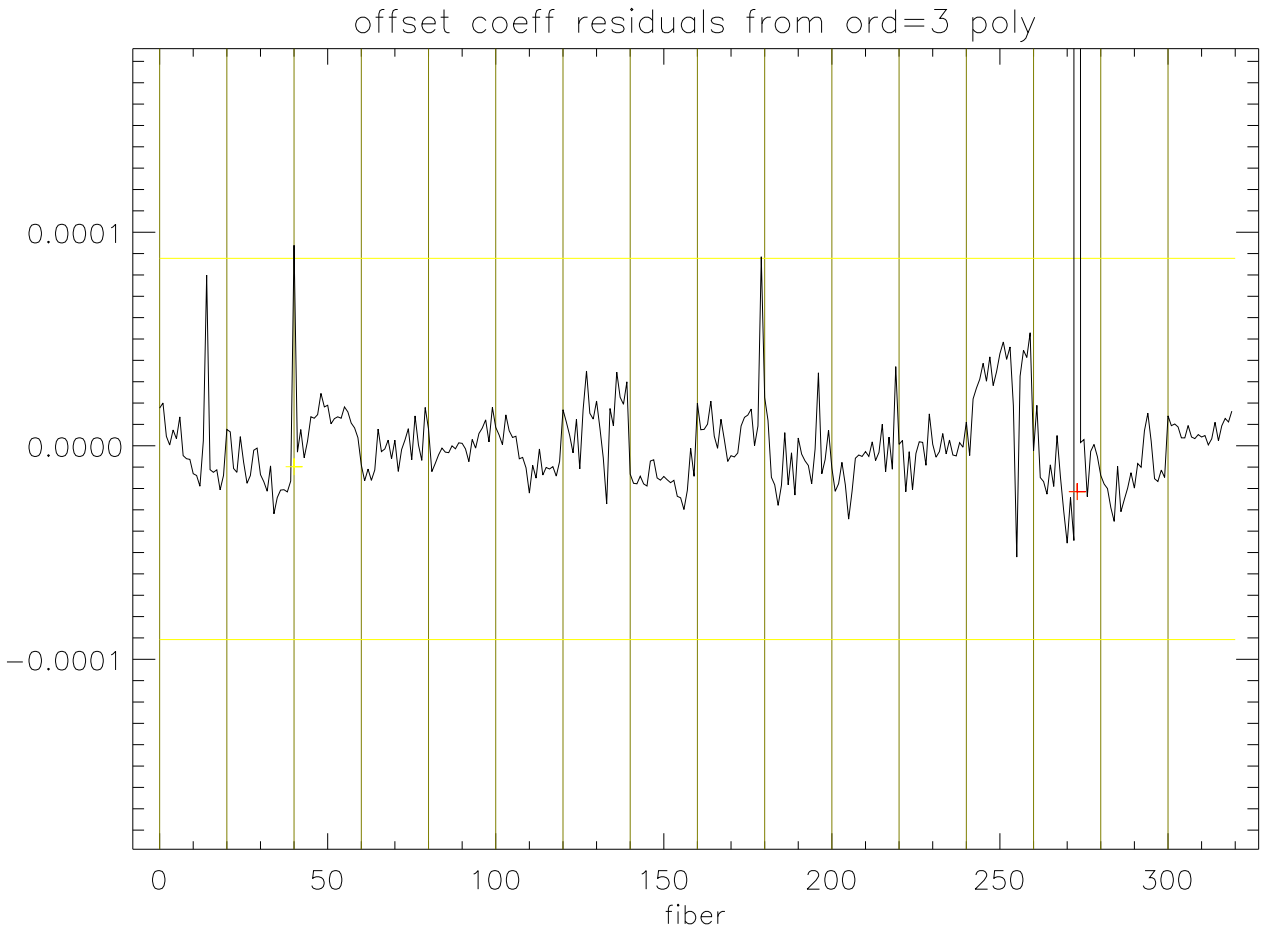
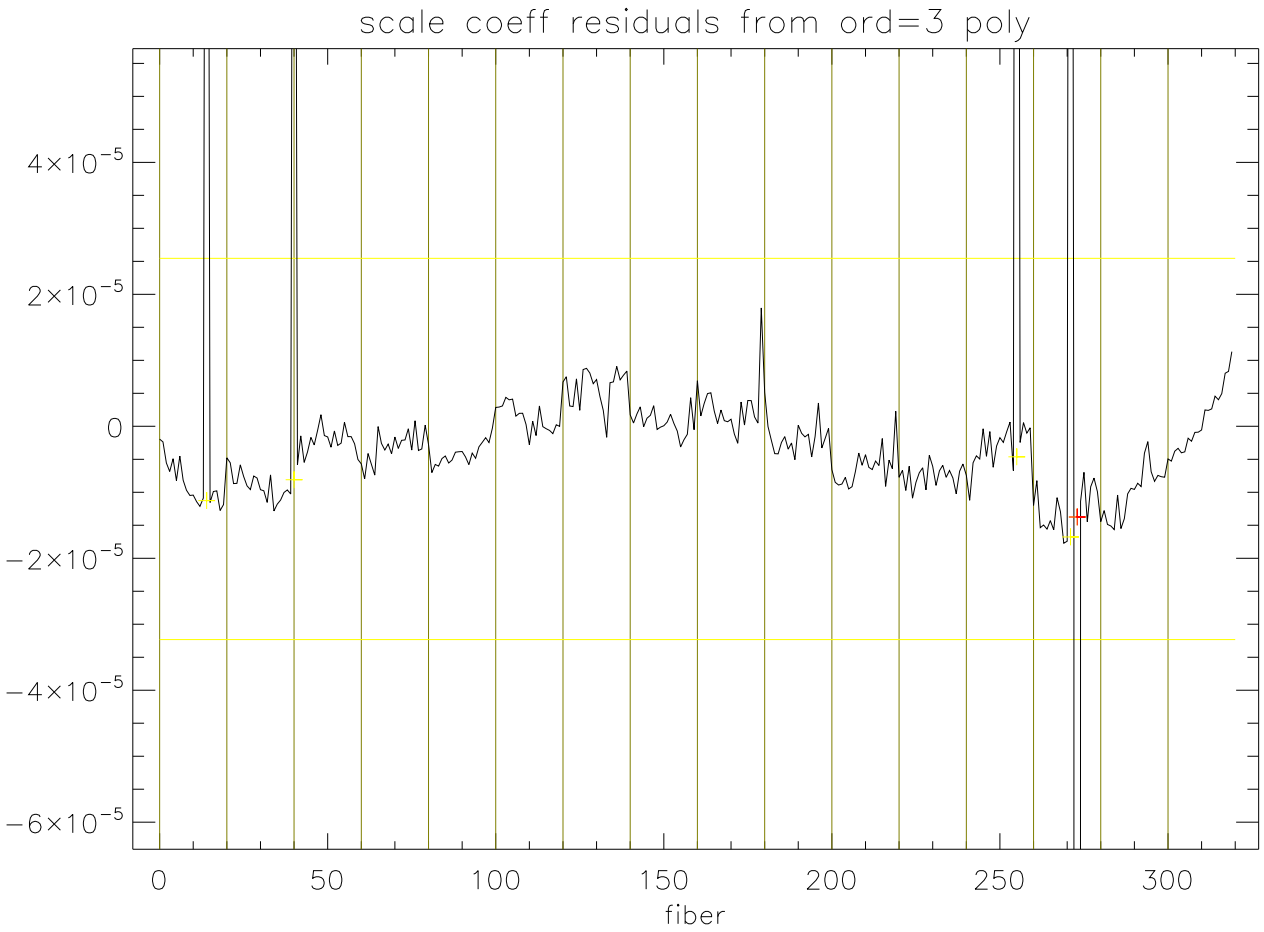
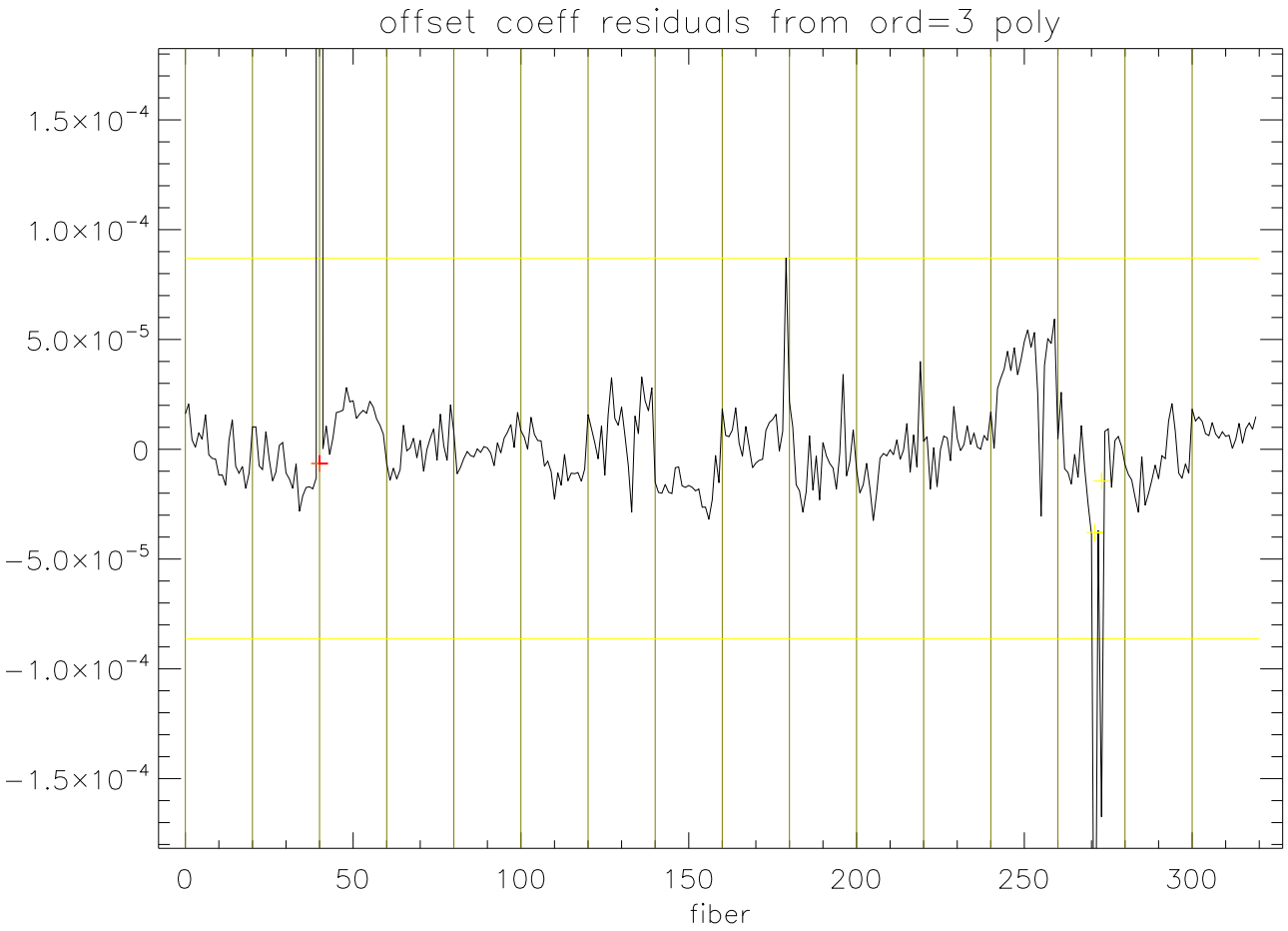
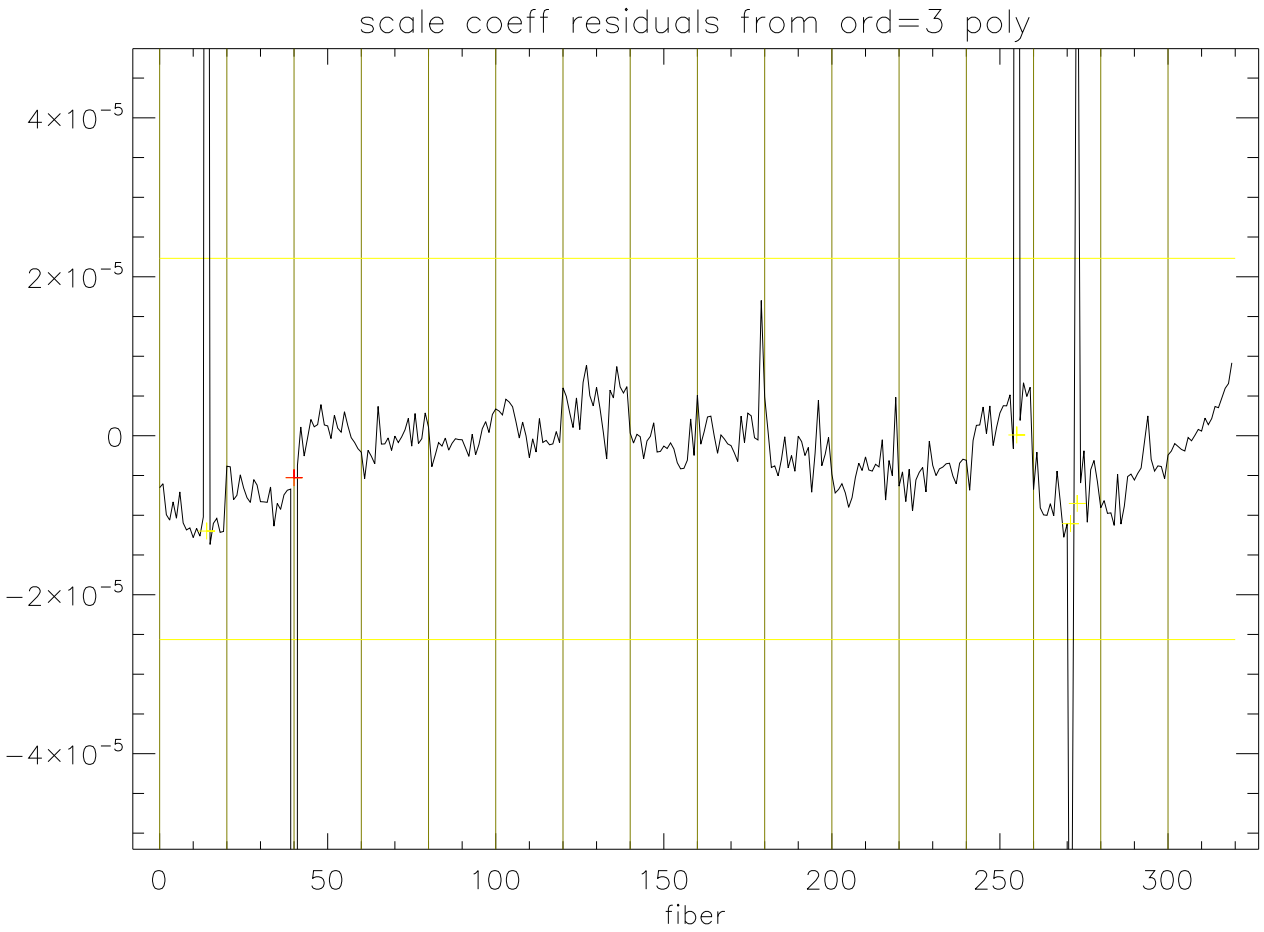
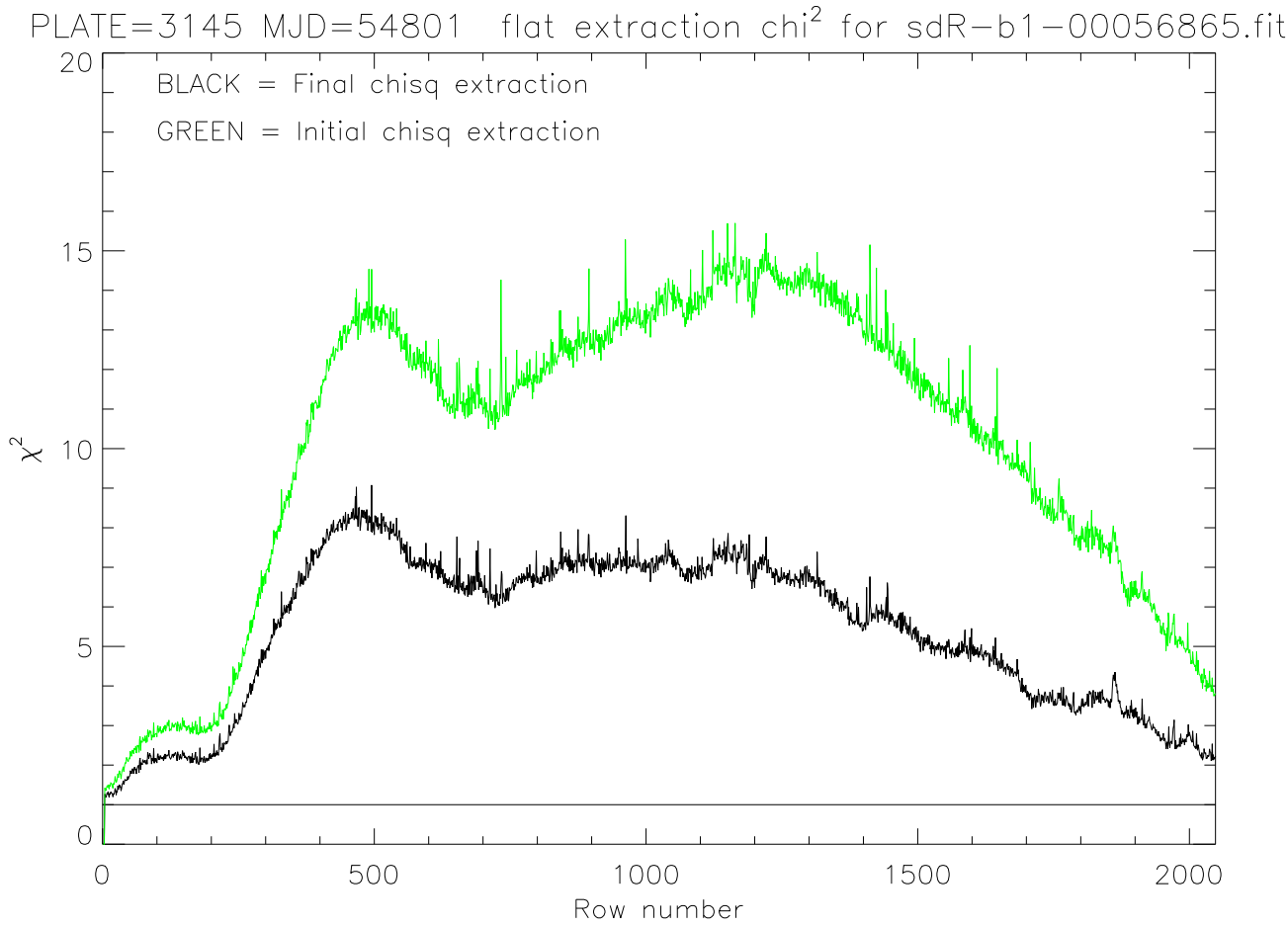
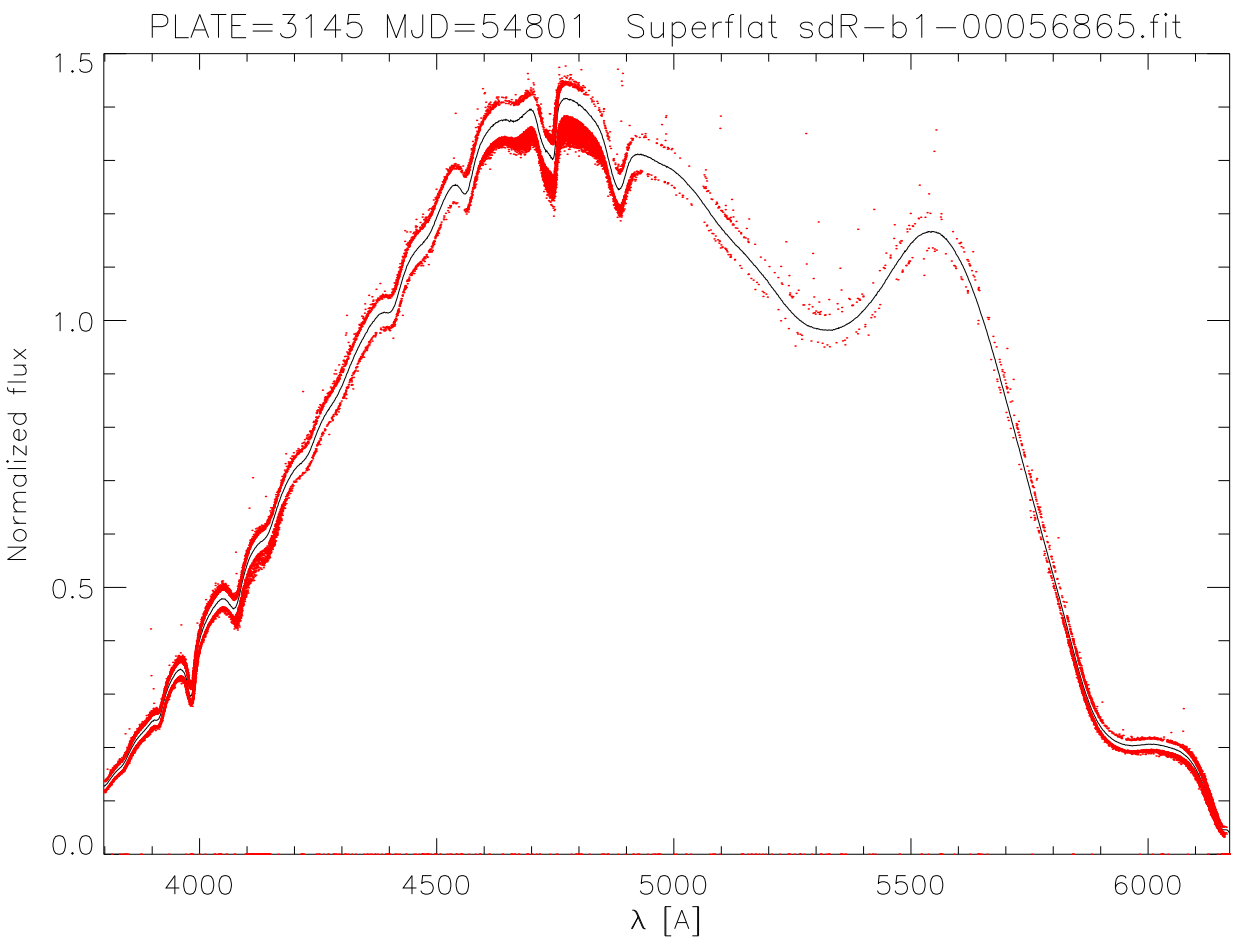

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

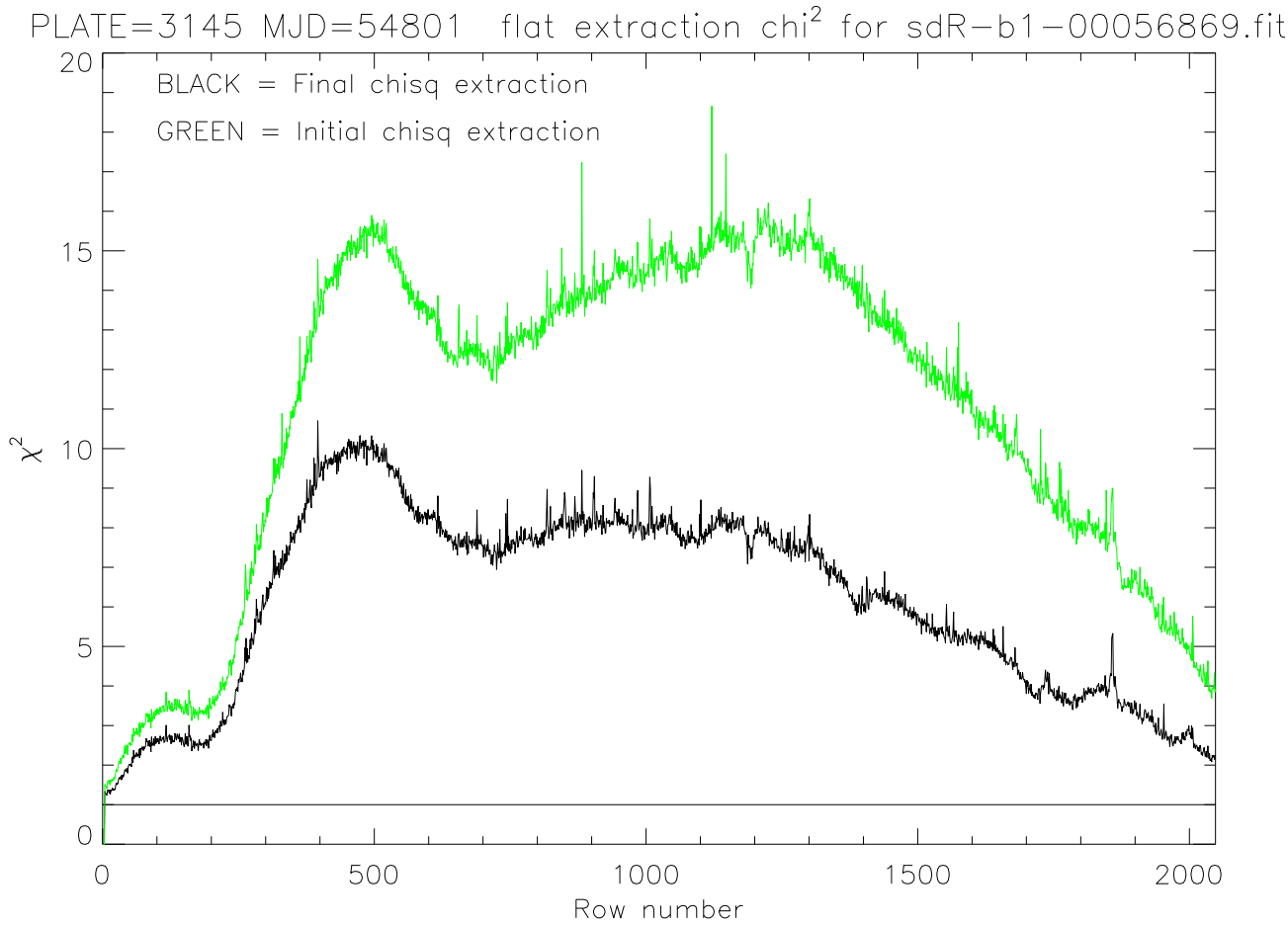

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

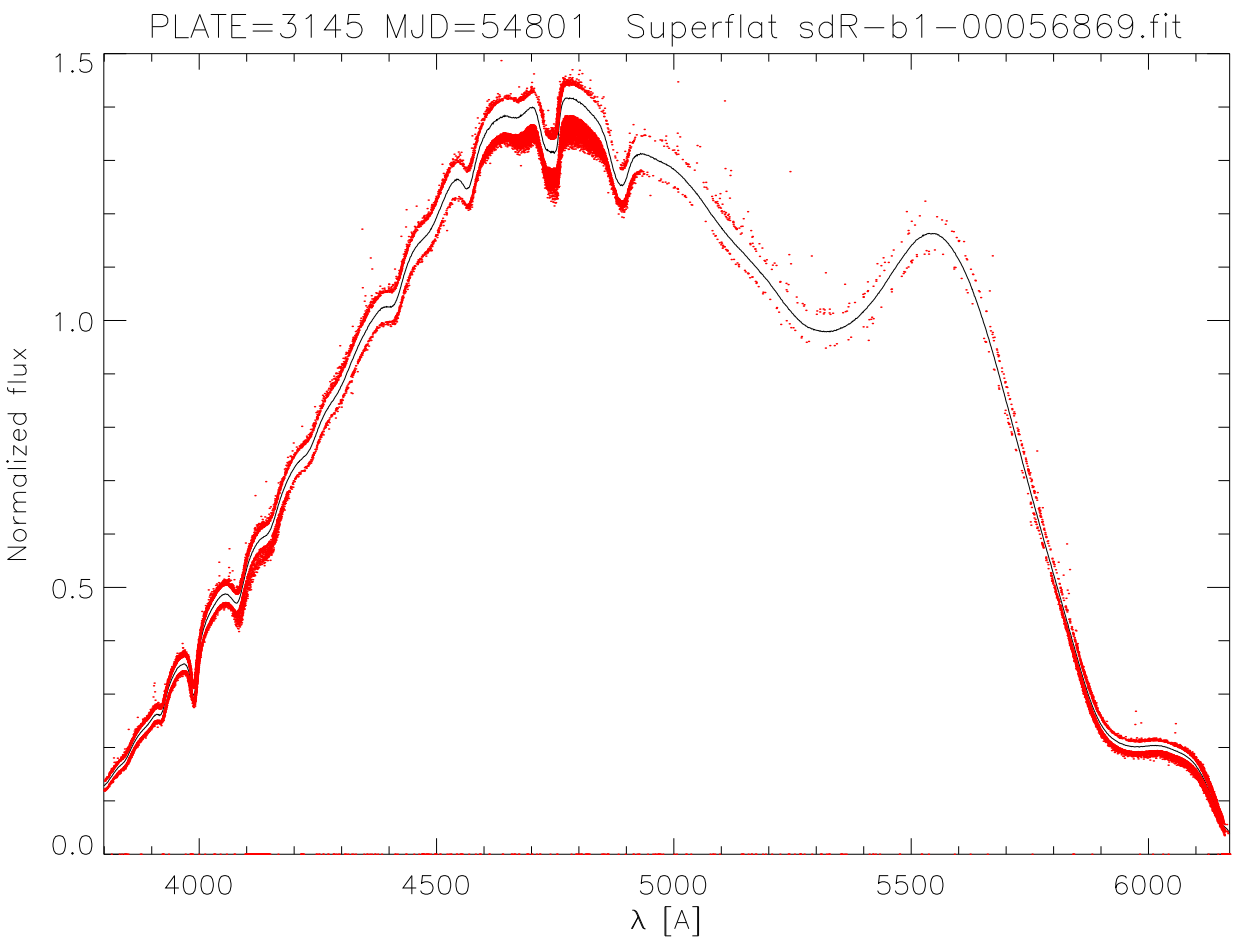

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

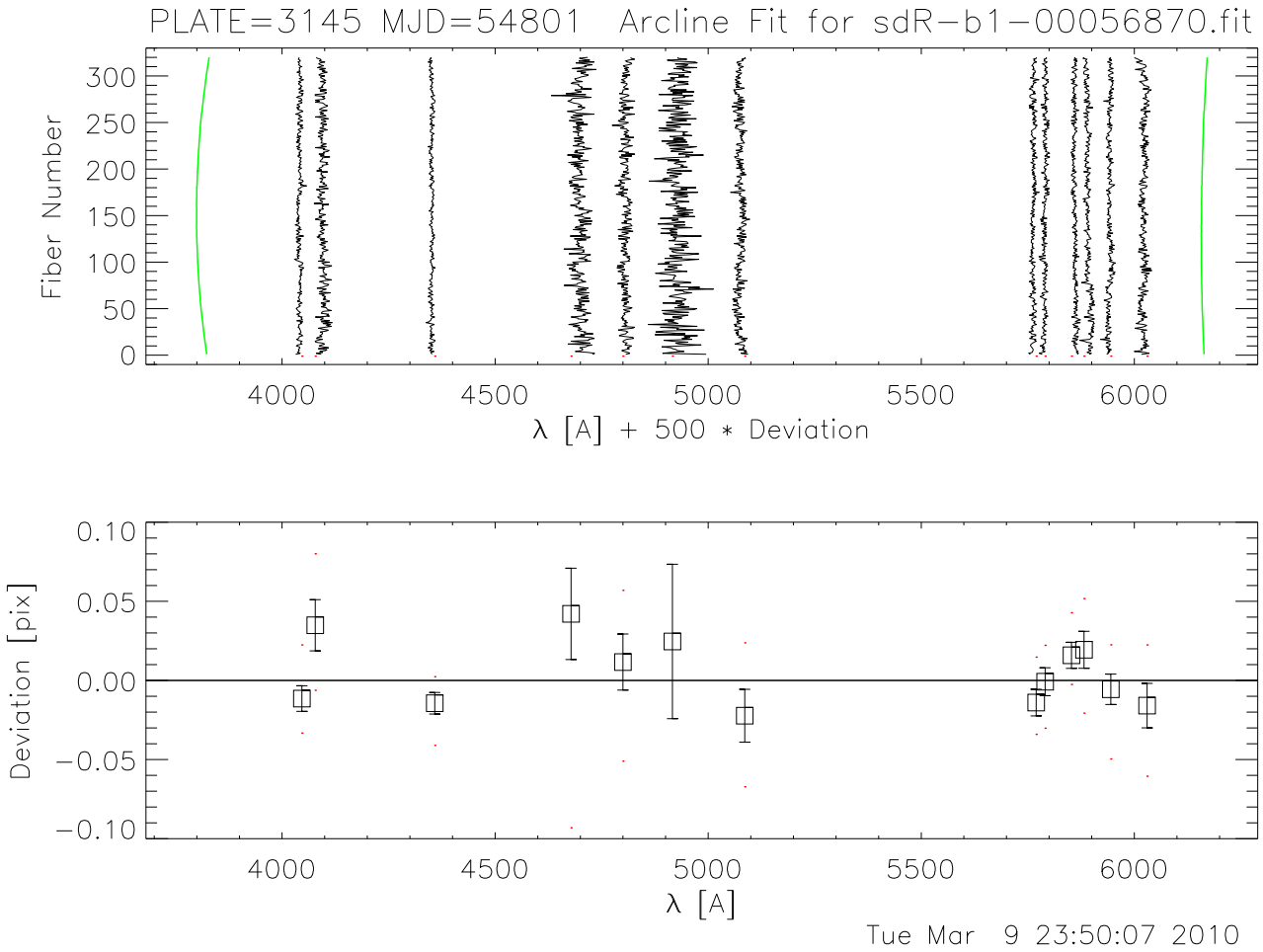

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

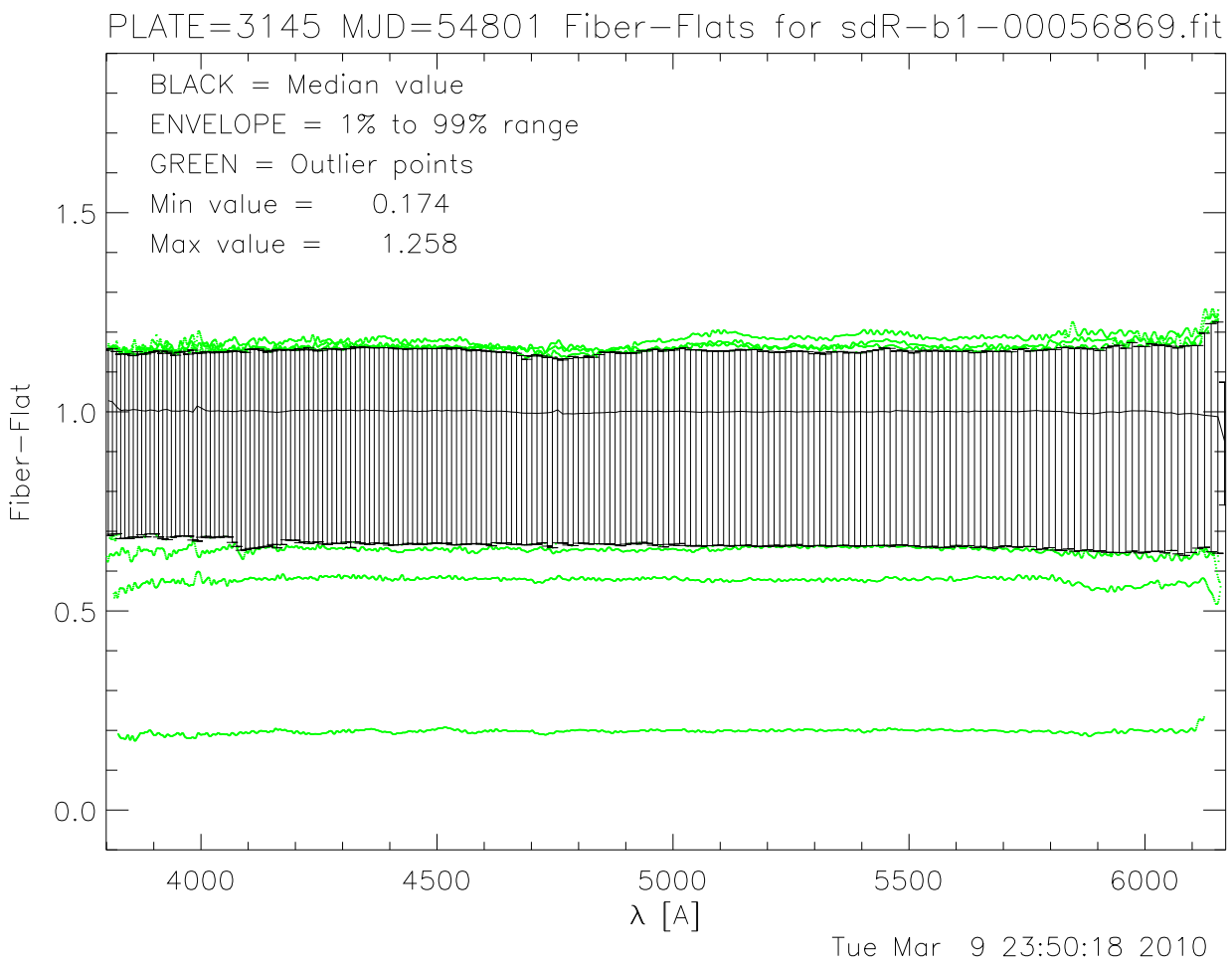

PLATE=3145 MJD=54801 flat extraction chi^2 for sdR−b1−00056865.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

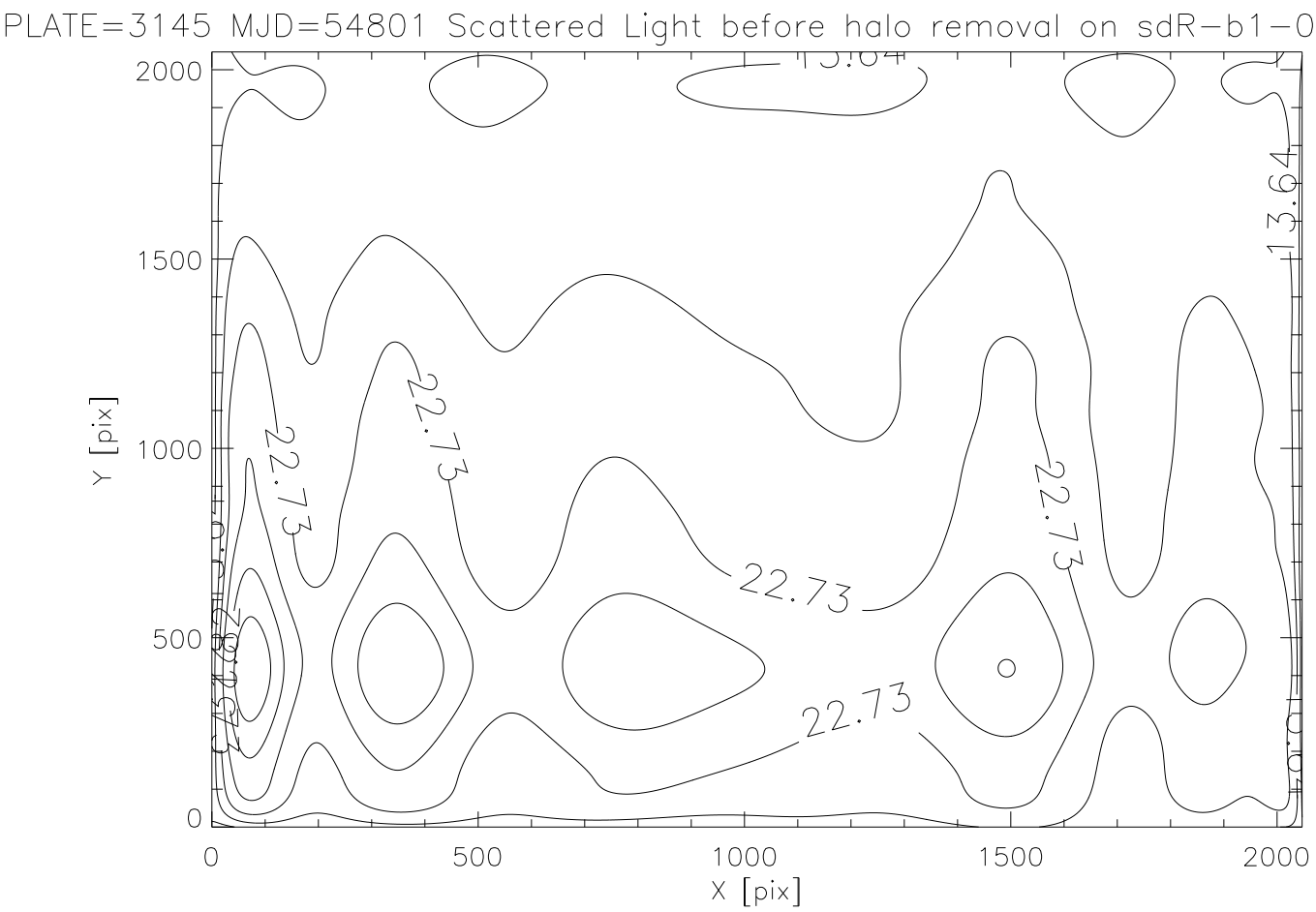

PLATE=3145 MJD=54801 Superflat sdR-b1-00056865.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

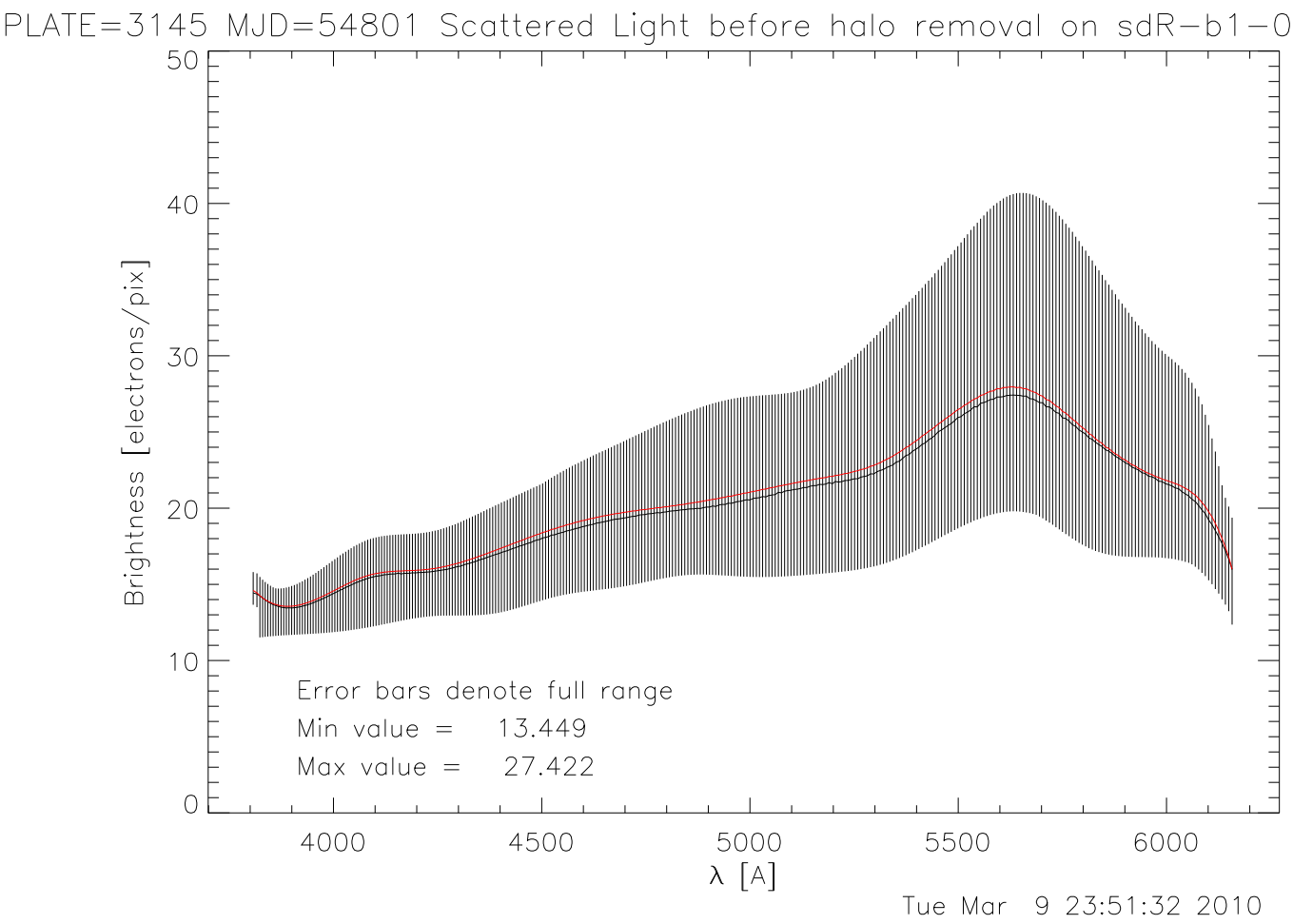

PLATE=3145 MJD=54801 flat extraction chi^2 for sdR−b1−00056869.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

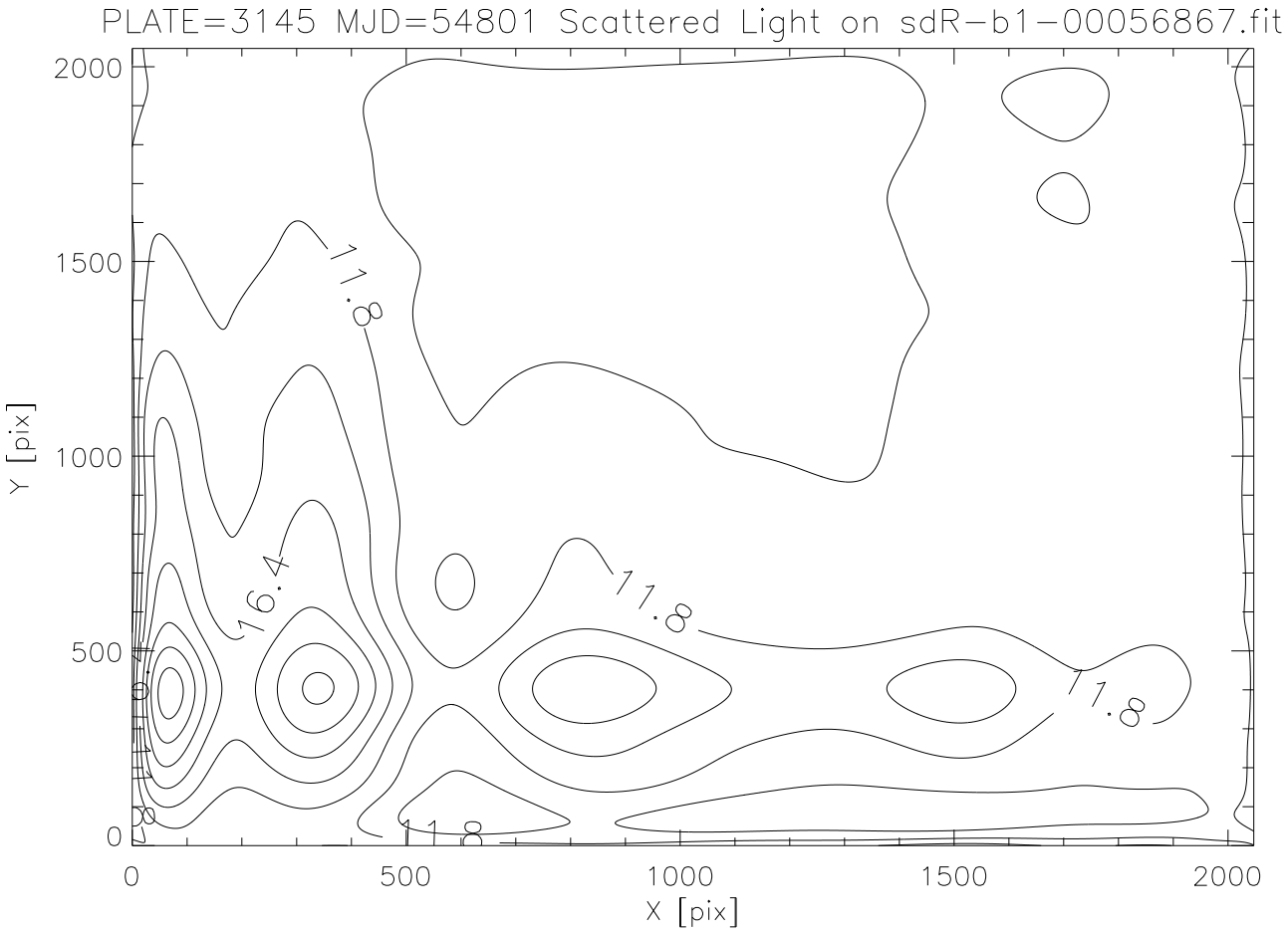

PLATE=3145 MJD=54801 Superflat sdR-b1-00056869.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

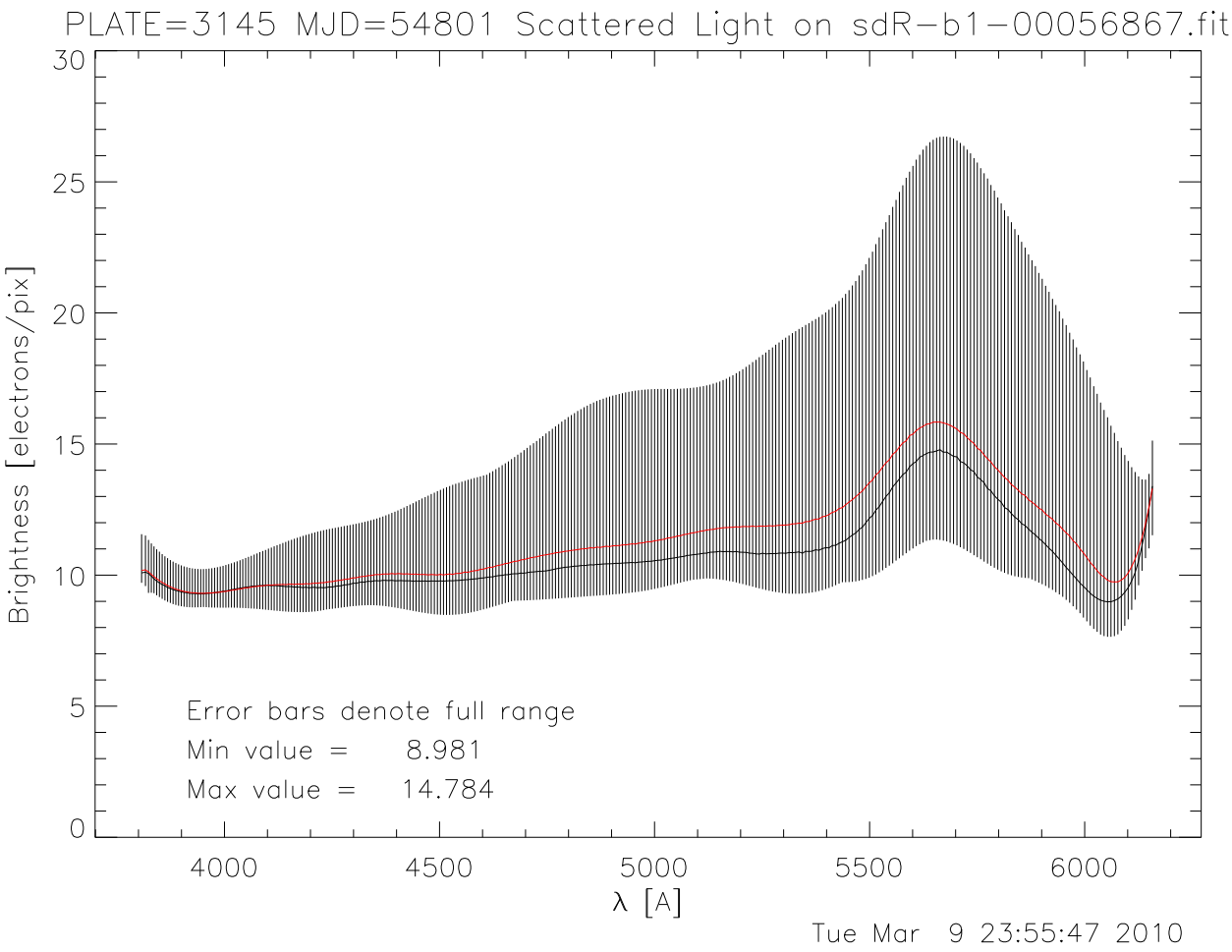

PLATE=3145 MJD=54801 Arcline Fit for sdR-b1-00056870.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Mar 9 23:50:07 2010

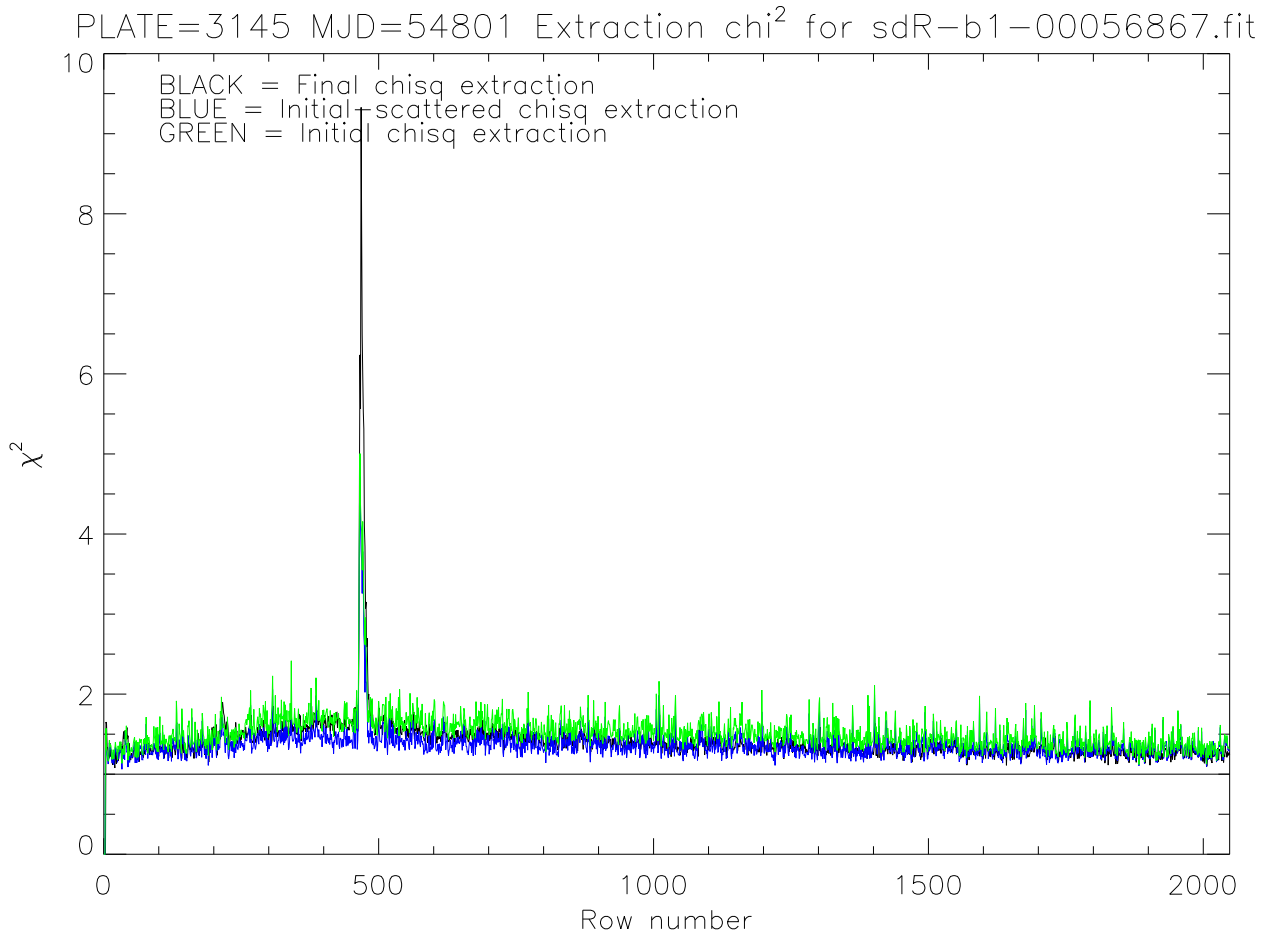

PLATE=3145 MJD=54801 Fiber-Flats for sdR-b1-00056869.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.174
Max value = 1.258
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 9 23:50:18 2010

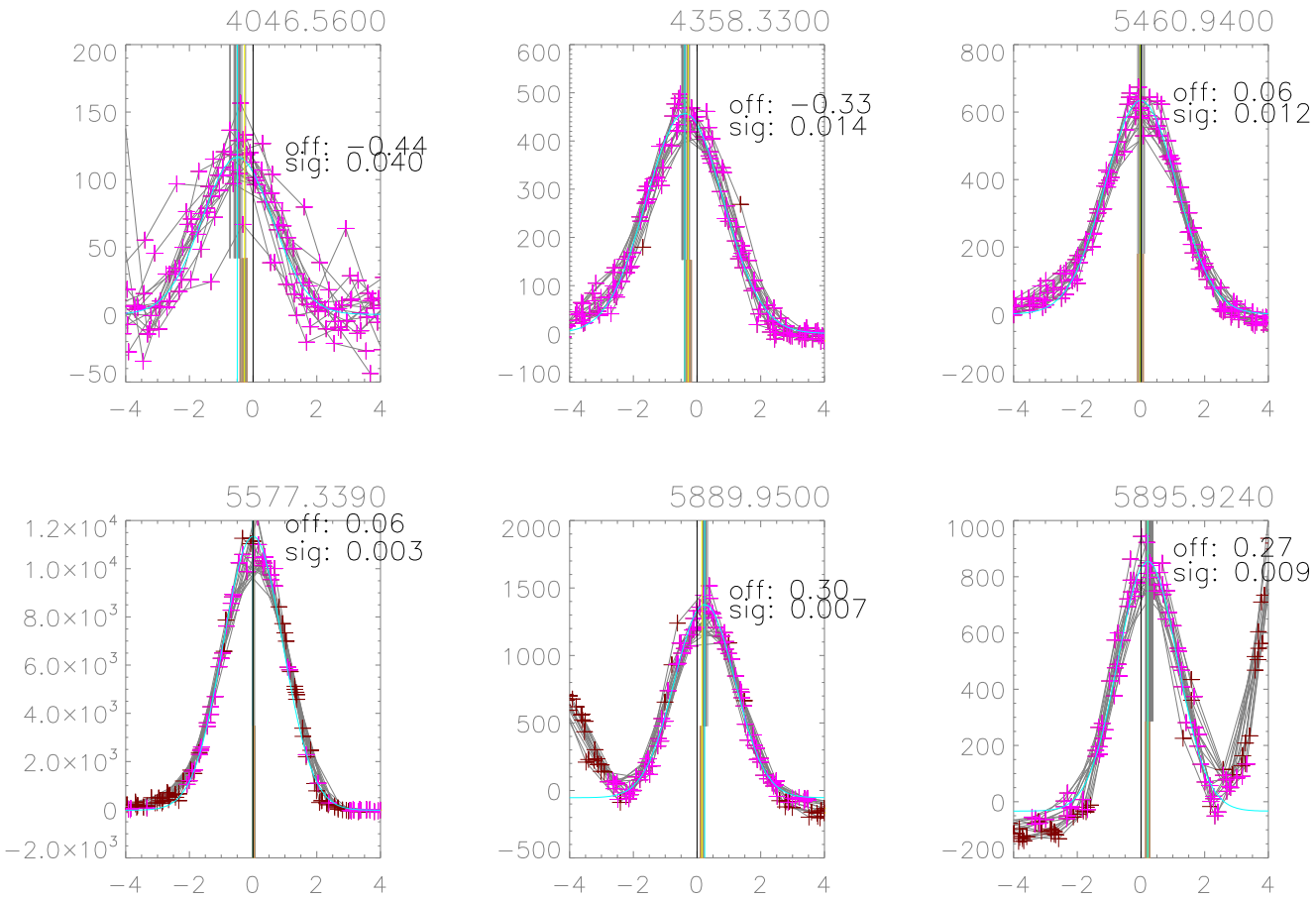

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-b1-00056867.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
22.73
22.73
22.73
22.73
13.64

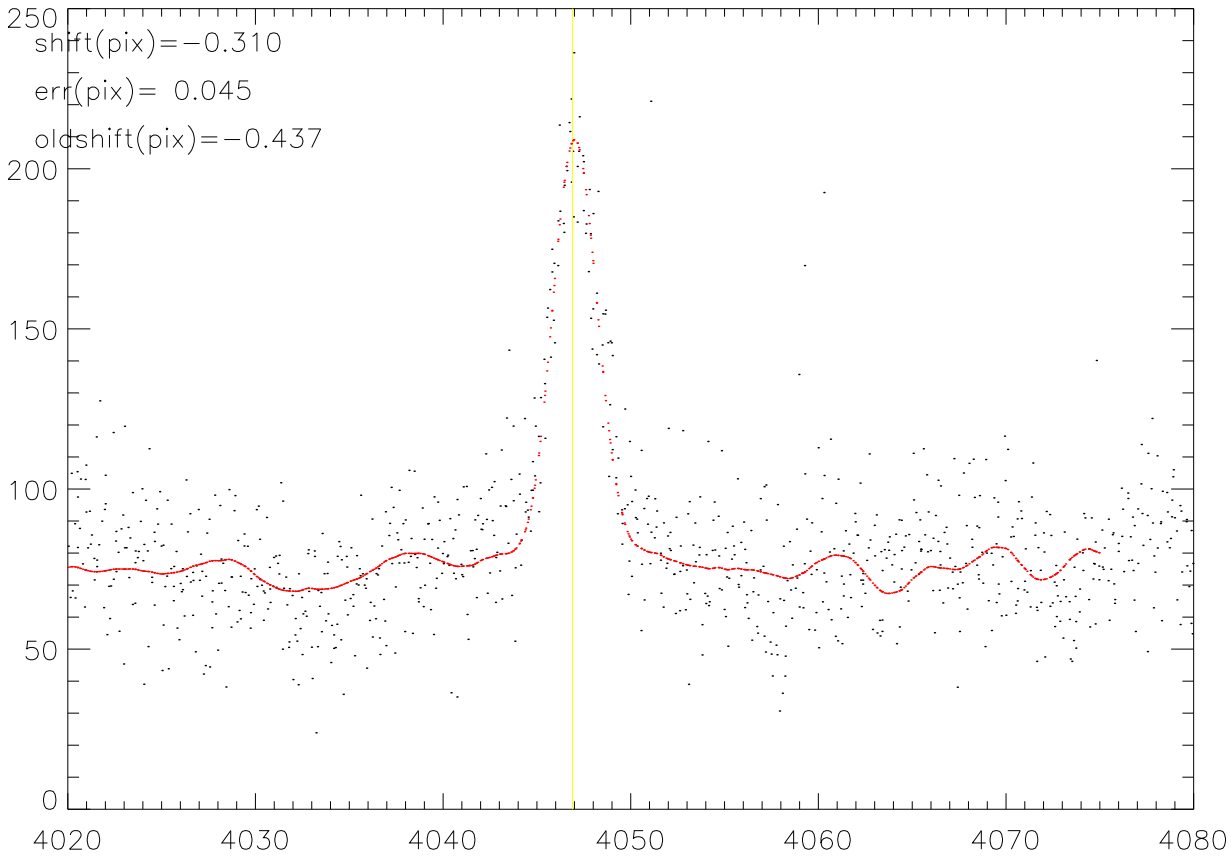

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR−b1−00056867.f
Brightness [electrons/pix]
50
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 13.449
Max value = 27.422
Tue Mar 9 23:51:32 2010

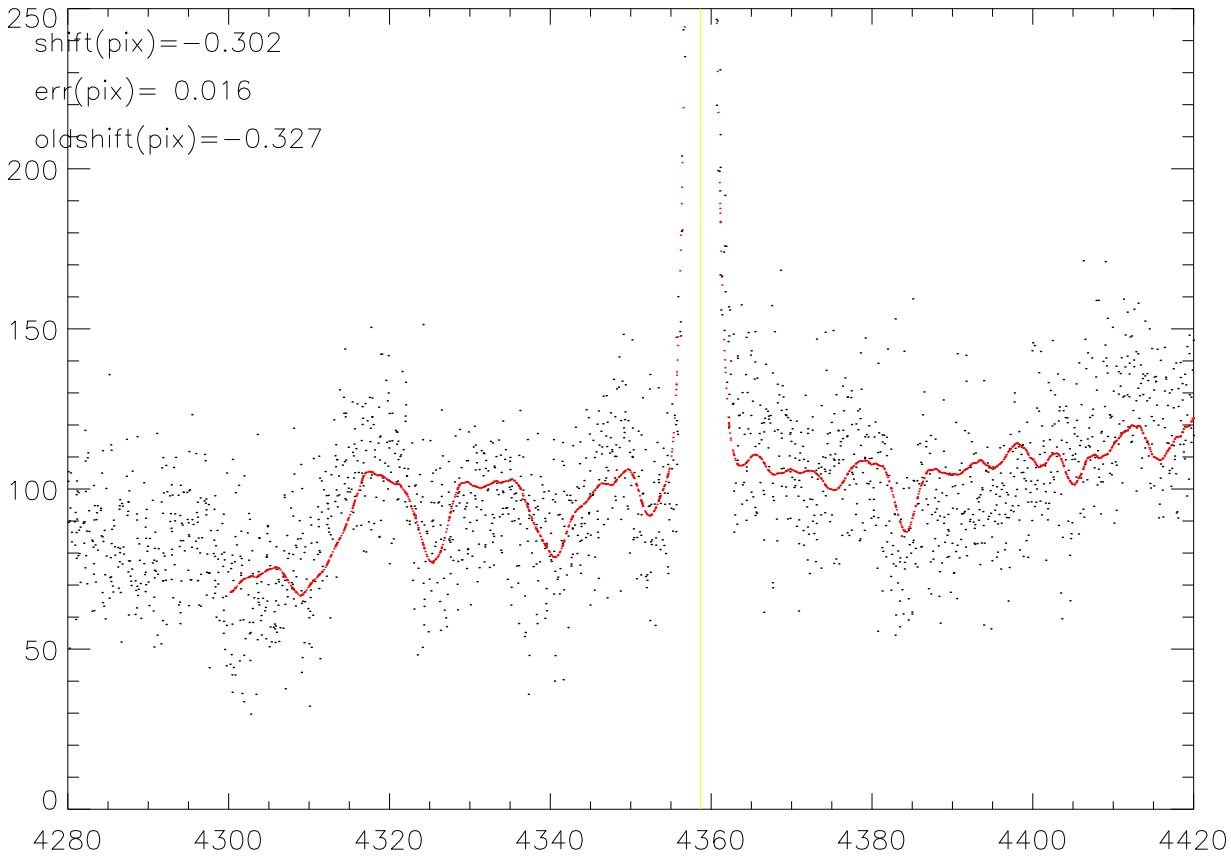

PLATE=3145 MJD=54801 Scattered Light on sdR-b1-00056867.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
11.8
16.4
11.8
11.8
11.8

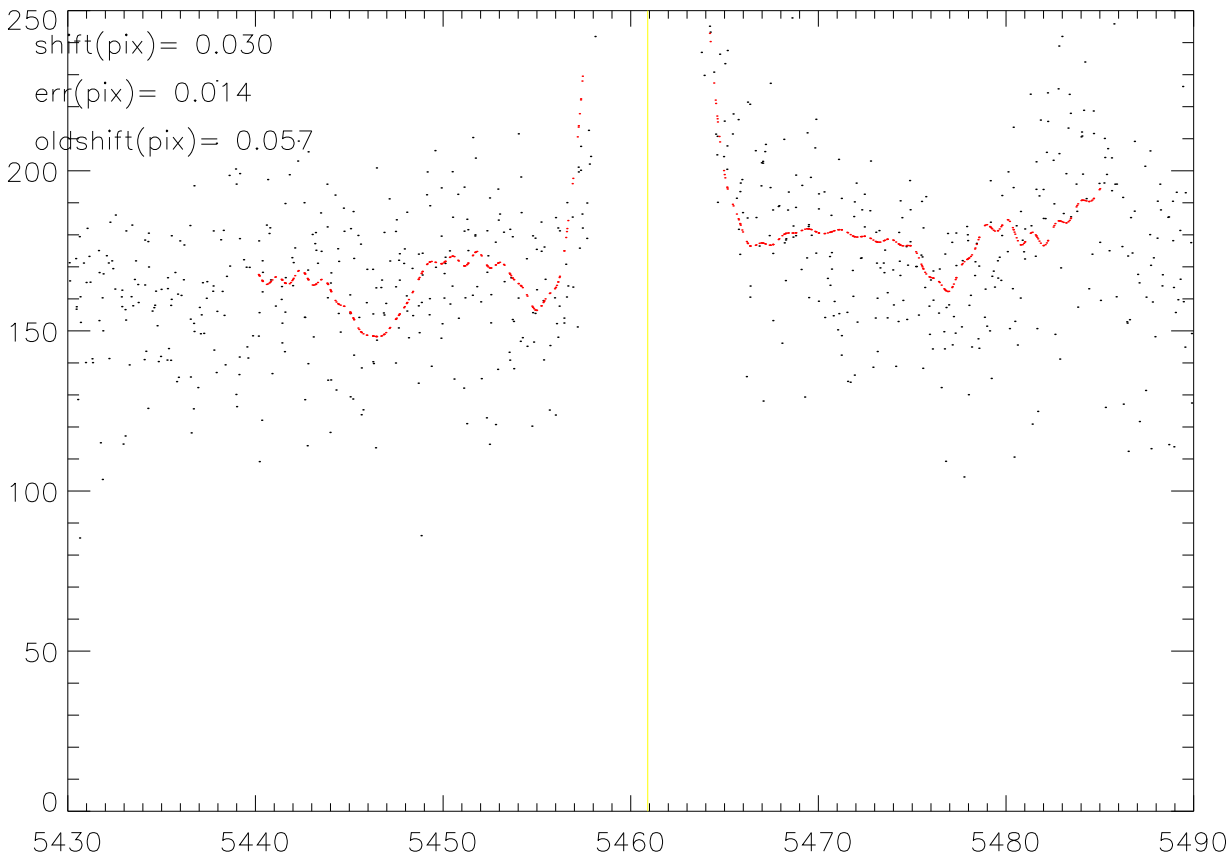

PLATE=3145 MJD=54801 Scattered Light on sdR-b1-00056867.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 8.981
Max value = 14.784
4000
4500
5000
5500
6000
λ [A]
Tue Mar 9 23:55:47 2010

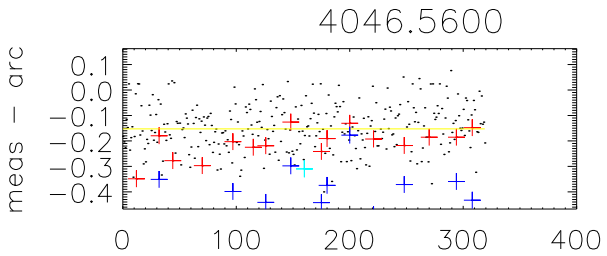

PLATE=3145 MJD=54801 Extraction chi^2 for sdR-b1-00056867.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

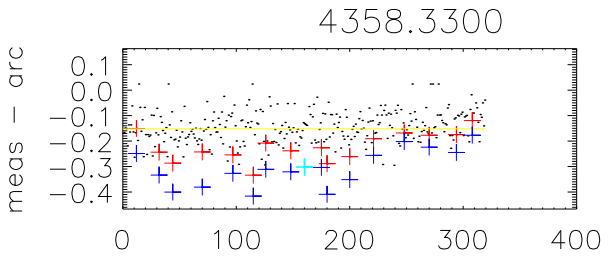

4046.5600
off: −0.44
sig: 0.040
4358.3300
off: −0.33
sig: 0.014
5460.9400
off: 0.06
sig: 0.012
5577.3390
off: 0.06
sig: 0.003
5889.9500
off: 0.30
sig: 0.007
5895.9240
off: 0.27
sig: 0.009

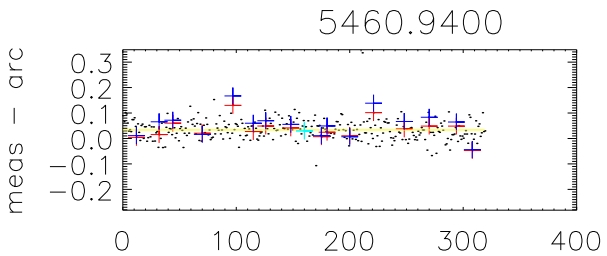

shift(pix)=−0.310
err(pix)= 0.045
oldshift(pix)=−0.437
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

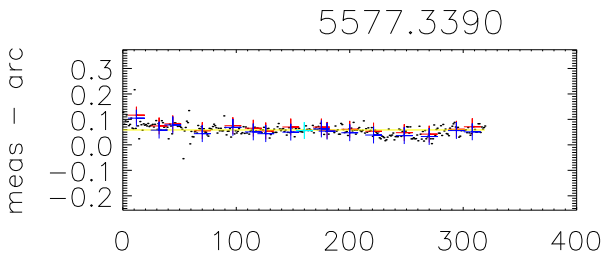

shift(pix)=−0.302
err(pix)= 0.016
oldshift(pix)=−0.327
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

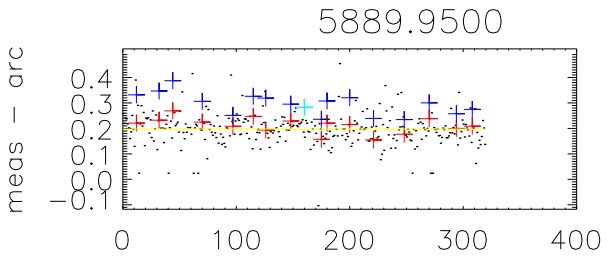

shift(pix)= 0.030
err(pix)= 0.014
oldshift(pix)= 0.057
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

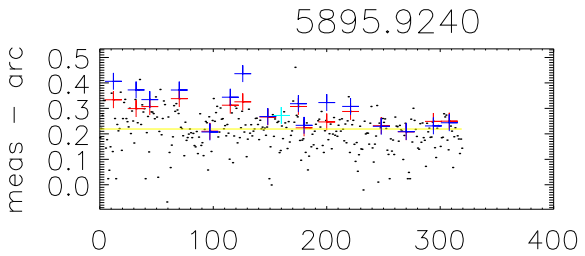

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

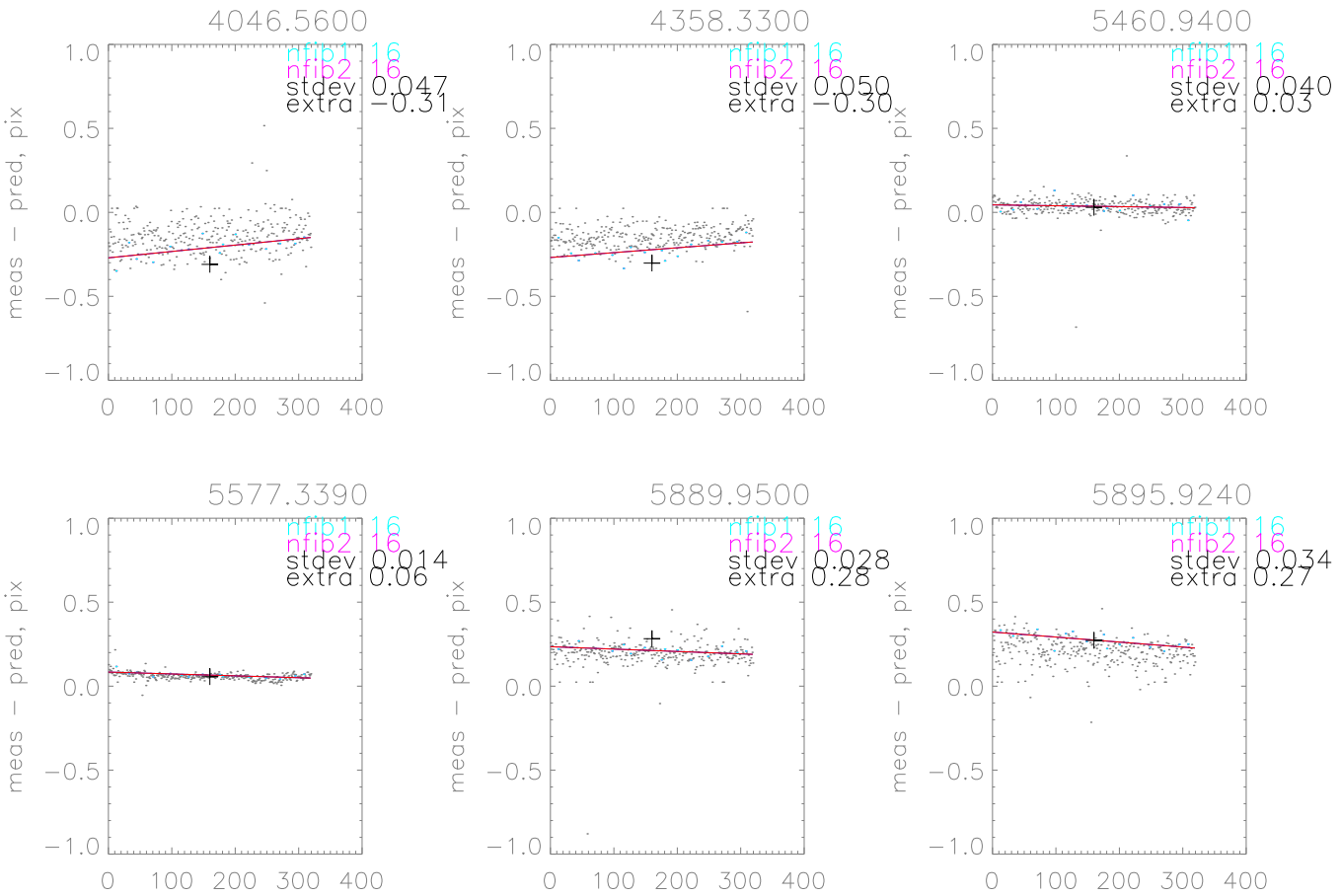

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

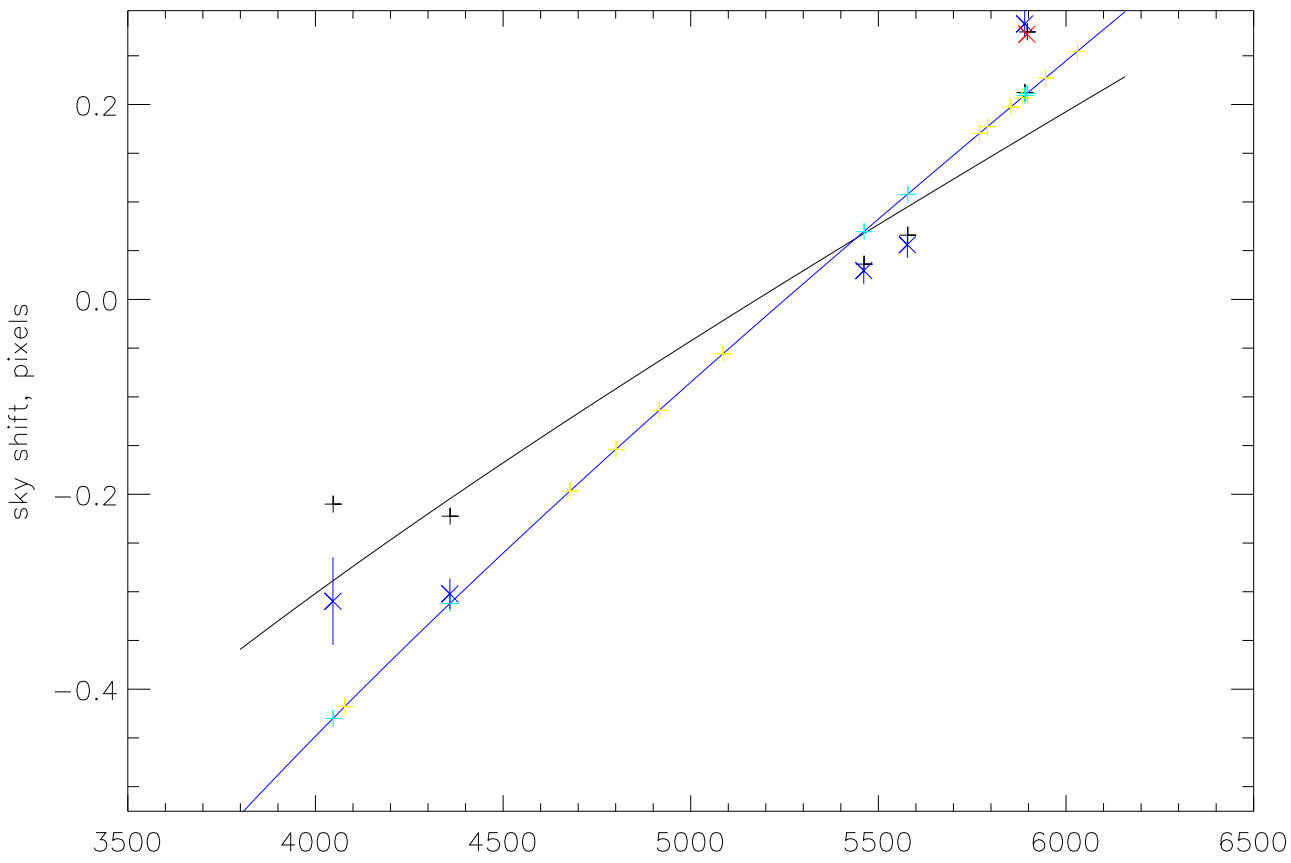

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

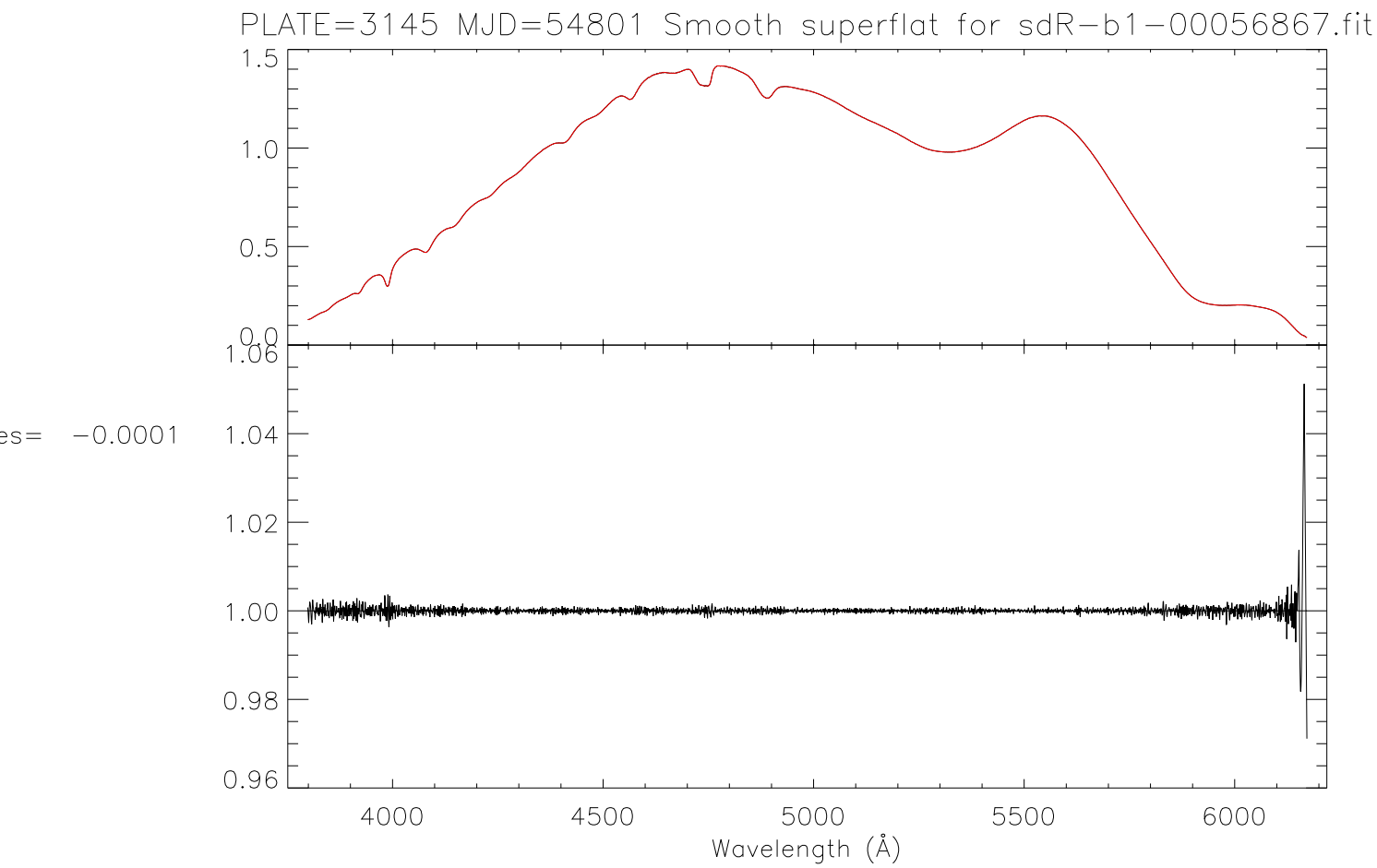

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

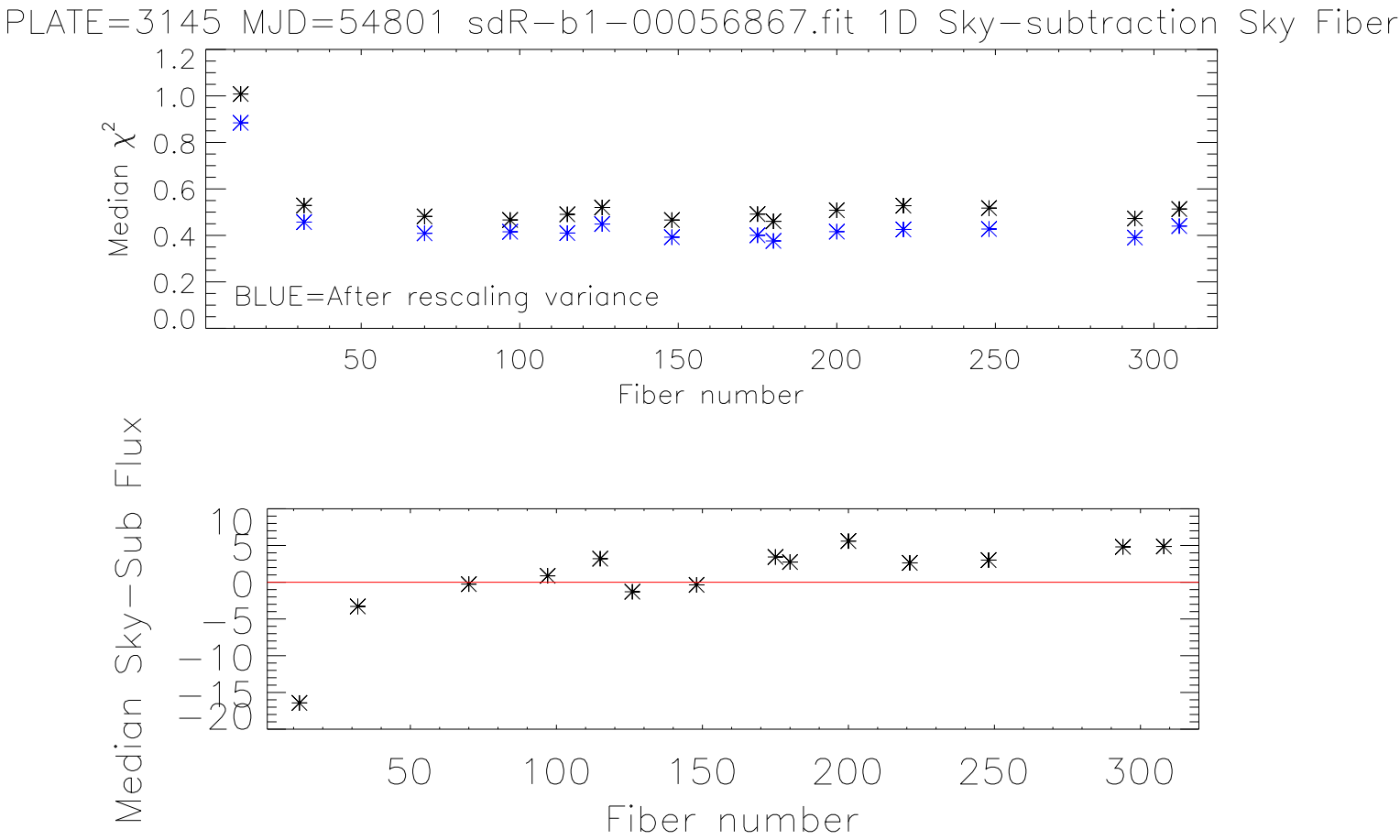

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

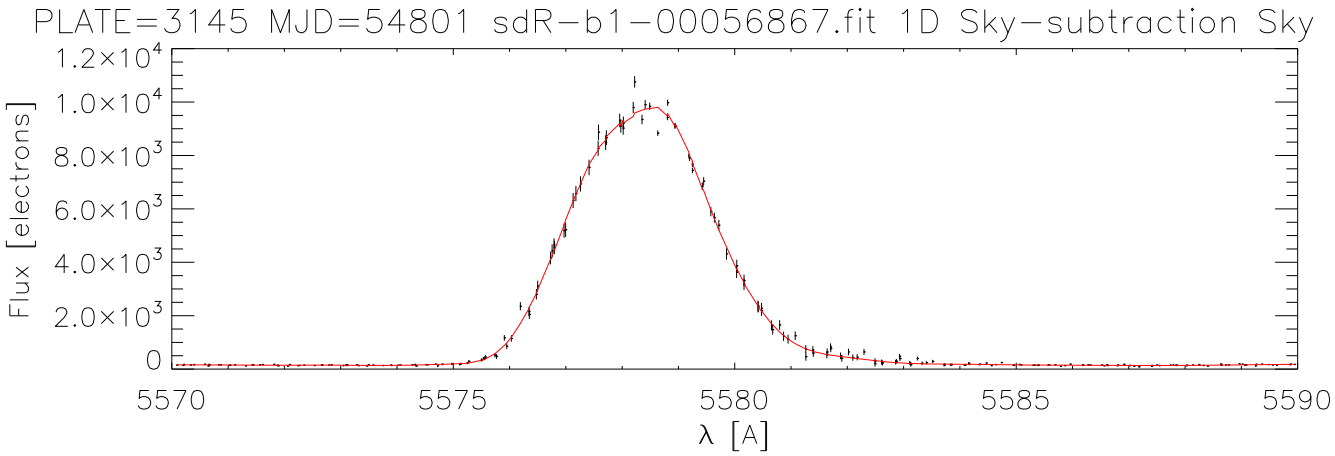

4046.5600
nfib1 16
nfib2 16
stdev 0.047
extra −0.31
4358.3300
nfib1 16
nfib2 16
stdev 0.050
extra −0.30
5460.9400
nfib1 16
nfib2 16
stdev 0.040
extra 0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.06
5889.9500
nfib1 16
nfib2 16
stdev 0.028
extra 0.28
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

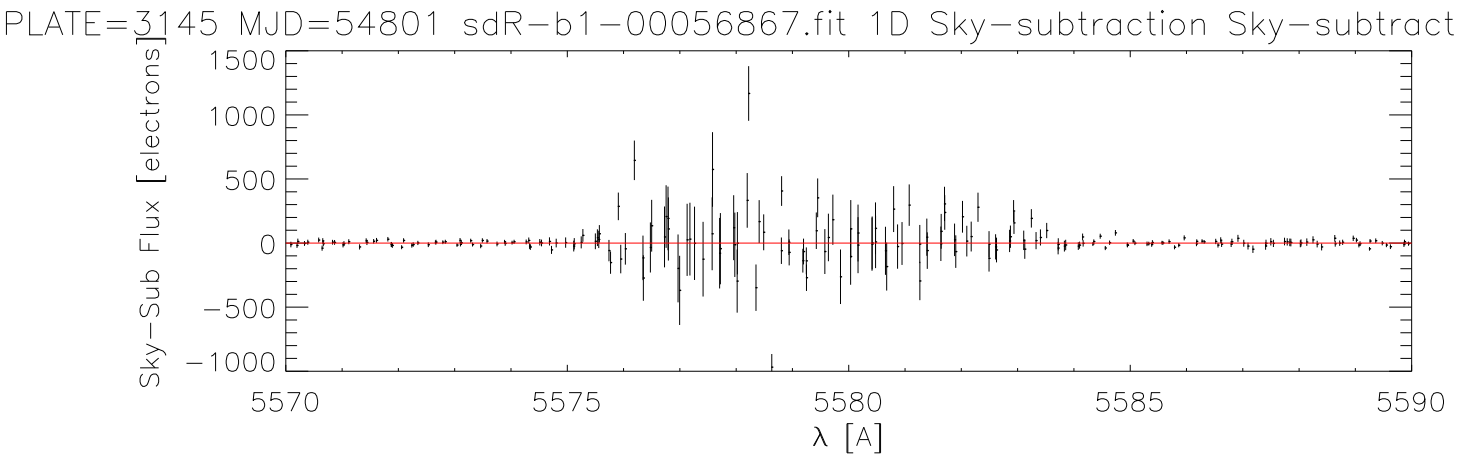

sky shift, pixels
0.2
0.0
−0.2
−0.4
3500
4000
4500
5000
5500
6000
6500

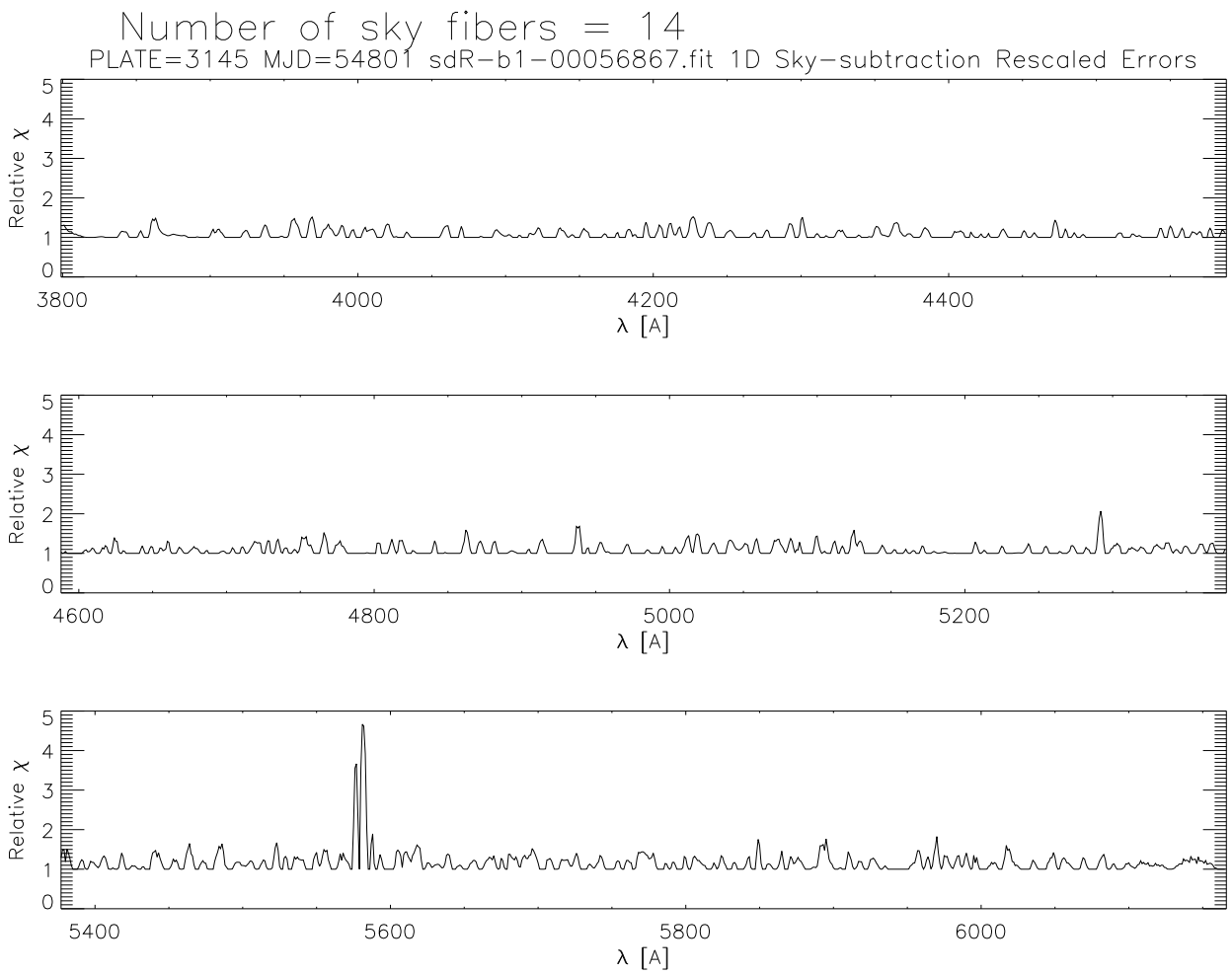

PLATE=3145 MJD=54801 Smooth superflat for sdR-b1-00056867.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

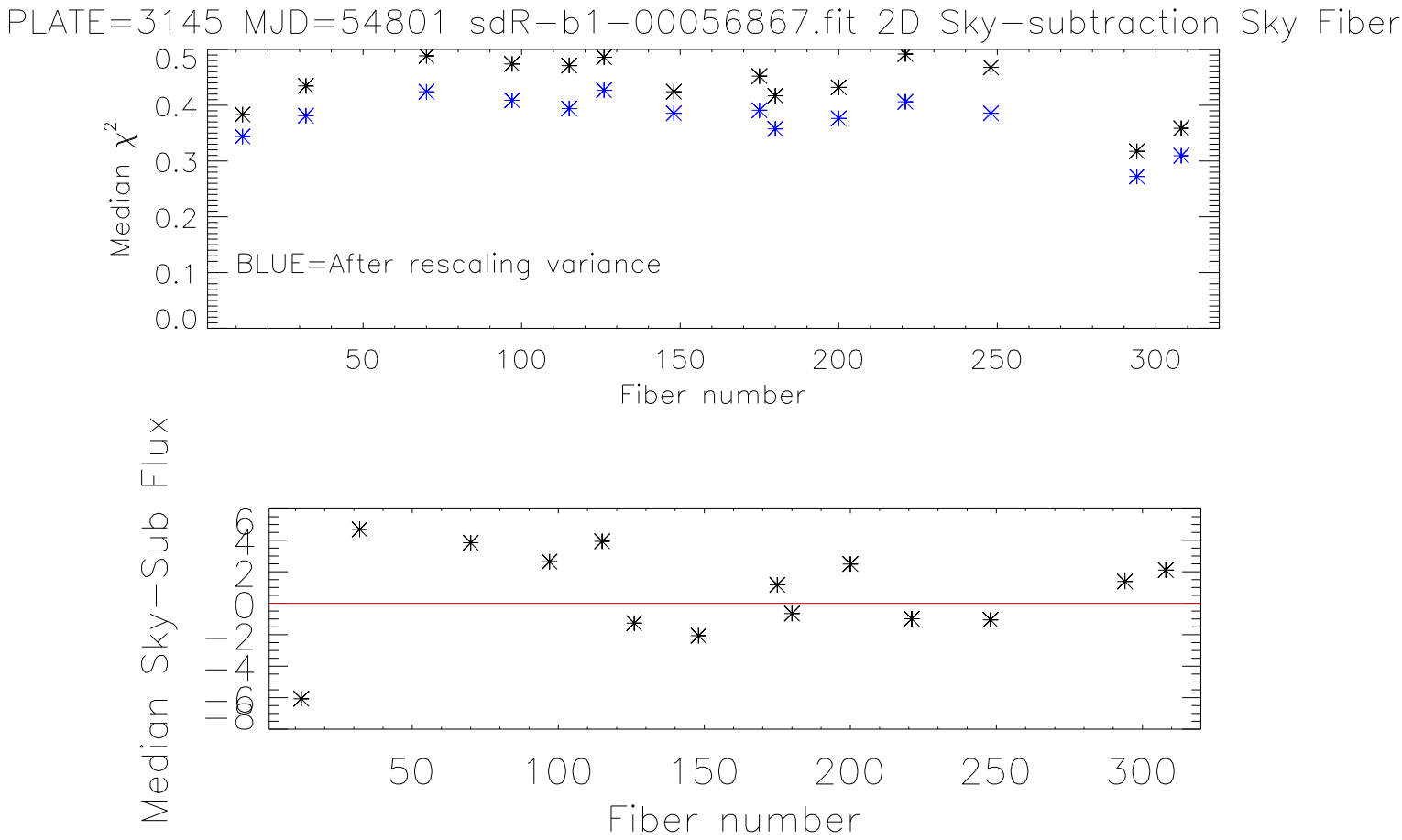
es= −0.0001

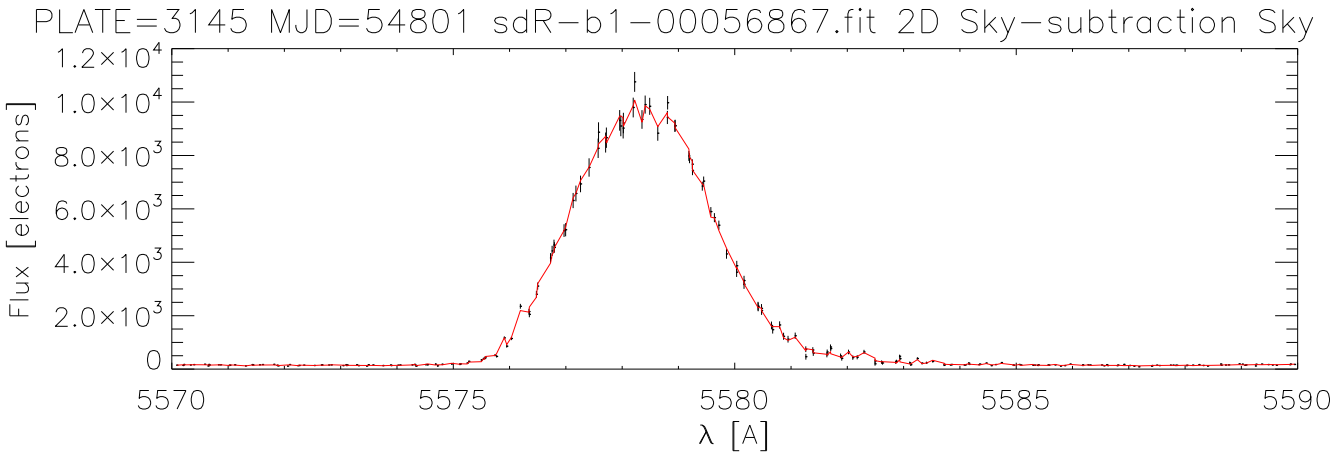

PLATE=3145 MJD=54801 sdR-b1-00056867.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

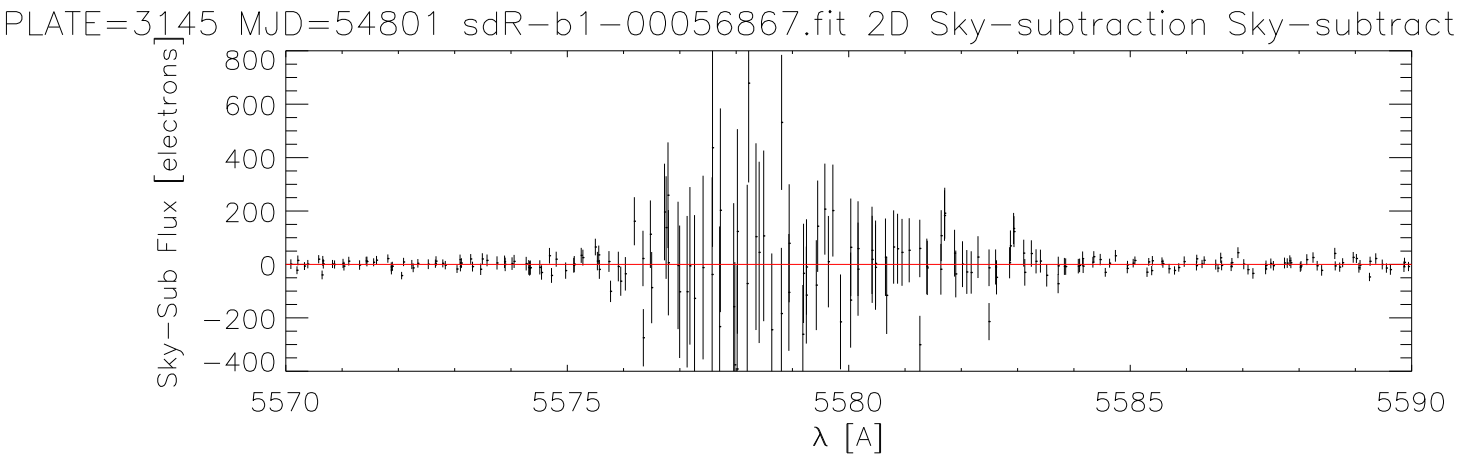

PLATE=3145 MJD=54801 sdR-b1-00056867.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

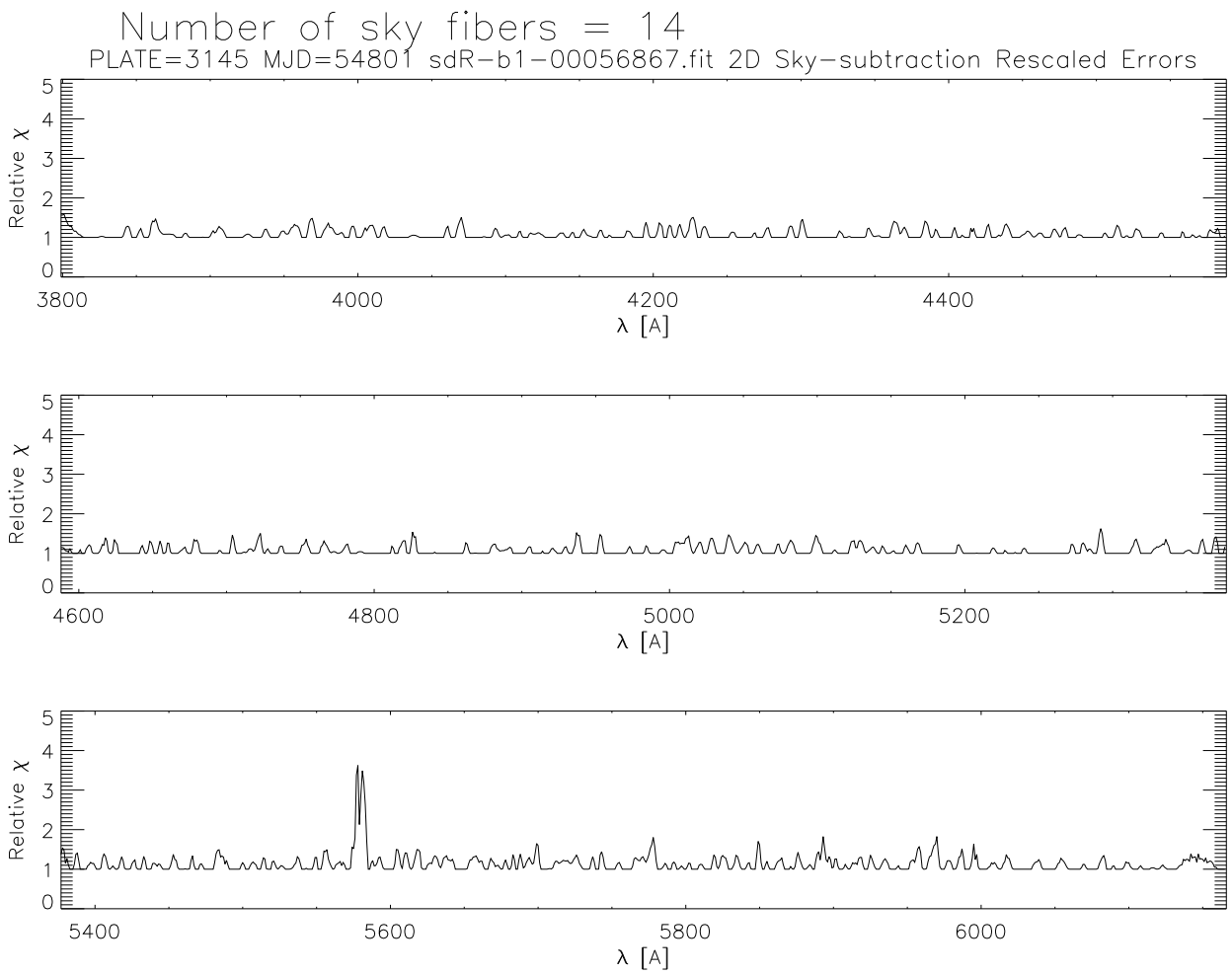

PLATE=3145 MJD=54801 sdR-b1-00056867.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

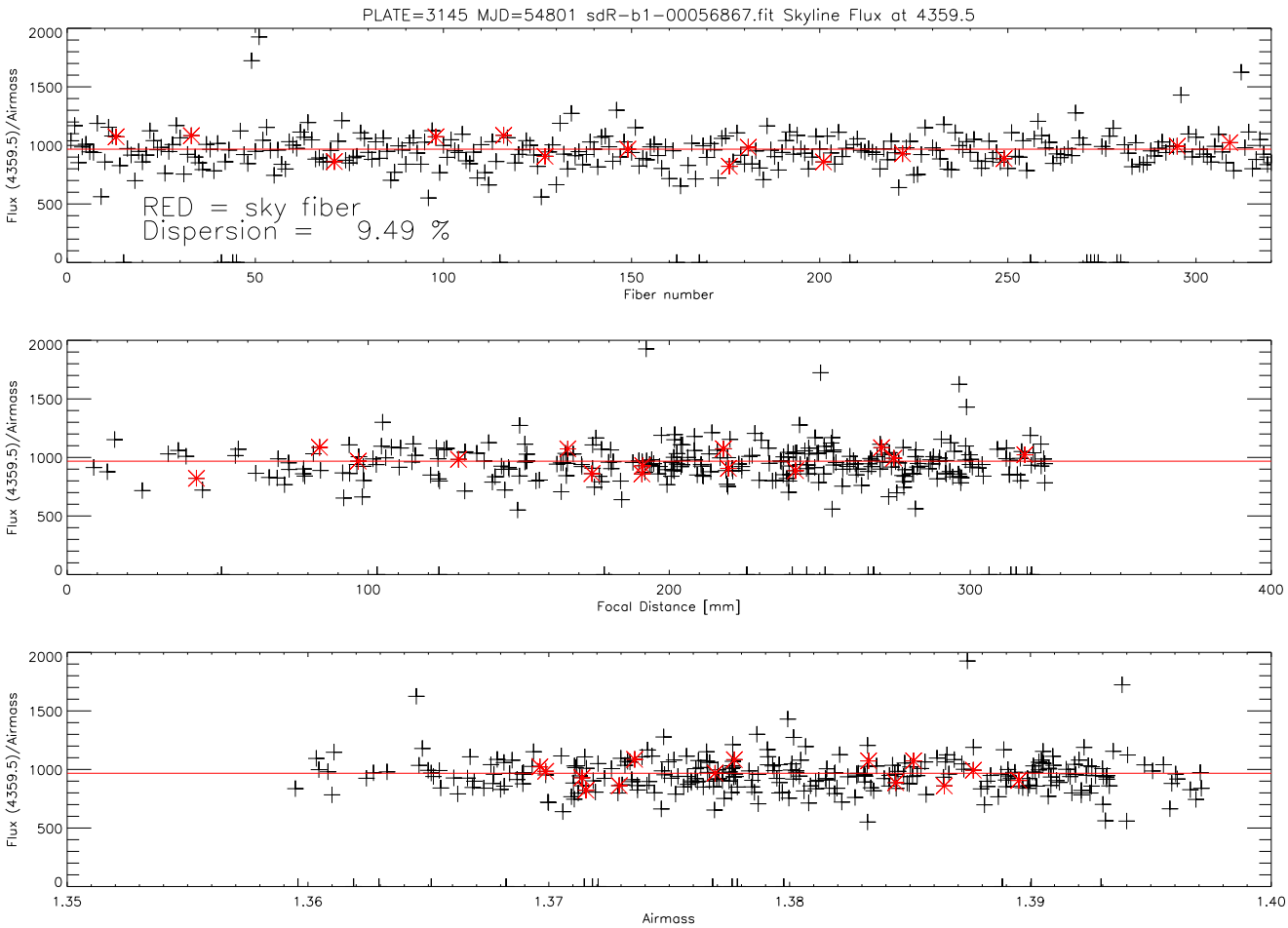

Number of sky fibers = 14
PLATE=3145 MJD=54801 sdR-b1-00056867.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

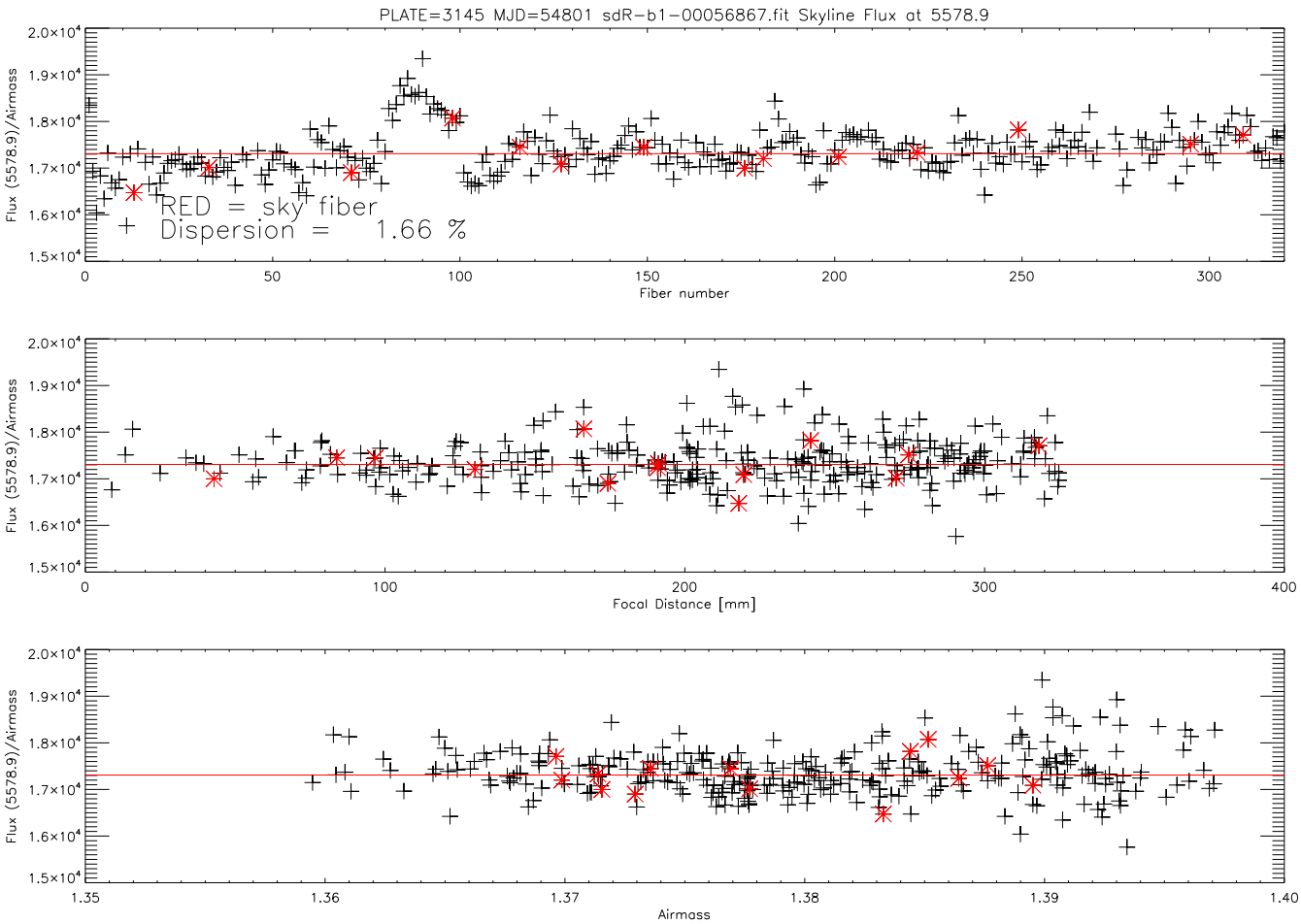

PLATE=3145 MJD=54801 sdR-b1-00056867.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.0006
-0.0004
-0.0002
0.0000
0.0002
0.0004
0.0006
50
100
150
200
250
300
Fiber number

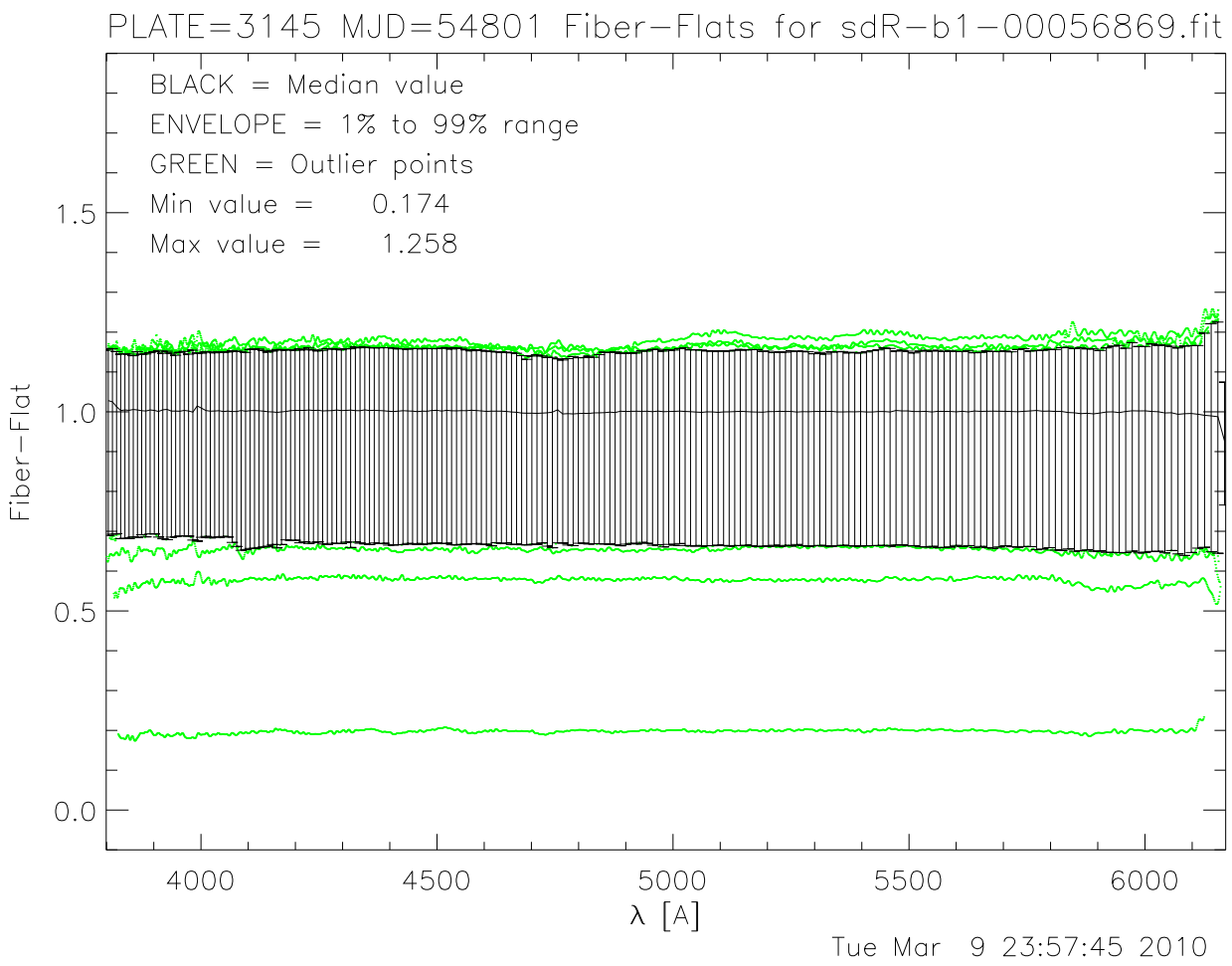

PLATE=3145 MJD=54801 sdR-b1-00056867.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

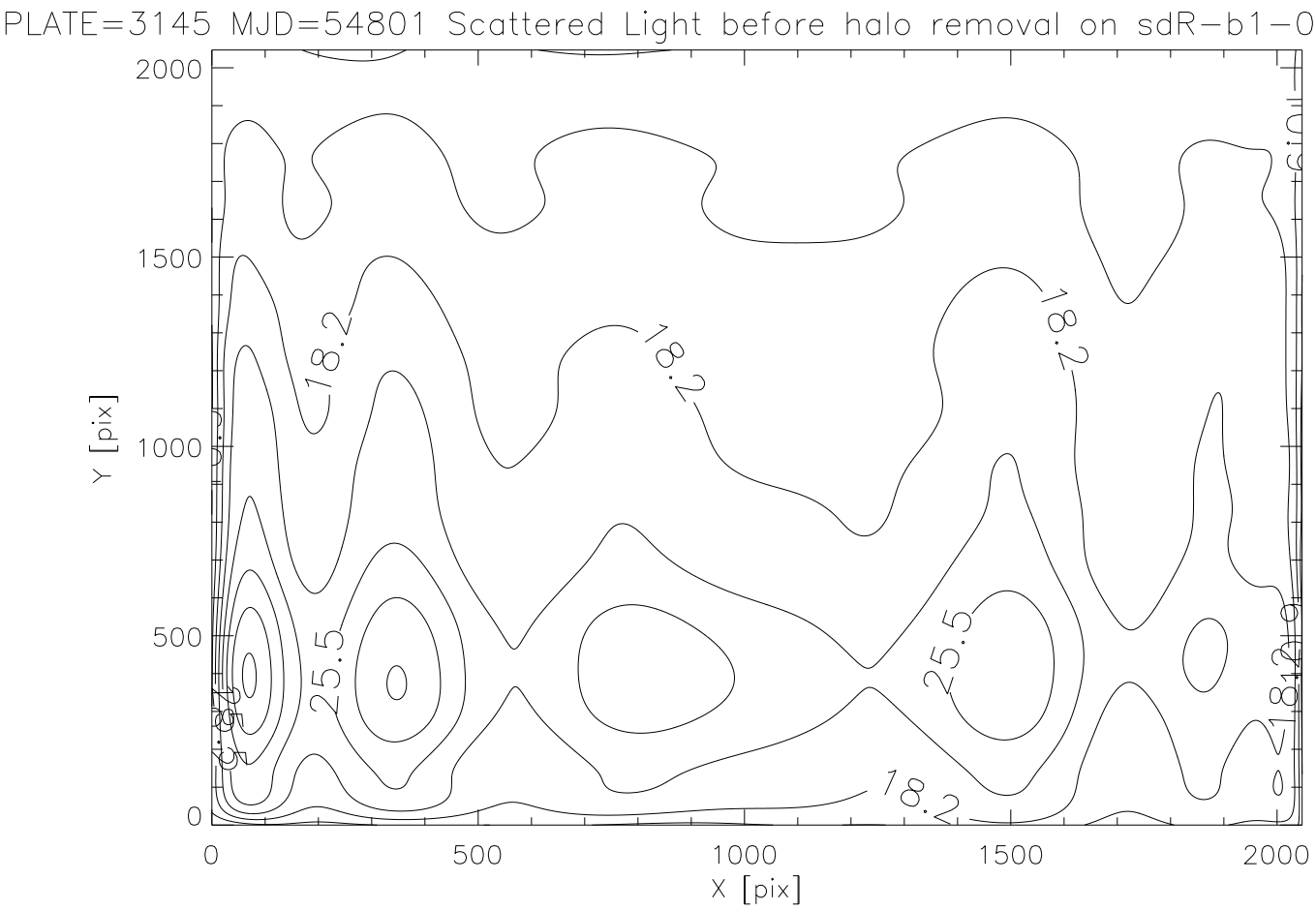

PLATE=3145 MJD=54801 sdR-b1-00056867.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

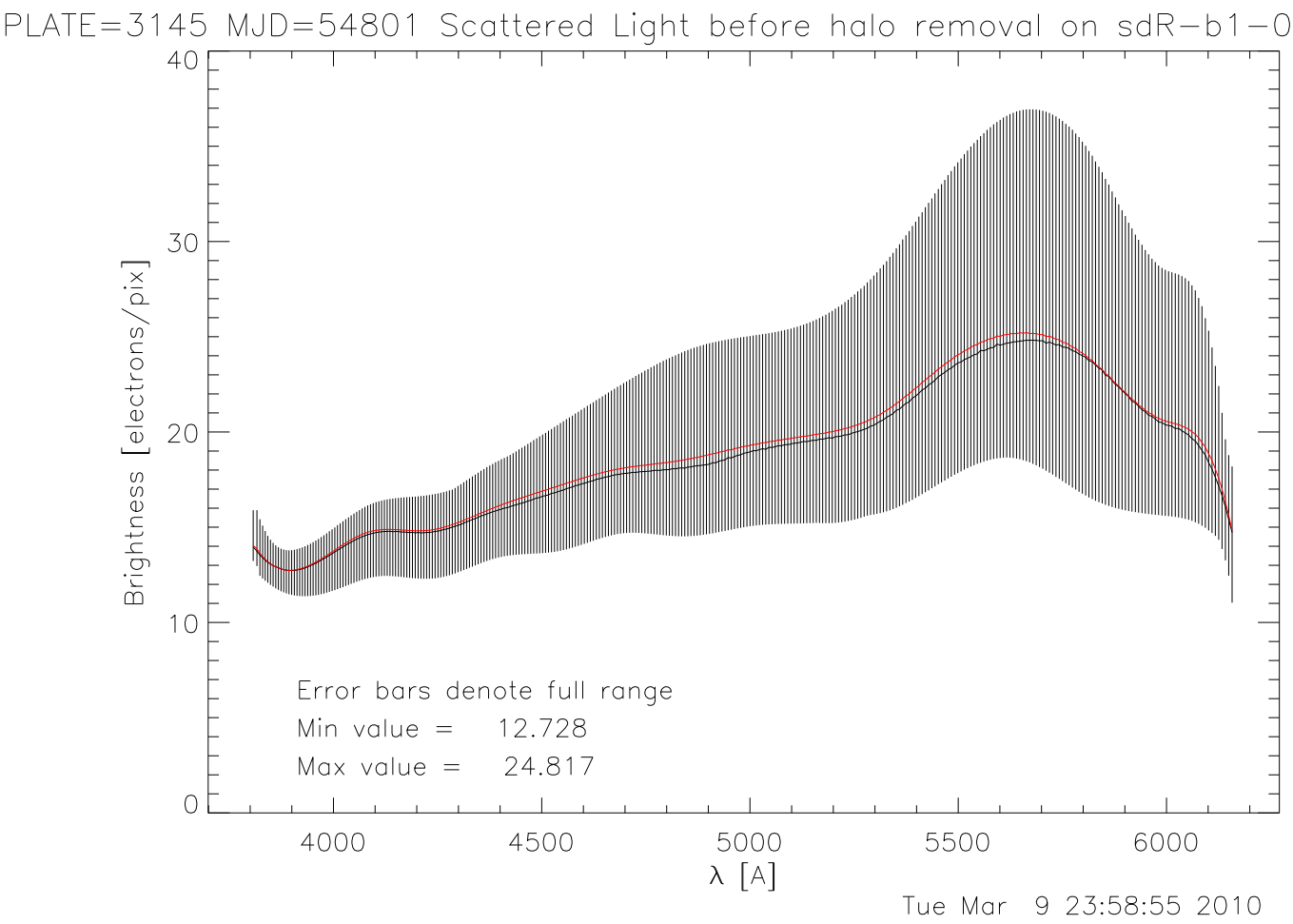

Number of sky fibers = 14
PLATE=3145 MJD=54801 sdR-b1-00056867.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

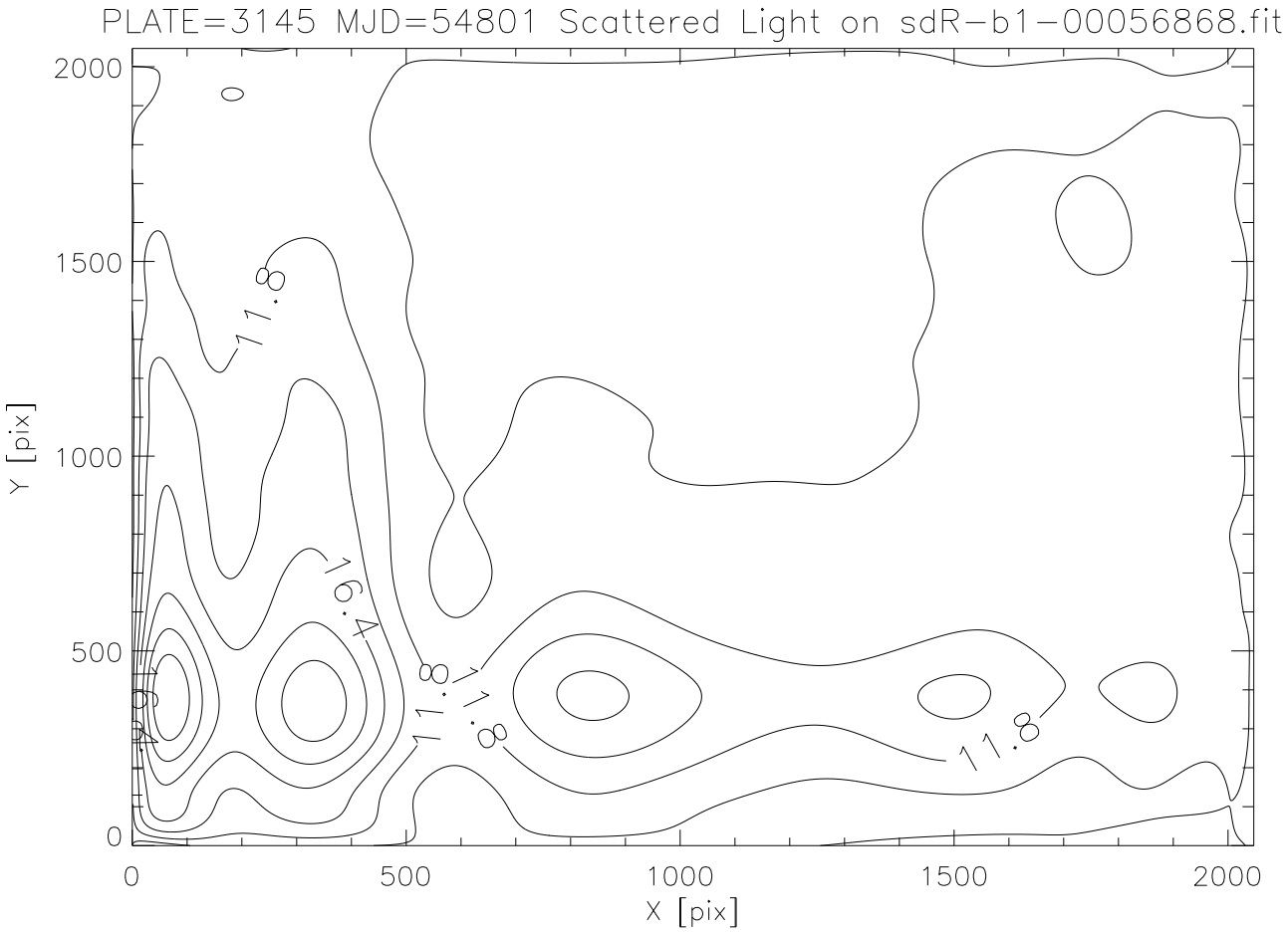

PLATE=3145 MJD=54801 sdR-b1-00056867.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.49 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

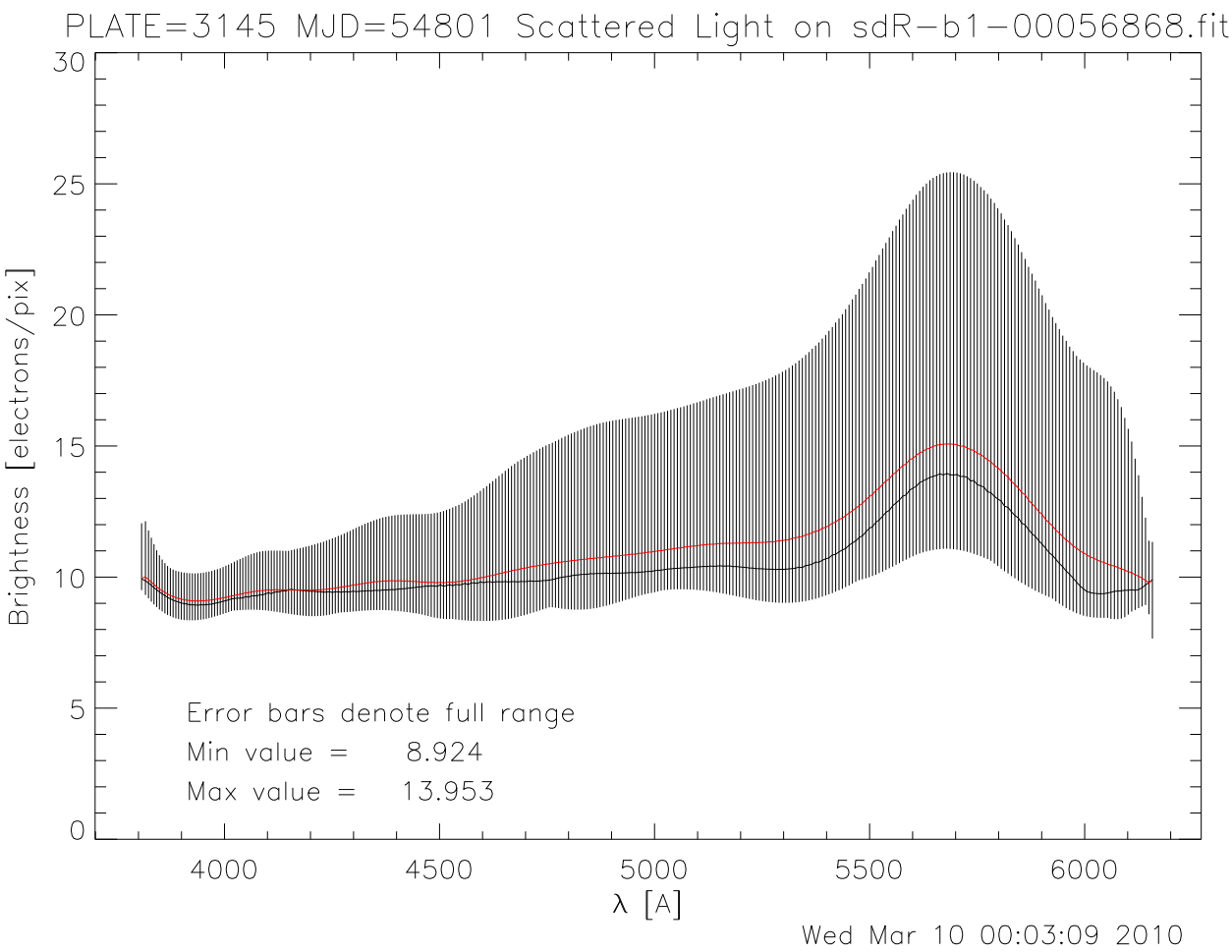

PLATE=3145 MJD=54801 sdR-b1-00056867.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.66 %
Focal Distance [mm]
Airmass

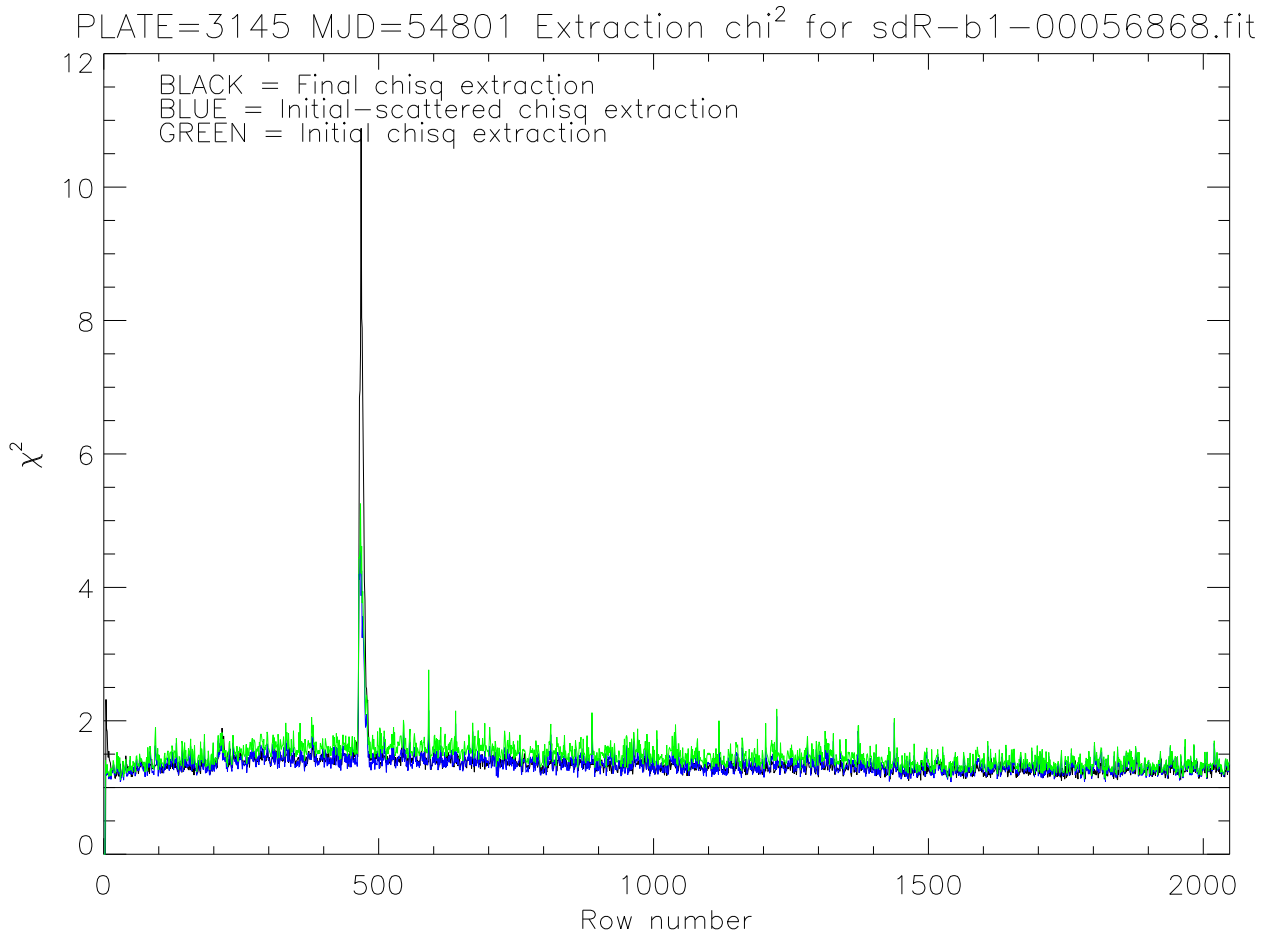

PLATE=3145 MJD=54801 Fiber-Flats for sdR-b1-00056869.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.174
Max value = 1.258
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 9 23:57:45 2010

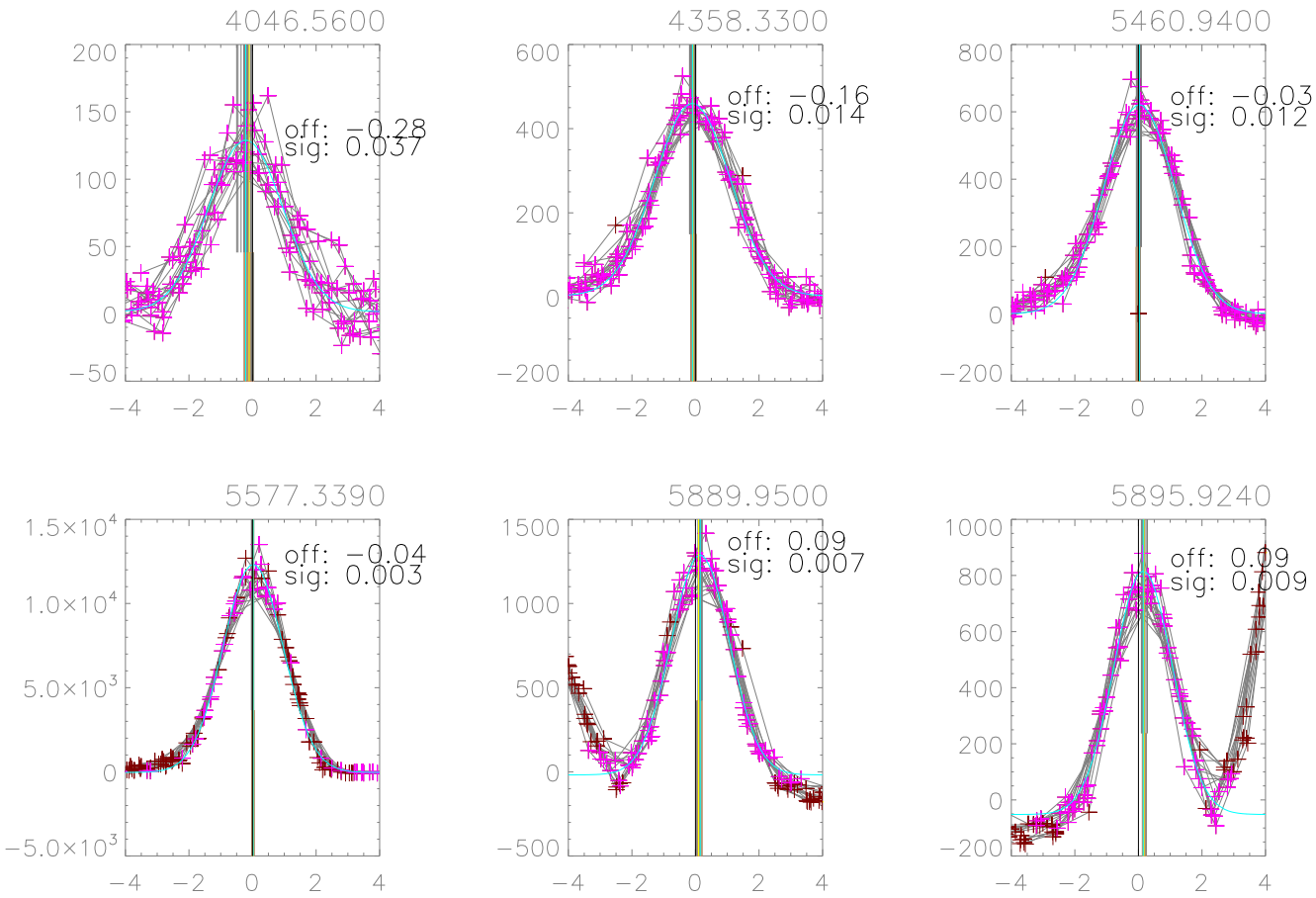

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR−b1−00056868.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
18.2
18.2
18.2
25.5
25.5
25.5
18.2

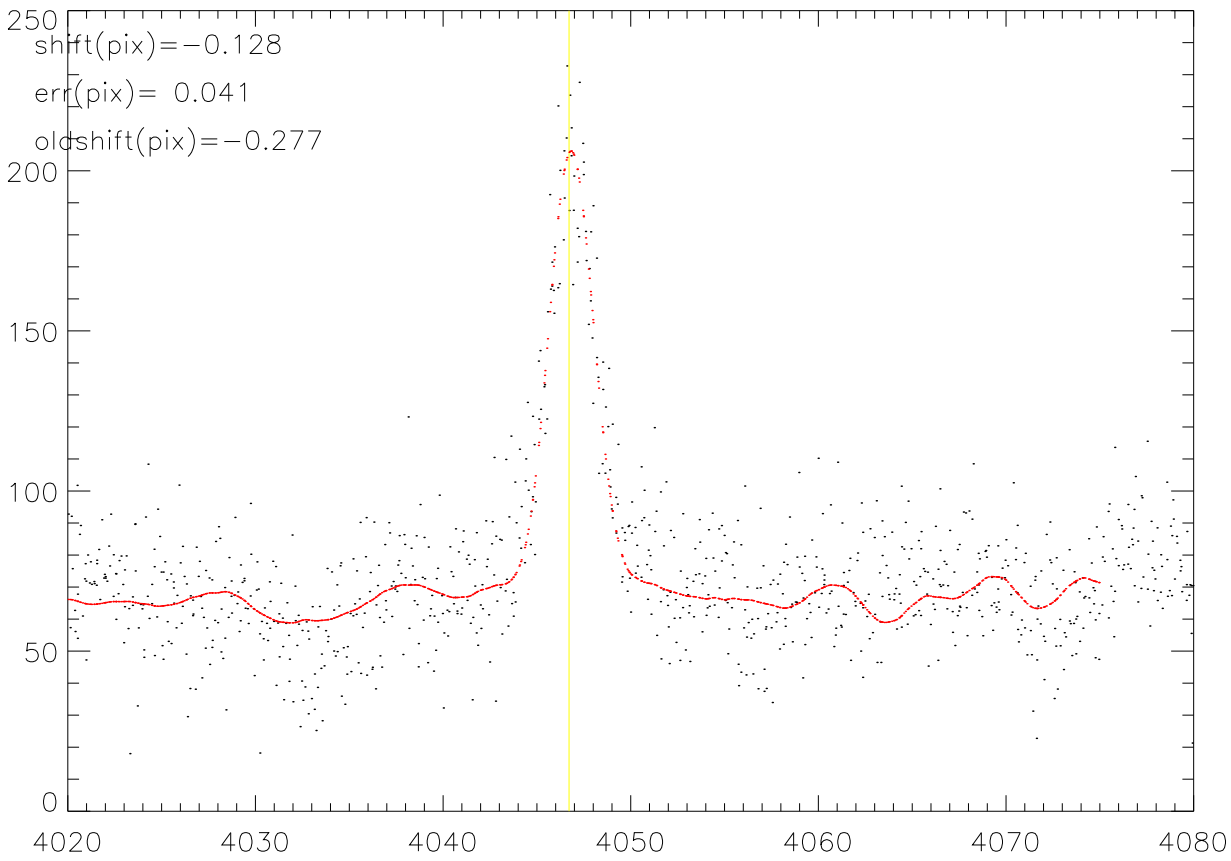

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-b1-00056868.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 12.728
Max value = 24.817
4000
4500
5000
5500
6000
λ [A]
Tue Mar 9 23:58:55 2010

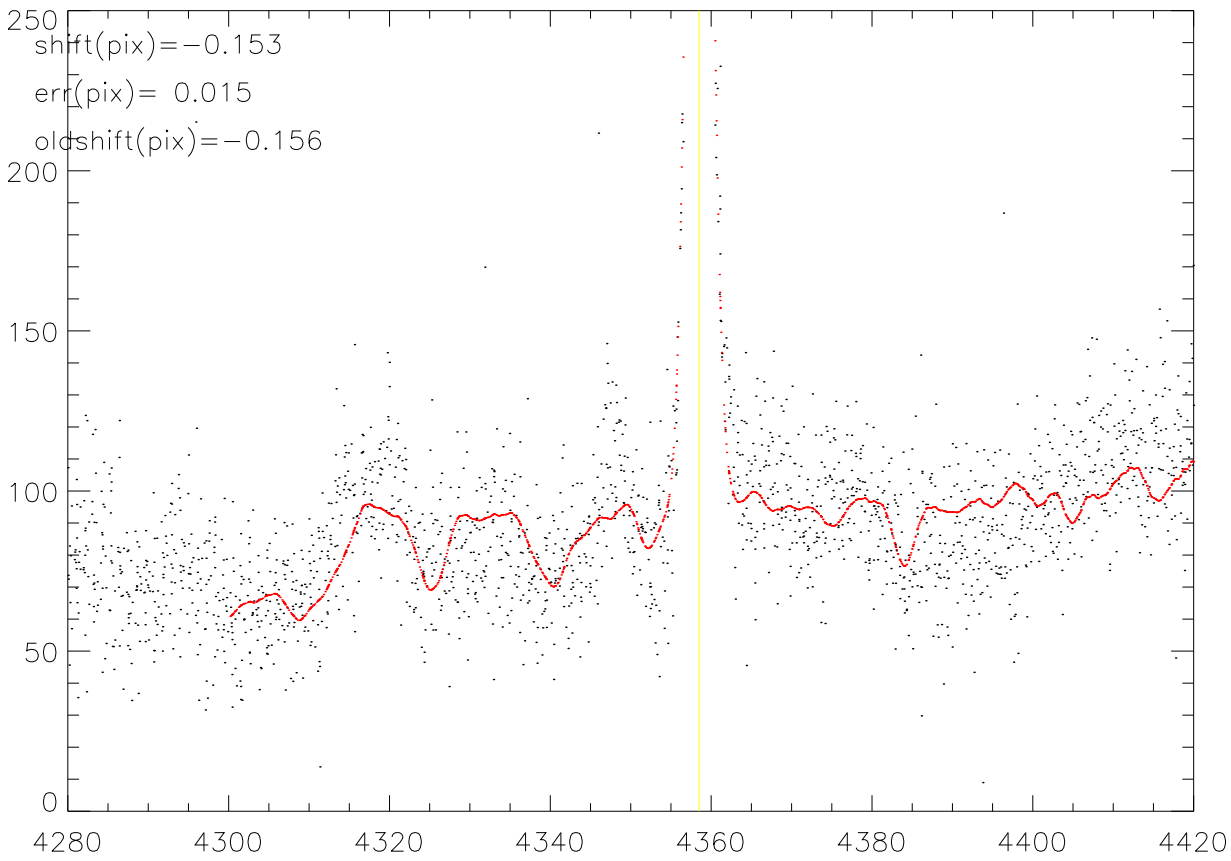

PLATE=3145 MJD=54801 Scattered Light on sdR-b1-00056868.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.8
11.8
11.8
11.8
11.8

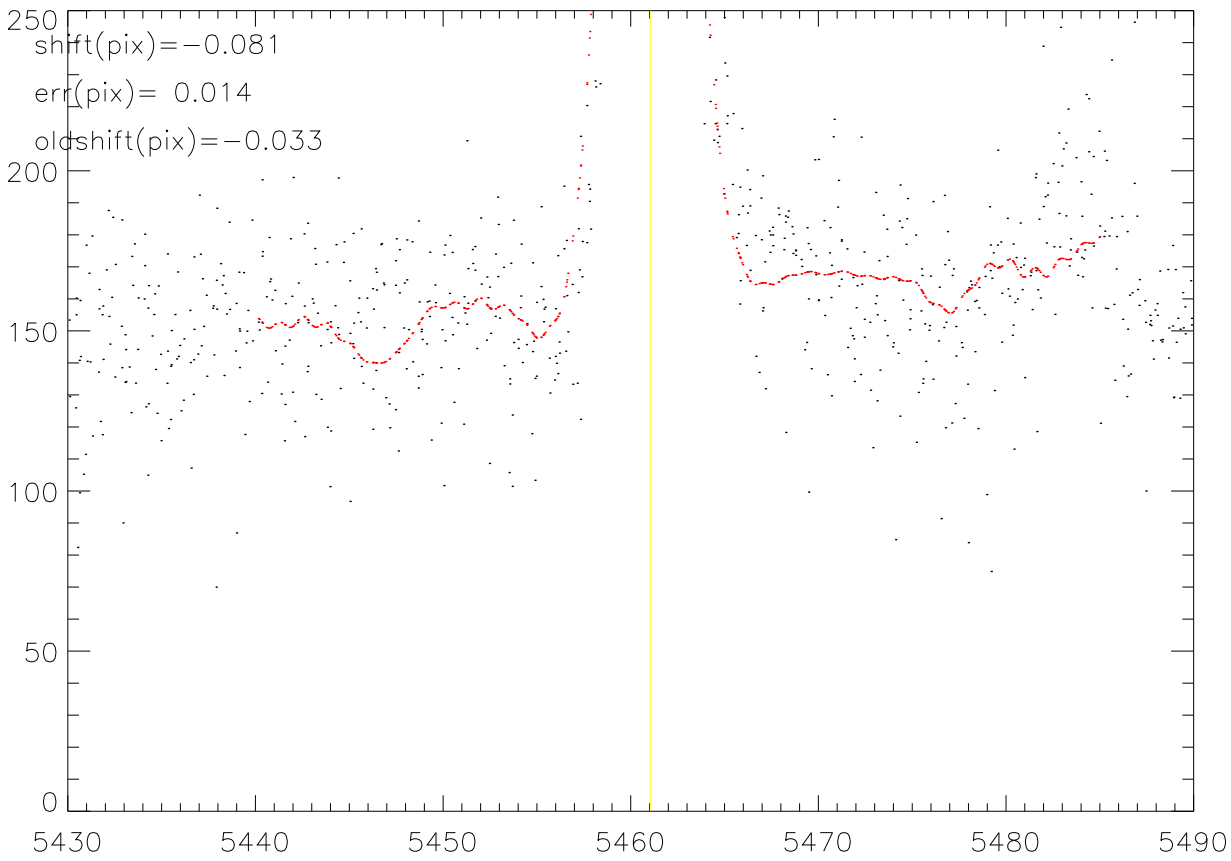

PLATE=3145 MJD=54801 Scattered Light on sdR-b1-00056868.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.924
Max value = 13.953
Wed Mar 10 00:03:09 2010

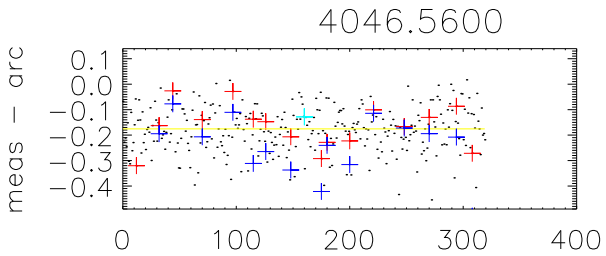

PLATE=3145 MJD=54801 Extraction chi^2 for sdR-b1-00056868.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

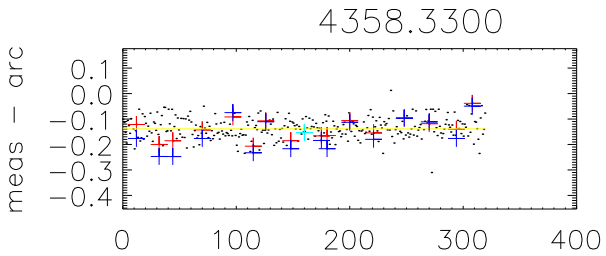

4046.5600
off: −0.28
sig: 0.037
4358.3300
off: −0.16
sig: 0.014
5460.9400
off: −0.03
sig: 0.012
5577.3390
off: −0.04
sig: 0.003
5889.9500
off: 0.09
sig: 0.007
5895.9240
off: 0.09
sig: 0.009

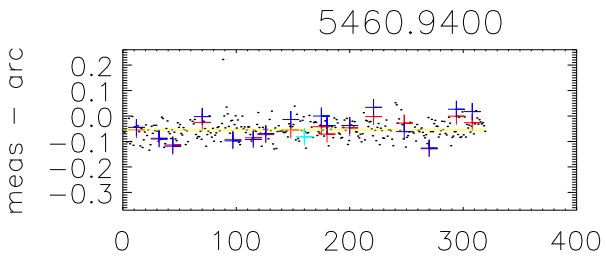

shift(pix)=−0.128
err(pix)= 0.041
oldshift(pix)=−0.277
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

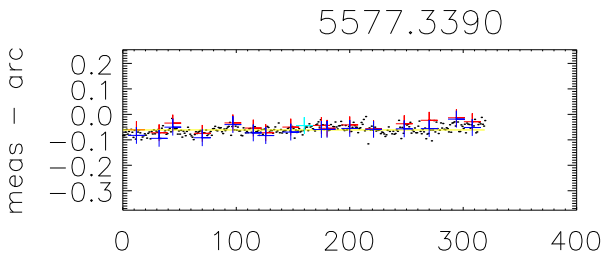

shift(pix)=−0.153
err(pix)= 0.015
oldshift(pix)=−0.156
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

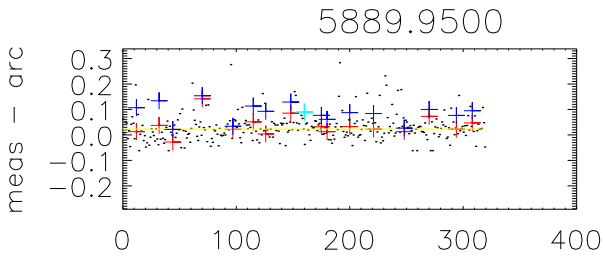

shift(pix)=−0.081
err(pix)= 0.014
oldshift(pix)=−0.033
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

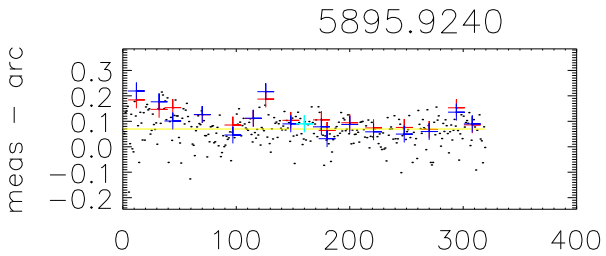

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

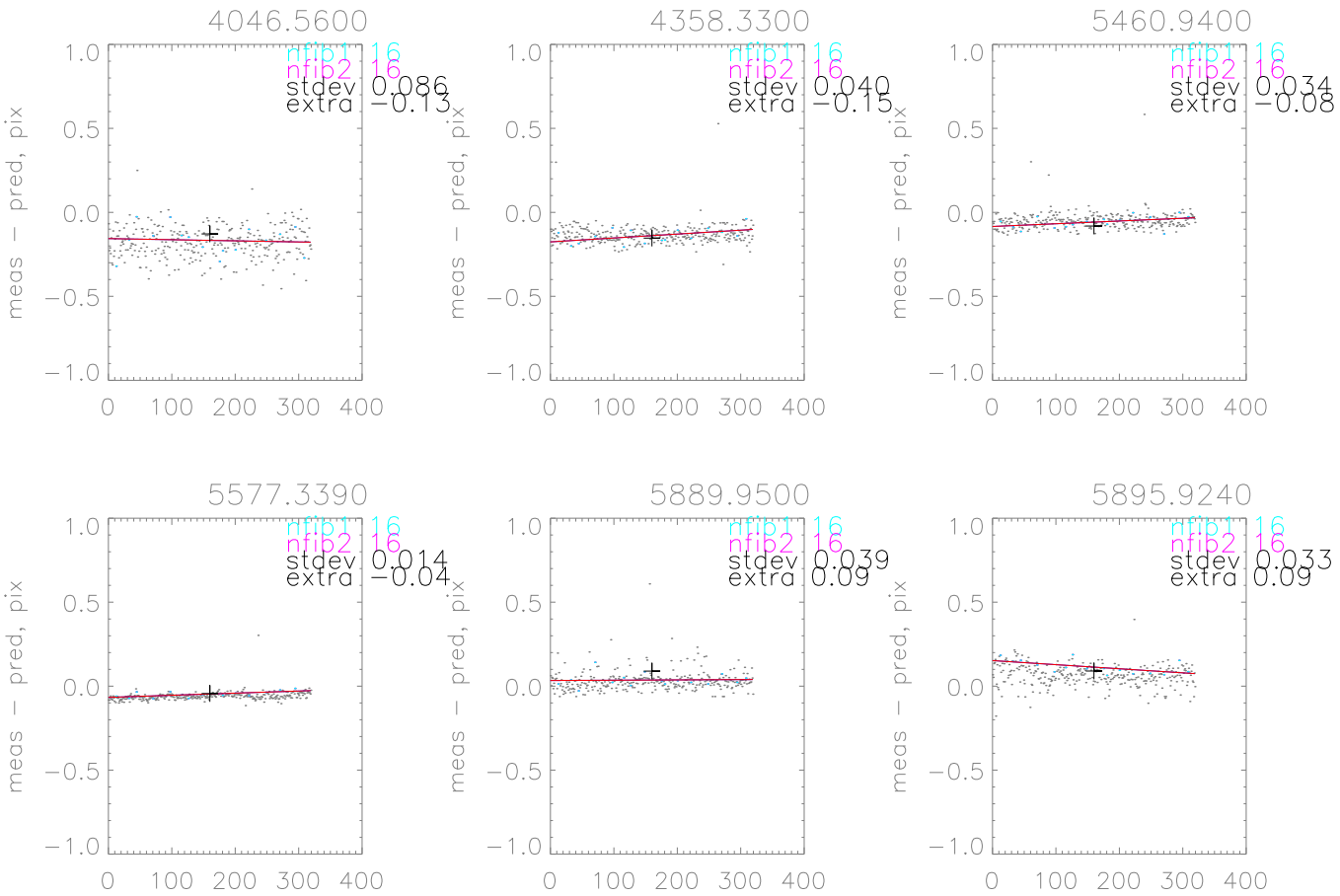

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

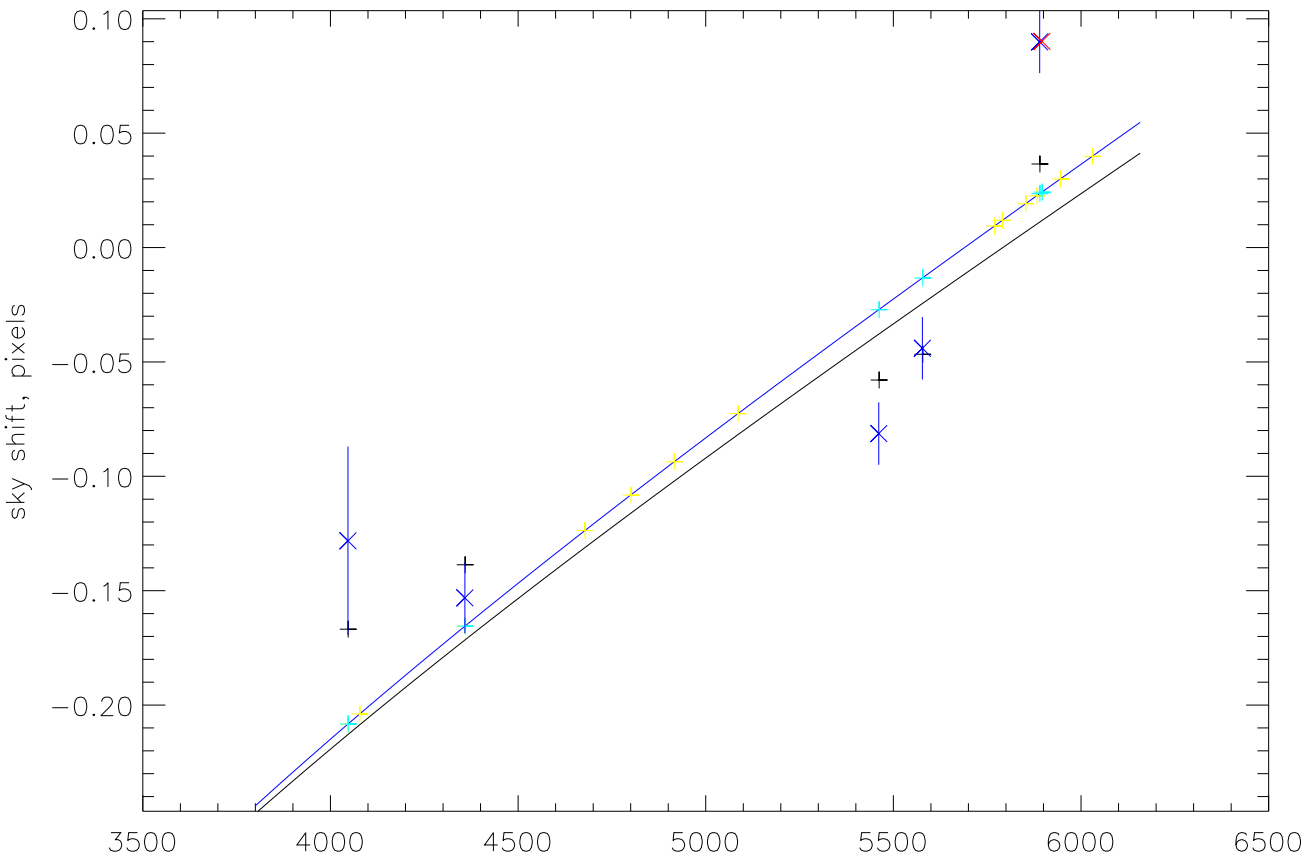

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

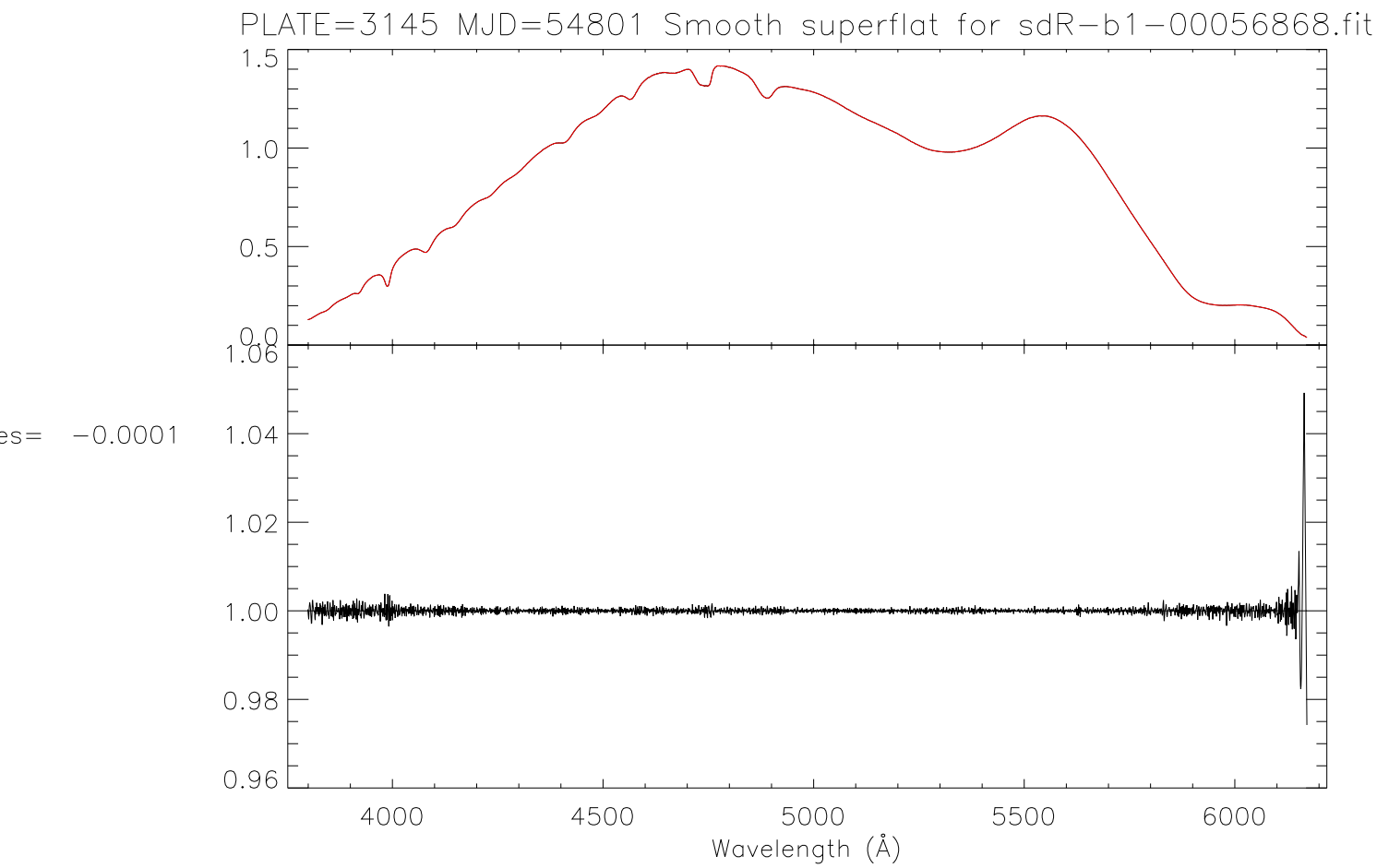

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

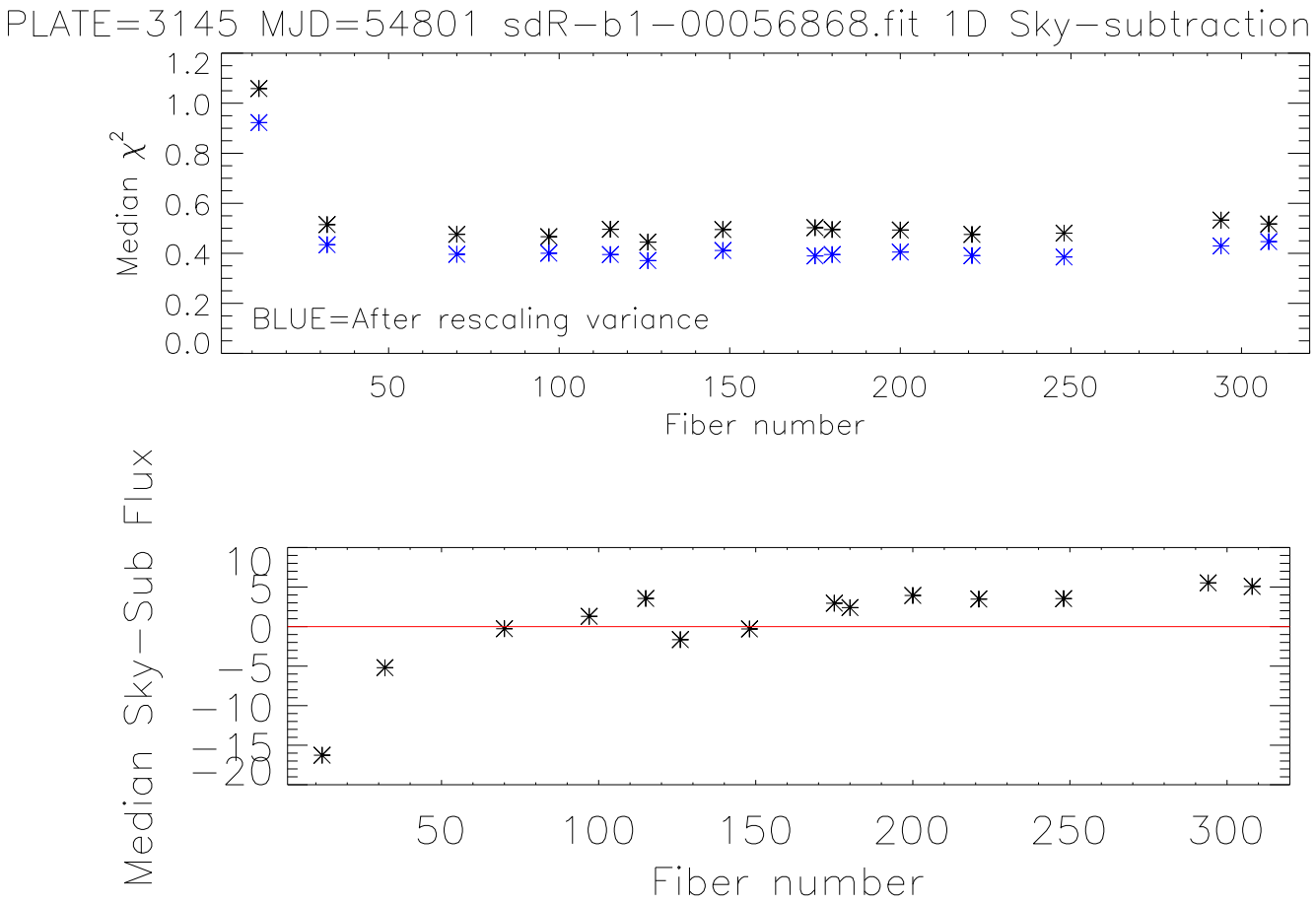

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

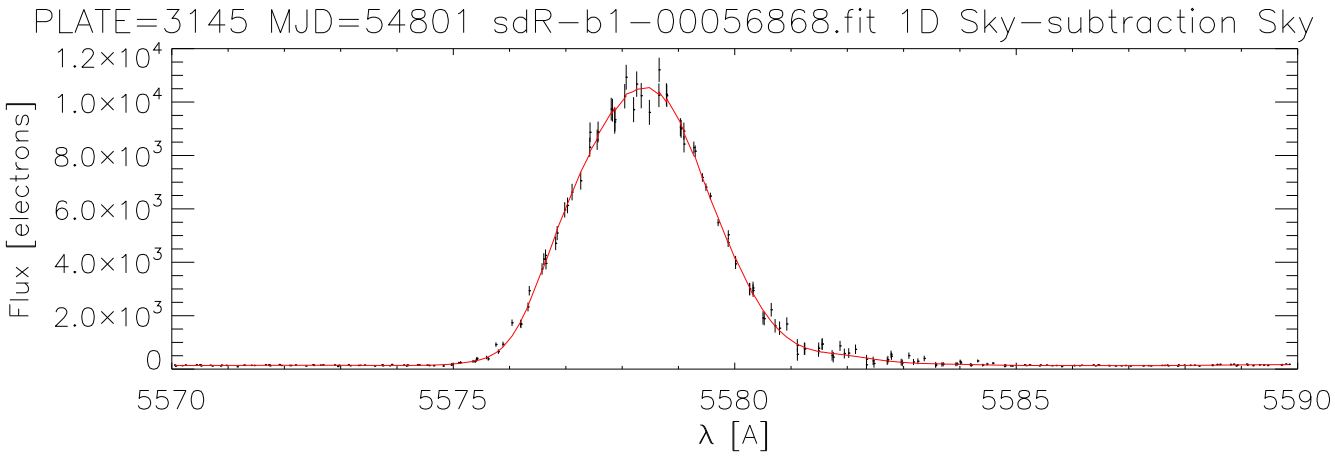

4046.5600
nfib1 16
nfib2 16
stdev 0.086
extra −0.13
4358.3300
nfib1 16
nfib2 16
stdev 0.040
extra −0.15
5460.9400
nfib1 16
nfib2 16
stdev 0.034
extra −0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra −0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.039
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.033
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

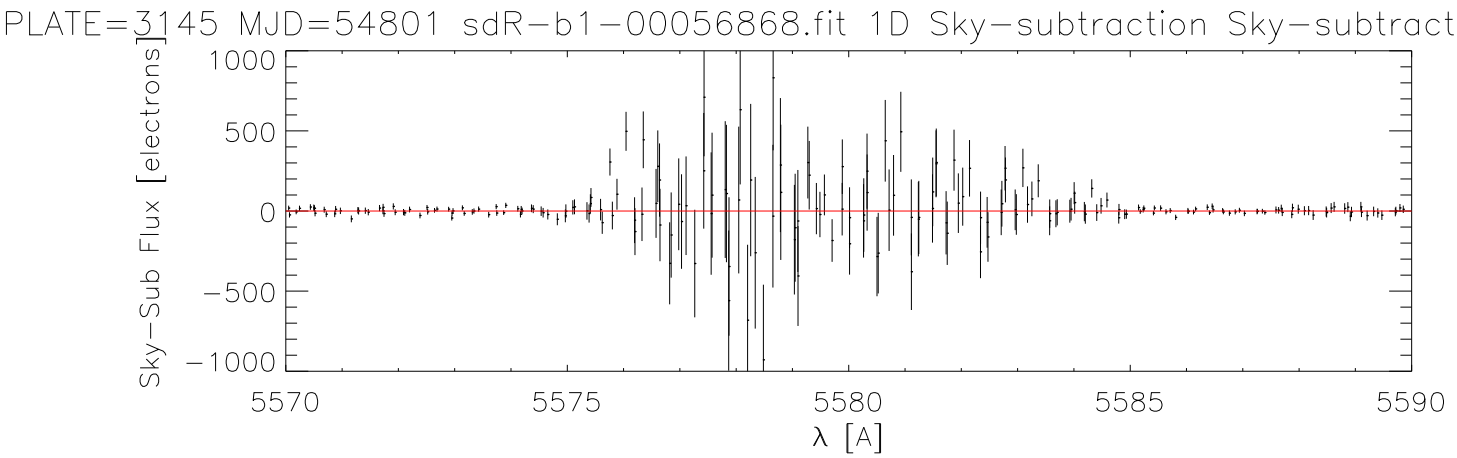

0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

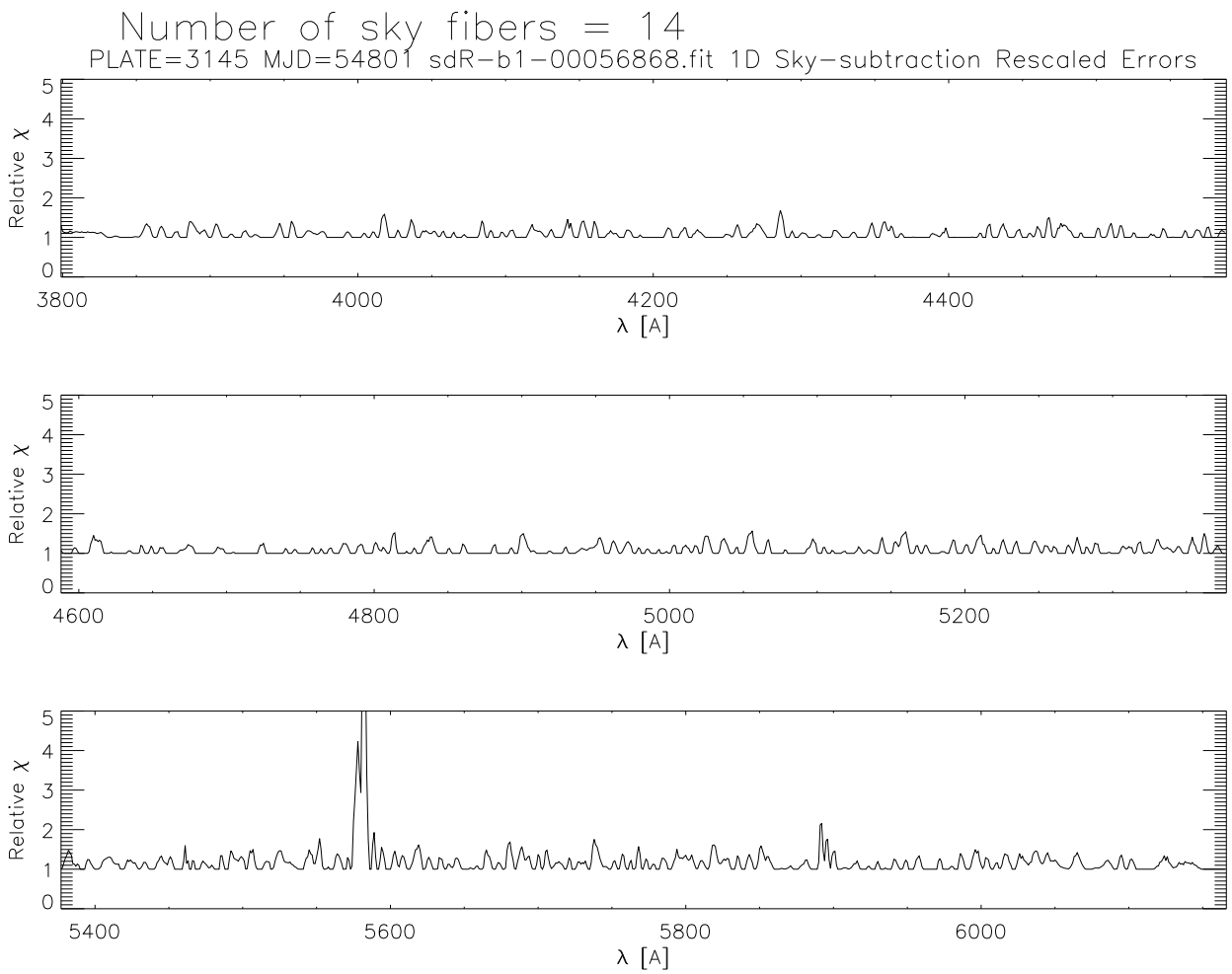

PLATE=3145 MJD=54801 Smooth superflat for sdR-b1-00056868.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

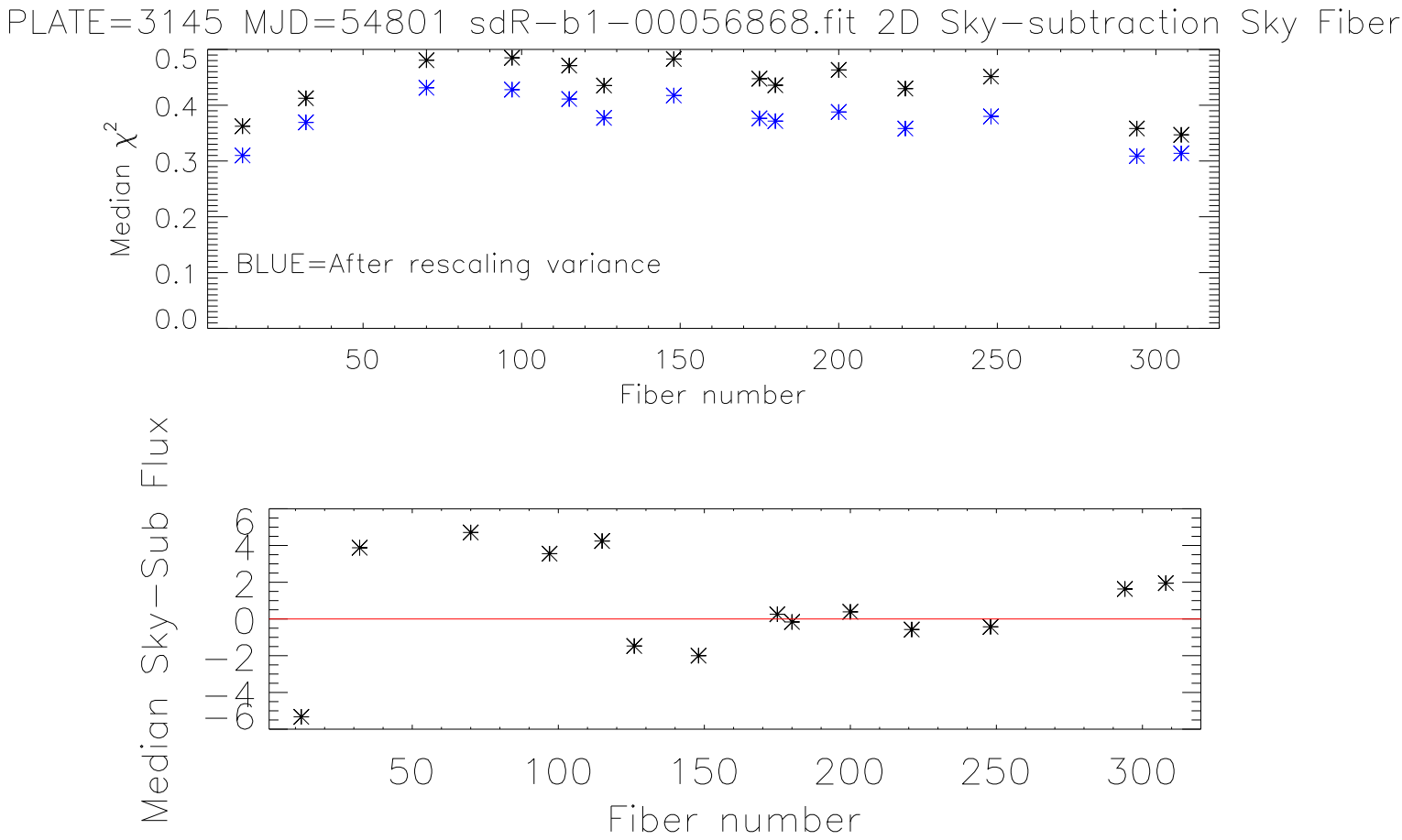
es= −0.0001

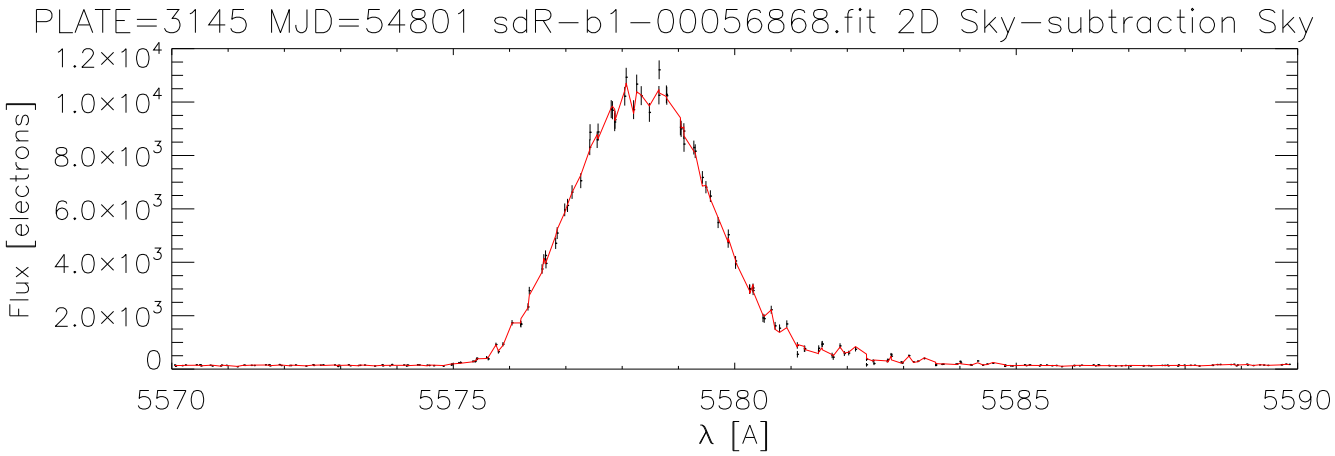

PLATE=3145 MJD=54801 sdR-b1-00056868.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

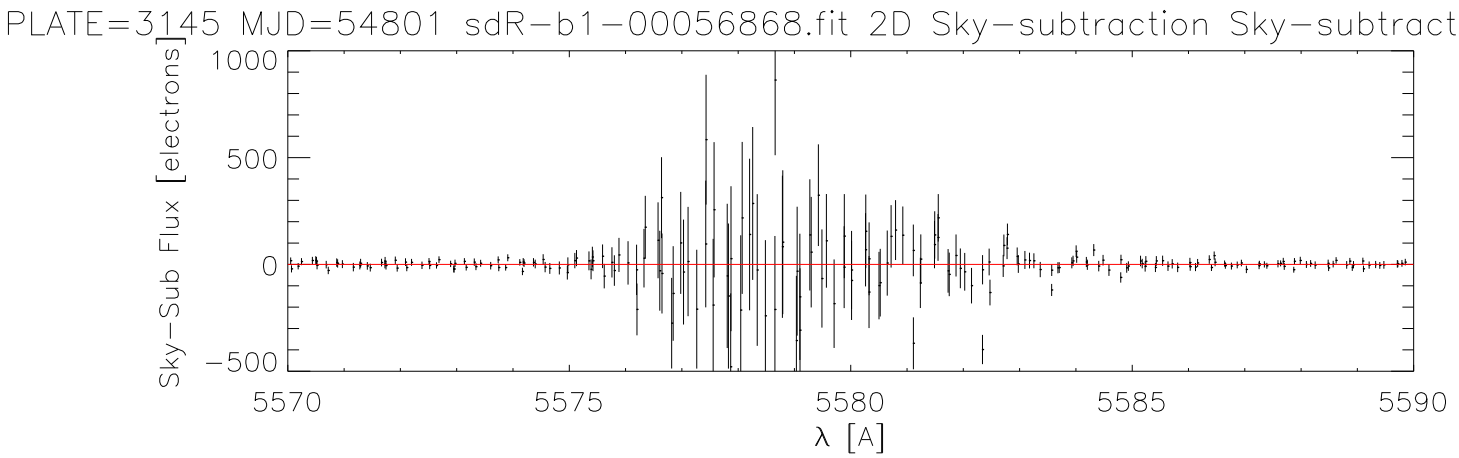

PLATE=3145 MJD=54801 sdR-b1-00056868.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

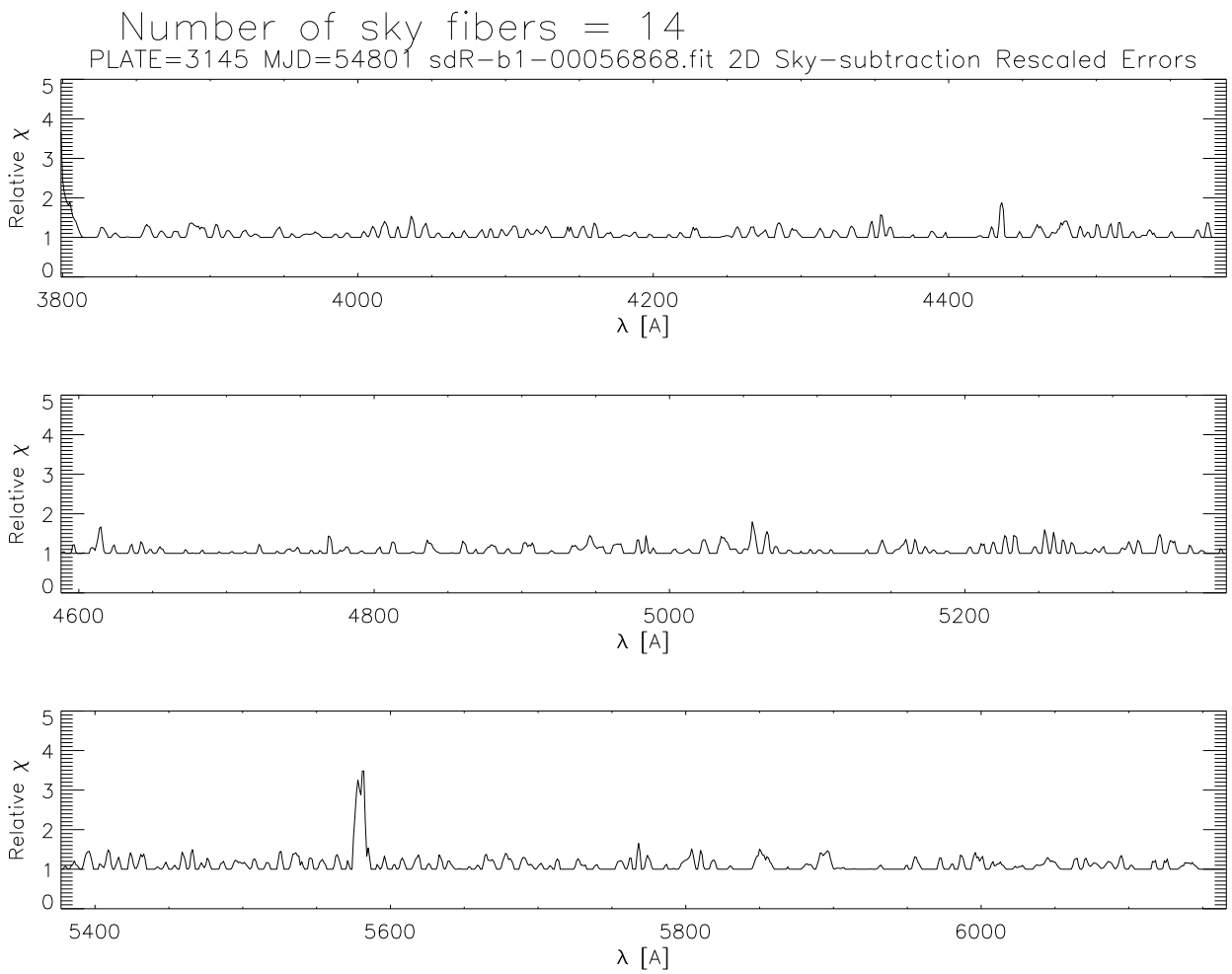

PLATE=3145 MJD=54801 sdR-b1-00056868.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

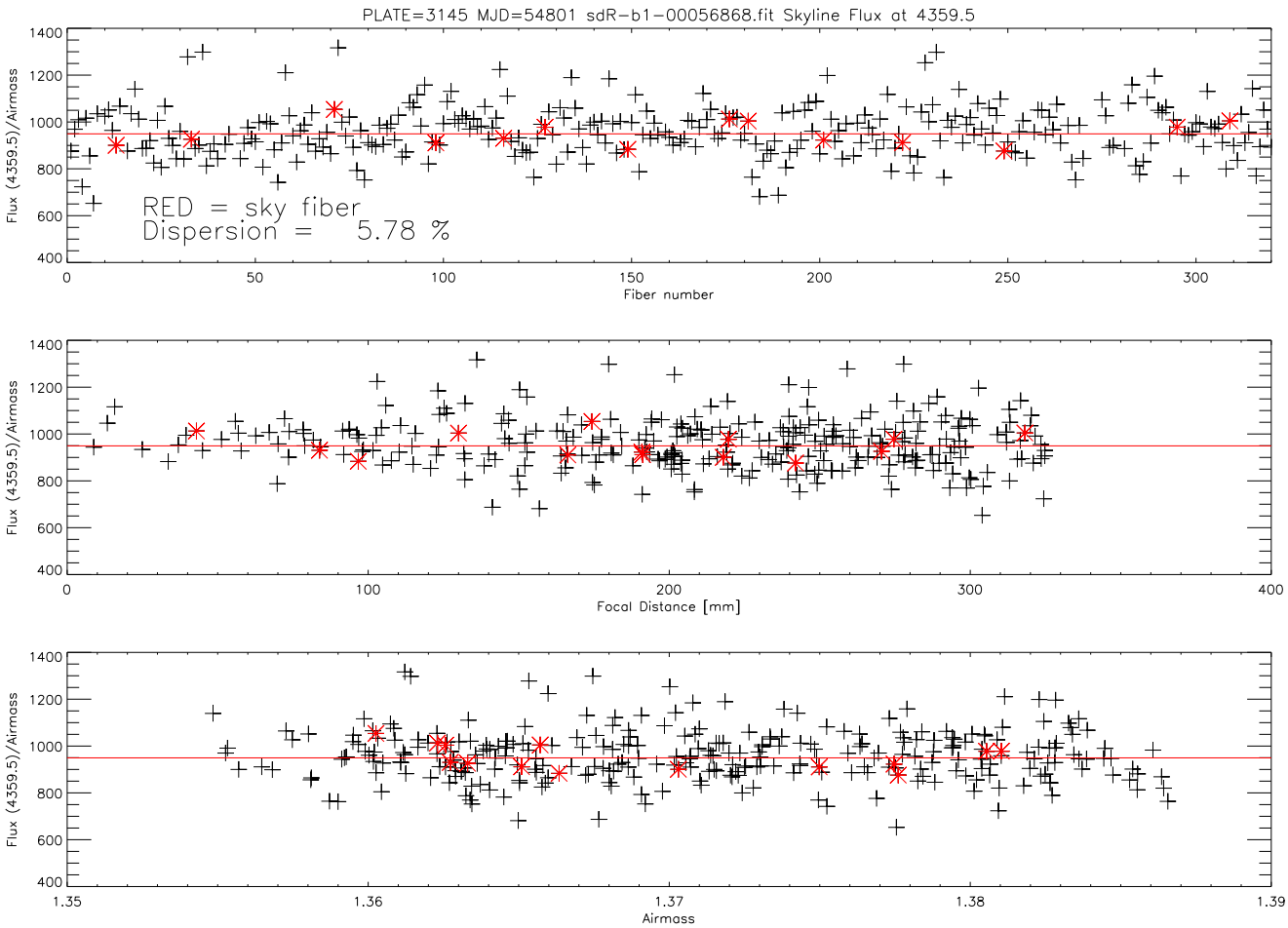

Number of sky fibers = 14
PLATE=3145 MJD=54801 sdR-b1-00056868.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

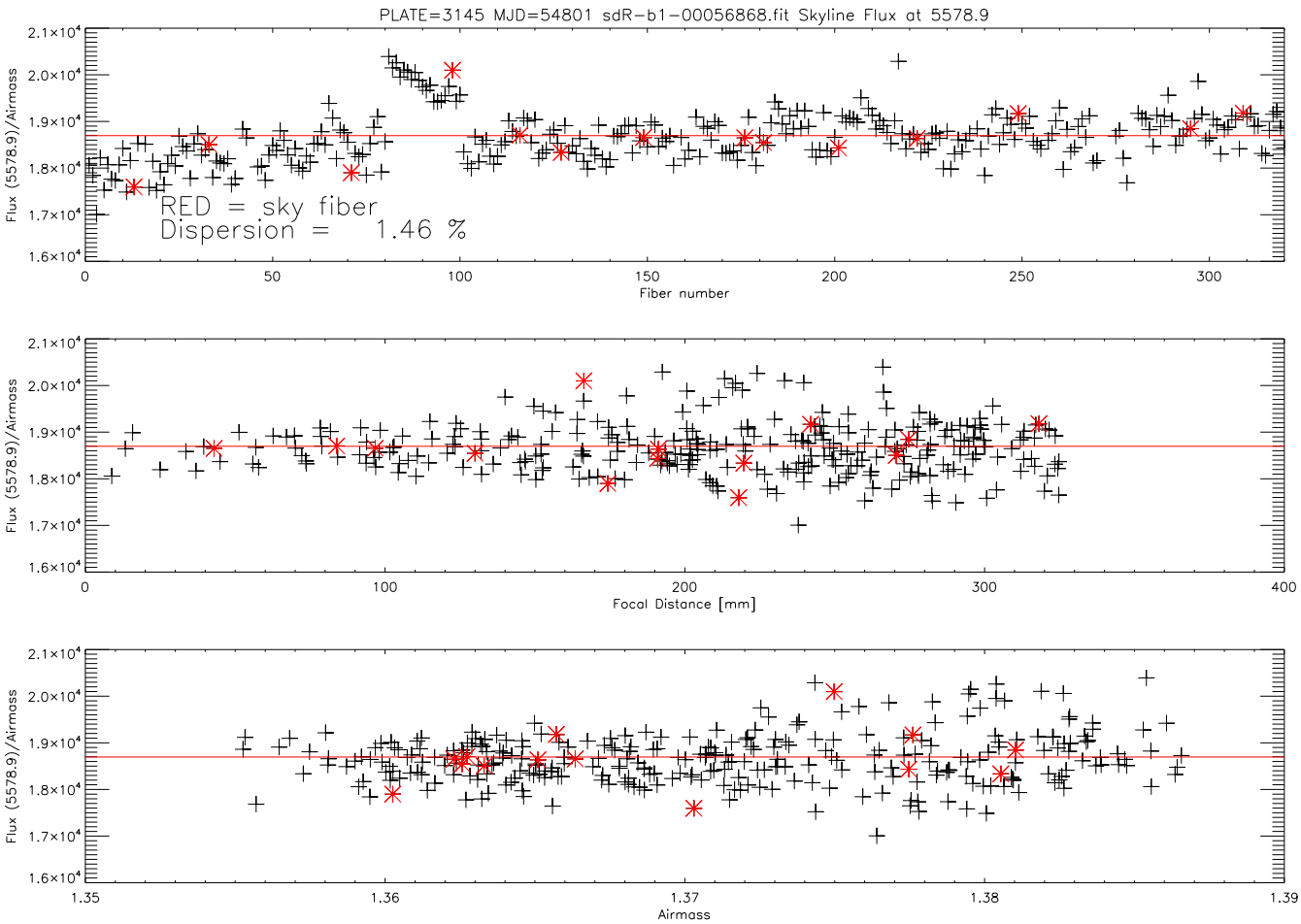

PLATE=3145 MJD=54801 sdR-b1-00056868.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

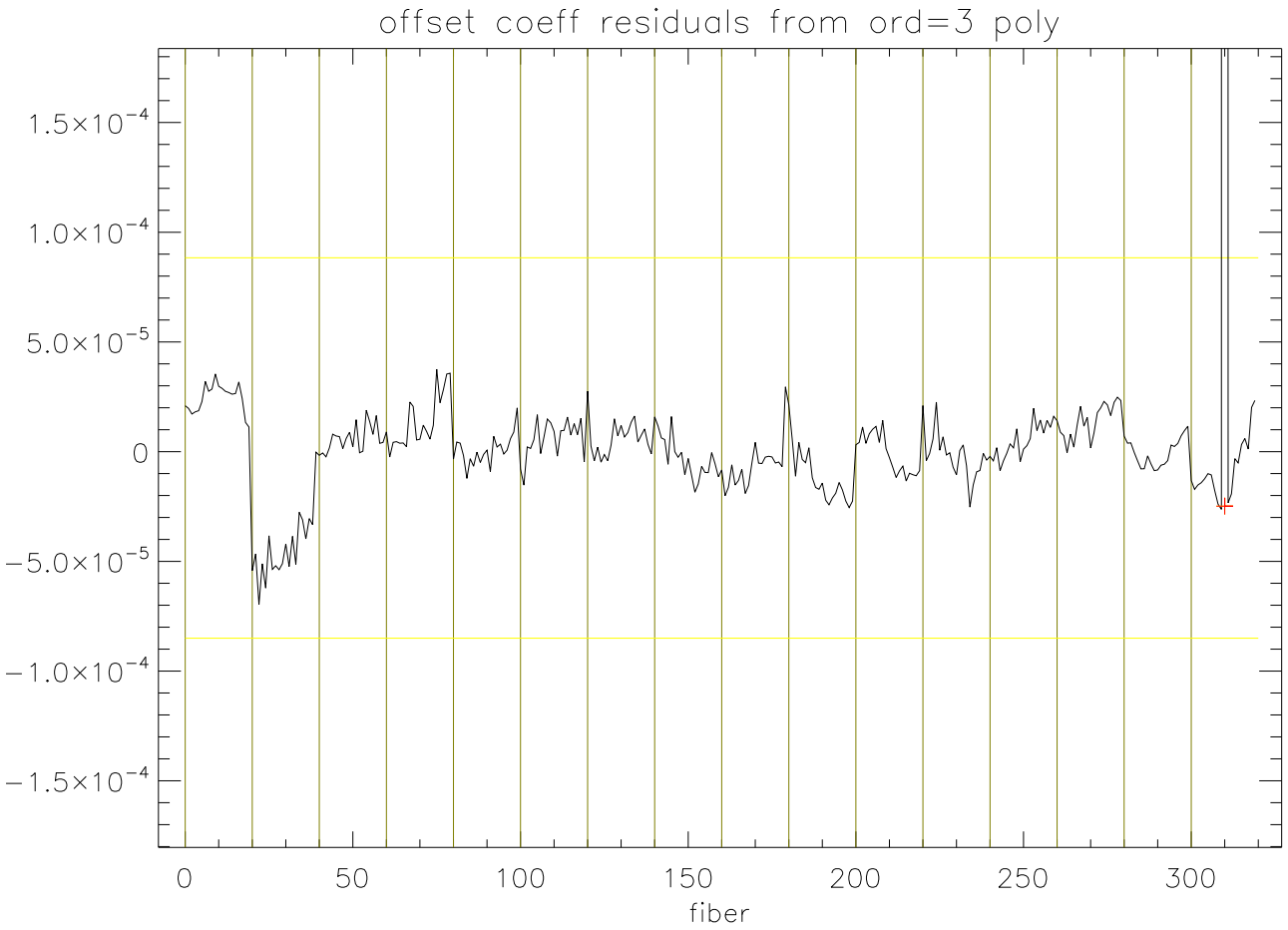

PLATE=3145 MJD=54801 sdR-b1-00056868.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

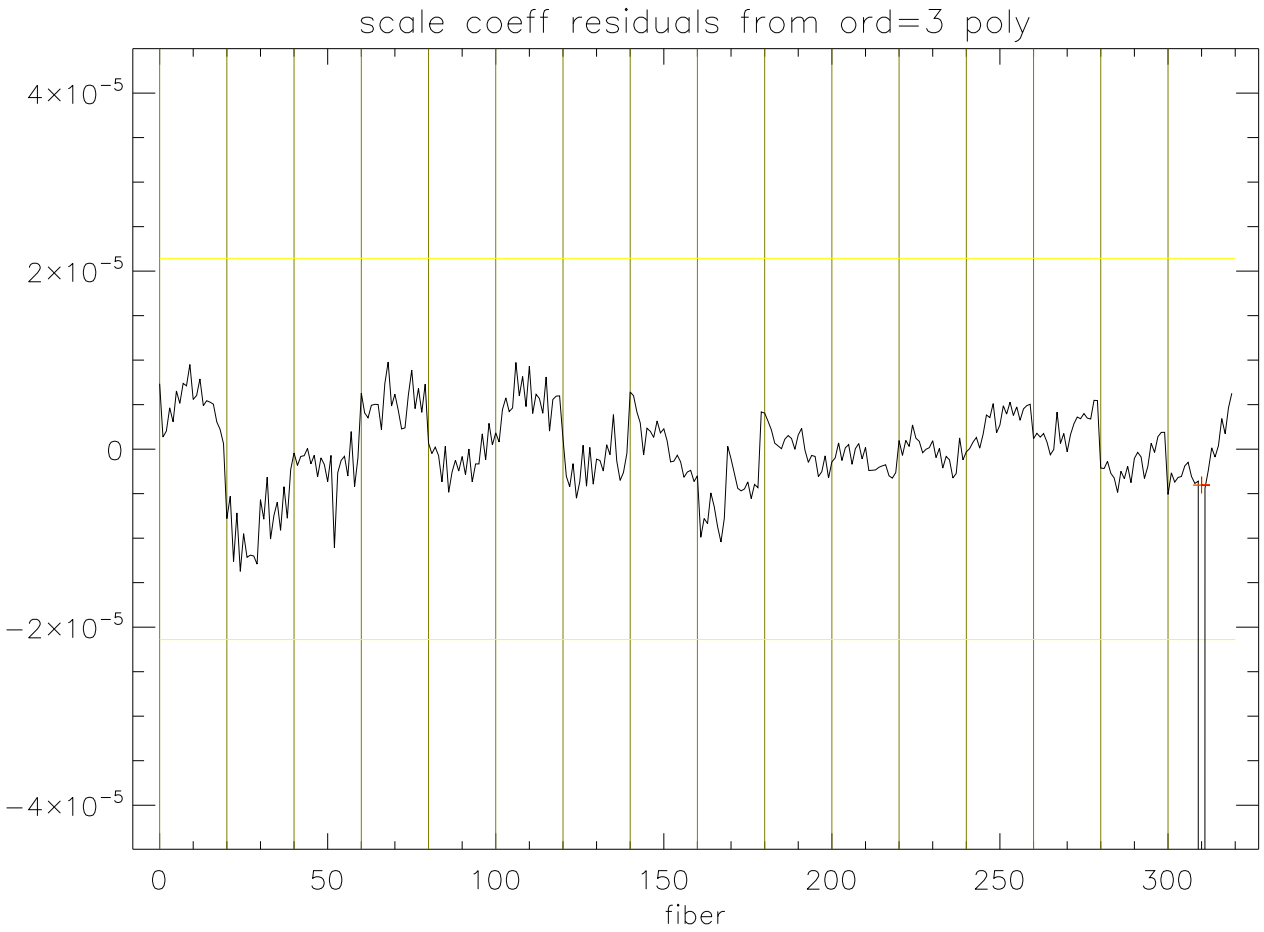

PLATE=3145 MJD=54801 sdR-b1-00056868.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

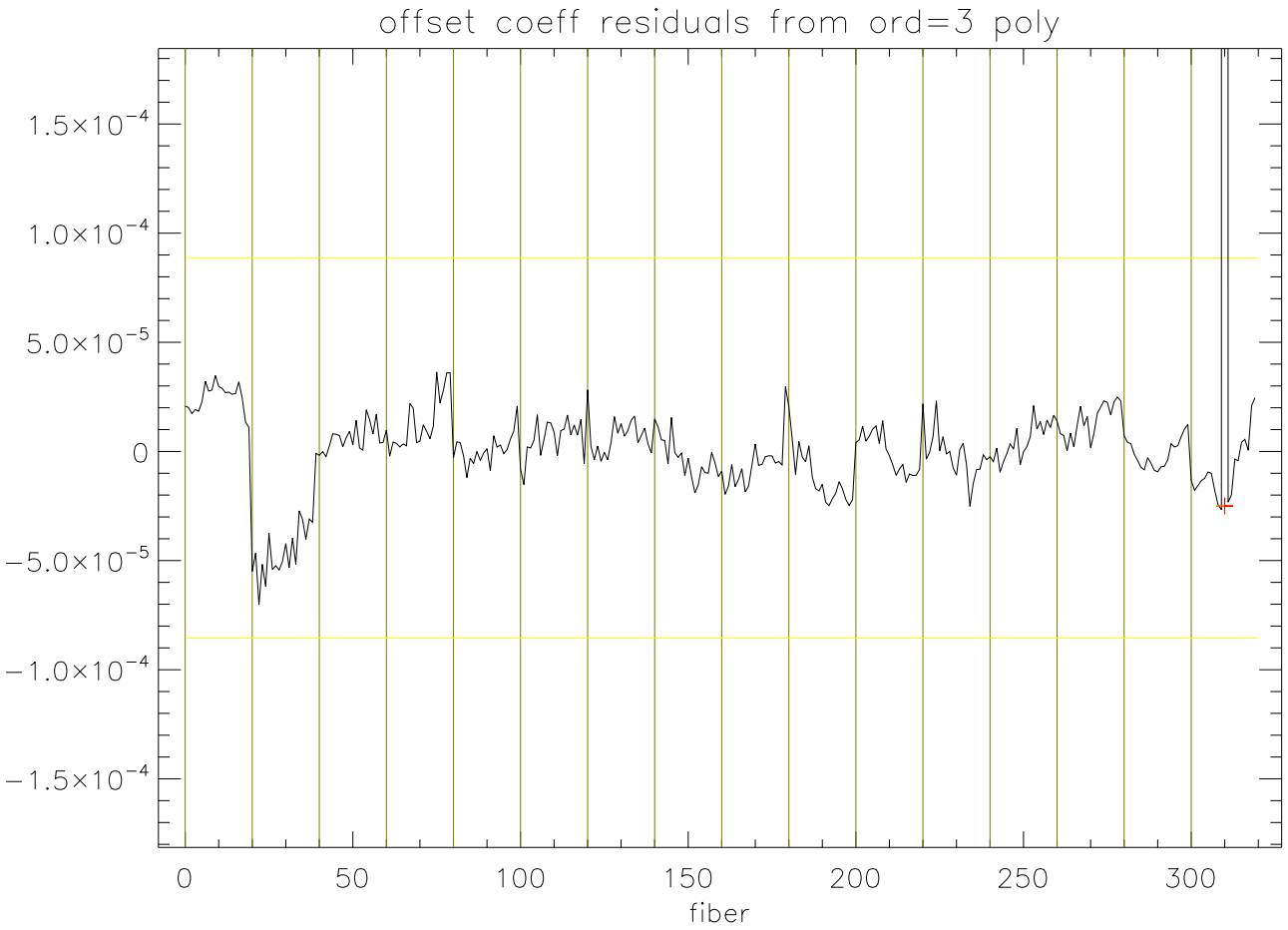

Number of sky fibers = 14
PLATE=3145 MJD=54801 sdR-b1-00056868.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

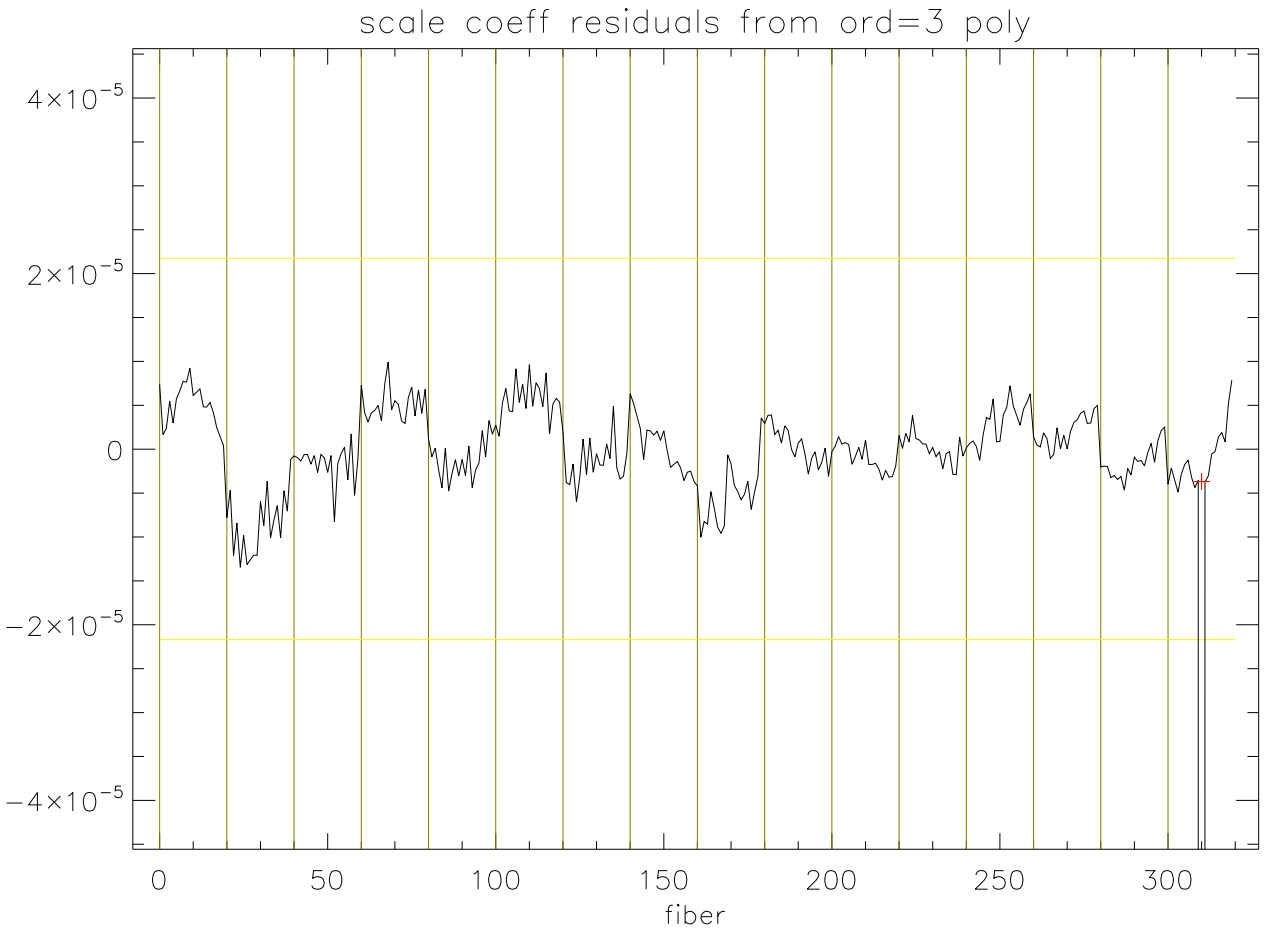

PLATE=3145 MJD=54801 sdR-b1-00056868.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.78 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

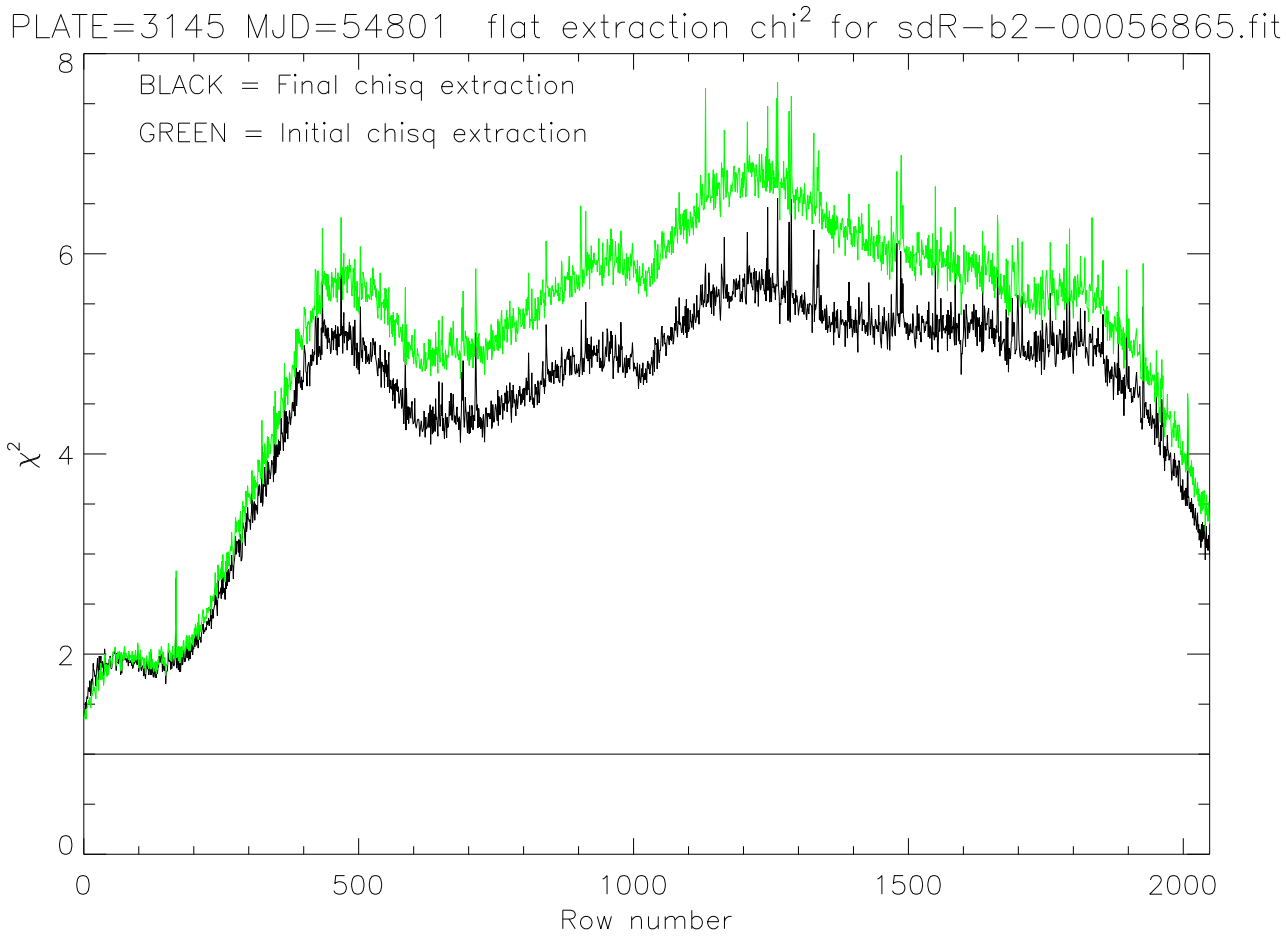

PLATE=3145 MJD=54801 sdR-b1-00056868.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.46 %
Fiber number
Focal Distance [mm]
Airmass

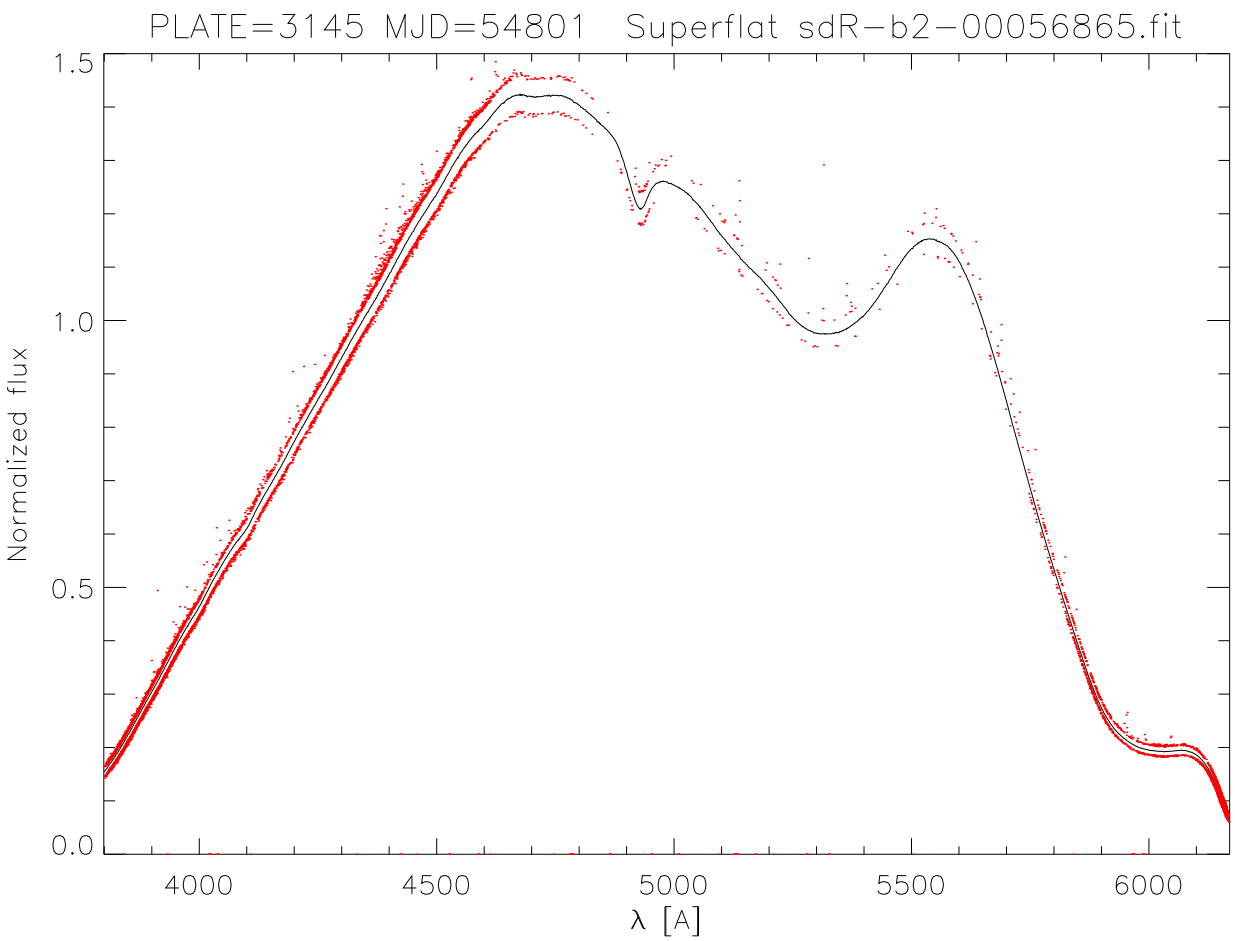

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

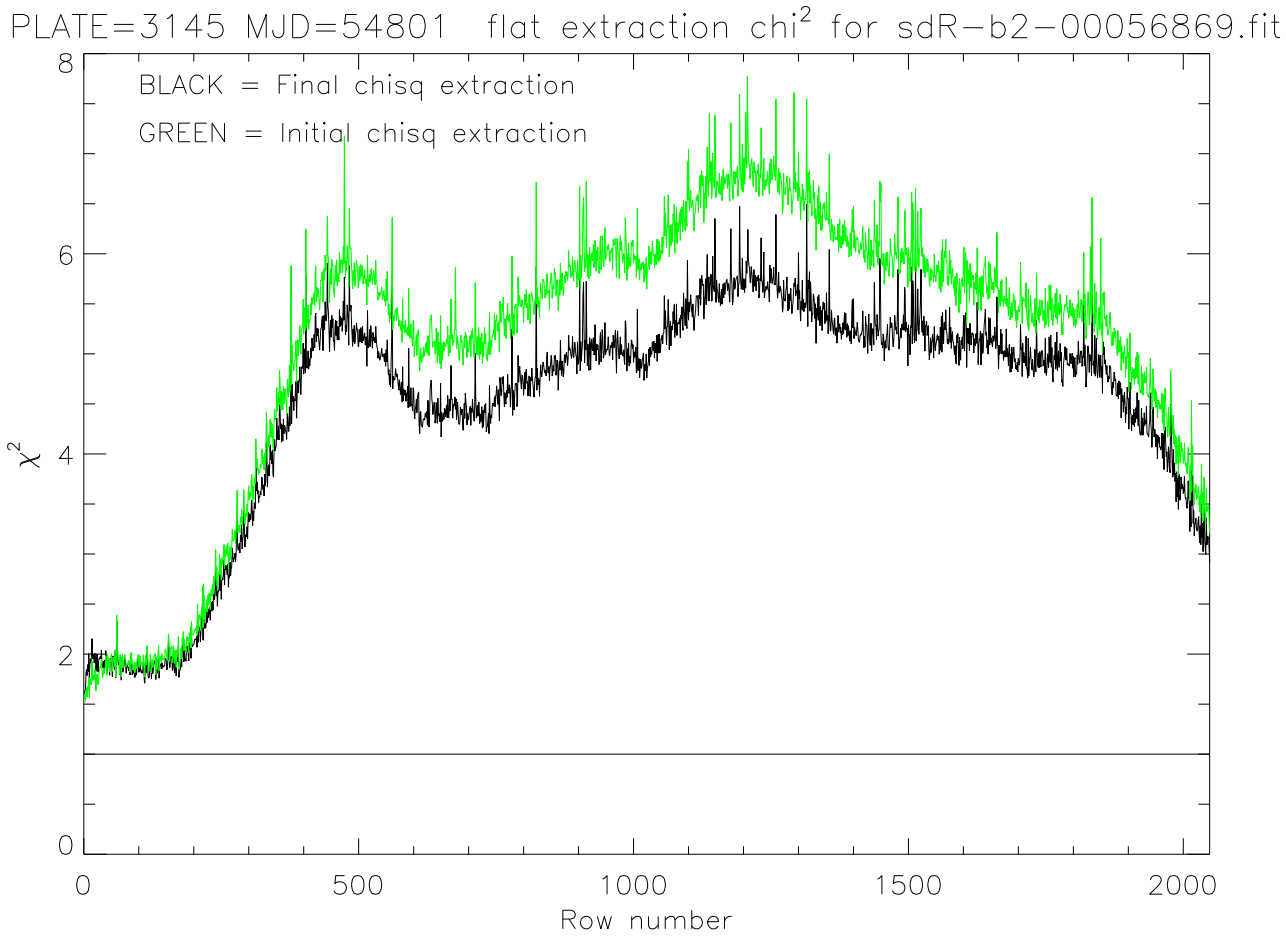

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

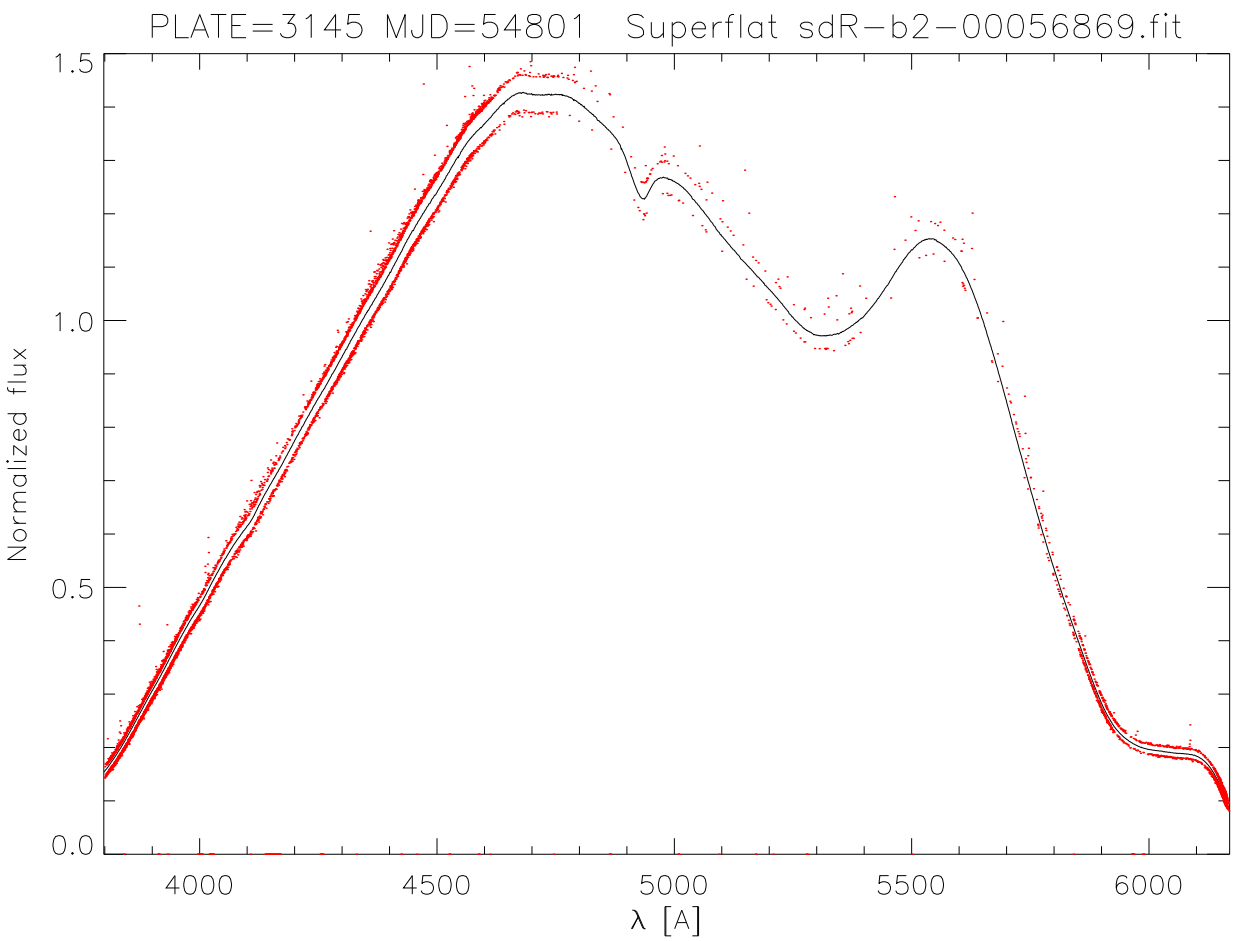

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

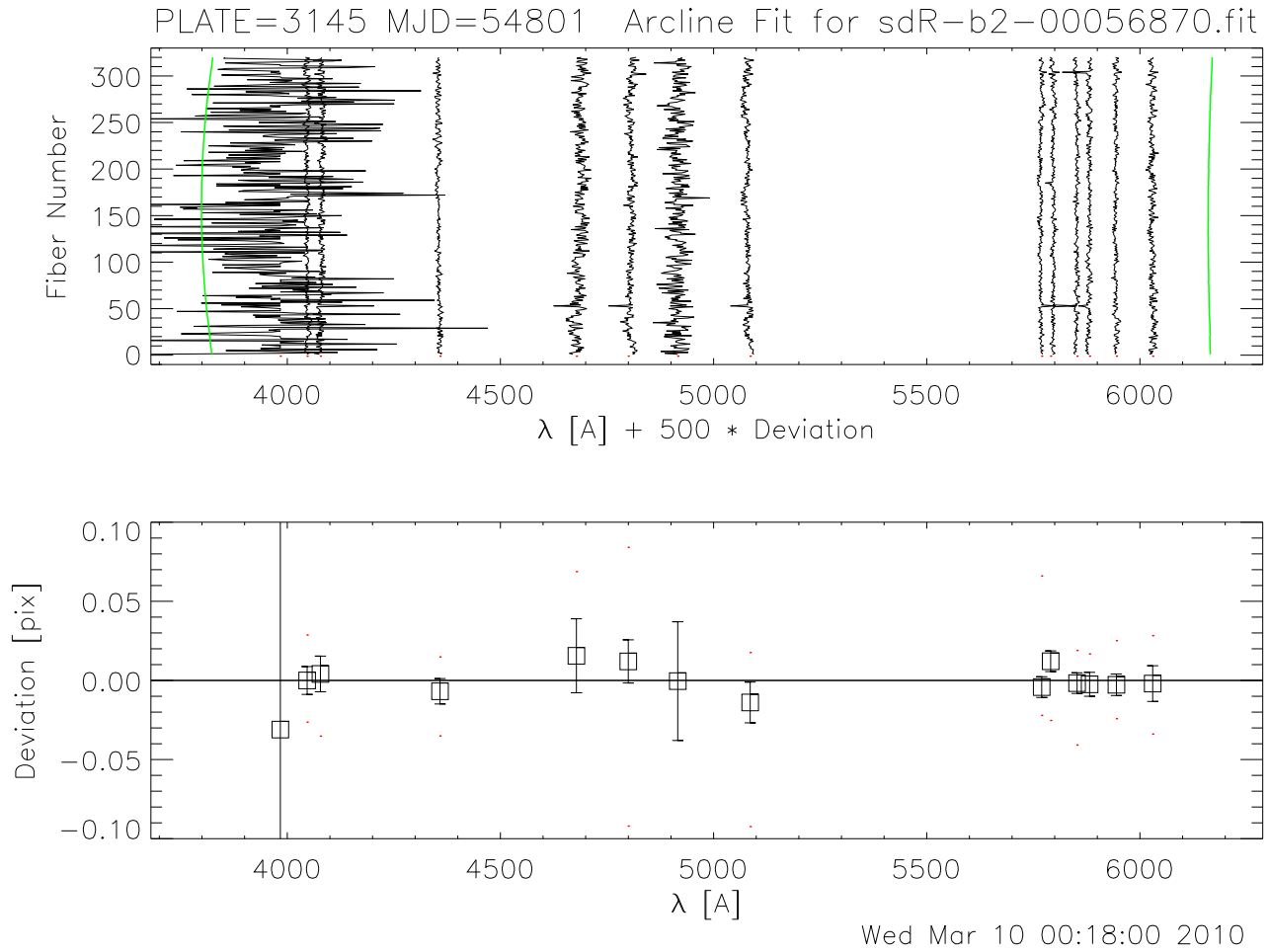

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

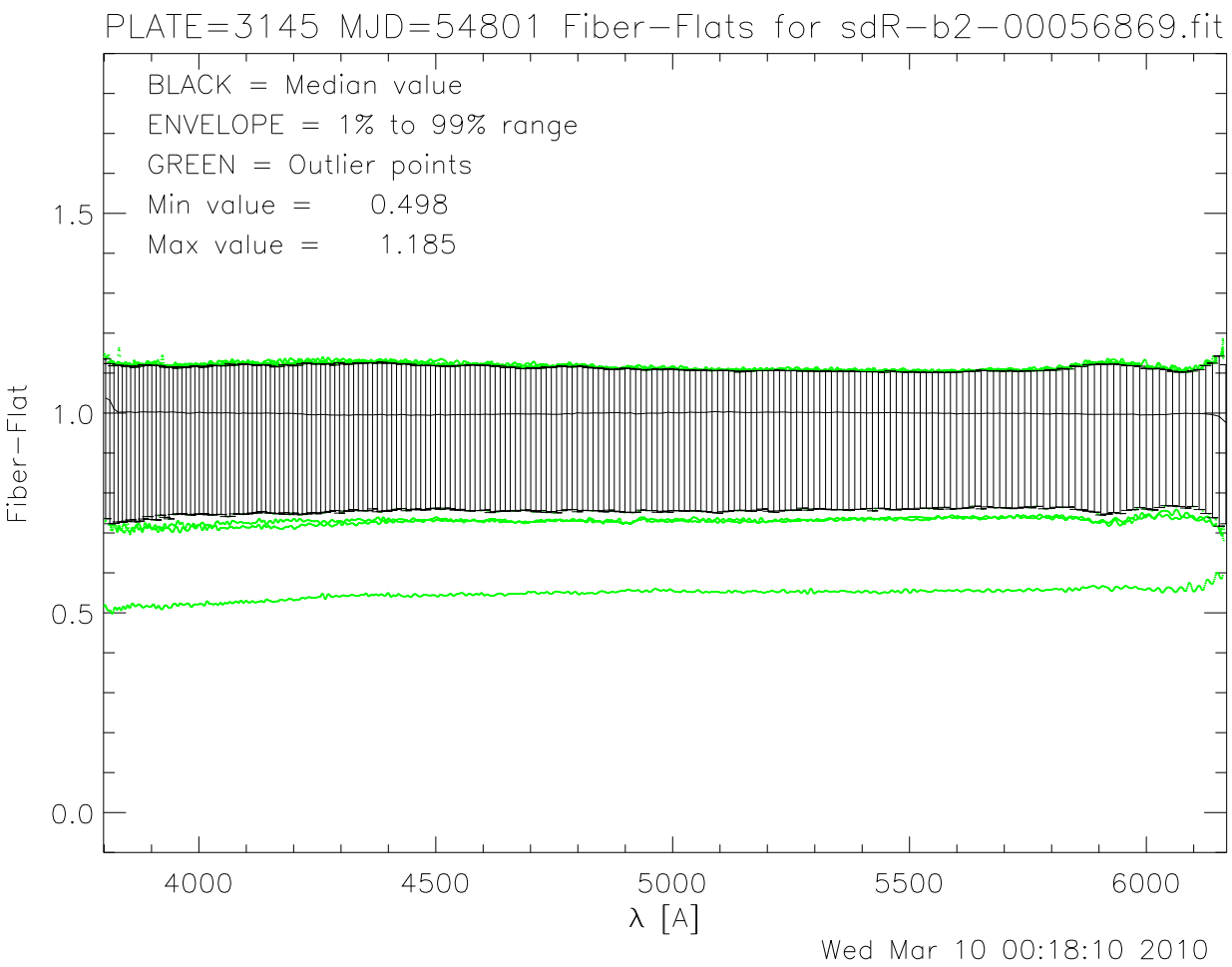

PLATE=3145 MJD=54801 flat extraction chi^2 for sdR−b2−00056865.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

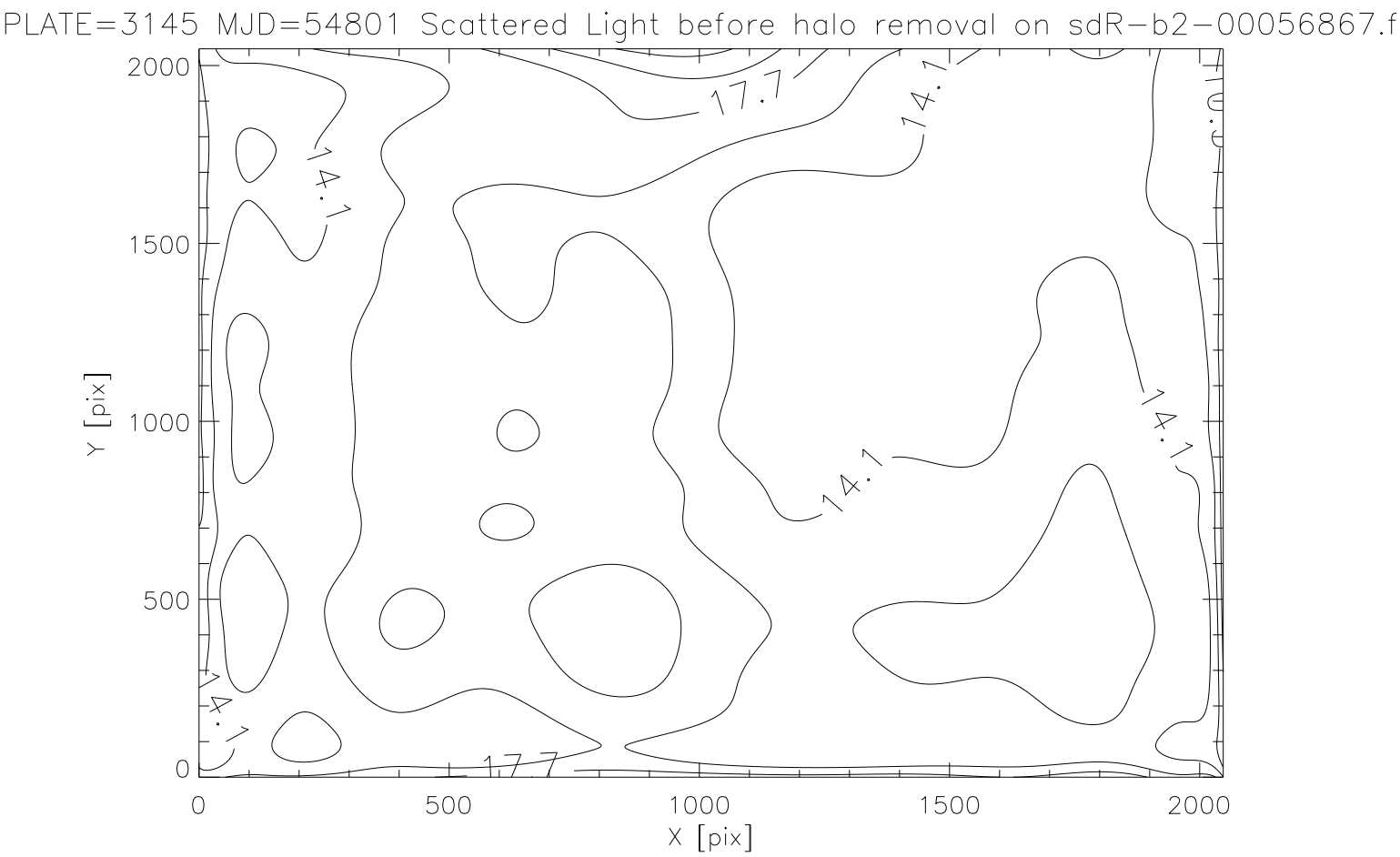

PLATE=3145 MJD=54801 Superflat sdR-b2-00056865.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

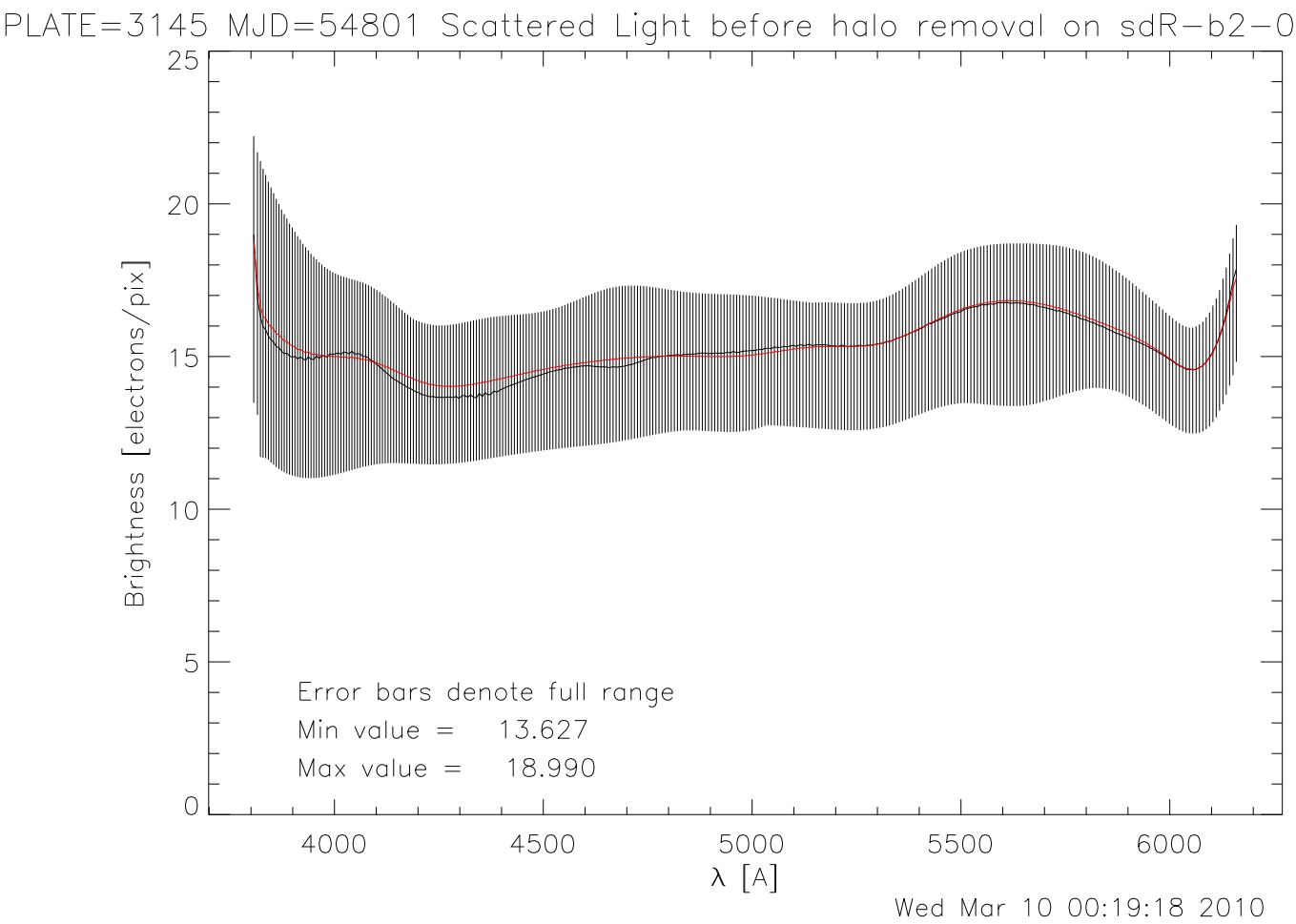

PLATE=3145 MJD=54801 flat extraction chi^2 for sdR−b2−00056869.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

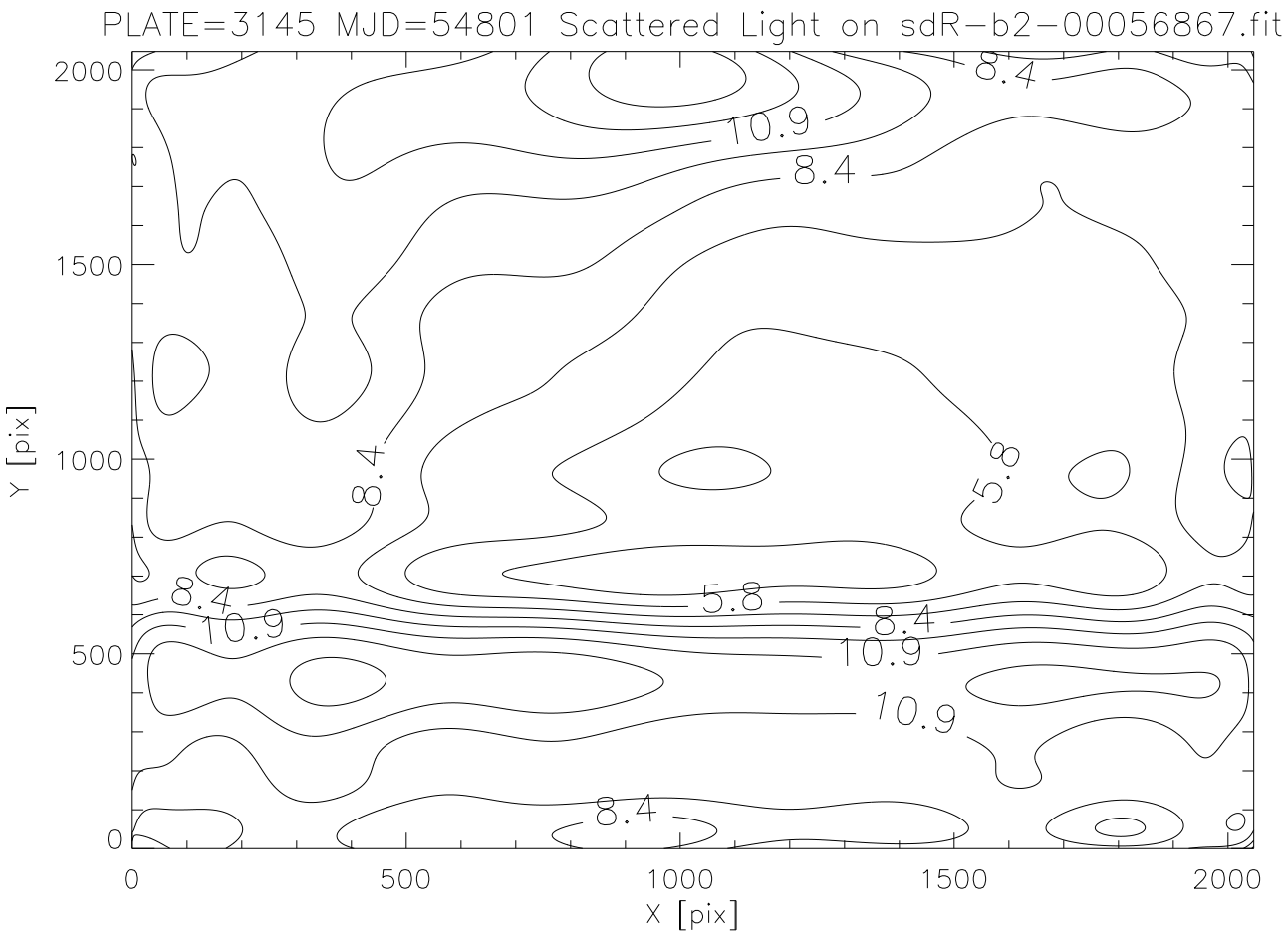

PLATE=3145 MJD=54801 Superflat sdR-b2-00056869.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

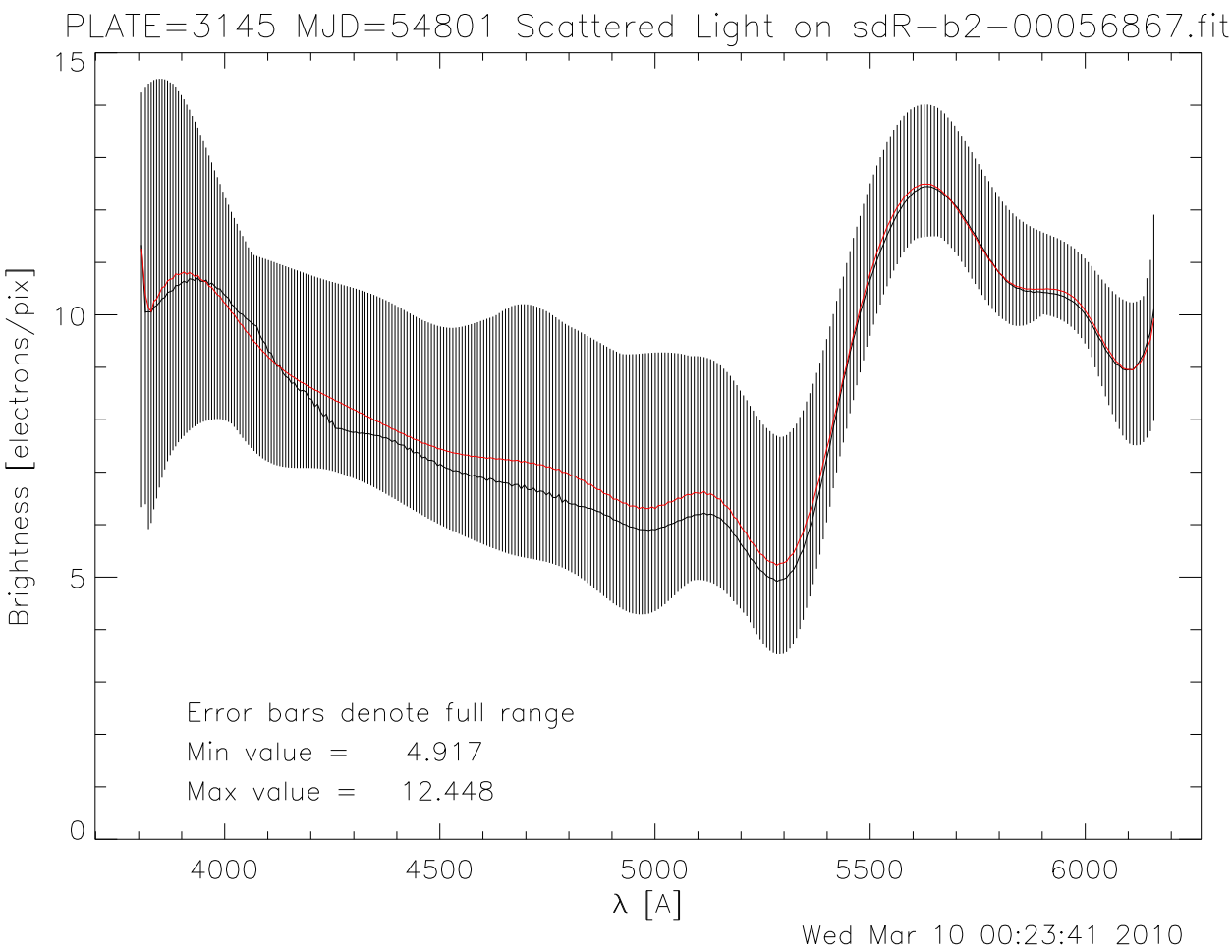

PLATE=3145 MJD=54801 Arcline Fit for sdR-b2-00056870.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 00:18:00 2010

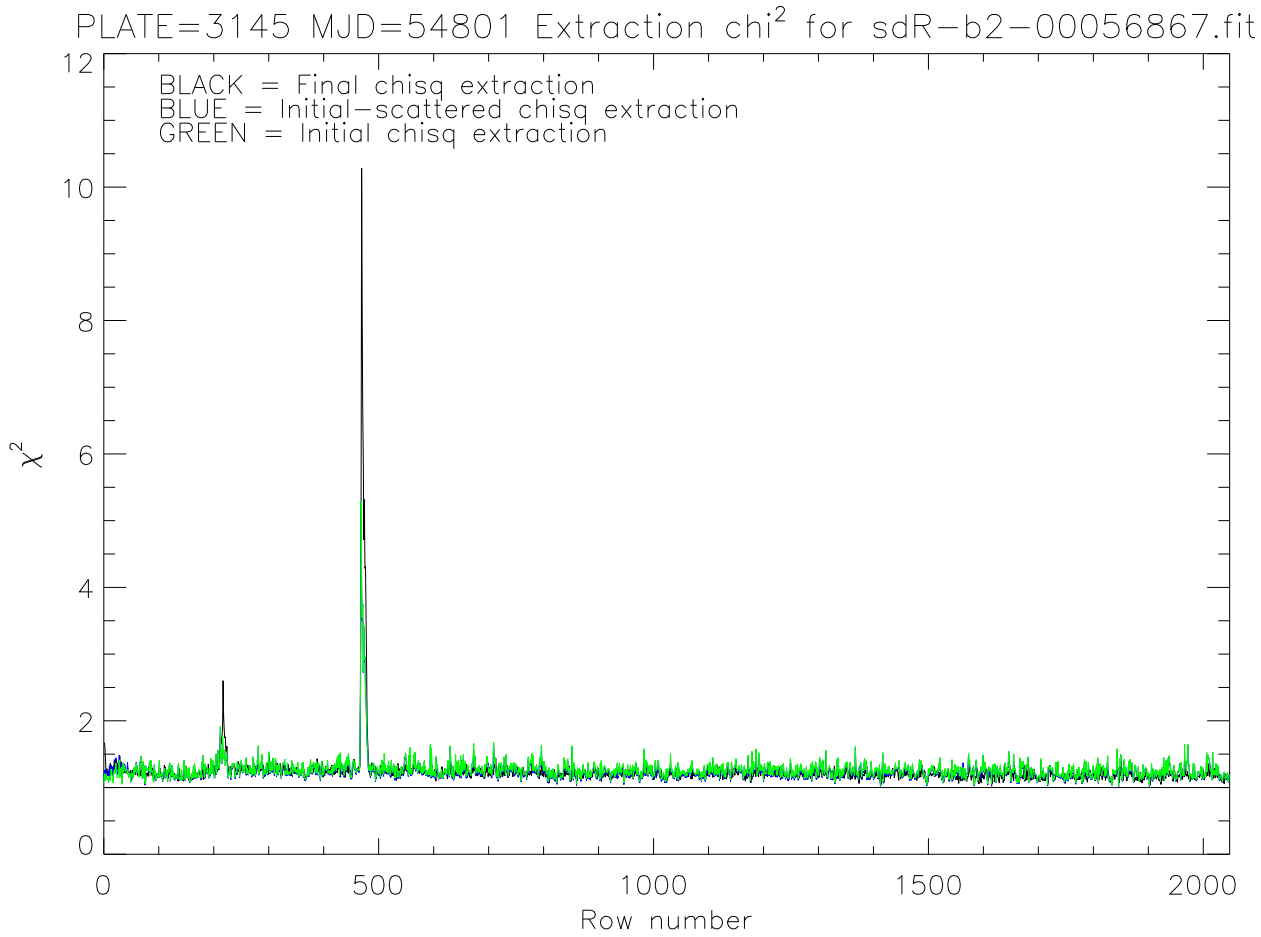

PLATE=3145 MJD=54801 Fiber-Flats for sdR-b2-00056869.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.498
Max value = 1.185
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 00:18:10 2010

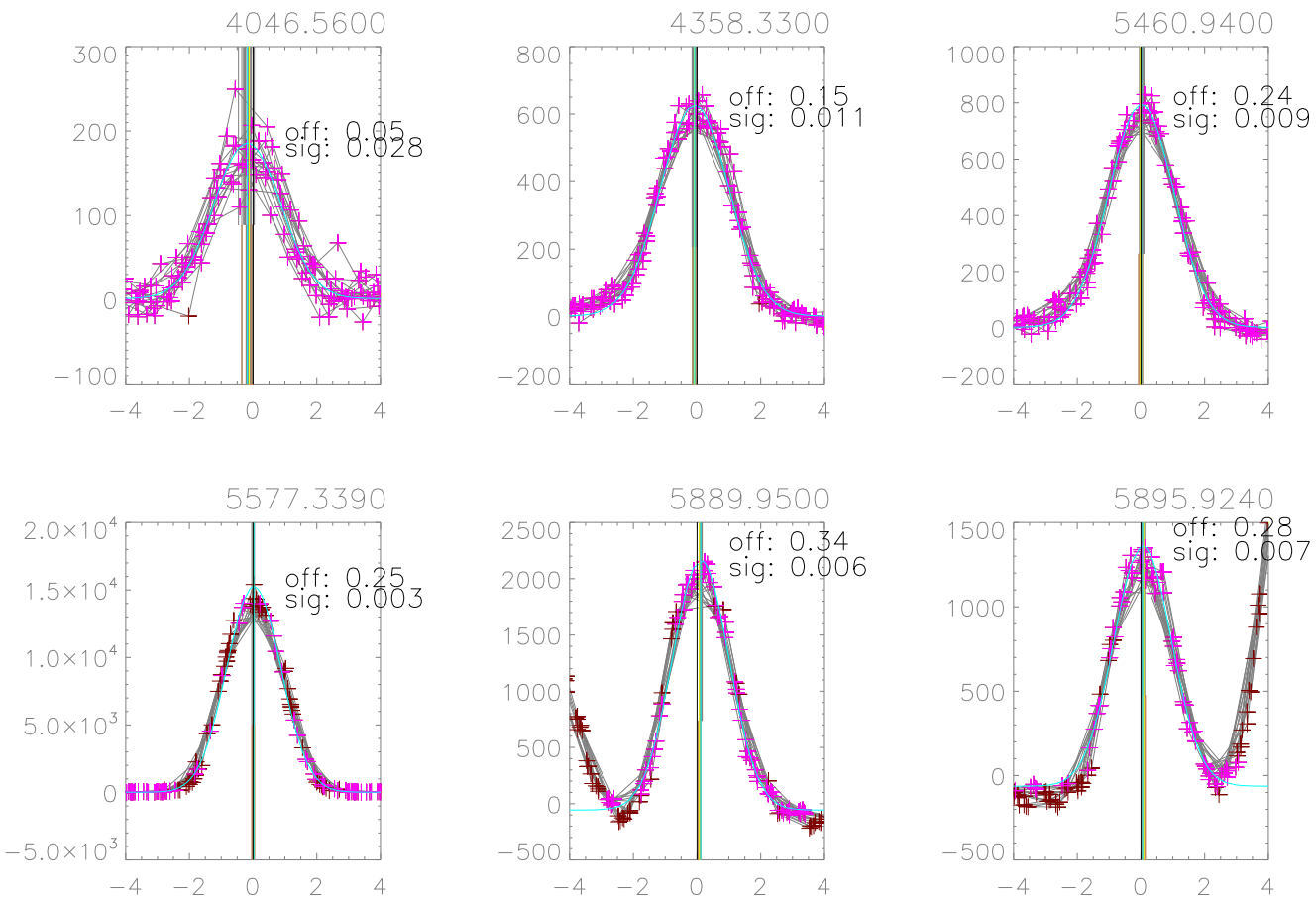

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR−b2−00056867.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
17.7
14.1
14.1
14.1
14.1
14.1
17.7

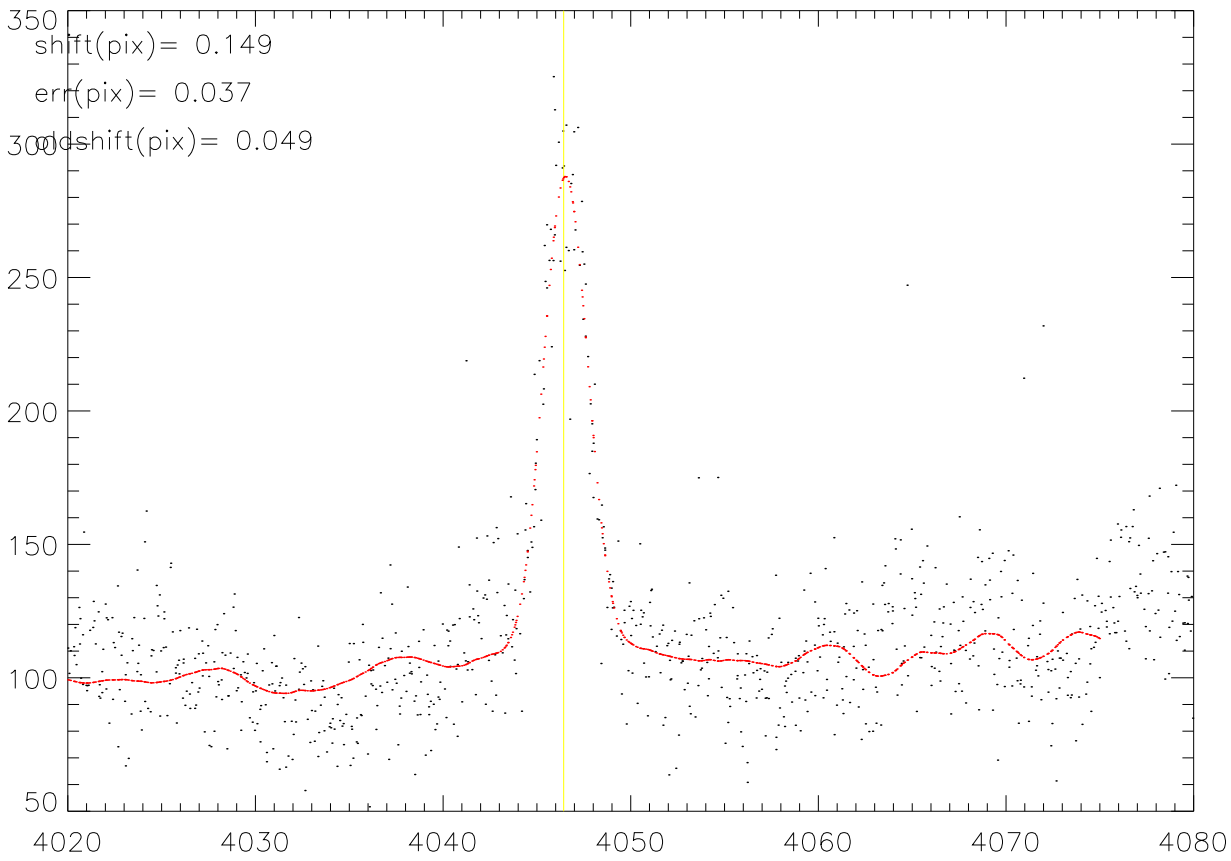

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-b2-00056867.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 13.627
Max value = 18.990
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 00:19:18 2010

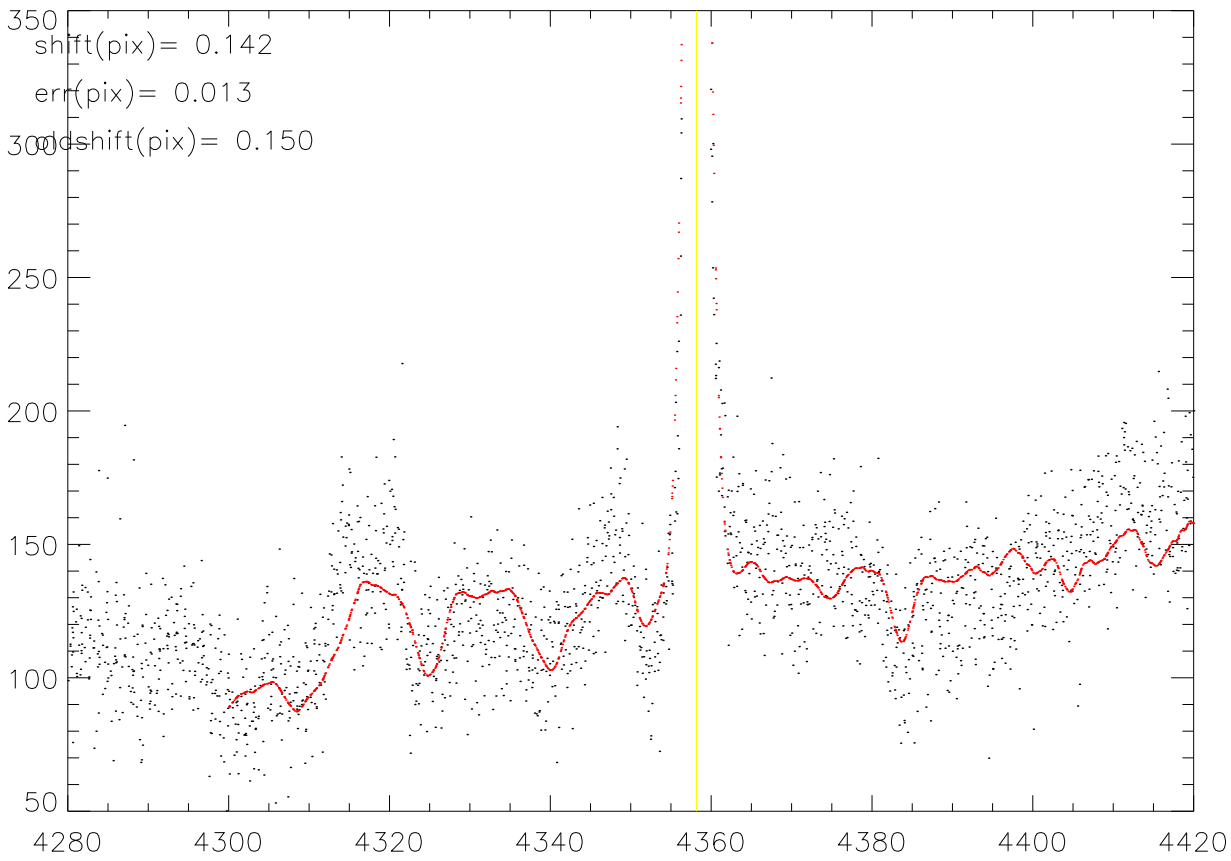

PLATE=3145 MJD=54801 Scattered Light on sdR-b2-00056867.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
10.9
5.8

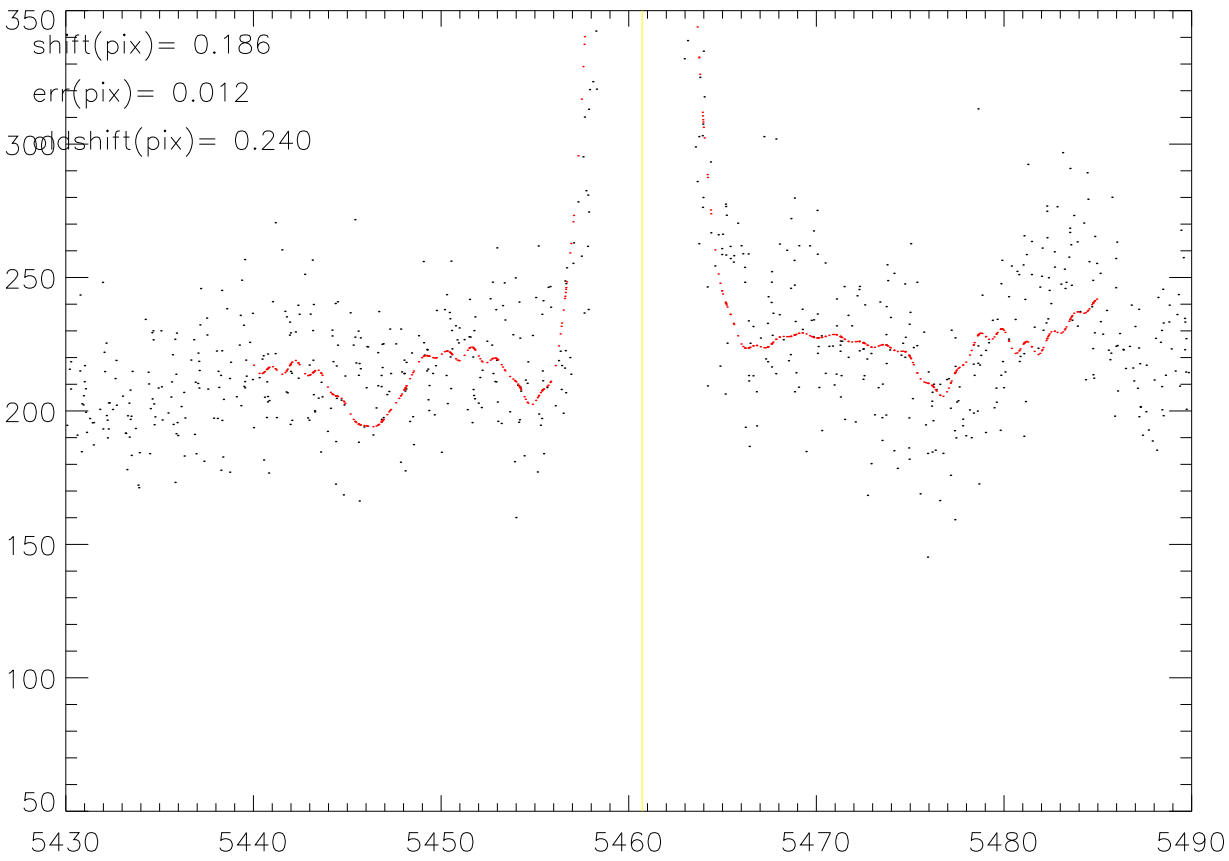

PLATE=3145 MJD=54801 Scattered Light on sdR-b2-00056867.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.917
Max value = 12.448
Wed Mar 10 00:23:41 2010

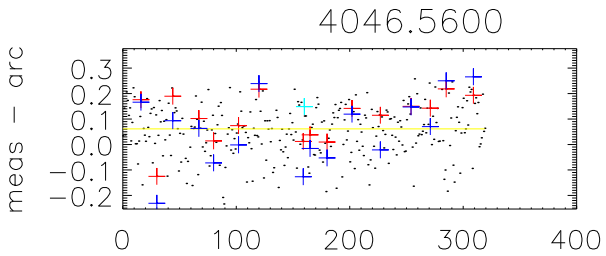

PLATE=3145 MJD=54801 Extraction chi^2 for sdR-b2-00056867.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

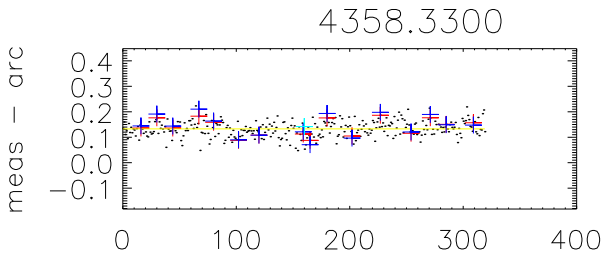

4046.5600
off: 0.05
sig: 0.028
4358.3300
off: 0.15
sig: 0.011
5460.9400
off: 0.24
sig: 0.009
5577.3390
off: 0.25
sig: 0.003
5889.9500
off: 0.34
sig: 0.006
5895.9240
off: 0.28
sig: 0.007

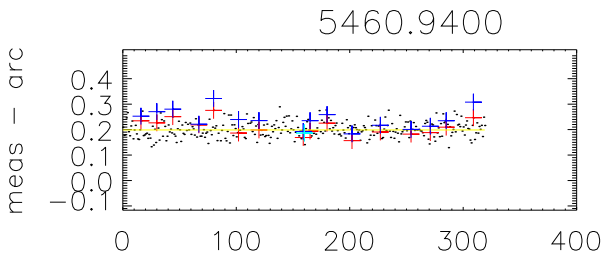

shift(pix)= 0.149
err(pix)= 0.037
oldshift(pix)= 0.049
350
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

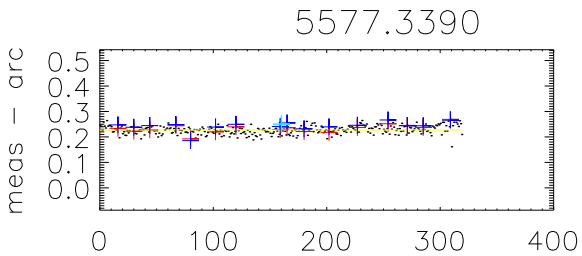

shift(pix)= 0.142
err(pix)= 0.013
oldshift(pix)= 0.150
350
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

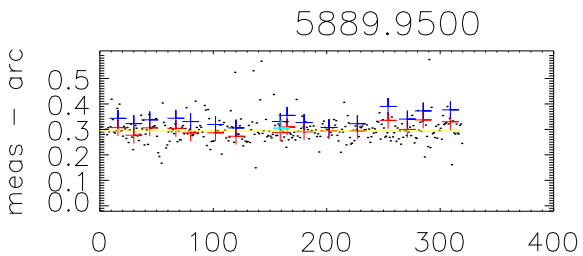

shift(pix)= 0.186
err(pix)= 0.012
oldshift(pix)= 0.240
350
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

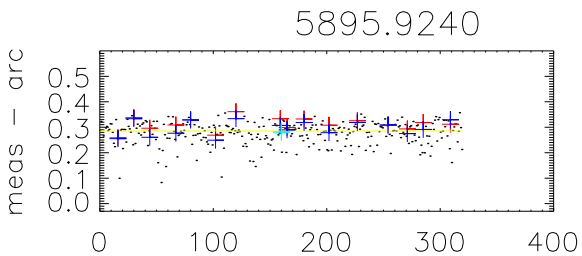

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

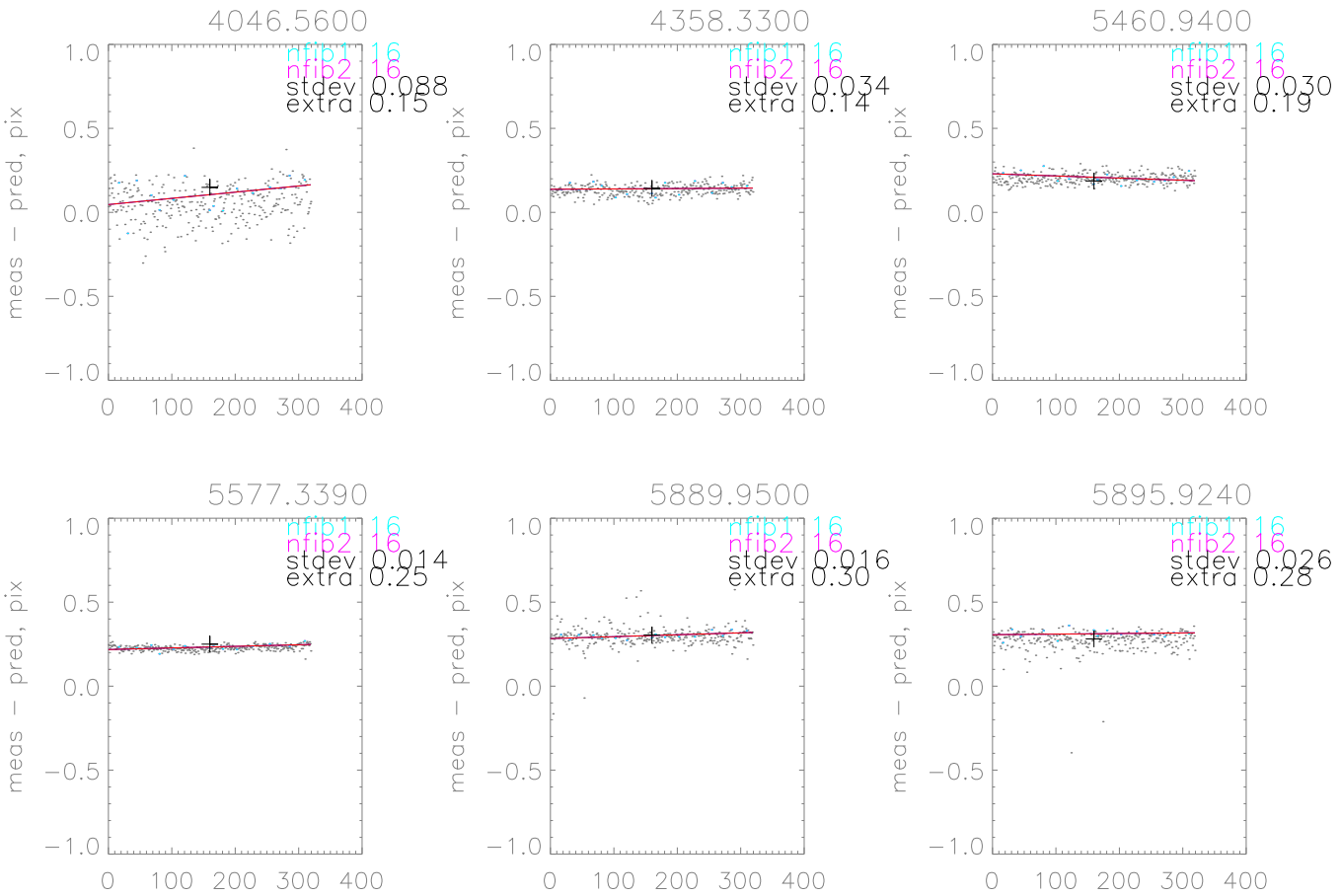

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

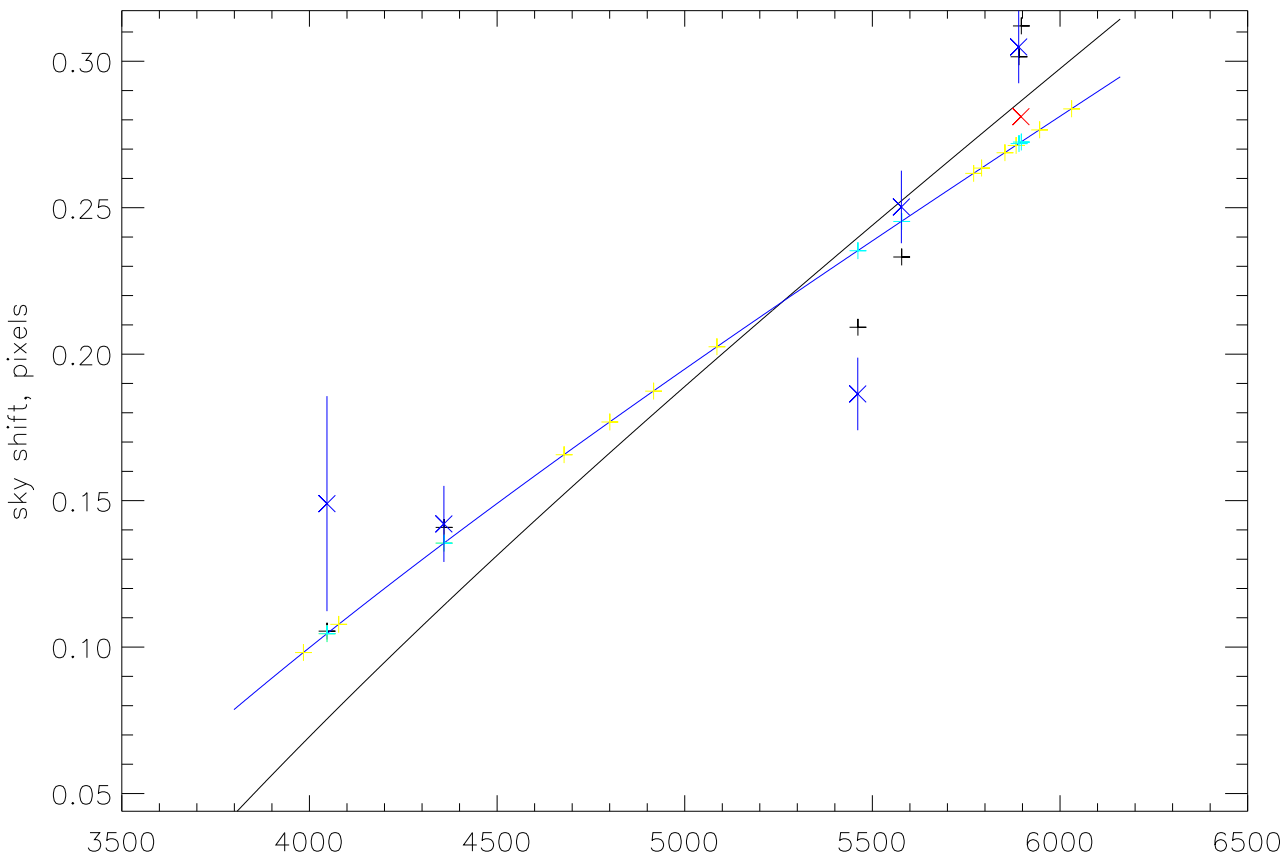

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

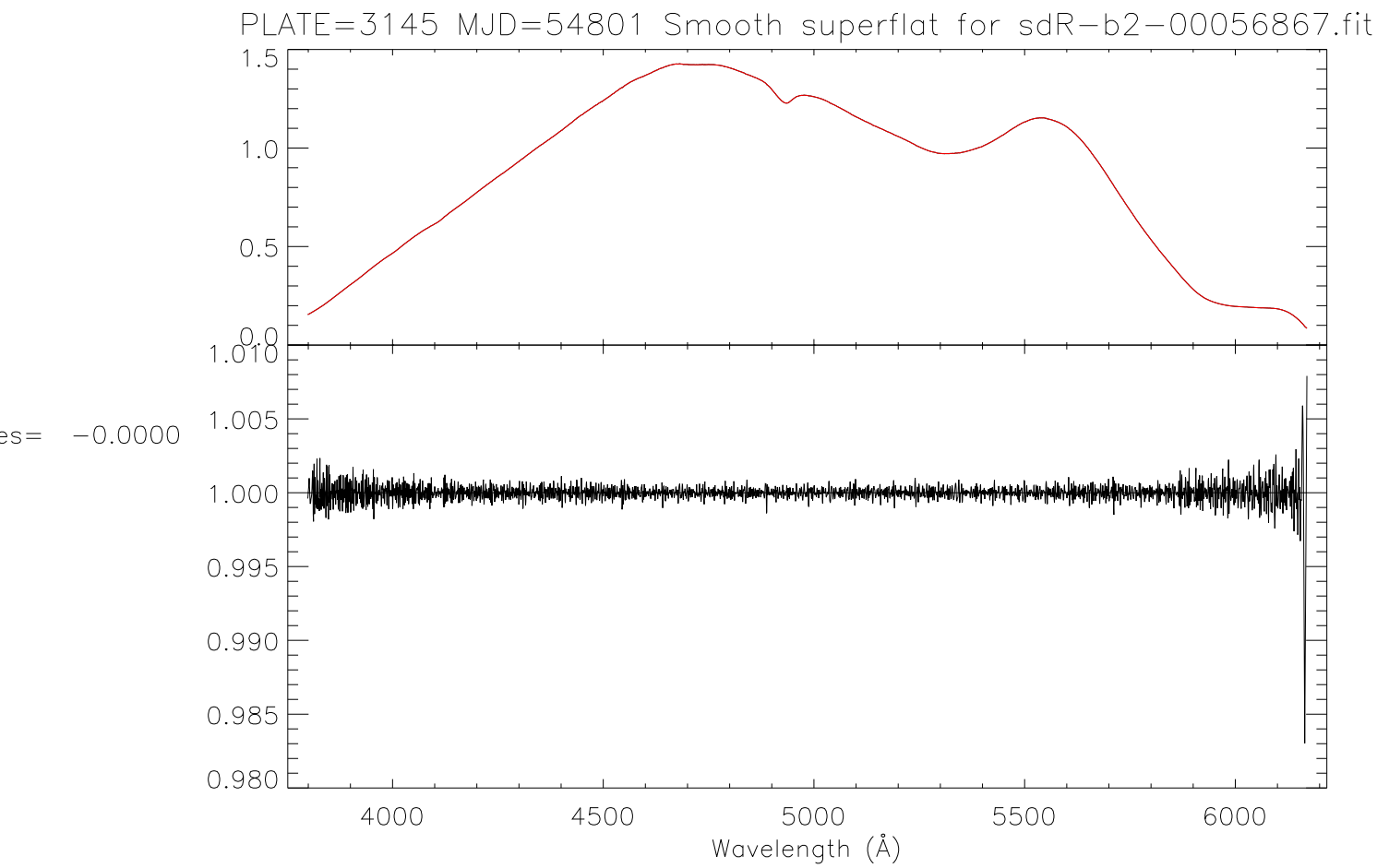

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

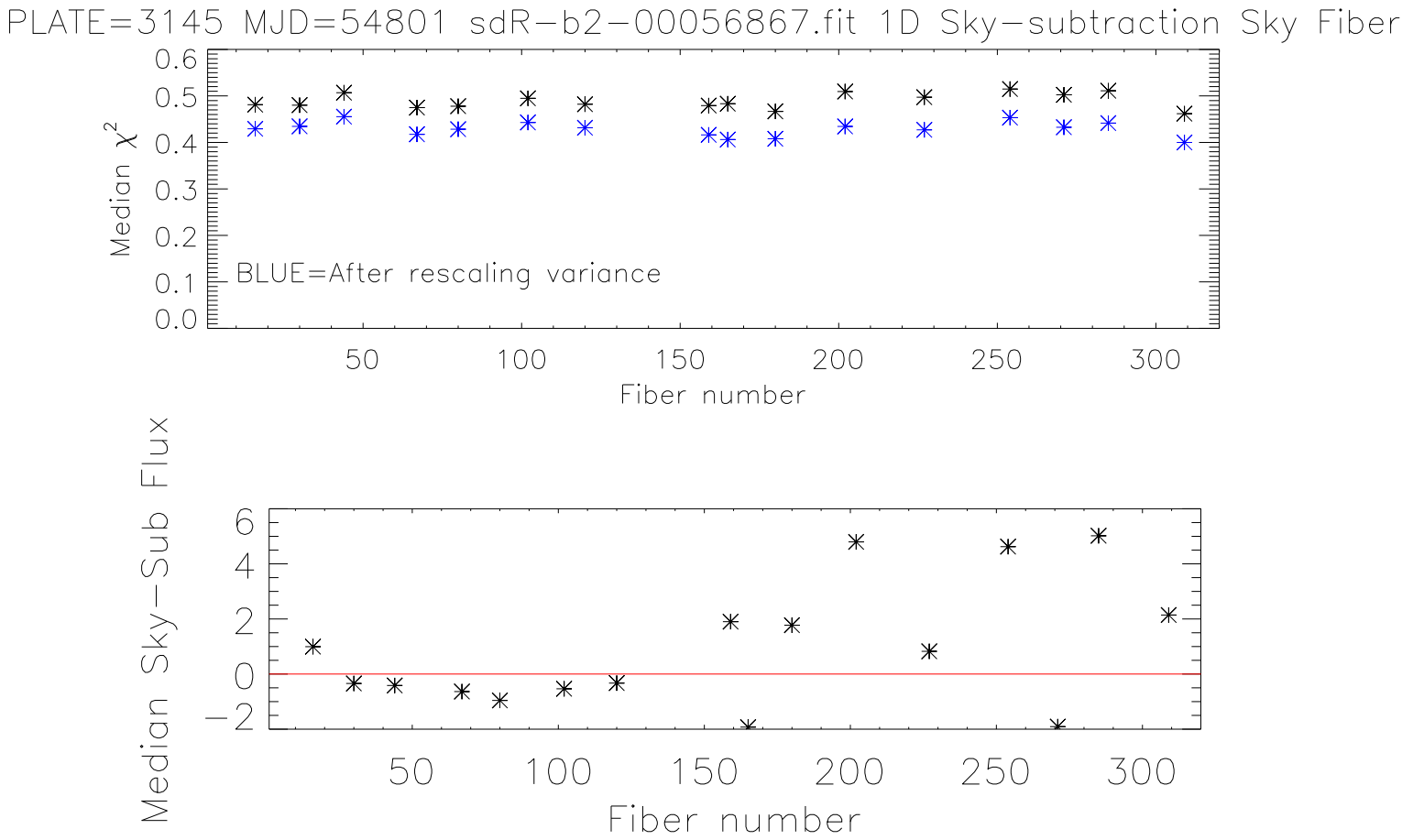

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

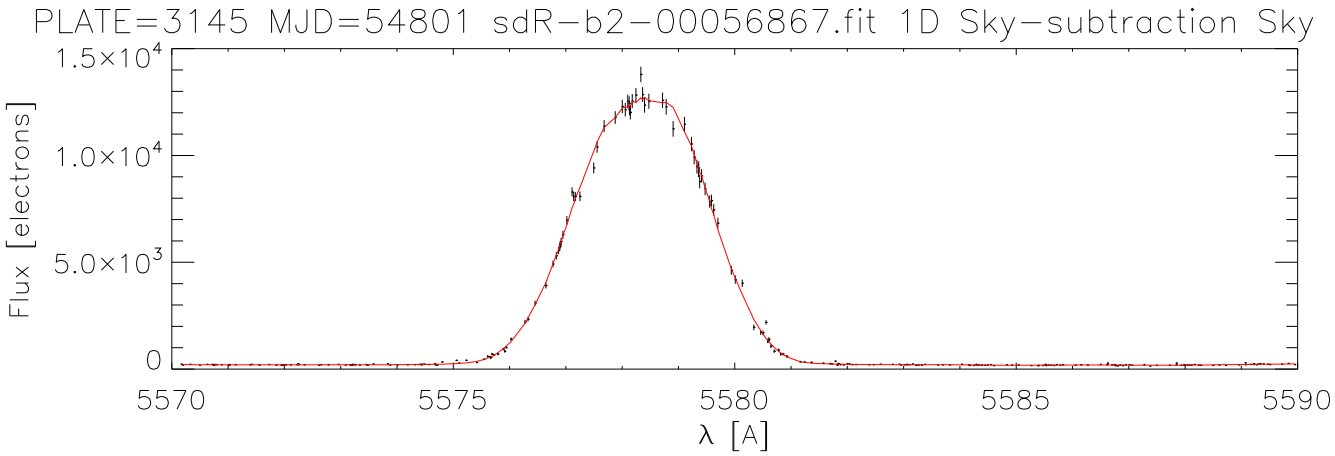

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

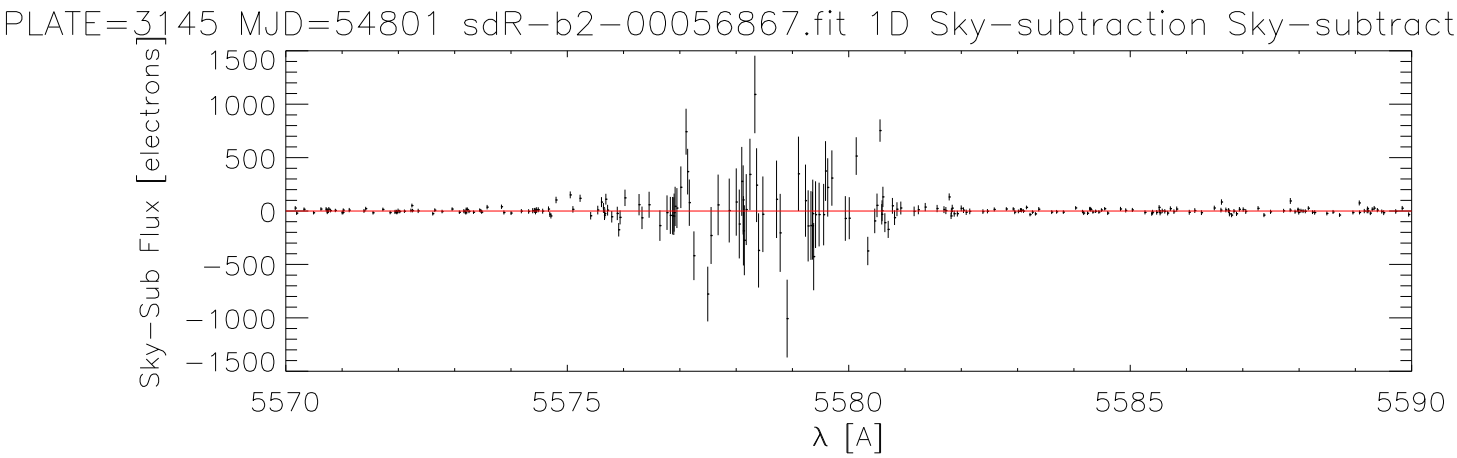

4046.5600
nfib1 16
nfib2 16
stdev 0.088
extra 0.15
4358.3300
nfib1 16
nfib2 16
stdev 0.034
extra 0.14
5460.9400
nfib1 16
nfib2 16
stdev 0.030
extra 0.19
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.25
5889.9500
nfib1 16
nfib2 16
stdev 0.016
extra 0.30
5895.9240
nfib1 16
nfib2 16
stdev 0.026
extra 0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

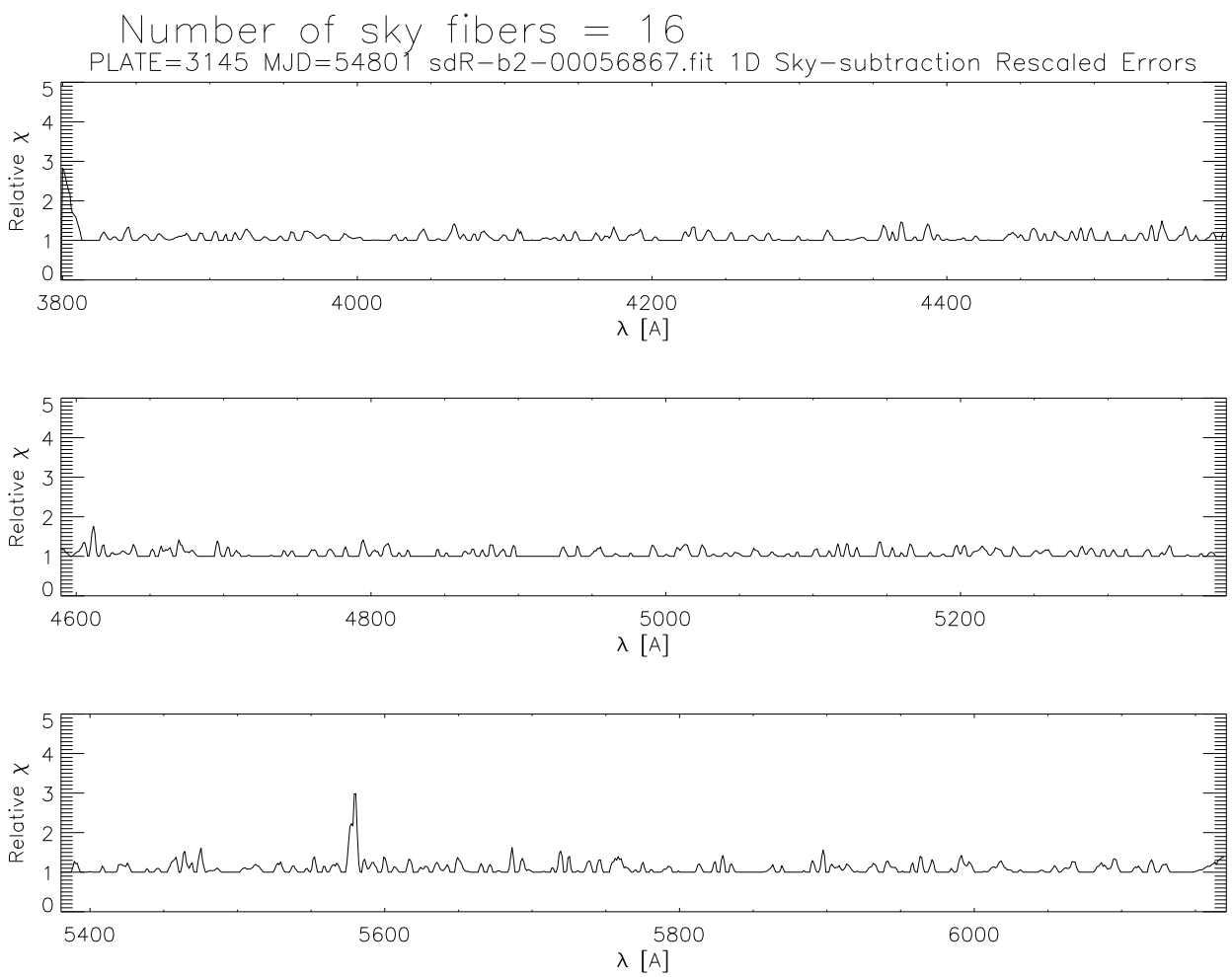

sky shift, pixels
0.30
0.25
0.20
0.15
0.10
0.05
3500
4000
4500
5000
5500
6000
6500

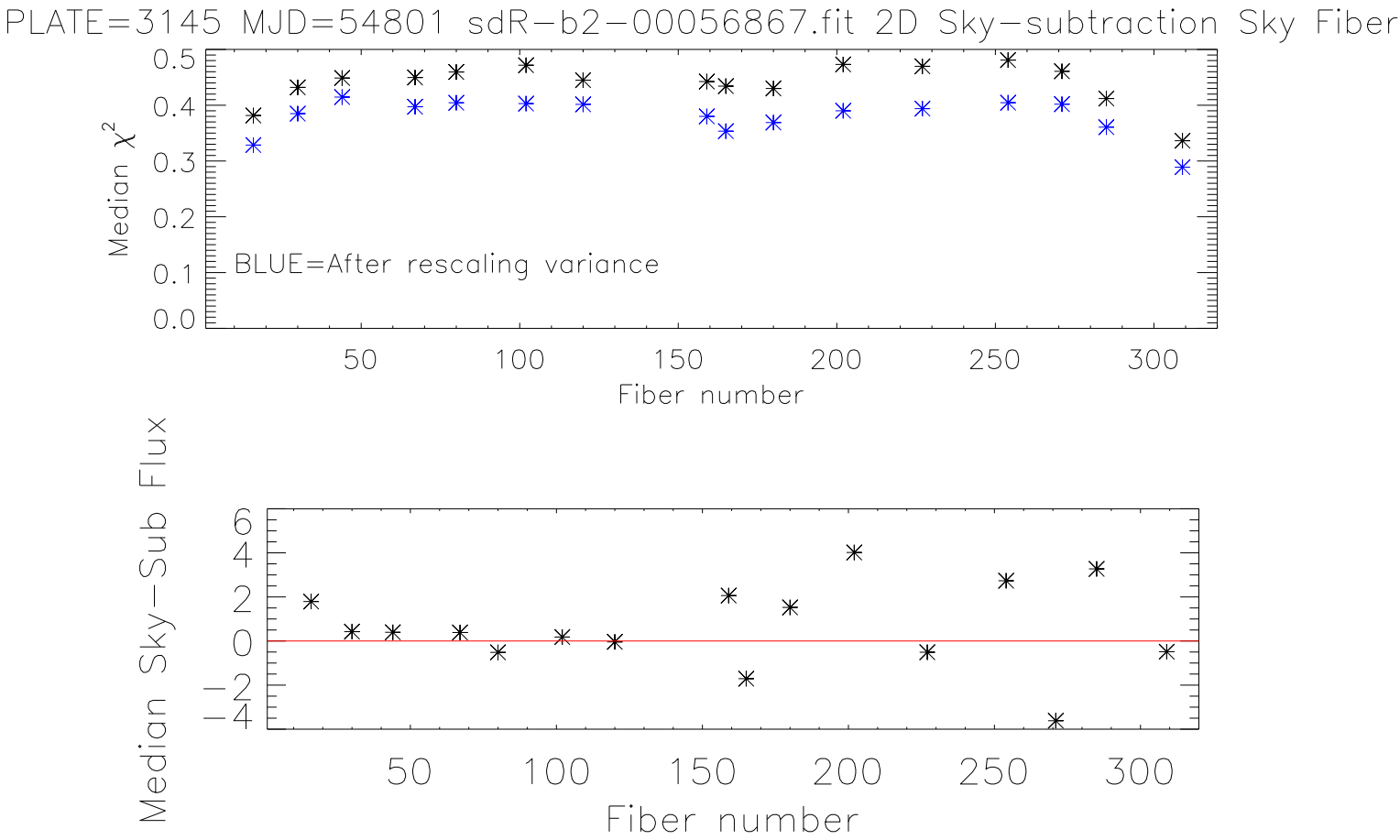

PLATE=3145 MJD=54801 Smooth superflat for sdR-b2-00056867.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

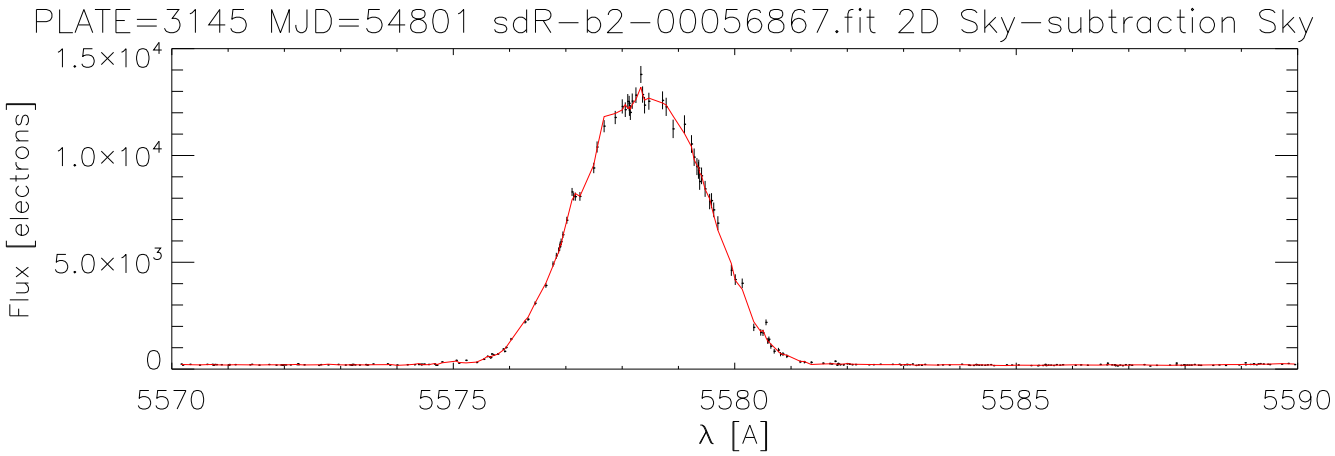

PLATE=3145 MJD=54801 sdR-b2-00056867.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

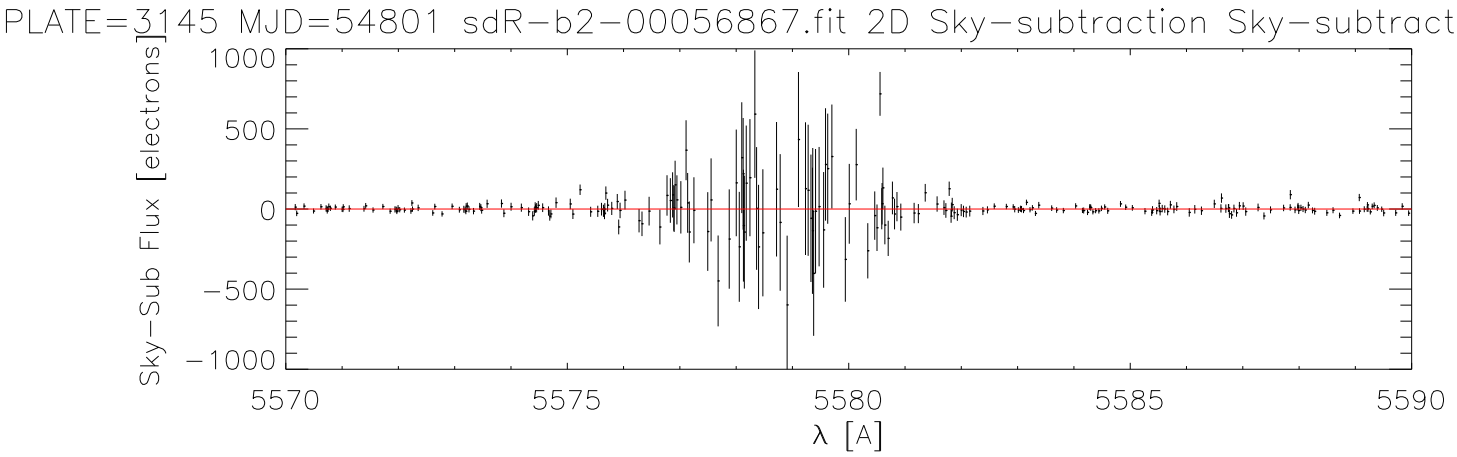

PLATE=3145 MJD=54801 sdR-b2-00056867.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

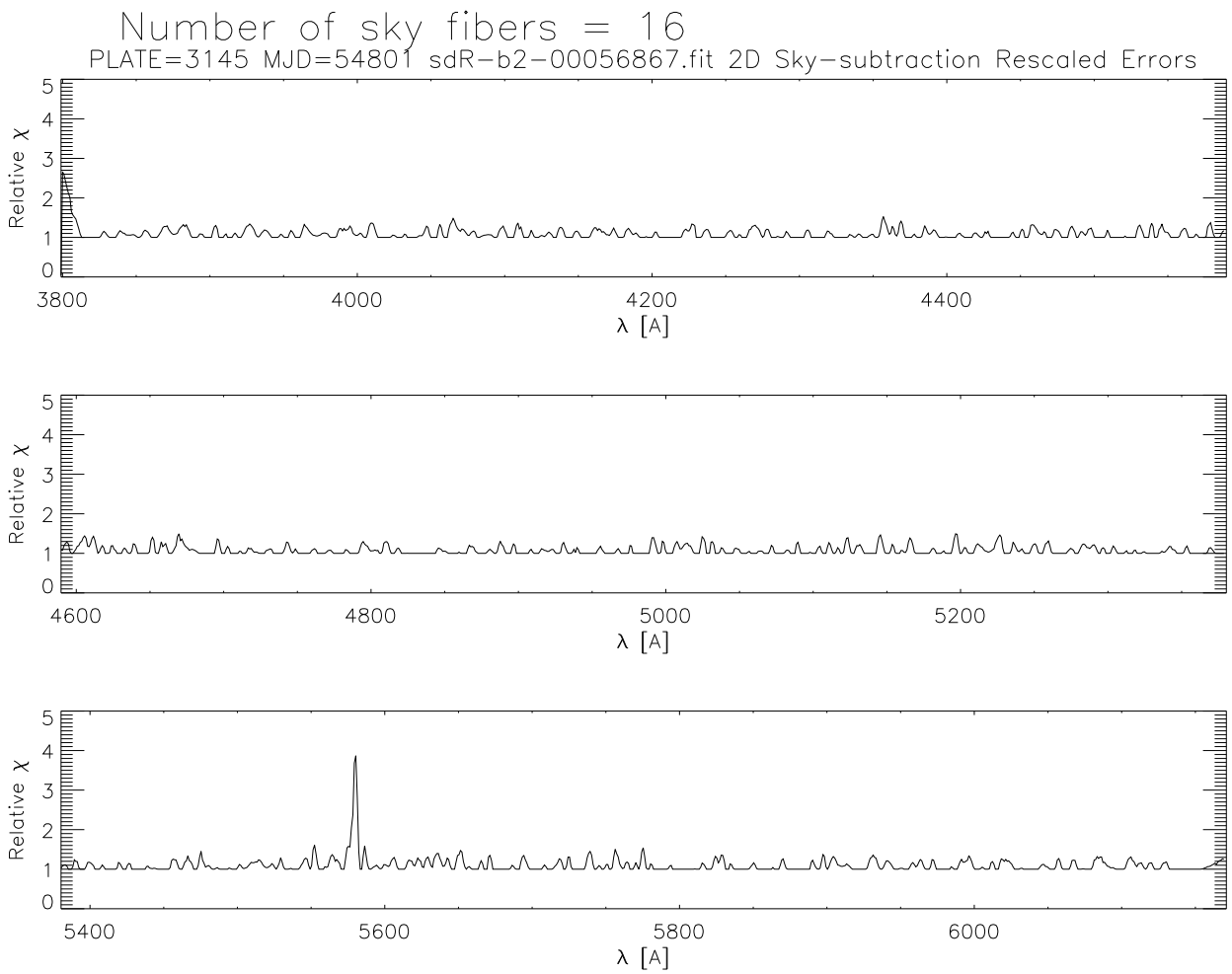

PLATE=3145 MJD=54801 sdR-b2-00056867.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

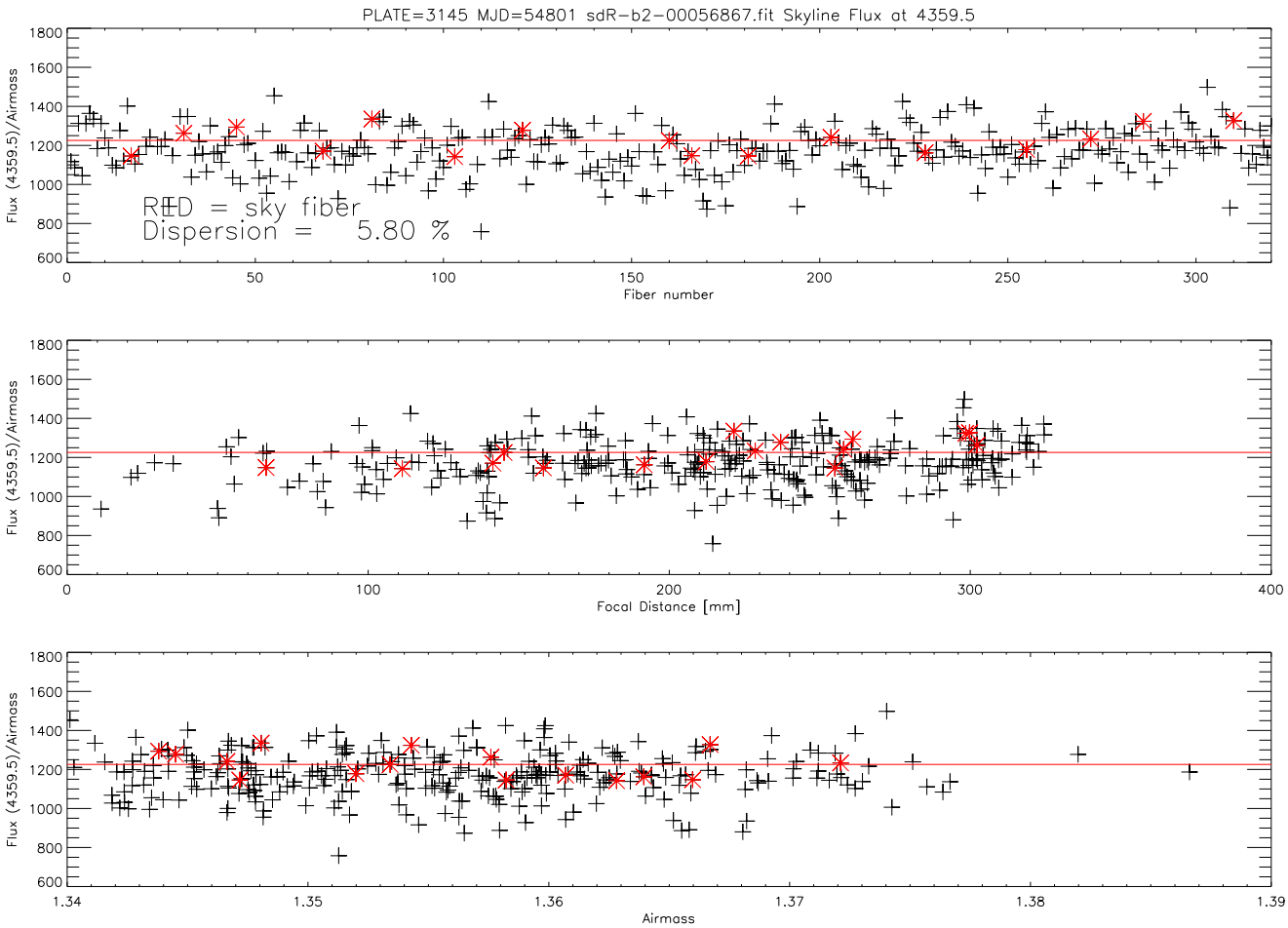

Number of sky fibers = 16
PLATE=3145 MJD=54801 sdR-b2-00056867.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

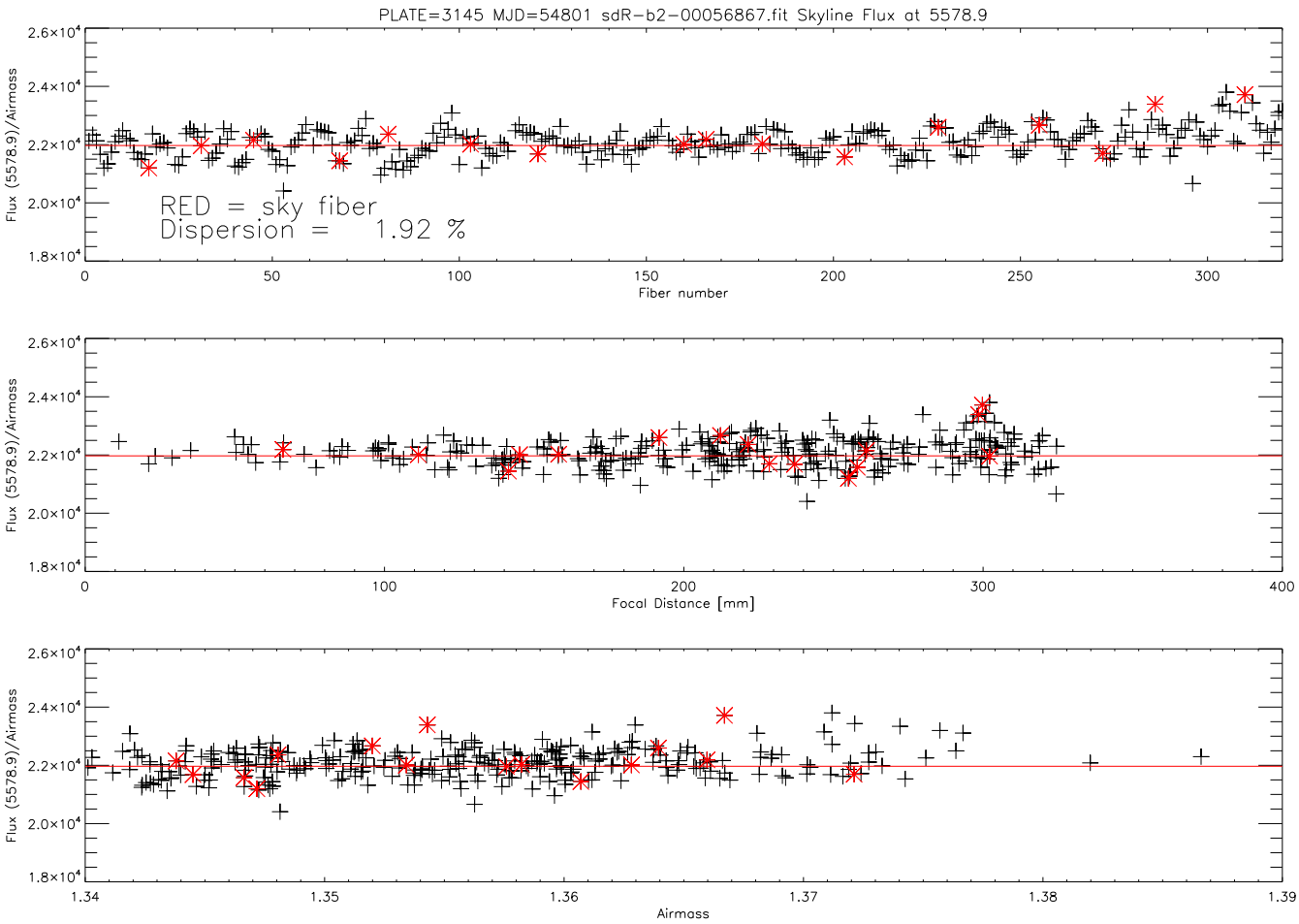

PLATE=3145 MJD=54801 sdR-b2-00056867.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

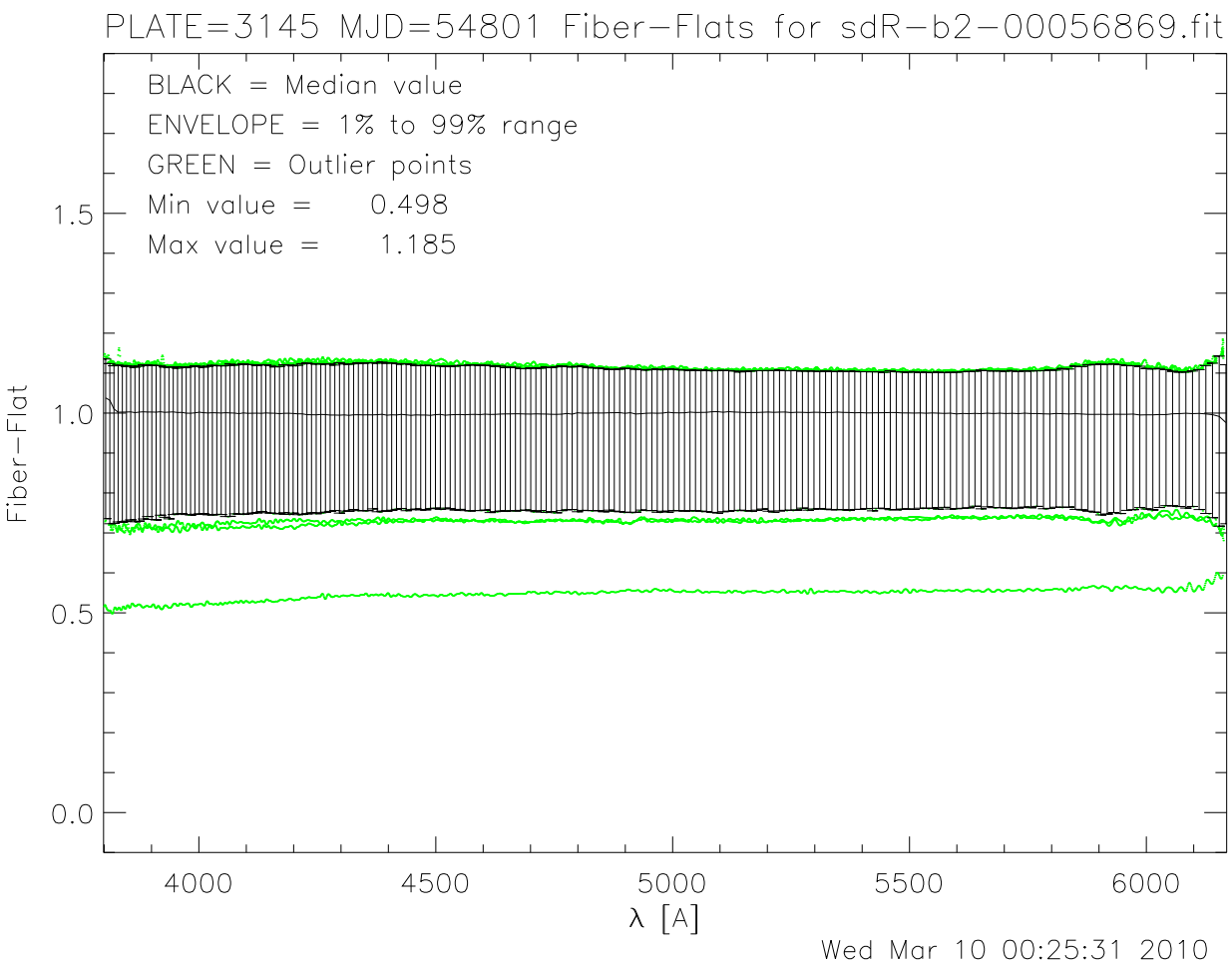

PLATE=3145 MJD=54801 sdR-b2-00056867.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

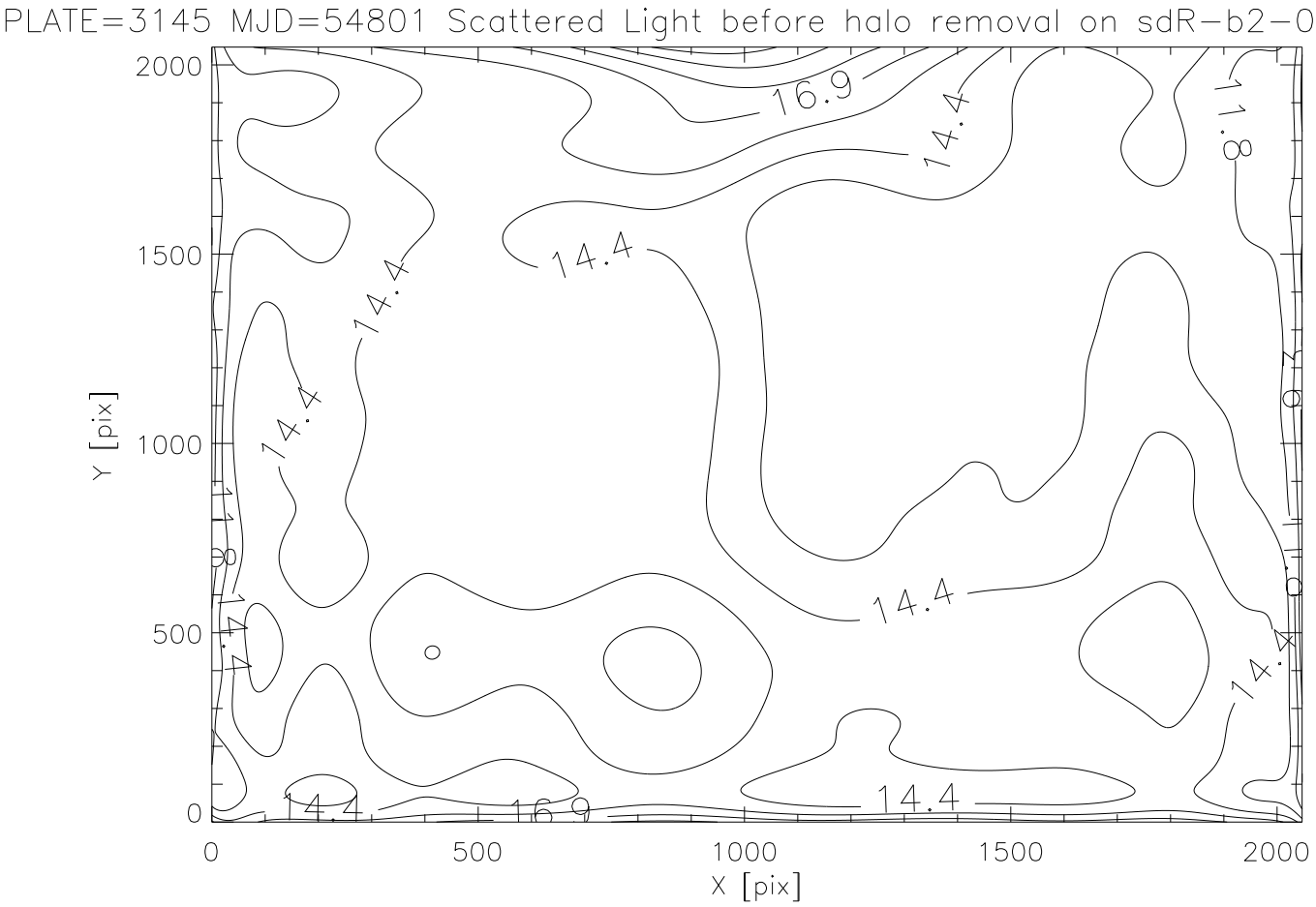

PLATE=3145 MJD=54801 sdR-b2-00056867.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

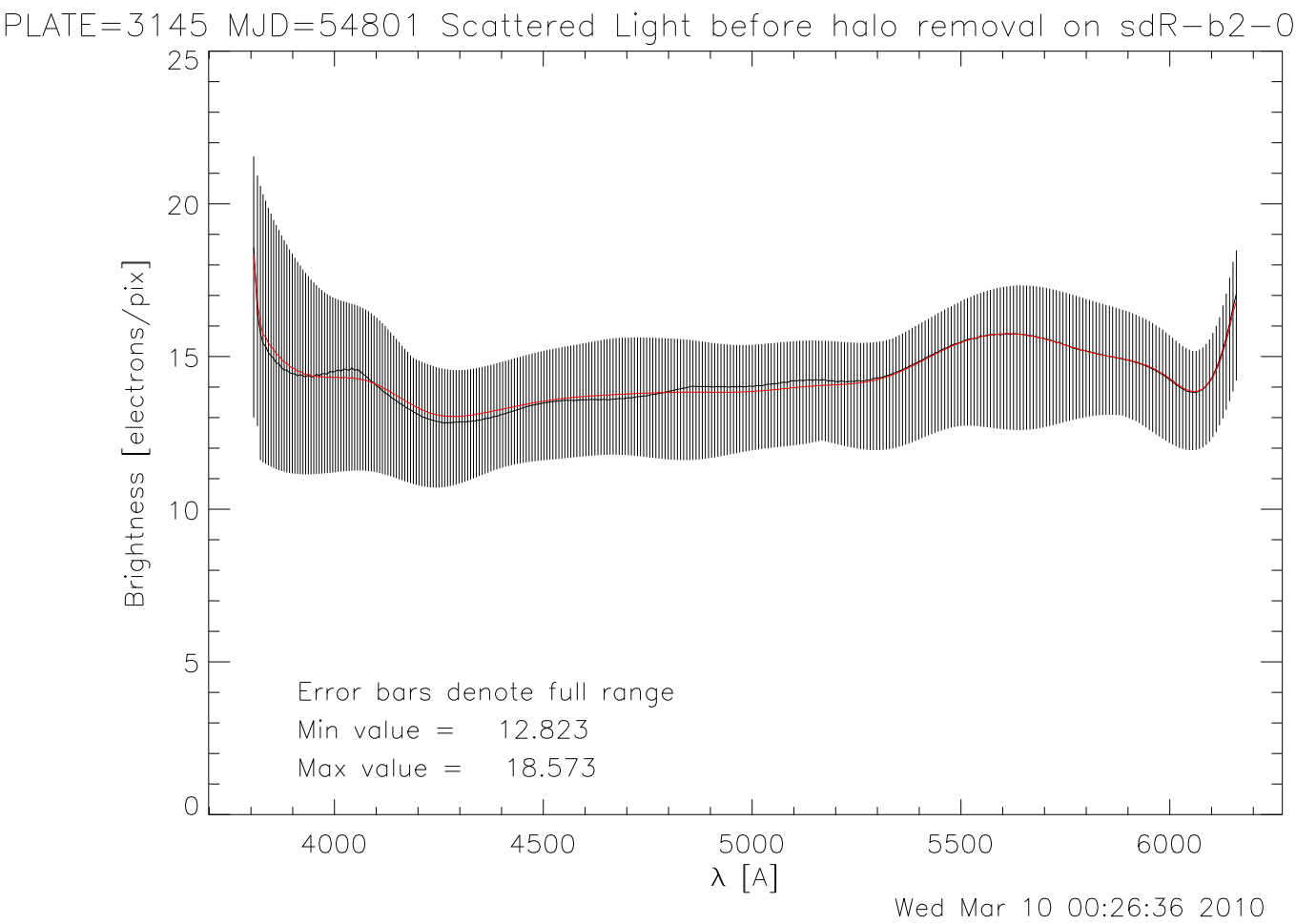

Number of sky fibers = 16
PLATE=3145 MJD=54801 sdR-b2-00056867.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

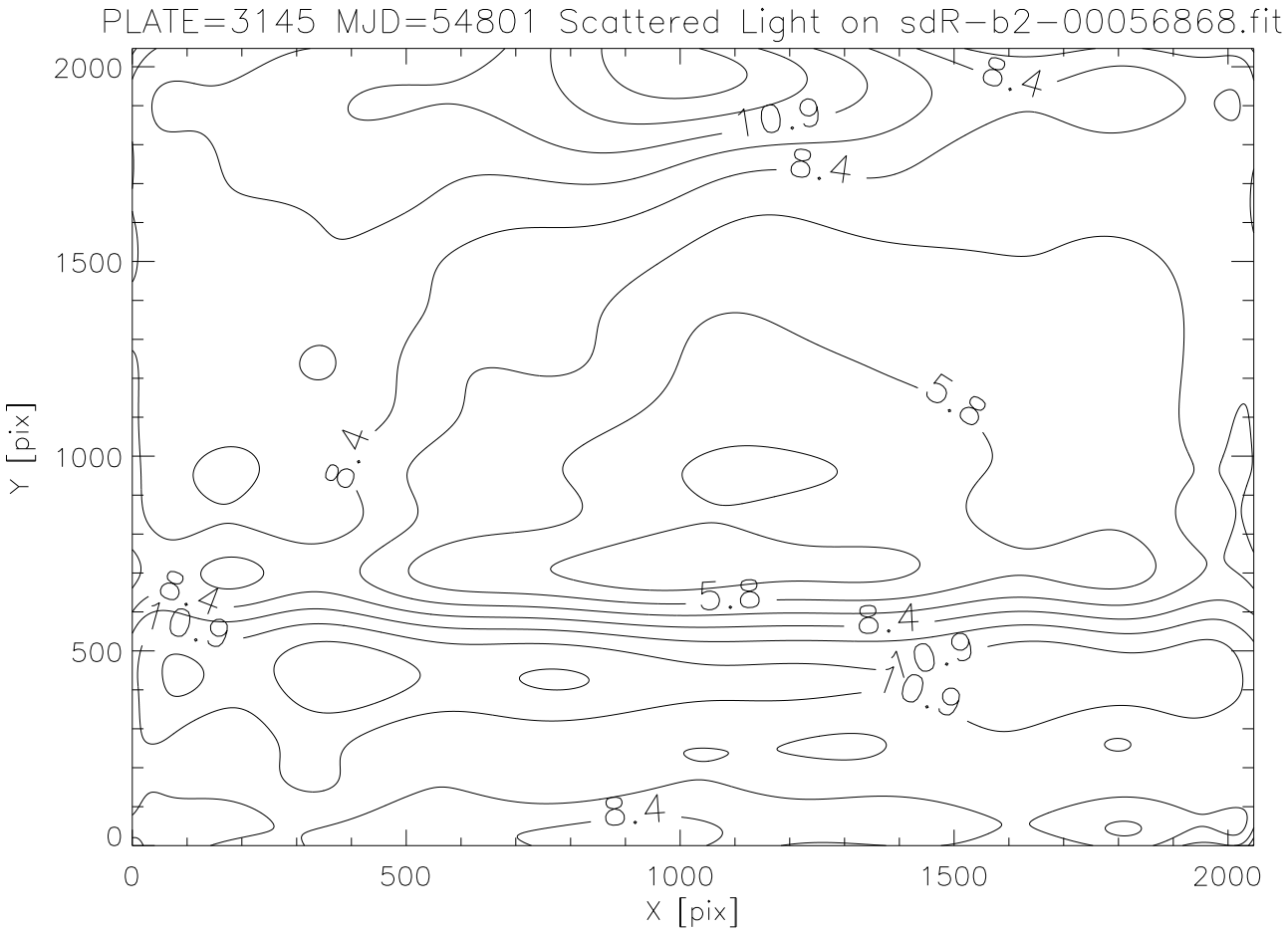

PLATE=3145 MJD=54801 sdR-b2-00056867.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.80 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

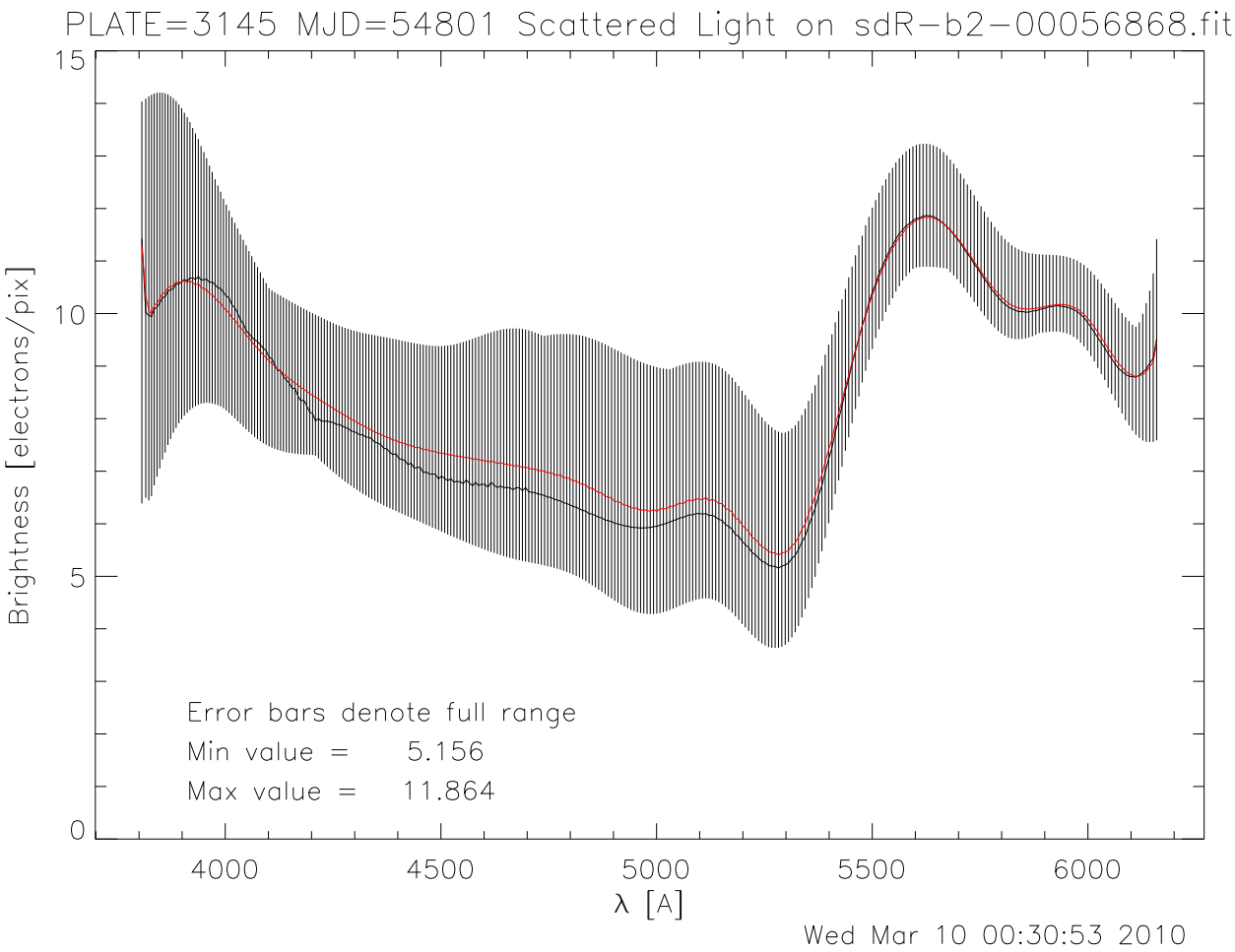

PLATE=3145 MJD=54801 sdR-b2-00056867.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.6×10^4
2.4×10^4
2.2×10^4
2.0×10^4
1.8×10^4
RED = sky fiber
Dispersion = 1.92 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
2.6×10^4
2.4×10^4
2.2×10^4
2.0×10^4
1.8×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
2.6×10^4
2.4×10^4
2.2×10^4
2.0×10^4
1.8×10^4
1.34
1.35
1.36
1.37
1.38
1.39
Airmass

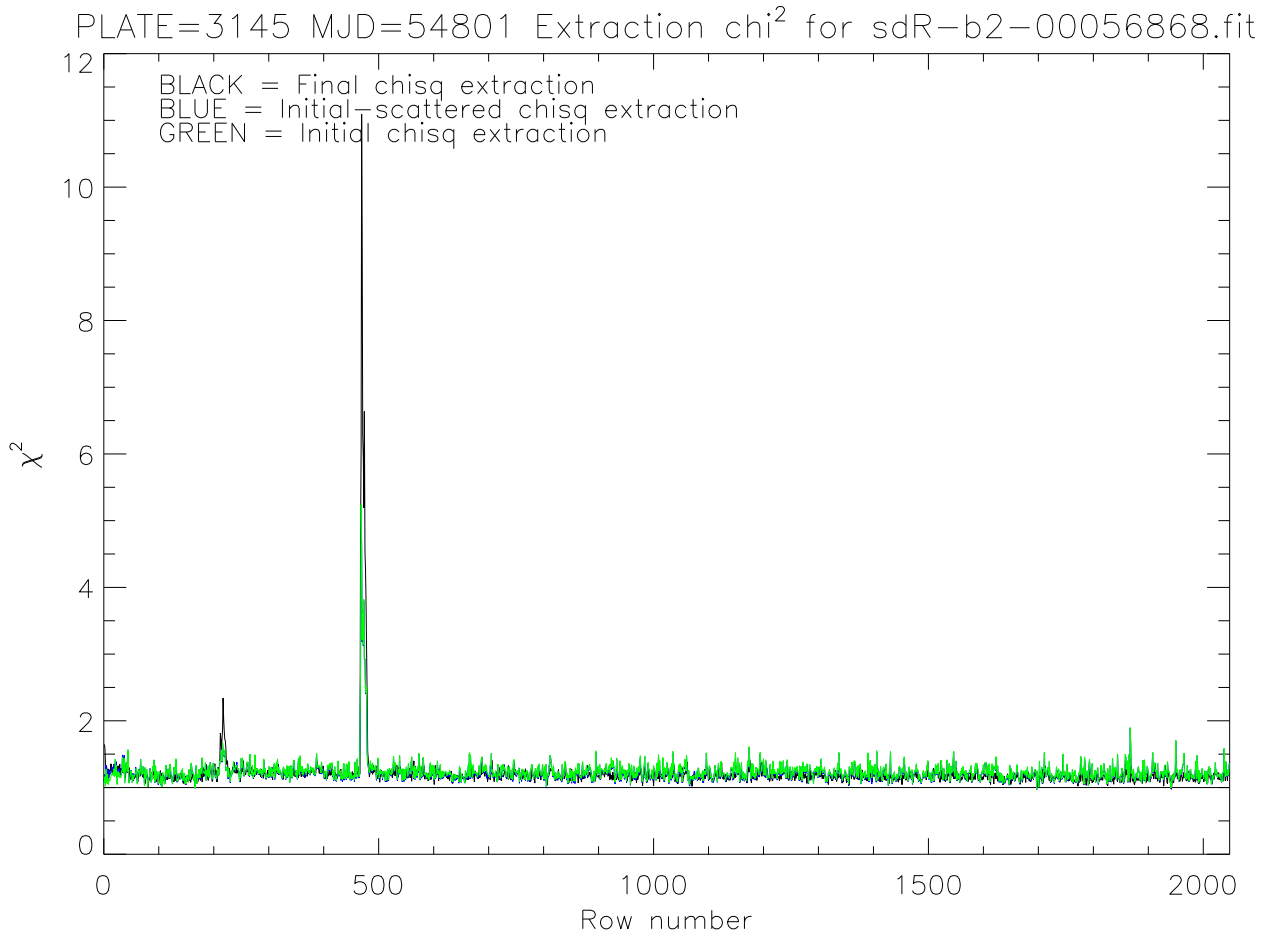

PLATE=3145 MJD=54801 Fiber-Flats for sdR-b2-00056869.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.498
Max value = 1.185
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 10 00:25:31 2010

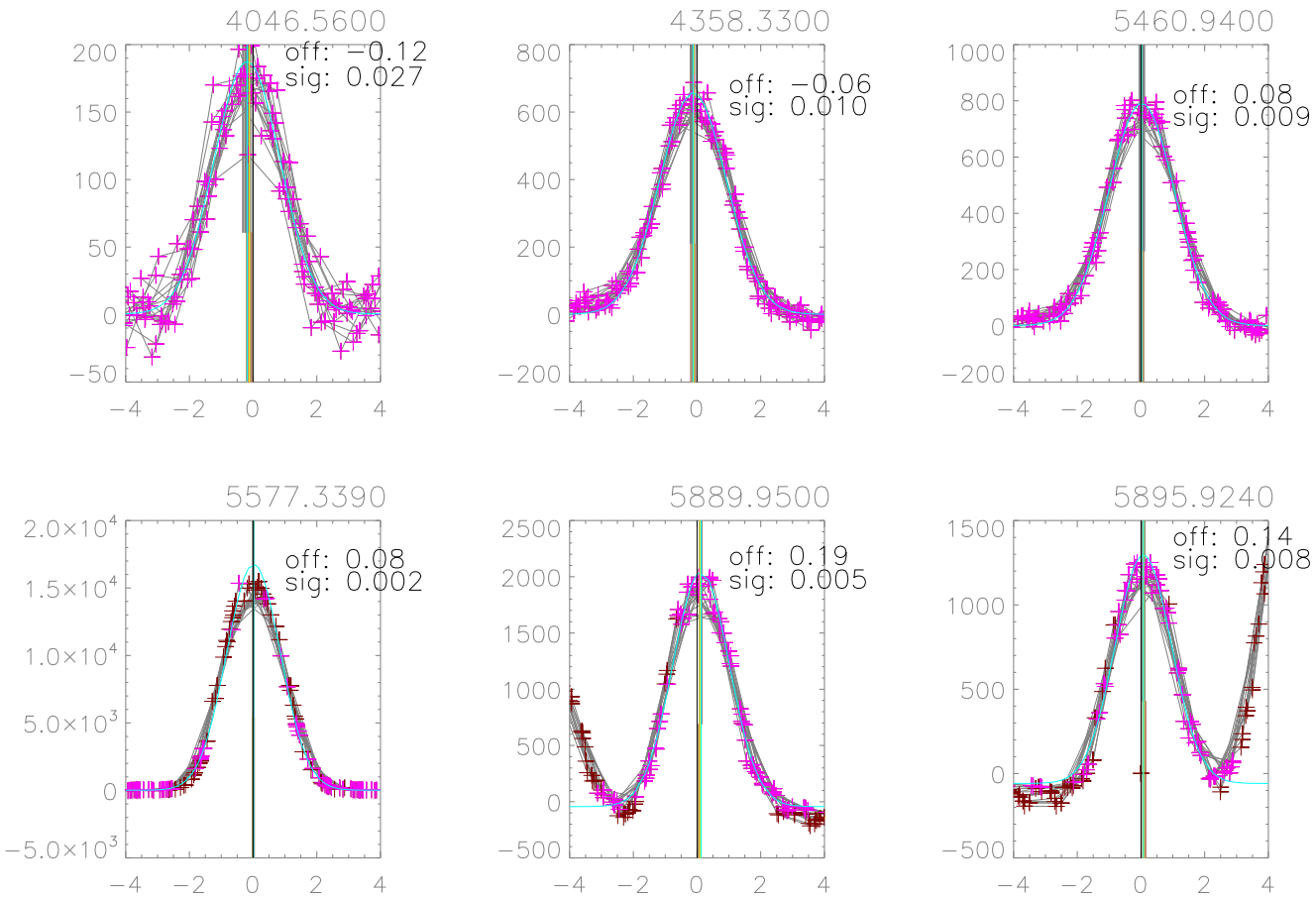

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-b2-00056868.f
16.9
14.4
14.4
14.4
14.4
14.4
14.4
14.4
14.4
14.4
14.4
14.4
14.4
16.9
14.4
Y [pix]
X [pix]
0
500
1000
1500
2000

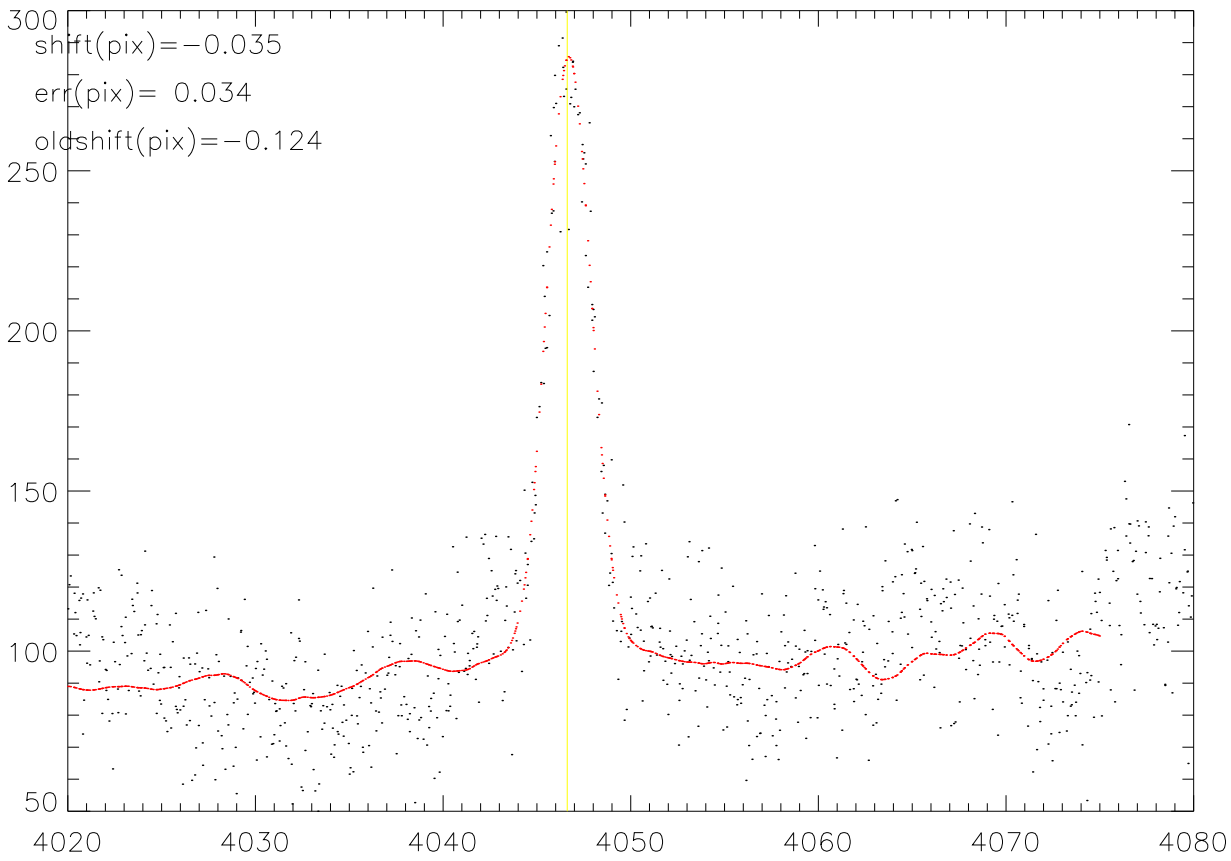

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-b2-00056868.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 12.823
Max value = 18.573
Wed Mar 10 00:26:36 2010

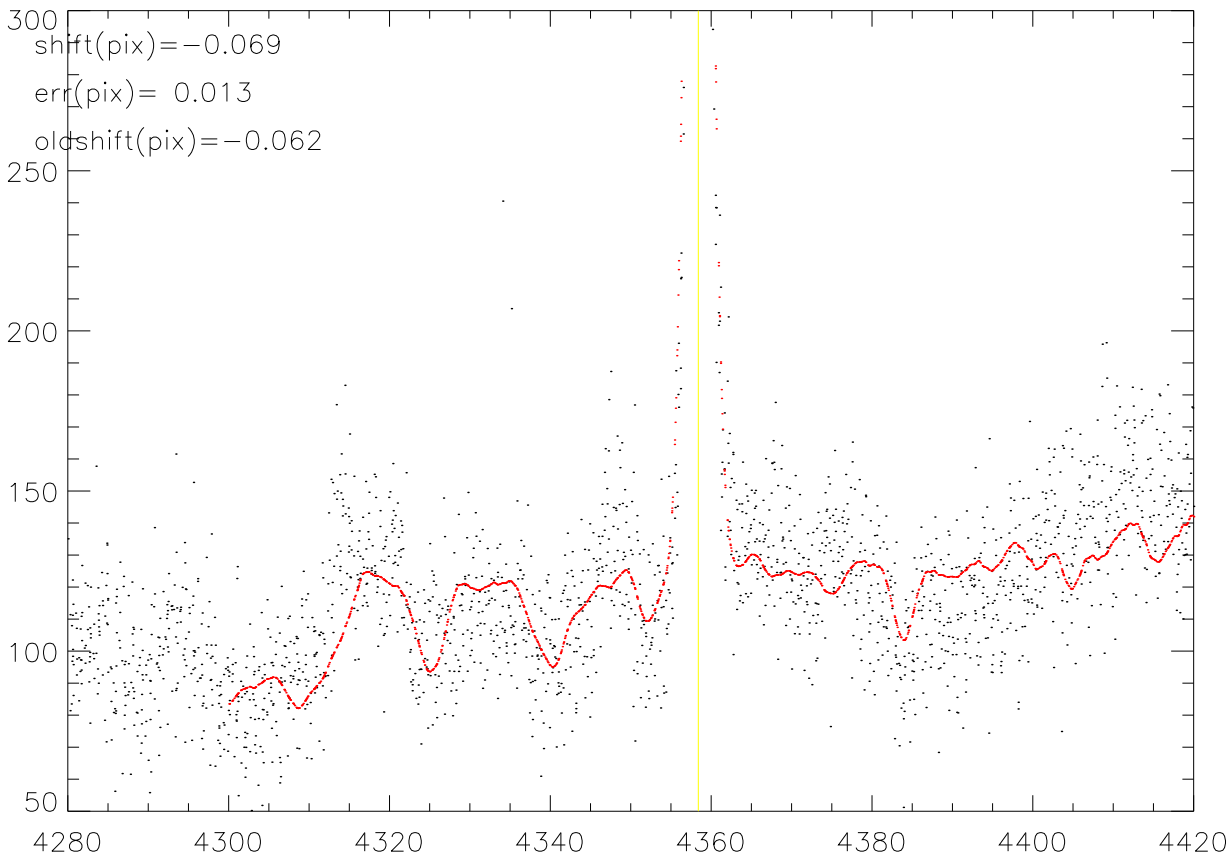

PLATE=3145 MJD=54801 Scattered Light on sdR-b2-00056868.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
10.9
5.8

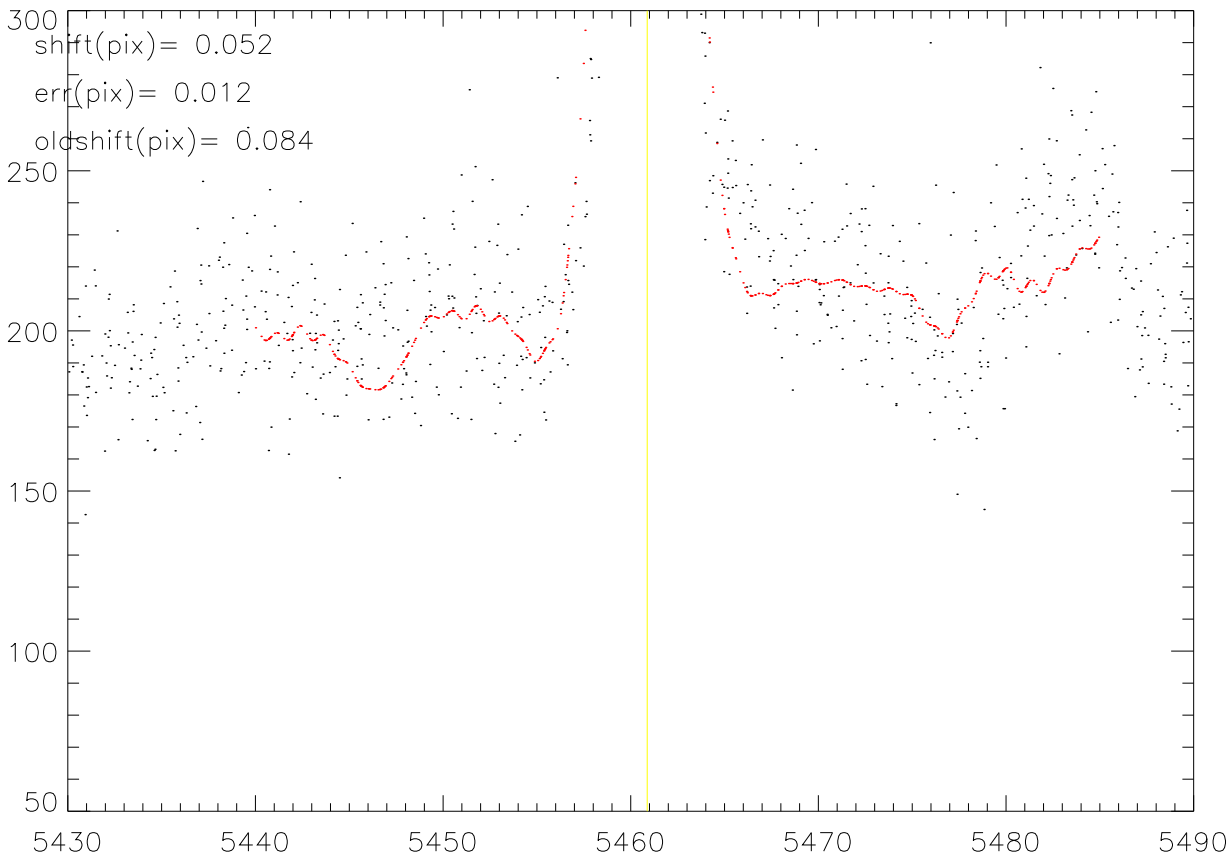

PLATE=3145 MJD=54801 Scattered Light on sdR-b2-00056868.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.156
Max value = 11.864
Wed Mar 10 00:30:53 2010

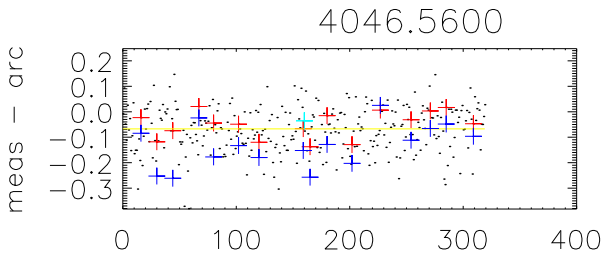

PLATE=3145 MJD=54801 Extraction chi^2 for sdR-b2-00056868.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

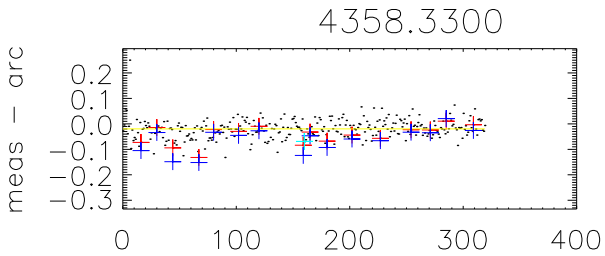

4046.5600
off: −0.12
sig: 0.027
4358.3300
off: −0.06
sig: 0.010
5460.9400
off: 0.08
sig: 0.009
5577.3390
off: 0.08
sig: 0.002
5889.9500
off: 0.19
sig: 0.005
5895.9240
off: 0.14
sig: 0.008

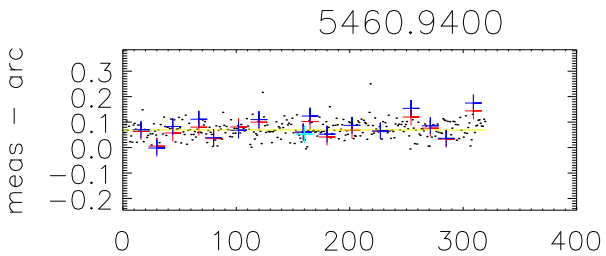

shift(pix)=−0.035
err(pix)= 0.034
oldshift(pix)=−0.124
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

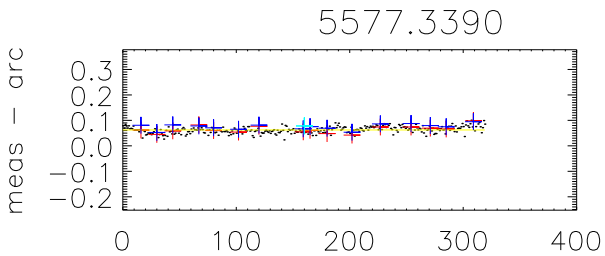

shift(pix)=−0.069
err(pix)= 0.013
oldshift(pix)=−0.062
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

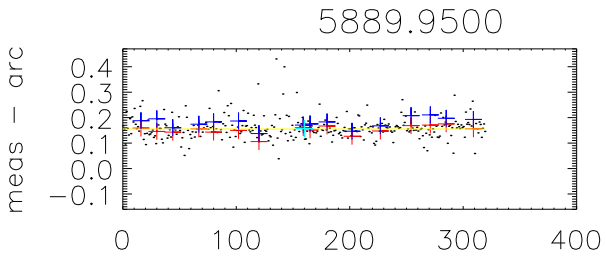

shift(pix)= 0.052
err(pix)= 0.012
oldshift(pix)= 0.084
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

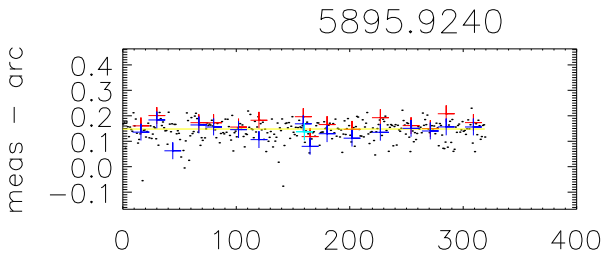

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

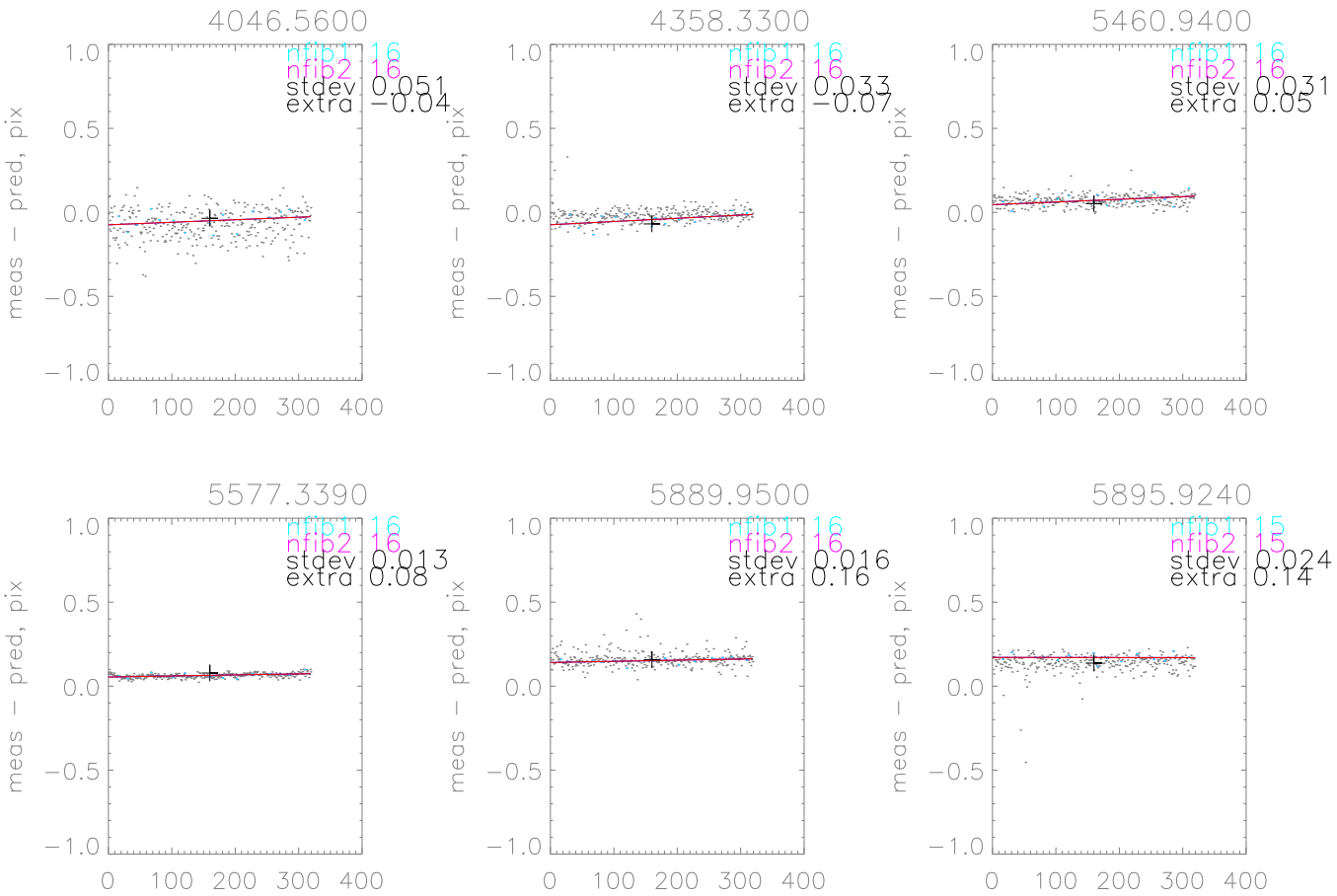

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

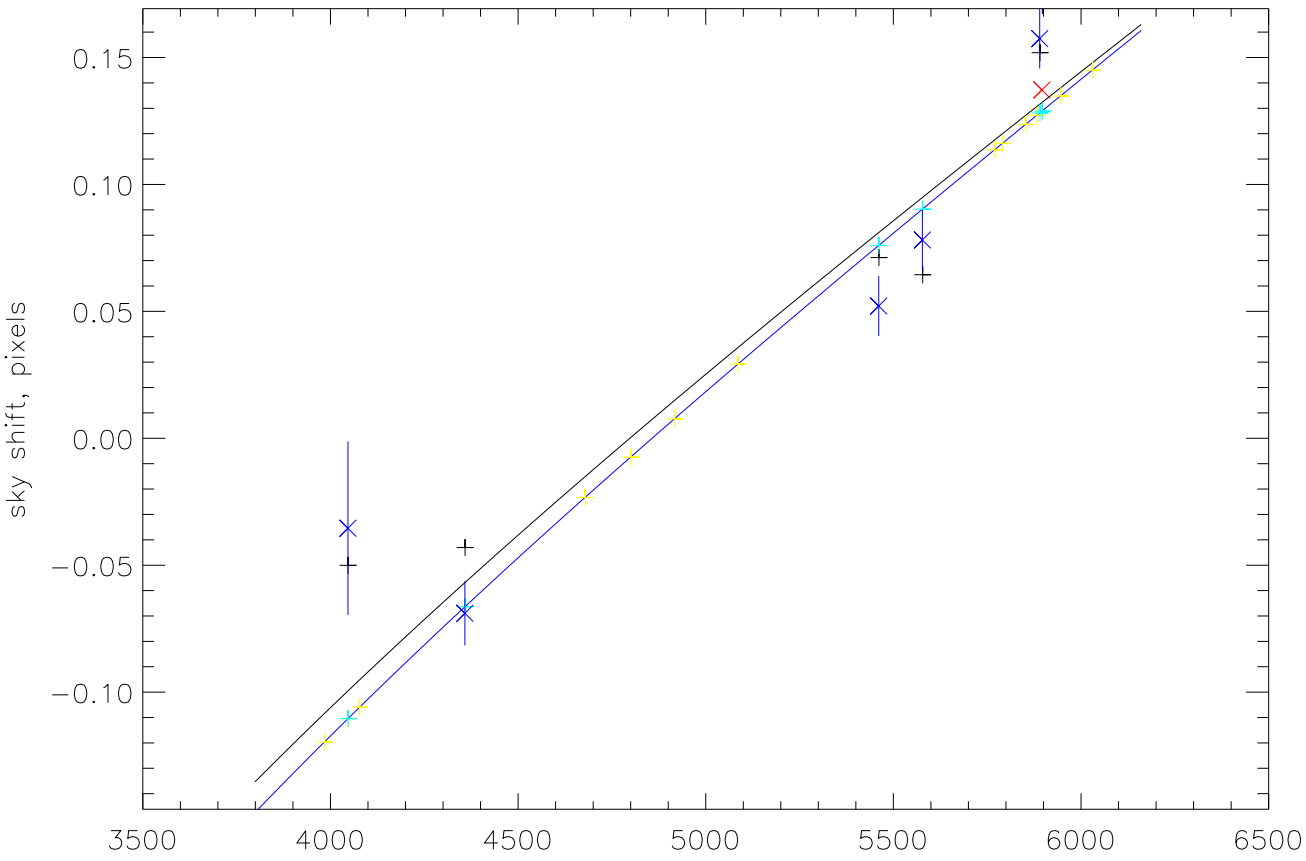

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

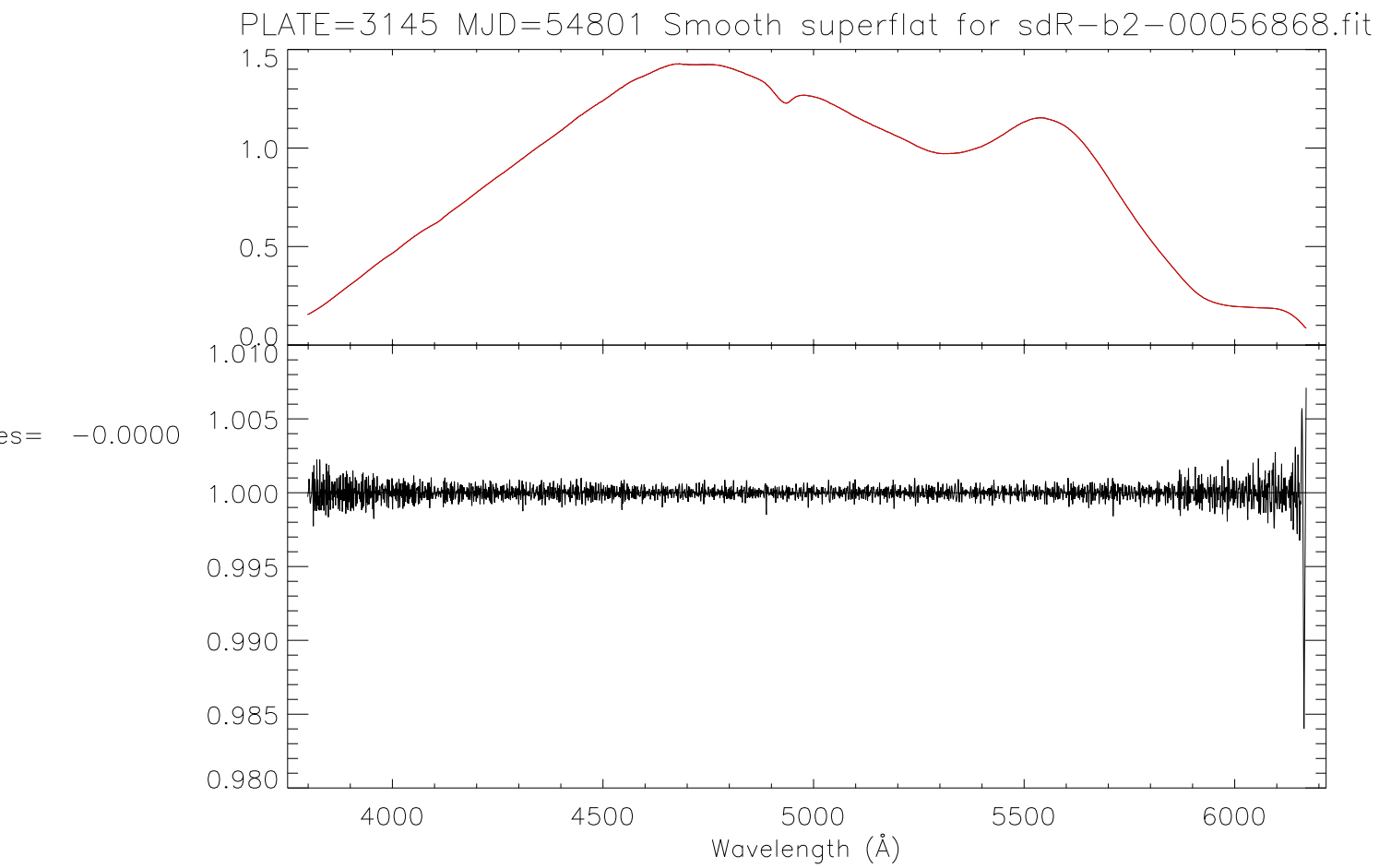

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

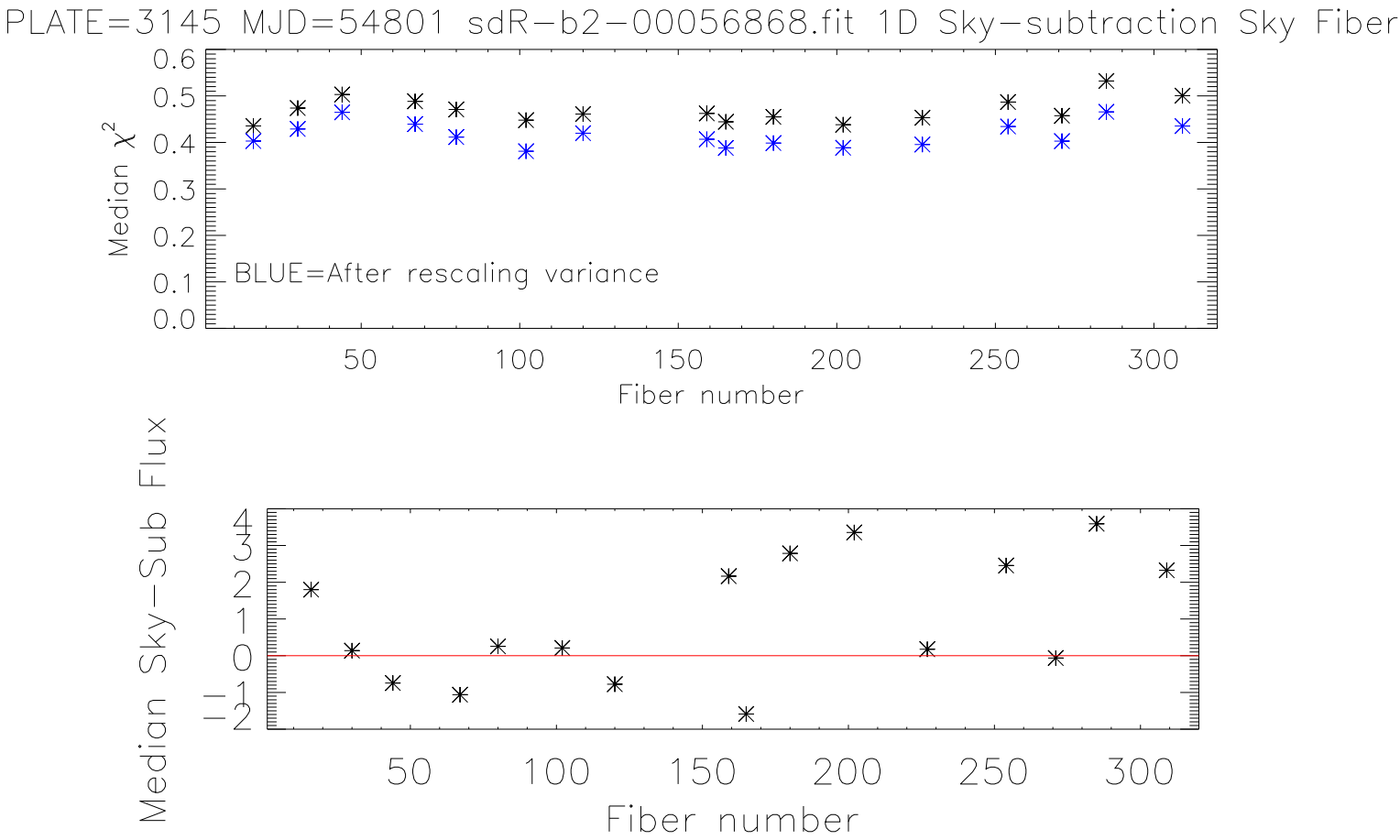

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

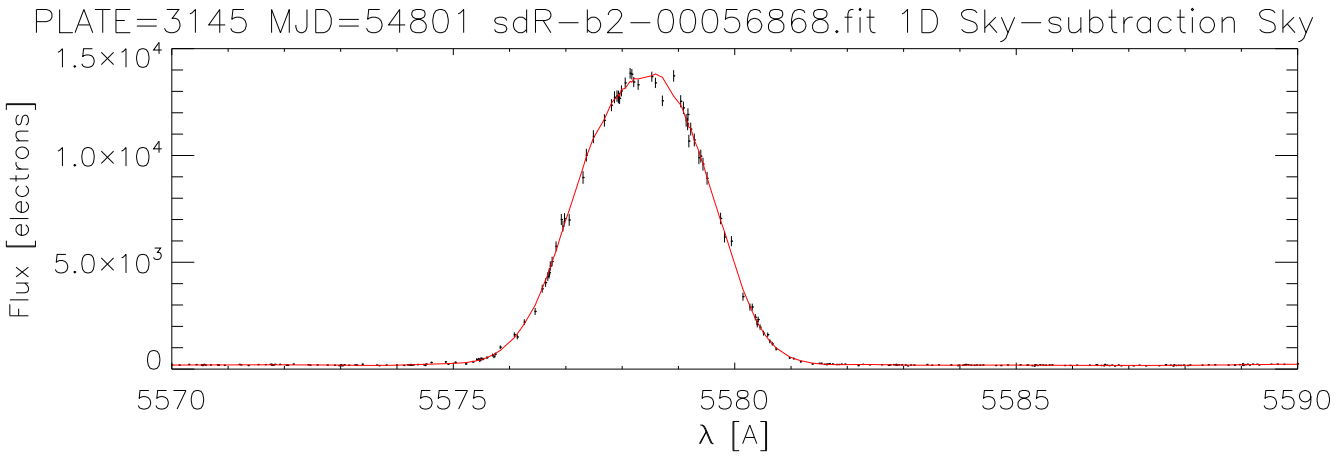

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

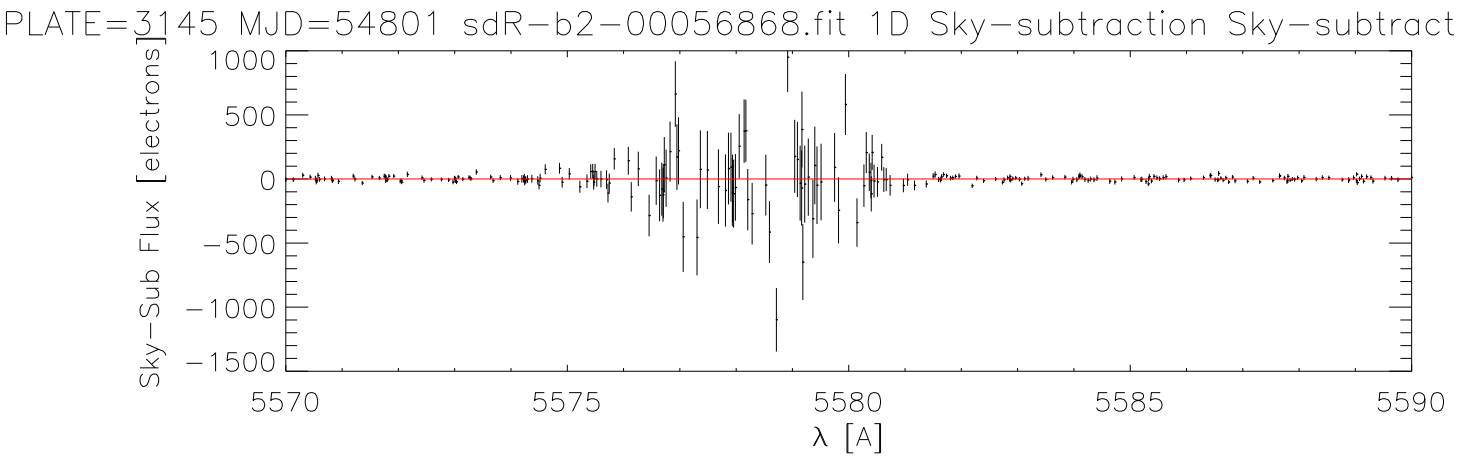

4046.5600
nfib1 16
nfib2 16
stdev 0.051
extra −0.04
4358.3300
nfib1 16
nfib2 16
stdev 0.033
extra −0.07
5460.9400
nfib1 16
nfib2 16
stdev 0.031
extra 0.05
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.016
extra 0.16
5895.9240
nfib1 15
nfib2 15
stdev 0.024
extra 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

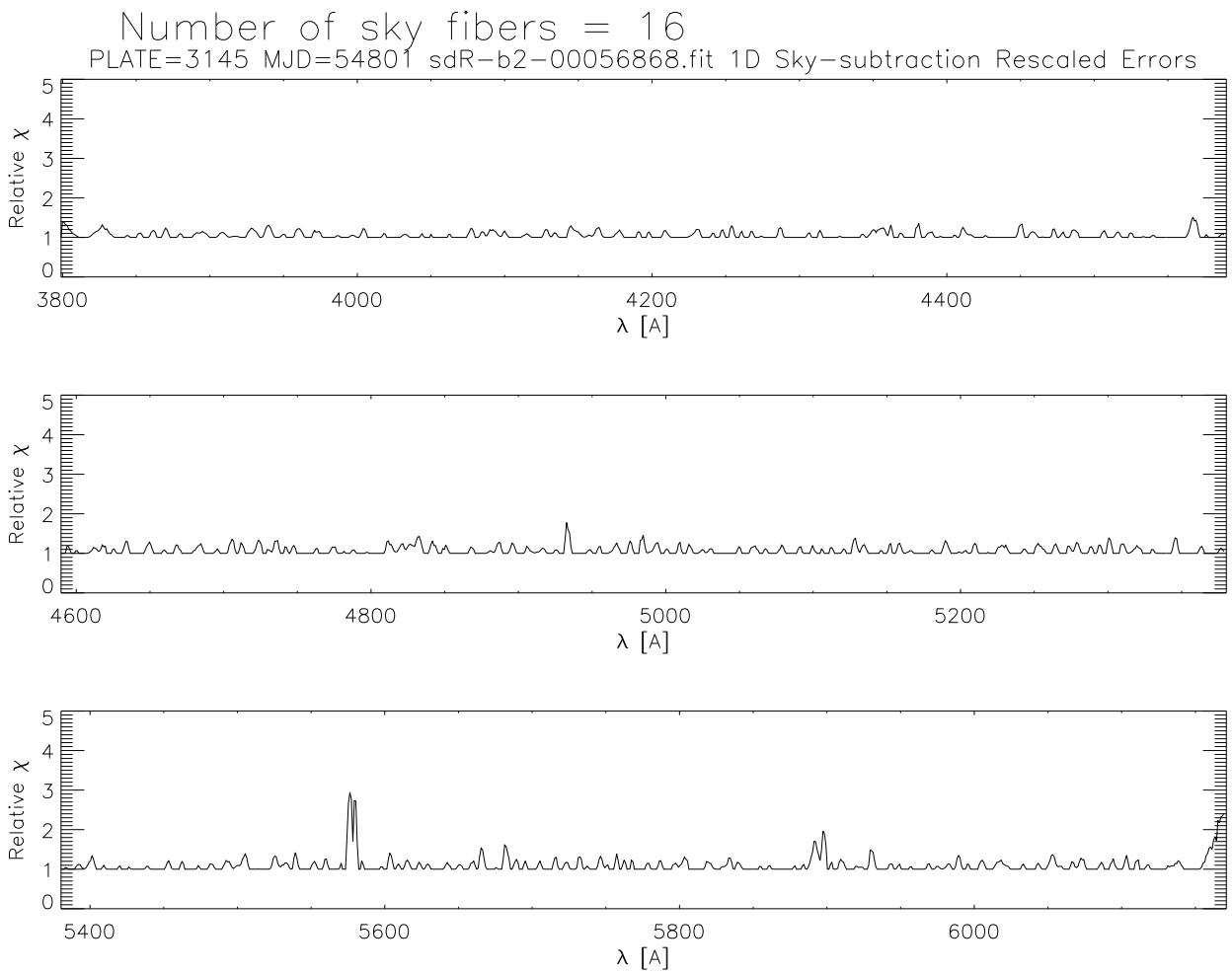

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

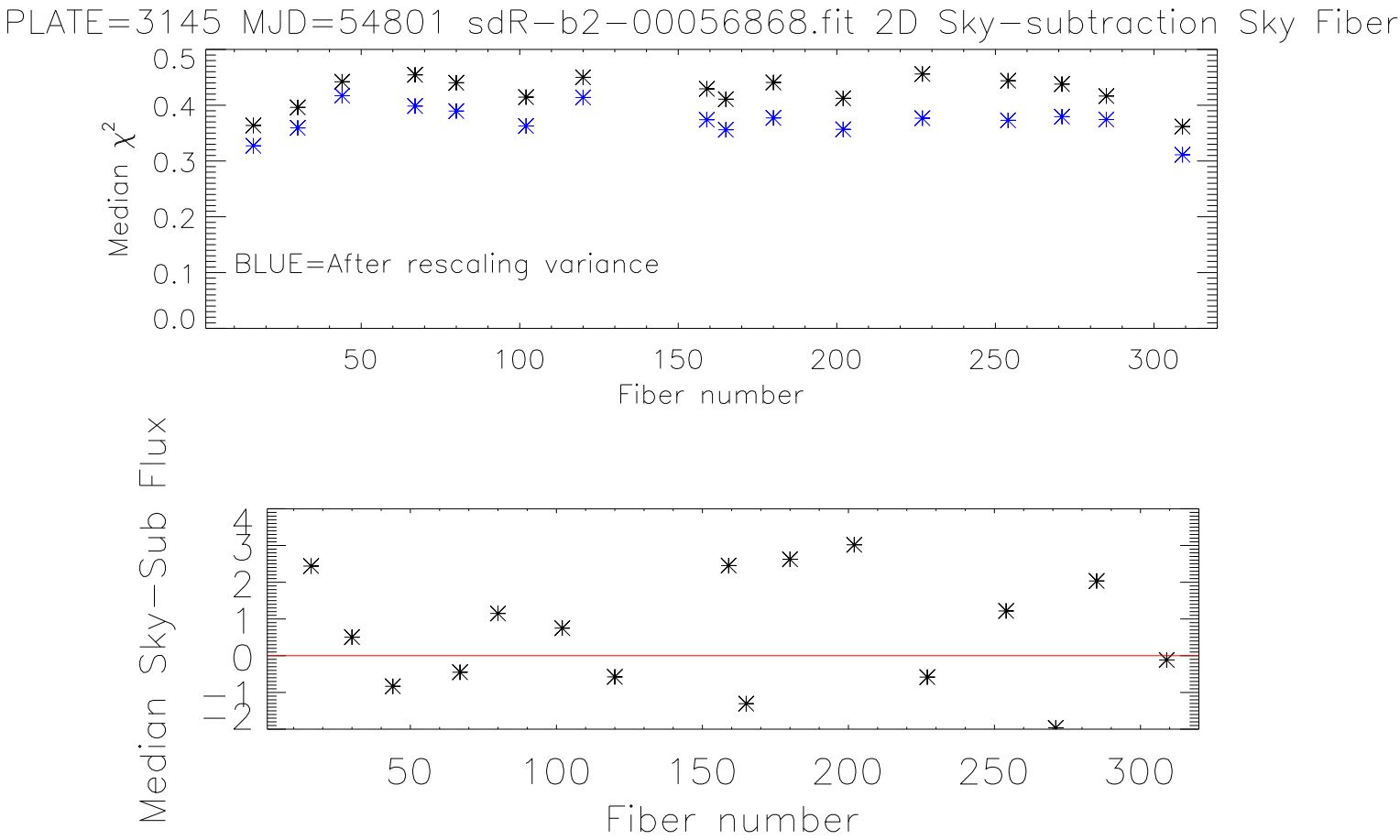

PLATE=3145 MJD=54801 Smooth superflat for sdR-b2-00056868.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

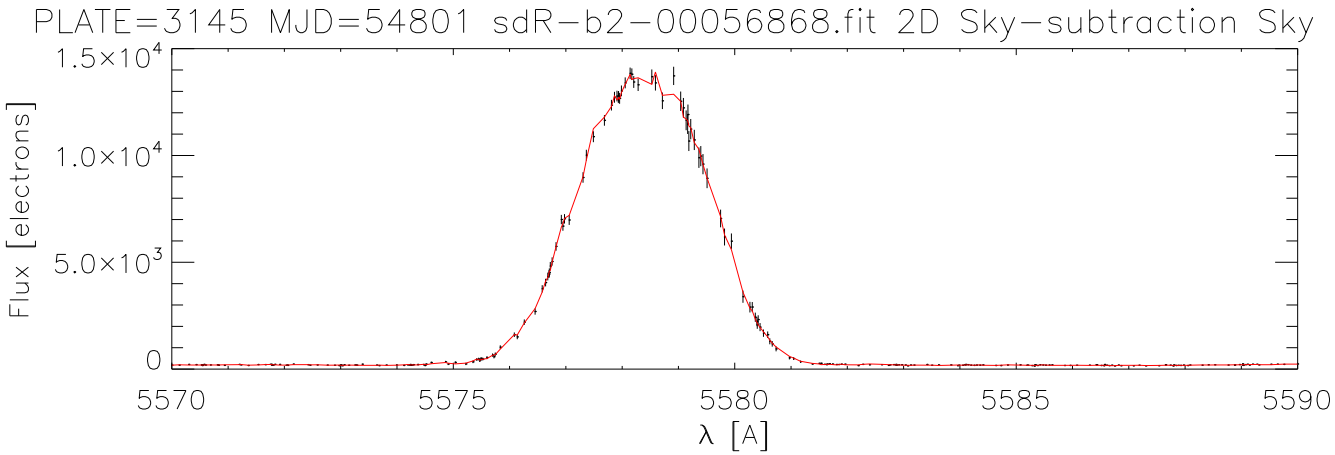

PLATE=3145 MJD=54801 sdR-b2-00056868.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

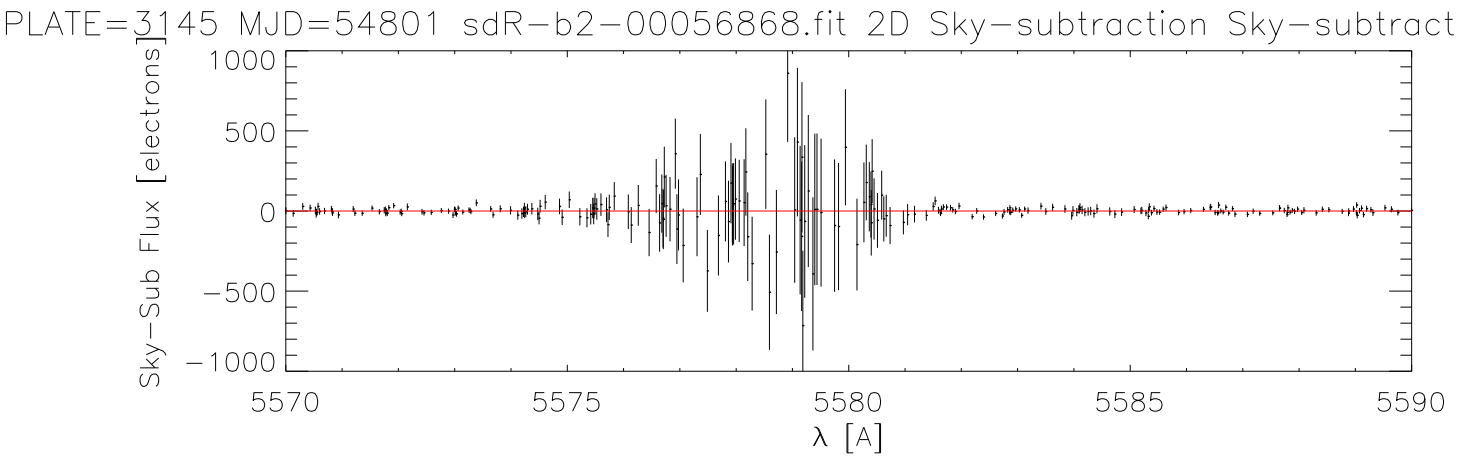

PLATE=3145 MJD=54801 sdR-b2-00056868.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

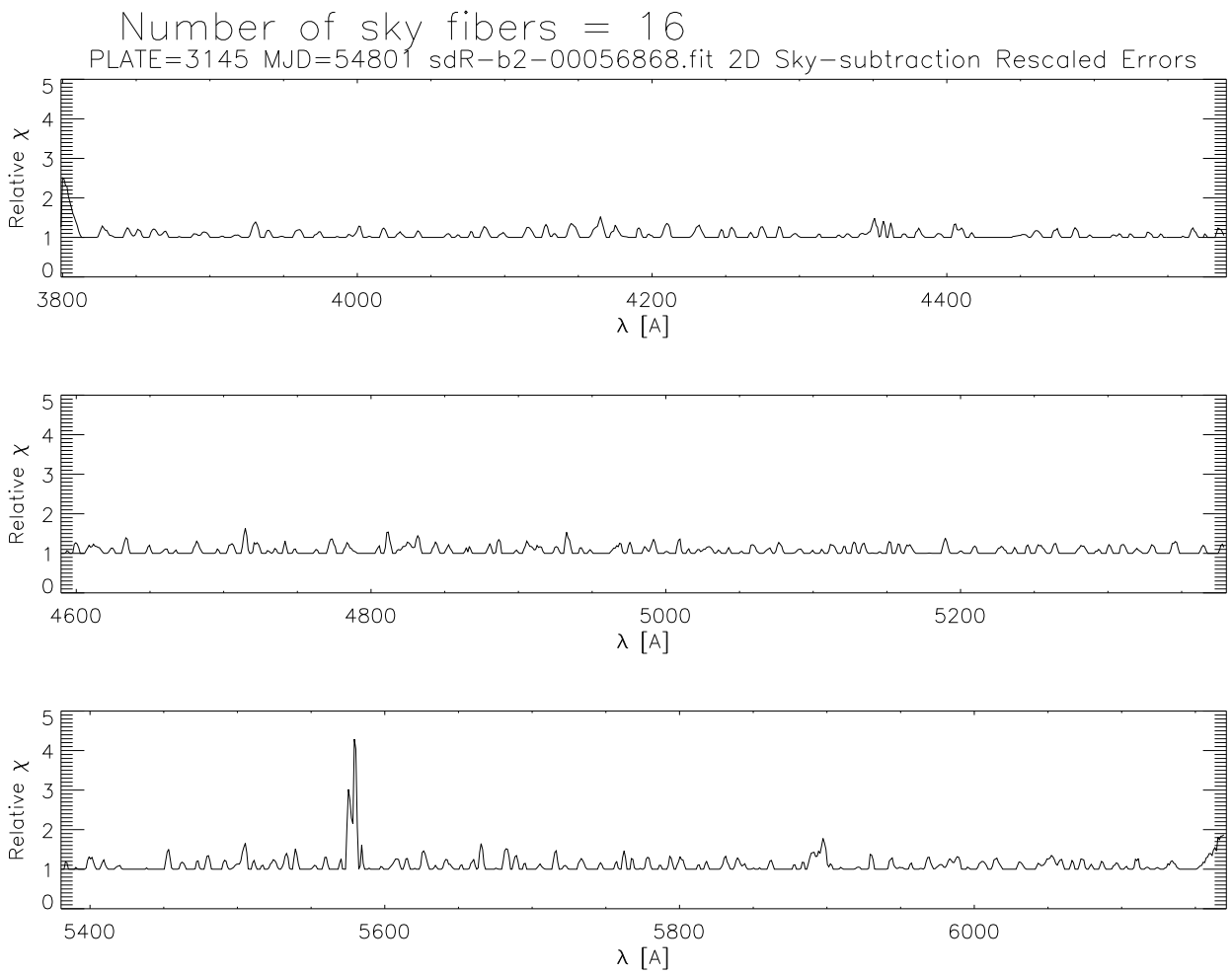

PLATE=3145 MJD=54801 sdR-b2-00056868.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

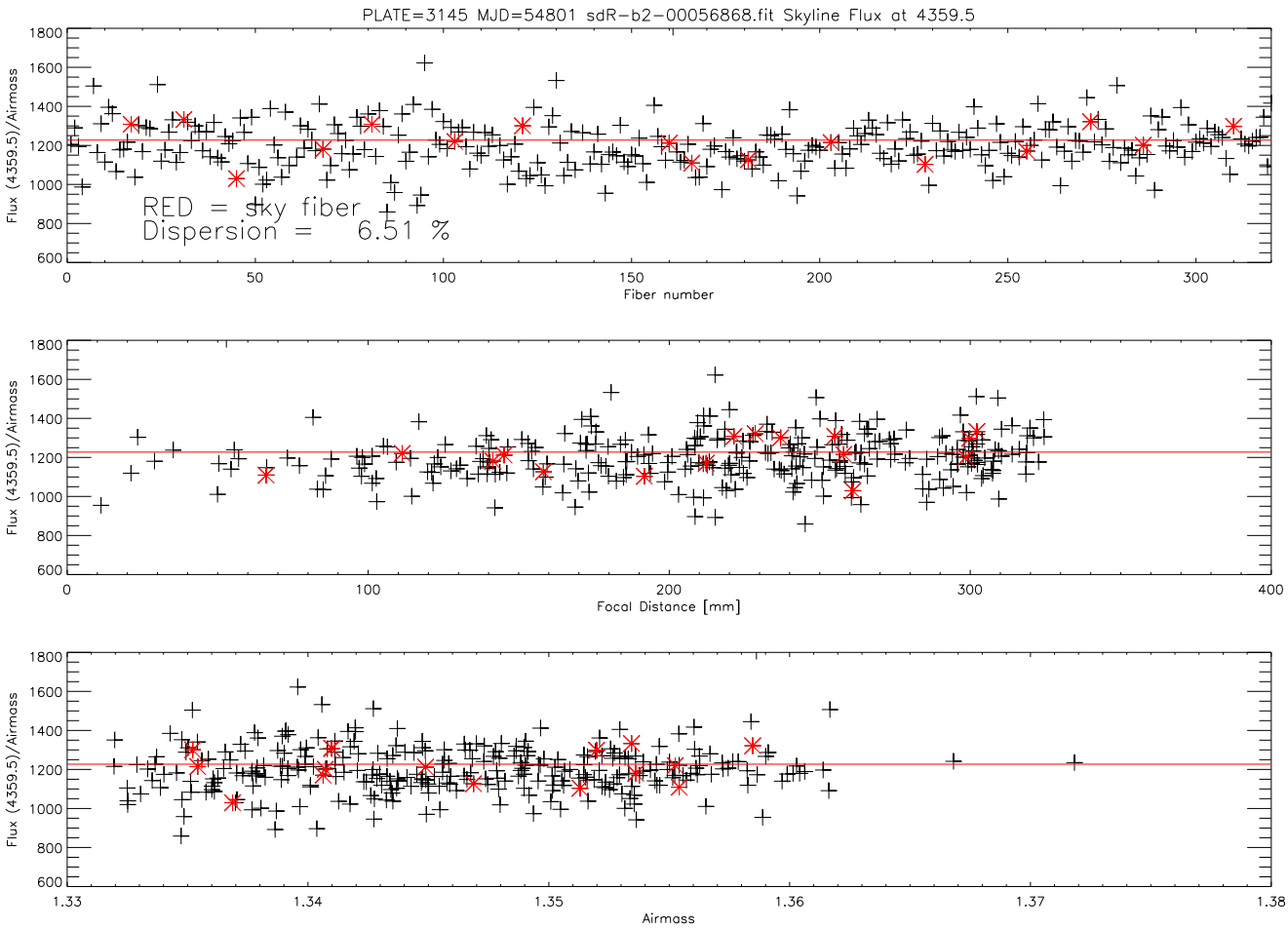

Number of sky fibers = 16
PLATE=3145 MJD=54801 sdR-b2-00056868.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

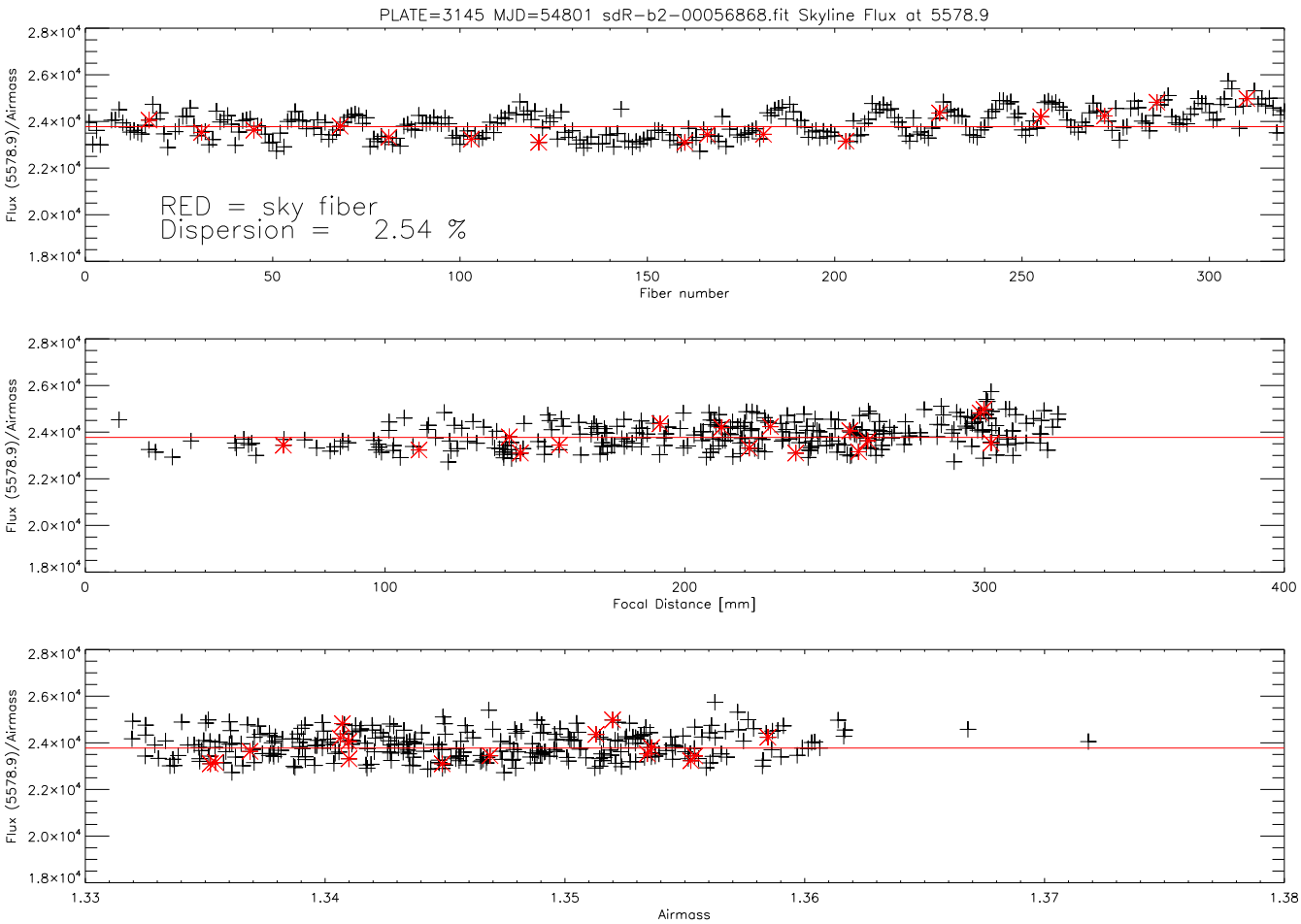

PLATE=3145 MJD=54801 sdR-b2-00056868.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

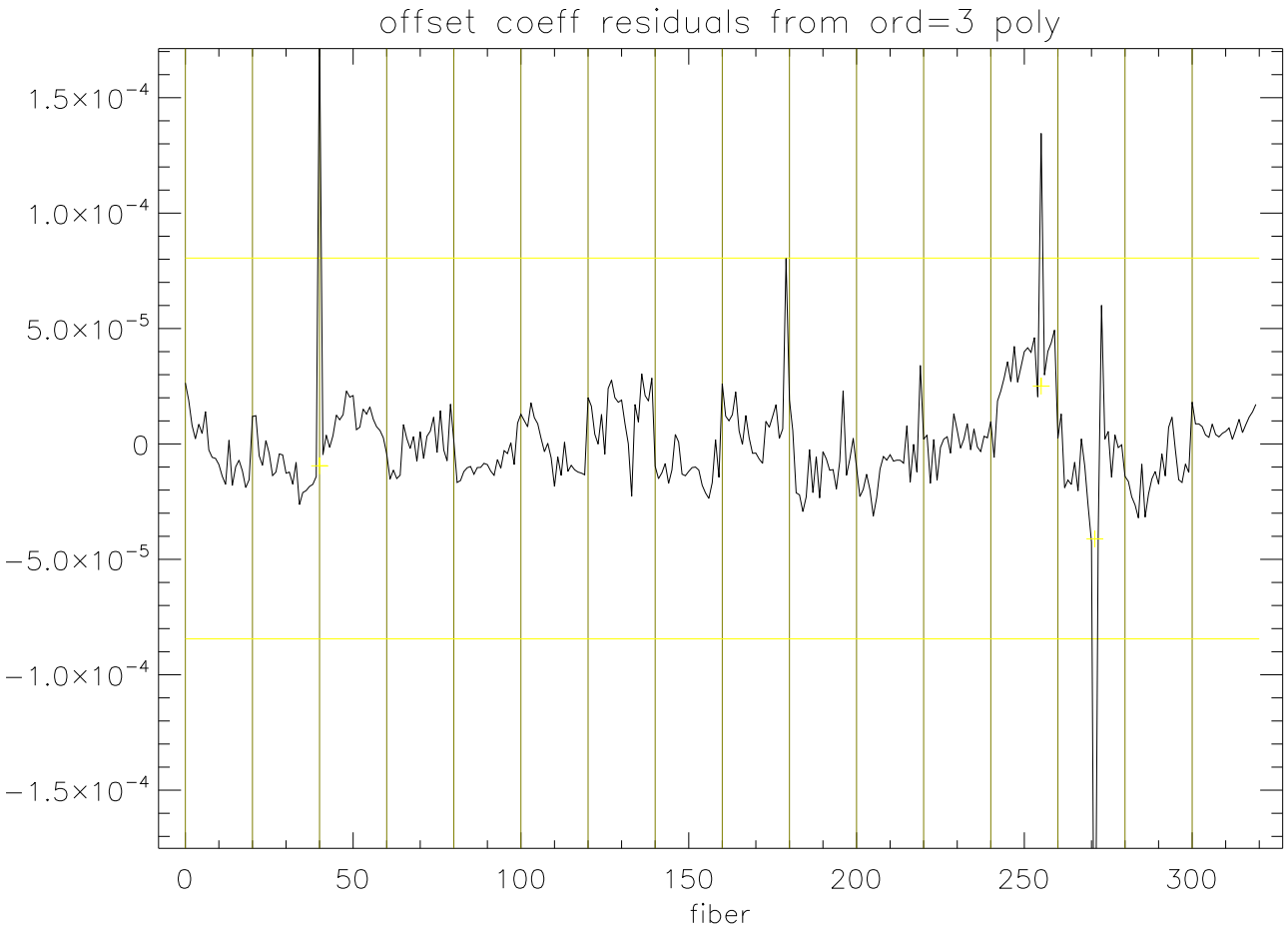

PLATE=3145 MJD=54801 sdR-b2-00056868.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

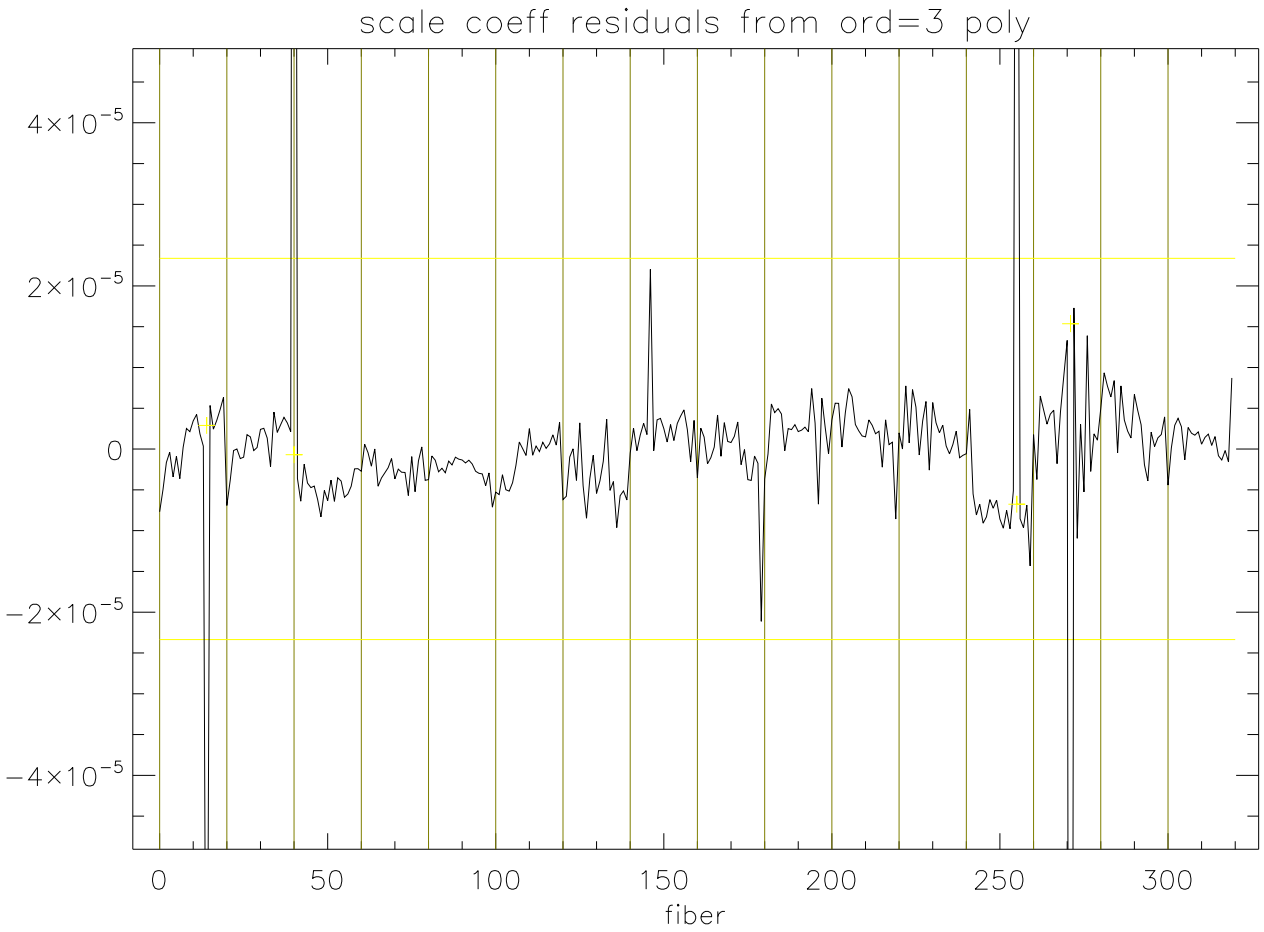

PLATE=3145 MJD=54801 sdR-b2-00056868.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

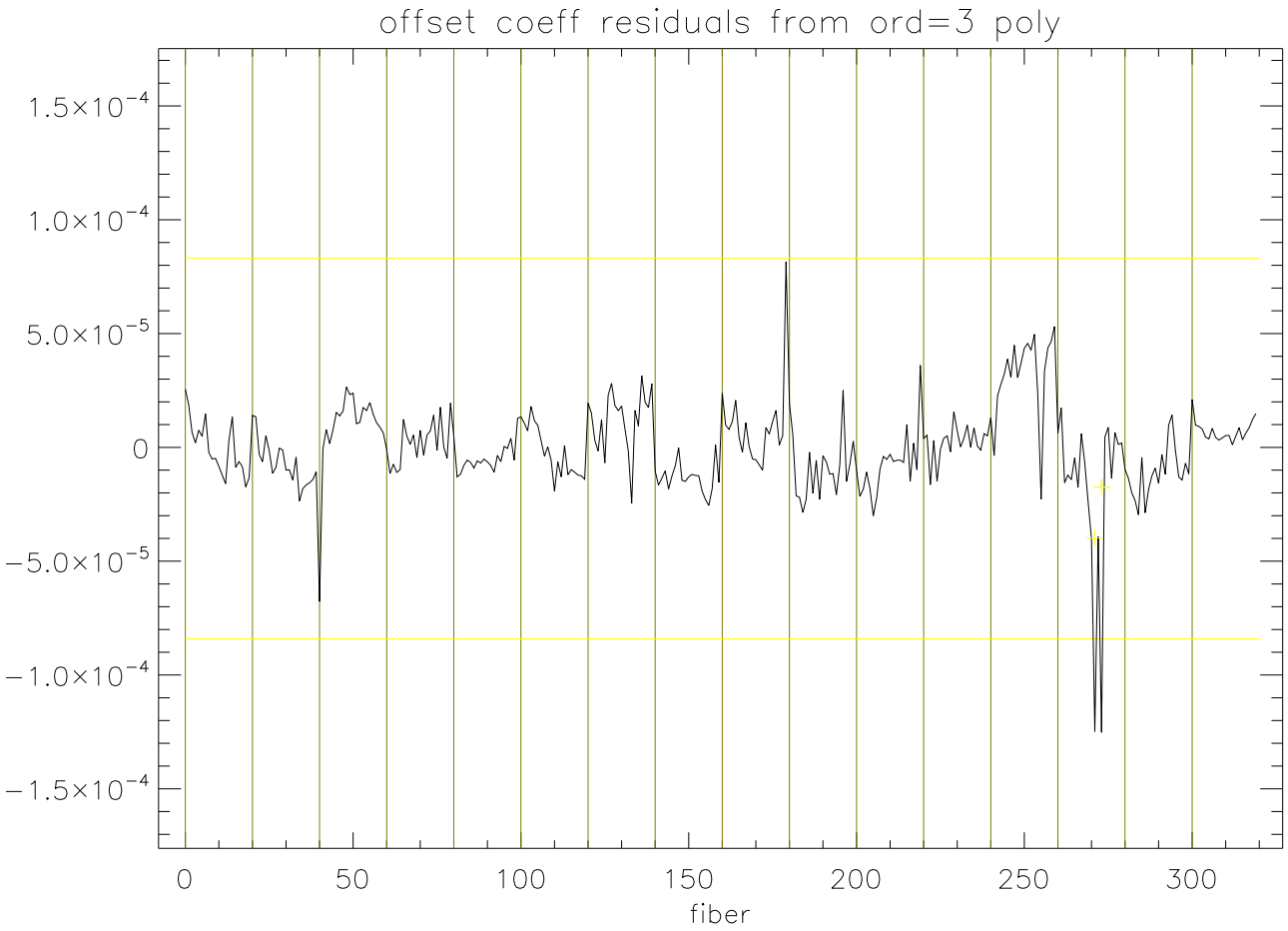

Number of sky fibers = 16
PLATE=3145 MJD=54801 sdR-b2-00056868.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

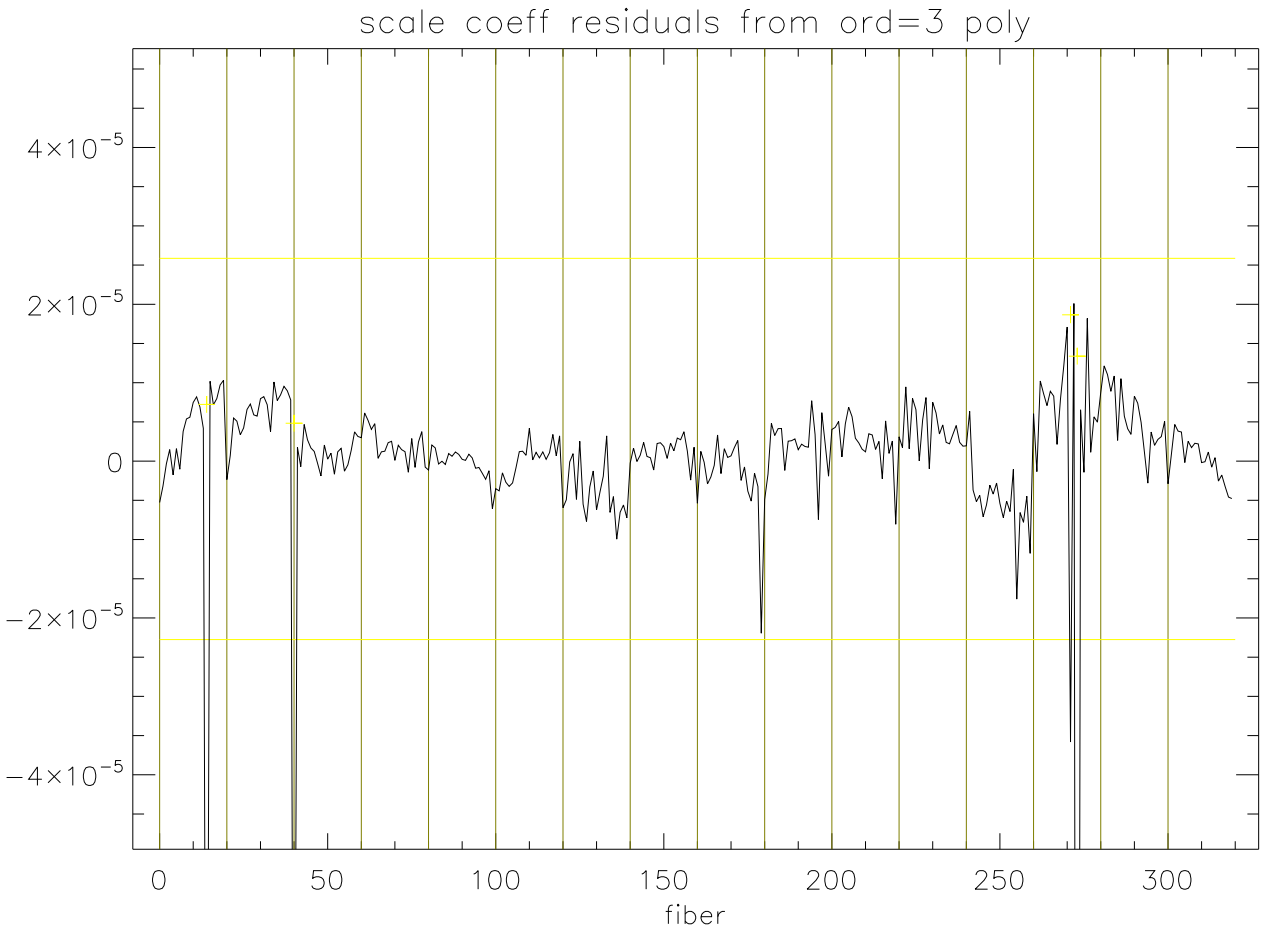

PLATE=3145 MJD=54801 sdR-b2-00056868.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 6.51 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

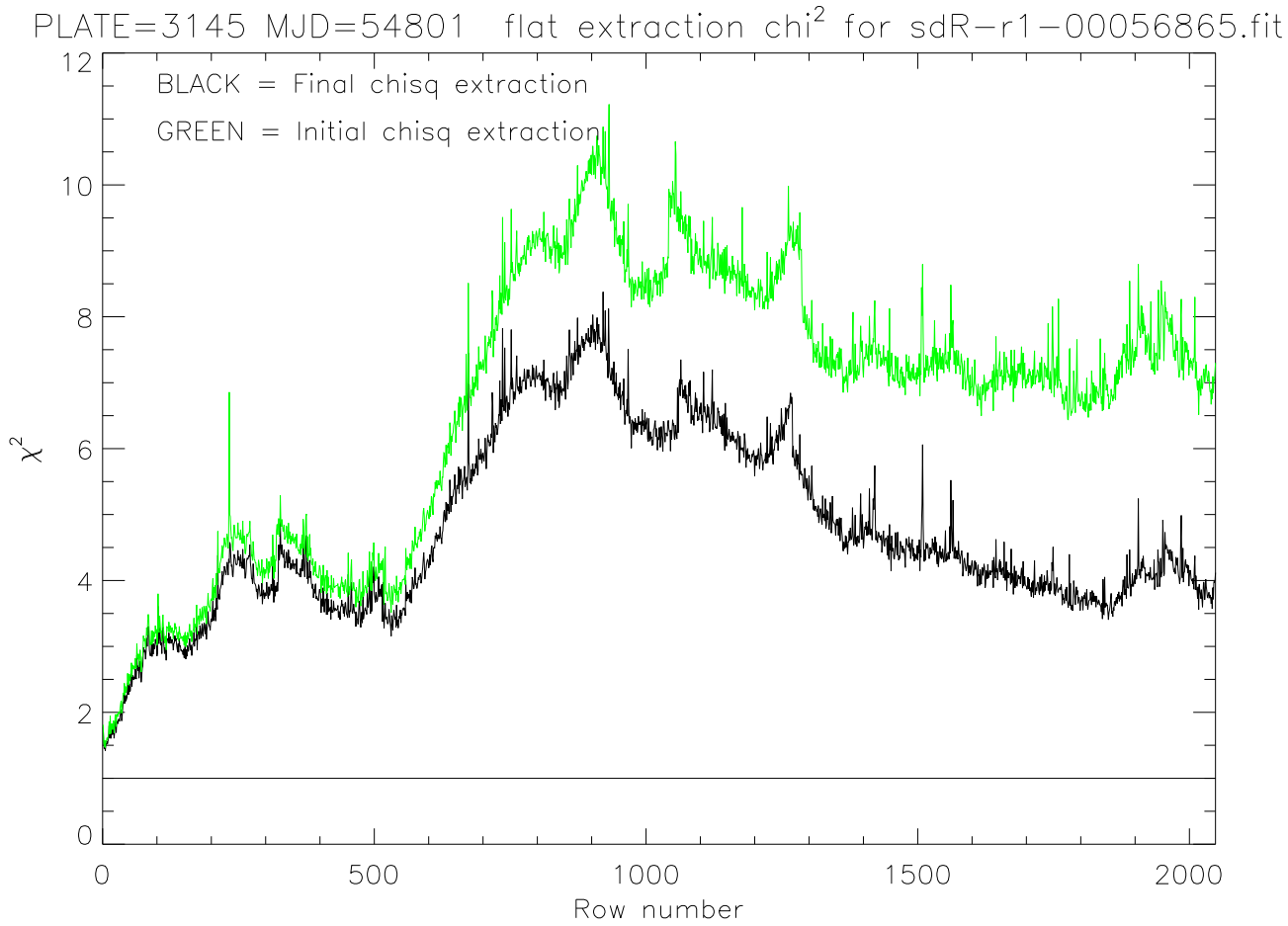

PLATE=3145 MJD=54801 sdR-b2-00056868.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.54 %
Fiber number
Focal Distance [mm]
Airmass

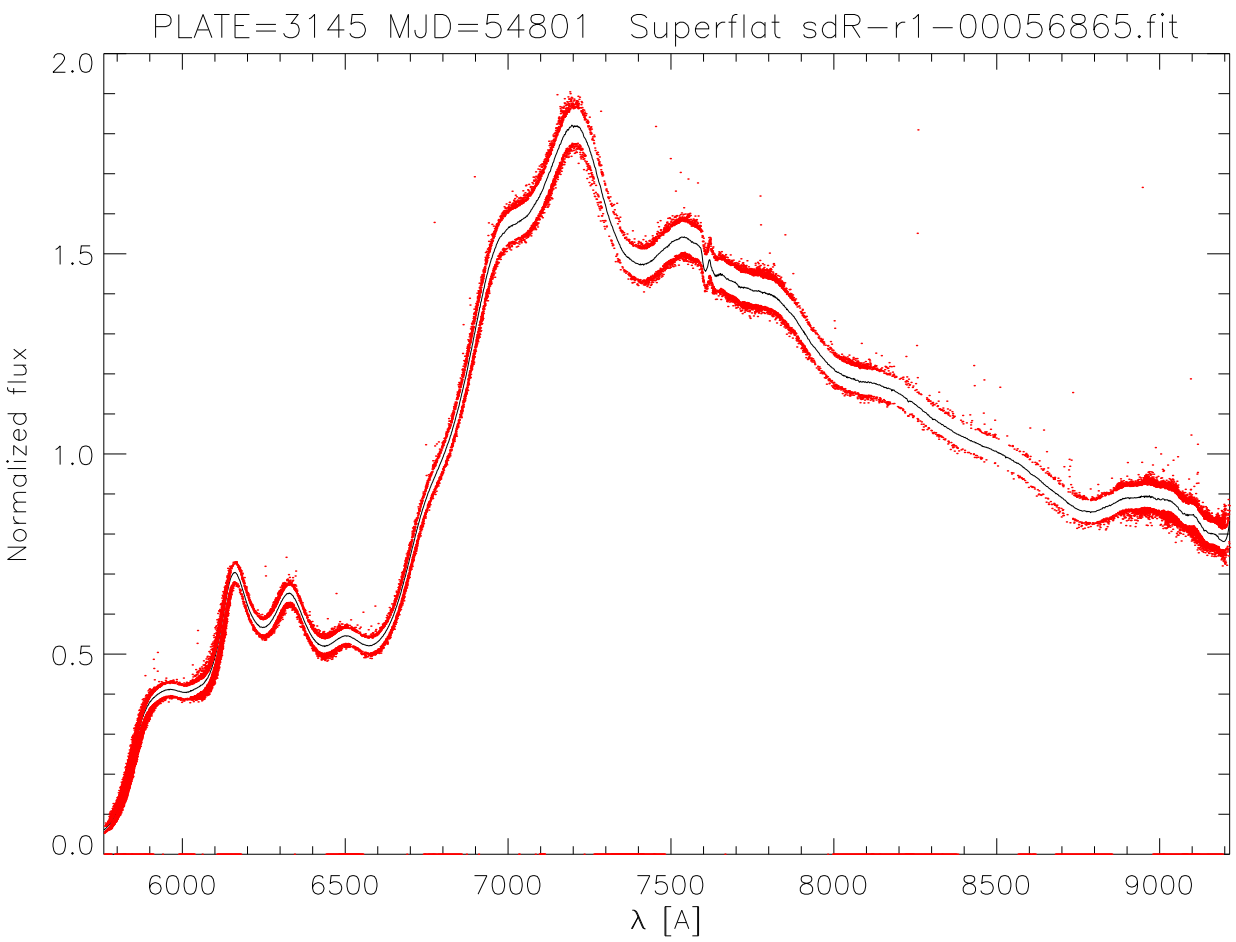

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

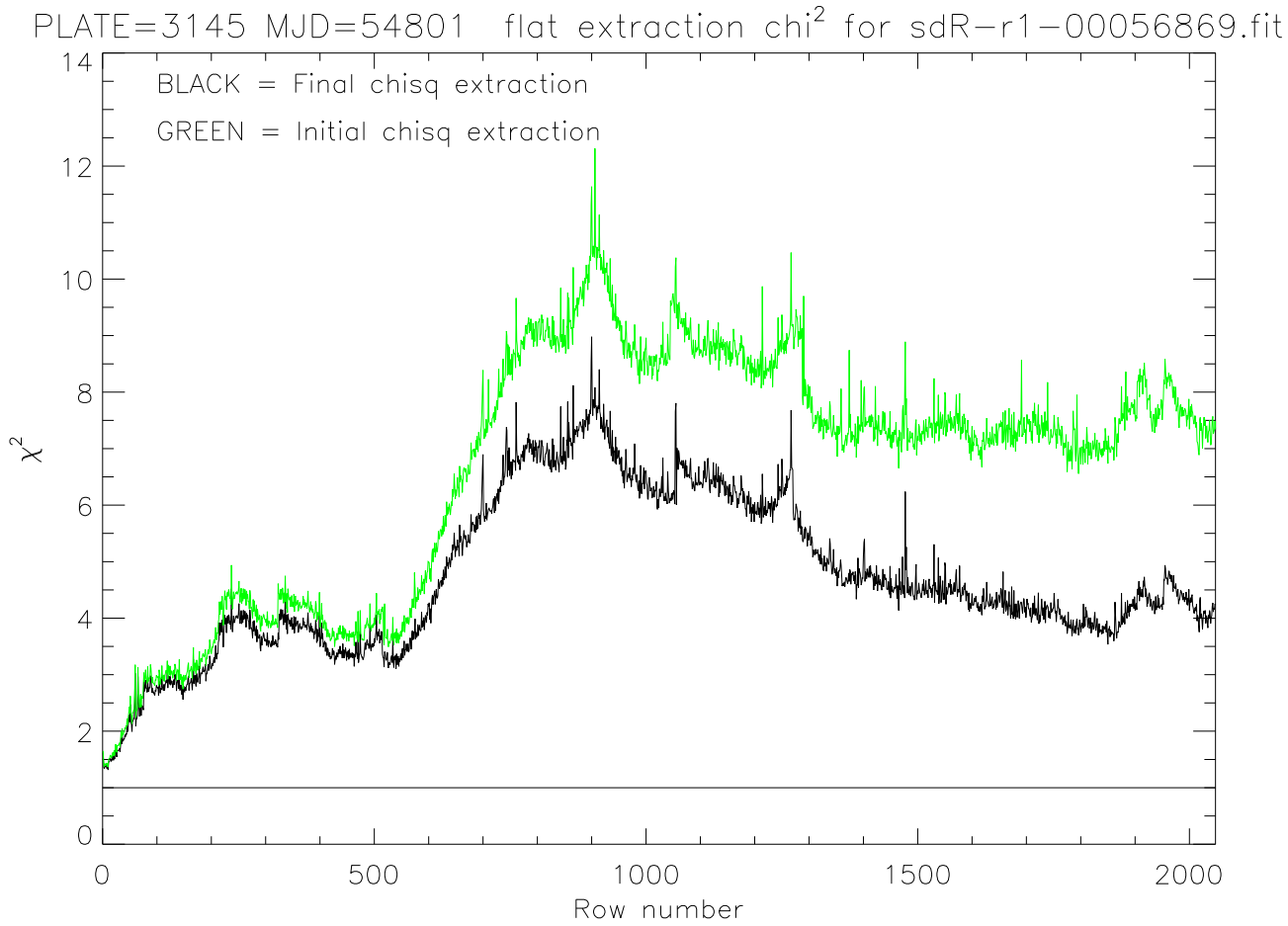

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

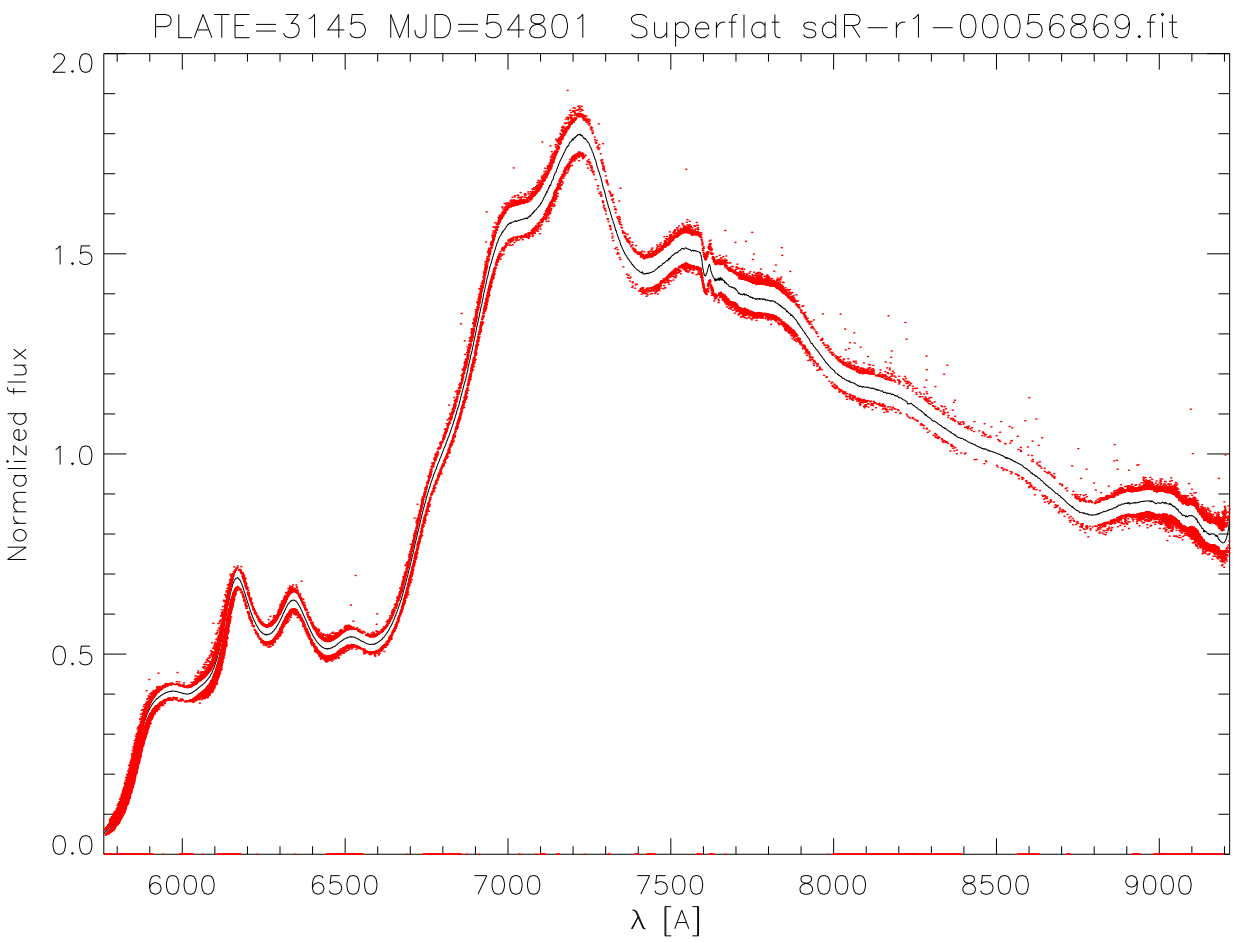

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

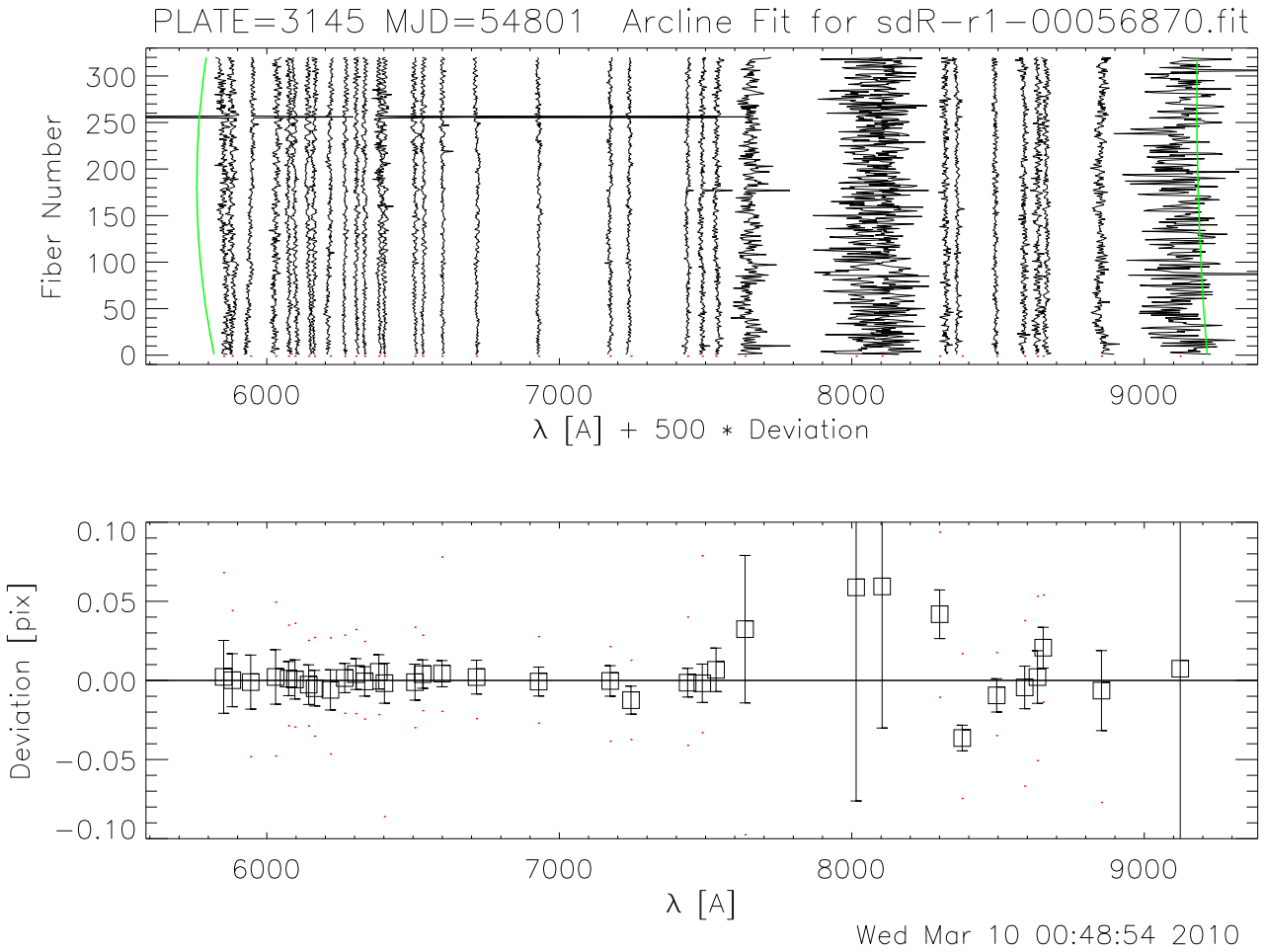

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

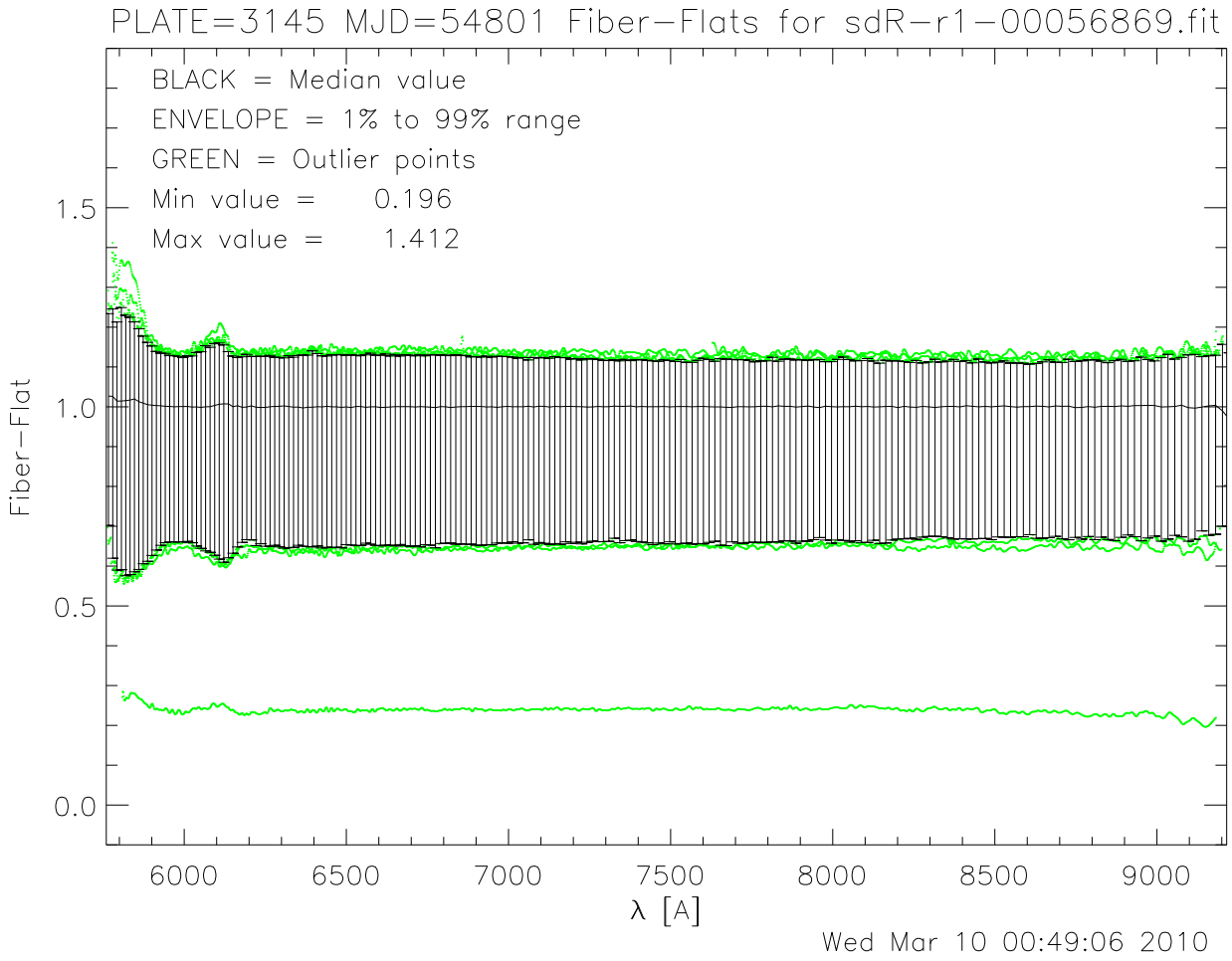

PLATE=3145 MJD=54801 flat extraction chi^2 for sdR−r1−00056865.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

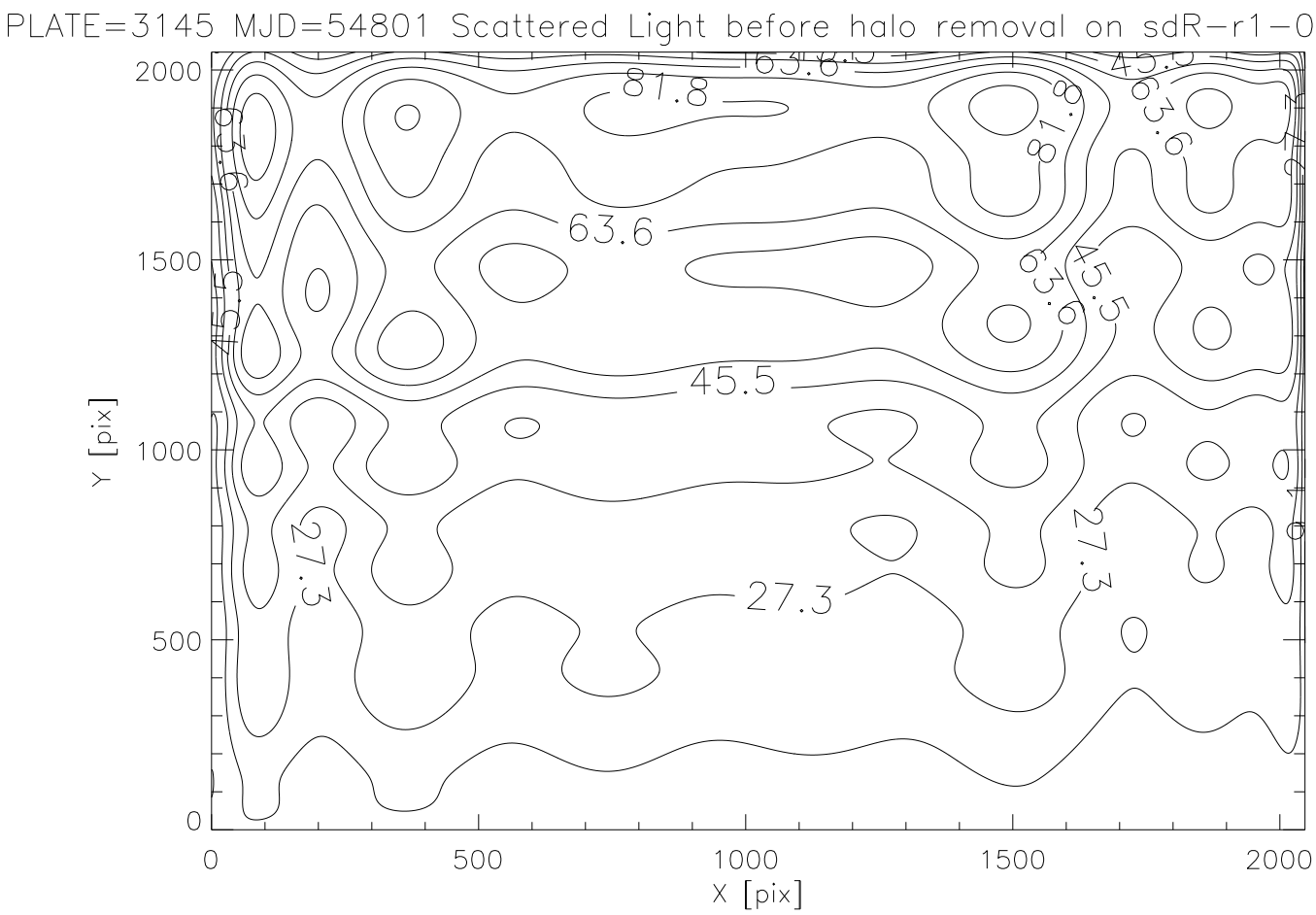

PLATE=3145 MJD=54801 Superflat sdR-r1-00056865.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

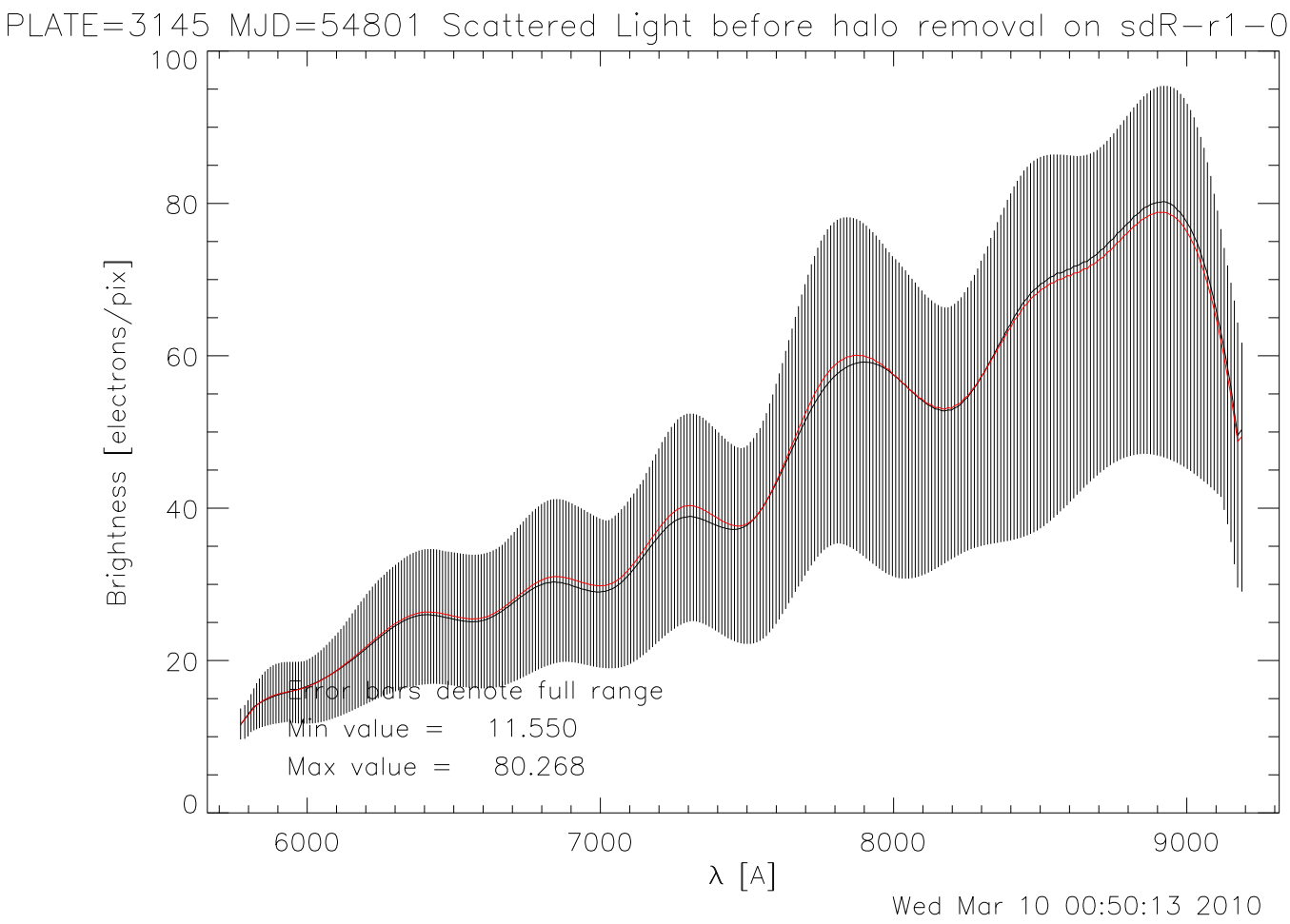

PLATE=3145 MJD=54801 flat extraction chi^2 for sdR−r1−00056869.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

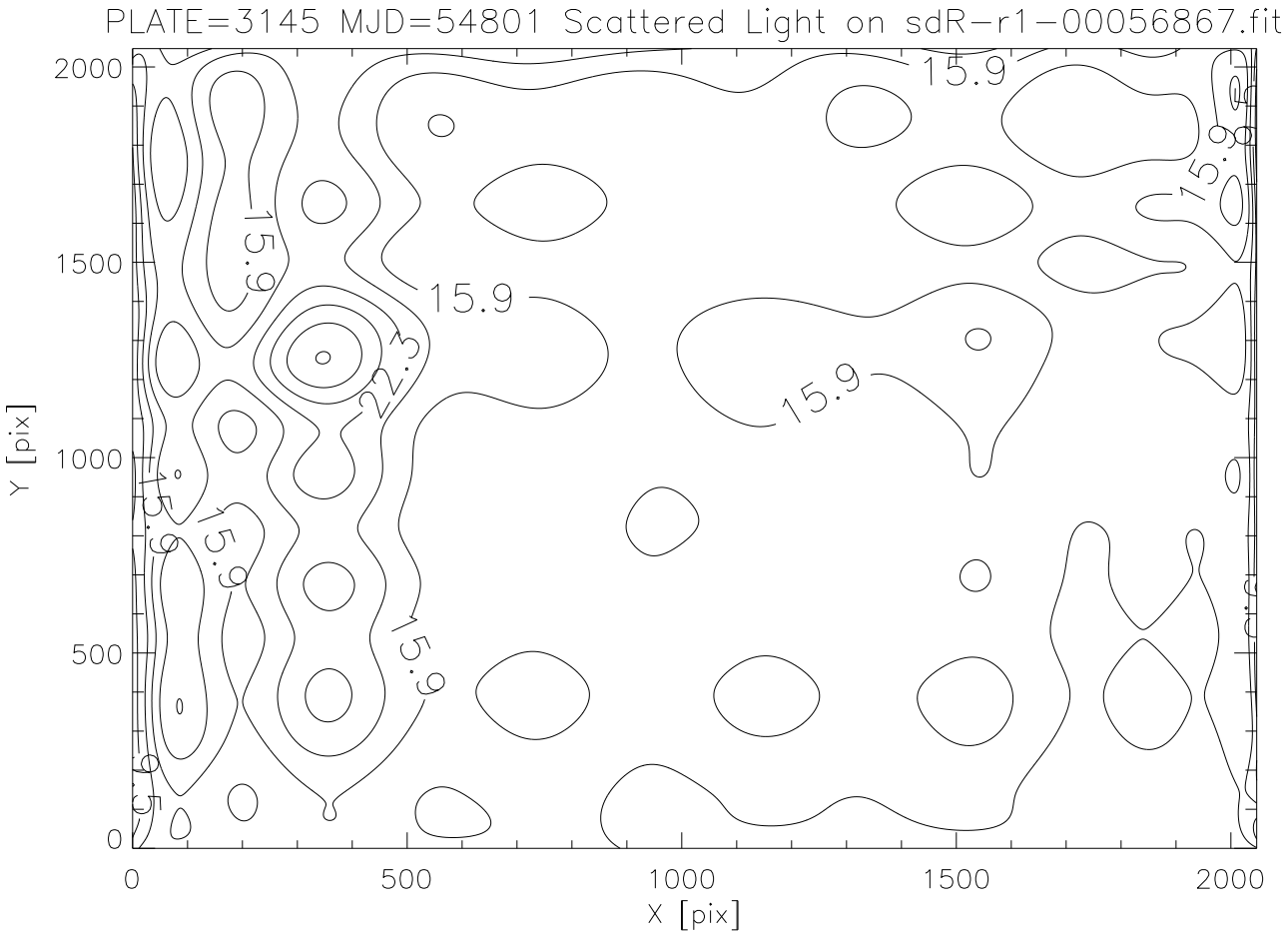

PLATE=3145 MJD=54801 Superflat sdR-r1-00056869.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

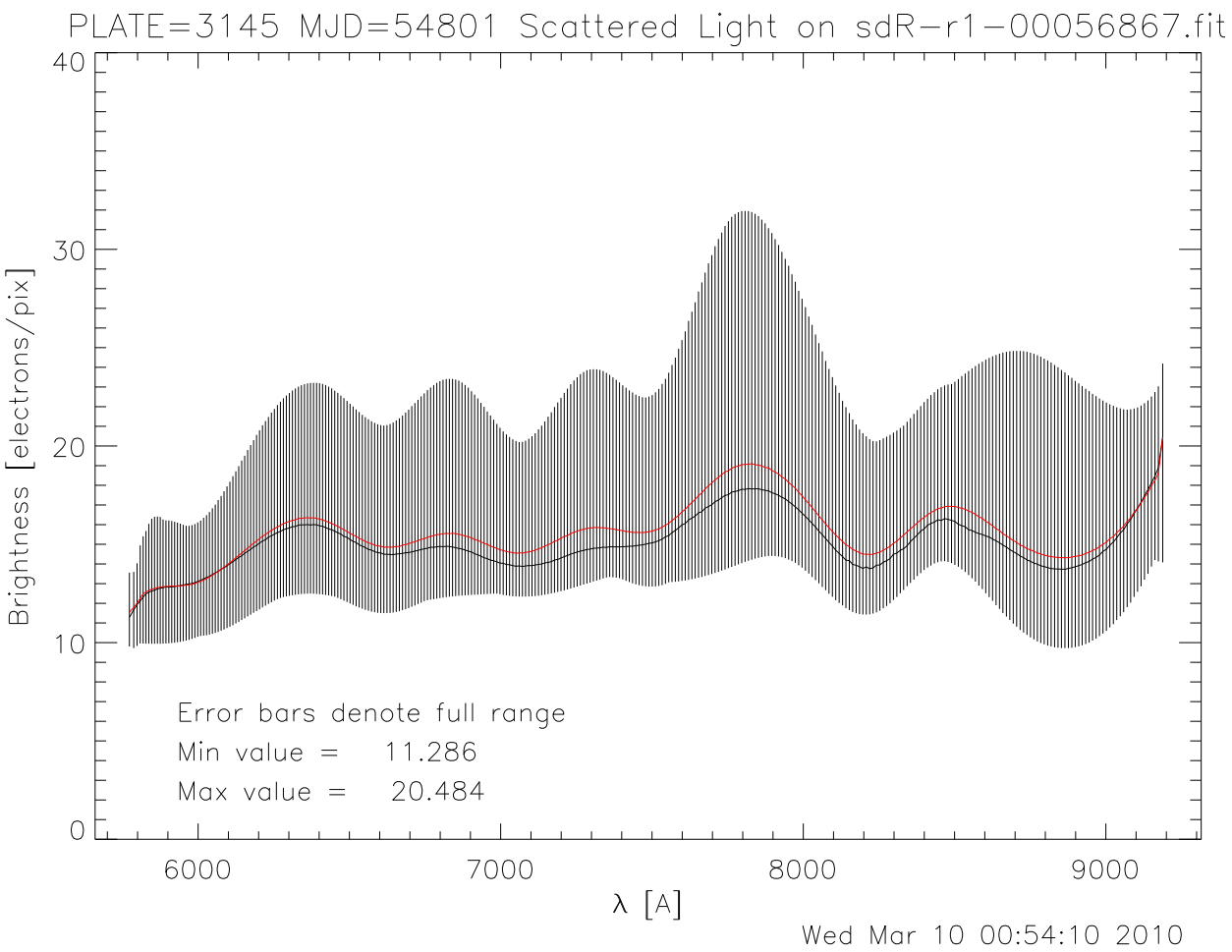

PLATE=3145 MJD=54801 Arcline Fit for sdR-r1-00056870.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Mar 10 00:48:54 2010

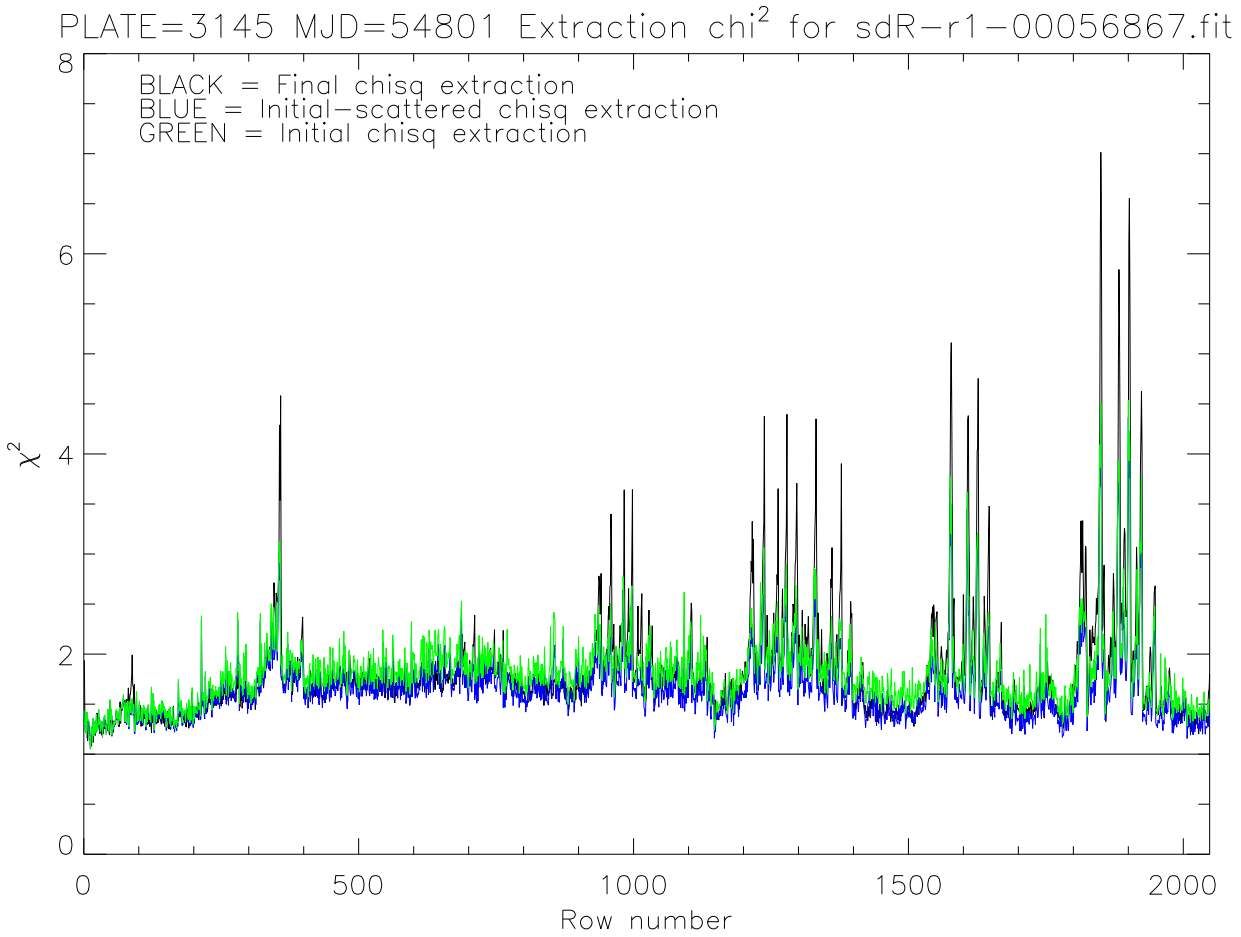

PLATE=3145 MJD=54801 Fiber−Flats for sdR−r1−00056869.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.196
Max value = 1.412
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 00:49:06 2010

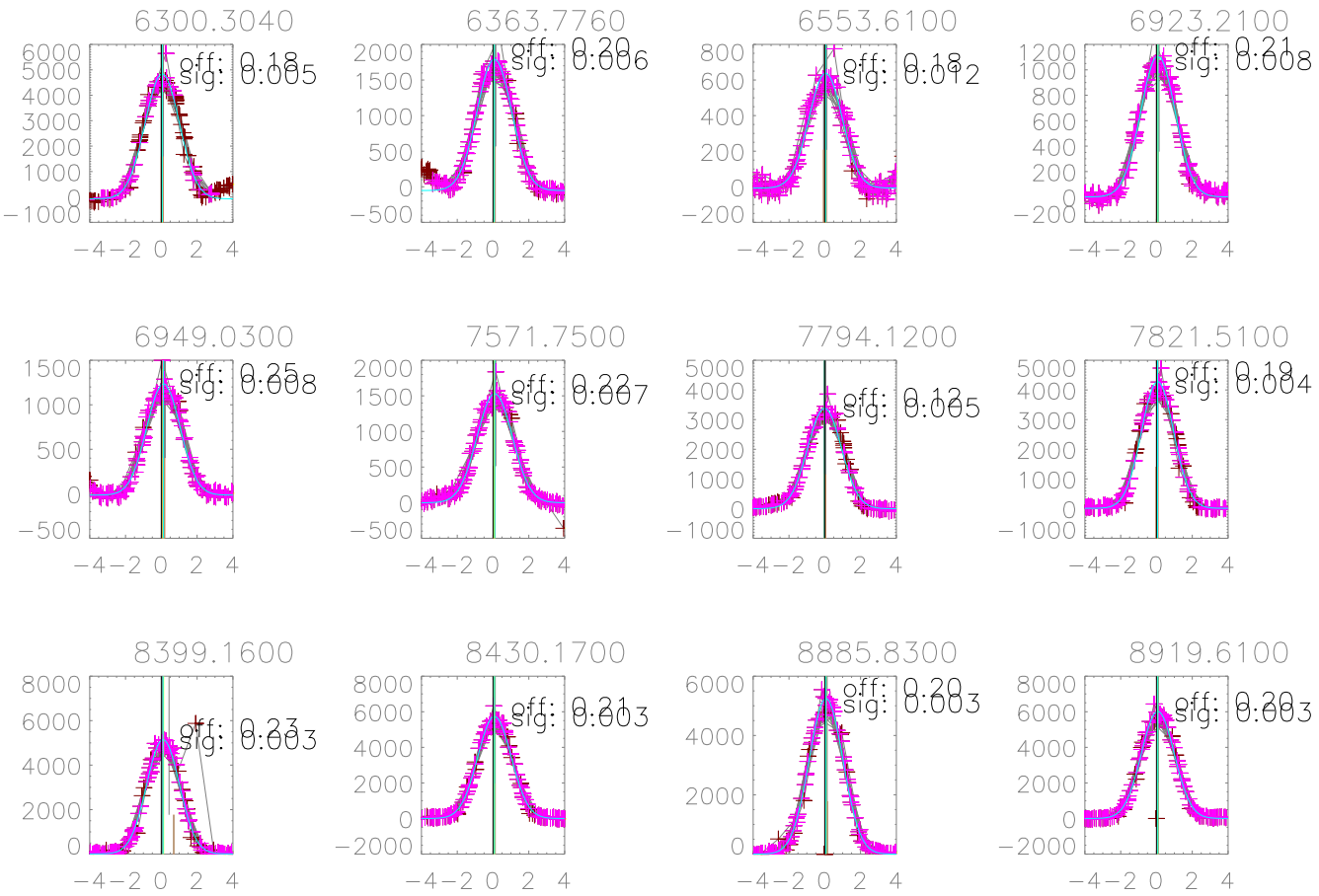

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-r1-00056867.fi
81.8
63.6
45.5
27.3
Y [pix]
X [pix]
0
500
1000
1500
2000

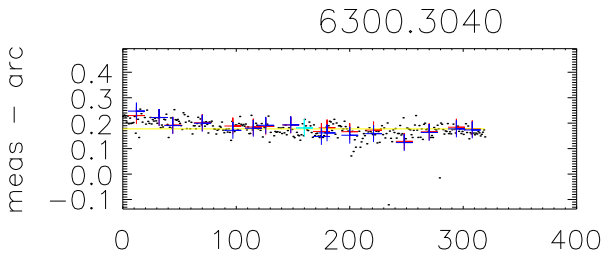

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-r1-00056867.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.550
Max value = 80.268
Wed Mar 10 00:50:13 2010

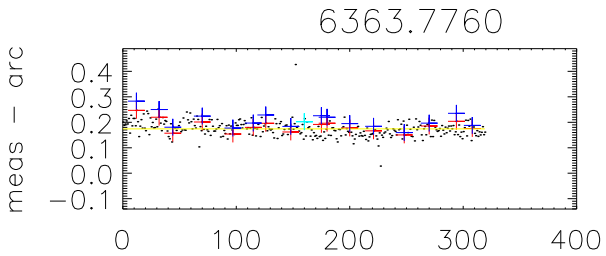

PLATE=3145 MJD=54801 Scattered Light on sdR-r1-00056867.fit
15.9
15.9
15.9
15.9
15.9
15.9
15.9
15.9
22.3
Y [pix]
X [pix]
0
500
1000
1500
2000

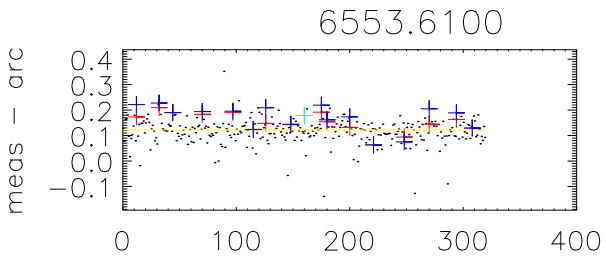

PLATE=3145 MJD=54801 Scattered Light on sdR-r1-00056867.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.286
Max value = 20.484
Wed Mar 10 00:54:10 2010

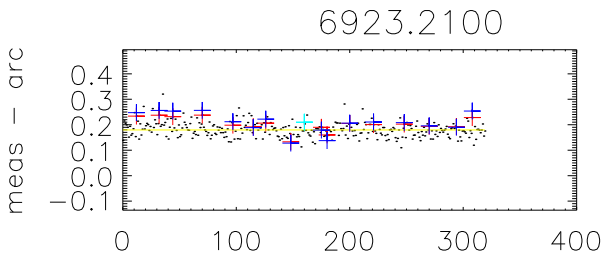

PLATE=3145 MJD=54801 Extraction chi^2 for sdR−r1−00056867.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

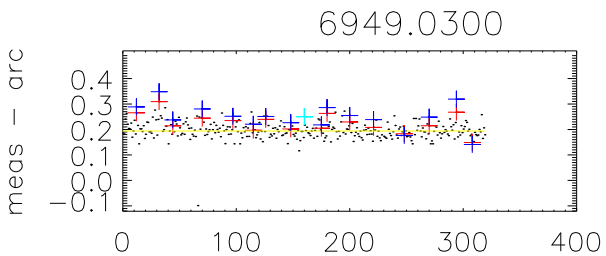

6300.3040
off: 0.18
sig: 0.005
6363.7760
off: 0.20
sig: 0.006
6553.6100
off: 0.18
sig: 0.012
6923.2100
off: 0.21
sig: 0.008
6949.0300
off: 0.25
sig: 0.008
7571.7500
off: 0.22
sig: 0.007
7794.1200
off: 0.12
sig: 0.005
7821.5100
off: 0.19
sig: 0.004
8399.1600
off: 0.23
sig: 0.003
8430.1700
off: 0.21
sig: 0.003
8885.8300
off: 0.20
sig: 0.003
8919.6100
off: 0.20
sig: 0.003

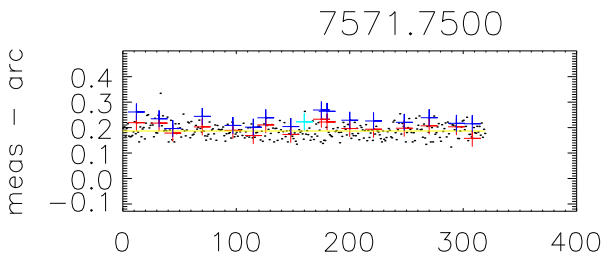

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

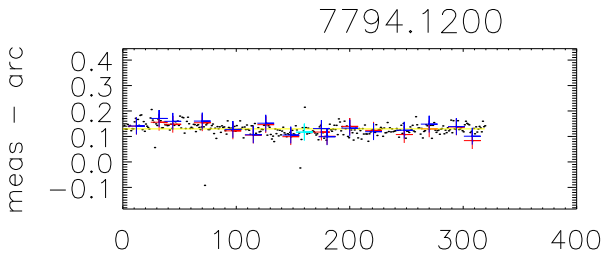

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

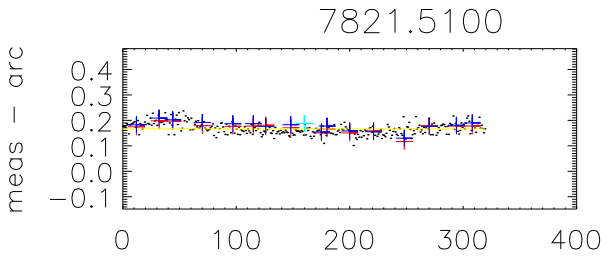

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

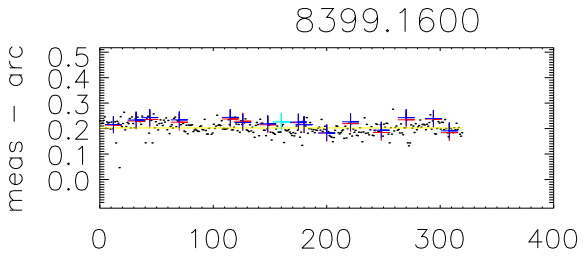

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

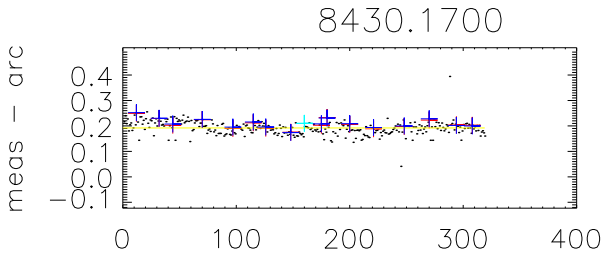

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

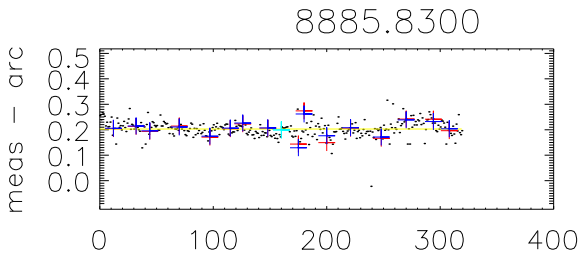

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

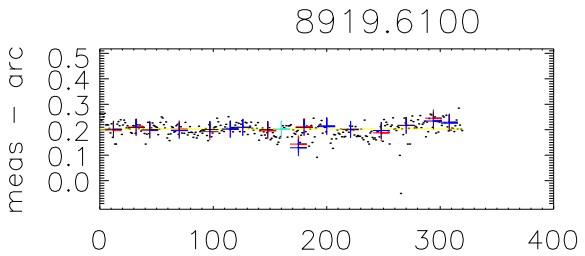

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

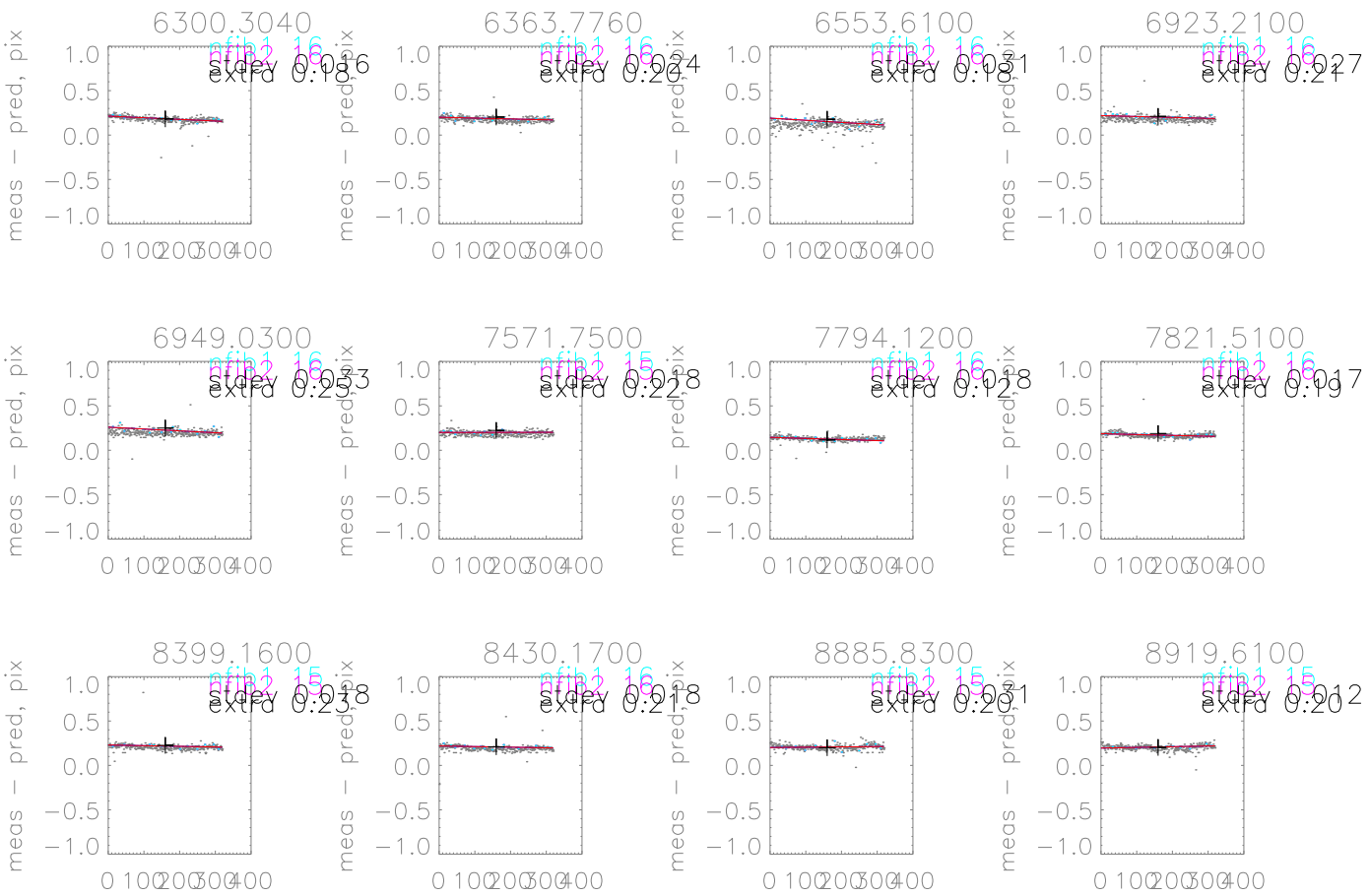

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

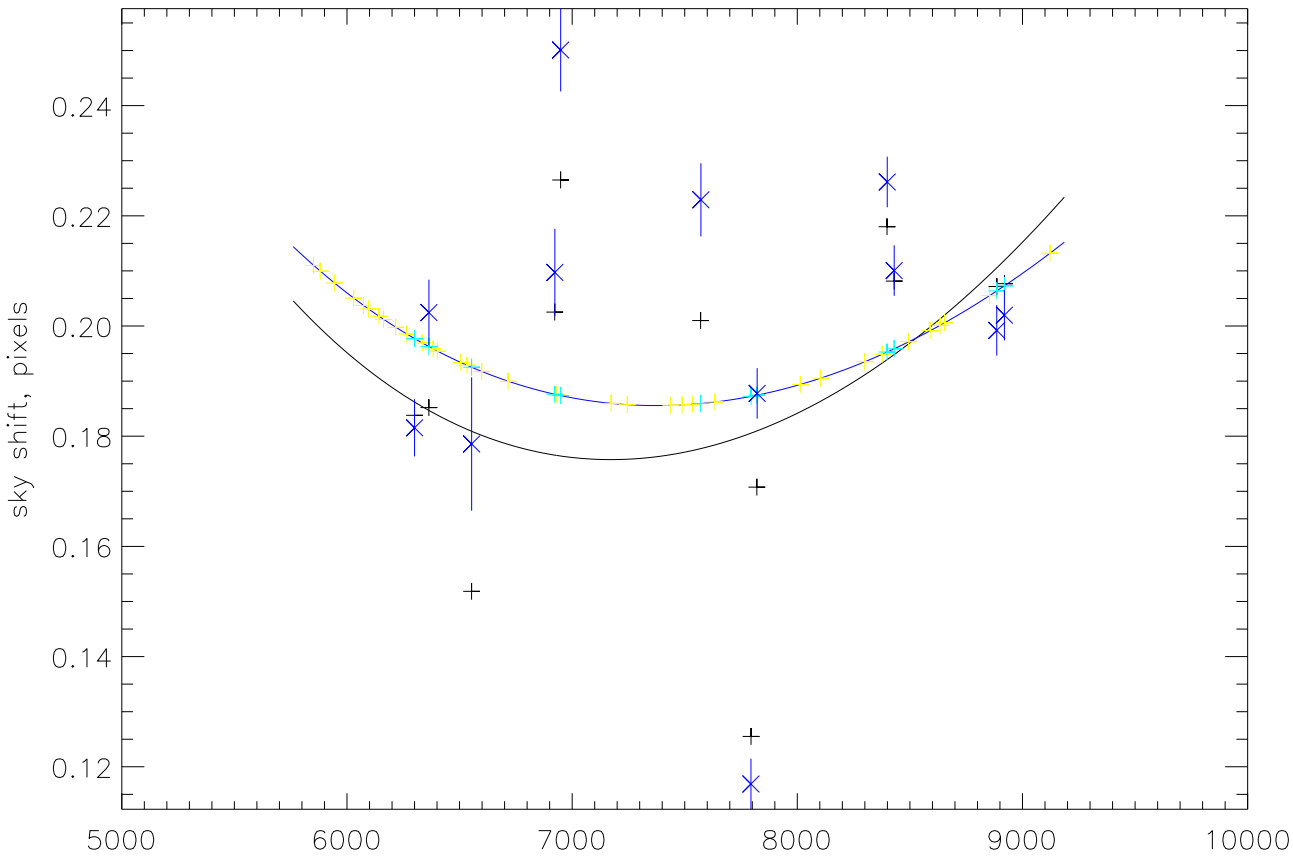

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

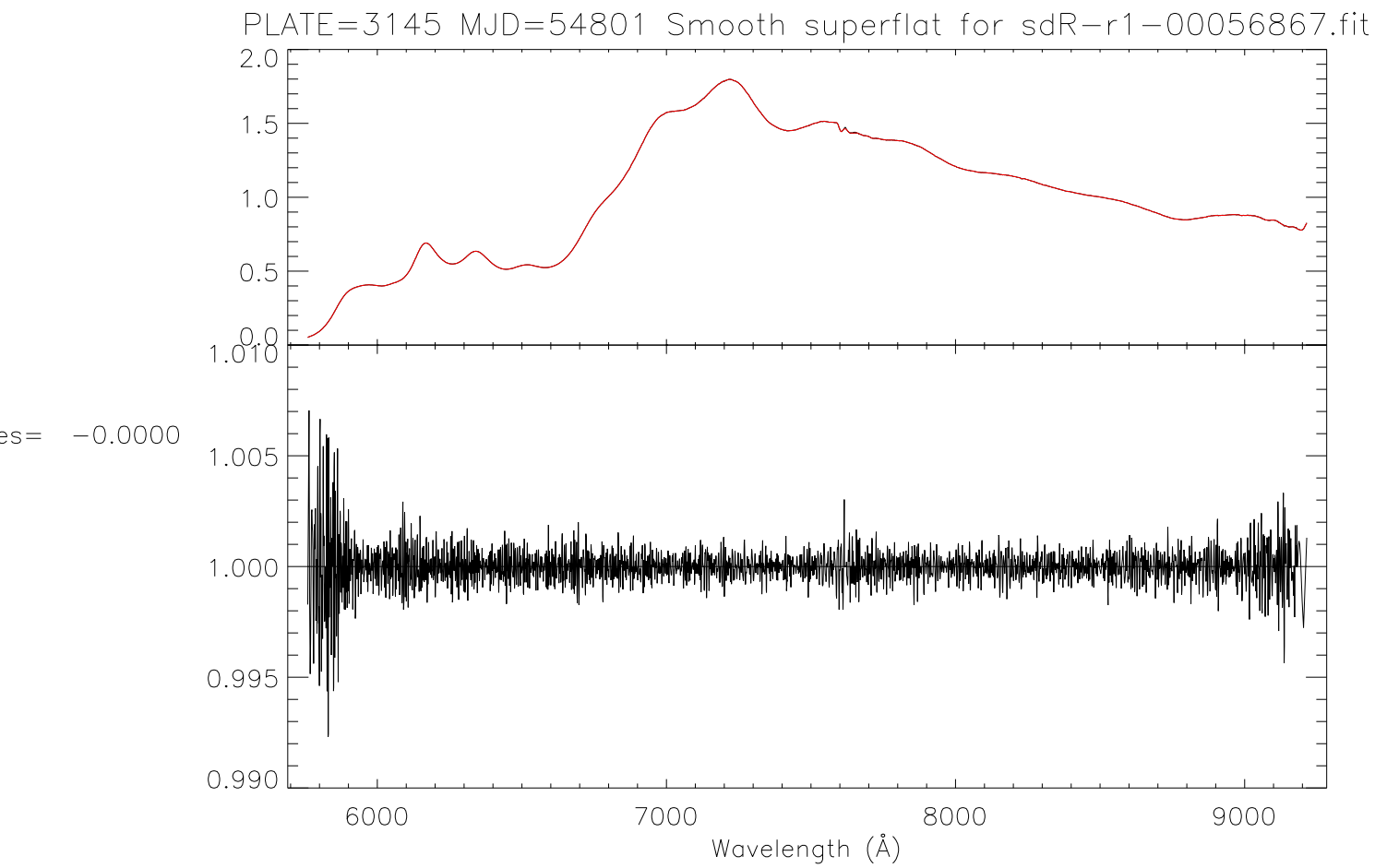

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

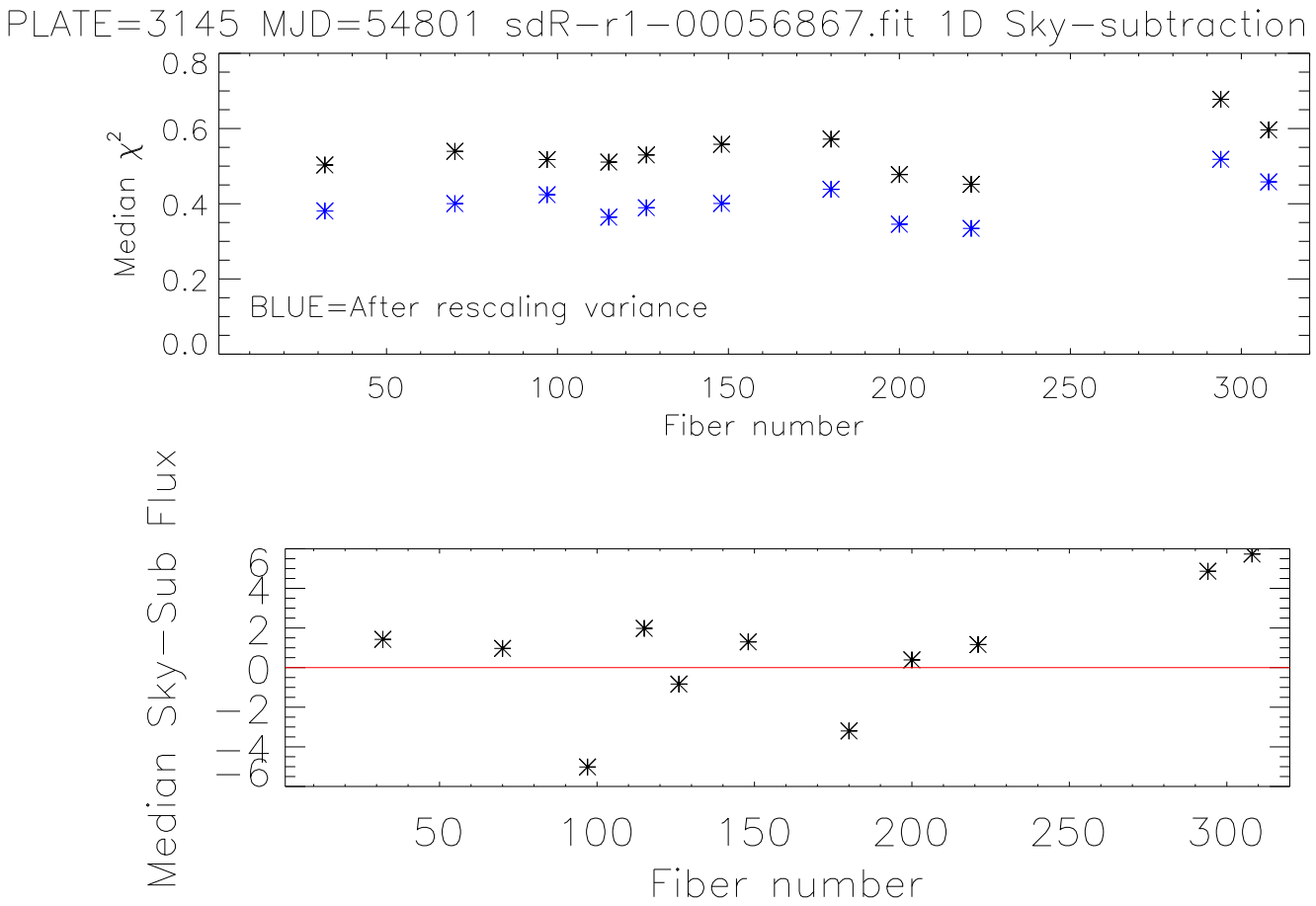

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

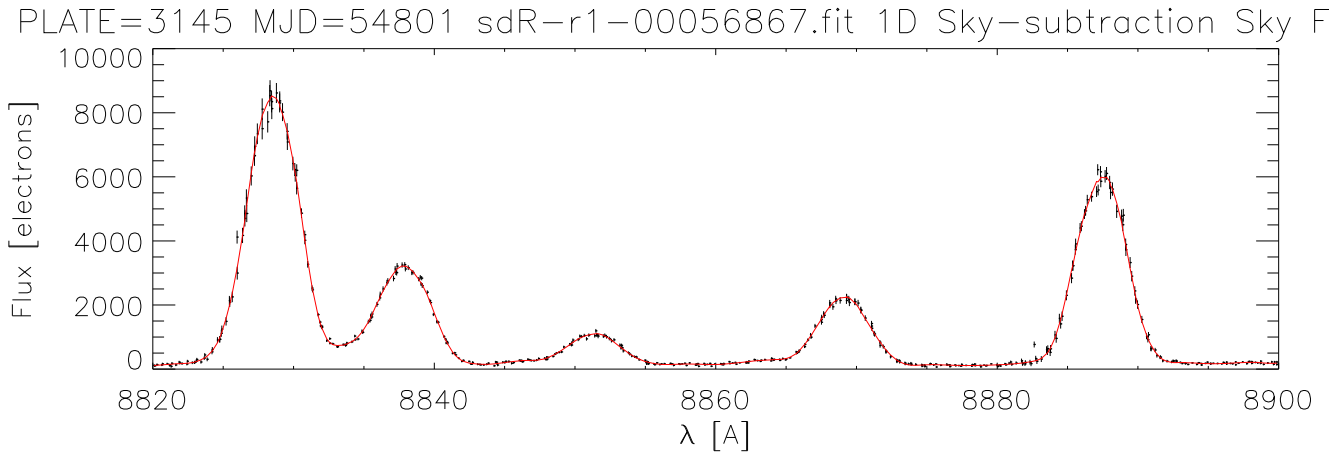

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

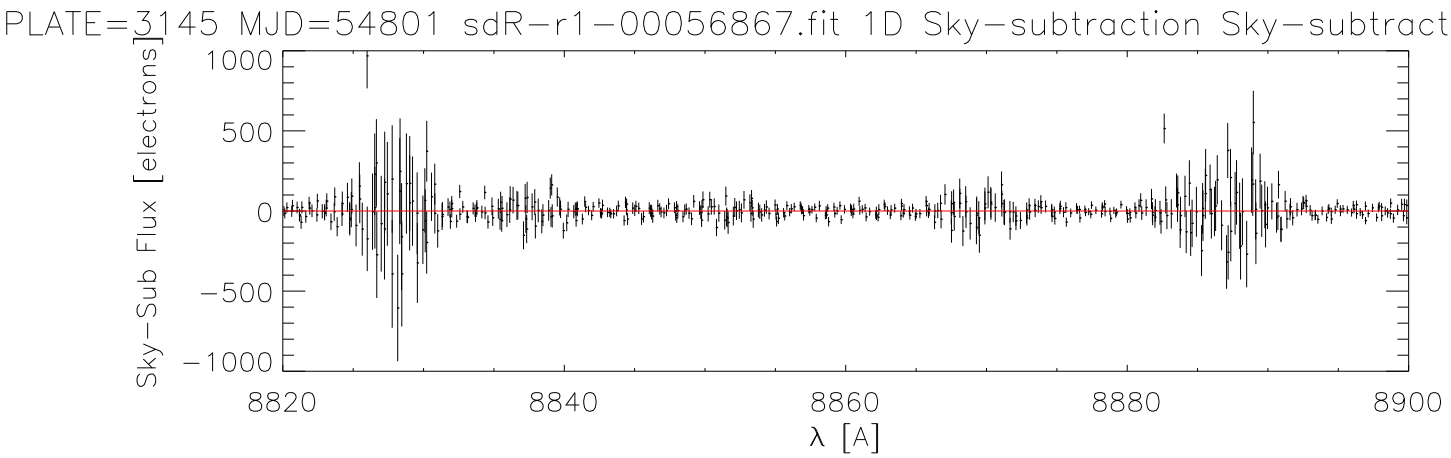

6300.3040
stdev 0.016
extra 0.18
6363.7760
stdev 0.024
extra 0.26
6553.6100
stdev 0.031
extra 0.18
6923.2100
stdev 0.027
extra 0.21
6949.0300
stdev 0.033
extra 0.25
7571.7500
stdev 0.028
extra 0.22
7794.1200
stdev 0.028
extra 0.12
7821.5100
stdev 0.017
extra 0.19
8399.1600
stdev 0.038
extra 0.23
8430.1700
stdev 0.018
extra 0.21
8885.8300
stdev 0.031
extra 0.20
8919.6100
stdev 0.012
extra 0.20
meas − pred, pix
mfhd1 16
mfhd2 15
mfhd2 16

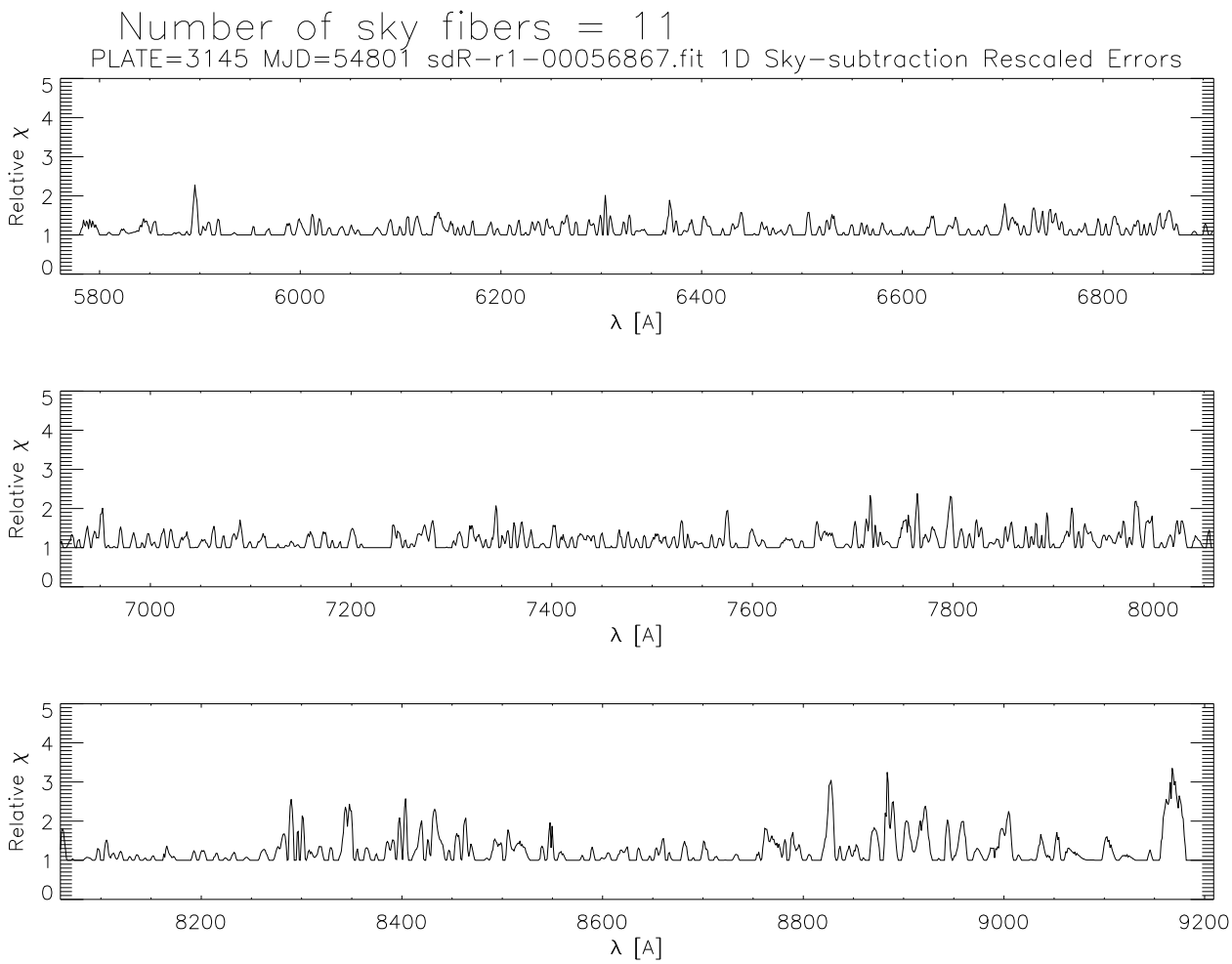

sky shift, pixels
0.24
0.22
0.20
0.18
0.16
0.14
0.12
5000
6000
7000
8000
9000
10000

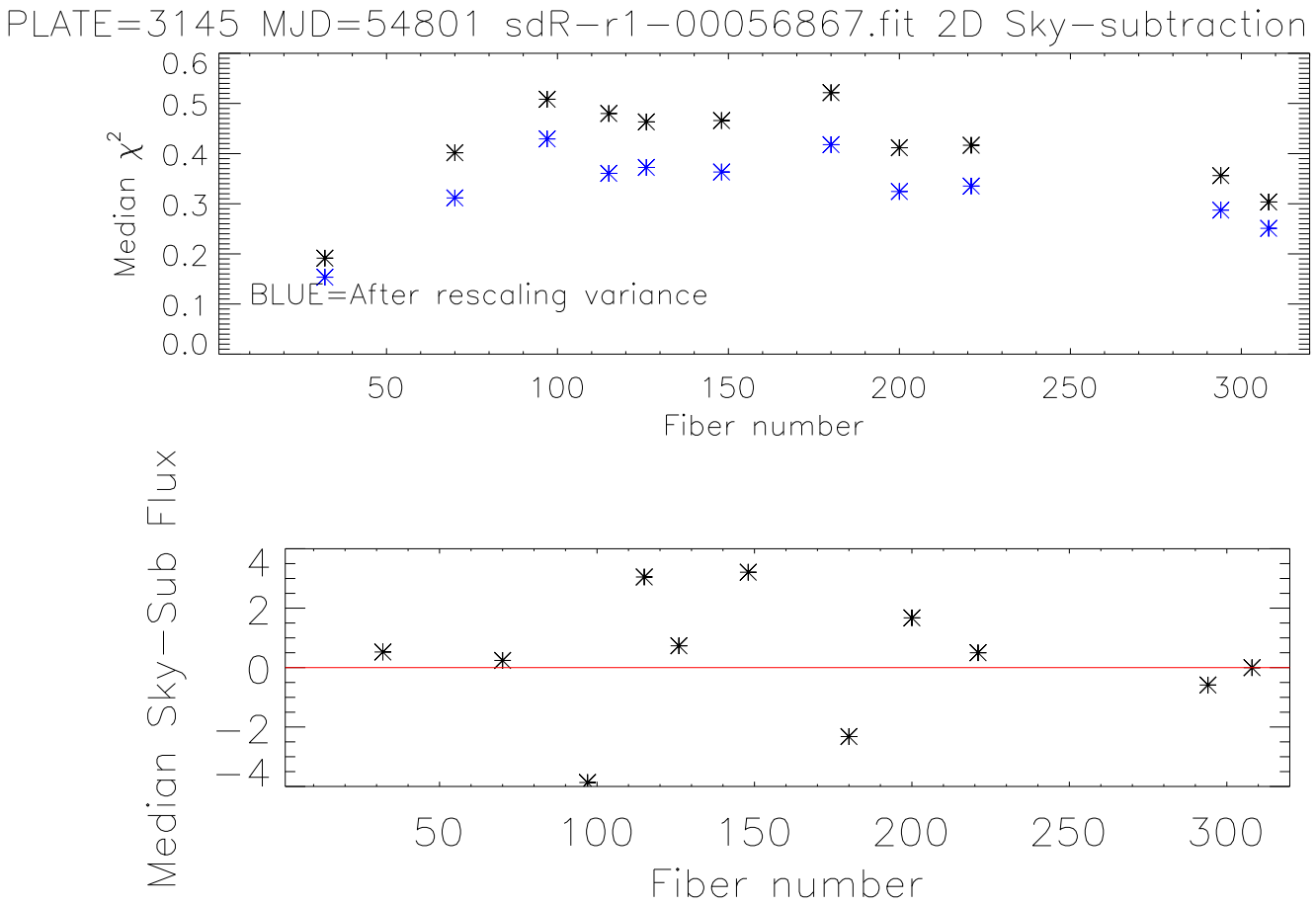

PLATE=3145 MJD=54801 Smooth superflat for sdR-r1-00056867.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

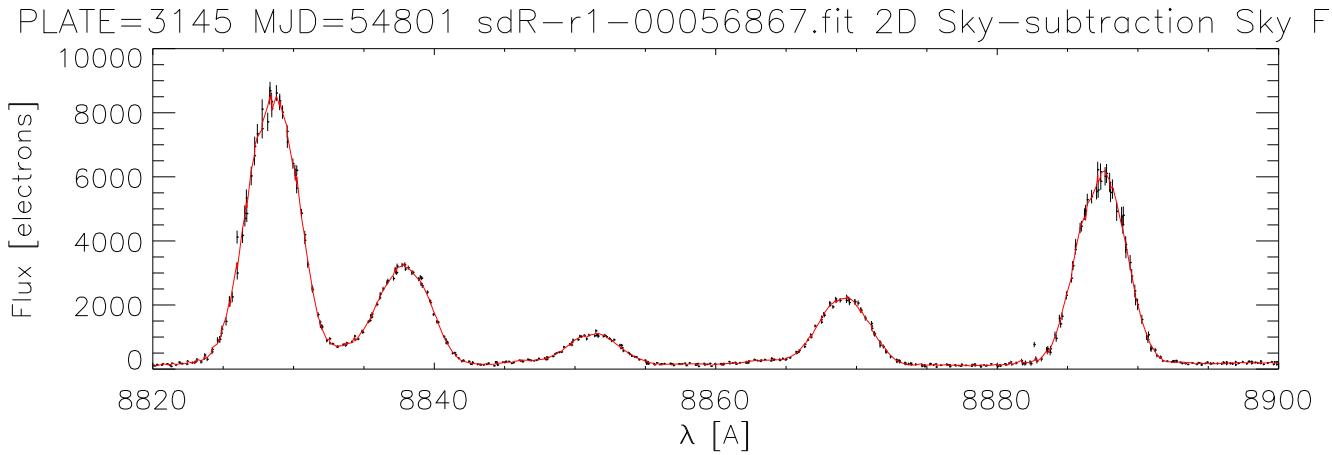

PLATE=3145 MJD=54801 sdR-r1-00056867.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

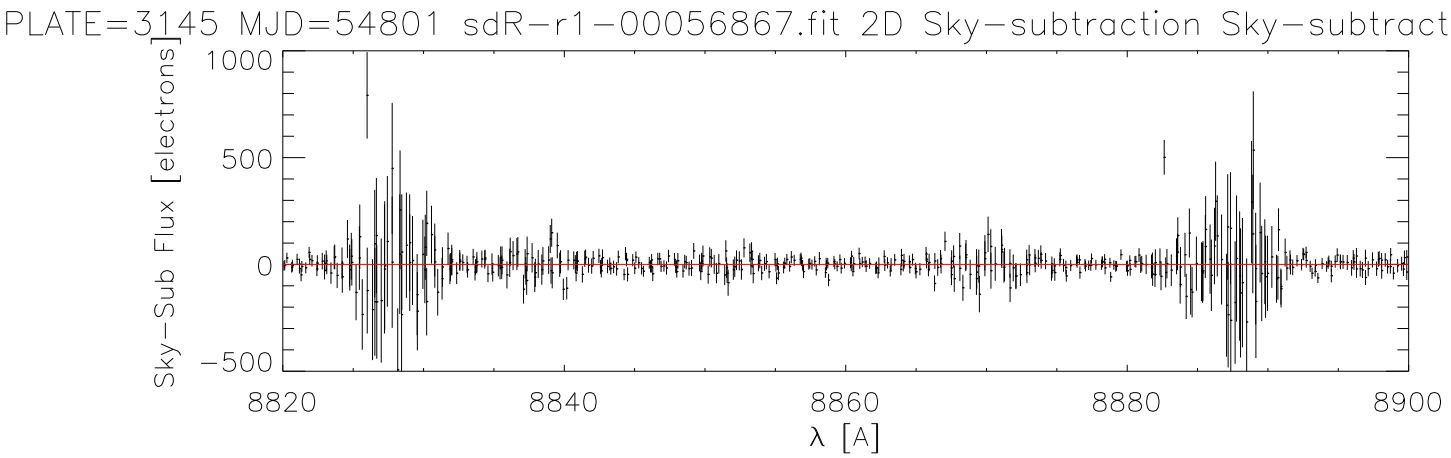

PLATE=3145 MJD=54801 sdR-r1-00056867.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

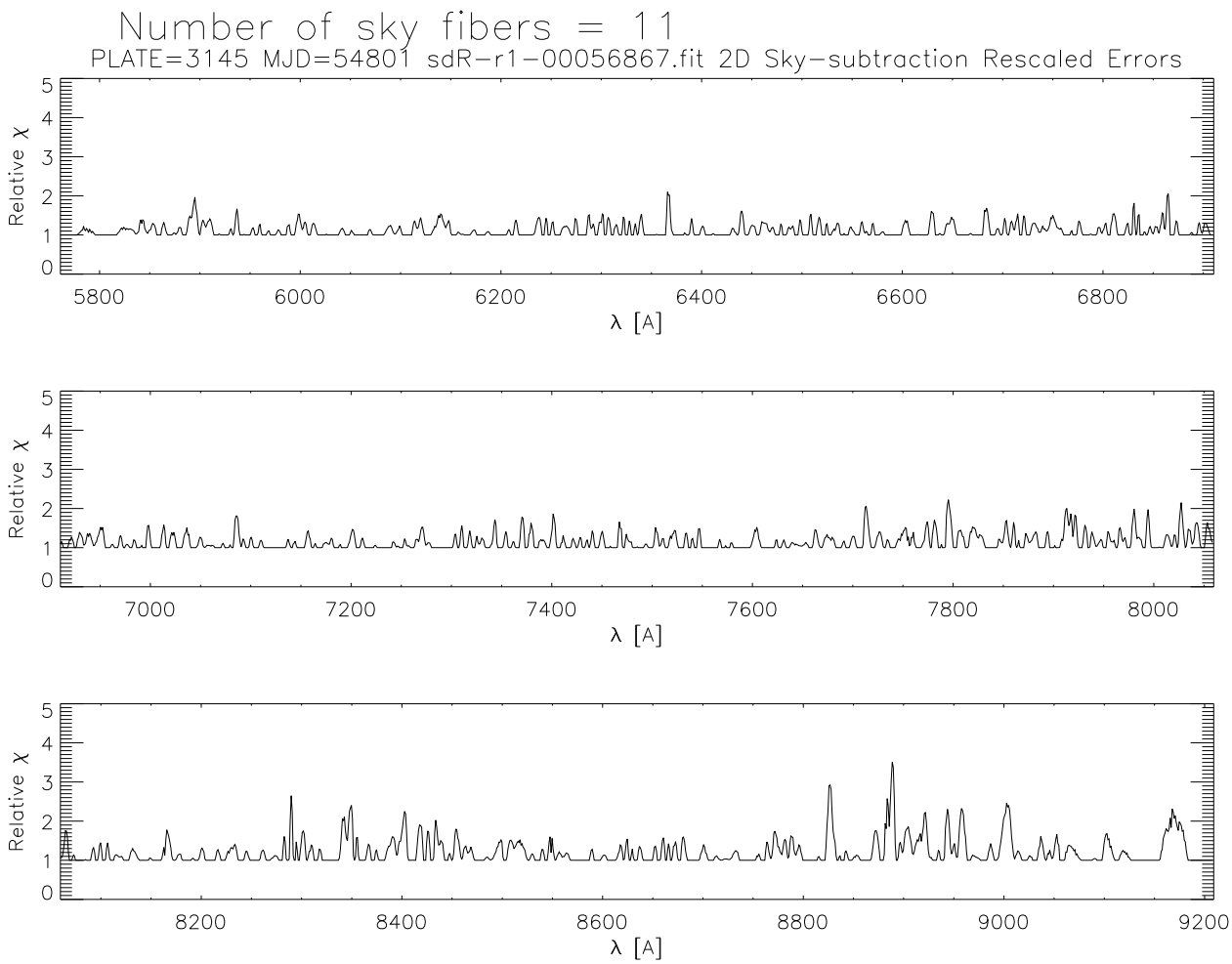

PLATE=3145 MJD=54801 sdR-r1-00056867.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

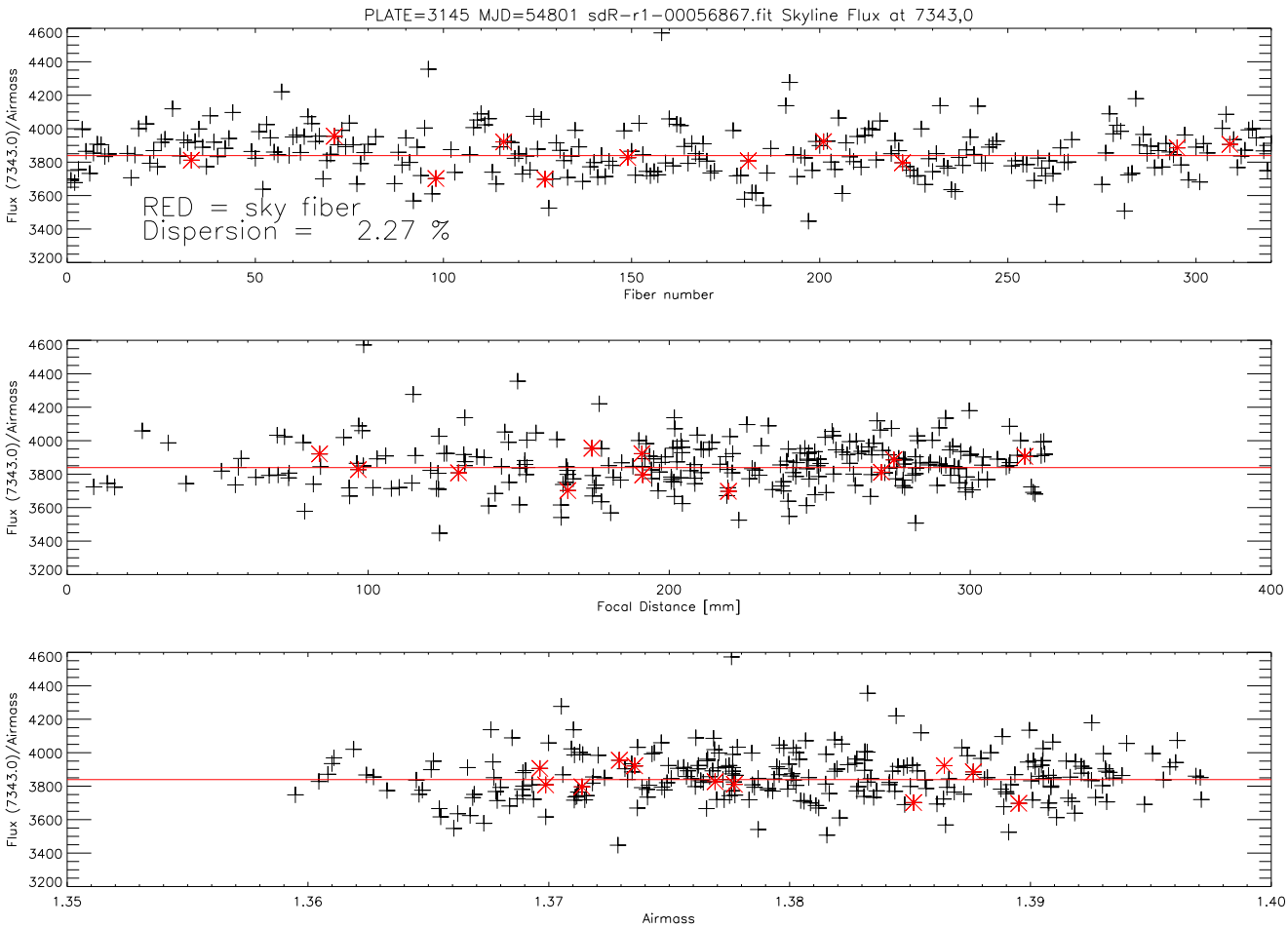

Number of sky fibers = 11
PLATE=3145 MJD=54801 sdR-r1-00056867.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

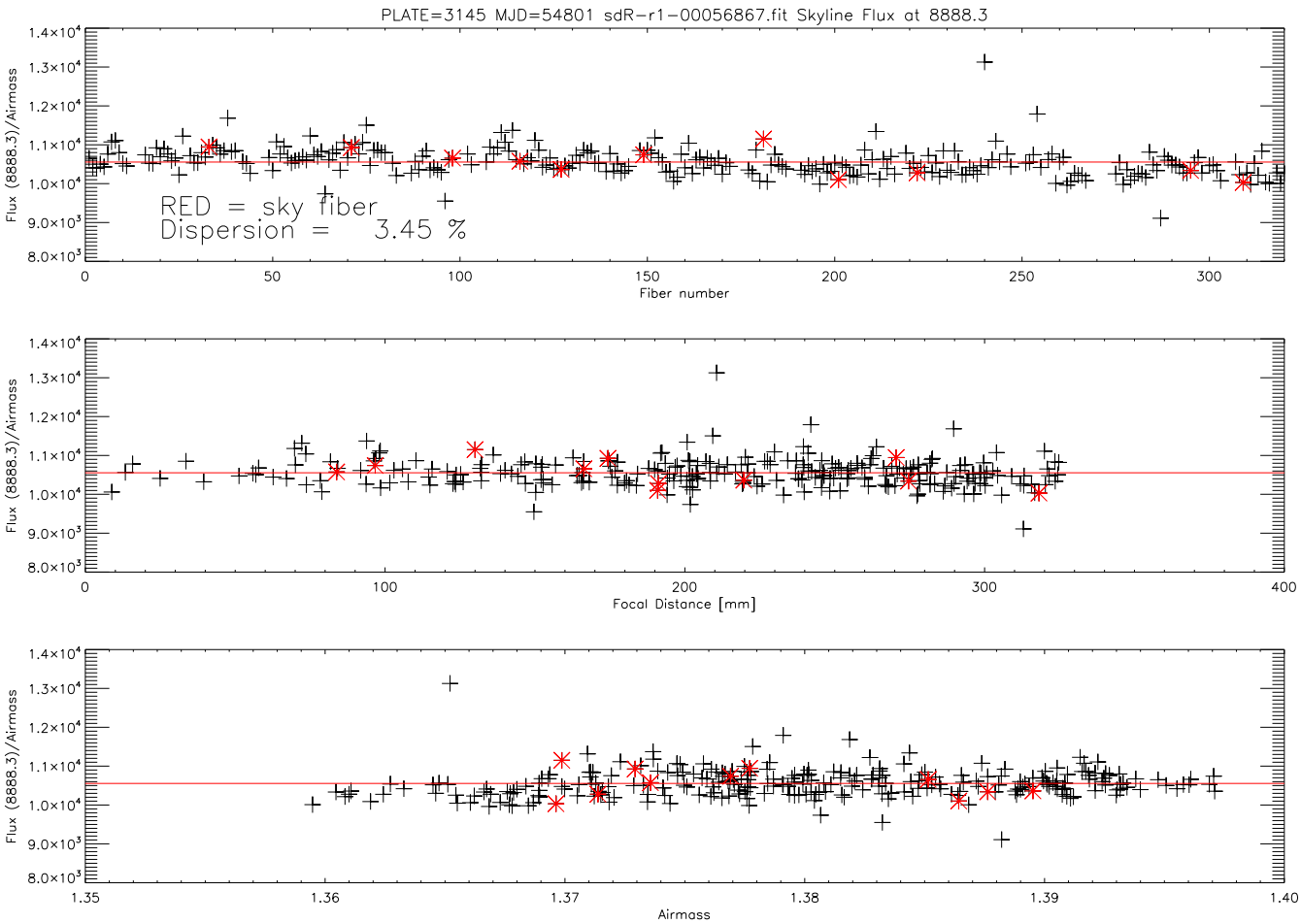

PLATE=3145 MJD=54801 sdR-r1-00056867.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

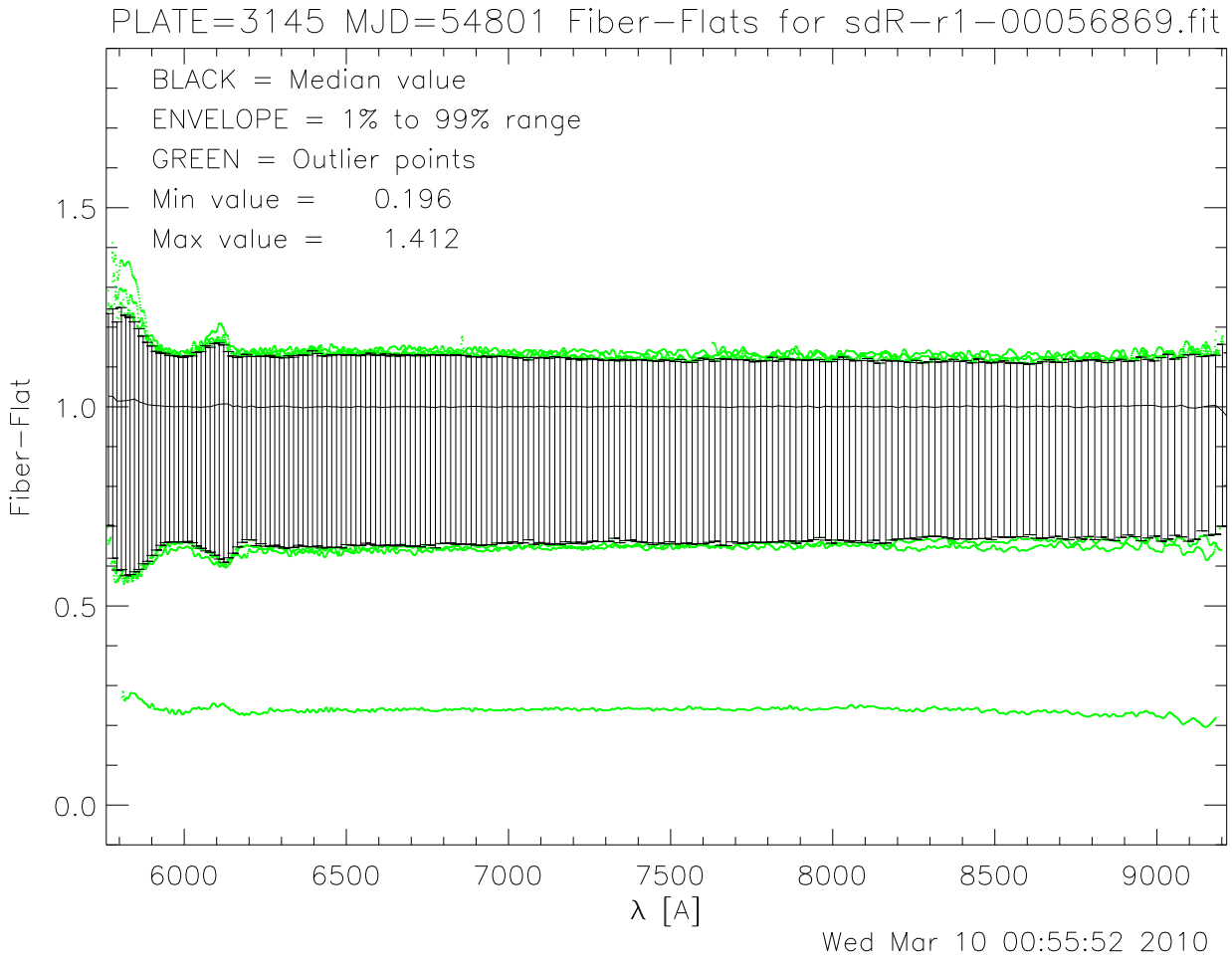

PLATE=3145 MJD=54801 sdR-r1-00056867.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

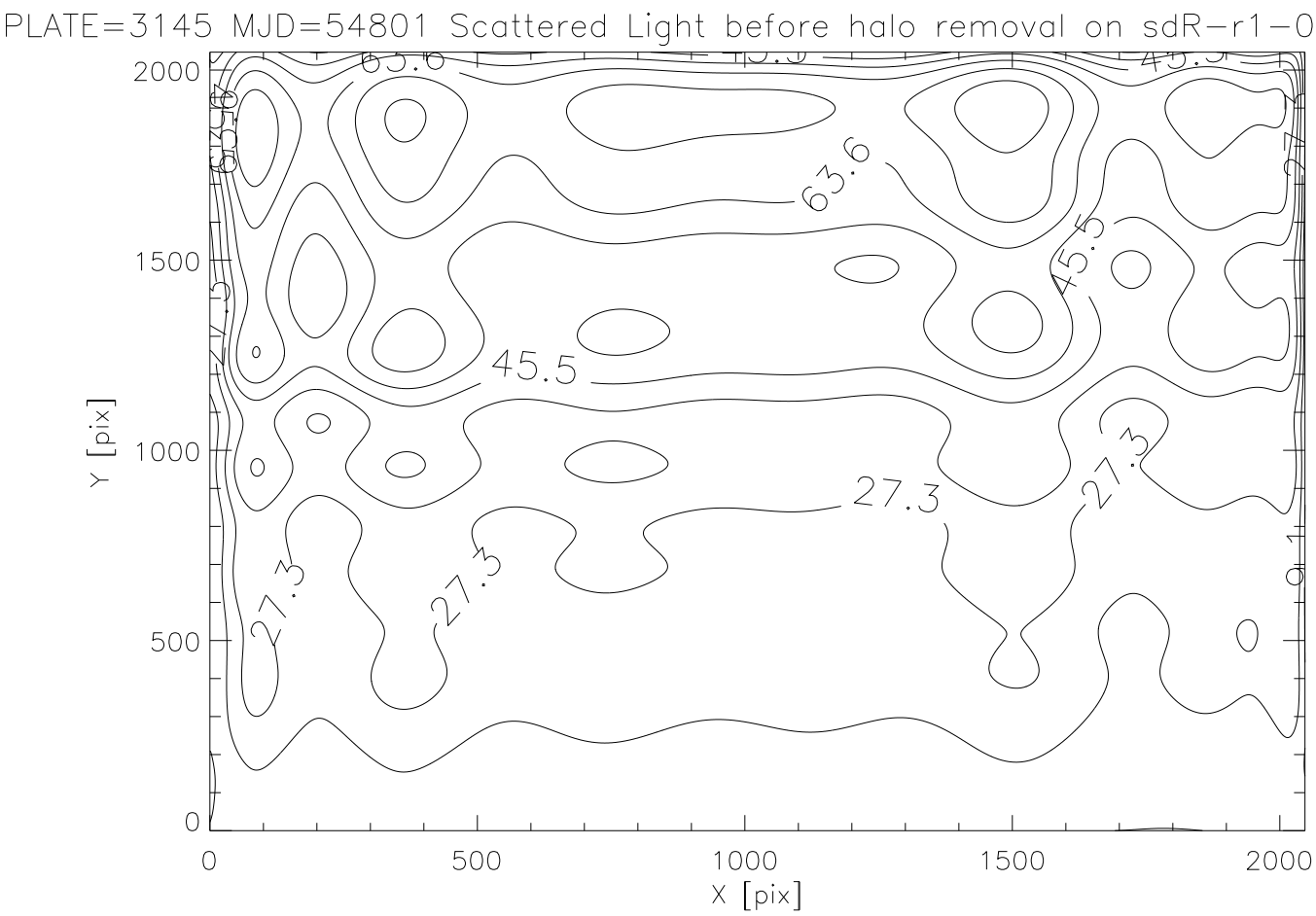

PLATE=3145 MJD=54801 sdR-r1-00056867.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

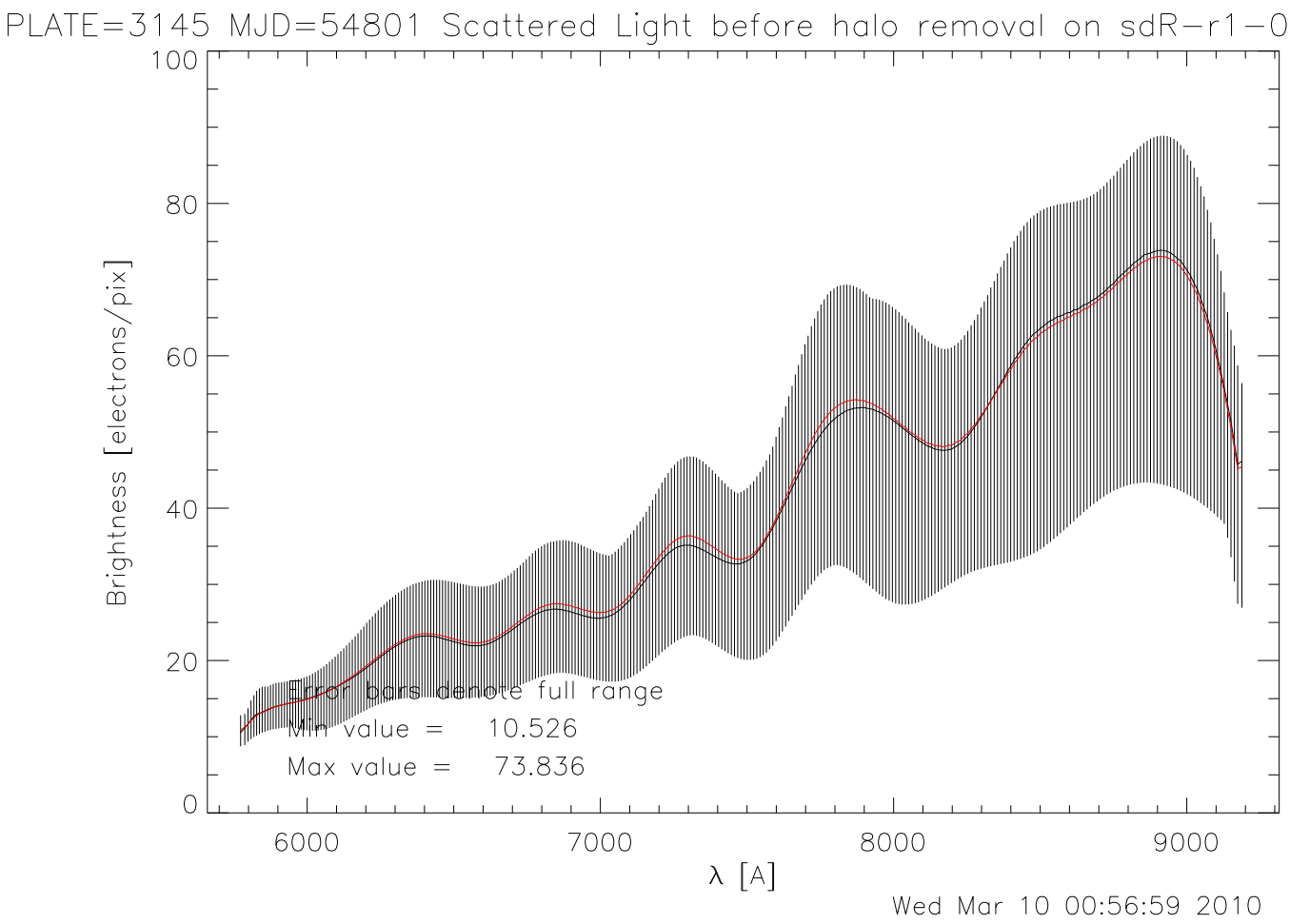

Number of sky fibers = 11
PLATE=3145 MJD=54801 sdR-r1-00056867.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

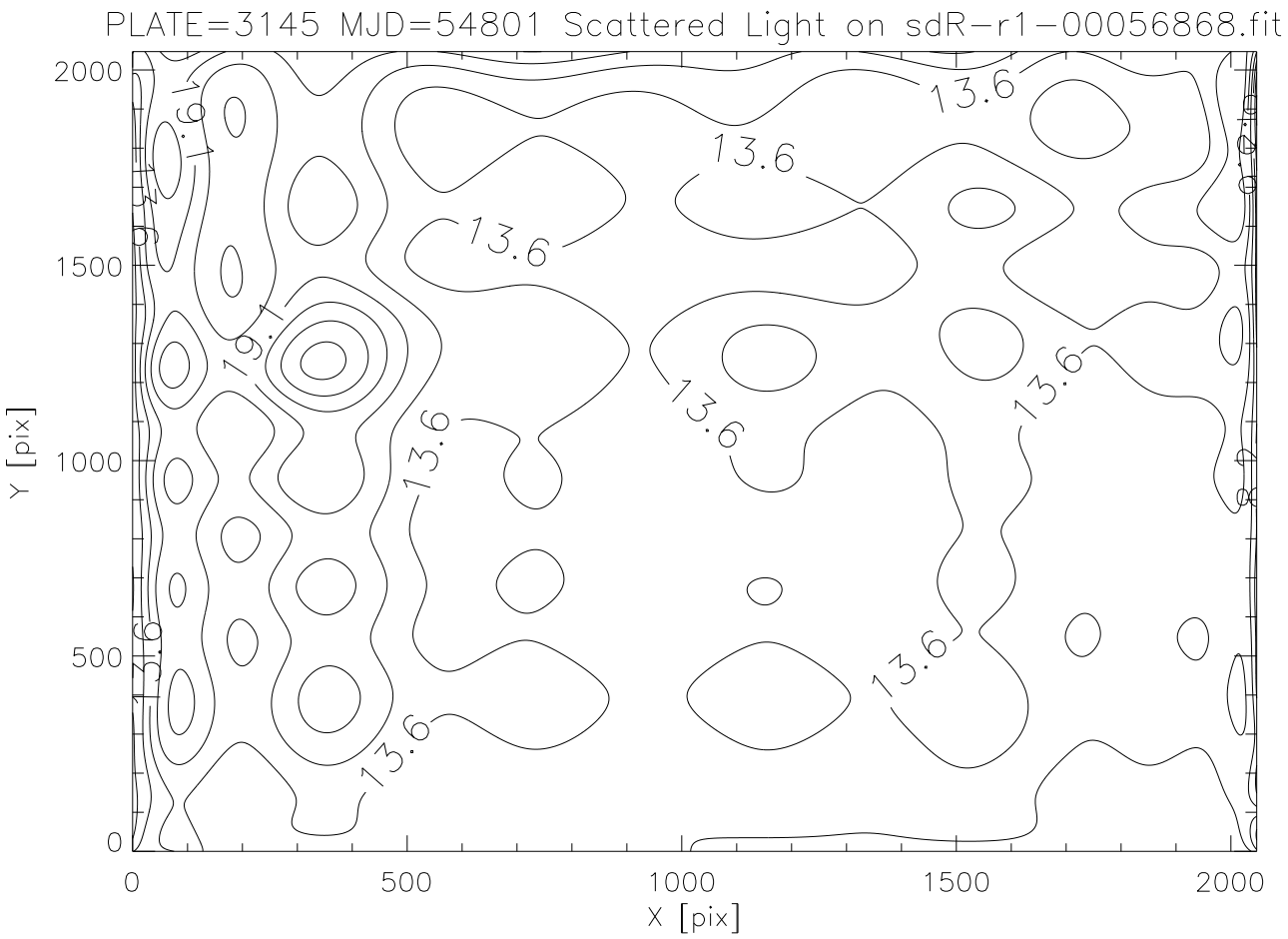

PLATE=3145 MJD=54801 sdR-r1-00056867.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.27 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

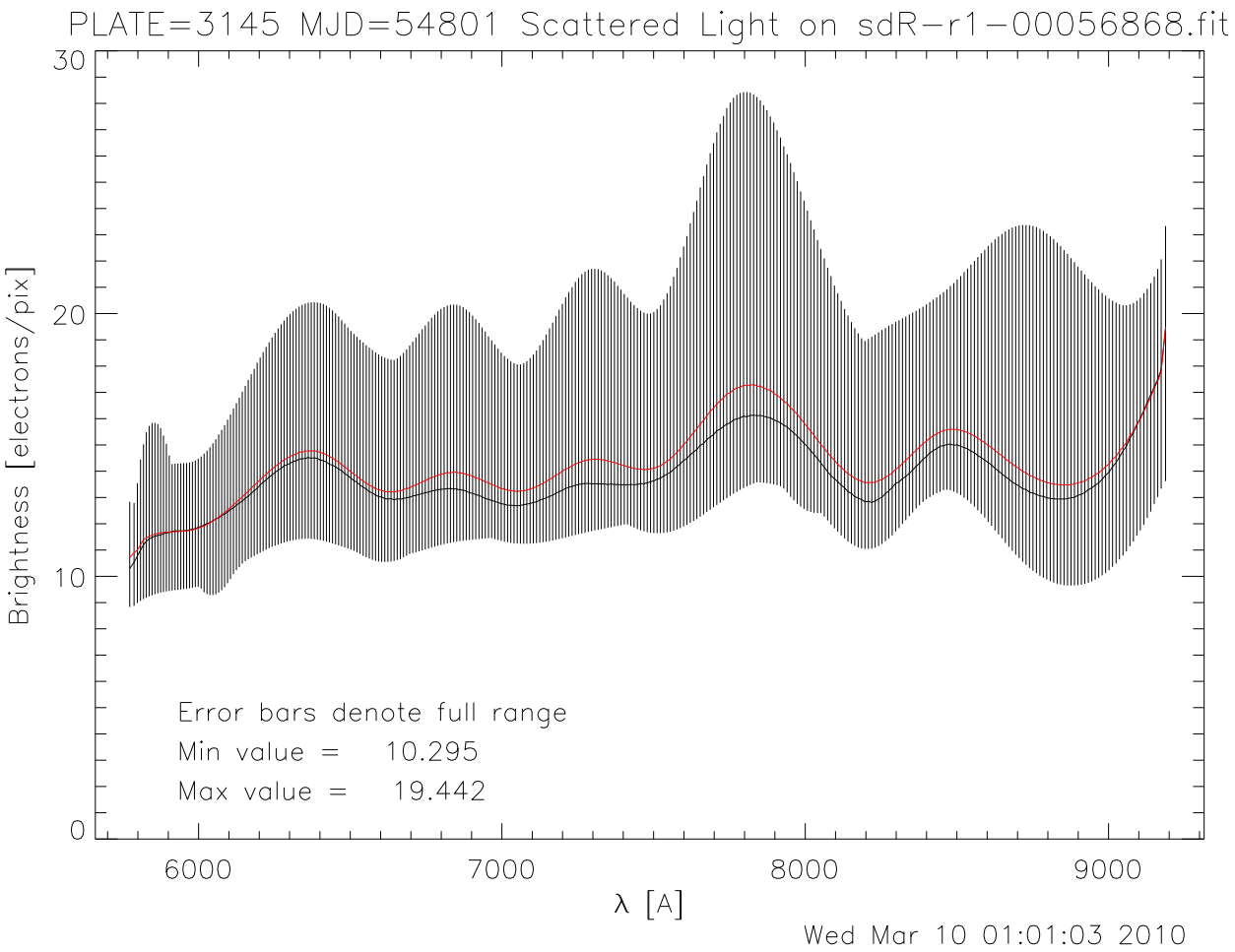

PLATE=3145 MJD=54801 sdR-r1-00056867.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.45 %
Fiber number
Focal Distance [mm]
Airmass

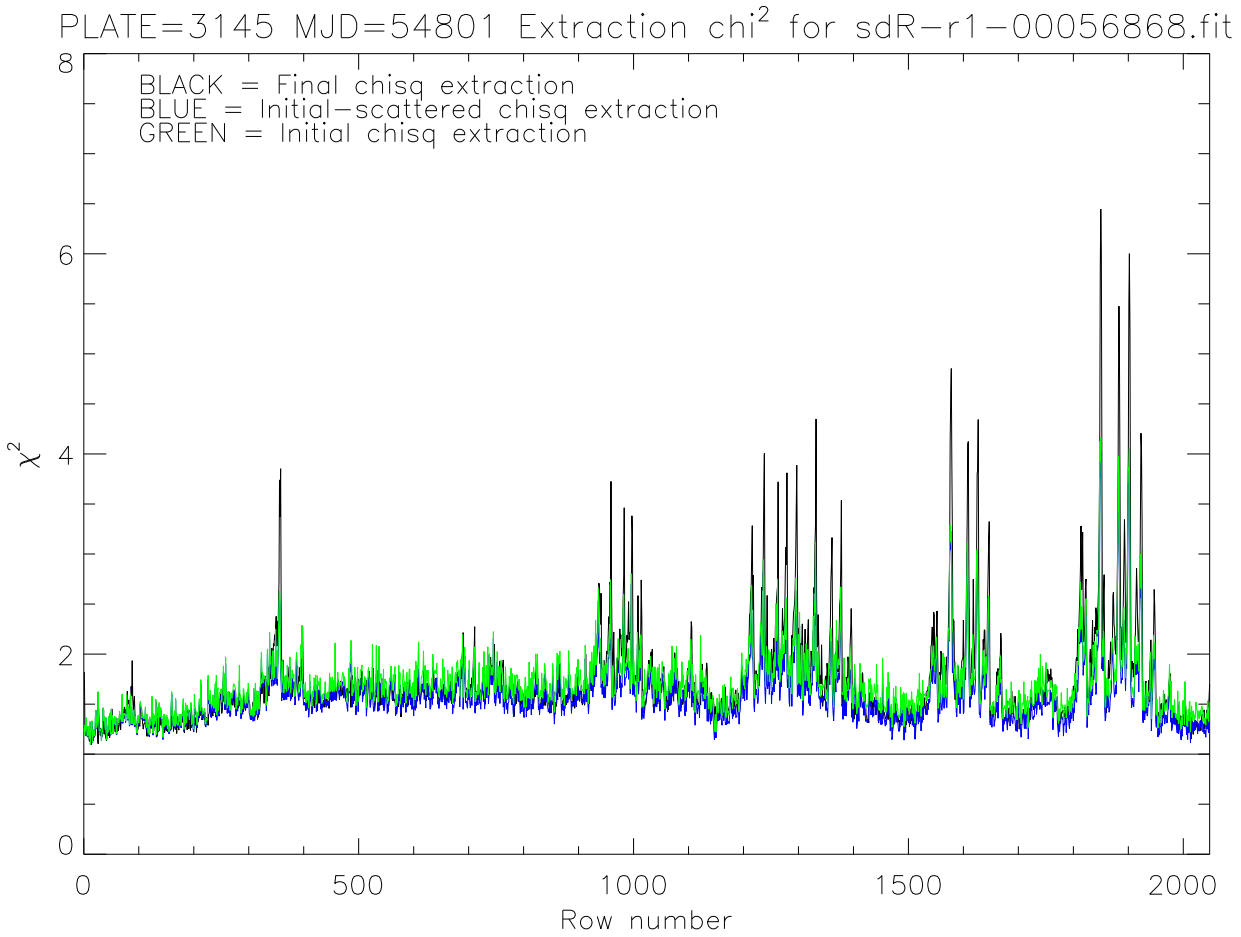

PLATE=3145 MJD=54801 Fiber−Flats for sdR−r1−00056869.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.196
Max value = 1.412
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 00:55:52 2010

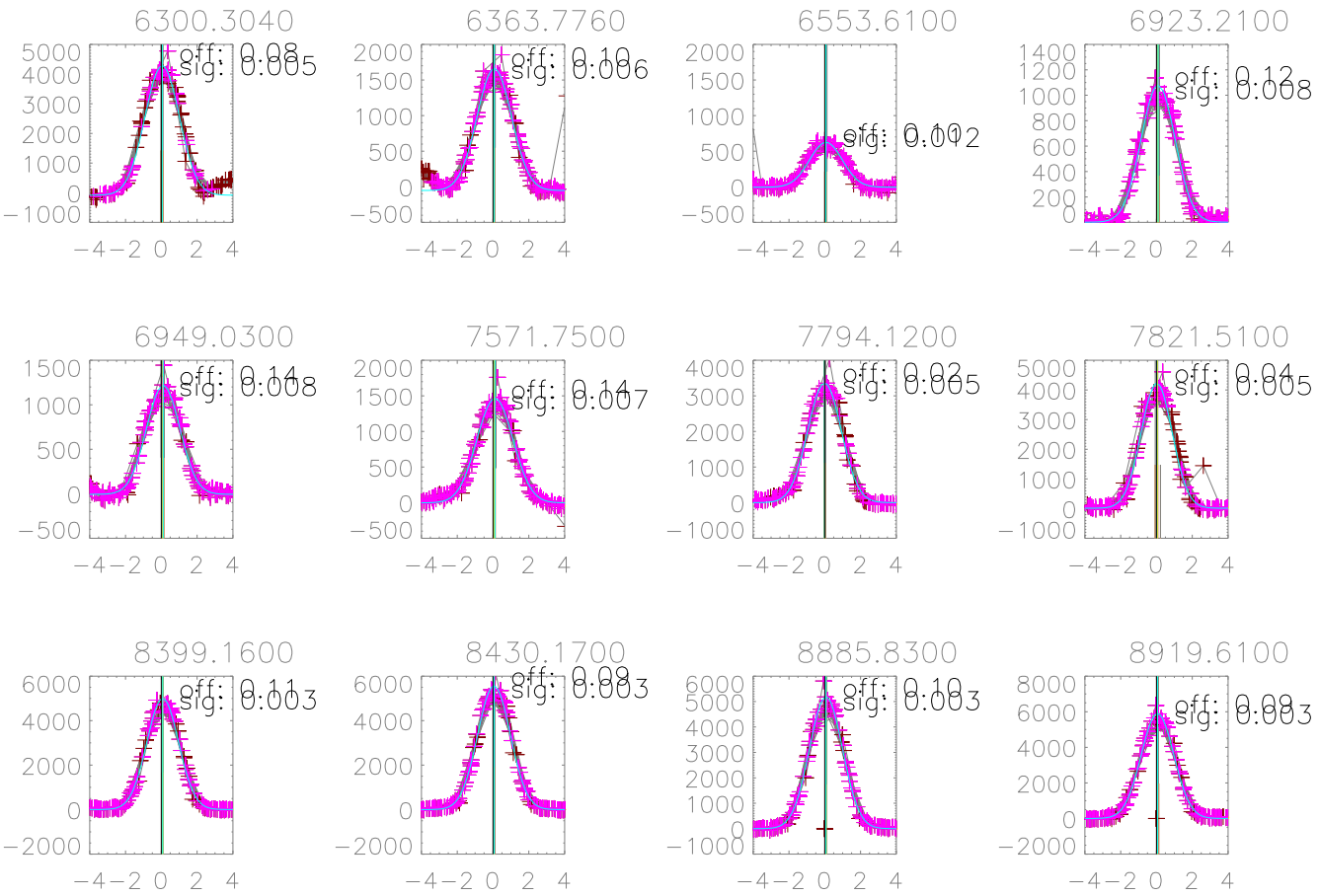

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-r1-00056868.fi
63.6
45.5
27.3
0
Y [pix]
X [pix]
0
500
1000
1500
2000

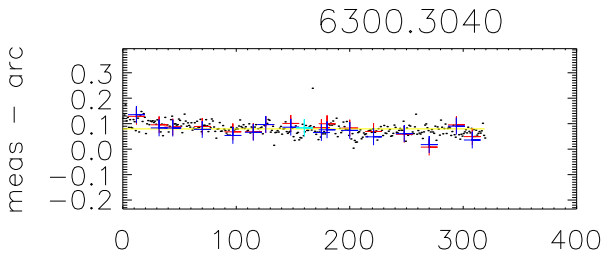

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-r1-00056868.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.526
Max value = 73.836
Wed Mar 10 00:56:59 2010

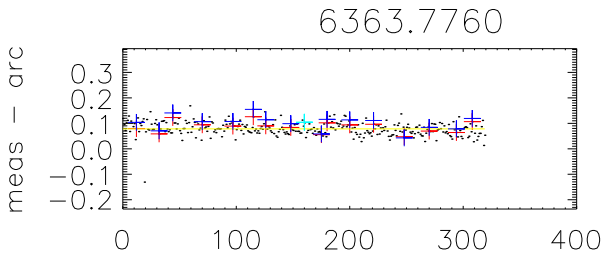

PLATE=3145 MJD=54801 Scattered Light on sdR−r1−00056868.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1

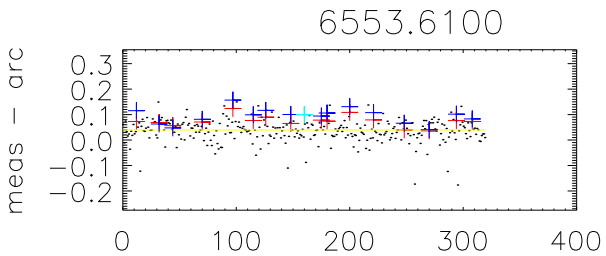

PLATE=3145 MJD=54801 Scattered Light on sdR-r1-00056868.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.295
Max value = 19.442
Wed Mar 10 01:01:03 2010

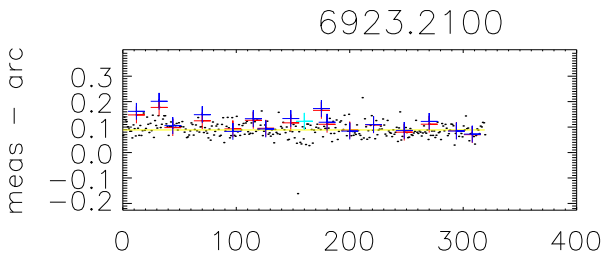

PLATE=3145 MJD=54801 Extraction chi^2 for sdR−r1−00056868.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

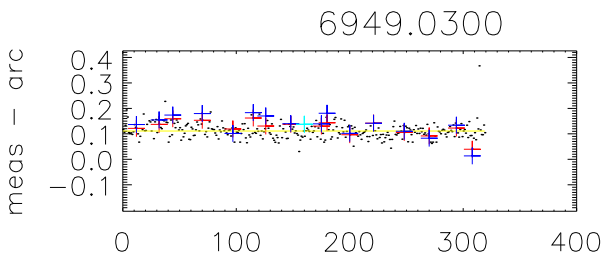

6300.3040
off: 0.08
sig: 0.005
6363.7760
off: 0.10
sig: 0.006
6553.6100
off: 0.00
sig: 0.012
6923.2100
off: 0.12
sig: 0.008
6949.0300
off: 0.14
sig: 0.008
7571.7500
off: 0.14
sig: 0.007
7794.1200
off: 0.02
sig: 0.005
7821.5100
off: 0.04
sig: 0.005
8399.1600
off: 0.11
sig: 0.003
8430.1700
off: 0.09
sig: 0.003
8885.8300
off: 0.10
sig: 0.003
8919.6100
off: 0.09
sig: 0.003

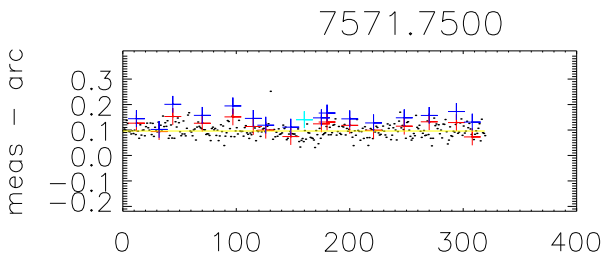

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

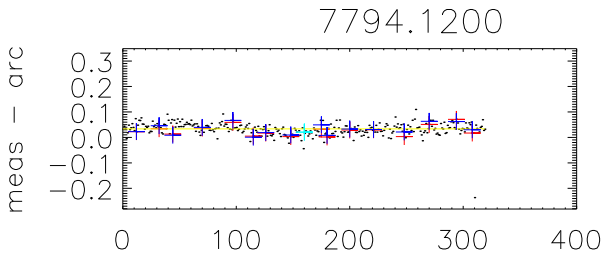

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

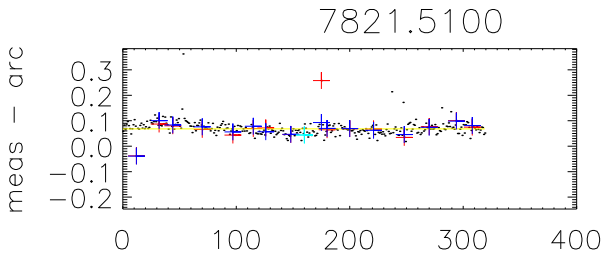

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

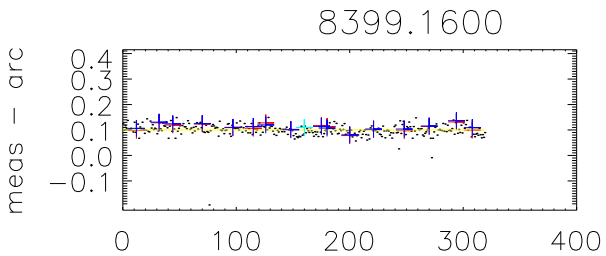

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

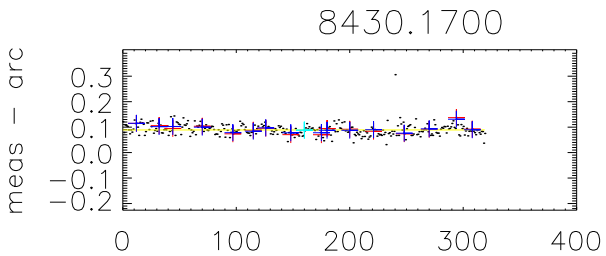

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

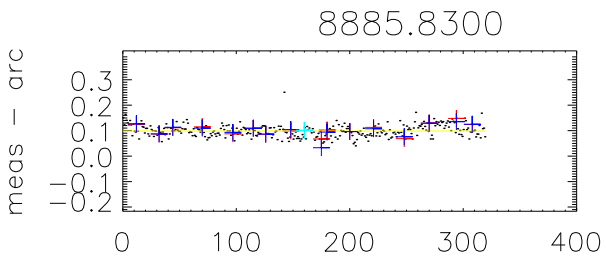

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

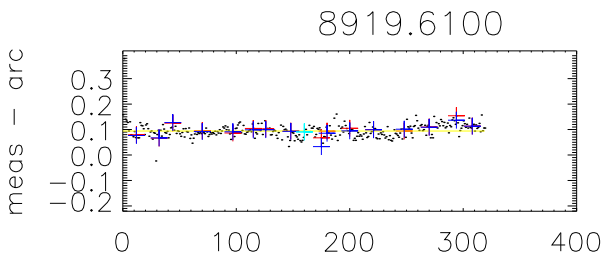

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

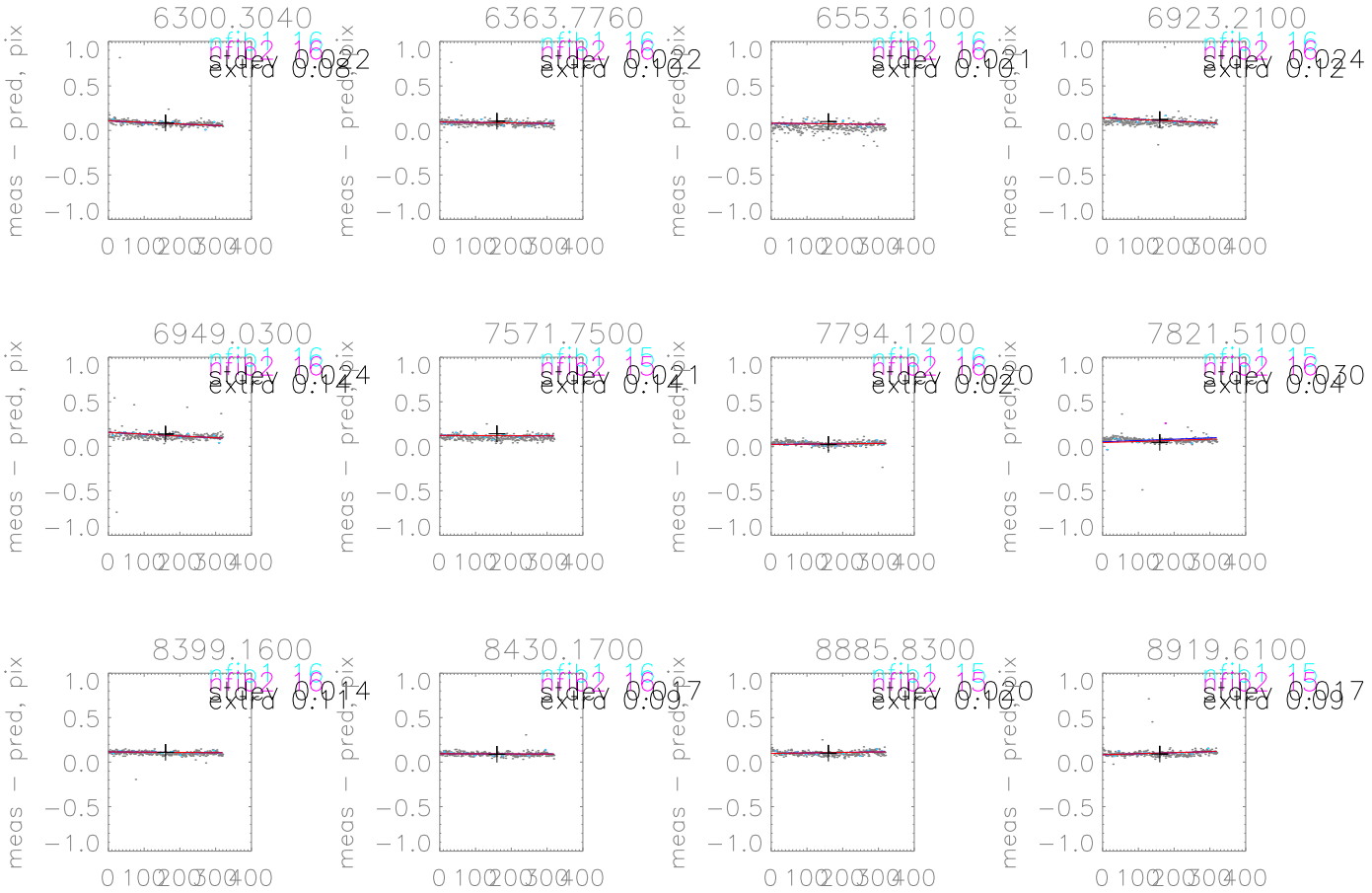

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

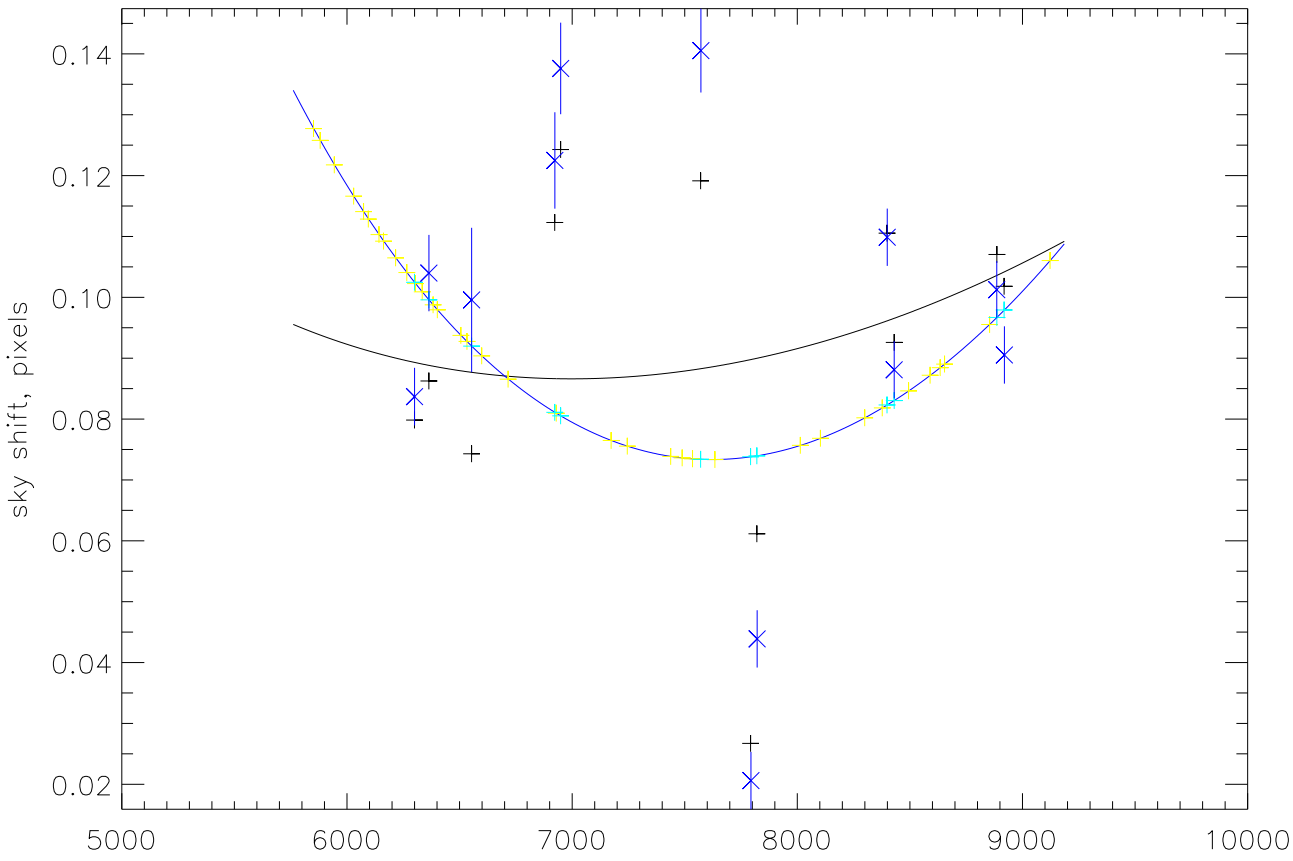

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

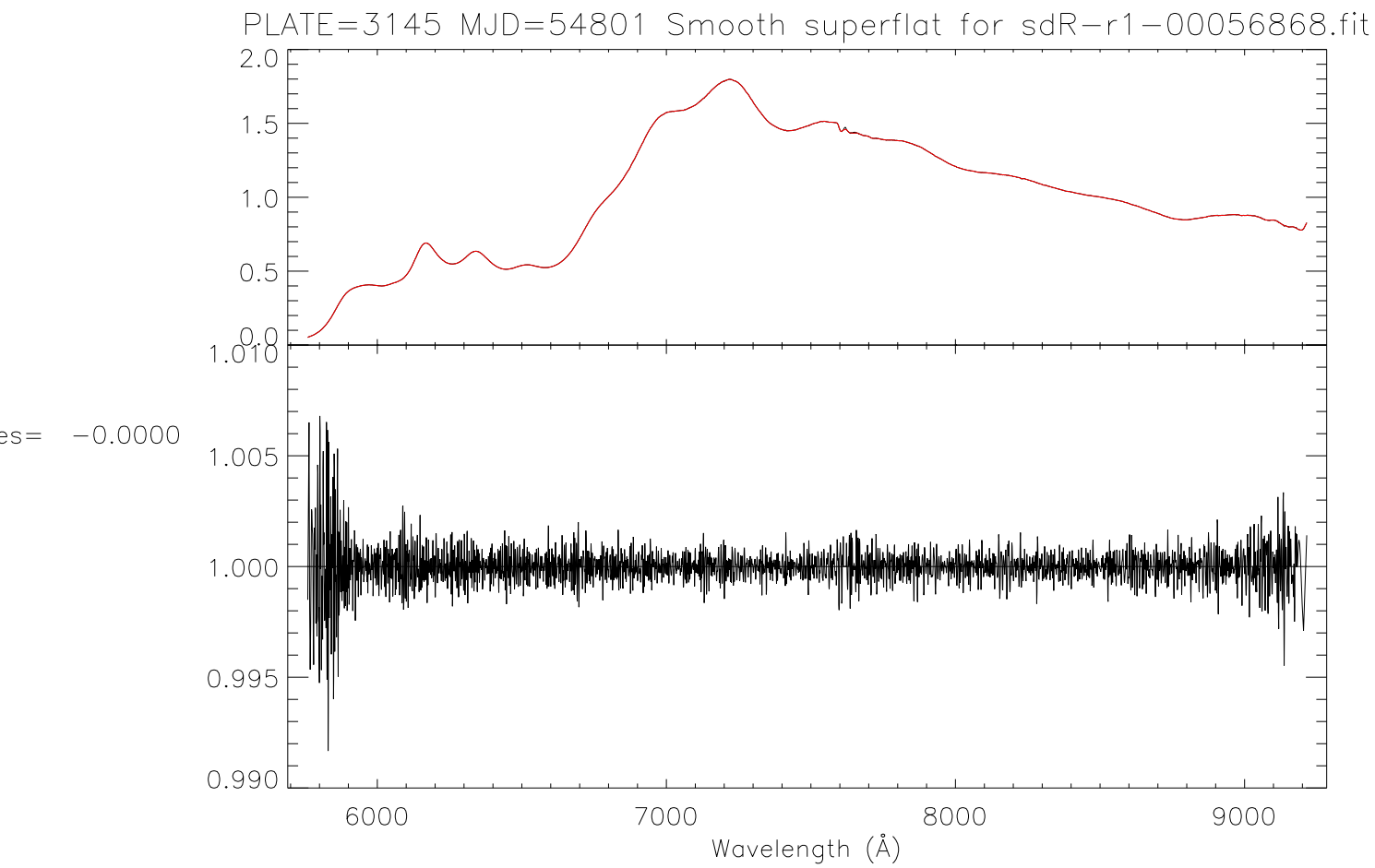

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

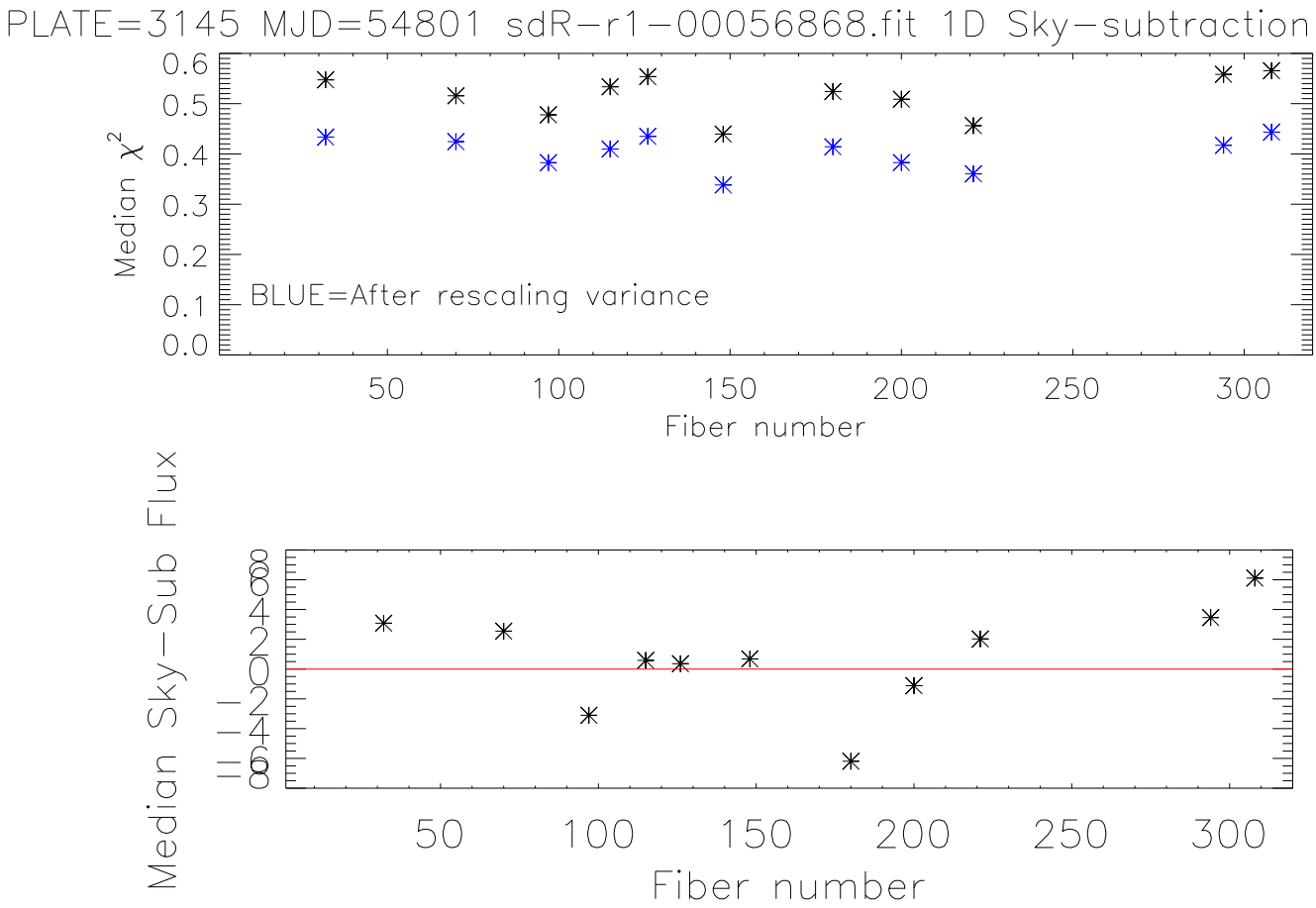

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

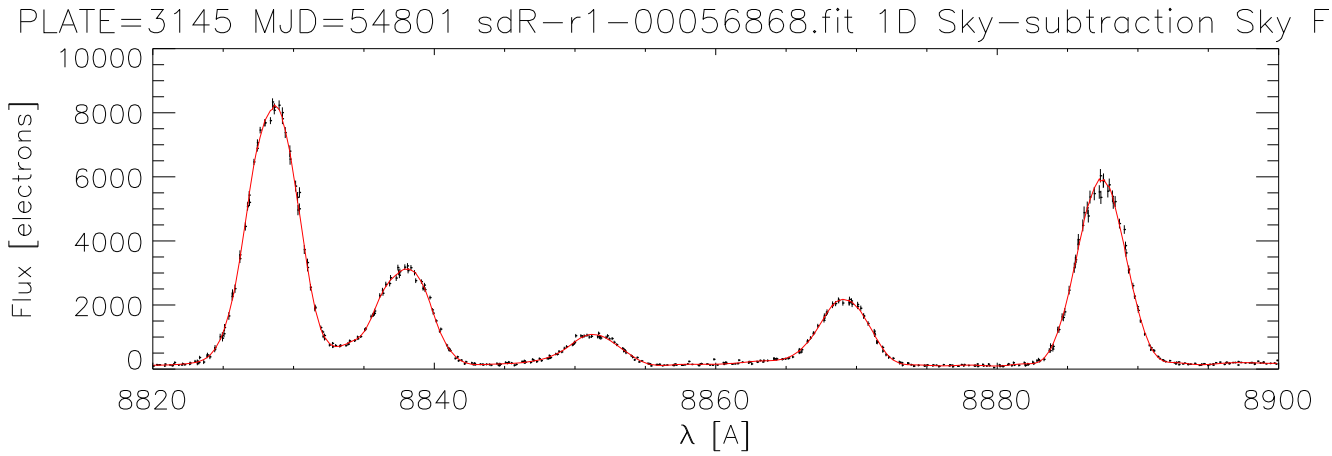

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

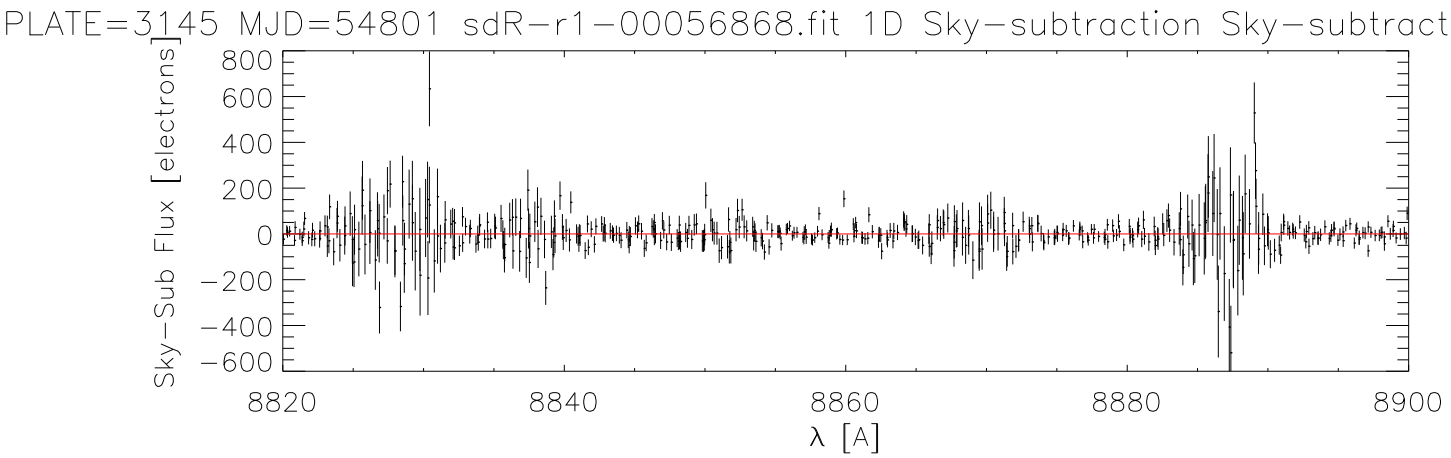

6300.3040
stdev 0.022
extra 0.082
6363.7760
stdev 0.022
extra 0.162
6553.6100
stdev 0.021
extra 0.161
6923.2100
stdev 0.024
extra 0.12
6949.0300
stdev 0.024
extra 0.14
7571.7500
stdev 0.021
extra 0.141
7794.1200
stdev 0.020
extra 0.02
7821.5100
stdev 0.030
extra 0.04
8399.1600
stdev 0.014
extra 0.111
8430.1700
stdev 0.017
extra 0.093
8885.8300
stdev 0.020
extra 0.16
8919.6100
stdev 0.017
extra 0.093
meas − pred, pix
mfib2 16
mfib1 16
mfib2 15
mfib1 15

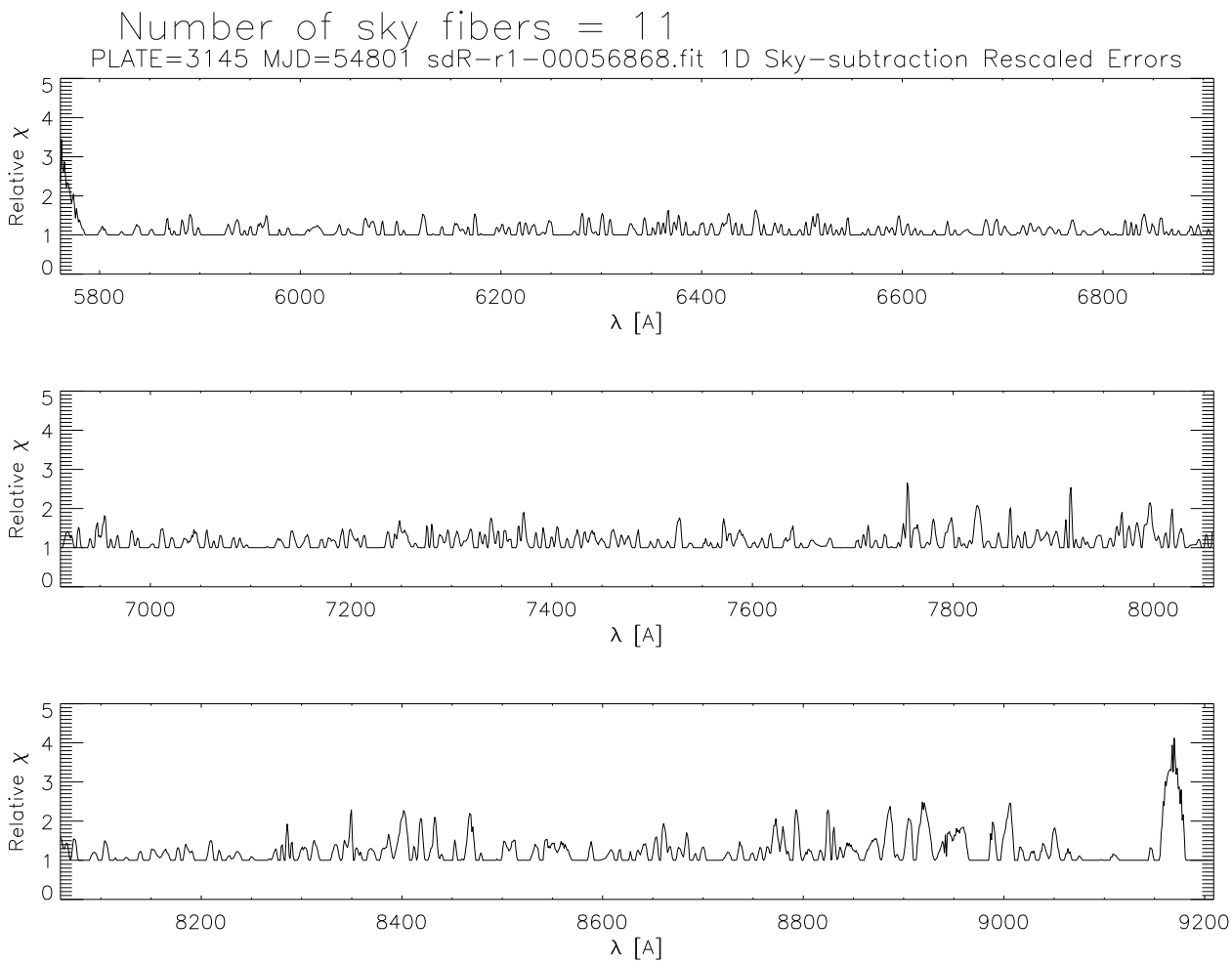

sky shift, pixels
0.14
0.12
0.10
0.08
0.06
0.04
0.02
5000
6000
7000
8000
9000
10000

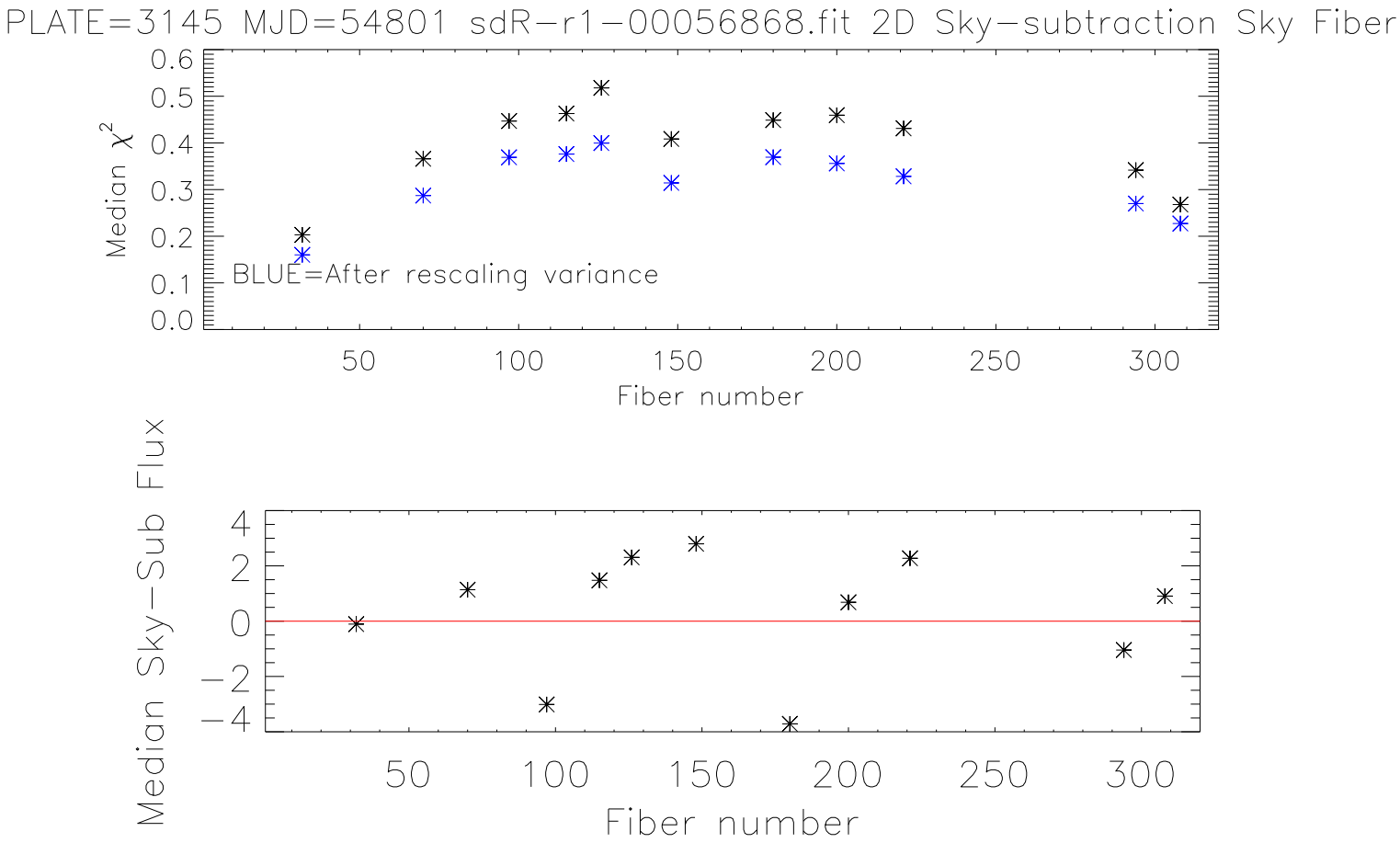

PLATE=3145 MJD=54801 Smooth superflat for sdR-r1-00056868.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

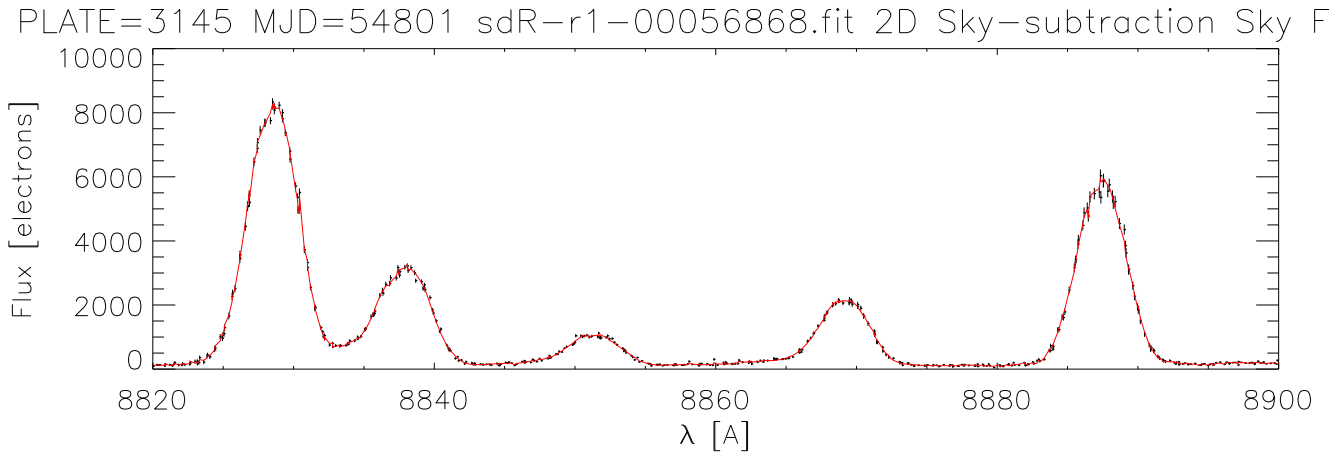

PLATE=3145 MJD=54801 sdR-r1-00056868.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
Fiber number

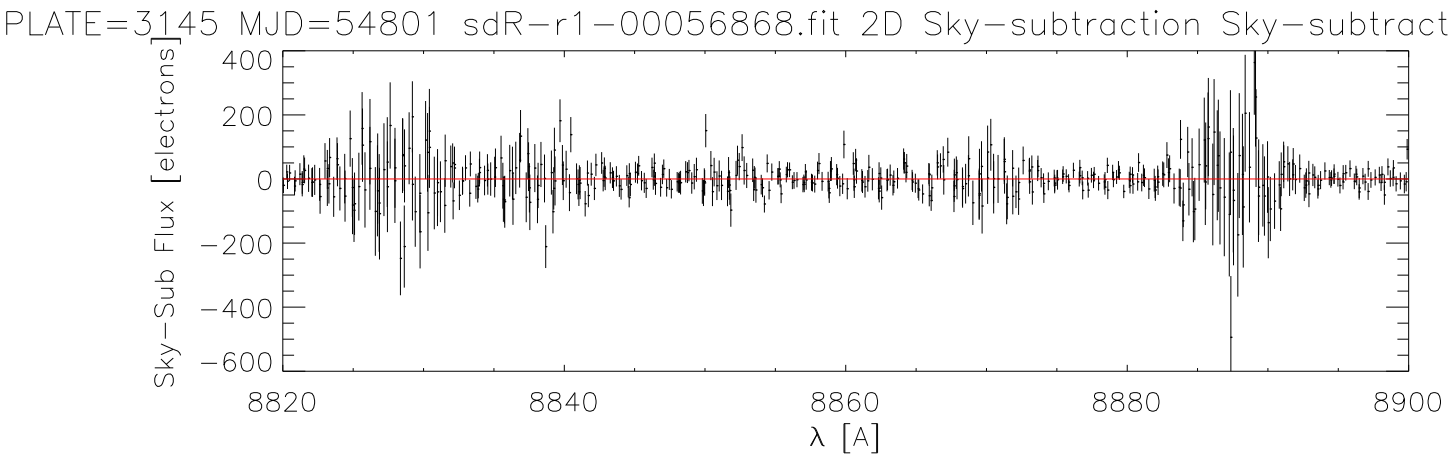

PLATE=3145 MJD=54801 sdR-r1-00056868.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

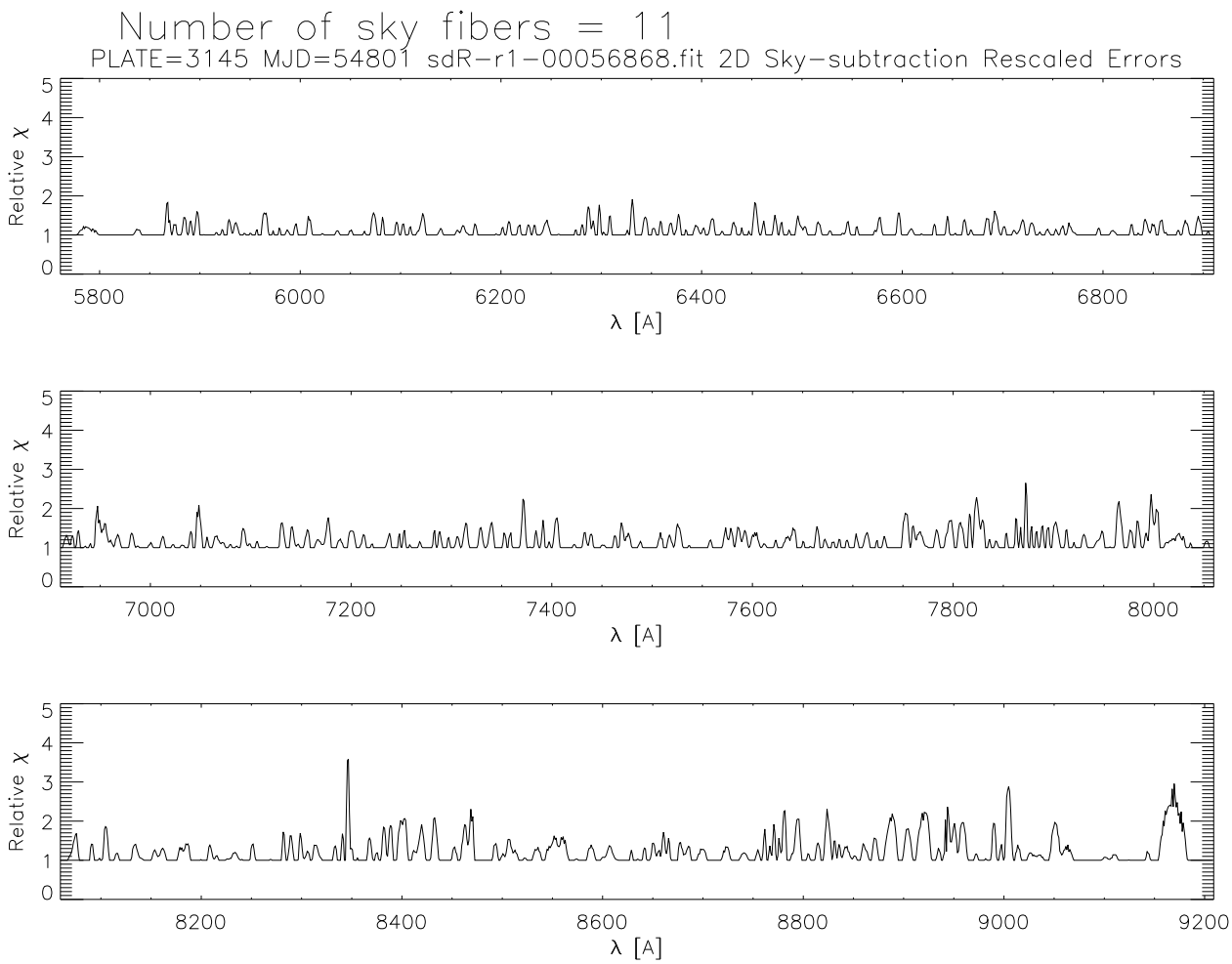

PLATE=3145 MJD=54801 sdR-r1-00056868.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

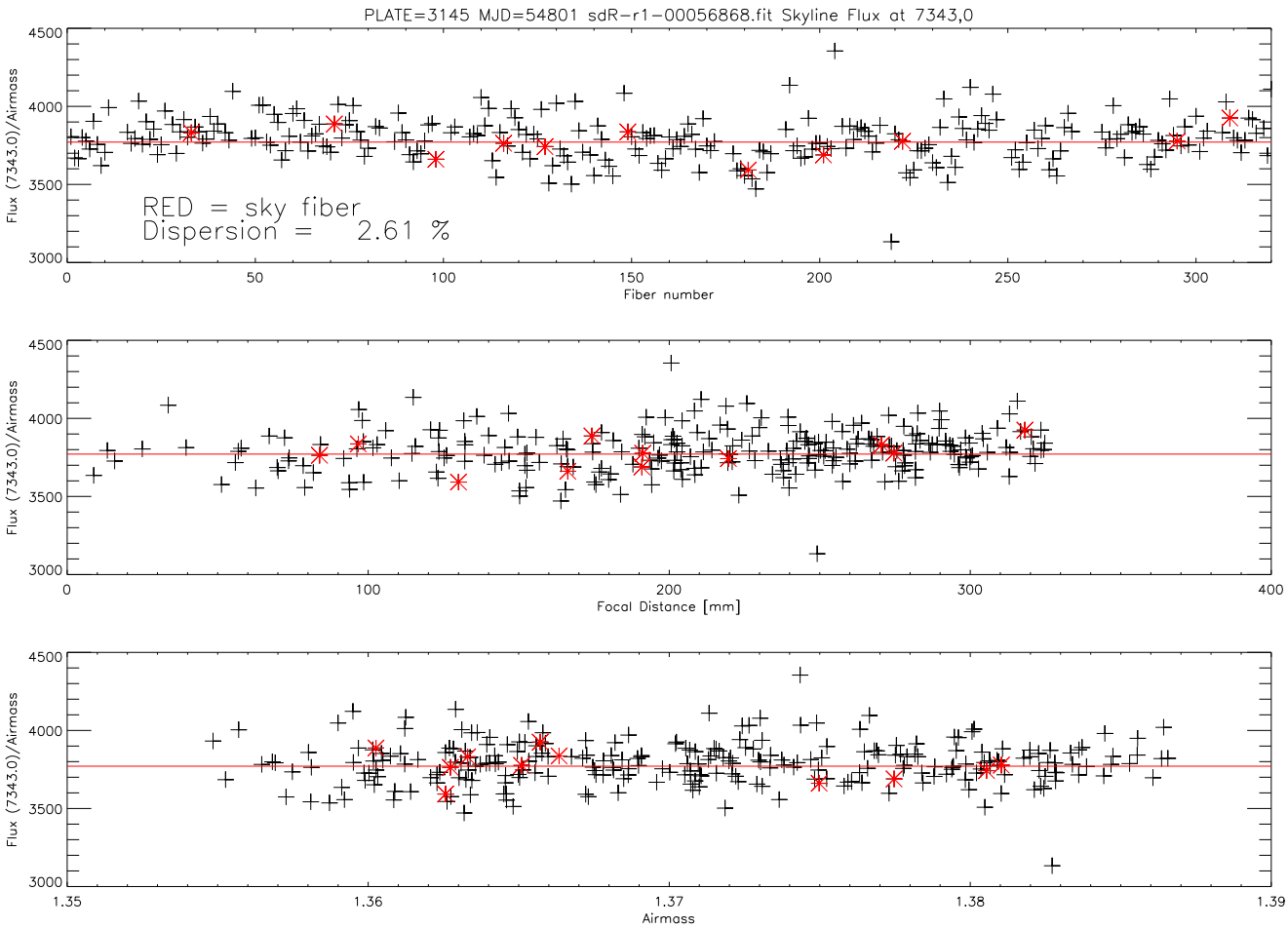

Number of sky fibers = 11
PLATE=3145 MJD=54801 sdR-r1-00056868.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

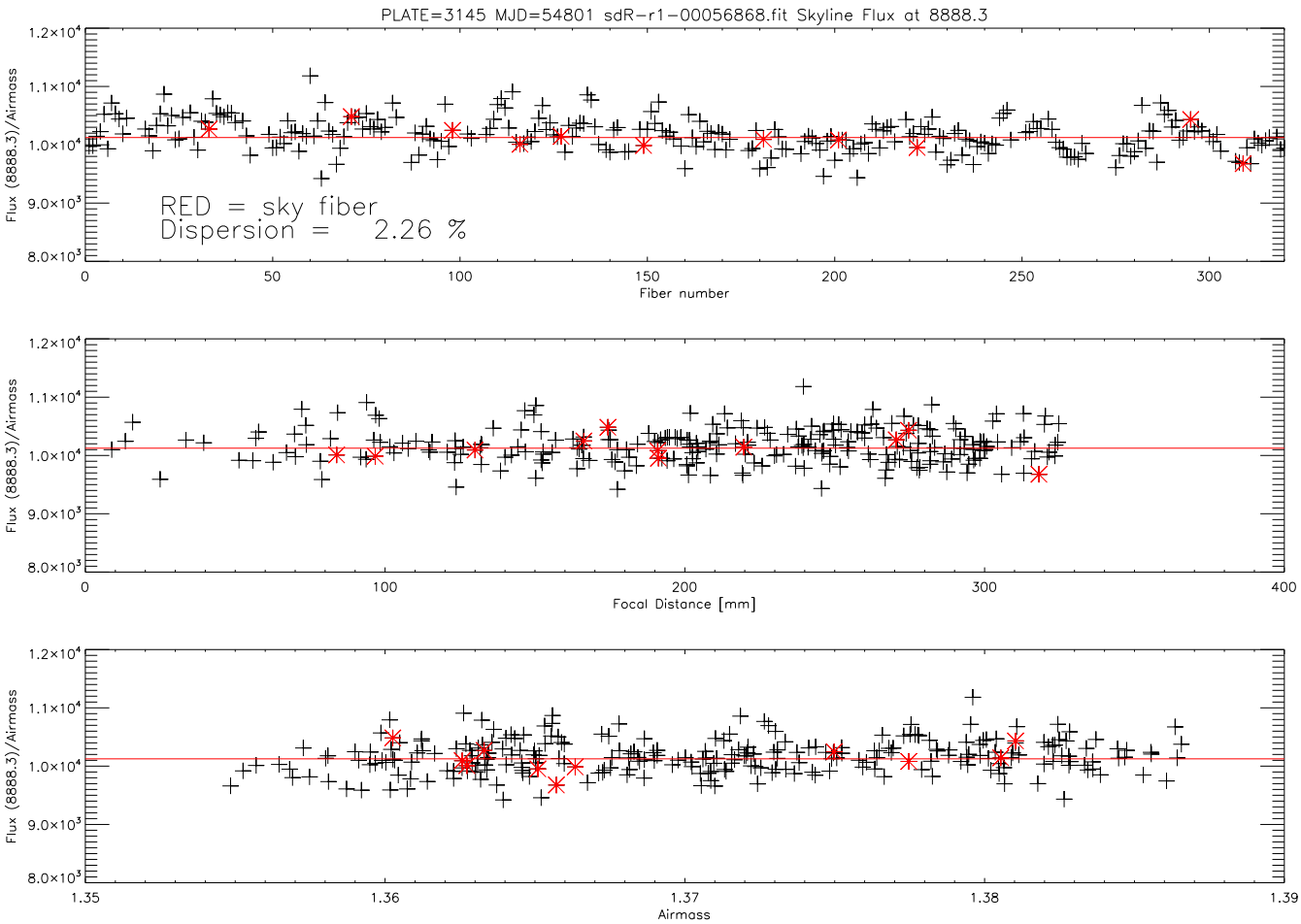

PLATE=3145 MJD=54801 sdR-r1-00056868.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

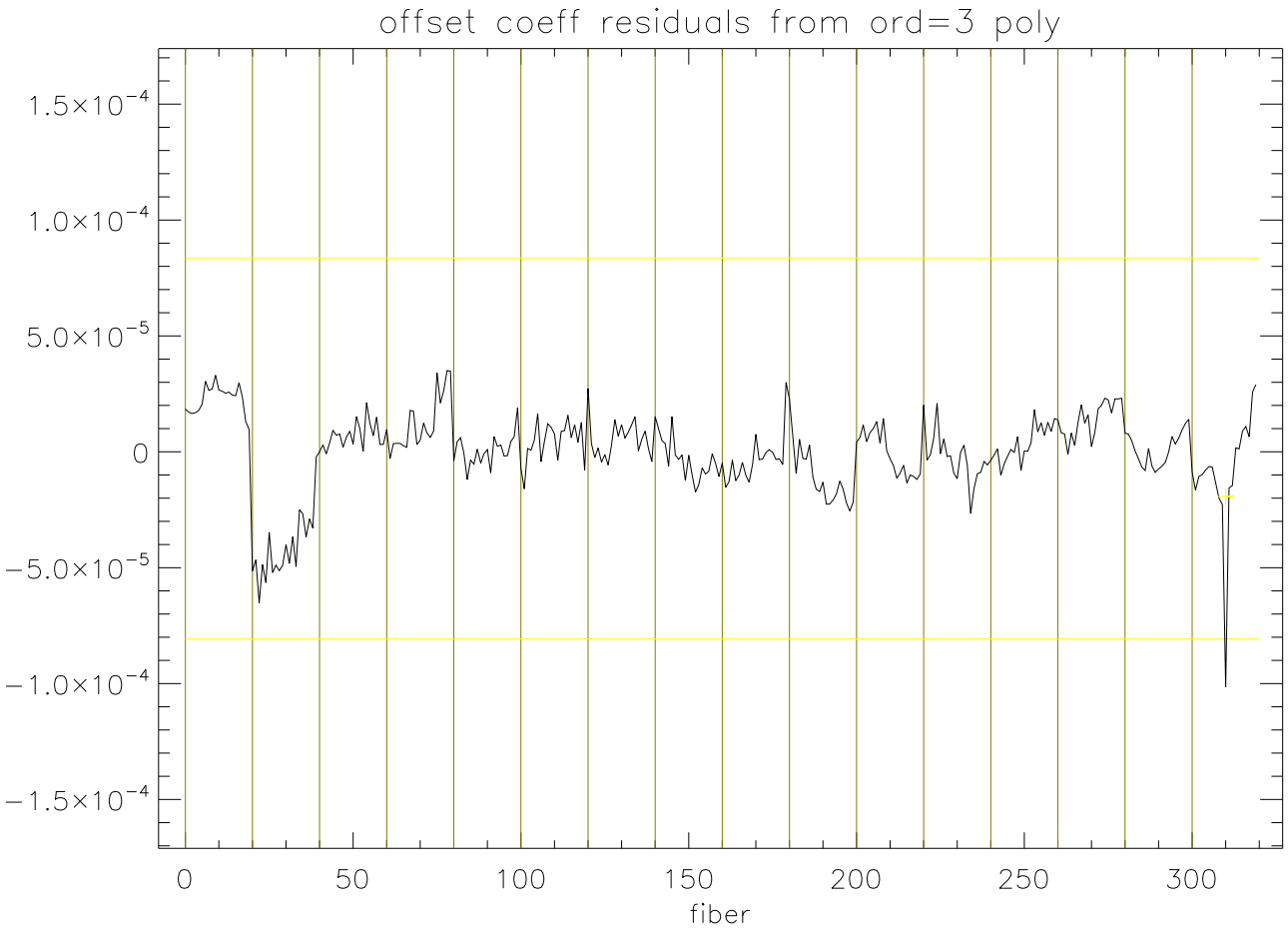

PLATE=3145 MJD=54801 sdR-r1-00056868.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

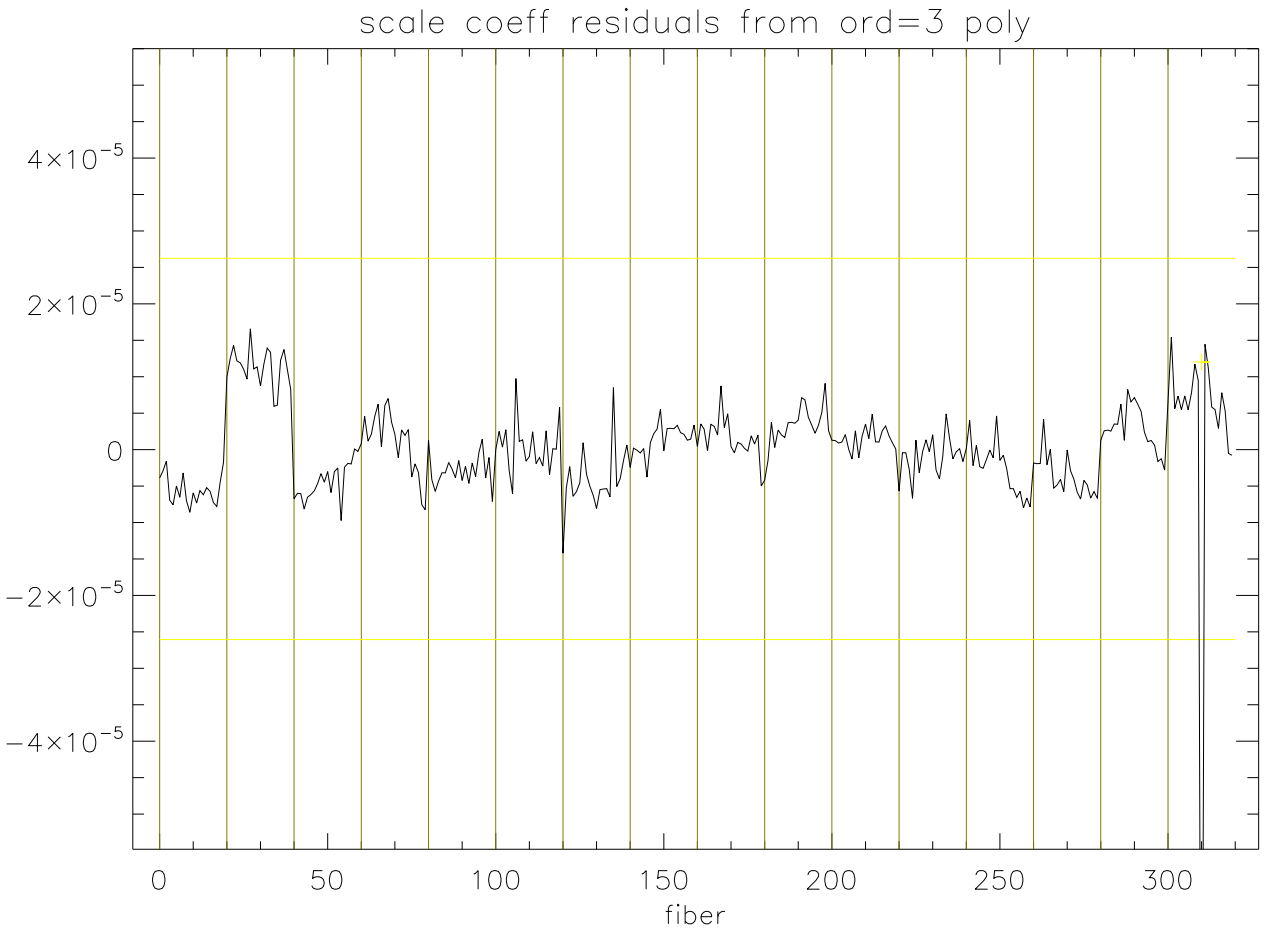

PLATE=3145 MJD=54801 sdR-r1-00056868.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

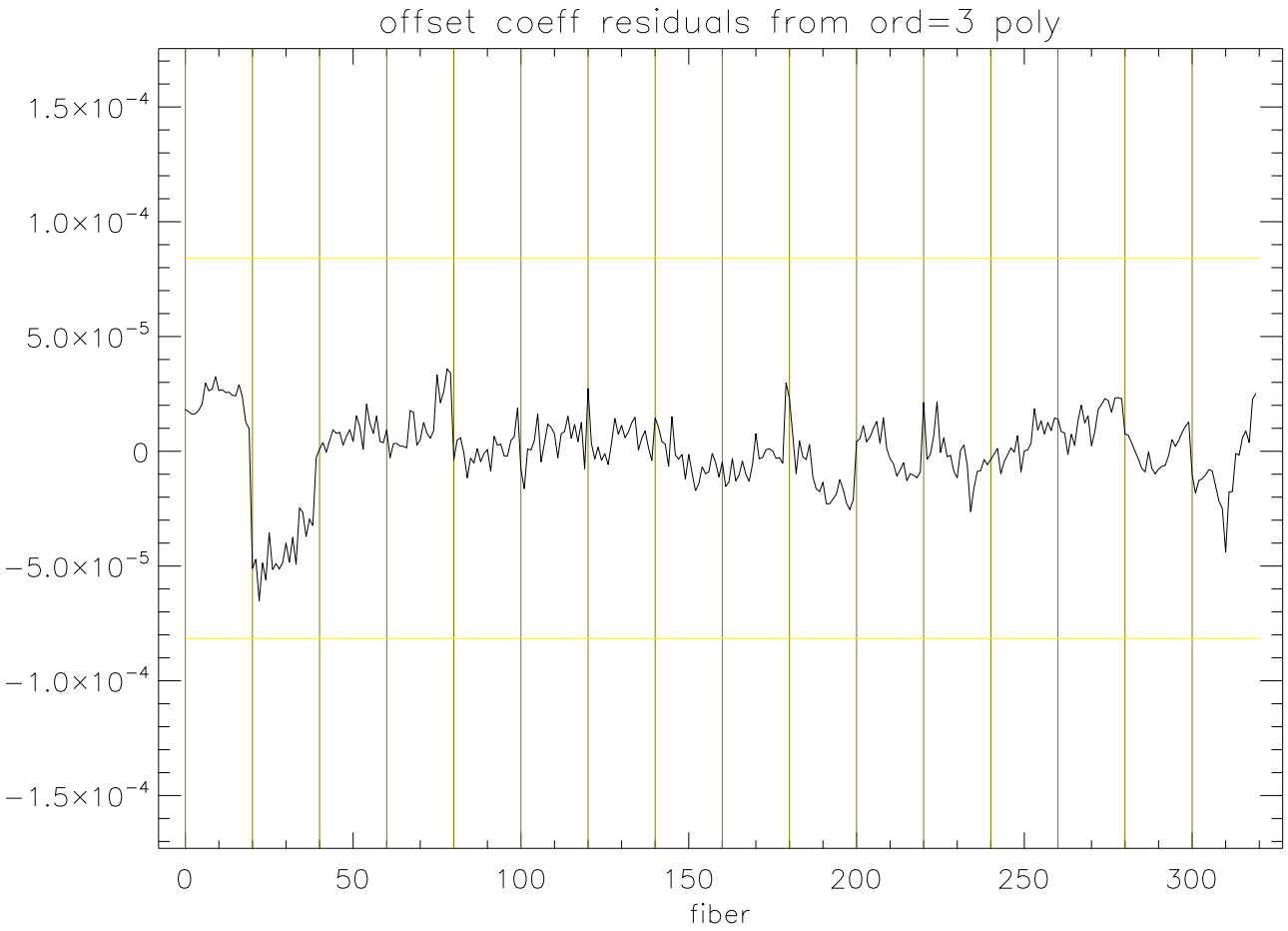

Number of sky fibers = 11
PLATE=3145 MJD=54801 sdR-r1-00056868.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

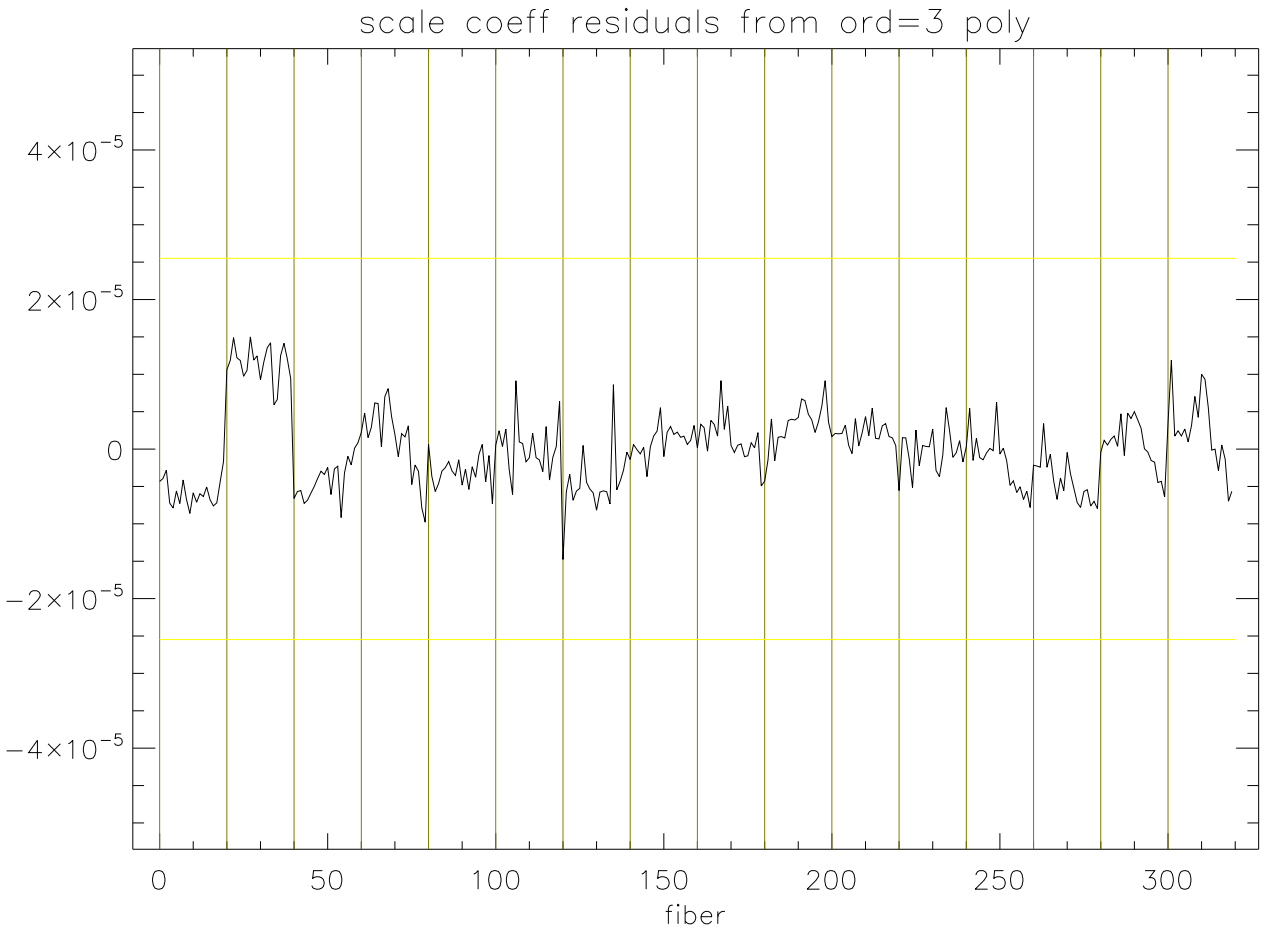

PLATE=3145 MJD=54801 sdR-r1-00056868.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.61 %
Fiber number
Focal Distance [mm]
Airmass

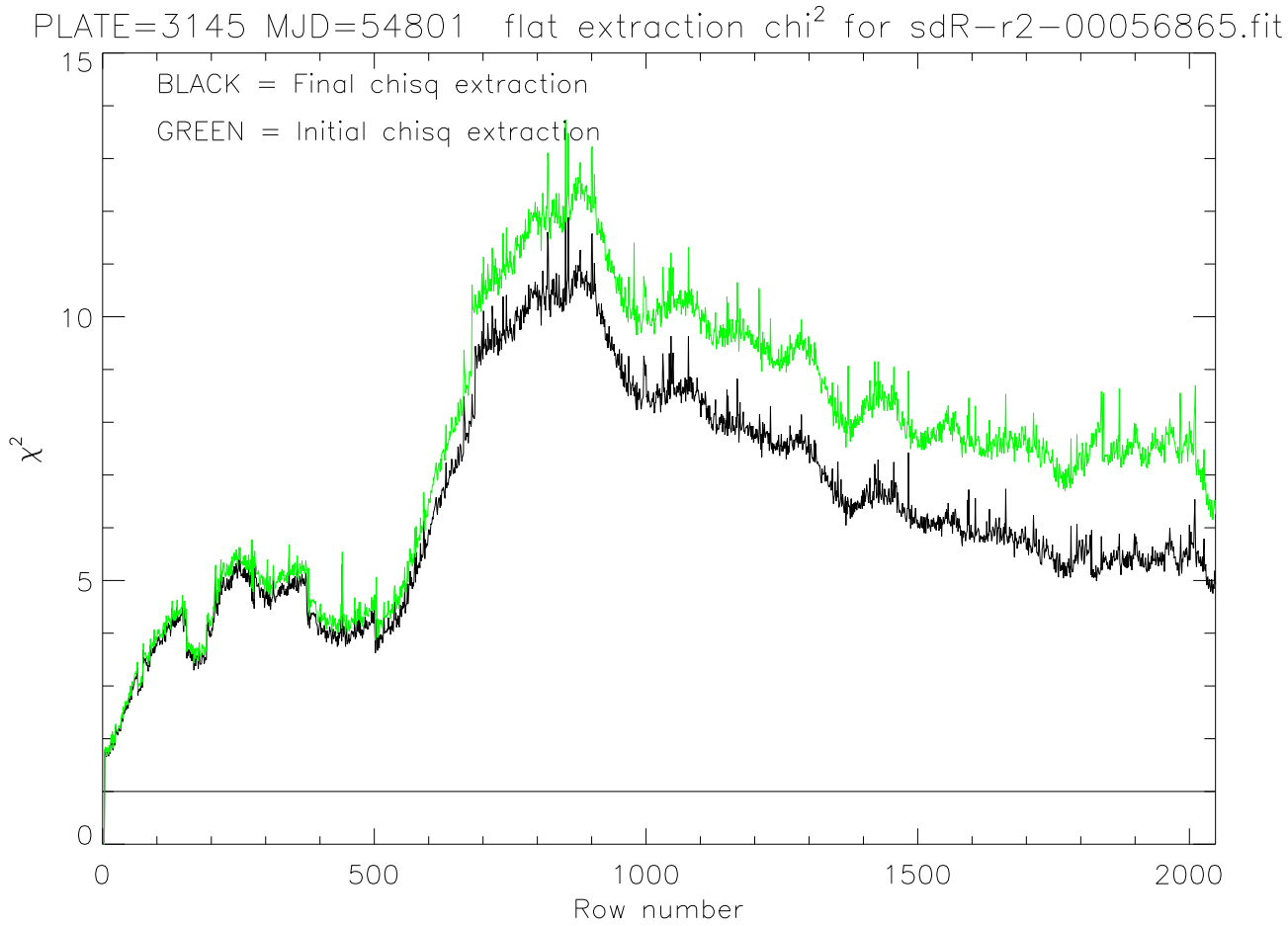

PLATE=3145 MJD=54801 sdR-r1-00056868.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.26 %
Fiber number
Focal Distance [mm]
Airmass

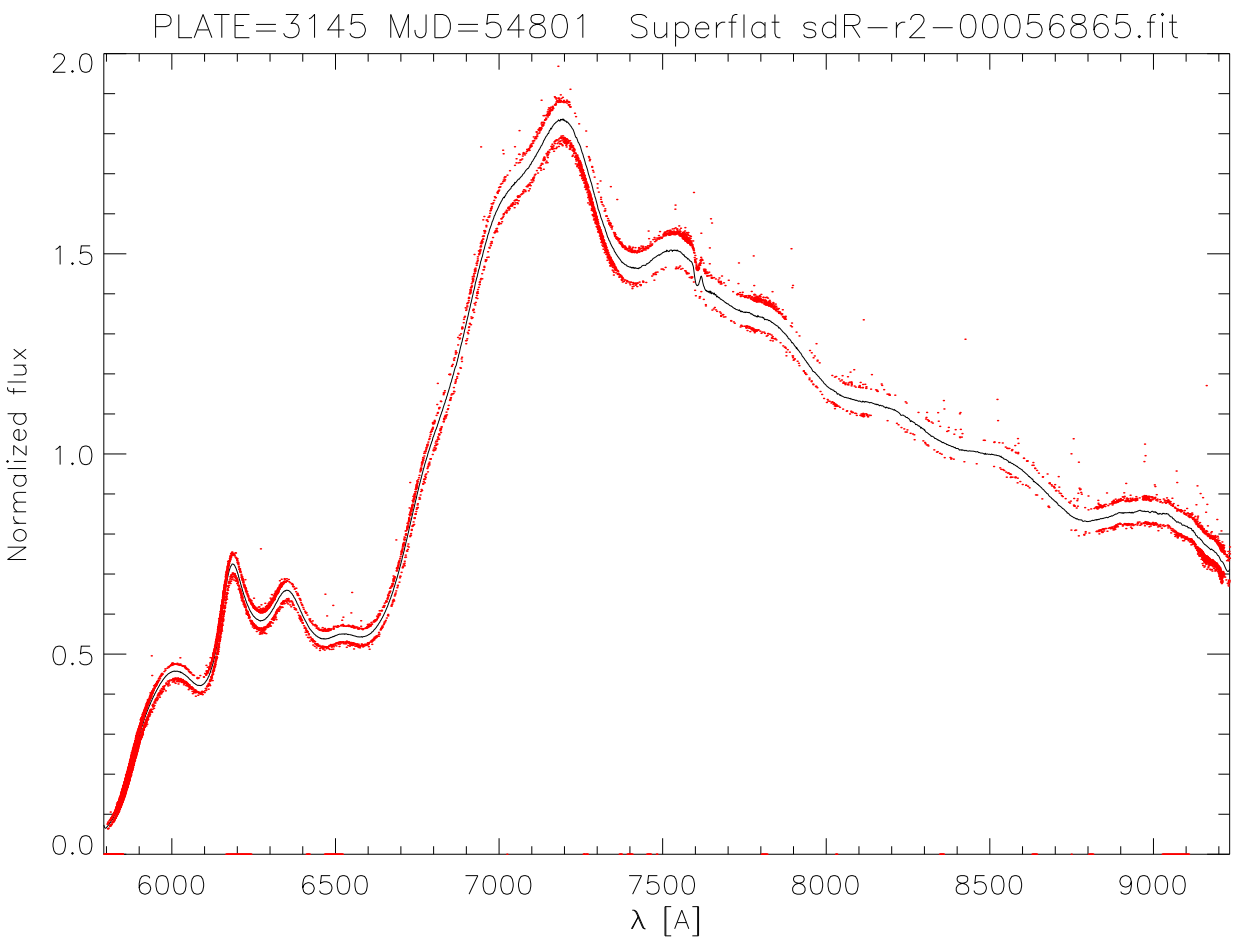

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

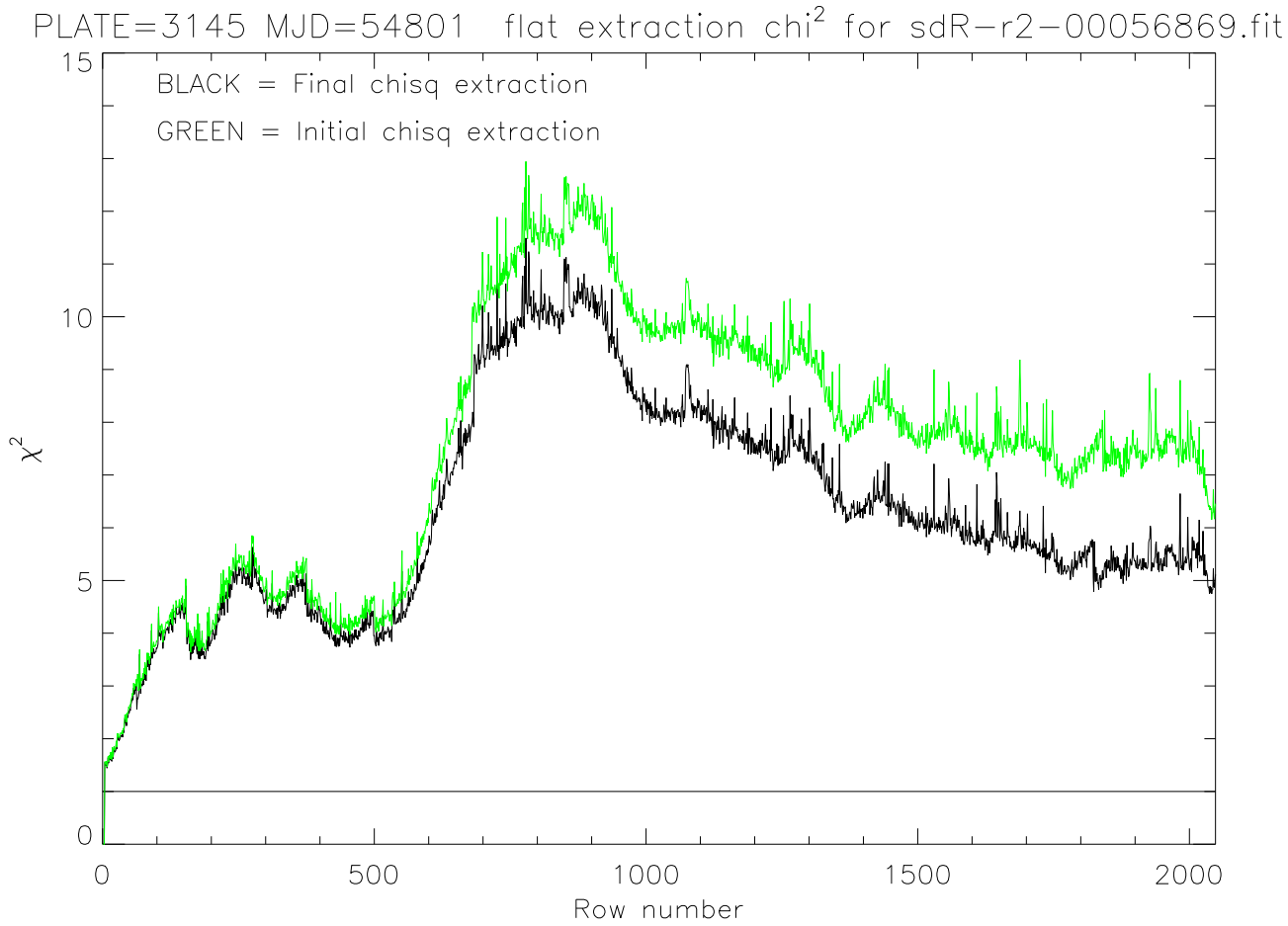

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

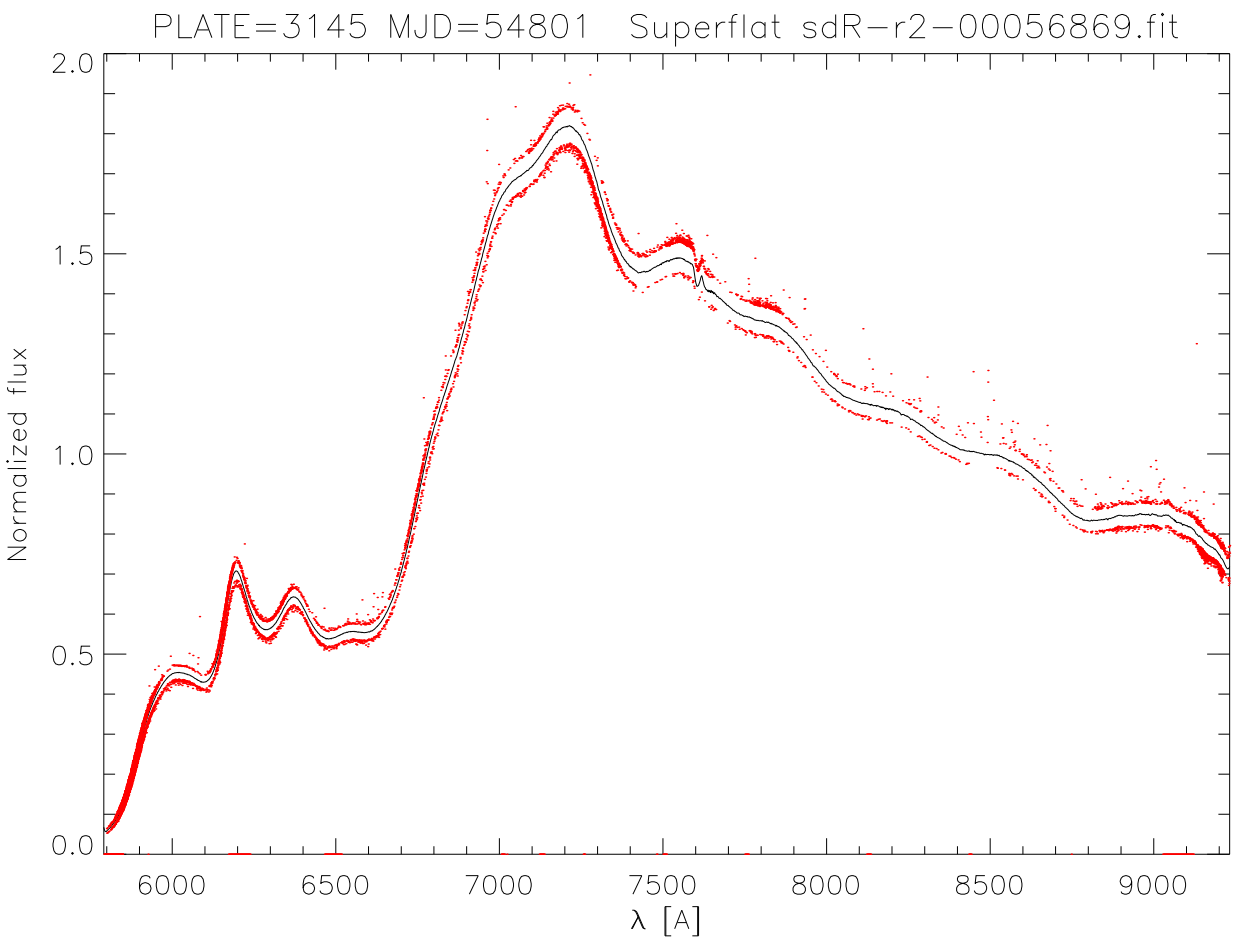

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

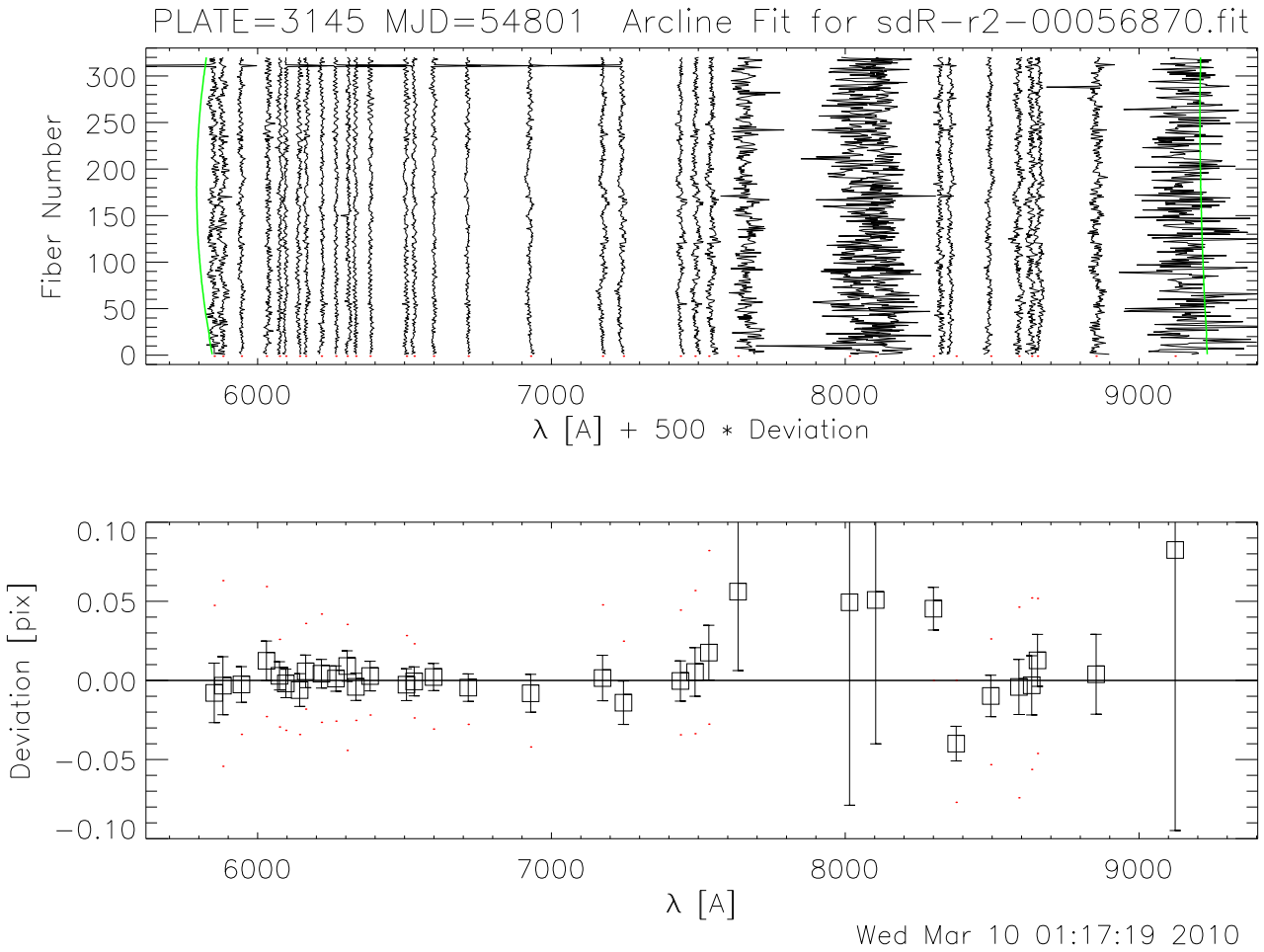

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

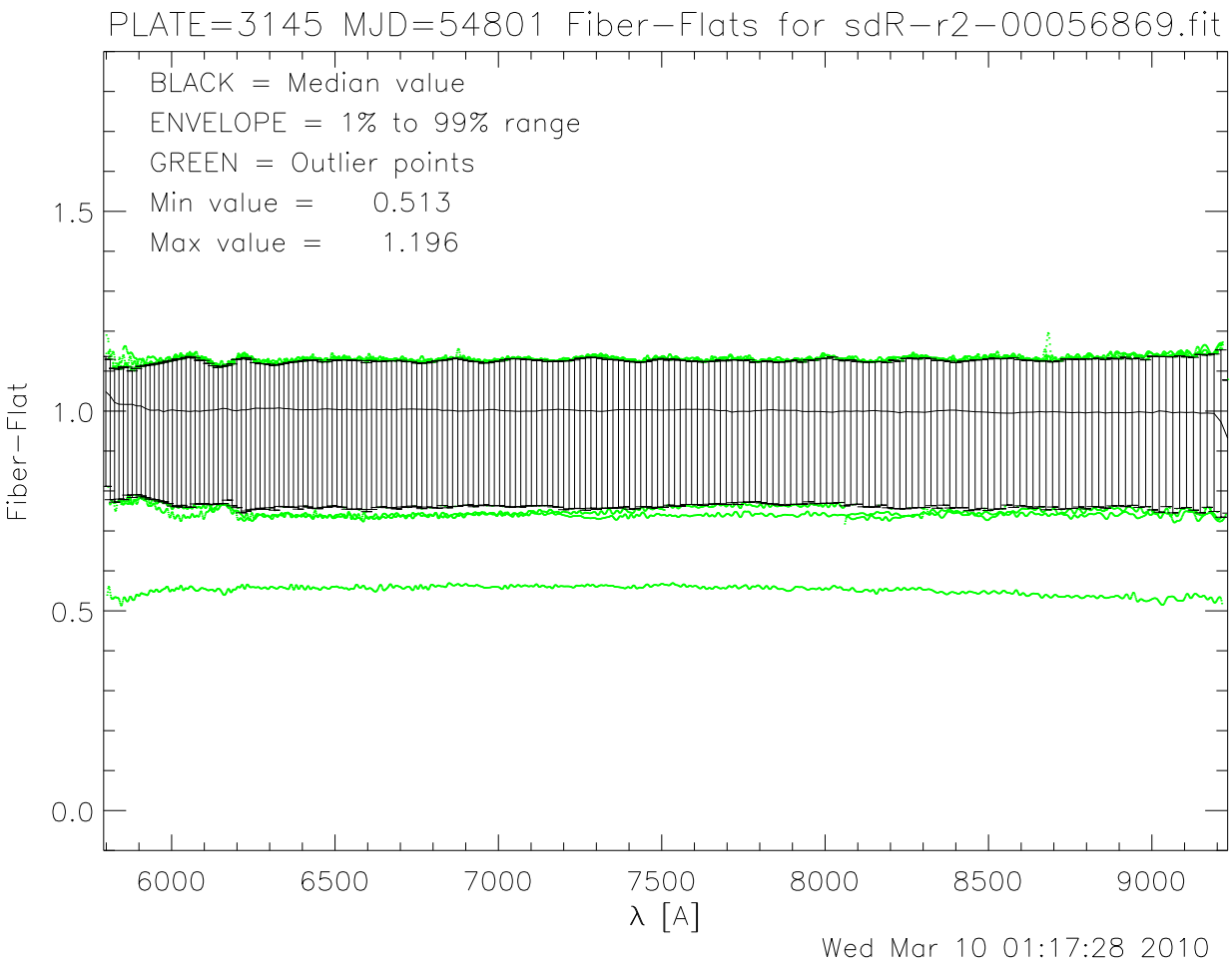

PLATE=3145 MJD=54801 flat extraction chi^2 for sdR−r2−00056865.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

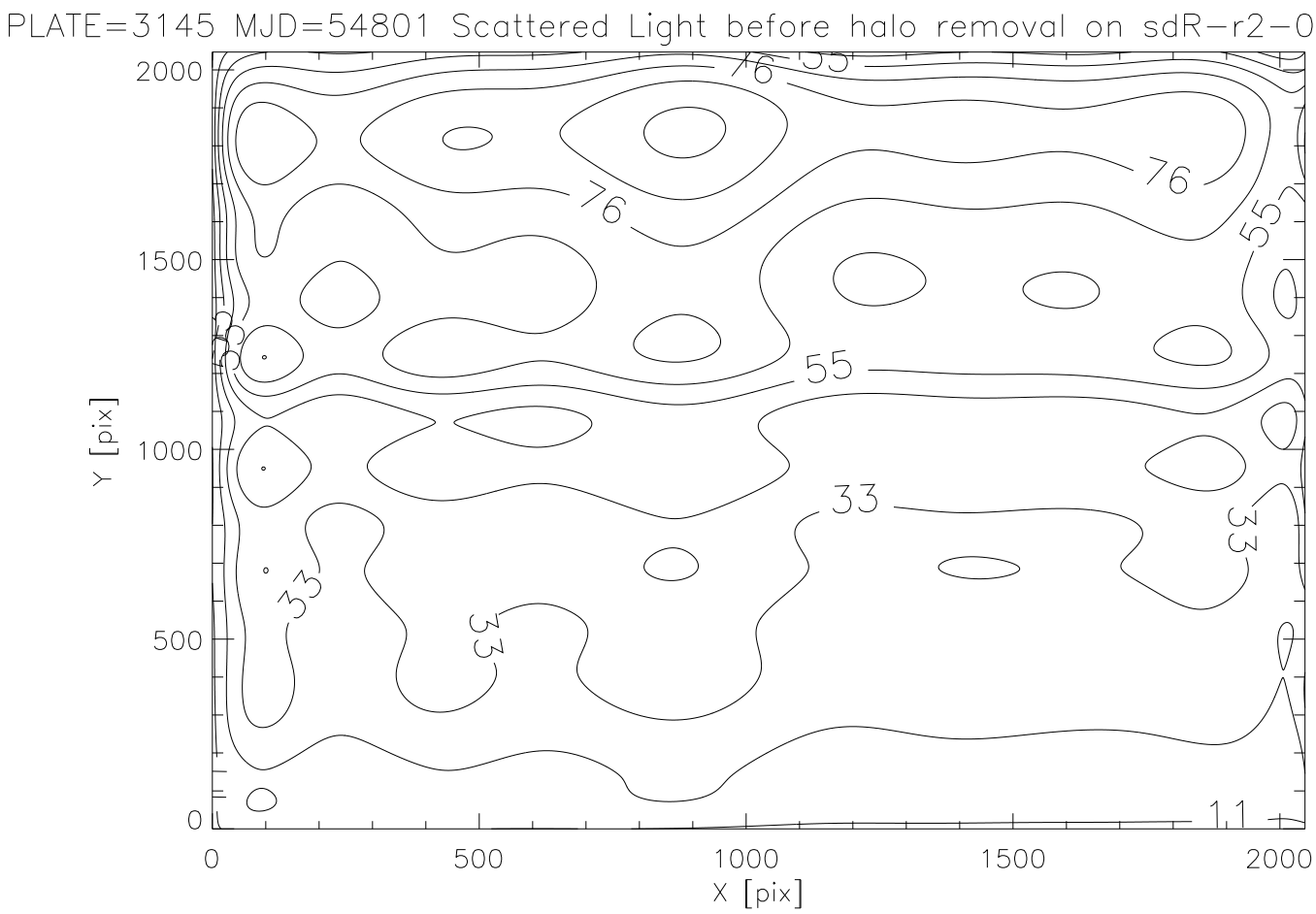

PLATE=3145 MJD=54801 Superflat sdR-r2-00056865.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

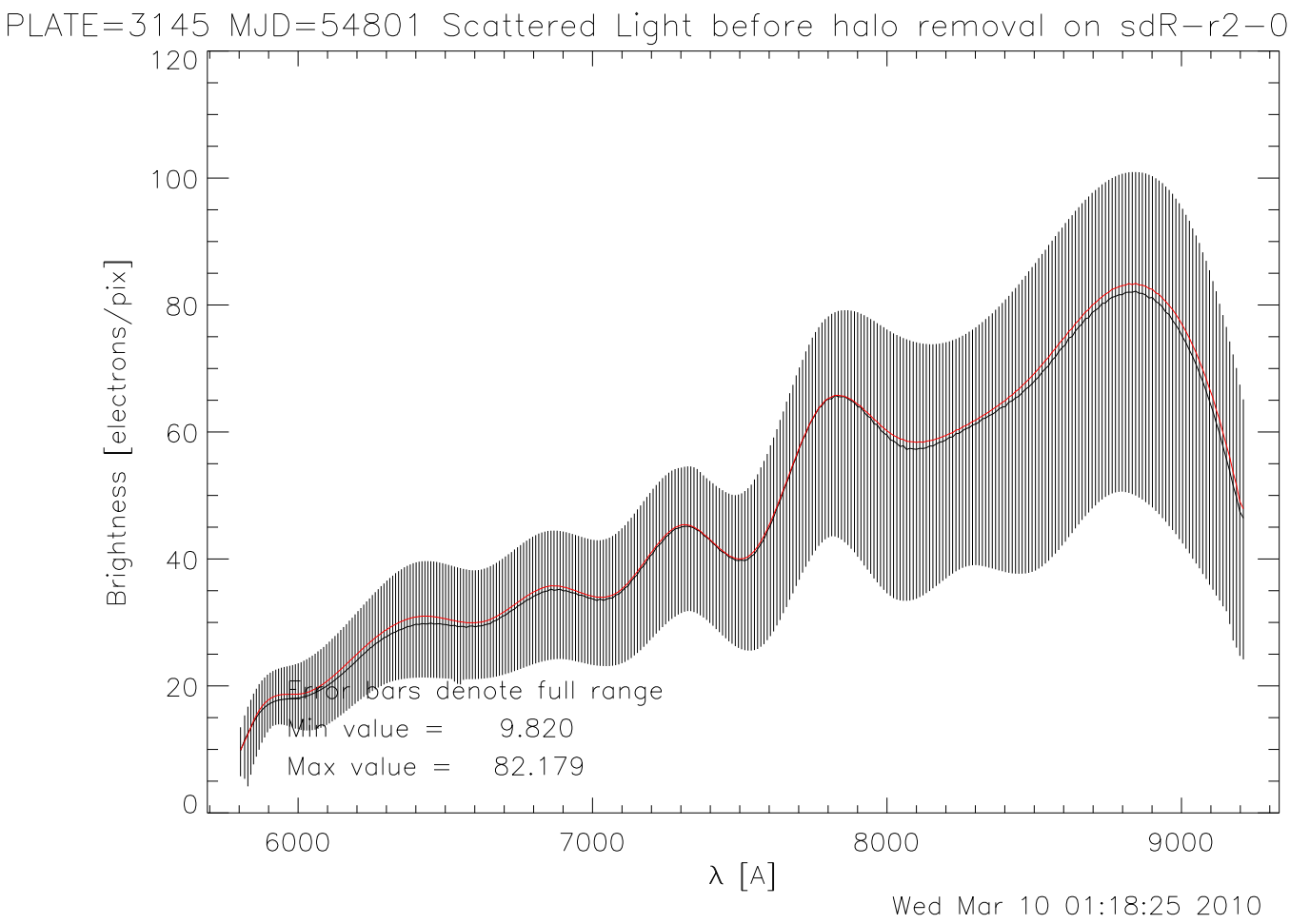

PLATE=3145 MJD=54801 flat extraction chi^2 for sdR−r2−00056869.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

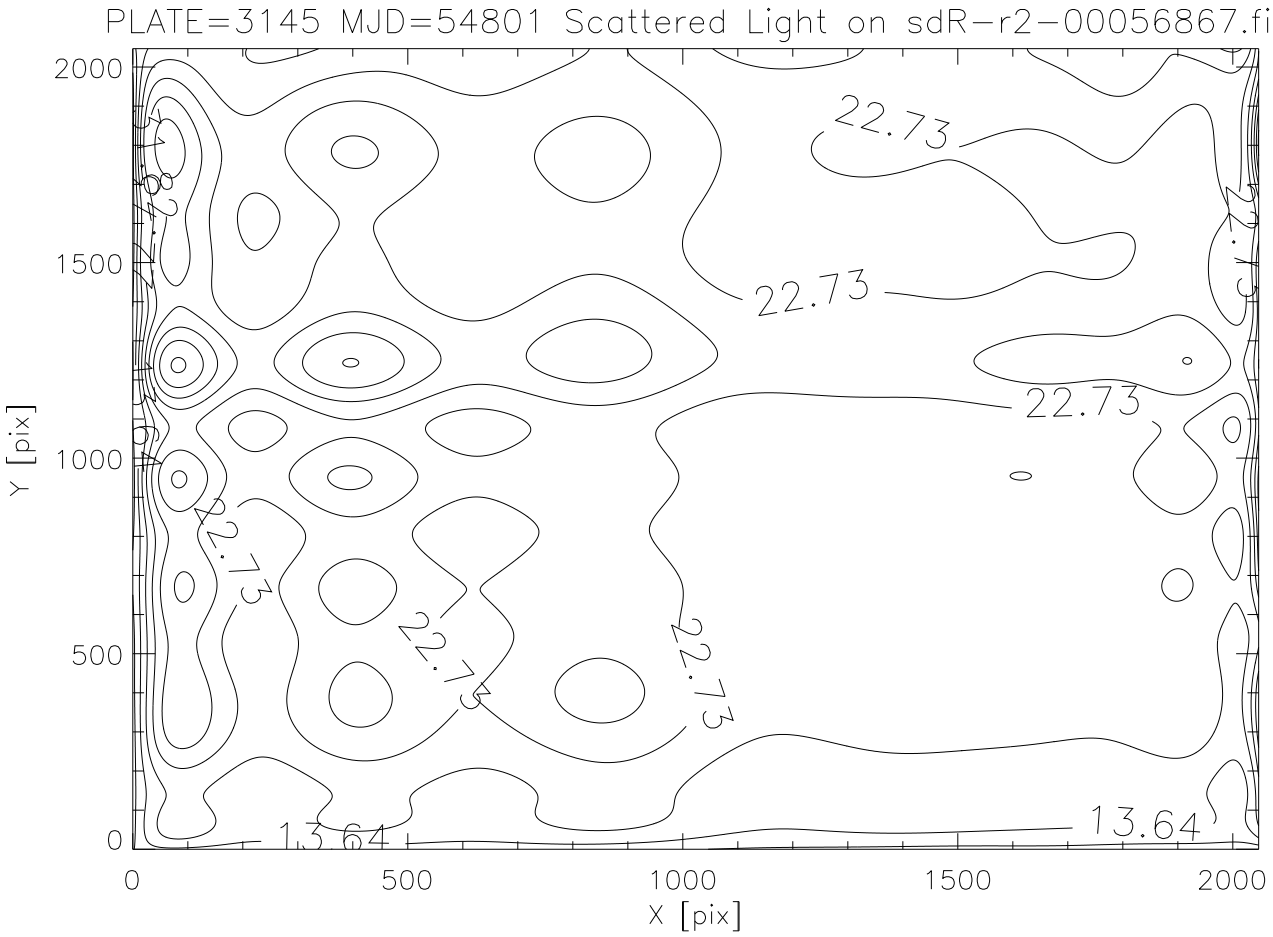

PLATE=3145 MJD=54801 Superflat sdR-r2-00056869.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

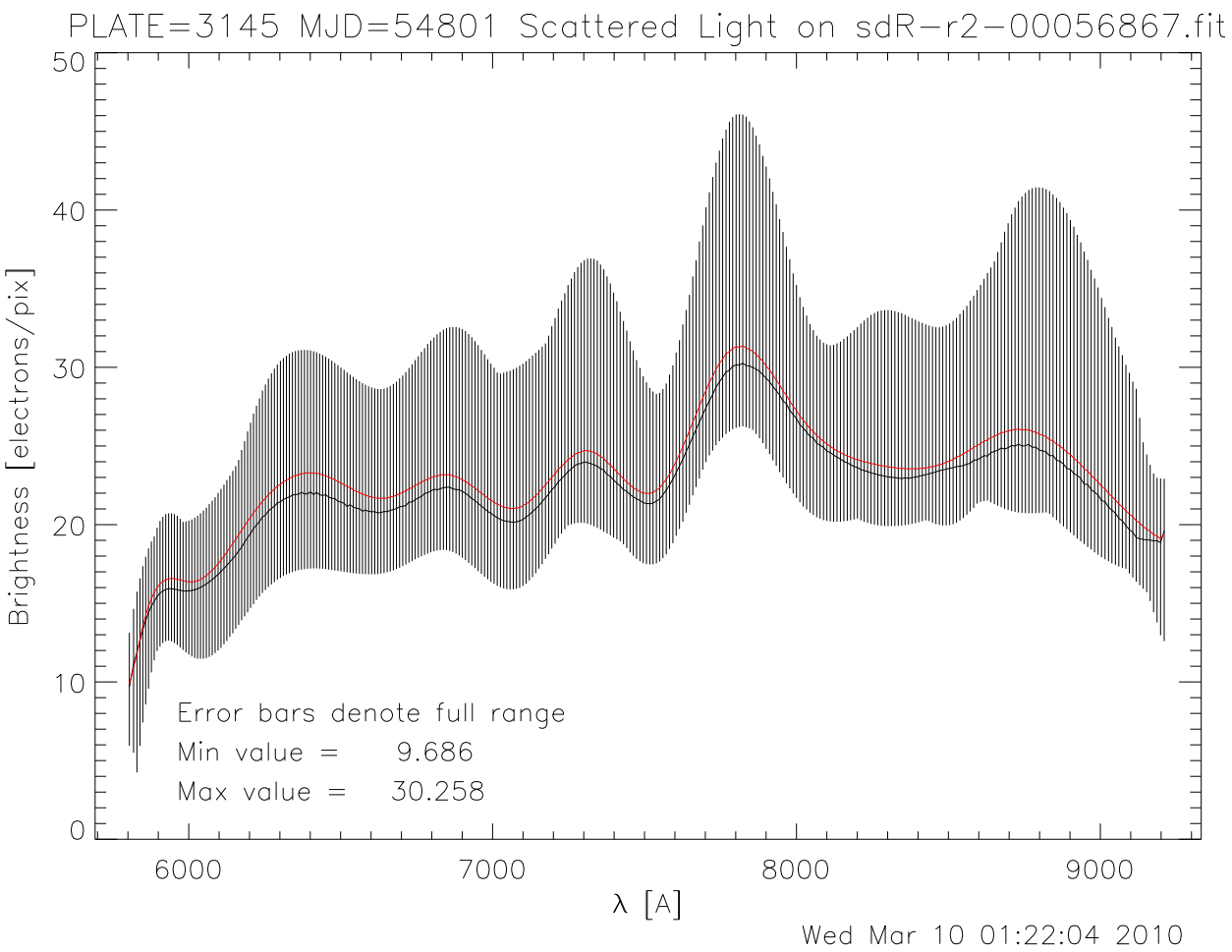

PLATE=3145 MJD=54801 Arcline Fit for sdR-r2-00056870.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Mar 10 01:17:19 2010

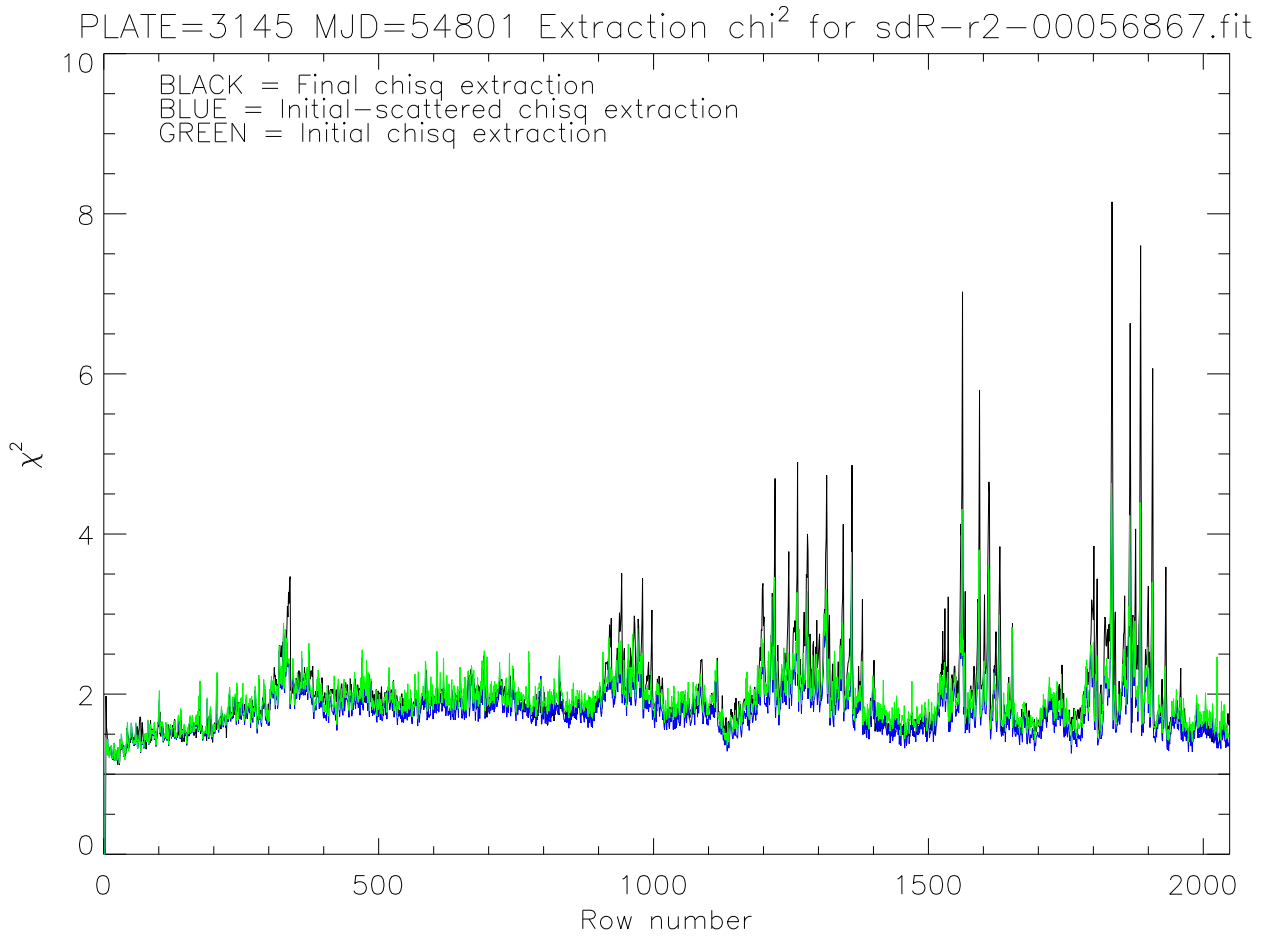

PLATE=3145 MJD=54801 Fiber-Flats for sdR-r2-00056869.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.513
Max value = 1.196
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 01:17:28 2010

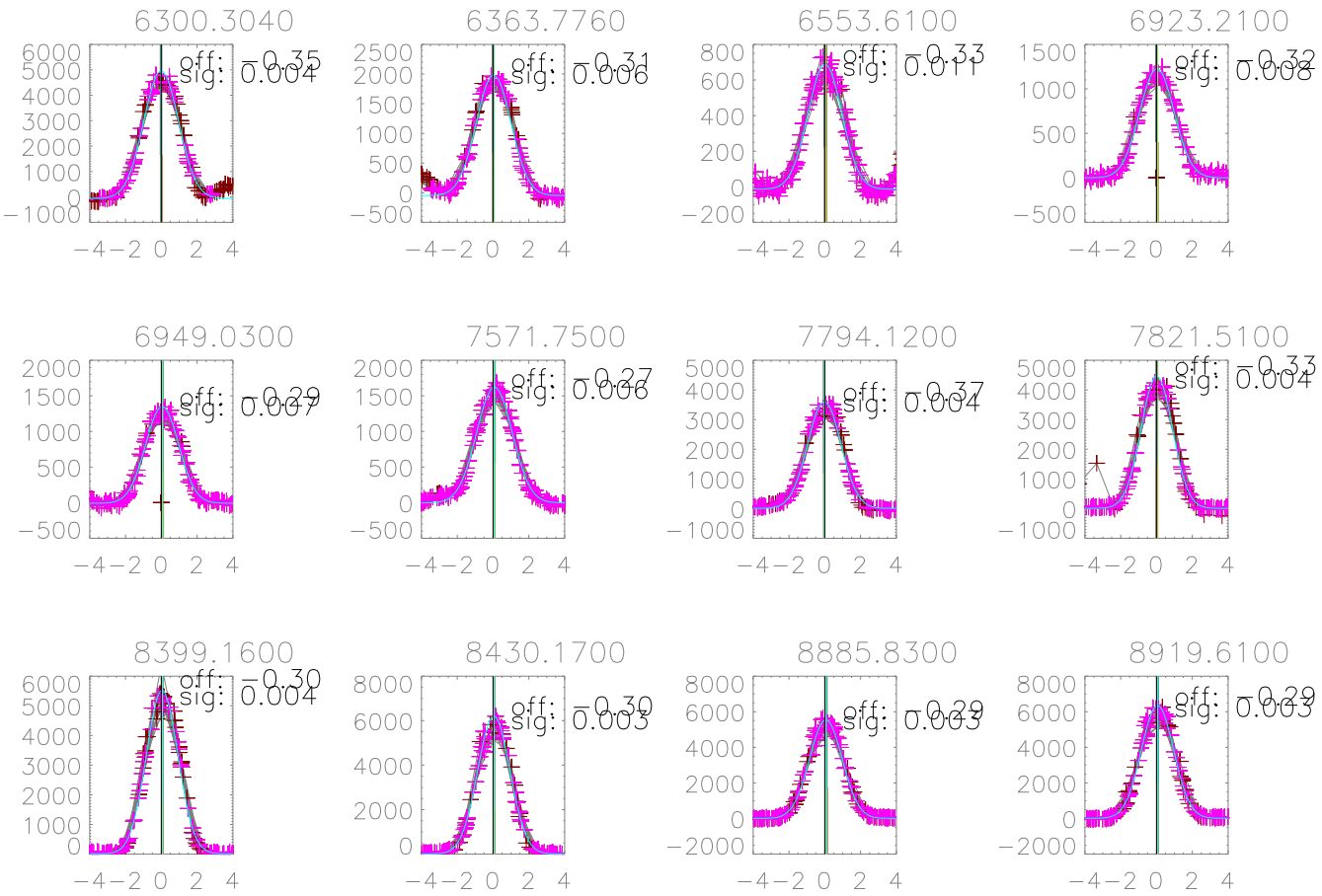

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-r2-00056867.fi
76
55
33
0
1.1
Y [pix]
X [pix]
0
500
1000
1500
2000

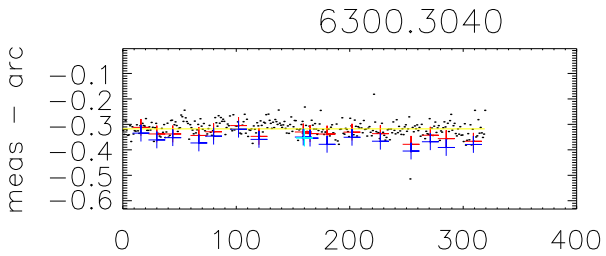

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-r2-00056867.fi
Brightness [electrons/pix]
120
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.820
Max value = 82.179
Wed Mar 10 01:18:25 2010

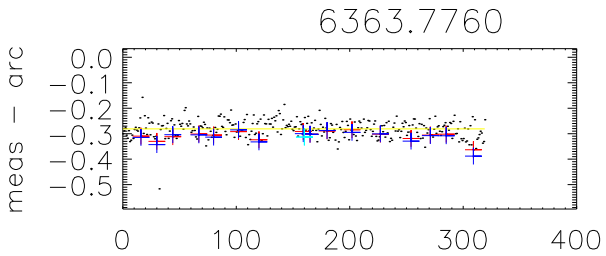

PLATE=3145 MJD=54801 Scattered Light on sdR-r2-00056867.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
22.73
22.73
22.73
22.73
22.73
22.73
13.64
13.64

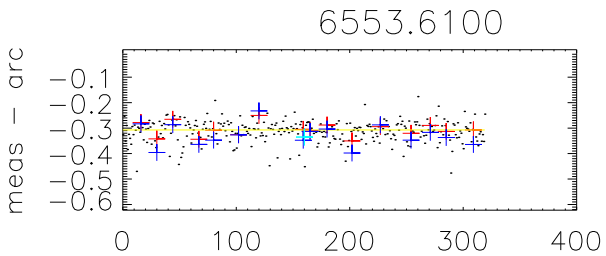

PLATE=3145 MJD=54801 Scattered Light on sdR-r2-00056867.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.686
Max value = 30.258
Wed Mar 10 01:22:04 2010

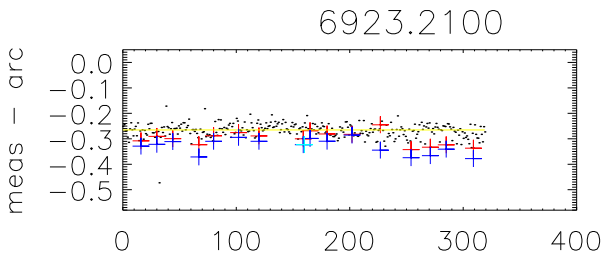

PLATE=3145 MJD=54801 Extraction chi^2 for sdR−r2−00056867.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

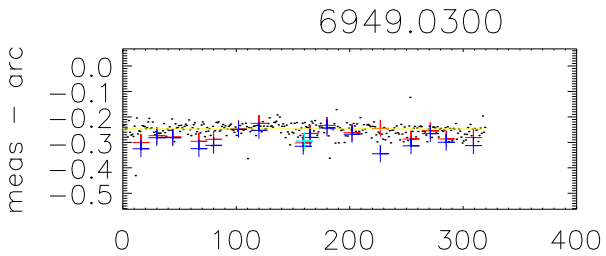

6300.3040
off: −0.35
sig: 0.004
6363.7760
off: −0.31
sig: 0.006
6553.6100
off: −0.33
sig: 0.011
6923.2100
off: −0.32
sig: 0.008
6949.0300
off: −0.29
sig: 0.007
7571.7500
off: −0.27
sig: 0.006
7794.1200
off: −0.37
sig: 0.004
7821.5100
off: −0.33
sig: 0.004
8399.1600
off: −0.30
sig: 0.004
8430.1700
off: −0.30
sig: 0.003
8885.8300
off: −0.29
sig: 0.003
8919.6100
off: −0.29
sig: 0.003

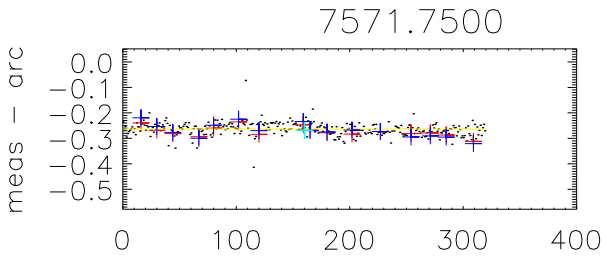

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

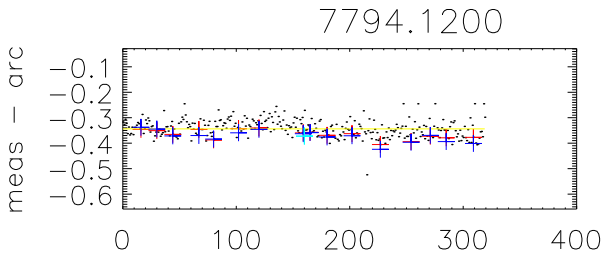

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

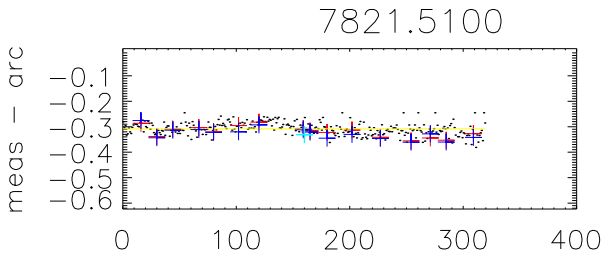

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

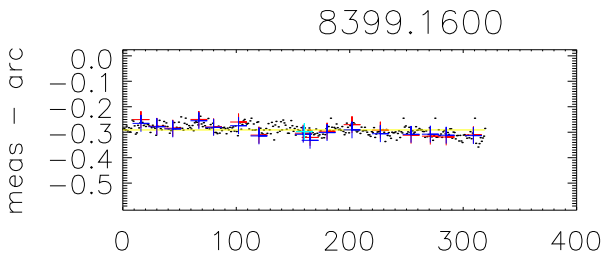

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

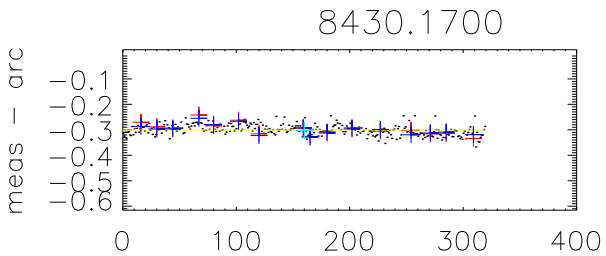

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

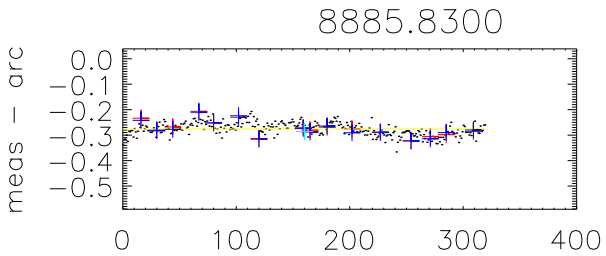

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

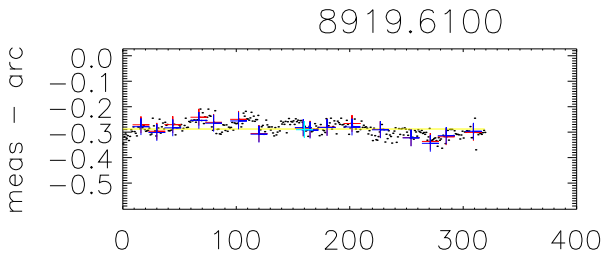

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

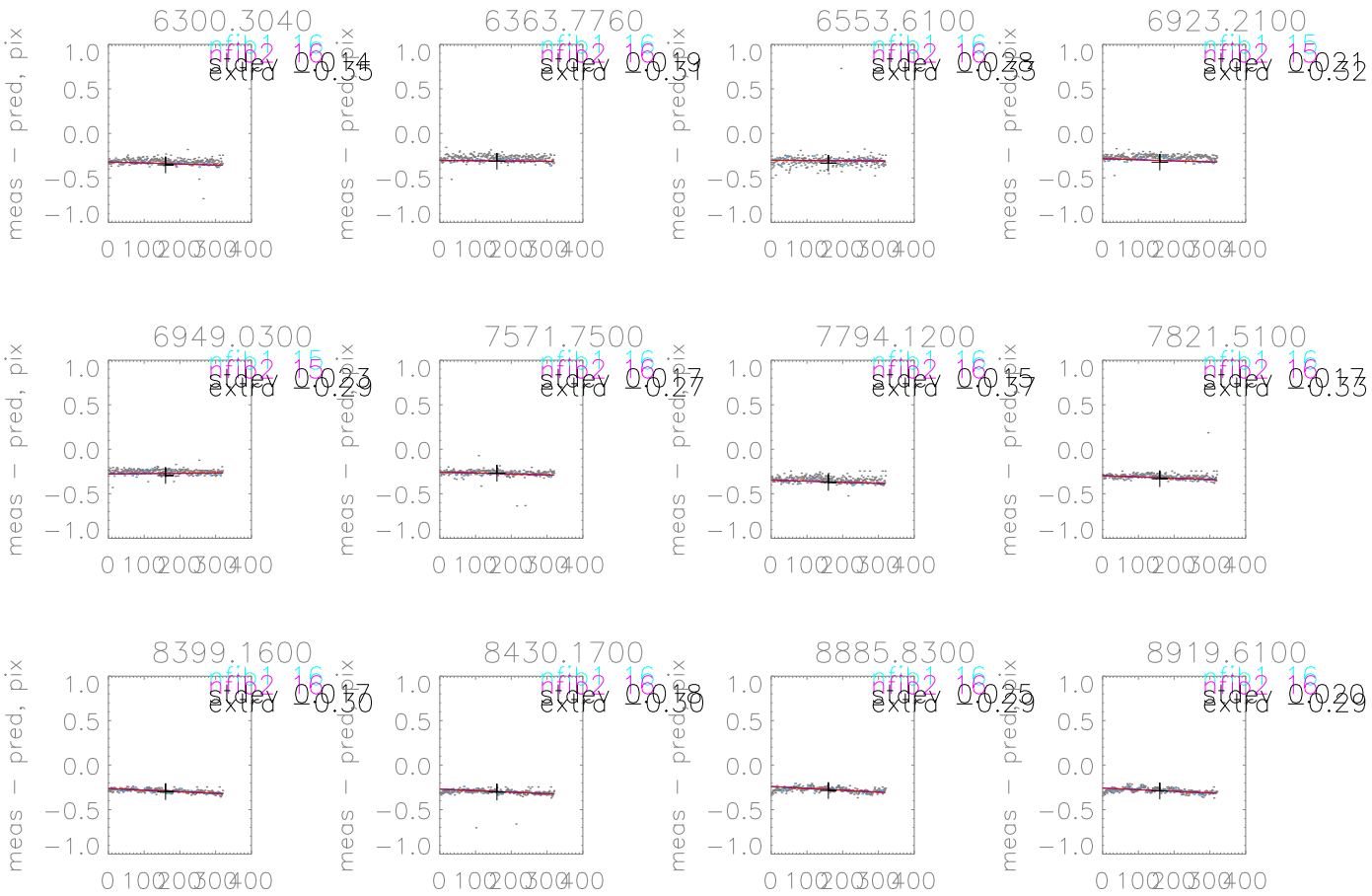

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

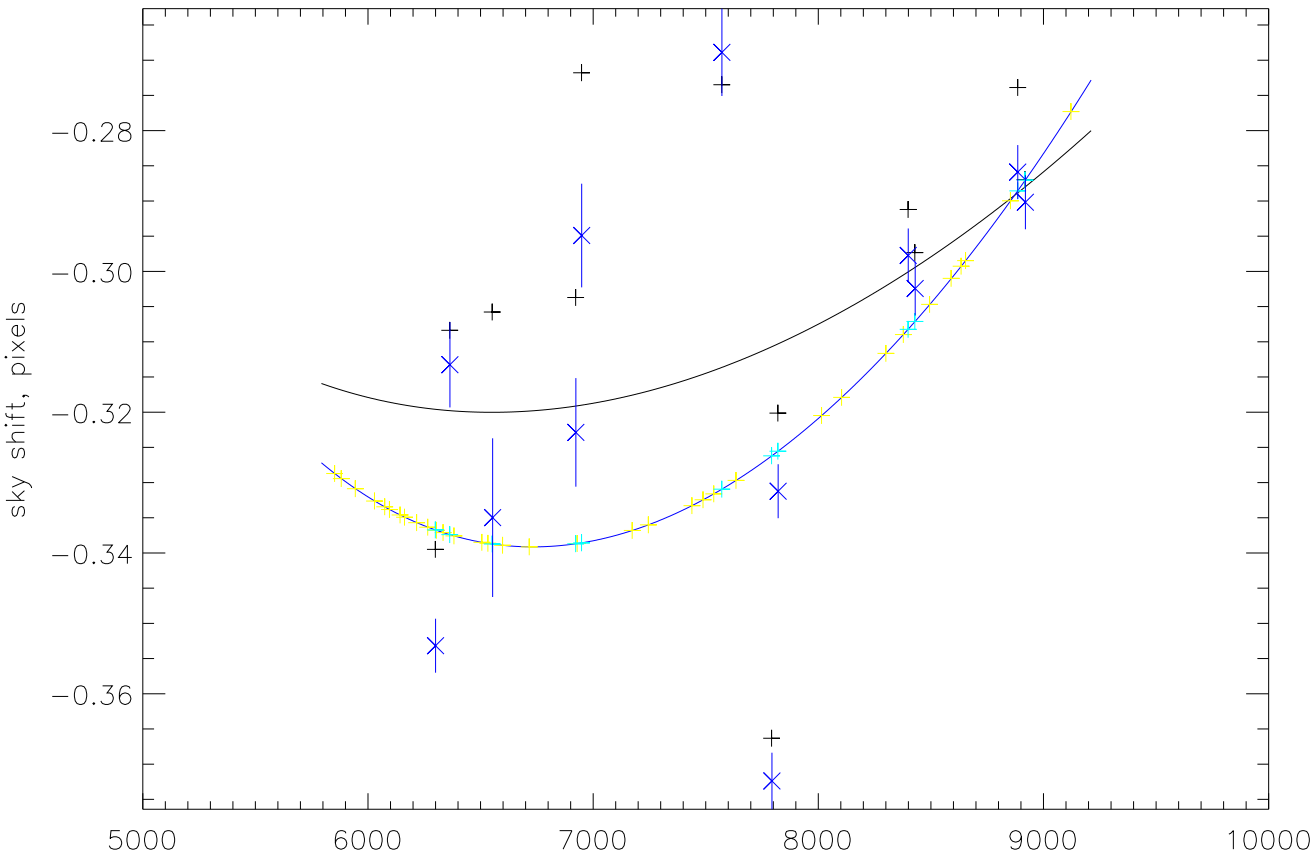

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

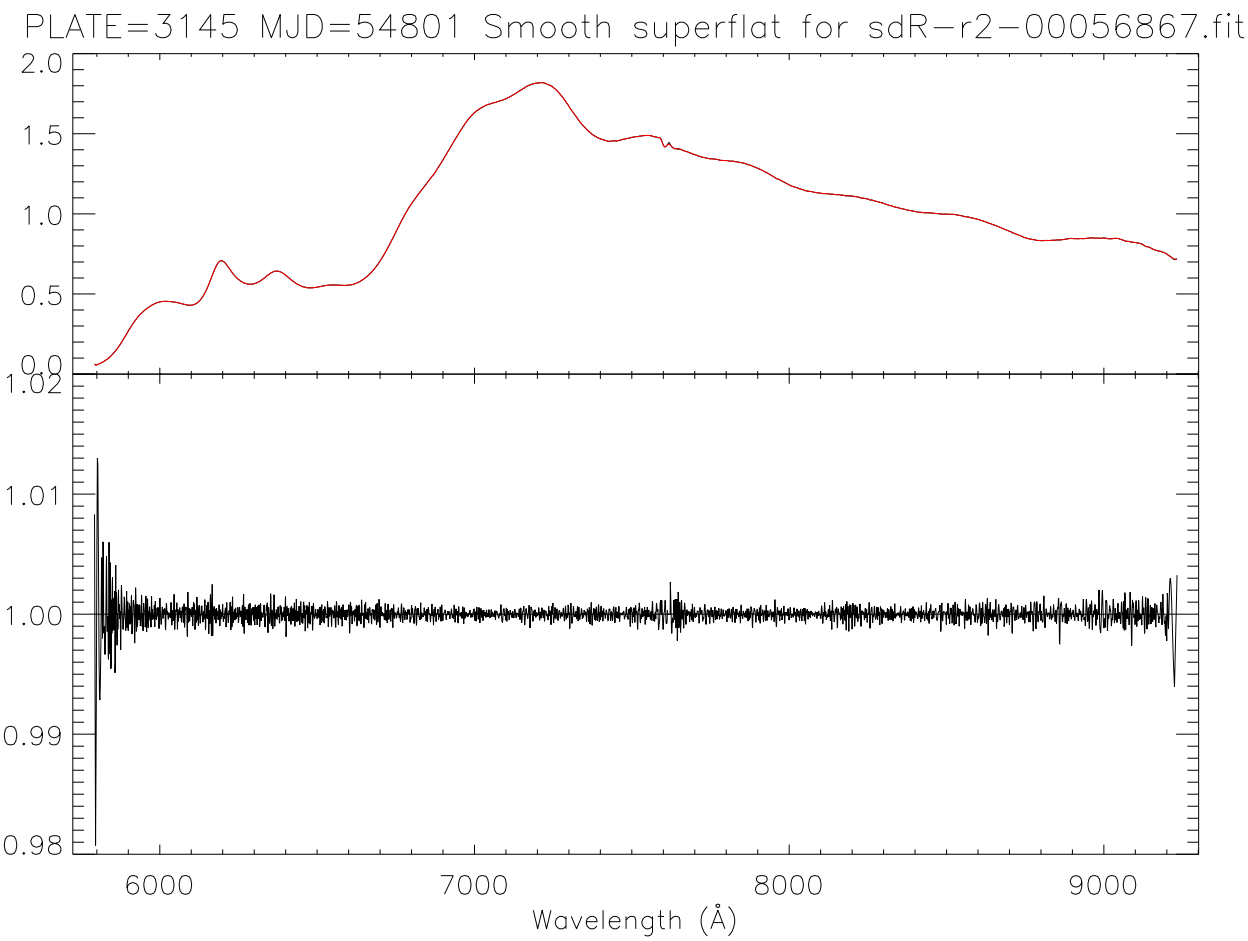

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

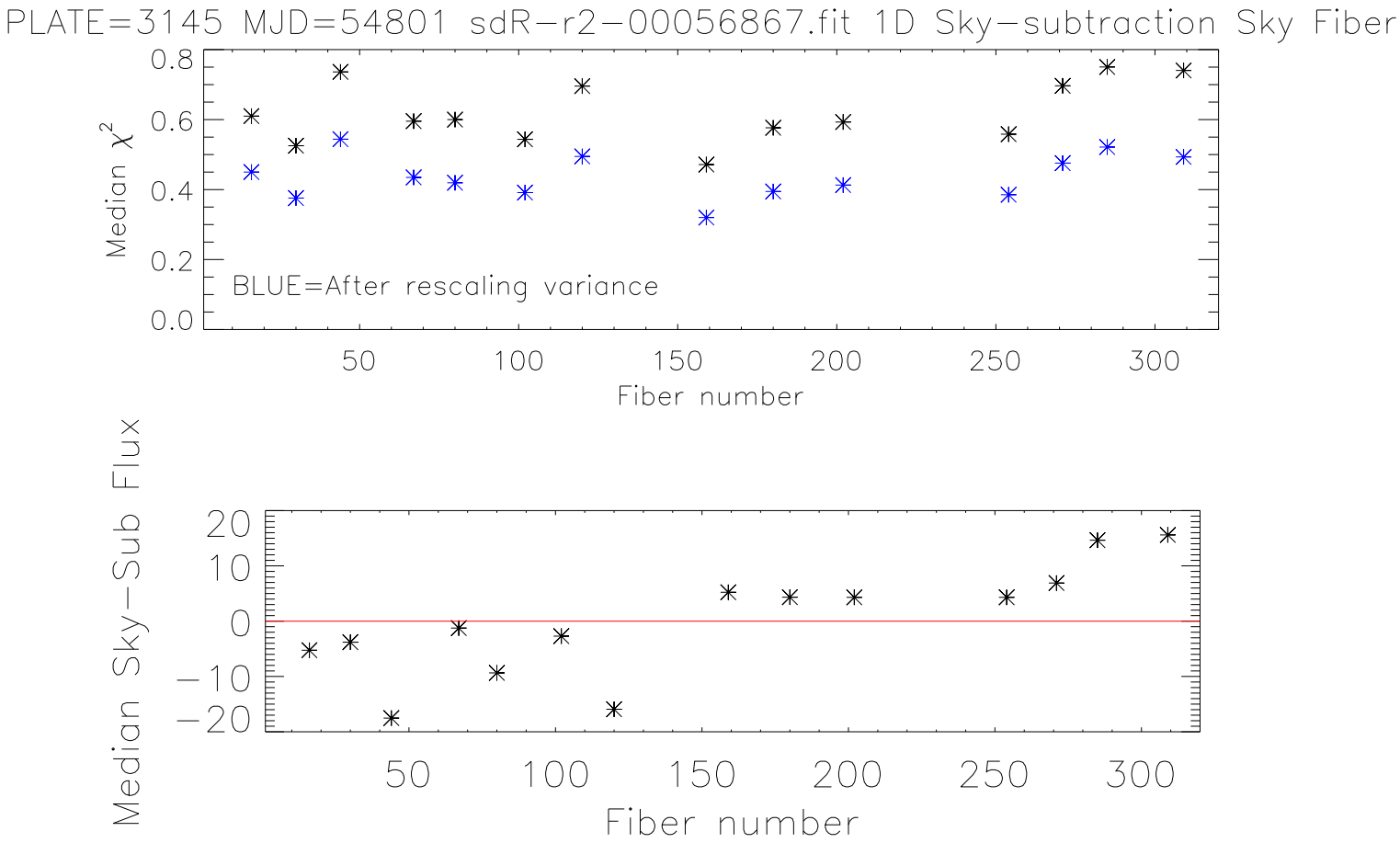

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

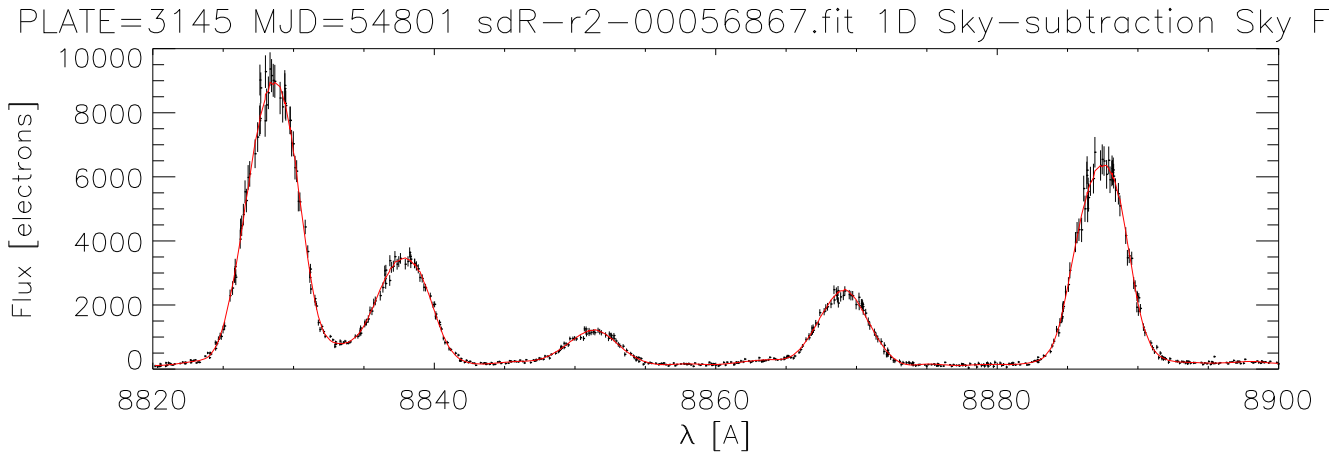

6300.3040
stdev 0.34
extra −0.35
6363.7760
stdev 0.39
extra −0.31
6553.6100
stdev 0.28
extra −0.33
6923.2100
stdev 0.21
extra −0.32
6949.0300
stdev 0.23
extra −0.29
7571.7500
stdev 0.17
extra −0.27
7794.1200
stdev 0.15
extra −0.37
7821.5100
stdev 0.17
extra −0.33
8399.1600
stdev 0.17
extra −0.30
8430.1700
stdev 0.18
extra −0.30
8885.8300
stdev 0.25
extra −0.29
8919.6100
stdev 0.20
extra −0.29
meas − pred, pix
mfib1 16
mfib2 15

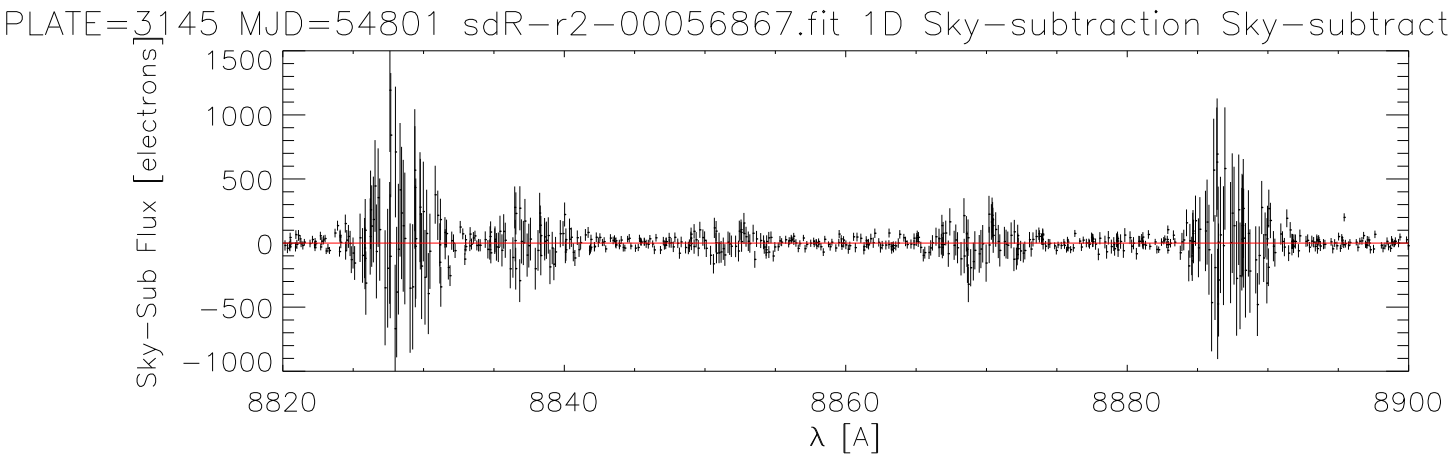

sky shift, pixels
−0.28
−0.30
−0.32
−0.34
−0.36
5000
6000
7000
8000
9000
10000

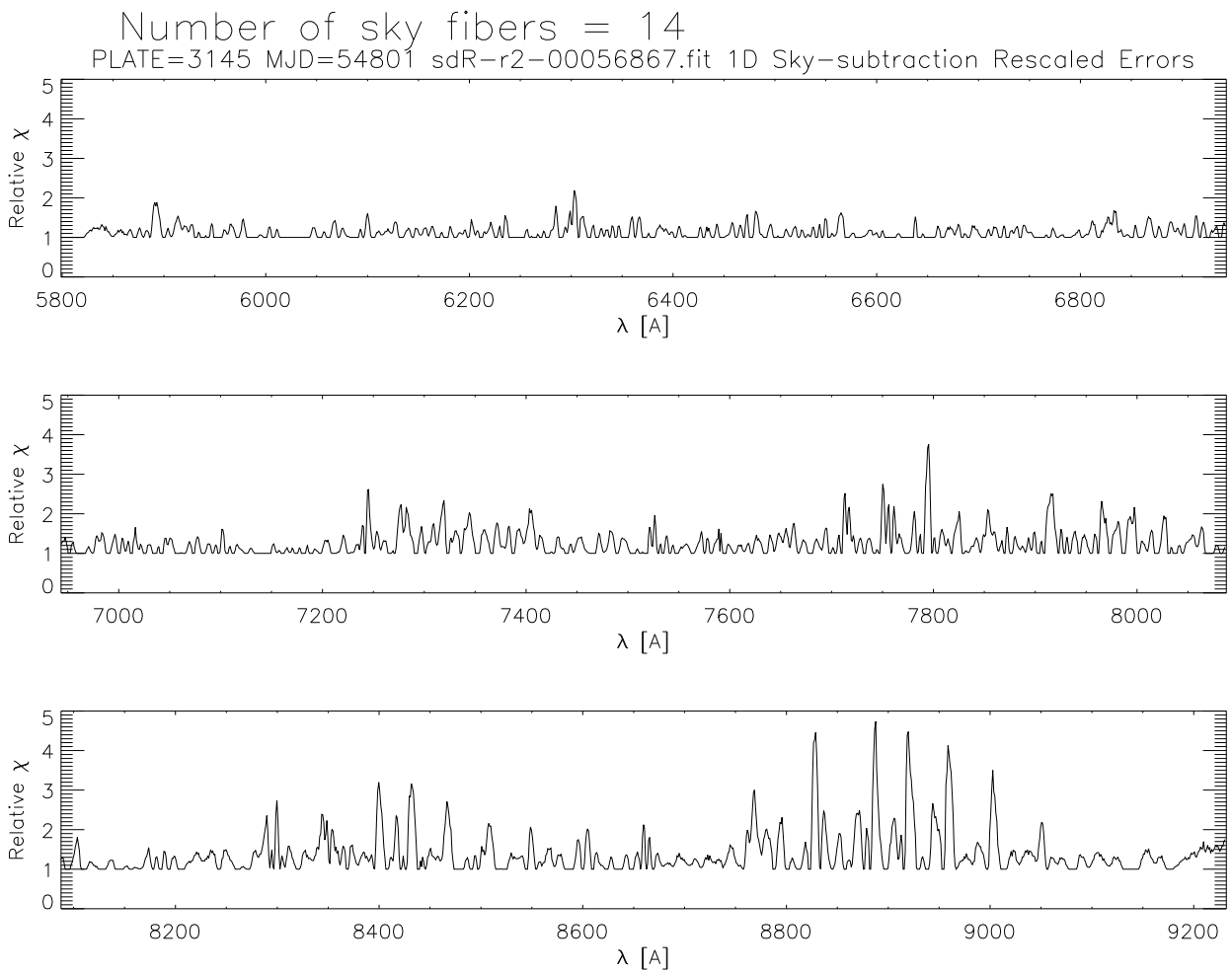
es= −0.0000

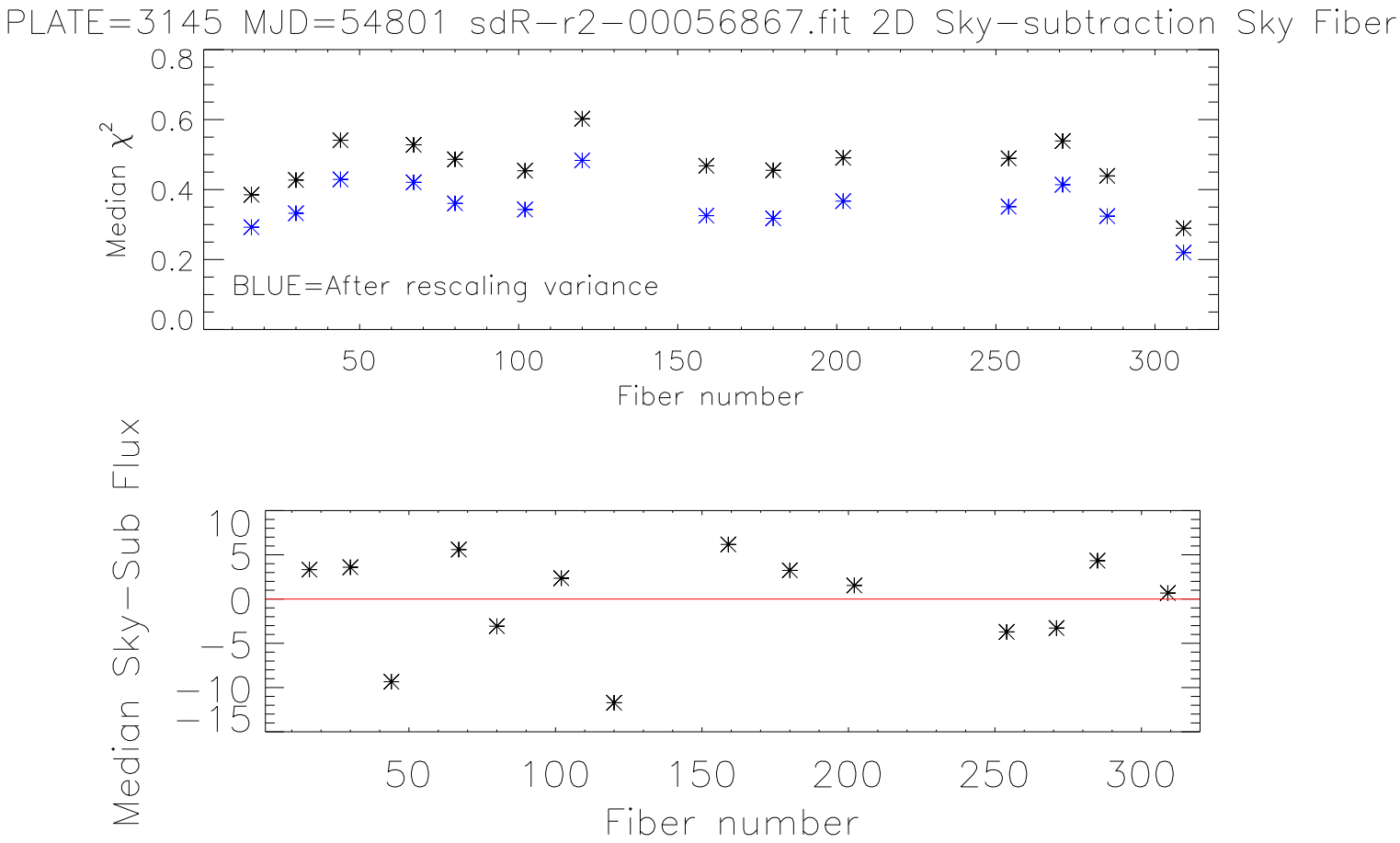

PLATE=3145 MJD=54801 Smooth superflat for sdR−r2−00056867.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
6000
7000
8000
9000
Wavelength (Å)

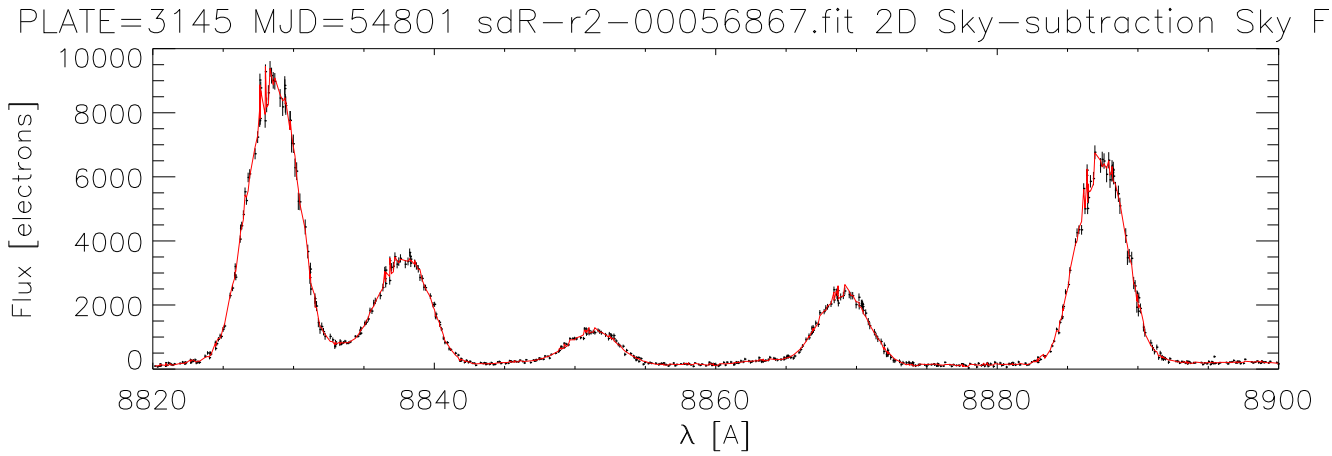

PLATE=3145 MJD=54801 sdR-r2-00056867.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
−10
−20
50
100
150
200
250
300
Fiber number

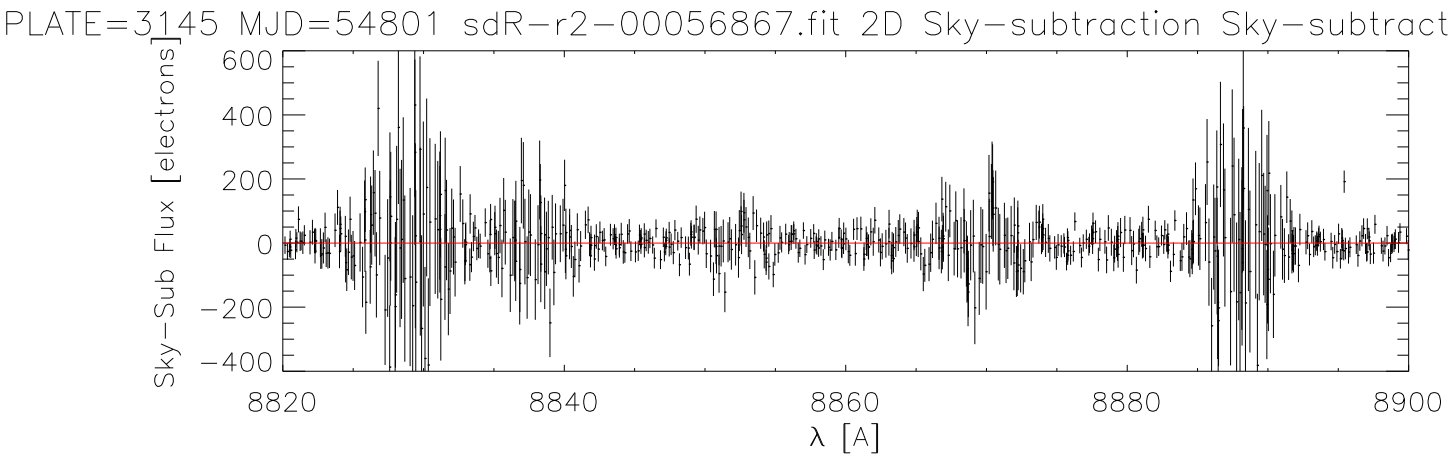

PLATE=3145 MJD=54801 sdR-r2-00056867.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

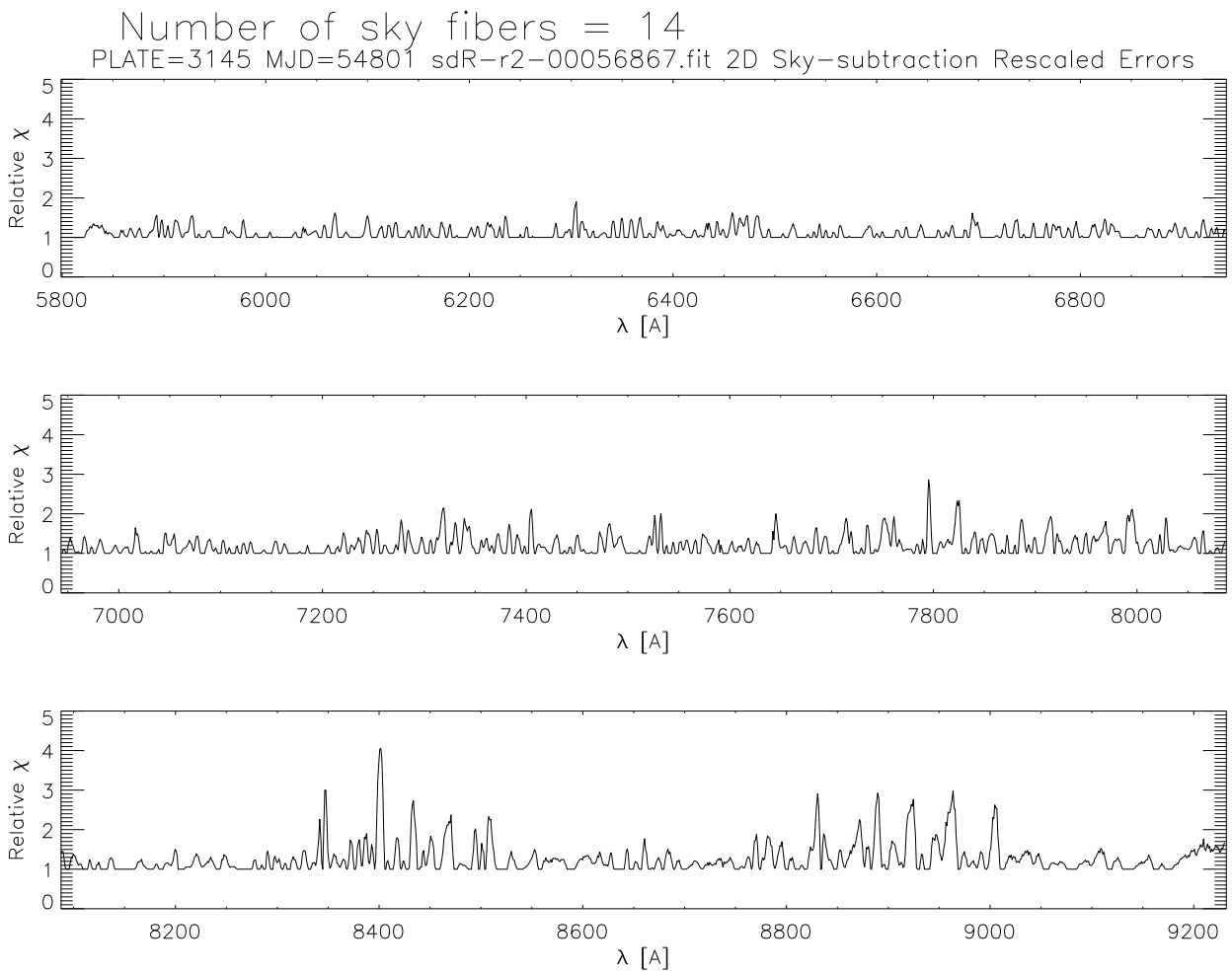

PLATE=3145 MJD=54801 sdR-r2-00056867.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

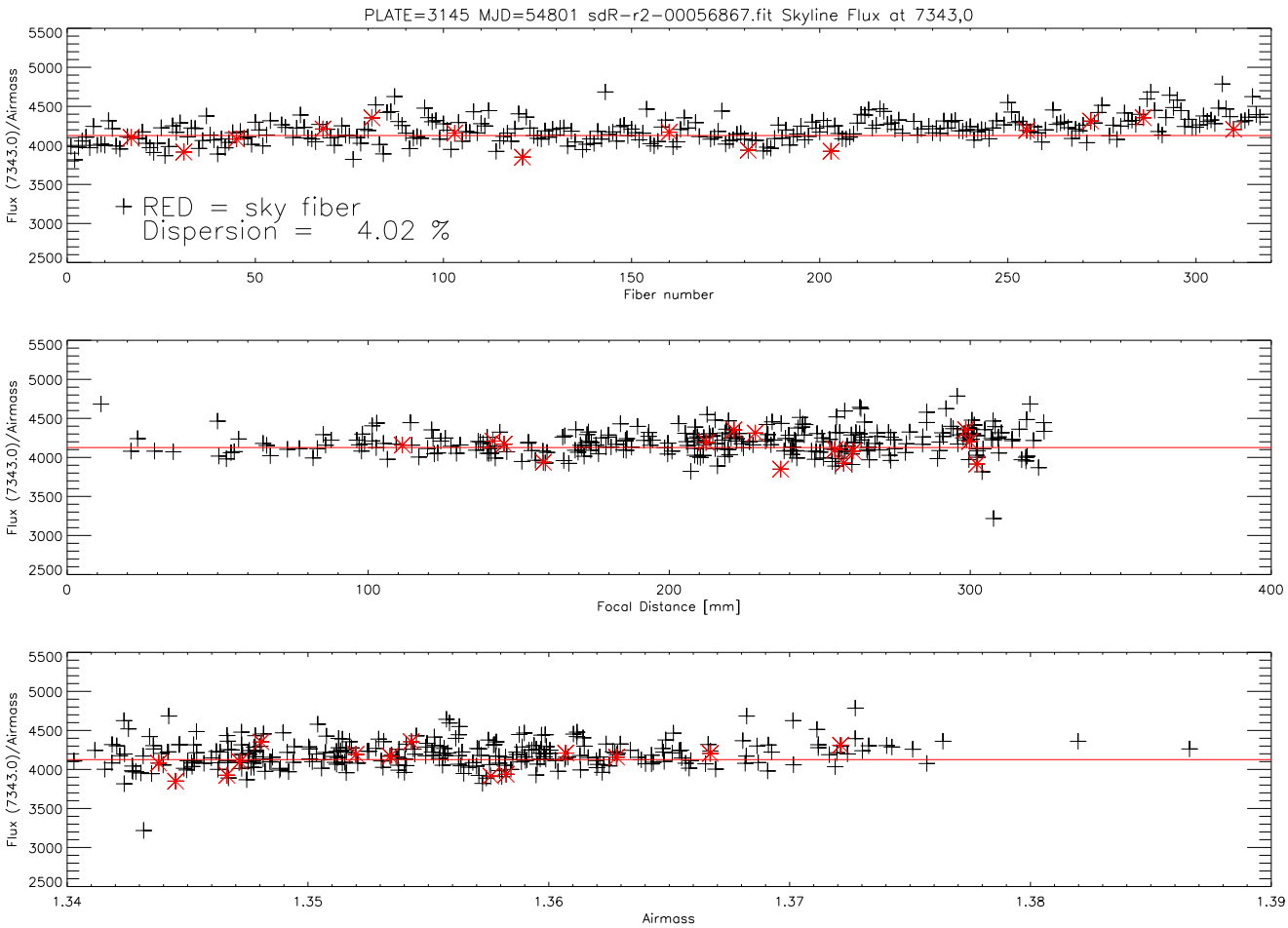

Number of sky fibers = 14
PLATE=3145 MJD=54801 sdR-r2-00056867.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

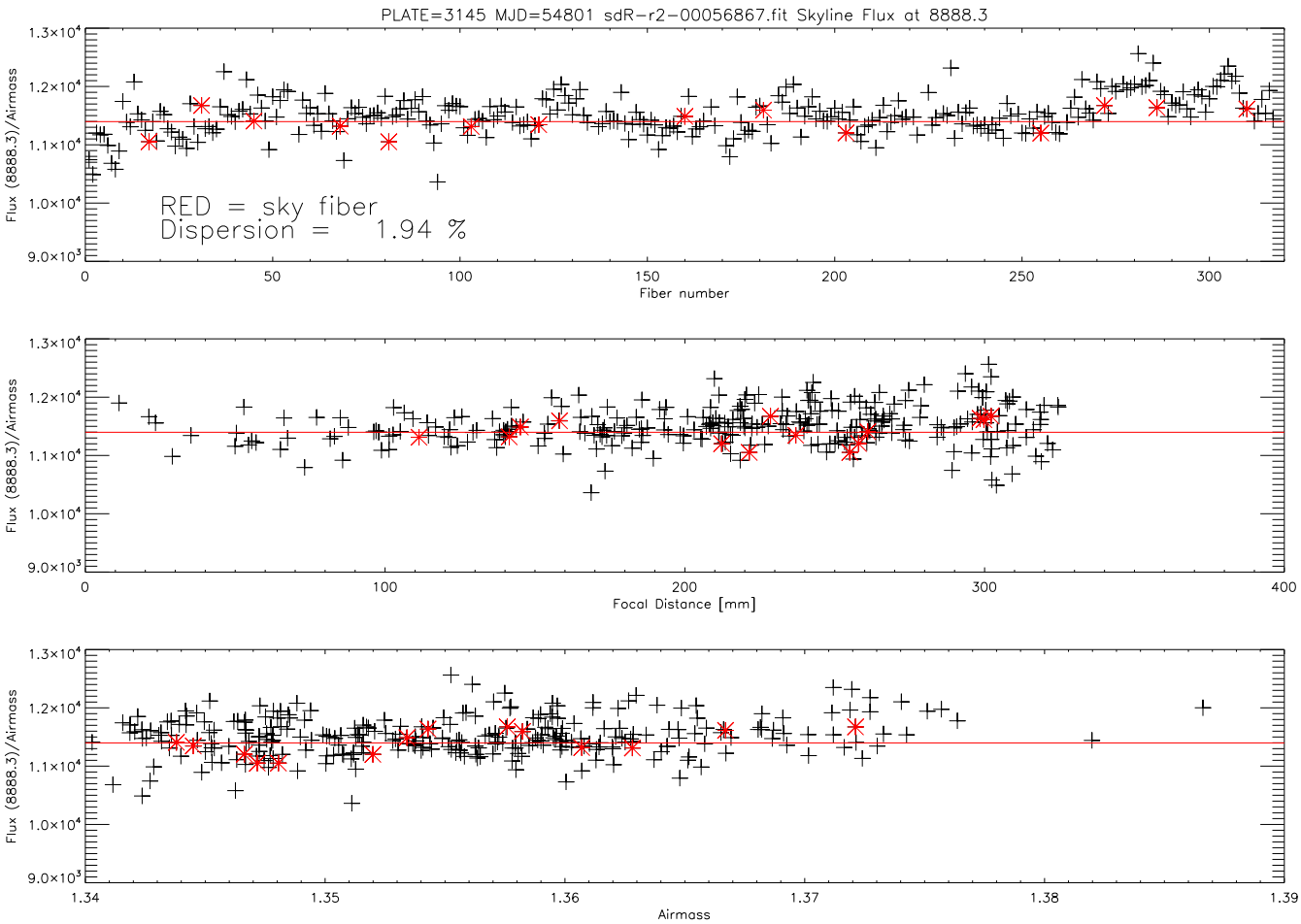

PLATE=3145 MJD=54801 sdR-r2-00056867.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

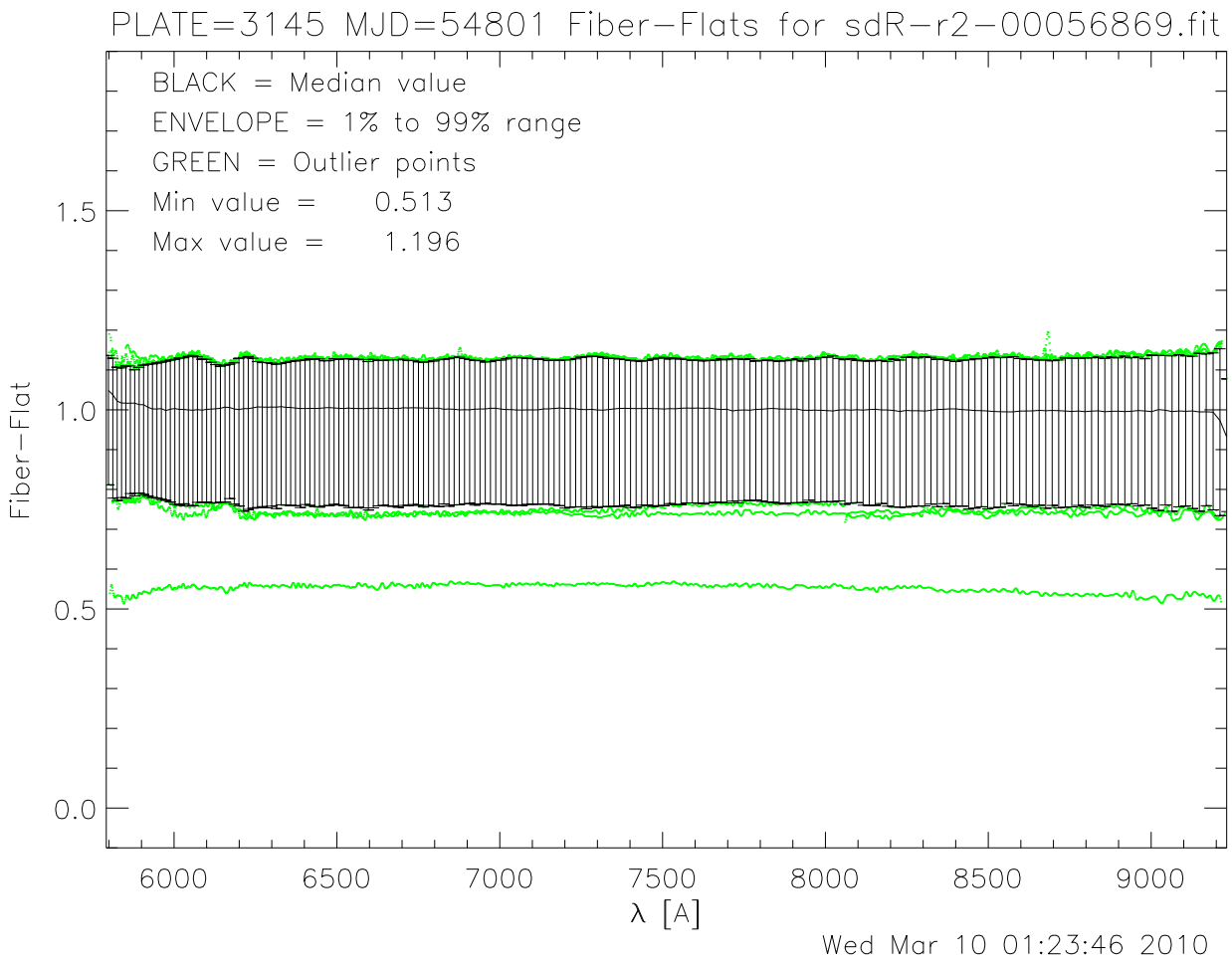

PLATE=3145 MJD=54801 sdR-r2-00056867.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

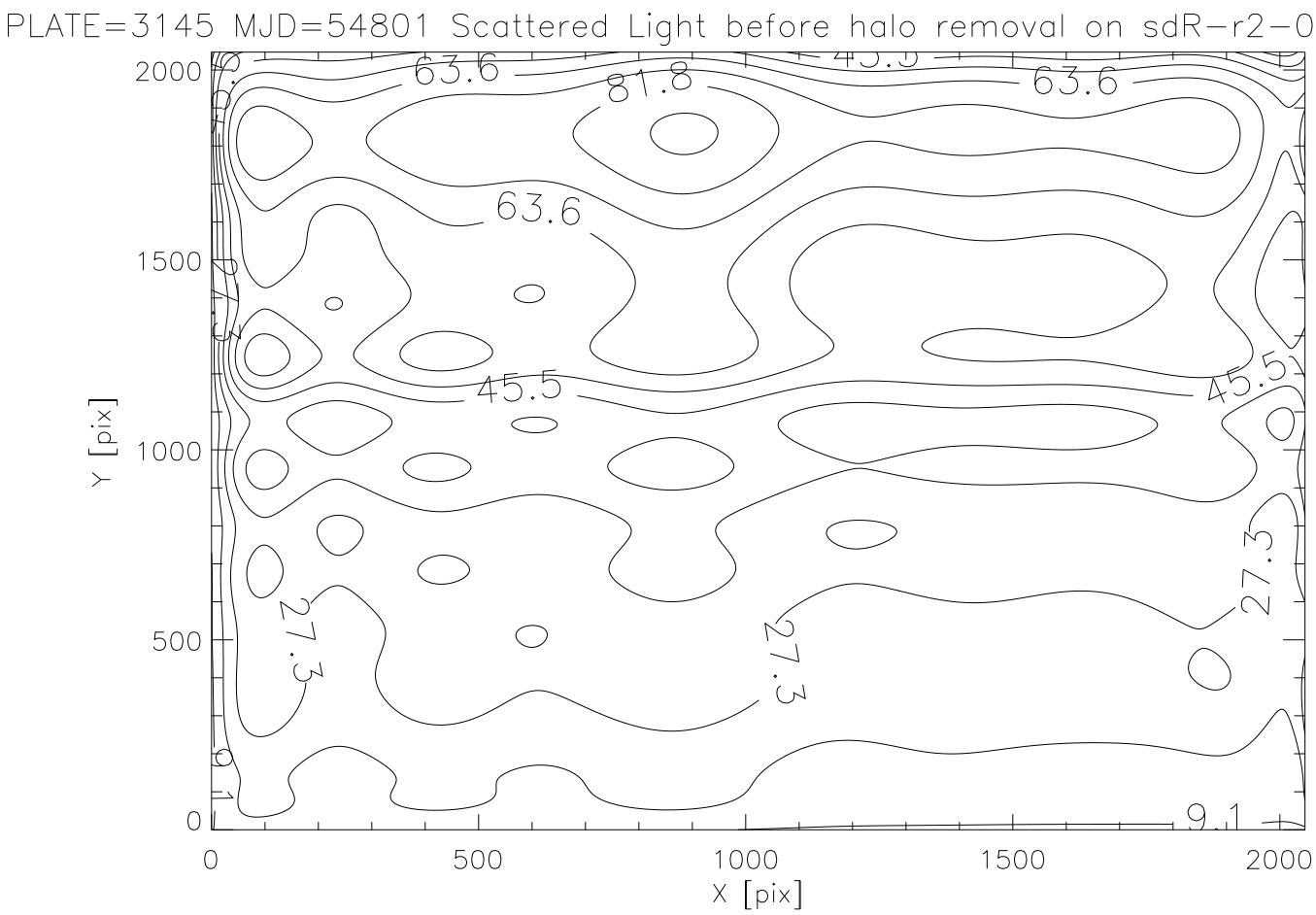

PLATE=3145 MJD=54801 sdR-r2-00056867.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

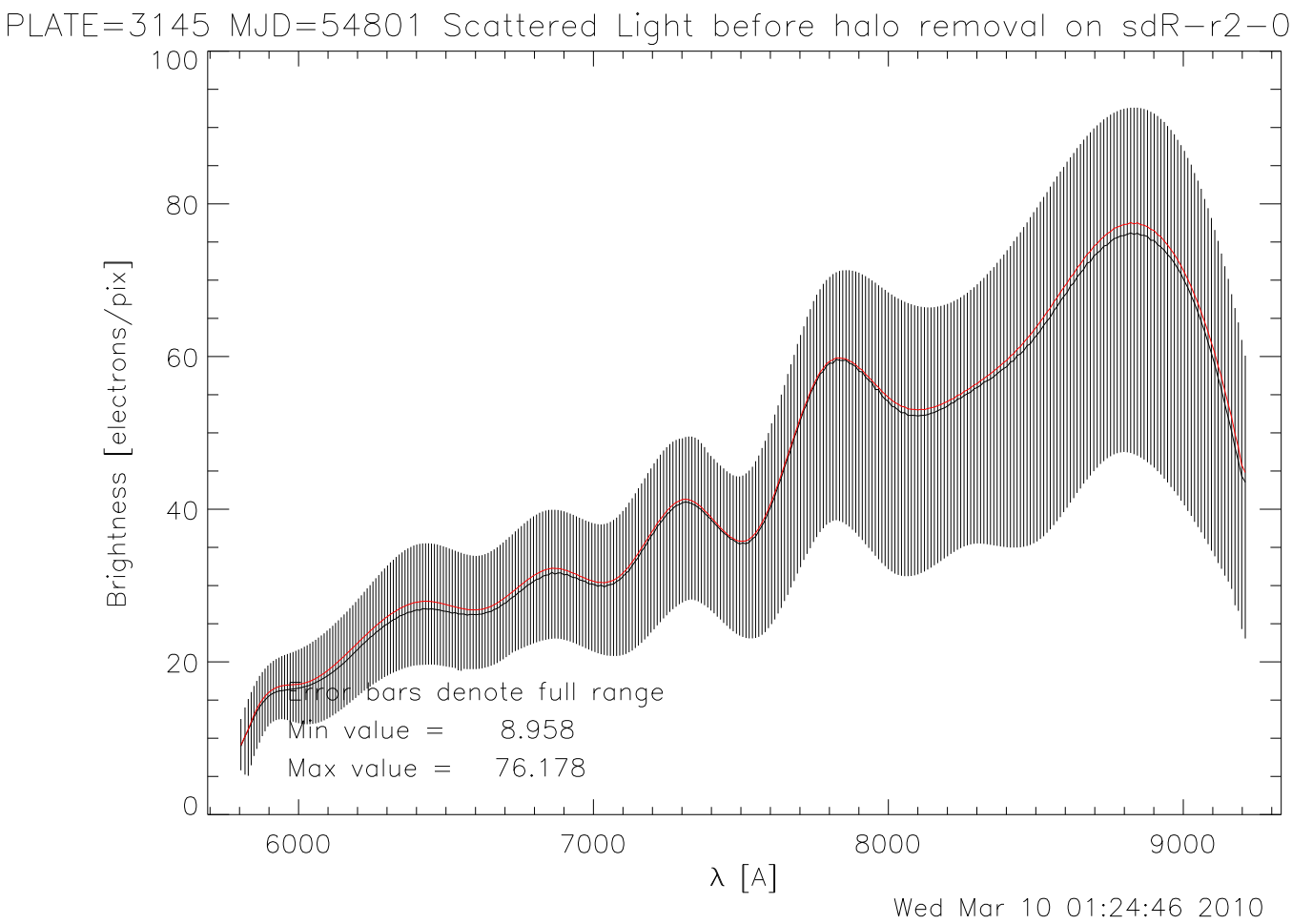

Number of sky fibers = 14
PLATE=3145 MJD=54801 sdR-r2-00056867.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

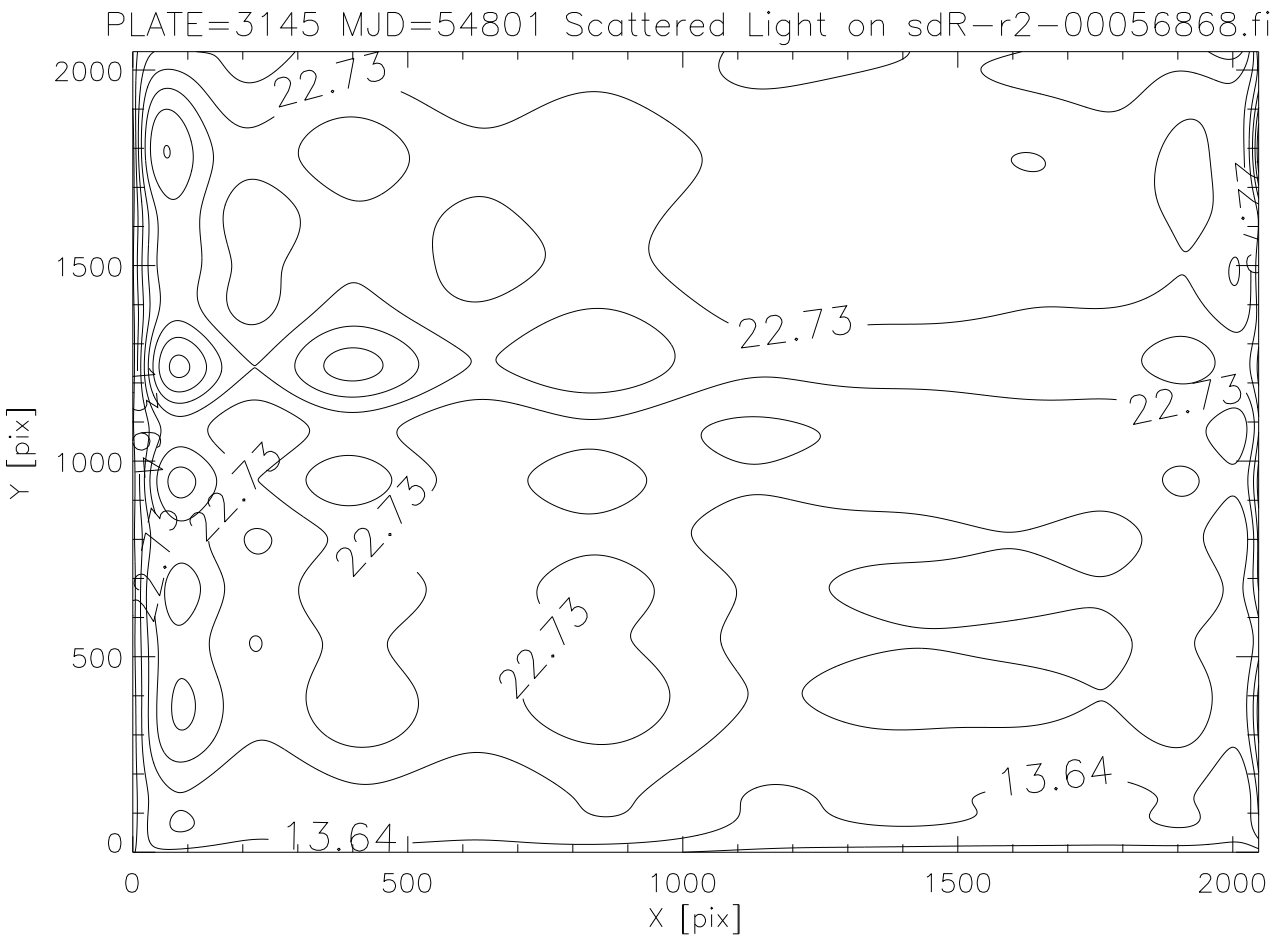

PLATE=3145 MJD=54801 sdR-r2-00056867.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
+ RED = sky fiber
Dispersion = 4.02 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

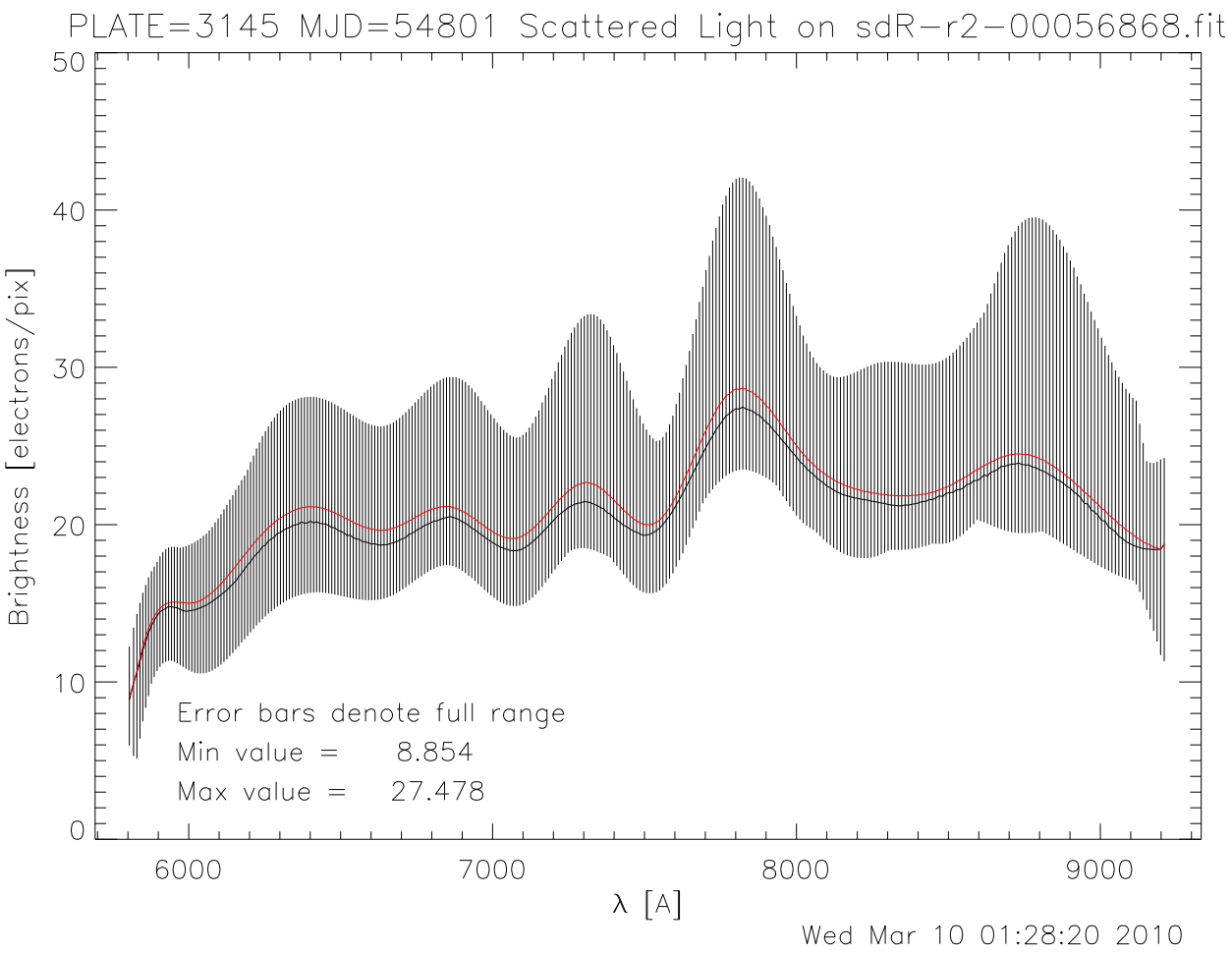

PLATE=3145 MJD=54801 sdR-r2-00056867.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.94 %
Fiber number
Focal Distance [mm]
Airmass

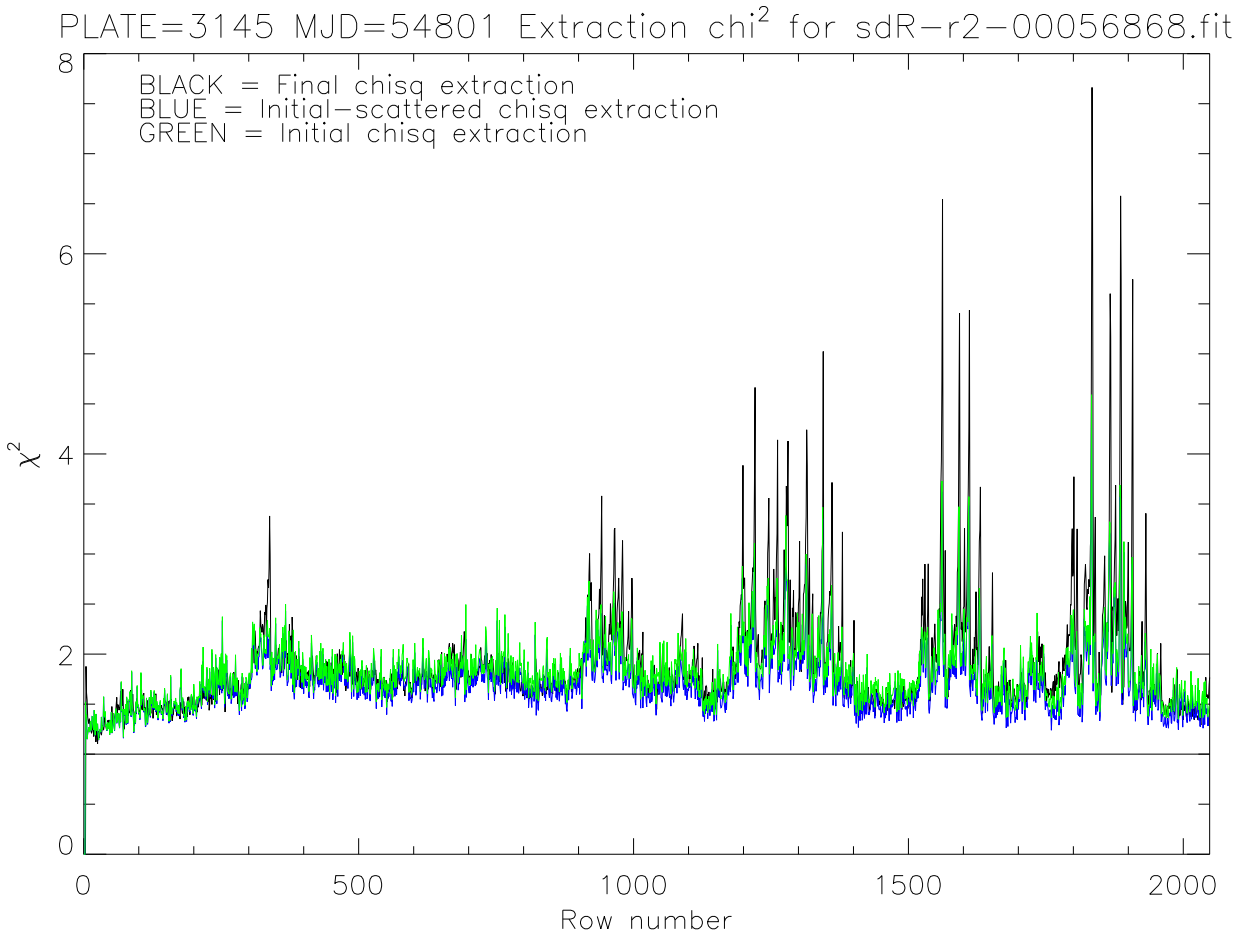

PLATE=3145 MJD=54801 Fiber−Flats for sdR−r2−00056869.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.513
Max value = 1.196
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 10 01:23:46 2010

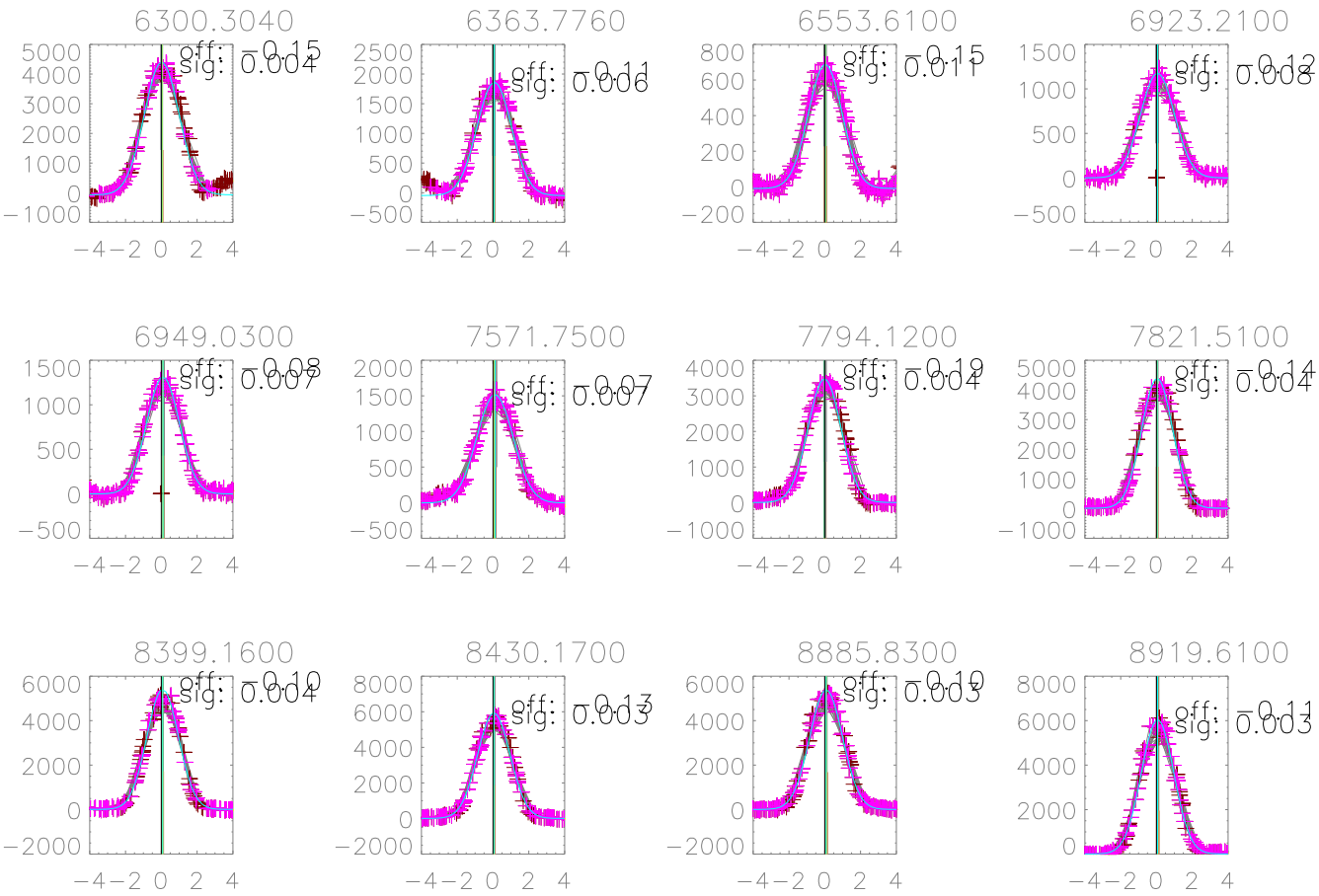

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-r2-00056868.fi
63.6
81.8
63.6
63.6
45.5
45.5
27.3
27.3
27.3
9.1
9.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

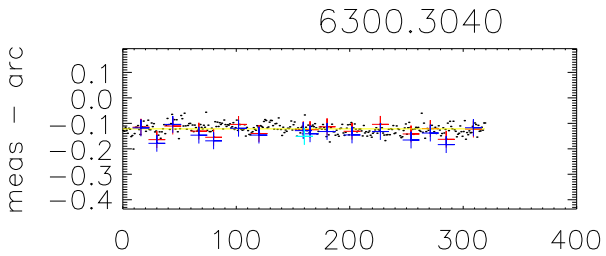

PLATE=3145 MJD=54801 Scattered Light before halo removal on sdR-r2-00056868.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.958
Max value = 76.178
Wed Mar 10 01:24:46 2010

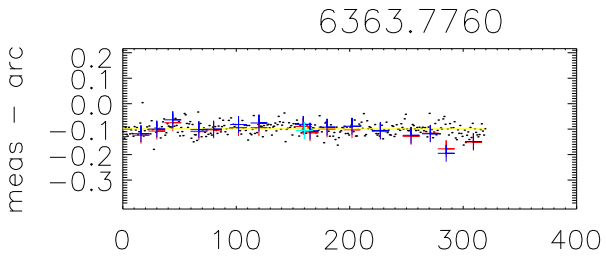

PLATE=3145 MJD=54801 Scattered Light on sdR-r2-00056868.fit
22.73
22.73
22.73
22.73
22.73
22.73
22.73
13.64
13.64
0
0
0
0
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000

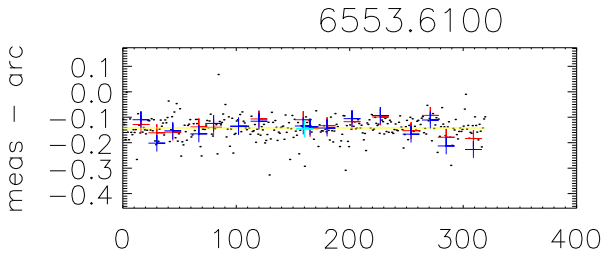

PLATE=3145 MJD=54801 Scattered Light on sdR-r2-00056868.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.854
Max value = 27.478
Wed Mar 10 01:28:20 2010

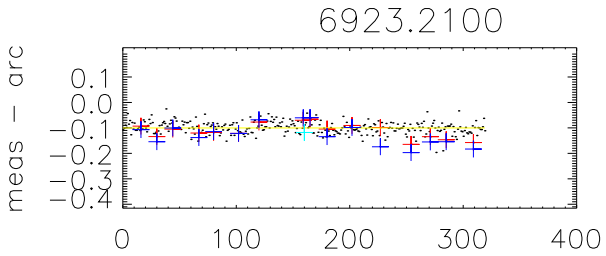

PLATE=3145 MJD=54801 Extraction chi^2 for sdR−r2−00056868.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

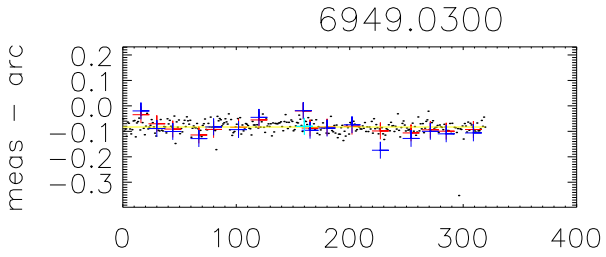

6300.3040
off: −0.15
sig: 0.004
6363.7760
off: −0.11
sig: 0.006
6553.6100
off: −0.15
sig: 0.011
6923.2100
off: −0.12
sig: 0.008
6949.0300
off: −0.08
sig: 0.007
7571.7500
off: −0.07
sig: 0.007
7794.1200
off: −0.19
sig: 0.004
7821.5100
off: −0.14
sig: 0.004
8399.1600
off: −0.10
sig: 0.004
8430.1700
off: −0.13
sig: 0.003
8885.8300
off: −0.10
sig: 0.003
8919.6100
off: −0.11
sig: 0.003

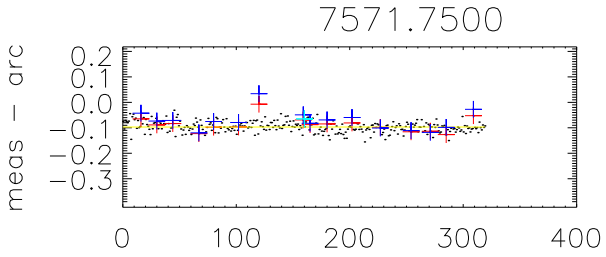

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

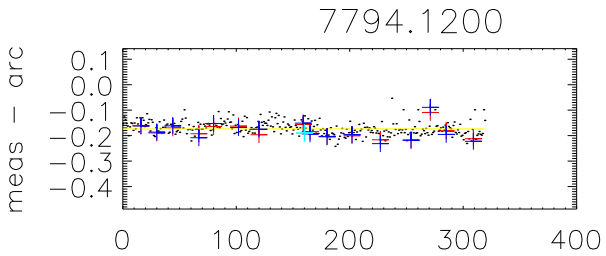

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

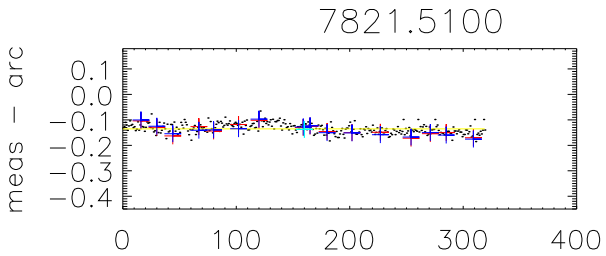

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

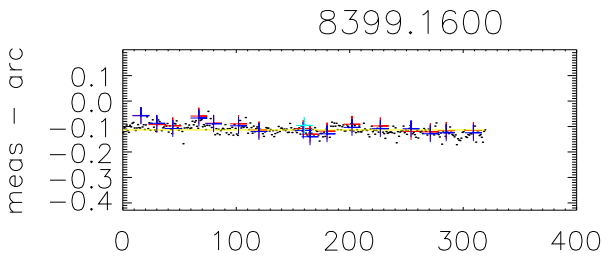

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

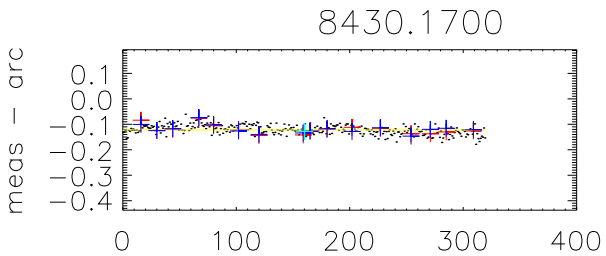

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

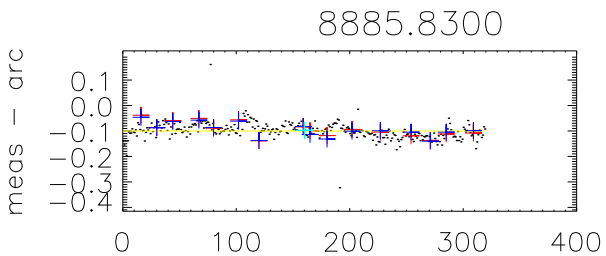

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

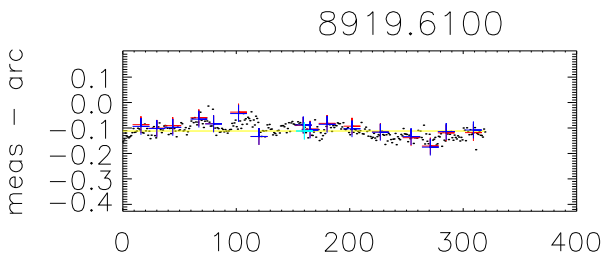

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

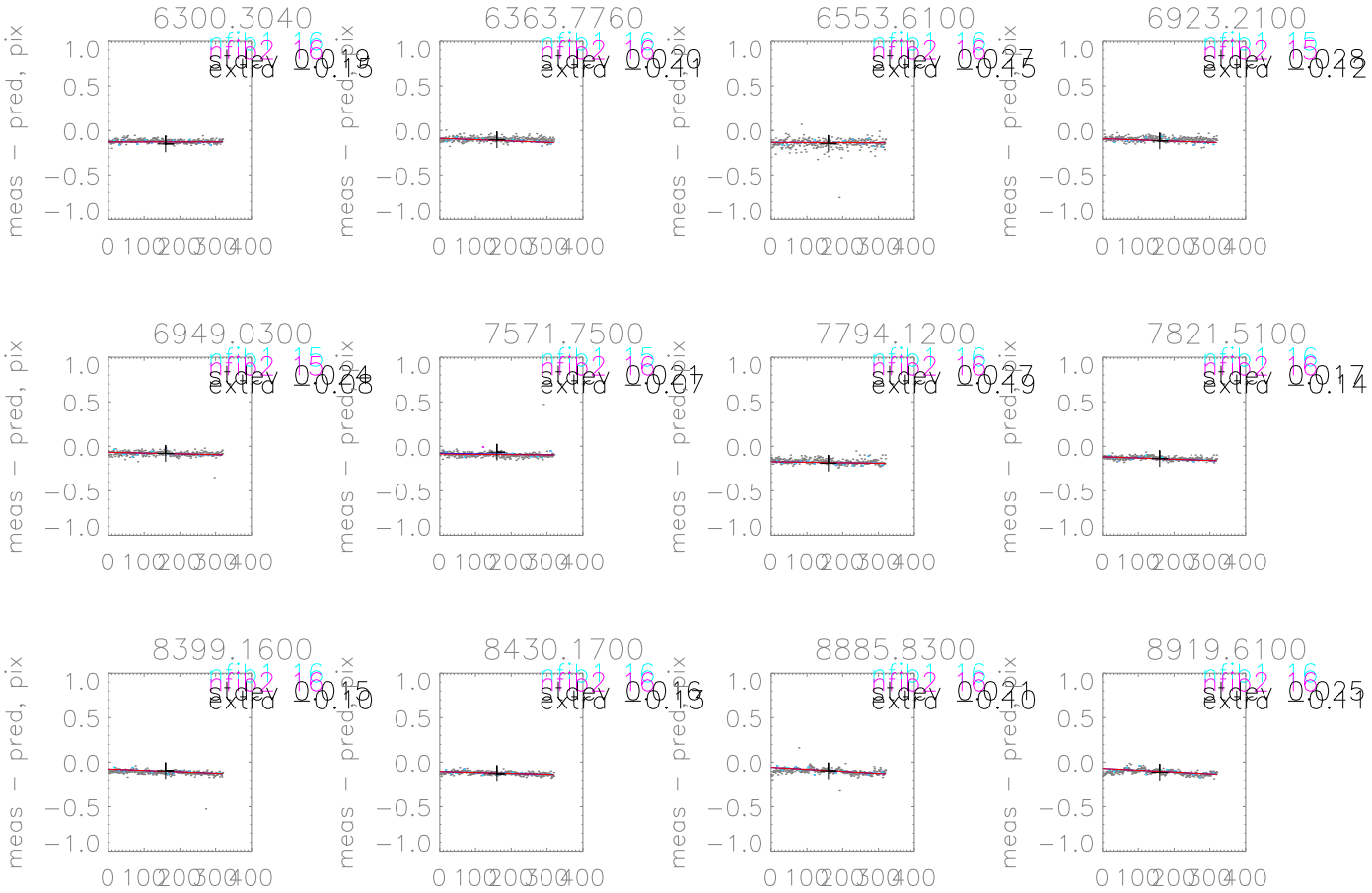

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

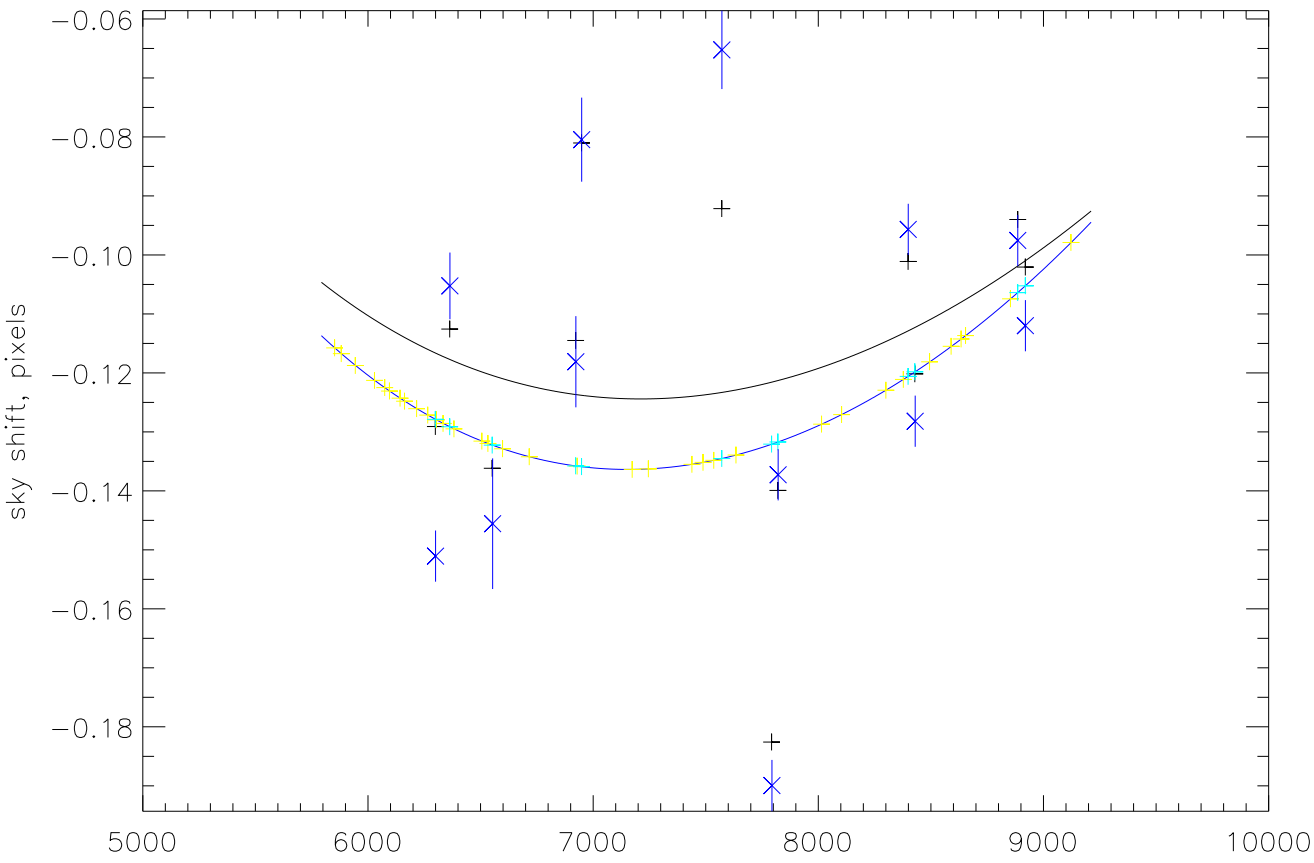

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

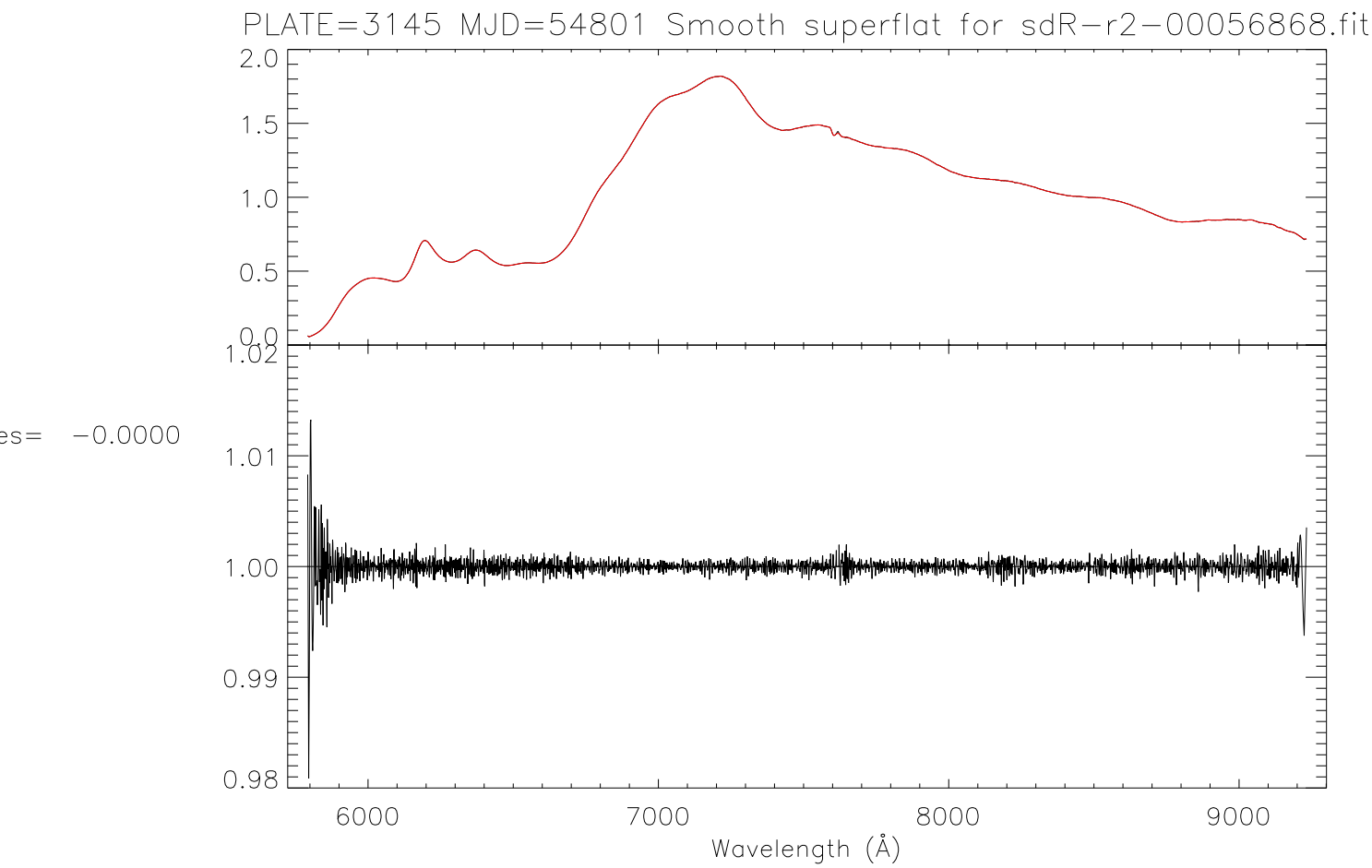

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

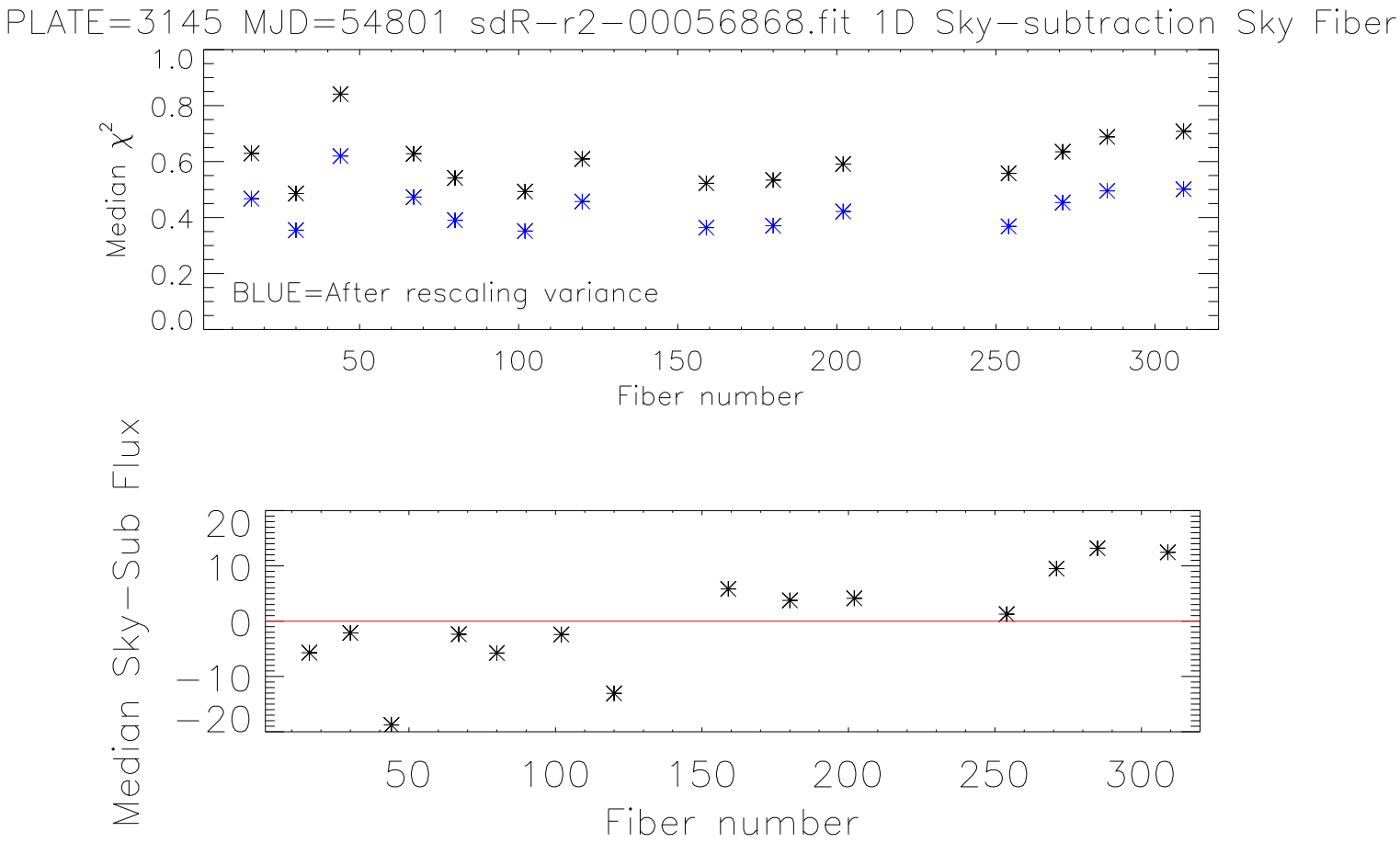

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

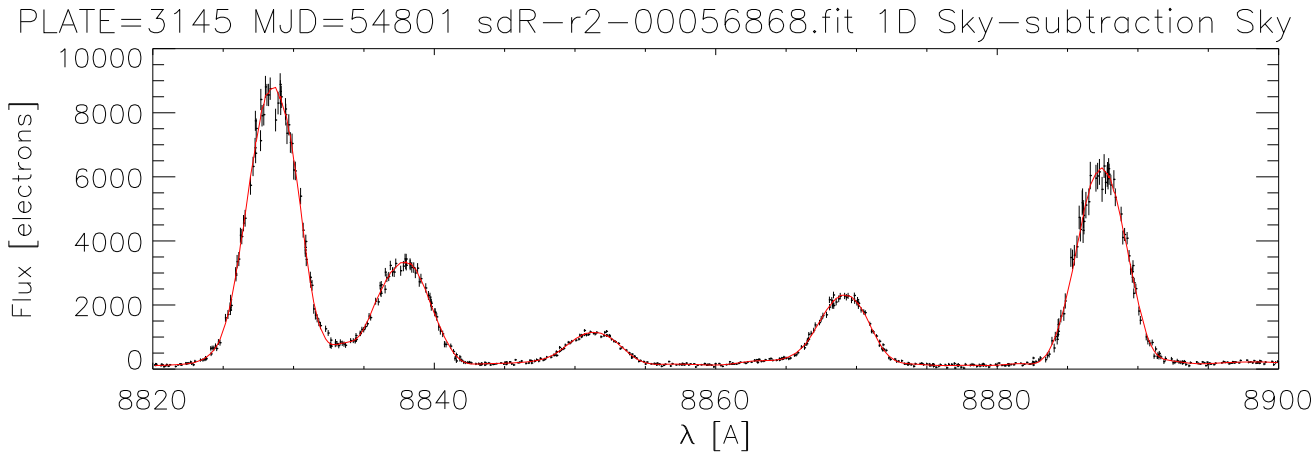

6300.3040
stdev 0.019
extra −0.15
6363.7760
stdev 0.020
extra −0.41
6553.6100
stdev 0.027
extra −0.45
6923.2100
stdev 0.028
extra −0.42
6949.0300
stdev 0.024
extra −0.08
7571.7500
stdev 0.021
extra −0.07
7794.1200
stdev 0.027
extra −0.49
7821.5100
stdev 0.017
extra −0.14
8399.1600
stdev 0.015
extra −0.10
8430.1700
stdev 0.016
extra −0.13
8885.8300
stdev 0.021
extra −0.40
8919.6100
stdev 0.025
extra −0.41
meas − pred, pix
mfib2 16
mfib1 15

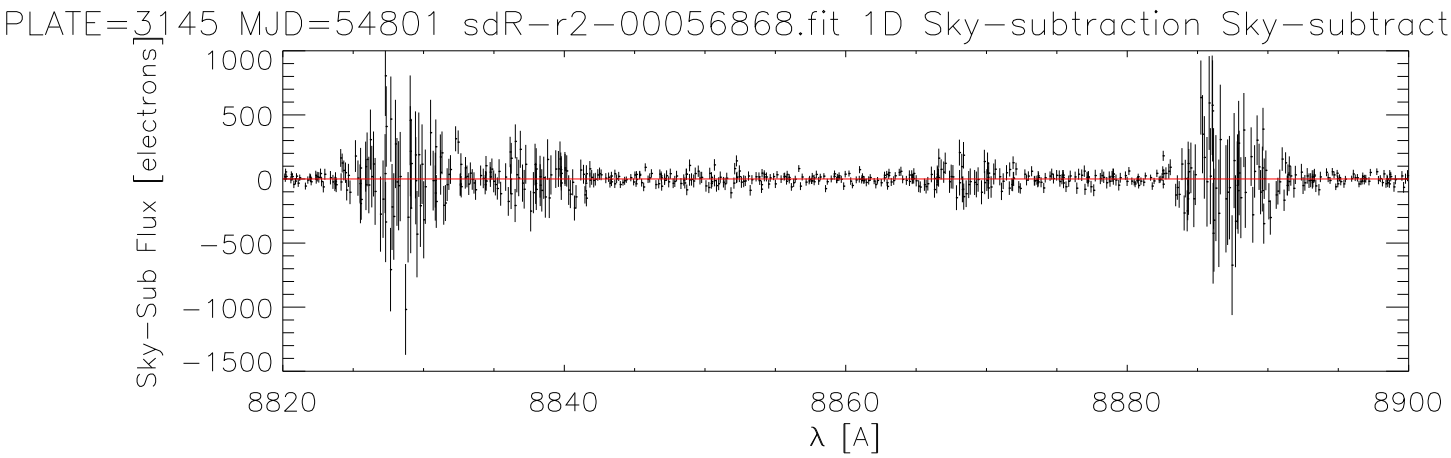

−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
sky shift, pixels
5000
6000
7000
8000
9000
10000

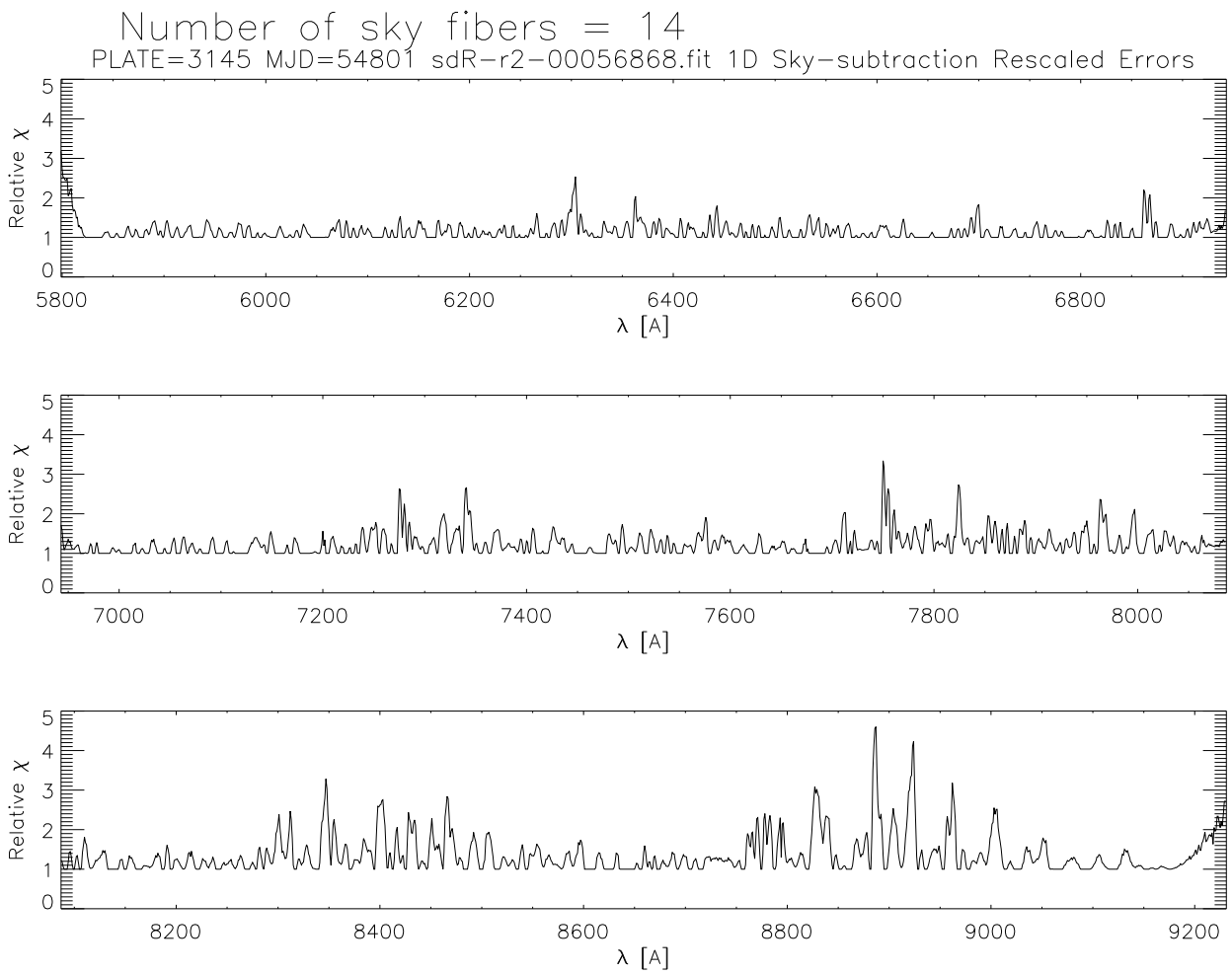

PLATE=3145 MJD=54801 Smooth superflat for sdR-r2-00056868.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
6000
7000
8000
9000
Wavelength (Å)

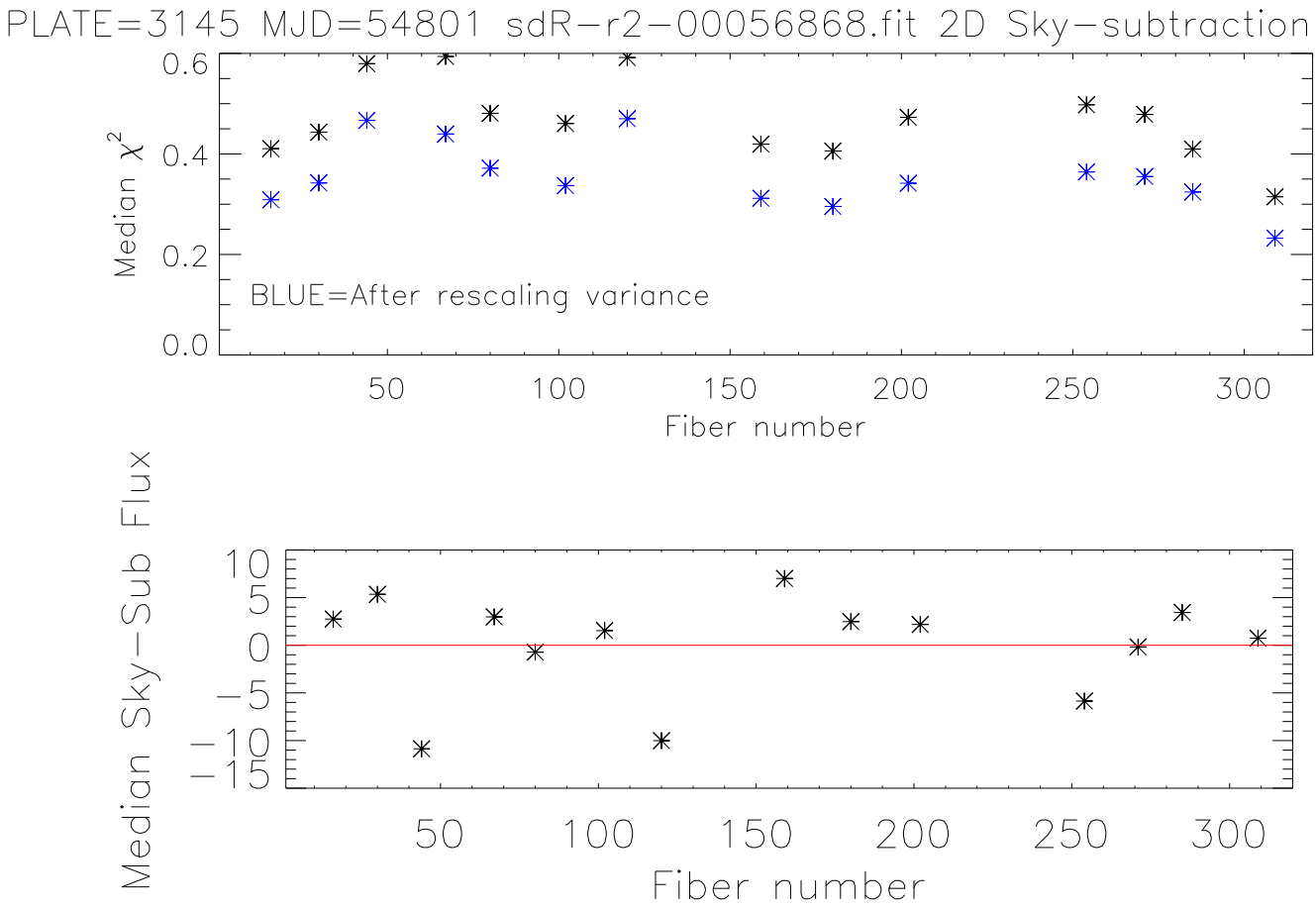
es= −0.0000

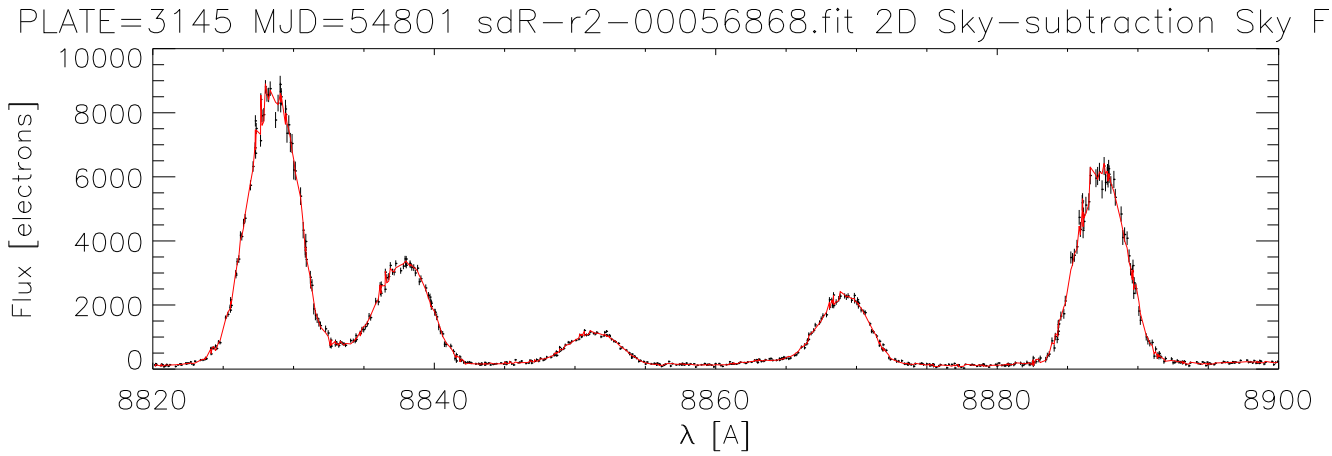

PLATE=3145 MJD=54801 sdR-r2-00056868.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

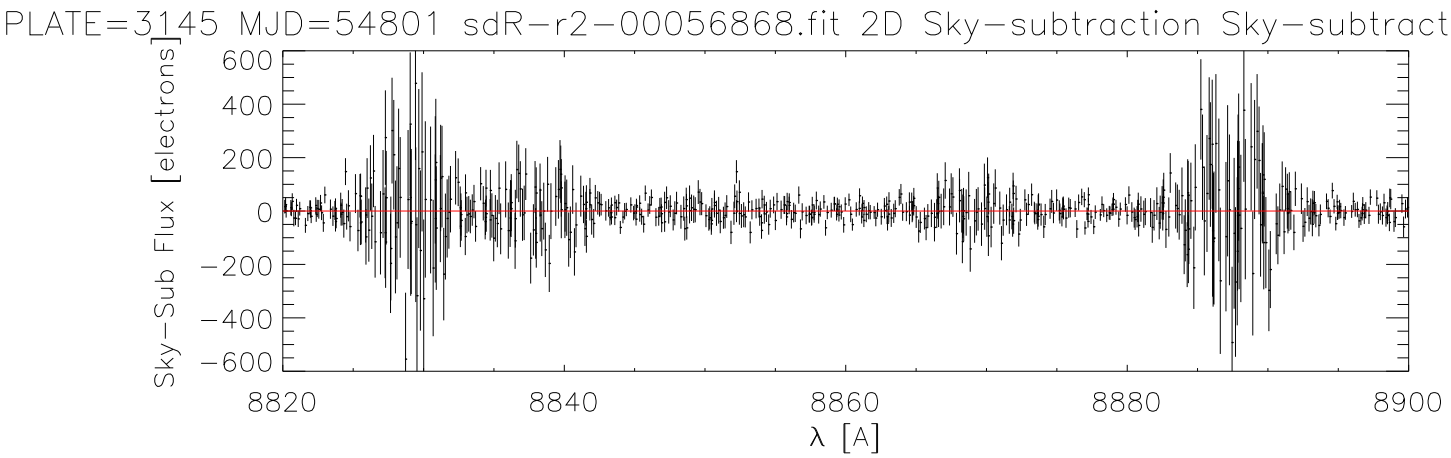

PLATE=3145 MJD=54801 sdR-r2-00056868.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

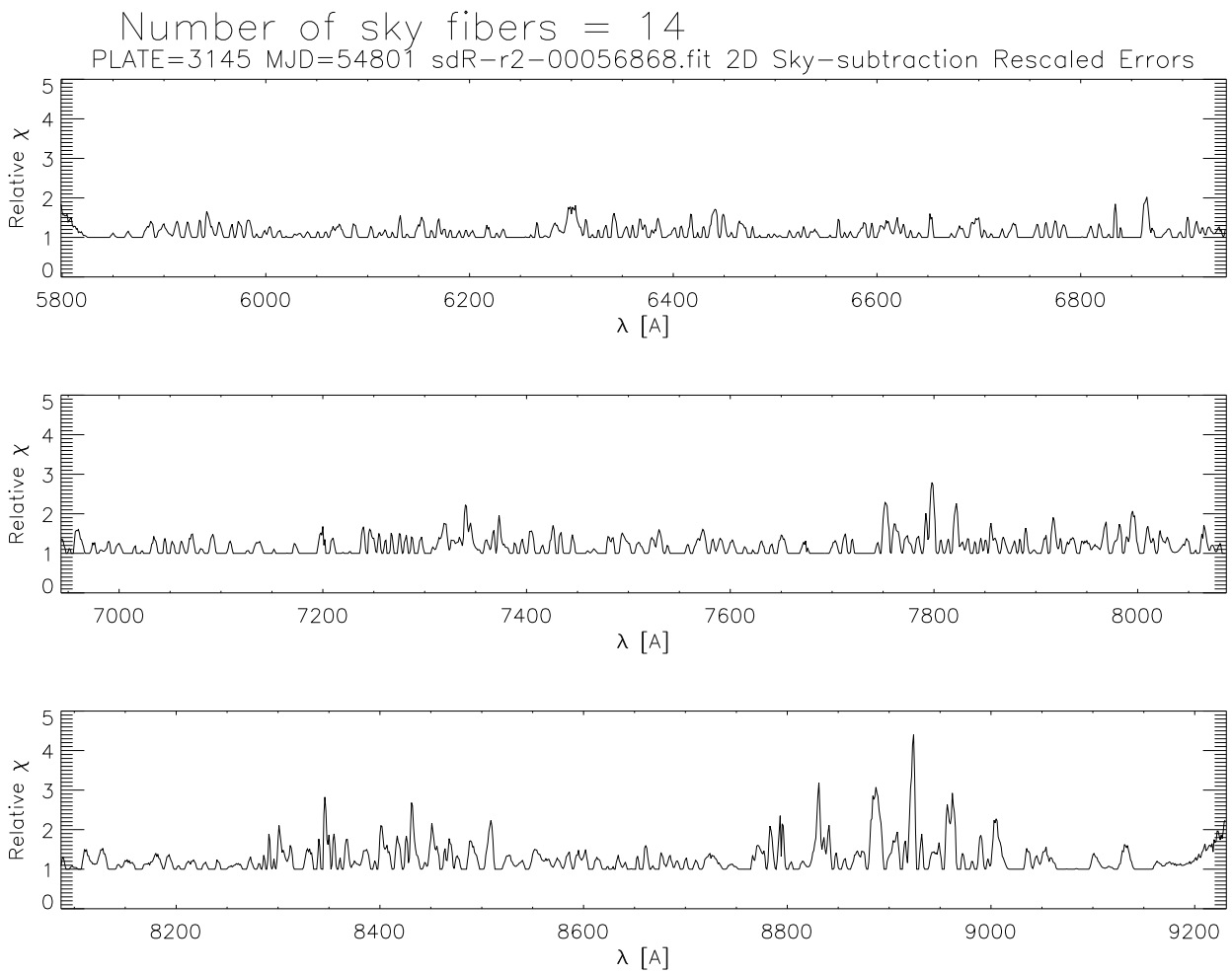

PLATE=3145 MJD=54801 sdR-r2-00056868.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
-1500
8820
8840
8860
8880
8900
λ [A]

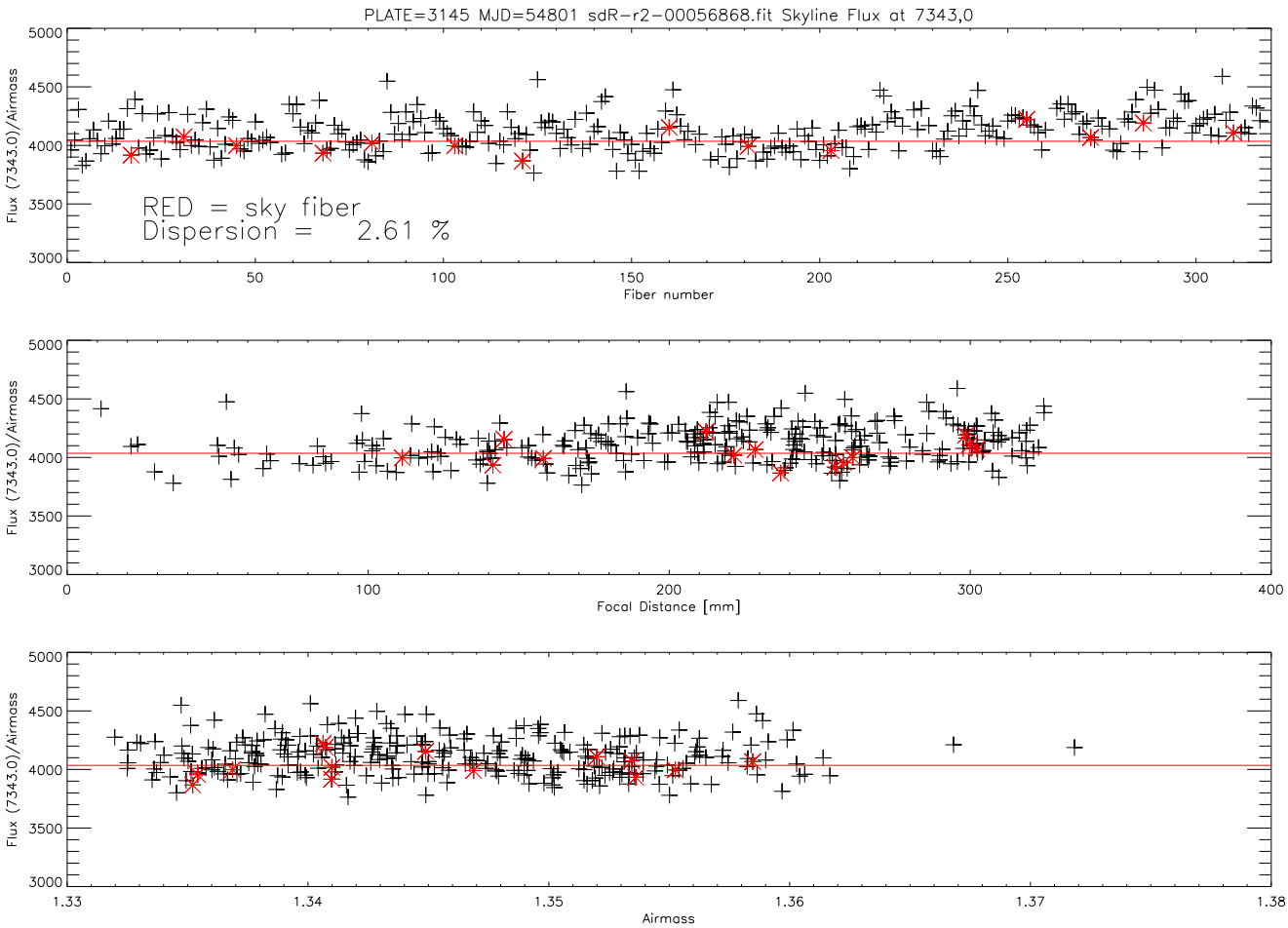

Number of sky fibers = 14
PLATE=3145 MJD=54801 sdR-r2-00056868.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

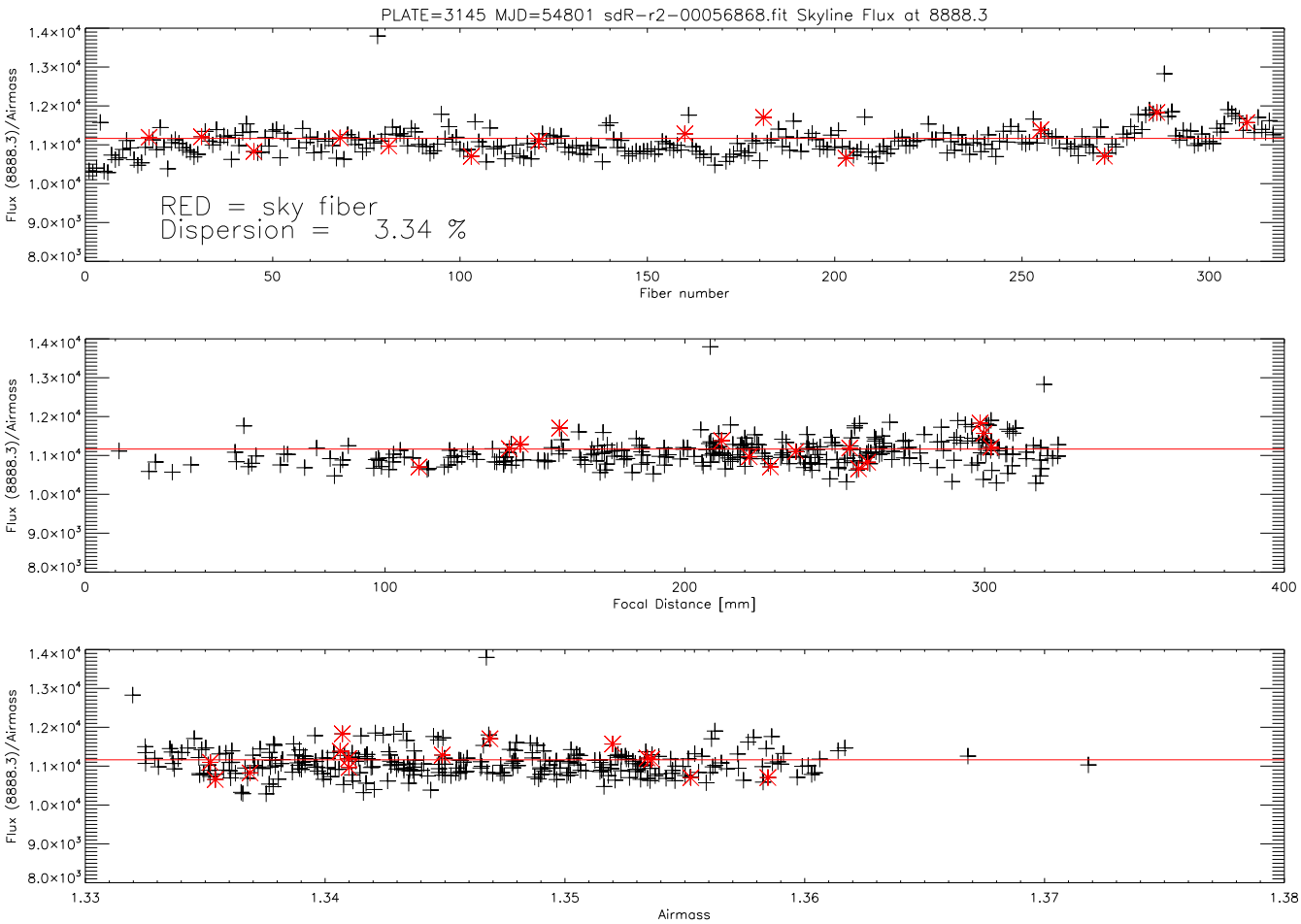

PLATE=3145 MJD=54801 sdR-r2-00056868.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number


PLATE=3145 MJD=54801 sdR-r2-00056868.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=3145 MJD=54801 sdR-r2-00056868.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 14
PLATE=3145 MJD=54801 sdR-r2-00056868.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=3145 MJD=54801 sdR-r2-00056868.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.61 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=3145 MJD=54801 sdR-r2-00056868.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.34 %
Fiber number
Focal Distance [mm]
Airmass