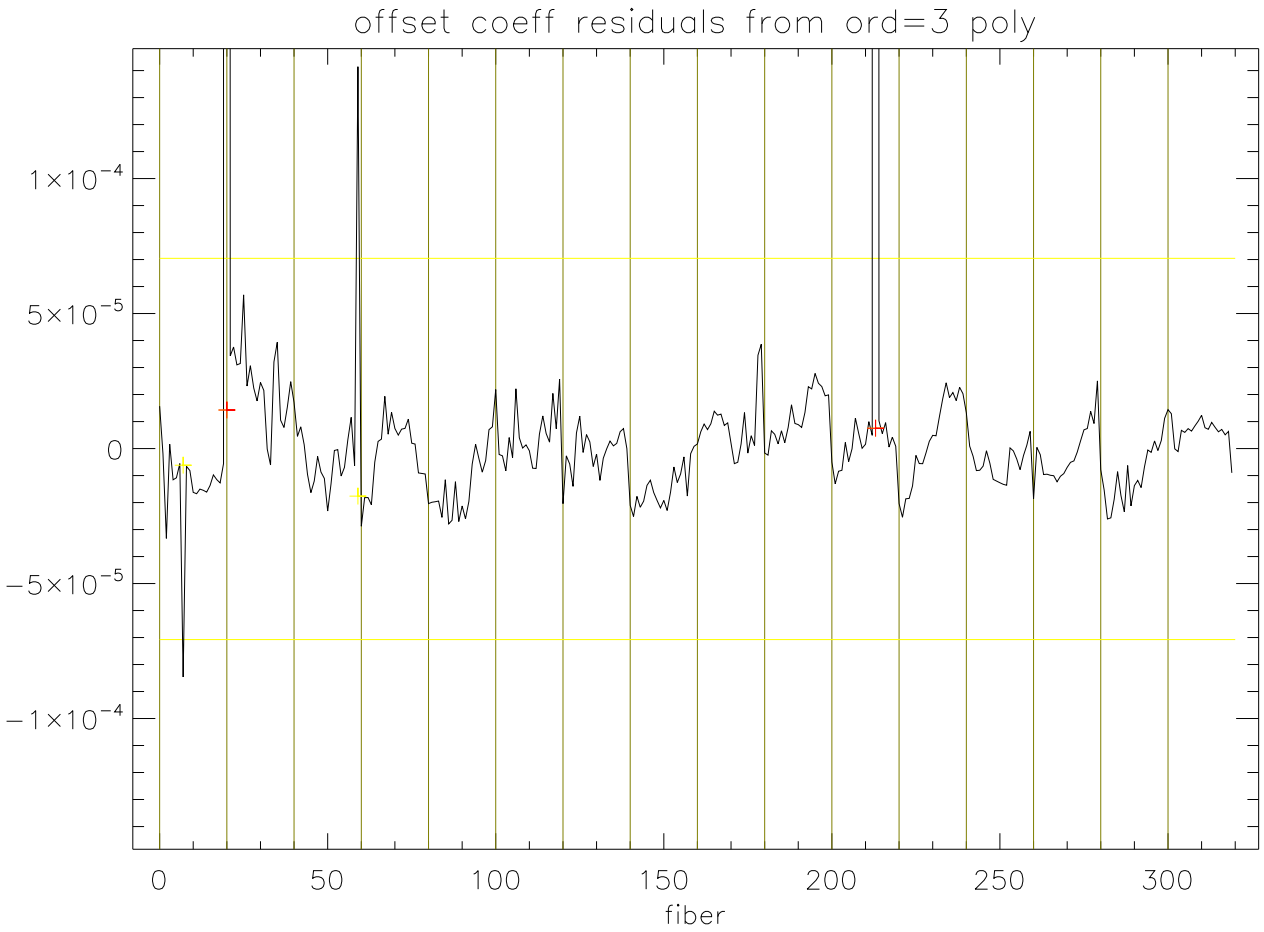
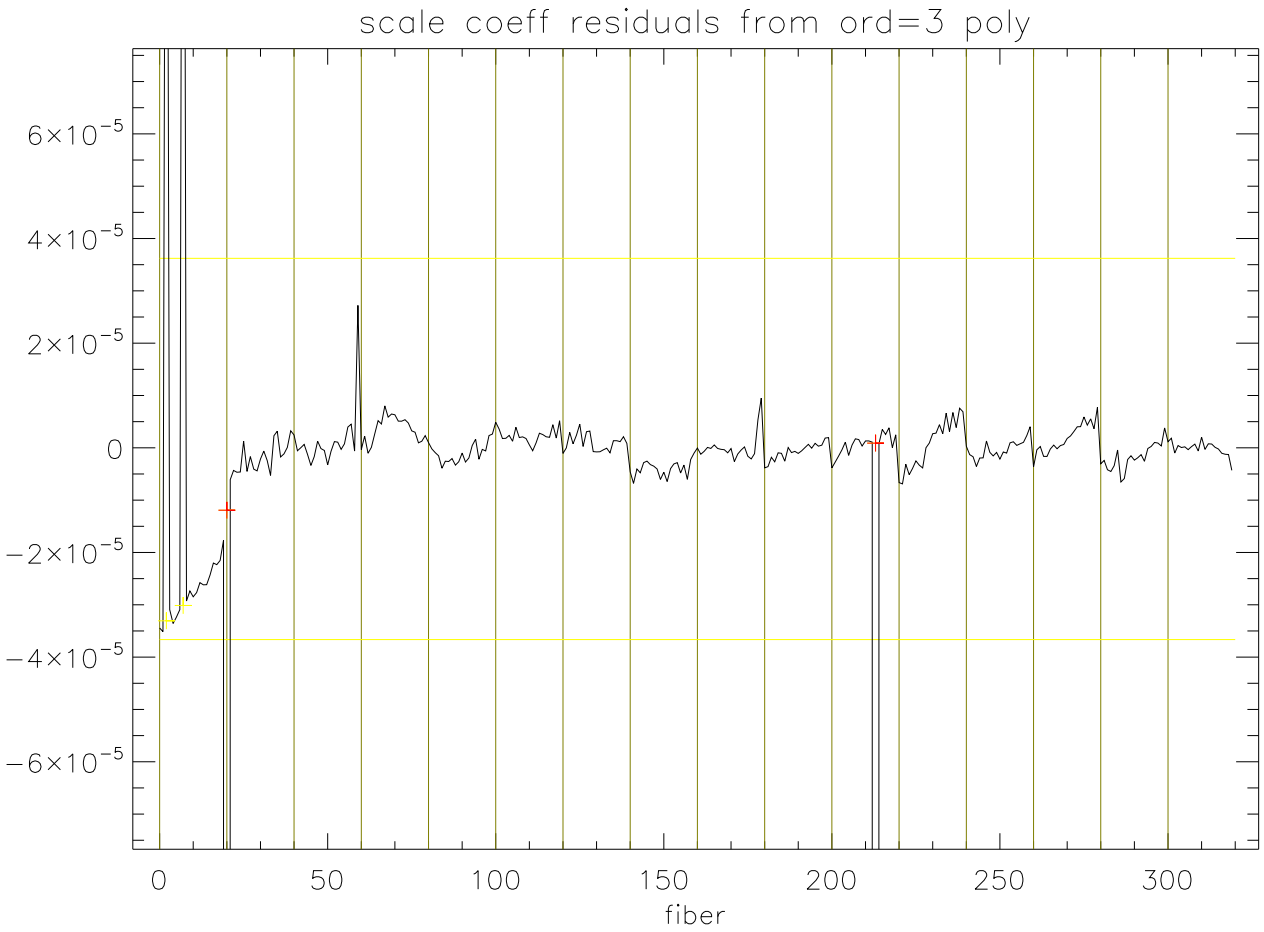
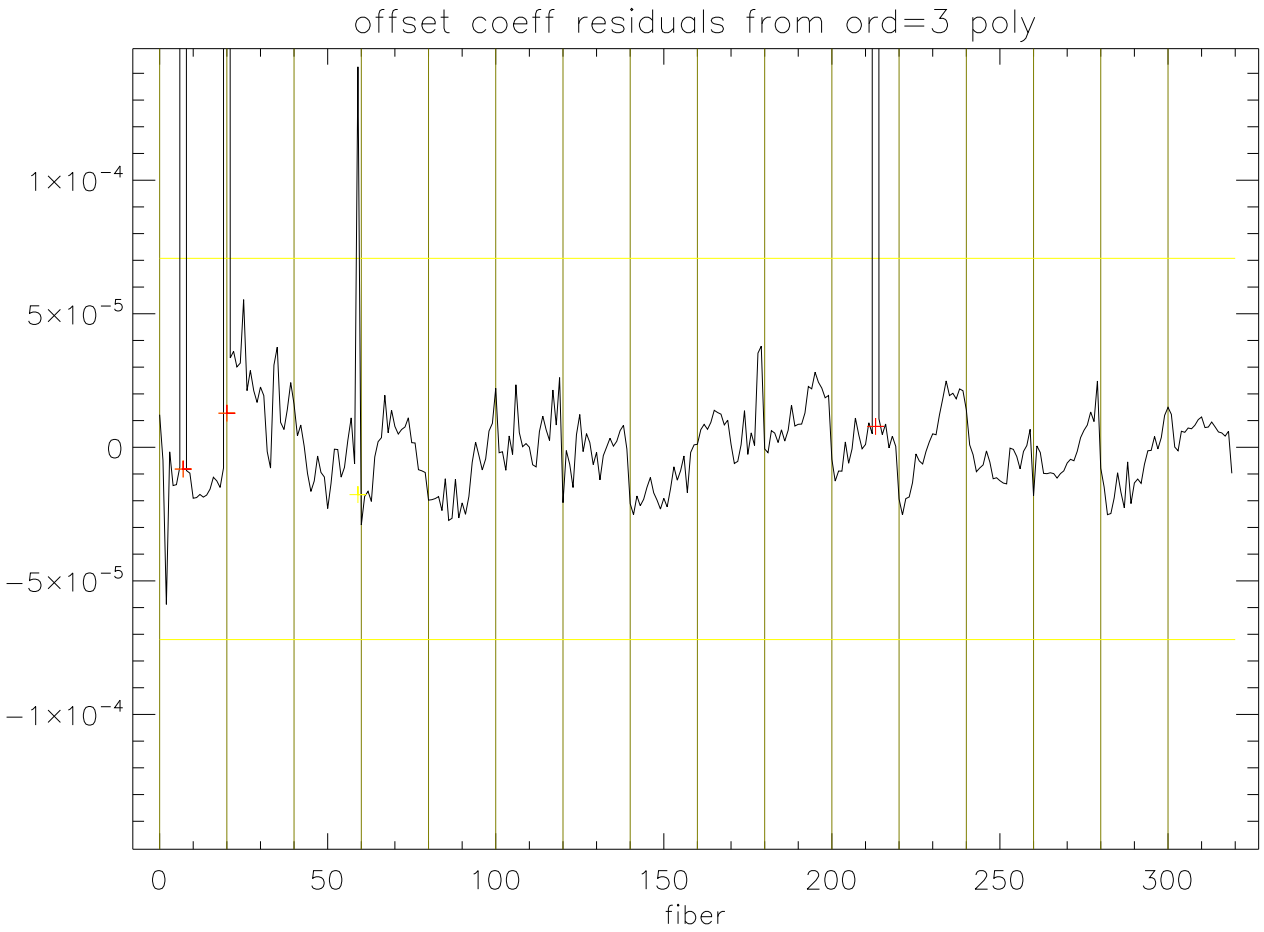
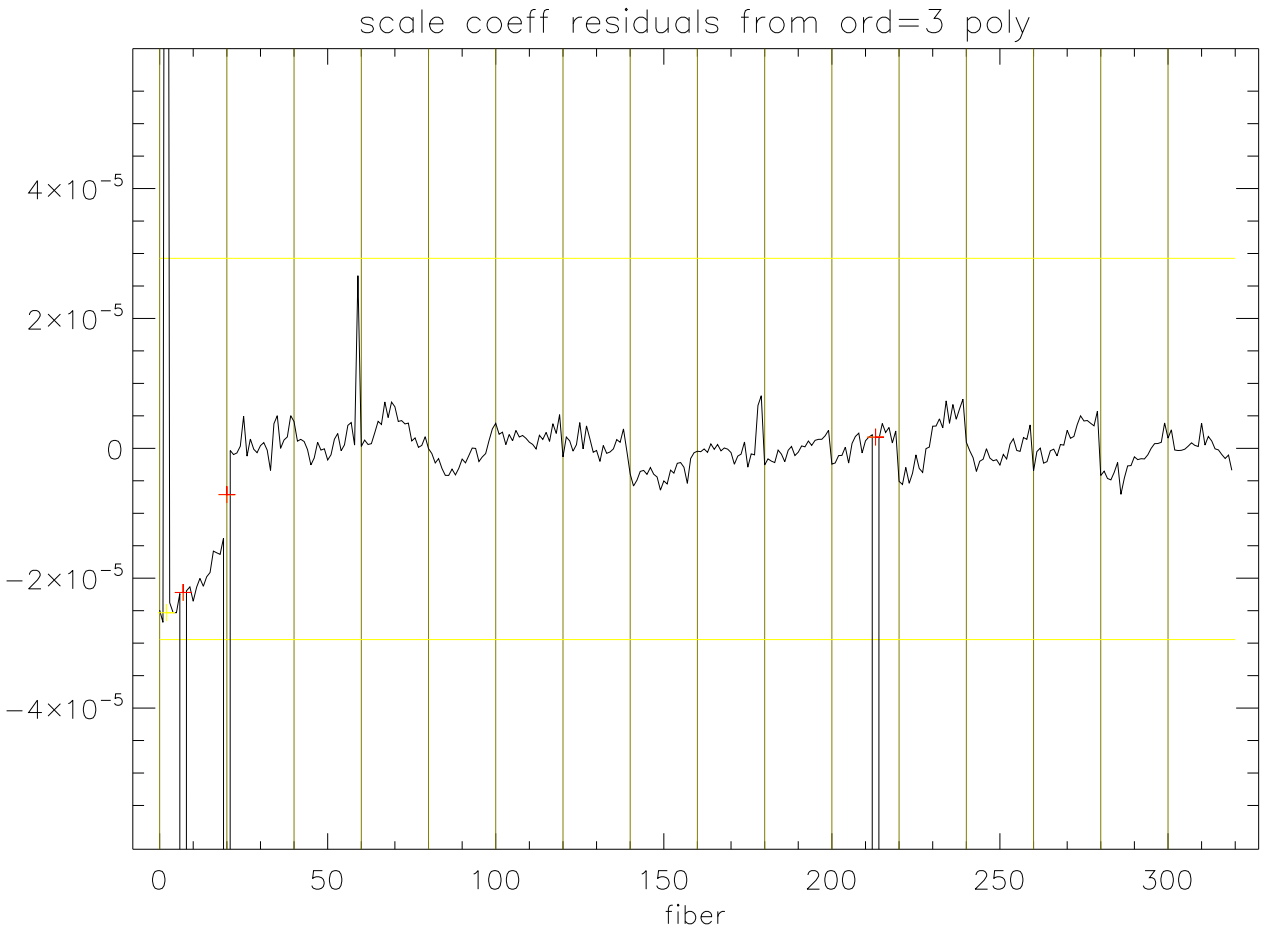
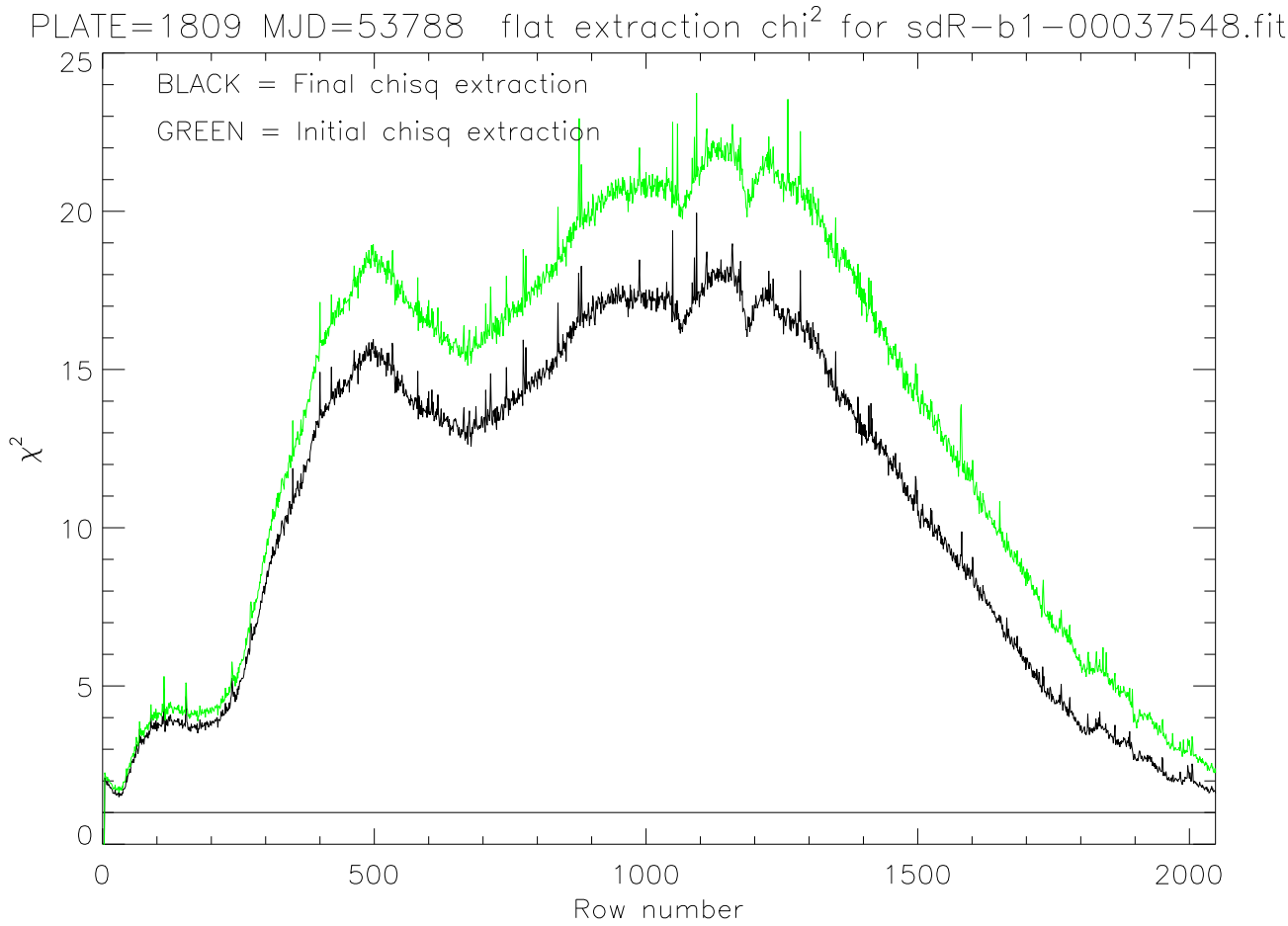
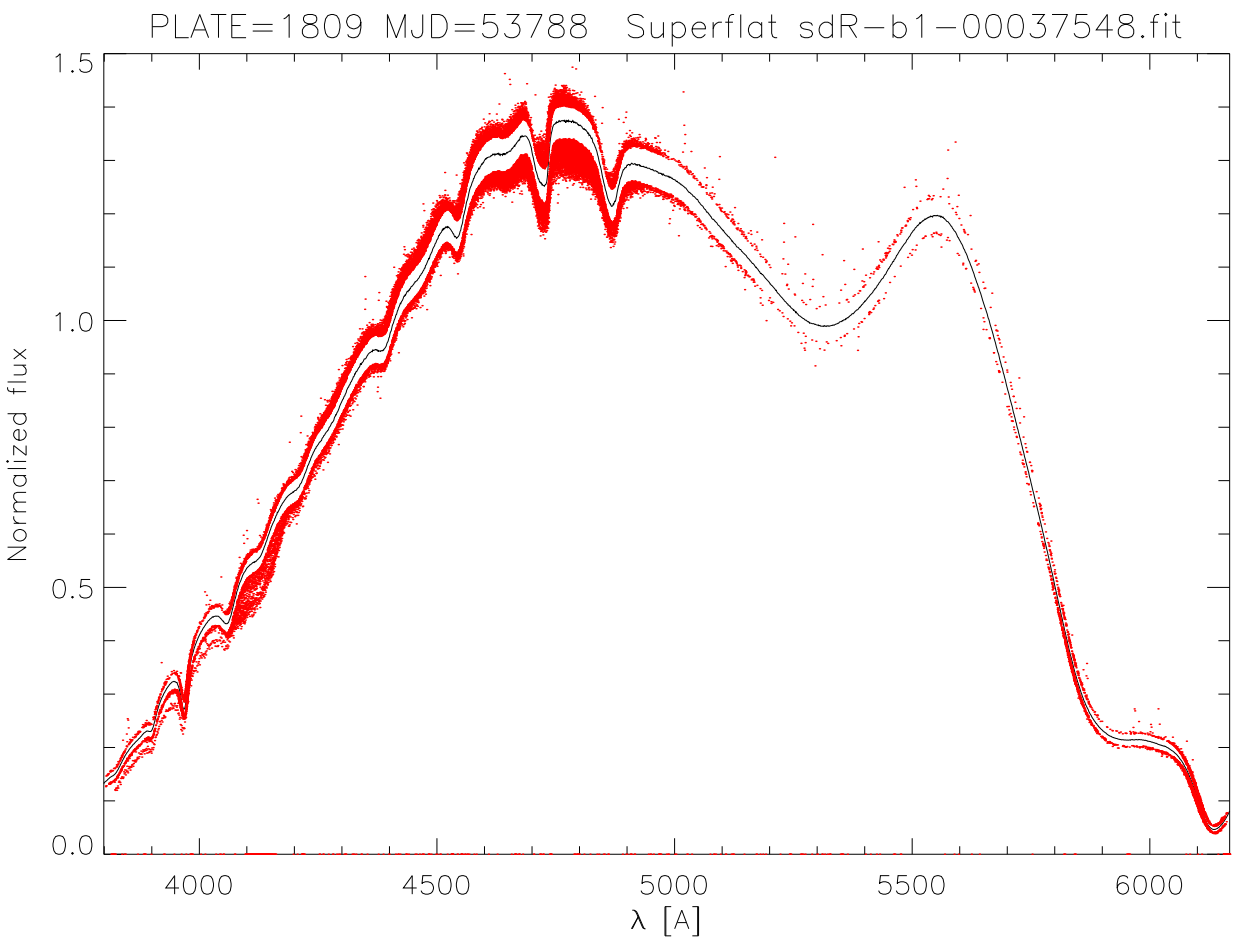

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

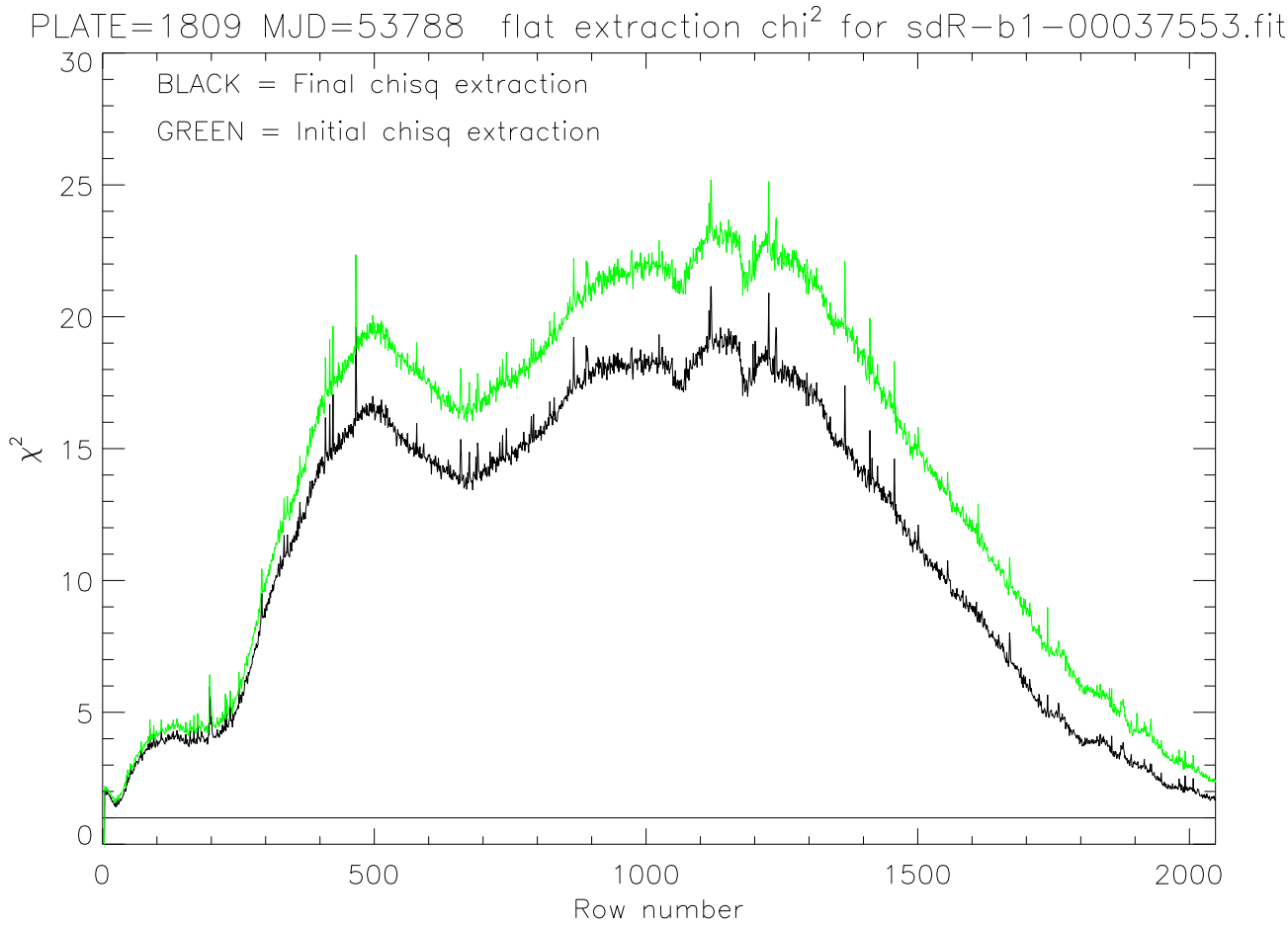

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

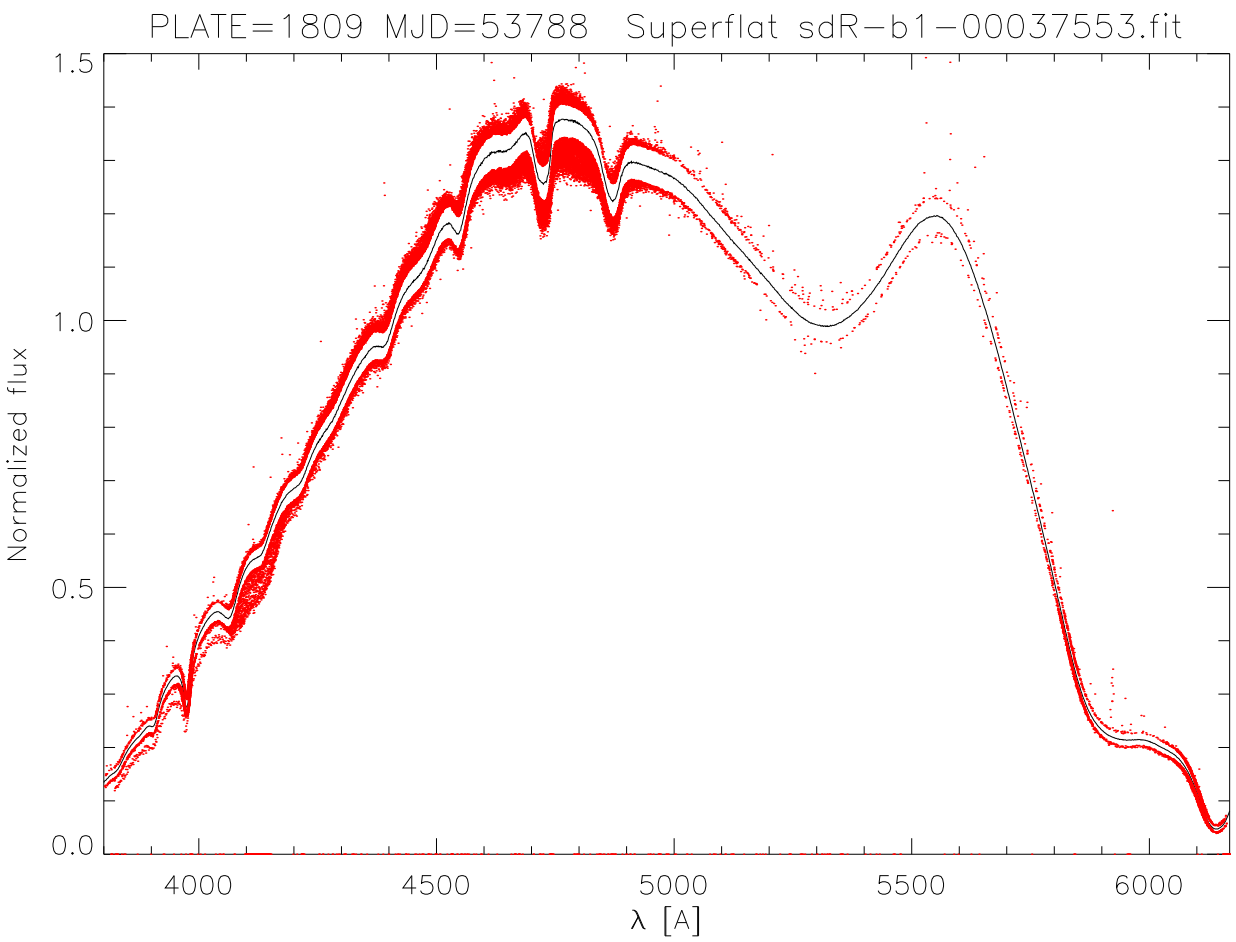

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

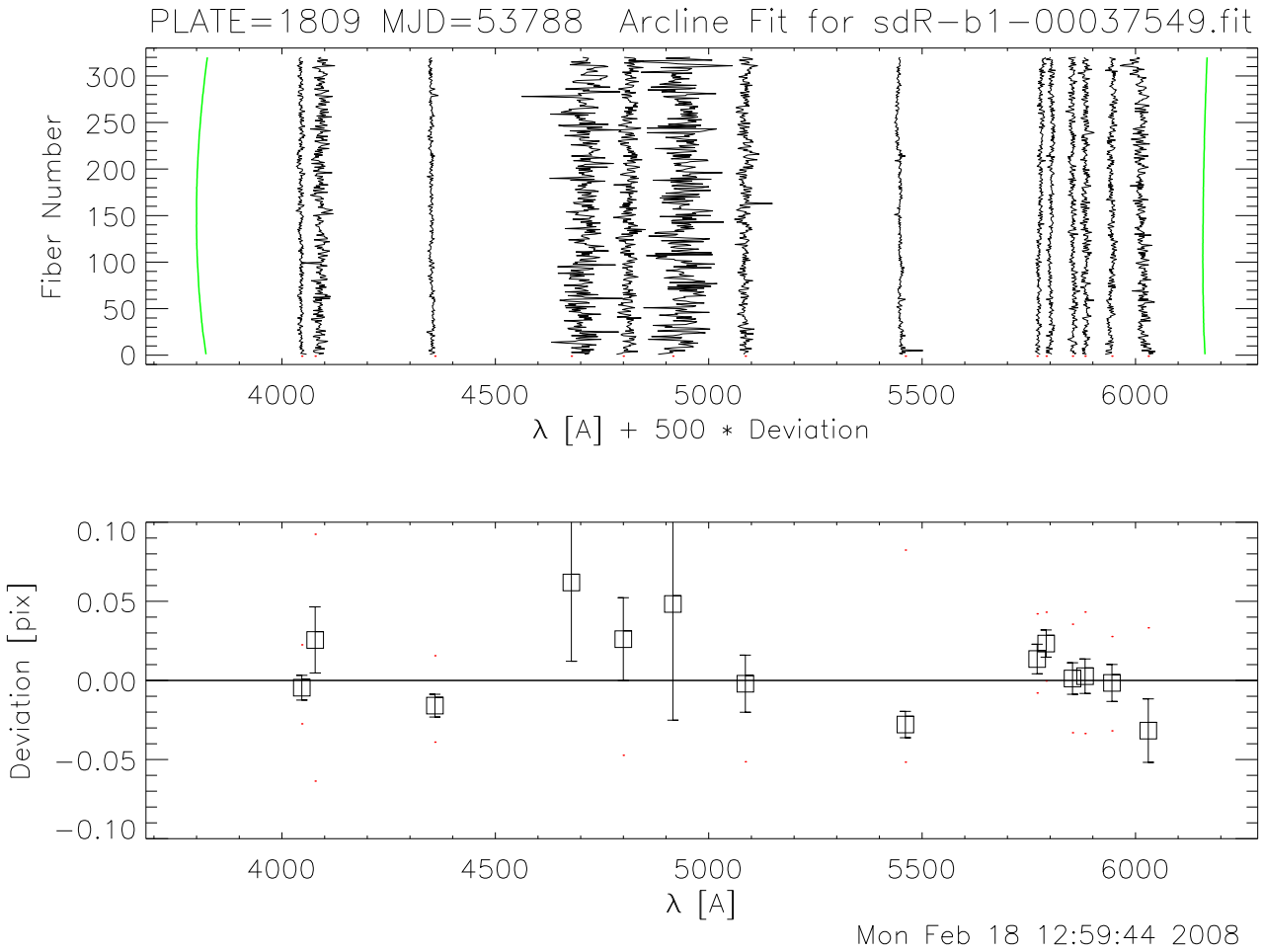

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

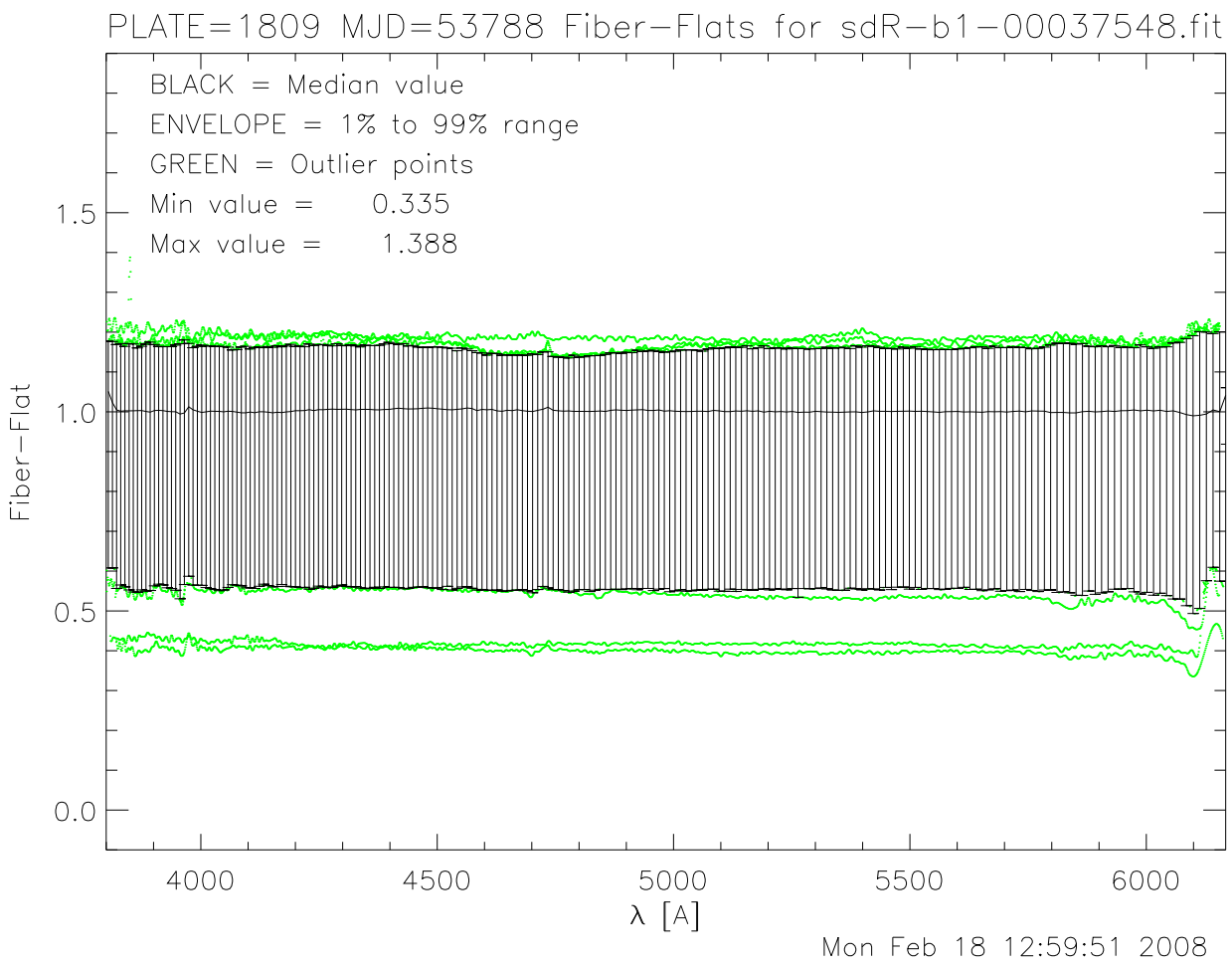

PLATE=1809 MJD=53788 flat extraction chi^2 for sdR−b1−00037548.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

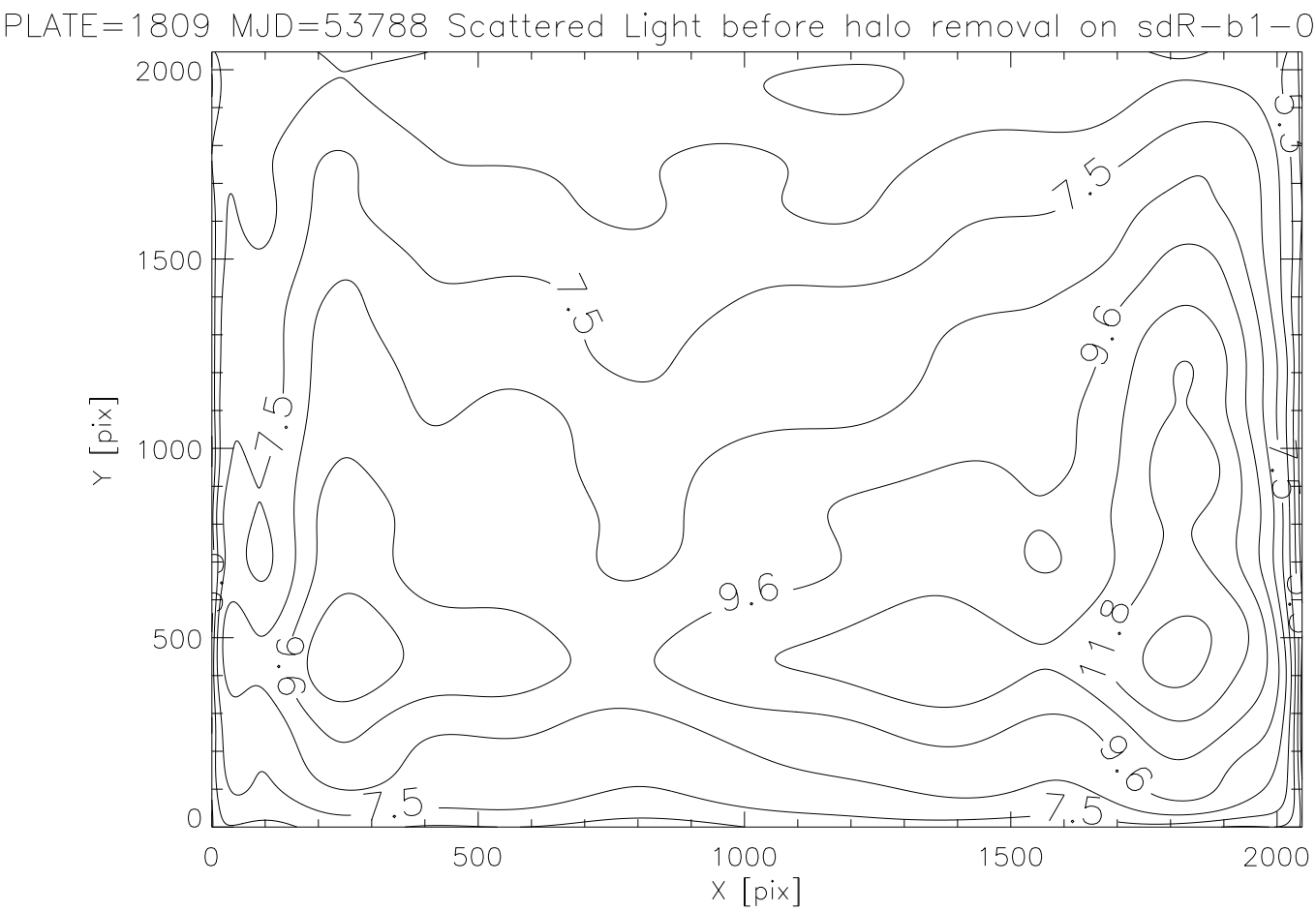

PLATE=1809 MJD=53788 Superflat sdR-b1-00037548.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

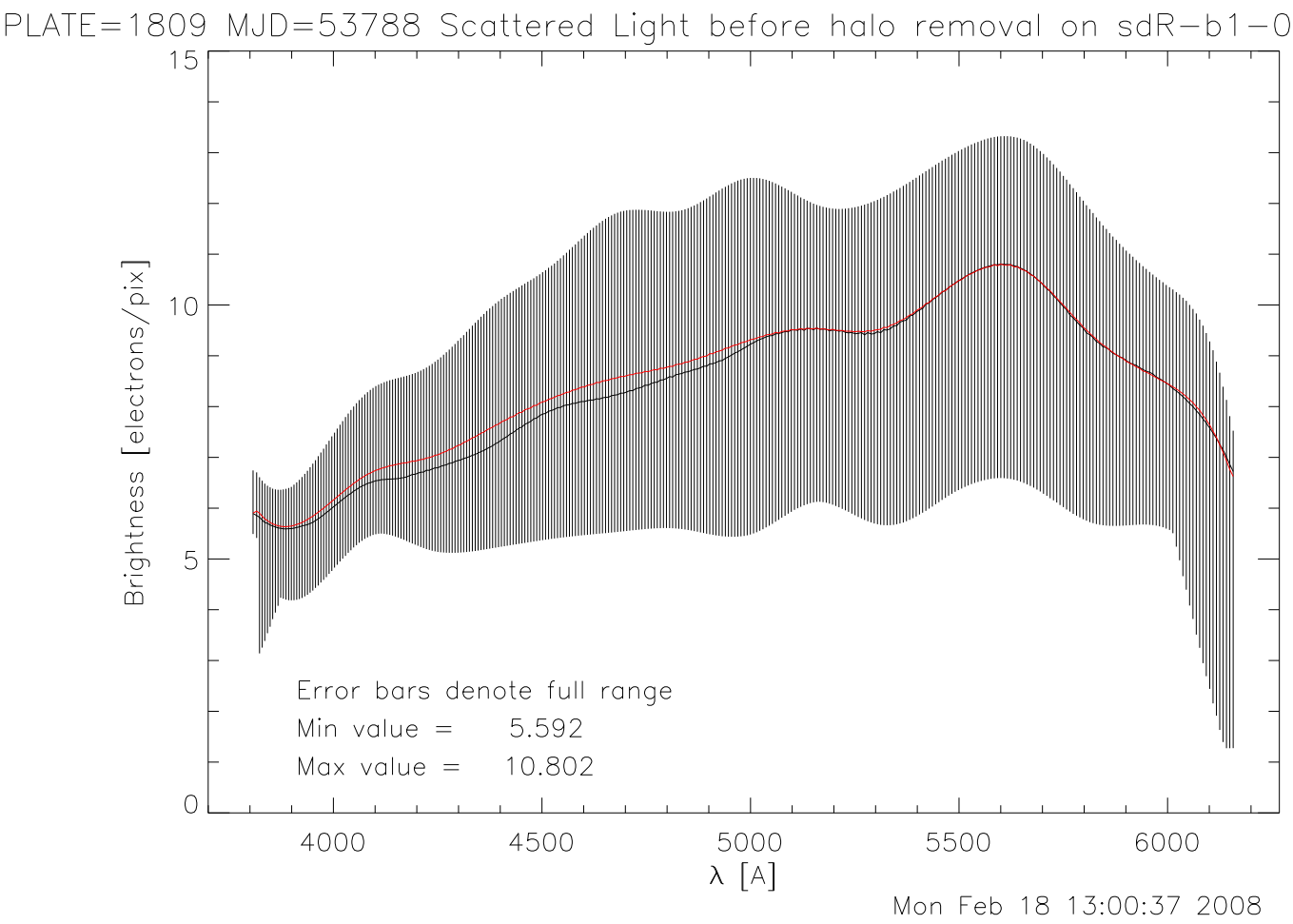

PLATE=1809 MJD=53788 flat extraction chi^2 for sdR−b1−00037553.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
30
0
500
1000
1500
2000

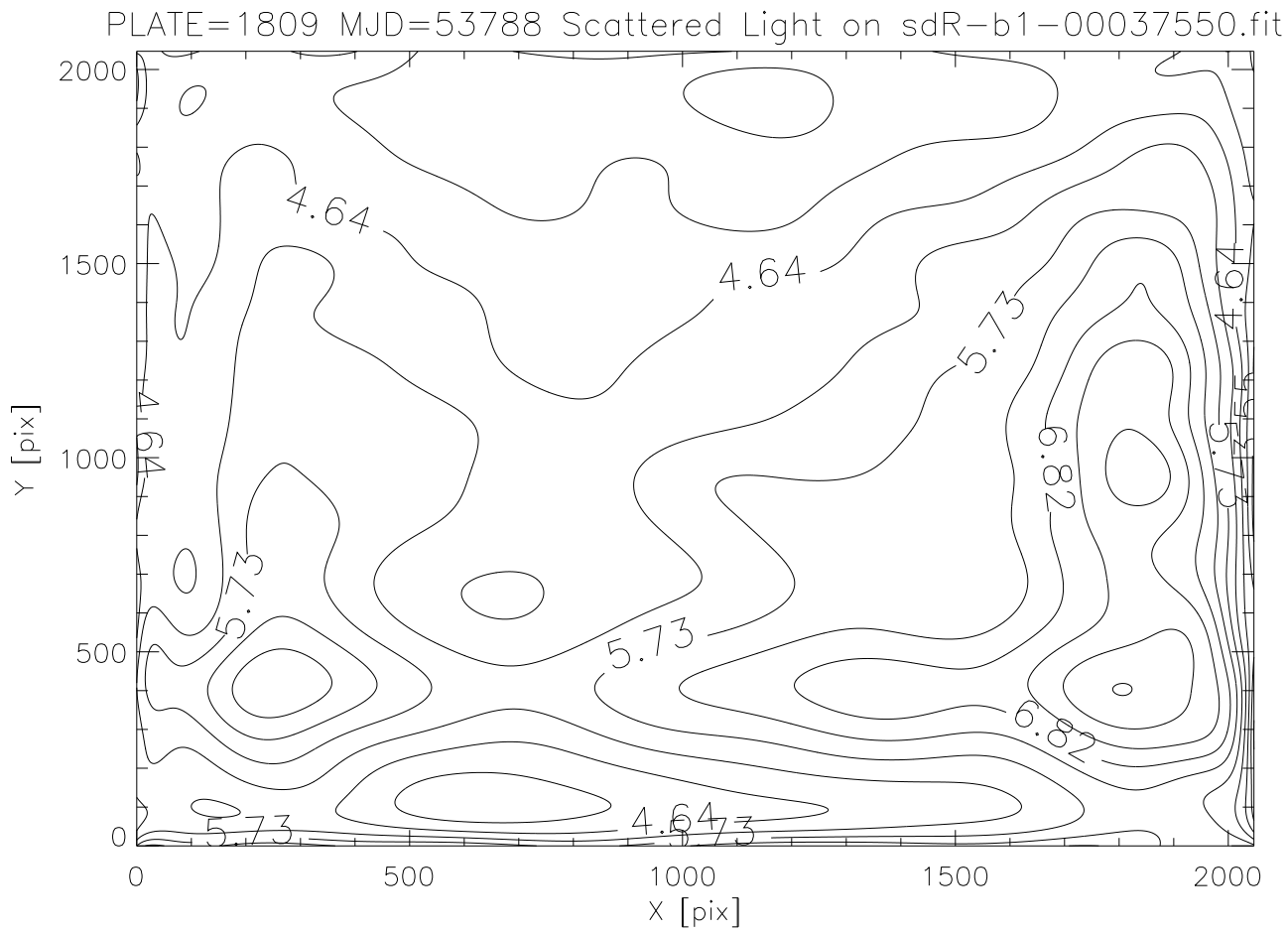

PLATE=1809 MJD=53788 Superflat sdR-b1-00037553.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

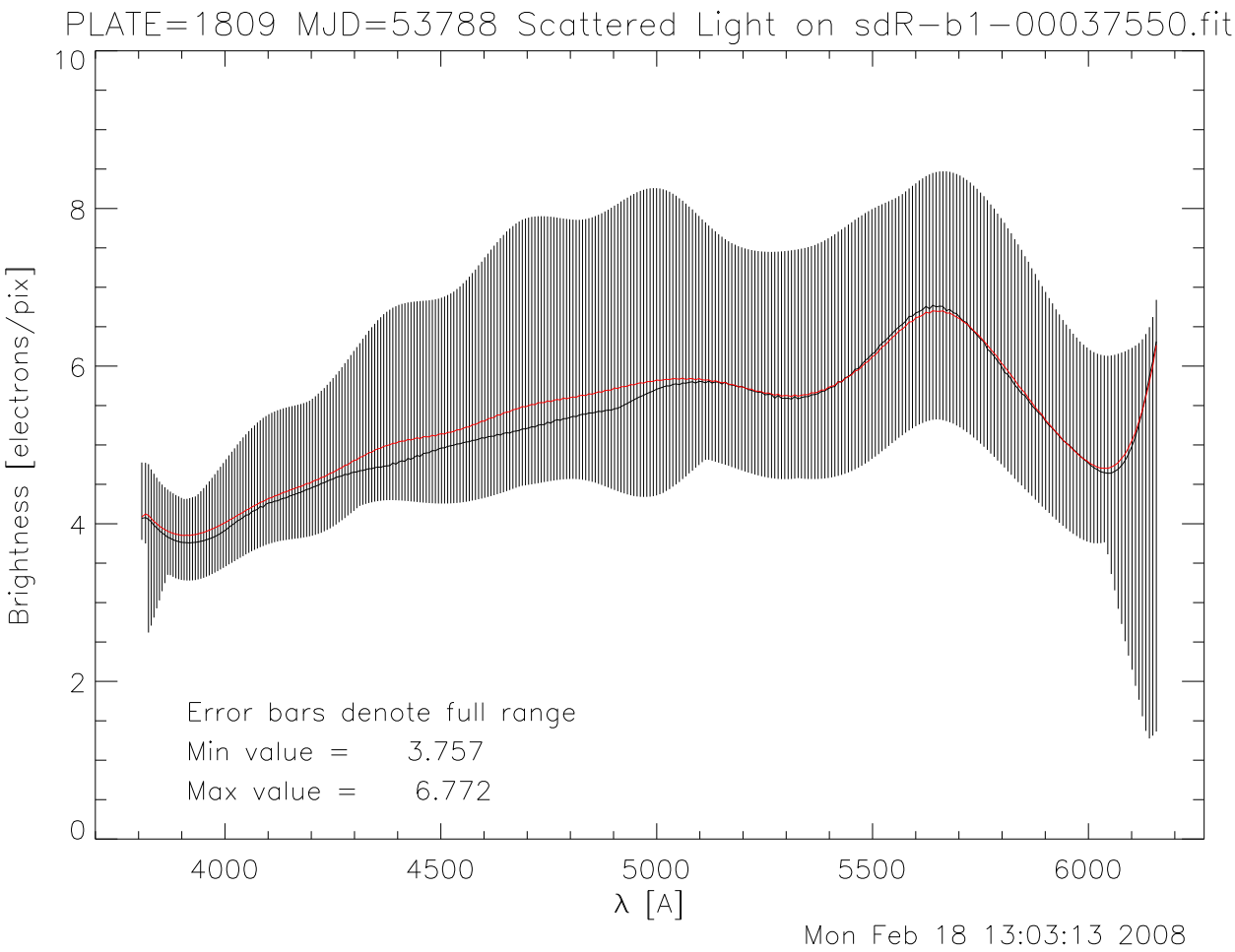

PLATE=1809 MJD=53788 Arcline Fit for sdR-b1-00037549.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 18 12:59:44 2008

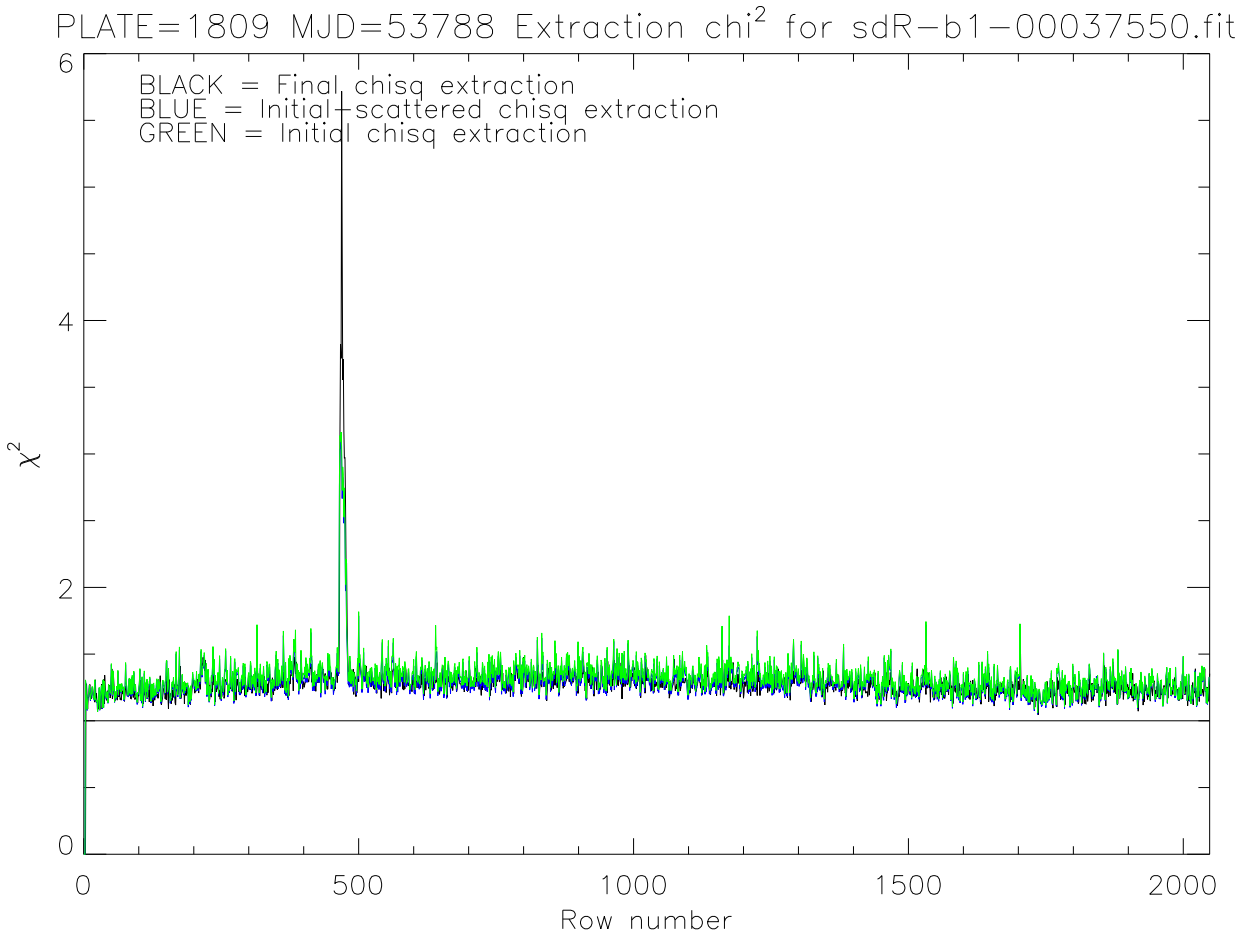

PLATE=1809 MJD=53788 Fiber-Flats for sdR-b1-00037548.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.335
Max value = 1.388
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 18 12:59:51 2008

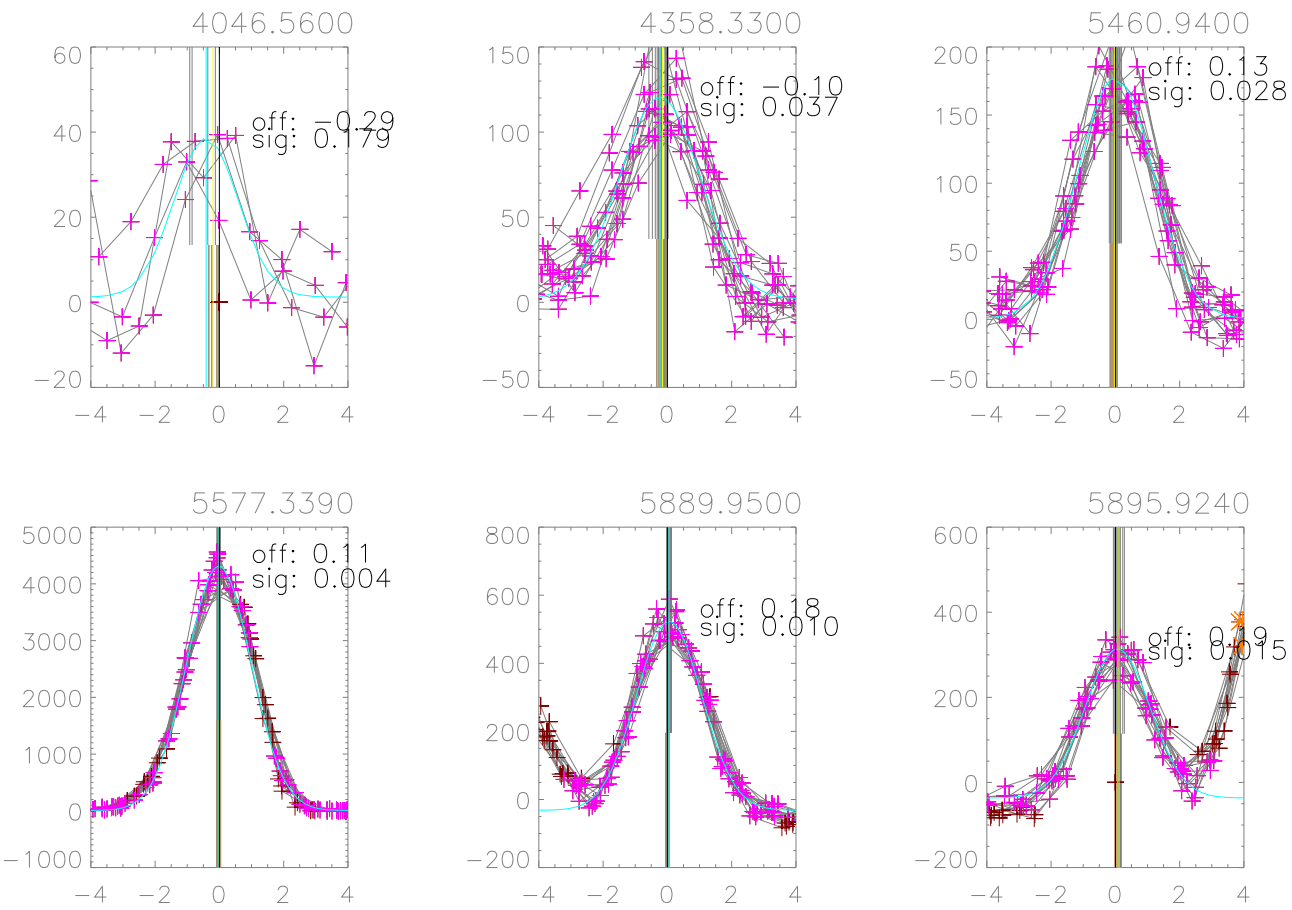

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR−b1−00037550.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
7.5
9.6
11.8

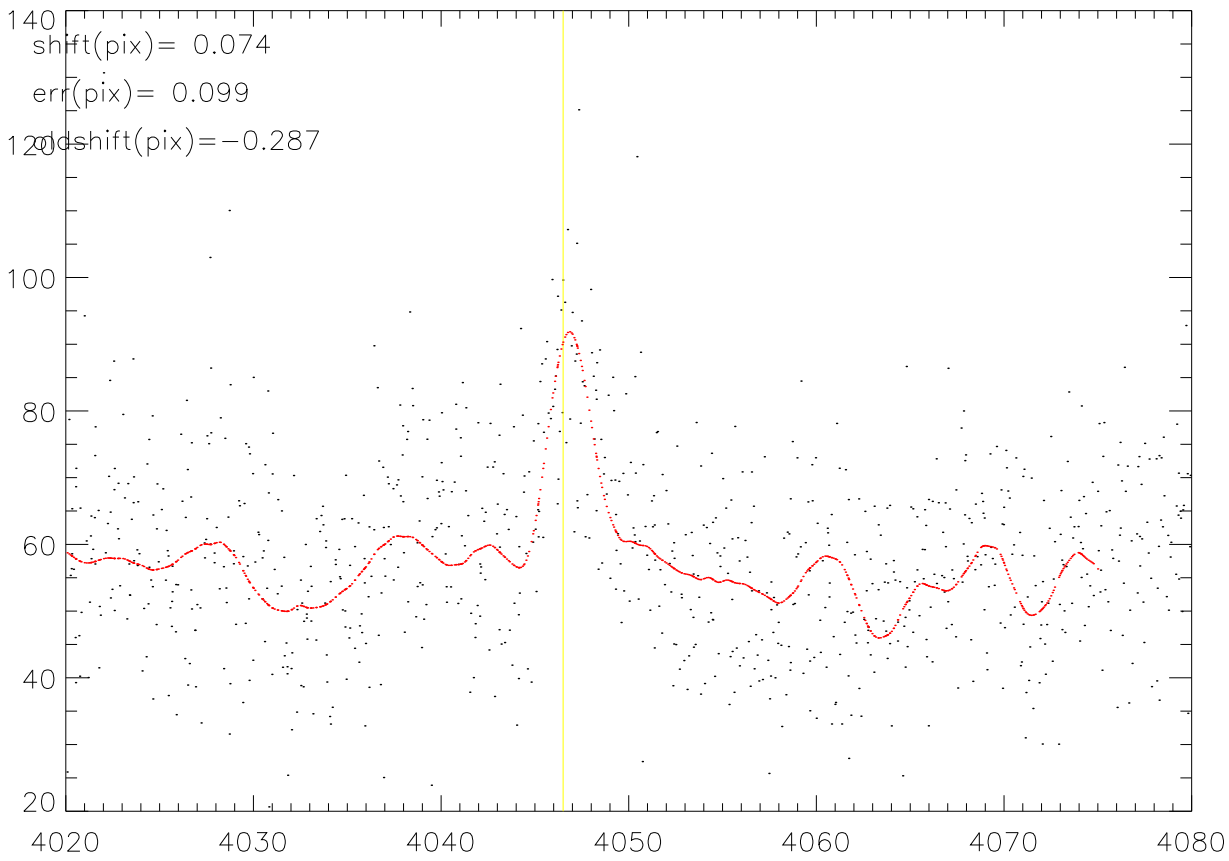

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-b1-00037550.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.592
Max value = 10.802
Mon Feb 18 13:00:37 2008

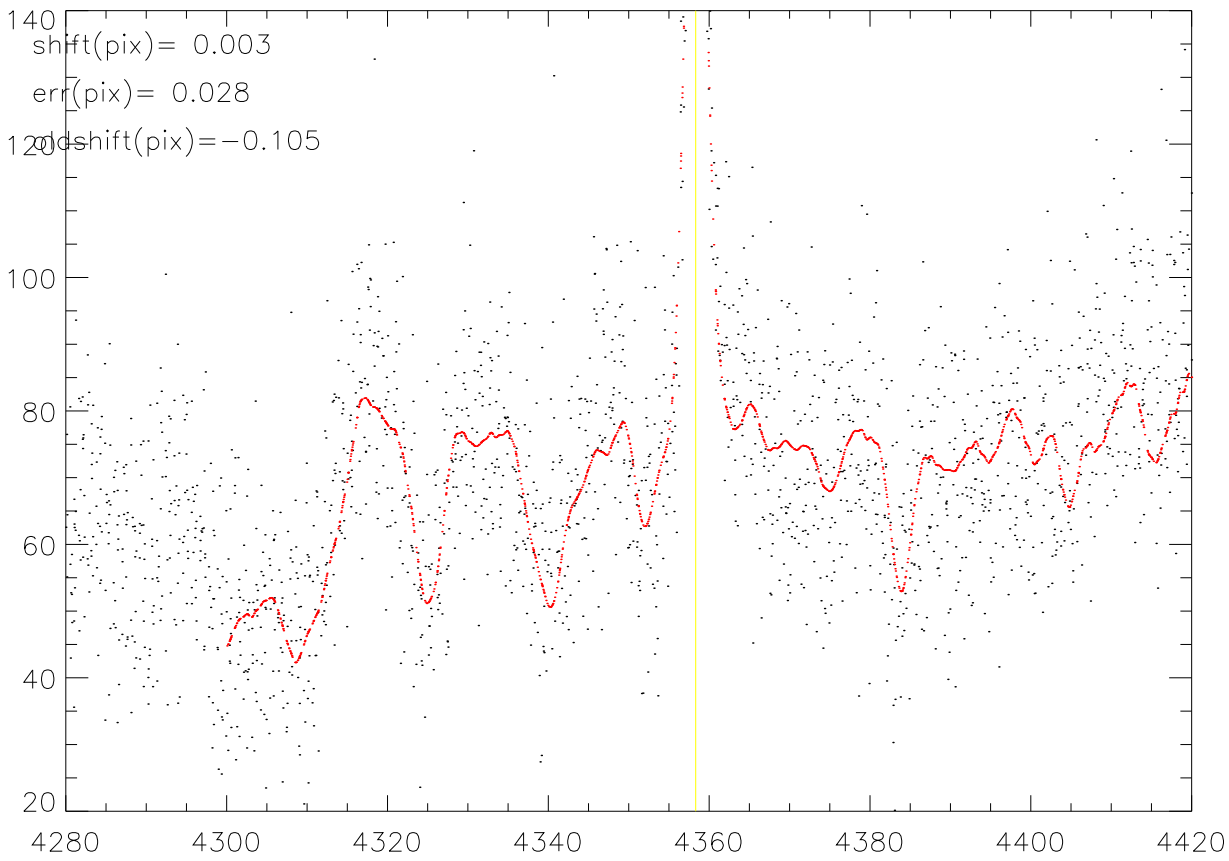

PLATE=1809 MJD=53788 Scattered Light on sdR-b1-00037550.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.64
5.73
6.82
7.91

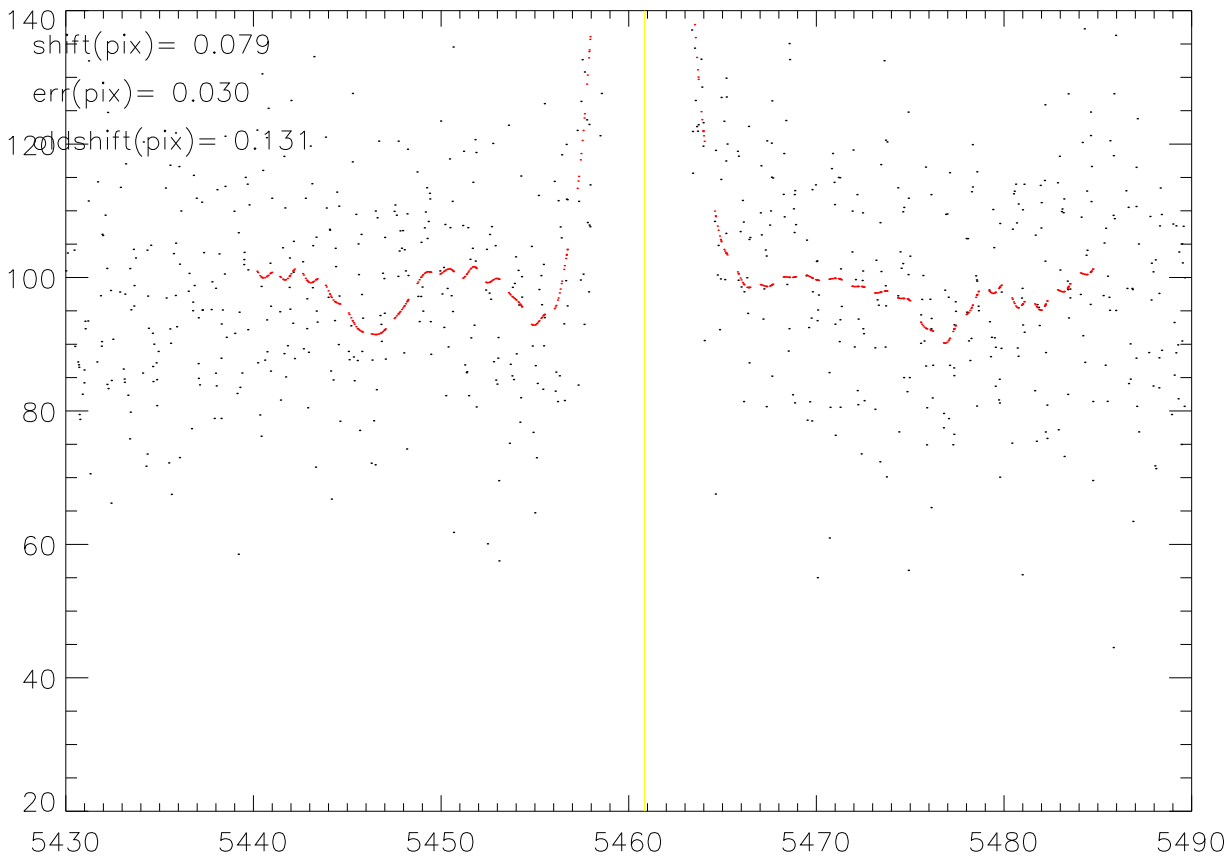

PLATE=1809 MJD=53788 Scattered Light on sdR-b1-00037550.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.757
Max value = 6.772
Mon Feb 18 13:03:13 2008

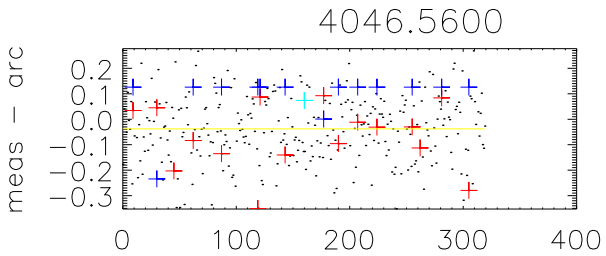

PLATE=1809 MJD=53788 Extraction chi^2 for sdR-b1-00037550.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

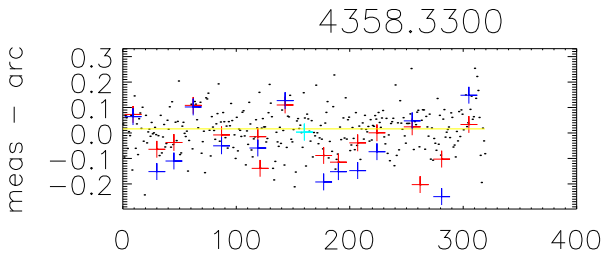

4046.5600
off: −0.29
sig: 0.179
4358.3300
off: −0.10
sig: 0.037
5460.9400
off: 0.13
sig: 0.028
5577.3390
off: 0.11
sig: 0.004
5889.9500
off: 0.18
sig: 0.010
5895.9240
off: 0.19
sig: 0.015

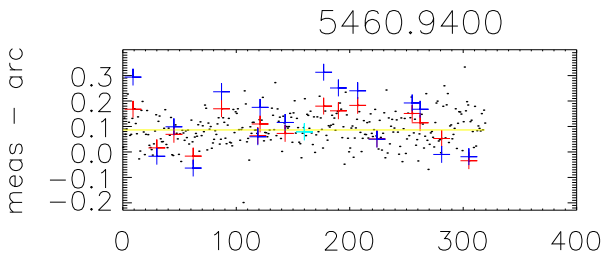

shift(pix)= 0.074
err(pix)= 0.099
oldshift(pix)=−0.287
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

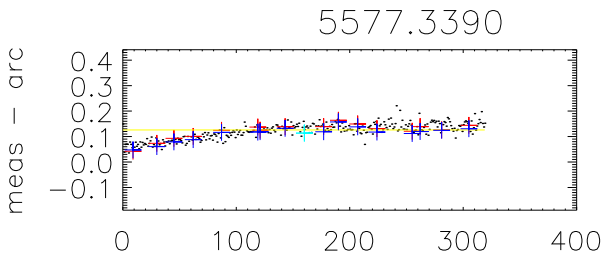

shift(pix)= 0.003
err(pix)= 0.028
oldshift(pix)=−0.105
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

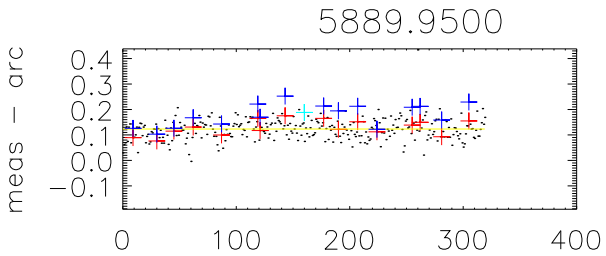

shift(pix)= 0.079
err(pix)= 0.030
oldshift(pix)= 0.131
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

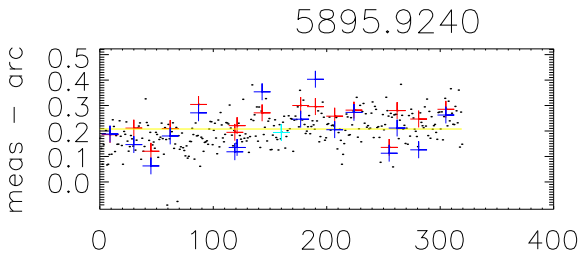

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

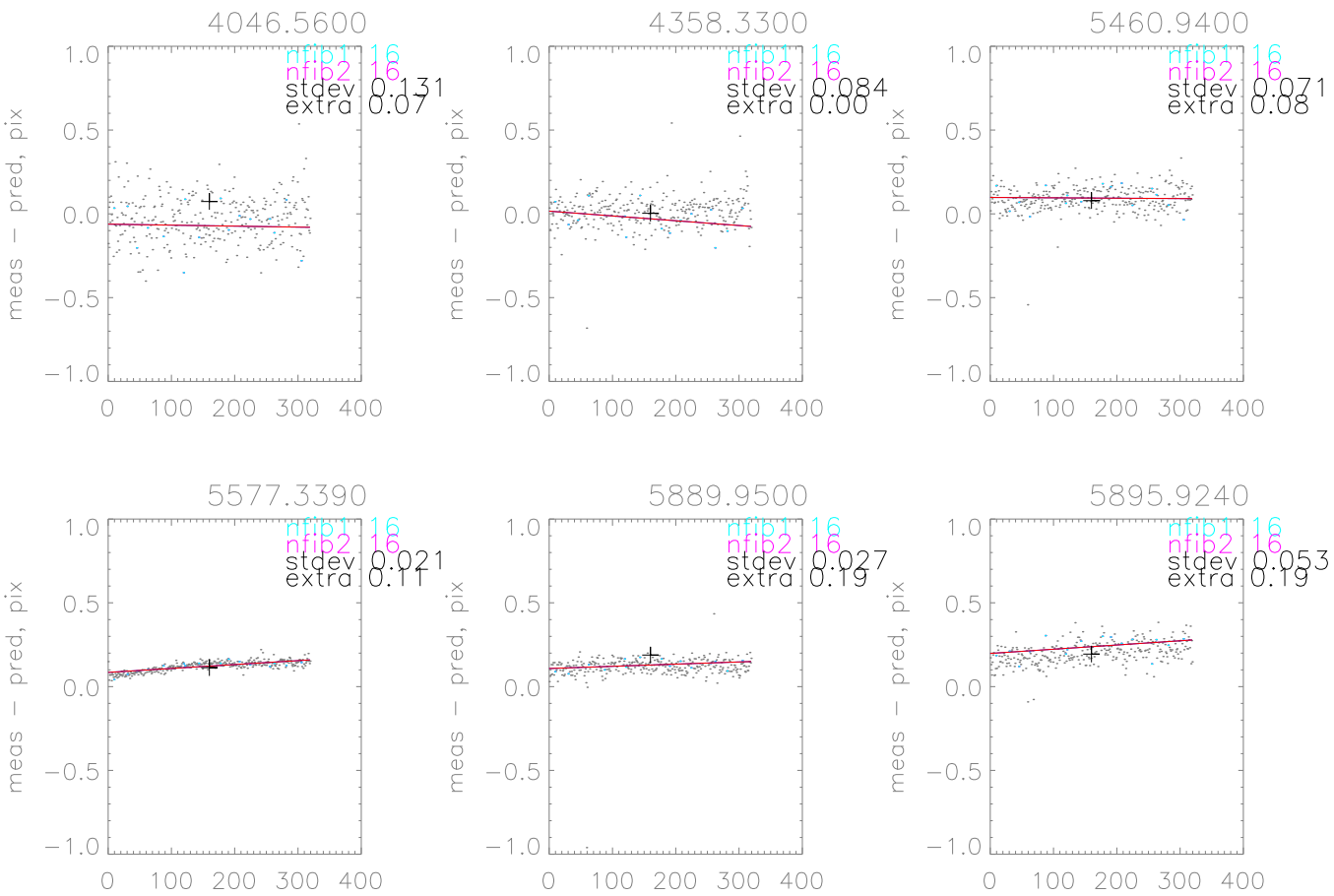

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

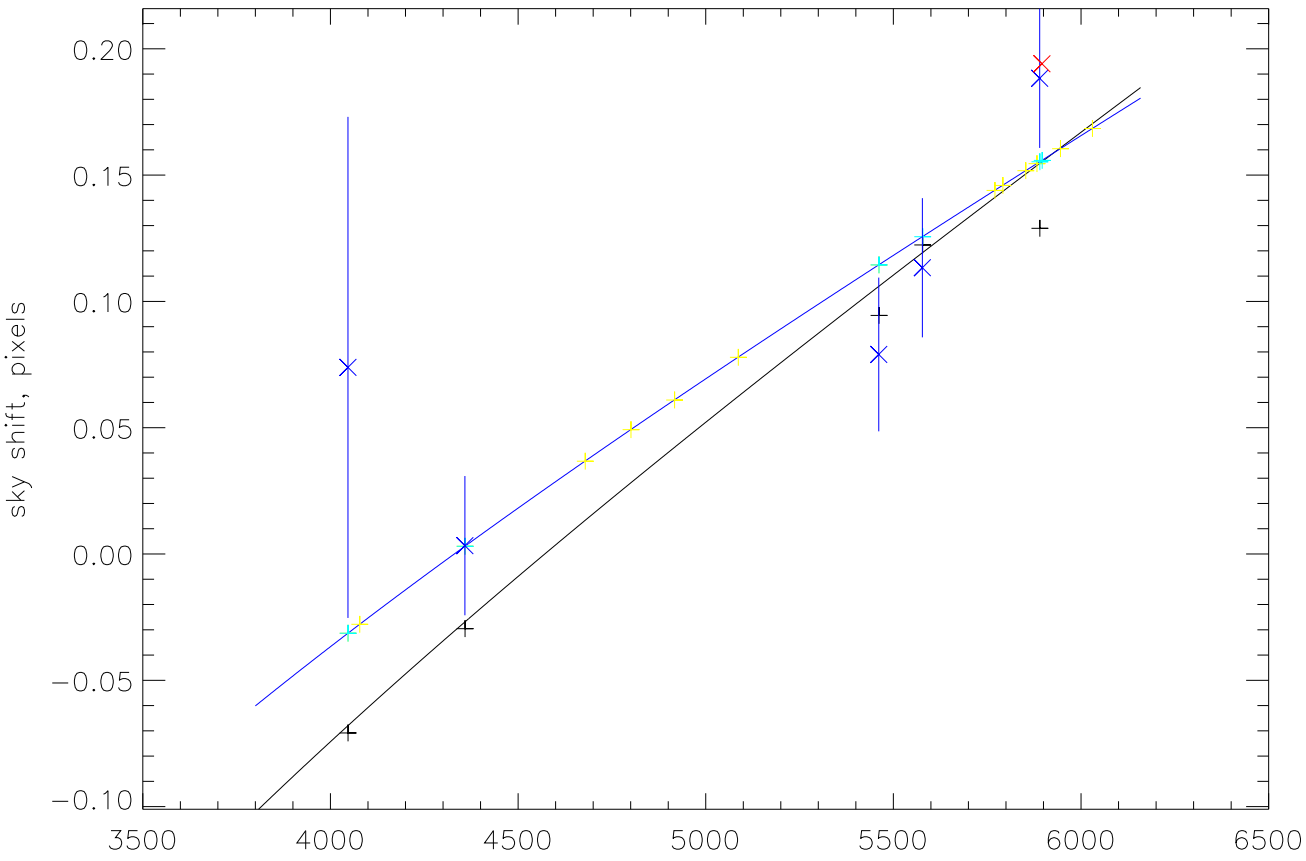

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

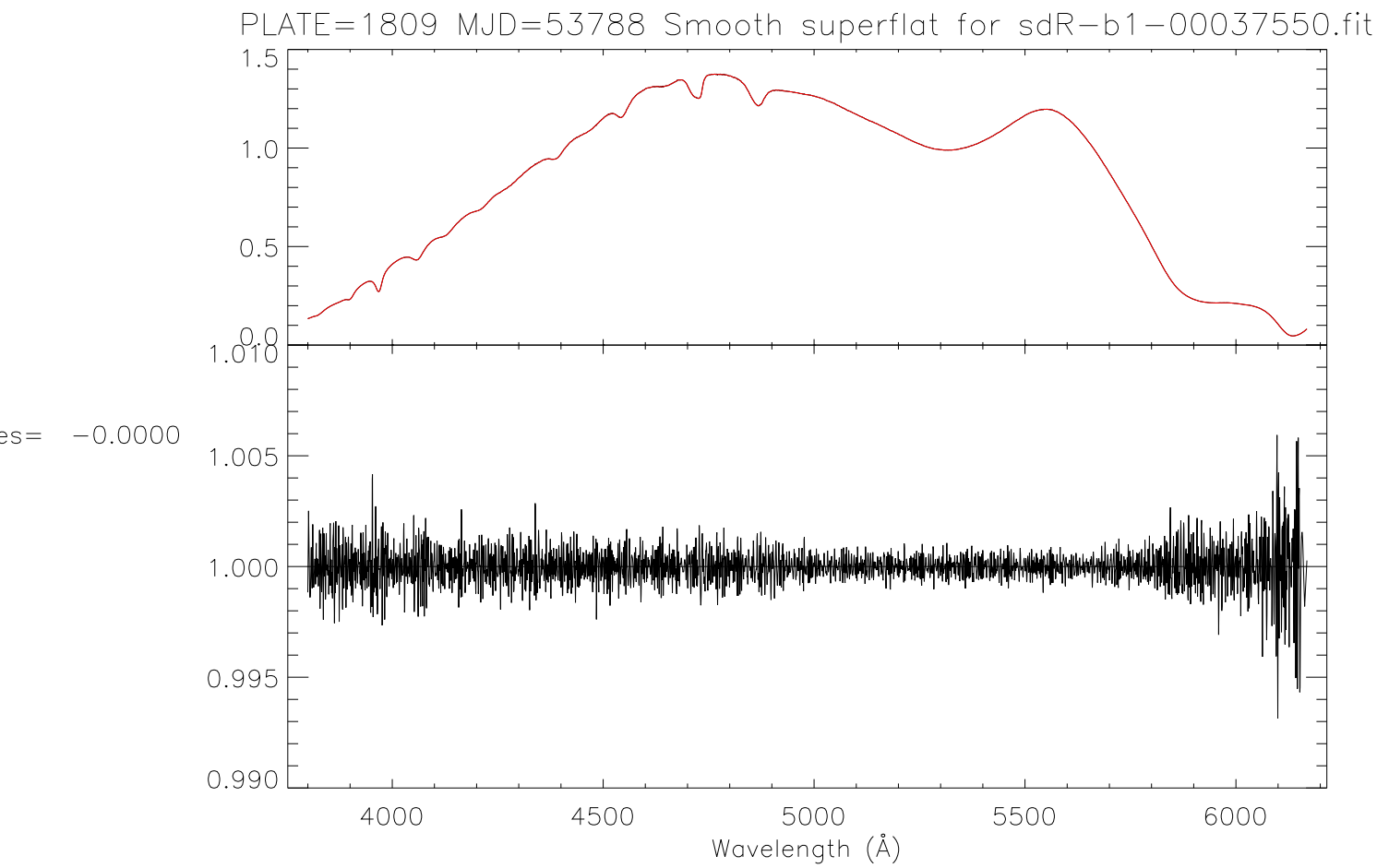

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

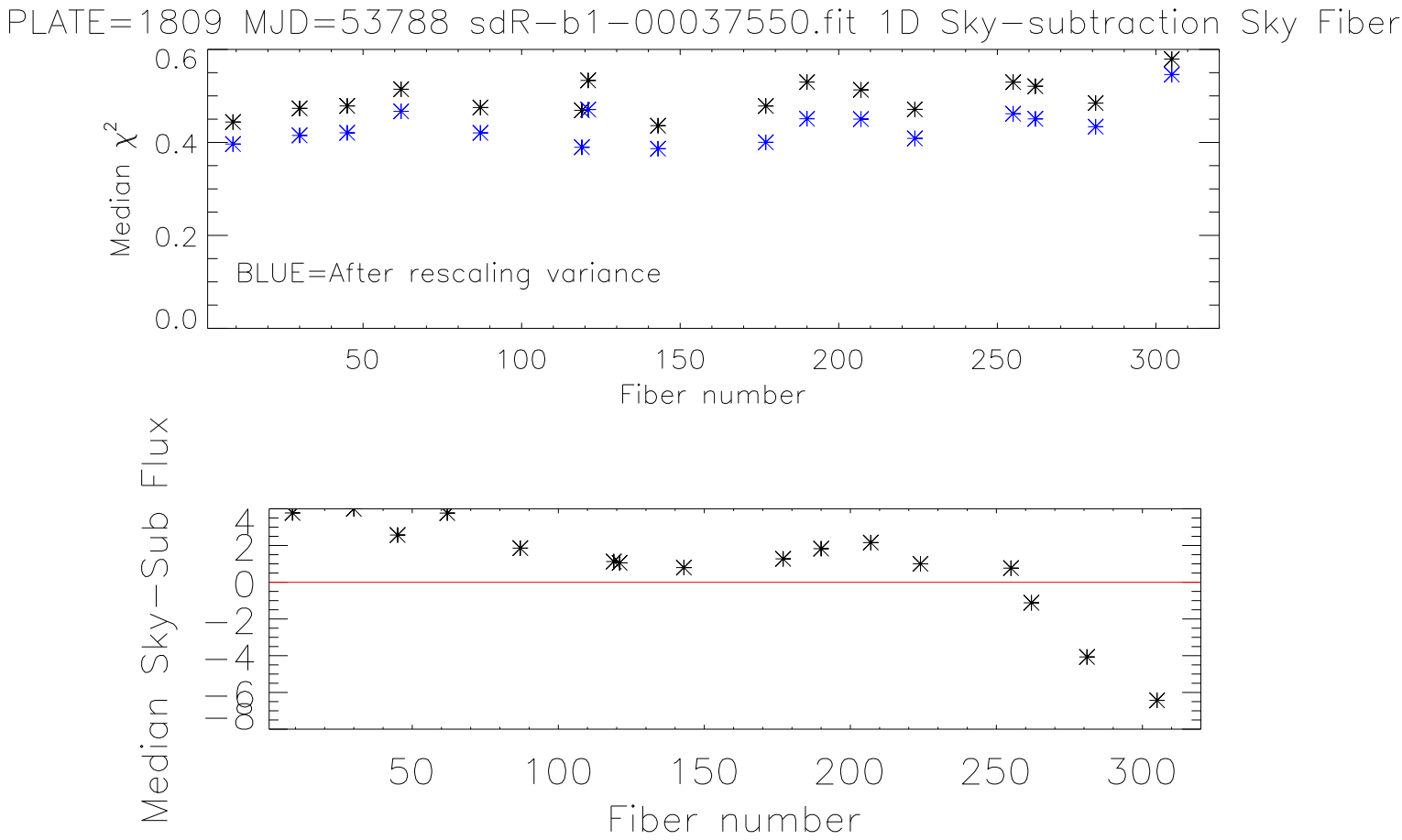

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

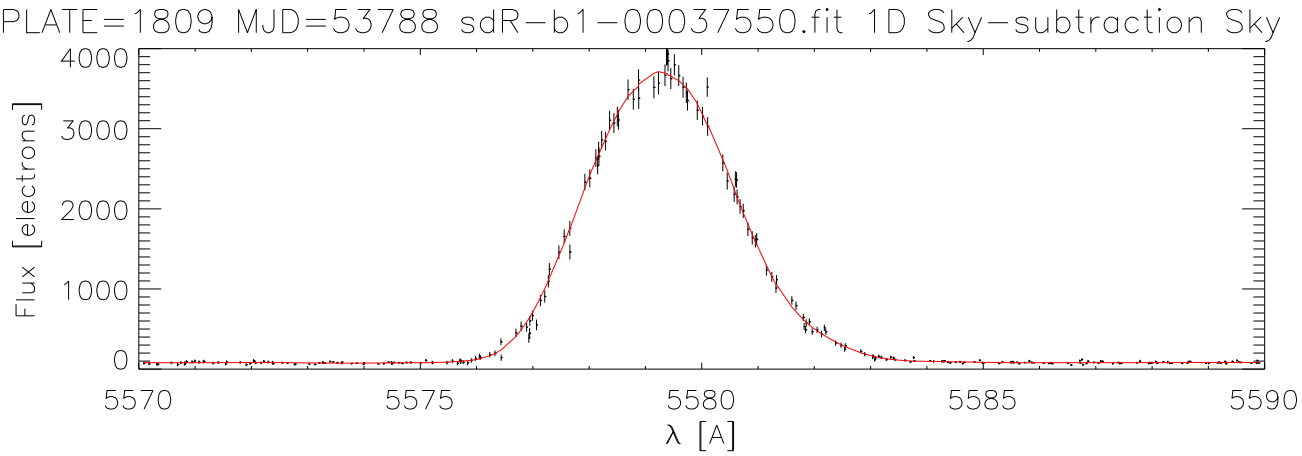

4046.5600
nfib1 16
nfib2 16
stdev 0.131
extra 0.07
4358.3300
nfib1 16
nfib2 16
stdev 0.084
extra 0.00
5460.9400
nfib1 16
nfib2 16
stdev 0.071
extra 0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.027
extra 0.19
5895.9240
nfib1 16
nfib2 16
stdev 0.053
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

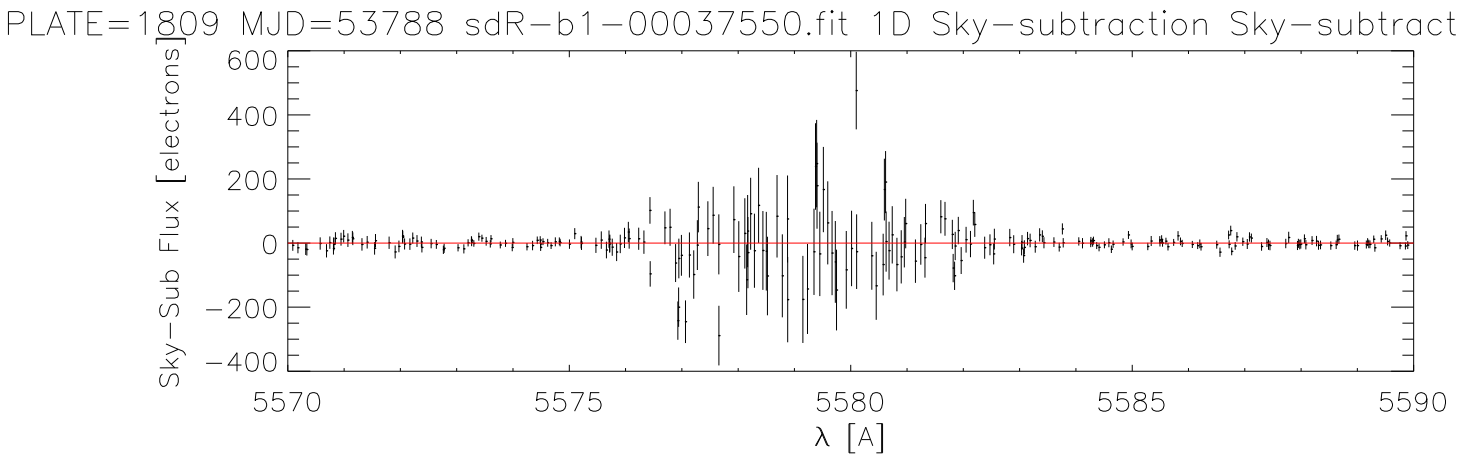

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

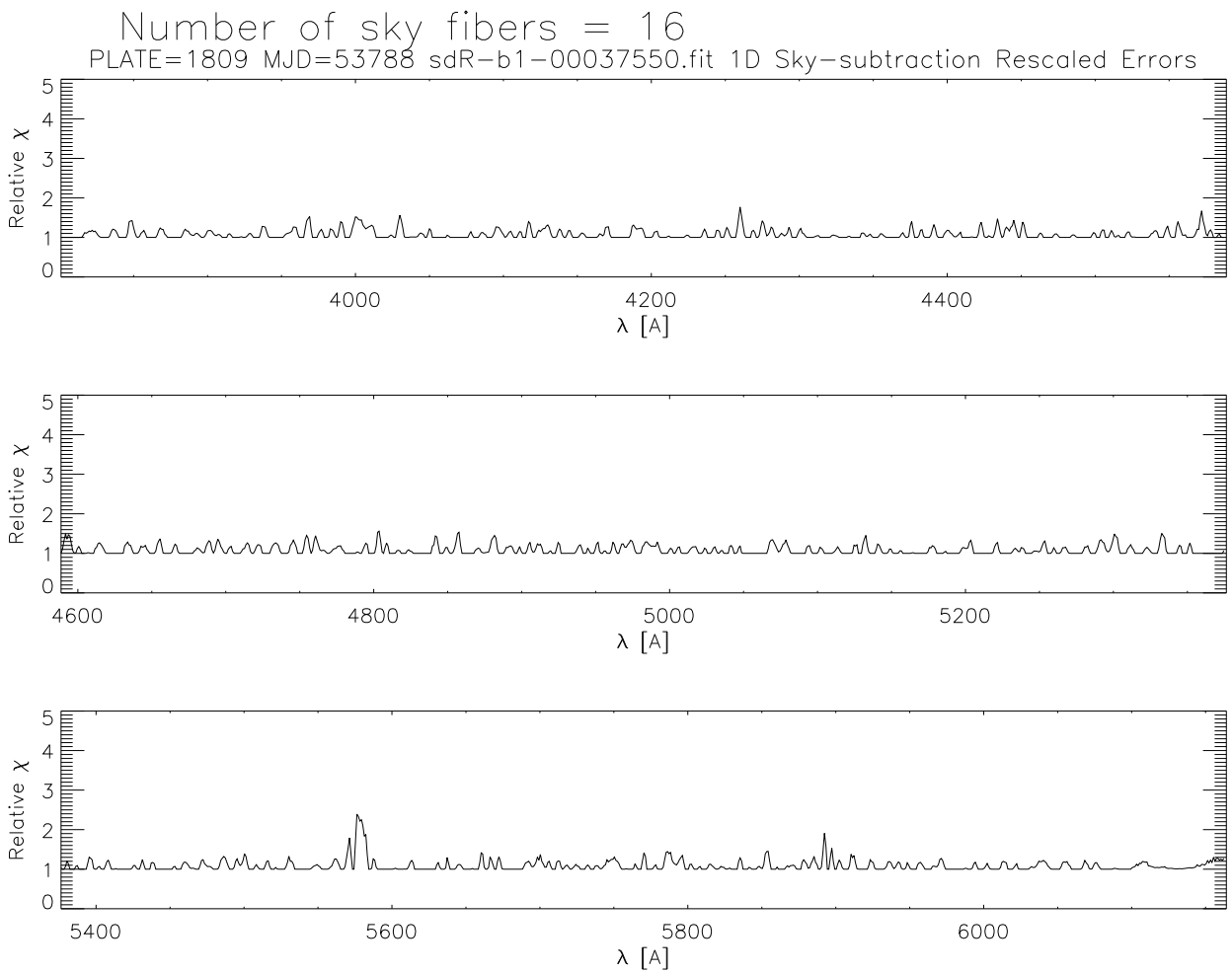

PLATE=1809 MJD=53788 Smooth superflat for sdR-b1-00037550.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

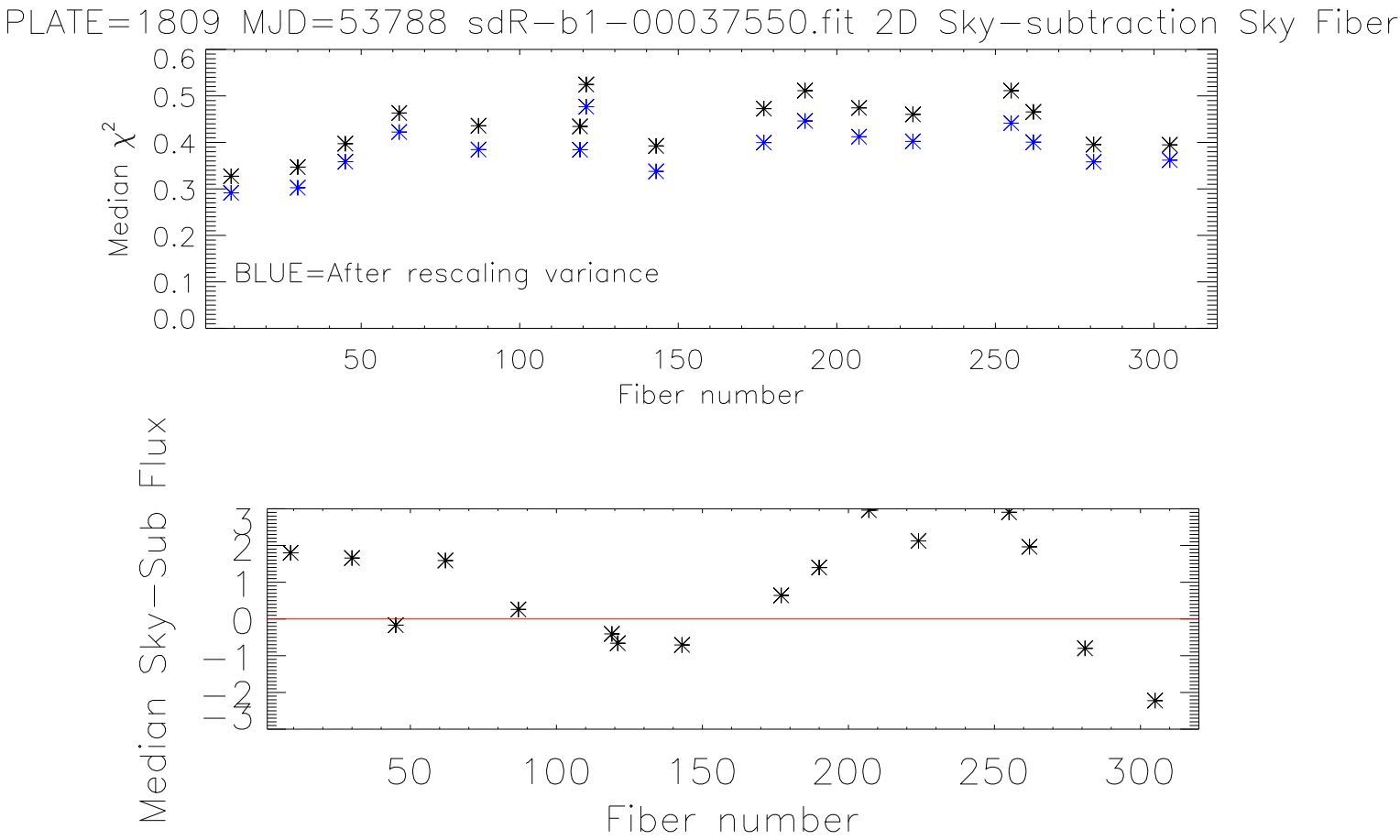
es= −0.0000

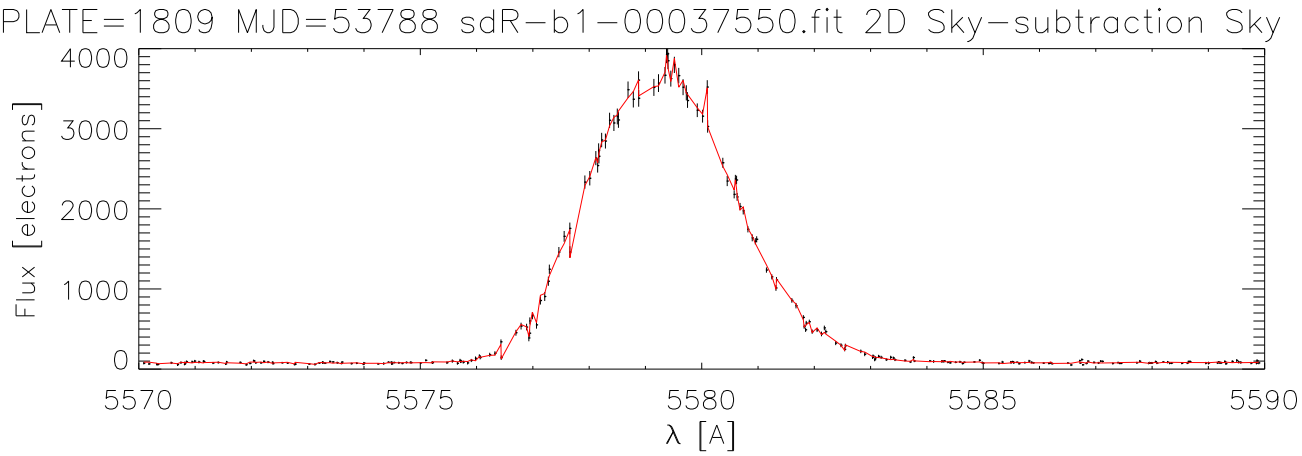

PLATE=1809 MJD=53788 sdR-b1-00037550.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

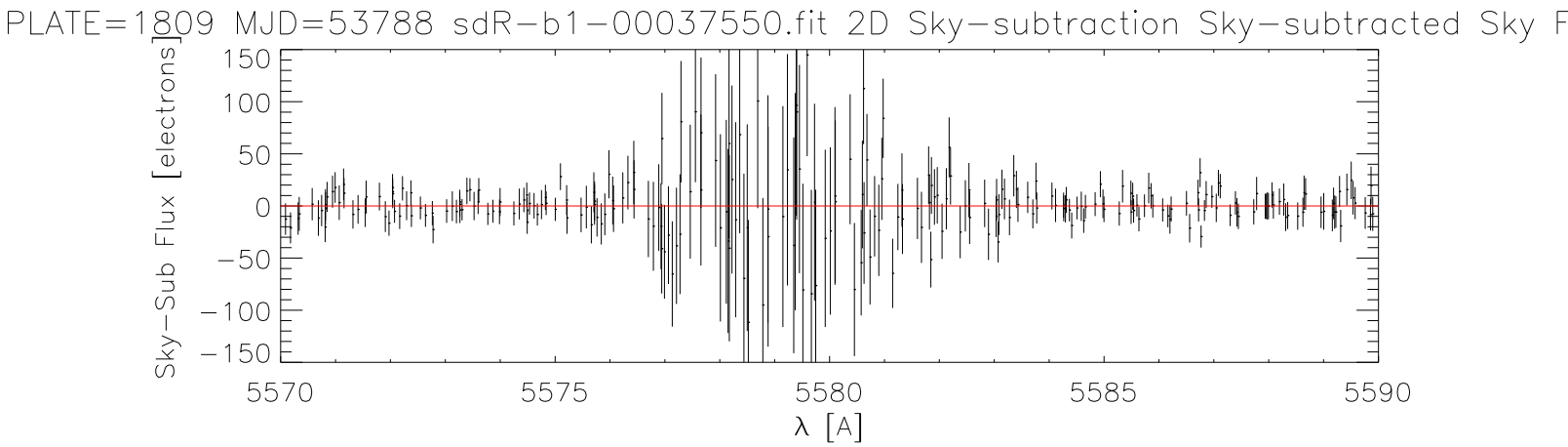

PLATE=1809 MJD=53788 sdR-b1-00037550.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

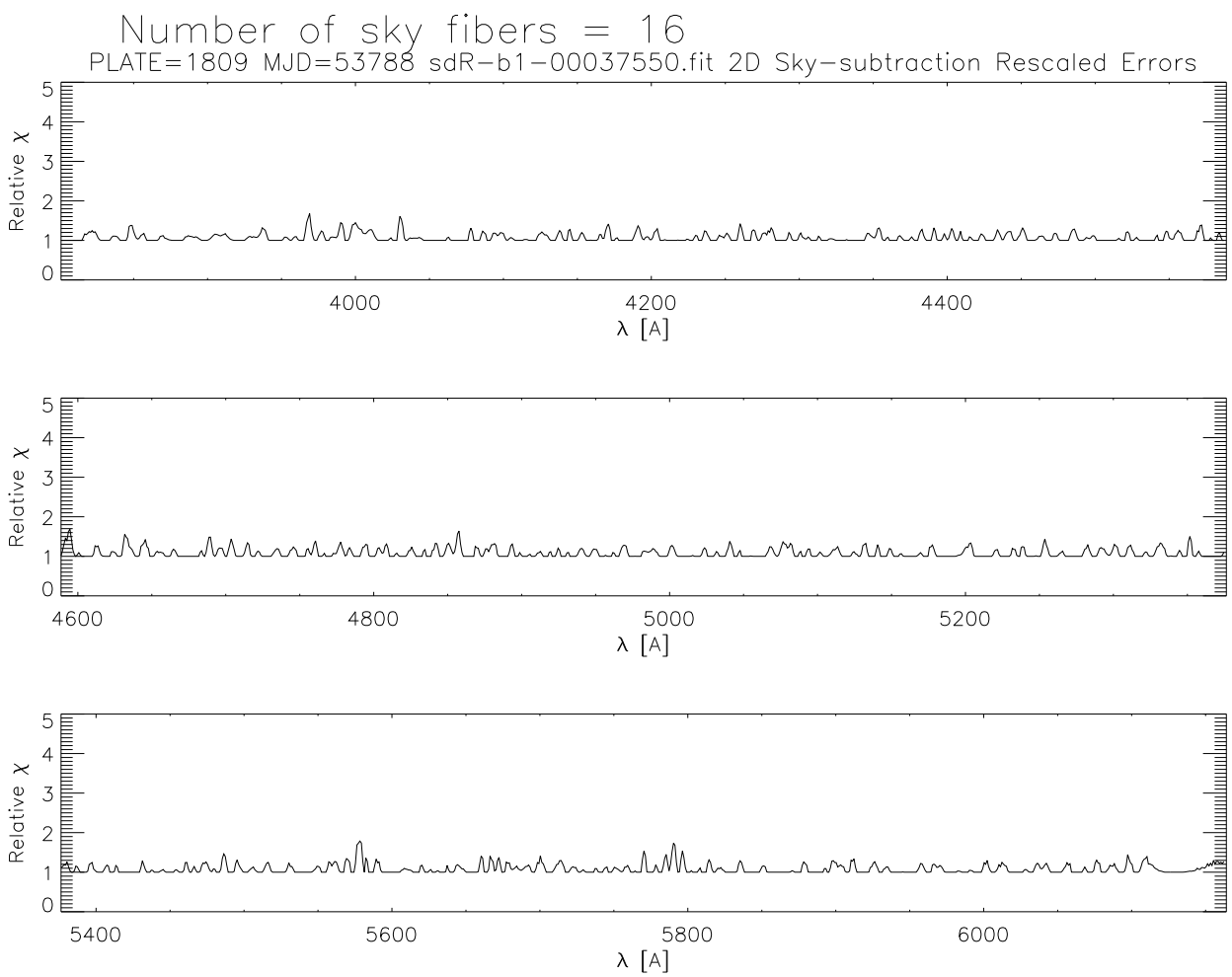

PLATE=1809 MJD=53788 sdR-b1-00037550.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

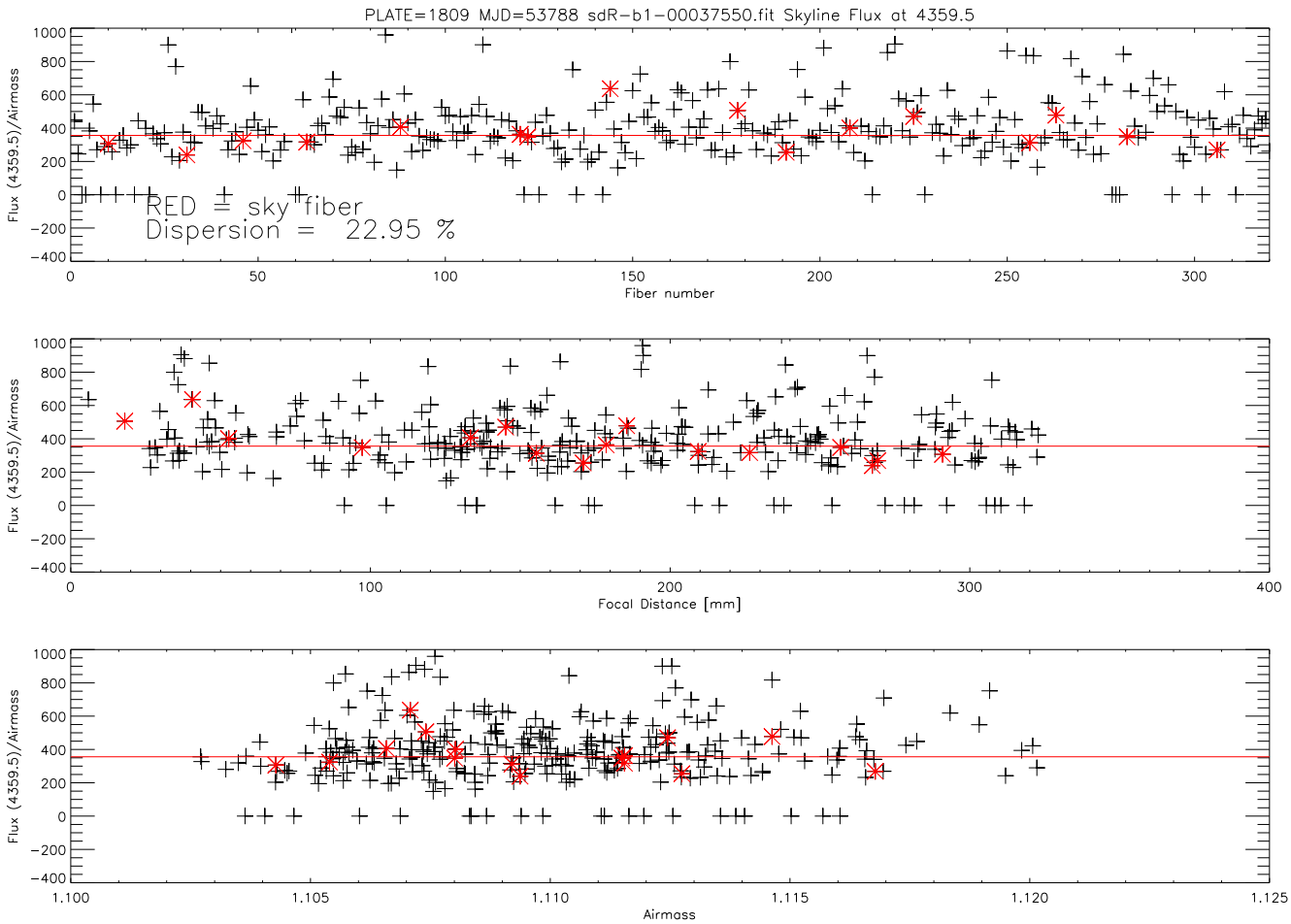

Number of sky fibers = 16
PLATE=1809 MJD=53788 sdR-b1-00037550.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

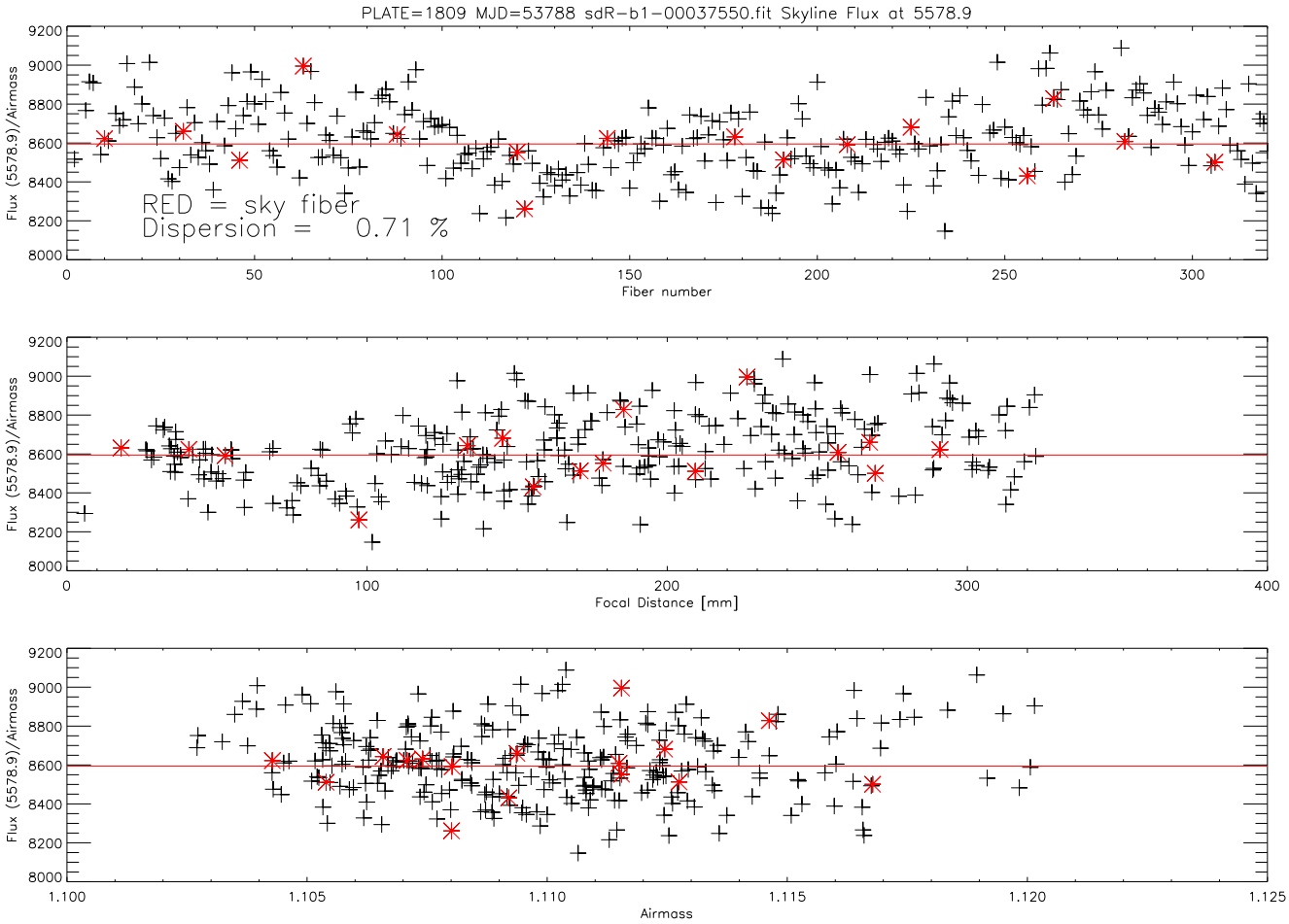

PLATE=1809 MJD=53788 sdR-b1-00037550.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

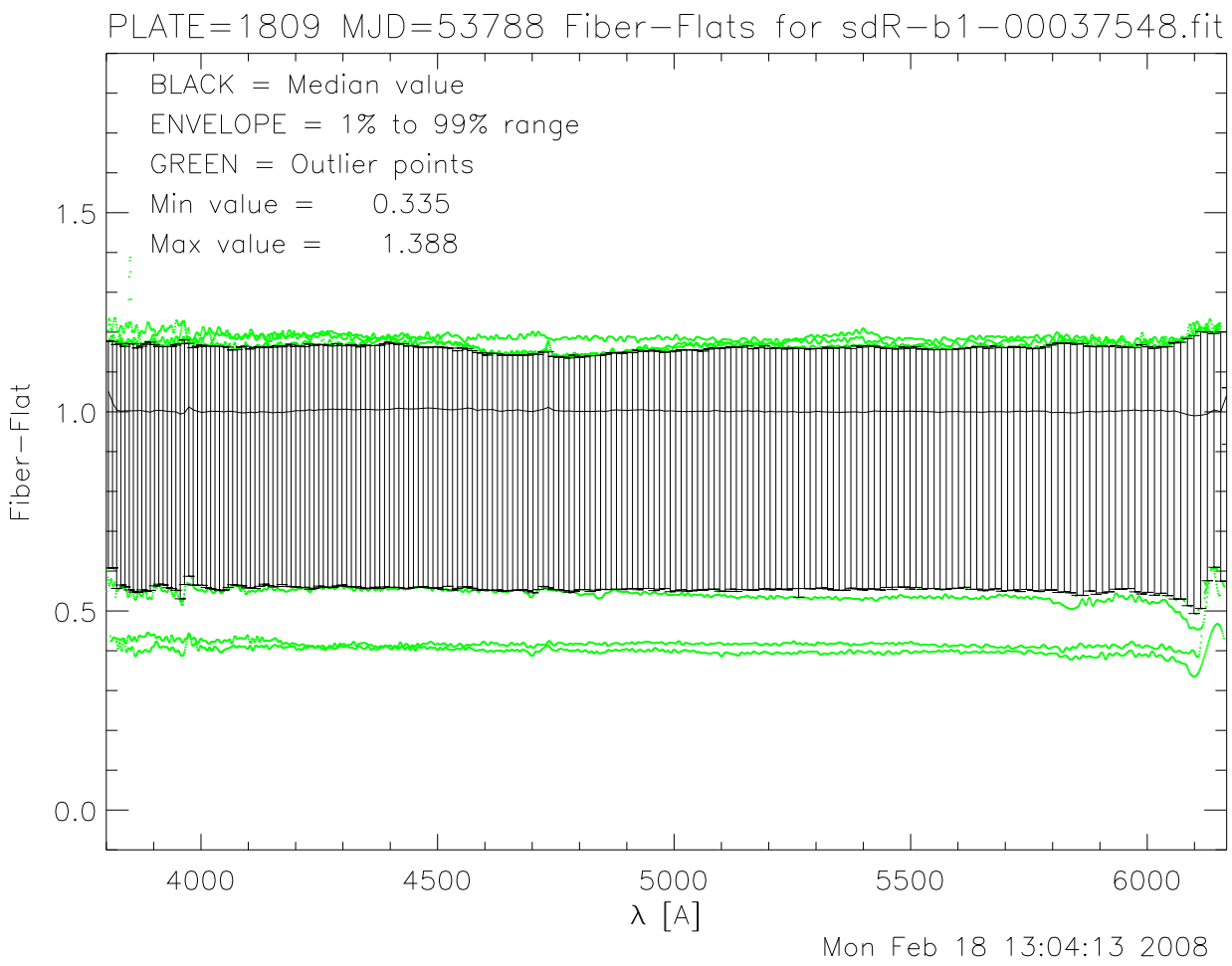

PLATE=1809 MJD=53788 sdR-b1-00037550.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

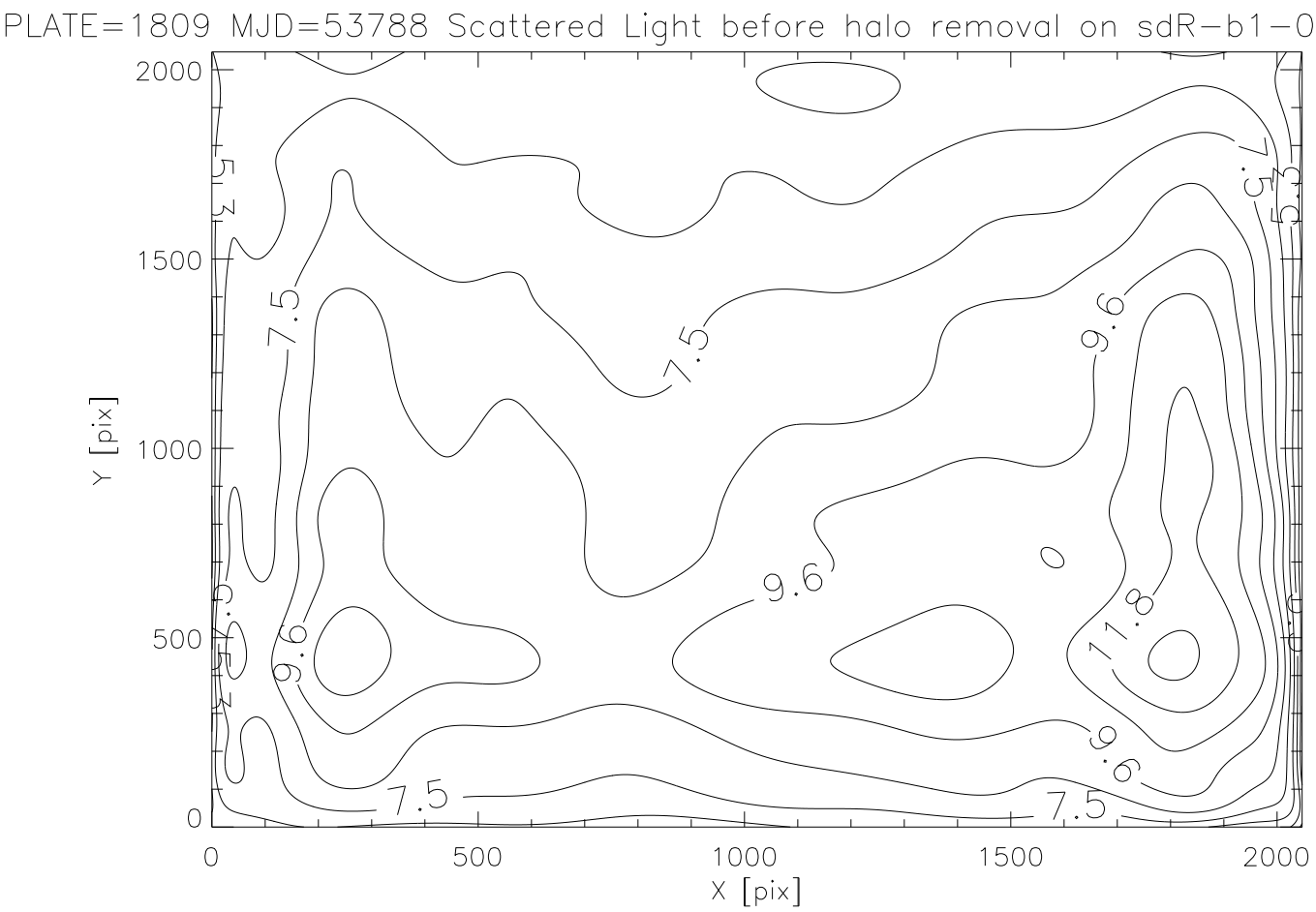

PLATE=1809 MJD=53788 sdR-b1-00037550.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

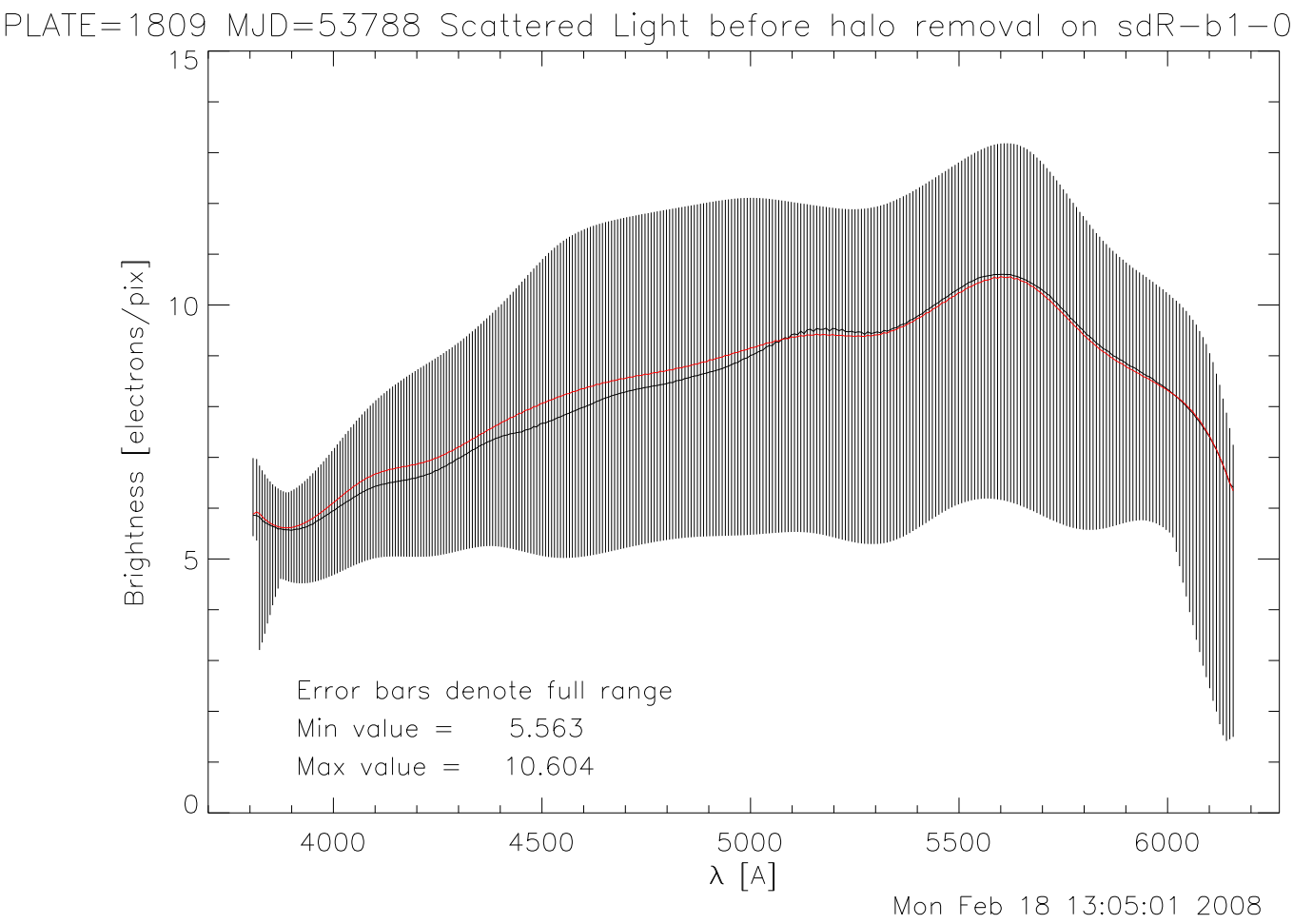

Number of sky fibers = 16
PLATE=1809 MJD=53788 sdR-b1-00037550.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

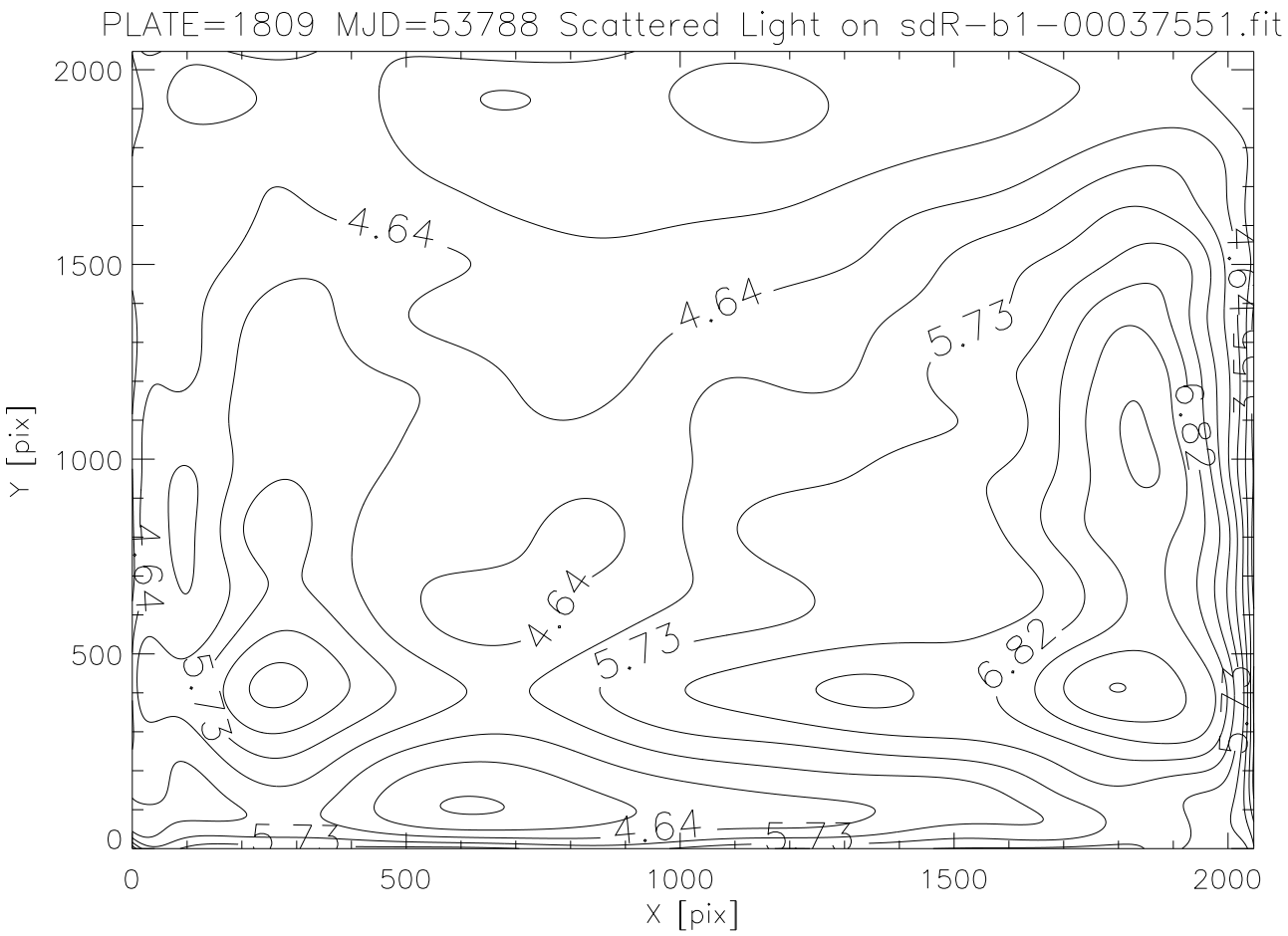

PLATE=1809 MJD=53788 sdR-b1-00037550.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 22.95 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

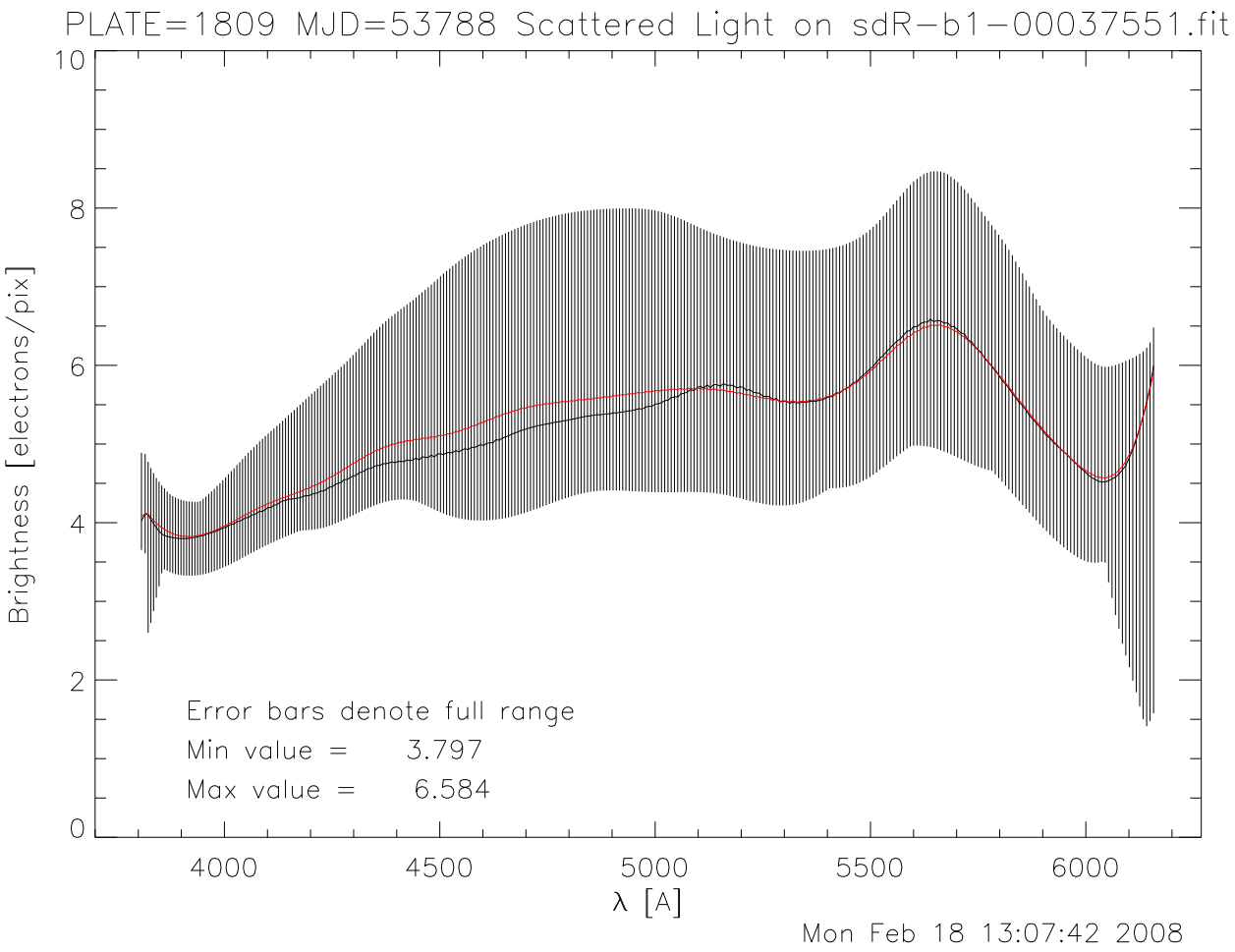

PLATE=1809 MJD=53788 sdR-b1-00037550.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.71 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

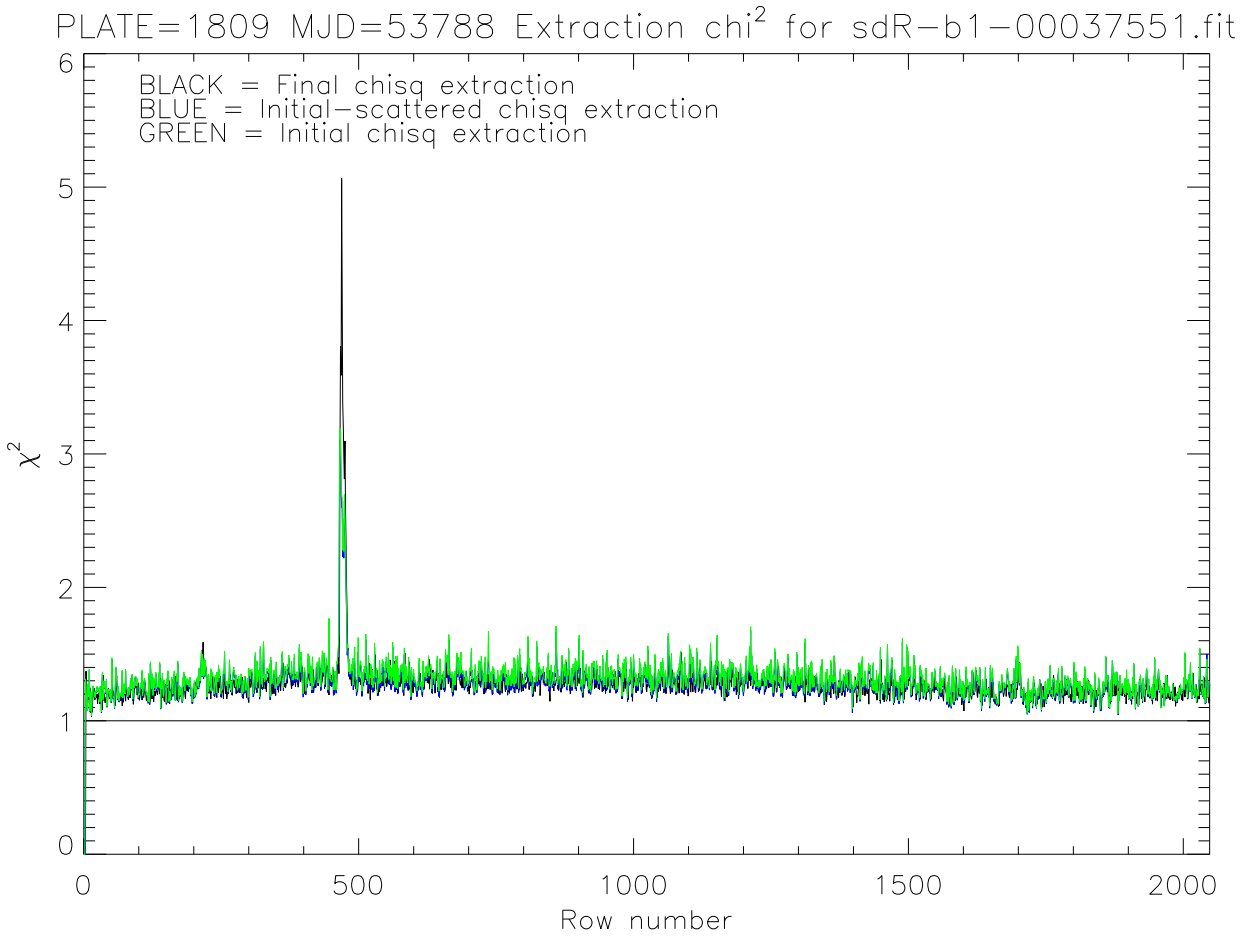

PLATE=1809 MJD=53788 Fiber-Flats for sdR-b1-00037548.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.335
Max value = 1.388
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 18 13:04:13 2008

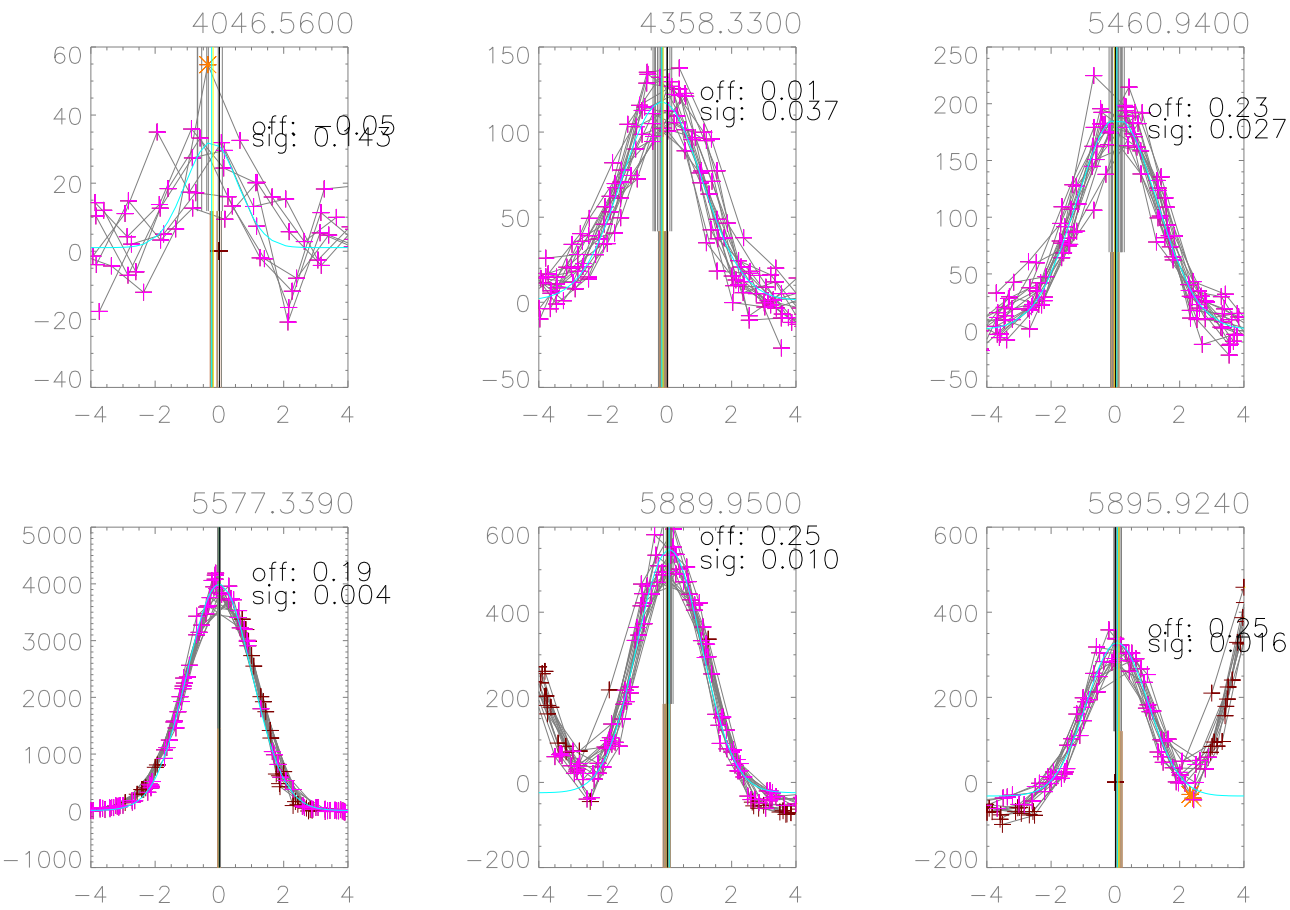

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR−b1−00037551.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5
9.6
11.8
5.3
3.0

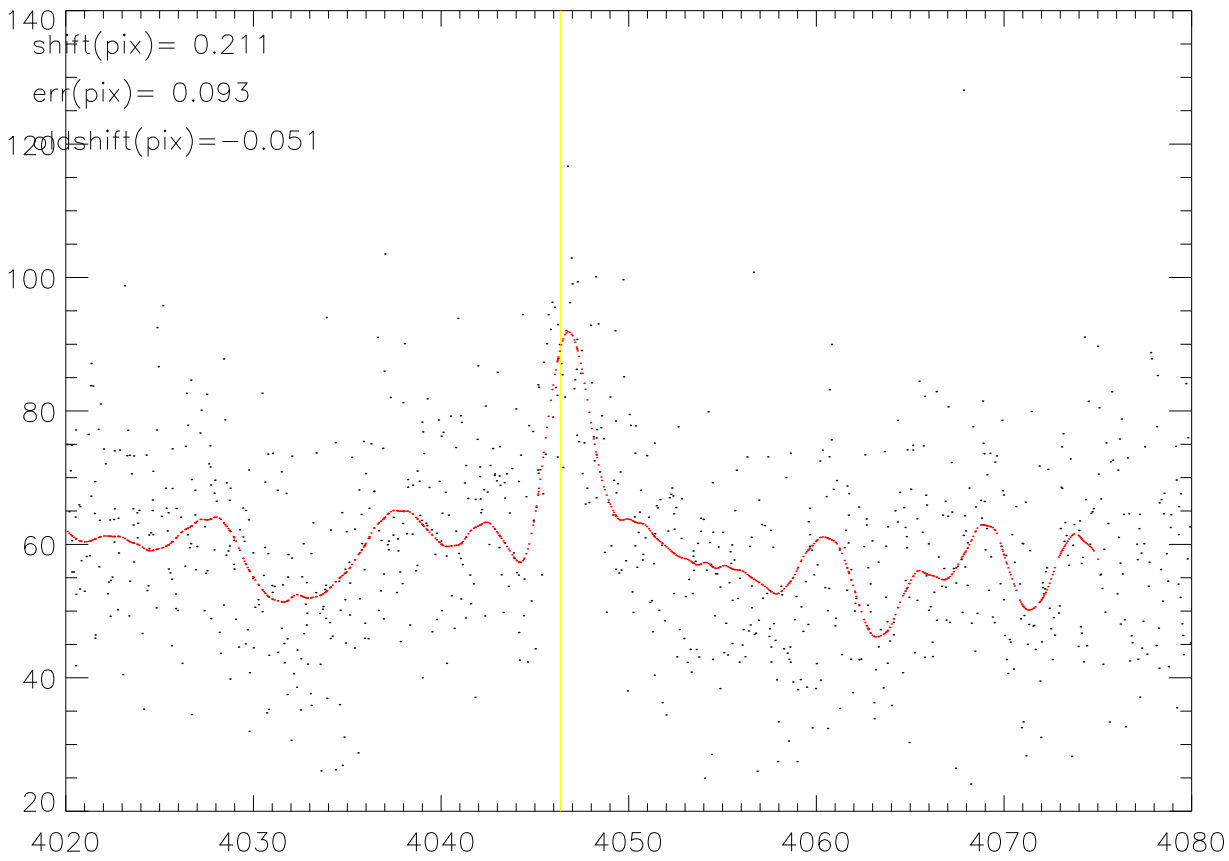

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-b1-00037551.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.563
Max value = 10.604
Mon Feb 18 13:05:01 2008

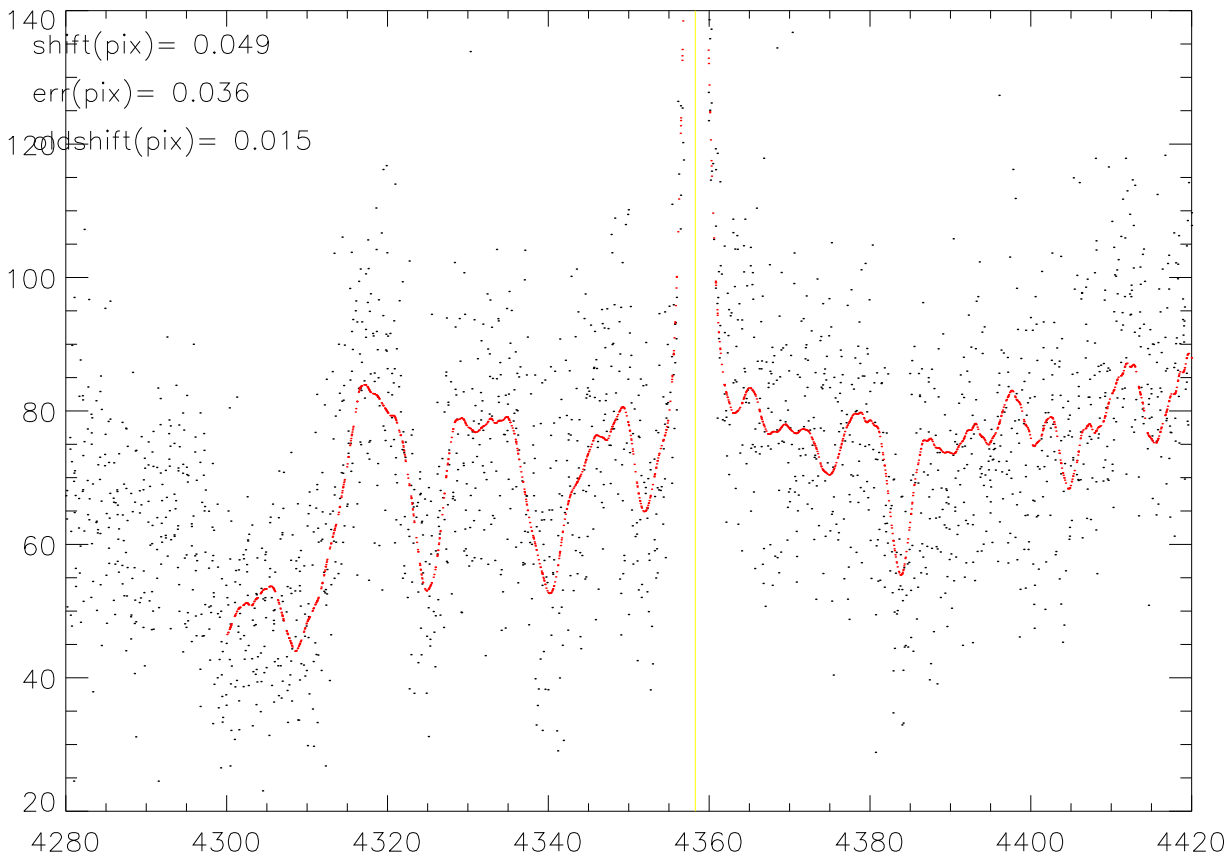

PLATE=1809 MJD=53788 Scattered Light on sdR-b1-00037551.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.64
5.73
6.82

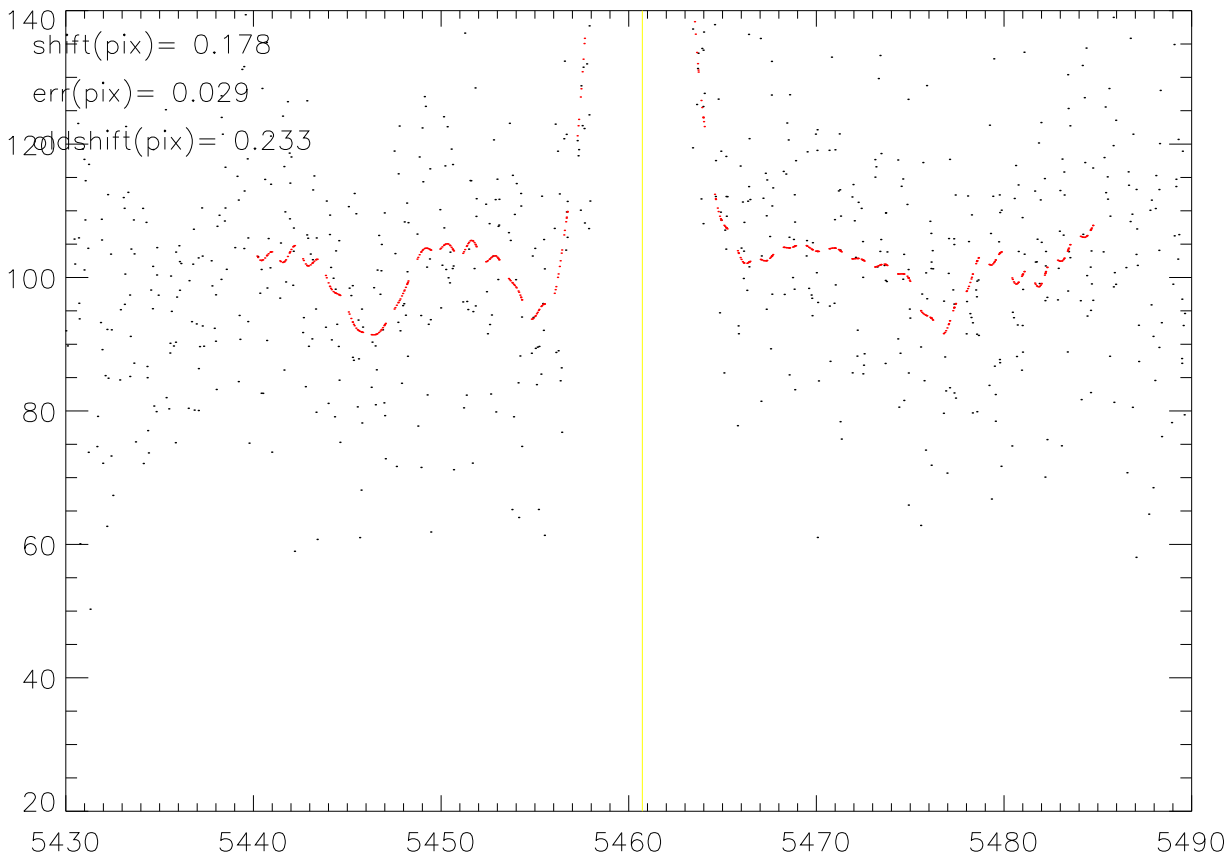

PLATE=1809 MJD=53788 Scattered Light on sdR-b1-00037551.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.797
Max value = 6.584
Mon Feb 18 13:07:42 2008

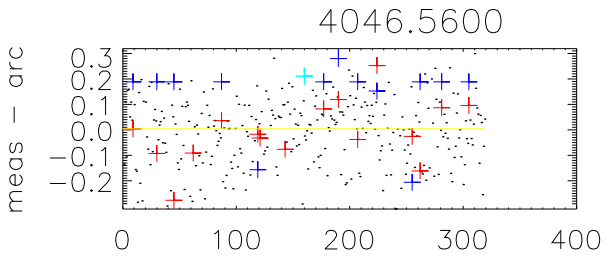

PLATE=1809 MJD=53788 Extraction chi^2 for sdR-b1-00037551.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

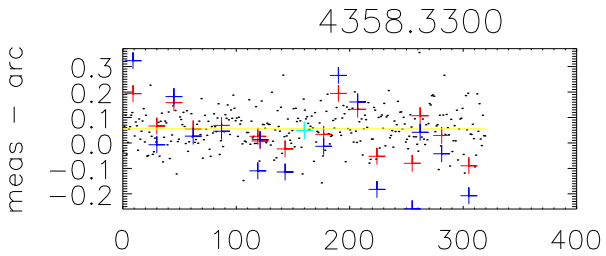

4046.5600
off: −0.05
sig: 0.143
4358.3300
off: 0.01
sig: 0.037
5460.9400
off: 0.23
sig: 0.027
5577.3390
off: 0.19
sig: 0.004
5889.9500
off: 0.25
sig: 0.010
5895.9240
off: 0.25
sig: 0.016

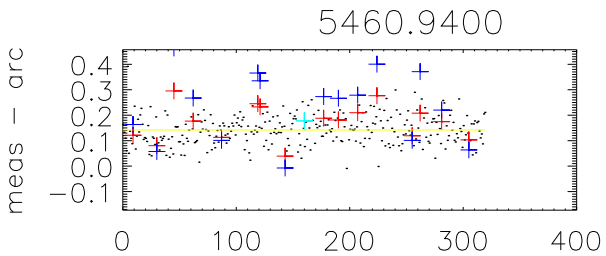

shift(pix)= 0.211
err(pix)= 0.093
oldshift(pix)=−0.051
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

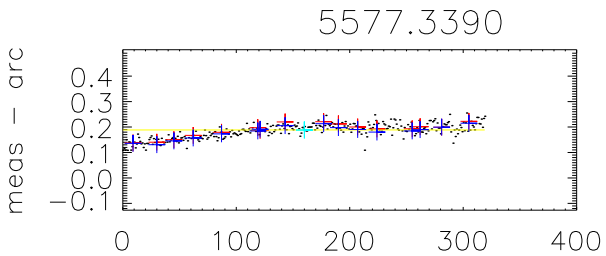

shift(pix)= 0.049
err(pix)= 0.036
oldshift(pix)= 0.015
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

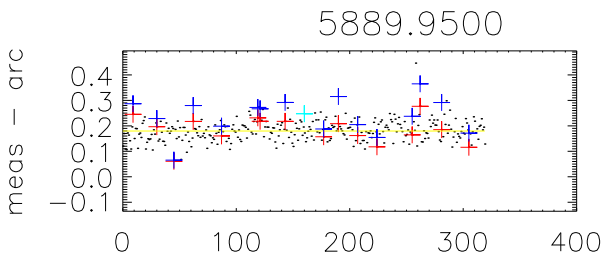

shift(pix)= 0.178
err(pix)= 0.029
oldshift(pix)= 0.233
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

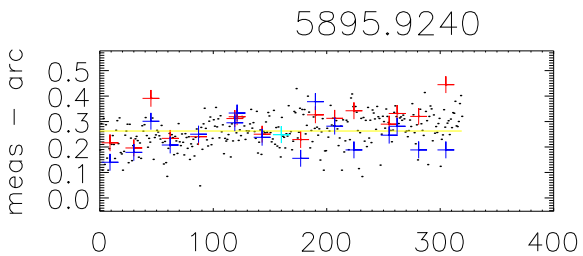

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

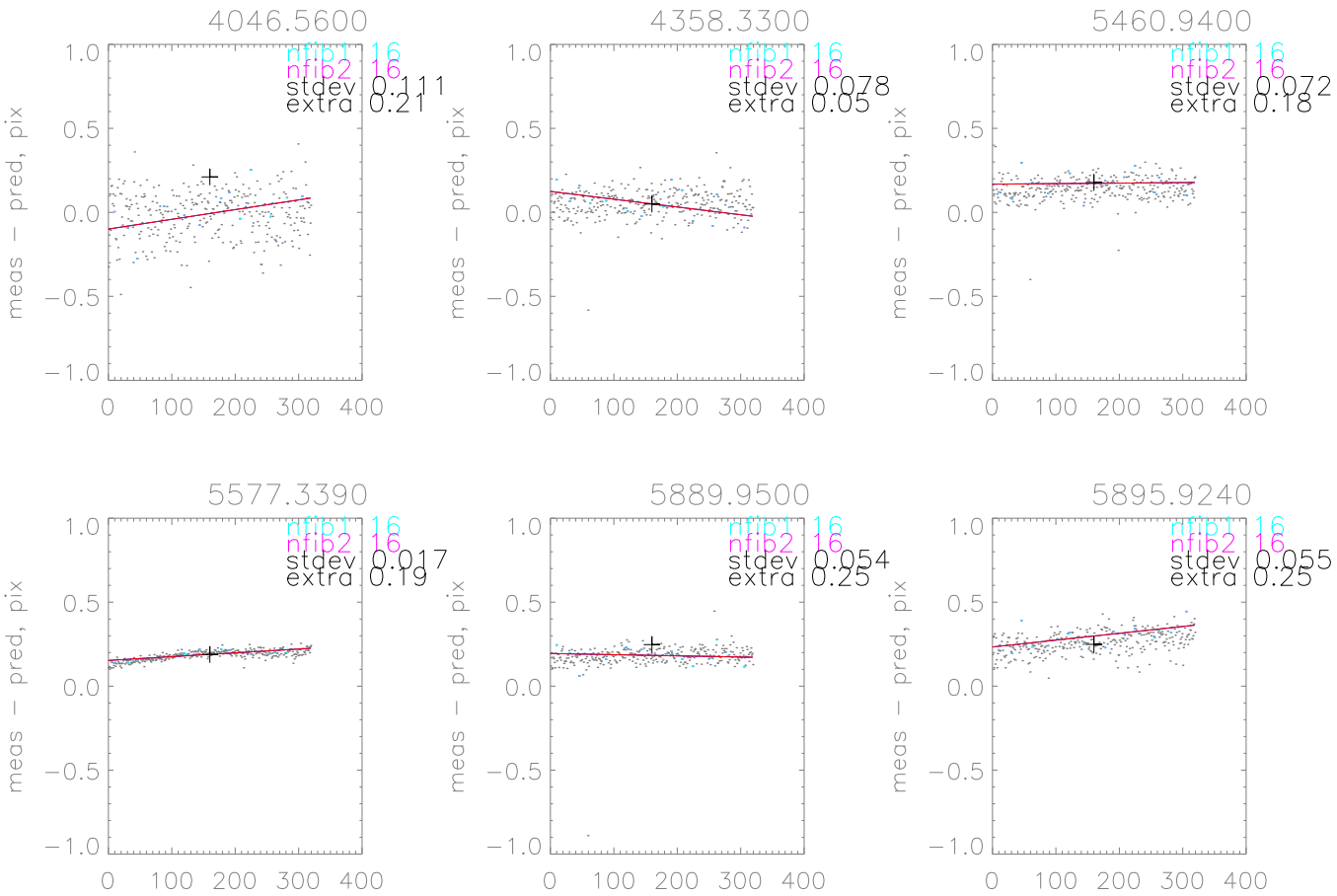

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

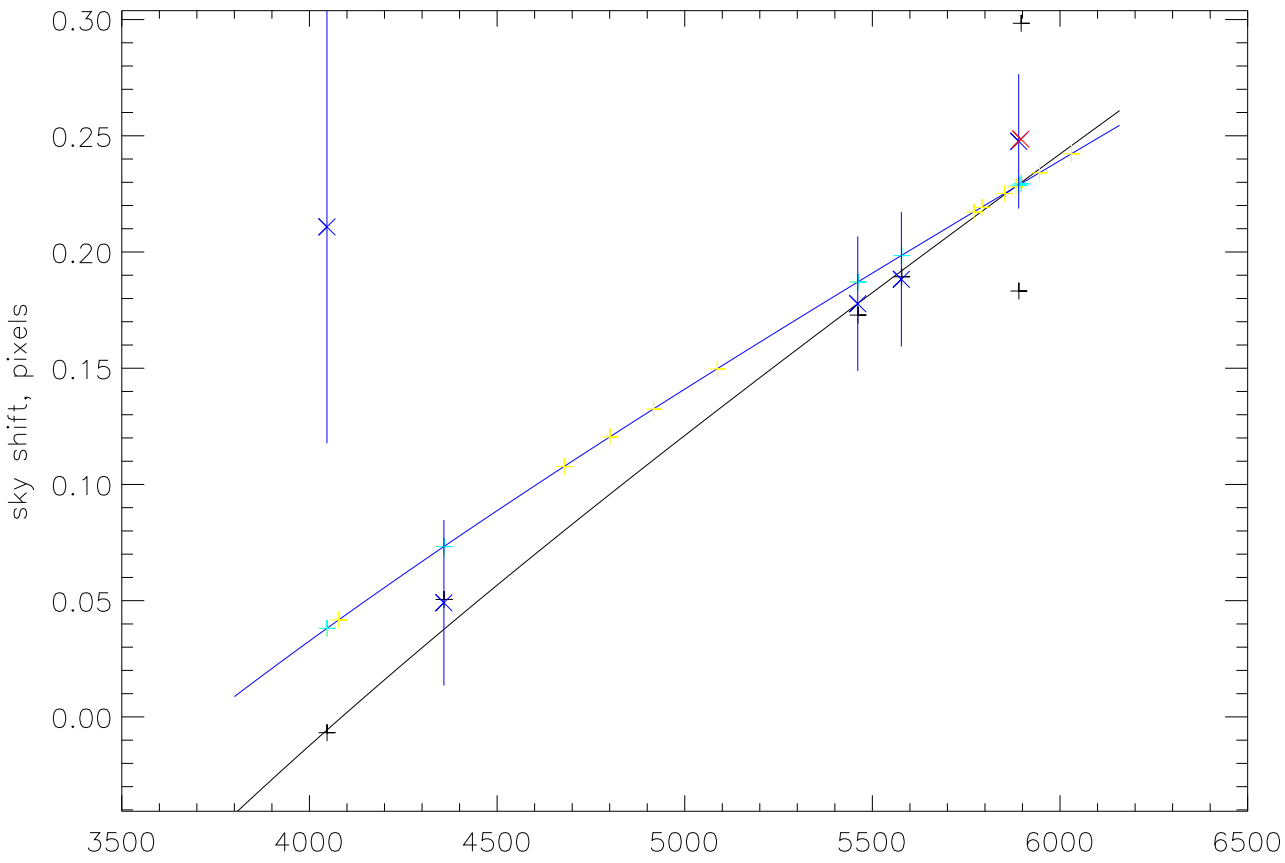

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

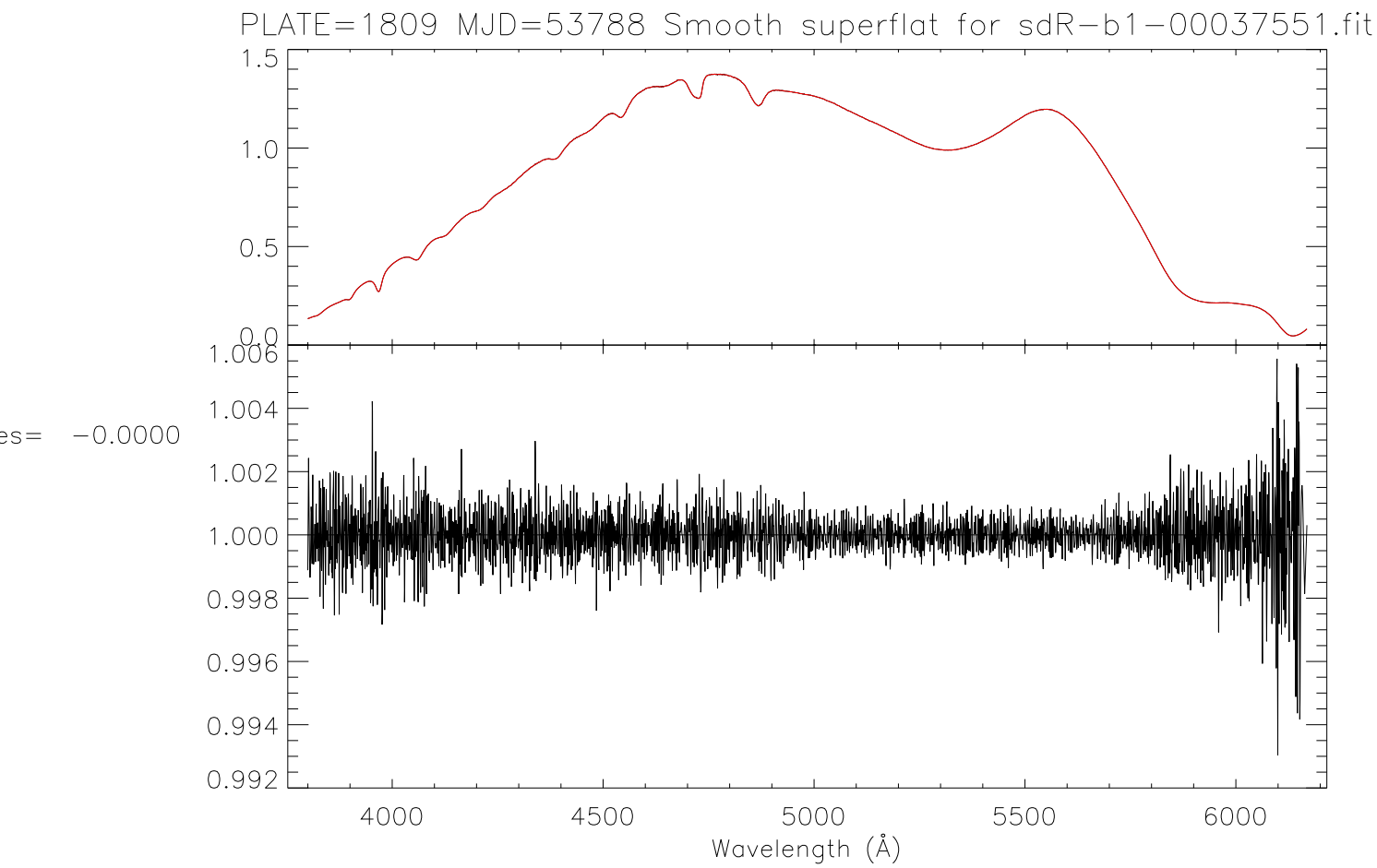

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

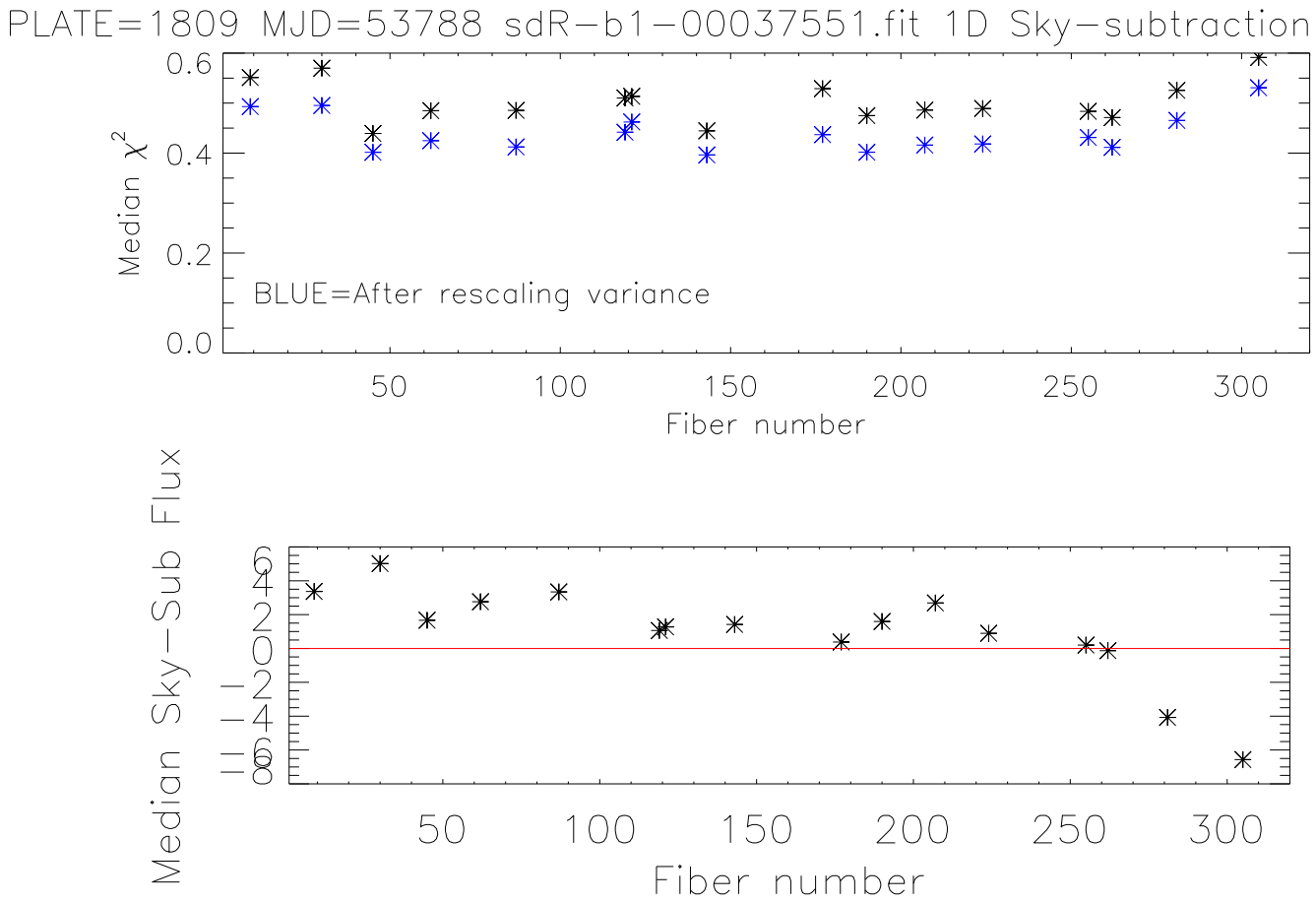

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


4046.5600
nfib1 16
nfib2 16
stdev 0.111
extra 0.21
4358.3300
nfib1 16
nfib2 16
stdev 0.078
extra 0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.072
extra 0.18
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.19
5889.9500
nfib1 16
nfib2 16
stdev 0.054
extra 0.25
5895.9240
nfib1 16
nfib2 16
stdev 0.055
extra 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

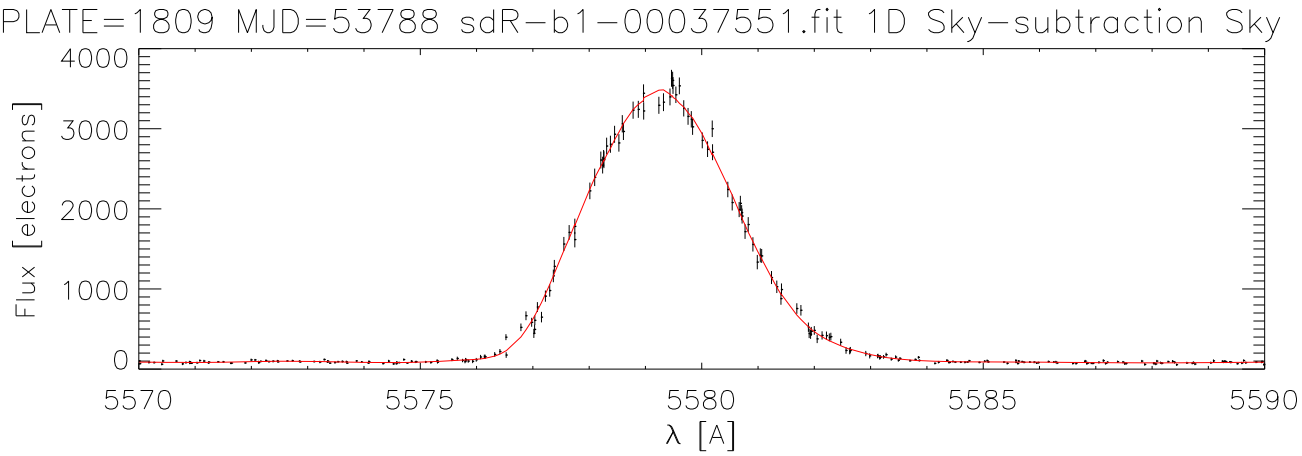

0.30
0.25
0.20
0.15
0.10
0.05
0.00
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

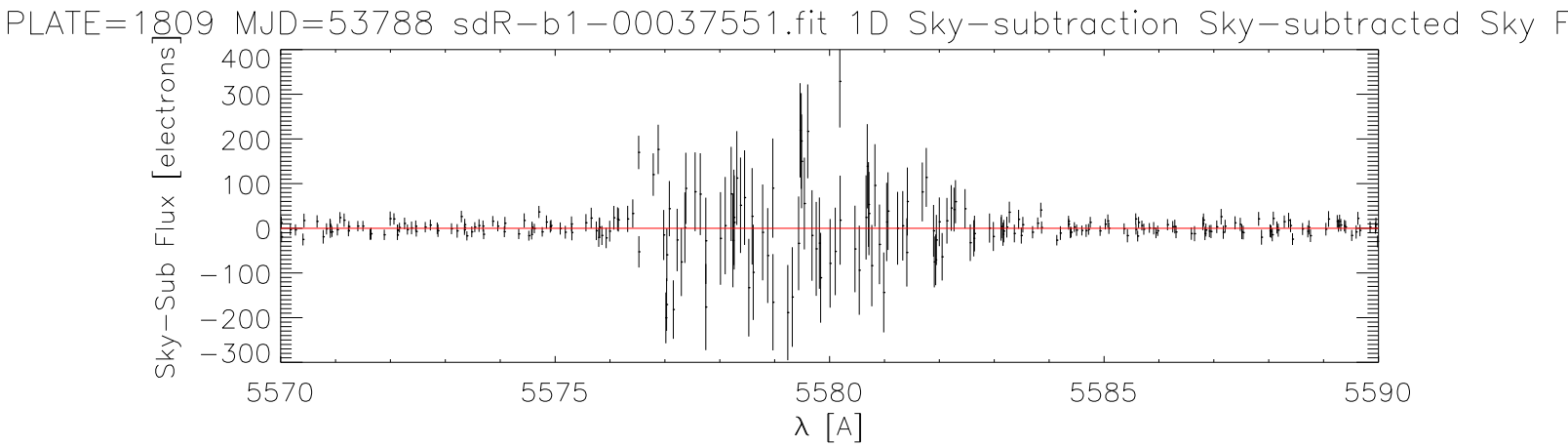

PLATE=1809 MJD=53788 Smooth superflat for sdR-b1-00037551.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

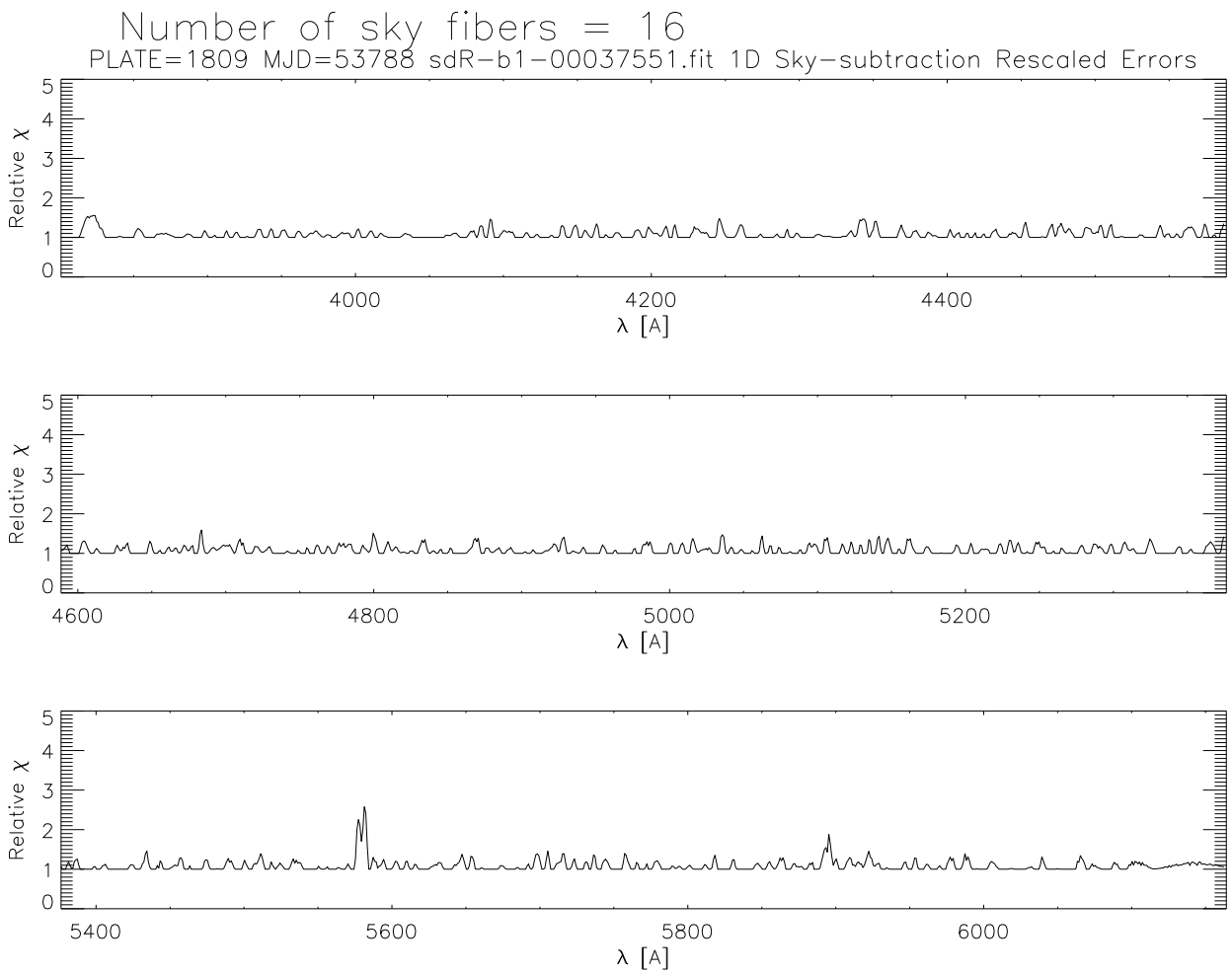
es= −0.0000

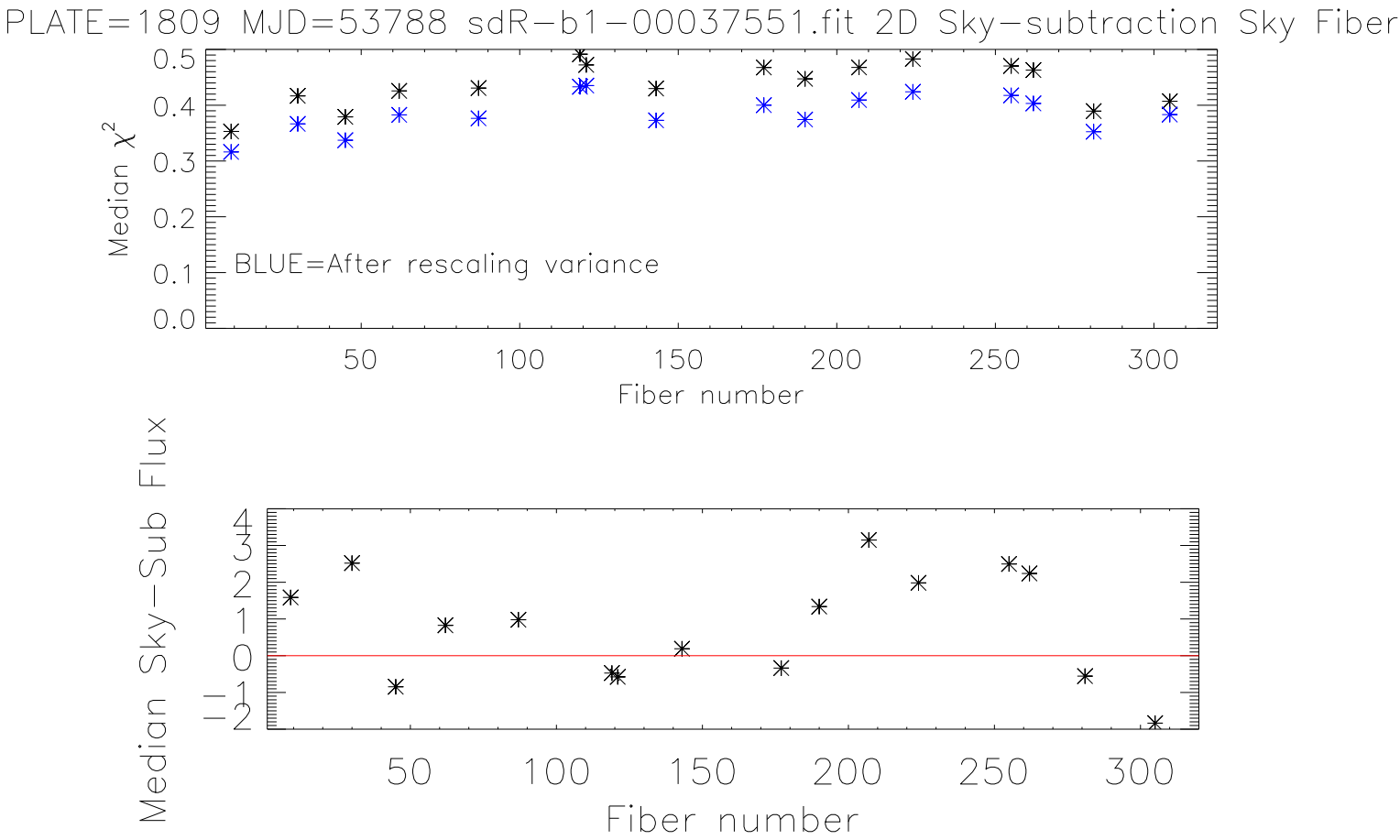

PLATE=1809 MJD=53788 sdR-b1-00037551.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

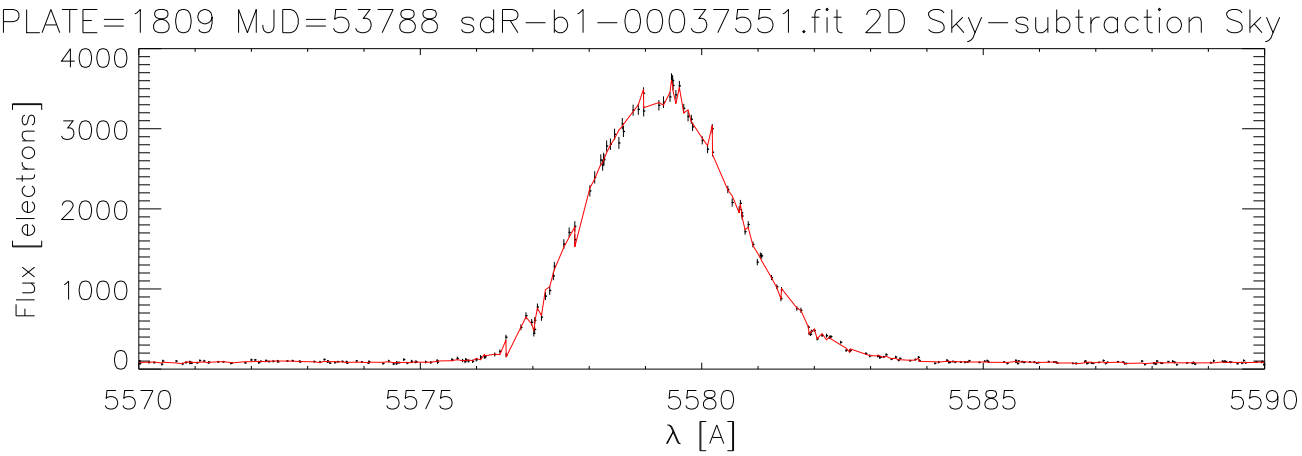
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

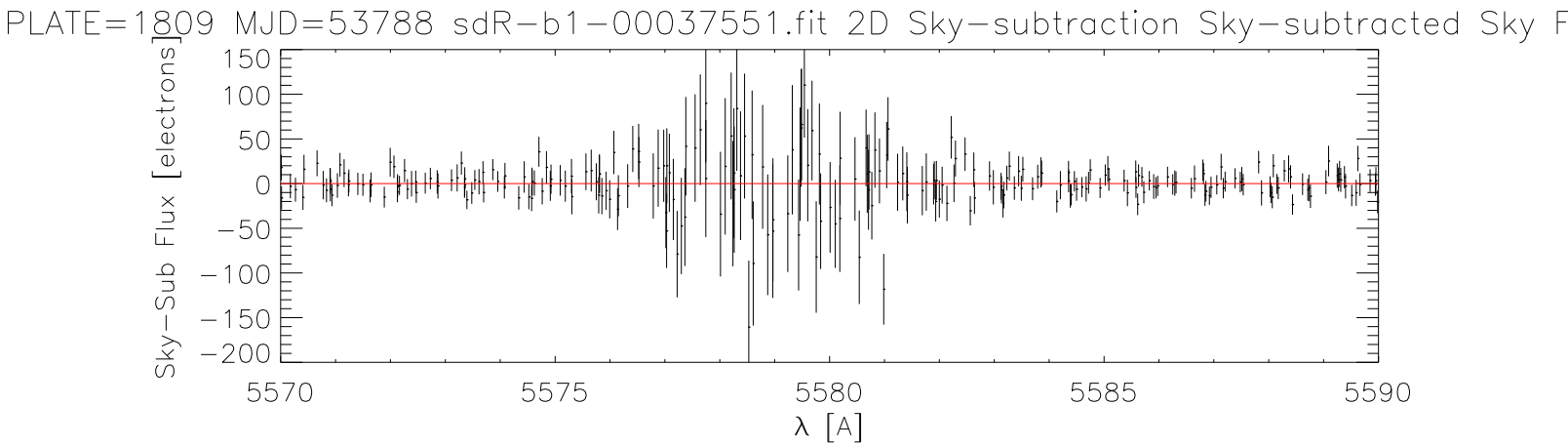

PLATE=1809 MJD=53788 sdR-b1-00037551.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

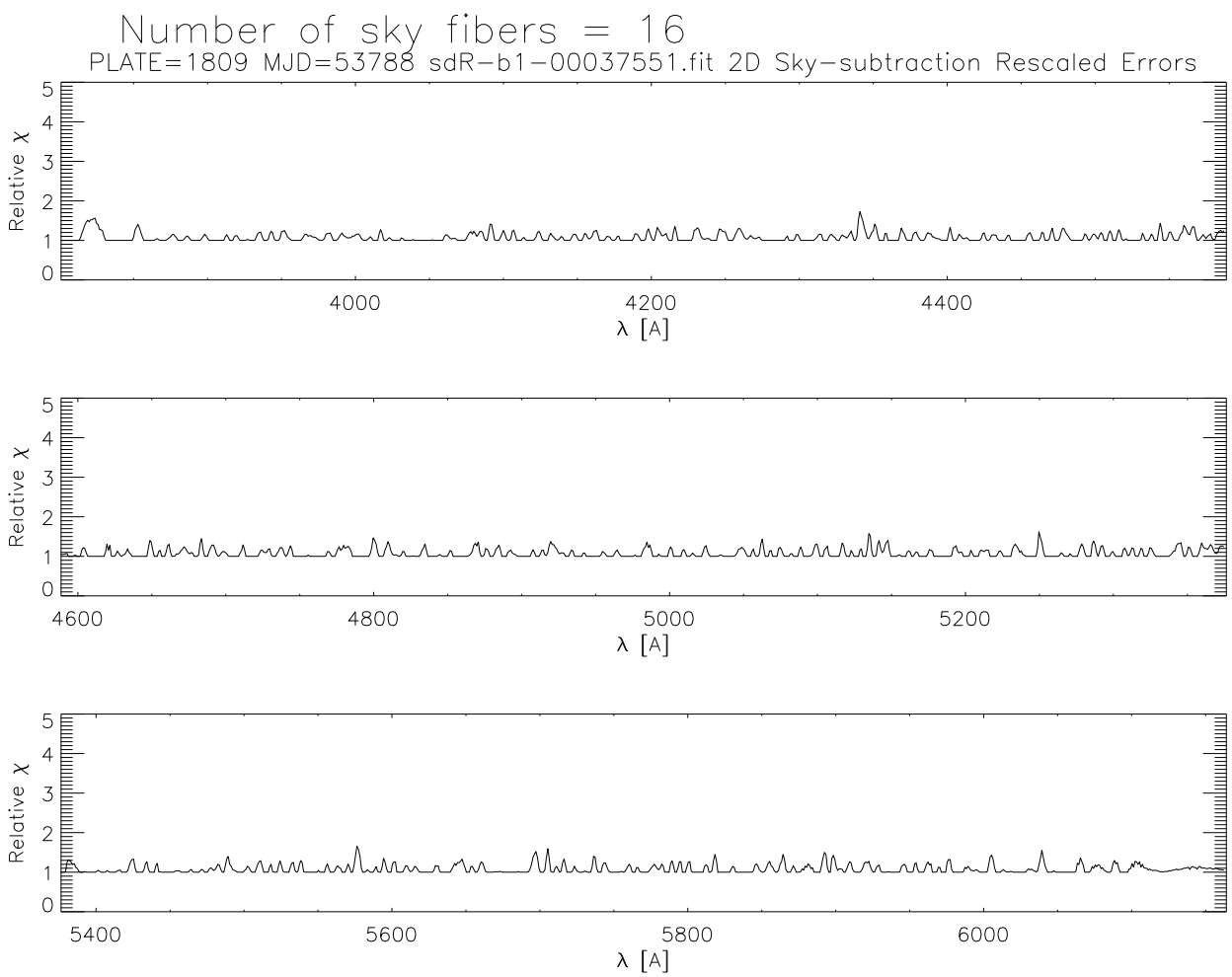

PLATE=1809 MJD=53788 sdR-b1-00037551.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

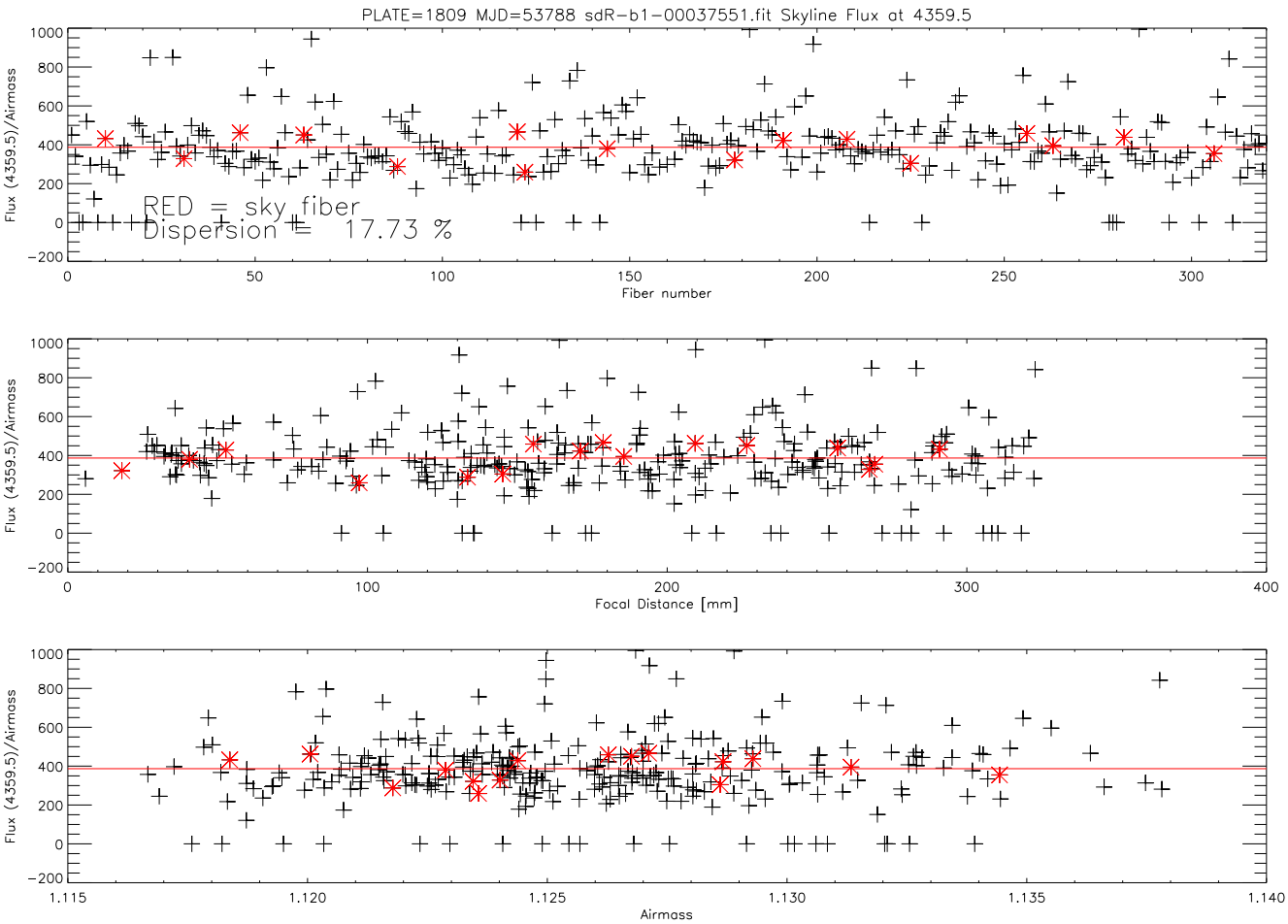

Number of sky fibers = 16
PLATE=1809 MJD=53788 sdR-b1-00037551.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

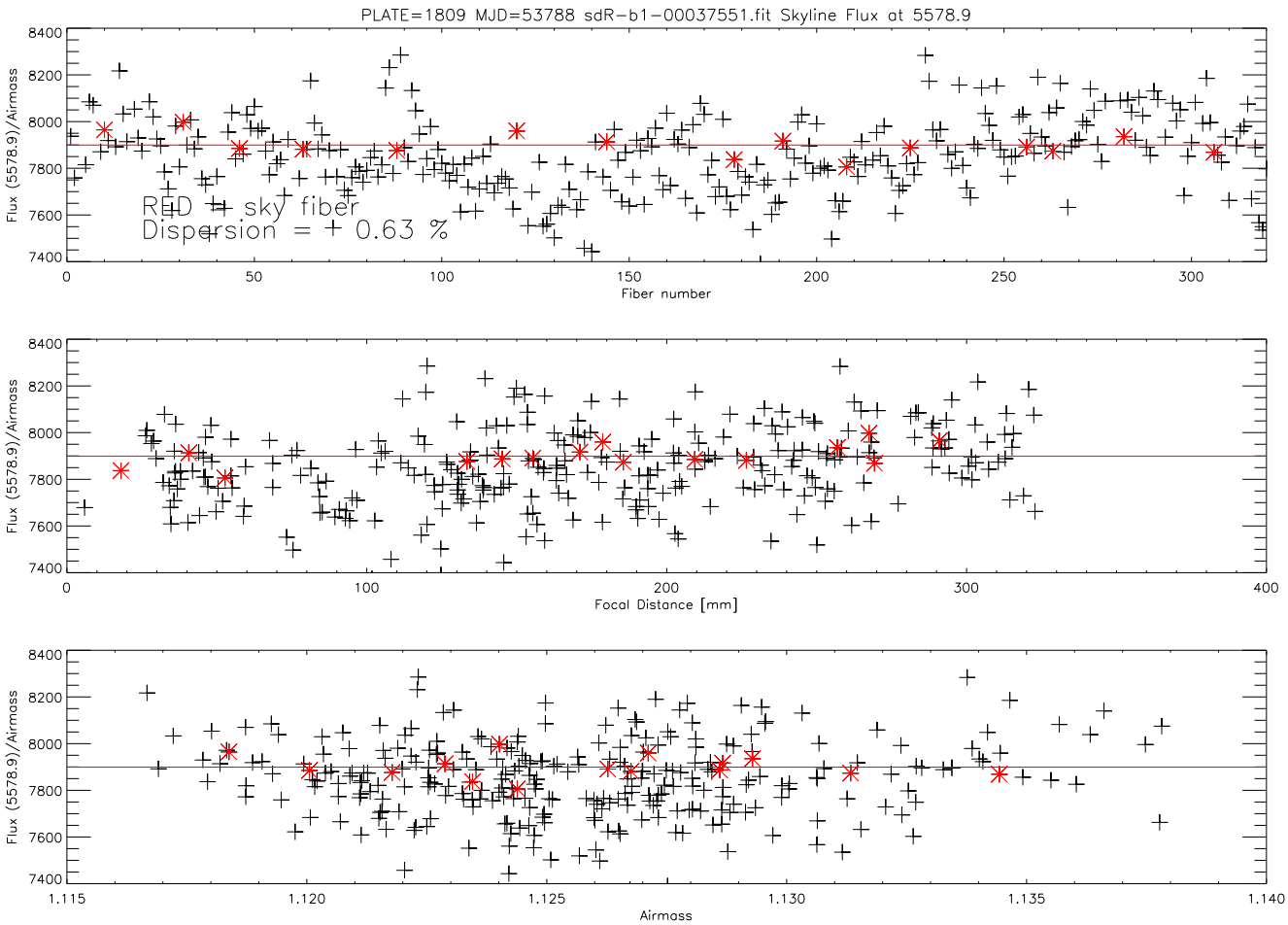

PLATE=1809 MJD=53788 sdR-b1-00037551.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

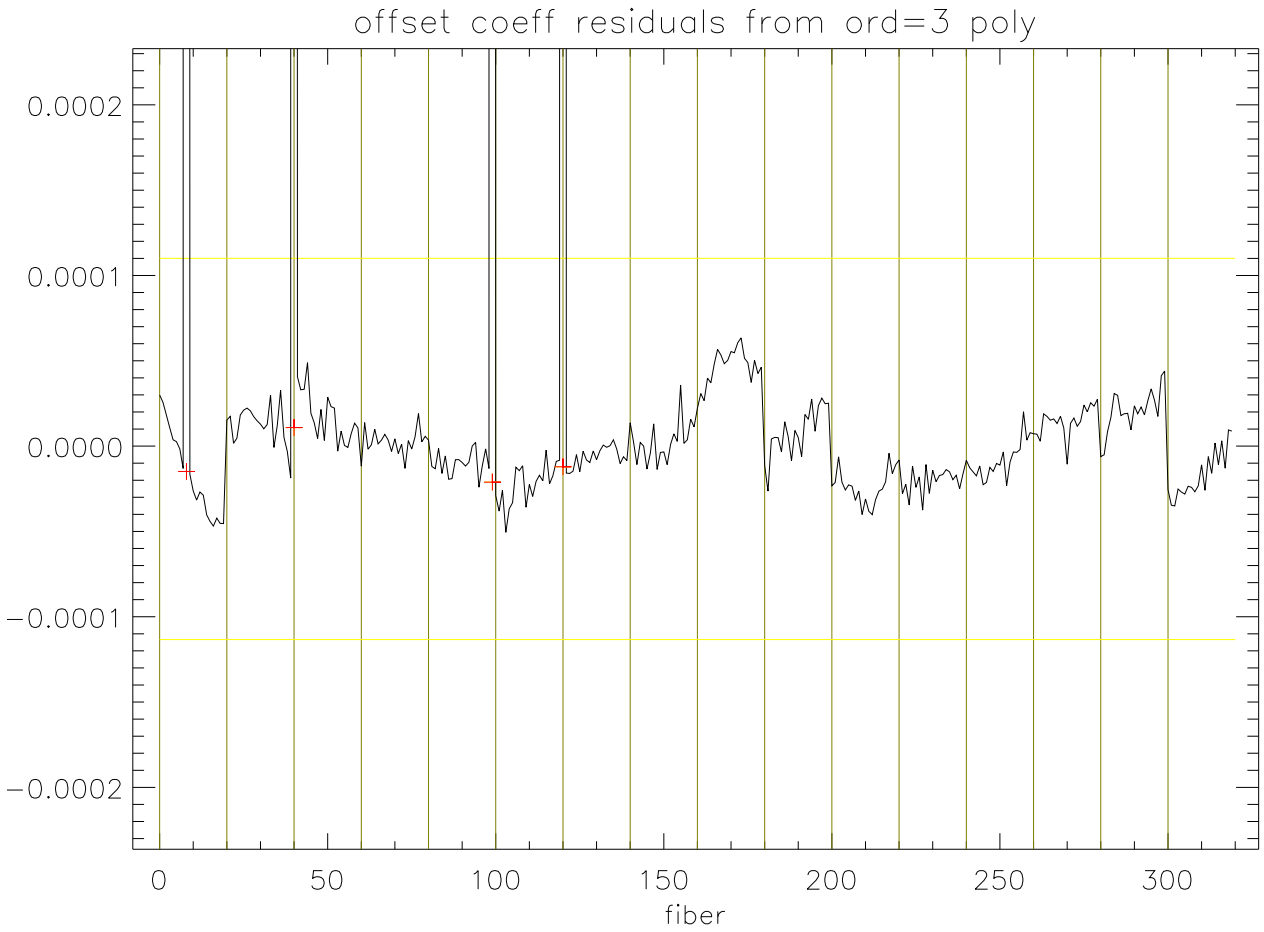

PLATE=1809 MJD=53788 sdR-b1-00037551.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

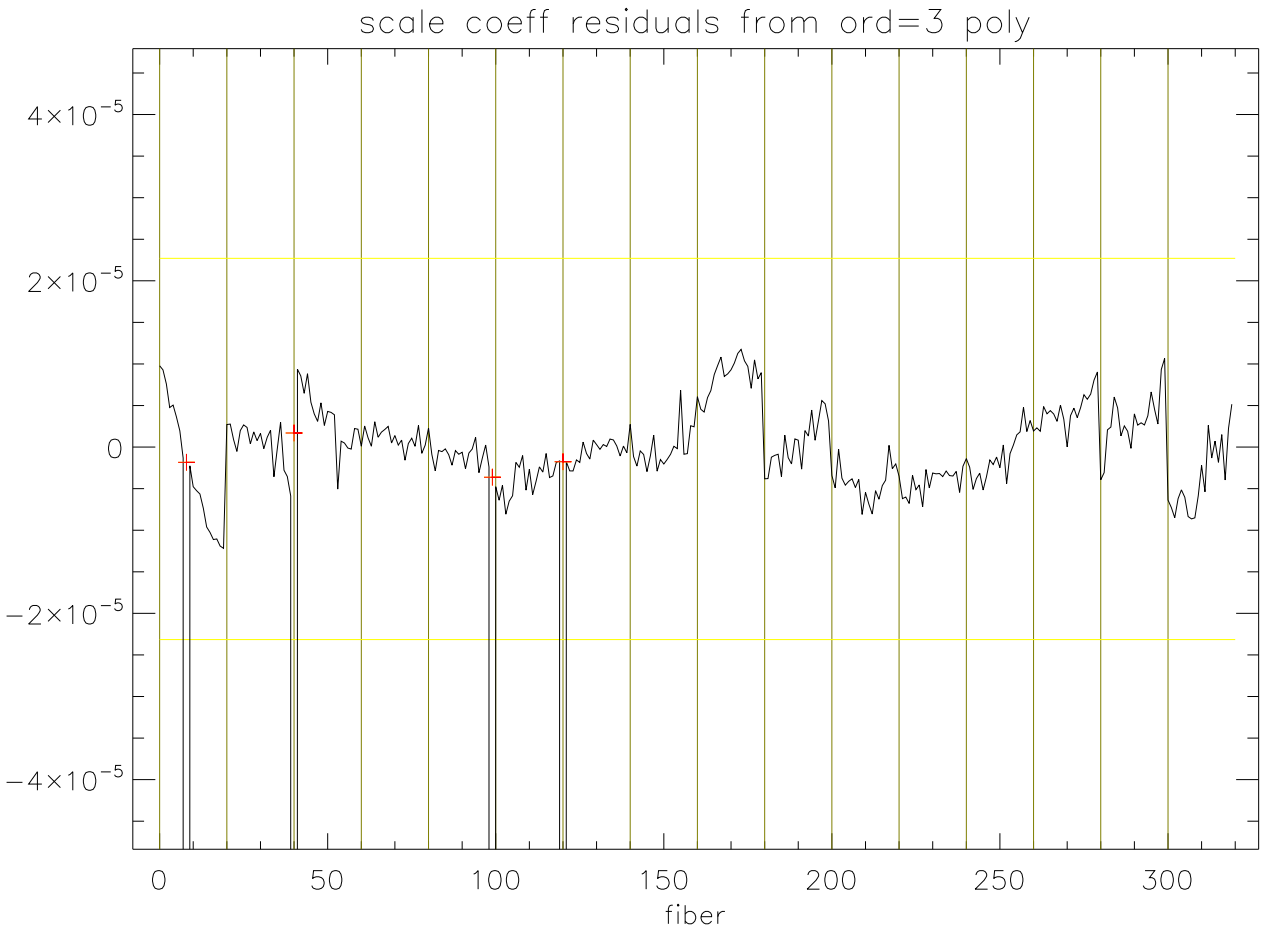

PLATE=1809 MJD=53788 sdR-b1-00037551.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
-200
5570
5575
5580
5585
5590
λ [A]

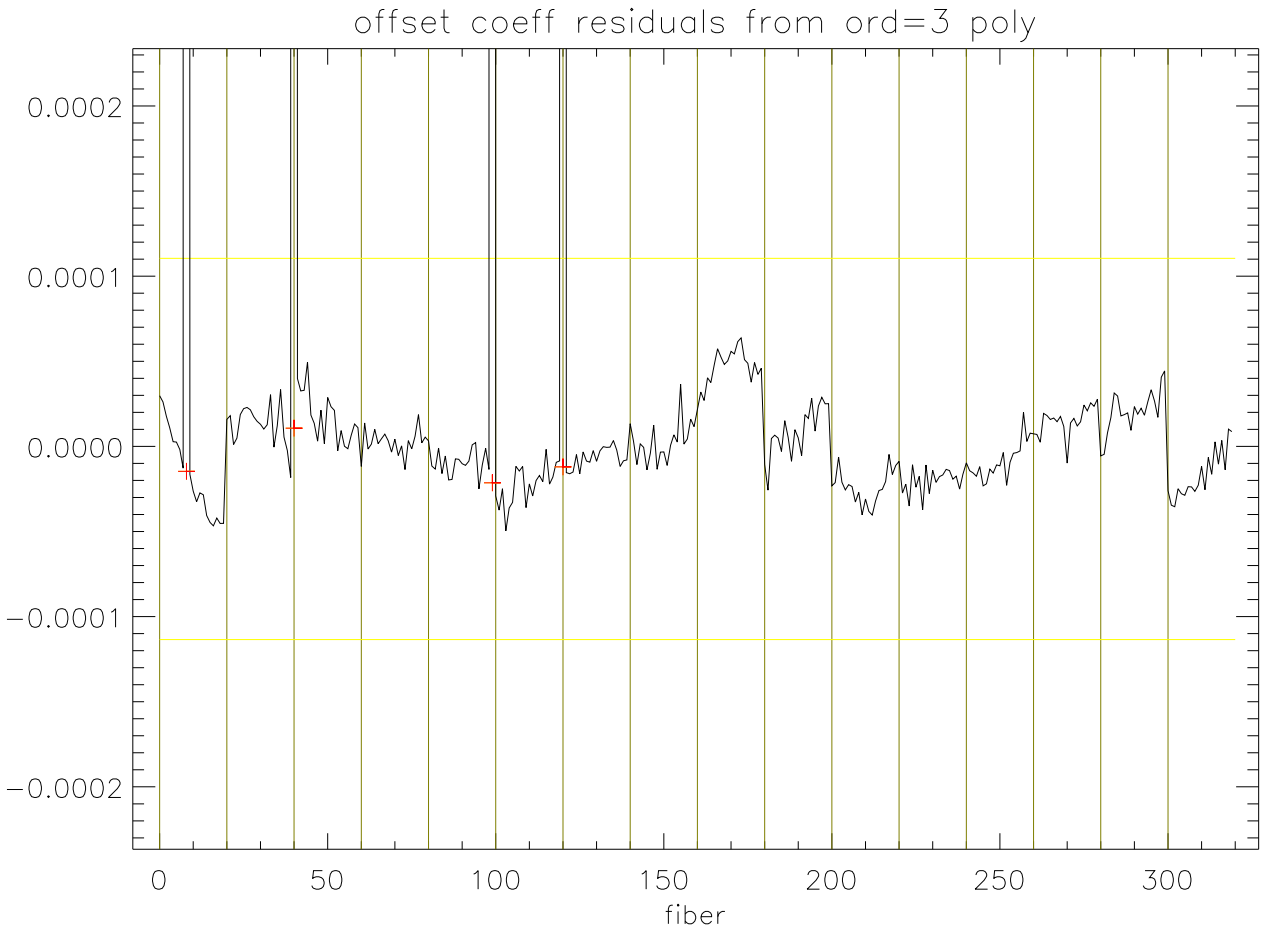

Number of sky fibers = 16
PLATE=1809 MJD=53788 sdR-b1-00037551.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

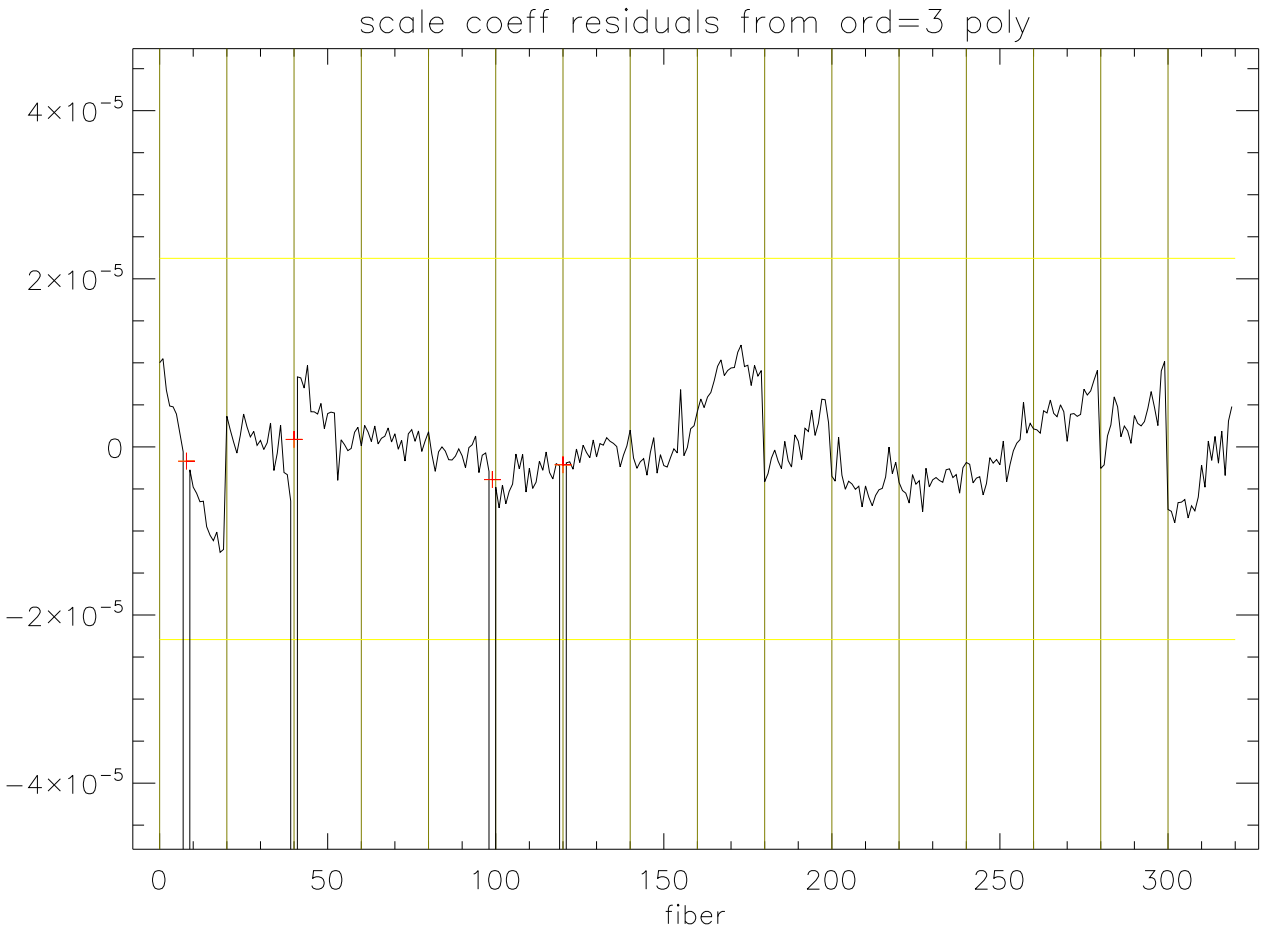

PLATE=1809 MJD=53788 sdR-b1-00037551.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 17.73 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

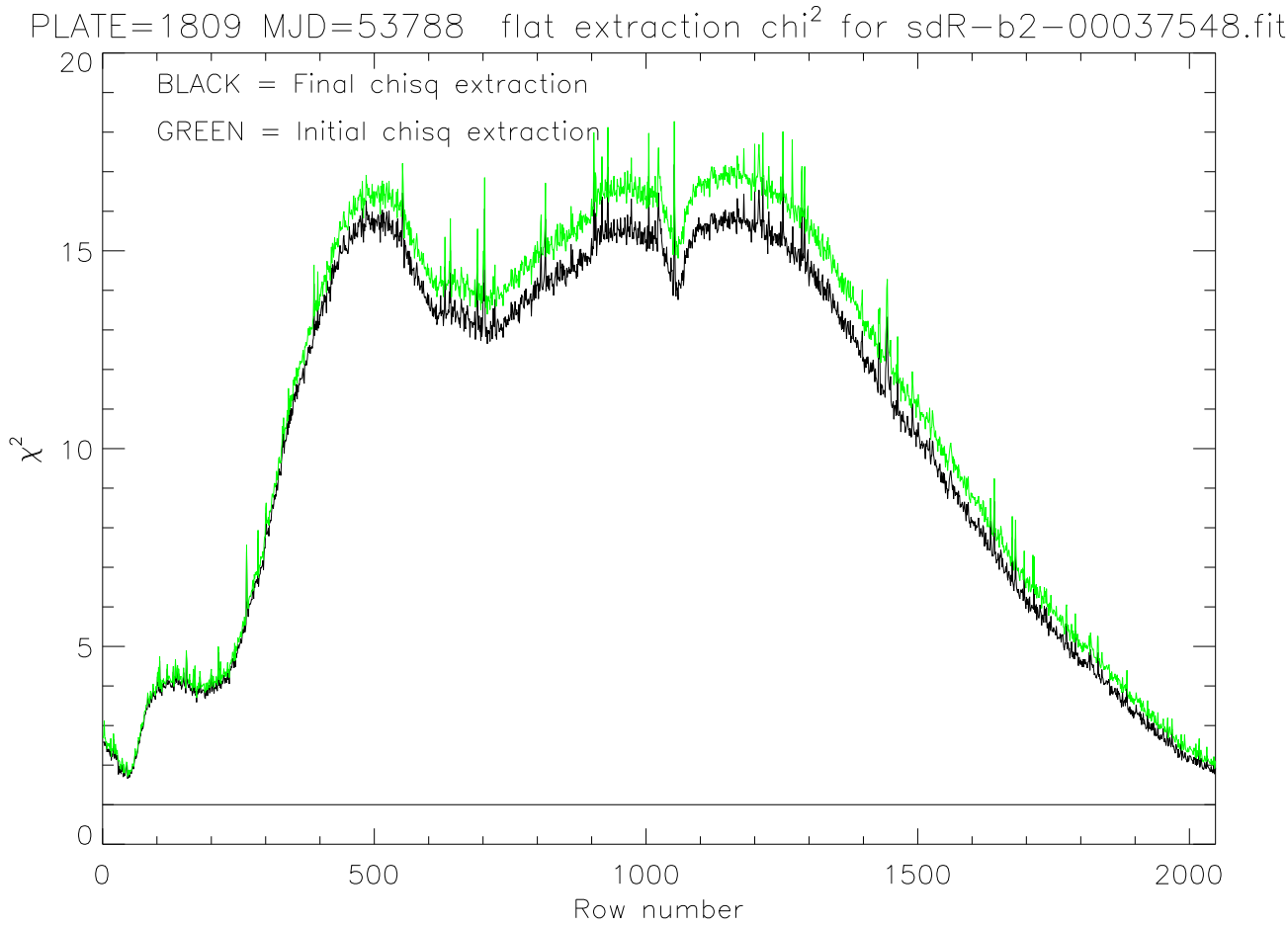

PLATE=1809 MJD=53788 sdR-b1-00037551.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED sky fiber
Dispersion = + 0.63 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

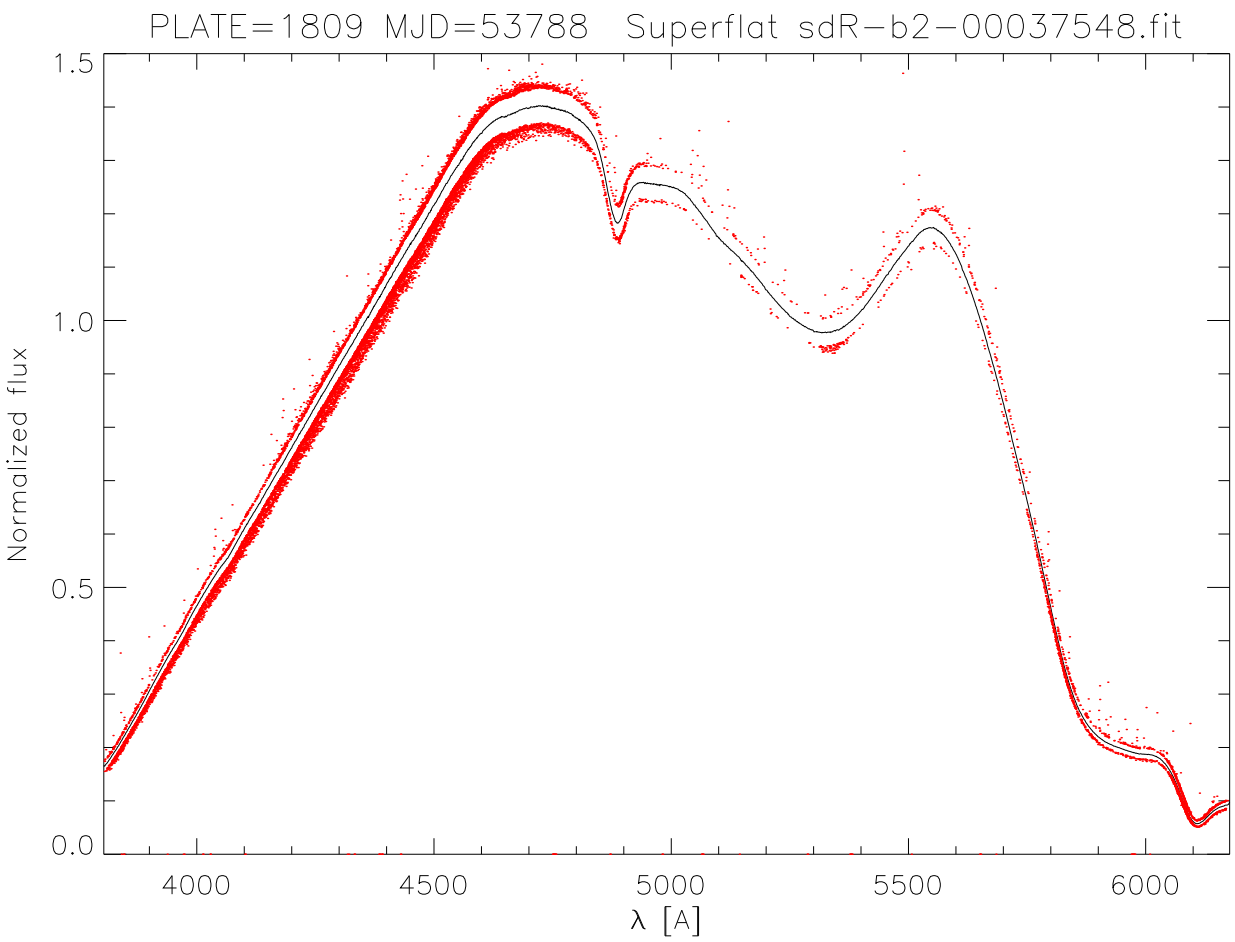

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

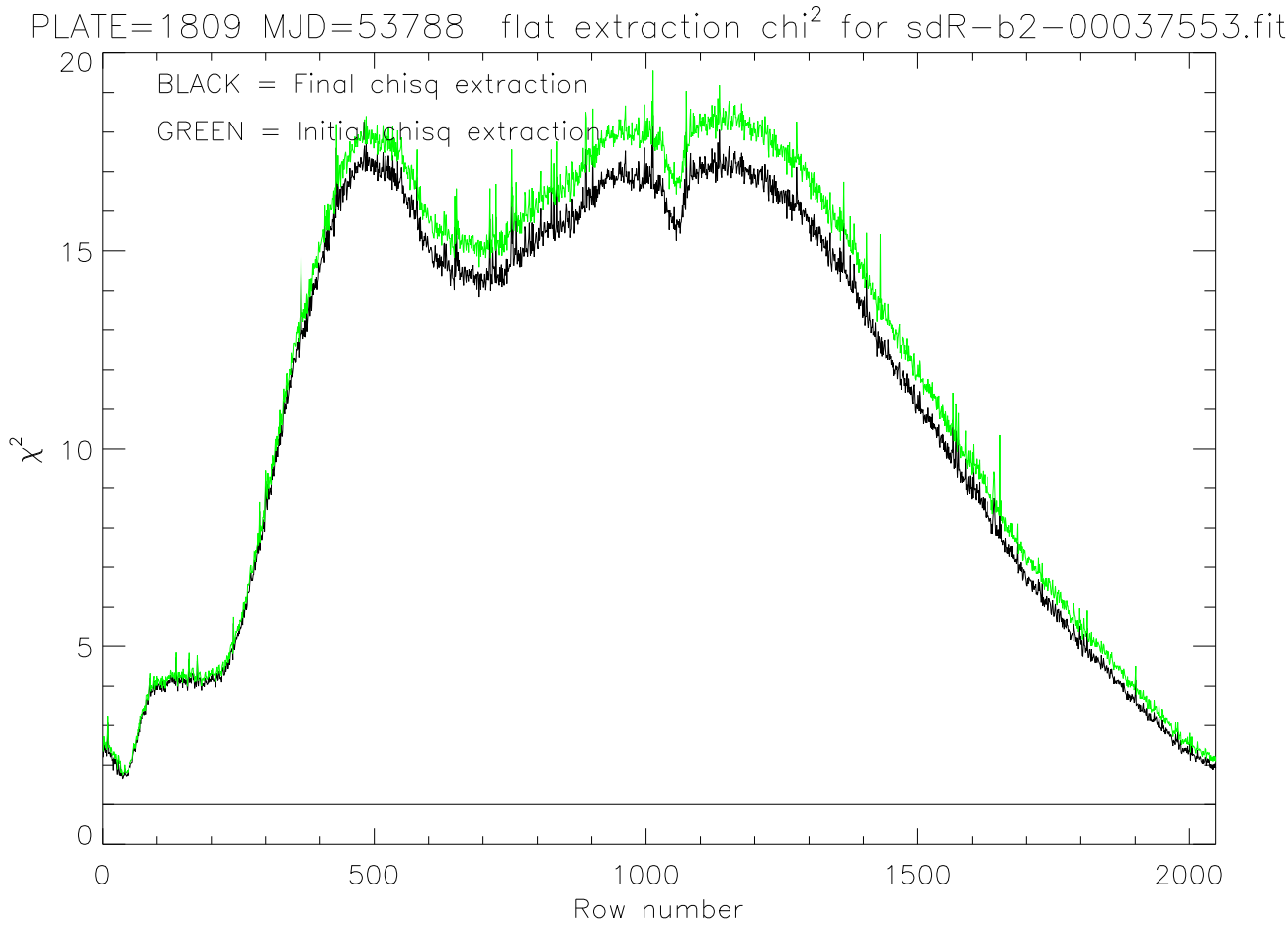

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

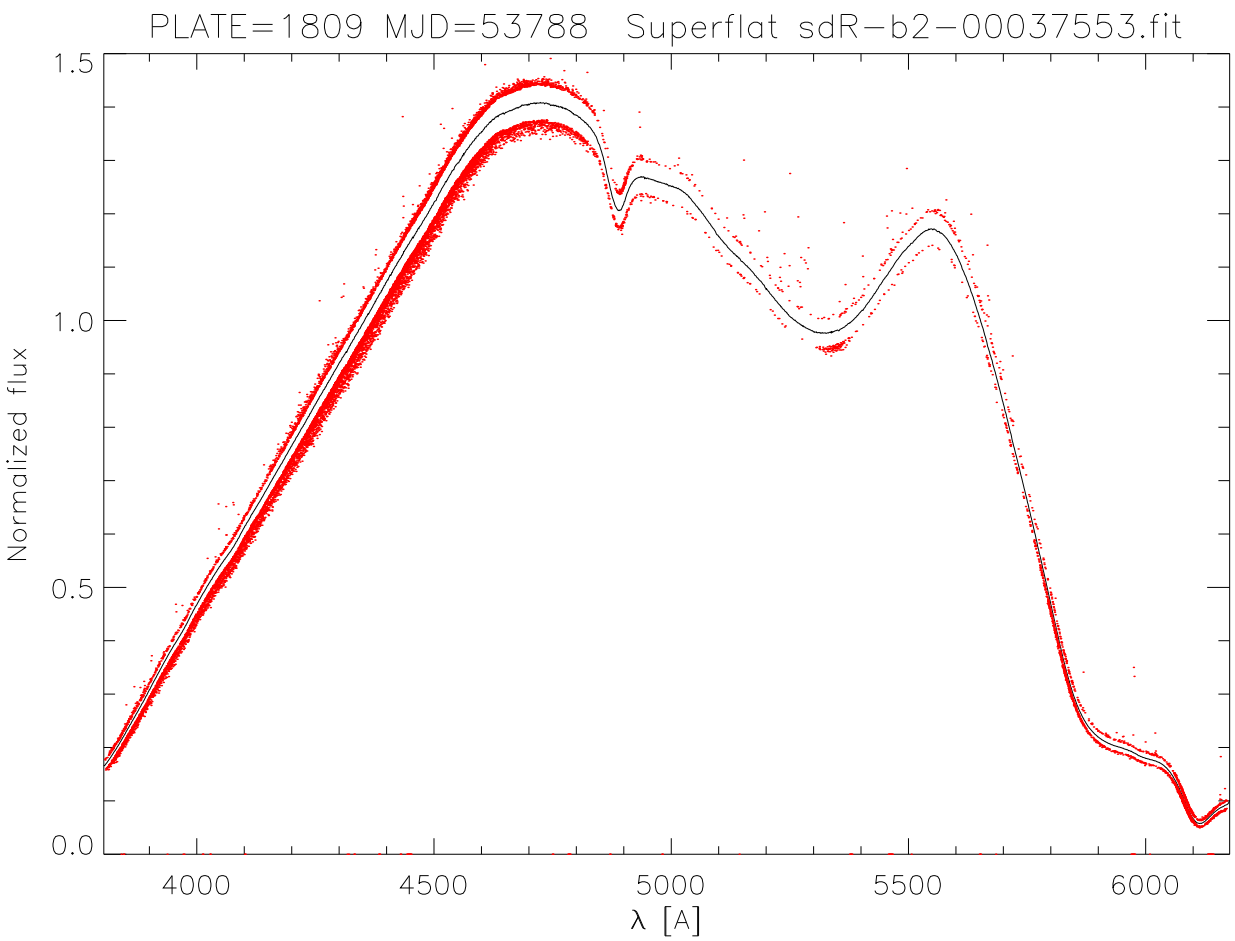

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

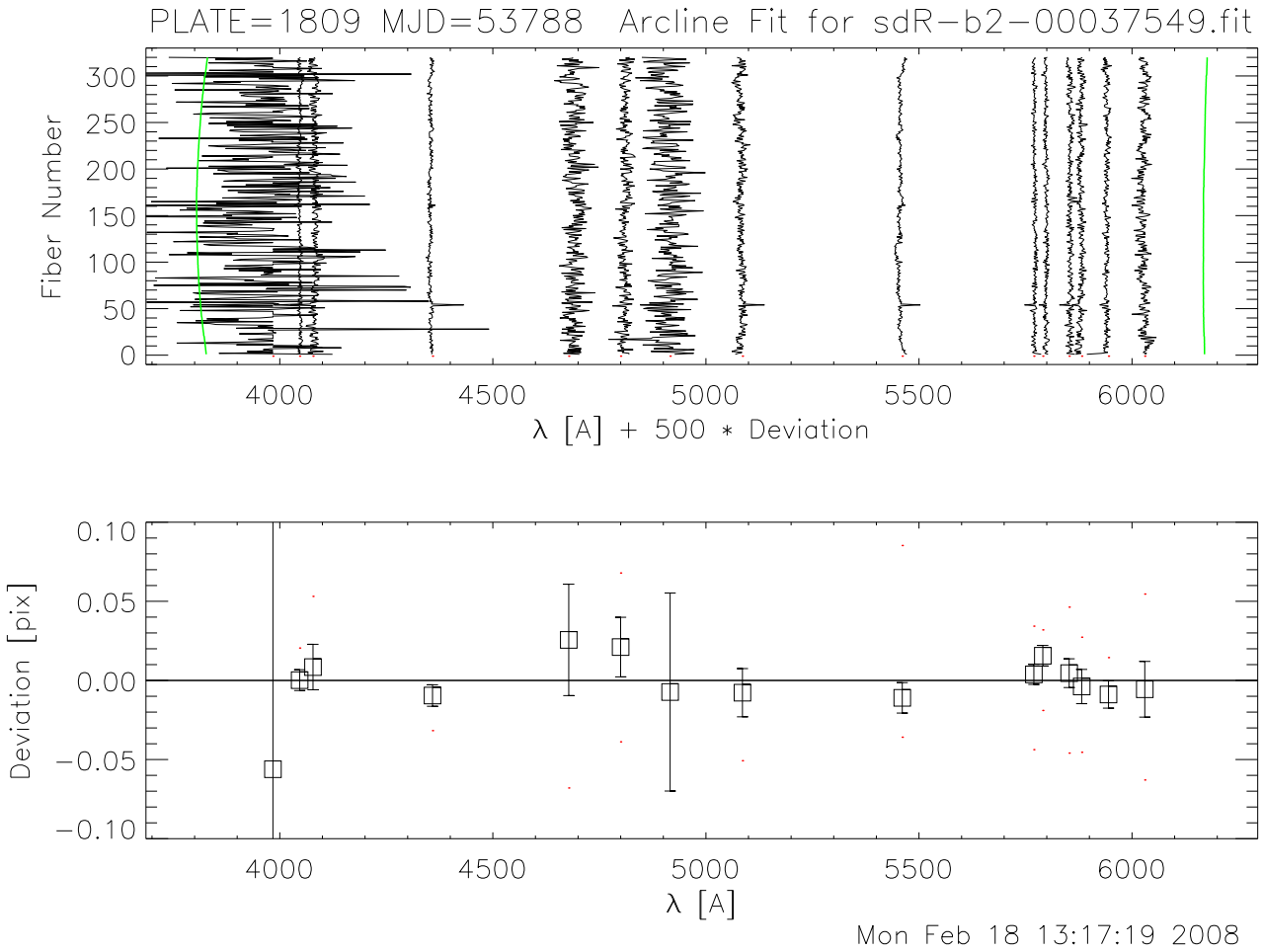

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

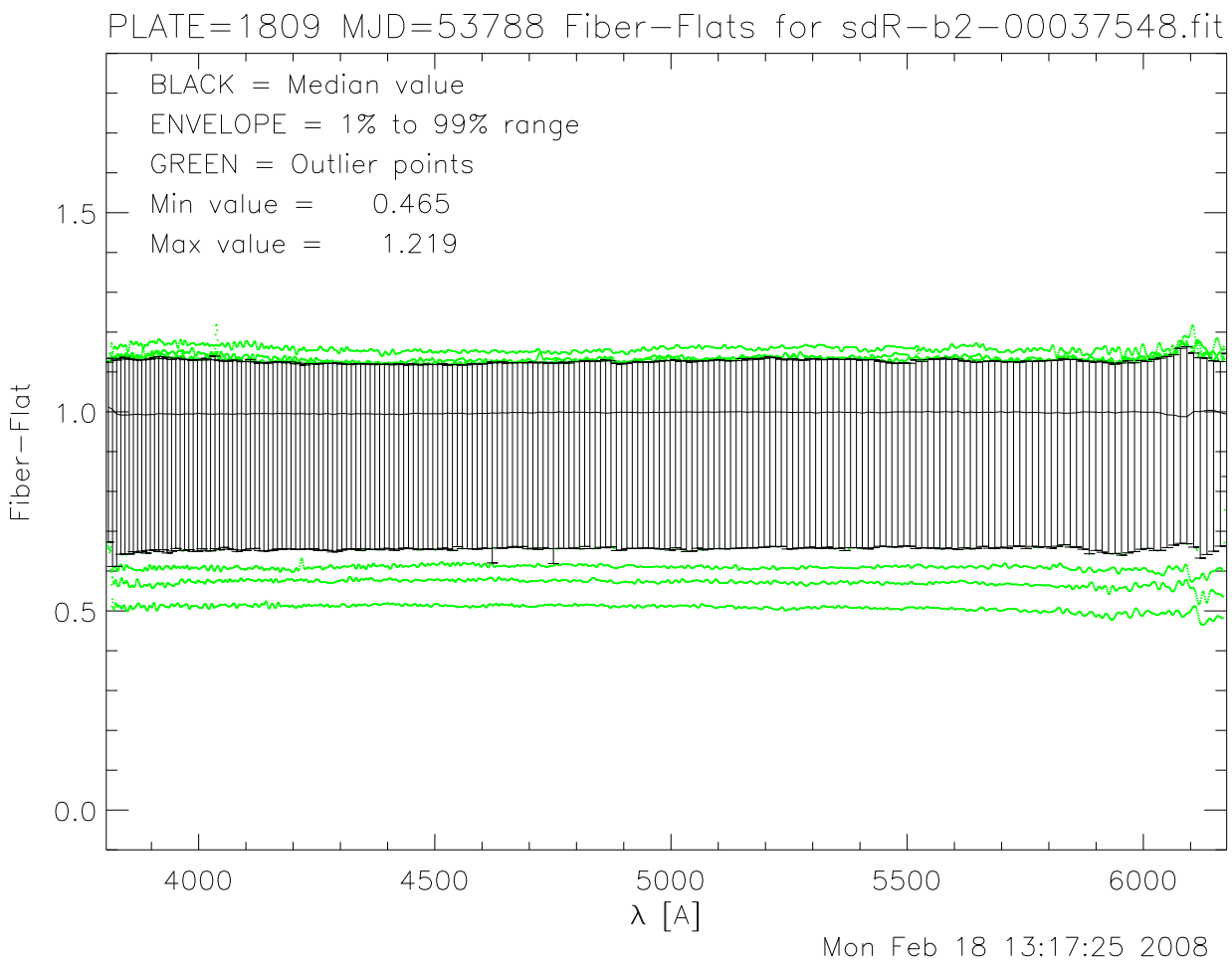

PLATE=1809 MJD=53788 flat extraction chi^2 for sdR−b2−00037548.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

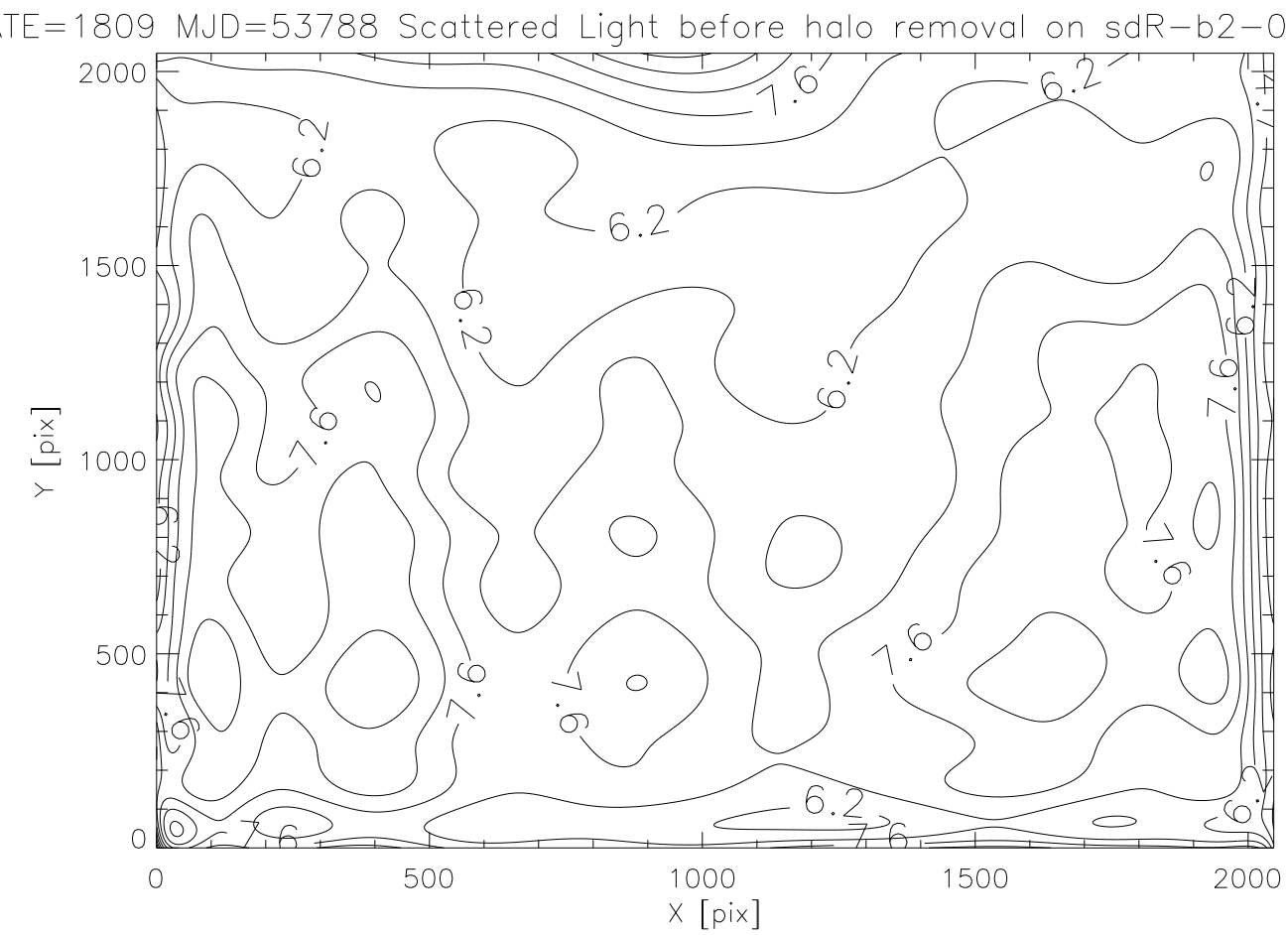

PLATE=1809 MJD=53788 Superflat sdR-b2-00037548.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

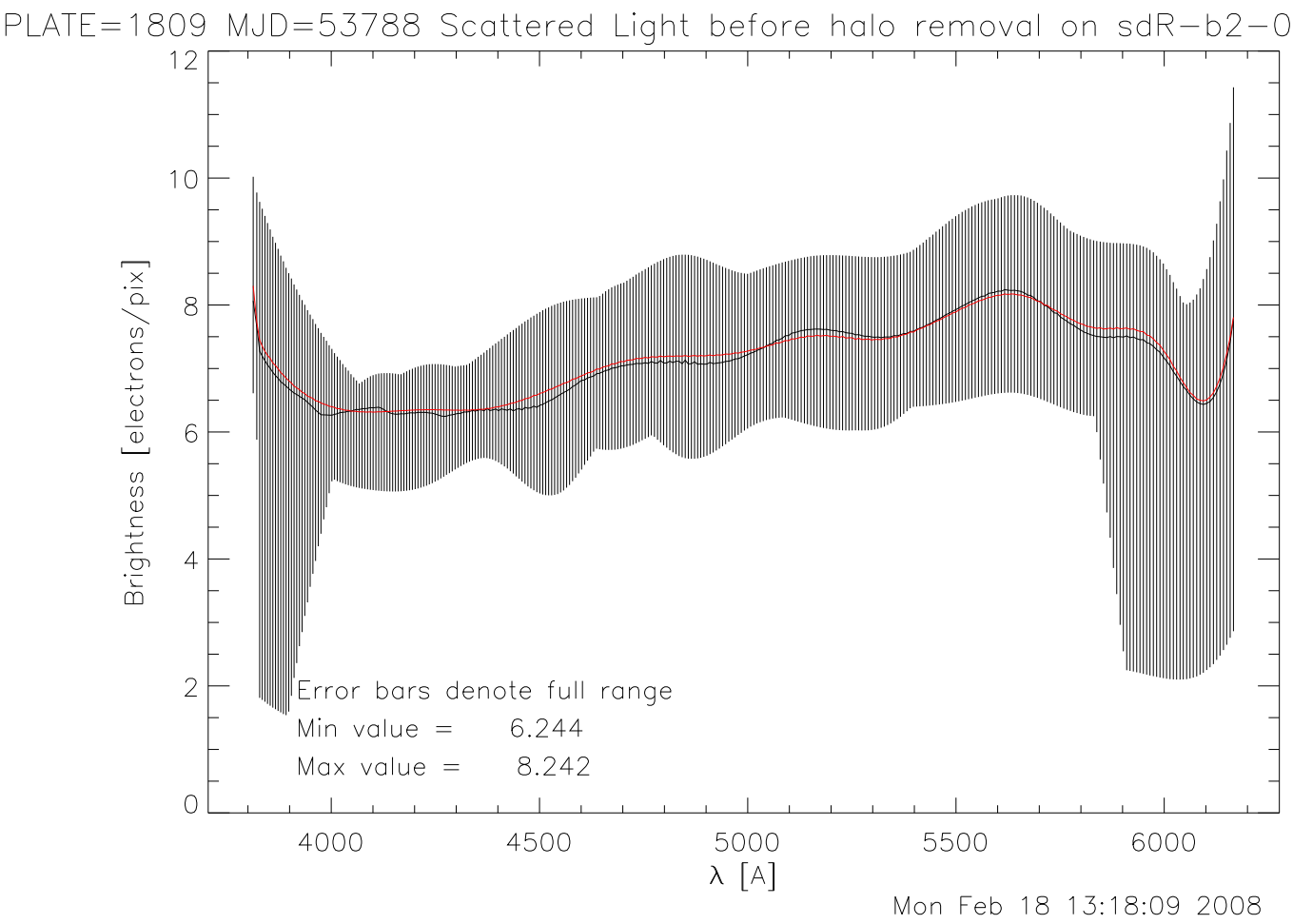

PLATE=1809 MJD=53788 flat extraction chi^2 for sdR−b2−00037553.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

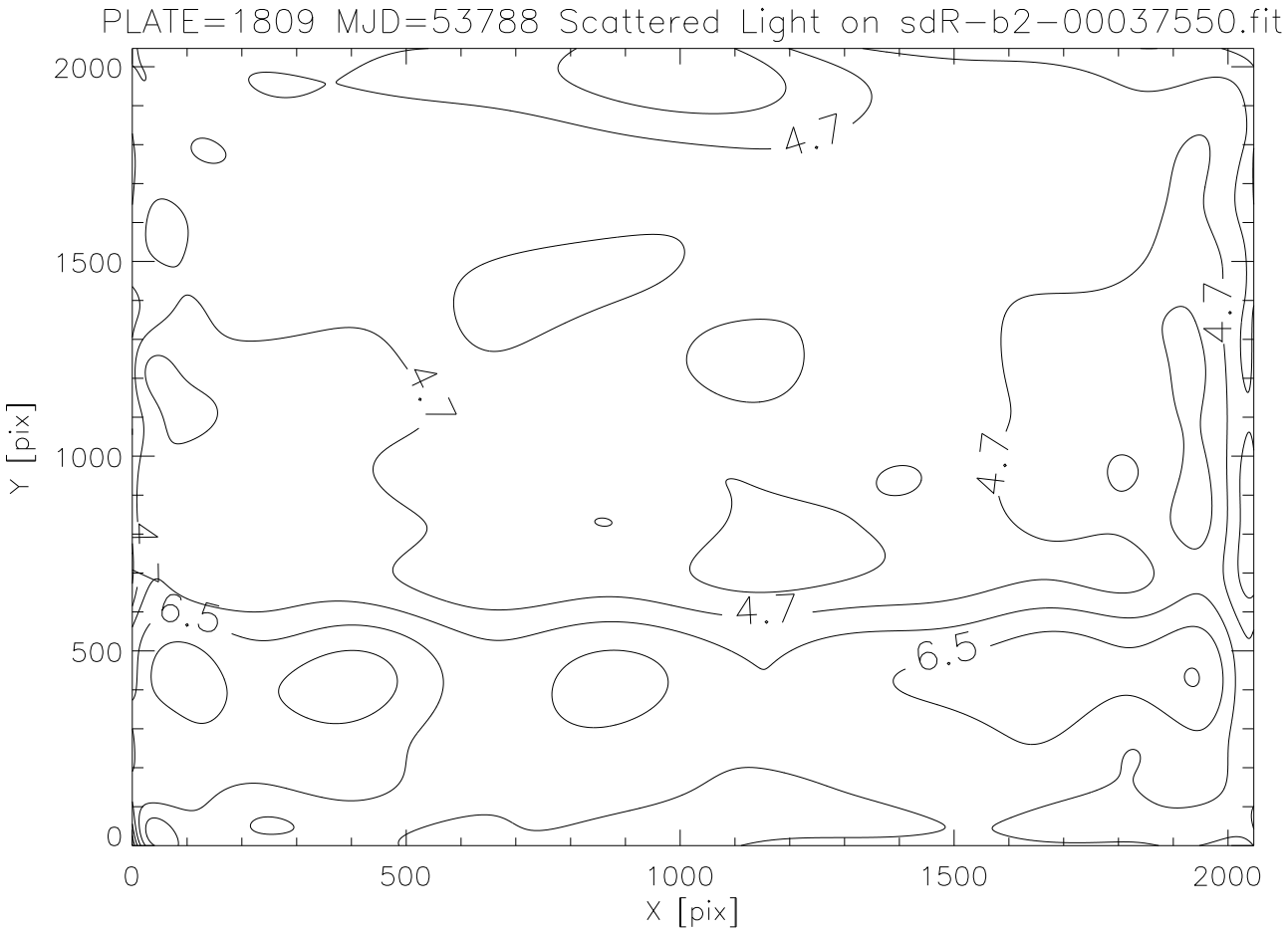

PLATE=1809 MJD=53788 Superflat sdR-b2-00037553.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

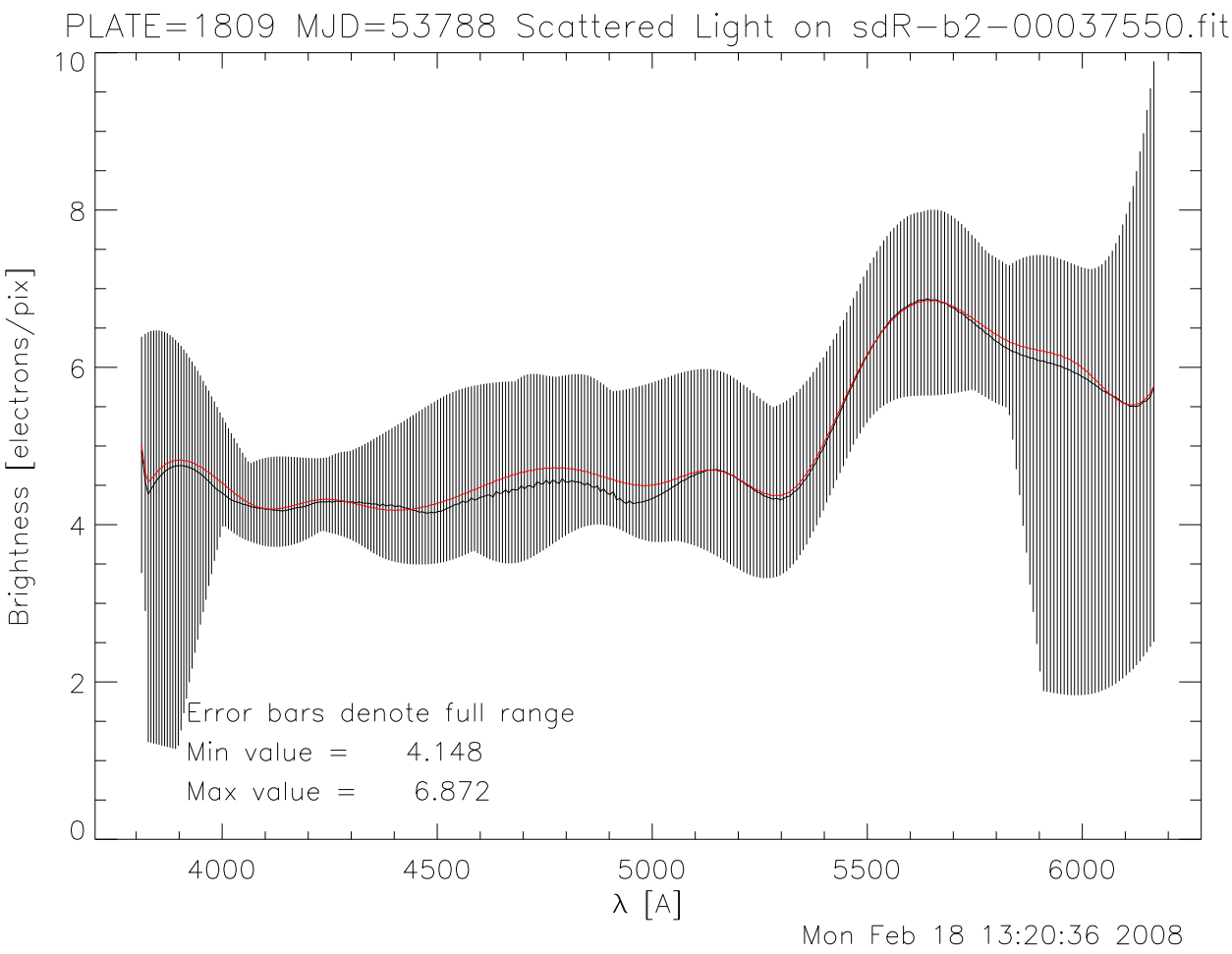

PLATE=1809 MJD=53788 Arcline Fit for sdR-b2-00037549.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 18 13:17:19 2008

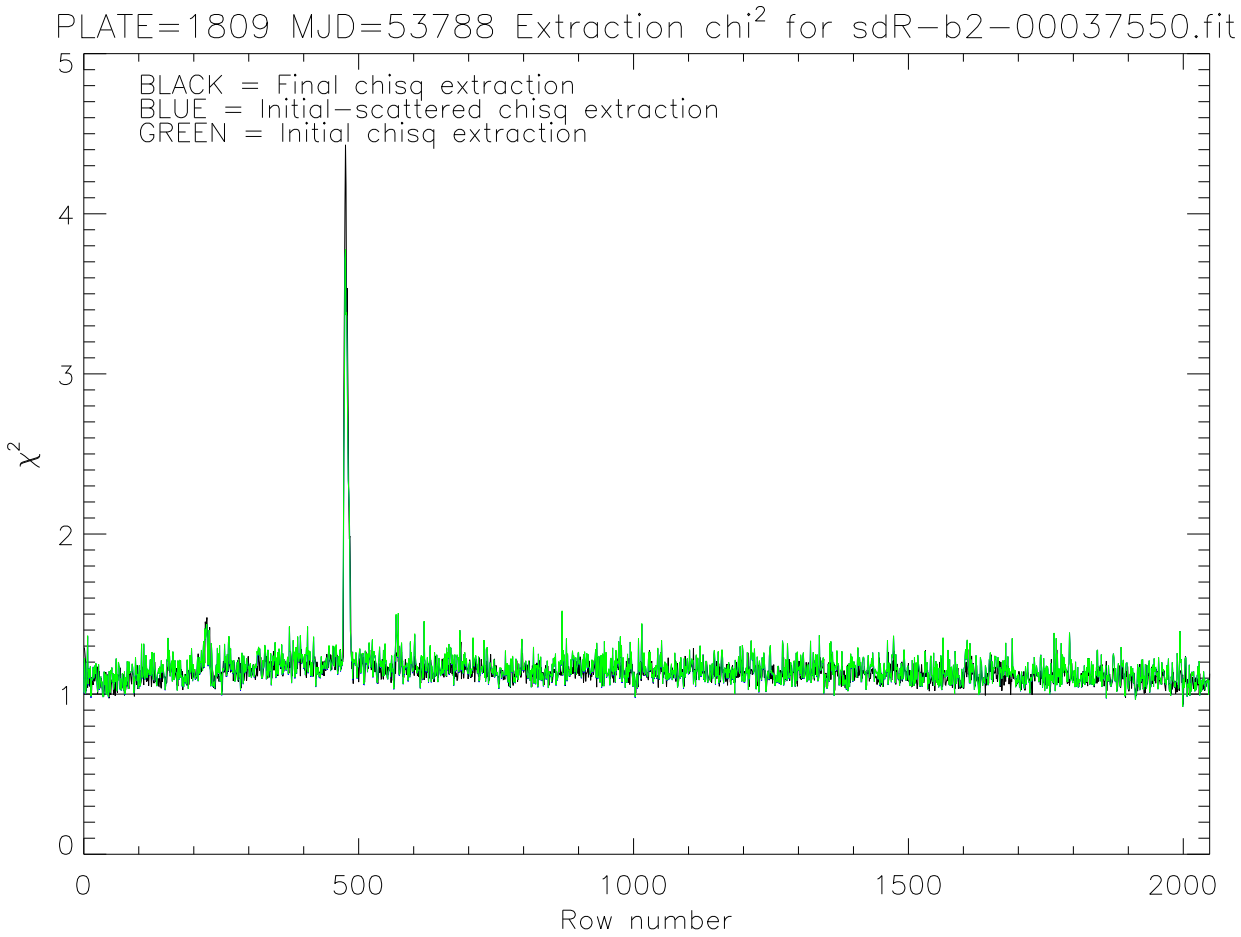

PLATE=1809 MJD=53788 Fiber-Flats for sdR-b2-00037548.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.465
Max value = 1.219
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 18 13:17:25 2008

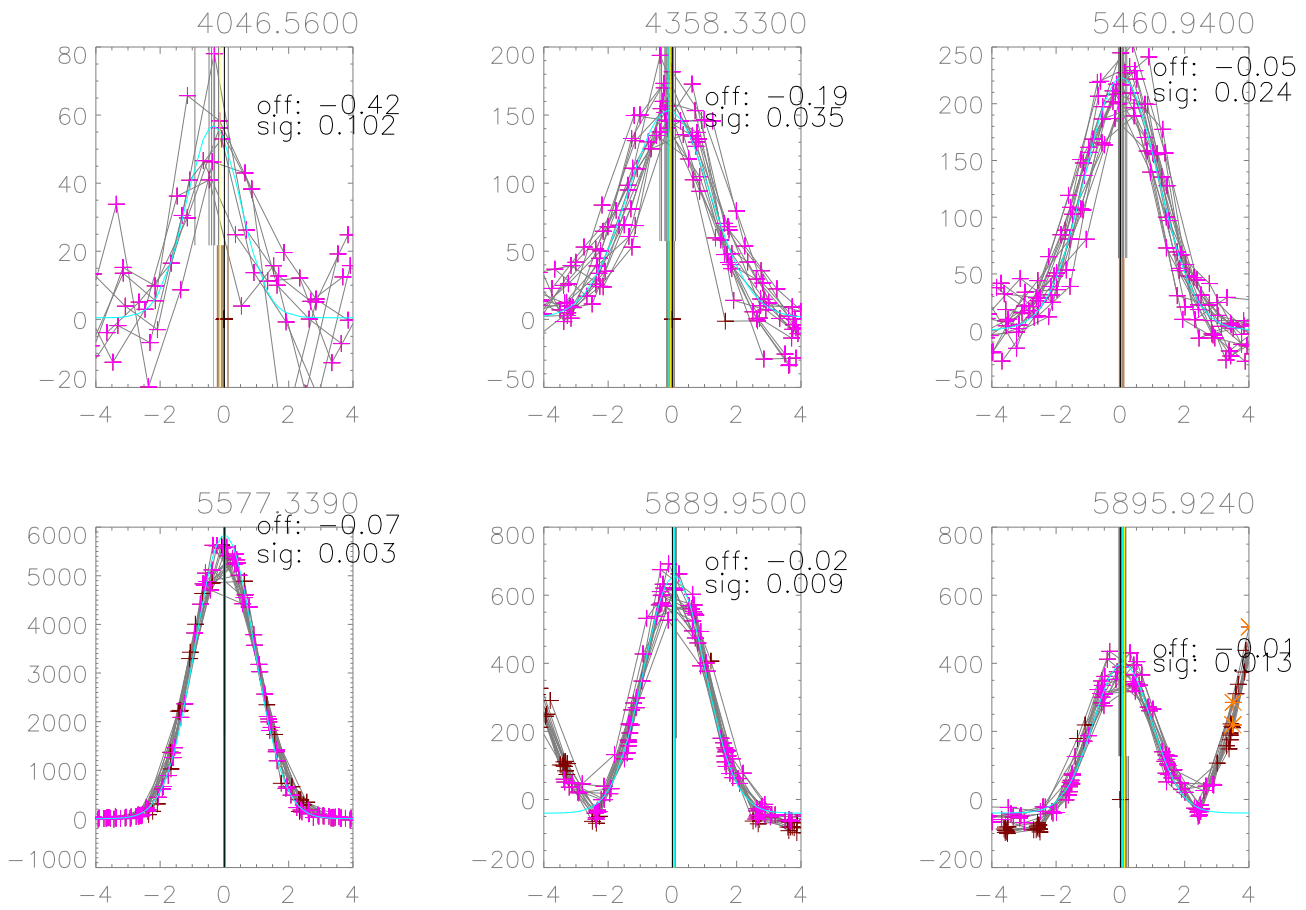

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-b2-00037550.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.2
7.6
0

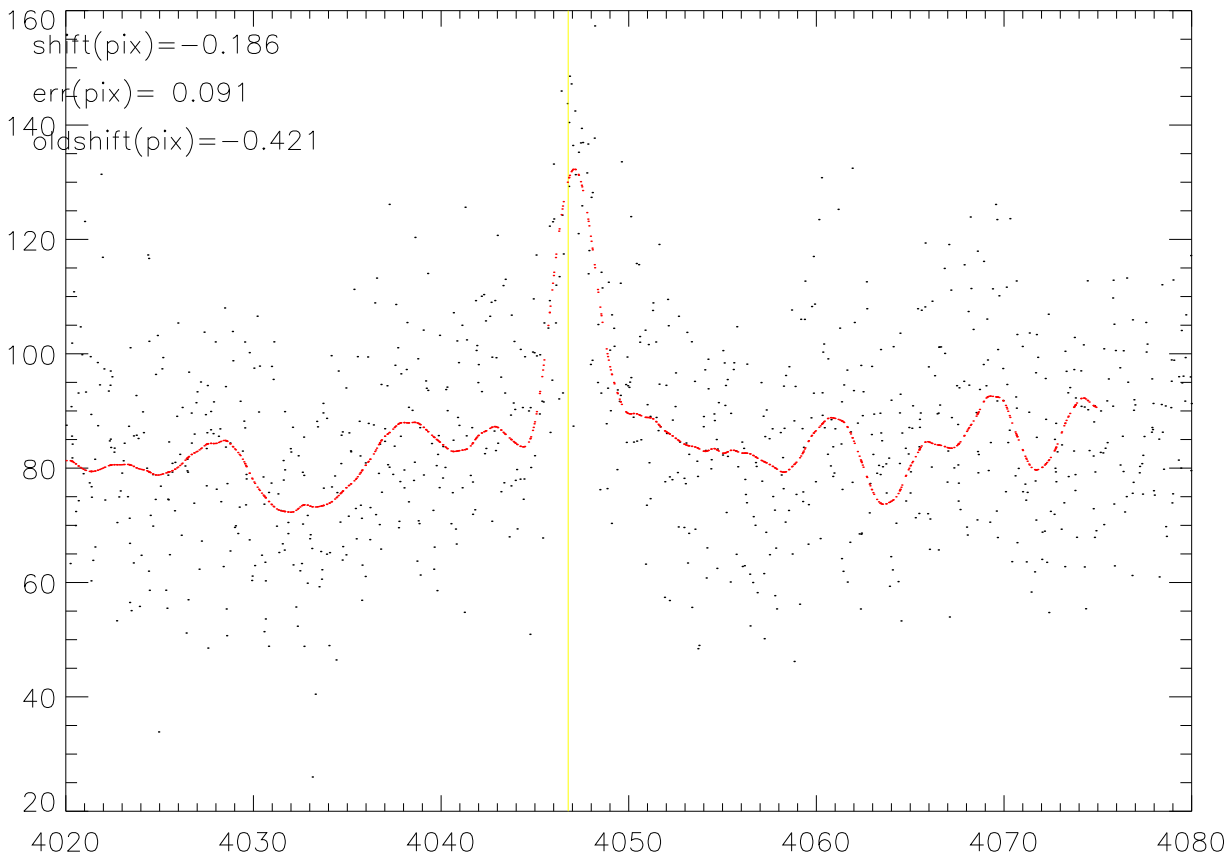

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-b2-00037550.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.244
Max value = 8.242
Mon Feb 18 13:18:09 2008

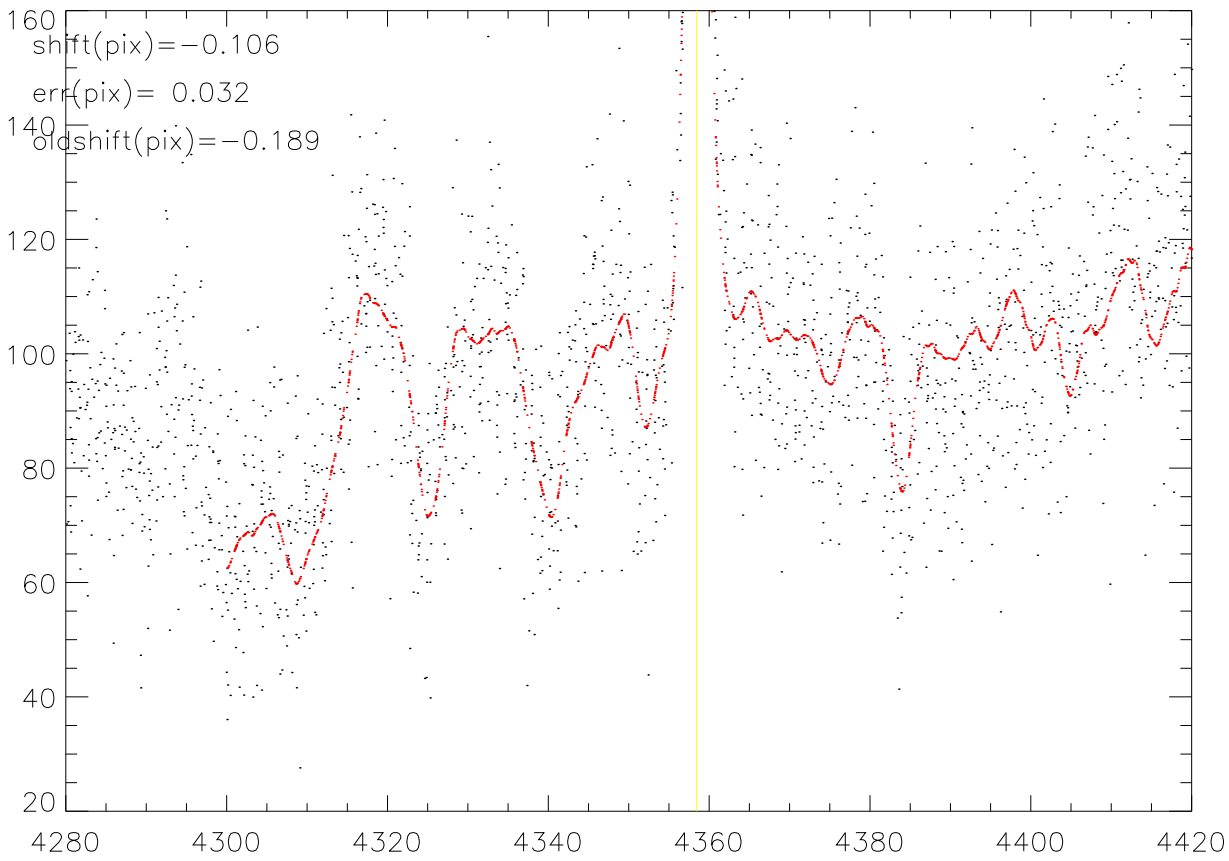

PLATE=1809 MJD=53788 Scattered Light on sdR-b2-00037550.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.7
4.7
4.7
4.7
6.5
6.5

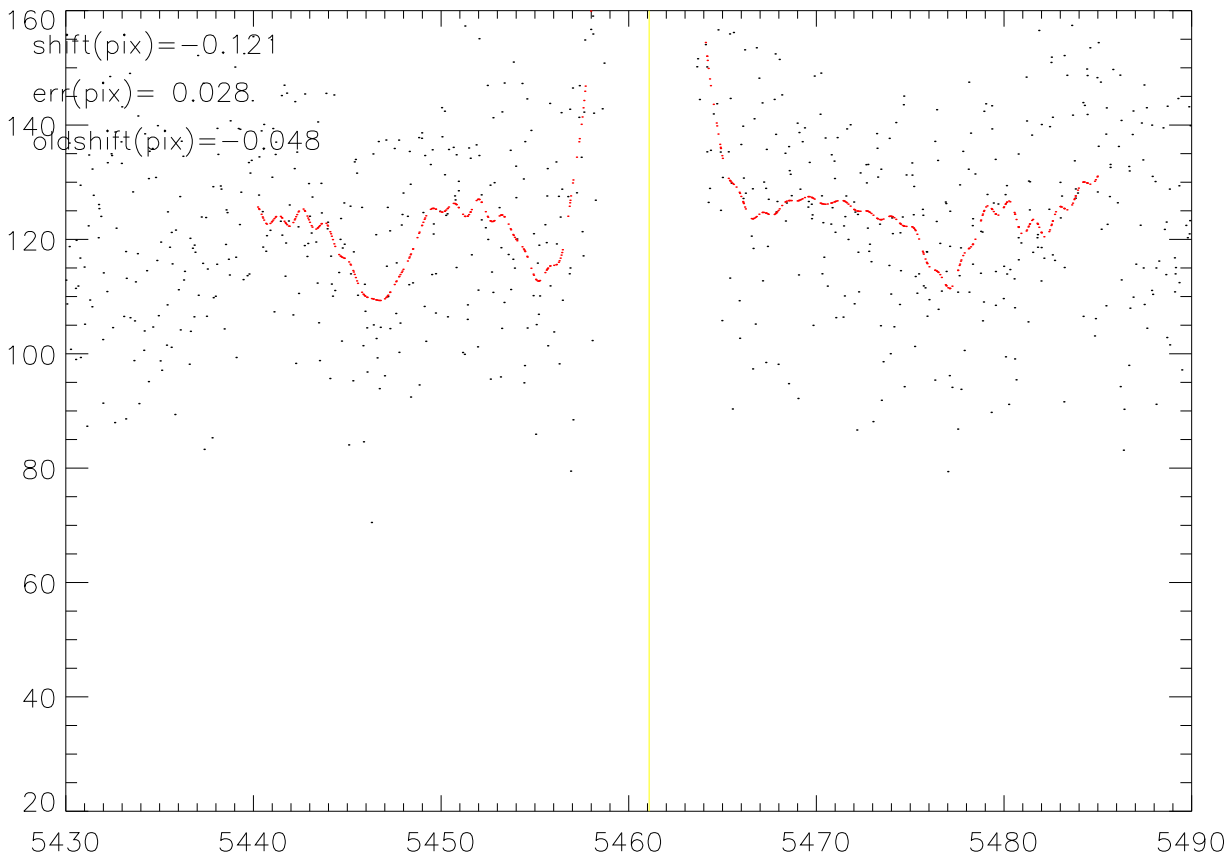

PLATE=1809 MJD=53788 Scattered Light on sdR-b2-00037550.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.148
Max value = 6.872
Mon Feb 18 13:20:36 2008

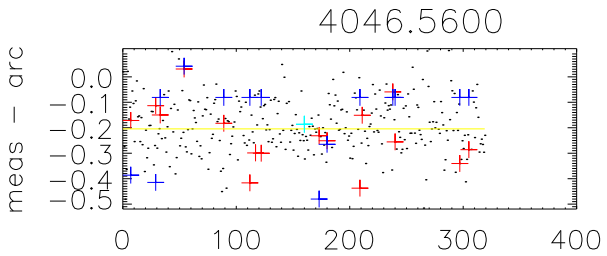

PLATE=1809 MJD=53788 Extraction chi^2 for sdR−b2−00037550.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

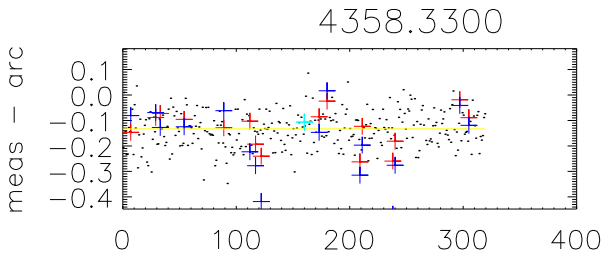

4046.5600
off: −0.42
sig: 0.102
4358.3300
off: −0.19
sig: 0.035
5460.9400
off: −0.05
sig: 0.024
5577.3390
off: −0.07
sig: 0.003
5889.9500
off: −0.02
sig: 0.009
5895.9240
off: −0.01
sig: 0.013

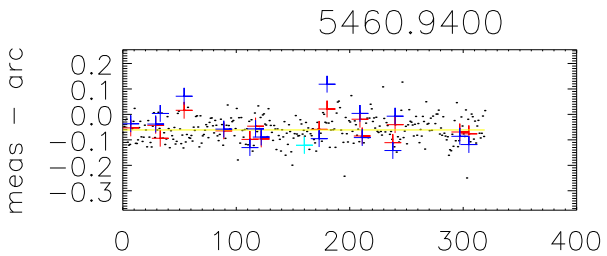

shift(pix)=−0.186
err(pix)= 0.091
oldshift(pix)=−0.421
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

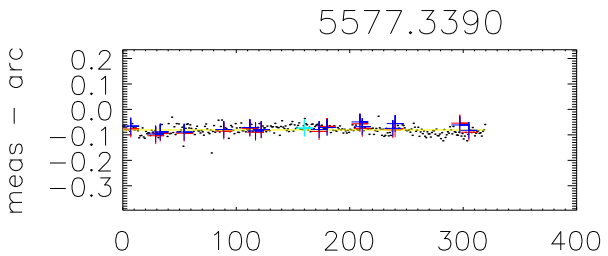

shift(pix)=−0.106
err(pix)= 0.032
oldshift(pix)=−0.189
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

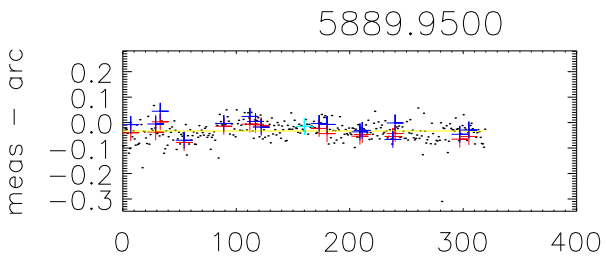

shift(pix)=−0.121
err(pix)= 0.028
oldshift(pix)=−0.048
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

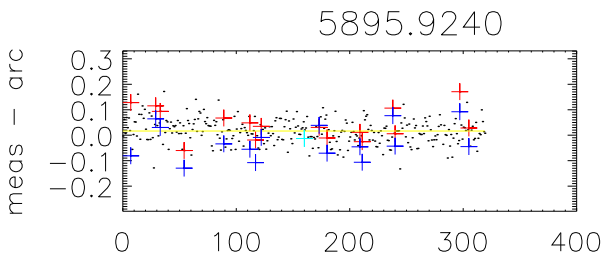

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

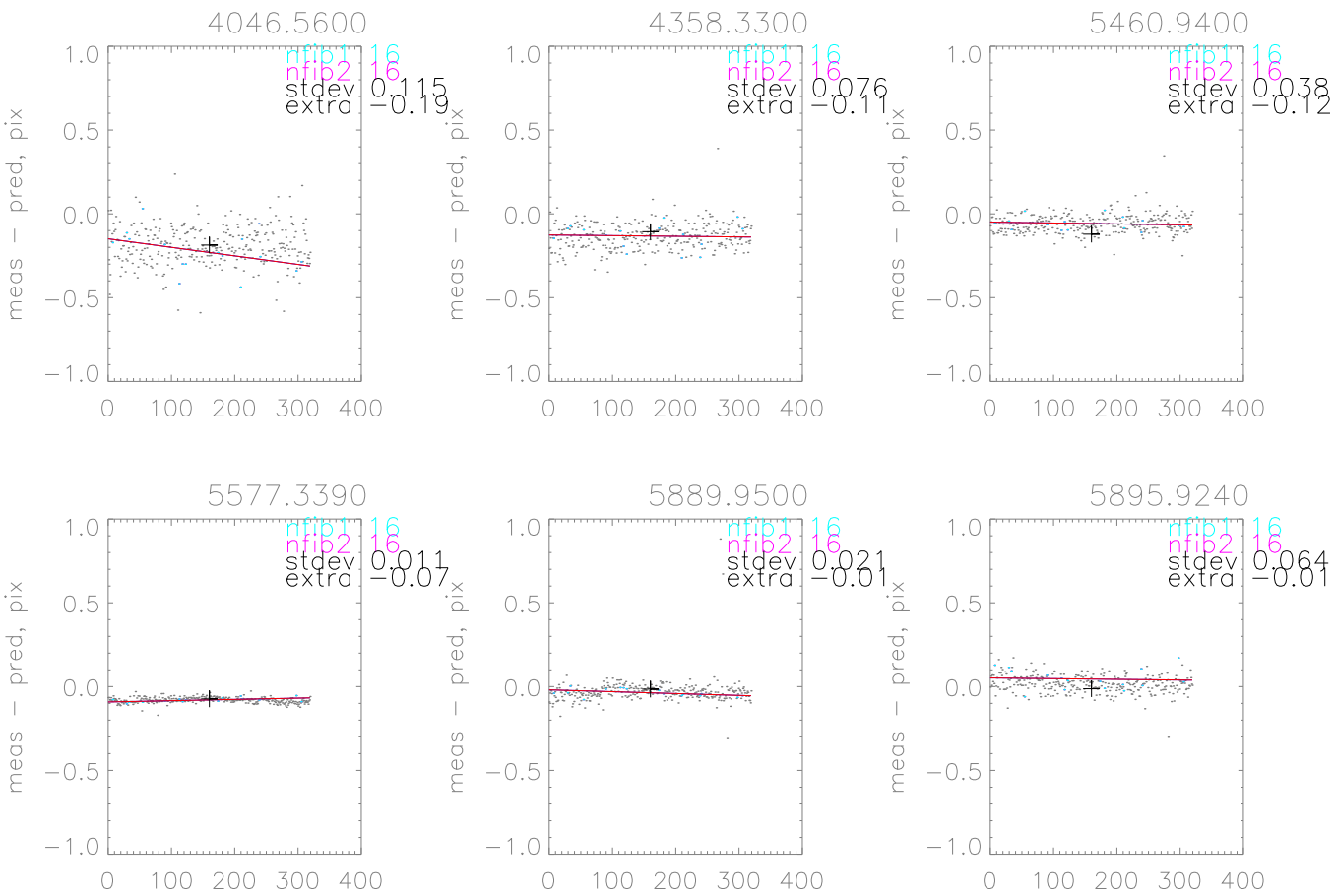

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

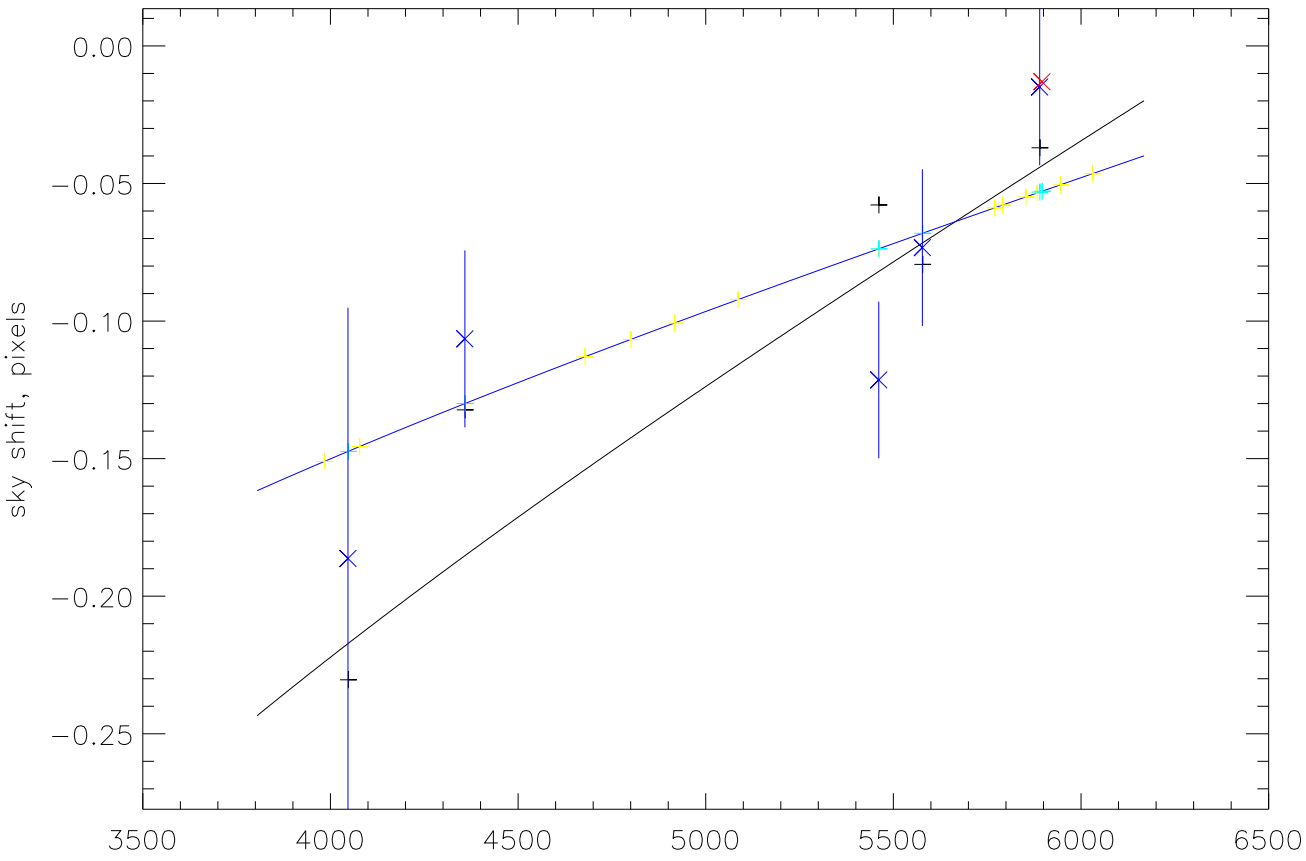

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

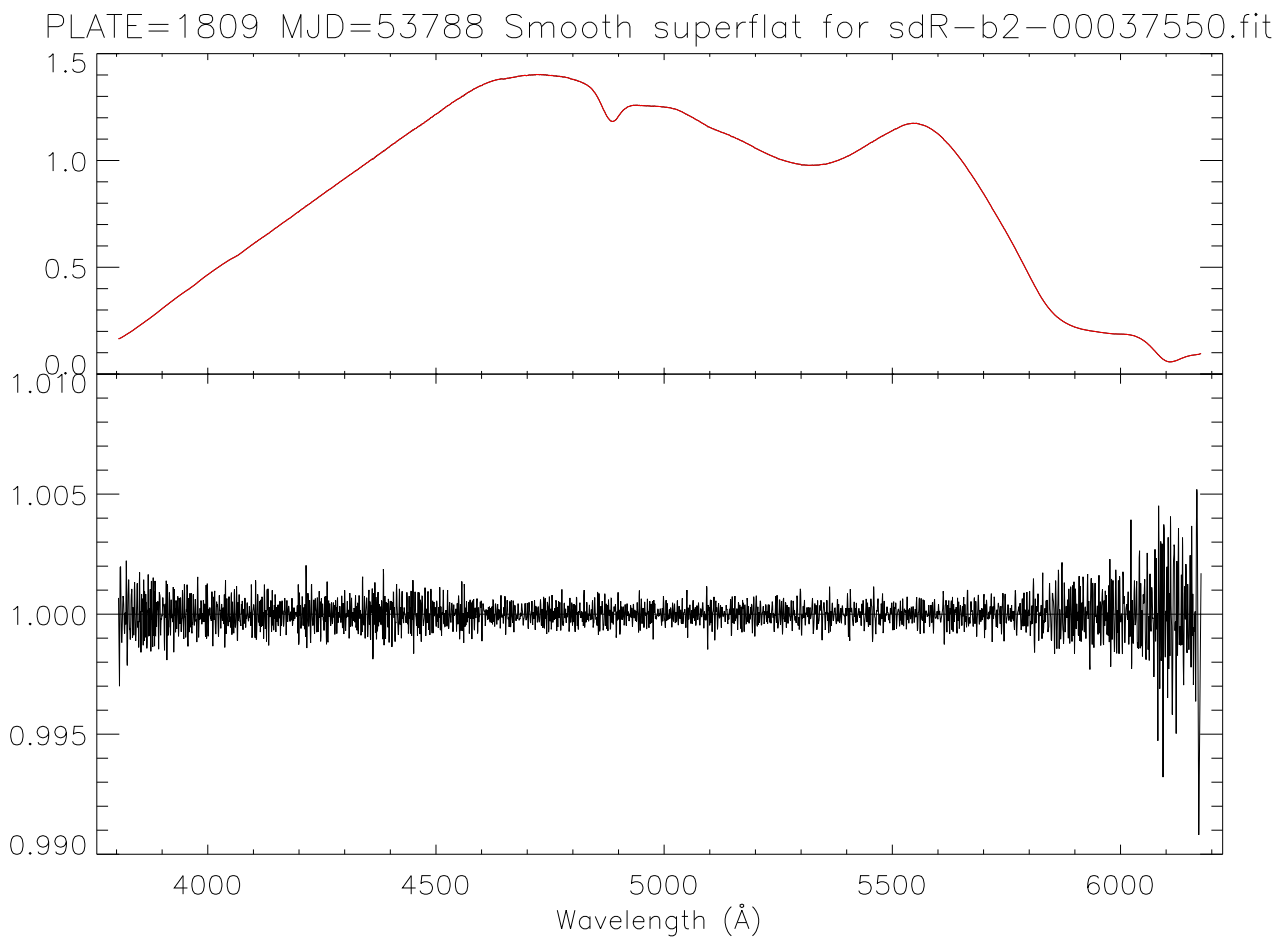

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

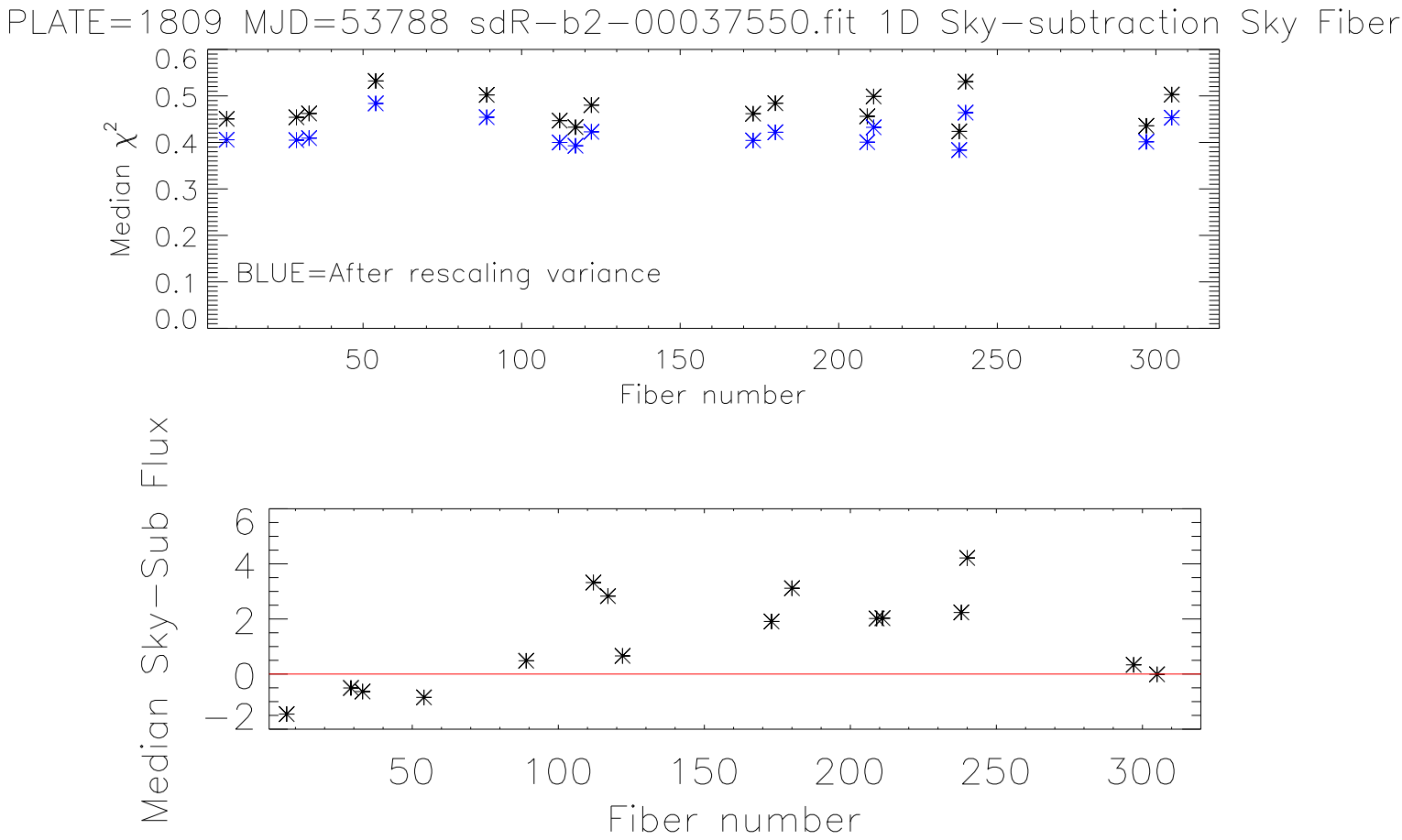

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

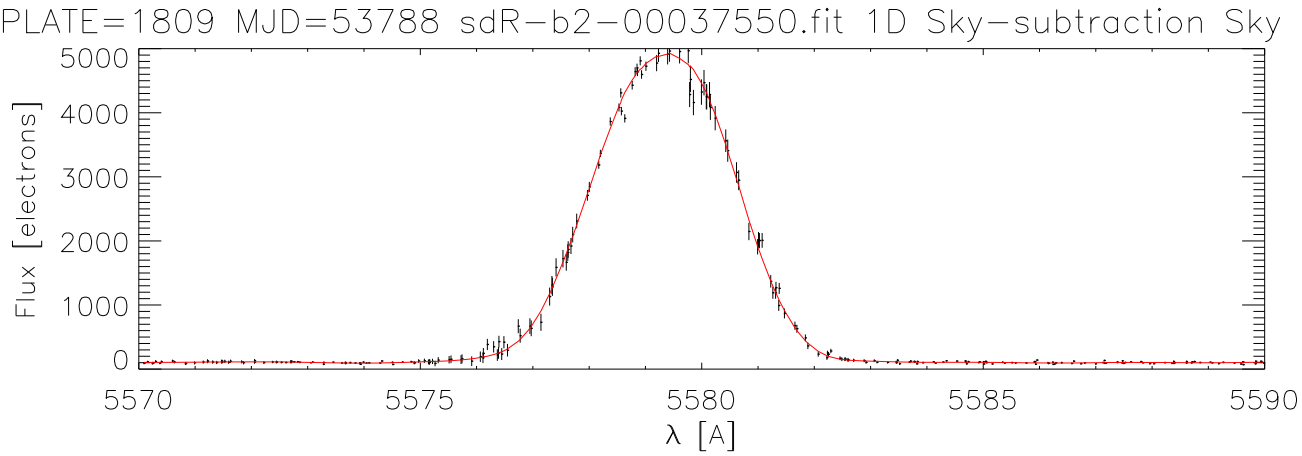

4046.5600
nfib1 16
nfib2 16
stdev 0.115
extra −0.19
4358.3300
nfib1 16
nfib2 16
stdev 0.076
extra −0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.038
extra −0.12
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra −0.07
5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra −0.01
5895.9240
nfib1 16
nfib2 16
stdev 0.064
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

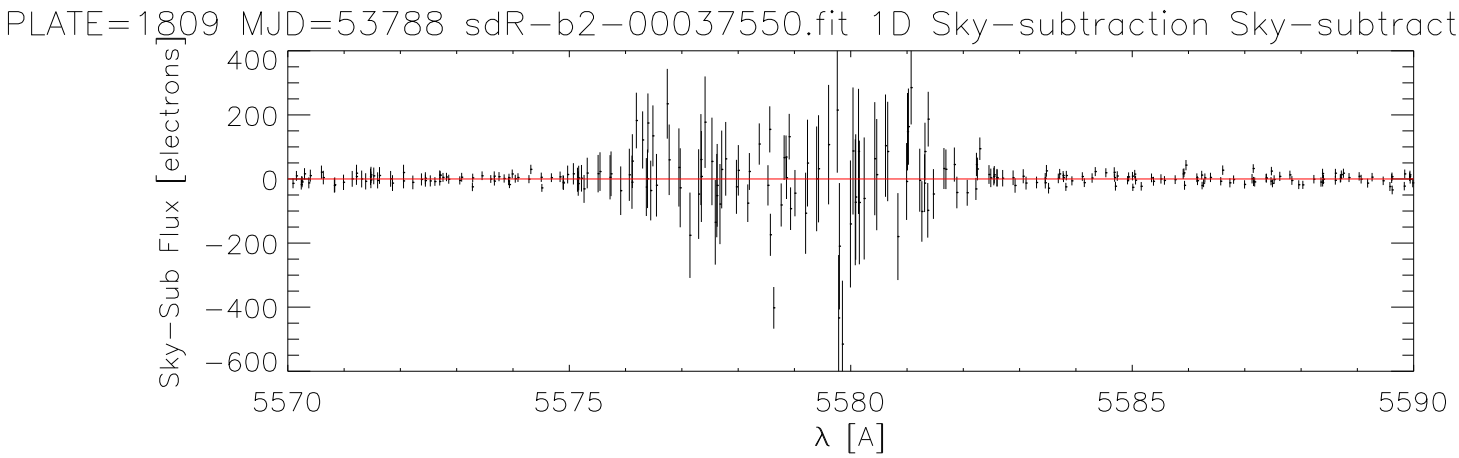

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

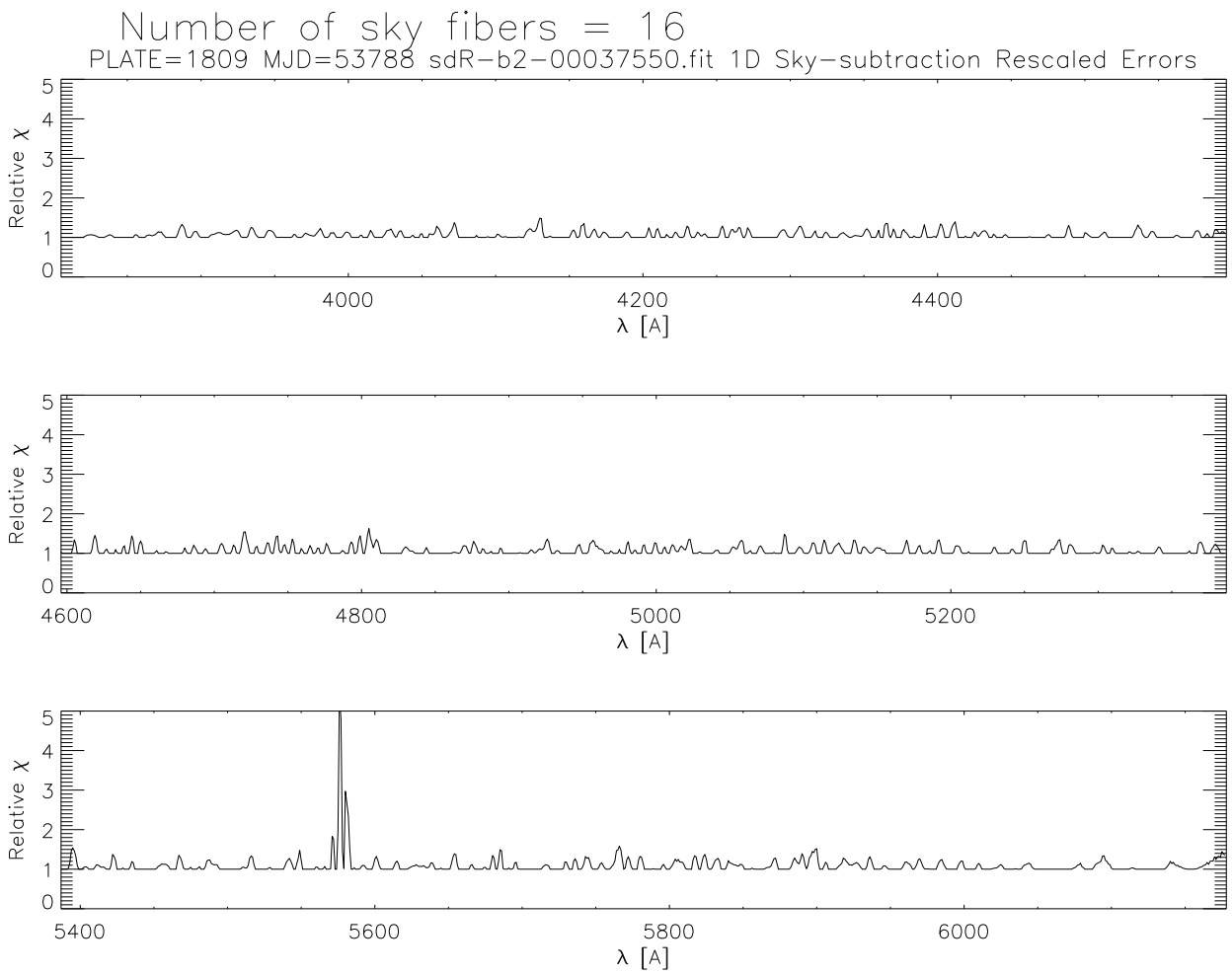
es= −0.0000

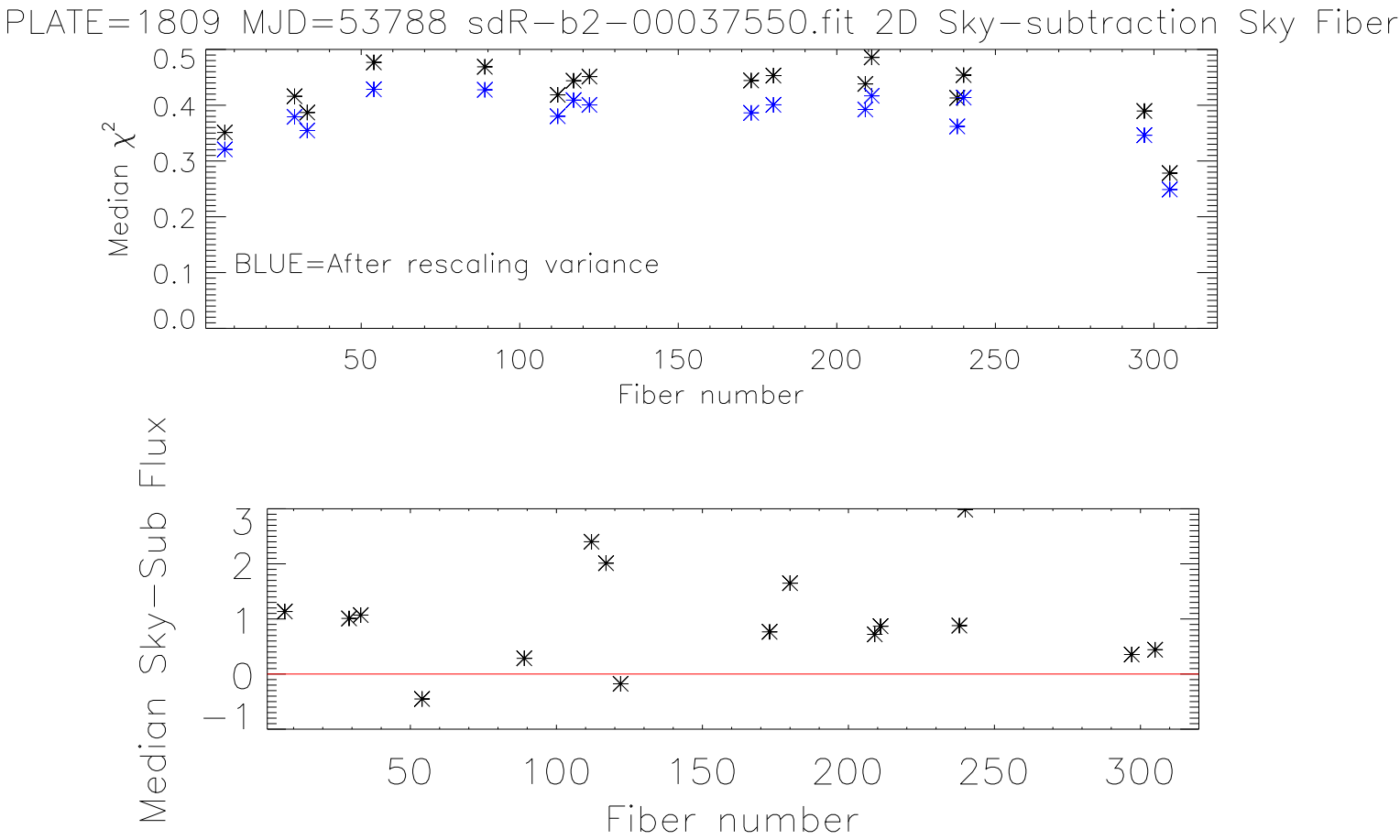

PLATE=1809 MJD=53788 Smooth superflat for sdR−b2−00037550.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

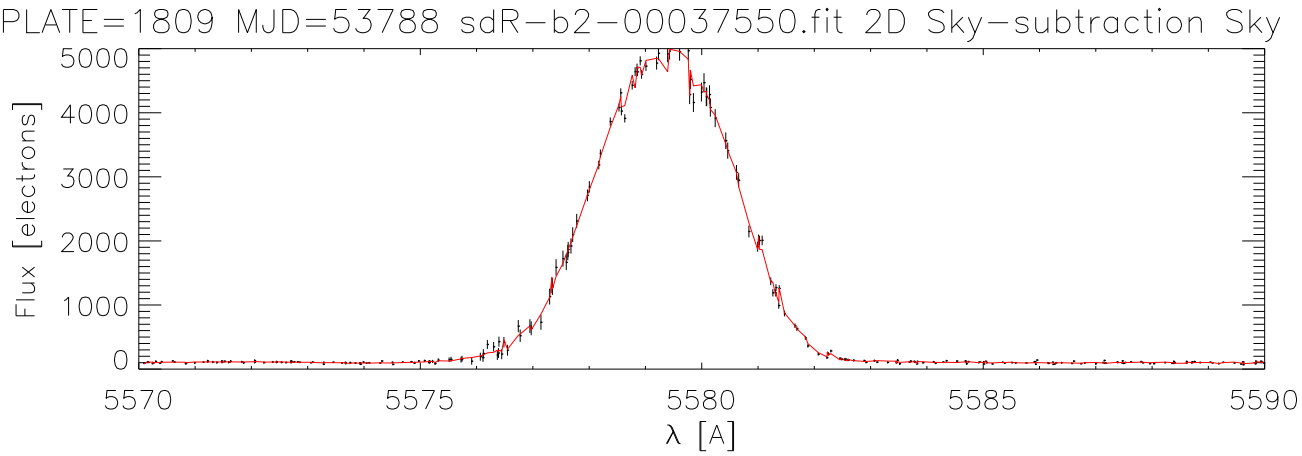

PLATE=1809 MJD=53788 sdR-b2-00037550.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

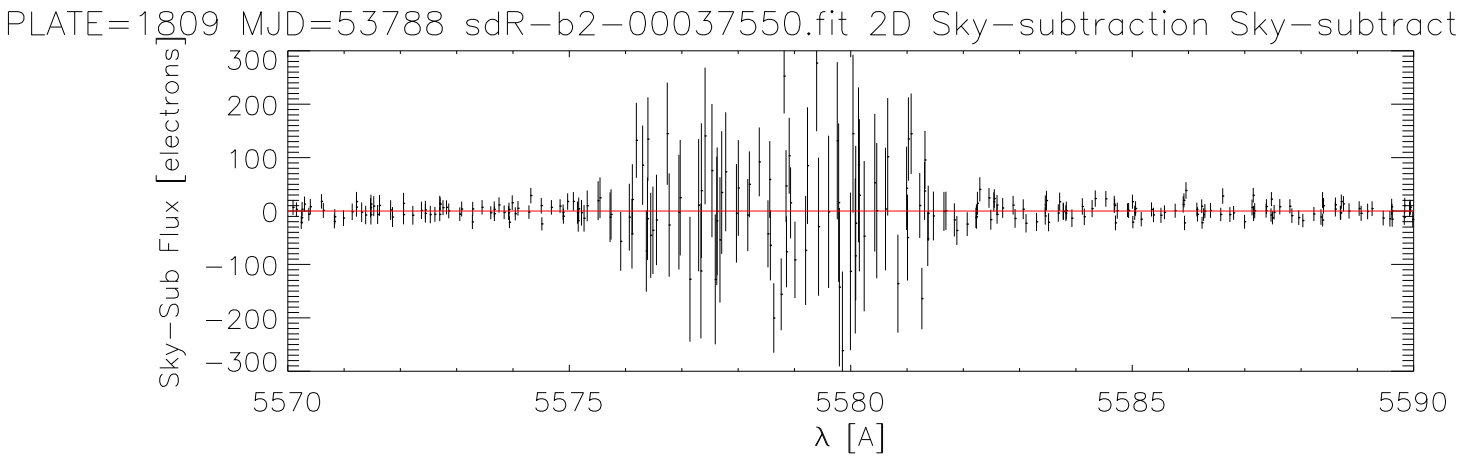

PLATE=1809 MJD=53788 sdR-b2-00037550.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

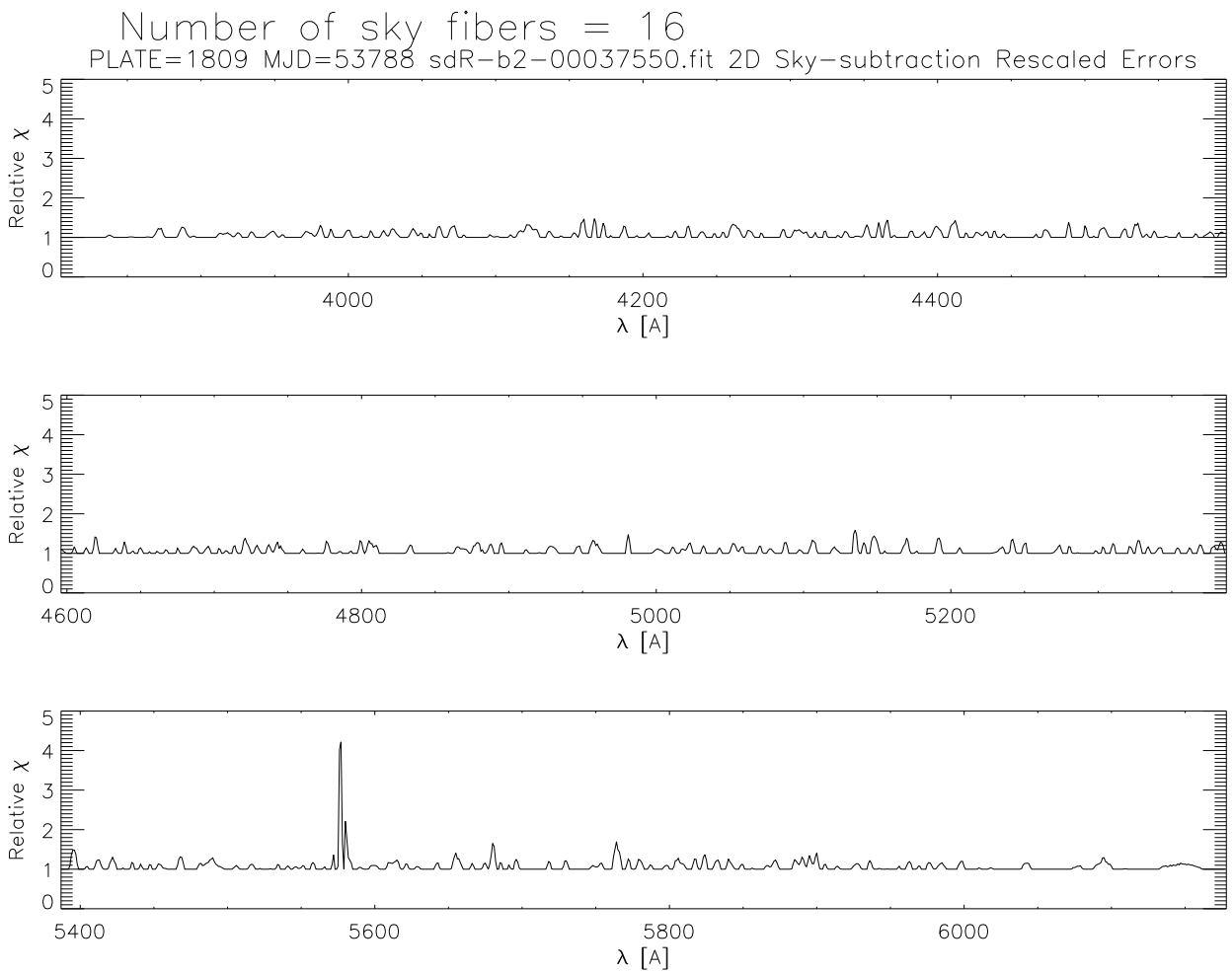

PLATE=1809 MJD=53788 sdR-b2-00037550.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

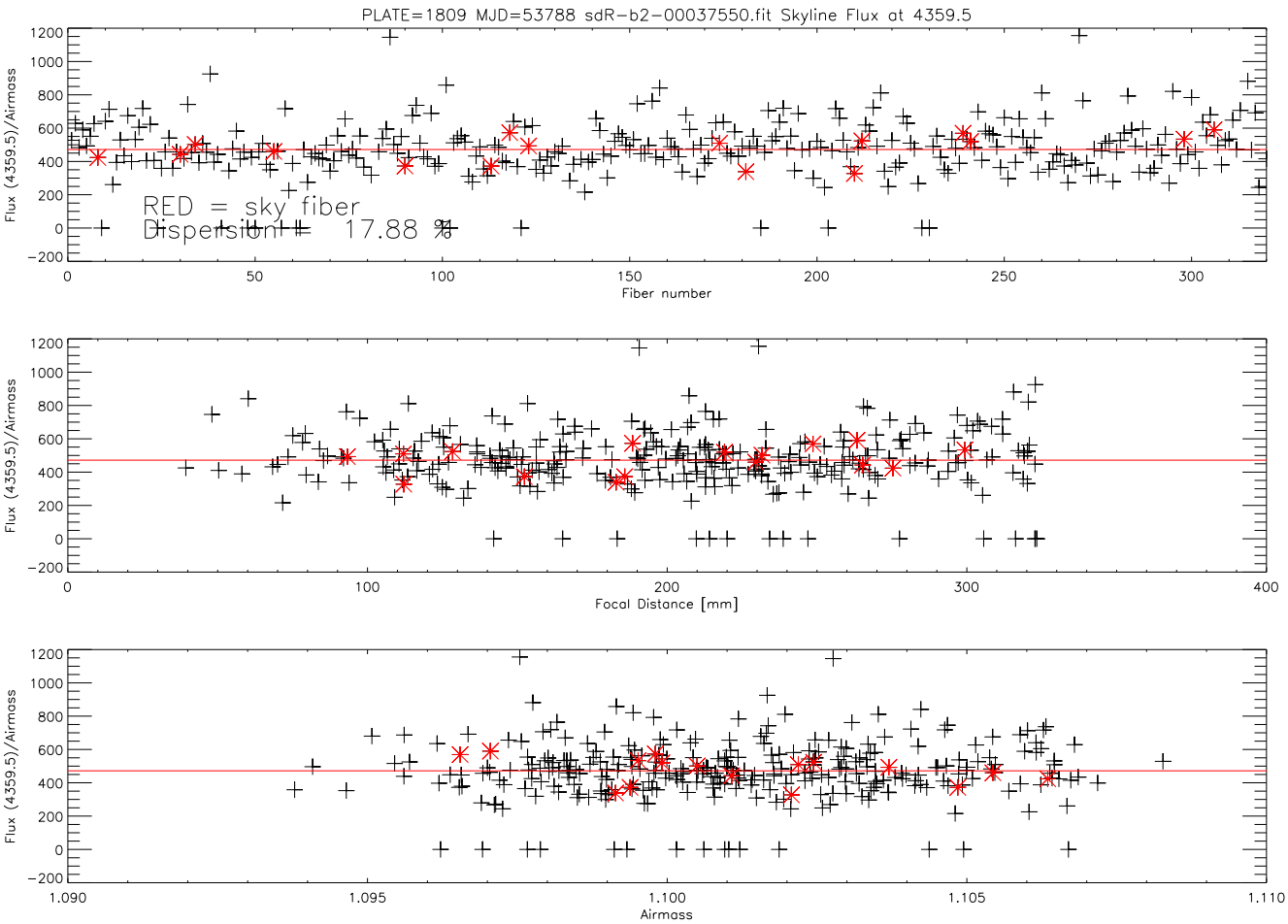

Number of sky fibers = 16
PLATE=1809 MJD=53788 sdR-b2-00037550.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

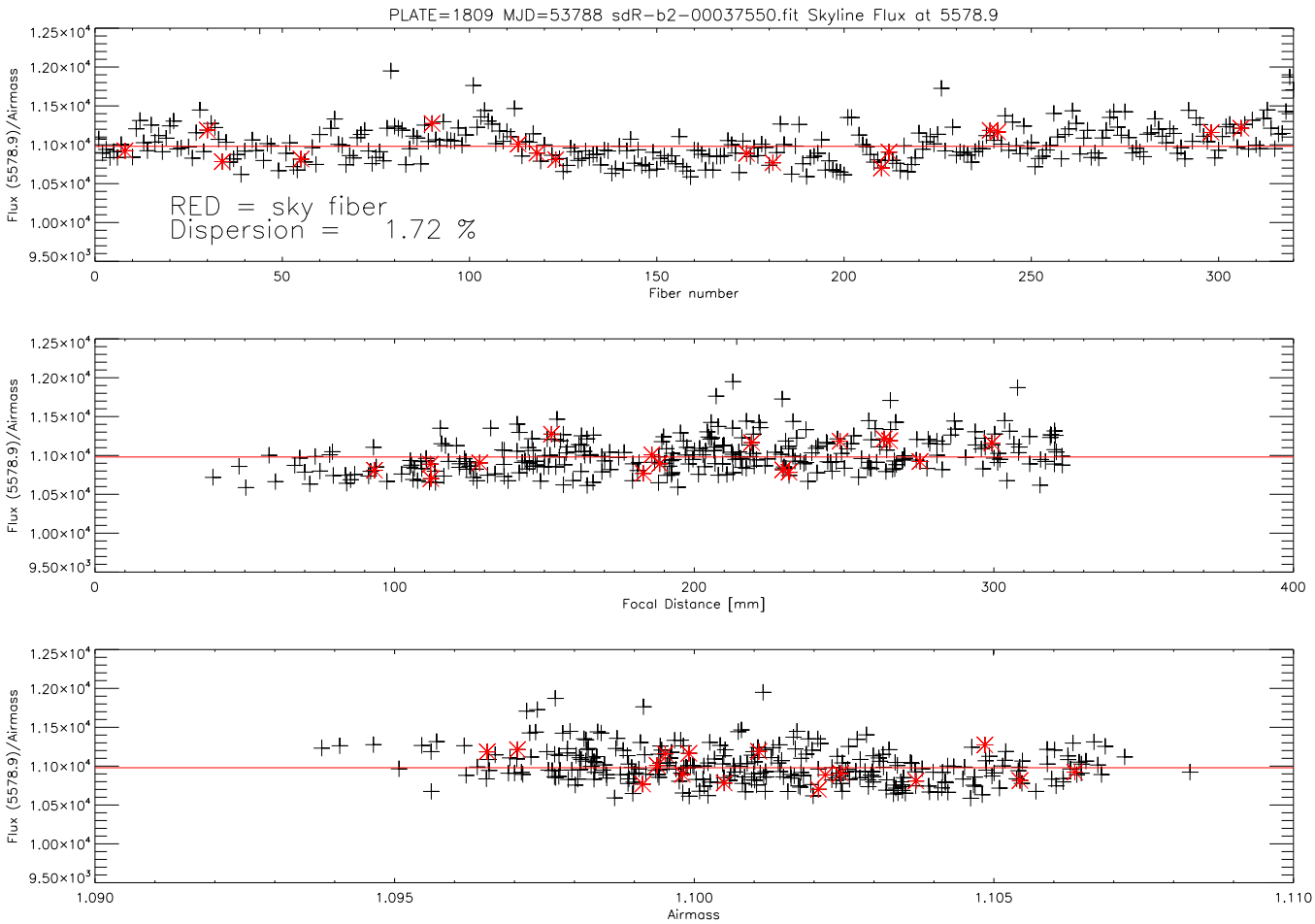

PLATE=1809 MJD=53788 sdR-b2-00037550.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

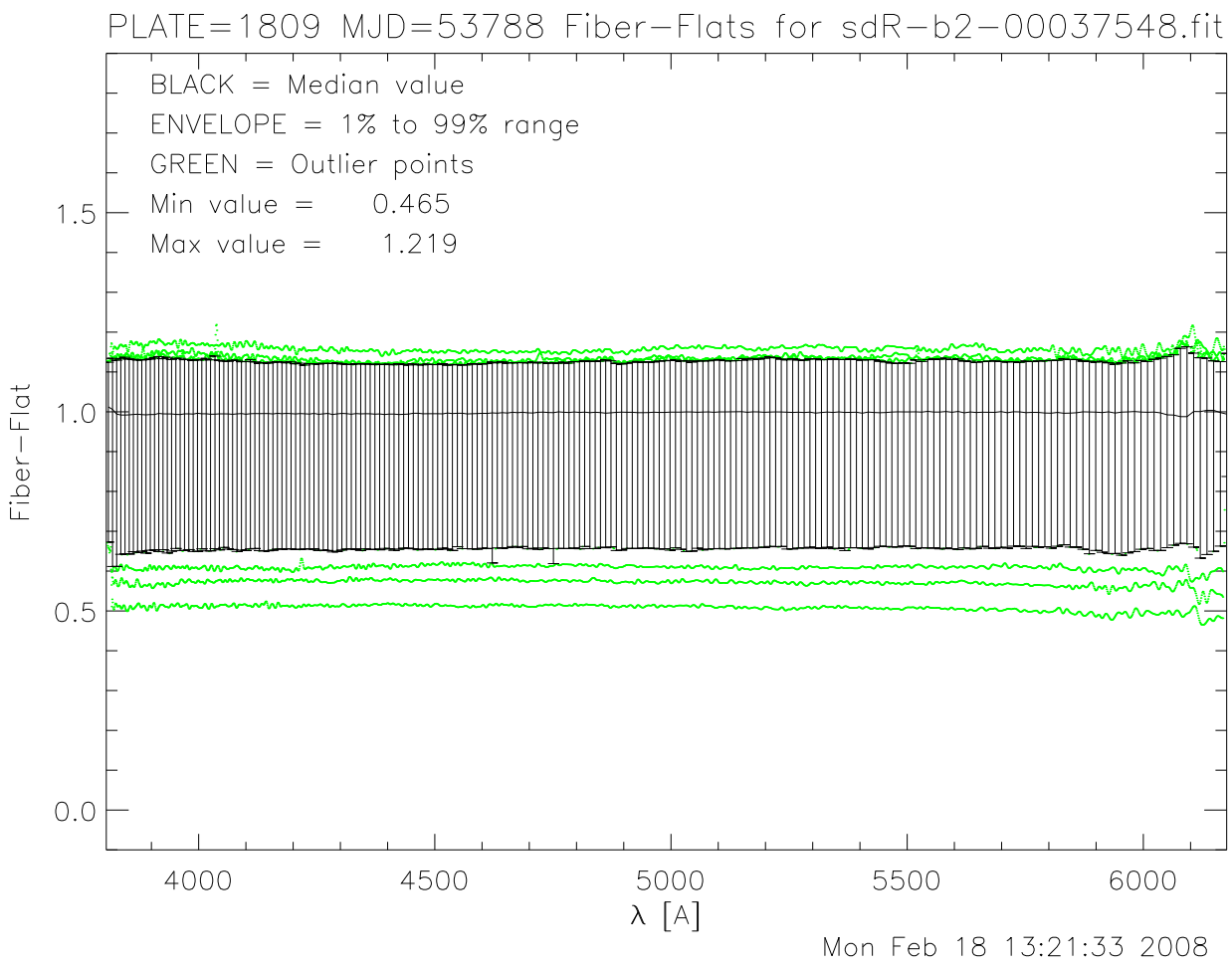

PLATE=1809 MJD=53788 sdR-b2-00037550.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

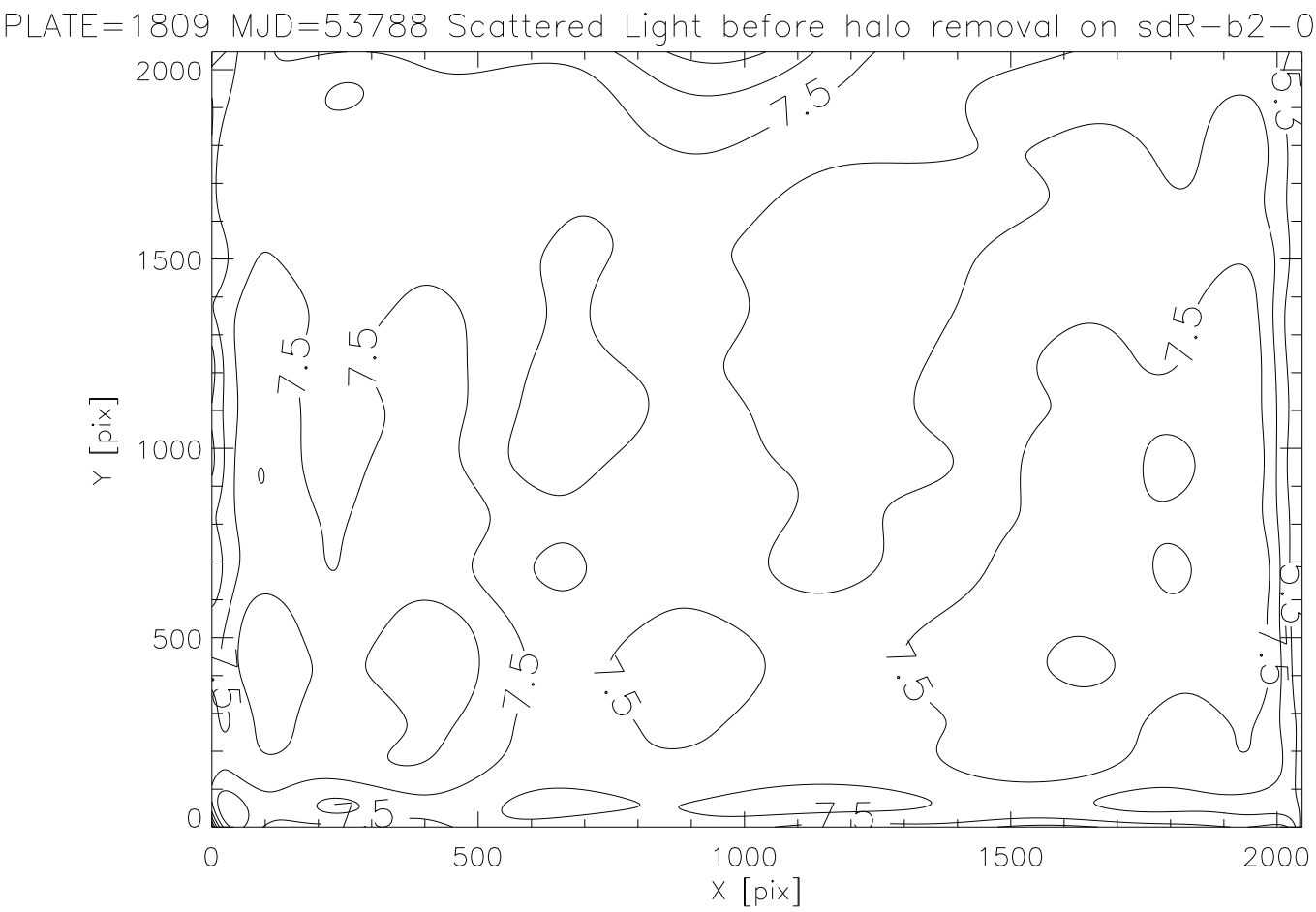

PLATE=1809 MJD=53788 sdR-b2-00037550.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

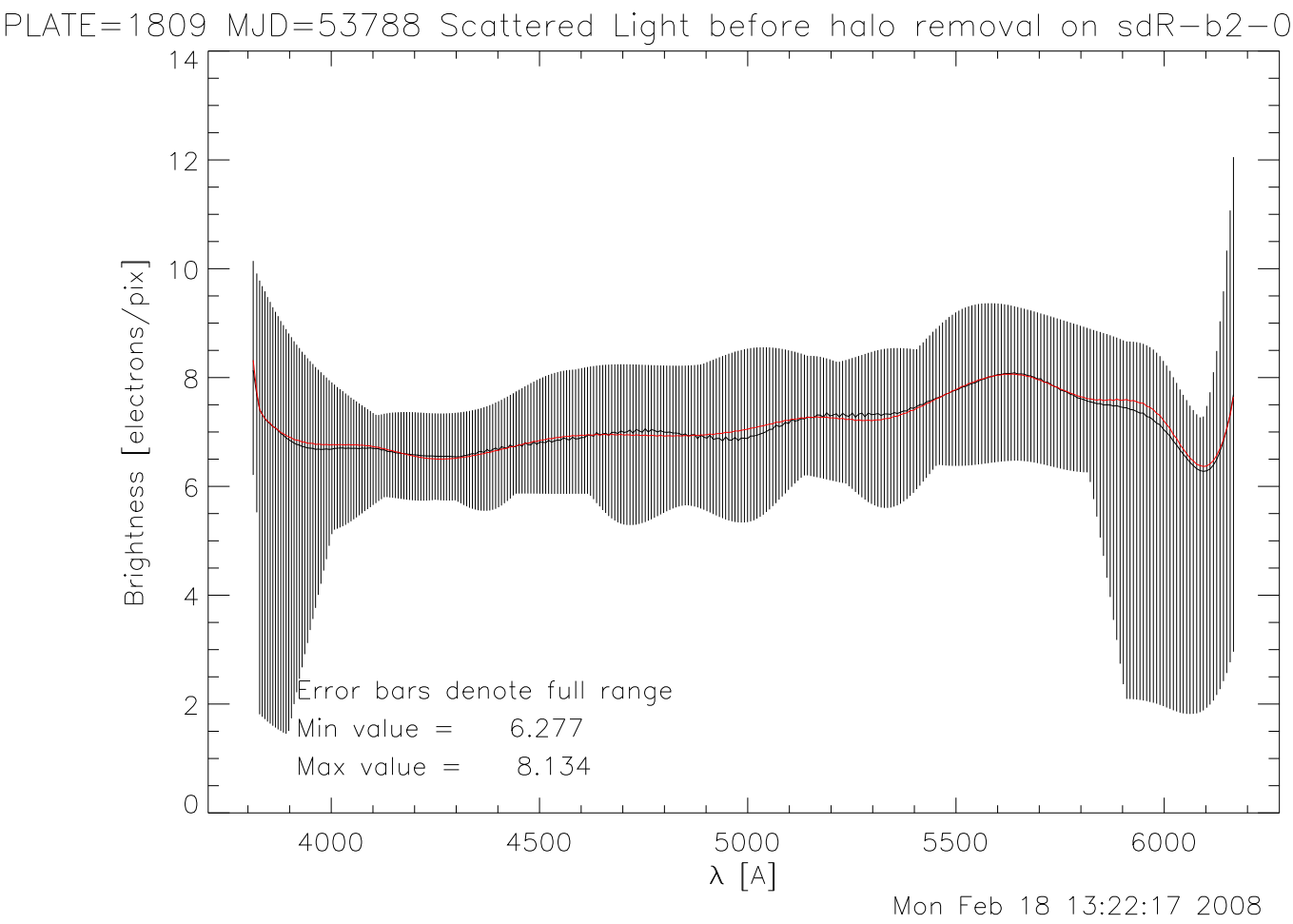

Number of sky fibers = 16
PLATE=1809 MJD=53788 sdR-b2-00037550.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

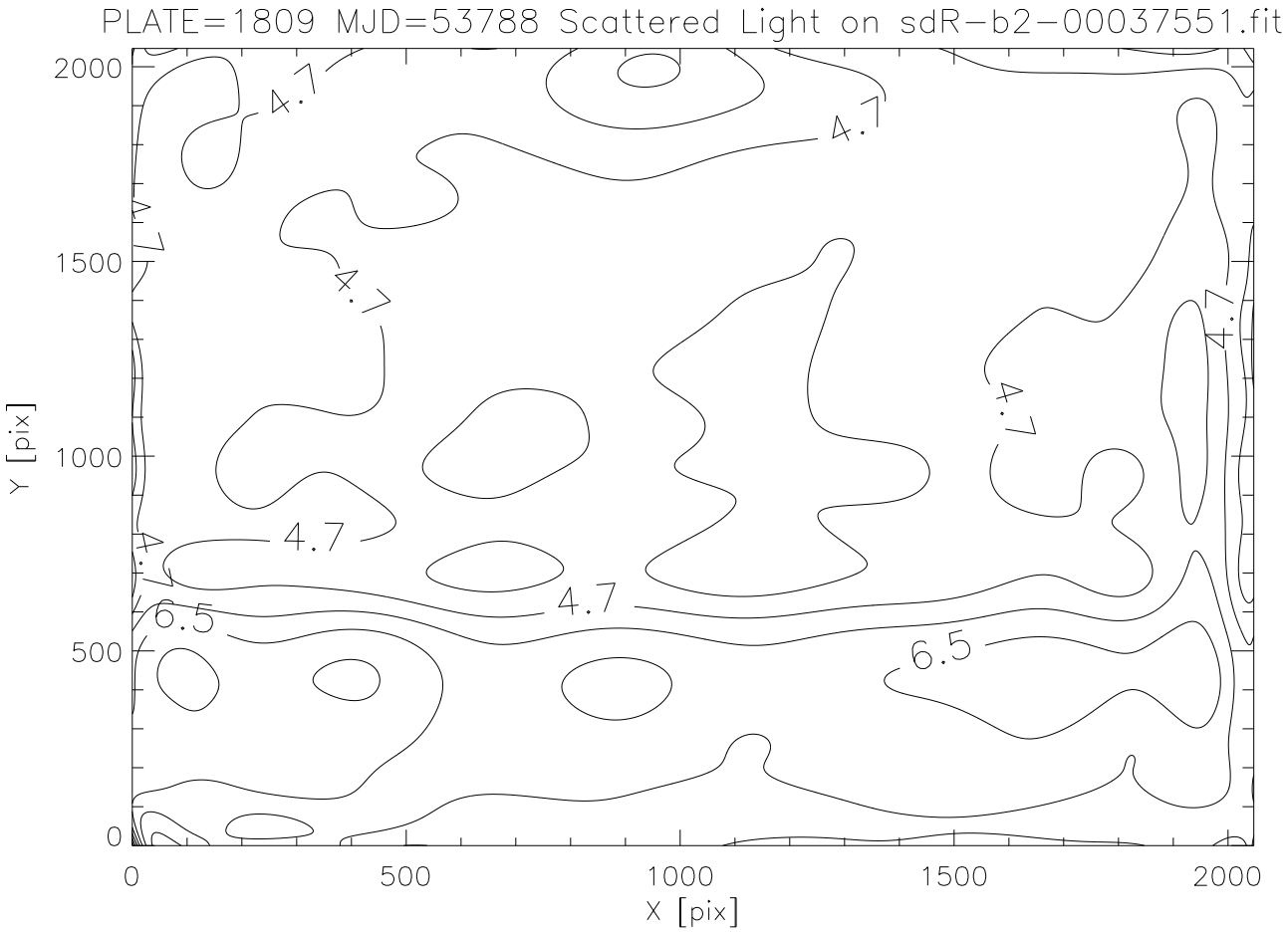

PLATE=1809 MJD=53788 sdR-b2-00037550.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 17.88 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

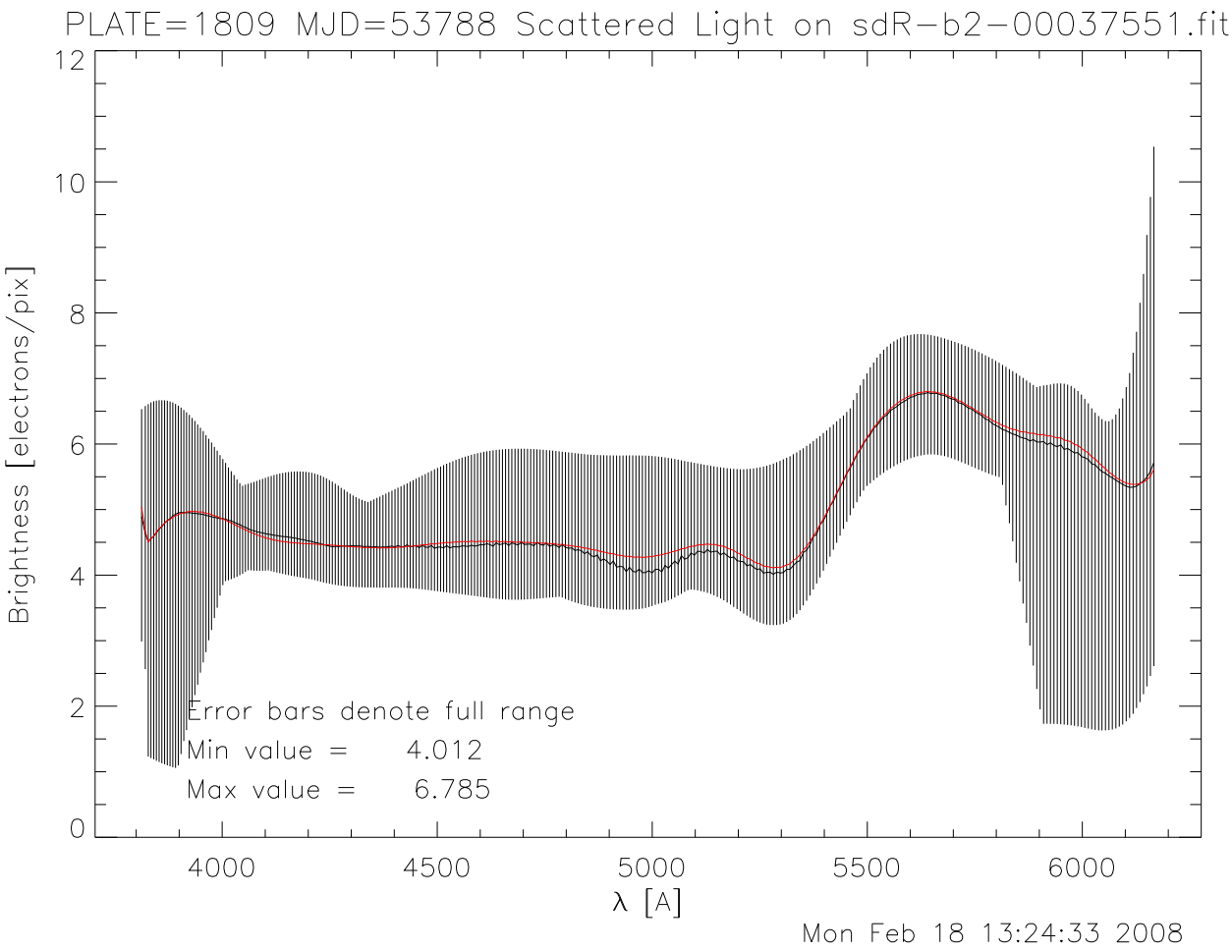

PLATE=1809 MJD=53788 sdR-b2-00037550.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.72 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=1809 MJD=53788 Fiber−Flats for sdR−b2−00037548.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.465
Max value = 1.219
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 18 13:21:33 2008


PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR−b2−00037551.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5


PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-b2-00037551.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.277
Max value = 8.134
Mon Feb 18 13:22:17 2008


PLATE=1809 MJD=53788 Scattered Light on sdR-b2-00037551.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.7
6.5


PLATE=1809 MJD=53788 Scattered Light on sdR-b2-00037551.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.012
Max value = 6.785
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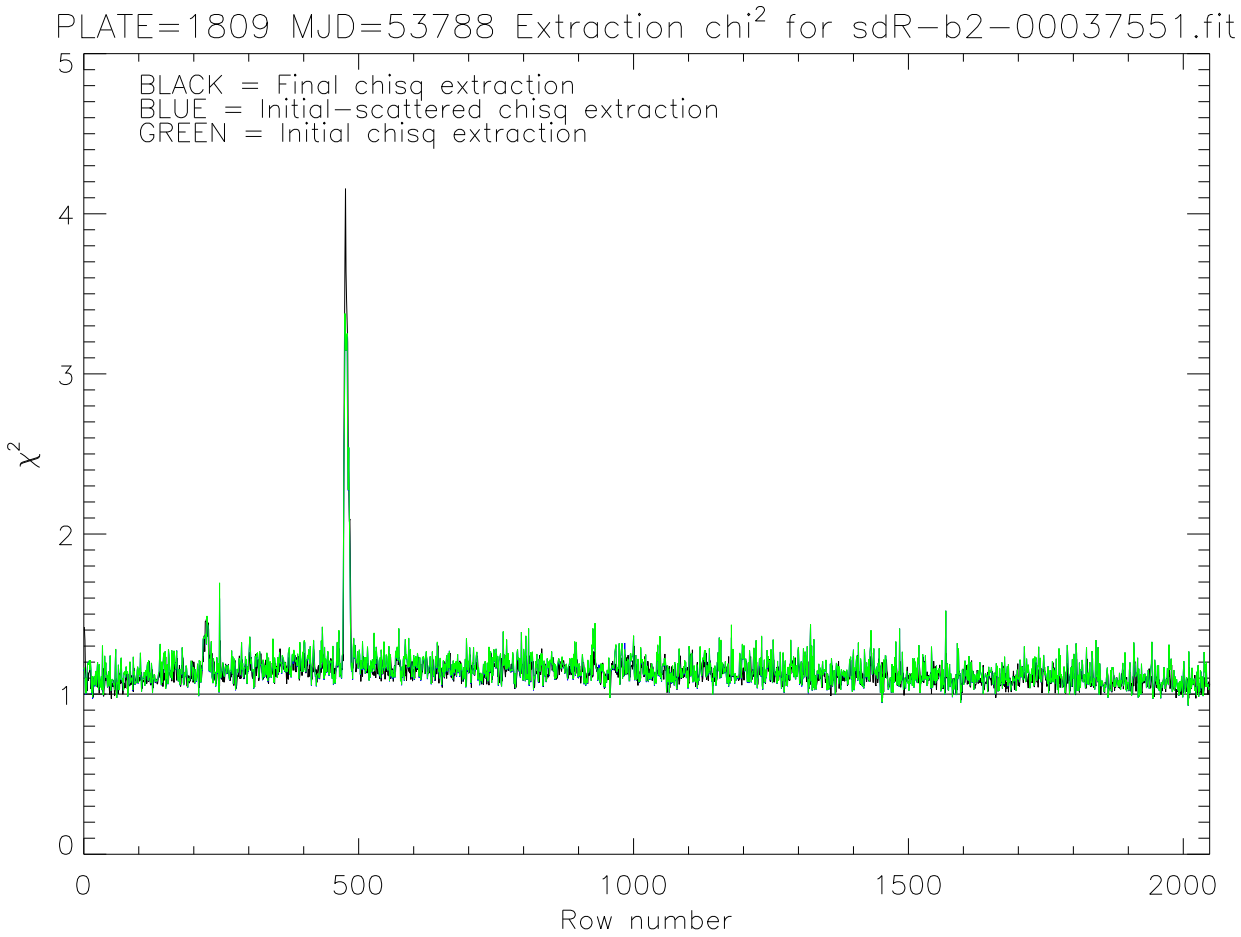
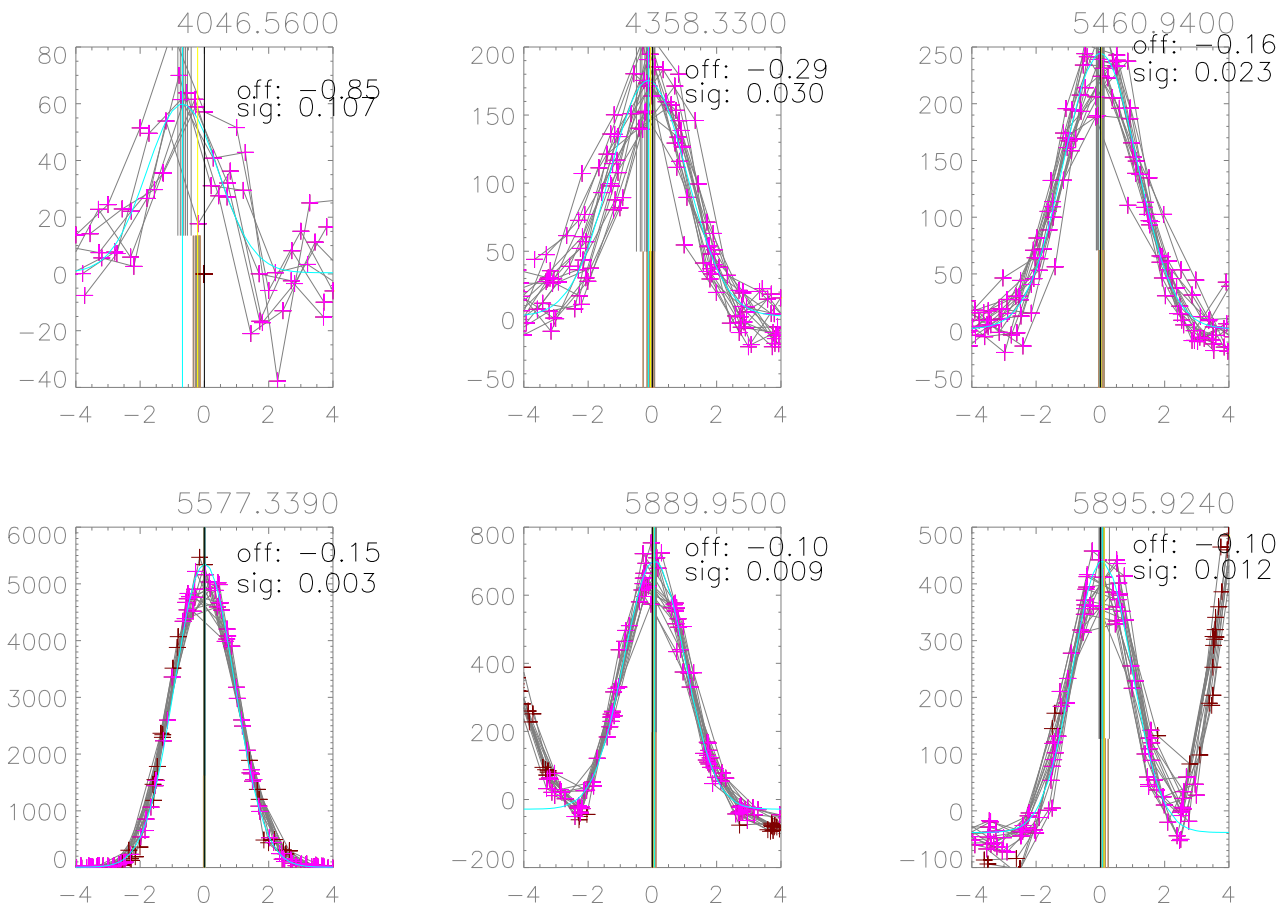
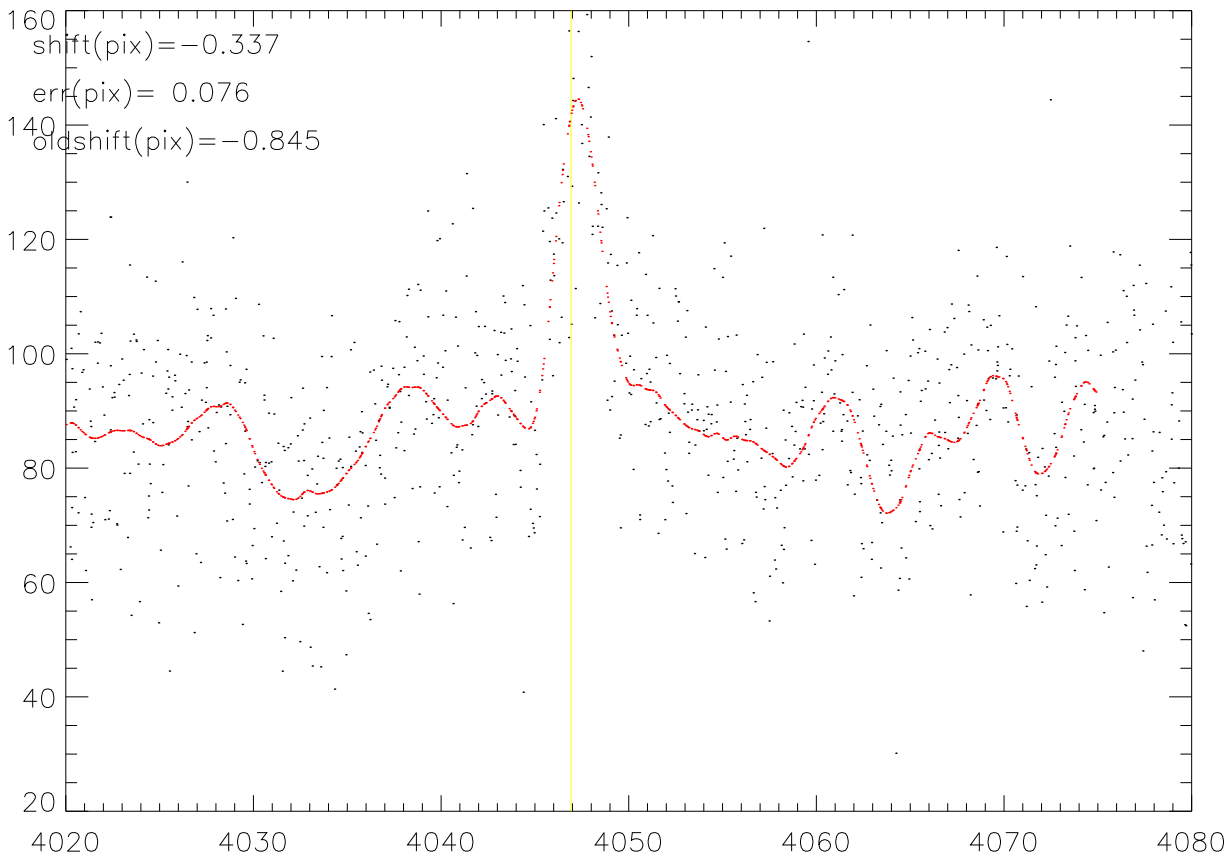
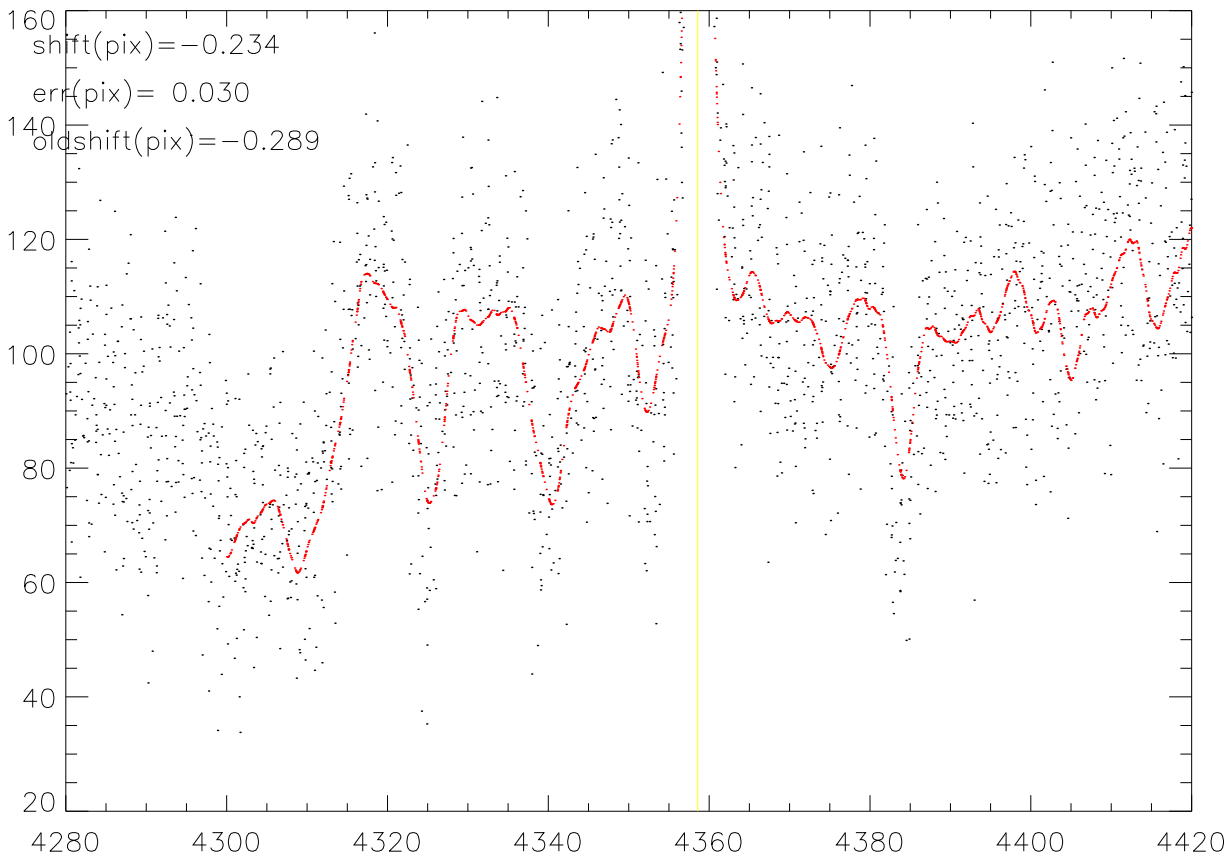
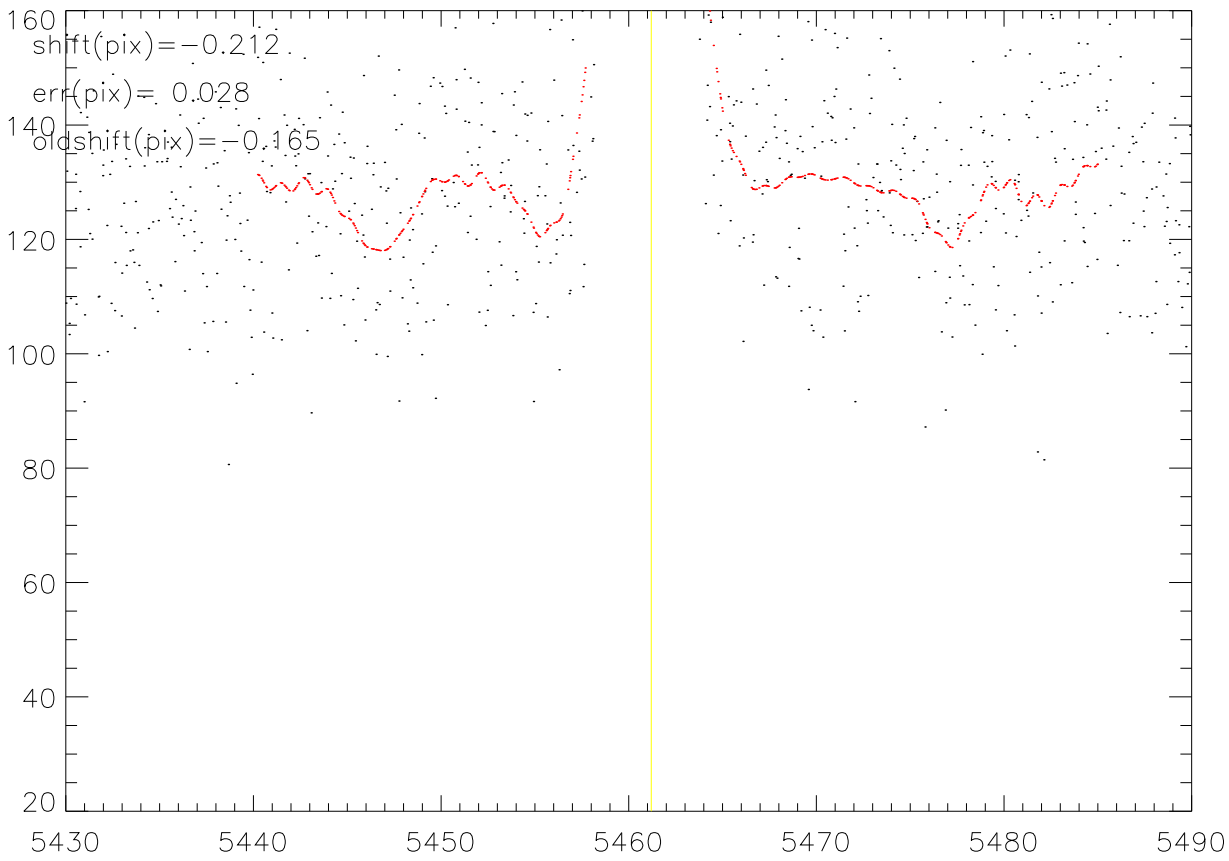
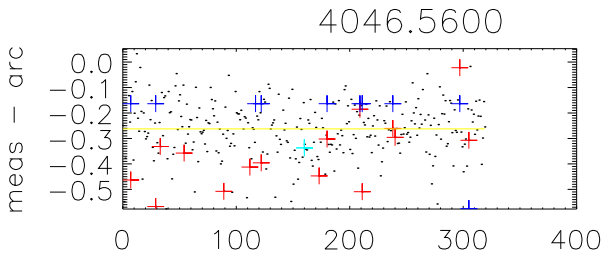

PLATE=1809 MJD=53788 Extraction chi^2 for sdR-b2-00037551.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

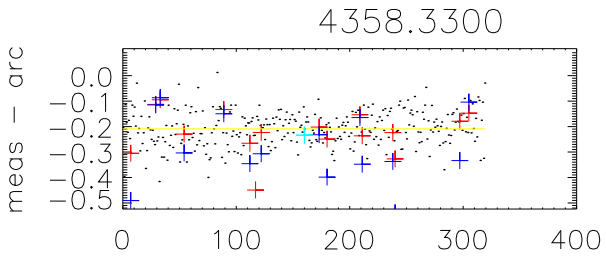

4046.5600
off: −0.85
sig: 0.107
4358.3300
off: −0.29
sig: 0.030
5460.9400
off: −0.16
sig: 0.023
5577.3390
off: −0.15
sig: 0.003
5889.9500
off: −0.10
sig: 0.009
5895.9240
off: −0.10
sig: 0.012

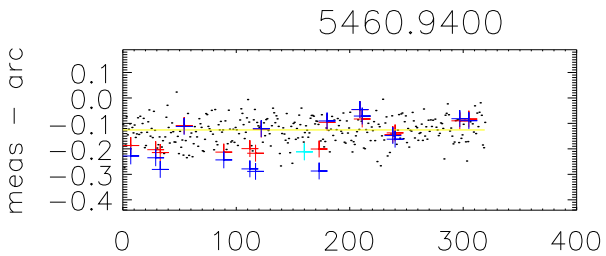

shift(pix)=−0.337
err(pix)= 0.076
oldshift(pix)=−0.845
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

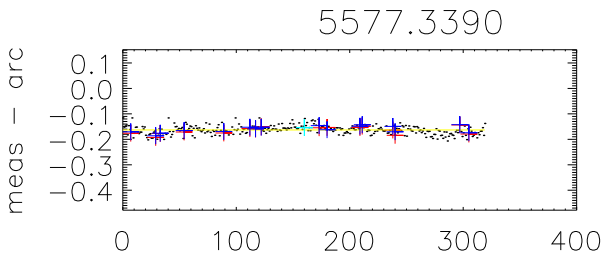

shift(pix)=−0.234
err(pix)= 0.030
oldshift(pix)=−0.289
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

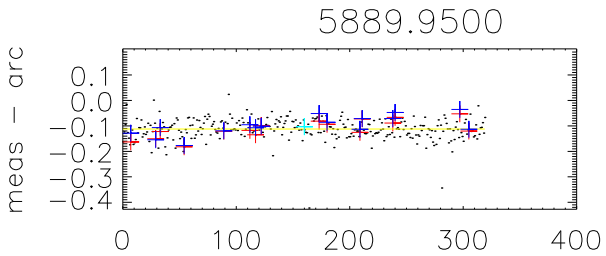

shift(pix)=−0.212
err(pix)= 0.028
oldshift(pix)=−0.165
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

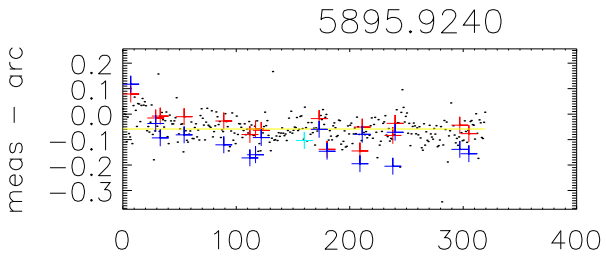

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

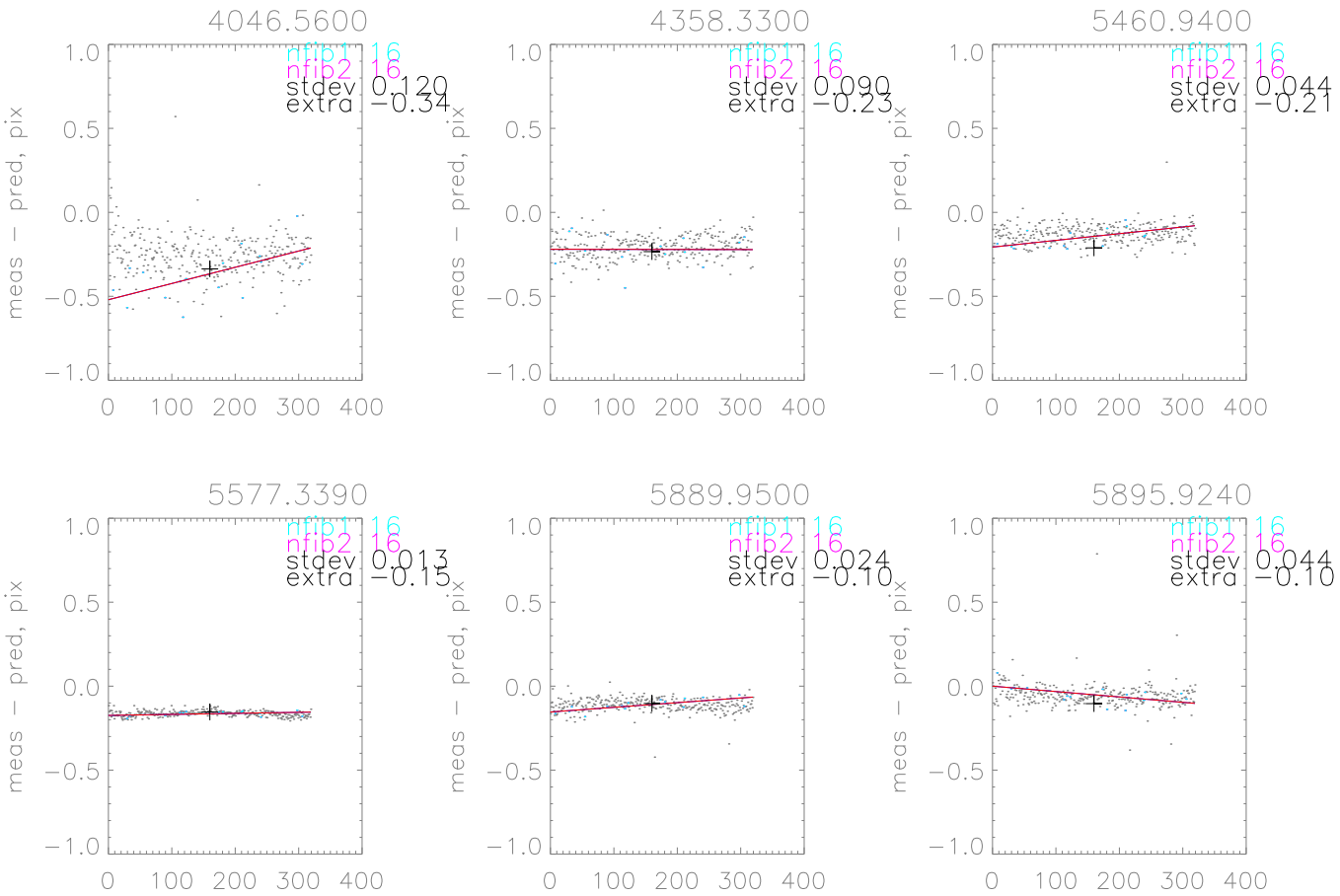

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

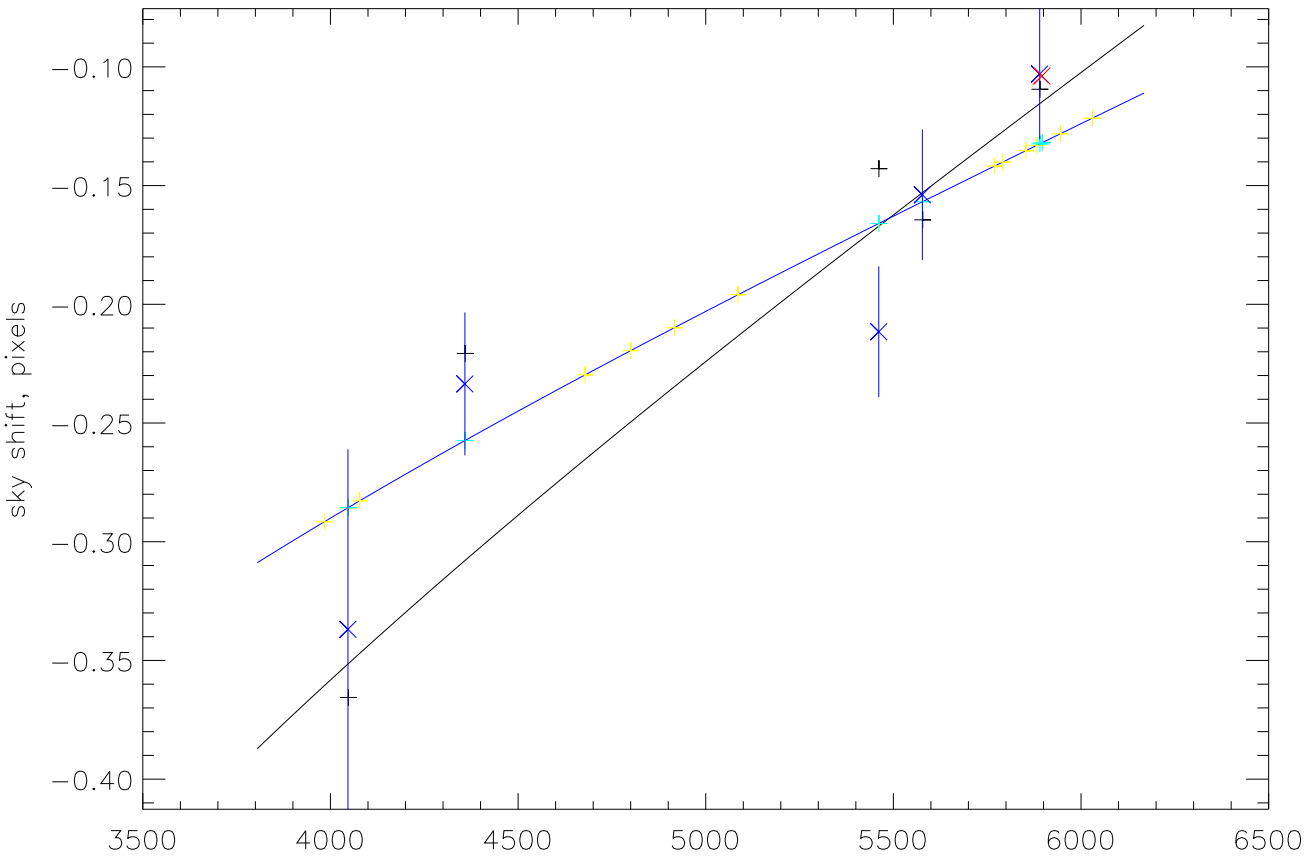

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

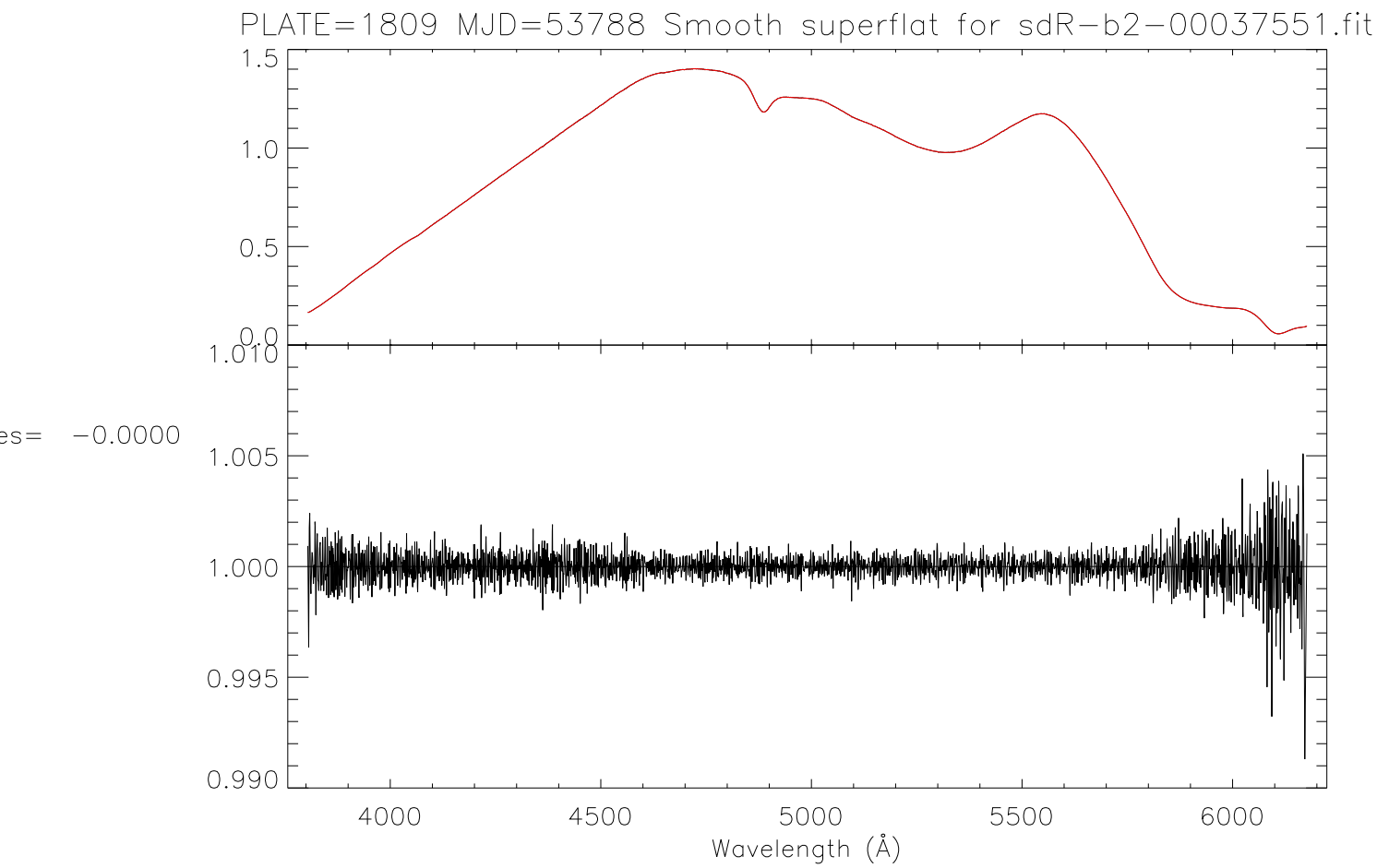

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

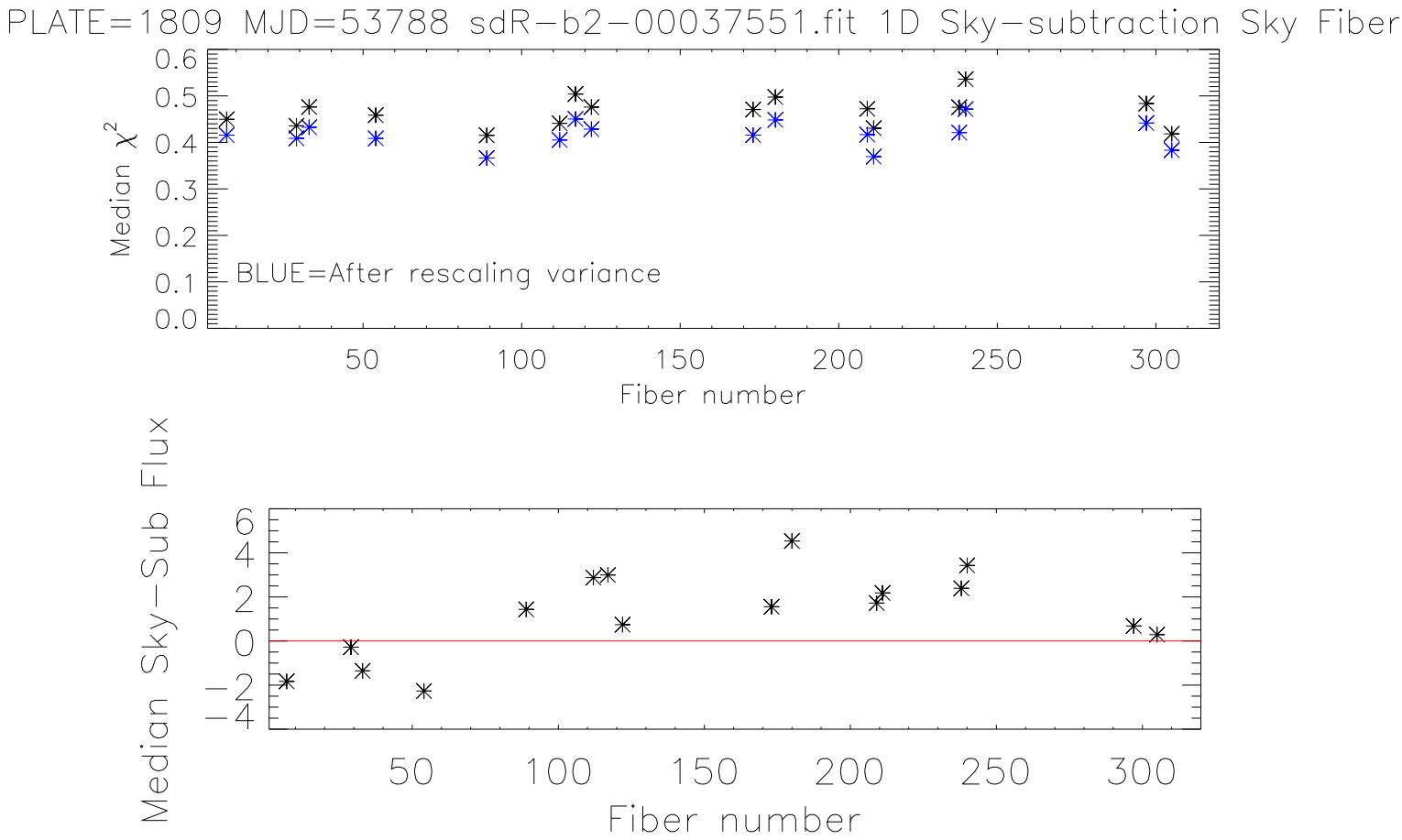

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

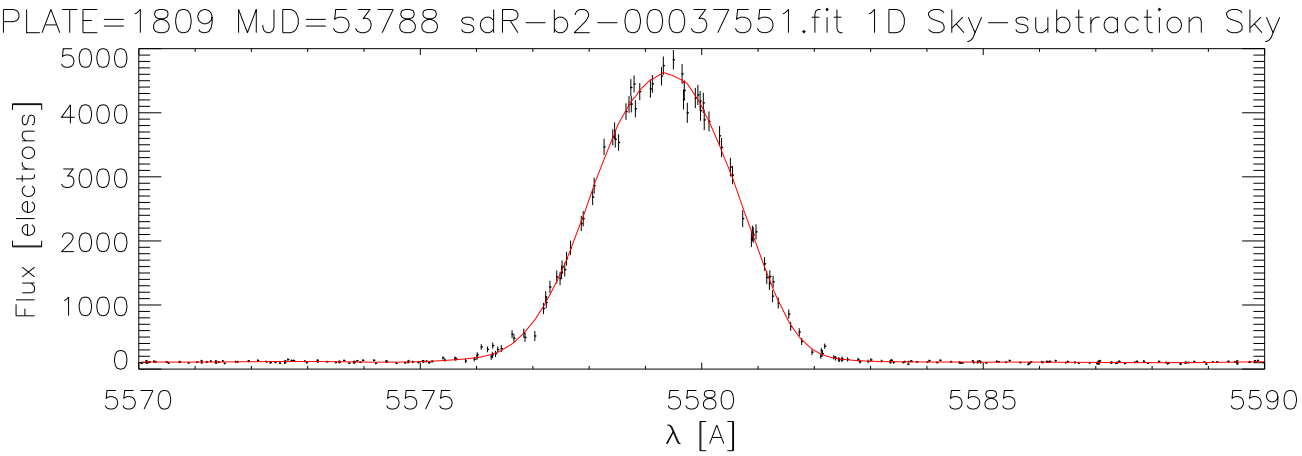

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

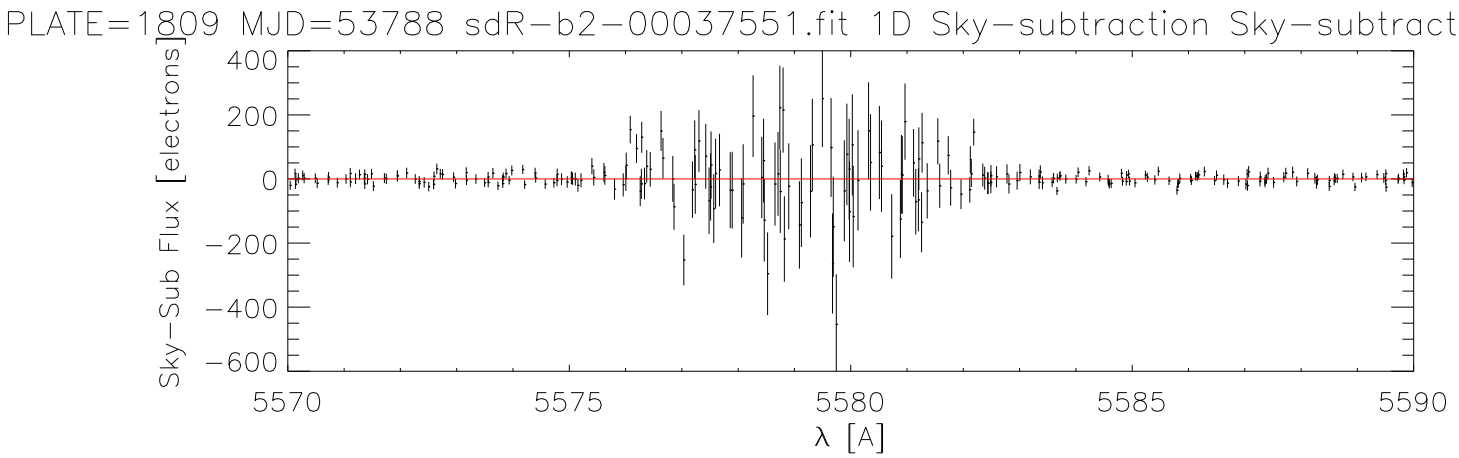

4046.5600
nfib1 16
nfib2 16
stdev 0.120
extra −0.34
4358.3300
nfib1 16
nfib2 16
stdev 0.090
extra −0.23
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra −0.21
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra −0.15
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra −0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra −0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

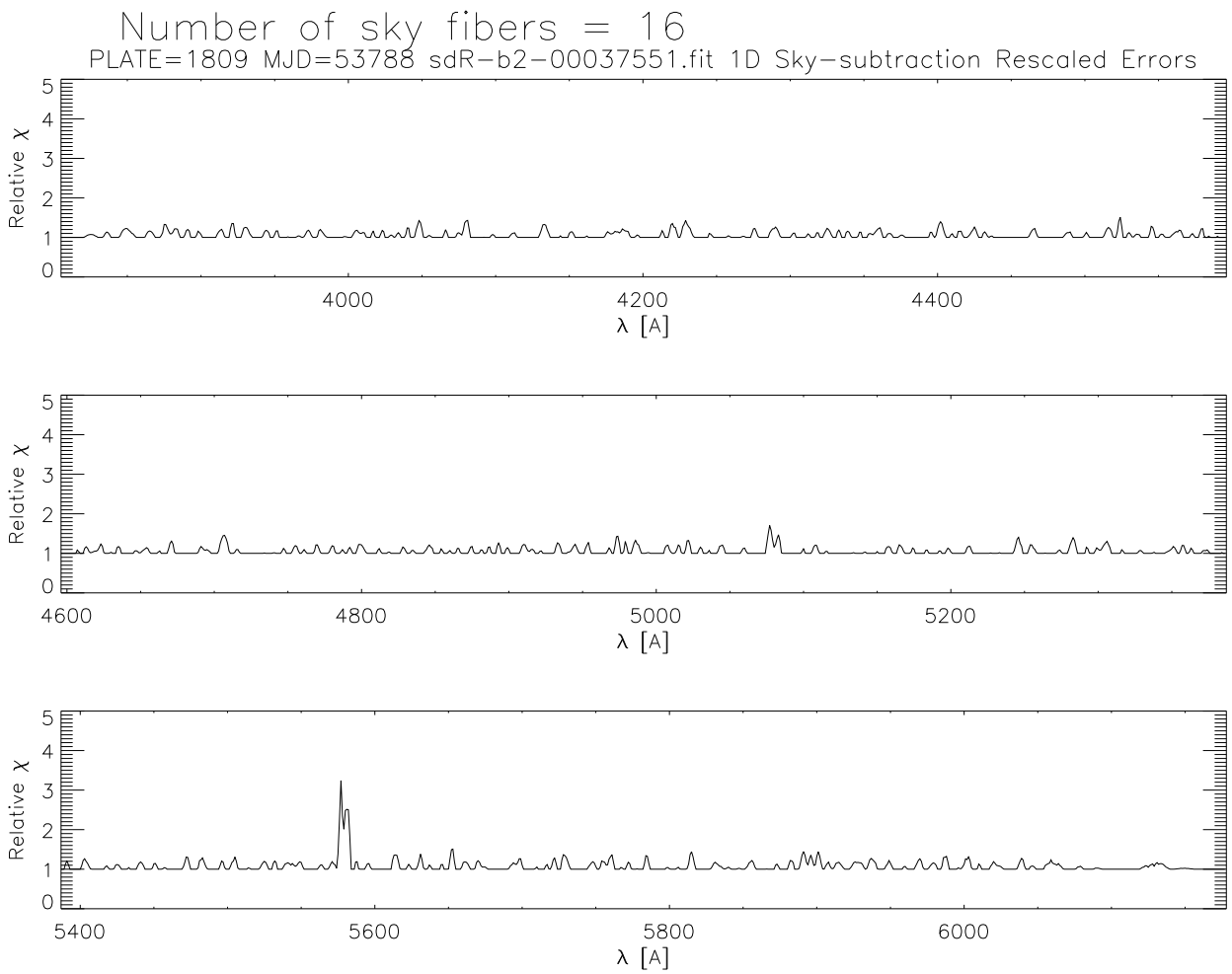

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
−0.40
3500
4000
4500
5000
5500
6000
6500

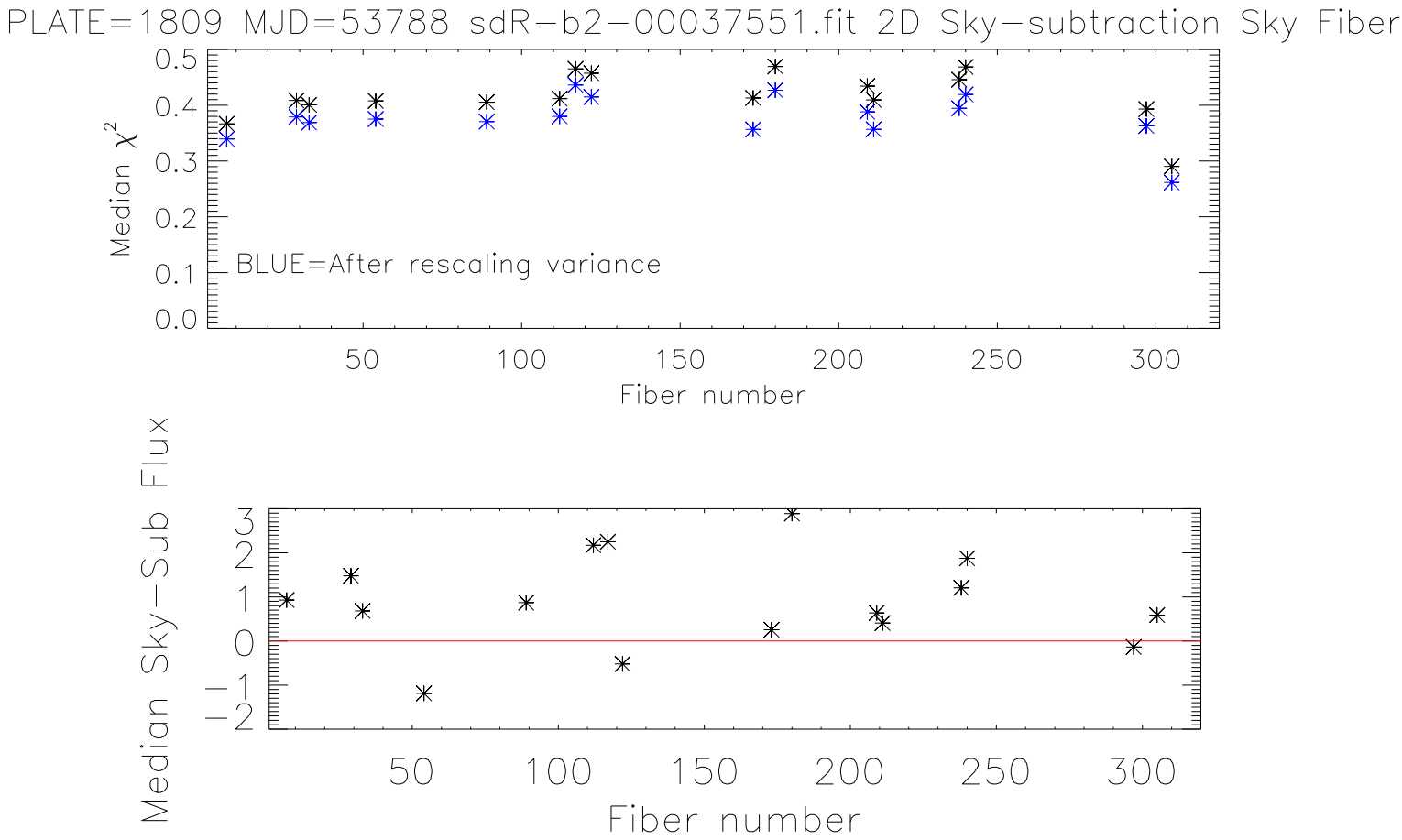

PLATE=1809 MJD=53788 Smooth superflat for sdR-b2-00037551.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

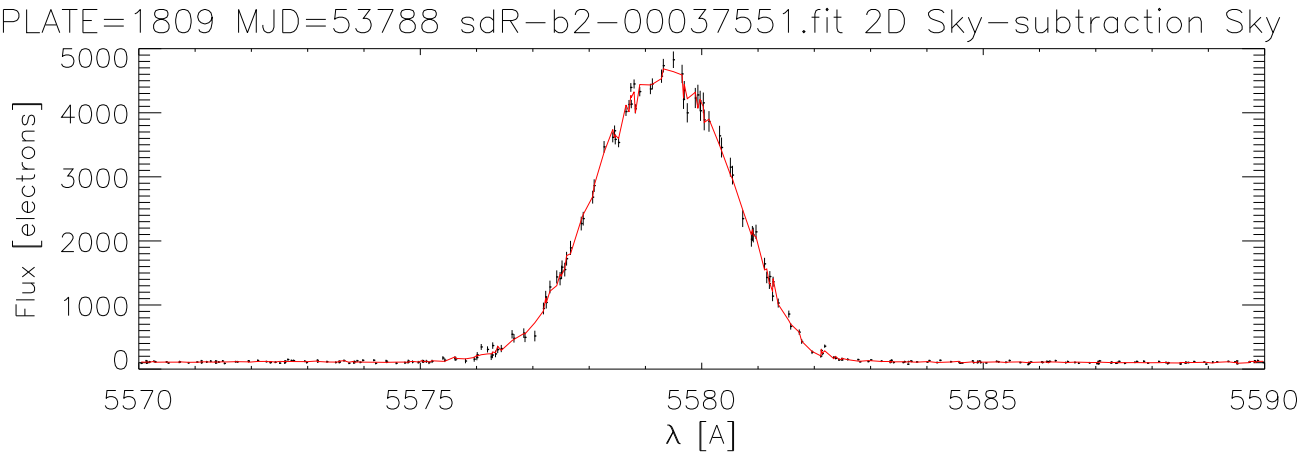

PLATE=1809 MJD=53788 sdR-b2-00037551.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

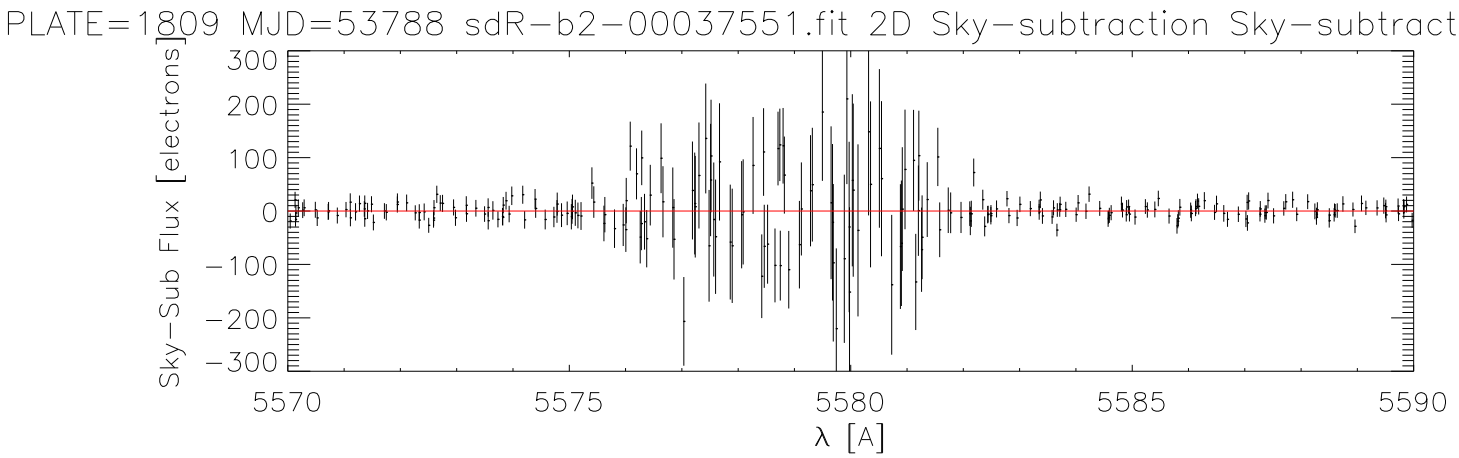

PLATE=1809 MJD=53788 sdR-b2-00037551.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

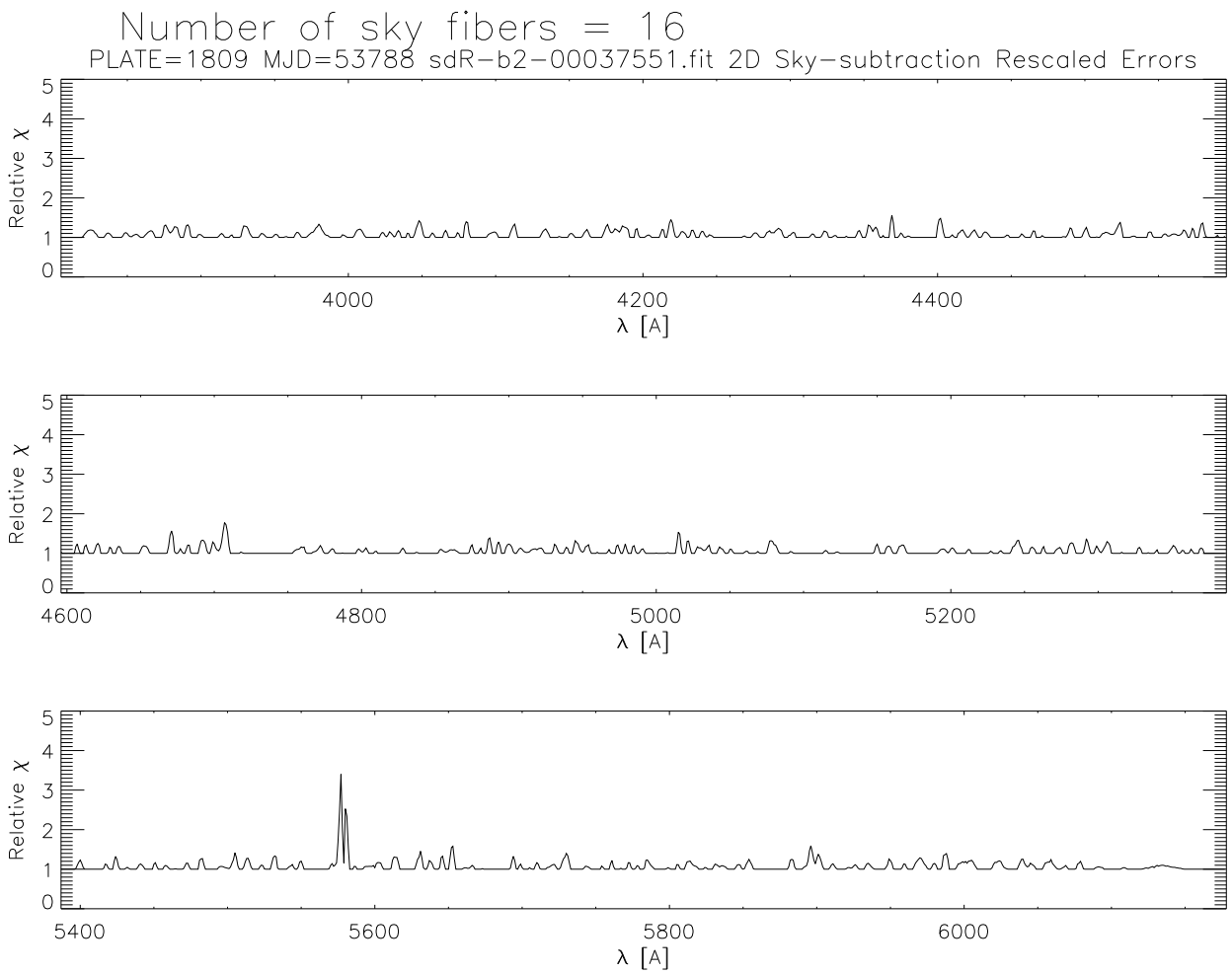

PLATE=1809 MJD=53788 sdR-b2-00037551.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

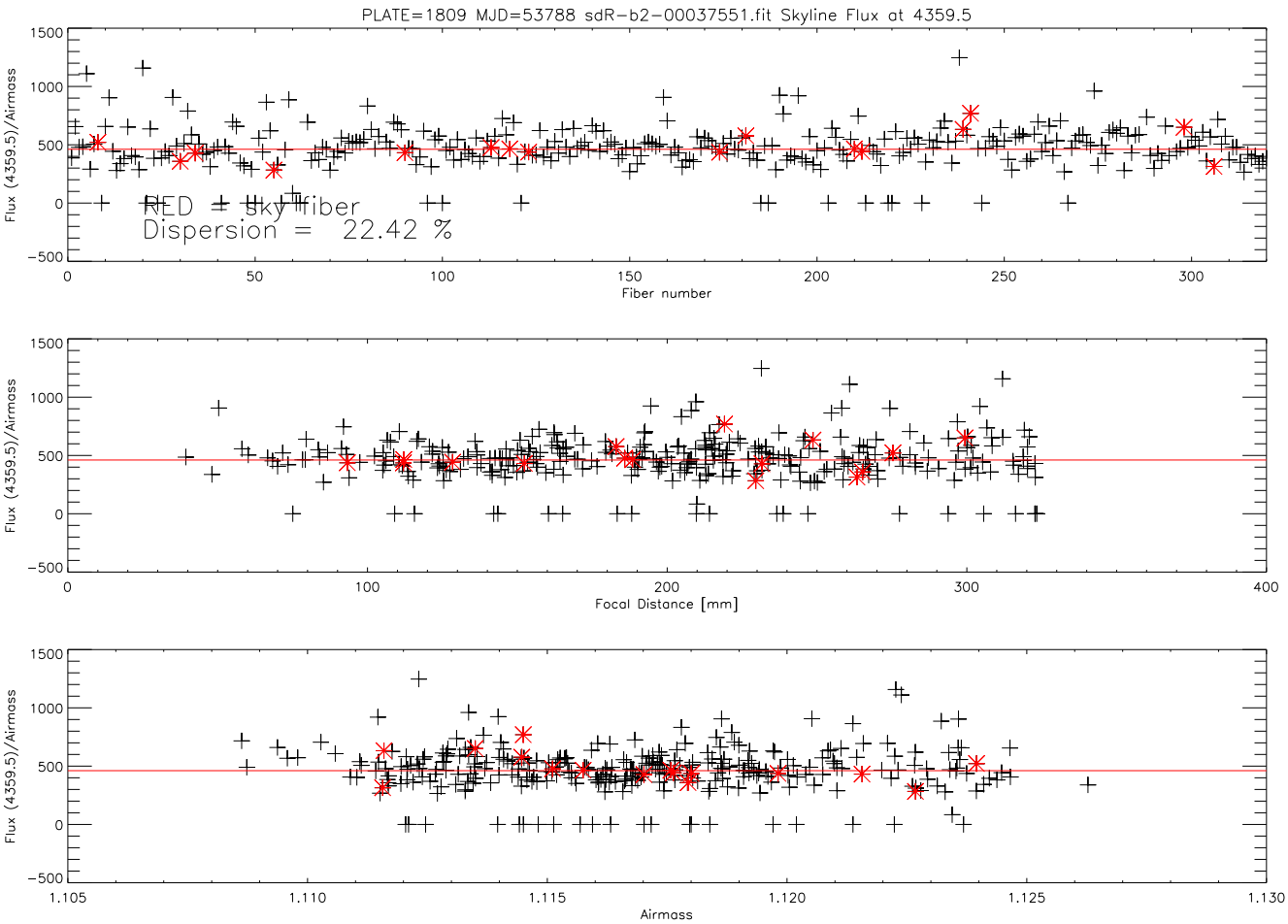

Number of sky fibers = 16
PLATE=1809 MJD=53788 sdR-b2-00037551.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

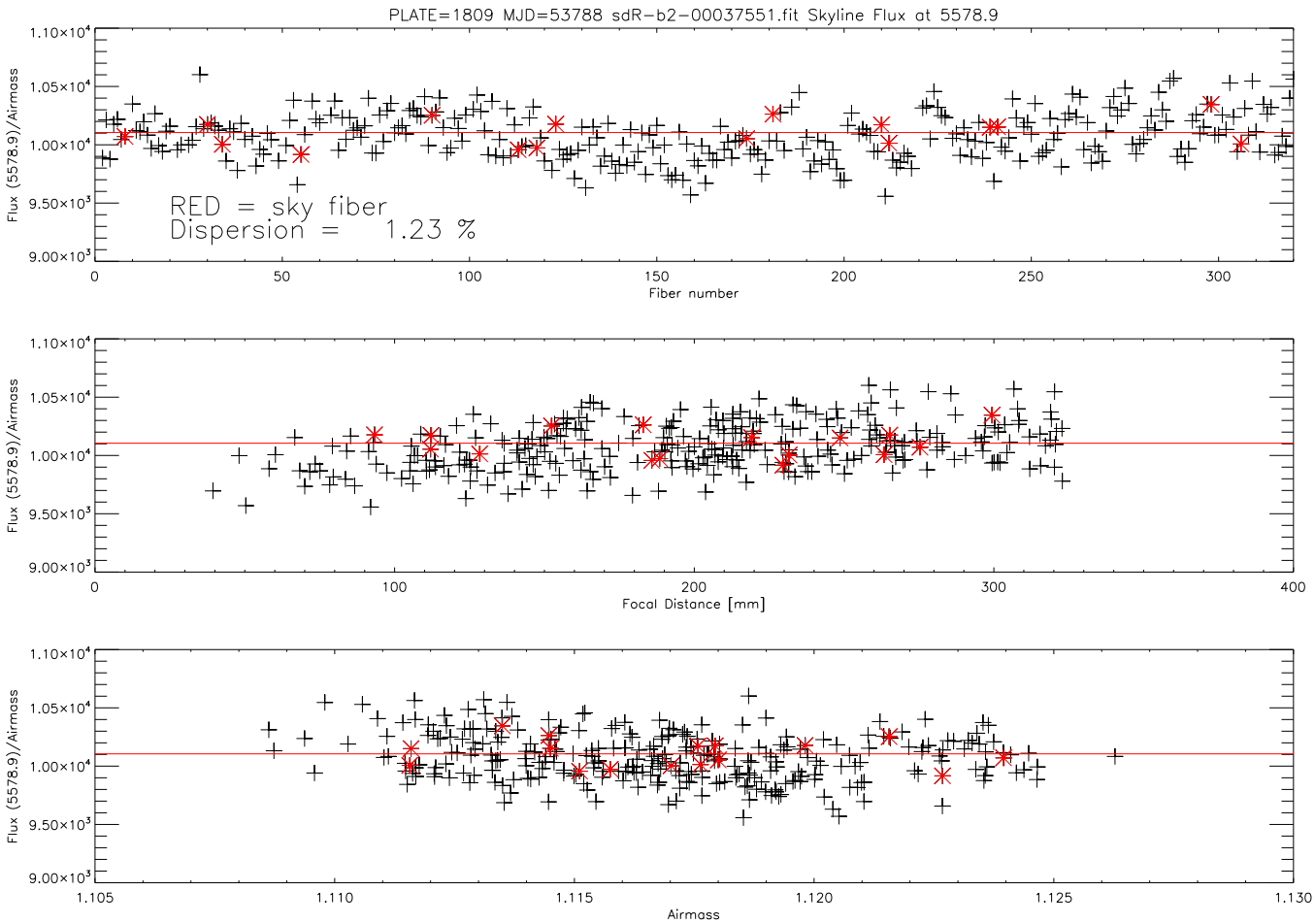

PLATE=1809 MJD=53788 sdR-b2-00037551.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

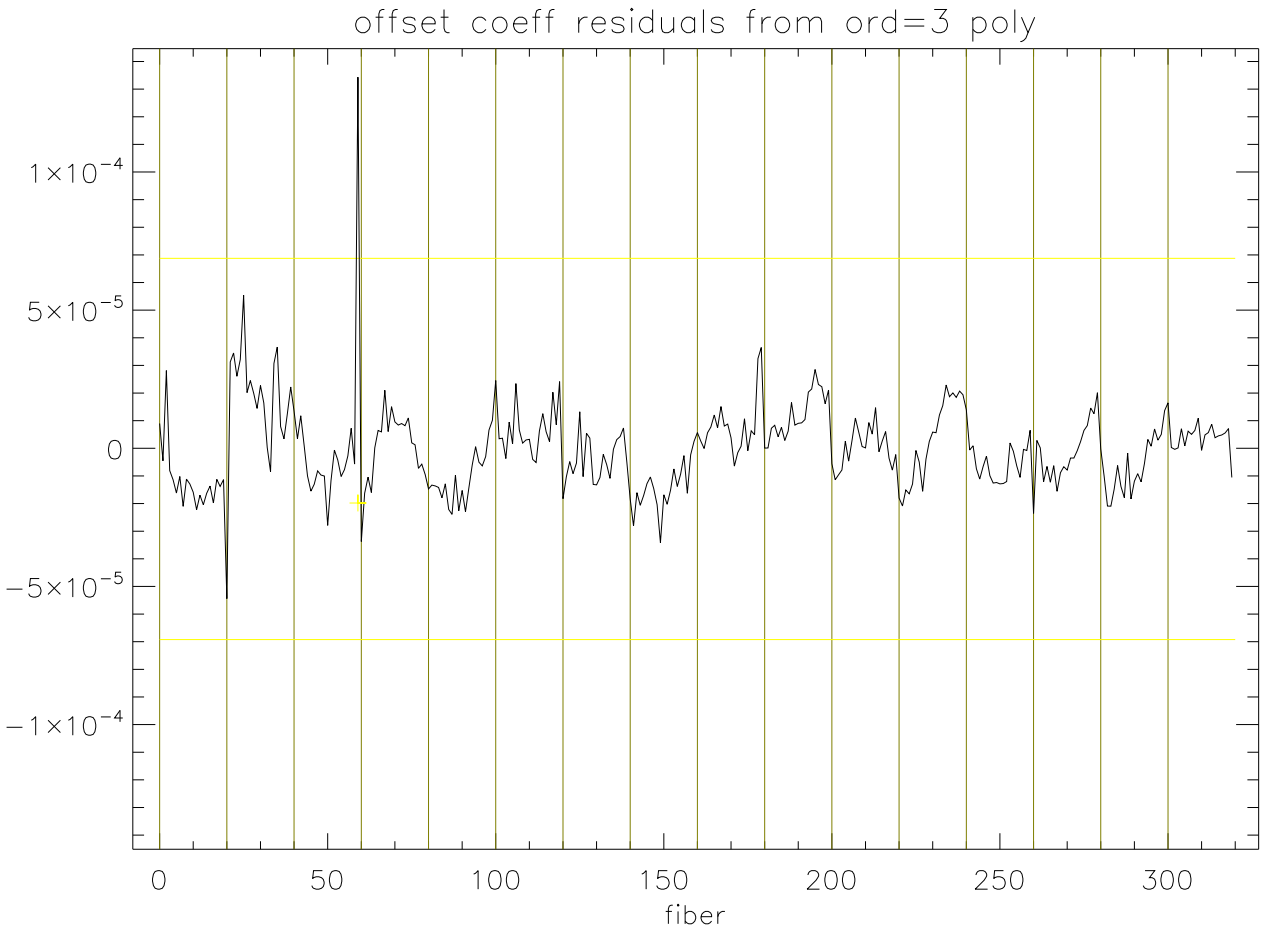

PLATE=1809 MJD=53788 sdR-b2-00037551.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

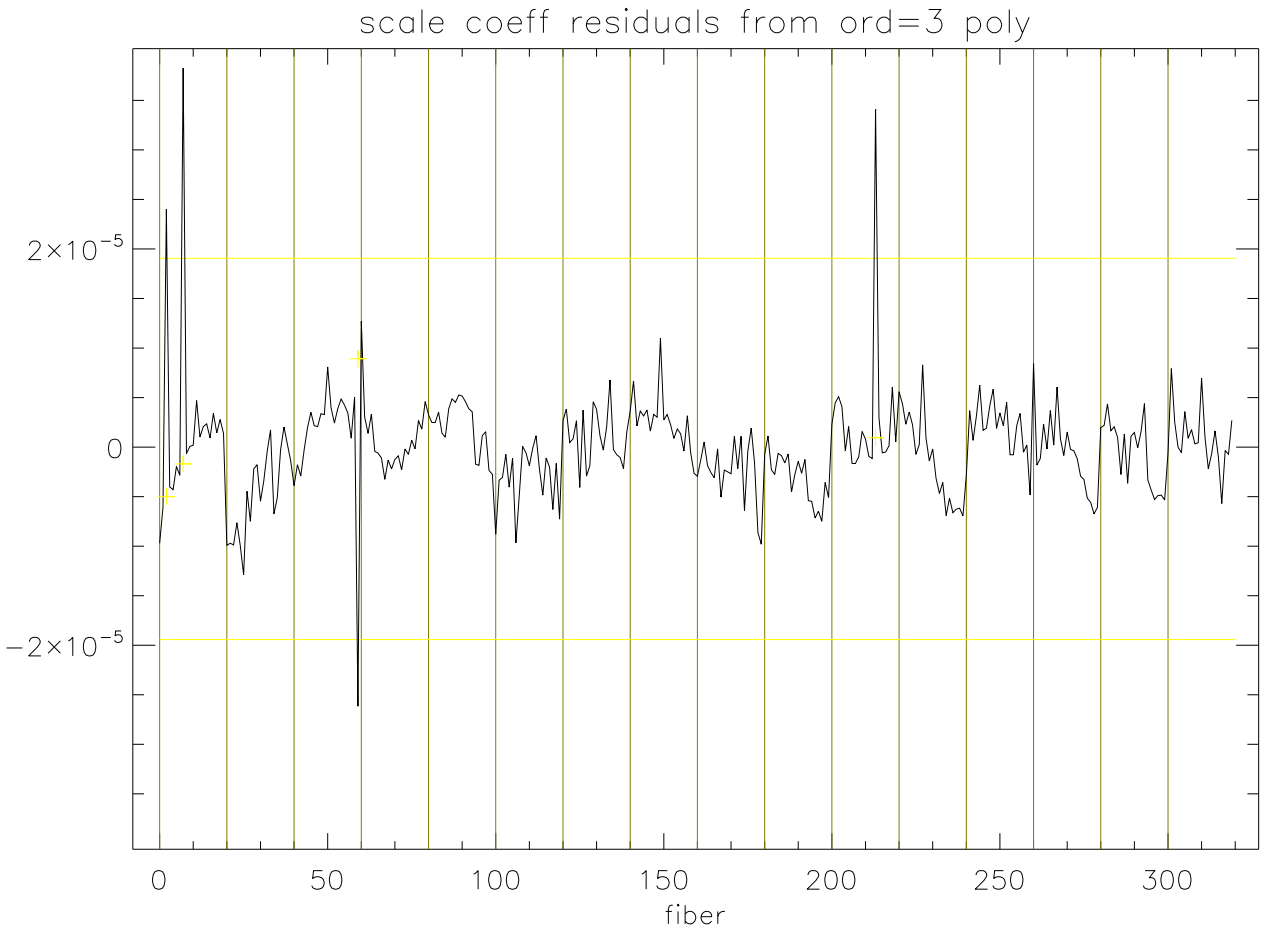

PLATE=1809 MJD=53788 sdR-b2-00037551.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

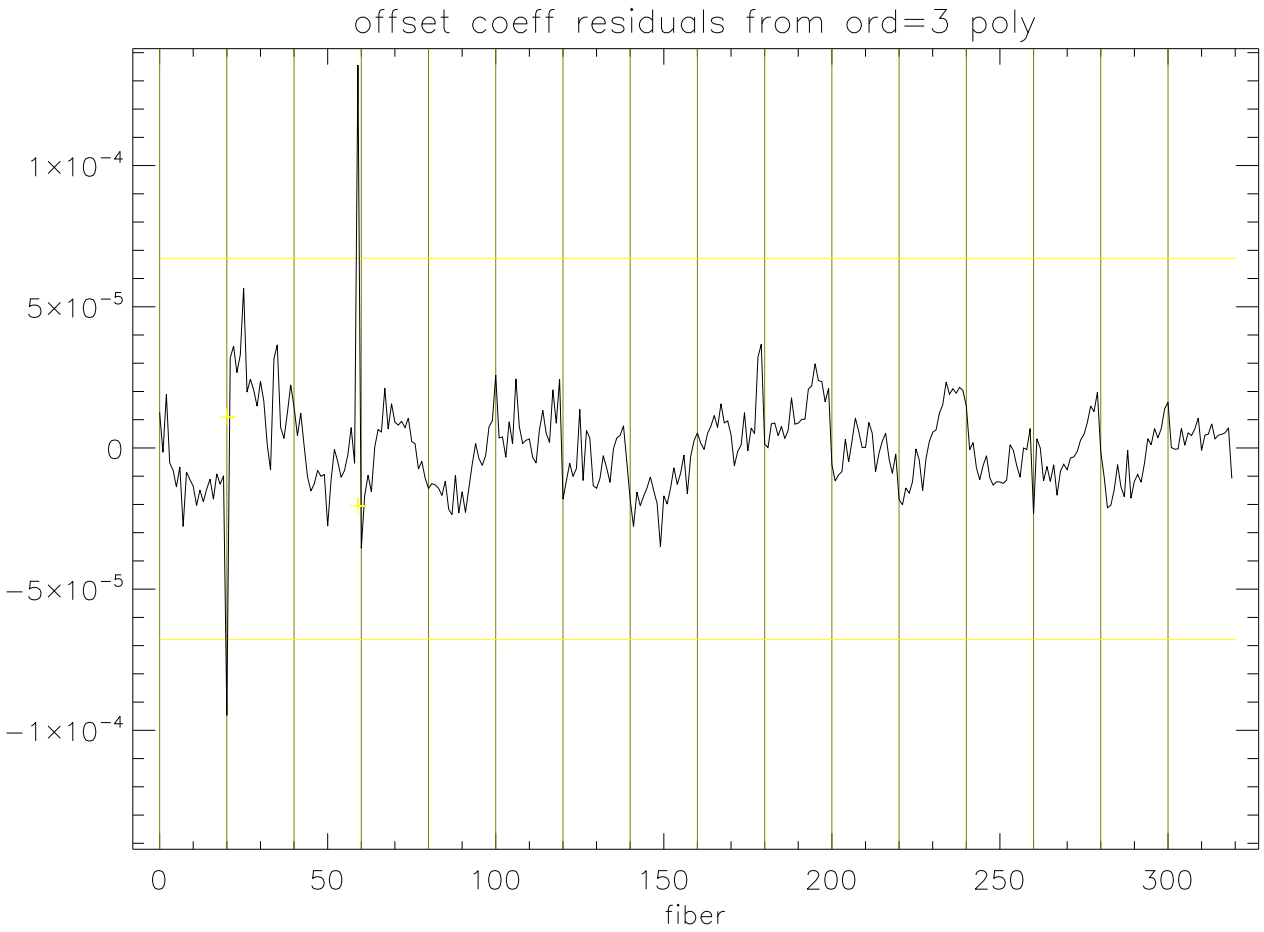

Number of sky fibers = 16
PLATE=1809 MJD=53788 sdR-b2-00037551.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

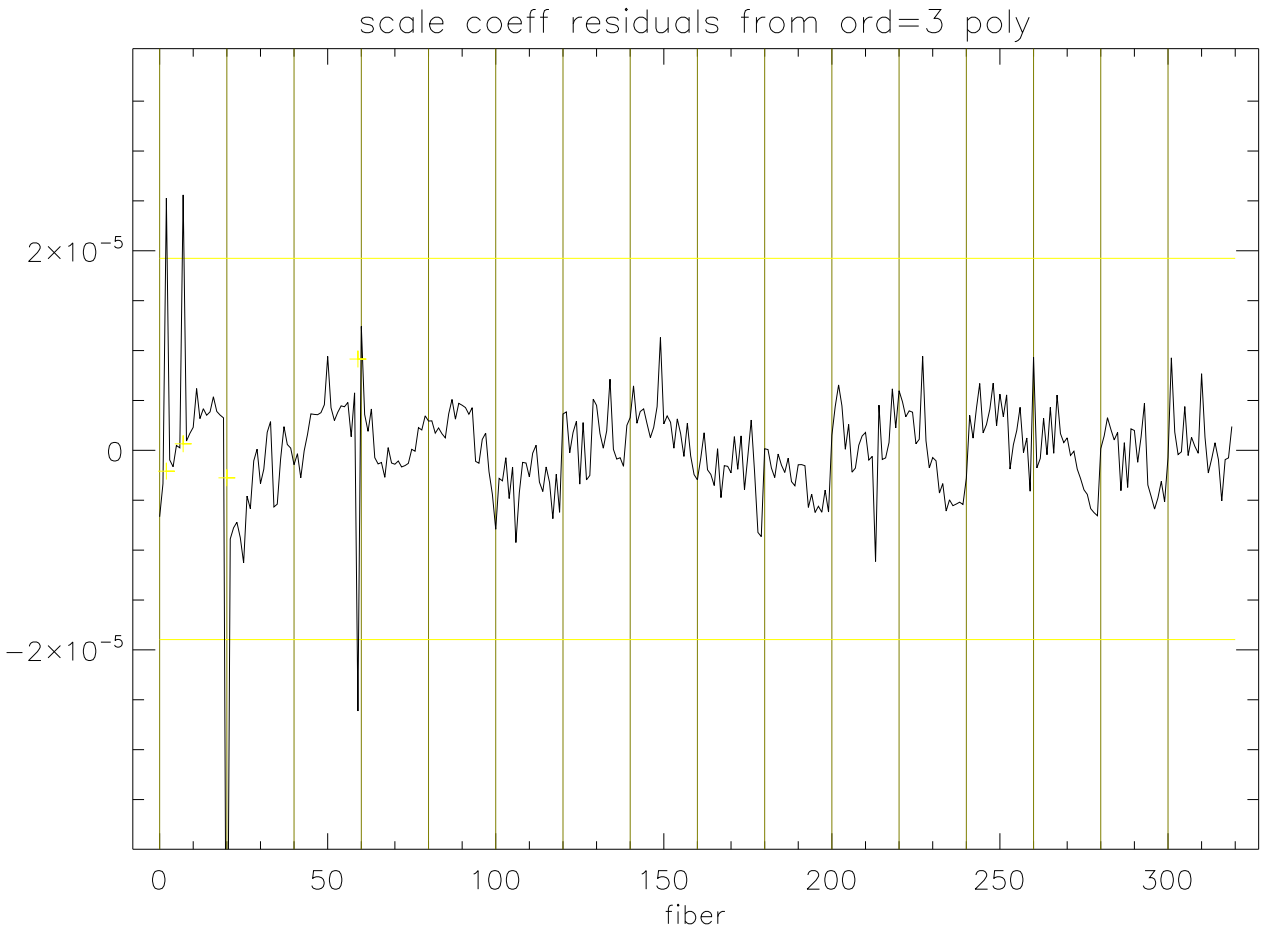

PLATE=1809 MJD=53788 sdR-b2-00037551.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 22.42 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

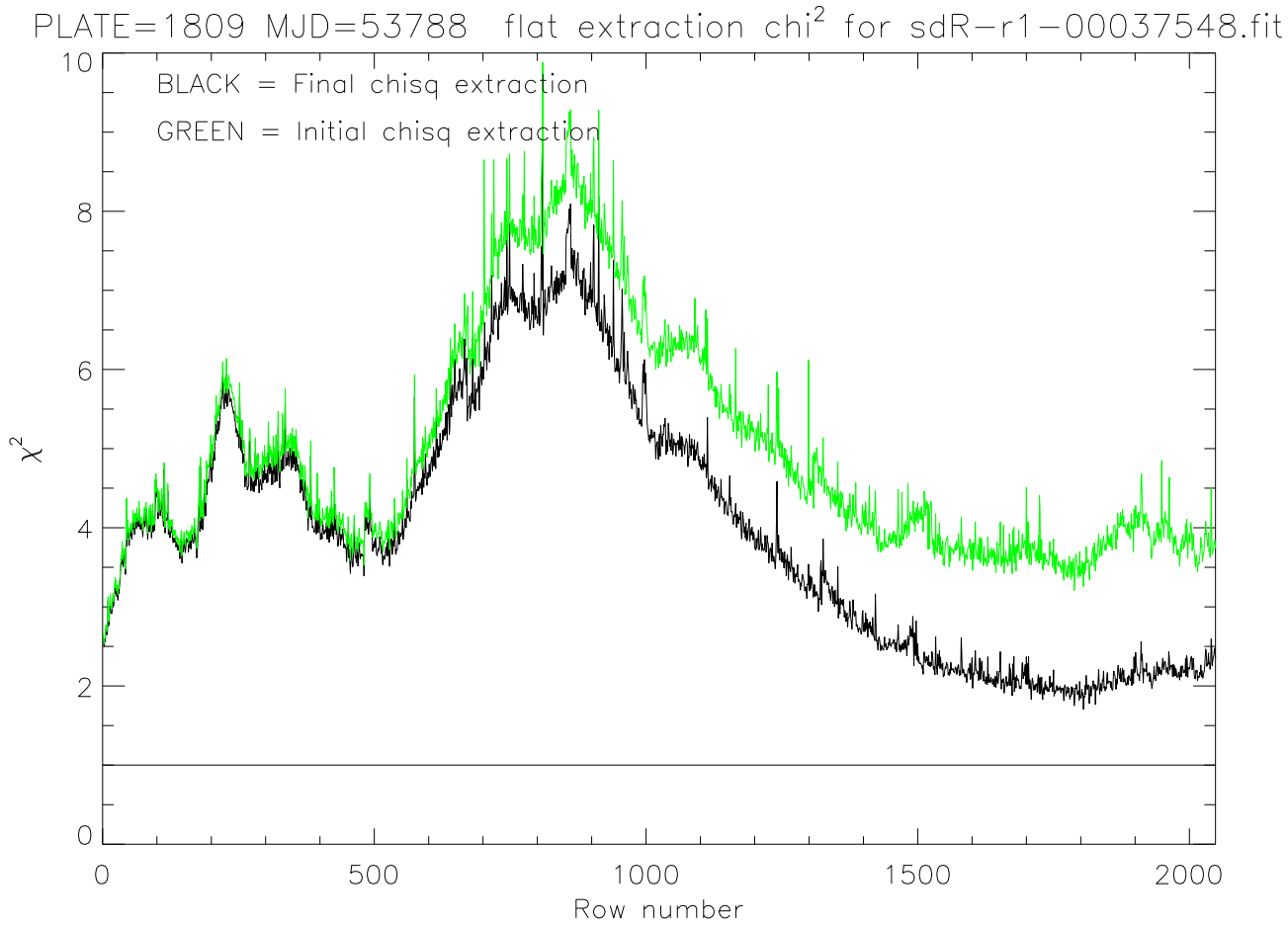

PLATE=1809 MJD=53788 sdR-b2-00037551.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.23 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

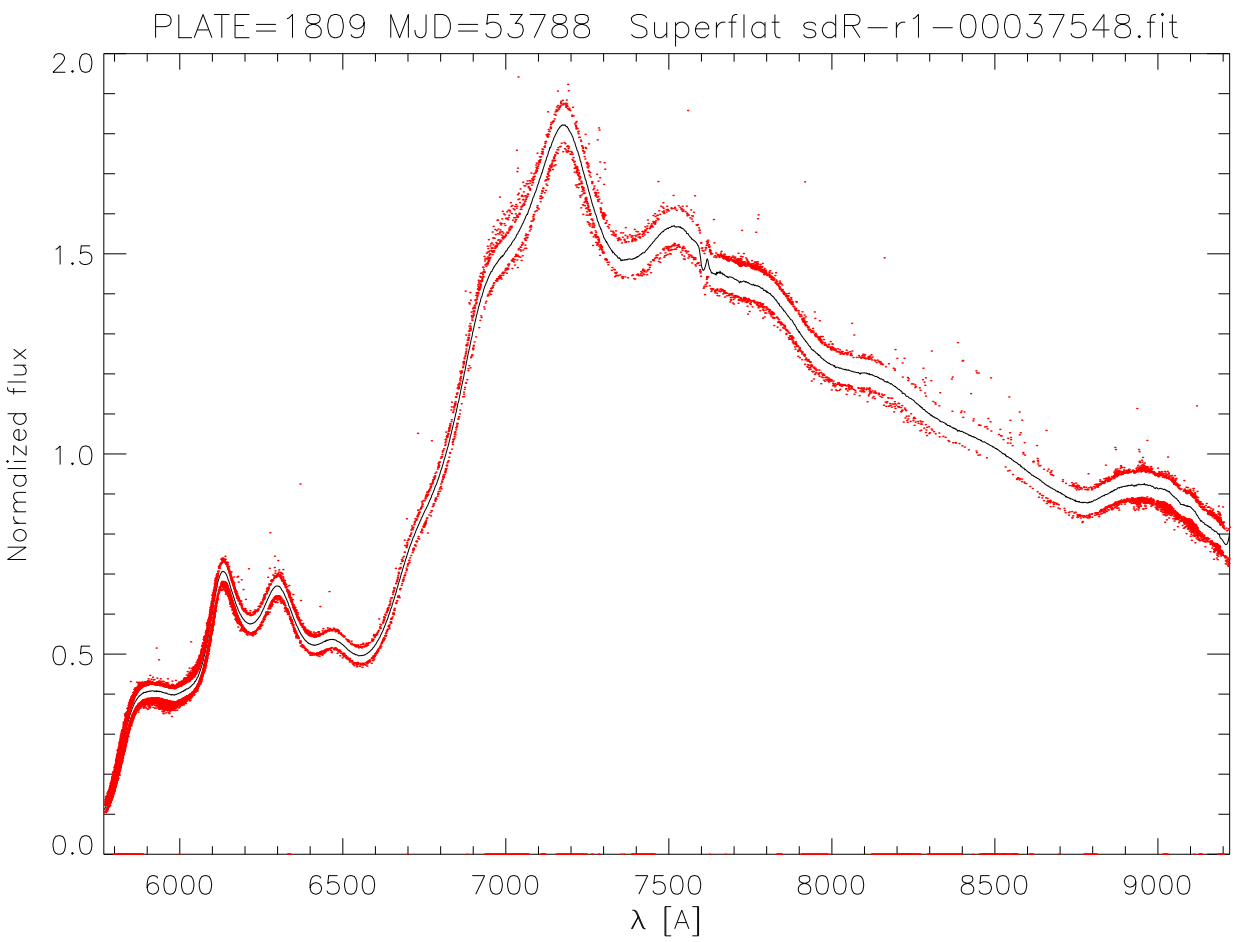

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

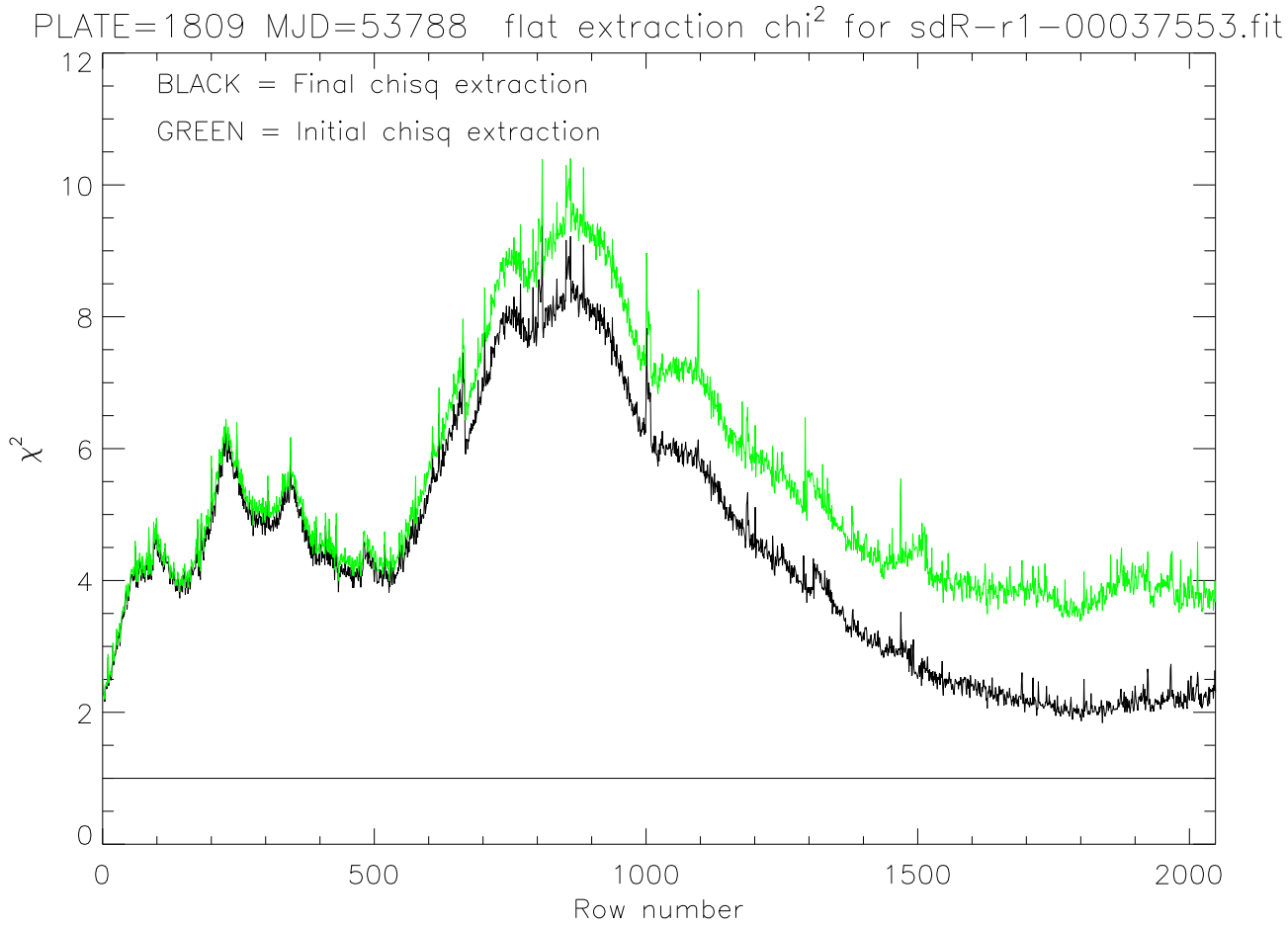

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

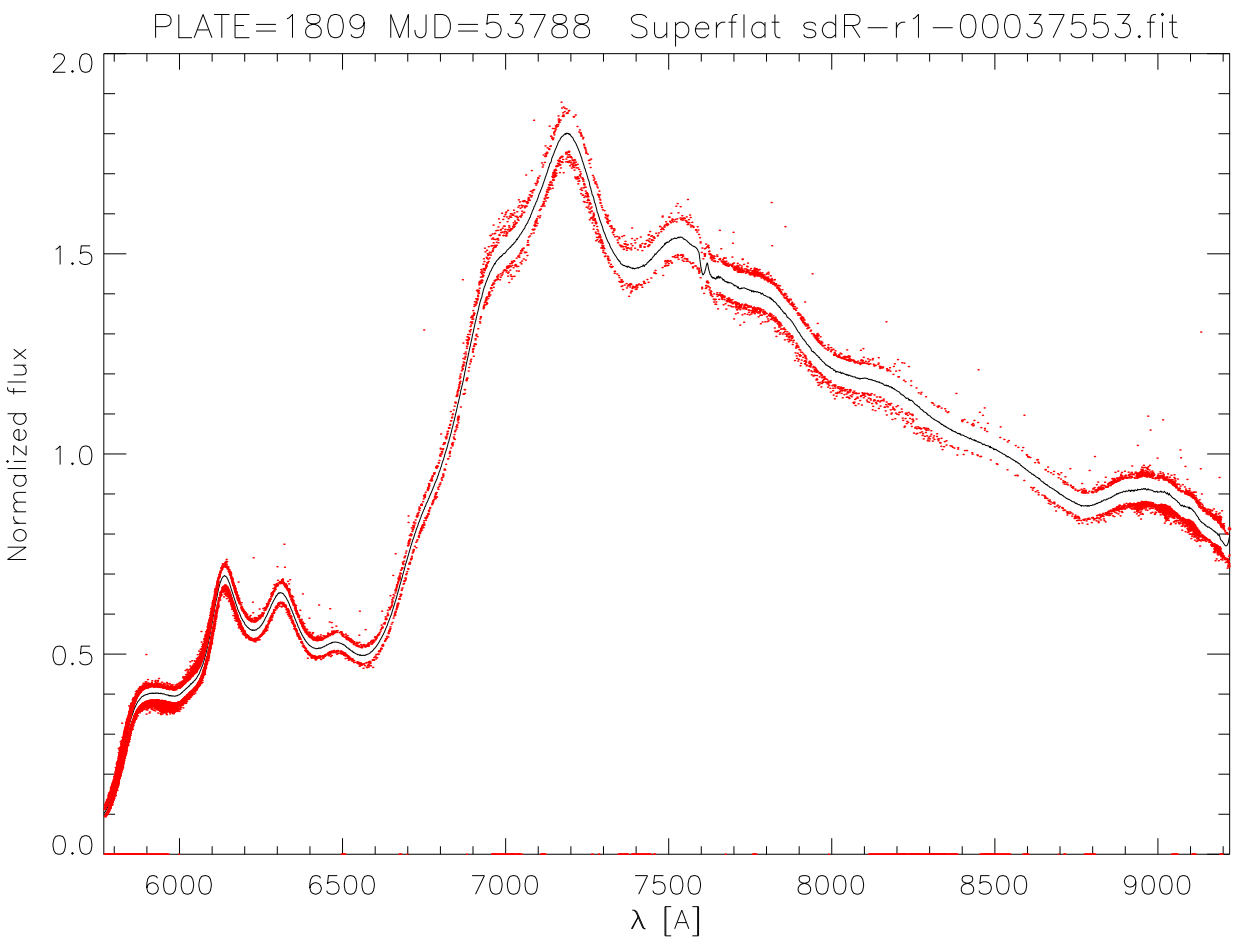

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

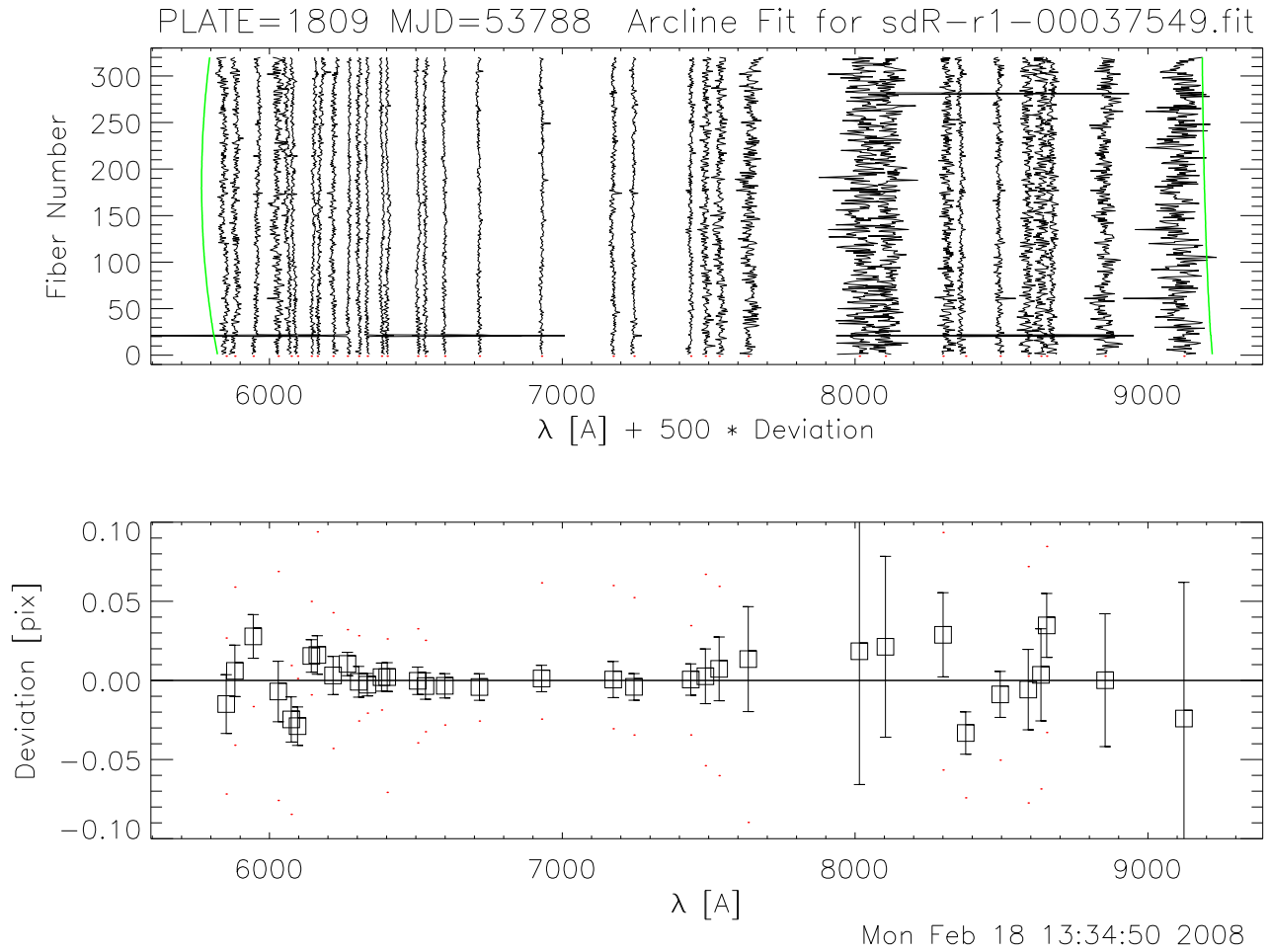

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

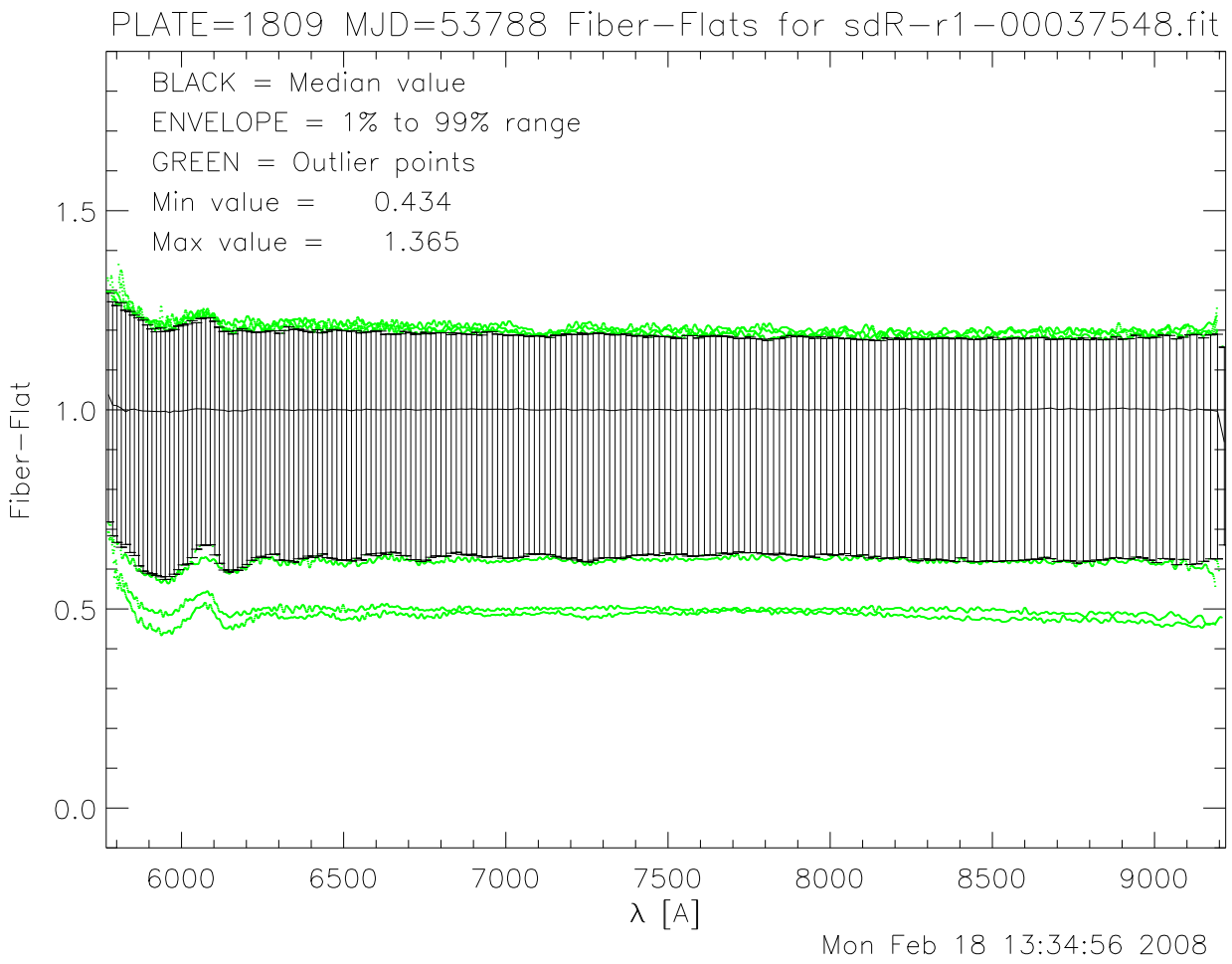

PLATE=1809 MJD=53788 flat extraction chi^2 for sdR−r1−00037548.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

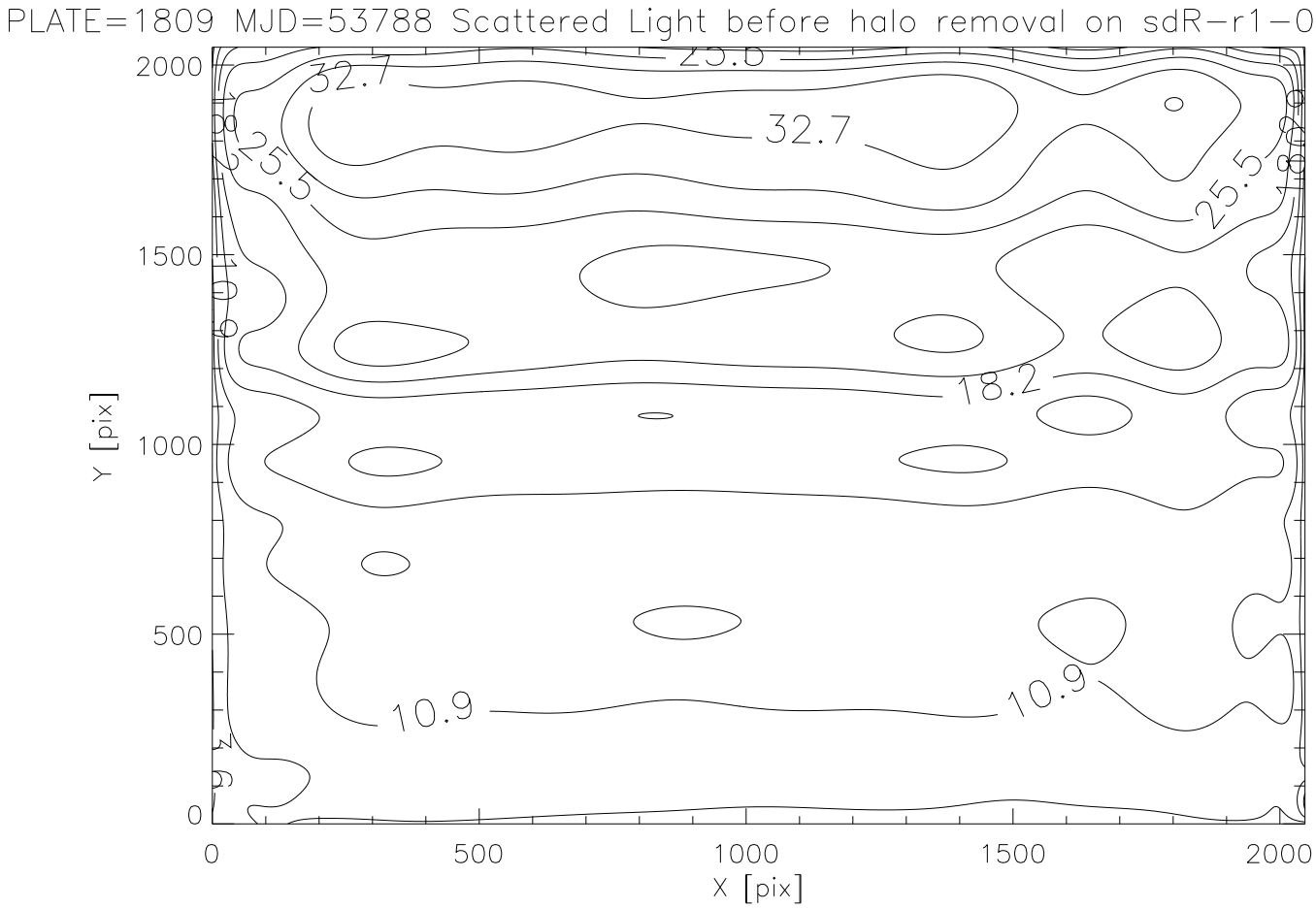

PLATE=1809 MJD=53788 Superflat sdR-r1-00037548.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

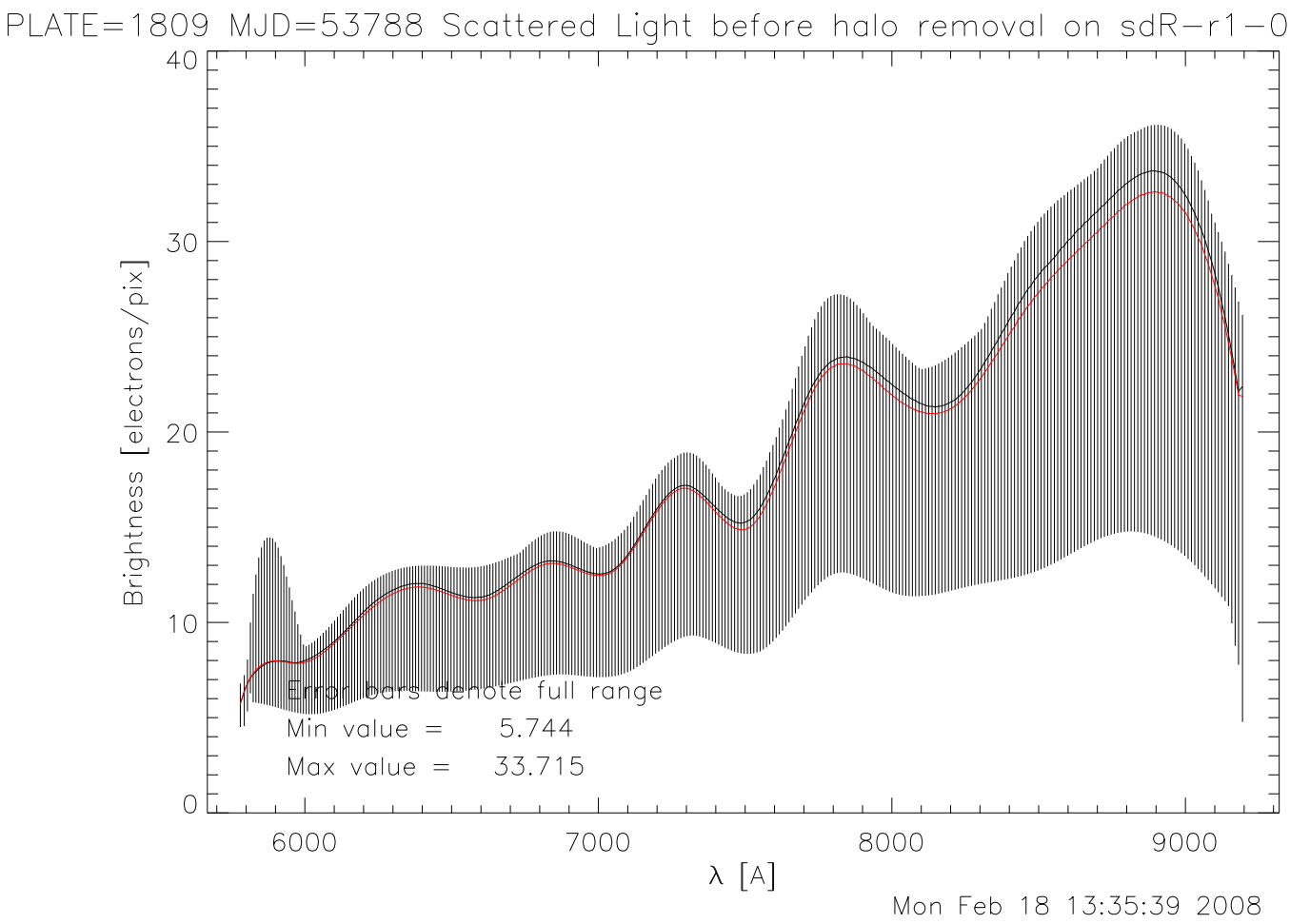

PLATE=1809 MJD=53788 flat extraction chi^2 for sdR−r1−00037553.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

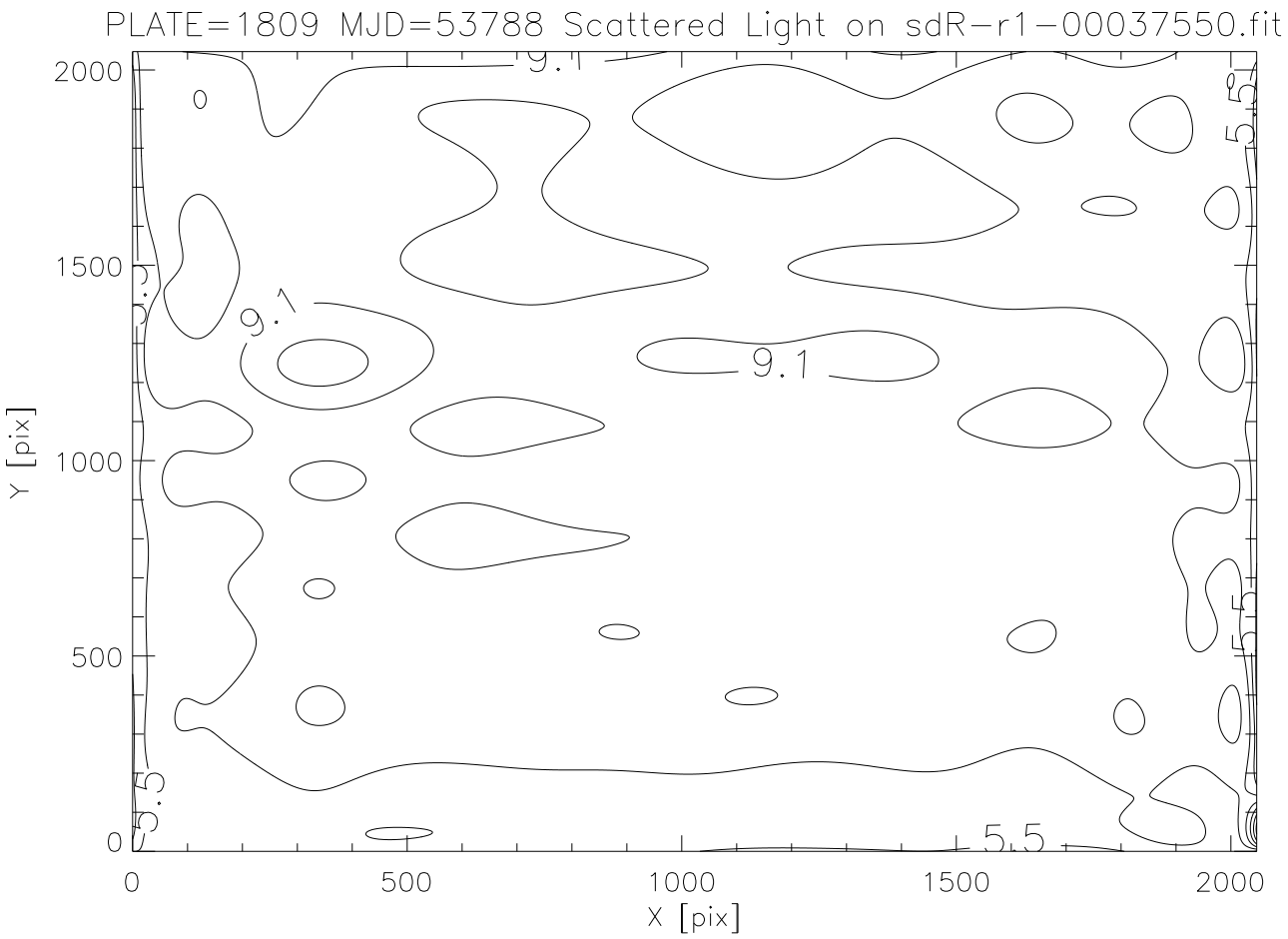

PLATE=1809 MJD=53788 Superflat sdR-r1-00037553.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

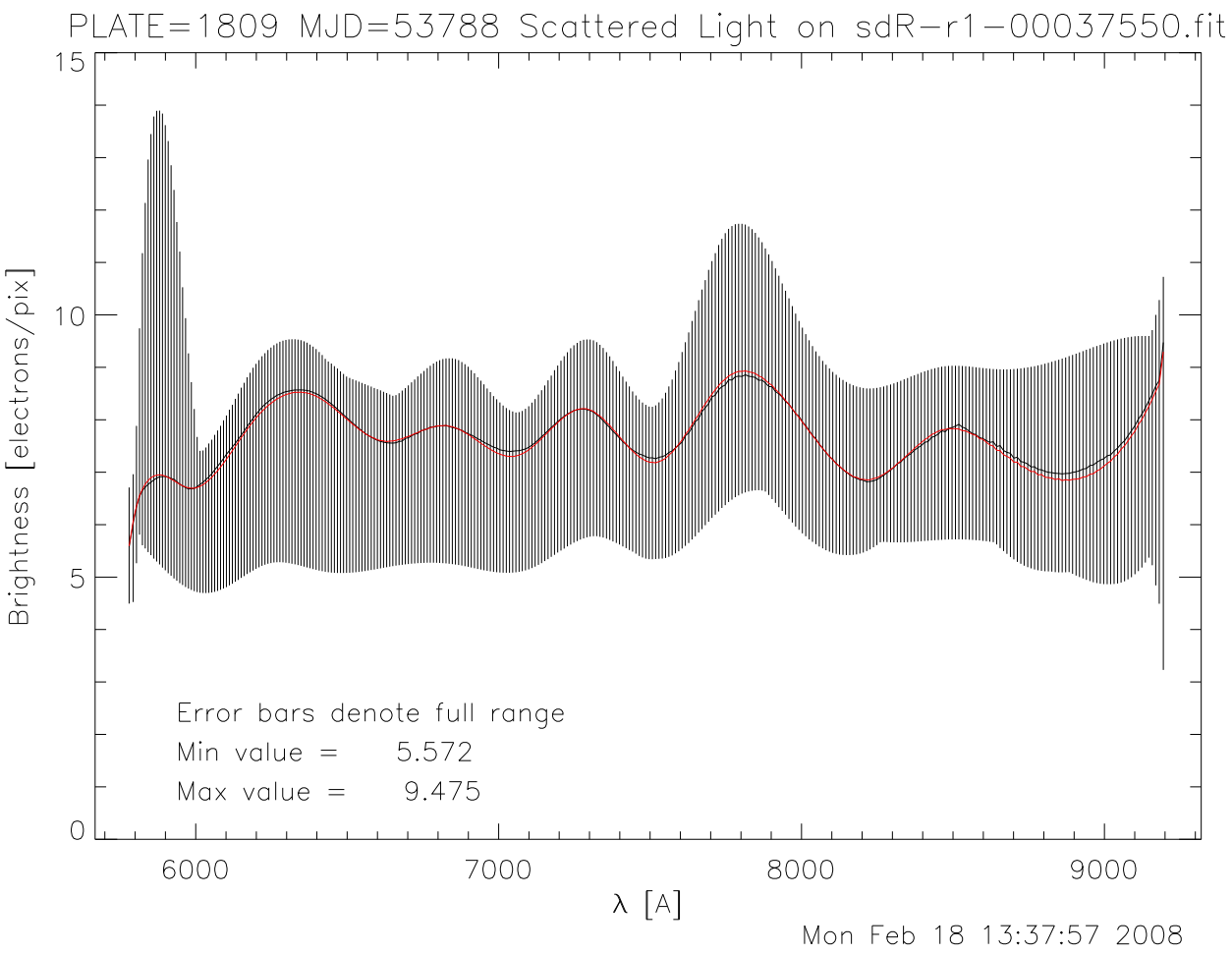

PLATE=1809 MJD=53788 Arcline Fit for sdR-r1-00037549.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 18 13:34:50 2008

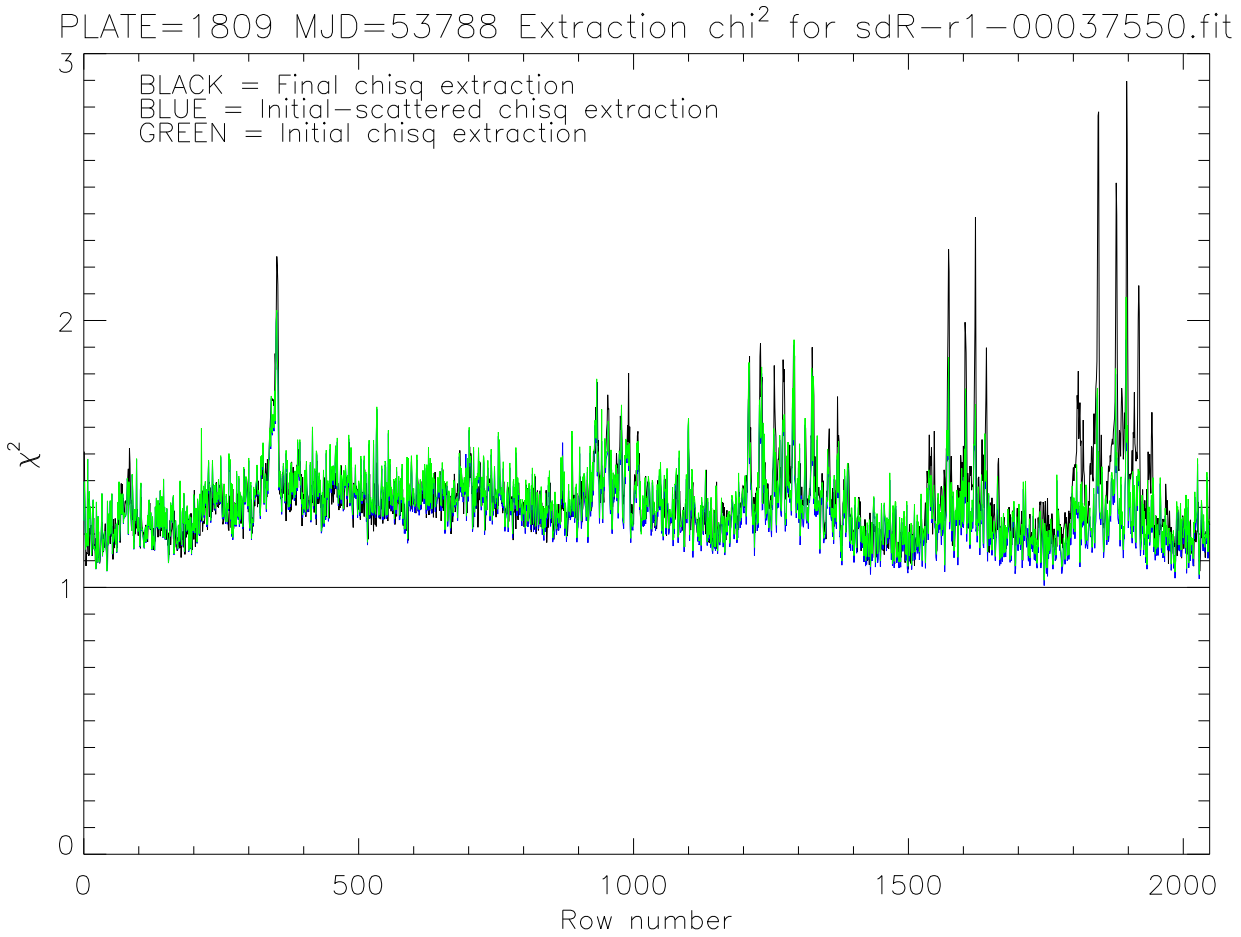

PLATE=1809 MJD=53788 Fiber−Flats for sdR−r1−00037548.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.434
Max value = 1.365
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 18 13:34:56 2008

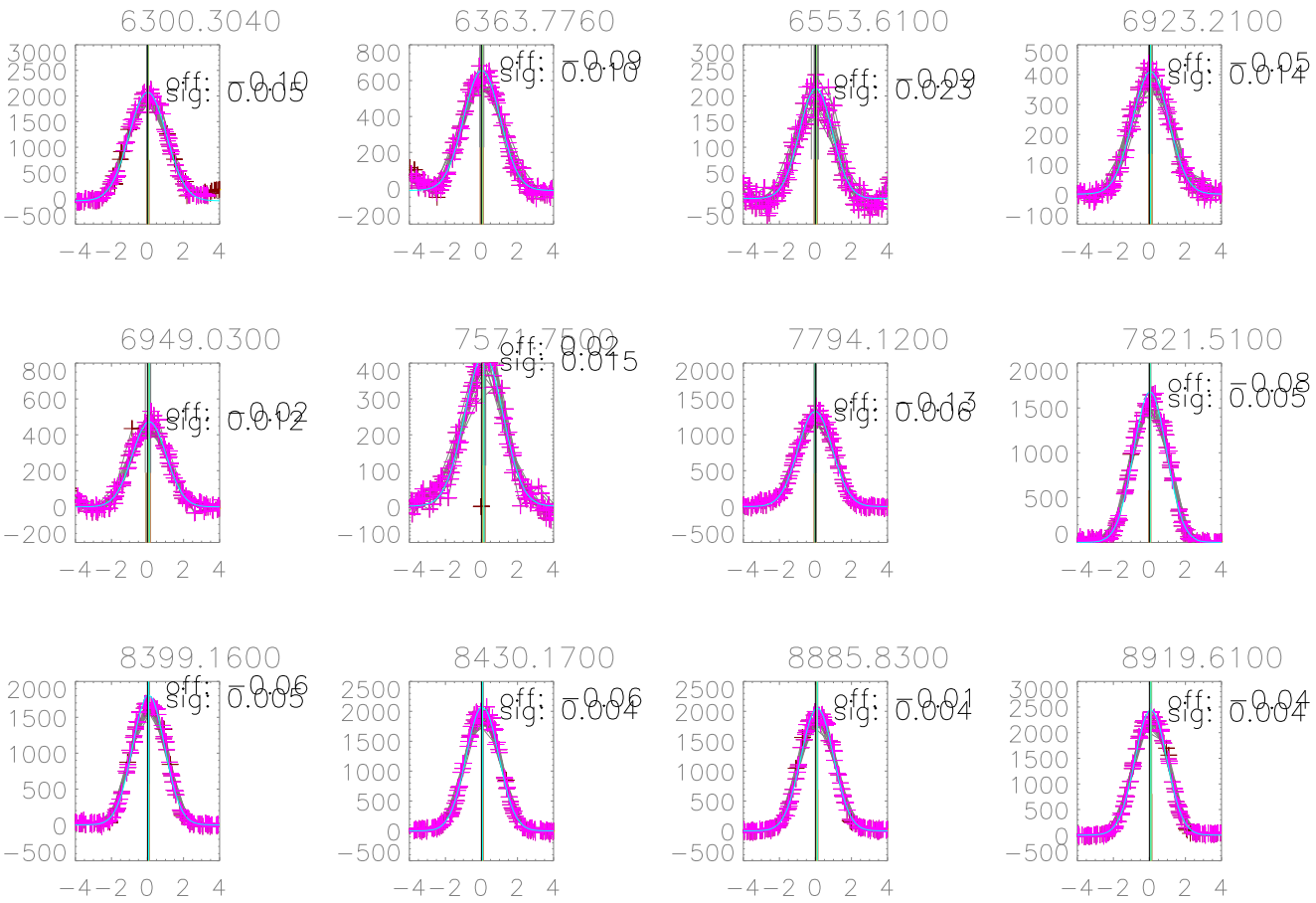

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-r1-00037550.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

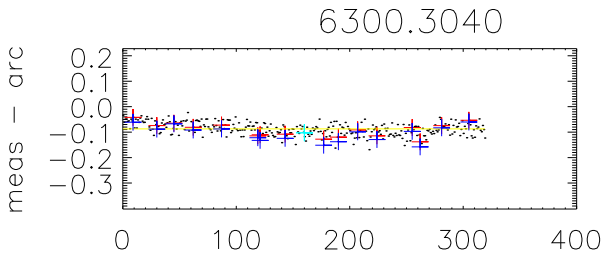

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-r1-00037550.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.744
Max value = 33.715
Mon Feb 18 13:35:39 2008

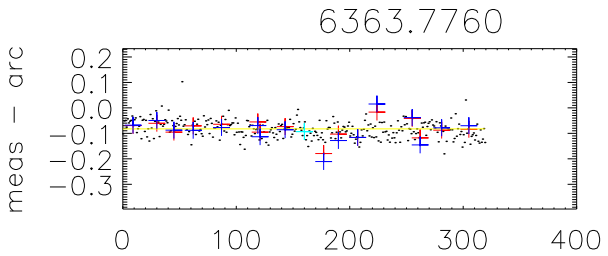

PLATE=1809 MJD=53788 Scattered Light on sdR-r1-00037550.fit
9.1
0
5.5
9.1
9.1
5.5
5.5
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

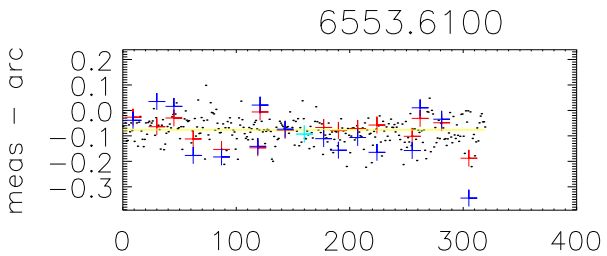

PLATE=1809 MJD=53788 Scattered Light on sdR-r1-00037550.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.572
Max value = 9.475
Mon Feb 18 13:37:57 2008

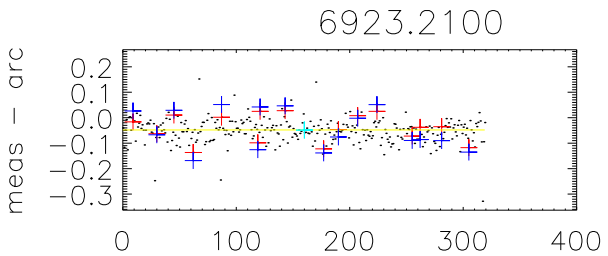

PLATE=1809 MJD=53788 Extraction chi^2 for sdR−r1−00037550.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3
2
1
0
0
500
1000
1500
2000
Row number

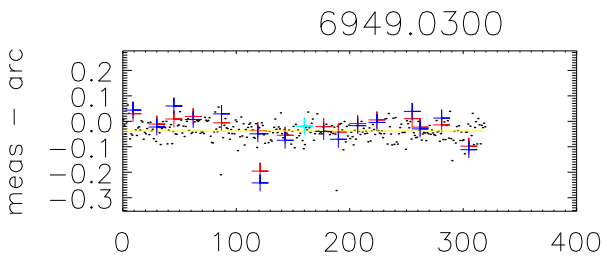

6300.3040
off: -0.10
sig: 0.005
6363.7760
off: -0.09
sig: 0.010
6553.6100
off: -0.09
sig: 0.023
6923.2100
off: -0.05
sig: 0.014
6949.0300
off: -0.02
sig: 0.012
7571.7500
off: 0.02
sig: 0.015
7794.1200
off: -0.13
sig: 0.006
7821.5100
off: -0.08
sig: 0.005
8399.1600
off: -0.06
sig: 0.005
8430.1700
off: -0.06
sig: 0.004
8885.8300
off: -0.01
sig: 0.004
8919.6100
off: -0.04
sig: 0.004

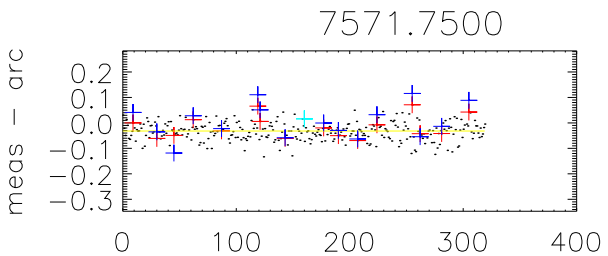

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

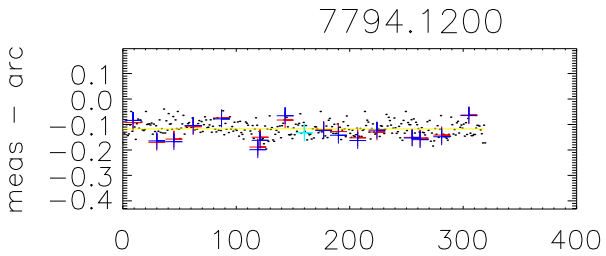

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

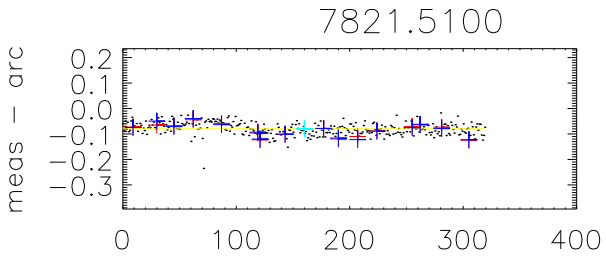

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

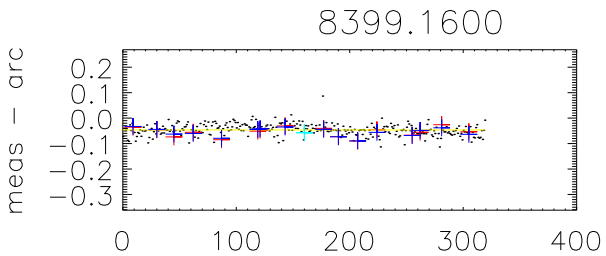

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

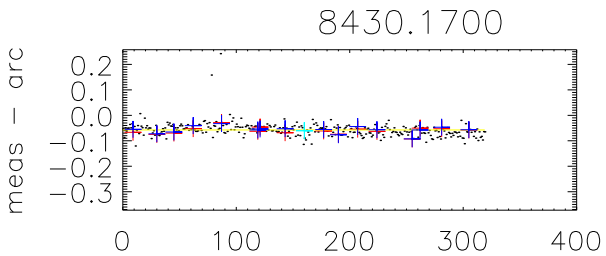

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

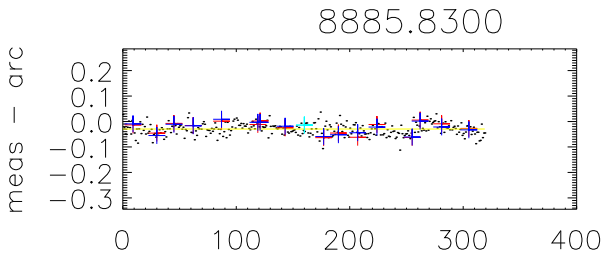

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

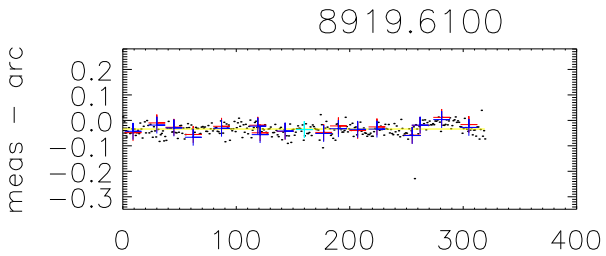

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

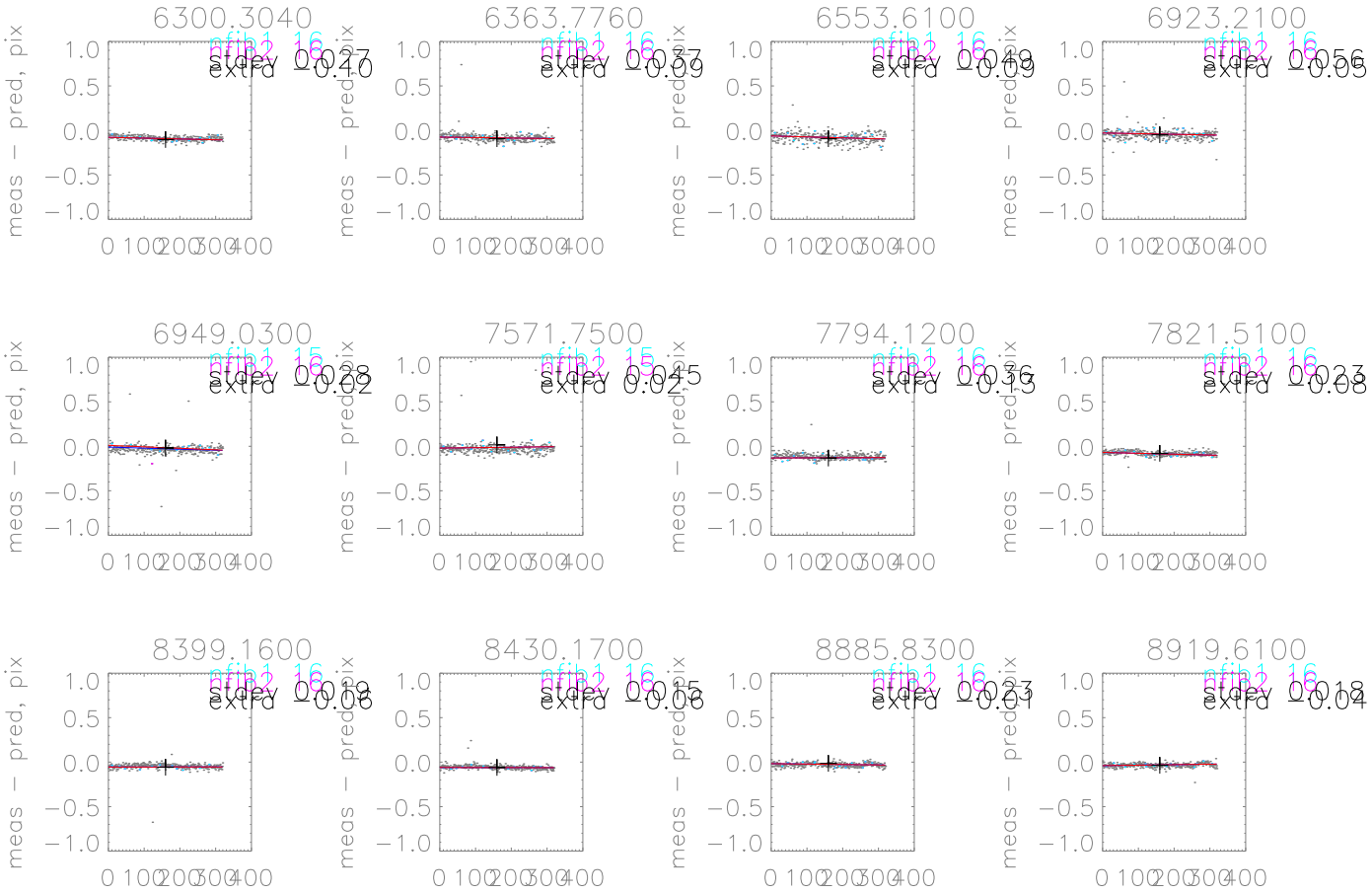

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

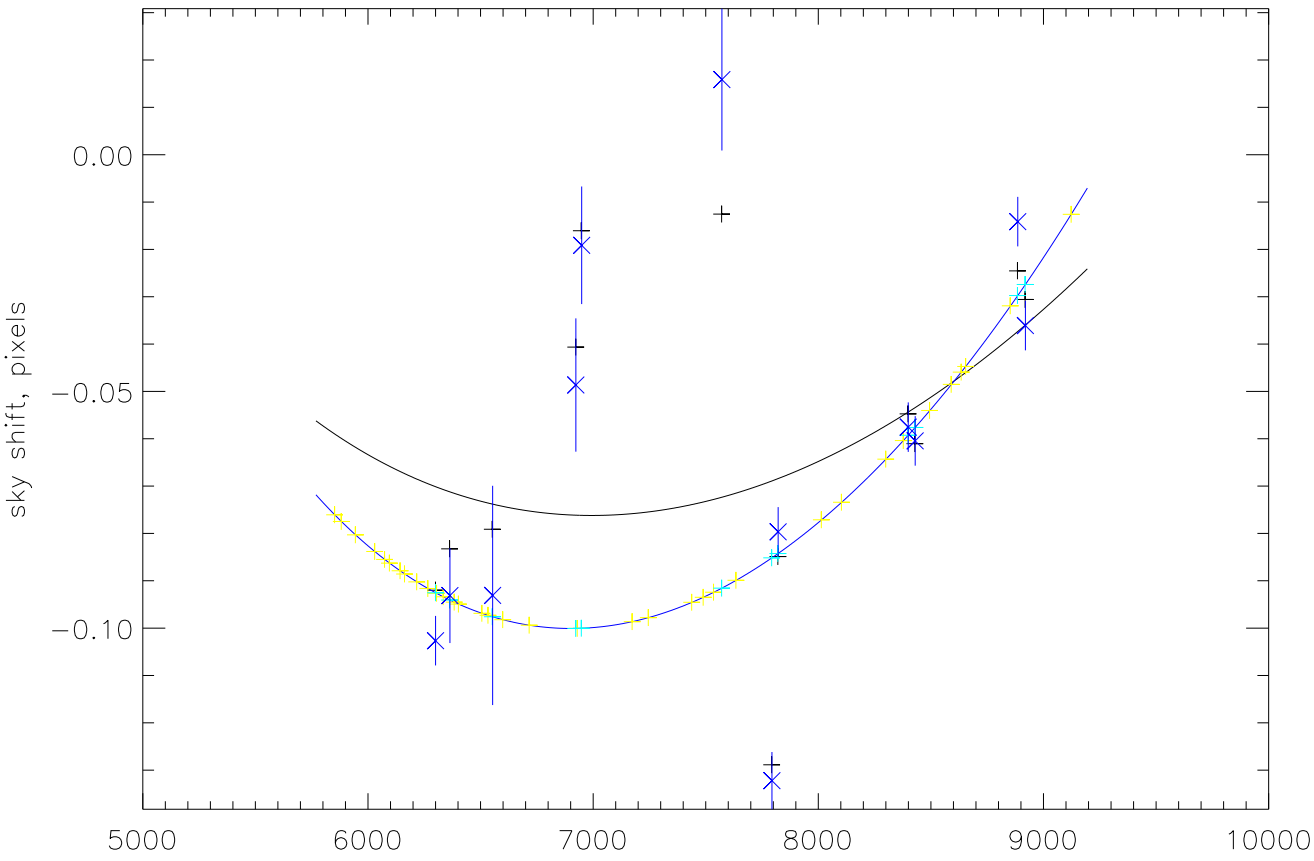

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

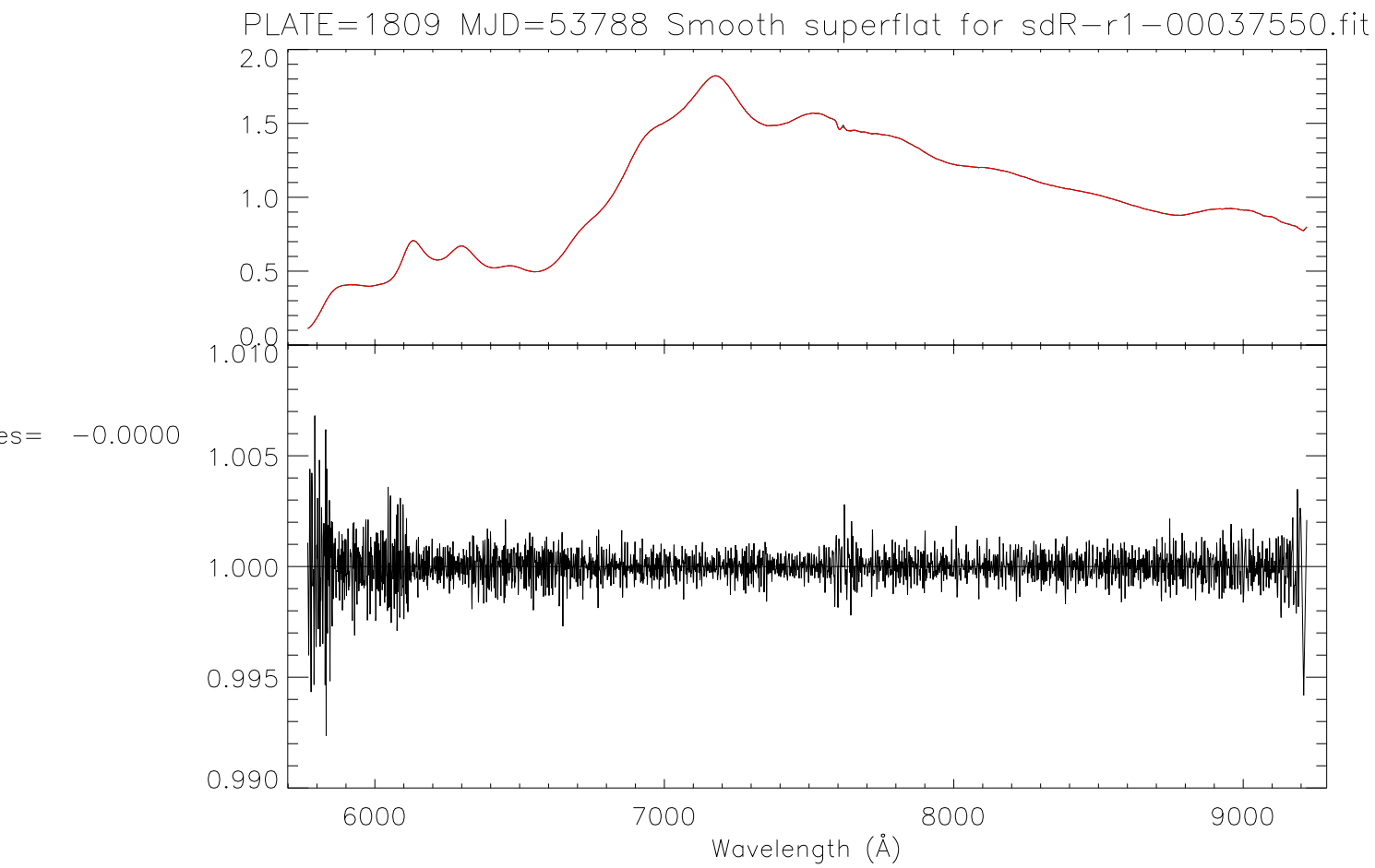

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

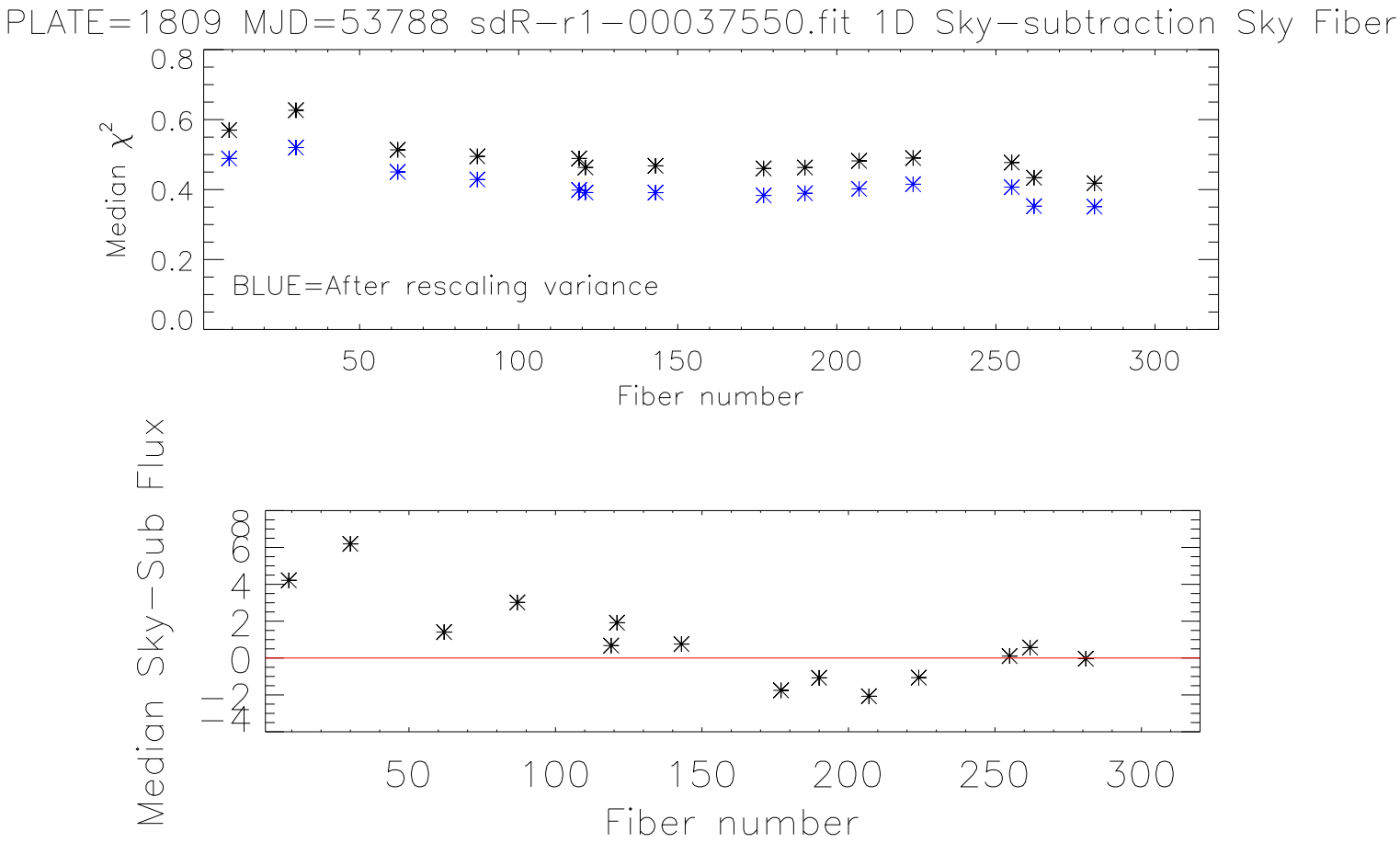

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

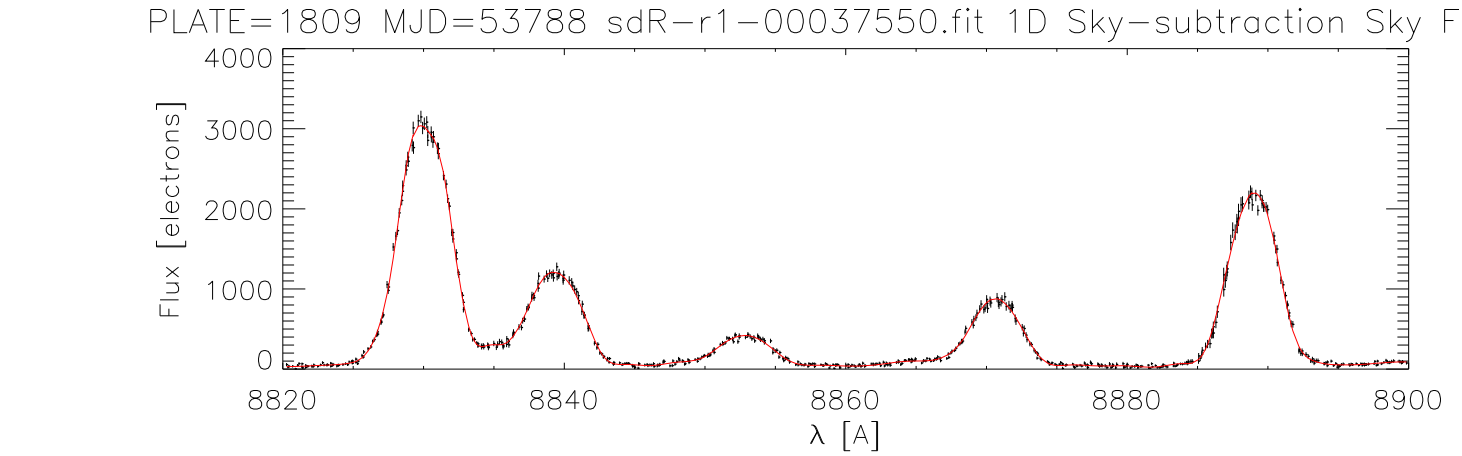

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

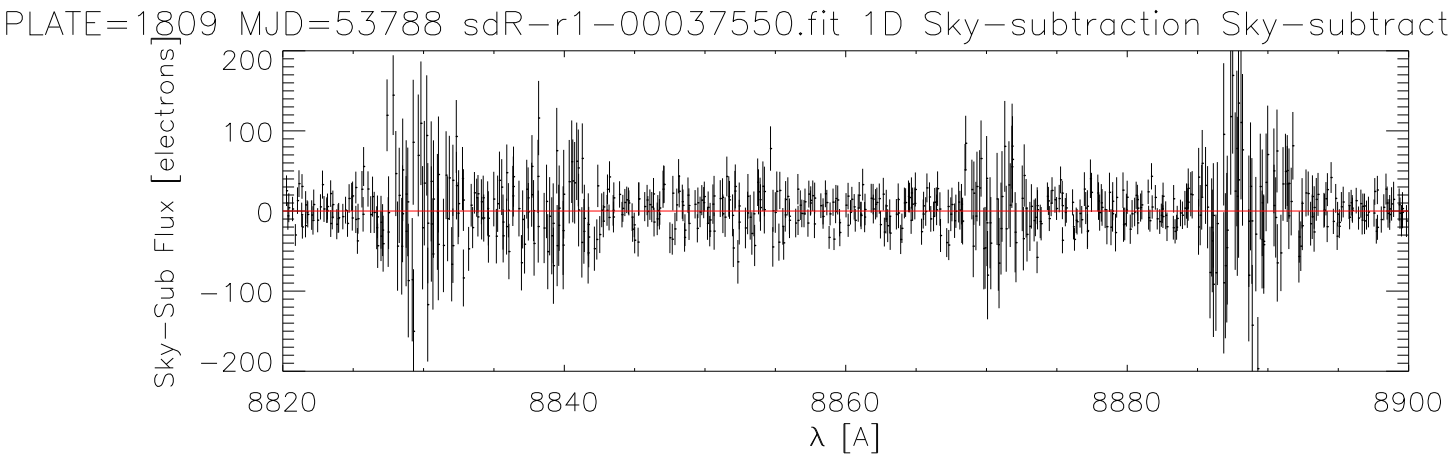

6300.3040
stdev 0.027
extra −0.040
6363.7760
stdev 0.037
extra −0.009
6553.6100
stdev 0.049
extra −0.009
6923.2100
stdev 0.056
extra −0.005
6949.0300
stdev 0.028
extra −0.002
7571.7500
stdev 0.045
extra 0.002
7794.1200
stdev 0.036
extra −0.013
7821.5100
stdev 0.023
extra −0.008
8399.1600
stdev 0.019
extra −0.006
8430.1700
stdev 0.015
extra −0.006
8885.8300
stdev 0.023
extra −0.001
8919.6100
stdev 0.018
extra −0.004
meas − pred, pix
mfhs2 16
mfhs1 15
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

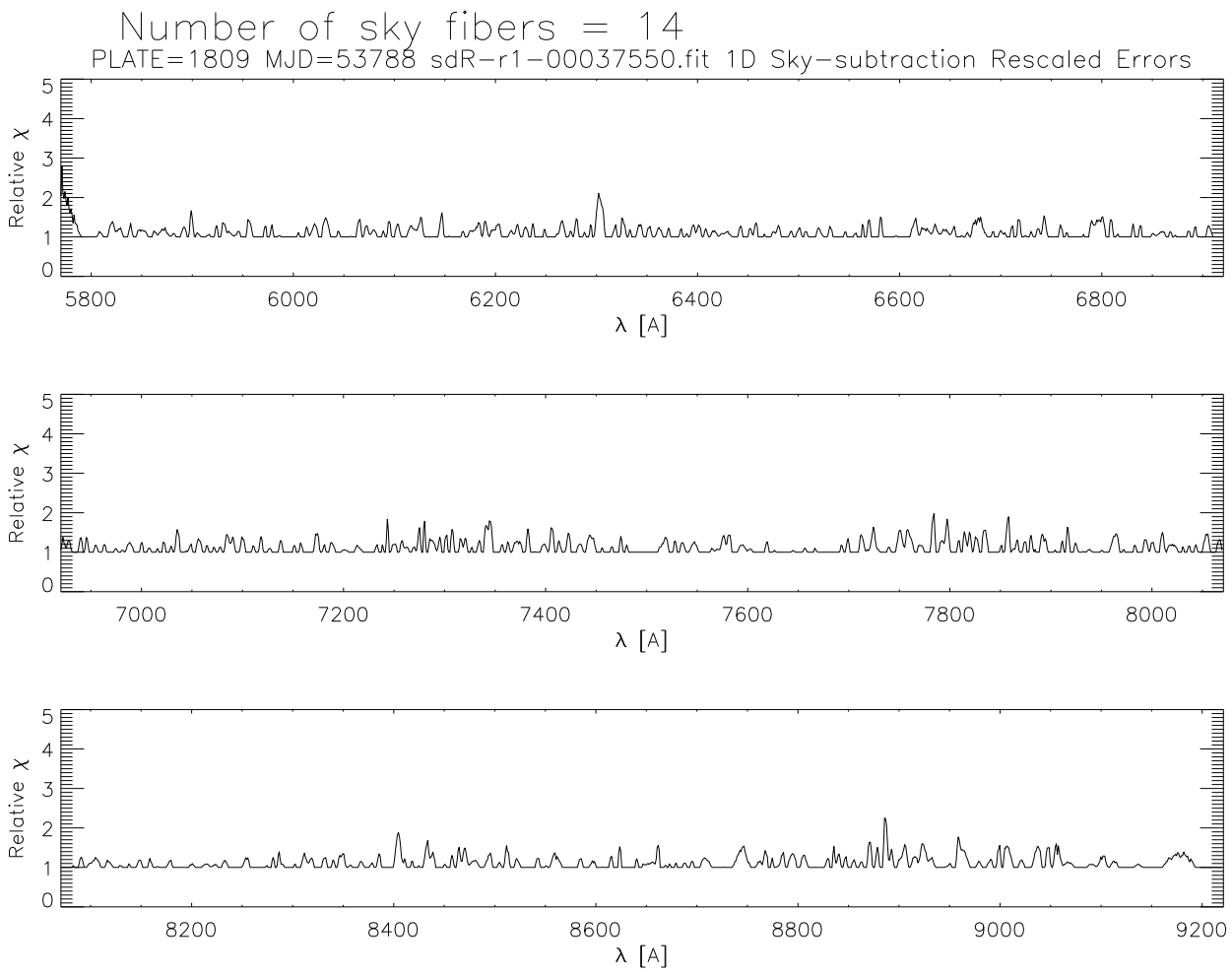

0.00
−0.05
−0.10
sky shift, pixels
5000
6000
7000
8000
9000
10000

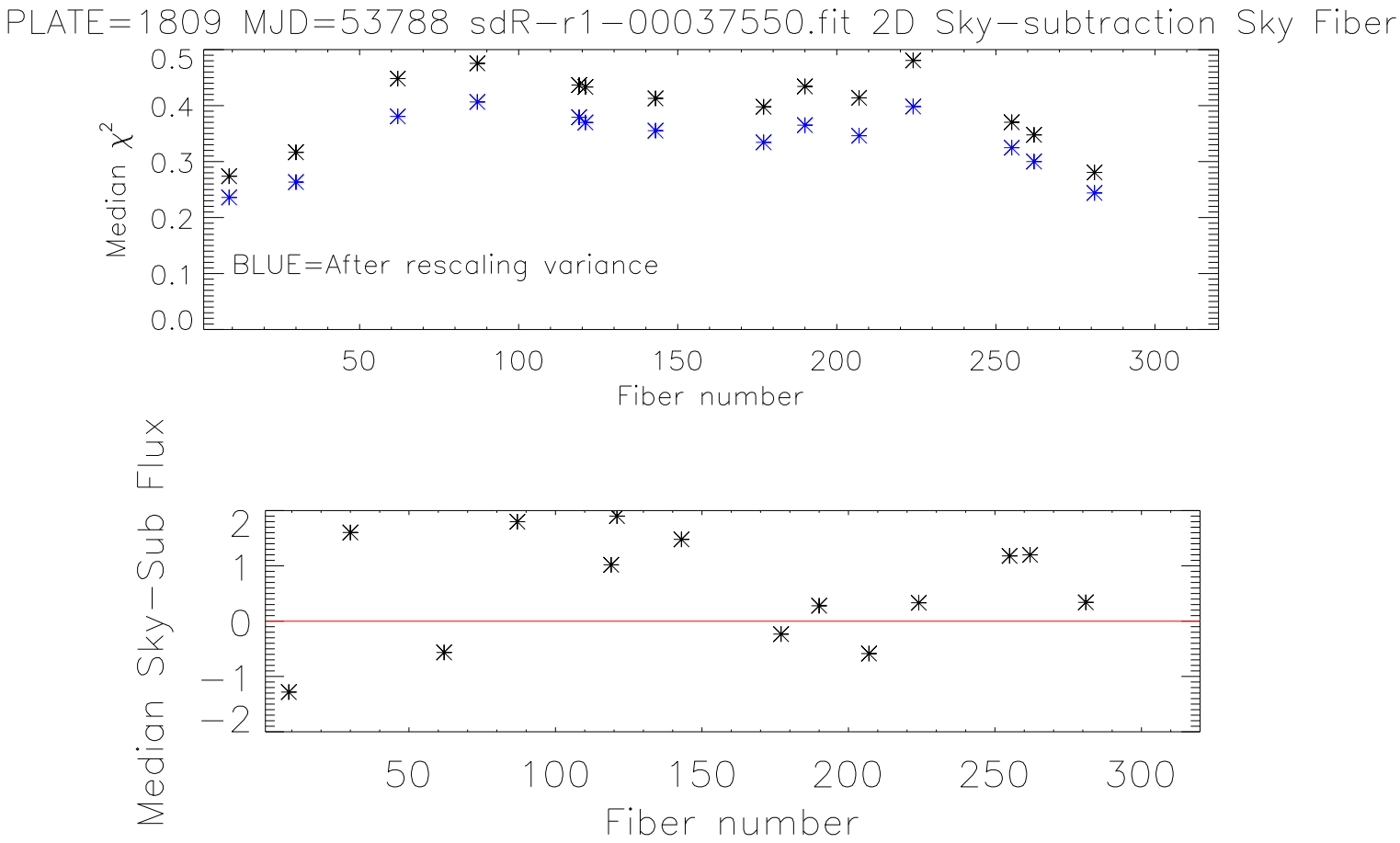

PLATE=1809 MJD=53788 Smooth superflat for sdR-r1-00037550.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

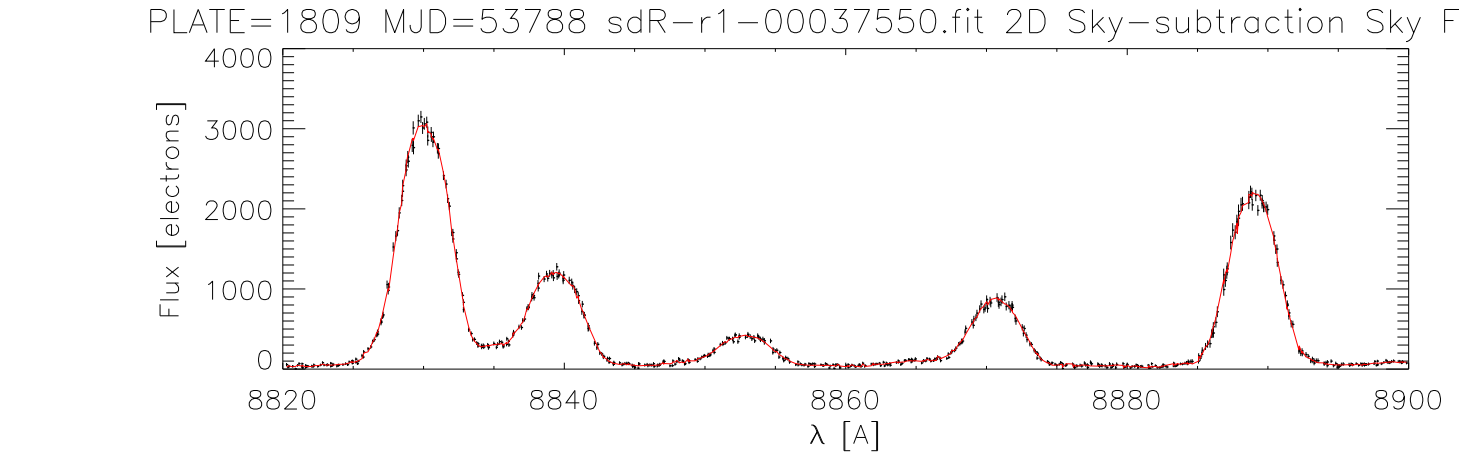

PLATE=1809 MJD=53788 sdR-r1-00037550.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

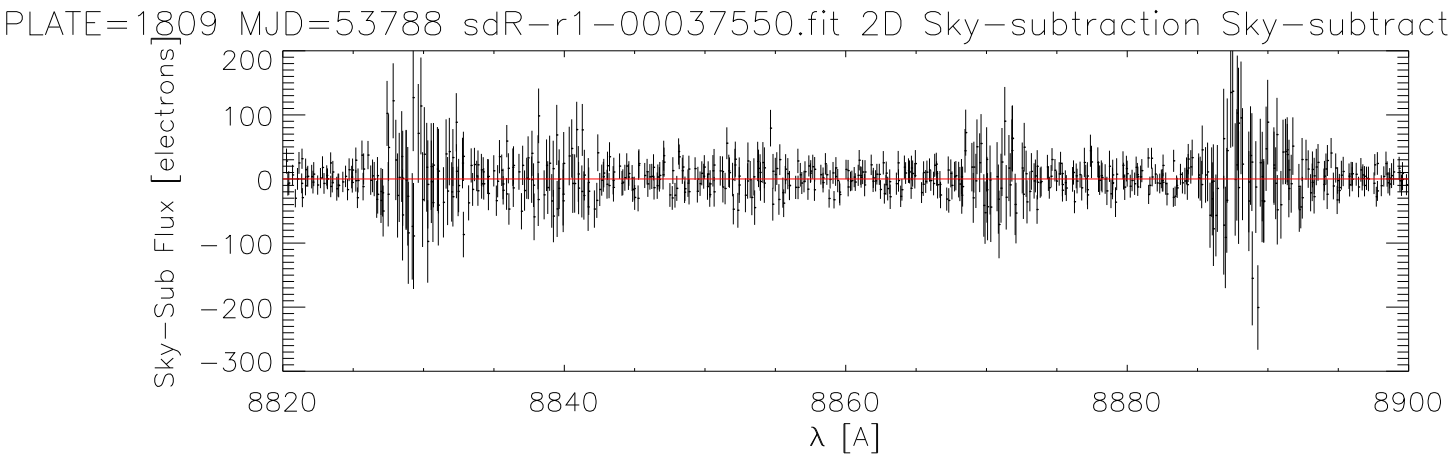

PLATE=1809 MJD=53788 sdR-r1-00037550.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

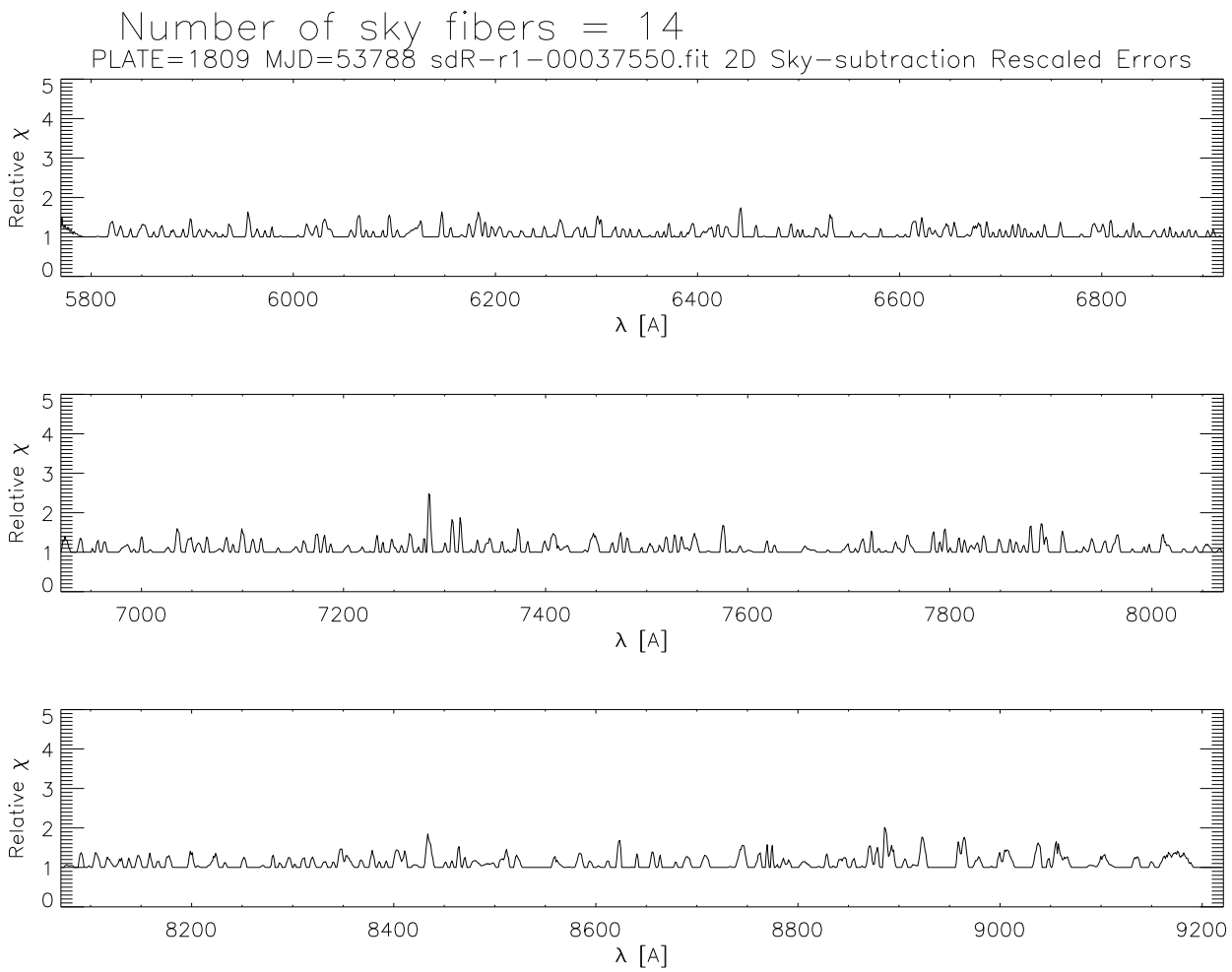

PLATE=1809 MJD=53788 sdR-r1-00037550.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

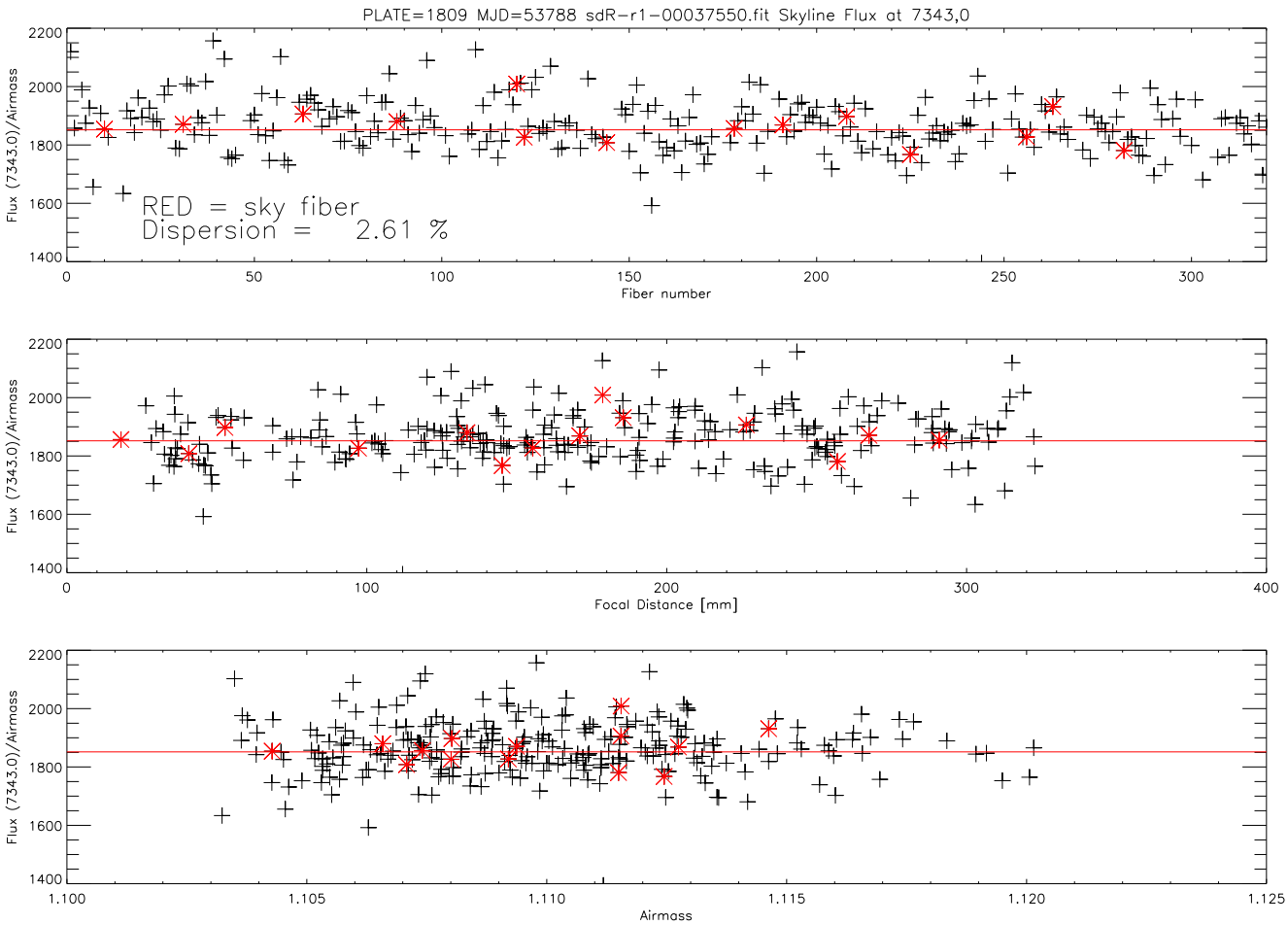

Number of sky fibers = 14
PLATE=1809 MJD=53788 sdR-r1-00037550.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

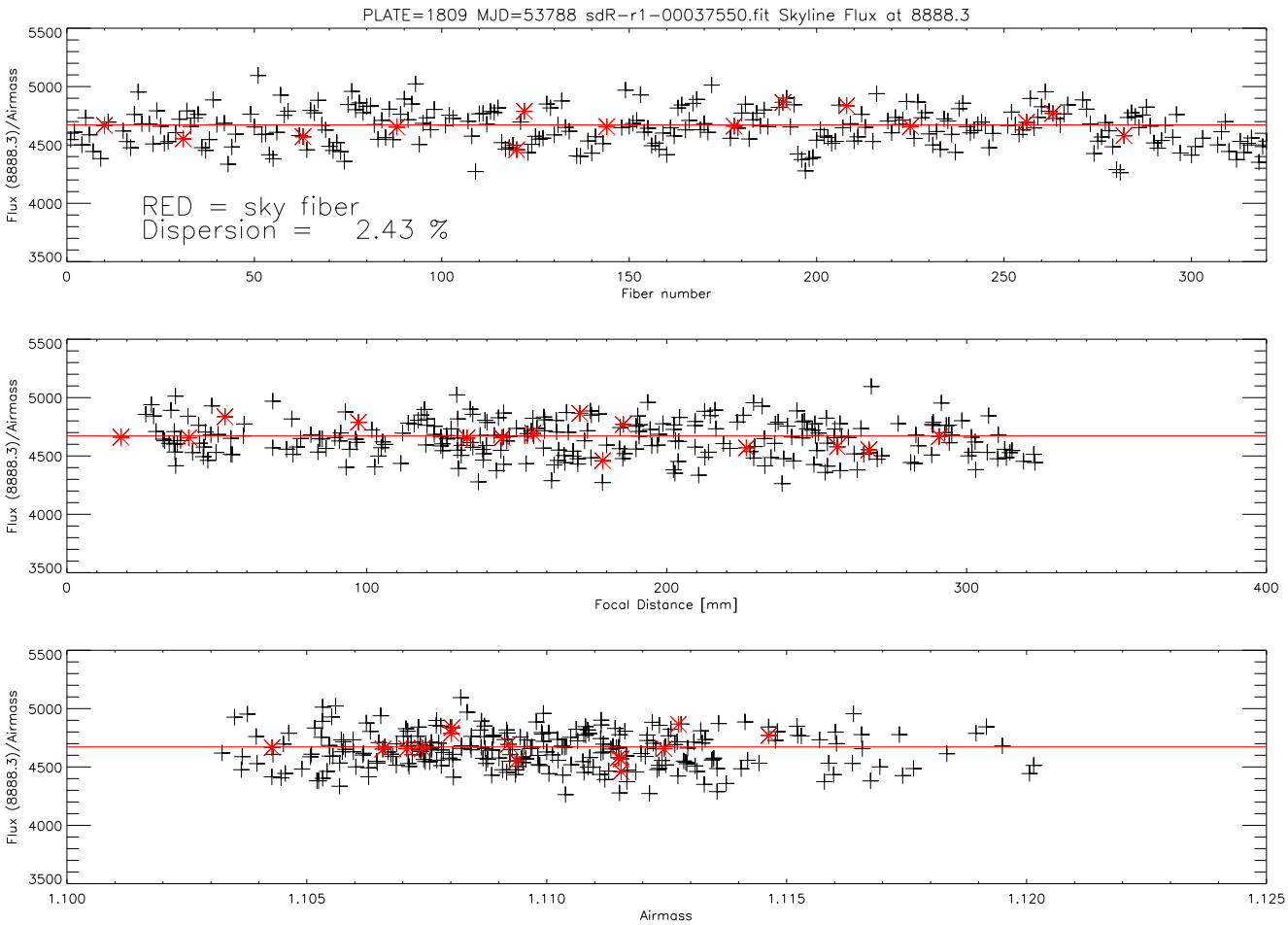

PLATE=1809 MJD=53788 sdR-r1-00037550.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
50
100
150
200
250
300
Fiber number

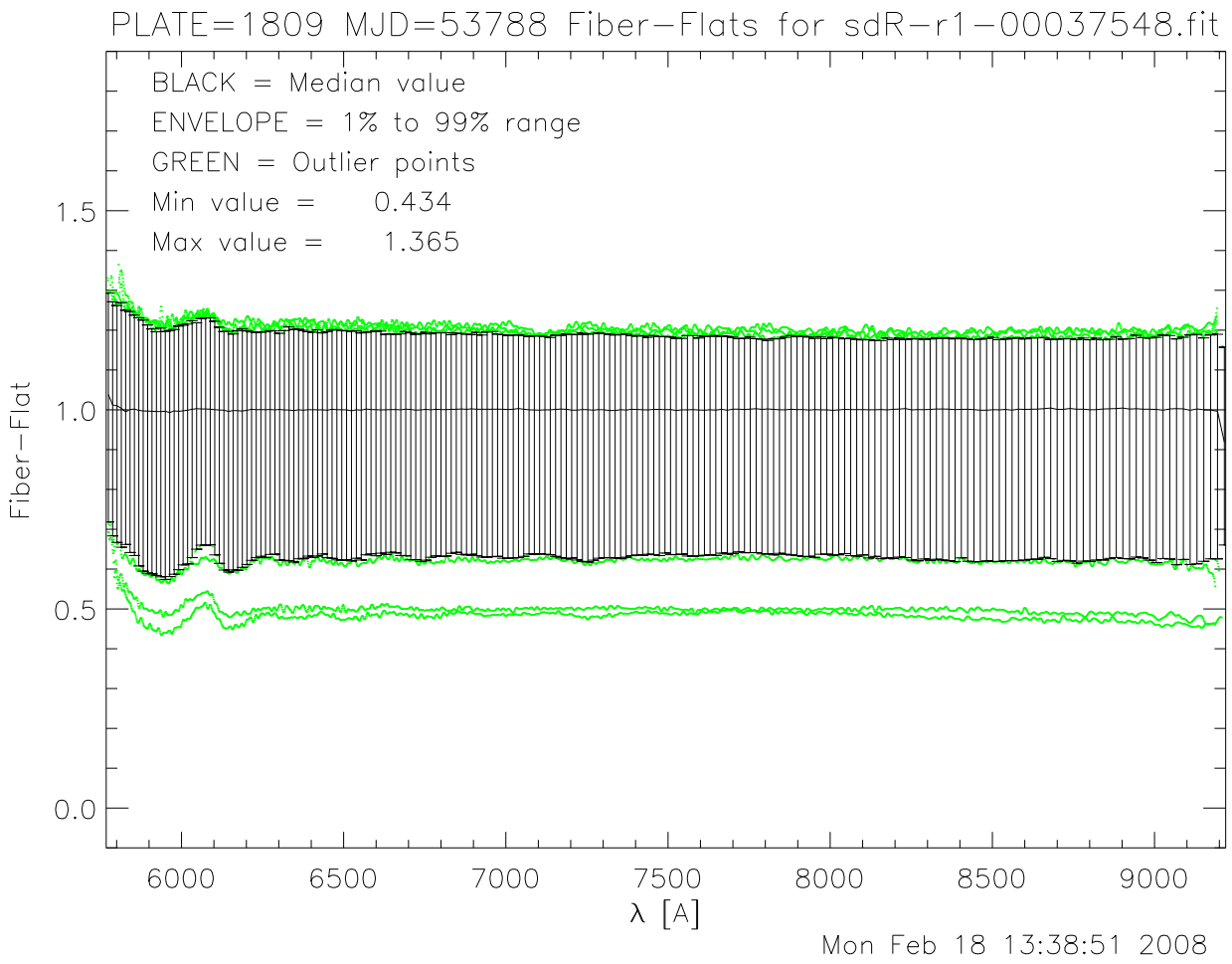

PLATE=1809 MJD=53788 sdR-r1-00037550.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

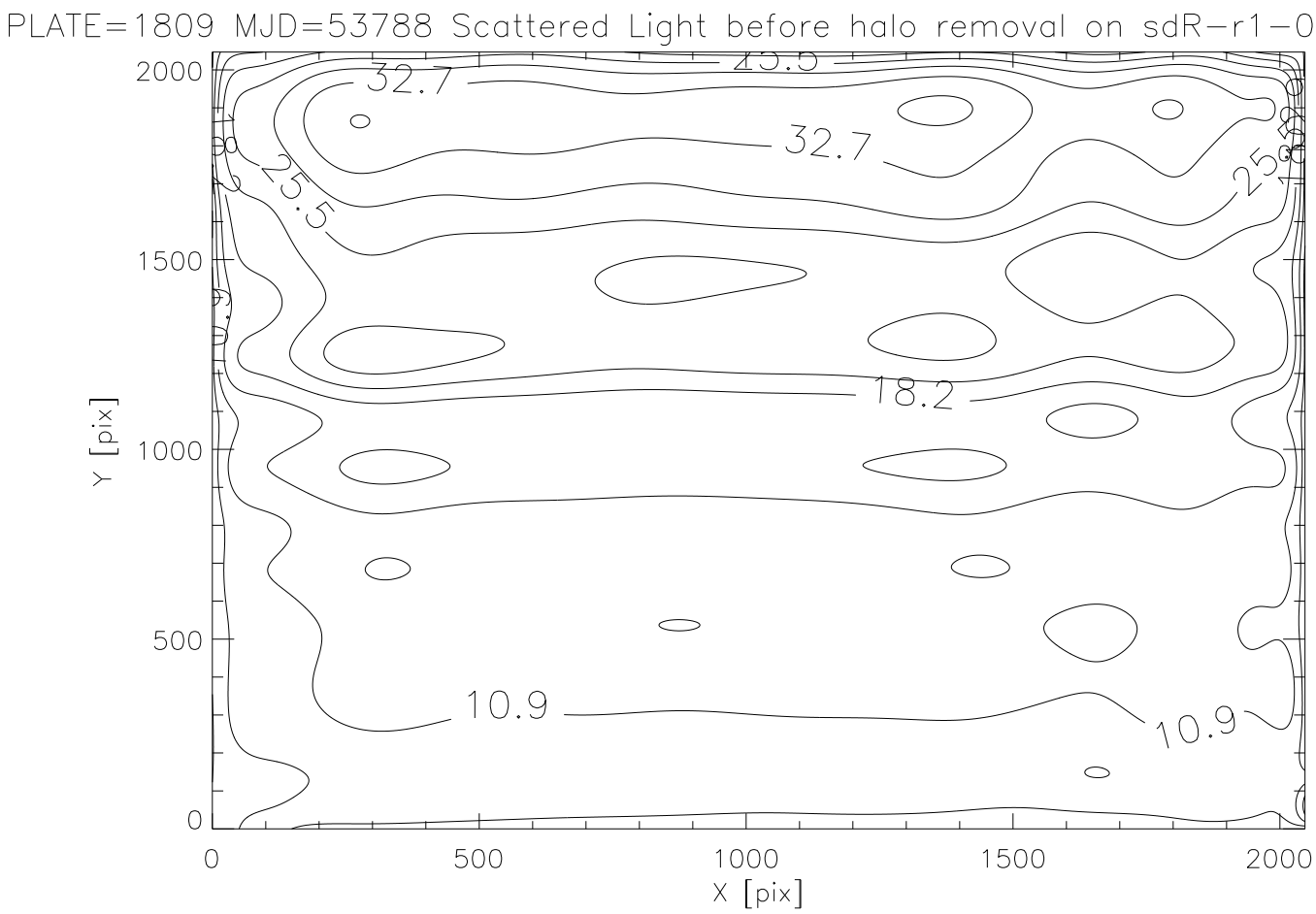

PLATE=1809 MJD=53788 sdR-r1-00037550.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

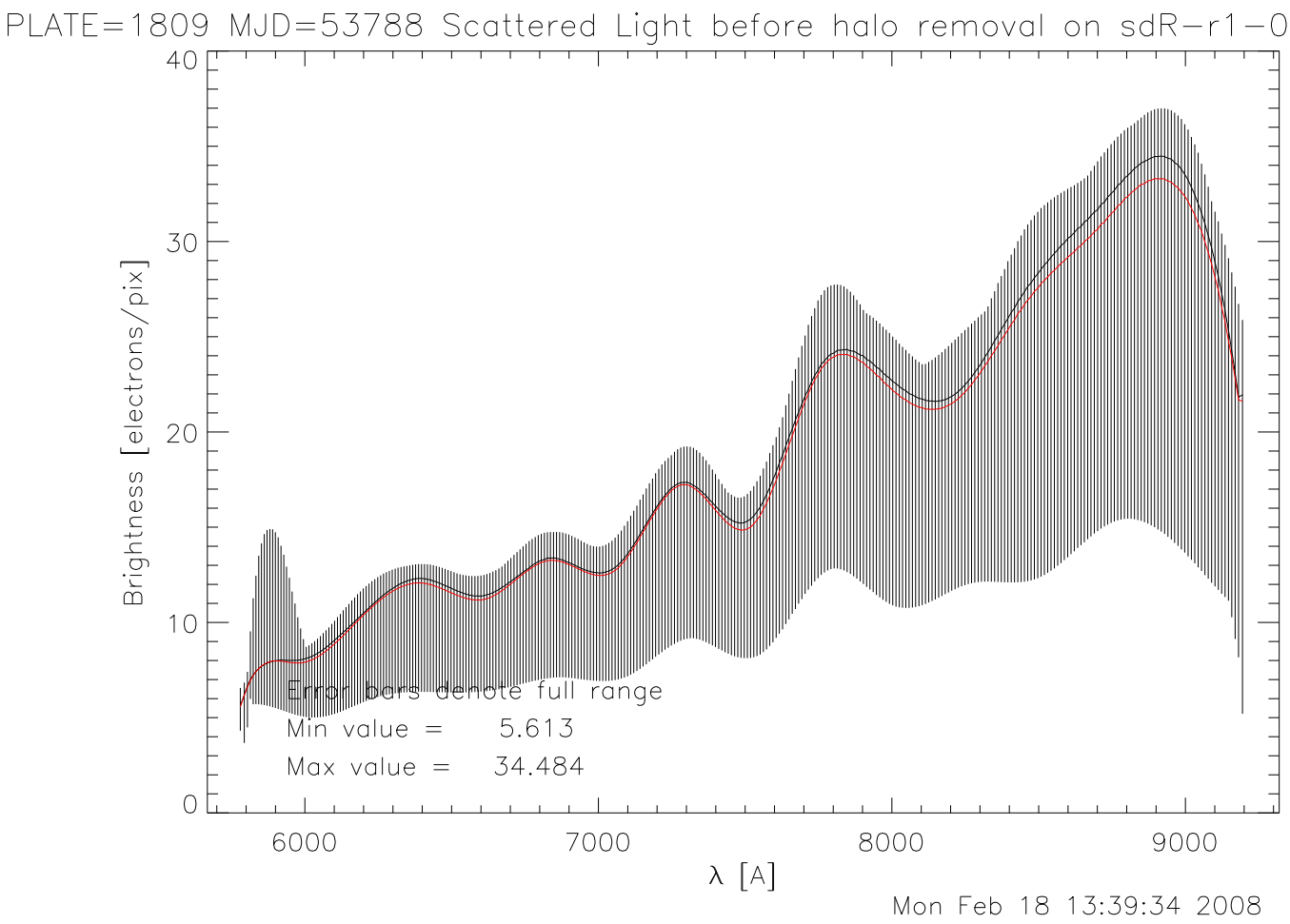

Number of sky fibers = 14
PLATE=1809 MJD=53788 sdR-r1-00037550.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

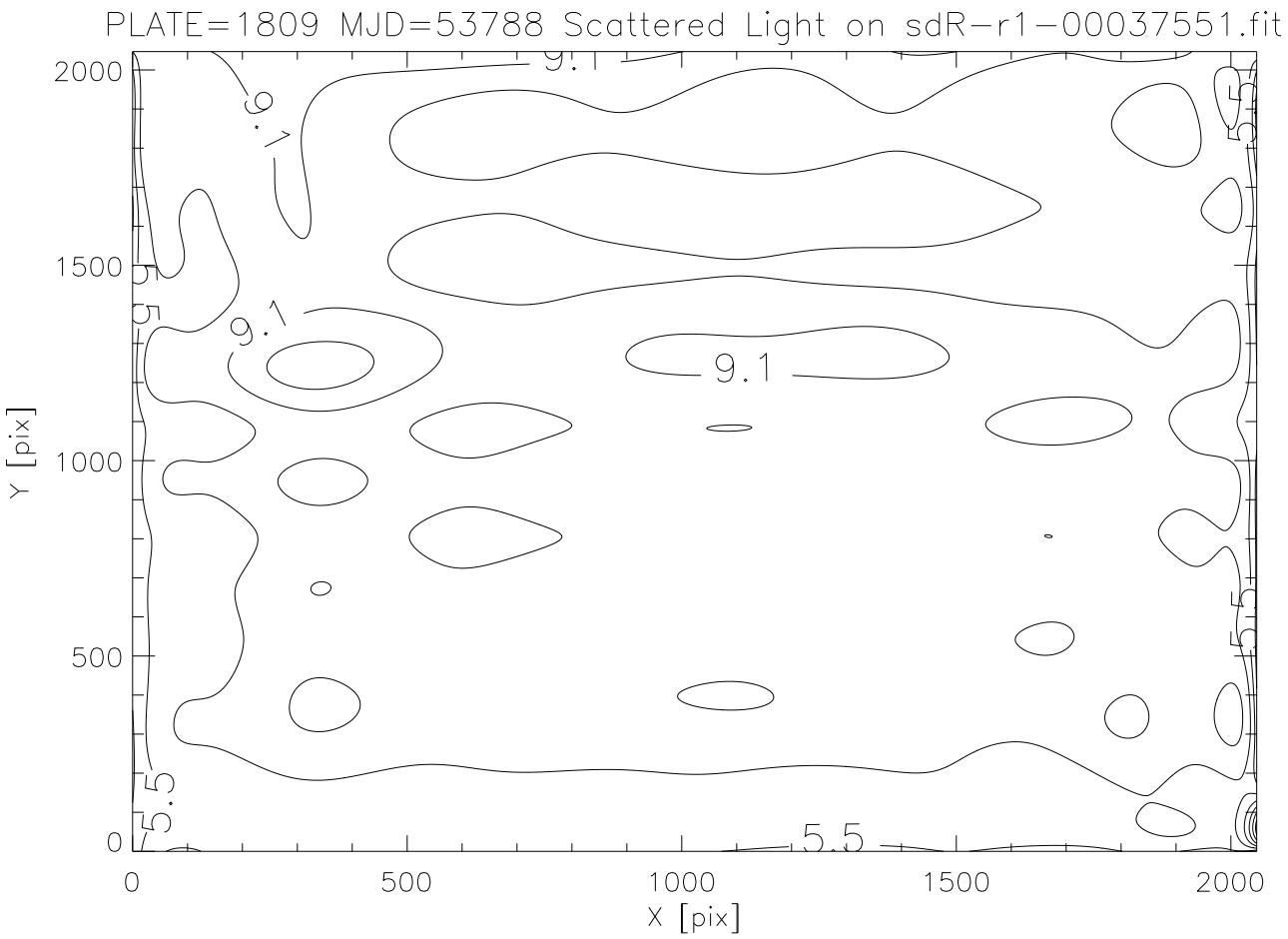

PLATE=1809 MJD=53788 sdR-r1-00037550.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.61 %
Fiber number
Focal Distance [mm]
Airmass

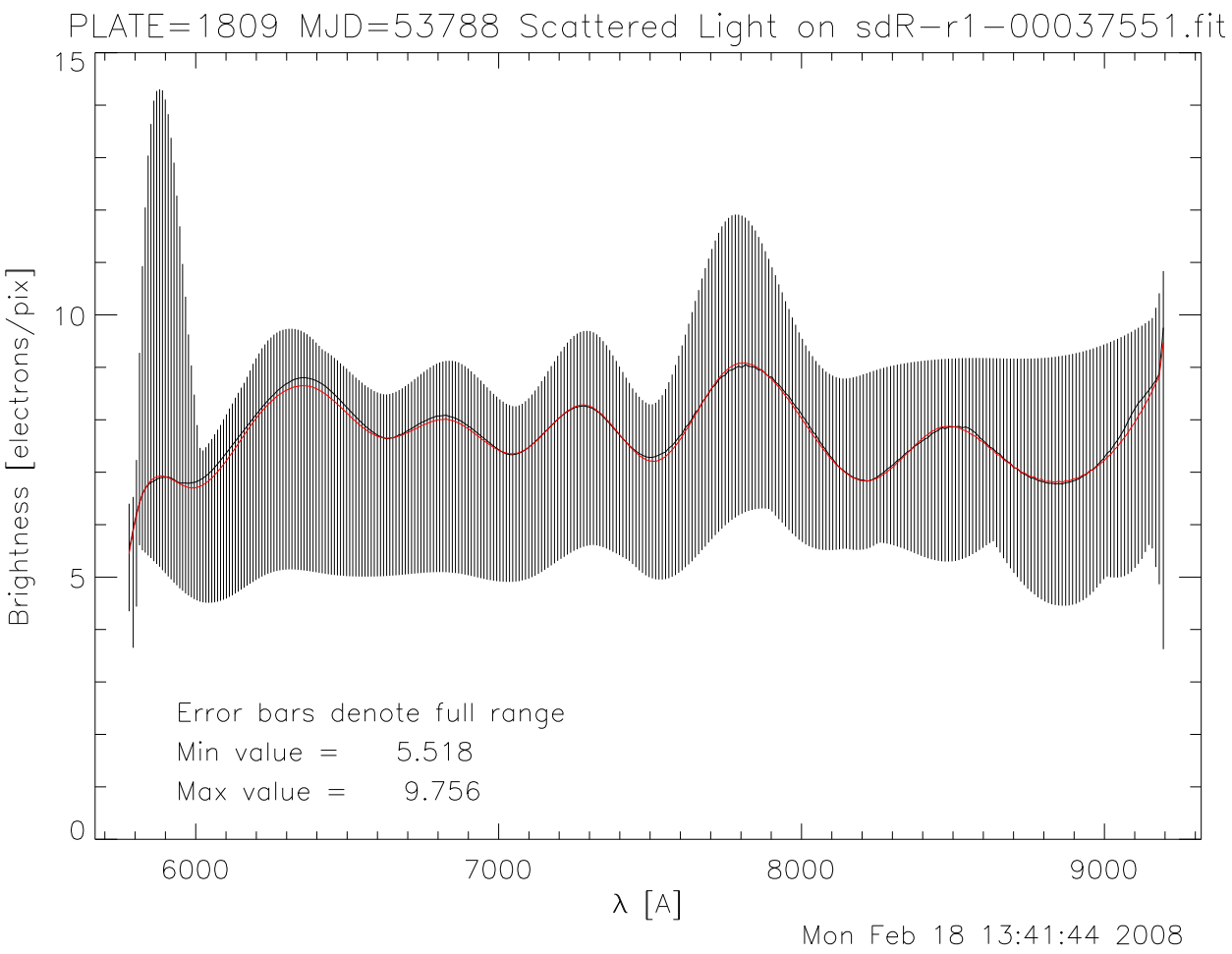

PLATE=1809 MJD=53788 sdR-r1-00037550.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.43 %
Fiber number
Focal Distance [mm]
Airmass

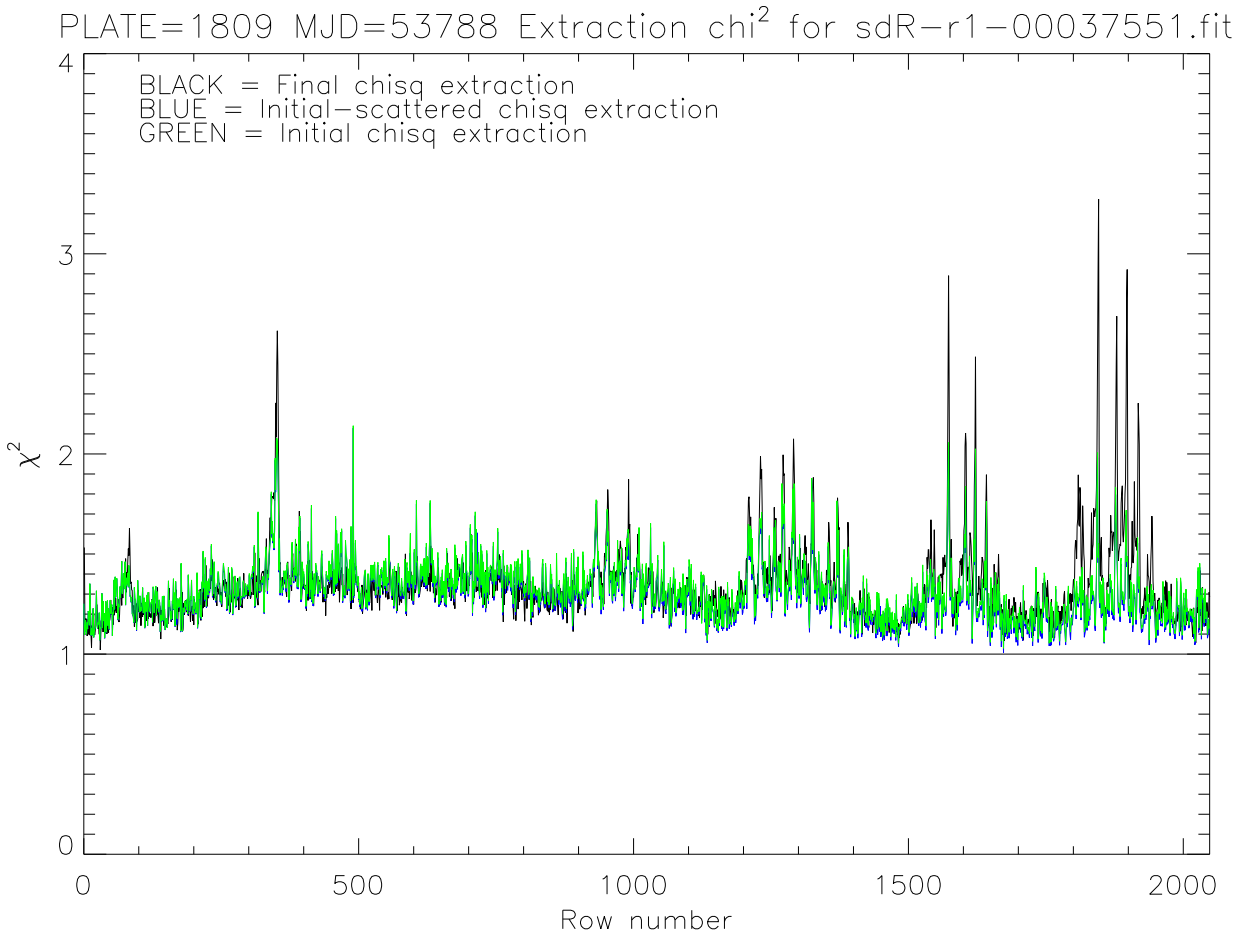

PLATE=1809 MJD=53788 Fiber−Flats for sdR−r1−00037548.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.434
Max value = 1.365
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 18 13:38:51 2008

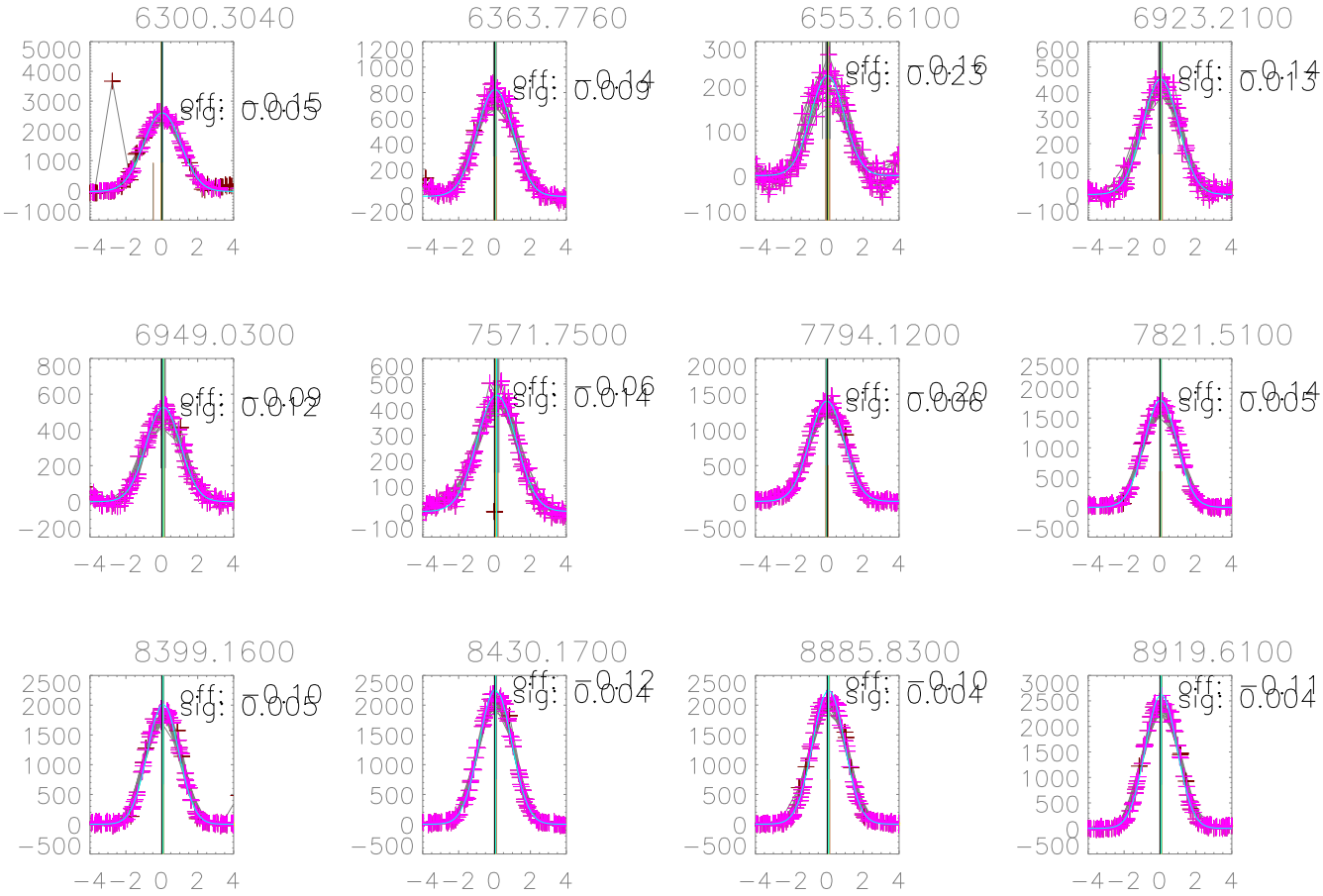

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR−r1−00037551.fi
45.5
32.7
32.7
25.5
25.5
18.2
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

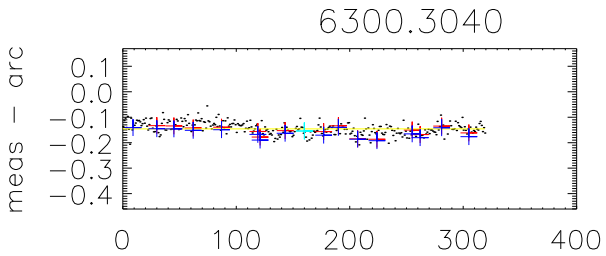

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-r1-00037551.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.613
Max value = 34.484
Mon Feb 18 13:39:34 2008

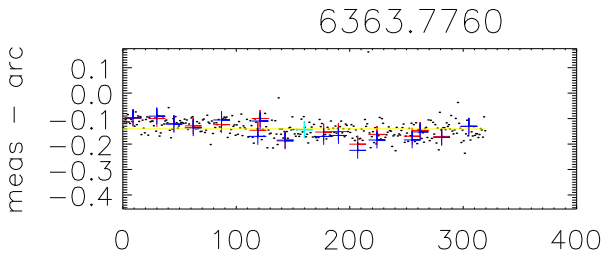

PLATE=1809 MJD=53788 Scattered Light on sdR−r1−00037551.fit
9.1
9.1
9.1
9.1
5.5
5.5
5.5
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

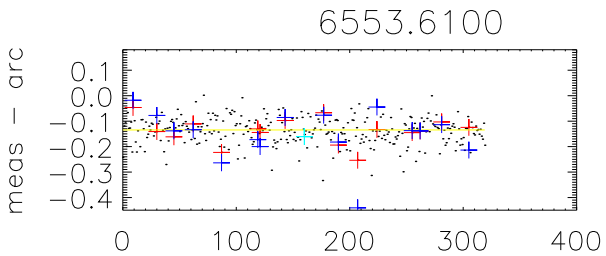

PLATE=1809 MJD=53788 Scattered Light on sdR-r1-00037551.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.518
Max value = 9.756
Mon Feb 18 13:41:44 2008

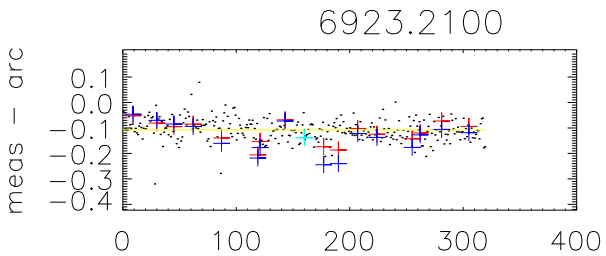

PLATE=1809 MJD=53788 Extraction chi^2 for sdR−r1−00037551.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

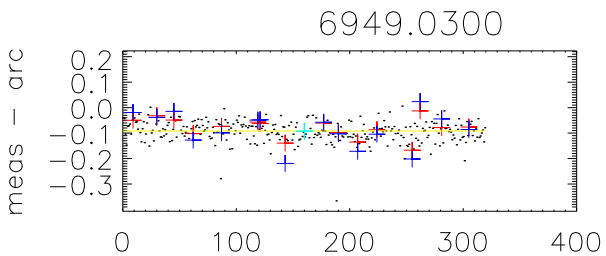

6300.3040
off: -0.15
sig: 0.005
6363.7760
off: -0.14
sig: 0.009
6553.6100
off: -0.16
sig: 0.023
6923.2100
off: -0.14
sig: 0.013
6949.0300
off: -0.09
sig: 0.012
7571.7500
off: -0.06
sig: 0.014
7794.1200
off: -0.20
sig: 0.066
7821.5100
off: -0.14
sig: 0.005
8399.1600
off: -0.10
sig: 0.005
8430.1700
off: -0.12
sig: 0.004
8885.8300
off: -0.10
sig: 0.004
8919.6100
off: -0.11
sig: 0.004

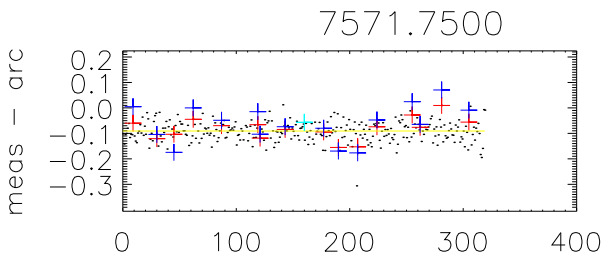

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

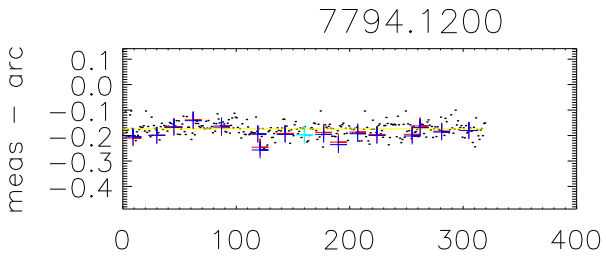

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

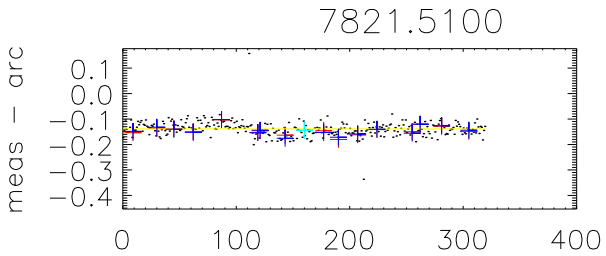

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

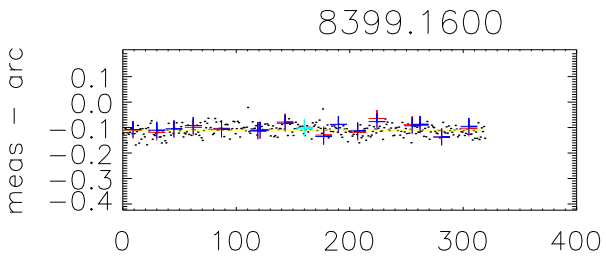

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

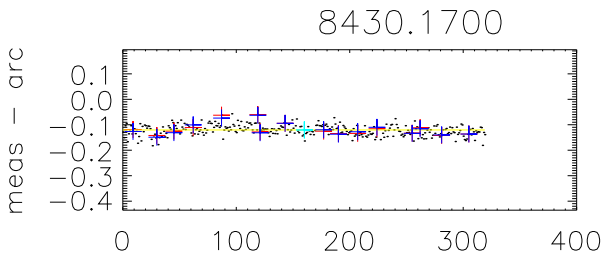

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

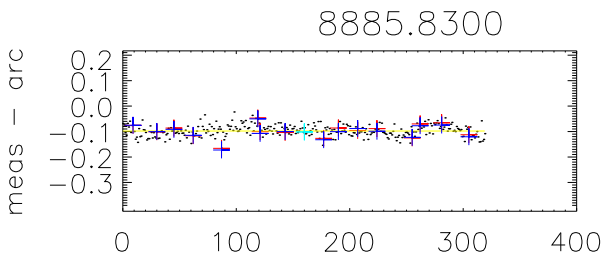

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

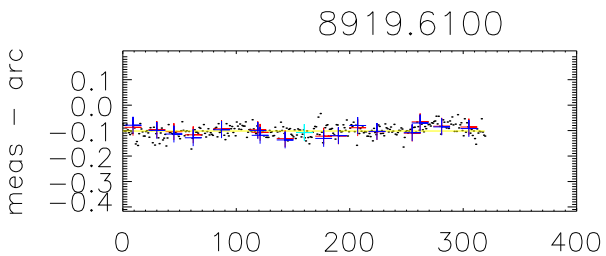

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

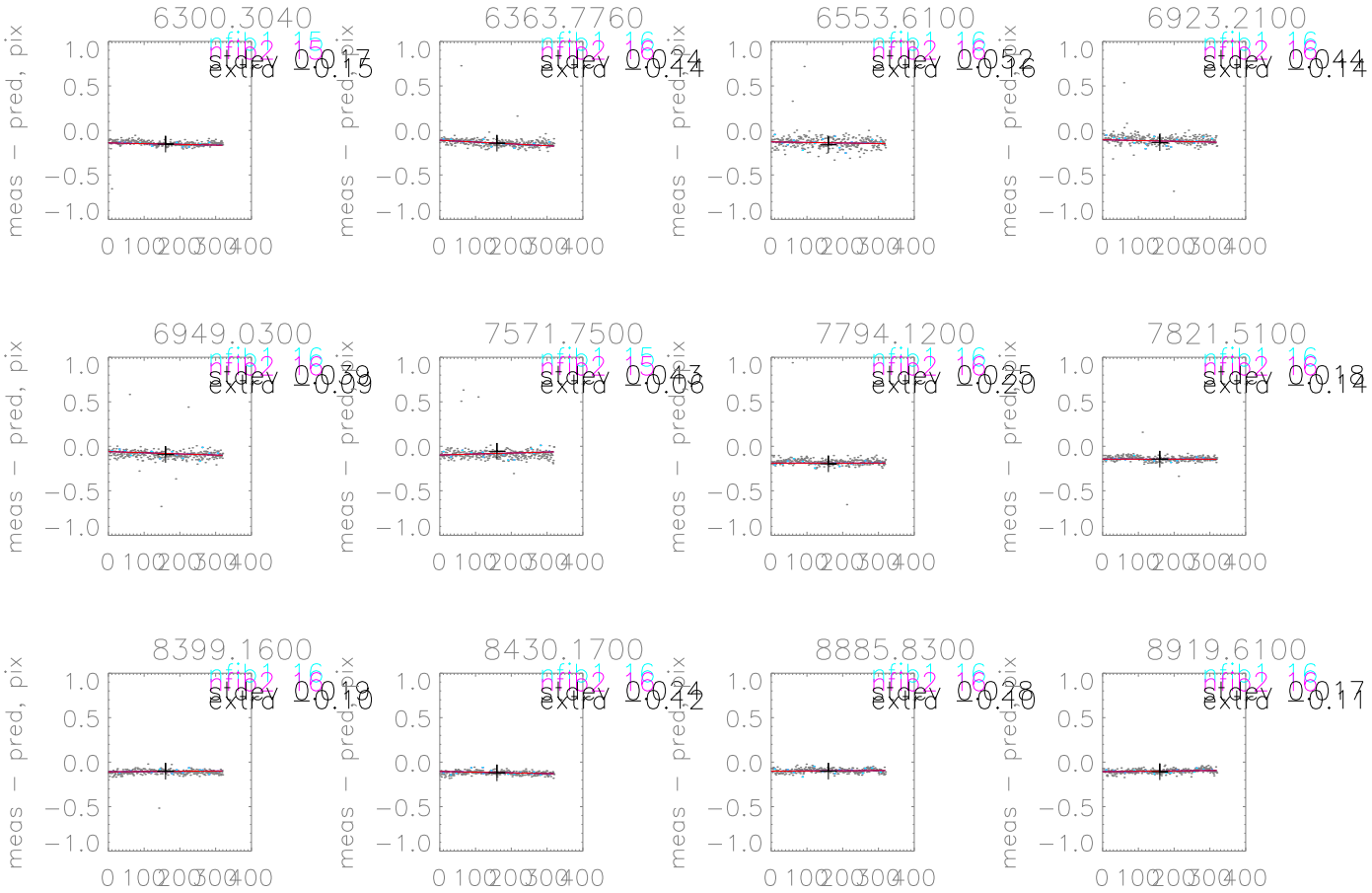

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

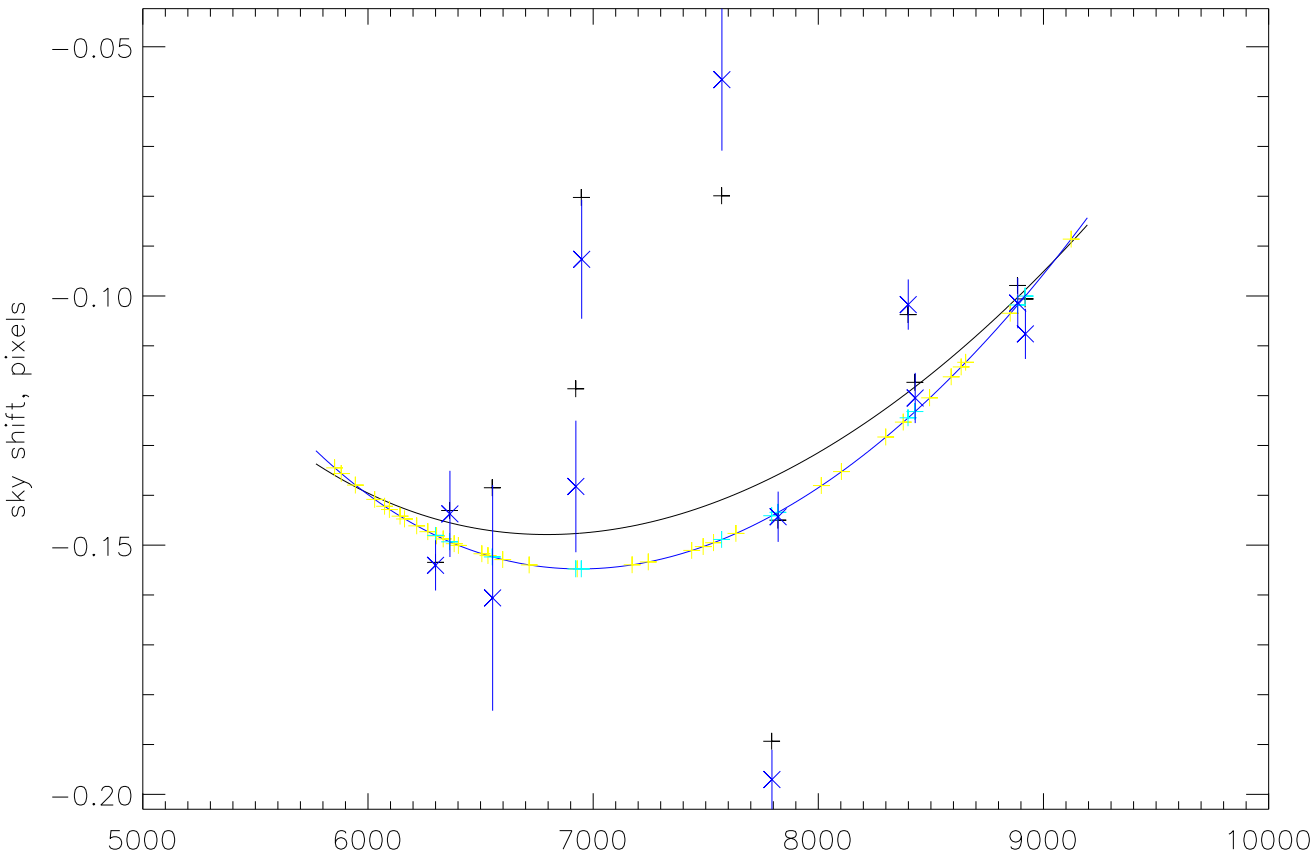

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

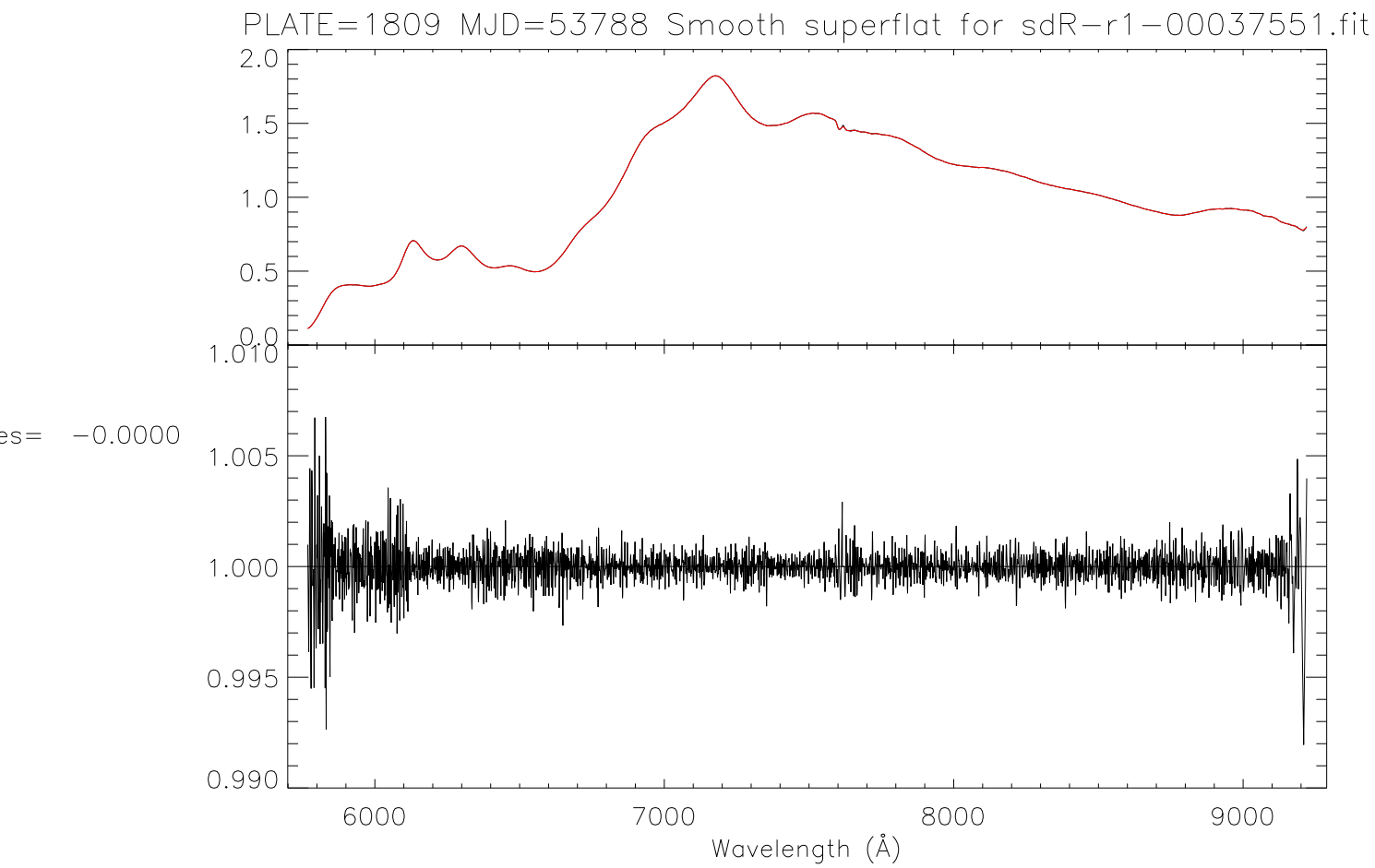

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

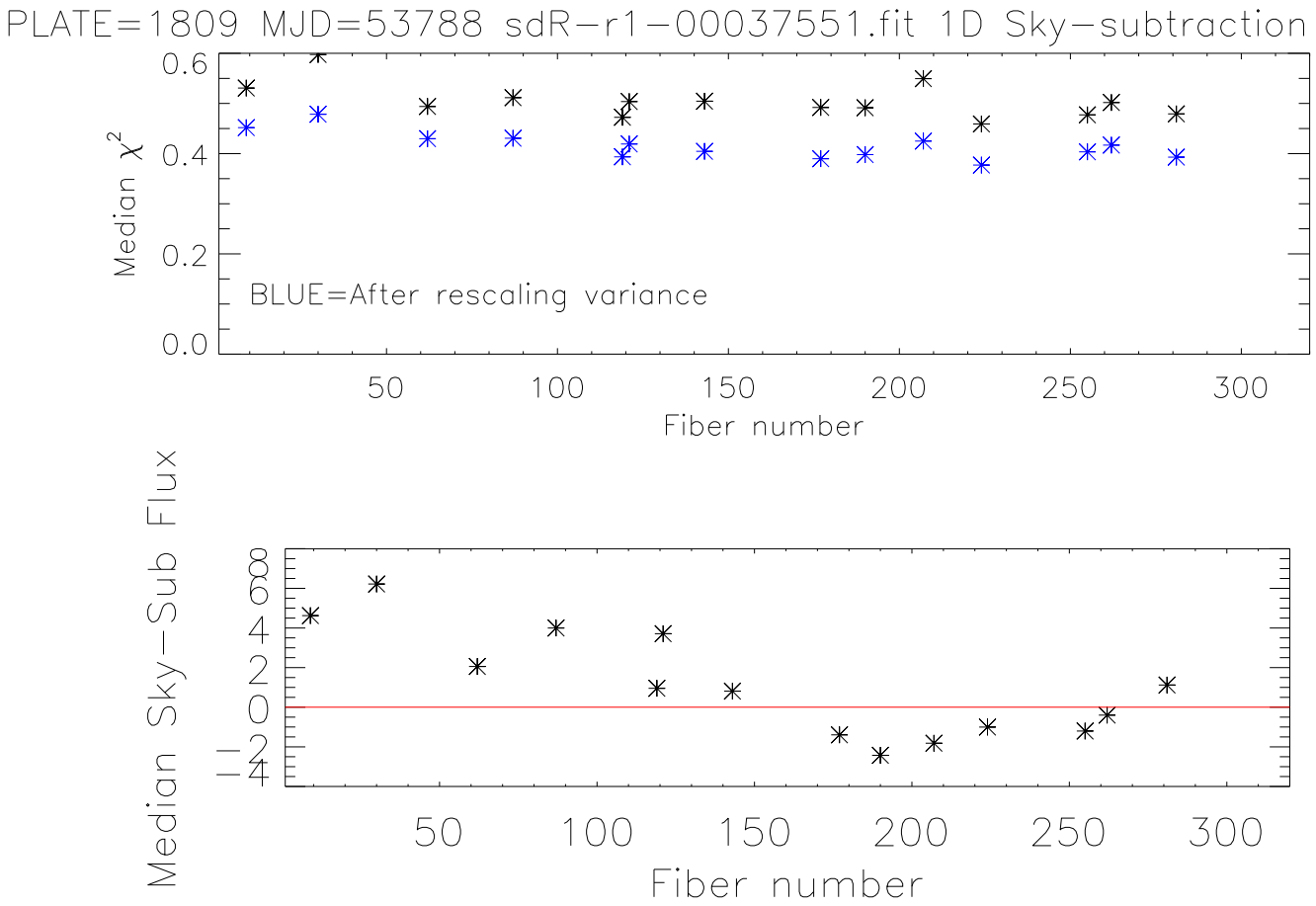

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

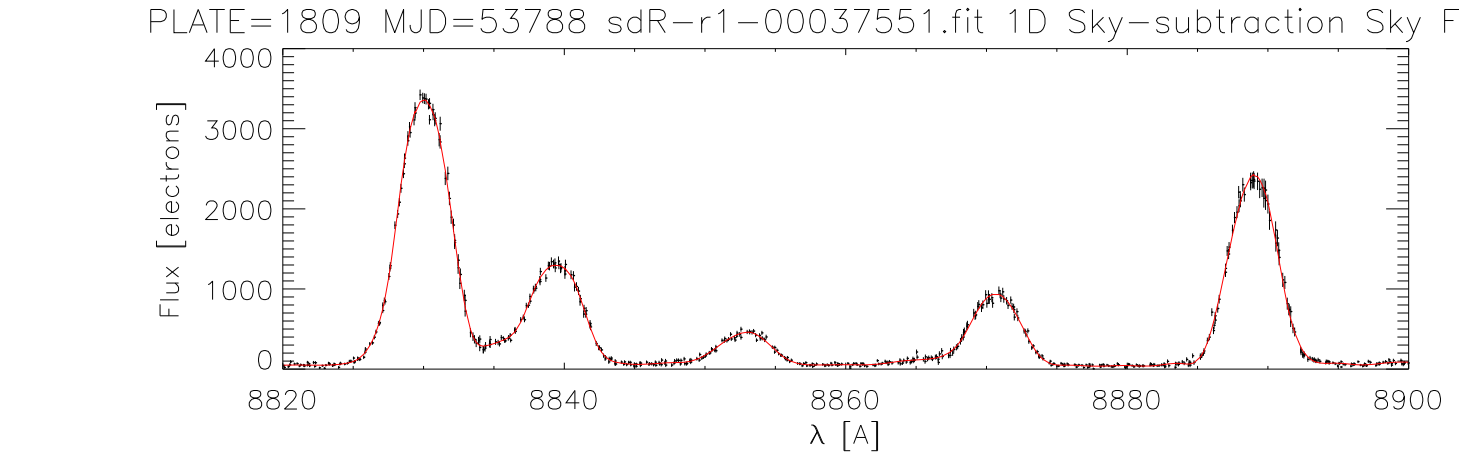

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhi2 15
mfhi2 16
stdev 0.17
extra 0.15
stdev 0.24
extra 0.44
stdev 0.32
extra 0.16
stdev 0.44
extra 0.14
stdev 0.39
extra 0.09
stdev 0.43
extra 0.08
stdev 0.25
extra 0.20
stdev 0.18
extra 0.14
stdev 0.19
extra 0.10
stdev 0.24
extra 0.42
stdev 0.28
extra 0.40
stdev 0.17
extra 0.11

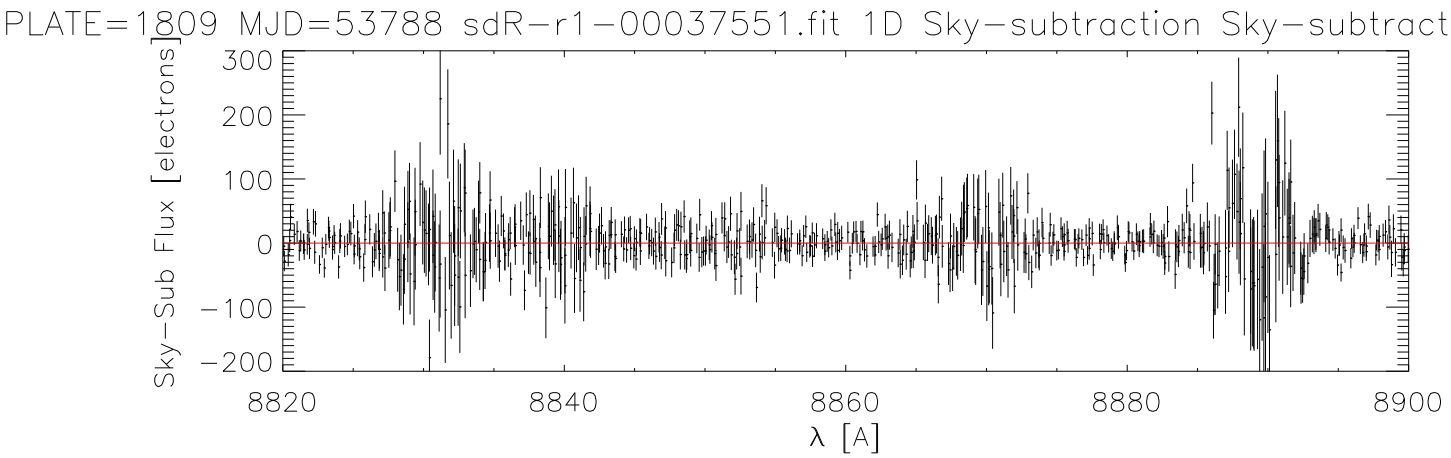

−0.05
−0.10
−0.15
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

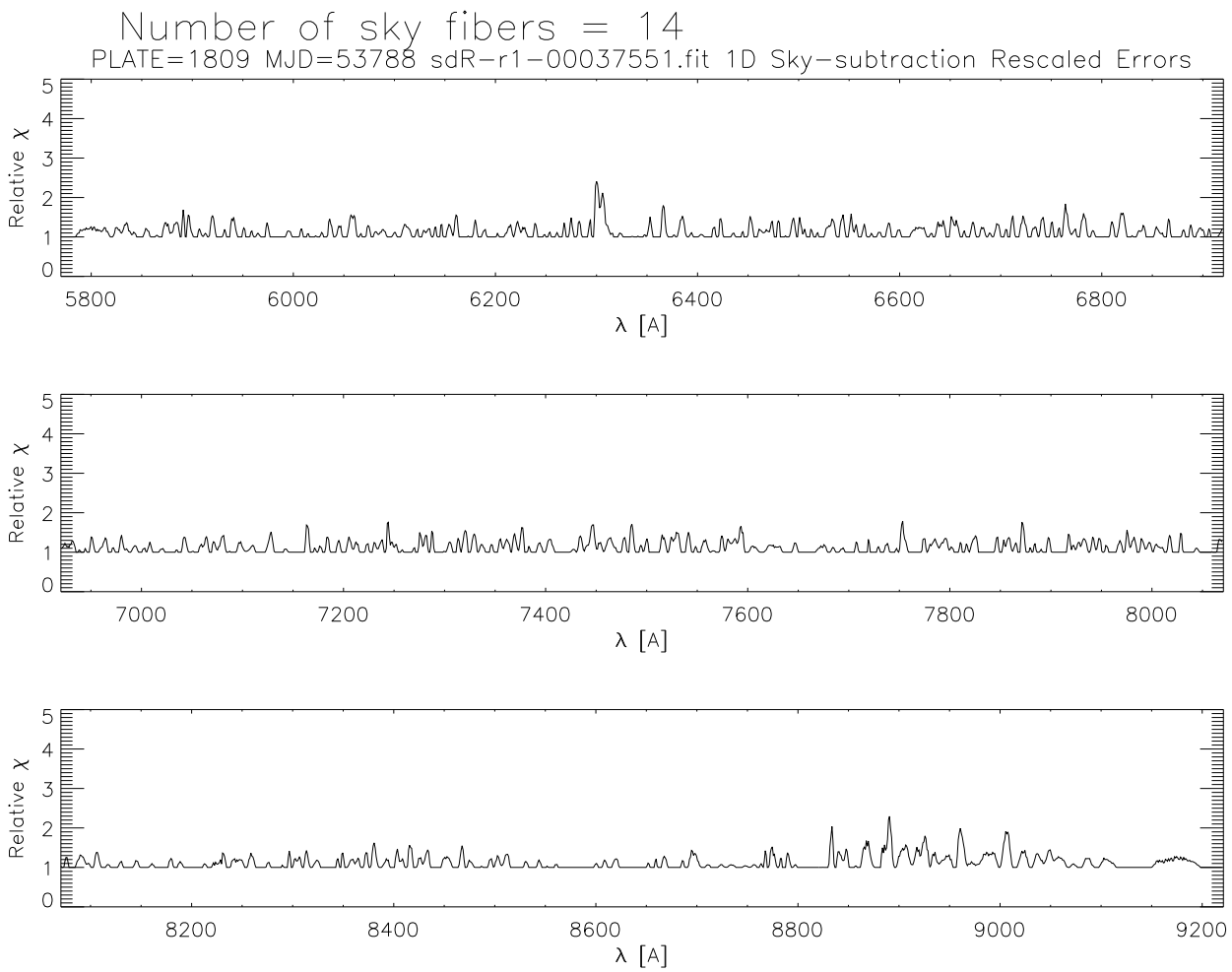

PLATE=1809 MJD=53788 Smooth superflat for sdR-r1-00037551.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

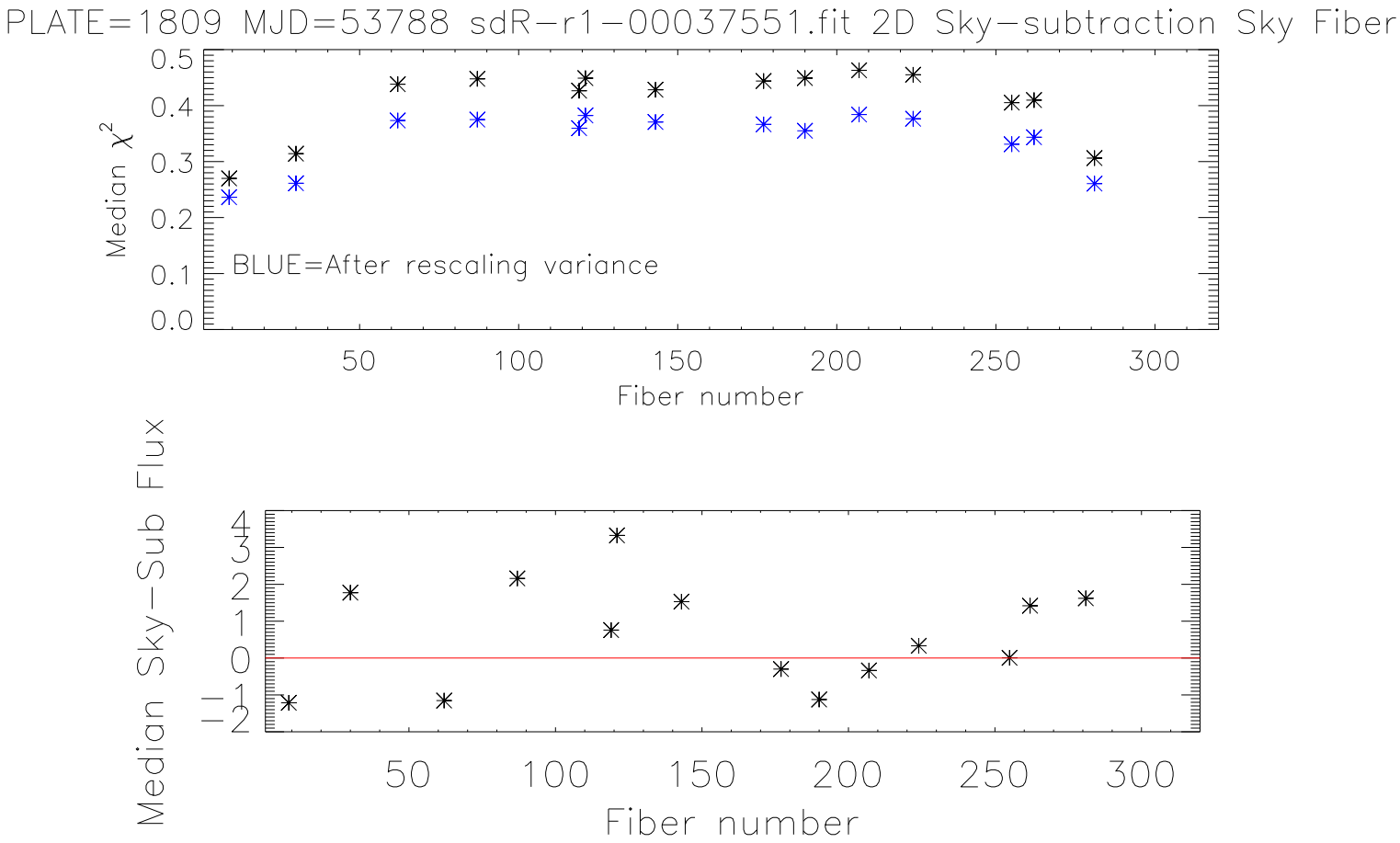

PLATE=1809 MJD=53788 sdR-r1-00037551.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

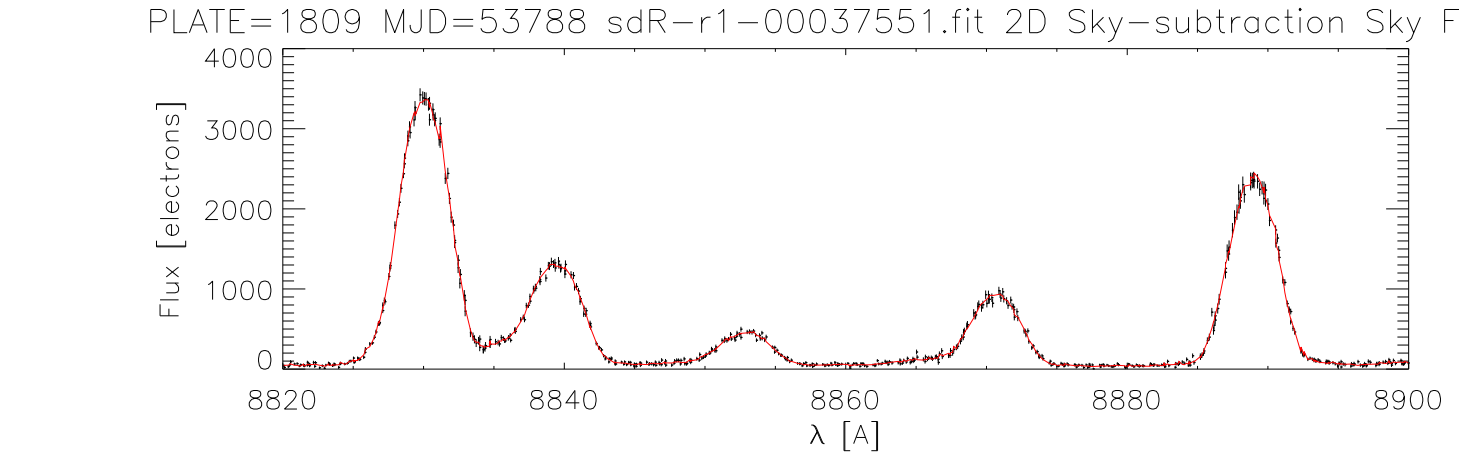
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

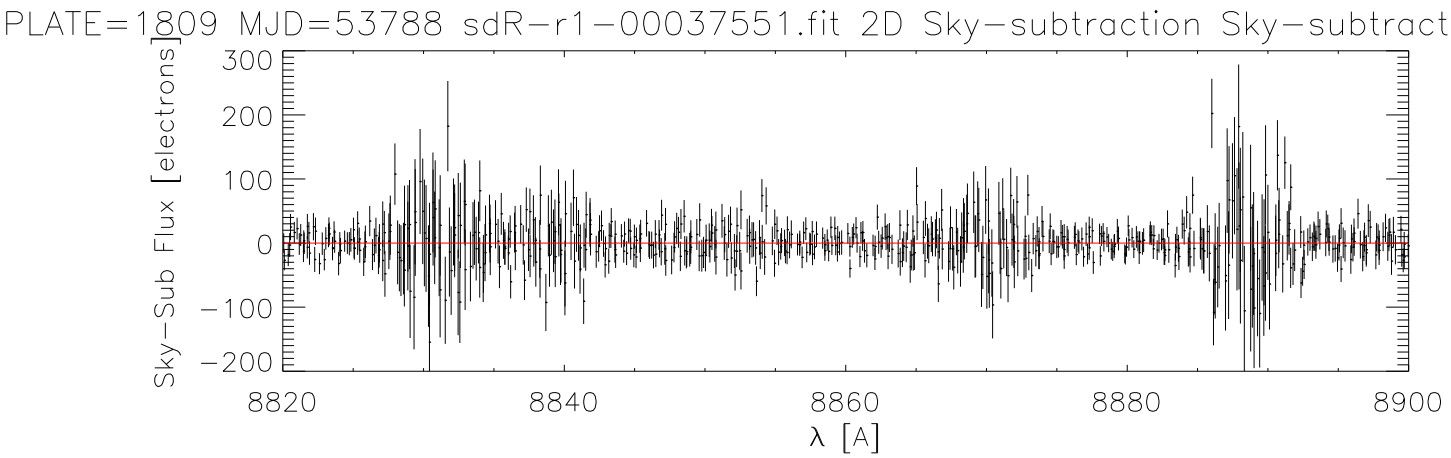

PLATE=1809 MJD=53788 sdR-r1-00037551.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

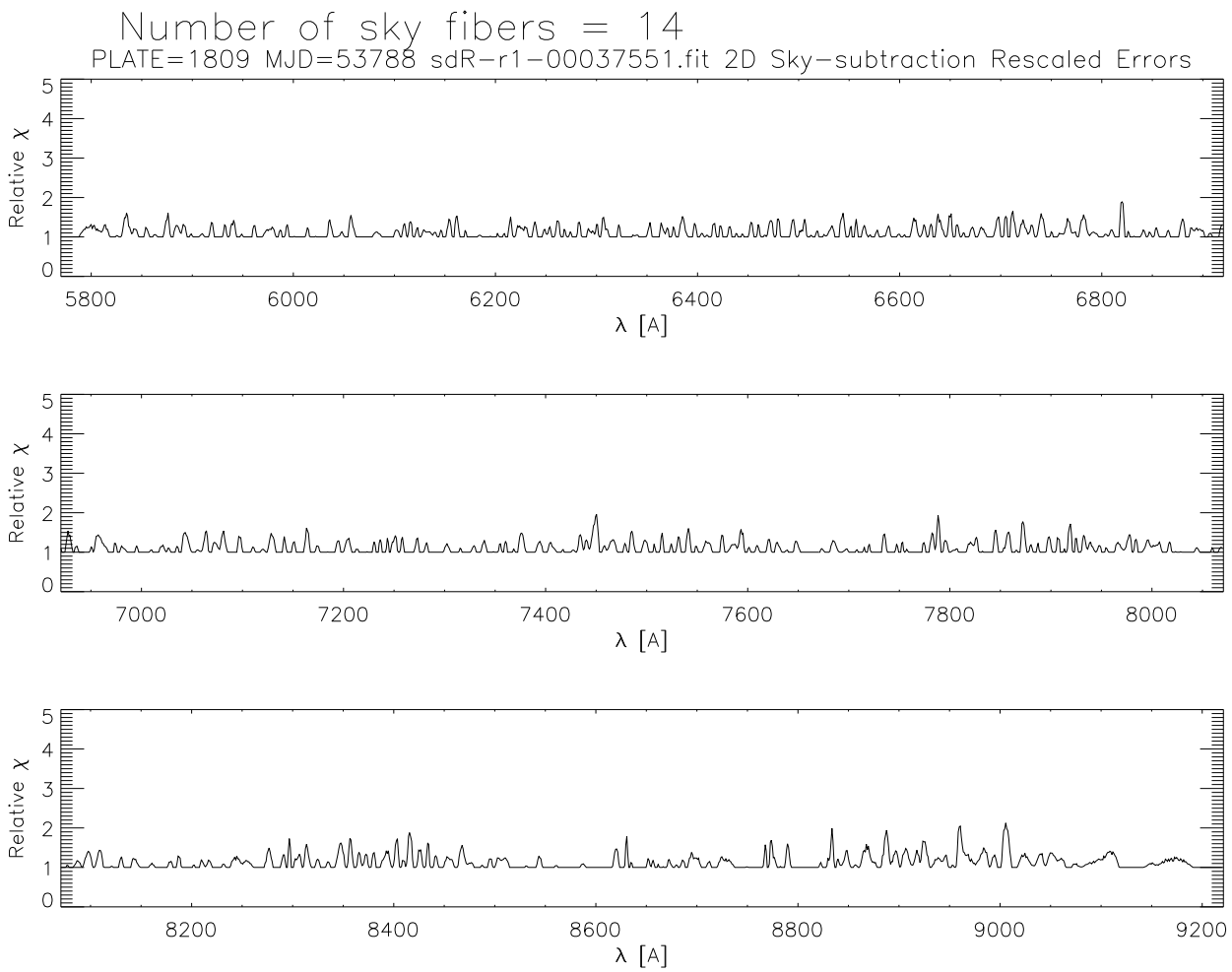

PLATE=1809 MJD=53788 sdR-r1-00037551.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

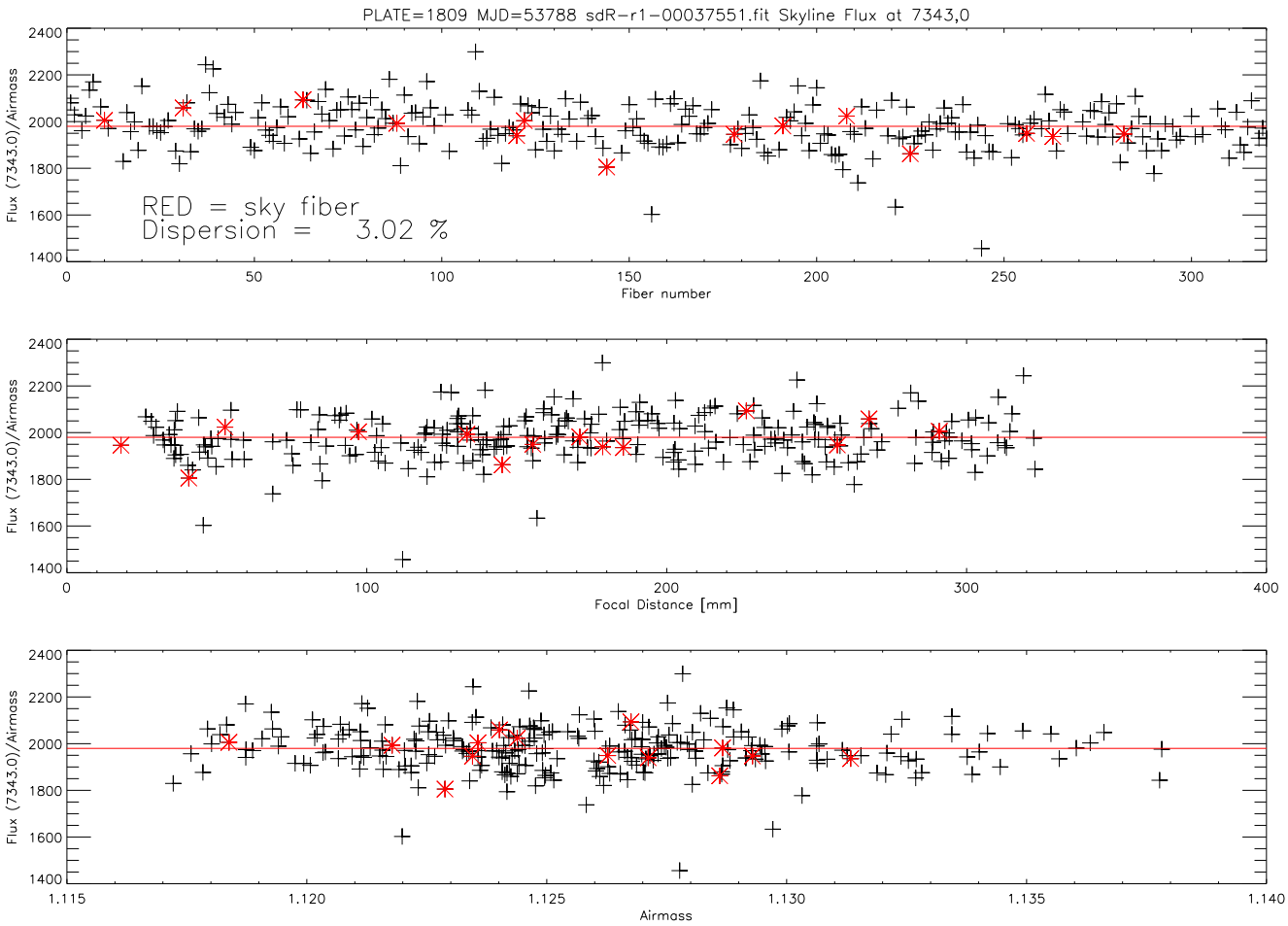

Number of sky fibers = 14
PLATE=1809 MJD=53788 sdR-r1-00037551.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

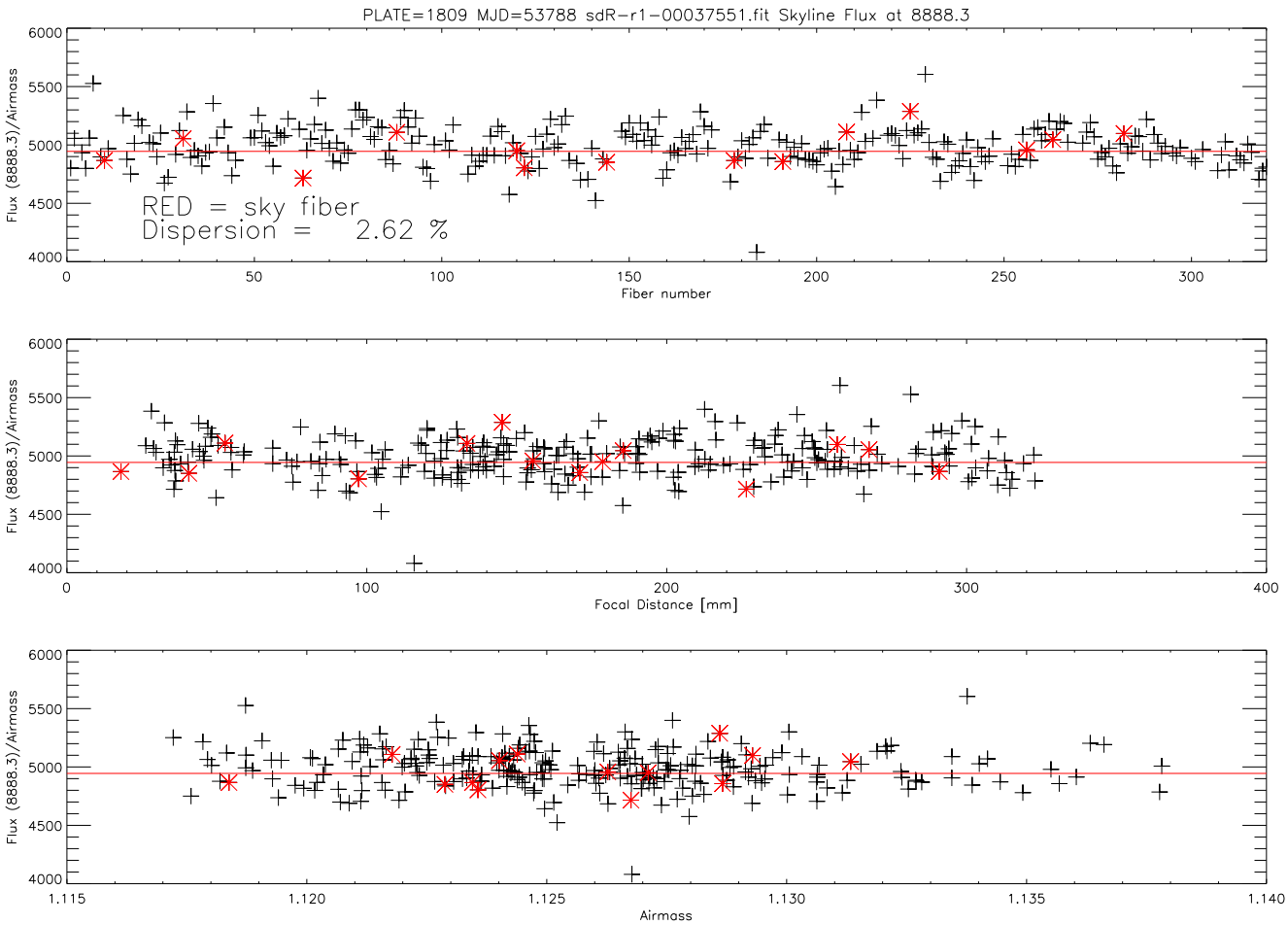

PLATE=1809 MJD=53788 sdR-r1-00037551.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

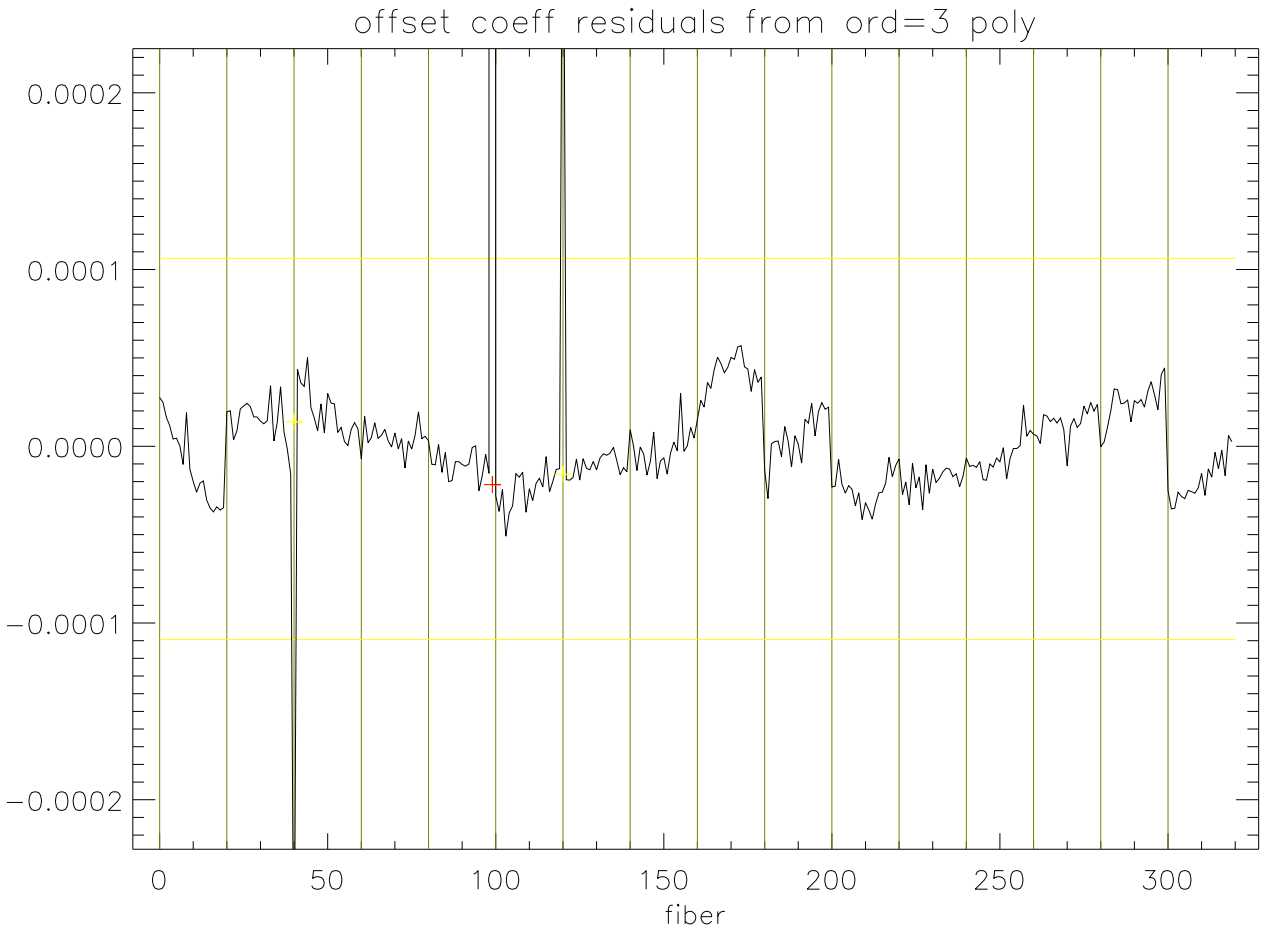

PLATE=1809 MJD=53788 sdR-r1-00037551.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

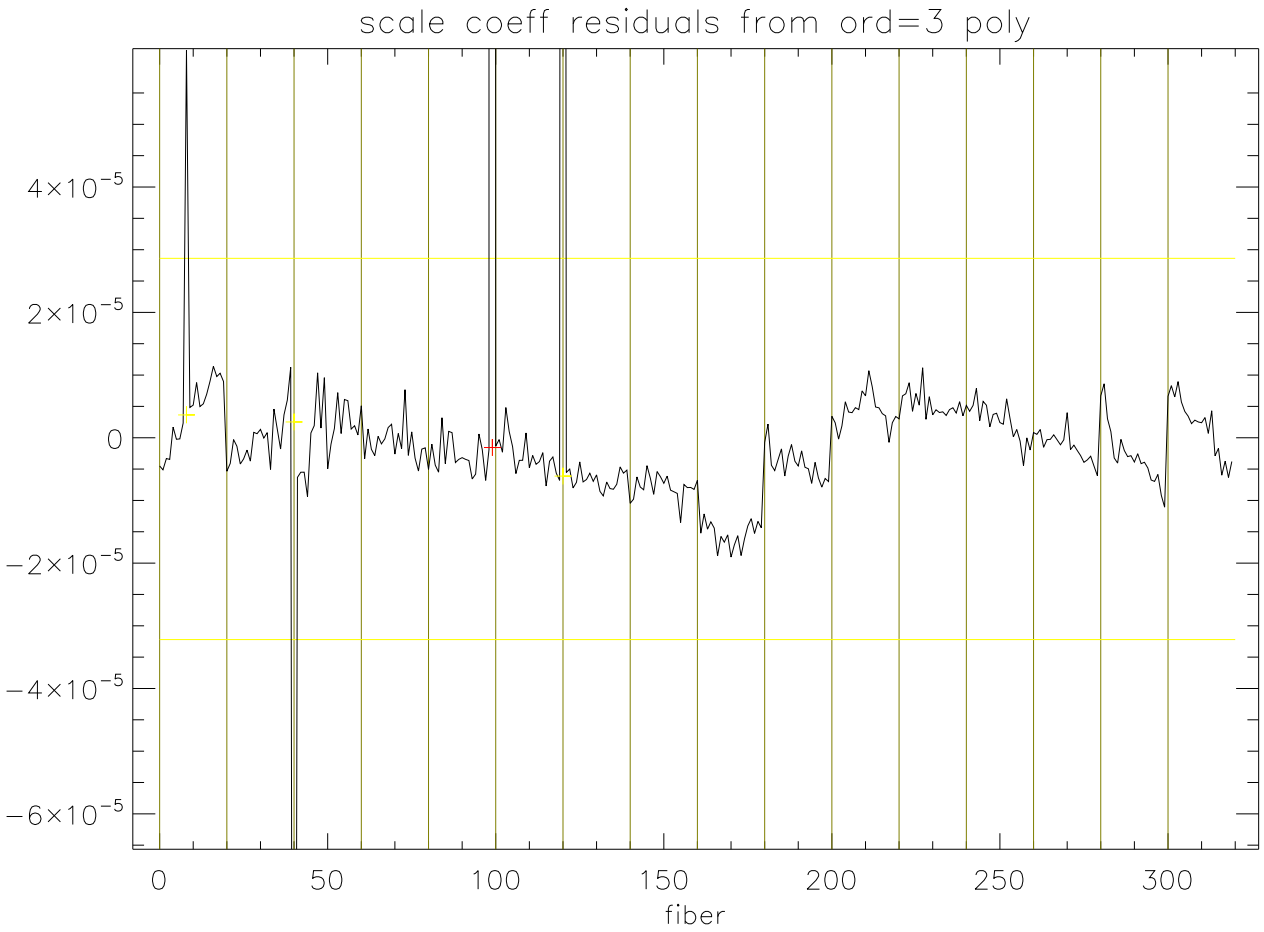

PLATE=1809 MJD=53788 sdR-r1-00037551.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

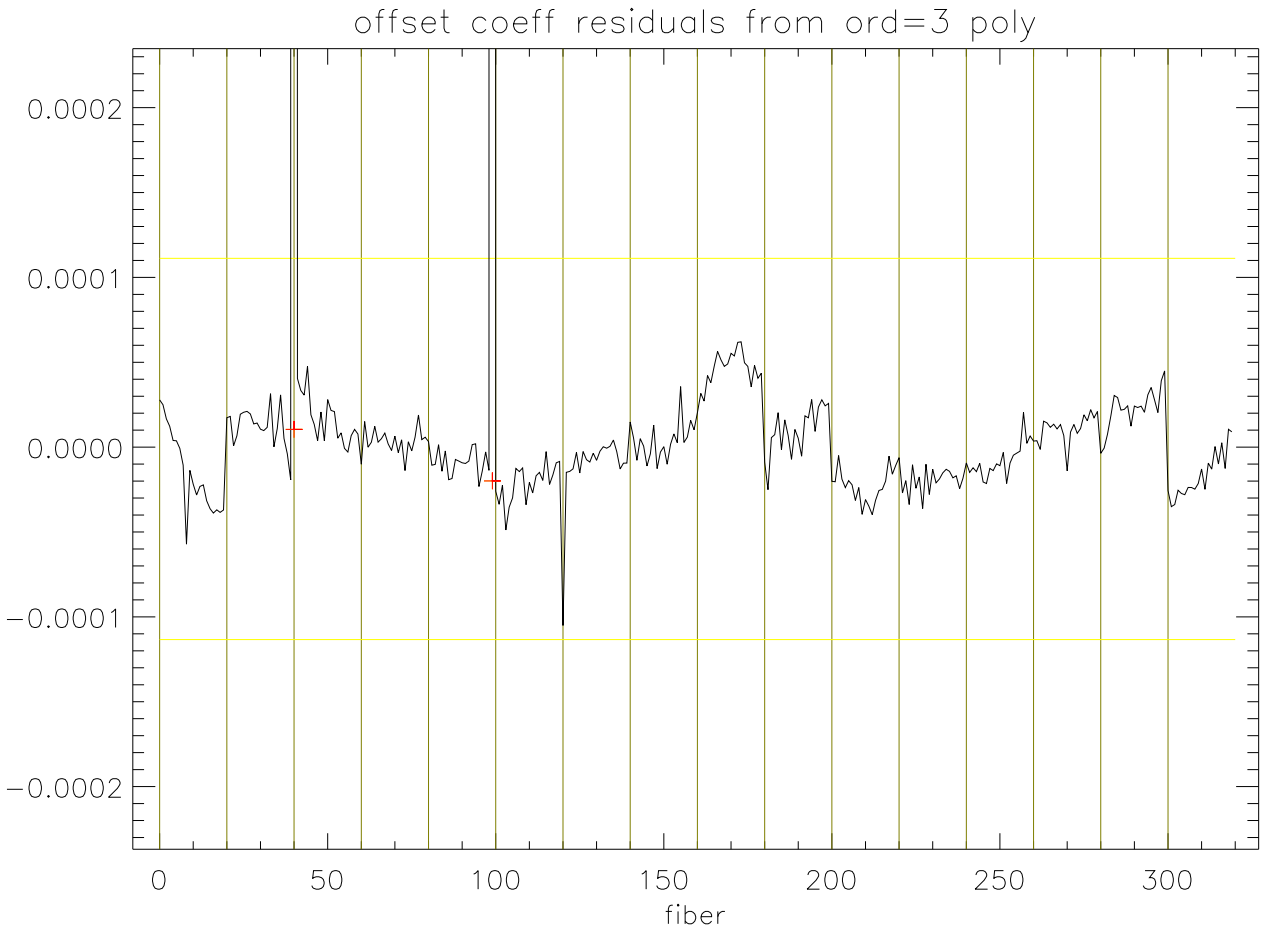

Number of sky fibers = 14
PLATE=1809 MJD=53788 sdR-r1-00037551.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

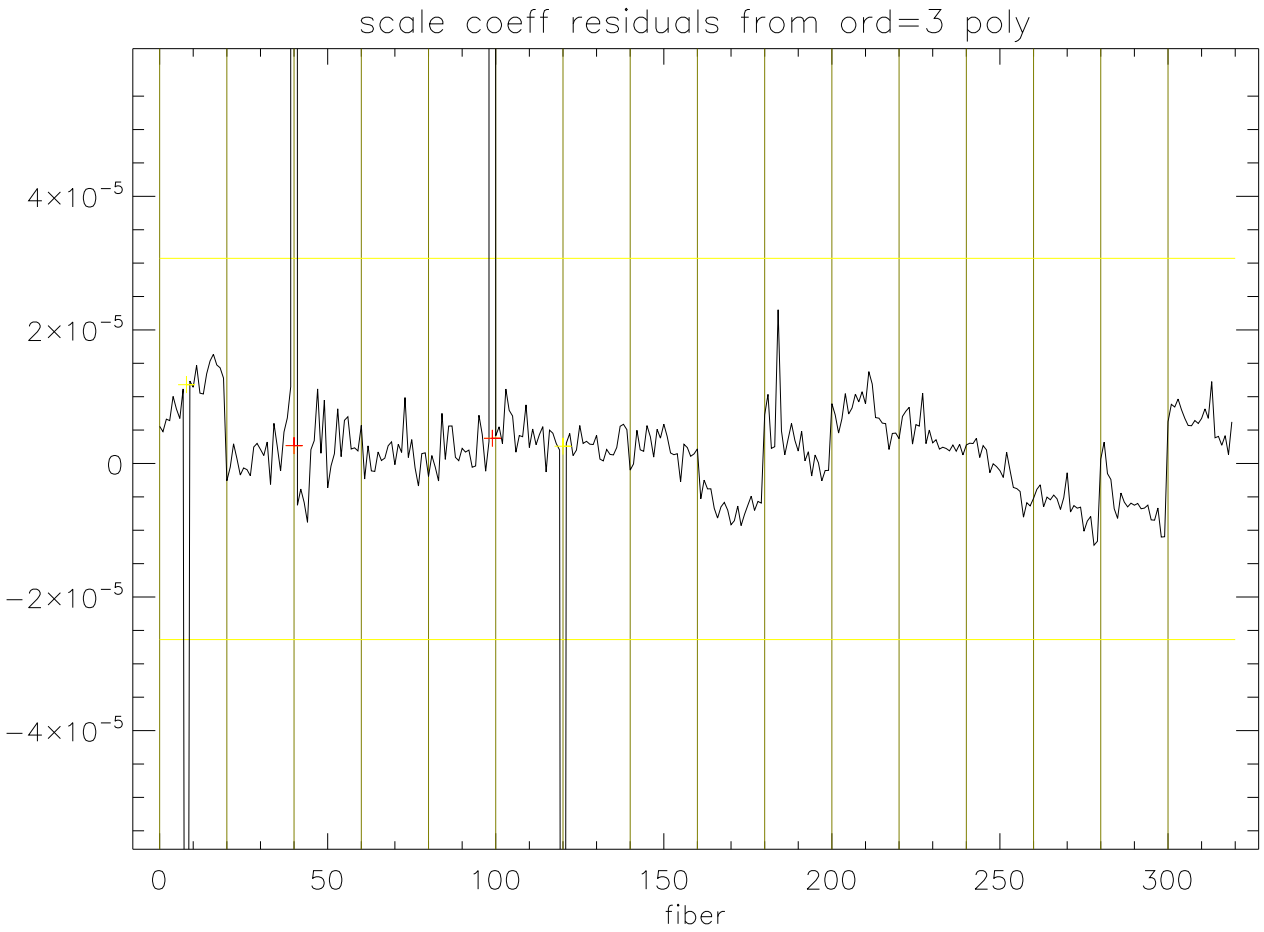

PLATE=1809 MJD=53788 sdR-r1-00037551.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.02 %
Fiber number
Focal Distance [mm]
Airmass

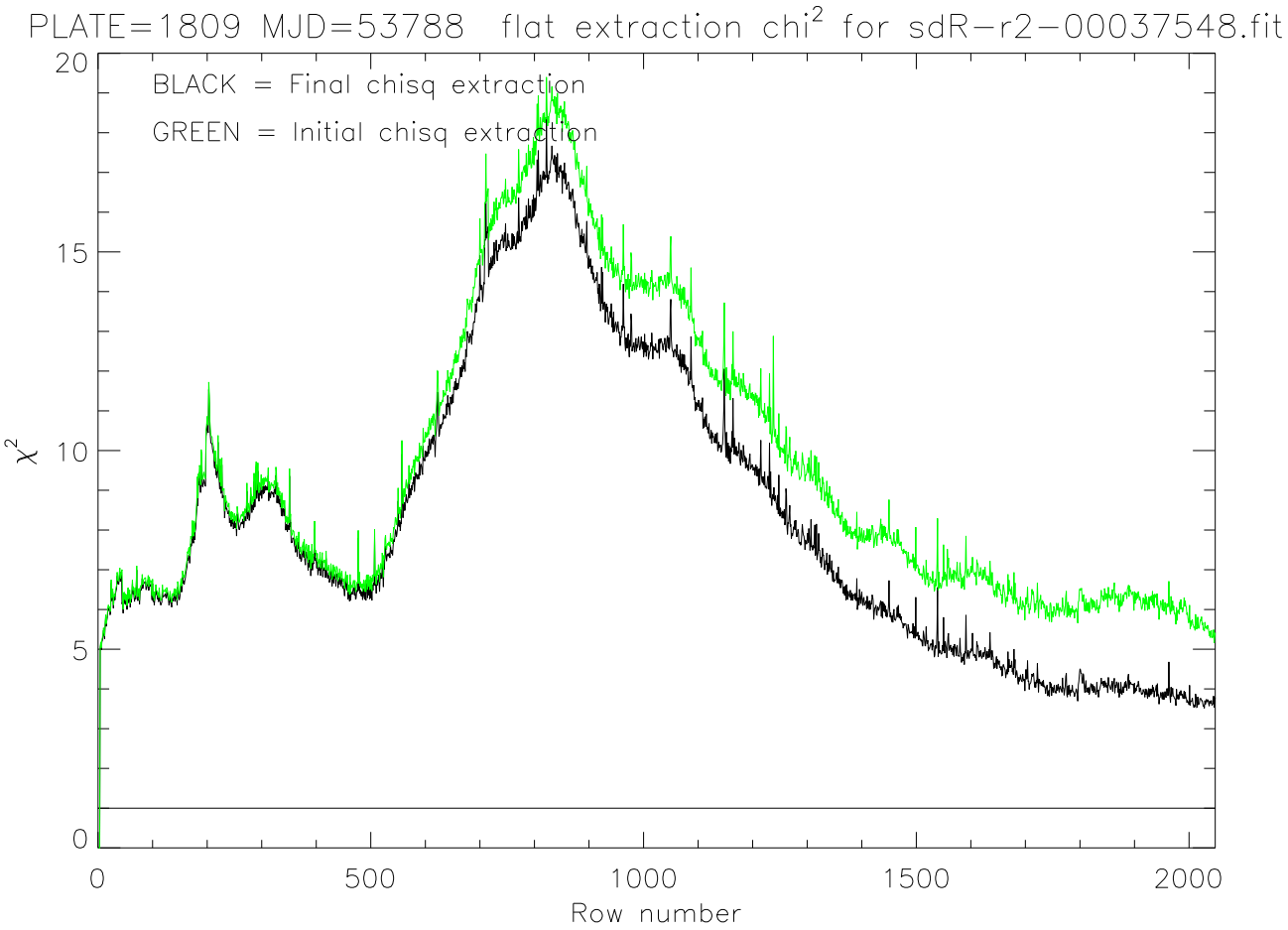

PLATE=1809 MJD=53788 sdR-r1-00037551.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.62 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

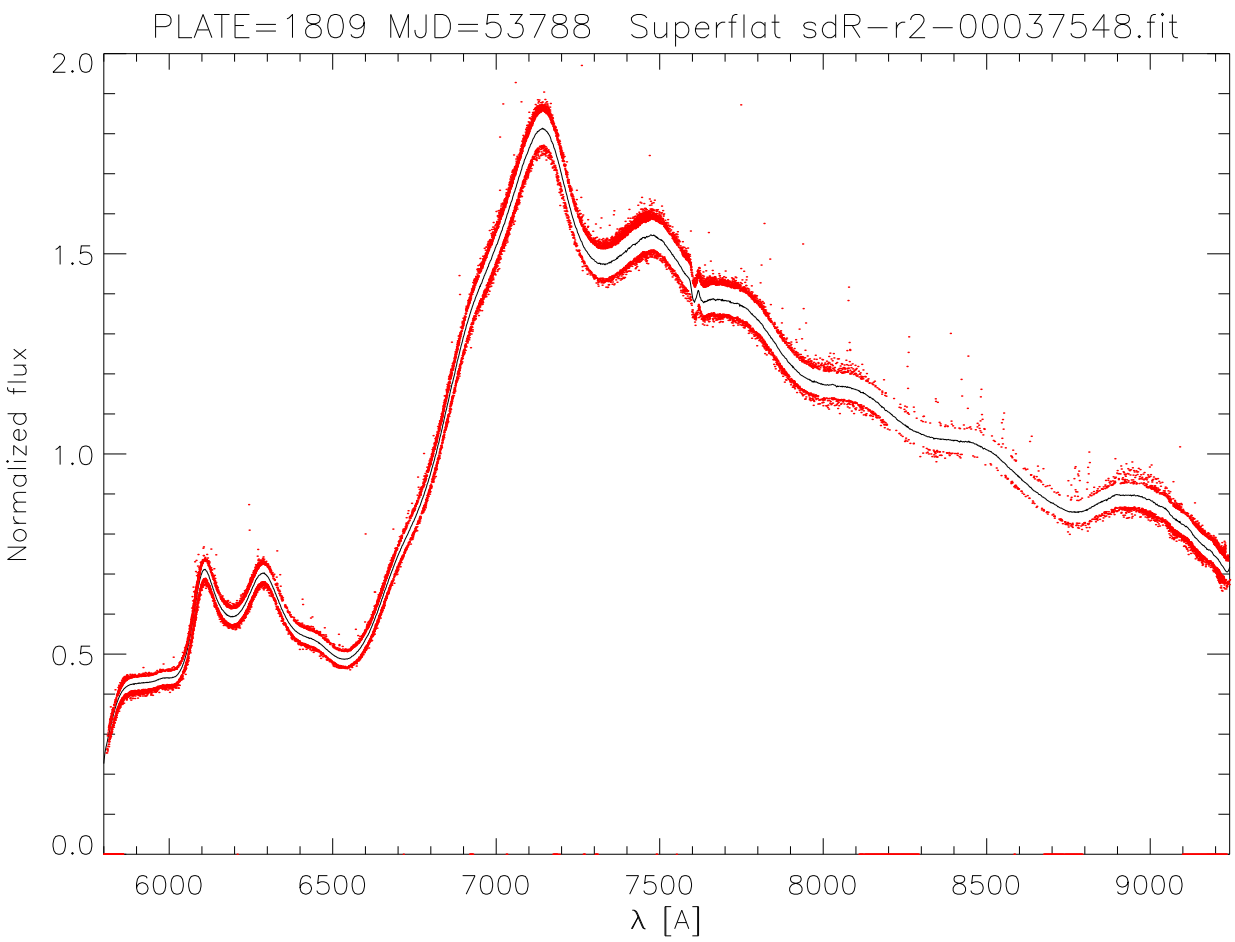

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

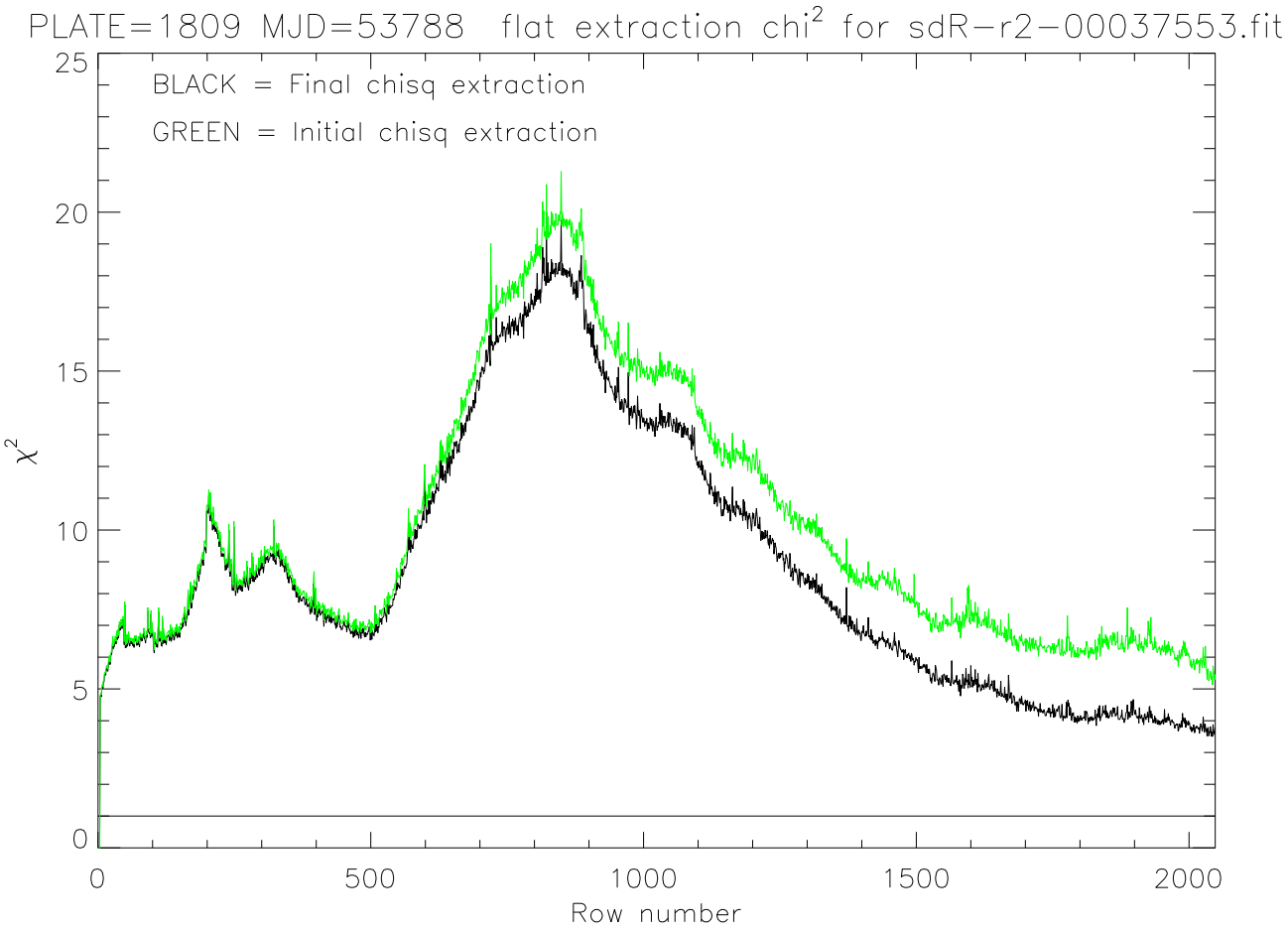

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

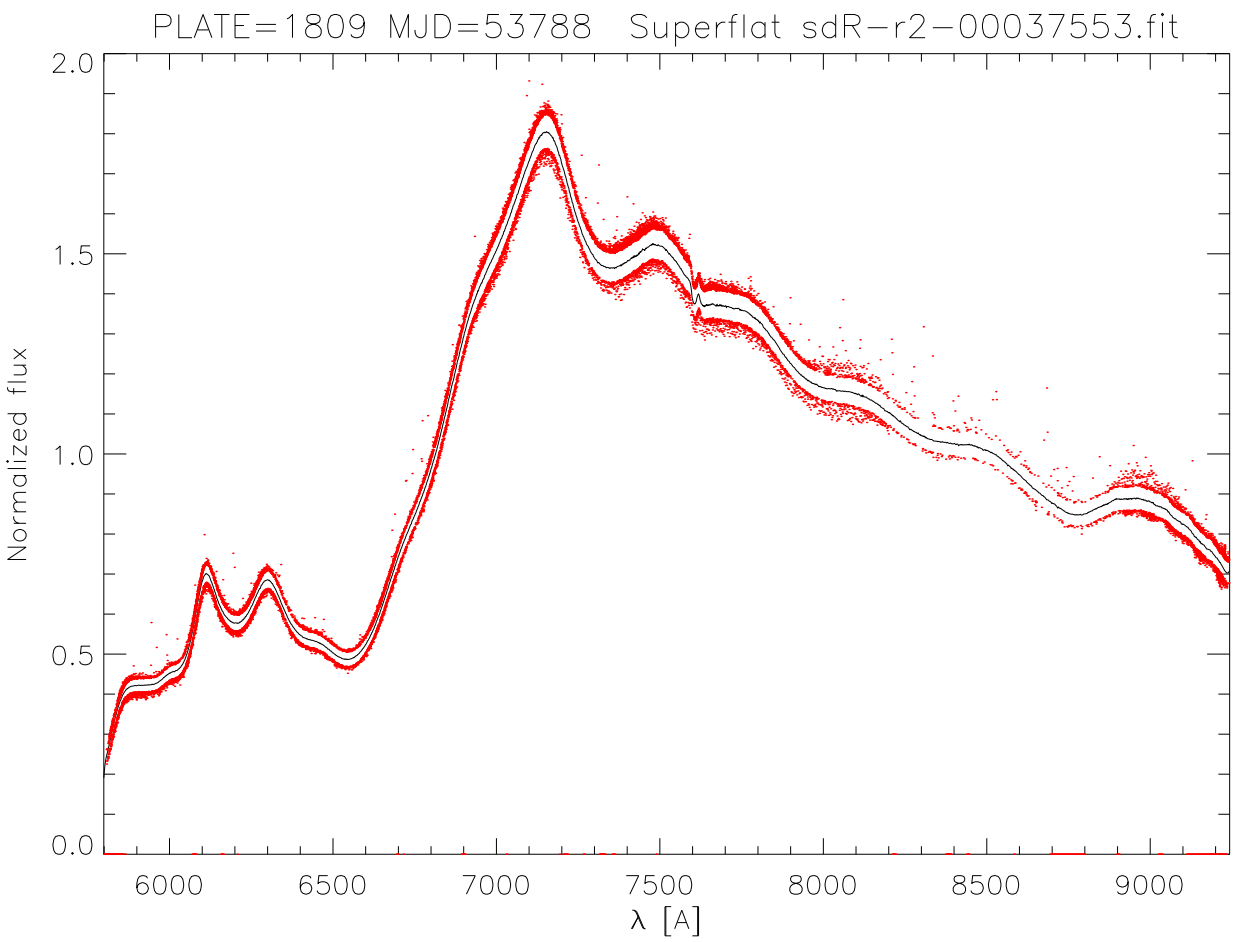

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

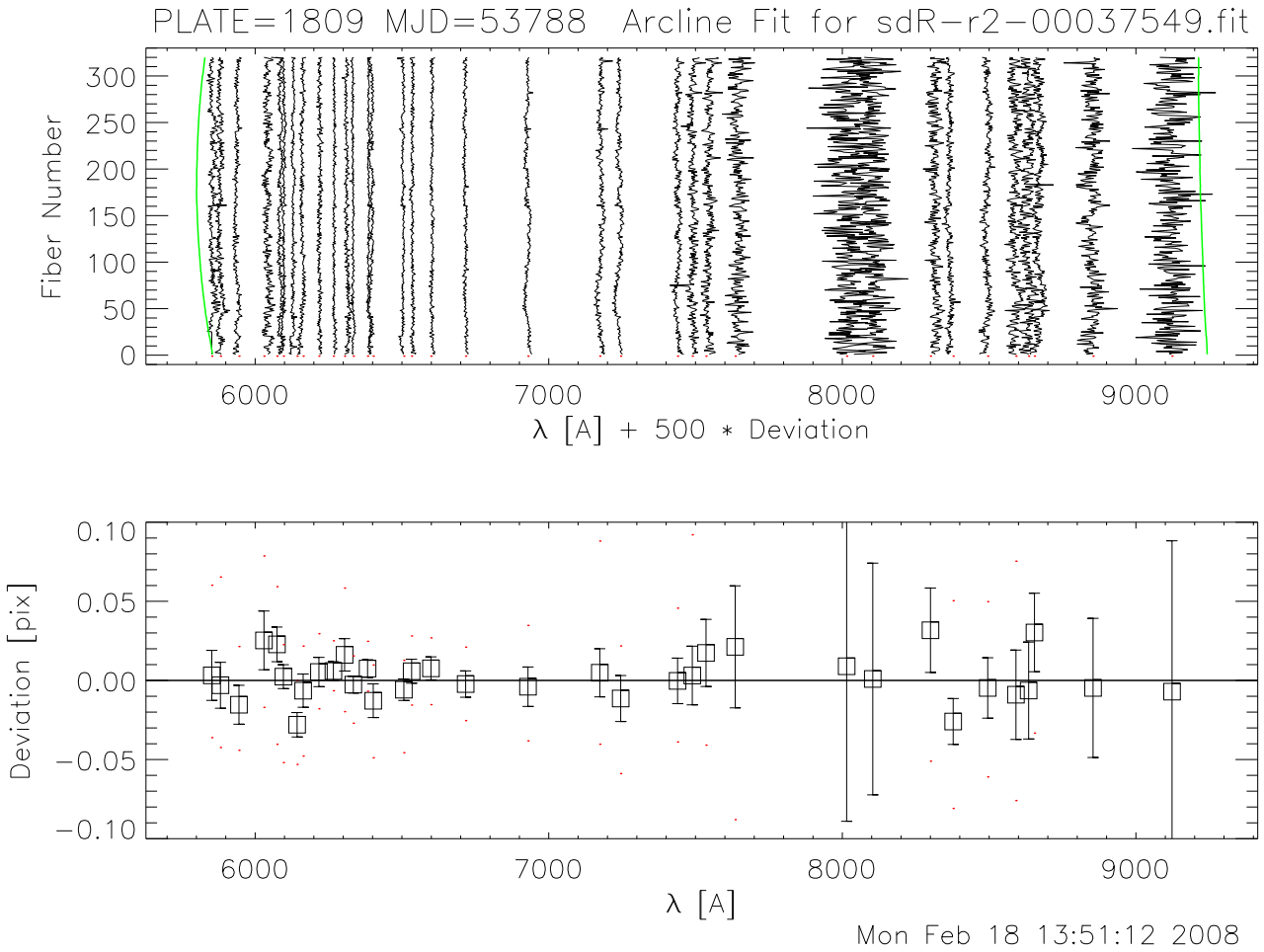

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

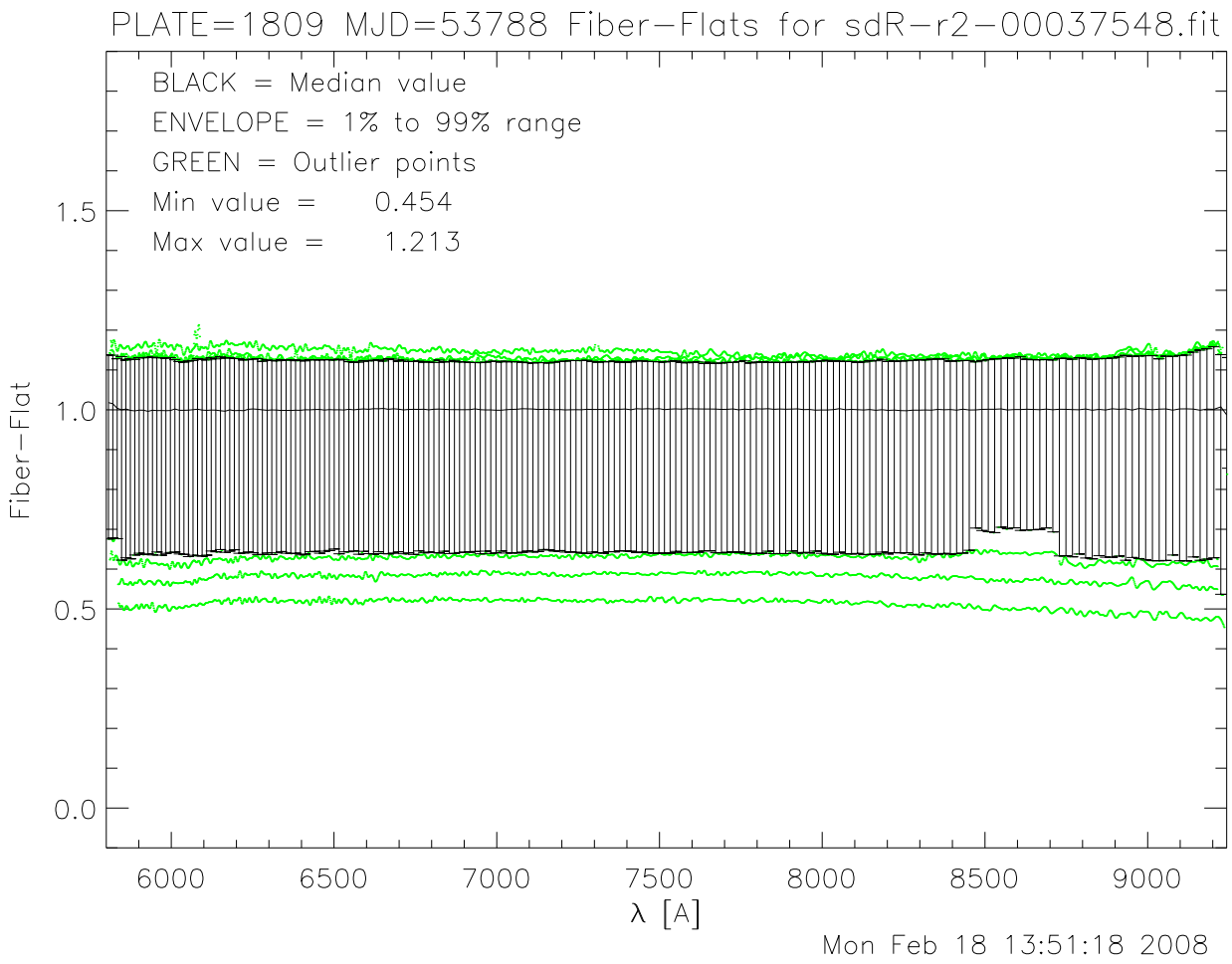

PLATE=1809 MJD=53788 flat extraction chi^2 for sdR−r2−00037548.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

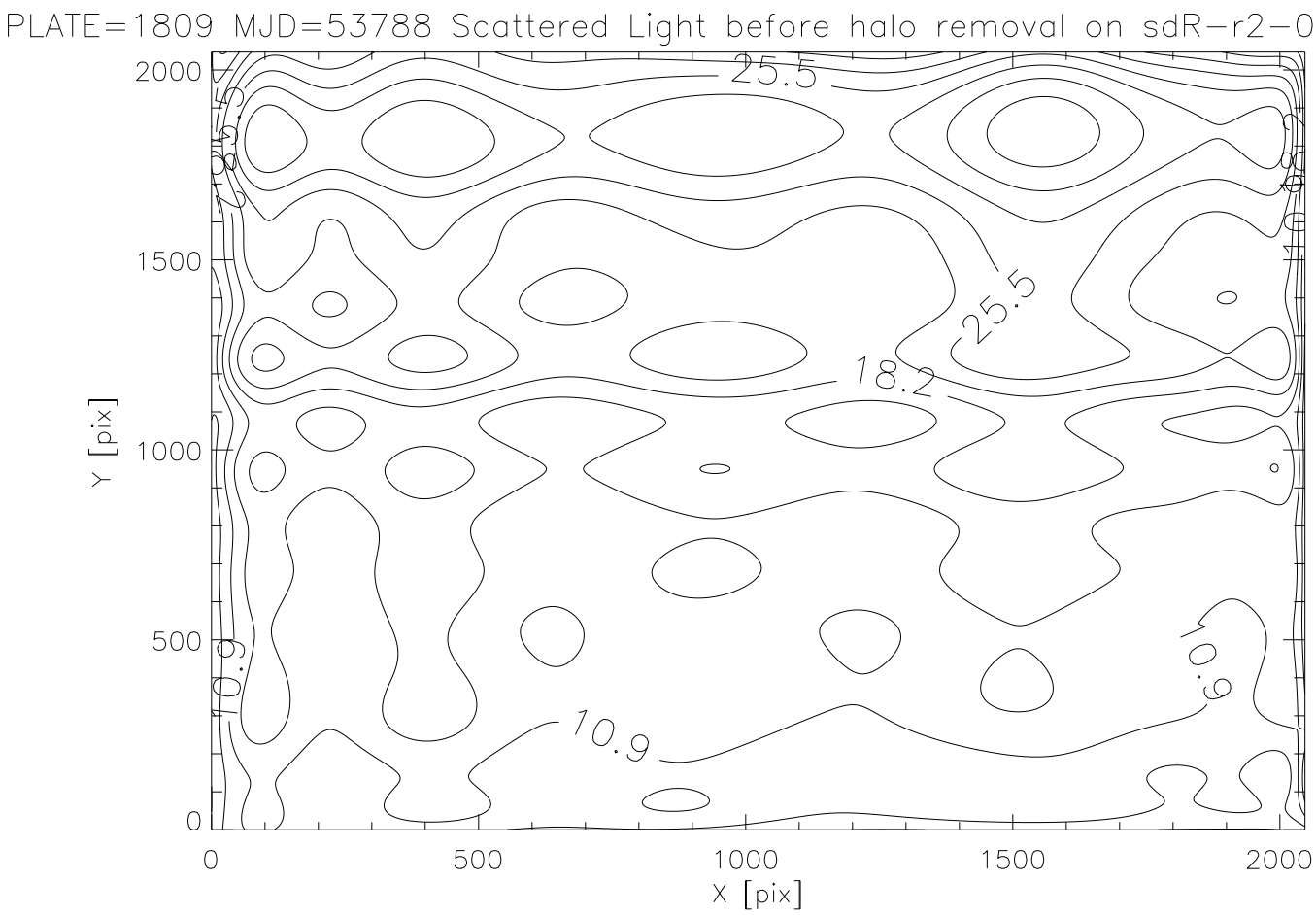

PLATE=1809 MJD=53788 Superflat sdR-r2-00037548.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

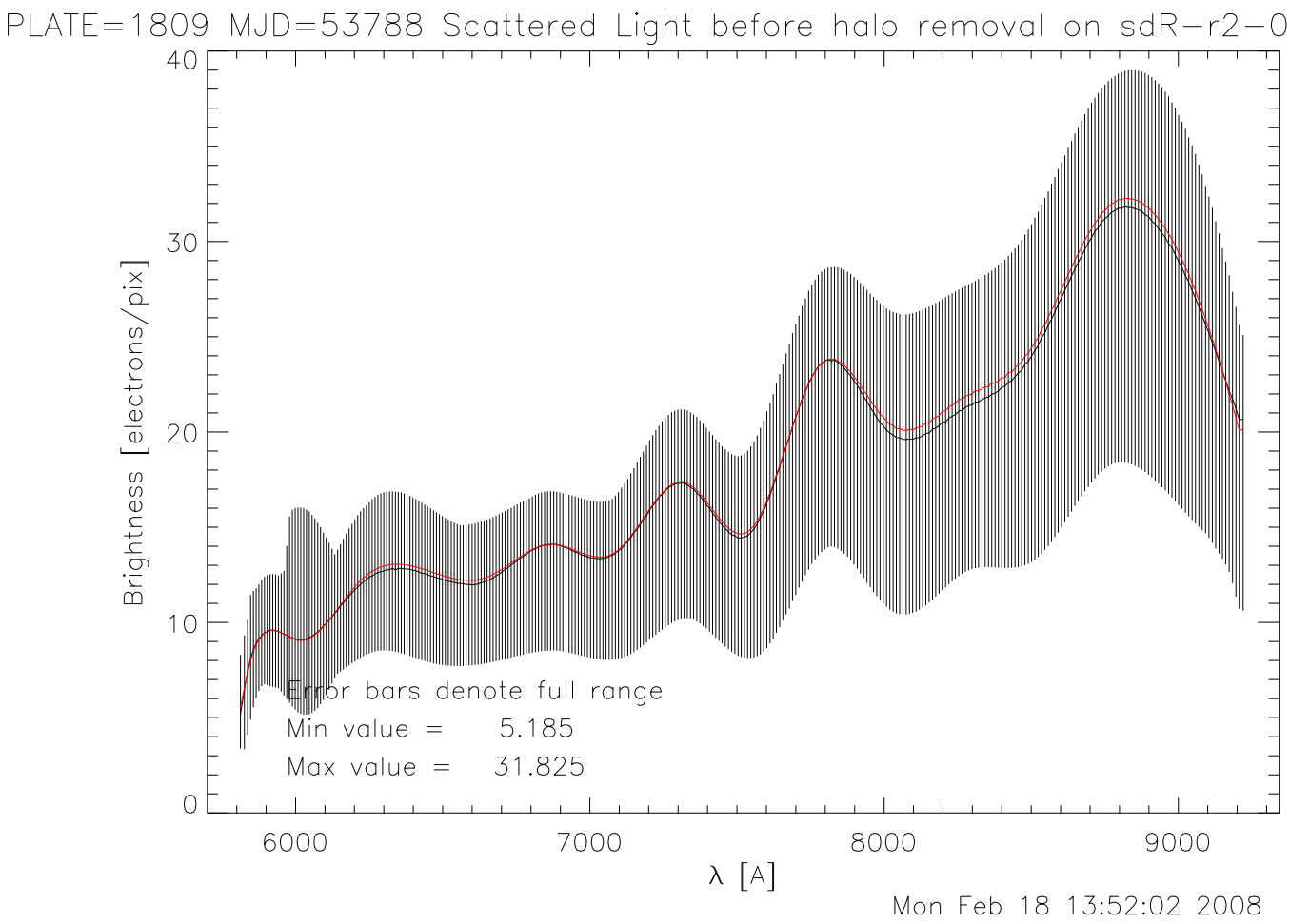

PLATE=1809 MJD=53788 flat extraction chi^2 for sdR−r2−00037553.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
25
0
500
1000
1500
2000
Row number

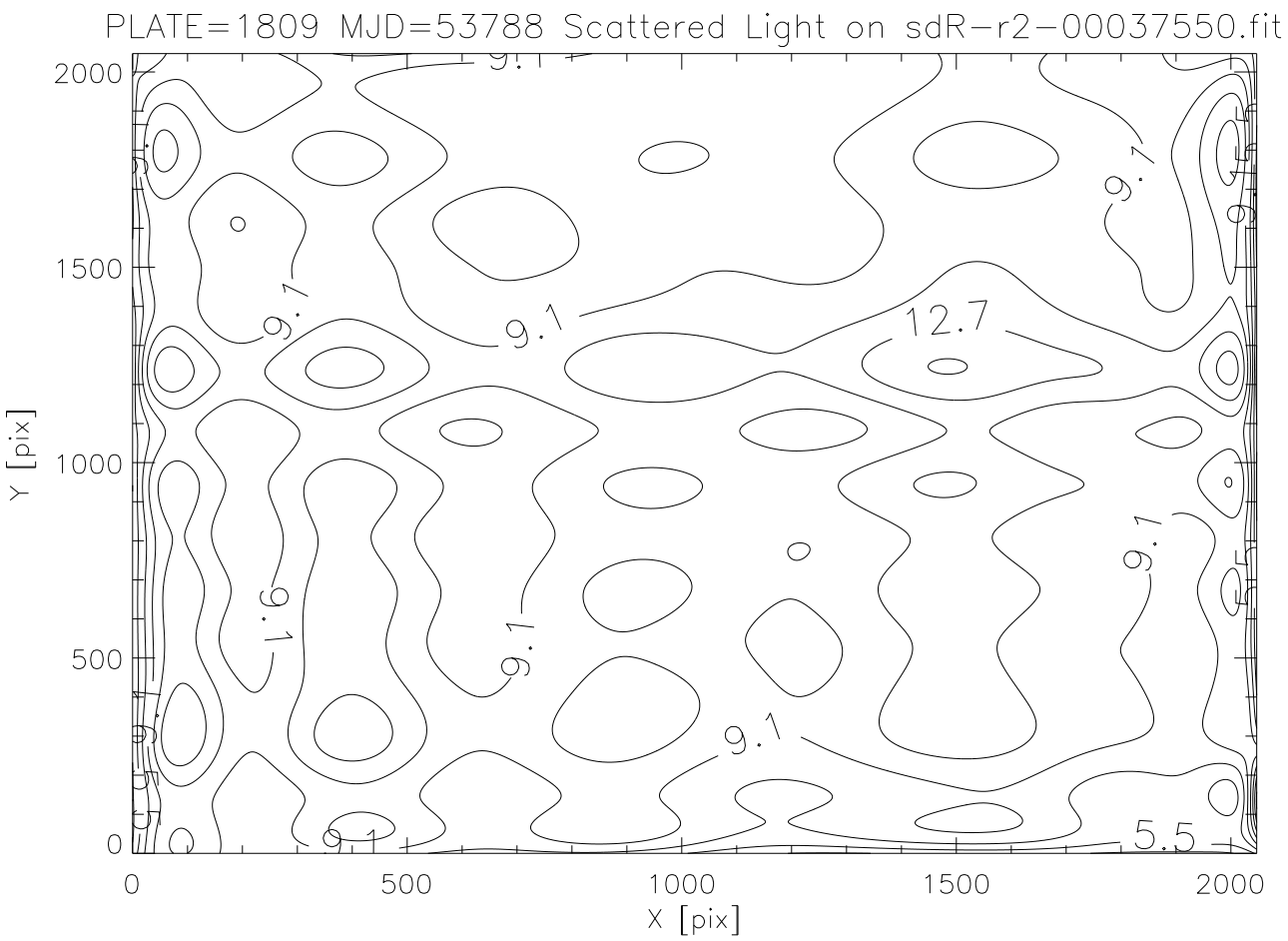

PLATE=1809 MJD=53788 Superflat sdR-r2-00037553.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

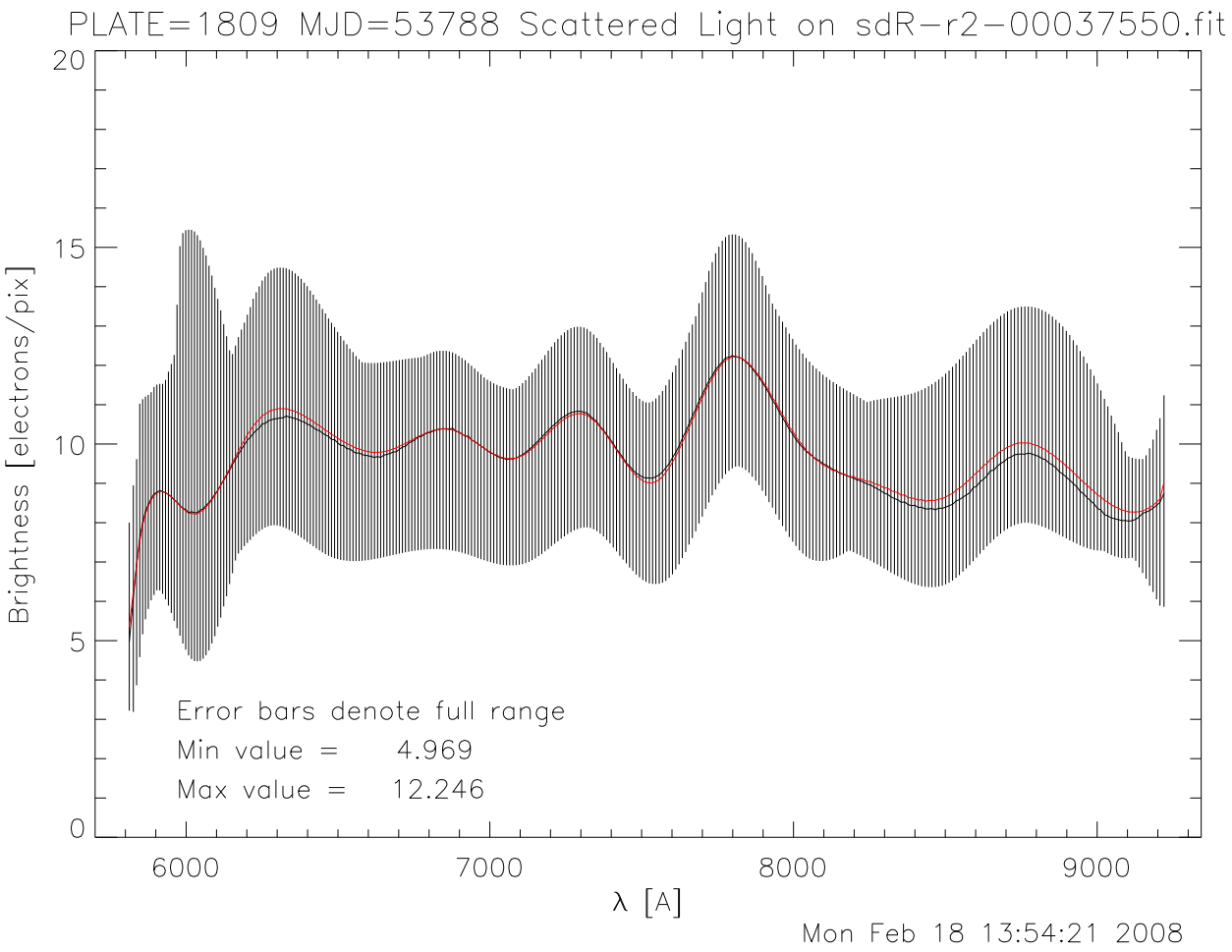

PLATE=1809 MJD=53788 Arcline Fit for sdR-r2-00037549.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 18 13:51:12 2008

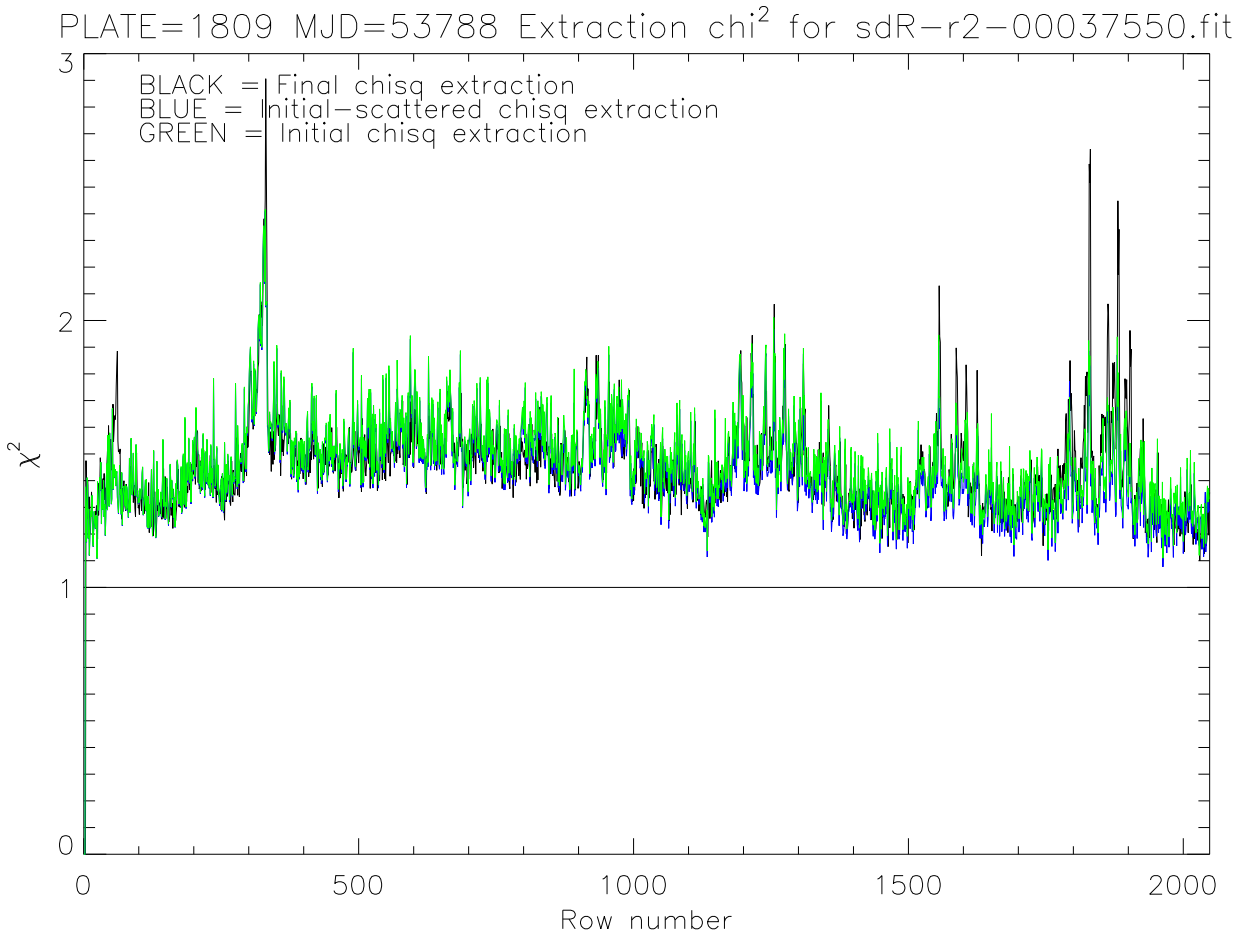

PLATE=1809 MJD=53788 Fiber−Flats for sdR−r2−00037548.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.454
Max value = 1.213
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 18 13:51:18 2008

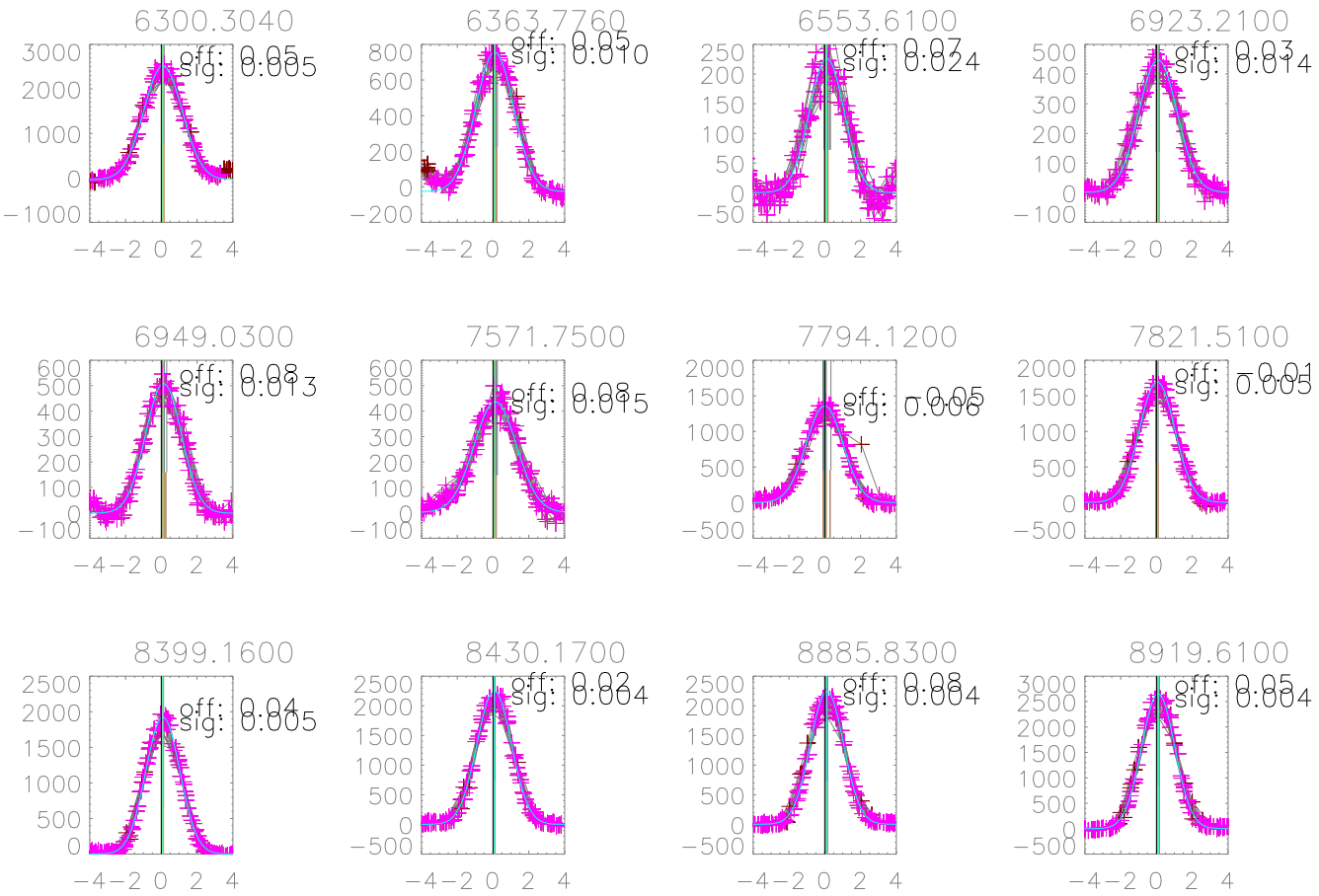

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-r2-00037550.fi
25.5
25.5
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

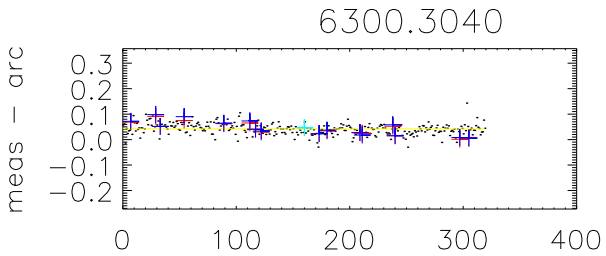

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-r2-00037550.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.185
Max value = 31.825
Mon Feb 18 13:52:02 2008

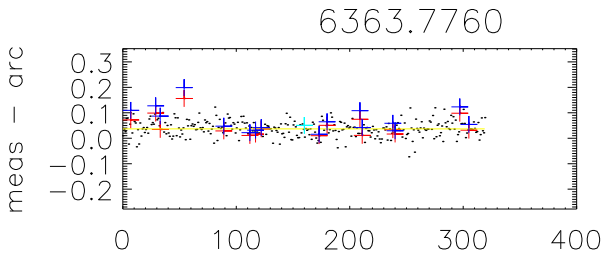

PLATE=1809 MJD=53788 Scattered Light on sdR-r2-00037550.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
12.7
5.5

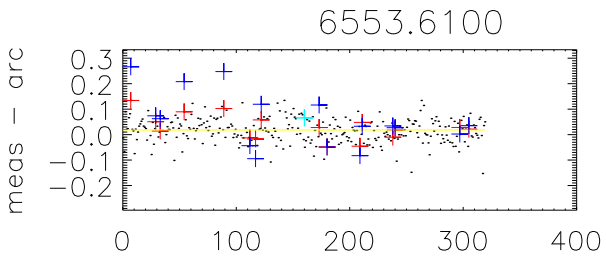

PLATE=1809 MJD=53788 Scattered Light on sdR-r2-00037550.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.969
Max value = 12.246
Mon Feb 18 13:54:21 2008

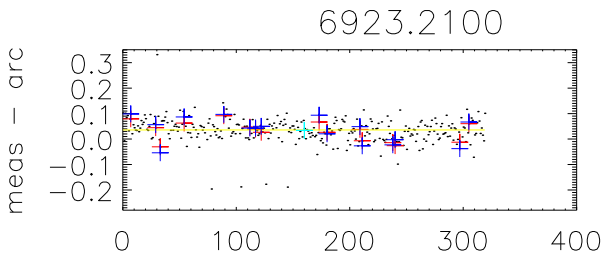

PLATE=1809 MJD=53788 Extraction chi^2 for sdR−r2−00037550.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

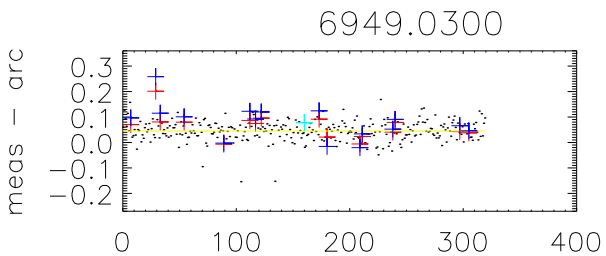

6300.3040
off: 0.05
sig: 0.005
6363.7760
off: 0.05
sig: 0.010
6553.6100
off: 0.07
sig: 0.024
6923.2100
off: 0.03
sig: 0.014
6949.0300
off: 0.08
sig: 0.013
7571.7500
off: 0.08
sig: 0.015
7794.1200
off: −0.05
sig: 0.006
7821.5100
off: −0.01
sig: 0.005
8399.1600
off: 0.04
sig: 0.005
8430.1700
off: 0.02
sig: 0.004
8885.8300
off: 0.08
sig: 0.004
8919.6100
off: 0.05
sig: 0.004

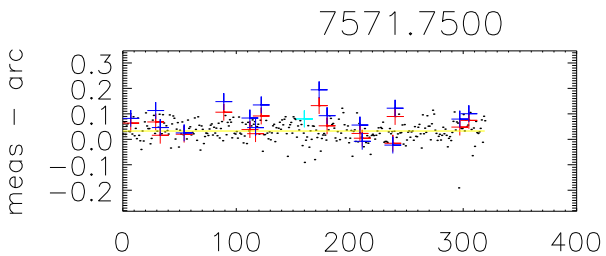

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

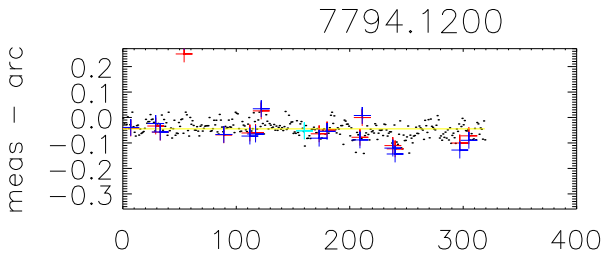

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

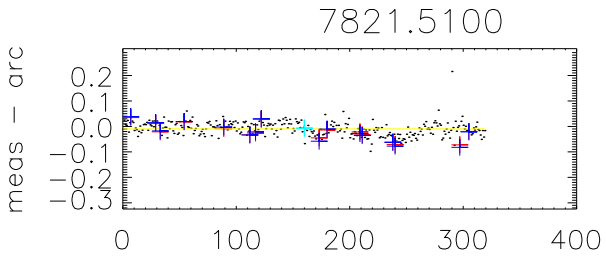

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

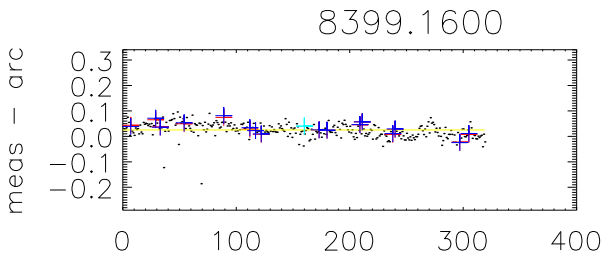

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

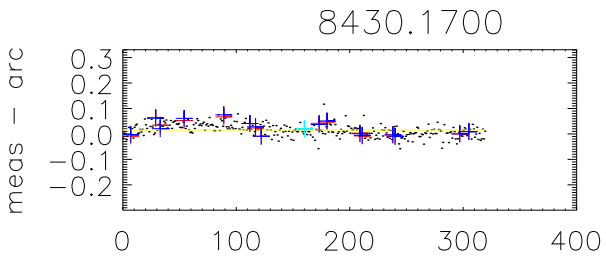

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

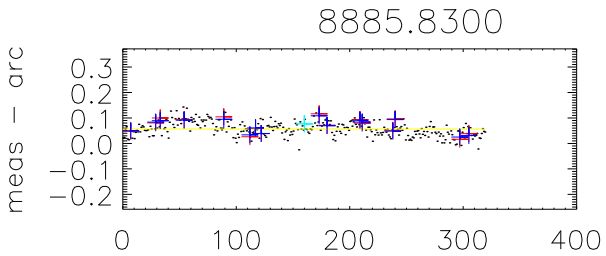

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

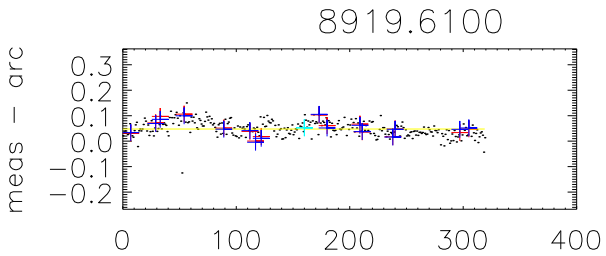

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

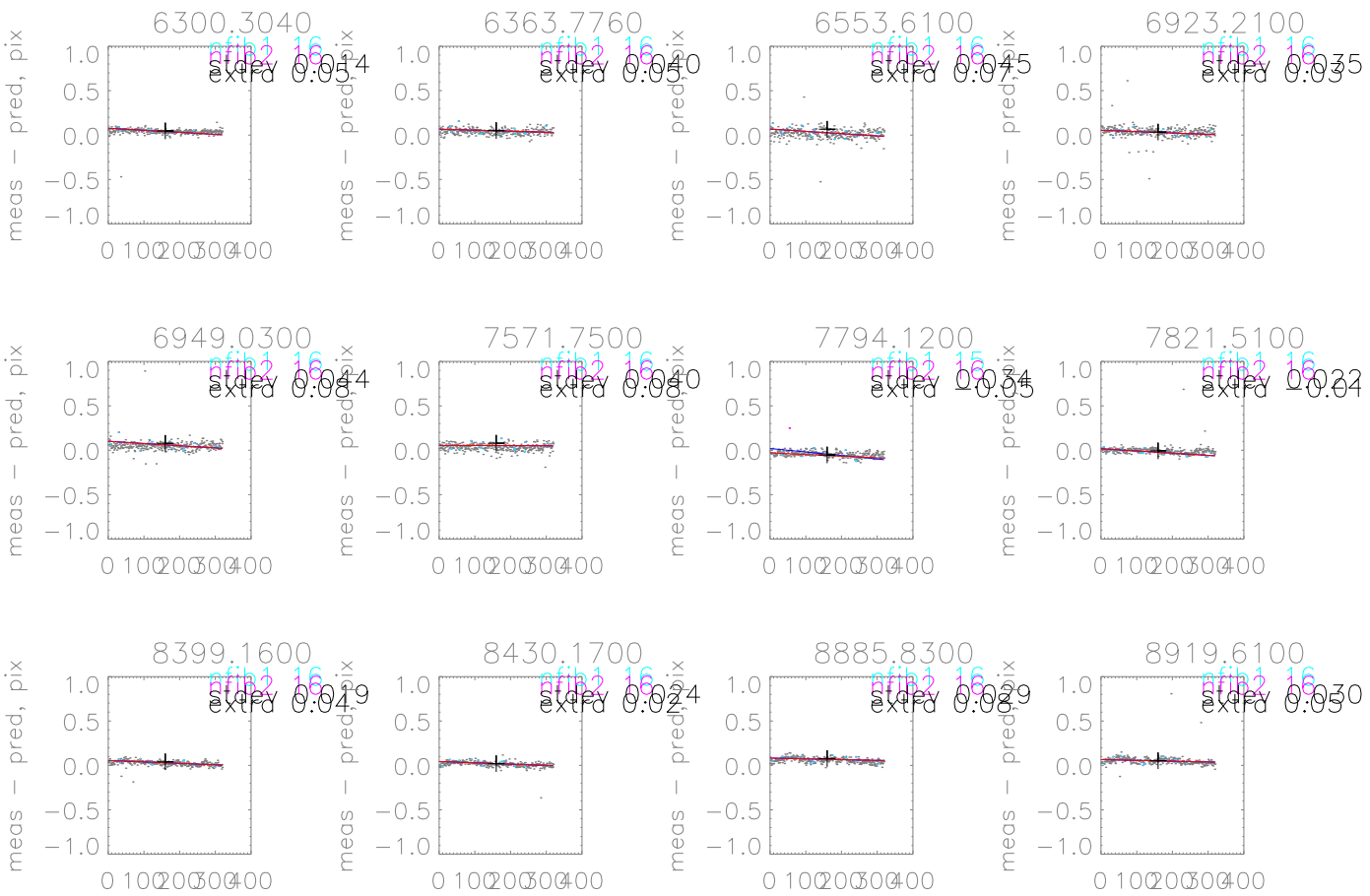

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

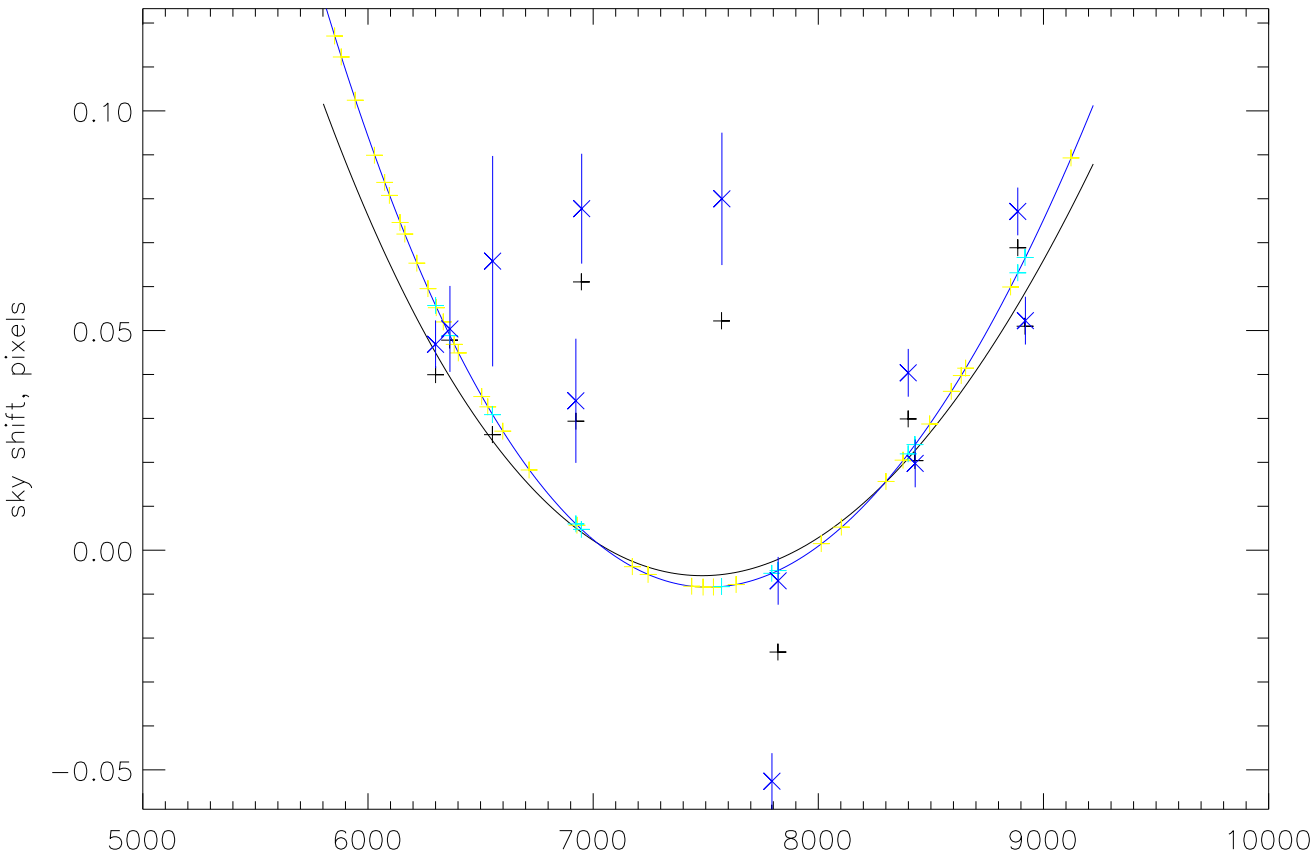

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

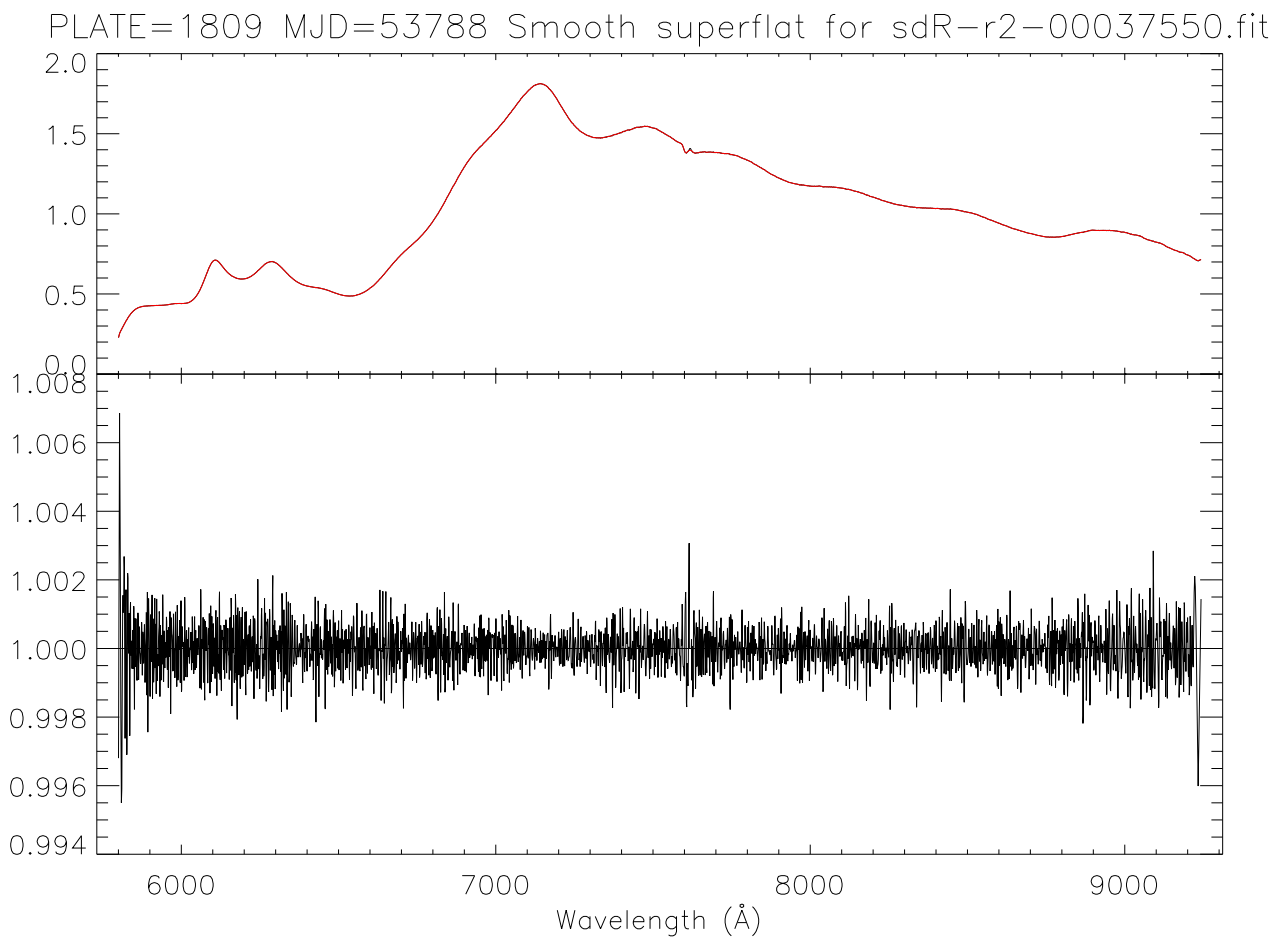

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

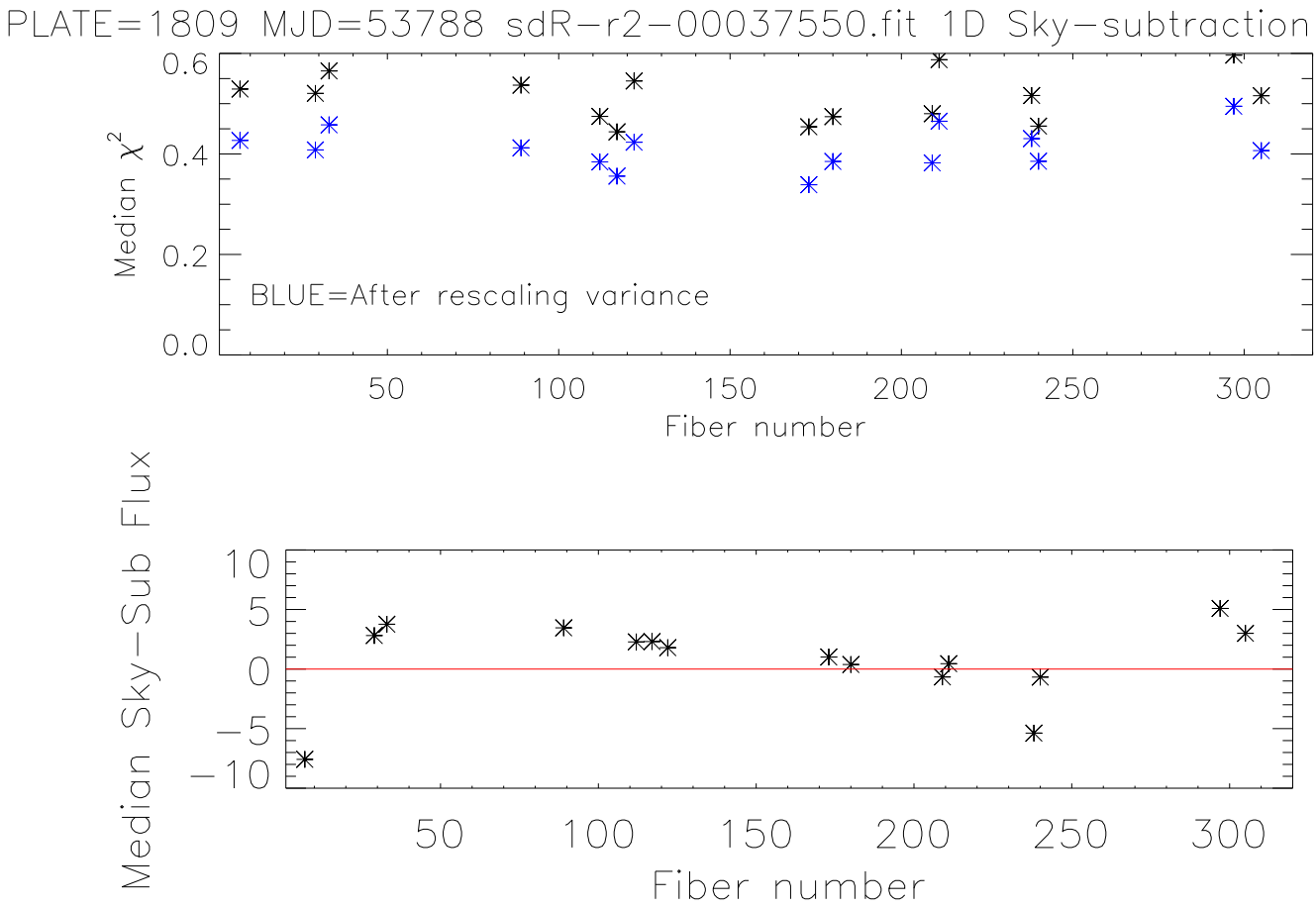

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

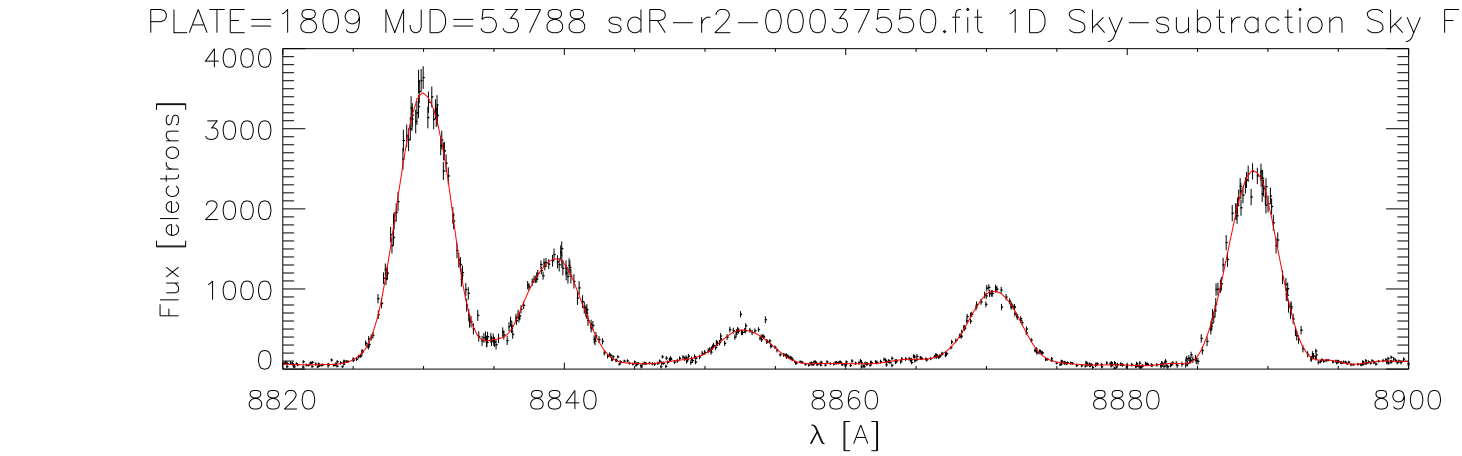

6300.3040
stdev 0.054
extra 0.05
6363.7760
stdev 0.040
extra 0.05
6553.6100
stdev 0.045
extra 0.07
6923.2100
stdev 0.035
extra 0.03
6949.0300
stdev 0.044
extra 0.08
7571.7500
stdev 0.040
extra 0.08
7794.1200
stdev 0.034
extra −0.05
7821.5100
stdev 0.022
extra −0.04
8399.1600
stdev 0.049
extra 0.04
8430.1700
stdev 0.024
extra 0.02
8885.8300
stdev 0.029
extra 0.08
8919.6100
stdev 0.030
extra 0.05
meas − pred, pix

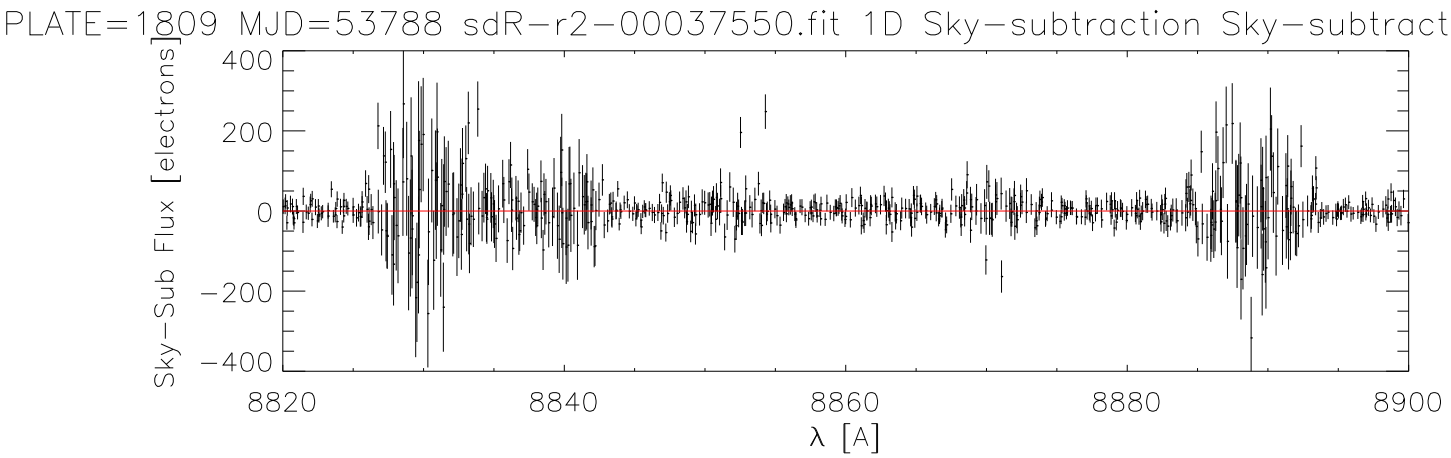

sky shift, pixels
0.10
0.05
0.00
−0.05
5000
6000
7000
8000
9000
10000

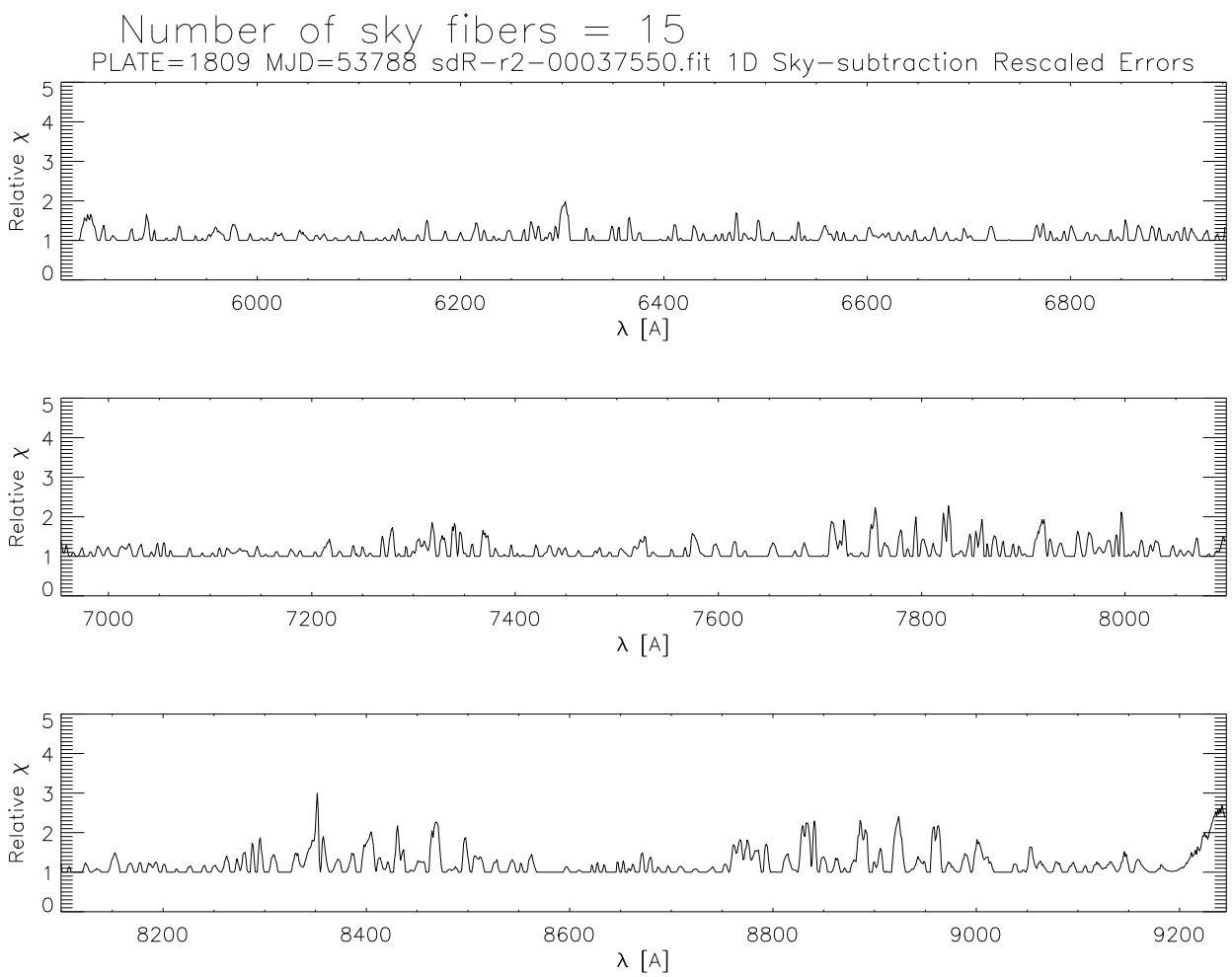
es= −0.0000

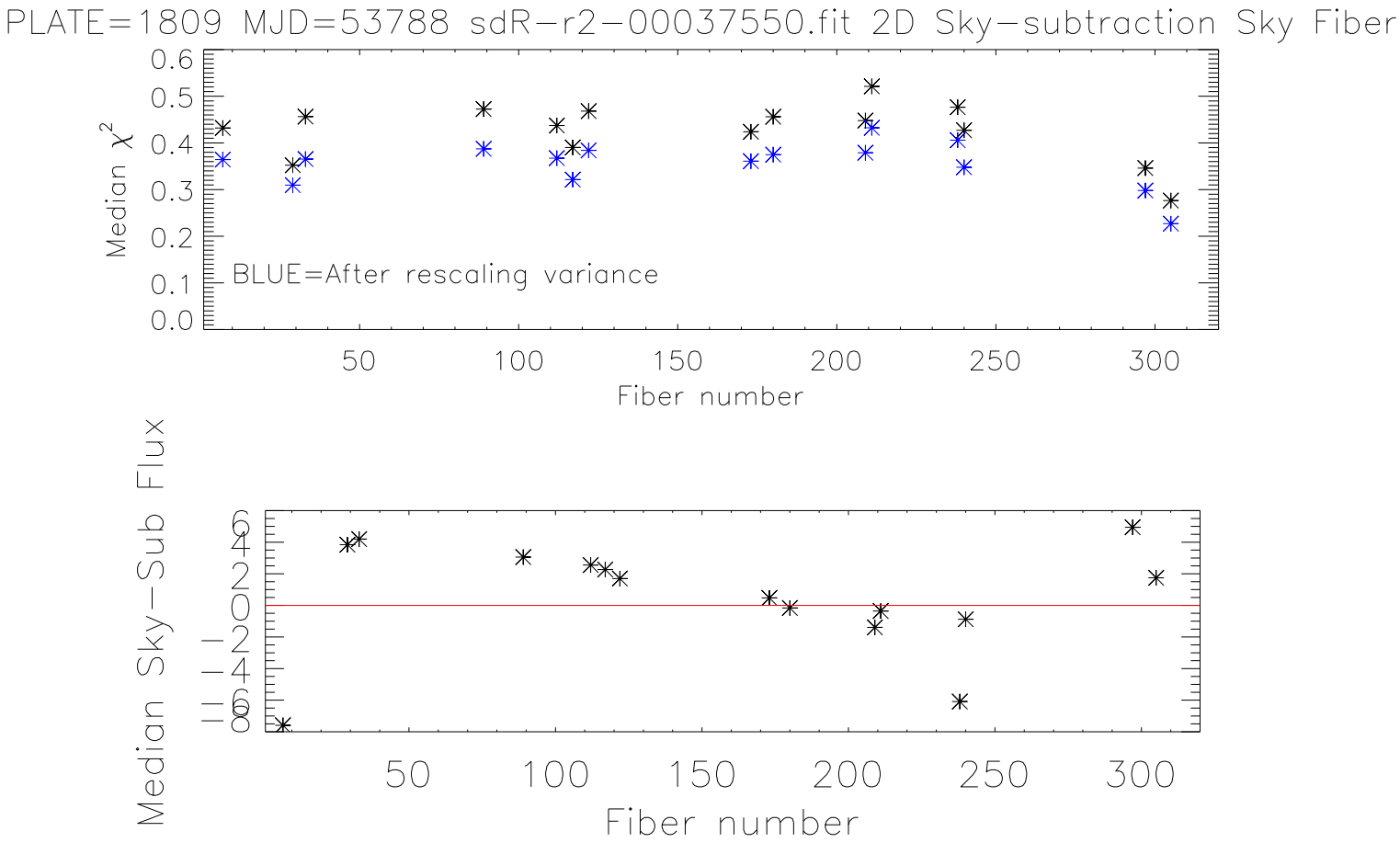

PLATE=1809 MJD=53788 Smooth superflat for sdR−r2−00037550.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

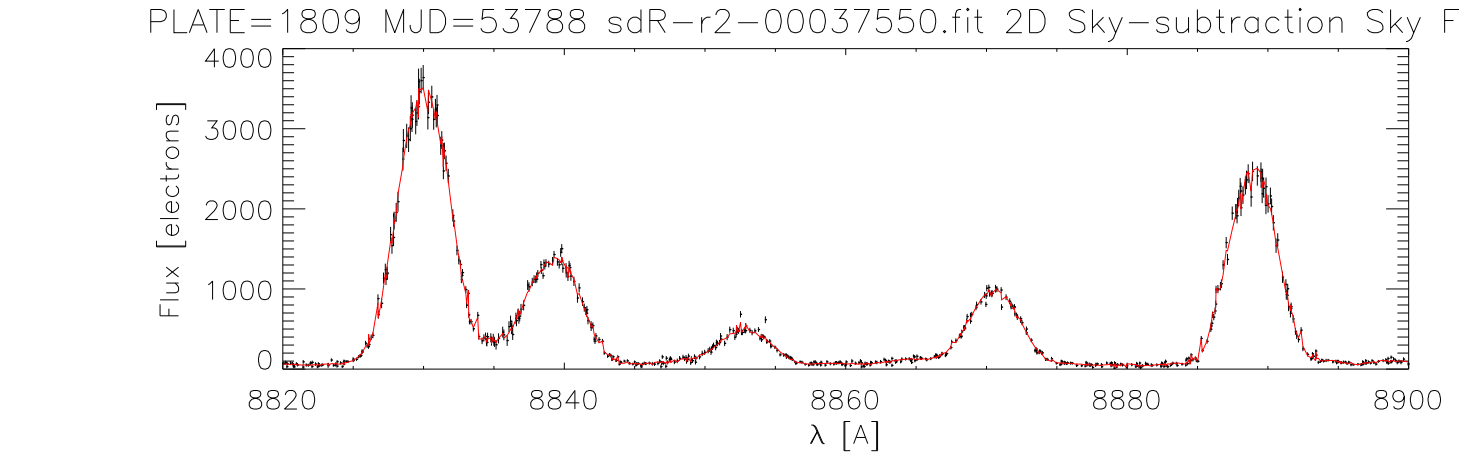

PLATE=1809 MJD=53788 sdR-r2-00037550.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

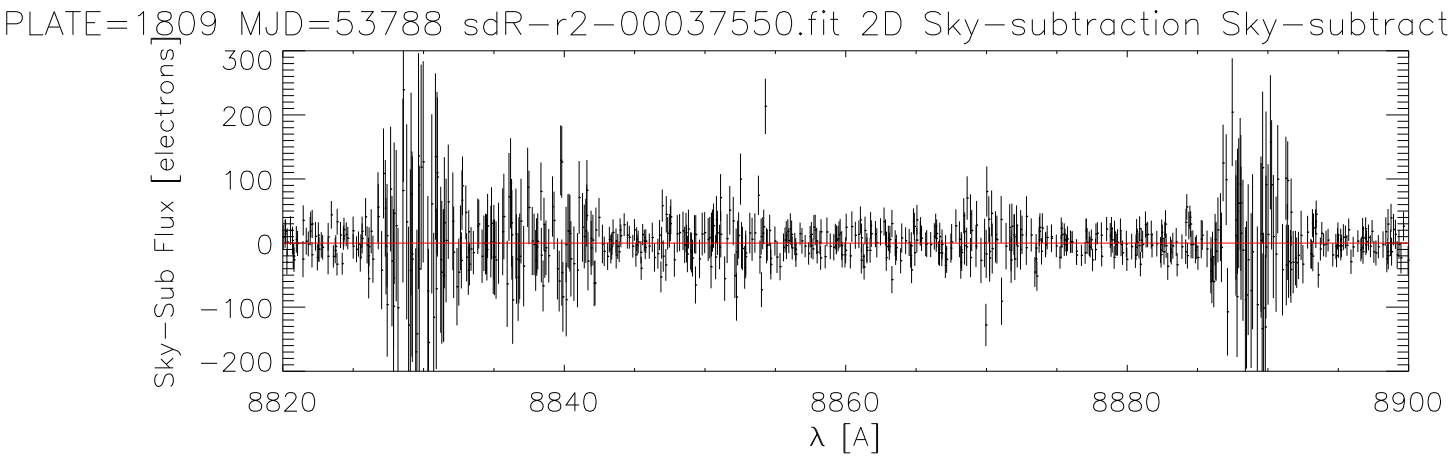

PLATE=1809 MJD=53788 sdR-r2-00037550.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

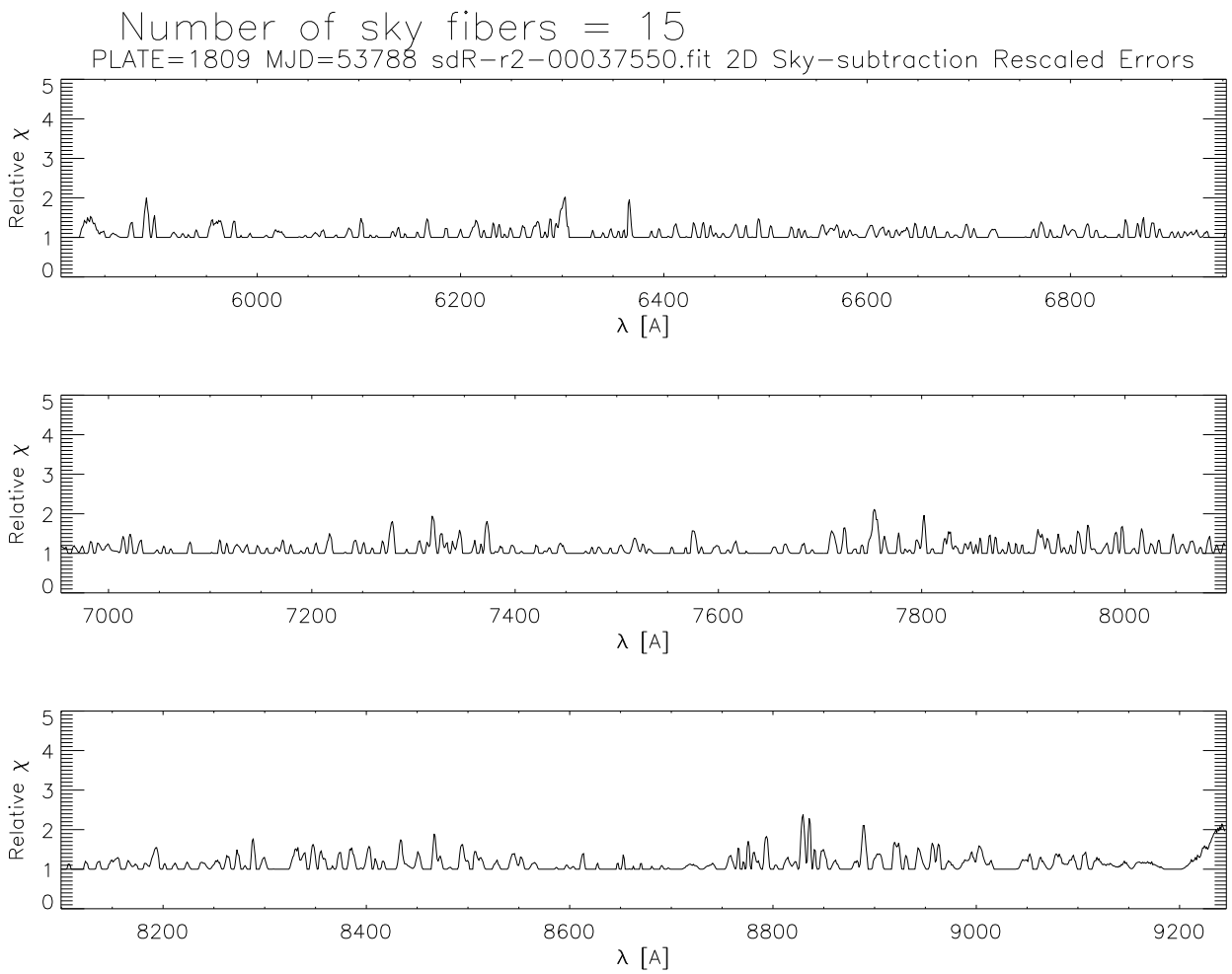

PLATE=1809 MJD=53788 sdR-r2-00037550.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

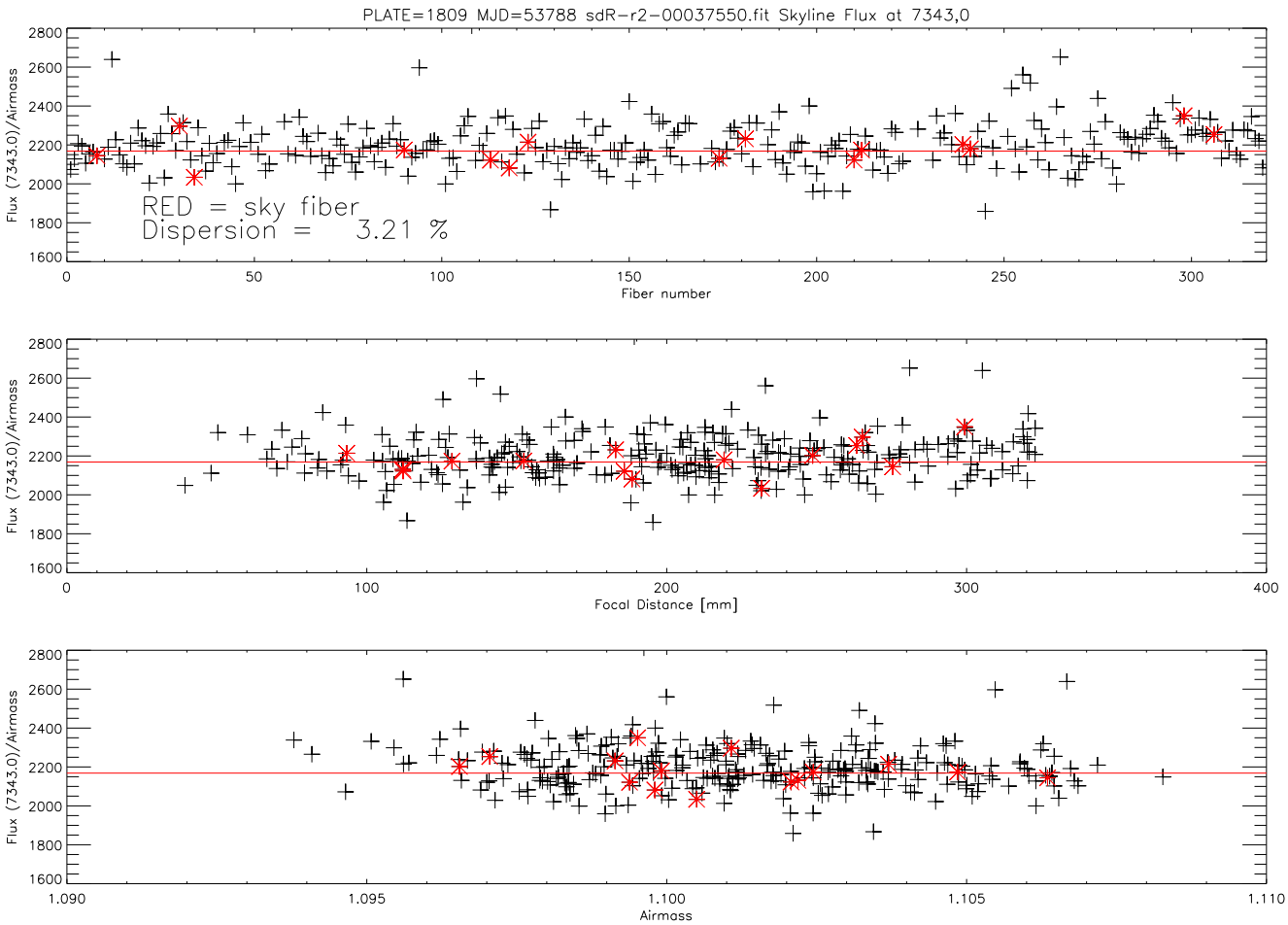

Number of sky fibers = 15
PLATE=1809 MJD=53788 sdR-r2-00037550.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

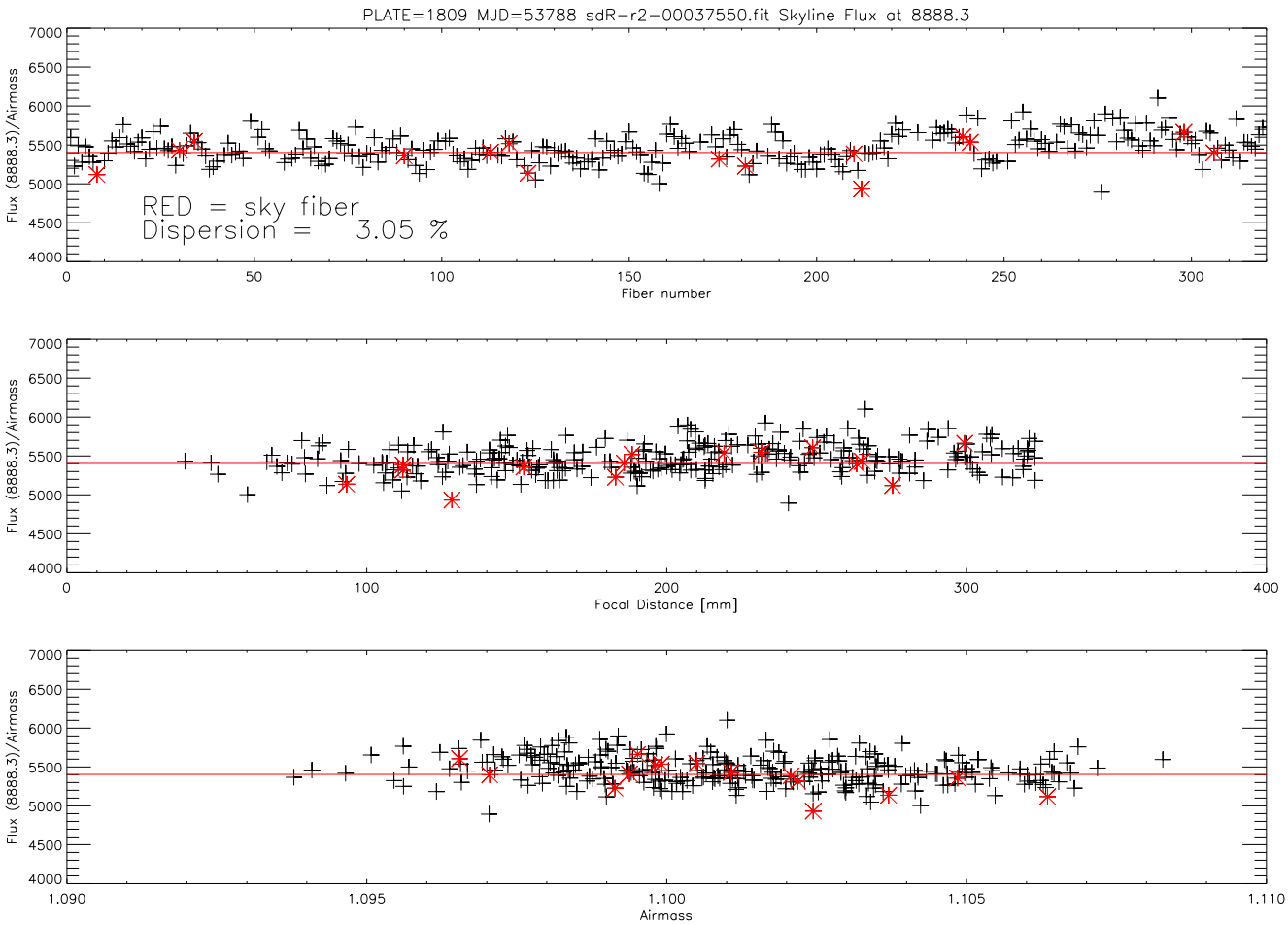

PLATE=1809 MJD=53788 sdR-r2-00037550.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
-1
-1
50
100
150
200
250
300
Fiber number

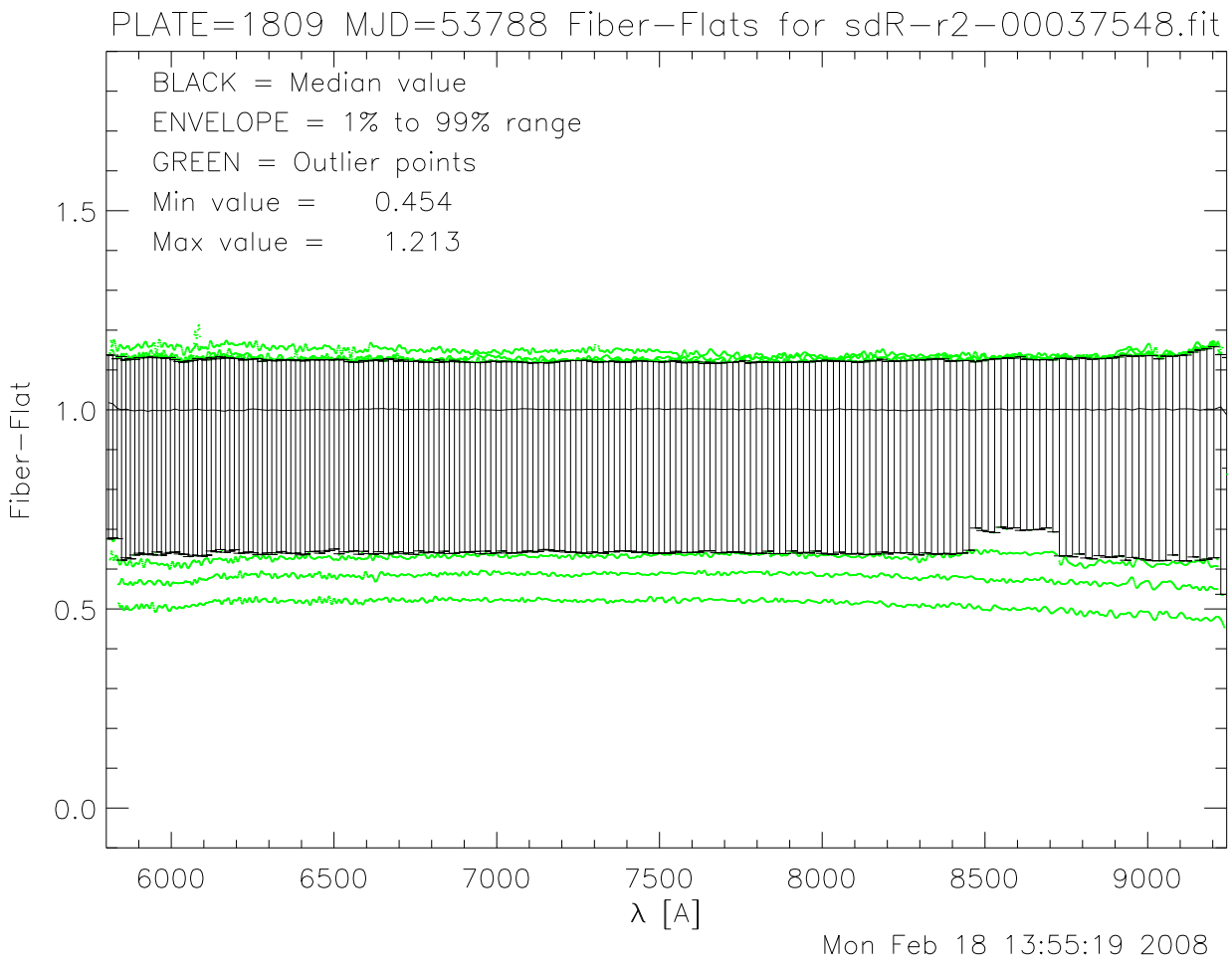

PLATE=1809 MJD=53788 sdR-r2-00037550.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

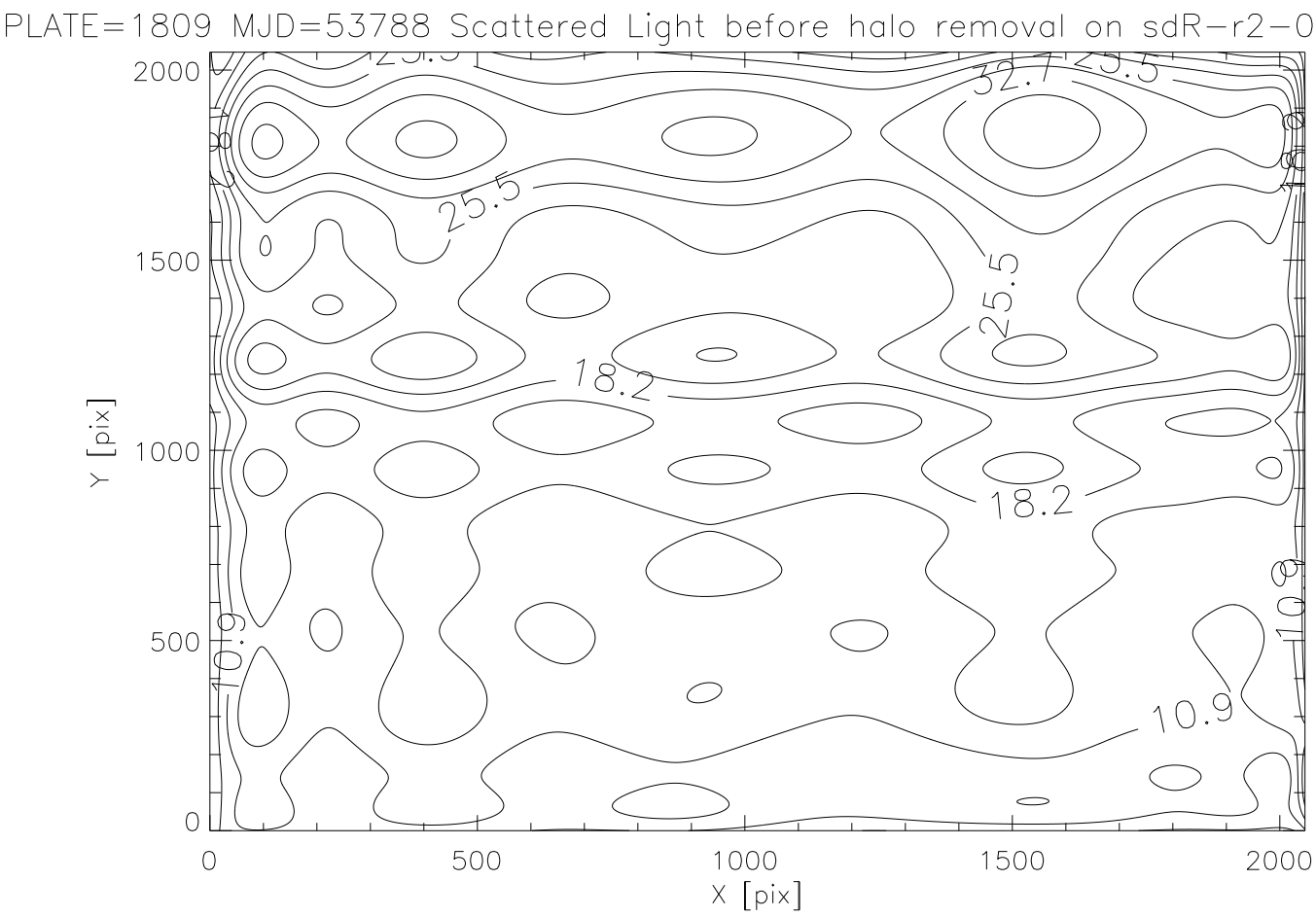

PLATE=1809 MJD=53788 sdR-r2-00037550.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

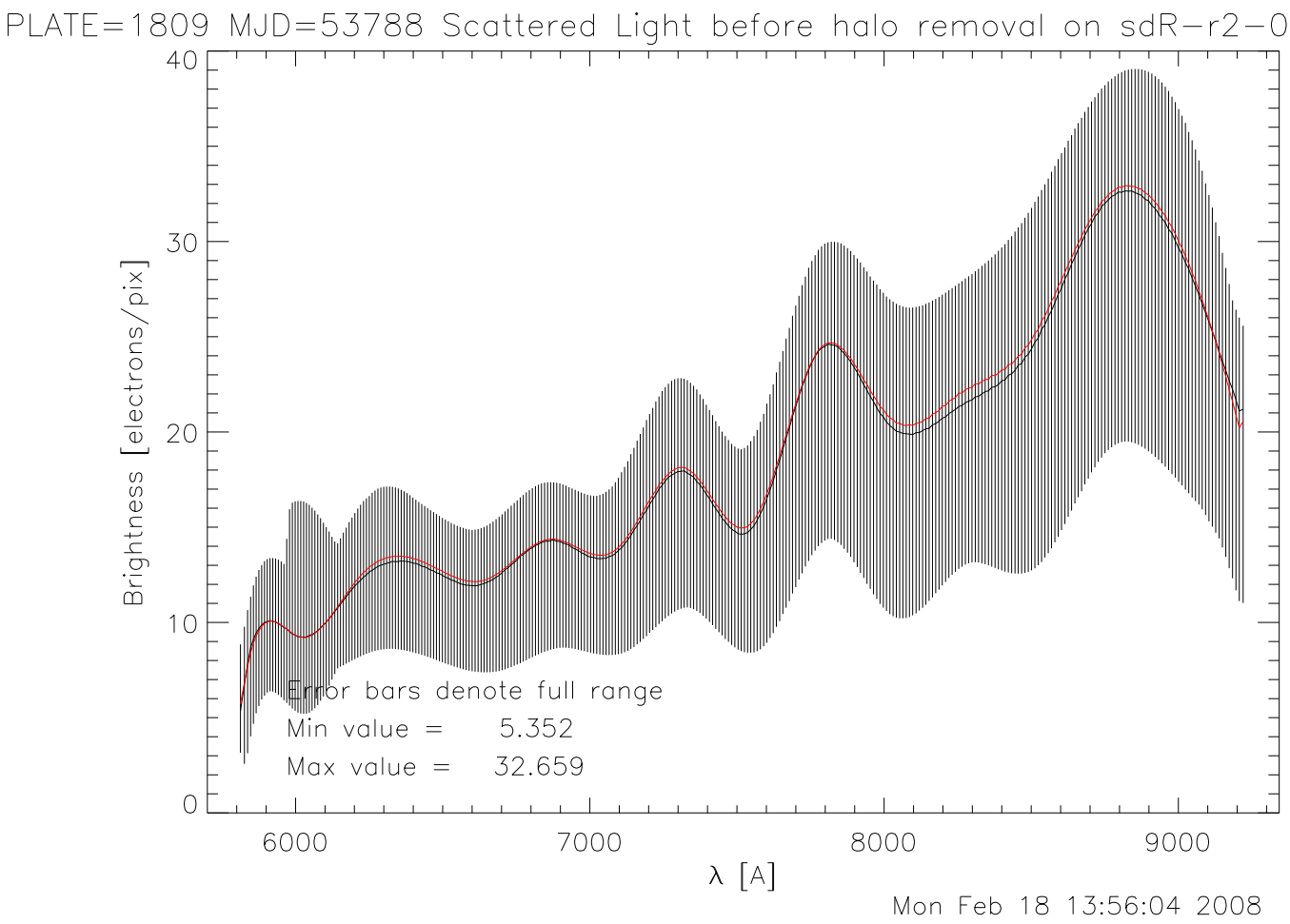

Number of sky fibers = 15
PLATE=1809 MJD=53788 sdR-r2-00037550.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

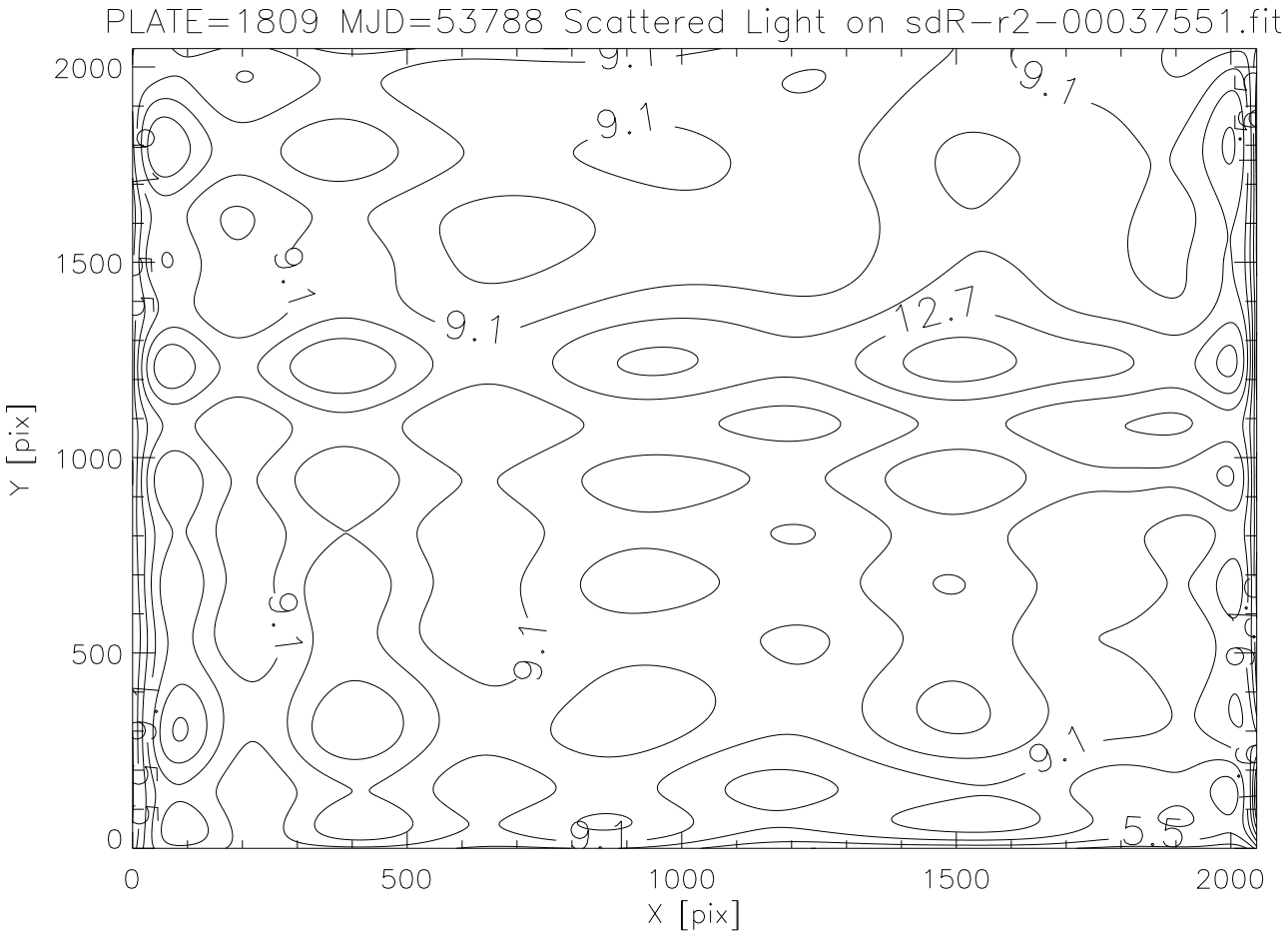

PLATE=1809 MJD=53788 sdR-r2-00037550.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.21 %
Fiber number
Focal Distance [mm]
Airmass

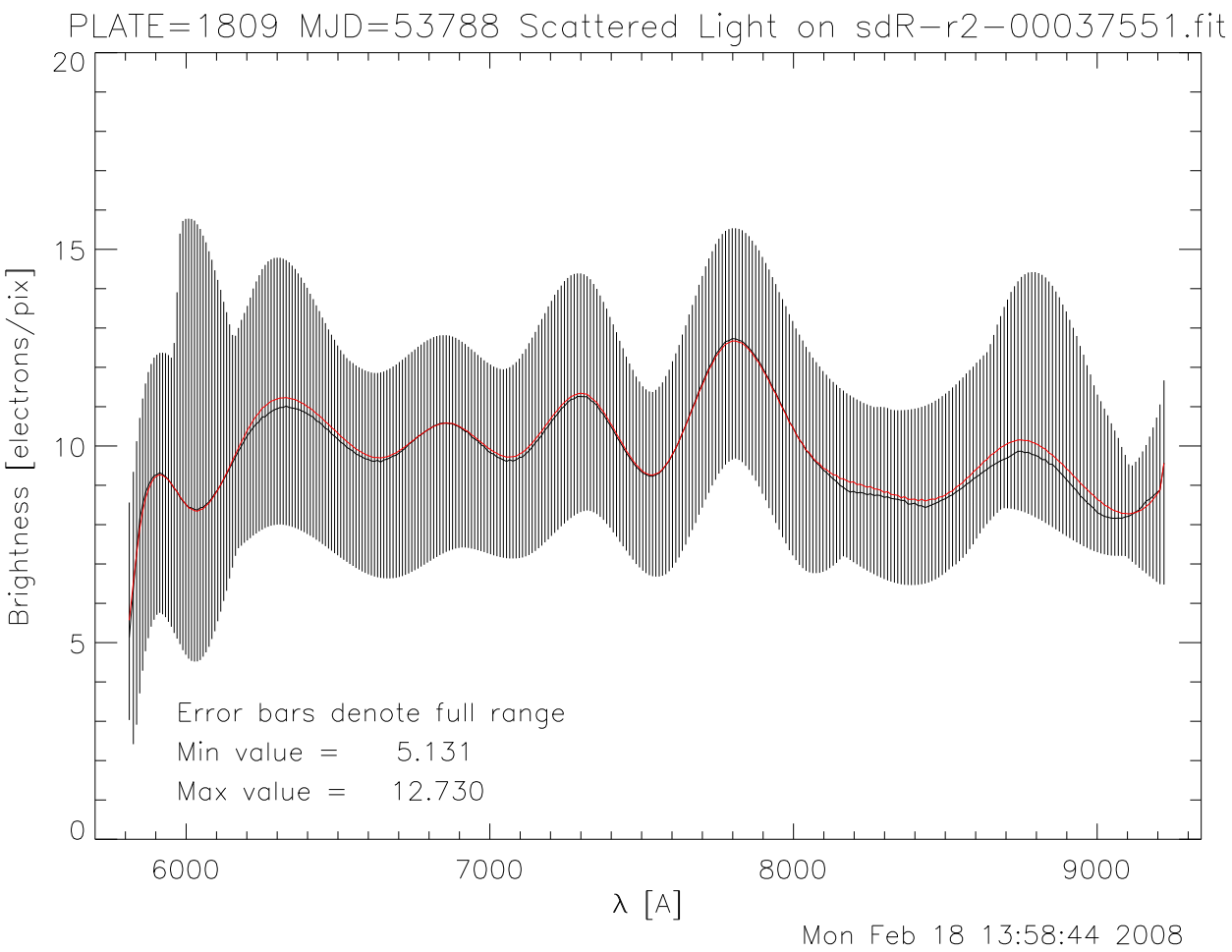

PLATE=1809 MJD=53788 sdR-r2-00037550.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.05 %
Fiber number
Focal Distance [mm]
Airmass

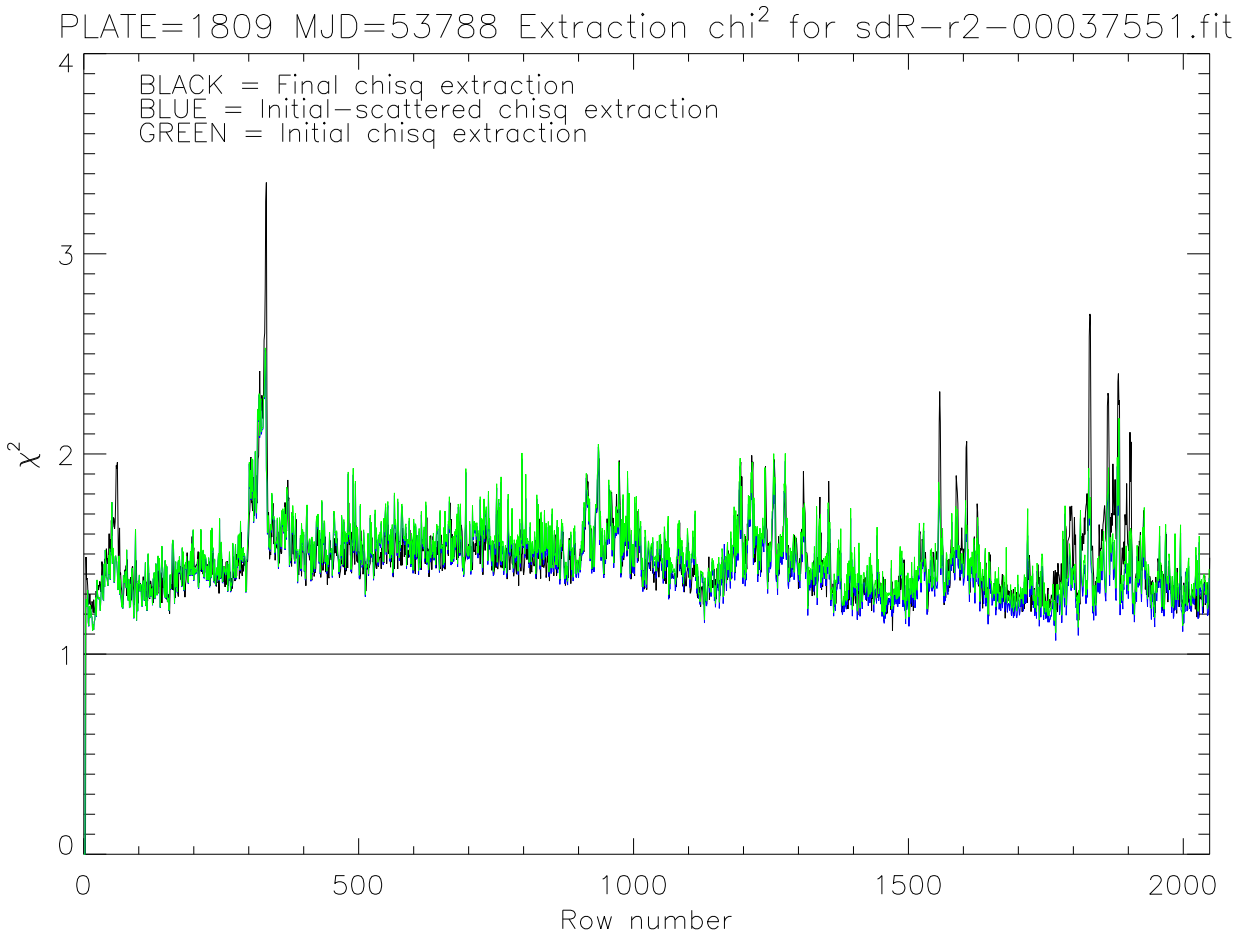

PLATE=1809 MJD=53788 Fiber−Flats for sdR−r2−00037548.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.454
Max value = 1.213
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 18 13:55:19 2008

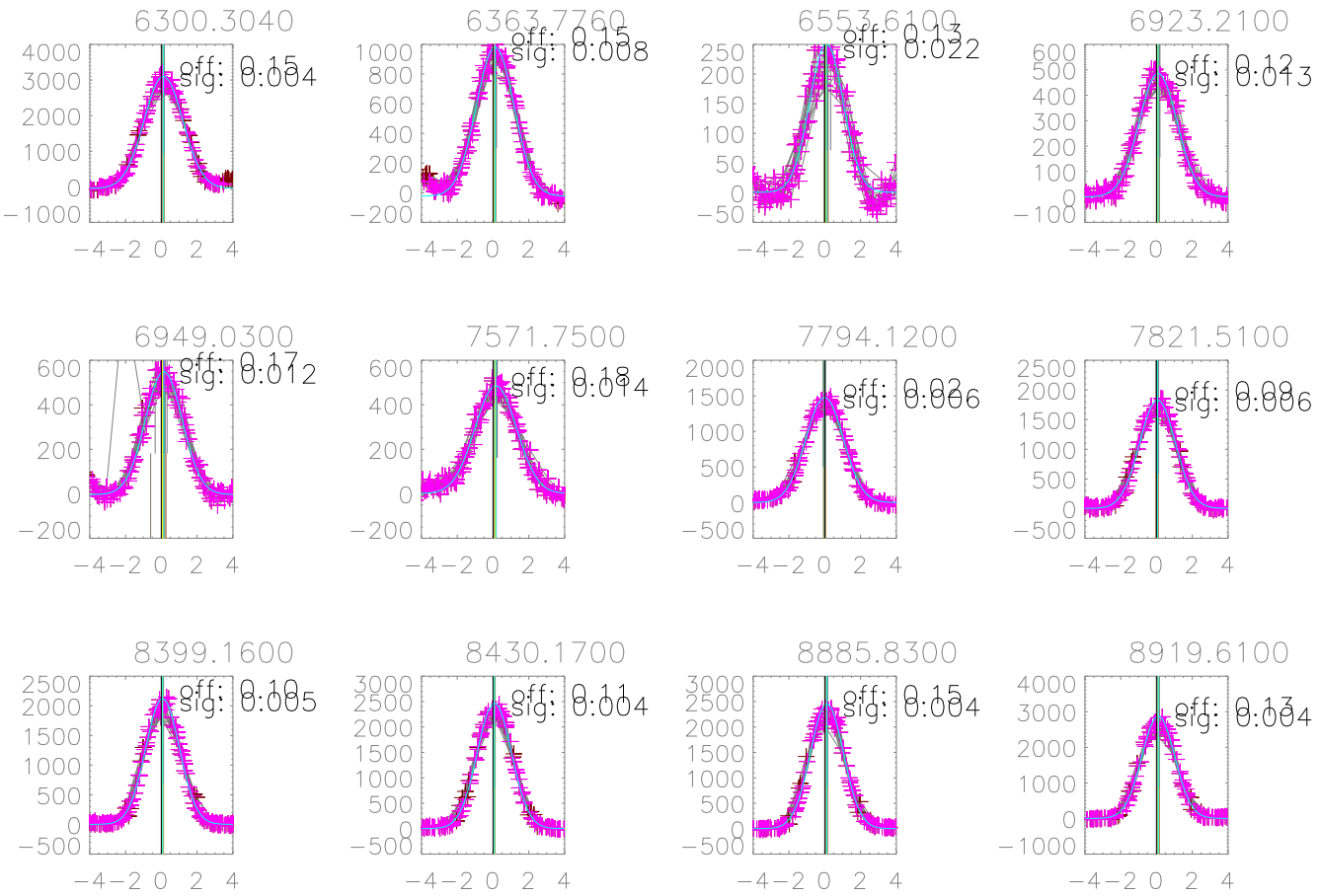

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-r2-00037551.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
32.7
25.5
25.5
18.2
18.2
10.9
10.9
10.9

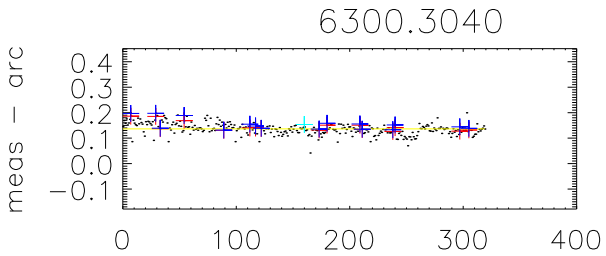

PLATE=1809 MJD=53788 Scattered Light before halo removal on sdR-r2-00037551.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.352
Max value = 32.659
Mon Feb 18 13:56:04 2008

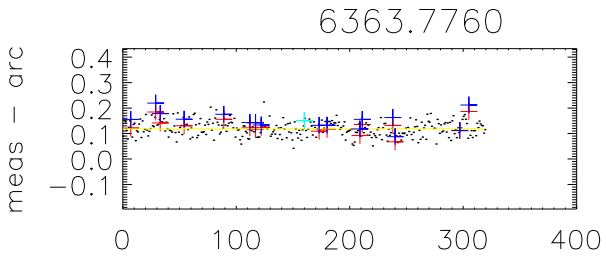

PLATE=1809 MJD=53788 Scattered Light on sdR-r2-00037551.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
12.7
5.5

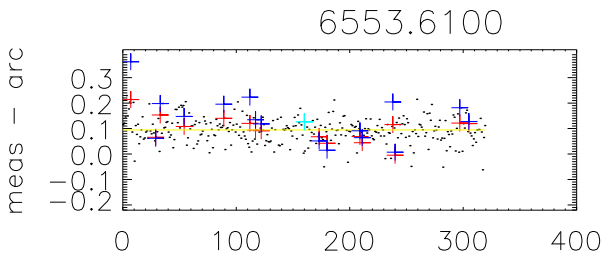

PLATE=1809 MJD=53788 Scattered Light on sdR-r2-00037551.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.131
Max value = 12.730
Mon Feb 18 13:58:44 2008

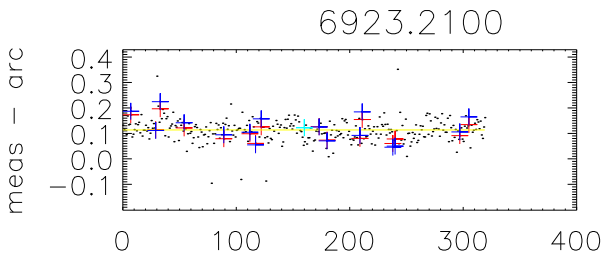

PLATE=1809 MJD=53788 Extraction chi^2 for sdR−r2−00037551.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

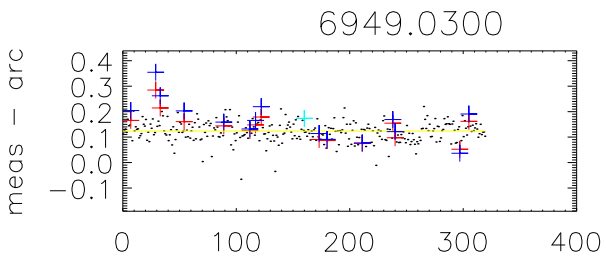

6300.3040
off: 0.15
sig: 0.004
6363.7760
off: 0.15
sig: 0.008
6553.6100
off: 0.13
sig: 0.022
6923.2100
off: 0.12
sig: 0.013
6949.0300
off: 0.17
sig: 0.012
7571.7500
off: 0.18
sig: 0.014
7794.1200
off: 0.02
sig: 0.006
7821.5100
off: 0.08
sig: 0.006
8399.1600
off: 0.10
sig: 0.005
8430.1700
off: 0.11
sig: 0.004
8885.8300
off: 0.15
sig: 0.004
8919.6100
off: 0.13
sig: 0.004

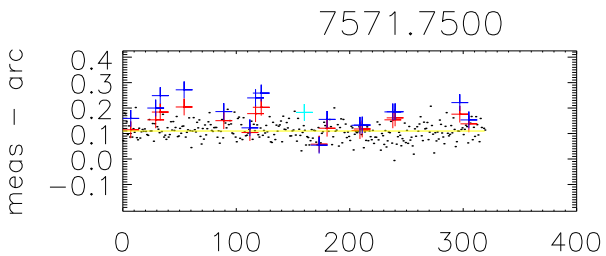

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

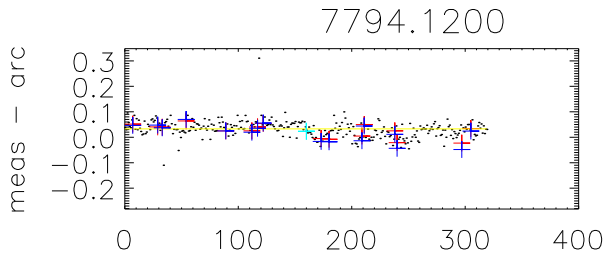

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

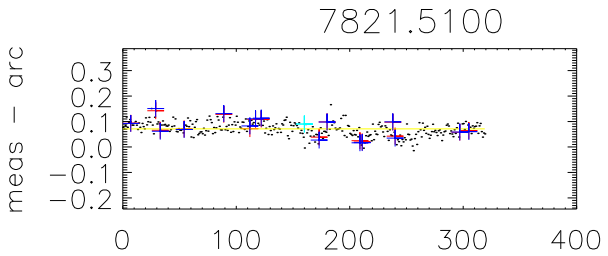

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

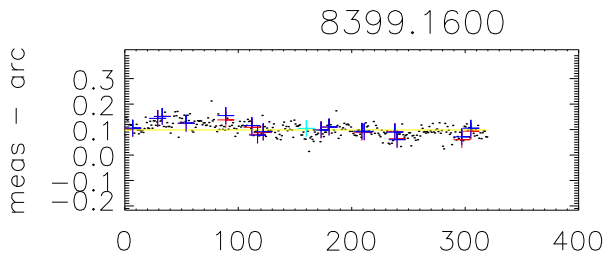

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

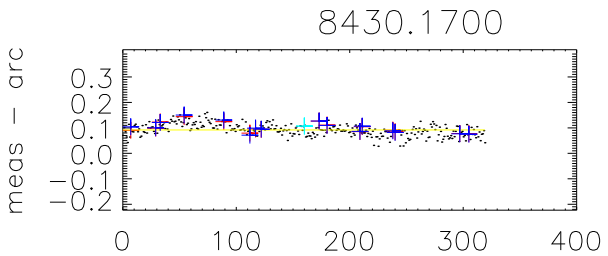

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

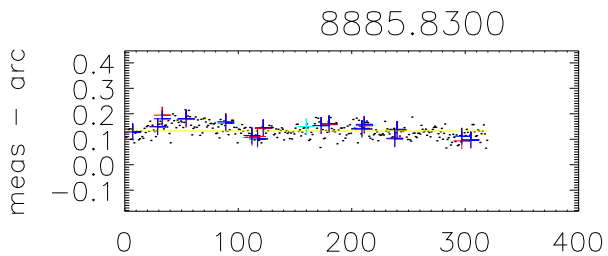

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

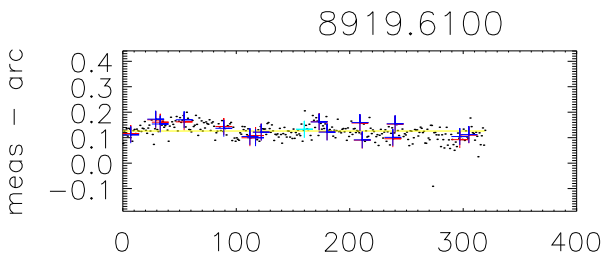

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

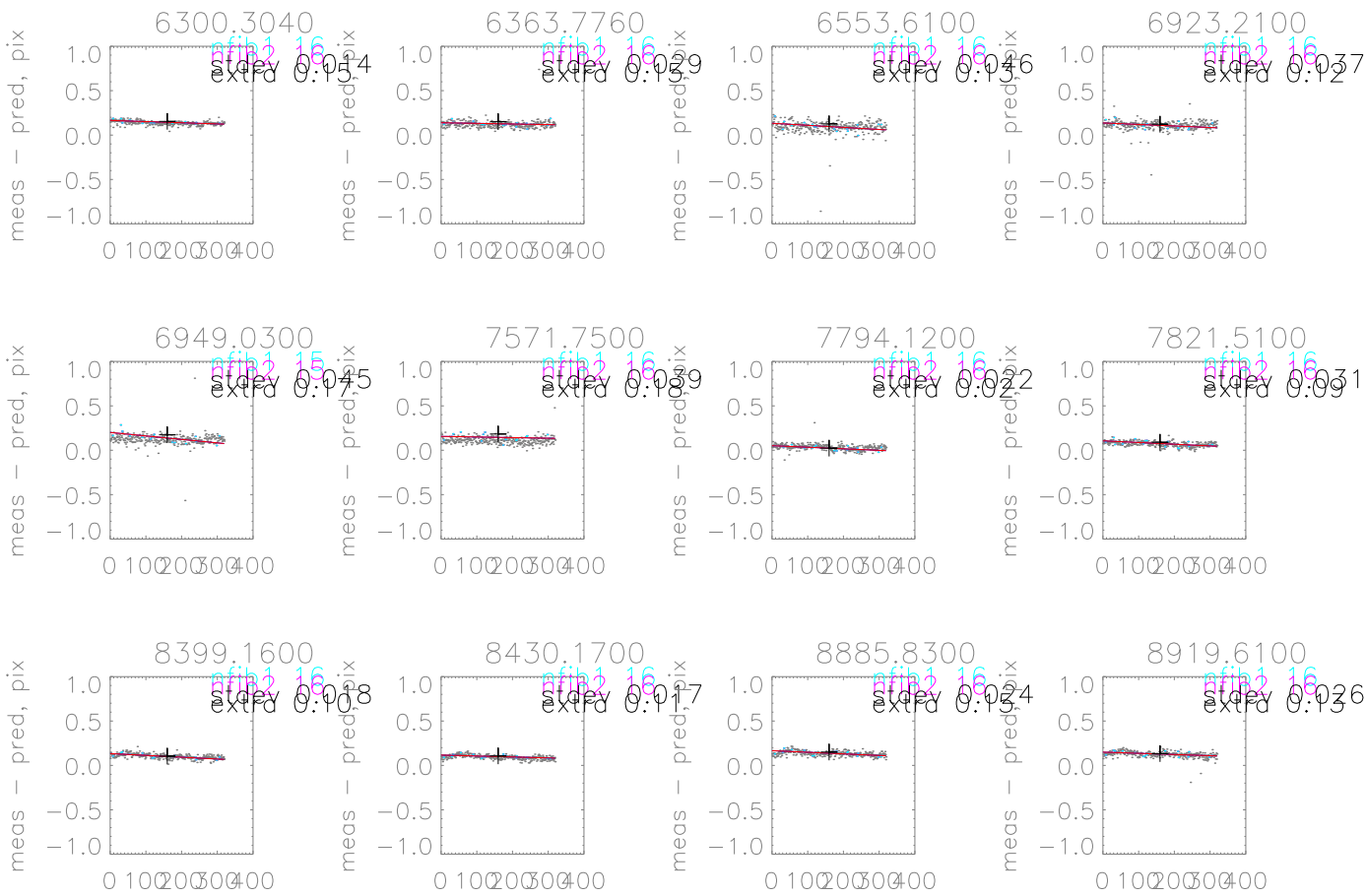

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

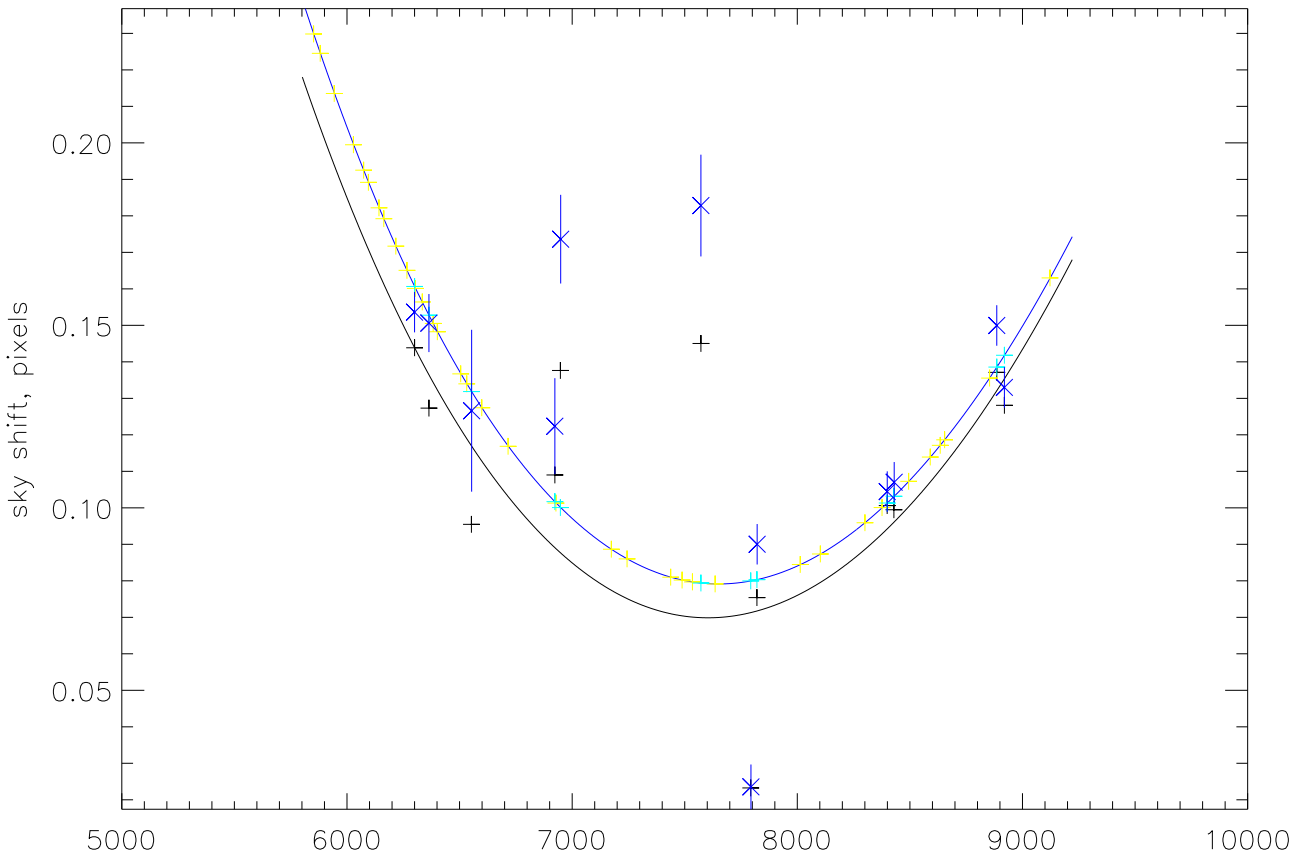

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

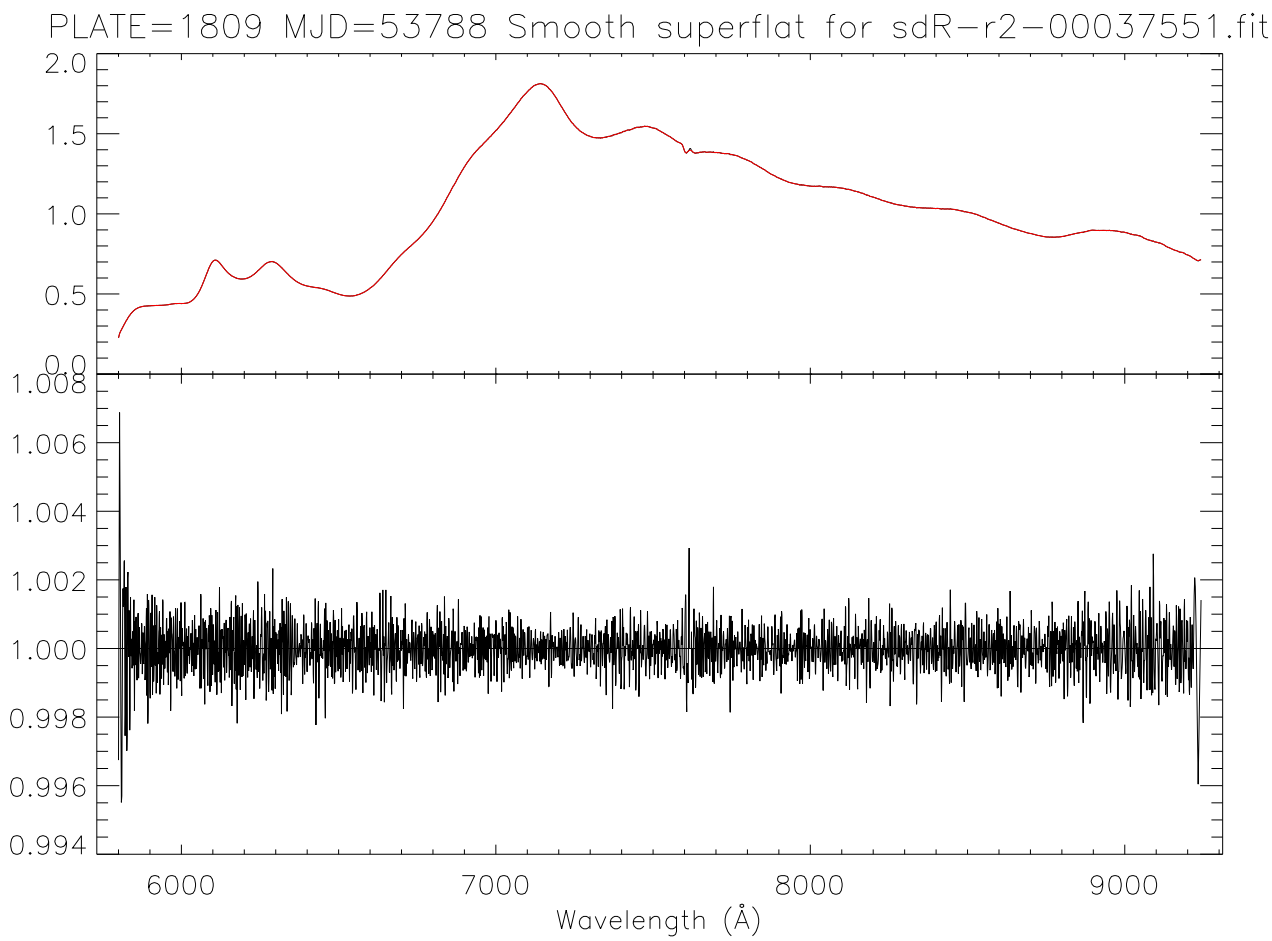

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

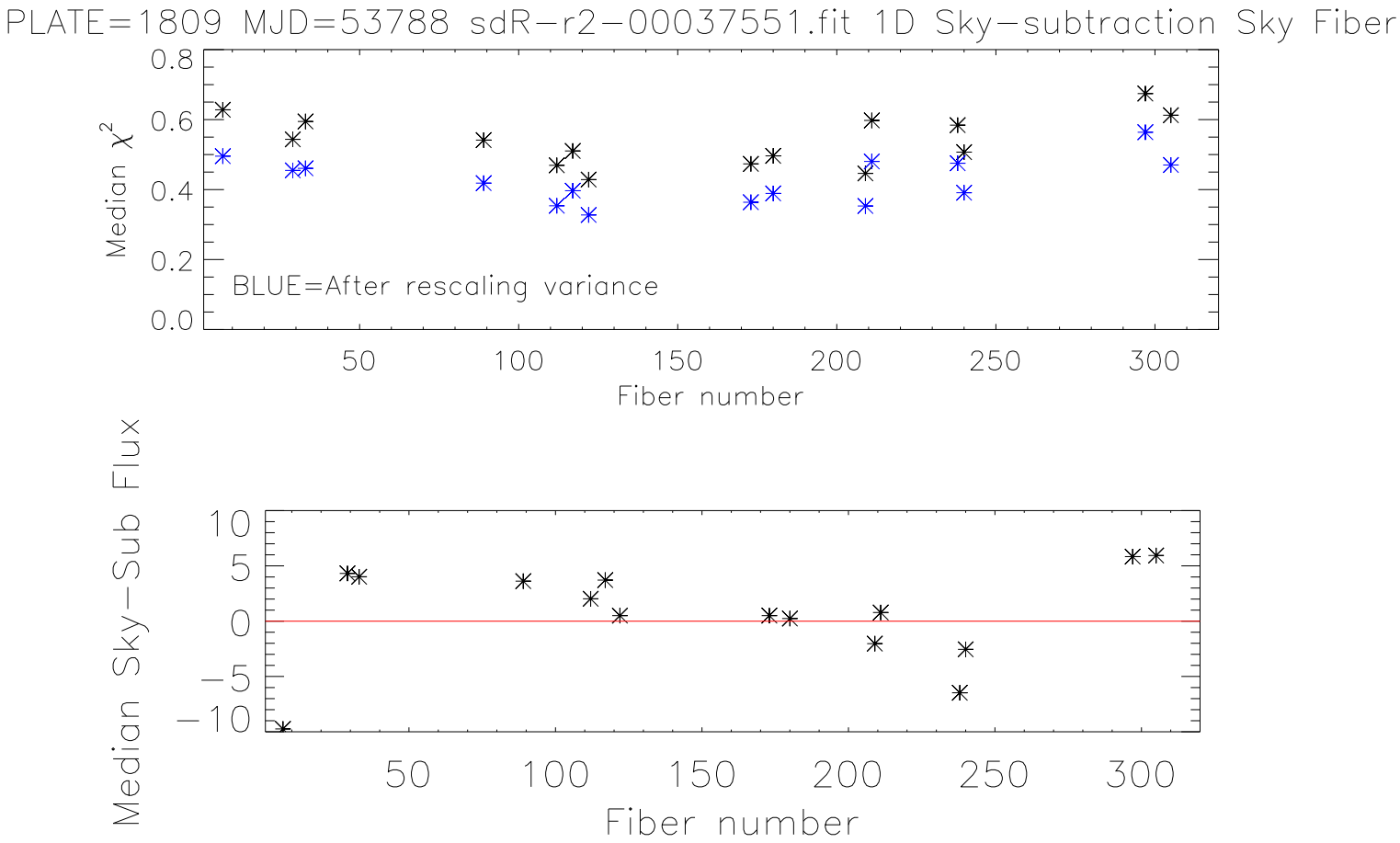

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

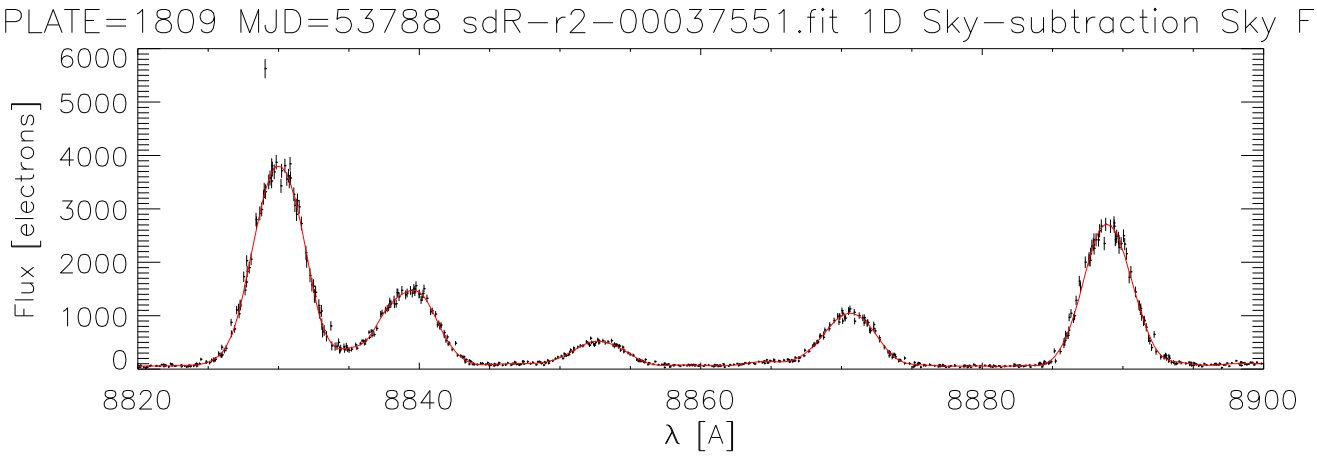

6300.3040
stdev 0.014
extra 0.15
6363.7760
stdev 0.029
extra 0.15
6553.6100
stdev 0.046
extra 0.13
6923.2100
stdev 0.037
extra 0.12
6949.0300
stdev 0.045
extra 0.17
7571.7500
stdev 0.039
extra 0.18
7794.1200
stdev 0.022
extra 0.02
7821.5100
stdev 0.031
extra 0.09
8399.1600
stdev 0.018
extra 0.10
8430.1700
stdev 0.017
extra 0.11
8885.8300
stdev 0.024
extra 0.13
8919.6100
stdev 0.026
extra 0.13
meas − pred, pix
mfib1 16
mfib2 16
mfib1 15

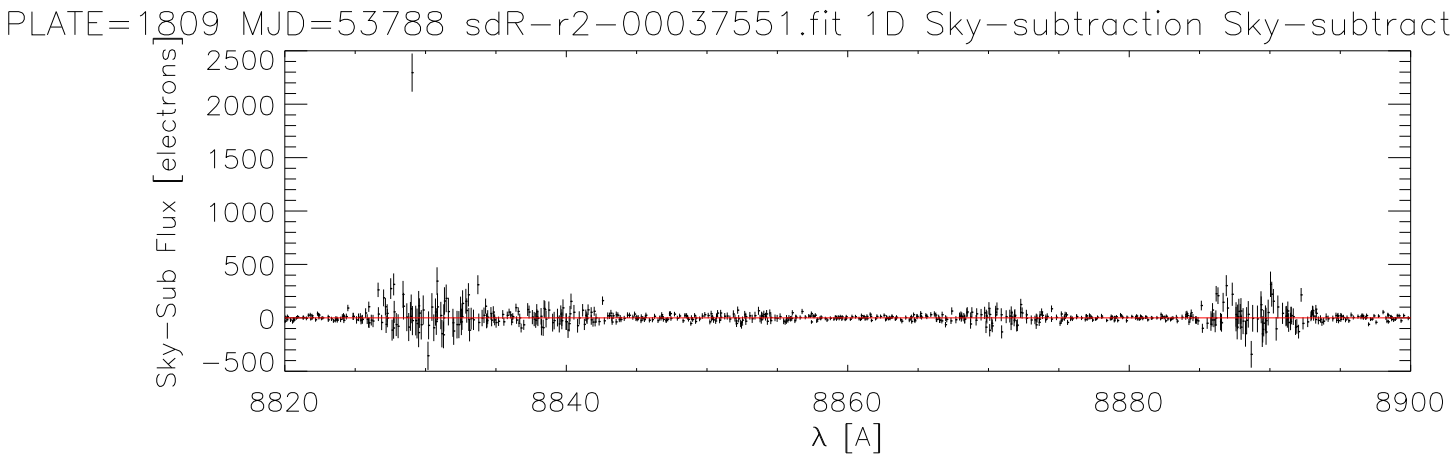

sky shift, pixels
0.20
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

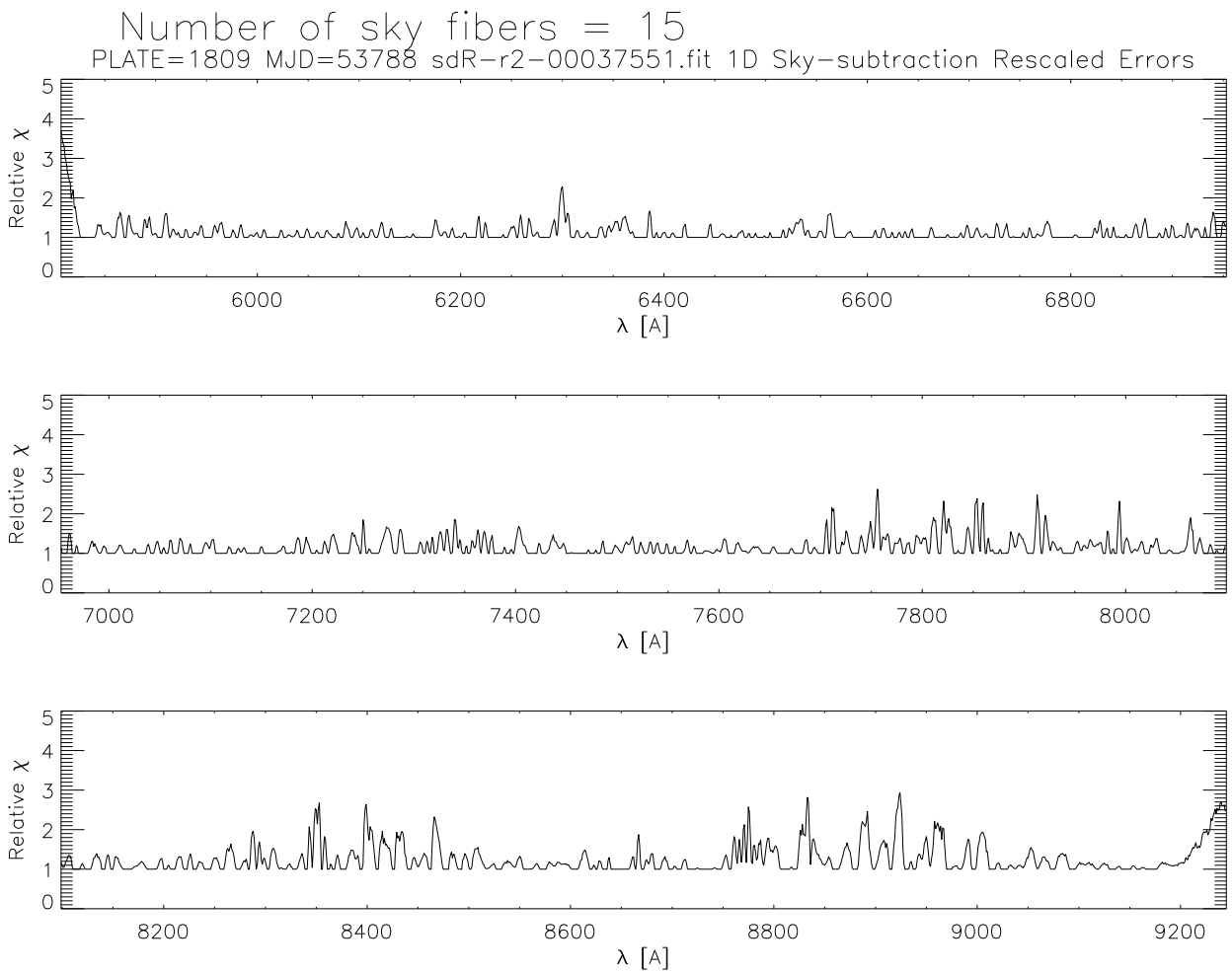
es= −0.0000

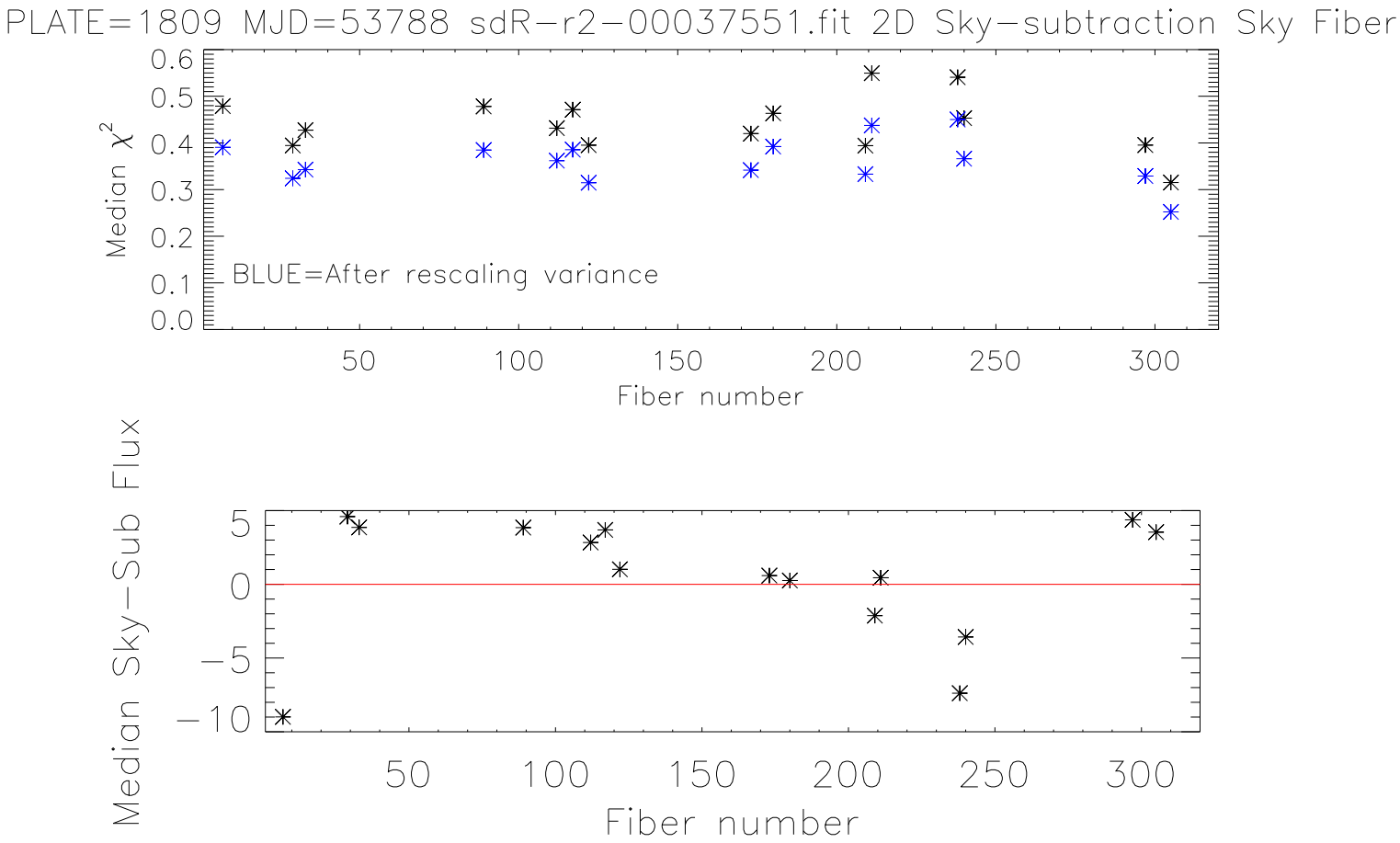

PLATE=1809 MJD=53788 Smooth superflat for sdR−r2−00037551.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

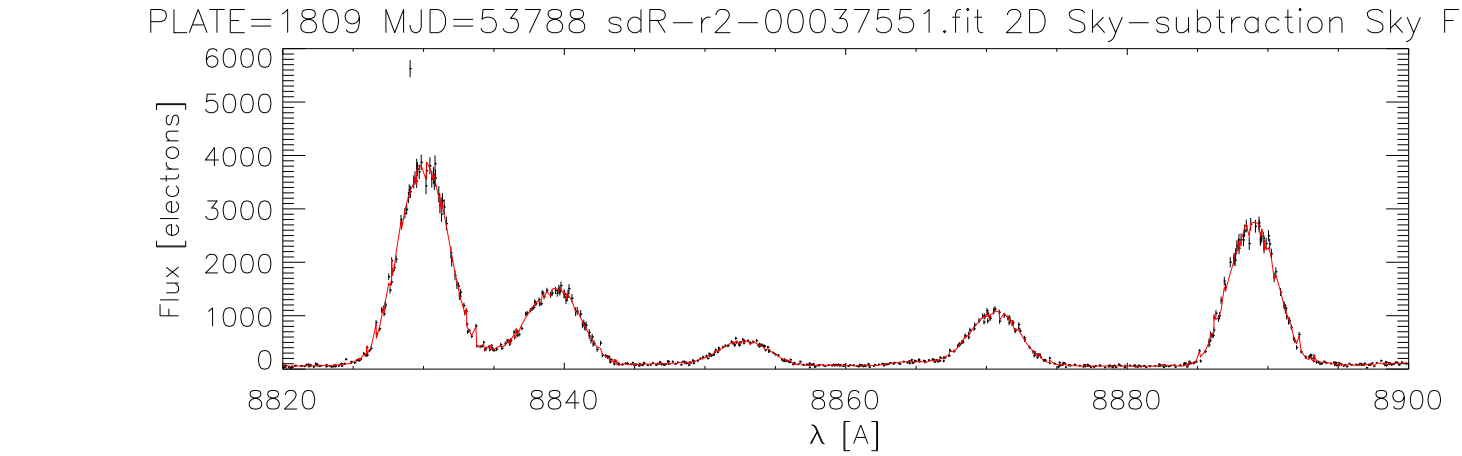

PLATE=1809 MJD=53788 sdR-r2-00037551.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

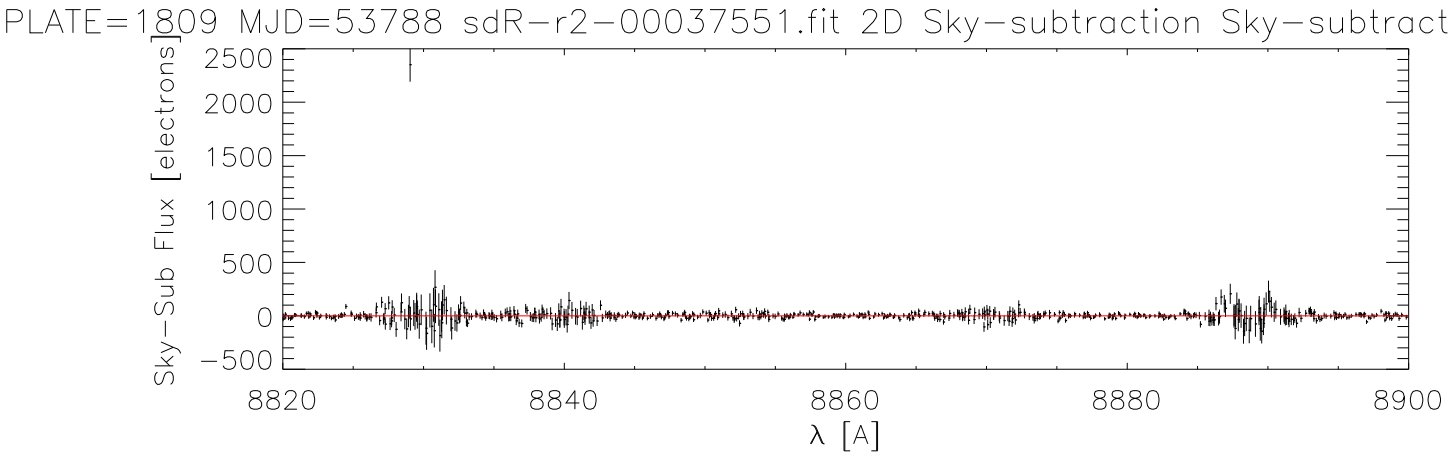

PLATE=1809 MJD=53788 sdR-r2-00037551.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

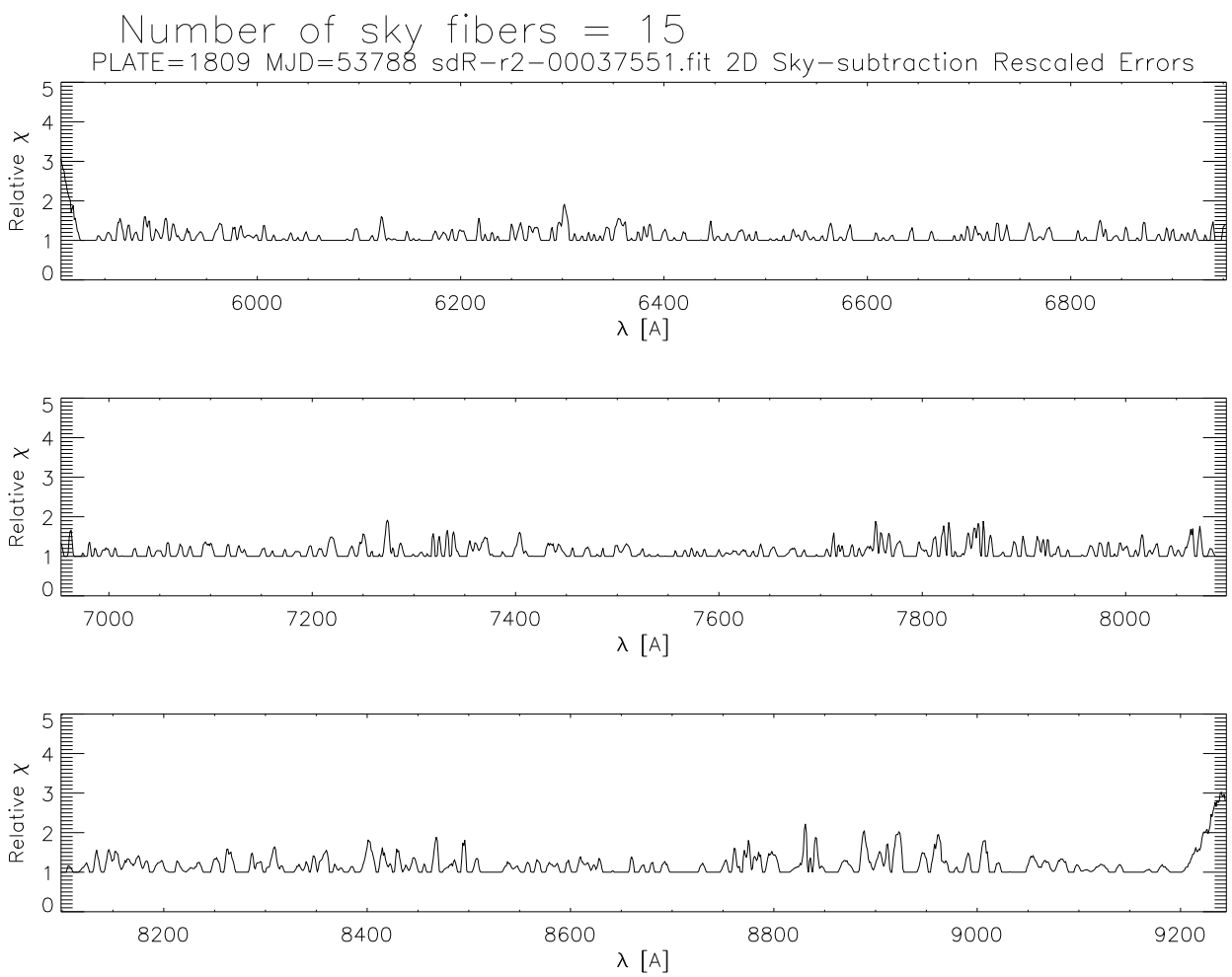

PLATE=1809 MJD=53788 sdR-r2-00037551.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

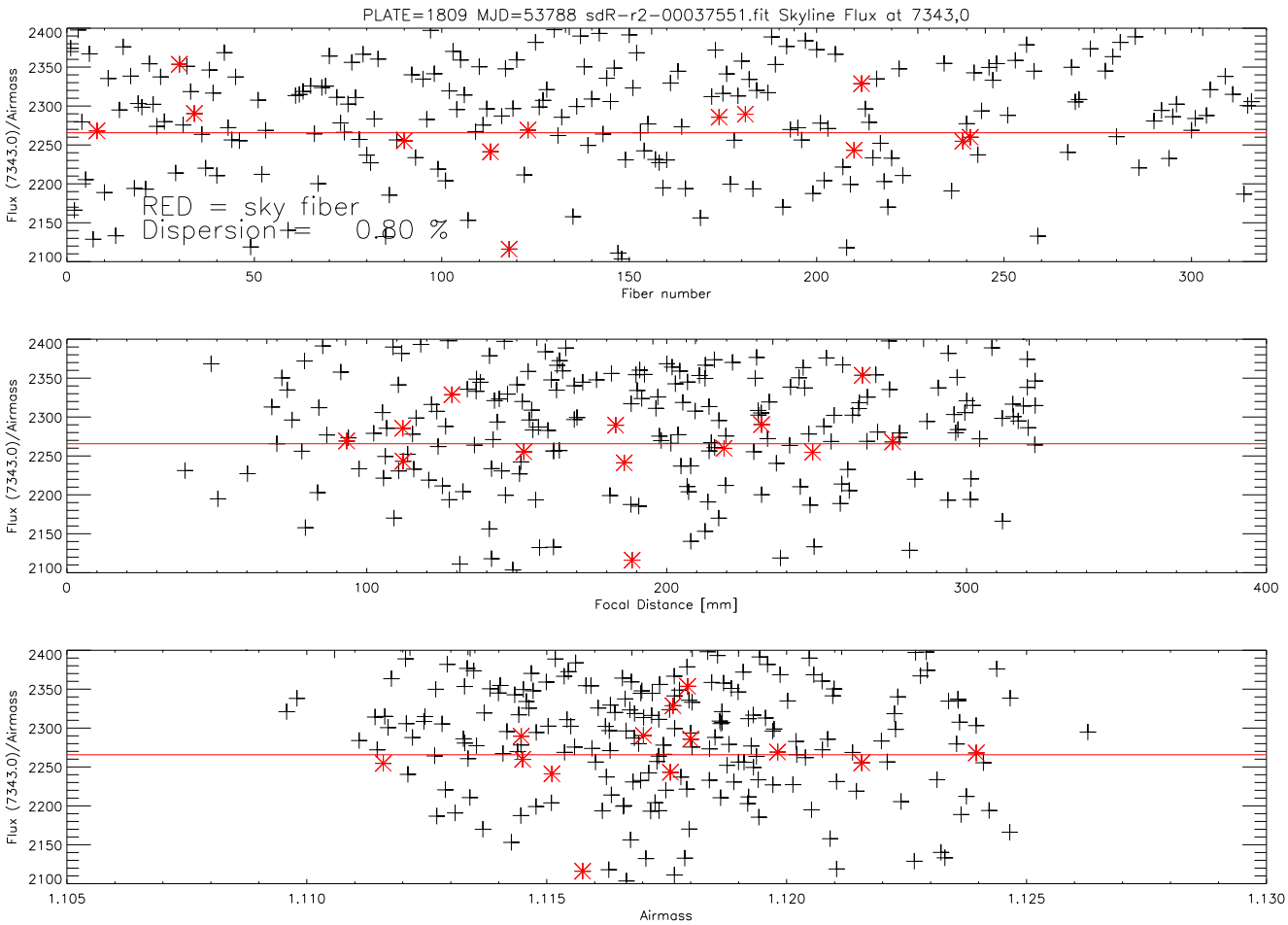

Number of sky fibers = 15
PLATE=1809 MJD=53788 sdR-r2-00037551.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

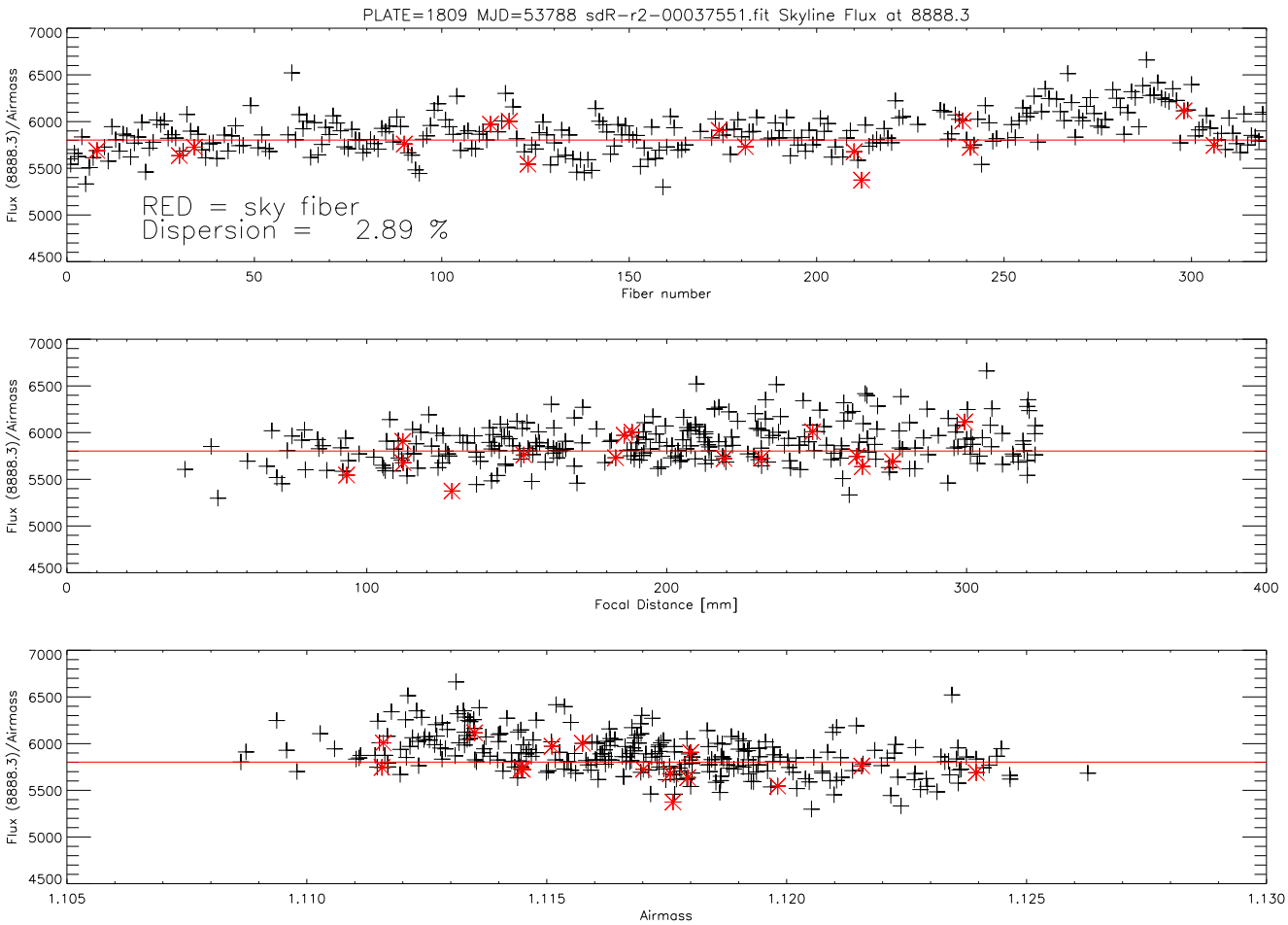

PLATE=1809 MJD=53788 sdR-r2-00037551.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
-5
-10
50
100
150
200
250
300
Fiber number


PLATE=1809 MJD=53788 sdR-r2-00037551.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1809 MJD=53788 sdR-r2-00037551.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=1809 MJD=53788 sdR-r2-00037551.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=1809 MJD=53788 sdR-r2-00037551.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion += 0.80 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1809 MJD=53788 sdR-r2-00037551.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.89 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass