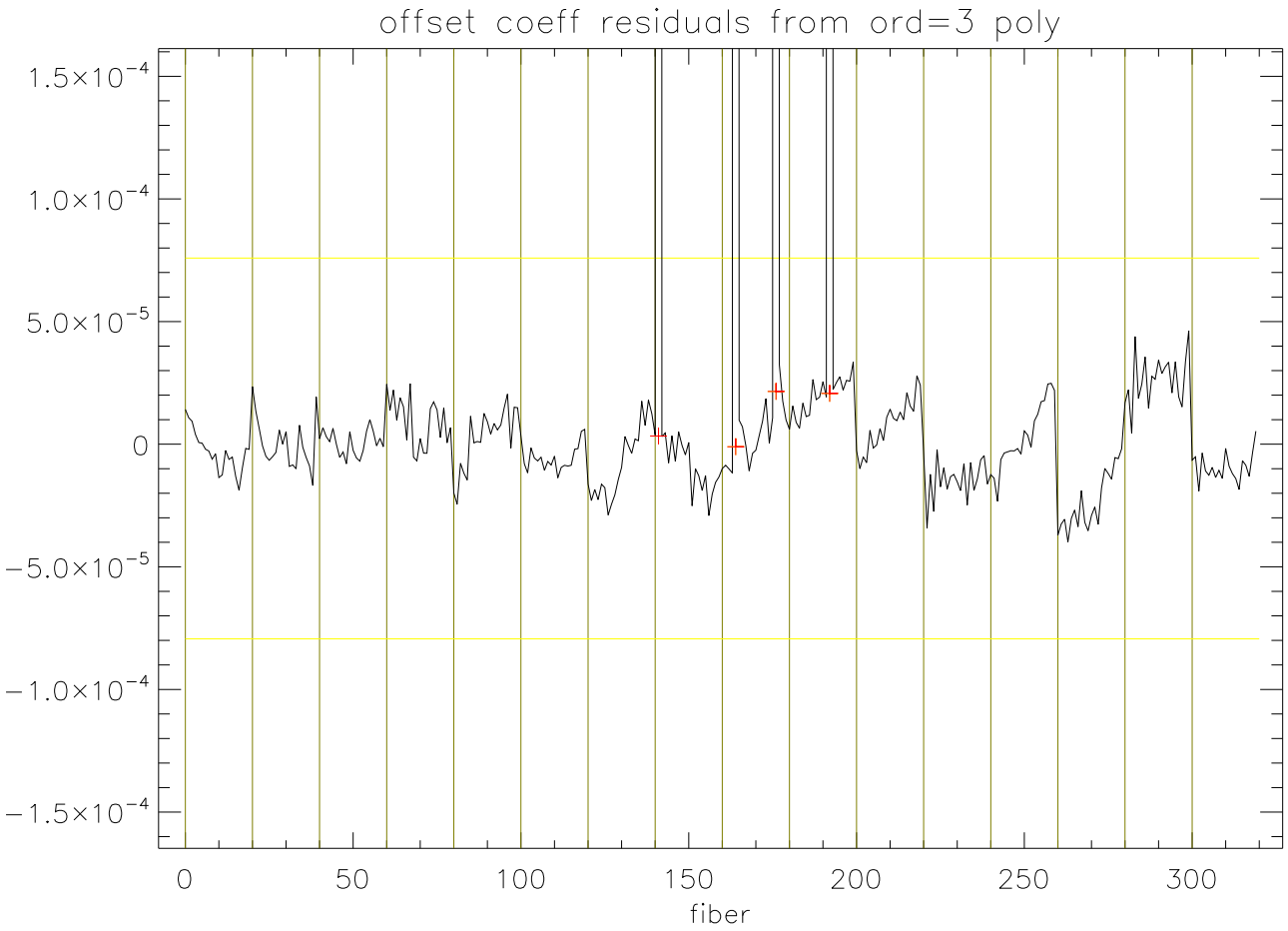
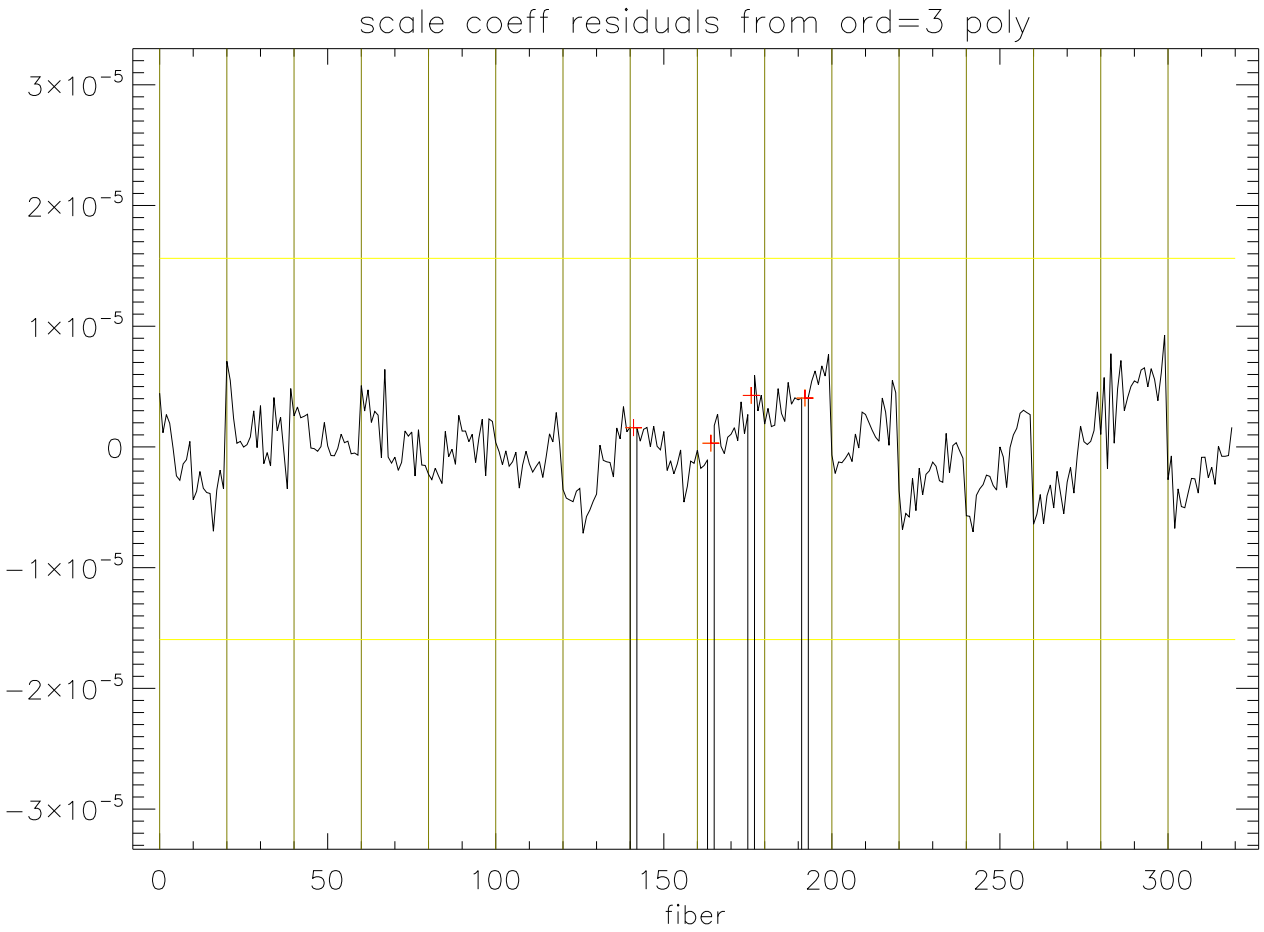
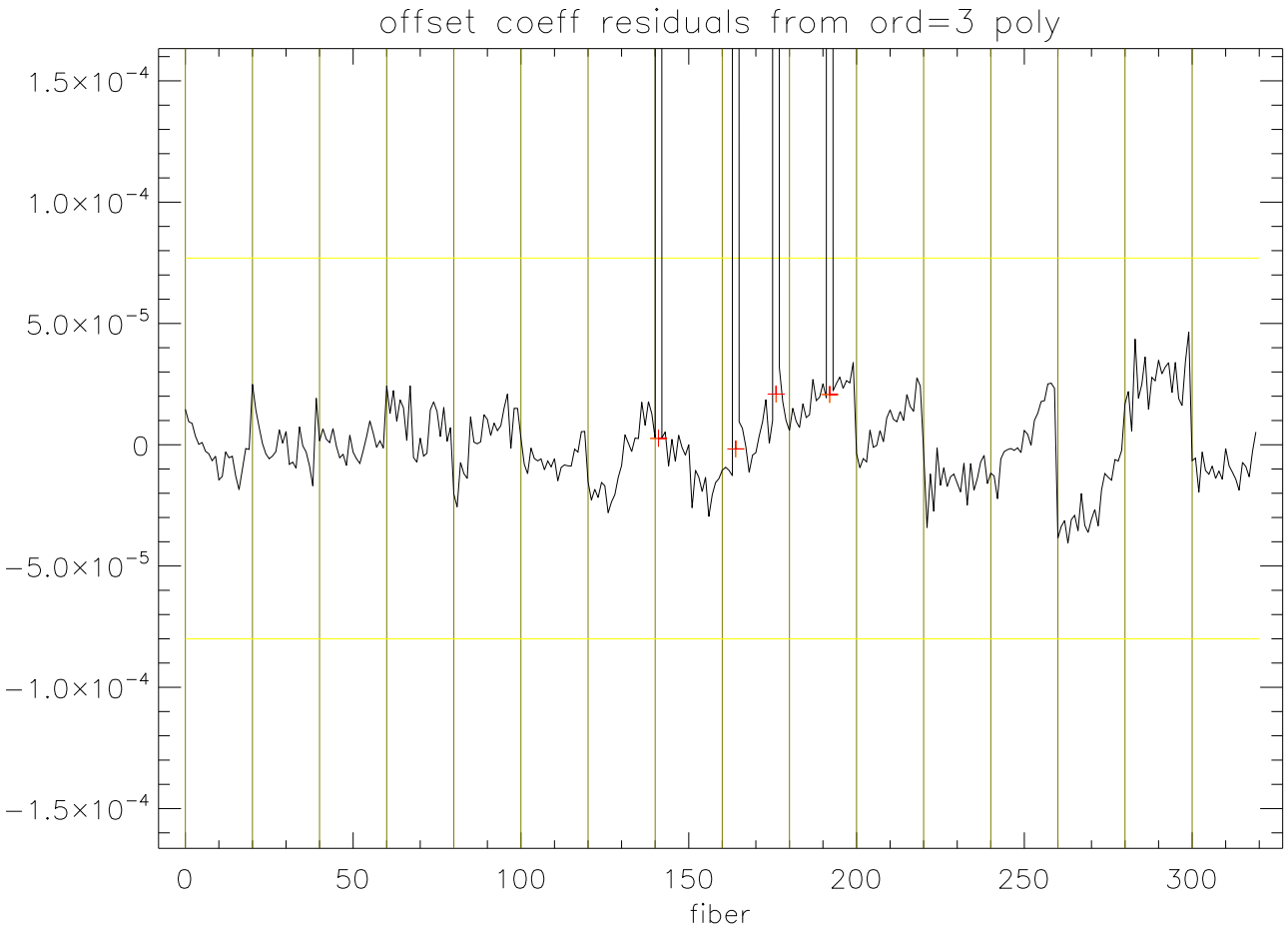
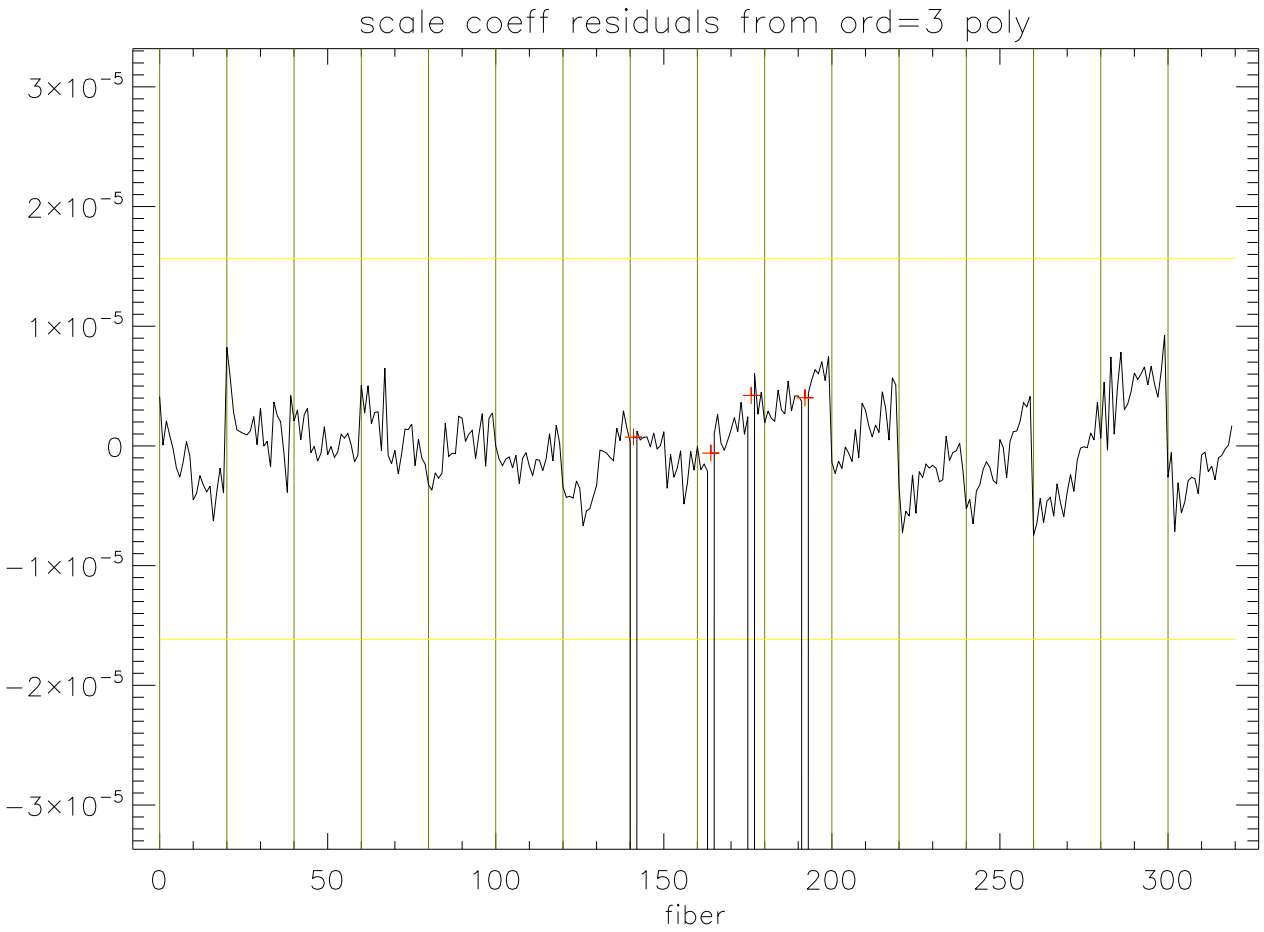
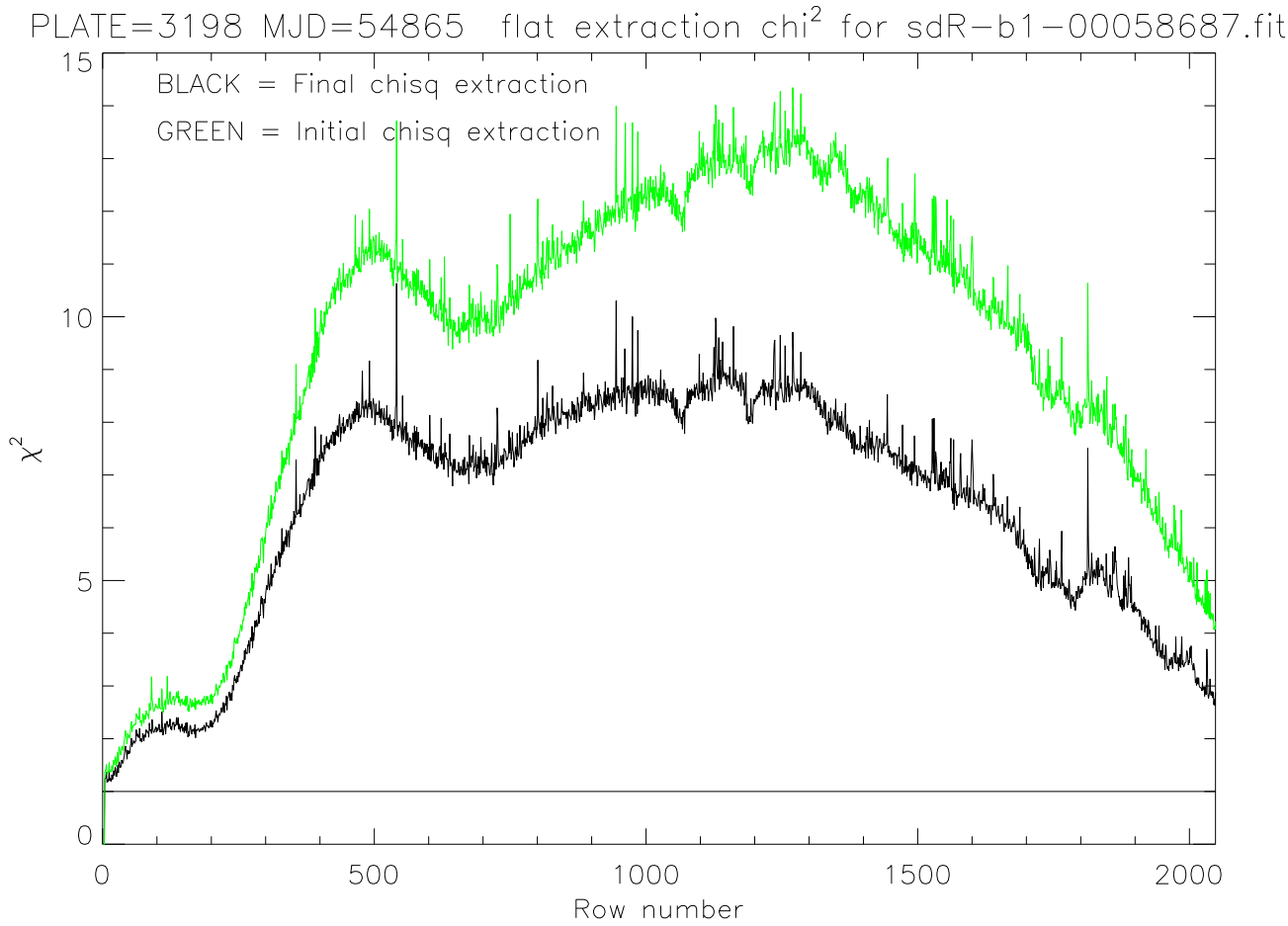
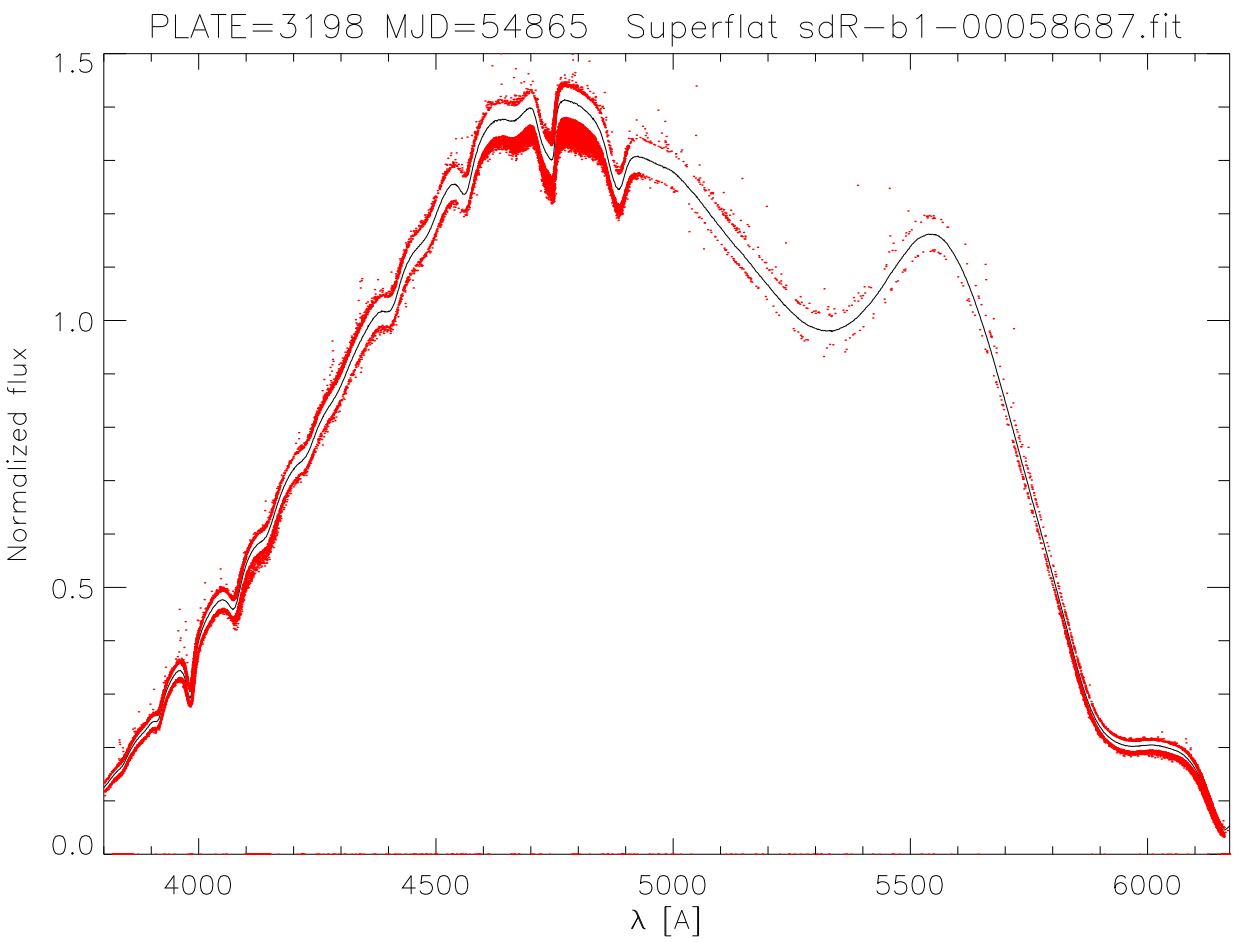

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

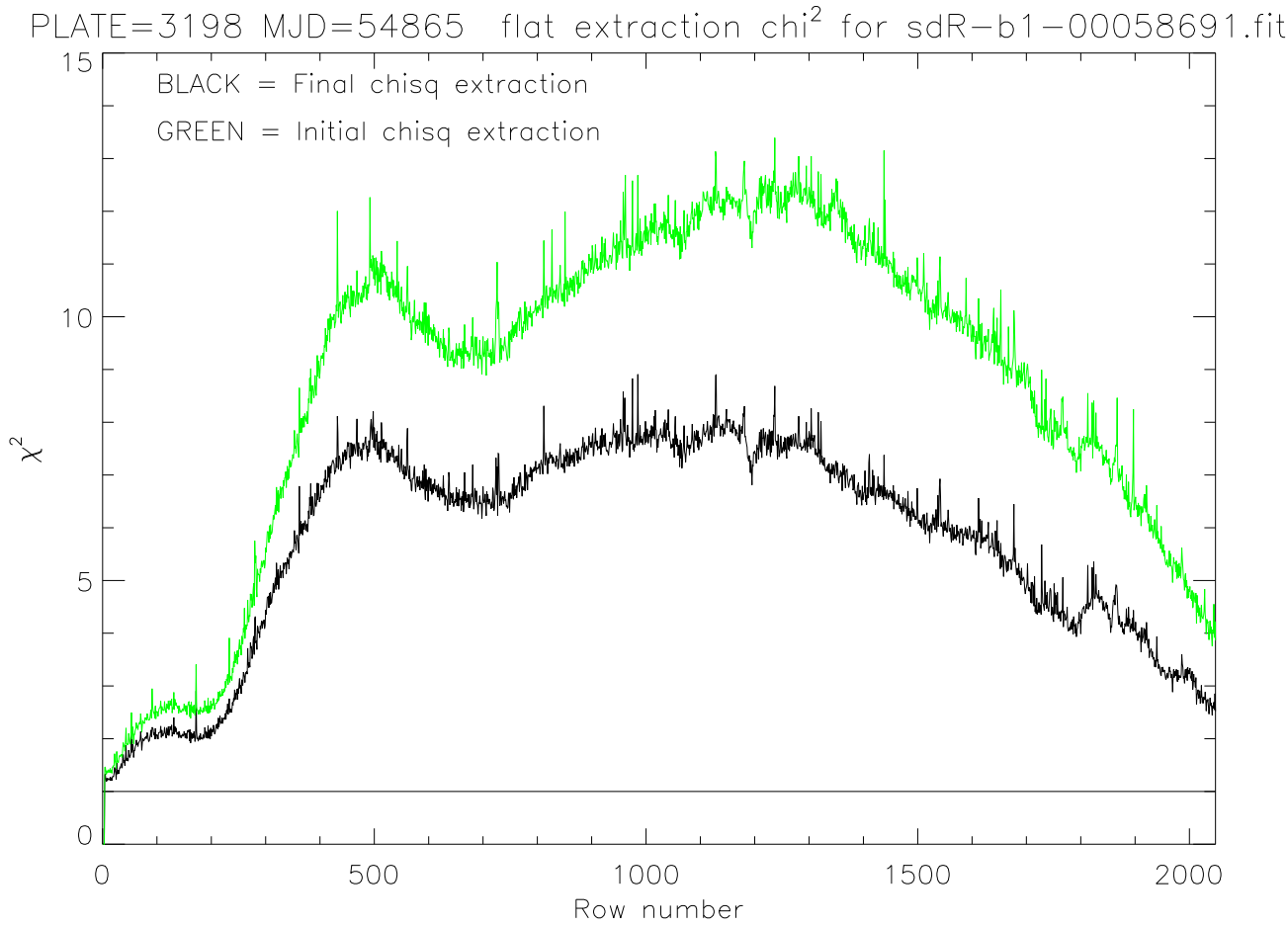

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

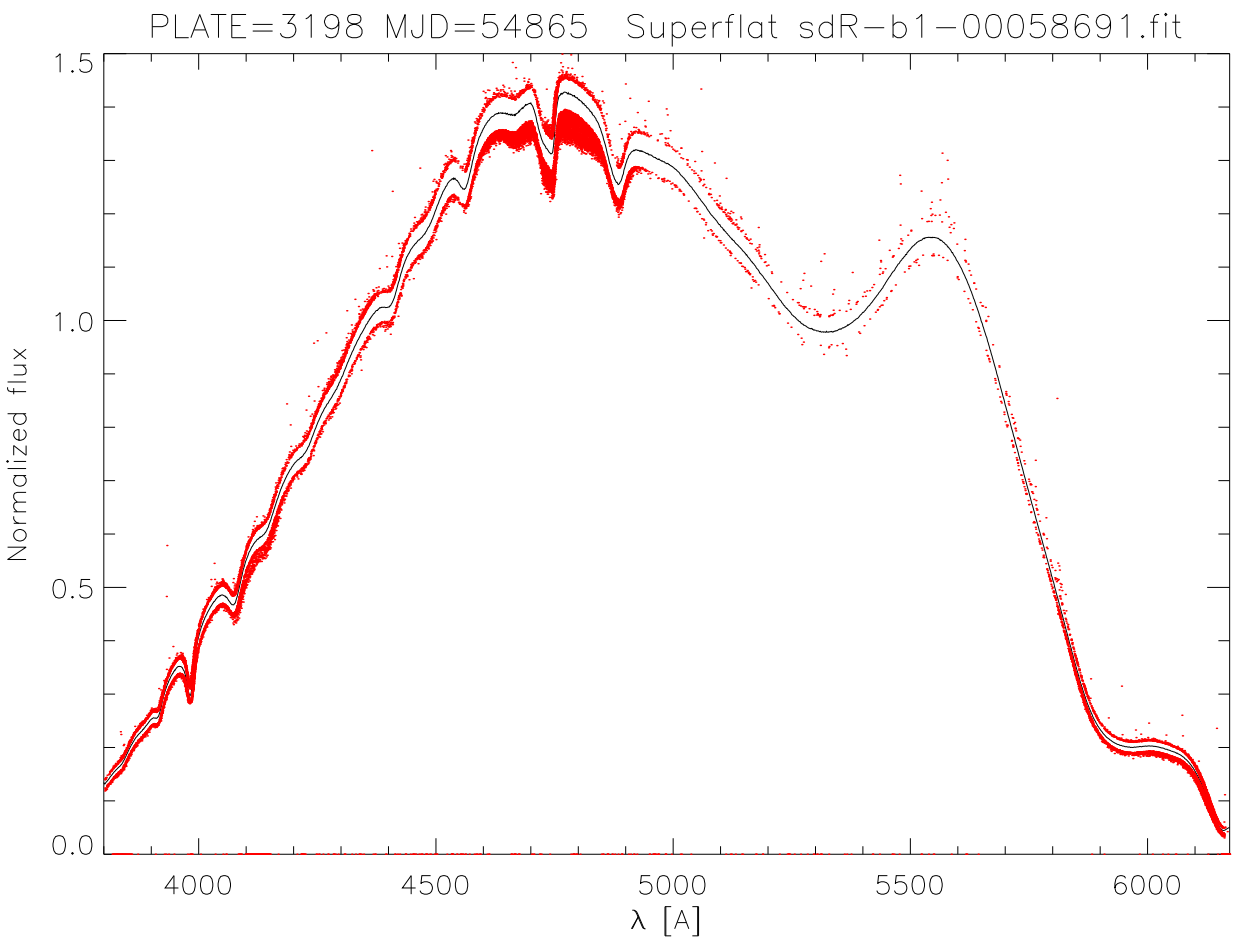

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

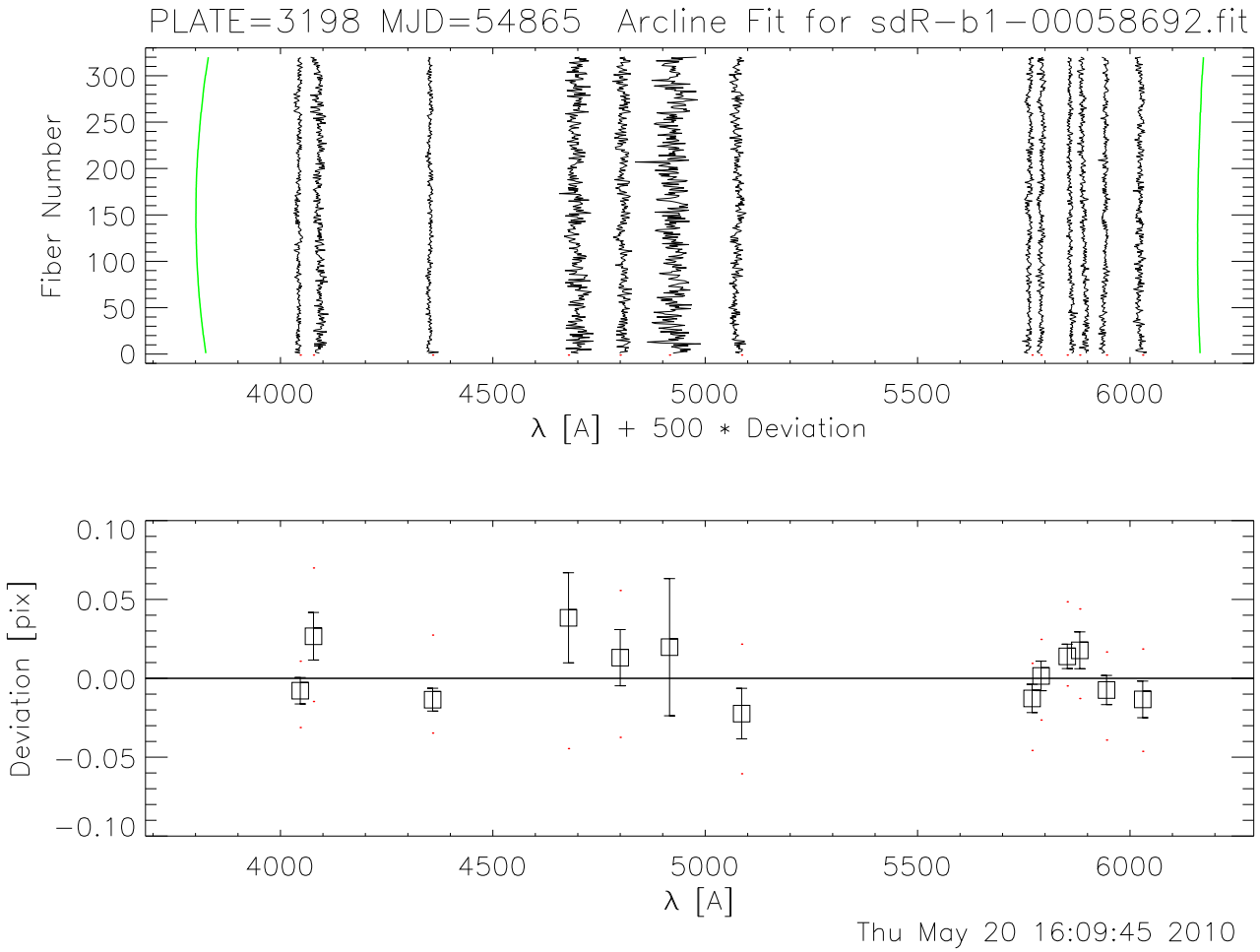

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

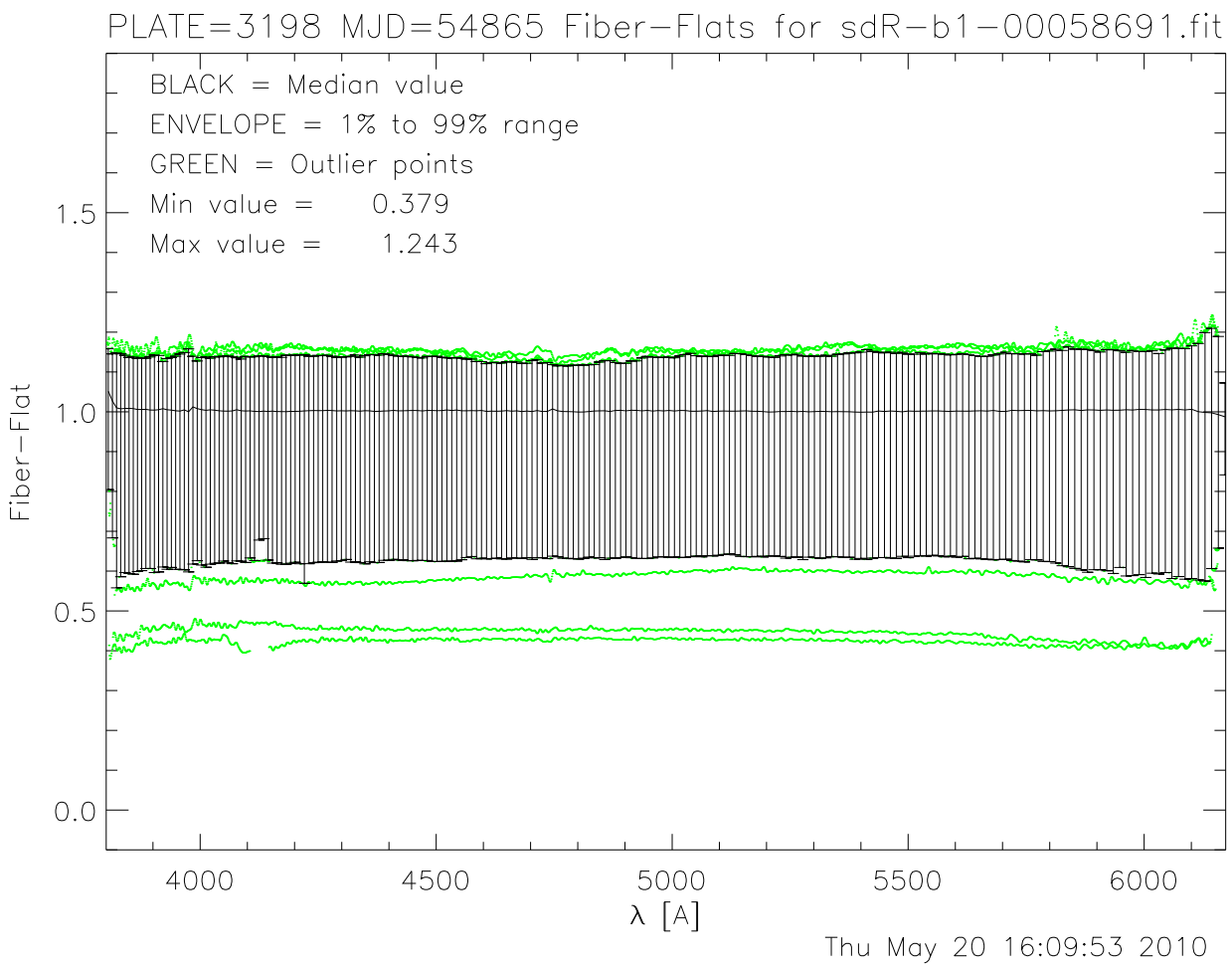

PLATE=3198 MJD=54865 flat extraction chi^2 for sdR−b1−00058687.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

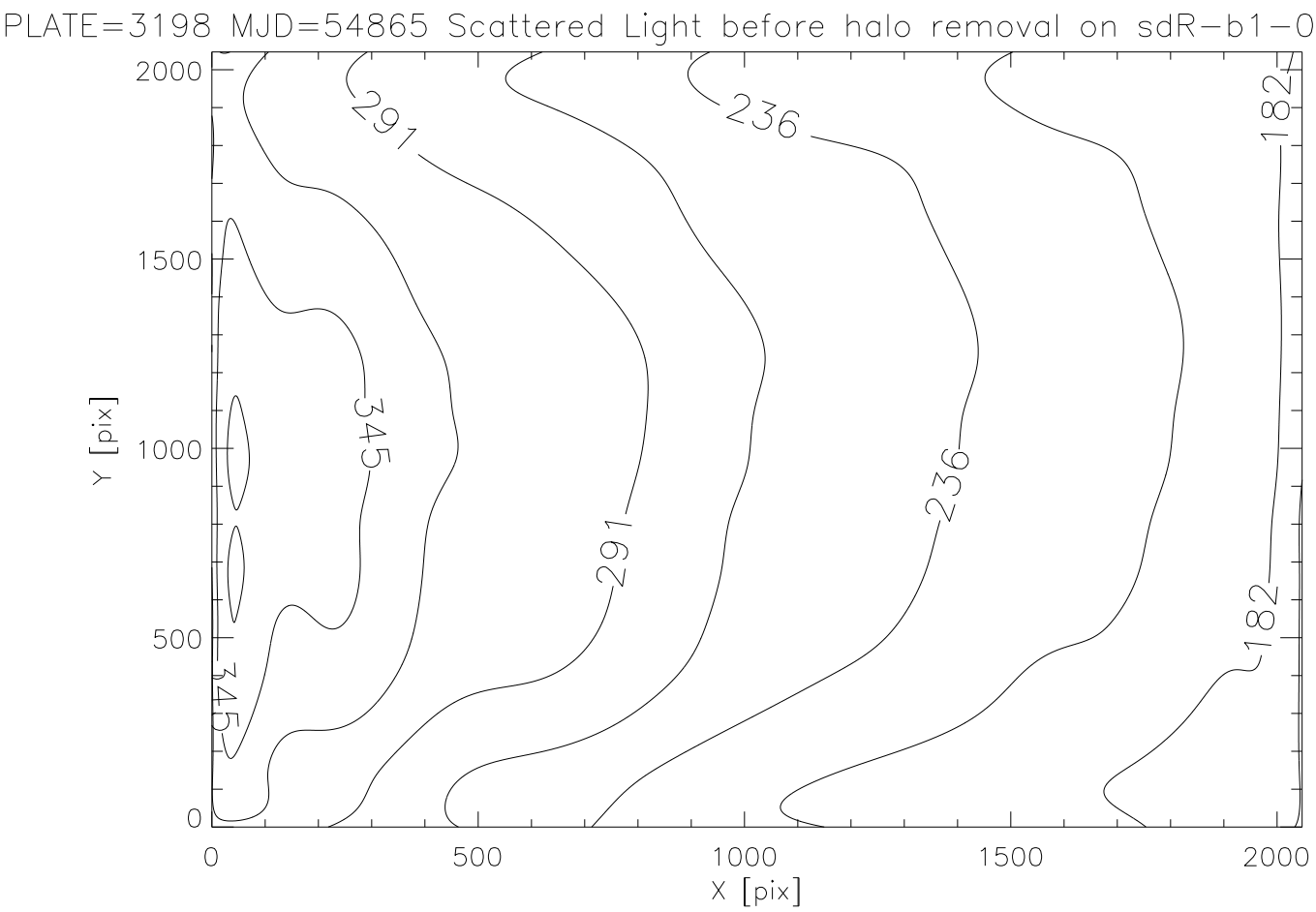

PLATE=3198 MJD=54865 Superflat sdR-b1-00058687.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

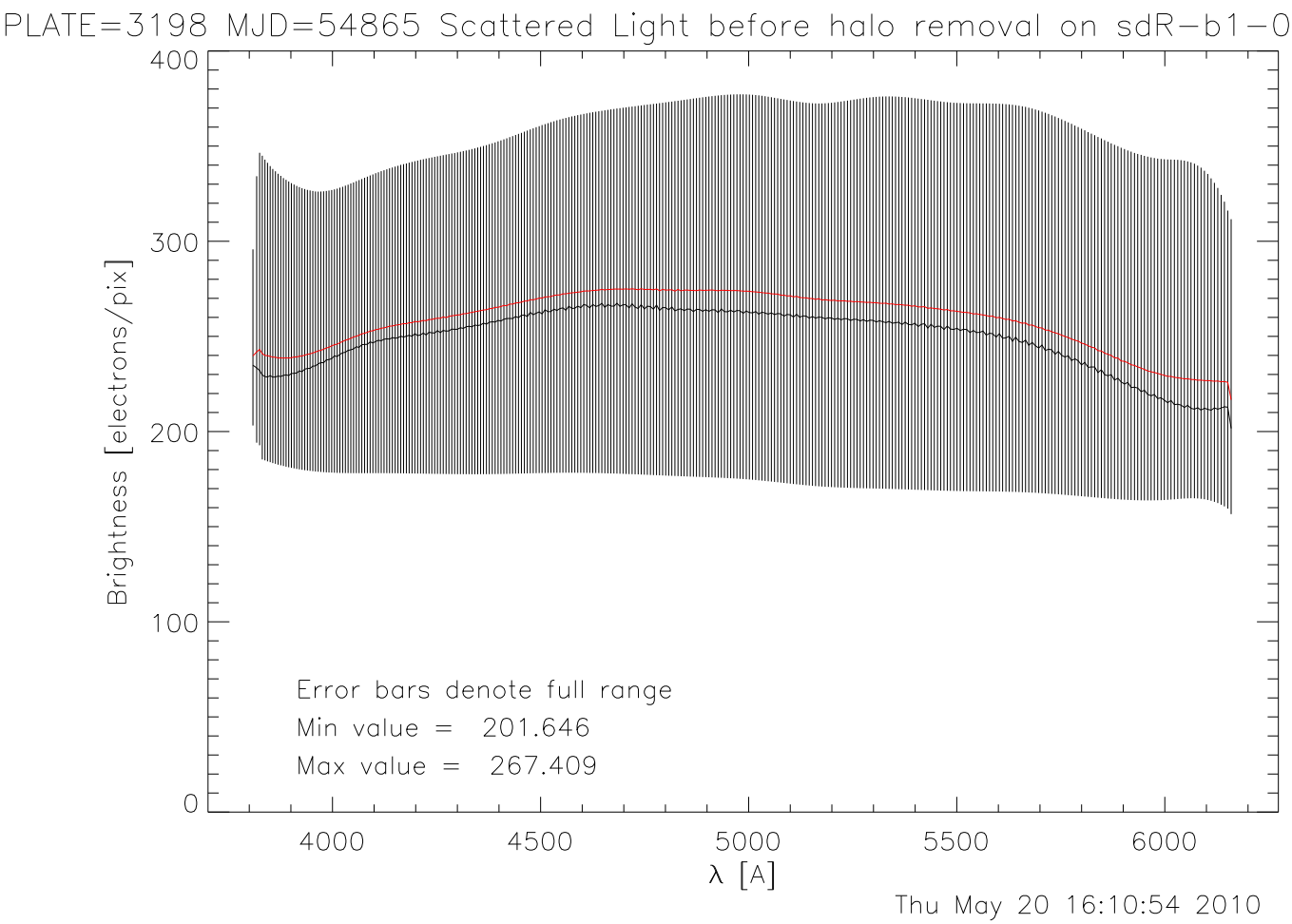

PLATE=3198 MJD=54865 flat extraction chi^2 for sdR−b1−00058691.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

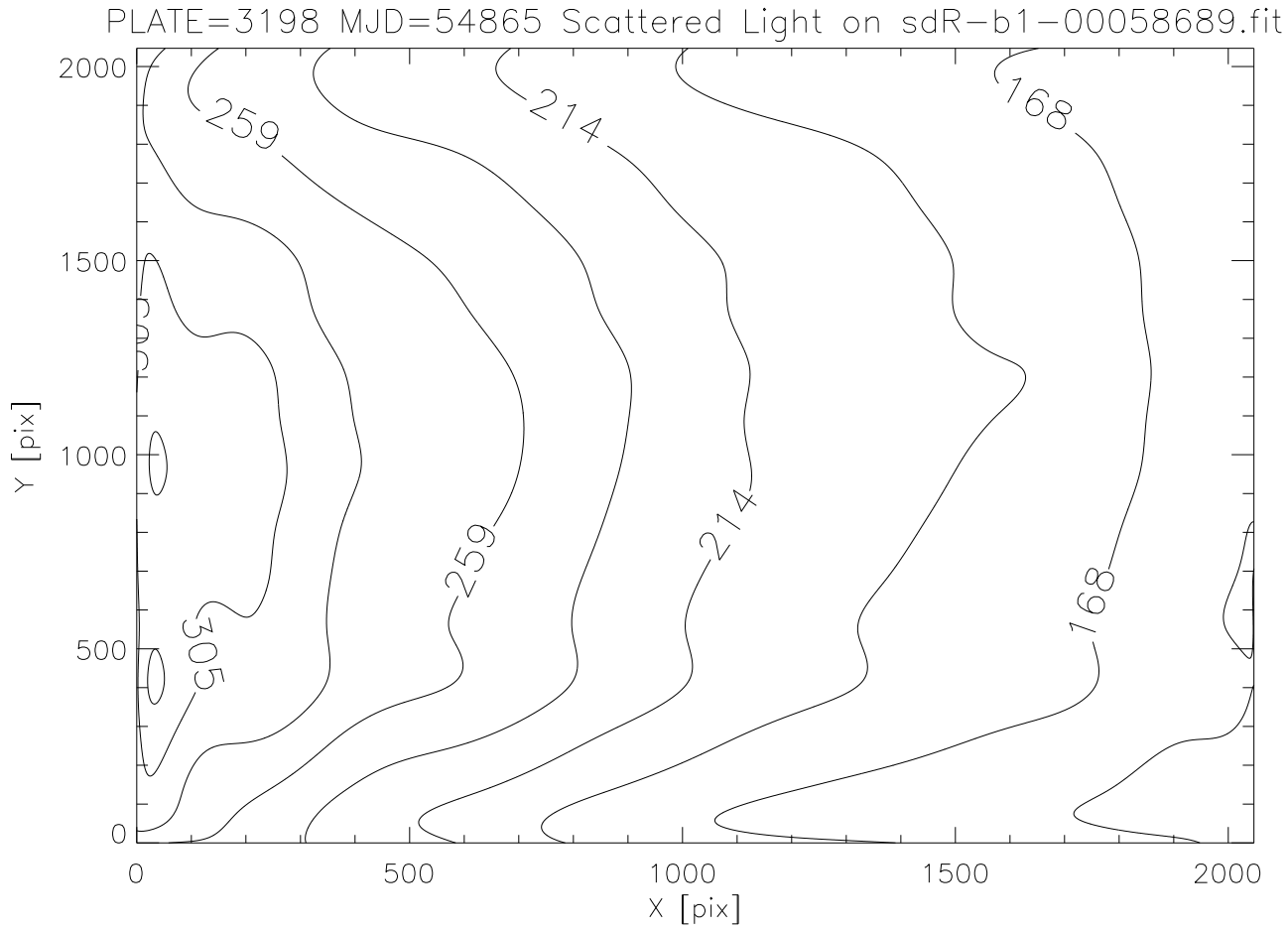

PLATE=3198 MJD=54865 Superflat sdR-b1-00058691.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

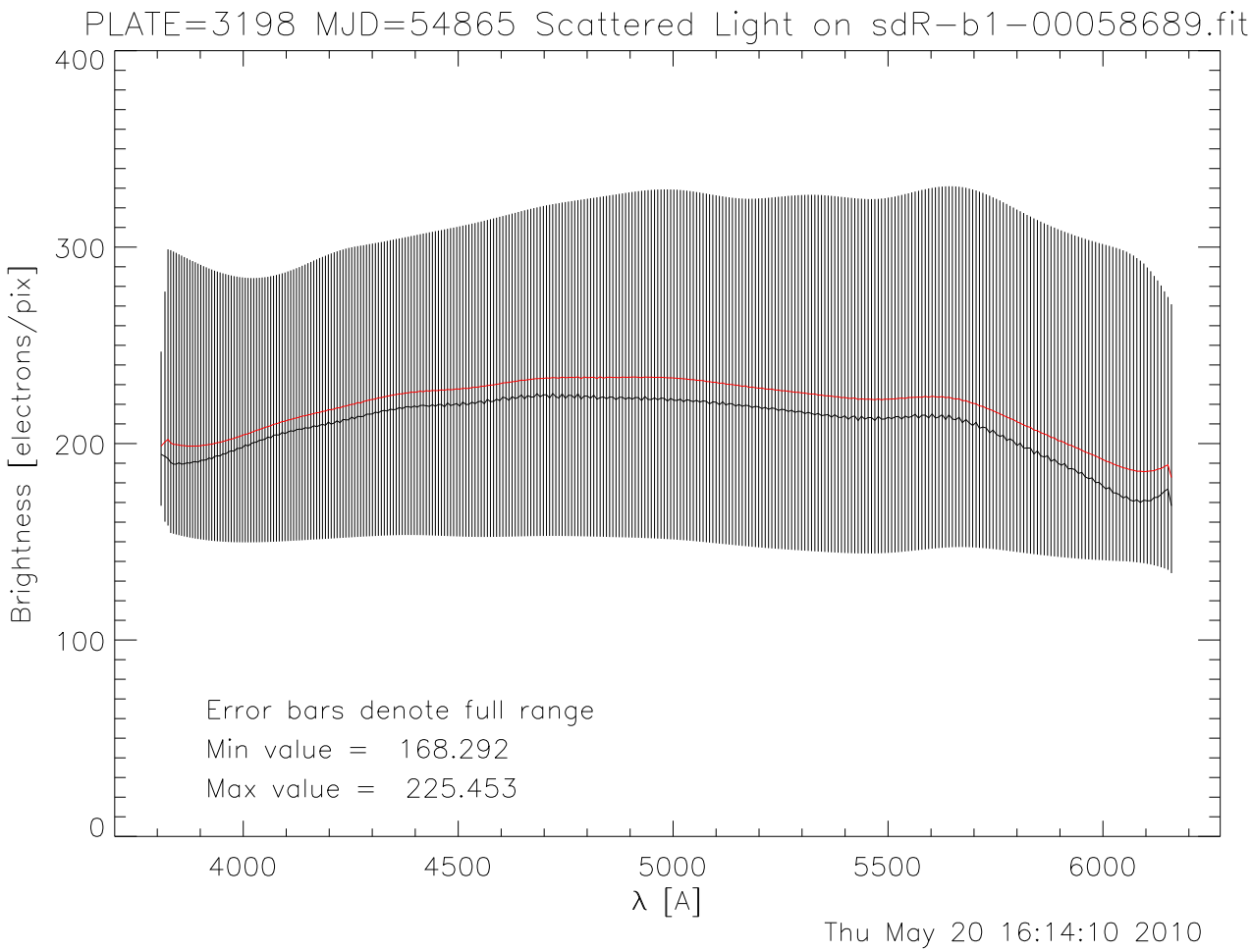

PLATE=3198 MJD=54865 Arcline Fit for sdR-b1-00058692.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:09:45 2010

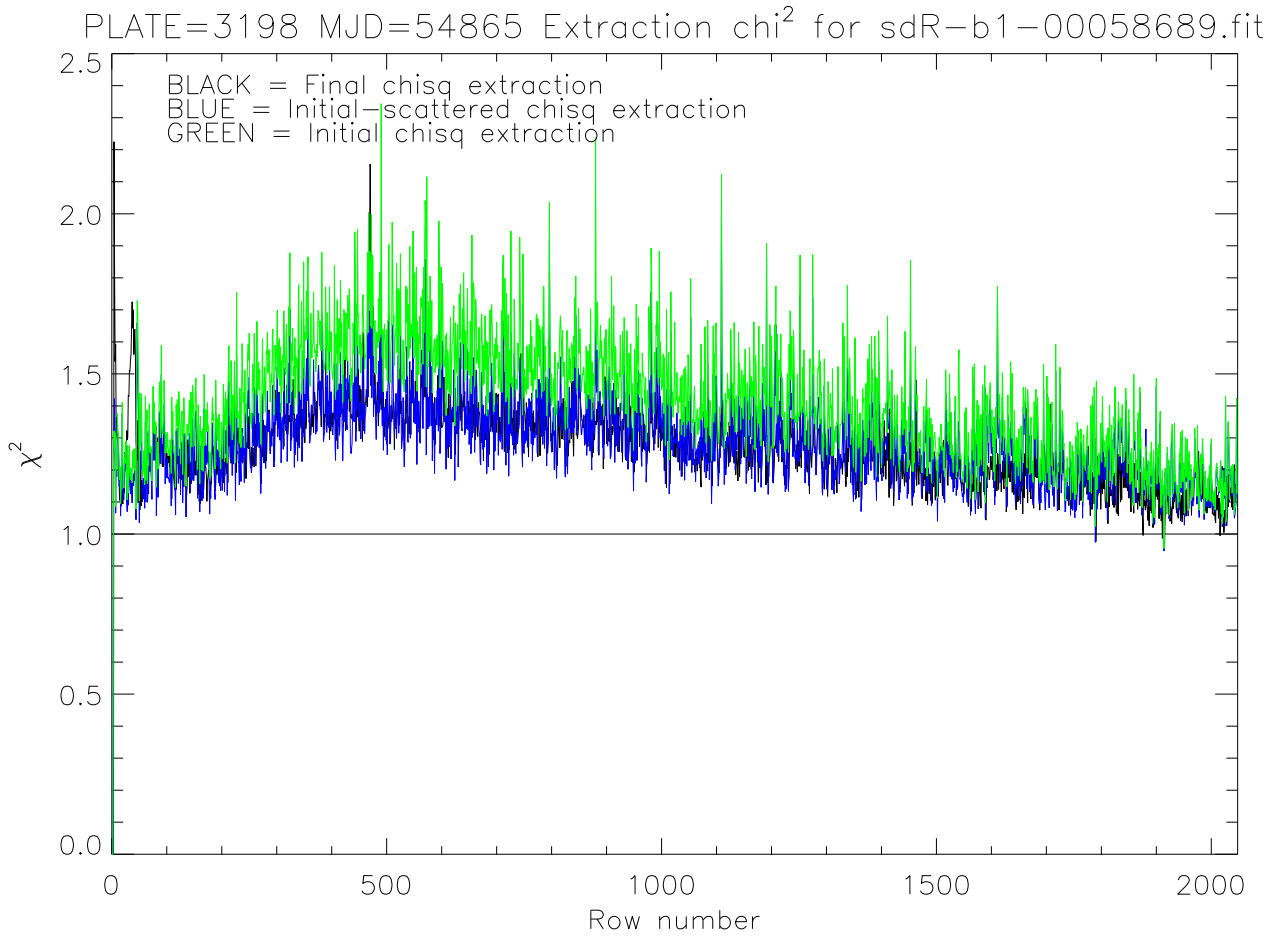

PLATE=3198 MJD=54865 Fiber-Flats for sdR-b1-00058691.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.379
Max value = 1.243
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:09:53 2010

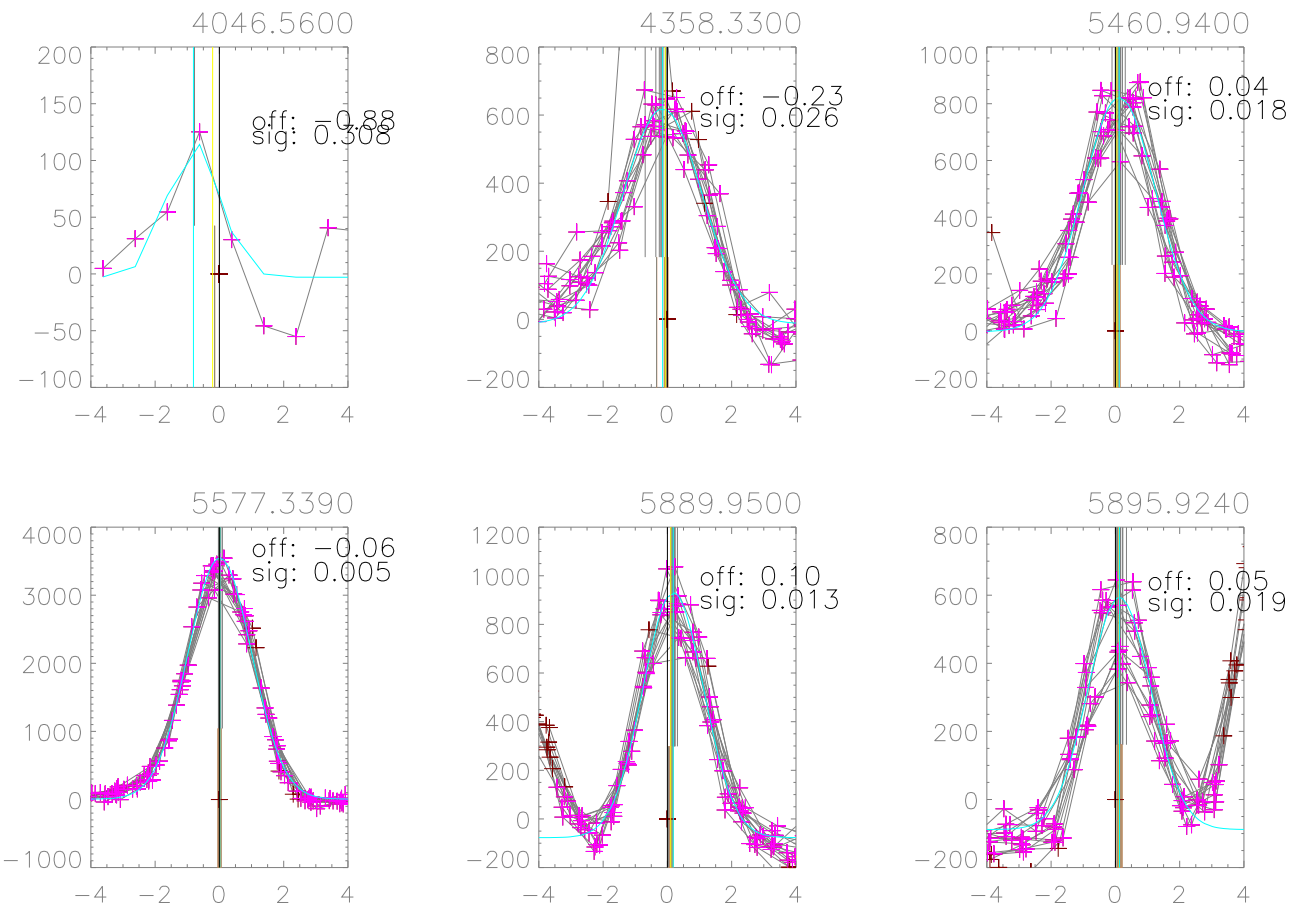

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR−b1−00058689.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
291
236
182
345
345
291
236
182

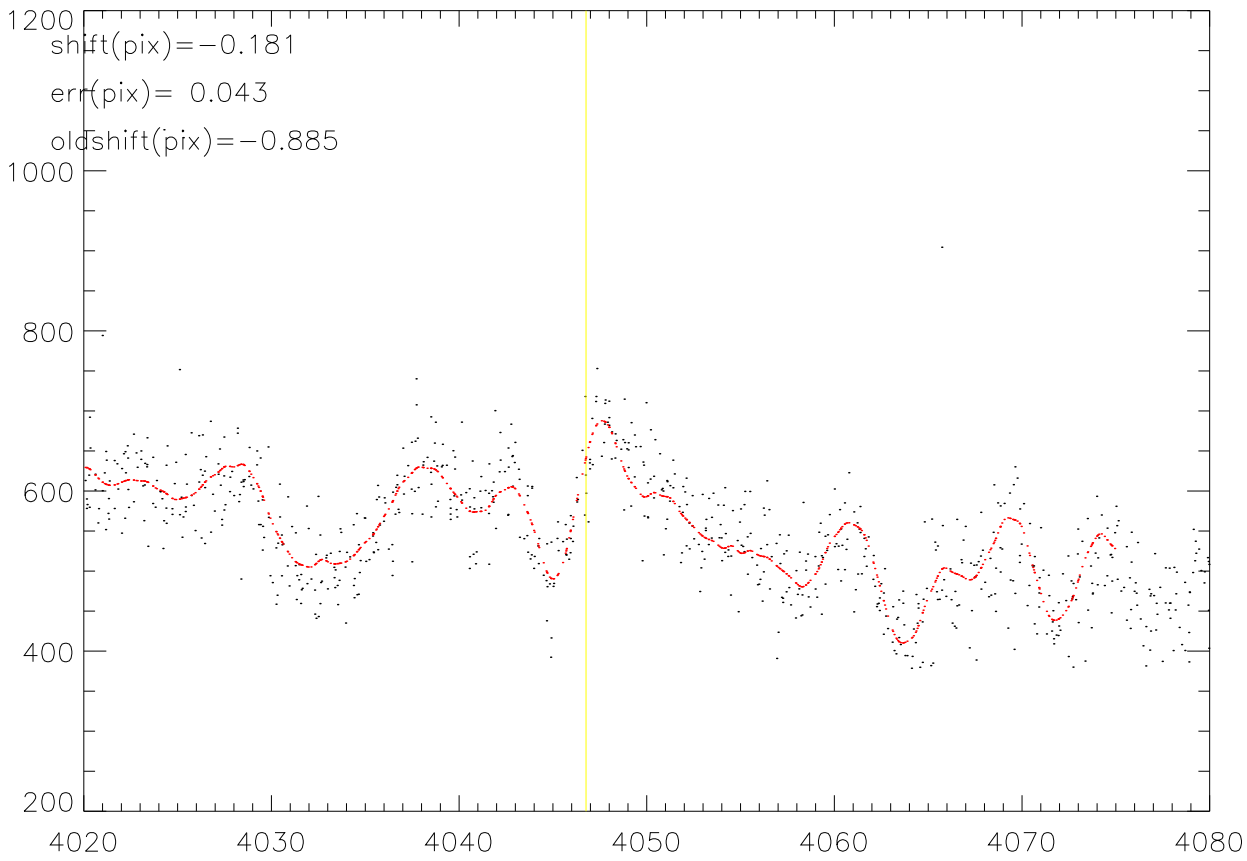

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-b1-00058689.f
Brightness [electrons/pix]
400
300
200
100
0
Error bars denote full range
Min value = 201.646
Max value = 267.409
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:10:54 2010

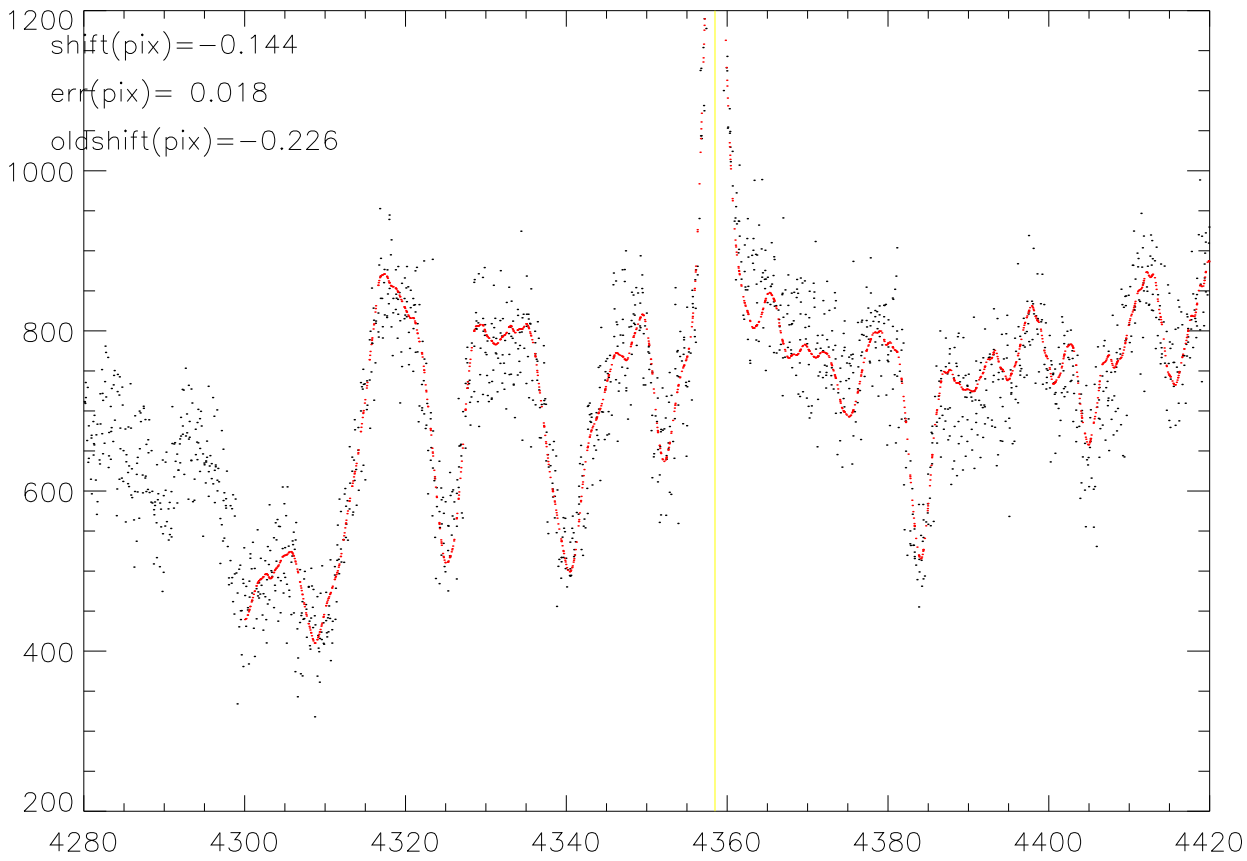

PLATE=3198 MJD=54865 Scattered Light on sdR−b1−00058689.fit
259
214
168
305
259
214
168
Y [pix]
X [pix]
0
500
1000
1500
2000

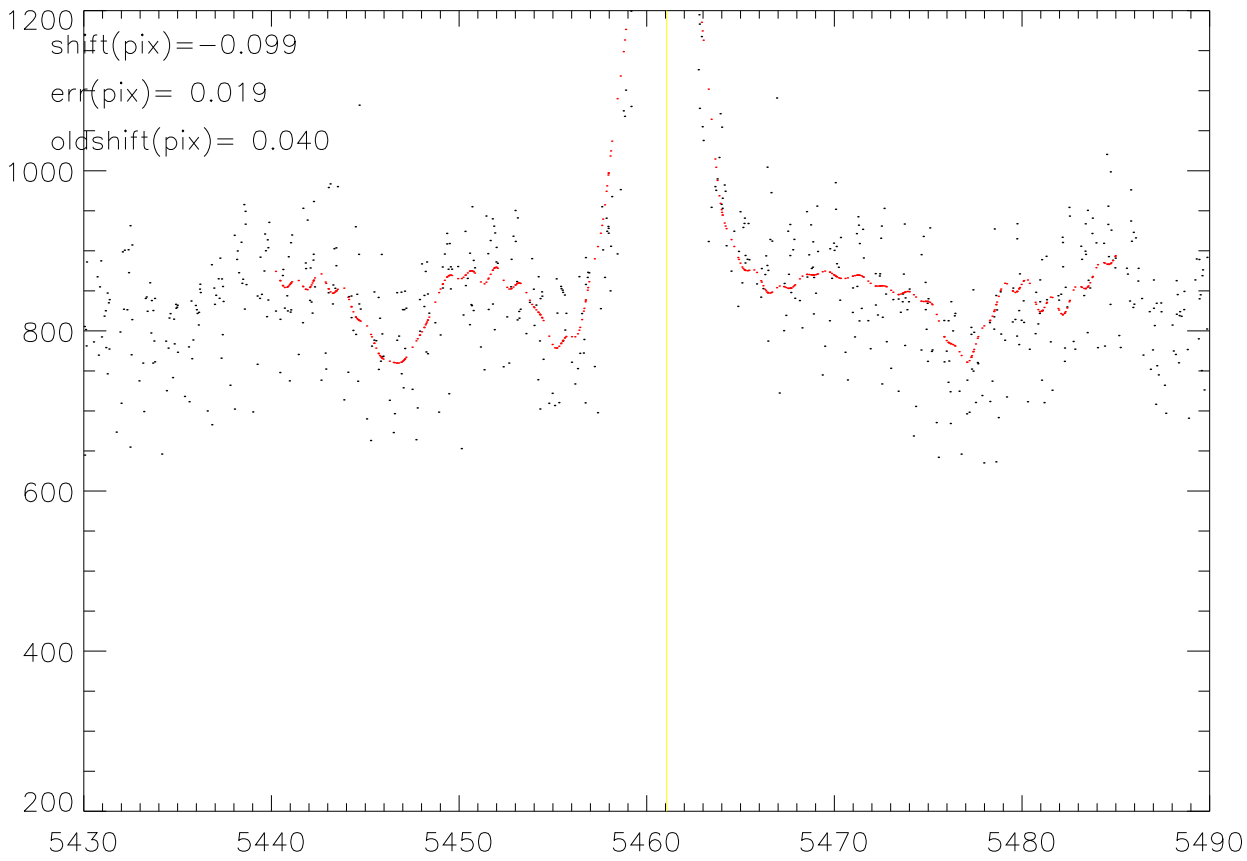

PLATE=3198 MJD=54865 Scattered Light on sdR-b1-00058689.fit
Brightness [electrons/pix]
400
300
200
100
0
Error bars denote full range
Min value = 168.292
Max value = 225.453
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:14:10 2010

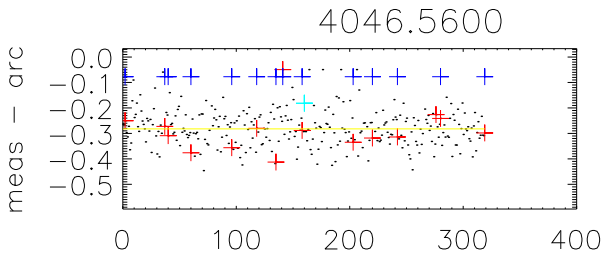

PLATE=3198 MJD=54865 Extraction chi^2 for sdR-b1-00058689.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

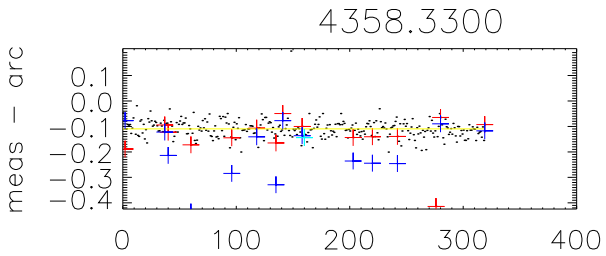

4046.5600
off: −0.88
sig: 0.308
4358.3300
off: −0.23
sig: 0.026
5460.9400
off: 0.04
sig: 0.018
5577.3390
off: −0.06
sig: 0.005
5889.9500
off: 0.10
sig: 0.013
5895.9240
off: 0.05
sig: 0.019

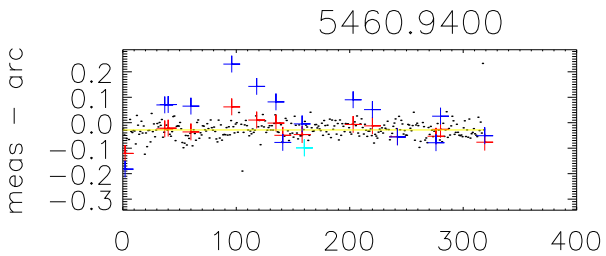

shift(pix)=−0.181
err(pix)= 0.043
oldshift(pix)=−0.885
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

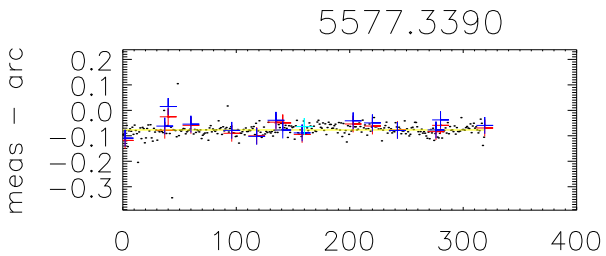

shift(pix)=−0.144
err(pix)= 0.018
oldshift(pix)=−0.226
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

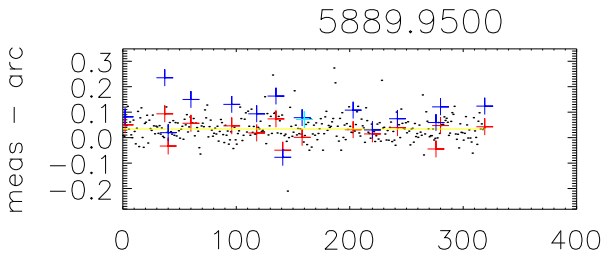

shift(pix)=−0.099
err(pix)= 0.019
oldshift(pix)= 0.040
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

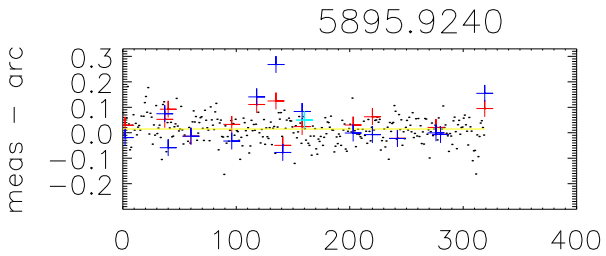

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

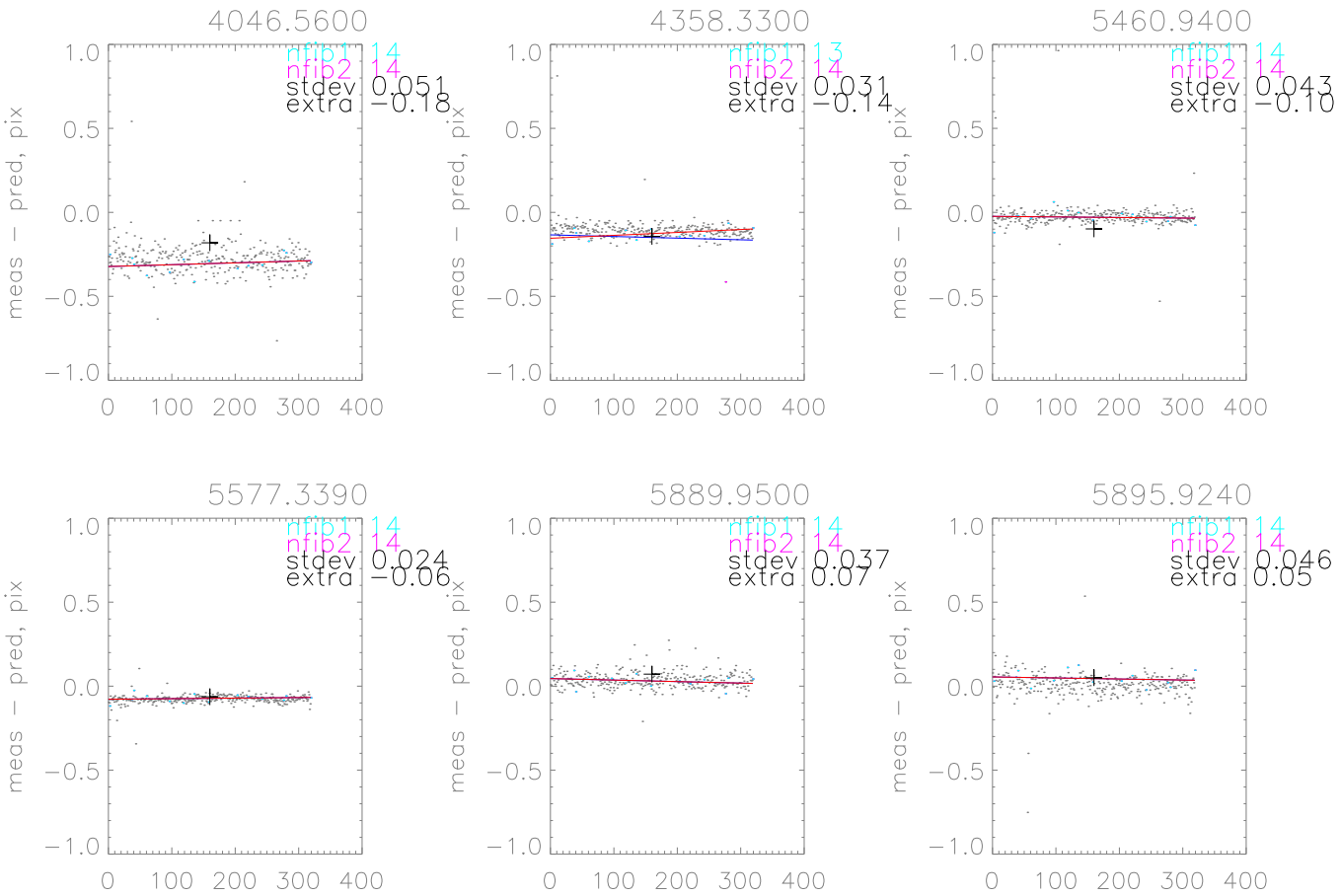

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

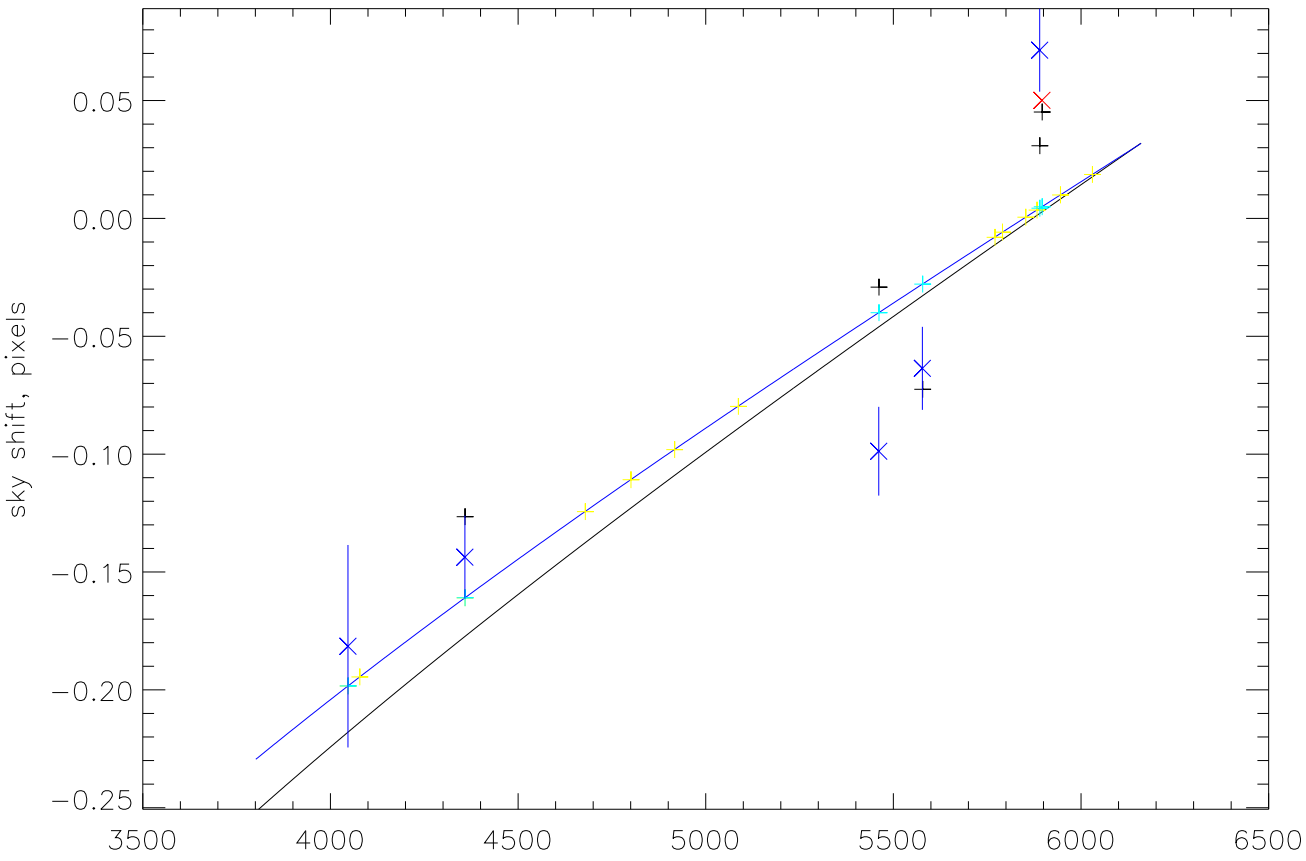

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

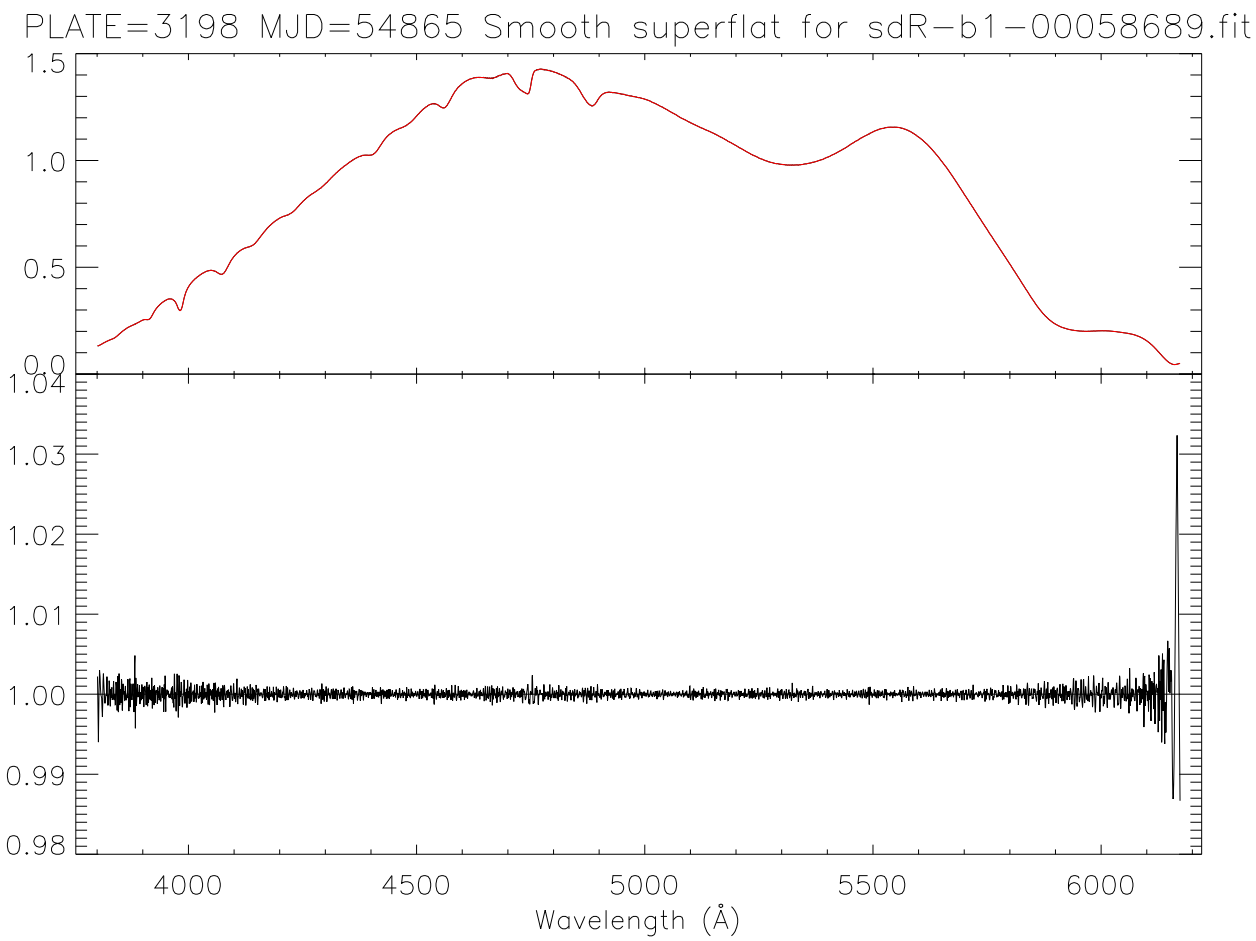

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

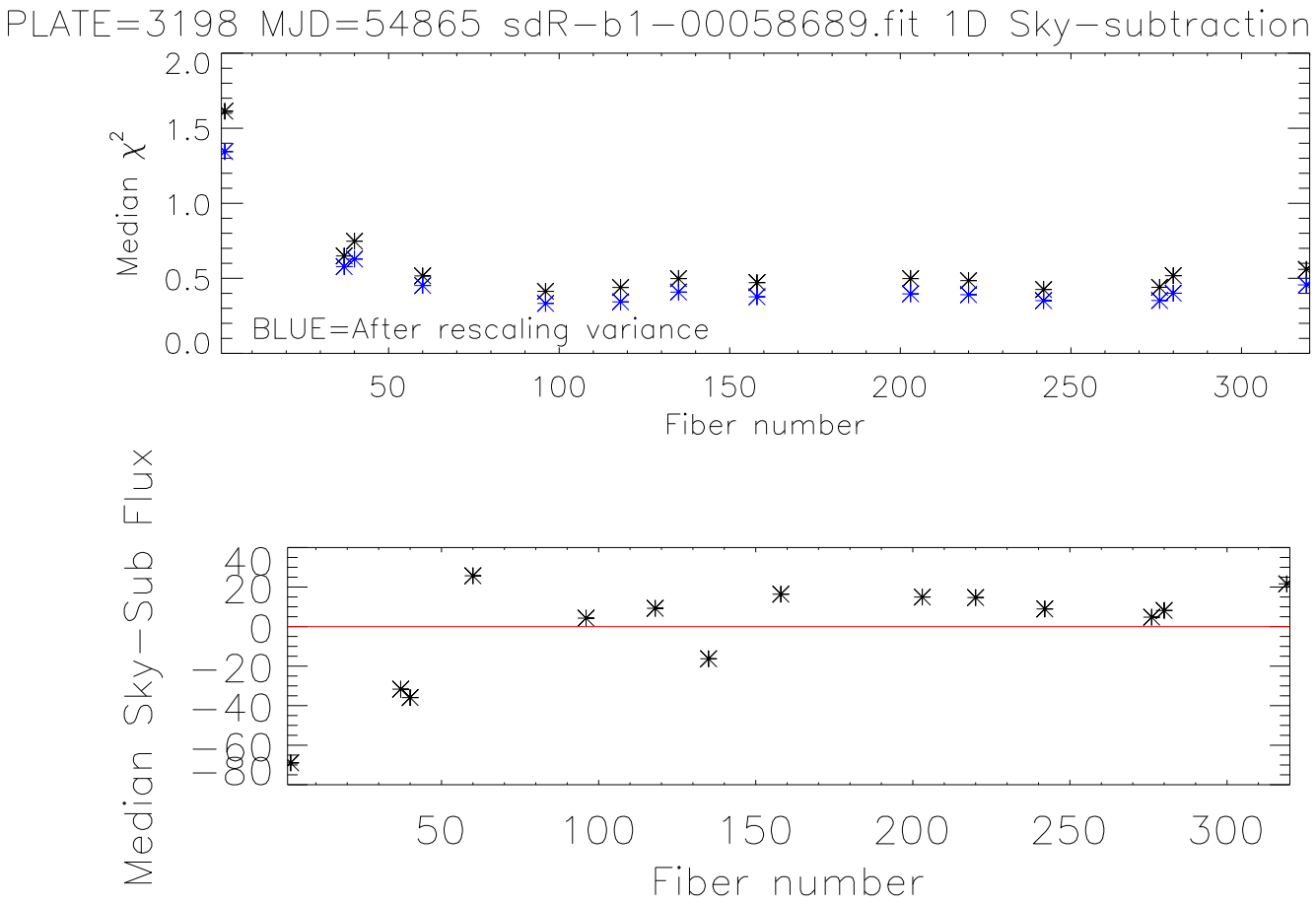

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

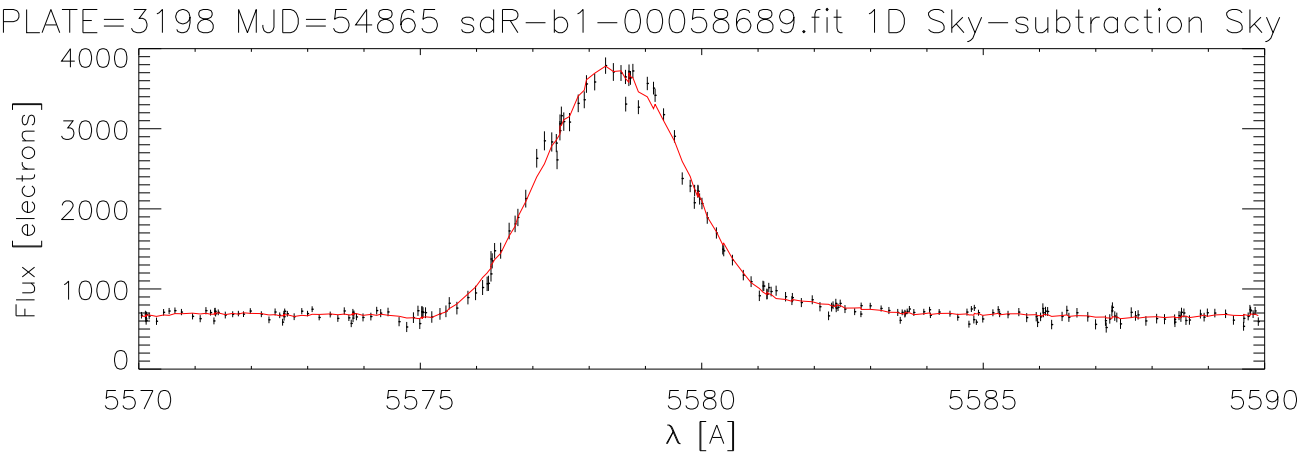

4046.5600
nfib1 14
nfib2 14
stdev 0.051
extra −0.18
4358.3300
nfib1 13
nfib2 14
stdev 0.031
extra −0.14
5460.9400
nfib1 14
nfib2 14
stdev 0.043
extra −0.10
5577.3390
nfib1 14
nfib2 14
stdev 0.024
extra −0.06
5889.9500
nfib1 14
nfib2 14
stdev 0.037
extra 0.07
5895.9240
nfib1 14
nfib2 14
stdev 0.046
extra 0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

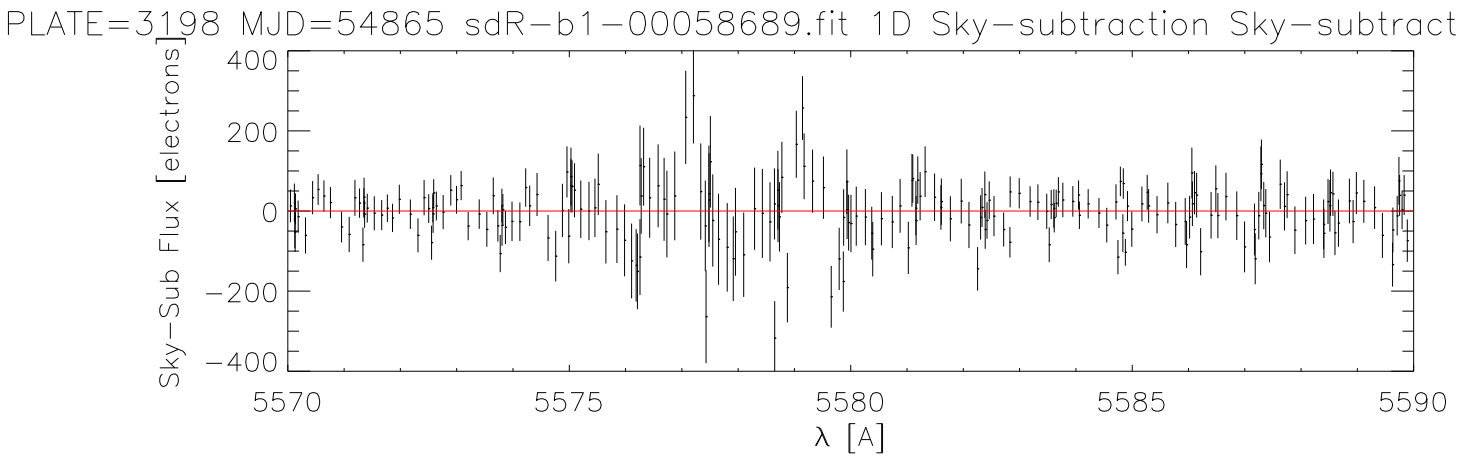

sky shift, pixels
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
3500
4000
4500
5000
5500
6000
6500

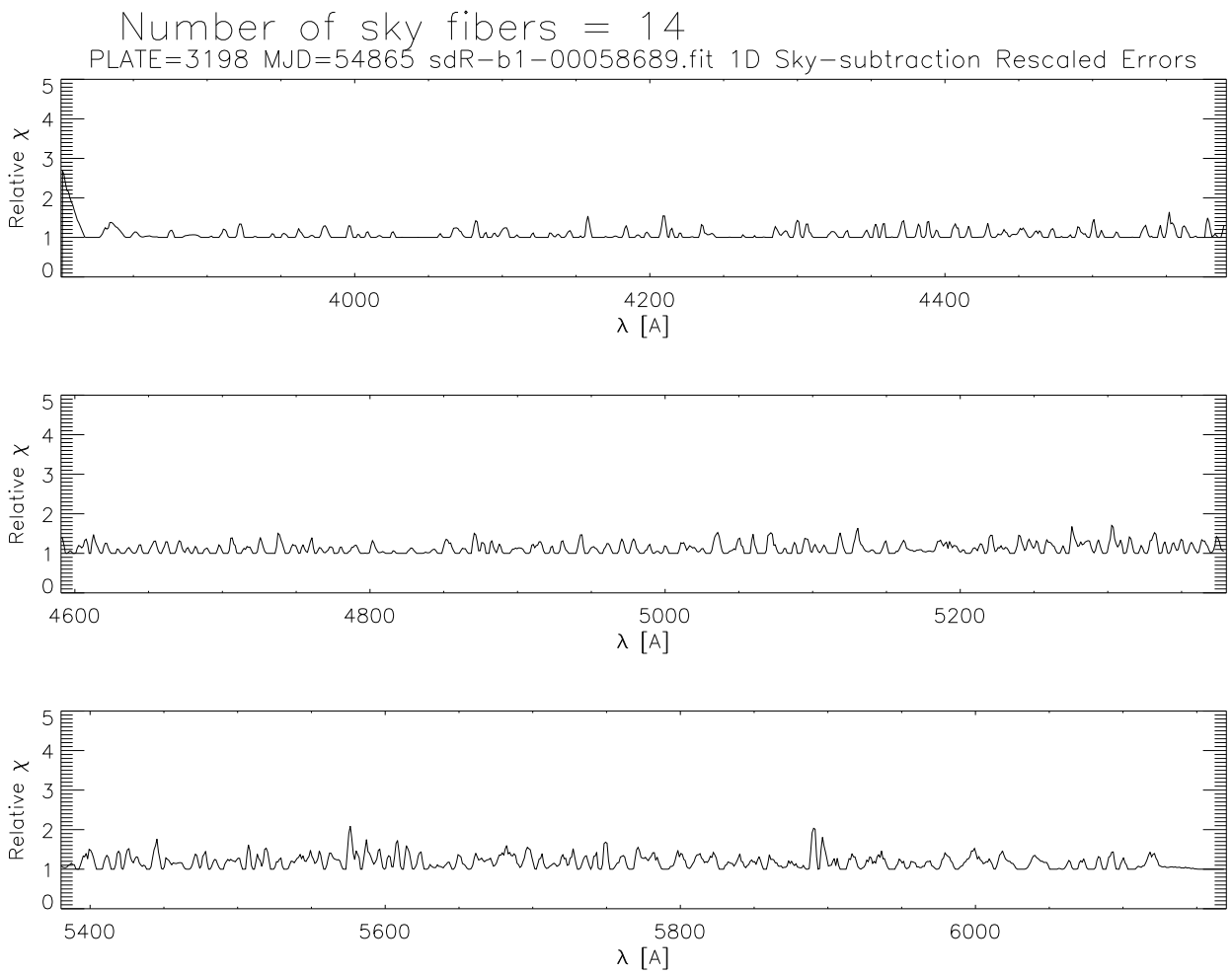
es= −0.0000

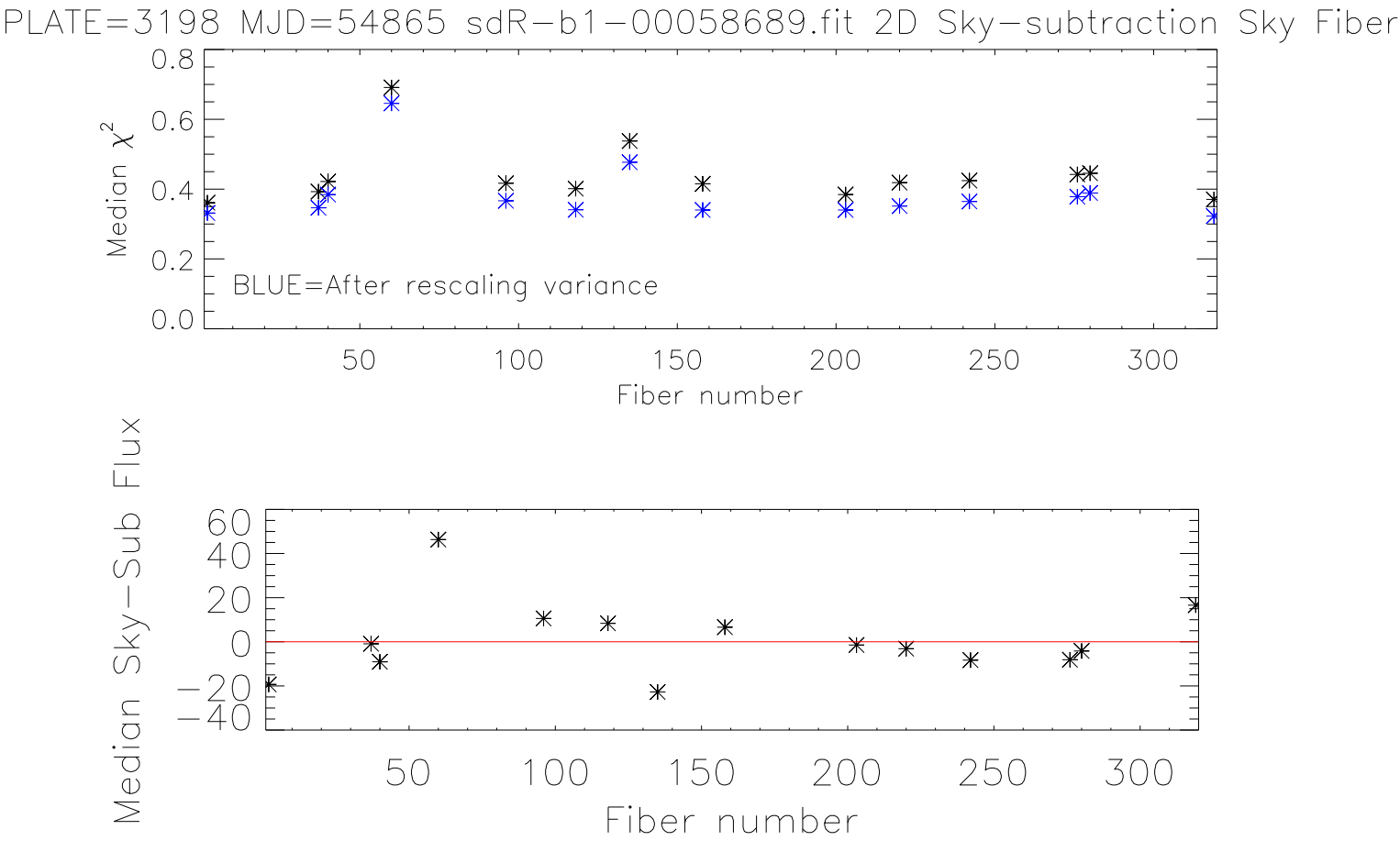

PLATE=3198 MJD=54865 Smooth superflat for sdR−b1−00058689.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

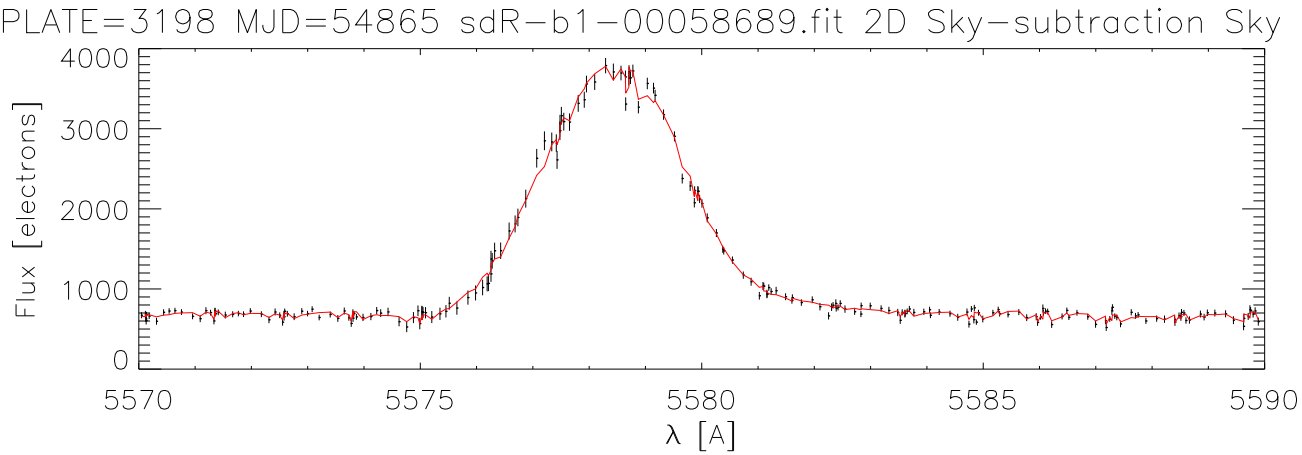

PLATE=3198 MJD=54865 sdR-b1-00058689.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

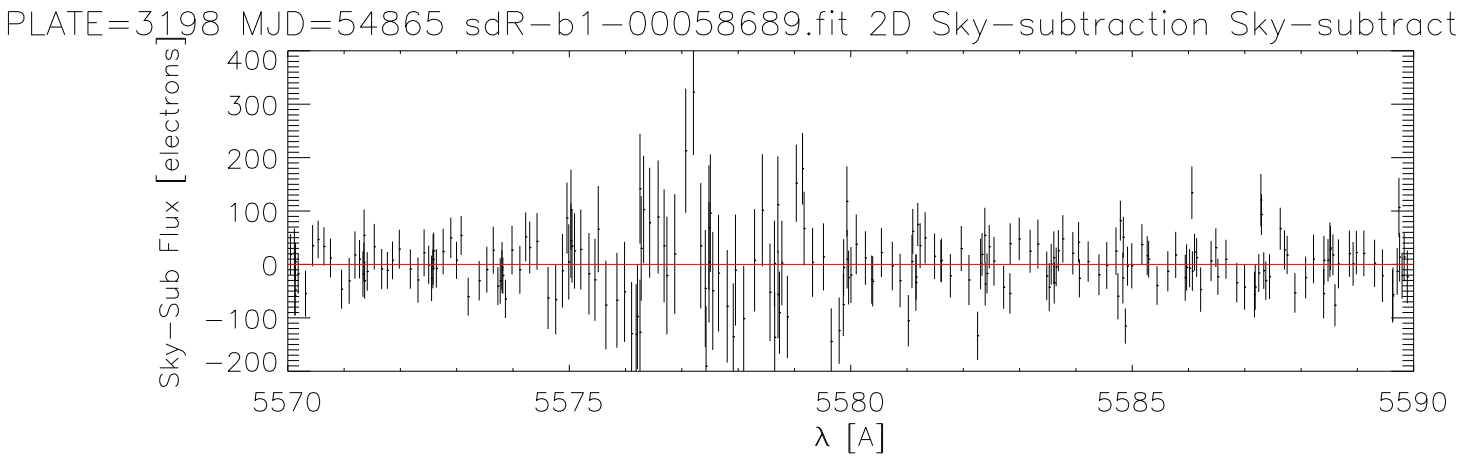

PLATE=3198 MJD=54865 sdR-b1-00058689.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

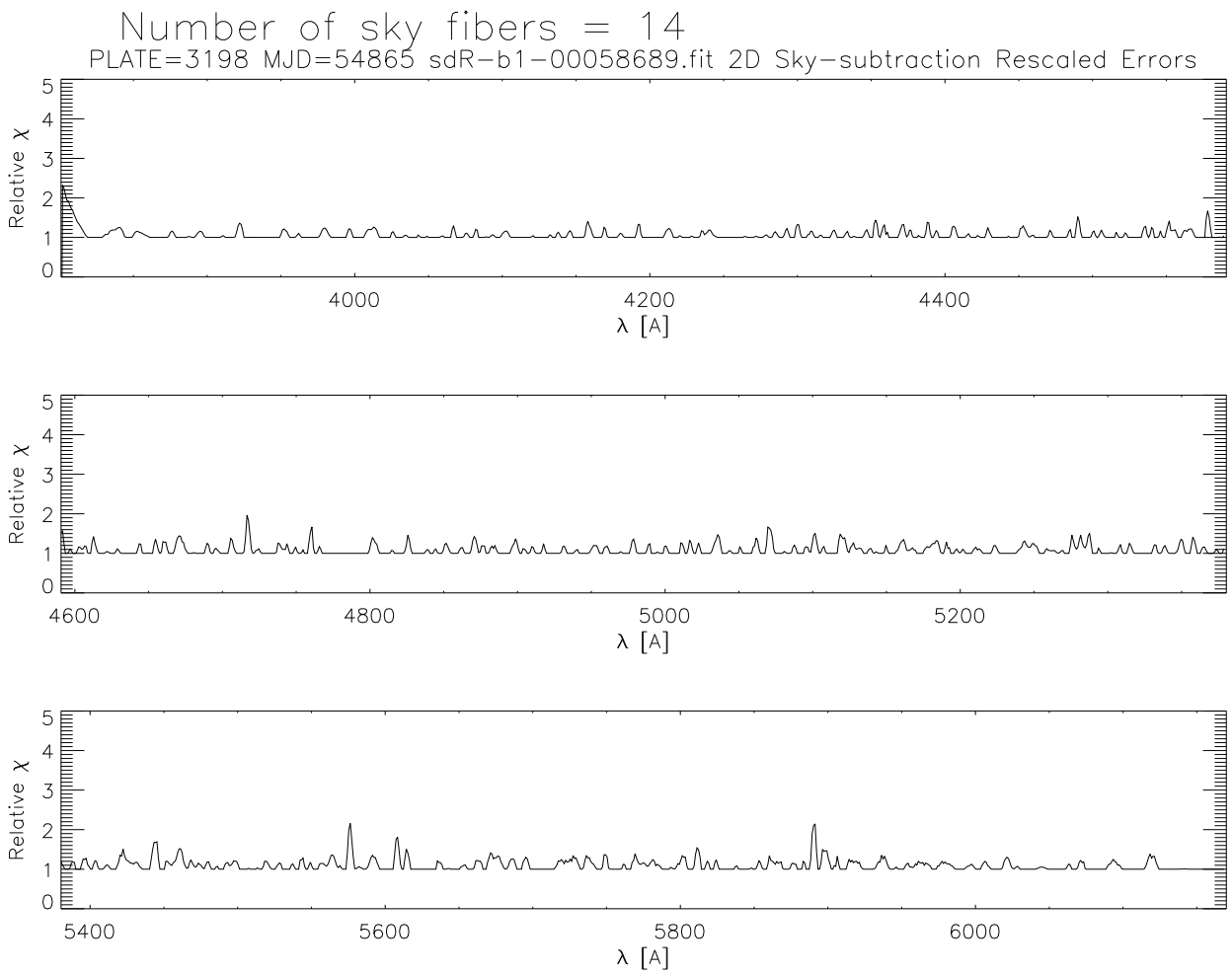

PLATE=3198 MJD=54865 sdR-b1-00058689.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

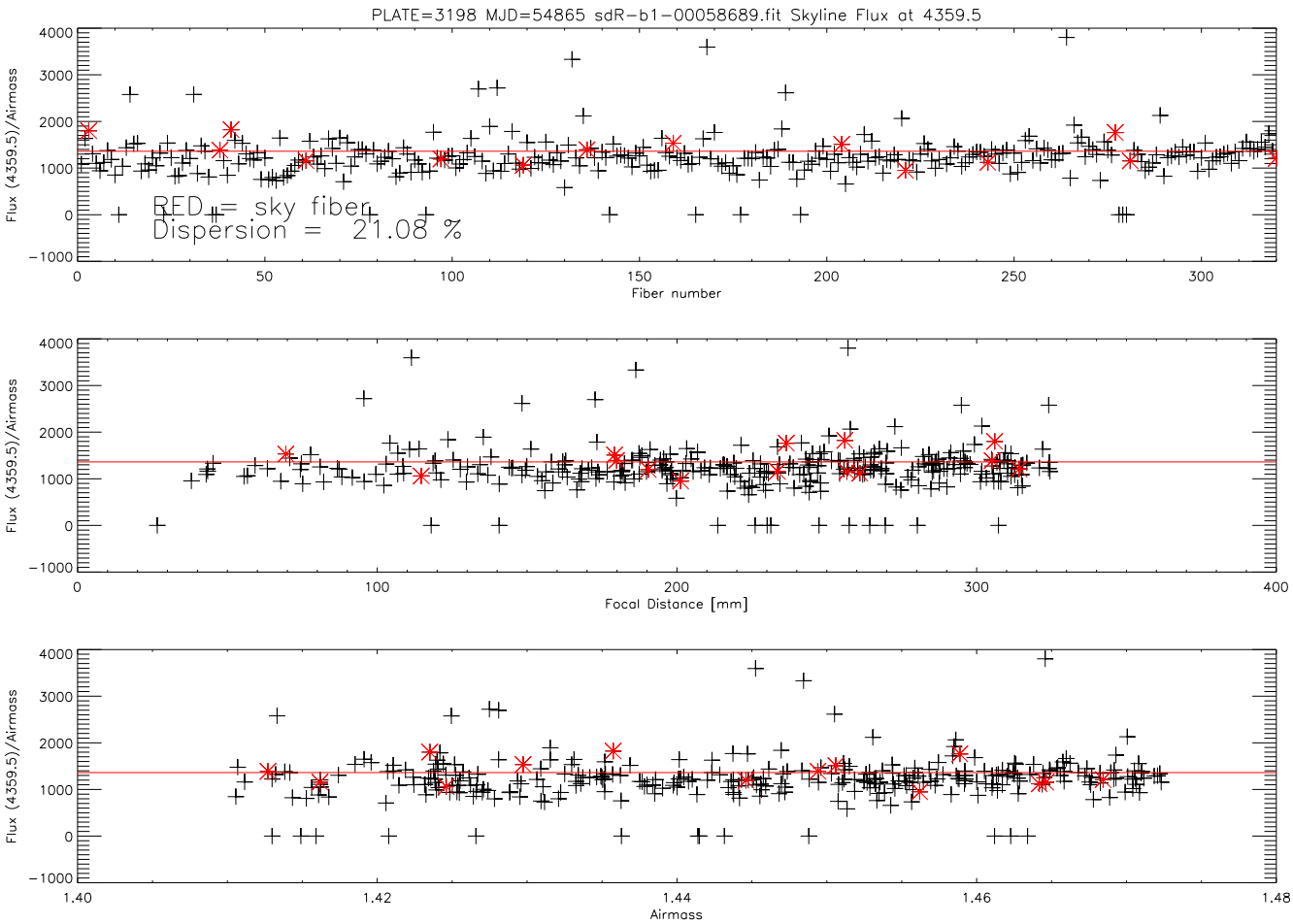

Number of sky fibers = 14
PLATE=3198 MJD=54865 sdR-b1-00058689.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

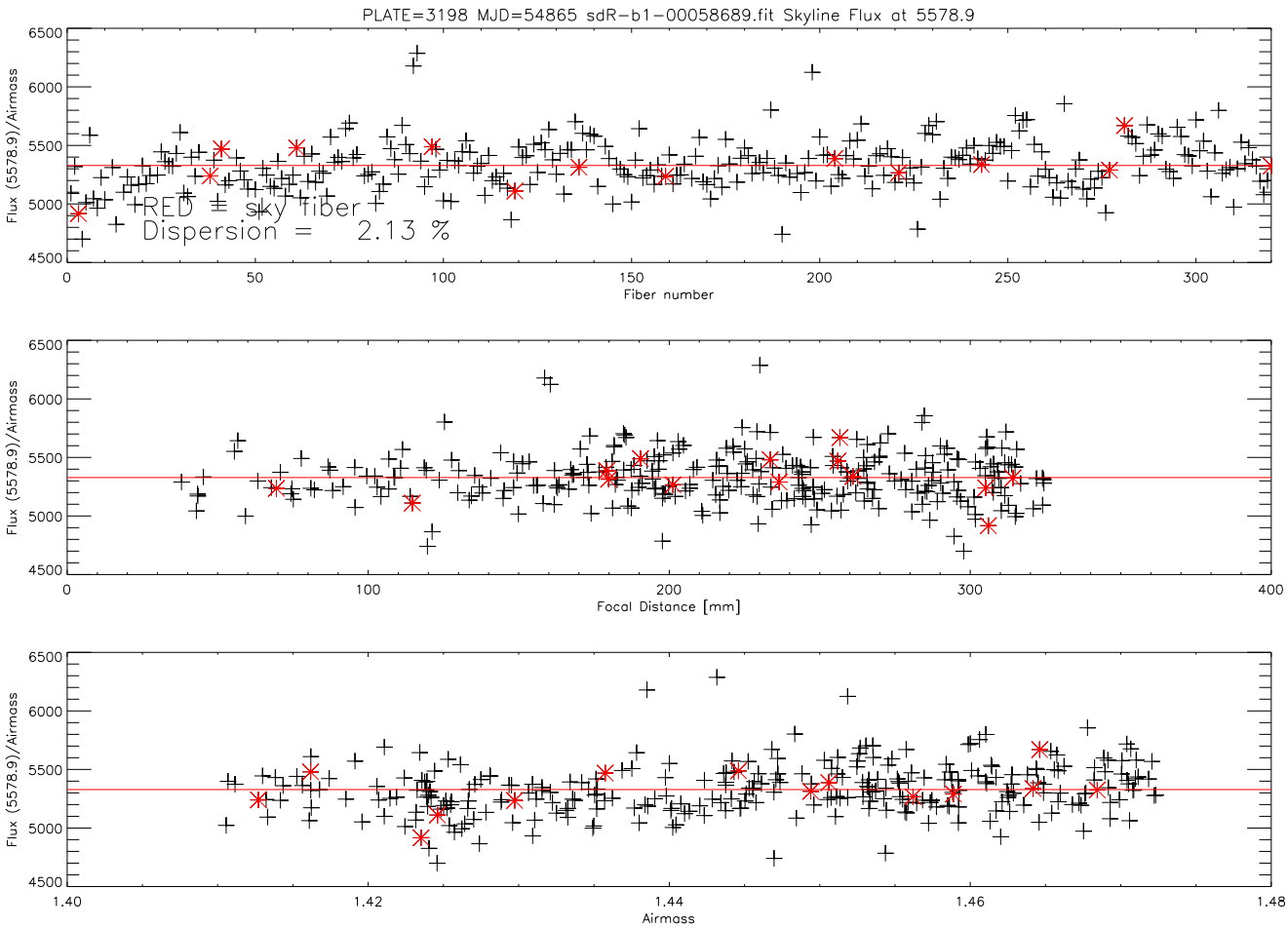

PLATE=3198 MJD=54865 sdR-b1-00058689.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
60
40
20
0
-20
-40
50
100
150
200
250
300
Fiber number

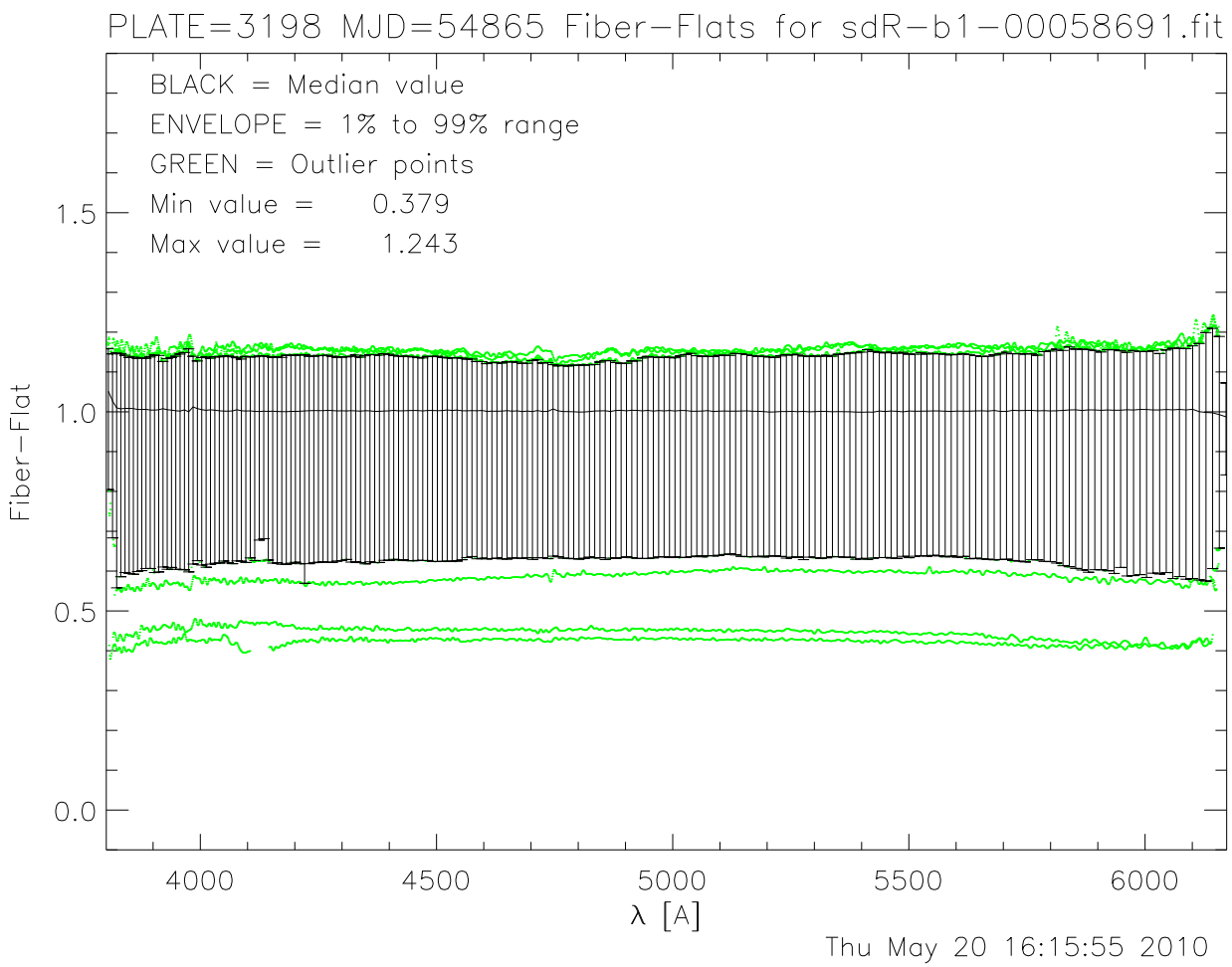

PLATE=3198 MJD=54865 sdR-b1-00058689.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

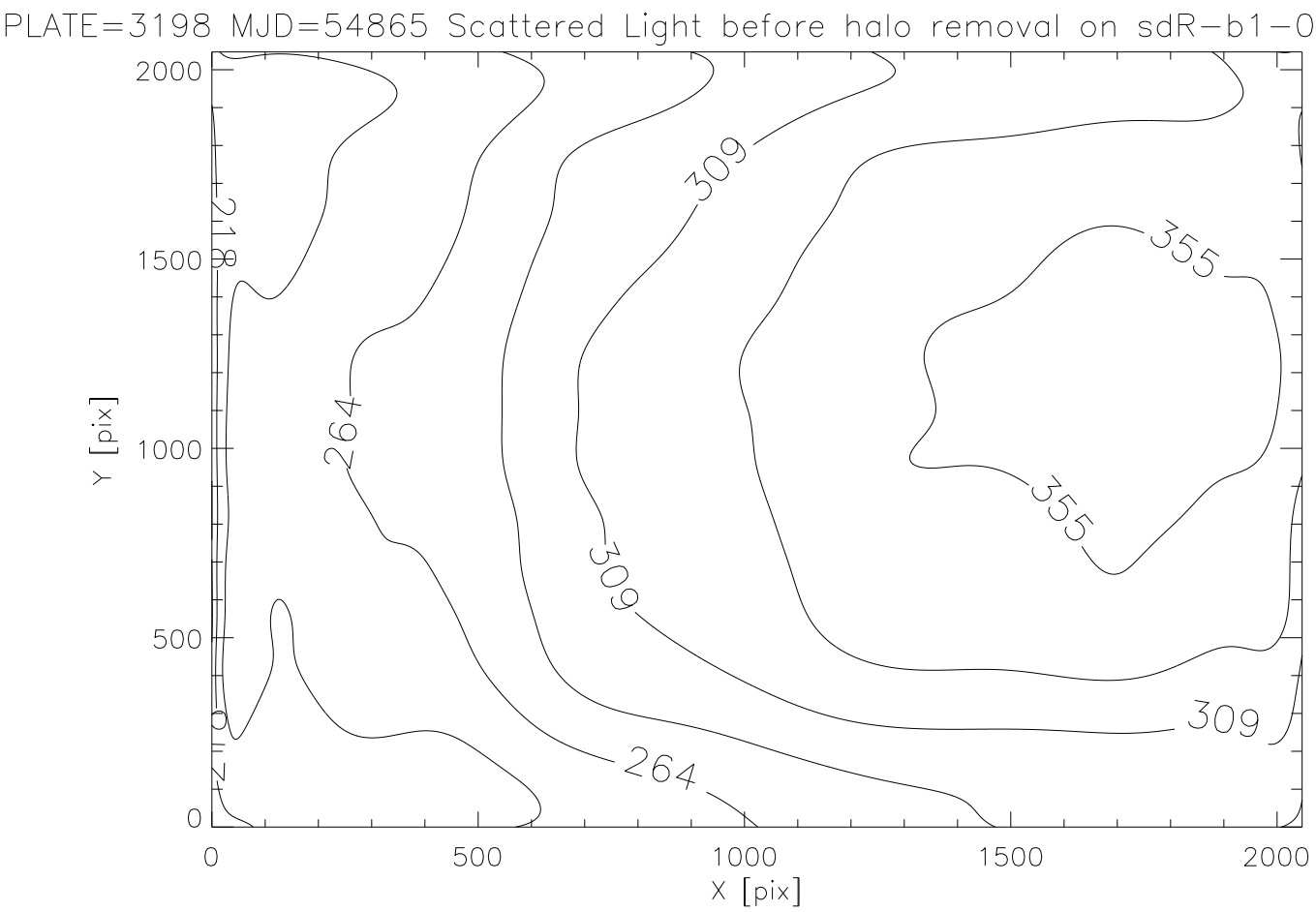

PLATE=3198 MJD=54865 sdR-b1-00058689.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

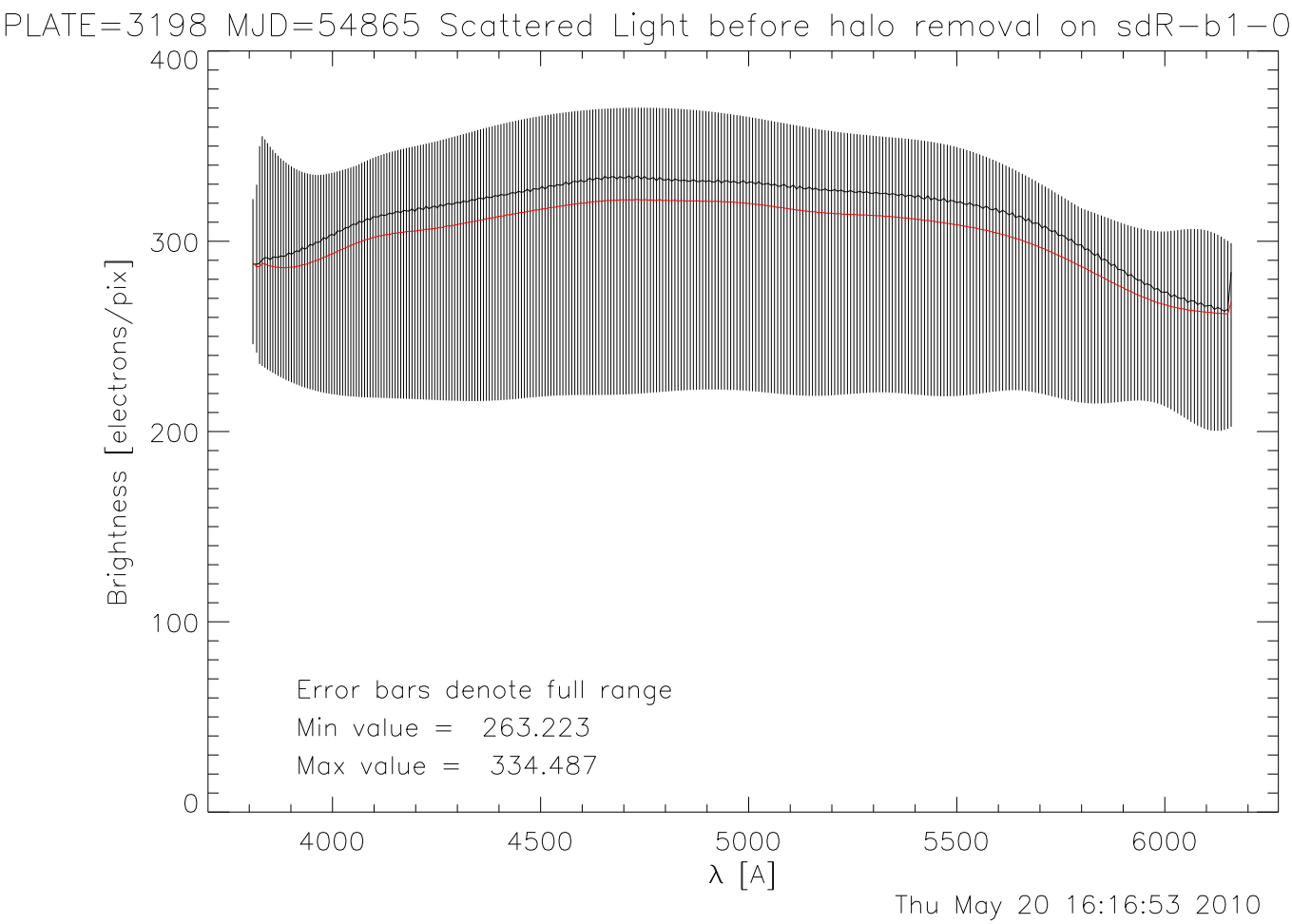

Number of sky fibers = 14
PLATE=3198 MJD=54865 sdR-b1-00058689.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

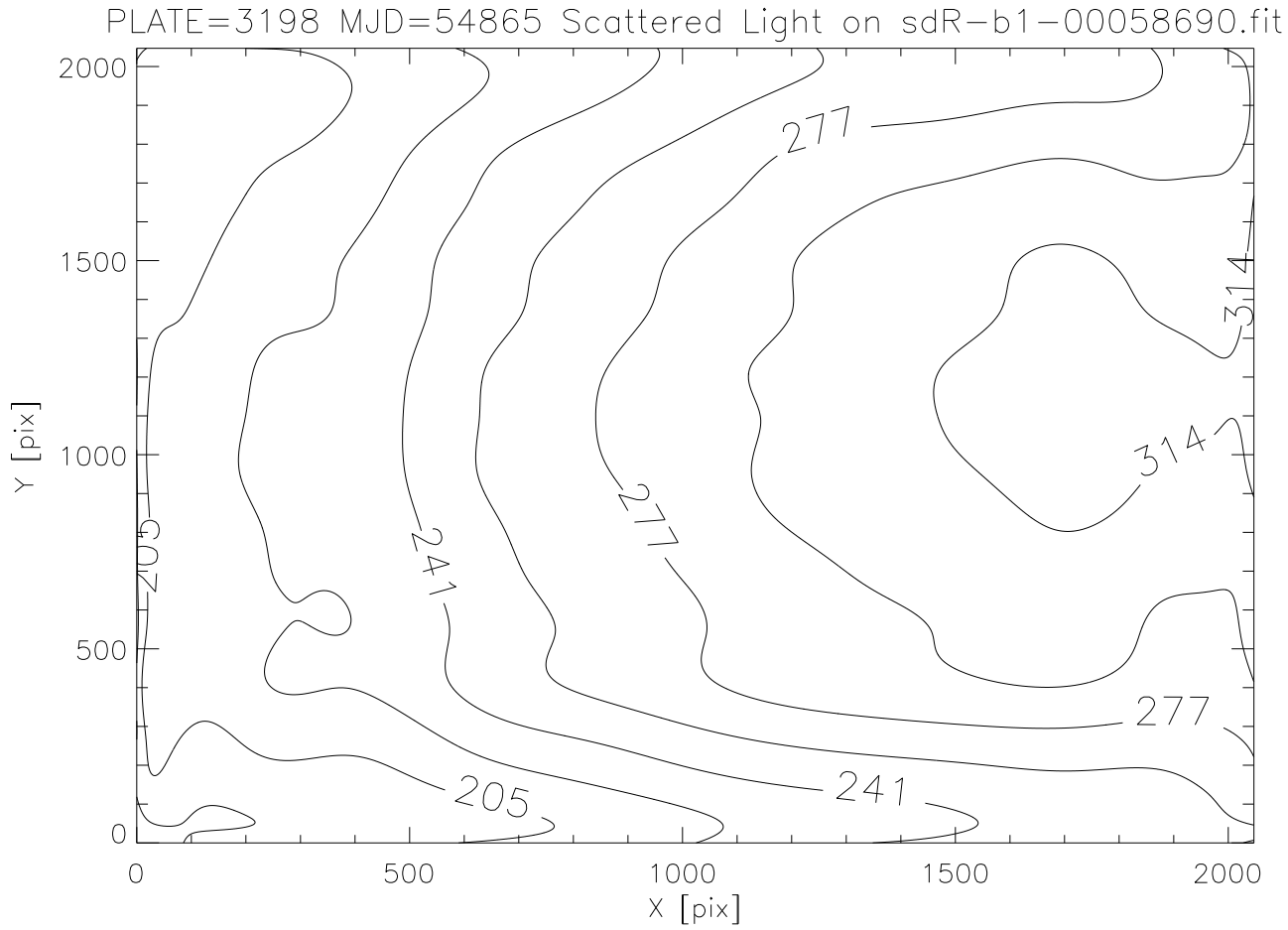

PLATE=3198 MJD=54865 sdR-b1-00058689.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 21.08 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

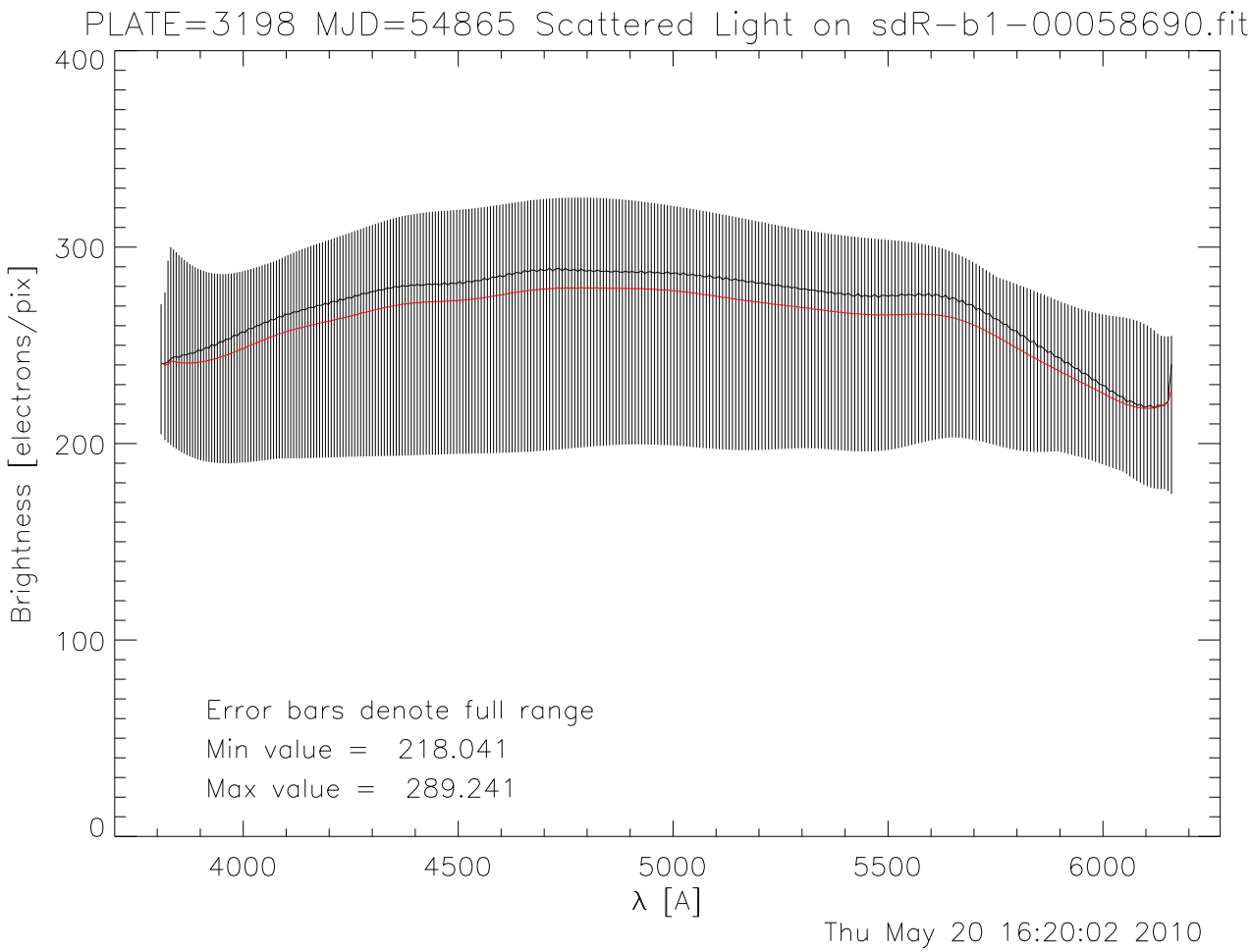

PLATE=3198 MJD=54865 sdR-b1-00058689.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.13 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

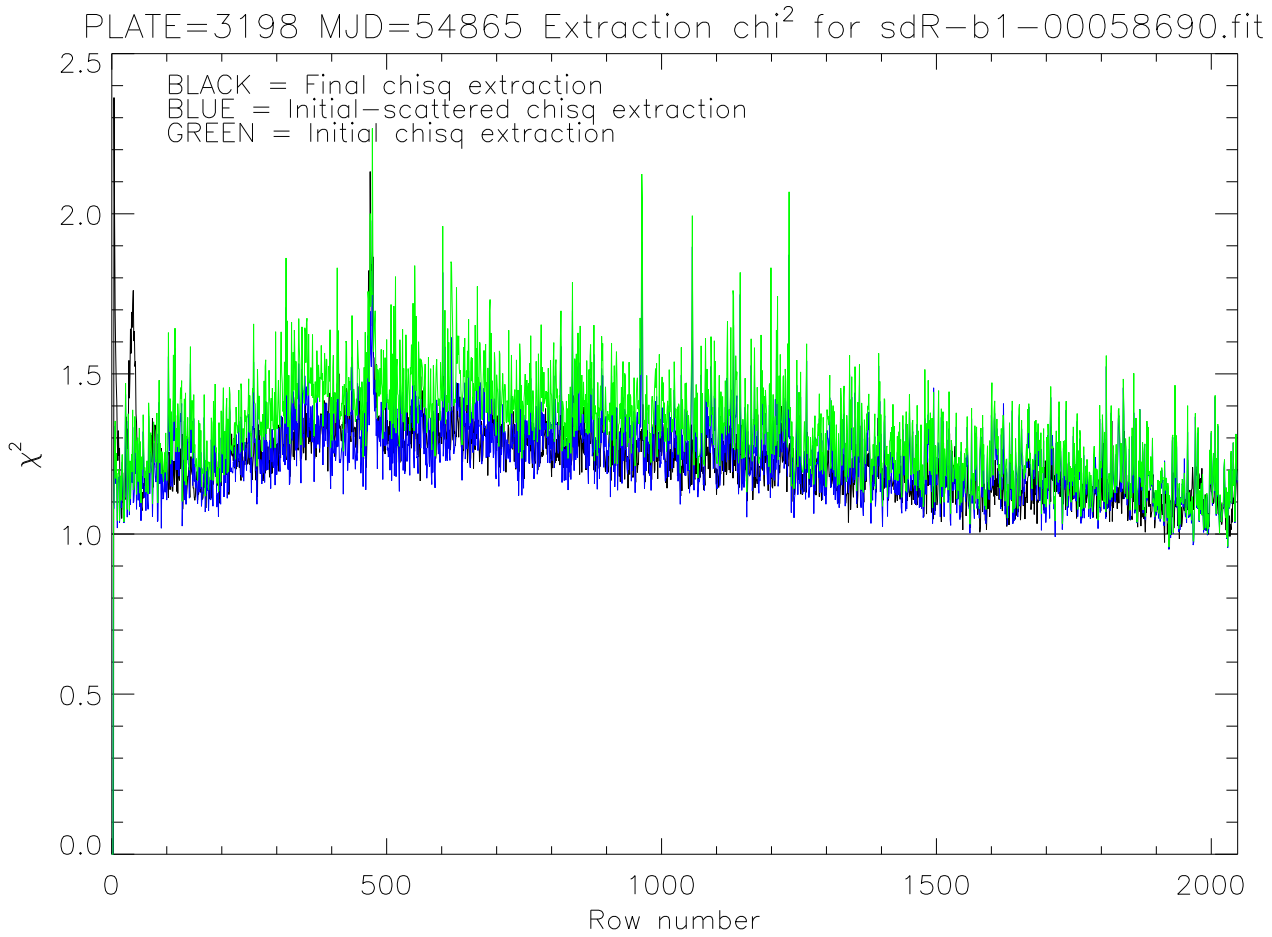

PLATE=3198 MJD=54865 Fiber-Flats for sdR-b1-00058691.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.379
Max value = 1.243
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:15:55 2010

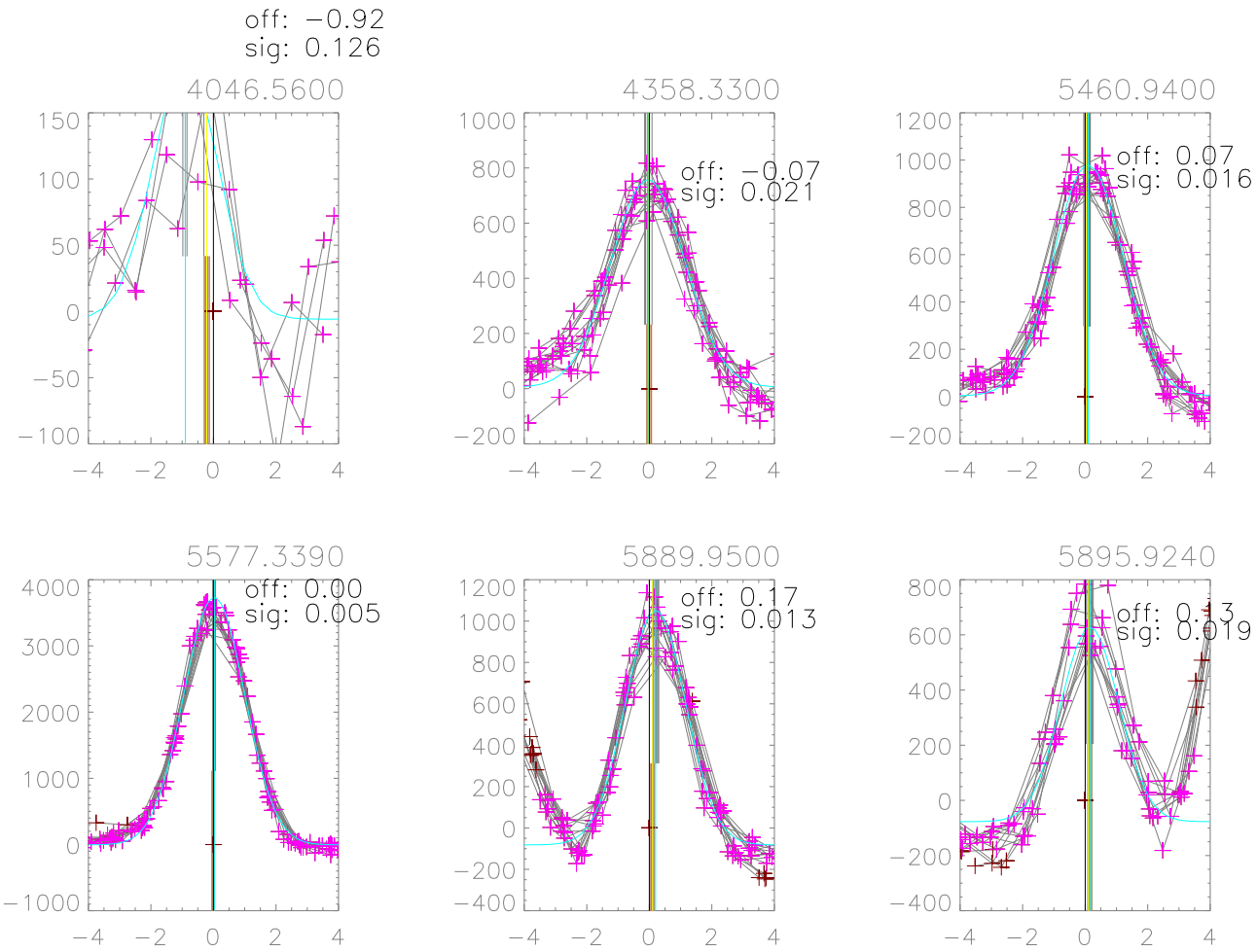

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-b1-00058690.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
218
264
309
355
355
309
309
264
218

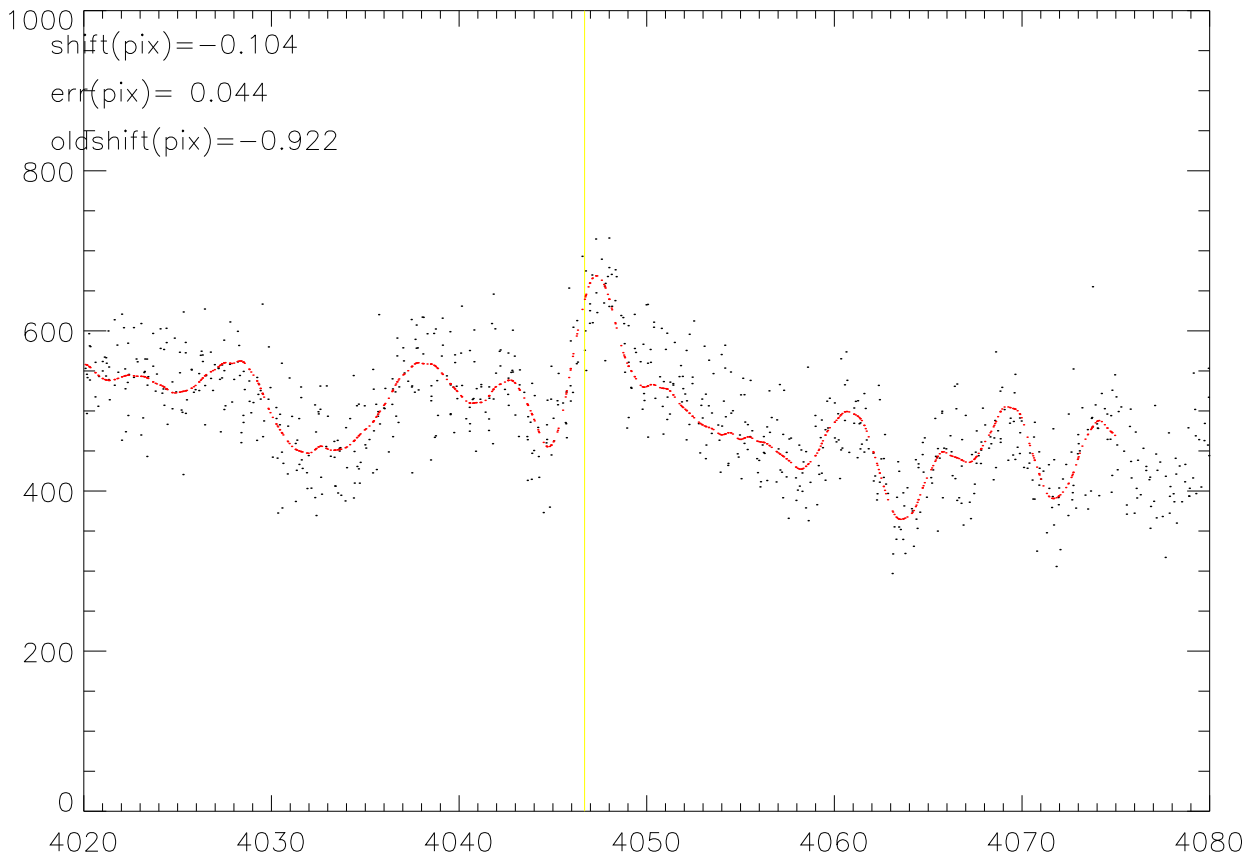

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-b1-00058690.f
Brightness [electrons/pix]
400
300
200
100
0
Error bars denote full range
Min value = 263.223
Max value = 334.487
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:16:53 2010

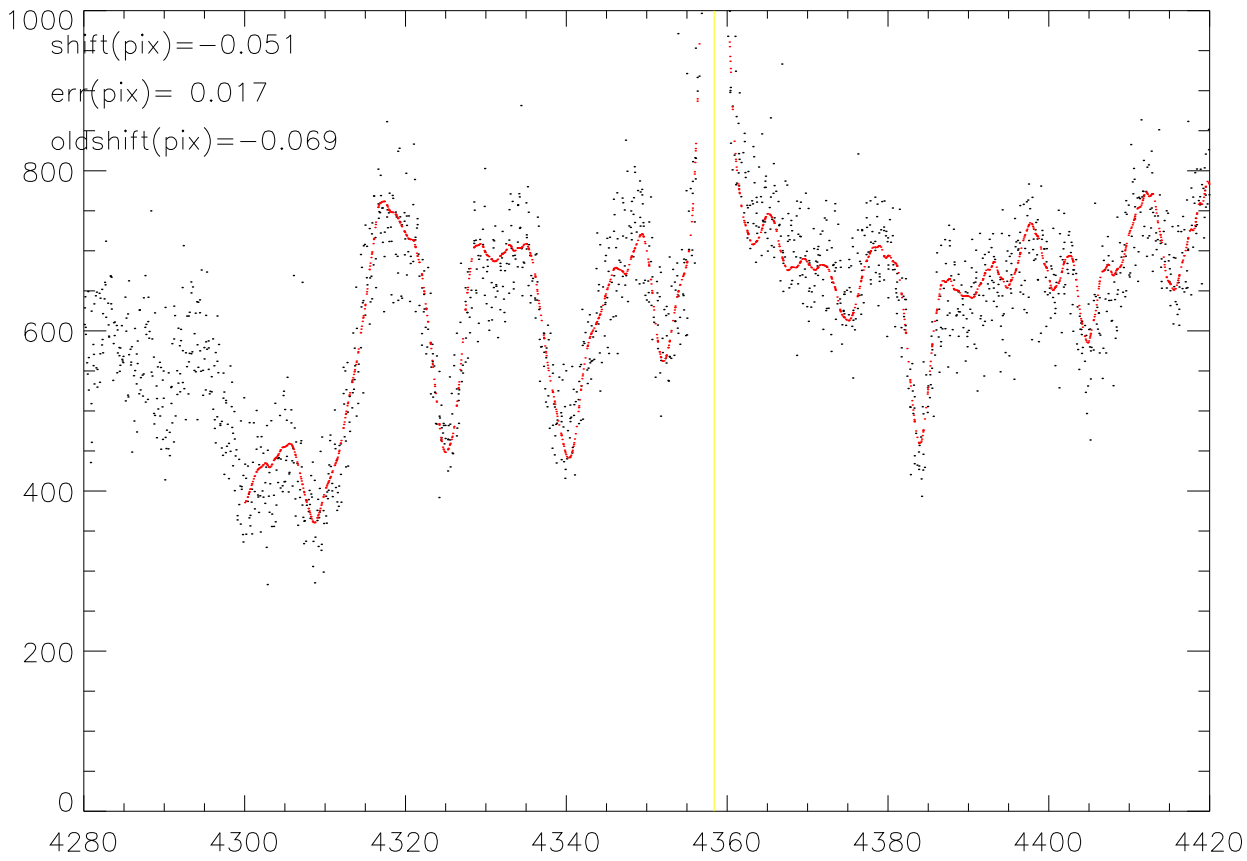

PLATE=3198 MJD=54865 Scattered Light on sdR-b1-00058690.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
205
241
277
314

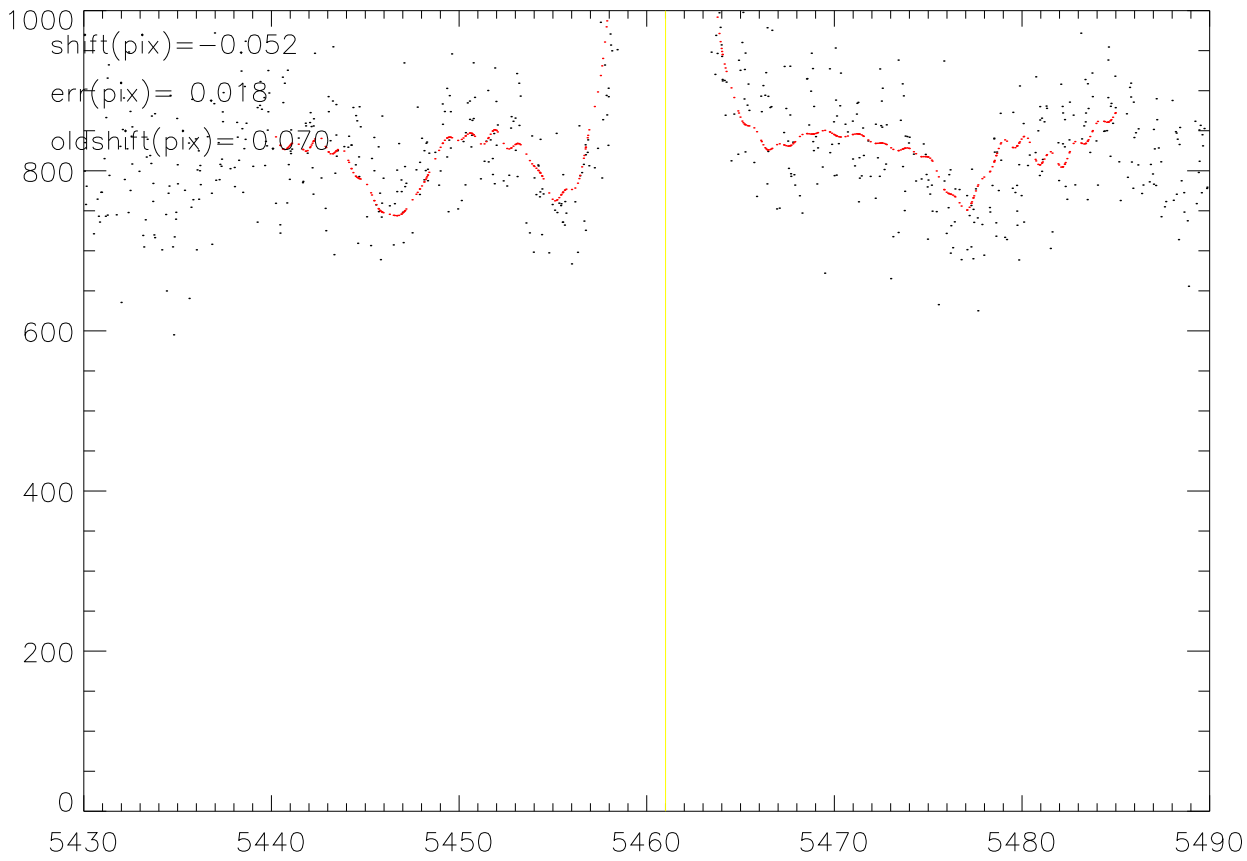

PLATE=3198 MJD=54865 Scattered Light on sdR-b1-00058690.fit
Brightness [electrons/pix]
400
300
200
100
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 218.041
Max value = 289.241
Thu May 20 16:20:02 2010

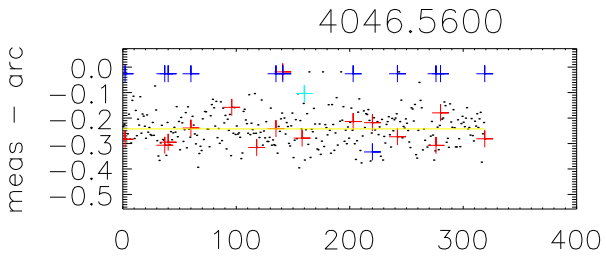

PLATE=3198 MJD=54865 Extraction chi^2 for sdR-b1-00058690.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

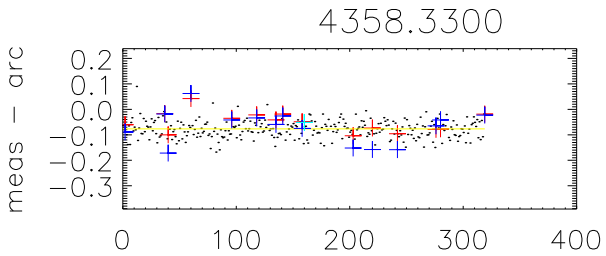

off: −0.92
sig: 0.126
4046.5600
4358.3300
off: −0.07
sig: 0.021
5460.9400
off: 0.07
sig: 0.016
5577.3390
off: 0.00
sig: 0.005
5889.9500
off: 0.17
sig: 0.013
5895.9240
off: 0.13
sig: 0.019

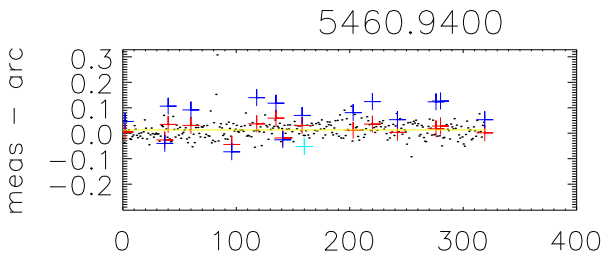

shift(pix)=−0.104
err(pix)= 0.044
oldshift(pix)=−0.922
1000
800
600
400
200
0
4020
4030
4040
4050
4060
4070
4080

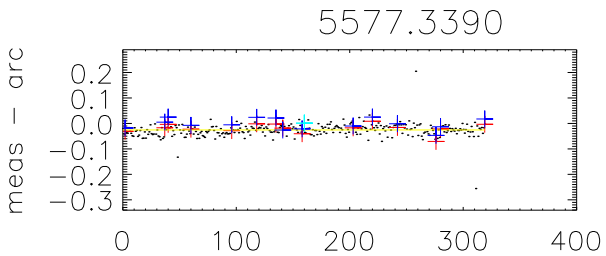

shift(pix)=−0.051
err(pix)= 0.017
oldshift(pix)=−0.069
1000
800
600
400
200
0
4280
4300
4320
4340
4360
4380
4400
4420

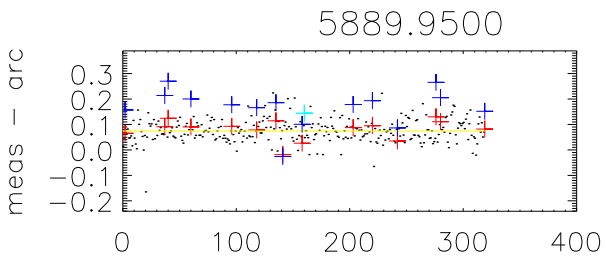

shift(pix)=−0.052
err(pix)= 0.018
oldshift(pix)= 0.070
1000
800
600
400
200
0
5430
5440
5450
5460
5470
5480
5490

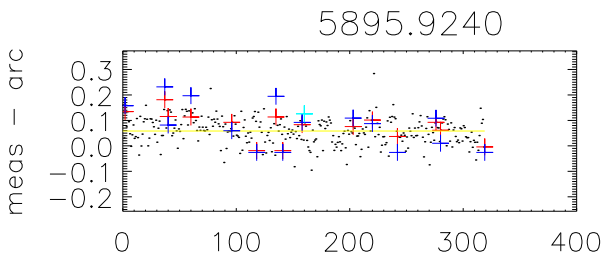

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

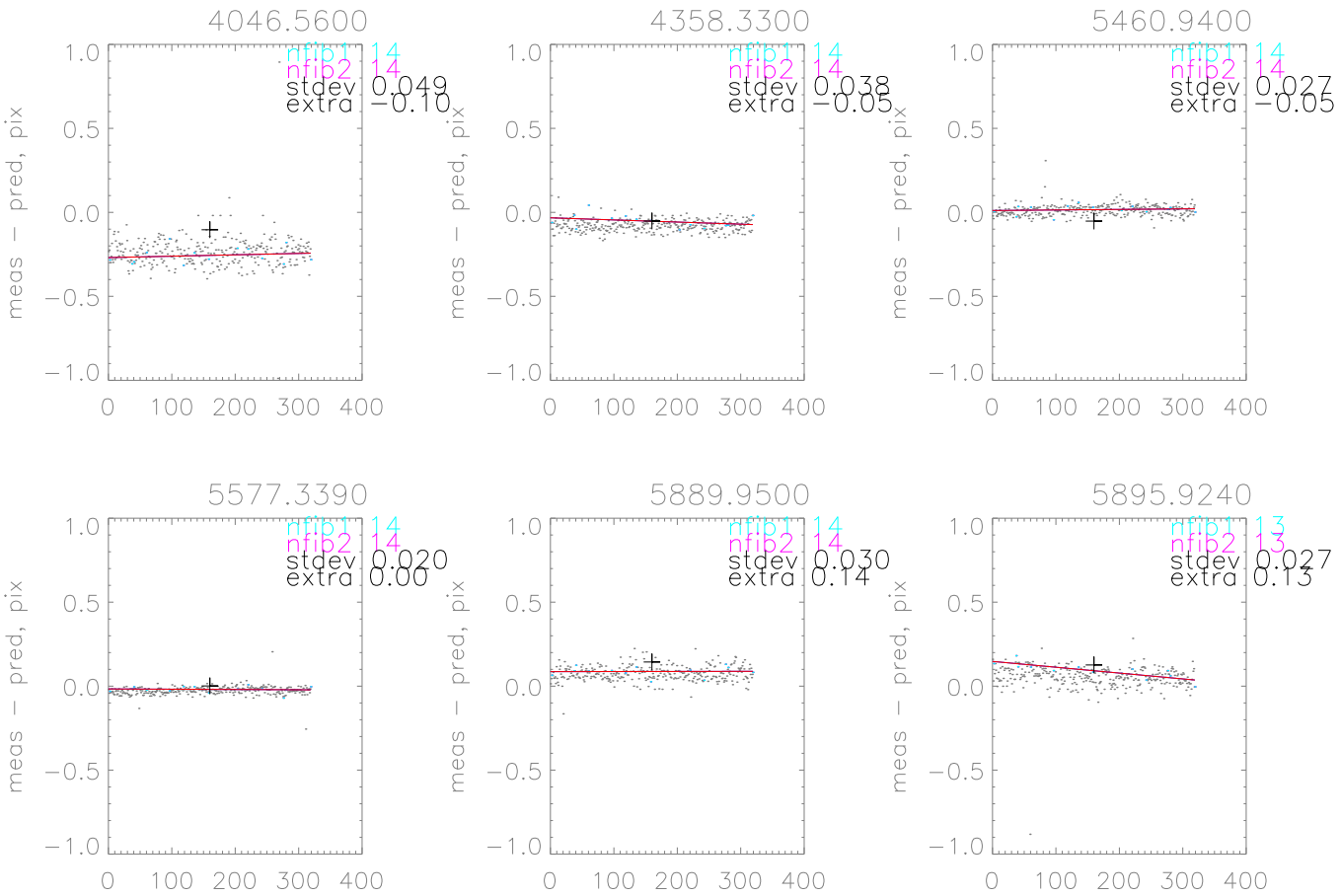

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

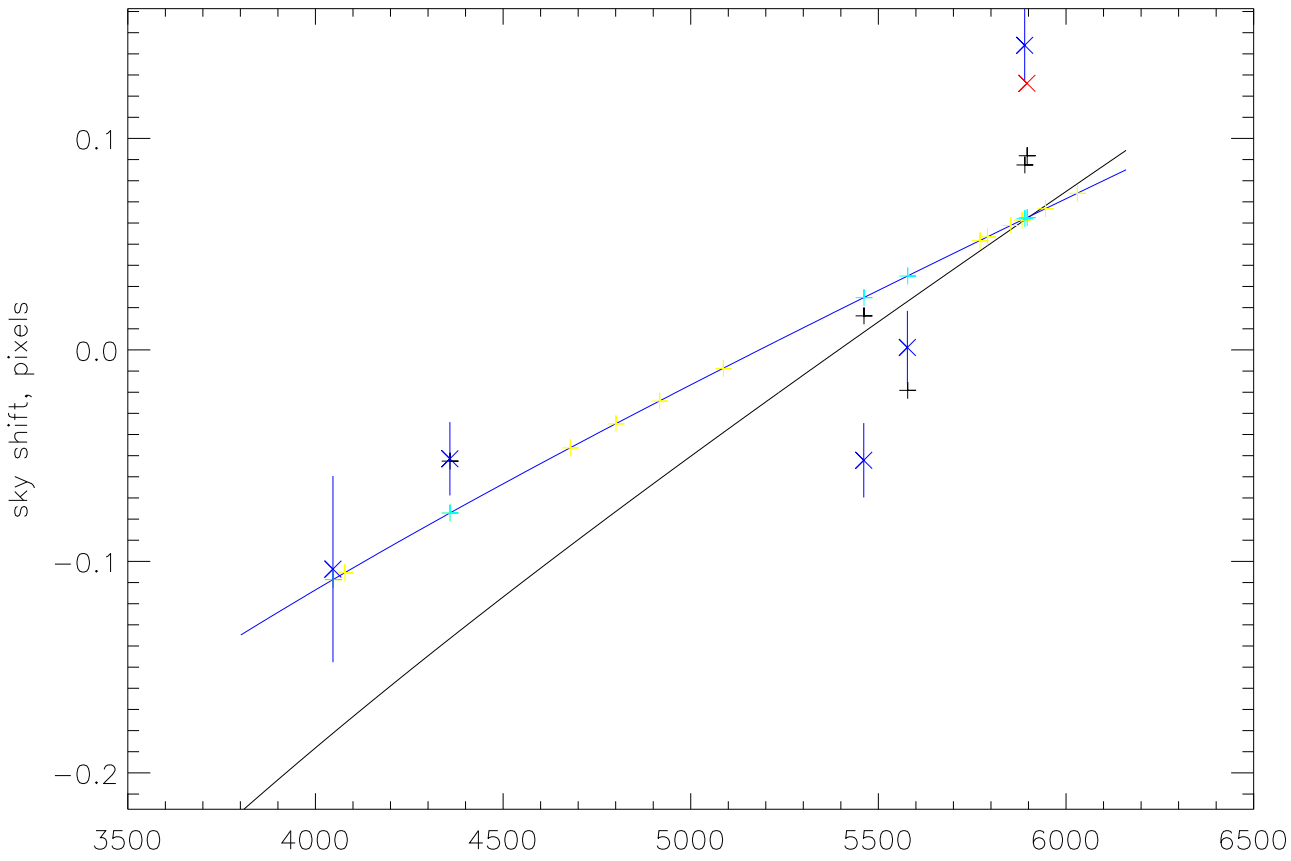

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

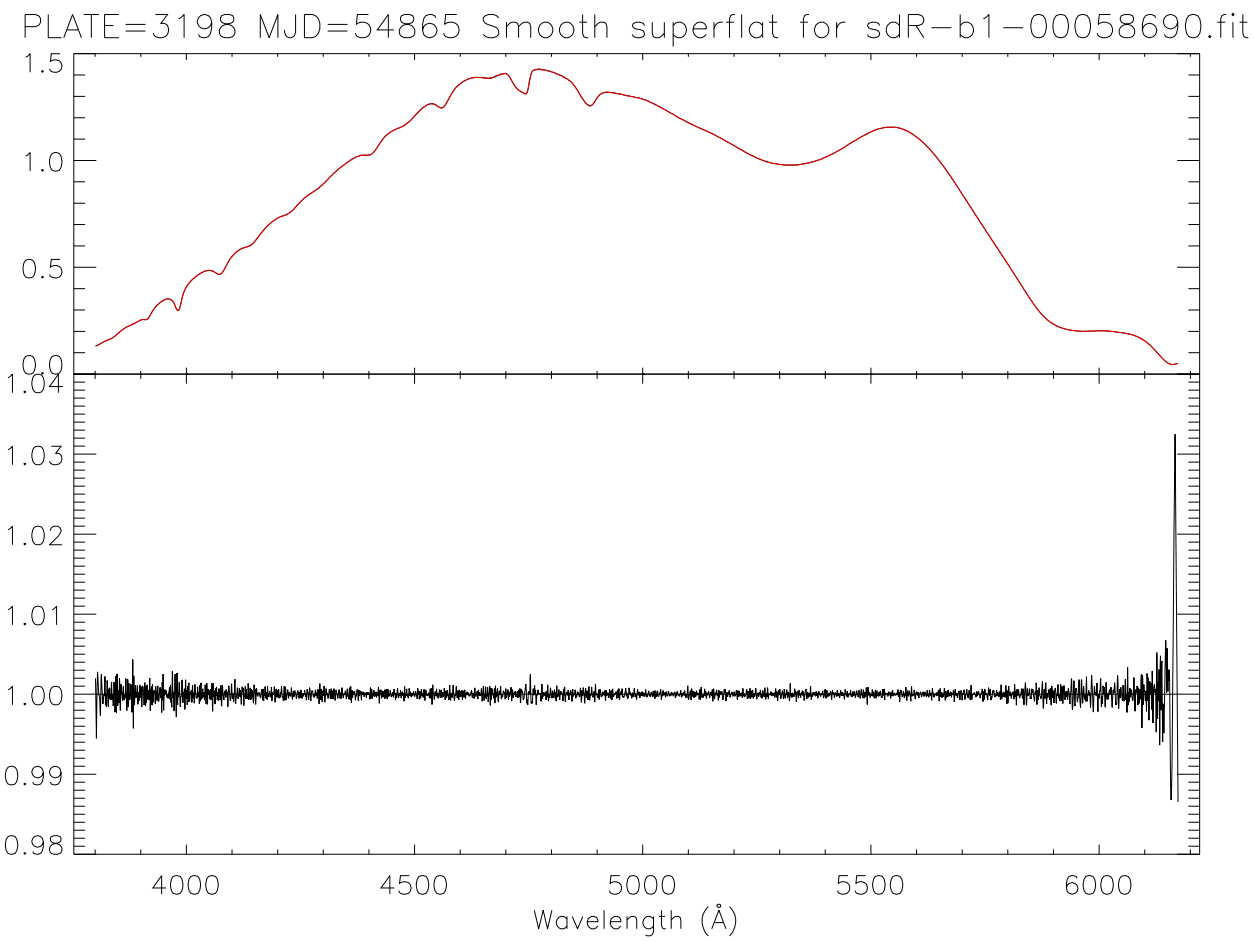

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

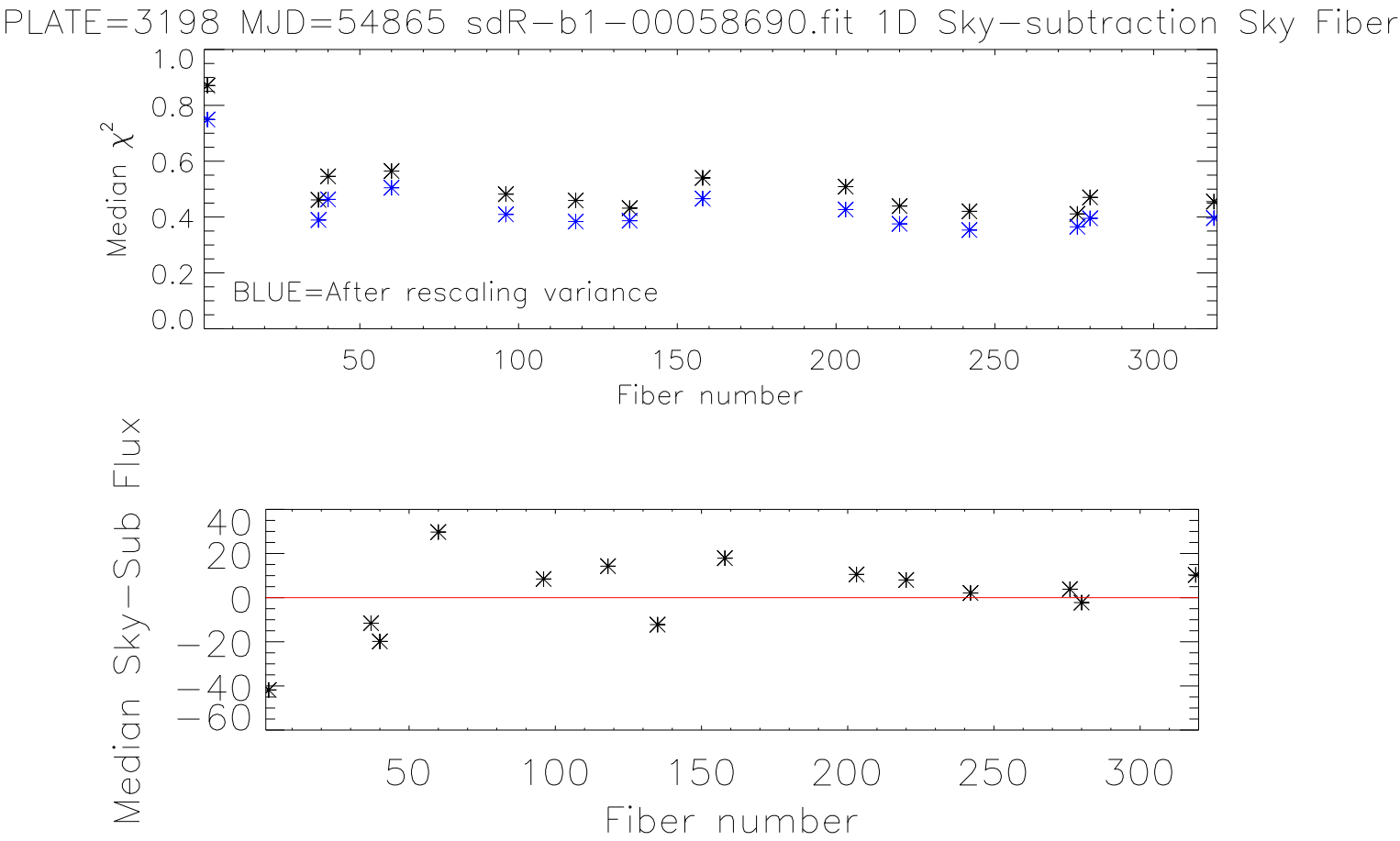

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

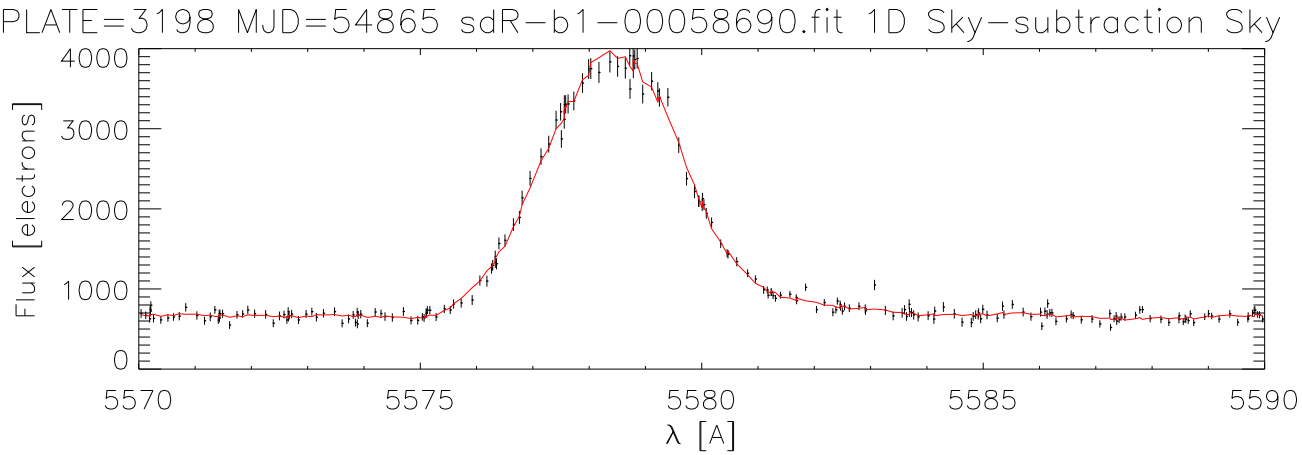

4046.5600
nfib1 14
nfib2 14
stdev 0.049
extra −0.10
4358.3300
nfib1 14
nfib2 14
stdev 0.038
extra −0.05
5460.9400
nfib1 14
nfib2 14
stdev 0.027
extra −0.05
5577.3390
nfib1 14
nfib2 14
stdev 0.020
extra 0.00
5889.9500
nfib1 14
nfib2 14
stdev 0.030
extra 0.14
5895.9240
nfib1 13
nfib2 13
stdev 0.027
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

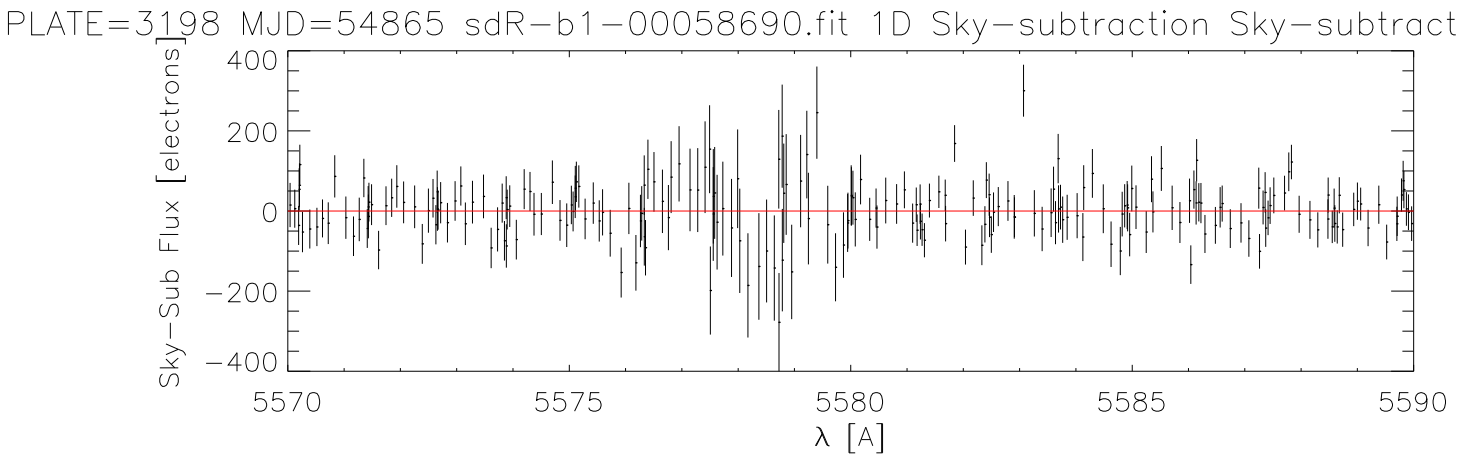

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

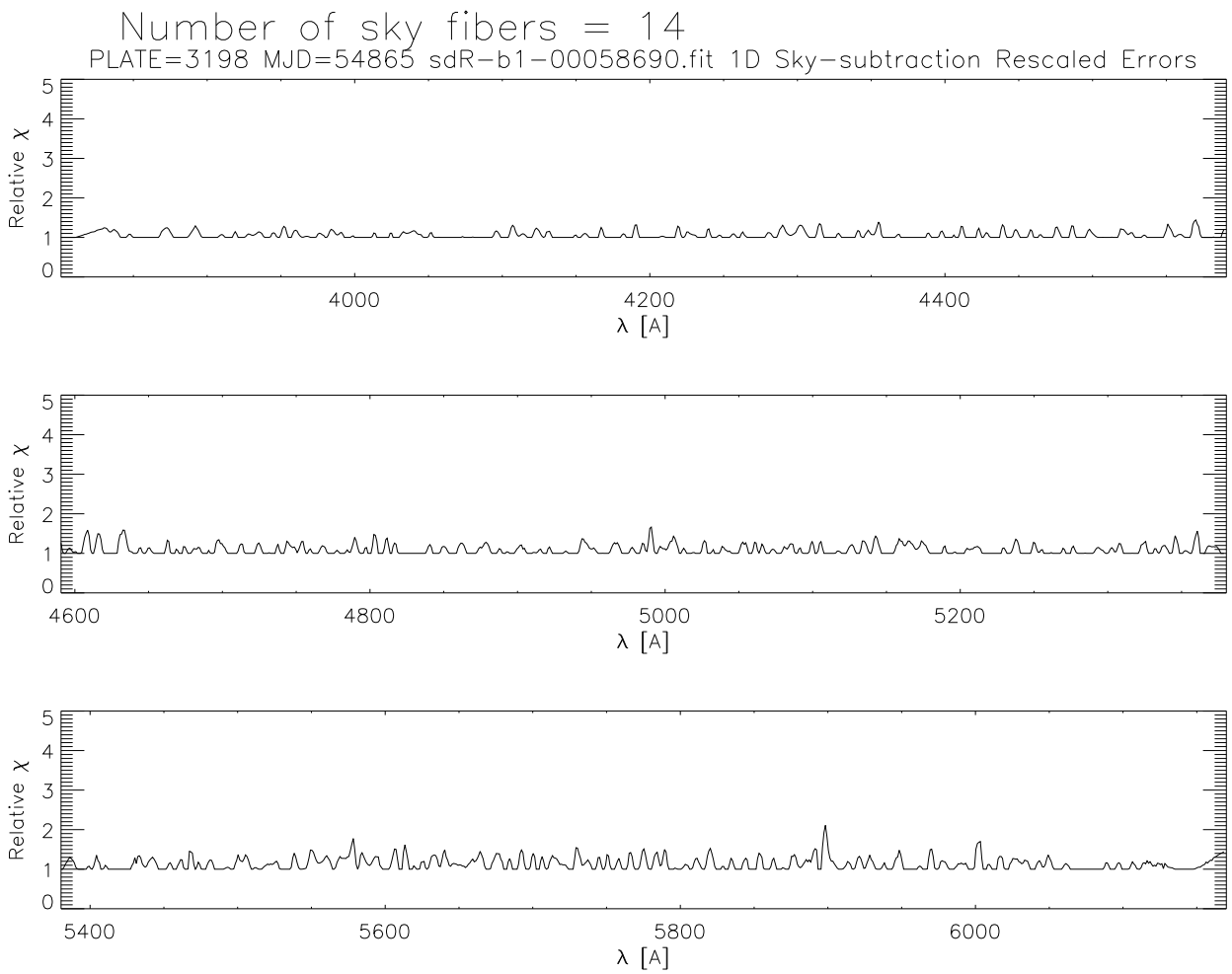
es= −0.0000

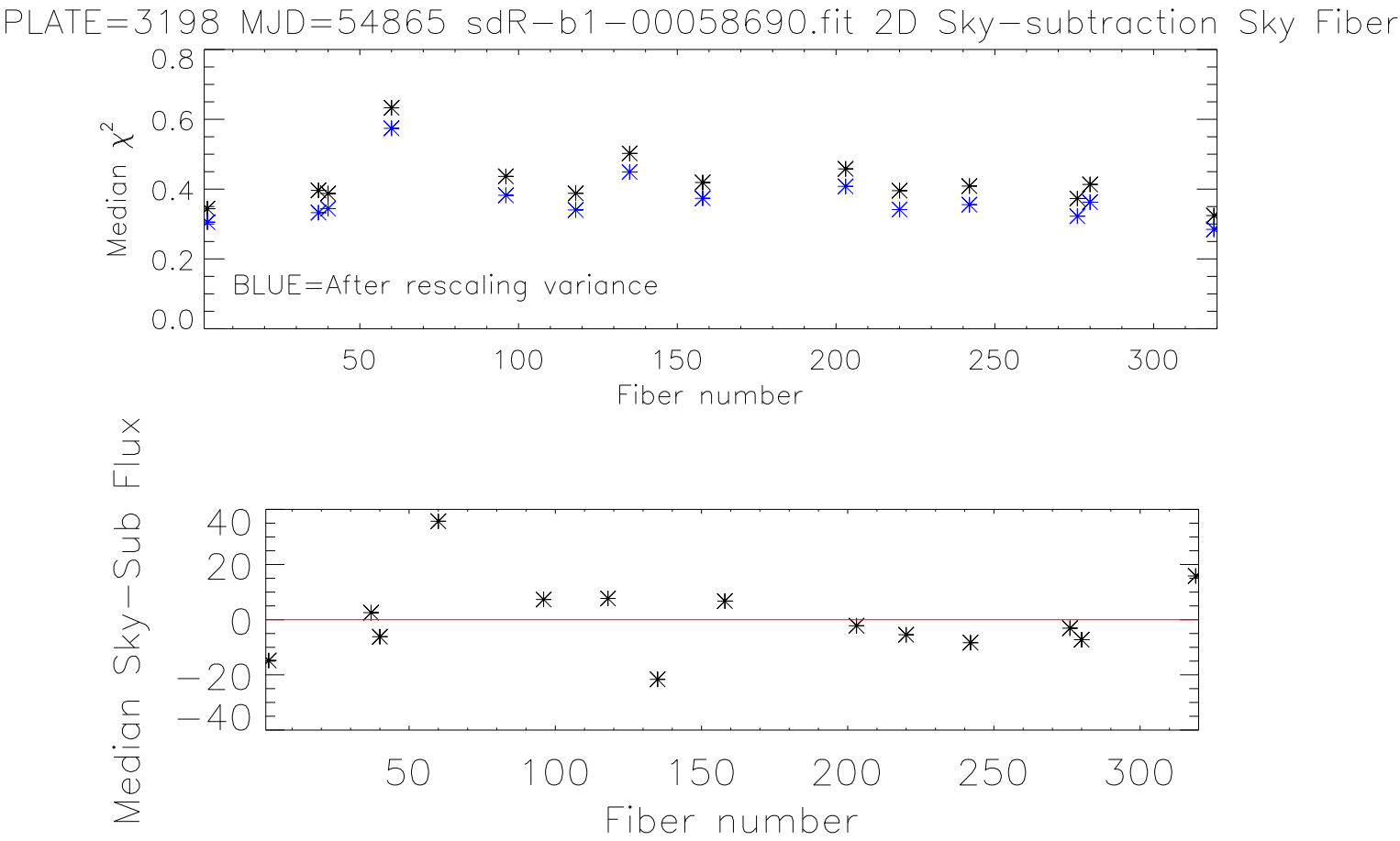

PLATE=3198 MJD=54865 Smooth superflat for sdR−b1−00058690.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

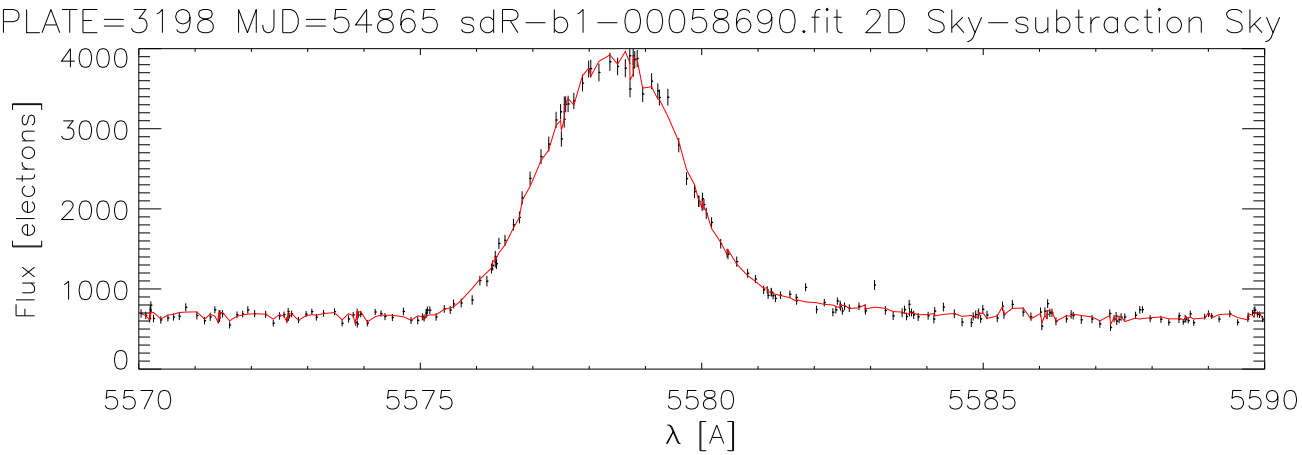

PLATE=3198 MJD=54865 sdR-b1-00058690.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

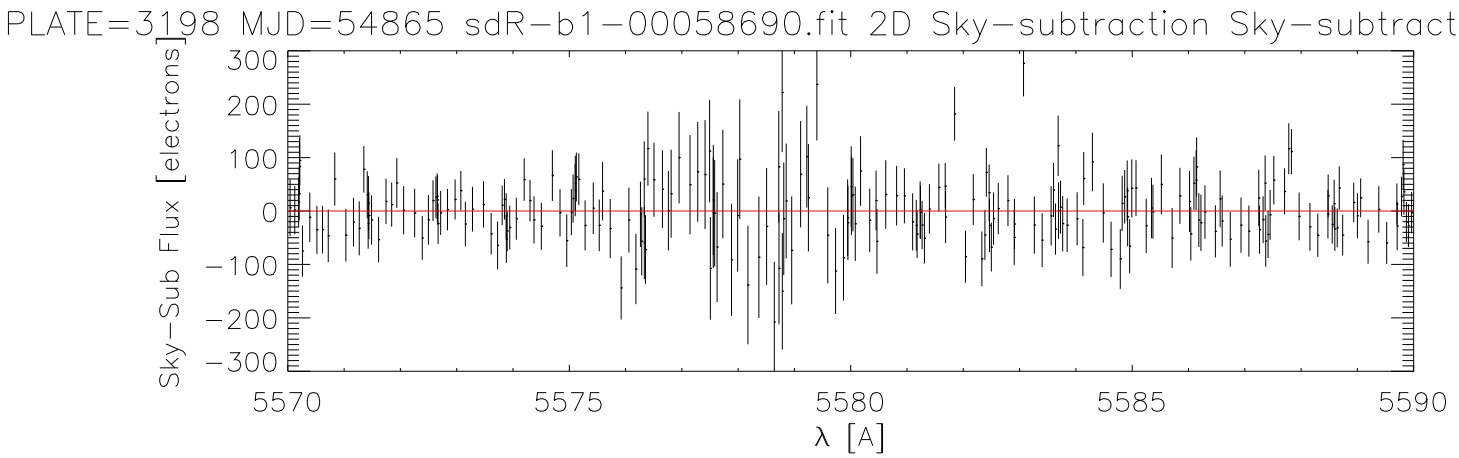

PLATE=3198 MJD=54865 sdR-b1-00058690.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

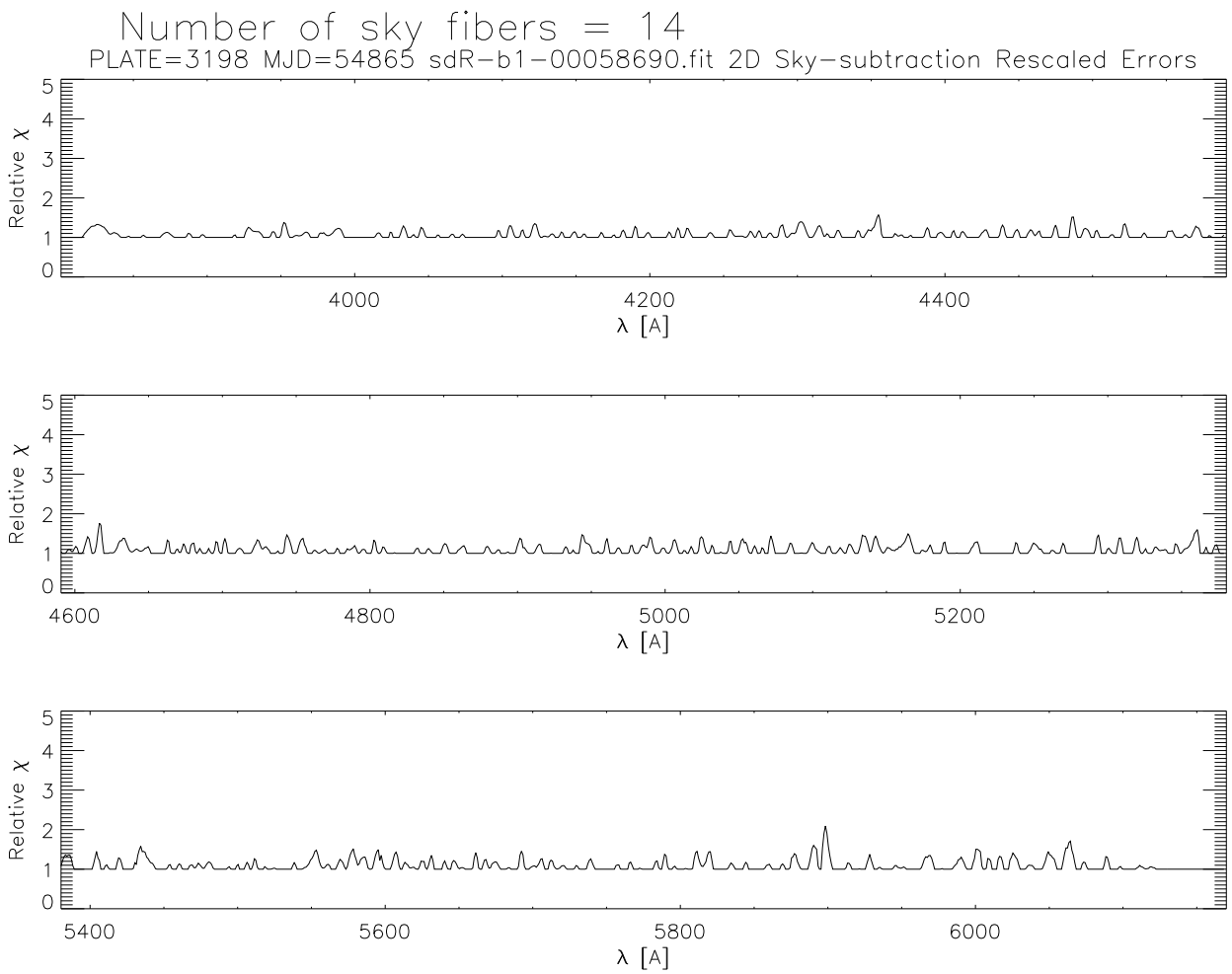

PLATE=3198 MJD=54865 sdR-b1-00058690.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

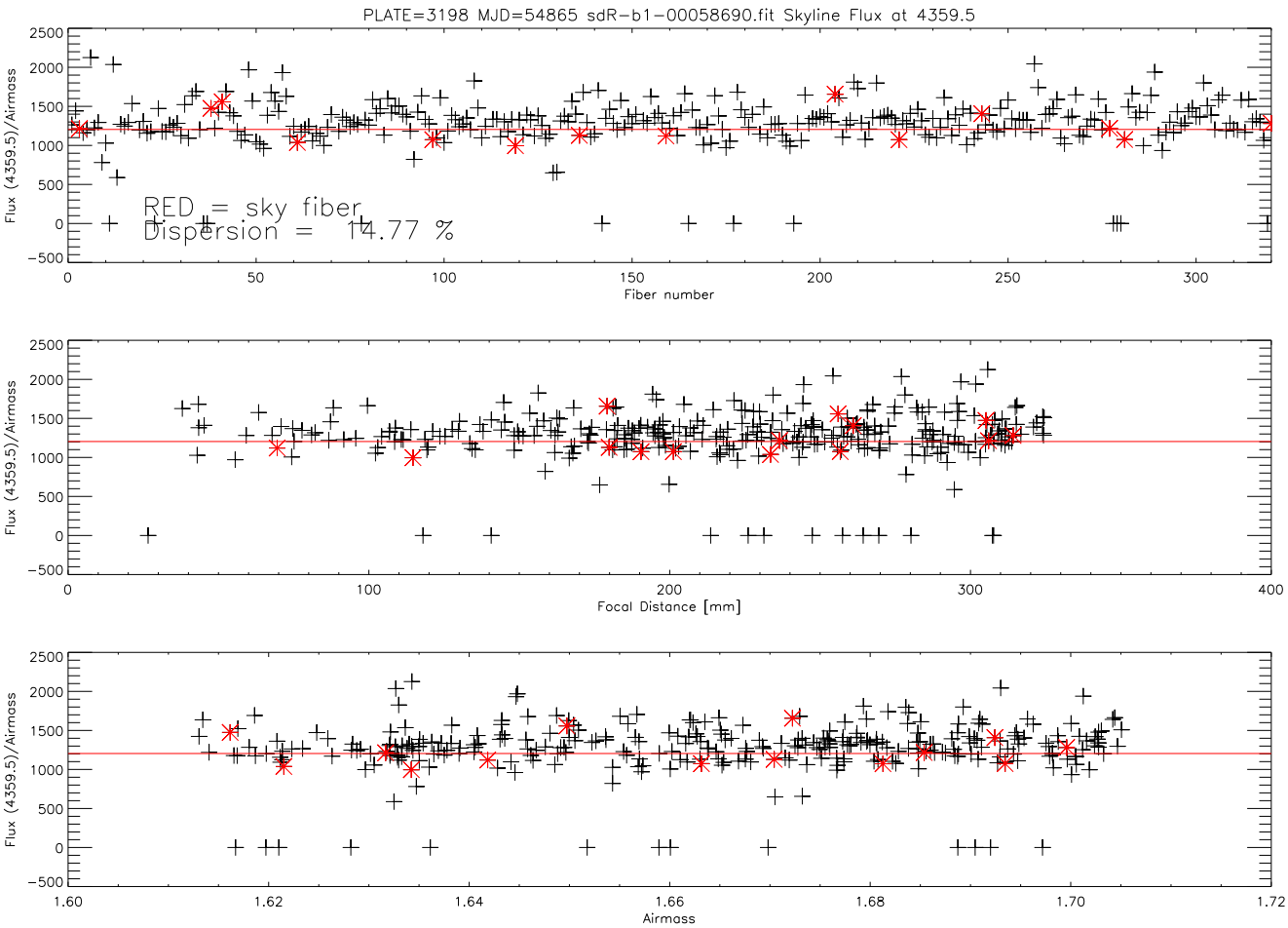

Number of sky fibers = 14
PLATE=3198 MJD=54865 sdR-b1-00058690.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

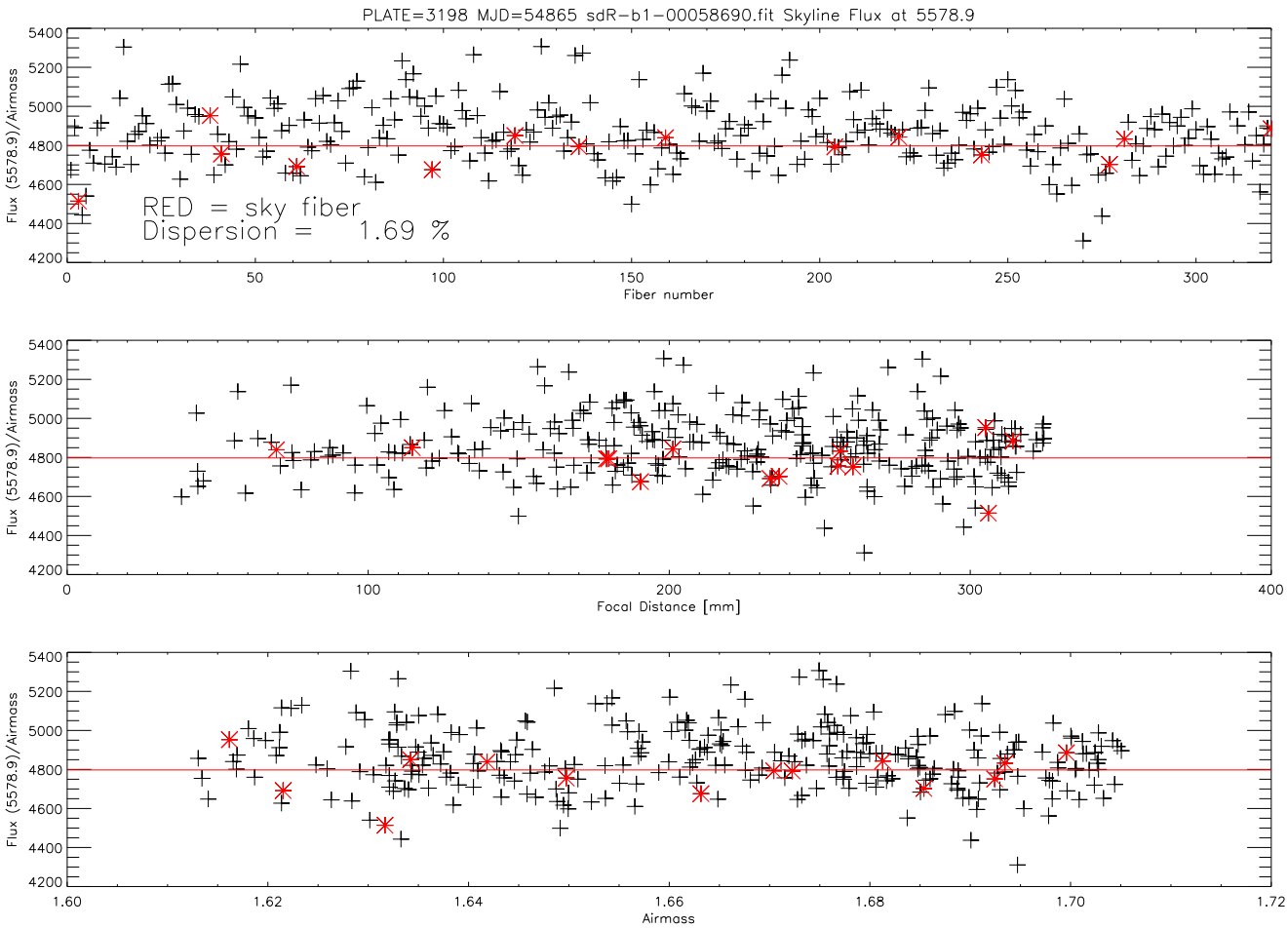

PLATE=3198 MJD=54865 sdR-b1-00058690.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

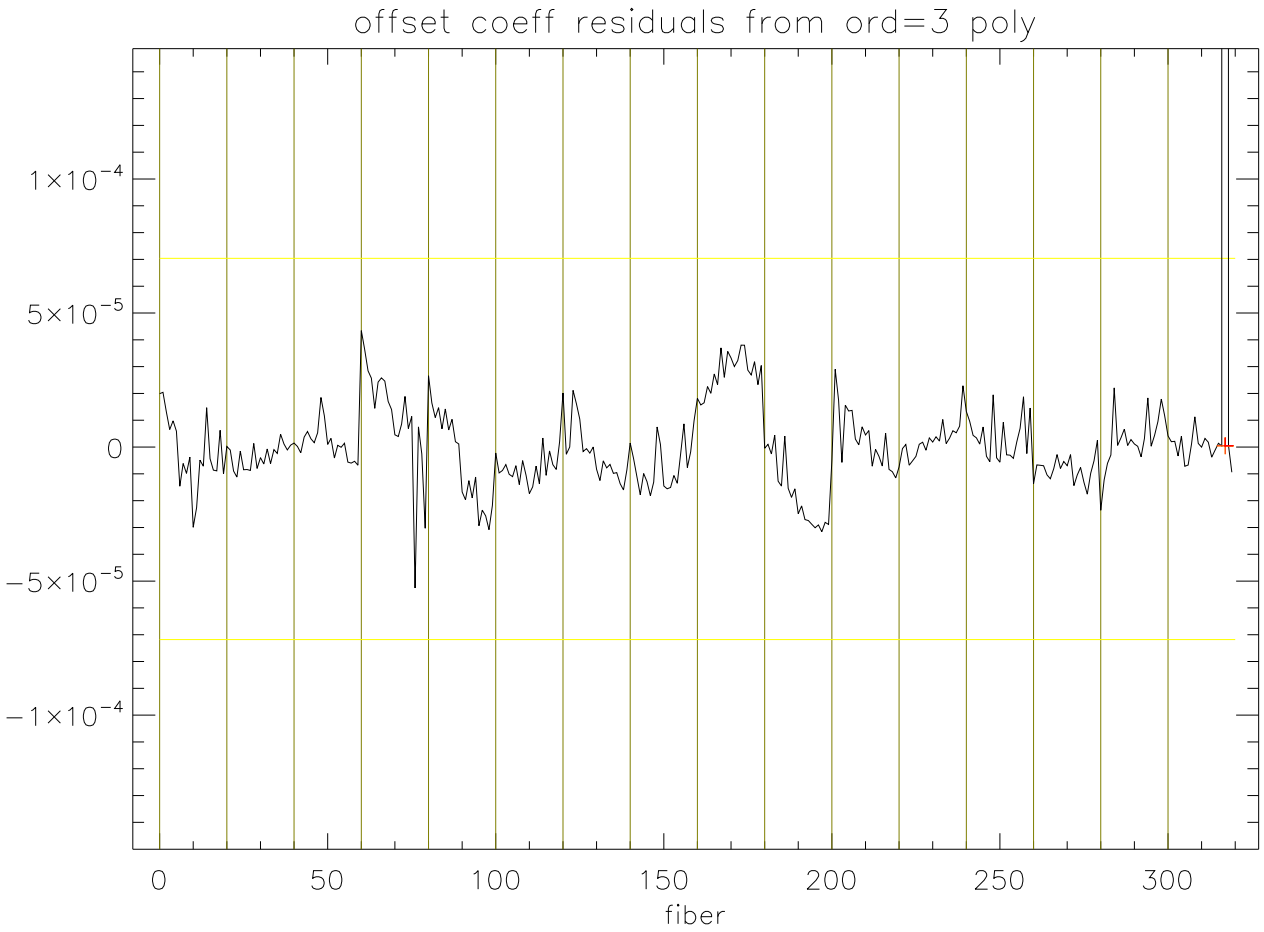

PLATE=3198 MJD=54865 sdR-b1-00058690.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

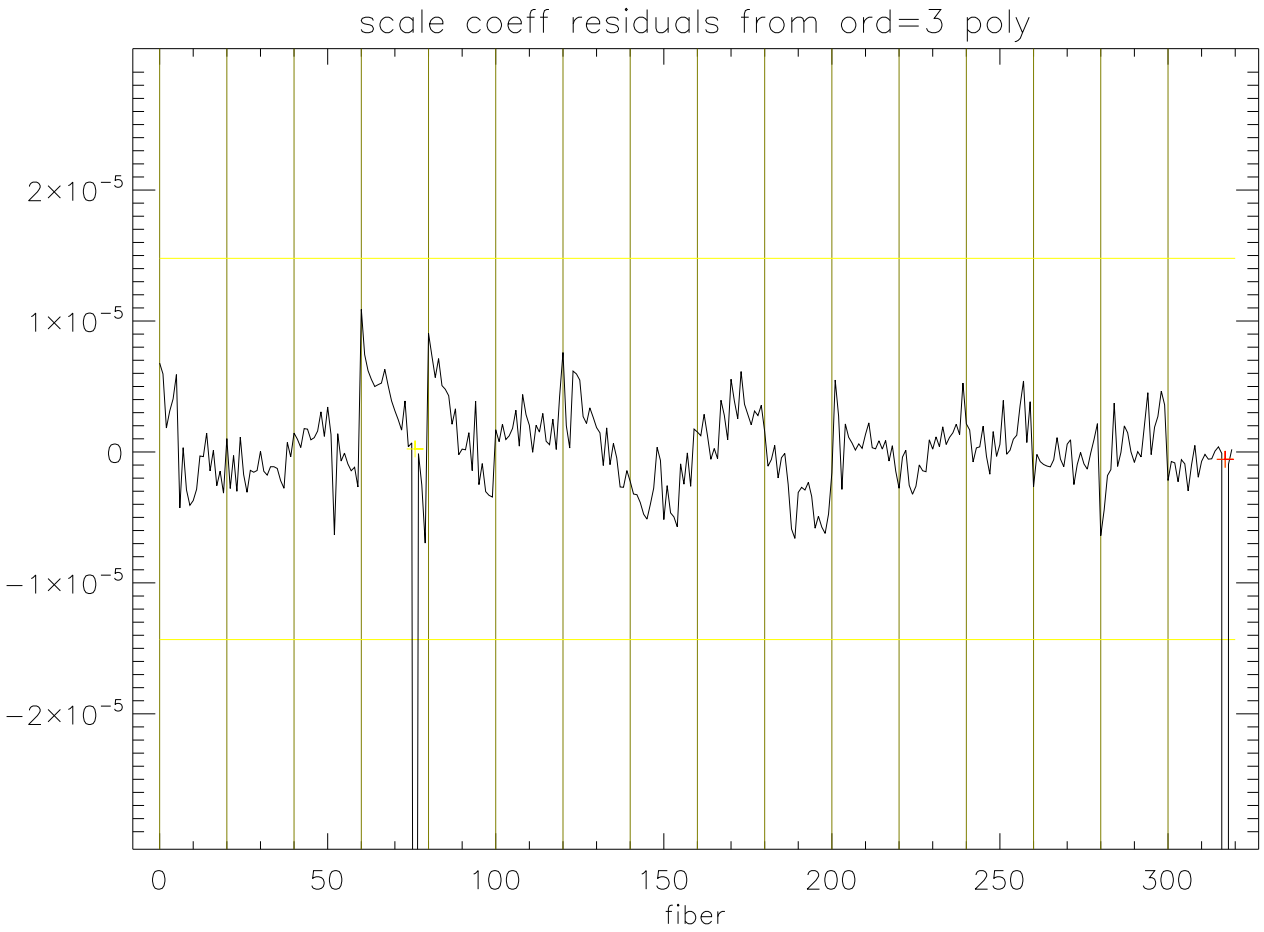

PLATE=3198 MJD=54865 sdR-b1-00058690.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

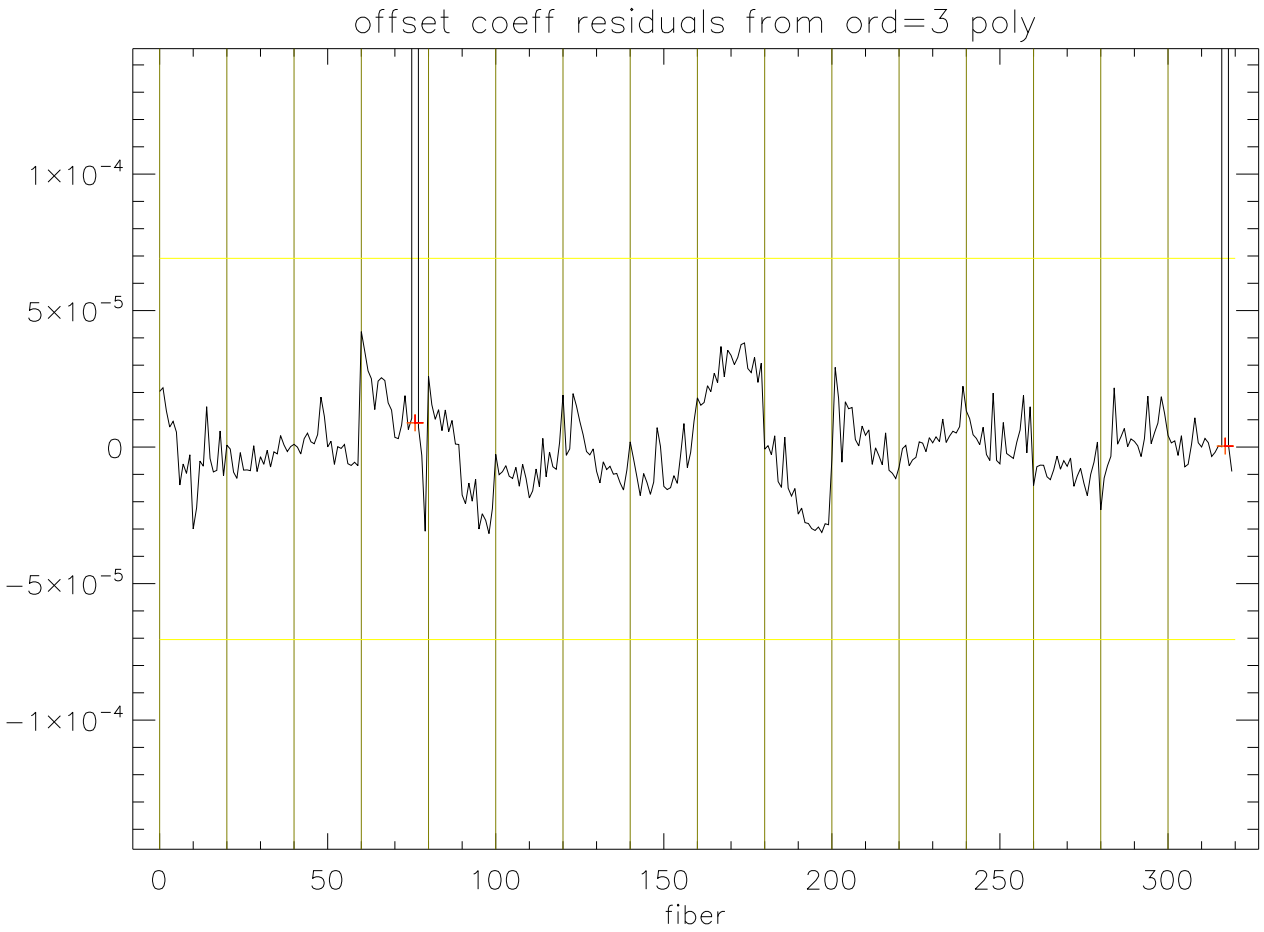

Number of sky fibers = 14
PLATE=3198 MJD=54865 sdR-b1-00058690.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

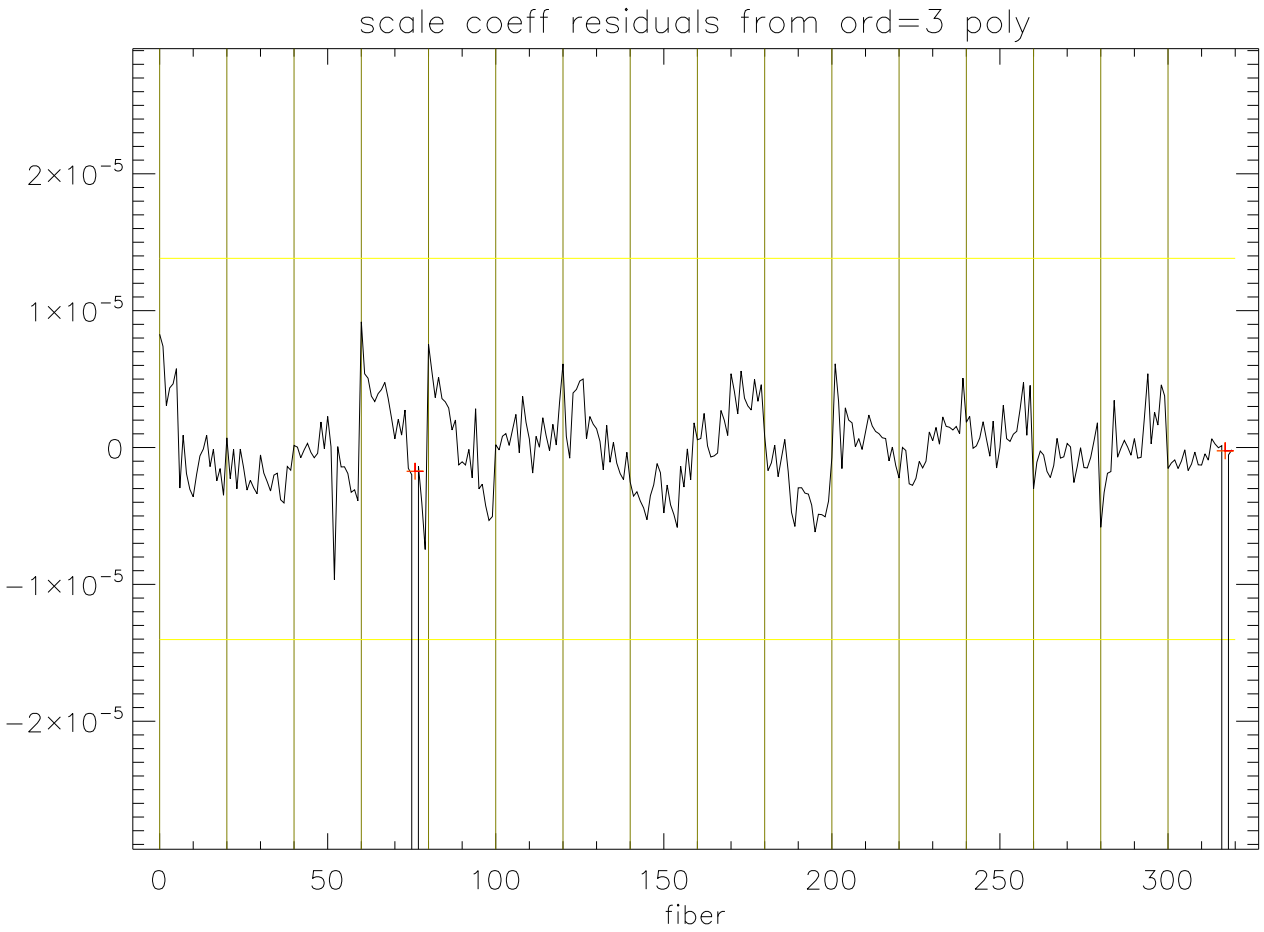

PLATE=3198 MJD=54865 sdR-b1-00058690.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.77 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

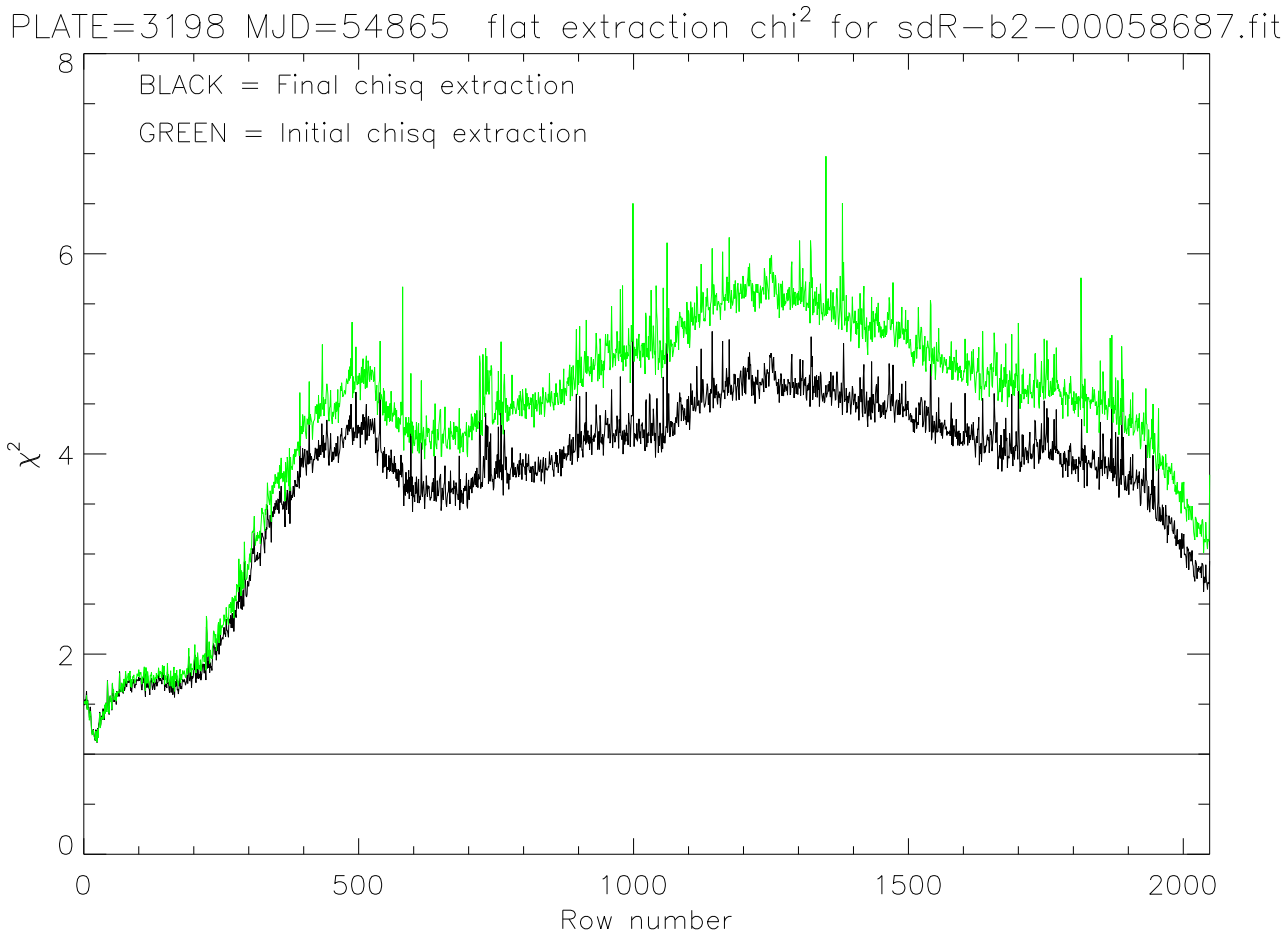

PLATE=3198 MJD=54865 sdR-b1-00058690.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.69 %
Fiber number
Focal Distance [mm]
Airmass

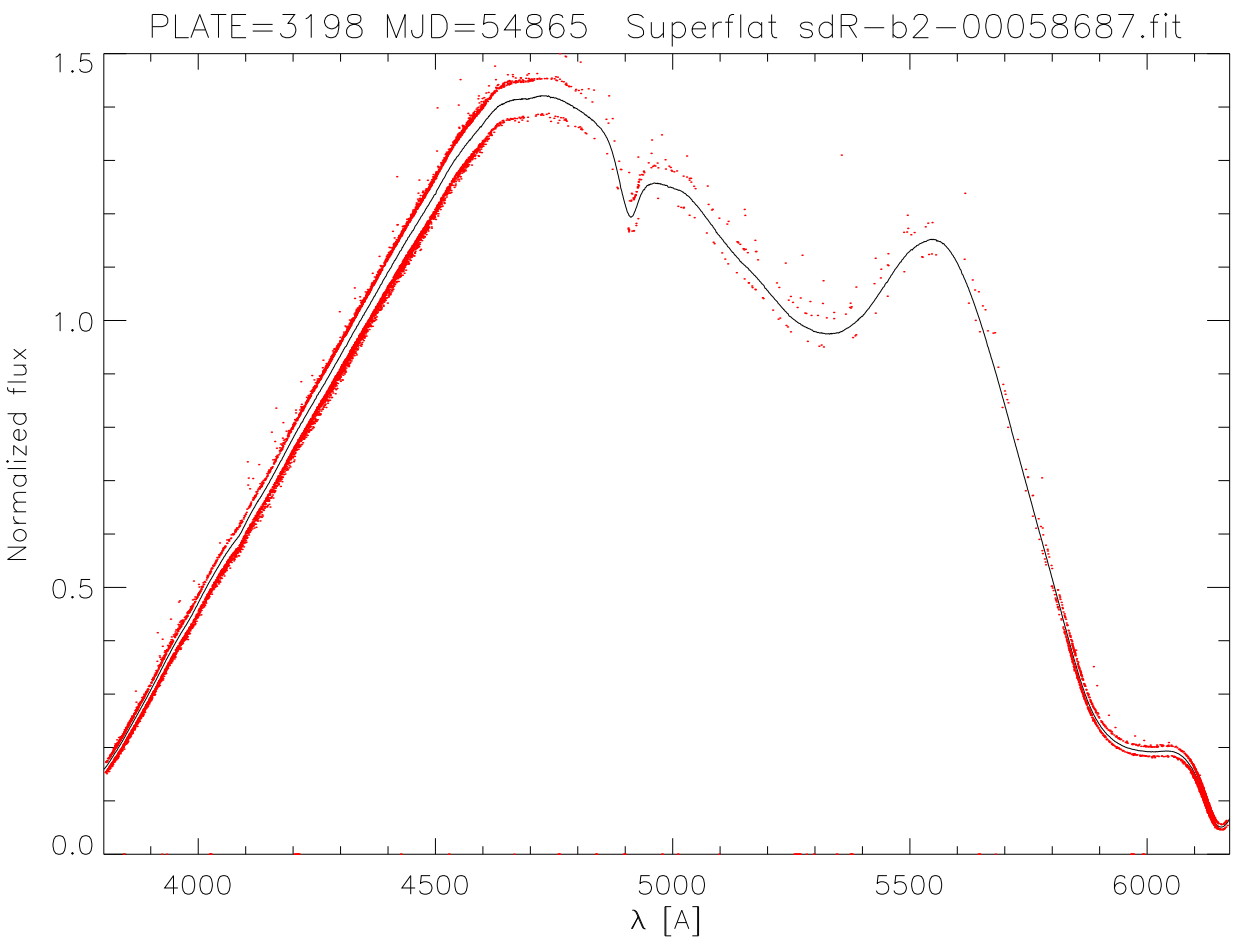

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

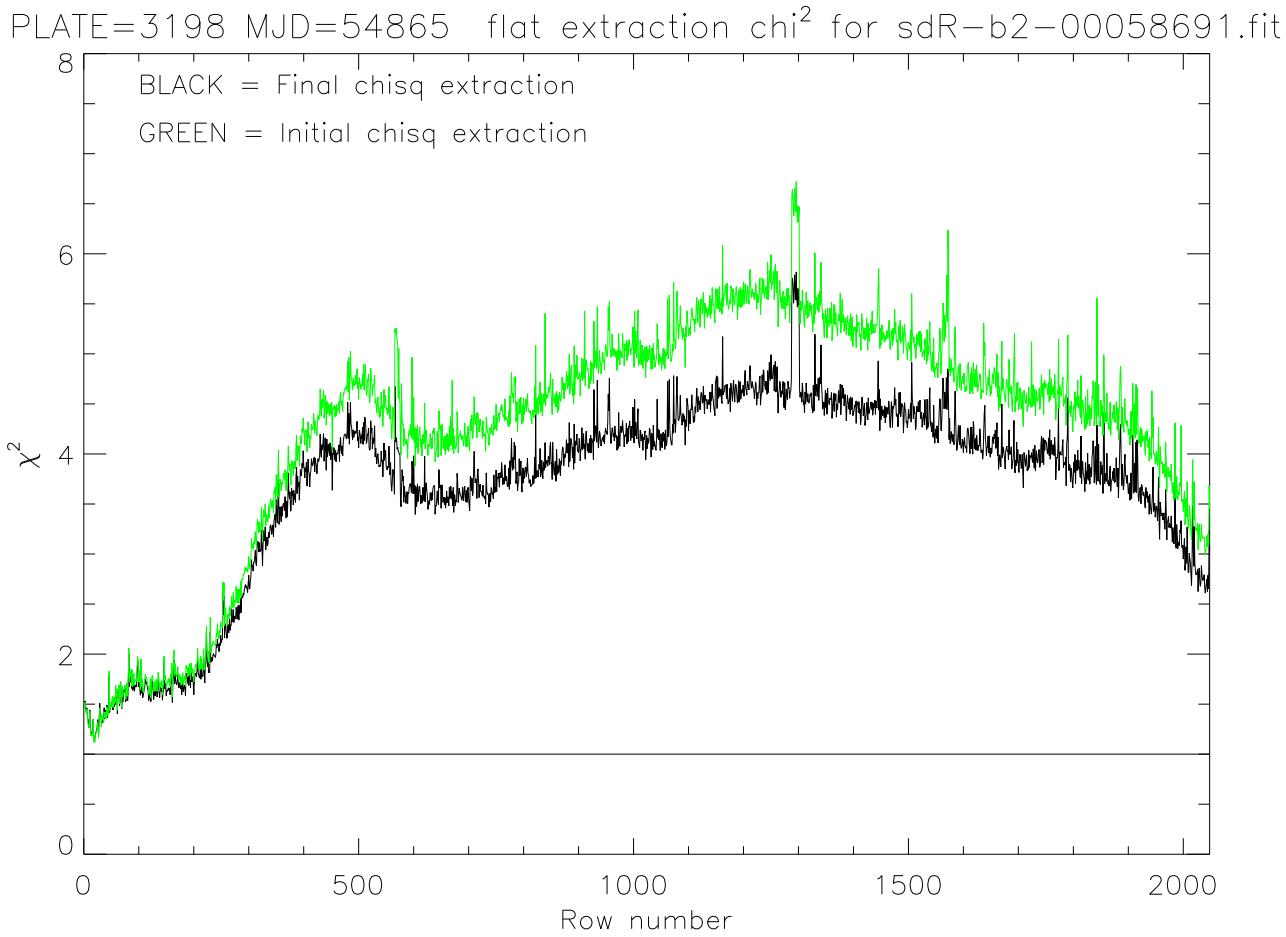

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

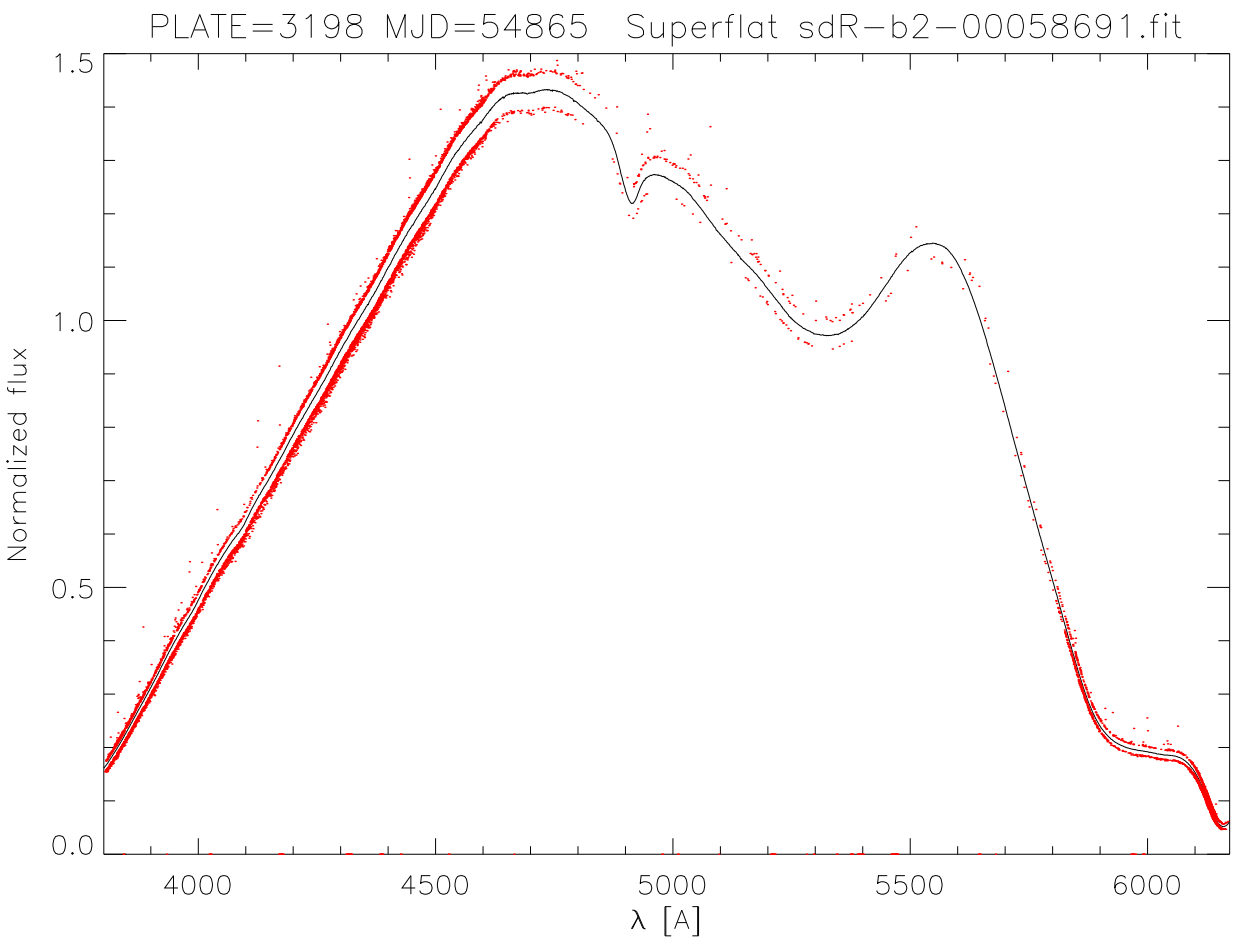

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

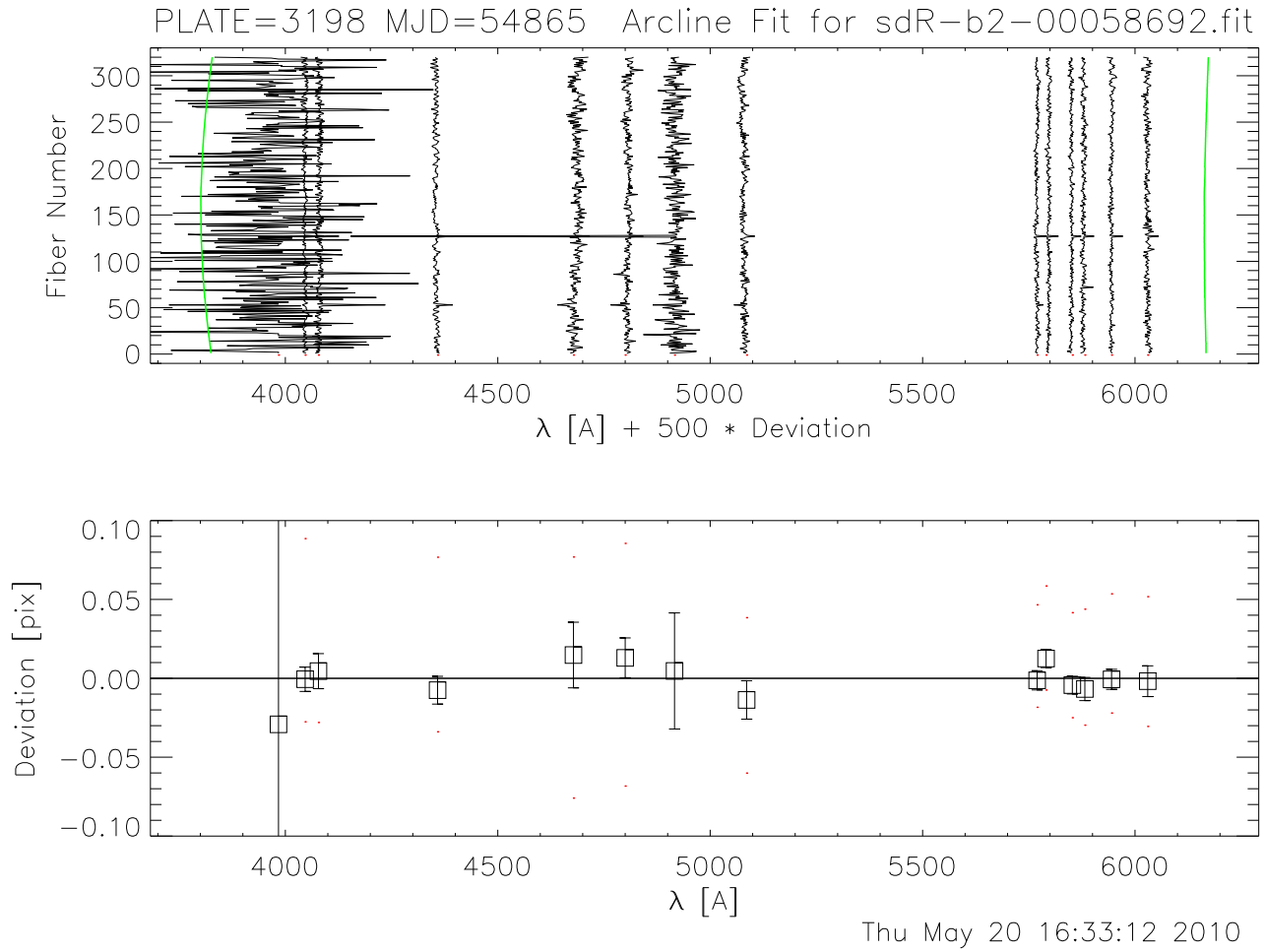

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

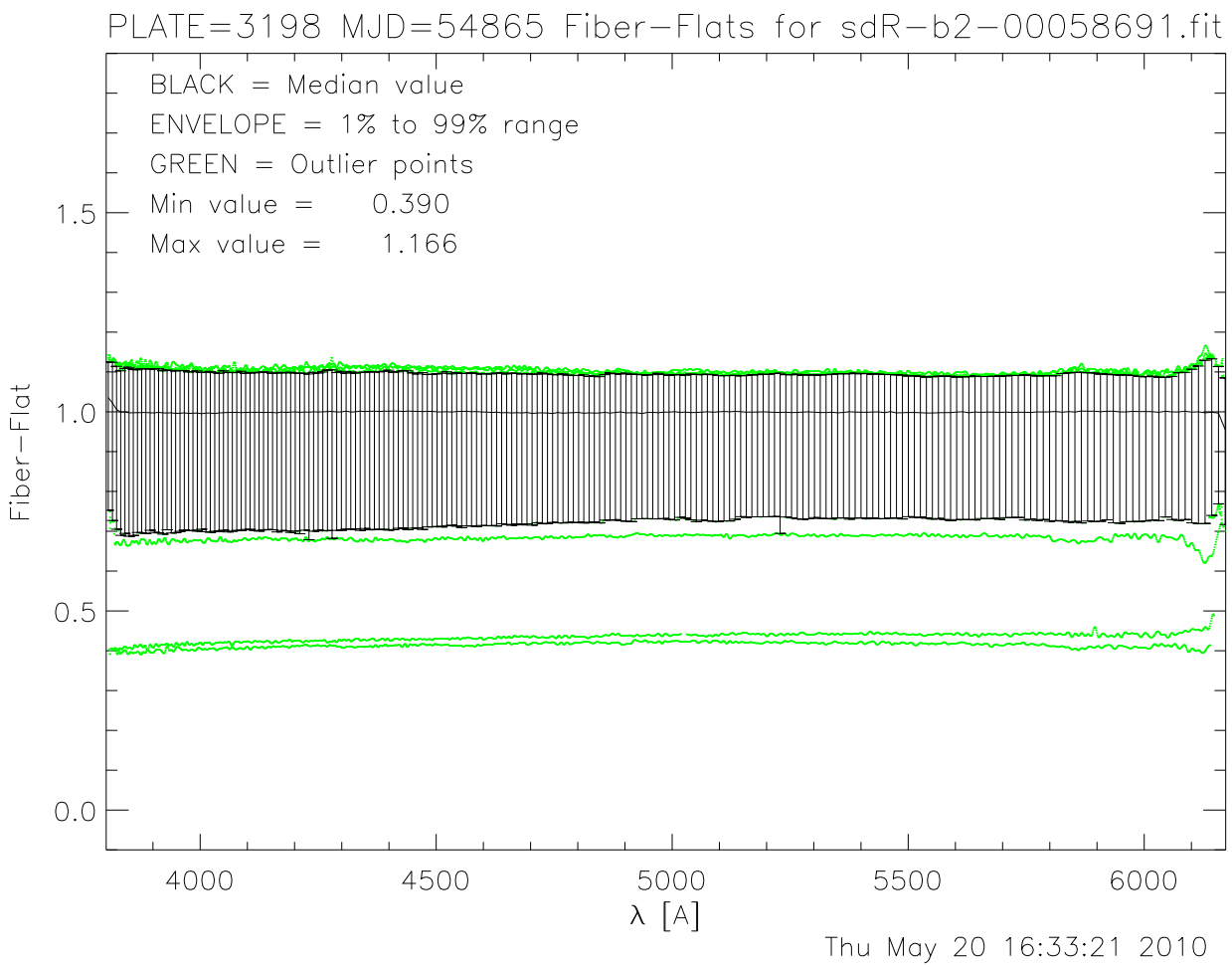

PLATE=3198 MJD=54865 flat extraction chi^2 for sdR−b2−00058687.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

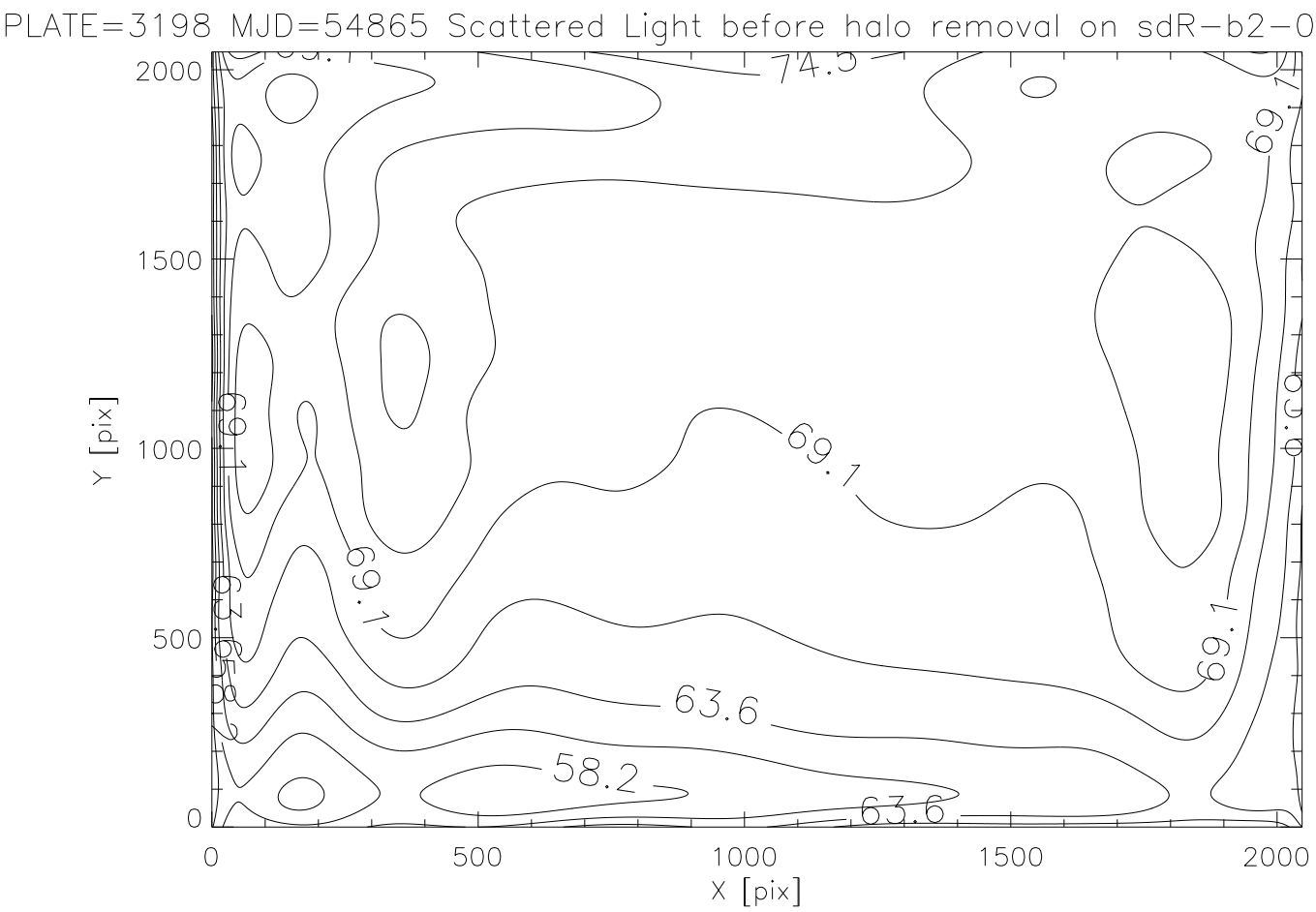

PLATE=3198 MJD=54865 Superflat sdR-b2-00058687.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

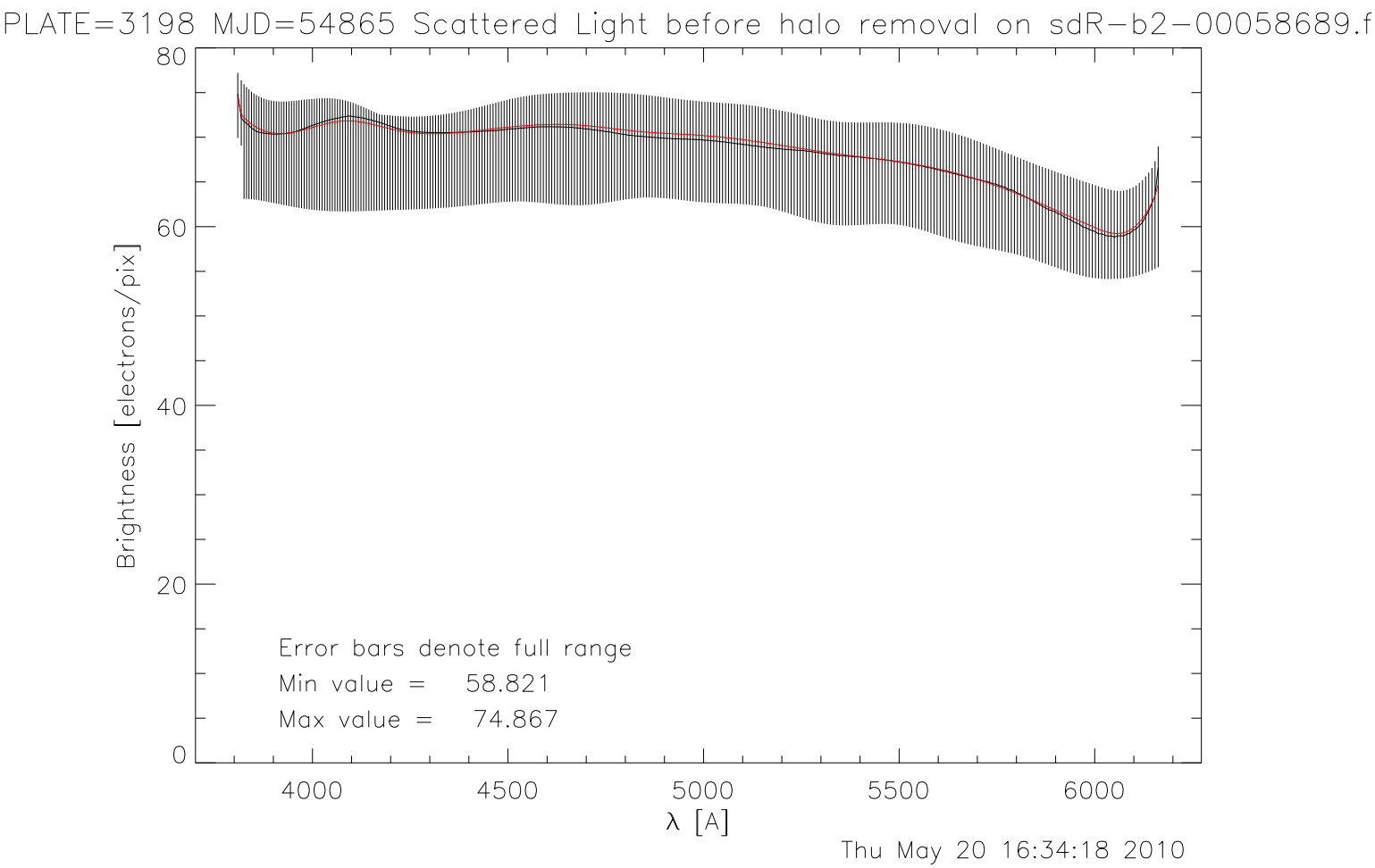

PLATE=3198 MJD=54865 flat extraction chi^2 for sdR−b2−00058691.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

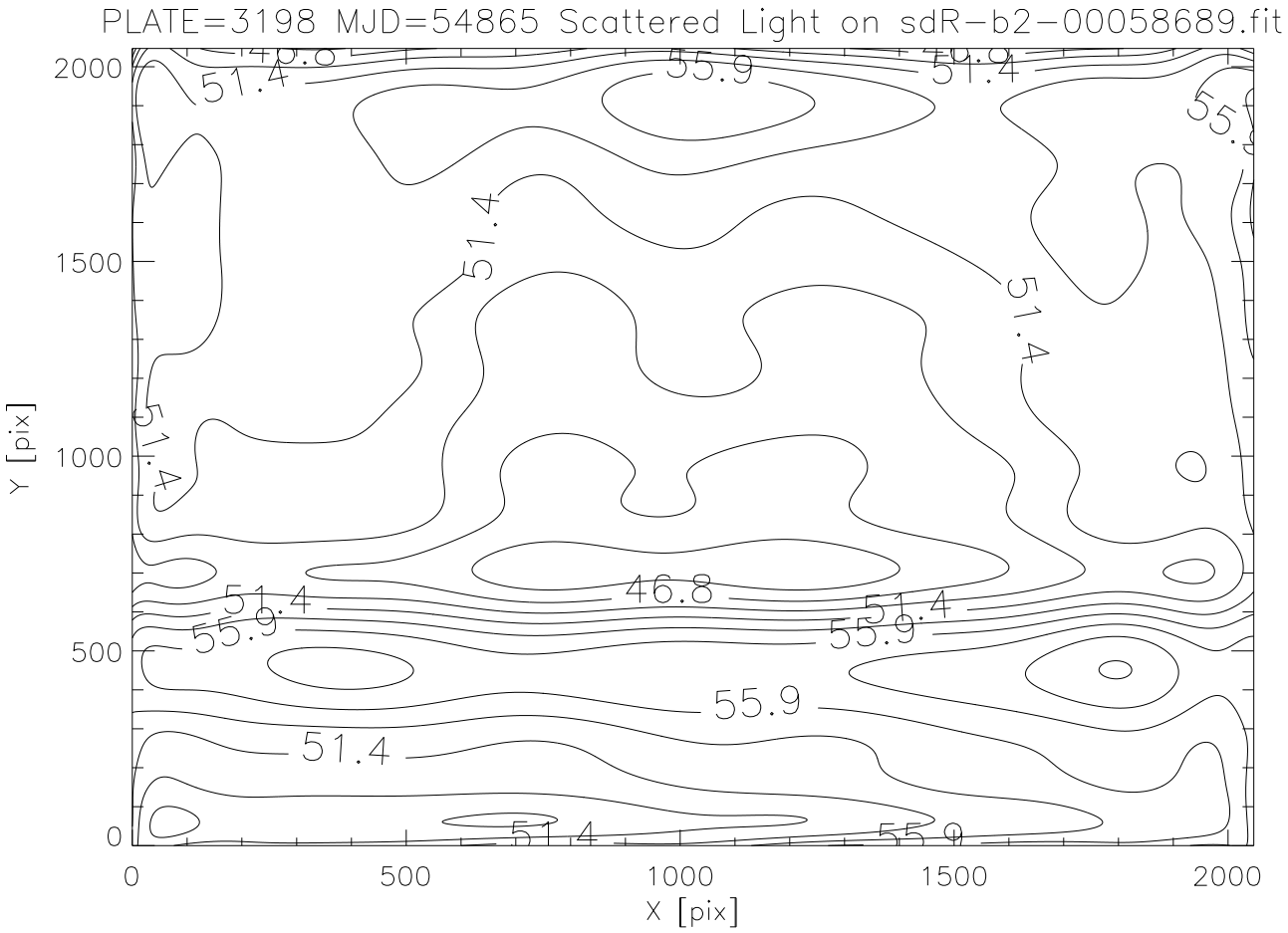

PLATE=3198 MJD=54865 Superflat sdR-b2-00058691.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

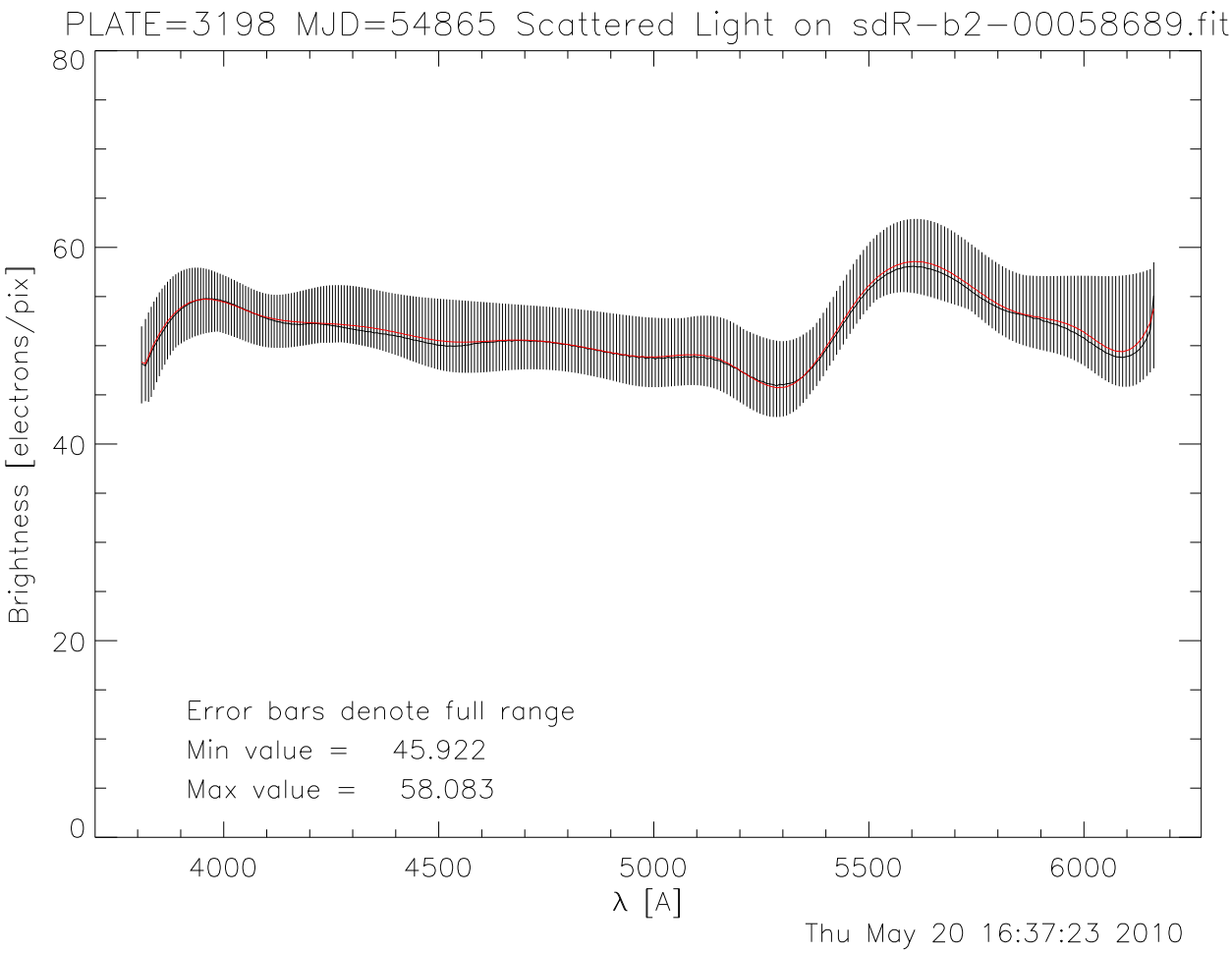

PLATE=3198 MJD=54865 Arcline Fit for sdR-b2-00058692.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:33:12 2010

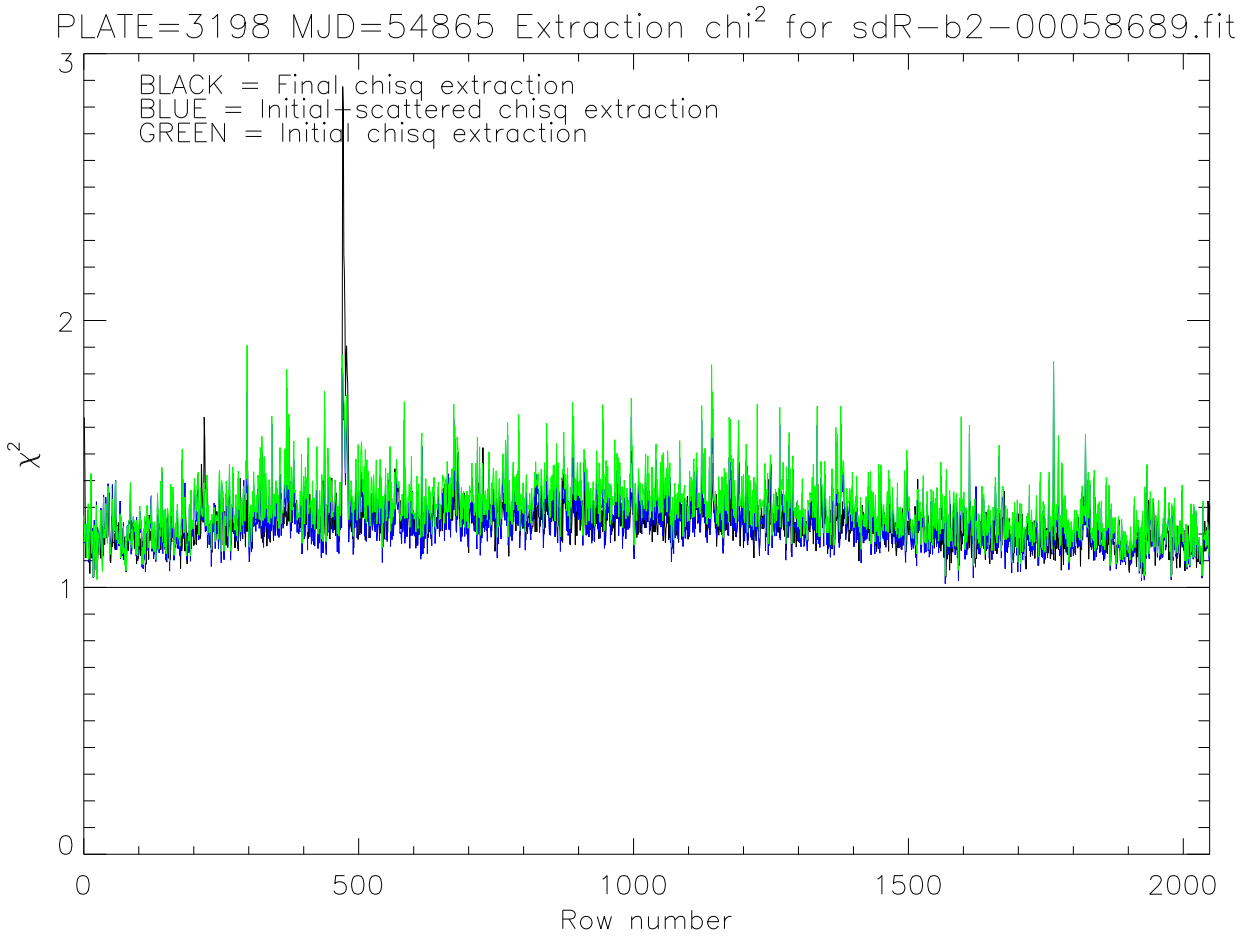

PLATE=3198 MJD=54865 Fiber-Flats for sdR-b2-00058691.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.390
Max value = 1.166
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:33:21 2010

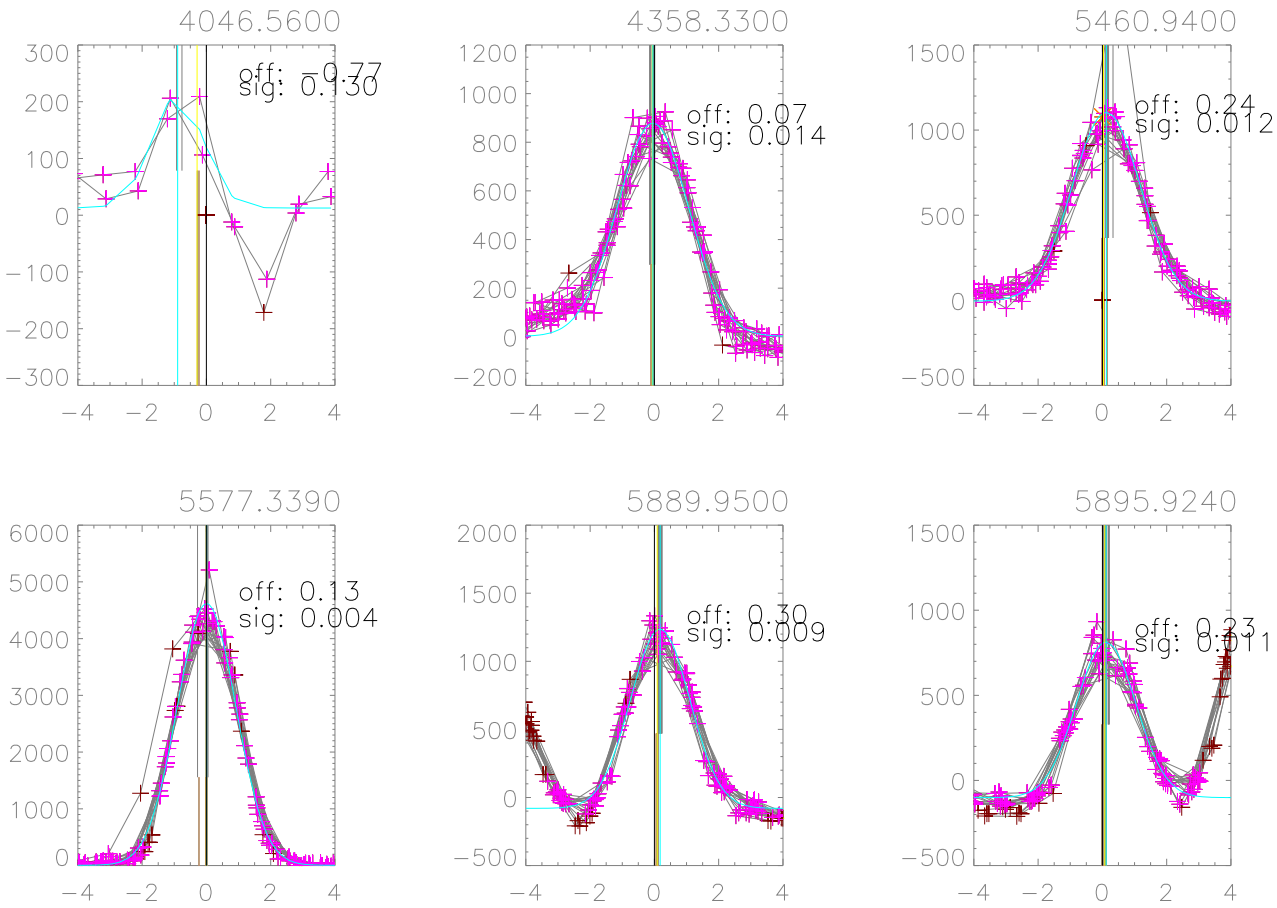

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR−b2−00058689.f
74.5
69.1
63.6
58.2
Y [pix]
X [pix]
0
500
1000
1500
2000

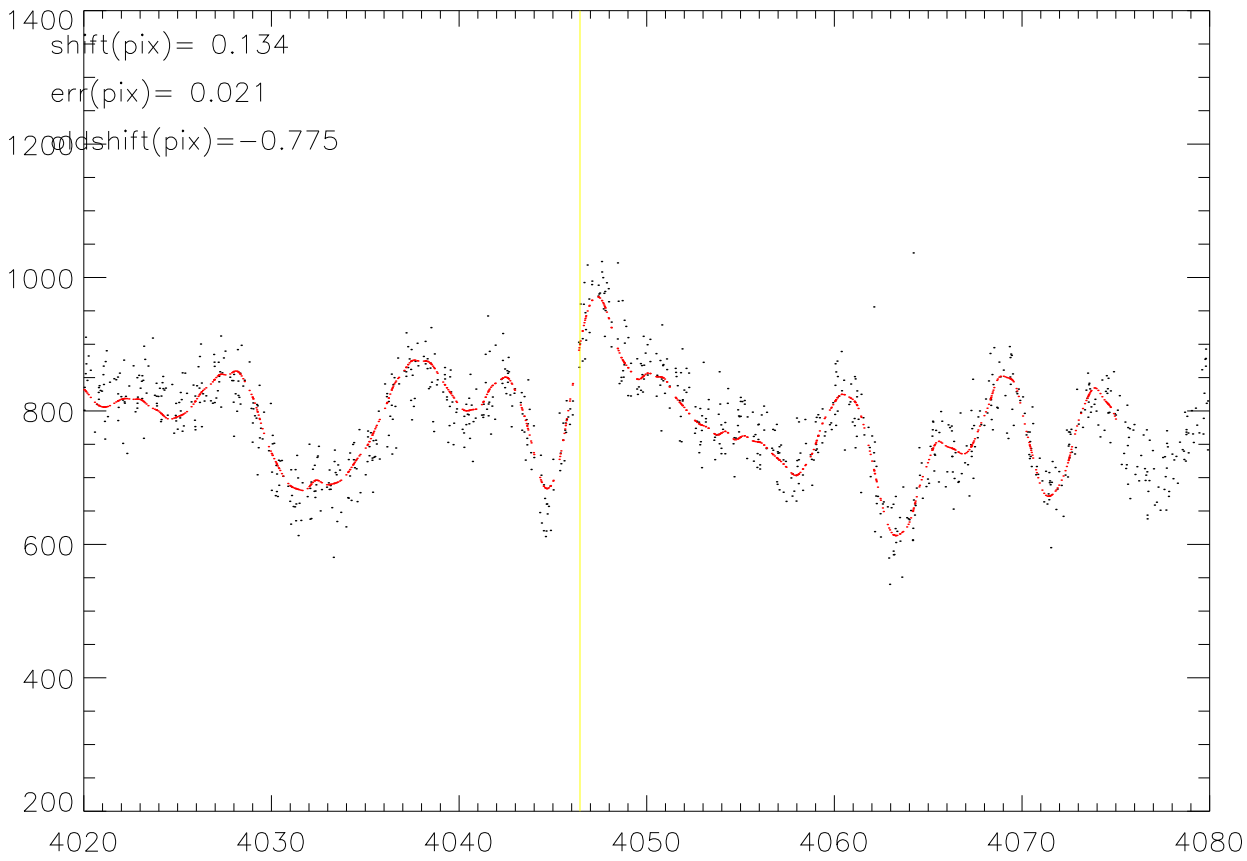

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-b2-00058689.f
Brightness [electrons/pix]
80
60
40
20
0
Error bars denote full range
Min value = 58.821
Max value = 74.867
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:34:18 2010

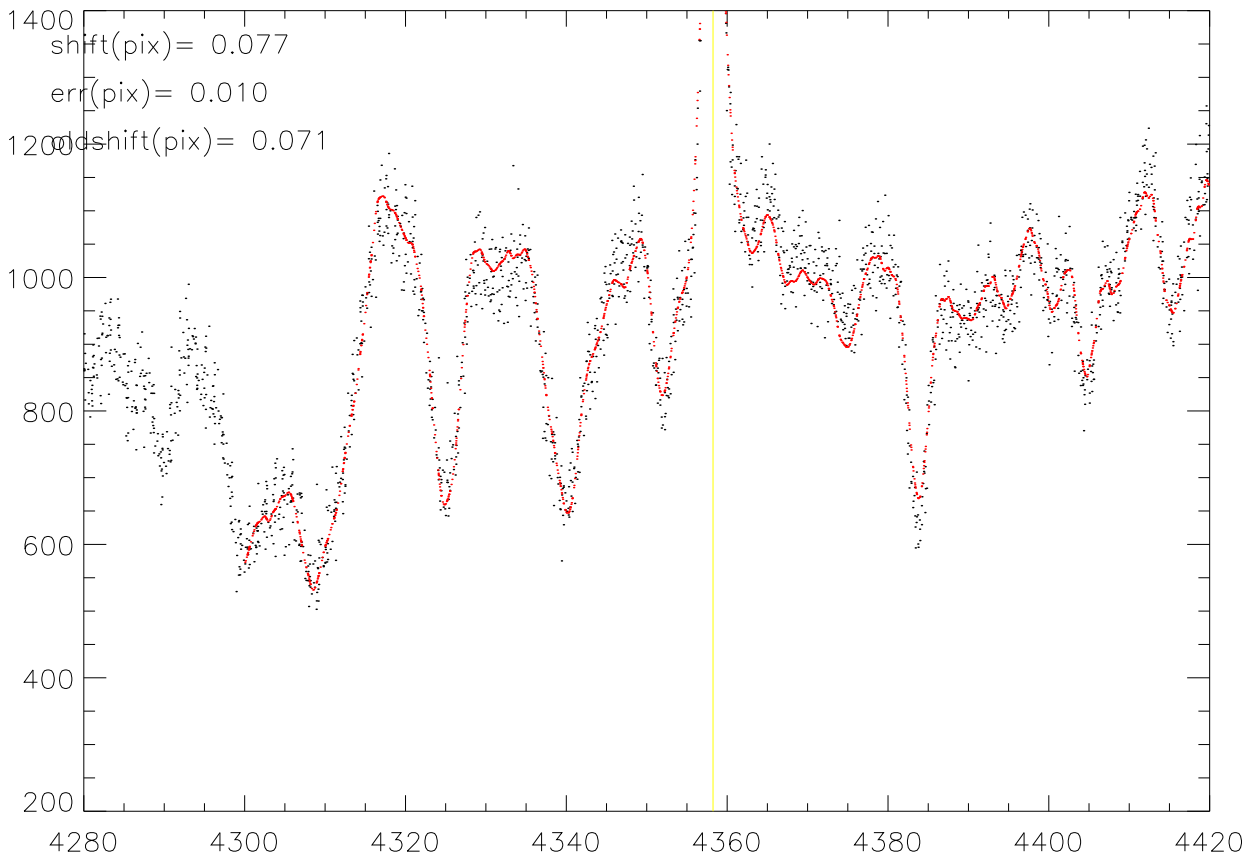

PLATE=3198 MJD=54865 Scattered Light on sdR-b2-00058689.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
51.4
55.9
46.8

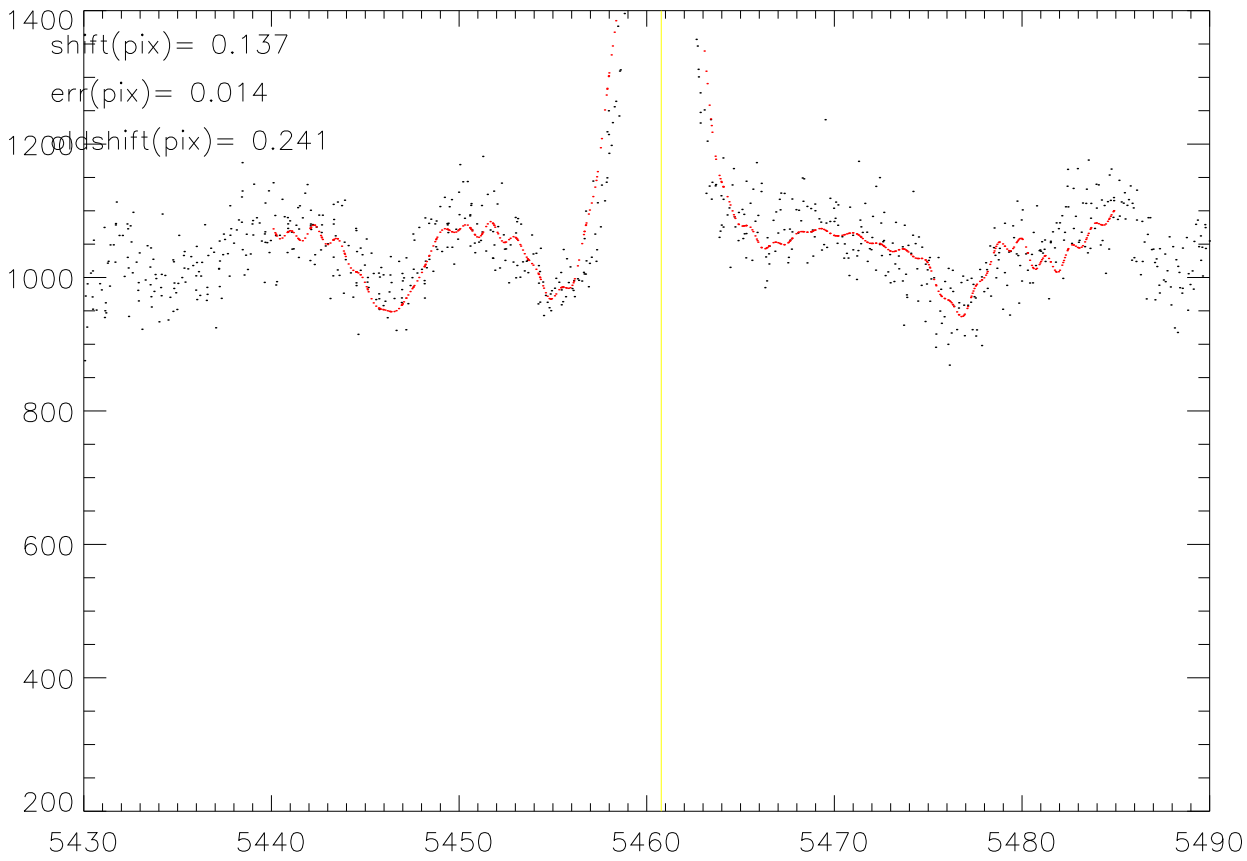

PLATE=3198 MJD=54865 Scattered Light on sdR-b2-00058689.fit
Brightness [electrons/pix]
80
60
40
20
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 45.922
Max value = 58.083
Thu May 20 16:37:23 2010

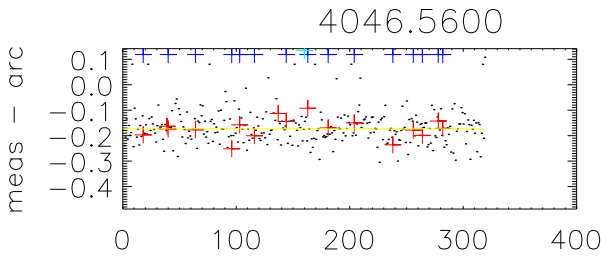

PLATE=3198 MJD=54865 Extraction chi^2 for sdR-b2-00058689.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

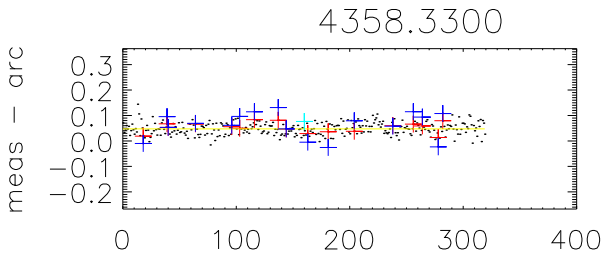

4046.5600
off: -0.77
sig: 0.130
4358.3300
off: 0.07
sig: 0.014
5460.9400
off: 0.24
sig: 0.012
5577.3390
off: 0.13
sig: 0.004
5889.9500
off: 0.30
sig: 0.009
5895.9240
off: 0.23
sig: 0.011

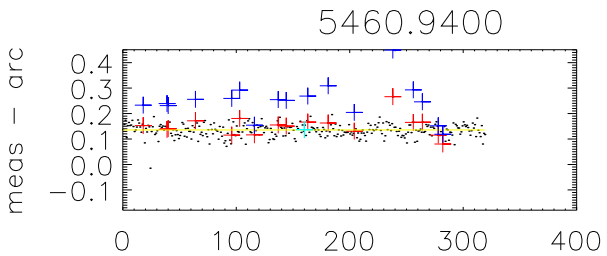

shift(pix)= 0.134
err(pix)= 0.021
oldshift(pix)=−0.775
1400
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

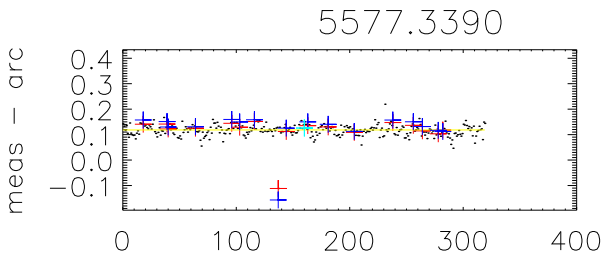

shift(pix)= 0.077
err(pix)= 0.010
oldshift(pix)= 0.071
1400
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

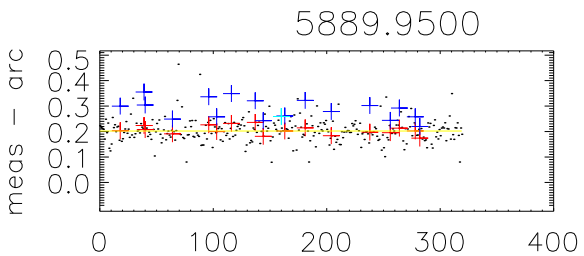

shift(pix)= 0.137
err(pix)= 0.014
oldshift(pix)= 0.241
1400
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

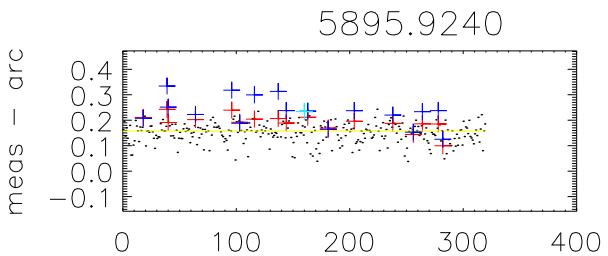

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

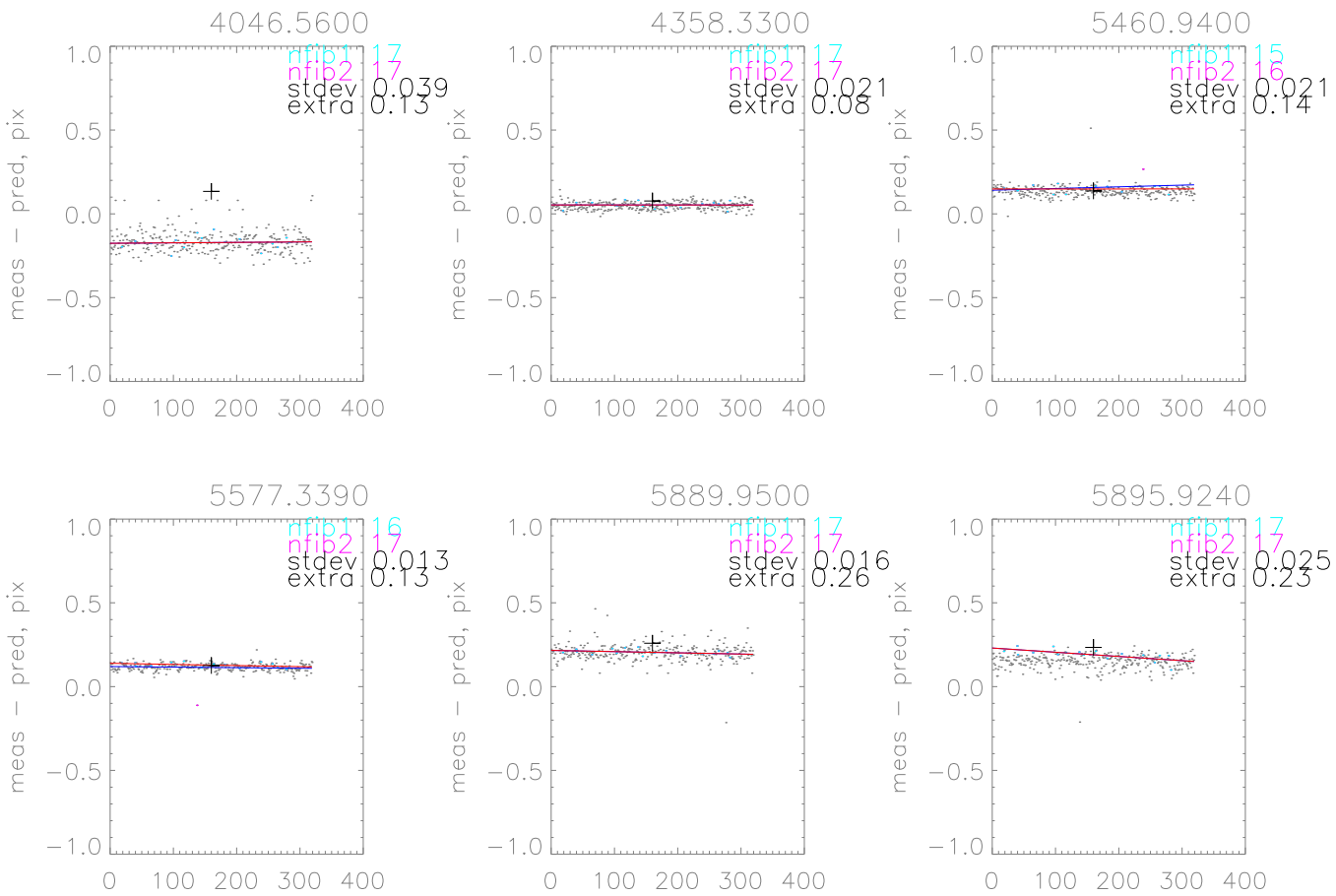

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

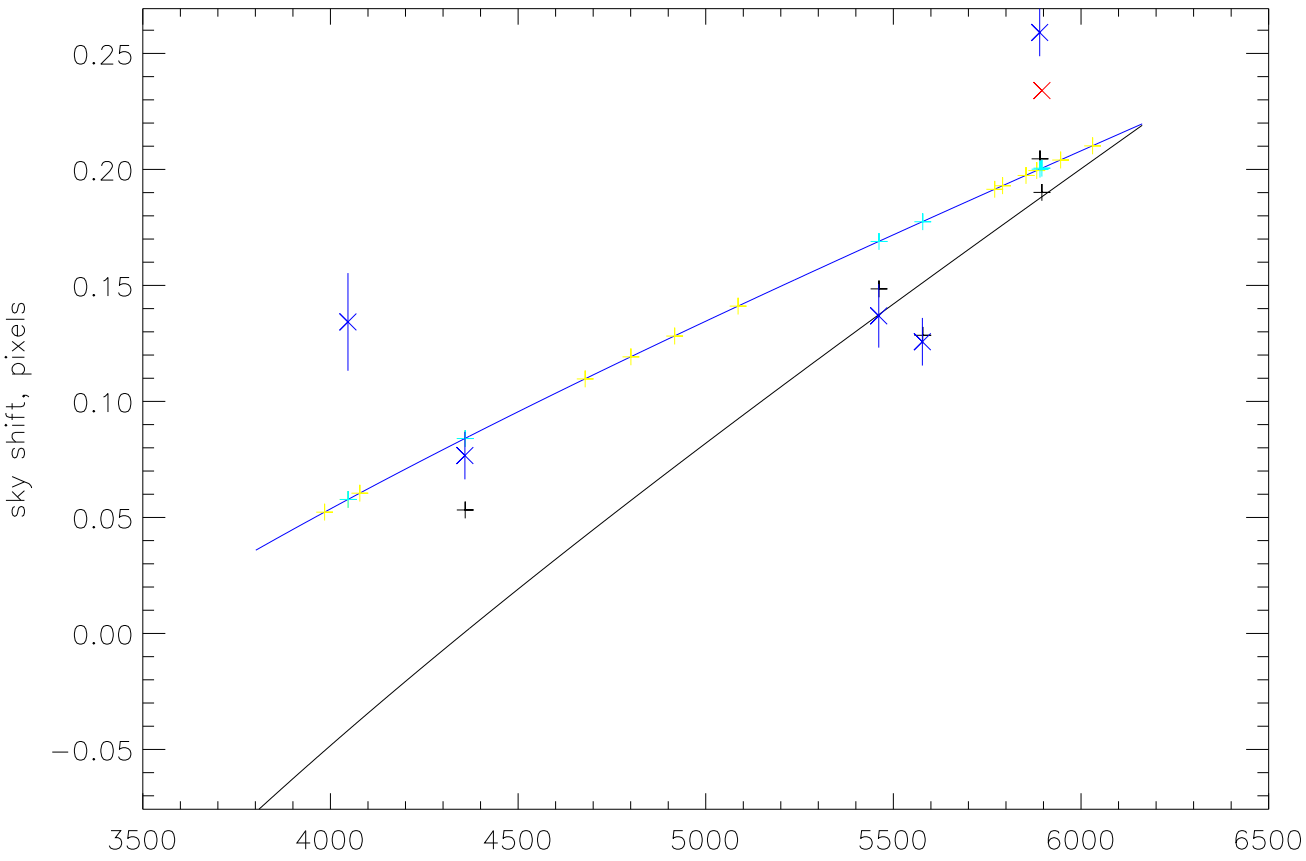

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

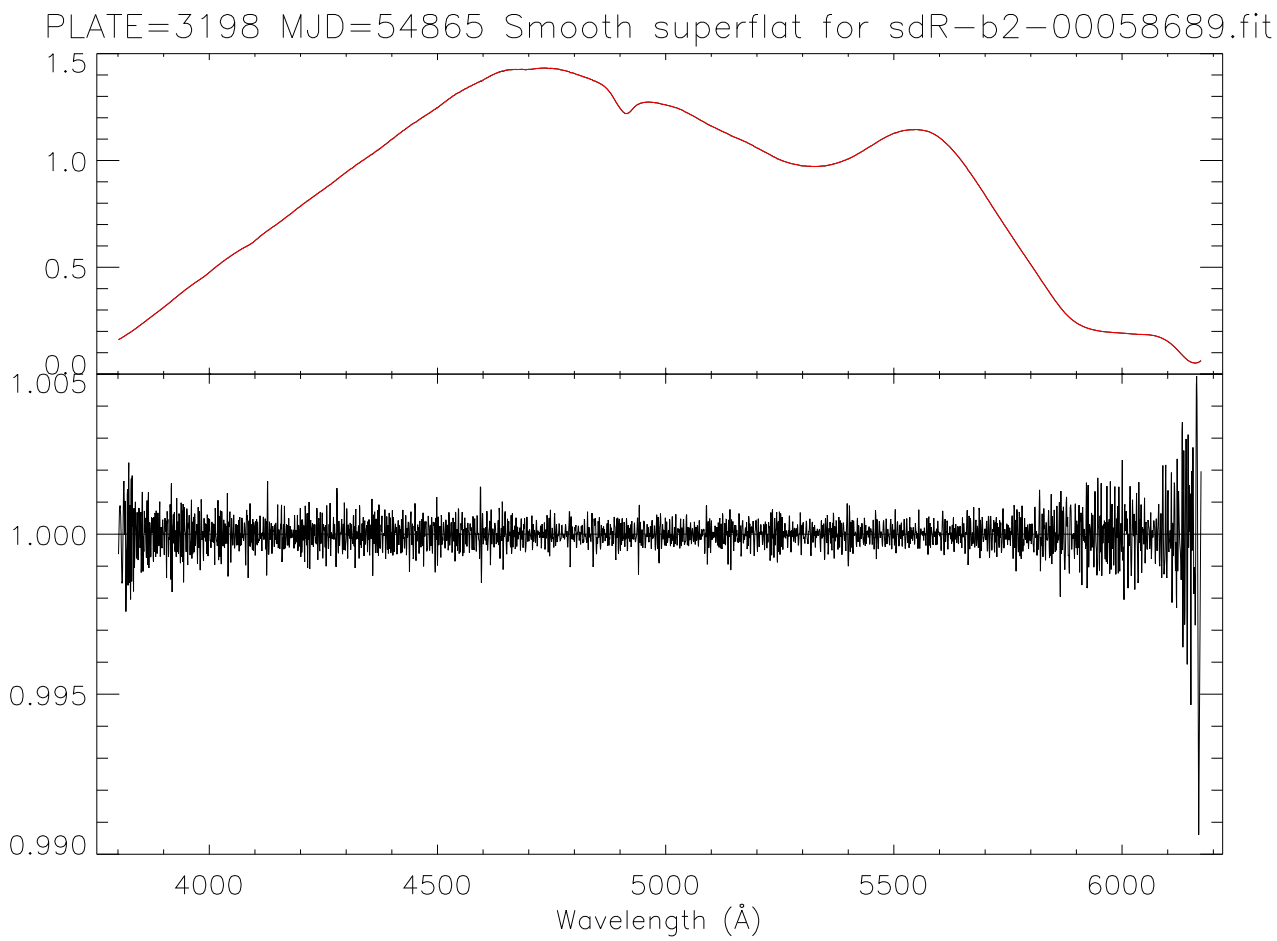

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

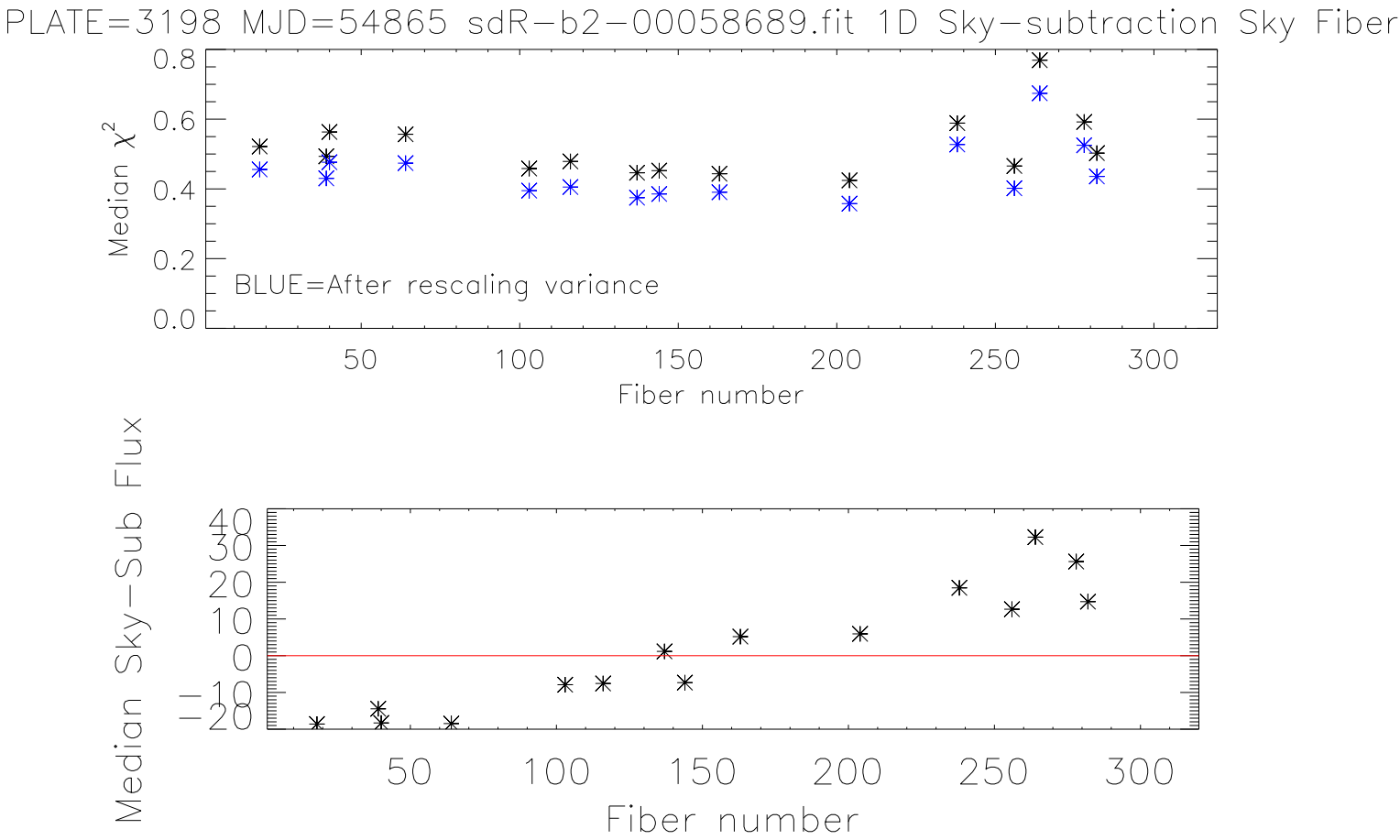

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

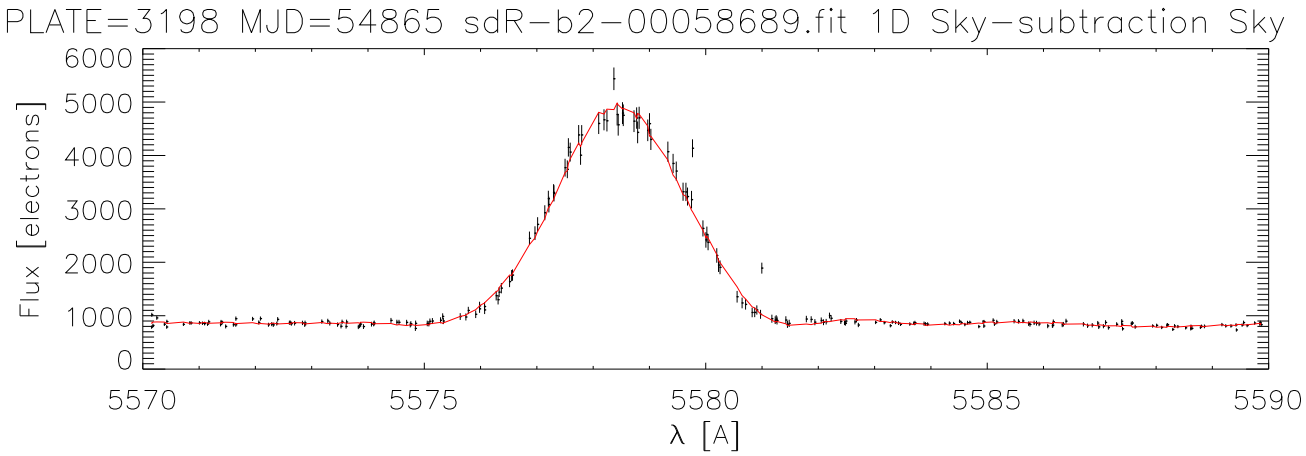

4046.5600
nfib1 17
nfib2 17
stdev 0.039
extra 0.13
4358.3300
nfib1 17
nfib2 17
stdev 0.021
extra 0.08
5460.9400
nfib1 15
nfib2 16
stdev 0.021
extra 0.14
5577.3390
nfib1 16
nfib2 17
stdev 0.013
extra 0.13
5889.9500
nfib1 17
nfib2 17
stdev 0.016
extra 0.26
5895.9240
nfib1 17
nfib2 17
stdev 0.025
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

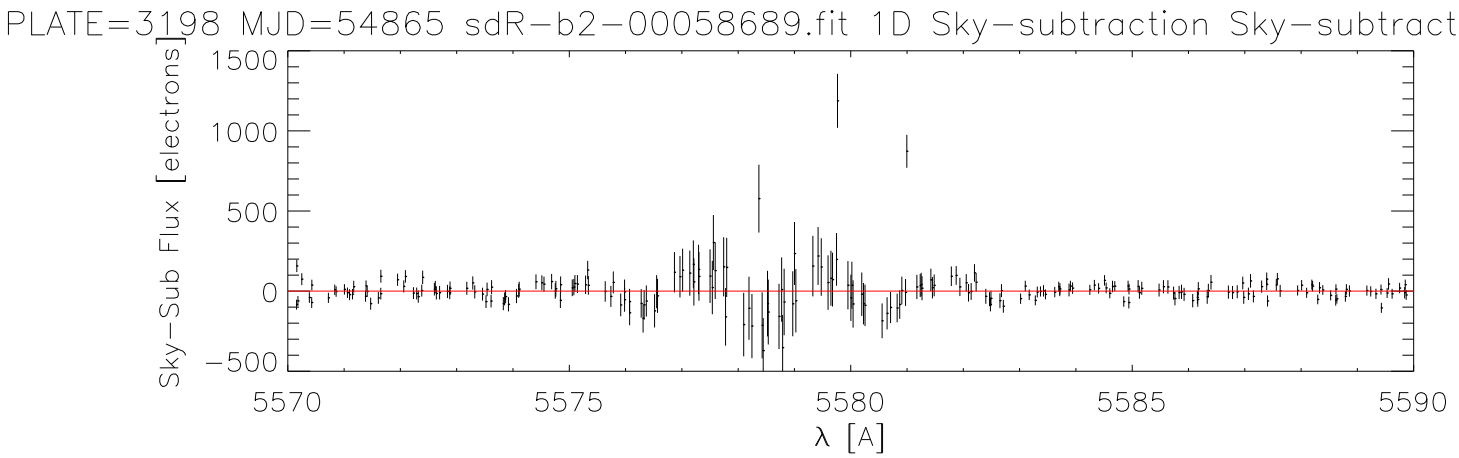

sky shift, pixels
0.25
0.20
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

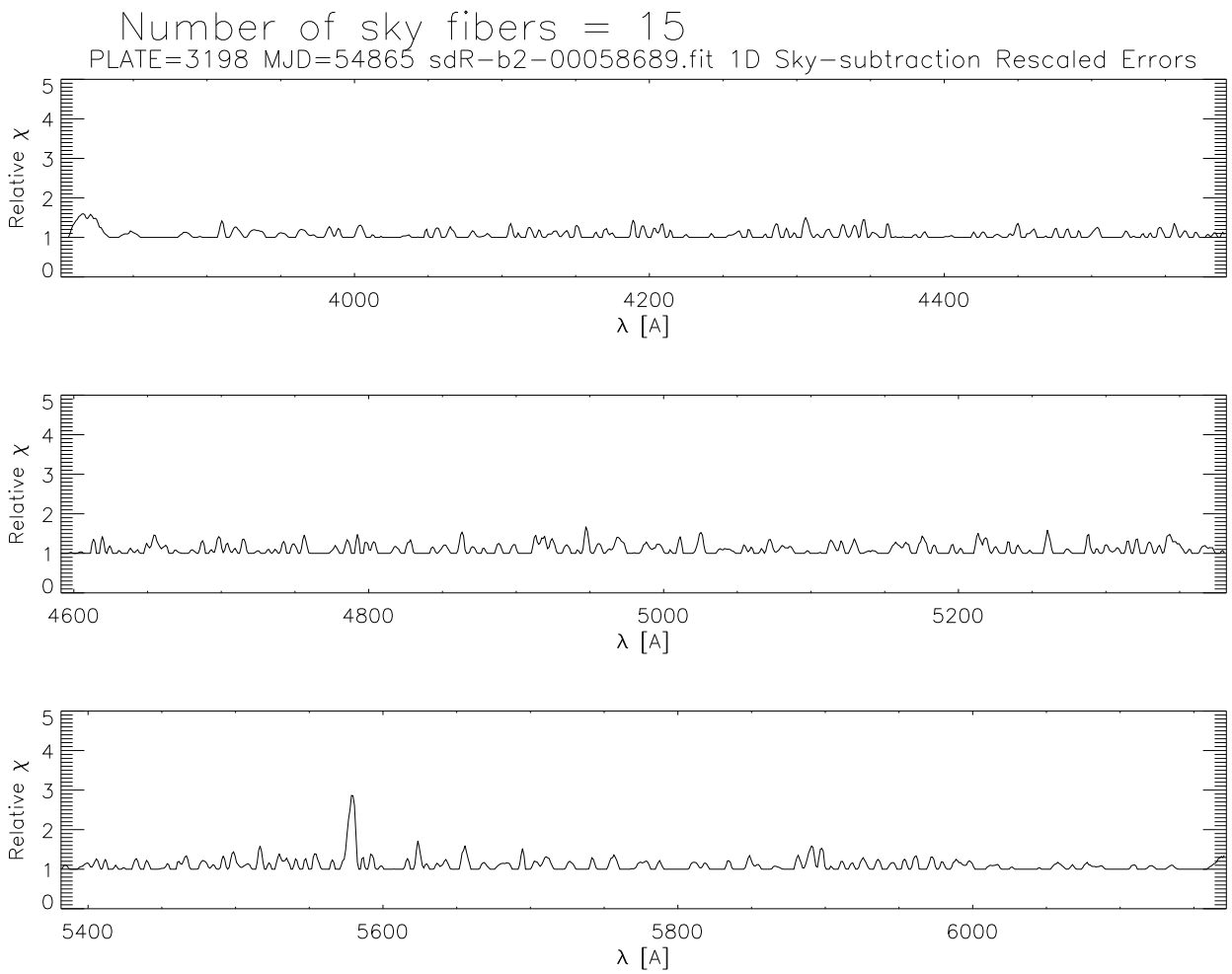
es= −0.0000

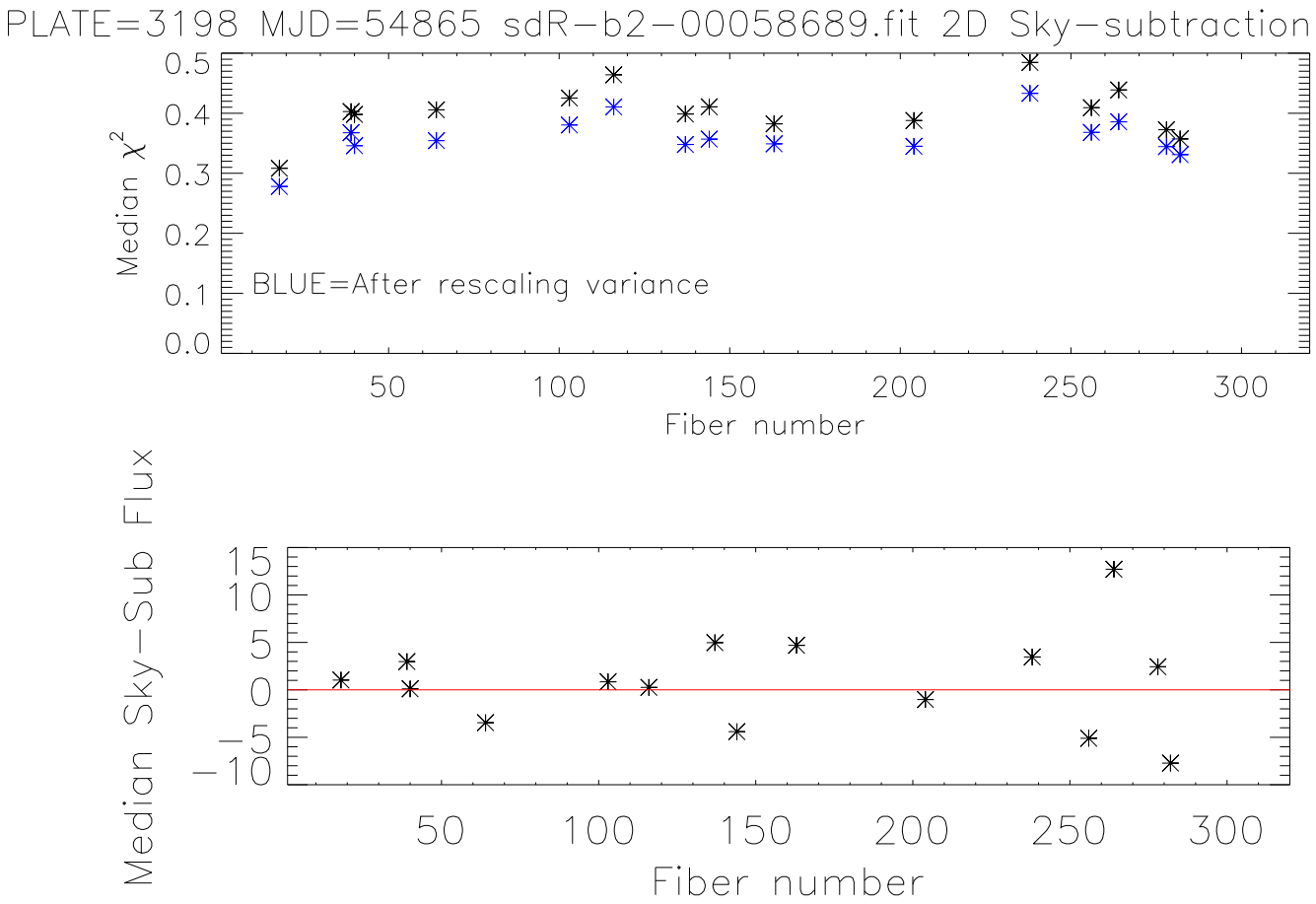

PLATE=3198 MJD=54865 Smooth superflat for sdR−b2−00058689.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

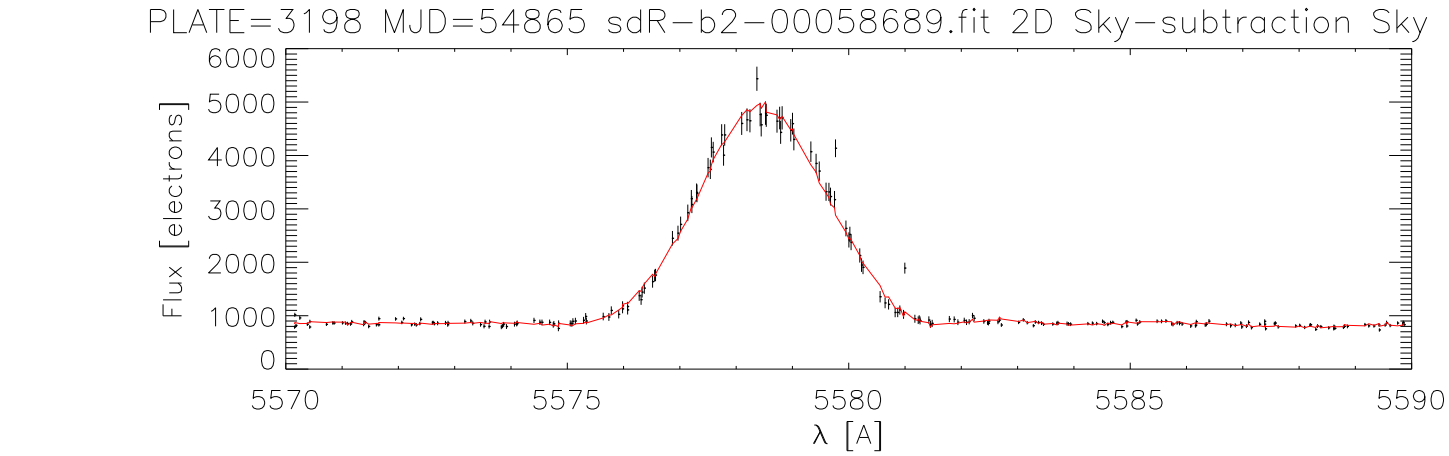

PLATE=3198 MJD=54865 sdR-b2-00058689.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

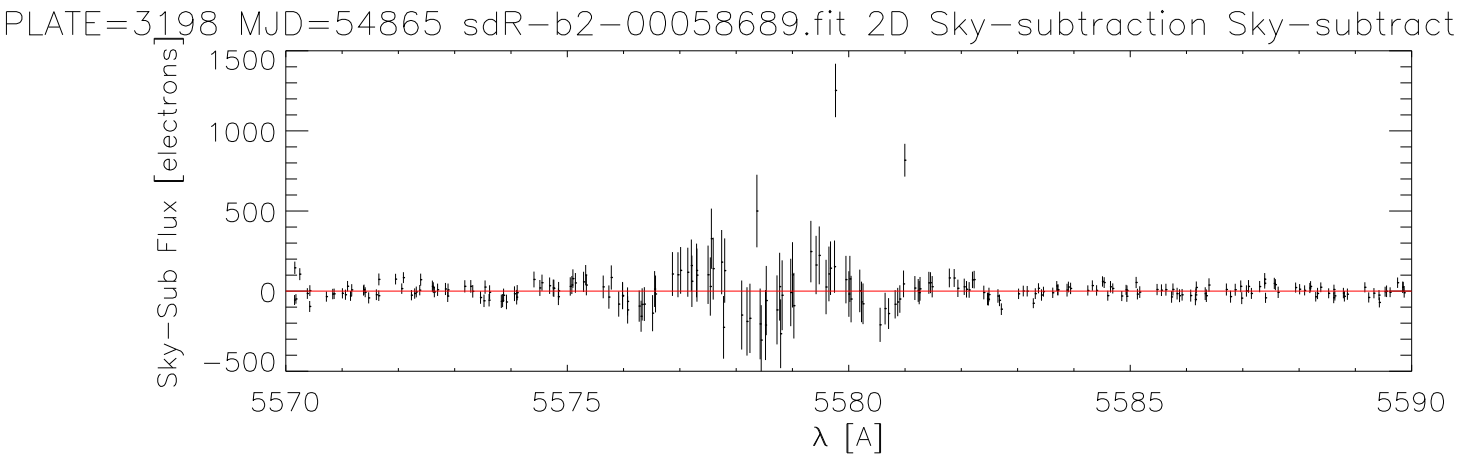

PLATE=3198 MJD=54865 sdR-b2-00058689.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

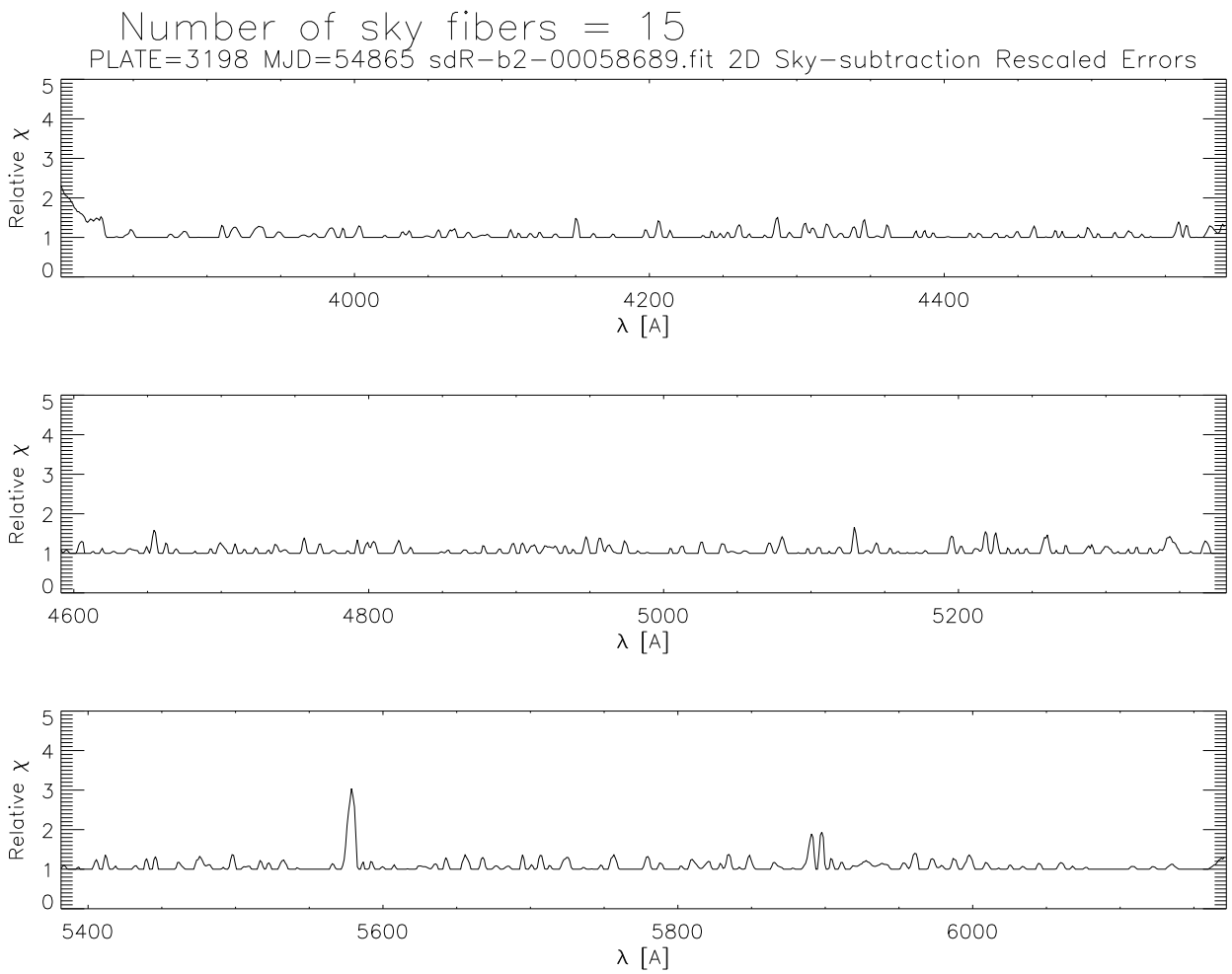

PLATE=3198 MJD=54865 sdR-b2-00058689.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

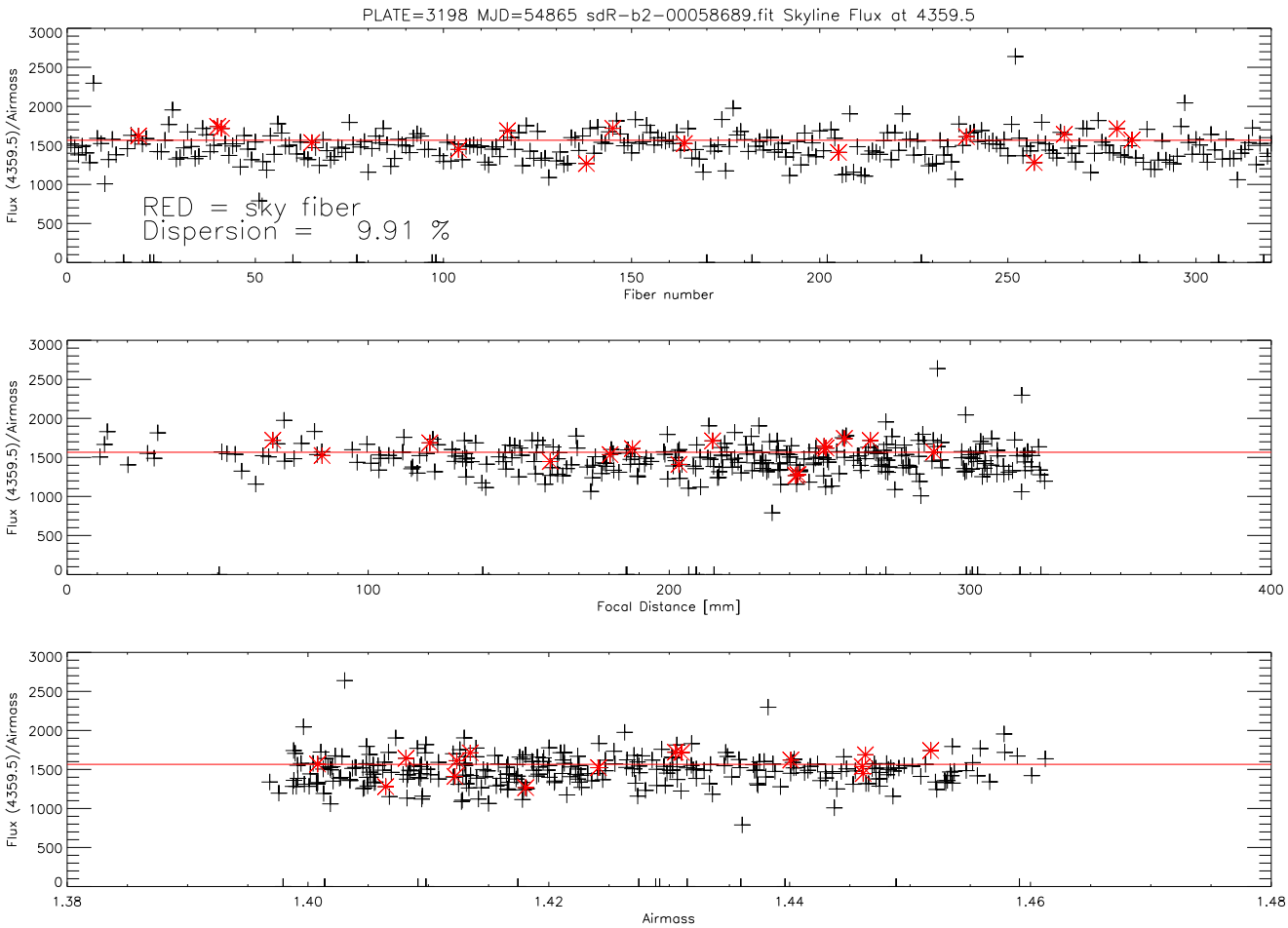

Number of sky fibers = 15
PLATE=3198 MJD=54865 sdR-b2-00058689.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

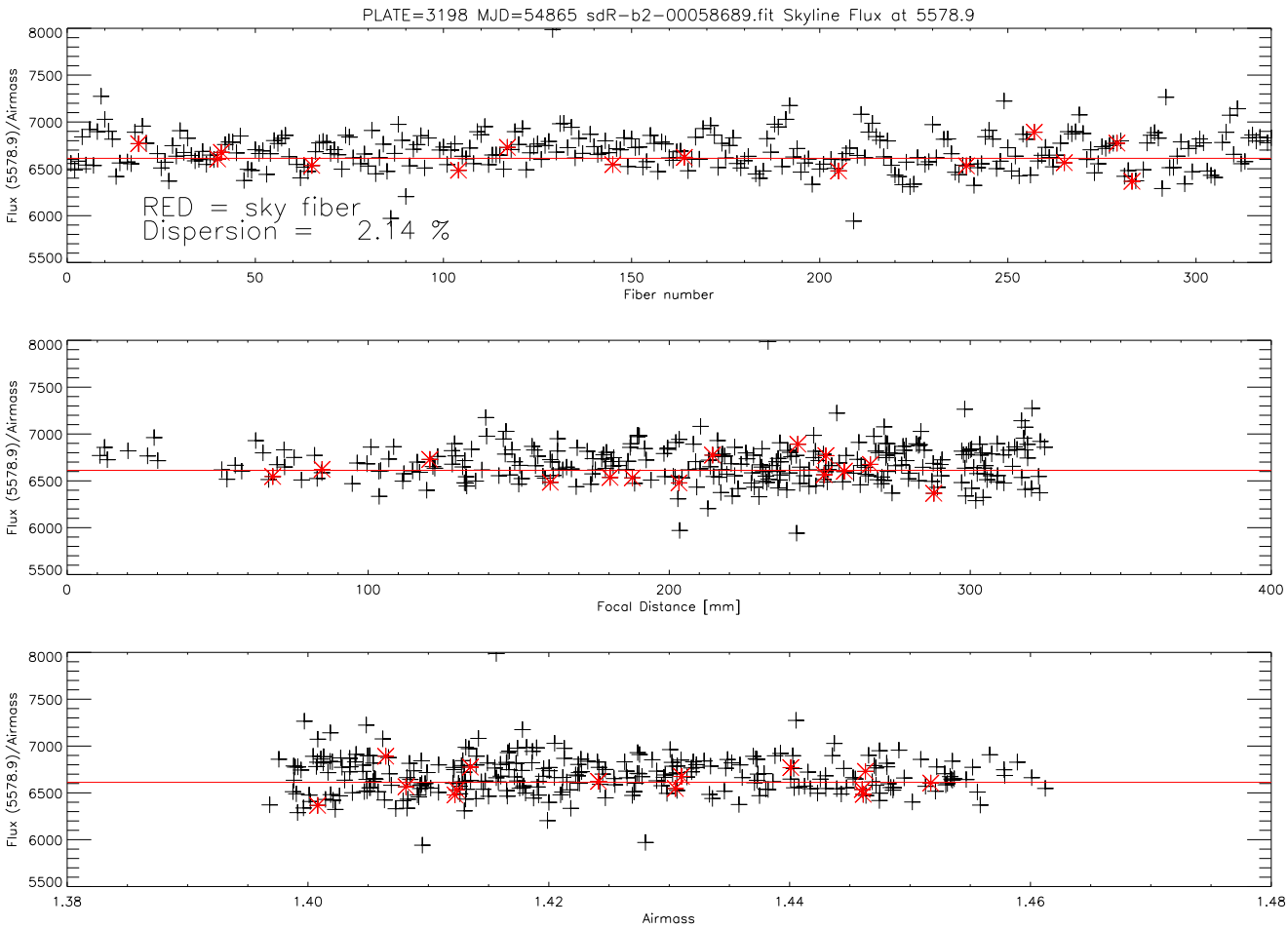

PLATE=3198 MJD=54865 sdR-b2-00058689.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

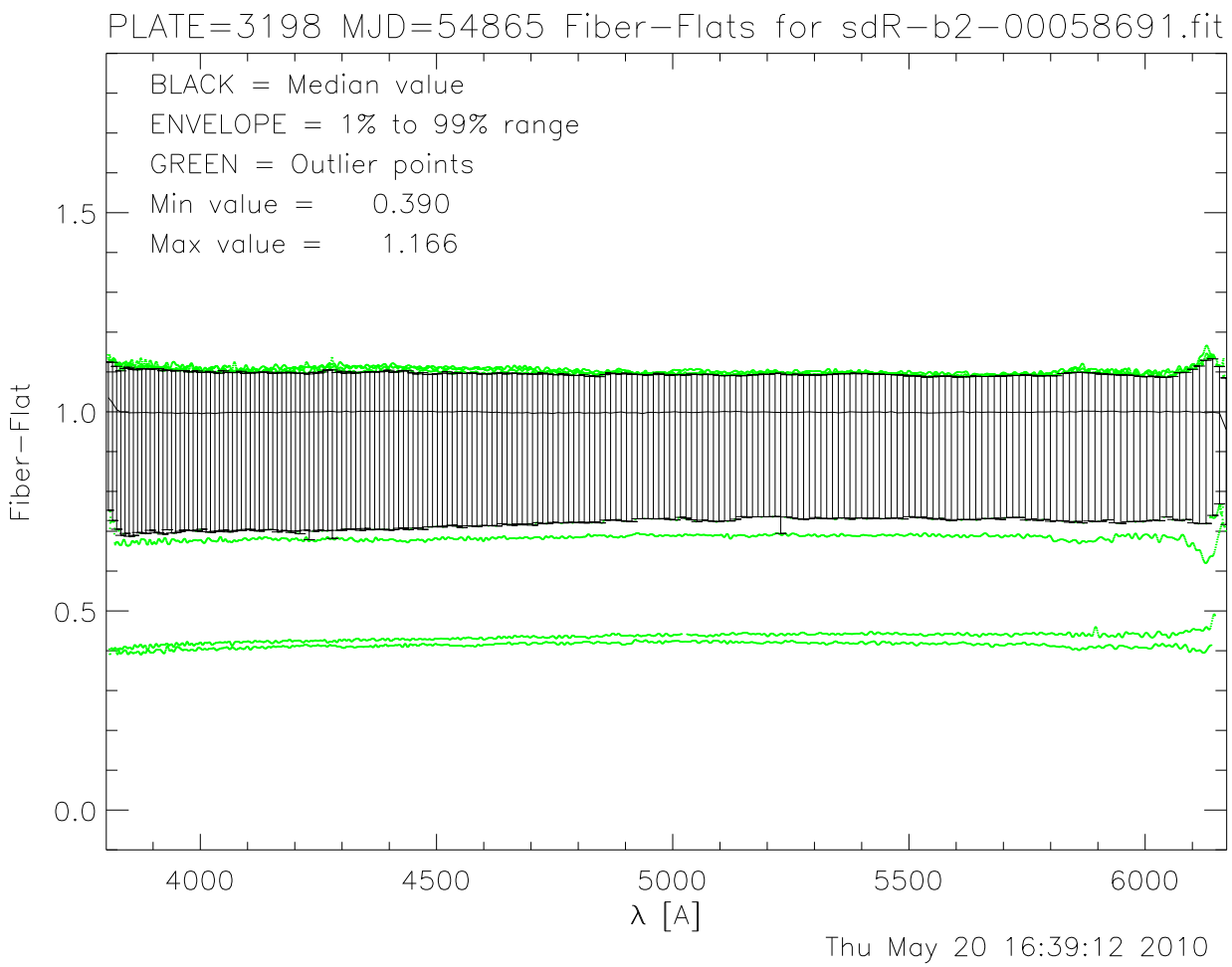

PLATE=3198 MJD=54865 sdR-b2-00058689.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

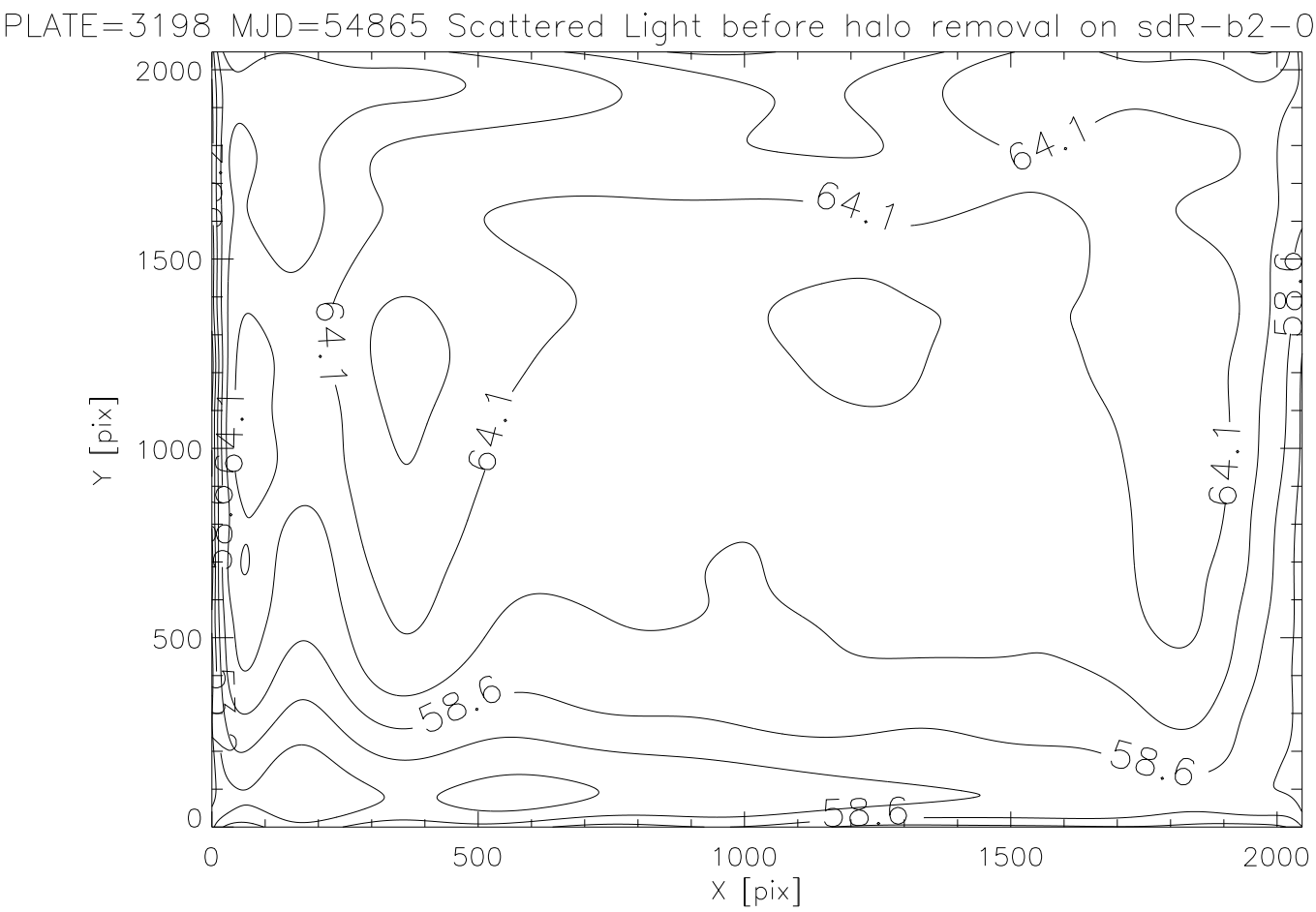

PLATE=3198 MJD=54865 sdR-b2-00058689.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

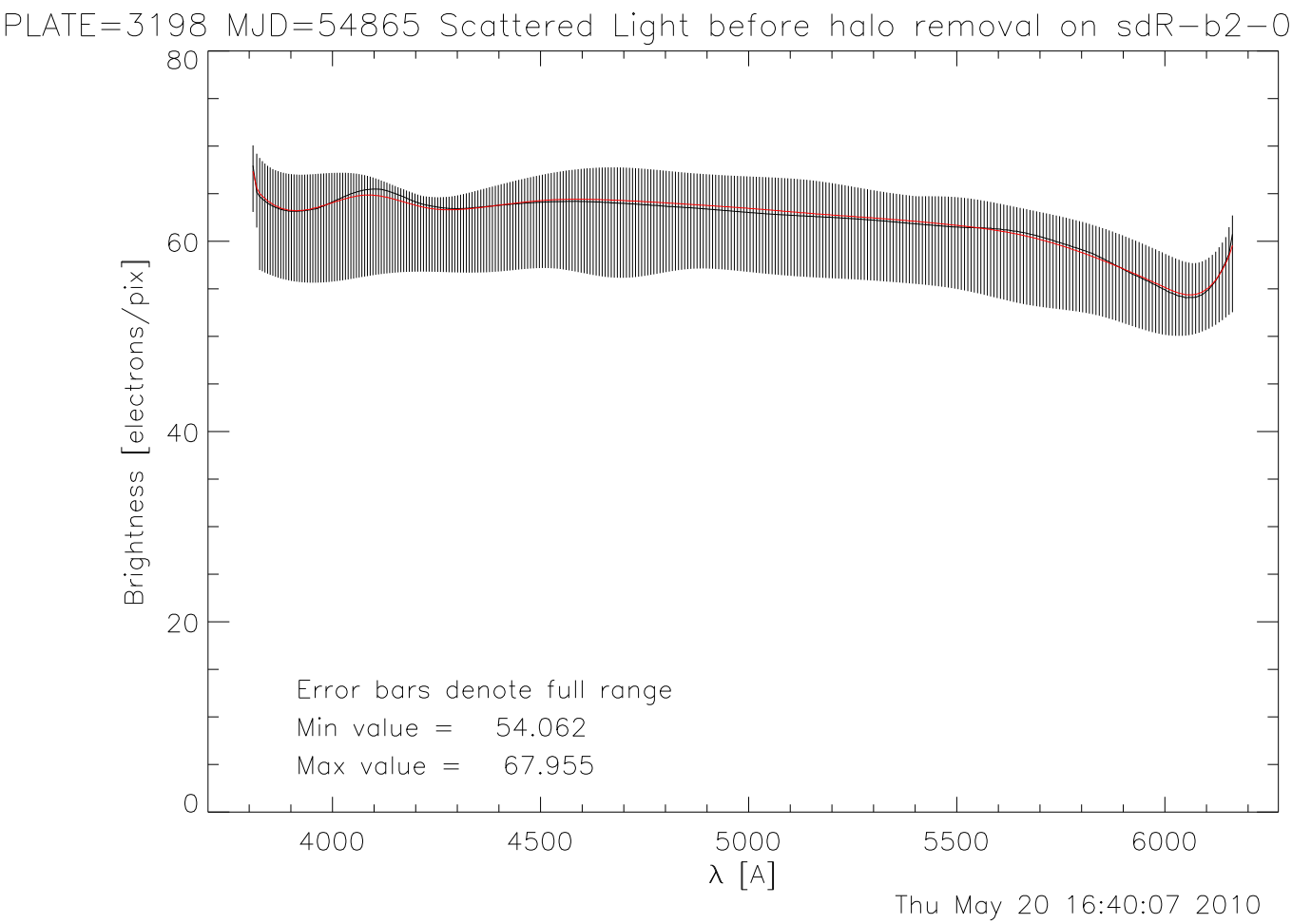

Number of sky fibers = 15
PLATE=3198 MJD=54865 sdR-b2-00058689.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

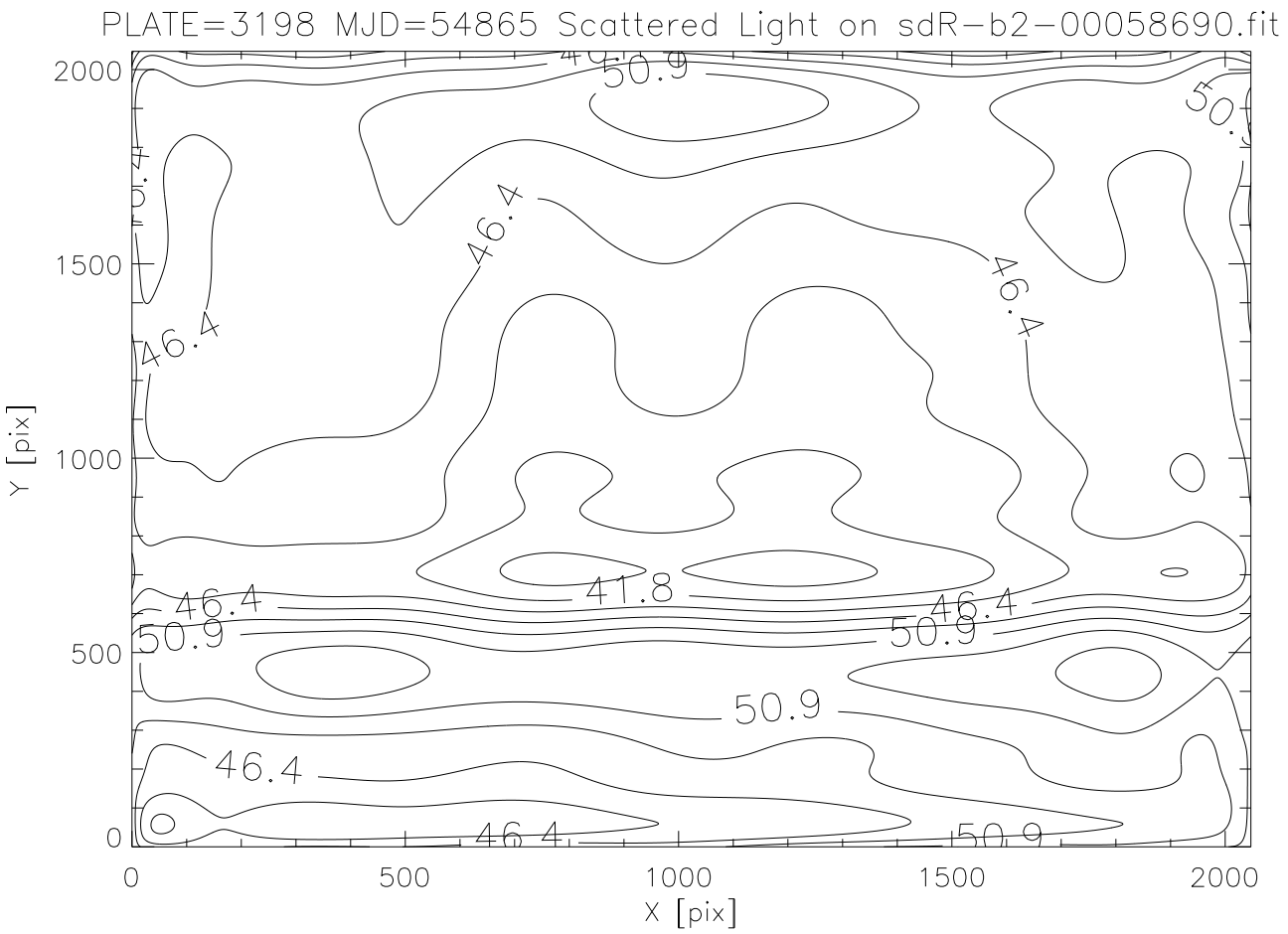

PLATE=3198 MJD=54865 sdR-b2-00058689.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.91 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

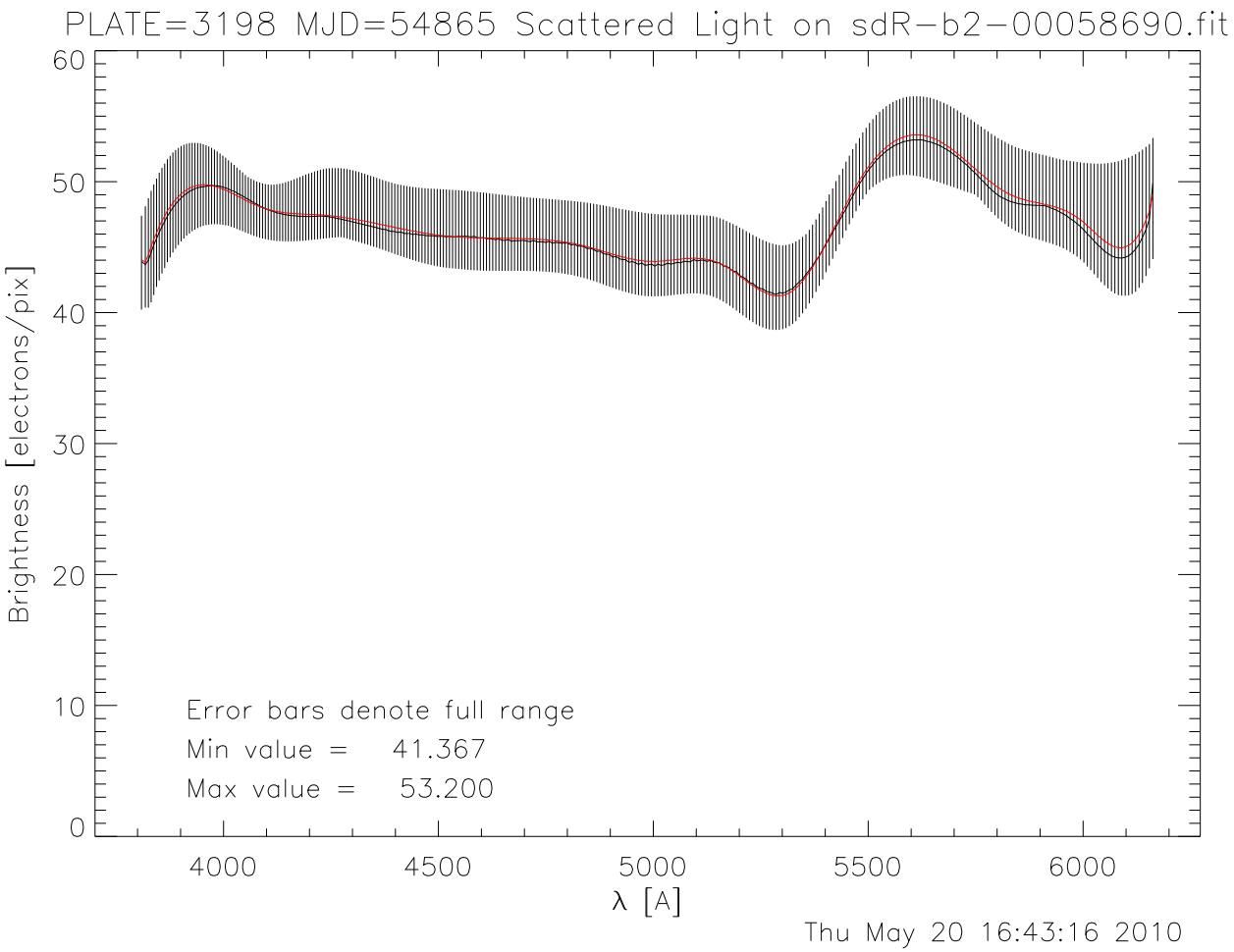

PLATE=3198 MJD=54865 sdR-b2-00058689.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.14 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass


PLATE=3198 MJD=54865 Fiber-Flats for sdR-b2-00058691.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.390
Max value = 1.166
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:39:12 2010


PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-b2-00058690.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
64.1
64.1
64.1
64.1
64.1
58.6
58.6
58.6
58.6
58.6


PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-b2-00058690.f
Brightness [electrons/pix]
80
60
40
20
0
Error bars denote full range
Min value = 54.062
Max value = 67.955
4000
4500
5000
5500
6000
λ [A]
Thu May 20 16:40:07 2010


PLATE=3198 MJD=54865 Scattered Light on sdR-b2-00058690.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
50.9
46.4
41.8


PLATE=3198 MJD=54865 Scattered Light on sdR-b2-00058690.fit
Brightness [electrons/pix]
60
50
40
30
20
10
0
Error bars denote full range
Min value = 41.367
Max value = 53.200
4000
4500
5000
5500
6000
λ [A]
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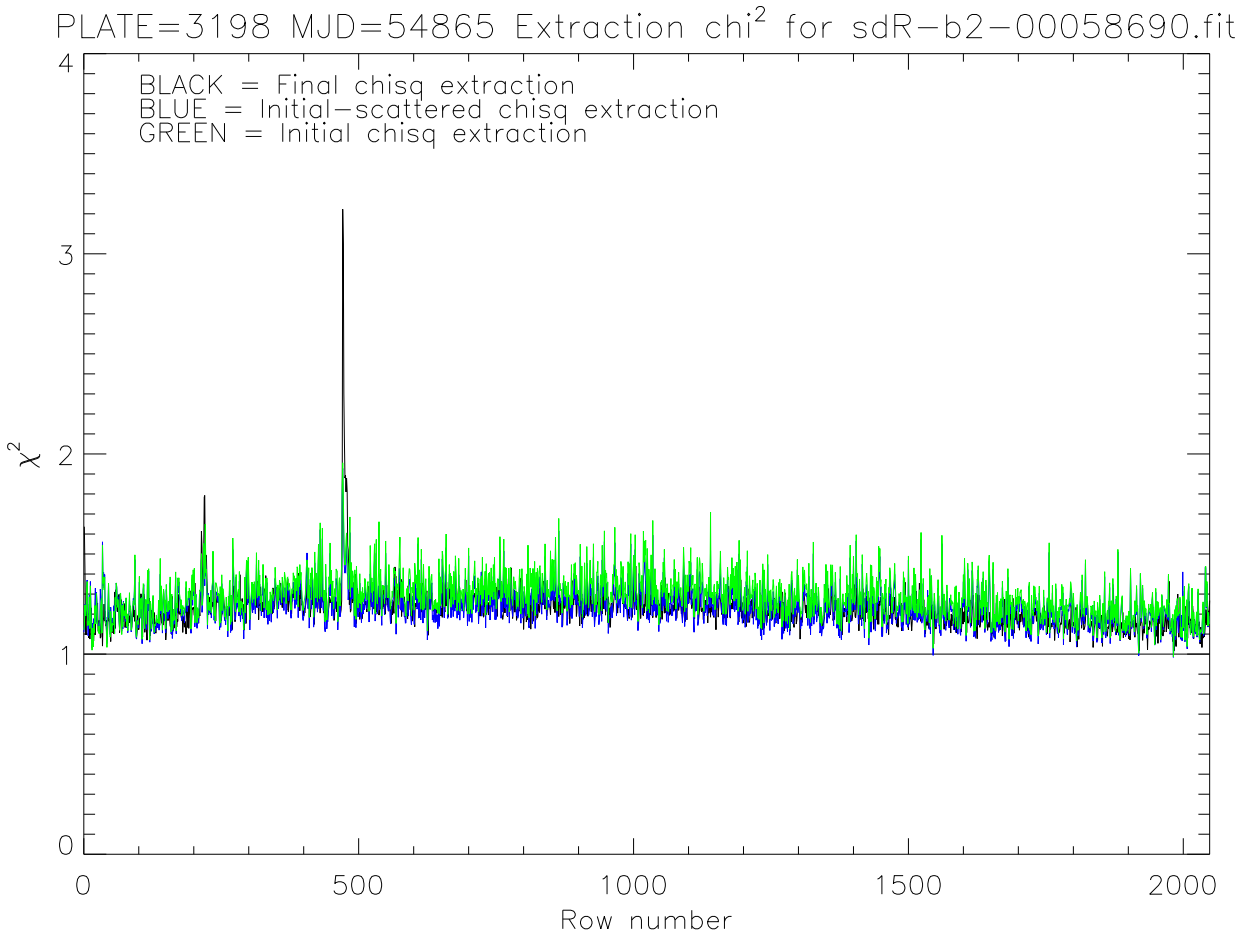
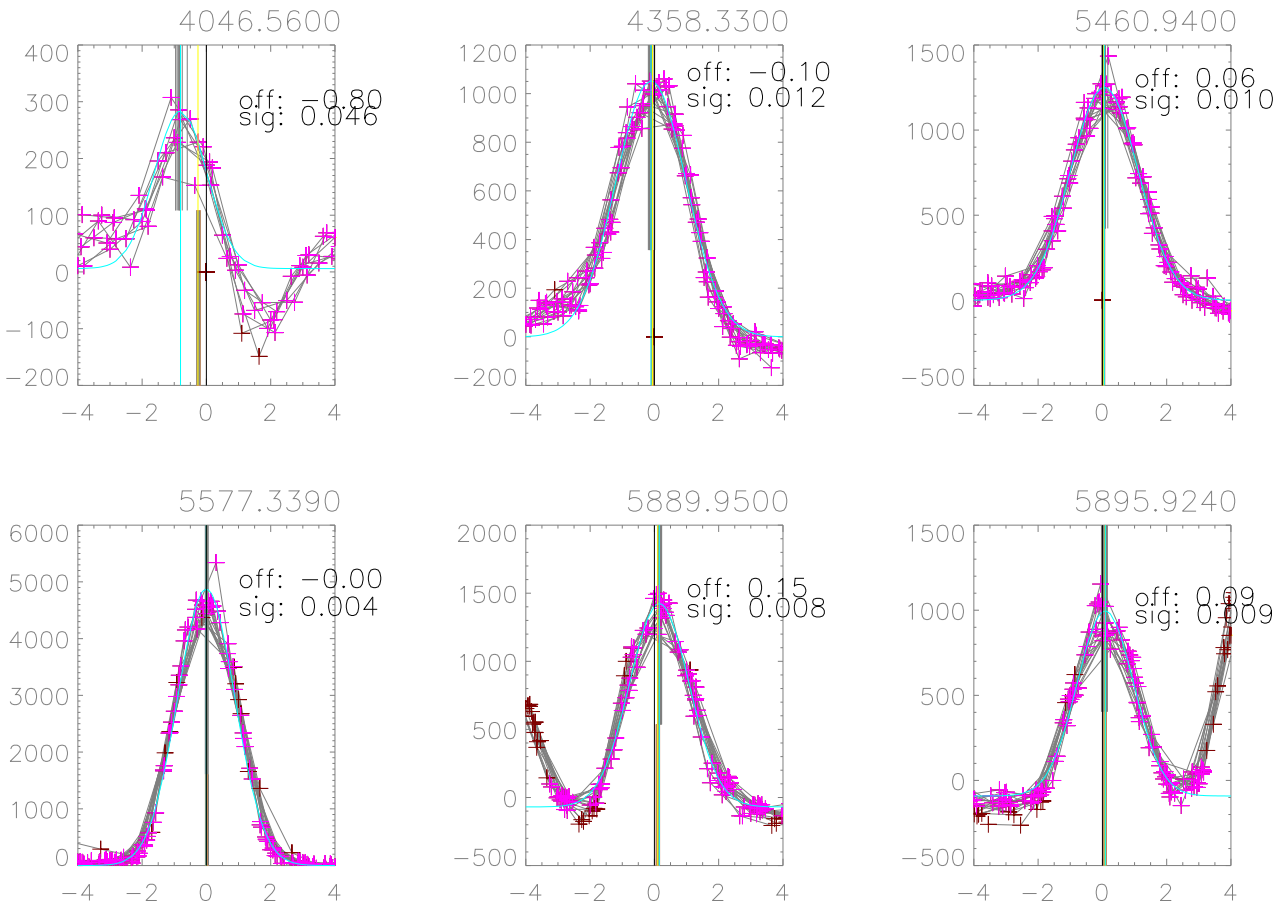
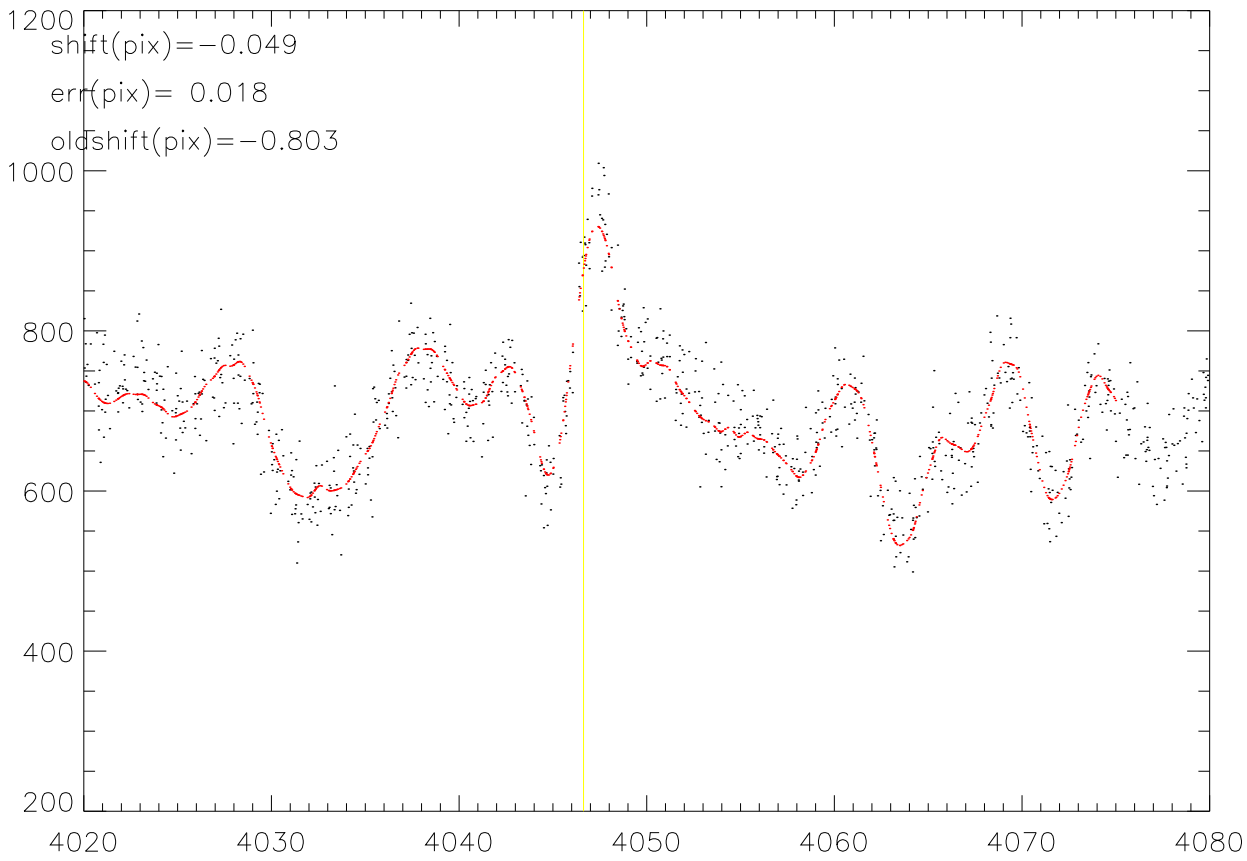
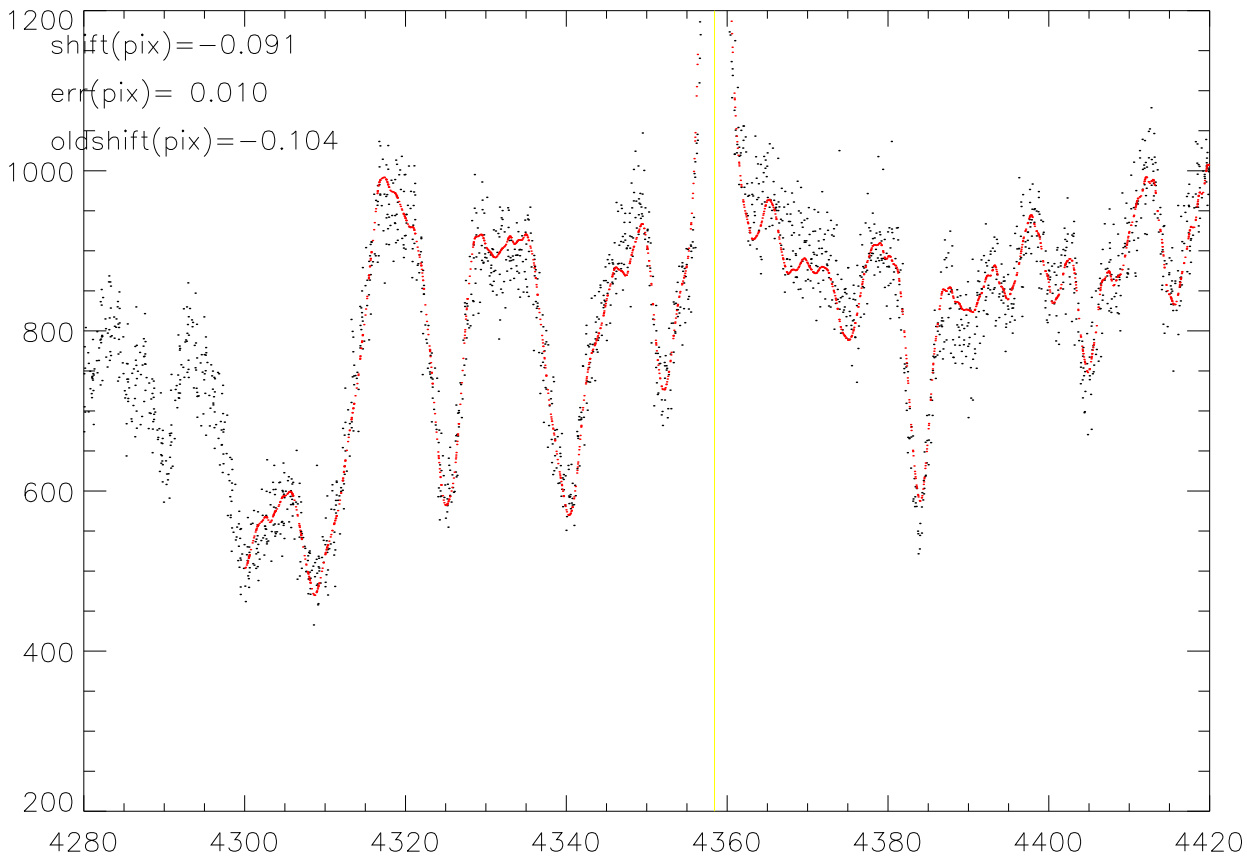
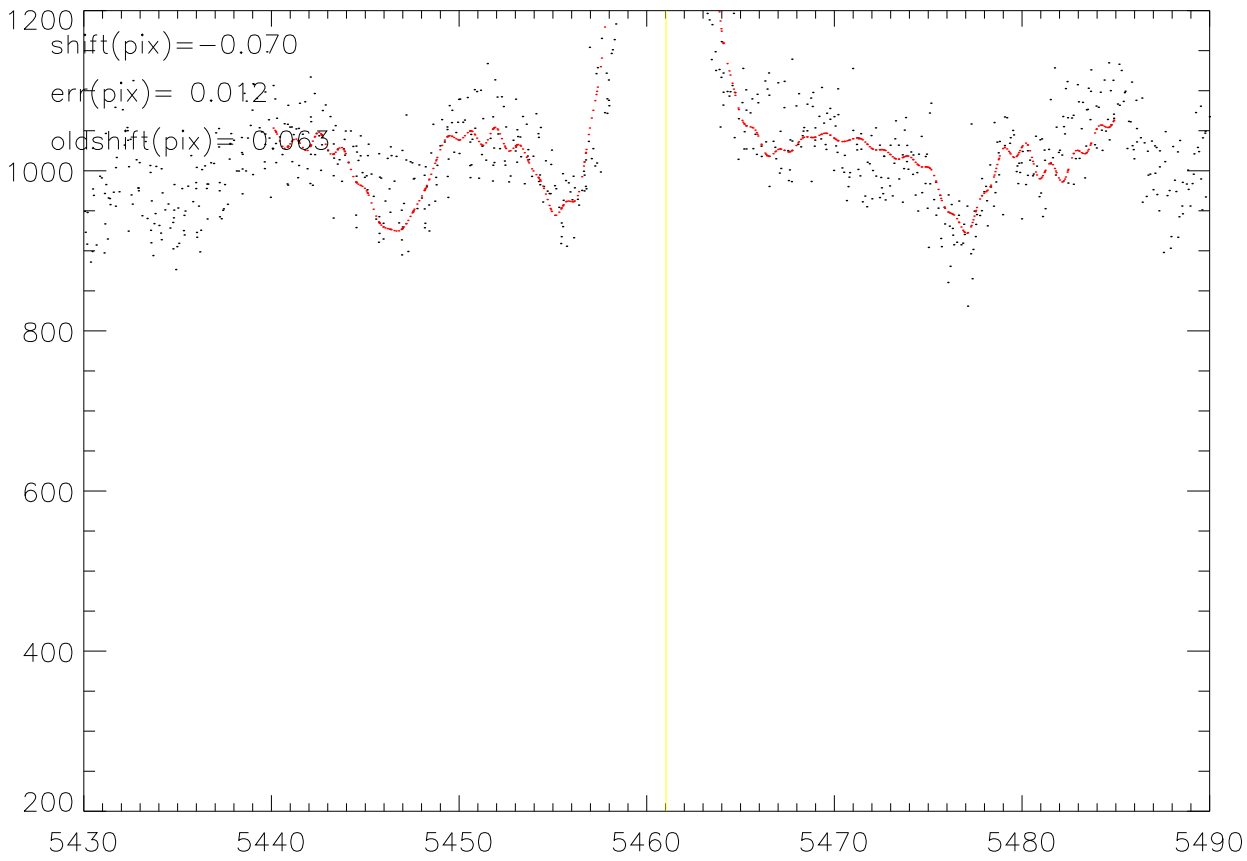
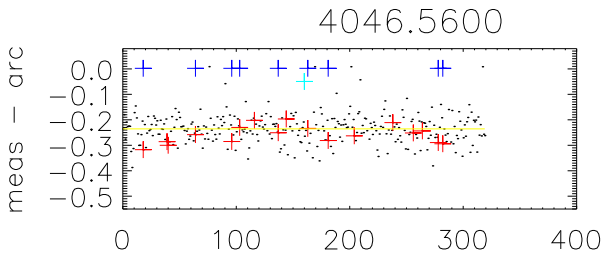

PLATE=3198 MJD=54865 Extraction chi^2 for sdR-b2-00058690.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

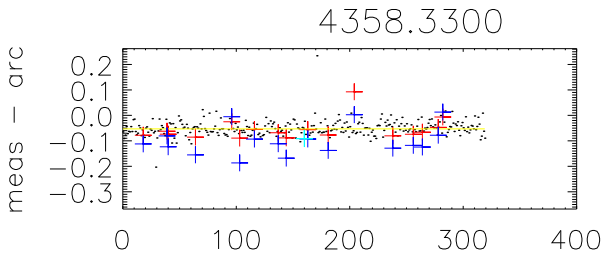

4046.5600
off: −0.80
sig: 0.046
4358.3300
off: −0.10
sig: 0.012
5460.9400
off: 0.06
sig: 0.010
5577.3390
off: −0.00
sig: 0.004
5889.9500
off: 0.15
sig: 0.008
5895.9240
off: 0.09
sig: 0.009

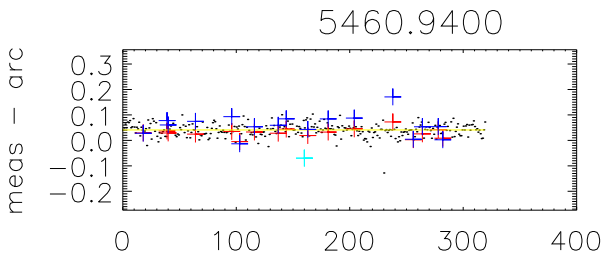

shift(pix)=−0.049
err(pix)= 0.018
oldshift(pix)=−0.803
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

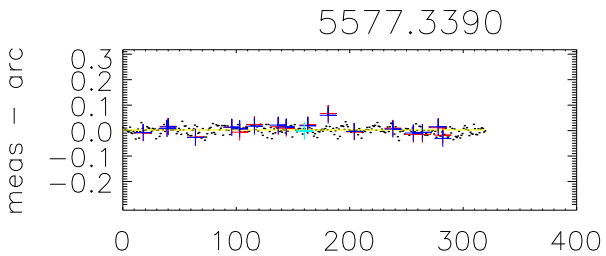

shift(pix)=−0.091
err(pix)= 0.010
oldshift(pix)=−0.104
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

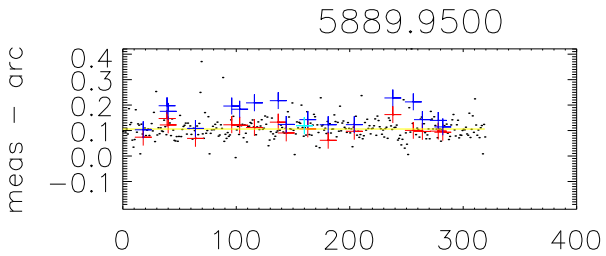

shift(pix)=−0.070
err(pix)= 0.012
oldshift(pix)= 0.063
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

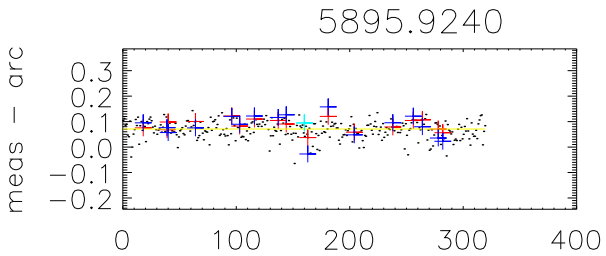

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

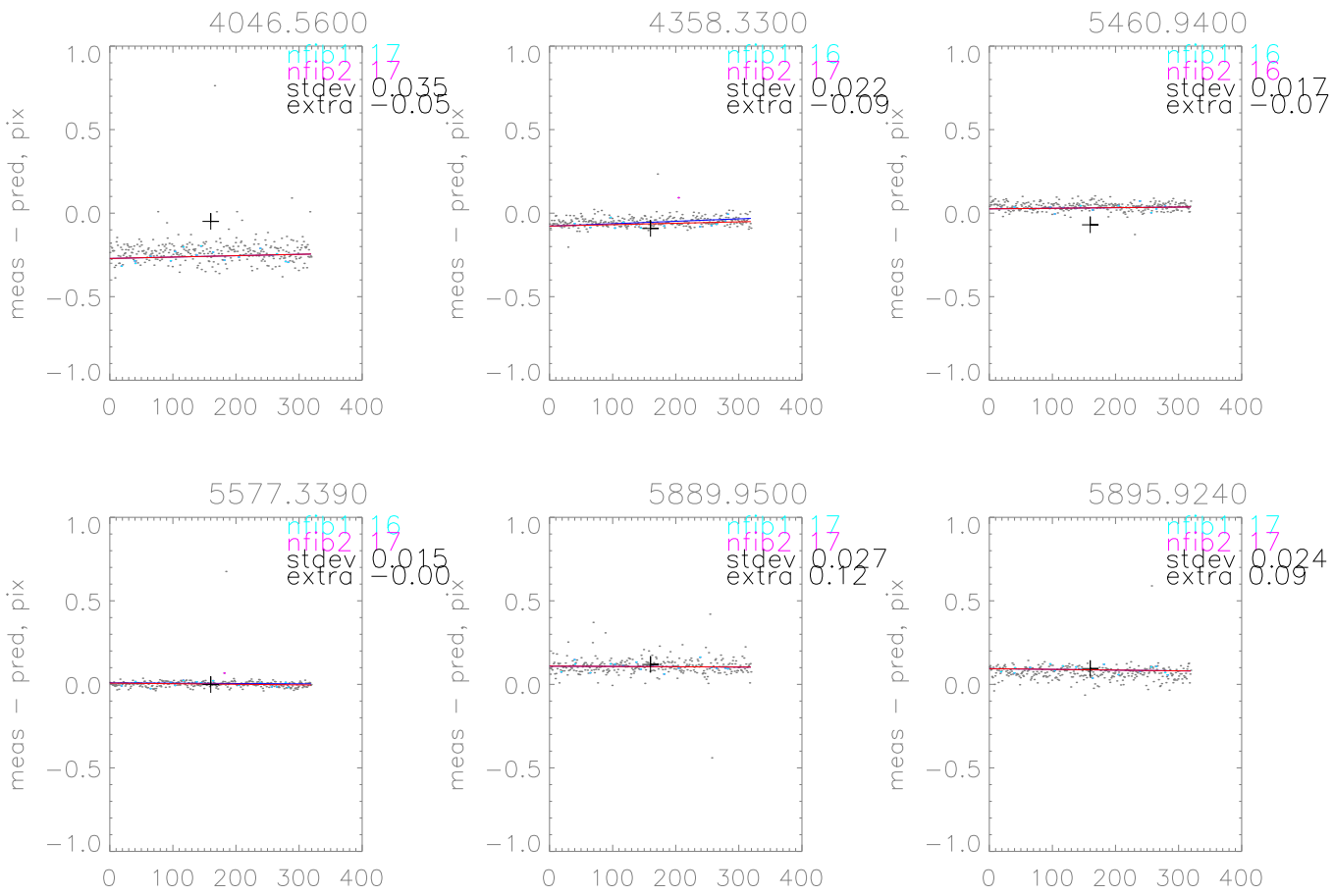

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

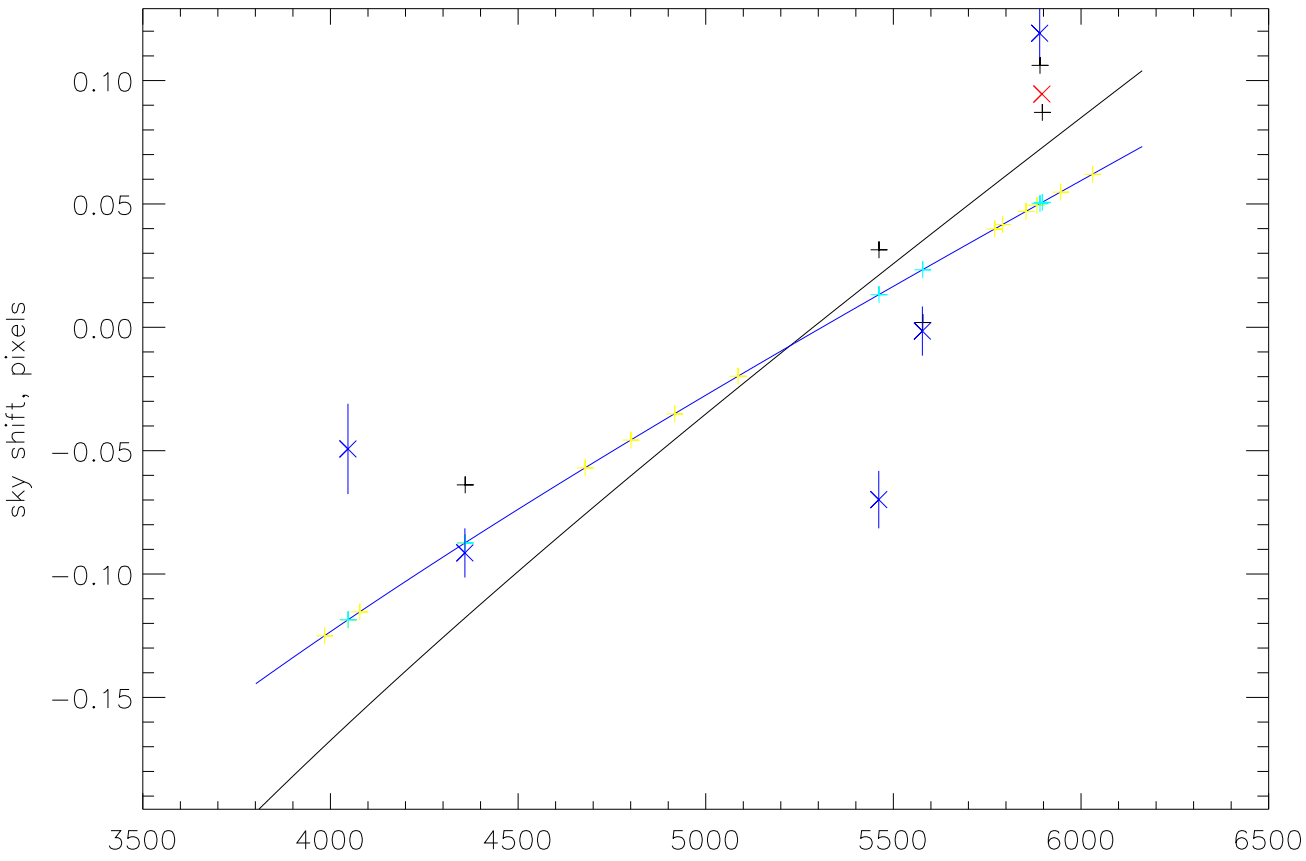

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

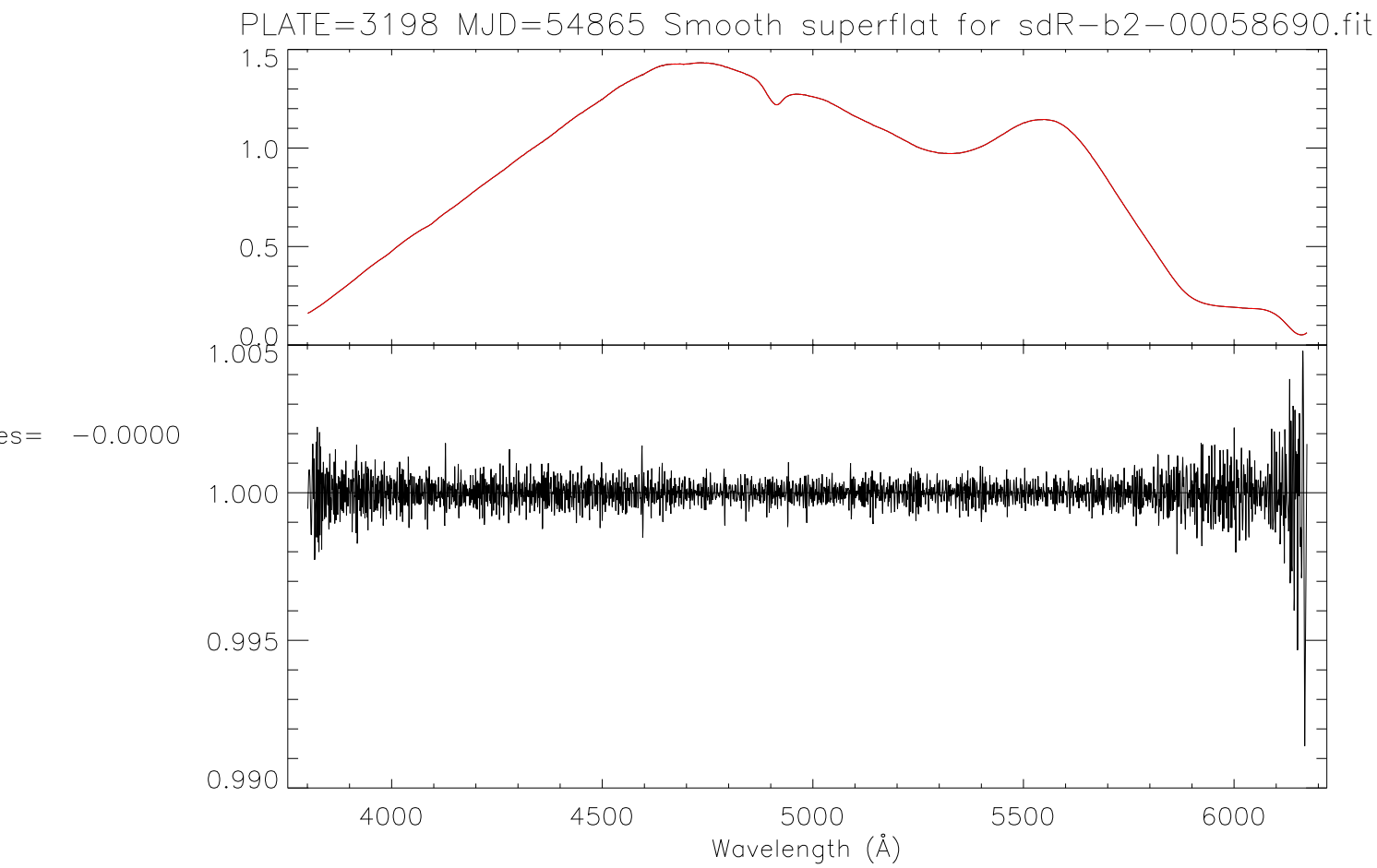

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

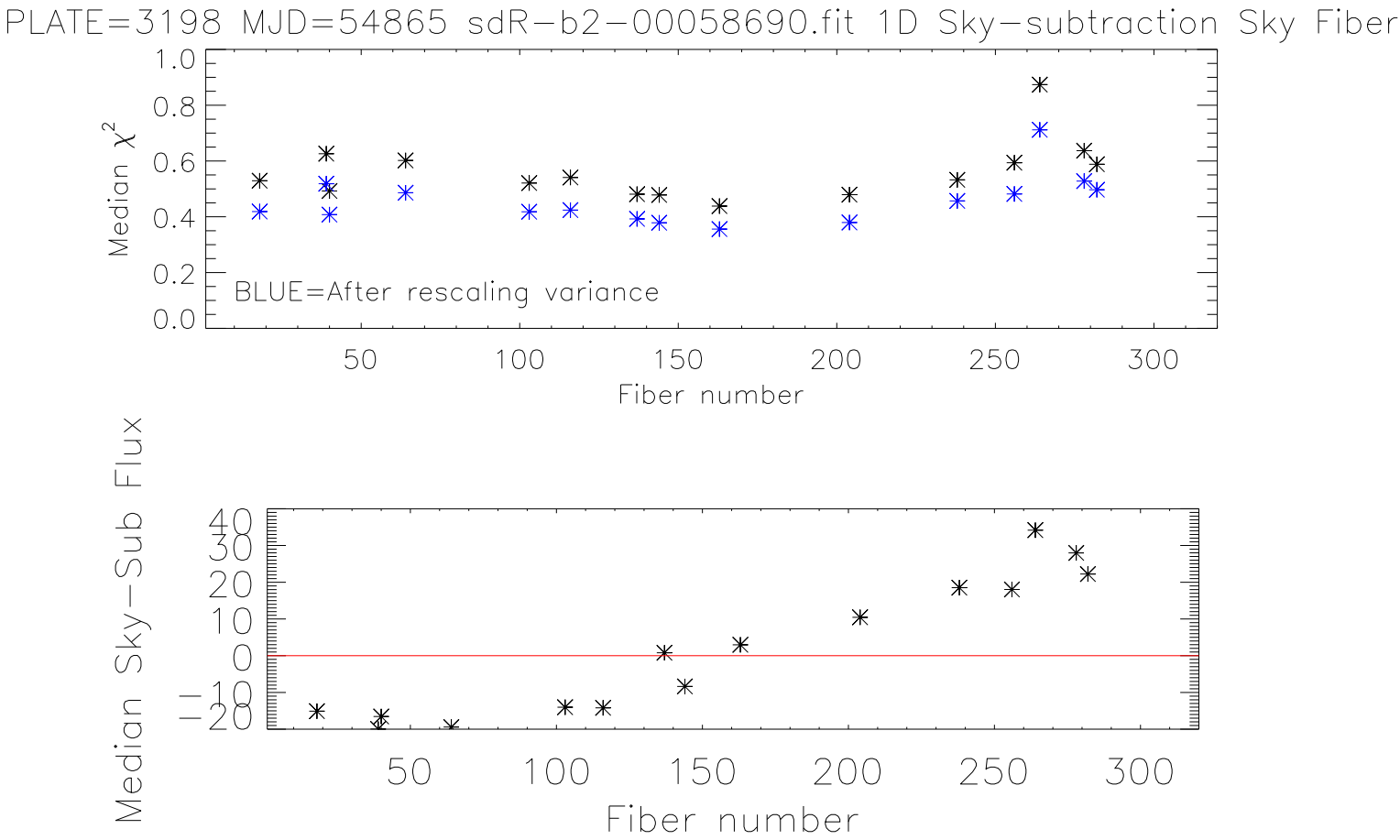

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

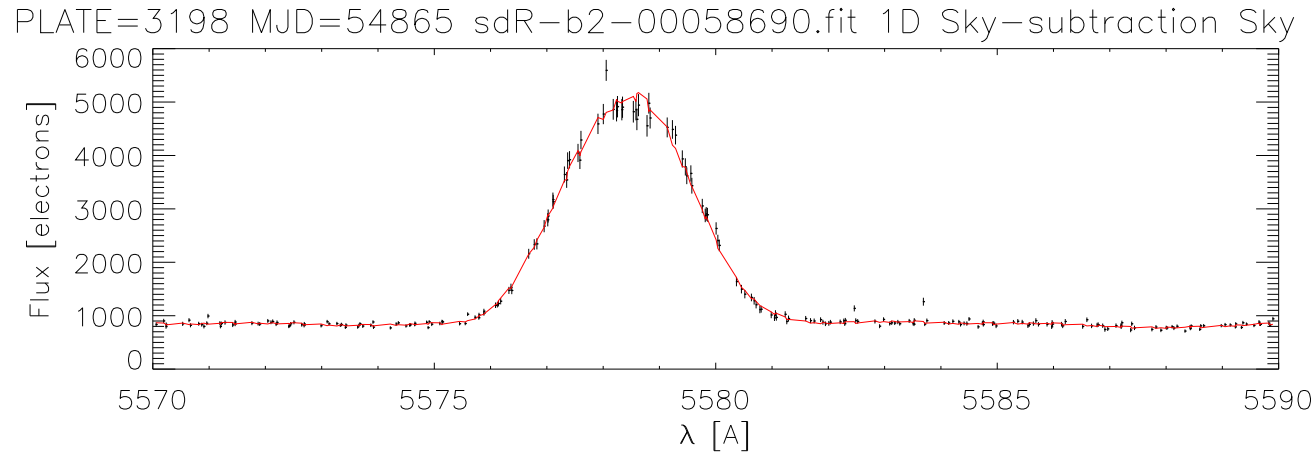

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

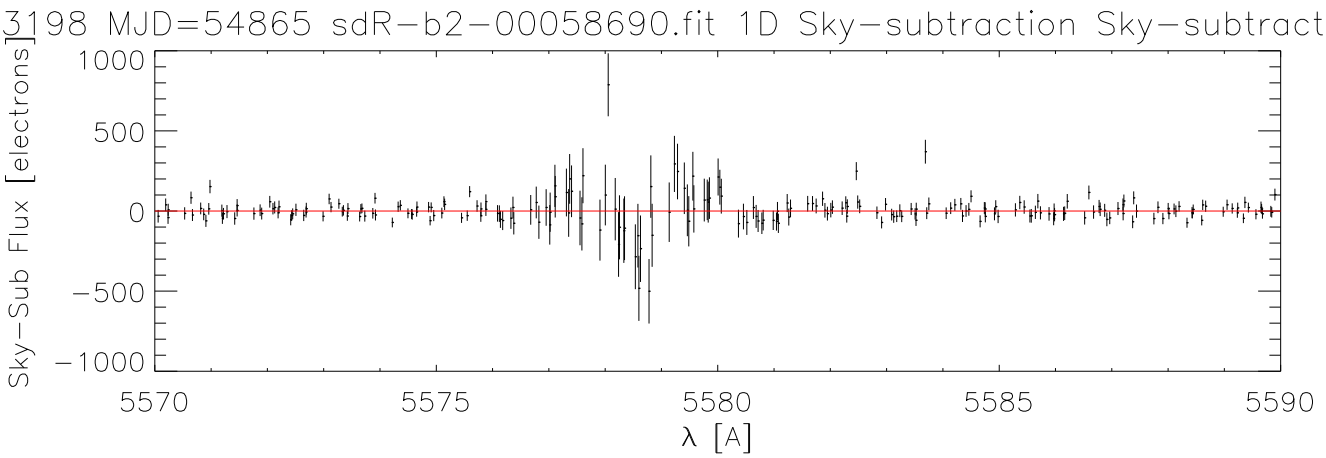

4046.5600
nfib1 17
nfib2 17
stdev 0.035
extra −0.05
4358.3300
nfib1 16
nfib2 17
stdev 0.022
extra −0.09
5460.9400
nfib1 16
nfib2 16
stdev 0.017
extra −0.07
5577.3390
nfib1 16
nfib2 17
stdev 0.015
extra −0.00
5889.9500
nfib1 17
nfib2 17
stdev 0.027
extra 0.12
5895.9240
nfib1 17
nfib2 17
stdev 0.024
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

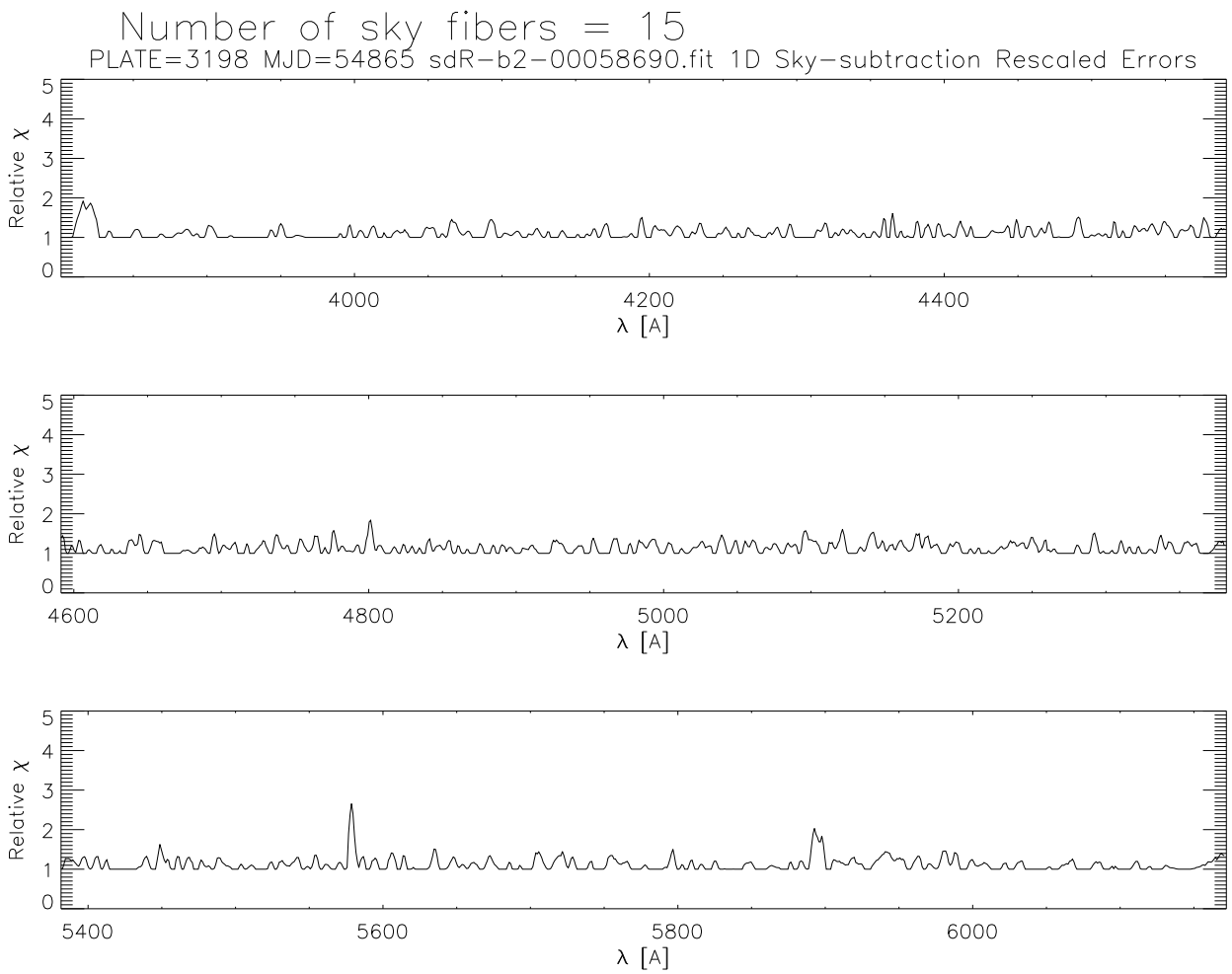

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

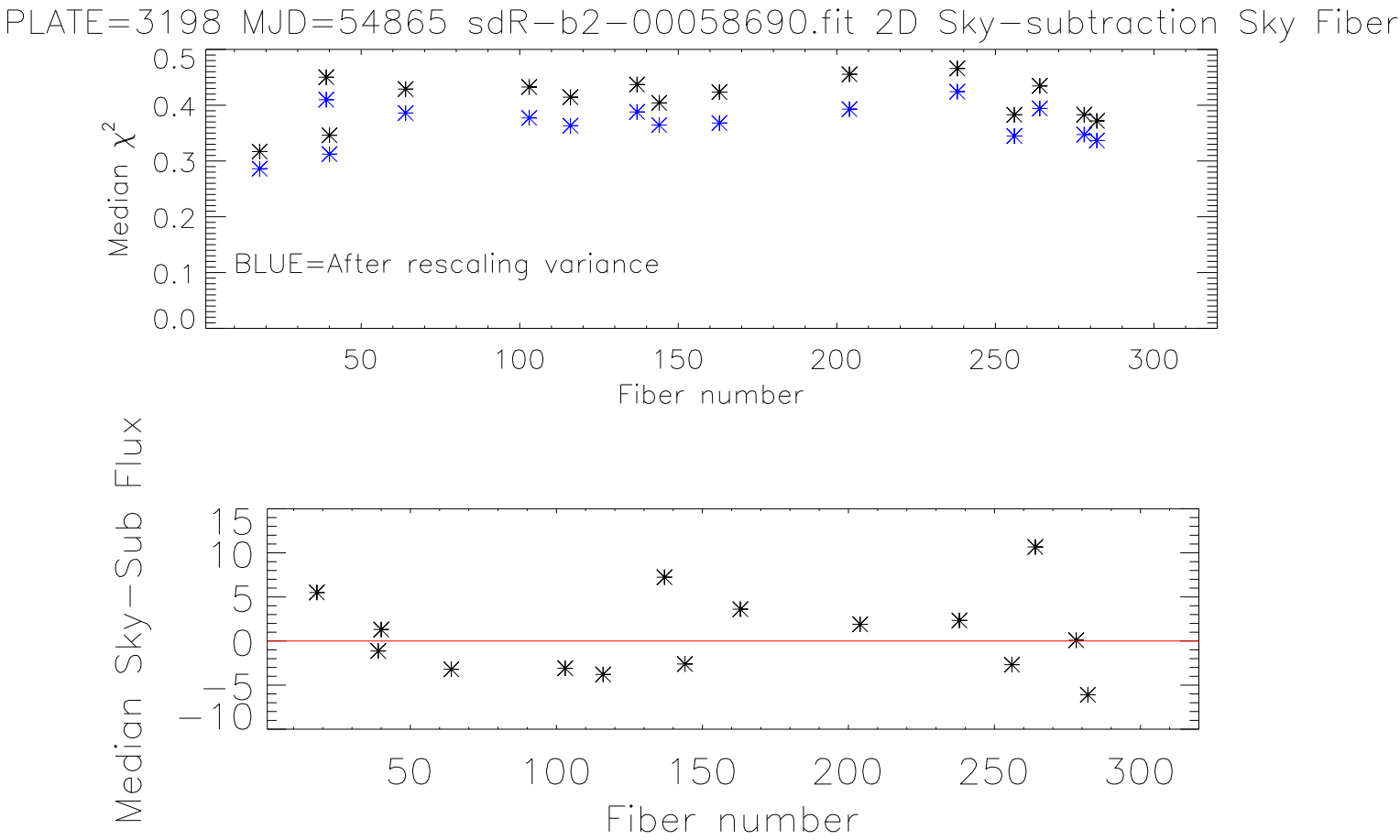

PLATE=3198 MJD=54865 Smooth superflat for sdR-b2-00058690.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

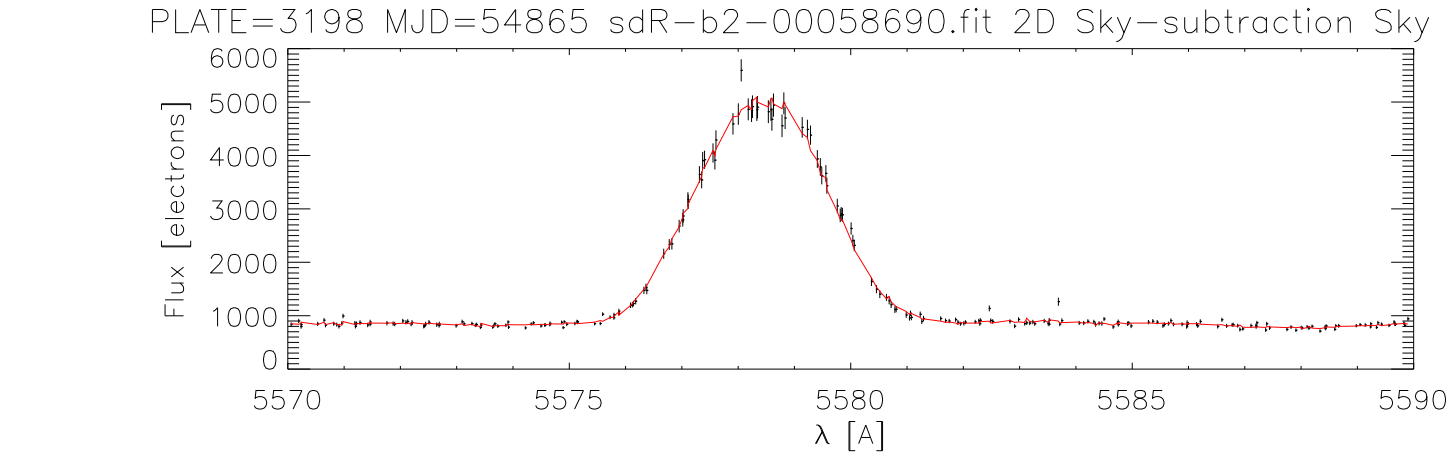

PLATE=3198 MJD=54865 sdR-b2-00058690.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

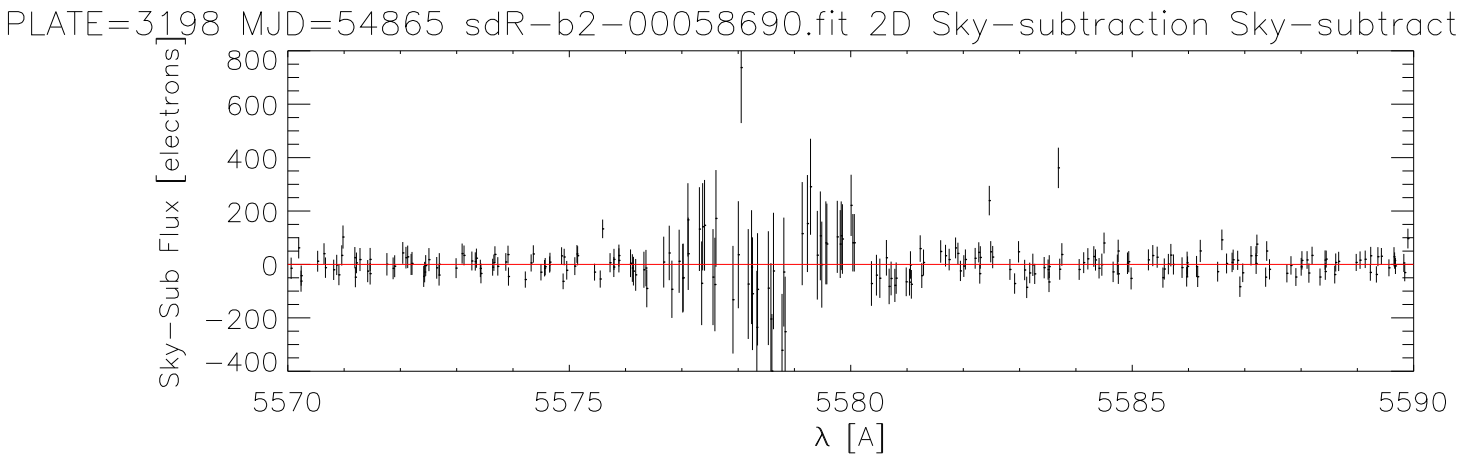

PLATE=3198 MJD=54865 sdR-b2-00058690.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

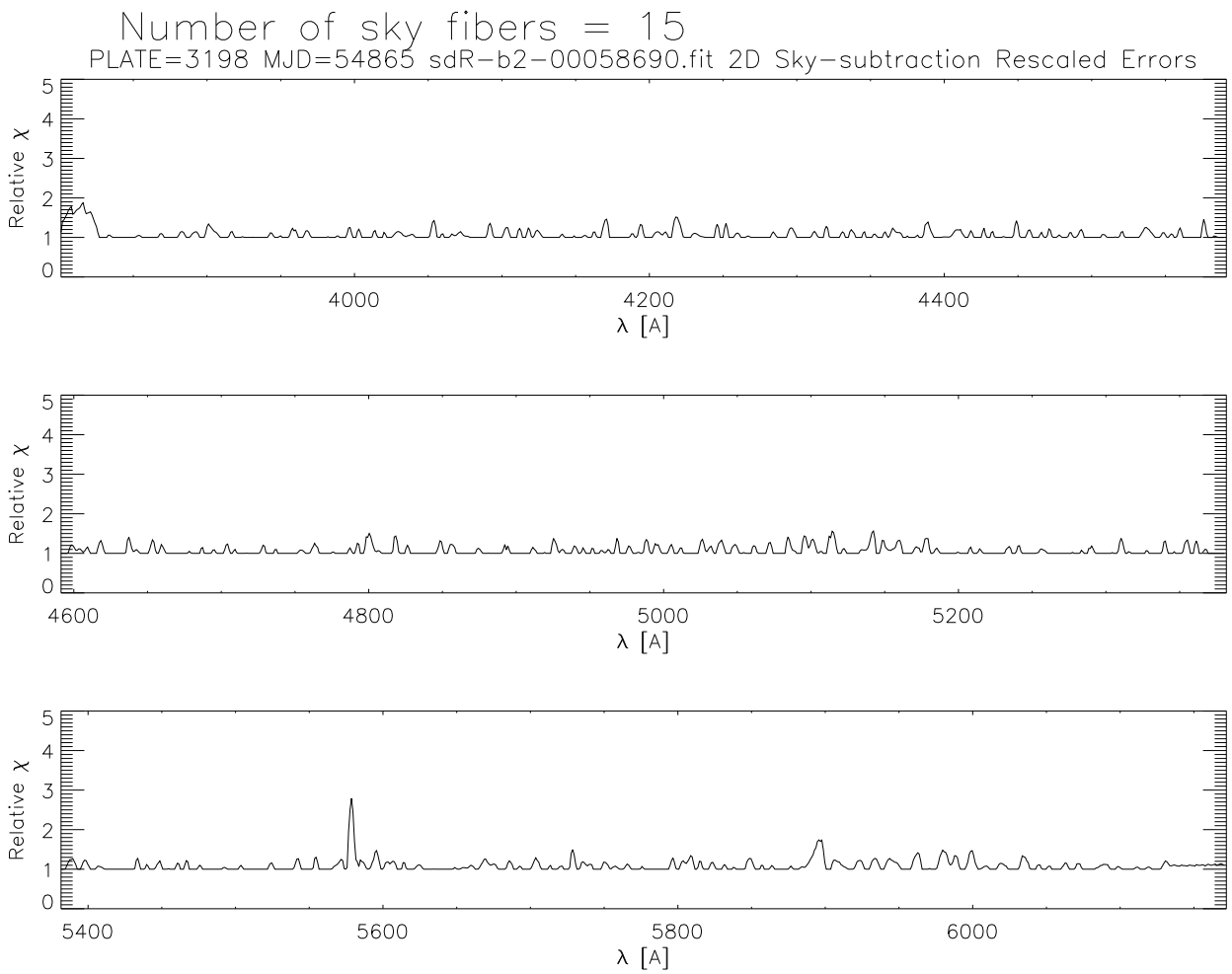

PLATE=3198 MJD=54865 sdR-b2-00058690.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

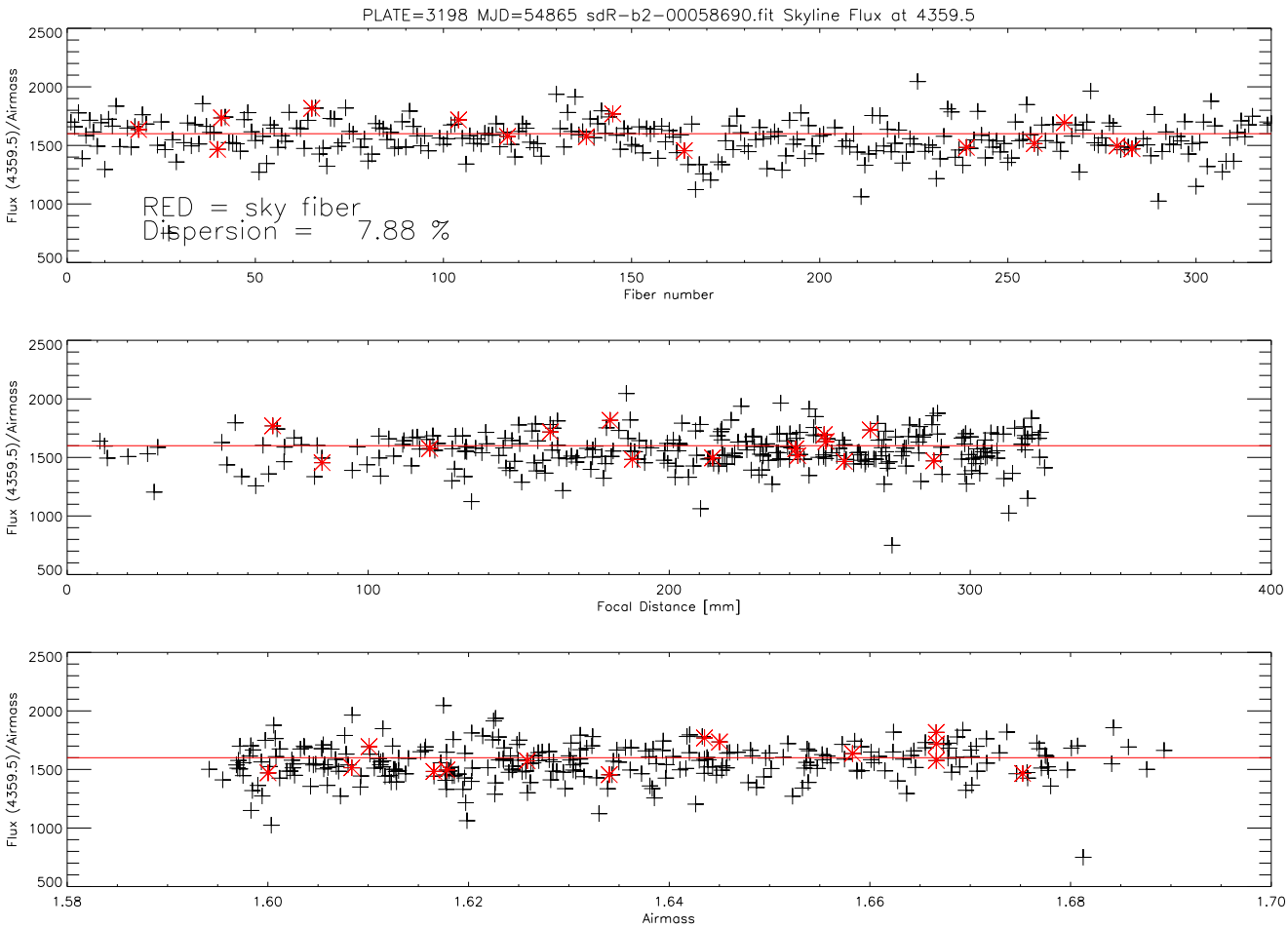

Number of sky fibers = 15
PLATE=3198 MJD=54865 sdR-b2-00058690.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

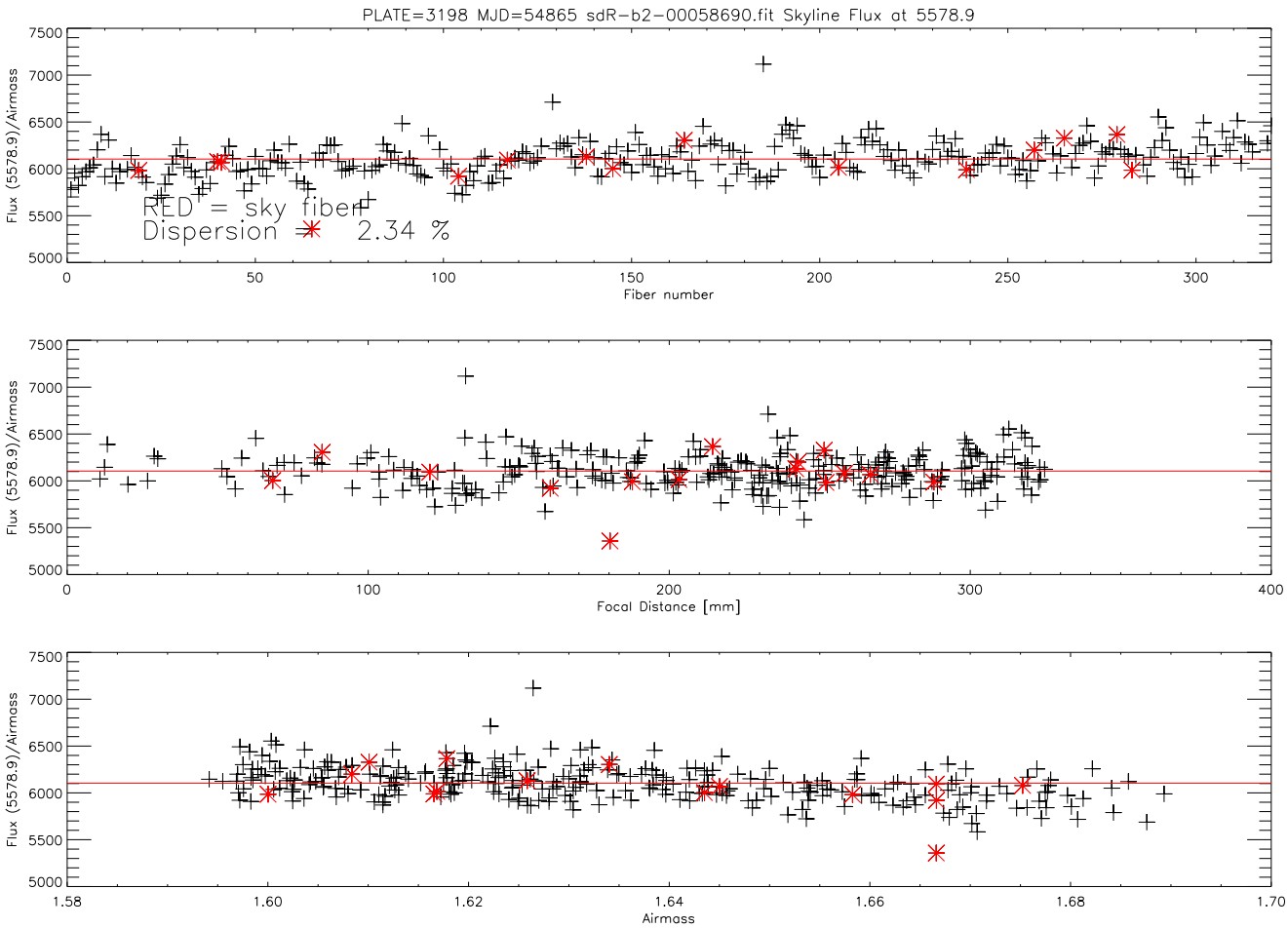

PLATE=3198 MJD=54865 sdR-b2-00058690.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

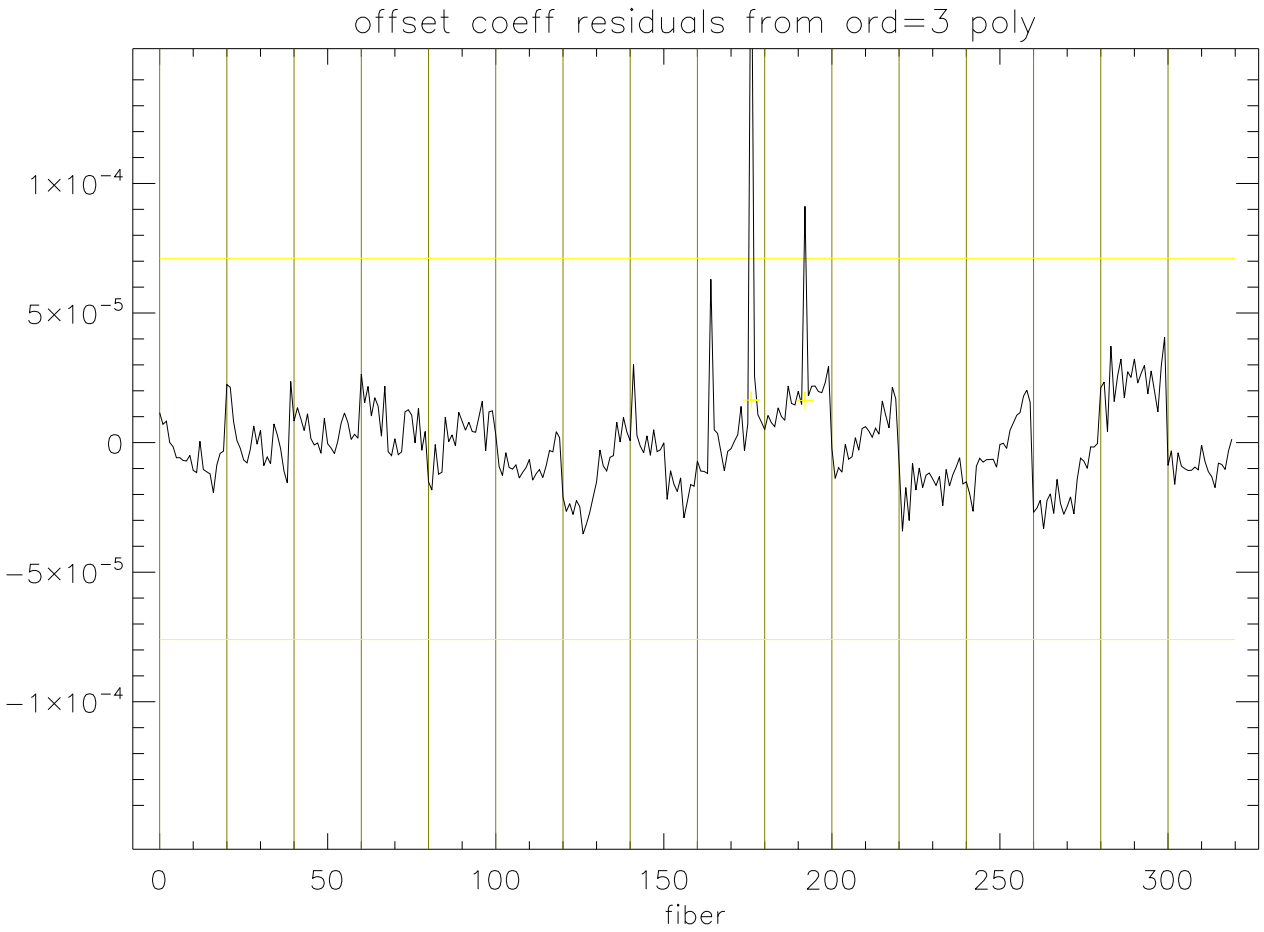

PLATE=3198 MJD=54865 sdR-b2-00058690.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

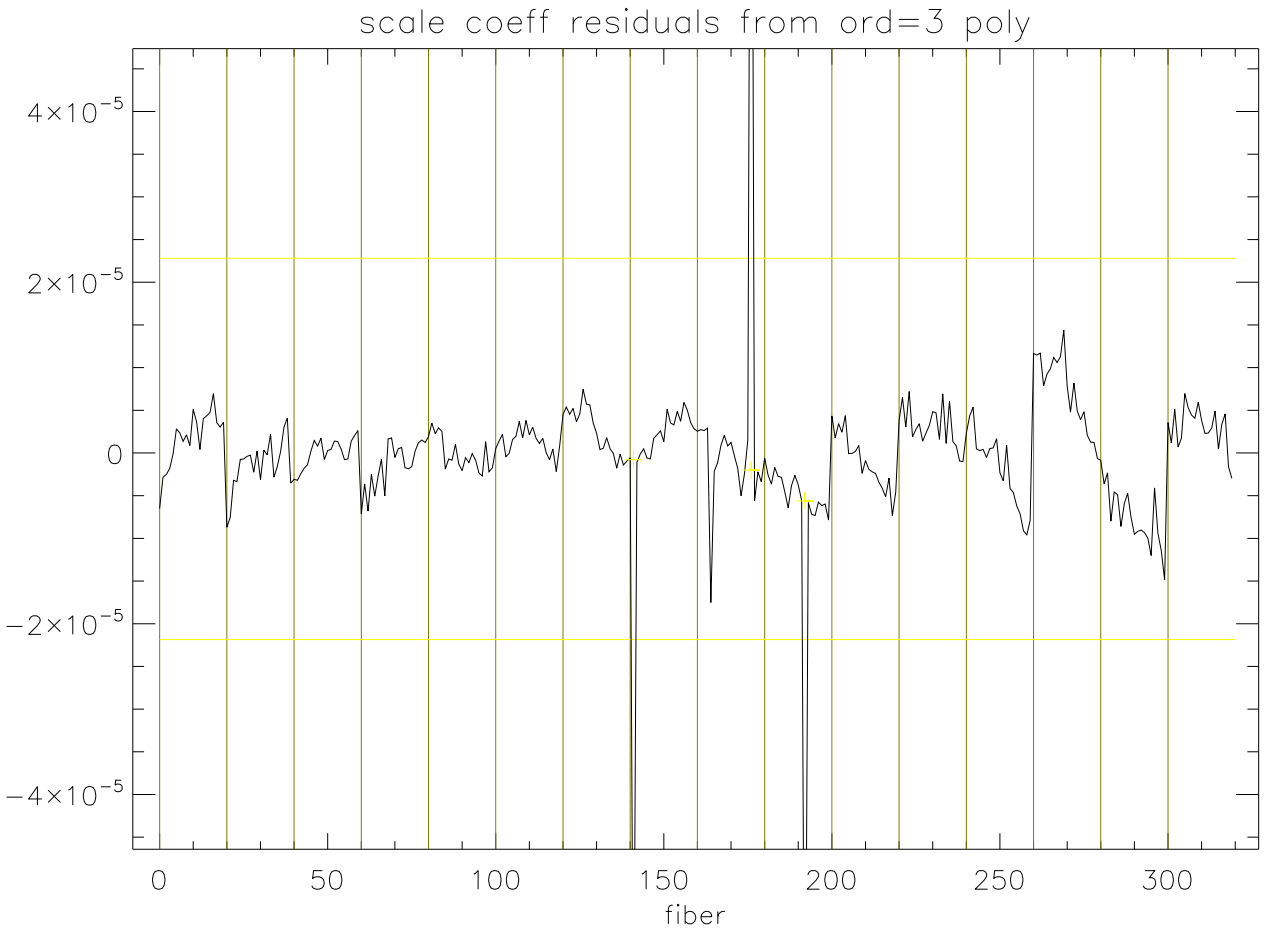

PLATE=3198 MJD=54865 sdR-b2-00058690.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

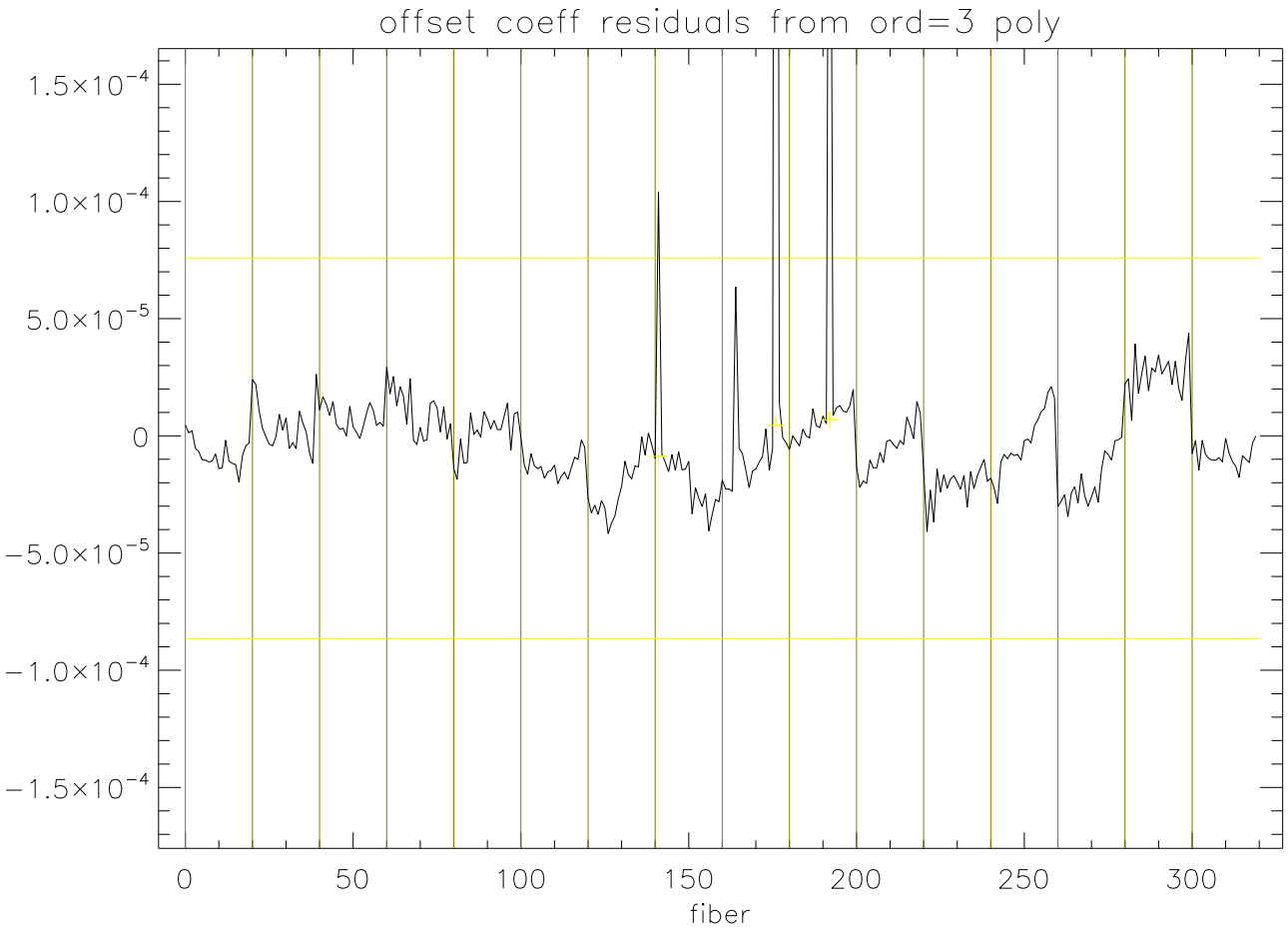

Number of sky fibers = 15
PLATE=3198 MJD=54865 sdR-b2-00058690.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

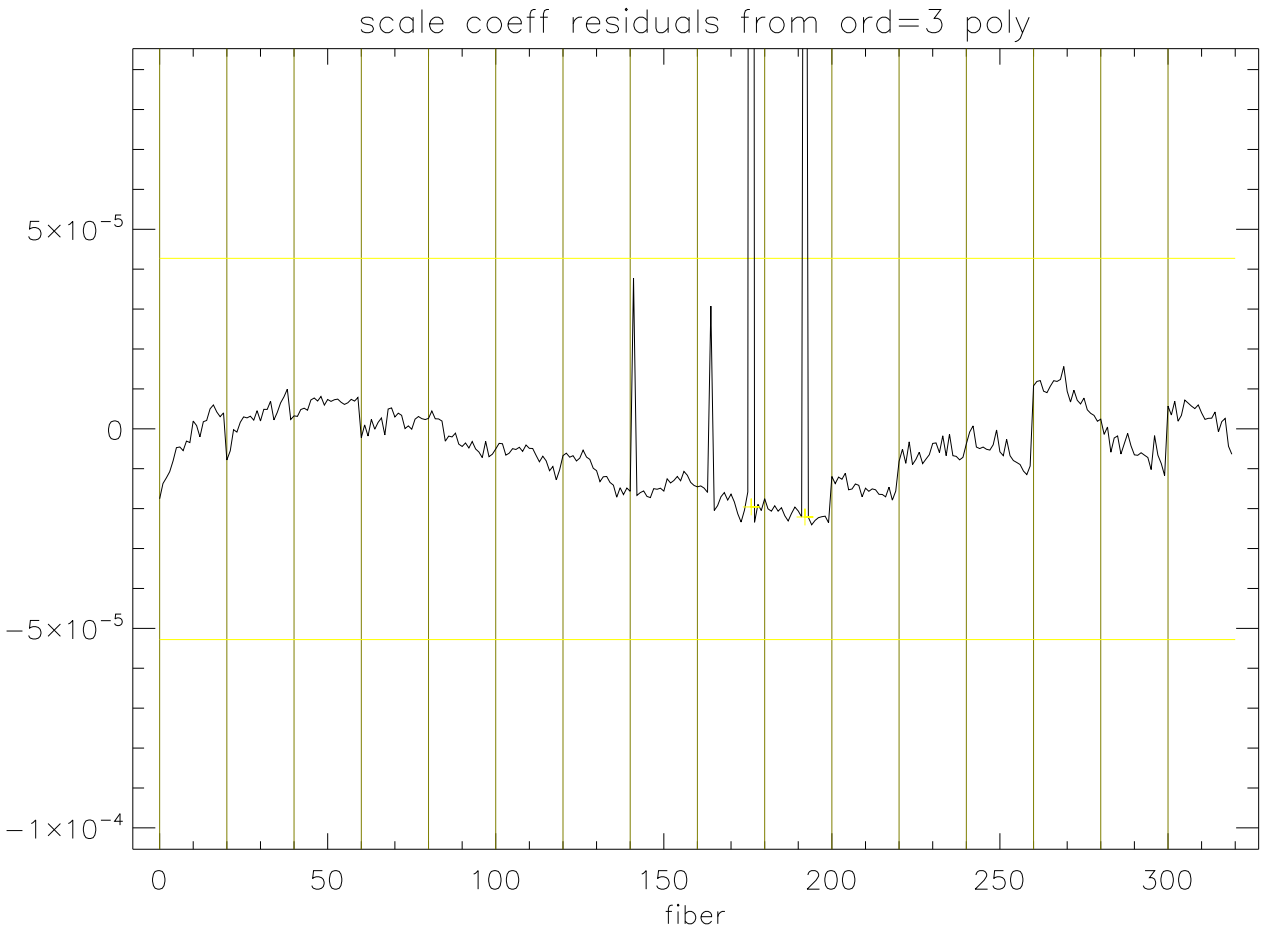

PLATE=3198 MJD=54865 sdR-b2-00058690.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.88 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

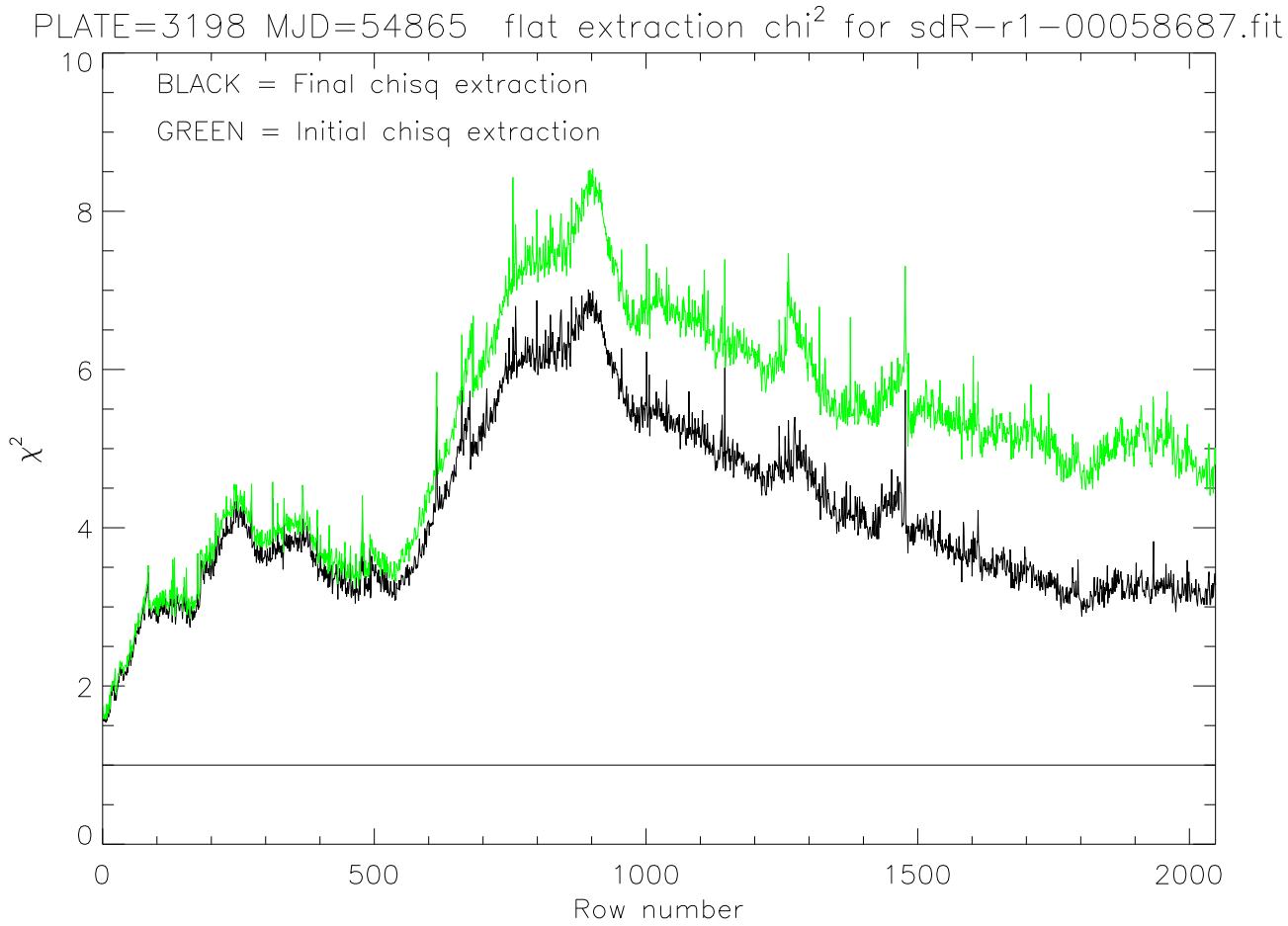

PLATE=3198 MJD=54865 sdR-b2-00058690.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.34 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

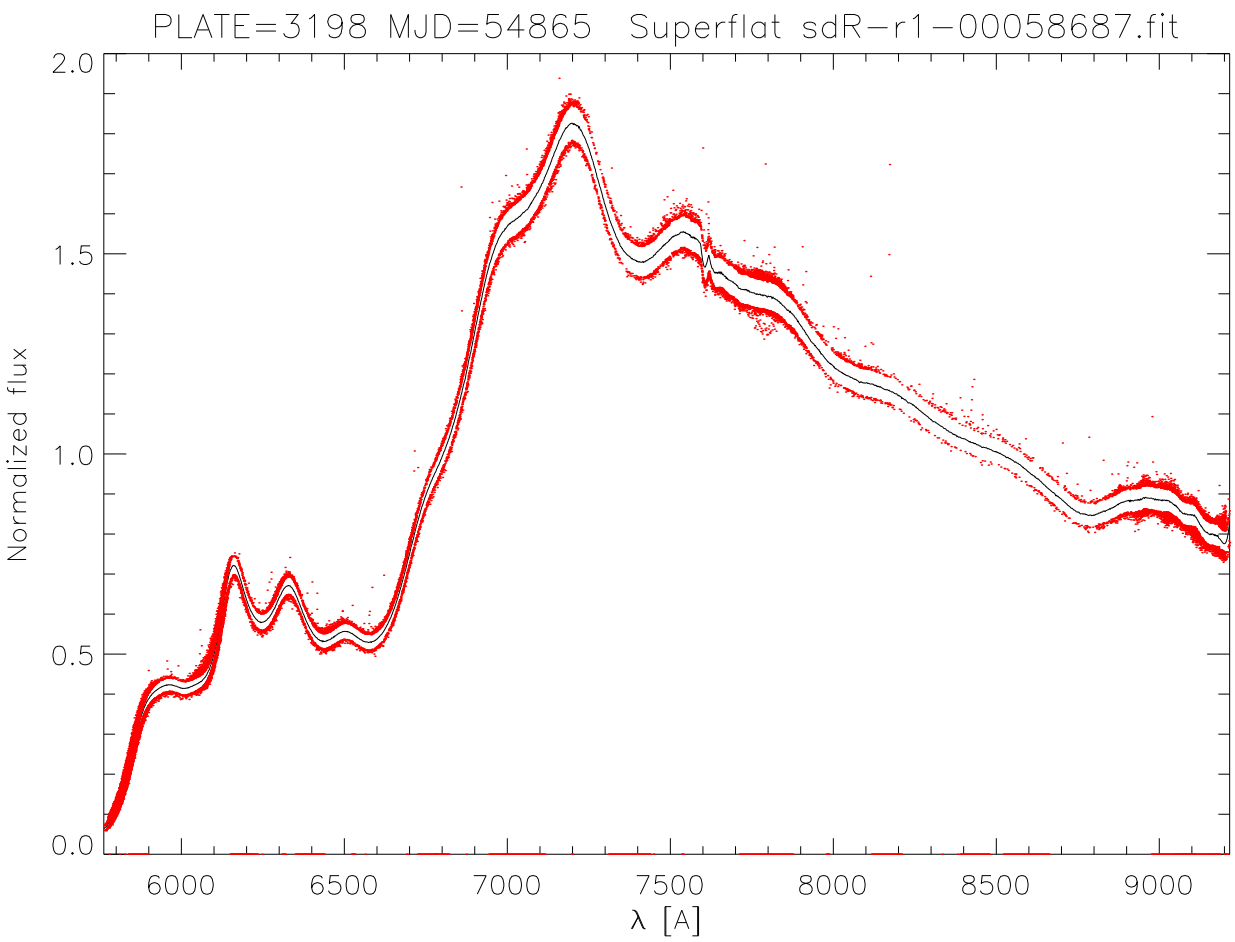

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

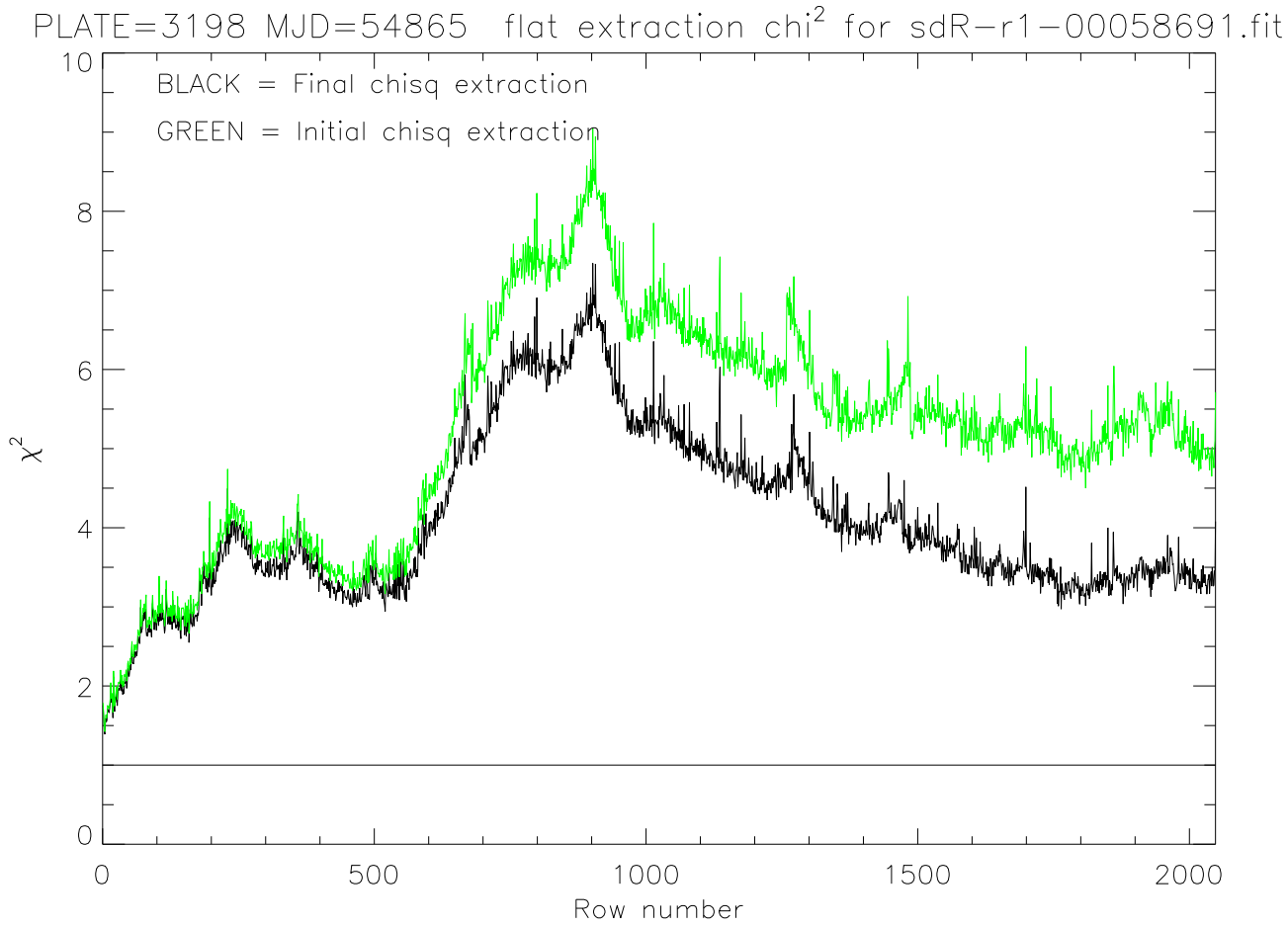

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

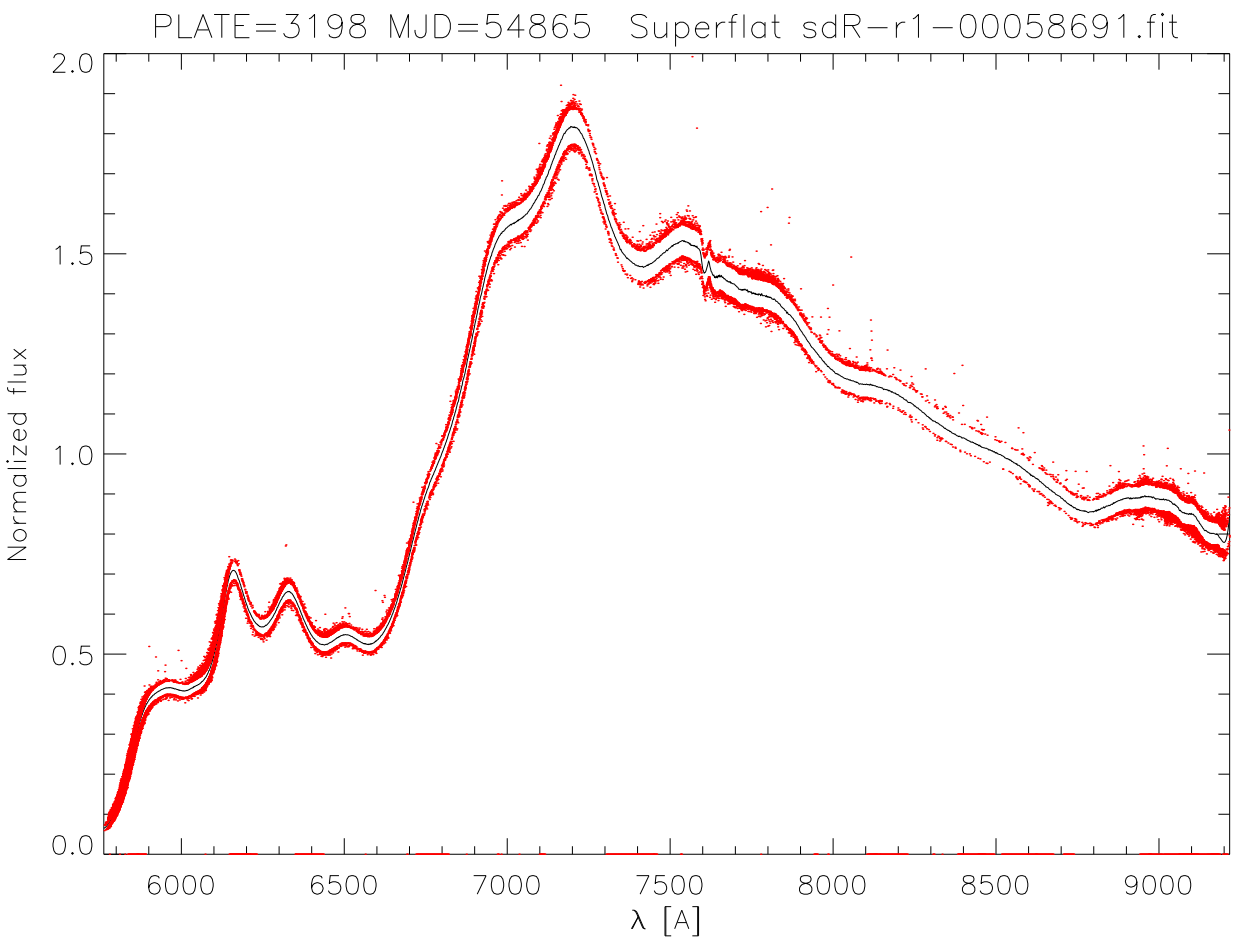

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

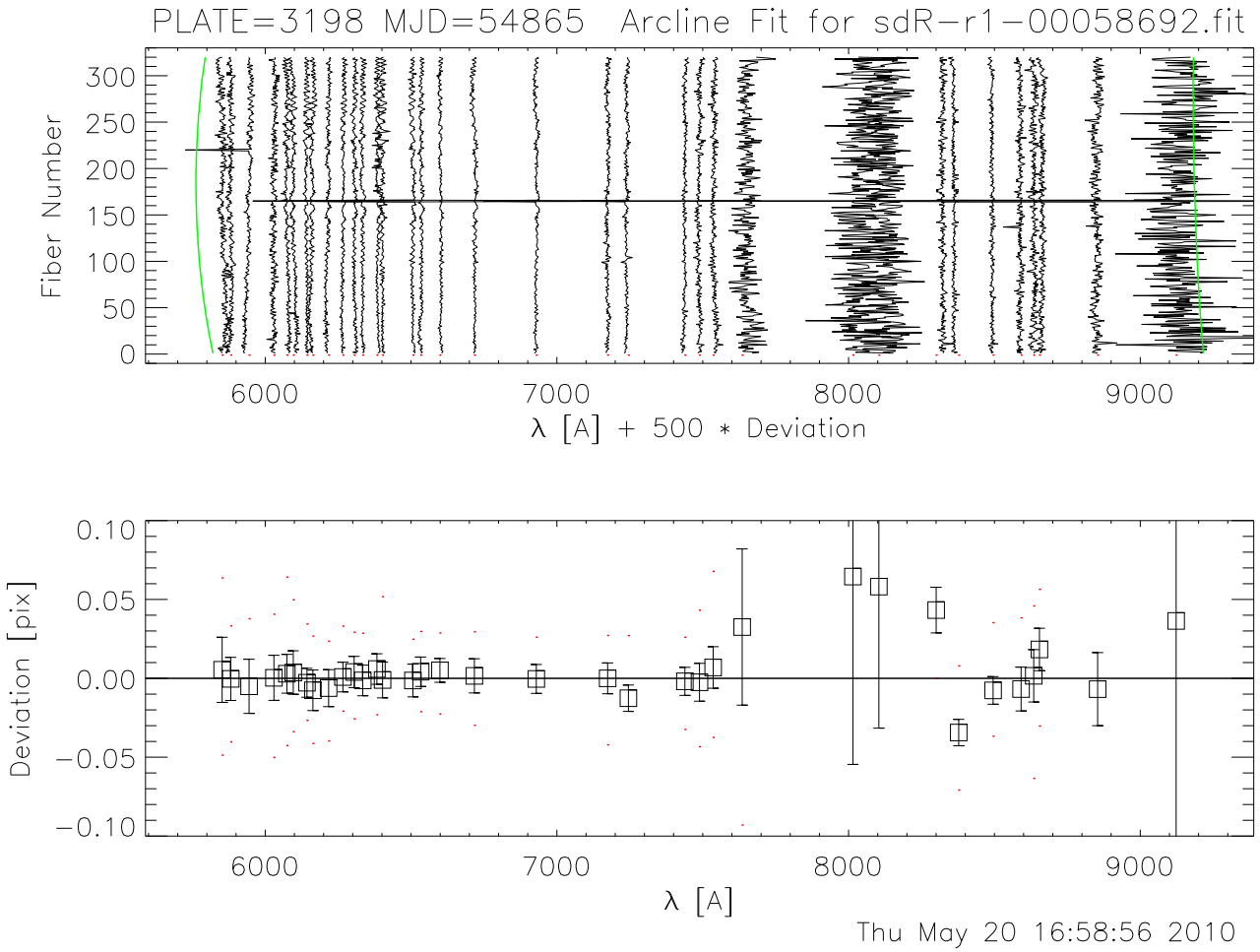

scale coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

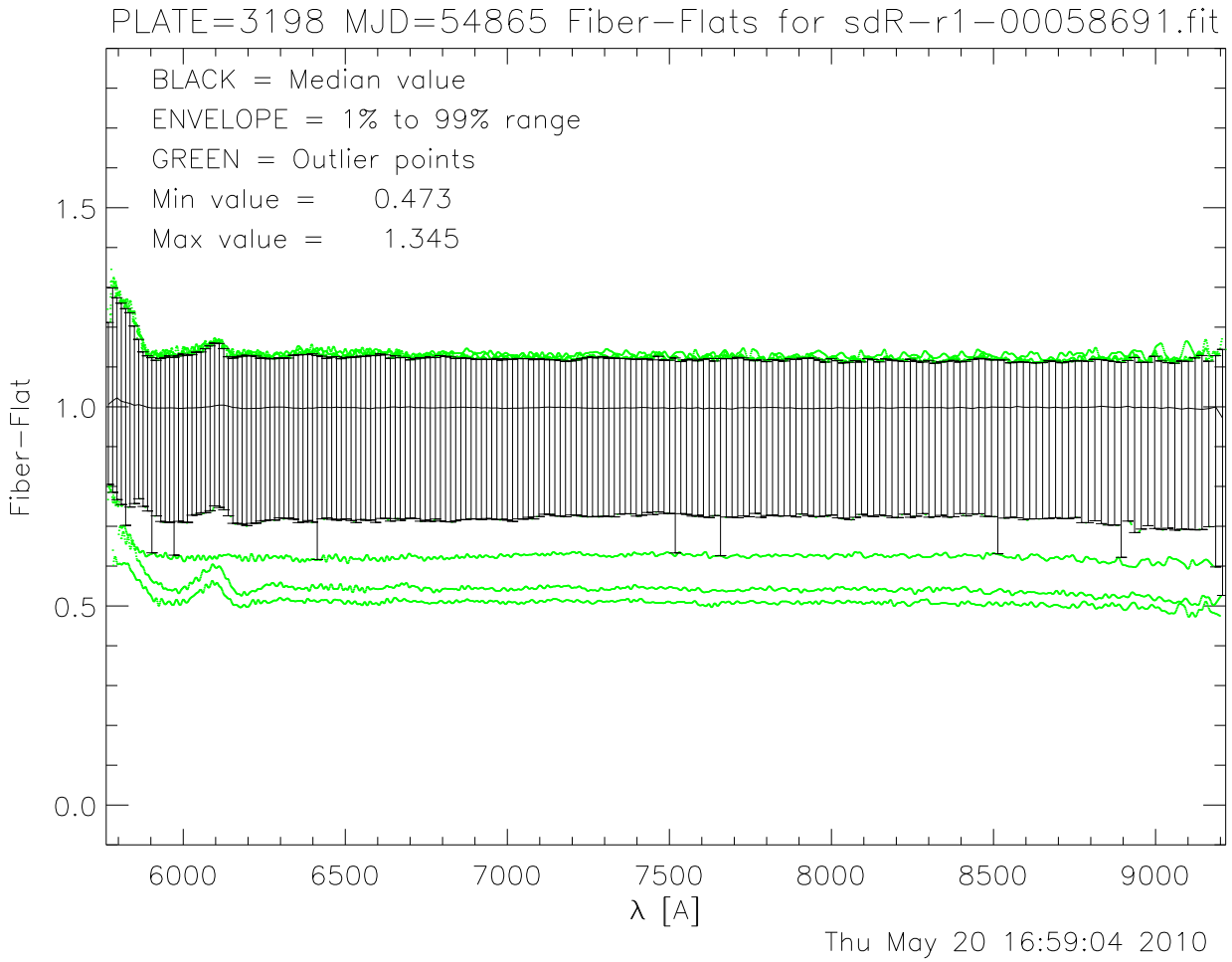

PLATE=3198 MJD=54865 flat extraction chi^2 for sdR−r1−00058687.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

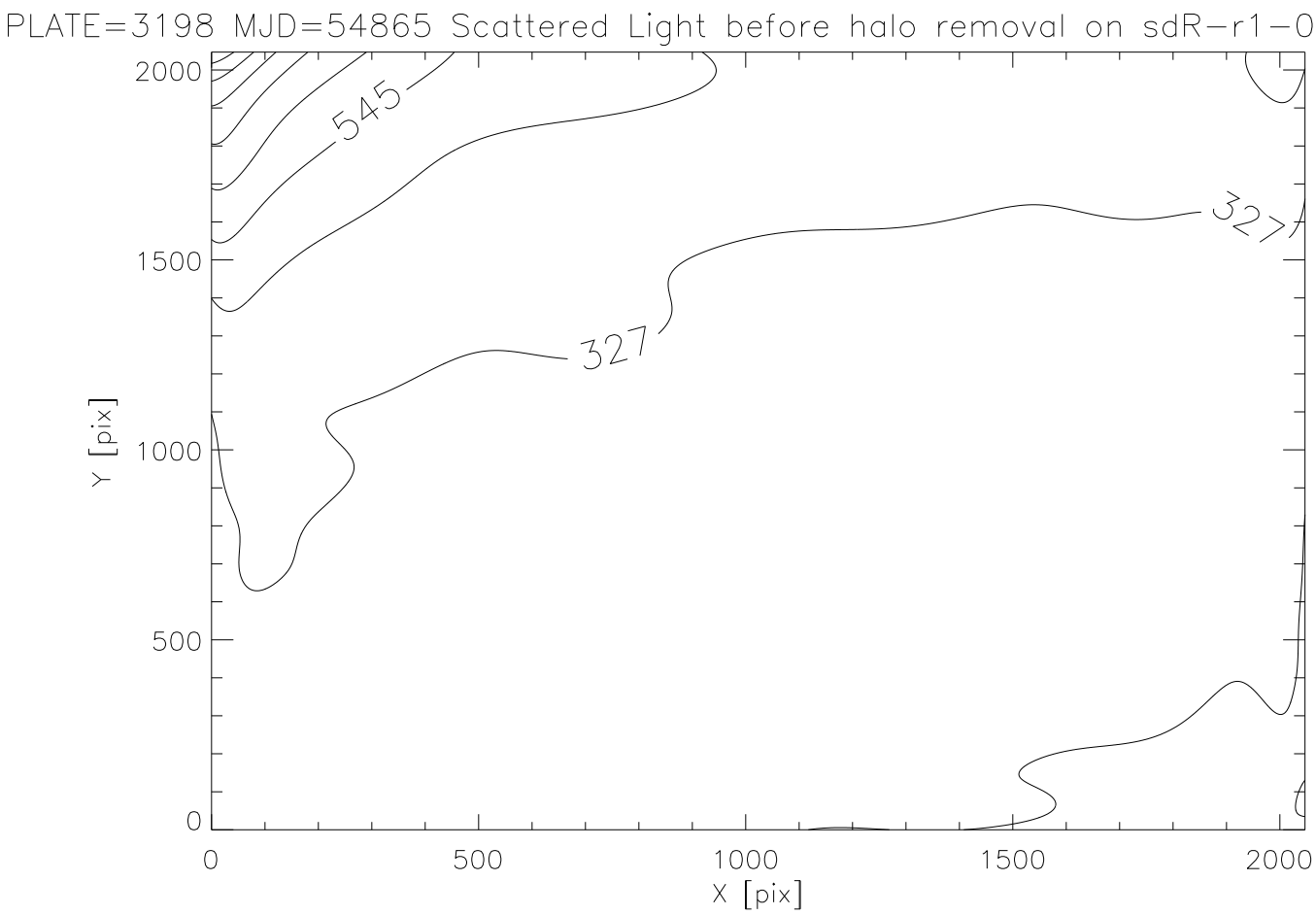

PLATE=3198 MJD=54865 Superflat sdR-r1-00058687.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

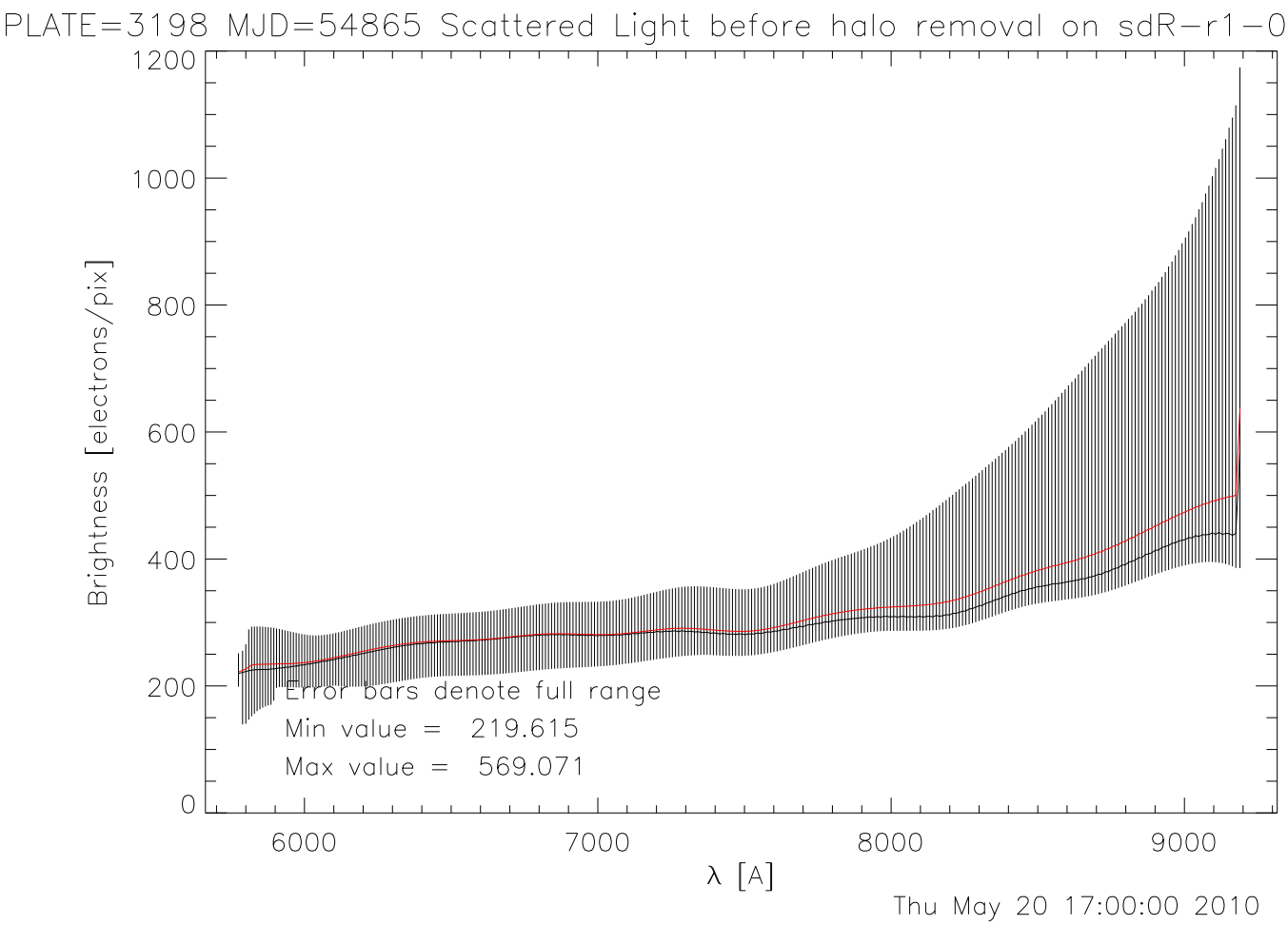

PLATE=3198 MJD=54865 flat extraction chi^2 for sdR−r1−00058691.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

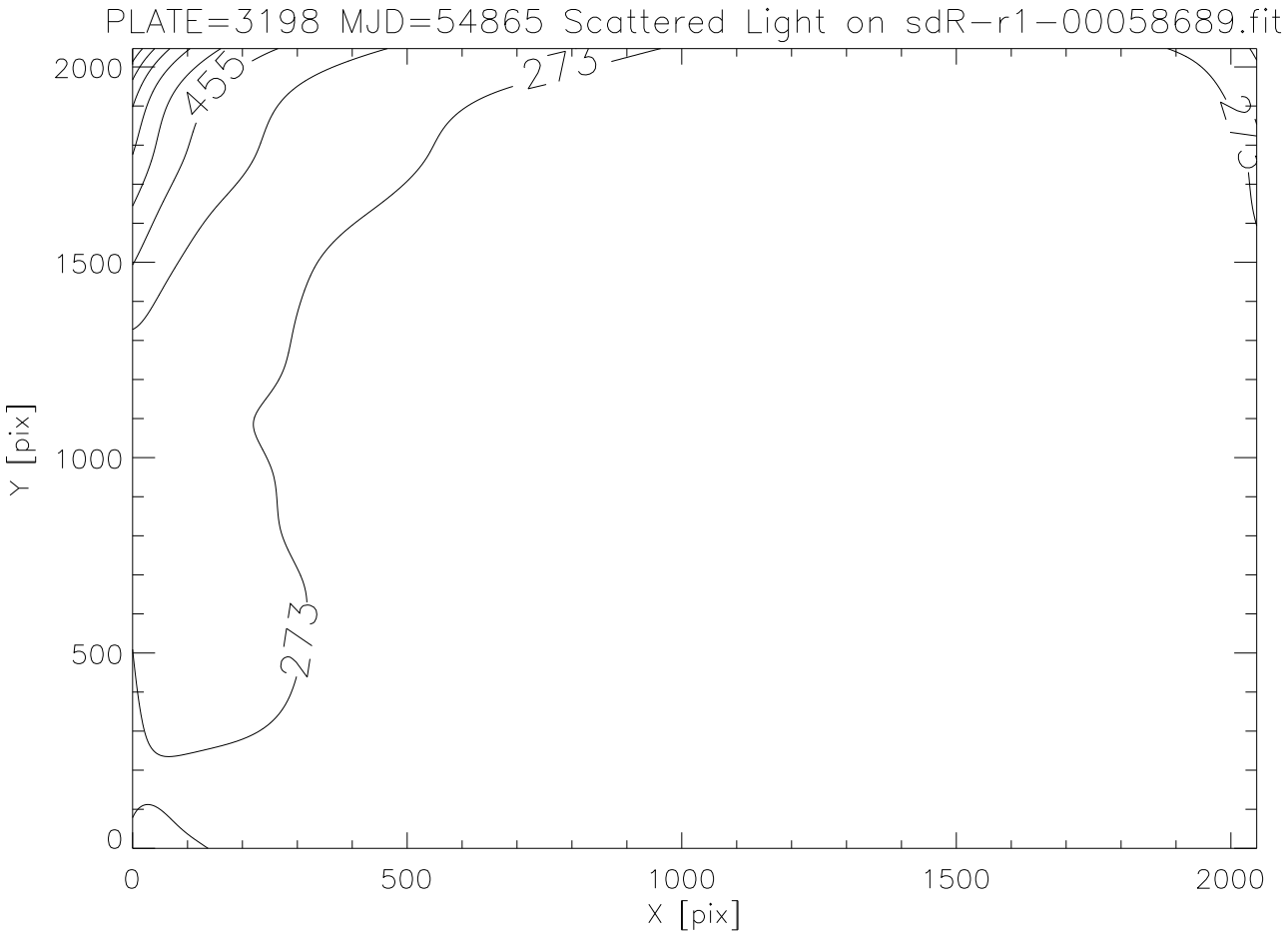

PLATE=3198 MJD=54865 Superflat sdR-r1-00058691.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

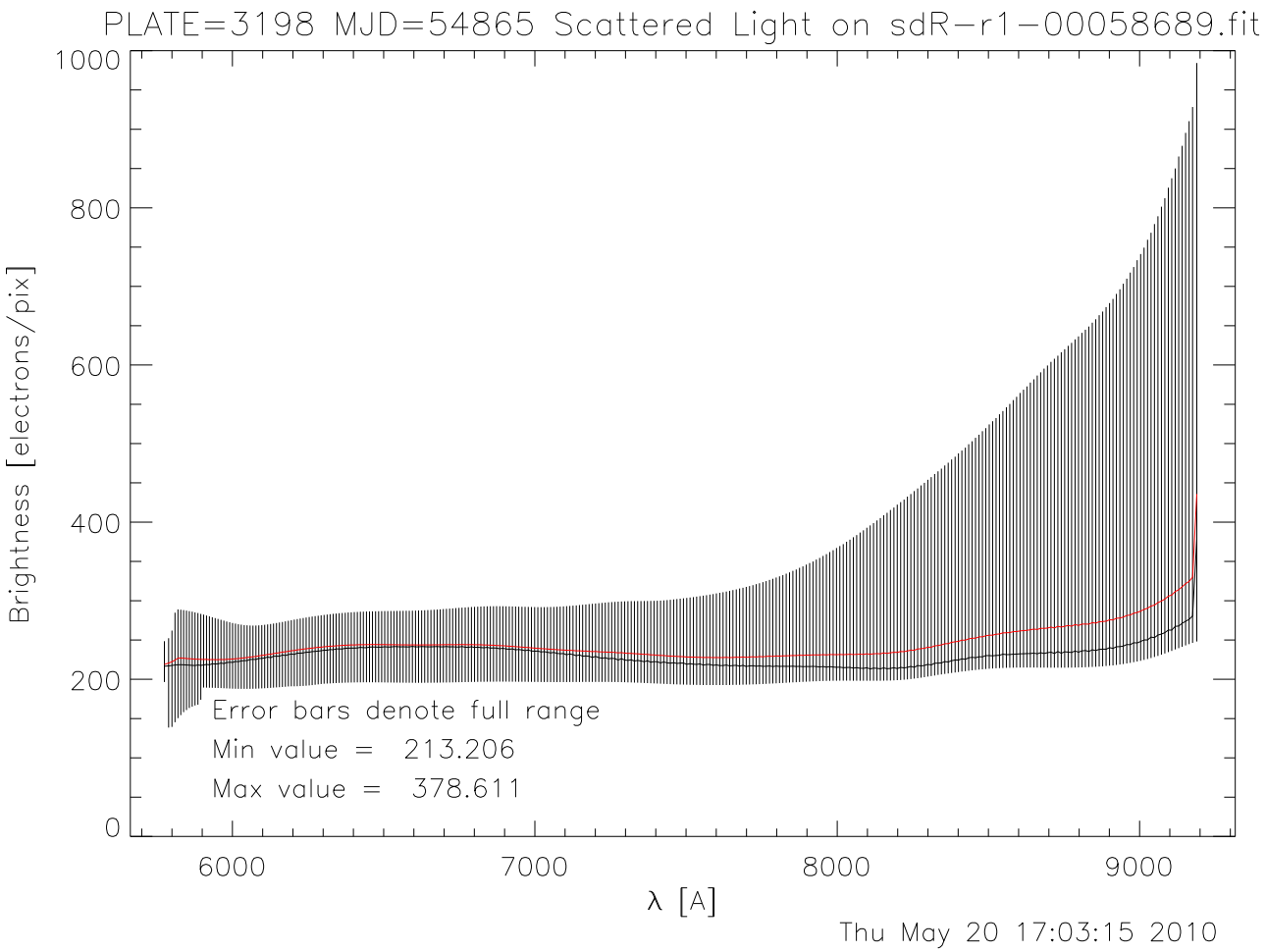

PLATE=3198 MJD=54865 Arcline Fit for sdR-r1-00058692.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu May 20 16:58:56 2010

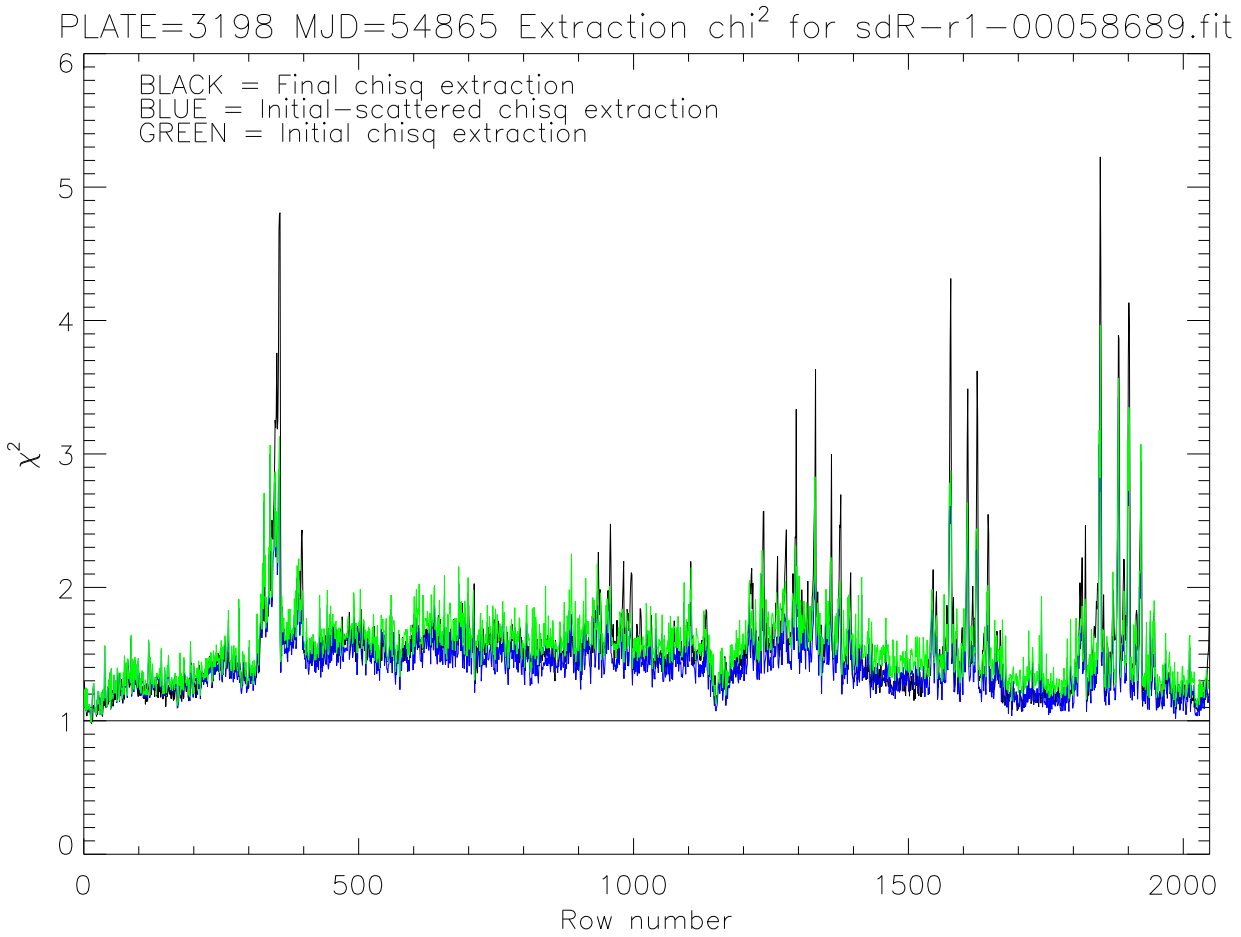

PLATE=3198 MJD=54865 Fiber−Flats for sdR−r1−00058691.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.473
Max value = 1.345
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu May 20 16:59:04 2010

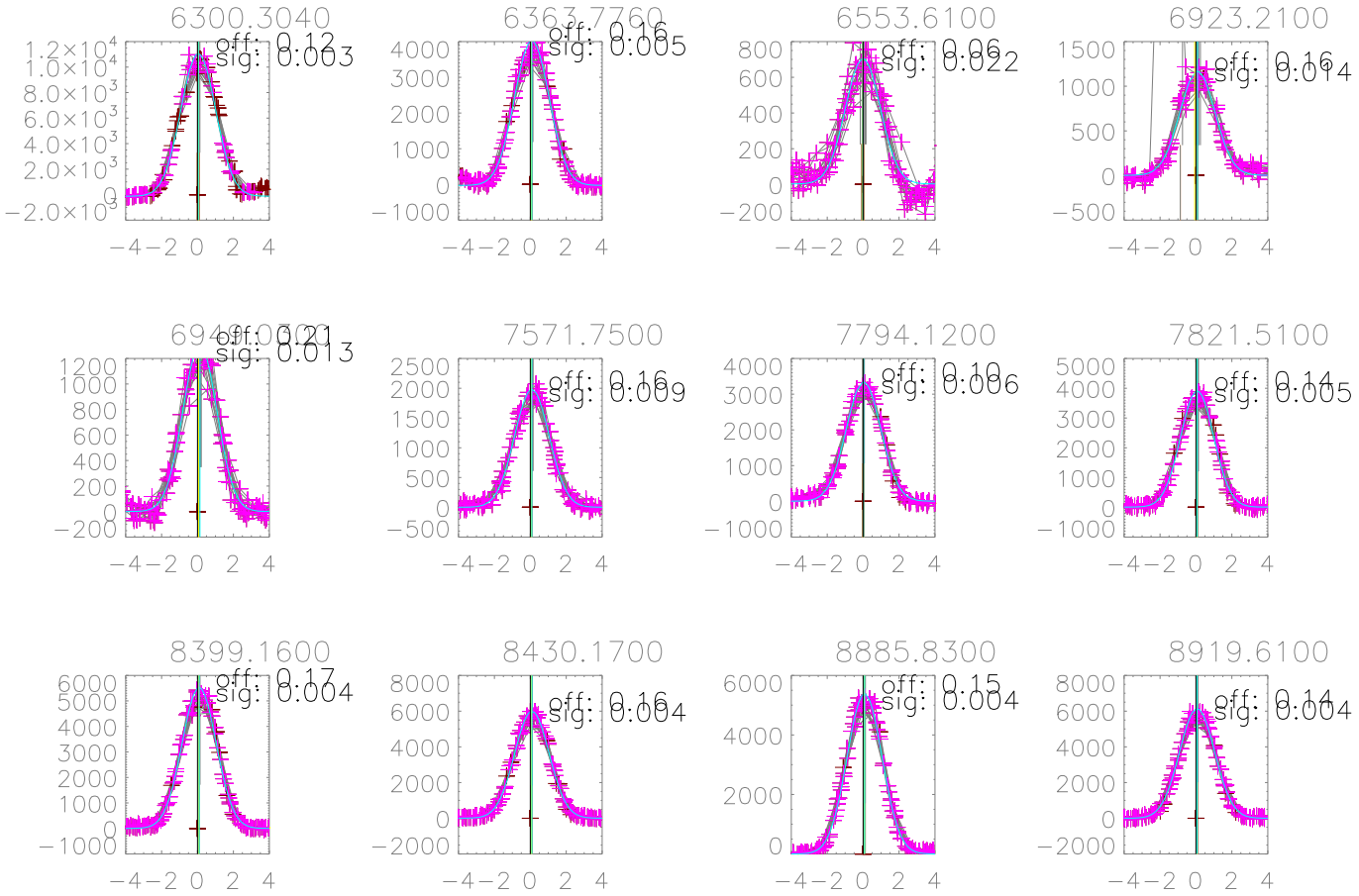

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-r1-00058689.fi
545
327
327
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

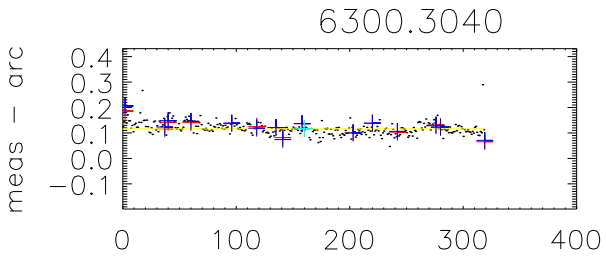

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-r1-00058689.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 219.615
Max value = 569.071
Thu May 20 17:00:00 2010

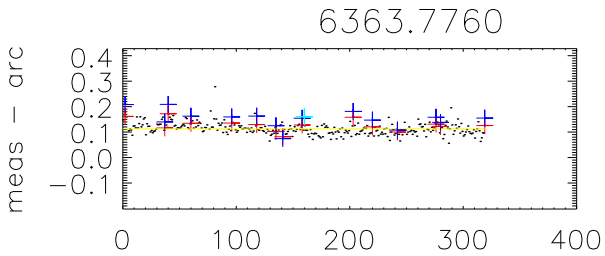

PLATE=3198 MJD=54865 Scattered Light on sdR-r1-00058689.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
455
273
273
273

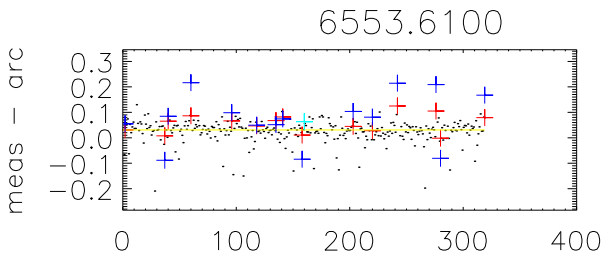

PLATE=3198 MJD=54865 Scattered Light on sdR-r1-00058689.fit
Brightness [electrons/pix]
1000
800
600
400
200
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 213.206
Max value = 378.611
Thu May 20 17:03:15 2010

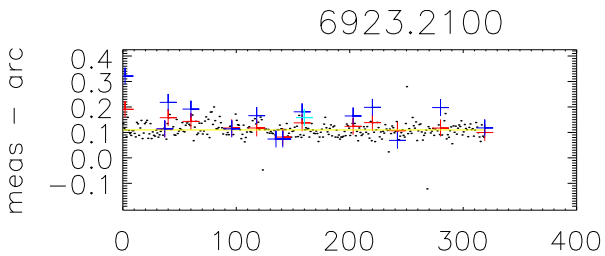

PLATE=3198 MJD=54865 Extraction chi^2 for sdR-r1-00058689.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

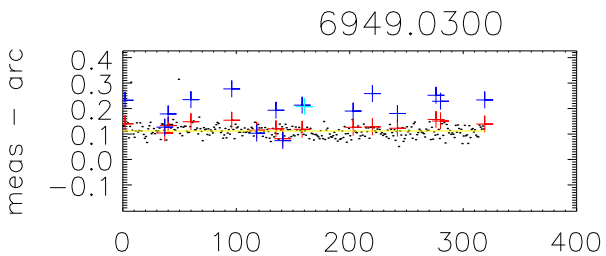

6300.3040
off: 0.12
sig: 0.003
6363.7760
off: 0.16
sig: 0.005
6553.6100
off: 0.06
sig: 0.022
6923.2100
off: 0.16
sig: 0.014
6948.0000
off: 0.21
sig: 0.013
7571.7500
off: 0.16
sig: 0.009
7794.1200
off: 0.10
sig: 0.006
7821.5100
off: 0.14
sig: 0.005
8399.1600
off: 0.17
sig: 0.004
8430.1700
off: 0.16
sig: 0.004
8885.8300
off: 0.15
sig: 0.004
8919.6100
off: 0.14
sig: 0.004

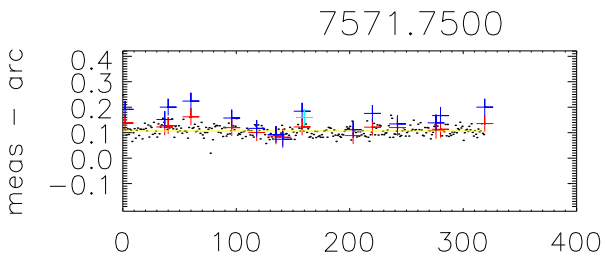

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

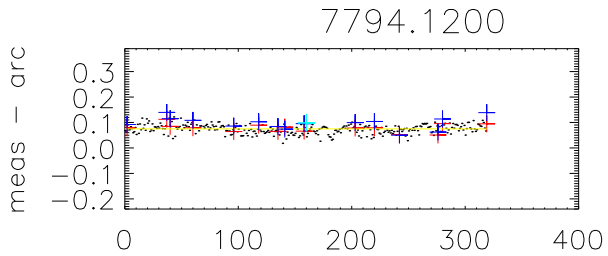

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

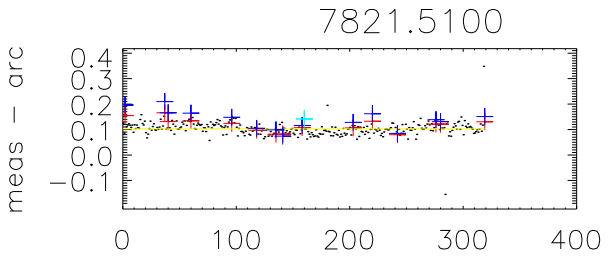

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

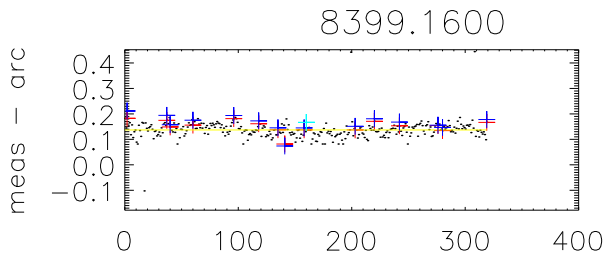

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

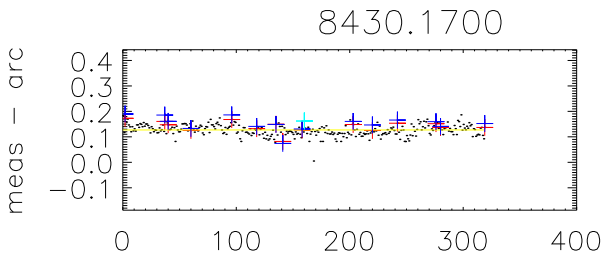

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

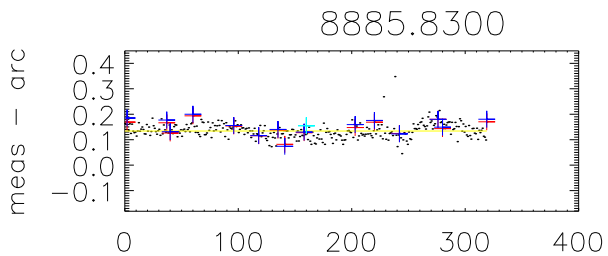

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

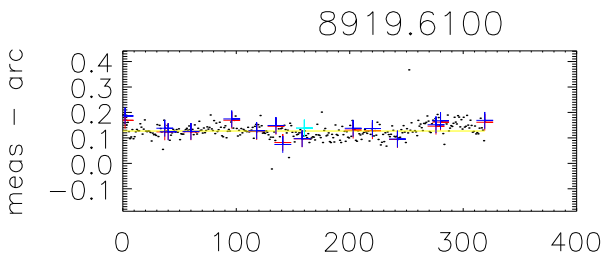

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

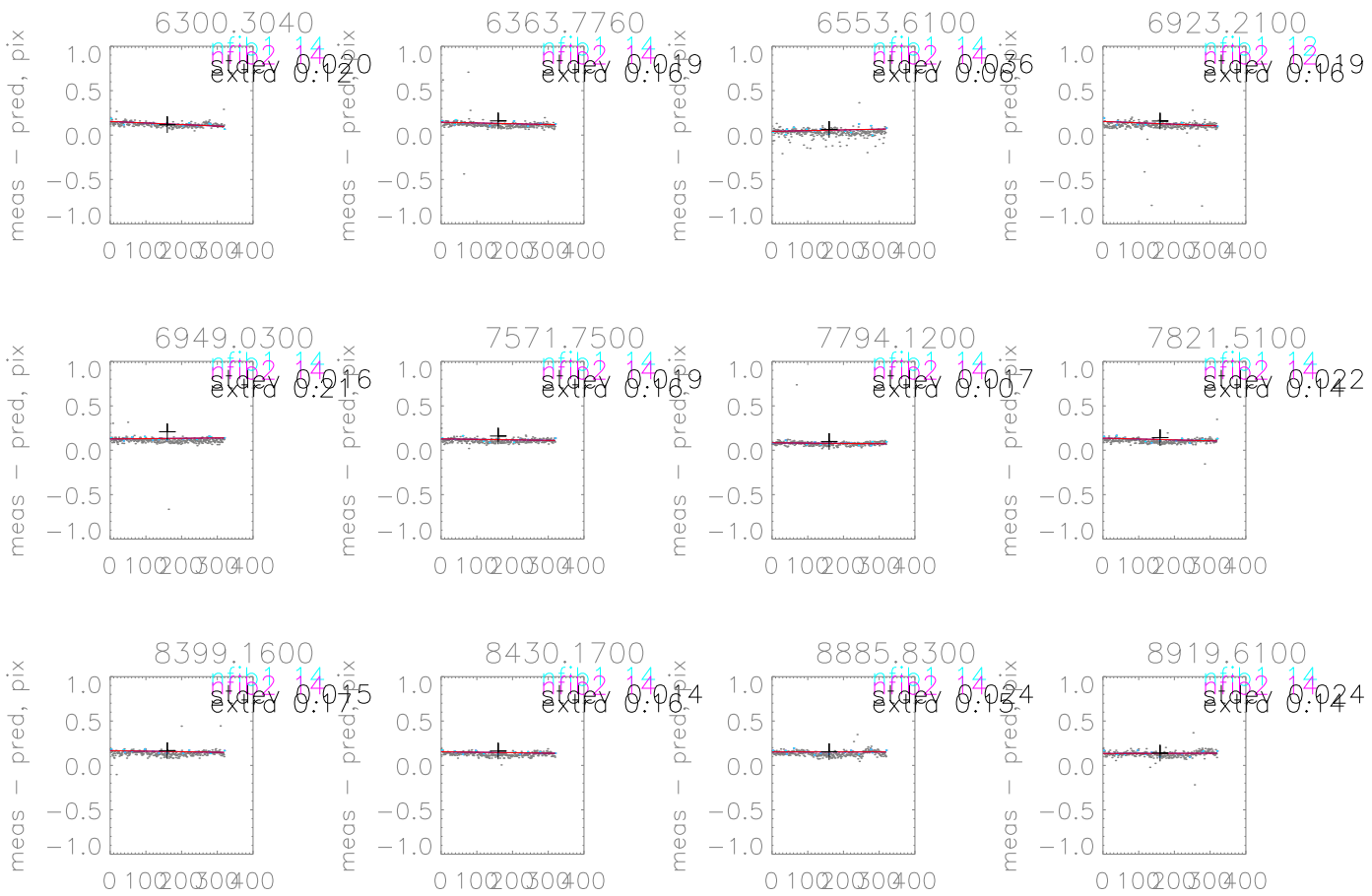

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

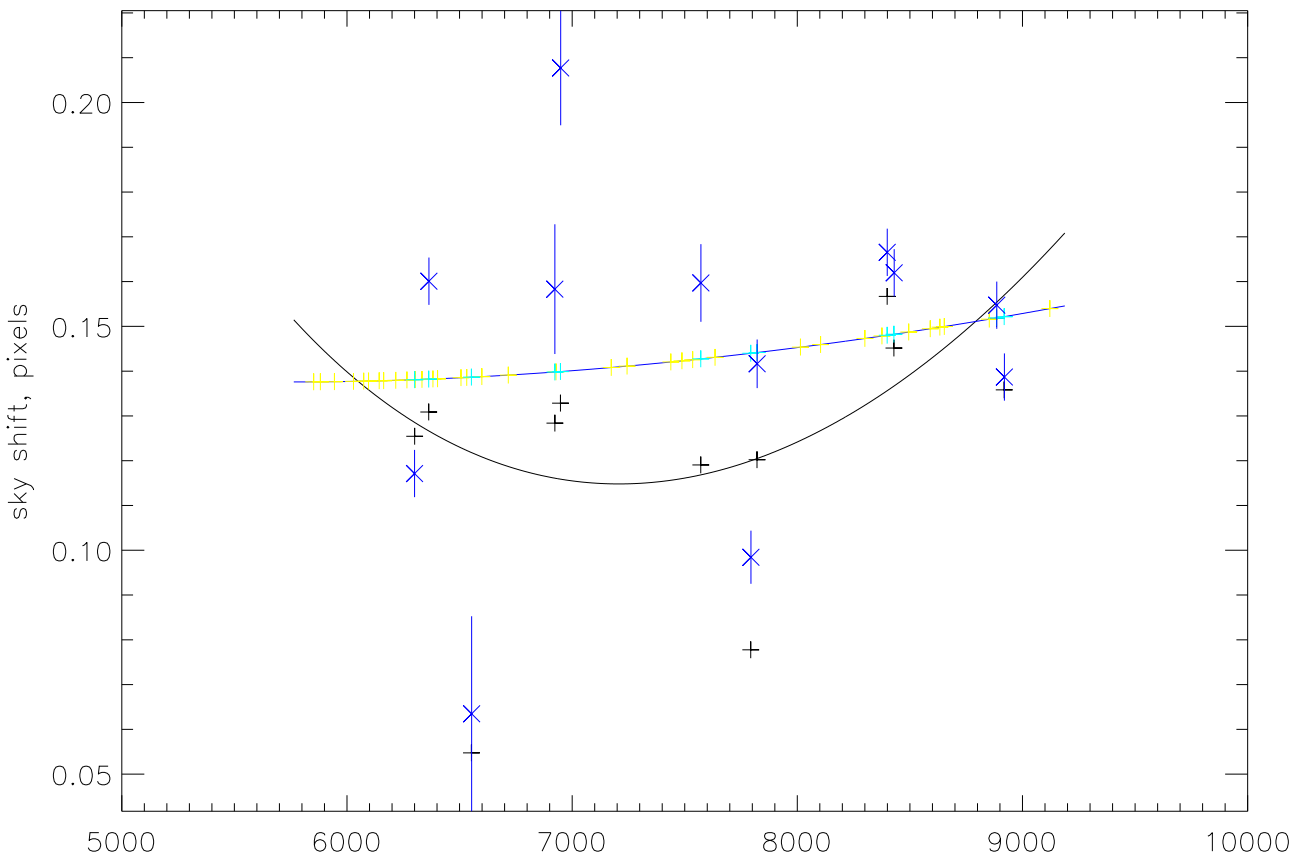

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

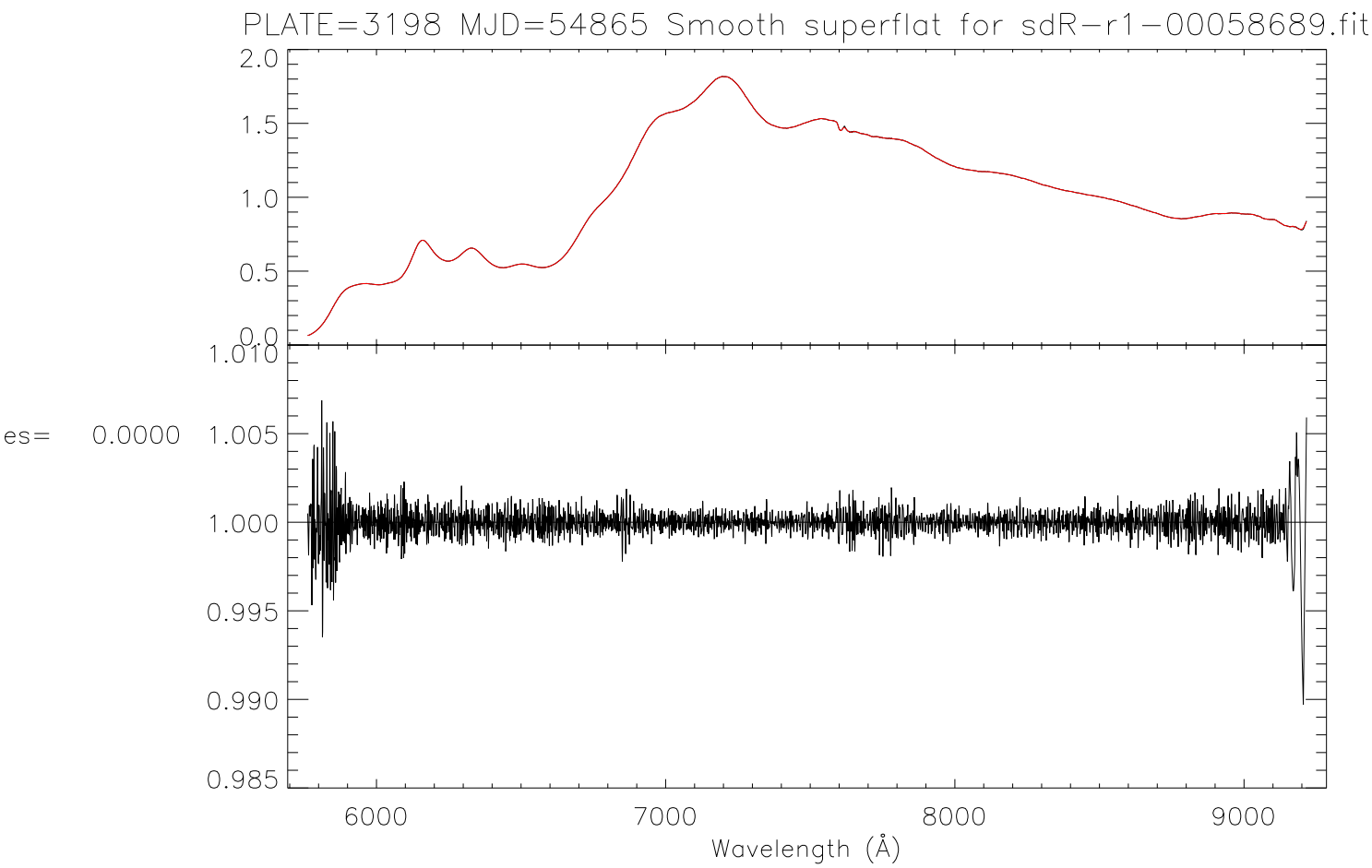

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

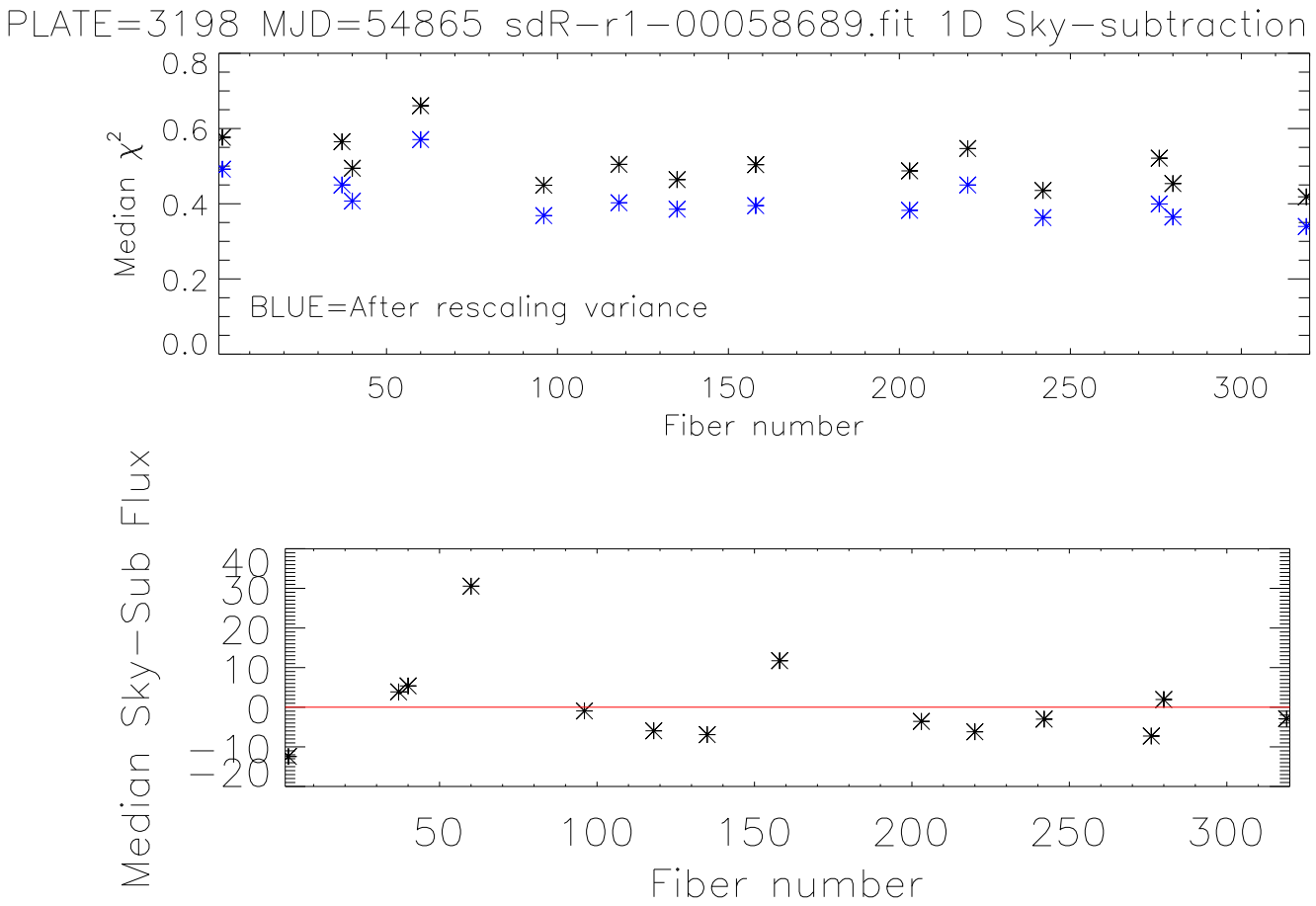

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

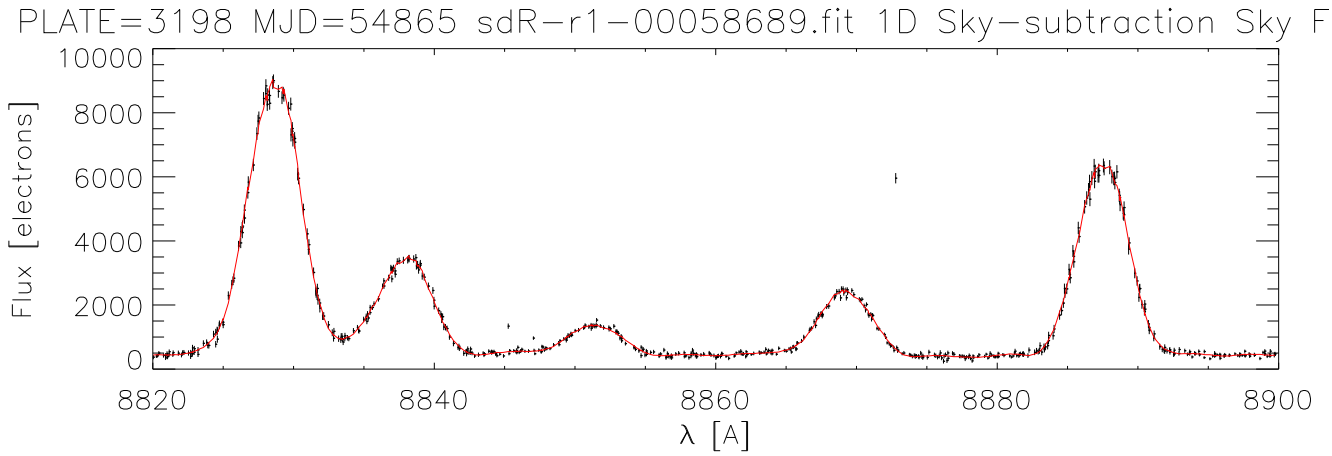

6300.3040
stdev 0.020
extra 0.12
6363.7760
stdev 0.019
extra 0.16
6553.6100
stdev 0.036
extra 0.06
6923.2100
stdev 0.019
extra 0.16
6949.0300
stdev 0.016
extra 0.21
7571.7500
stdev 0.019
extra 0.16
7794.1200
stdev 0.017
extra 0.10
7821.5100
stdev 0.022
extra 0.14
8399.1600
stdev 0.015
extra 0.17
8430.1700
stdev 0.014
extra 0.16
8885.8300
stdev 0.024
extra 0.13
8919.6100
stdev 0.024
extra 0.14
meas − pred, pix

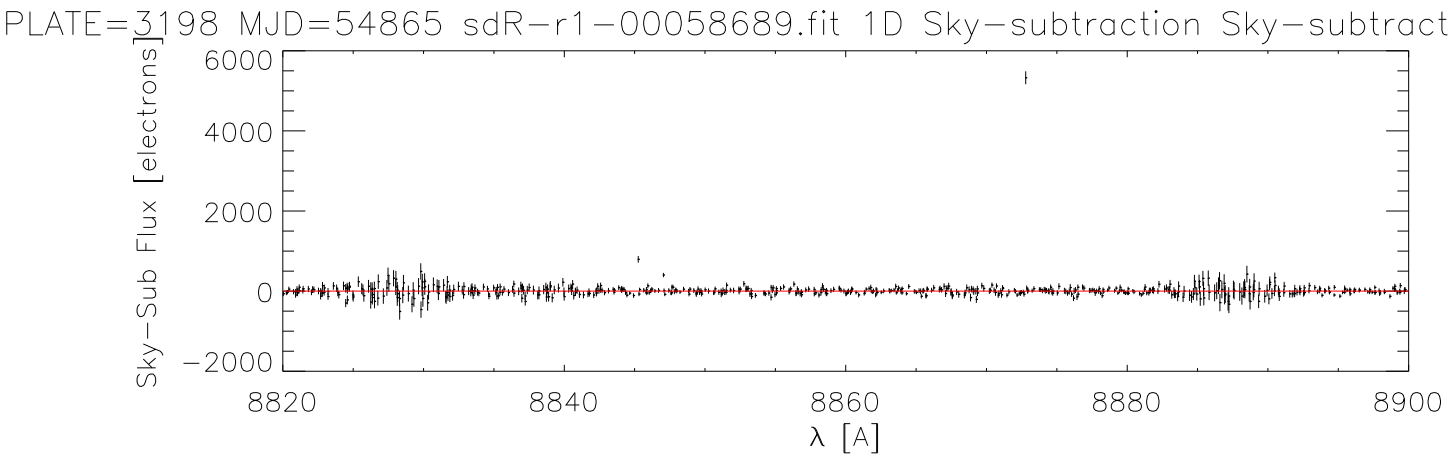

sky shift, pixels
0.20
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

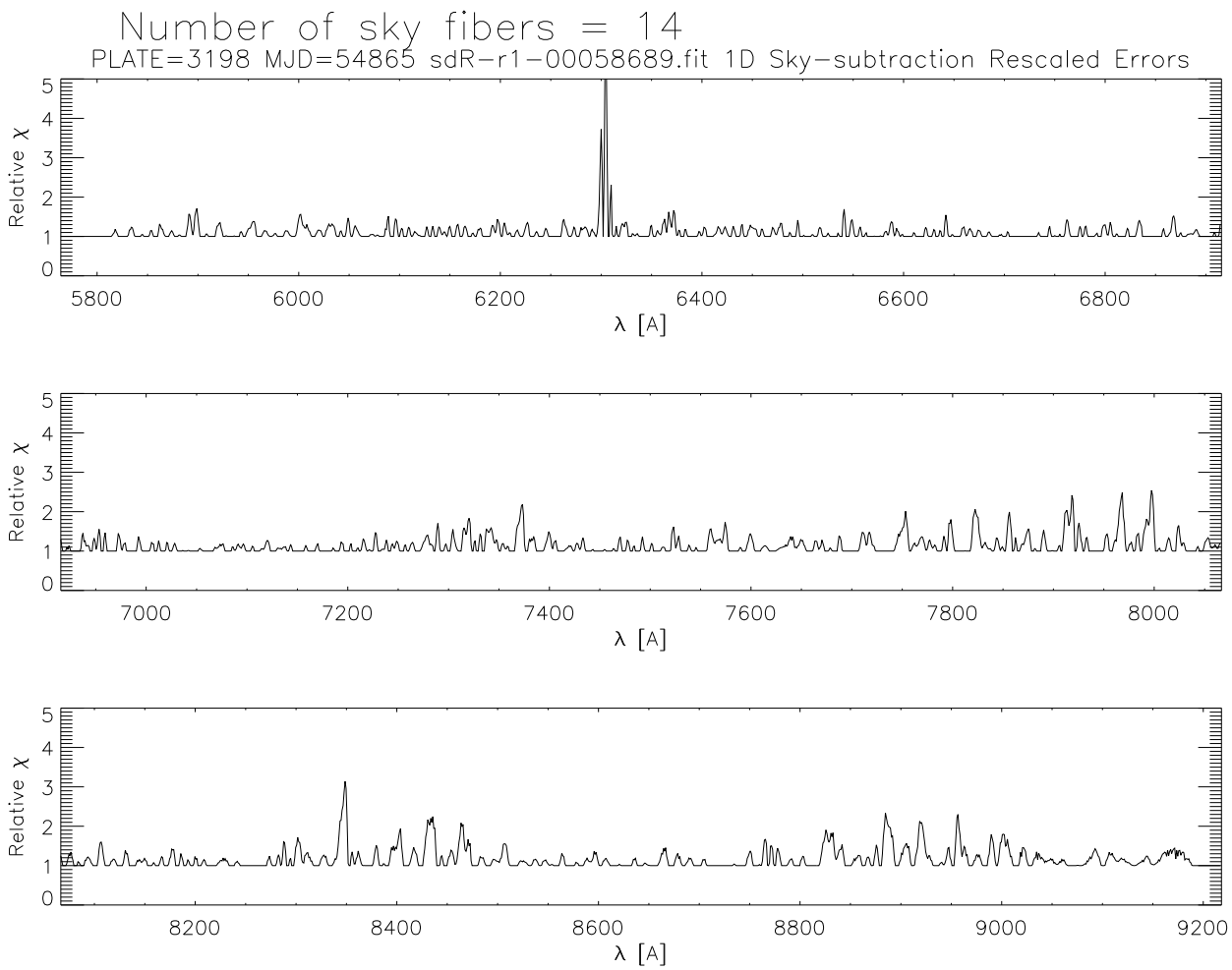

PLATE=3198 MJD=54865 Smooth superflat for sdR-r1-00058689.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

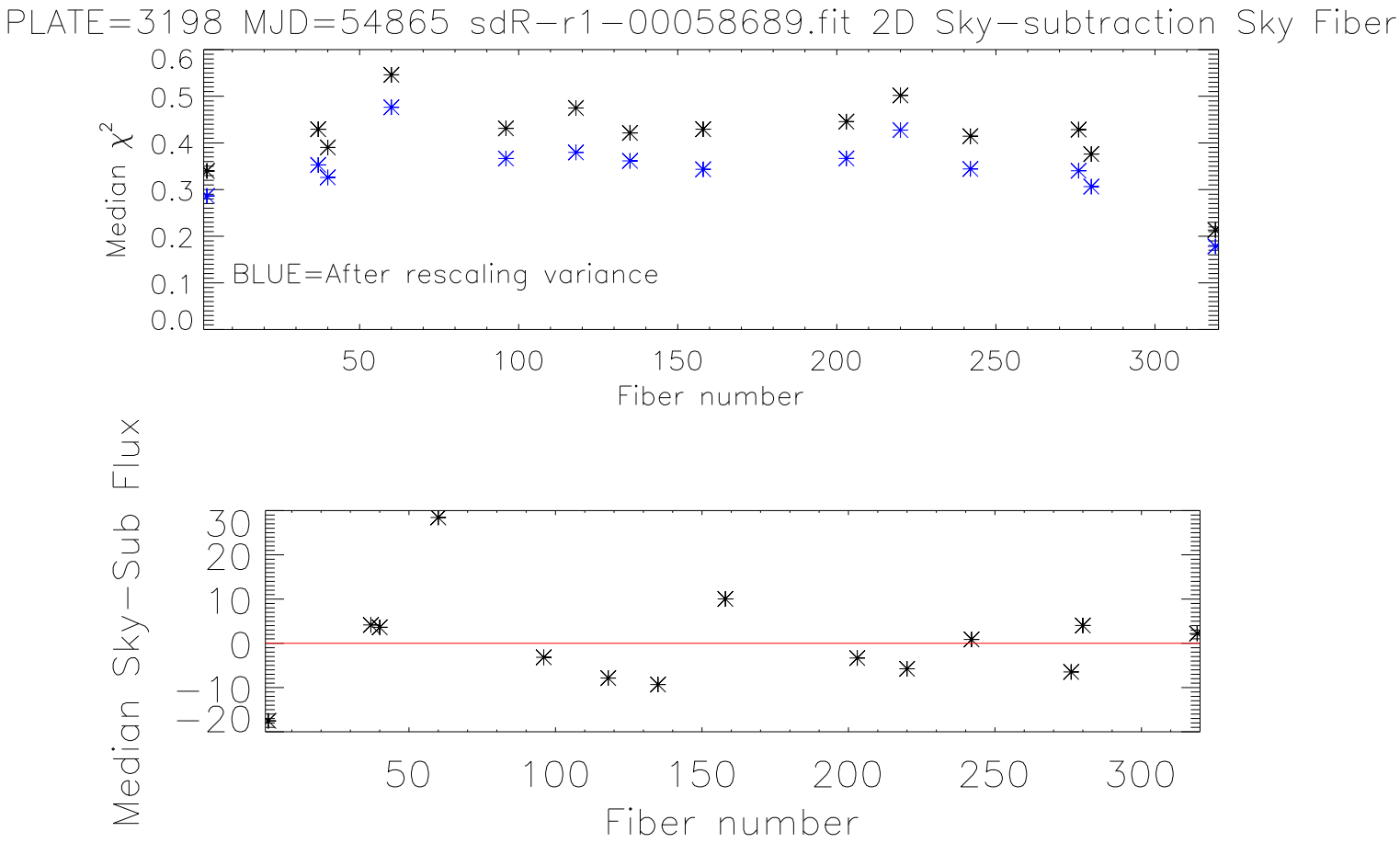
es= 0.0000

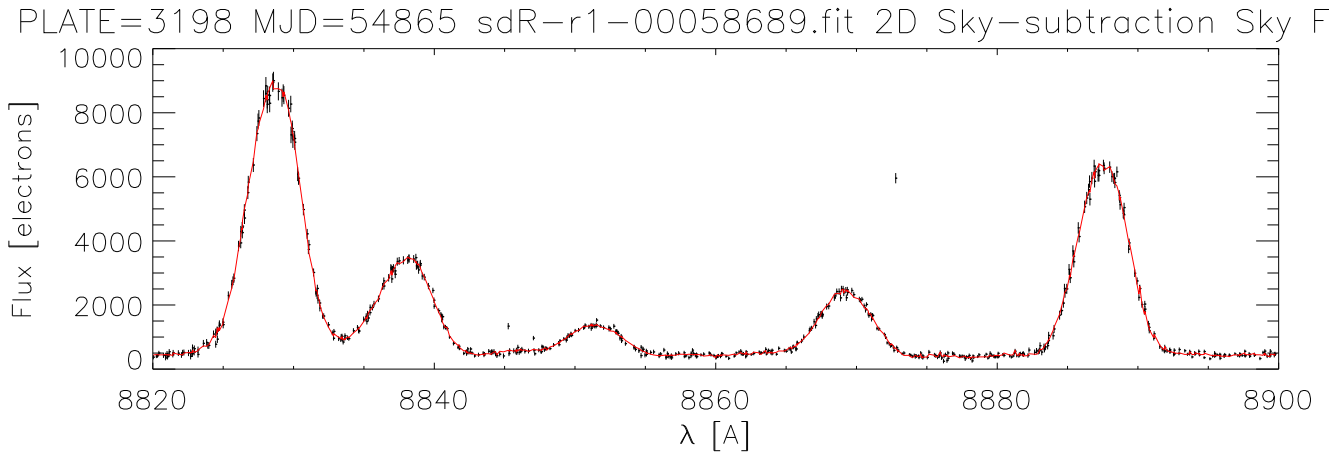

PLATE=3198 MJD=54865 sdR-r1-00058689.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

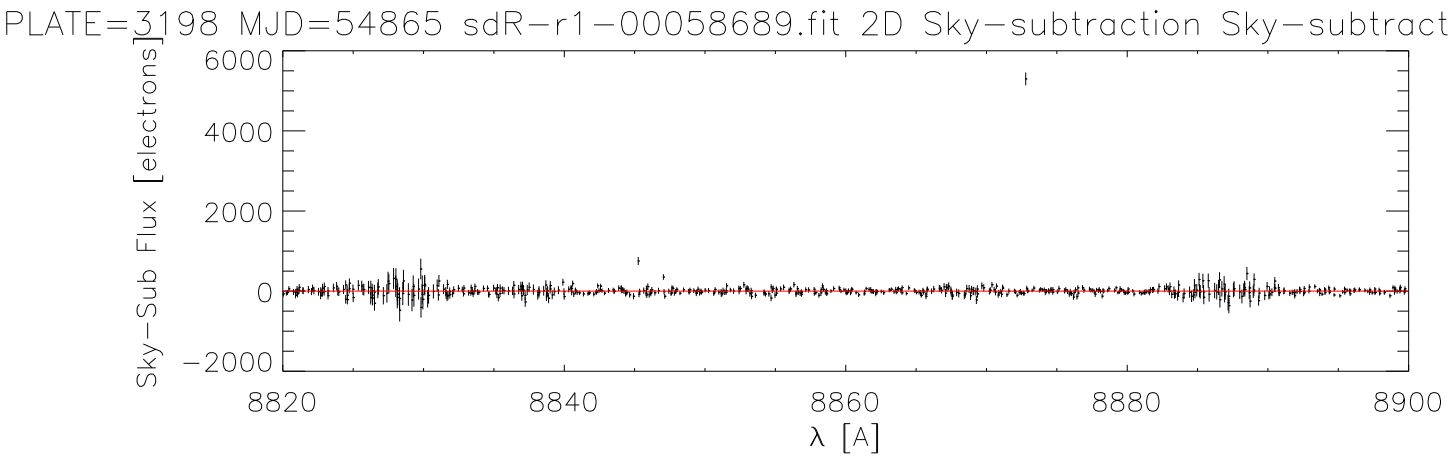

PLATE=3198 MJD=54865 sdR-r1-00058689.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

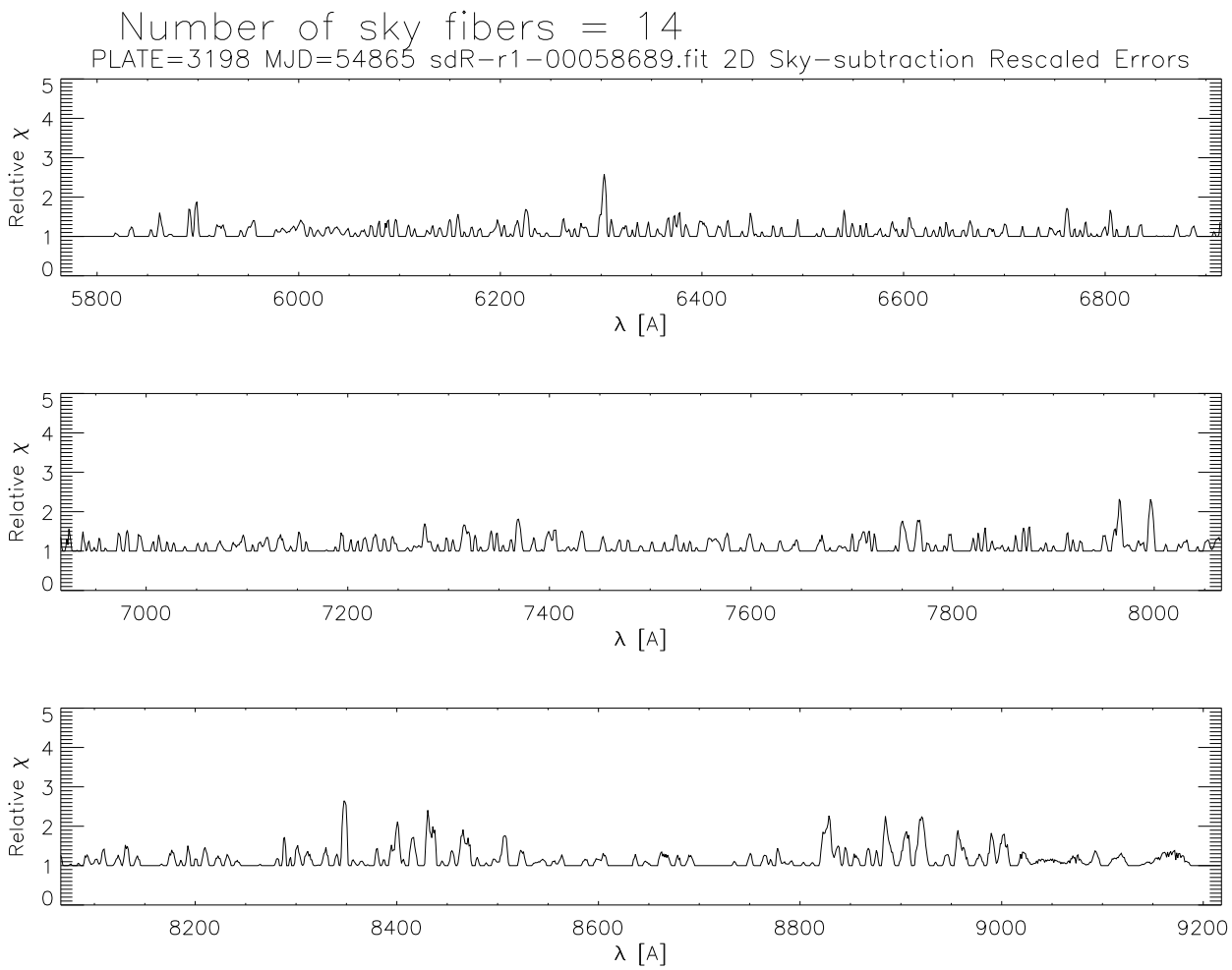

PLATE=3198 MJD=54865 sdR-r1-00058689.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

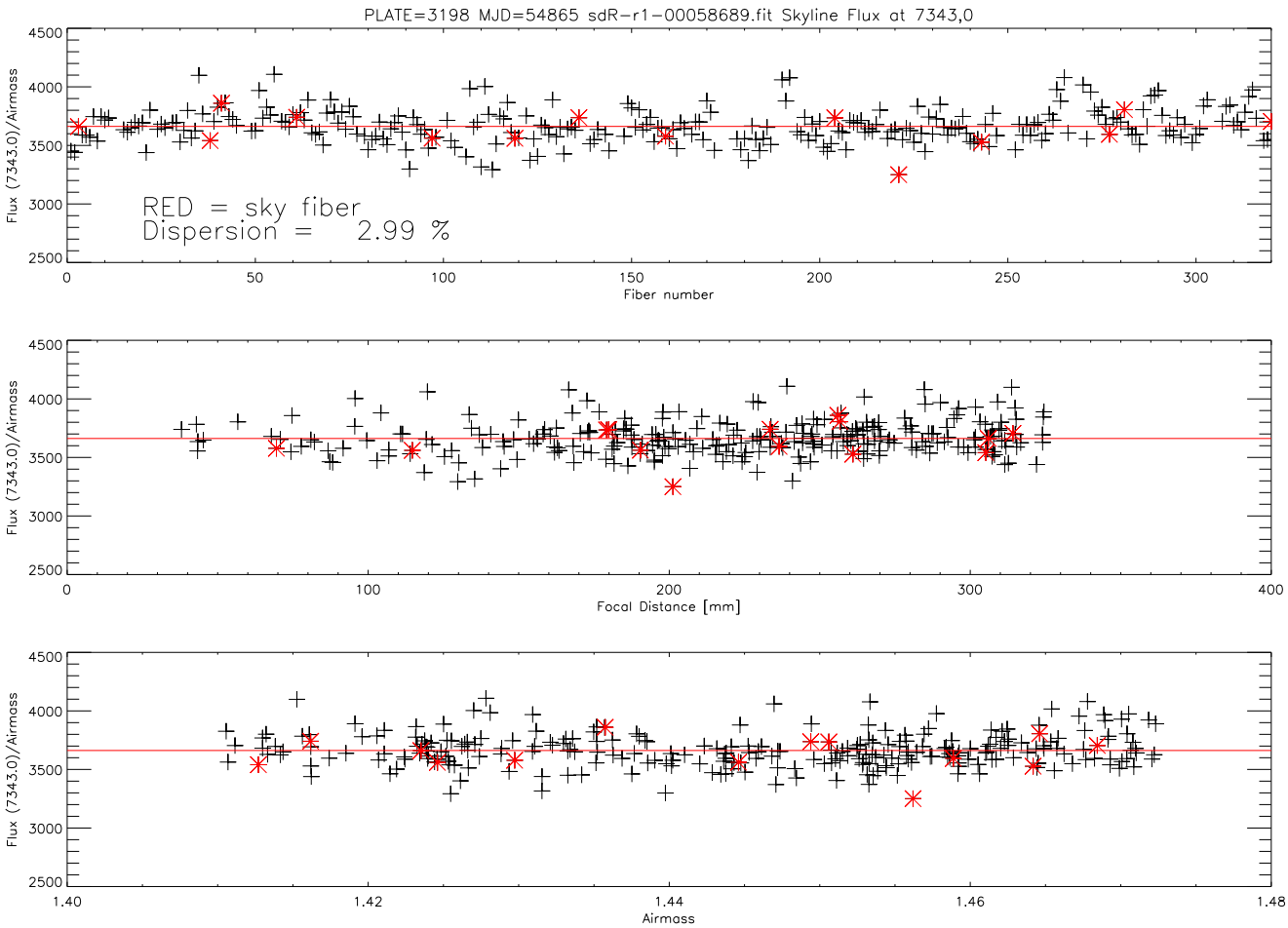

Number of sky fibers = 14
PLATE=3198 MJD=54865 sdR-r1-00058689.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

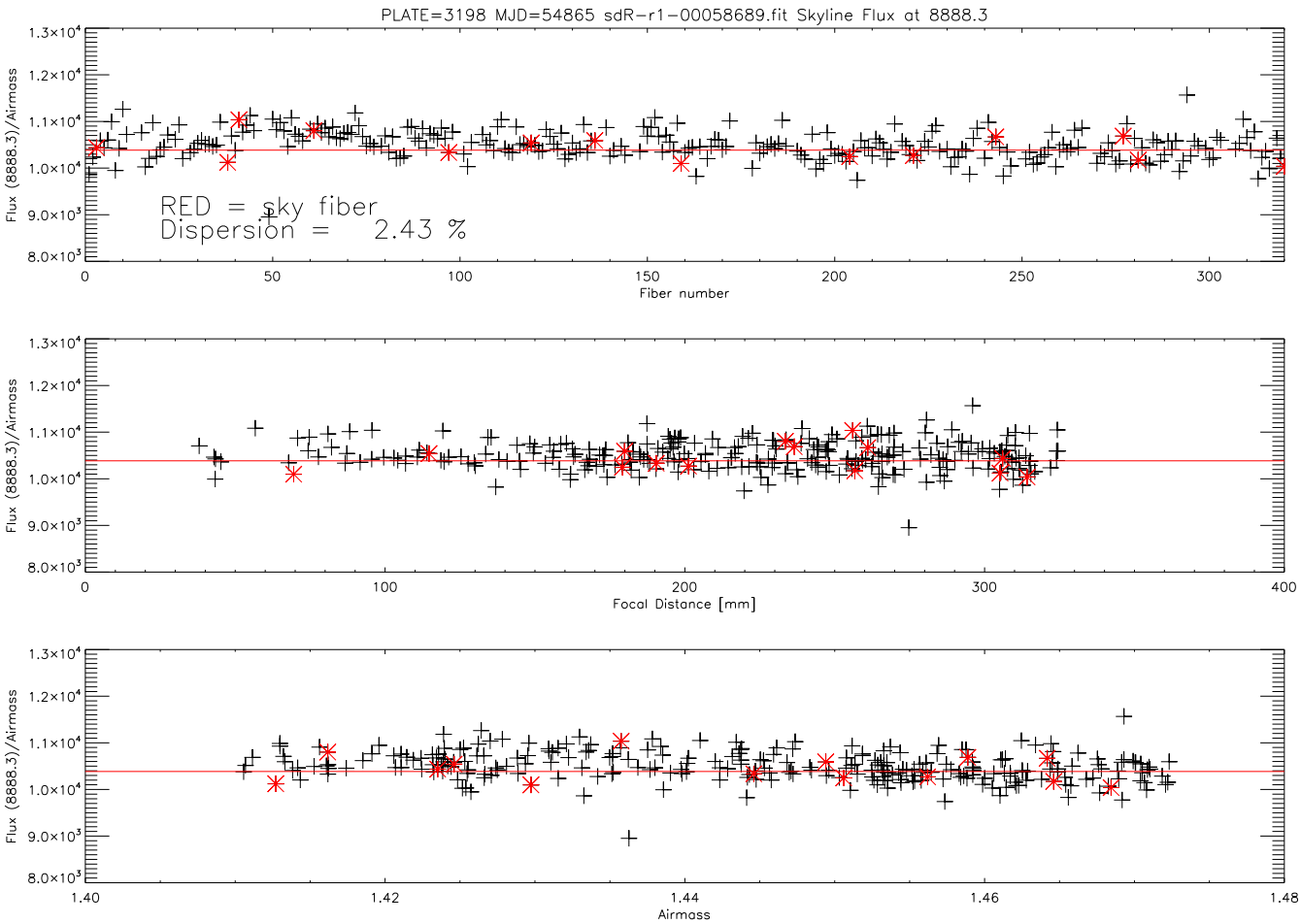

PLATE=3198 MJD=54865 sdR-r1-00058689.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

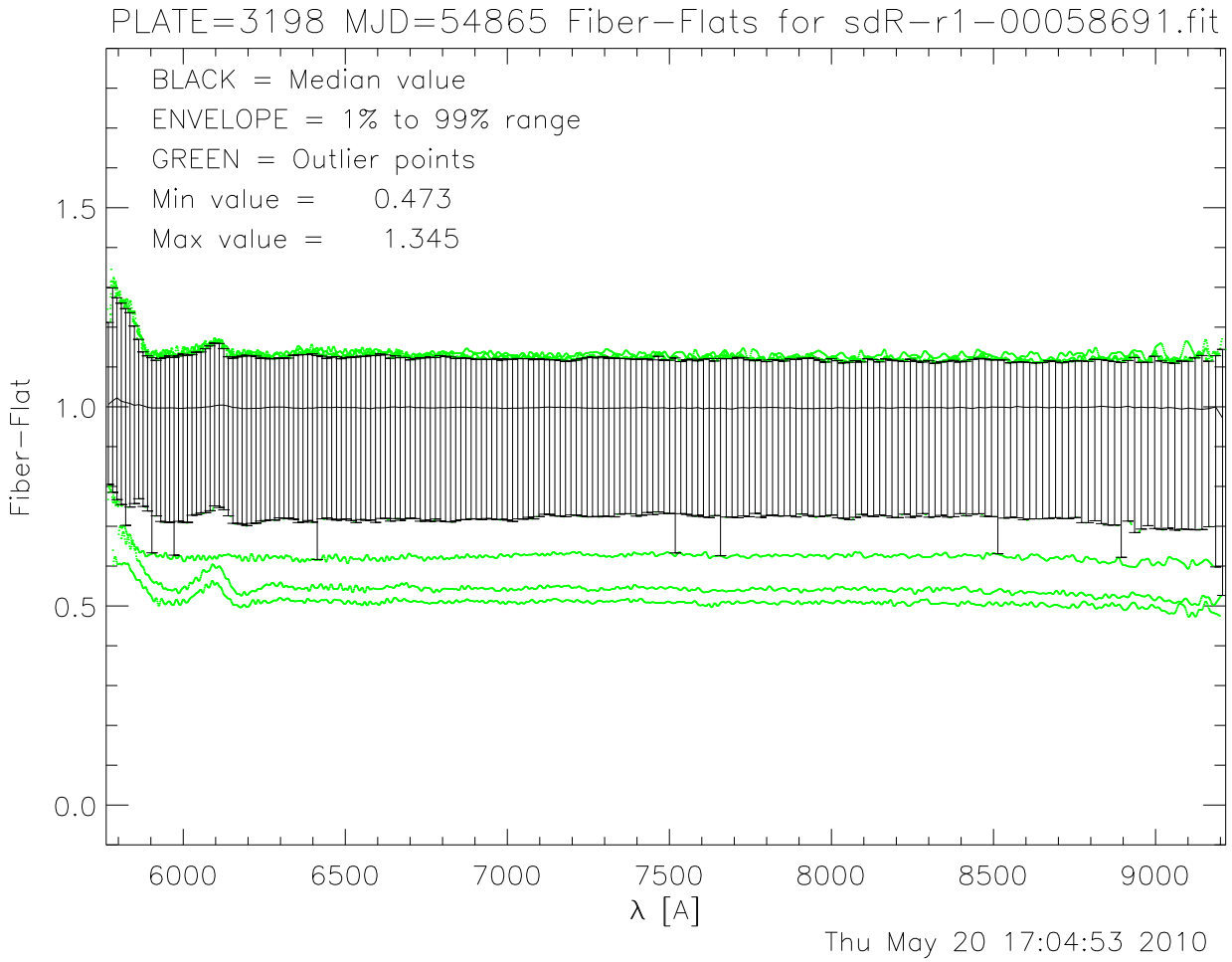

PLATE=3198 MJD=54865 sdR-r1-00058689.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

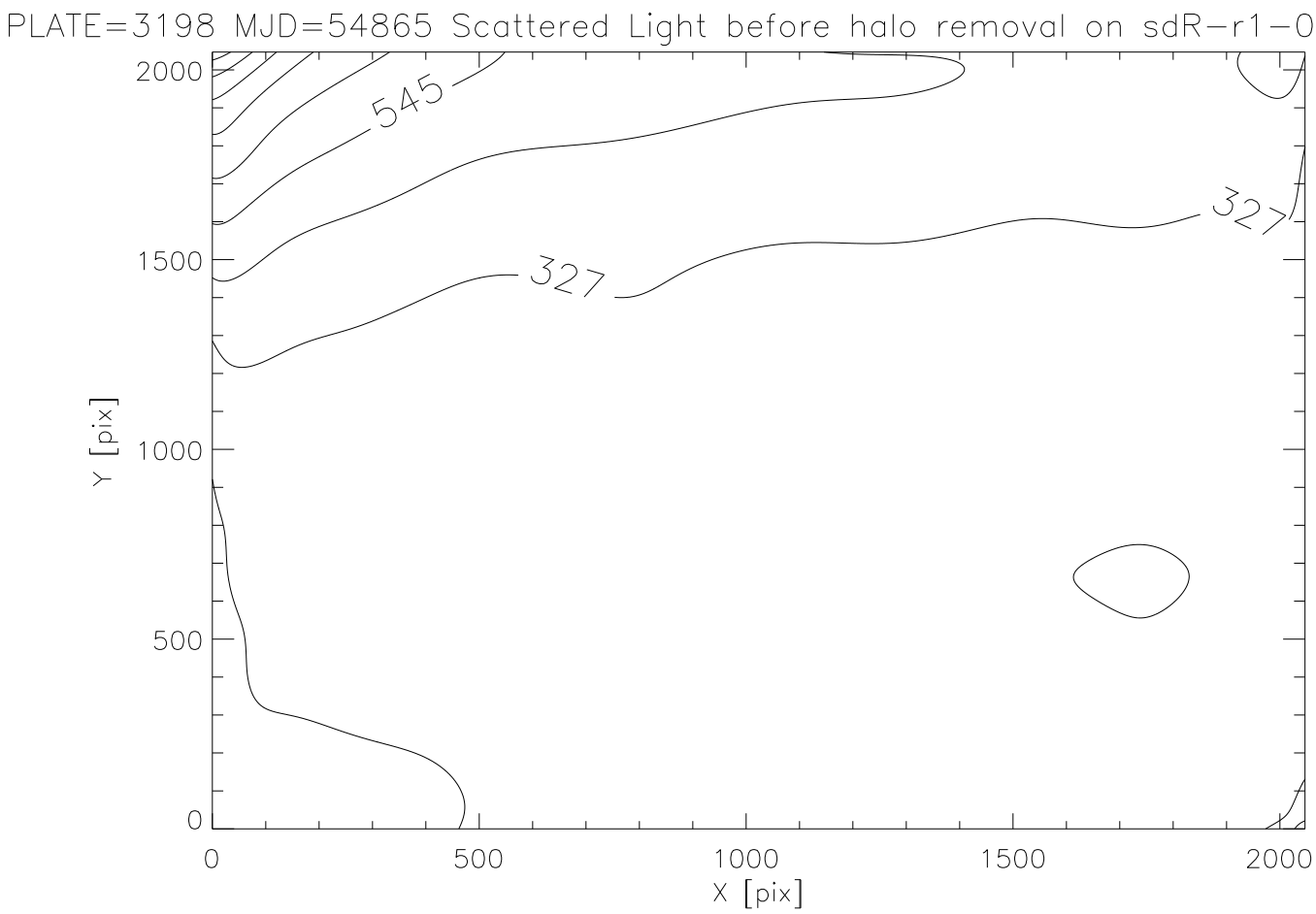

PLATE=3198 MJD=54865 sdR-r1-00058689.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

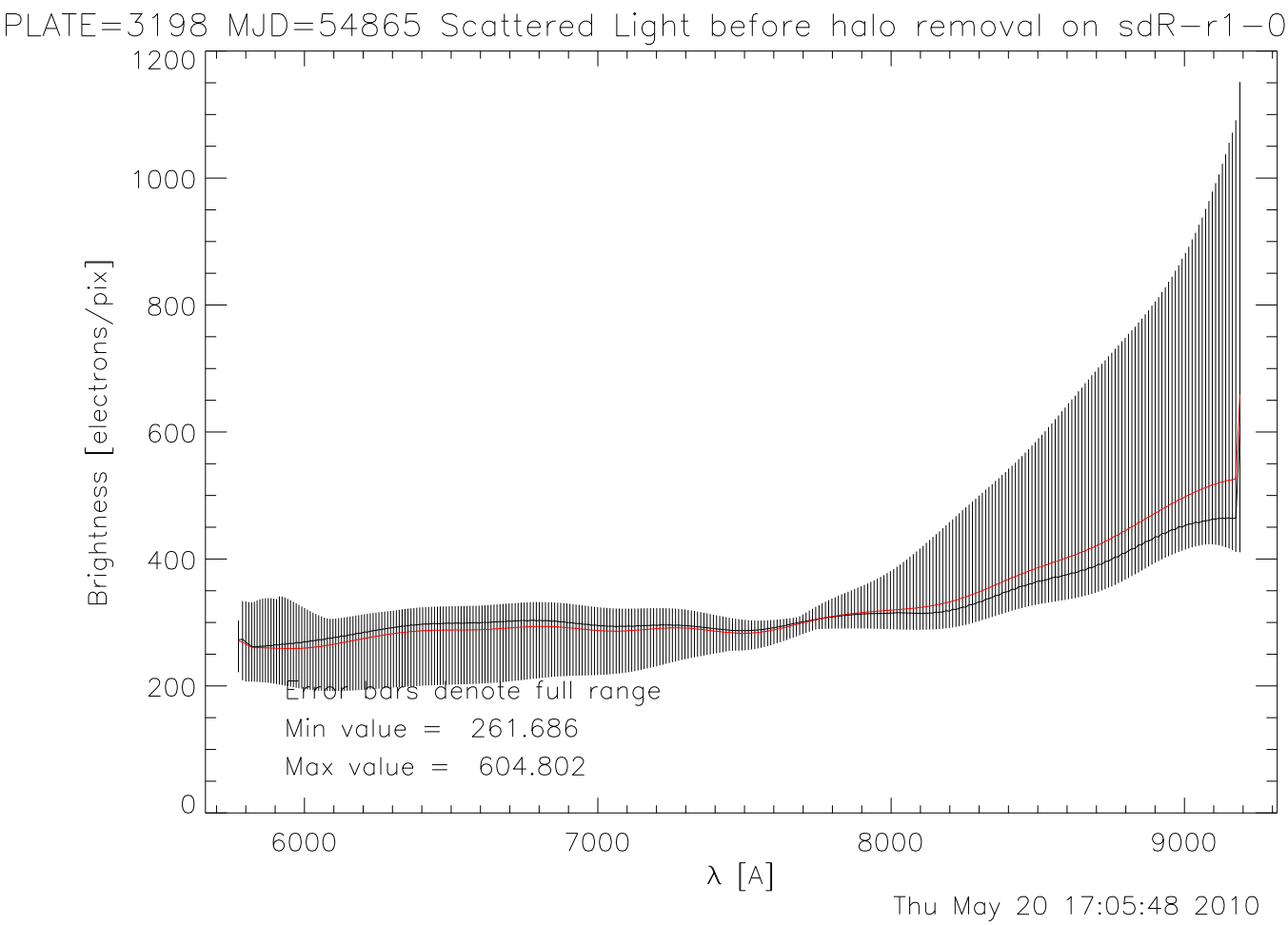

Number of sky fibers = 14
PLATE=3198 MJD=54865 sdR-r1-00058689.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

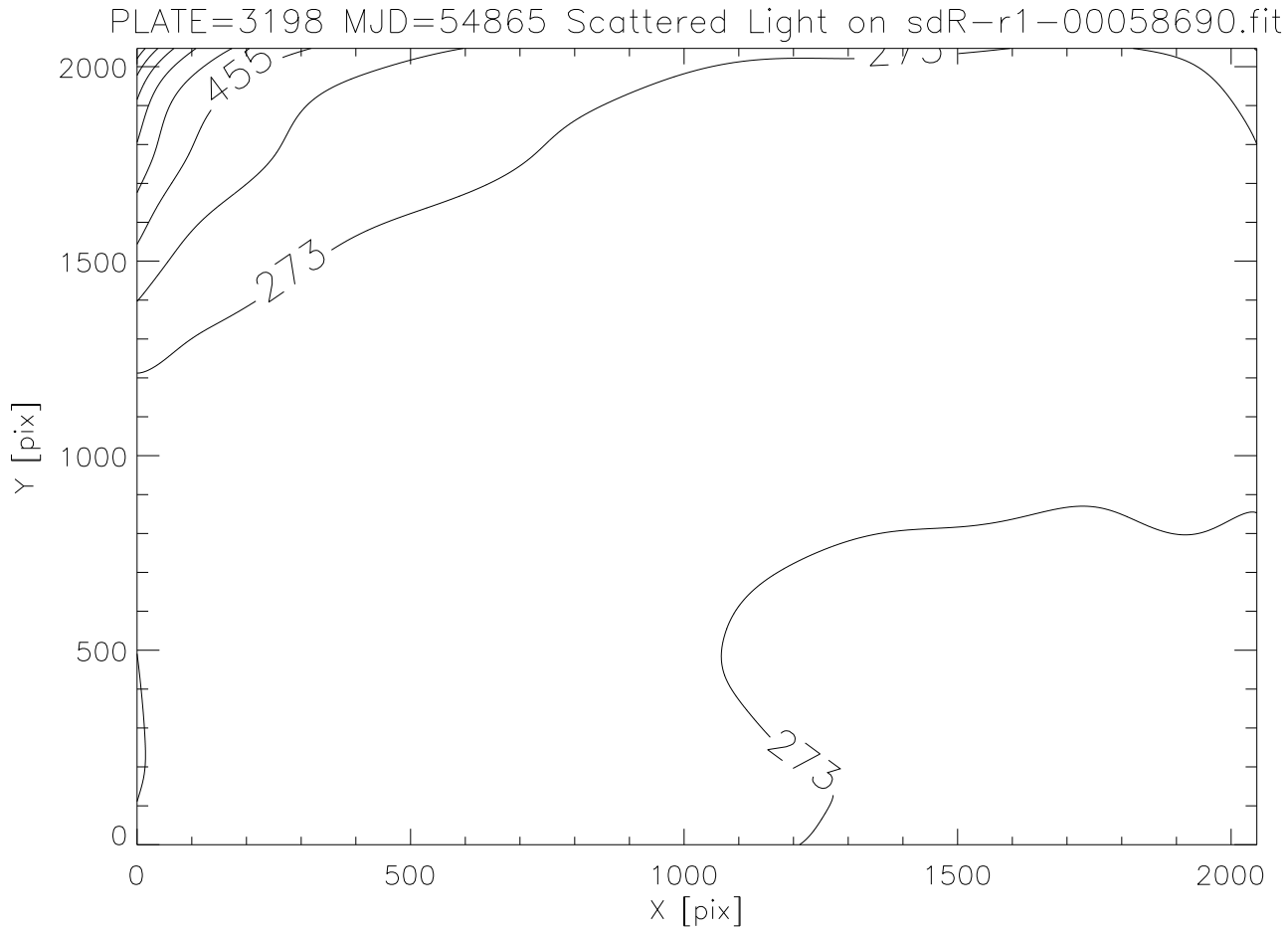

PLATE=3198 MJD=54865 sdR-r1-00058689.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.99 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

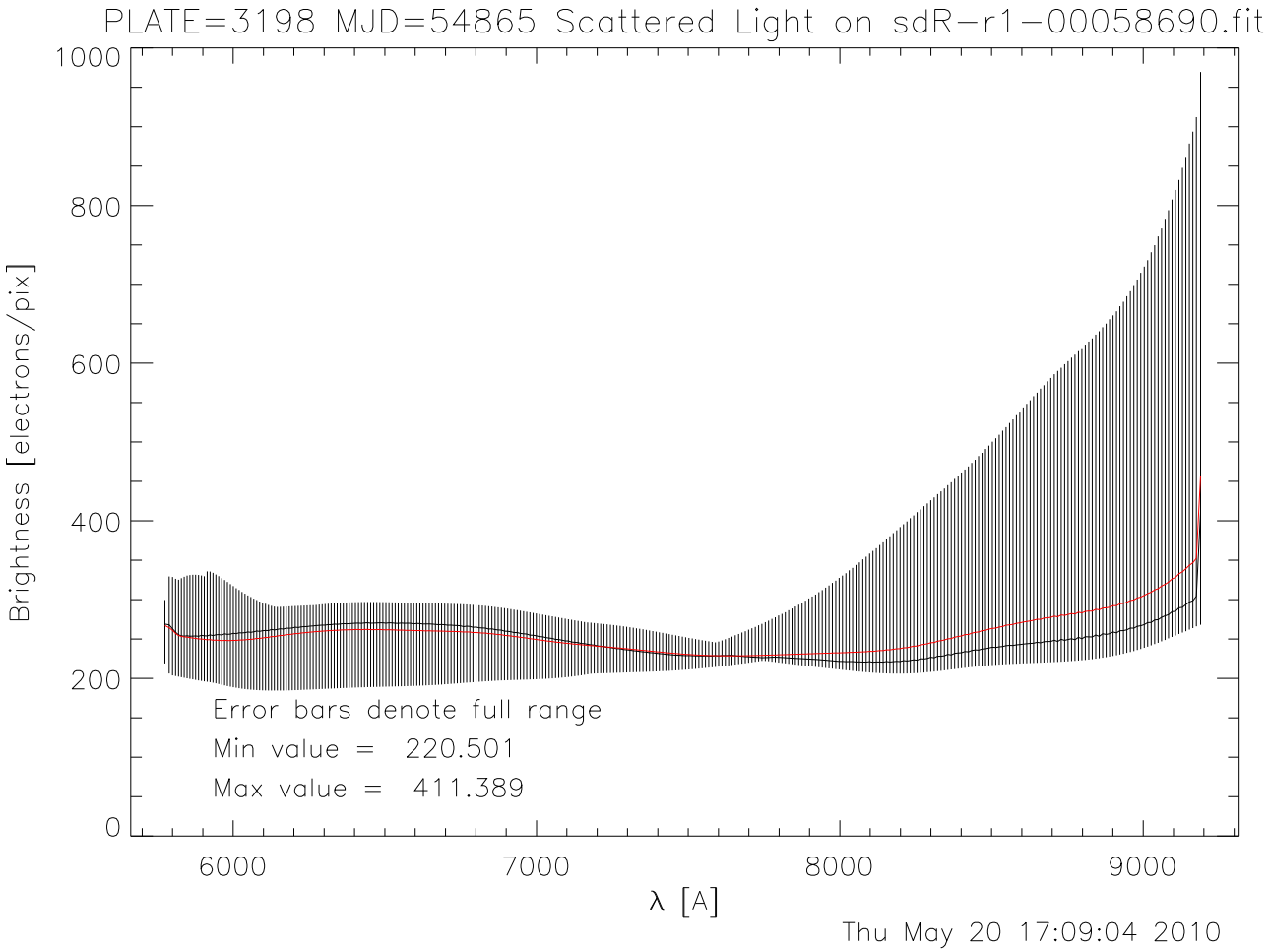

PLATE=3198 MJD=54865 sdR-r1-00058689.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.43 %
Fiber number
Focal Distance [mm]
Airmass

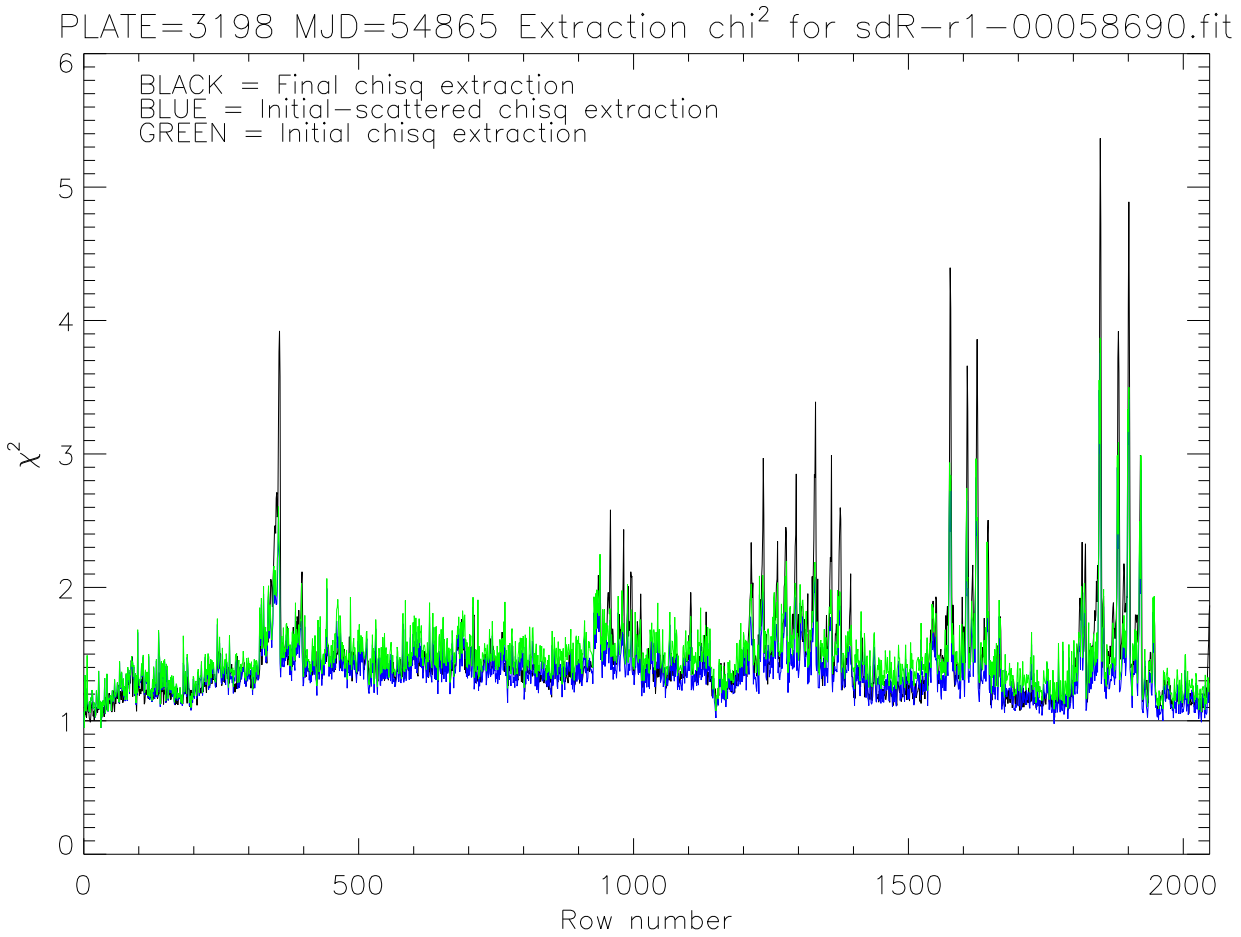

PLATE=3198 MJD=54865 Fiber−Flats for sdR−r1−00058691.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.473
Max value = 1.345
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu May 20 17:04:53 2010

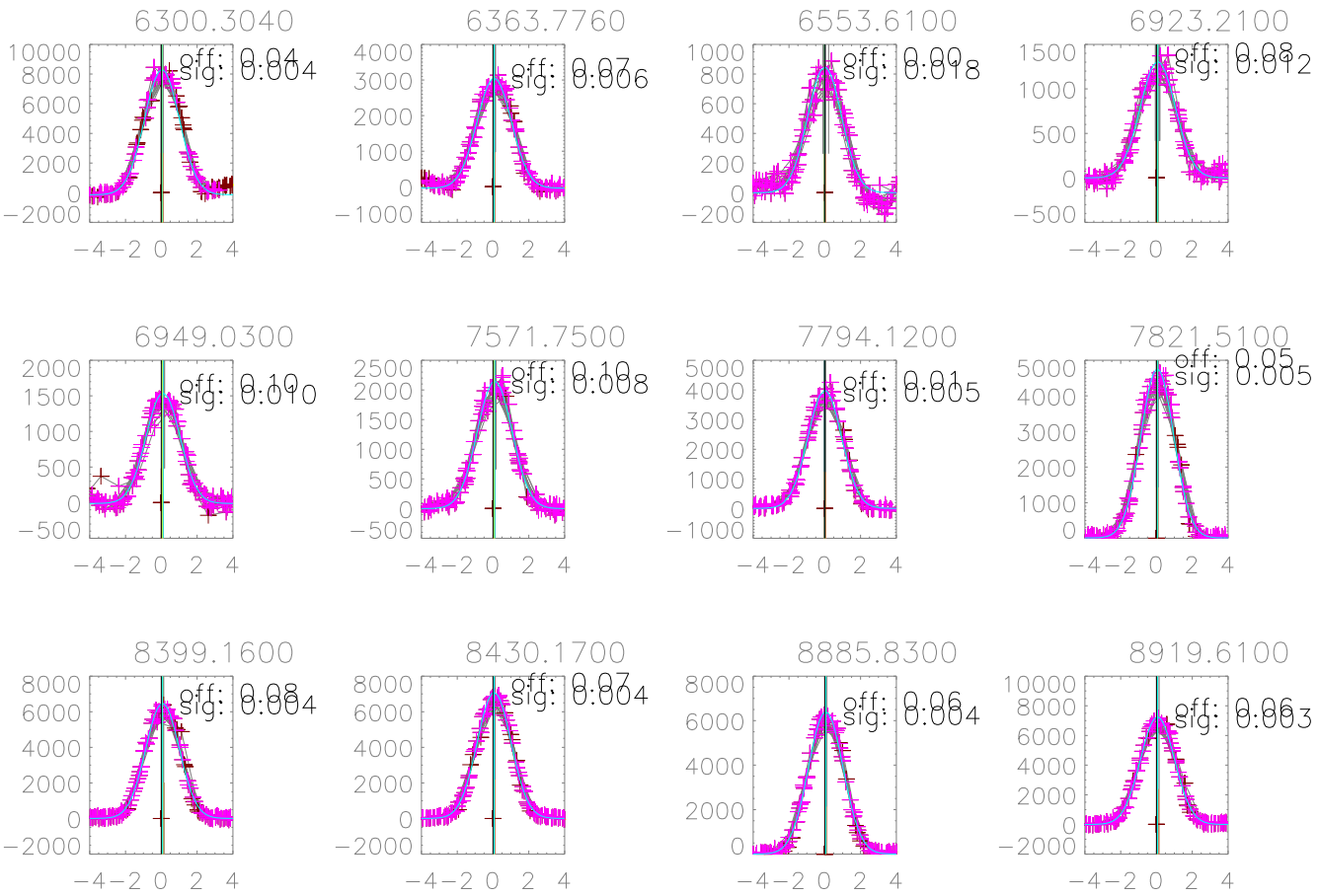

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-r1-00058690.fi
545
327
327
Y [pix]
X [pix]
0
500
1000
1500
2000

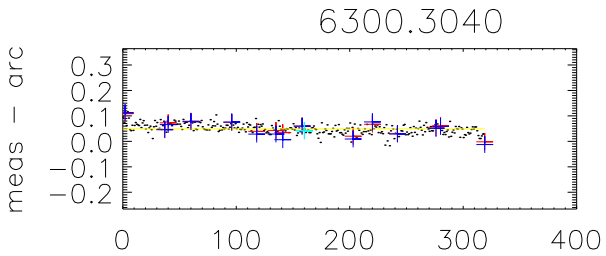

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-r1-00058690.fi
Brightness [electrons/pix]
1200
1000
800
600
400
200
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 261.686
Max value = 604.802
Thu May 20 17:05:48 2010

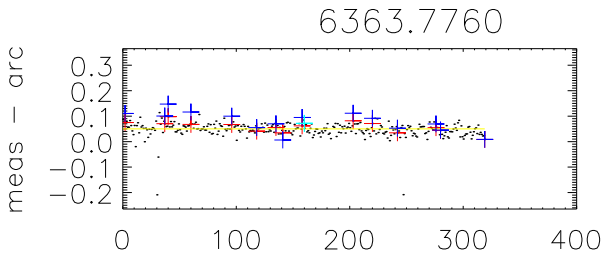

PLATE=3198 MJD=54865 Scattered Light on sdR-r1-00058690.fit
455
273
273
273
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

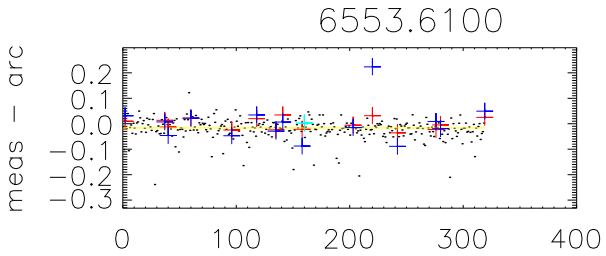

PLATE=3198 MJD=54865 Scattered Light on sdR-r1-00058690.fit
Brightness [electrons/pix]
1000
800
600
400
200
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 220.501
Max value = 411.389
Thu May 20 17:09:04 2010

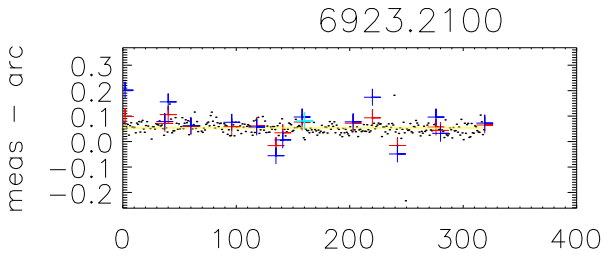

PLATE=3198 MJD=54865 Extraction chi^2 for sdR−r1−00058690.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

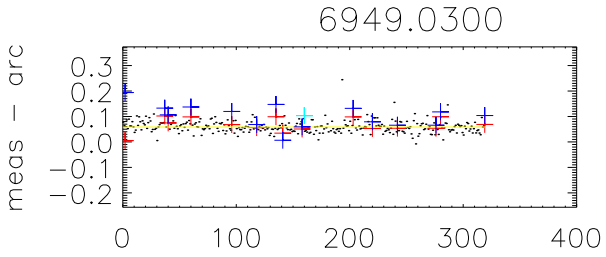

6300.3040
off: 0.04
sig: 0.004
6363.7760
off: 0.07
sig: 0.006
6553.6100
off: 0.00
sig: 0.018
6923.2100
off: 0.08
sig: 0.012
6949.0300
off: 0.10
sig: 0.010
7571.7500
off: 0.10
sig: 0.008
7794.1200
off: 0.01
sig: 0.005
7821.5100
off: 0.05
sig: 0.005
8399.1600
off: 0.08
sig: 0.004
8430.1700
off: 0.07
sig: 0.004
8885.8300
off: 0.06
sig: 0.004
8919.6100
off: 0.06
sig: 0.003

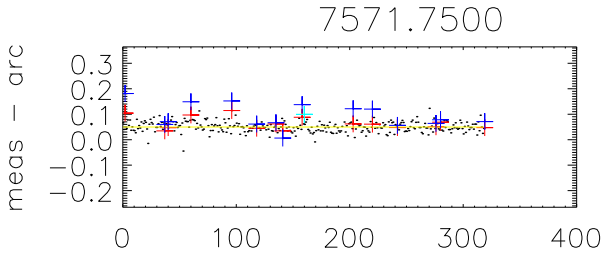

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

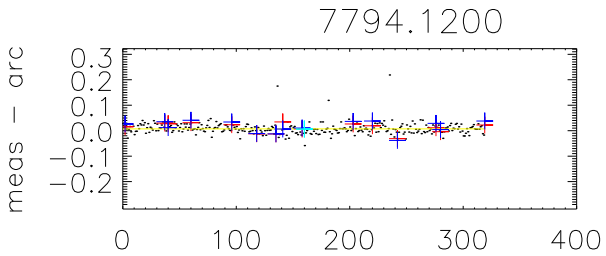

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

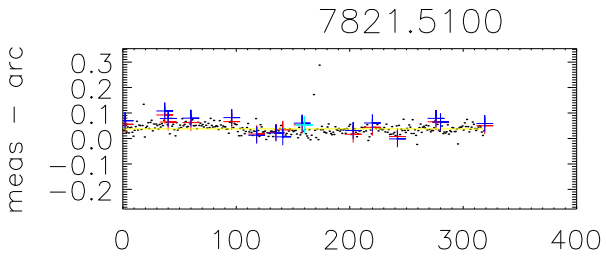

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

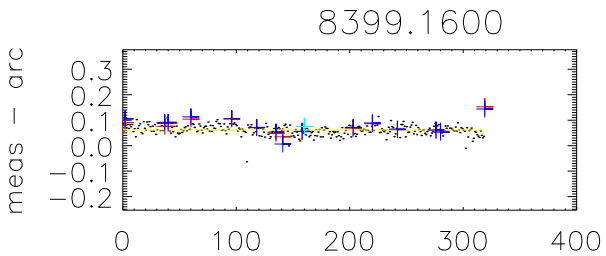

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

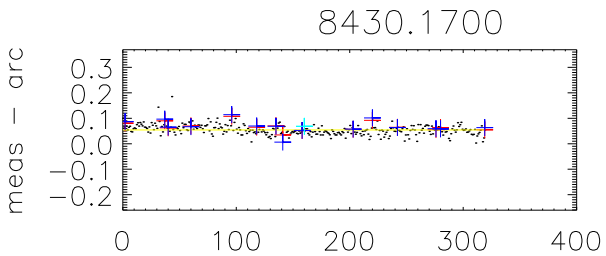

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

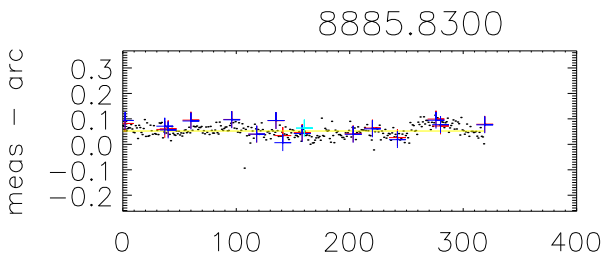

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

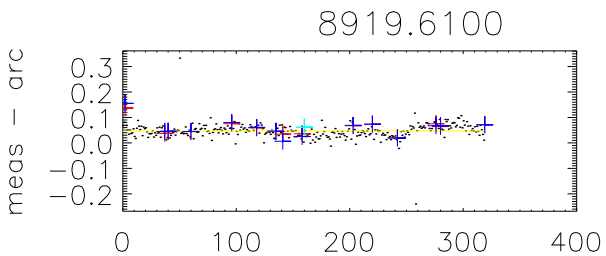

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

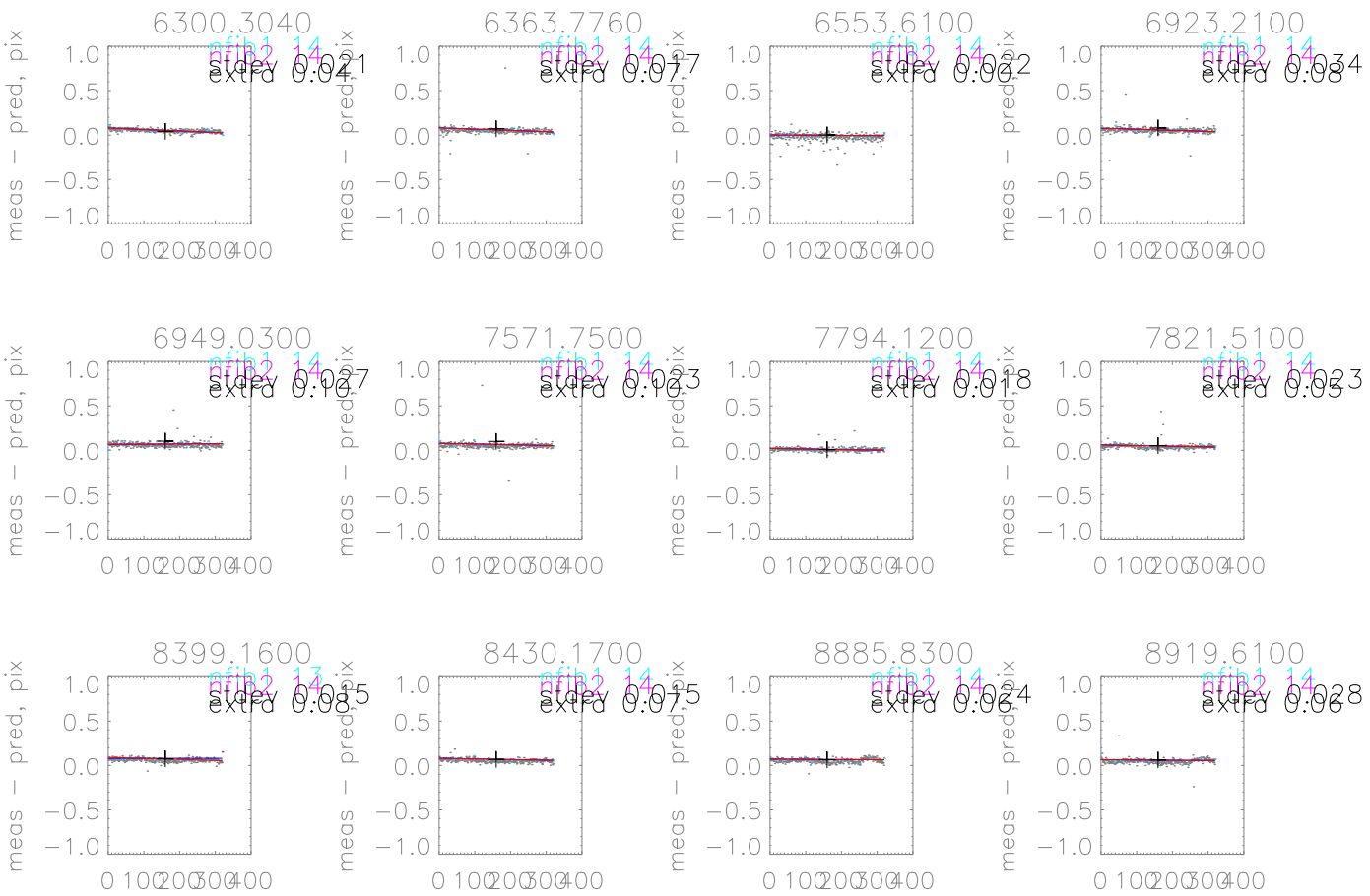

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

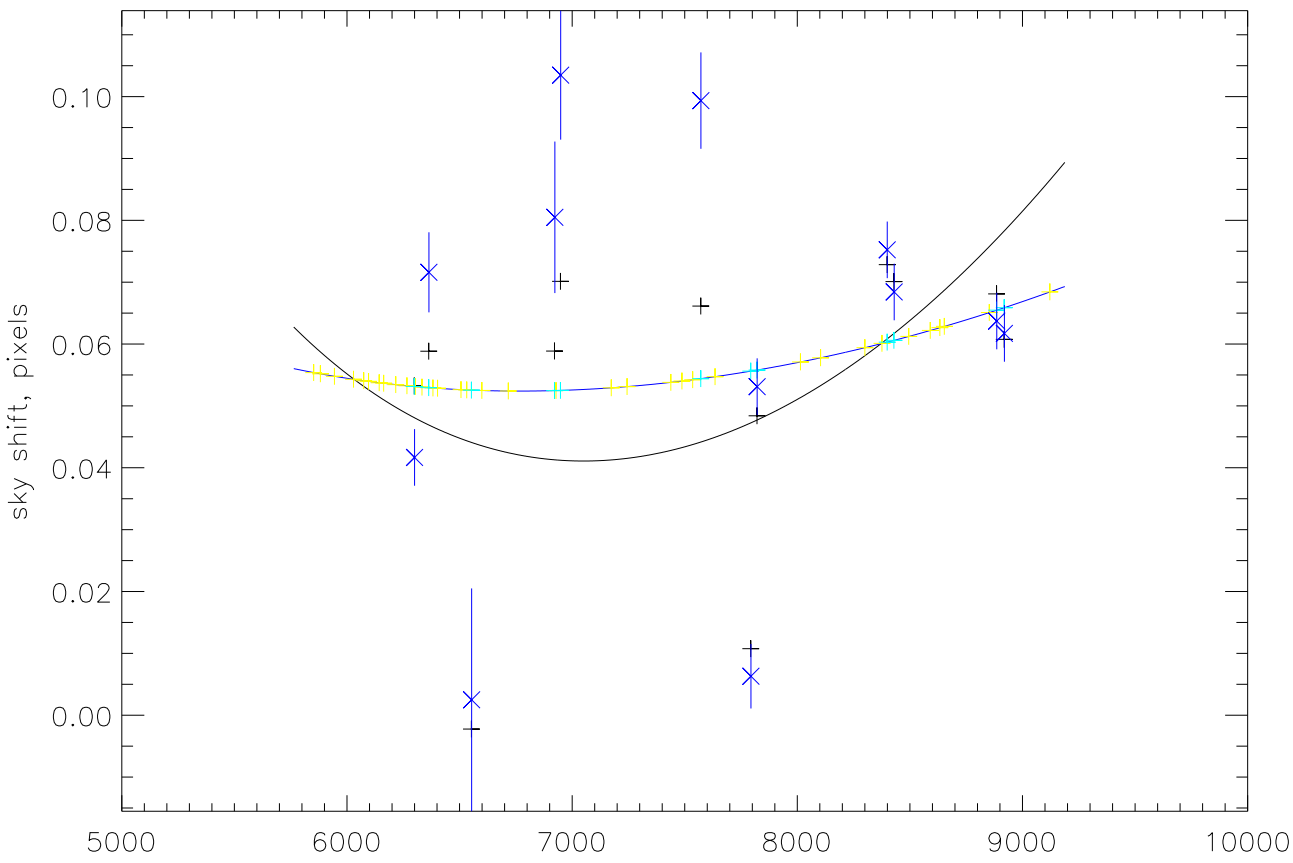

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

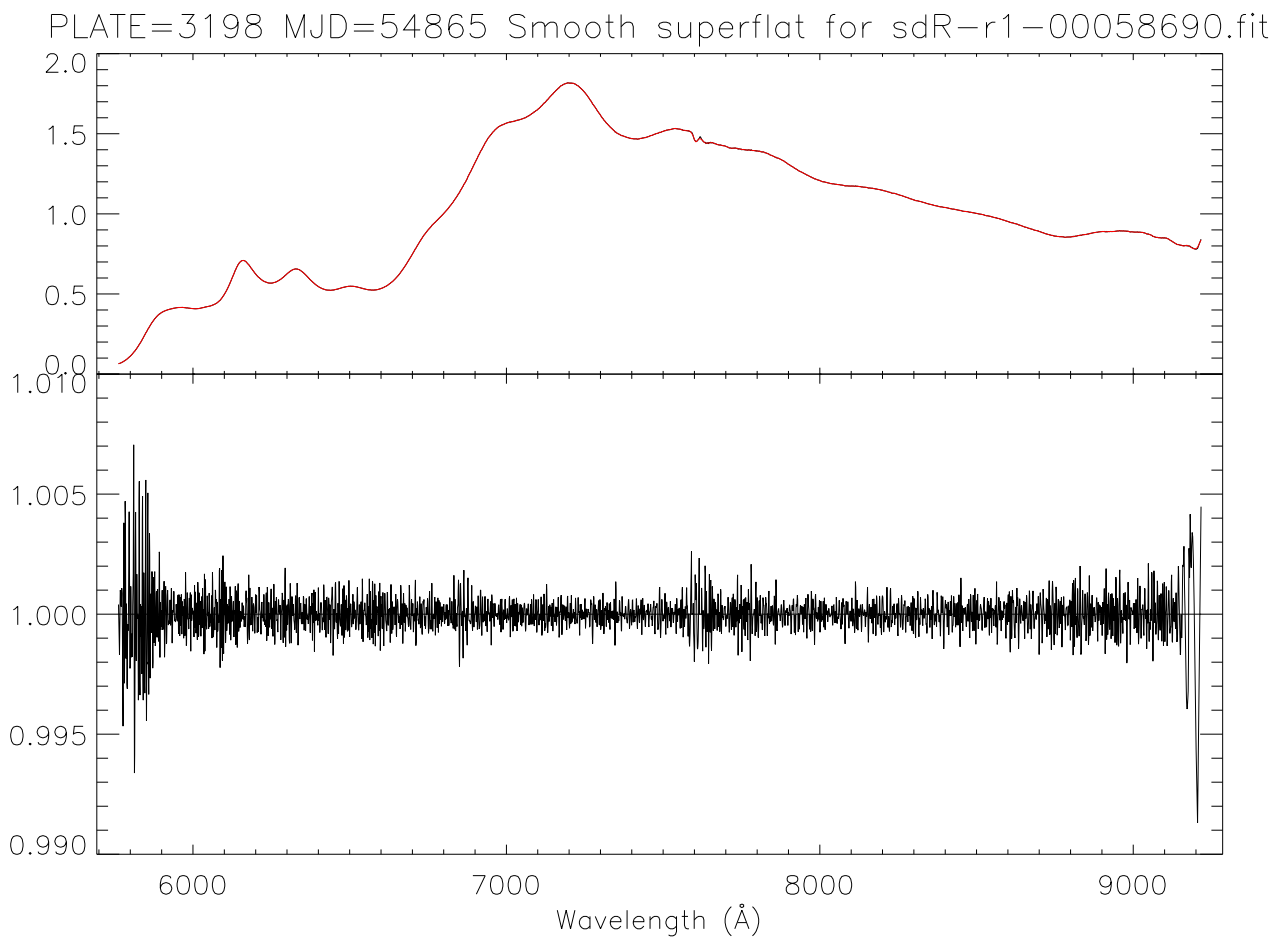

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

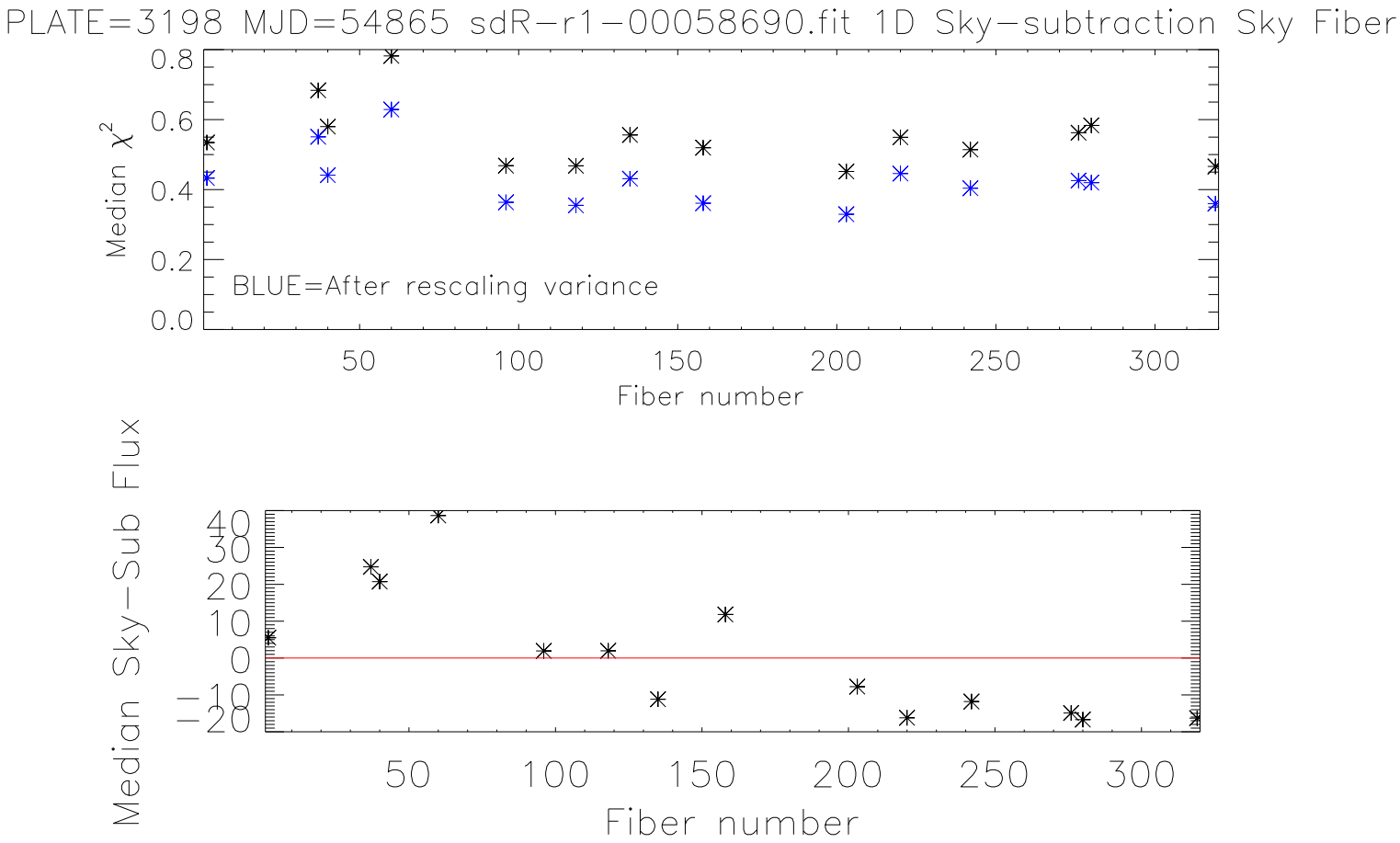

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

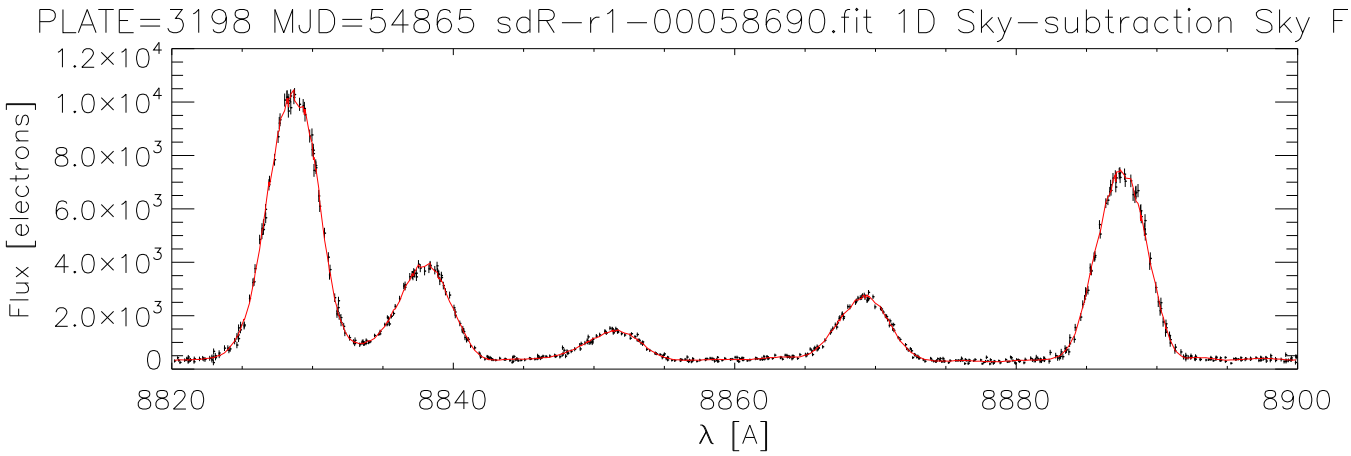

6300.3040
stdev 0.021
extra 0.04
6363.7760
stdev 0.017
extra 0.07
6553.6100
stdev 0.022
extra 0.06
6923.2100
stdev 0.034
extra 0.08
6949.0300
stdev 0.027
extra 0.10
7571.7500
stdev 0.023
extra 0.10
7794.1200
stdev 0.018
extra 0.01
7821.5100
stdev 0.023
extra 0.05
8399.1600
stdev 0.015
extra 0.08
8430.1700
stdev 0.015
extra 0.07
8885.8300
stdev 0.024
extra 0.06
8919.6100
stdev 0.028
extra 0.06
meas − pred, pix
mfib2 14
mfib2 13

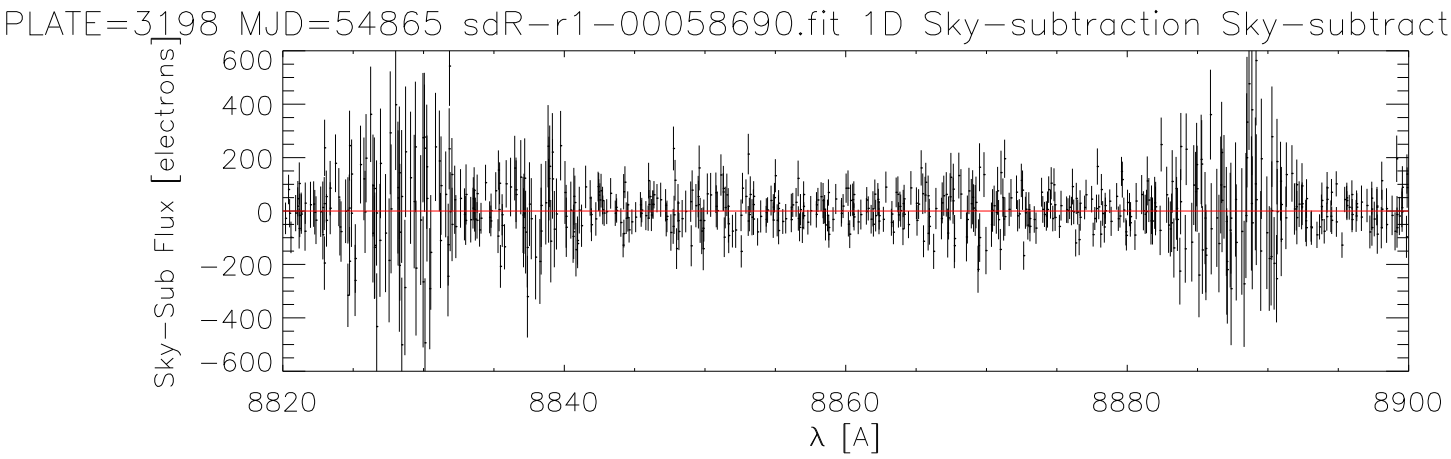

sky shift, pixels
0.10
0.08
0.06
0.04
0.02
0.00
5000
6000
7000
8000
9000
10000

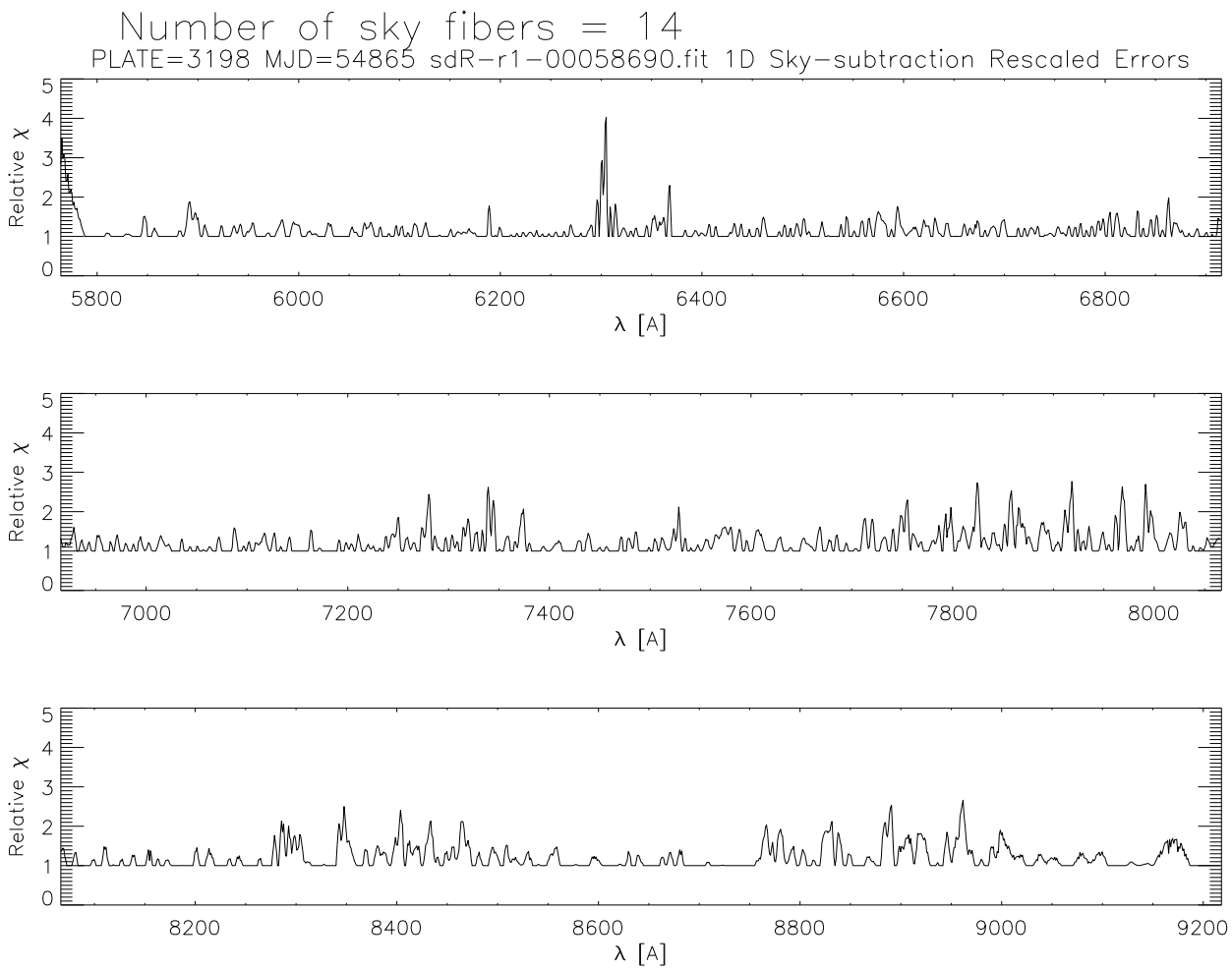
es= 0.0000

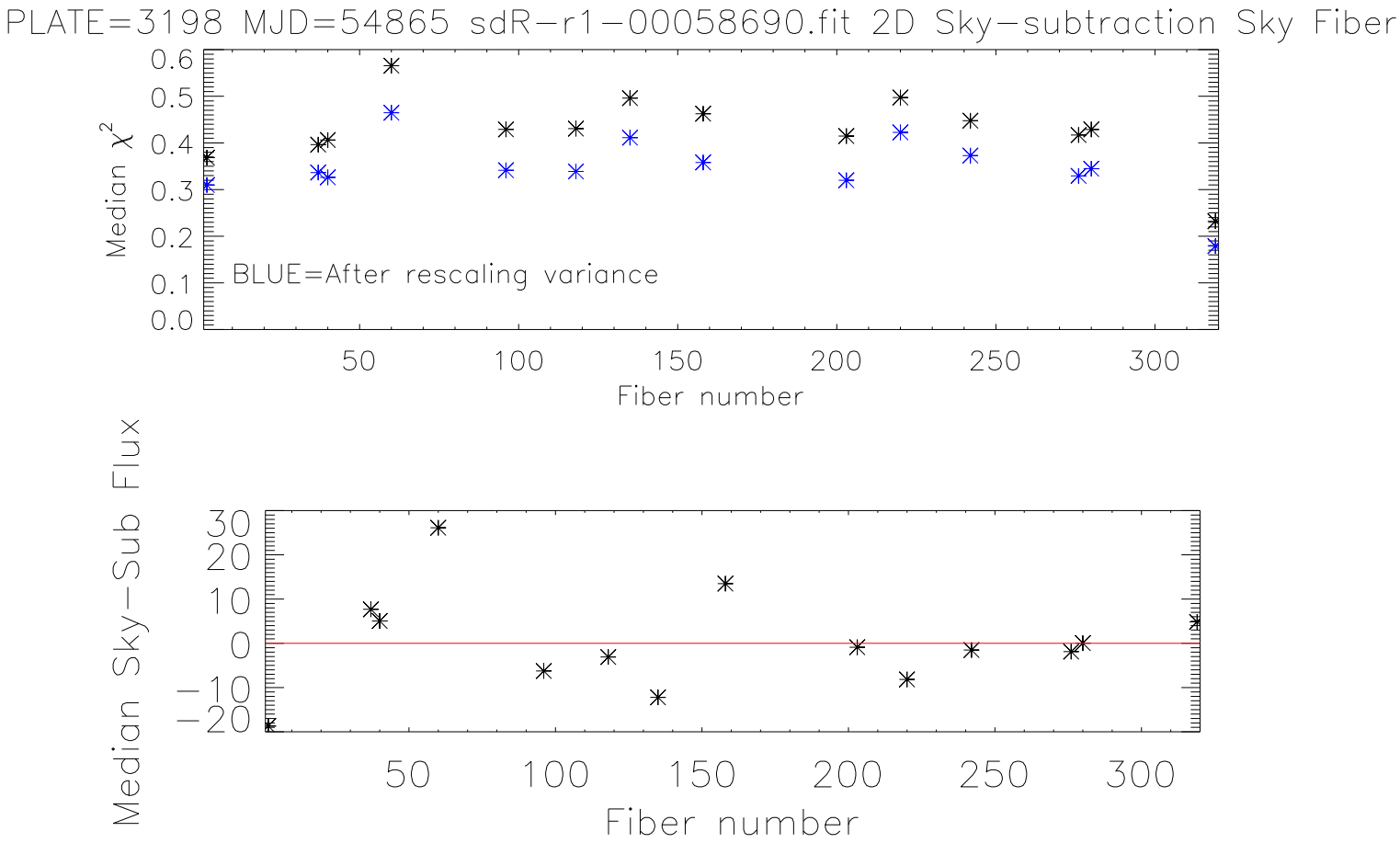

PLATE=3198 MJD=54865 Smooth superflat for sdR-r1-00058690.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

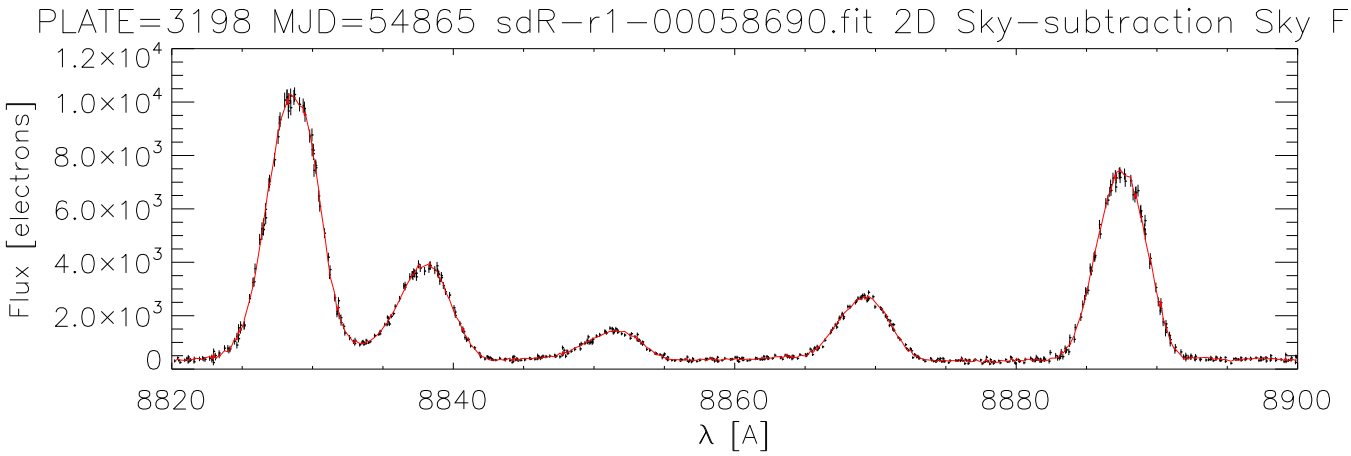

PLATE=3198 MJD=54865 sdR-r1-00058690.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

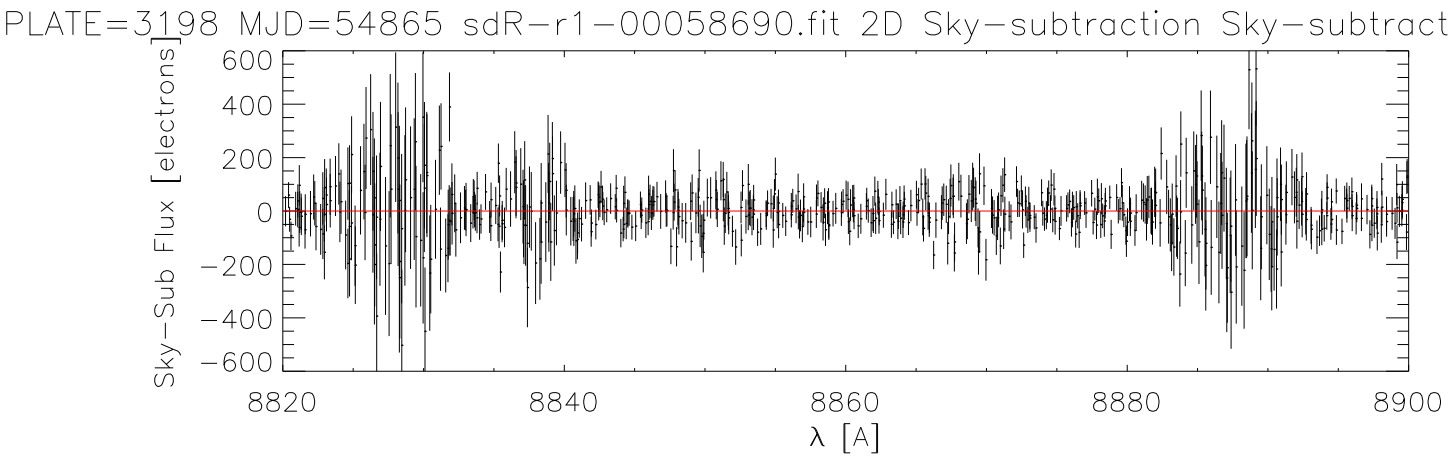

PLATE=3198 MJD=54865 sdR-r1-00058690.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

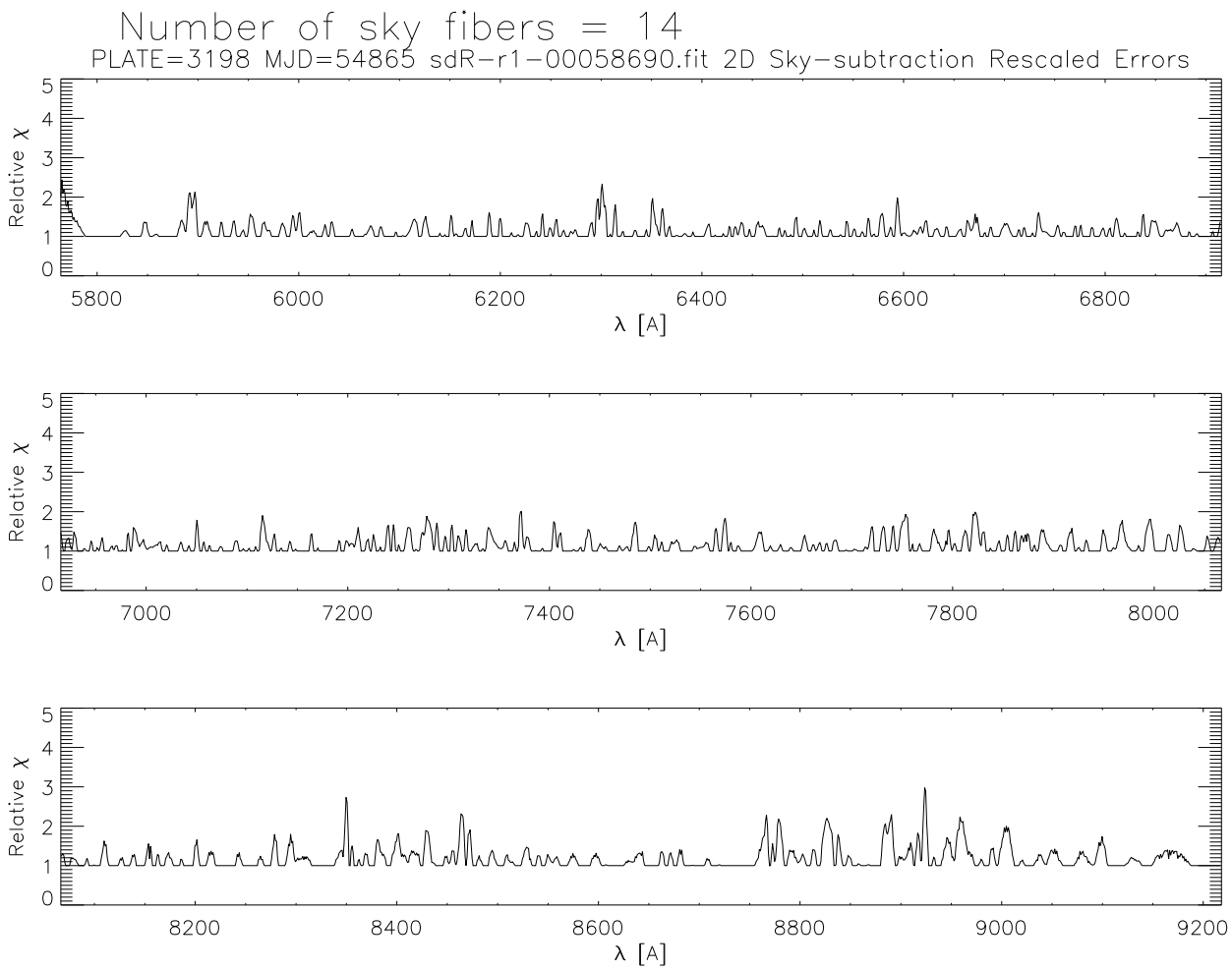

PLATE=3198 MJD=54865 sdR-r1-00058690.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
8820
8840
8860
8880
8900
λ [A]

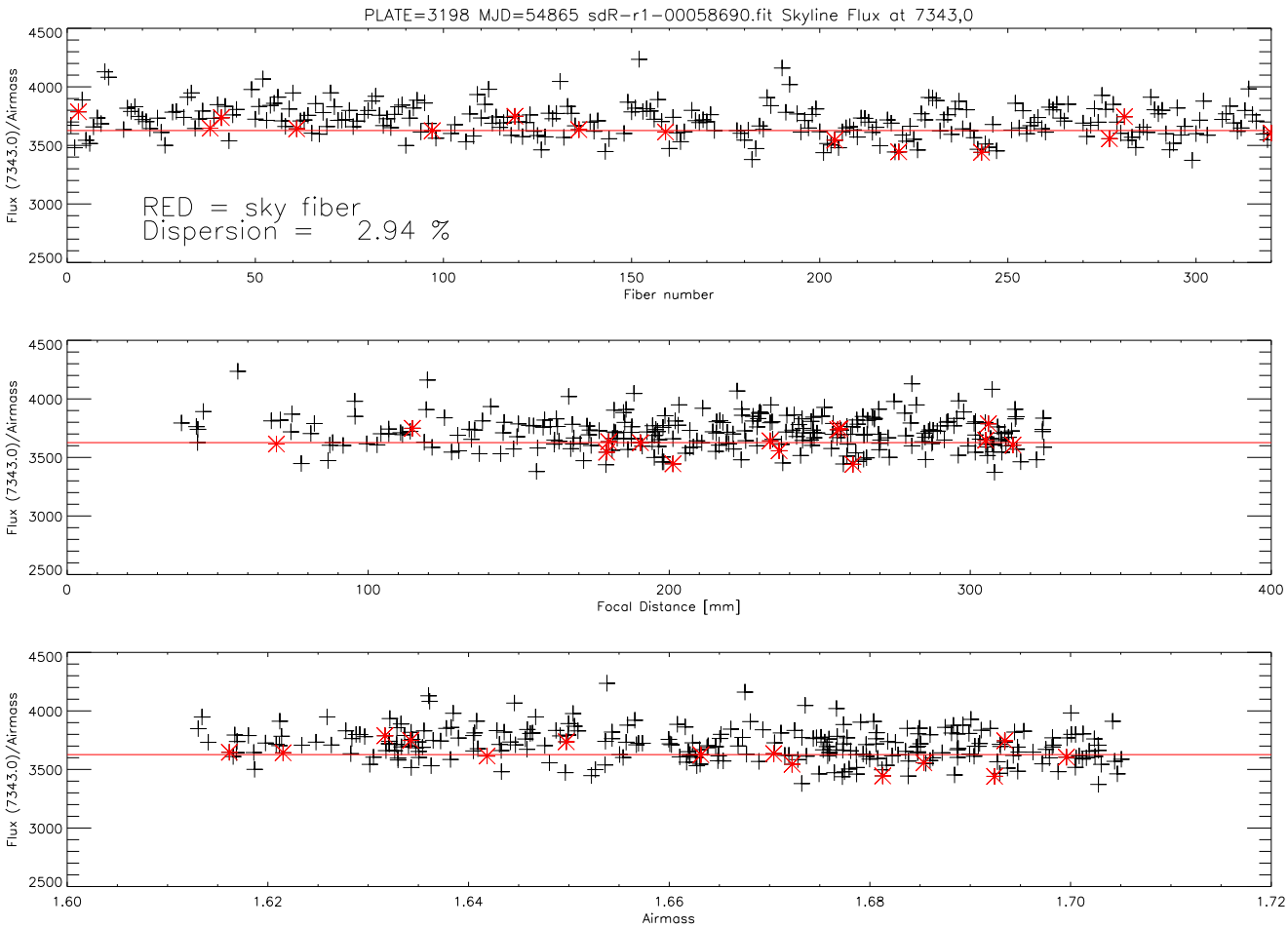

Number of sky fibers = 14
PLATE=3198 MJD=54865 sdR-r1-00058690.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

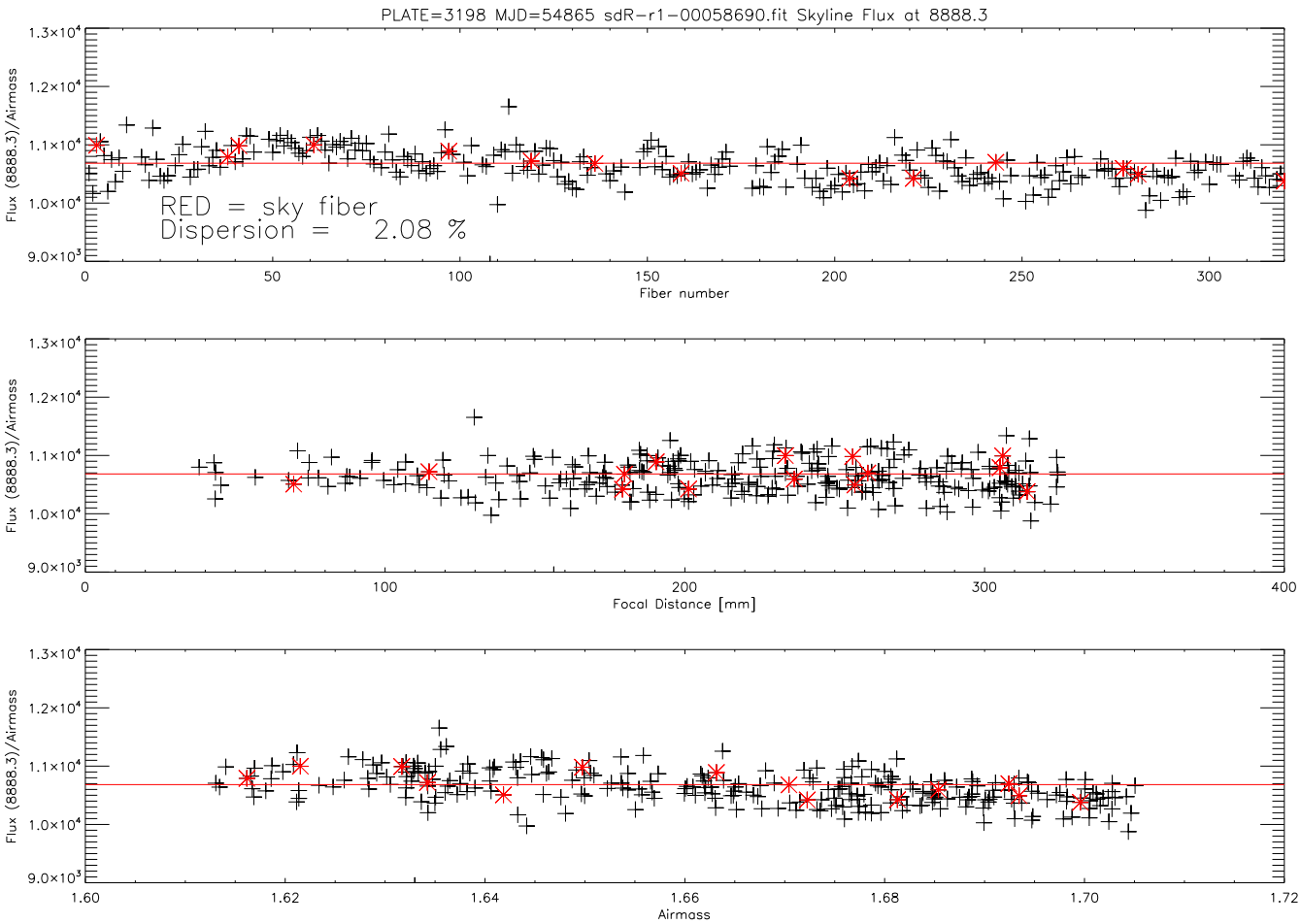

PLATE=3198 MJD=54865 sdR-r1-00058690.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

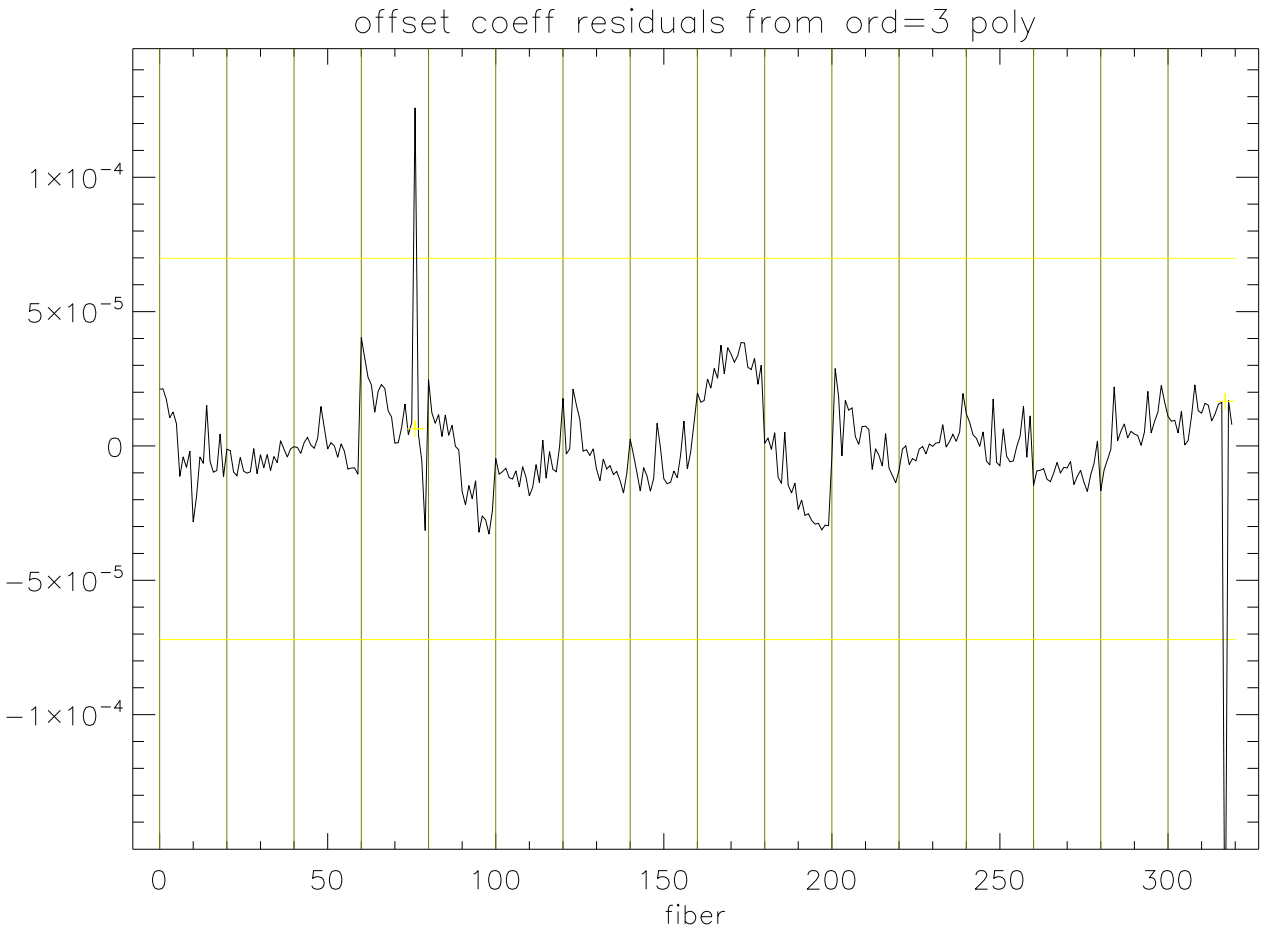

PLATE=3198 MJD=54865 sdR-r1-00058690.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

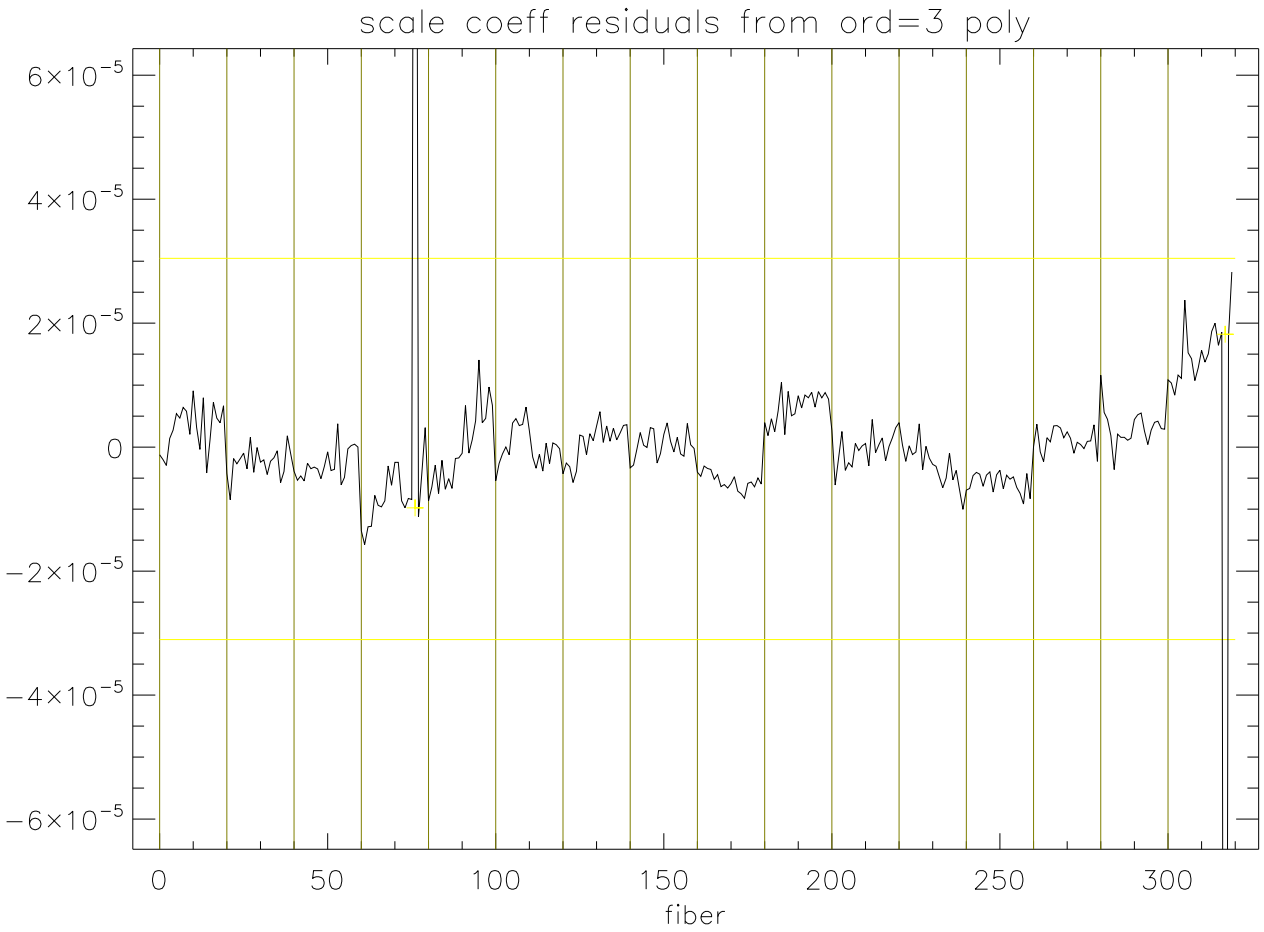

PLATE=3198 MJD=54865 sdR-r1-00058690.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
8820
8840
8860
8880
8900
λ [A]

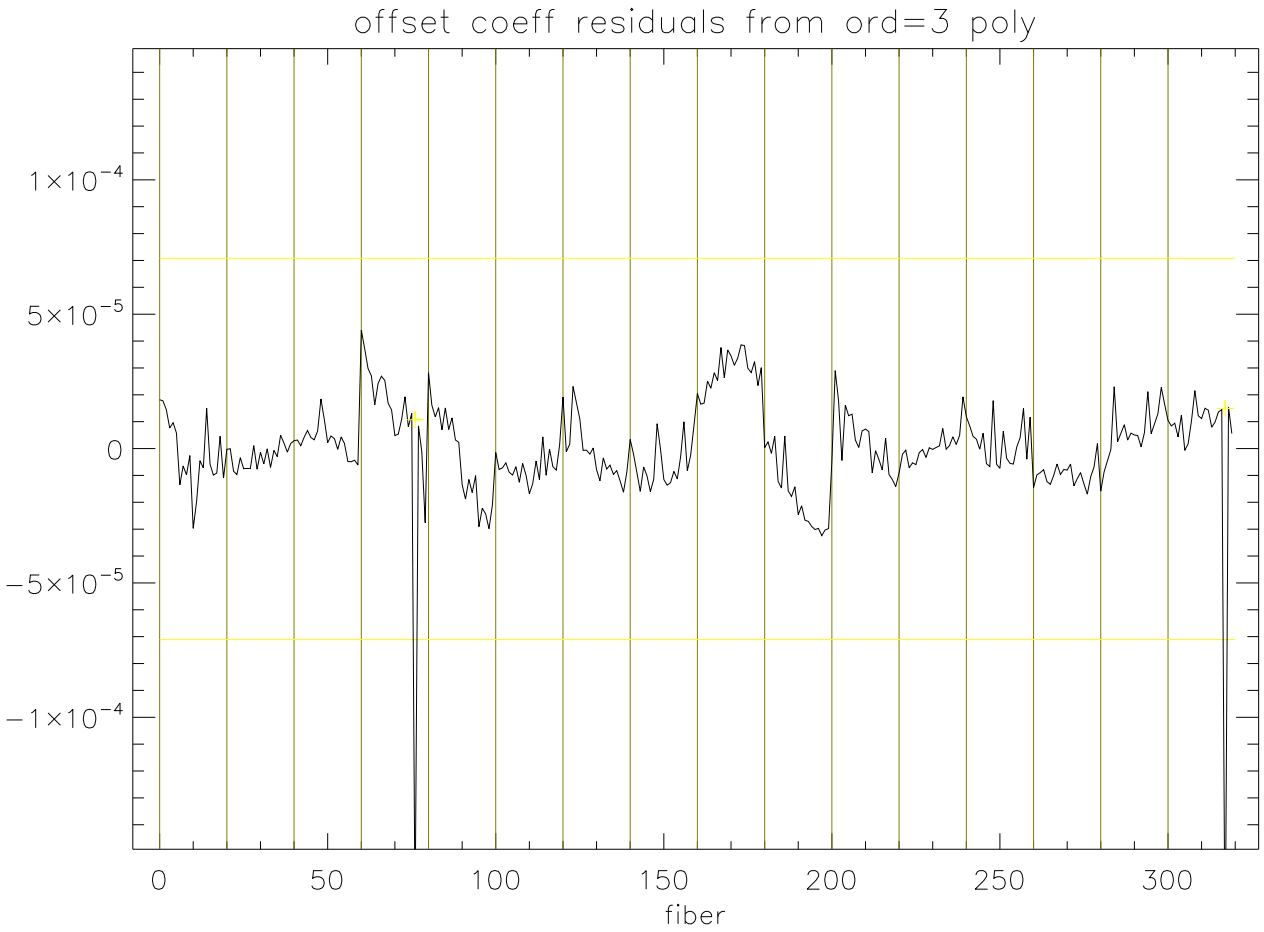

Number of sky fibers = 14
PLATE=3198 MJD=54865 sdR-r1-00058690.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

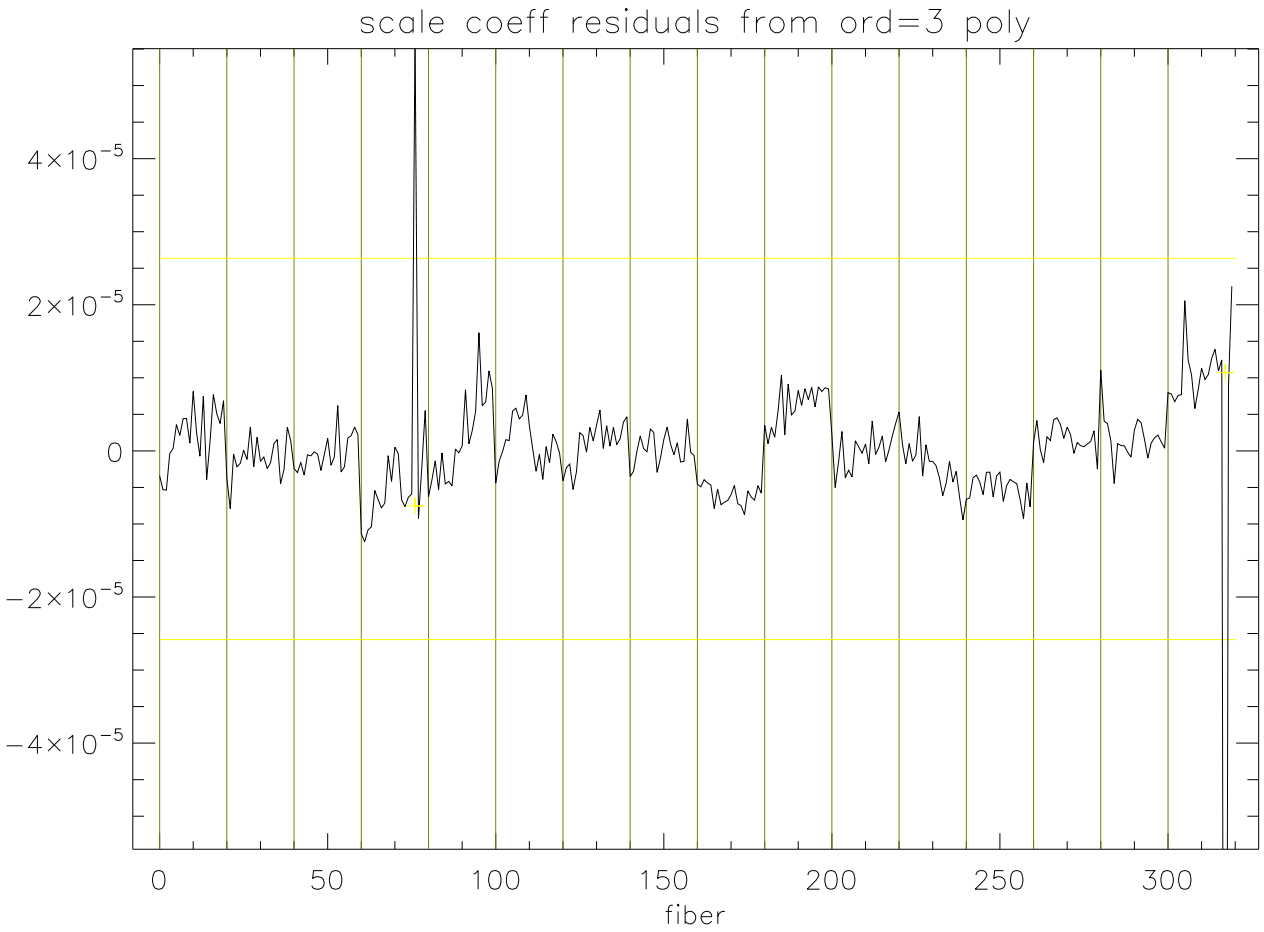

PLATE=3198 MJD=54865 sdR-r1-00058690.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.94 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

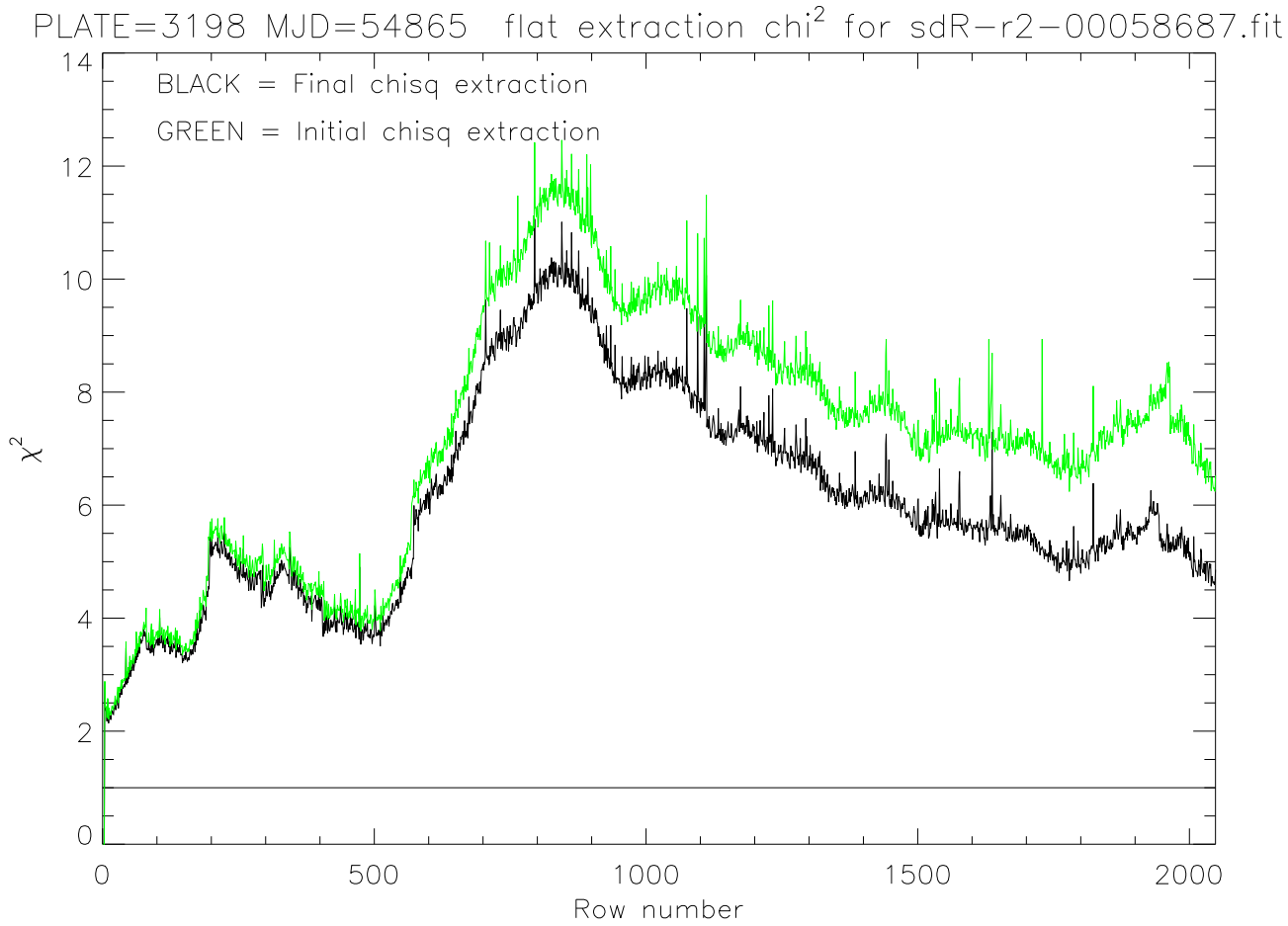

PLATE=3198 MJD=54865 sdR-r1-00058690.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.08 %
Fiber number
Focal Distance [mm]
Airmass

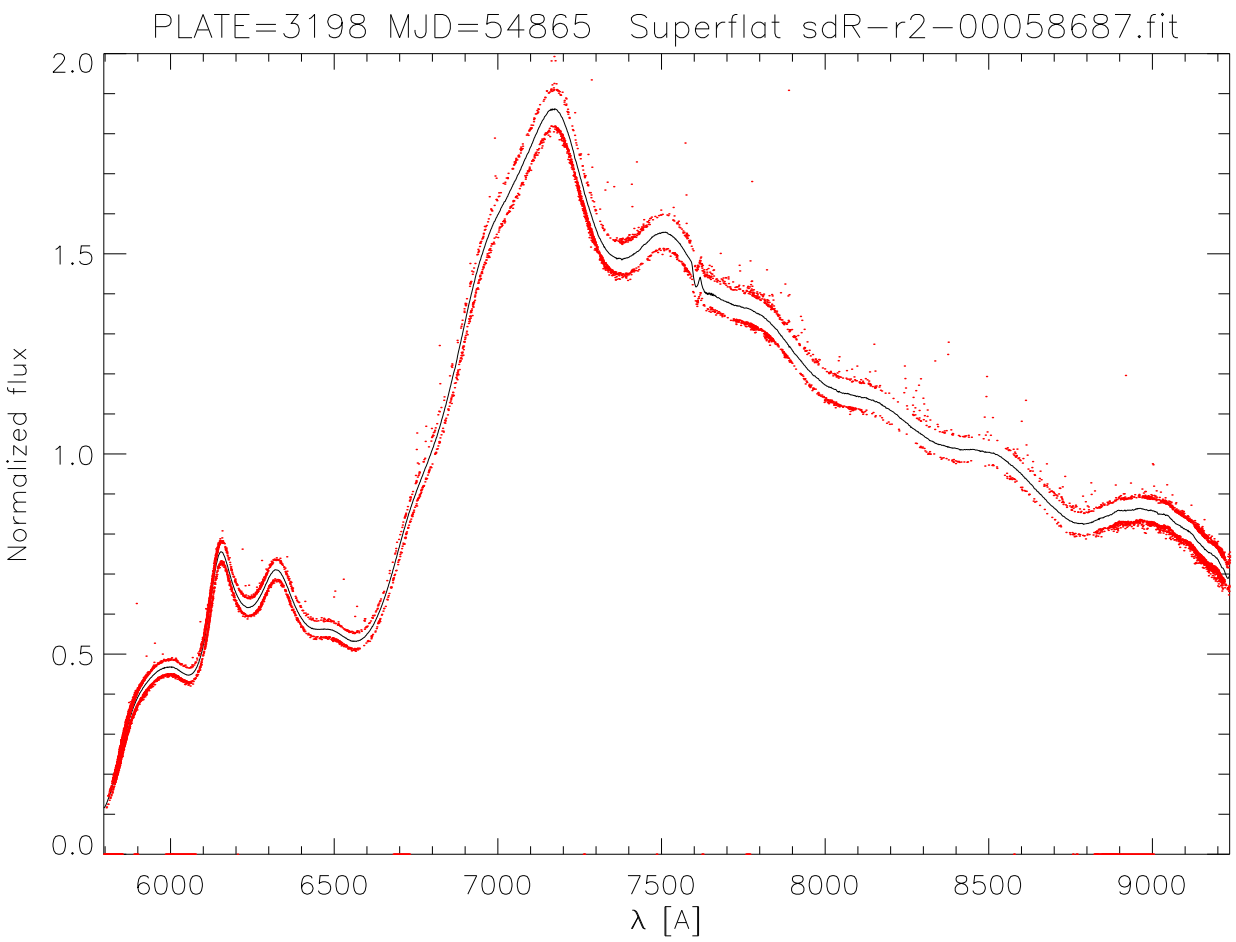

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

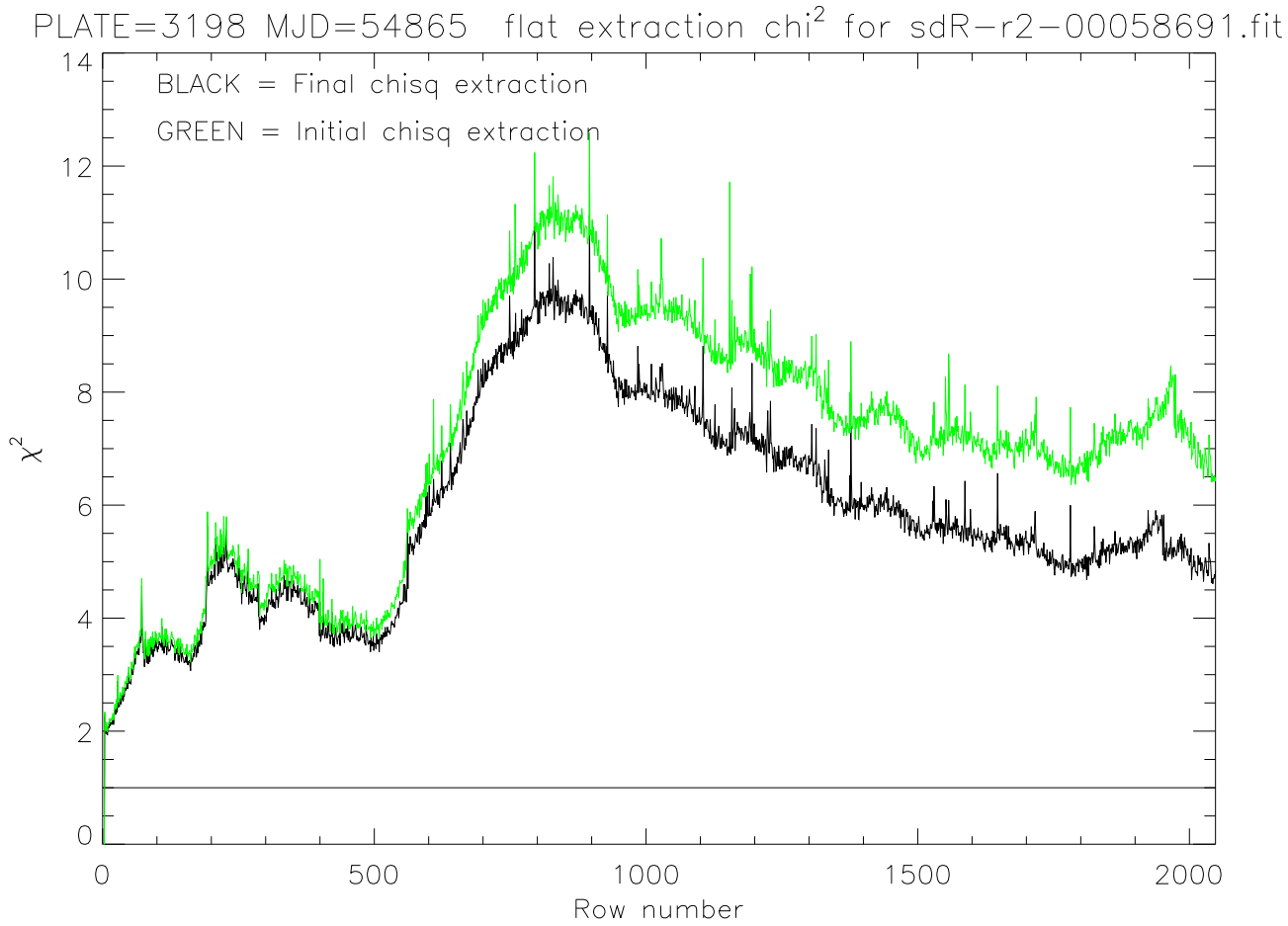

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

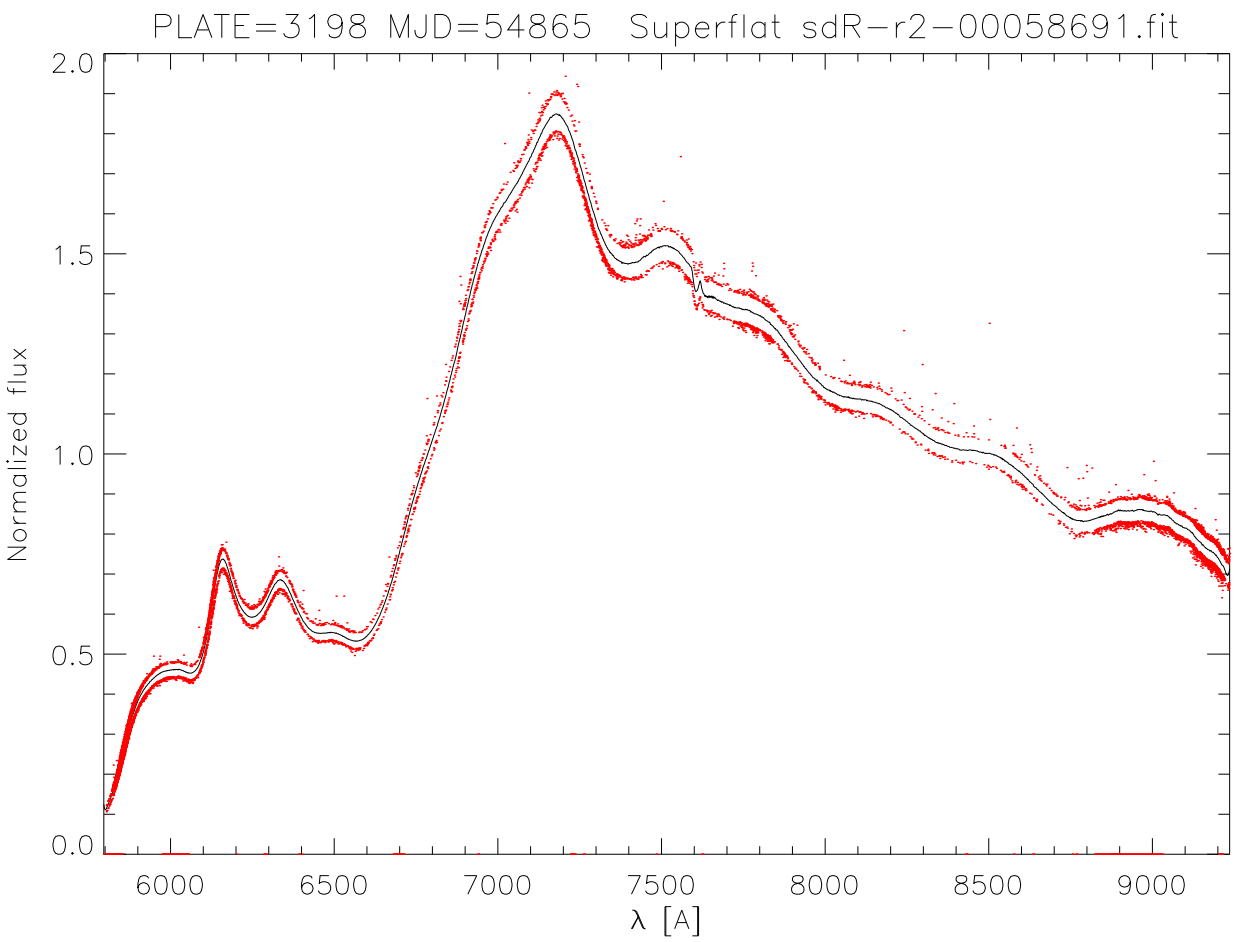

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

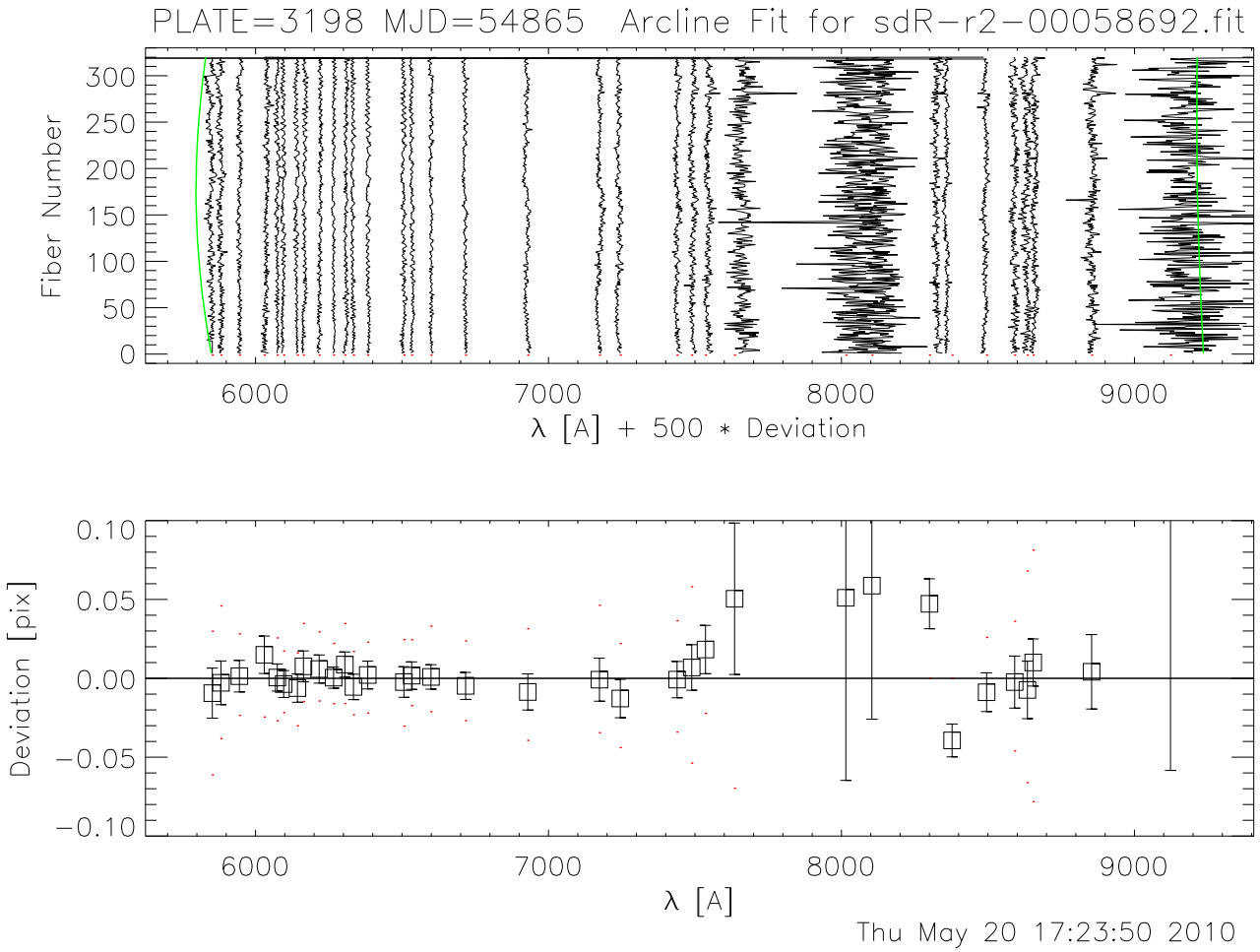

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

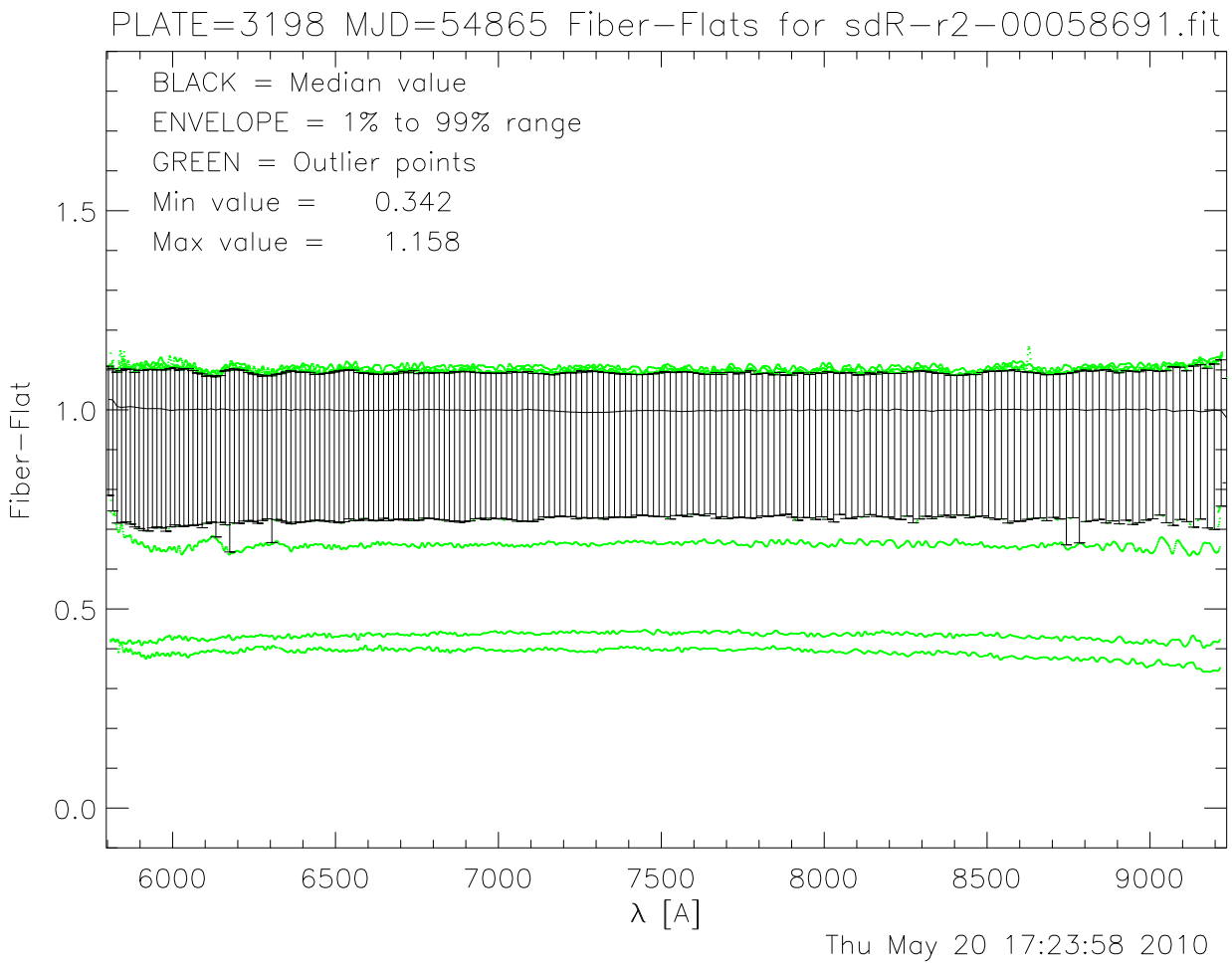

PLATE=3198 MJD=54865 flat extraction chi^2 for sdR−r2−00058687.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

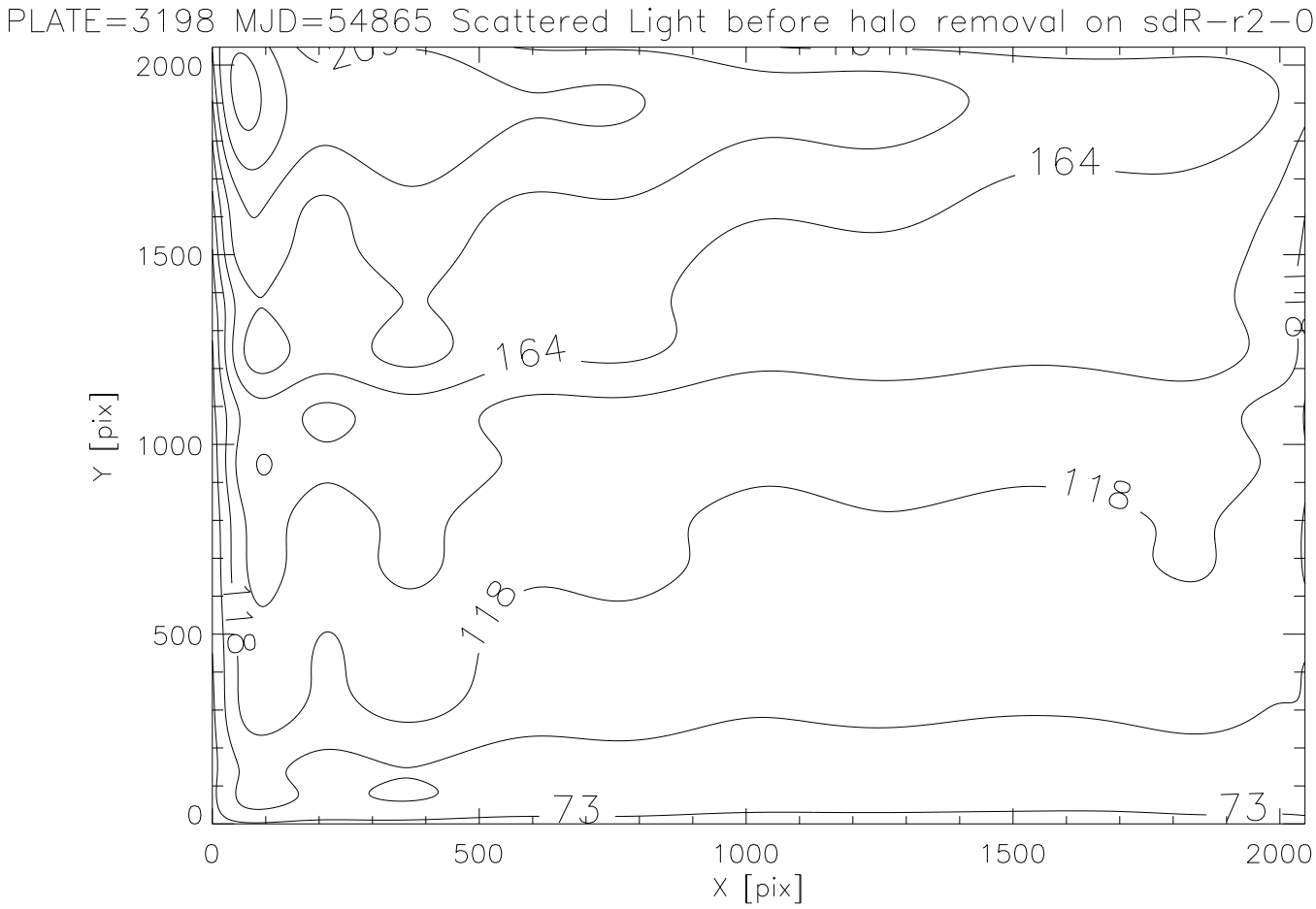

PLATE=3198 MJD=54865 Superflat sdR-r2-00058687.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

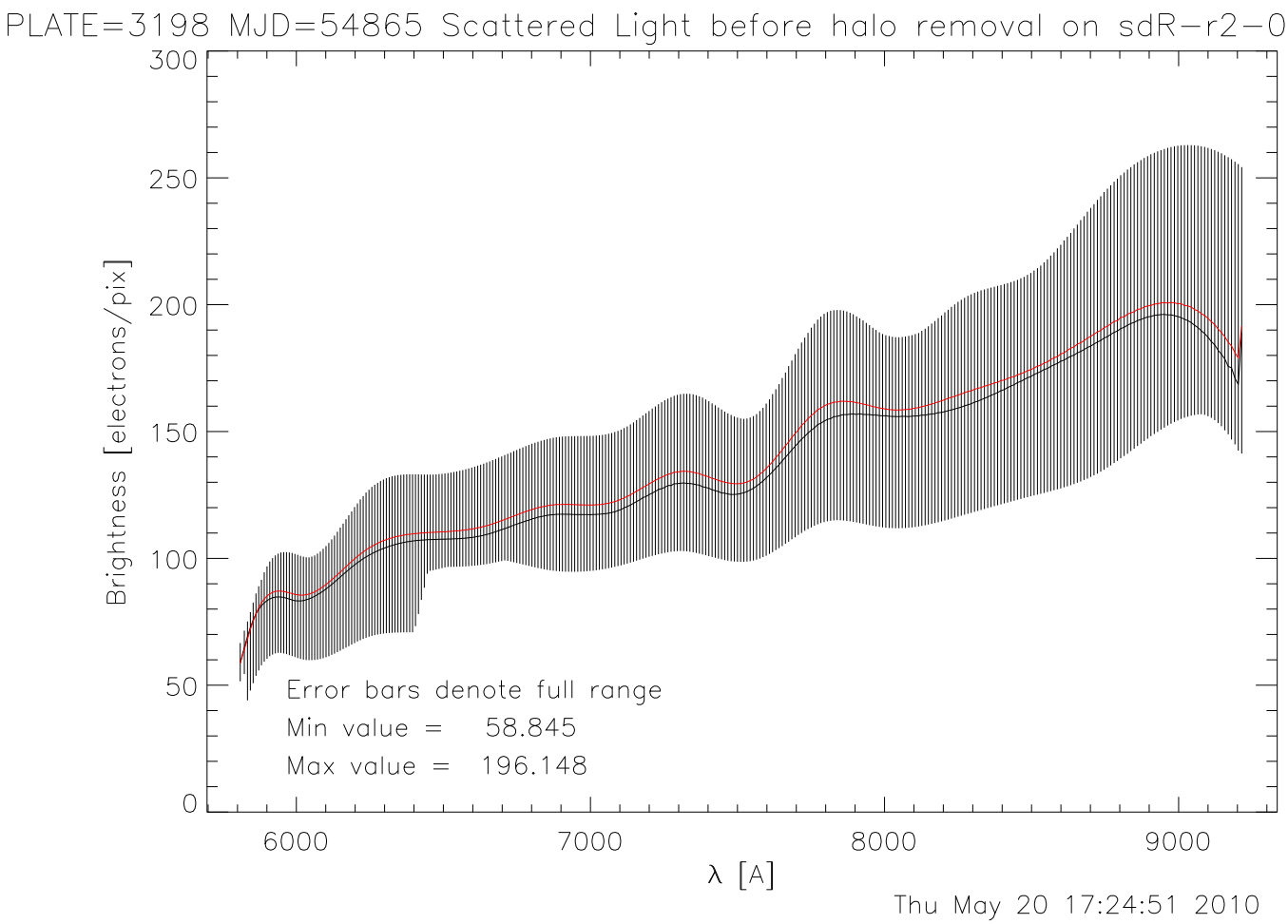

PLATE=3198 MJD=54865 flat extraction chi^2 for sdR−r2−00058691.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

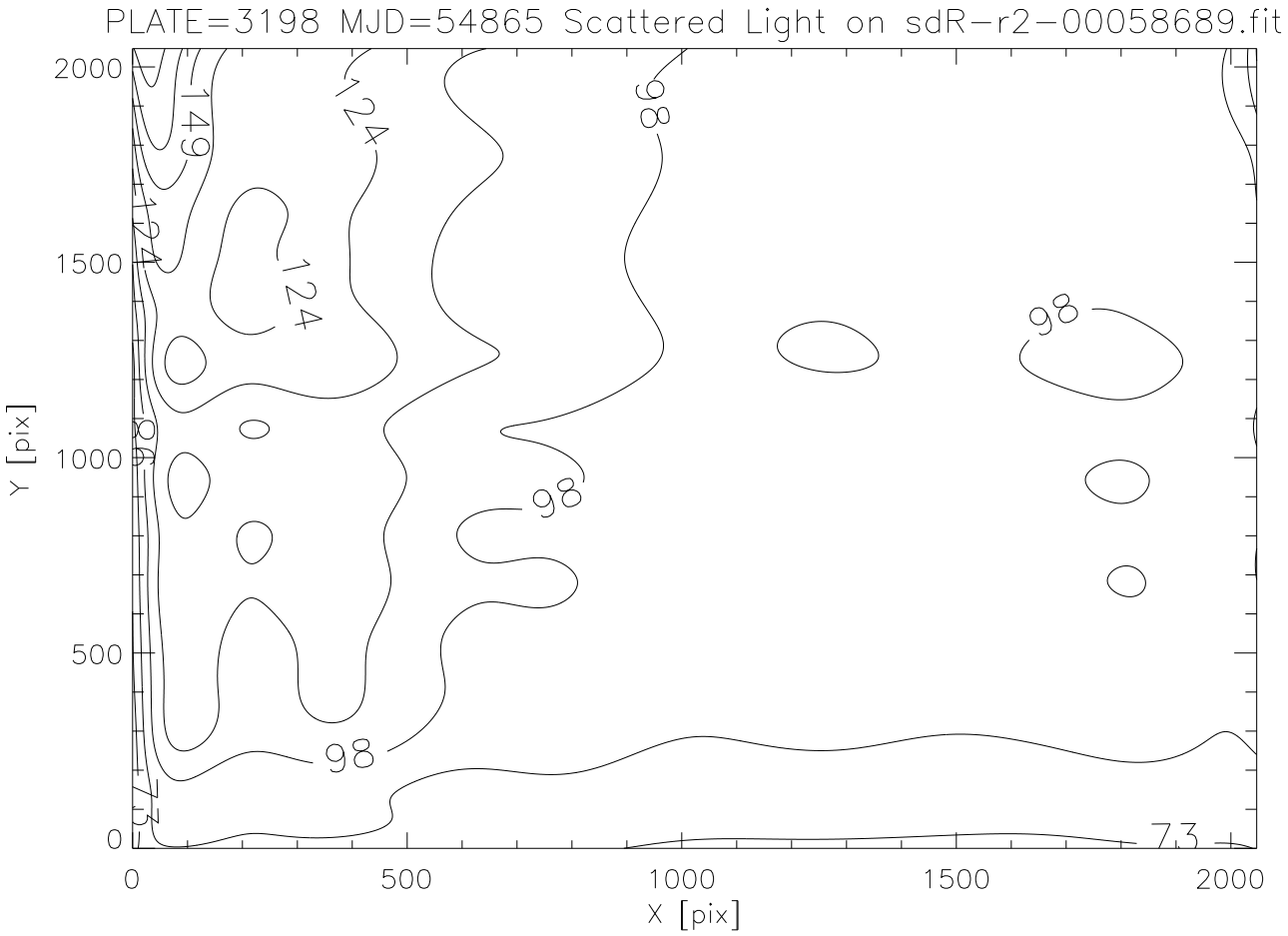

PLATE=3198 MJD=54865 Superflat sdR-r2-00058691.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

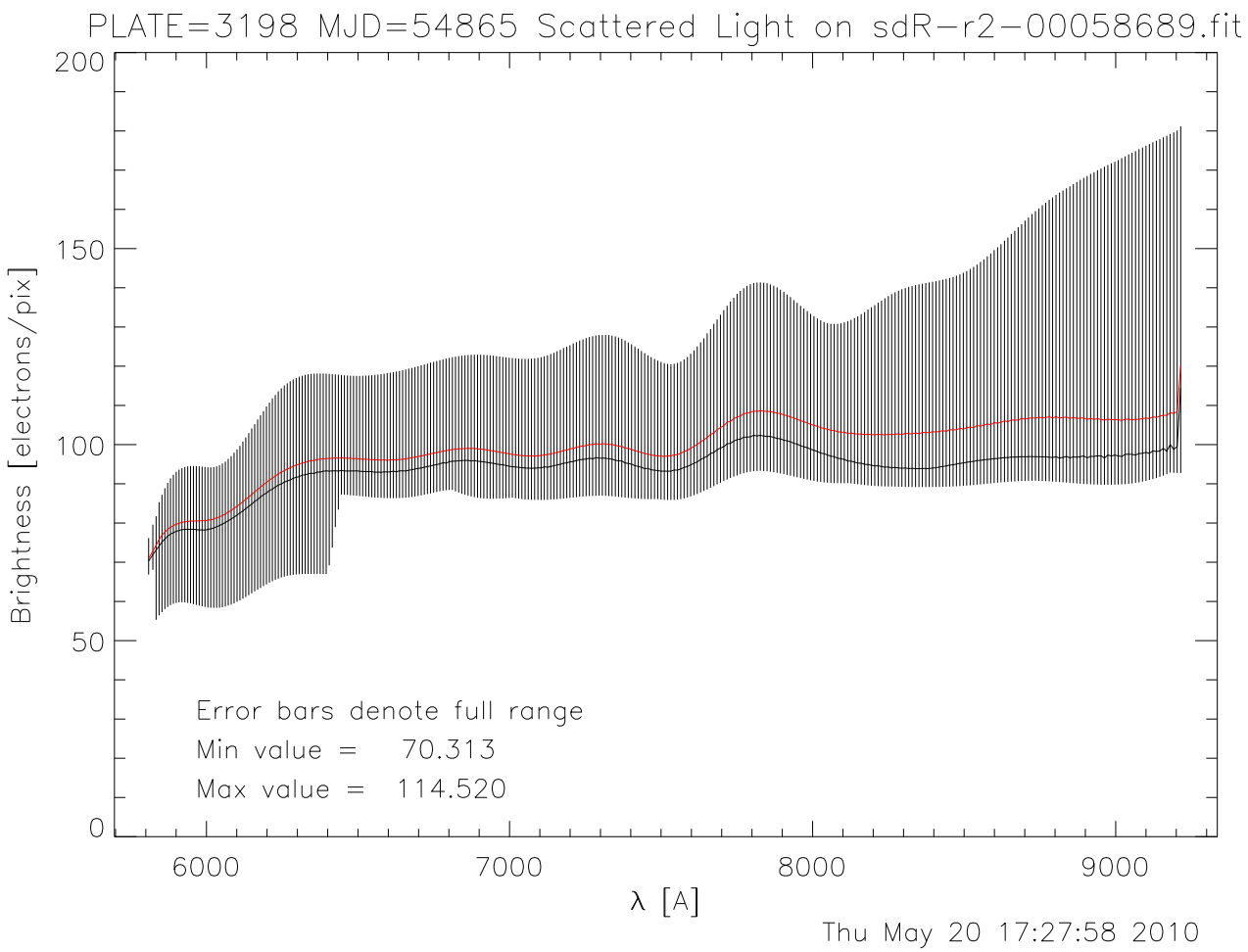

PLATE=3198 MJD=54865 Arcline Fit for sdR-r2-00058692.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu May 20 17:23:50 2010

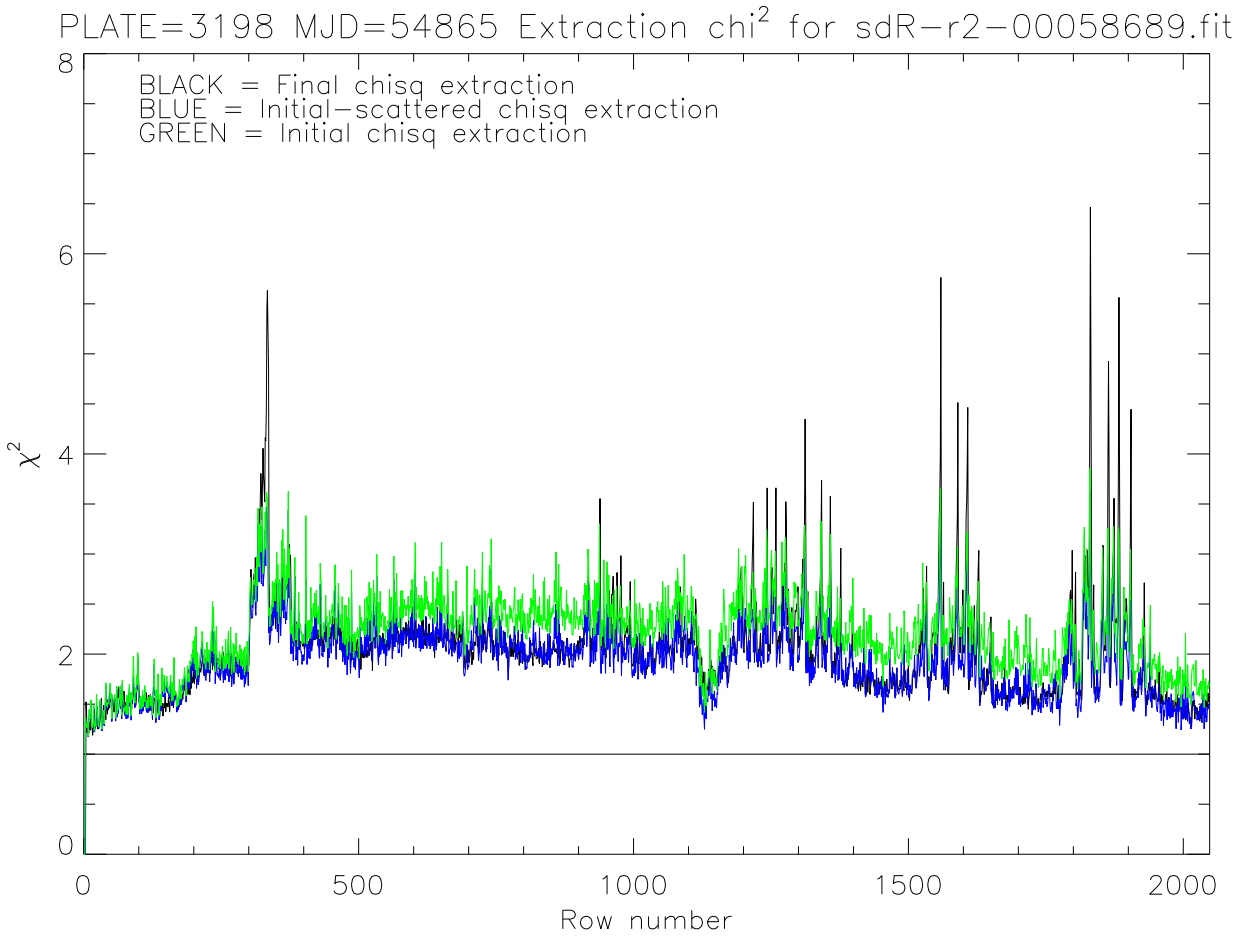

PLATE=3198 MJD=54865 Fiber−Flats for sdR−r2−00058691.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.342
Max value = 1.158
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu May 20 17:23:58 2010

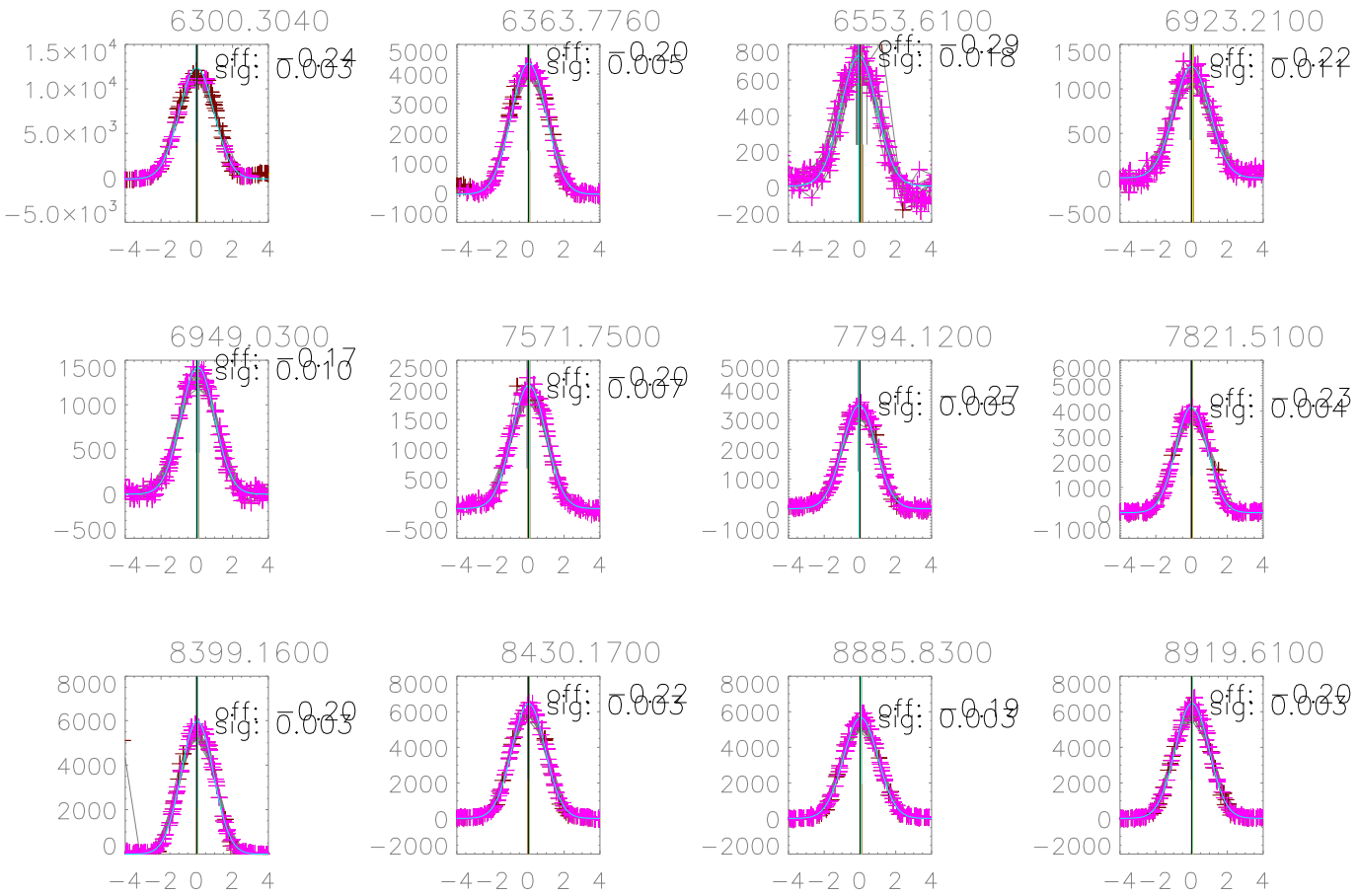

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-r2-00058689.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
164
164
0
118
118
118
73
73

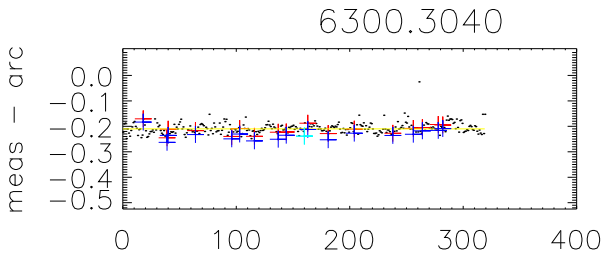

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-r2-00058689.fi
Brightness [electrons/pix]
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 58.845
Max value = 196.148
Thu May 20 17:24:51 2010

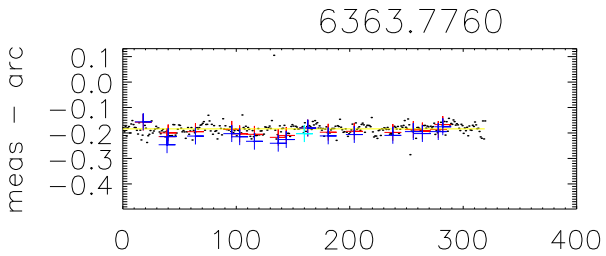

PLATE=3198 MJD=54865 Scattered Light on sdR-r2-00058689.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
149
124
98
73
7.3

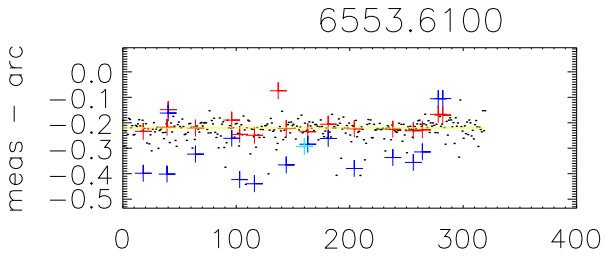

PLATE=3198 MJD=54865 Scattered Light on sdR-r2-00058689.fit
Brightness [electrons/pix]
200
150
100
50
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 70.313
Max value = 114.520
Thu May 20 17:27:58 2010

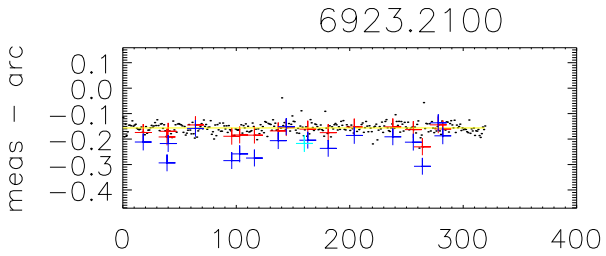

PLATE=3198 MJD=54865 Extraction chi^2 for sdR-r2-00058689.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

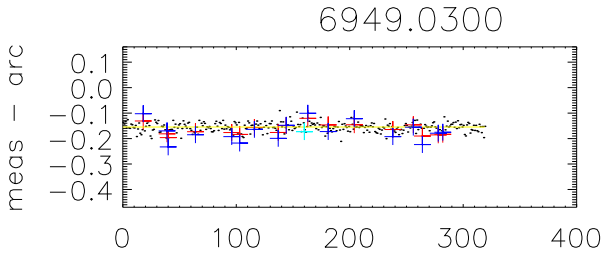

6300.3040
off: −0.24
sig: 0.003
6363.7760
off: −0.20
sig: 0.005
6553.6100
off: −0.29
sig: 0.018
6923.2100
off: −0.22
sig: 0.011
6949.0300
off: −0.17
sig: 0.010
7571.7500
off: −0.20
sig: 0.007
7794.1200
off: −0.27
sig: 0.005
7821.5100
off: −0.23
sig: 0.004
8399.1600
off: −0.20
sig: 0.003
8430.1700
off: −0.22
sig: 0.003
8885.8300
off: −0.19
sig: 0.003
8919.6100
off: −0.20
sig: 0.003

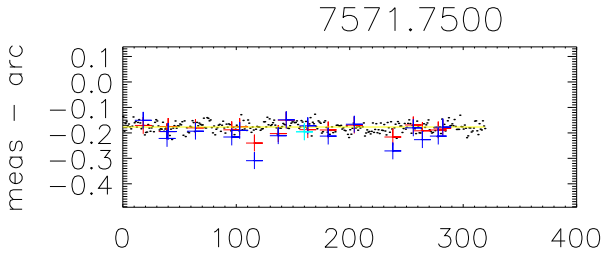

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

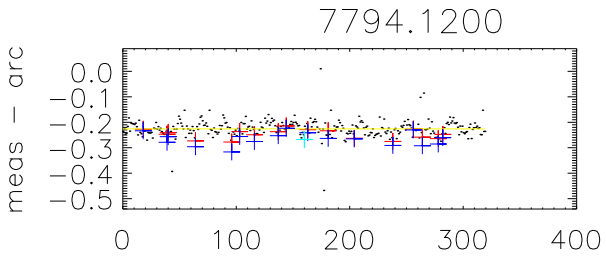

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

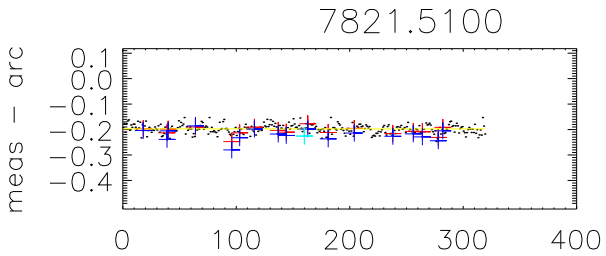

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

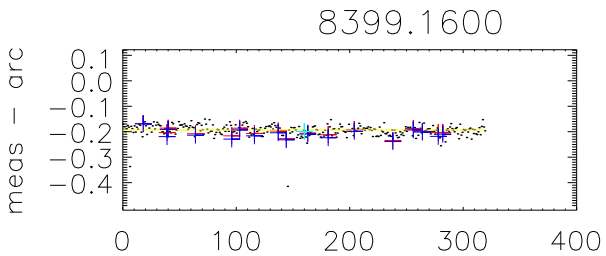

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

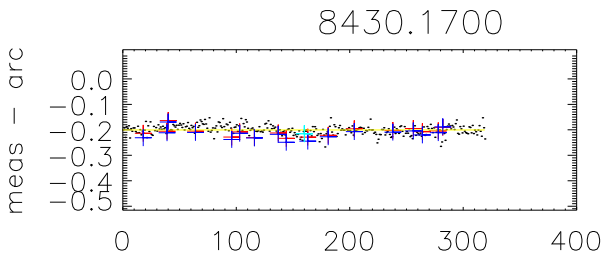

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

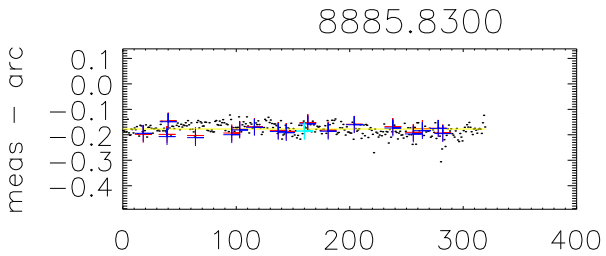

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

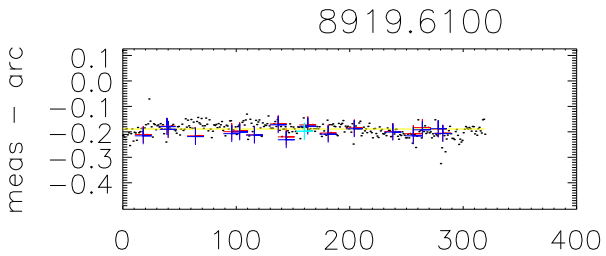

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

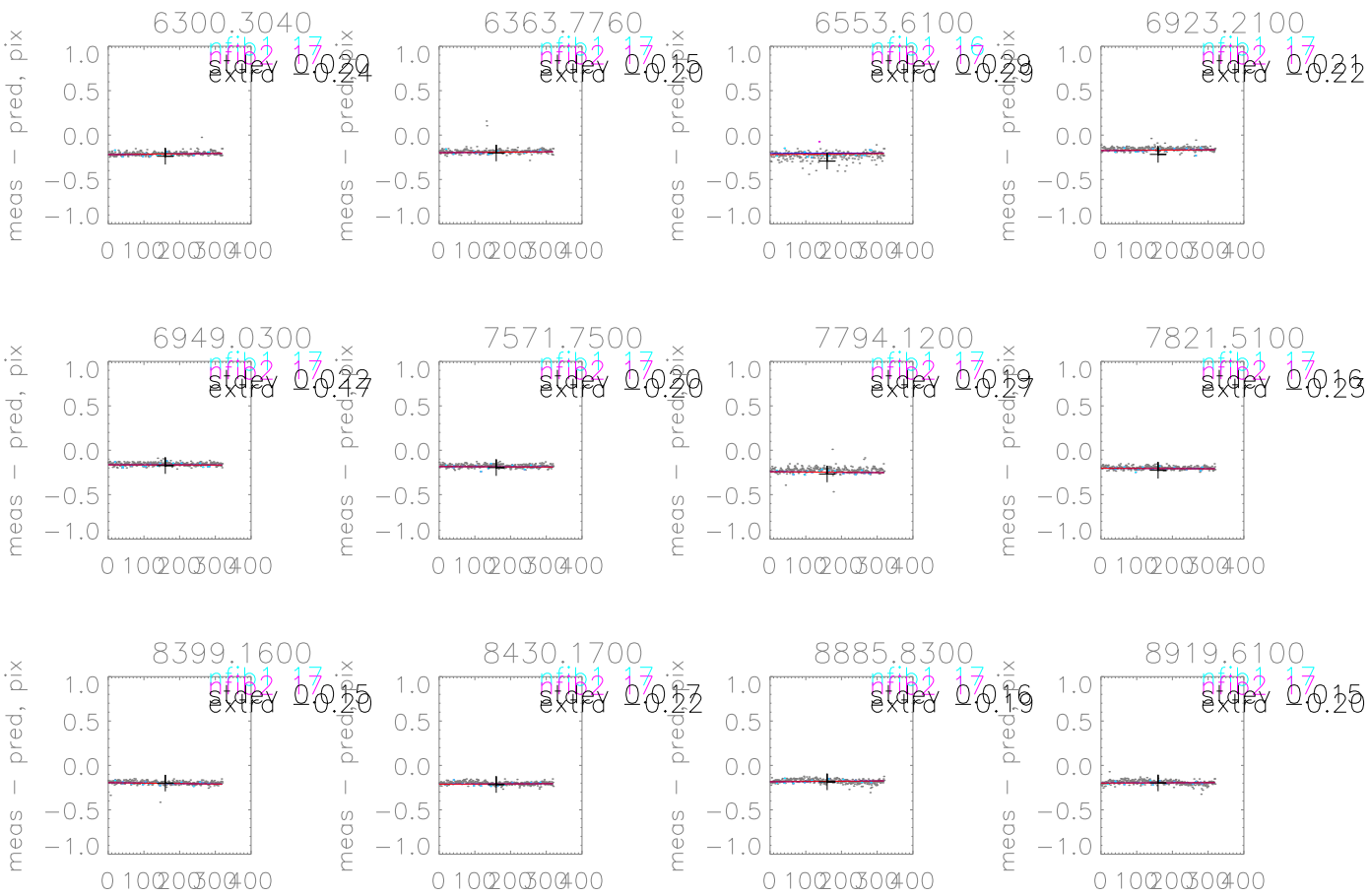

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

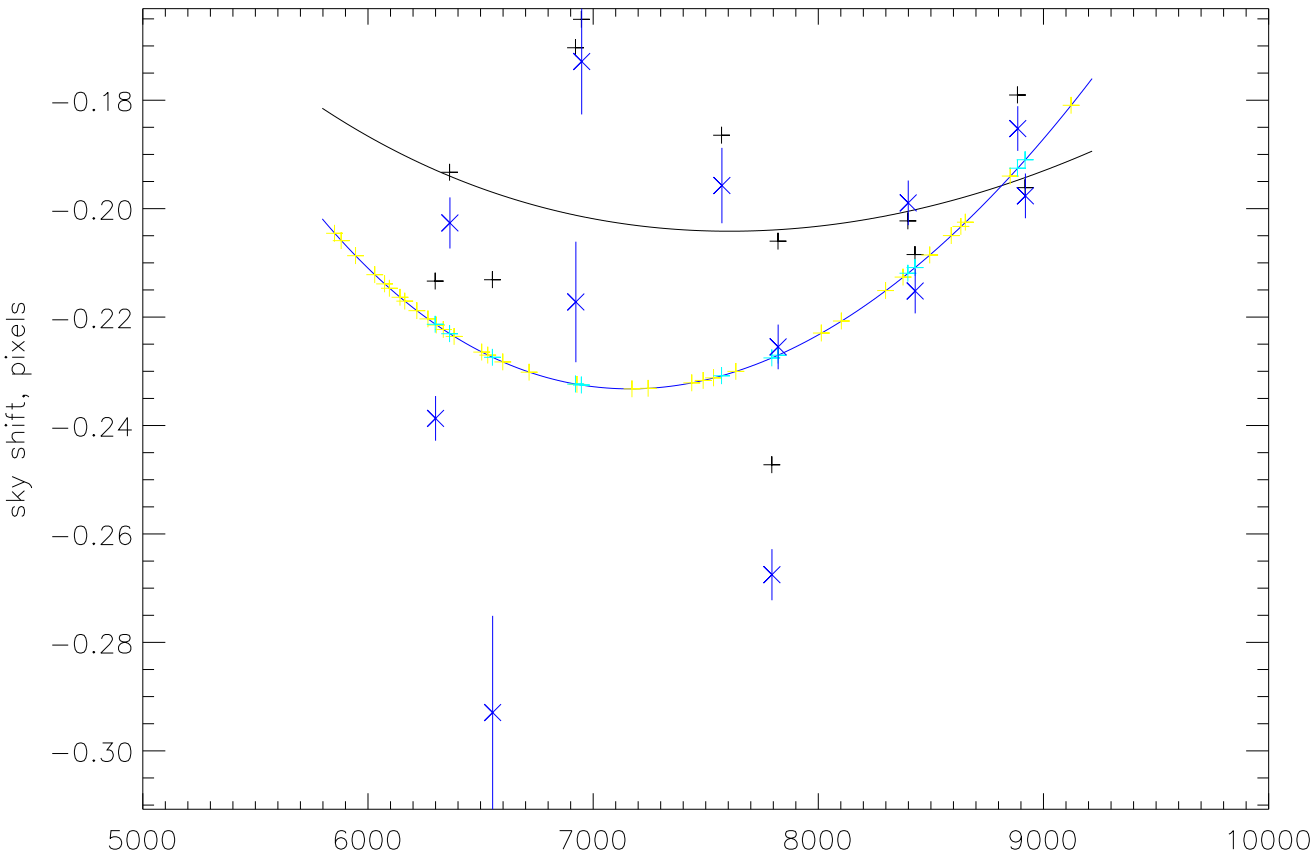

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

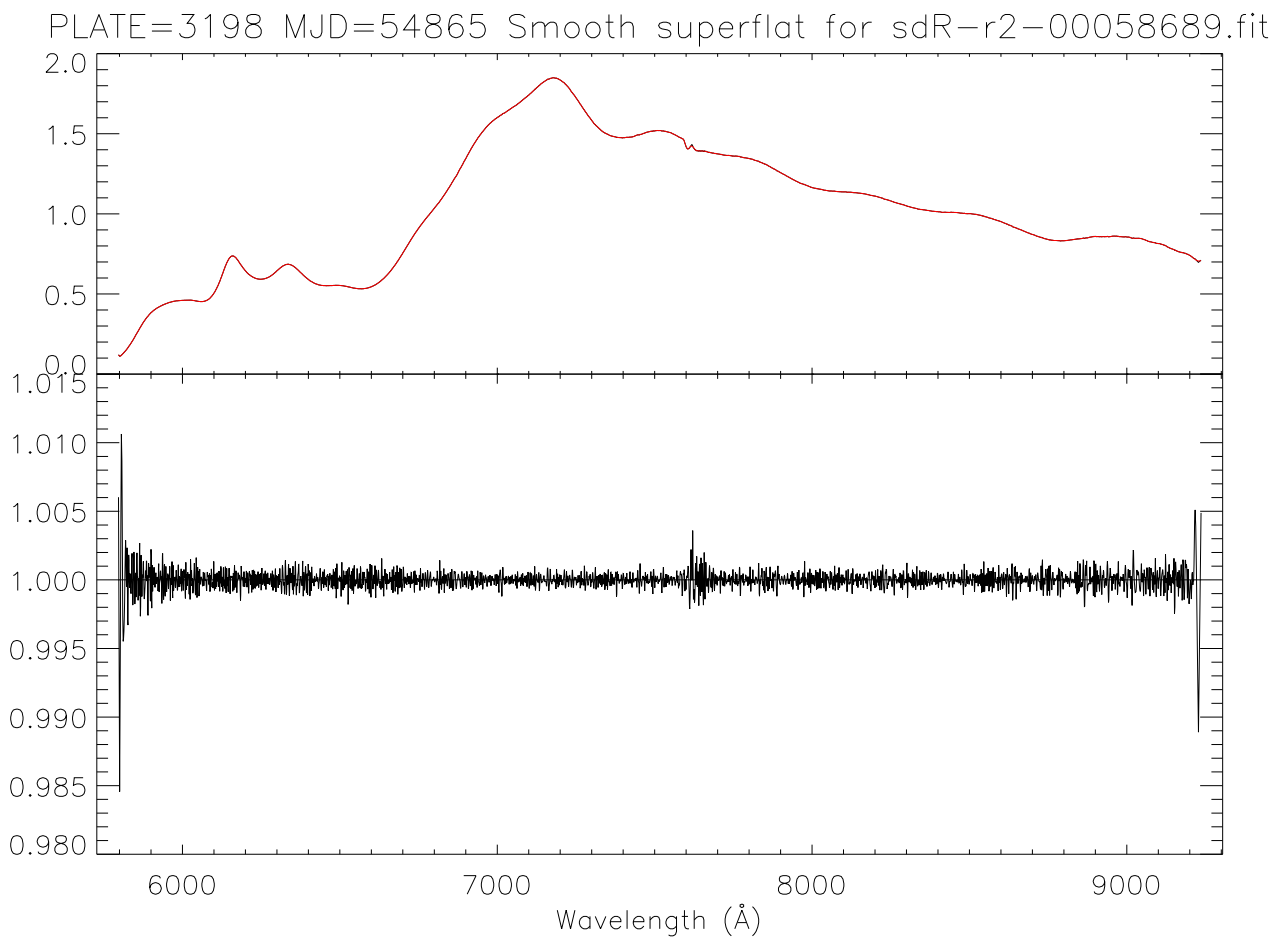

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

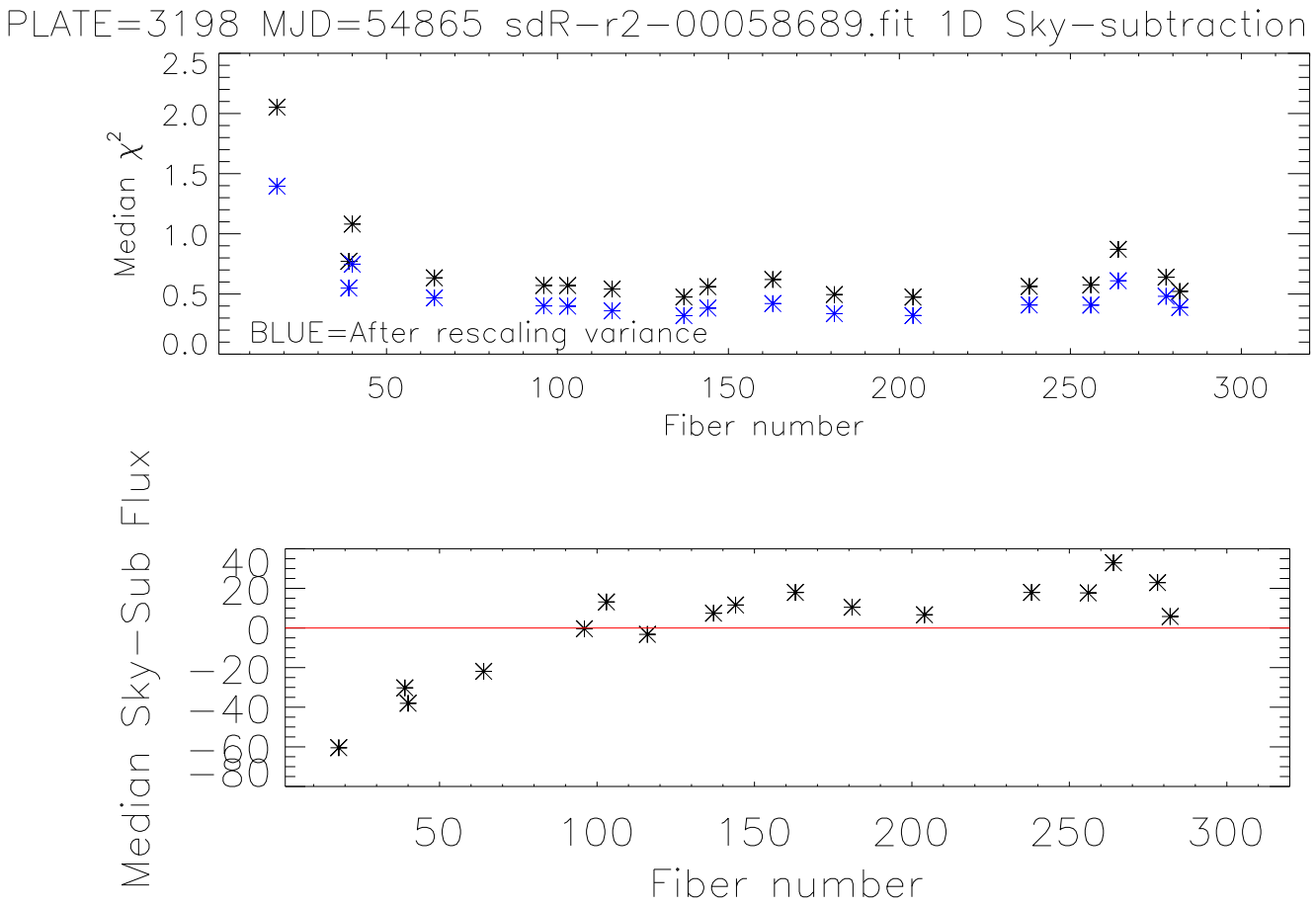

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

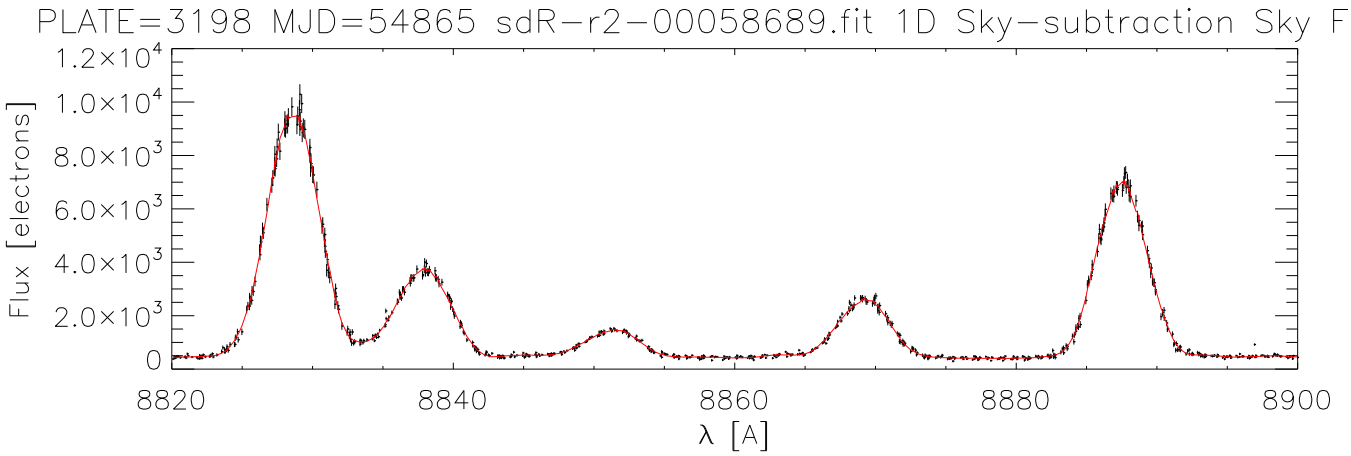

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 17
mfib2 17
stdev 0.20
extra 0.24
stdev 0.20
extra 0.20
stdev 0.29
extra 0.29
stdev 0.21
extra 0.22
stdev 0.22
extra 0.47
stdev 0.20
extra 0.20
stdev 0.19
extra 0.27
stdev 0.16
extra 0.23
stdev 0.15
extra 0.20
stdev 0.17
extra 0.22
stdev 0.16
extra 0.19
stdev 0.15
extra 0.20

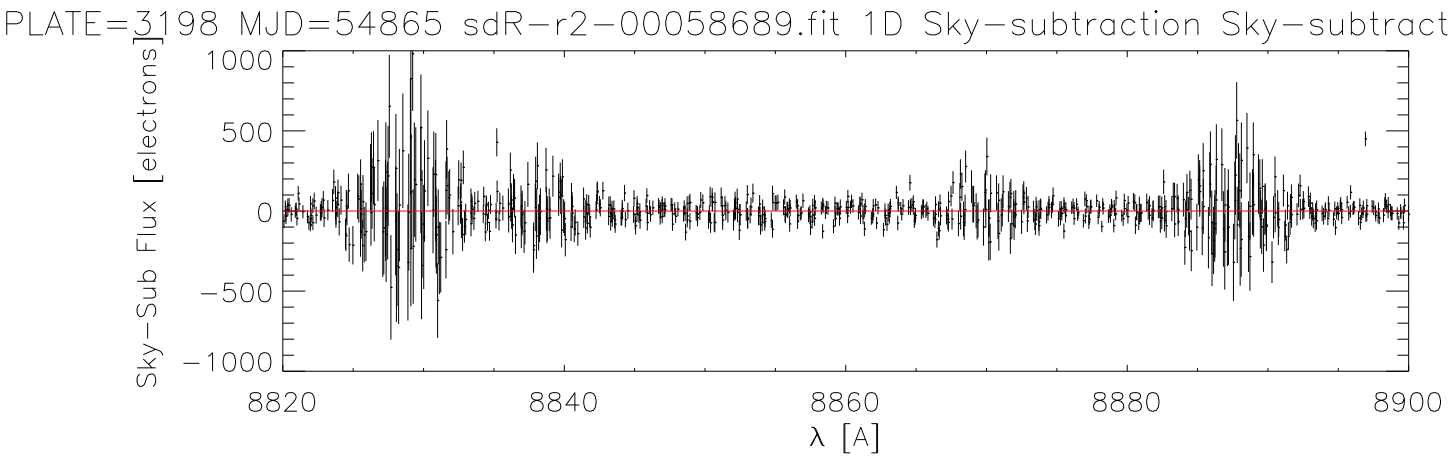

sky shift, pixels
−0.18
−0.20
−0.22
−0.24
−0.26
−0.28
−0.30
5000
6000
7000
8000
9000
10000

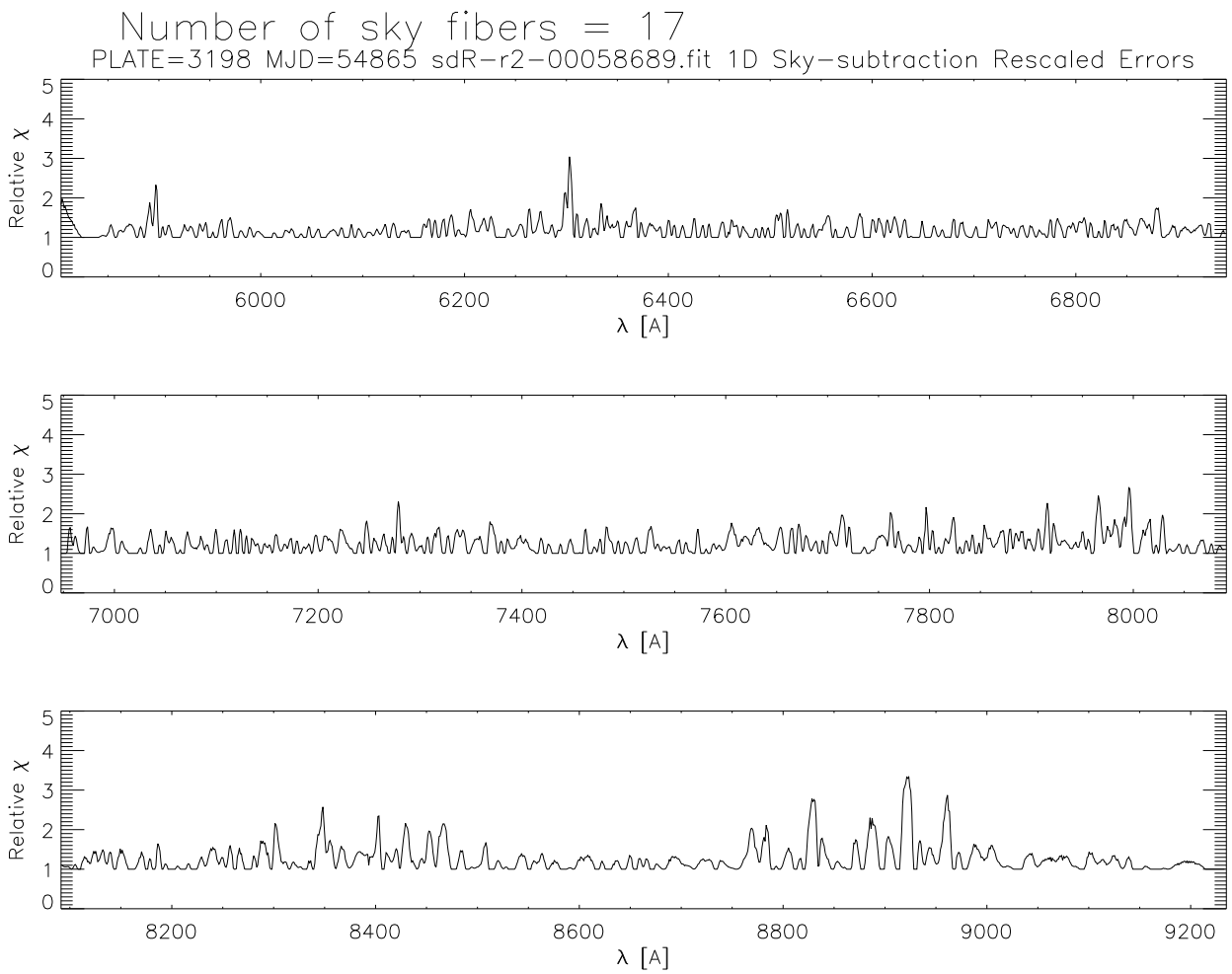
es= −0.0000

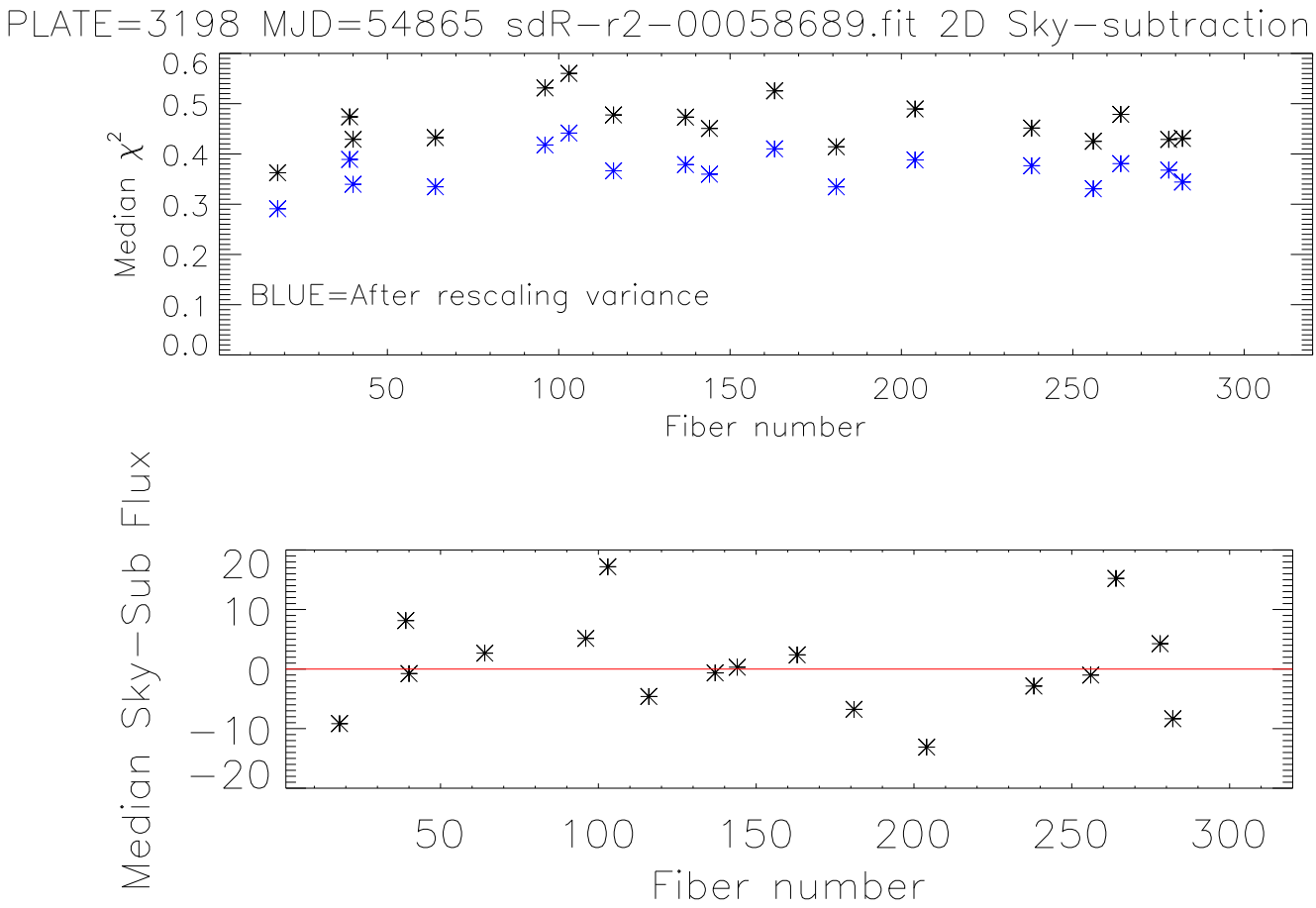

PLATE=3198 MJD=54865 Smooth superflat for sdR−r2−00058689.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
0.980
6000
7000
8000
9000
Wavelength (Å)

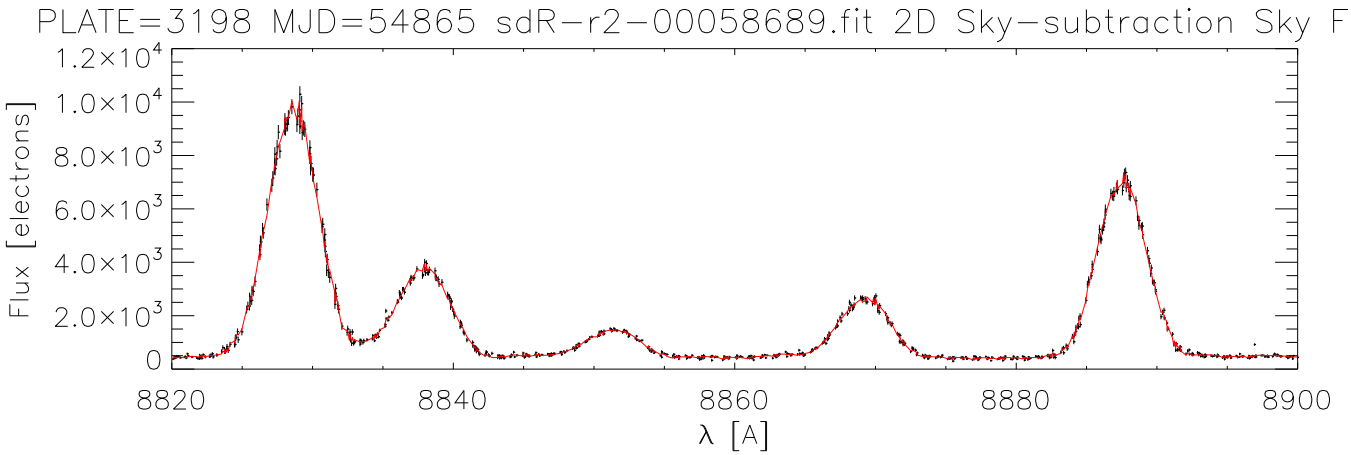

PLATE=3198 MJD=54865 sdR-r2-00058689.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

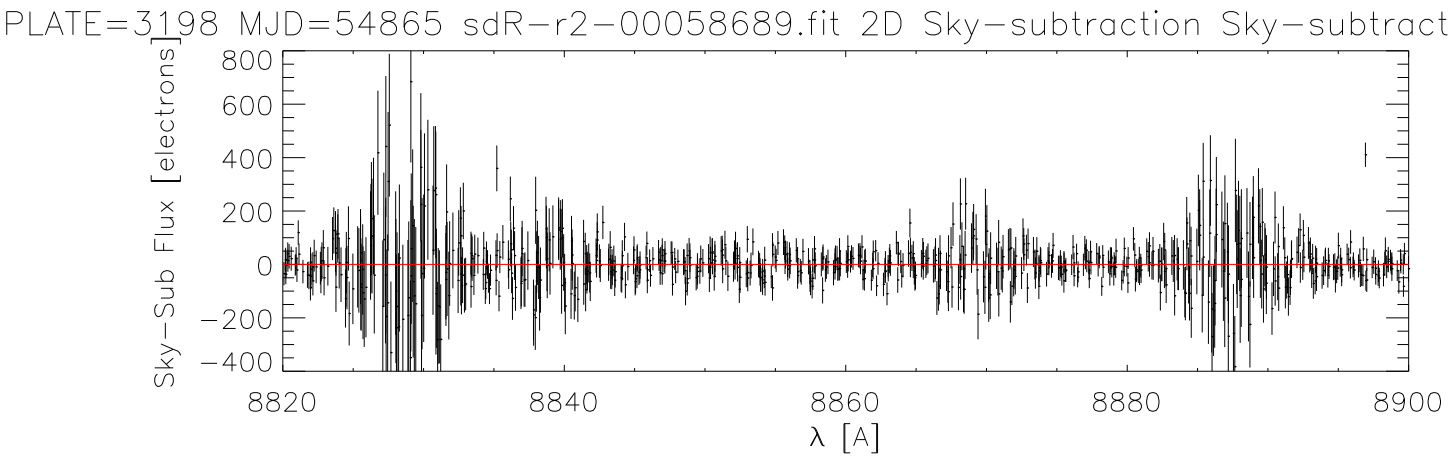

PLATE=3198 MJD=54865 sdR-r2-00058689.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

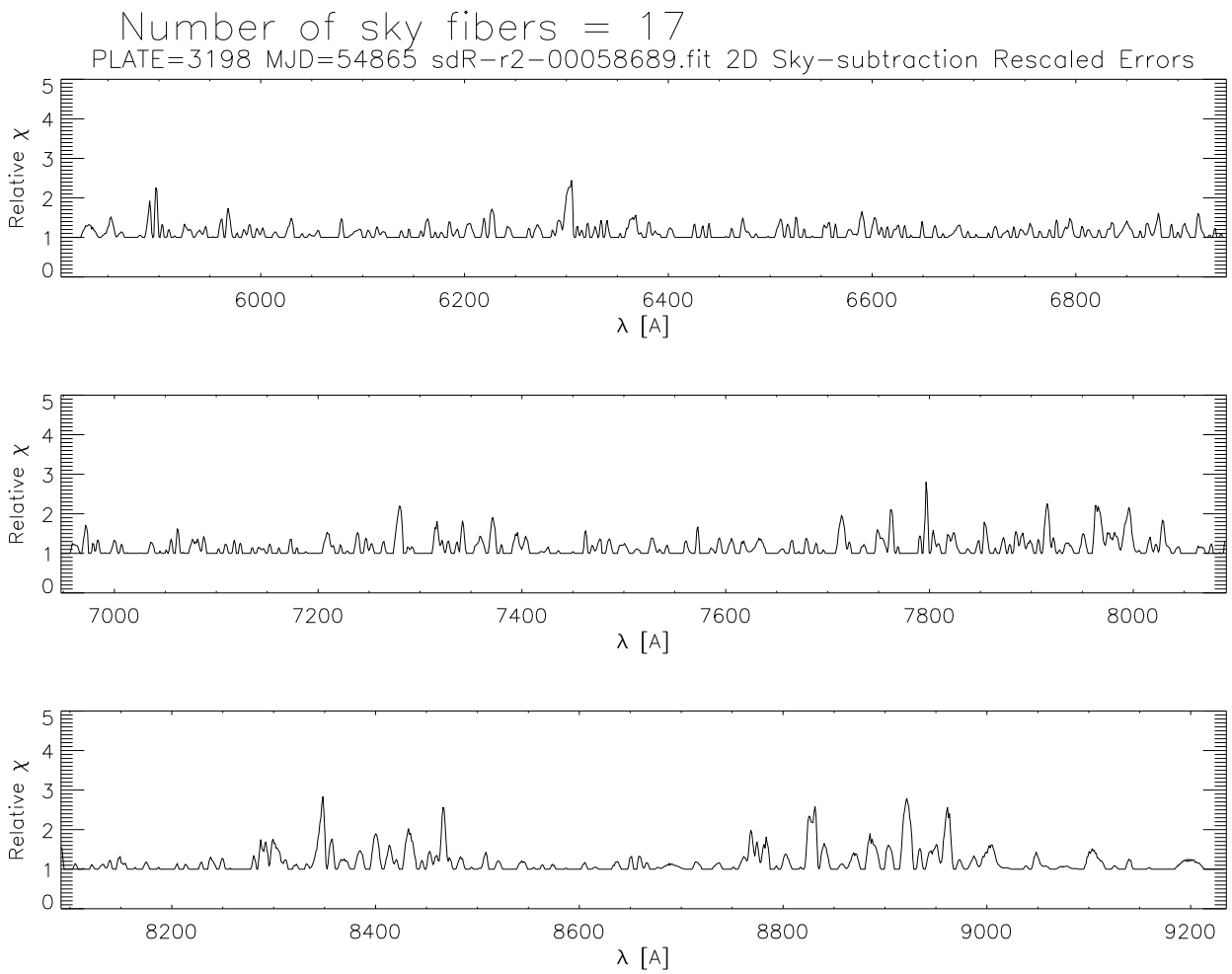

PLATE=3198 MJD=54865 sdR-r2-00058689.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
8820
8840
8860
8880
8900
λ [A]

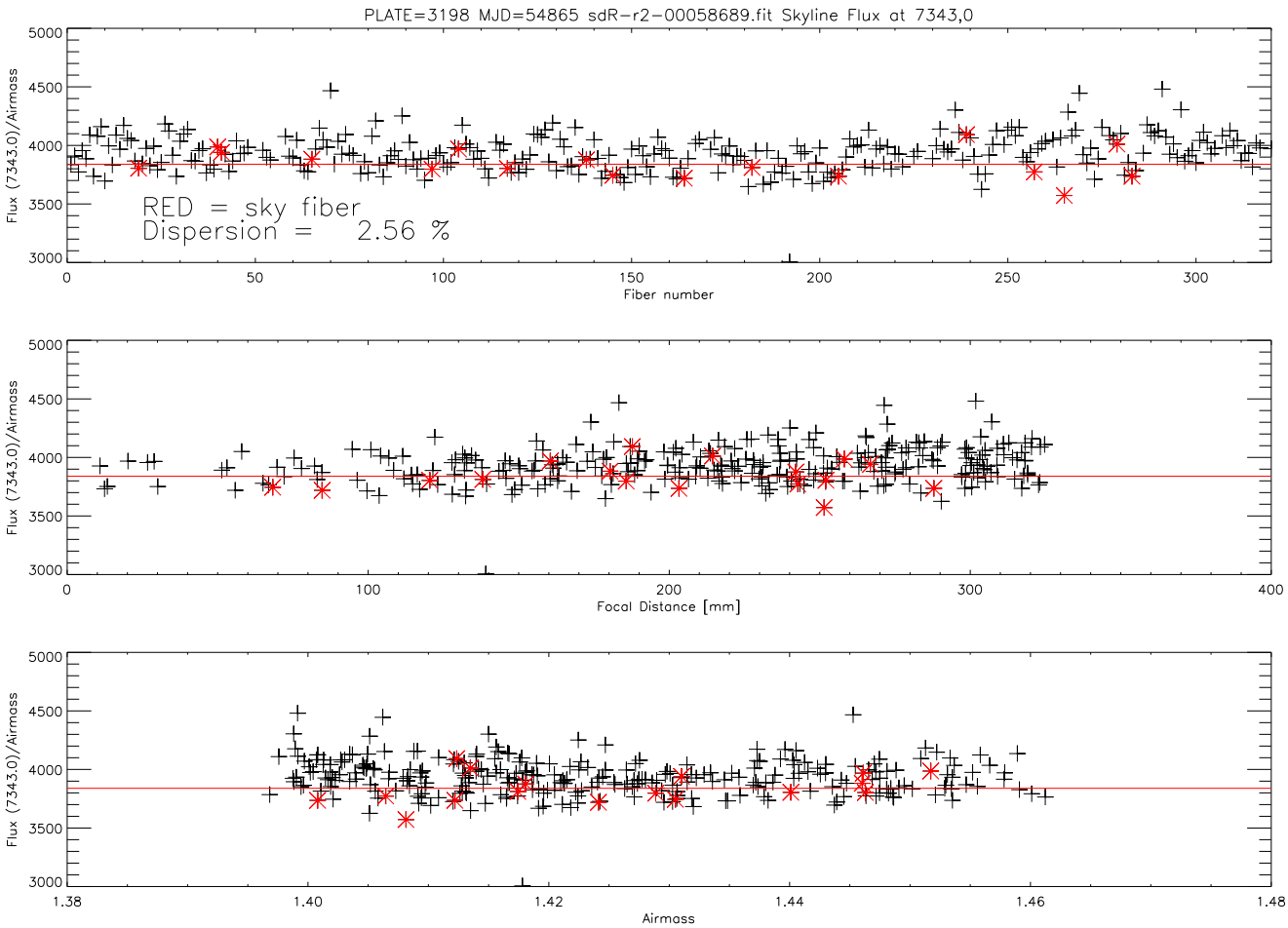

Number of sky fibers = 17
PLATE=3198 MJD=54865 sdR-r2-00058689.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

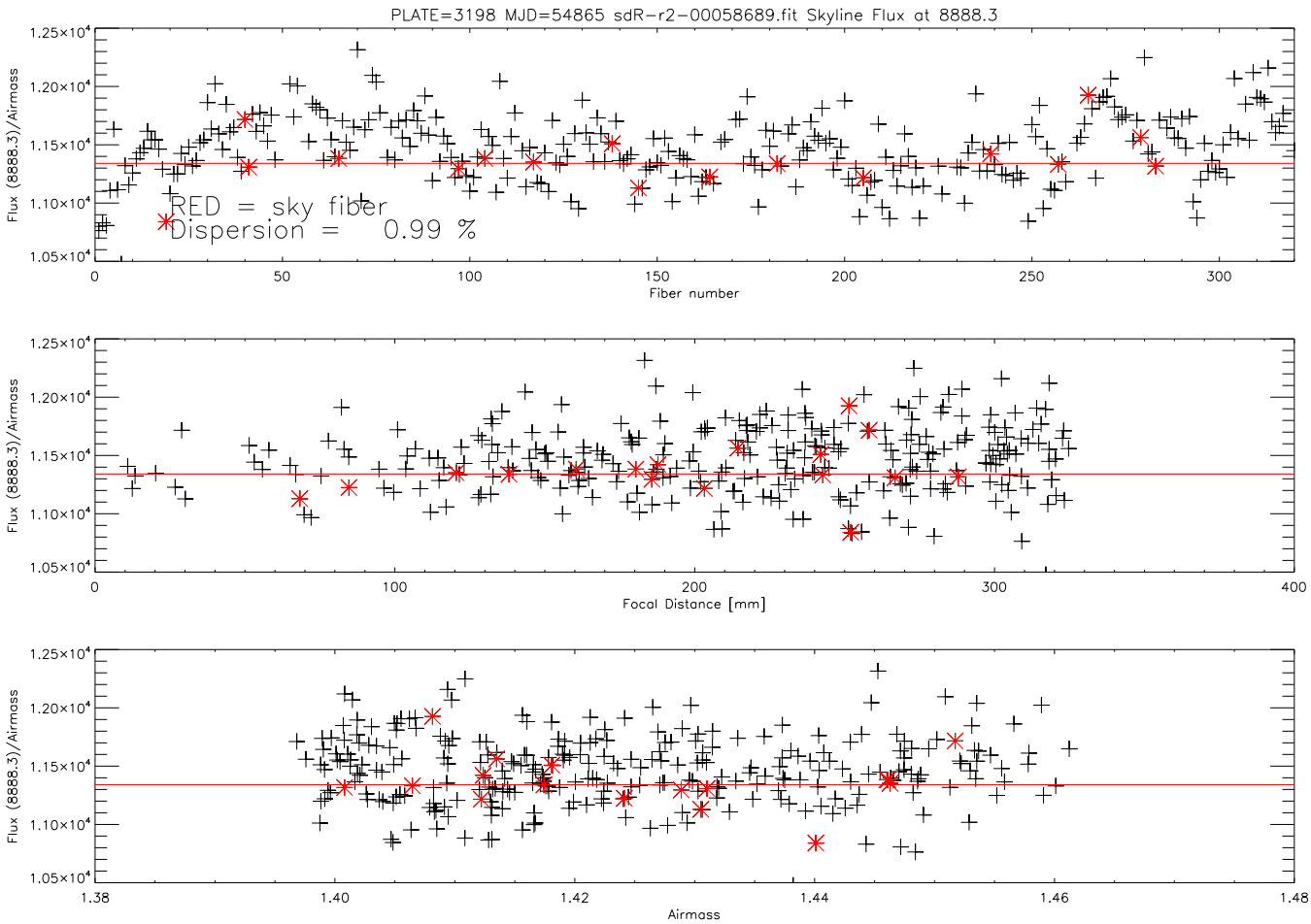

PLATE=3198 MJD=54865 sdR-r2-00058689.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

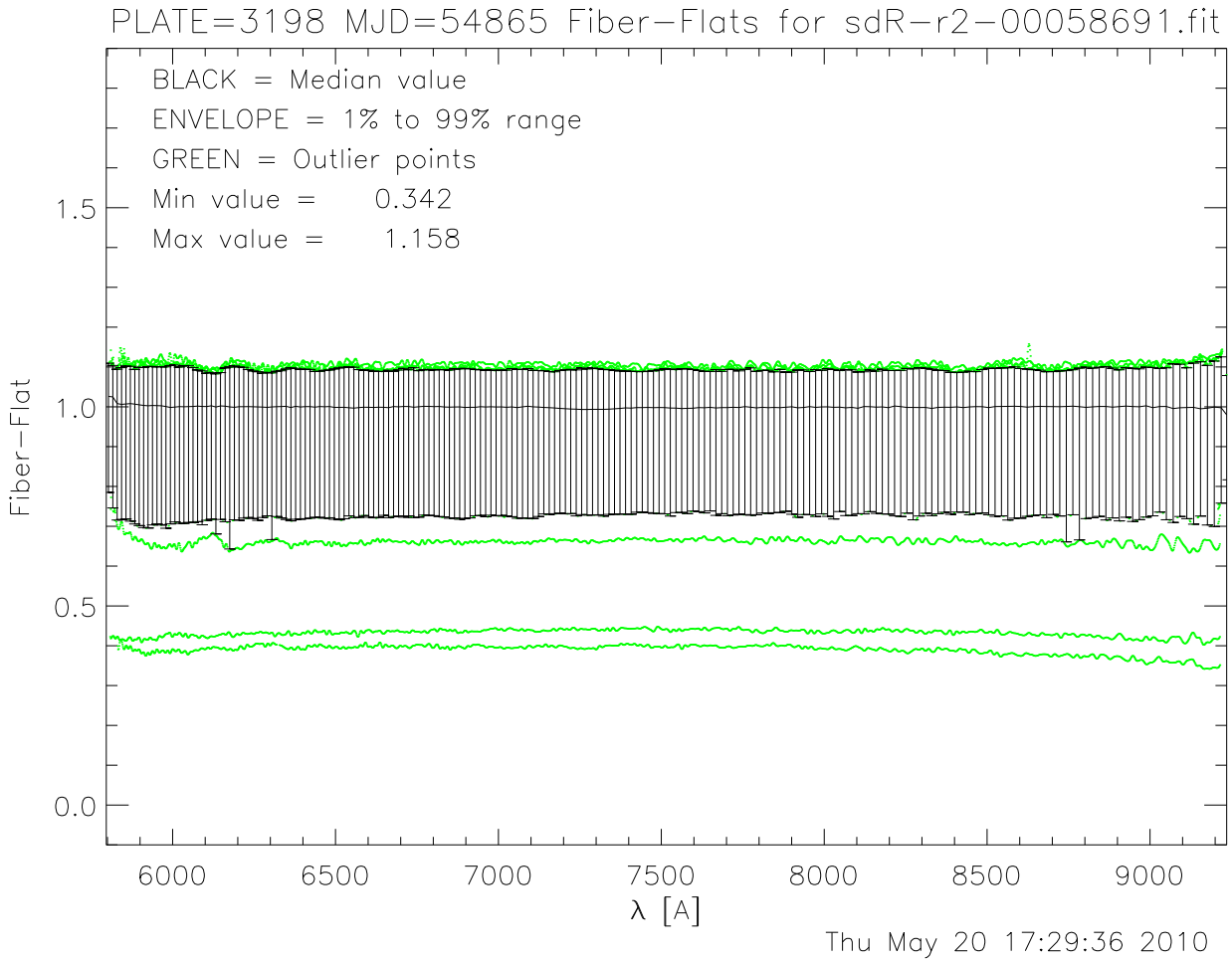

PLATE=3198 MJD=54865 sdR-r2-00058689.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

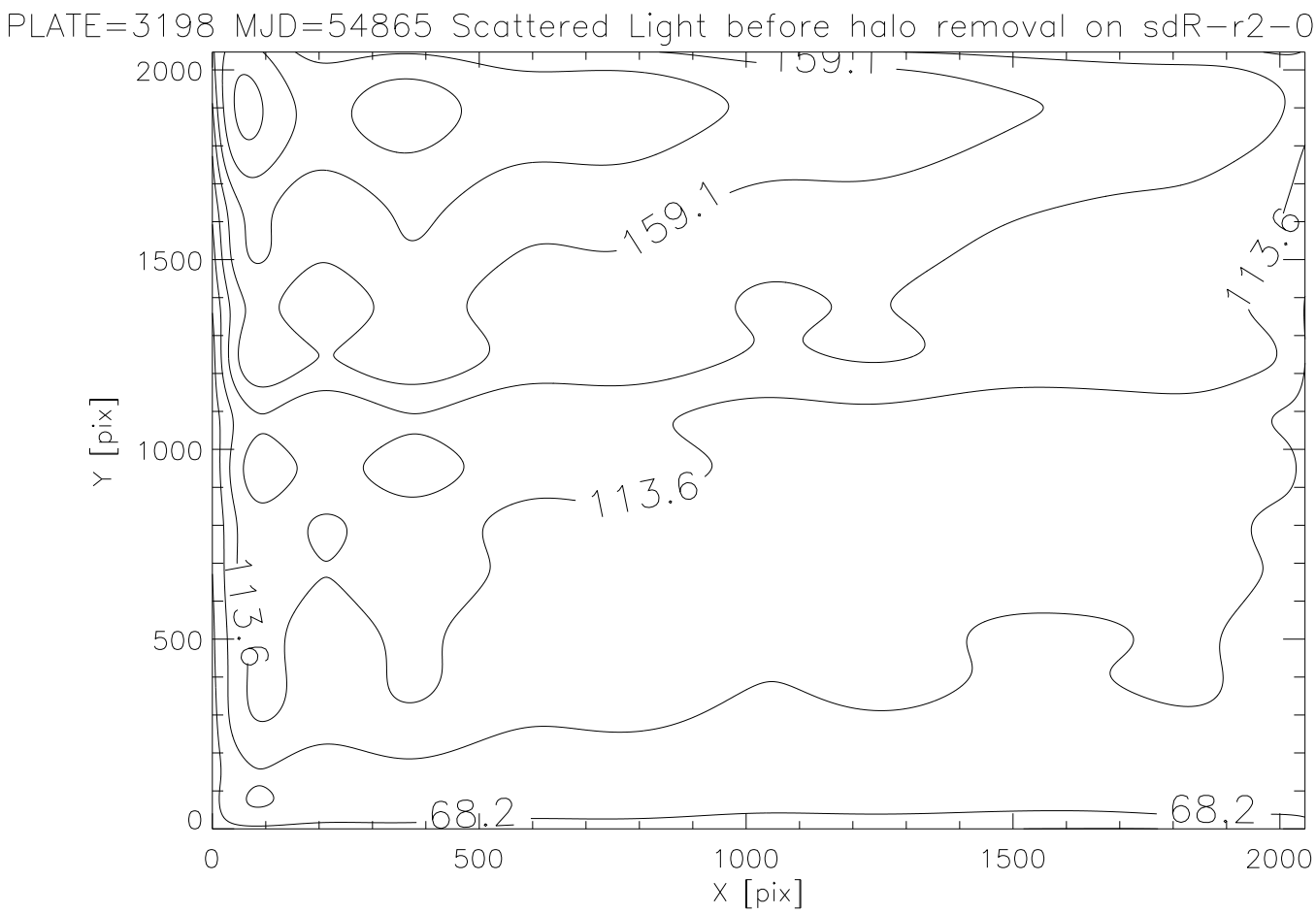

PLATE=3198 MJD=54865 sdR-r2-00058689.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

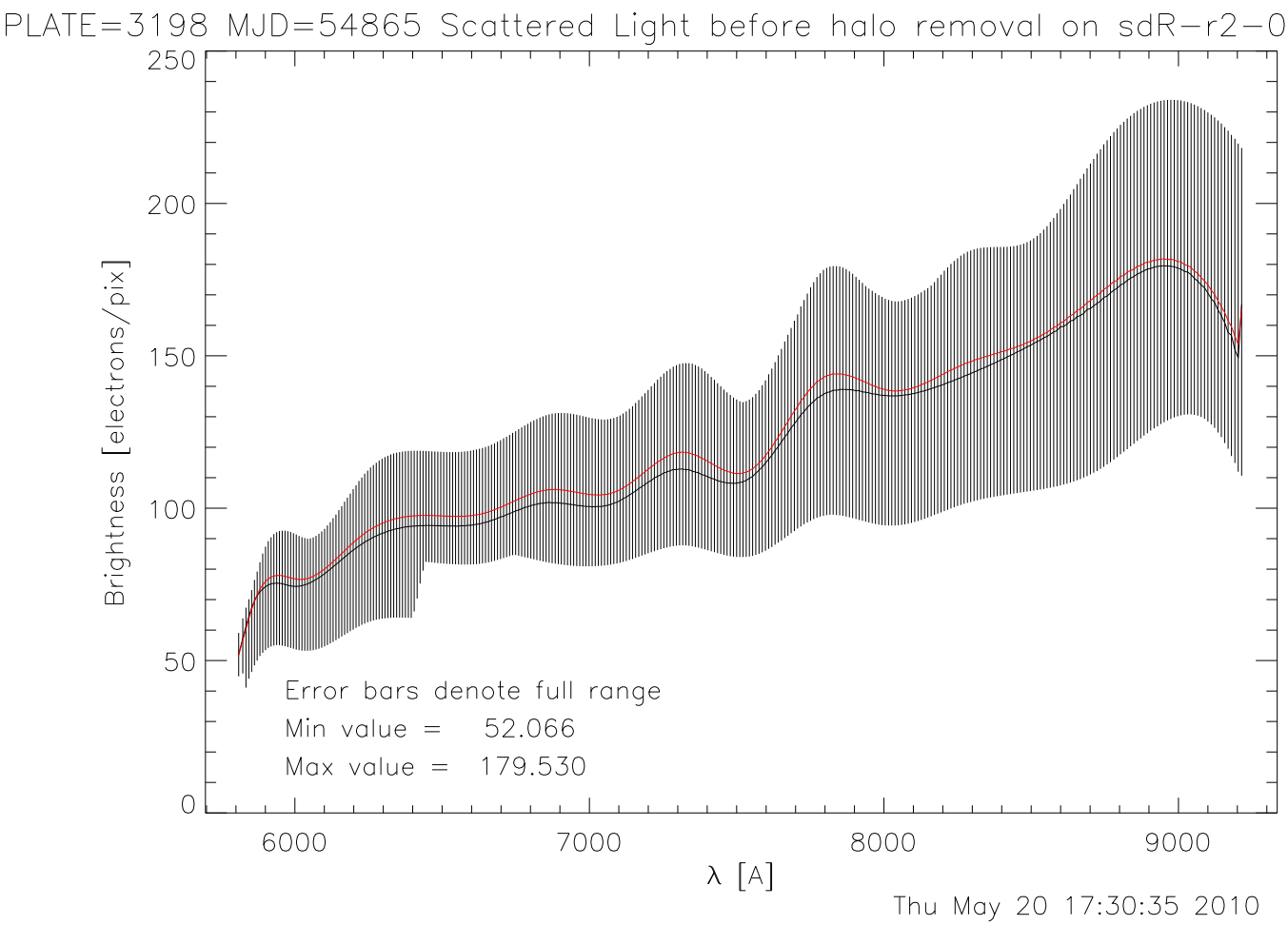

Number of sky fibers = 17
PLATE=3198 MJD=54865 sdR-r2-00058689.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

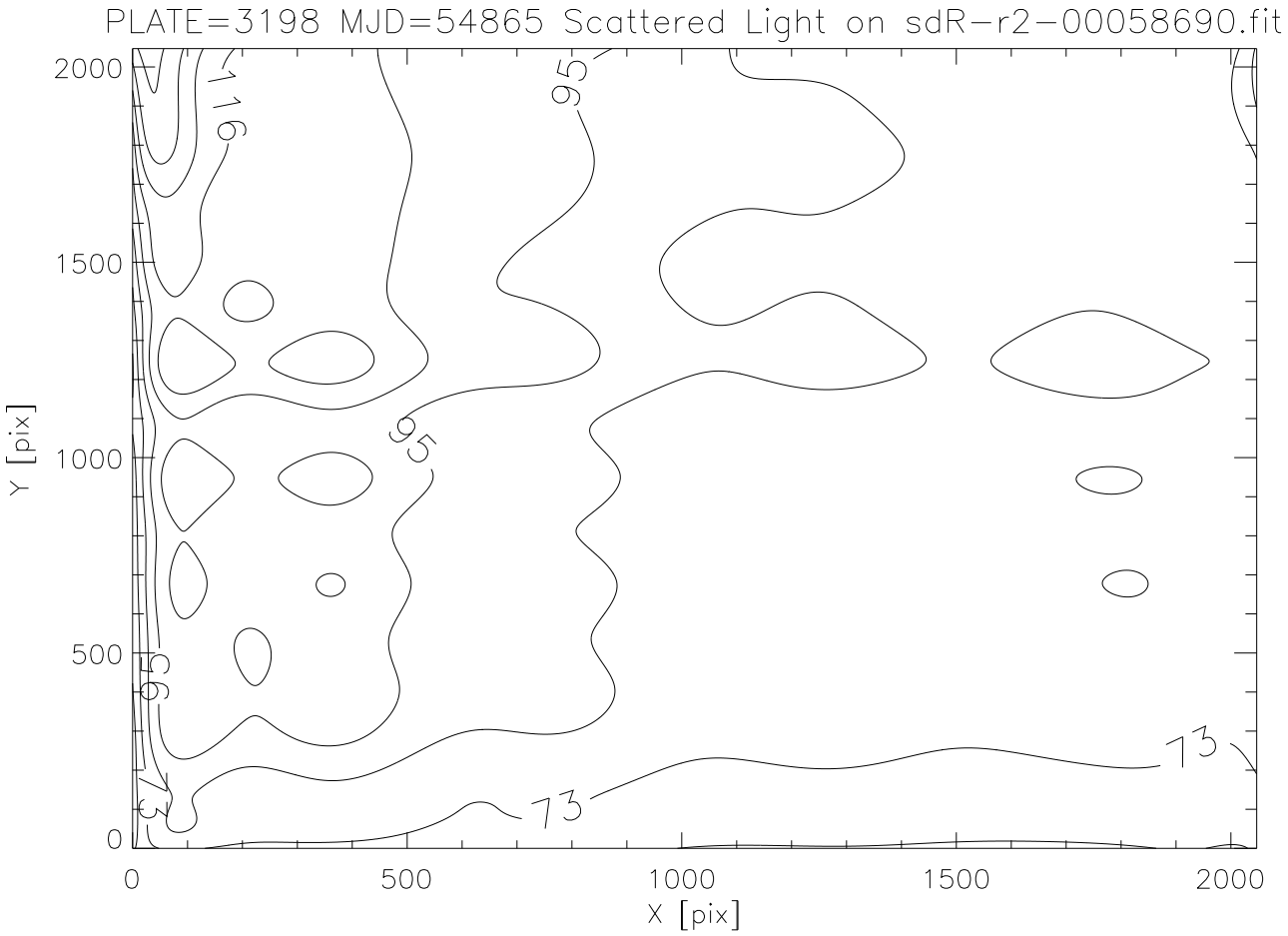

PLATE=3198 MJD=54865 sdR-r2-00058689.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.56 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

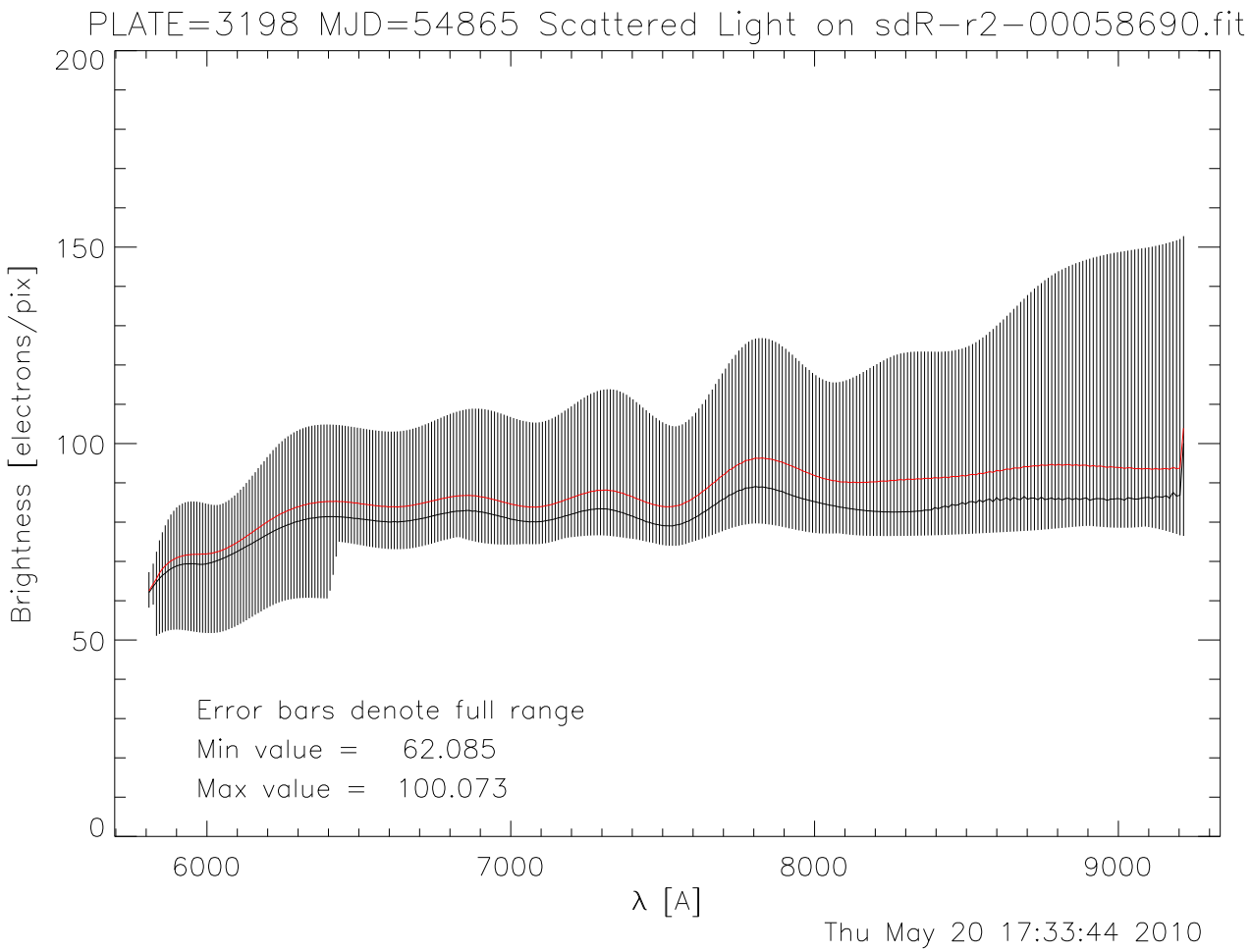

PLATE=3198 MJD=54865 sdR-r2-00058689.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.25×10^4
1.20×10^4
1.15×10^4
1.10×10^4
1.05×10^4
RED = sky fiber
Dispersion = 0.99 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
1.25×10^4
1.20×10^4
1.15×10^4
1.10×10^4
1.05×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.25×10^4
1.20×10^4
1.15×10^4
1.10×10^4
1.05×10^4
1.38
1.40
1.42
1.44
1.46
1.48
Airmass

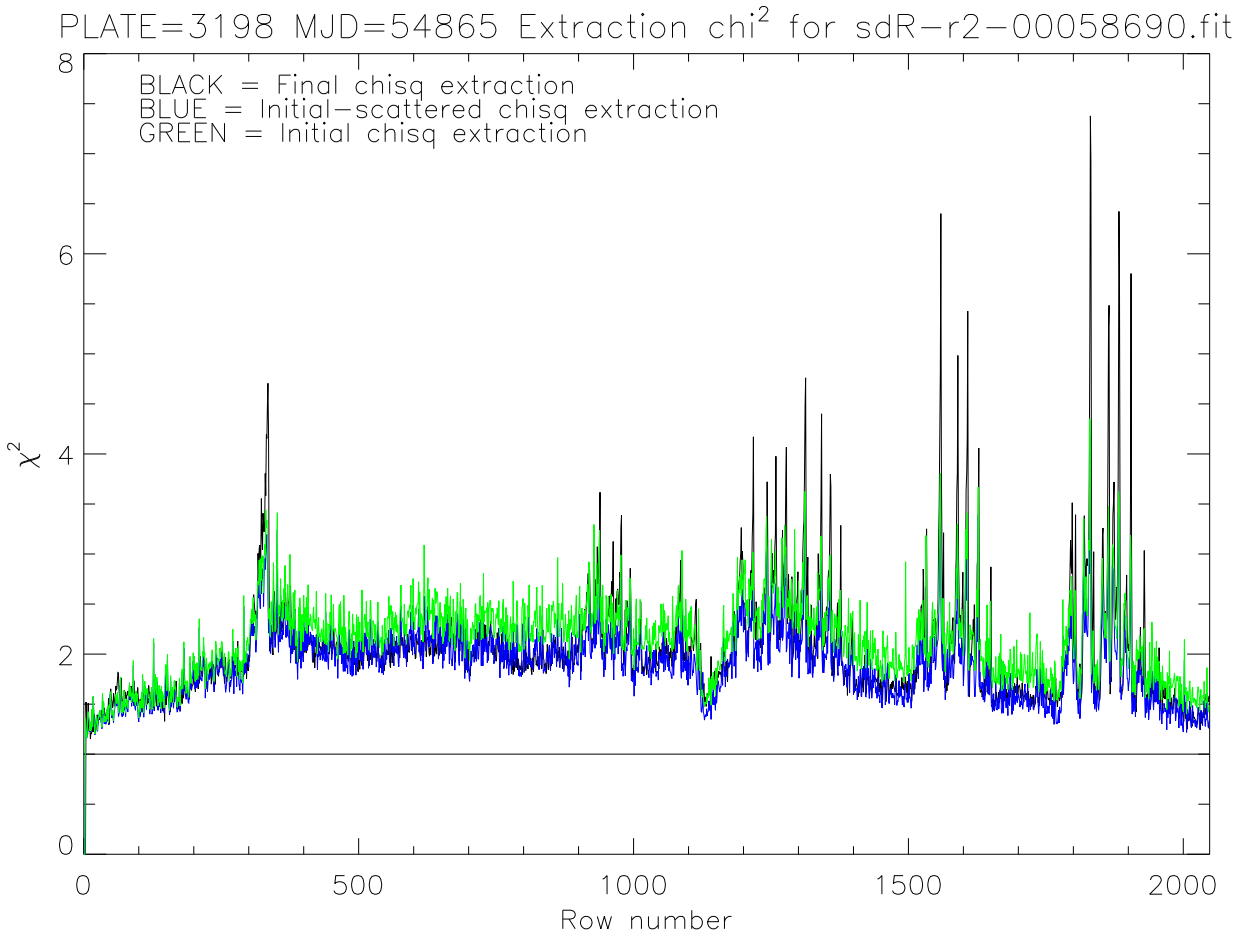

PLATE=3198 MJD=54865 Fiber−Flats for sdR−r2−00058691.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.342
Max value = 1.158
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu May 20 17:29:36 2010

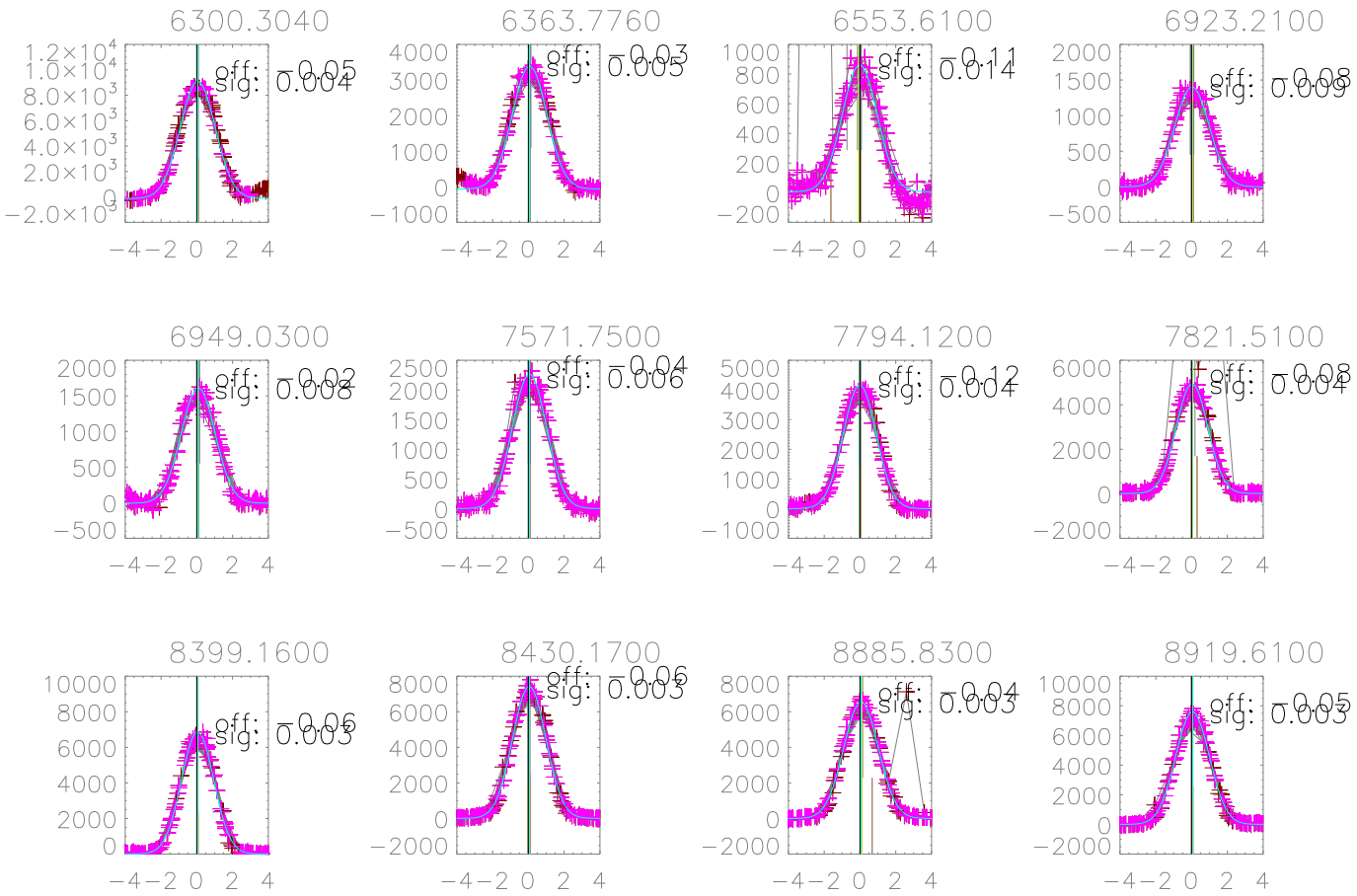

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-r2-00058690.fi
159.1
159.1
113.6
113.6
113.6
68.2
68.2
0
Y [pix]
X [pix]
0
500
1000
1500
2000

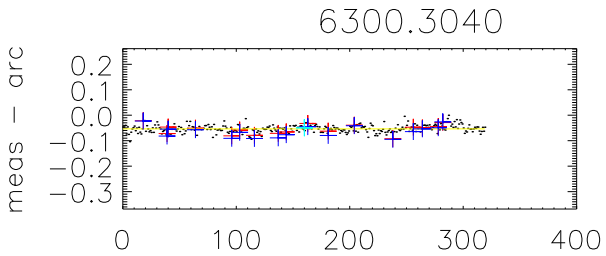

PLATE=3198 MJD=54865 Scattered Light before halo removal on sdR-r2-00058690.fi
Brightness [electrons/pix]
250
200
150
100
50
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 52.066
Max value = 179.530
Thu May 20 17:30:35 2010

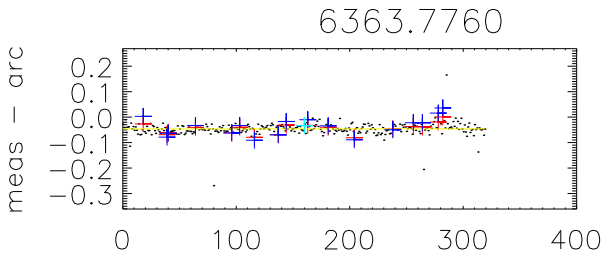

PLATE=3198 MJD=54865 Scattered Light on sdR-r2-00058690.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
117
95
59
55
37
73
73

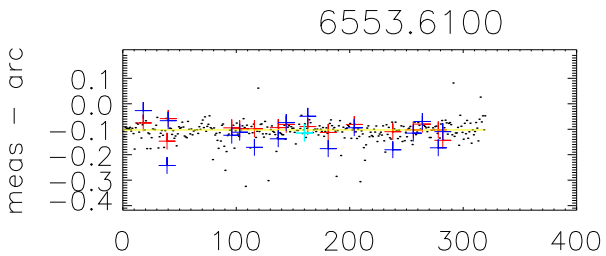

PLATE=3198 MJD=54865 Scattered Light on sdR-r2-00058690.fit
Brightness [electrons/pix]
200
150
100
50
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 62.085
Max value = 100.073
Thu May 20 17:33:44 2010

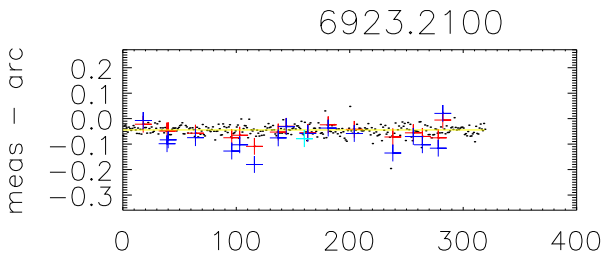

PLATE=3198 MJD=54865 Extraction chi^2 for sdR−r2−00058690.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

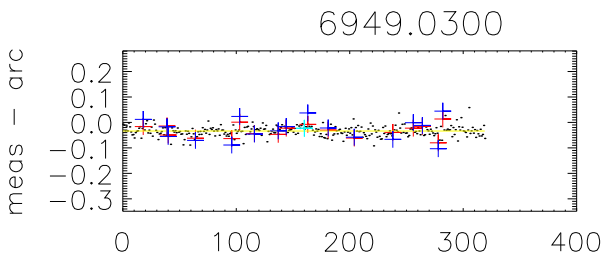

6300.3040
off: −0.05
sig: 0.004
6363.7760
off: −0.03
sig: 0.005
6553.6100
off: −0.11
sig: 0.014
6923.2100
off: −0.08
sig: 0.009
6949.0300
off: −0.02
sig: 0.008
7571.7500
off: −0.04
sig: 0.006
7794.1200
off: −0.12
sig: 0.004
7821.5100
off: −0.08
sig: 0.004
8399.1600
off: −0.06
sig: 0.003
8430.1700
off: −0.06
sig: 0.003
8885.8300
off: −0.04
sig: 0.003
8919.6100
off: −0.05
sig: 0.003

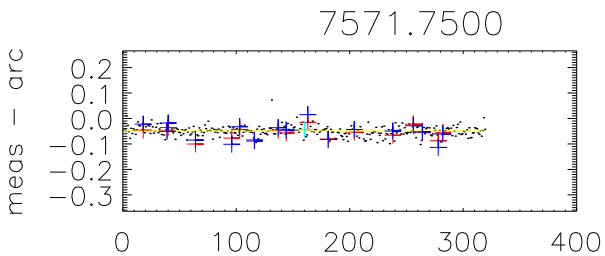

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

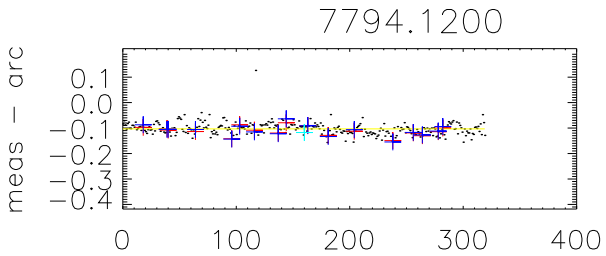

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

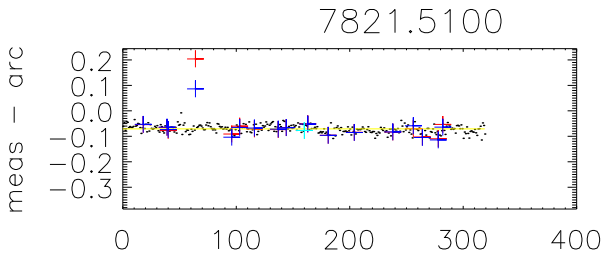

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

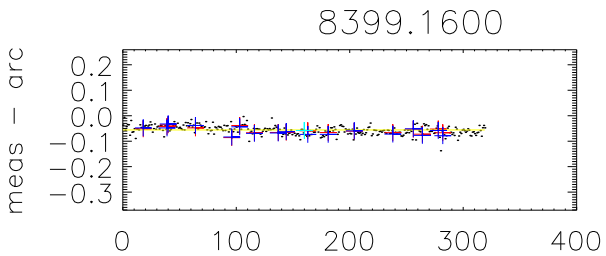

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

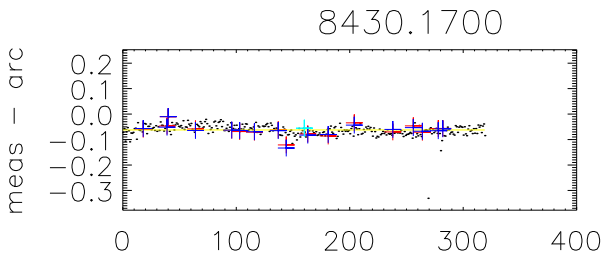

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

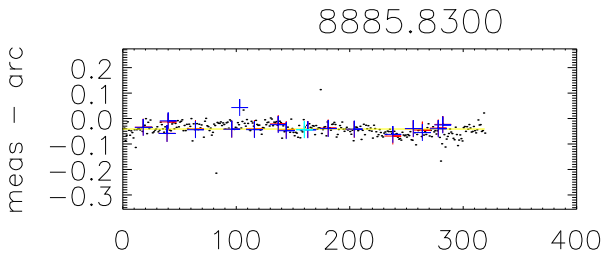

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

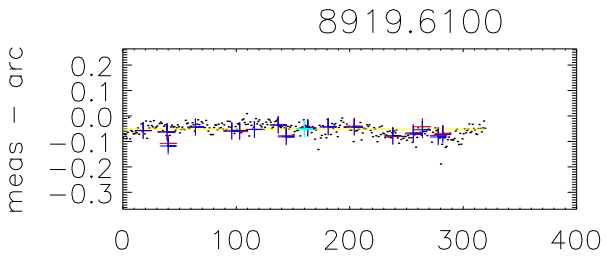

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

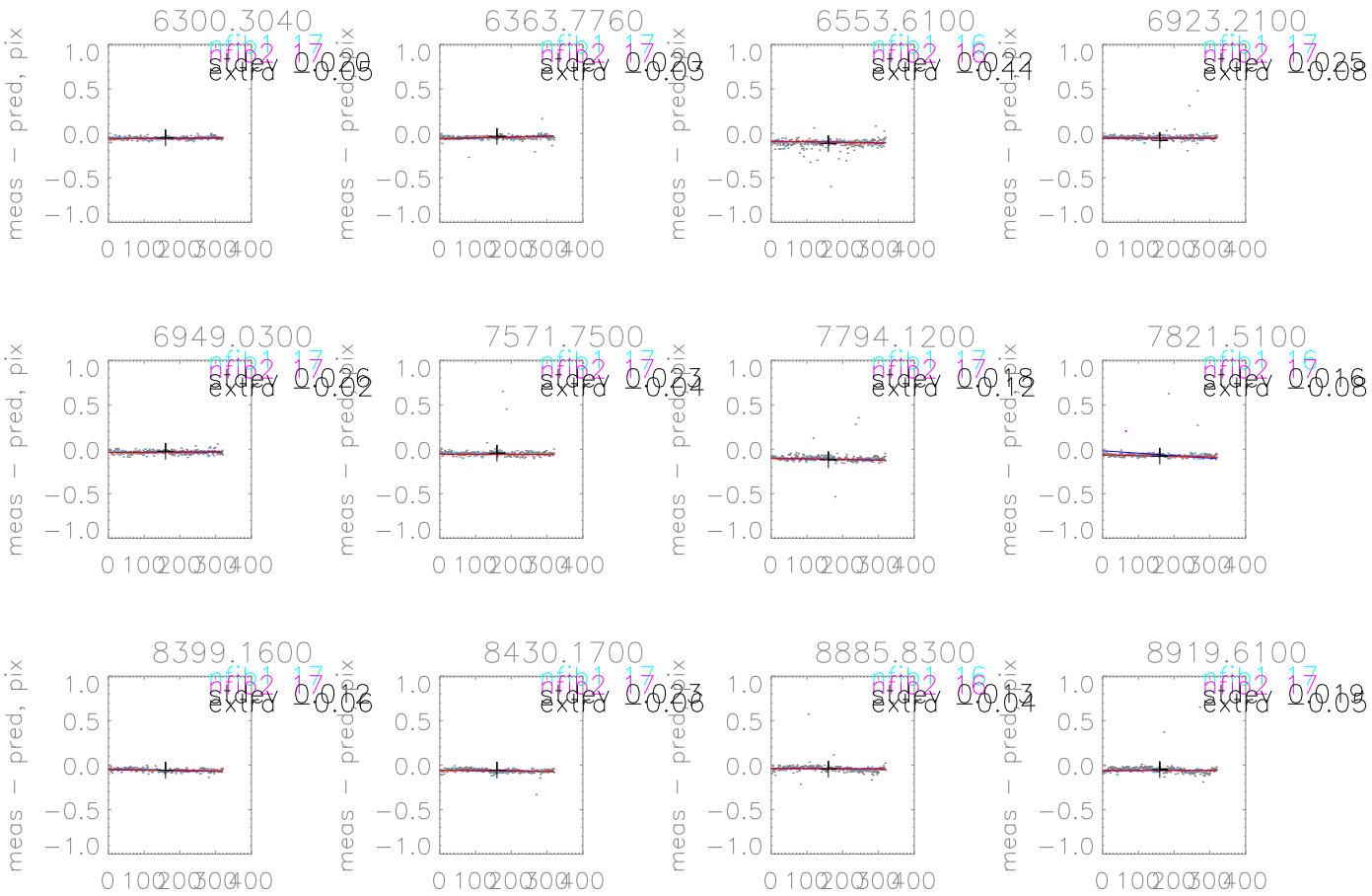

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

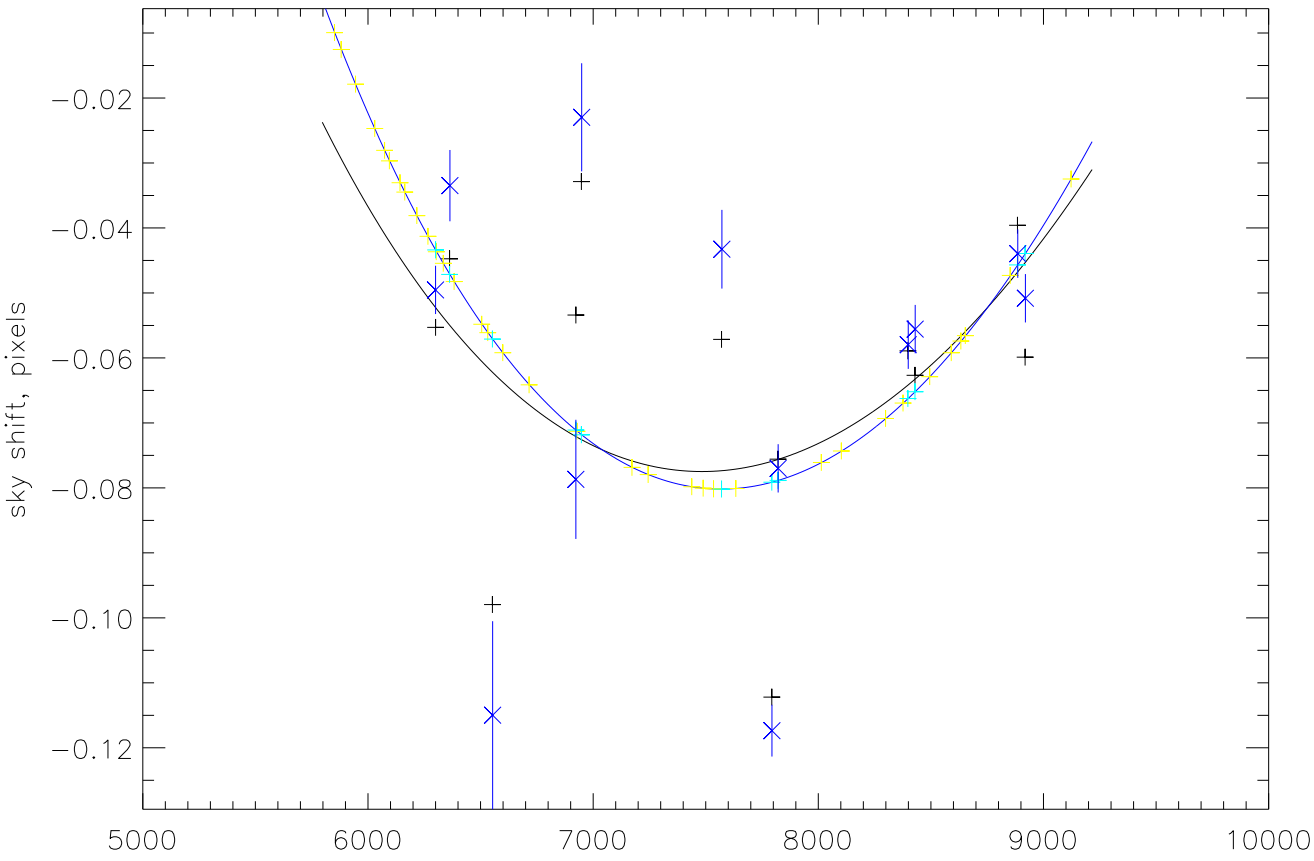

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

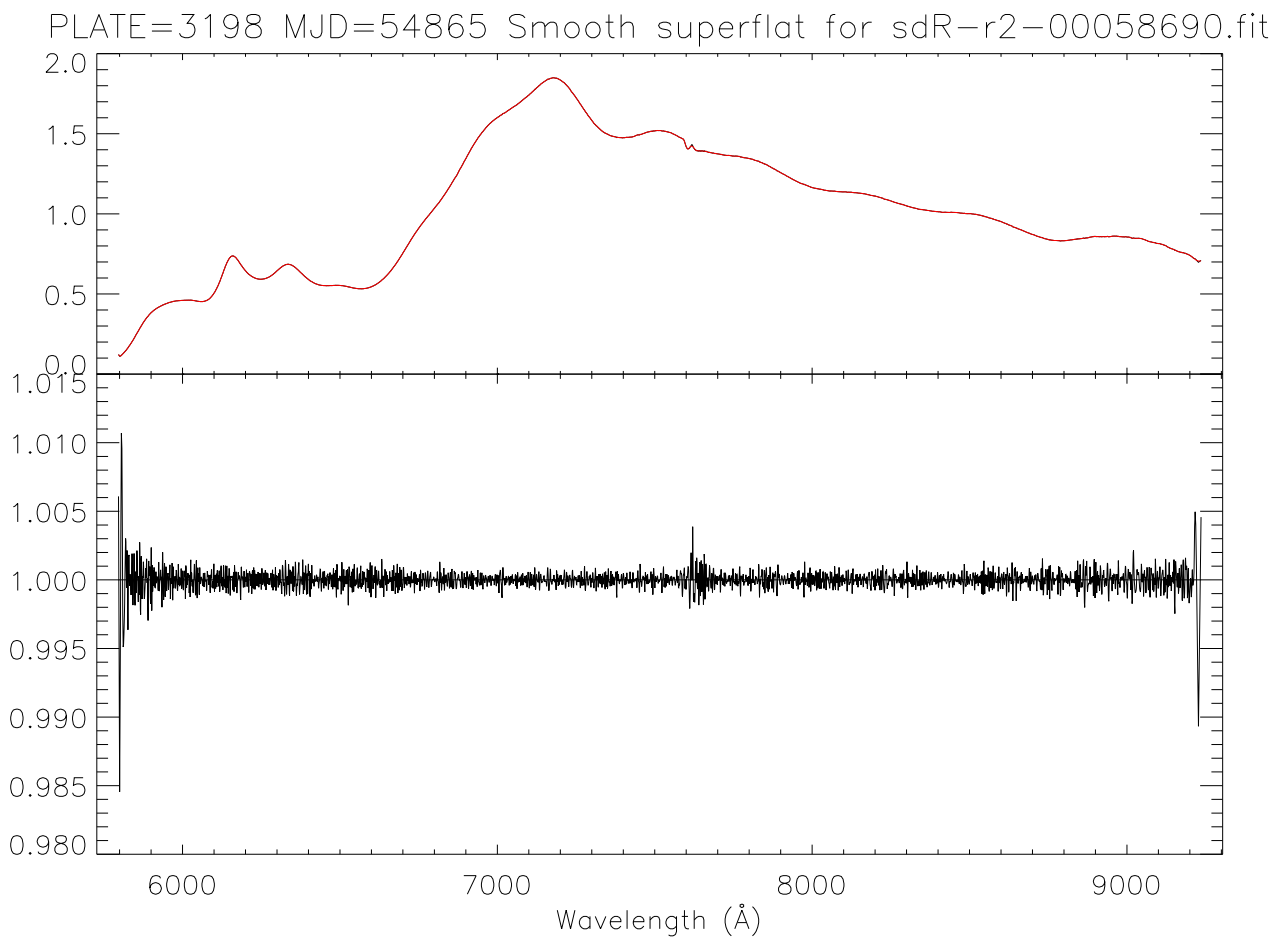

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

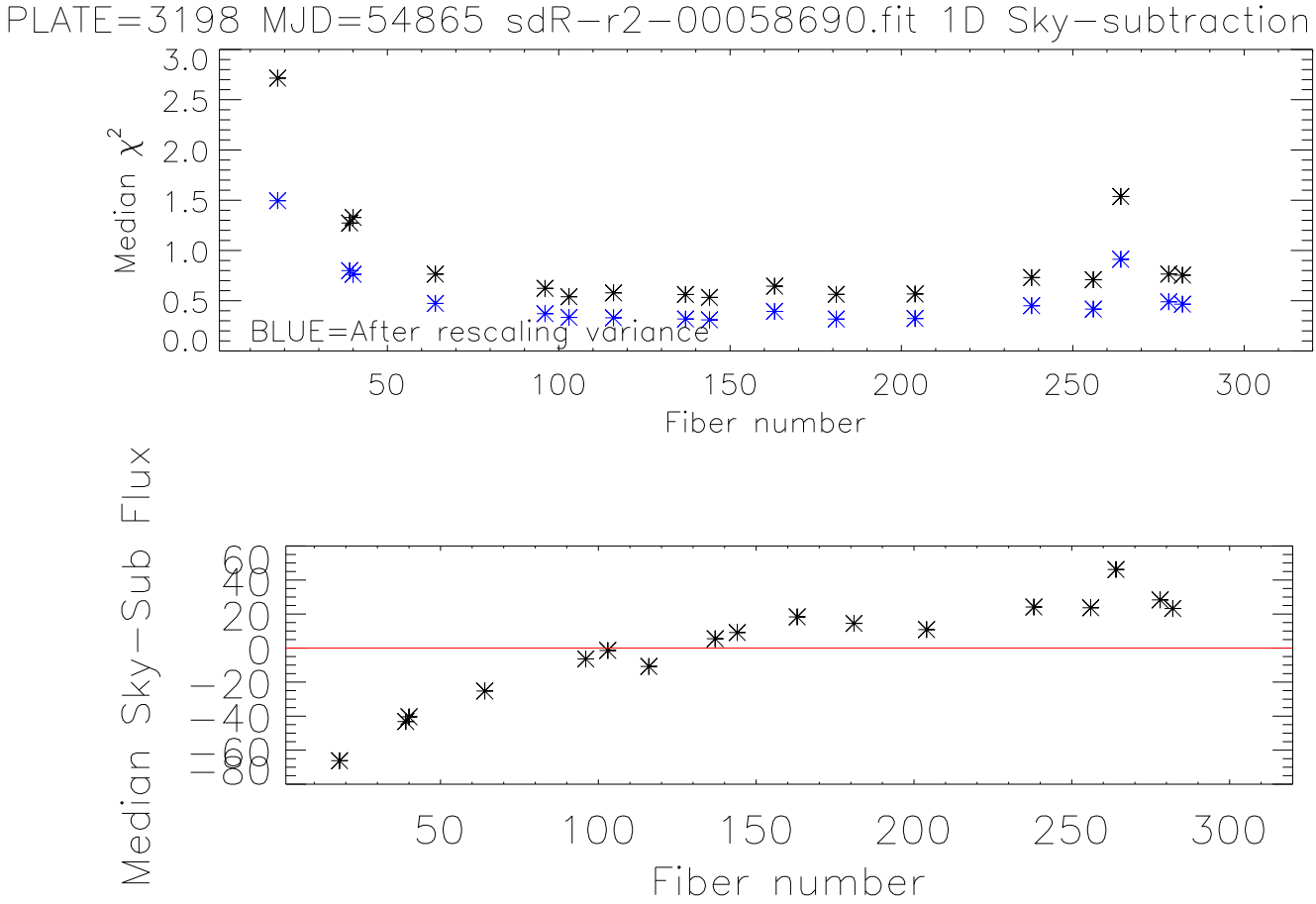

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

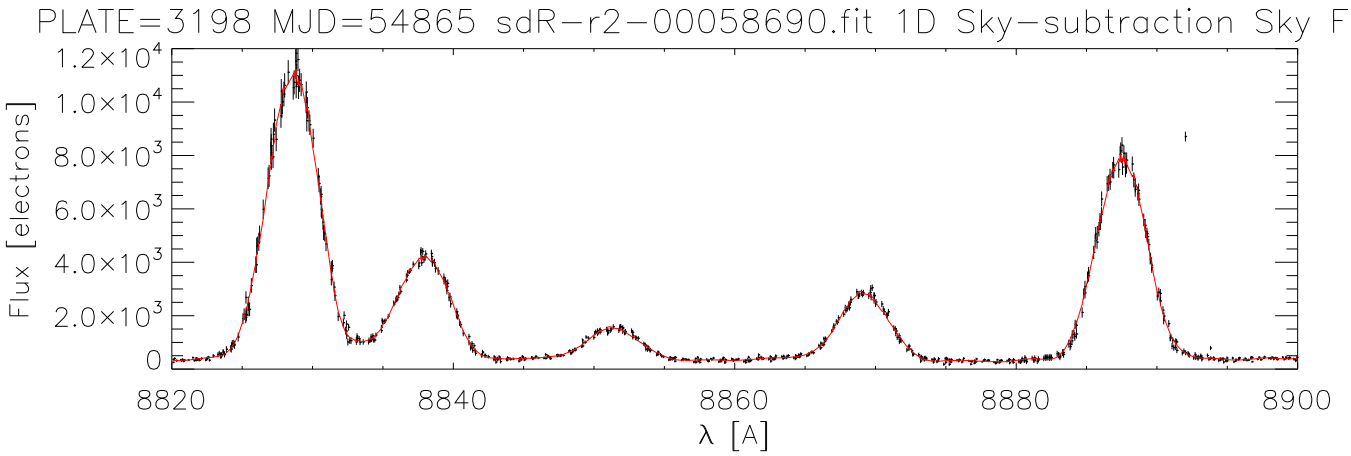

6300.3040
mfib1 17
mfib2 17
stdev 0.020
extra 0.05
6363.7760
mfib1 17
mfib2 17
stdev 0.020
extra 0.03
6553.6100
mfib1 16
mfib2 16
stdev 0.022
extra 0.44
6923.2100
mfib1 17
mfib2 17
stdev 0.025
extra 0.08
6949.0300
mfib1 17
mfib2 17
stdev 0.026
extra 0.02
7571.7500
mfib1 17
mfib2 17
stdev 0.023
extra 0.04
7794.1200
mfib1 17
mfib2 17
stdev 0.018
extra 0.12
7821.5100
mfib1 16
mfib2 16
stdev 0.016
extra 0.08
8399.1600
mfib1 17
mfib2 17
stdev 0.012
extra 0.06
8430.1700
mfib1 17
mfib2 17
stdev 0.023
extra 0.06
8885.8300
mfib1 16
mfib2 16
stdev 0.013
extra 0.04
8919.6100
mfib1 17
mfib2 17
stdev 0.019
extra 0.05
meas − pred, pix
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

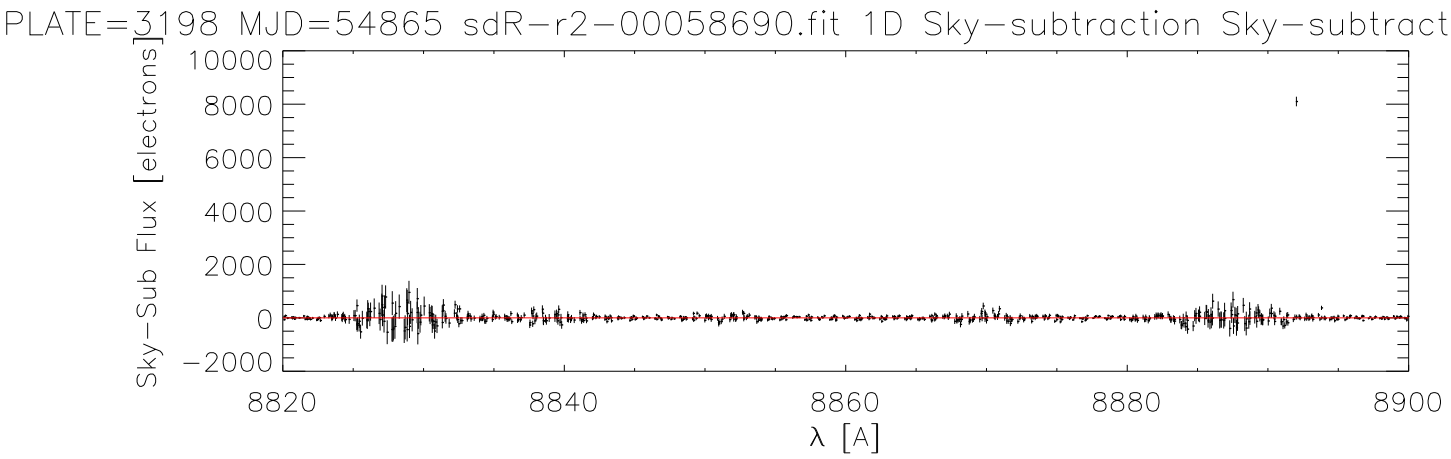

sky shift, pixels
−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
5000
6000
7000
8000
9000
10000

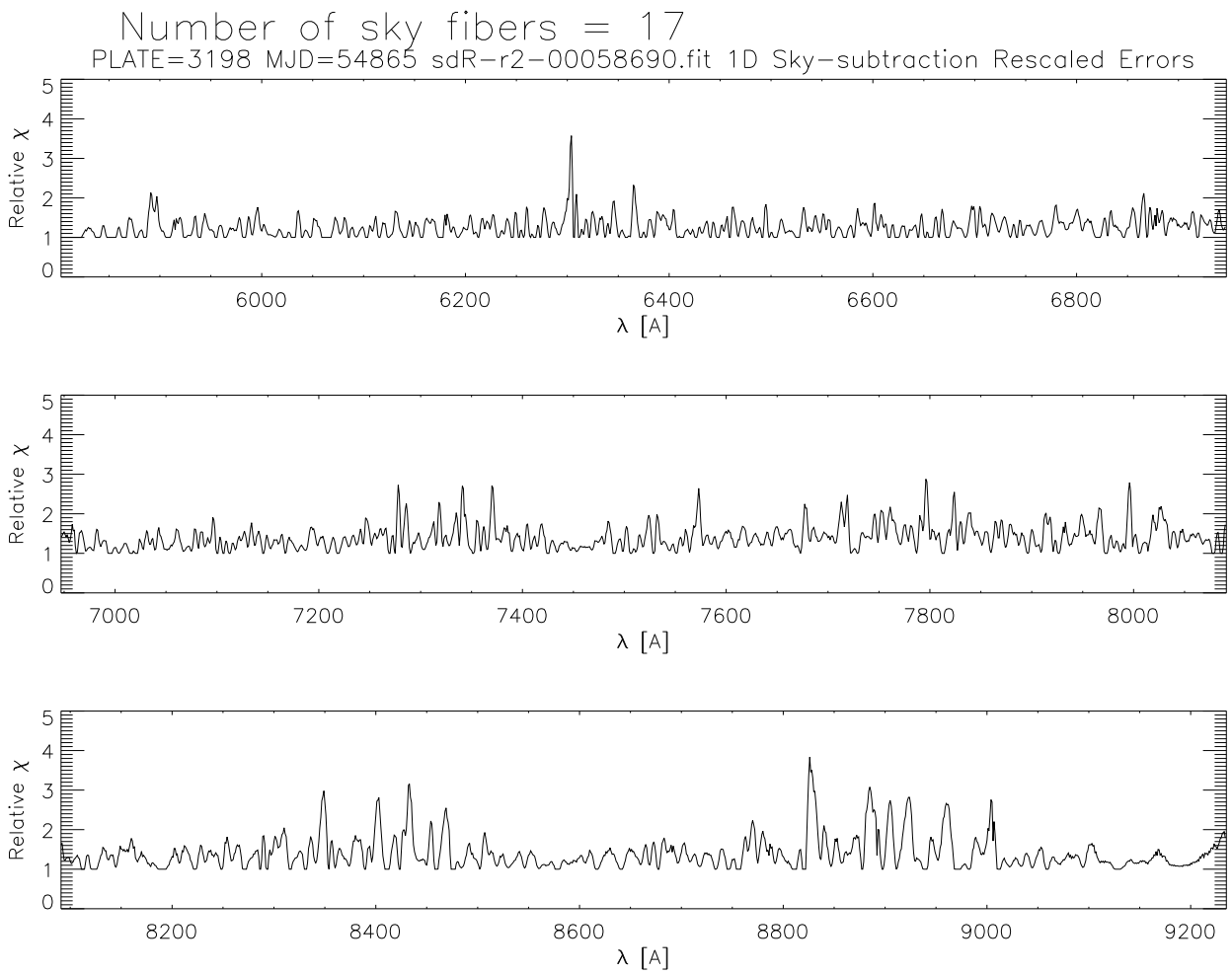
es= −0.0000

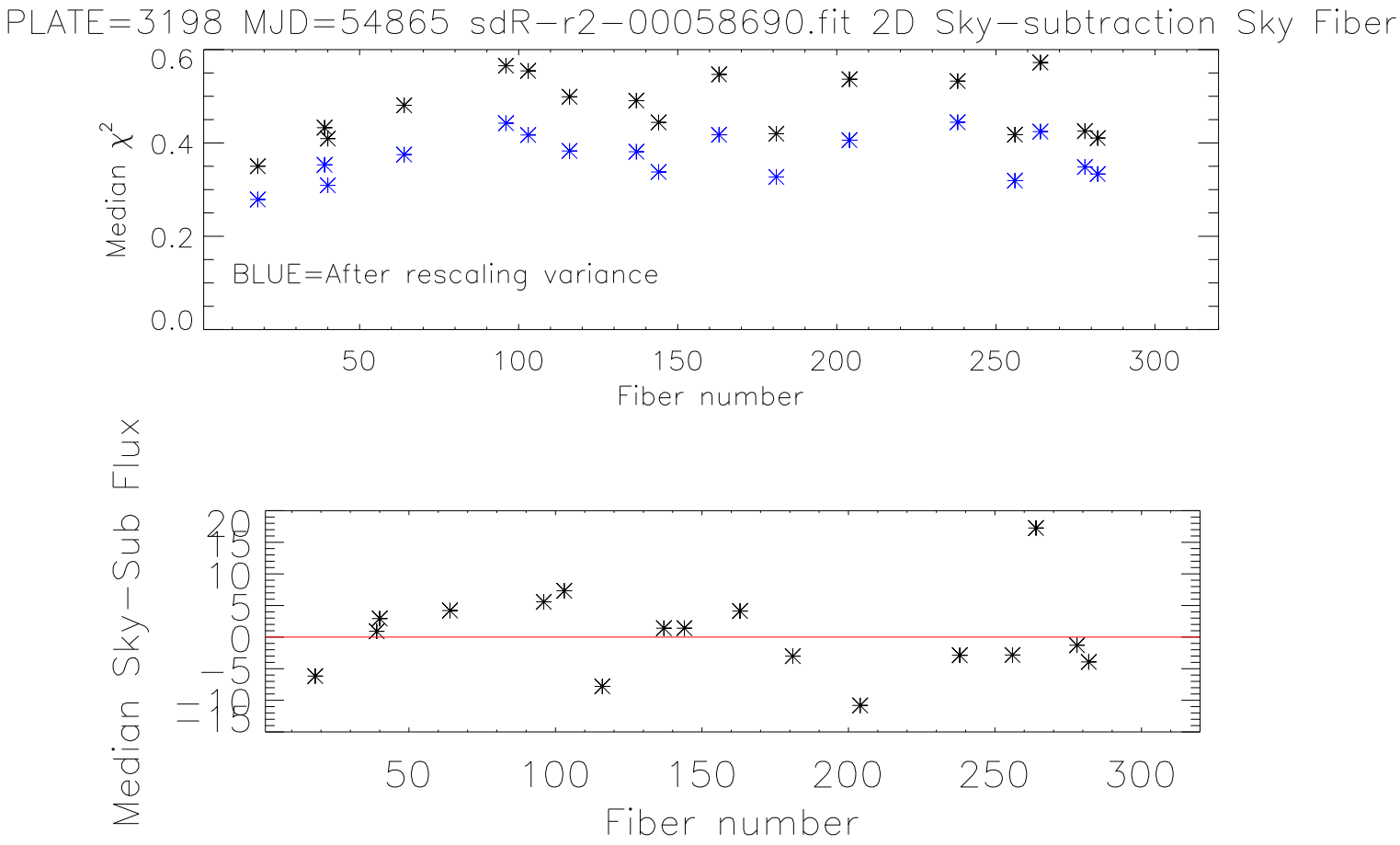

PLATE=3198 MJD=54865 Smooth superflat for sdR−r2−00058690.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
0.980
6000
7000
8000
9000
Wavelength (Å)

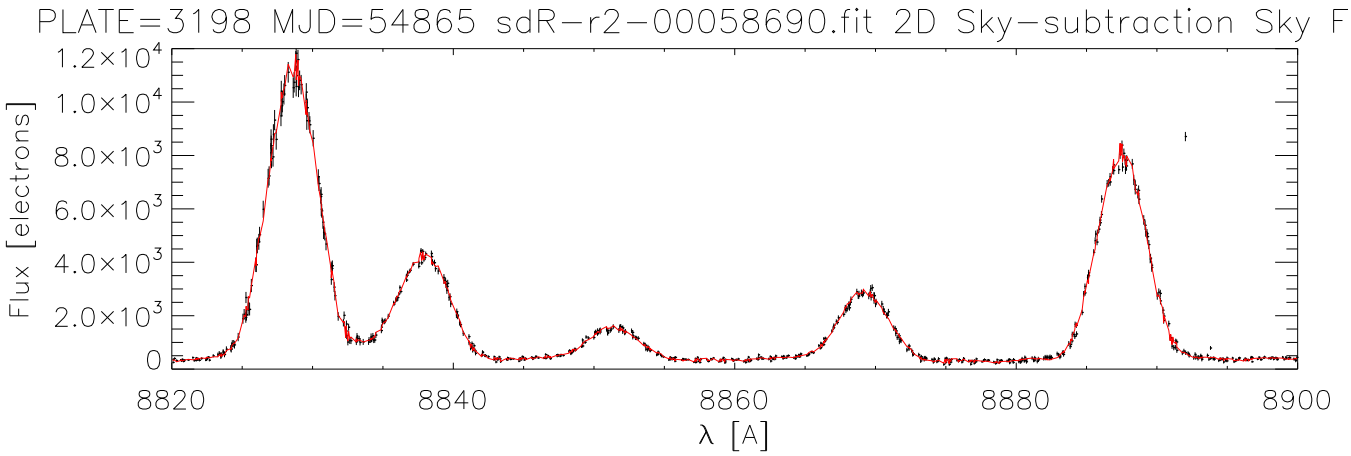

PLATE=3198 MJD=54865 sdR-r2-00058690.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

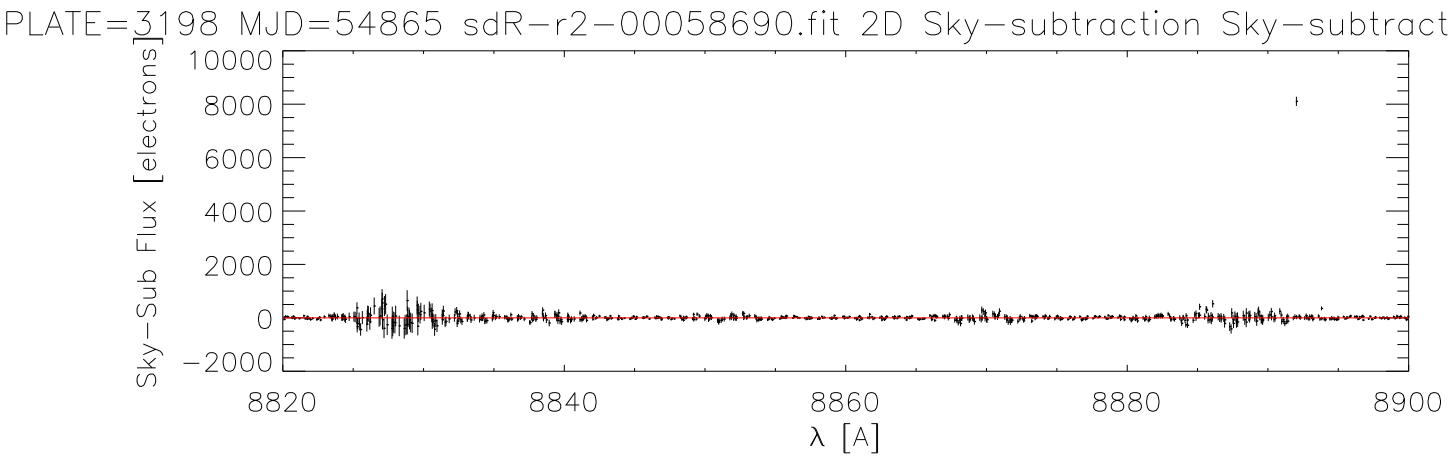

PLATE=3198 MJD=54865 sdR-r2-00058690.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

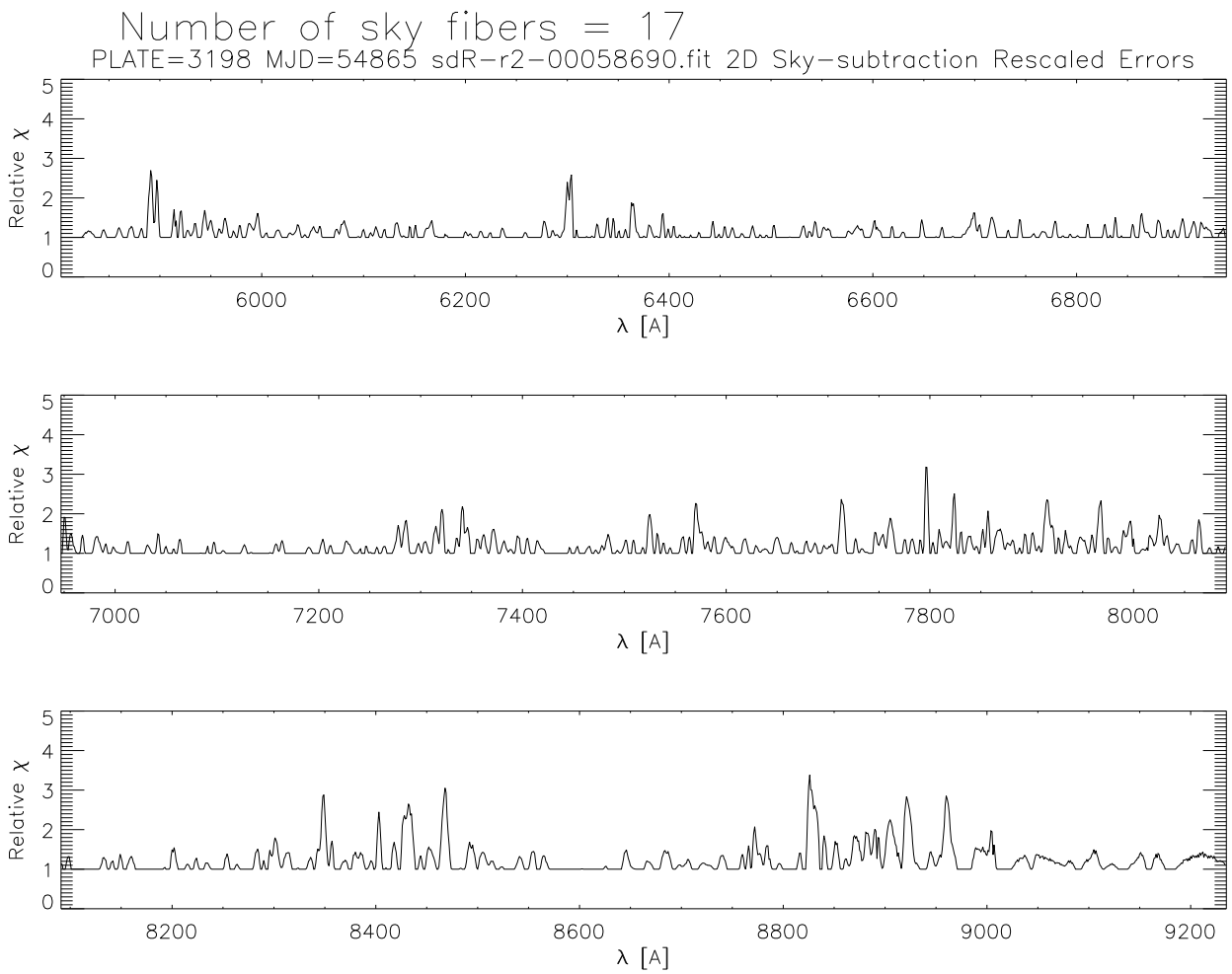

PLATE=3198 MJD=54865 sdR-r2-00058690.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
10000
8000
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

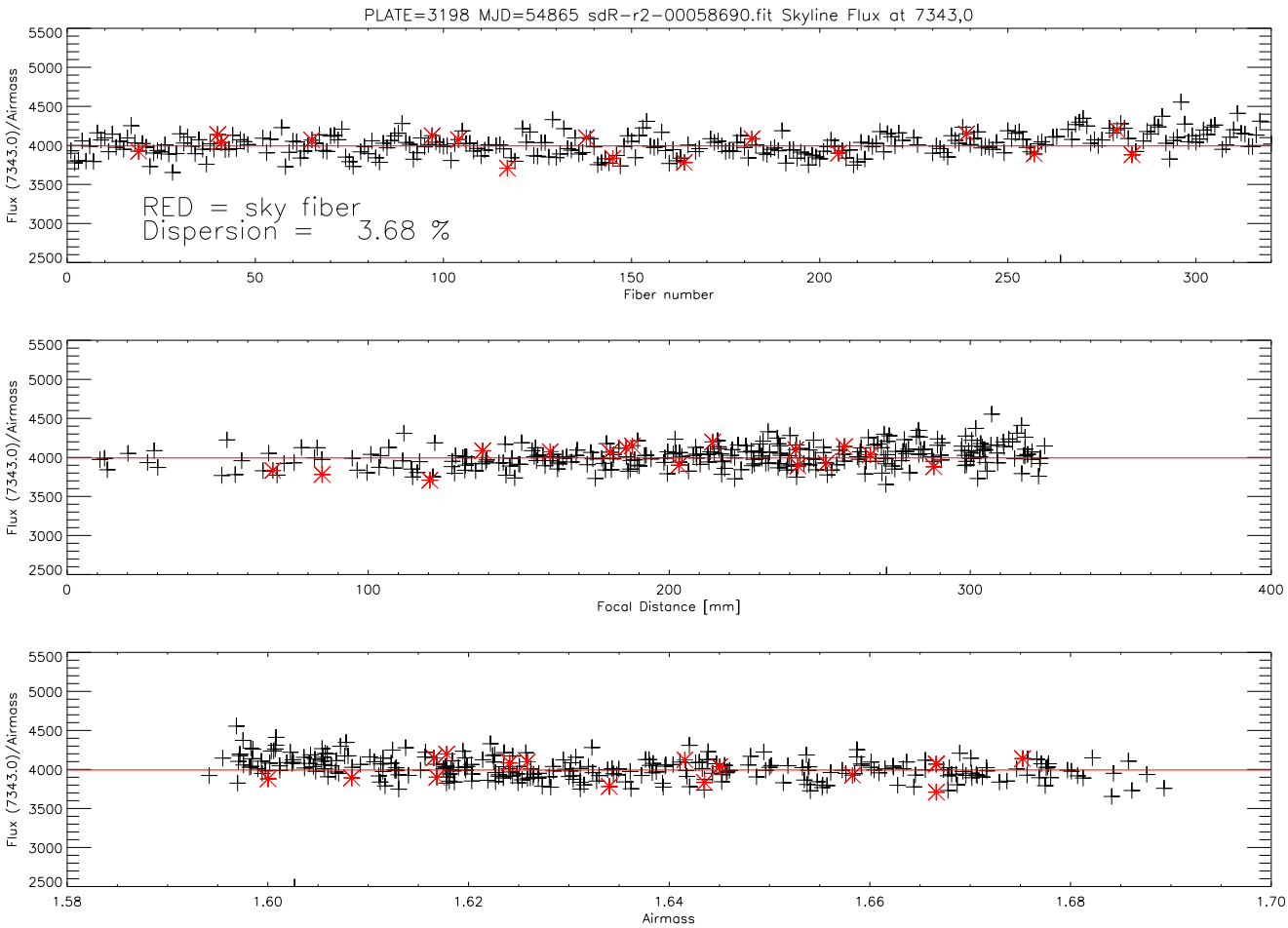

Number of sky fibers = 17
PLATE=3198 MJD=54865 sdR-r2-00058690.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

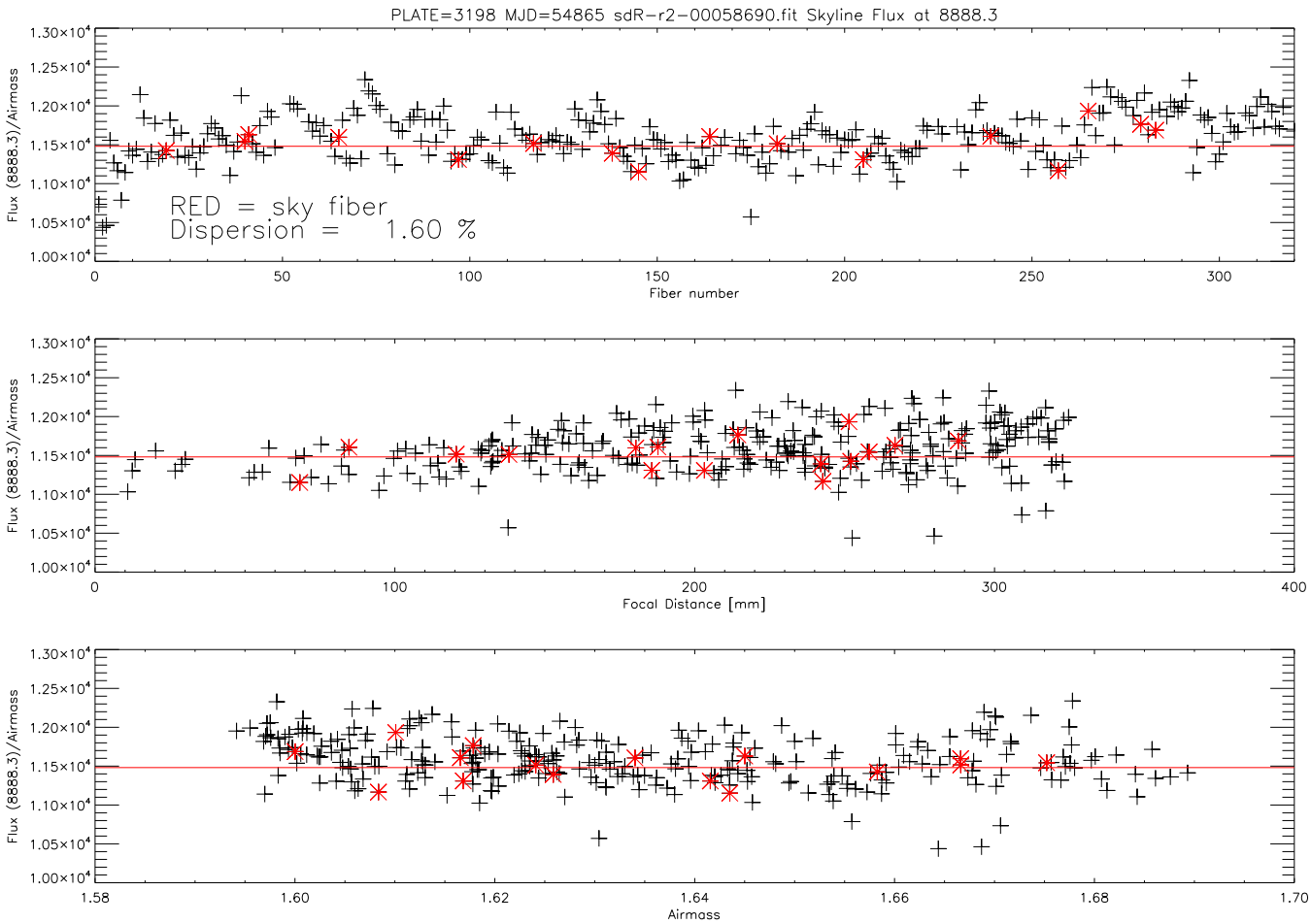

PLATE=3198 MJD=54865 sdR-r2-00058690.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number


PLATE=3198 MJD=54865 sdR-r2-00058690.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
8820
8840
8860
8880
8900
λ [A]


PLATE=3198 MJD=54865 sdR-r2-00058690.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 17
PLATE=3198 MJD=54865 sdR-r2-00058690.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=3198 MJD=54865 sdR-r2-00058690.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.68 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=3198 MJD=54865 sdR-r2-00058690.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.60 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass