

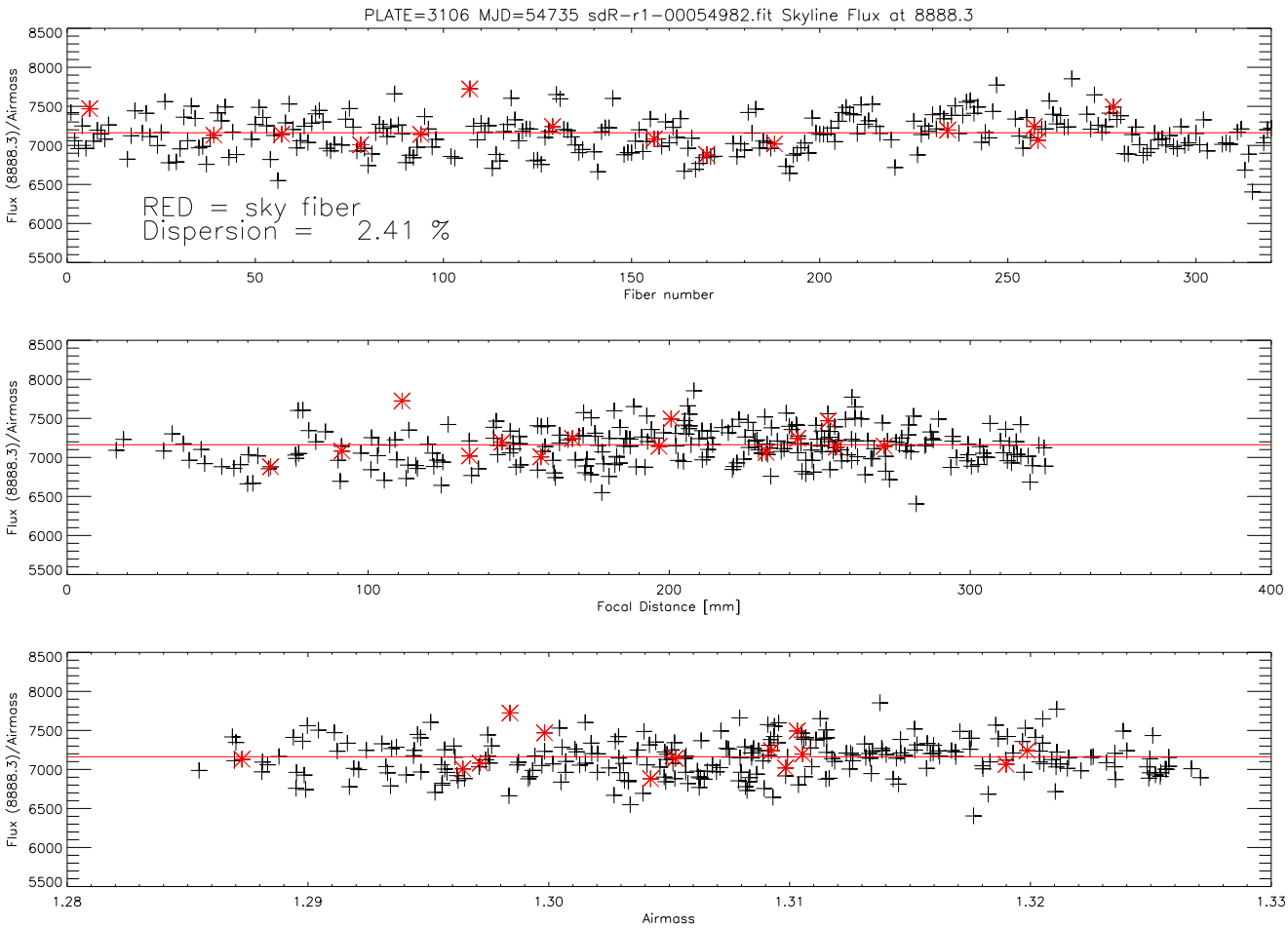

PLATE=3106 MJD=54735 sdR-r1-00054982.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

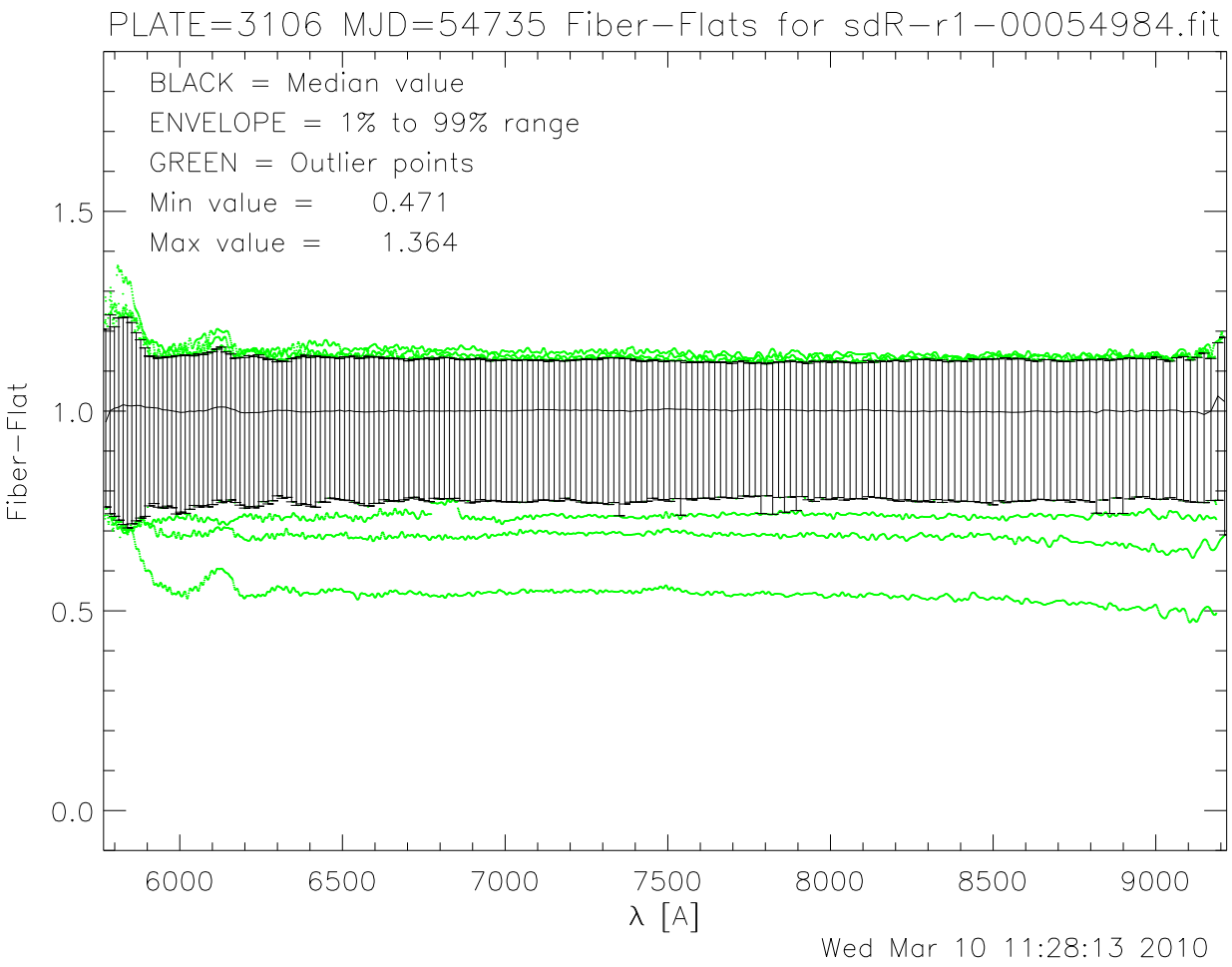

PLATE=3106 MJD=54735 sdR-r1-00054982.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

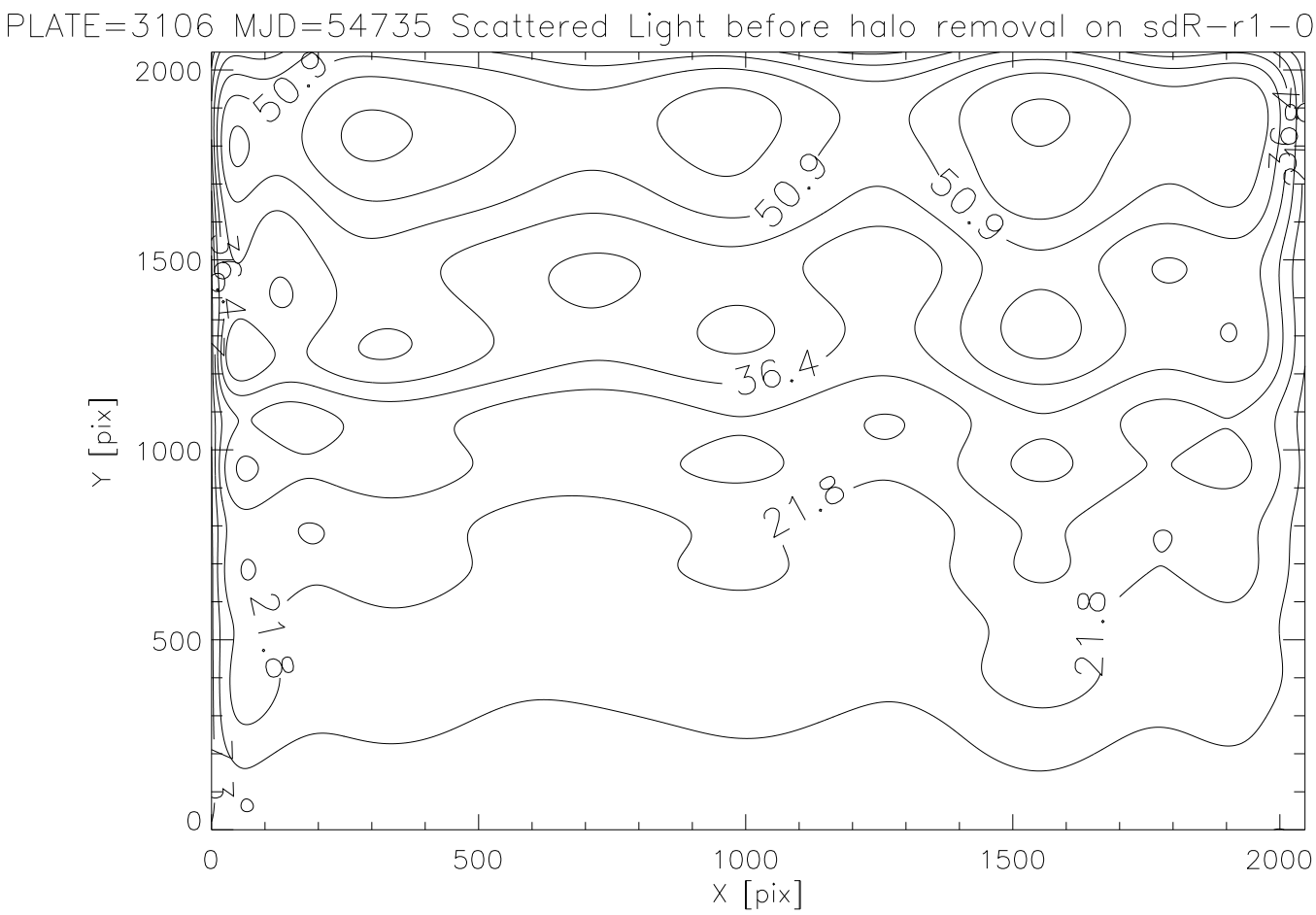

PLATE=3106 MJD=54735 sdR-r1-00054982.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

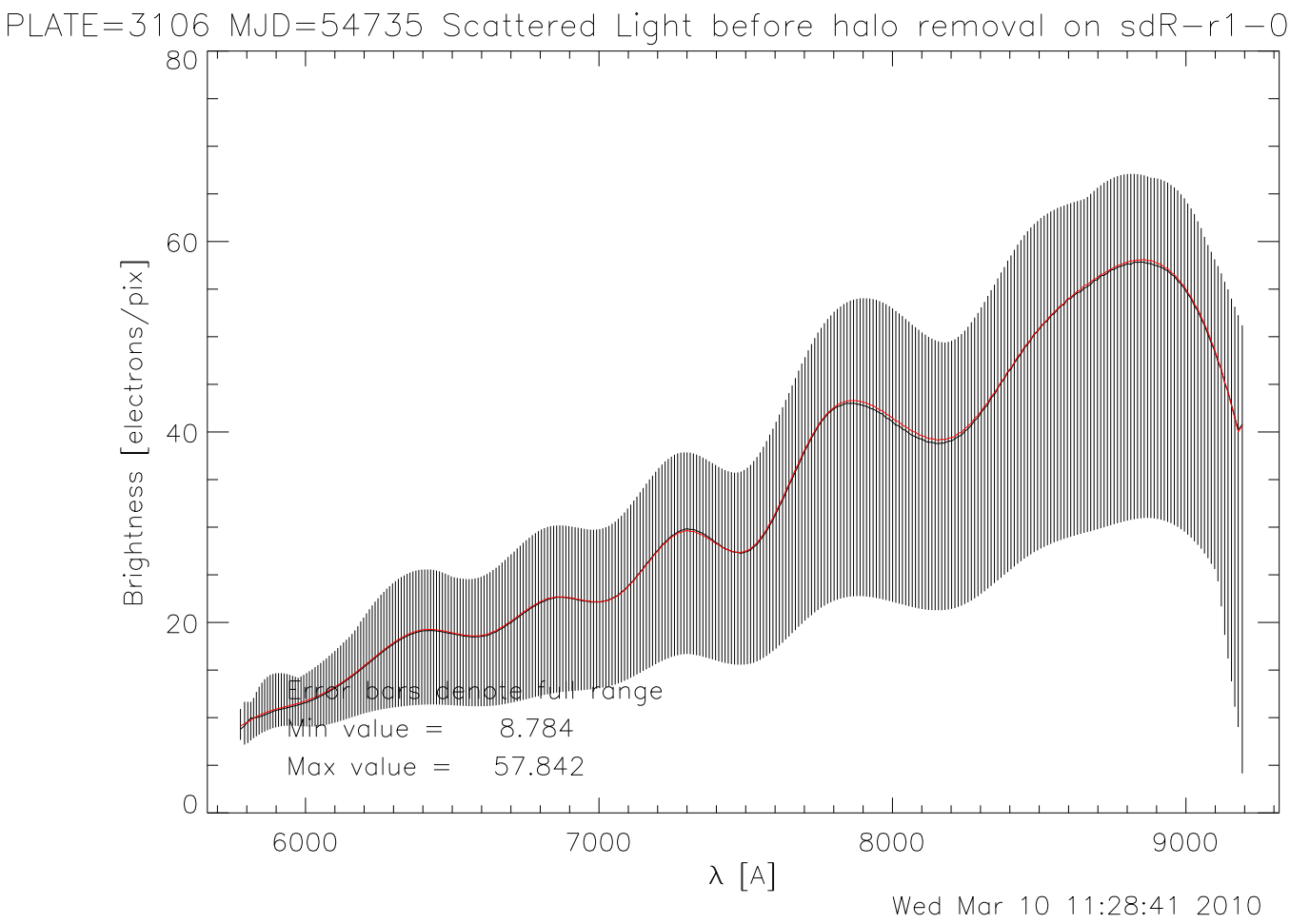

Number of sky fibers = 14
PLATE=3106 MJD=54735 sdR-r1-00054982.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

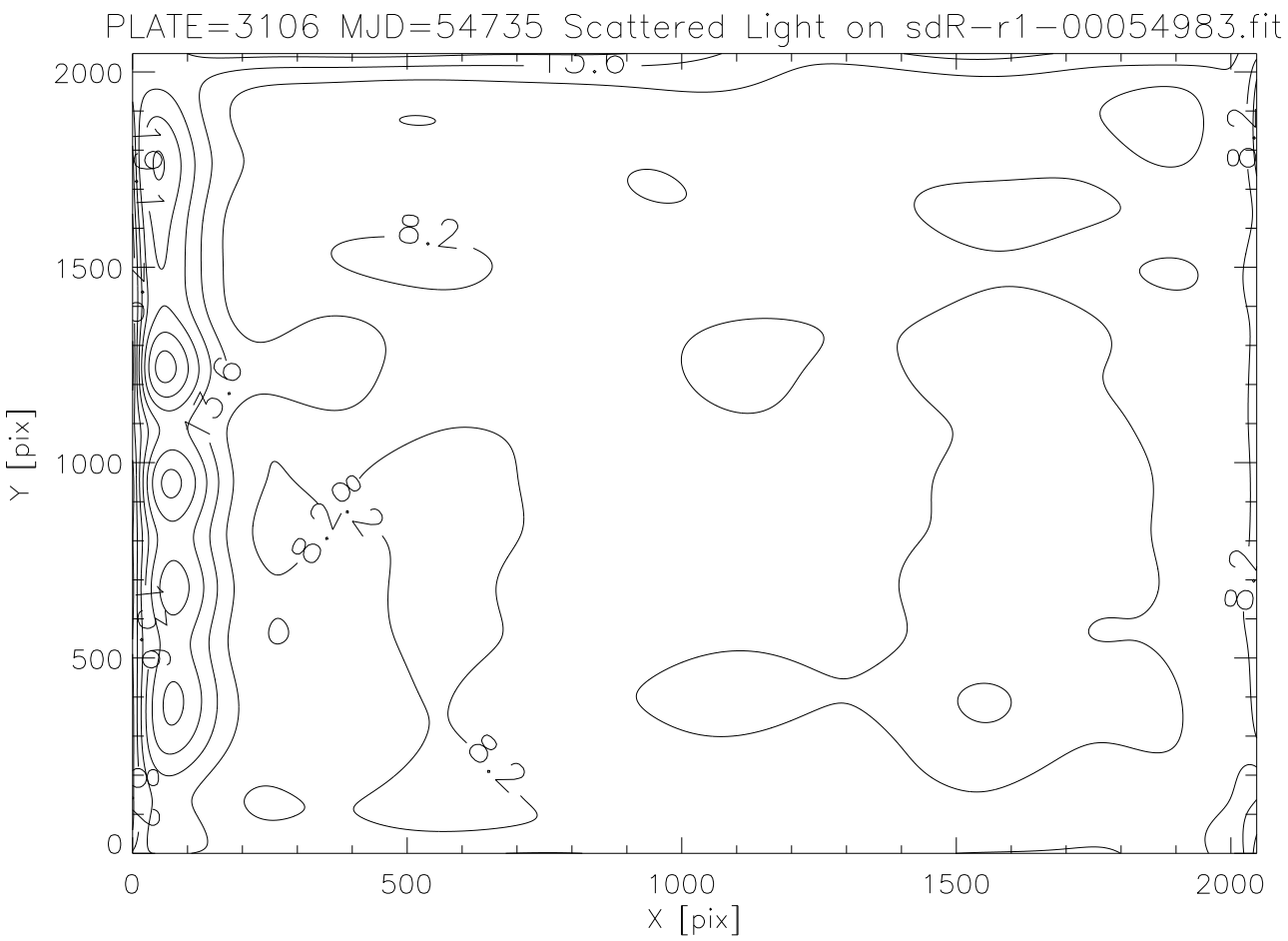

PLATE=3106 MJD=54735 sdR-r1-00054982.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.64 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

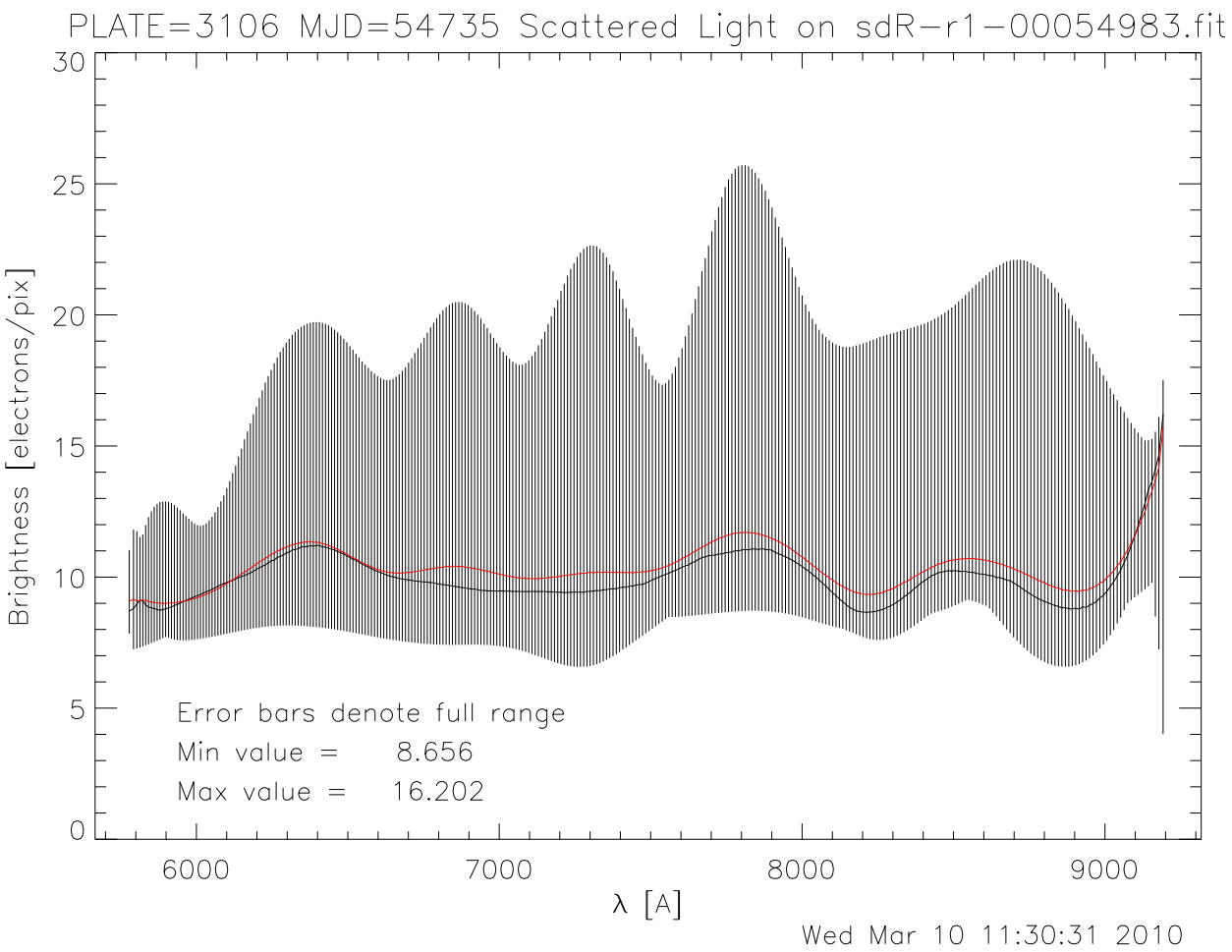

PLATE=3106 MJD=54735 sdR-r1-00054982.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.41 %
Fiber number
Focal Distance [mm]
Airmass

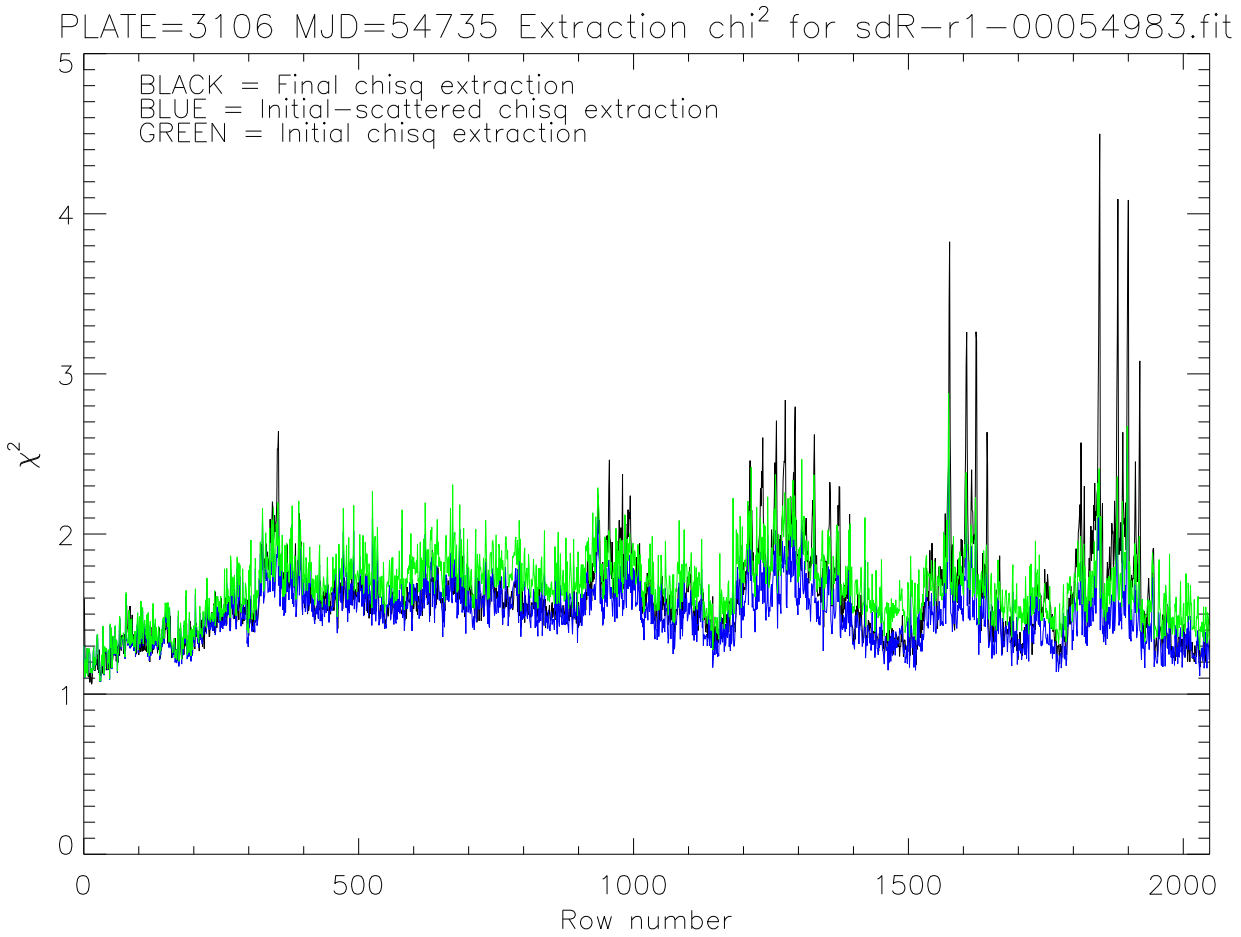

PLATE=3106 MJD=54735 Fiber−Flats for sdR−r1−00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.471
Max value = 1.364
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 11:28:13 2010

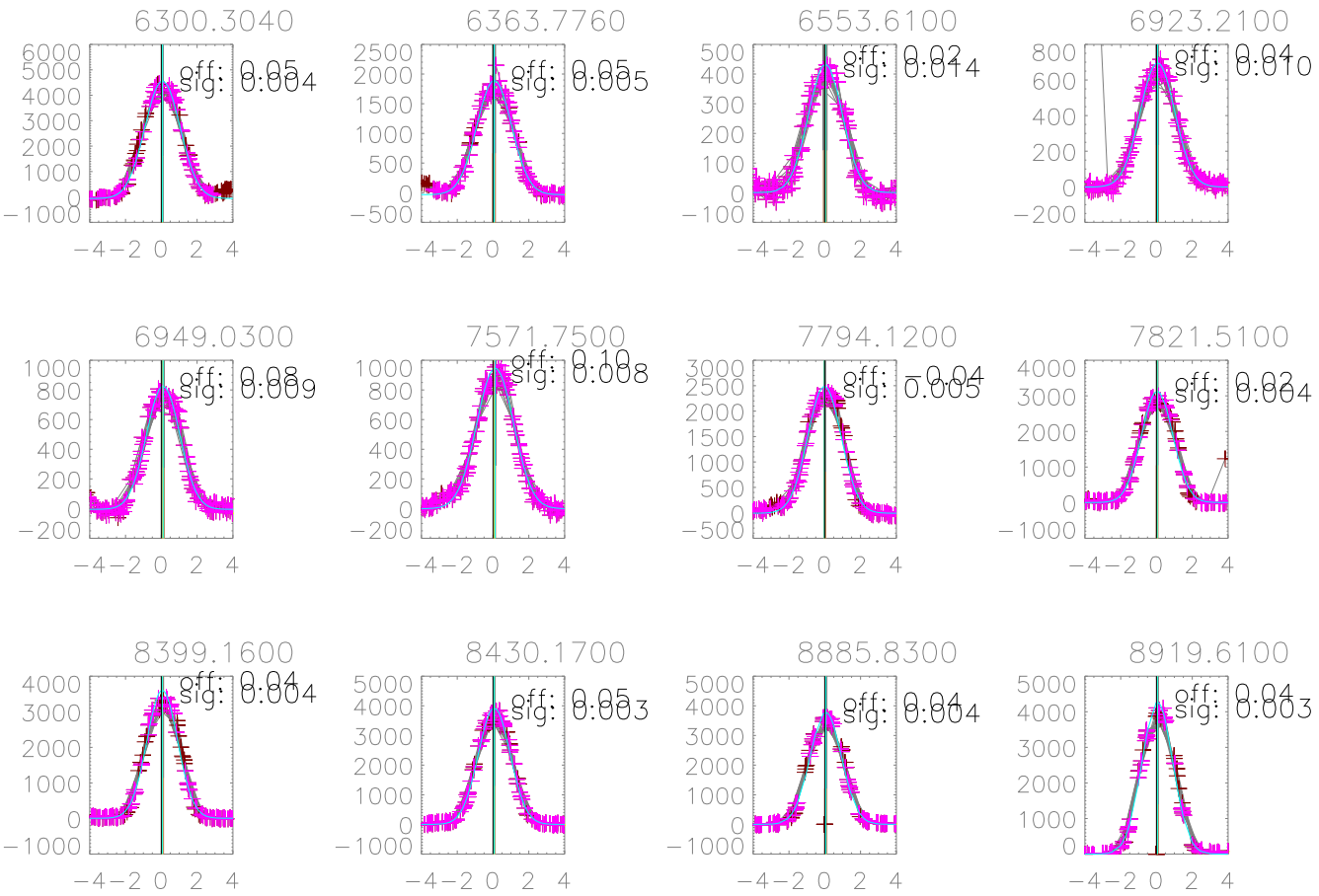

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r1-00054983.fi
50.9
36.4
21.8
0
Y [pix]
X [pix]
0
500
1000
1500
2000

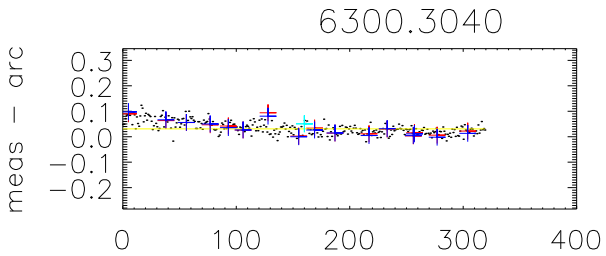

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r1-00054983.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.784
Max value = 57.842
Wed Mar 10 11:28:41 2010

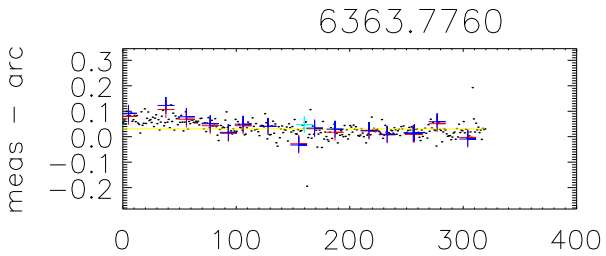

PLATE=3106 MJD=54735 Scattered Light on sdR-r1-00054983.fit
15.6
19.1
13.6
8.2
8.2
8.2
8.2
8.2
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

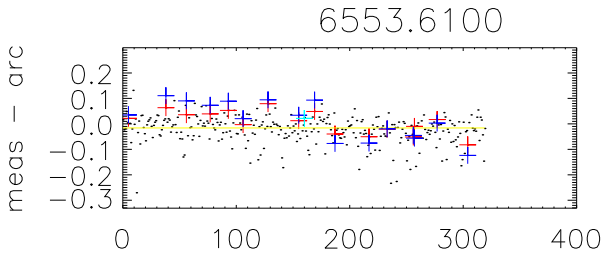

PLATE=3106 MJD=54735 Scattered Light on sdR-r1-00054983.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.656
Max value = 16.202
Wed Mar 10 11:30:31 2010

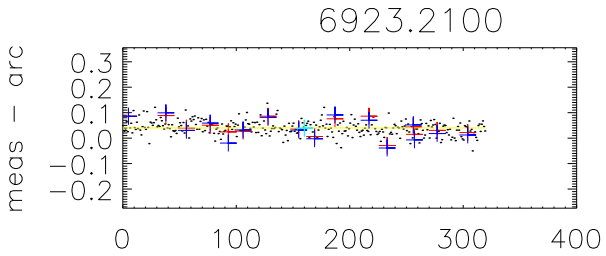

PLATE=3106 MJD=54735 Extraction chi^2 for sdR−r1−00054983.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

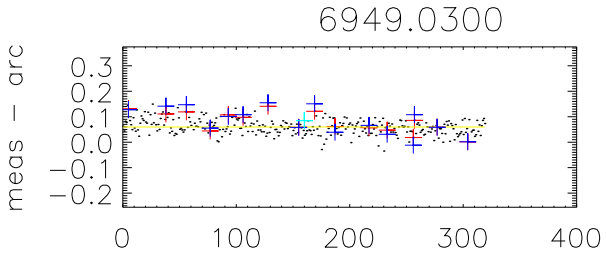

6300.3040
off: 0.05
sig: 0.004
6363.7760
off: 0.05
sig: 0.005
6553.6100
off: 0.02
sig: 0.014
6923.2100
off: 0.04
sig: 0.010
6949.0300
off: 0.08
sig: 0.009
7571.7500
off: 0.10
sig: 0.008
7794.1200
off: -0.04
sig: 0.005
7821.5100
off: 0.02
sig: 0.004
8399.1600
off: 0.04
sig: 0.004
8430.1700
off: 0.05
sig: 0.003
8885.8300
off: 0.04
sig: 0.004
8919.6100
off: 0.04
sig: 0.003

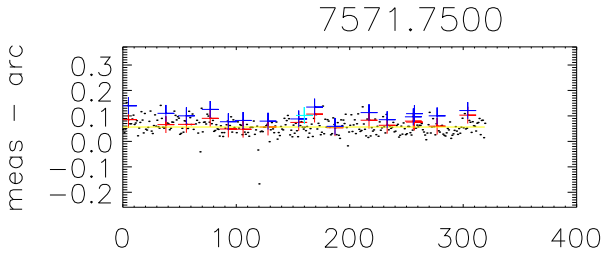

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

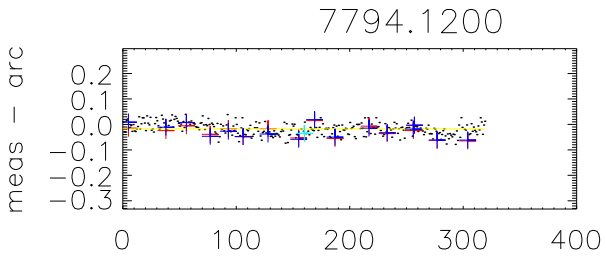

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

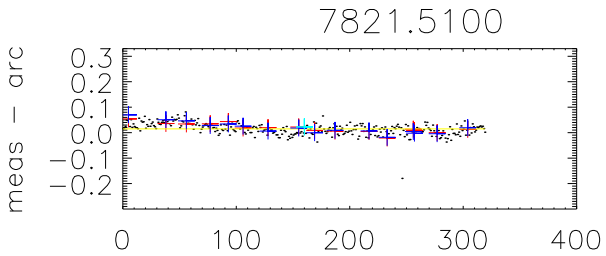

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

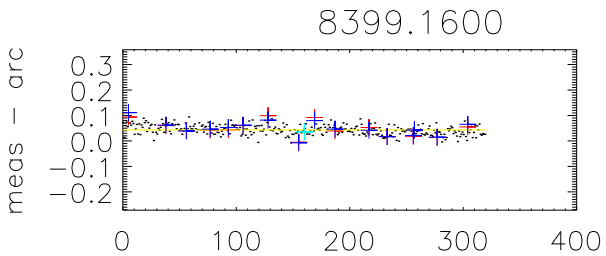

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

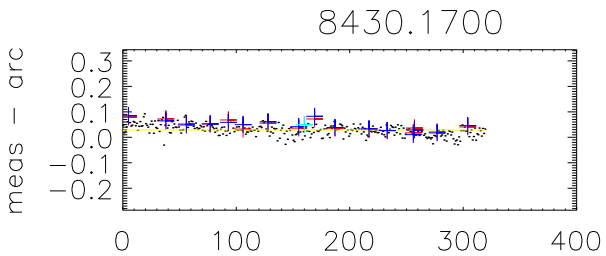

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

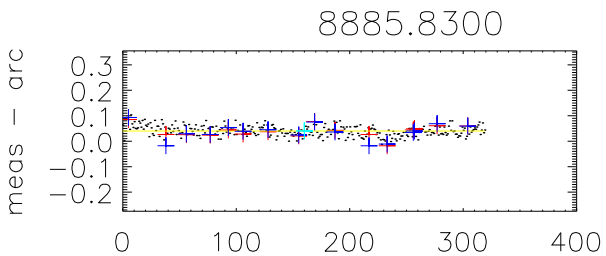

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

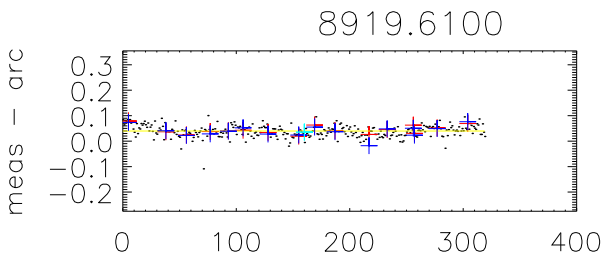

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

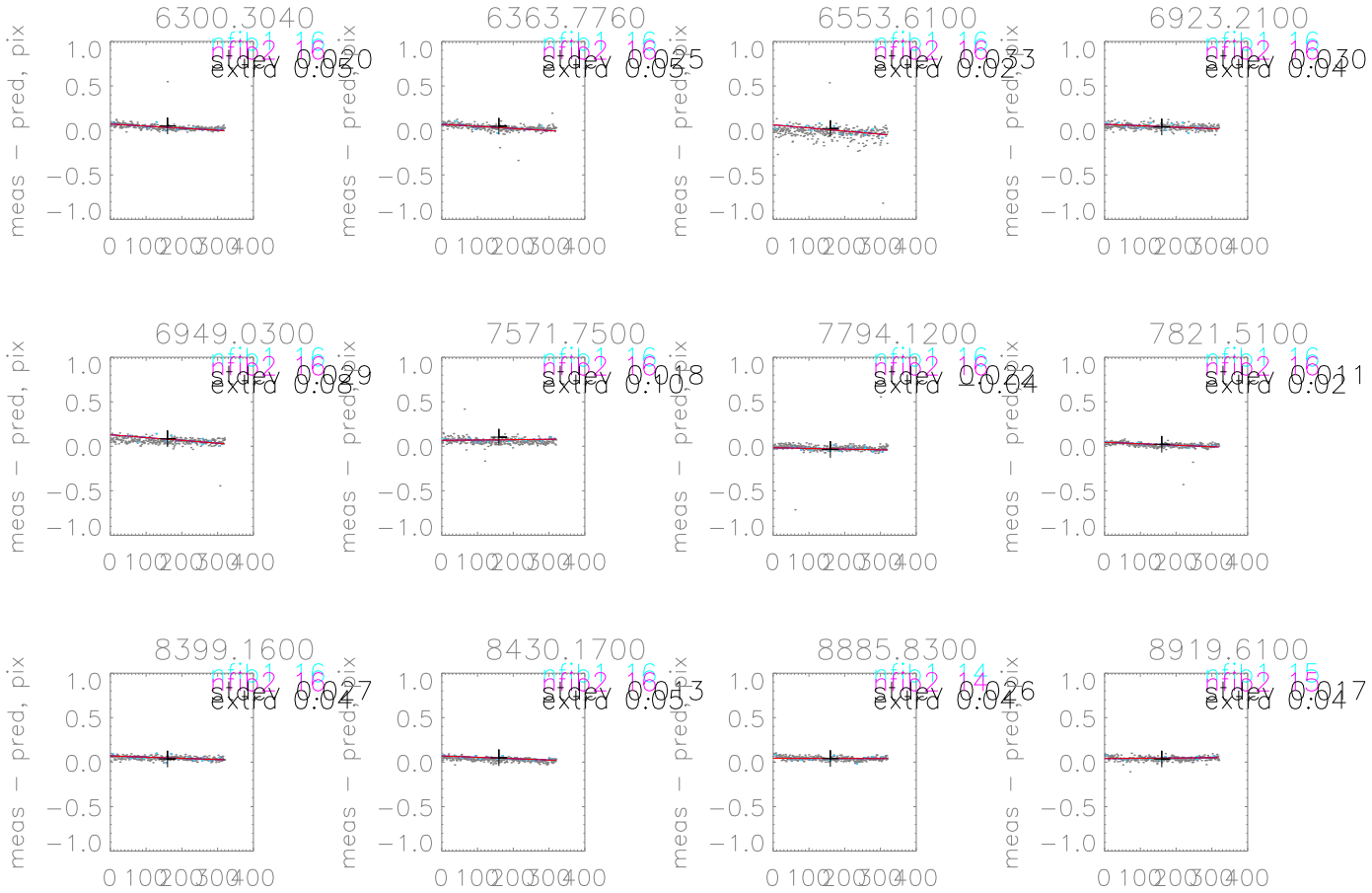

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

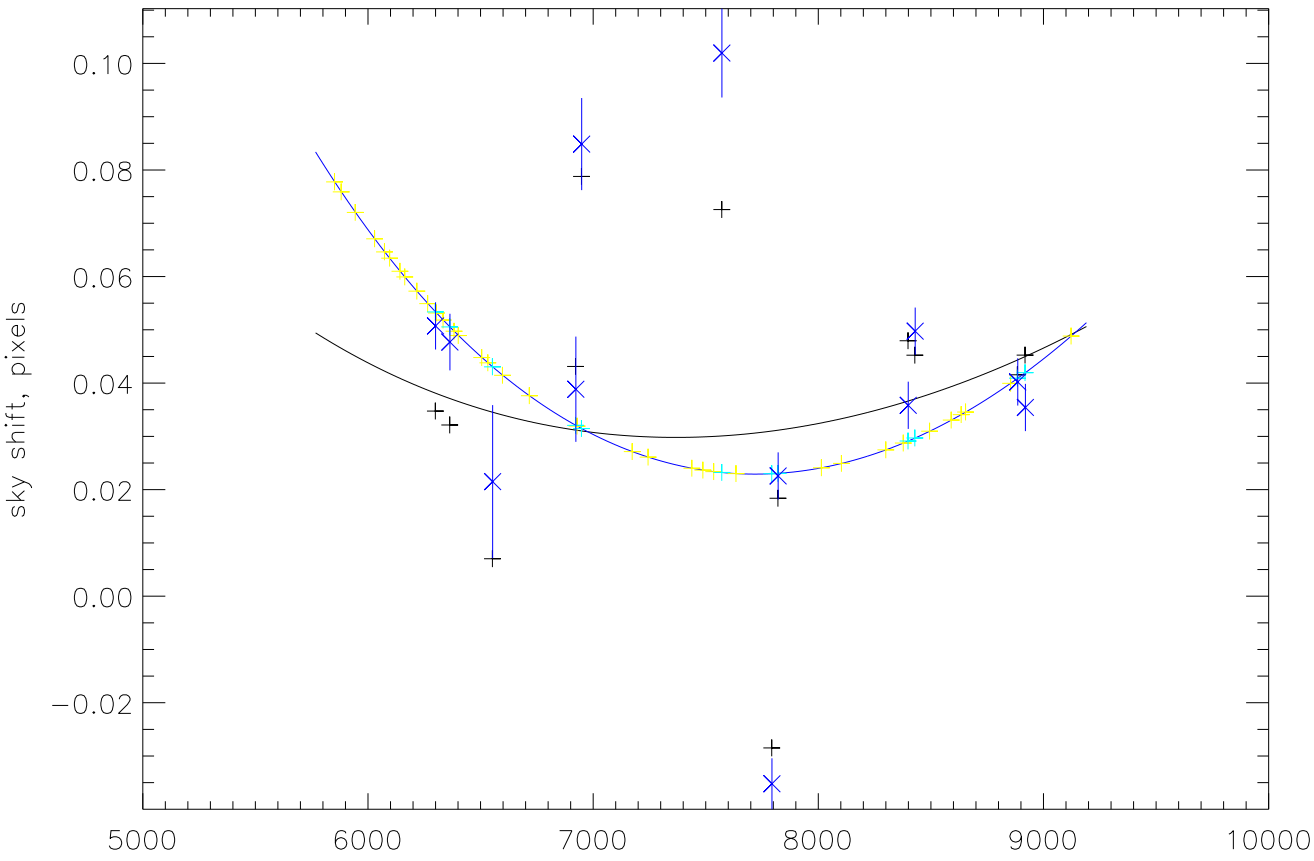

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

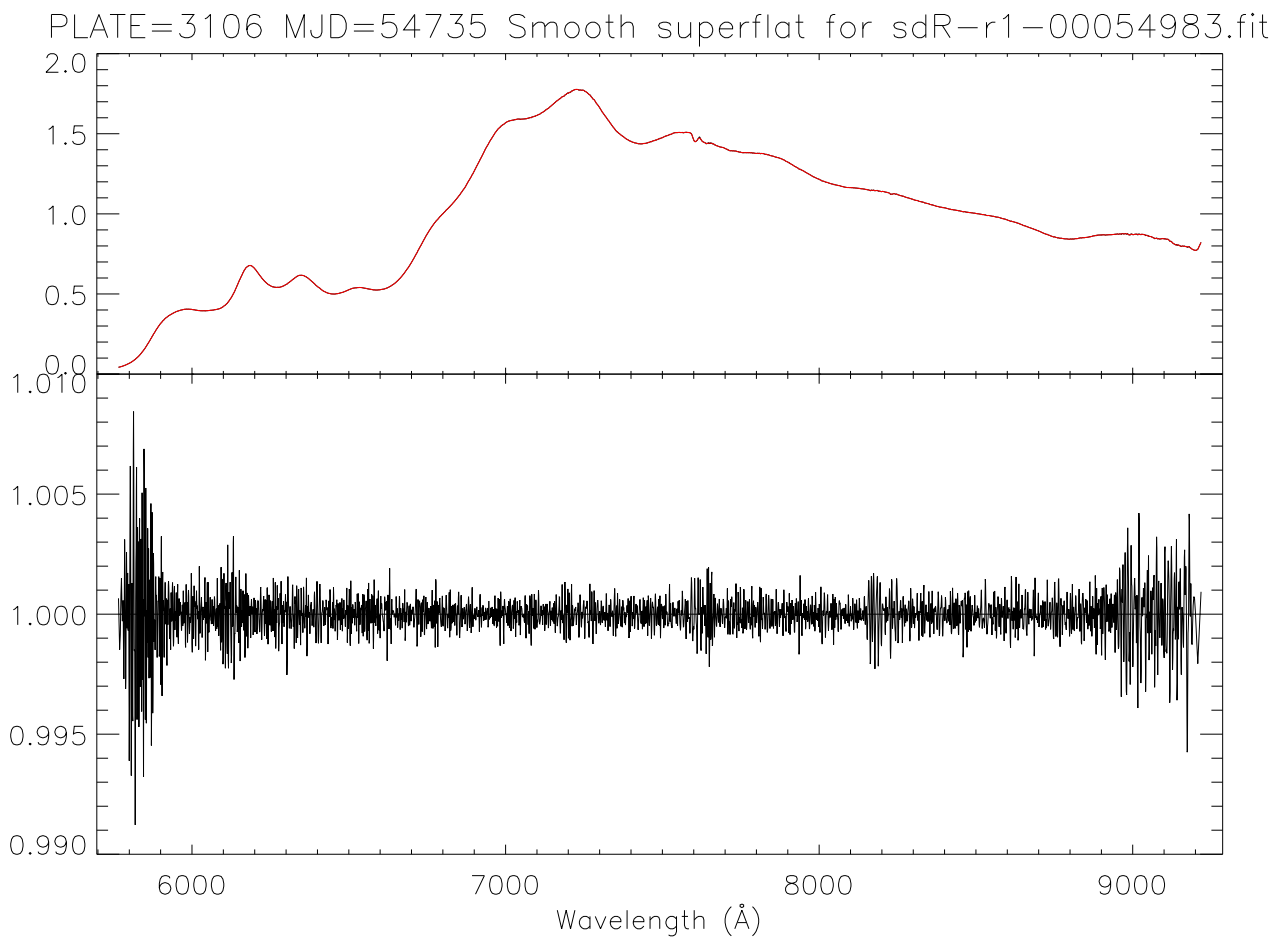

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

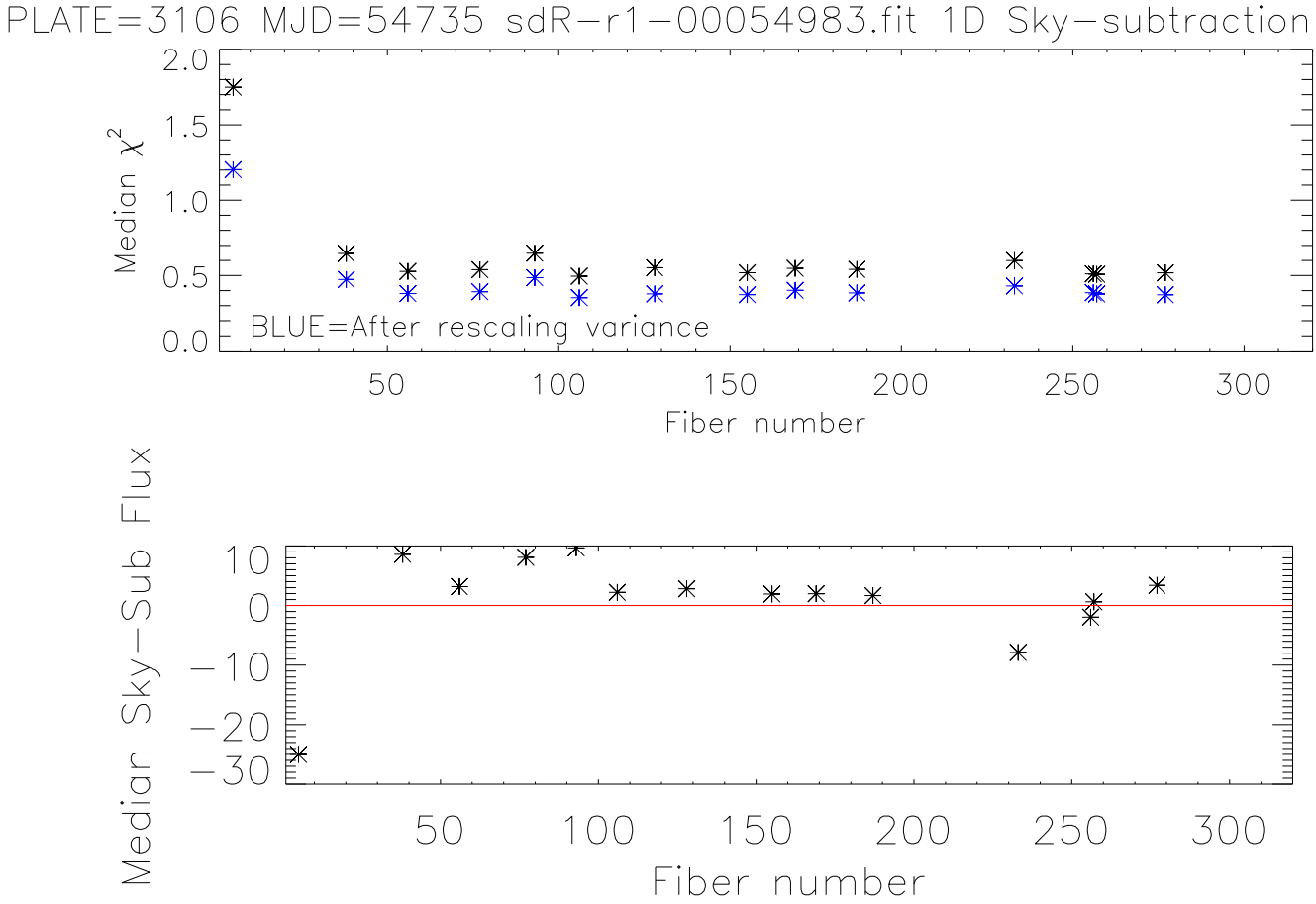

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

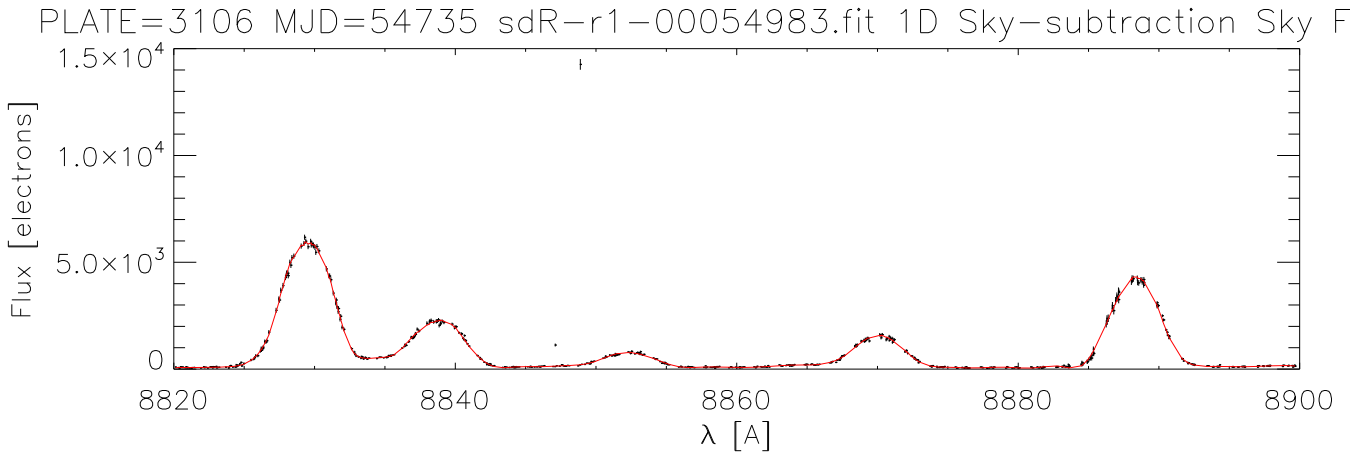

6300.3040
mfib1 16
mfib2 16
stdev 0.020
extra 0.05
6363.7760
mfib1 16
mfib2 16
stdev 0.025
extra 0.05
6553.6100
mfib1 16
mfib2 16
stdev 0.023
extra 0.02
6923.2100
mfib1 16
mfib2 16
stdev 0.030
extra 0.04
6949.0300
mfib1 16
mfib2 16
stdev 0.029
extra 0.08
7571.7500
mfib1 16
mfib2 16
stdev 0.018
extra 0.10
7794.1200
mfib1 16
mfib2 16
stdev 0.022
extra −0.04
7821.5100
mfib1 16
mfib2 16
stdev 0.011
extra 0.02
8399.1600
mfib1 16
mfib2 16
stdev 0.027
extra 0.04
8430.1700
mfib1 16
mfib2 16
stdev 0.043
extra 0.05
8885.8300
mfib1 14
mfib2 14
stdev 0.026
extra 0.04
8919.6100
mfib1 15
mfib2 15
stdev 0.017
extra 0.04
meas − pred, pix
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

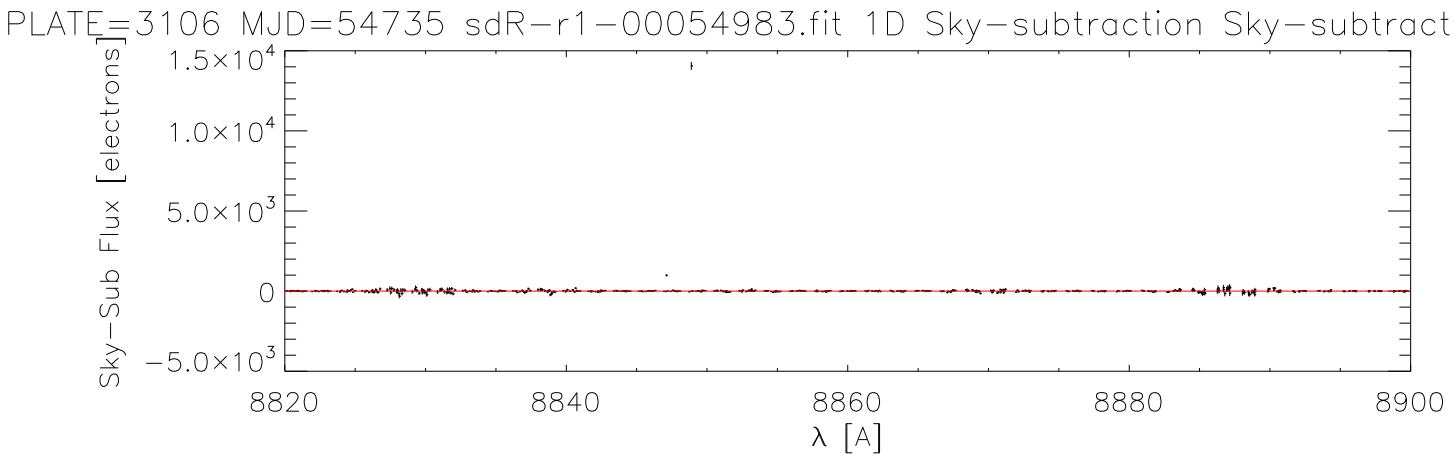

sky shift, pixels
0.10
0.08
0.06
0.04
0.02
0.00
−0.02
5000
6000
7000
8000
9000
10000

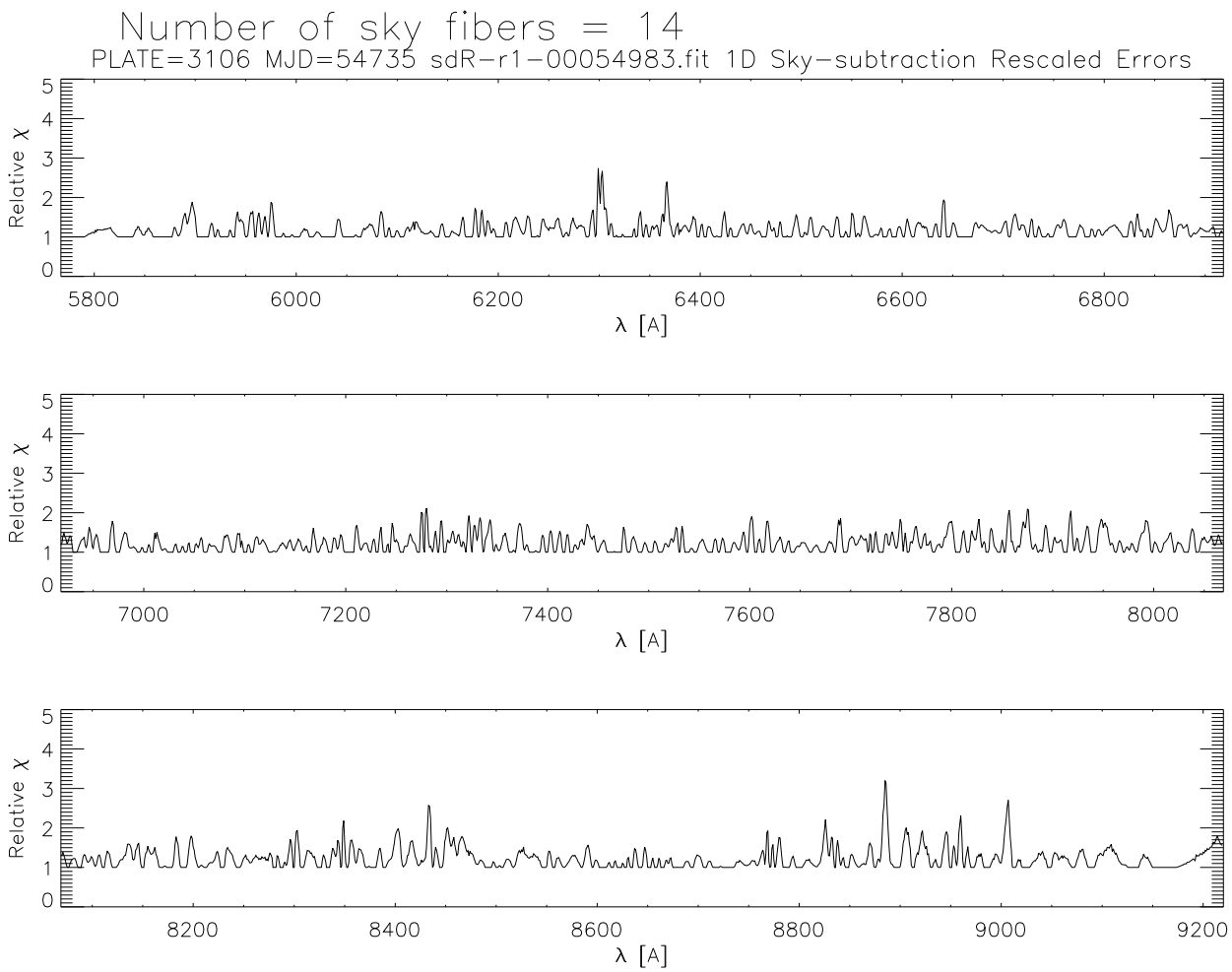
es= 0.0000

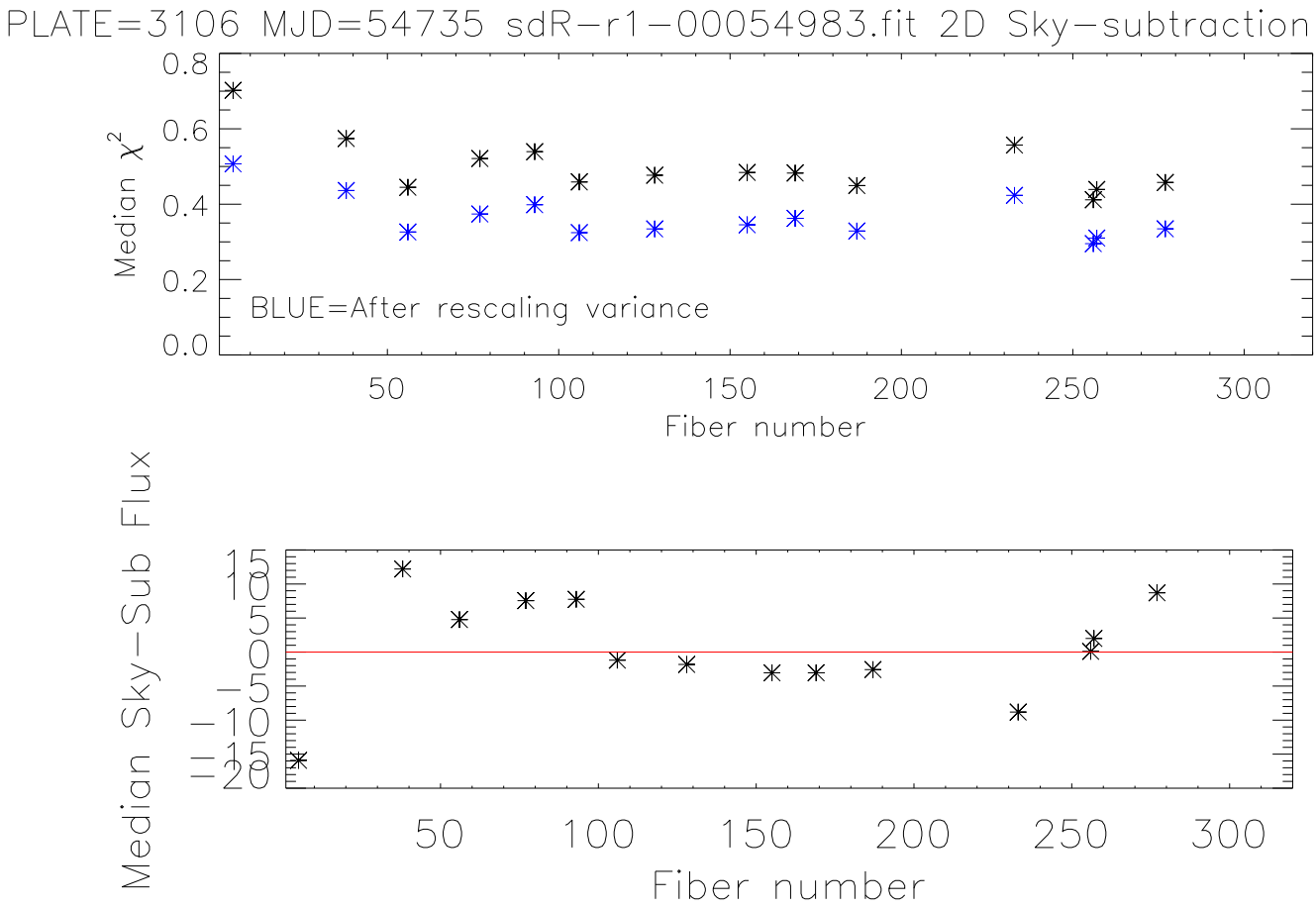

PLATE=3106 MJD=54735 Smooth superflat for sdR-r1-00054983.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

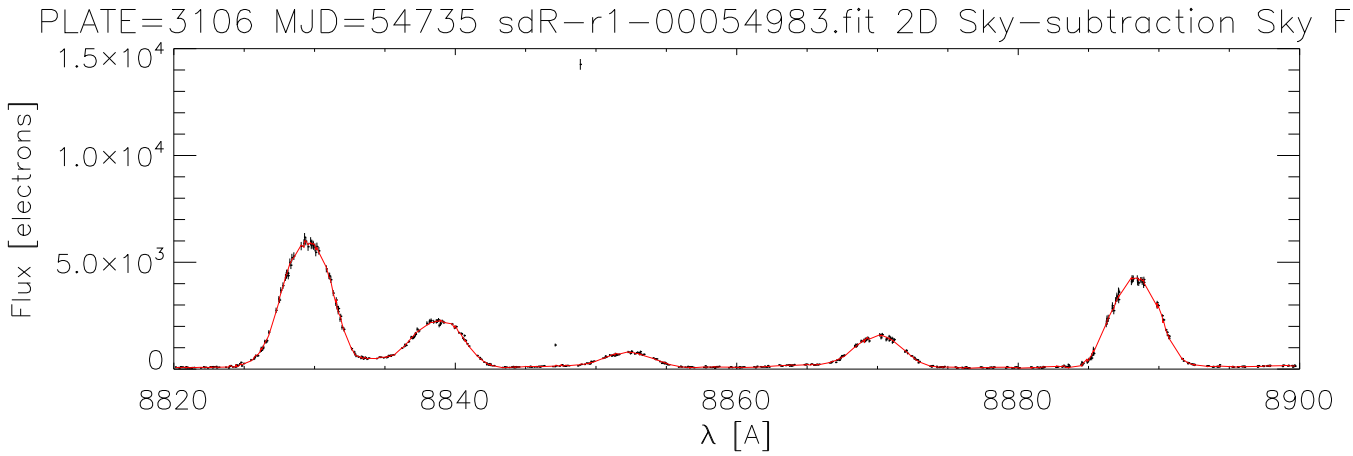

PLATE=3106 MJD=54735 sdR-r1-00054983.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

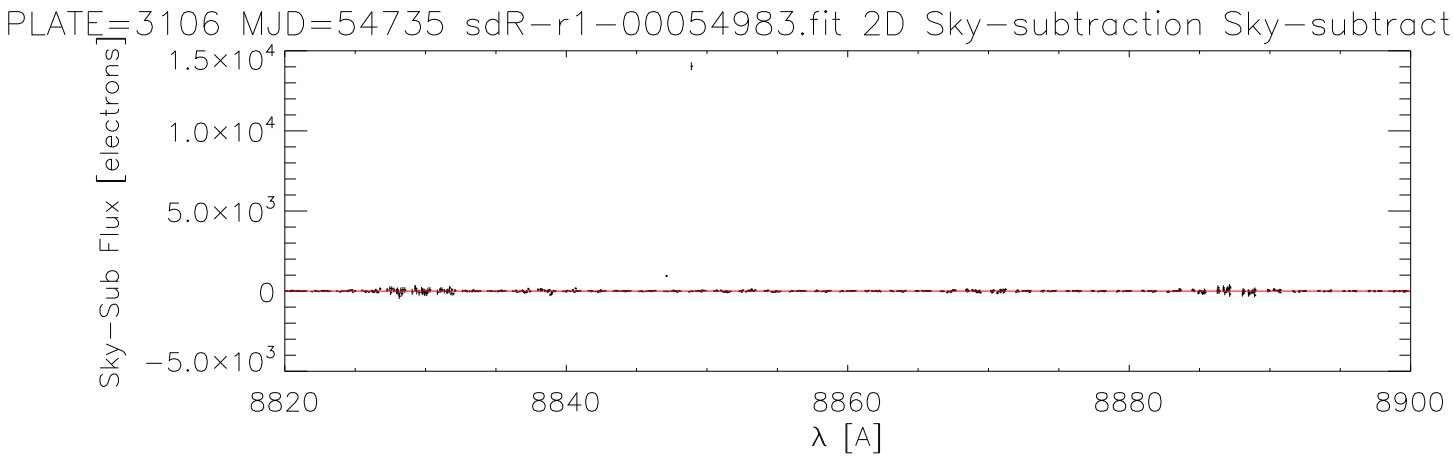

PLATE=3106 MJD=54735 sdR-r1-00054983.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

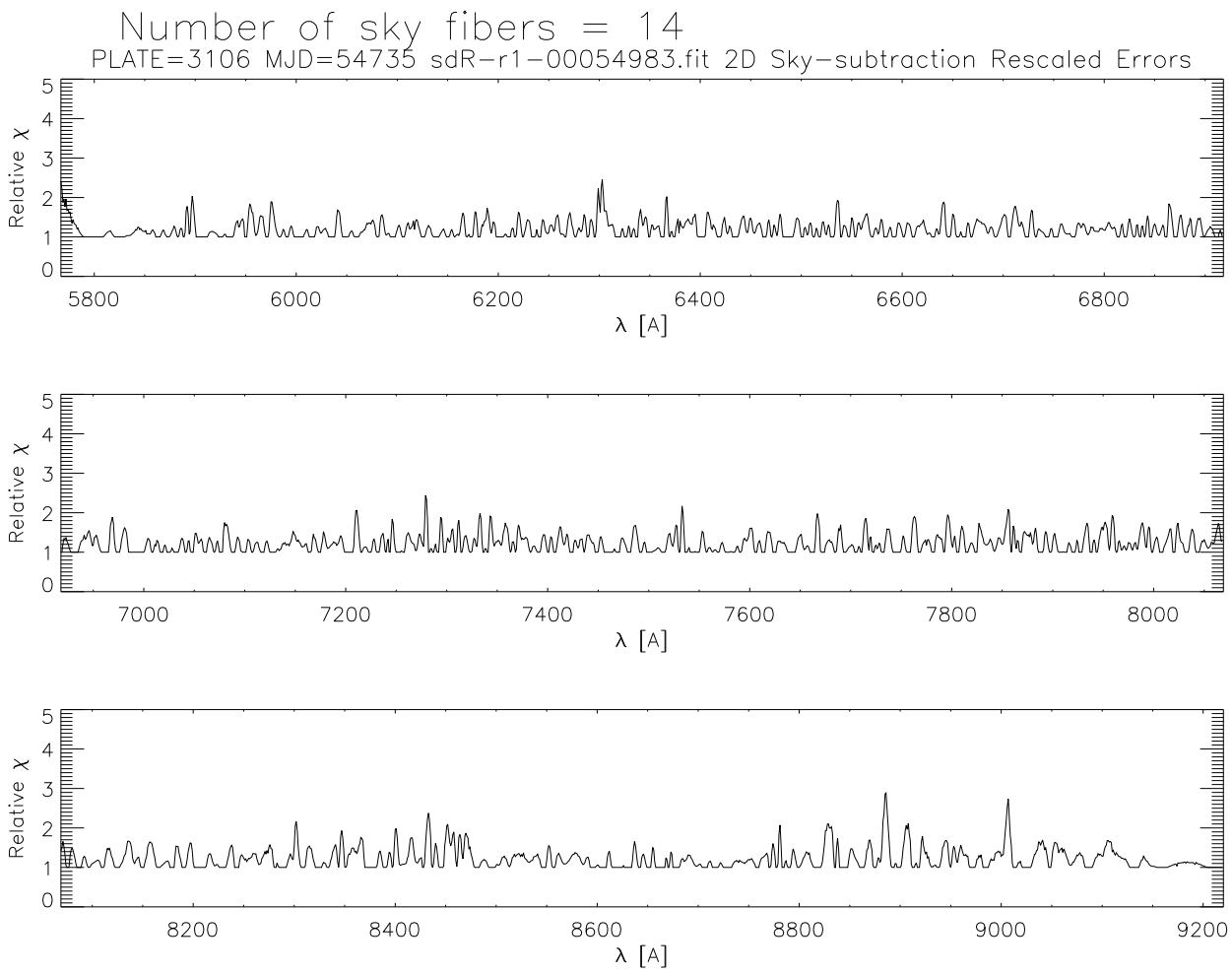

PLATE=3106 MJD=54735 sdR-r1-00054983.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
-5.0×10^3
8820
8840
8860
8880
8900
λ [A]

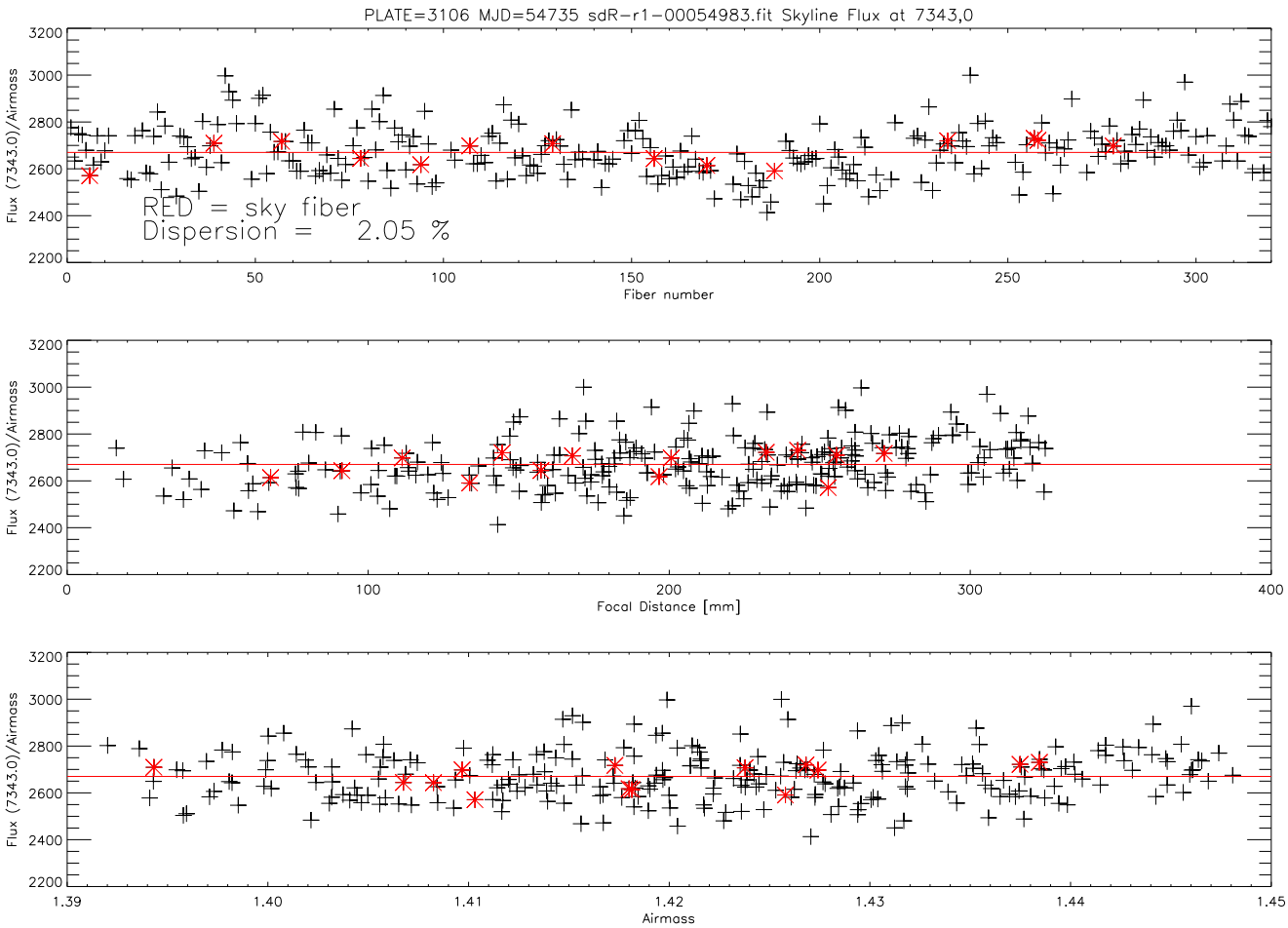

Number of sky fibers = 14
PLATE=3106 MJD=54735 sdR-r1-00054983.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

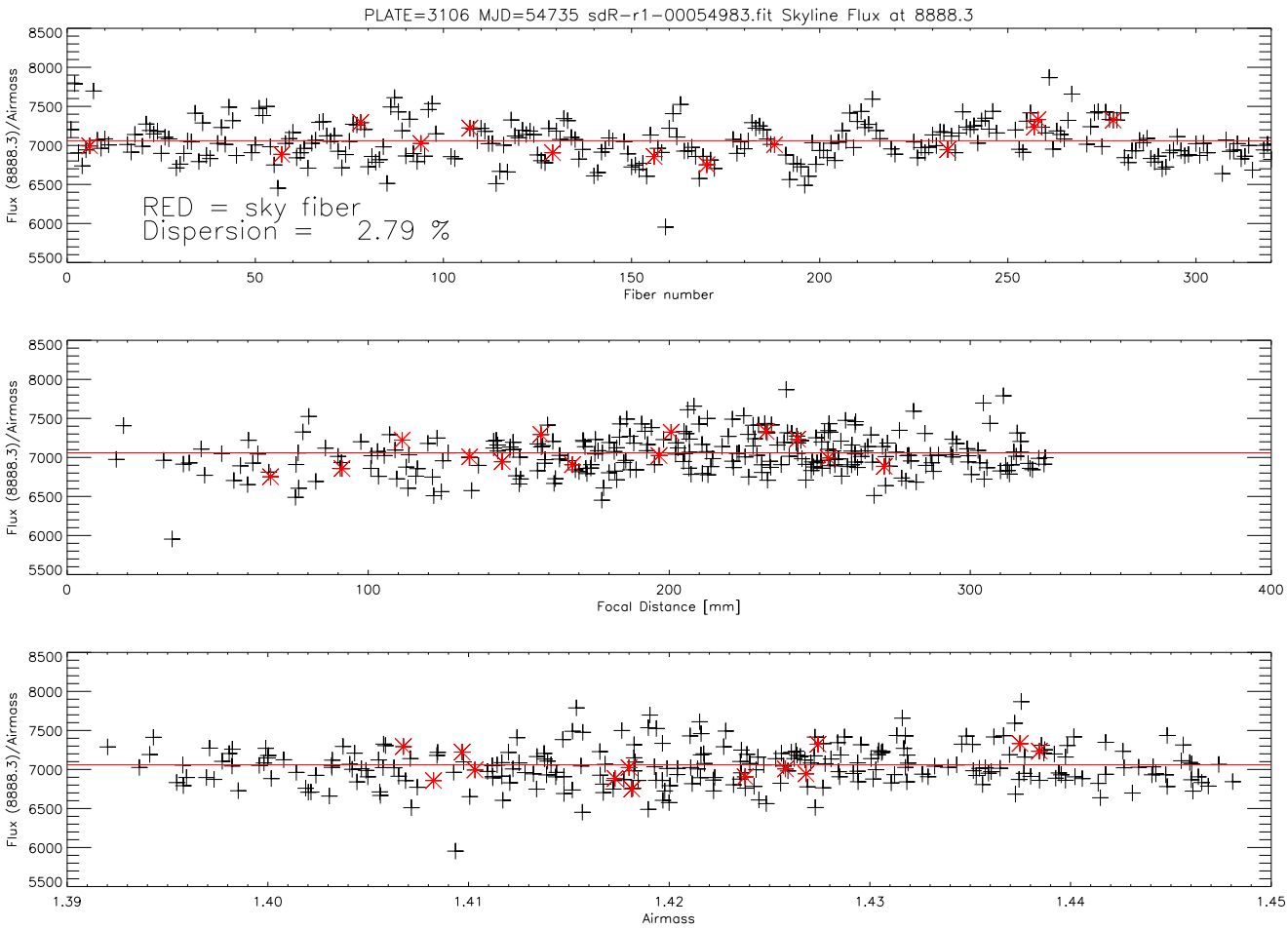

PLATE=3106 MJD=54735 sdR-r1-00054983.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
Fiber number

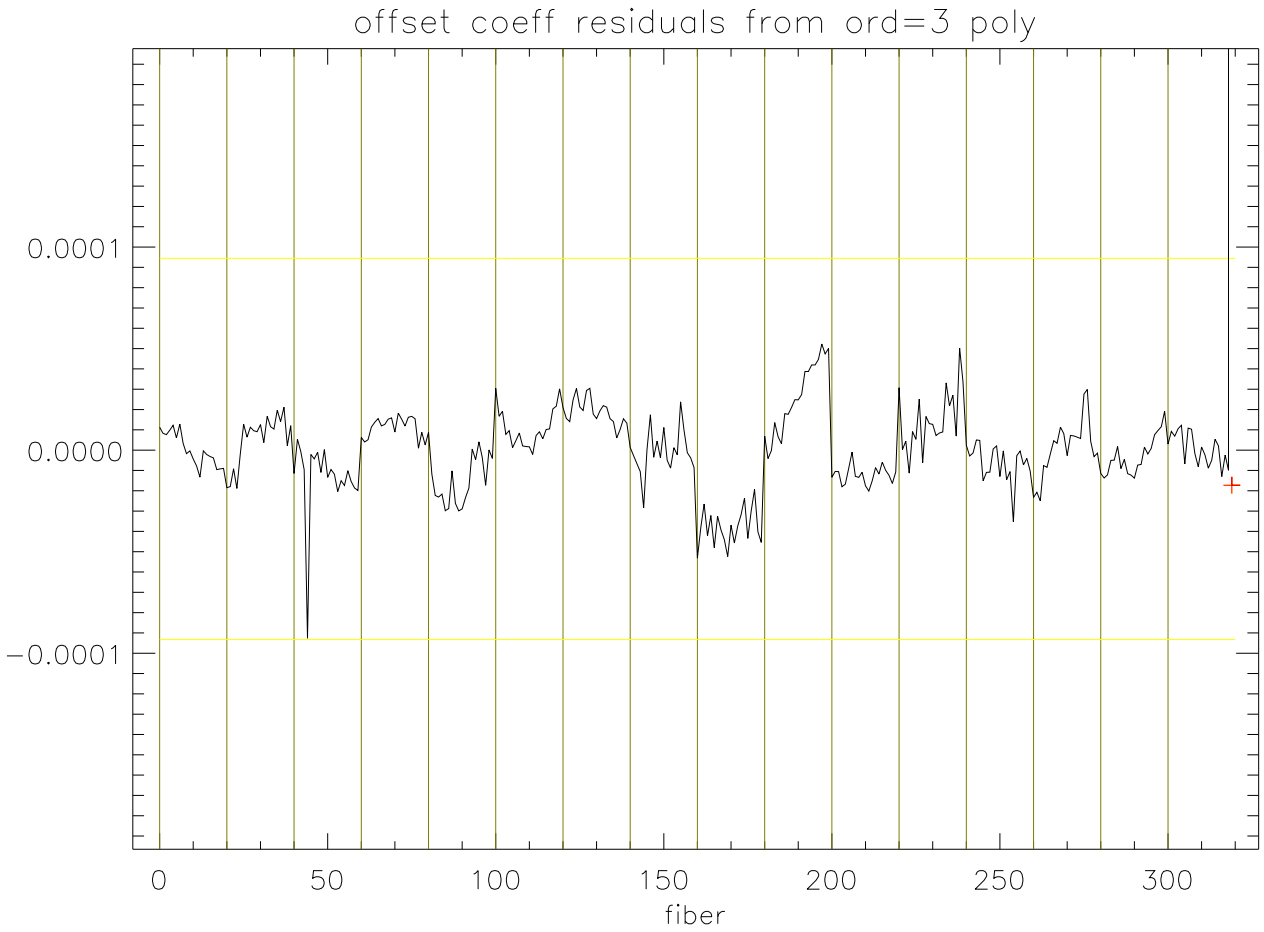

PLATE=3106 MJD=54735 sdR-r1-00054983.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

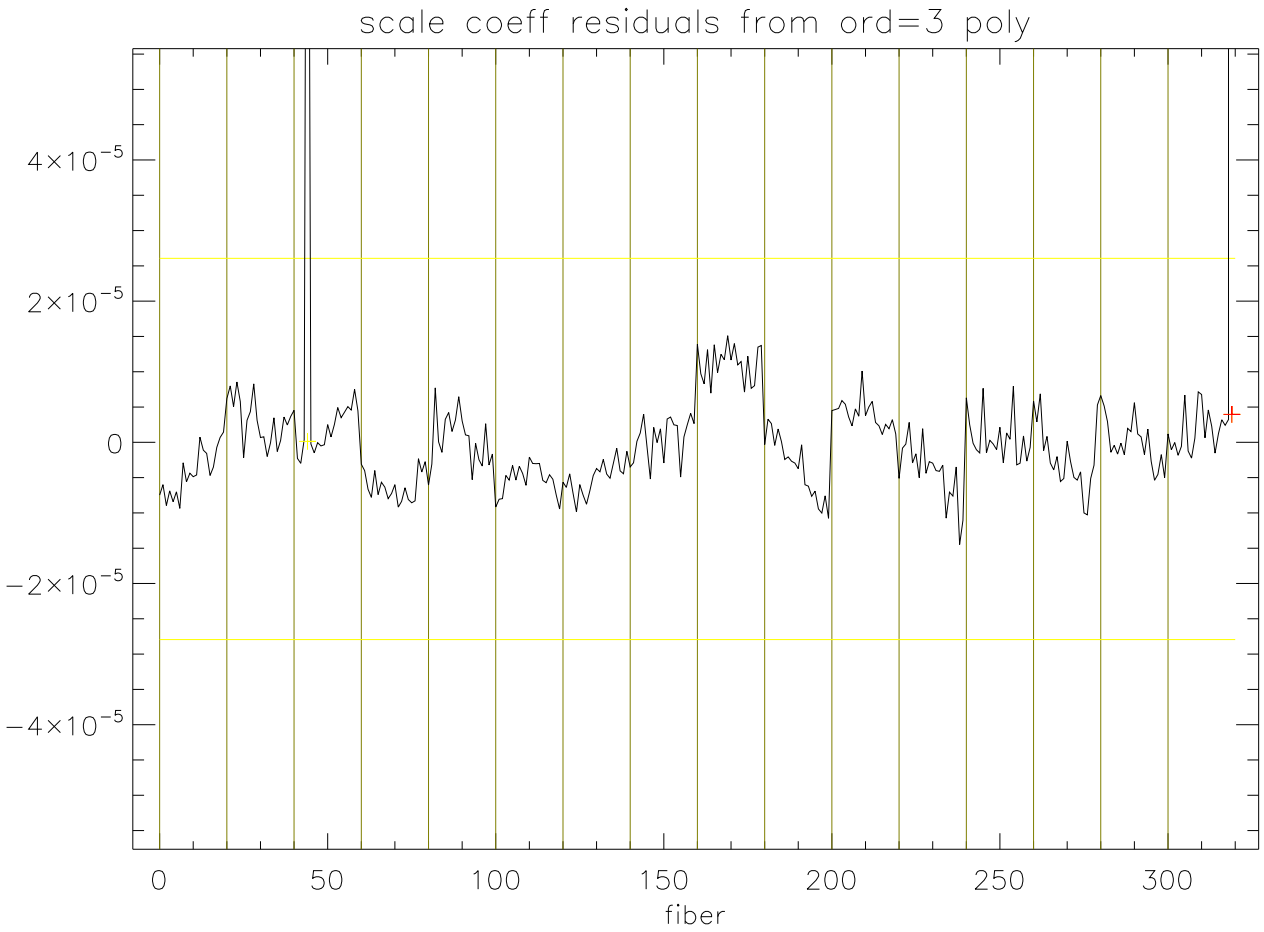

PLATE=3106 MJD=54735 sdR-r1-00054983.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
-5.0×10^3
8820
8840
8860
8880
8900
λ [A]

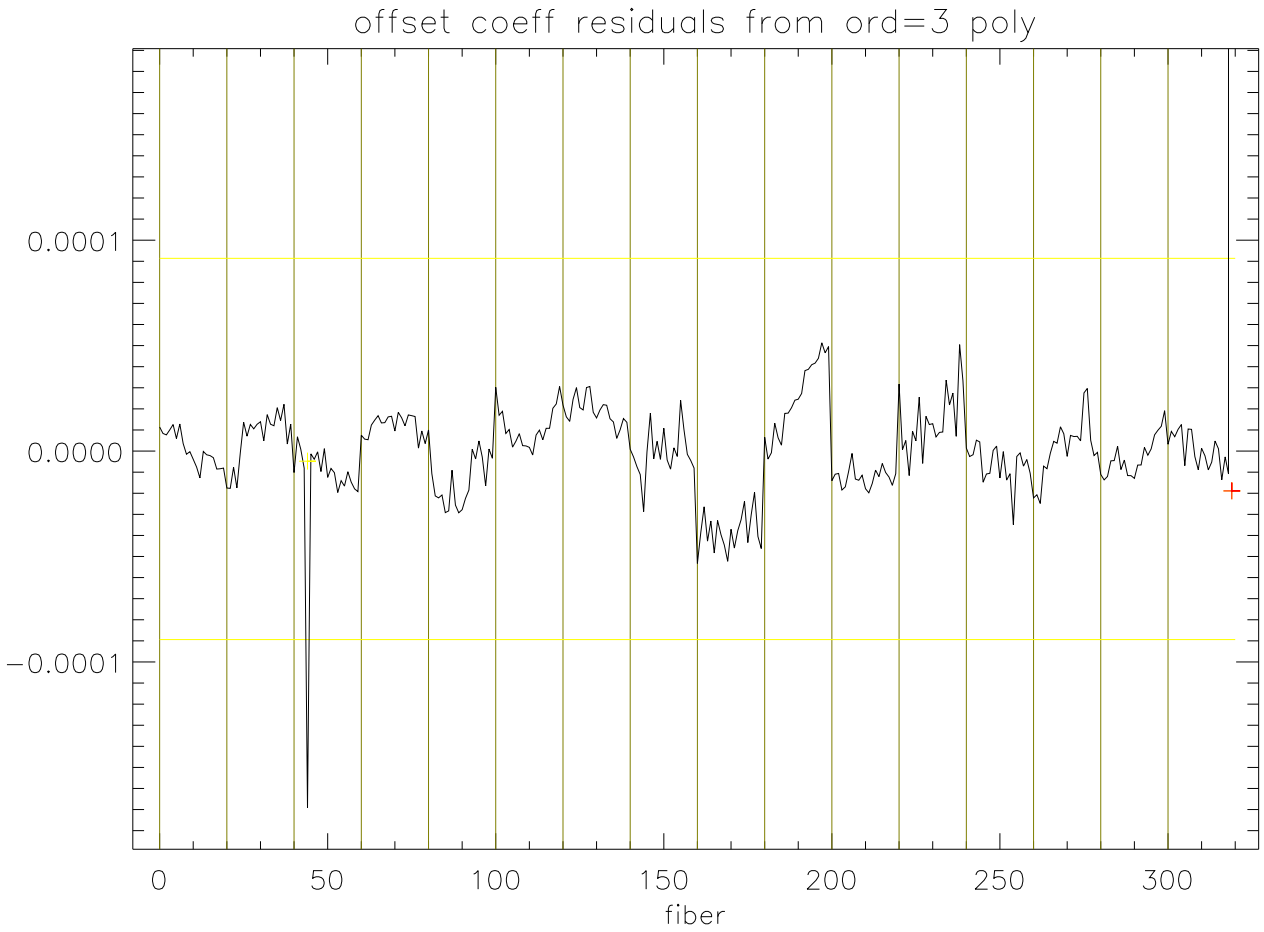

Number of sky fibers = 14
PLATE=3106 MJD=54735 sdR-r1-00054983.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

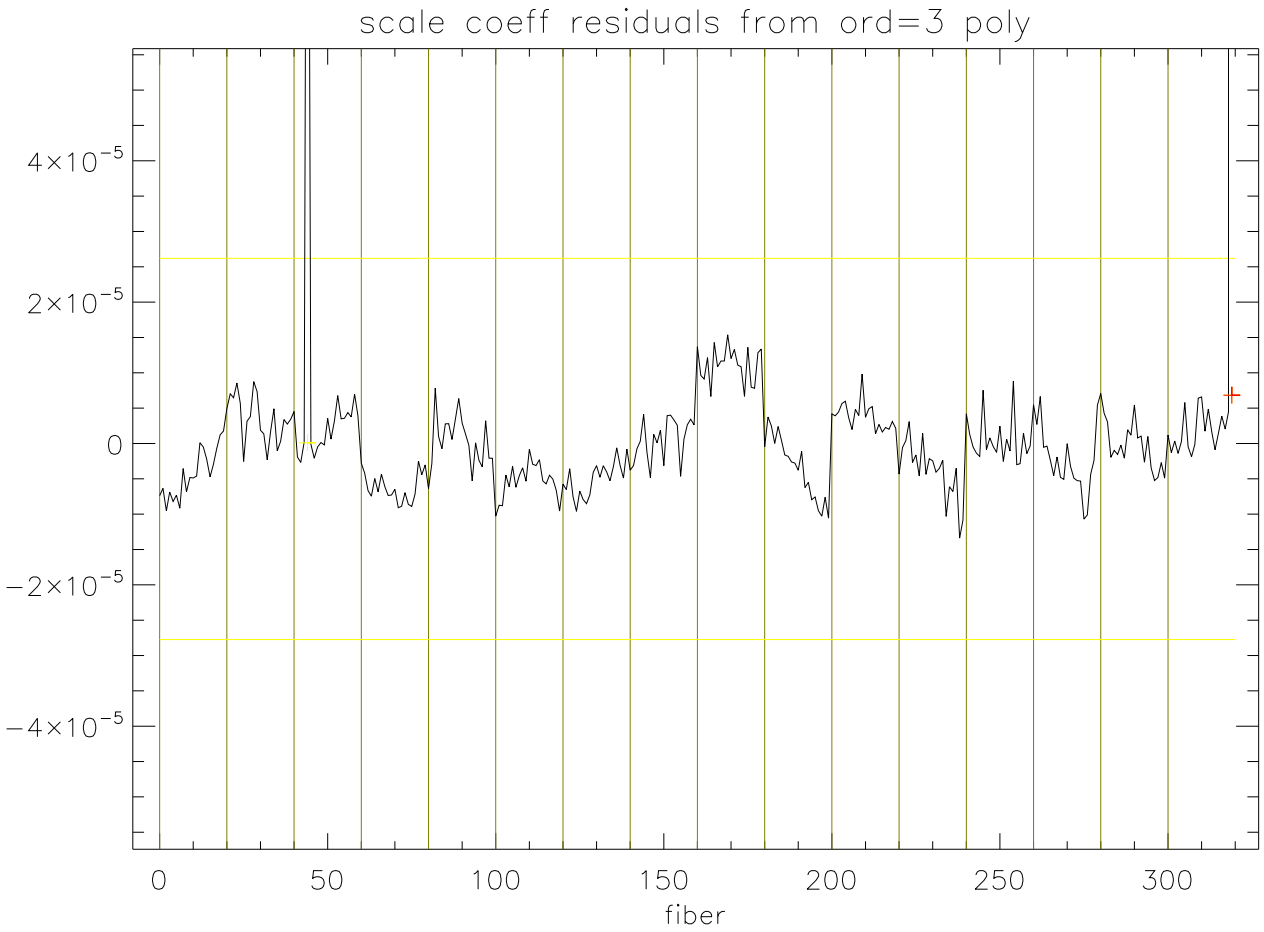

PLATE=3106 MJD=54735 sdR-r1-00054983.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.05 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

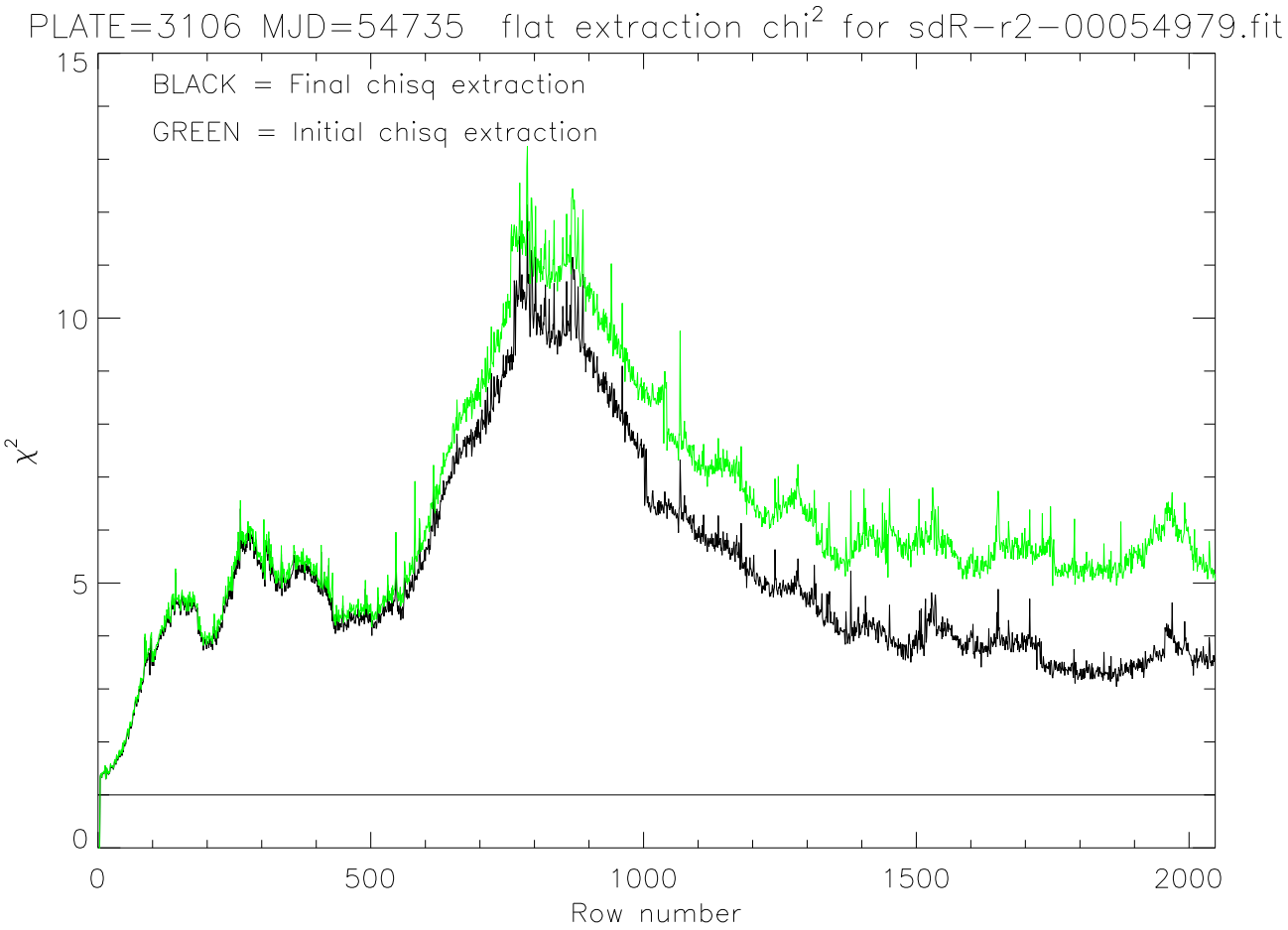

PLATE=3106 MJD=54735 sdR-r1-00054983.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.79 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

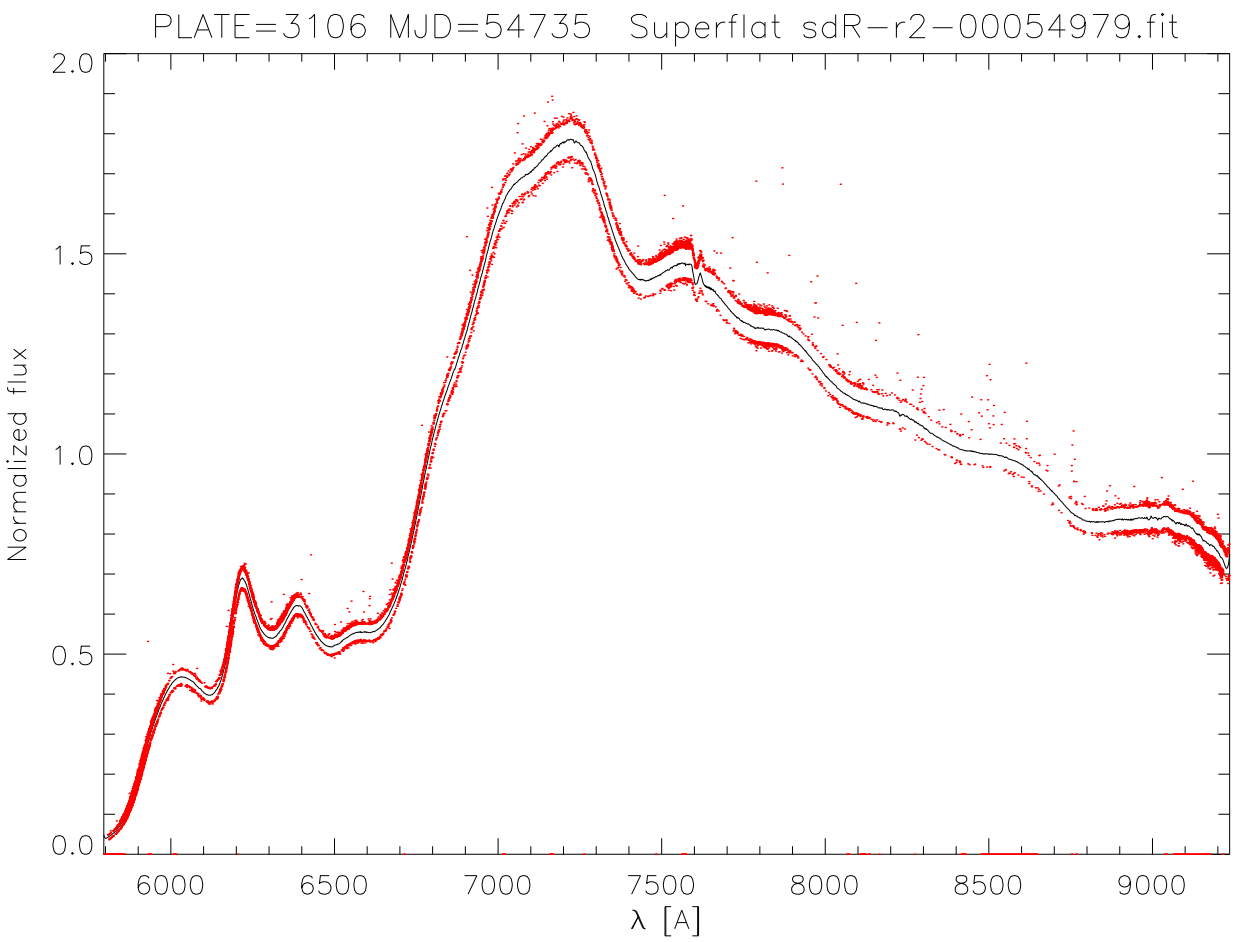

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

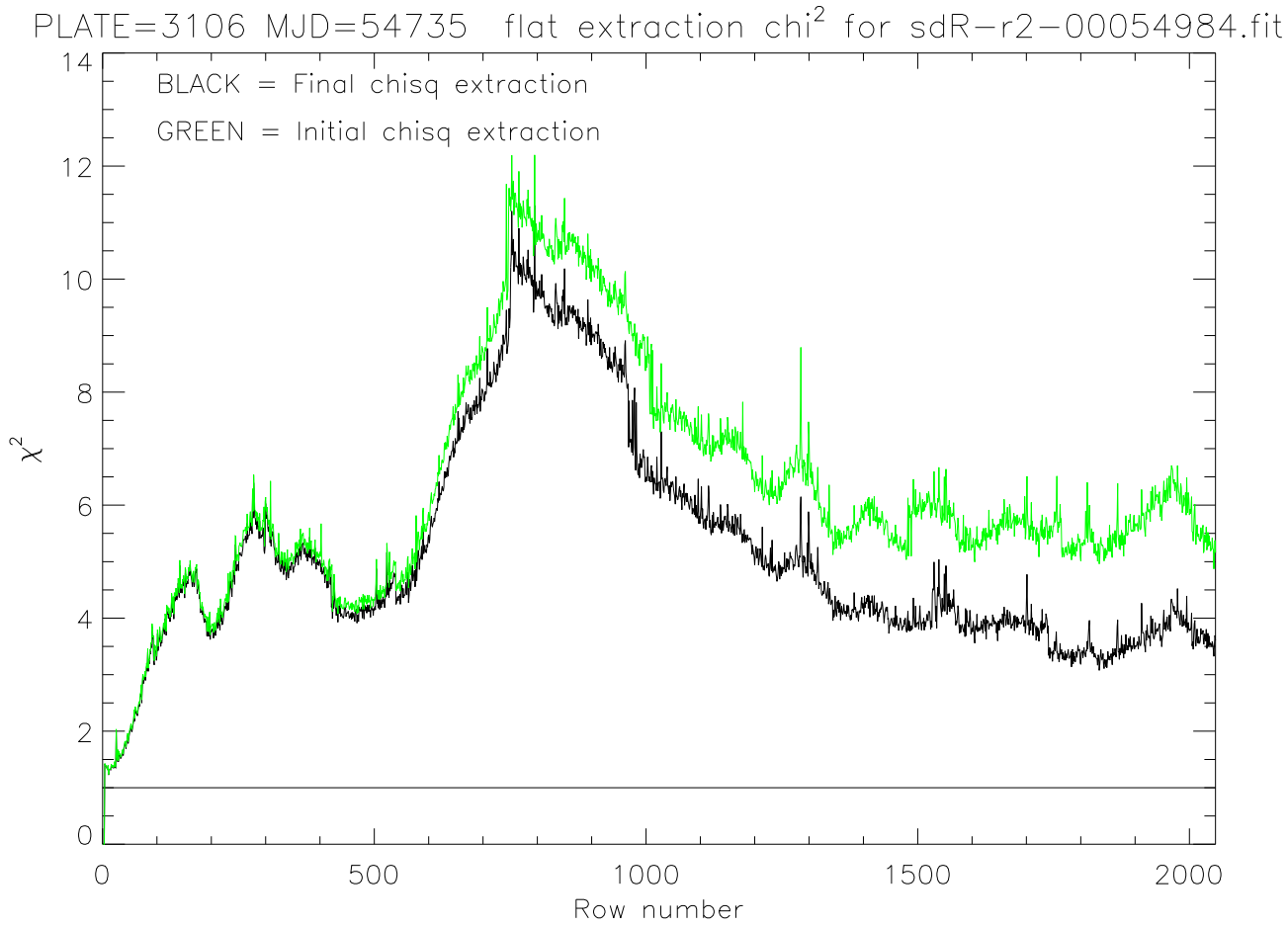

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

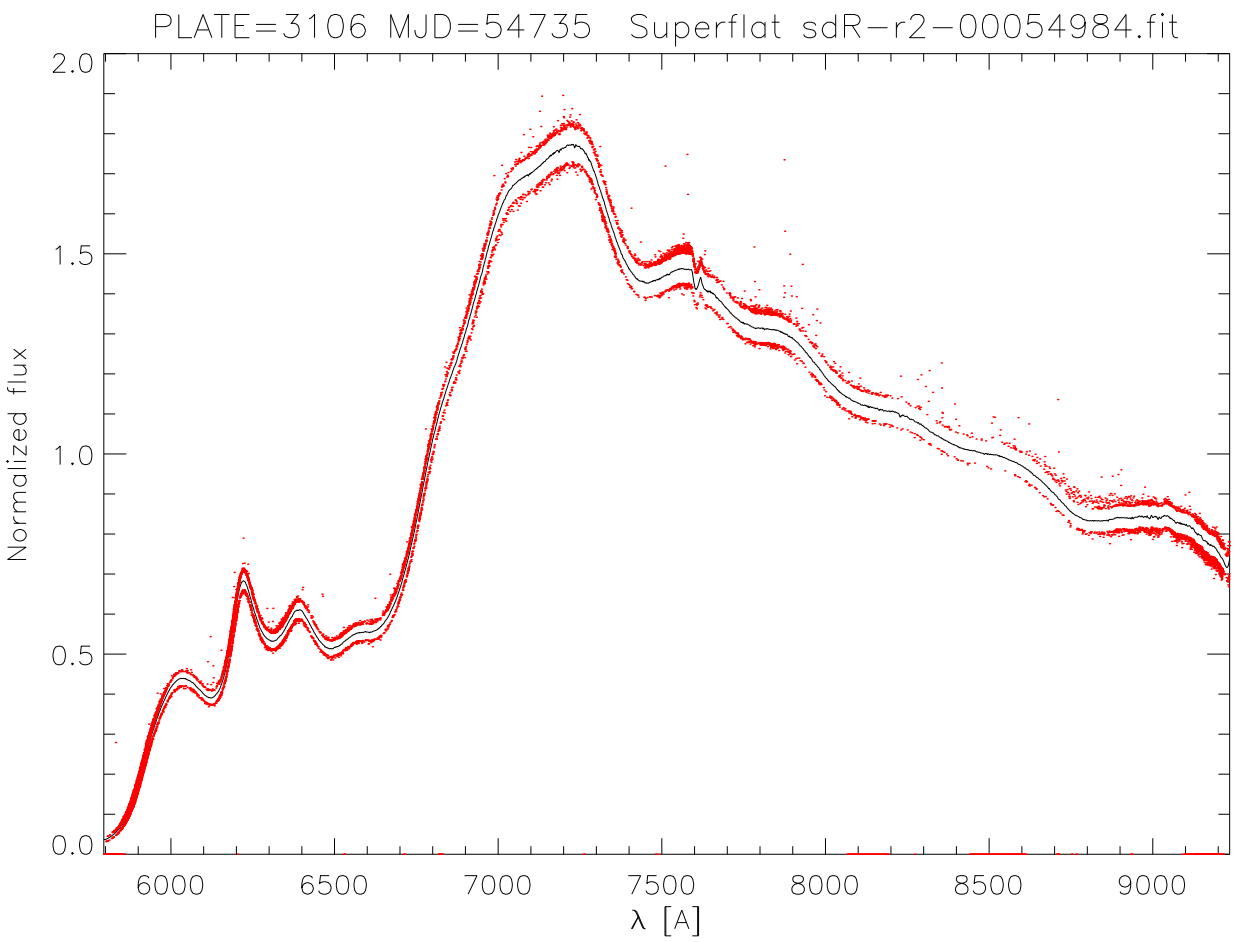

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

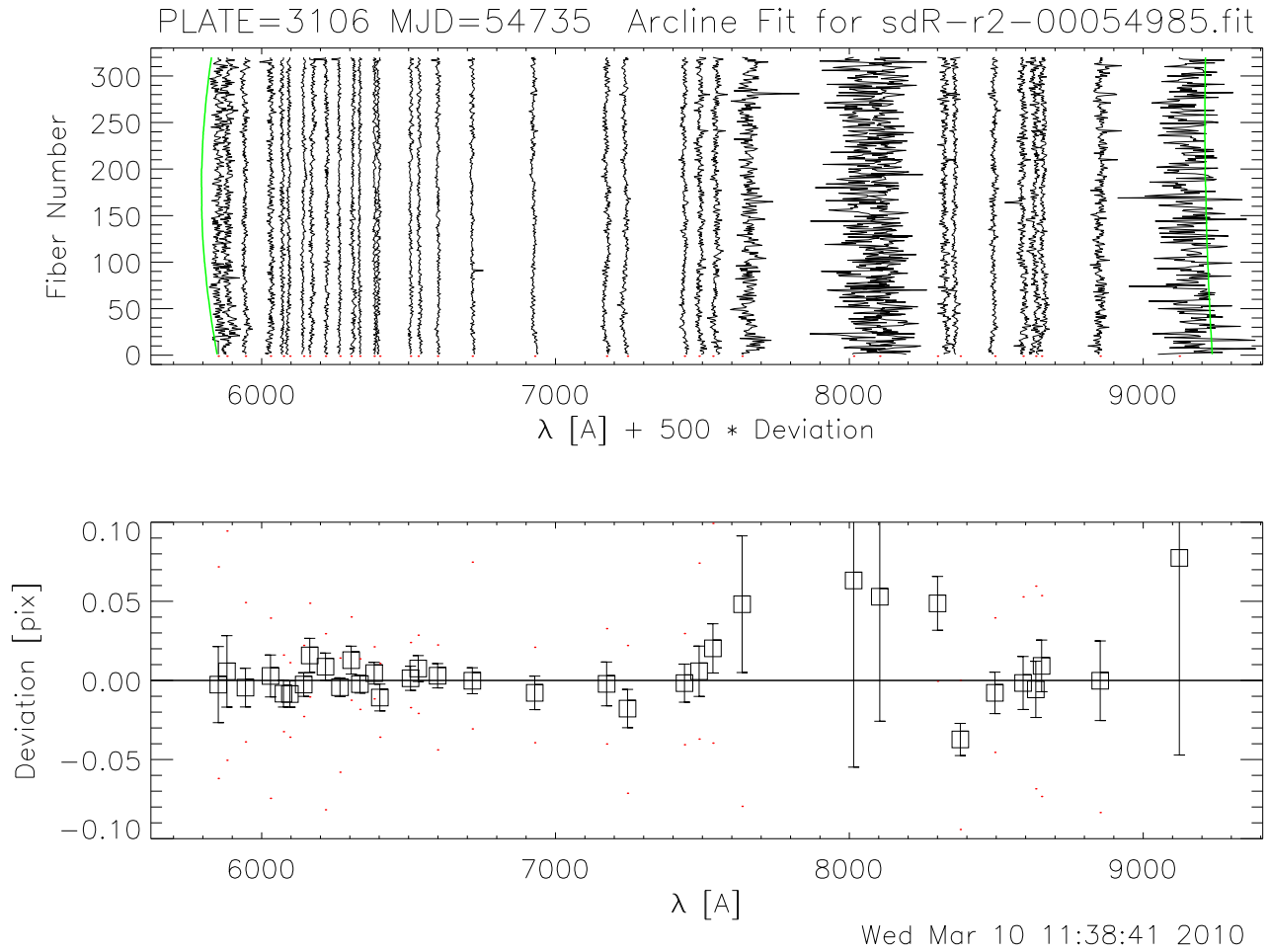

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

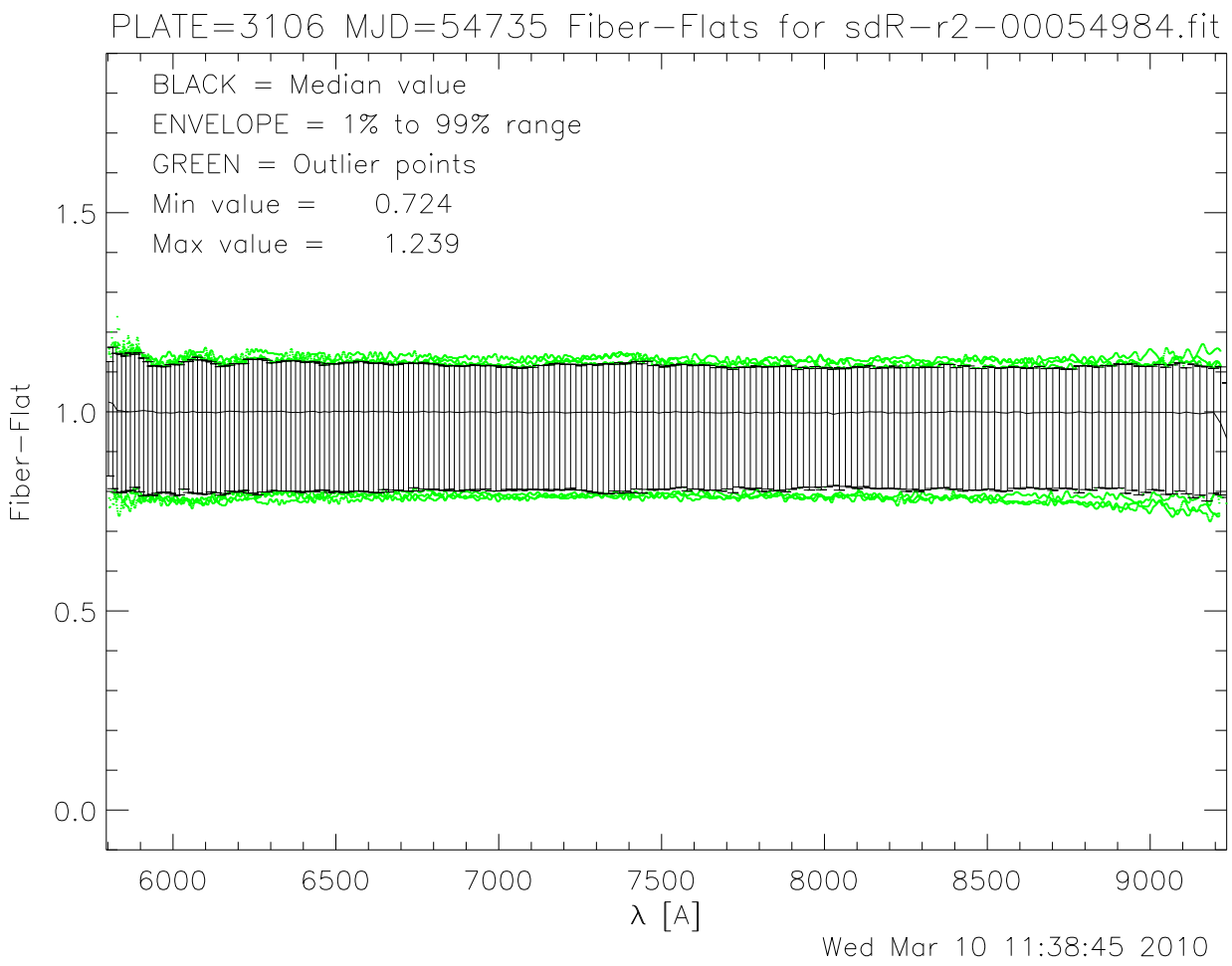

PLATE=3106 MJD=54735 flat extraction chi^2 for sdR−r2−00054979.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

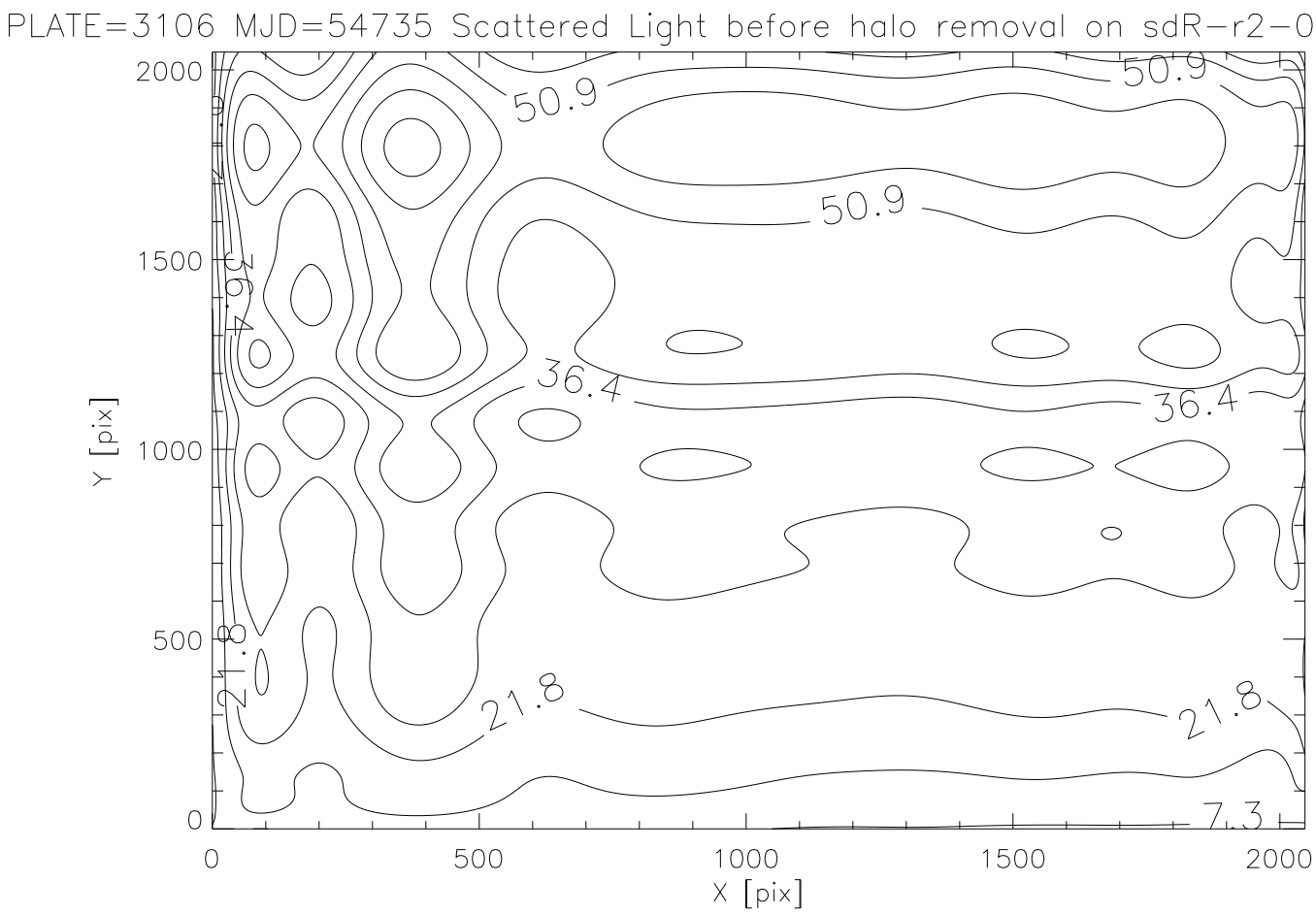

PLATE=3106 MJD=54735 Superflat sdR-r2-00054979.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

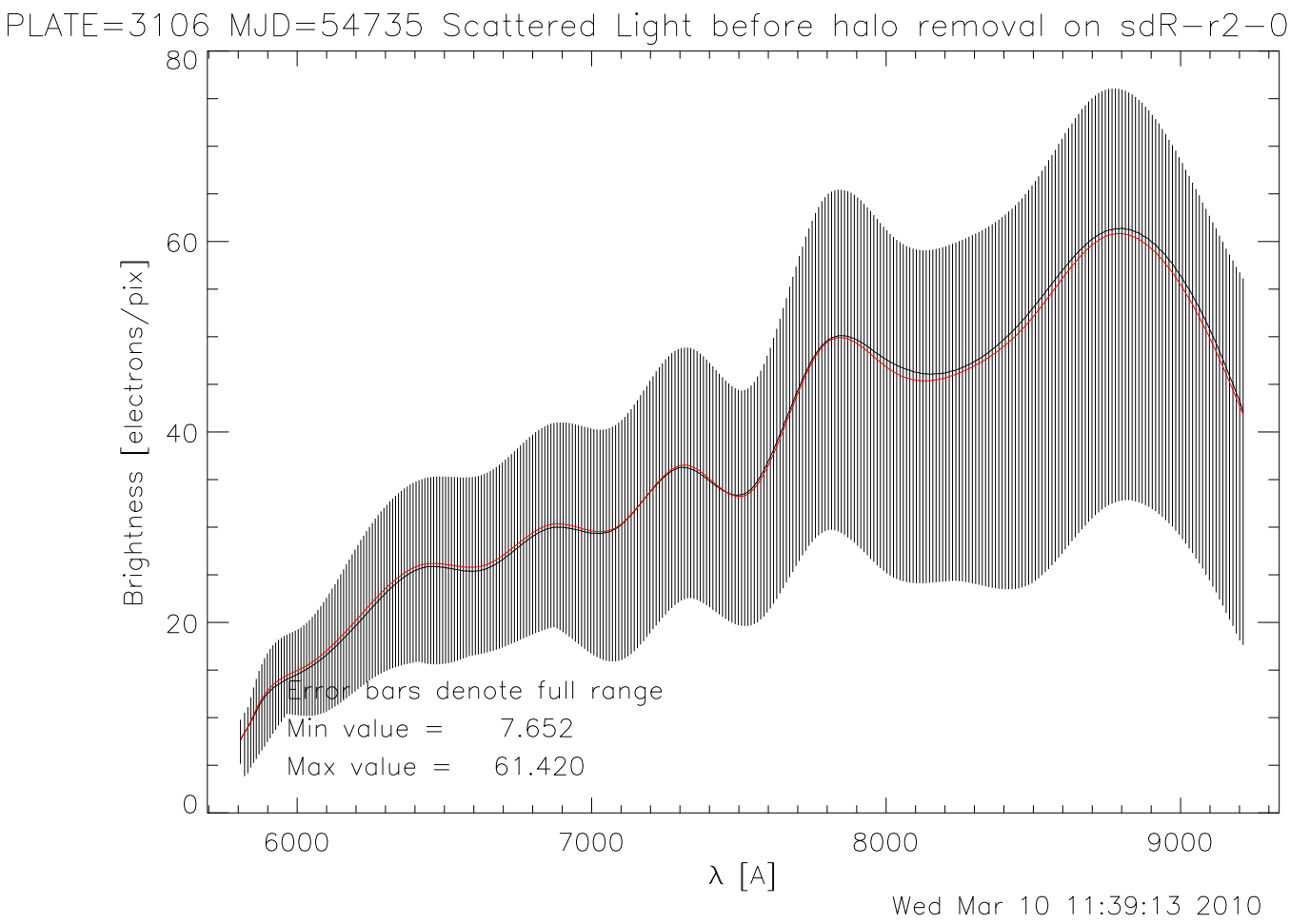

PLATE=3106 MJD=54735 flat extraction chi^2 for sdR−r2−00054984.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

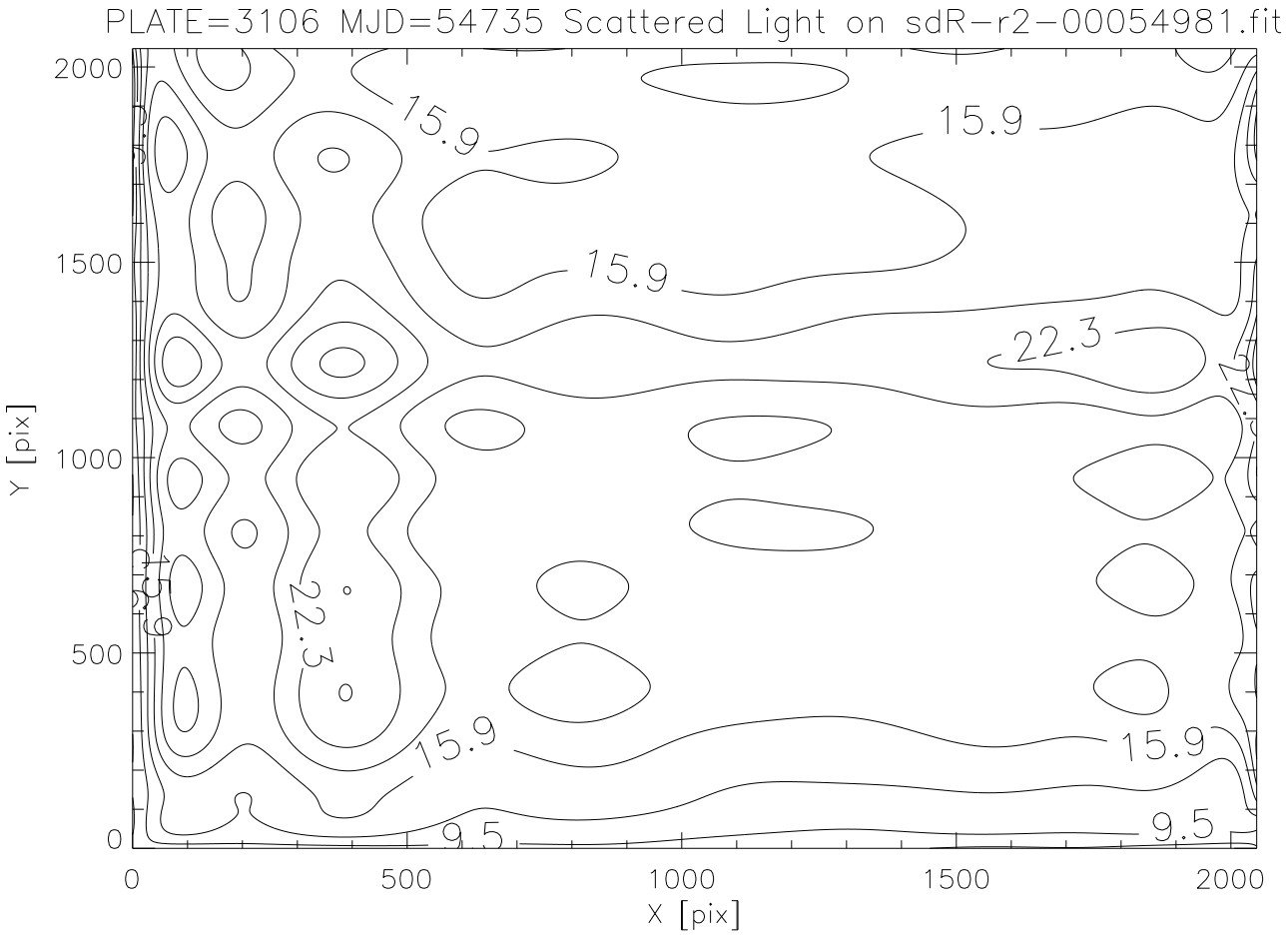

PLATE=3106 MJD=54735 Superflat sdR-r2-00054984.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

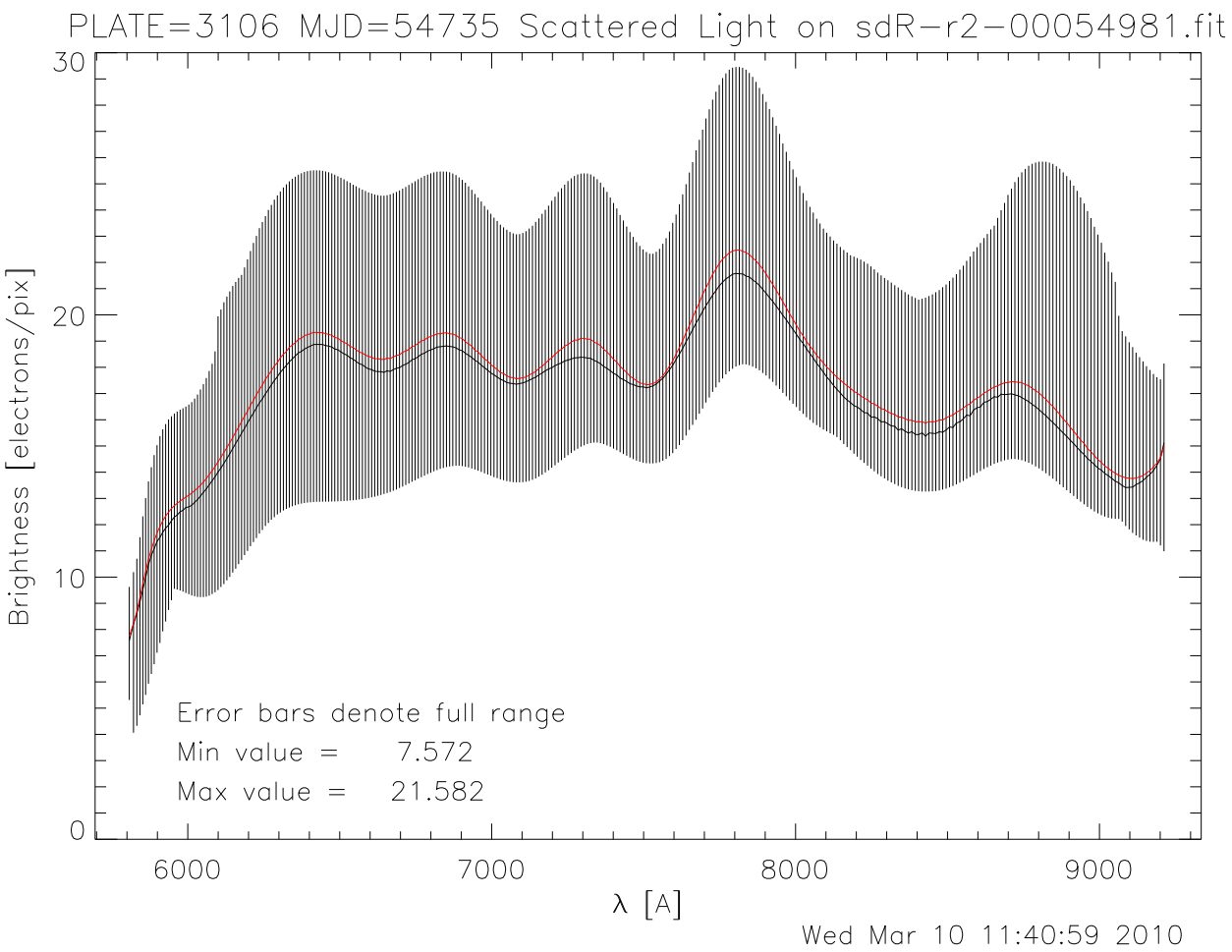

PLATE=3106 MJD=54735 Arcline Fit for sdR-r2-00054985.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Mar 10 11:38:41 2010

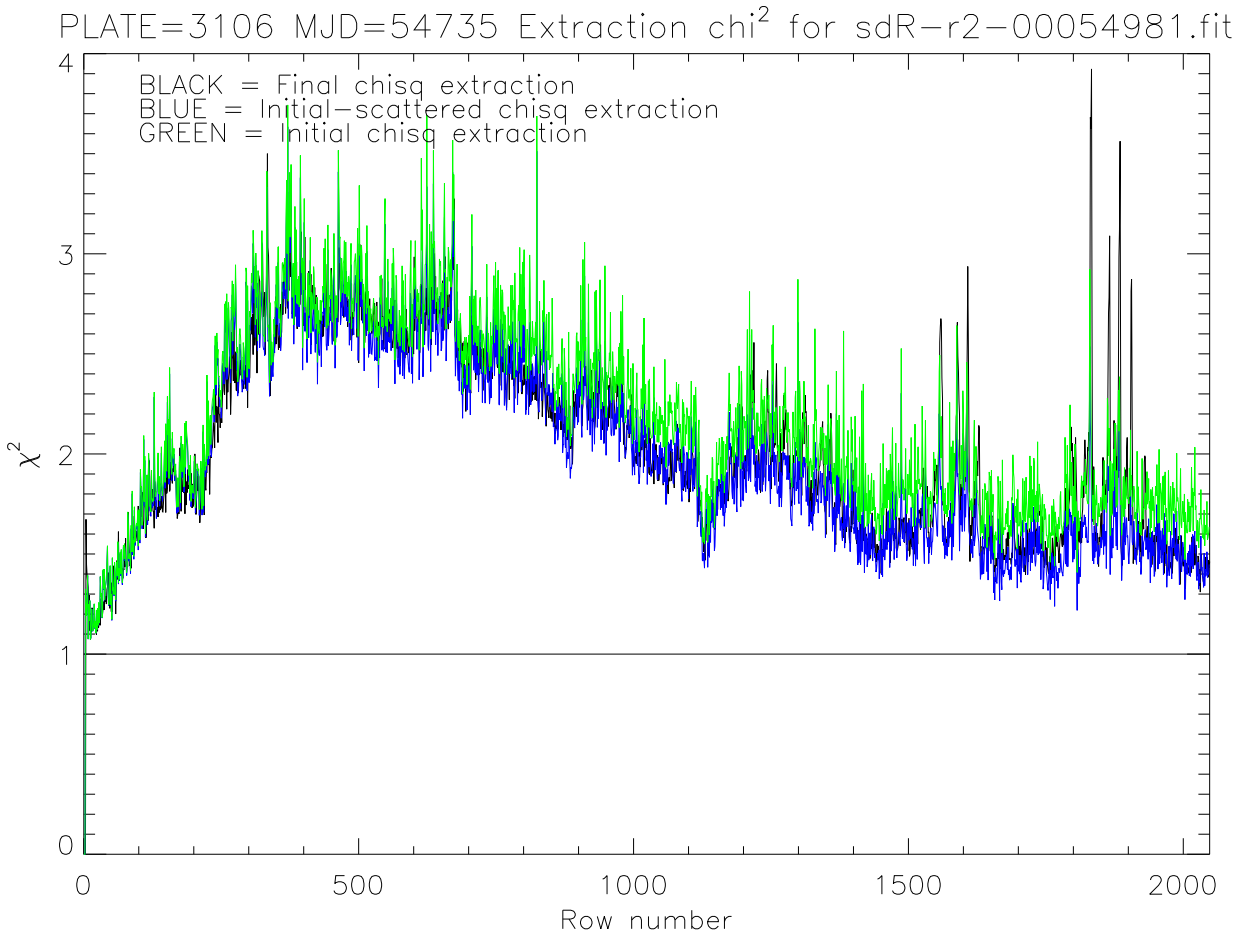

PLATE=3106 MJD=54735 Fiber−Flats for sdR−r2−00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.724
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 11:38:45 2010

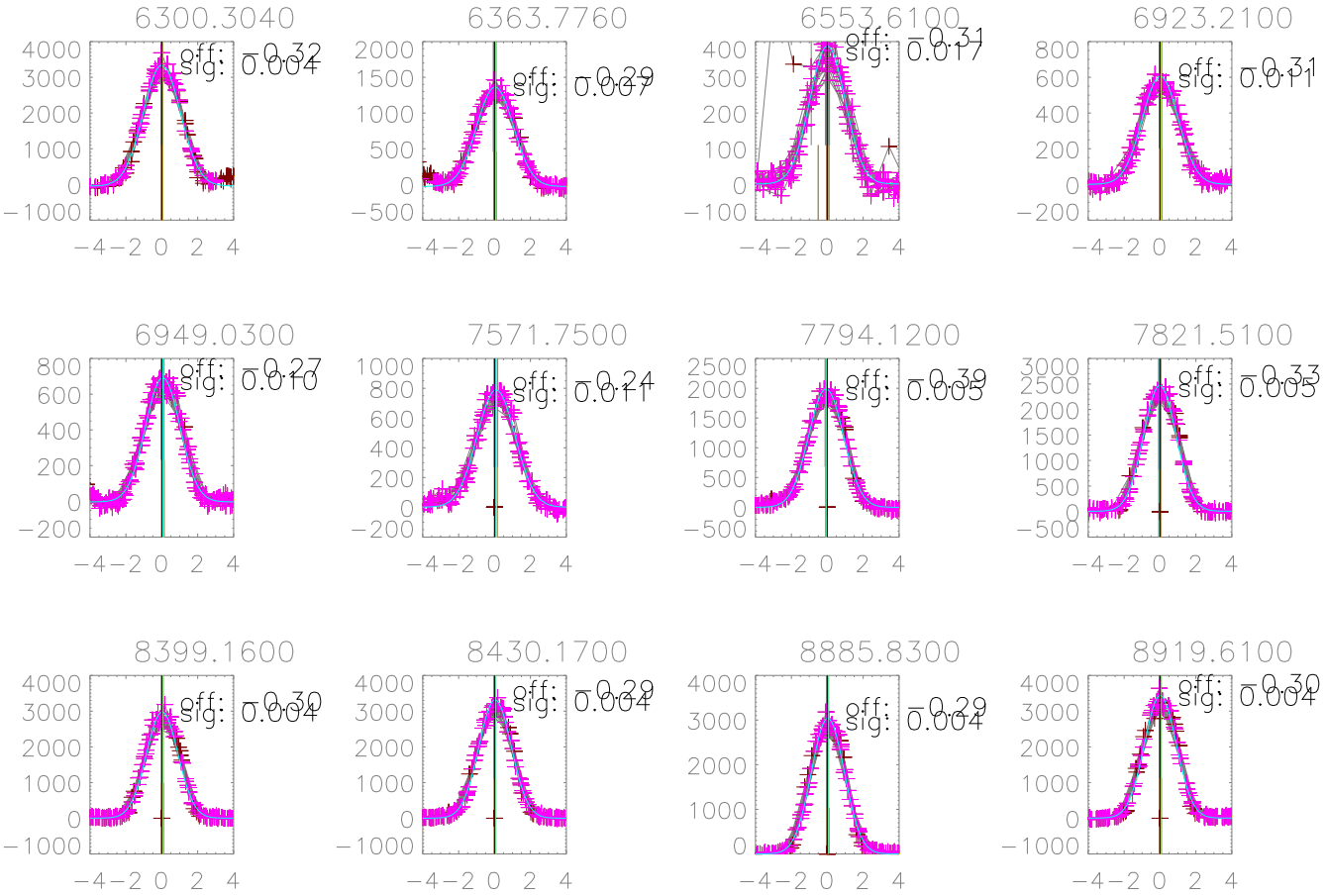

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r2-00054981.fi
50.9
50.9
50.9
36.4
36.4
36.4
21.8
21.8
21.8
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

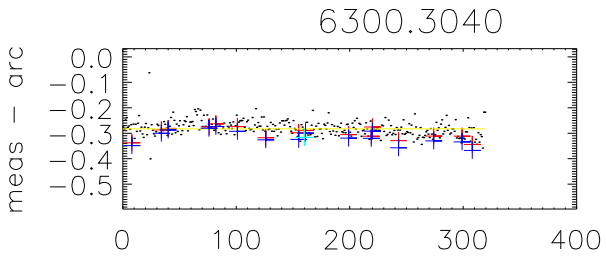

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r2-00054981.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.652
Max value = 61.420
Wed Mar 10 11:39:13 2010

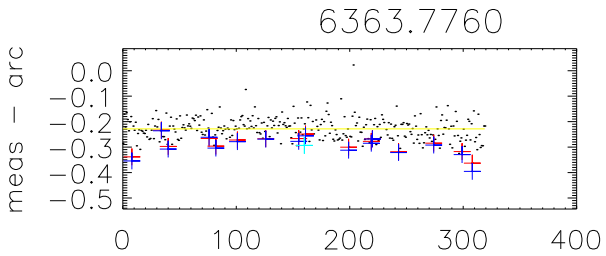

PLATE=3106 MJD=54735 Scattered Light on sdR-r2-00054981.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
15.9
15.9
15.9
22.3
22.3
15.9
15.9
15.9
9.5
9.5

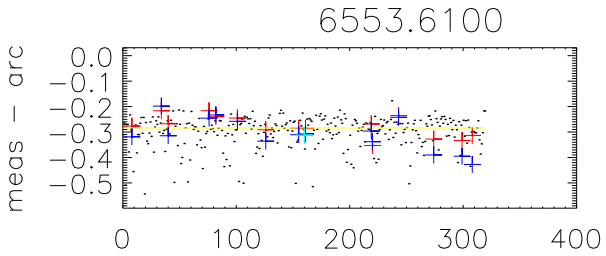

PLATE=3106 MJD=54735 Scattered Light on sdR-r2-00054981.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.572
Max value = 21.582
Wed Mar 10 11:40:59 2010

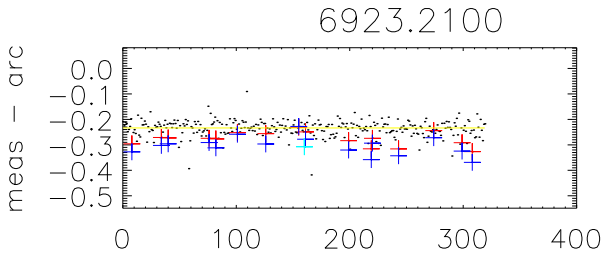

PLATE=3106 MJD=54735 Extraction chi^2 for sdR−r2−00054981.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

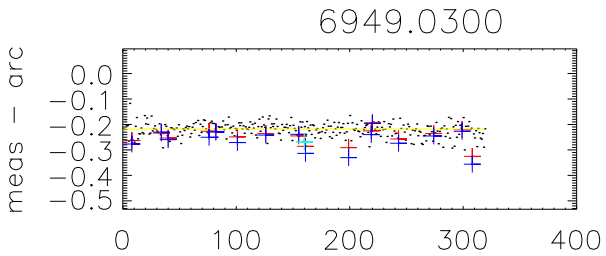

6300.3040
off: −0.32
sig: 0.004
6363.7760
off: −0.29
sig: 0.007
6553.6100
off: −0.31
sig: 0.017
6923.2100
off: −0.31
sig: 0.011
6949.0300
off: −0.27
sig: 0.010
7571.7500
off: −0.24
sig: 0.011
7794.1200
off: −0.39
sig: 0.005
7821.5100
off: −0.33
sig: 0.005
8399.1600
off: −0.30
sig: 0.004
8430.1700
off: −0.29
sig: 0.004
8885.8300
off: −0.29
sig: 0.004
8919.6100
off: −0.30
sig: 0.004

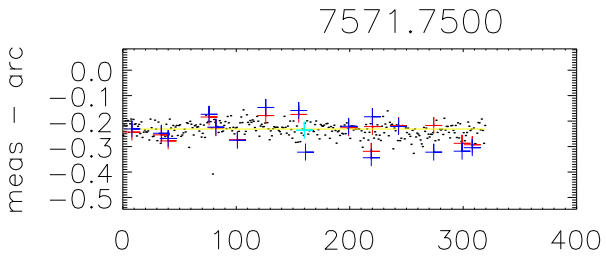

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

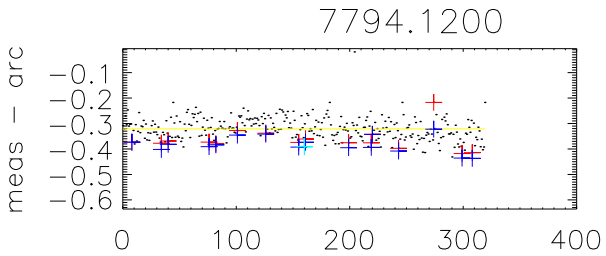

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

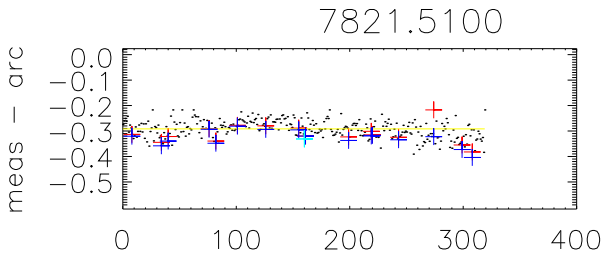

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

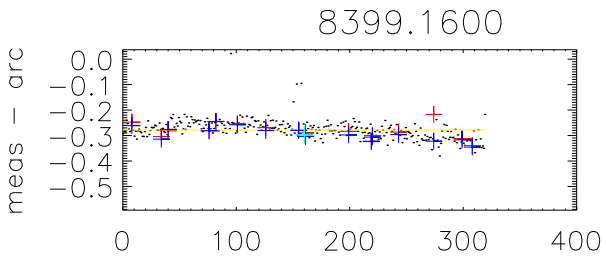

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

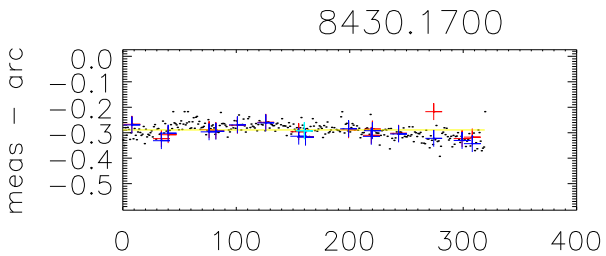

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

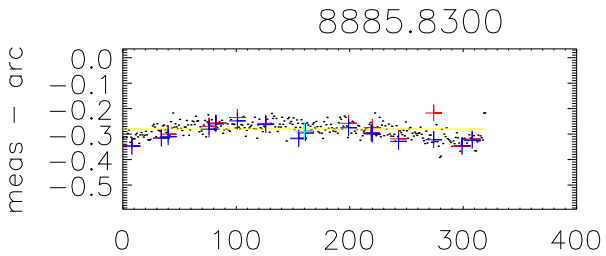

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

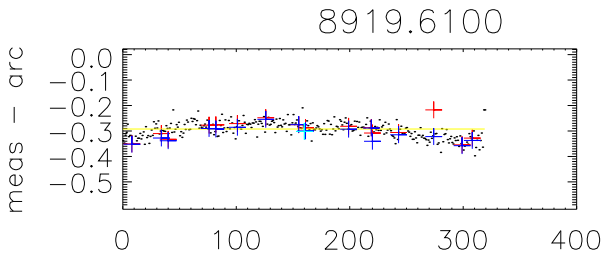

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

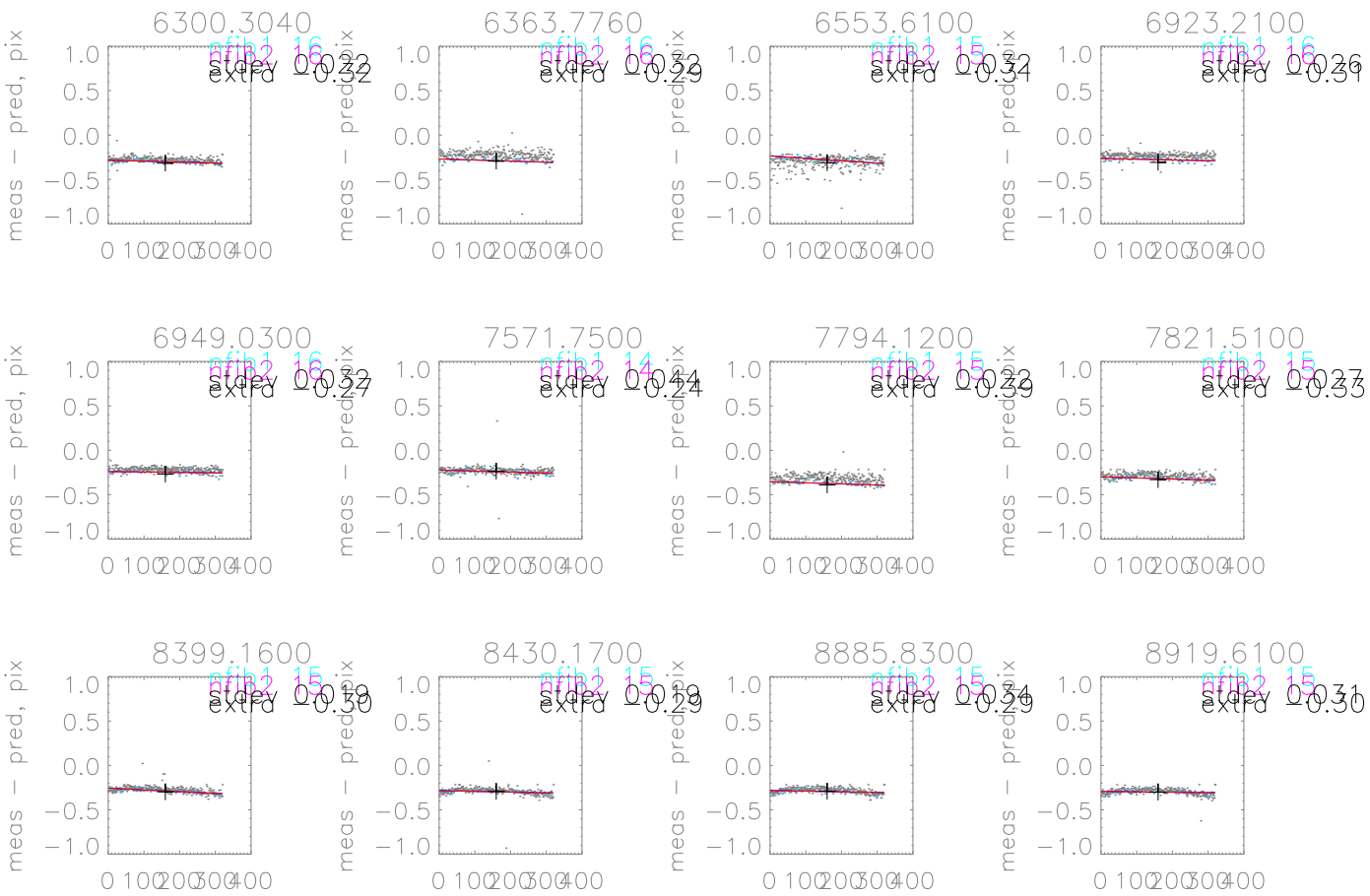

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

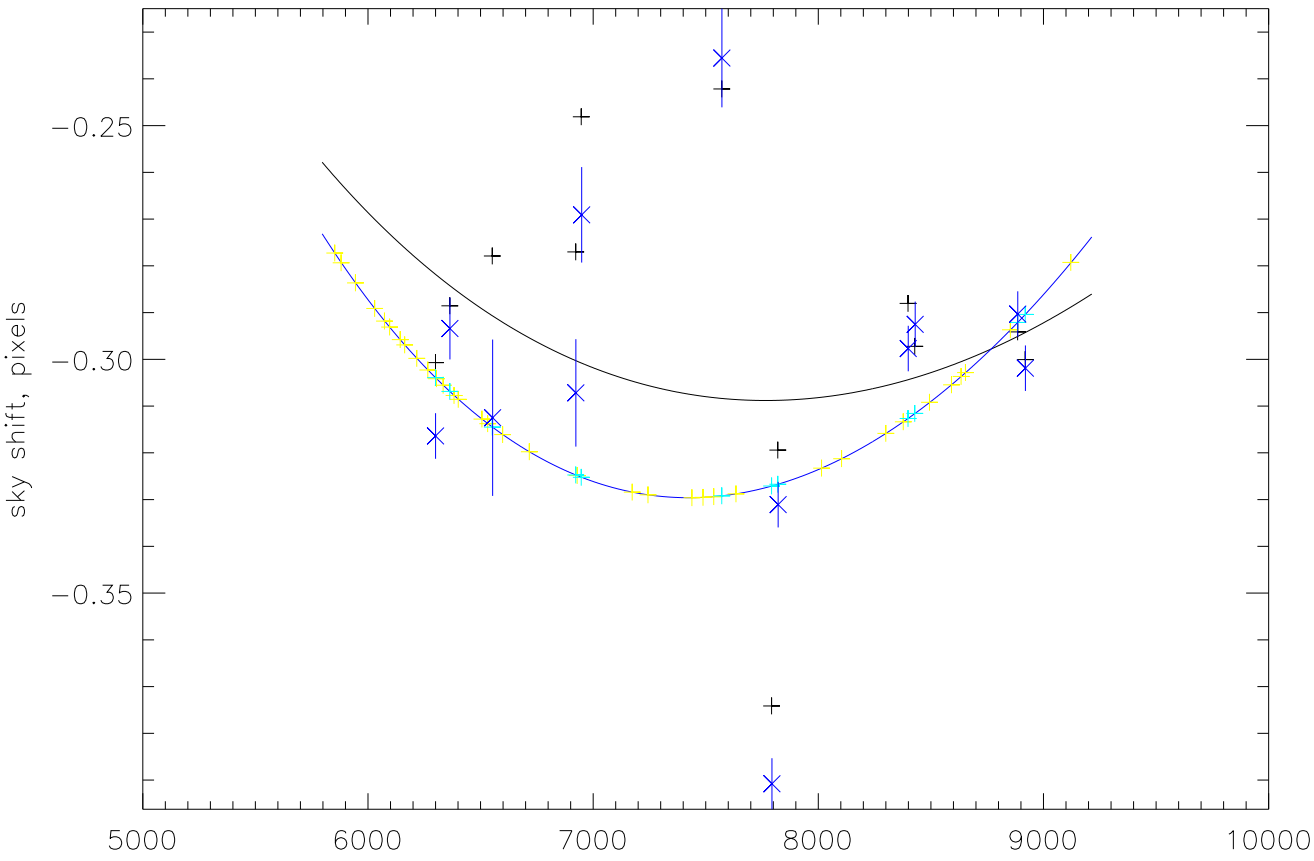

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

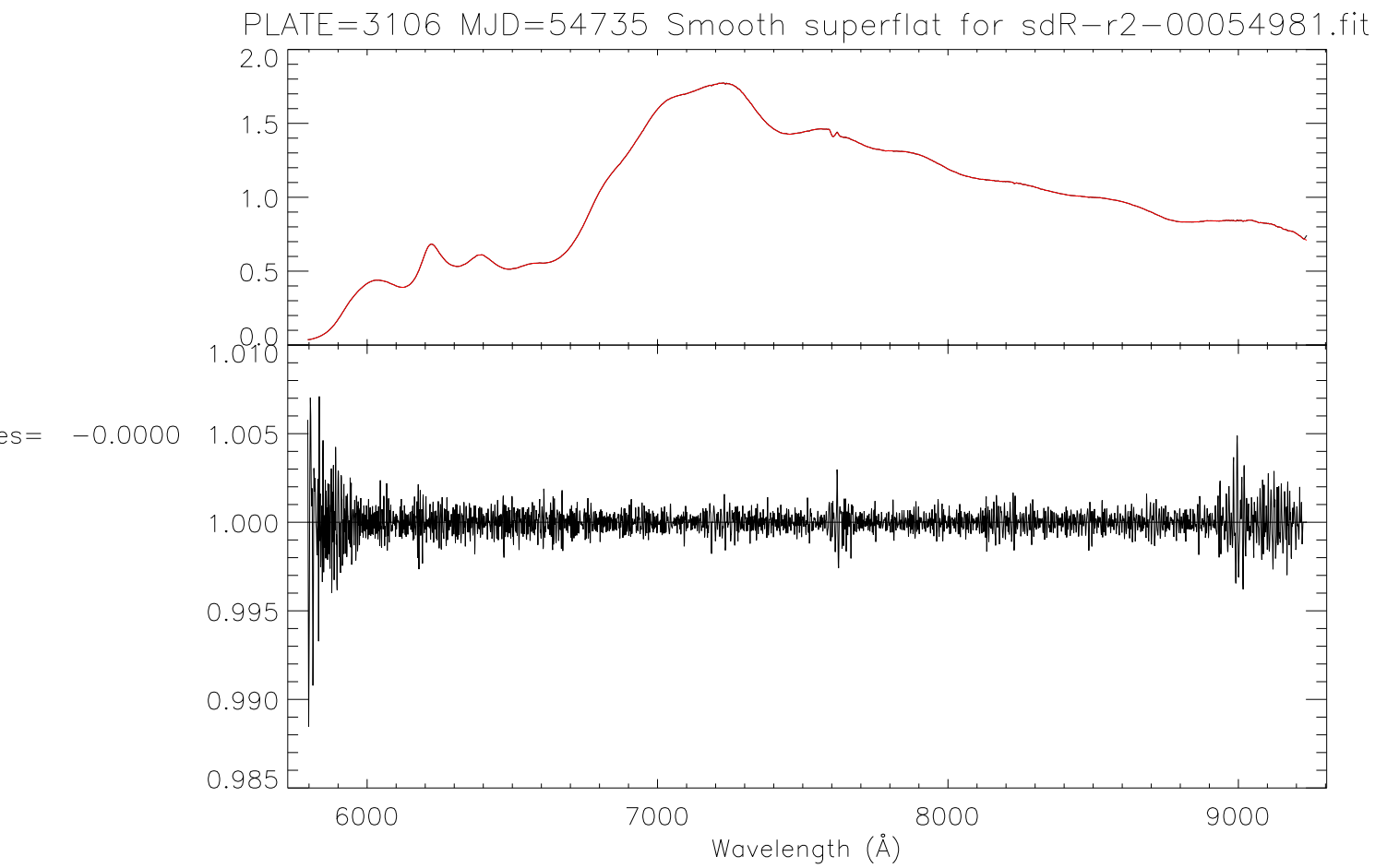

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

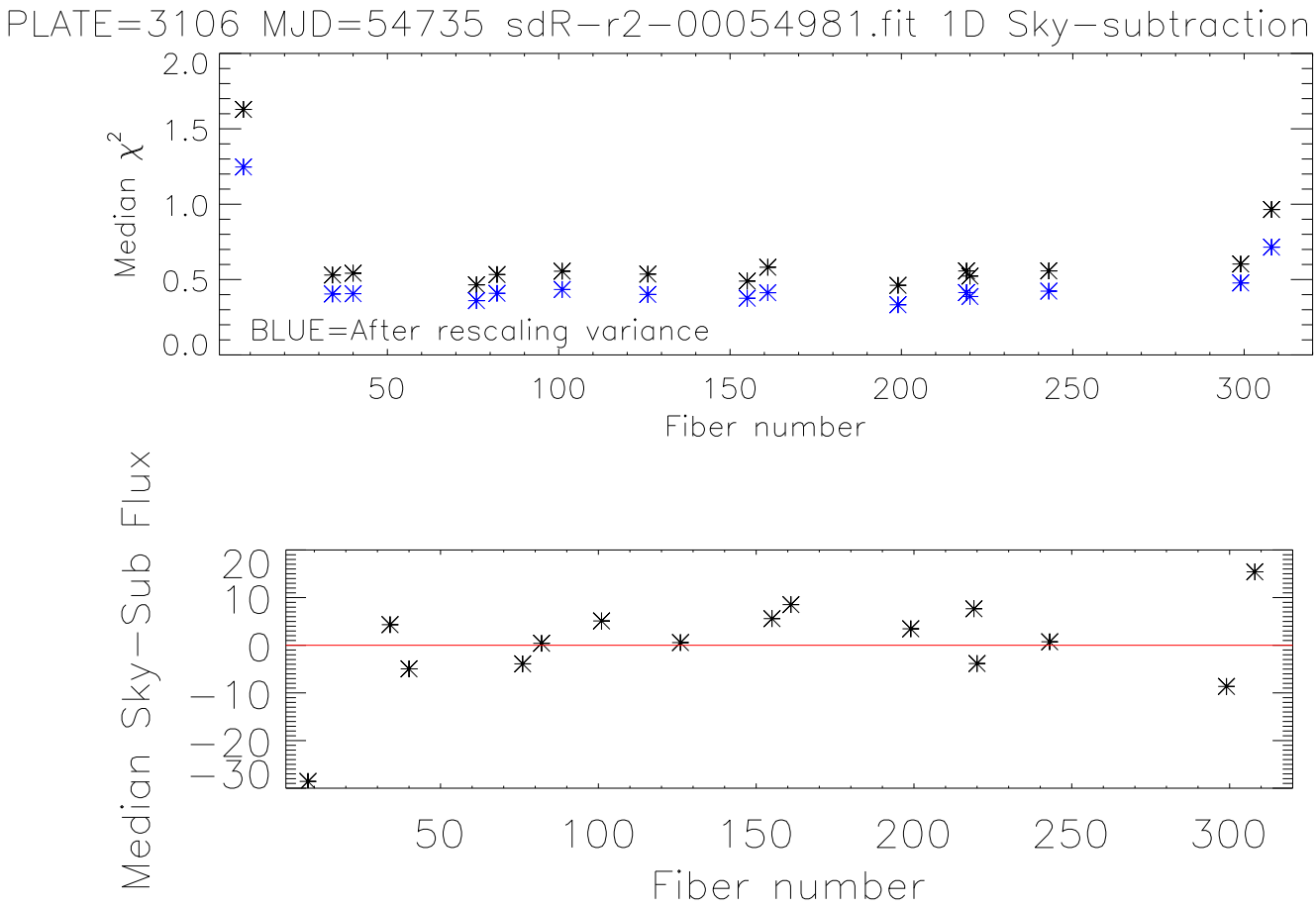

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

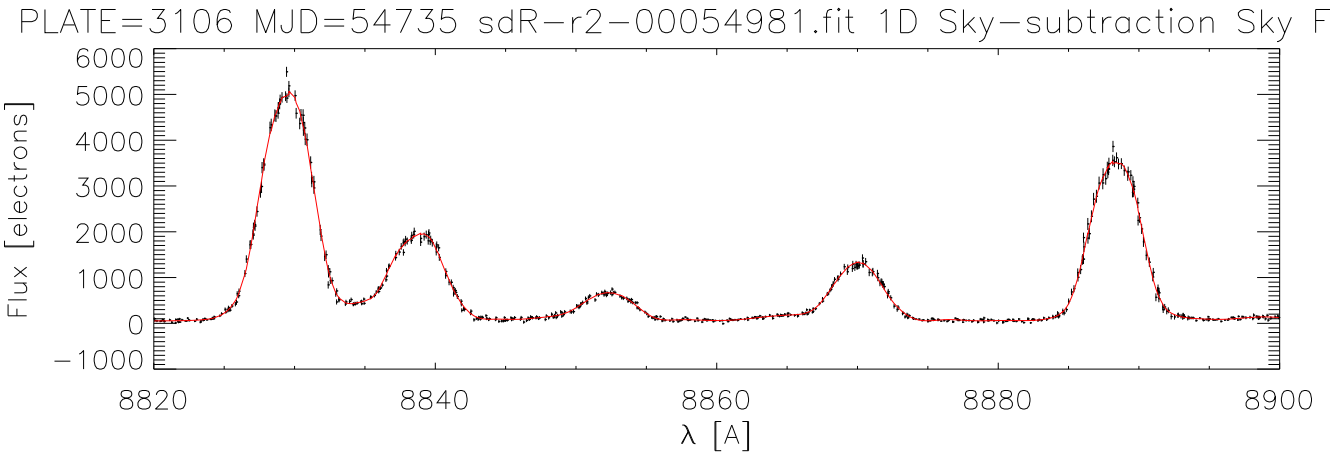

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

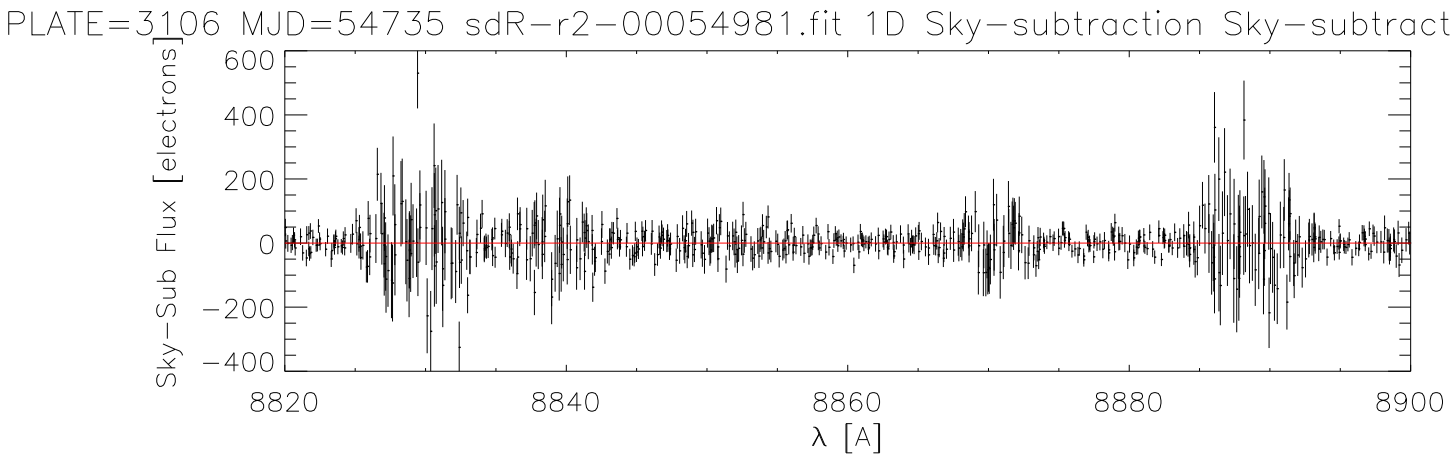

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 16
mfib2 16
stdev 0.32
extrd 0.32
stdev 0.29
extrd 0.32
stdev 0.34
extrd 0.32
stdev 0.31
extrd 0.26
stdev 0.27
extrd 0.32
stdev 0.24
extrd 0.44
stdev 0.29
extrd 0.32
stdev 0.33
extrd 0.27
stdev 0.30
extrd 0.19
stdev 0.29
extrd 0.19
stdev 0.29
extrd 0.34
stdev 0.30
extrd 0.31
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

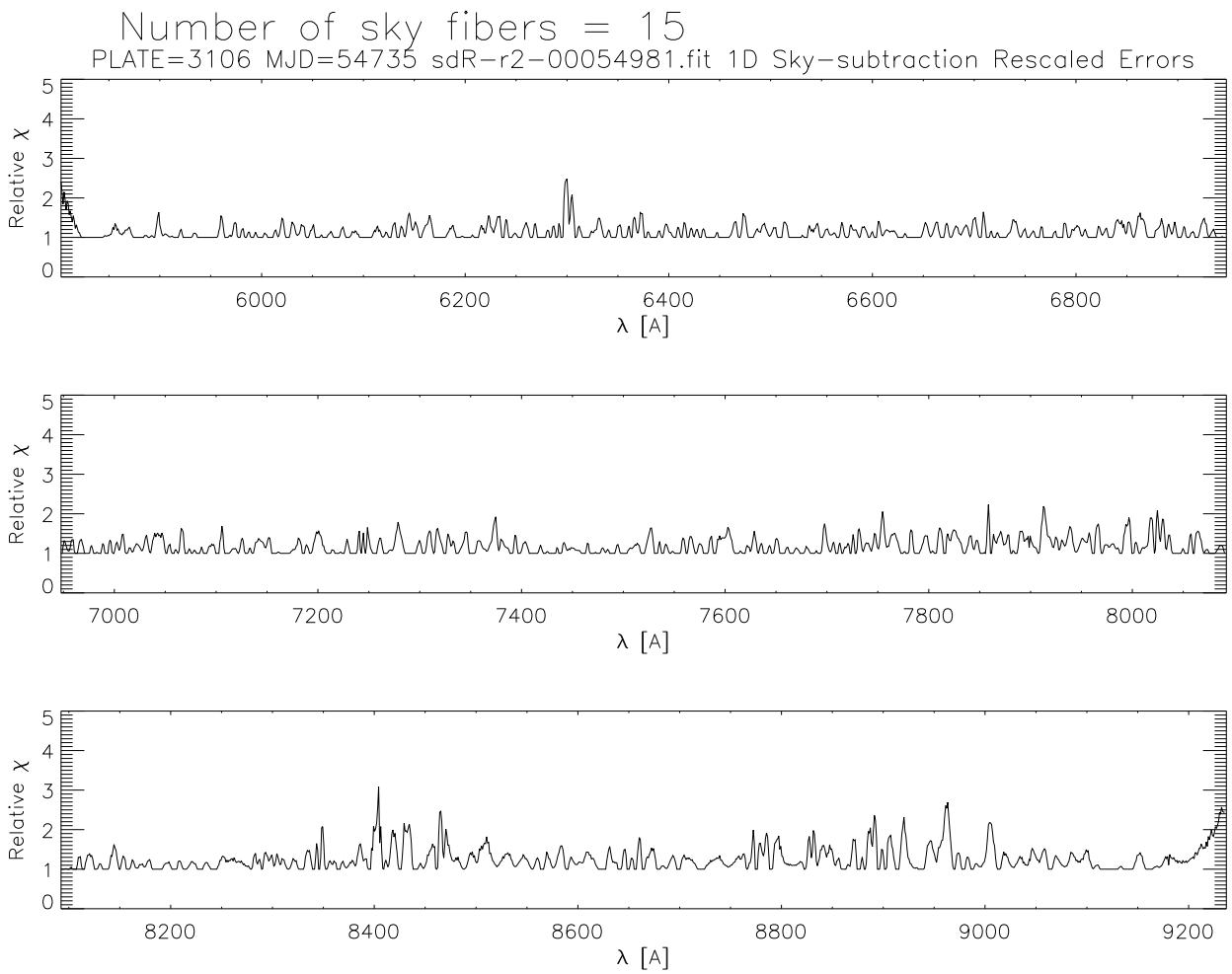

−0.25
−0.30
−0.35
sky shift, pixels
5000
6000
7000
8000
9000
10000

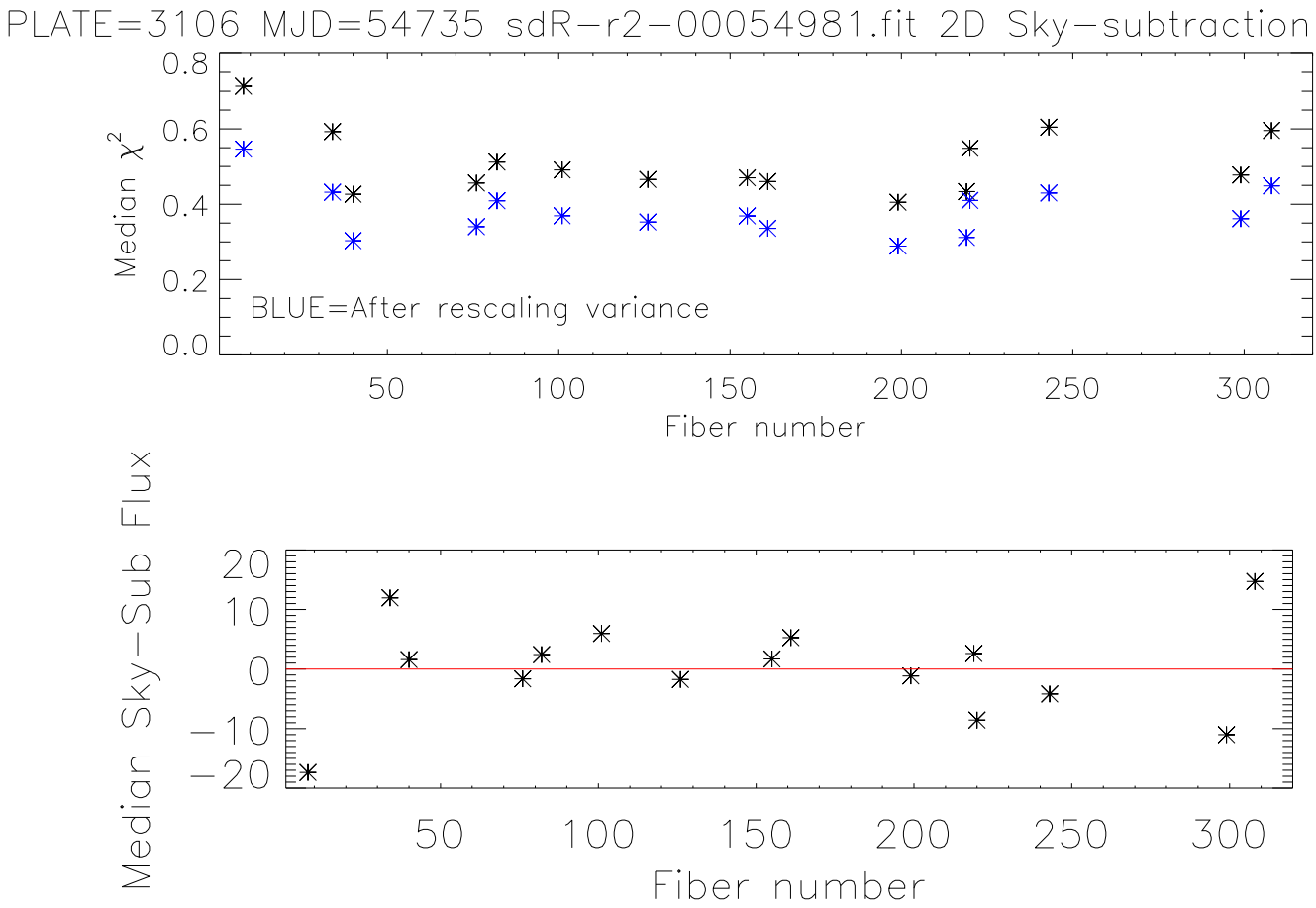

PLATE=3106 MJD=54735 Smooth superflat for sdR-r2-00054981.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

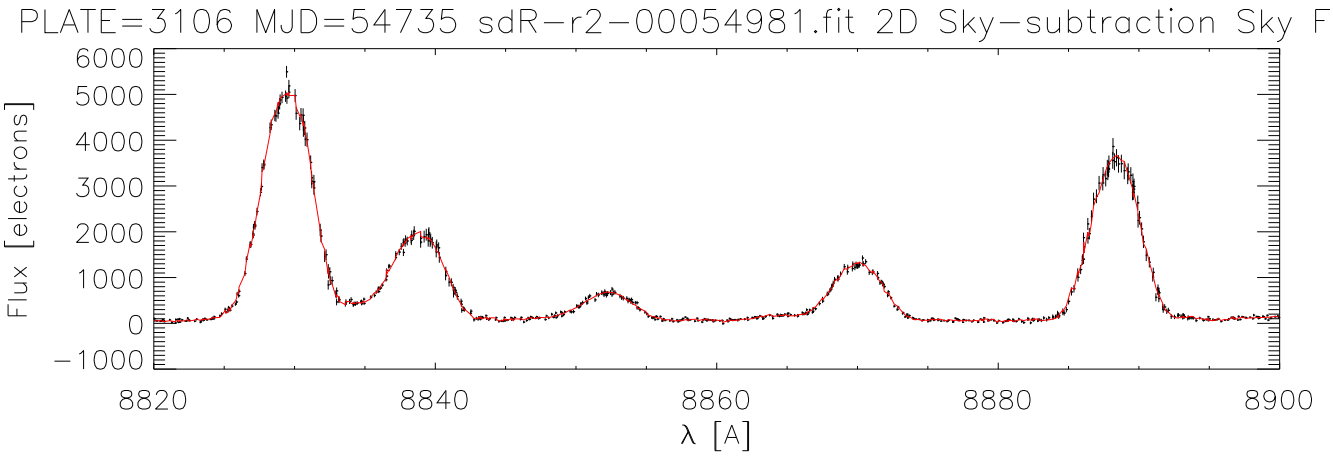

PLATE=3106 MJD=54735 sdR-r2-00054981.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

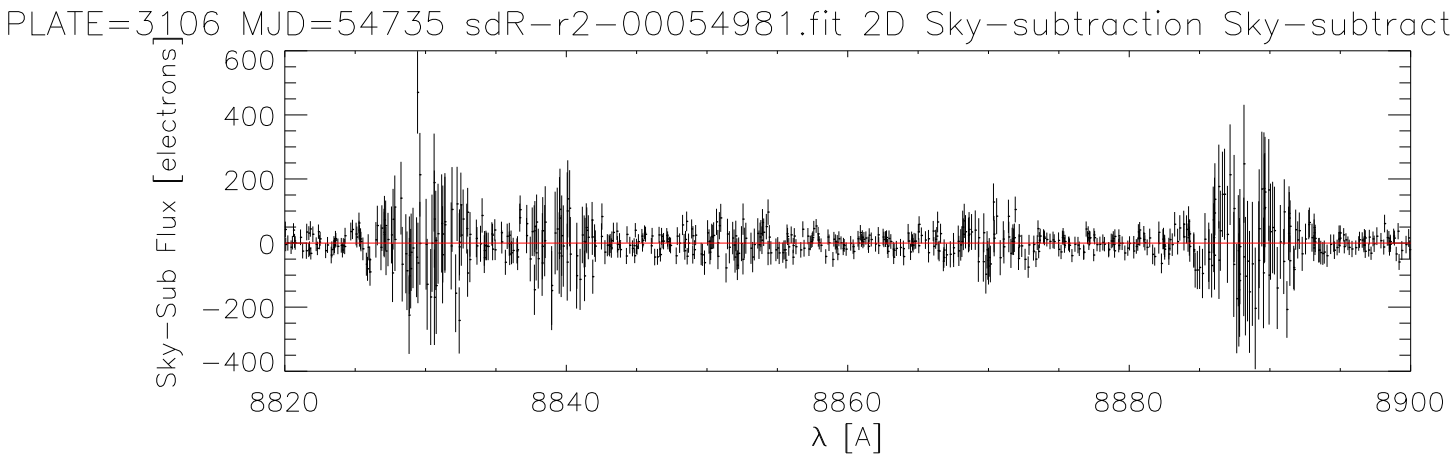

PLATE=3106 MJD=54735 sdR-r2-00054981.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

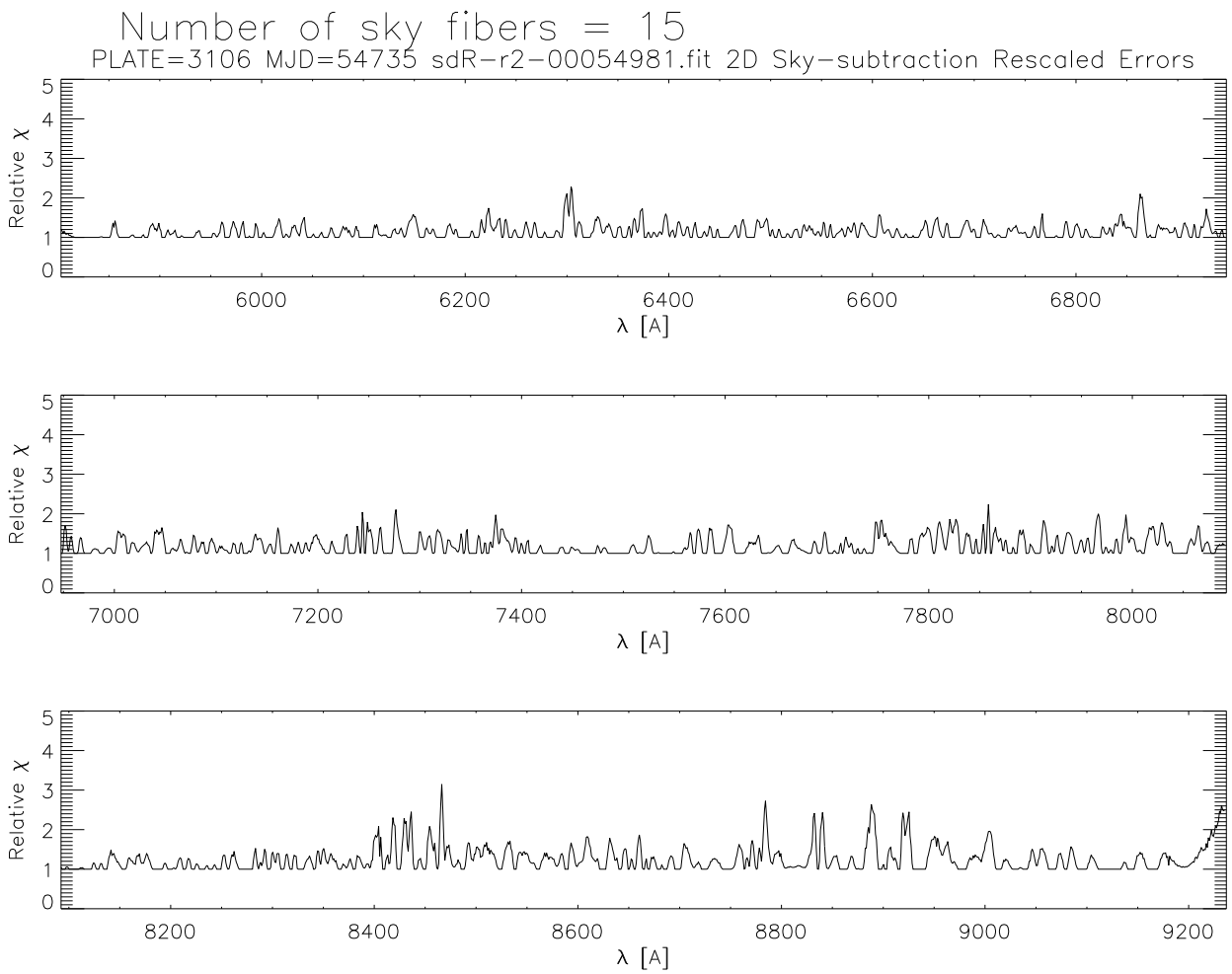

PLATE=3106 MJD=54735 sdR-r2-00054981.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

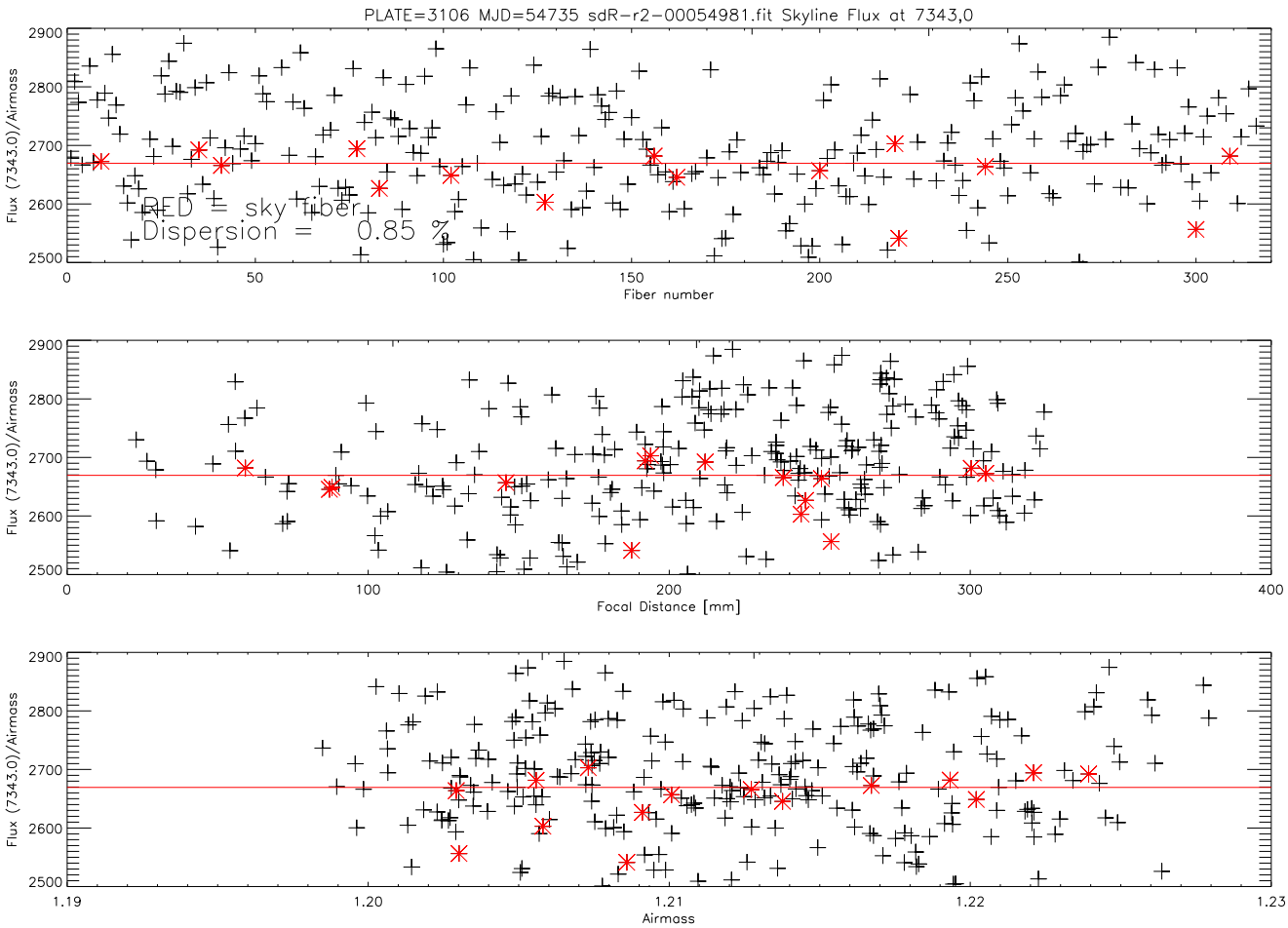

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-r2-00054981.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

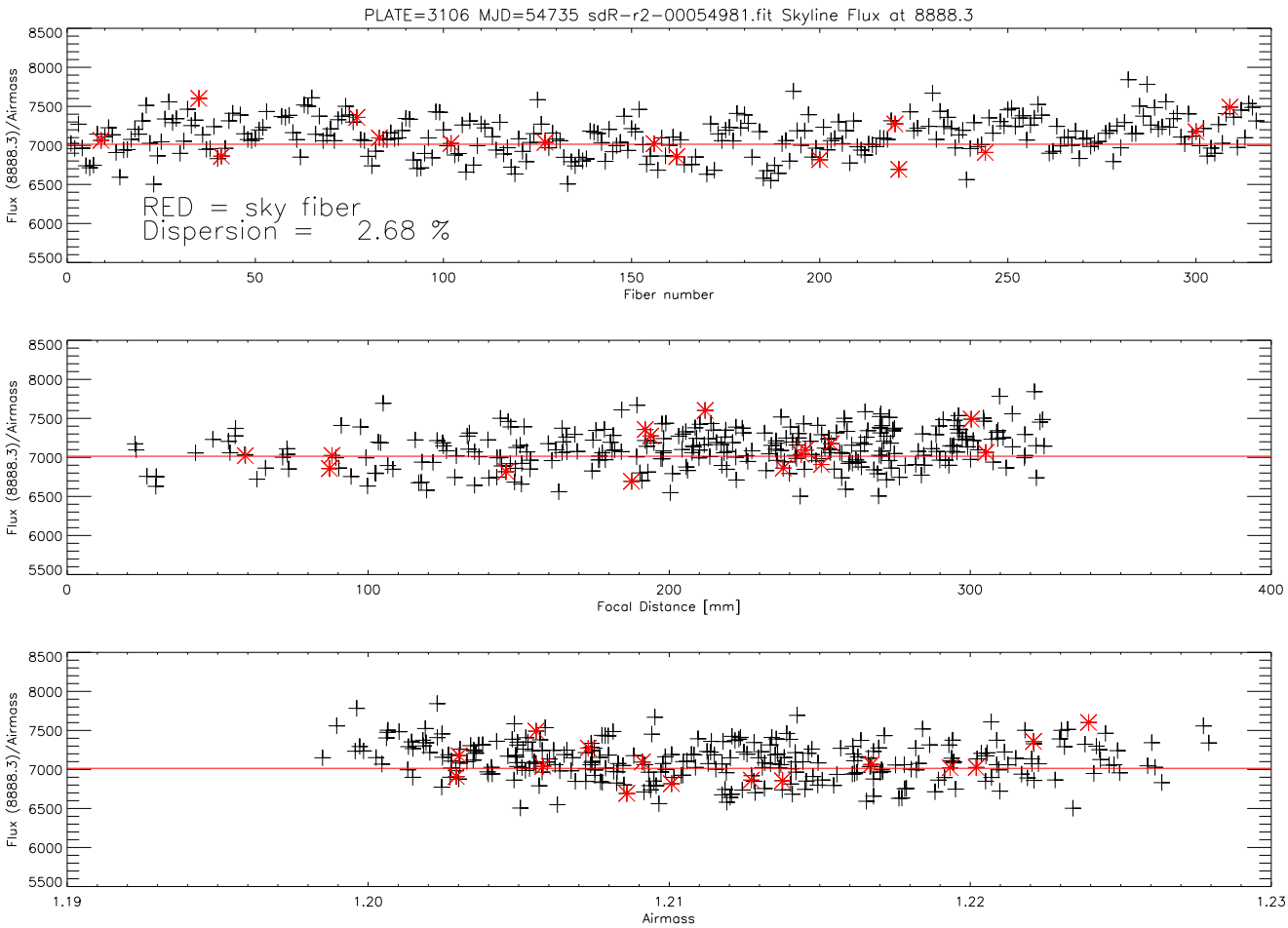

PLATE=3106 MJD=54735 sdR-r2-00054981.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

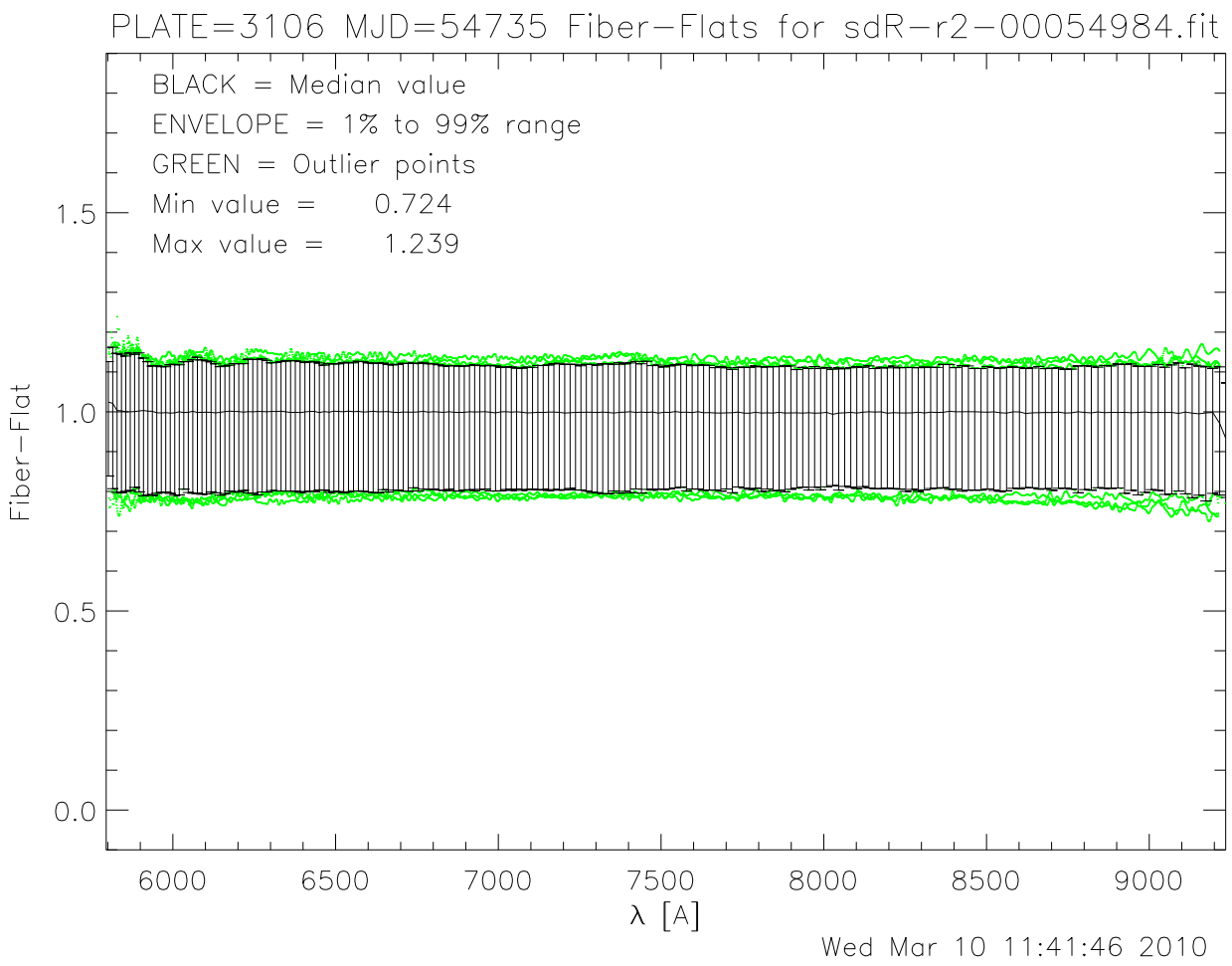

PLATE=3106 MJD=54735 sdR-r2-00054981.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

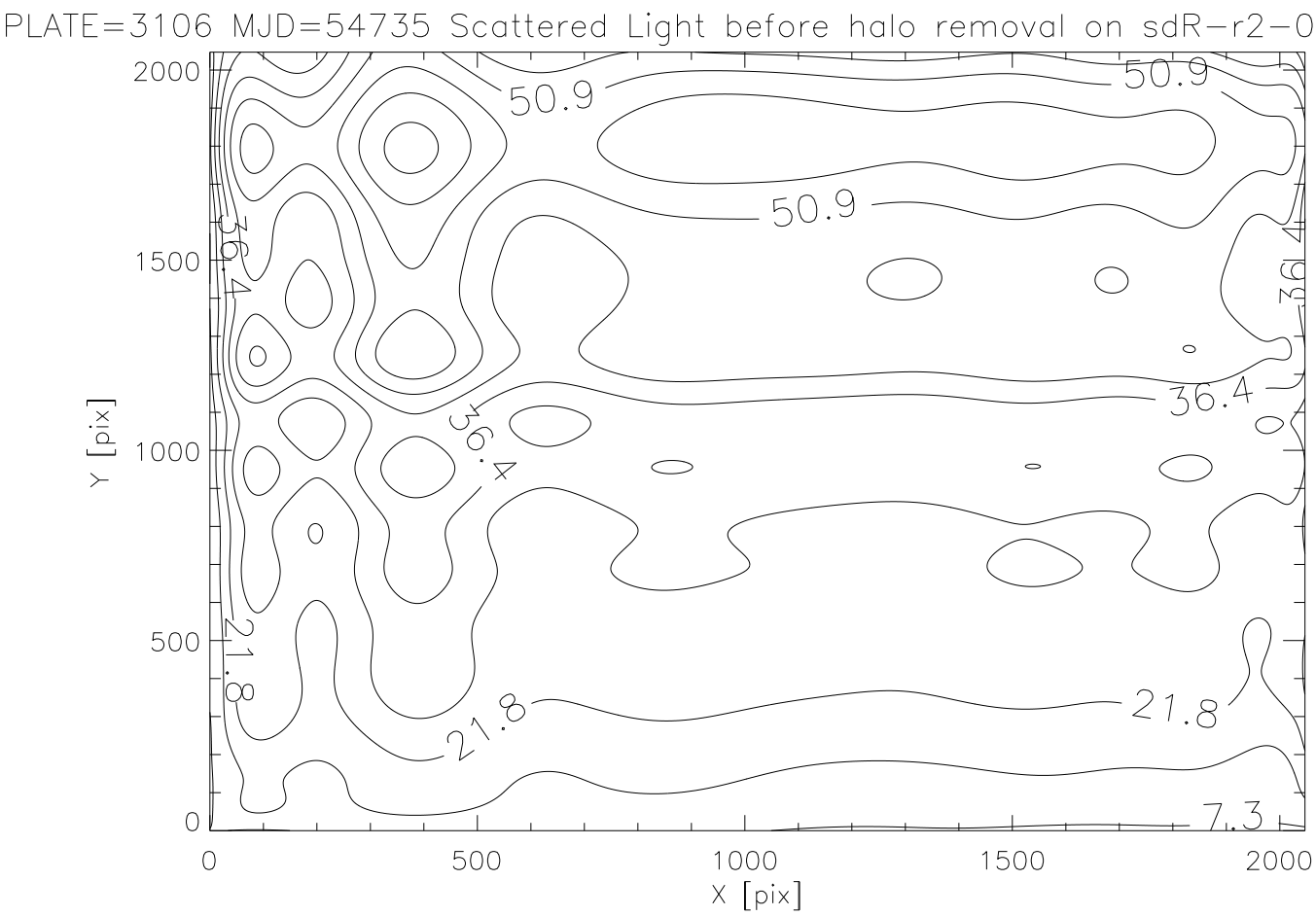

PLATE=3106 MJD=54735 sdR-r2-00054981.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

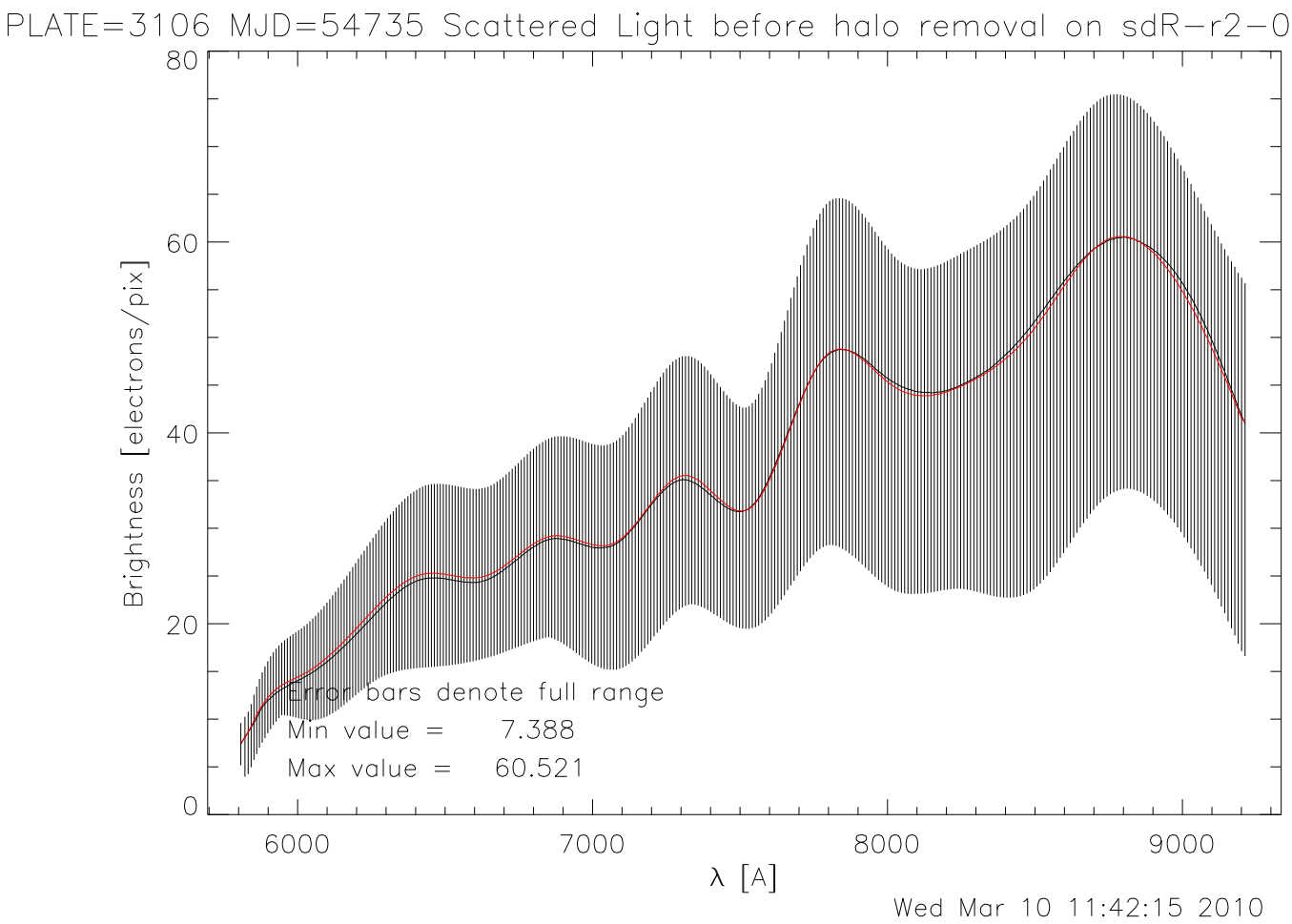

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-r2-00054981.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

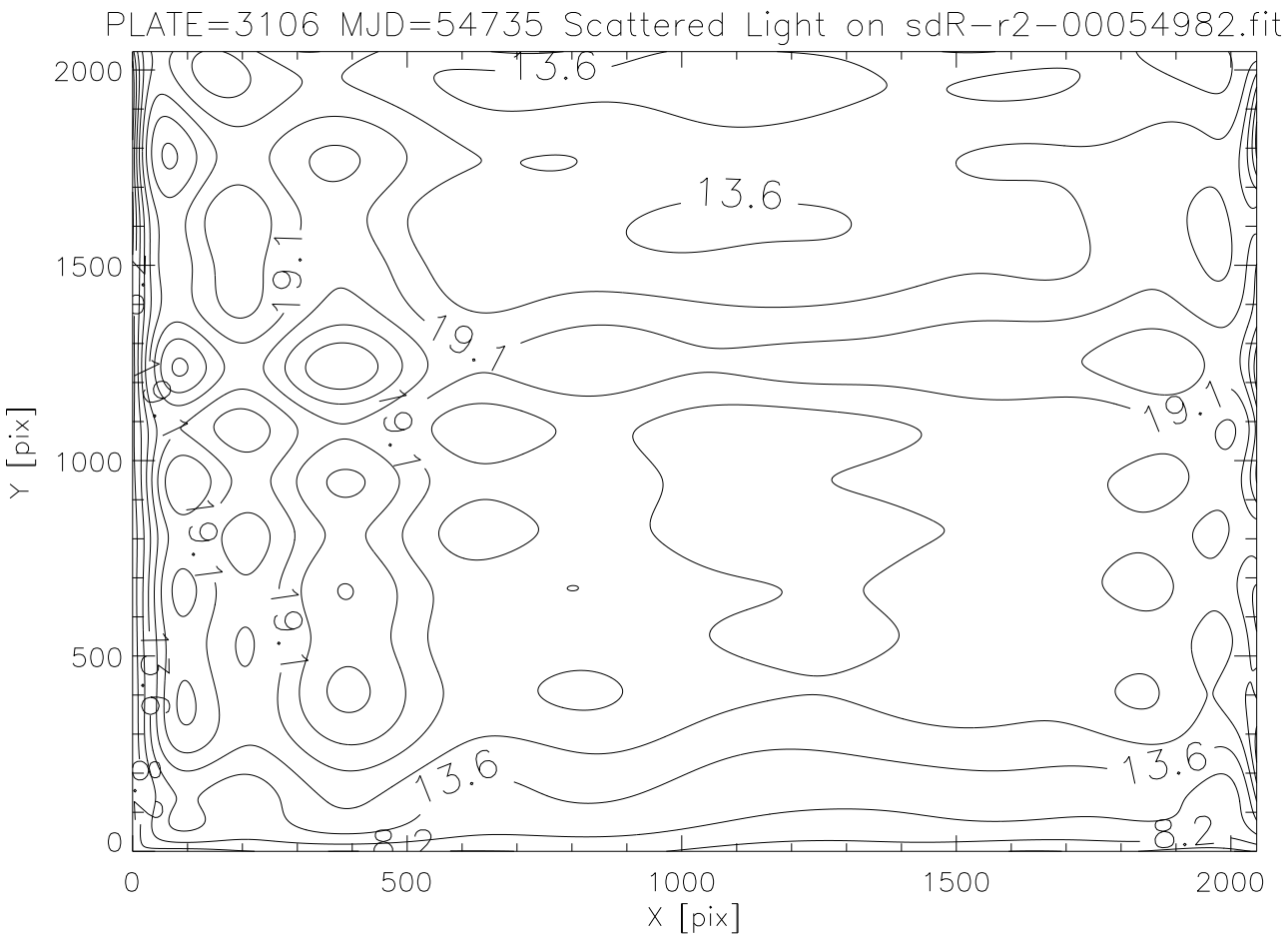

PLATE=3106 MJD=54735 sdR-r2-00054981.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 0.85 %
Flux (7343.0)/Airmass
Fiber number
Focal Distance [mm]
Airmass

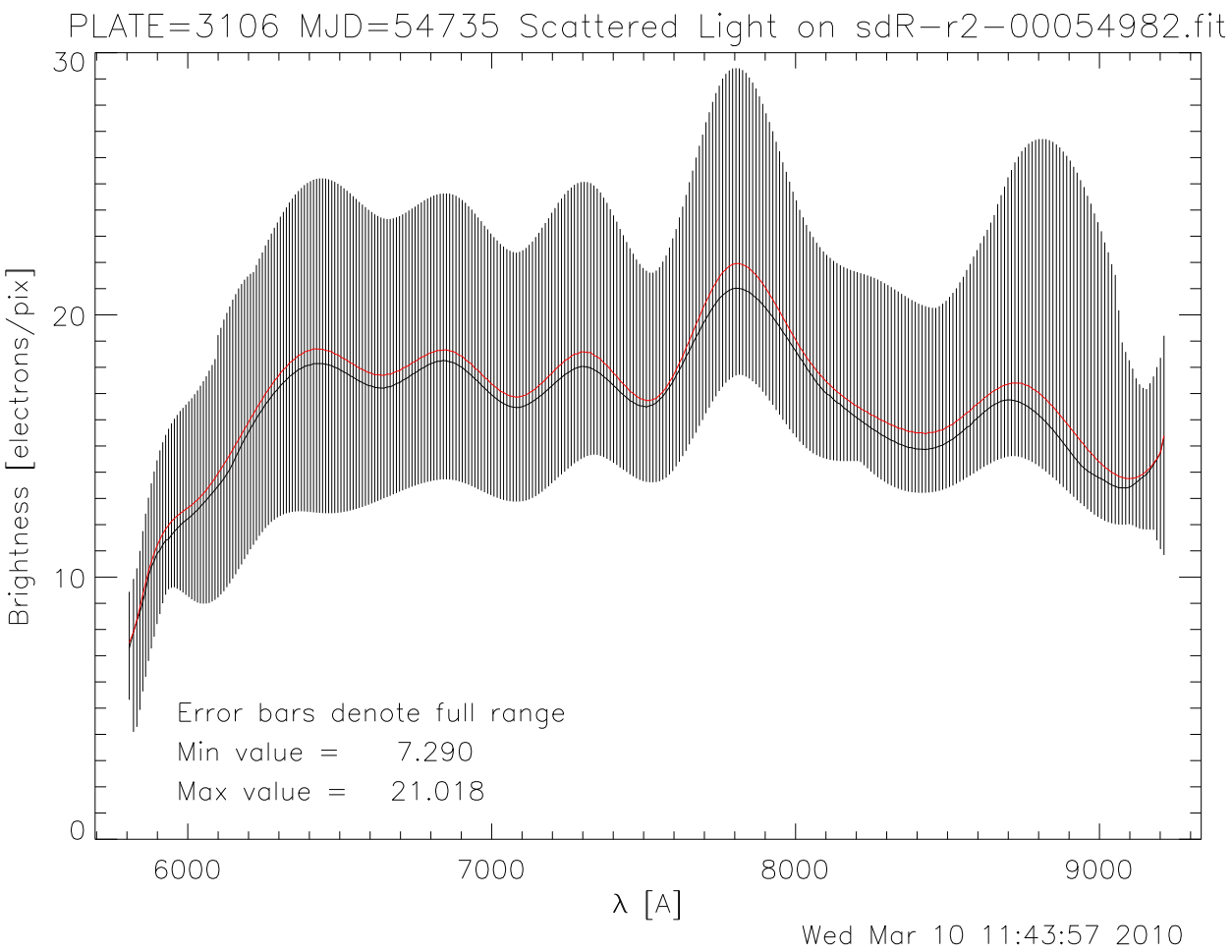

PLATE=3106 MJD=54735 sdR-r2-00054981.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.68 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

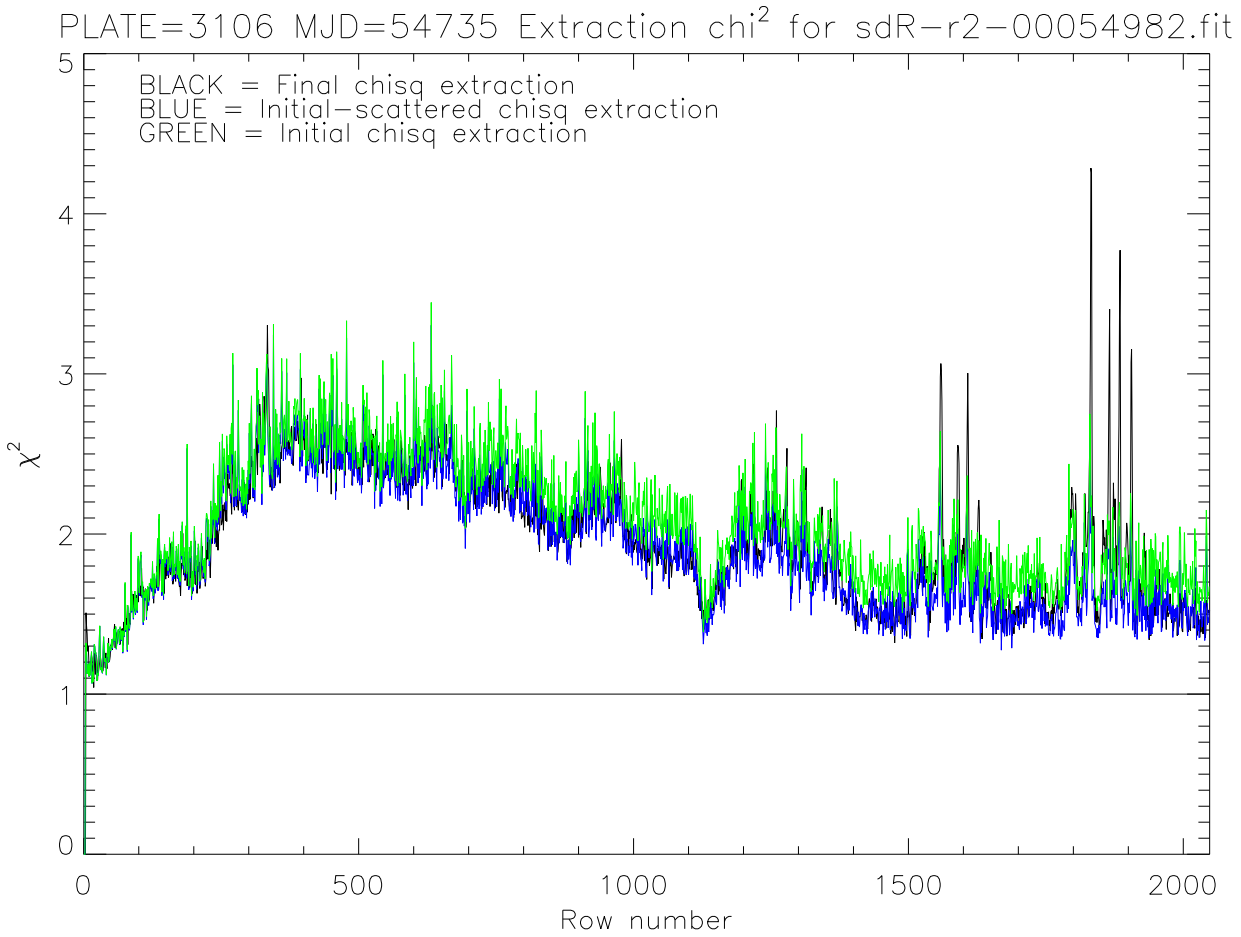

PLATE=3106 MJD=54735 Fiber−Flats for sdR−r2−00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.724
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 11:41:46 2010

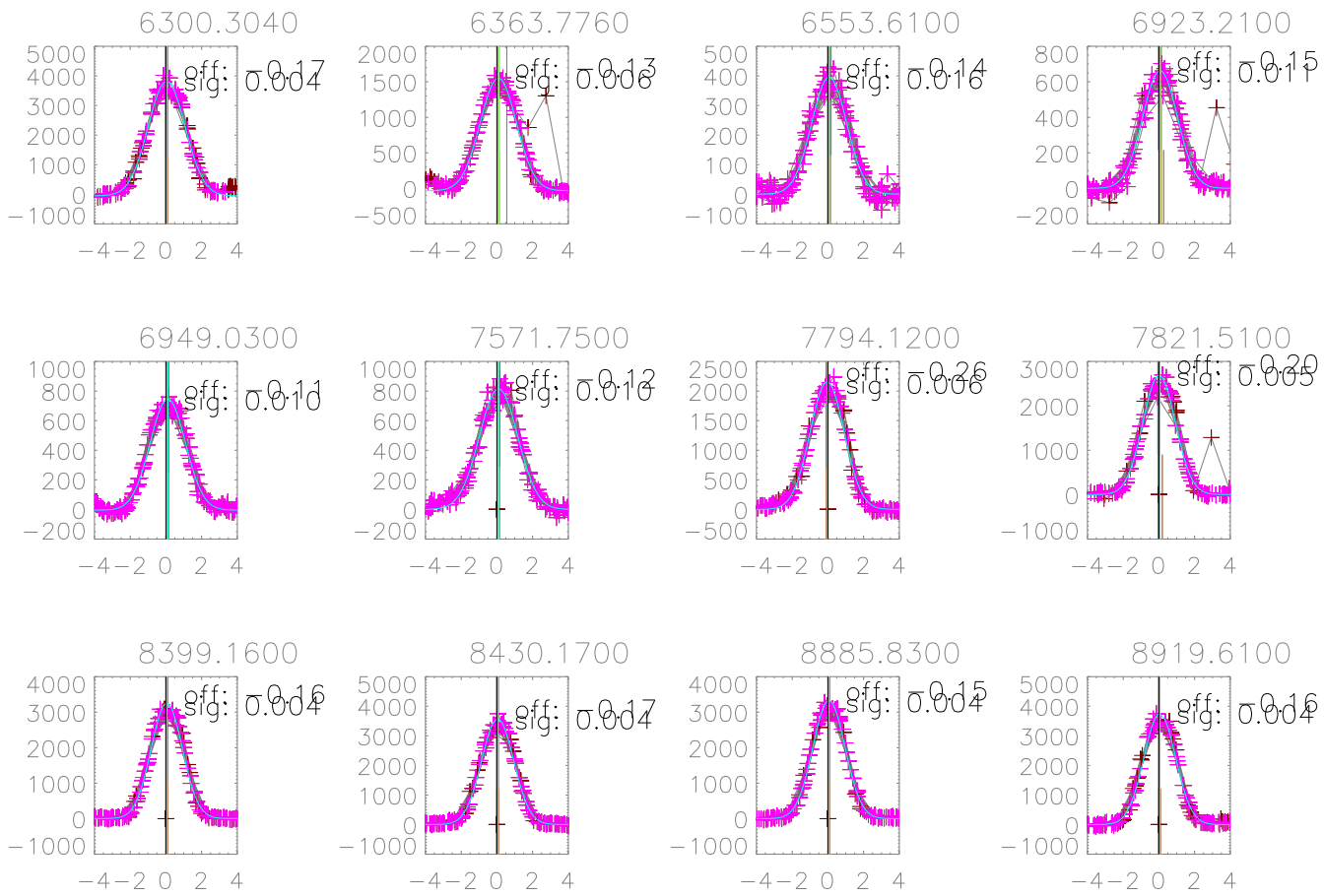

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r2-00054982.fi
50.9
50.9
50.9
36.4
36.4
36.4
36.4
21.8
21.8
21.8
7.3
0
0
0
0
0
Y [pix]
X [pix]
2000
1500
1000
500
0
0
500
1000
1500
2000

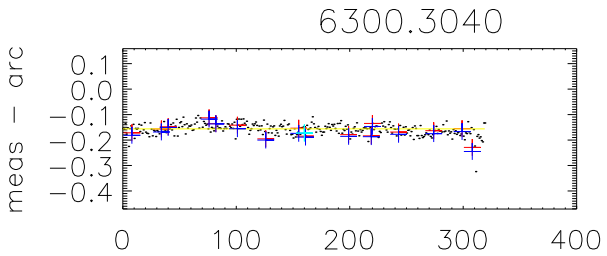

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r2-00054982.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.388
Max value = 60.521
Wed Mar 10 11:42:15 2010

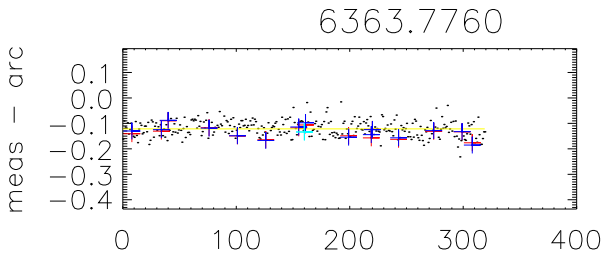

PLATE=3106 MJD=54735 Scattered Light on sdR-r2-00054982.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1
8.2

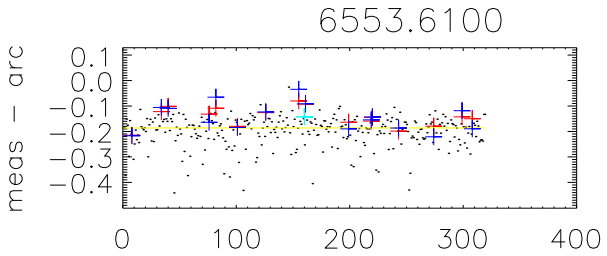

PLATE=3106 MJD=54735 Scattered Light on sdR-r2-00054982.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.290
Max value = 21.018
Wed Mar 10 11:43:57 2010

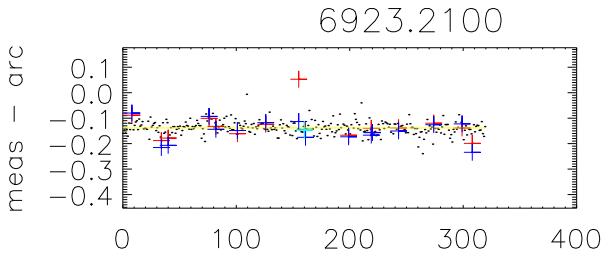

PLATE=3106 MJD=54735 Extraction chi^2 for sdR−r2−00054982.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

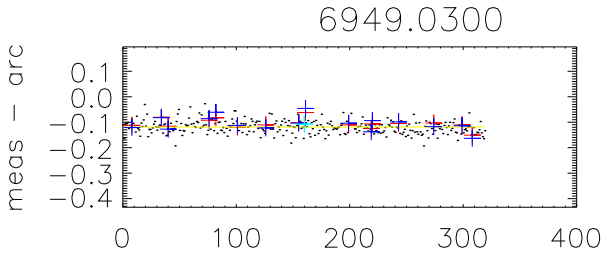

6300.3040
off: -0.17
sig: 0.004
6363.7760
off: -0.13
sig: 0.006
6553.6100
off: -0.14
sig: 0.016
6923.2100
off: -0.15
sig: 0.011
6949.0300
off: -0.11
sig: 0.010
7571.7500
off: -0.12
sig: 0.016
7794.1200
off: -0.26
sig: 0.006
7821.5100
off: -0.20
sig: 0.005
8399.1600
off: -0.16
sig: 0.004
8430.1700
off: -0.17
sig: 0.004
8885.8300
off: -0.15
sig: 0.004
8919.6100
off: -0.16
sig: 0.004

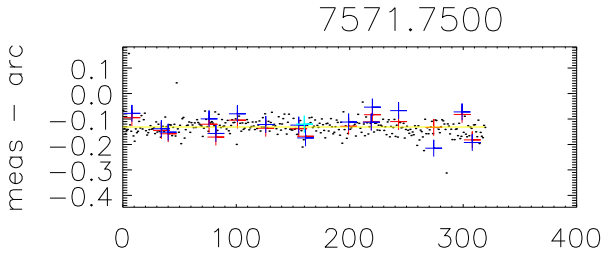

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

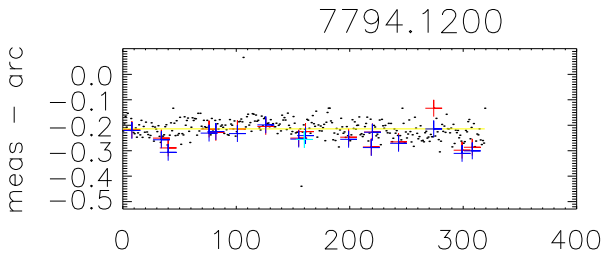

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

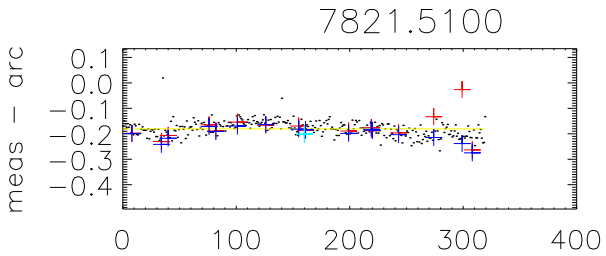

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

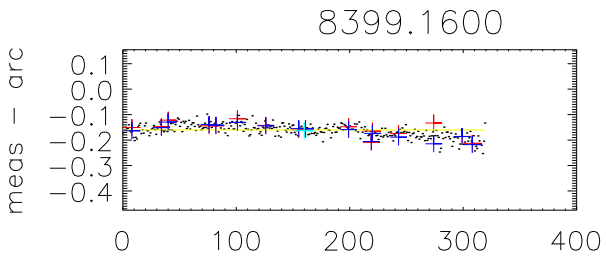

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

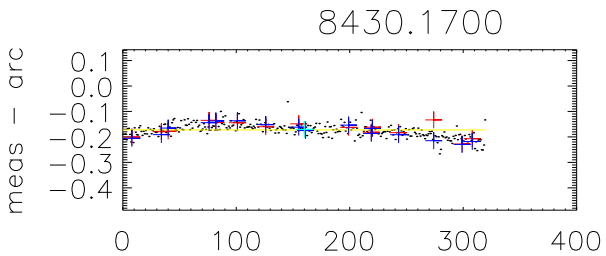

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

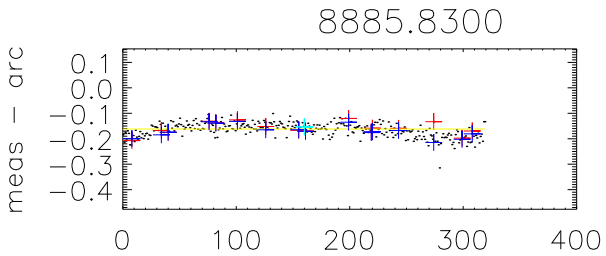

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

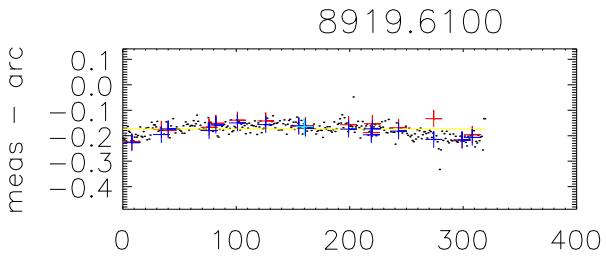

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

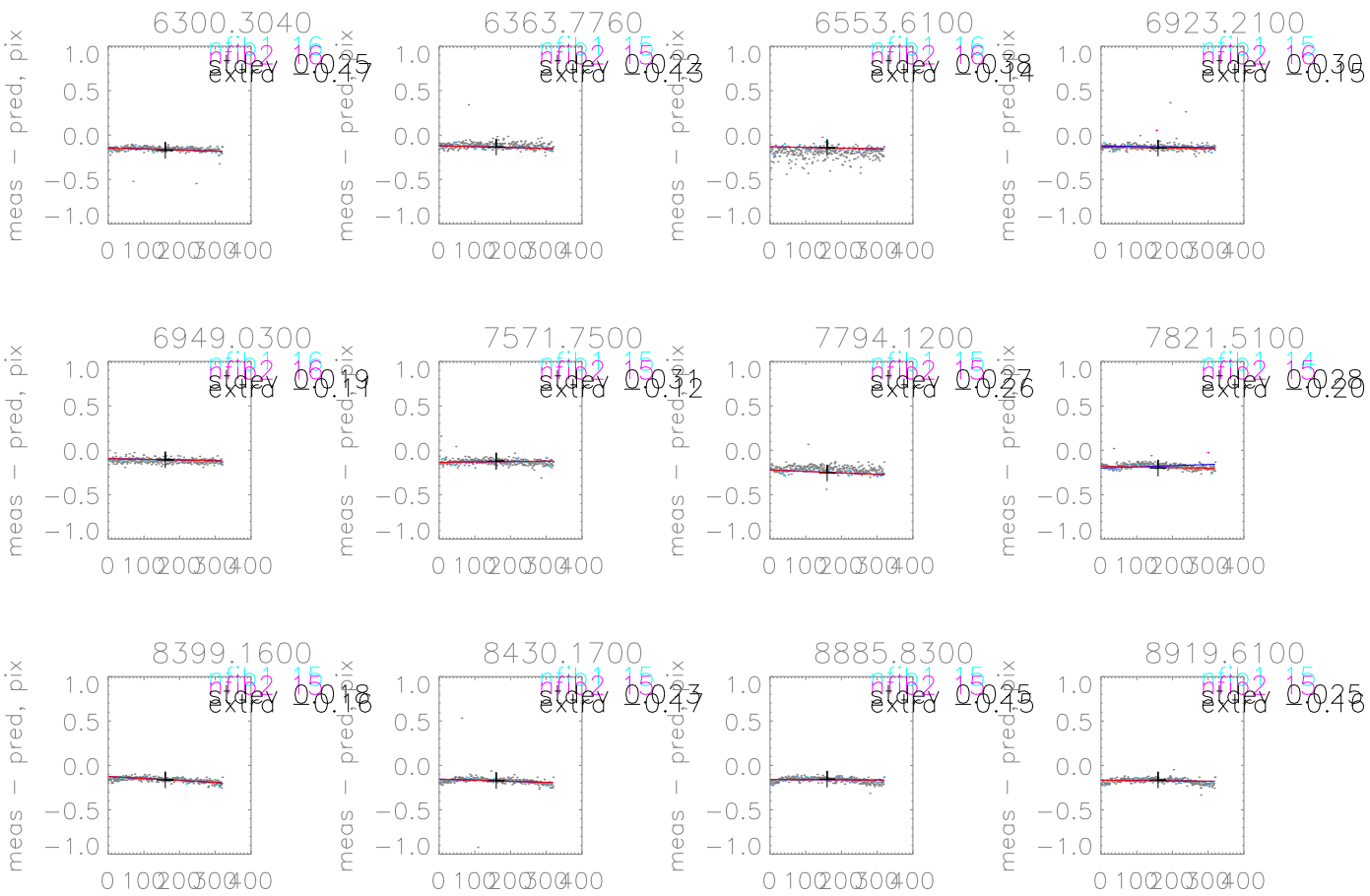

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

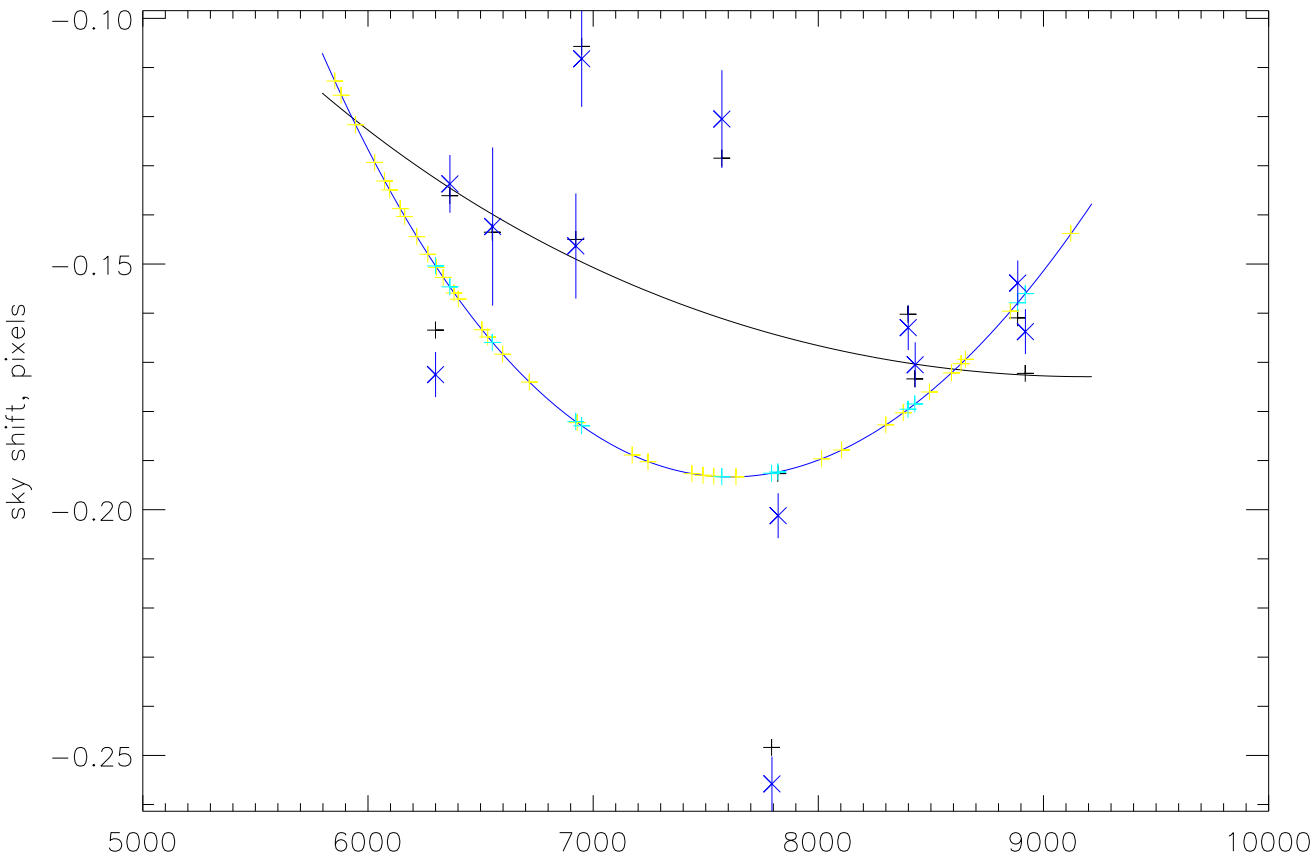

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

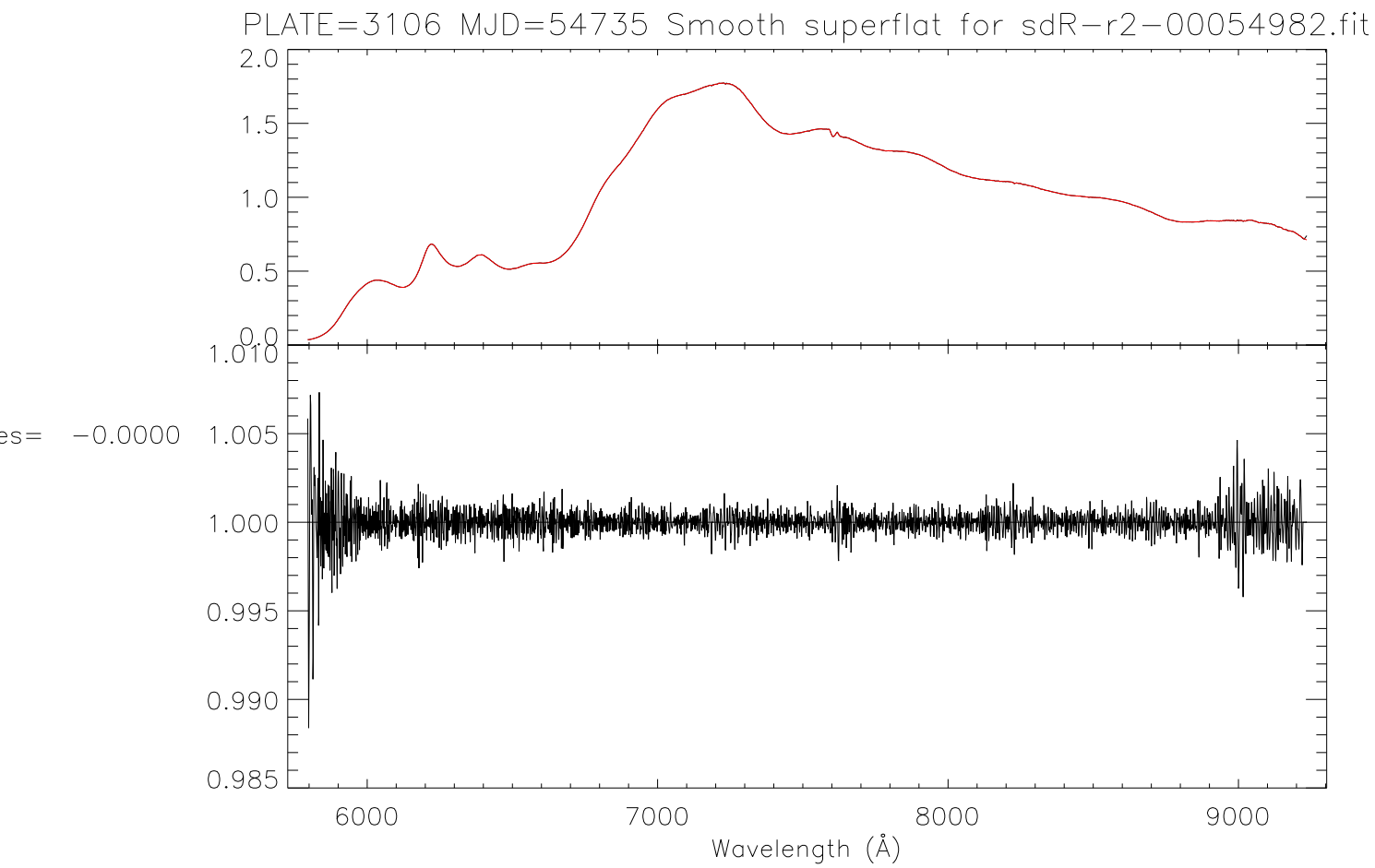

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

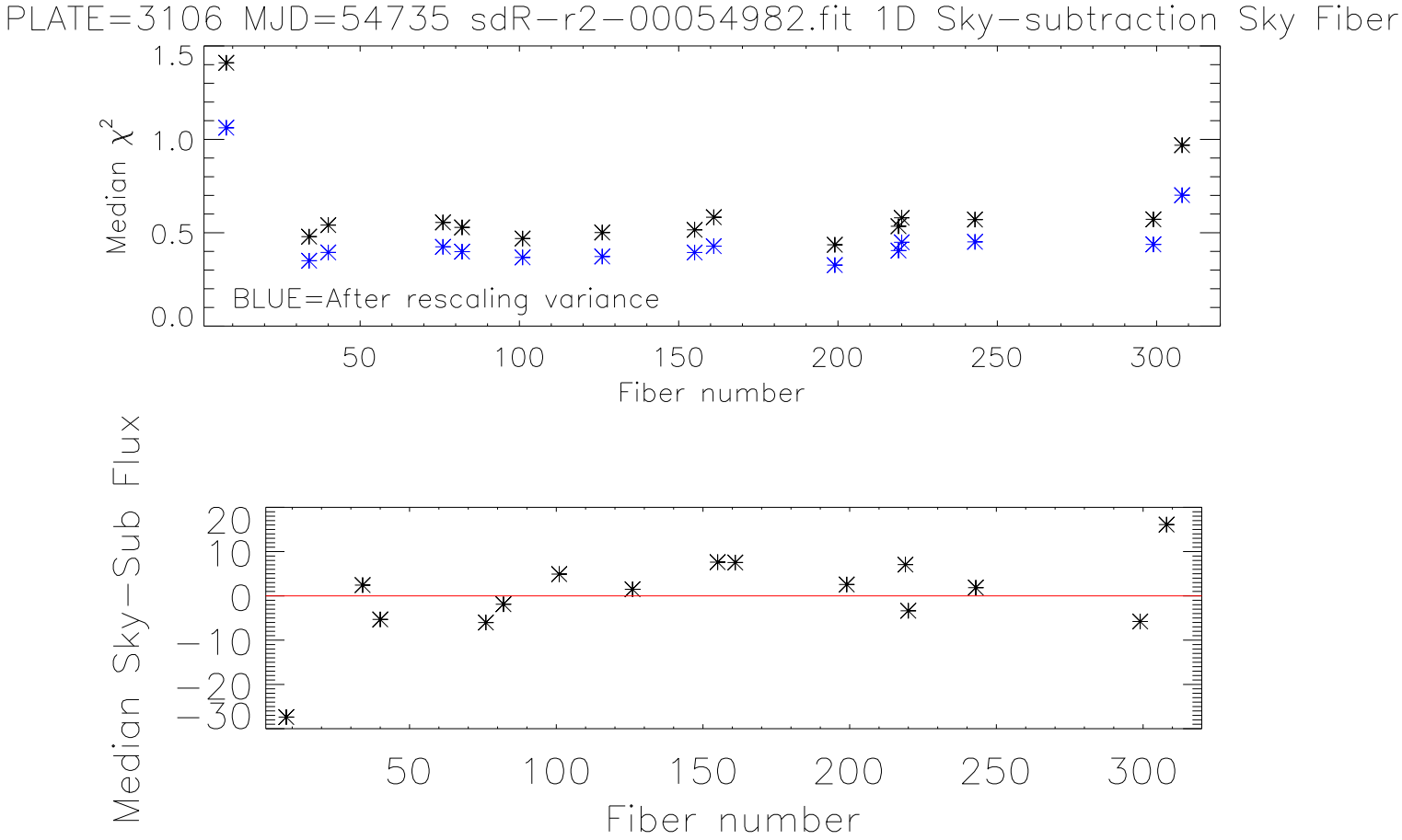

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

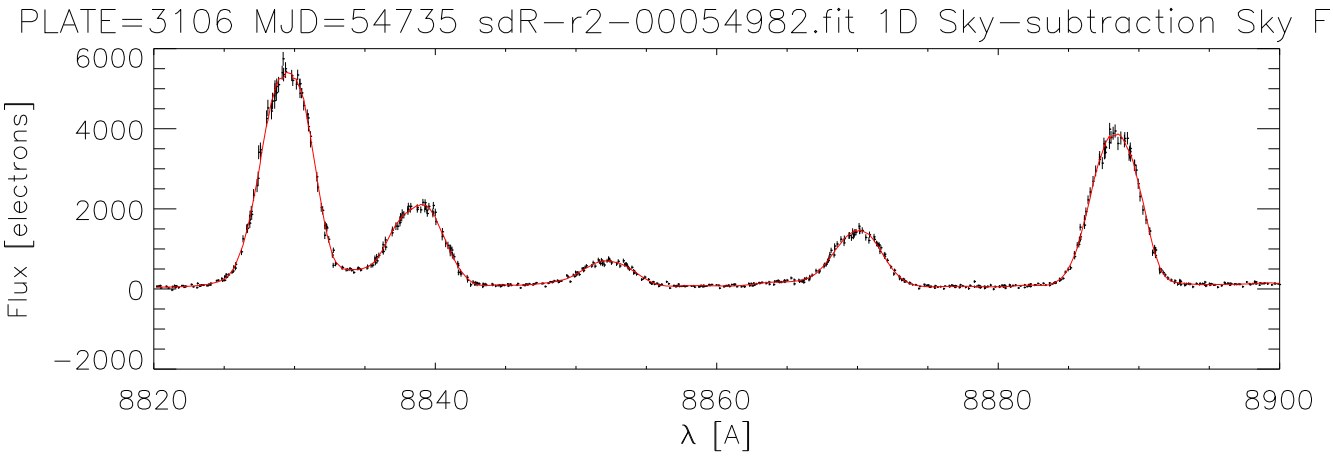

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

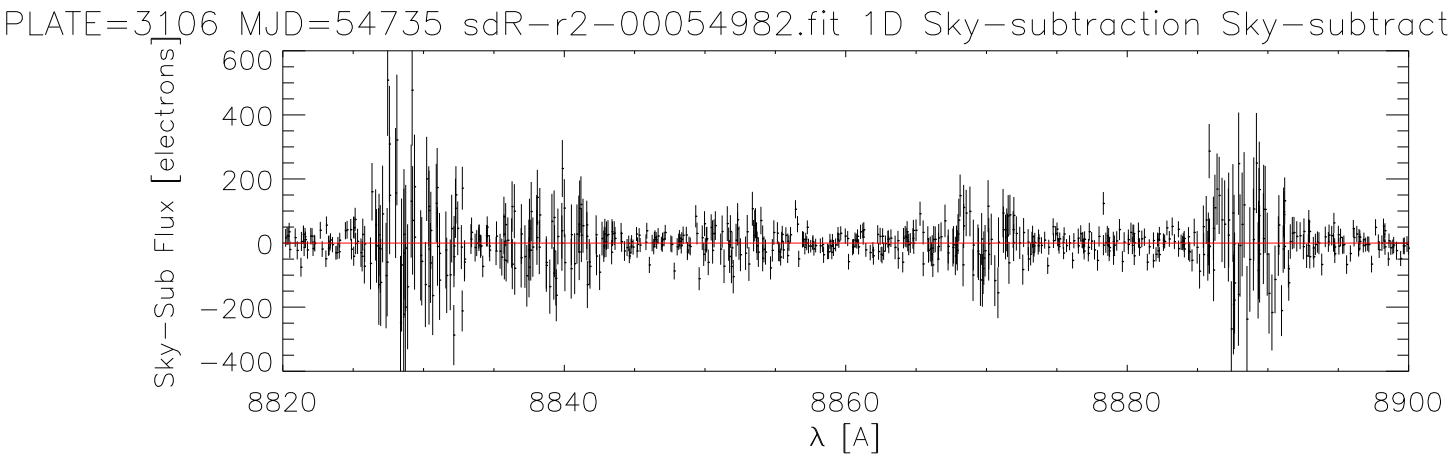

6300.3040
mfhi1 16
mfhi2 16
stdev 0.025
extra 0.47
6363.7760
mfhi1 15
mfhi2 15
stdev 0.022
extra 0.43
6553.6100
mfhi1 16
mfhi2 16
stdev 0.038
extra 0.34
6923.2100
mfhi1 15
mfhi2 15
stdev 0.030
extra 0.15
6949.0300
mfhi1 16
mfhi2 16
stdev 0.019
extra 0.19
7571.7500
mfhi1 15
mfhi2 15
stdev 0.031
extra 0.12
7794.1200
mfhi1 15
mfhi2 15
stdev 0.027
extra 0.26
7821.5100
mfhi1 14
mfhi2 15
stdev 0.028
extra 0.20
8399.1600
mfhi1 15
mfhi2 15
stdev 0.018
extra 0.16
8430.1700
mfhi1 15
mfhi2 15
stdev 0.023
extra 0.47
8885.8300
mfhi1 15
mfhi2 15
stdev 0.025
extra 0.45
8919.6100
mfhi1 15
mfhi2 15
stdev 0.025
extra 0.48
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

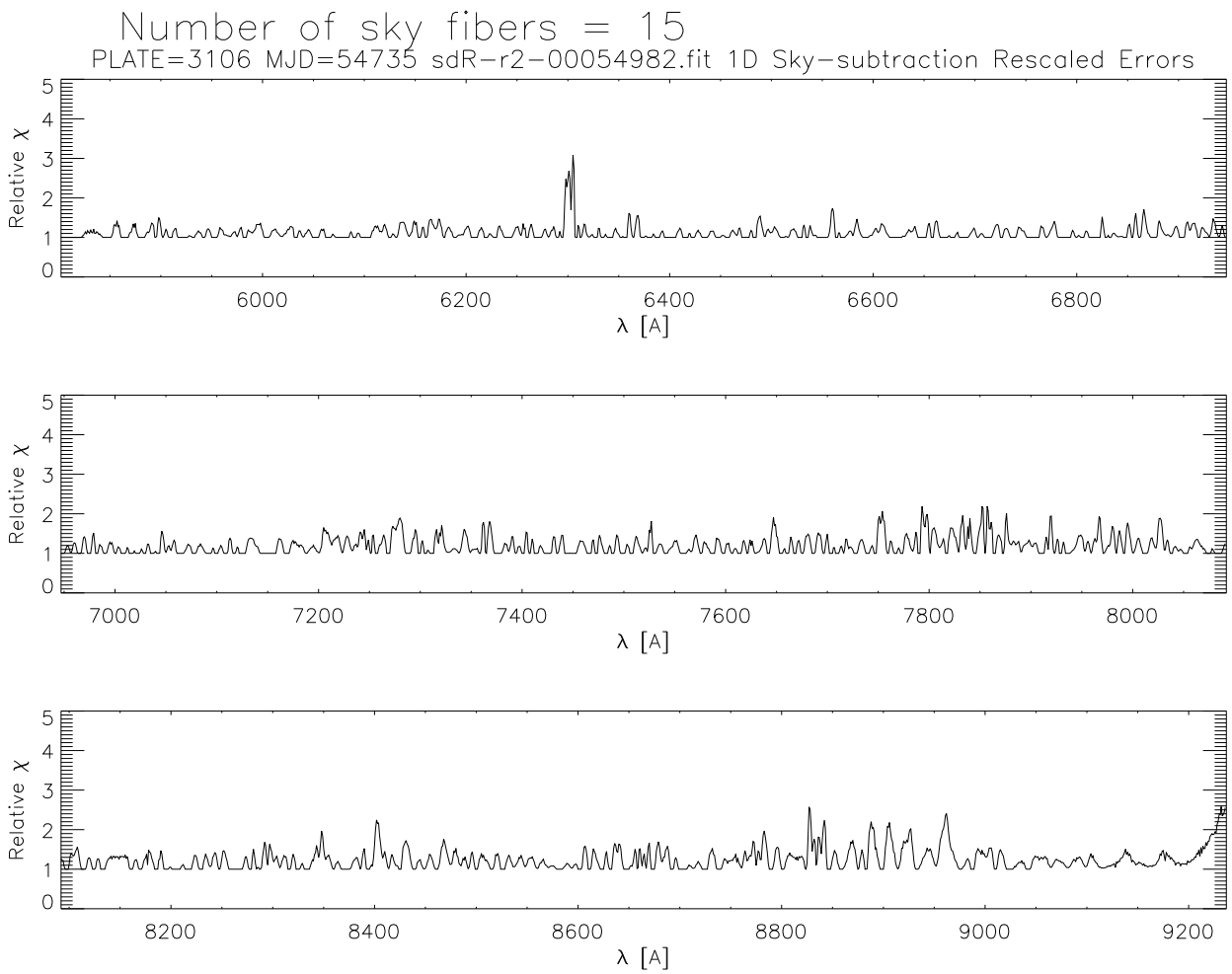

−0.10
−0.15
−0.20
−0.25
sky shift, pixels
5000
6000
7000
8000
9000
10000

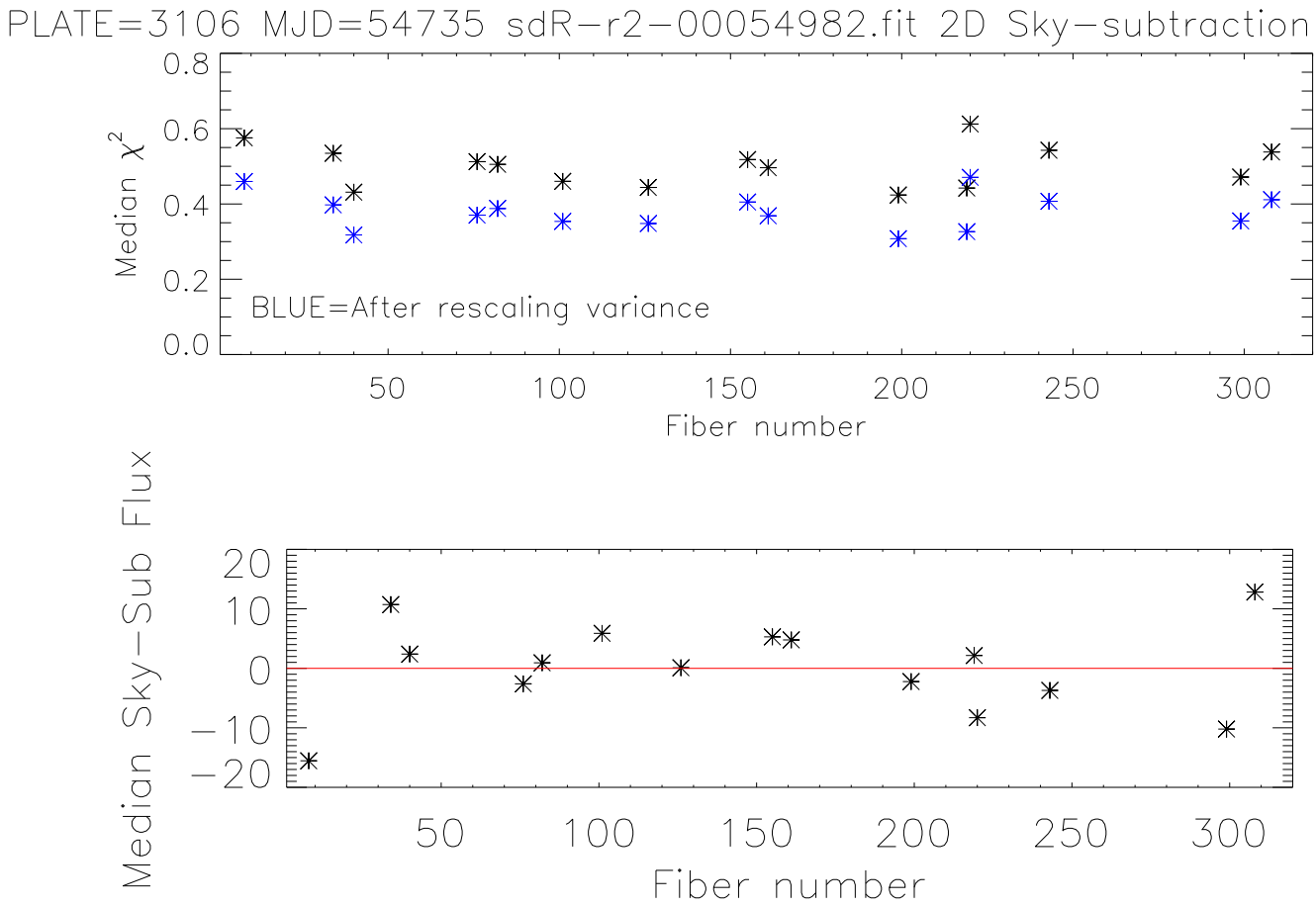

PLATE=3106 MJD=54735 Smooth superflat for sdR-r2-00054982.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

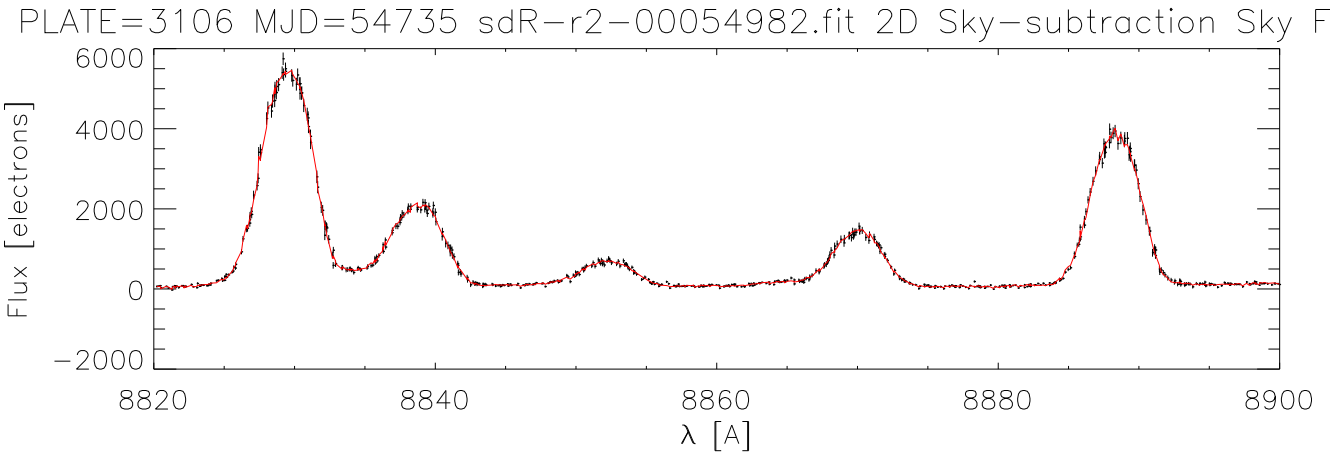

PLATE=3106 MJD=54735 sdR-r2-00054982.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

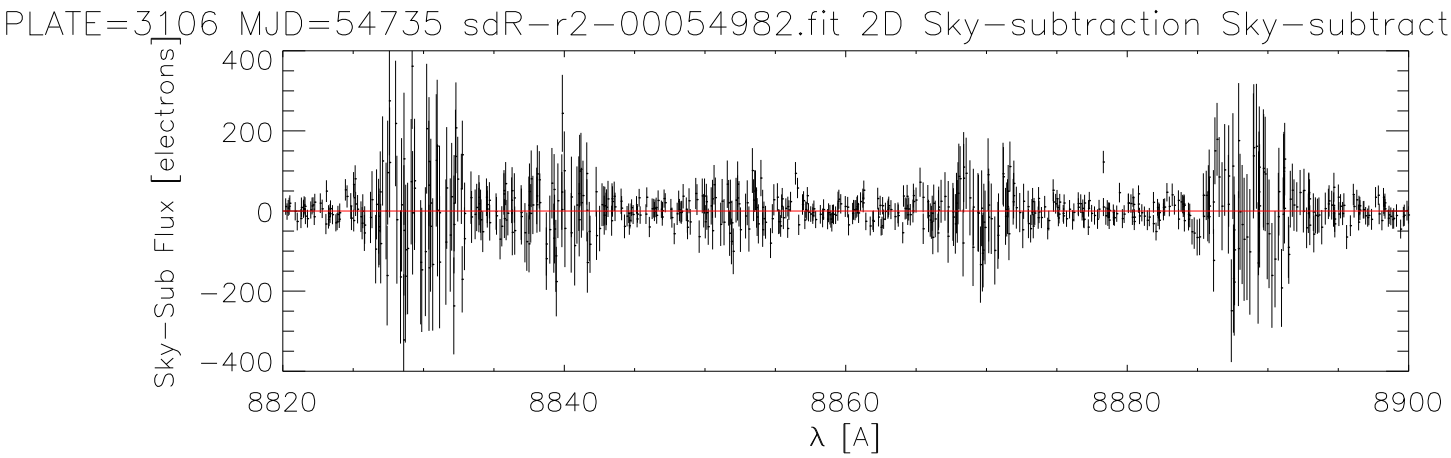

PLATE=3106 MJD=54735 sdR-r2-00054982.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

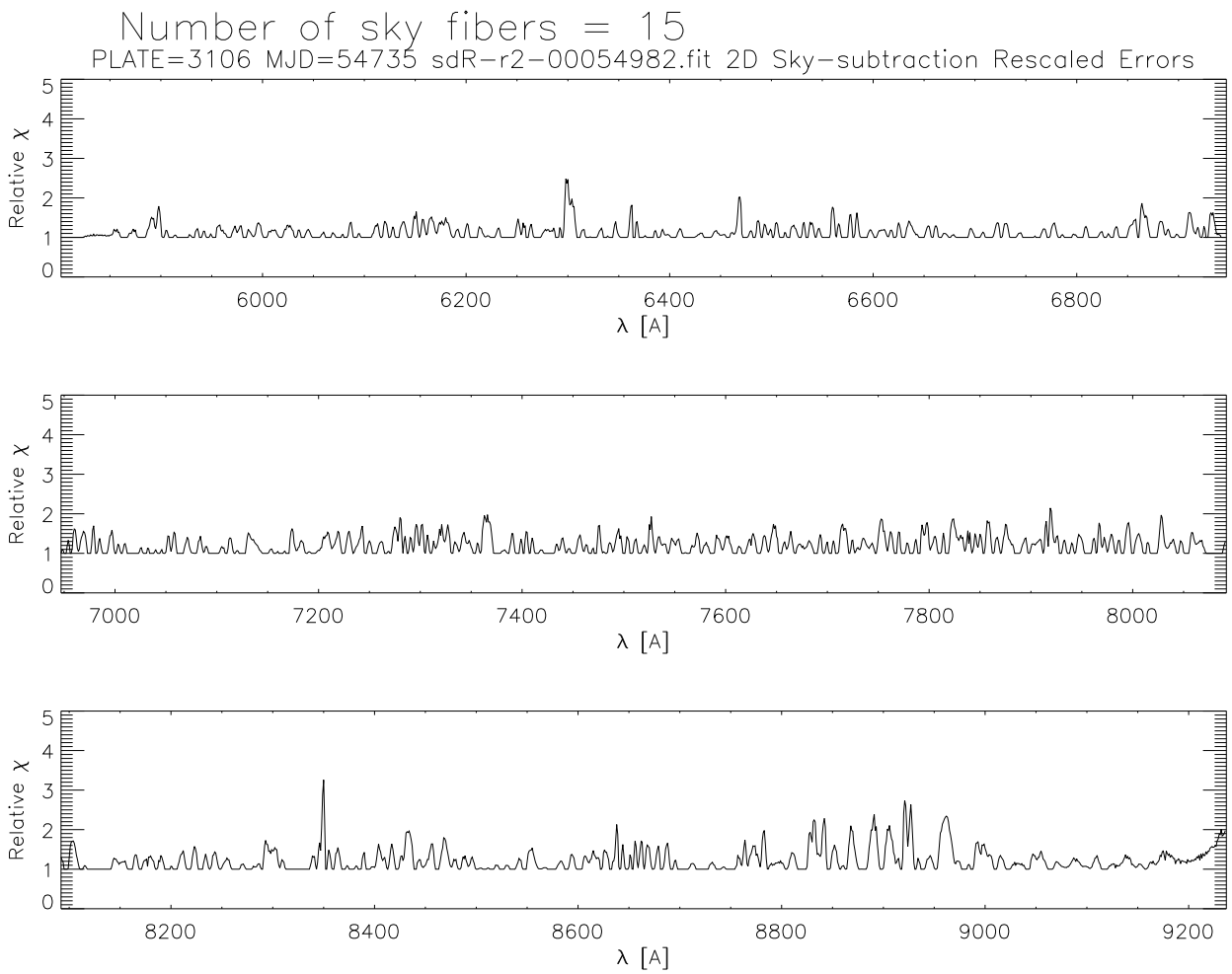

PLATE=3106 MJD=54735 sdR-r2-00054982.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

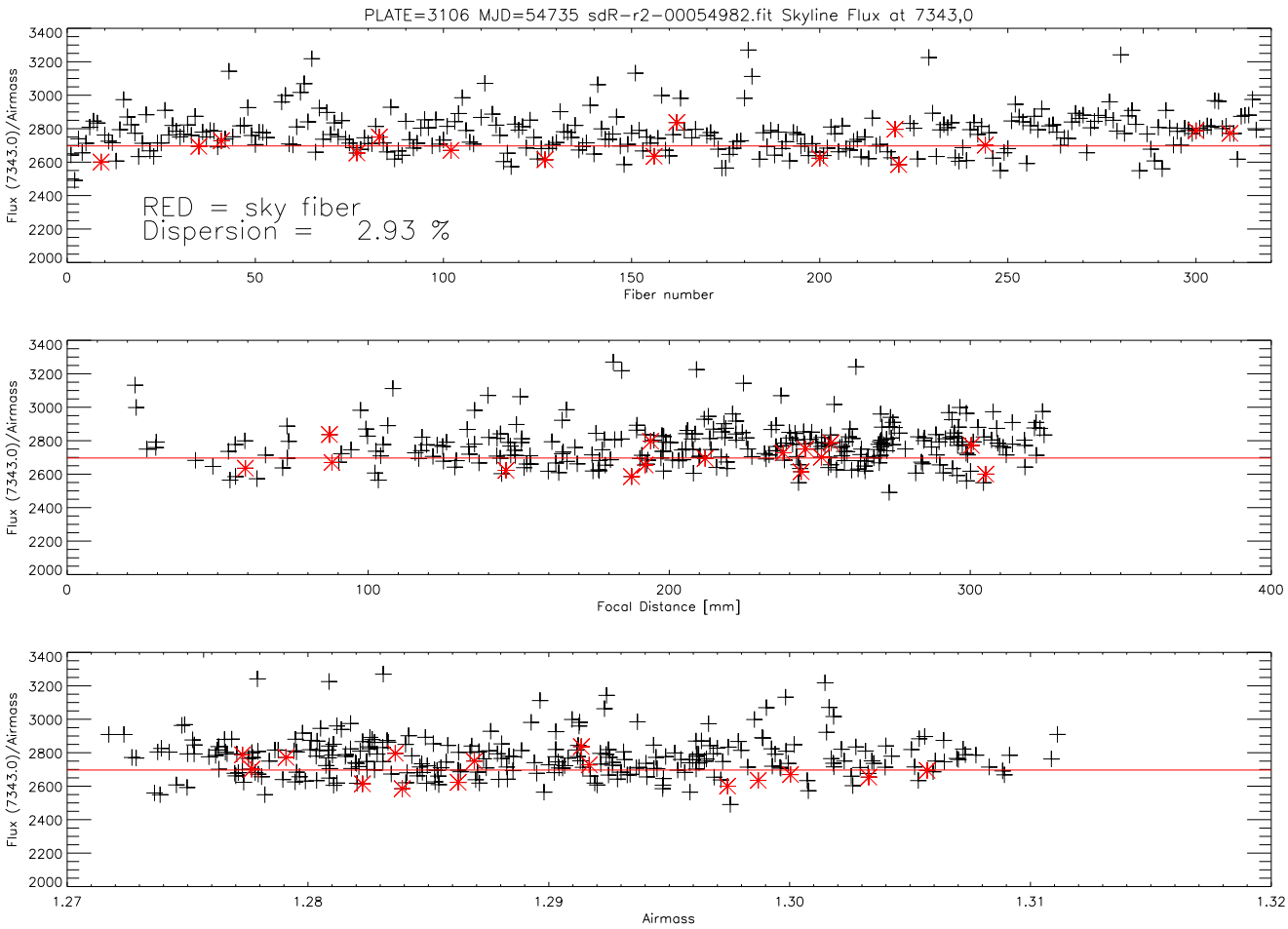

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-r2-00054982.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

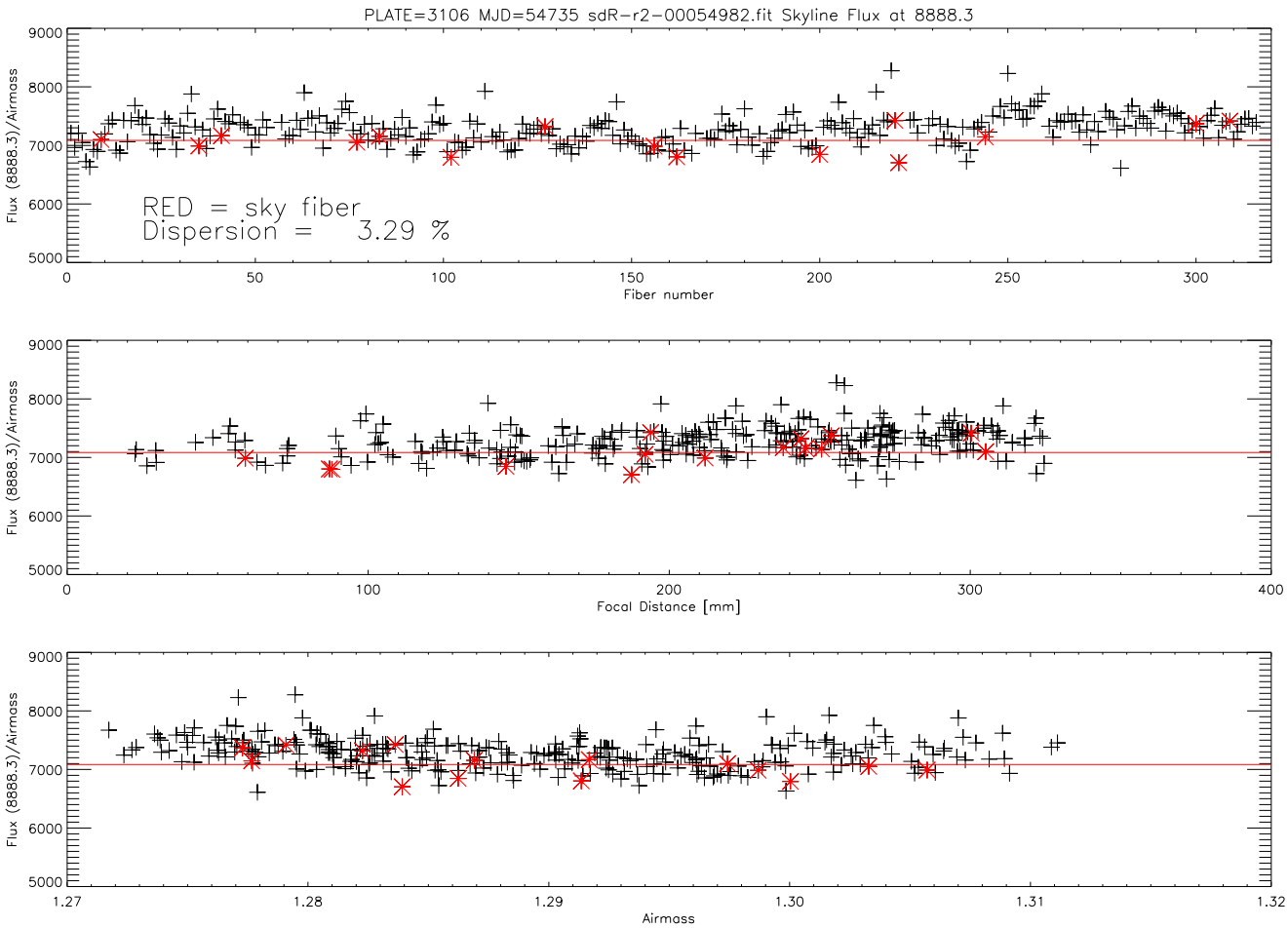

PLATE=3106 MJD=54735 sdR-r2-00054982.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

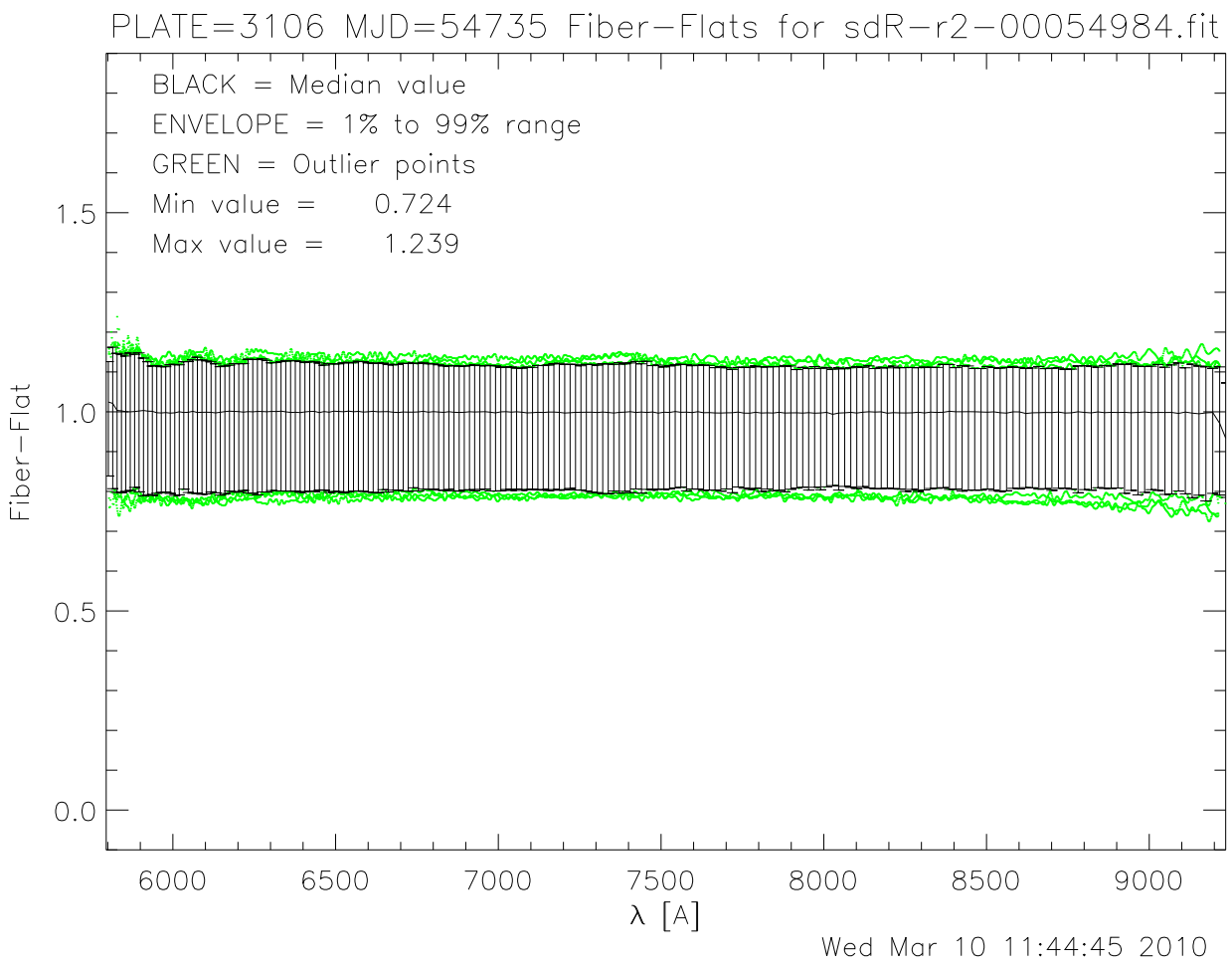

PLATE=3106 MJD=54735 sdR-r2-00054982.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

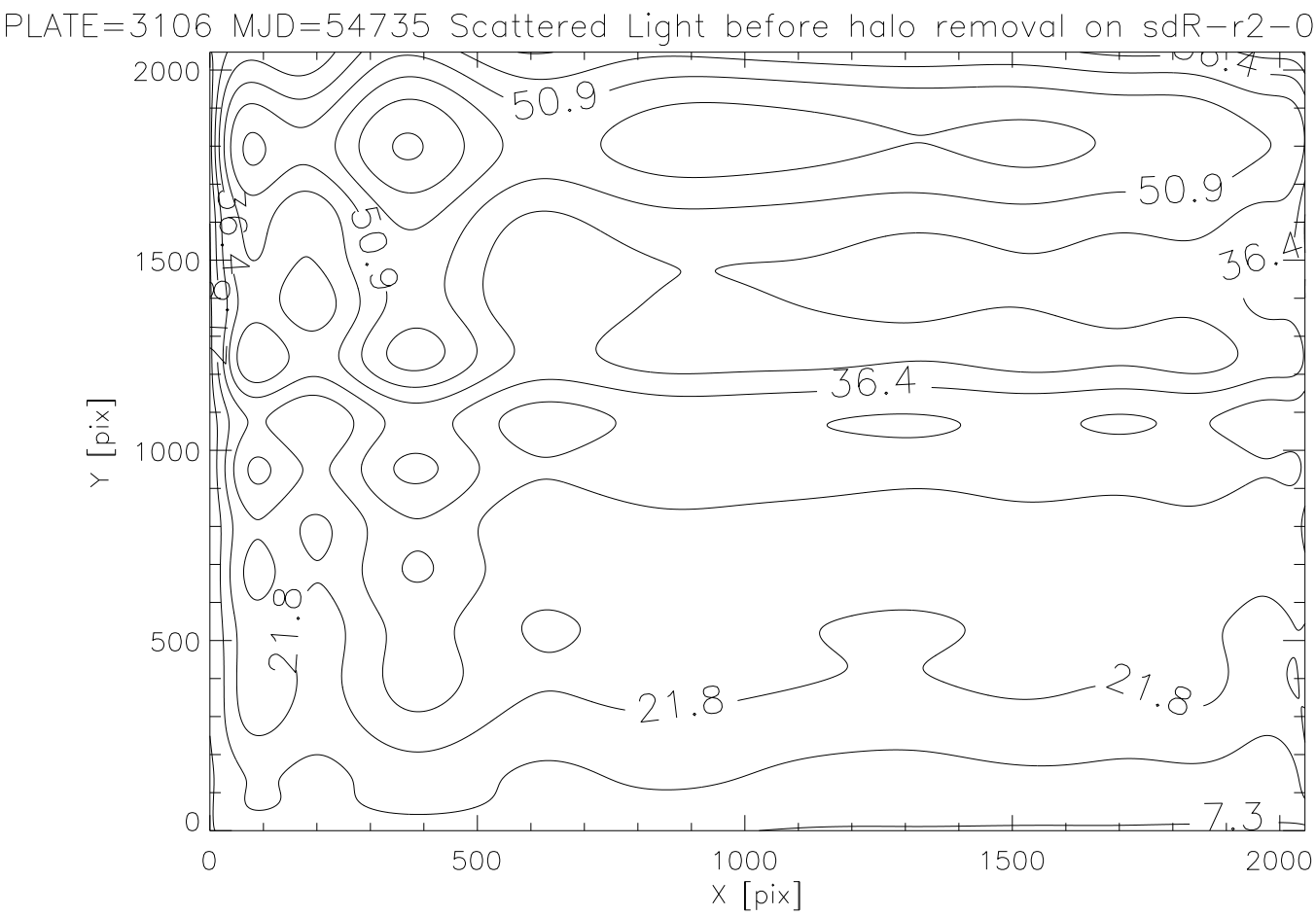

PLATE=3106 MJD=54735 sdR-r2-00054982.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

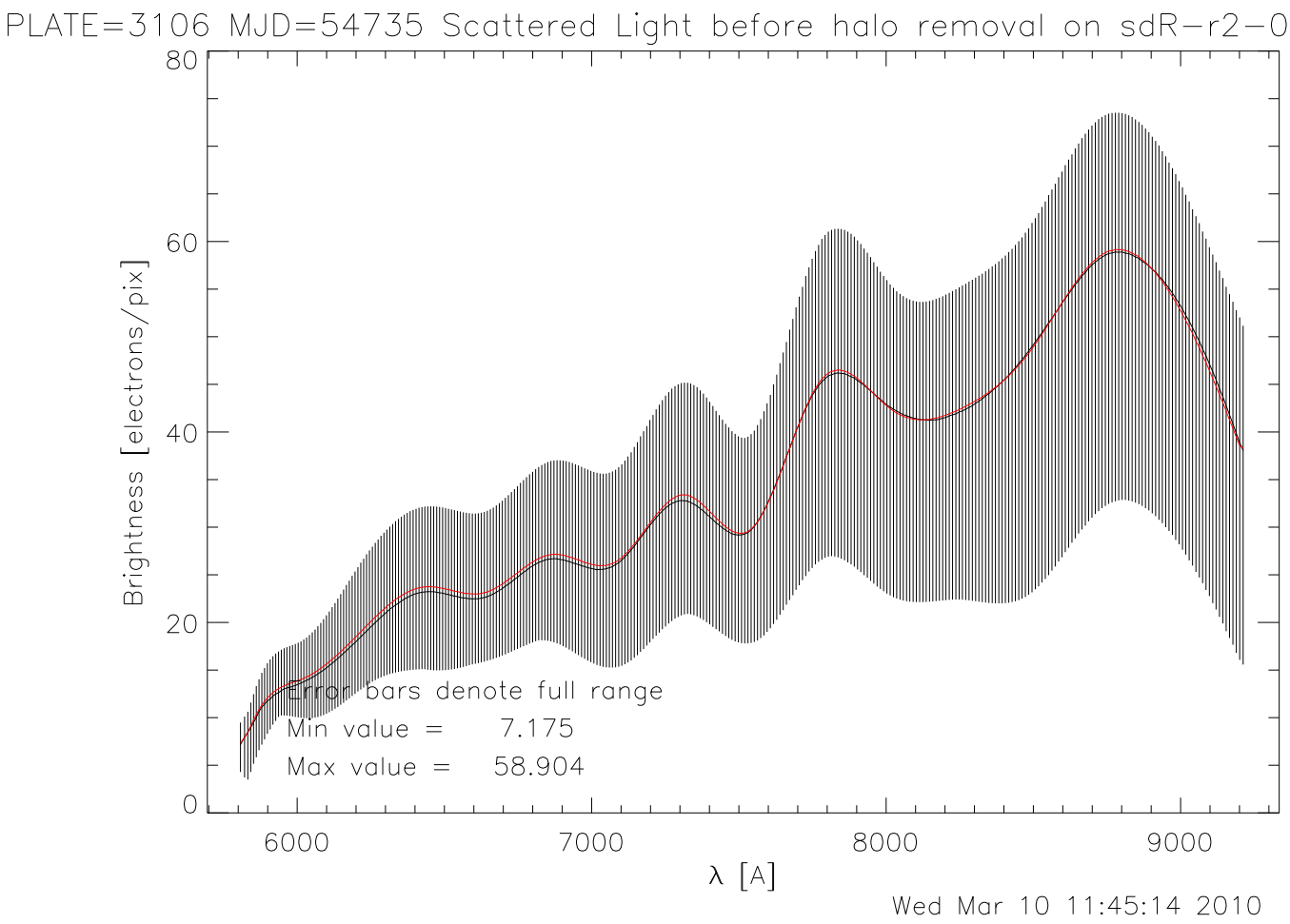

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-r2-00054982.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

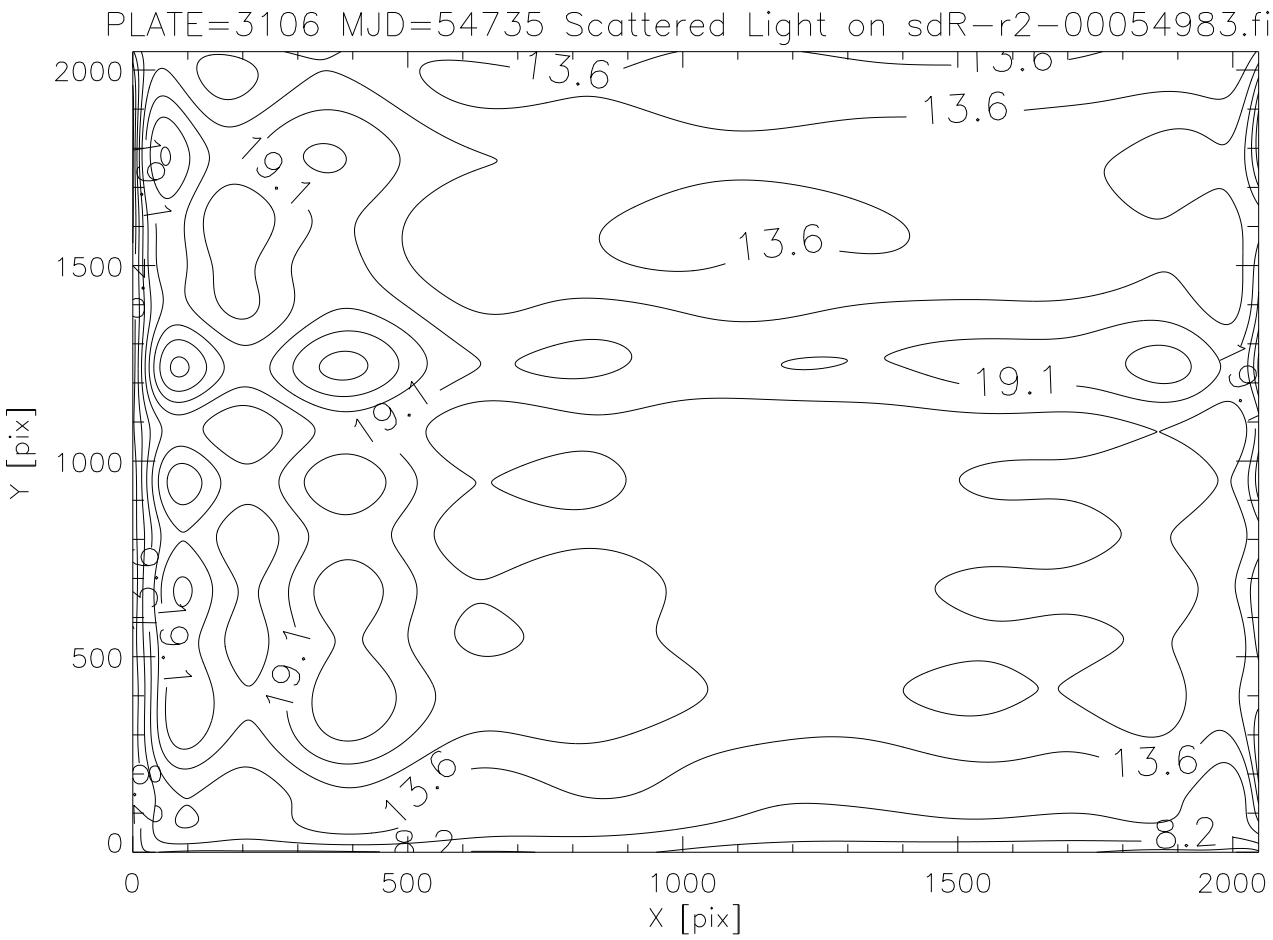

PLATE=3106 MJD=54735 sdR-r2-00054982.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.93 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

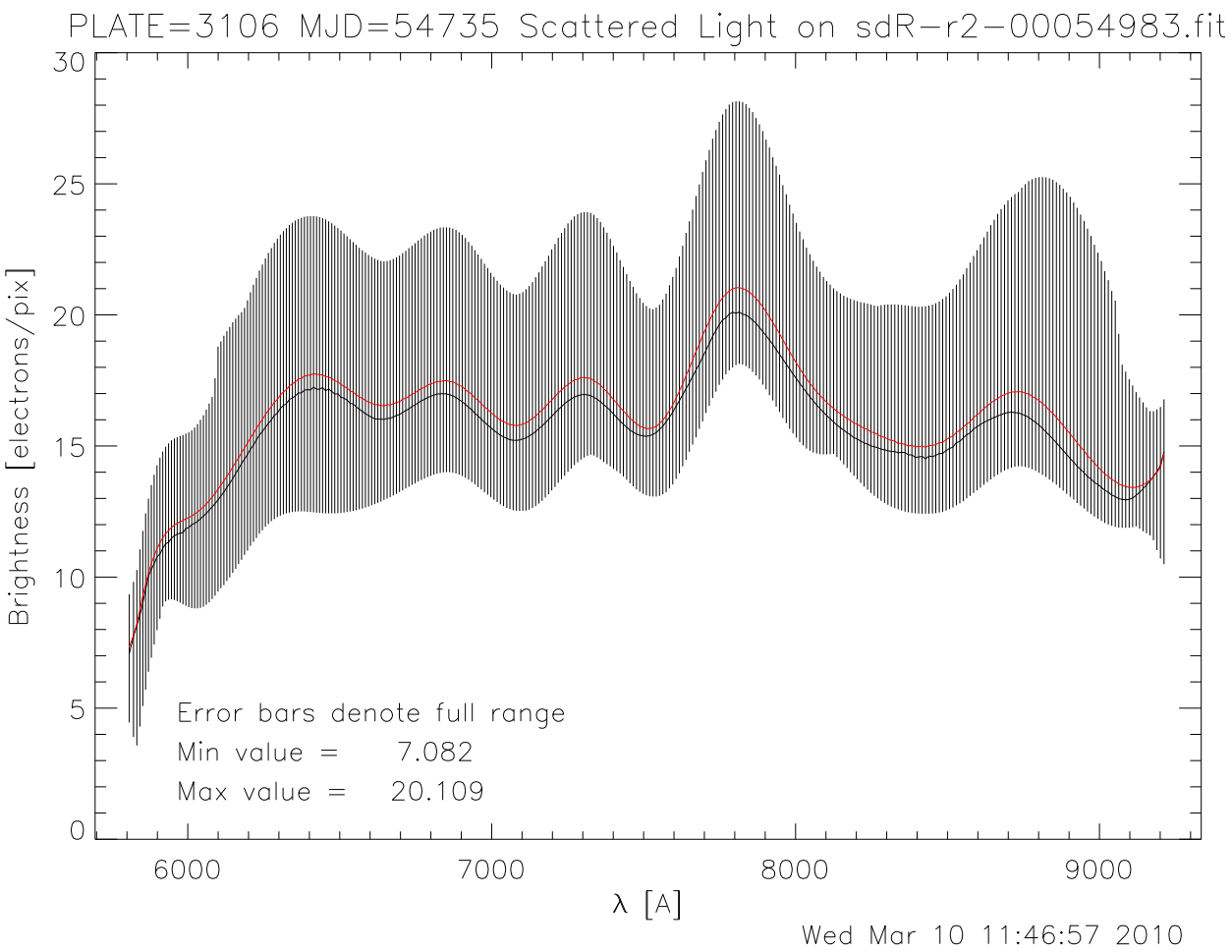

PLATE=3106 MJD=54735 sdR-r2-00054982.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.29 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

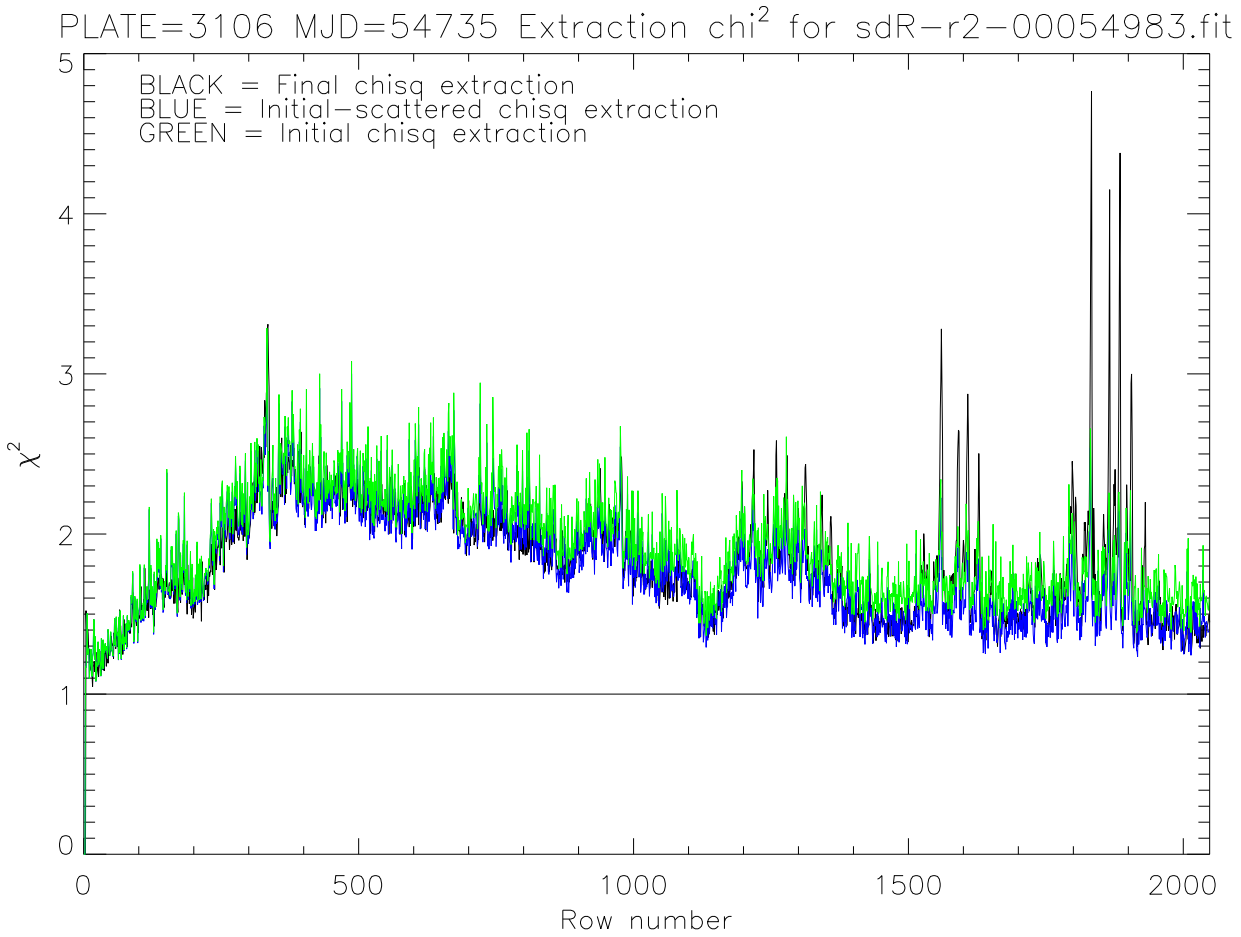

PLATE=3106 MJD=54735 Fiber-Flats for sdR-r2-00054984.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.724
Max value = 1.239
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 11:44:45 2010

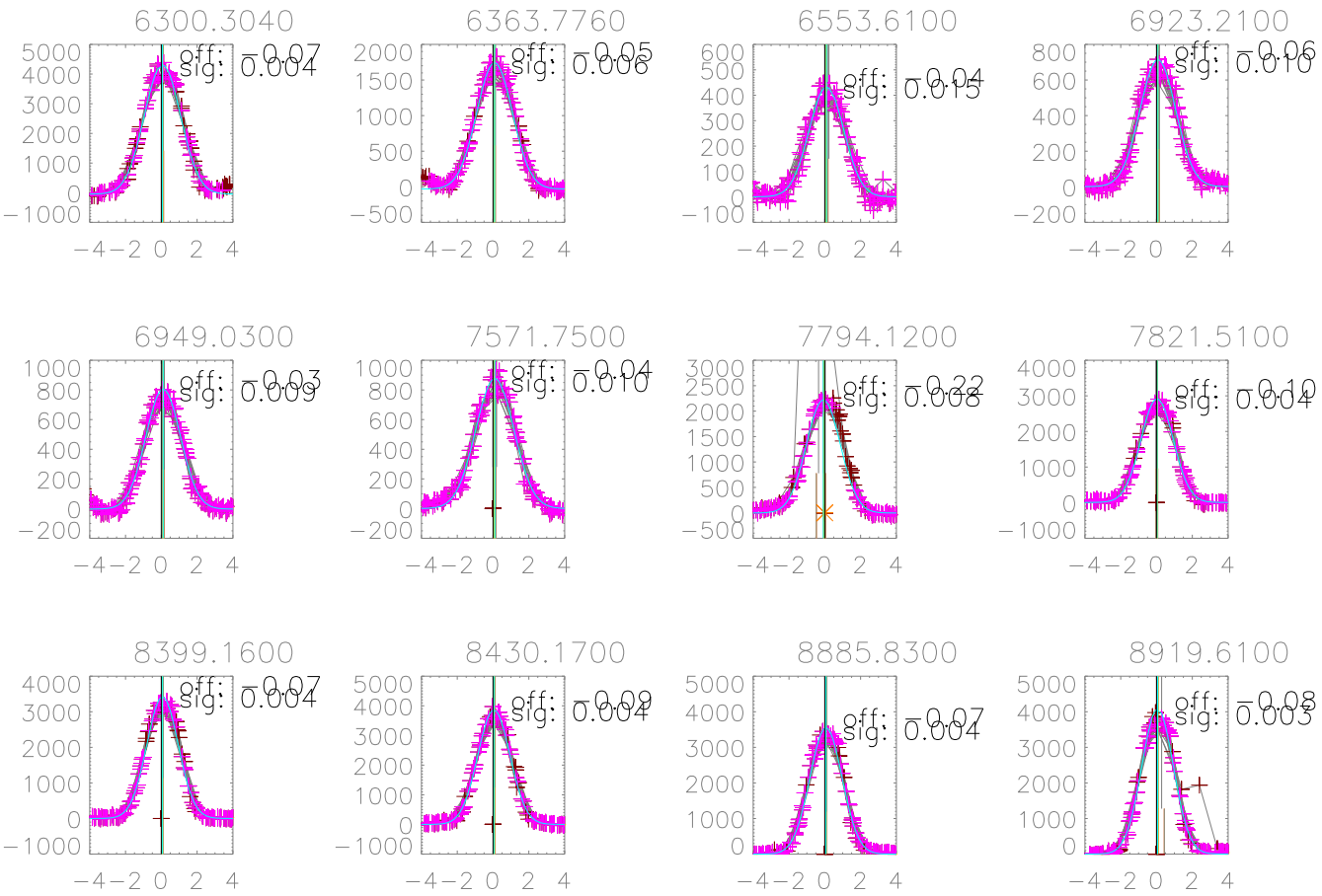

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r2-00054983.fi
50.9
50.9
36.4
36.4
50.6
36.4
21.8
21.8
21.8
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

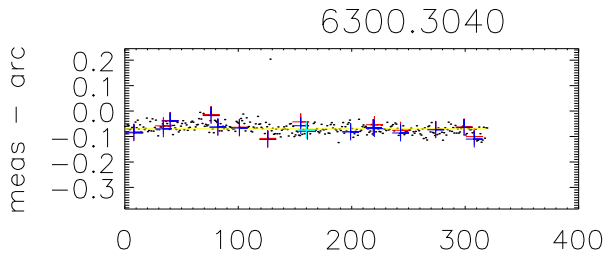

PLATE=3106 MJD=54735 Scattered Light before halo removal on sdR-r2-00054983.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.175
Max value = 58.904
Wed Mar 10 11:45:14 2010

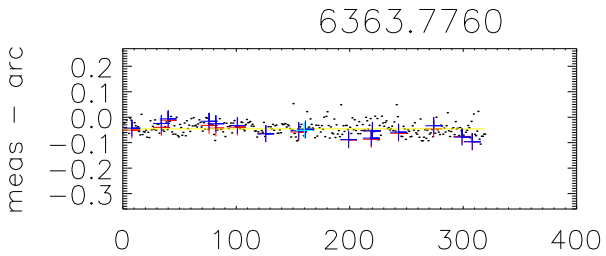

PLATE=3106 MJD=54735 Scattered Light on sdR-r2-00054983.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1
8.2

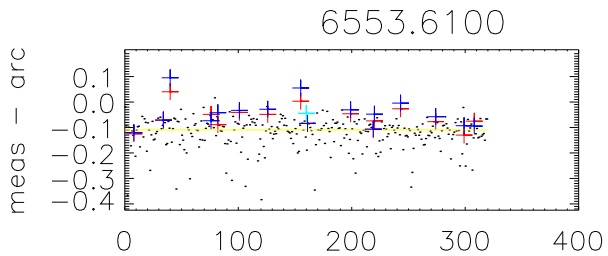

PLATE=3106 MJD=54735 Scattered Light on sdR-r2-00054983.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.082
Max value = 20.109
Wed Mar 10 11:46:57 2010

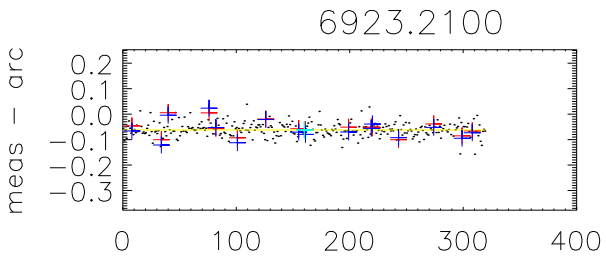

PLATE=3106 MJD=54735 Extraction chi^2 for sdR−r2−00054983.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

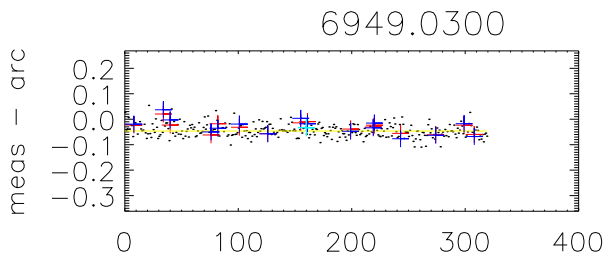

6300.3040
off: −0.07
sig: 0.004
6363.7760
off: −0.05
sig: 0.006
6553.6100
off: −0.04
sig: 0.015
6923.2100
off: −0.06
sig: 0.010
6949.0300
off: −0.03
sig: 0.009
7571.7500
off: −0.04
sig: 0.010
7794.1200
off: −0.22
sig: 0.008
7821.5100
off: −0.10
sig: 0.004
8399.1600
off: −0.07
sig: 0.004
8430.1700
off: −0.09
sig: 0.004
8885.8300
off: −0.07
sig: 0.004
8919.6100
off: −0.08
sig: 0.003

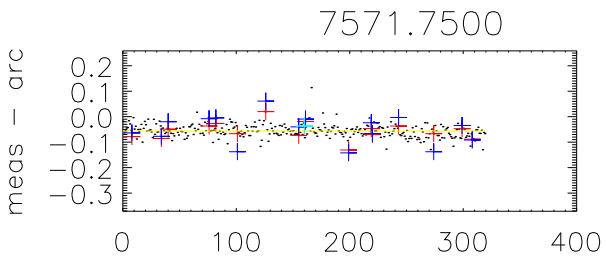

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

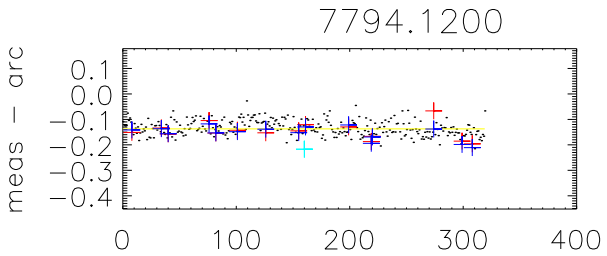

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

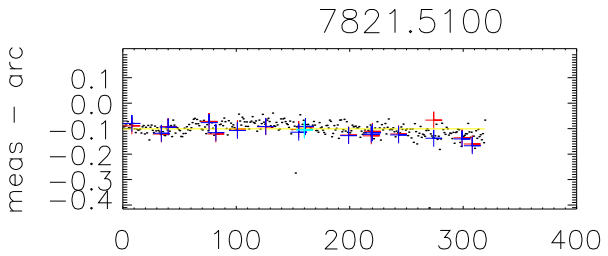

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

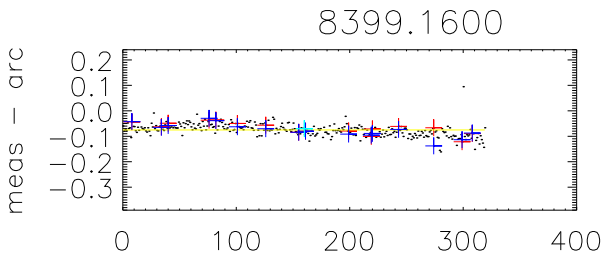

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

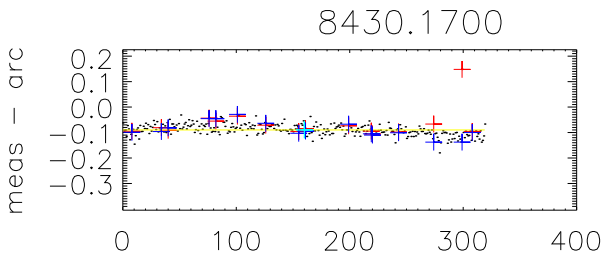

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

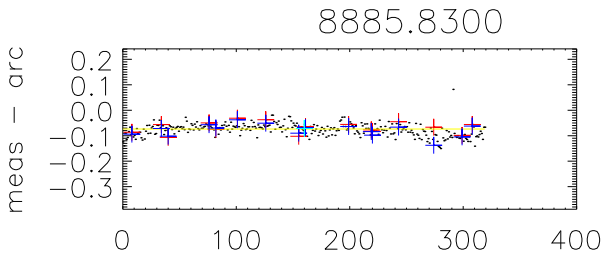

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

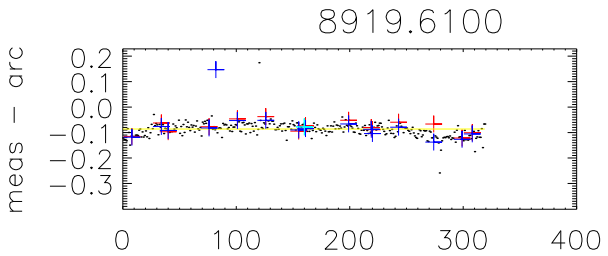

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

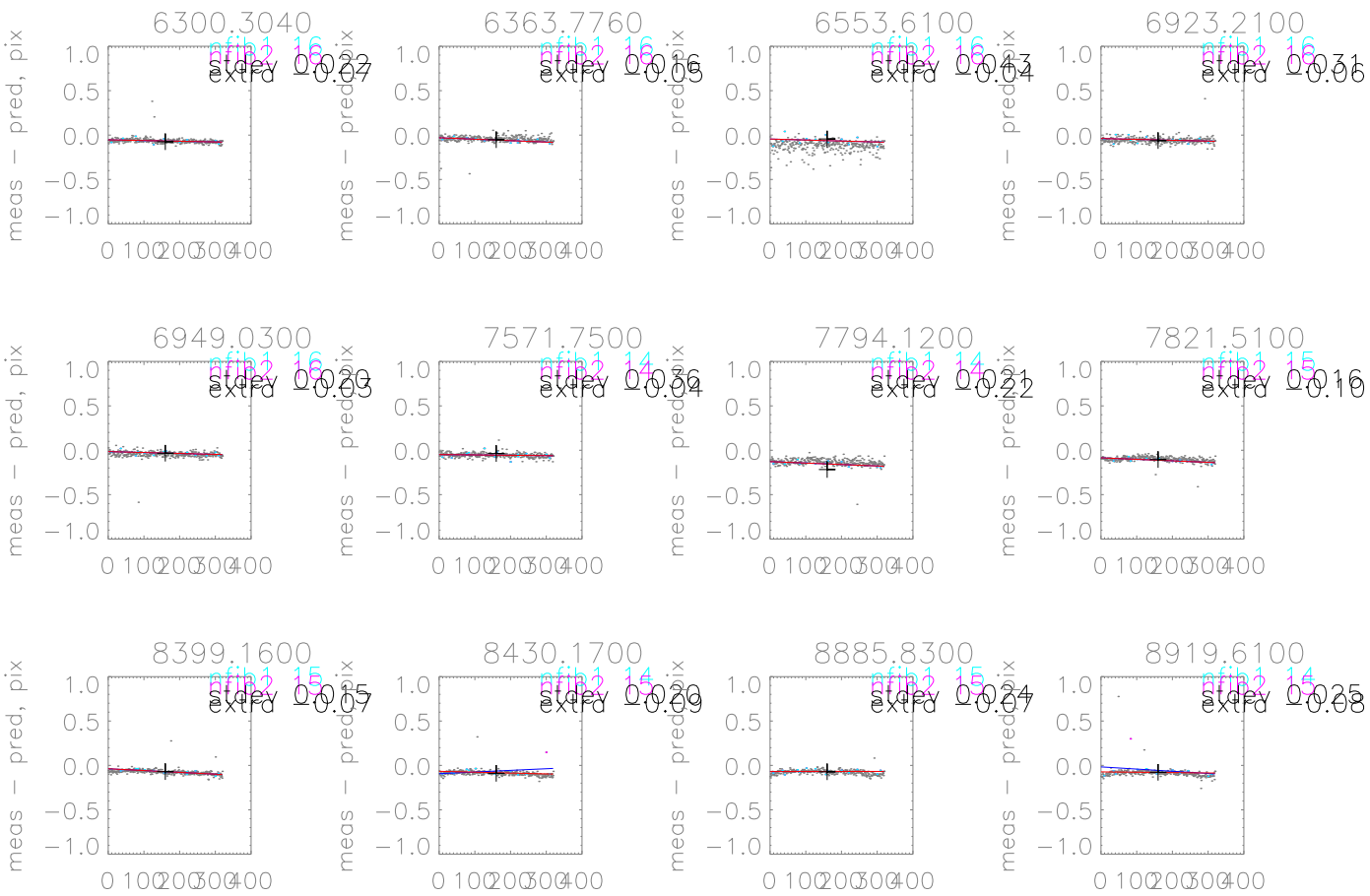

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

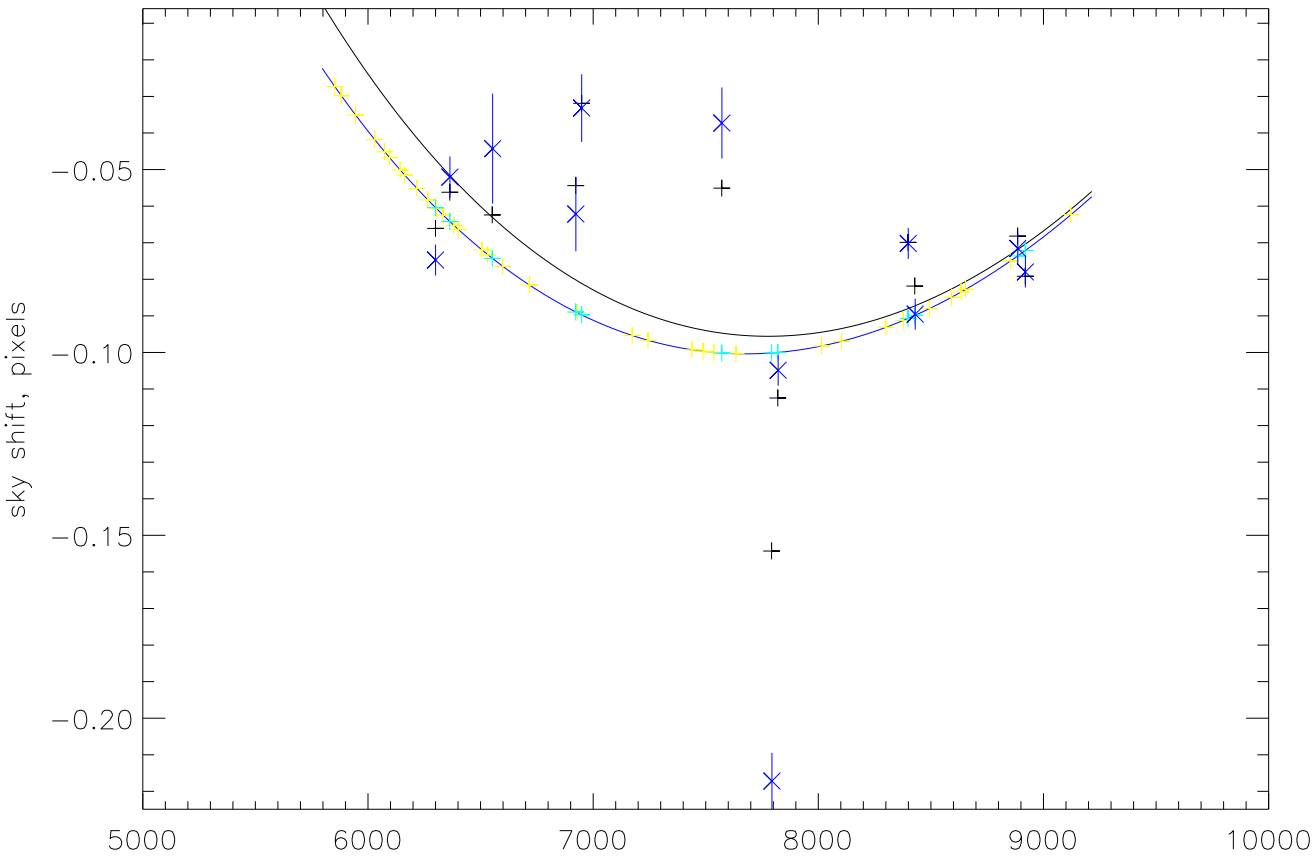

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

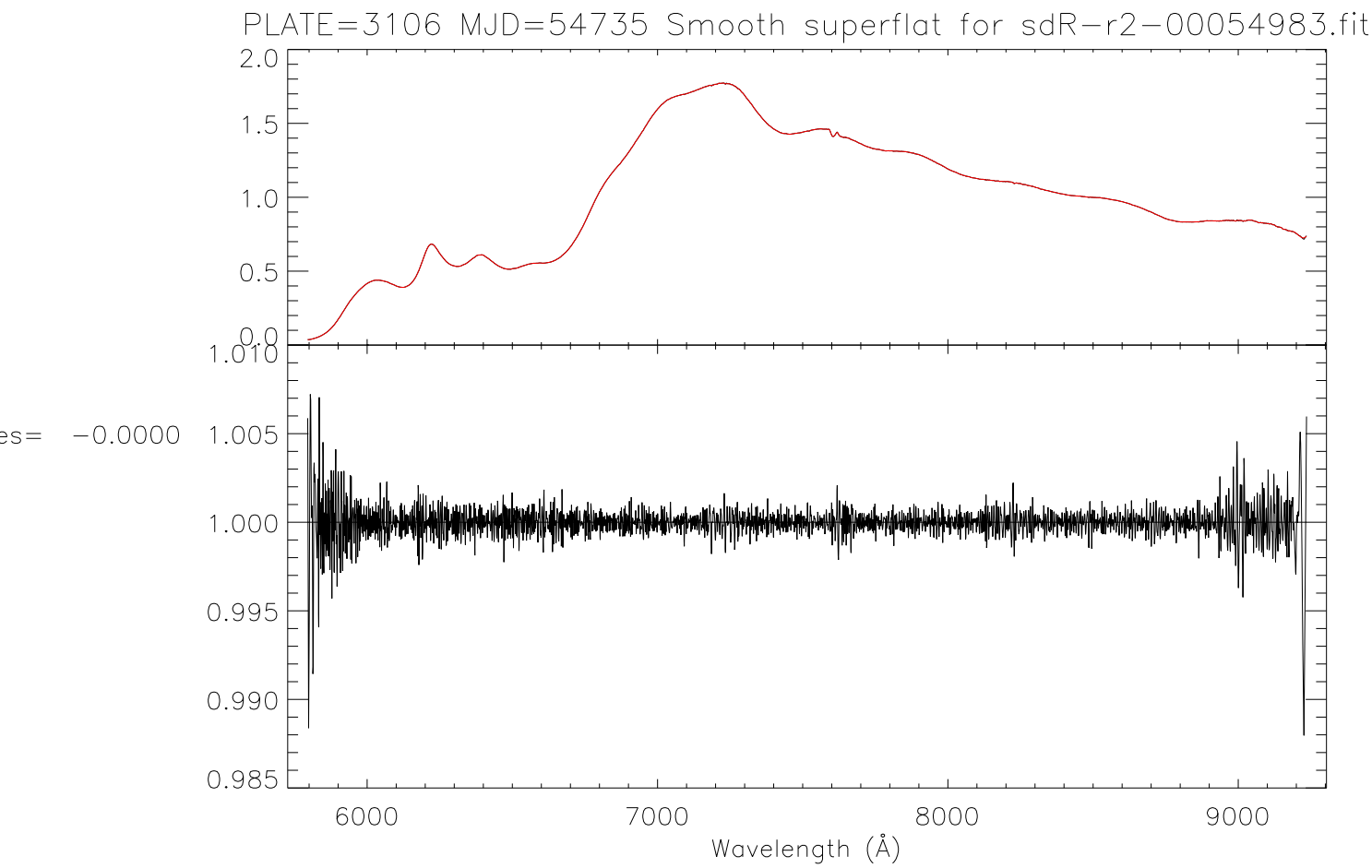

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

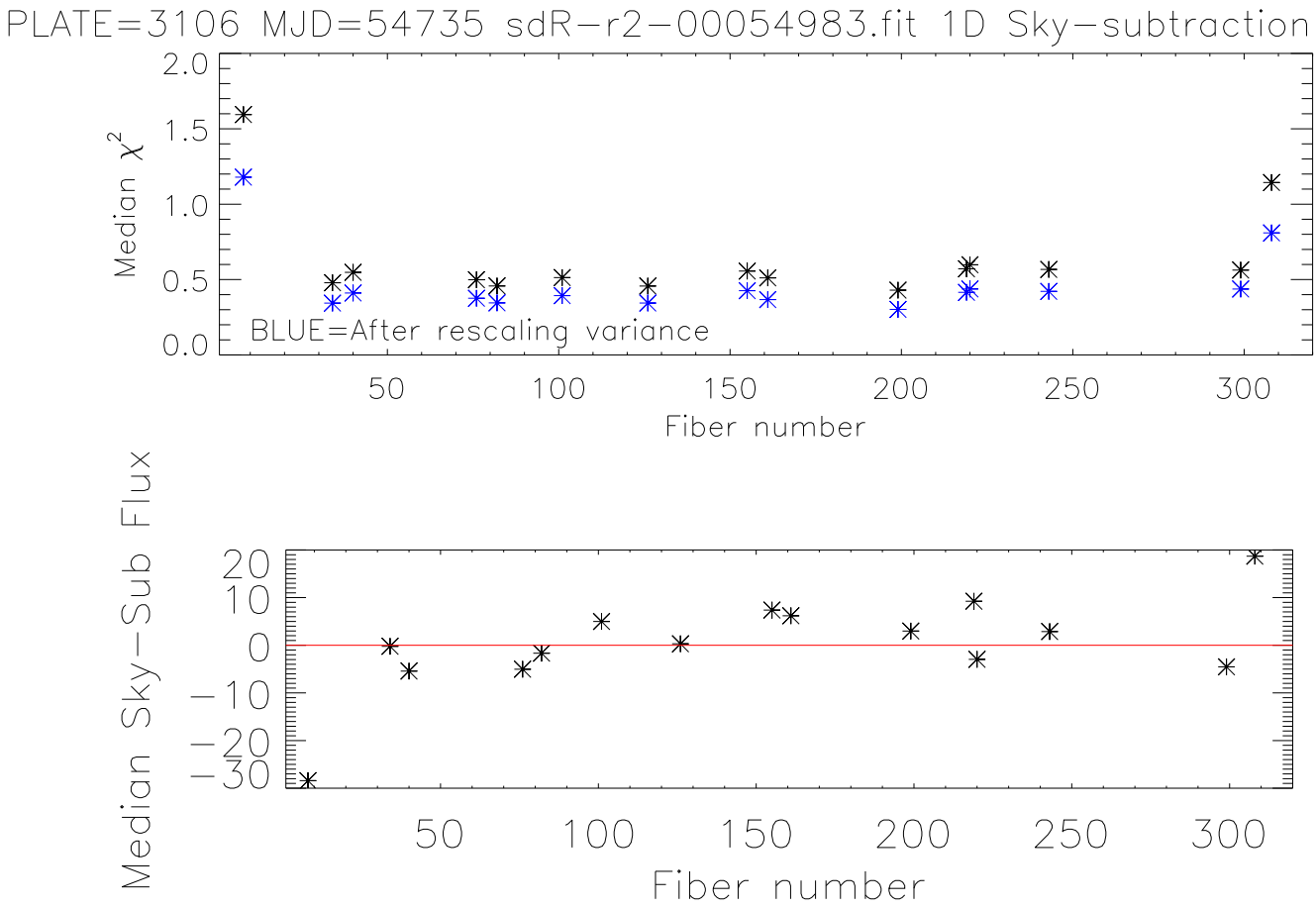

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

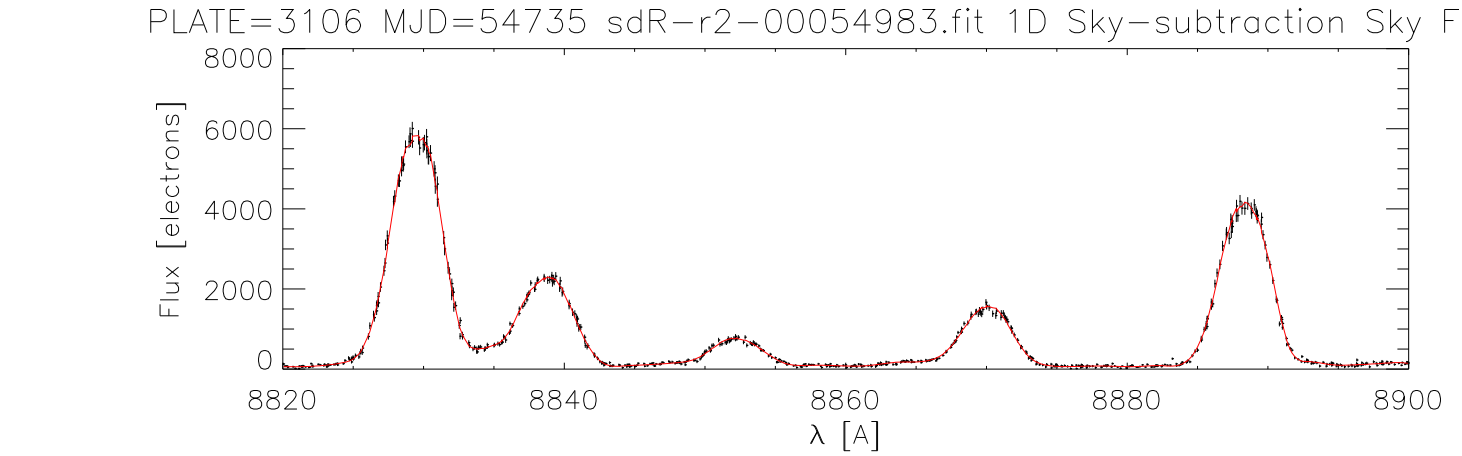

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

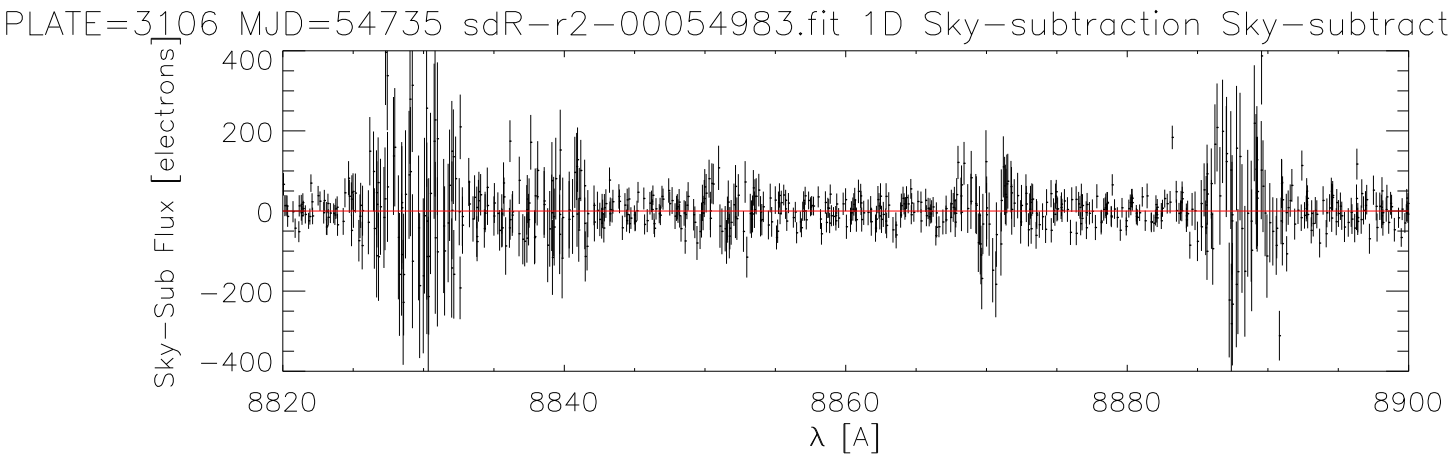

6300.3040
mfib1 16
mfib2 16
stdev 0.022
extrd 0.007
6363.7760
mfib1 16
mfib2 16
stdev 0.016
extrd 0.005
6553.6100
mfib1 16
mfib2 16
stdev 0.043
extrd 0.004
6923.2100
mfib1 16
mfib2 16
stdev 0.031
extrd 0.006
6949.0300
mfib1 16
mfib2 16
stdev 0.020
extrd 0.003
7571.7500
mfib1 14
mfib2 14
stdev 0.036
extrd 0.004
7794.1200
mfib1 14
mfib2 14
stdev 0.031
extrd 0.022
7821.5100
mfib1 15
mfib2 15
stdev 0.016
extrd 0.010
8399.1600
mfib1 15
mfib2 15
stdev 0.015
extrd 0.007
8430.1700
mfib1 14
mfib2 15
stdev 0.020
extrd 0.009
8885.8300
mfib1 15
mfib2 15
stdev 0.024
extrd 0.007
8919.6100
mfib1 14
mfib2 14
stdev 0.025
extrd 0.008
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

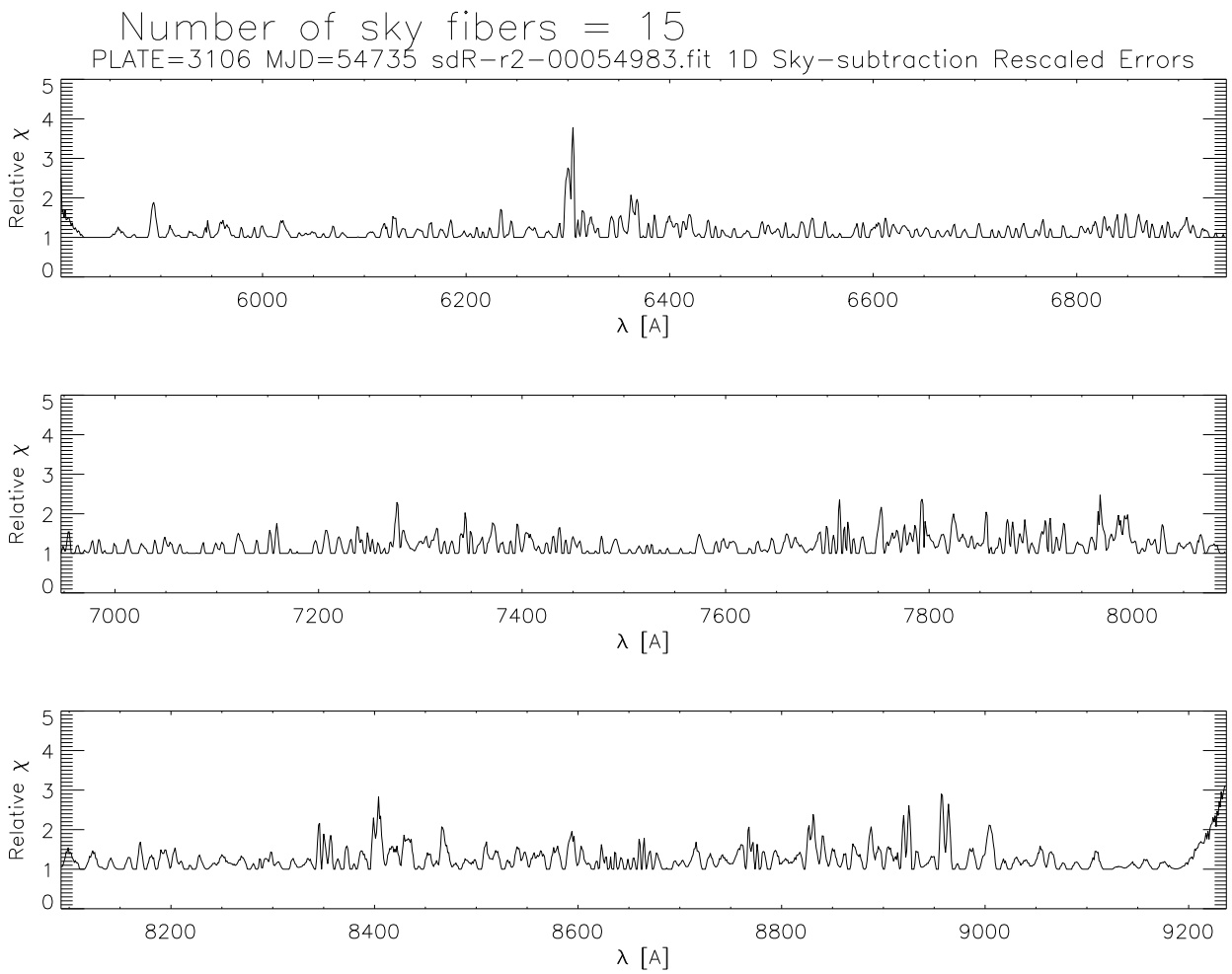

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
5000
6000
7000
8000
9000
10000

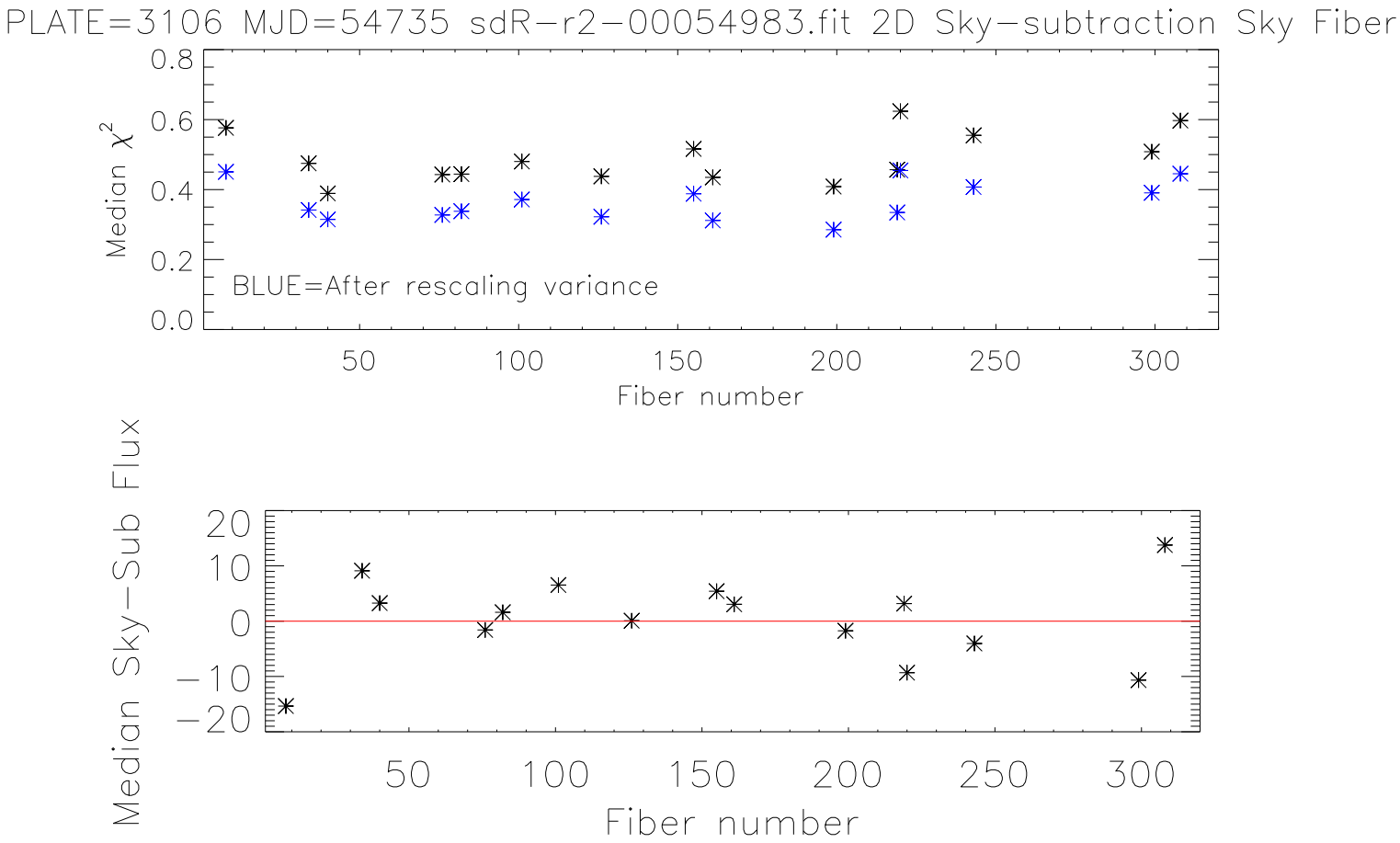

PLATE=3106 MJD=54735 Smooth superflat for sdR-r2-00054983.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

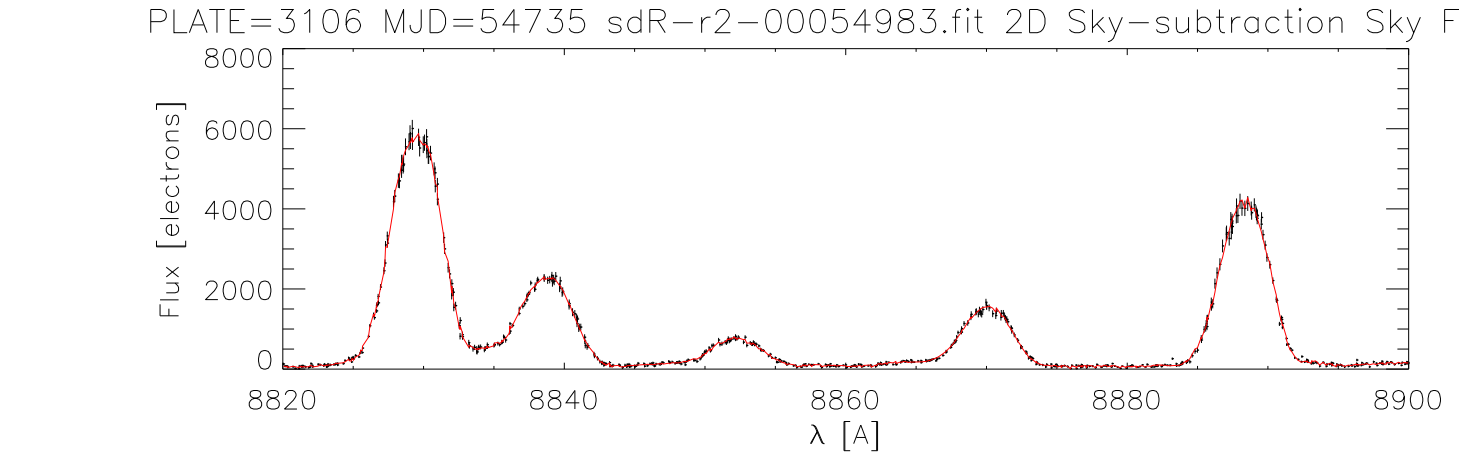

PLATE=3106 MJD=54735 sdR-r2-00054983.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

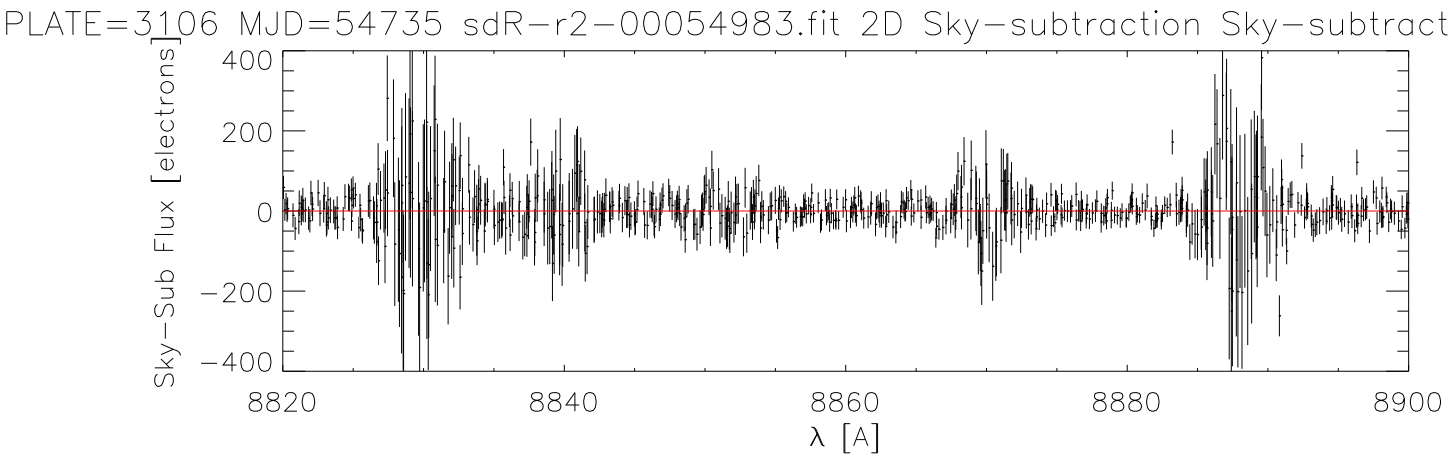

PLATE=3106 MJD=54735 sdR-r2-00054983.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

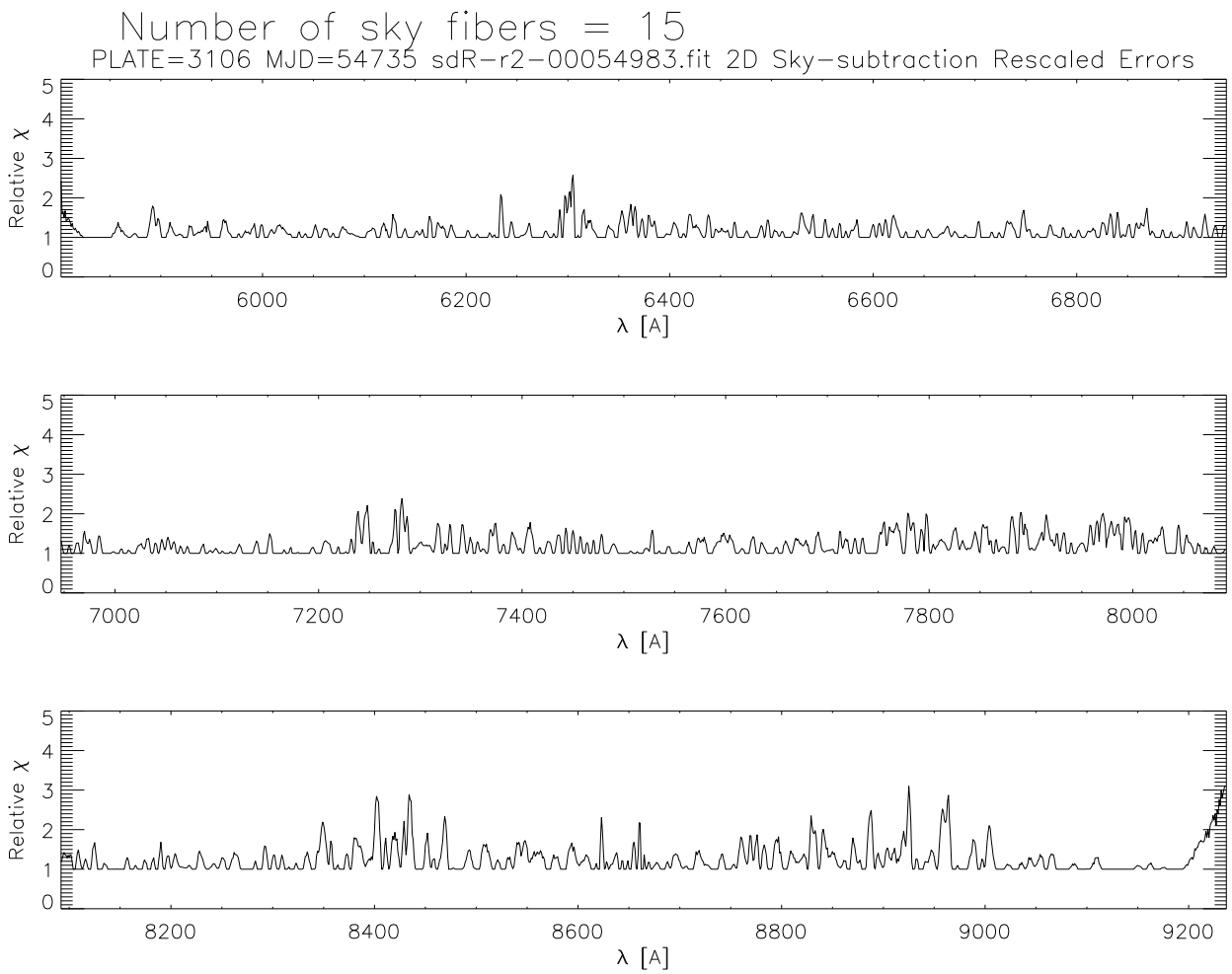

PLATE=3106 MJD=54735 sdR-r2-00054983.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

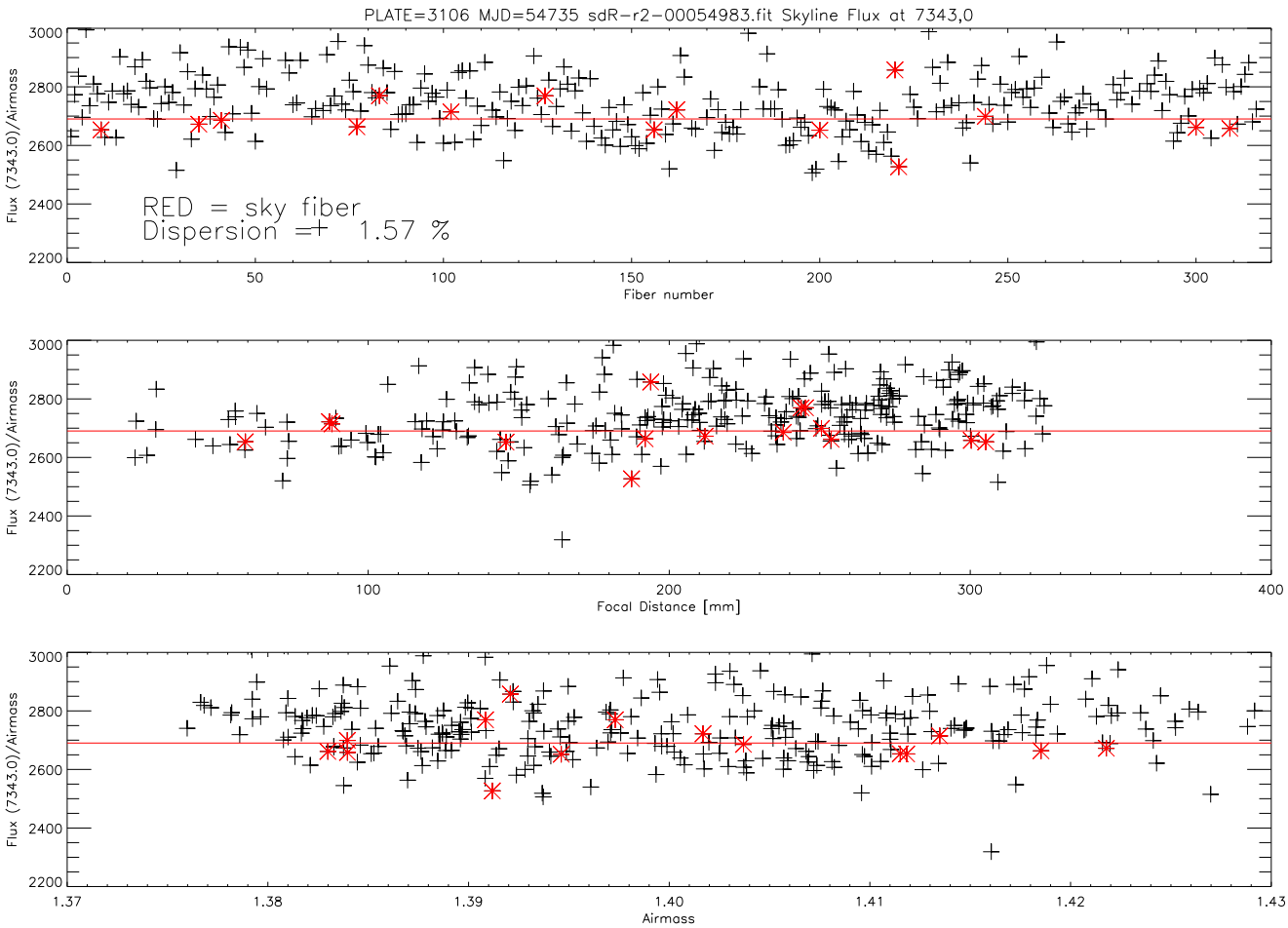

Number of sky fibers = 15
PLATE=3106 MJD=54735 sdR-r2-00054983.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

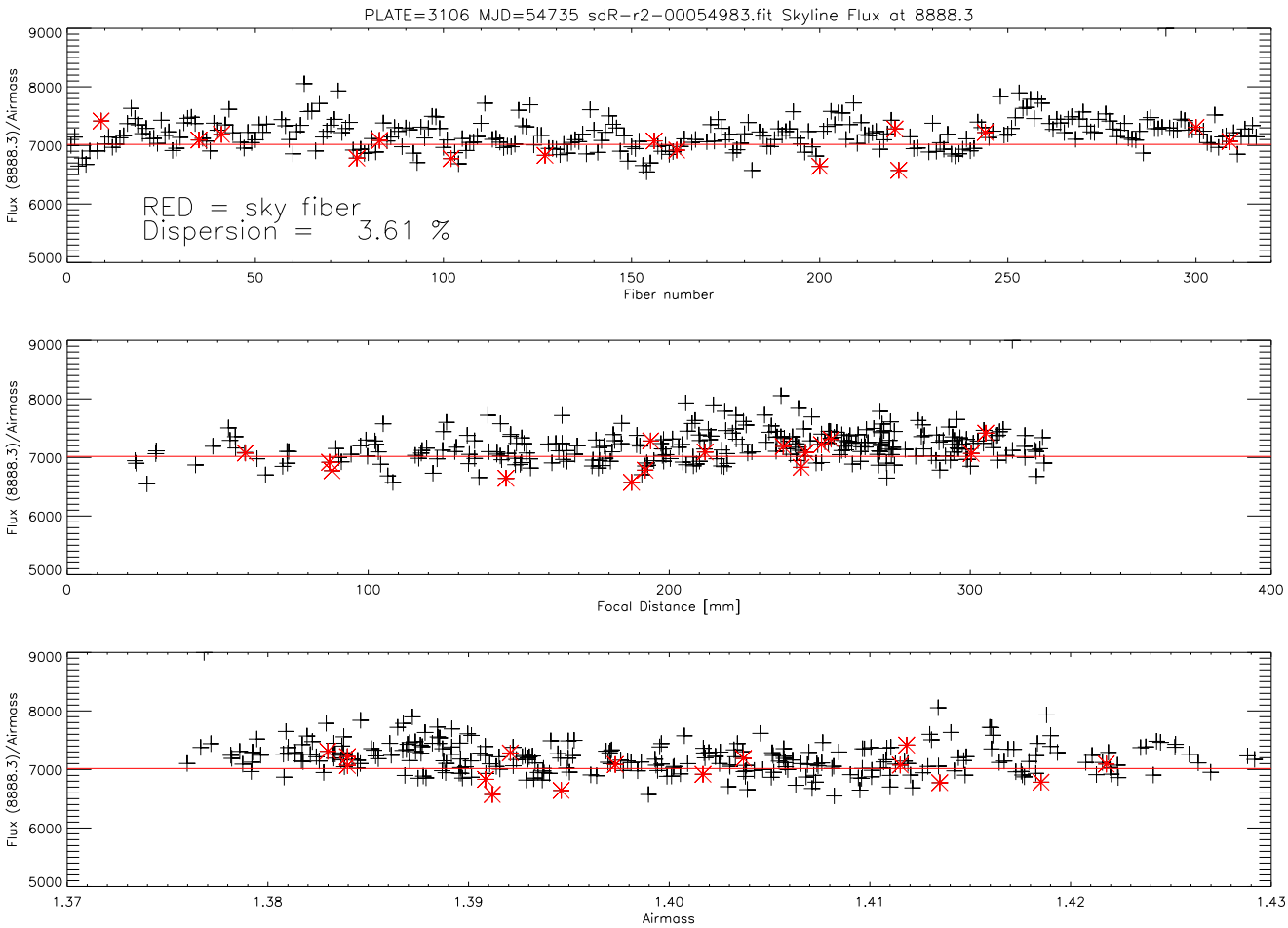

PLATE=3106 MJD=54735 sdR-r2-00054983.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number


PLATE=3106 MJD=54735 sdR-r2-00054983.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=3106 MJD=54735 sdR-r2-00054983.fit 2D 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 = 15
PLATE=3106 MJD=54735 sdR-r2-00054983.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=3106 MJD=54735 sdR-r2-00054983.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion =+ 1.57 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=3106 MJD=54735 sdR-r2-00054983.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.61 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass