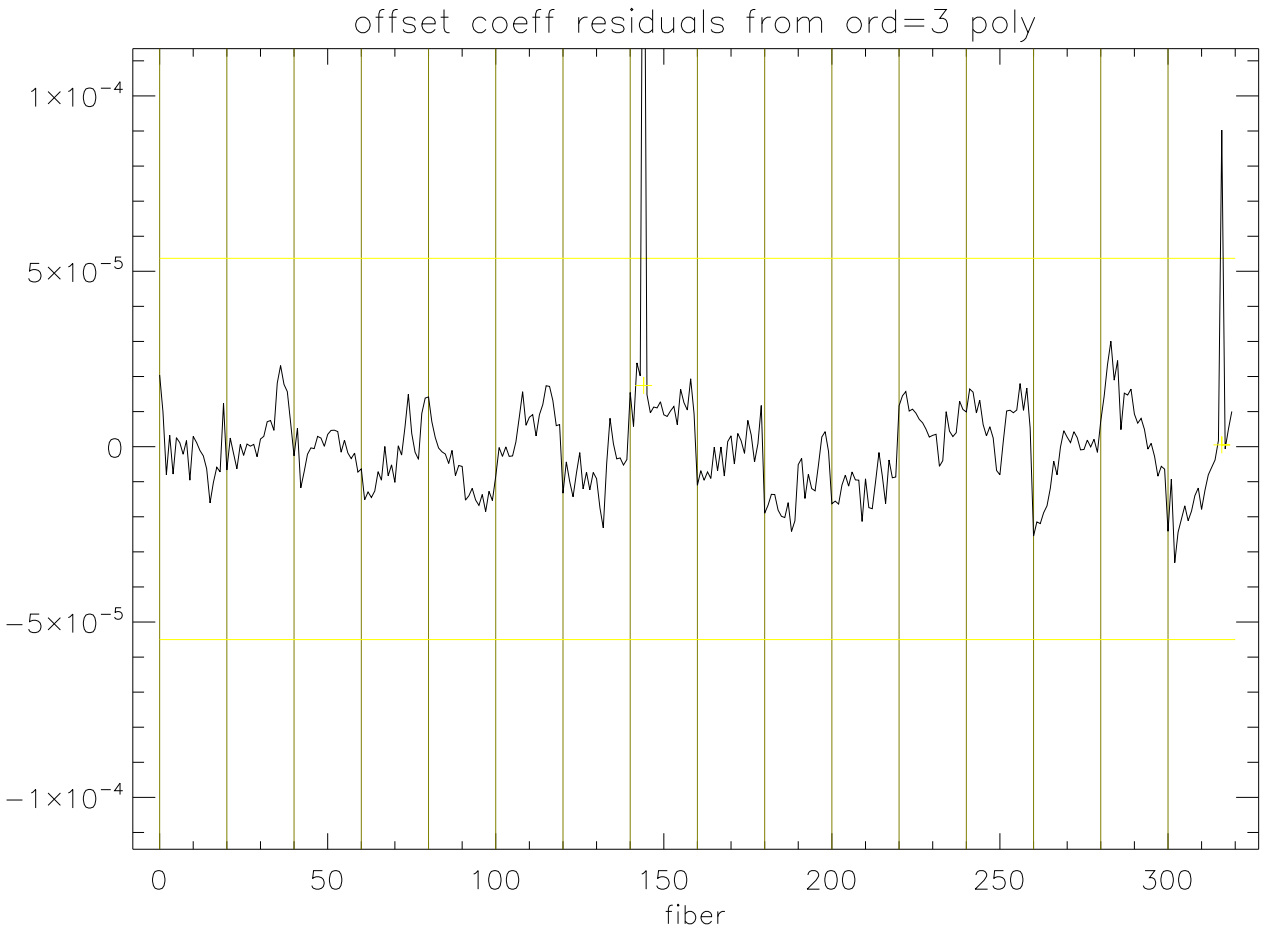
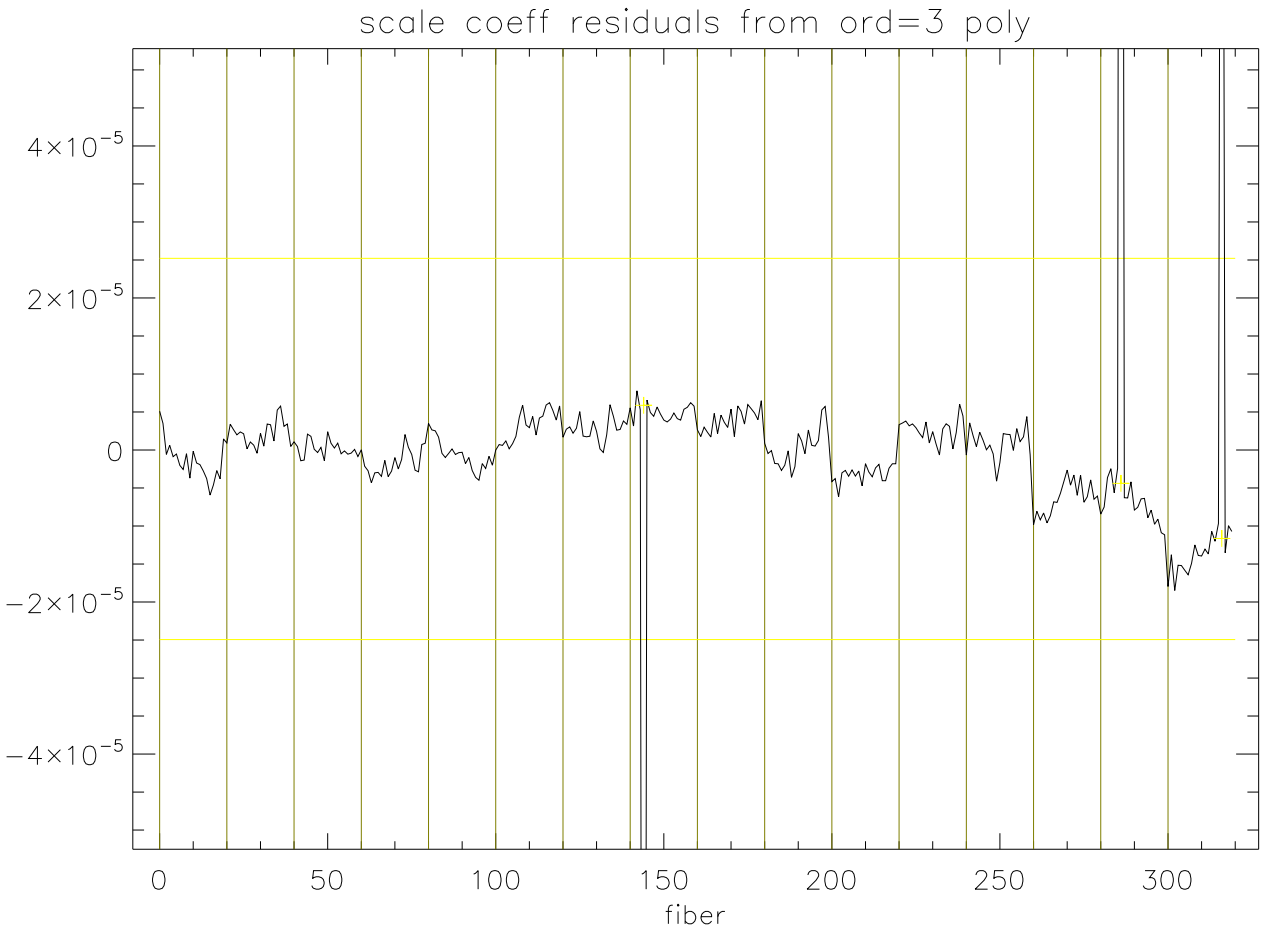
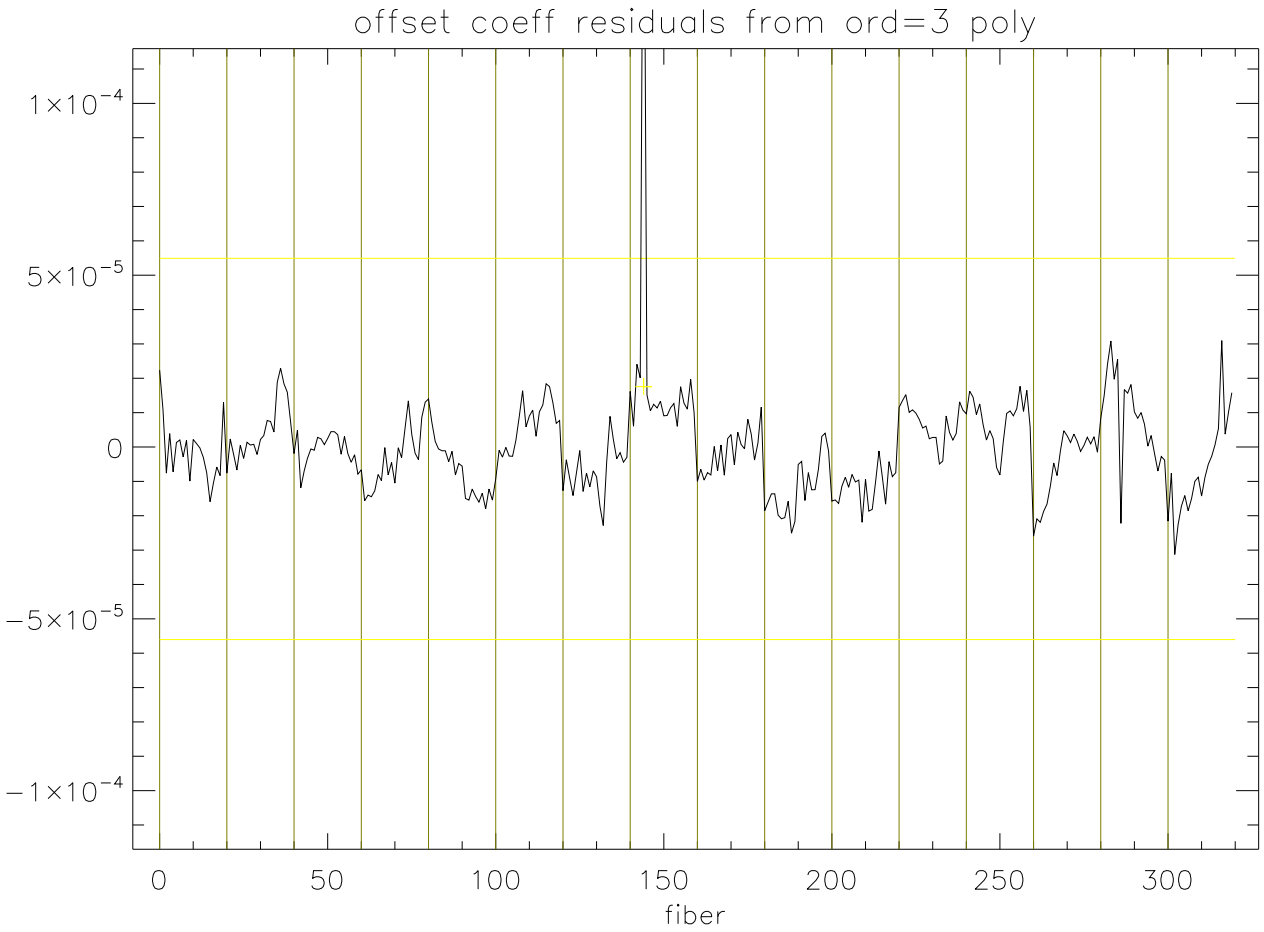
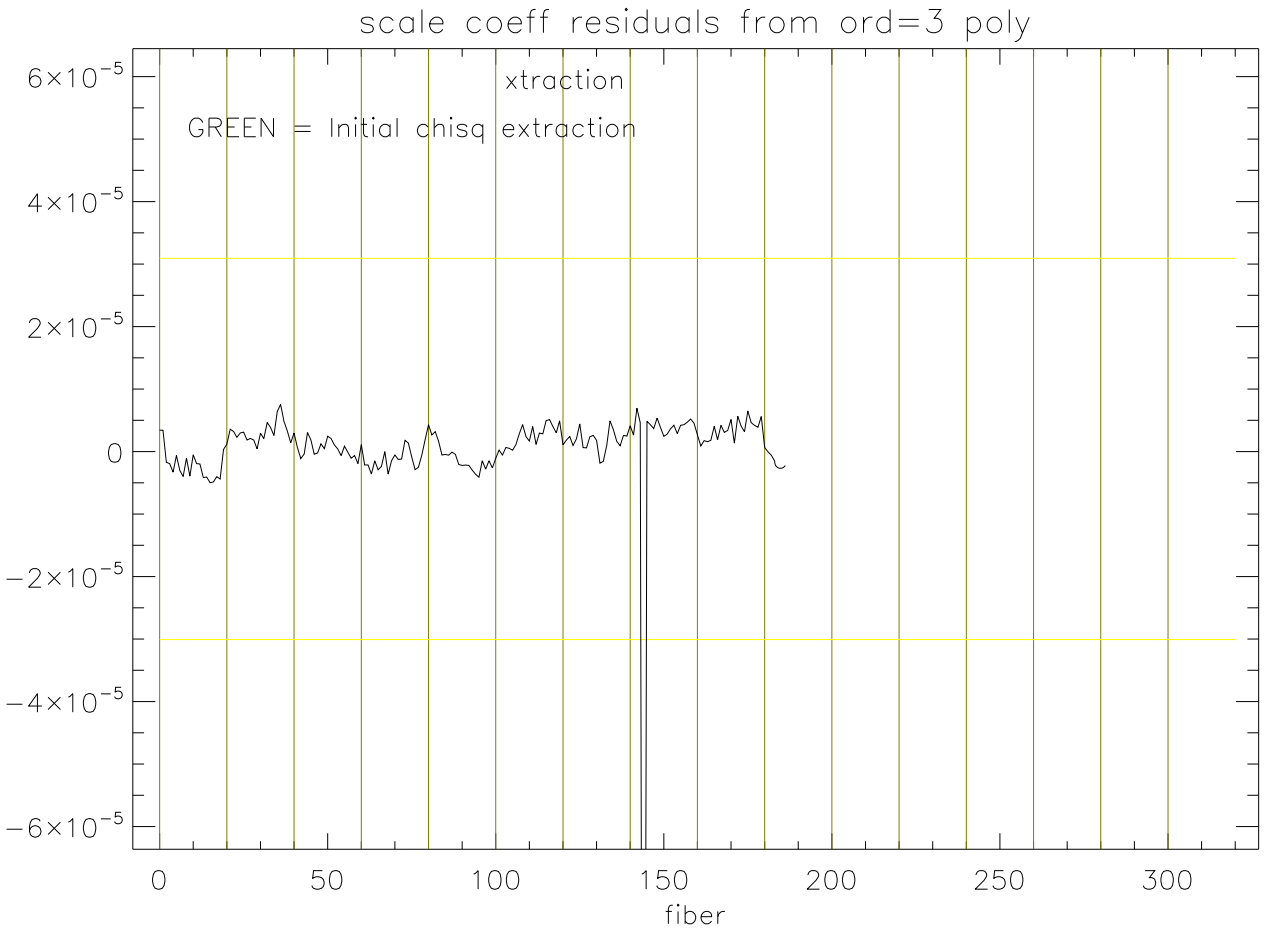
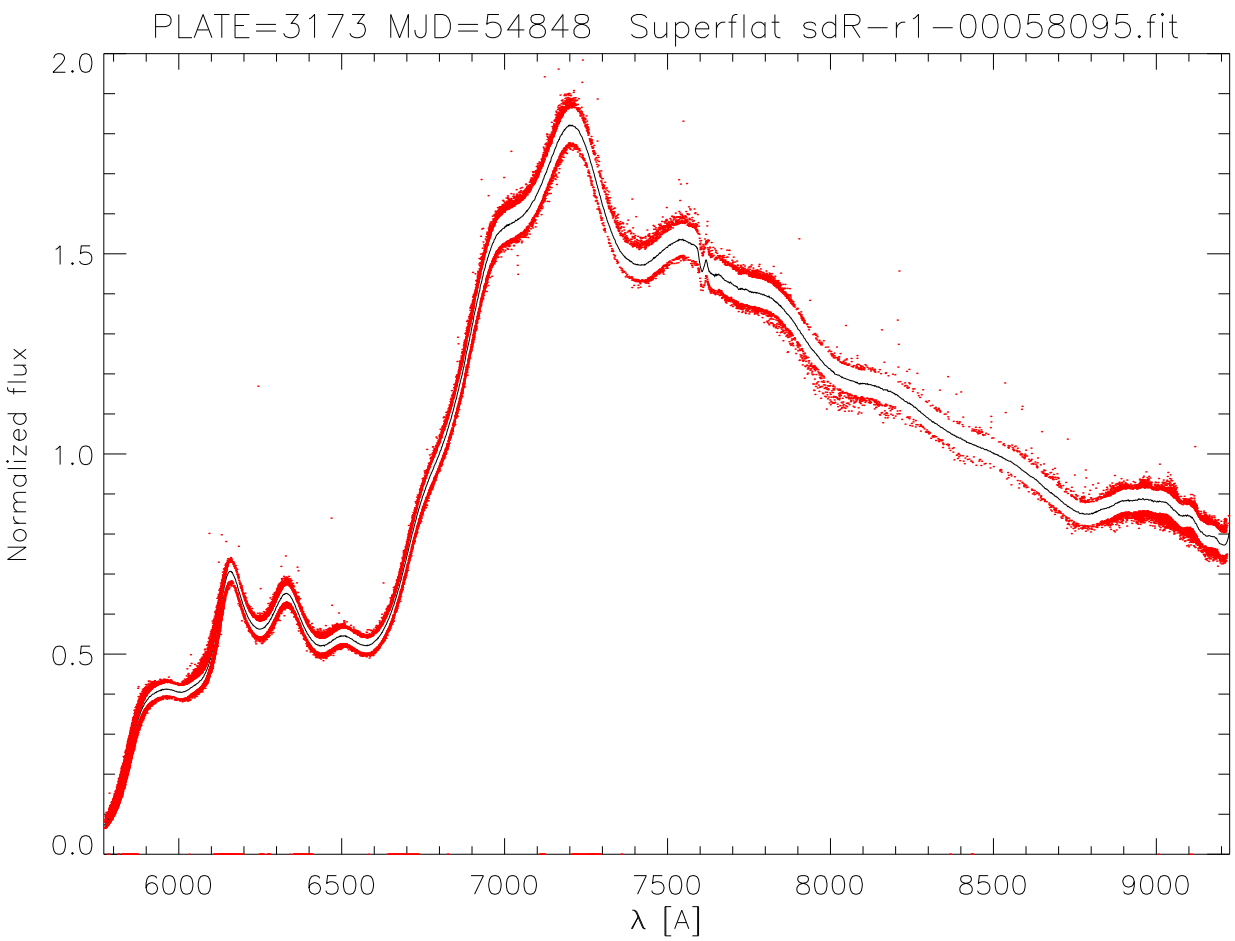
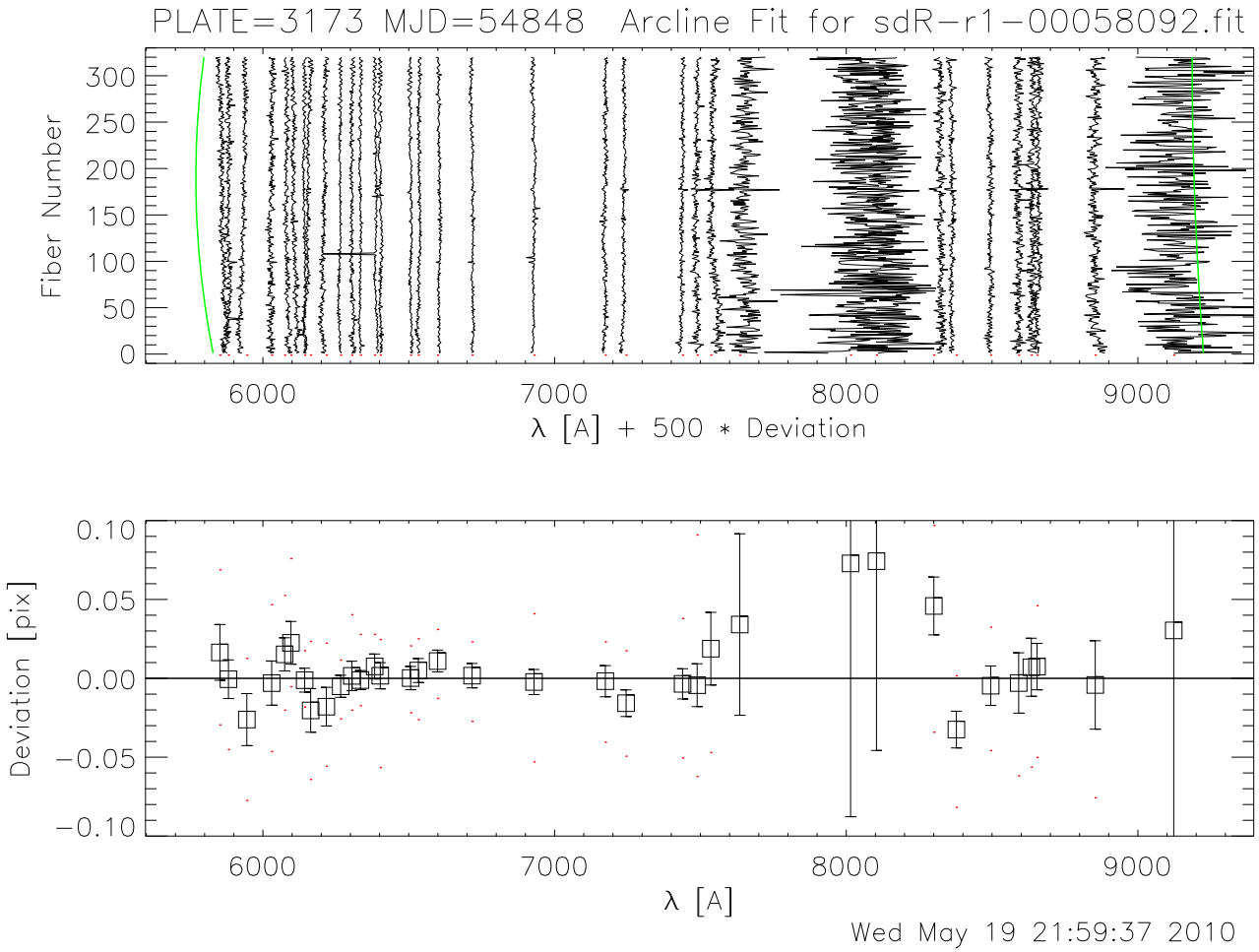

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

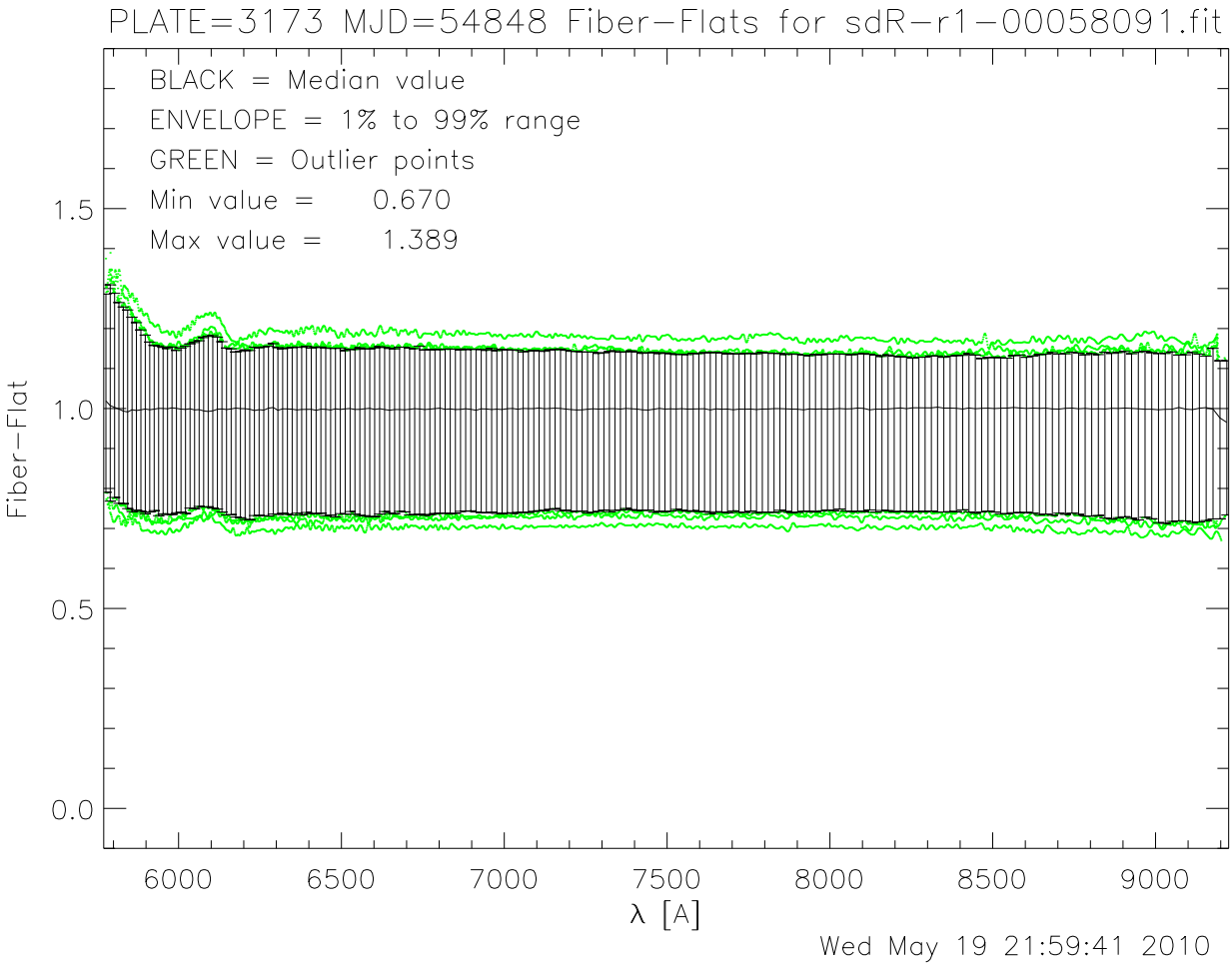

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

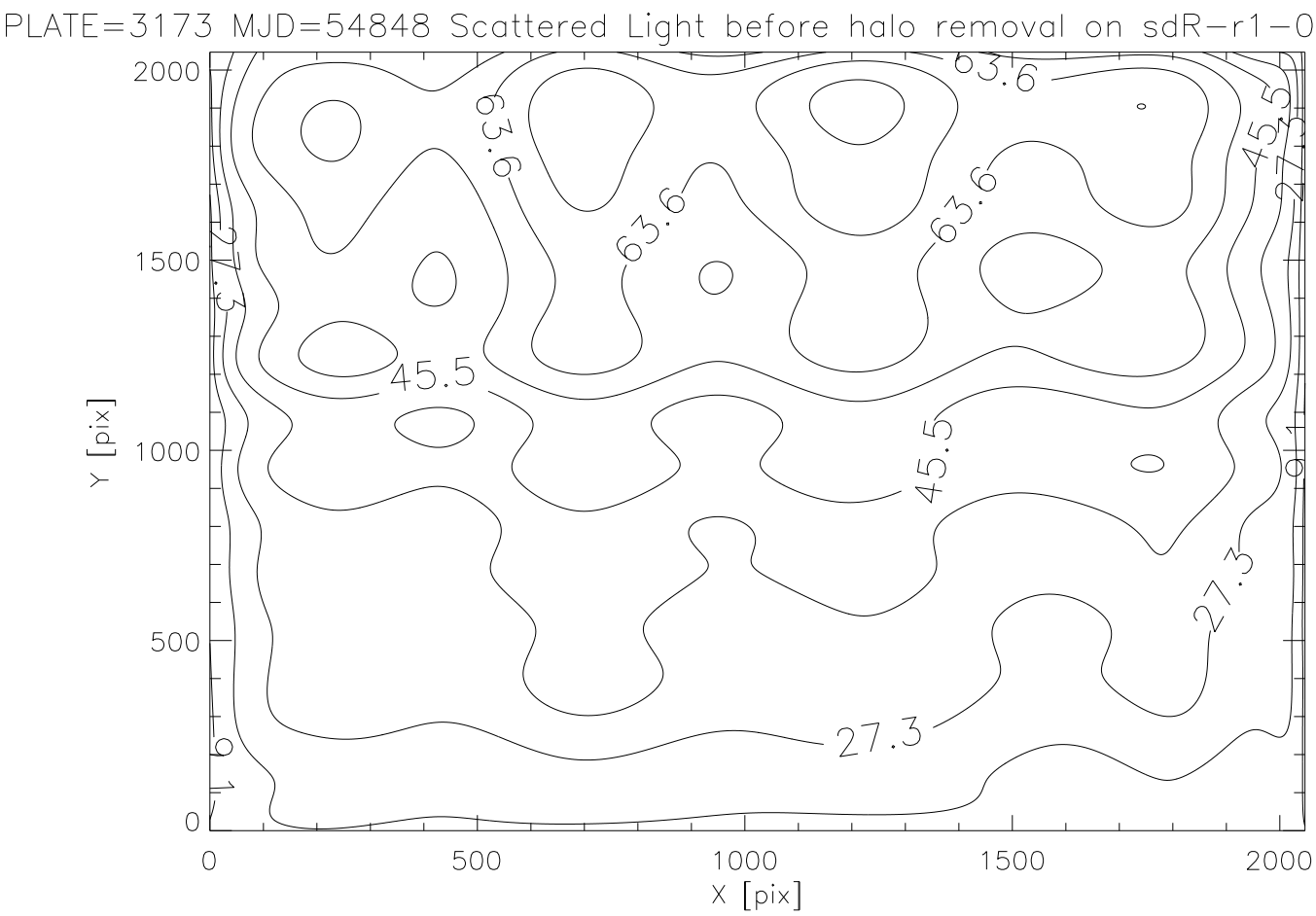

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

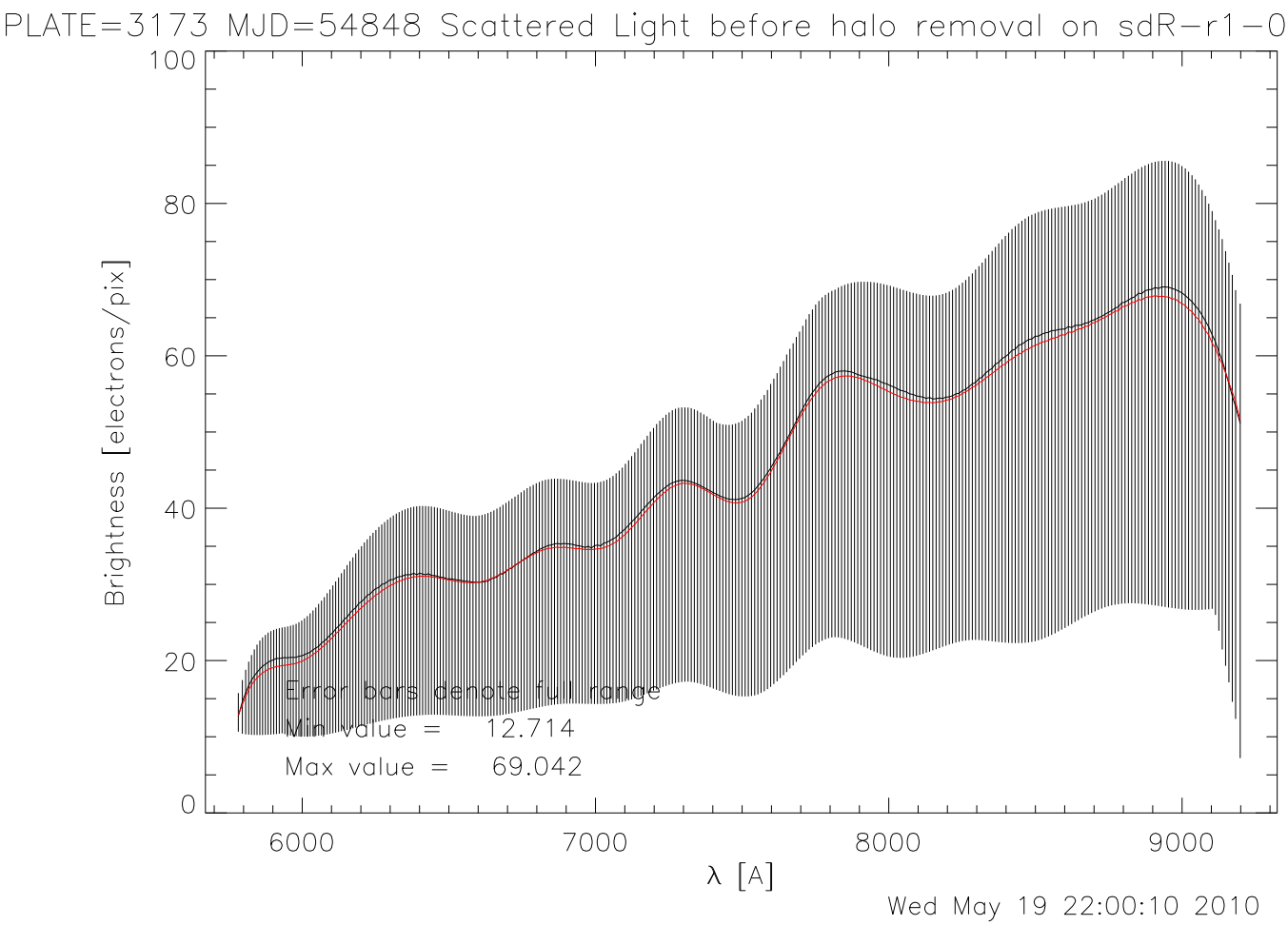

scale coeff residuals from ord=3 poly
xtraction
GREEN = Initial chisq extraction
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

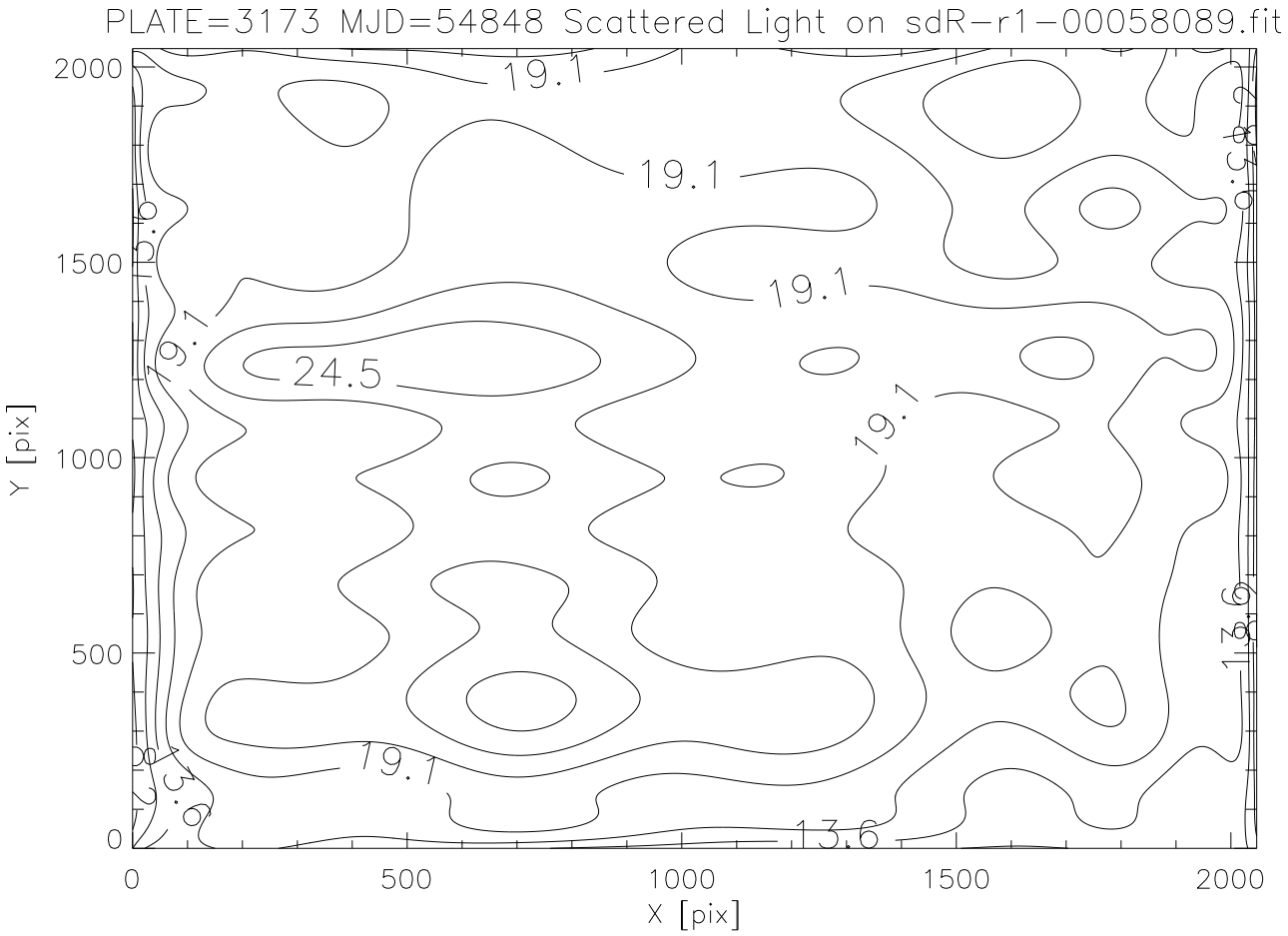

PLATE=3173 MJD=54848 Superflat sdR-r1-00058095.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

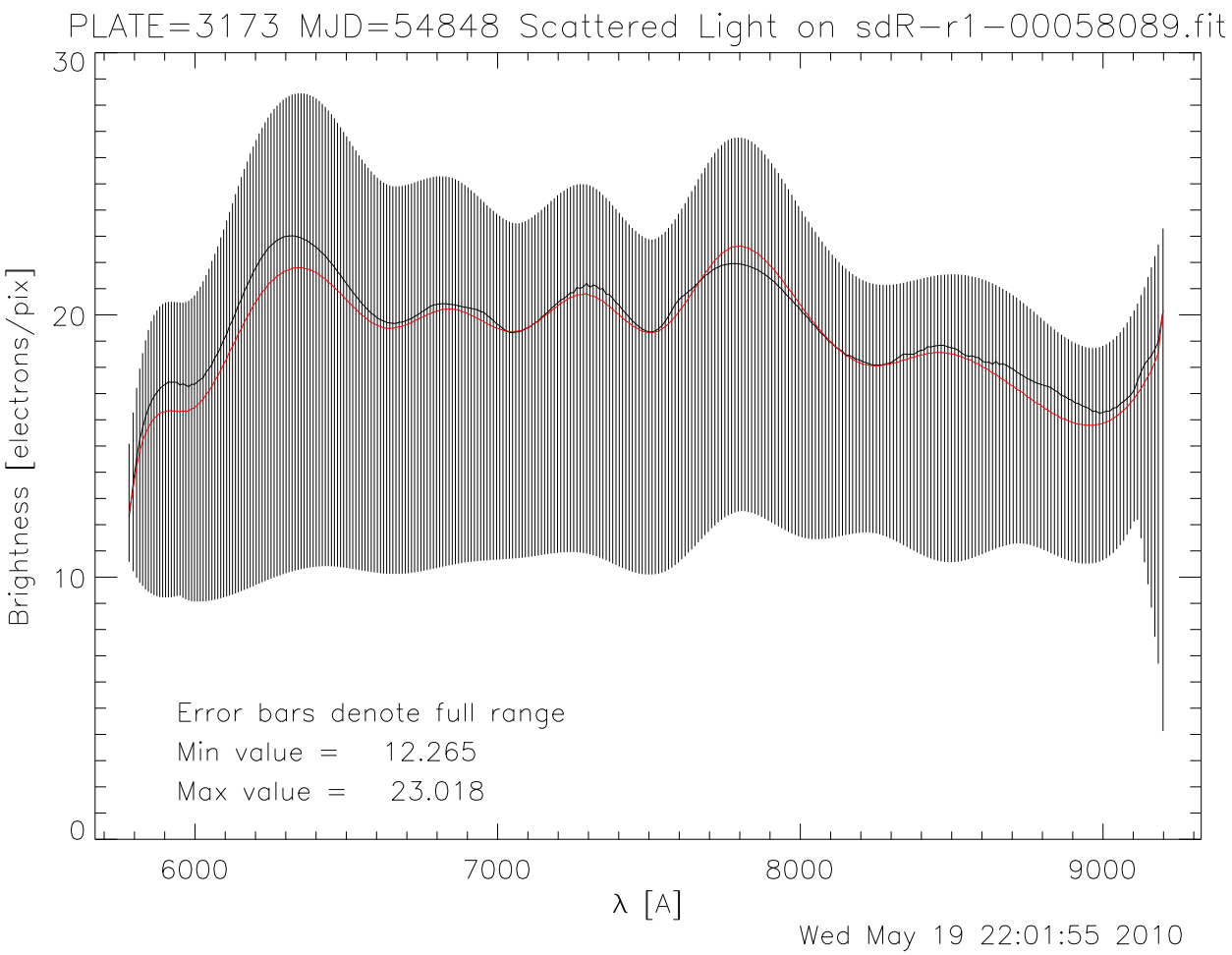

PLATE=3173 MJD=54848 Arcline Fit for sdR-r1-00058092.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed May 19 21:59:37 2010

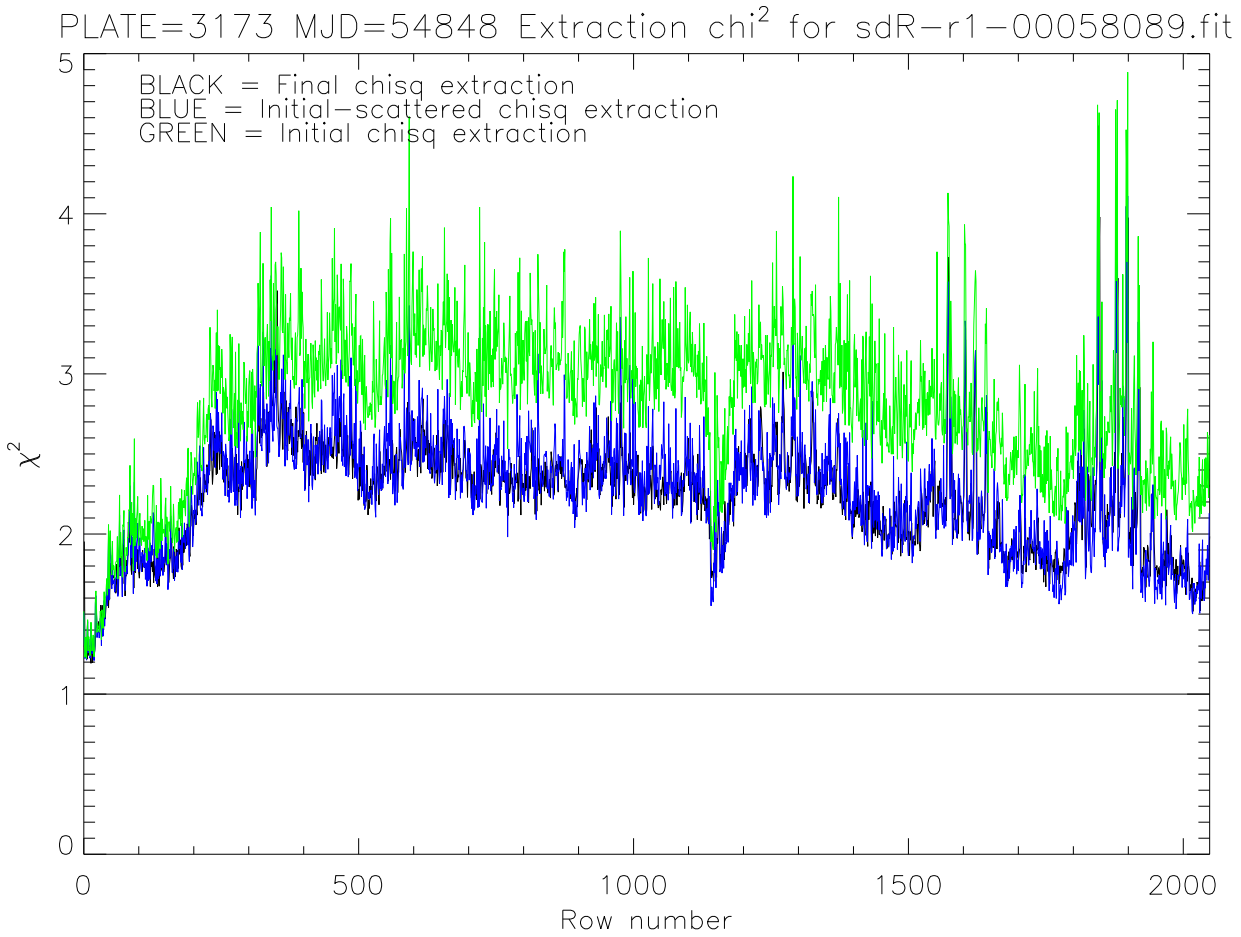

PLATE=3173 MJD=54848 Fiber-Flats for sdR-r1-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.670
Max value = 1.389
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed May 19 21:59:41 2010

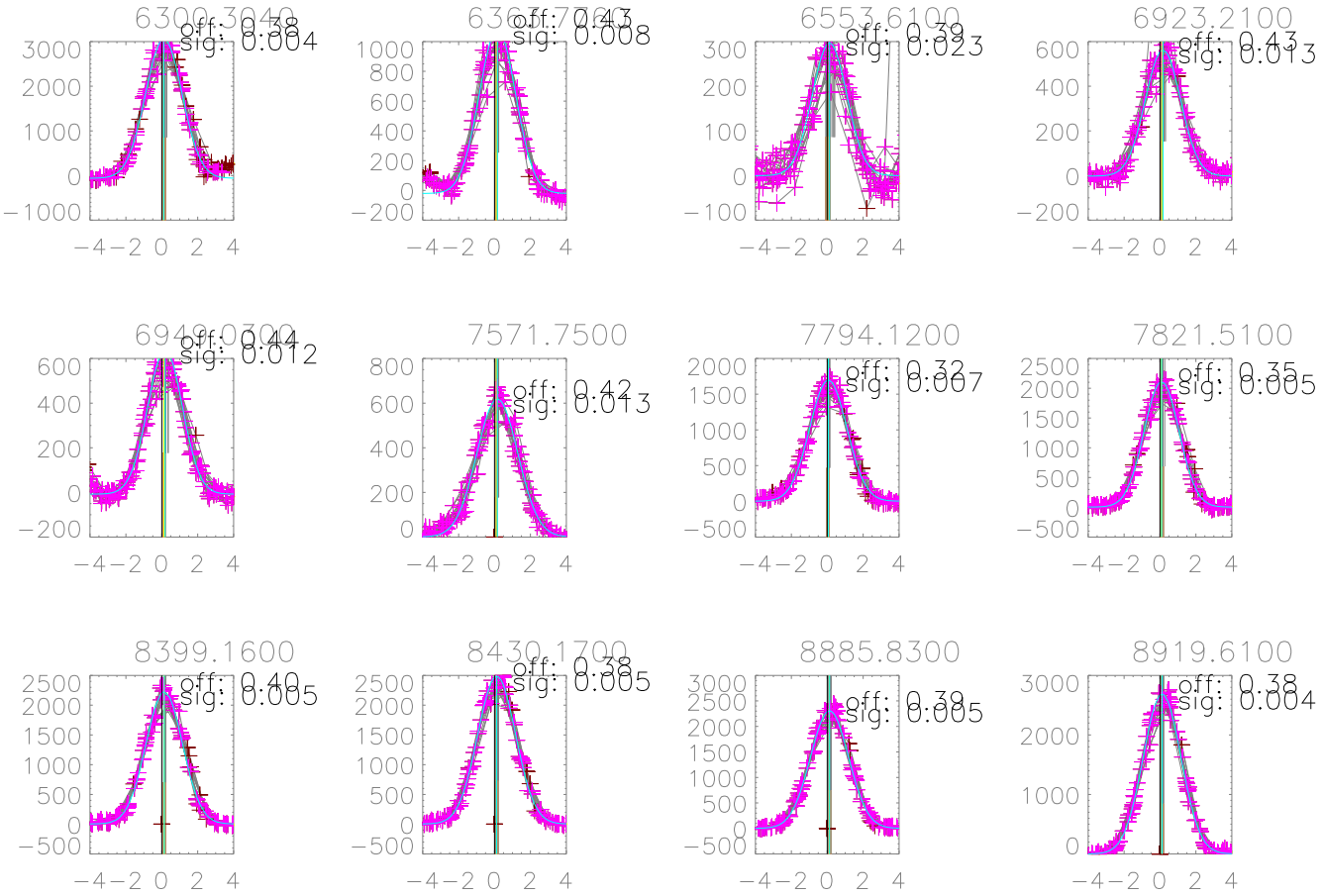

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-r1-00058089.fi
63.6
45.5
27.3
0
Y [pix]
X [pix]
0
500
1000
1500
2000

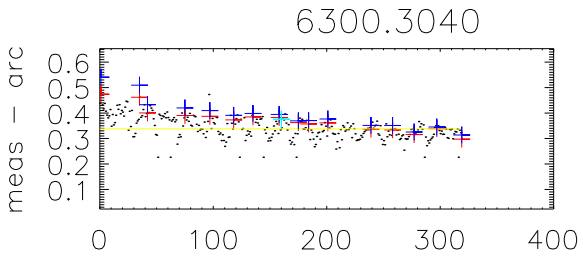

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-r1-00058089.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.714
Max value = 69.042
Wed May 19 22:00:10 2010

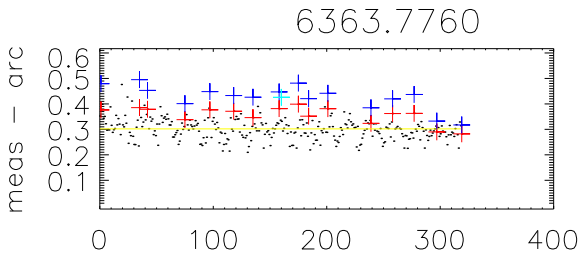

PLATE=3173 MJD=54848 Scattered Light on sdR−r1−00058089.fit
19.1
19.1
19.1
24.5
19.1
19.1
19.1
13.6
13.6
13.6
13.6
13.6
Y [pix]
X [pix]
0
500
1000
1500
2000

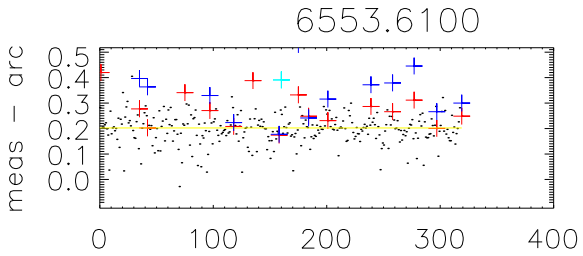

PLATE=3173 MJD=54848 Scattered Light on sdR-r1-00058089.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.265
Max value = 23.018
Wed May 19 22:01:55 2010

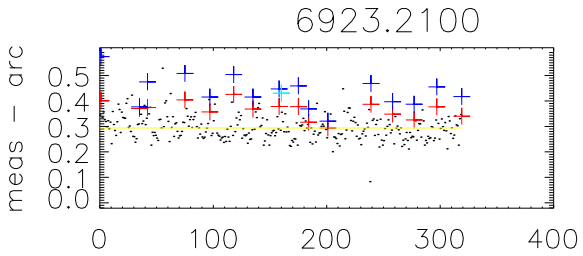

PLATE=3173 MJD=54848 Extraction chi^2 for sdR−r1−00058089.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

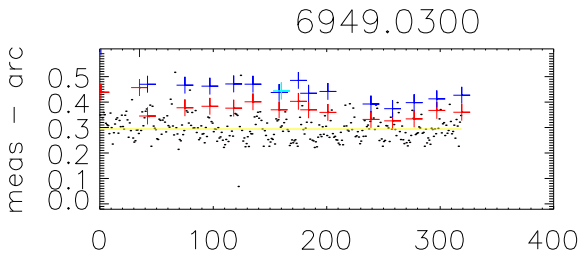

6300.3040
off: 0.38
sig: 0.004
6363.7043
off: 0.43
sig: 0.008
6553.6100
off: 0.39
sig: 0.023
6923.2100
off: 0.43
sig: 0.013
6949.0300
off: 0.44
sig: 0.012
7571.7500
off: 0.42
sig: 0.013
7794.1200
off: 0.32
sig: 0.007
7821.5100
off: 0.35
sig: 0.005
8399.1600
off: 0.40
sig: 0.005
8430.1700
off: 0.38
sig: 0.005
8885.8300
off: 0.38
sig: 0.005
8919.6100
off: 0.38
sig: 0.004

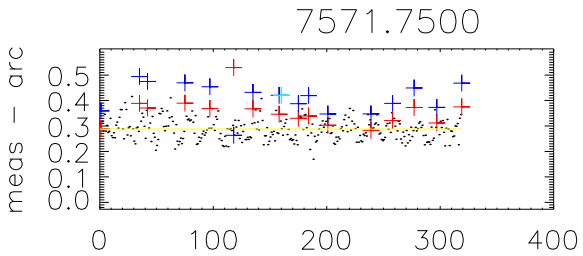

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

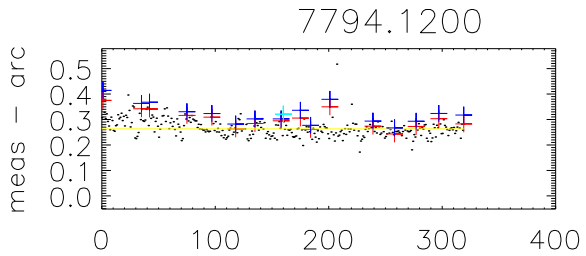

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

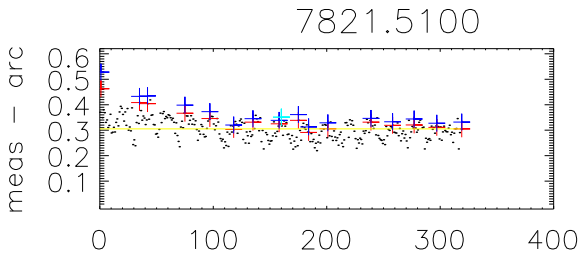

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

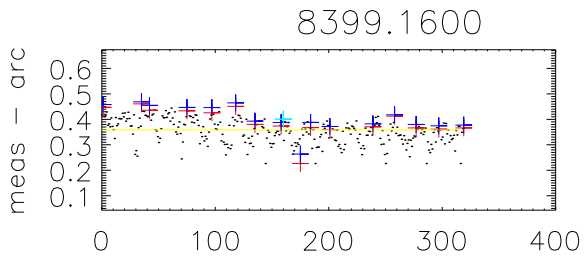

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

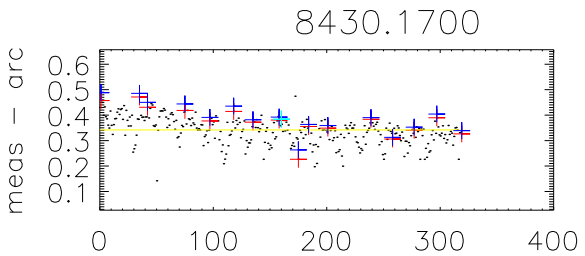

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

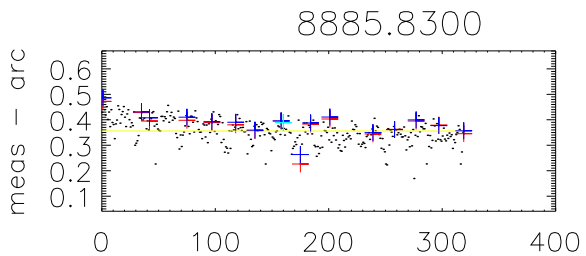

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

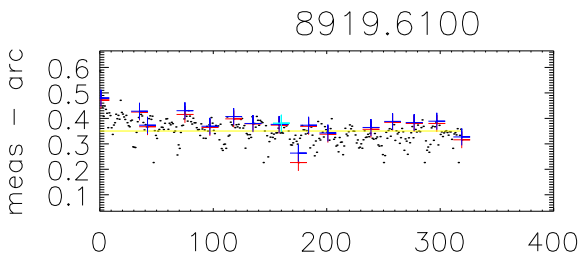

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

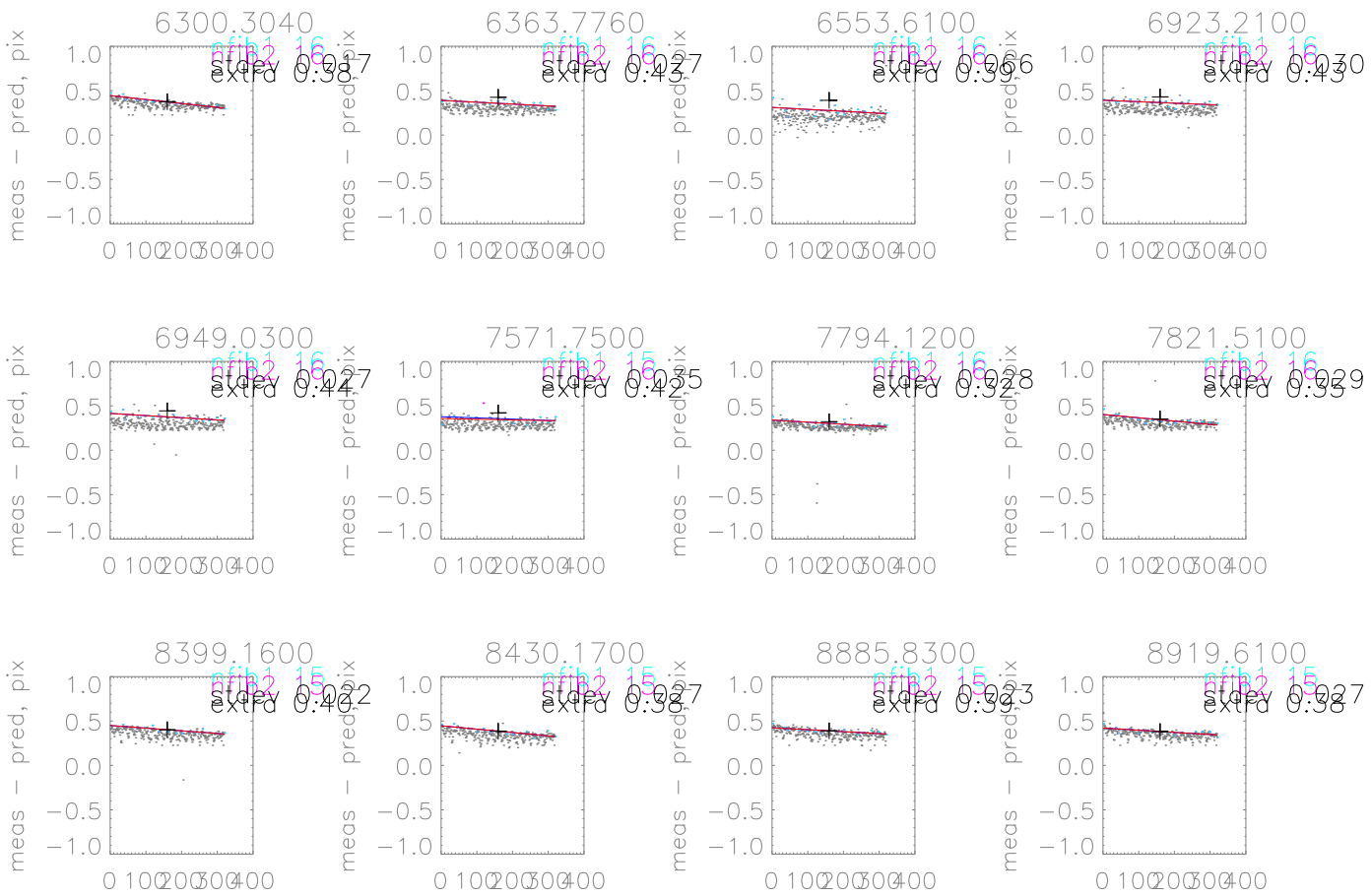

7821.5100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

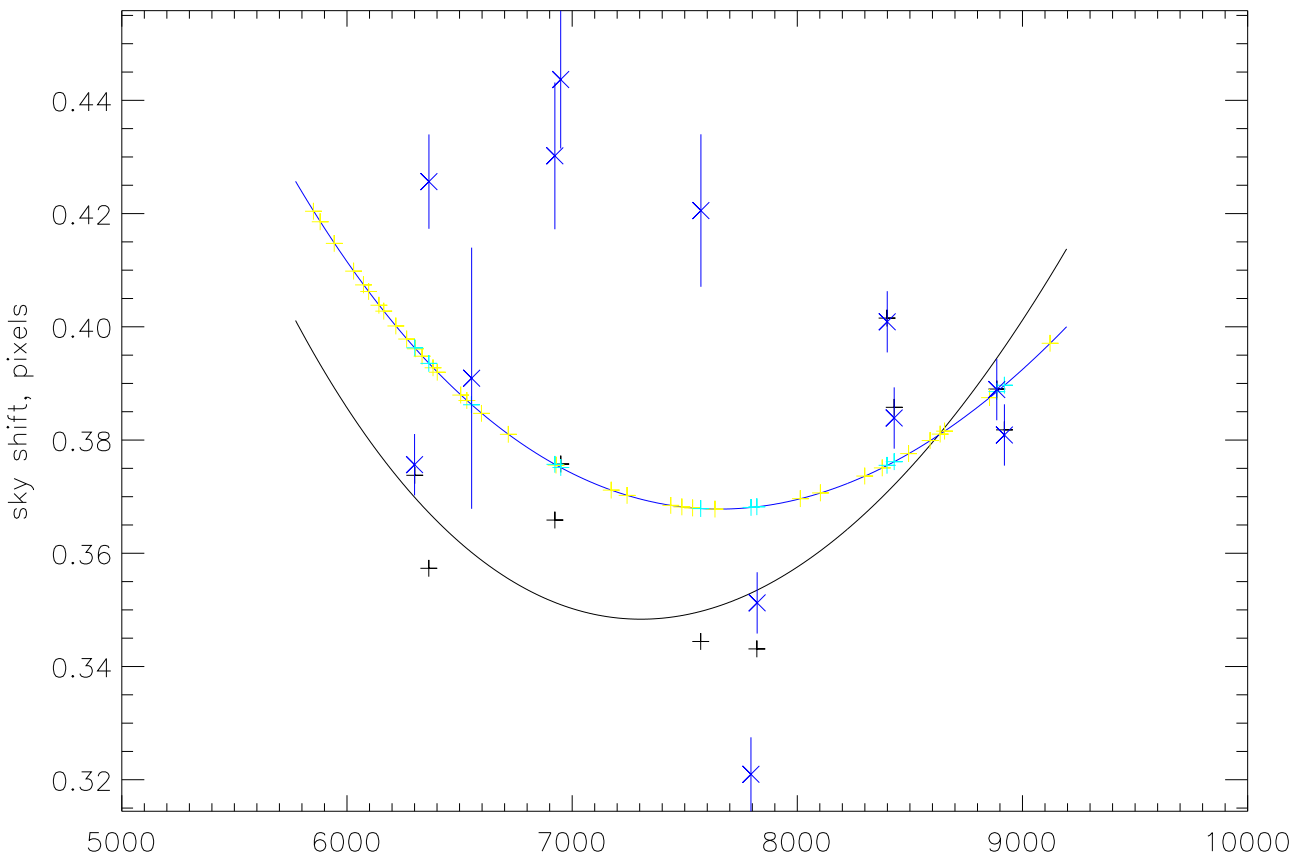

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

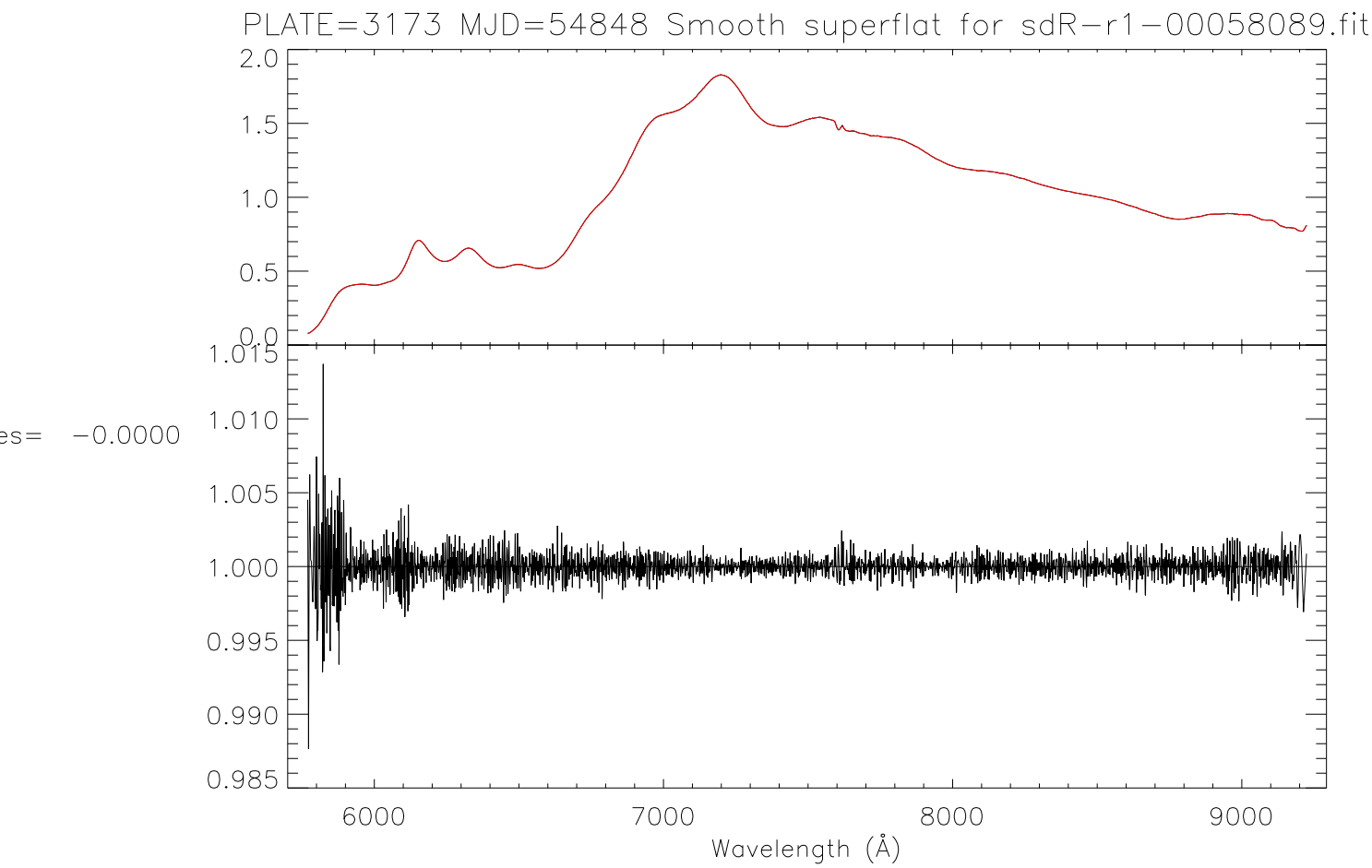

8430.1700
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


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

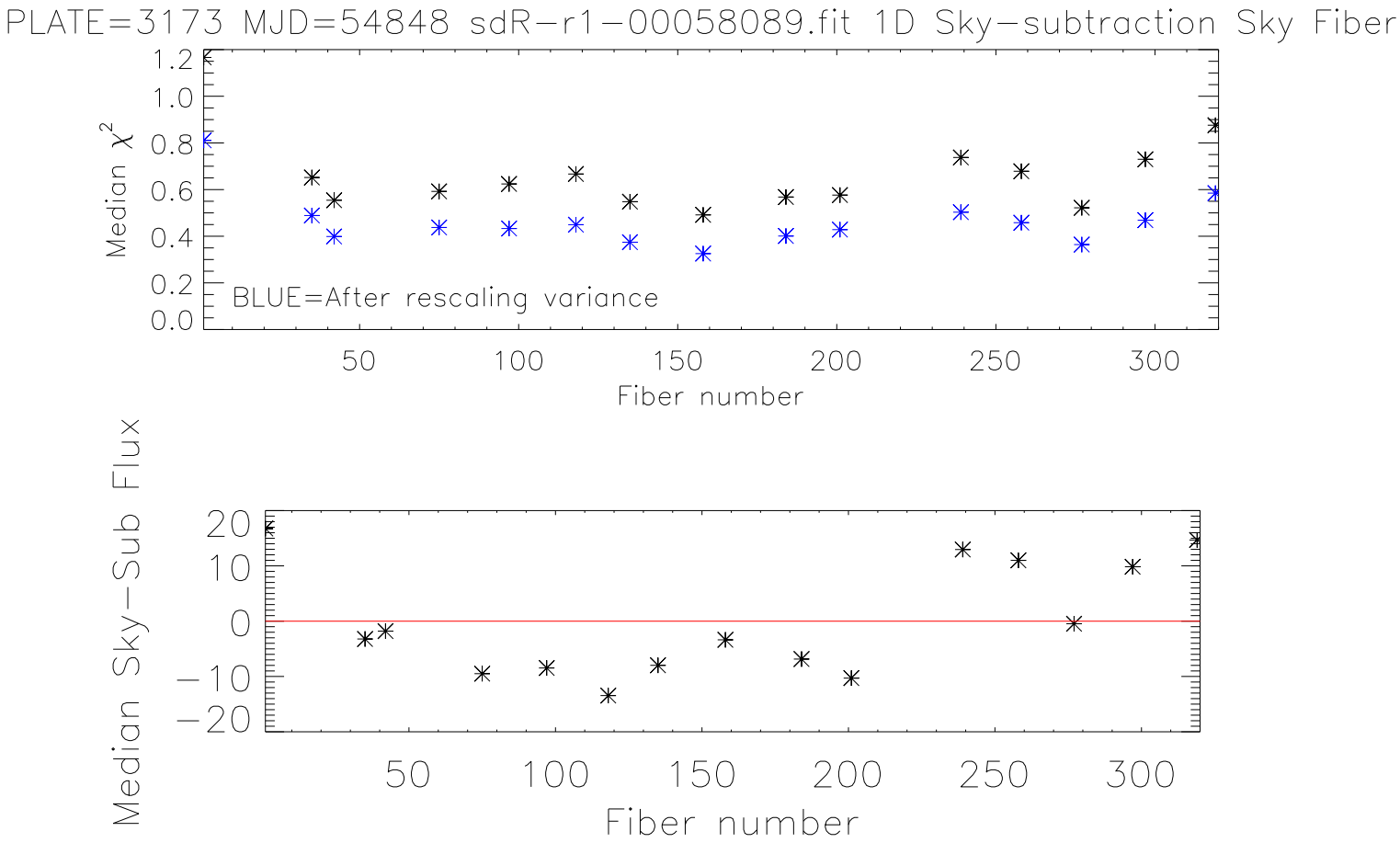

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

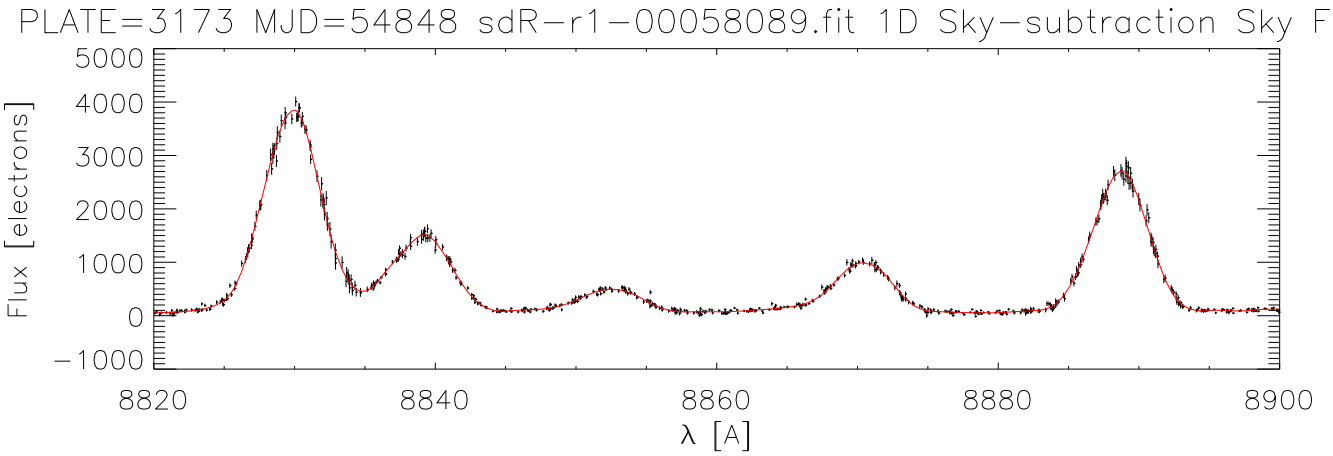

6300.3040
stdev 0.027
extra 0.38
6363.7760
stdev 0.027
extra 0.43
6553.6100
stdev 0.026
extra 0.39
6923.2100
stdev 0.030
extra 0.43
6949.0300
stdev 0.027
extra 0.44
7571.7500
stdev 0.035
extra 0.42
7794.1200
stdev 0.028
extra 0.32
7821.5100
stdev 0.029
extra 0.35
8399.1600
stdev 0.022
extra 0.44
8430.1700
stdev 0.027
extra 0.38
8885.8300
stdev 0.023
extra 0.39
8919.6100
stdev 0.027
extra 0.38
meas − pred, pix

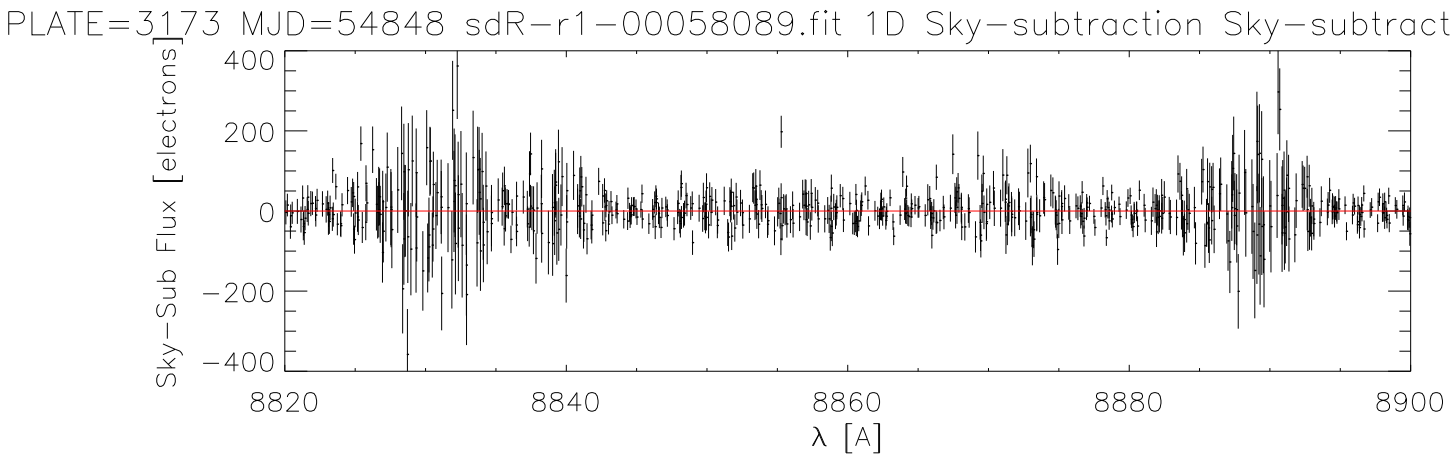

sky shift, pixels
0.44
0.42
0.40
0.38
0.36
0.34
0.32
5000
6000
7000
8000
9000
10000

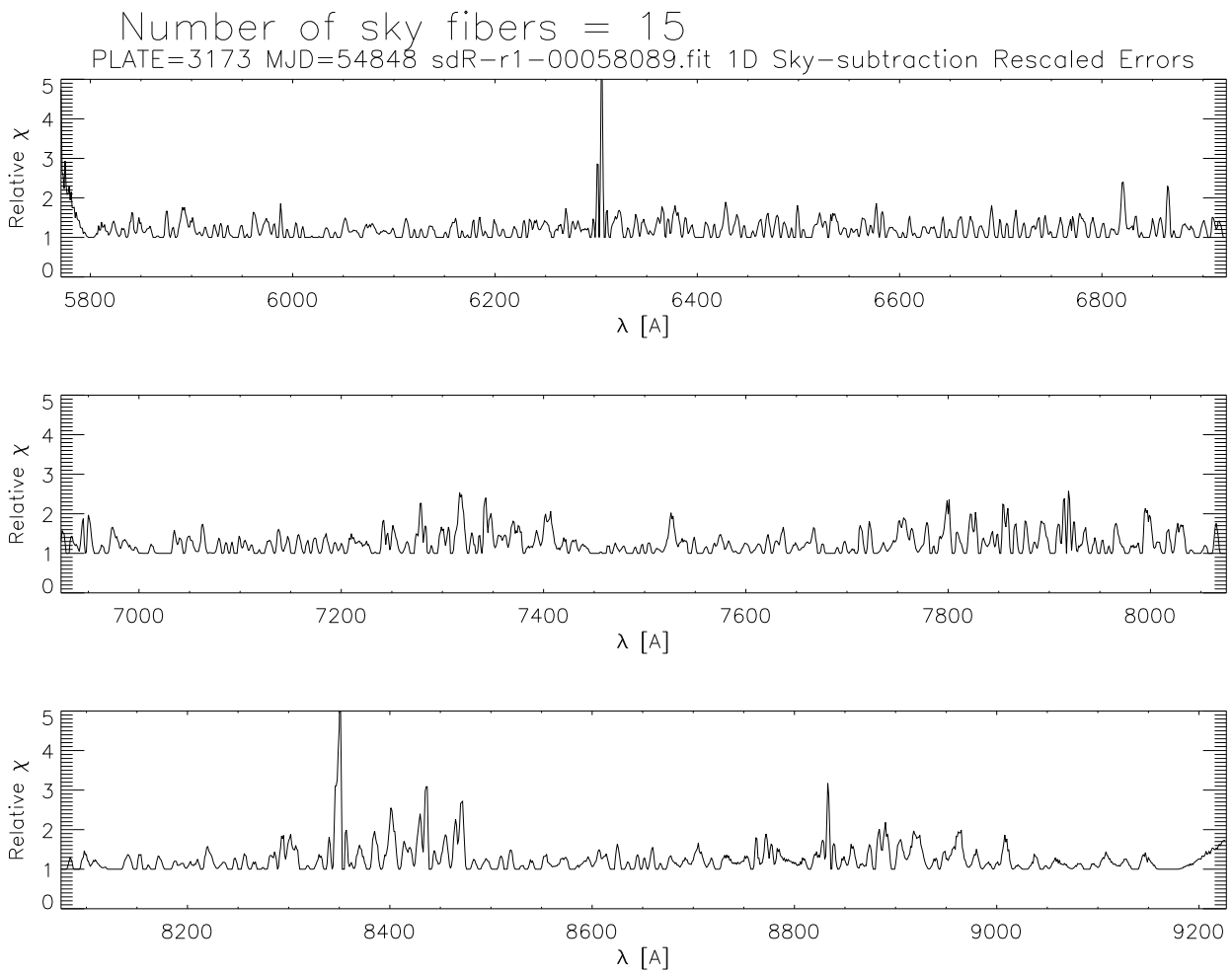

PLATE=3173 MJD=54848 Smooth superflat for sdR-r1-00058089.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

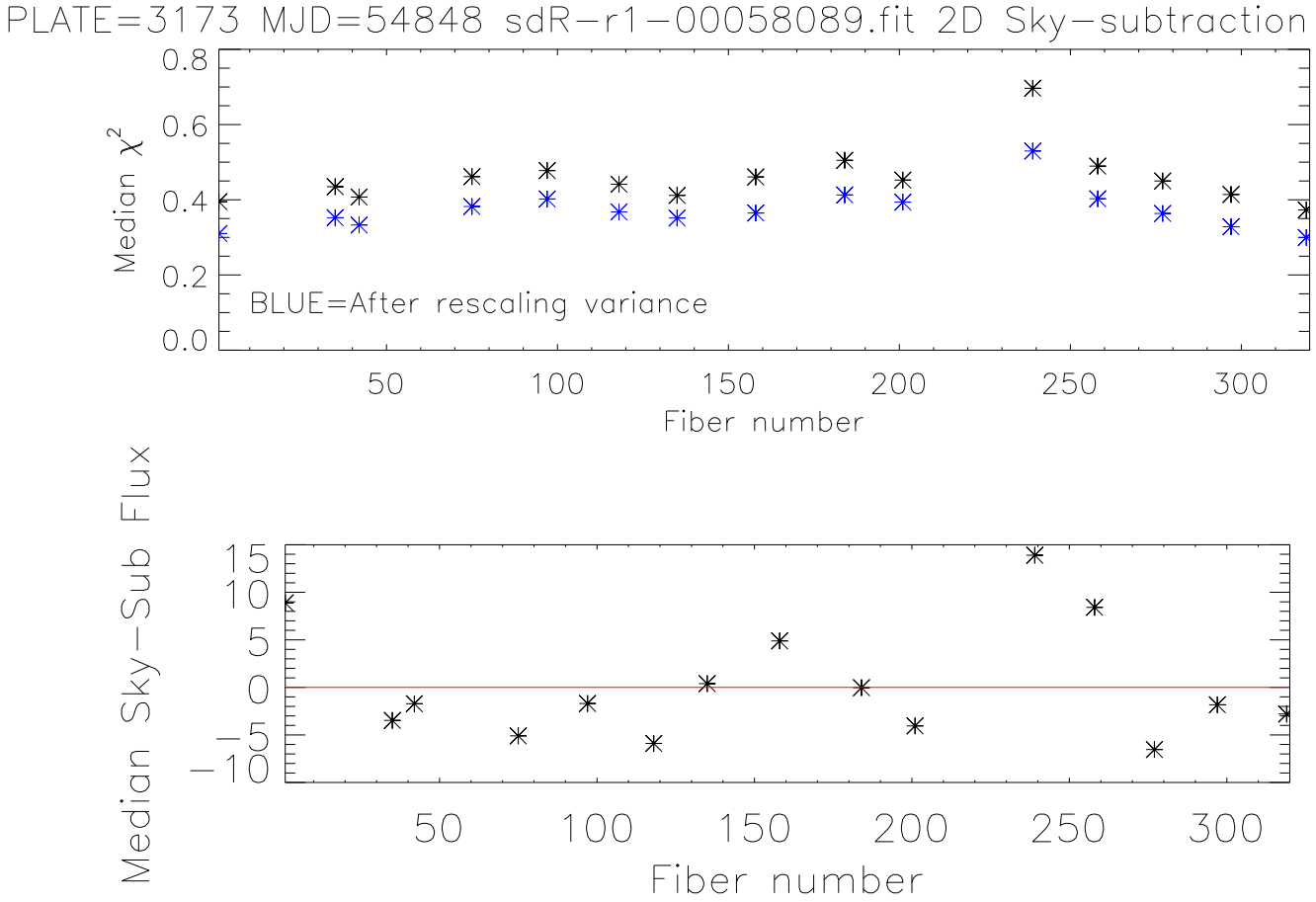
es= −0.0000

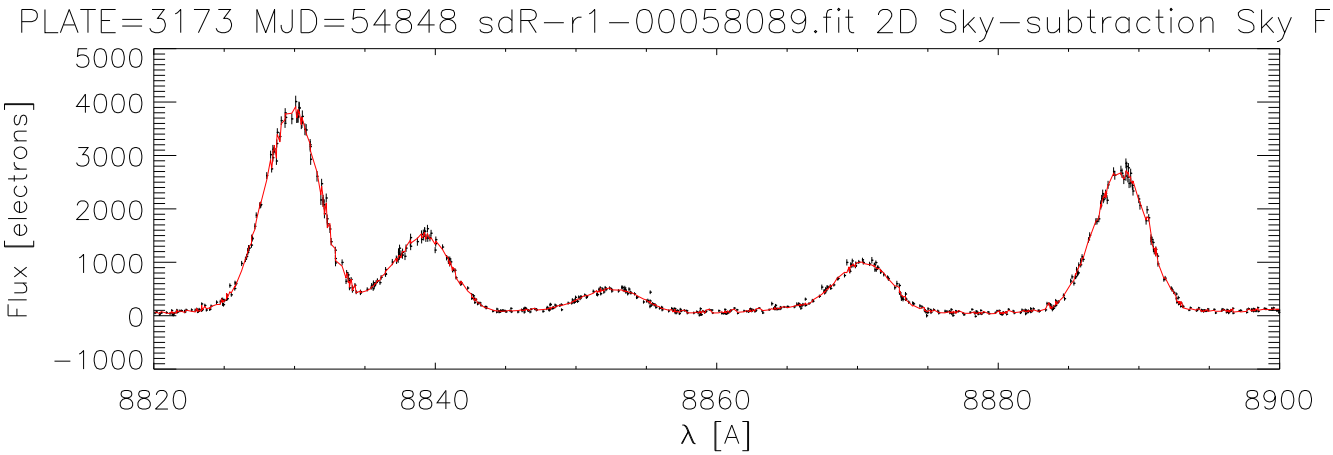

PLATE=3173 MJD=54848 sdR-r1-00058089.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

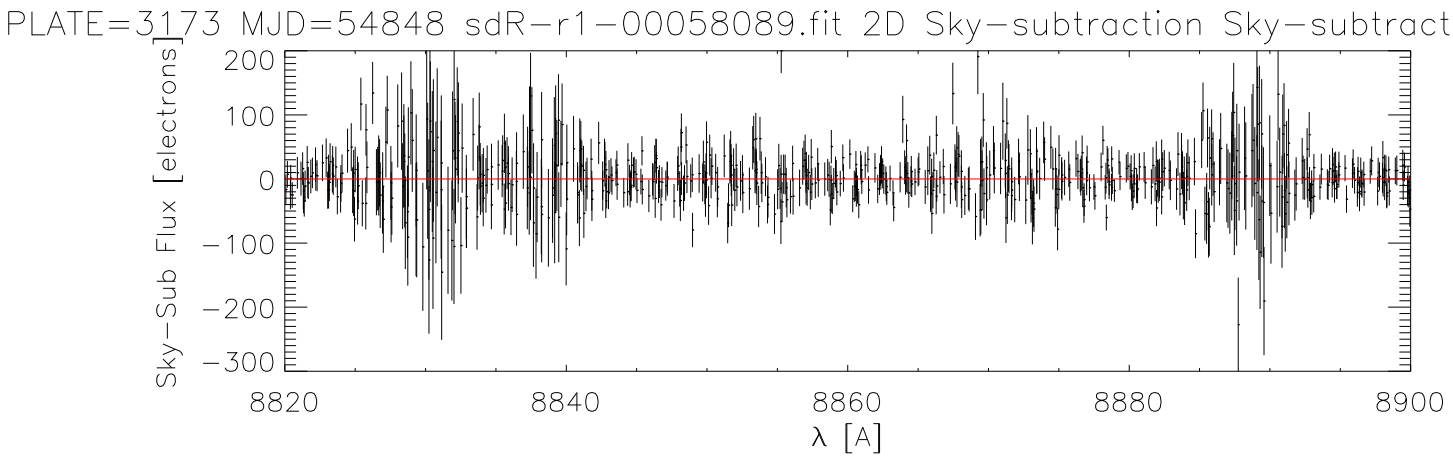

PLATE=3173 MJD=54848 sdR-r1-00058089.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

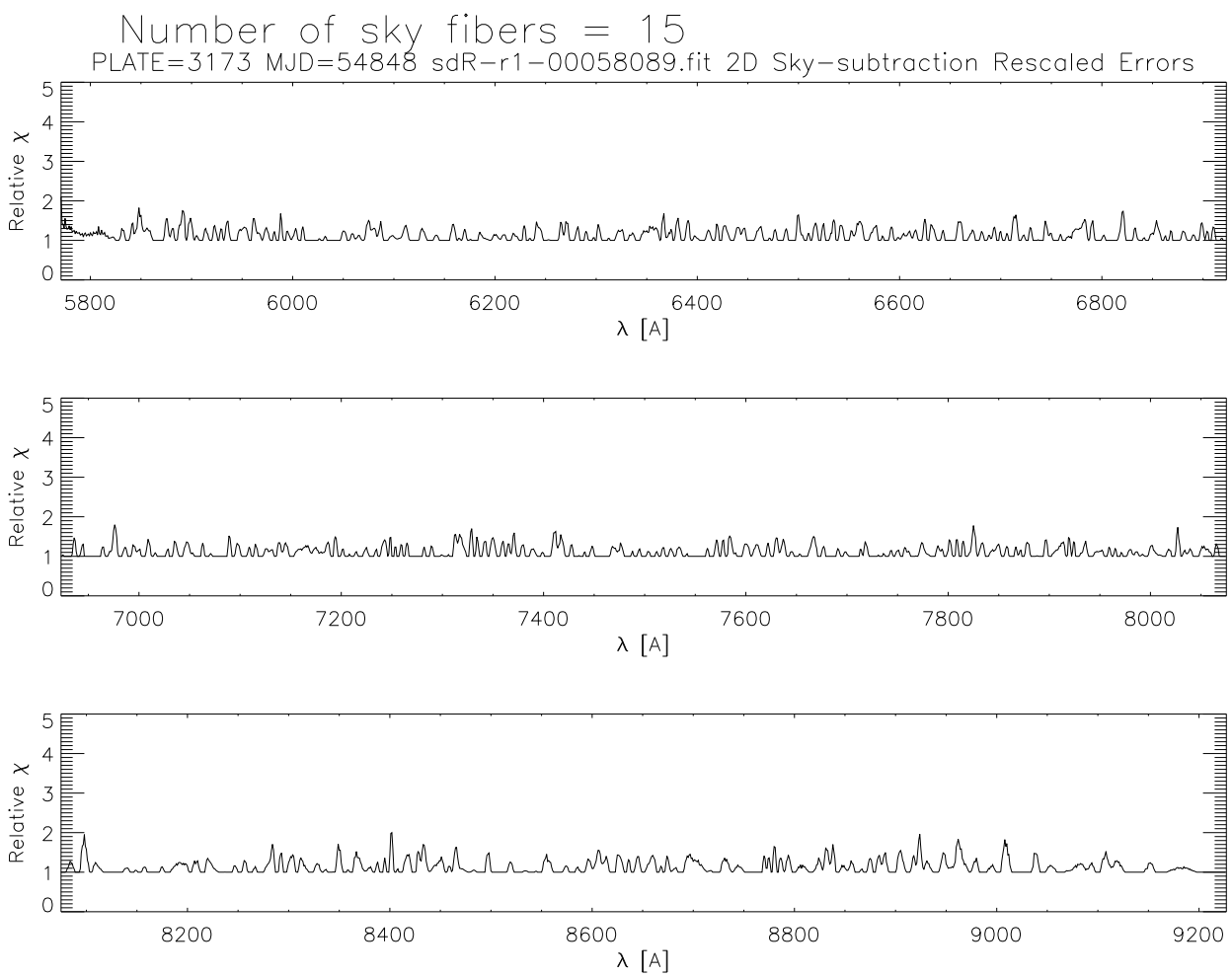

PLATE=3173 MJD=54848 sdR-r1-00058089.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

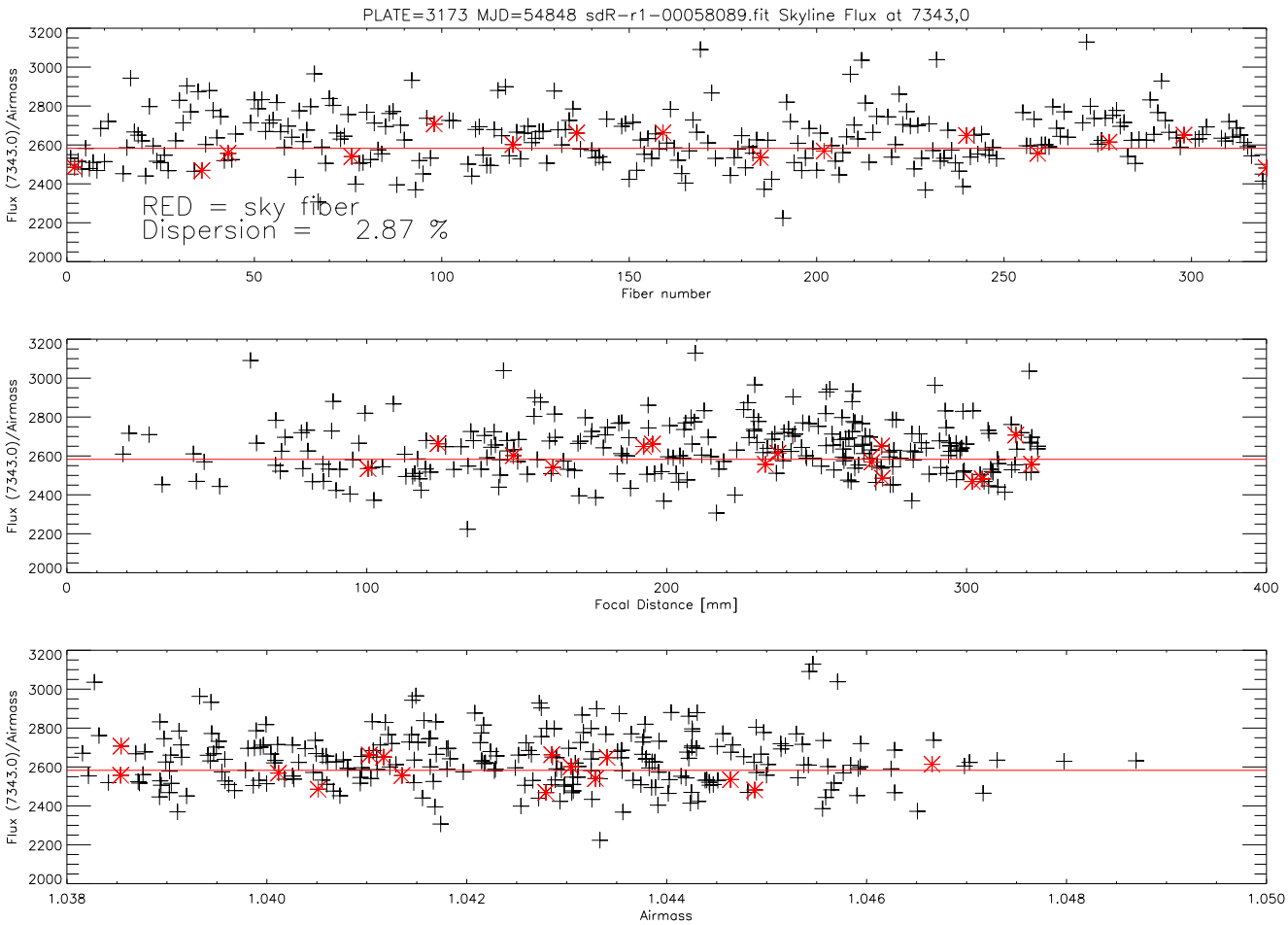

Number of sky fibers = 15
PLATE=3173 MJD=54848 sdR-r1-00058089.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

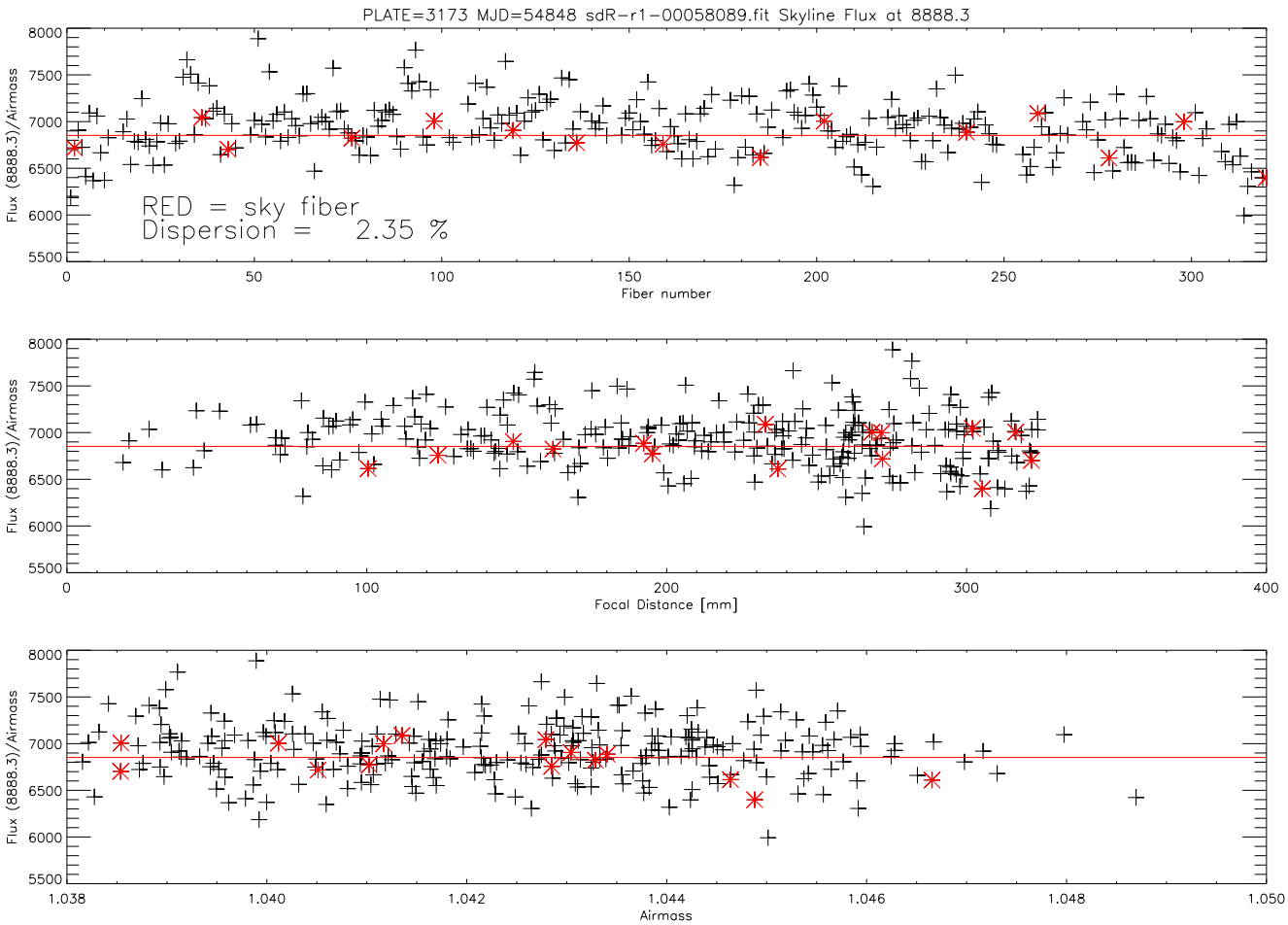

PLATE=3173 MJD=54848 sdR-r1-00058089.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

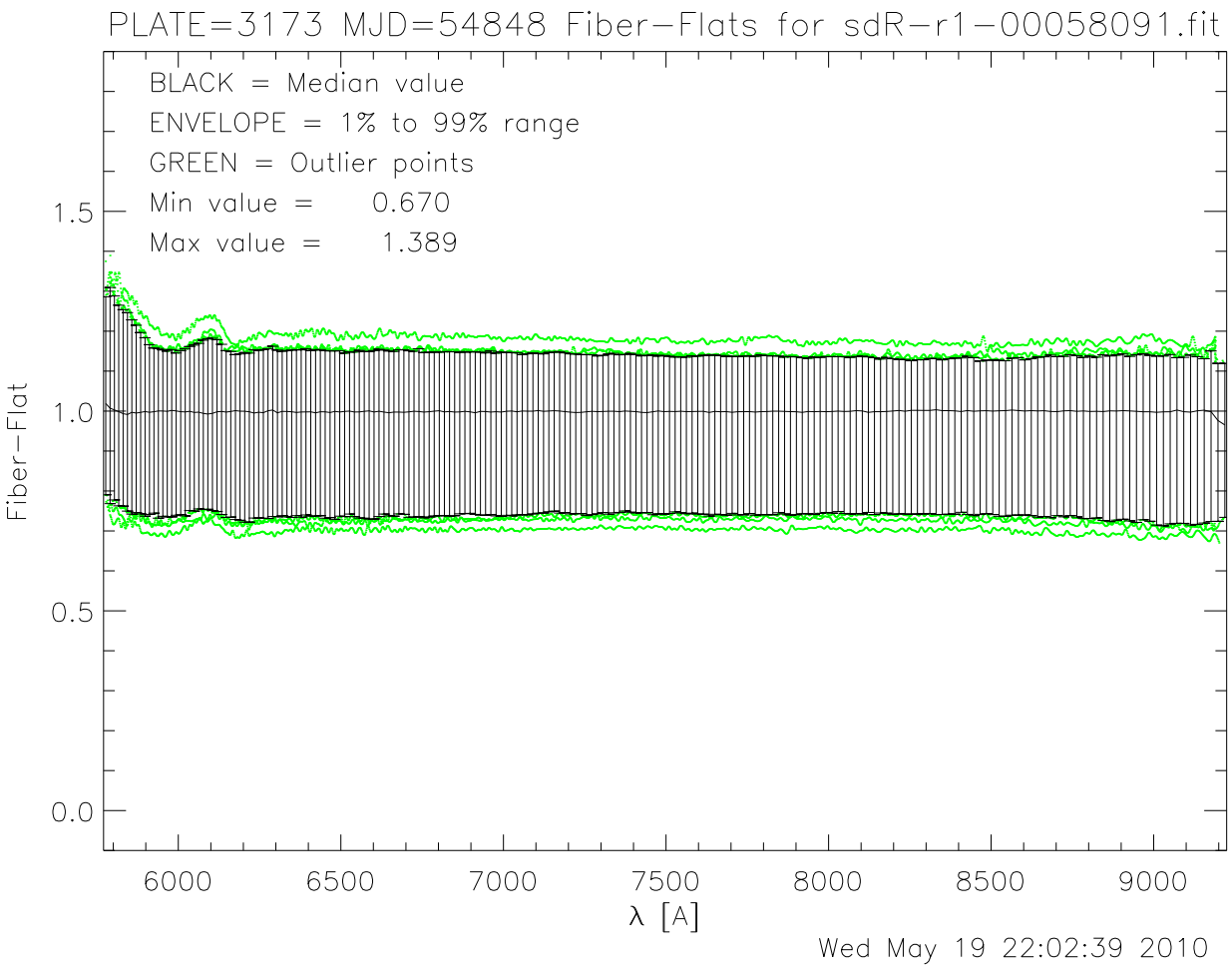

PLATE=3173 MJD=54848 sdR-r1-00058089.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

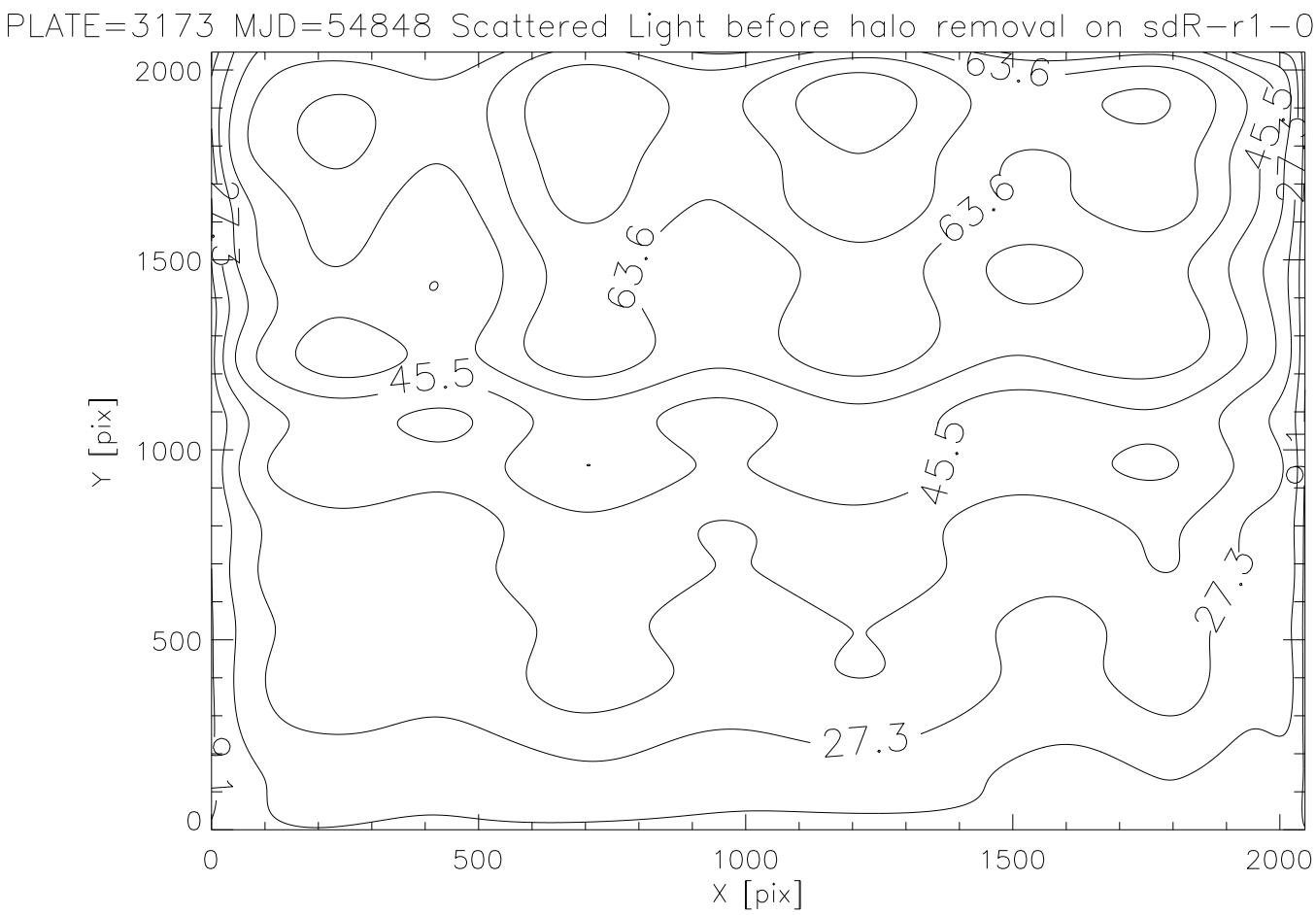

PLATE=3173 MJD=54848 sdR-r1-00058089.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

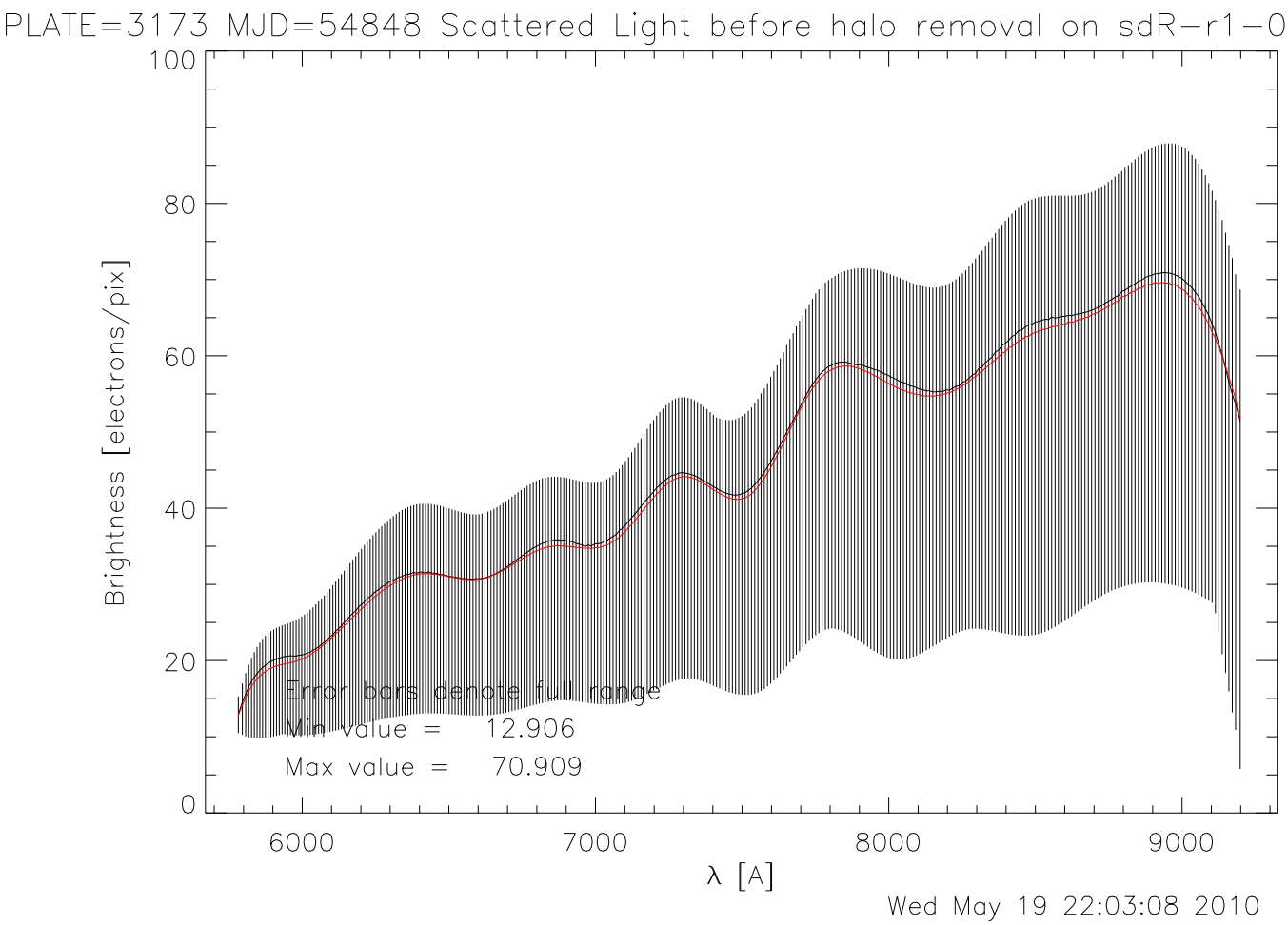

Number of sky fibers = 15
PLATE=3173 MJD=54848 sdR-r1-00058089.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

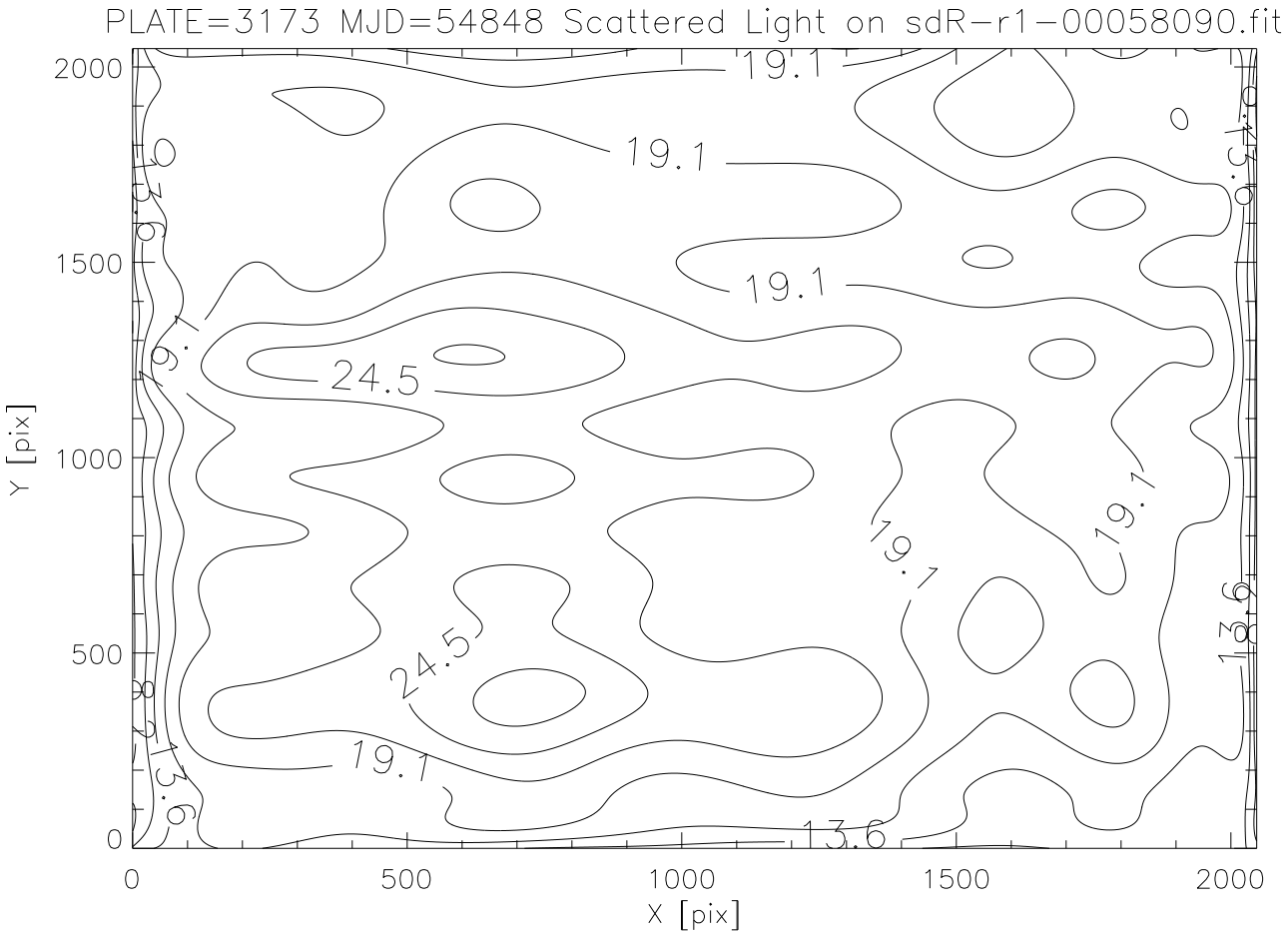

PLATE=3173 MJD=54848 sdR-r1-00058089.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.87 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

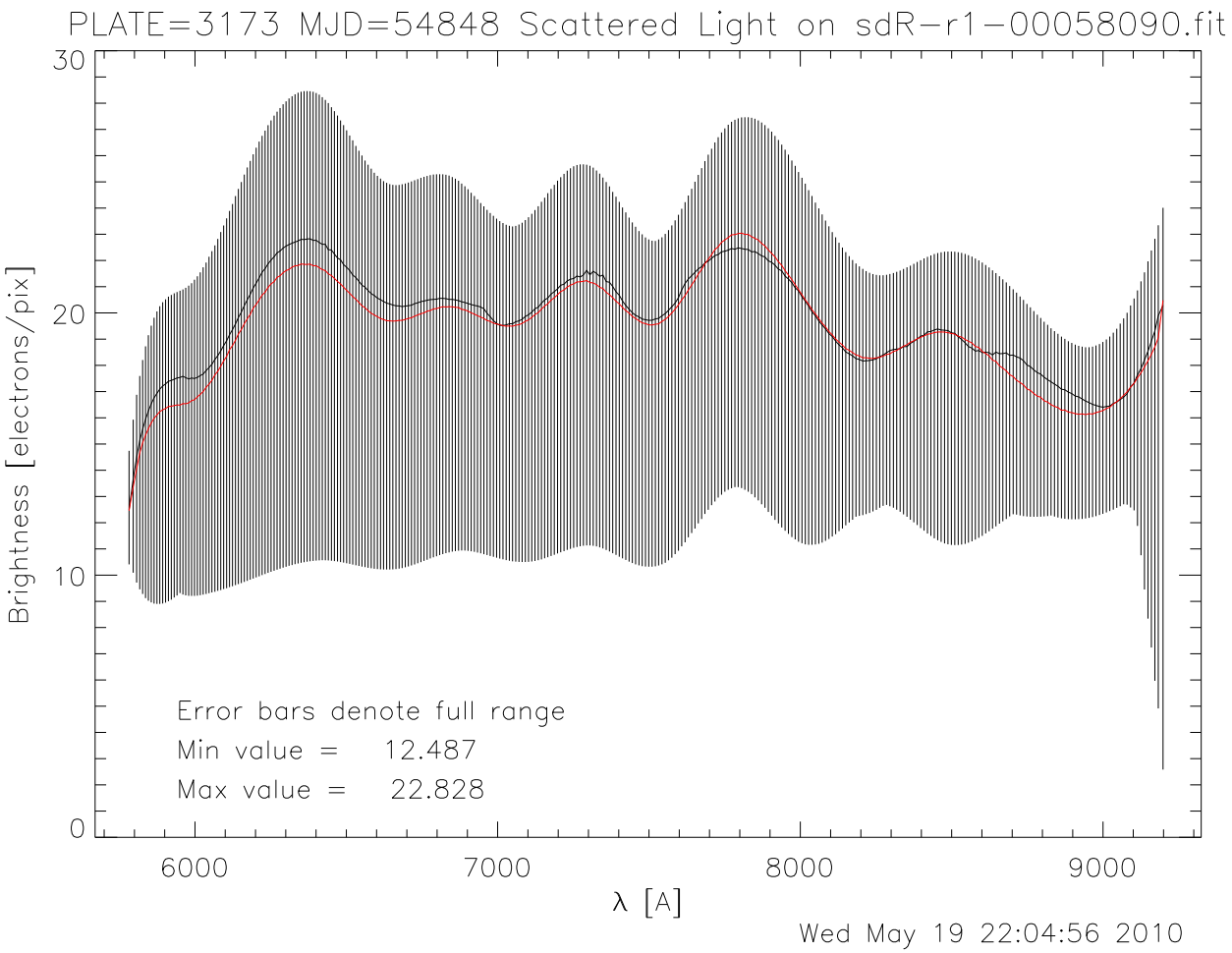

PLATE=3173 MJD=54848 sdR-r1-00058089.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.35 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

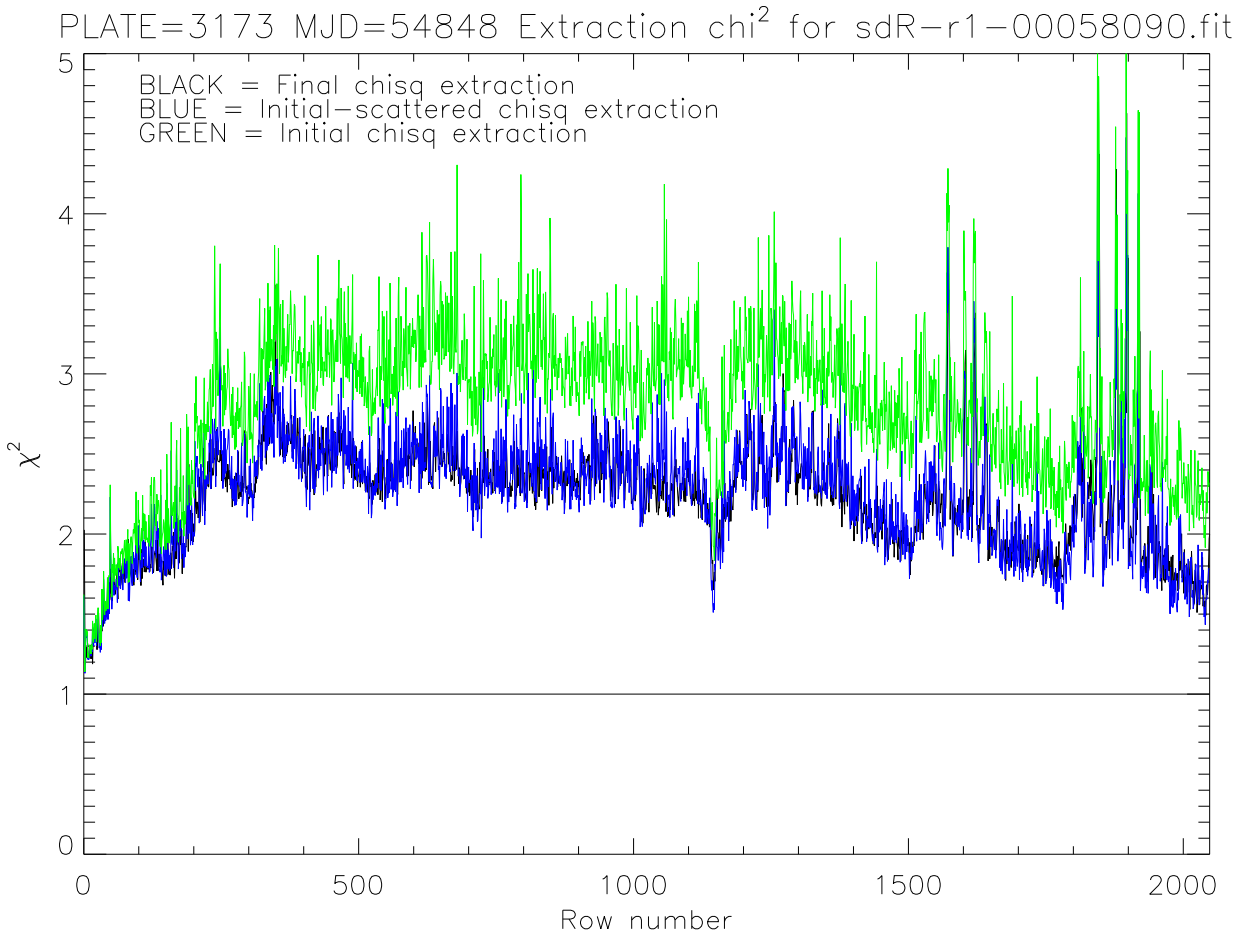

PLATE=3173 MJD=54848 Fiber−Flats for sdR−r1−00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.670
Max value = 1.389
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed May 19 22:02:39 2010

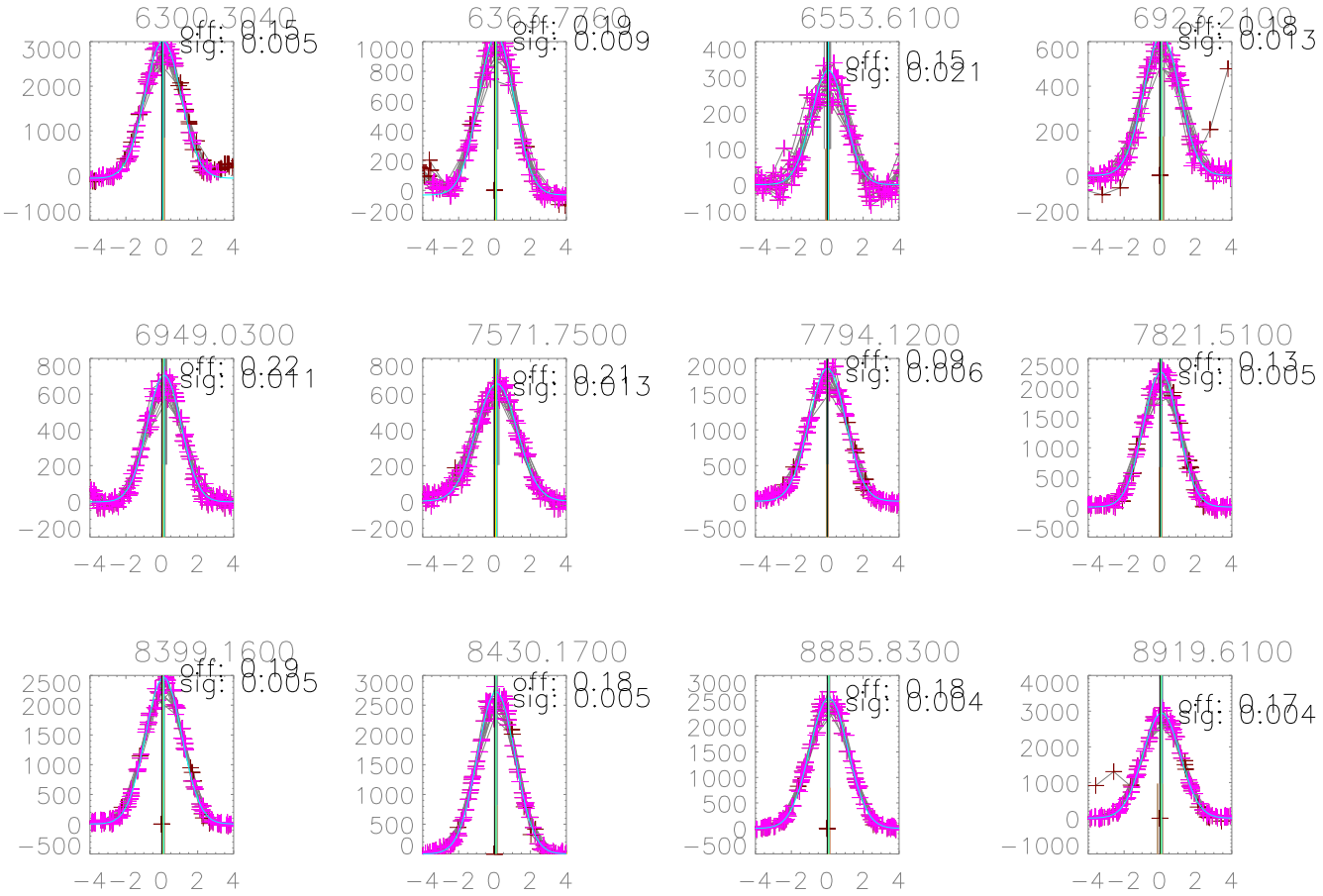

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-r1-00058090.fi
63.6
45.5
27.3
0.1
Y [pix]
X [pix]
0
500
1000
1500
2000

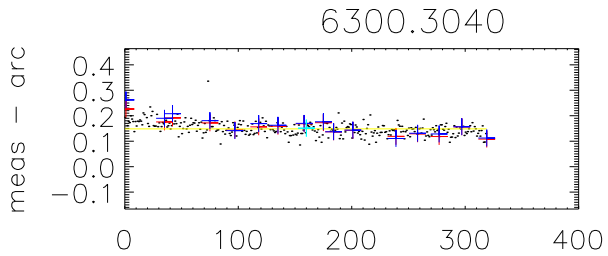

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-r1-00058090.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.906
Max value = 70.909
Wed May 19 22:03:08 2010

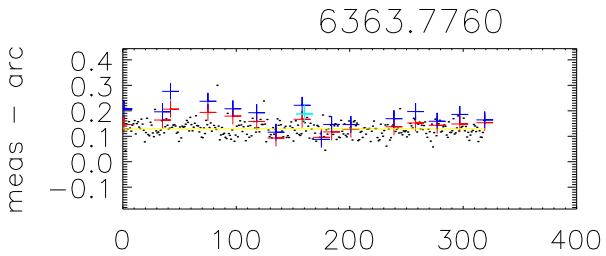

PLATE=3173 MJD=54848 Scattered Light on sdR-r1-00058090.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
19.1
24.5
13.6

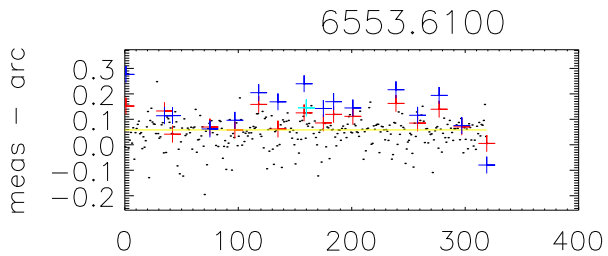

PLATE=3173 MJD=54848 Scattered Light on sdR-r1-00058090.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.487
Max value = 22.828
Wed May 19 22:04:56 2010

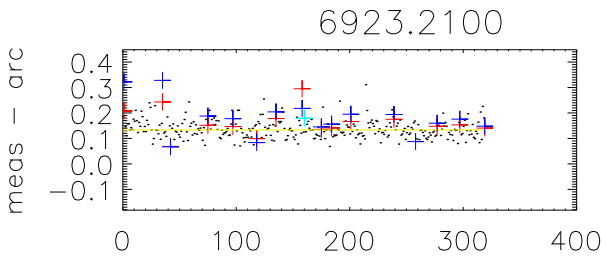

PLATE=3173 MJD=54848 Extraction chi^2 for sdR−r1−00058090.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

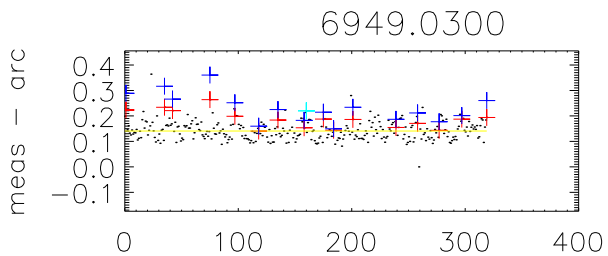

6300.3040
off: 0.15
sig: 0.005
6363.7760
off: 0.19
sig: 0.009
6553.6100
off: 0.15
sig: 0.021
6923.2100
off: 0.18
sig: 0.013
6949.0300
off: 0.22
sig: 0.011
7571.7500
off: 0.21
sig: 0.013
7794.1200
off: 0.09
sig: 0.006
7821.5100
off: 0.13
sig: 0.005
8399.1600
off: 0.19
sig: 0.005
8430.1700
off: 0.18
sig: 0.005
8885.8300
off: 0.18
sig: 0.004
8919.6100
off: 0.17
sig: 0.004

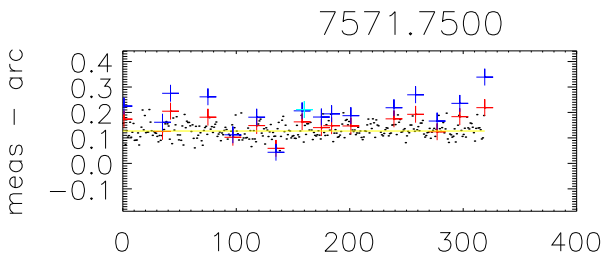

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

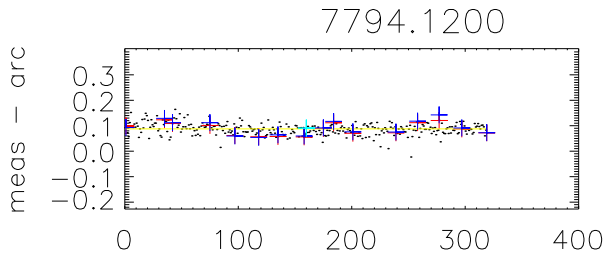

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

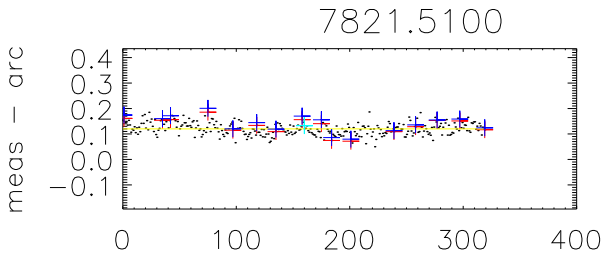

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

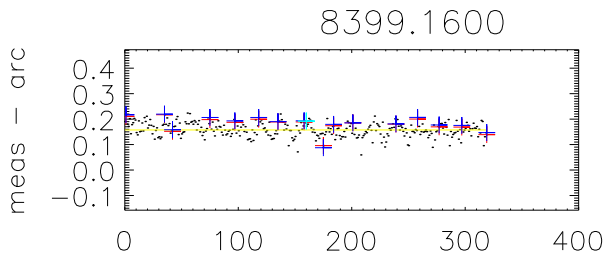

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

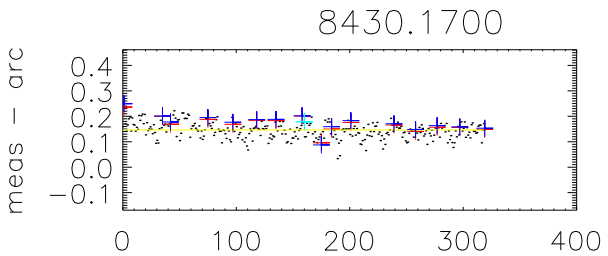

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

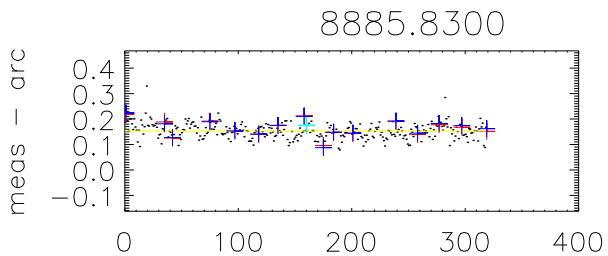

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

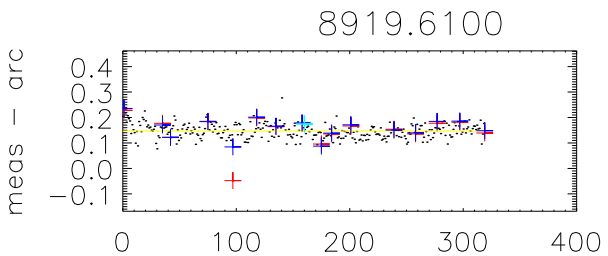

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

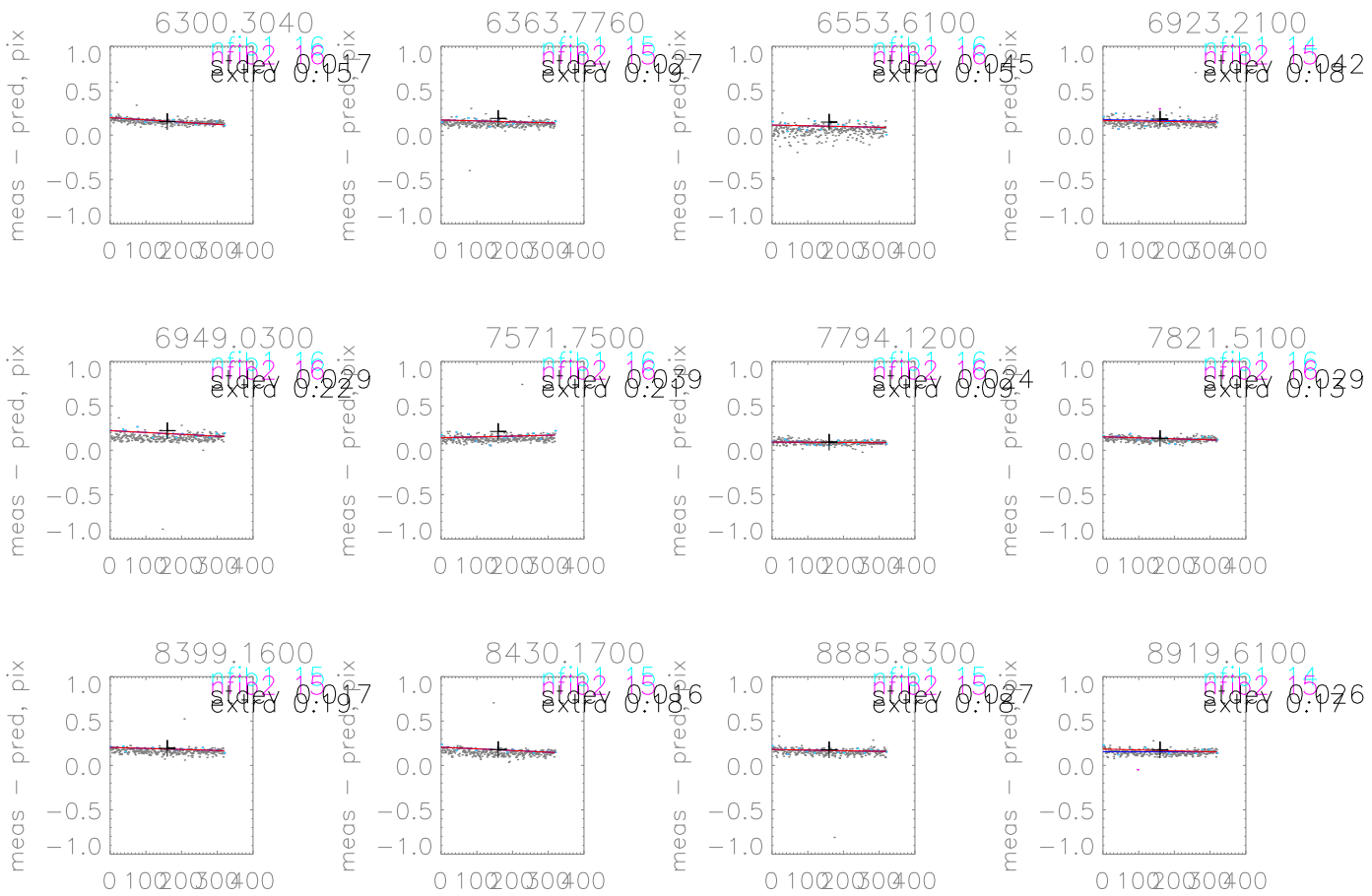

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

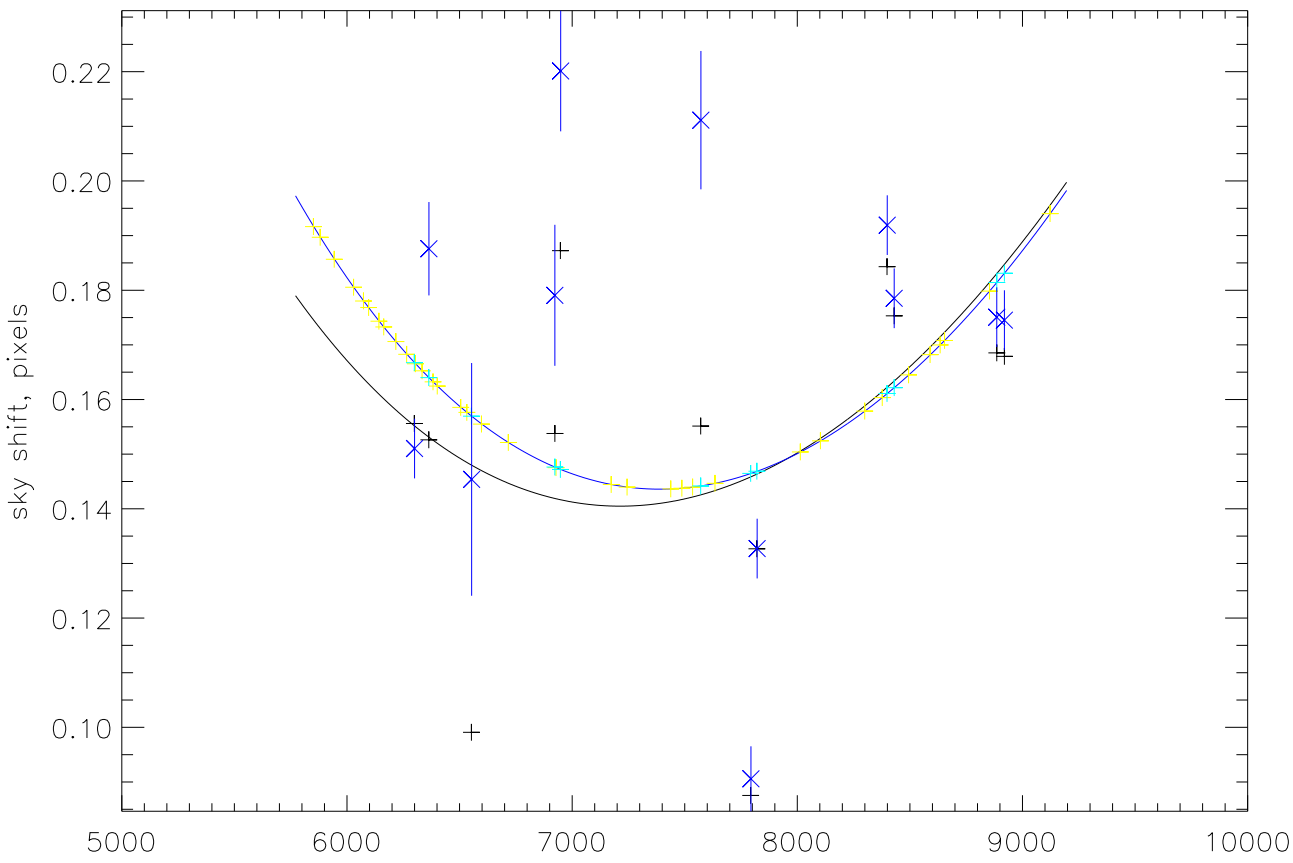

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

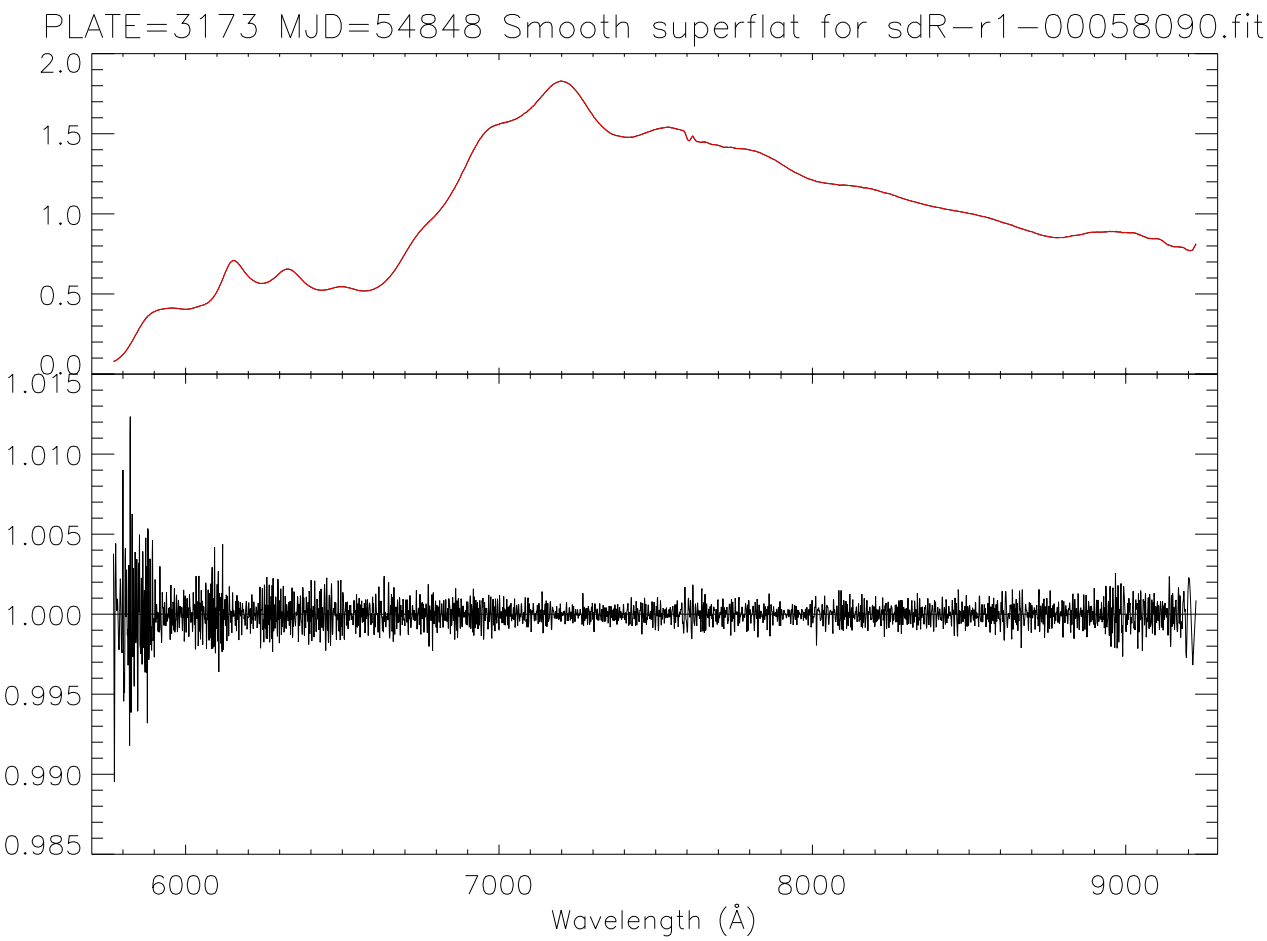

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

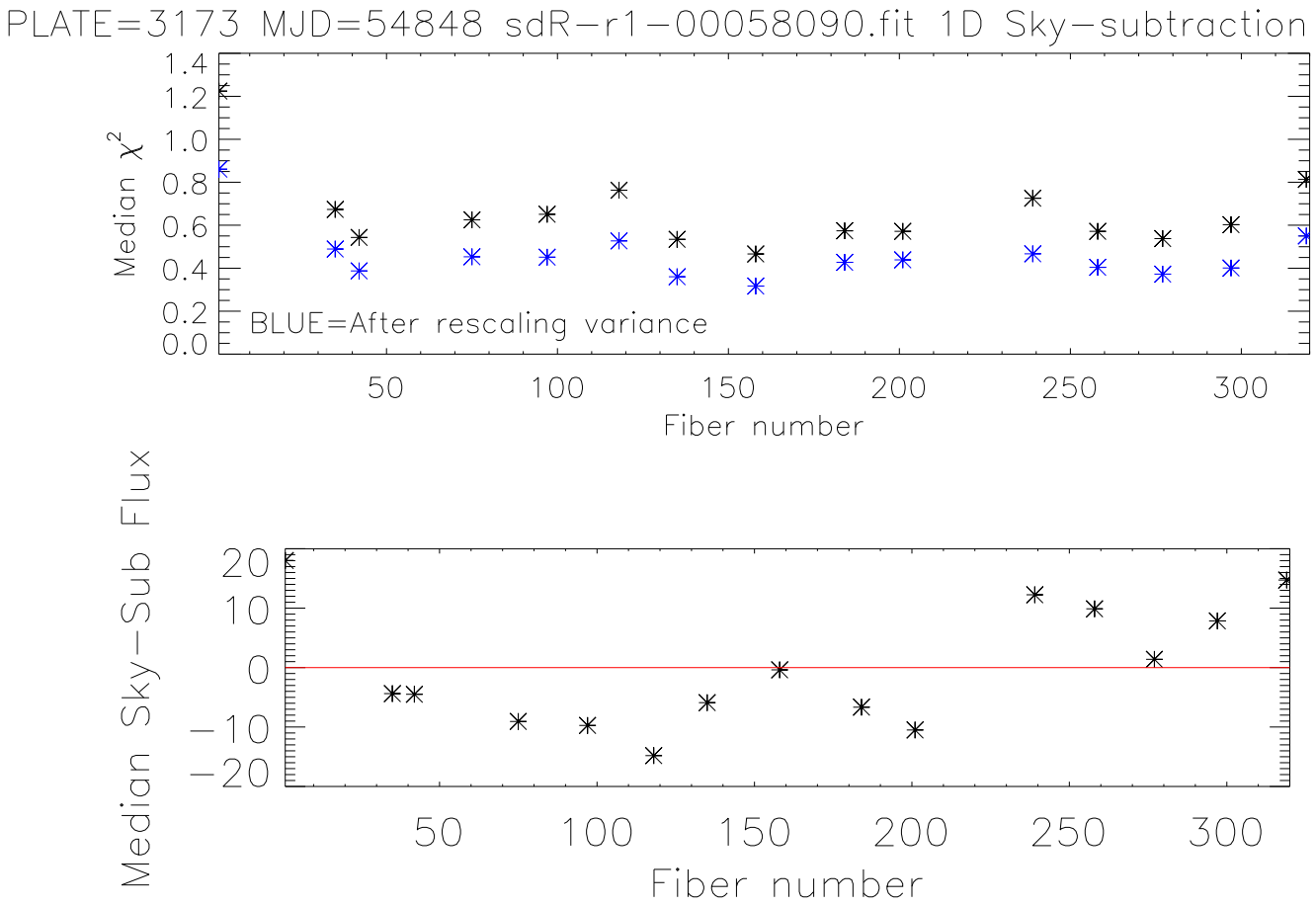

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

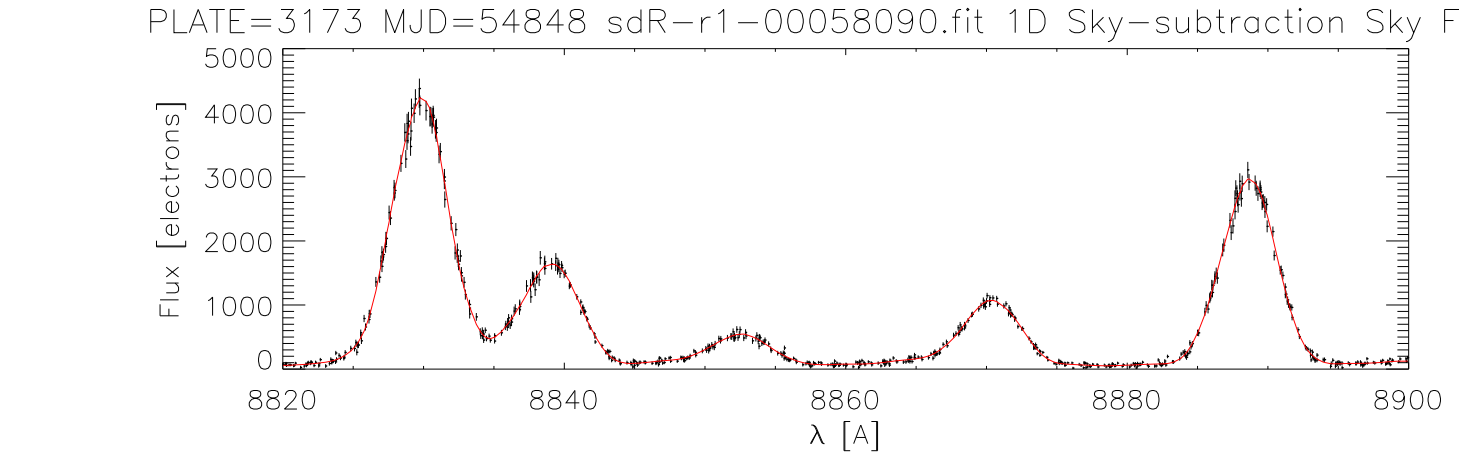

6300.3040
stdev 0.017
extra 0.15
6363.7760
stdev 0.027
extra 0.16
6553.6100
stdev 0.045
extra 0.15
6923.2100
stdev 0.042
extra 0.18
6949.0300
stdev 0.029
extra 0.22
7571.7500
stdev 0.039
extra 0.21
7794.1200
stdev 0.024
extra 0.09
7821.5100
stdev 0.029
extra 0.13
8399.1600
stdev 0.047
extra 0.19
8430.1700
stdev 0.046
extra 0.18
8885.8300
stdev 0.027
extra 0.18
8919.6100
stdev 0.026
extra 0.17
meas − pred, pix

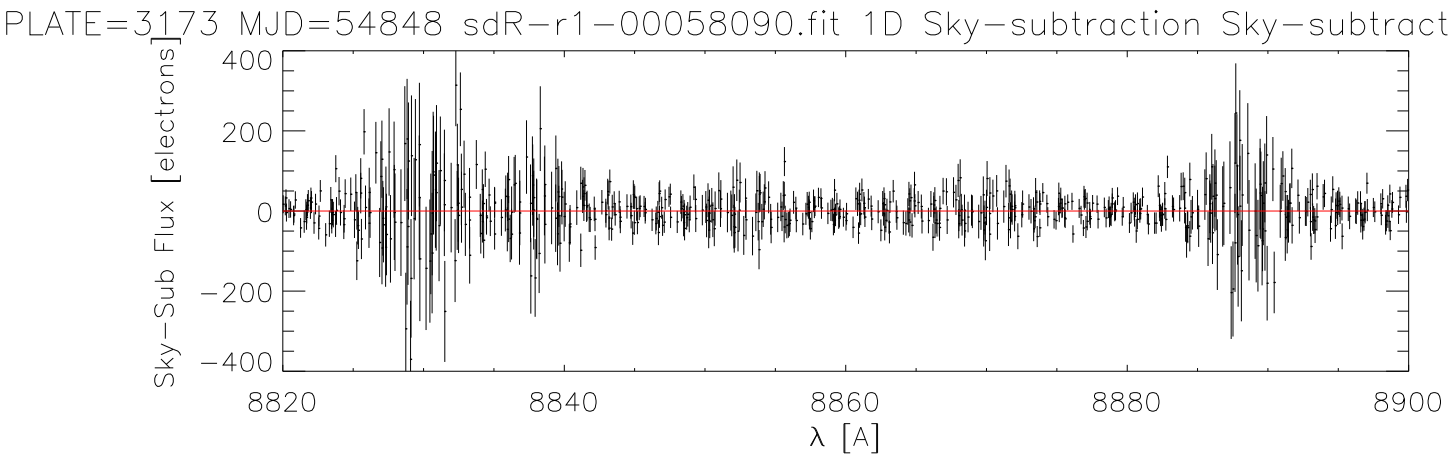

sky shift, pixels
0.22
0.20
0.18
0.16
0.14
0.12
0.10
5000
6000
7000
8000
9000
10000

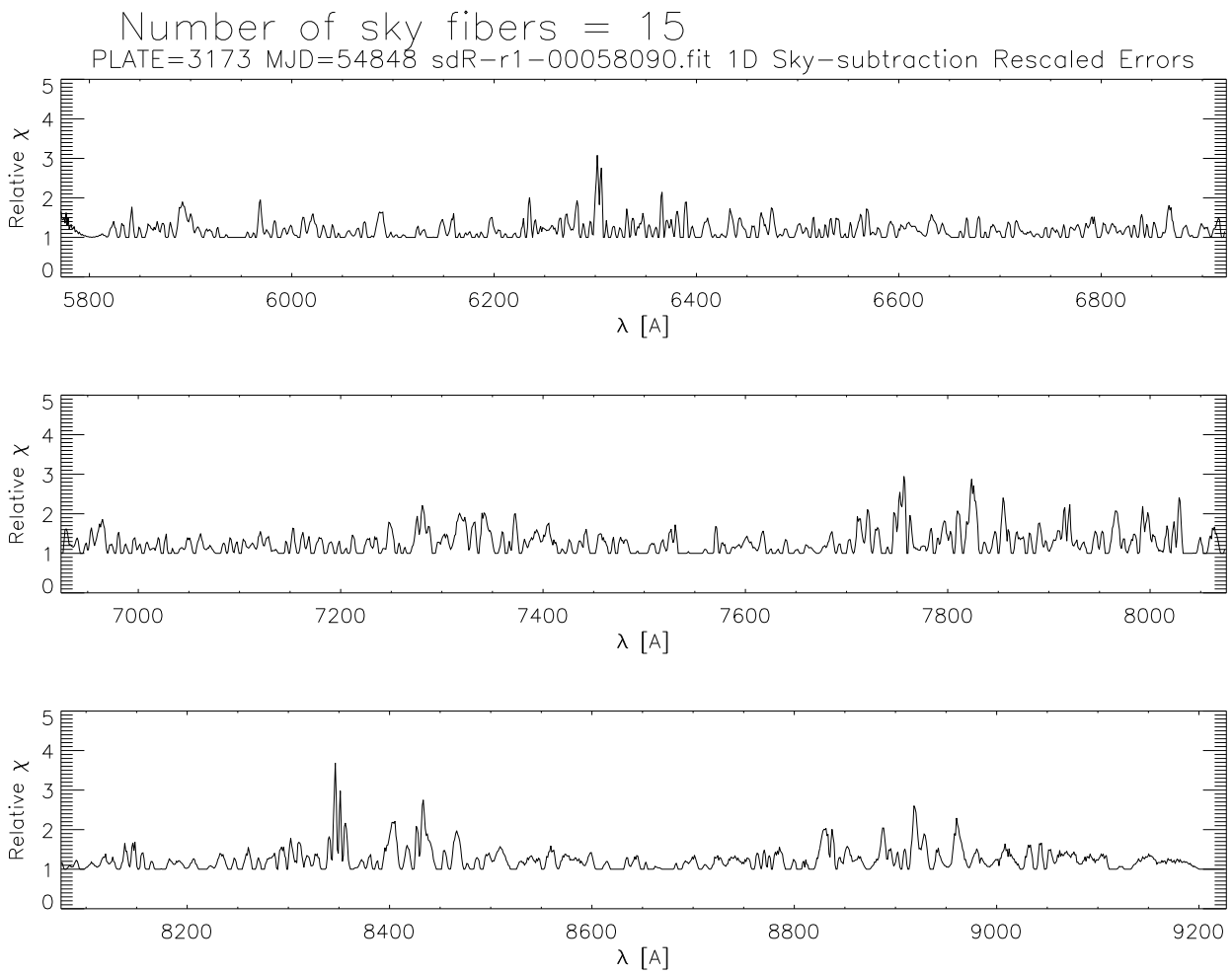
es= −0.0001

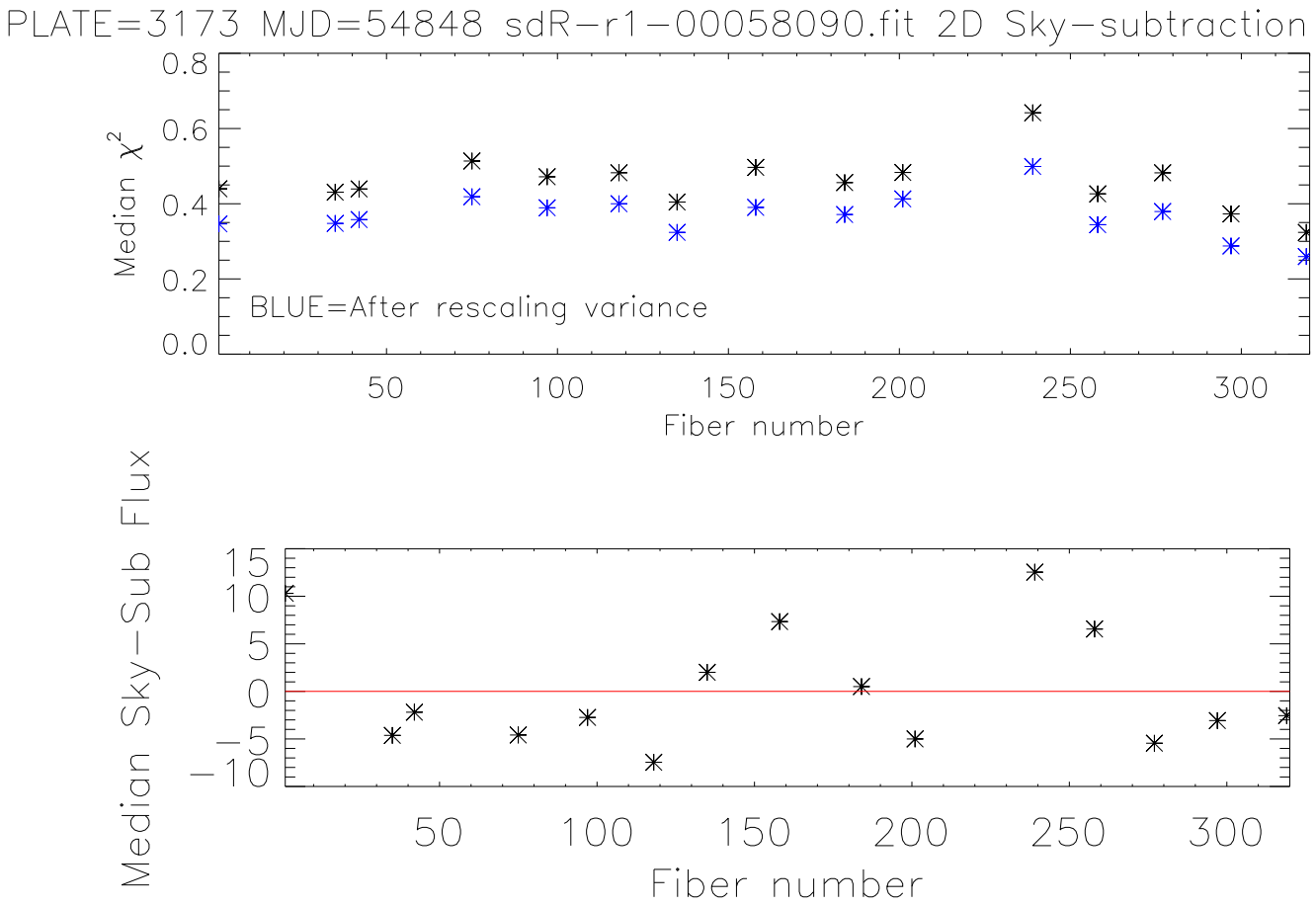

PLATE=3173 MJD=54848 Smooth superflat for sdR−r1−00058090.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

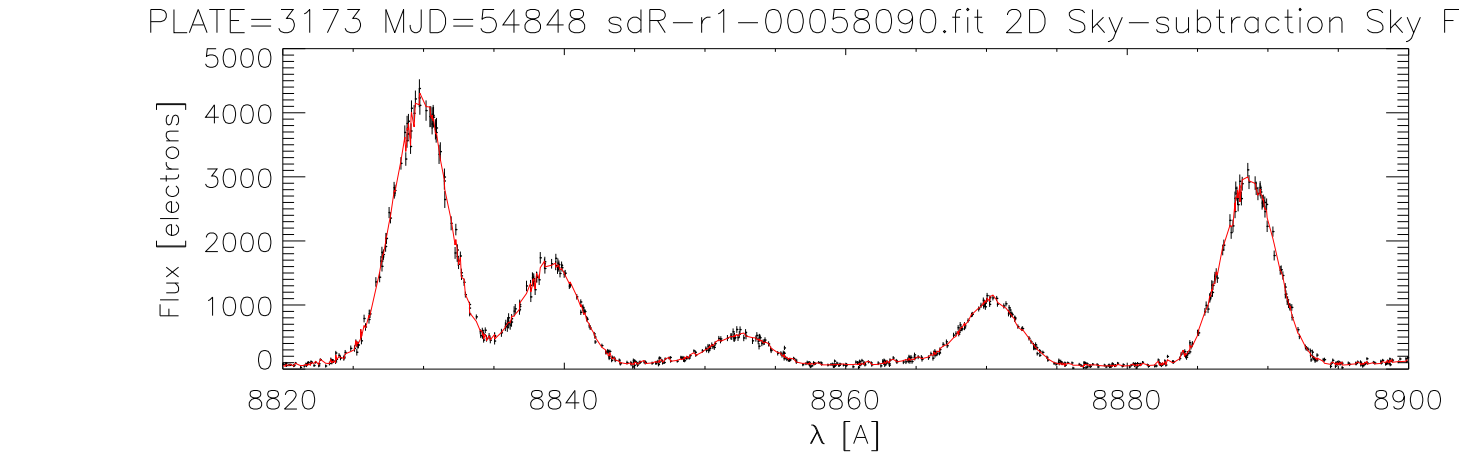

PLATE=3173 MJD=54848 sdR-r1-00058090.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

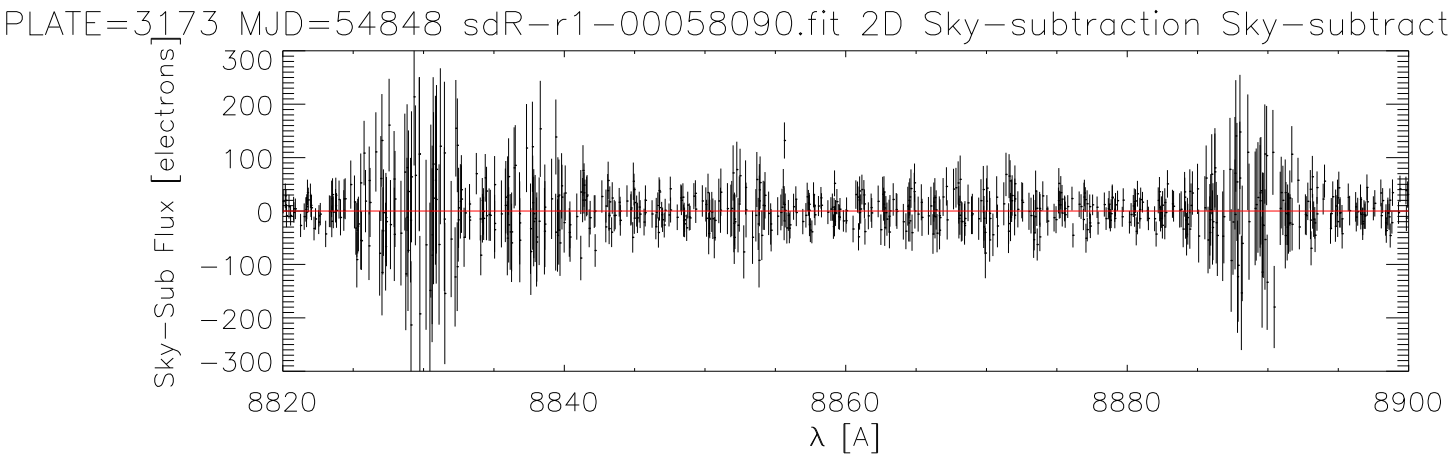

PLATE=3173 MJD=54848 sdR-r1-00058090.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

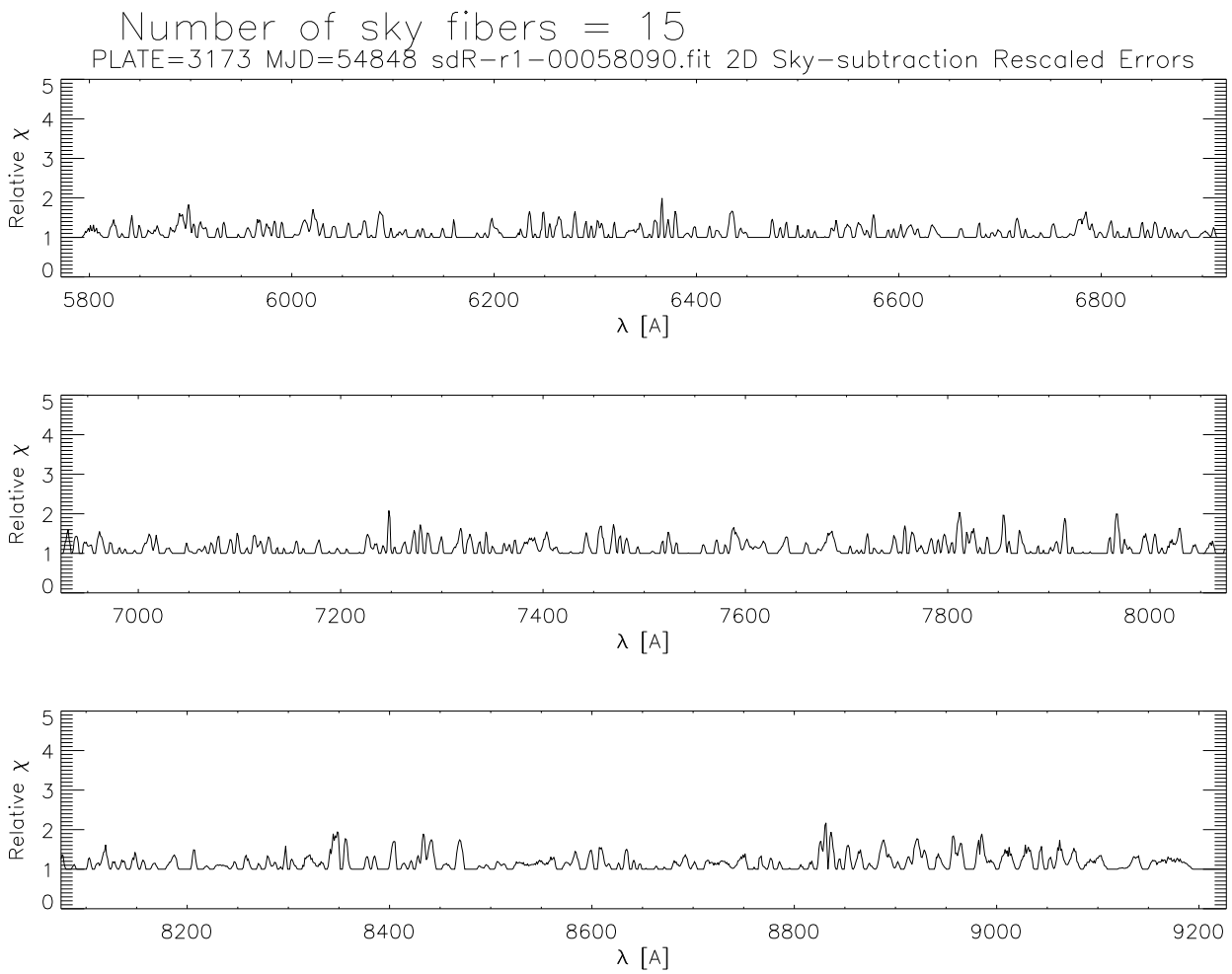

PLATE=3173 MJD=54848 sdR-r1-00058090.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

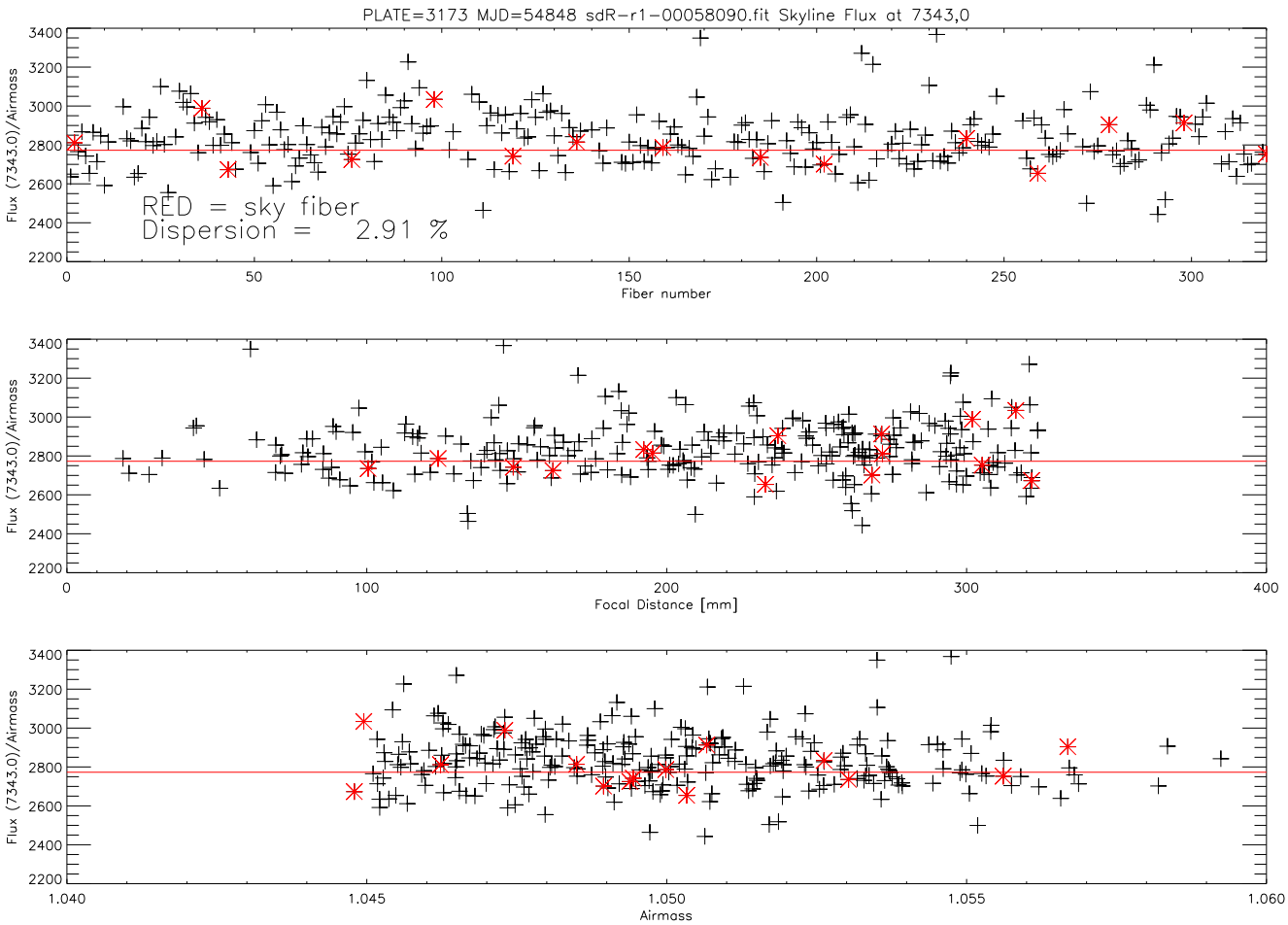

Number of sky fibers = 15
PLATE=3173 MJD=54848 sdR-r1-00058090.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

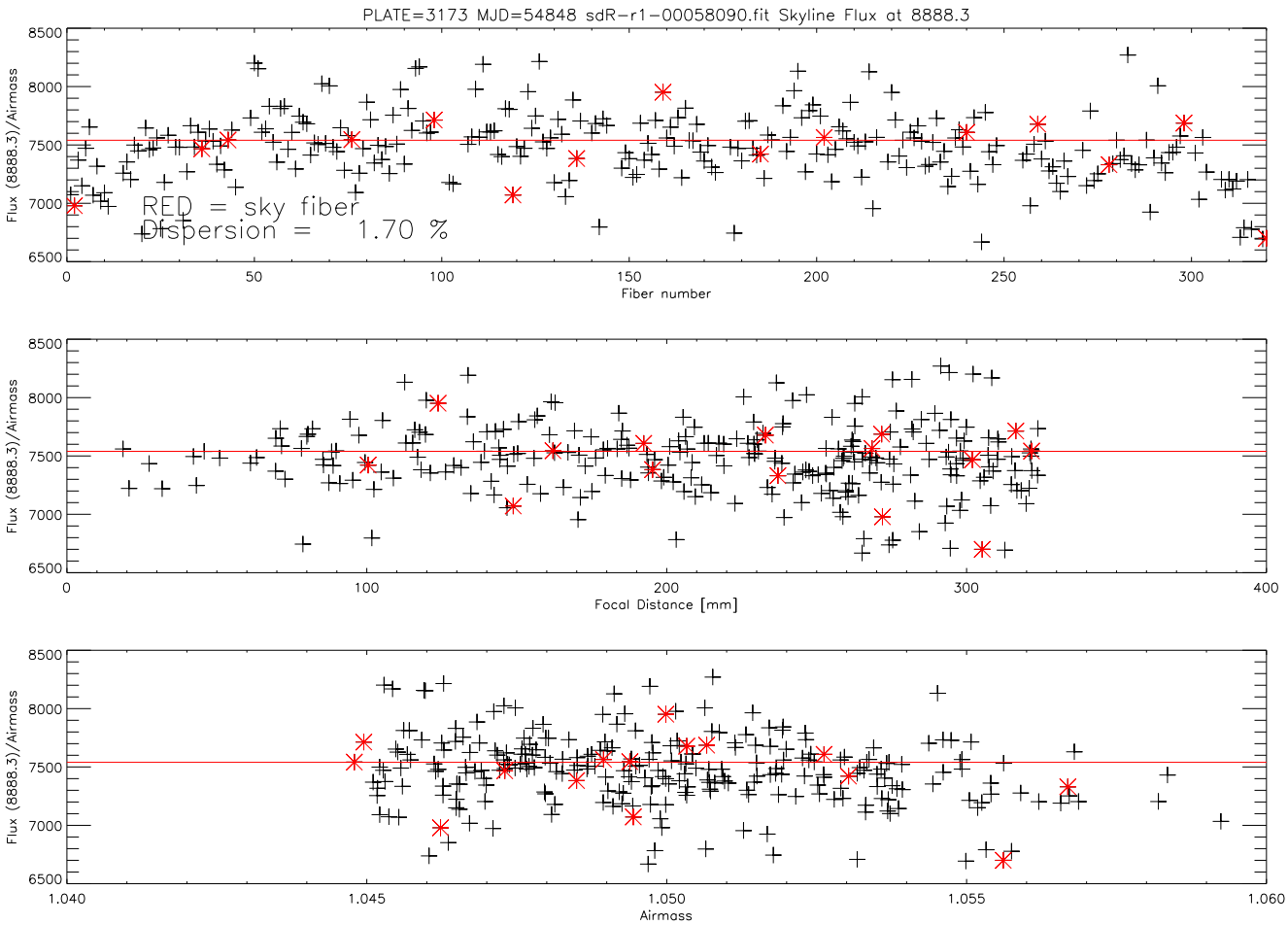

PLATE=3173 MJD=54848 sdR-r1-00058090.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

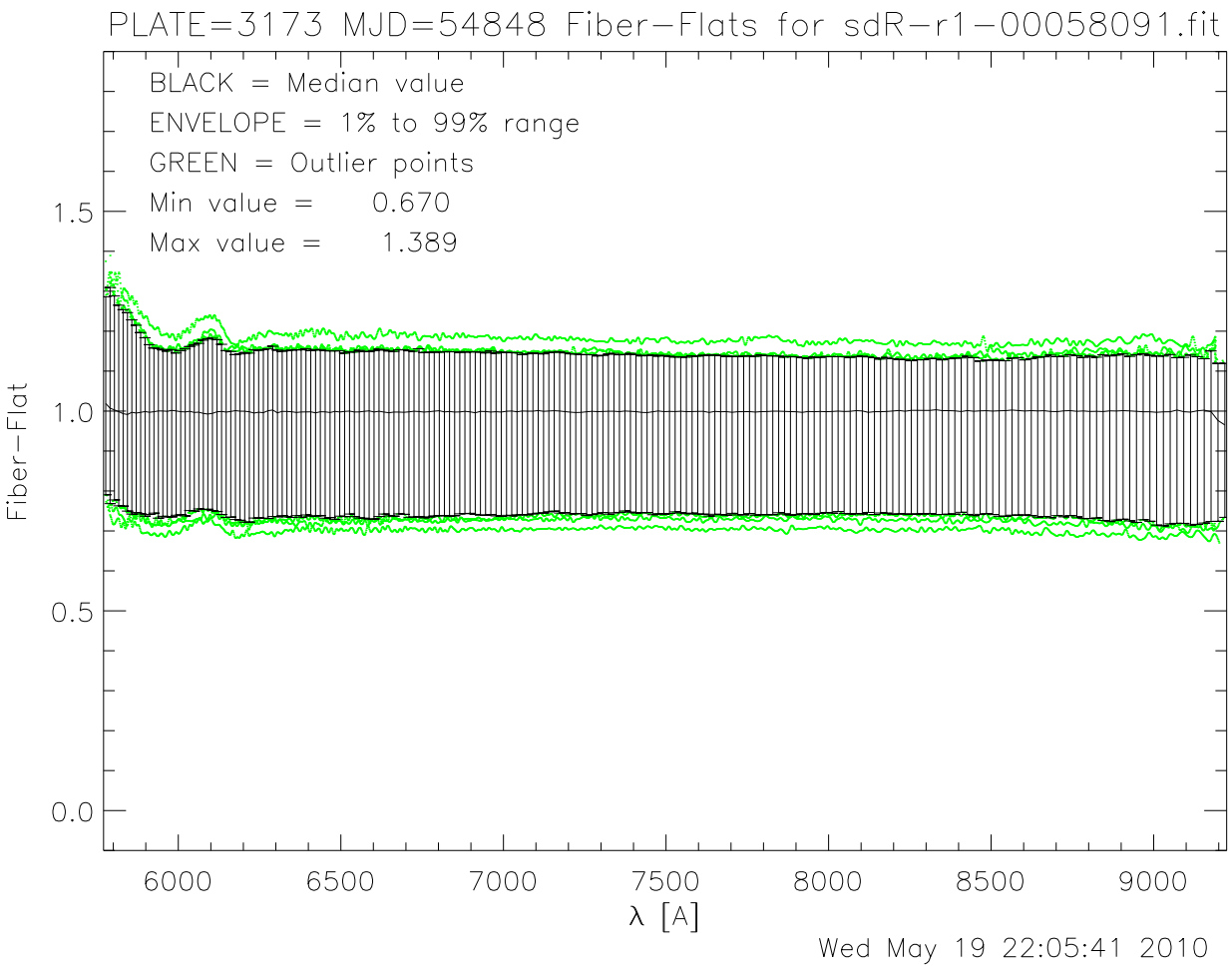

PLATE=3173 MJD=54848 sdR-r1-00058090.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

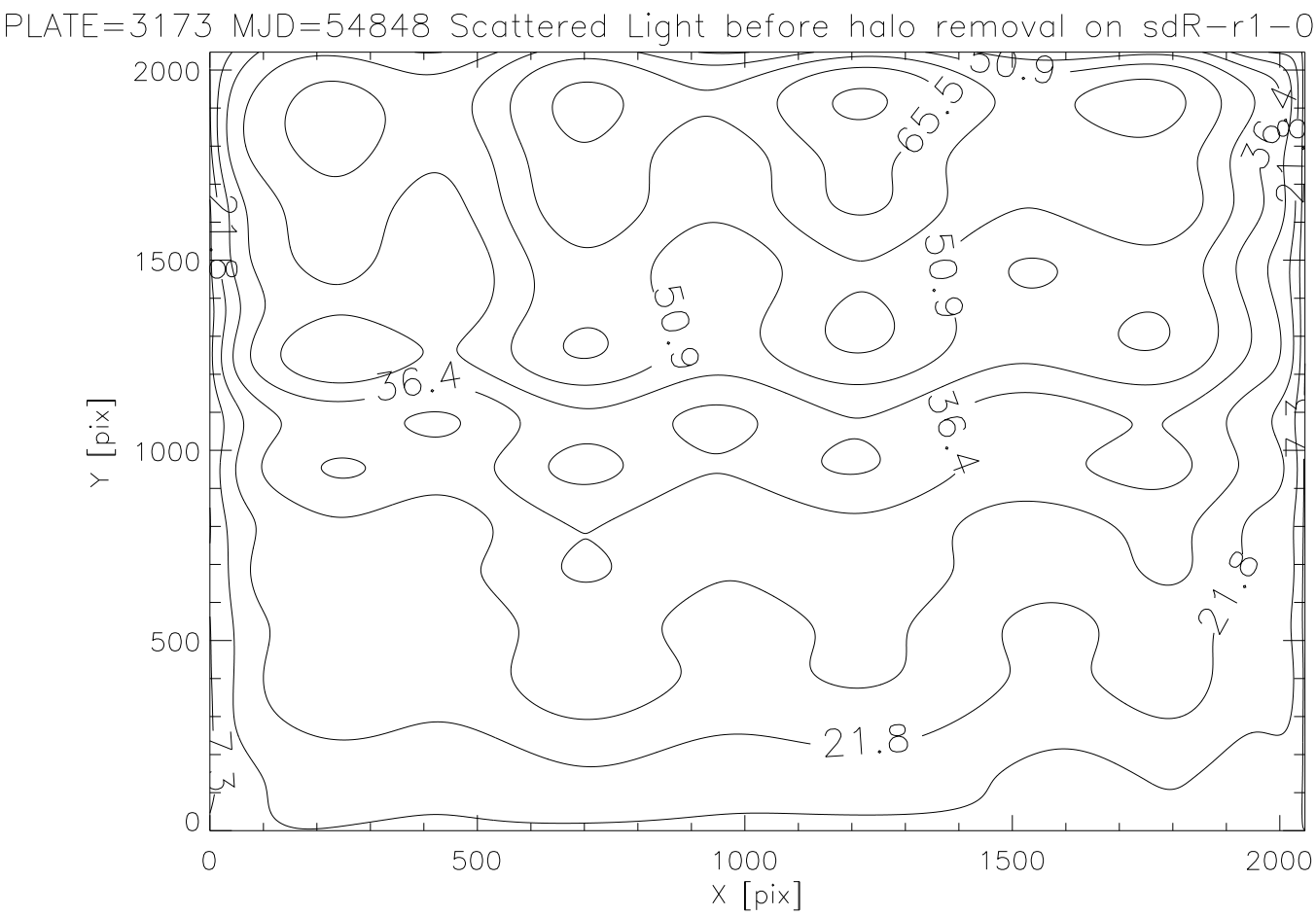

PLATE=3173 MJD=54848 sdR-r1-00058090.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

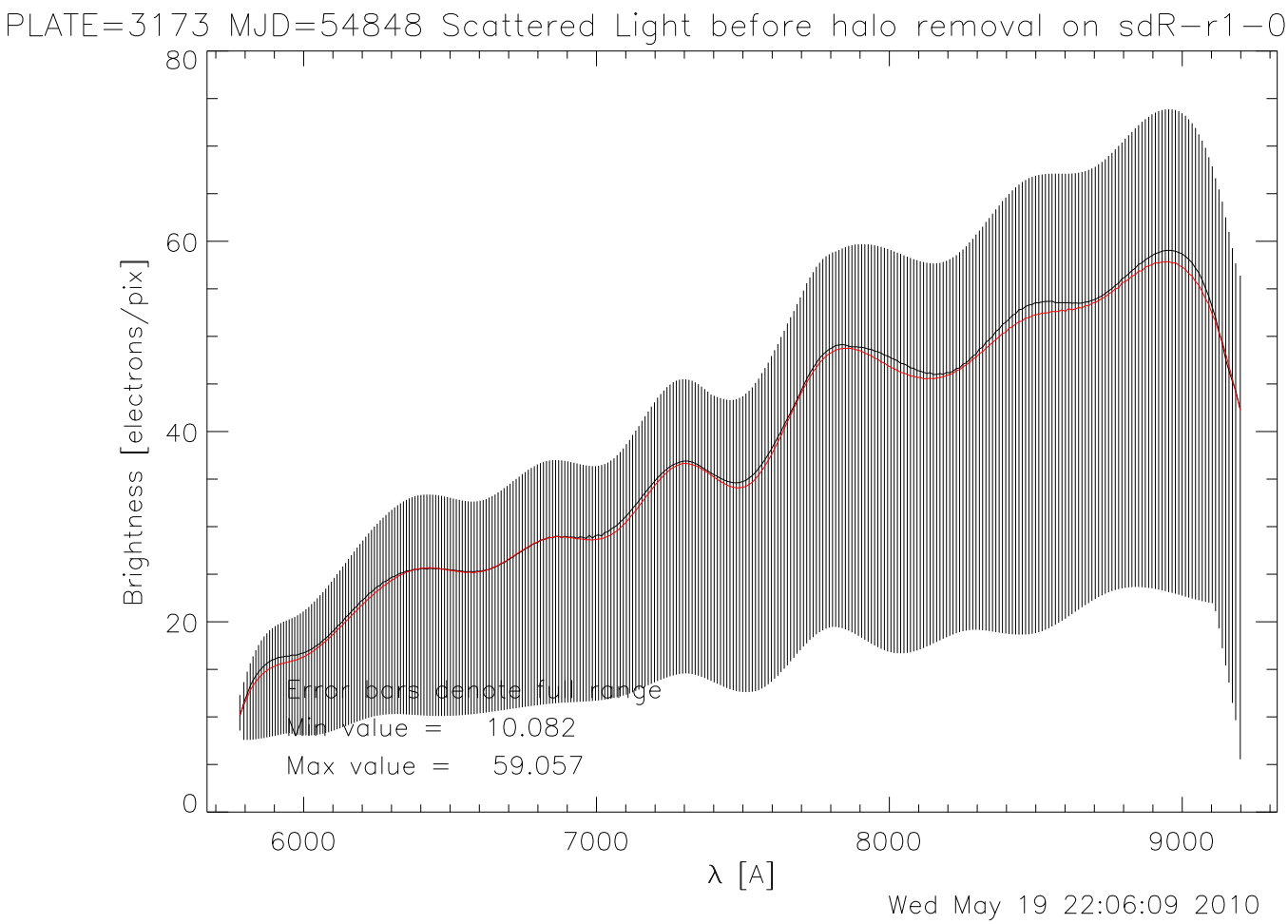

Number of sky fibers = 15
PLATE=3173 MJD=54848 sdR-r1-00058090.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

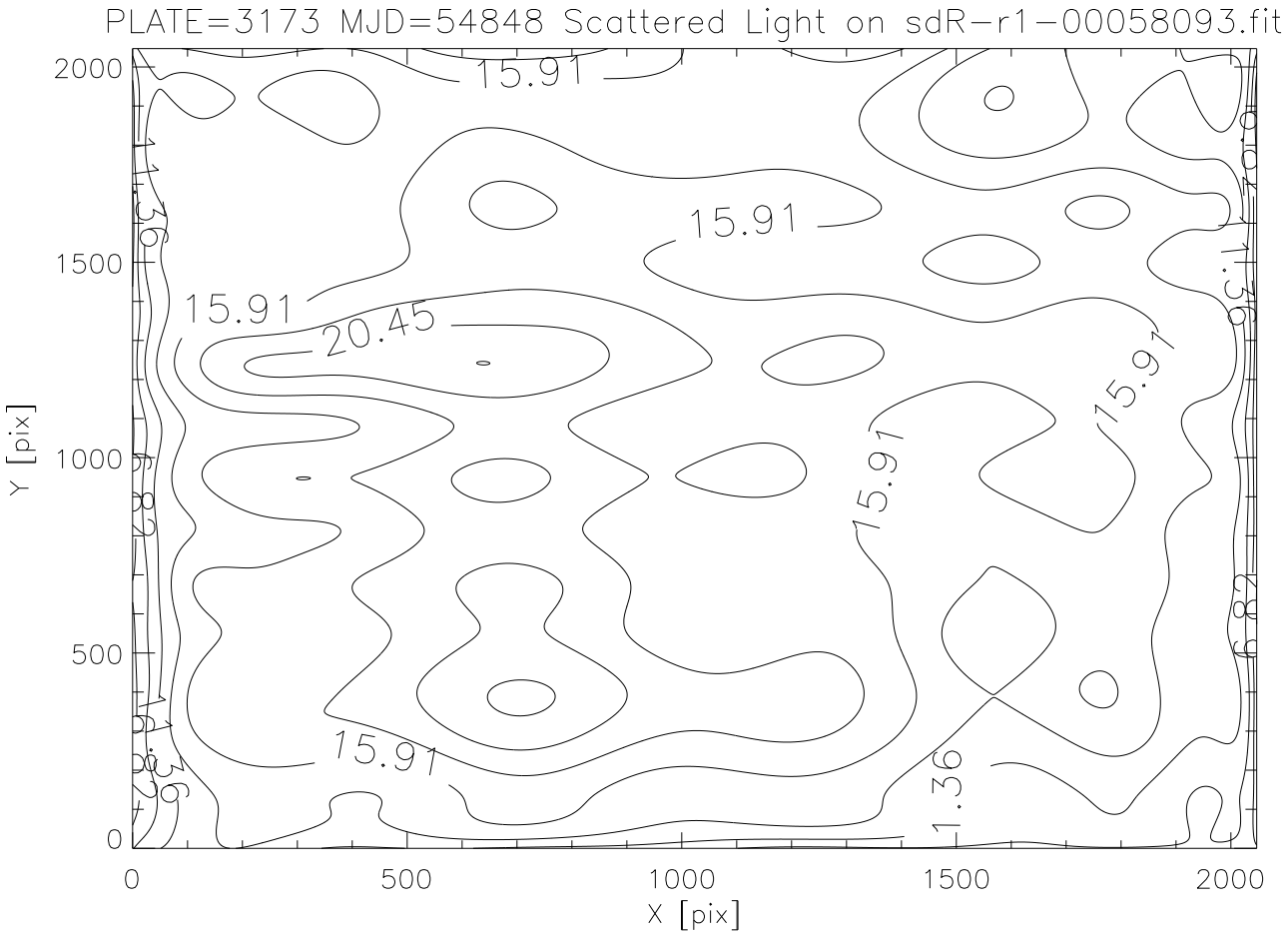

PLATE=3173 MJD=54848 sdR-r1-00058090.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.91 %
Fiber number
Focal Distance [mm]
Airmass

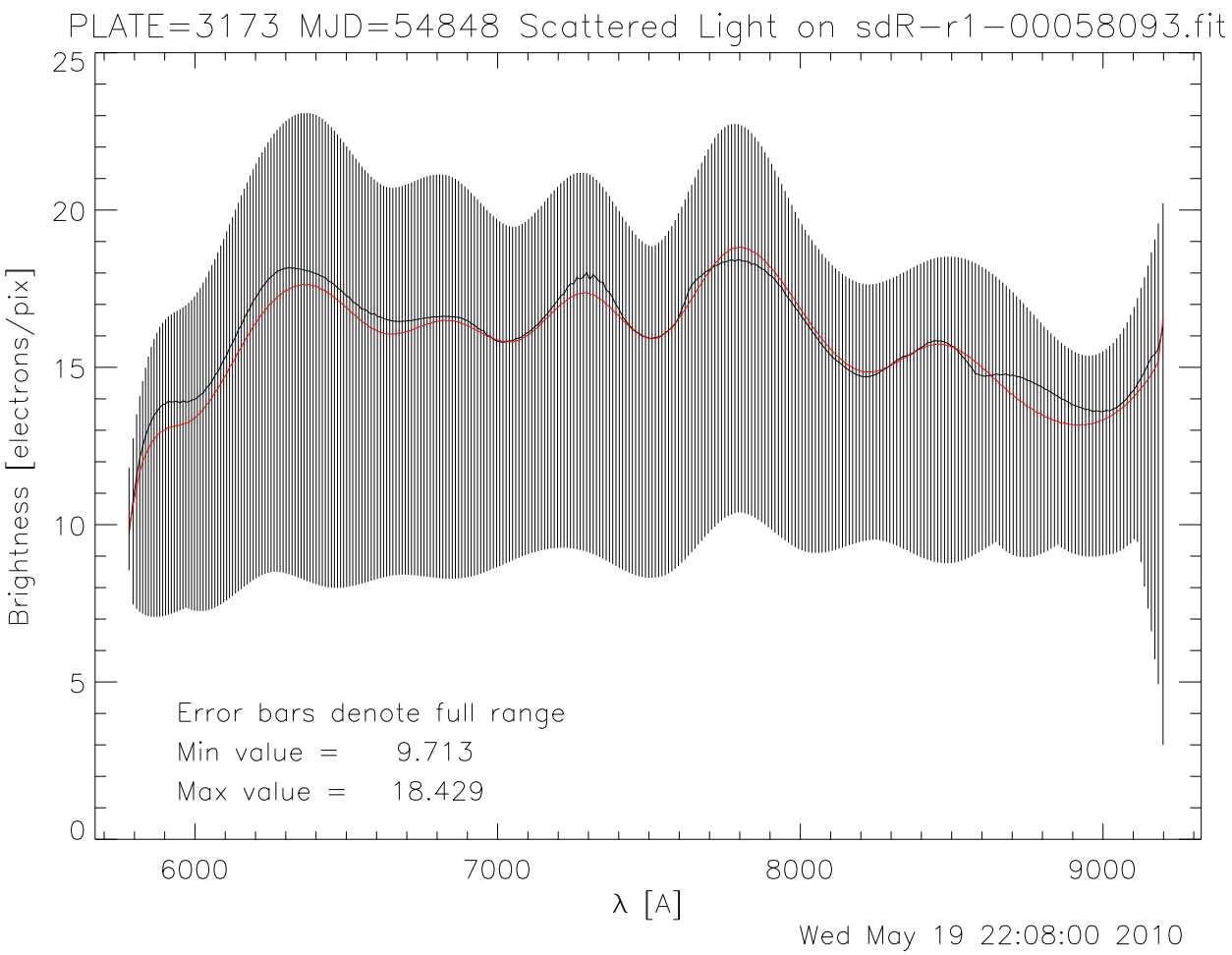

PLATE=3173 MJD=54848 sdR-r1-00058090.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.70 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

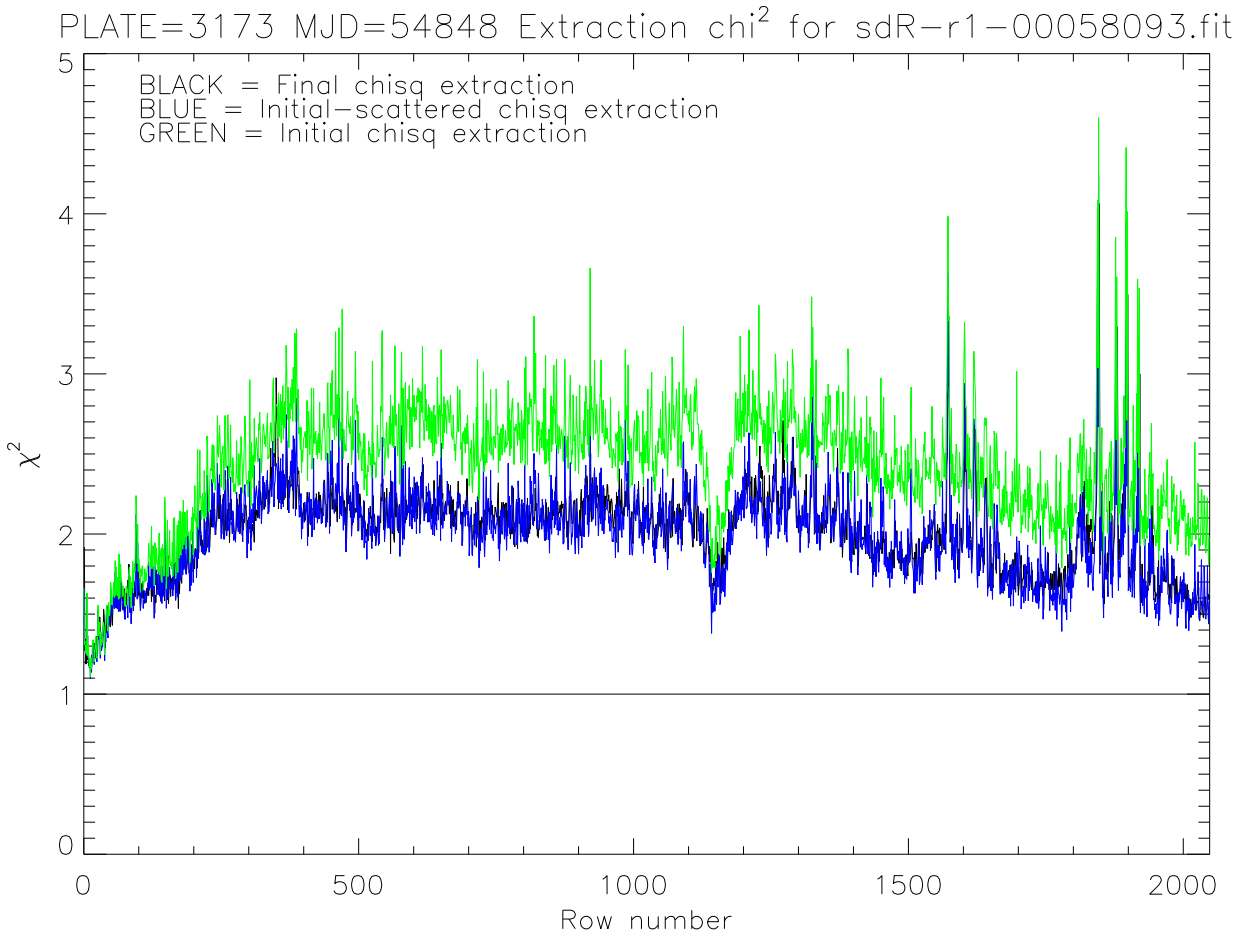

PLATE=3173 MJD=54848 Fiber-Flats for sdR-r1-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.670
Max value = 1.389
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed May 19 22:05:41 2010

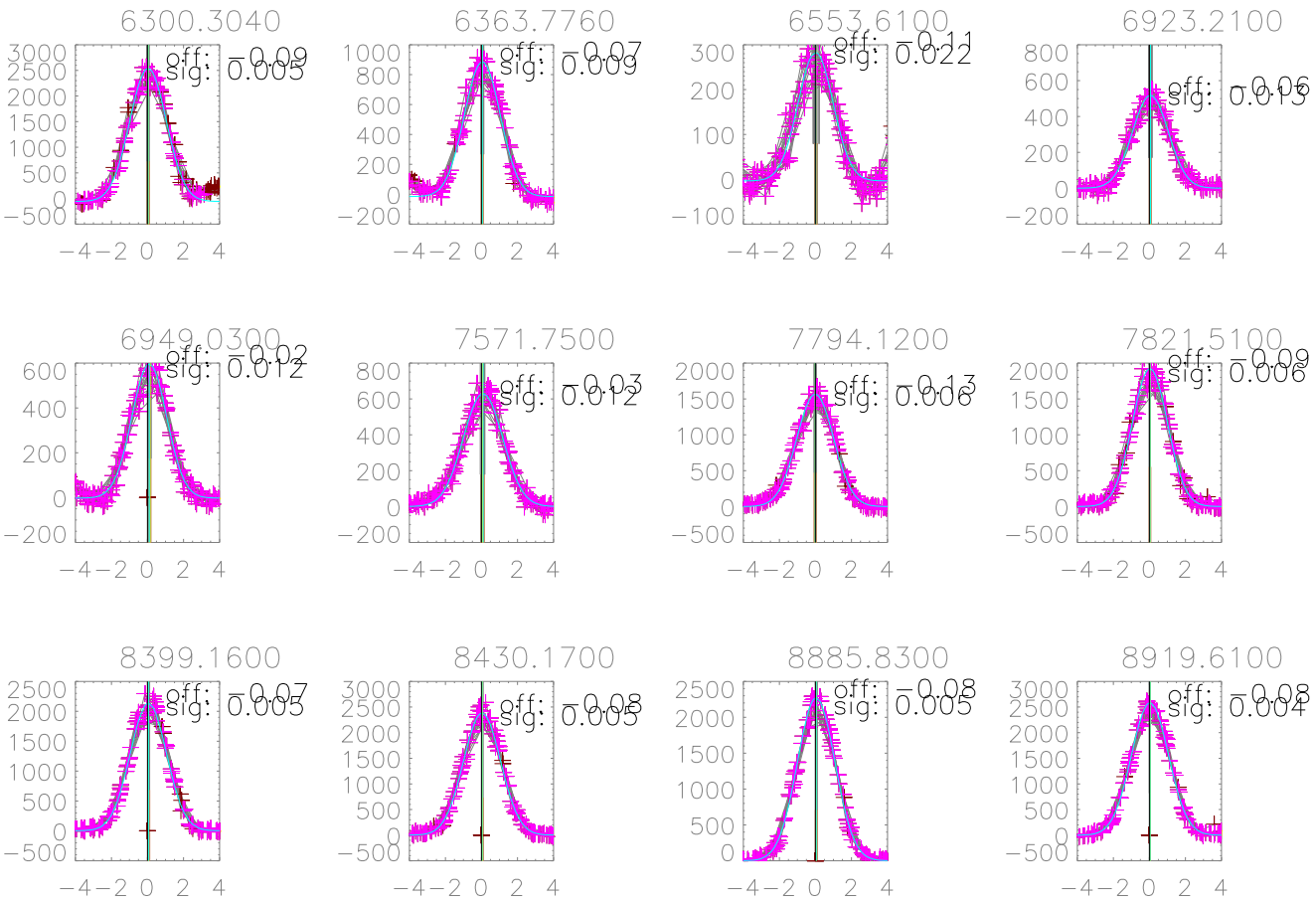

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-r1-00058093.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
50.9
65.5
36.4
21.8
50.9
50.9
36.4
36.4
21.8
21.8
7.3

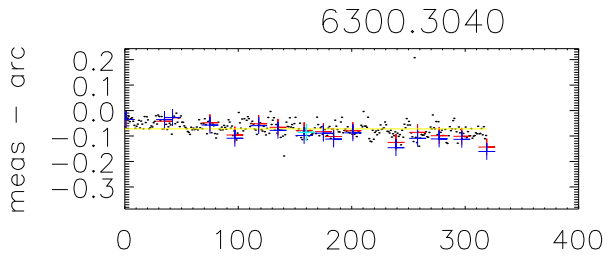

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-r1-00058093.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.082
Max value = 59.057
Wed May 19 22:06:09 2010

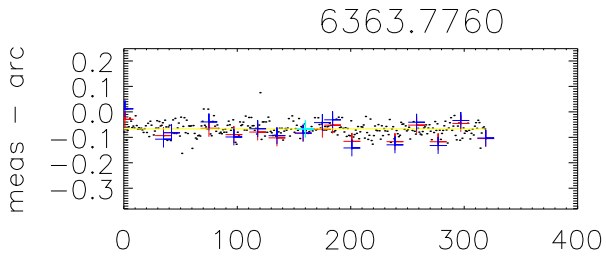

PLATE=3173 MJD=54848 Scattered Light on sdR-r1-00058093.fit
15.91
15.91
15.91
20.45
15.91
15.91
1.36
1.36
1.36

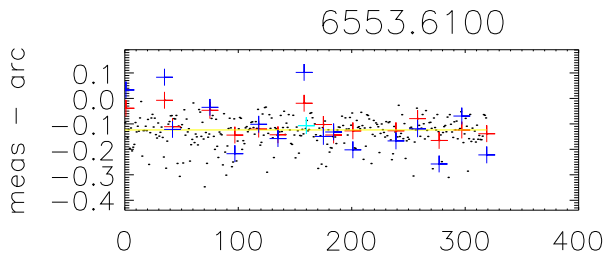

PLATE=3173 MJD=54848 Scattered Light on sdR-r1-00058093.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.713
Max value = 18.429
Wed May 19 22:08:00 2010

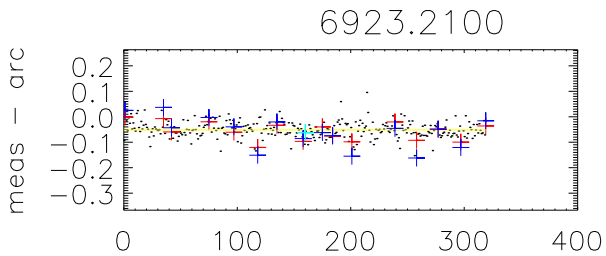

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-r1-00058093.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

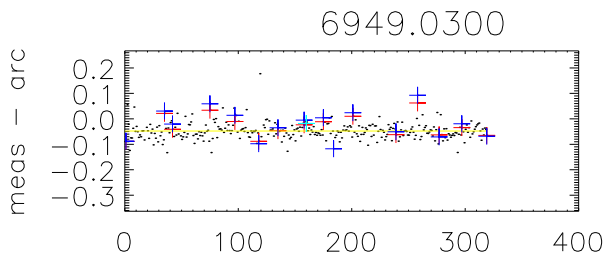

6300.3040
off: −0.09
sig: 0.005
6363.7760
off: −0.07
sig: 0.009
6553.6100
off: −0.11
sig: 0.022
6923.2100
off: −0.06
sig: 0.013
6949.0300
off: −0.02
sig: 0.012
7571.7500
off: −0.03
sig: 0.012
7794.1200
off: −0.13
sig: 0.006
7821.5100
off: −0.09
sig: 0.006
8399.1600
off: −0.07
sig: 0.005
8430.1700
off: −0.08
sig: 0.005
8885.8300
off: −0.08
sig: 0.005
8919.6100
off: −0.08
sig: 0.004

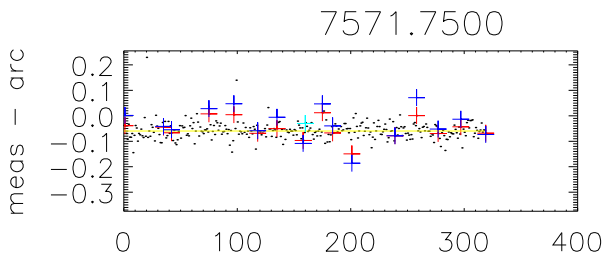

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

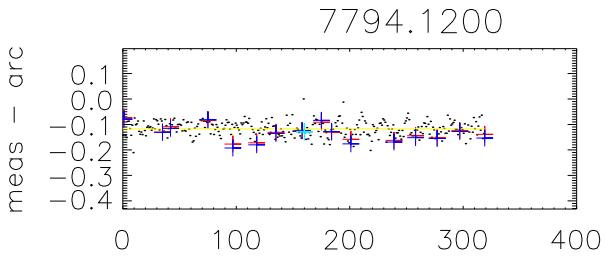

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

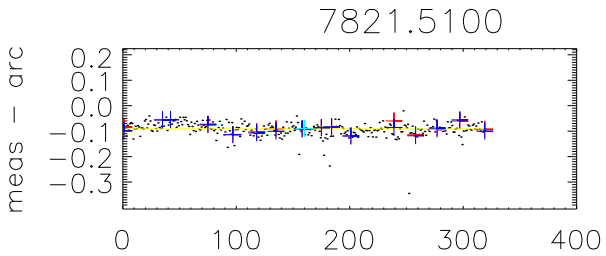

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

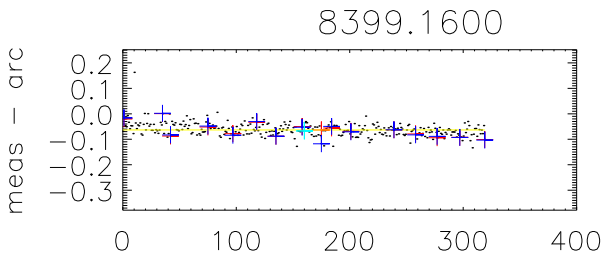

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

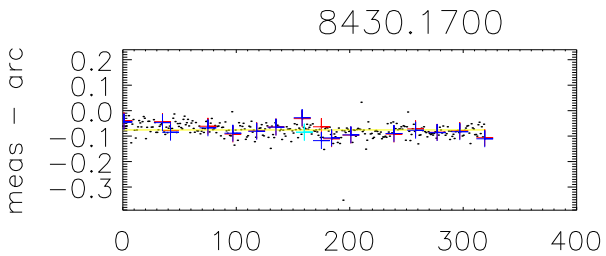

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

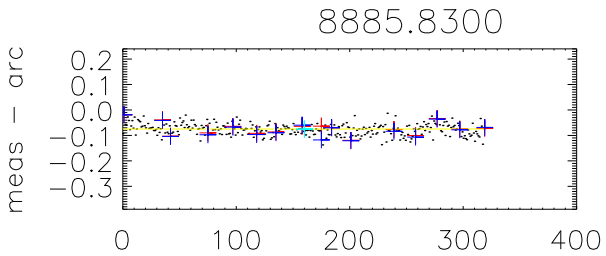

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

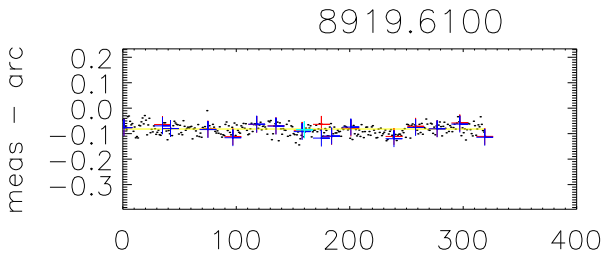

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

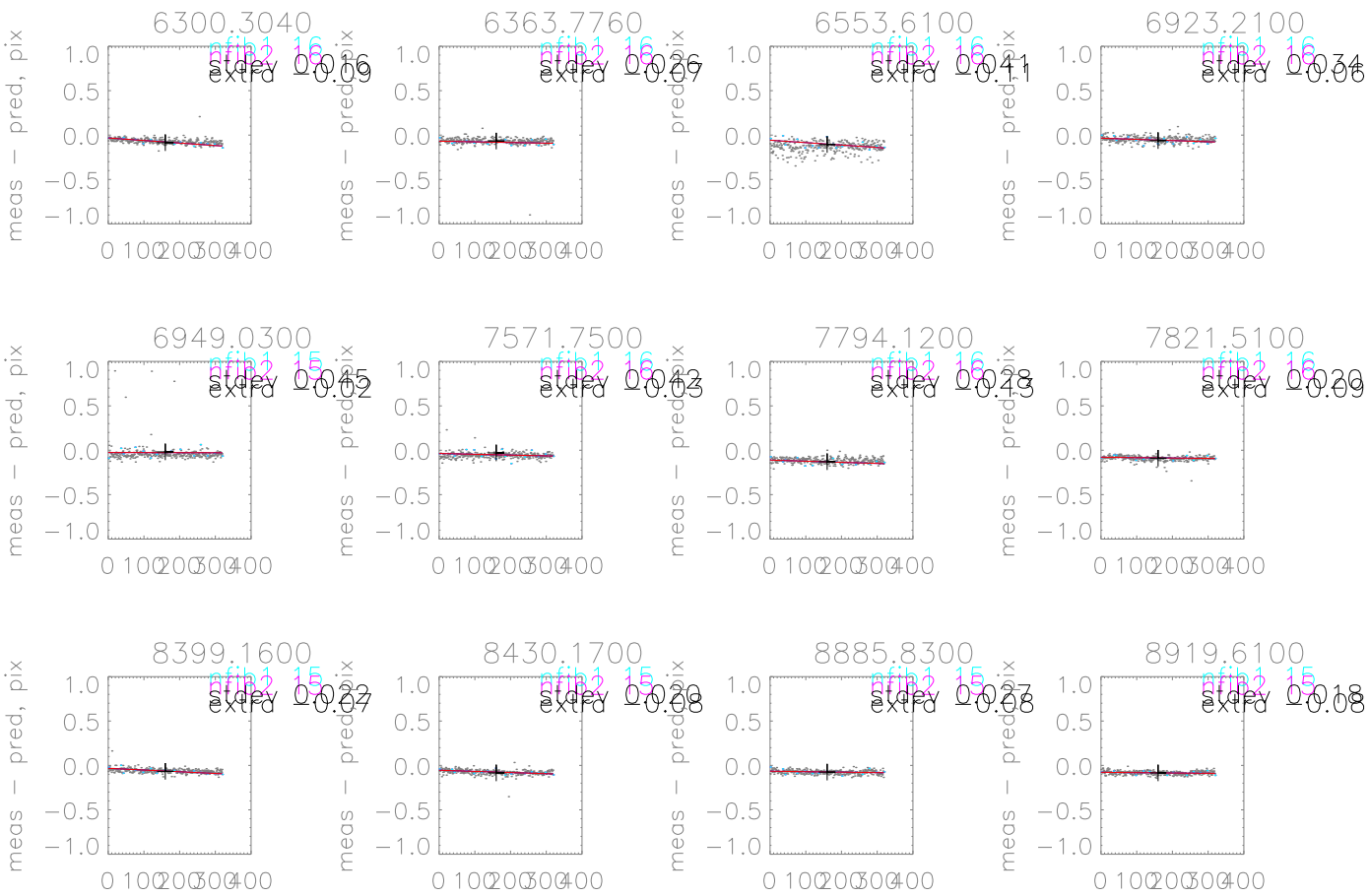

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

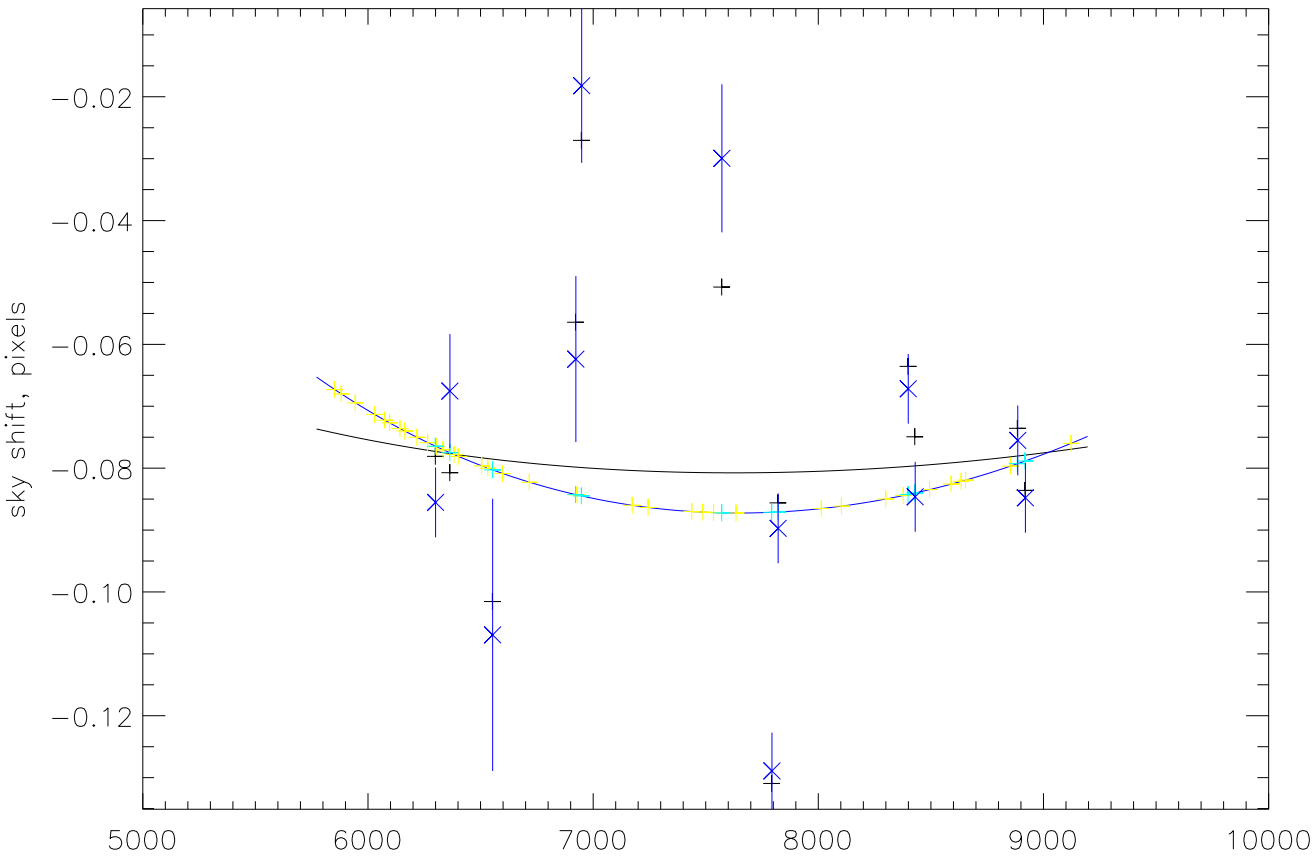

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

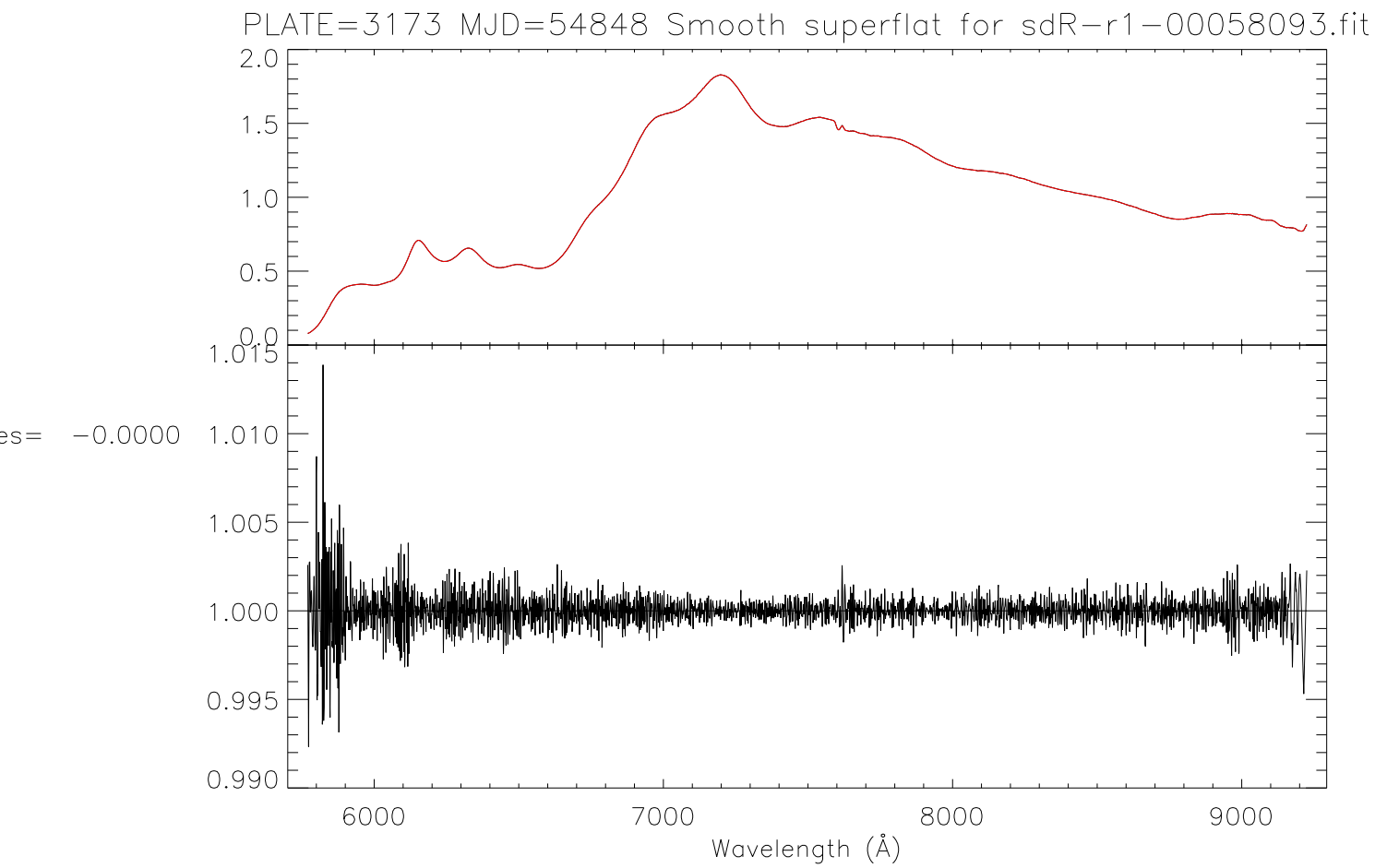

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

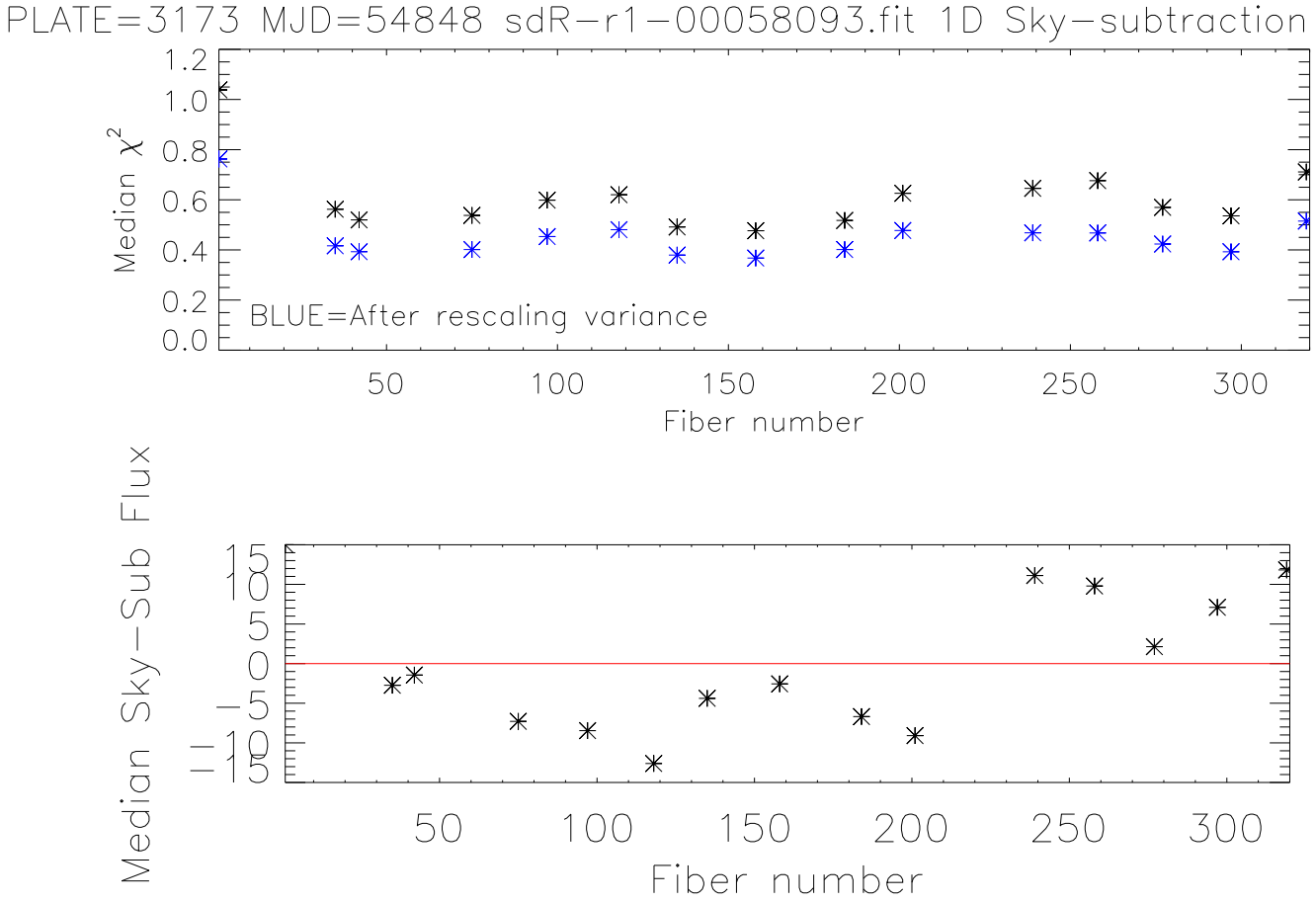

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

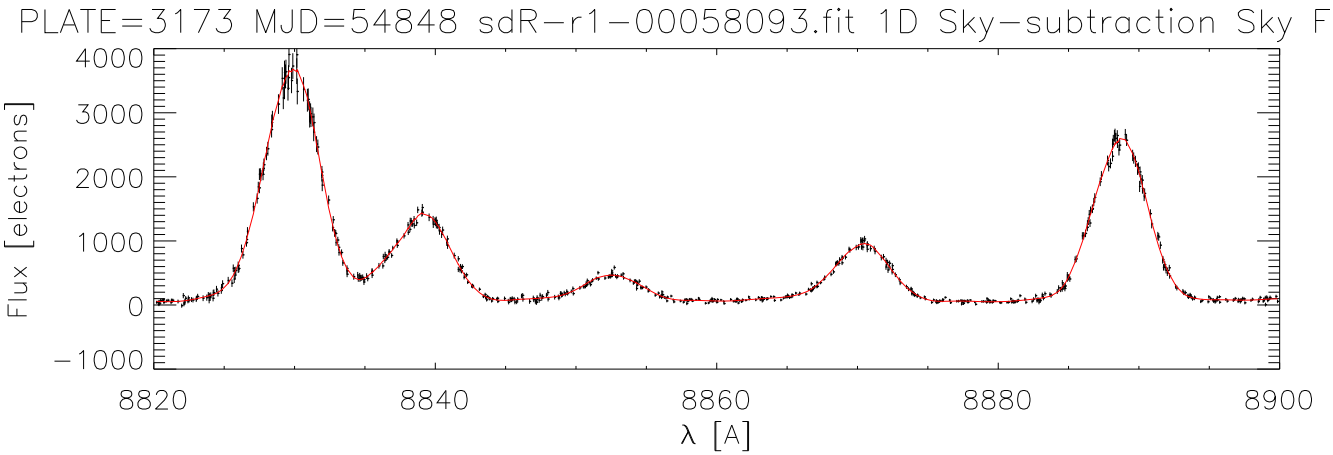

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

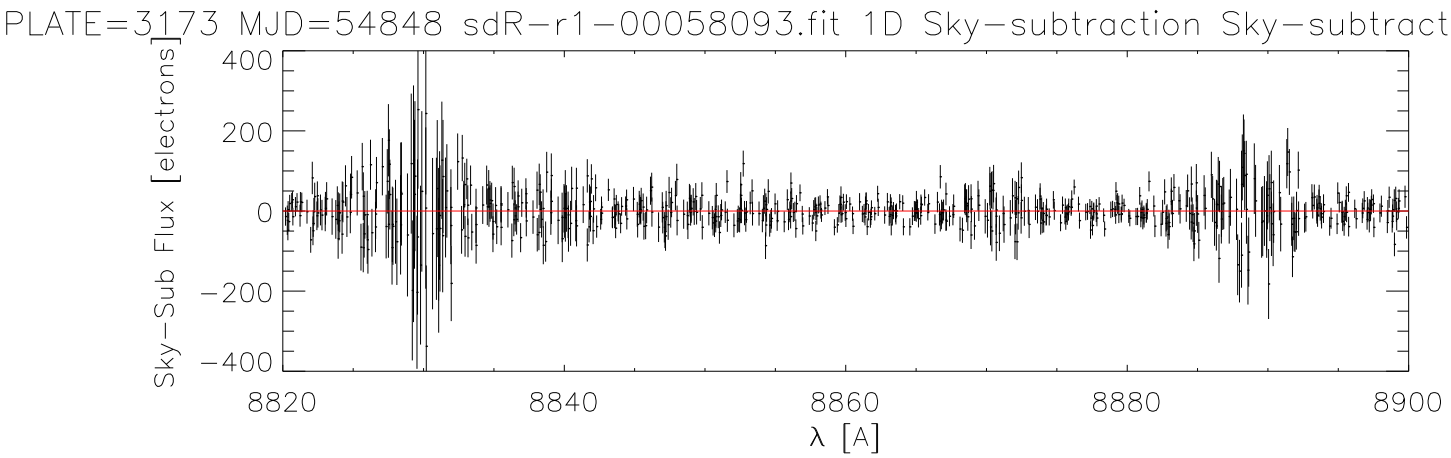

6300.3040
stdev 0.016
extra 0.09
6363.7760
stdev 0.026
extra 0.07
6553.6100
stdev 0.041
extra 0.11
6923.2100
stdev 0.034
extra 0.06
6949.0300
stdev 0.045
extra 0.02
7571.7500
stdev 0.042
extra 0.03
7794.1200
stdev 0.028
extra 0.03
7821.5100
stdev 0.020
extra 0.09
8399.1600
stdev 0.022
extra 0.07
8430.1700
stdev 0.020
extra 0.08
8885.8300
stdev 0.027
extra 0.08
8919.6100
stdev 0.018
extra 0.08
meas − pred, pix
mfib2 16
mfib1 15

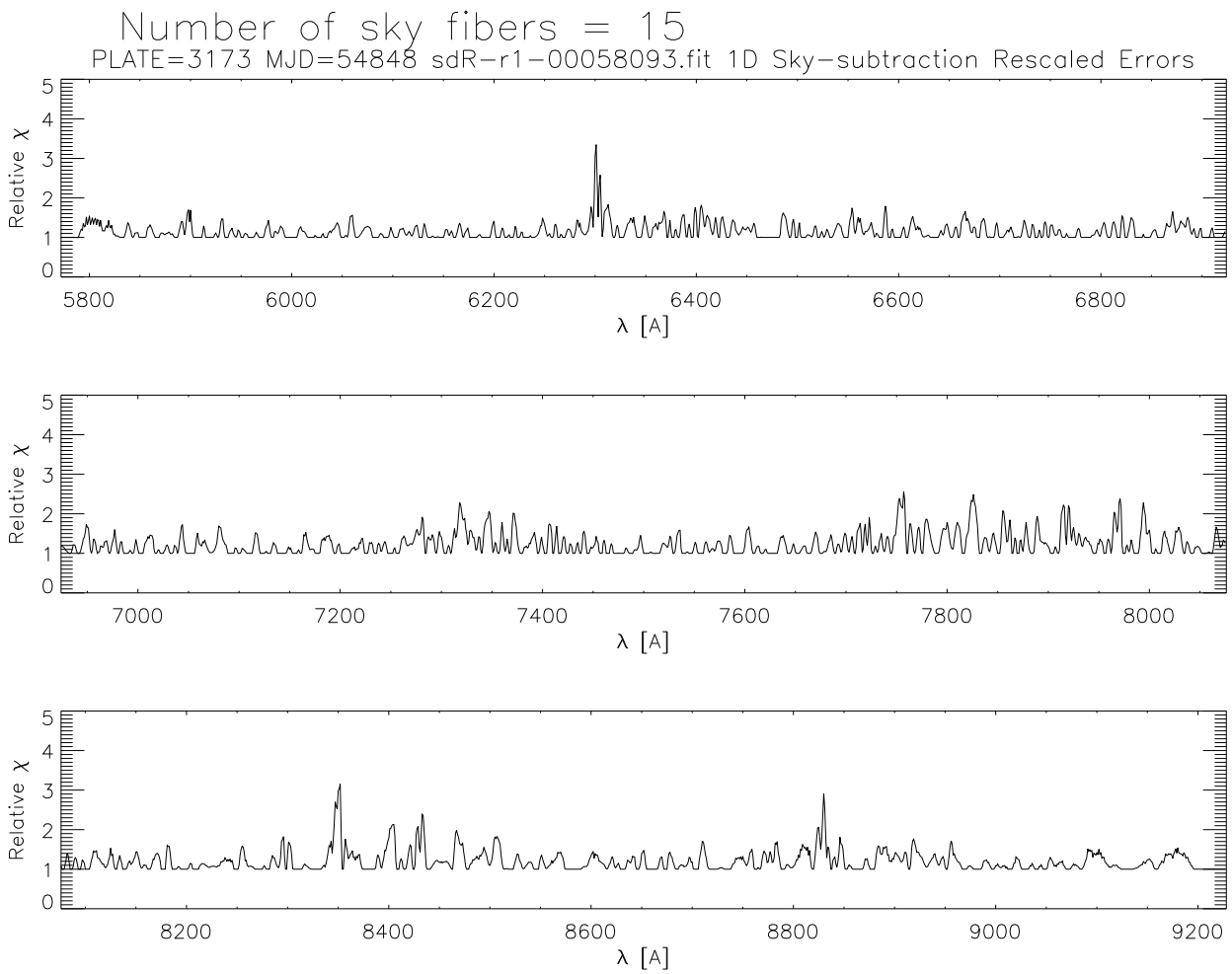

sky shift, pixels
−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
5000
6000
7000
8000
9000
10000

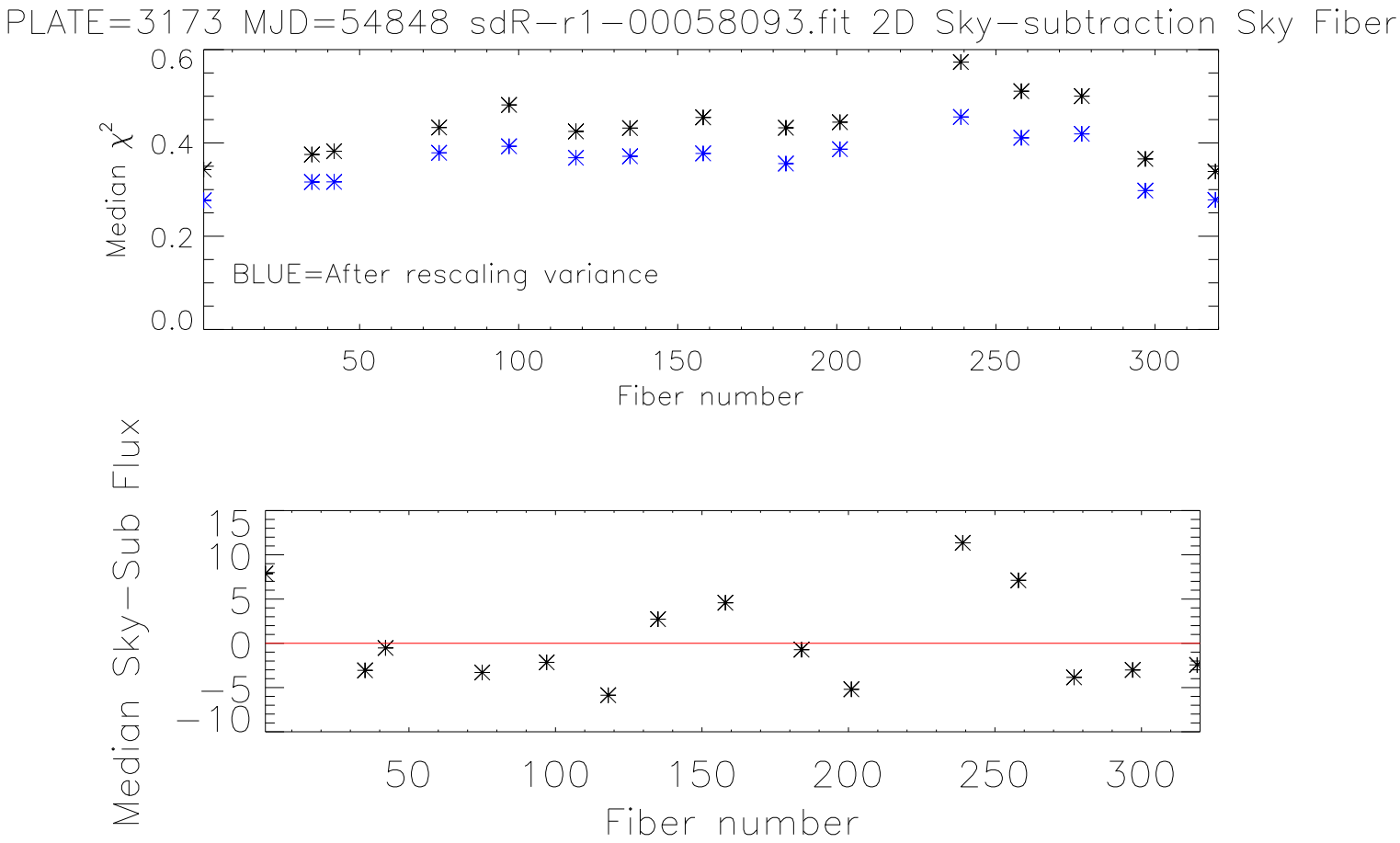

PLATE=3173 MJD=54848 Smooth superflat for sdR-r1-00058093.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

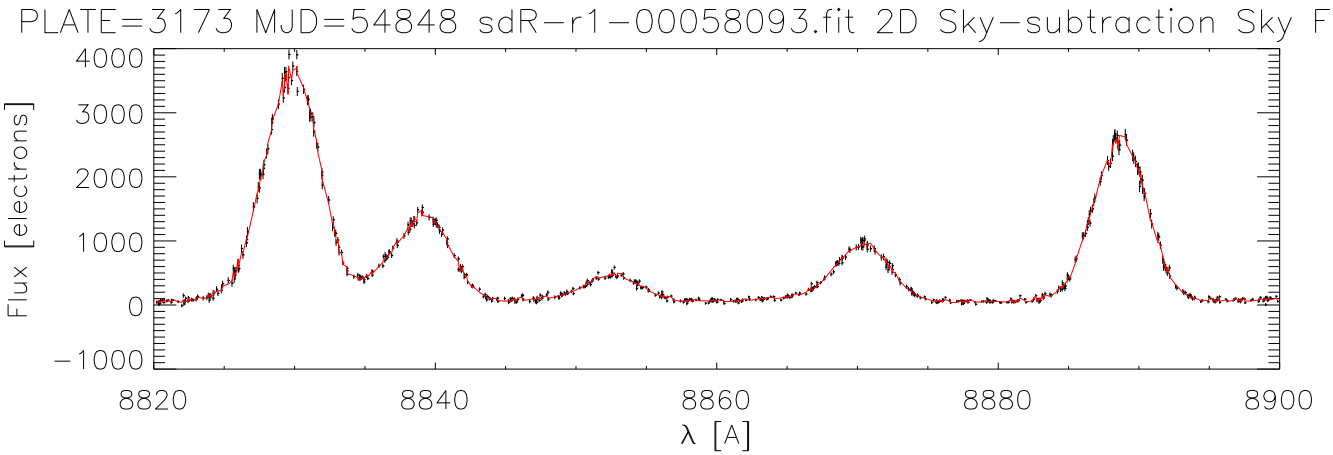

PLATE=3173 MJD=54848 sdR-r1-00058093.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

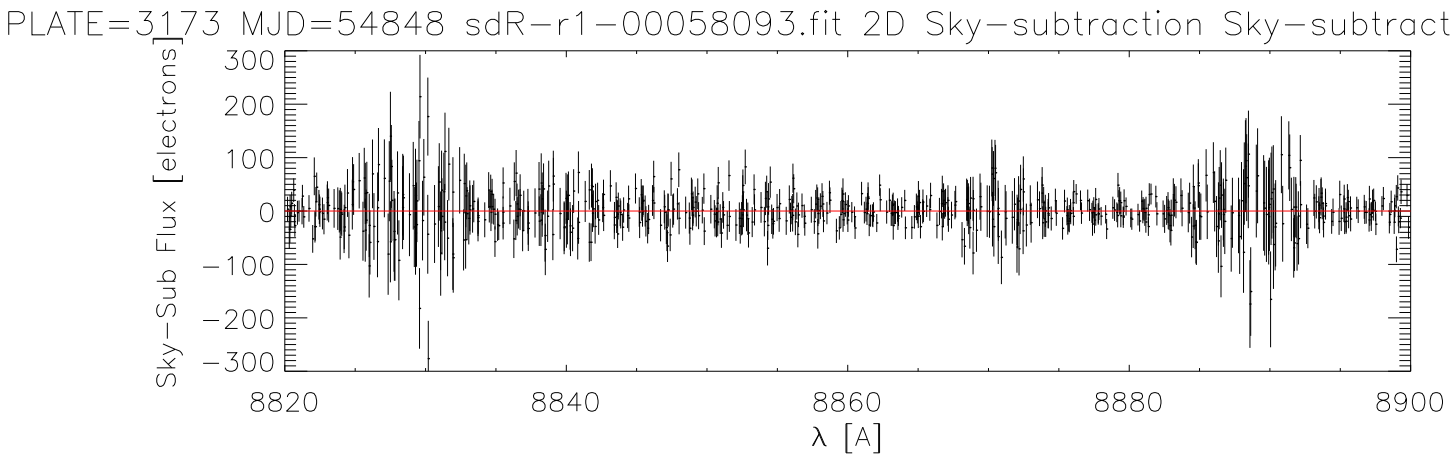

PLATE=3173 MJD=54848 sdR-r1-00058093.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

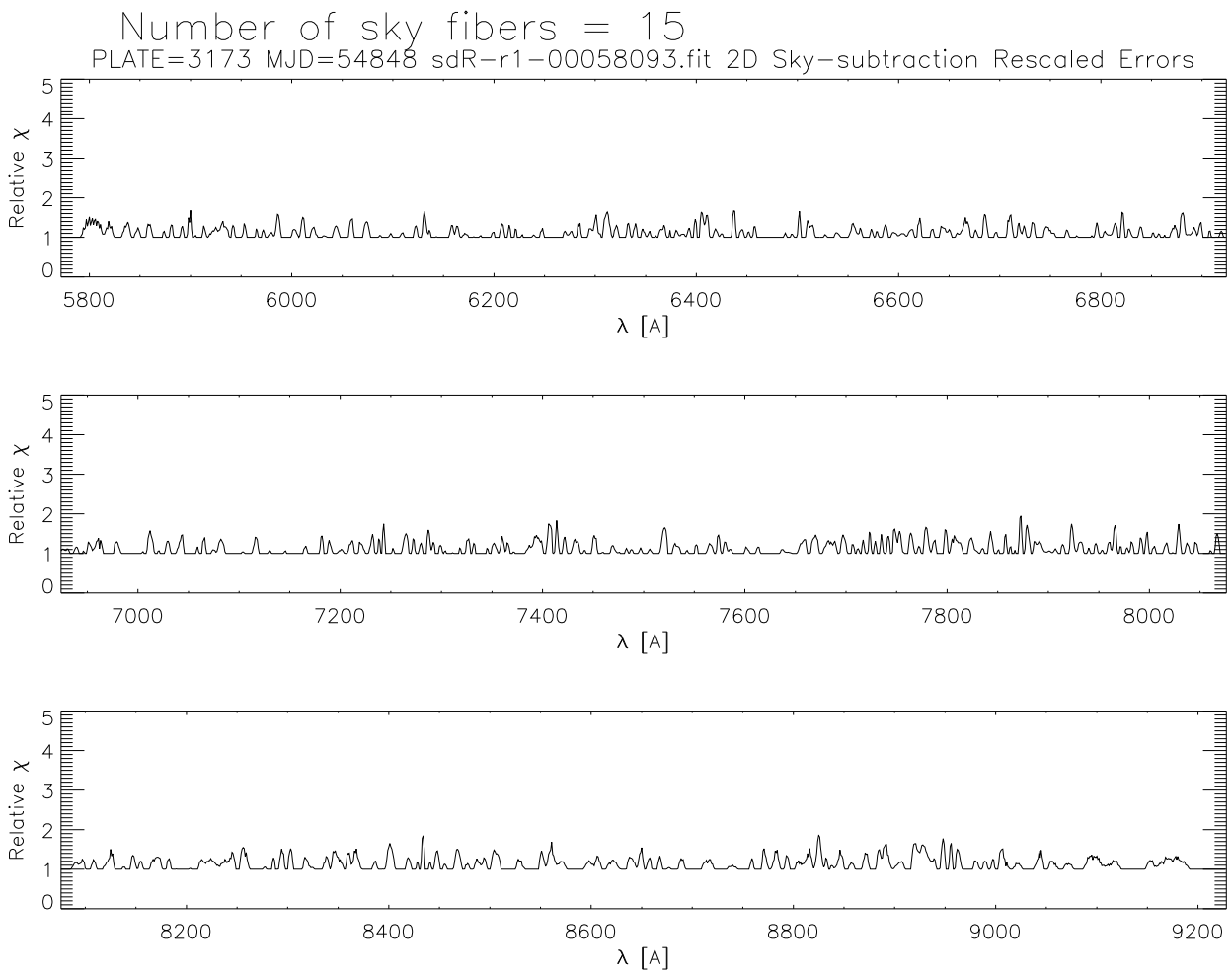

PLATE=3173 MJD=54848 sdR-r1-00058093.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

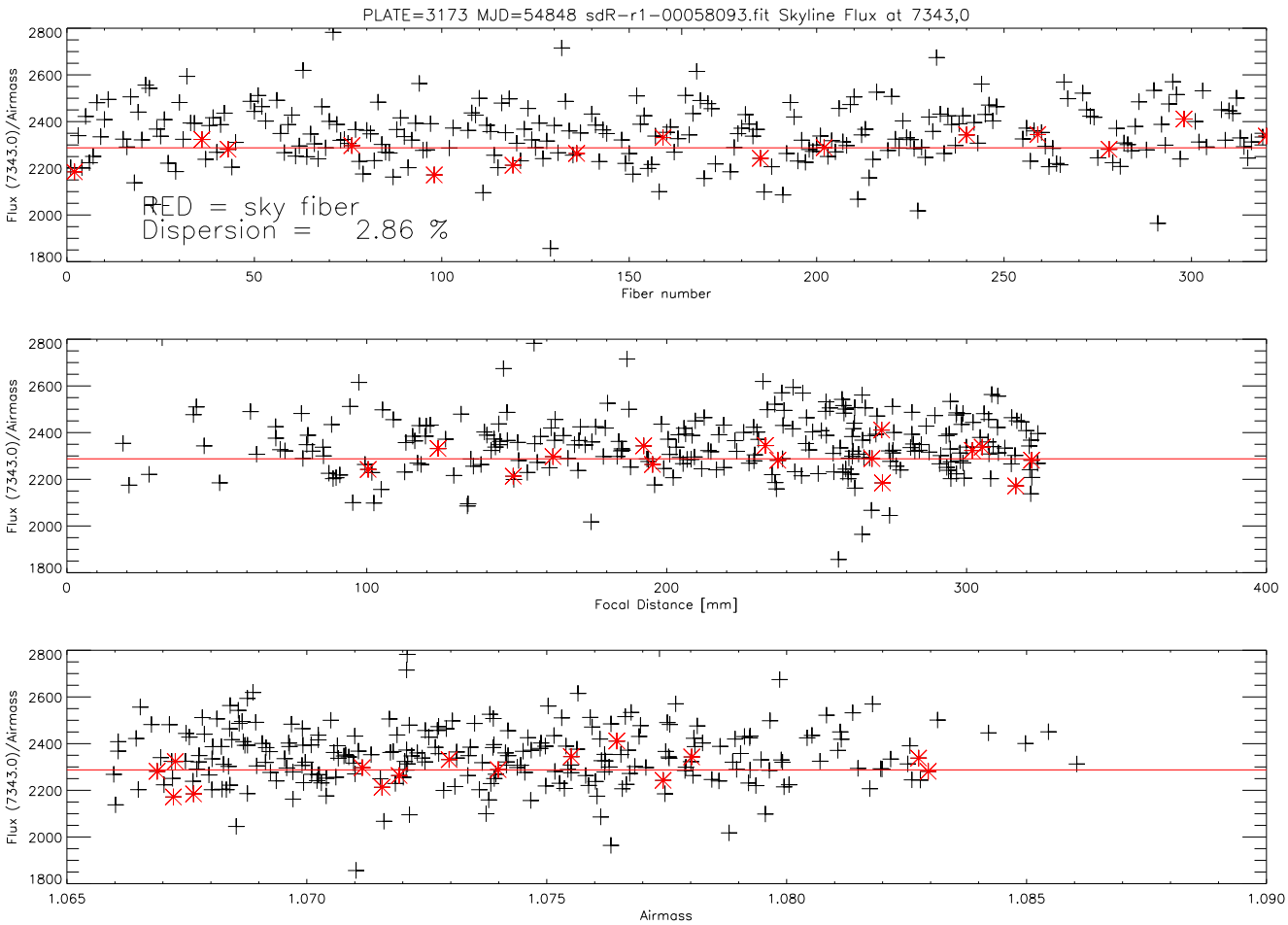

Number of sky fibers = 15
PLATE=3173 MJD=54848 sdR-r1-00058093.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

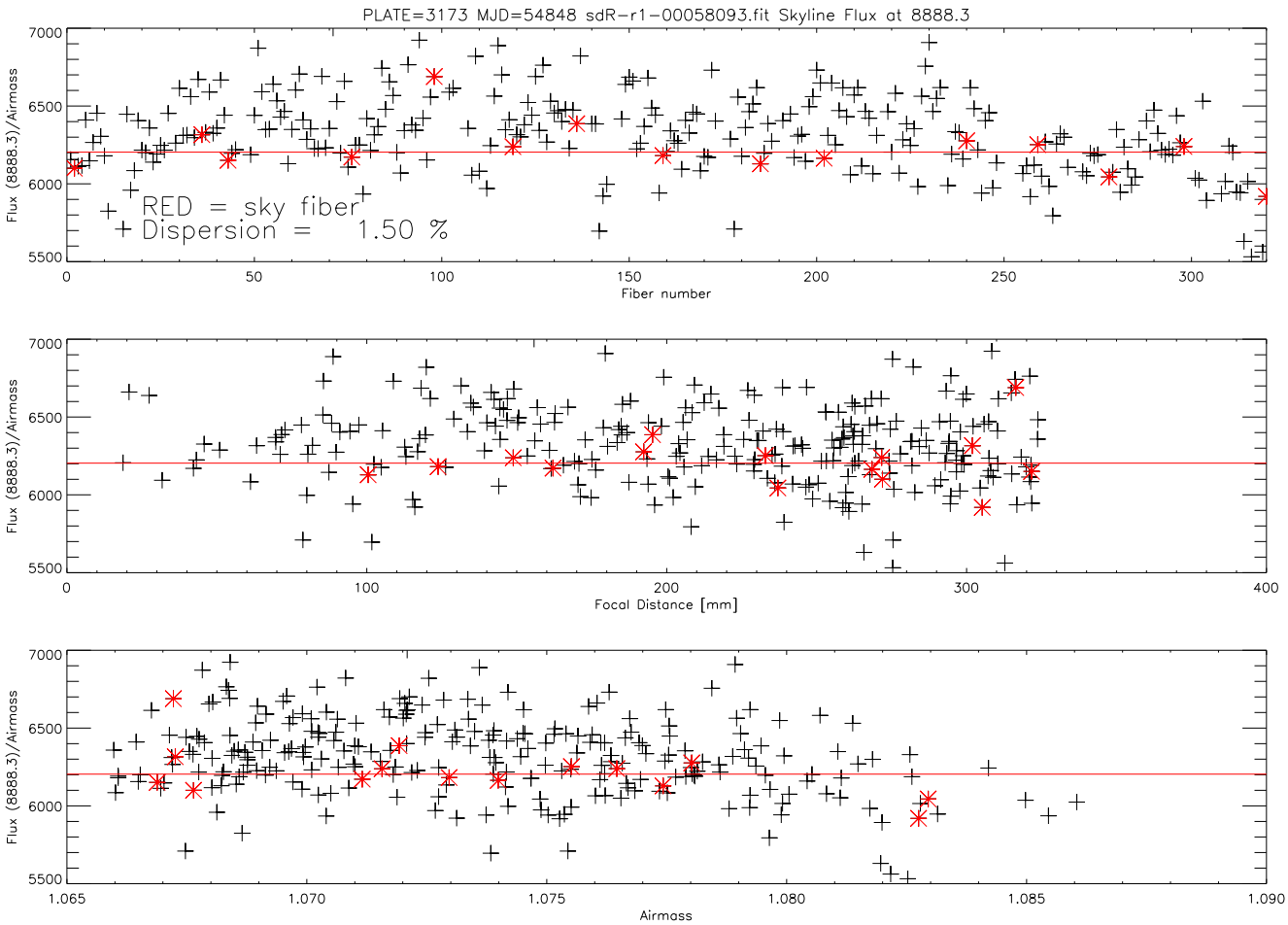

PLATE=3173 MJD=54848 sdR-r1-00058093.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

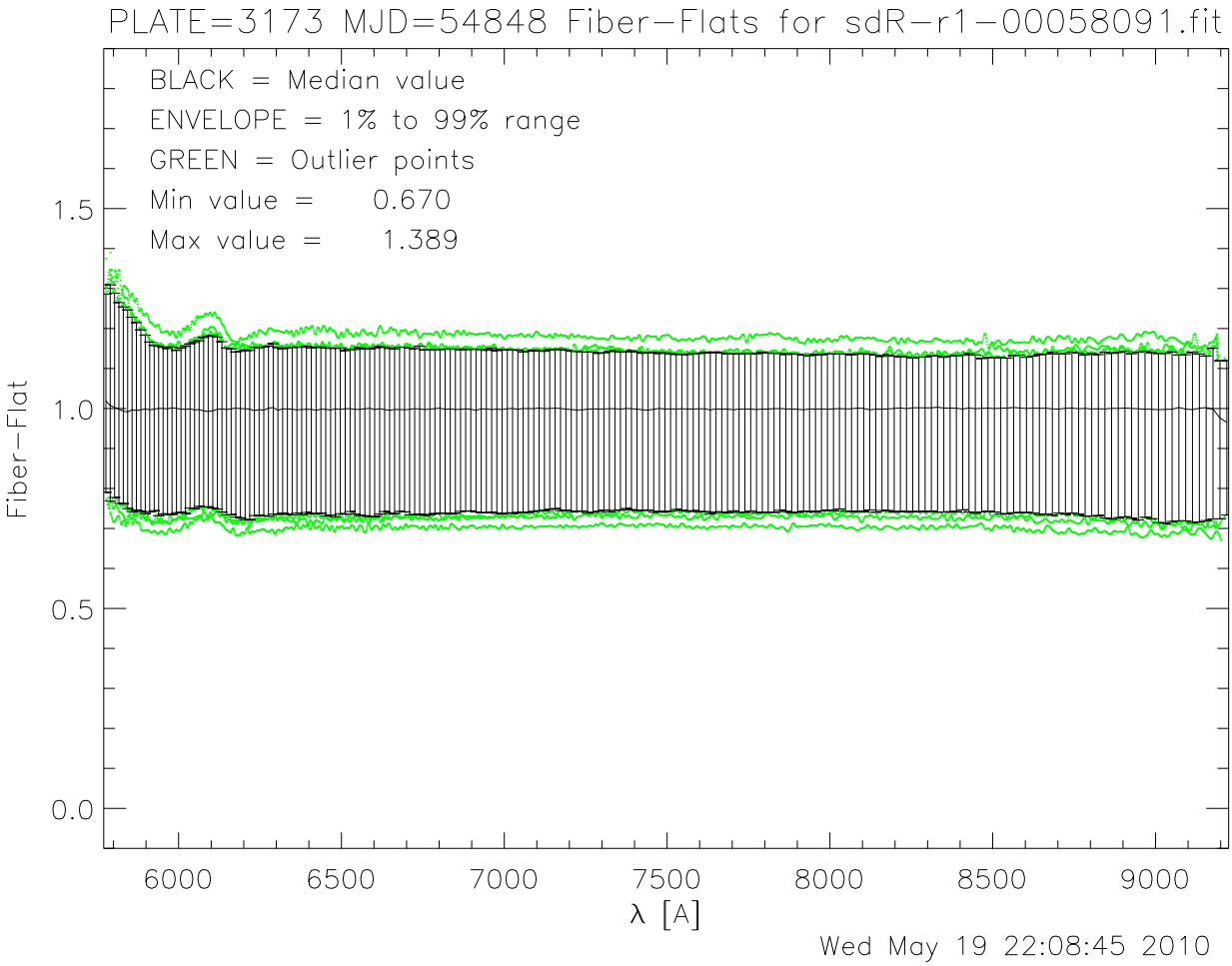

PLATE=3173 MJD=54848 sdR-r1-00058093.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

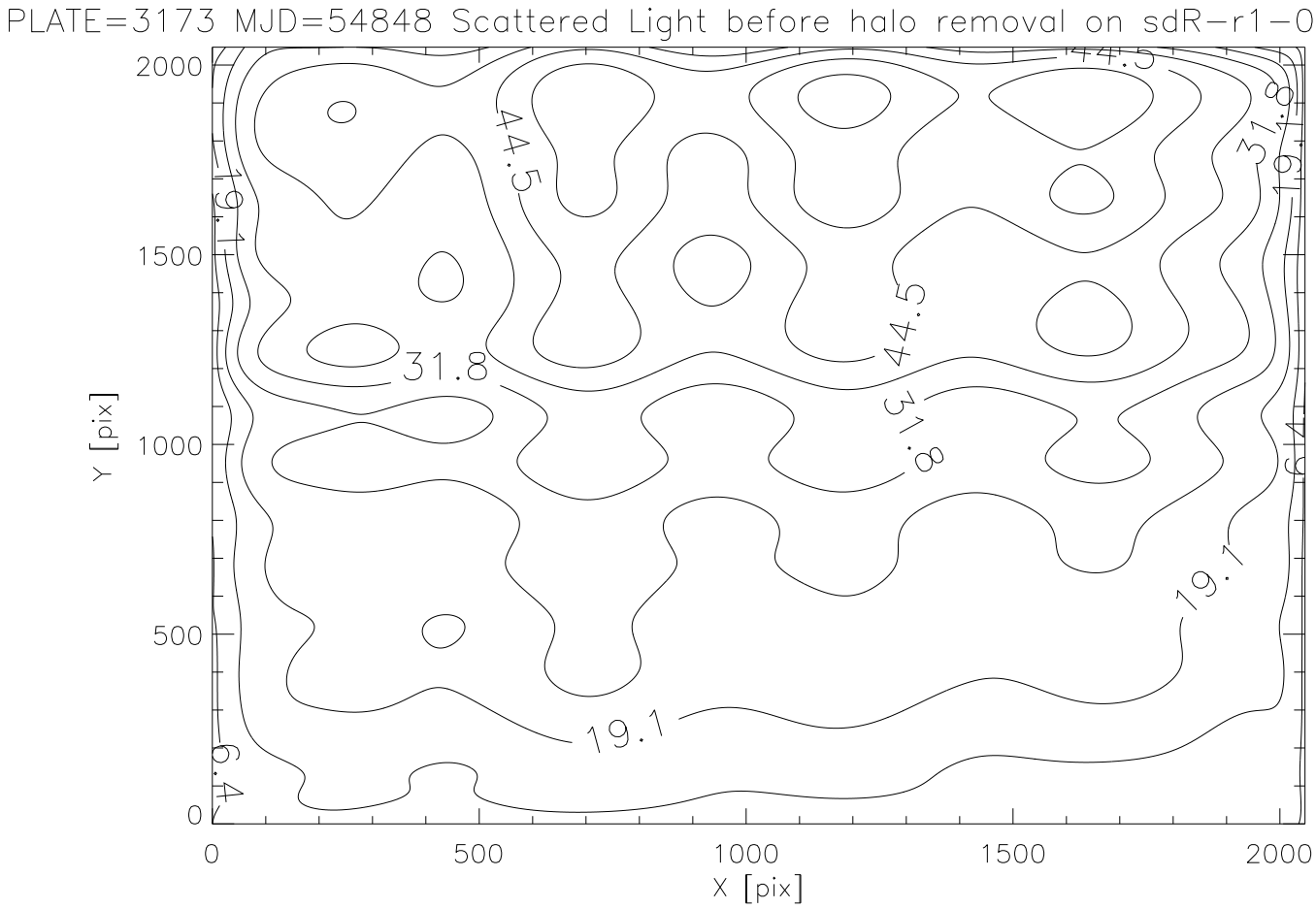

PLATE=3173 MJD=54848 sdR-r1-00058093.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

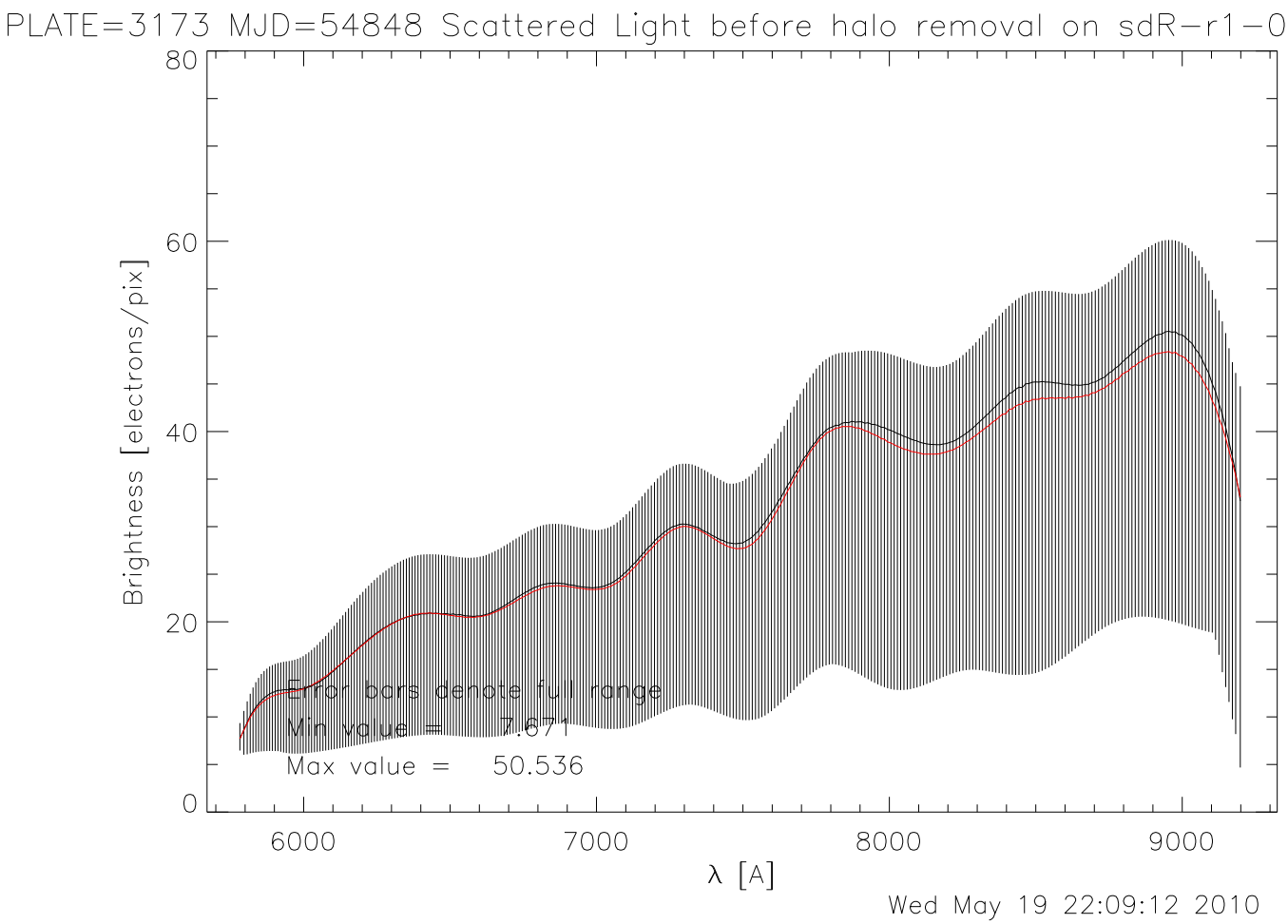

Number of sky fibers = 15
PLATE=3173 MJD=54848 sdR-r1-00058093.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

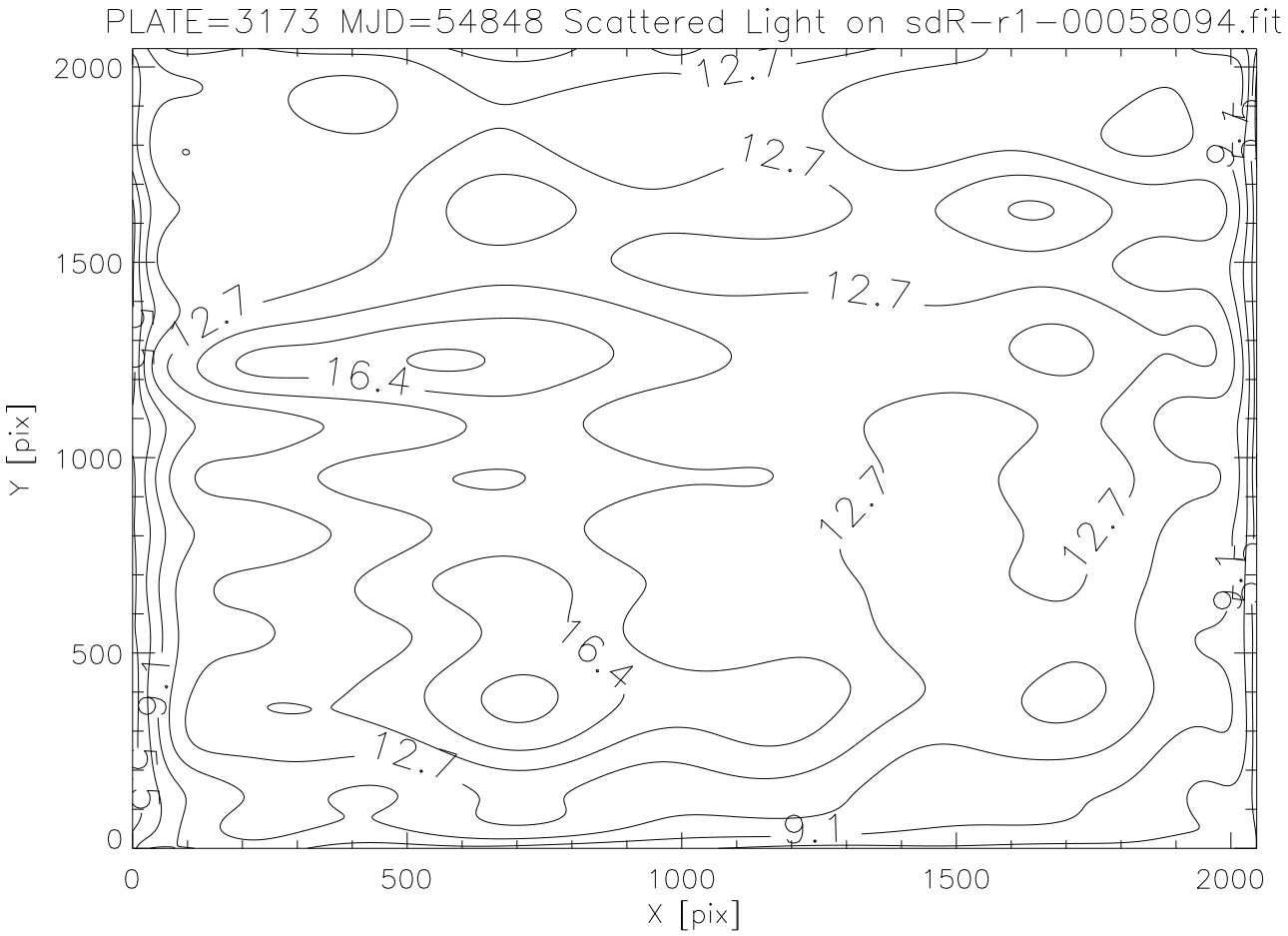

PLATE=3173 MJD=54848 sdR-r1-00058093.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.86 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

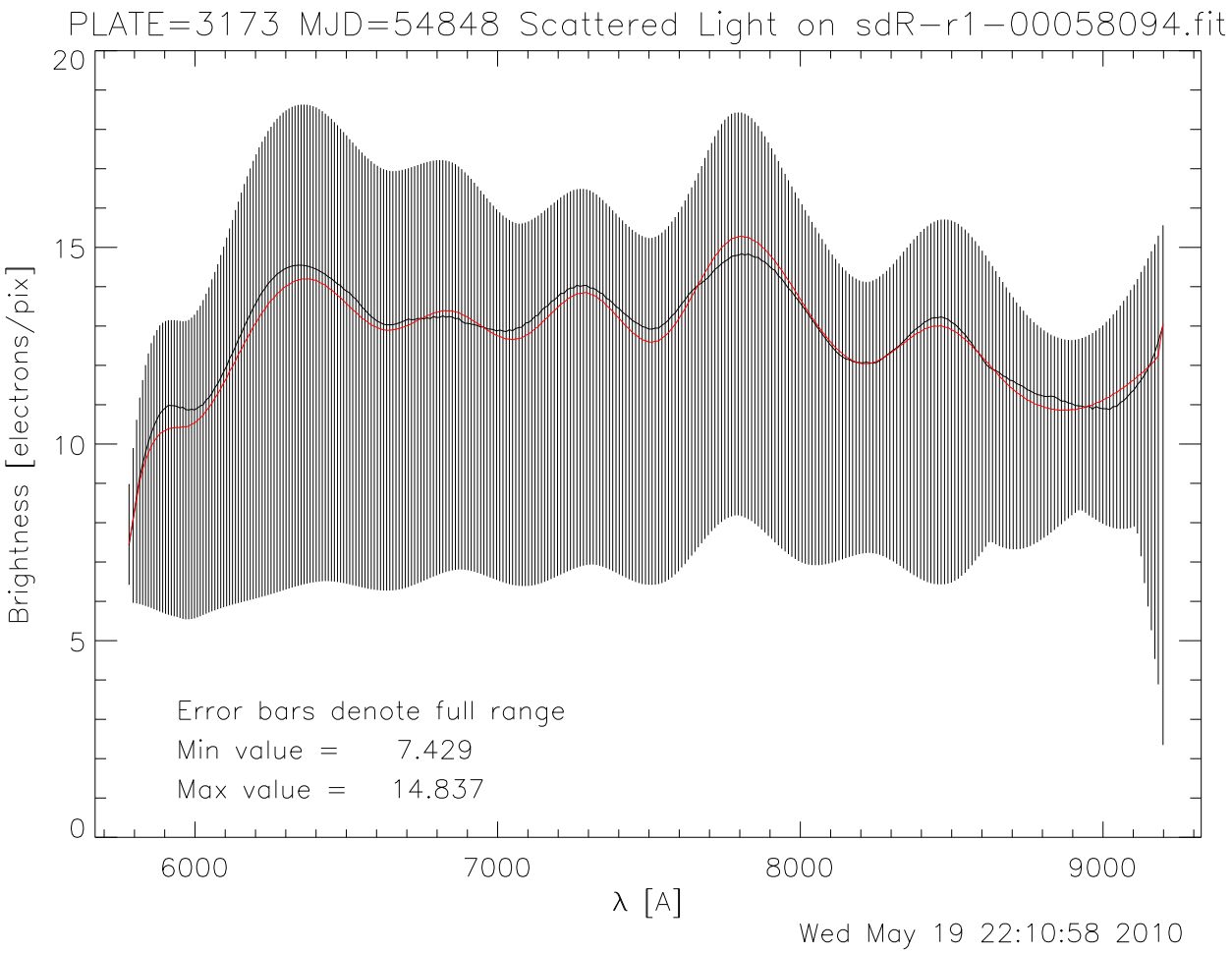

PLATE=3173 MJD=54848 sdR-r1-00058093.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.50 %
Fiber number
Focal Distance [mm]
Airmass

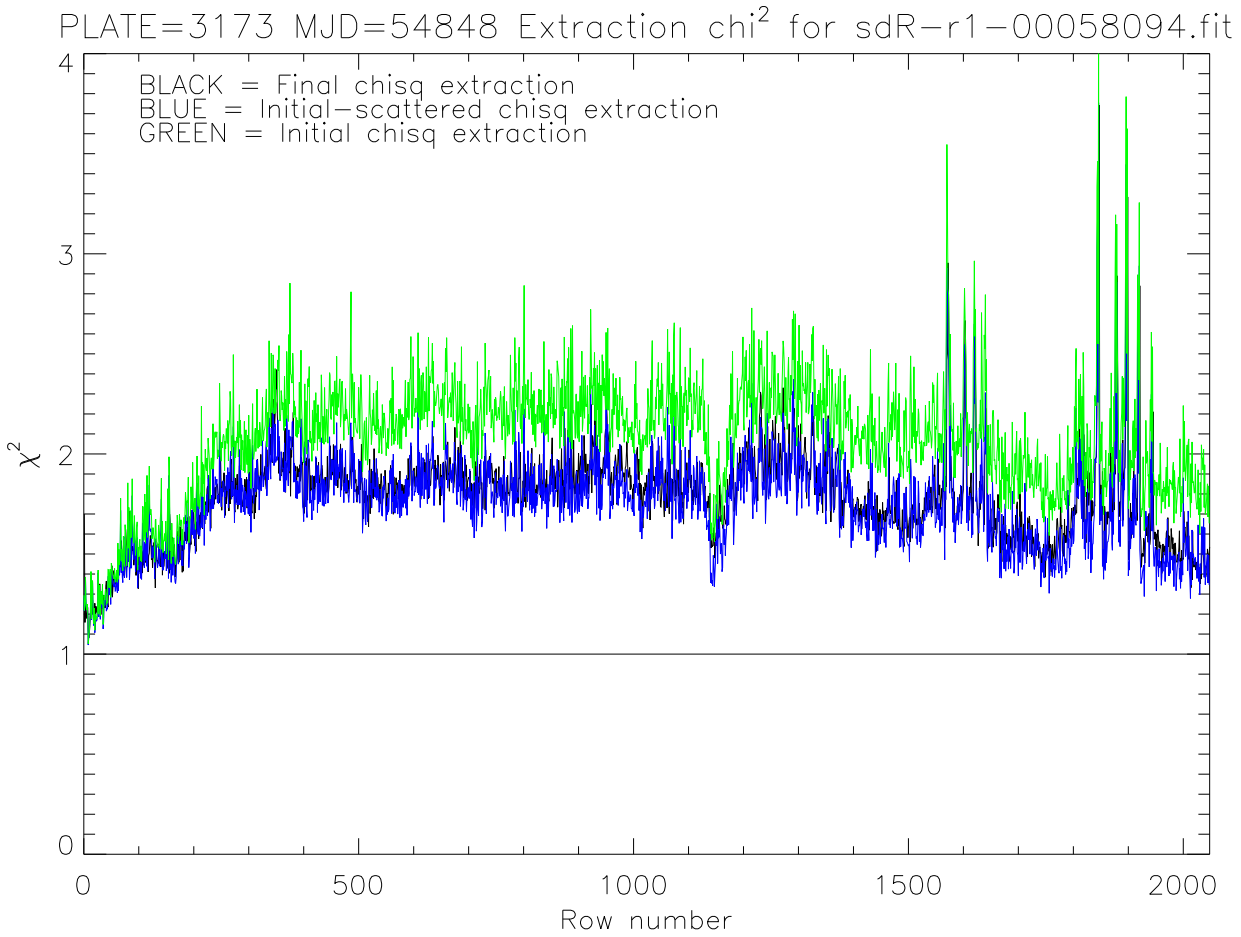

PLATE=3173 MJD=54848 Fiber−Flats for sdR−r1−00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.670
Max value = 1.389
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed May 19 22:08:45 2010

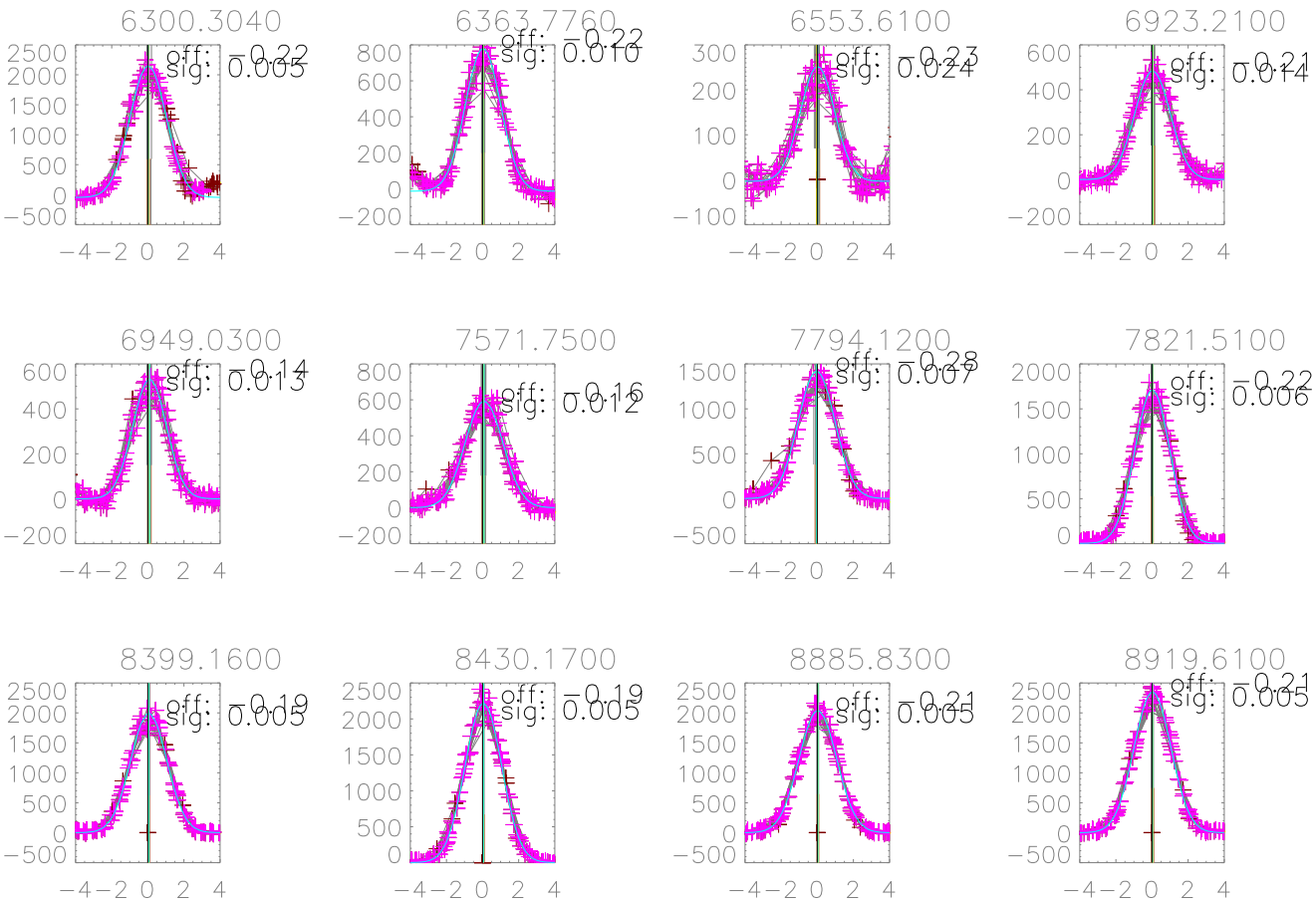

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-r1-00058094.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
44.5
31.8
19.1
6.4

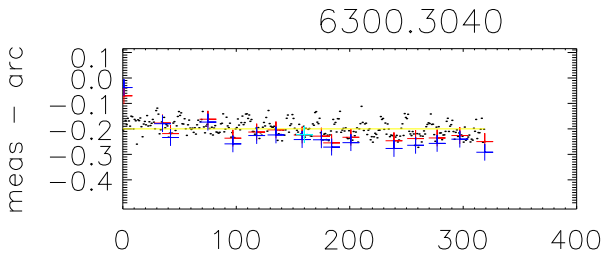

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-r1-00058094.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.671
Max value = 50.536
Wed May 19 22:09:12 2010

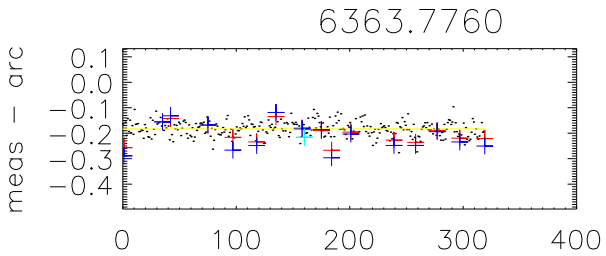

PLATE=3173 MJD=54848 Scattered Light on sdR-r1-00058094.fit
12.7
12.7
9.1
12.7
12.7
16.4
12.7
12.7
9.1
16.4
12.7
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

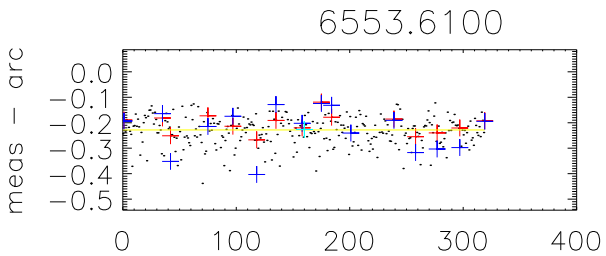

PLATE=3173 MJD=54848 Scattered Light on sdR-r1-00058094.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.429
Max value = 14.837
Wed May 19 22:10:58 2010

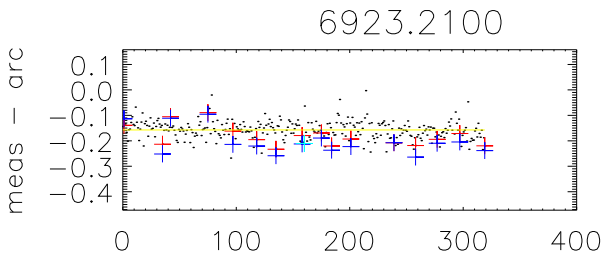

PLATE=3173 MJD=54848 Extraction chi^2 for sdR−r1−00058094.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

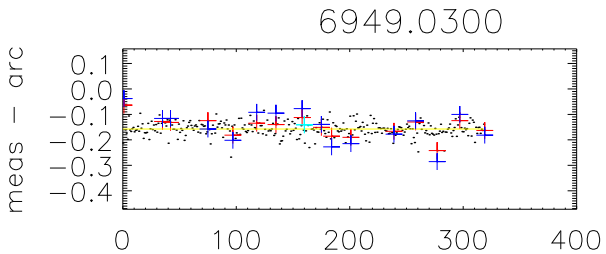

6300.3040
off: −0.22
sig: 0.005
6363.7760
off: −0.22
sig: 0.010
6553.6100
off: −0.23
sig: 0.024
6923.2100
off: −0.21
sig: 0.014
6949.0300
off: −0.14
sig: 0.013
7571.7500
off: −0.16
sig: 0.012
7794.1200
off: −0.28
sig: 0.007
7821.5100
off: −0.22
sig: 0.006
8399.1600
off: −0.19
sig: 0.005
8430.1700
off: −0.19
sig: 0.005
8885.8300
off: −0.21
sig: 0.005
8919.6100
off: −0.21
sig: 0.005

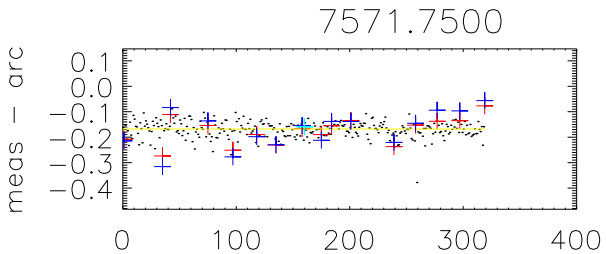

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

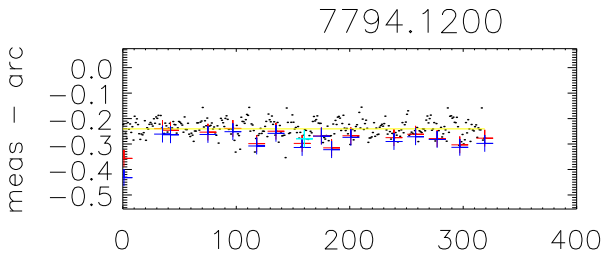

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

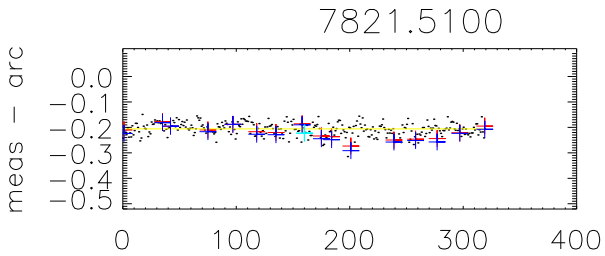

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

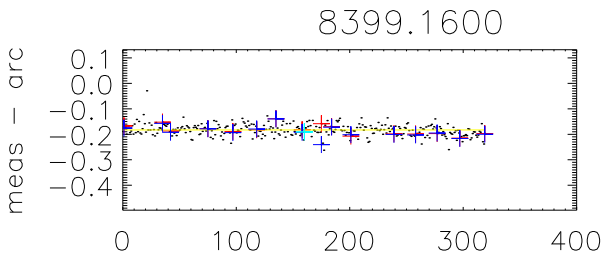

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

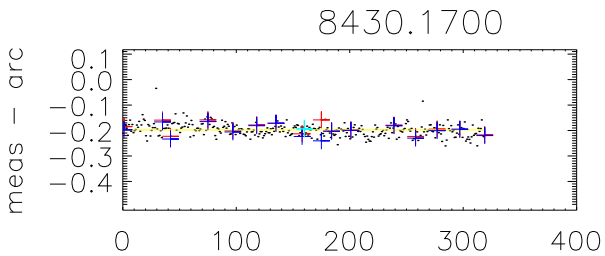

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

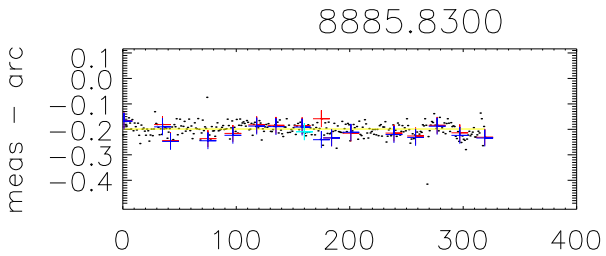

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

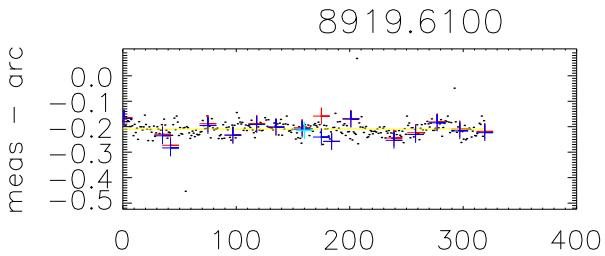

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

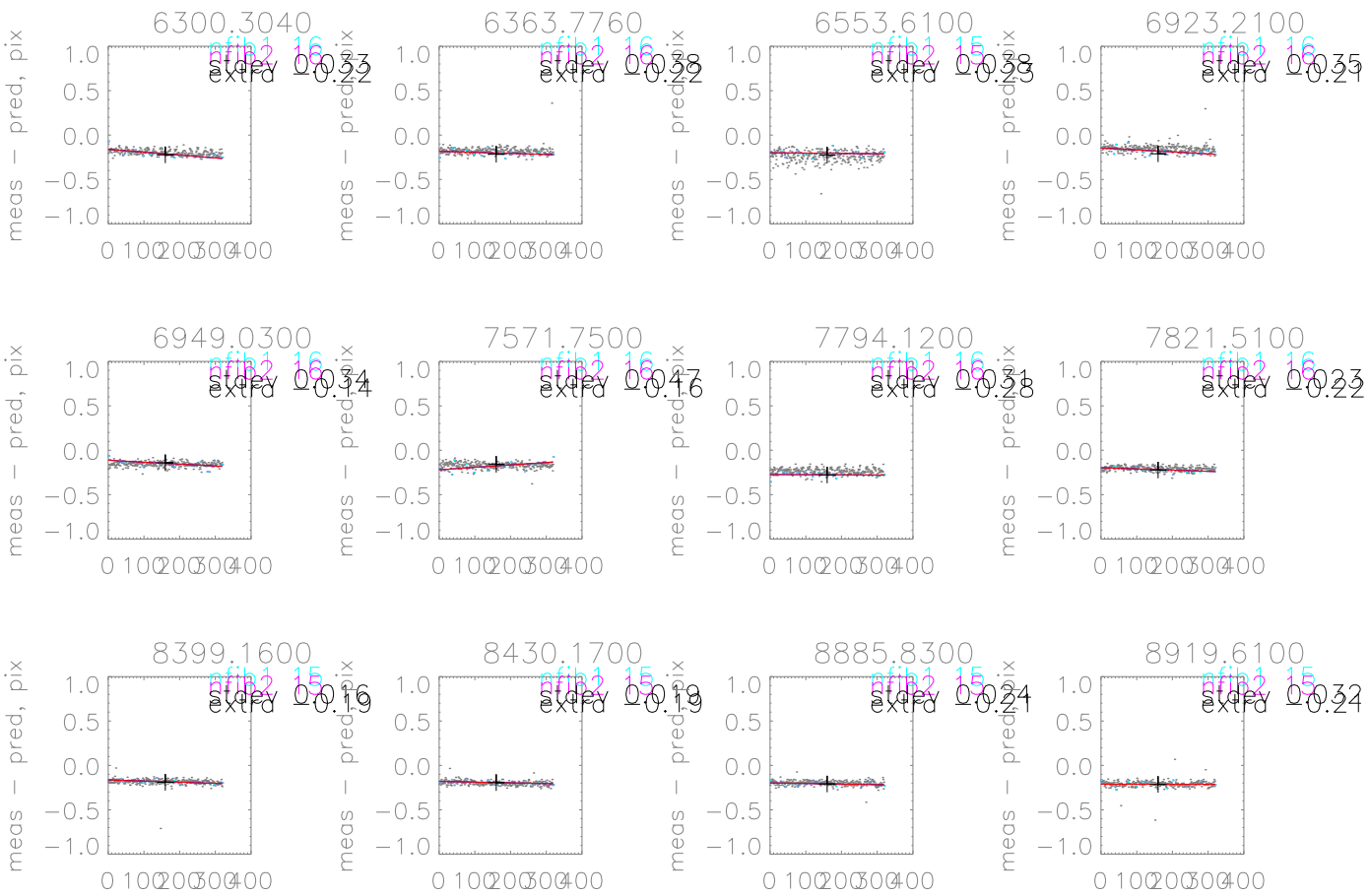

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

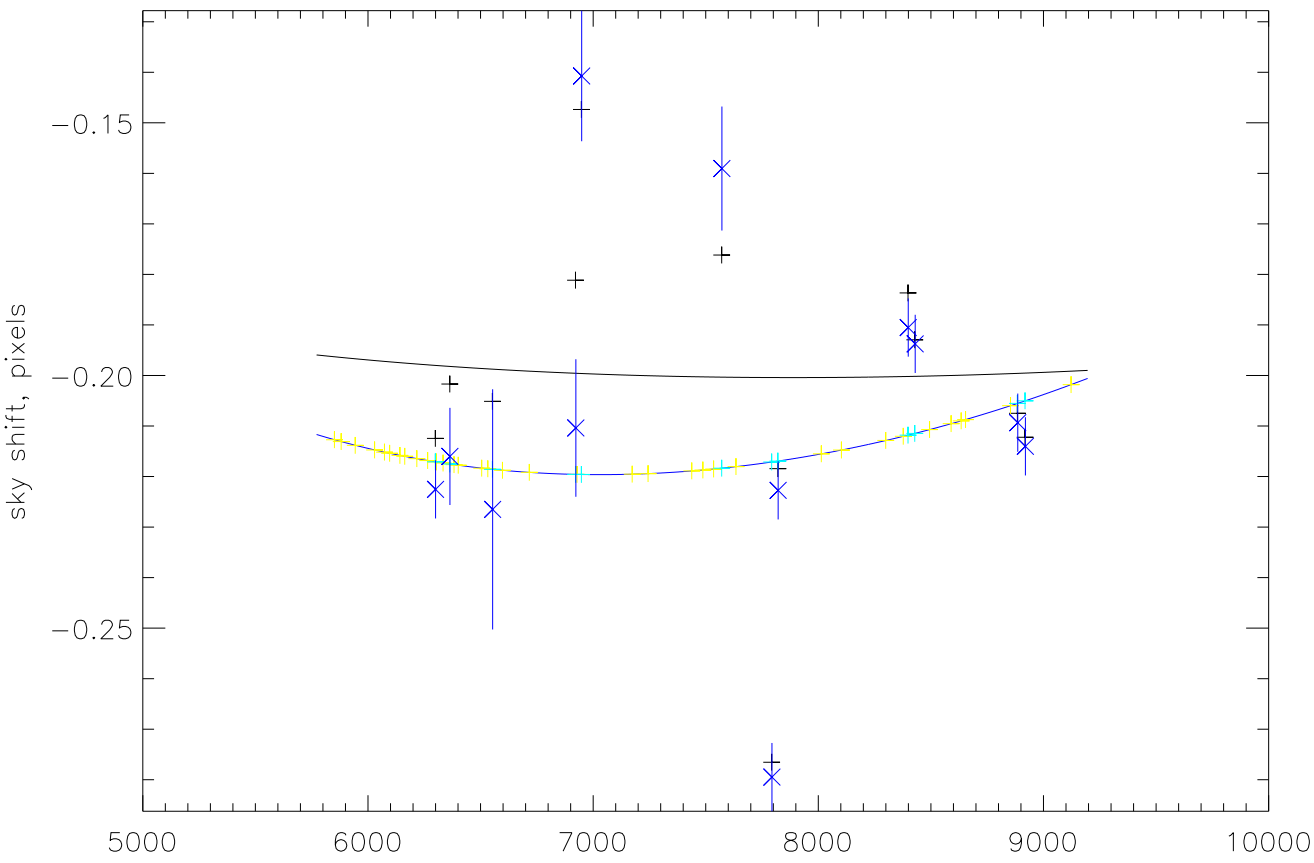

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

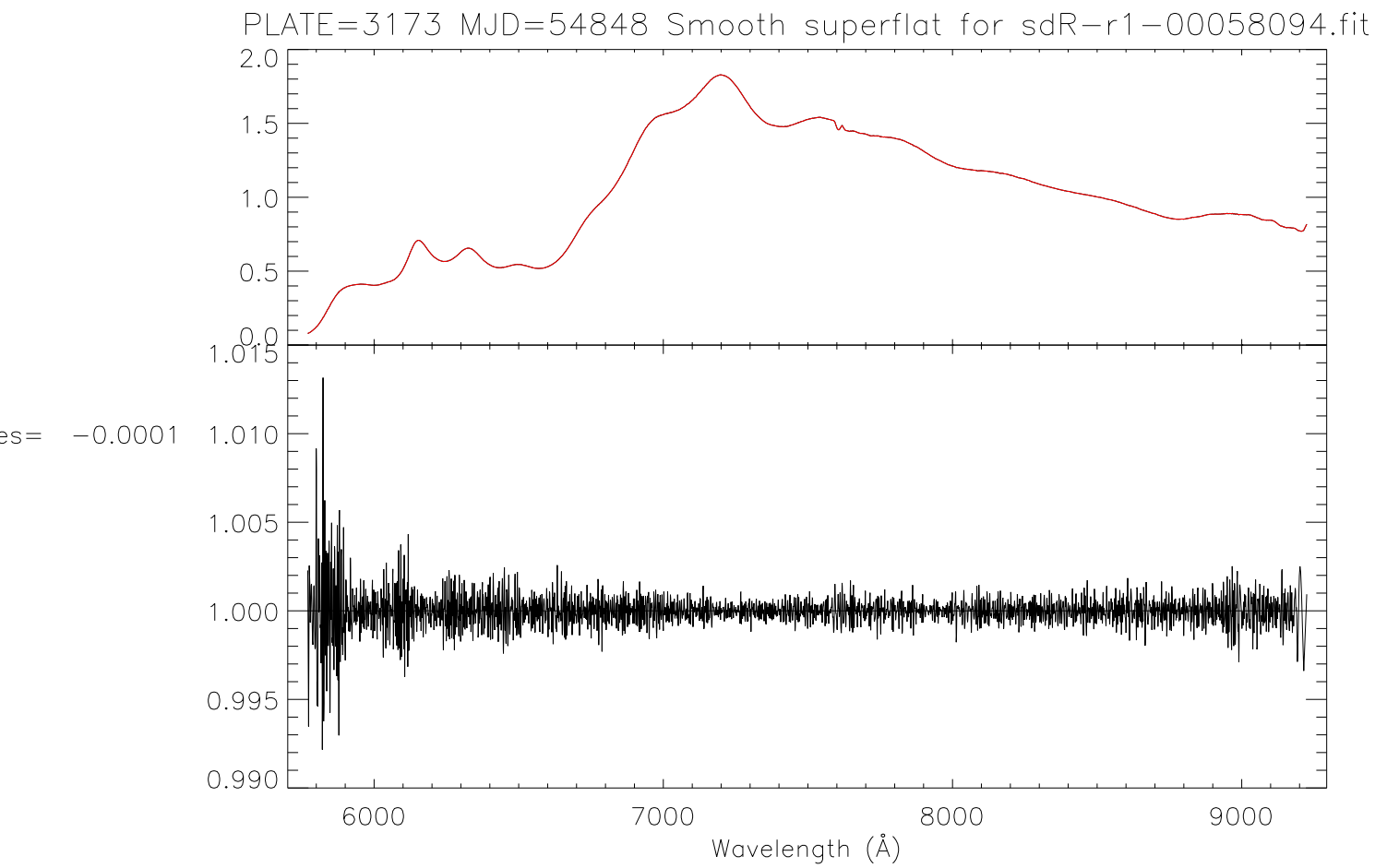

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

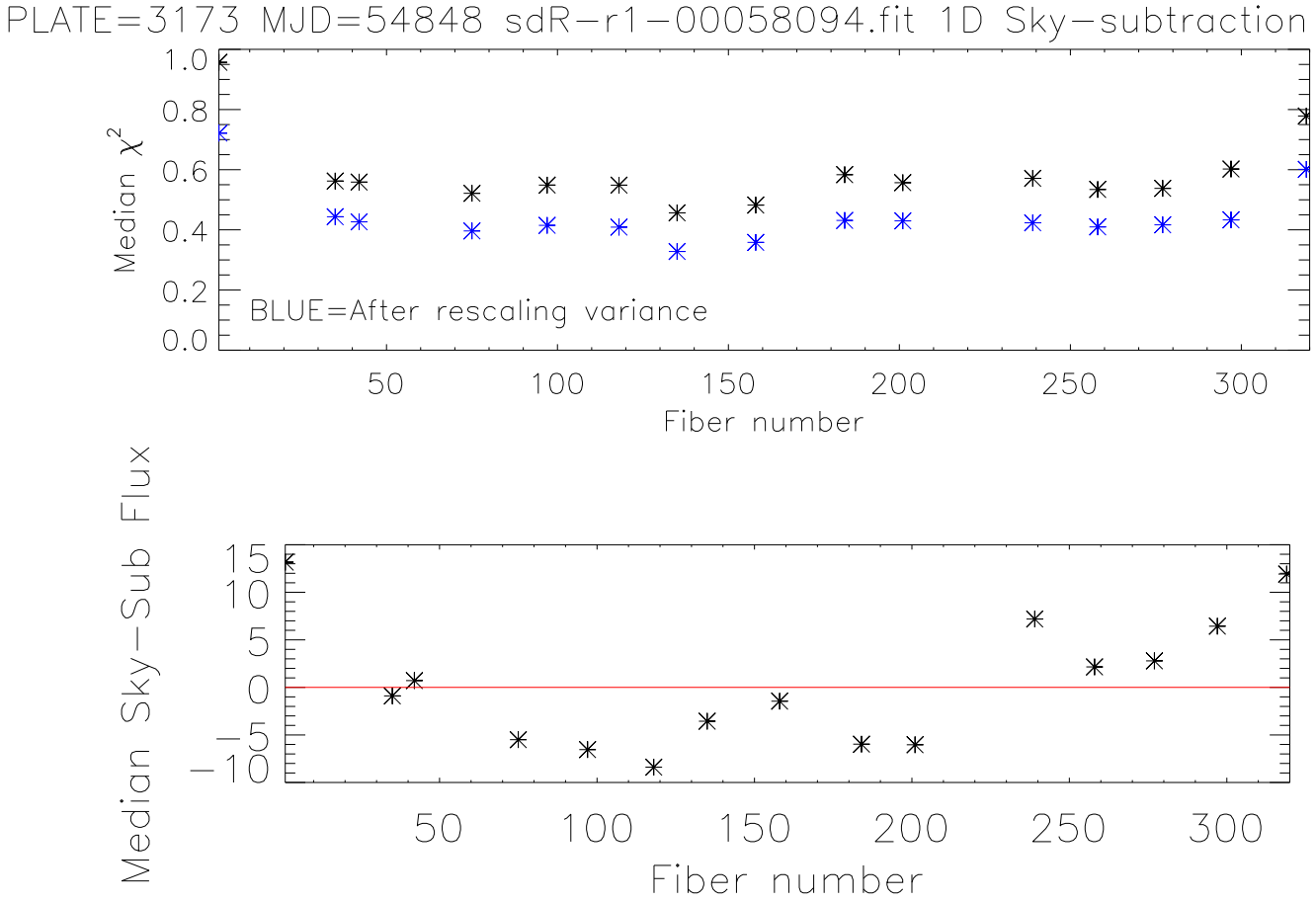

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

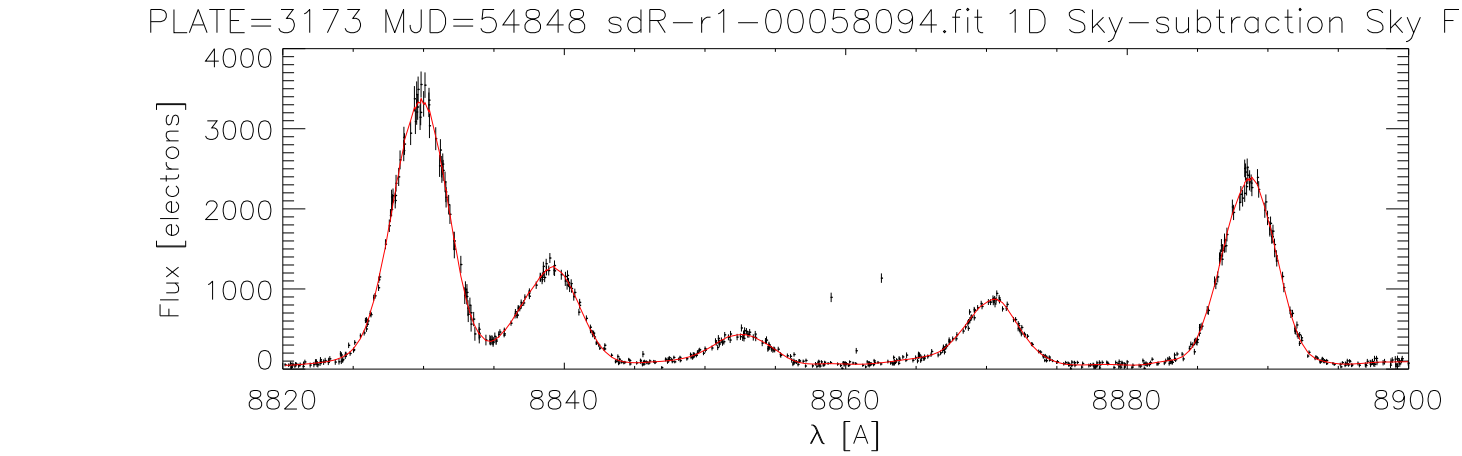

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

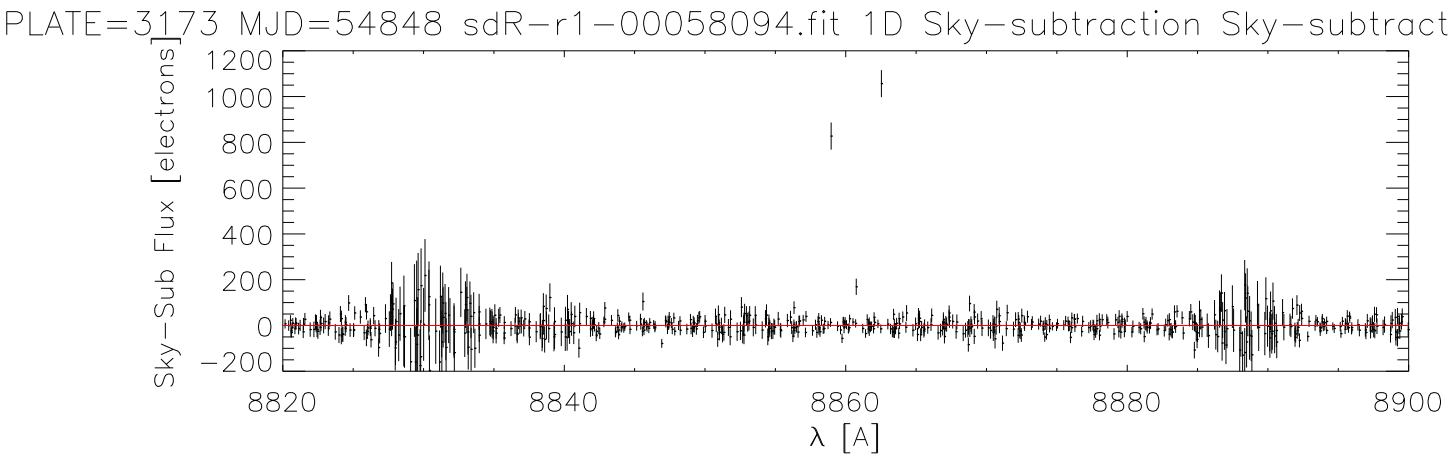

6300.3040
mfib1 16
mfib2 16
stdev 0.33
extra 0.22
6363.7760
mfib1 16
mfib2 16
stdev 0.38
extra 0.22
6553.6100
mfib1 15
mfib2 16
stdev 0.38
extra 0.23
6923.2100
mfib1 16
mfib2 16
stdev 0.35
extra 0.21
6949.0300
mfib1 16
mfib2 16
stdev 0.34
extra 0.14
7571.7500
mfib1 16
mfib2 16
stdev 0.47
extra 0.16
7794.1200
mfib1 16
mfib2 16
stdev 0.31
extra 0.28
7821.5100
mfib1 16
mfib2 16
stdev 0.23
extra 0.22
8399.1600
mfib1 15
mfib2 15
stdev 0.16
extra 0.19
8430.1700
mfib1 15
mfib2 15
stdev 0.19
extra 0.19
8885.8300
mfib1 15
mfib2 15
stdev 0.24
extra 0.21
8919.6100
mfib1 15
mfib2 15
stdev 0.32
extra 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

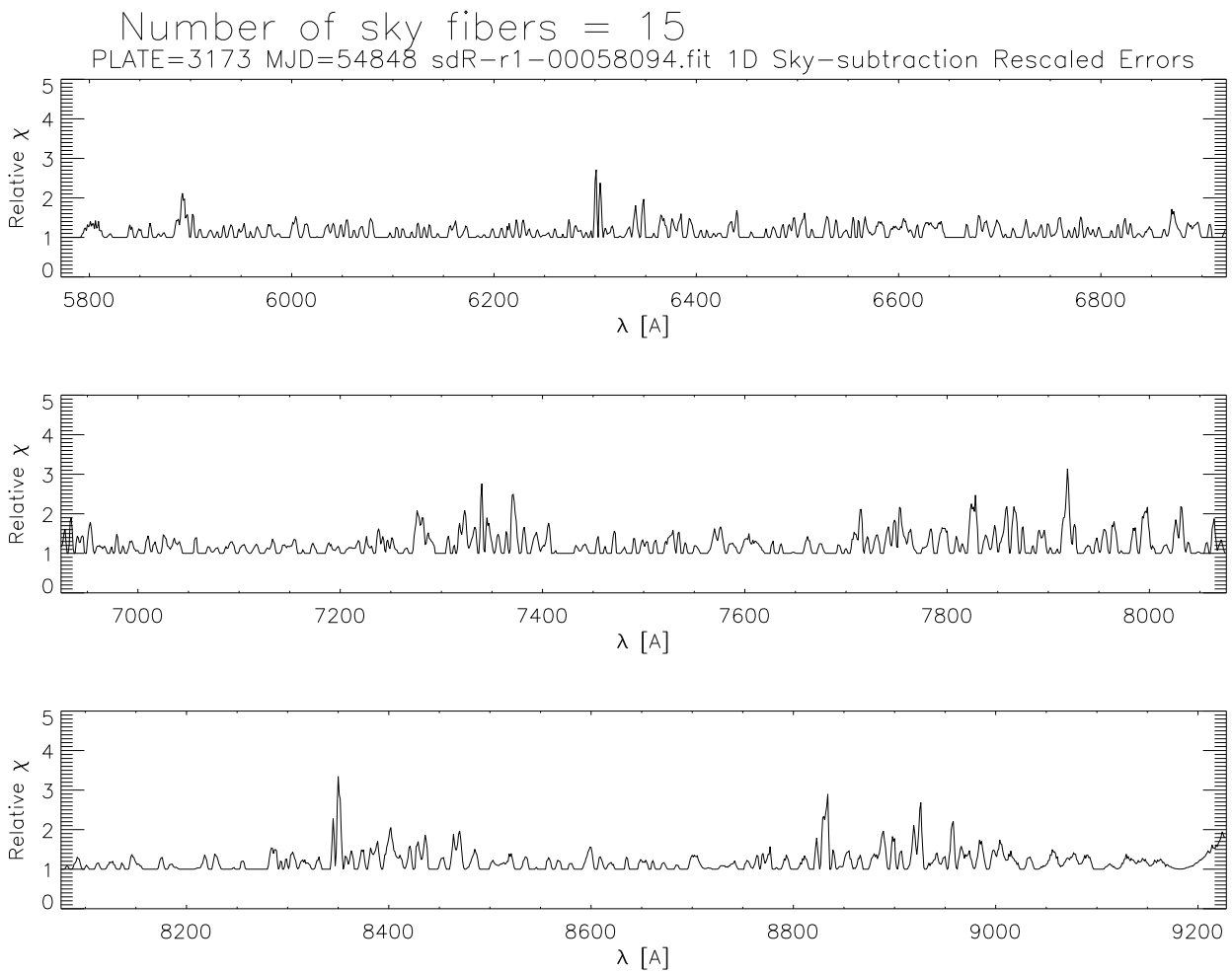

−0.15
−0.20
−0.25
sky shift, pixels
5000
6000
7000
8000
9000
10000

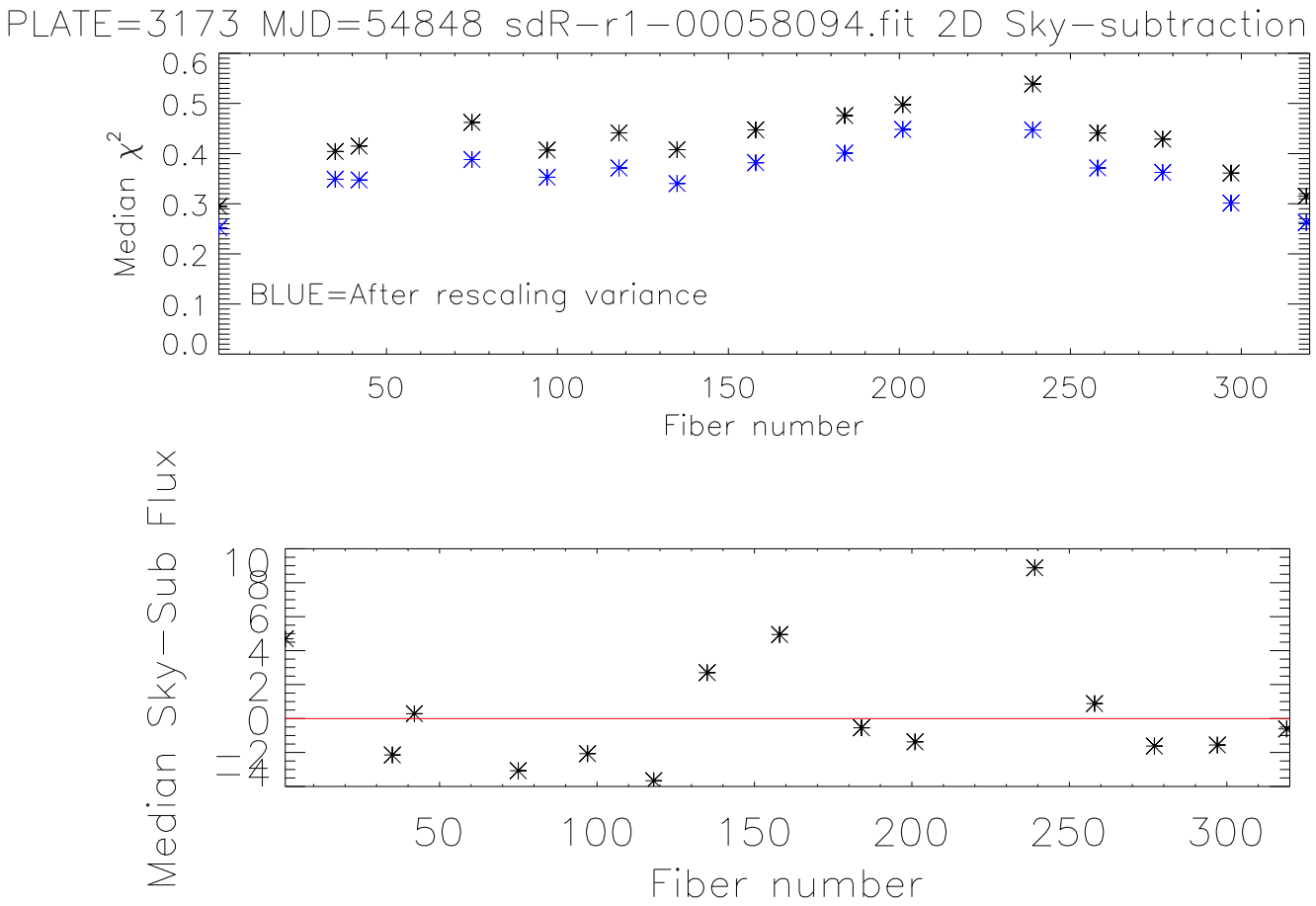

PLATE=3173 MJD=54848 Smooth superflat for sdR-r1-00058094.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0001
6000
7000
8000
9000
Wavelength (Å)

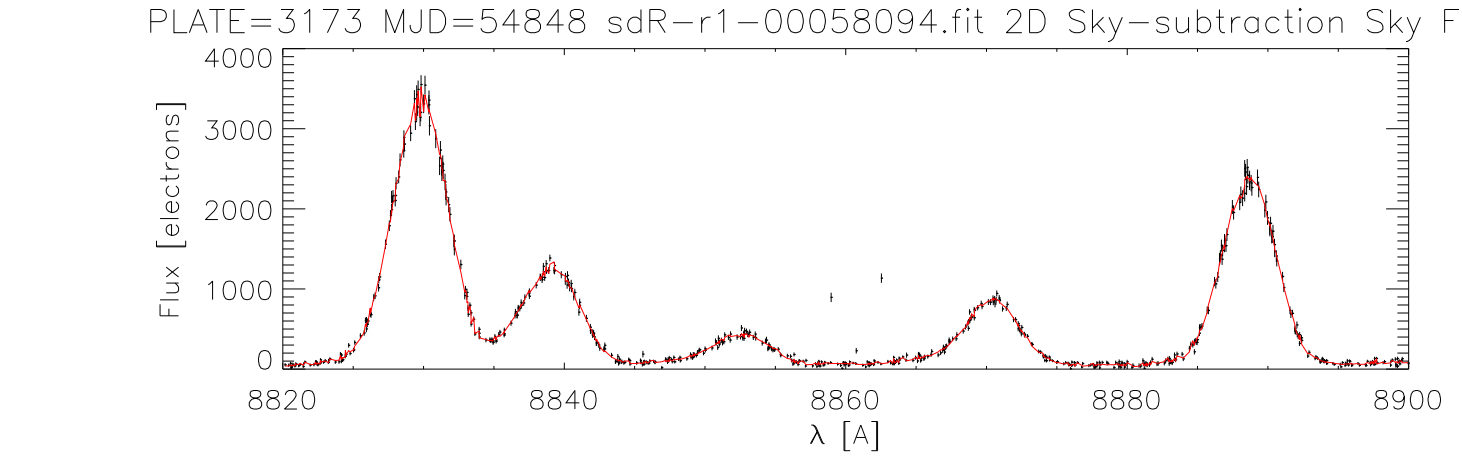

PLATE=3173 MJD=54848 sdR-r1-00058094.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

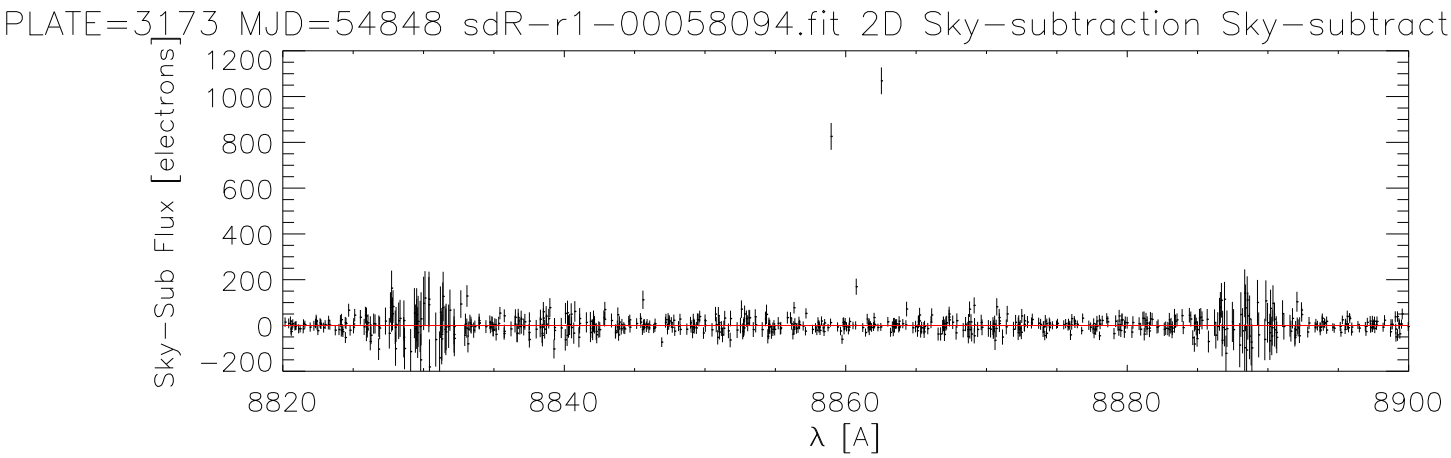

PLATE=3173 MJD=54848 sdR-r1-00058094.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

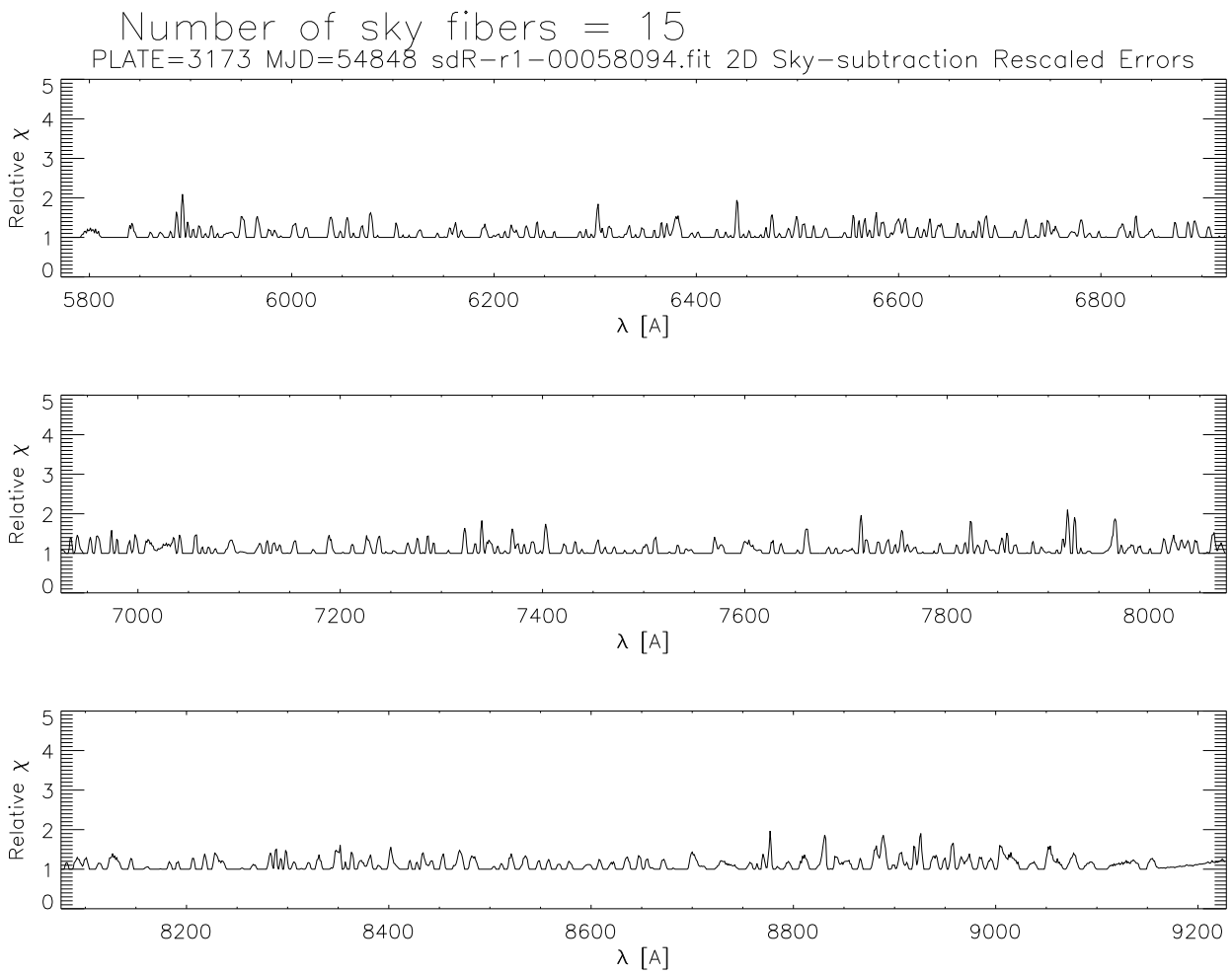

PLATE=3173 MJD=54848 sdR-r1-00058094.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

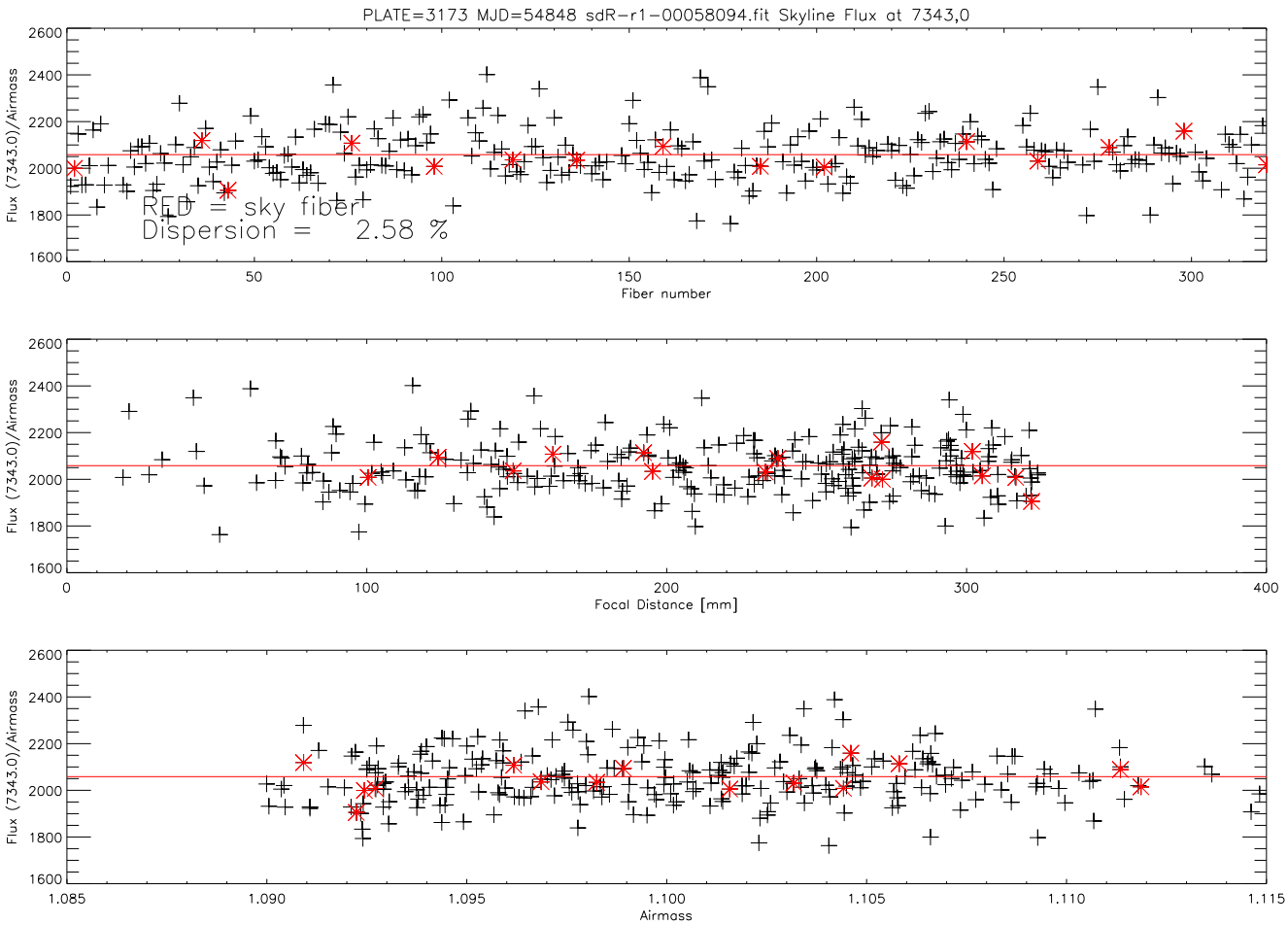

Number of sky fibers = 15
PLATE=3173 MJD=54848 sdR-r1-00058094.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

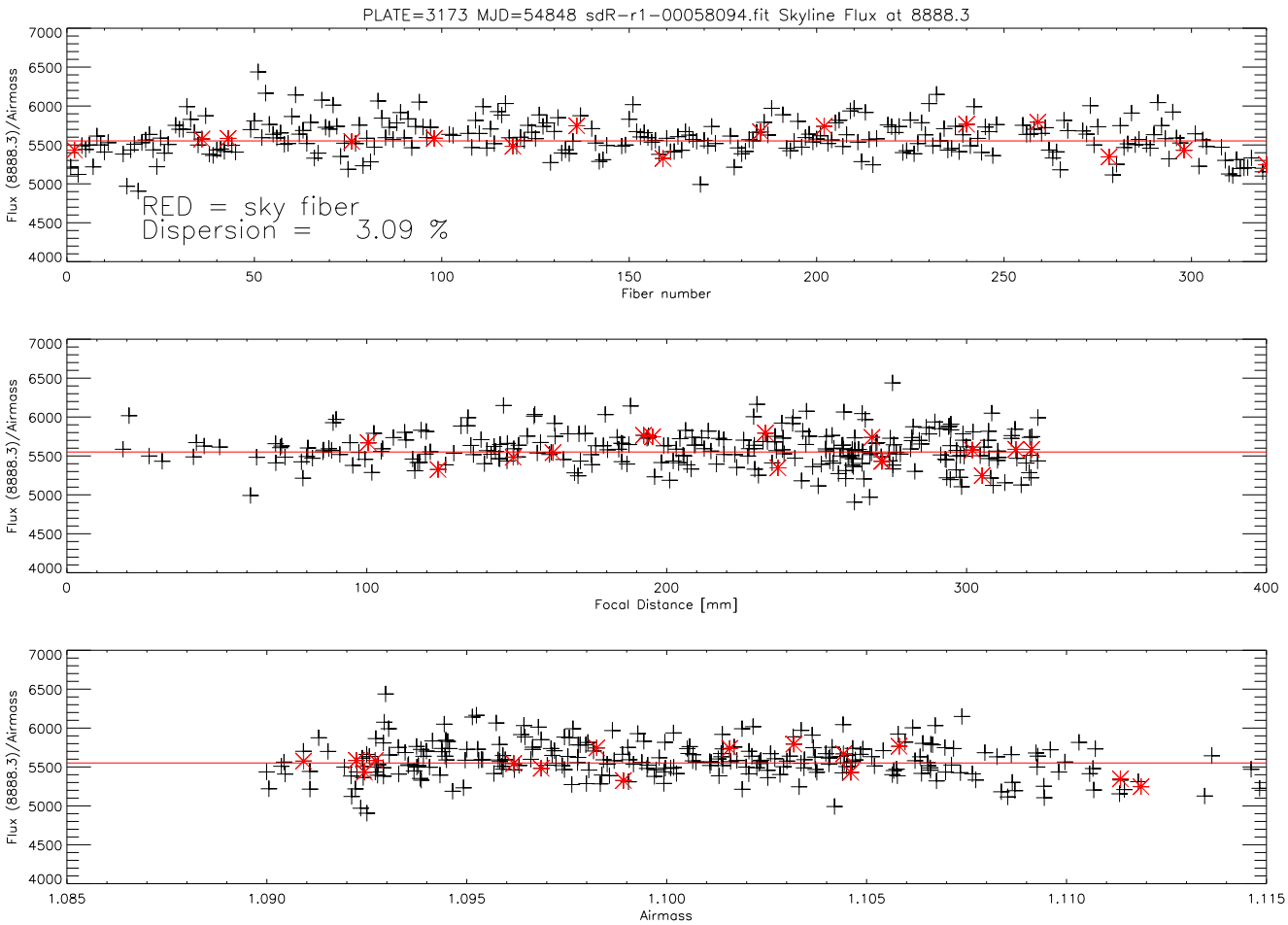

PLATE=3173 MJD=54848 sdR-r1-00058094.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-10
-8
-6
-4
-2
0
2
4
6
8
10
50
100
150
200
250
300
Fiber number

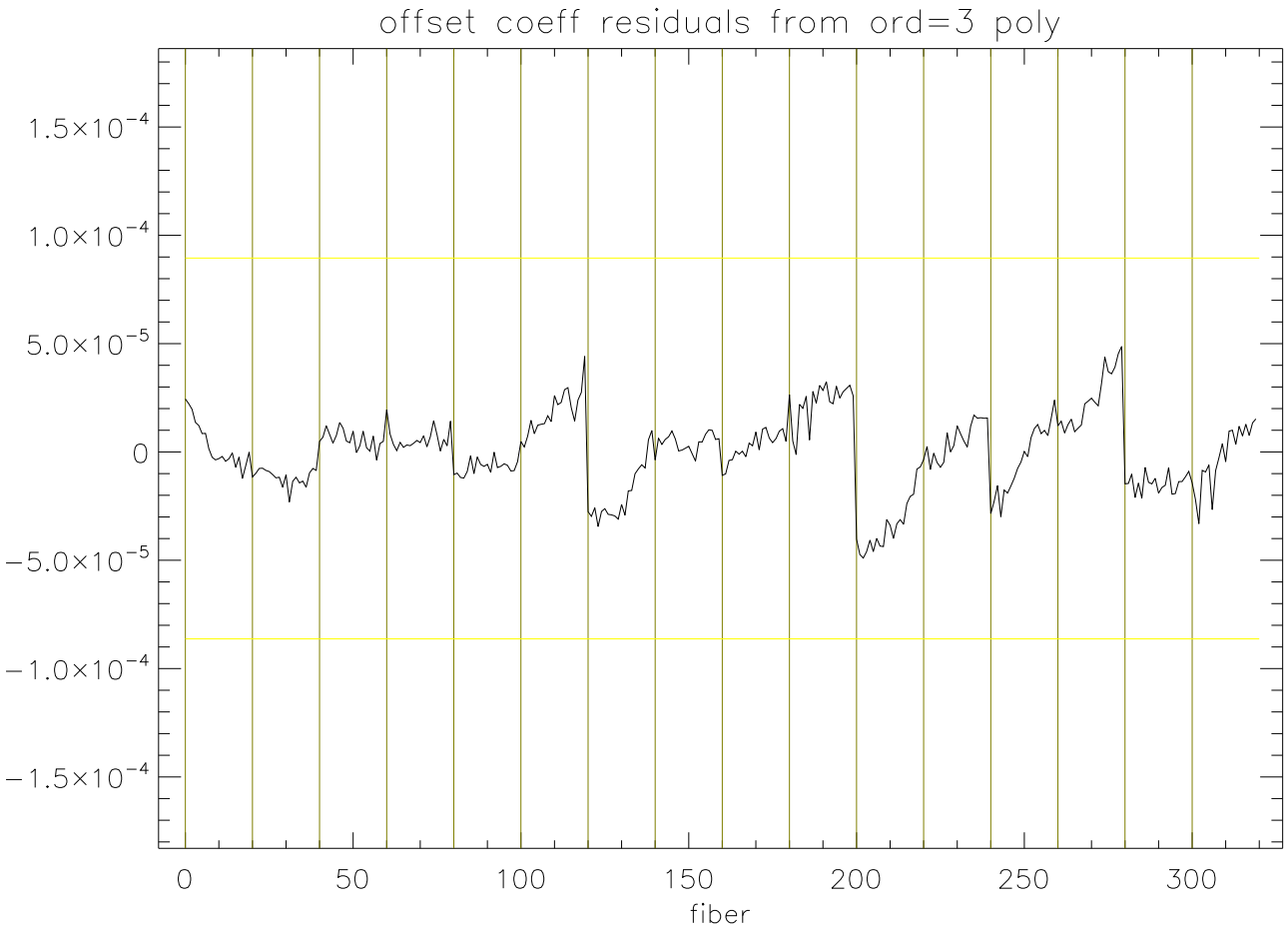

PLATE=3173 MJD=54848 sdR-r1-00058094.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

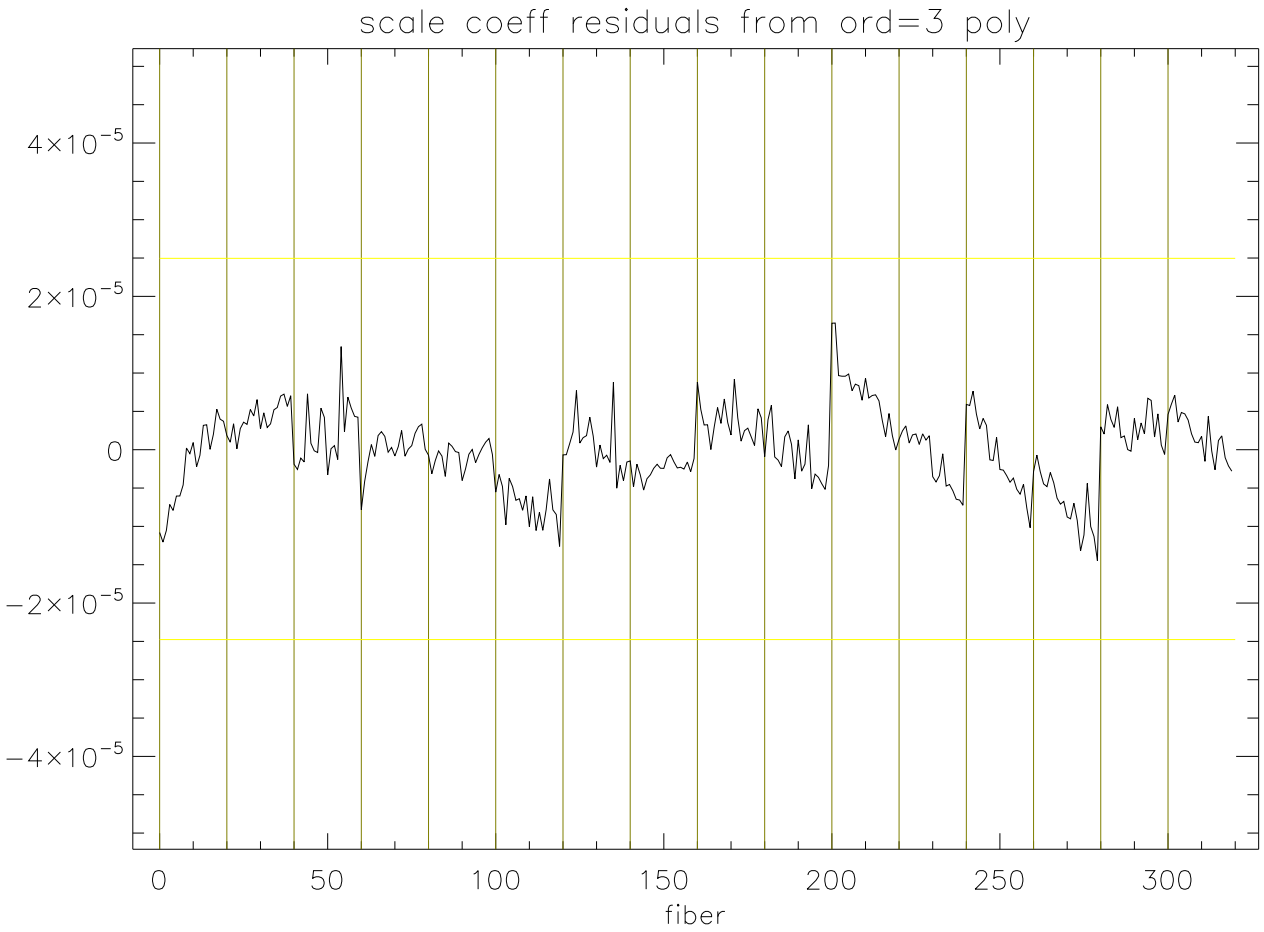

PLATE=3173 MJD=54848 sdR-r1-00058094.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

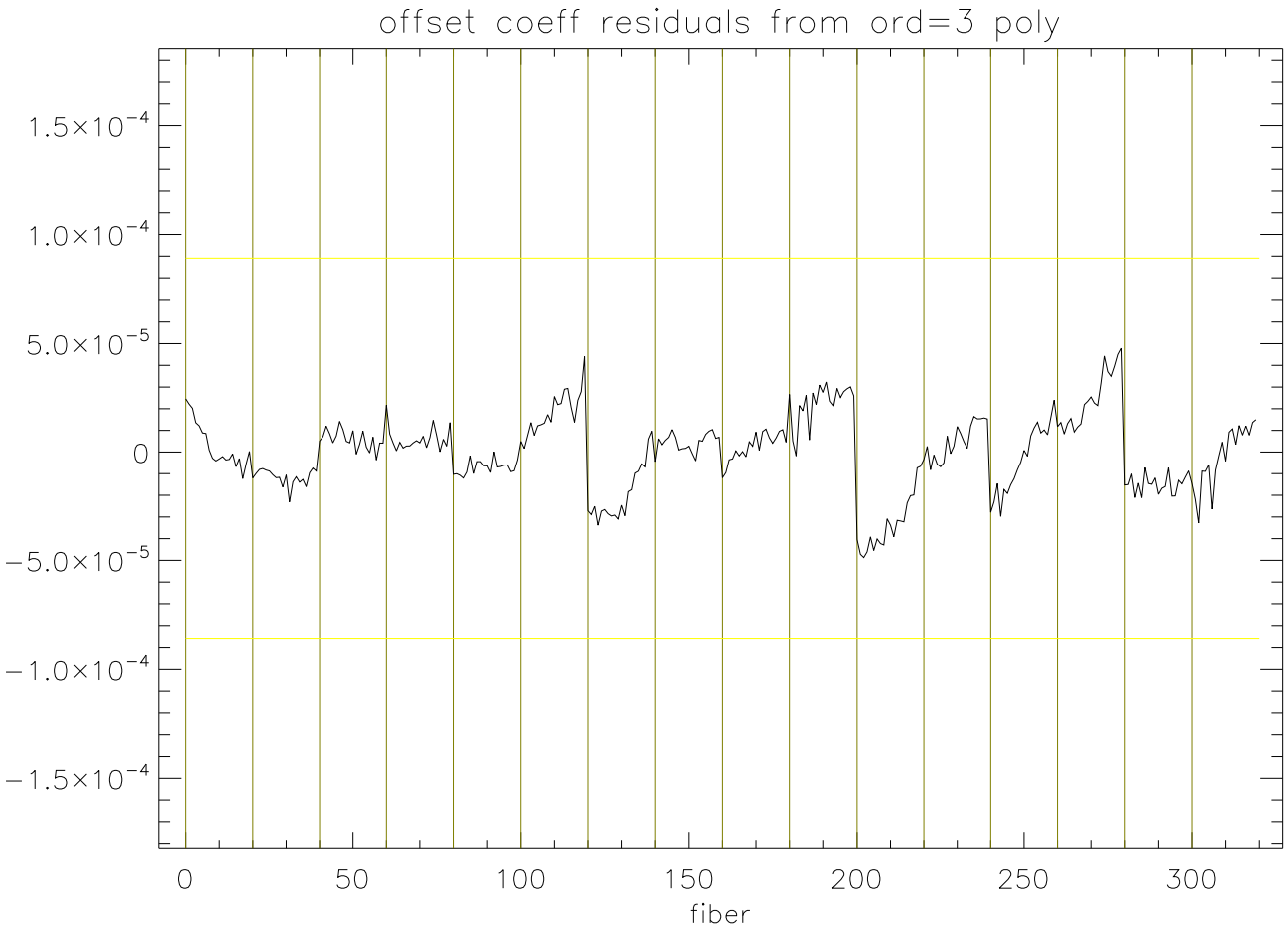

Number of sky fibers = 15
PLATE=3173 MJD=54848 sdR-r1-00058094.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

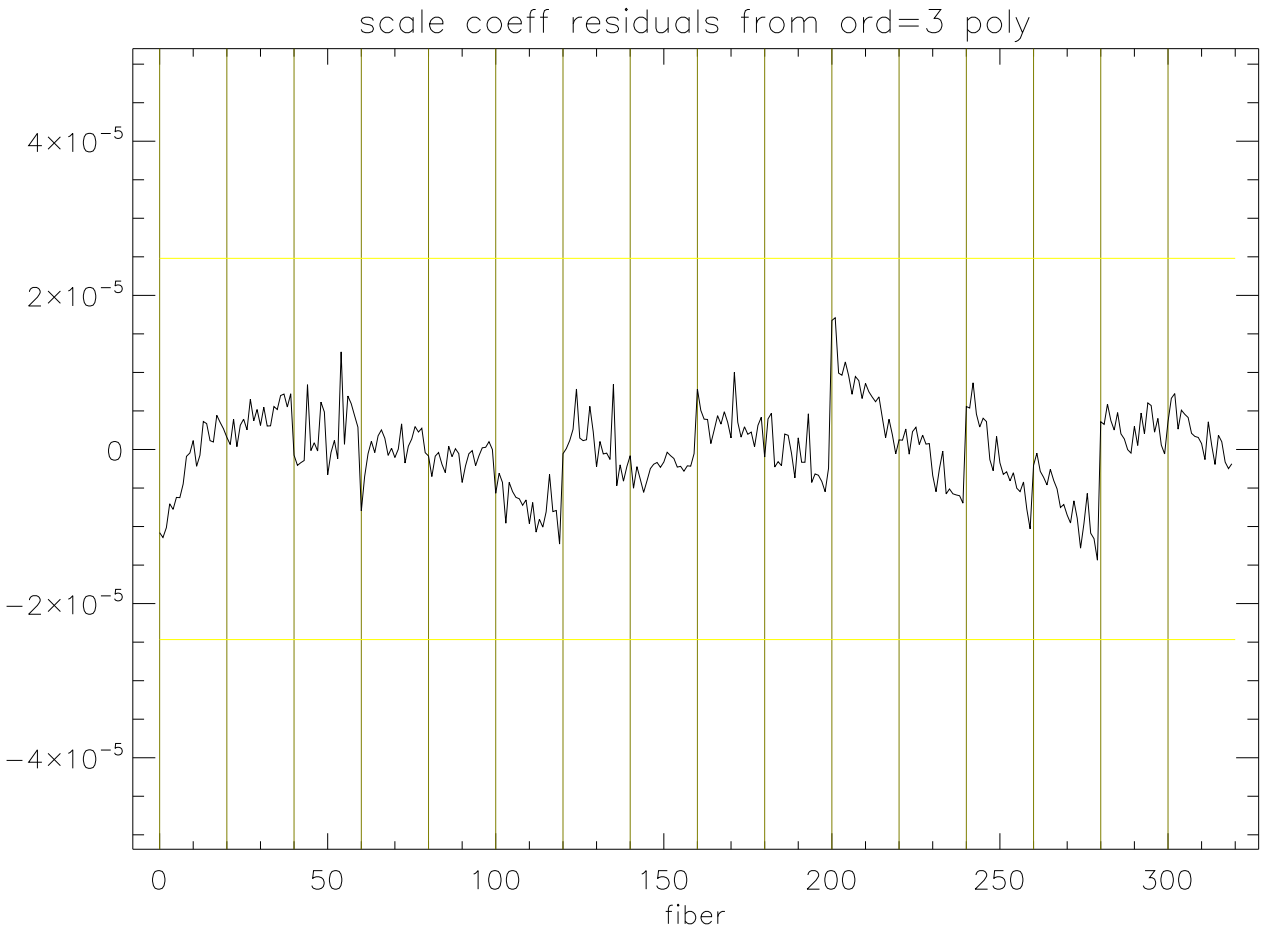

PLATE=3173 MJD=54848 sdR-r1-00058094.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.58 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

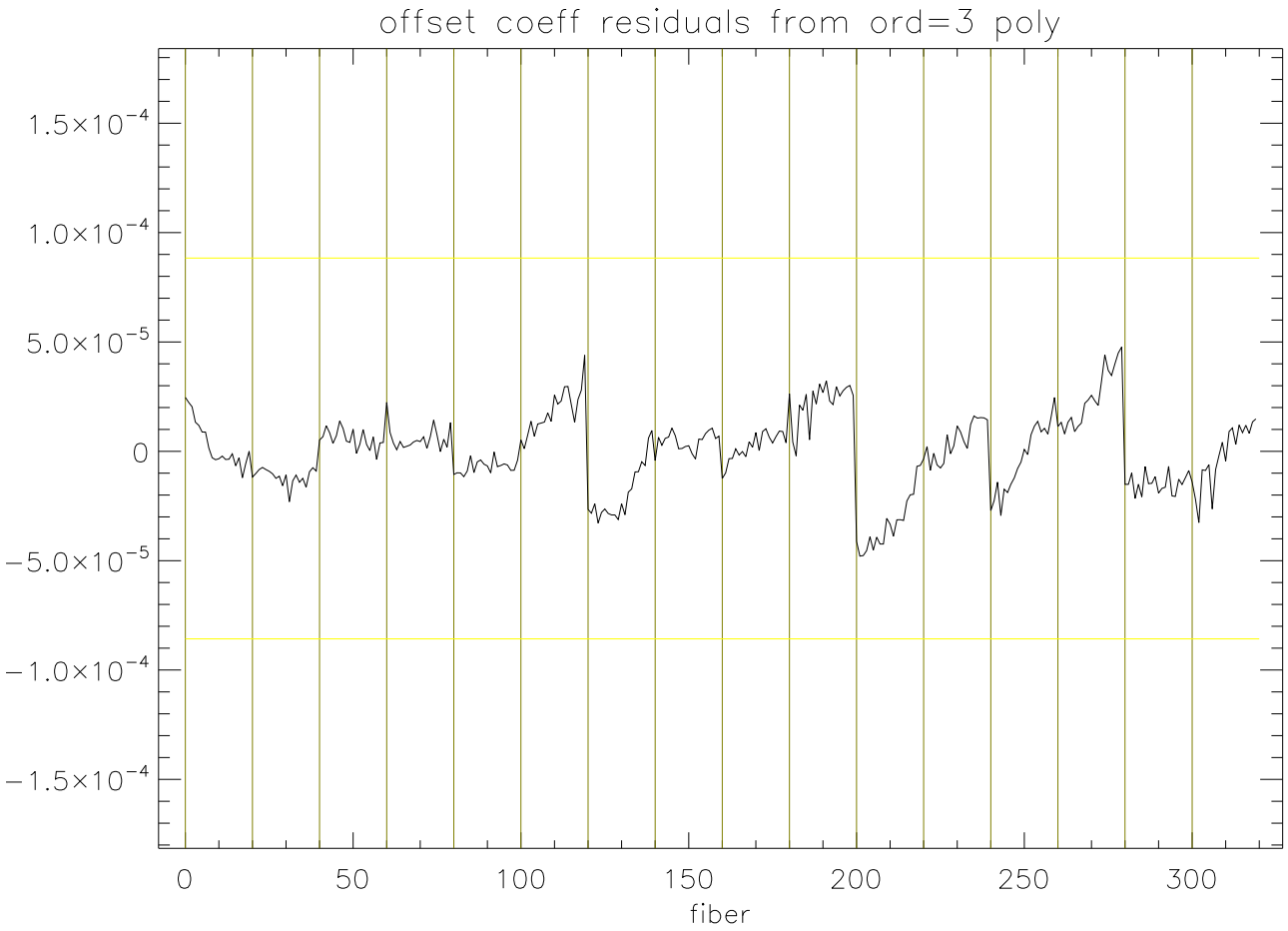

PLATE=3173 MJD=54848 sdR-r1-00058094.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.09 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

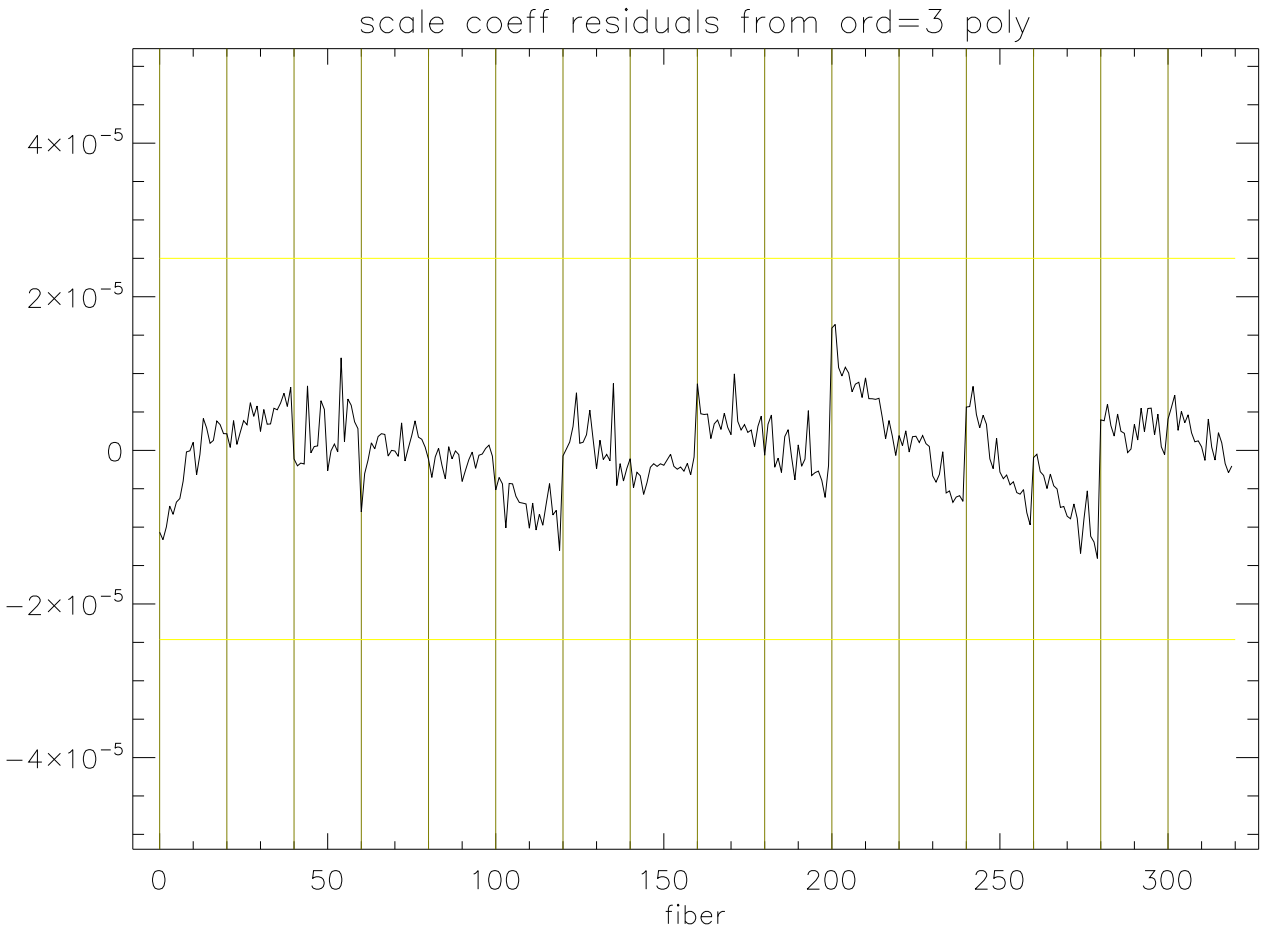

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

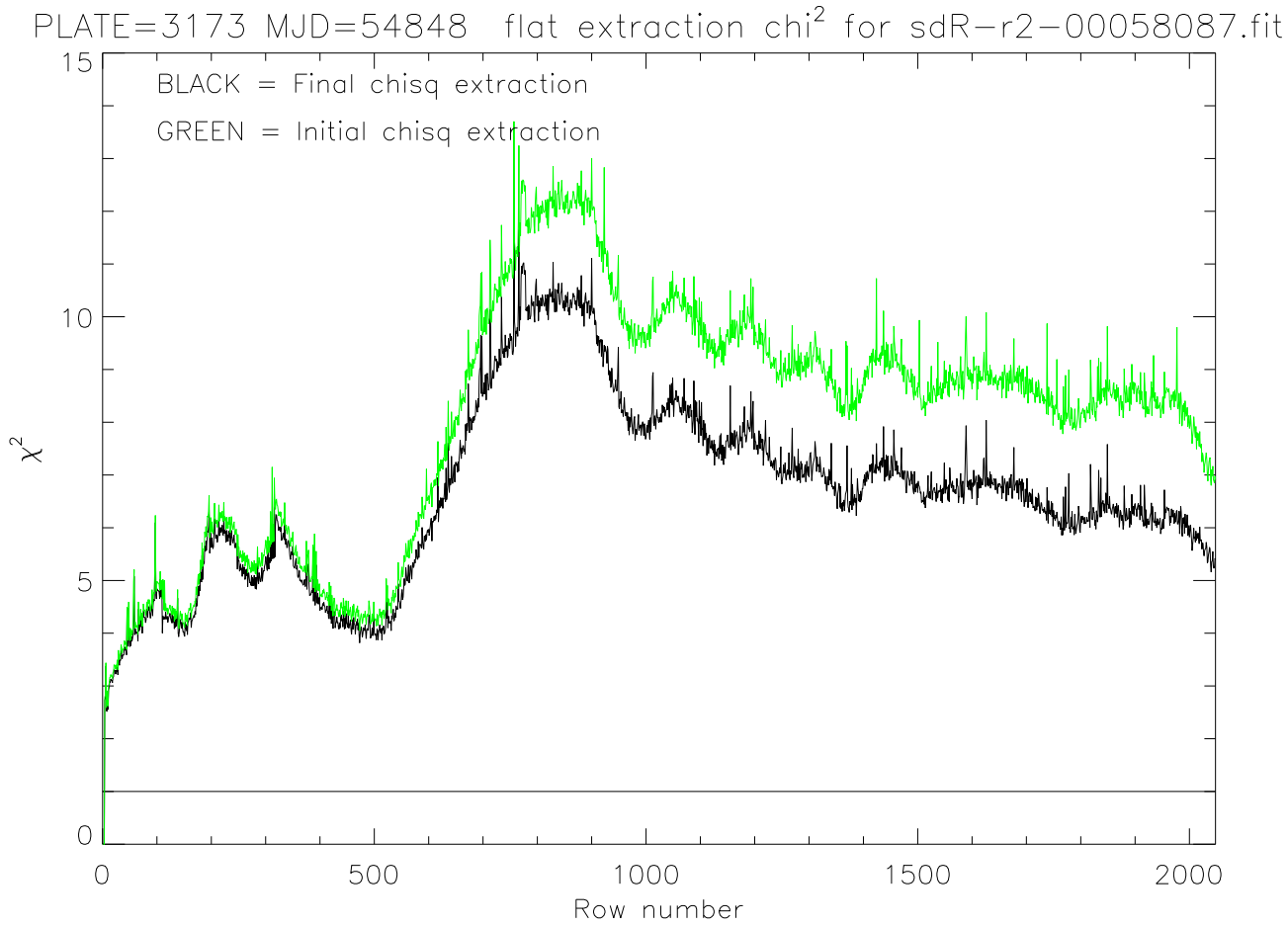

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

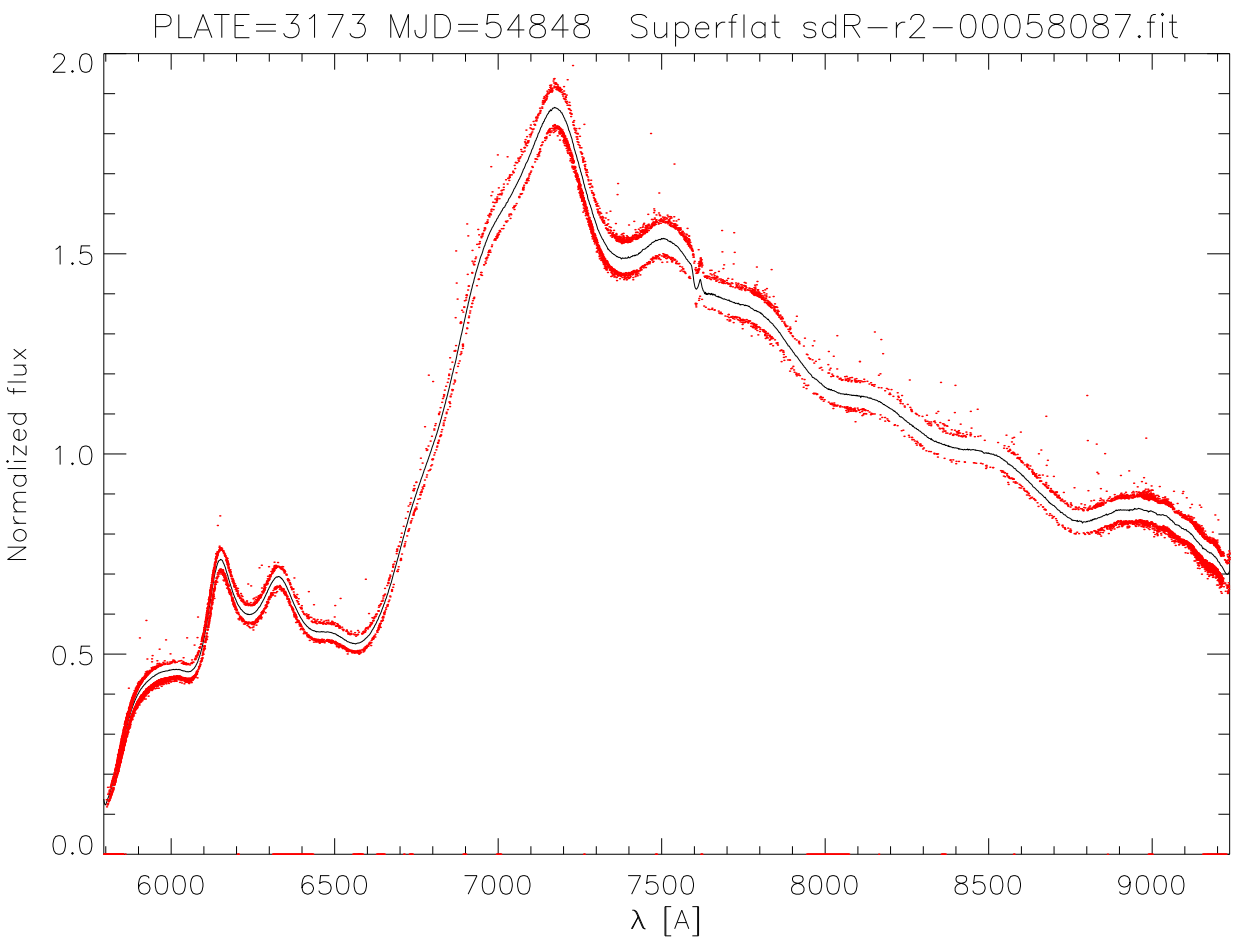

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

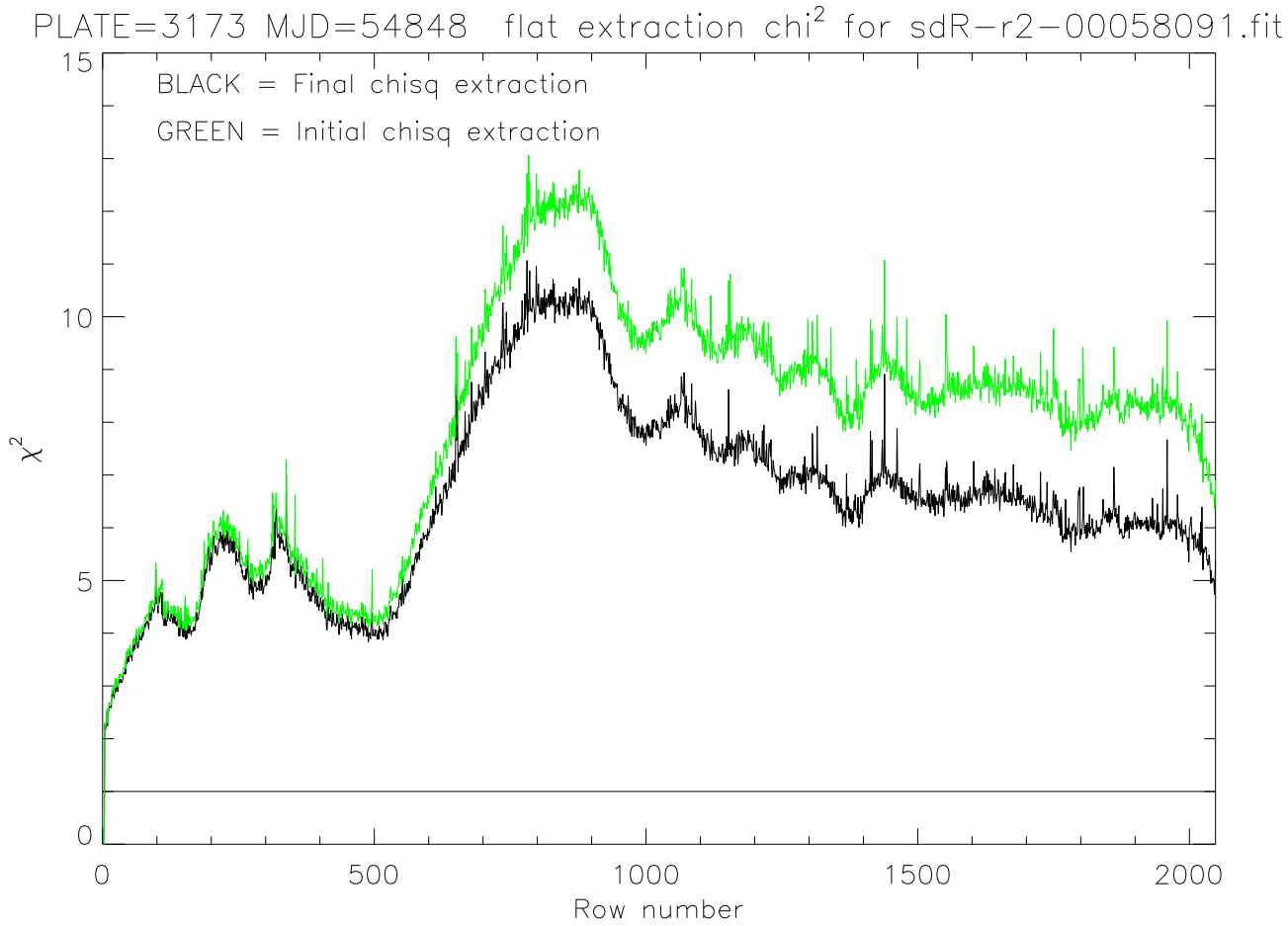

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber


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


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


PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−r2−00058087.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000


PLATE=3173 MJD=54848 Superflat sdR-r2-00058087.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]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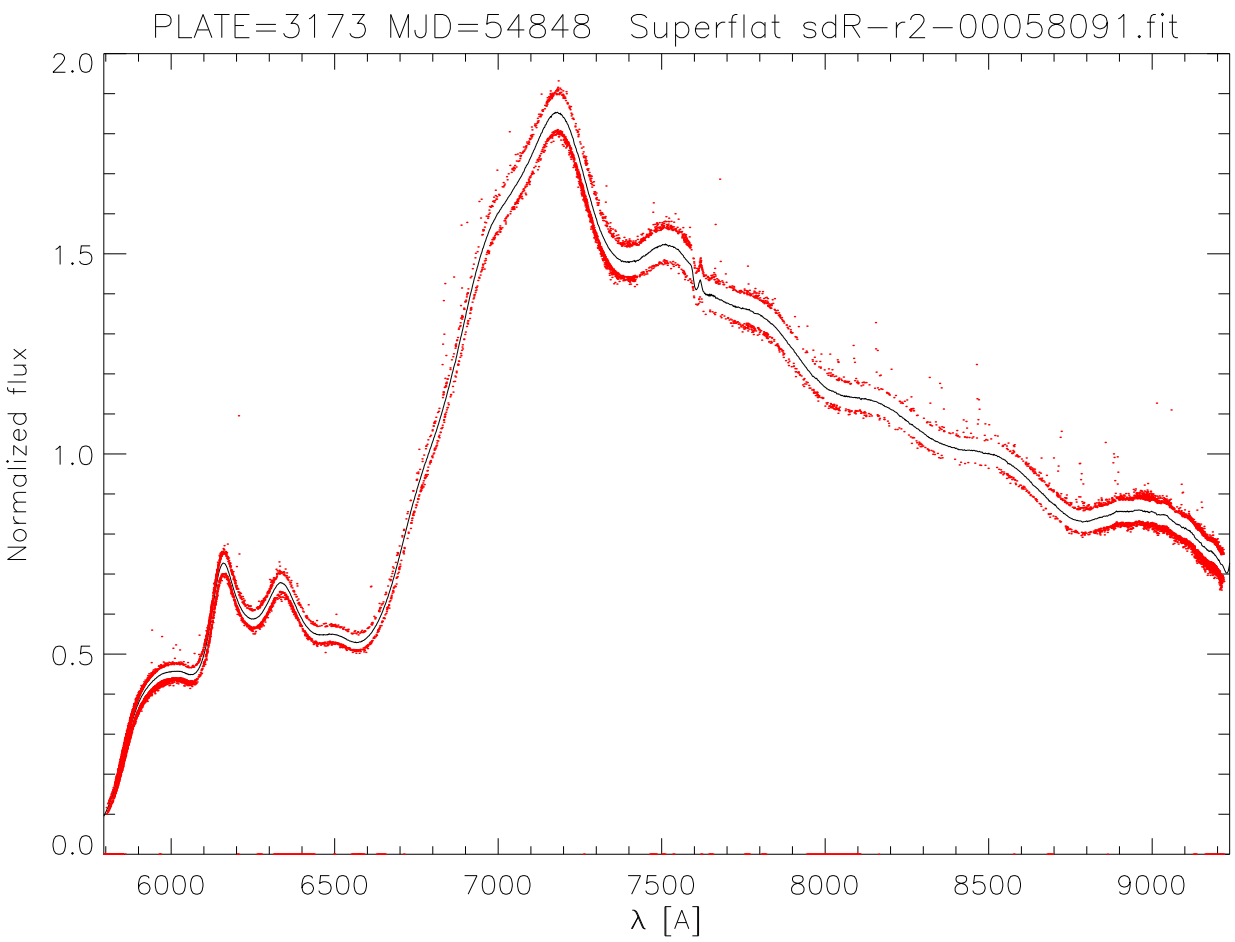
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000


PLATE=3173 MJD=54848 Superflat sdR-r2-00058091.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]