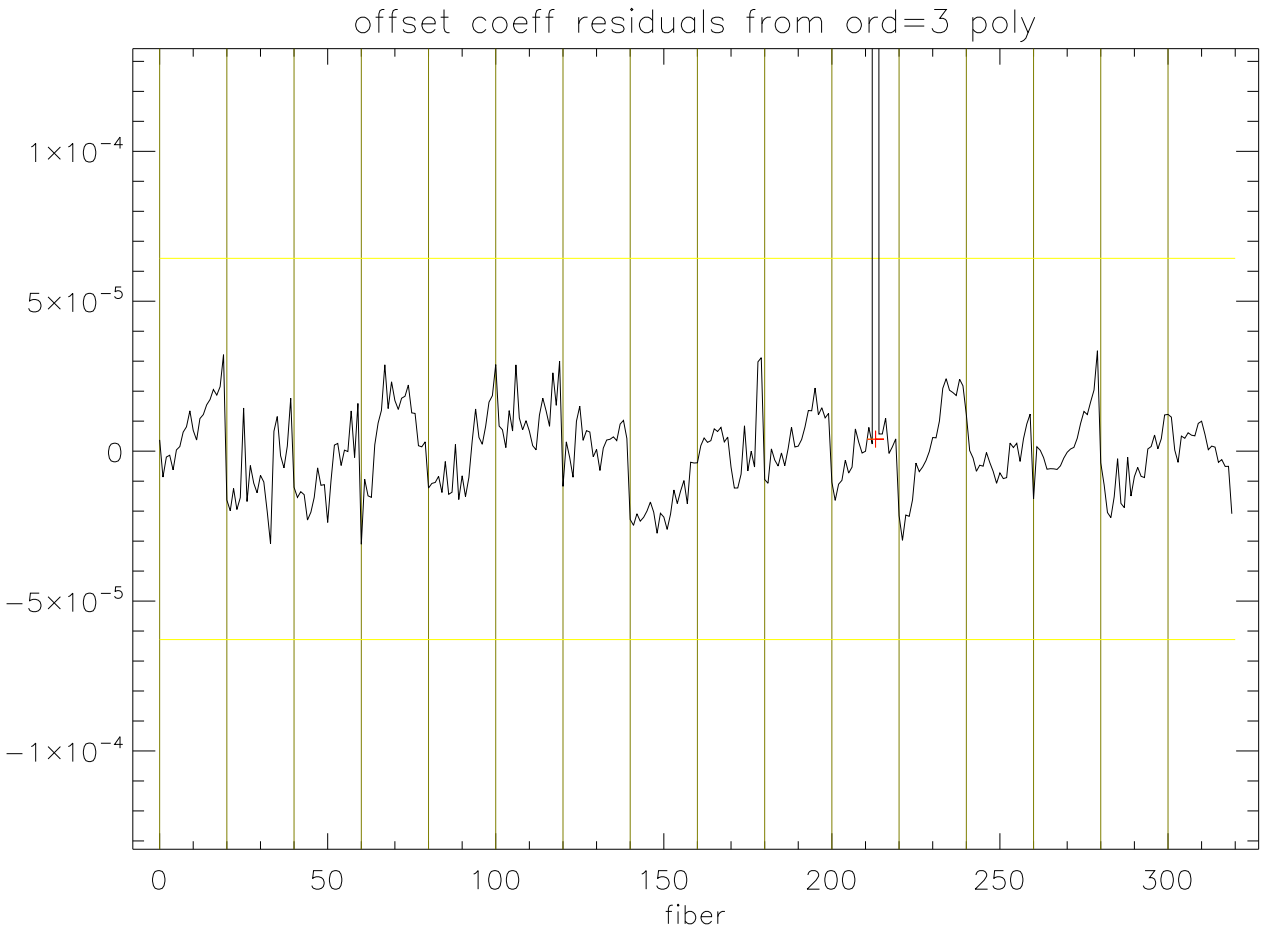
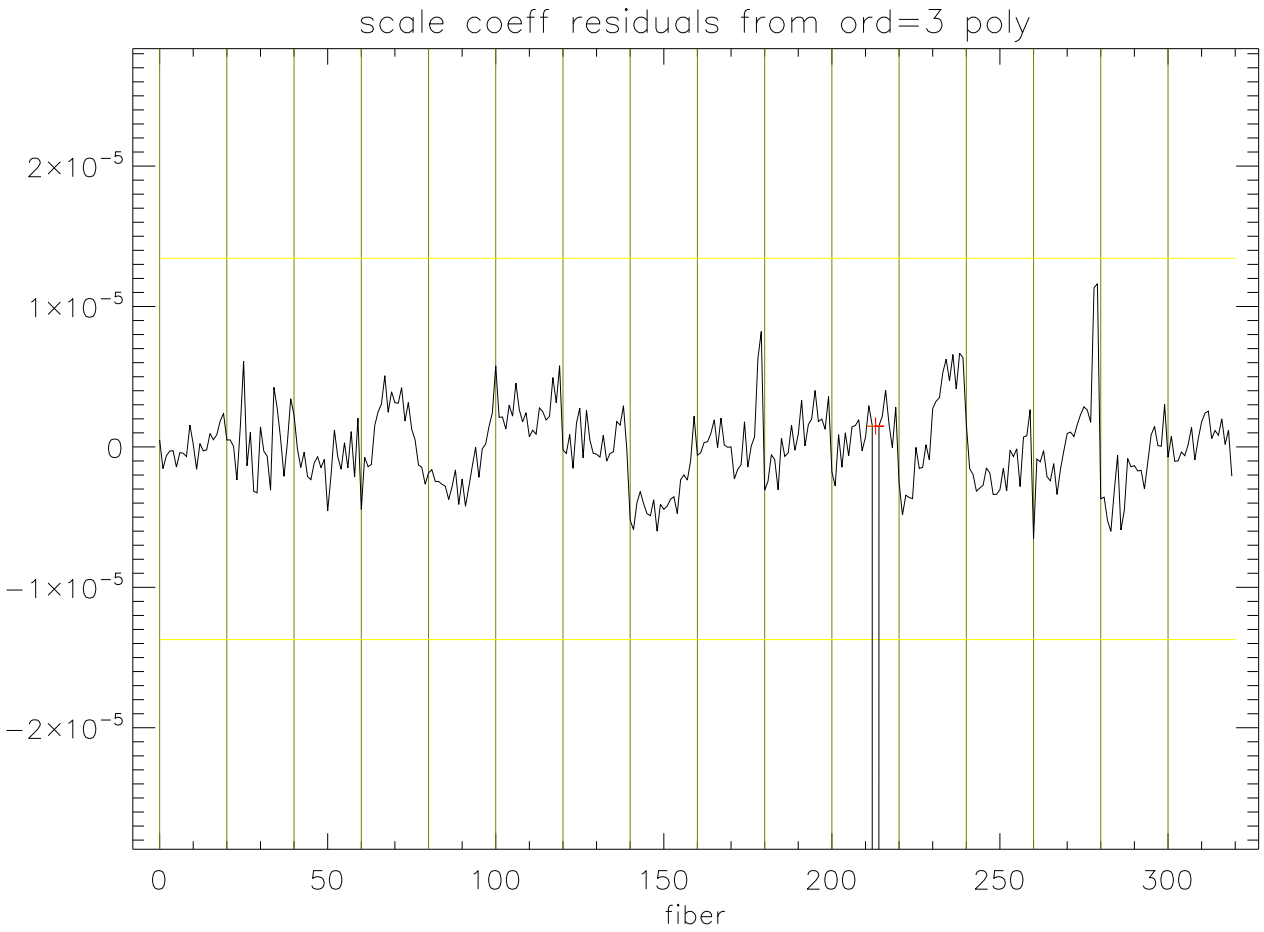
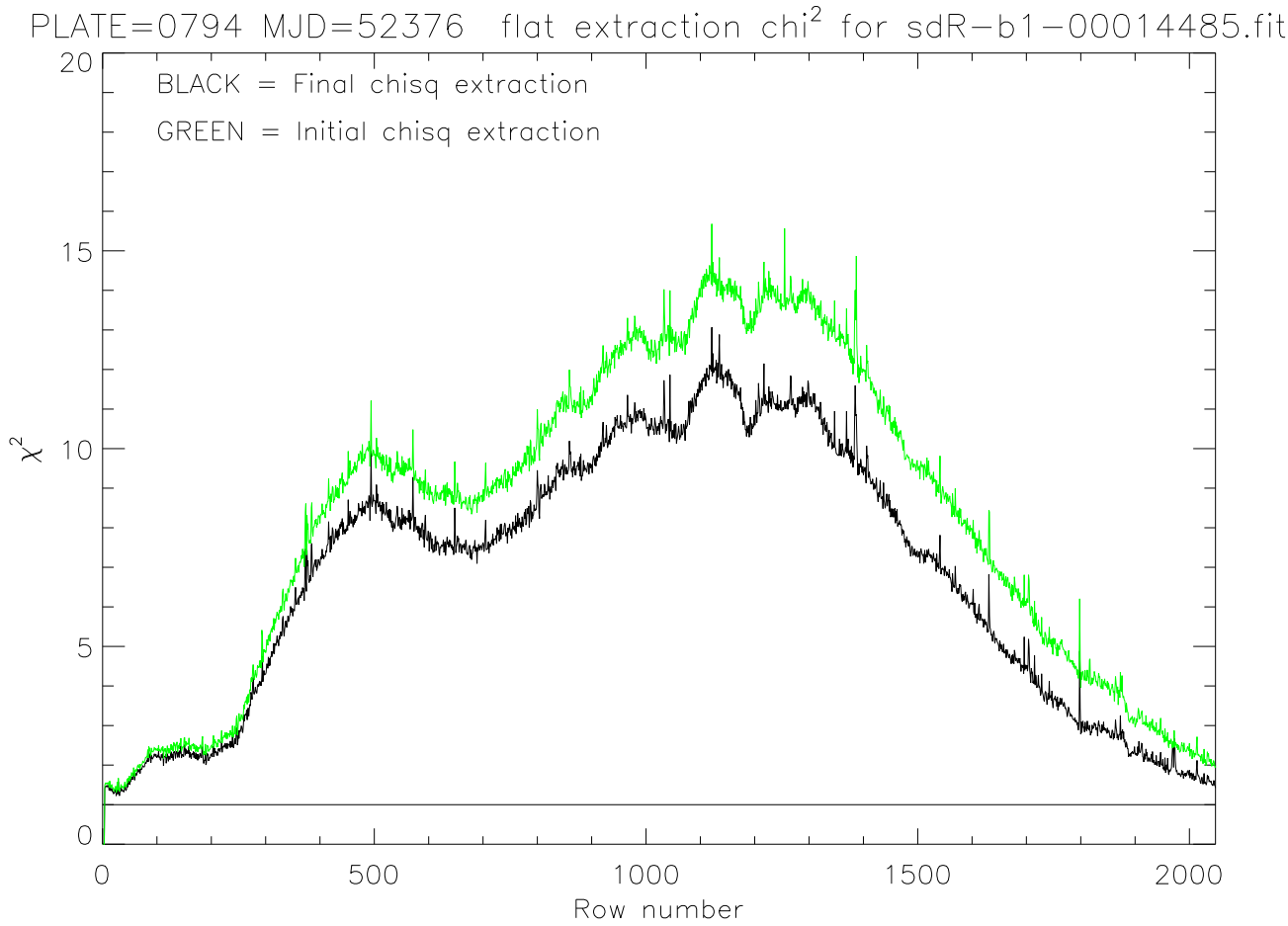
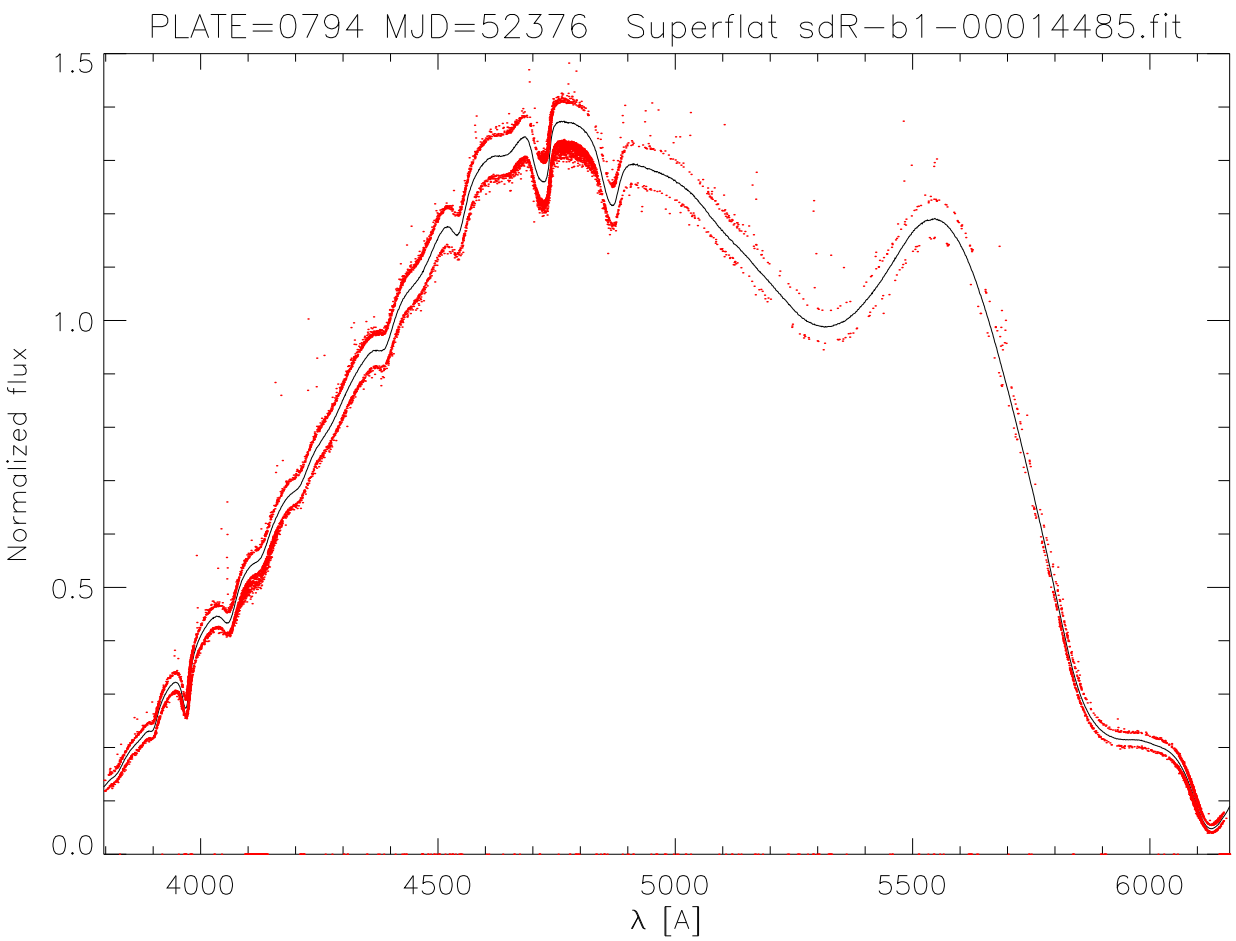
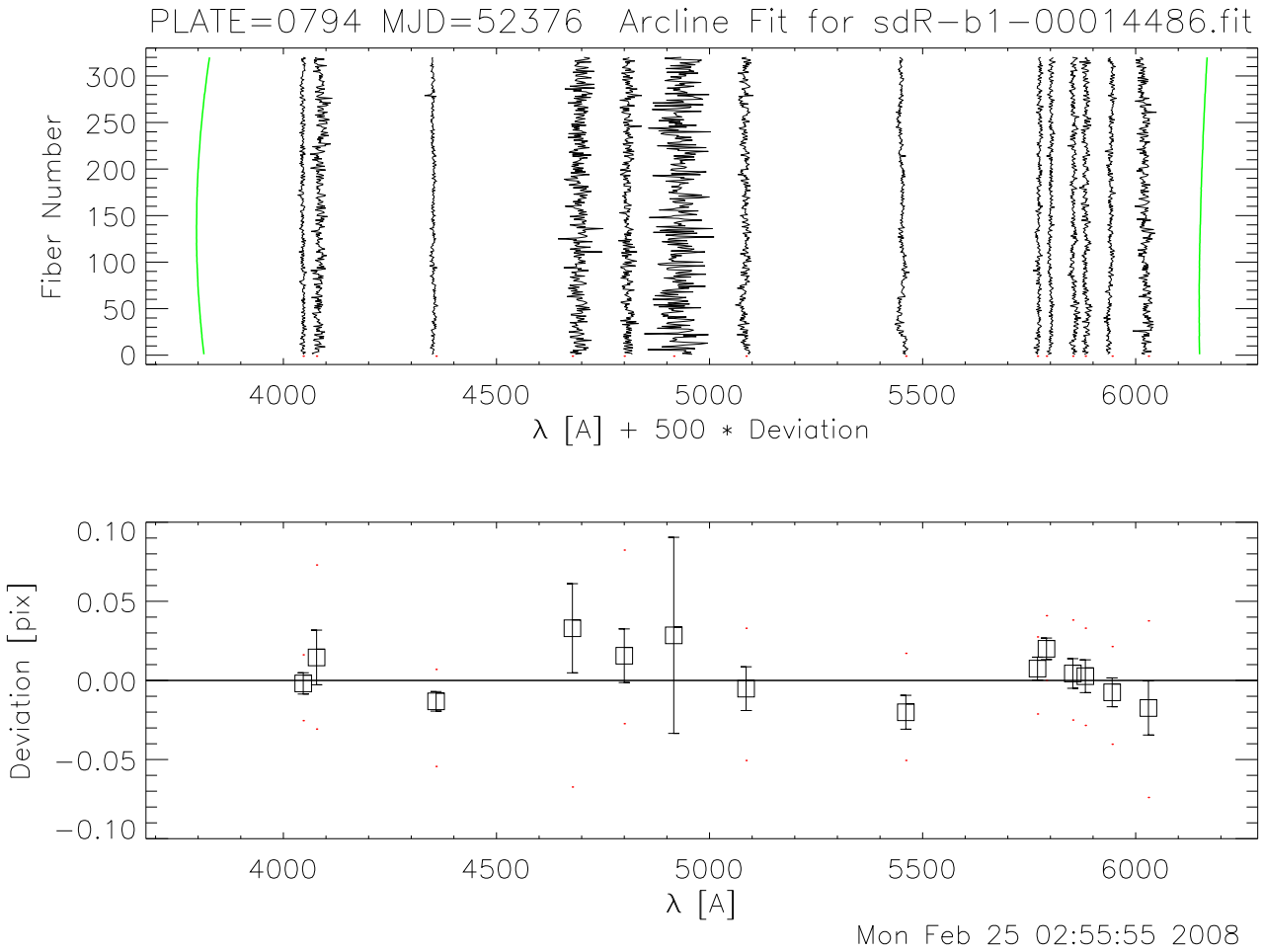
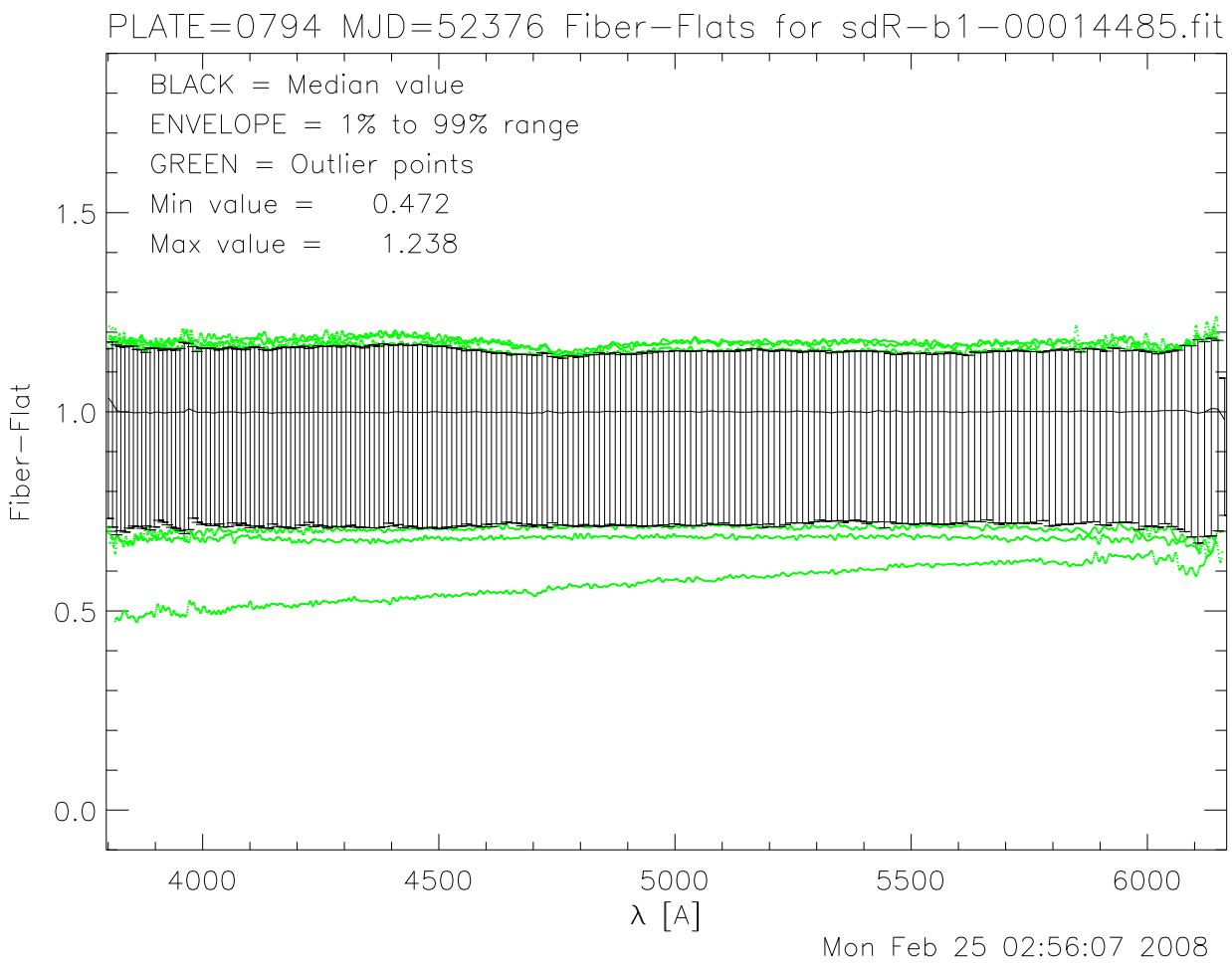

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

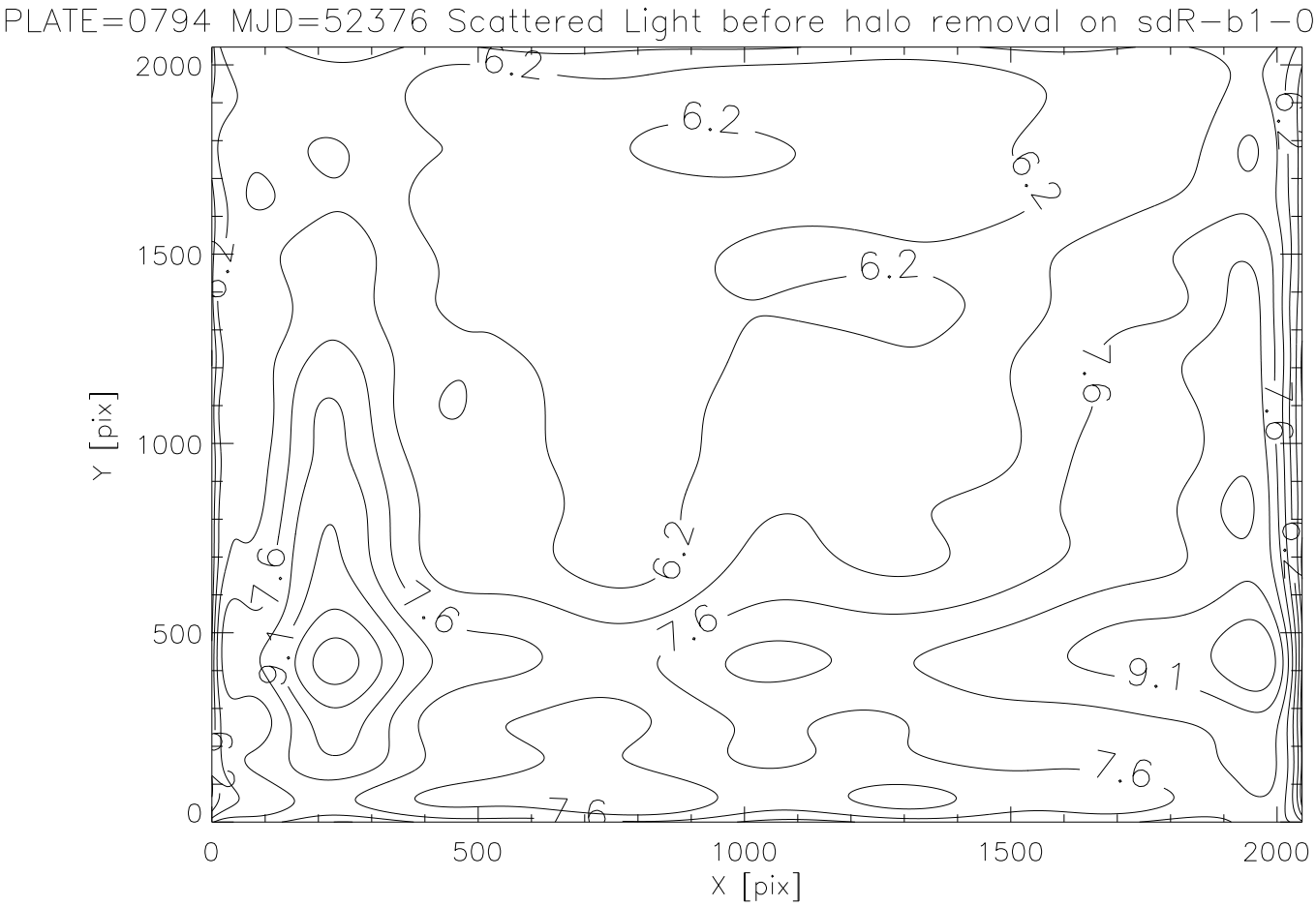

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

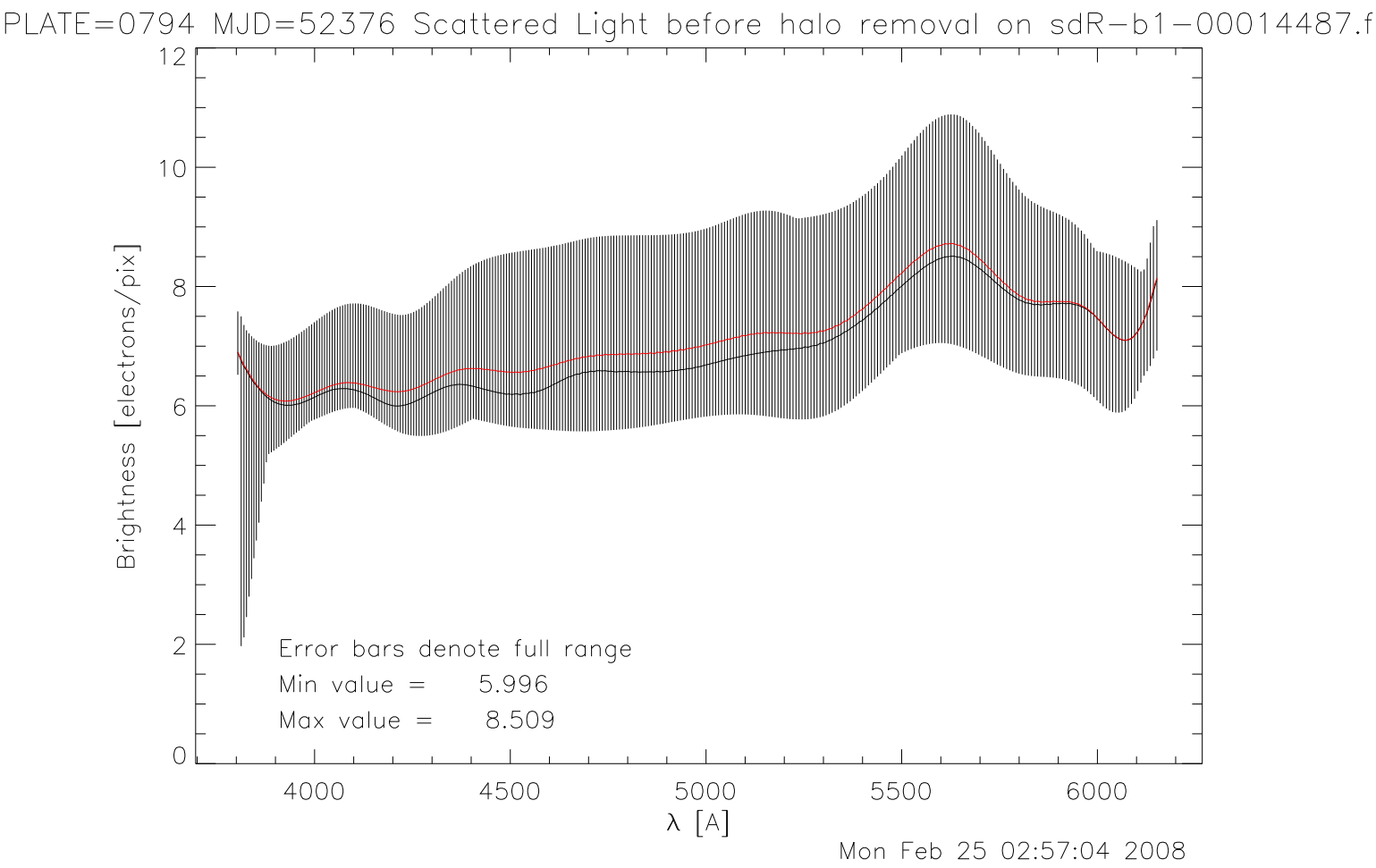

PLATE=0794 MJD=52376 flat extraction chi^2 for sdR−b1−00014485.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

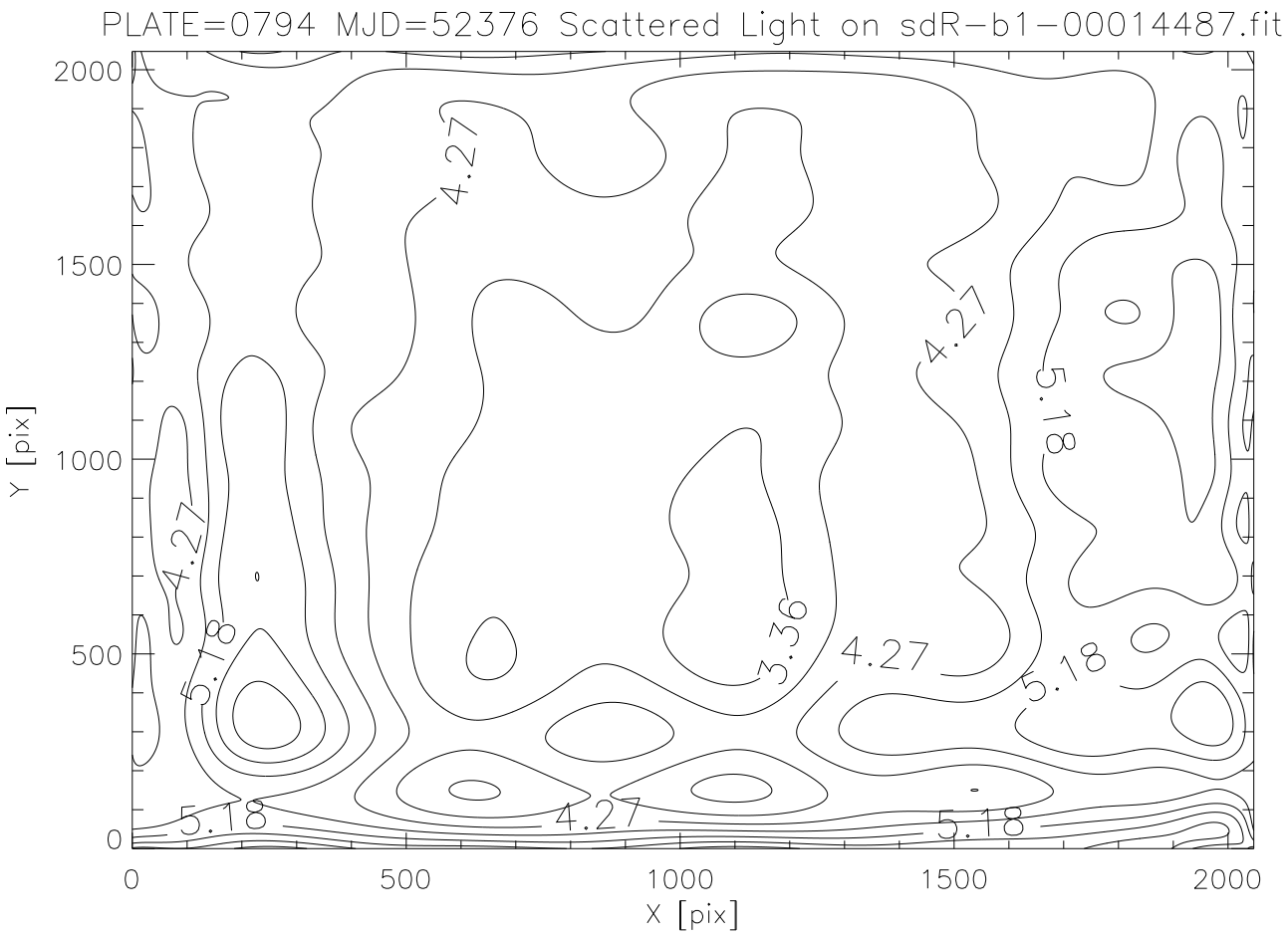

PLATE=0794 MJD=52376 Superflat sdR-b1-00014485.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

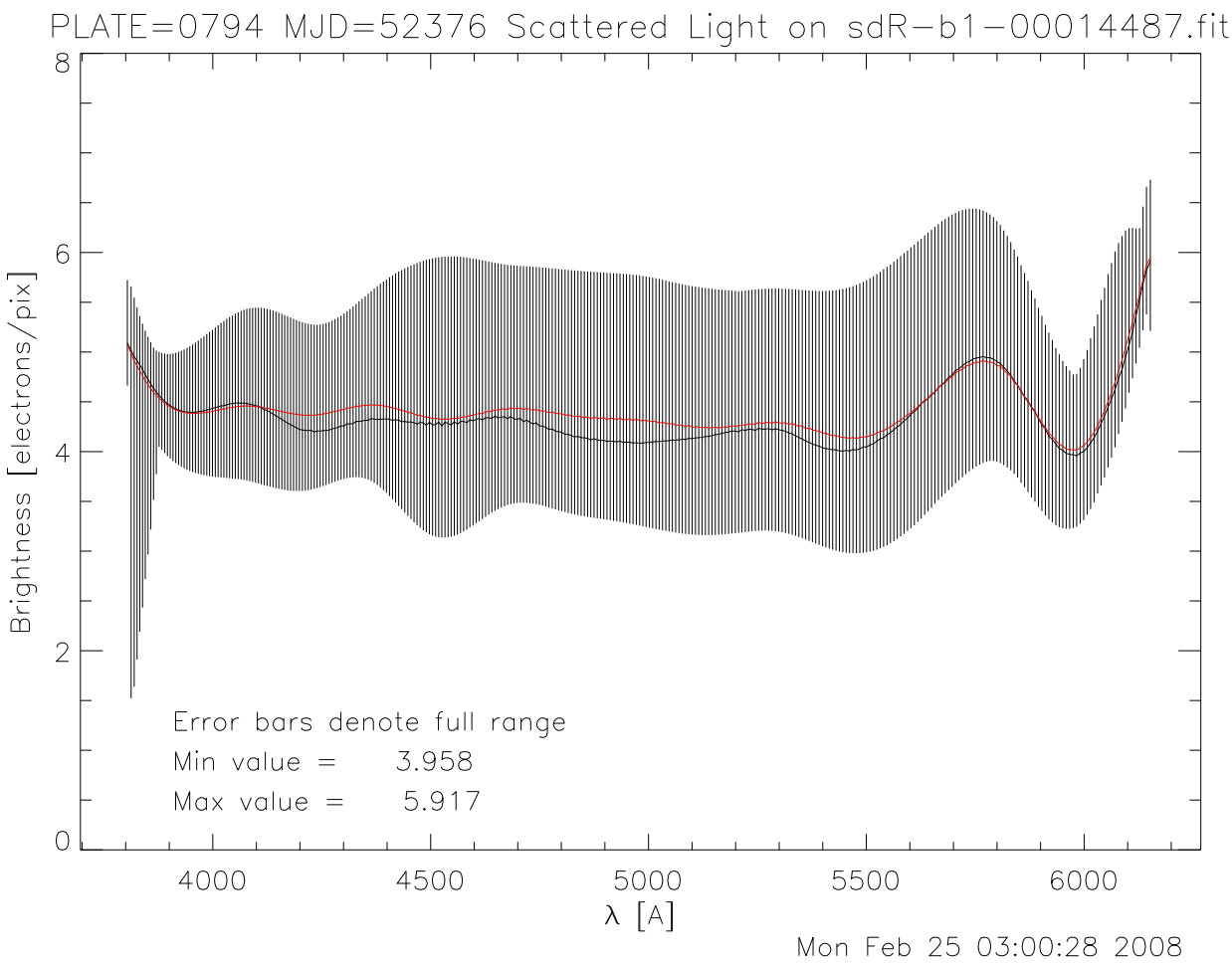

PLATE=0794 MJD=52376 Arcline Fit for sdR-b1-00014486.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:55:55 2008

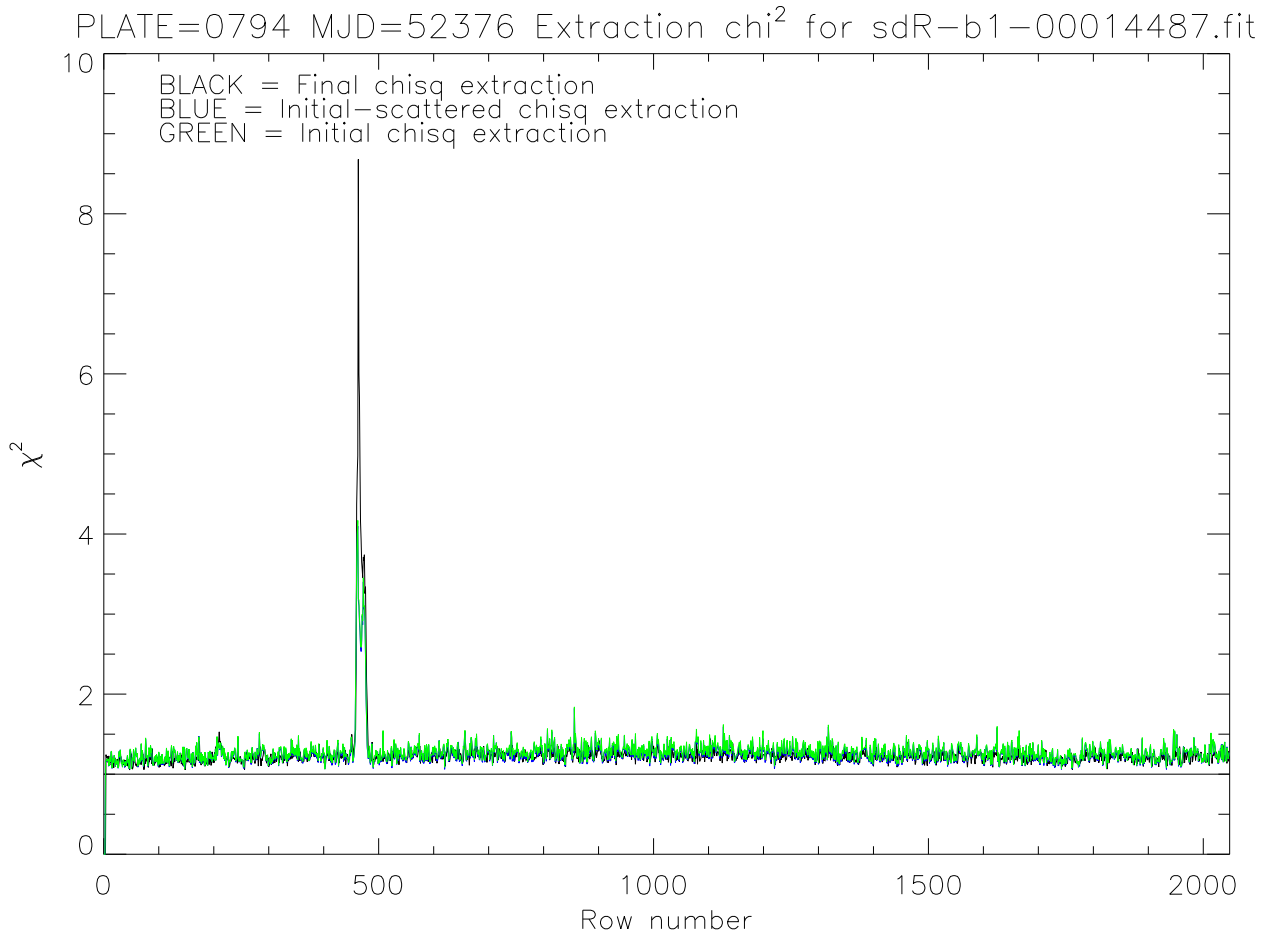

PLATE=0794 MJD=52376 Fiber-Flats for sdR-b1-00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.472
Max value = 1.238
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:56:07 2008

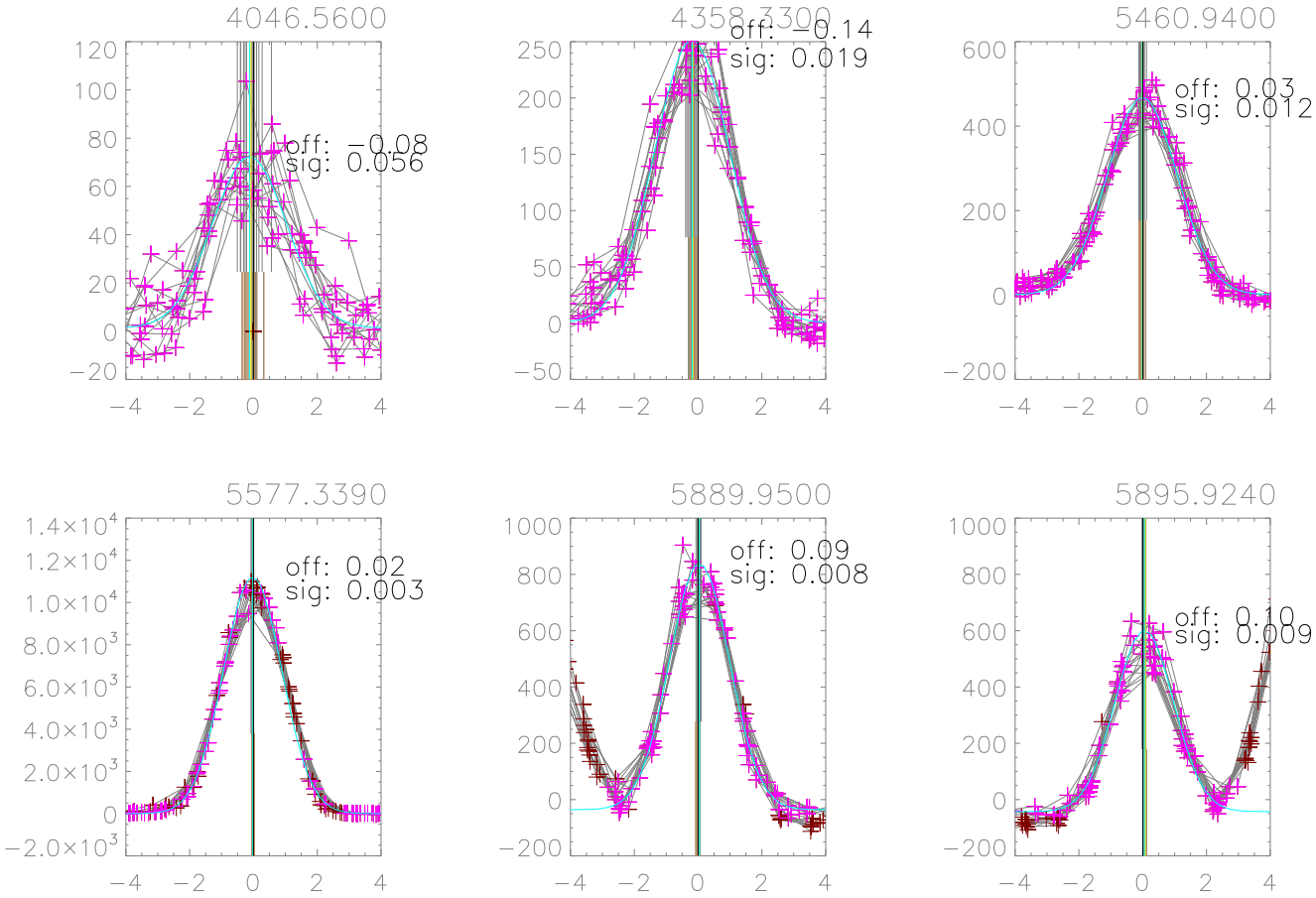

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b1-00014487.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.2
7.6
9.1

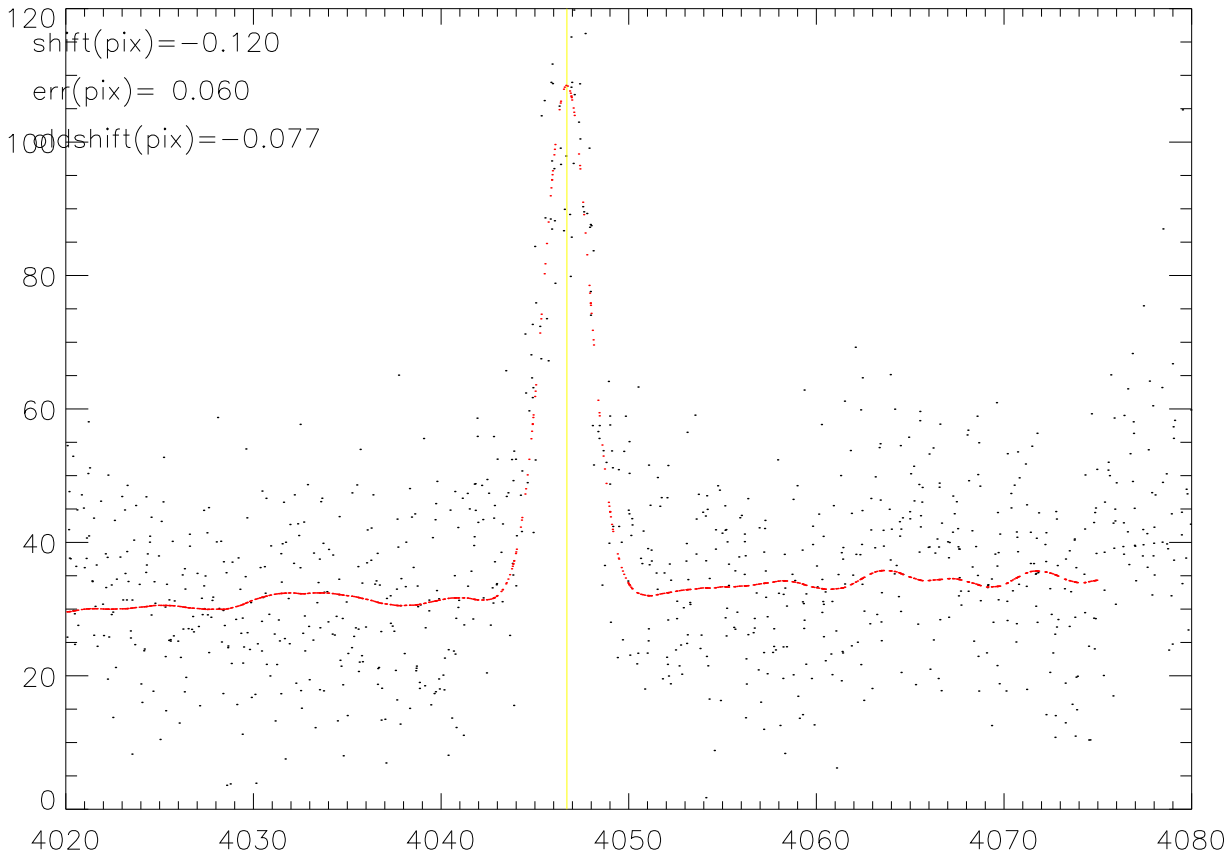

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b1-00014487.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.996
Max value = 8.509
Mon Feb 25 02:57:04 2008

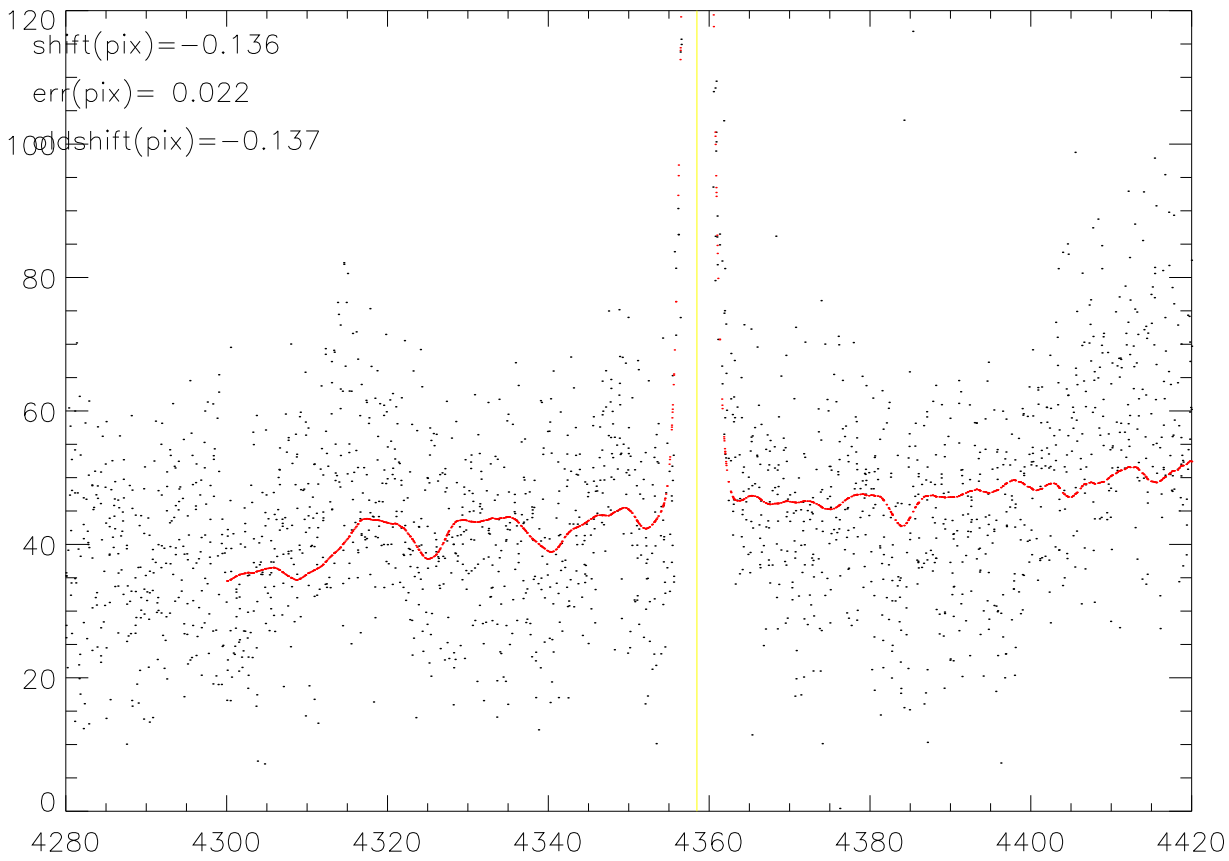

PLATE=0794 MJD=52376 Scattered Light on sdR-b1-00014487.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.27
5.18
3.36

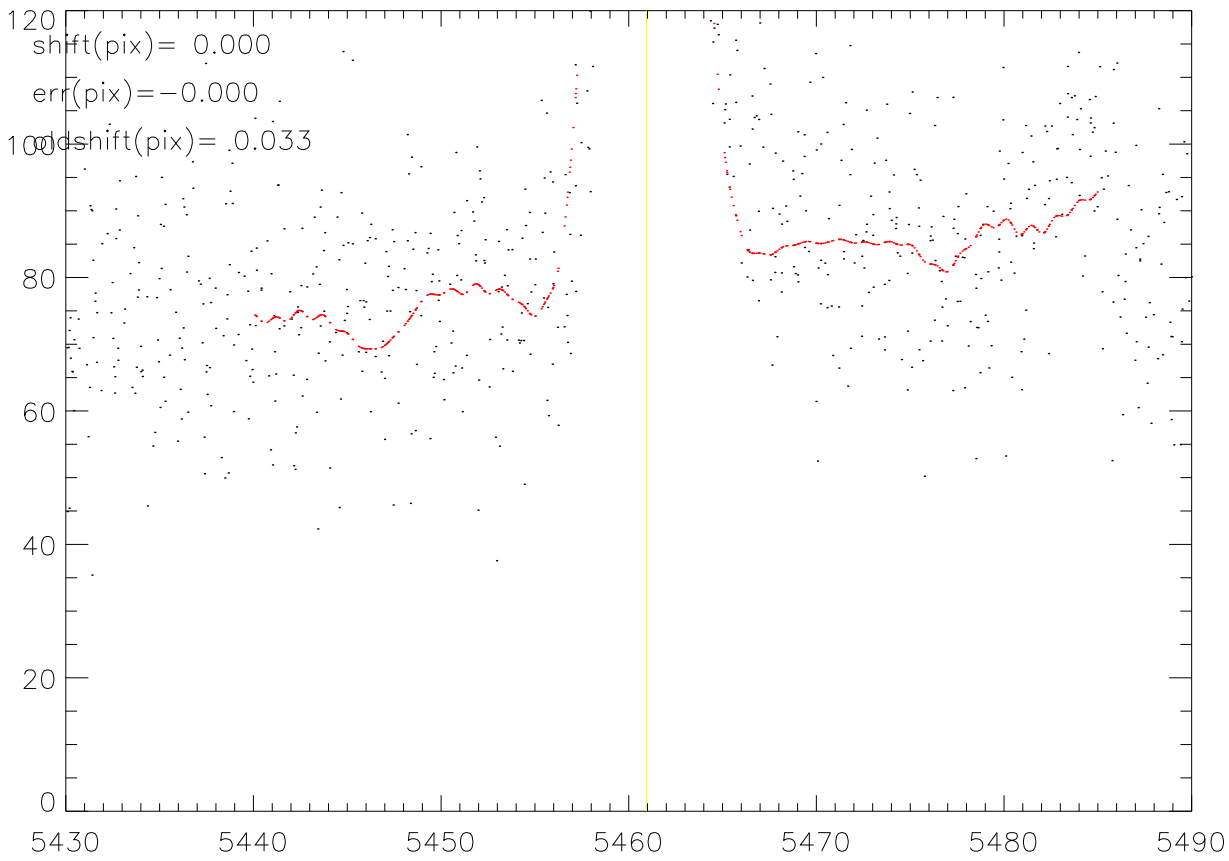

PLATE=0794 MJD=52376 Scattered Light on sdR-b1-00014487.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.958
Max value = 5.917
Mon Feb 25 03:00:28 2008

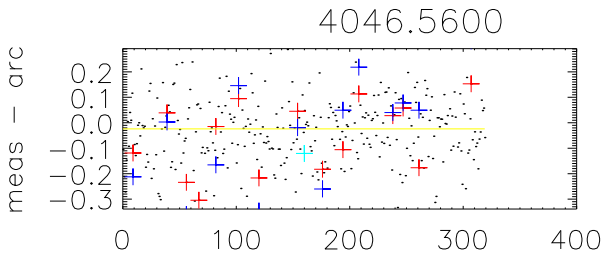

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-b1-00014487.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

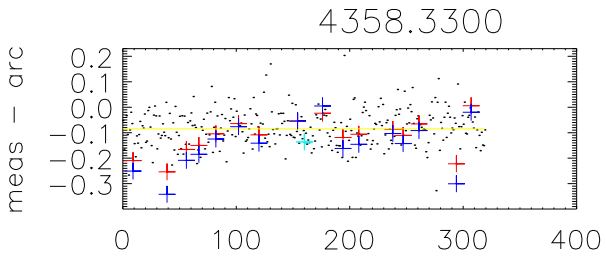

4046.5600
off: −0.08
sig: 0.056
4358.3300
off: −0.14
sig: 0.019
5460.9400
off: 0.03
sig: 0.012
5577.3390
off: 0.02
sig: 0.003
5889.9500
off: 0.09
sig: 0.008
5895.9240
off: 0.10
sig: 0.009

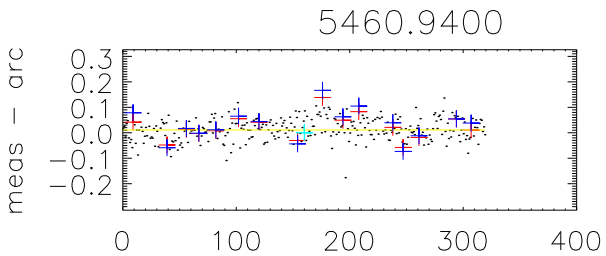

shift(pix)=−0.120
err(pix)= 0.060
oldshift(pix)=−0.077
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

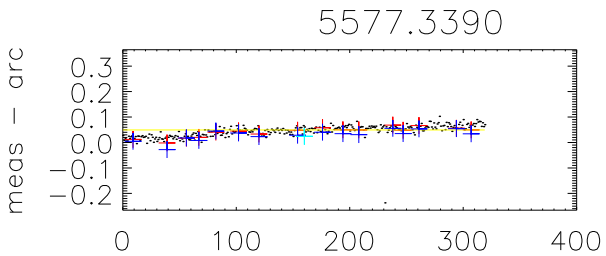

shift(pix)=−0.136
err(pix)= 0.022
oldshift(pix)=−0.137
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

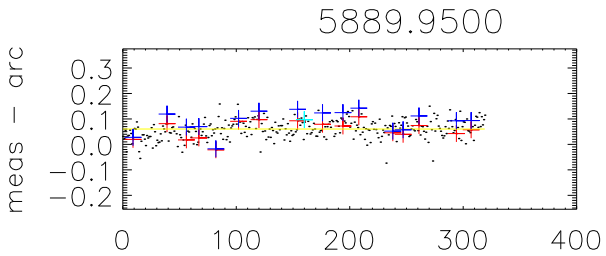

shift(pix)= 0.000
err(pix)=−0.000
oldshift(pix)= 0.033
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

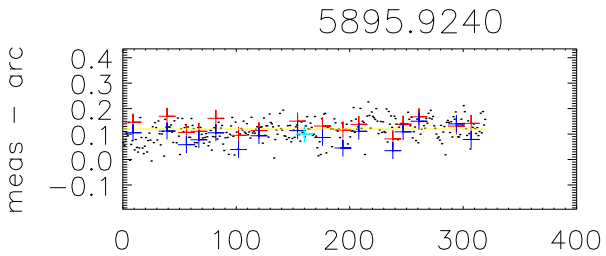

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

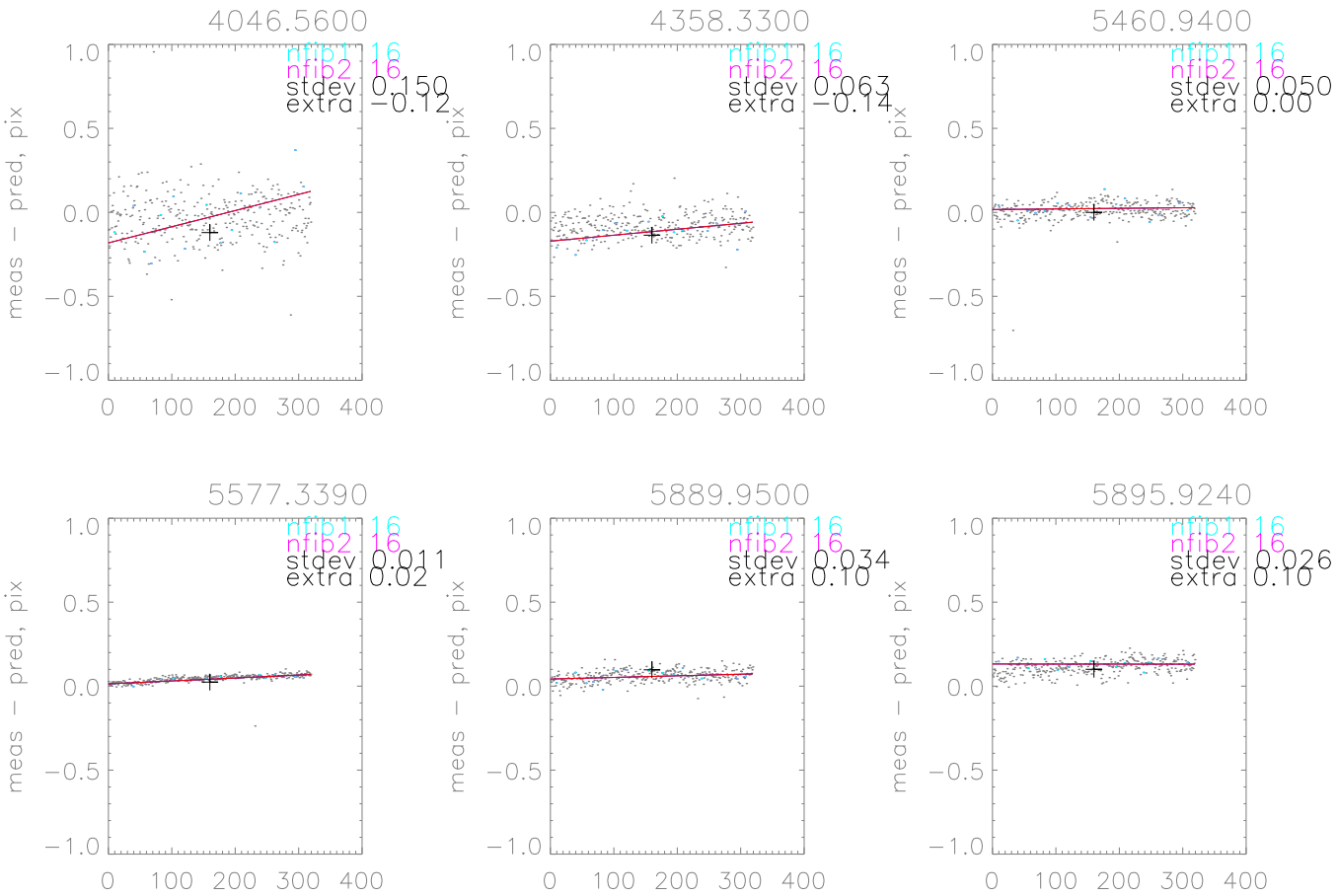

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

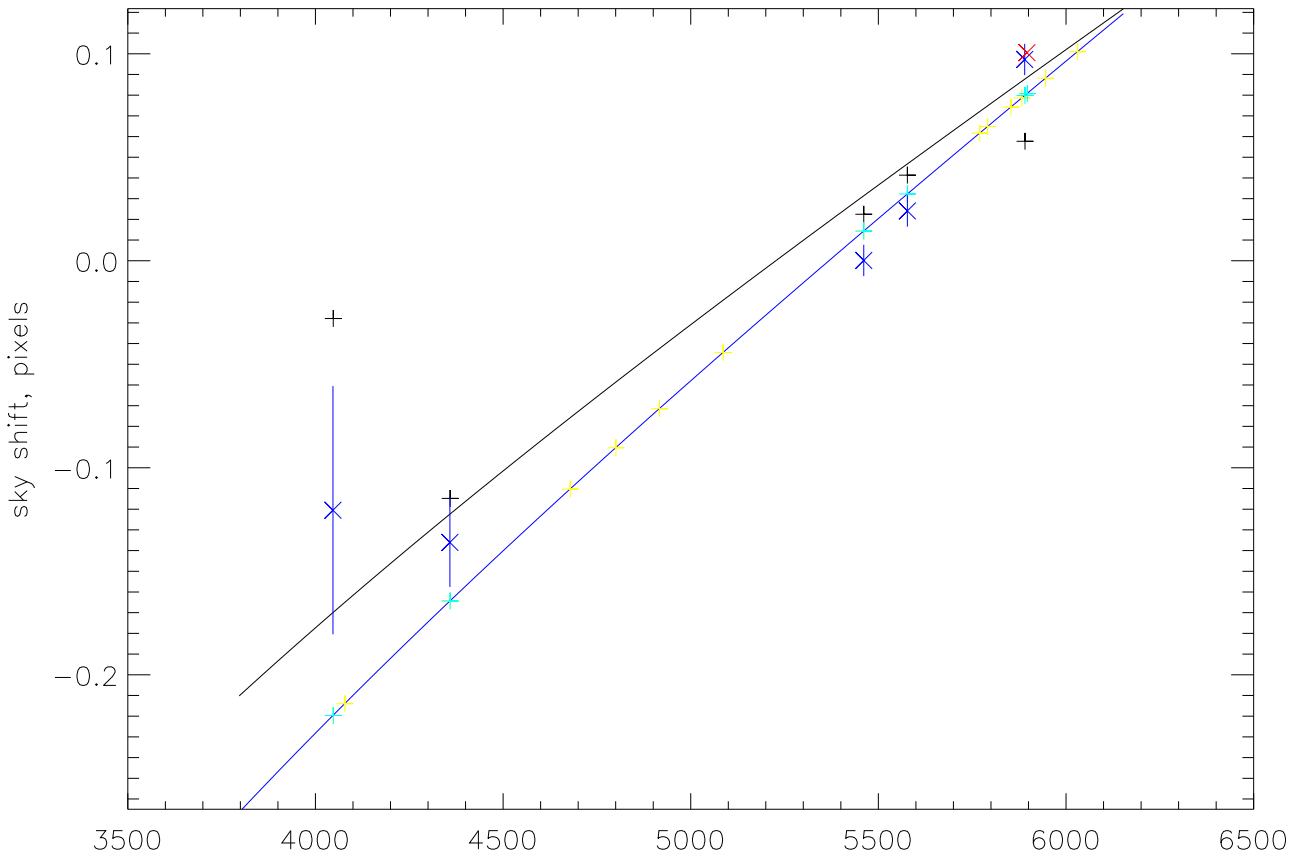

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

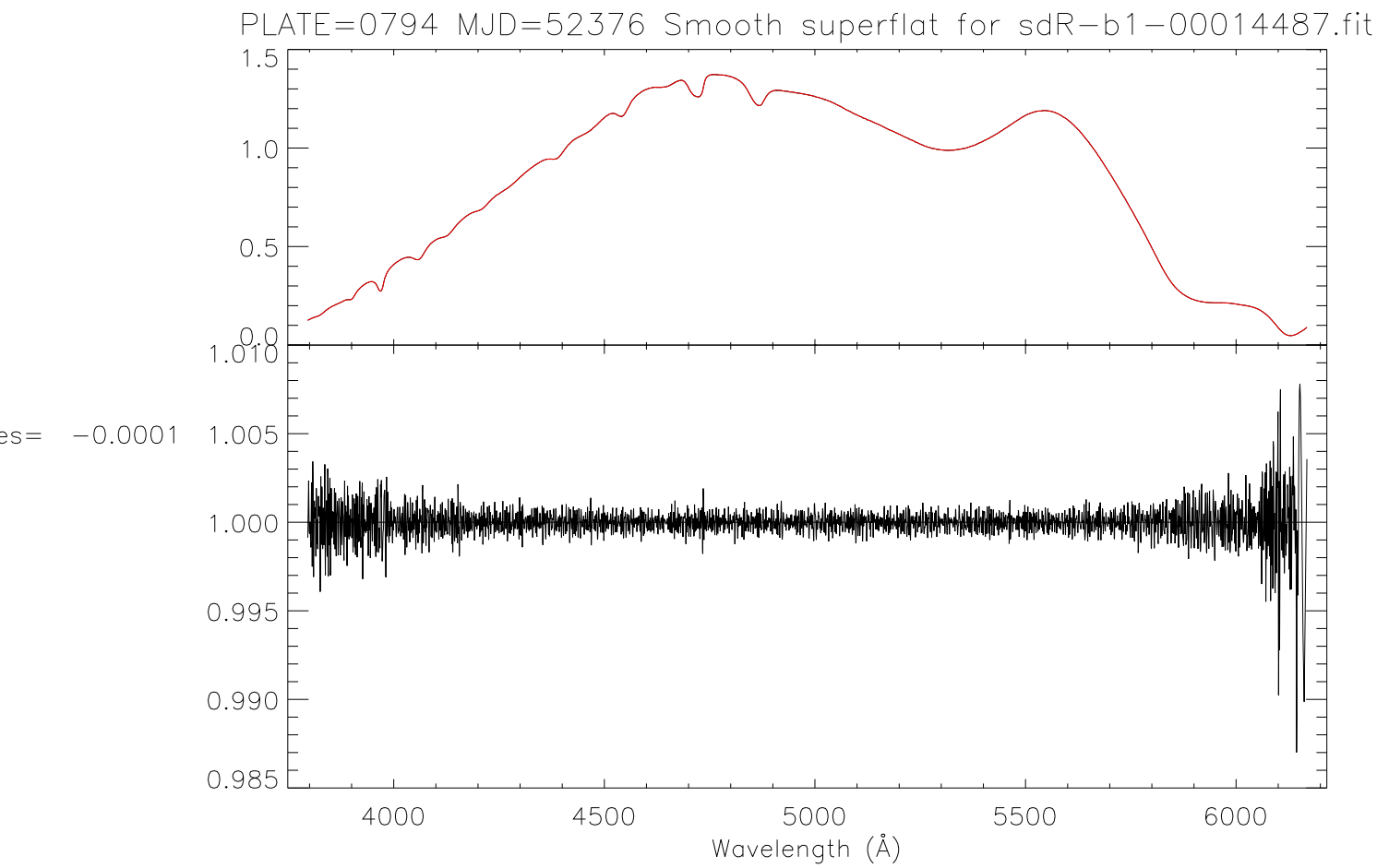

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

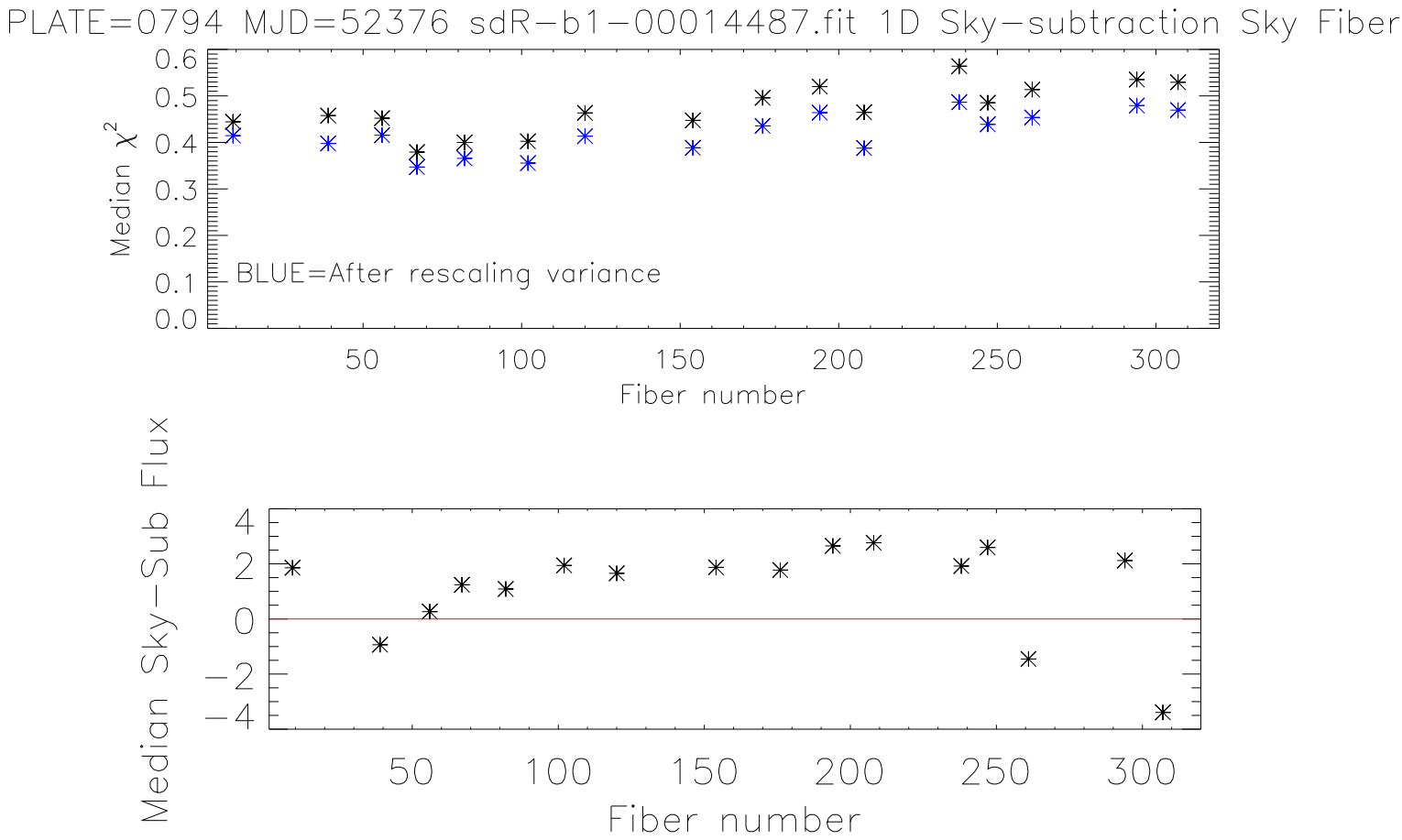

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

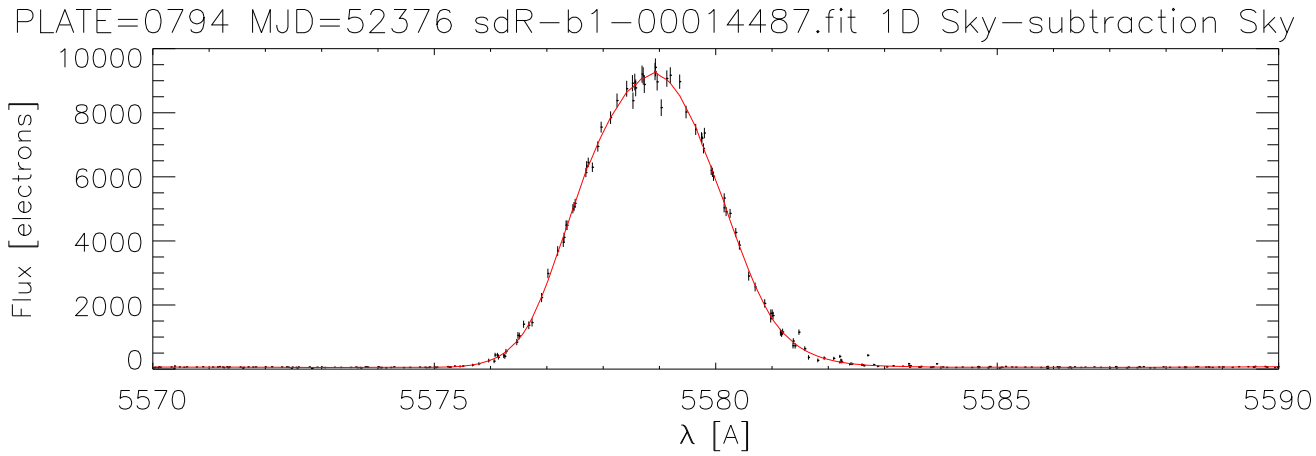

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

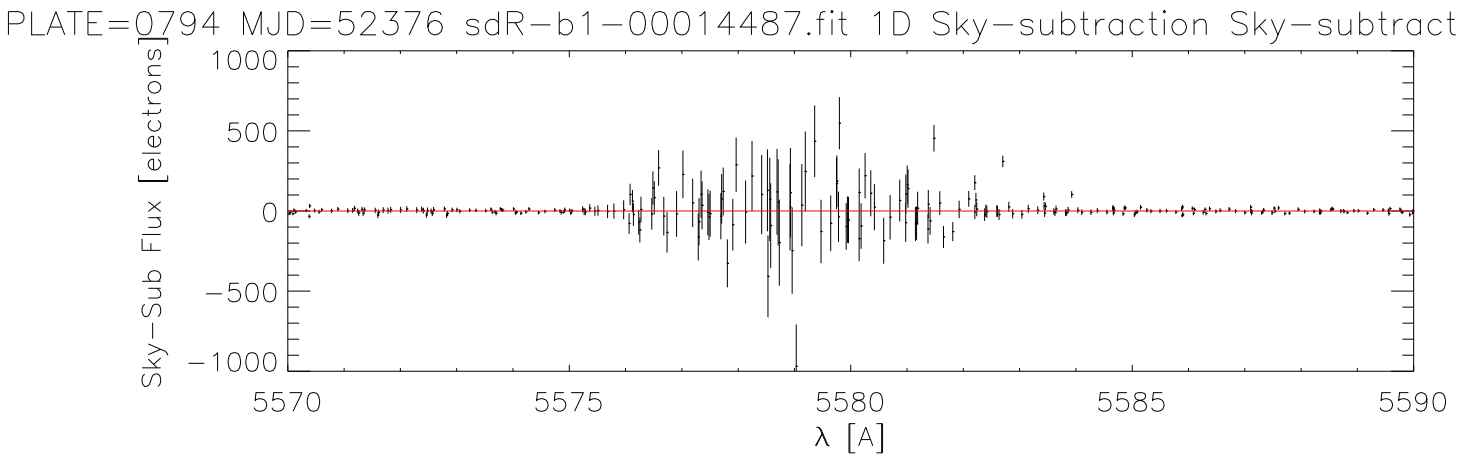

4046.5600
nfib1 16
nfib2 16
stdev 0.150
extra −0.12
4358.3300
nfib1 16
nfib2 16
stdev 0.063
extra −0.14
5460.9400
nfib1 16
nfib2 16
stdev 0.050
extra 0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra 0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.034
extra 0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.026
extra 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

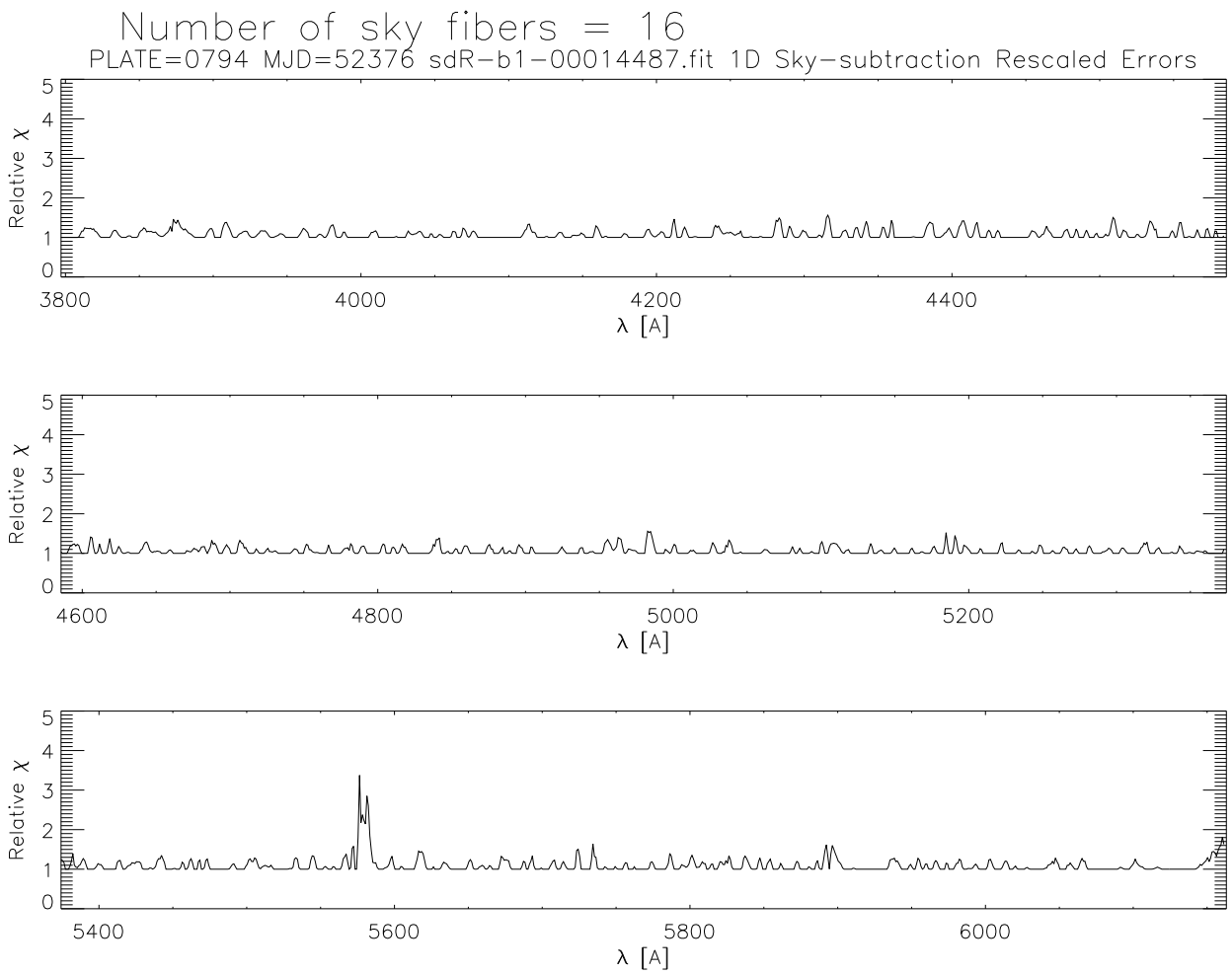

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

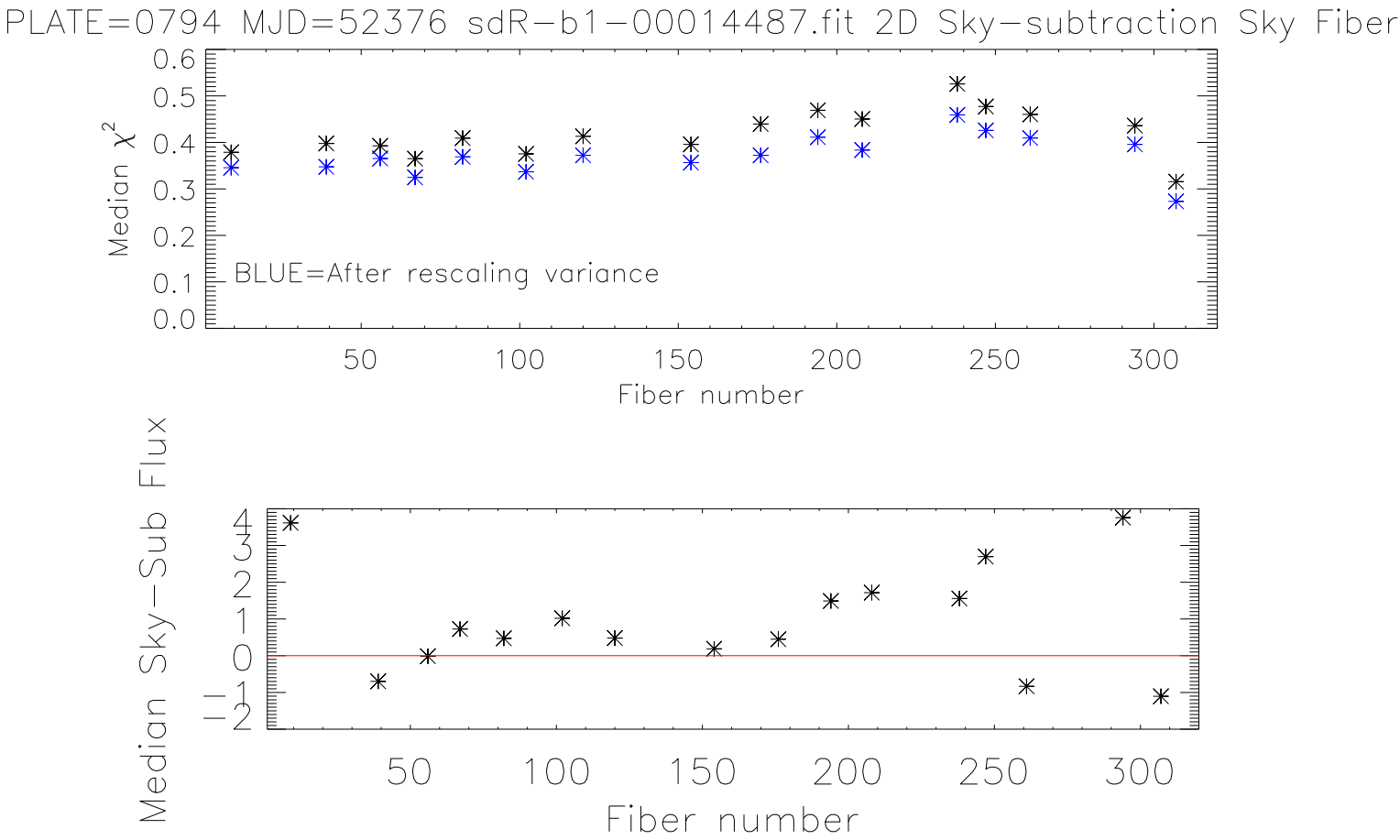

PLATE=0794 MJD=52376 Smooth superflat for sdR-b1-00014487.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

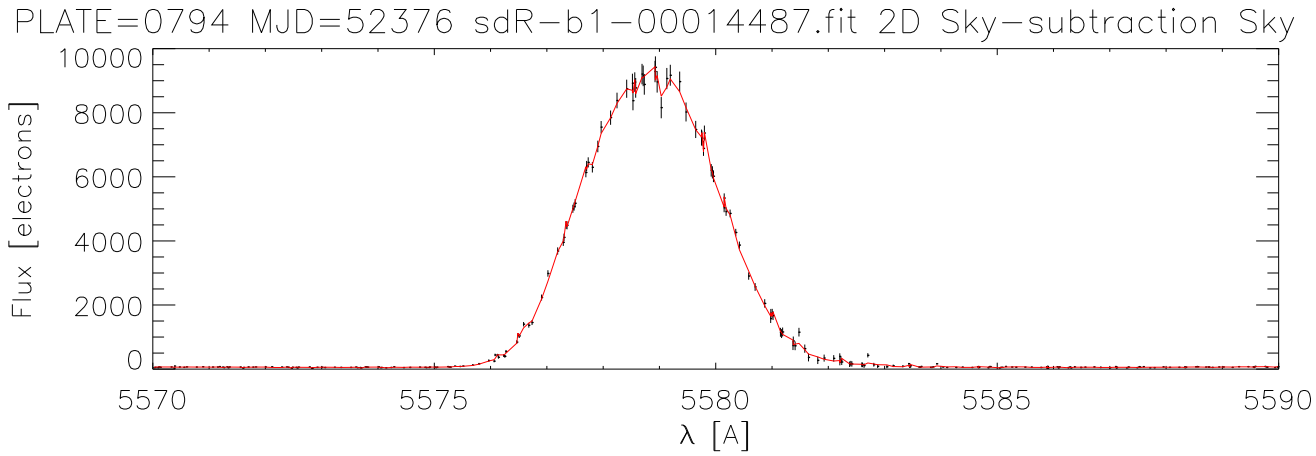

PLATE=0794 MJD=52376 sdR-b1-00014487.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

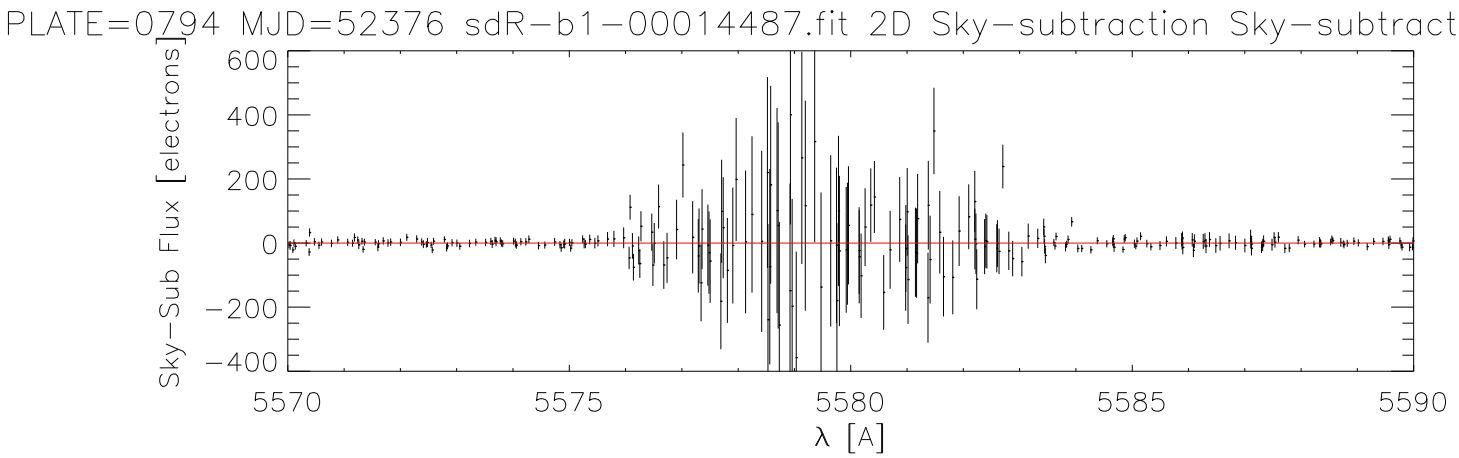

PLATE=0794 MJD=52376 sdR-b1-00014487.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

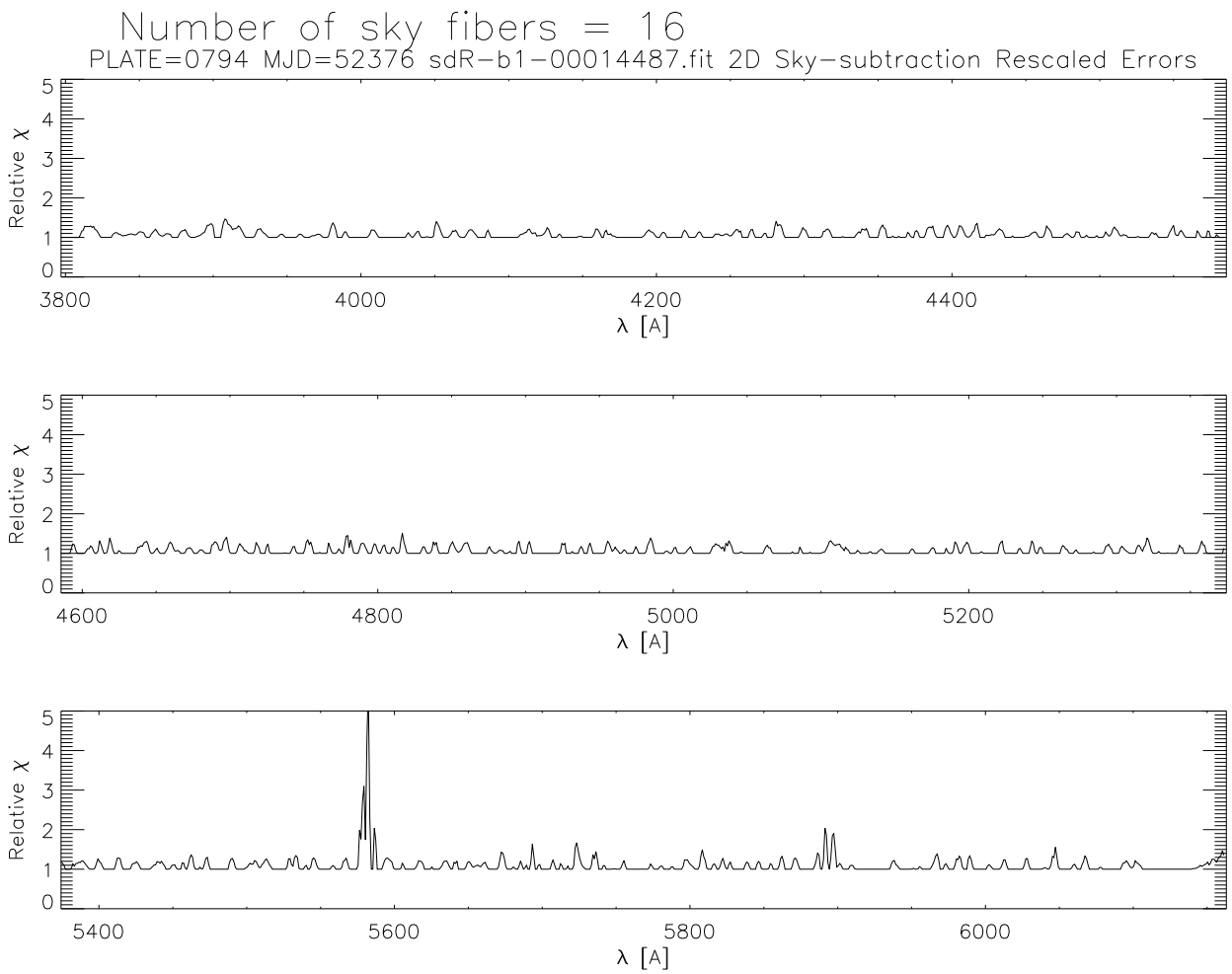

PLATE=0794 MJD=52376 sdR-b1-00014487.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

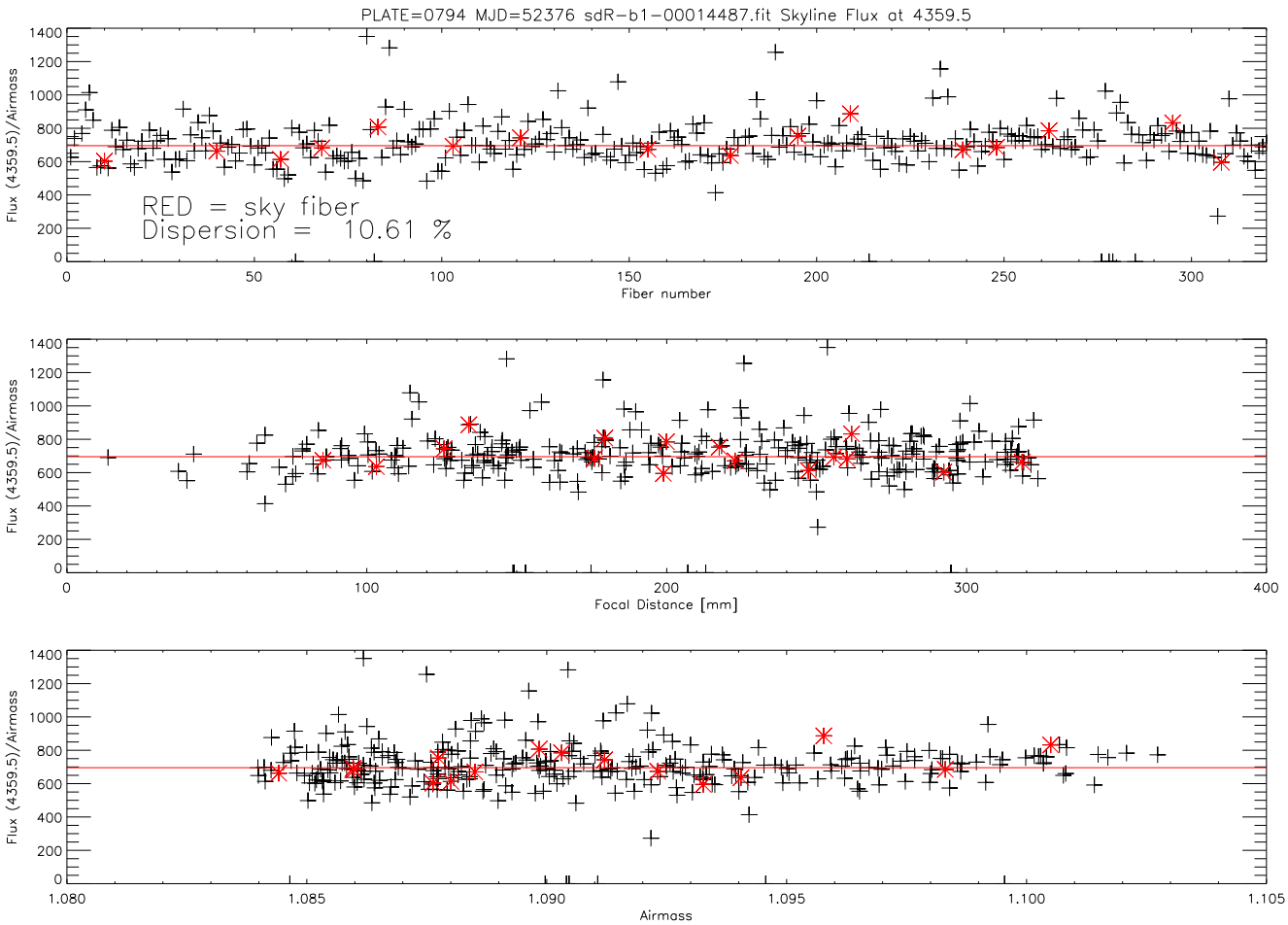

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b1-00014487.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

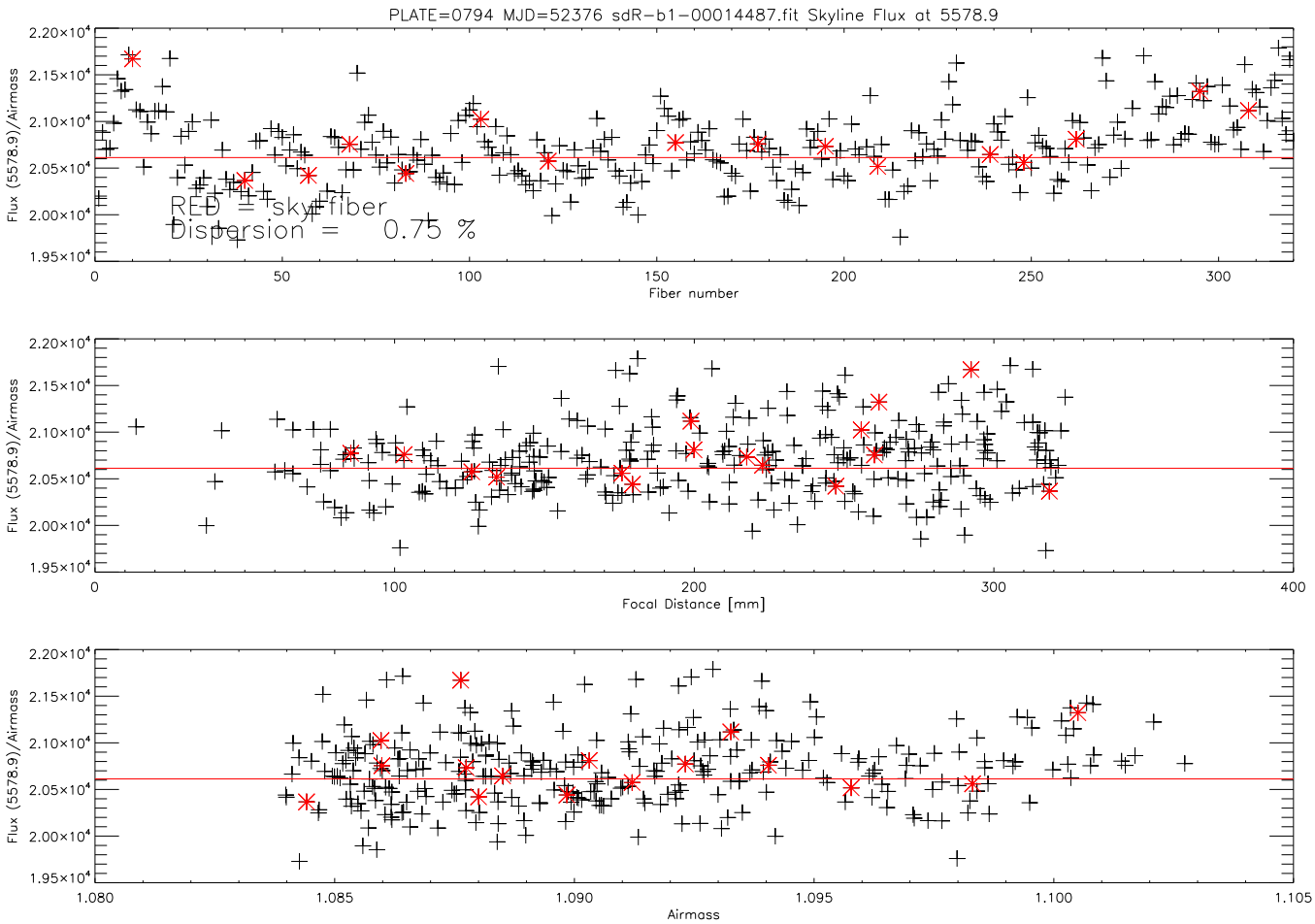

PLATE=0794 MJD=52376 sdR-b1-00014487.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

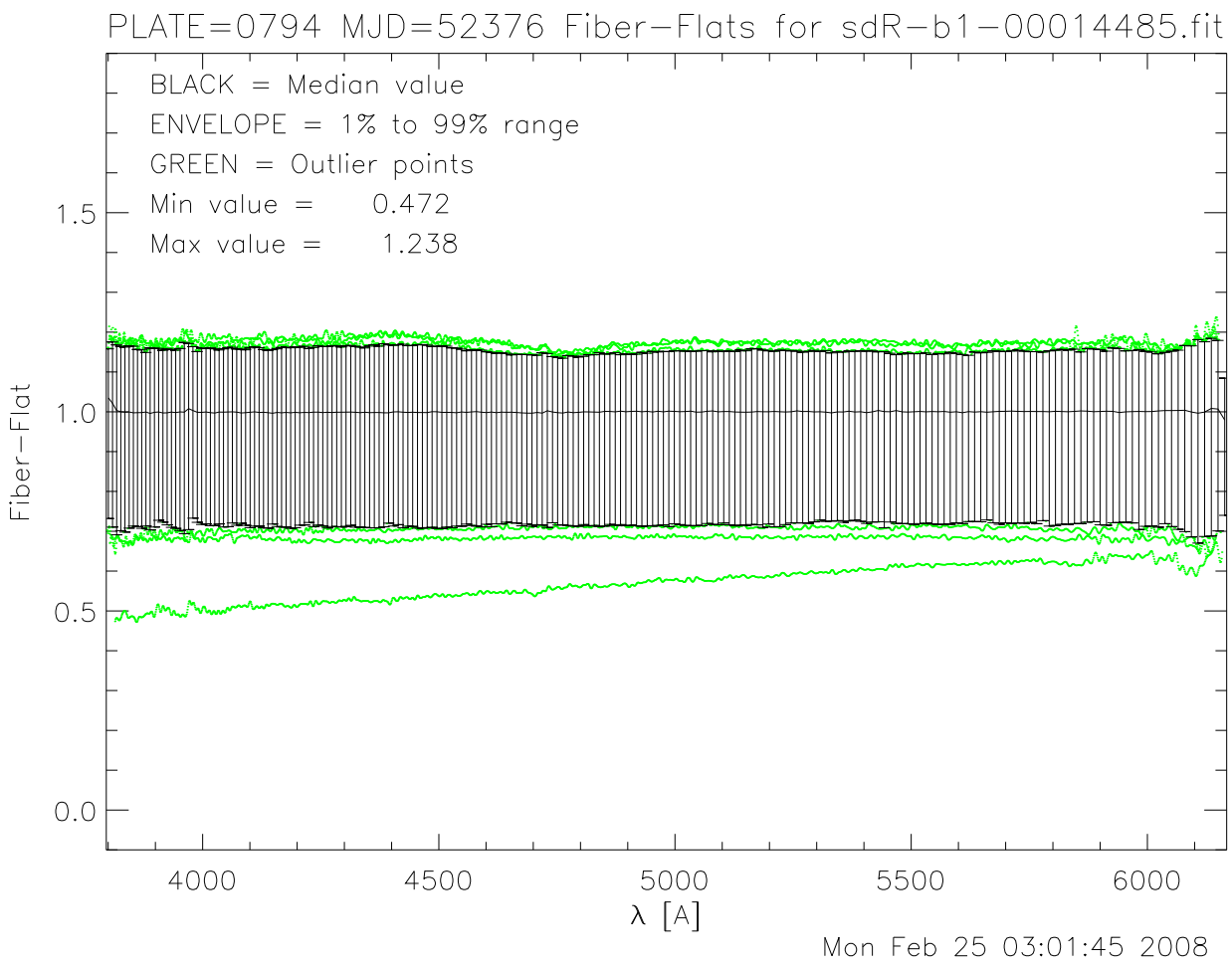

PLATE=0794 MJD=52376 sdR-b1-00014487.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

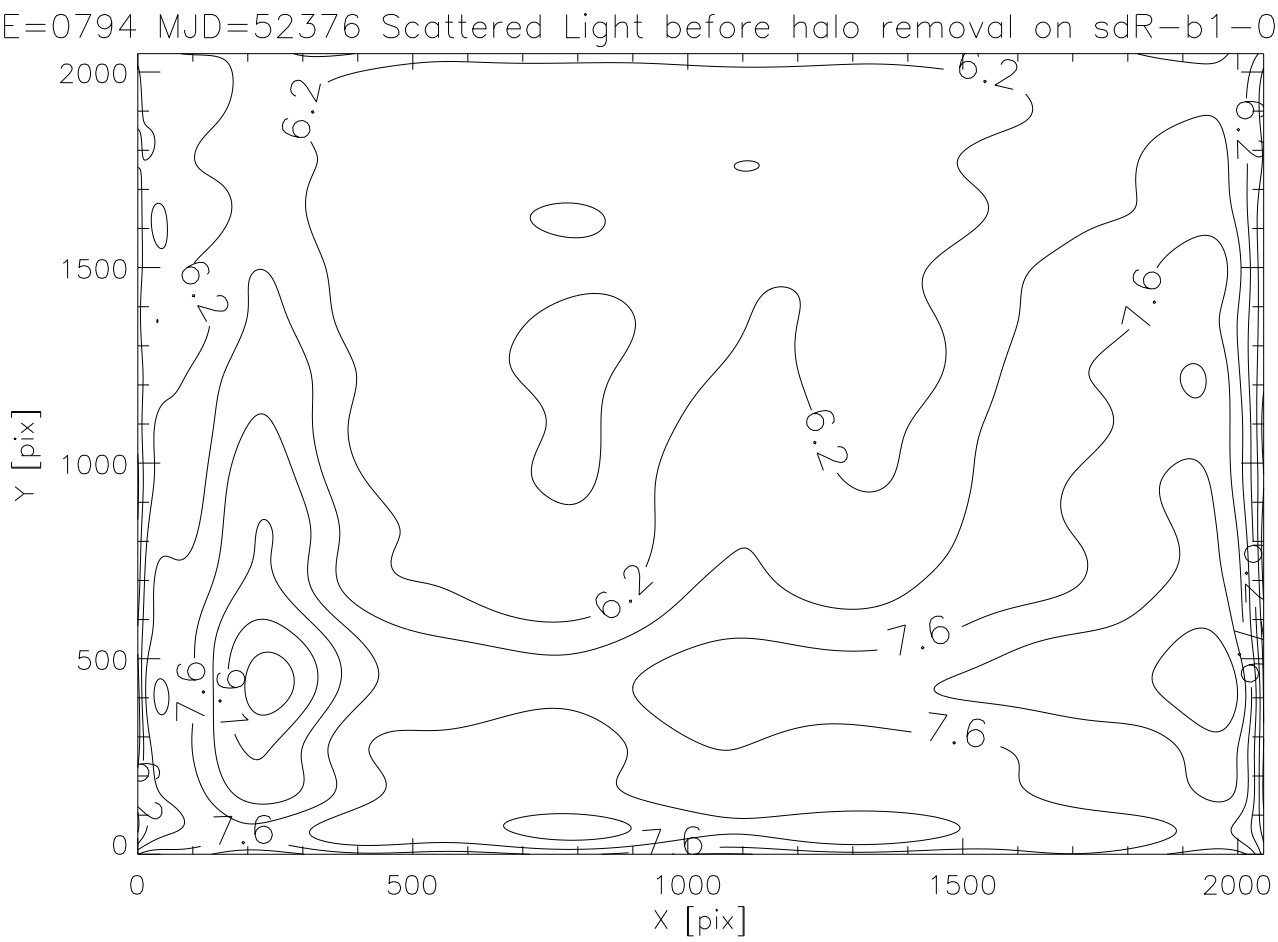

PLATE=0794 MJD=52376 sdR-b1-00014487.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

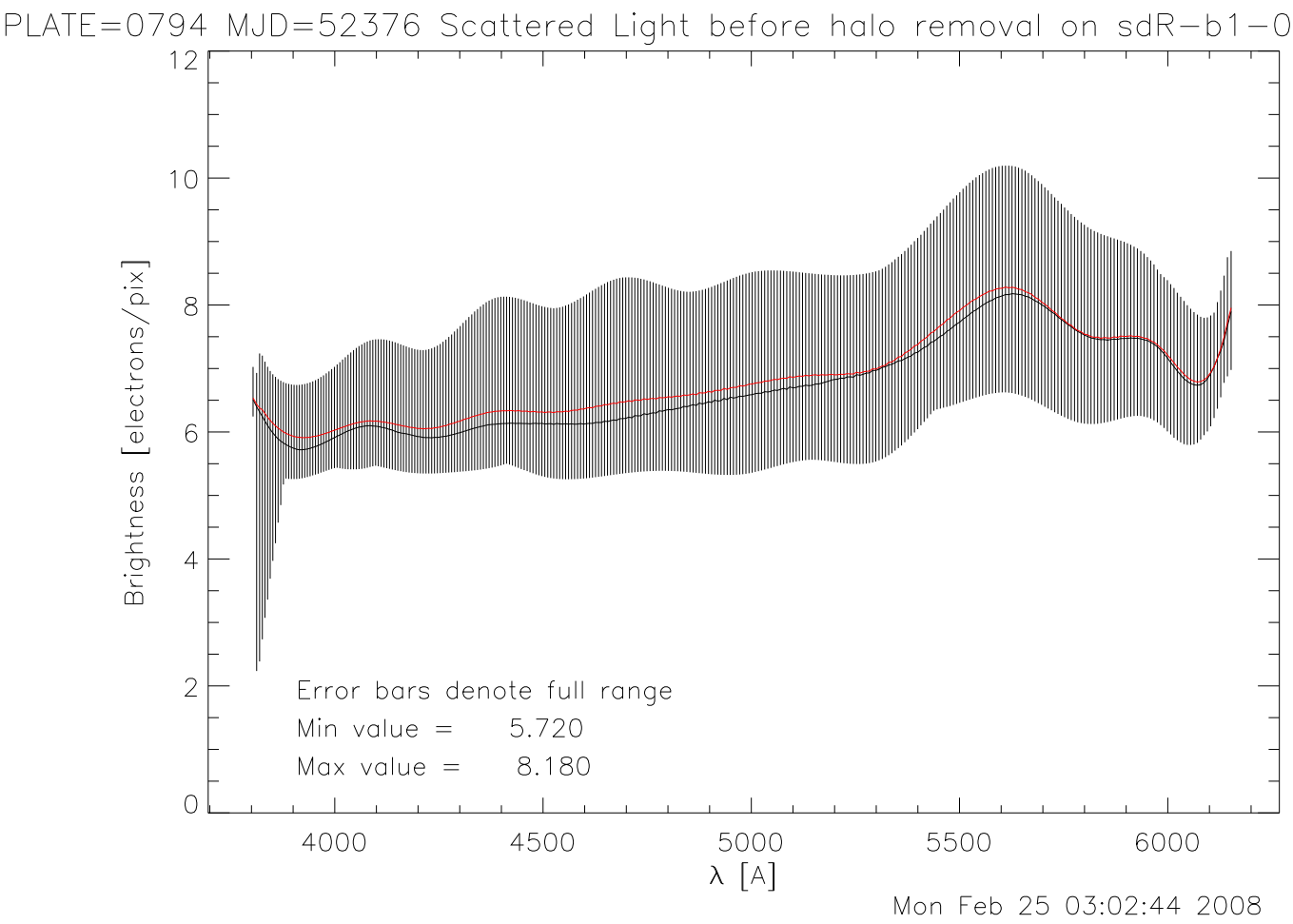

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b1-00014487.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

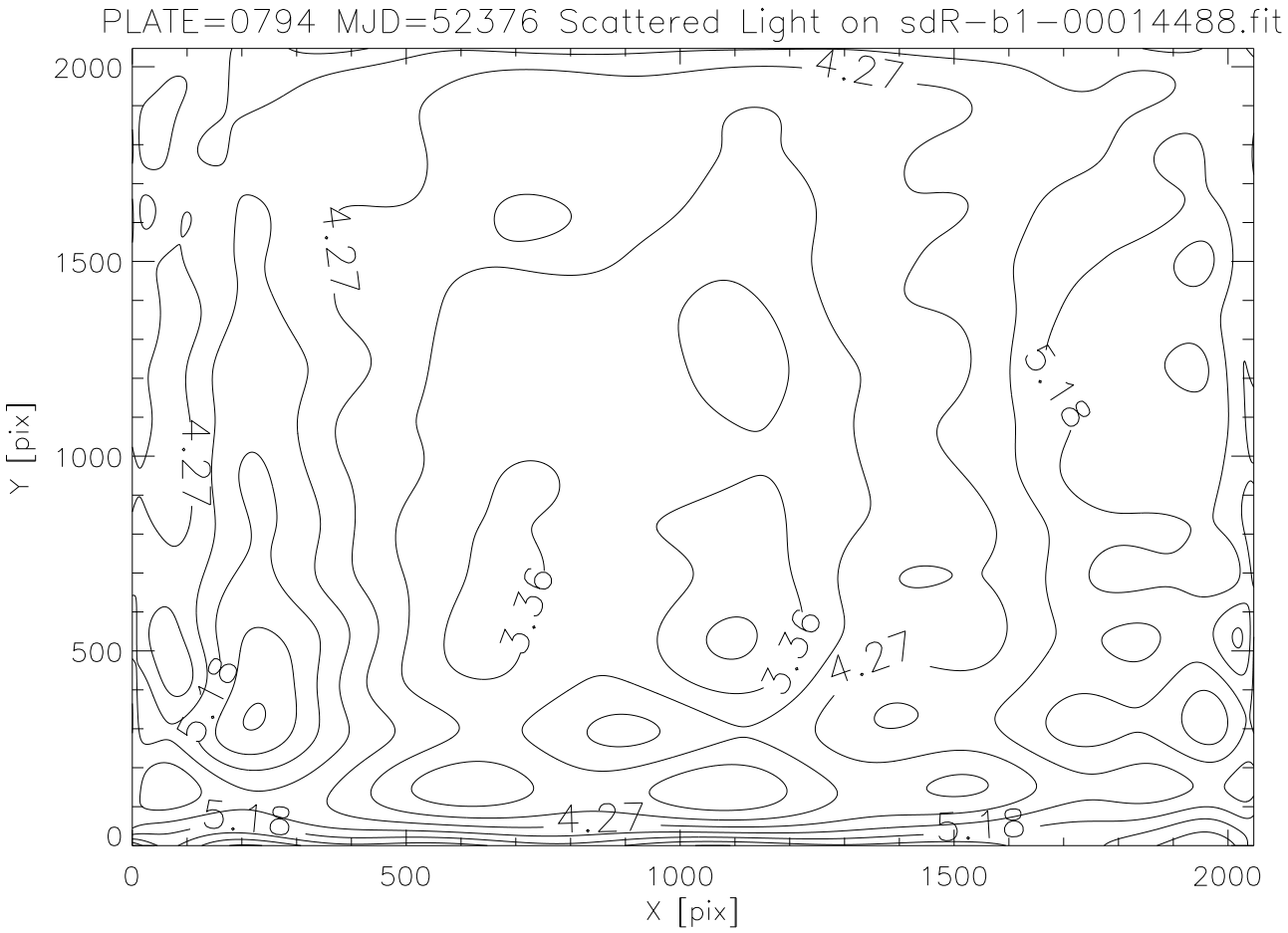

PLATE=0794 MJD=52376 sdR-b1-00014487.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.61 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

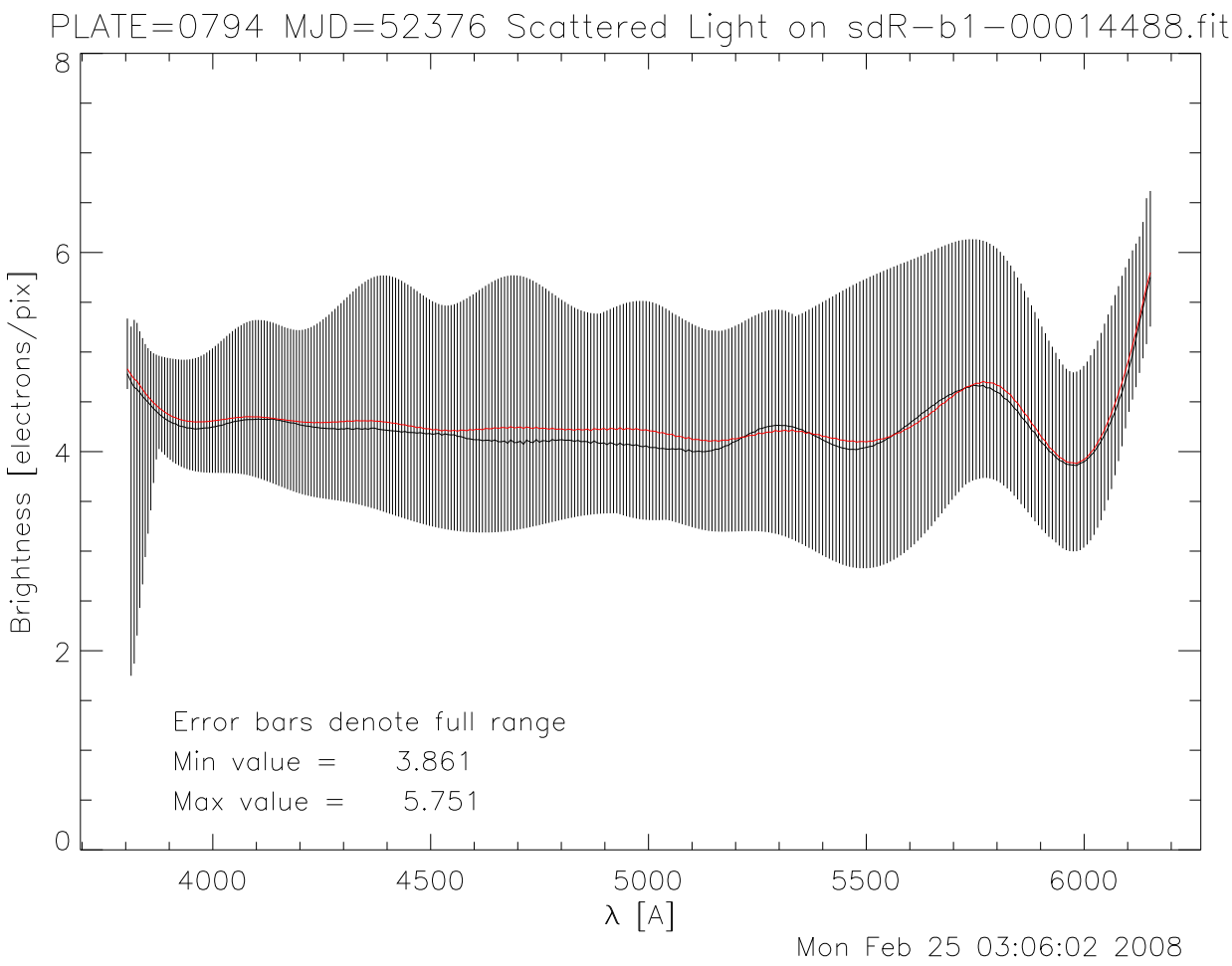

PLATE=0794 MJD=52376 sdR-b1-00014487.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.20×10^4
2.15×10^4
2.10×10^4
2.05×10^4
2.00×10^4
1.95×10^4
RED = sky fiber
Dispersion = 0.75 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
2.20×10^4
2.15×10^4
2.10×10^4
2.05×10^4
2.00×10^4
1.95×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
2.20×10^4
2.15×10^4
2.10×10^4
2.05×10^4
2.00×10^4
1.95×10^4
1.080
1.085
1.090
1.095
1.100
1.105
Airmass

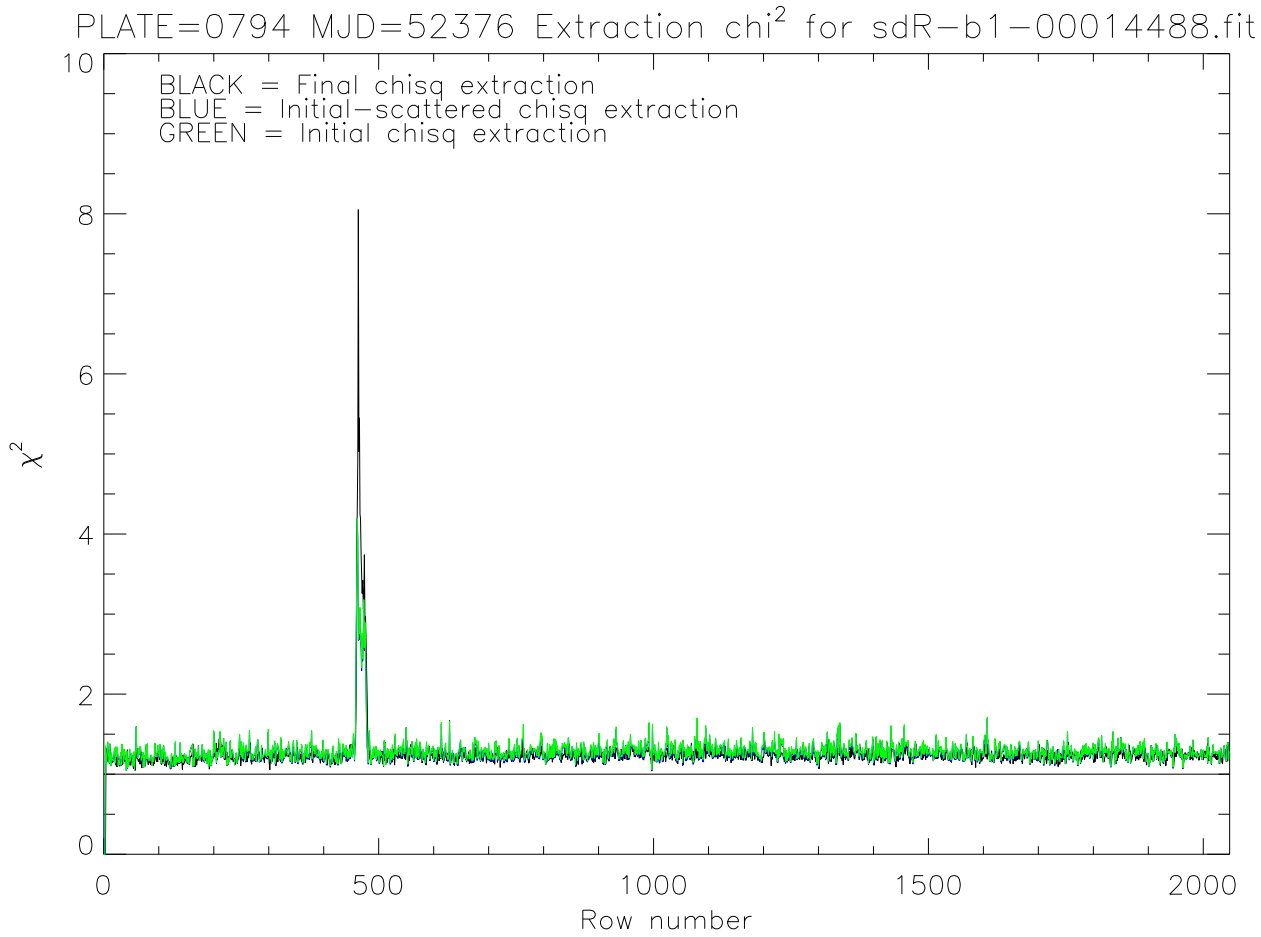

PLATE=0794 MJD=52376 Fiber-Flats for sdR-b1-00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.472
Max value = 1.238
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:01:45 2008

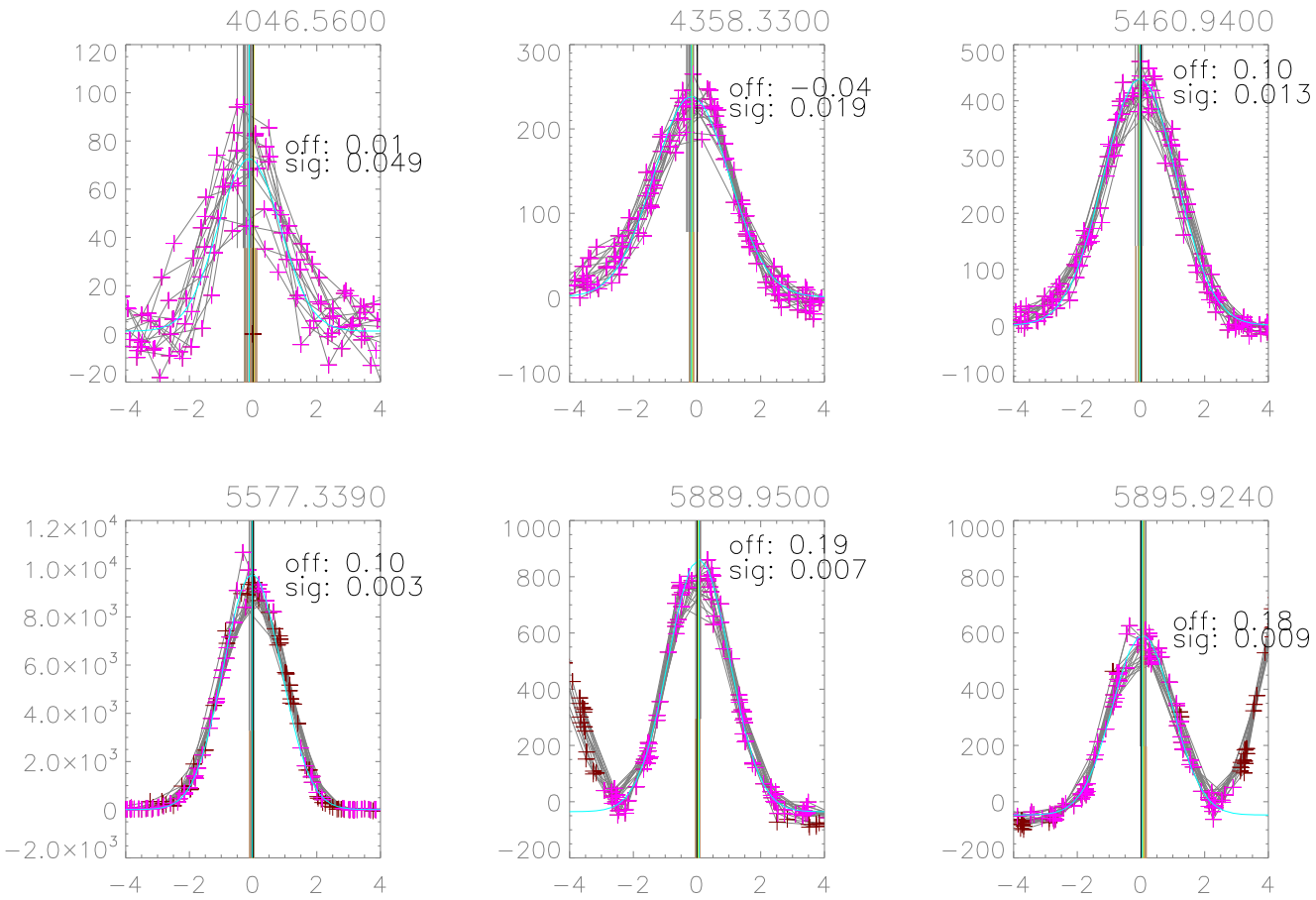

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR−b1−00014488.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.2
7.6

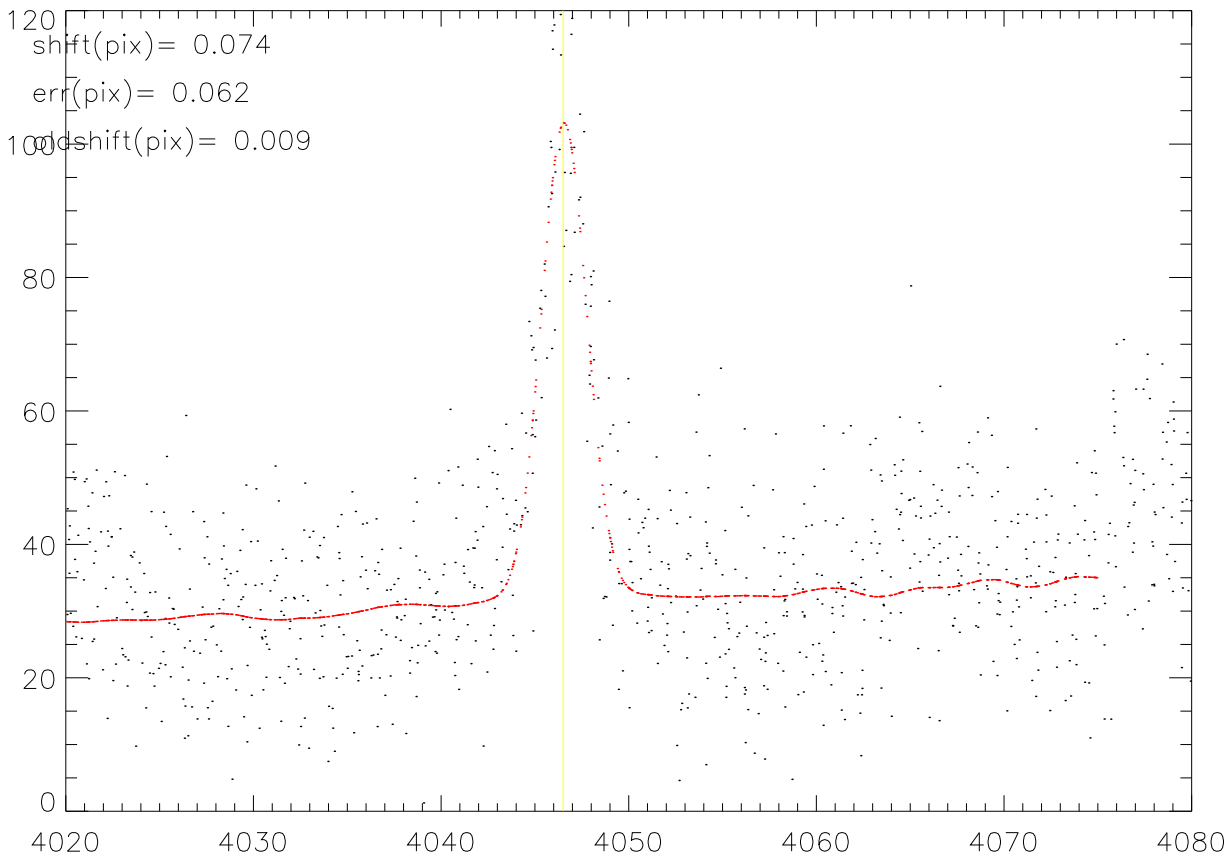

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b1-00014488.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.720
Max value = 8.180
Mon Feb 25 03:02:44 2008

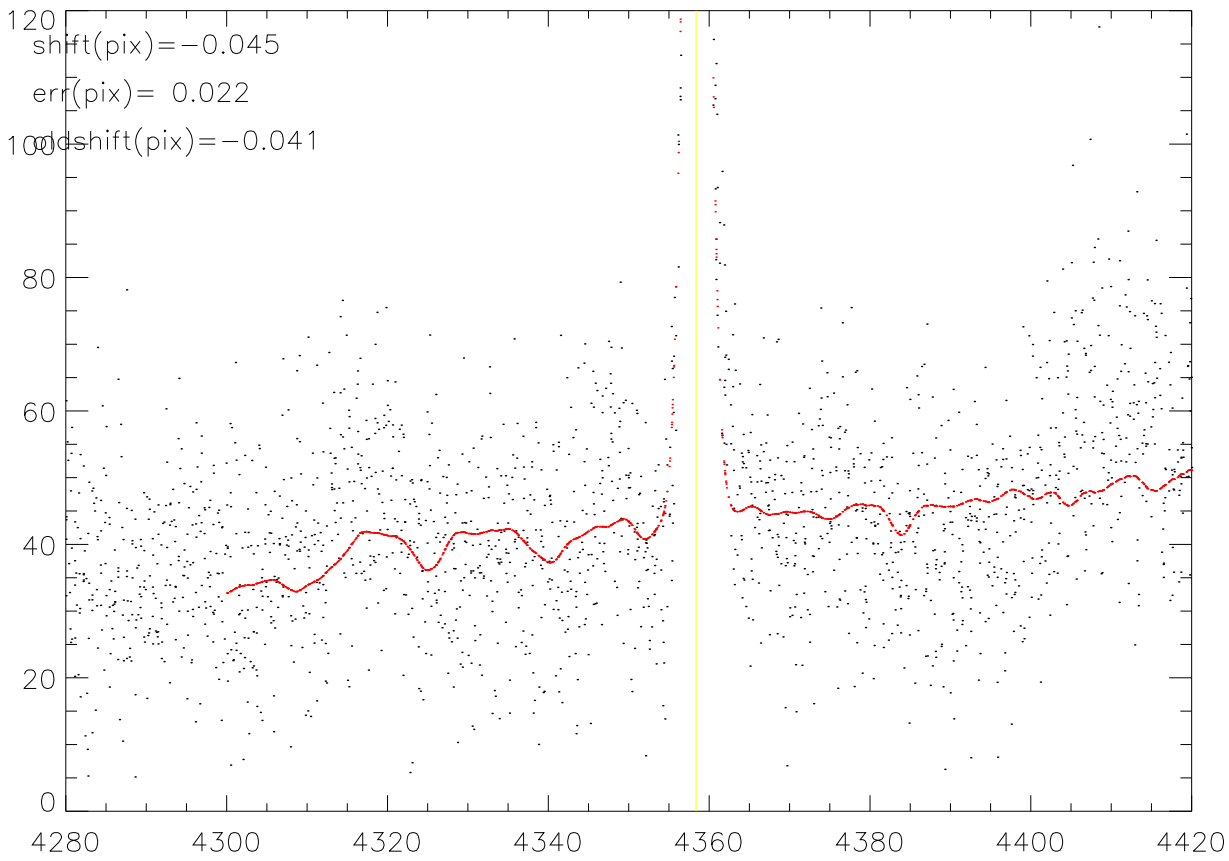

PLATE=0794 MJD=52376 Scattered Light on sdR-b1-00014488.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.27
3.36
5.18

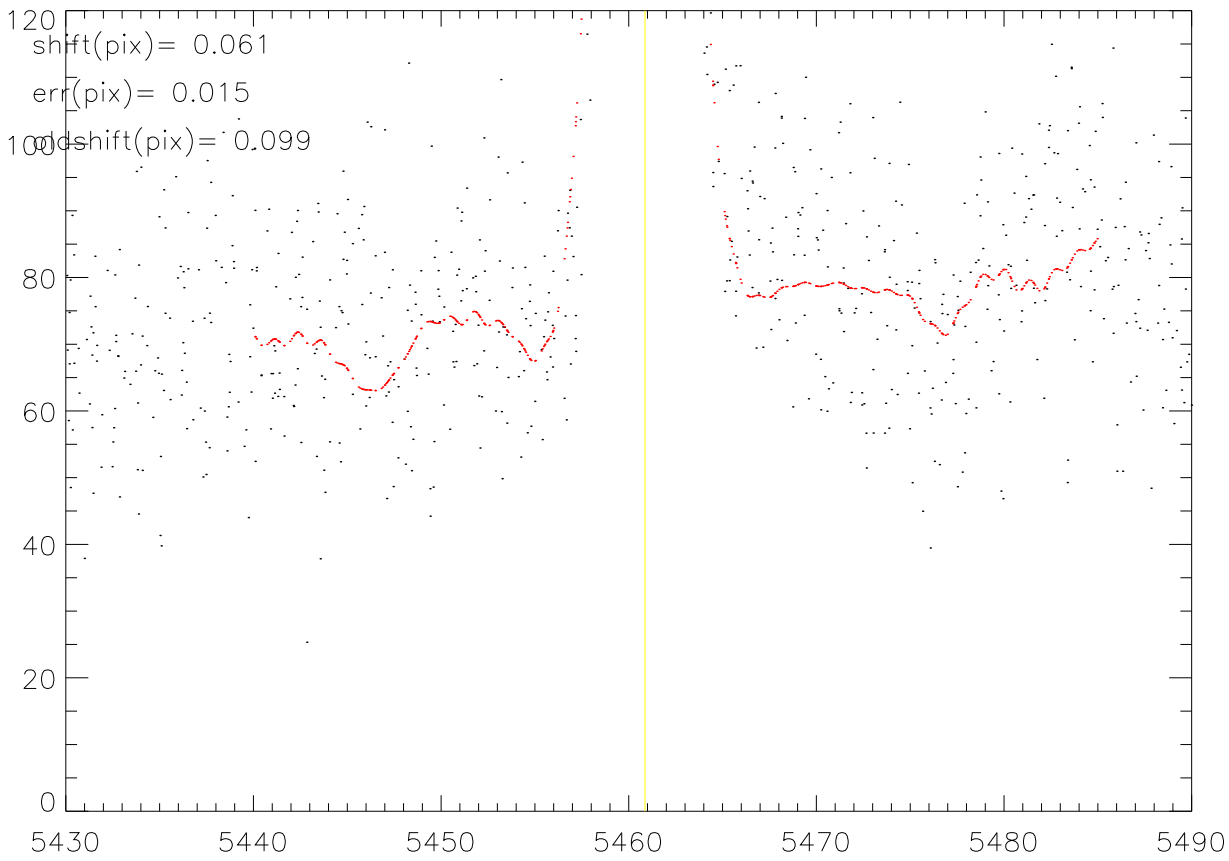

PLATE=0794 MJD=52376 Scattered Light on sdR-b1-00014488.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.861
Max value = 5.751
Mon Feb 25 03:06:02 2008

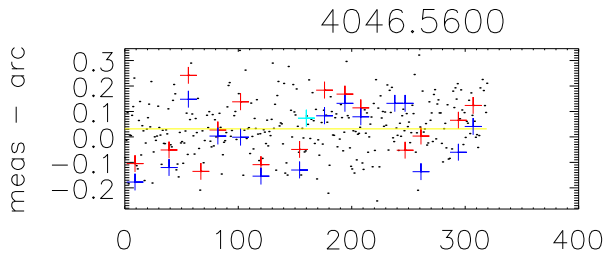

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-b1-00014488.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

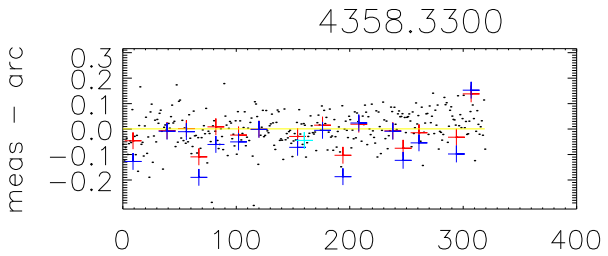

4046.5600
off: 0.01
sig: 0.049
4358.3300
off: −0.04
sig: 0.019
5460.9400
off: 0.10
sig: 0.013
5577.3390
off: 0.10
sig: 0.003
5889.9500
off: 0.19
sig: 0.007
5895.9240
off: 0.18
sig: 0.009

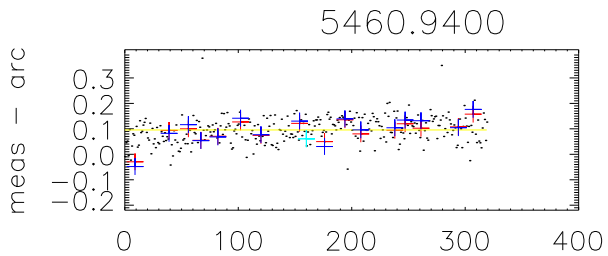

shift(pix)= 0.074
err(pix)= 0.062
oldshift(pix)= 0.009
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

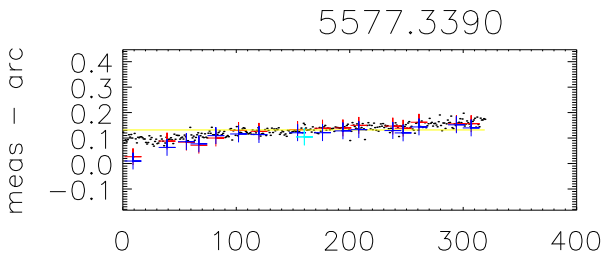

shift(pix)=−0.045
err(pix)= 0.022
oldshift(pix)=−0.041
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

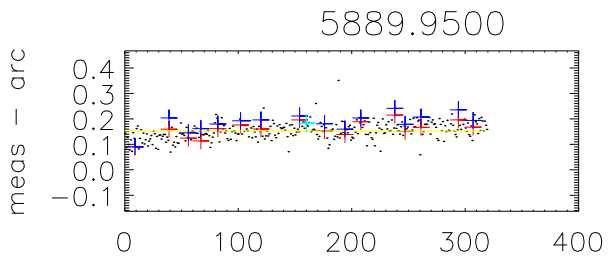

shift(pix)= 0.061
err(pix)= 0.015
oldshift(pix)= 0.099
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

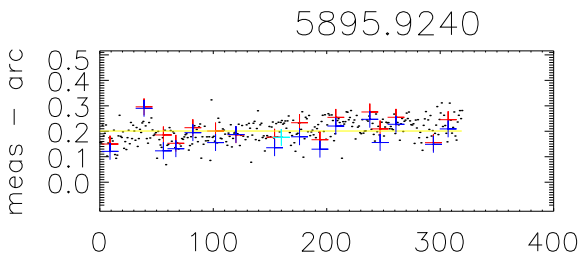

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

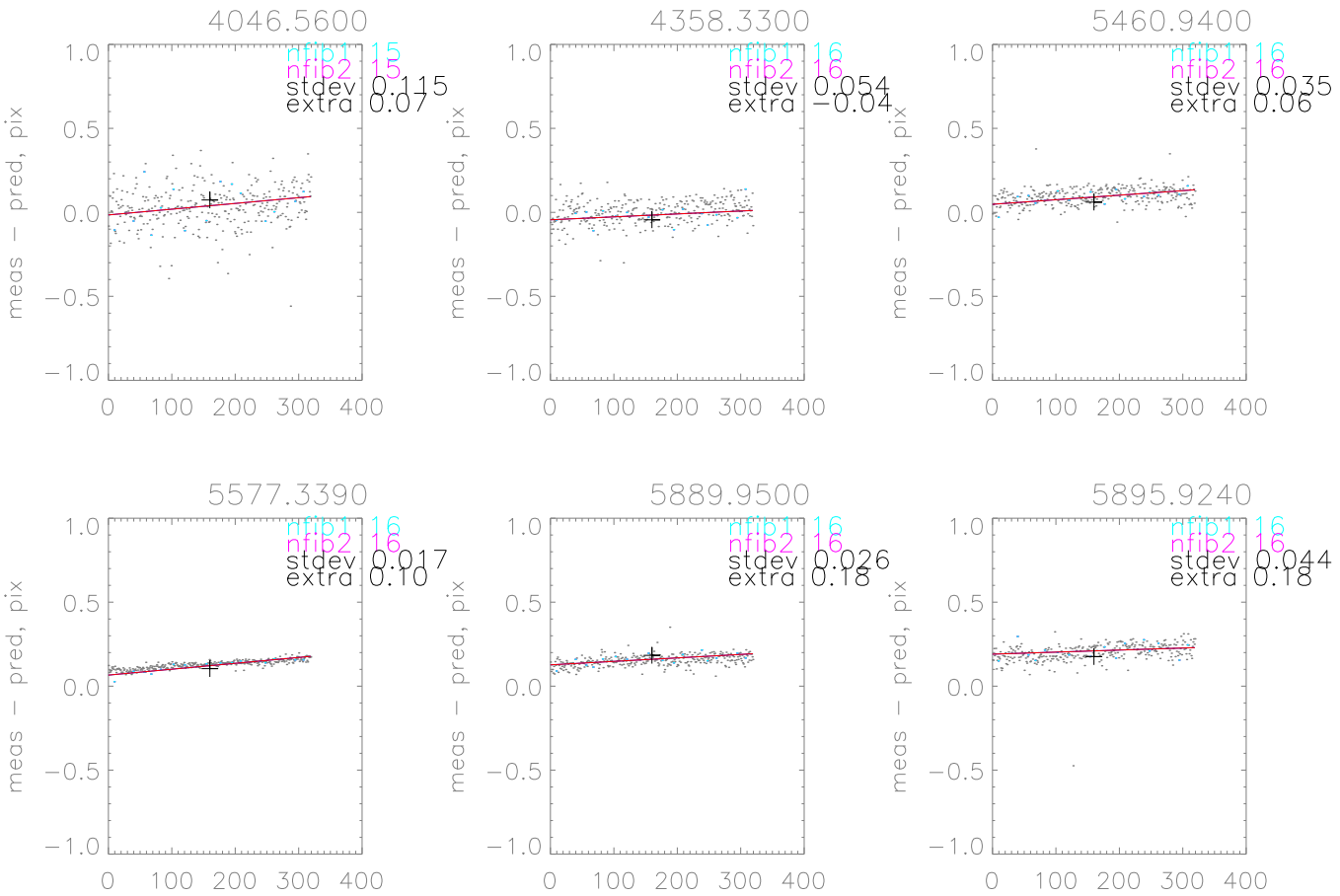

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

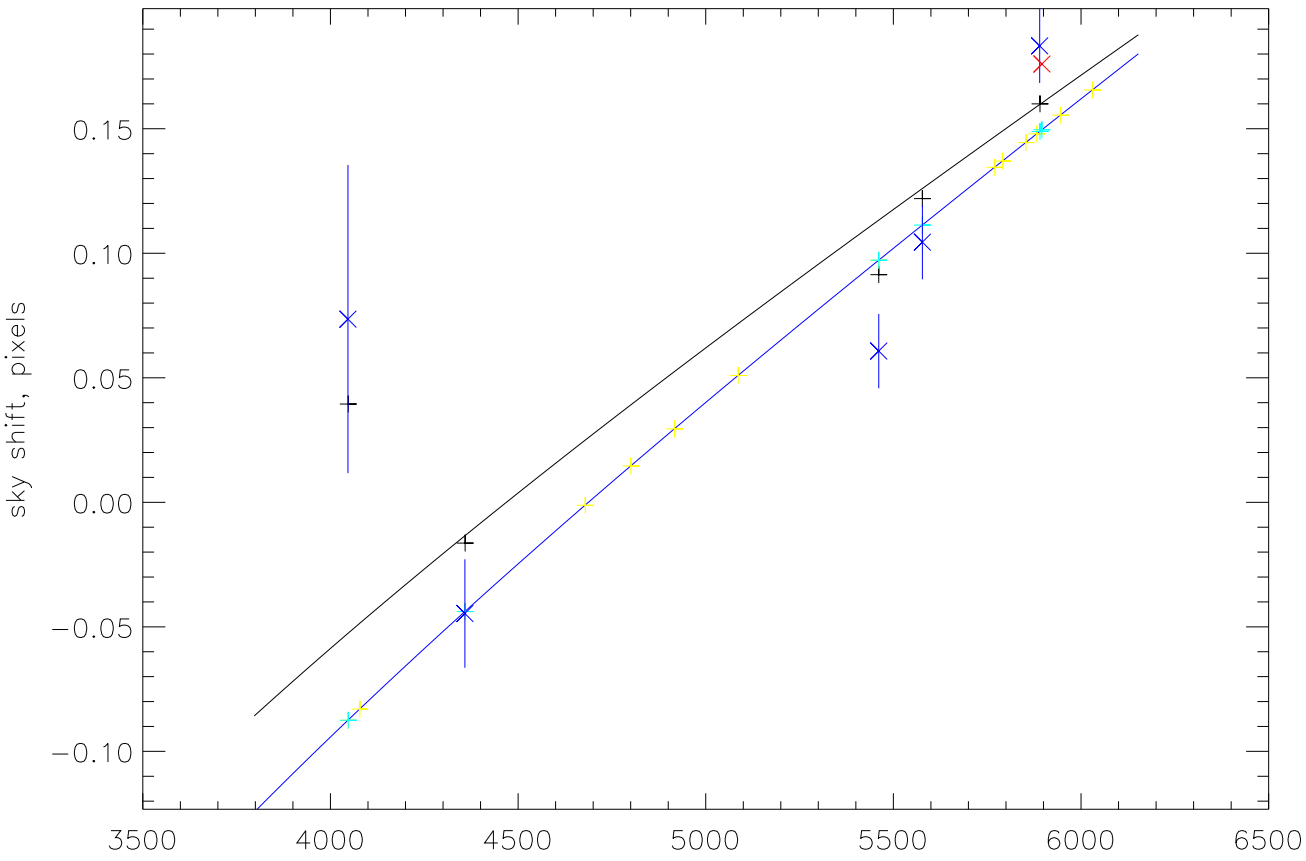

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

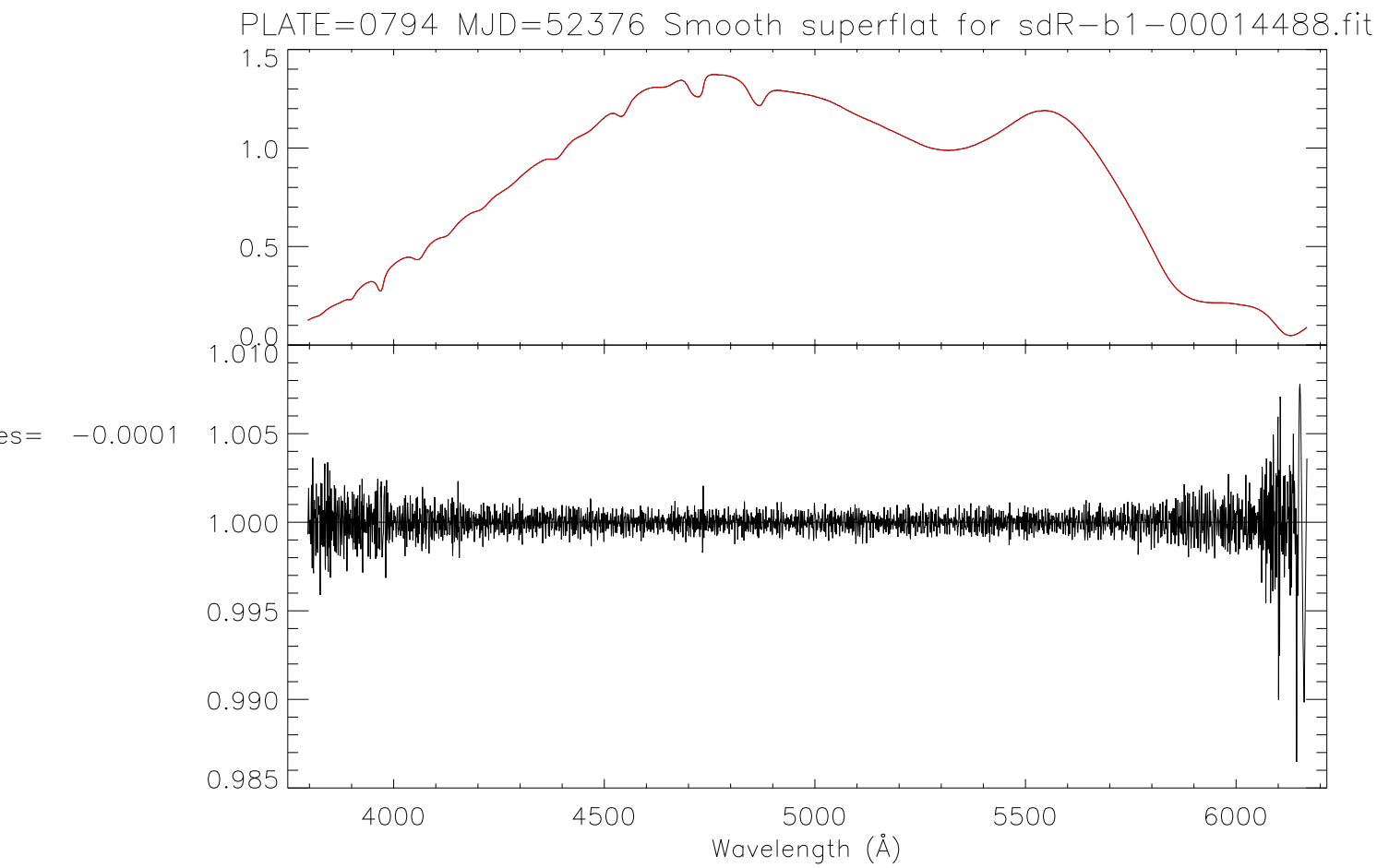

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

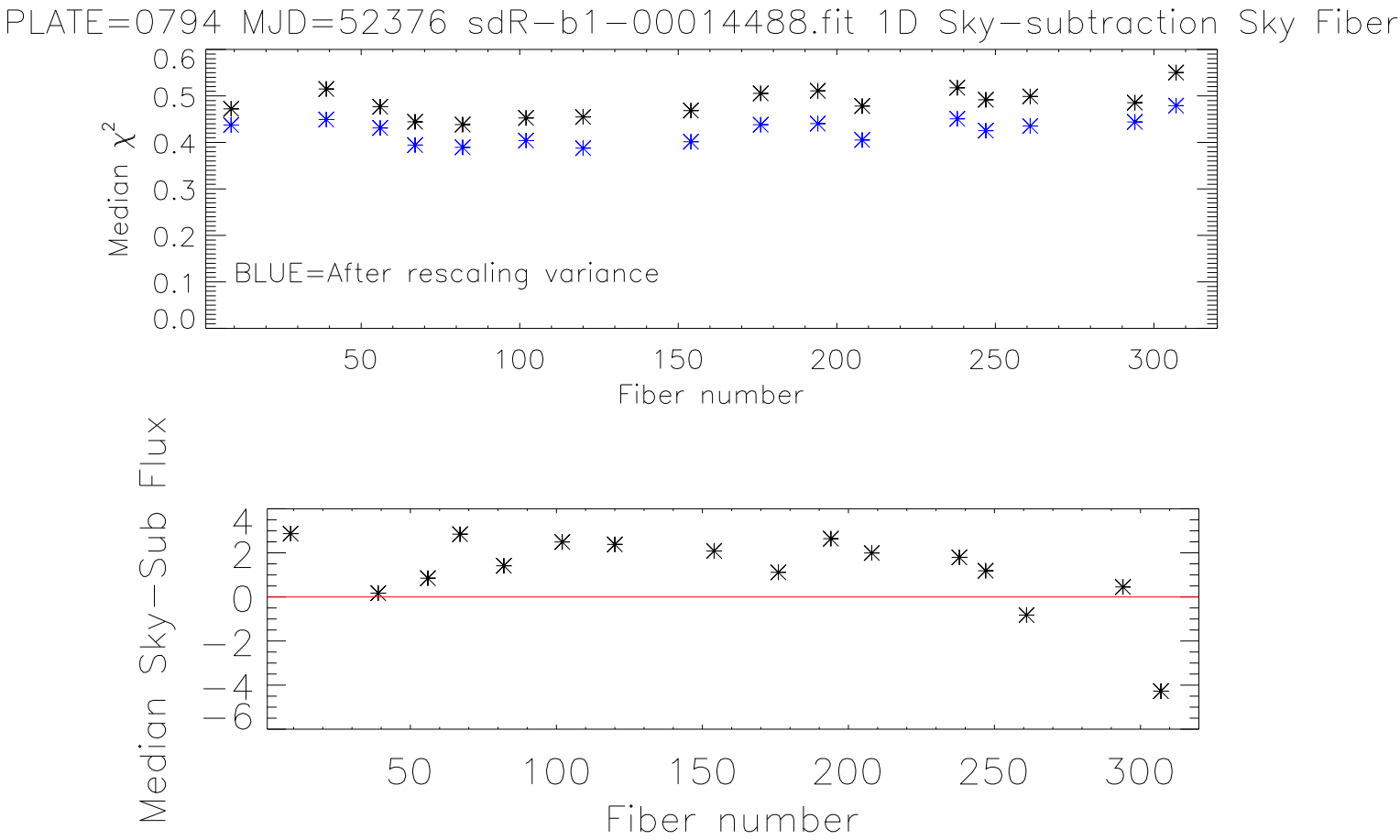

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

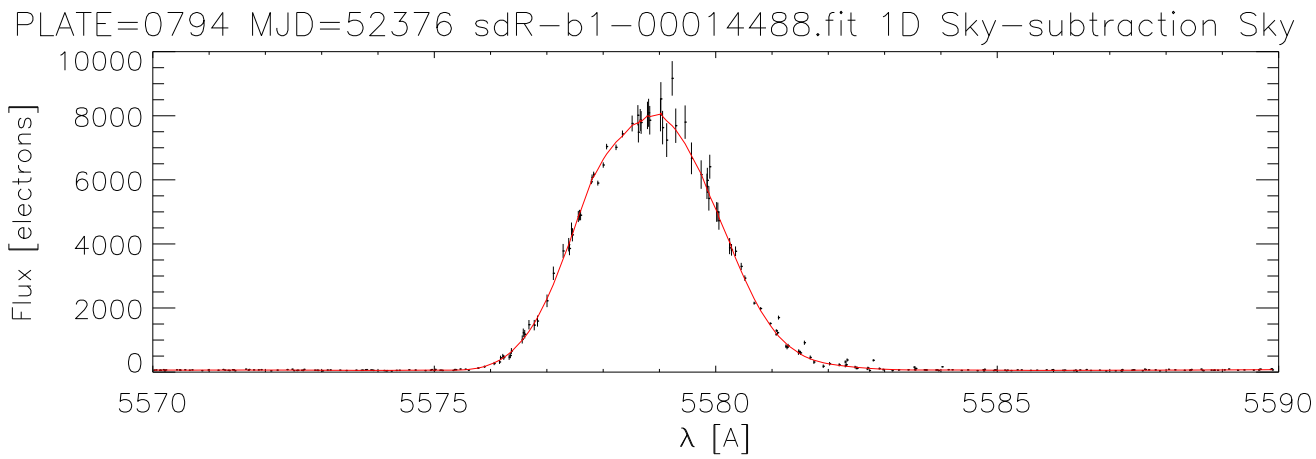

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

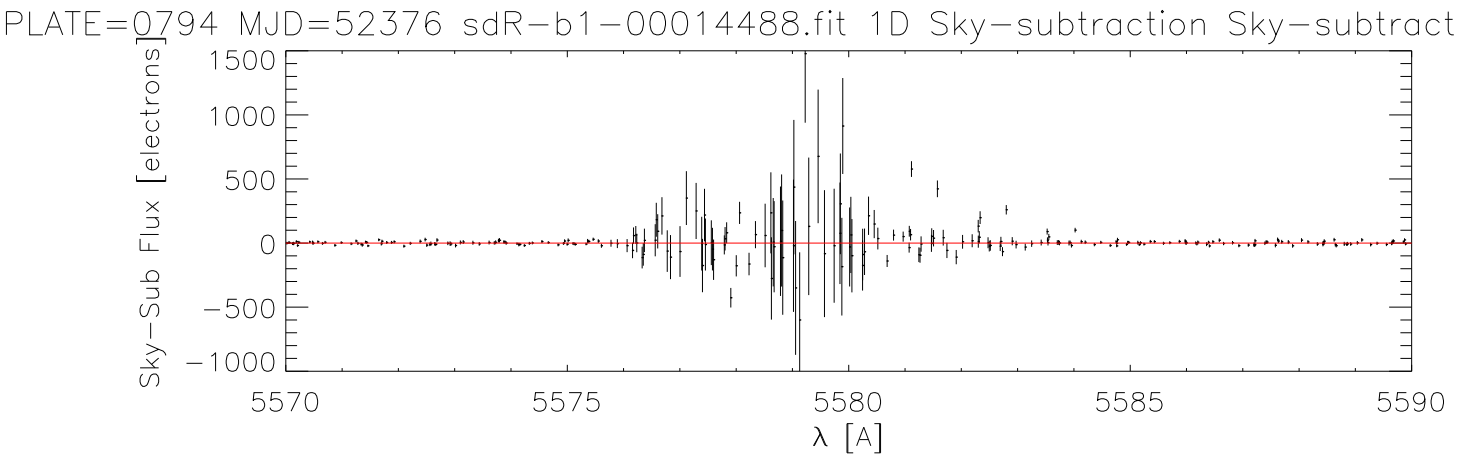

4046.5600
nfib1 15
nfib2 15
stdev 0.115
extra 0.07
4358.3300
nfib1 16
nfib2 16
stdev 0.054
extra −0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.035
extra 0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra 0.18
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

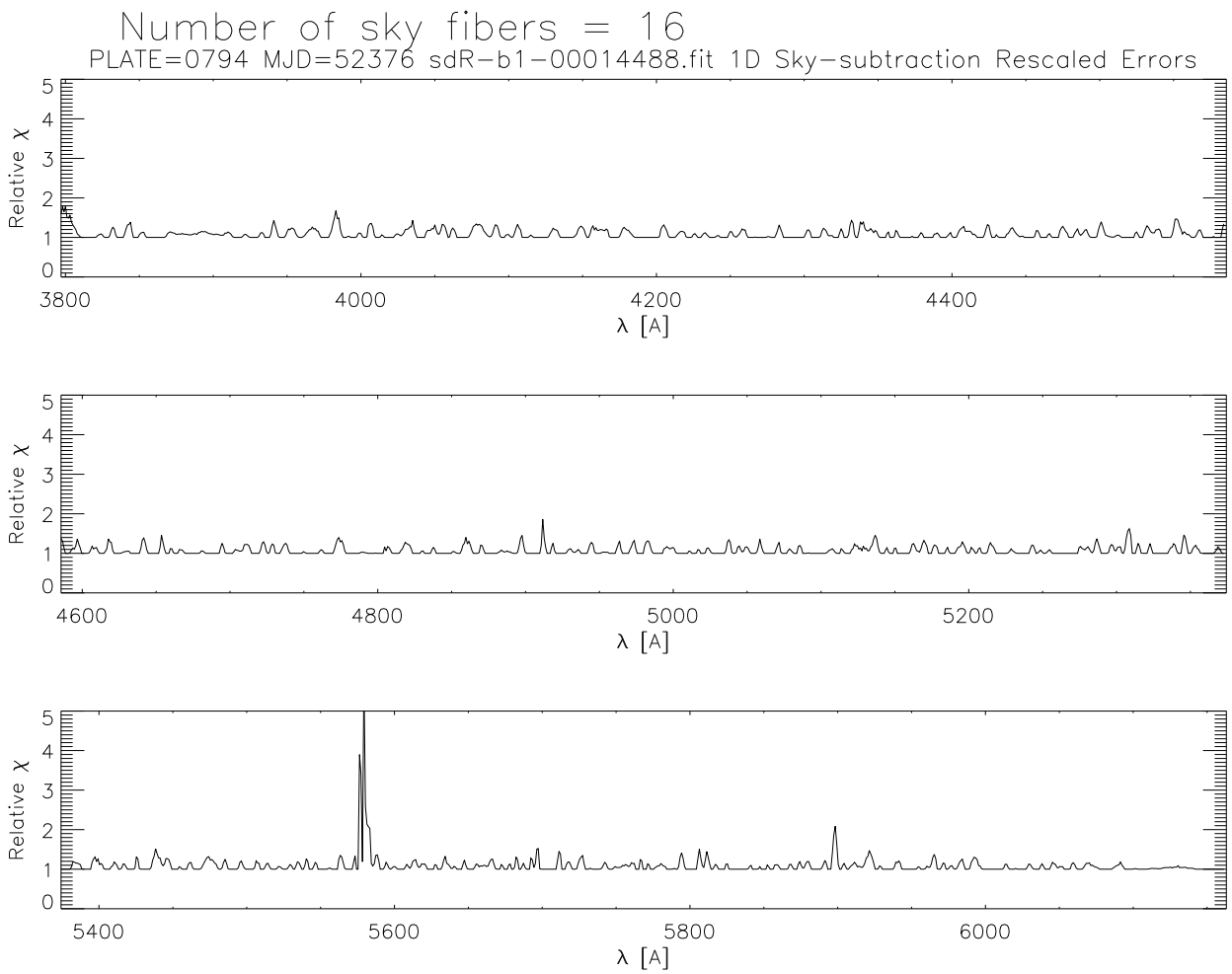

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

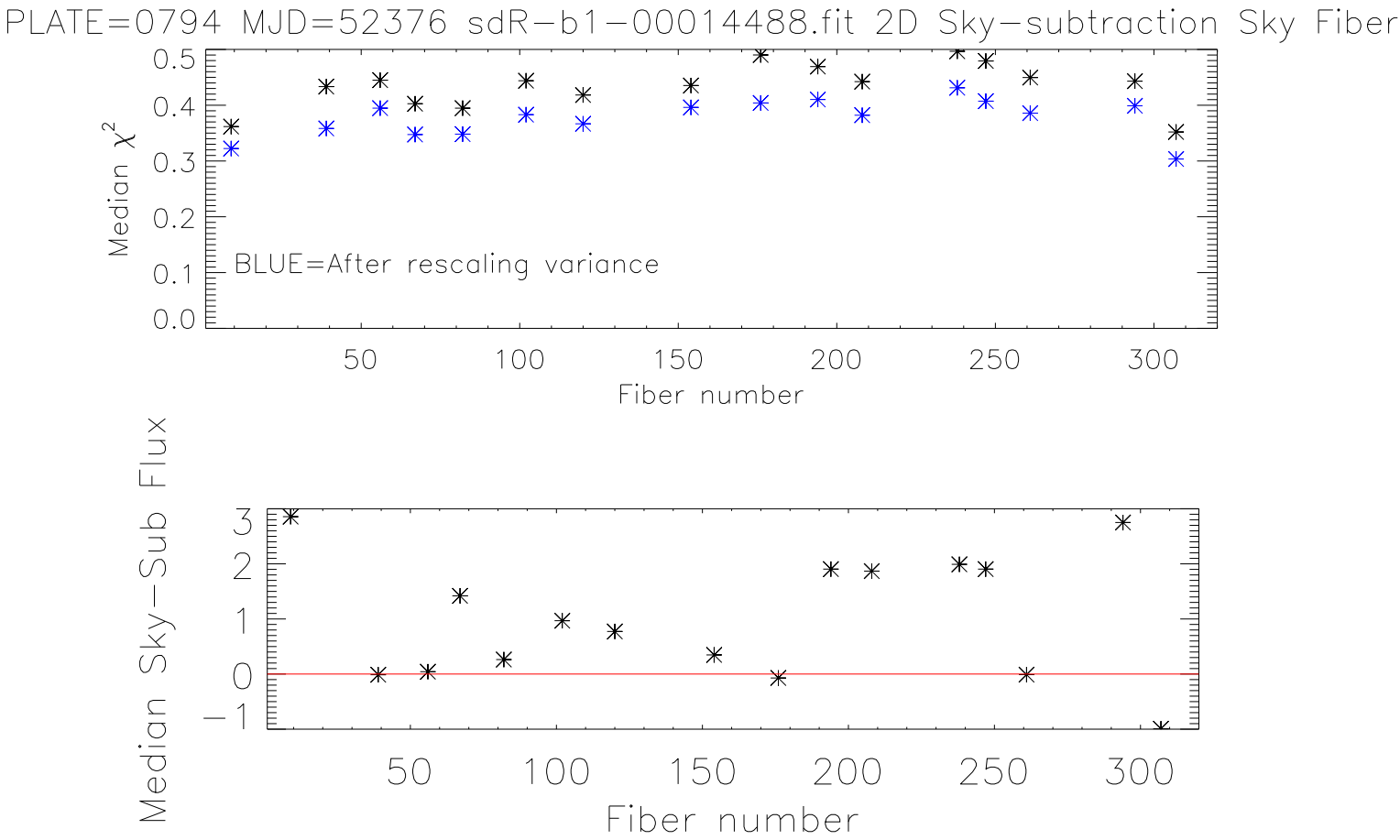

PLATE=0794 MJD=52376 Smooth superflat for sdR-b1-00014488.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

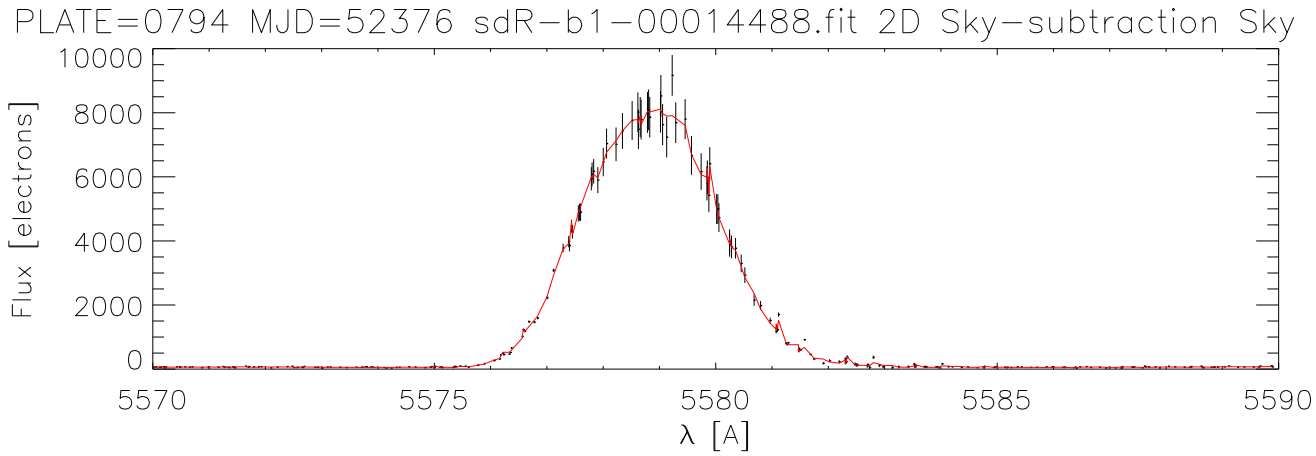

PLATE=0794 MJD=52376 sdR-b1-00014488.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

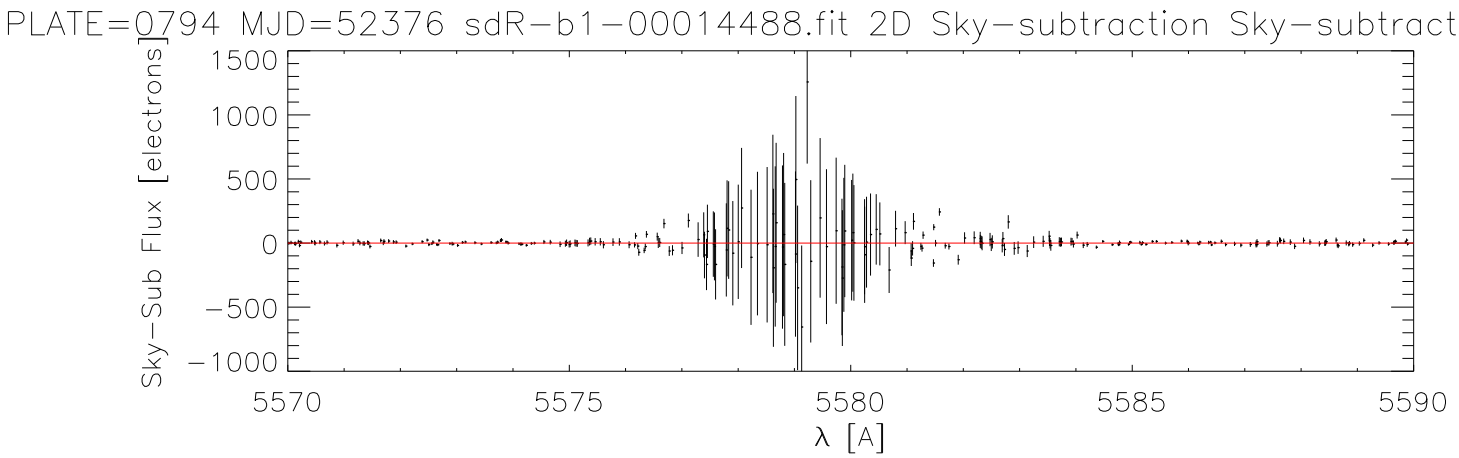

PLATE=0794 MJD=52376 sdR-b1-00014488.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

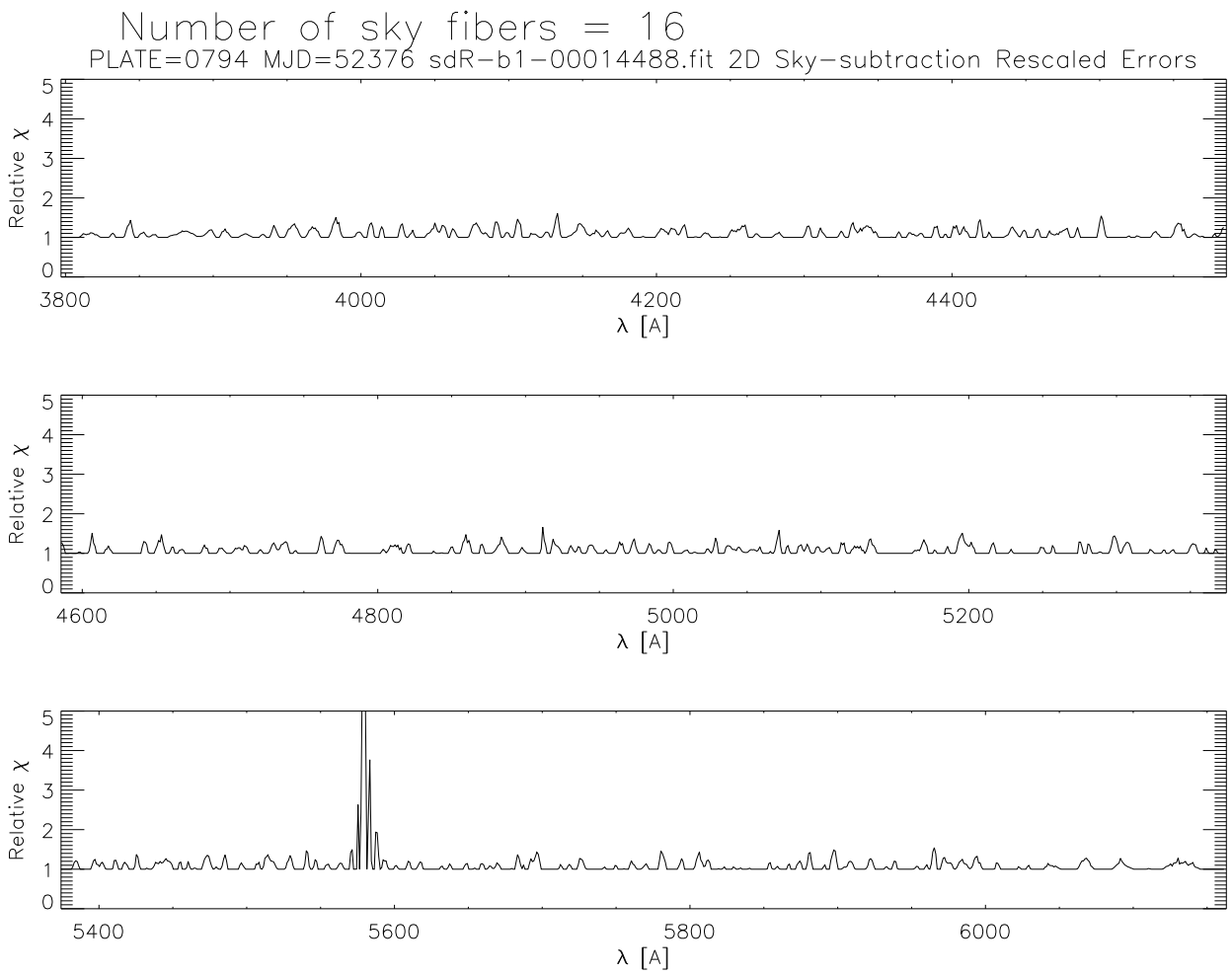

PLATE=0794 MJD=52376 sdR-b1-00014488.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

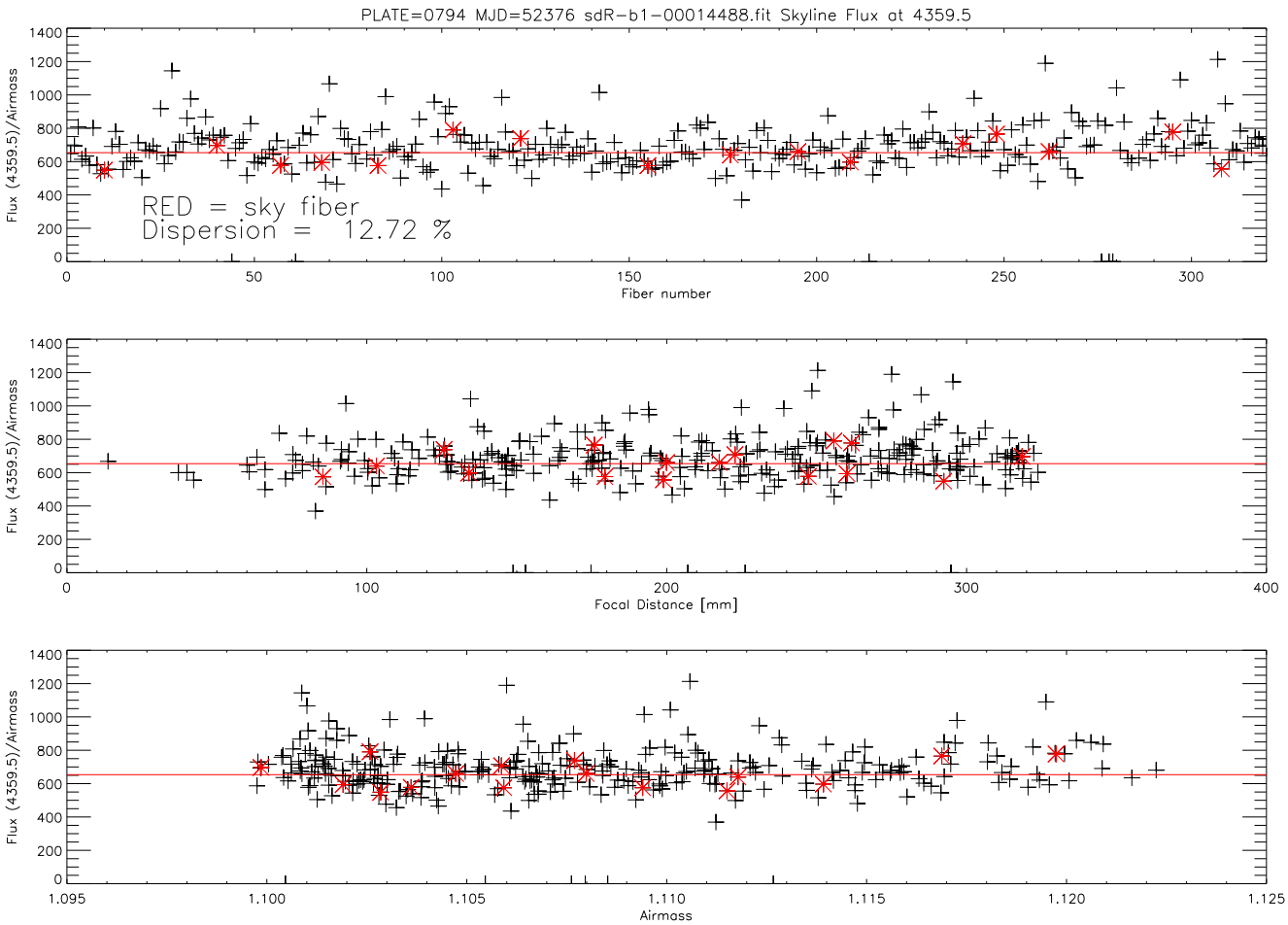

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b1-00014488.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

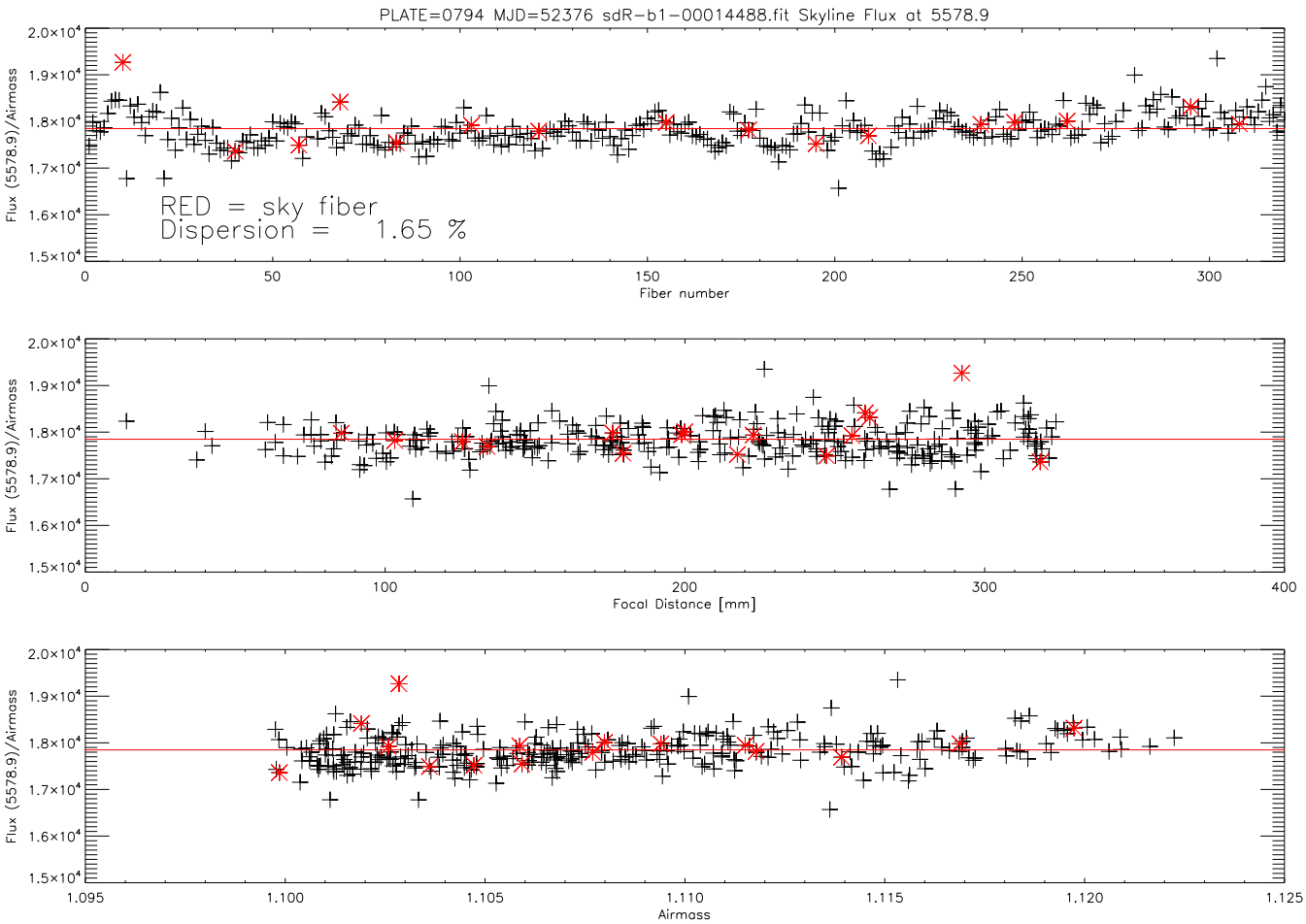

PLATE=0794 MJD=52376 sdR-b1-00014488.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

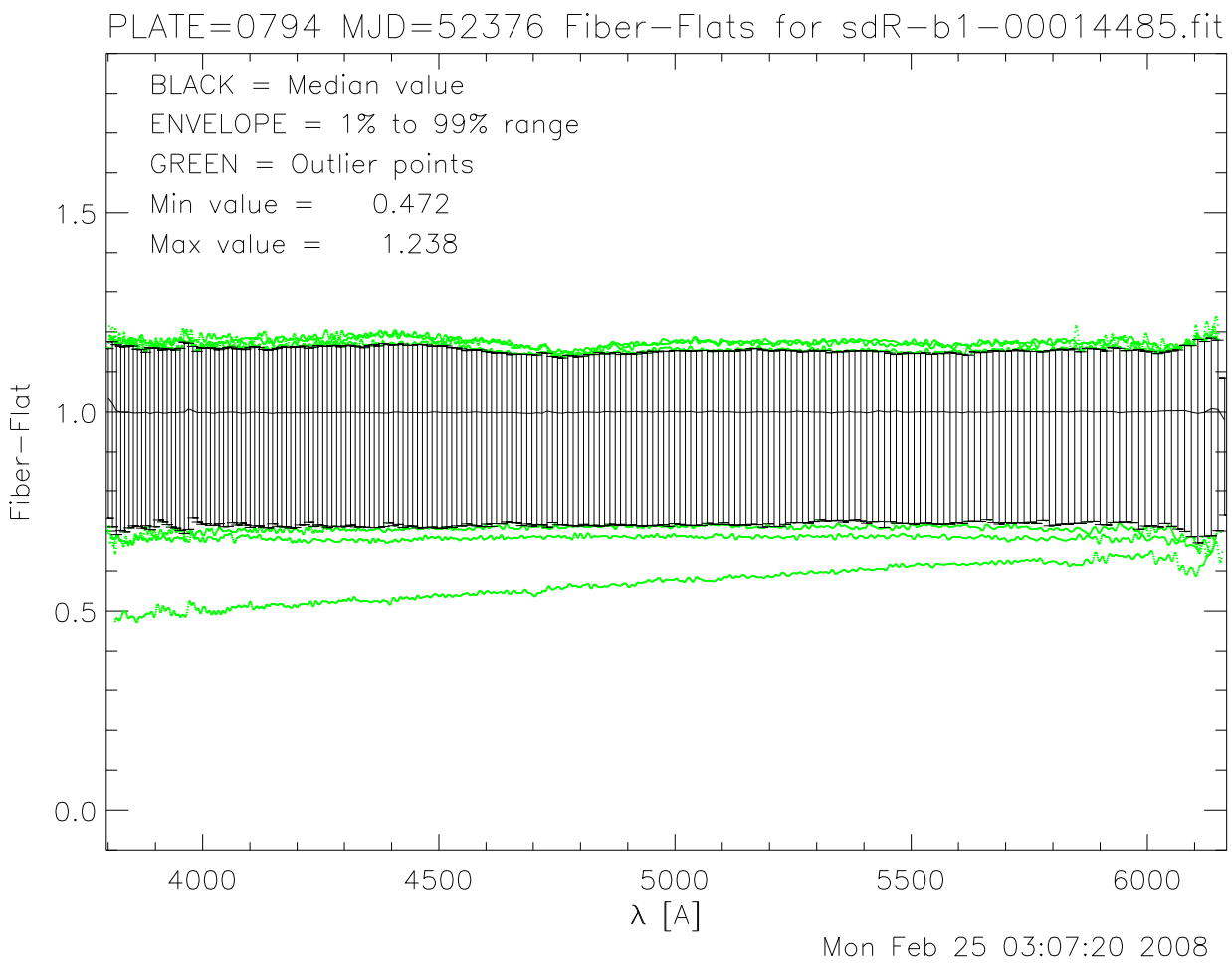

PLATE=0794 MJD=52376 sdR-b1-00014488.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=0794 MJD=52376 sdR-b1-00014488.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b1-00014488.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5


PLATE=0794 MJD=52376 sdR-b1-00014488.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.72 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=0794 MJD=52376 sdR-b1-00014488.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.65 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=0794 MJD=52376 Fiber-Flats for sdR-b1-00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.472
Max value = 1.238
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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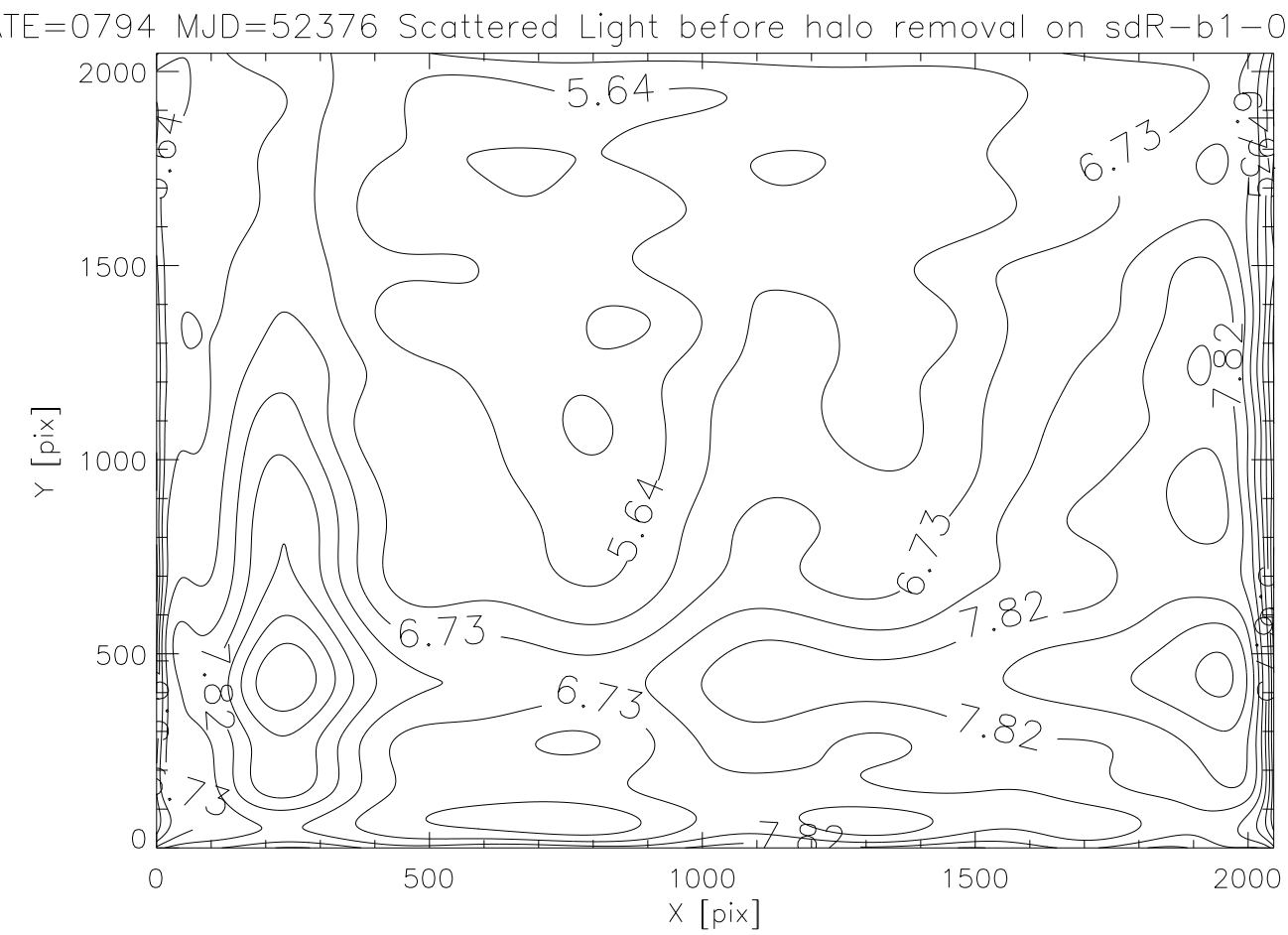
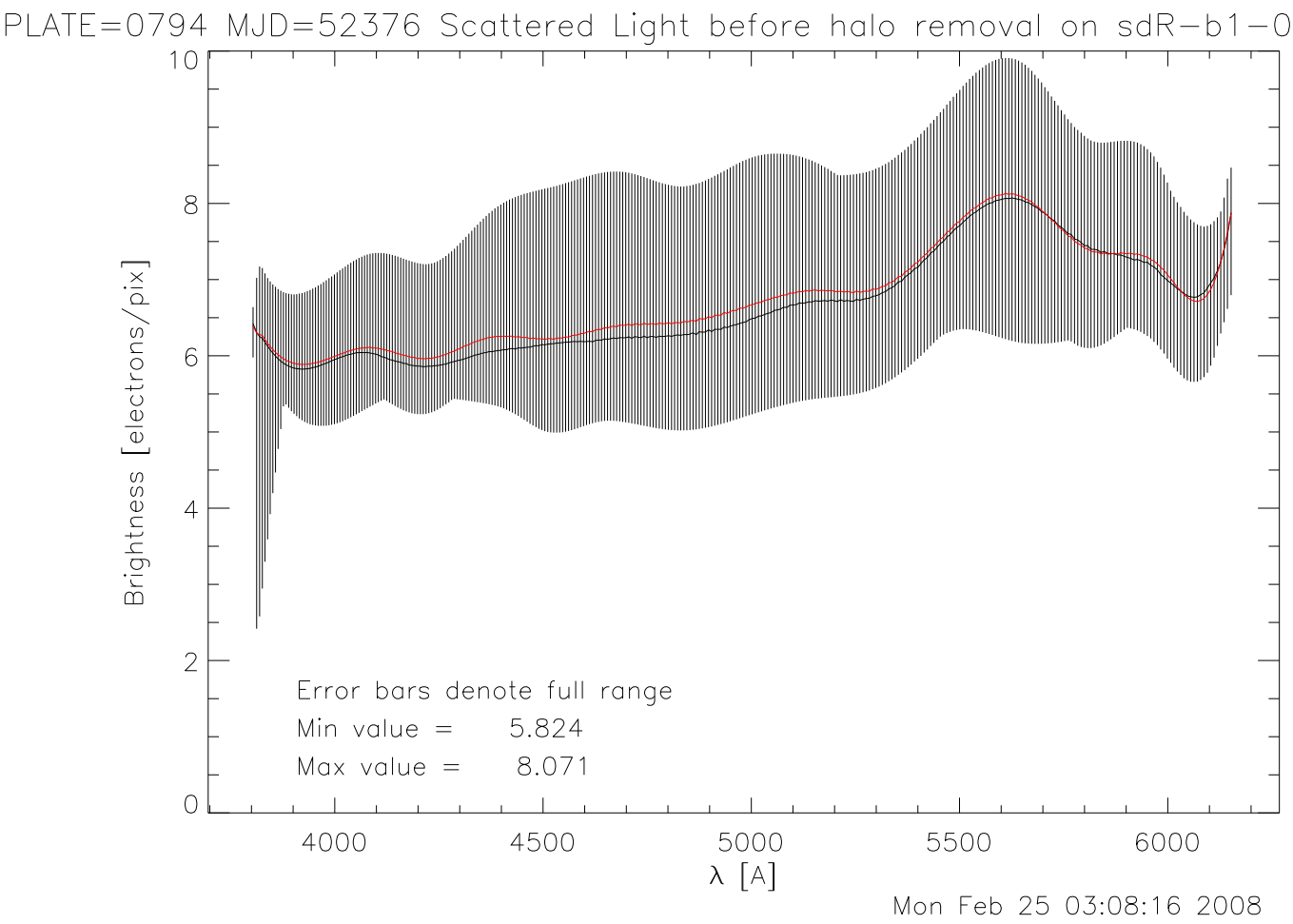
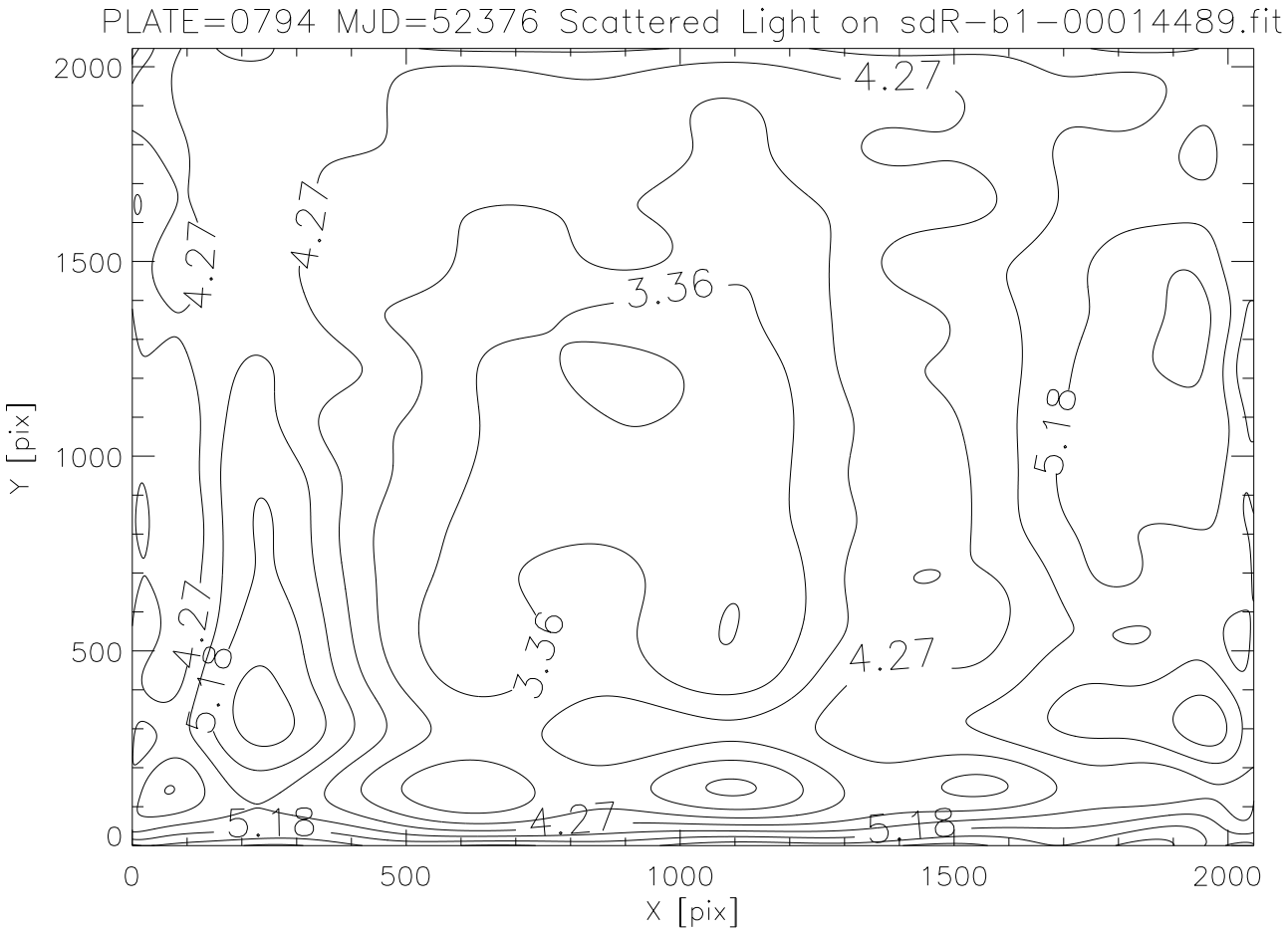
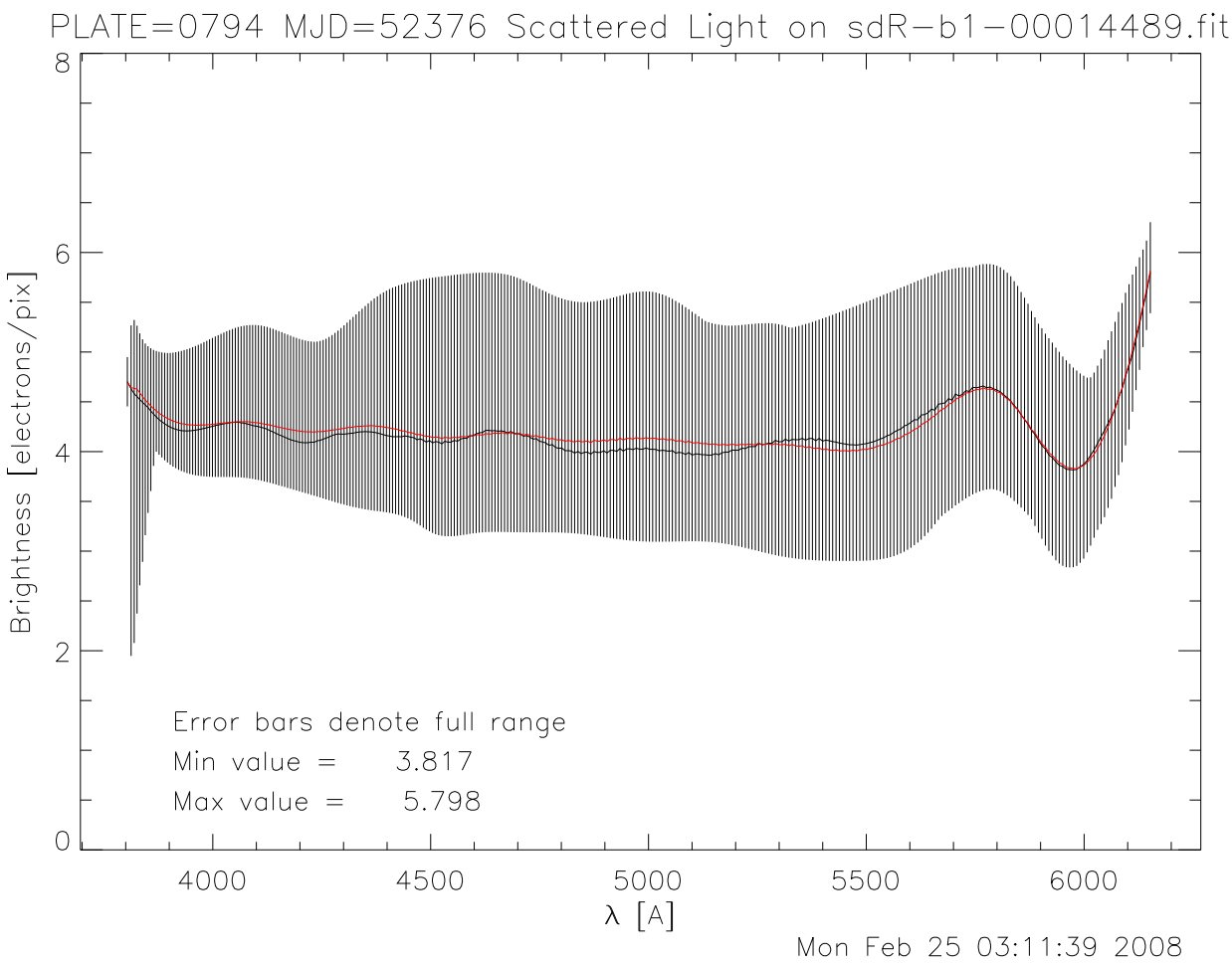
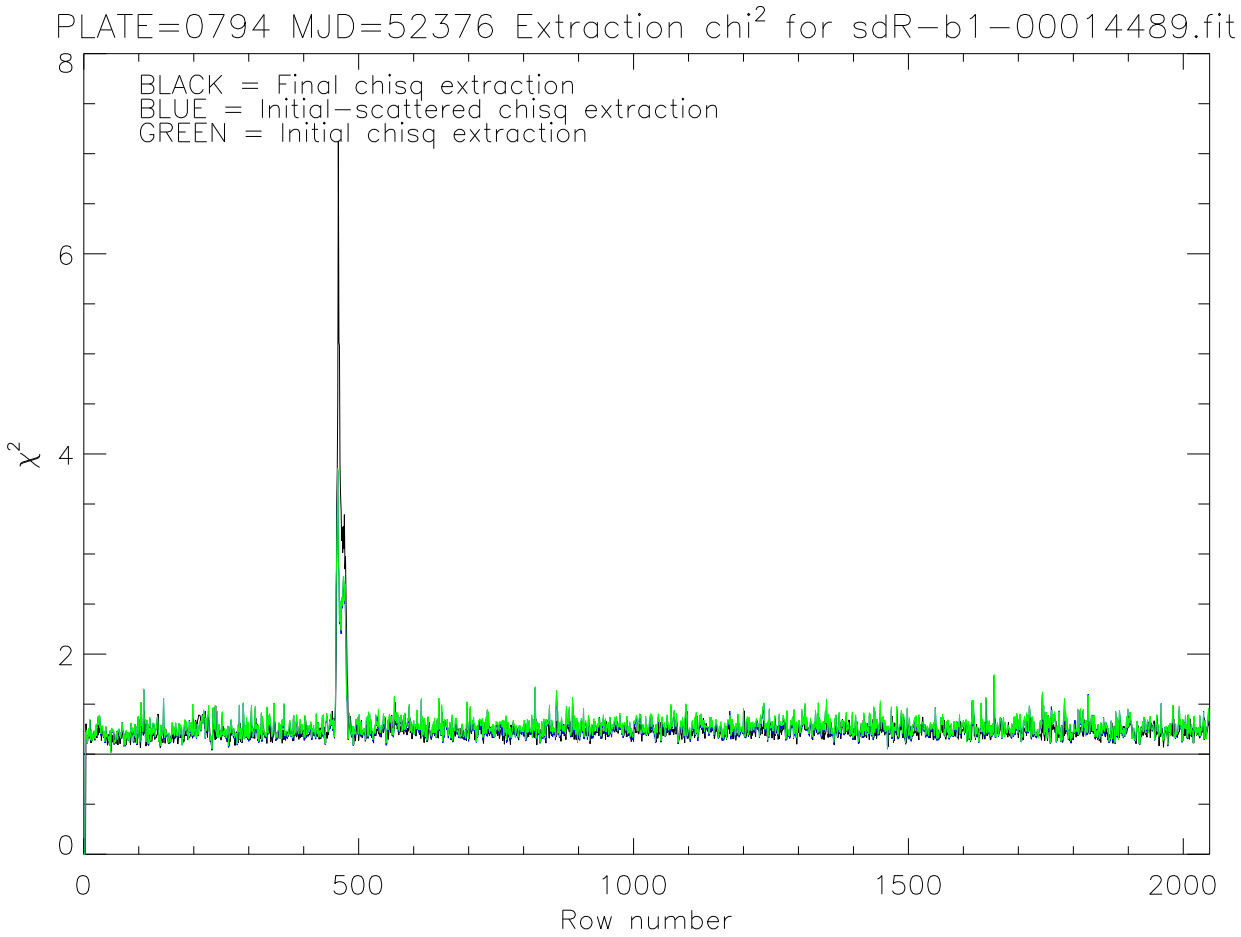
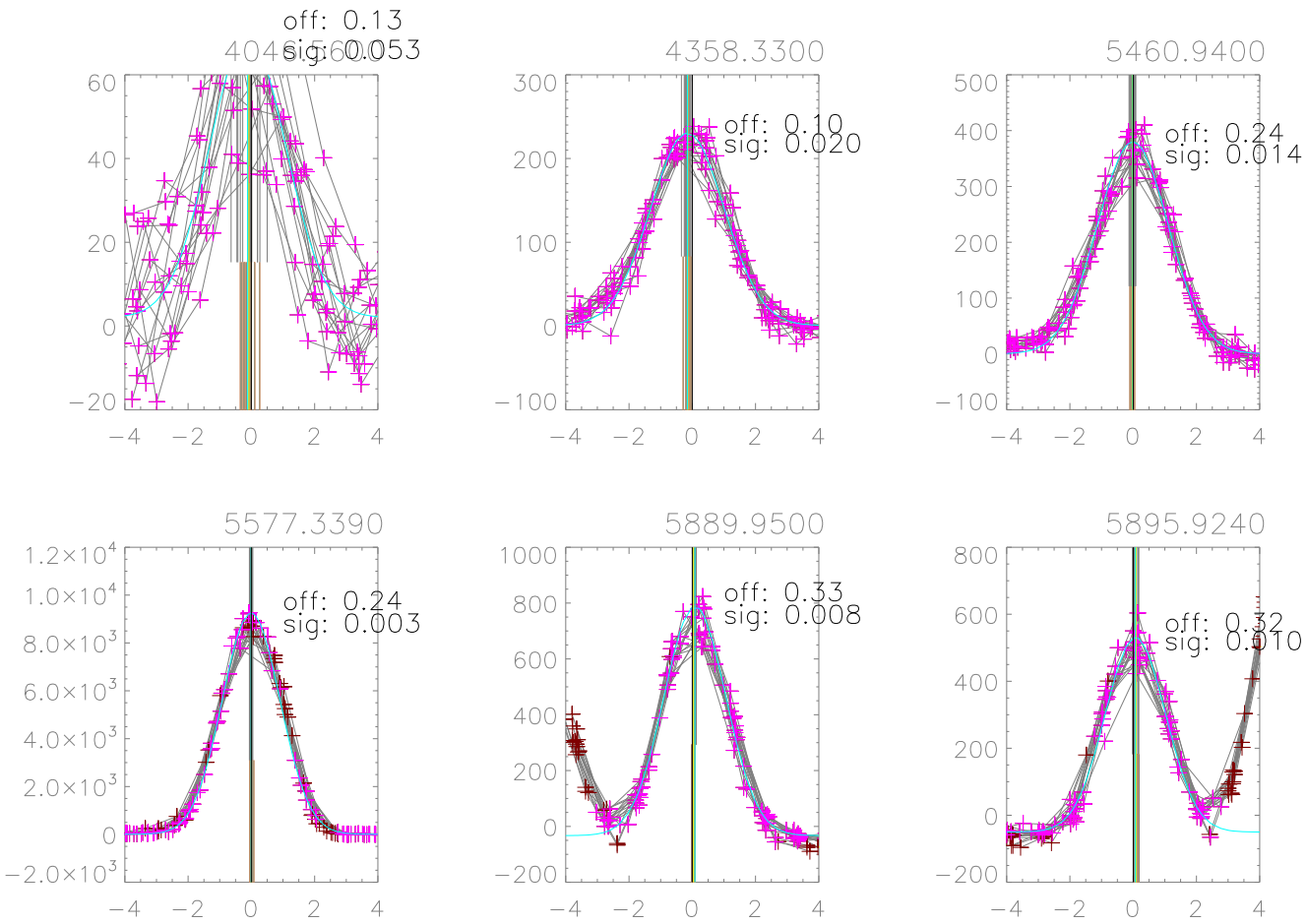

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR−b1−00014489.f
5.64
6.73
7.82
Y [pix]
X [pix]
0
500
1000
1500
2000

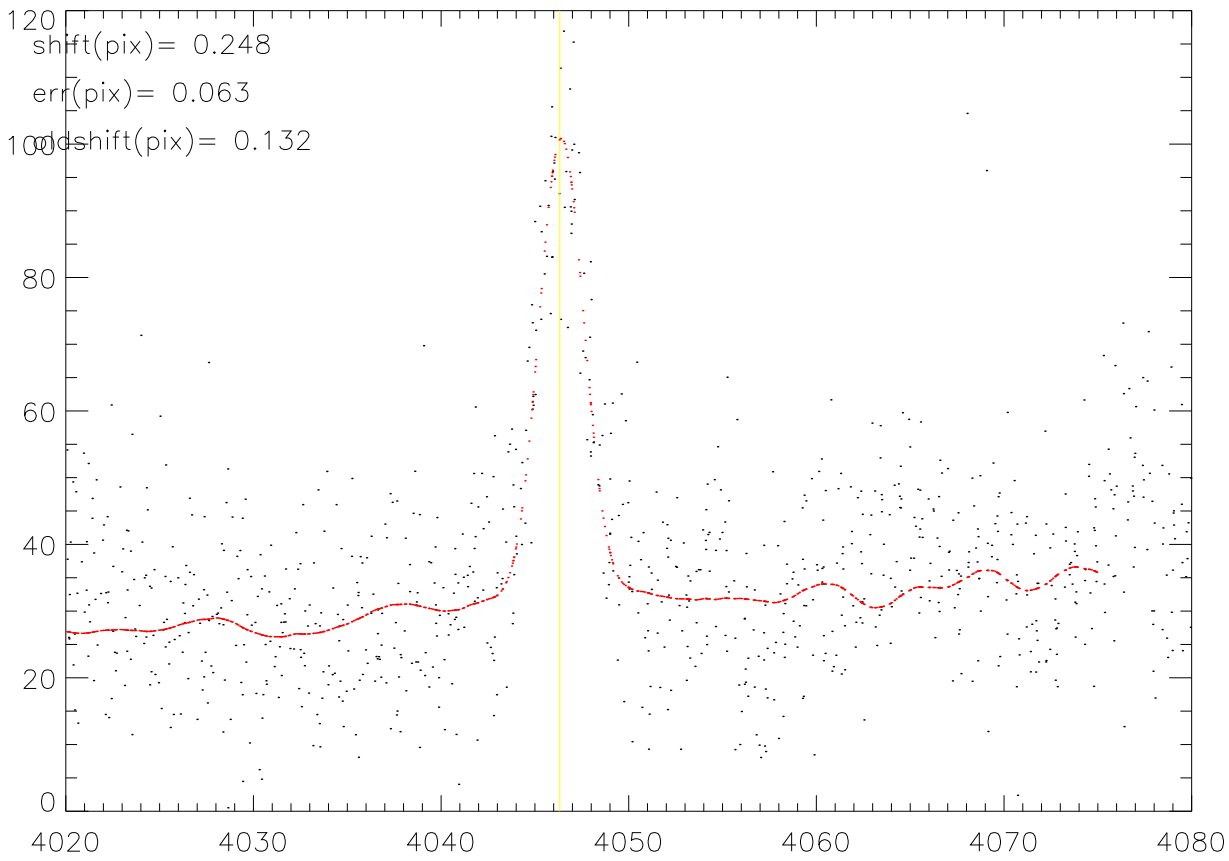

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR−b1−00014489.f
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.824
Max value = 8.071
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:08:16 2008

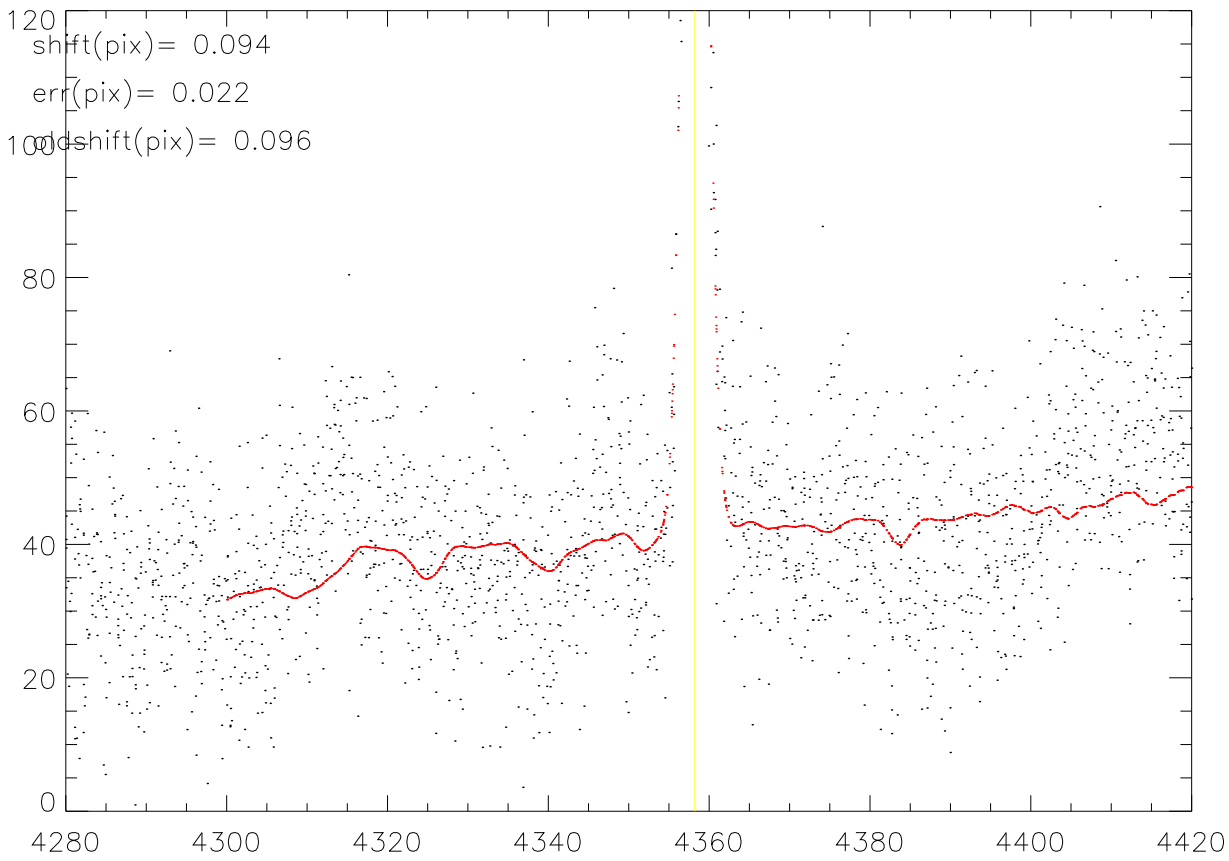

PLATE=0794 MJD=52376 Scattered Light on sdR-b1-00014489.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.27
3.36
5.18
0

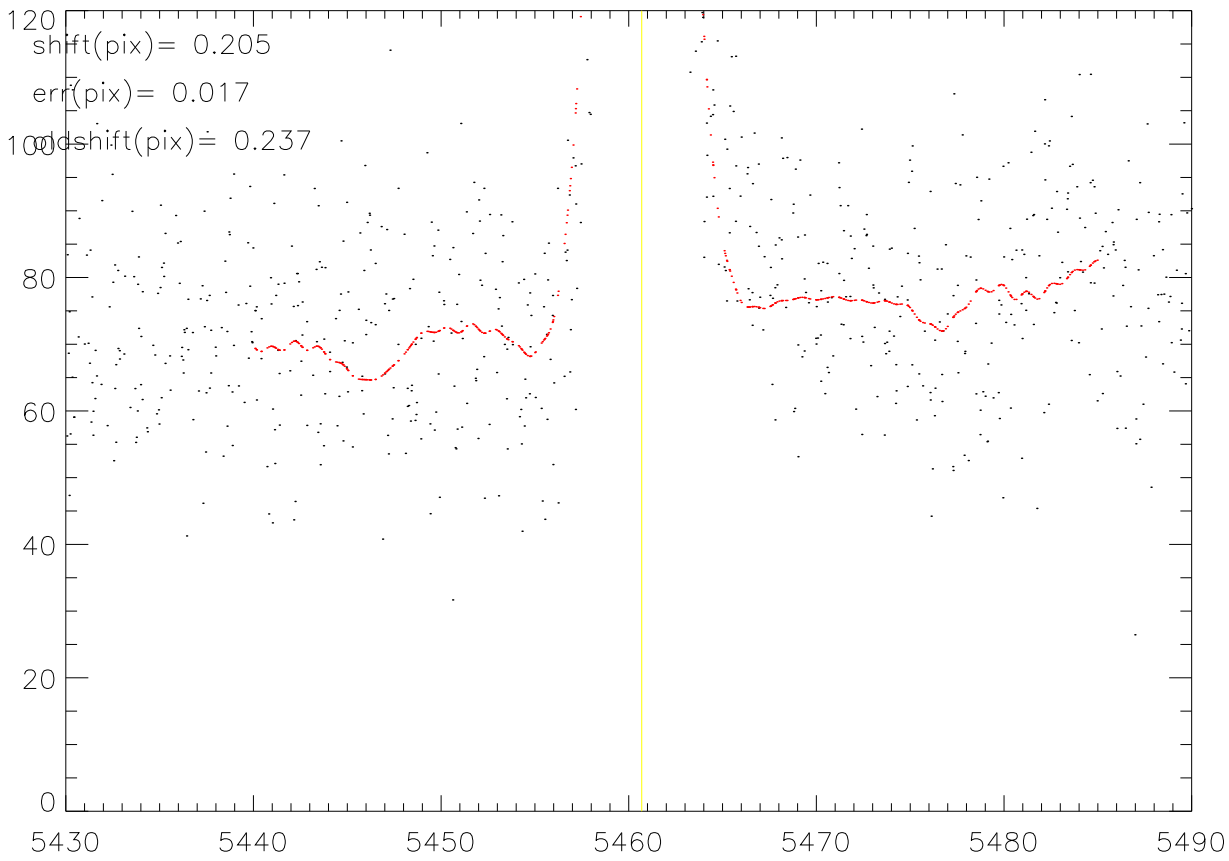

PLATE=0794 MJD=52376 Scattered Light on sdR-b1-00014489.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.817
Max value = 5.798
Mon Feb 25 03:11:39 2008

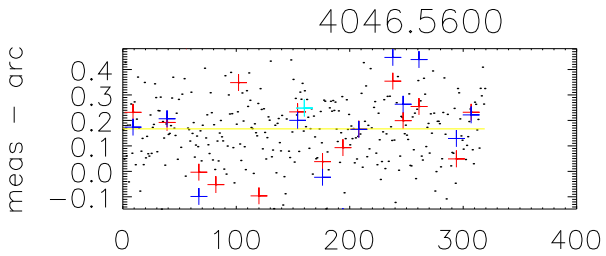

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-b1-00014489.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

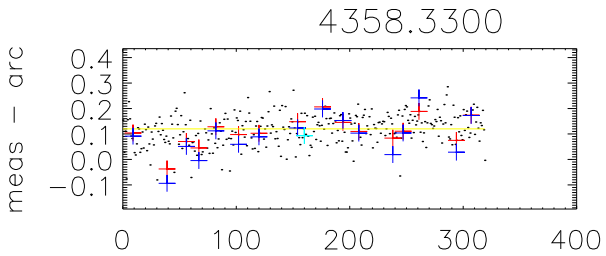

4046.5600
off: 0.13
sig: 0.053
4358.3300
off: 0.10
sig: 0.020
5460.9400
off: 0.24
sig: 0.014
5577.3390
off: 0.24
sig: 0.003
5889.9500
off: 0.33
sig: 0.008
5895.9240
off: 0.32
sig: 0.010

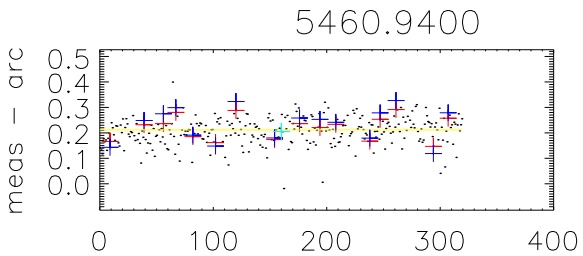

shift(pix)= 0.248
err(pix)= 0.063
oldshift(pix)= 0.132
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

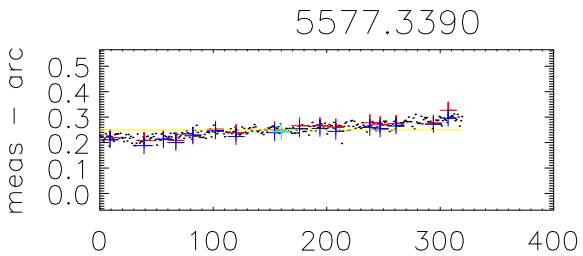

shift(pix)= 0.094
err(pix)= 0.022
oldshift(pix)= 0.096
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

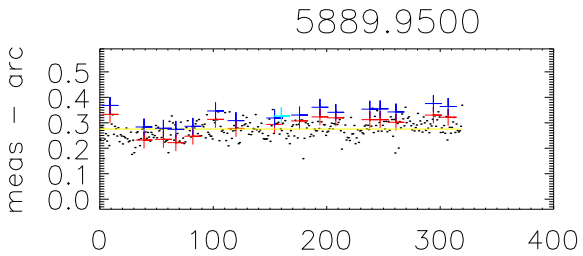

shift(pix)= 0.205
err(pix)= 0.017
oldshift(pix)= 0.237
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

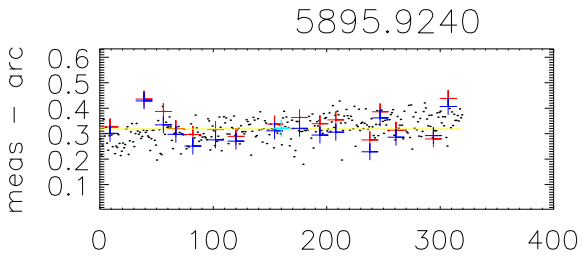

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

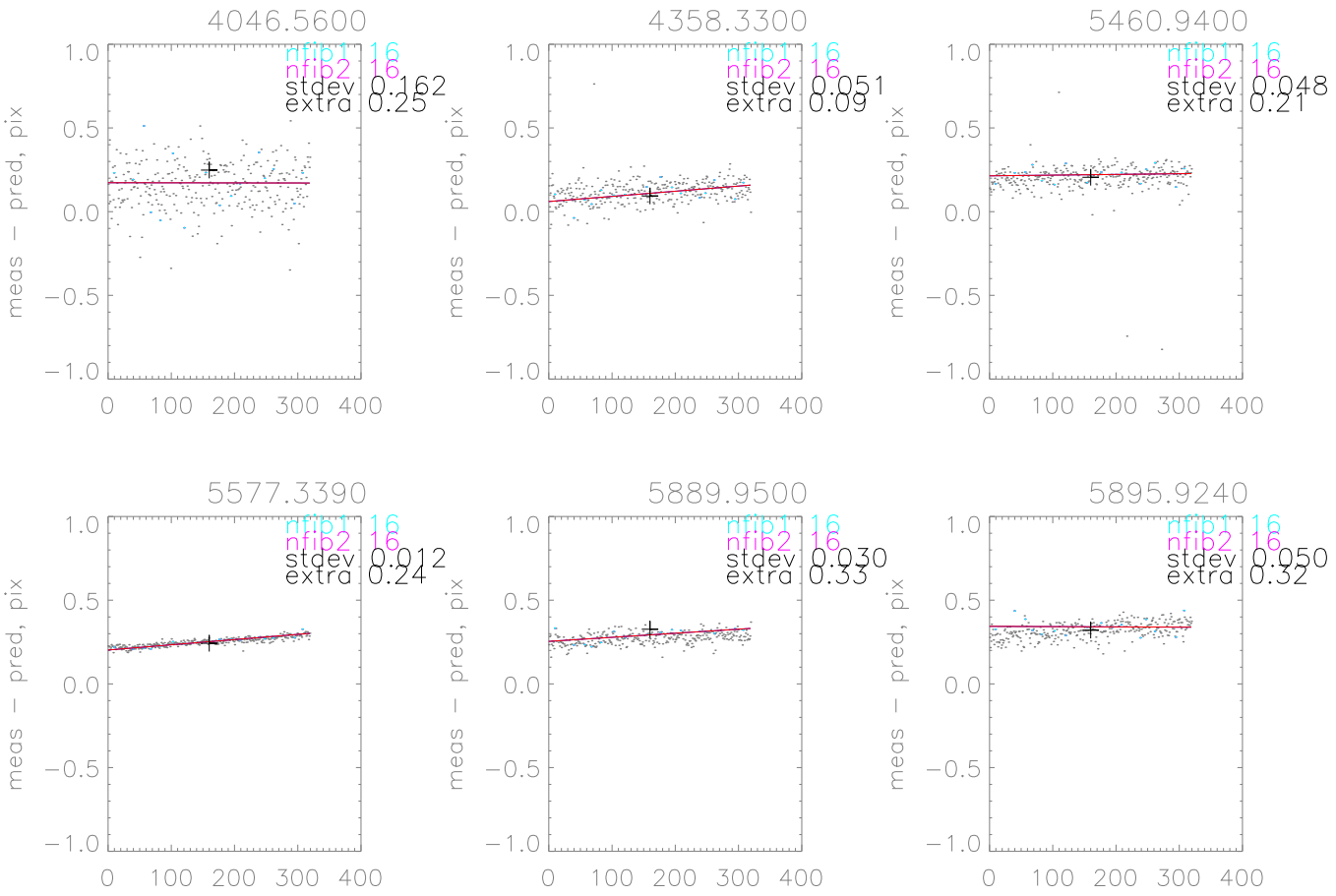

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

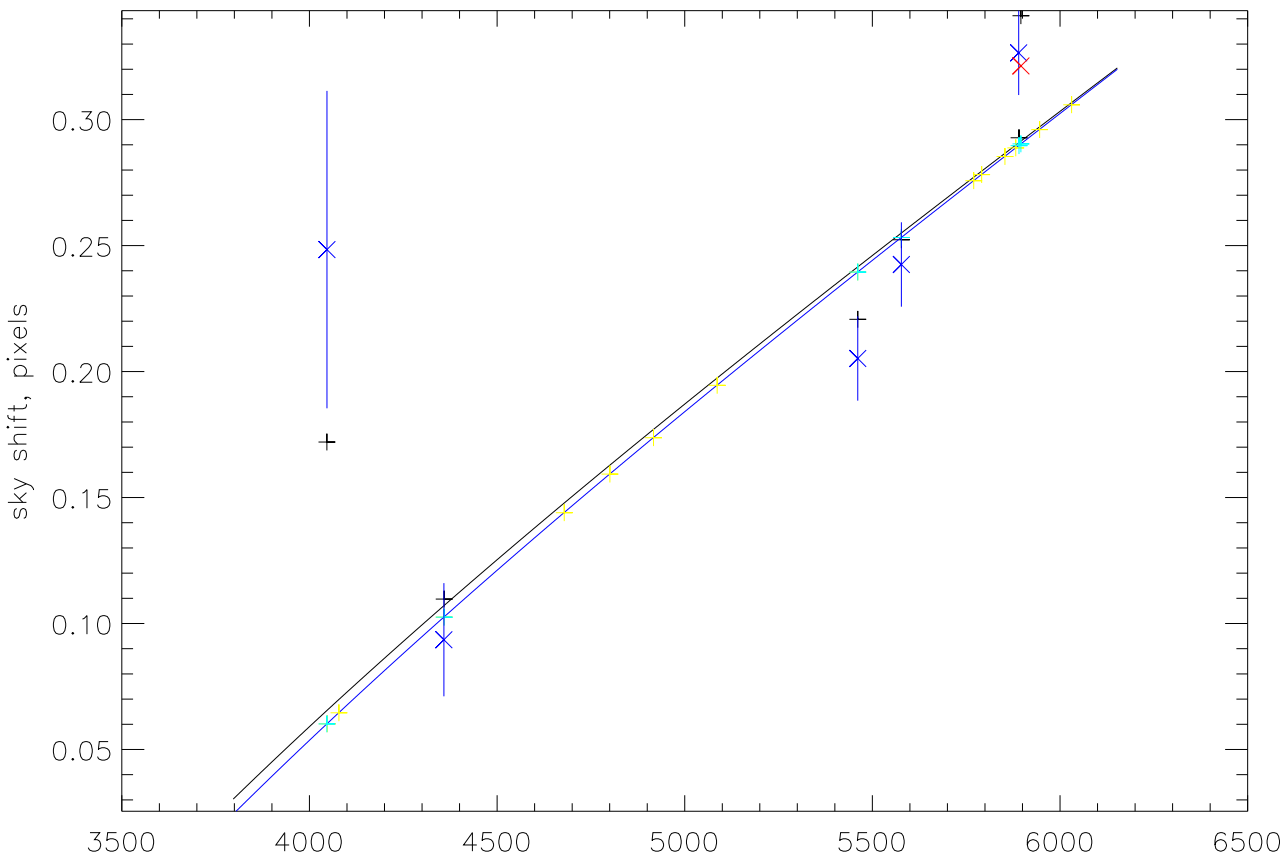

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

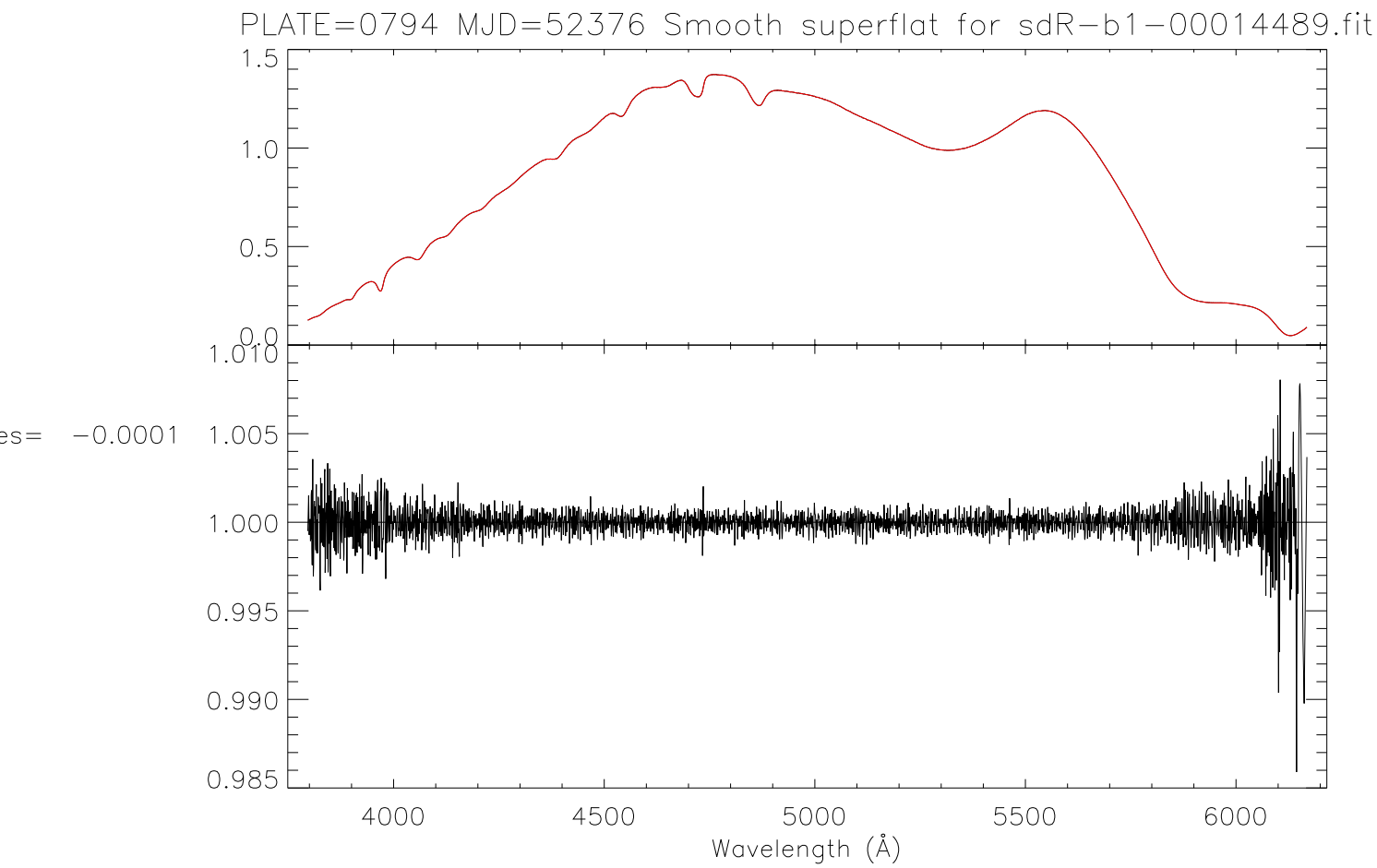

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

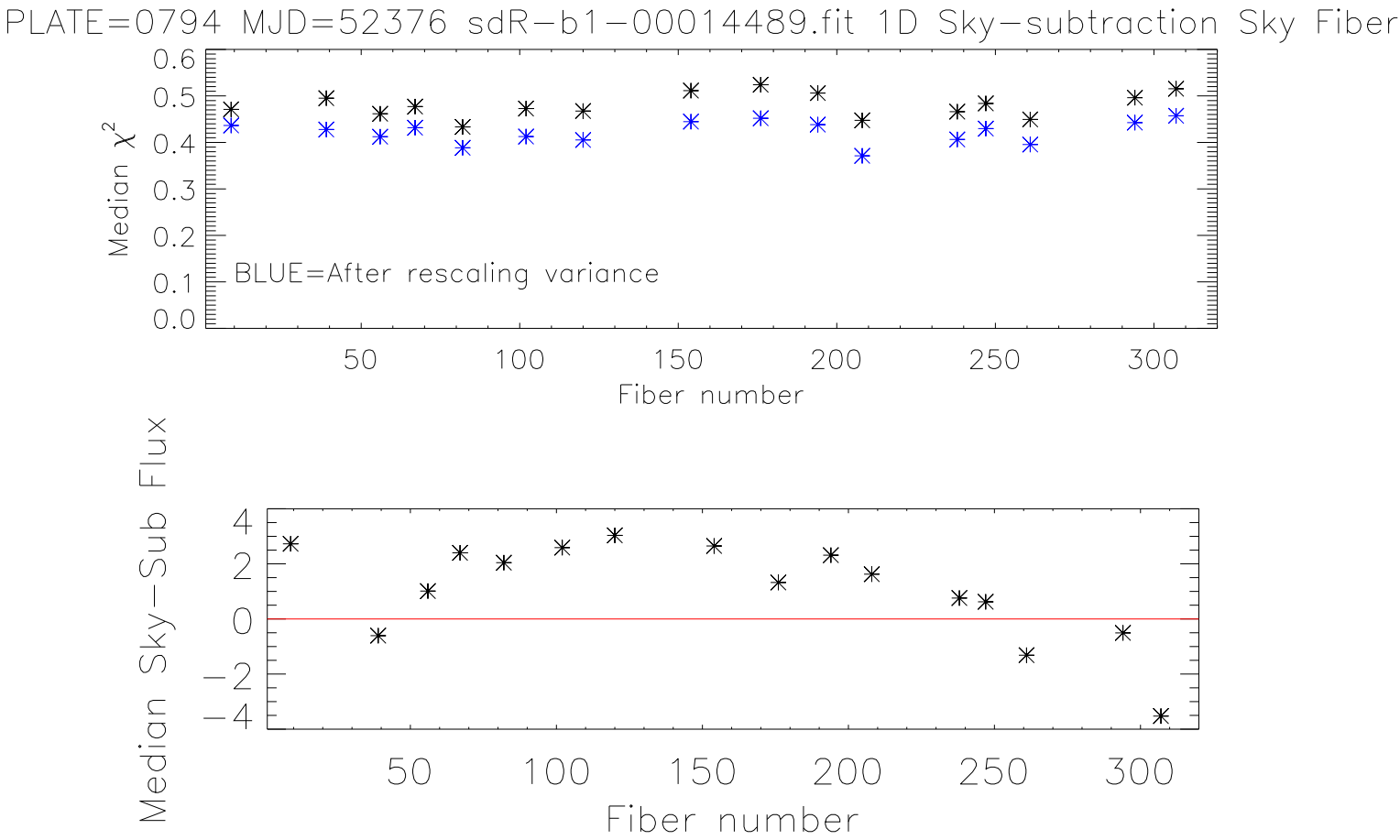

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

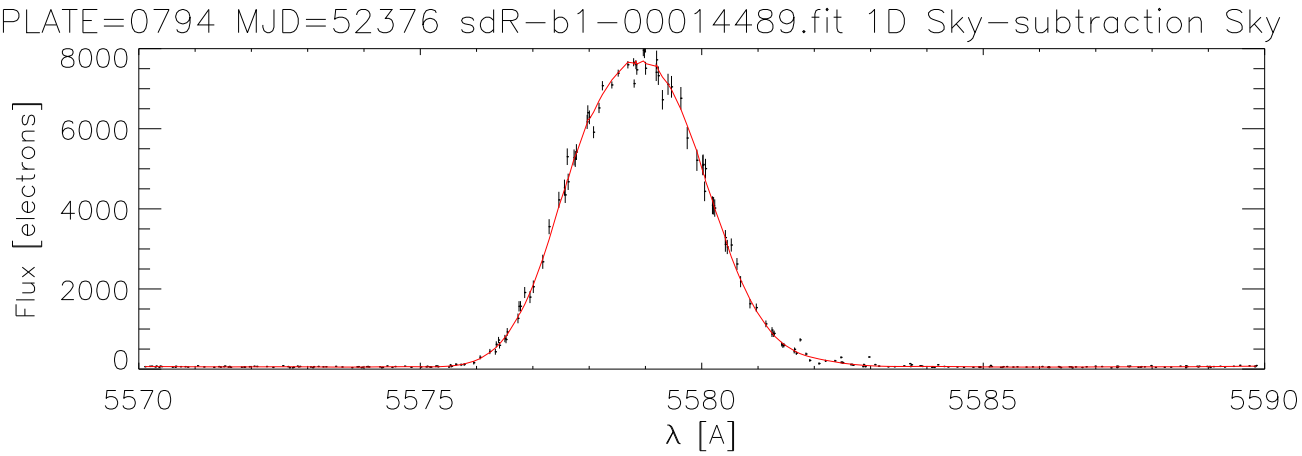

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

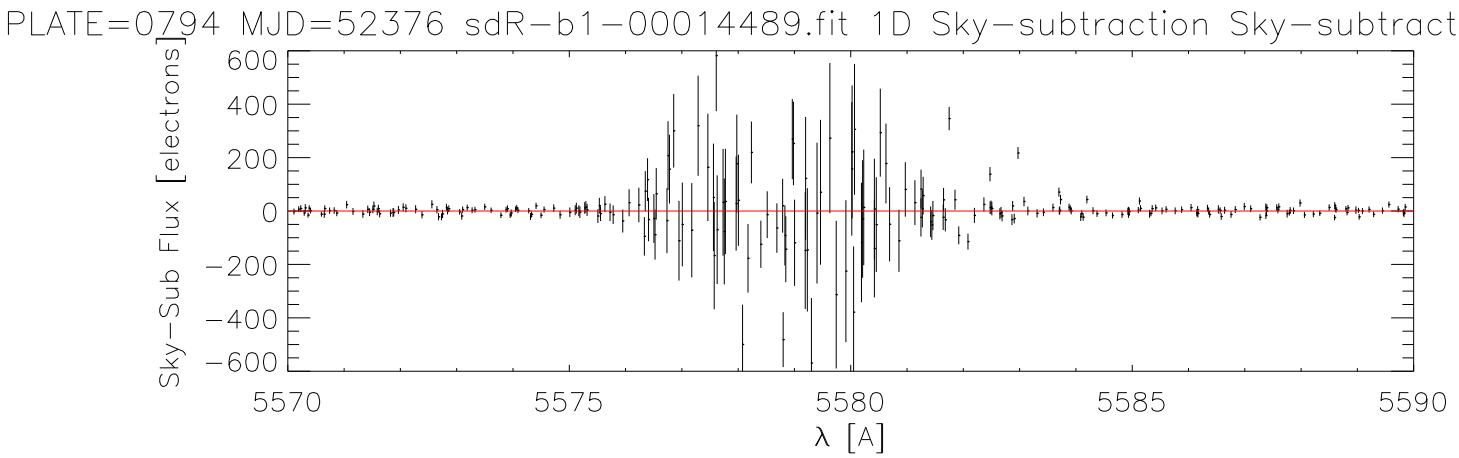

4046.5600
nfib1 16
nfib2 16
stdev 0.162
extra 0.25
4358.3300
nfib1 16
nfib2 16
stdev 0.051
extra 0.09
5460.9400
nfib1 16
nfib2 16
stdev 0.048
extra 0.21
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.24
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra 0.33
5895.9240
nfib1 16
nfib2 16
stdev 0.050
extra 0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

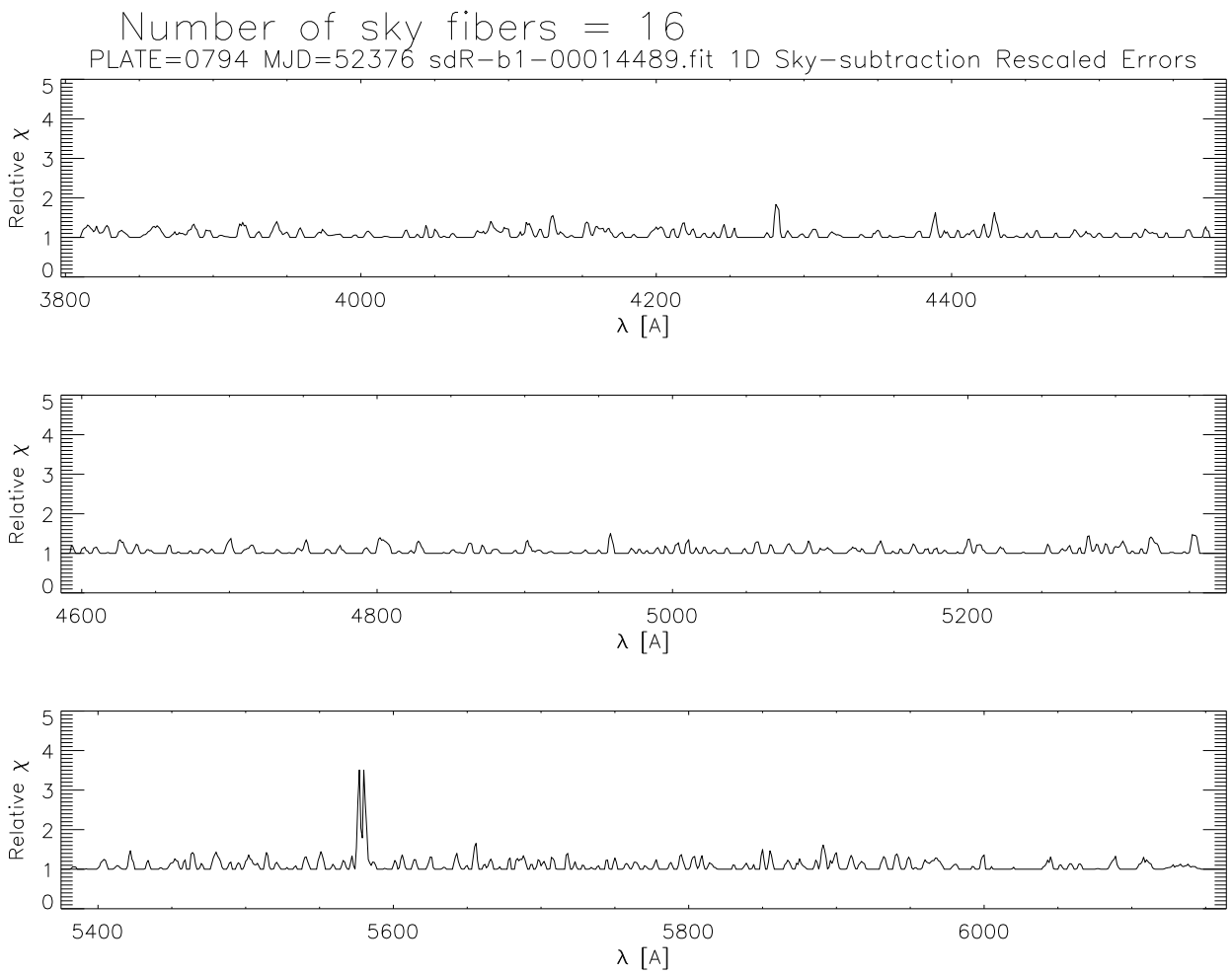

sky shift, pixels
0.30
0.25
0.20
0.15
0.10
0.05
3500
4000
4500
5000
5500
6000
6500

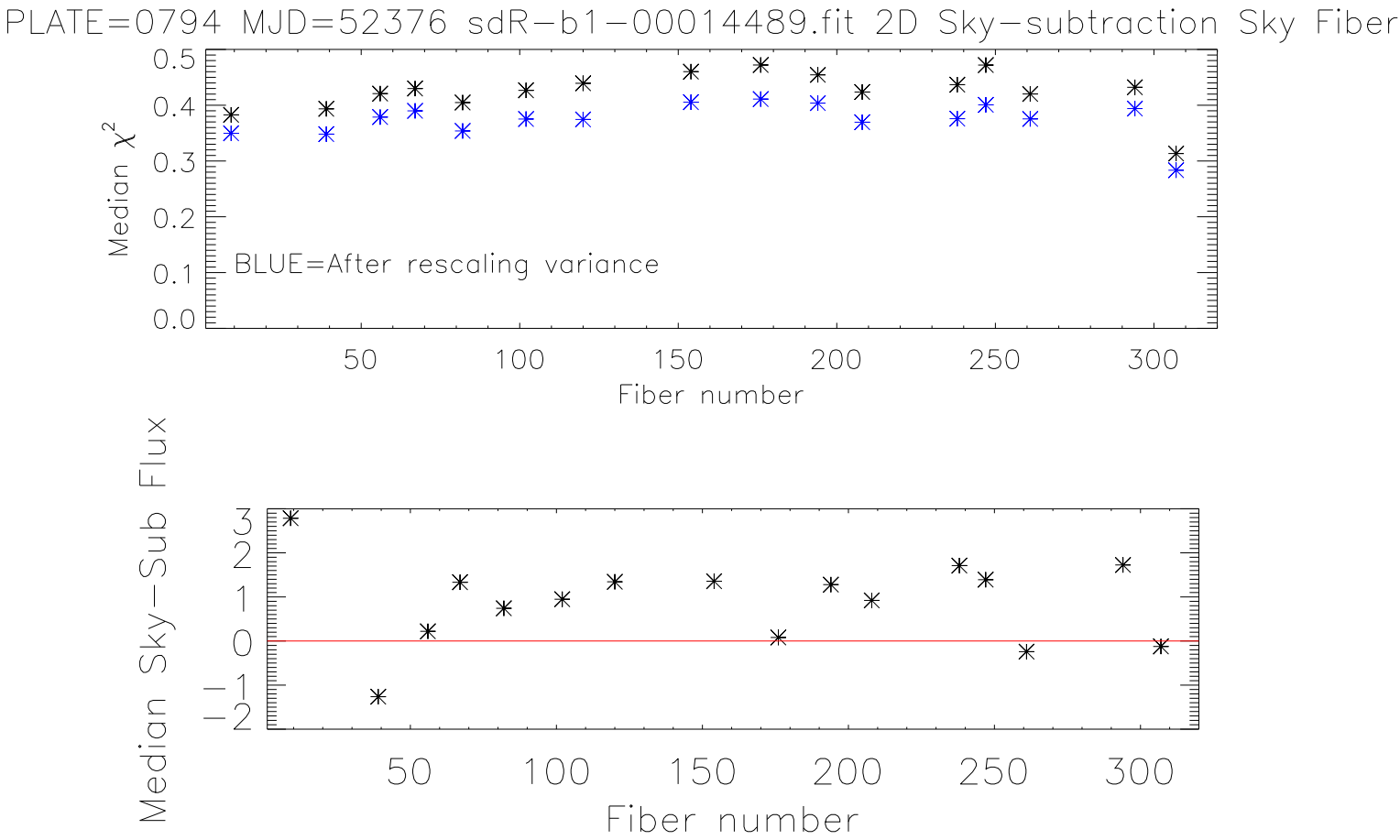

PLATE=0794 MJD=52376 Smooth superflat for sdR-b1-00014489.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

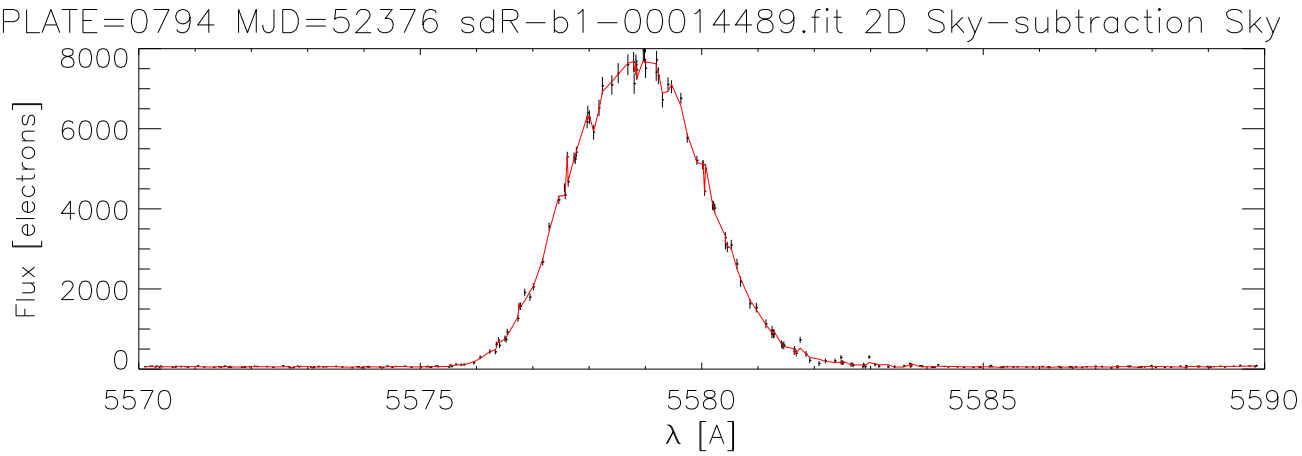

PLATE=0794 MJD=52376 sdR-b1-00014489.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

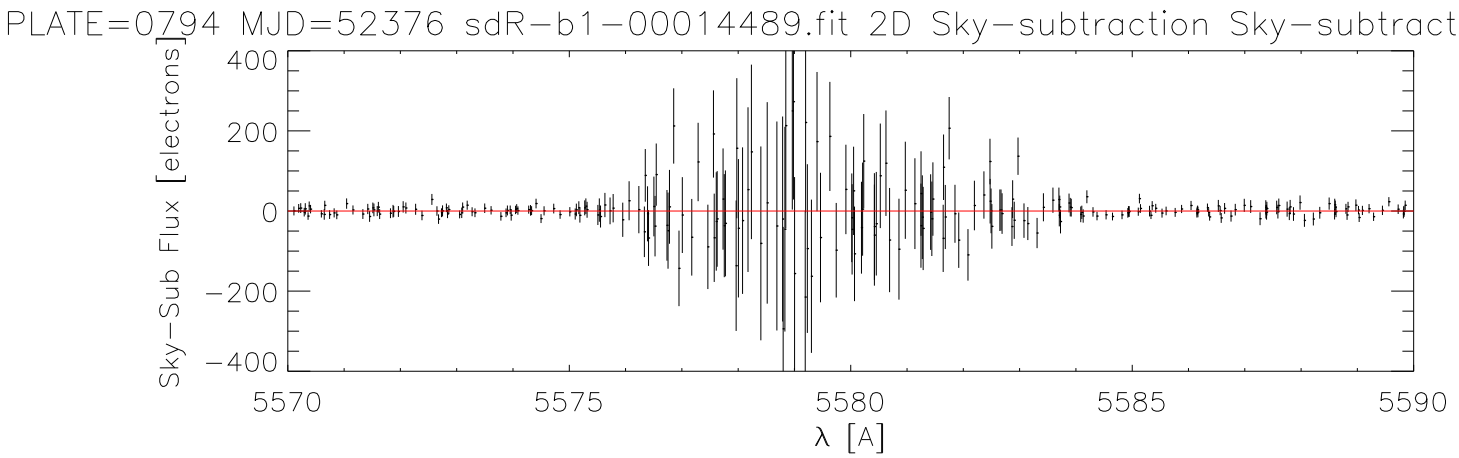

PLATE=0794 MJD=52376 sdR-b1-00014489.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

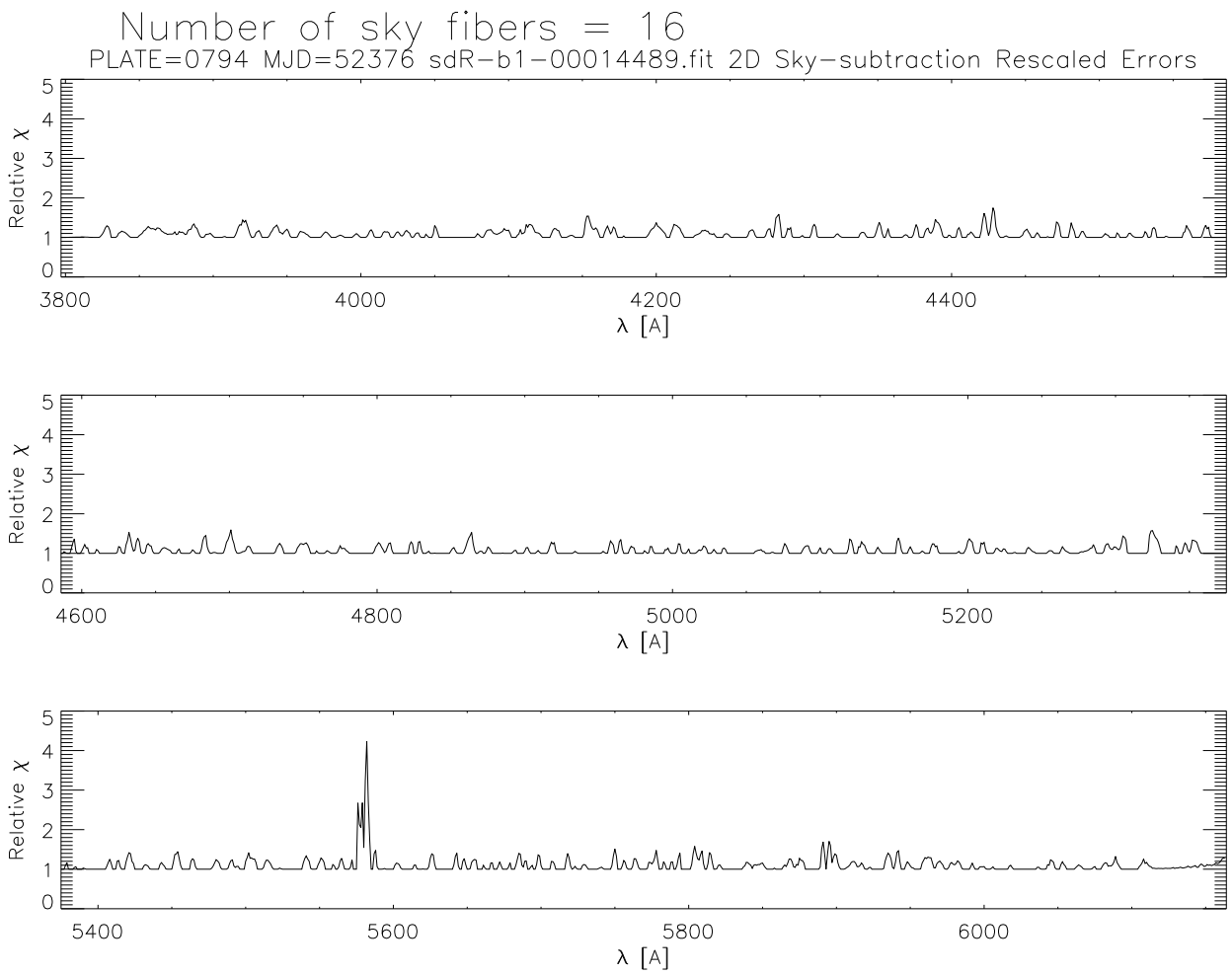

PLATE=0794 MJD=52376 sdR-b1-00014489.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

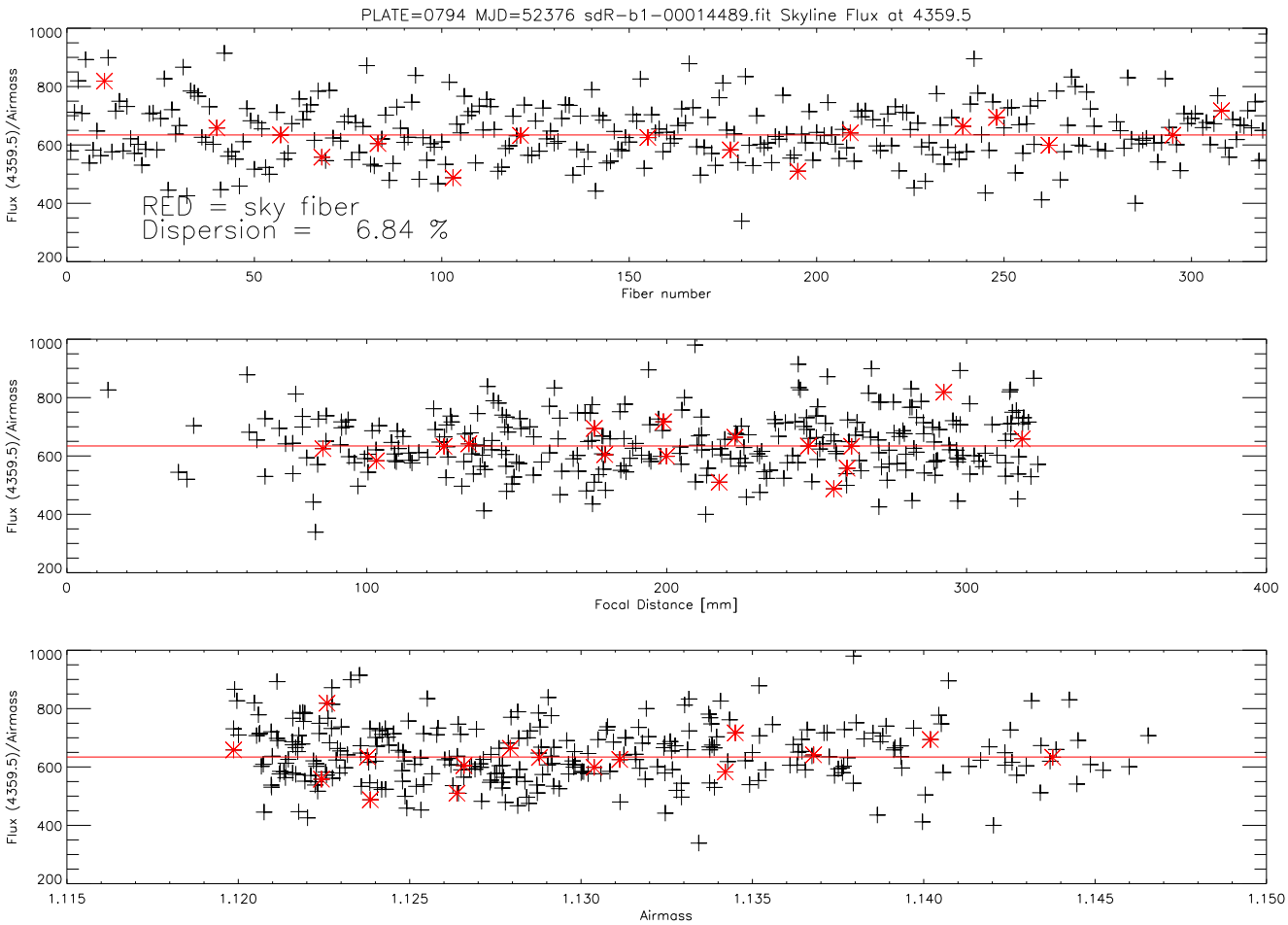

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b1-00014489.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

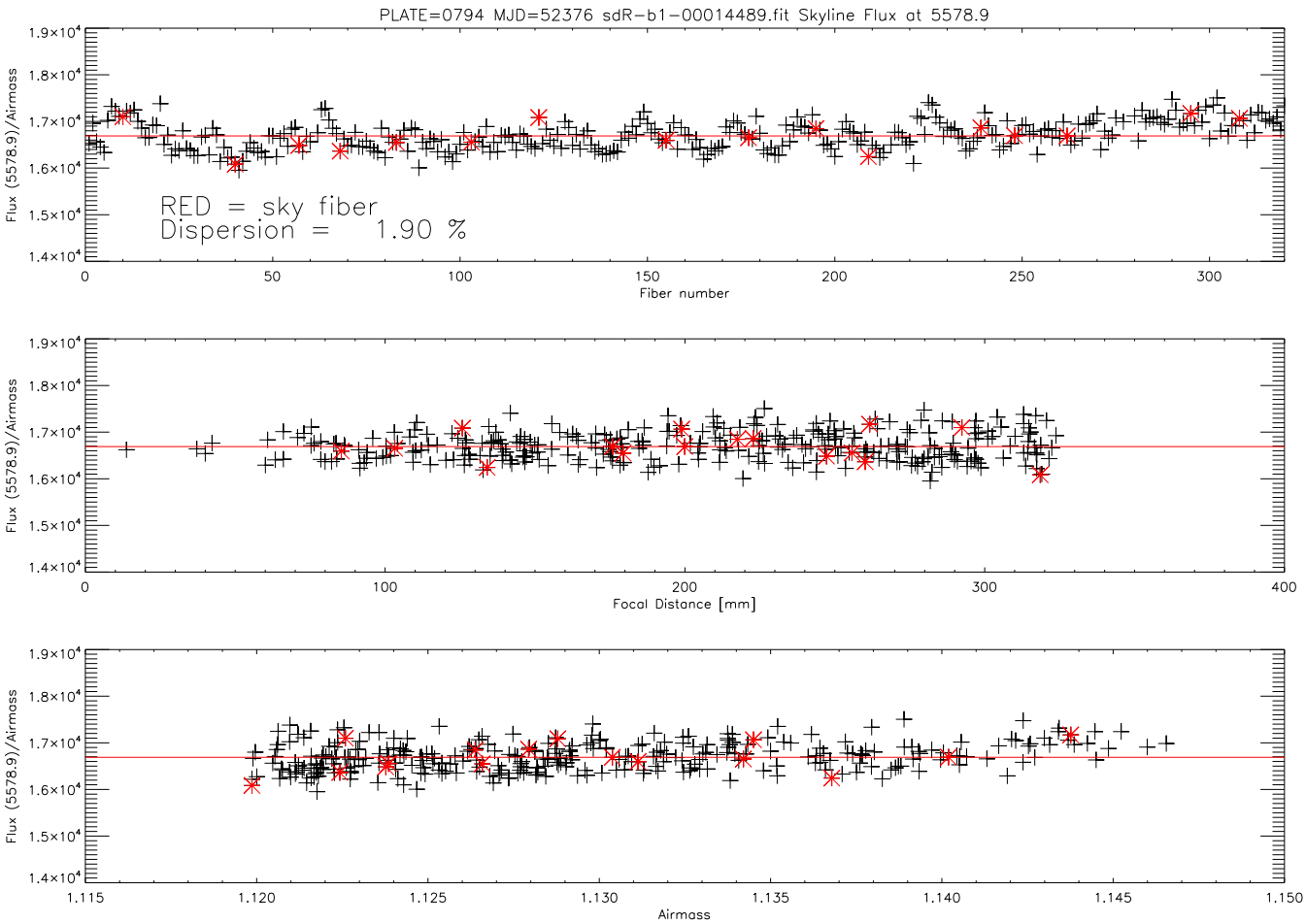

PLATE=0794 MJD=52376 sdR-b1-00014489.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

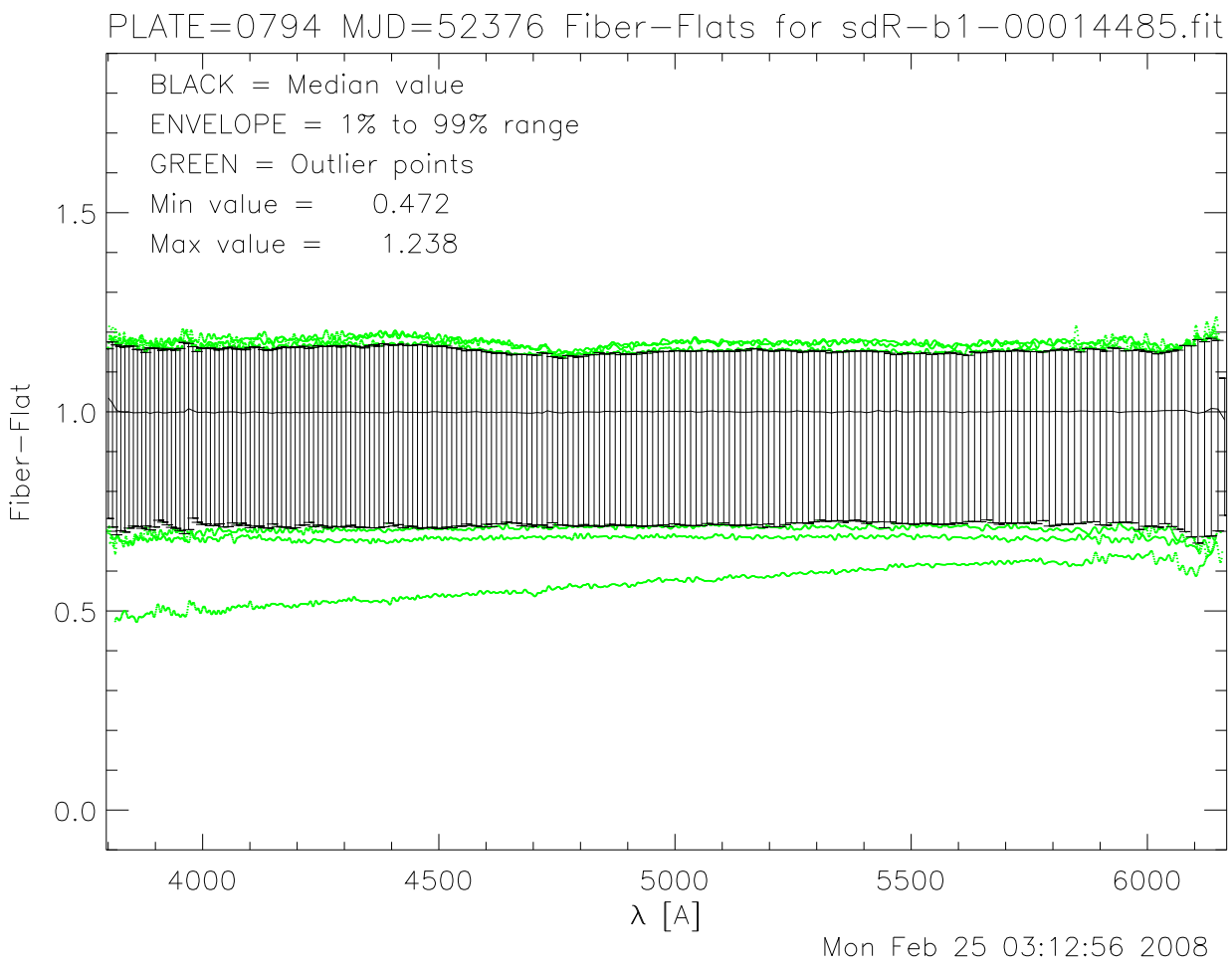

PLATE=0794 MJD=52376 sdR-b1-00014489.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

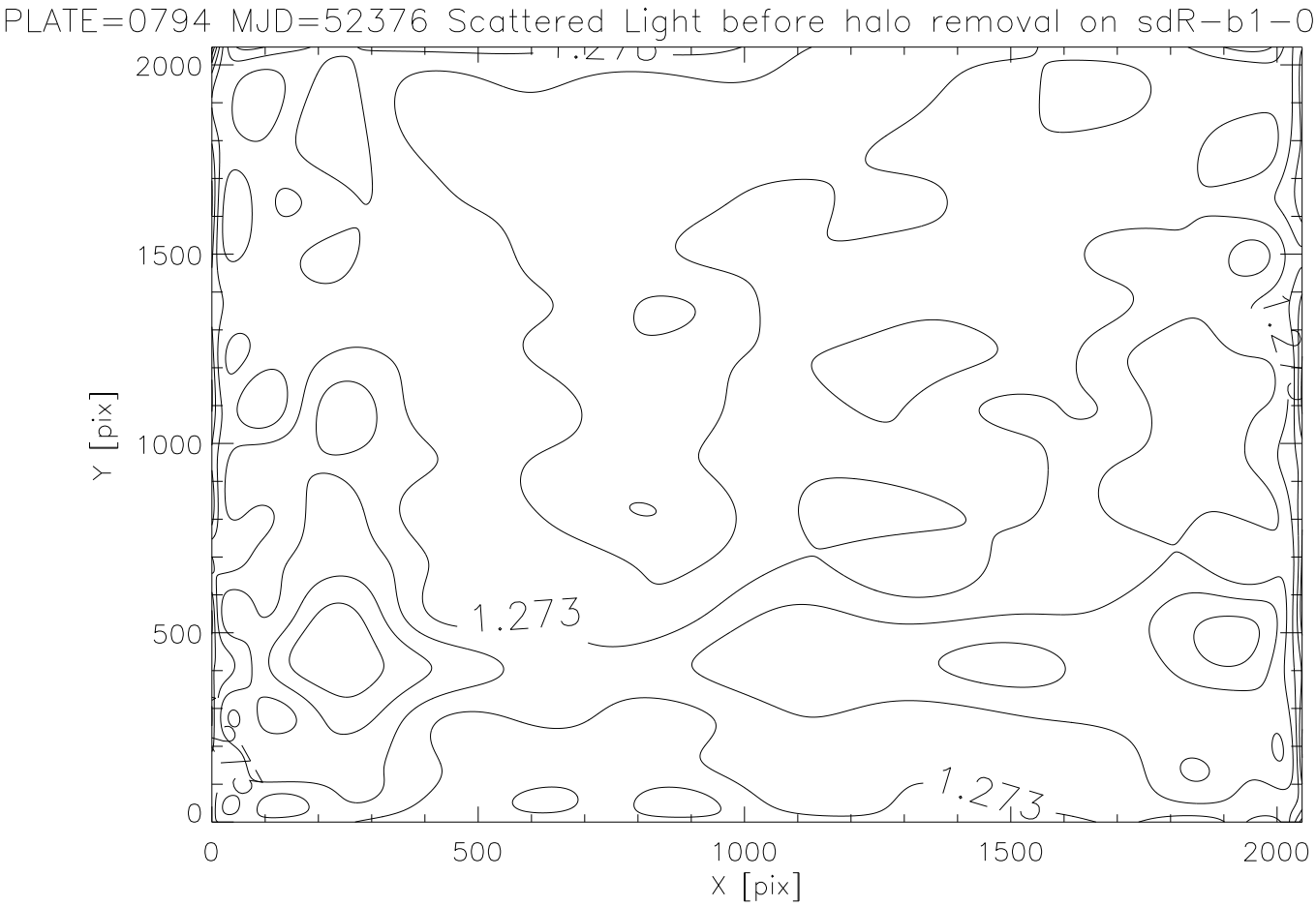

PLATE=0794 MJD=52376 sdR-b1-00014489.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

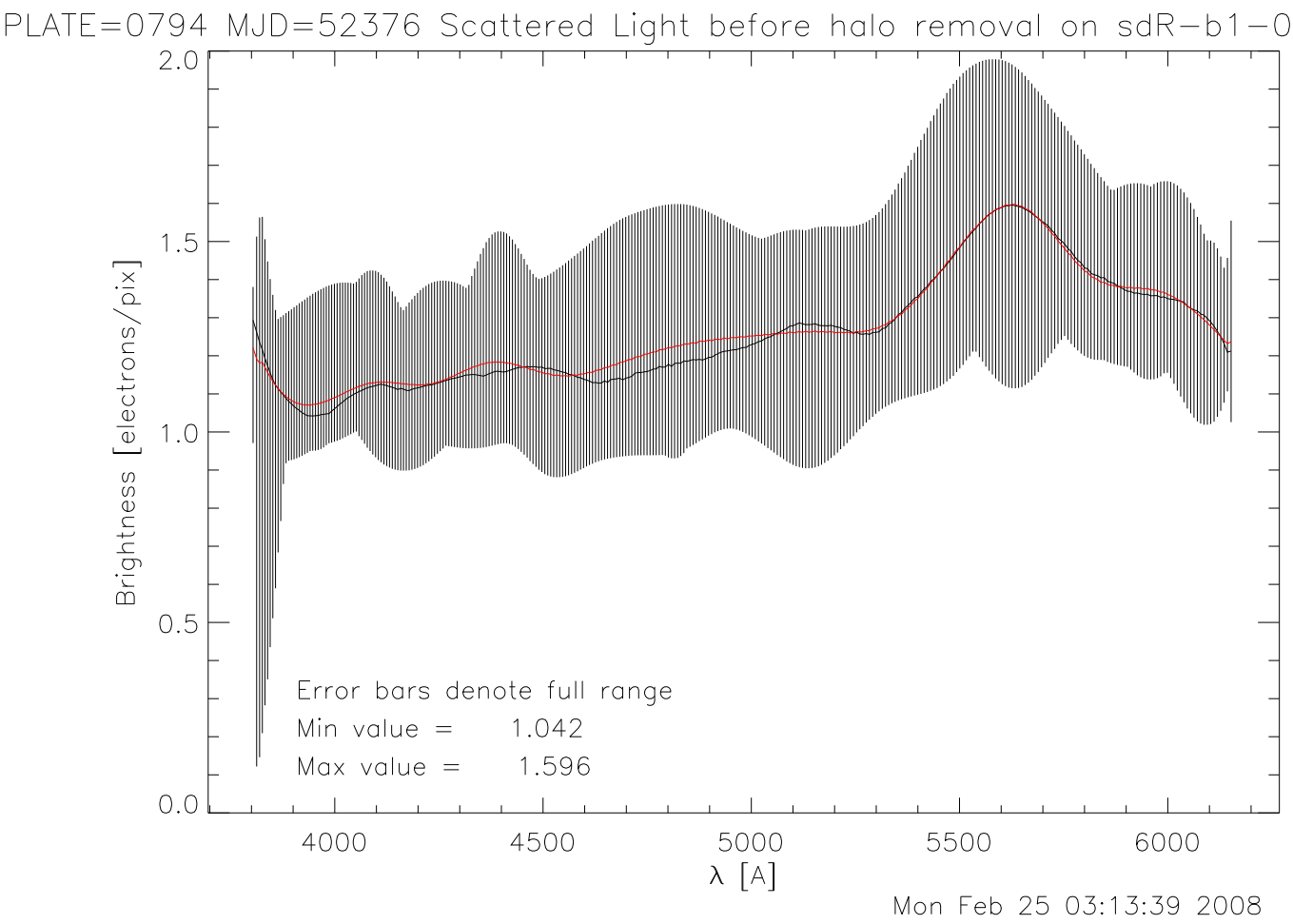

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b1-00014489.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

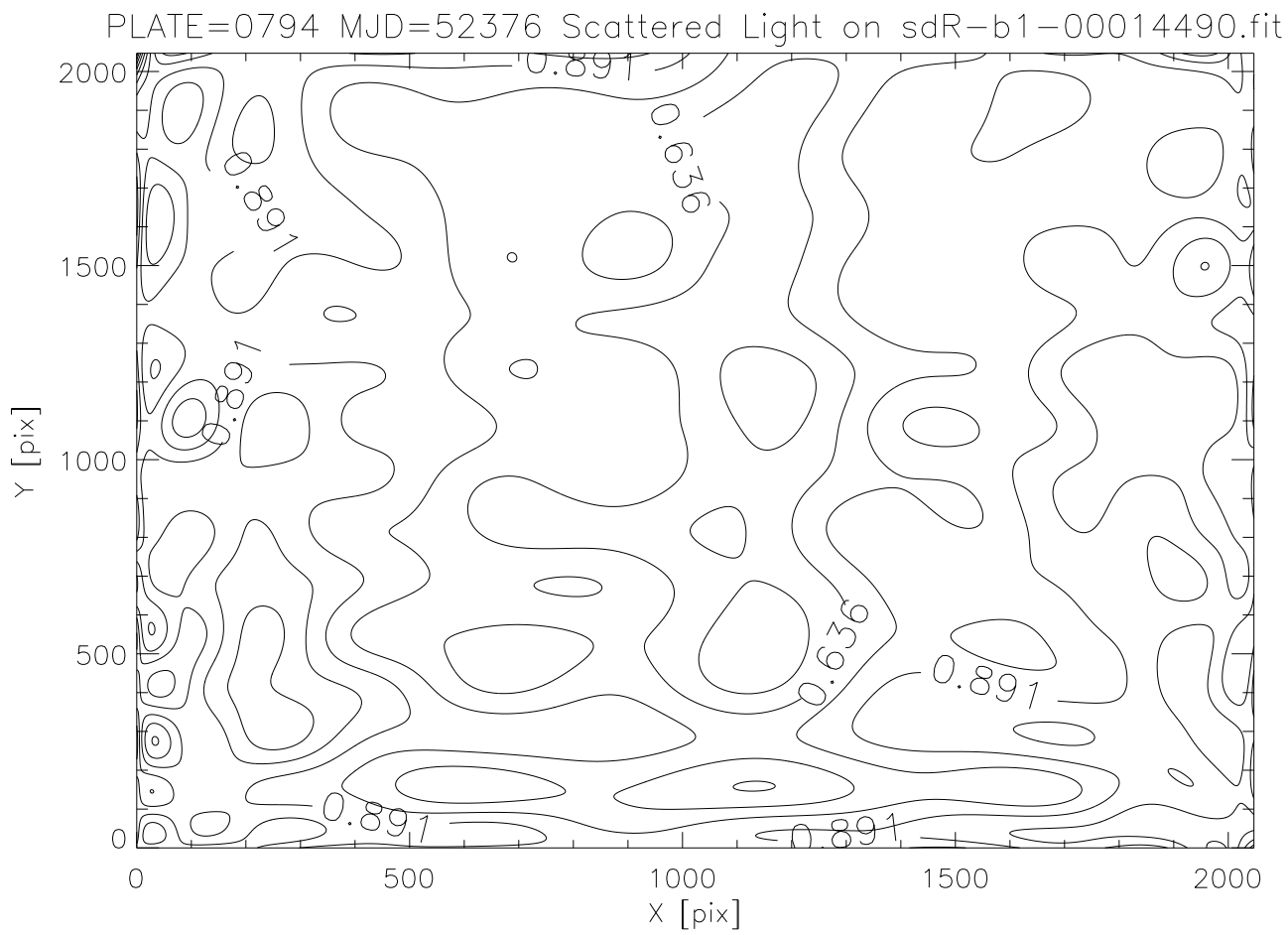

PLATE=0794 MJD=52376 sdR-b1-00014489.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.84 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

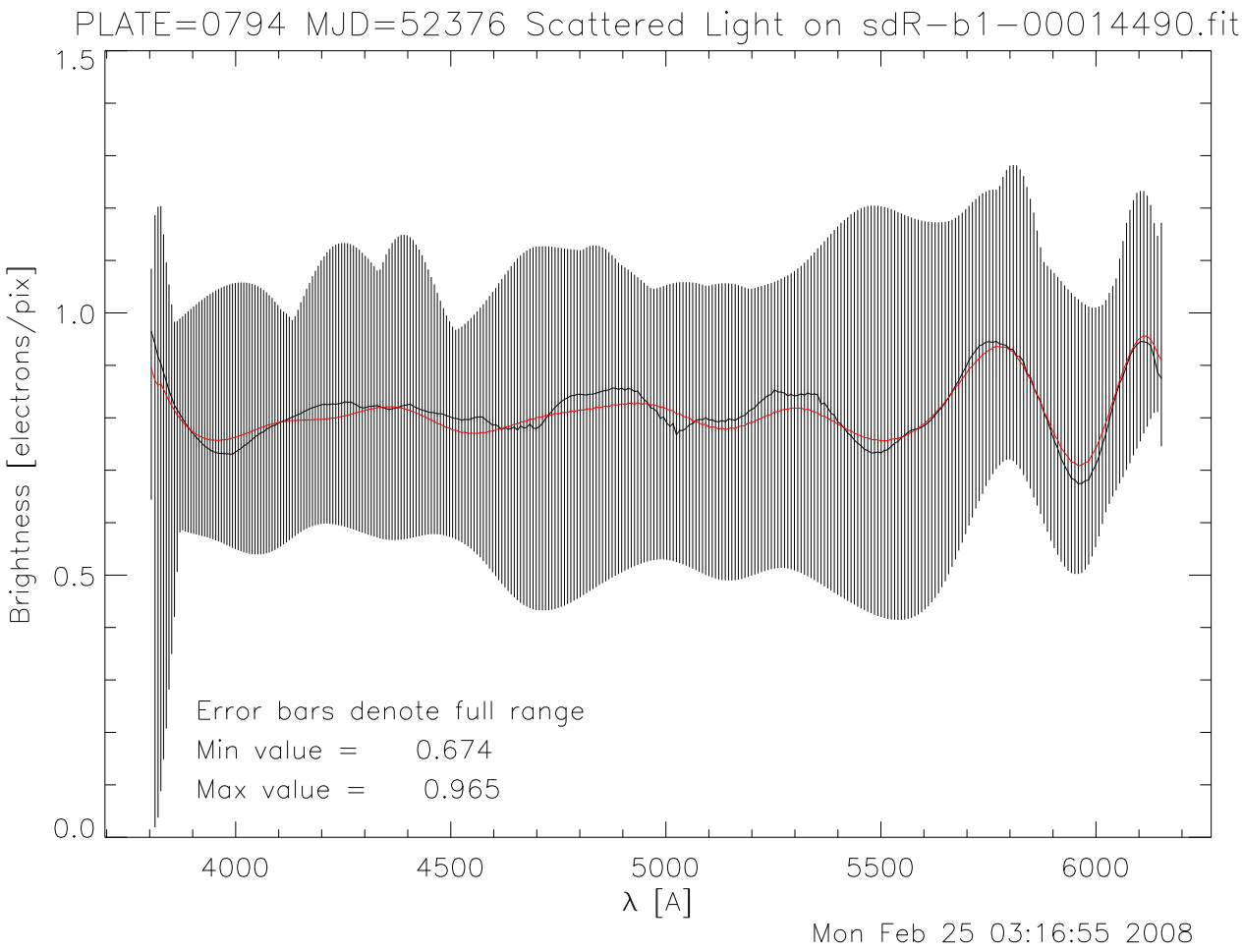

PLATE=0794 MJD=52376 sdR-b1-00014489.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.90 %
Fiber number
Focal Distance [mm]
Airmass

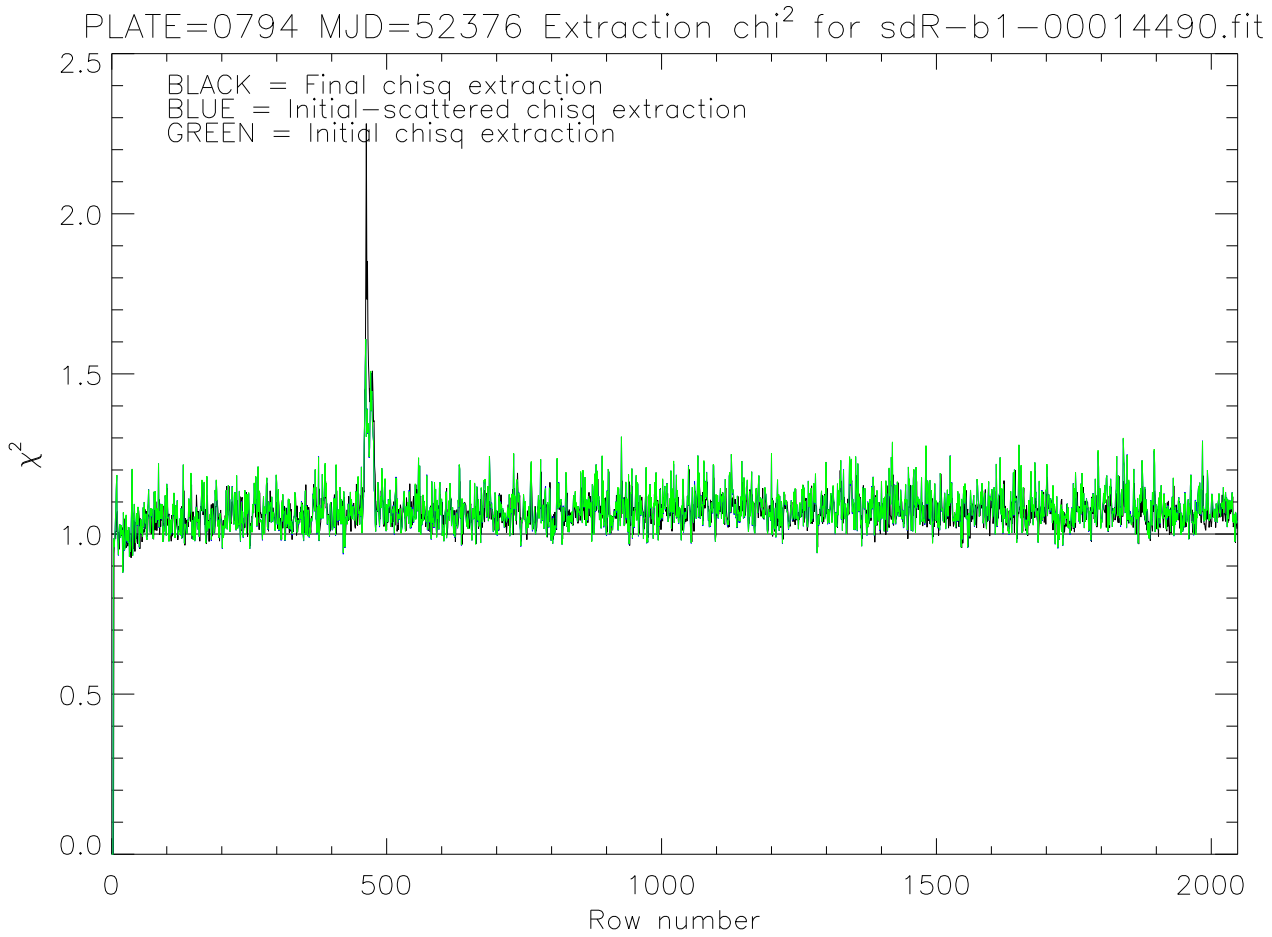

PLATE=0794 MJD=52376 Fiber-Flats for sdR-b1-00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.472
Max value = 1.238
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:12:56 2008

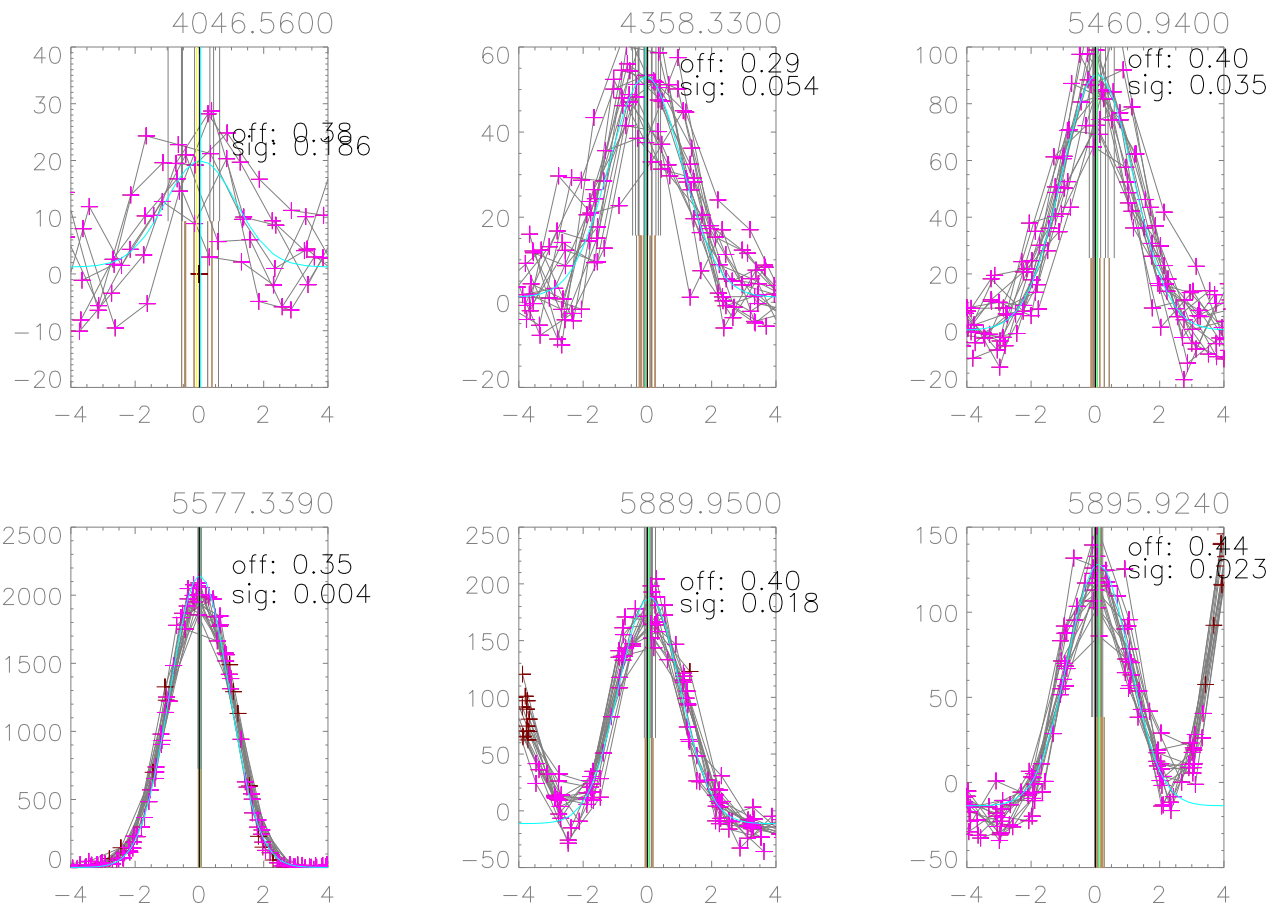

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b1-00014490.f
1.273
1.273
1.273
1.273
0
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

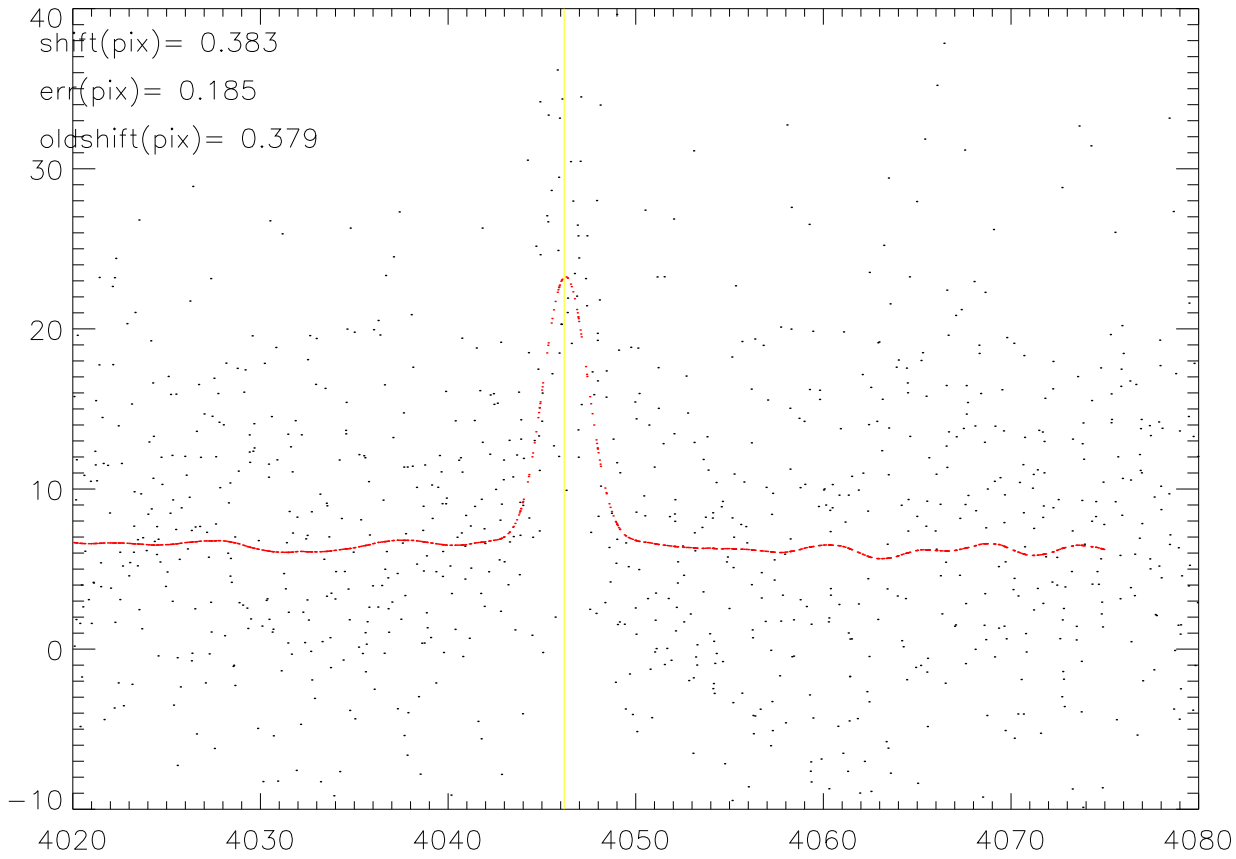

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b1-00014490.f
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.042
Max value = 1.596
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:13:39 2008

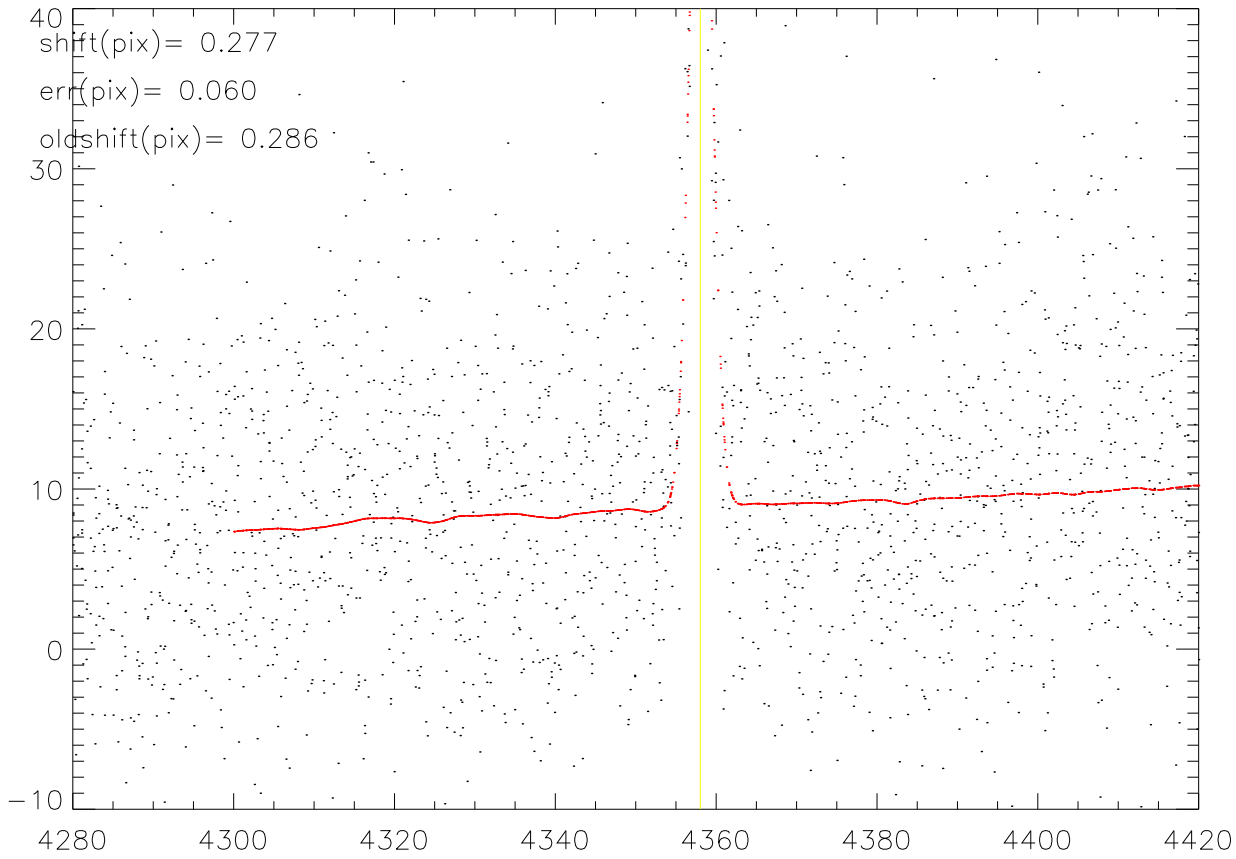

PLATE=0794 MJD=52376 Scattered Light on sdR-b1-00014490.fit
0.891
0.636
0.891
0.891
0.636
0.891
0.891
Y [pix]
X [pix]
0
500
1000
1500
2000

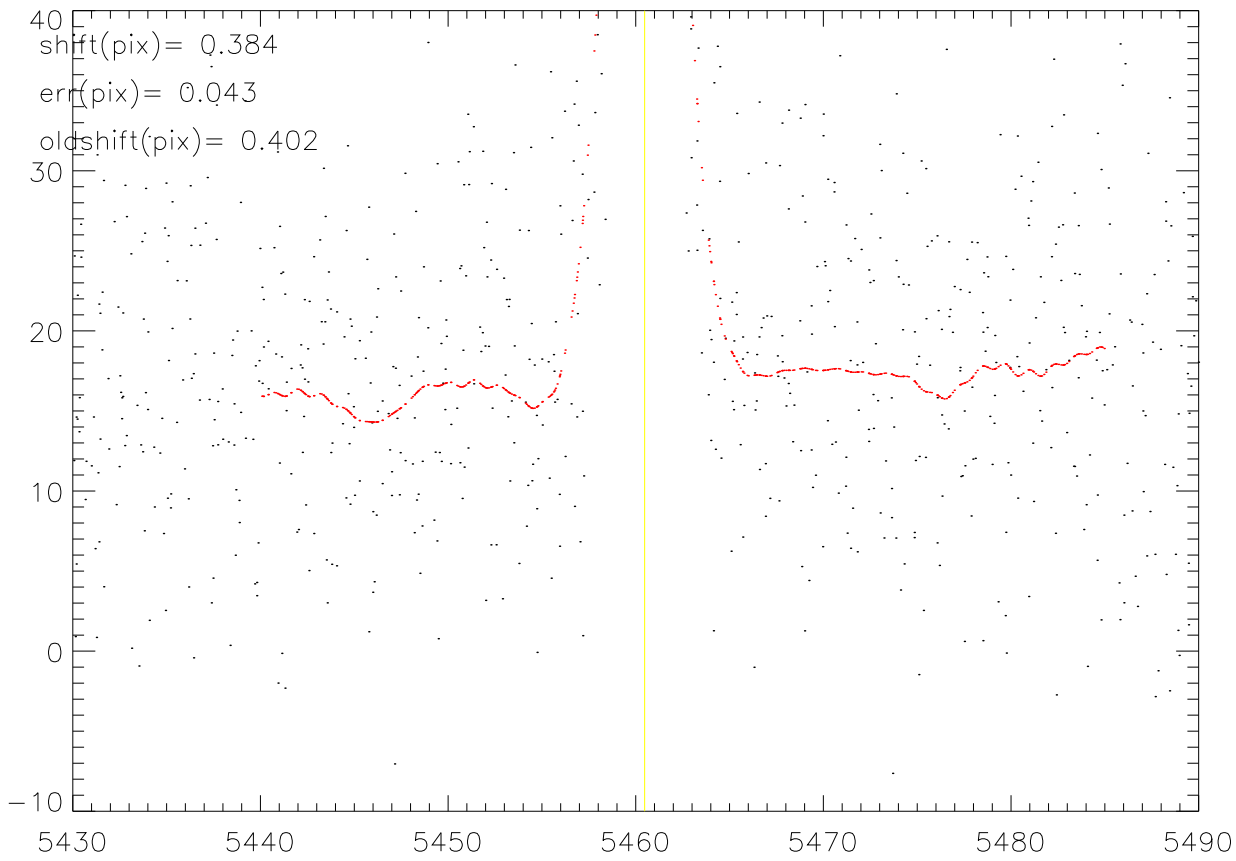

PLATE=0794 MJD=52376 Scattered Light on sdR-b1-00014490.fit
Brightness [electrons/pix]
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.674
Max value = 0.965
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:16:55 2008

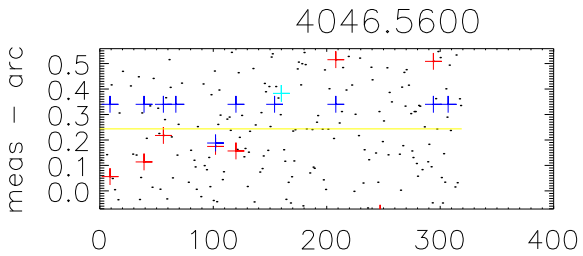

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-b1-00014490.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

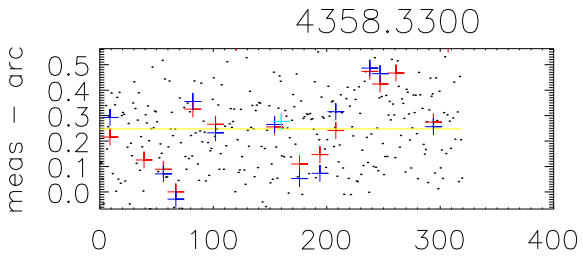

4046.5600
off: 0.38
sig: 0.186
4358.3300
off: 0.29
sig: 0.054
5460.9400
off: 0.40
sig: 0.035
5577.3390
off: 0.35
sig: 0.004
5889.9500
off: 0.40
sig: 0.018
5895.9240
off: 0.44
sig: 0.023

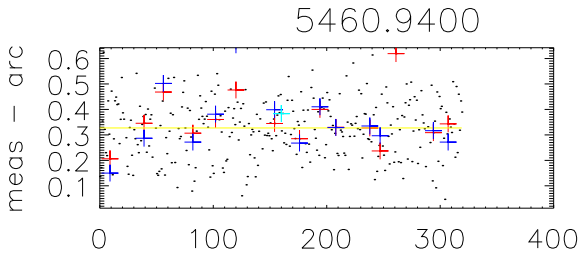

shift(pix)= 0.383
err(pix)= 0.185
oldshift(pix)= 0.379
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

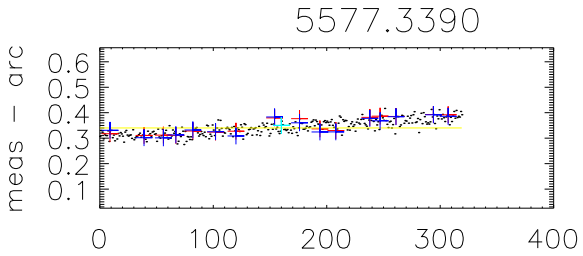

shift(pix)= 0.277
err(pix)= 0.060
oldshift(pix)= 0.286
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

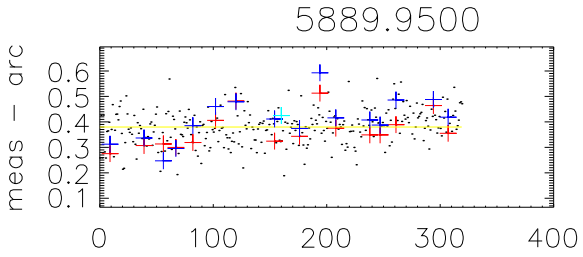

shift(pix)= 0.384
err(pix)= 0.043
oldshift(pix)= 0.402
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

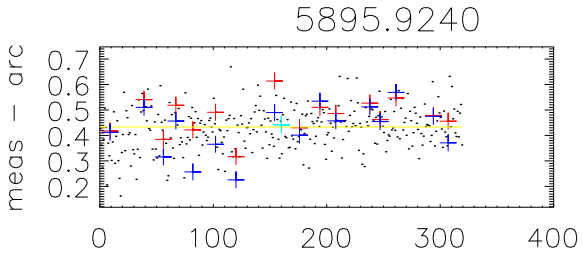

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

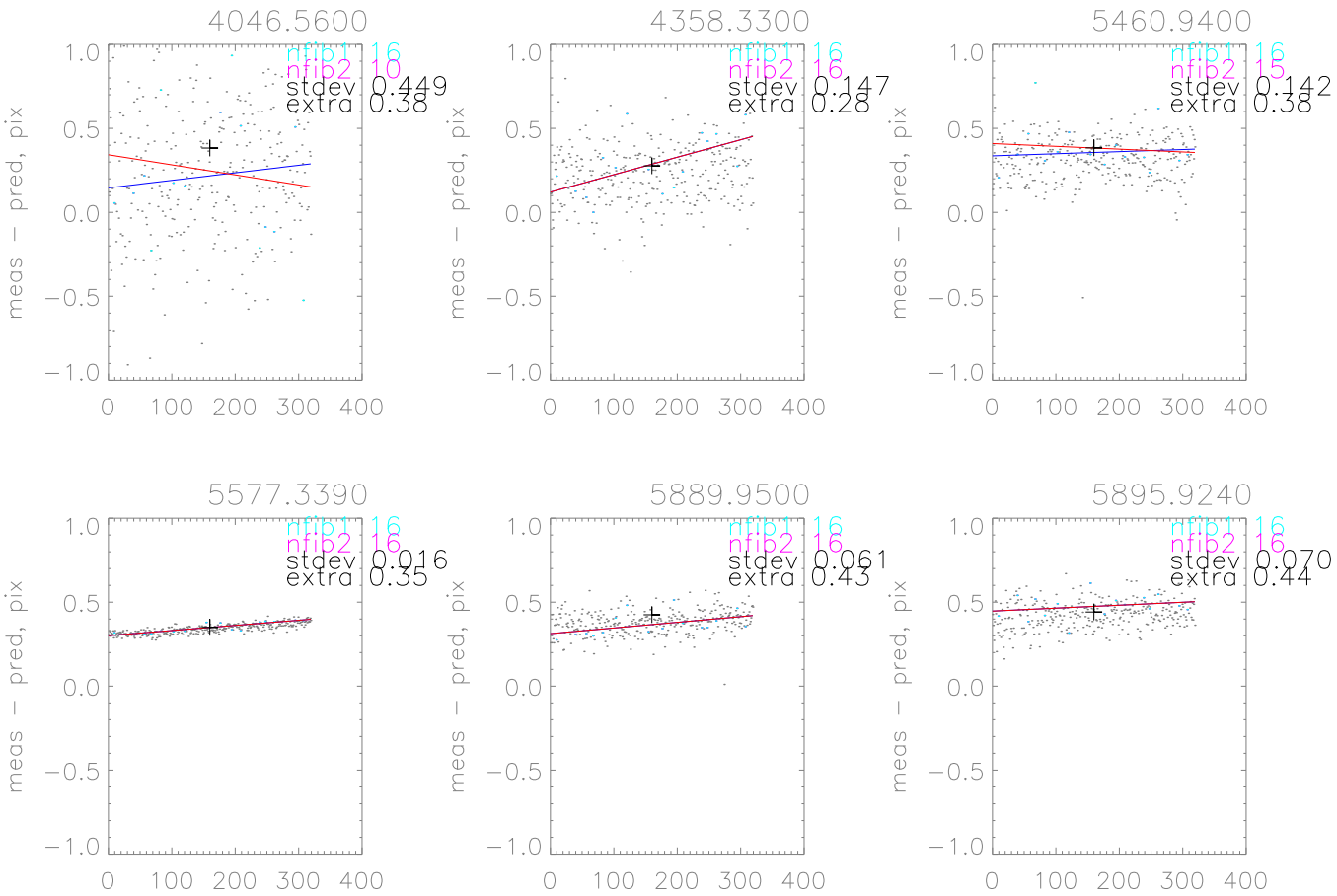

4358.3300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

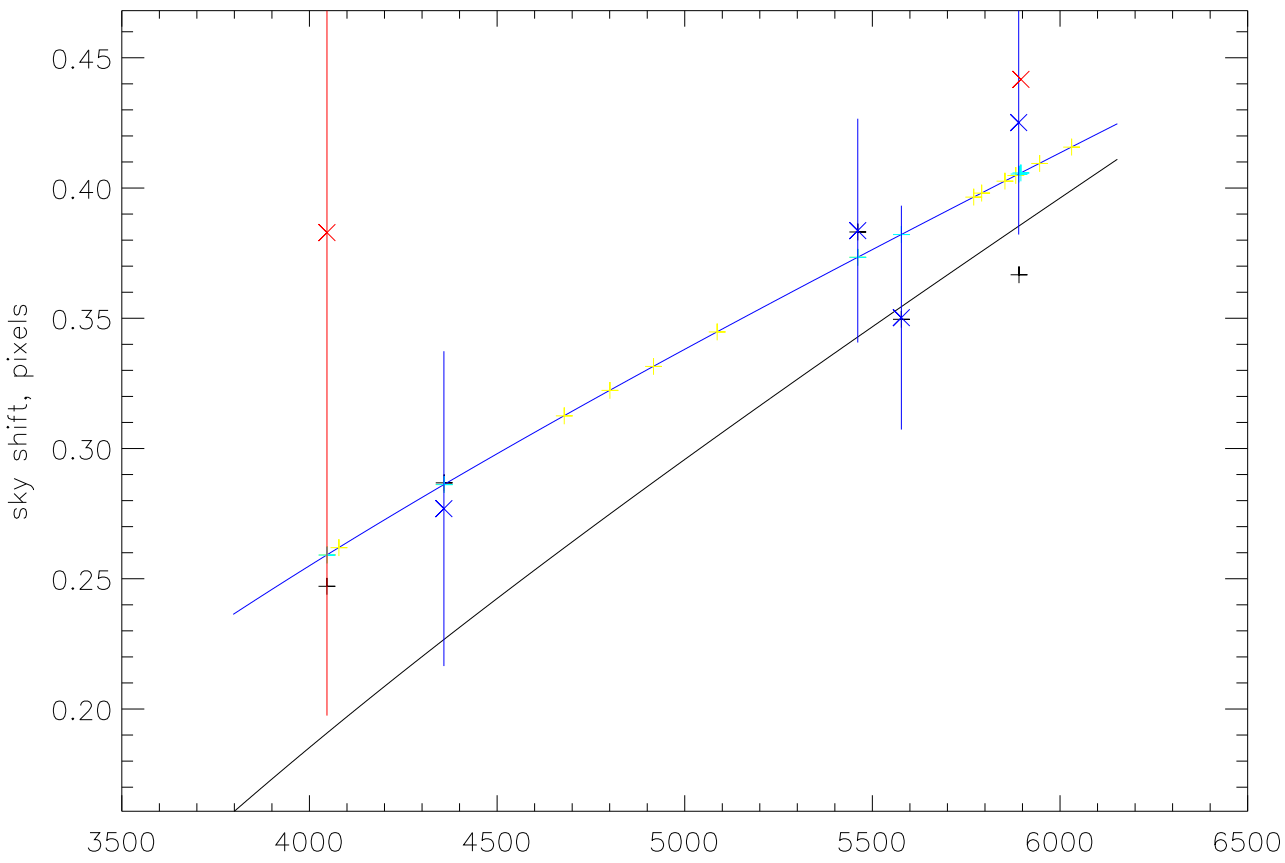

5460.9400
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

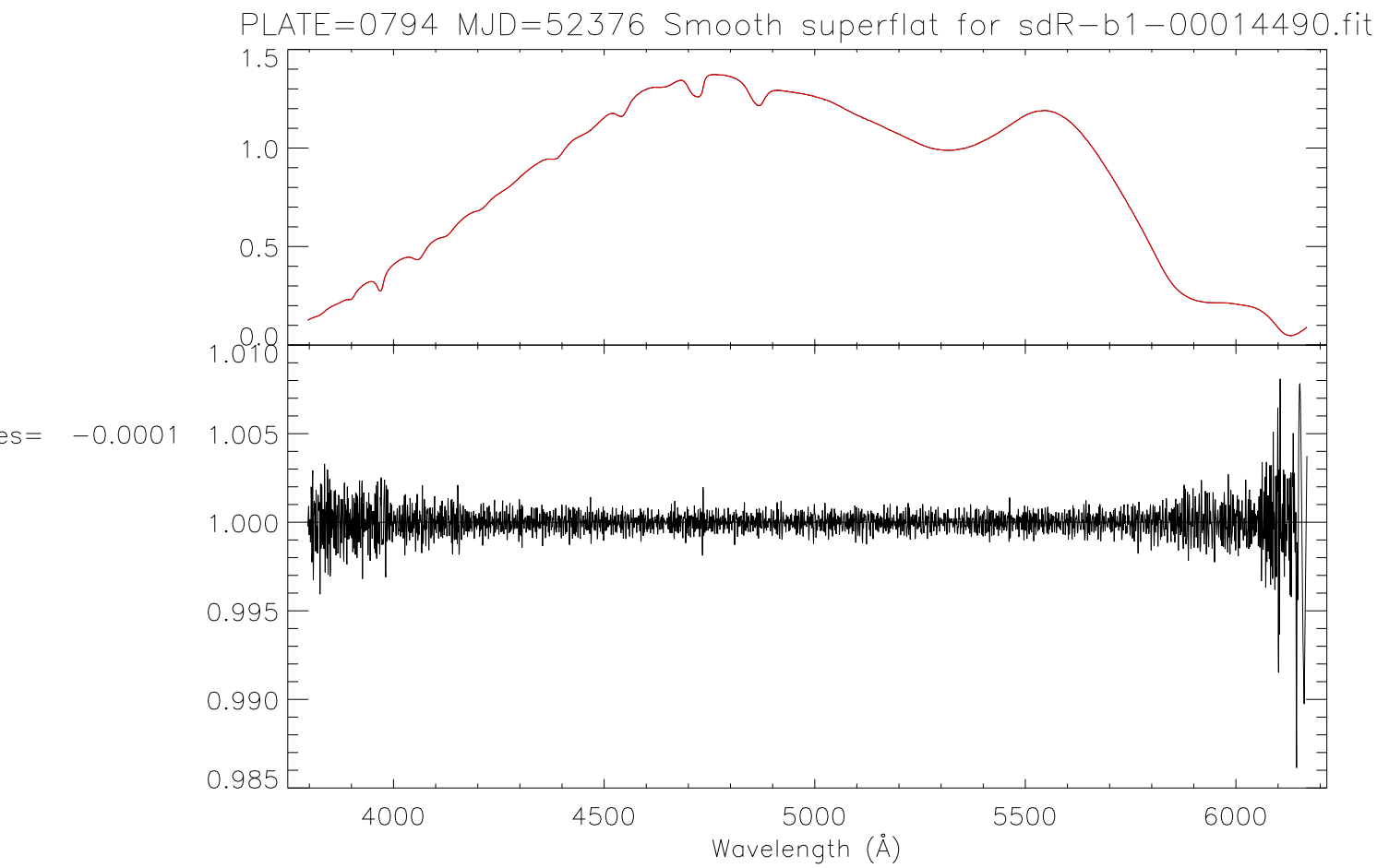

5577.3390
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

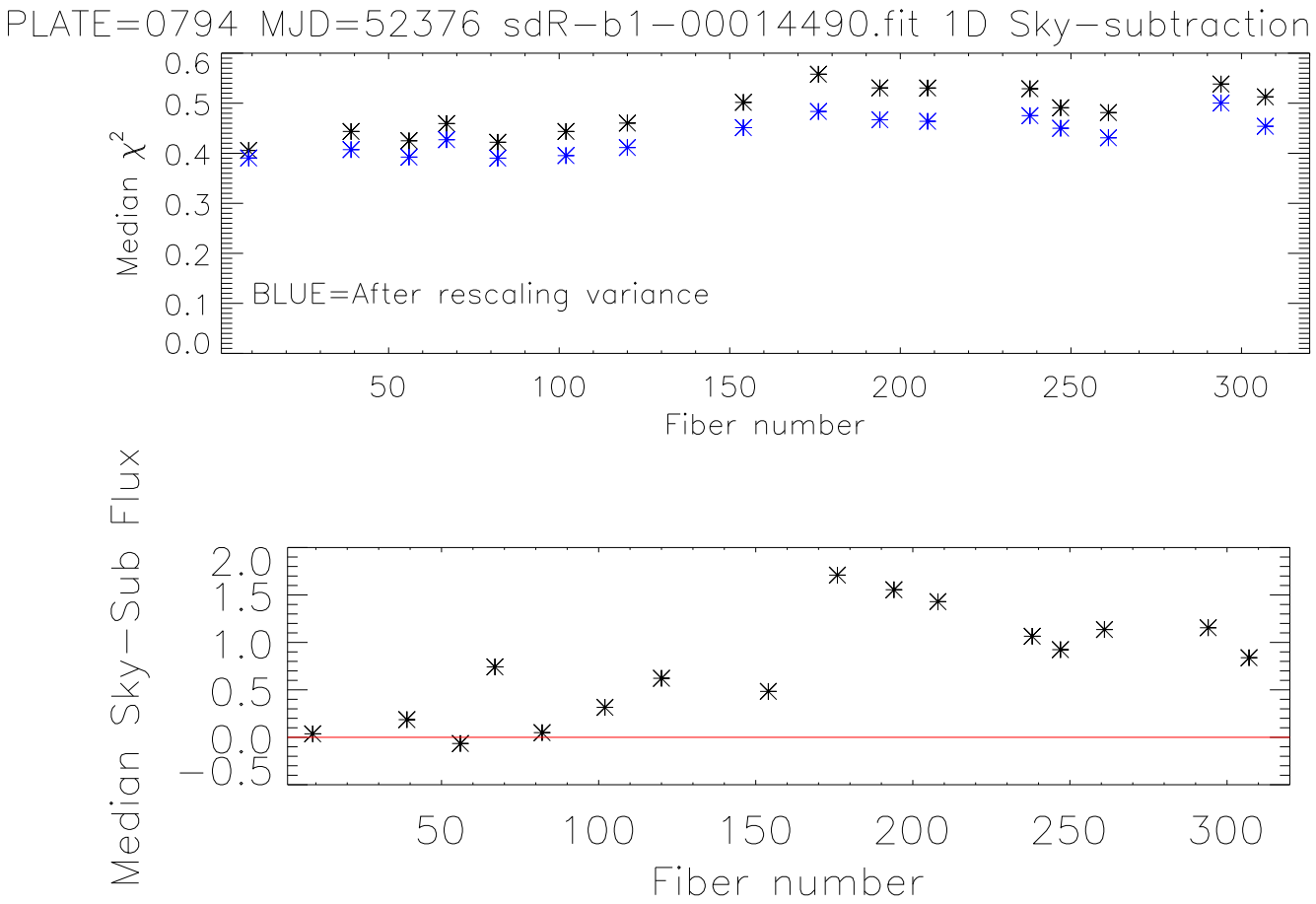

5889.9500
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

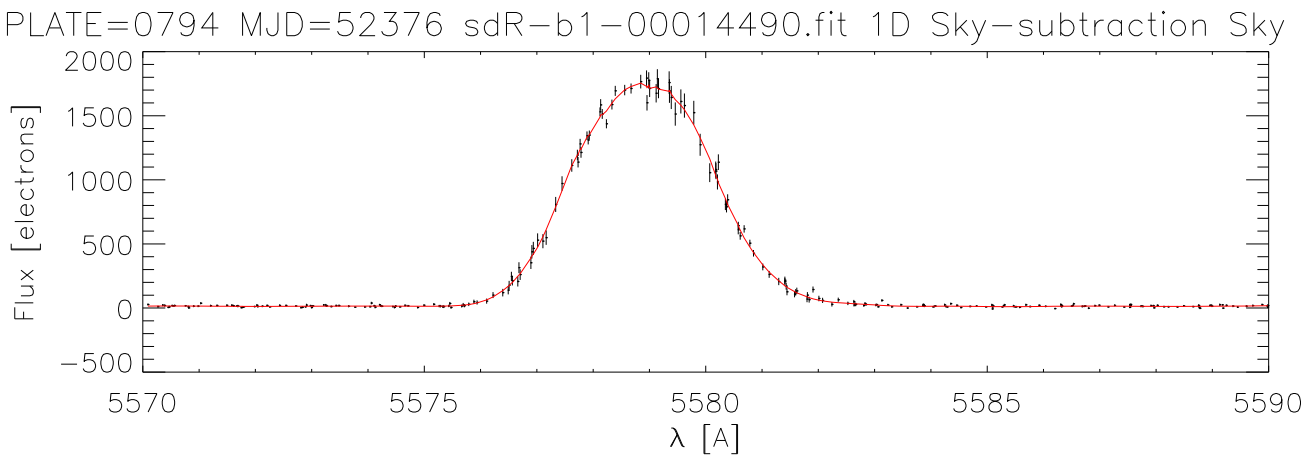

5895.9240
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

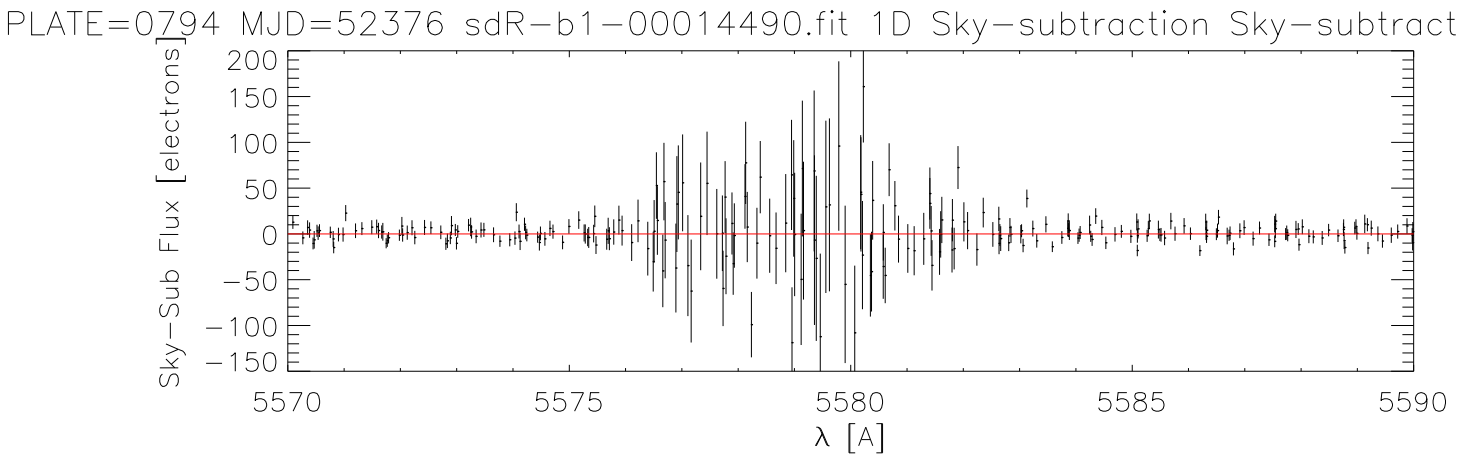

4046.5600
nfib1 16
nfib2 10
stdev 0.449
extra 0.38
4358.3300
nfib1 16
nfib2 16
stdev 0.147
extra 0.28
5460.9400
nfib1 16
nfib2 15
stdev 0.142
extra 0.38
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.35
5889.9500
nfib1 16
nfib2 16
stdev 0.061
extra 0.43
5895.9240
nfib1 16
nfib2 16
stdev 0.070
extra 0.44
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

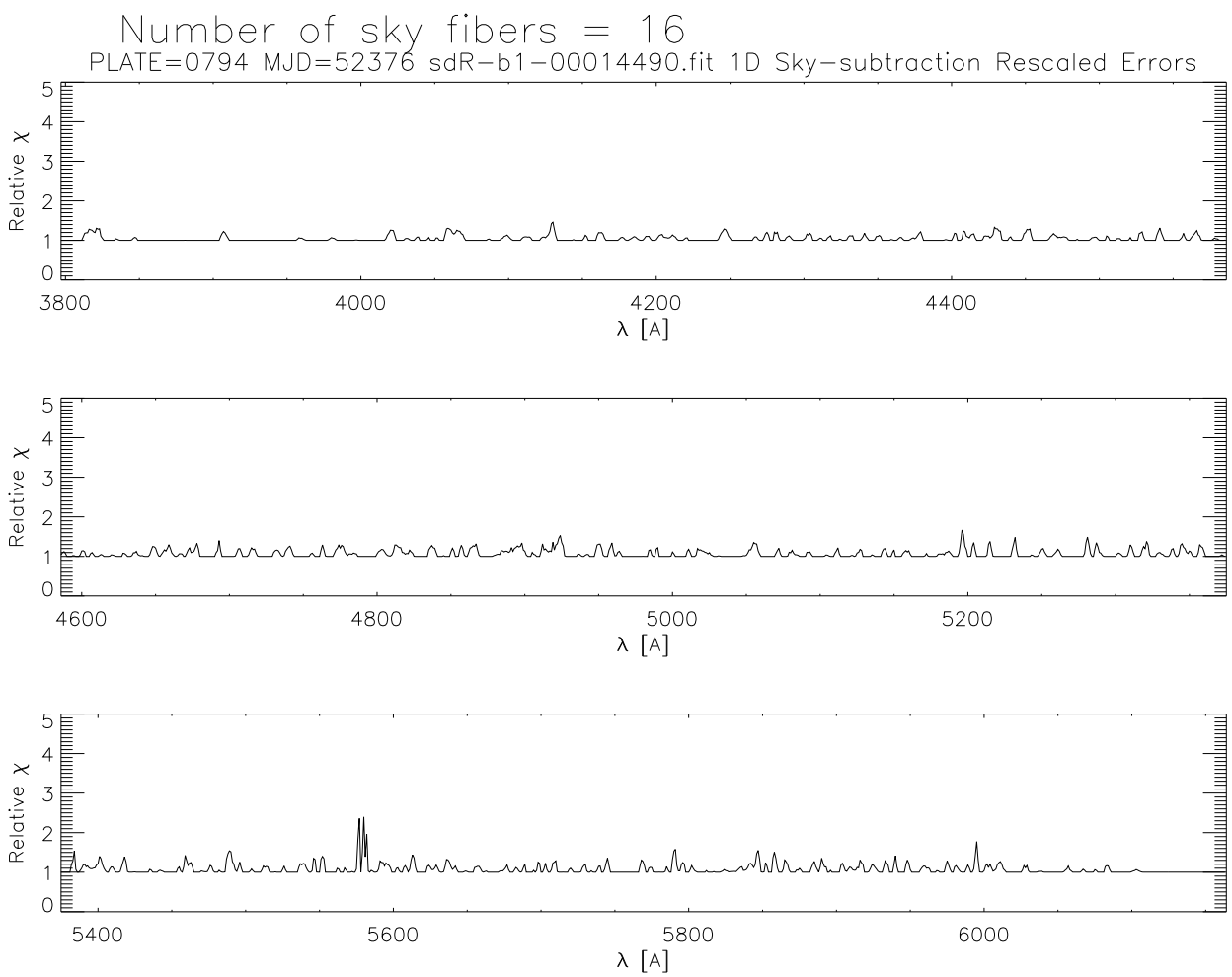

sky shift, pixels
0.45
0.40
0.35
0.30
0.25
0.20
3500
4000
4500
5000
5500
6000
6500

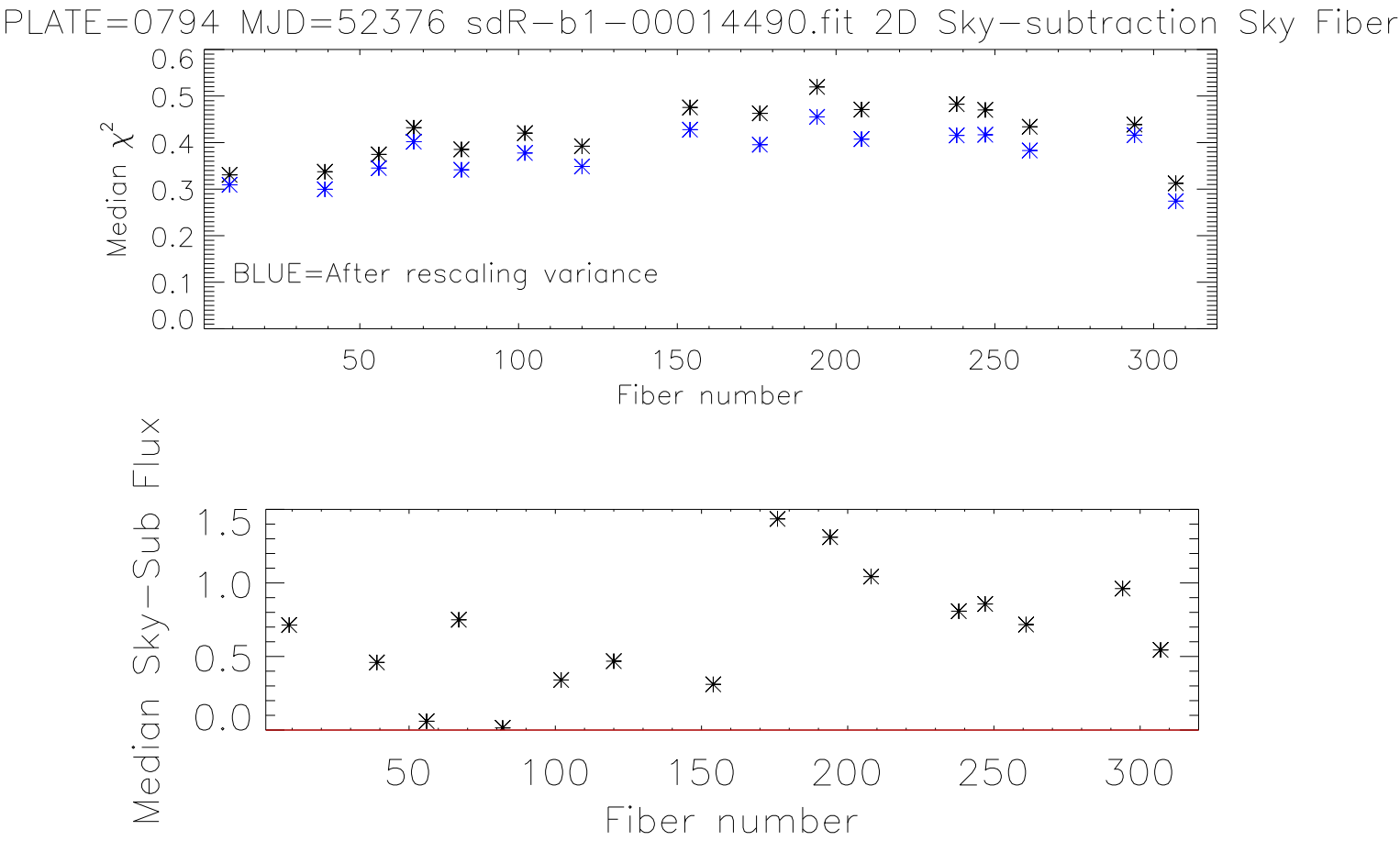

PLATE=0794 MJD=52376 Smooth superflat for sdR-b1-00014490.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

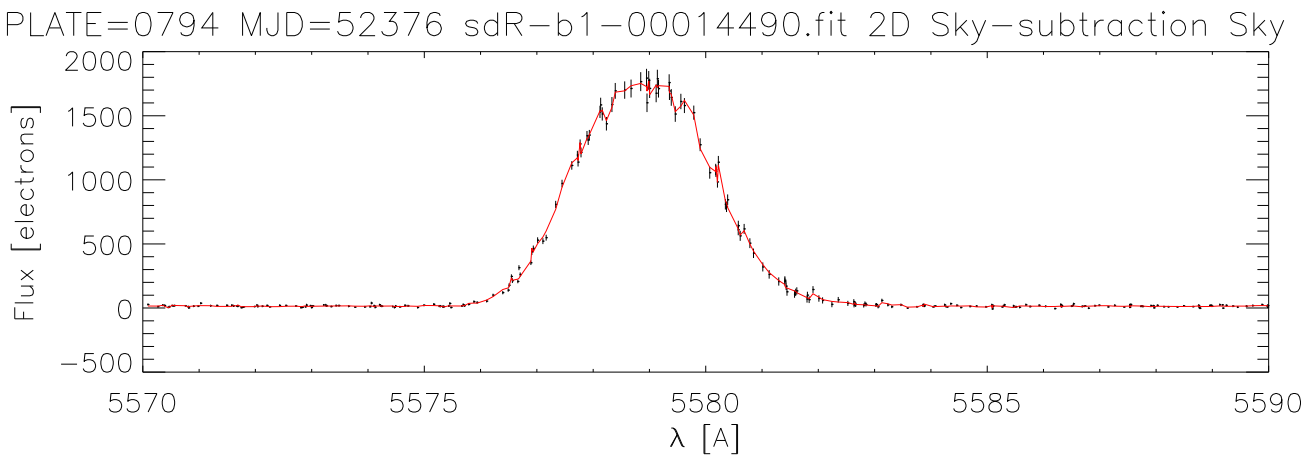

PLATE=0794 MJD=52376 sdR-b1-00014490.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

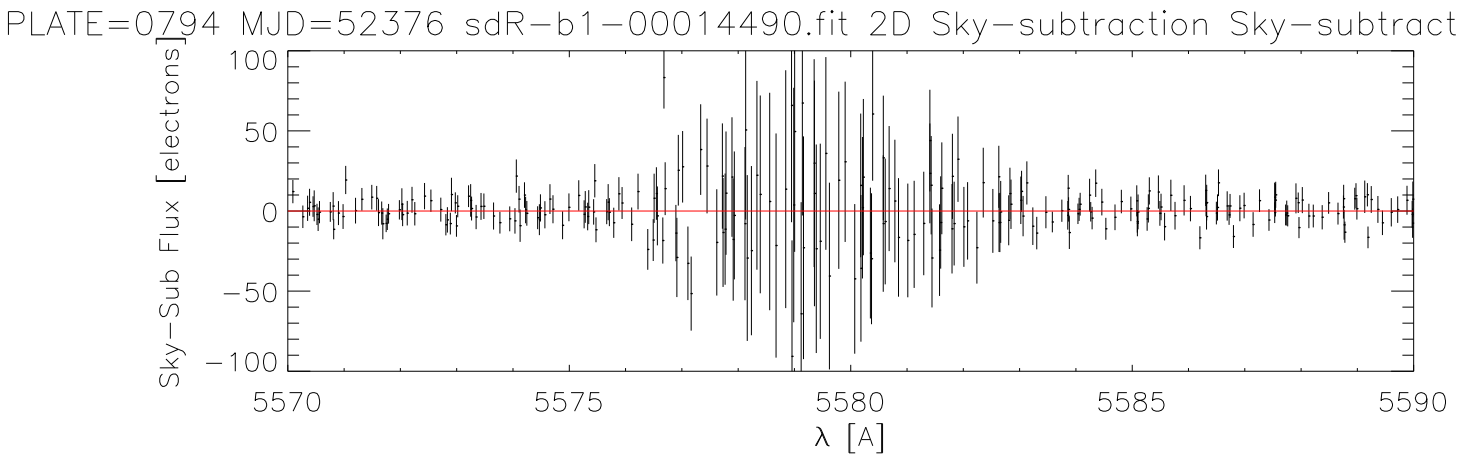

PLATE=0794 MJD=52376 sdR-b1-00014490.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

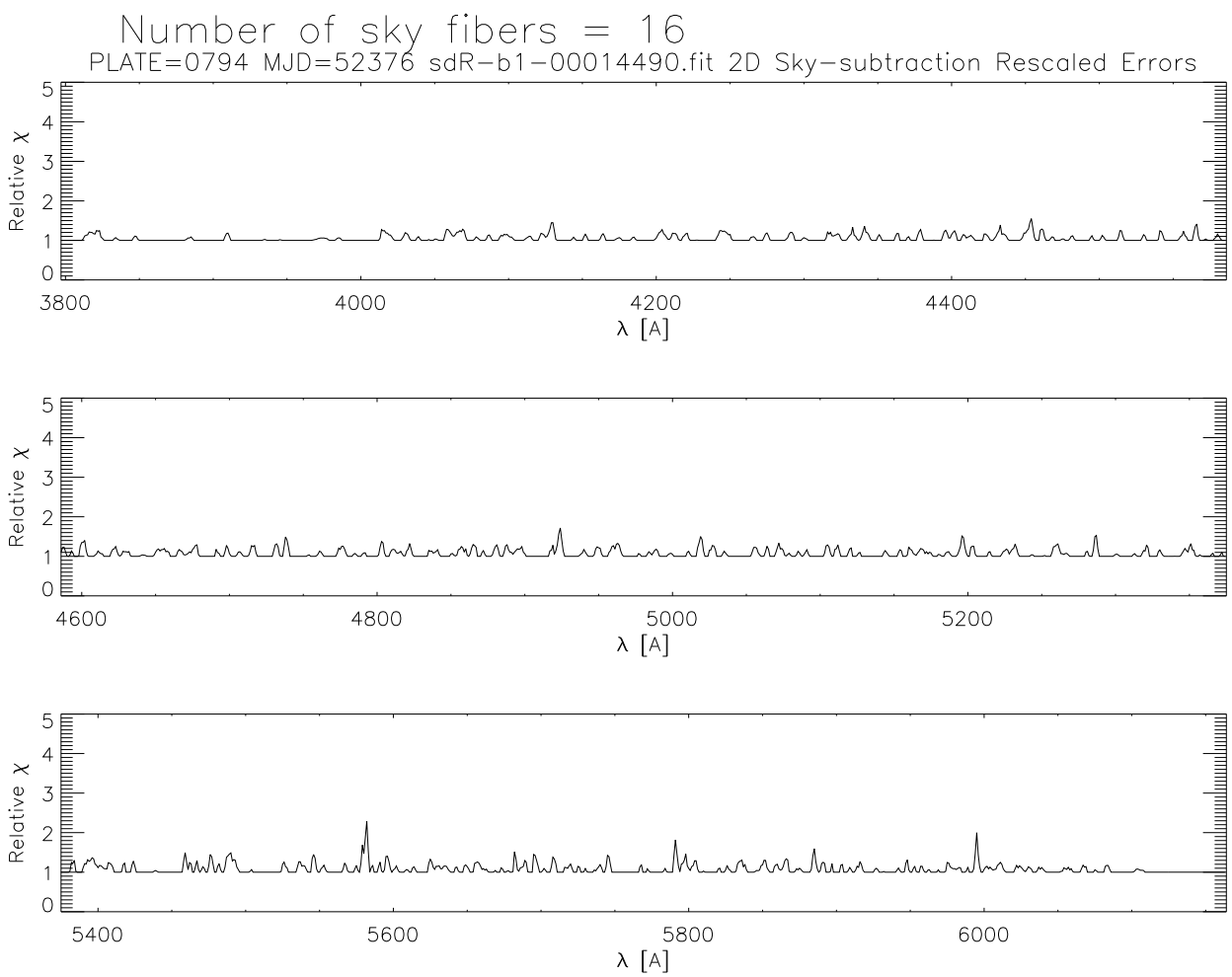

PLATE=0794 MJD=52376 sdR-b1-00014490.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

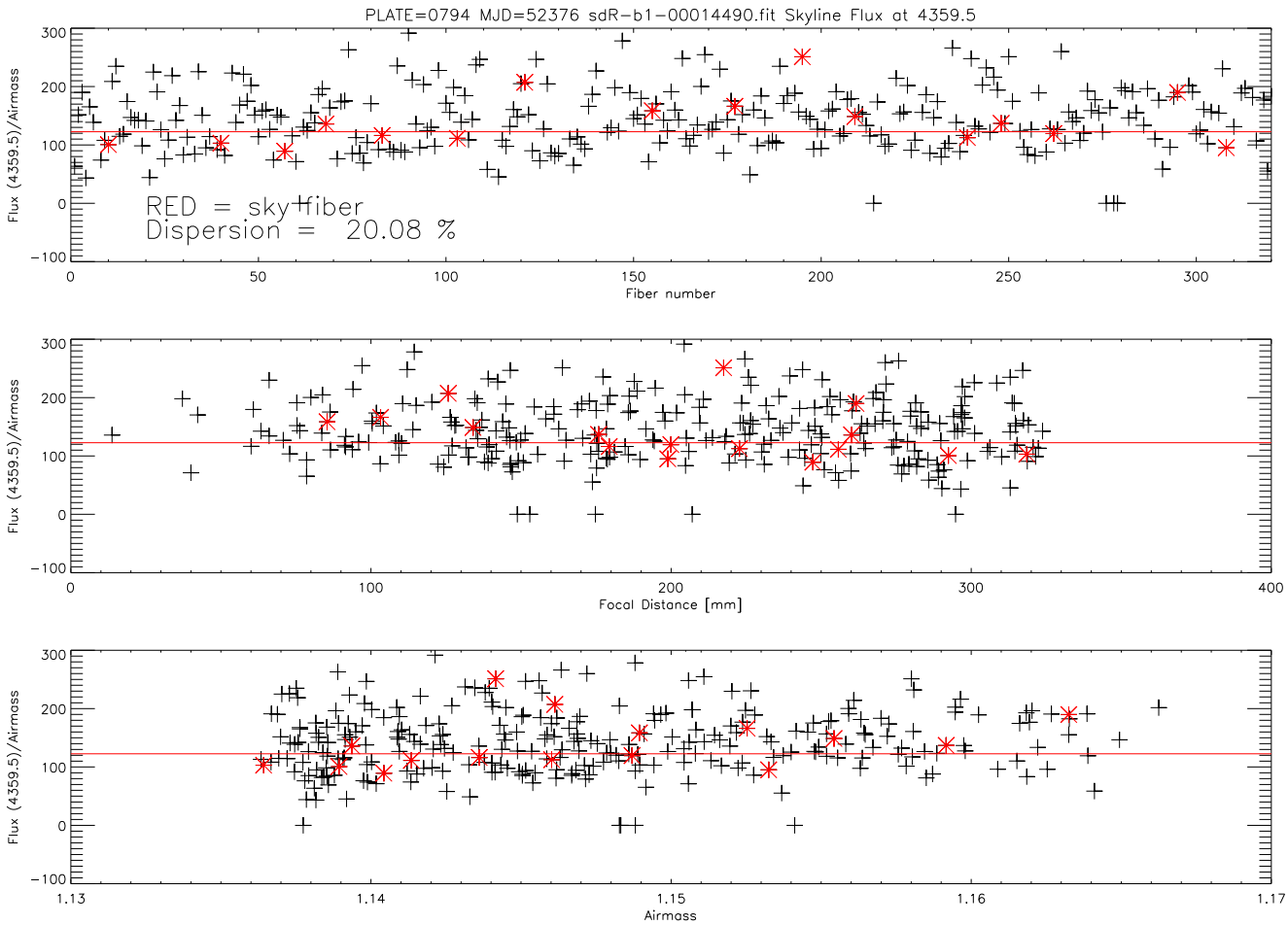

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b1-00014490.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

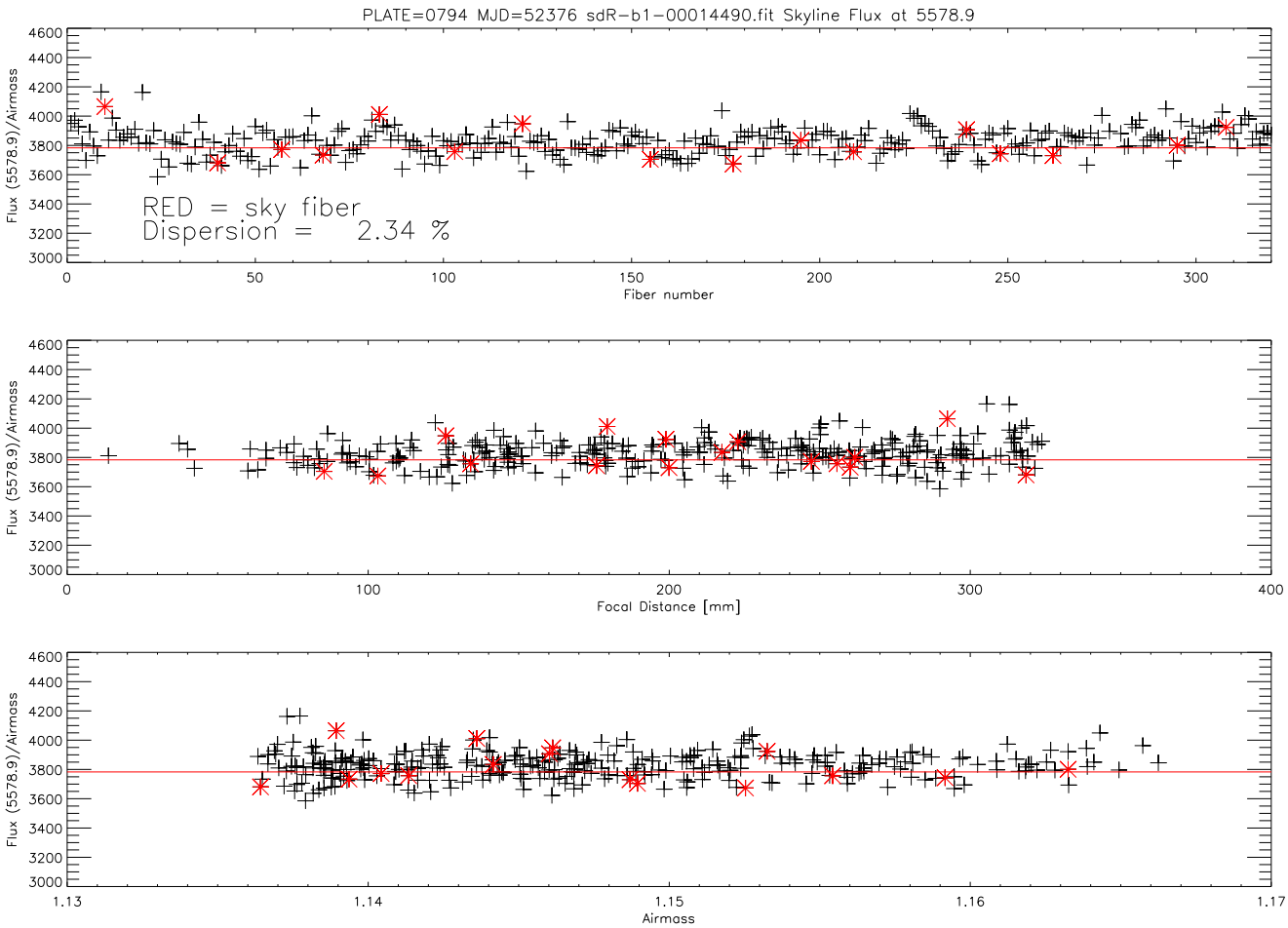

PLATE=0794 MJD=52376 sdR-b1-00014490.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

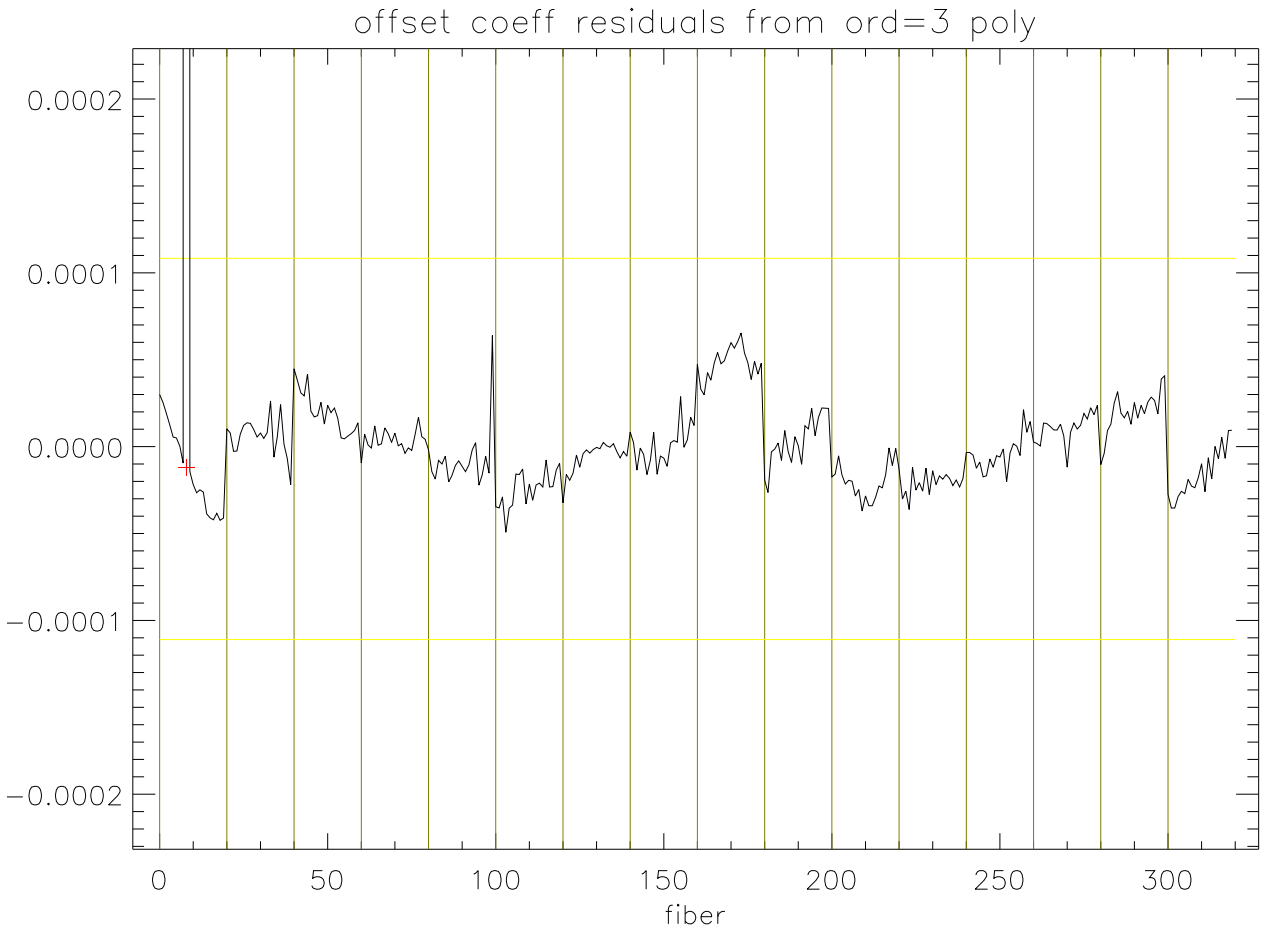

PLATE=0794 MJD=52376 sdR-b1-00014490.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

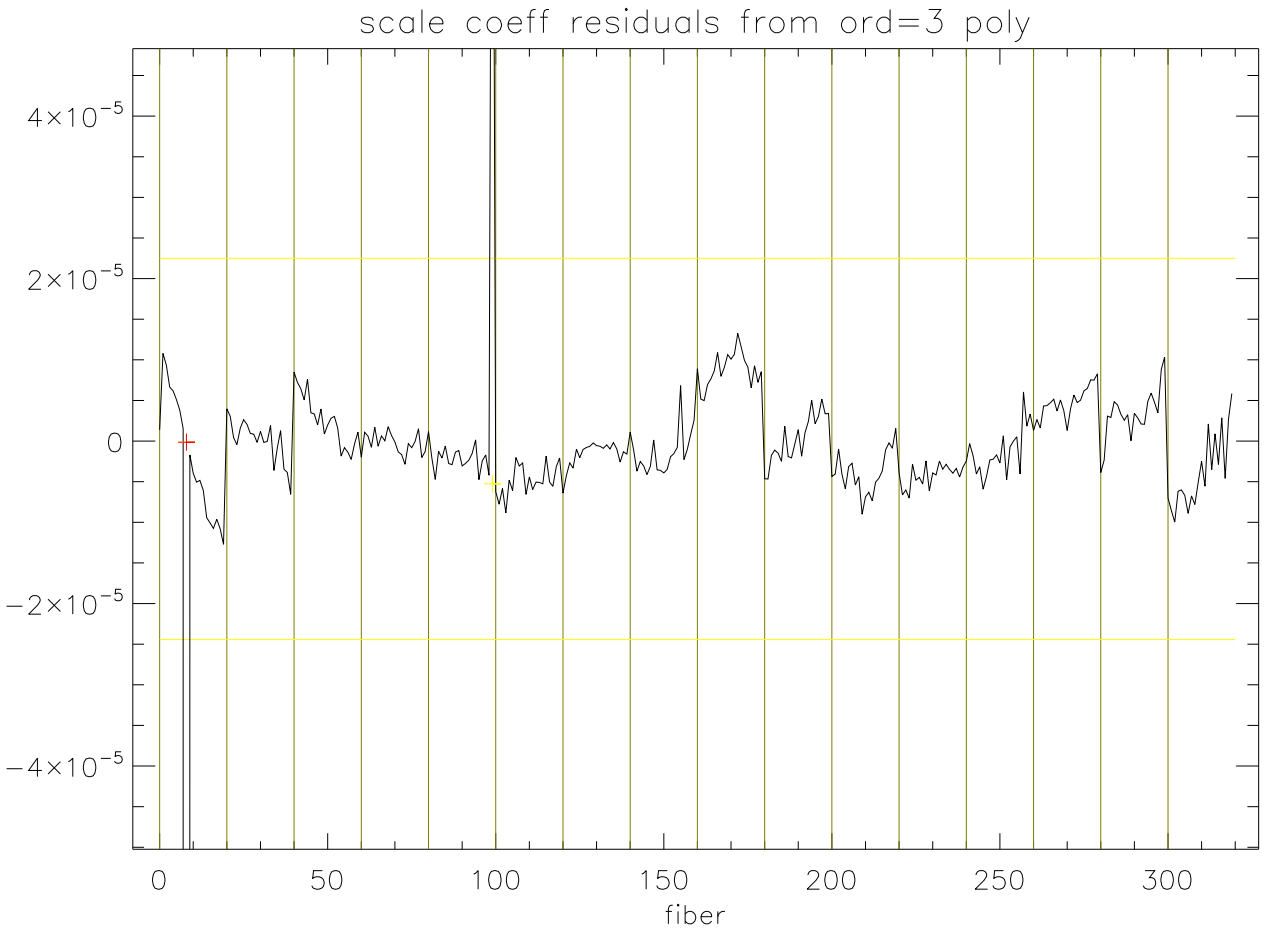

PLATE=0794 MJD=52376 sdR-b1-00014490.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

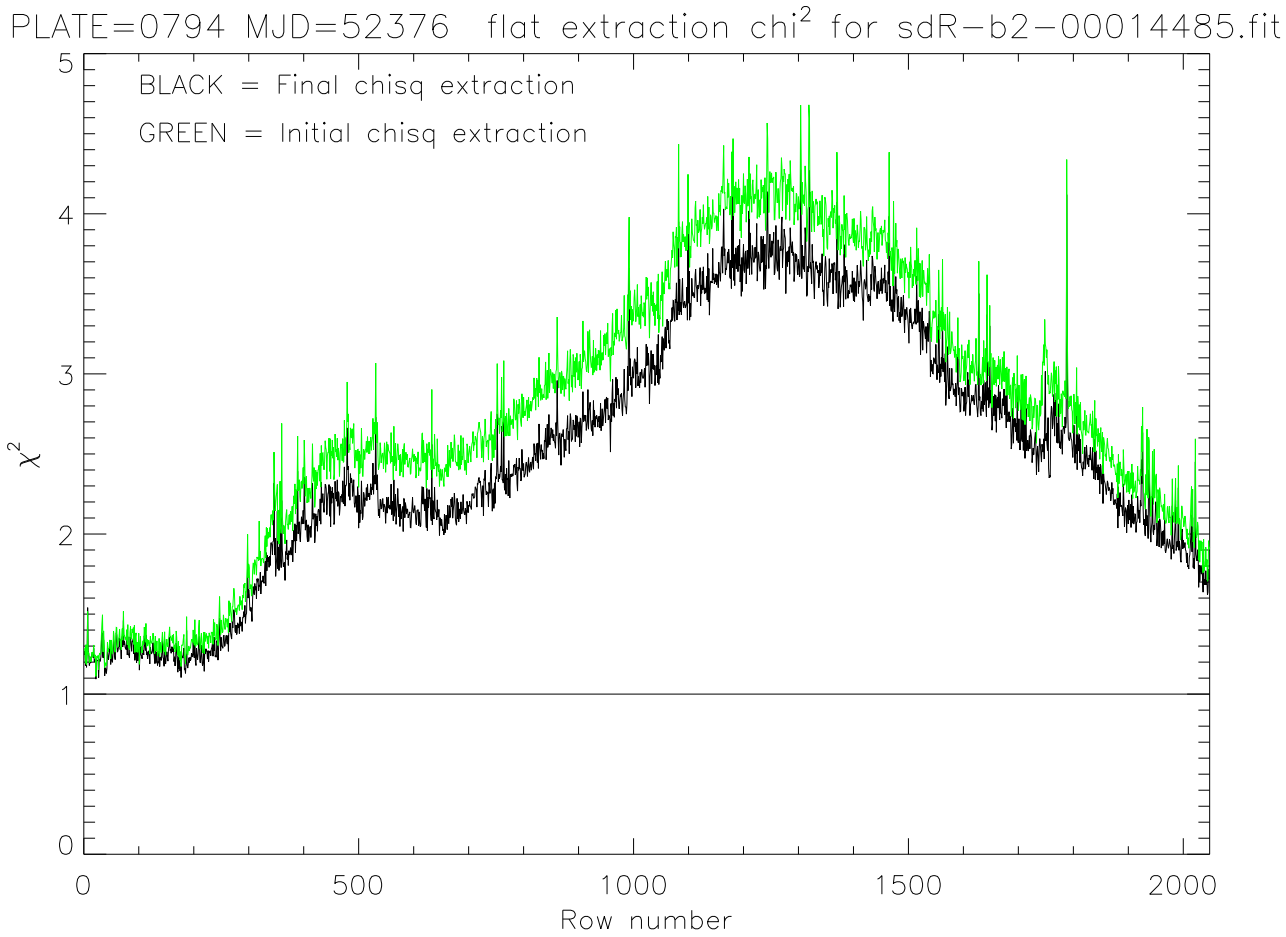

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b1-00014490.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

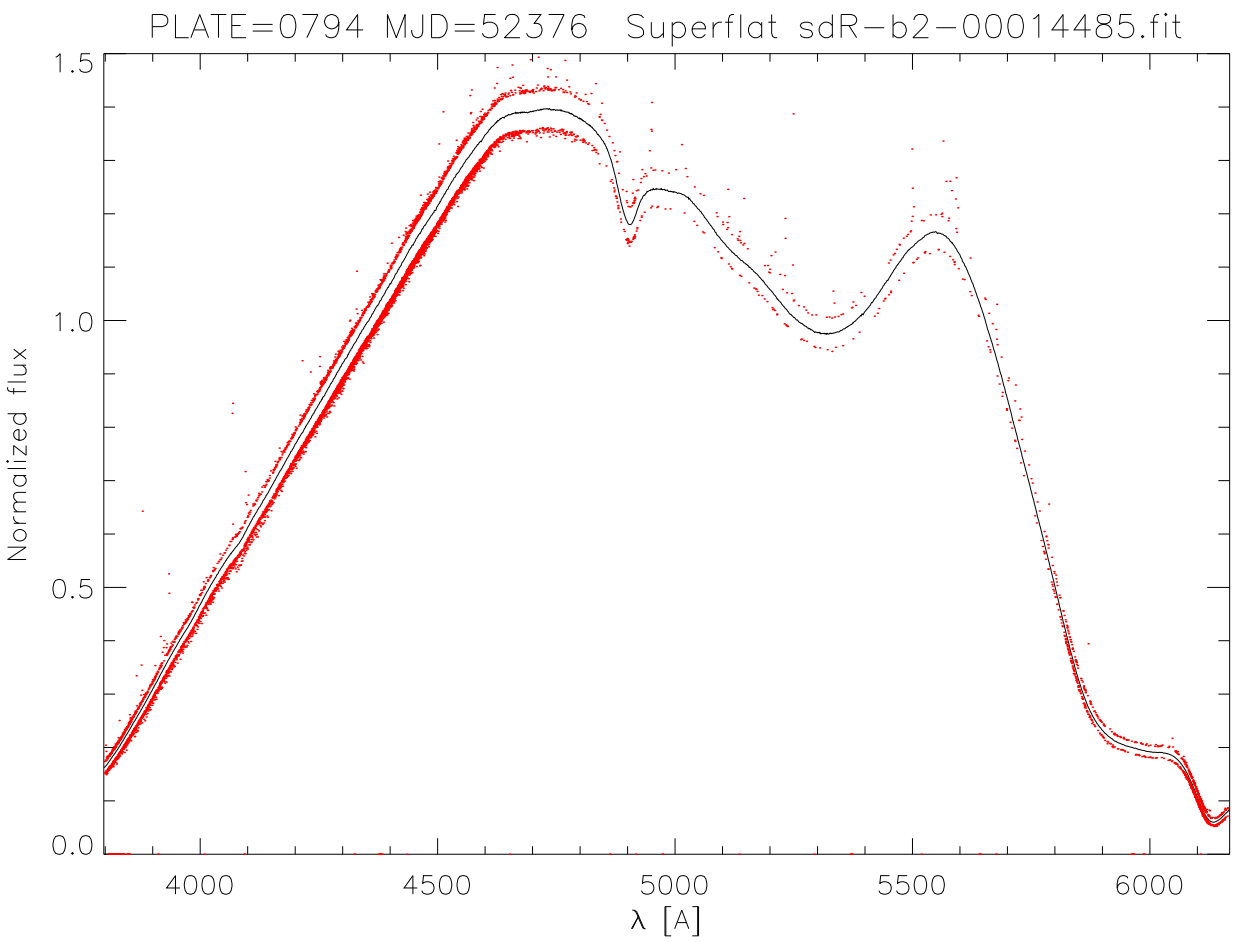

PLATE=0794 MJD=52376 sdR-b1-00014490.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 20.08 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

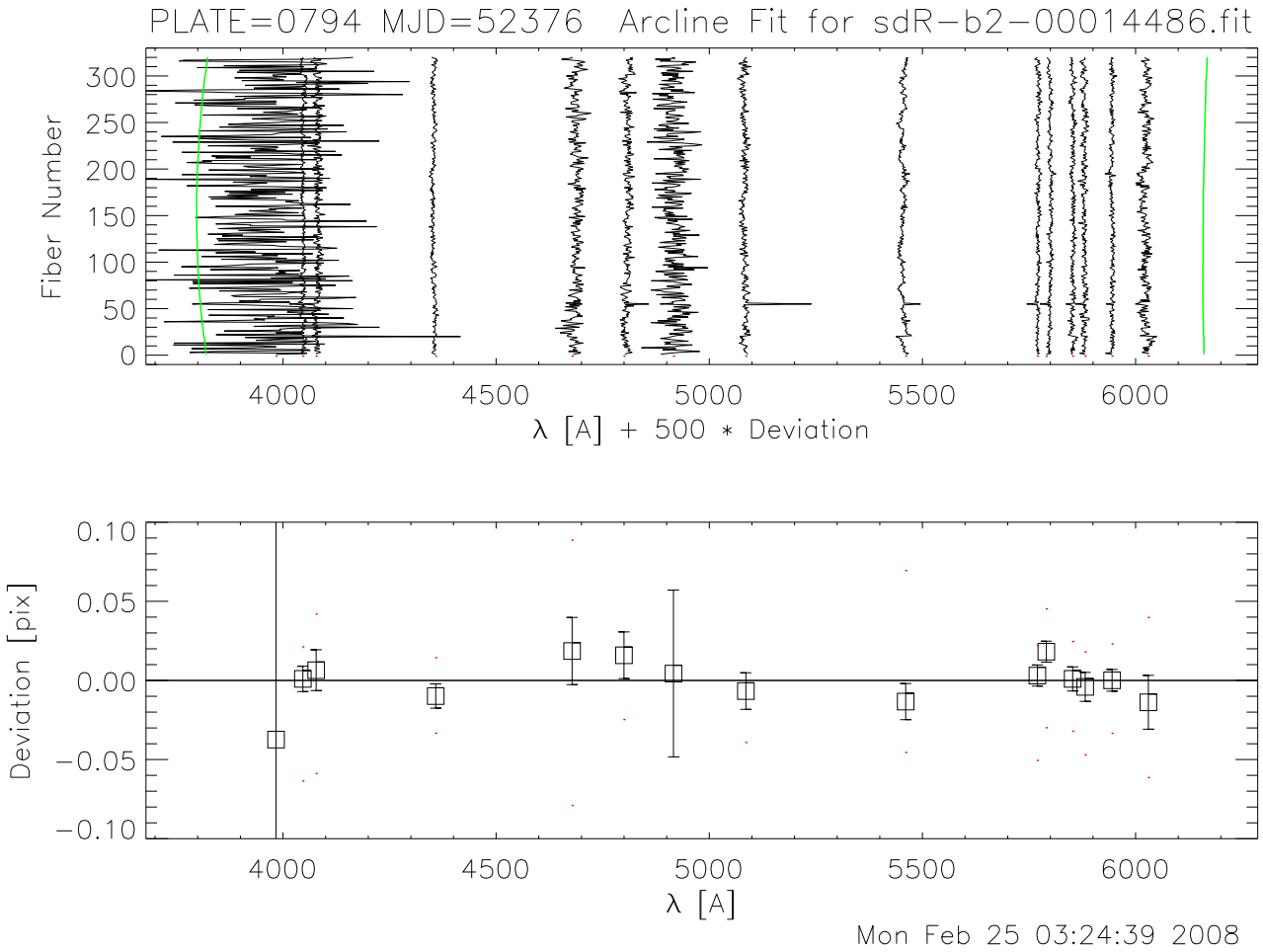

PLATE=0794 MJD=52376 sdR-b1-00014490.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.34 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

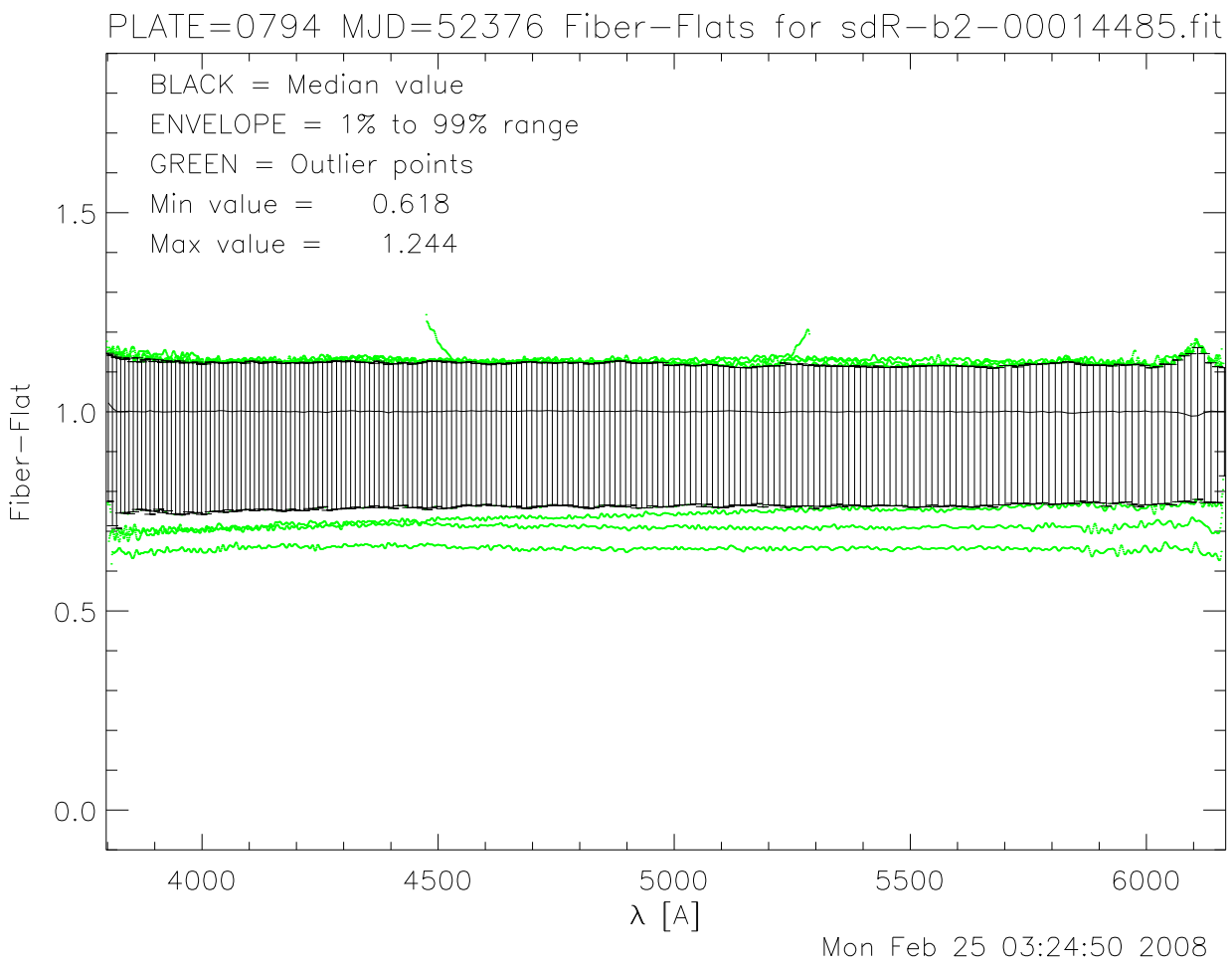

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

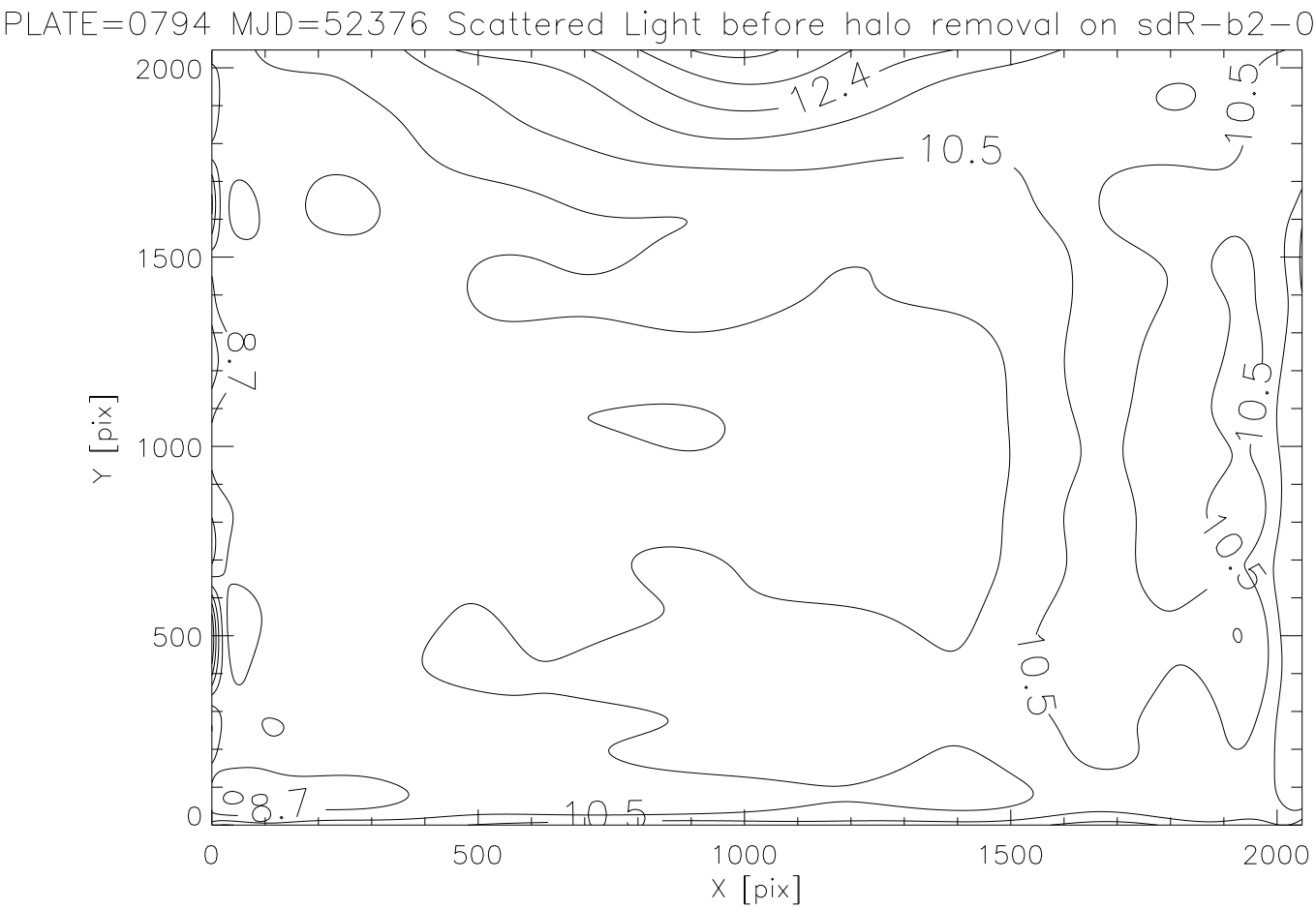

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

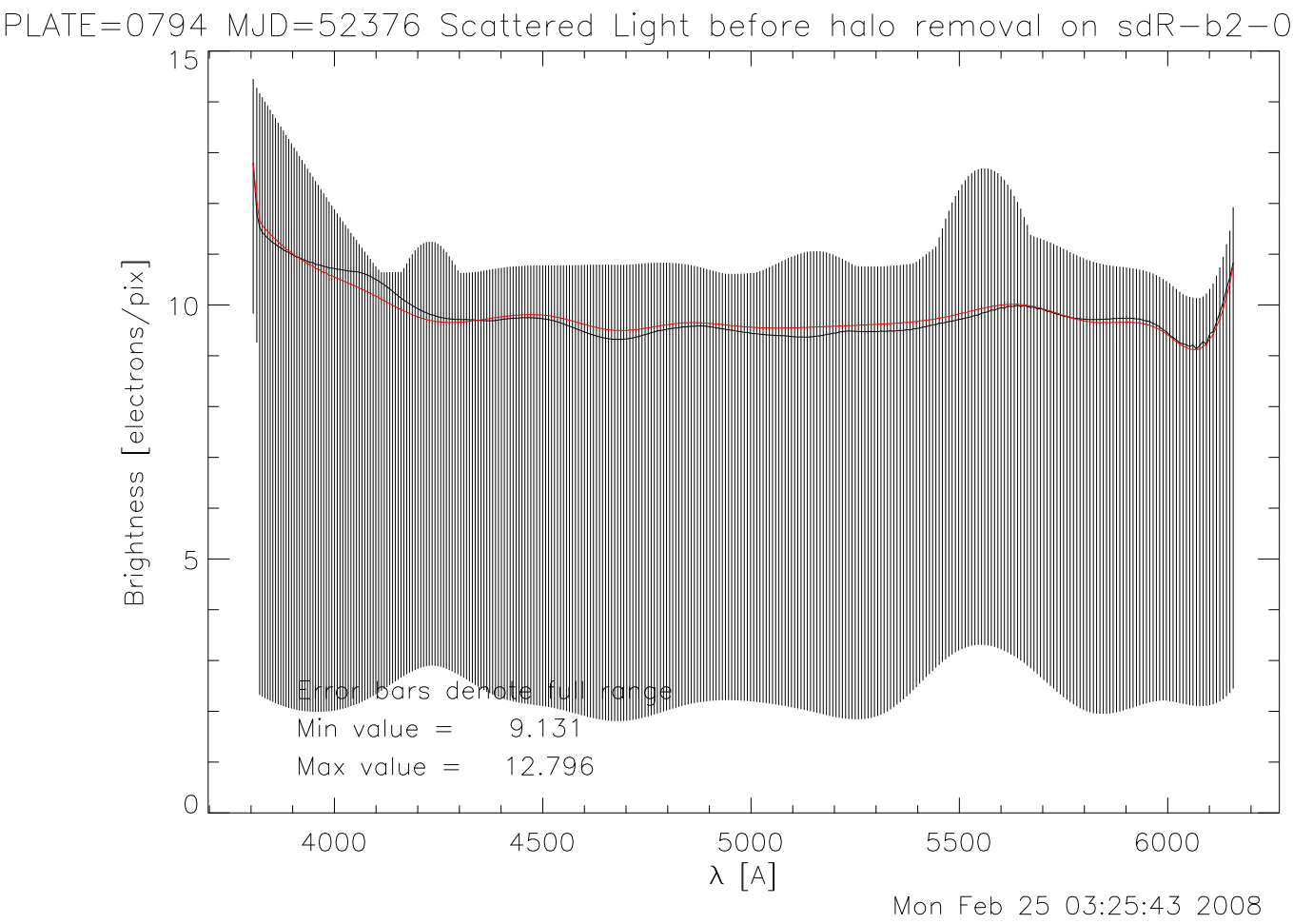

PLATE=0794 MJD=52376 flat extraction chi^2 for sdR−b2−00014485.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
0
500
1000
1500
2000

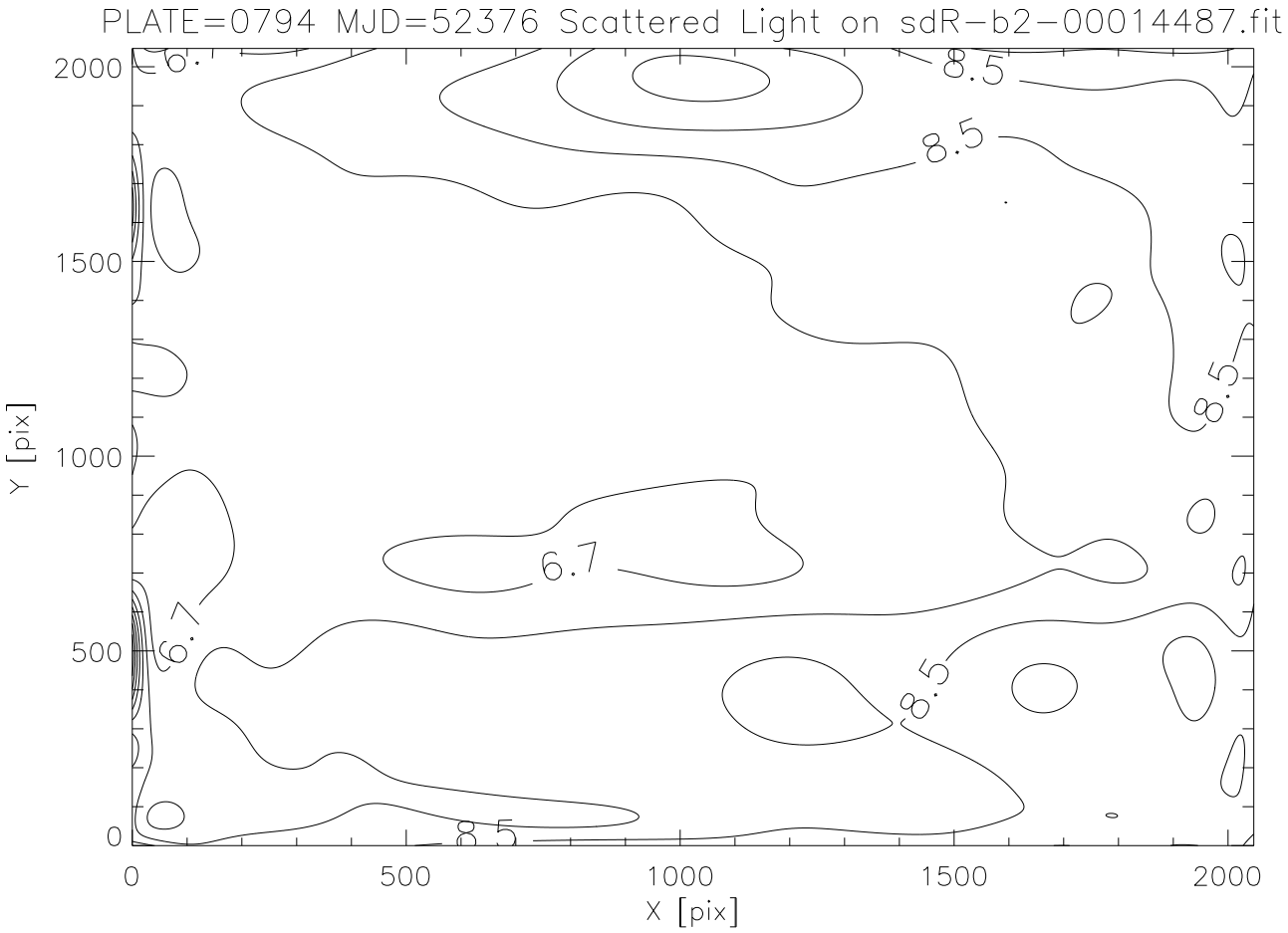

PLATE=0794 MJD=52376 Superflat sdR-b2-00014485.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

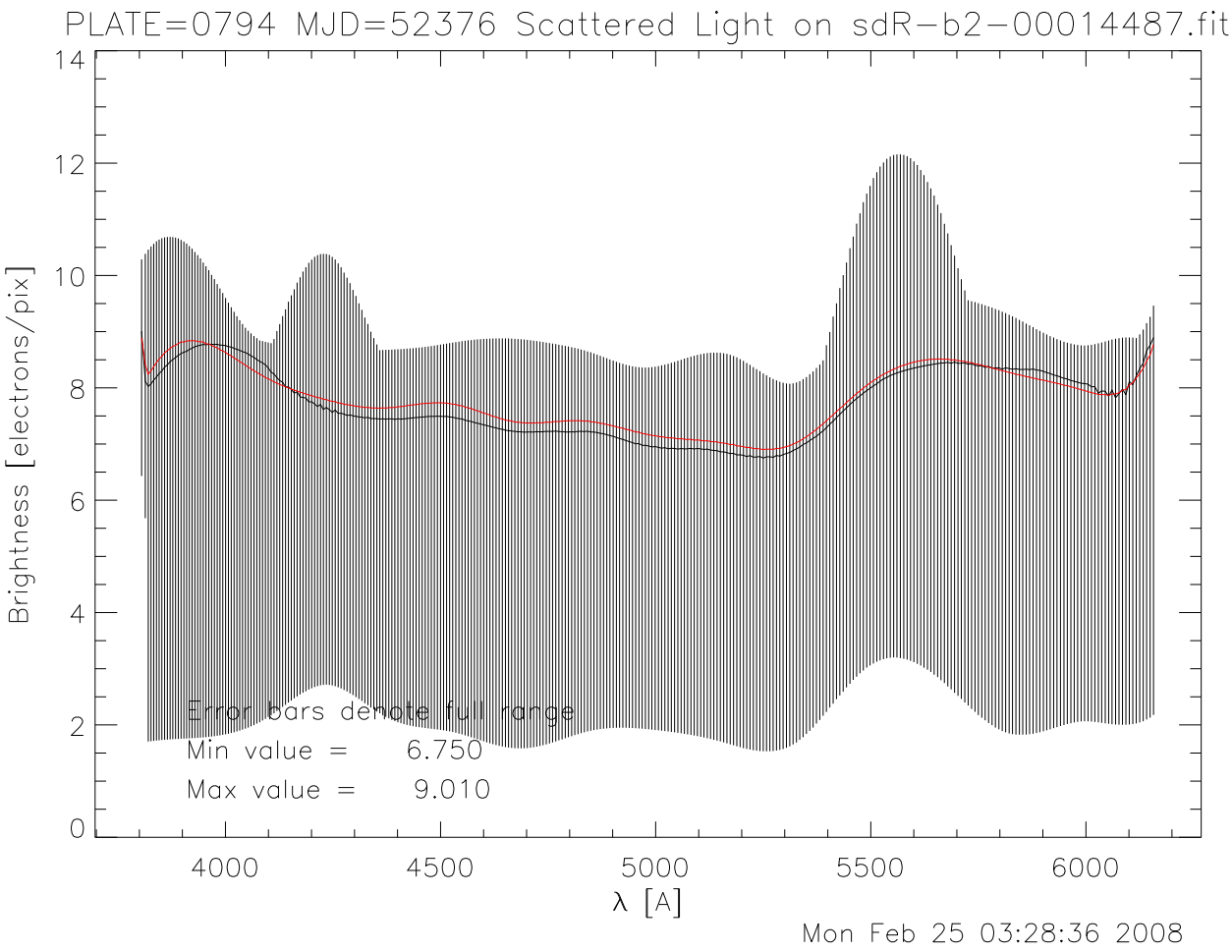

PLATE=0794 MJD=52376 Arcline Fit for sdR-b2-00014486.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:24:39 2008

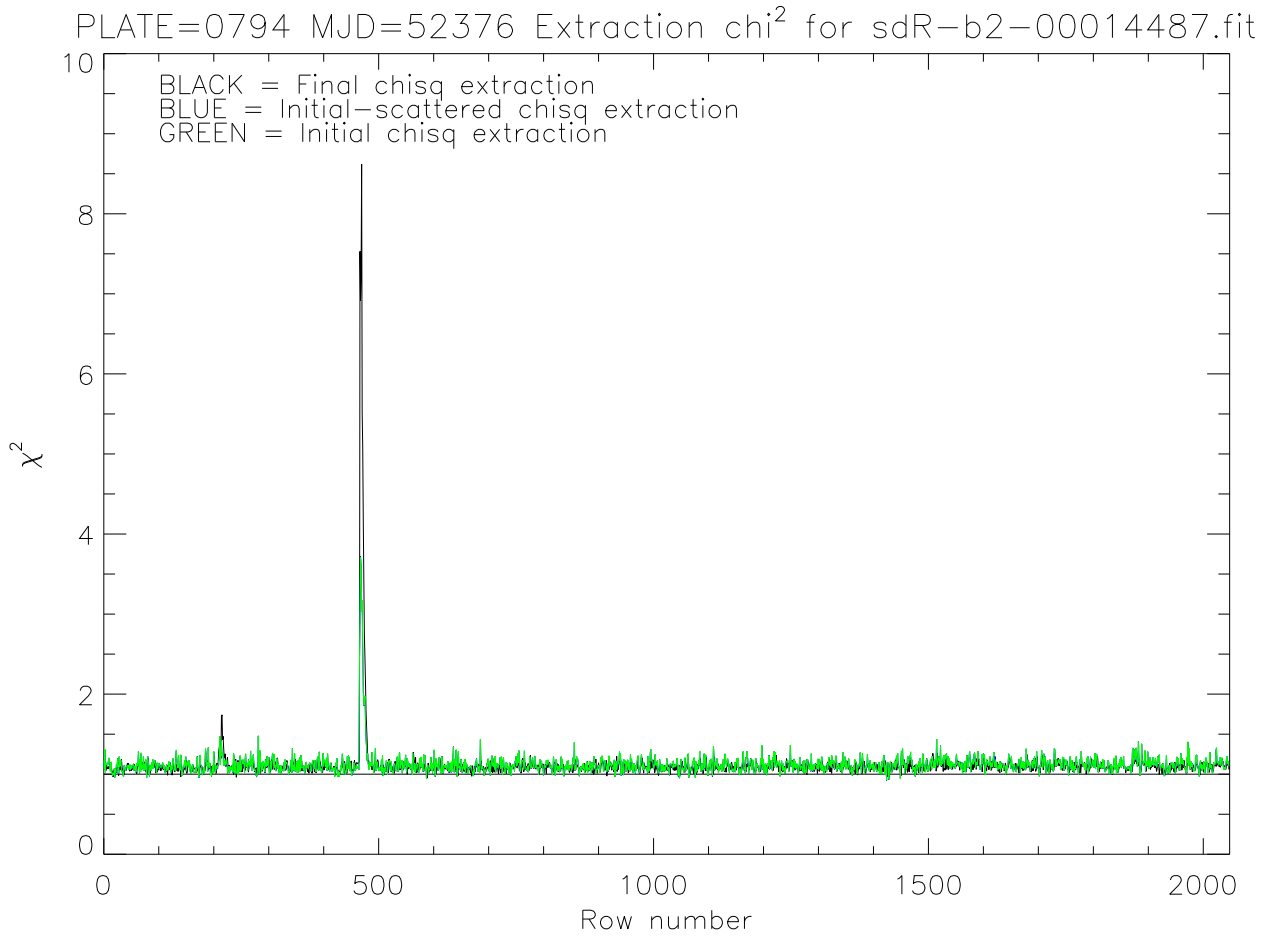

PLATE=0794 MJD=52376 Fiber-Flats for sdR-b2-00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.618
Max value = 1.244
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:24:50 2008

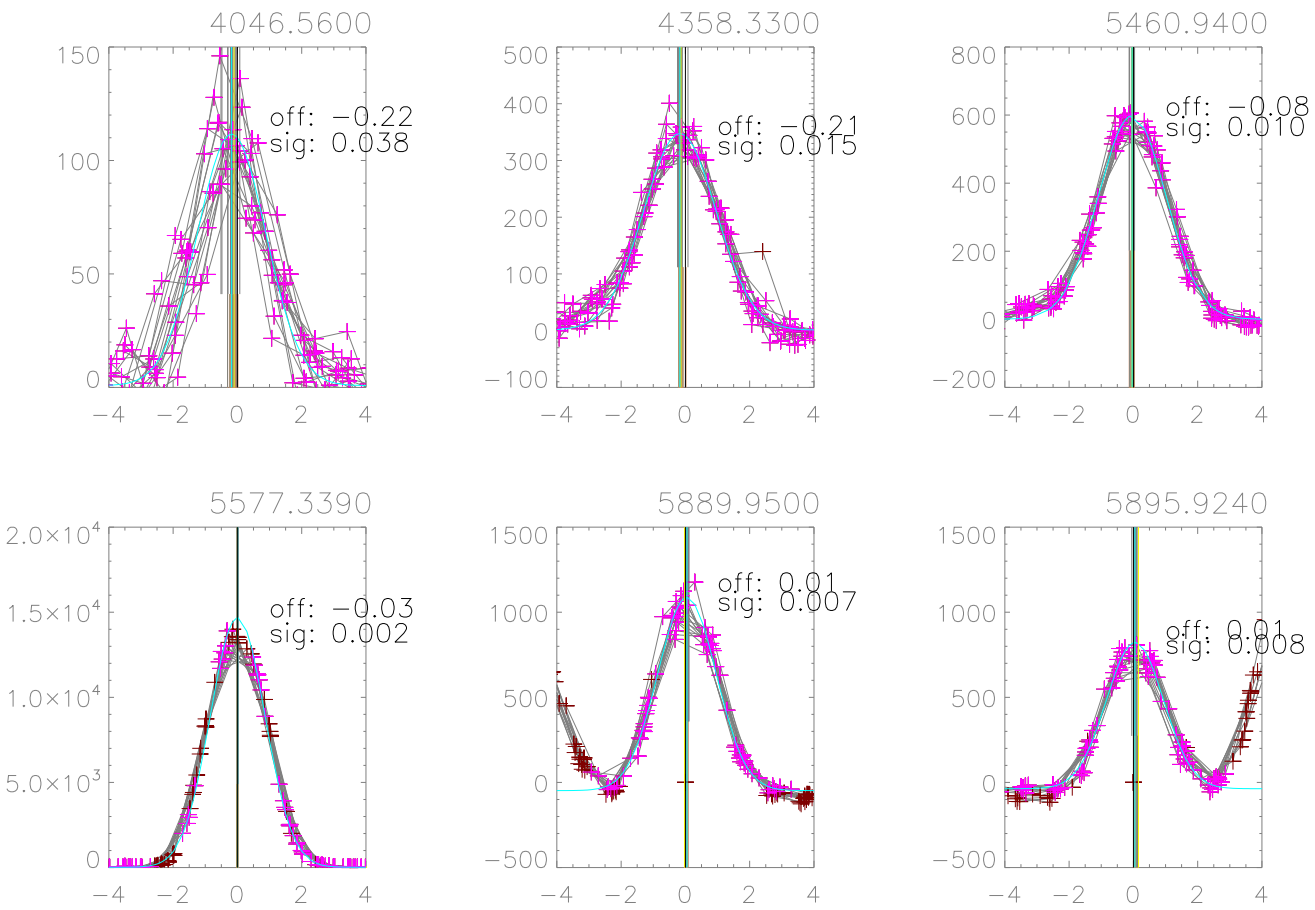

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b2-00014487.f
12.4
10.5
8.7
0
Y [pix]
X [pix]
0
500
1000
1500
2000

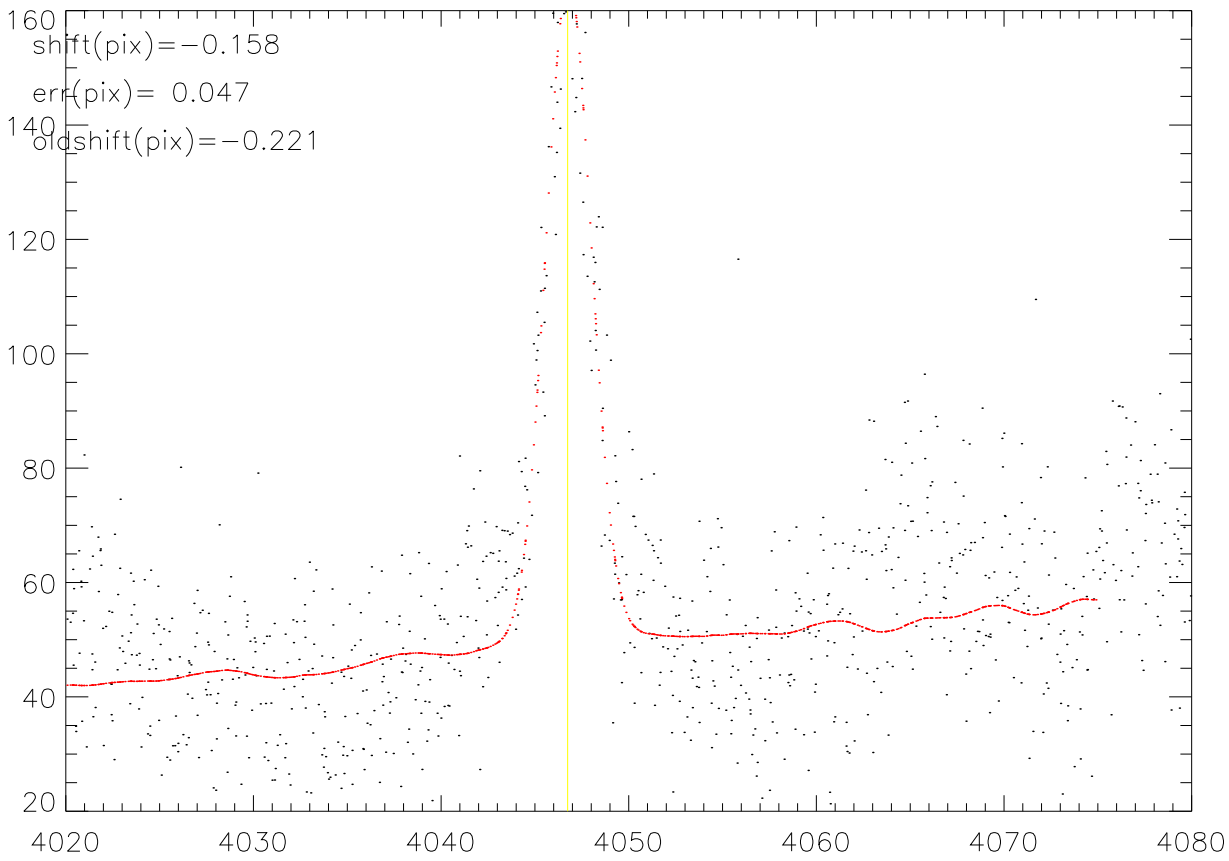

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b2-00014487.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 9.131
Max value = 12.796
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:25:43 2008

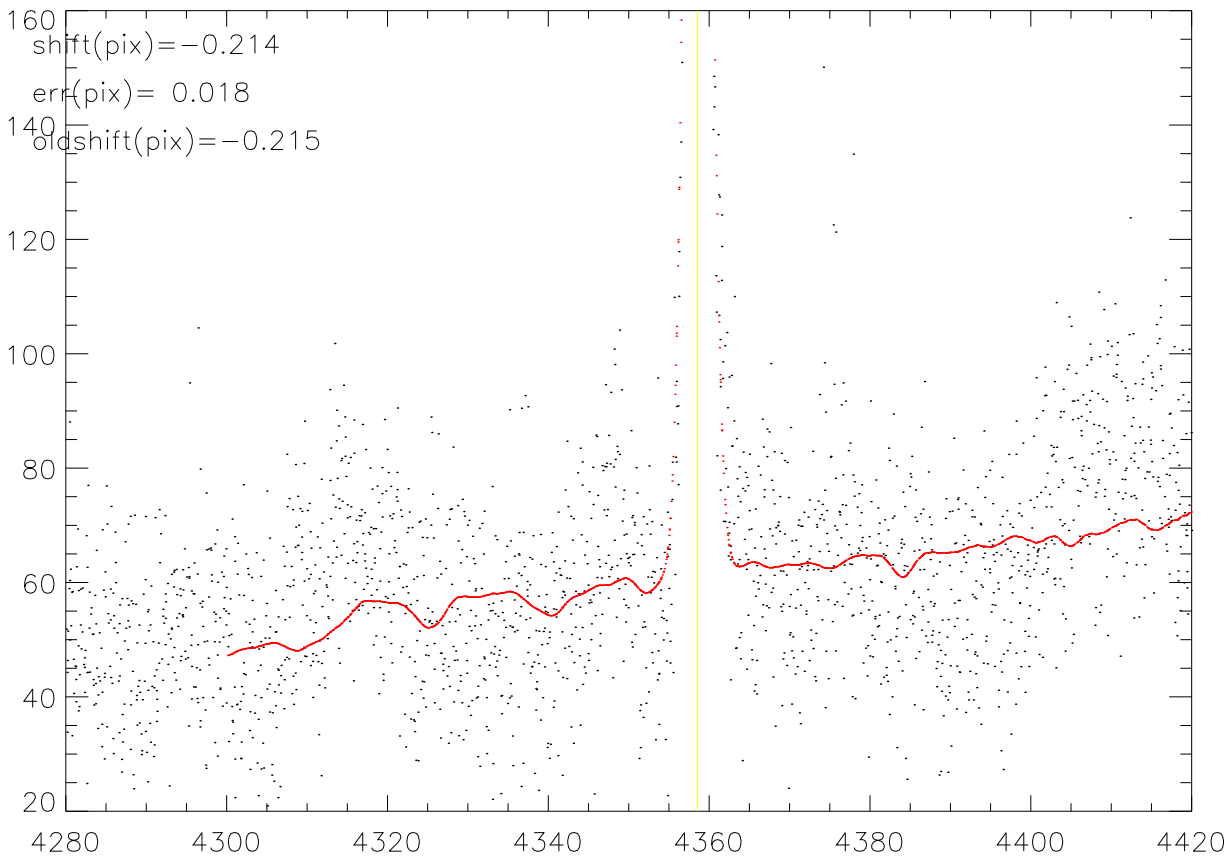

PLATE=0794 MJD=52376 Scattered Light on sdR-b2-00014487.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.7
8.5

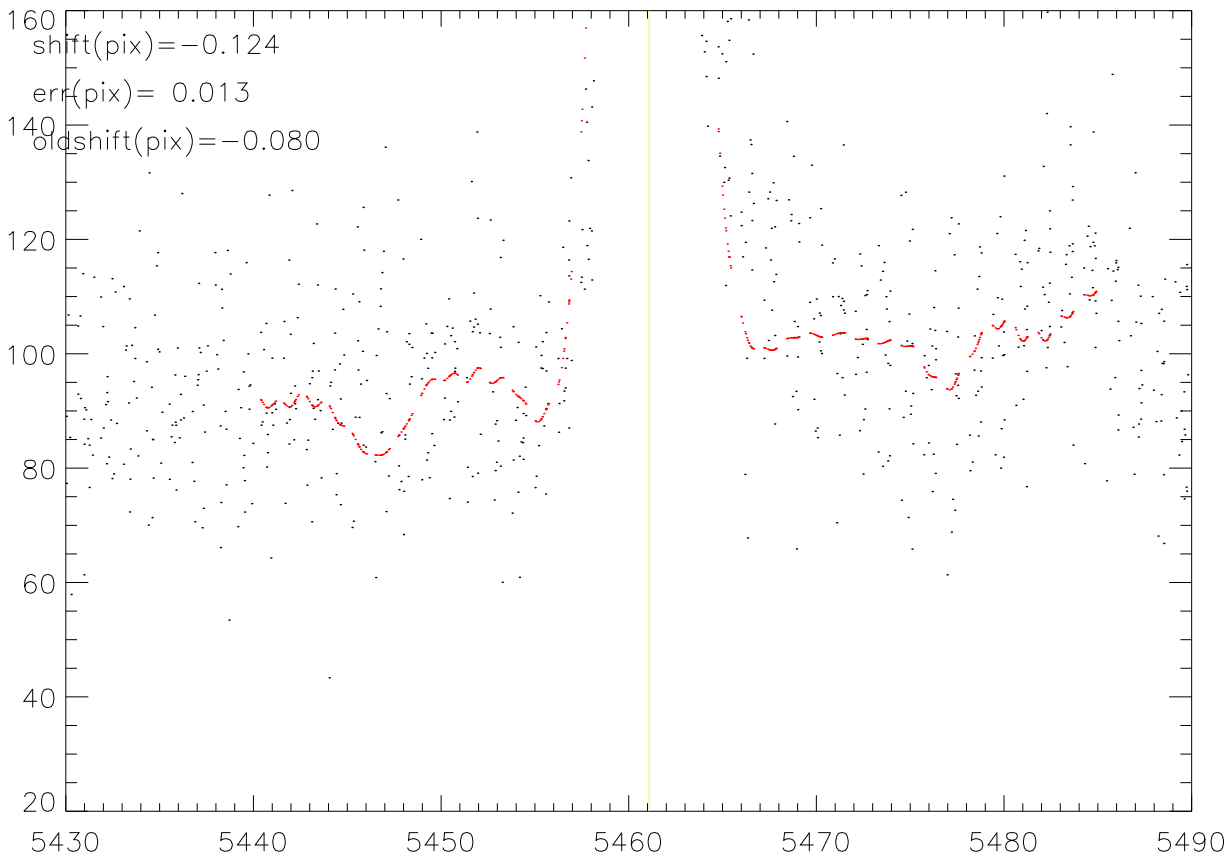

PLATE=0794 MJD=52376 Scattered Light on sdR-b2-00014487.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.750
Max value = 9.010
Mon Feb 25 03:28:36 2008

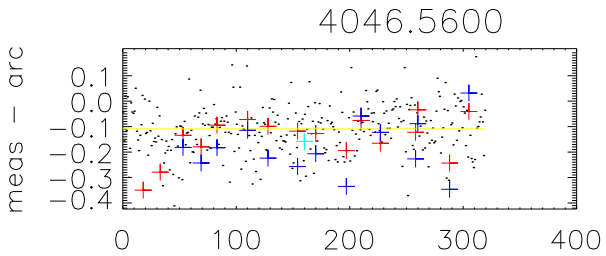

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-b2-00014487.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

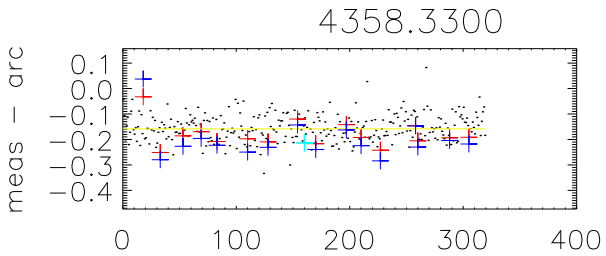

4046.5600
off: −0.22
sig: 0.038
4358.3300
off: −0.21
sig: 0.015
5460.9400
off: −0.08
sig: 0.010
5577.3390
off: −0.03
sig: 0.002
5889.9500
off: 0.01
sig: 0.007
5895.9240
off: 0.01
sig: 0.008

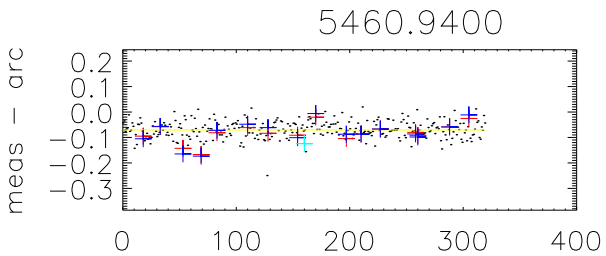

shift(pix)=−0.158
err(pix)= 0.047
oldshift(pix)=−0.221
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

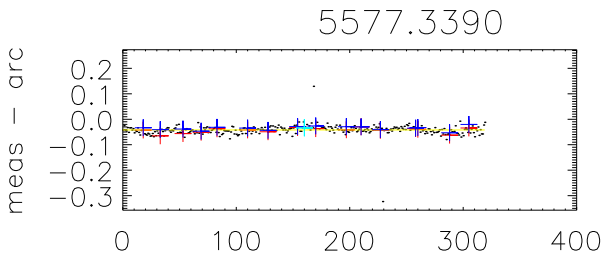

shift(pix)=−0.214
err(pix)= 0.018
oldshift(pix)=−0.215
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

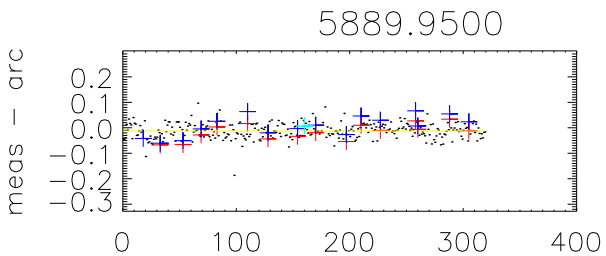

shift(pix)=−0.124
err(pix)= 0.013
oldshift(pix)=−0.080
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

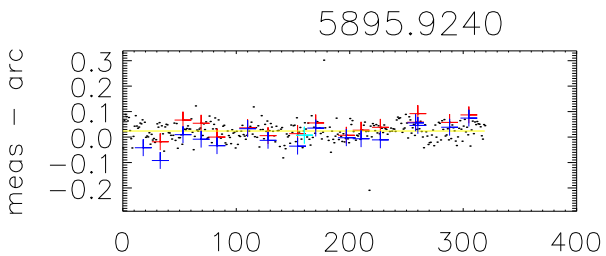

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

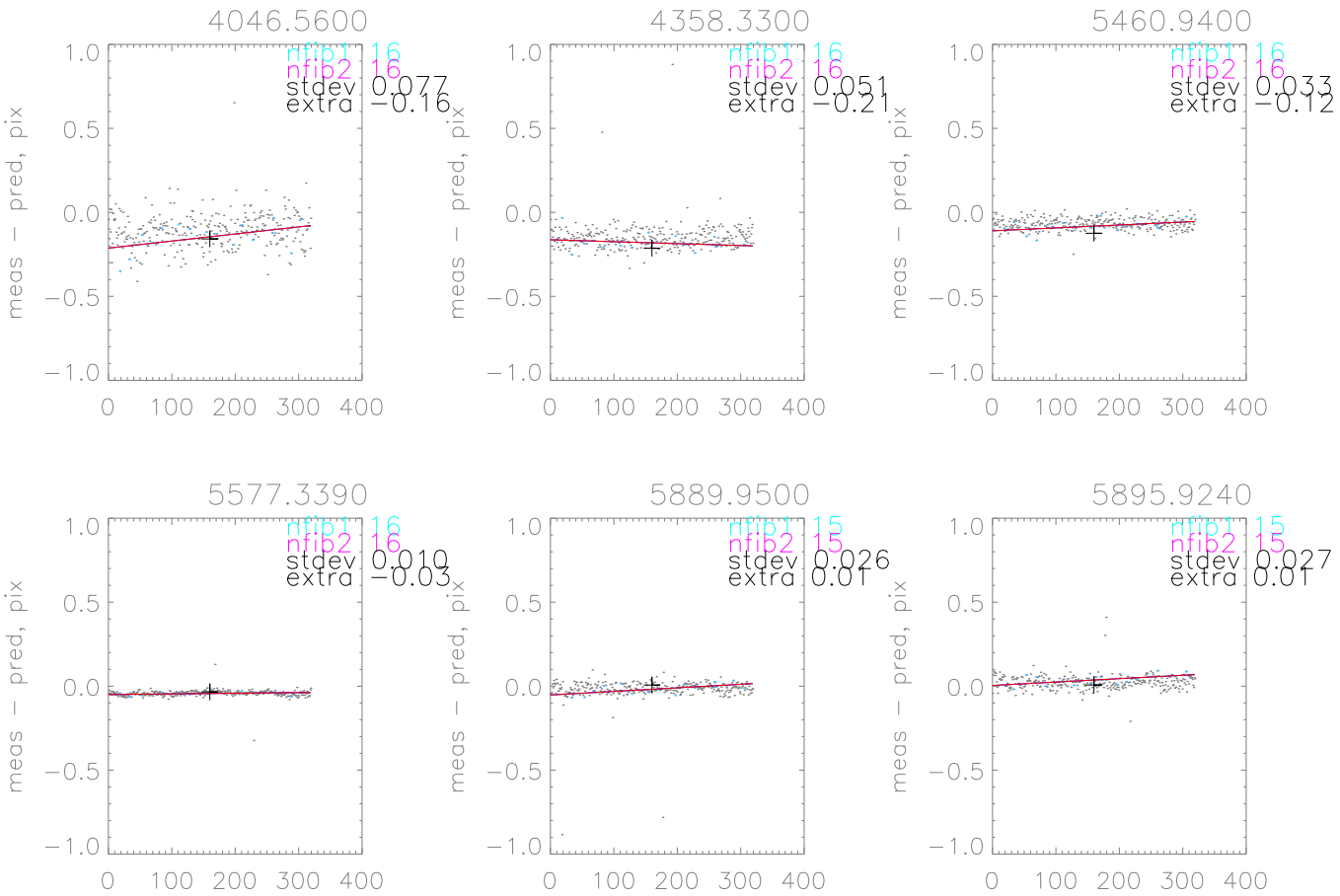

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

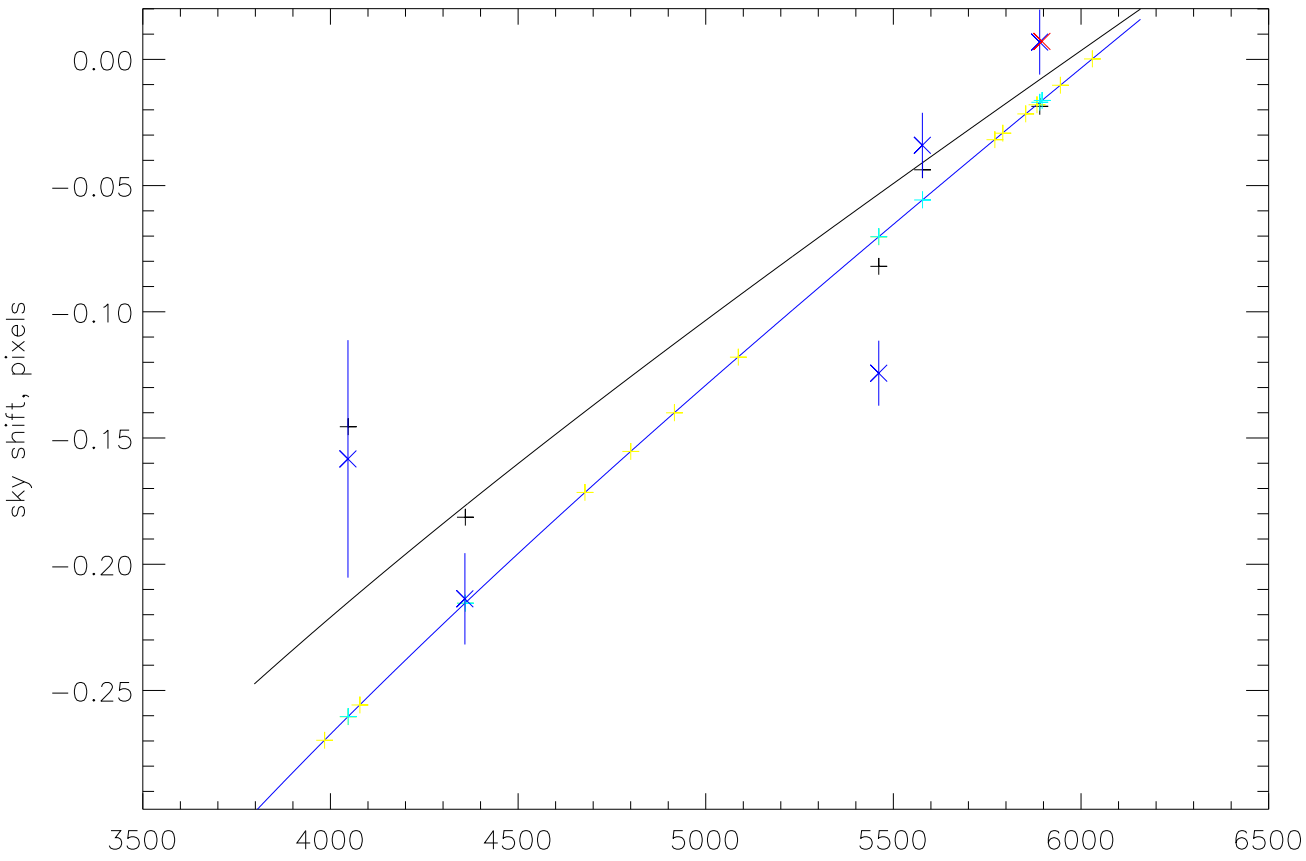

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

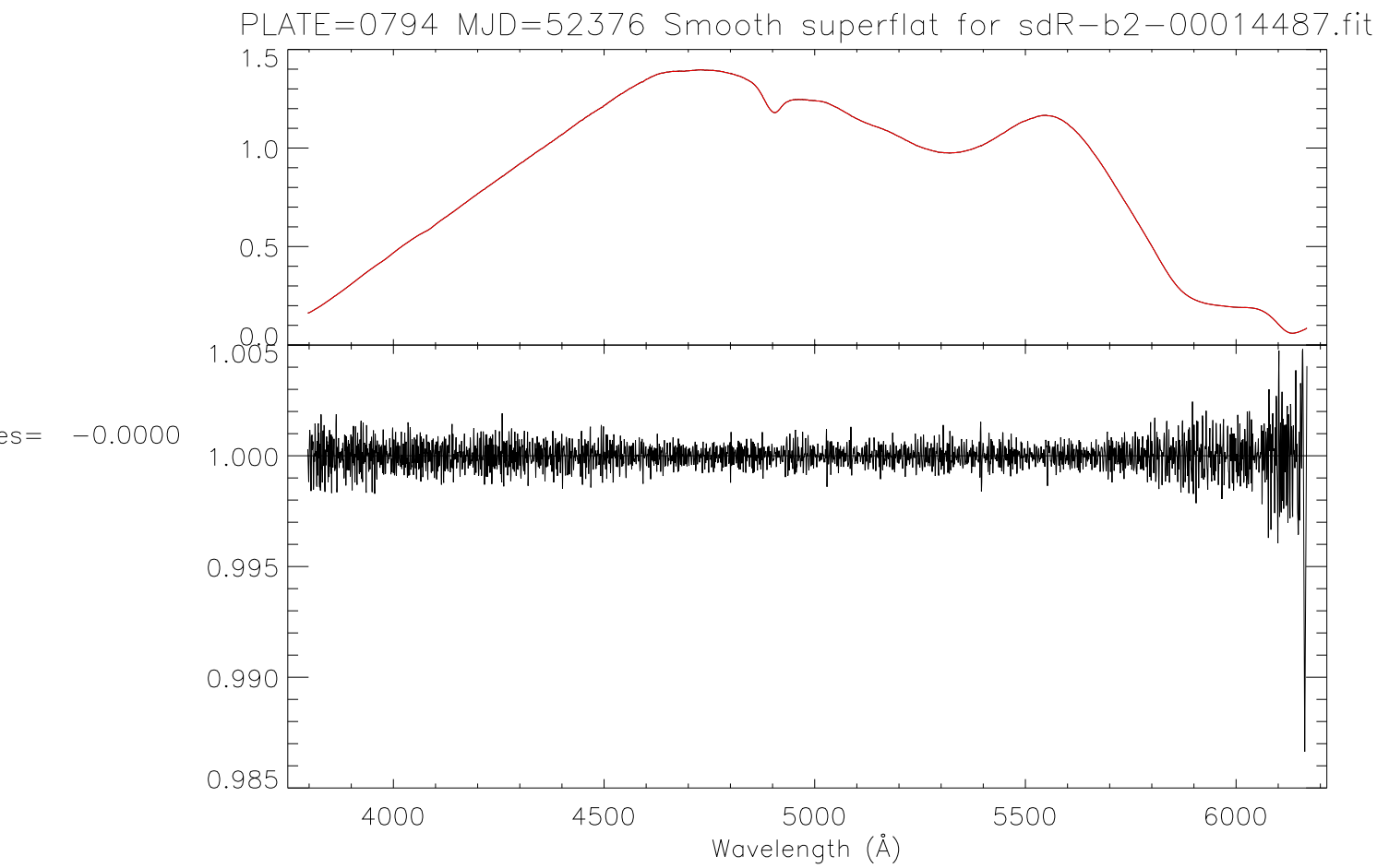

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

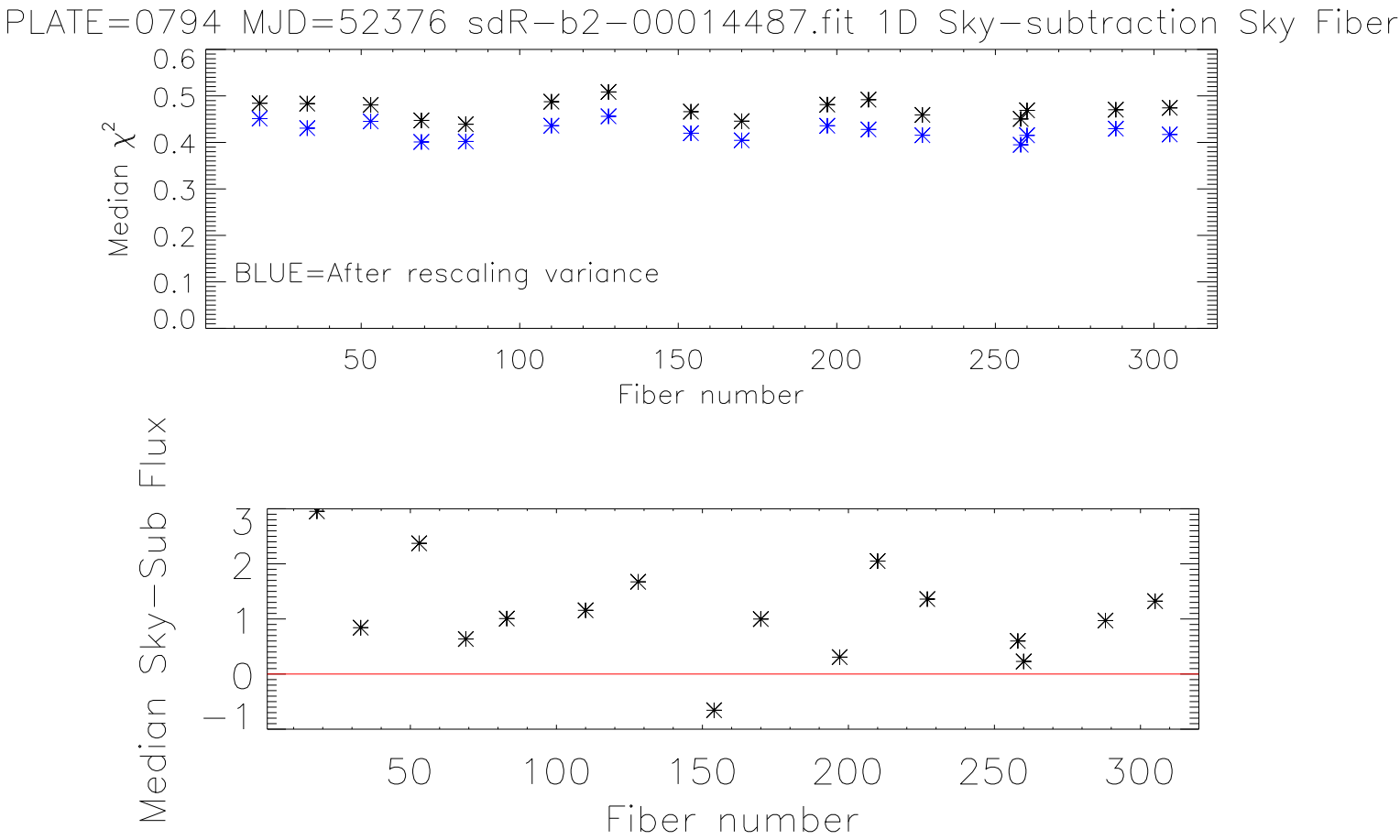

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

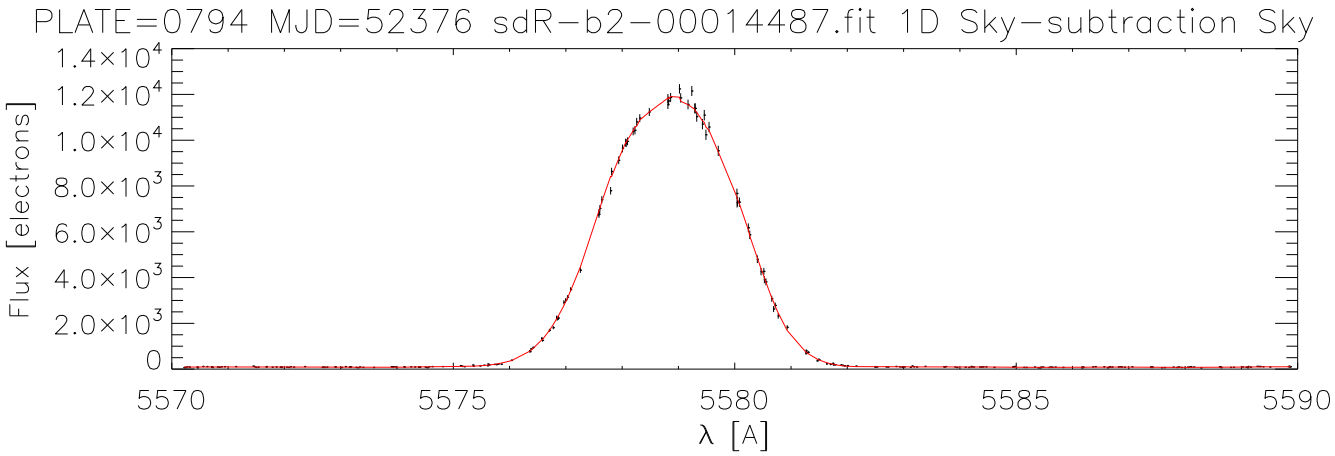

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

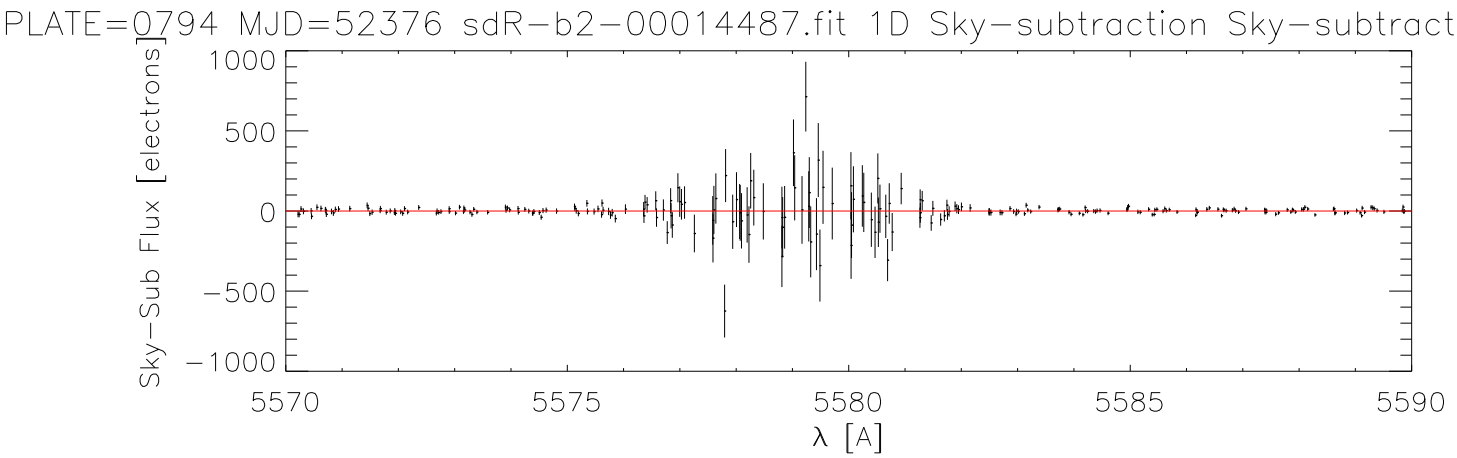

4046.5600
nfib1 16
nfib2 16
stdev 0.077
extra −0.16
4358.3300
nfib1 16
nfib2 16
stdev 0.051
extra −0.21
5460.9400
nfib1 16
nfib2 16
stdev 0.033
extra −0.12
5577.3390
nfib1 16
nfib2 16
stdev 0.010
extra −0.03
5889.9500
nfib1 15
nfib2 15
stdev 0.026
extra 0.01
5895.9240
nfib1 15
nfib2 15
stdev 0.027
extra 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

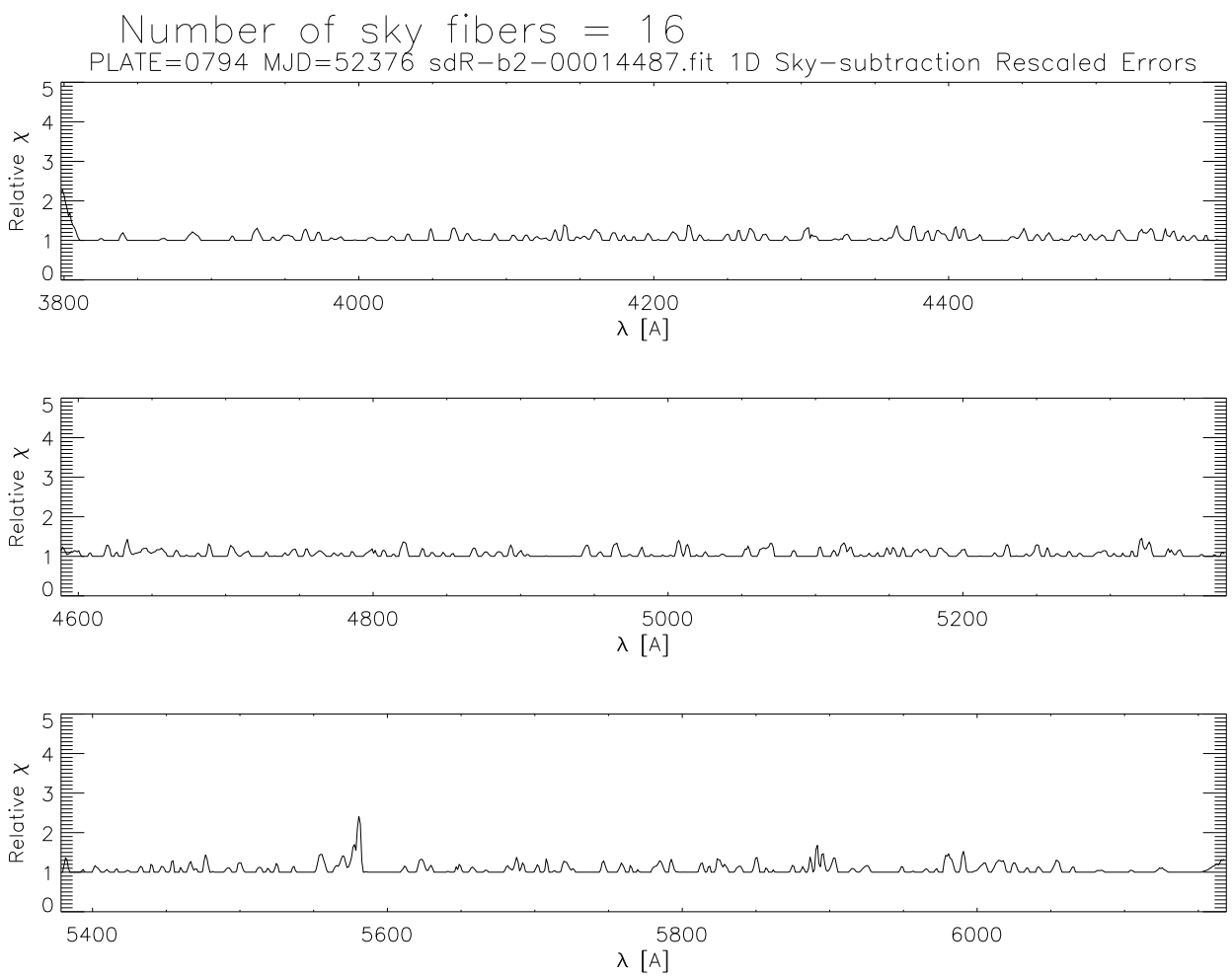

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

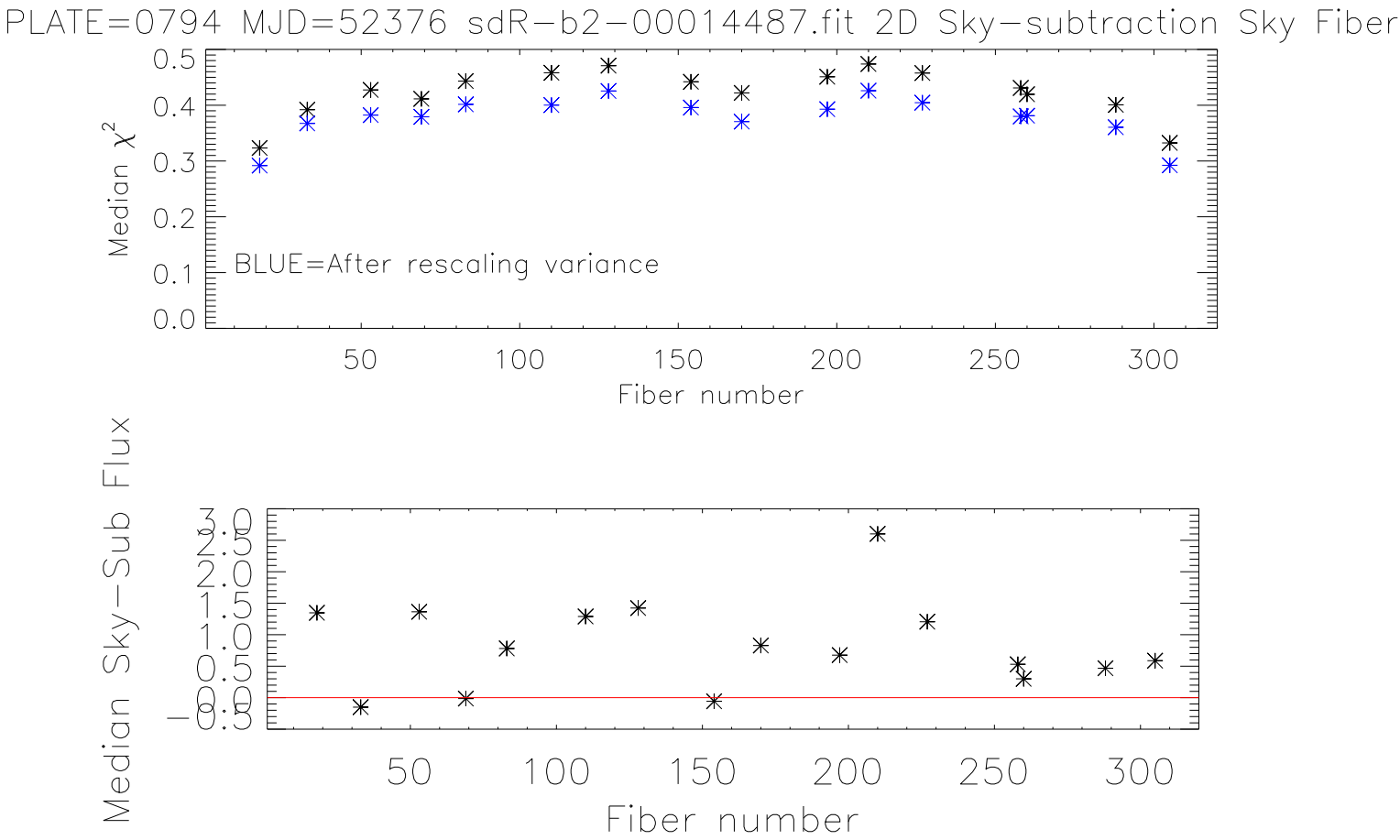

PLATE=0794 MJD=52376 Smooth superflat for sdR-b2-00014487.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

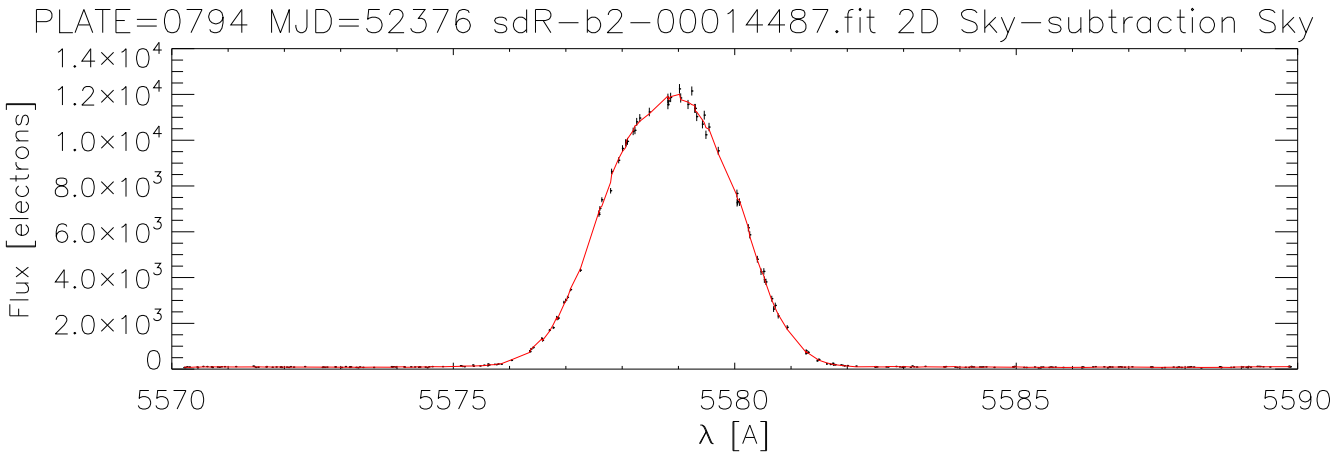

PLATE=0794 MJD=52376 sdR-b2-00014487.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

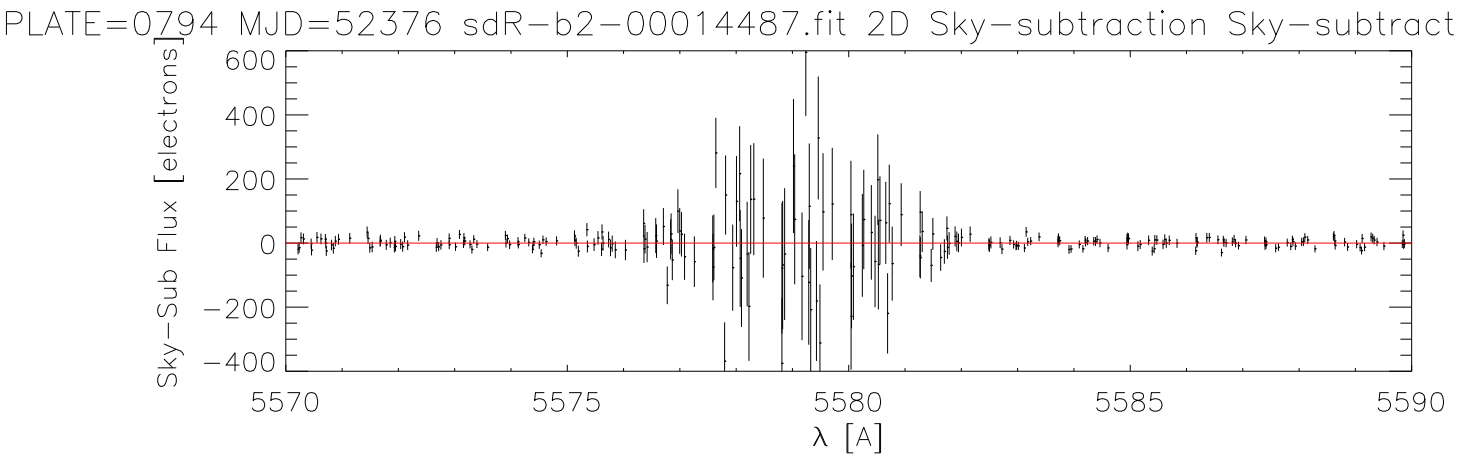

PLATE=0794 MJD=52376 sdR-b2-00014487.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

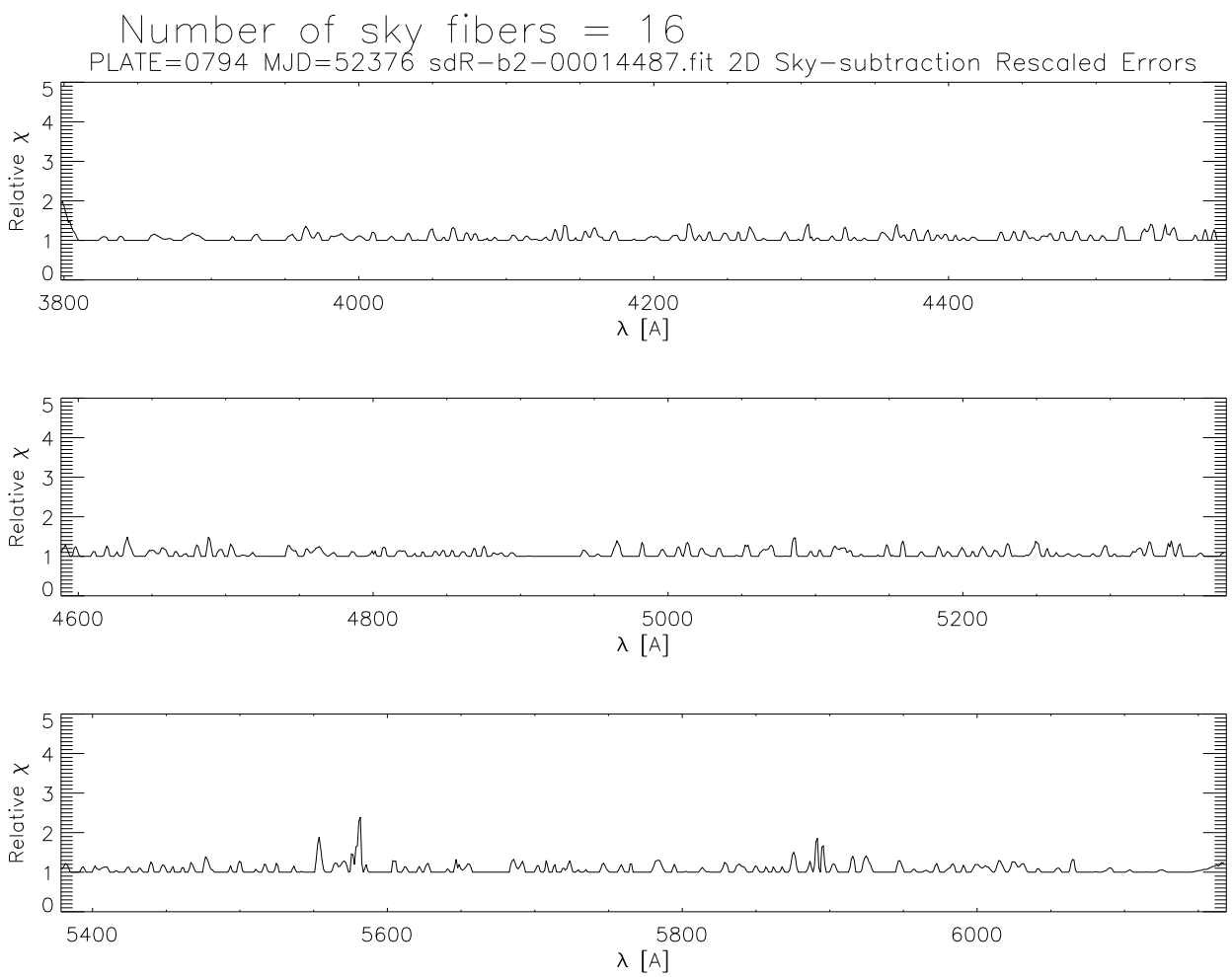

PLATE=0794 MJD=52376 sdR-b2-00014487.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

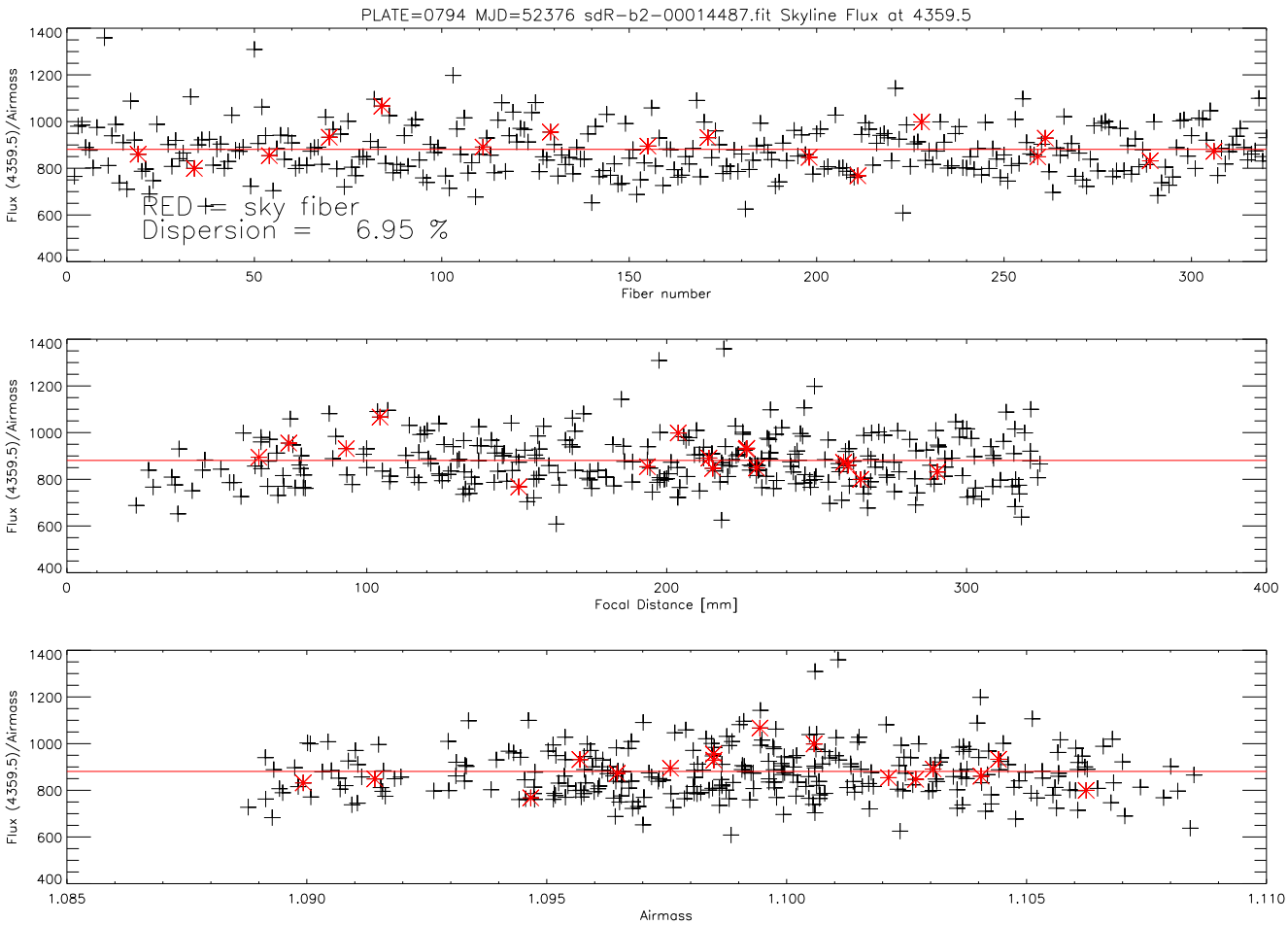

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b2-00014487.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

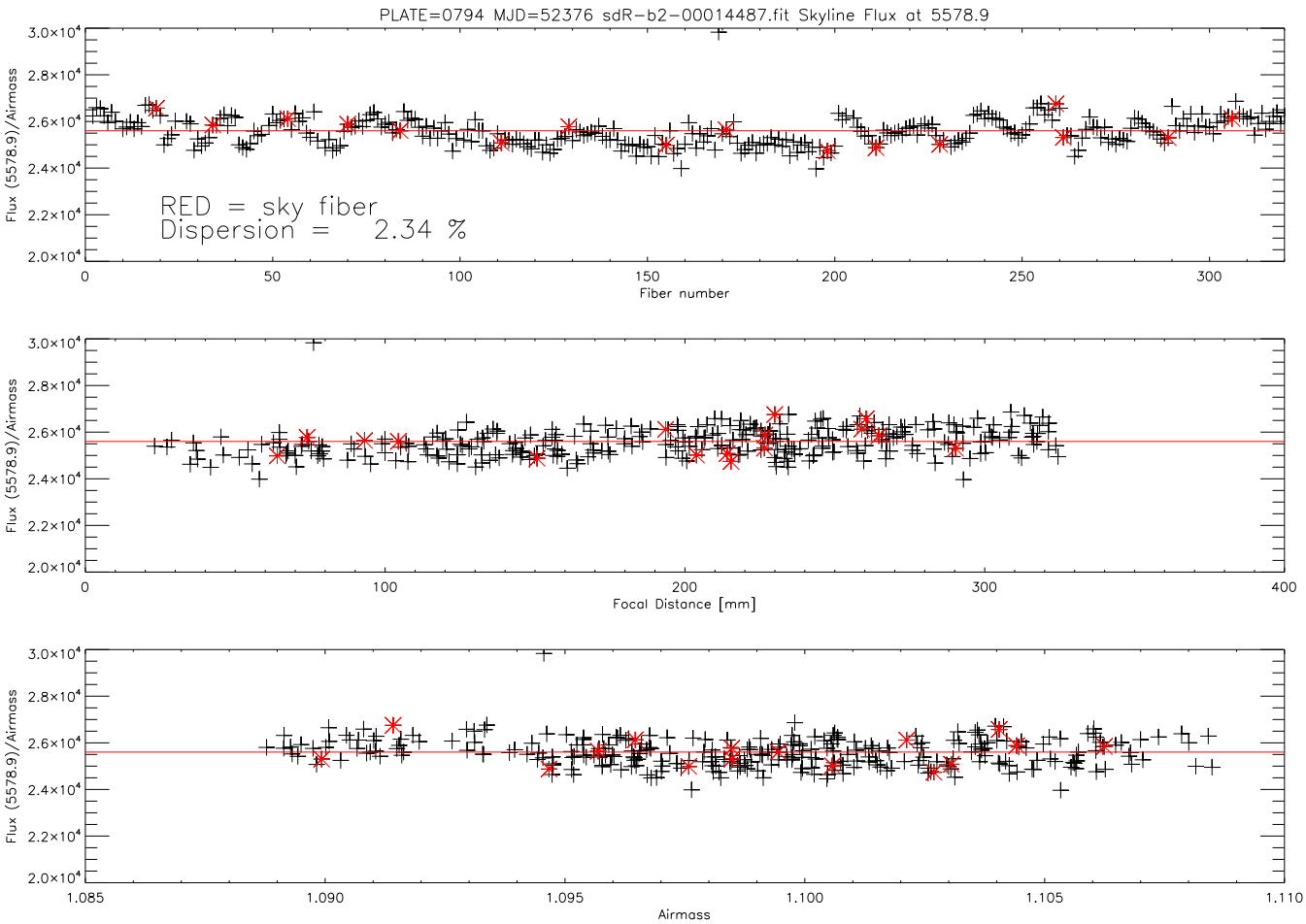

PLATE=0794 MJD=52376 sdR-b2-00014487.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

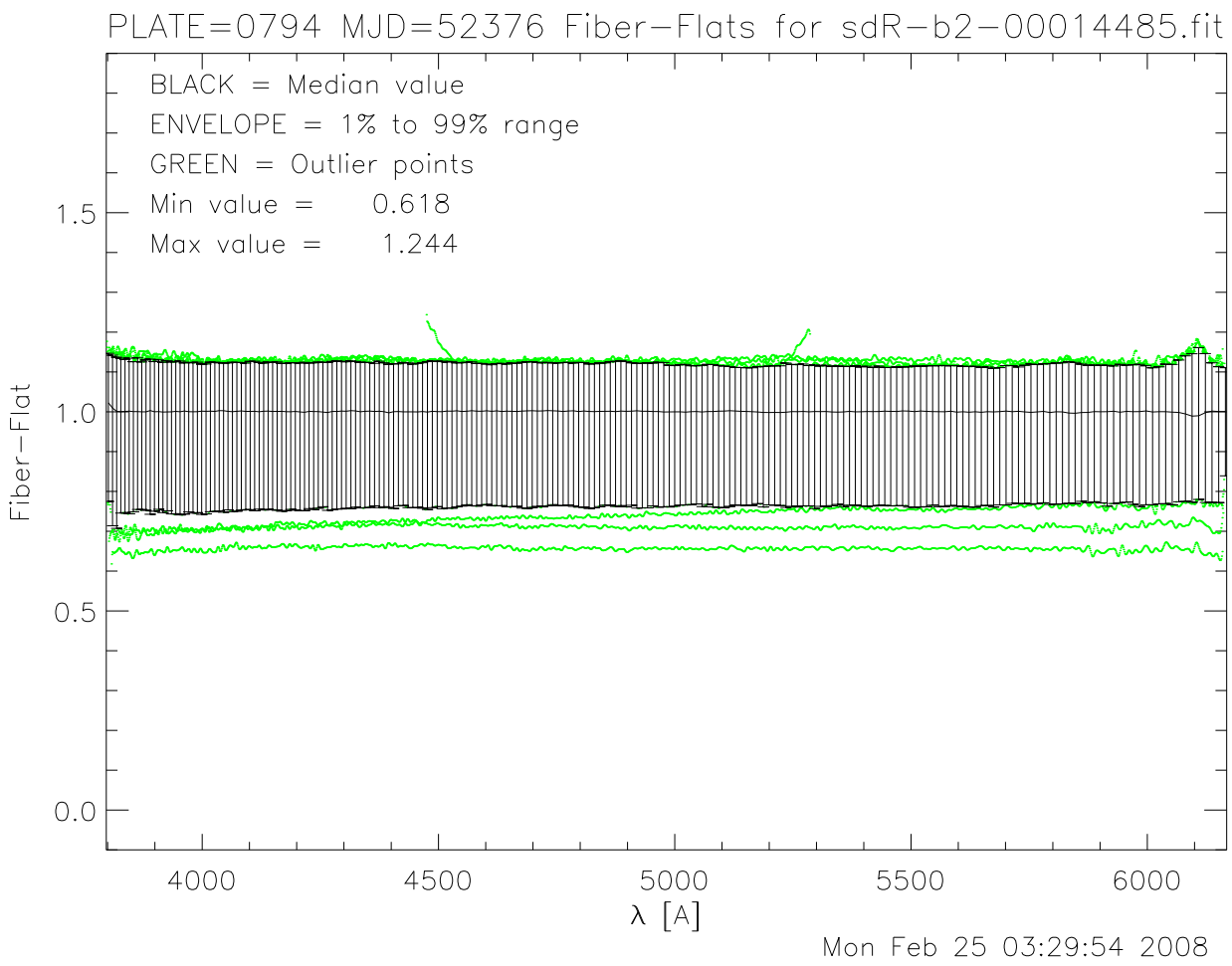

PLATE=0794 MJD=52376 sdR-b2-00014487.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

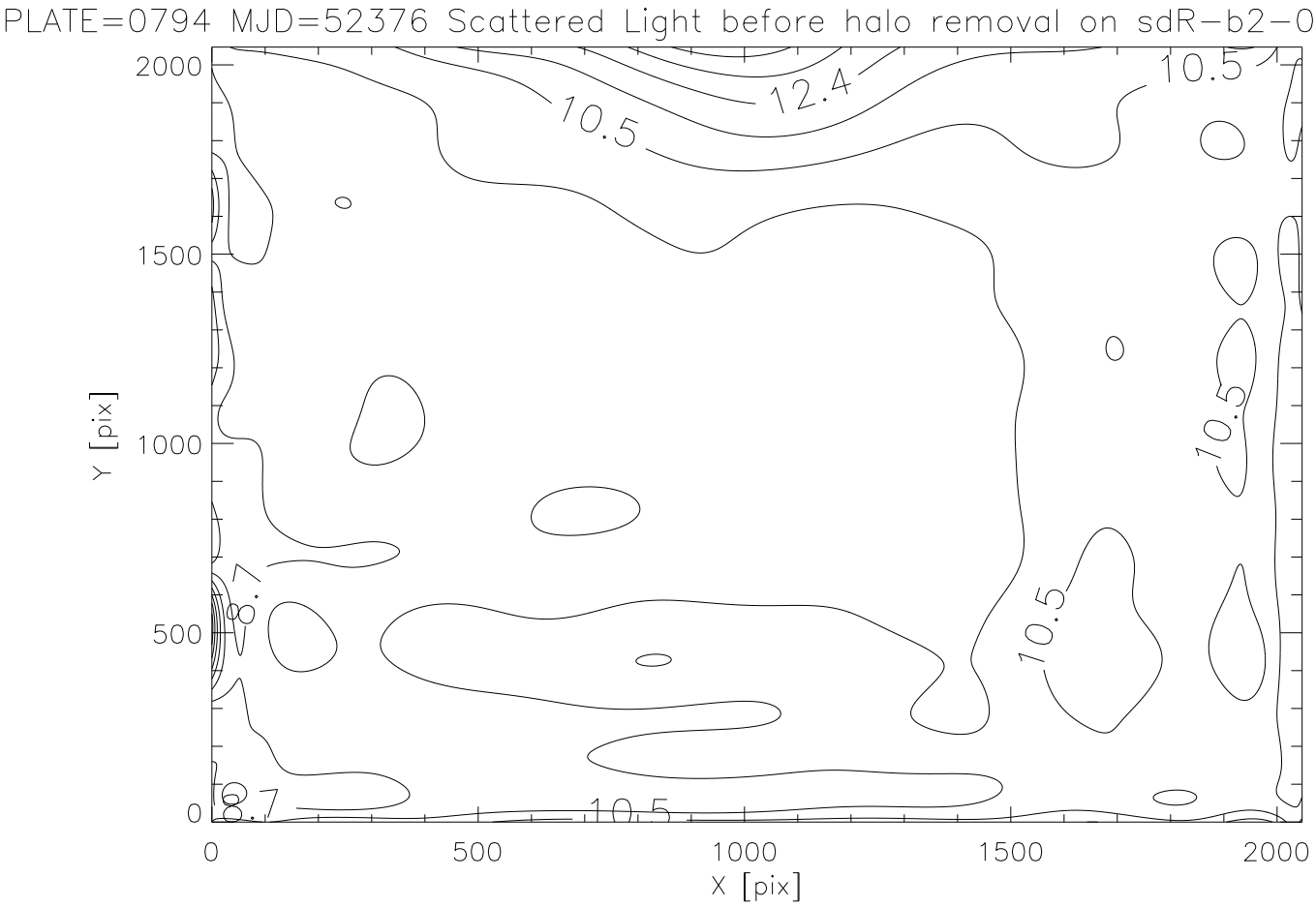

PLATE=0794 MJD=52376 sdR-b2-00014487.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

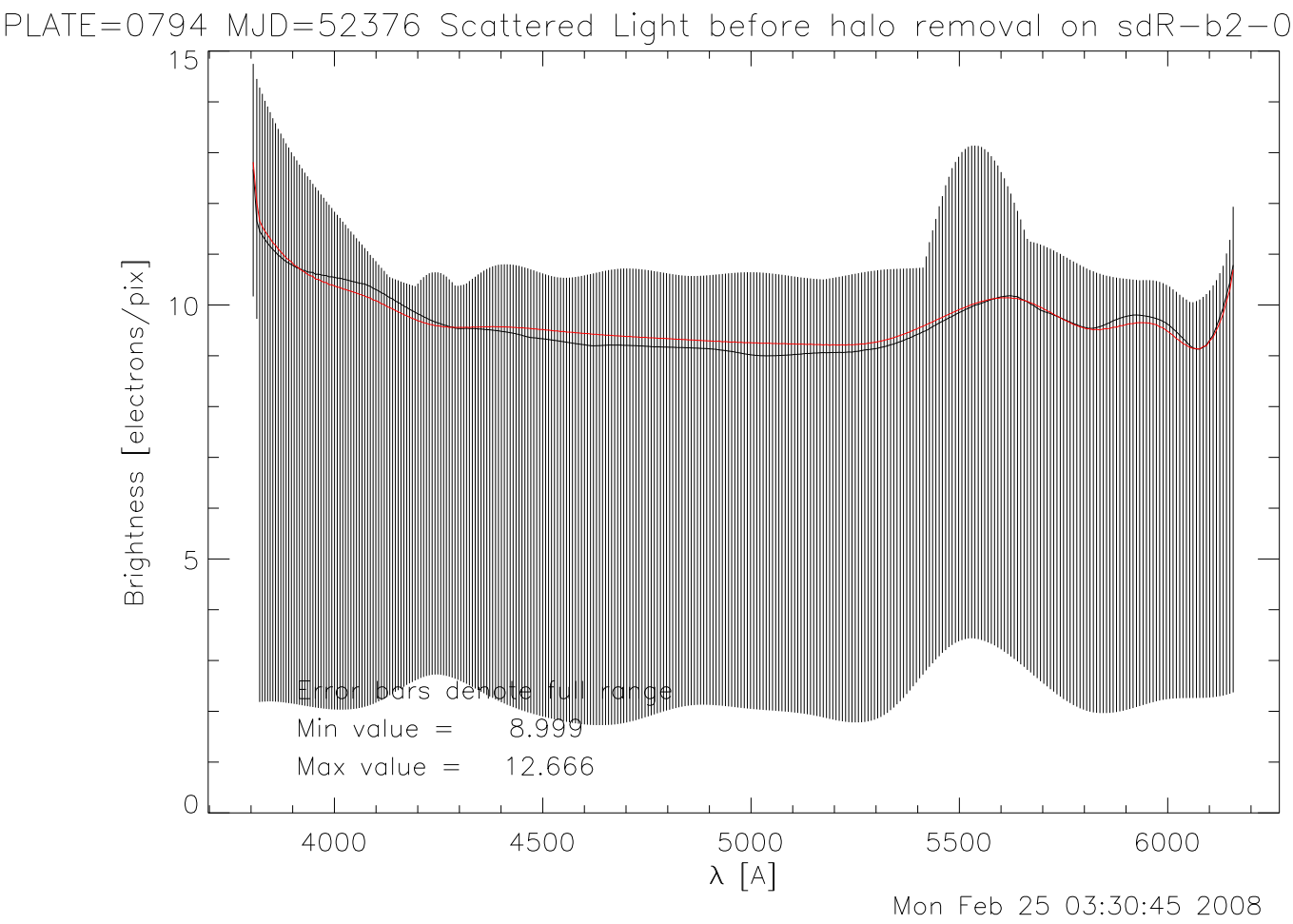

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b2-00014487.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

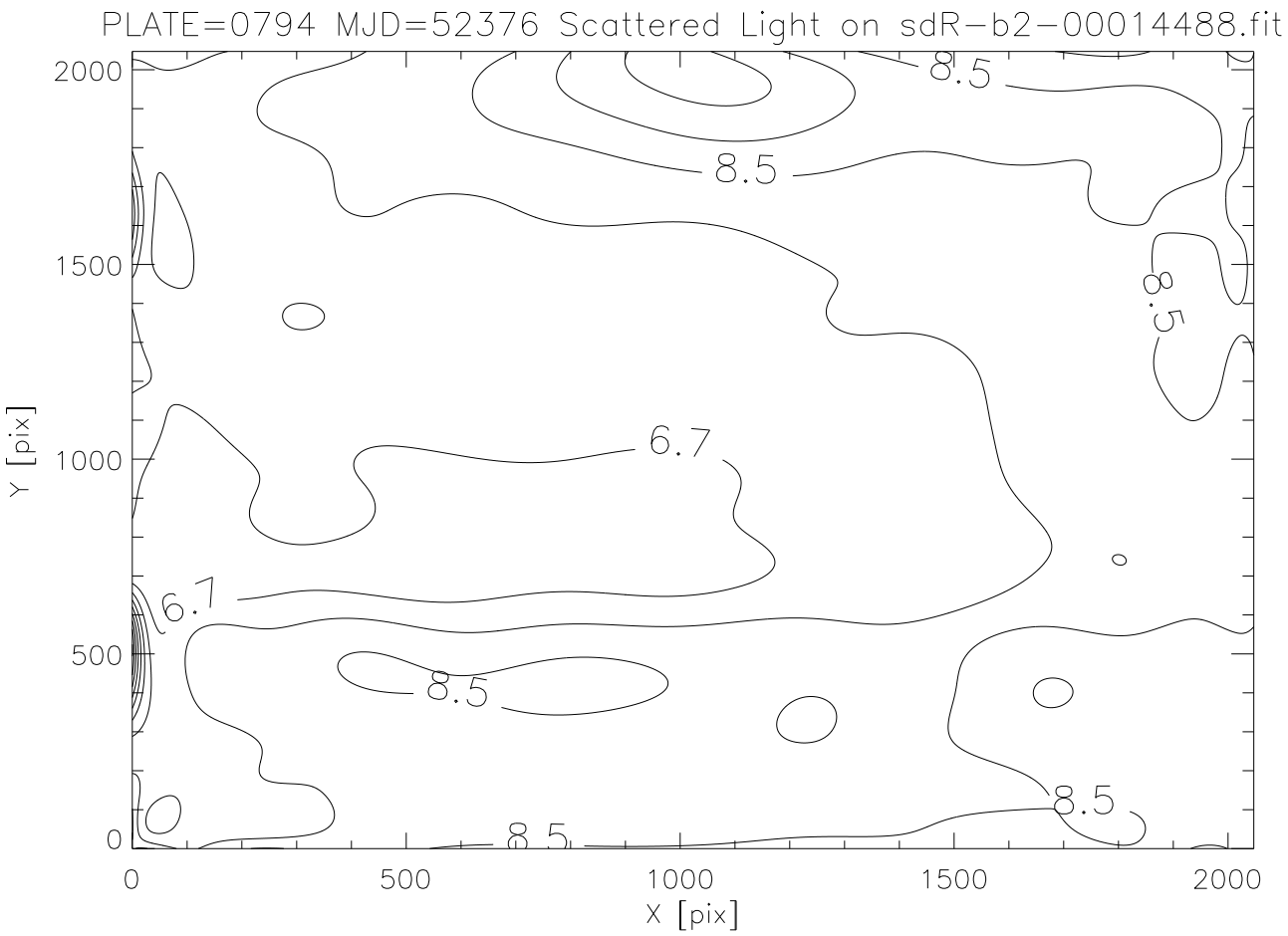

PLATE=0794 MJD=52376 sdR-b2-00014487.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.95 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

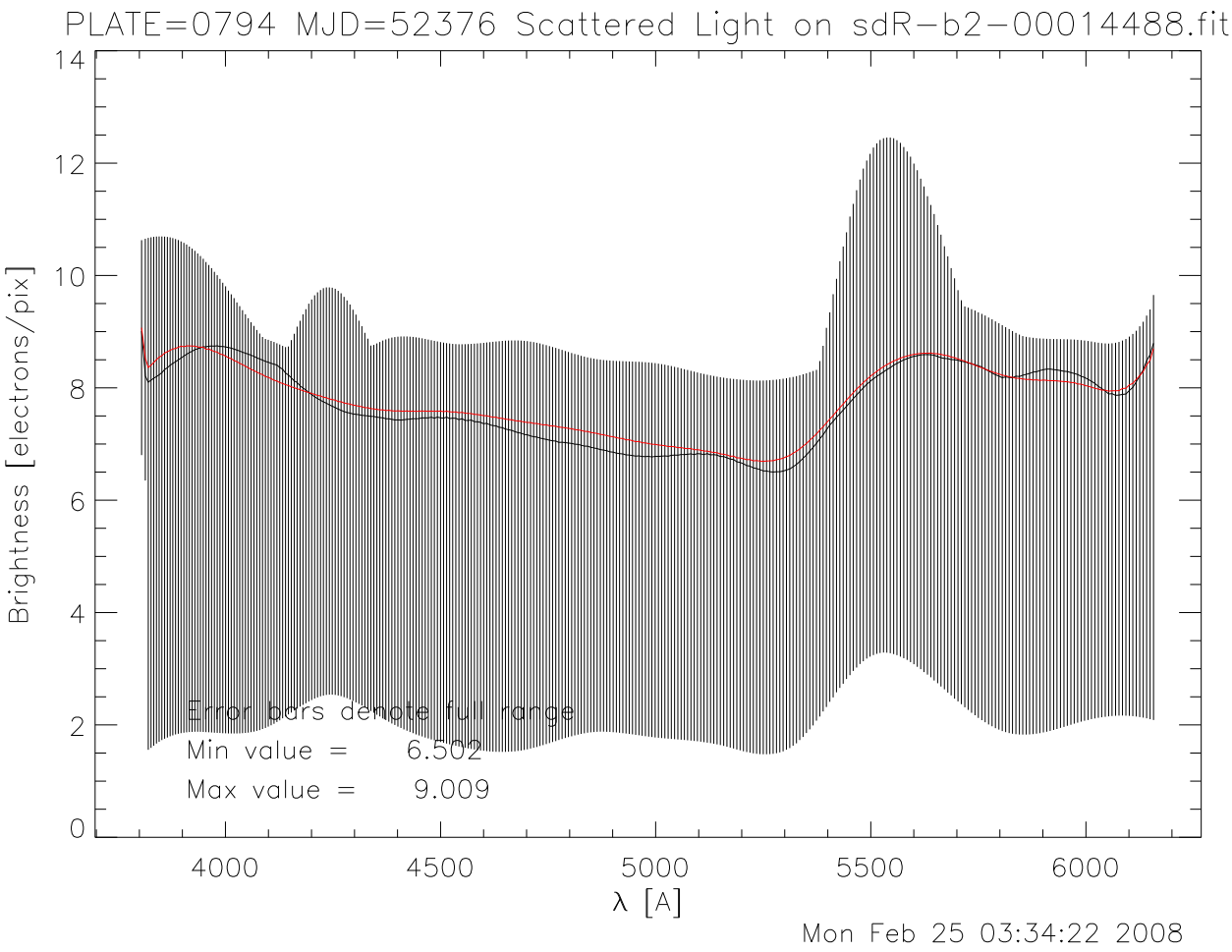

PLATE=0794 MJD=52376 sdR-b2-00014487.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.34 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

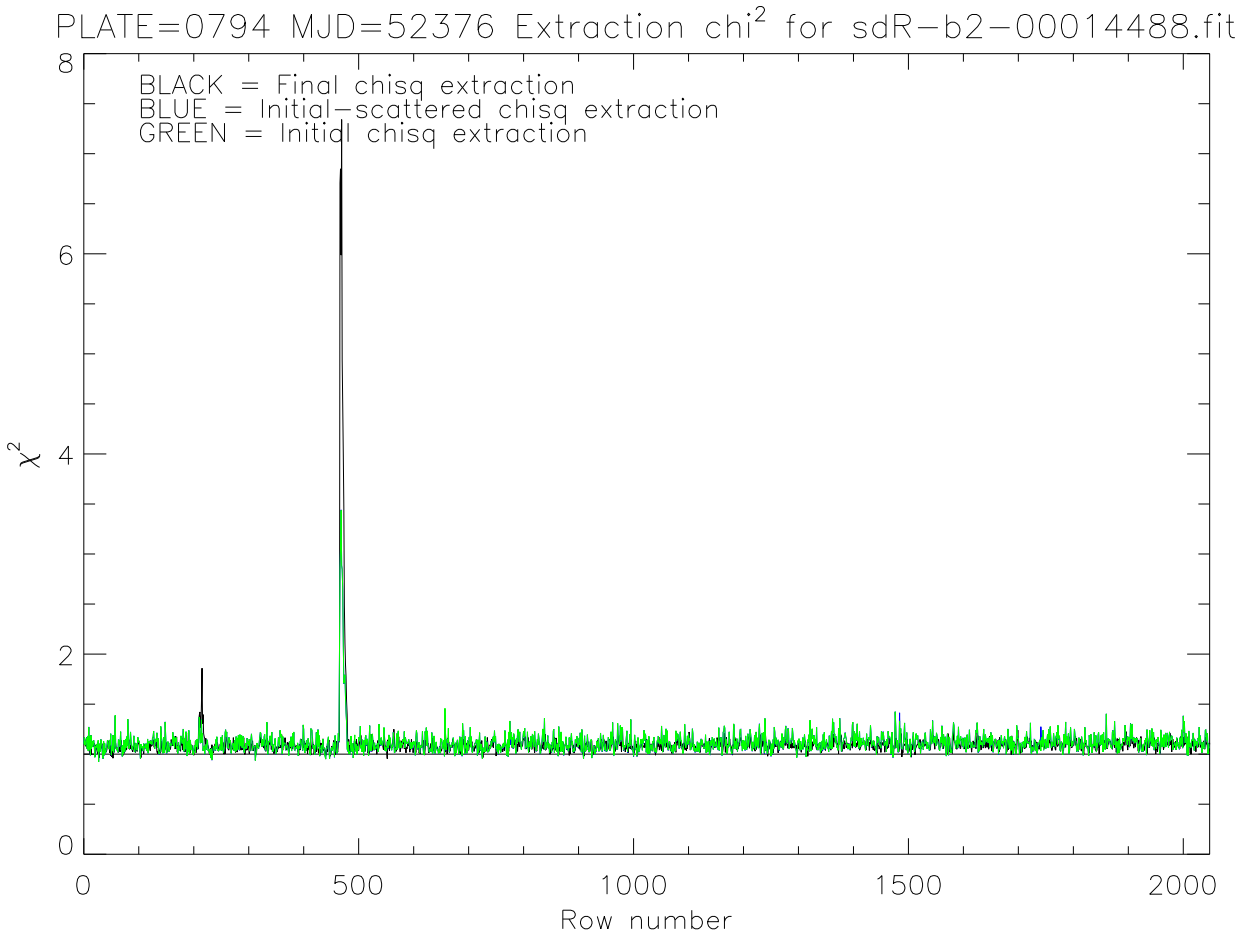

PLATE=0794 MJD=52376 Fiber-Flats for sdR-b2-00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.618
Max value = 1.244
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:29:54 2008

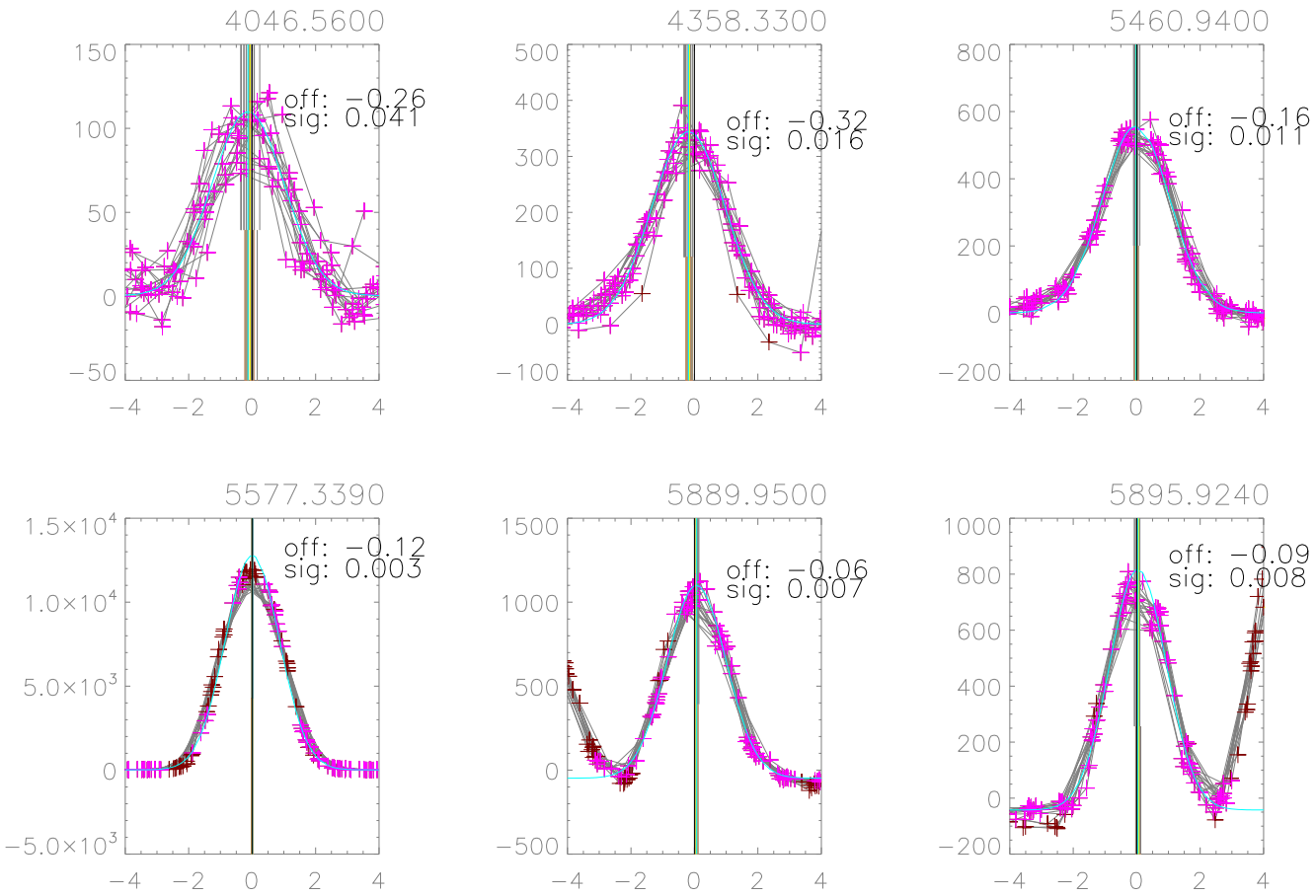

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b2-00014488.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.4
10.5
10.5
10.5
10.5
8.7
8.7
10.5
0
0
0

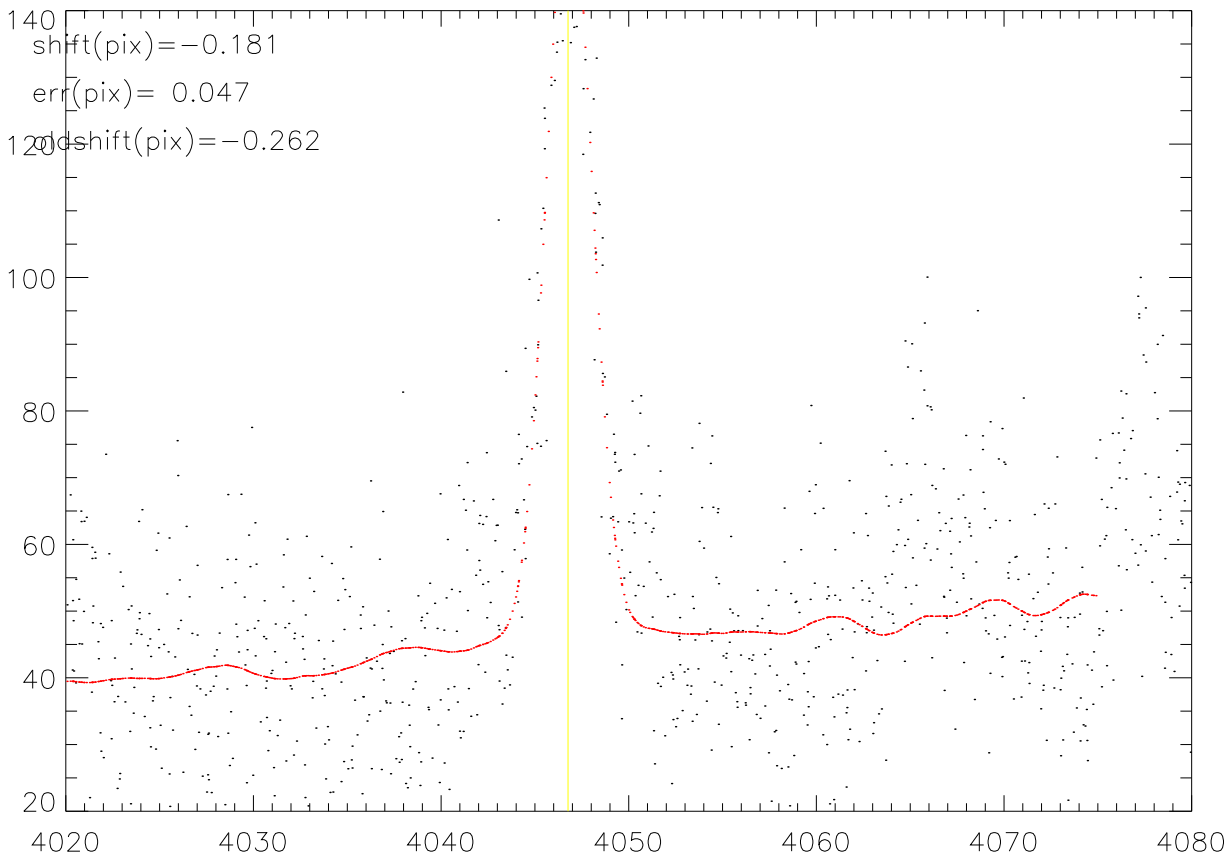

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b2-00014488.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.999
Max value = 12.666
Mon Feb 25 03:30:45 2008

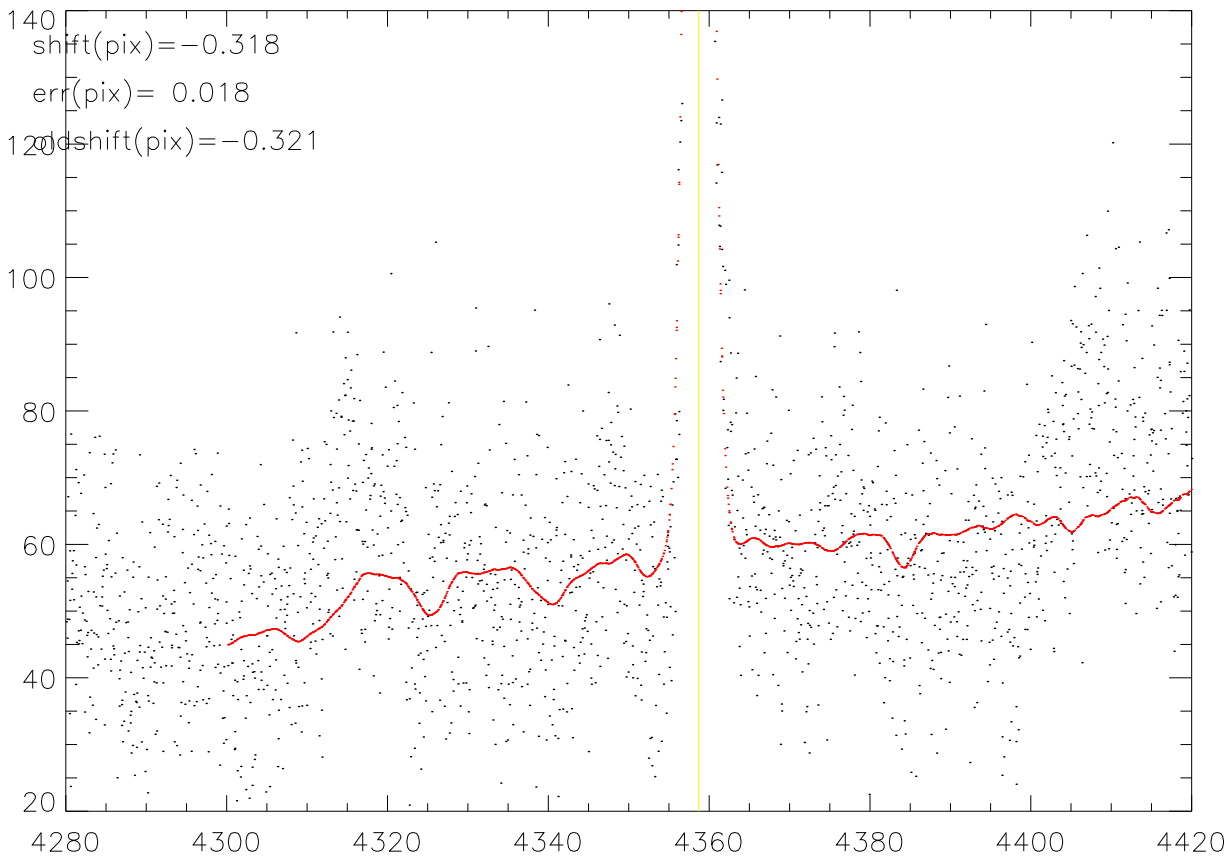

PLATE=0794 MJD=52376 Scattered Light on sdR-b2-00014488.fit
8.5
8.5
8.5
6.7
6.7
8.5
8.5
8.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

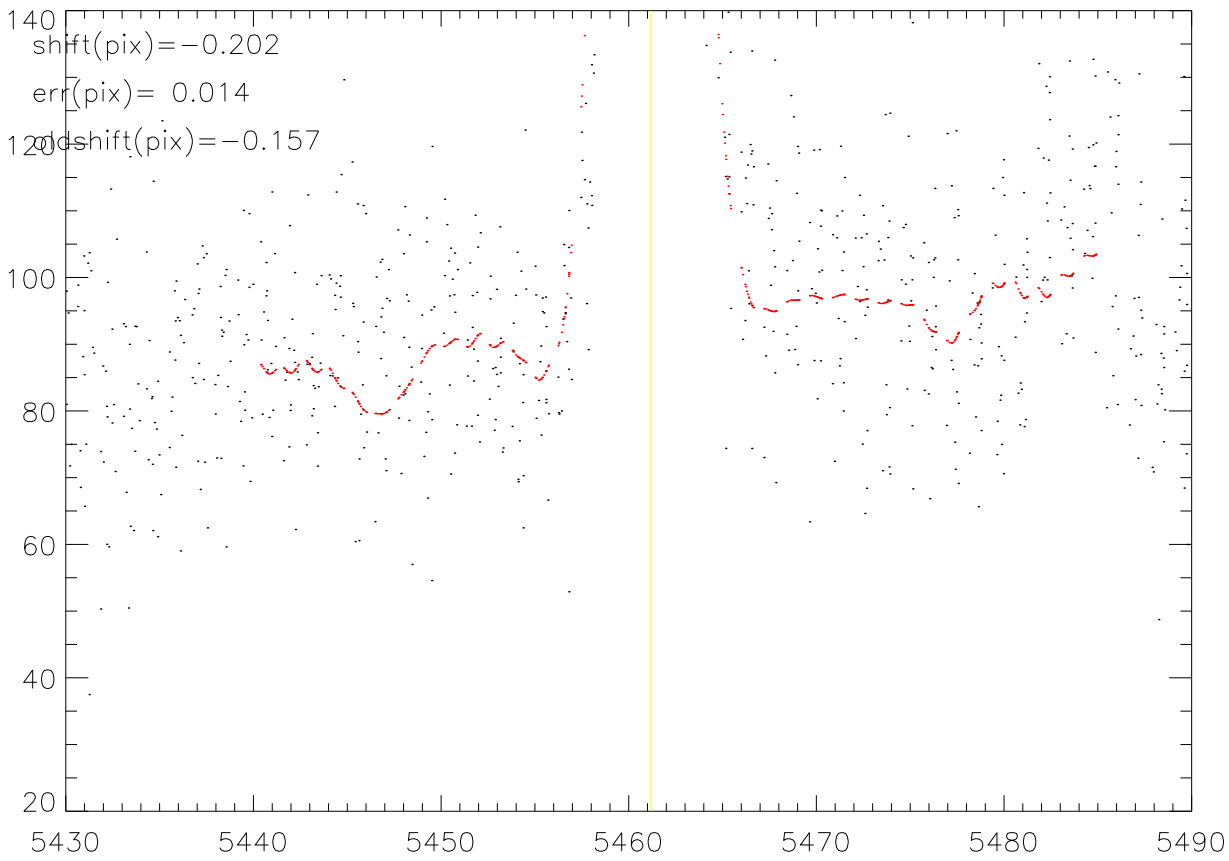

PLATE=0794 MJD=52376 Scattered Light on sdR-b2-00014488.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.502
Max value = 9.009
Mon Feb 25 03:34:22 2008

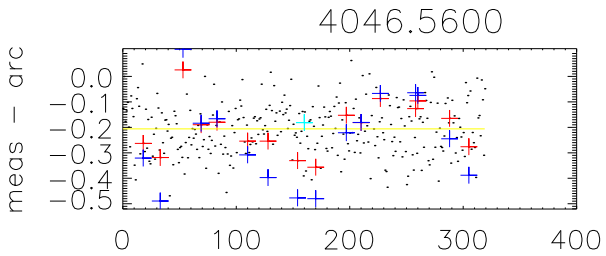

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-b2-00014488.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

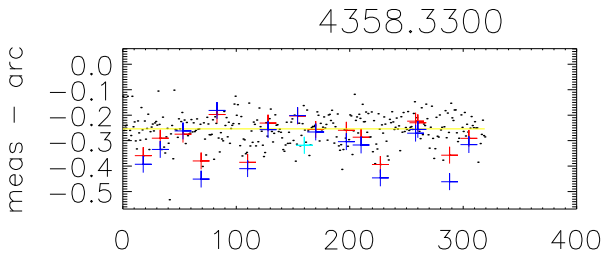

4046.5600
off: −0.26
sig: 0.041
4358.3300
off: −0.32
sig: 0.016
5460.9400
off: −0.16
sig: 0.011
5577.3390
off: −0.12
sig: 0.003
5889.9500
off: −0.06
sig: 0.007
5895.9240
off: −0.09
sig: 0.008

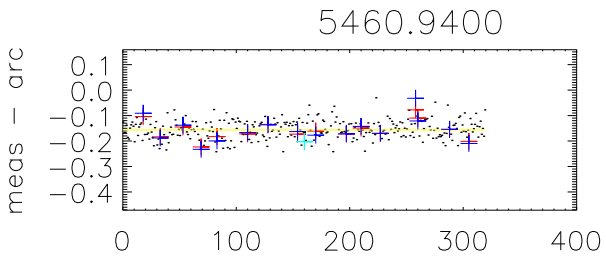

shift(pix)=−0.181
err(pix)= 0.047
oldshift(pix)=−0.262
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

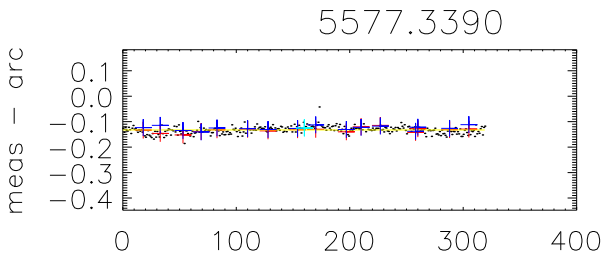

shift(pix)=−0.318
err(pix)= 0.018
oldshift(pix)=−0.321
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

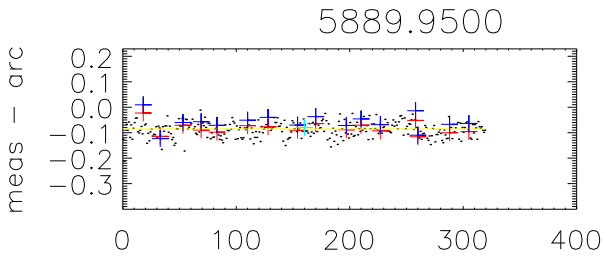

shift(pix)=−0.202
err(pix)= 0.014
oldshift(pix)=−0.157
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

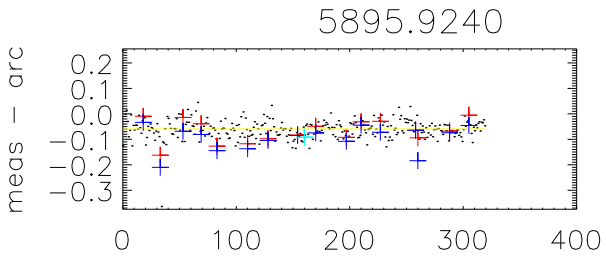

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

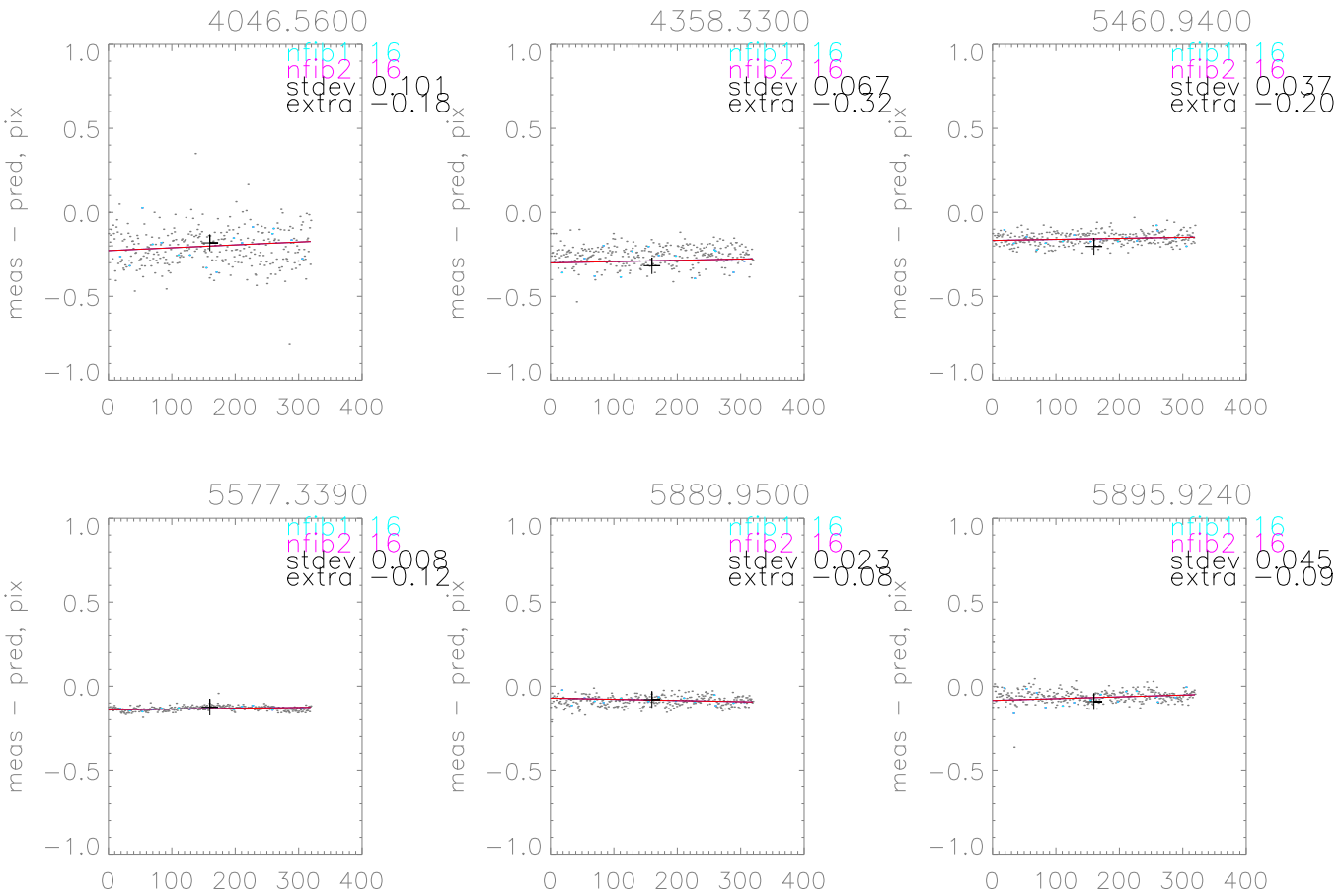

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

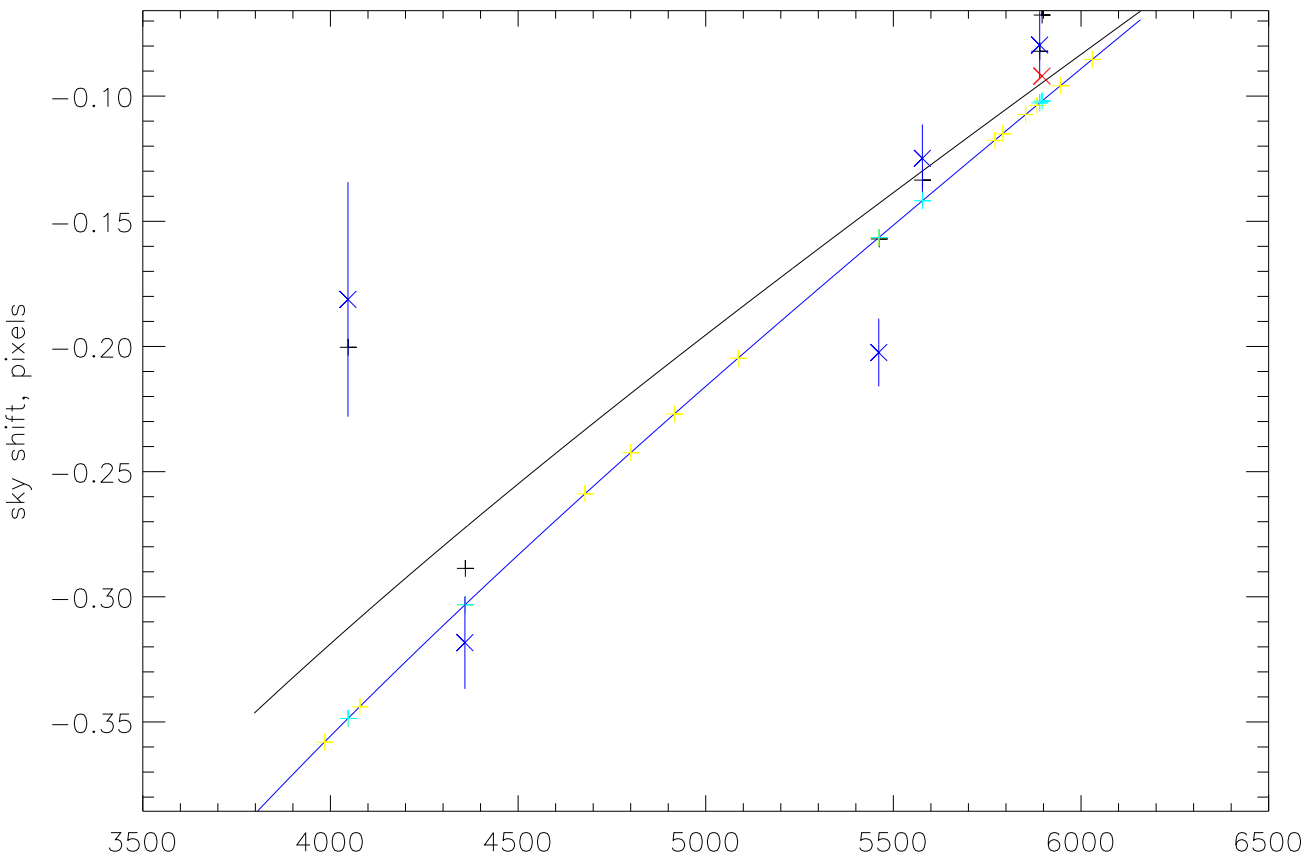

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

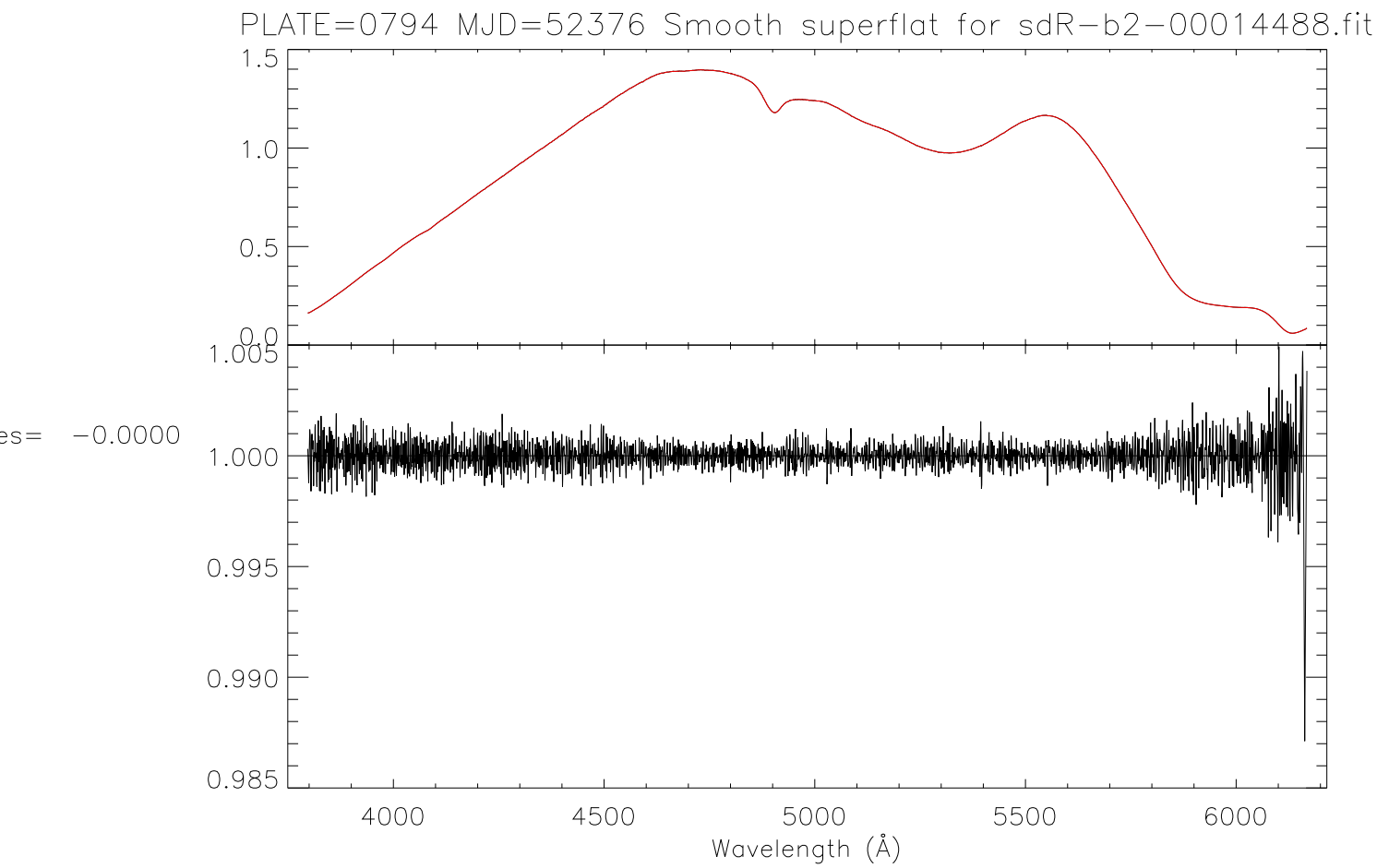

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

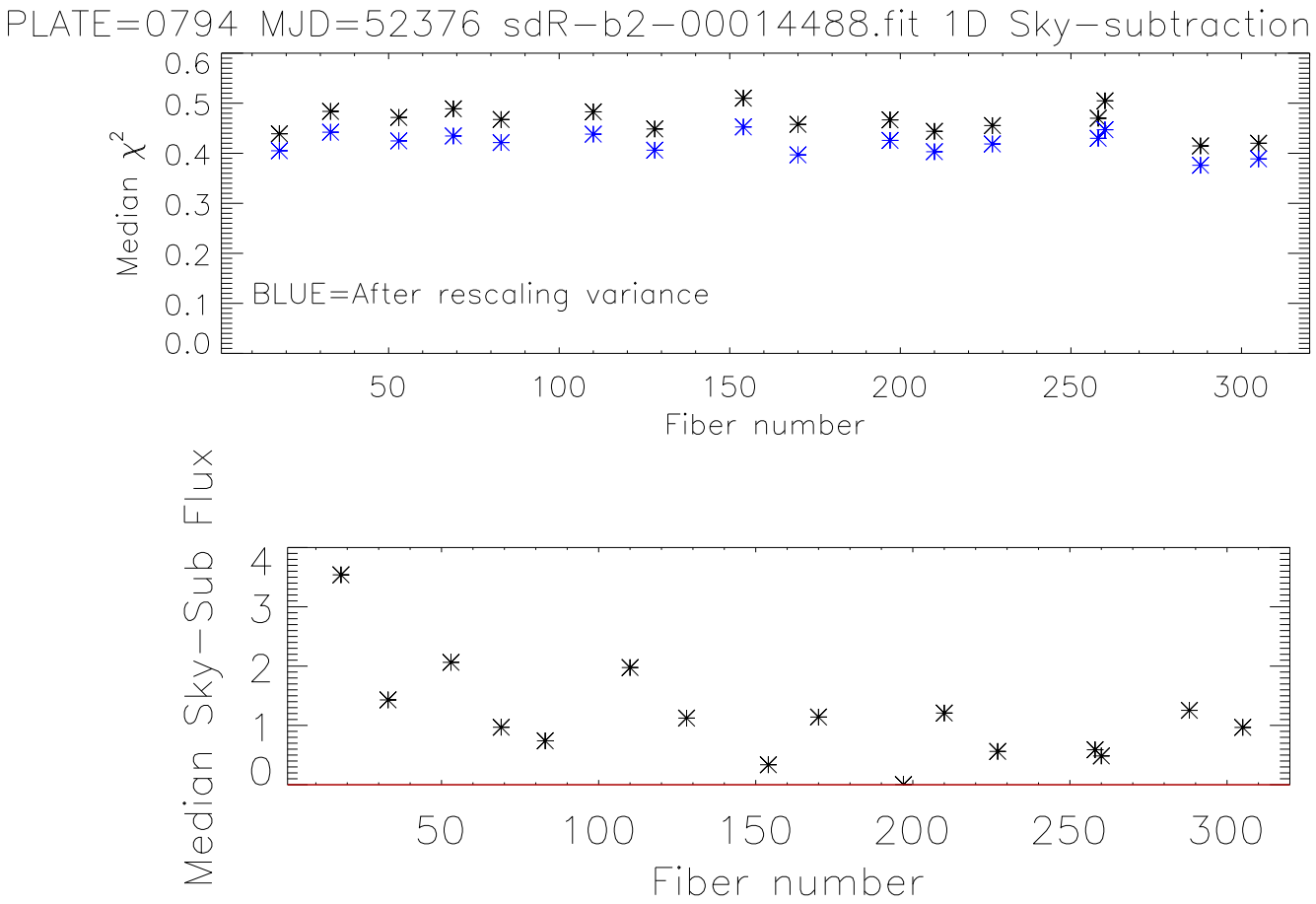

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

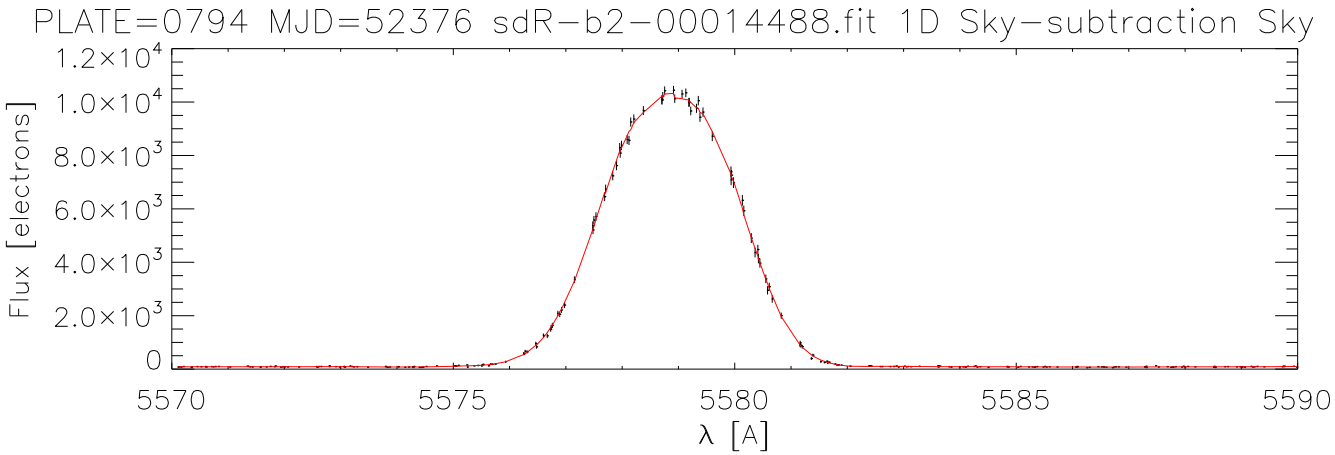

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

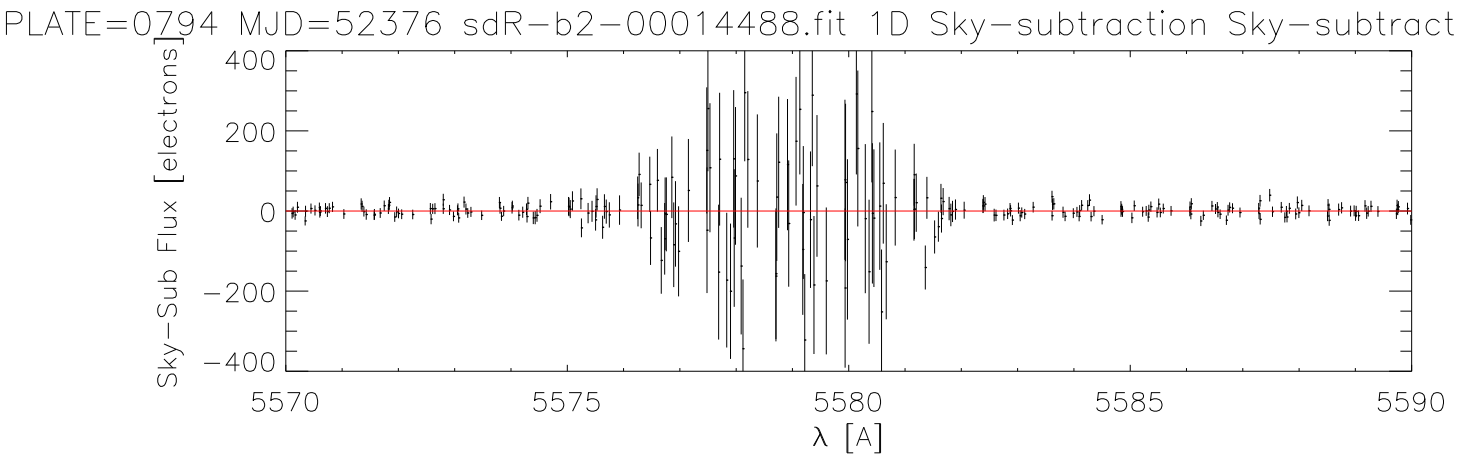

4046.5600
nfib1 16
nfib2 16
stdev 0.101
extra −0.18
4358.3300
nfib1 16
nfib2 16
stdev 0.067
extra −0.32
5460.9400
nfib1 16
nfib2 16
stdev 0.037
extra −0.20
5577.3390
nfib1 16
nfib2 16
stdev 0.008
extra −0.12
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra −0.08
5895.9240
nfib1 16
nfib2 16
stdev 0.045
extra −0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

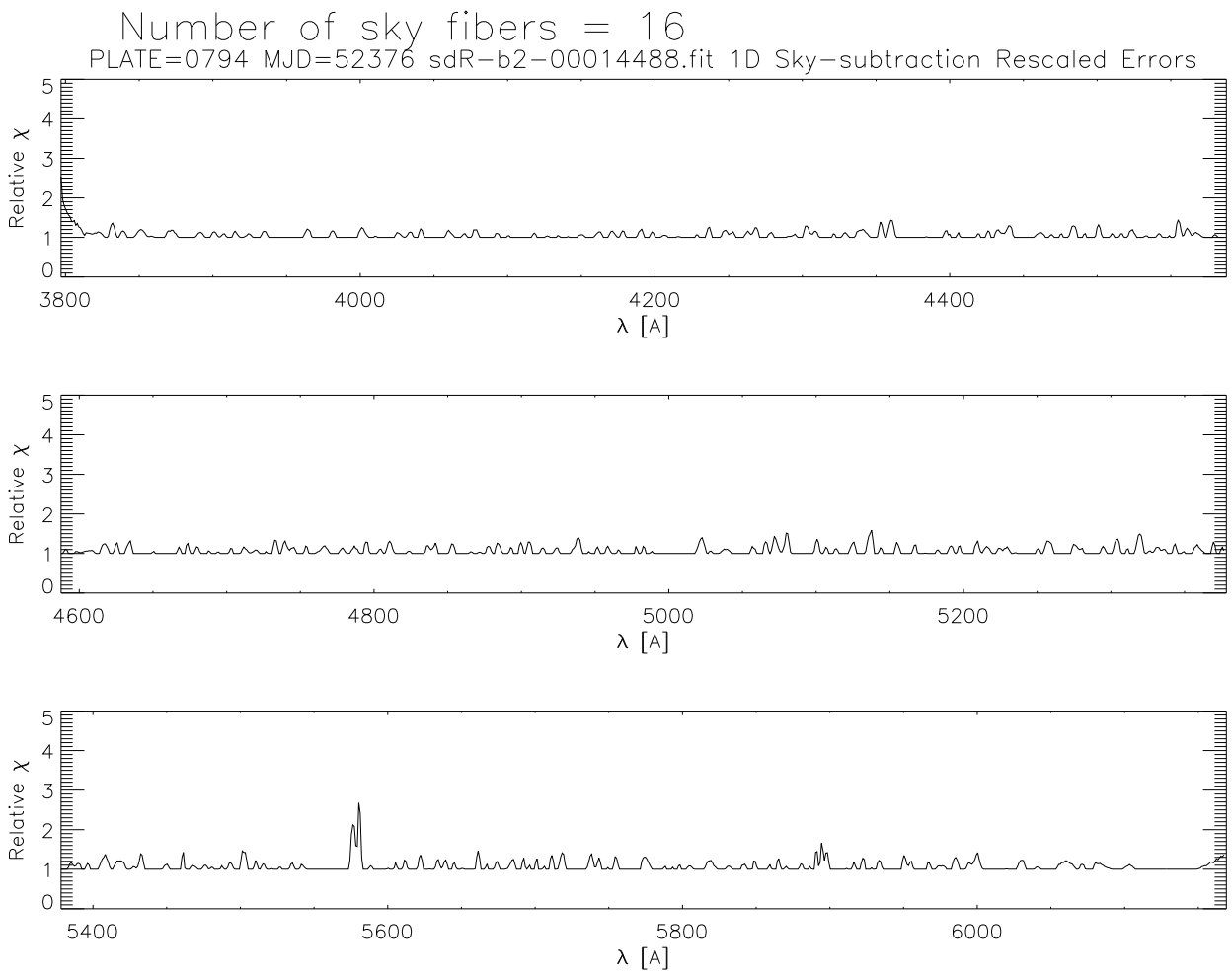

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
3500
4000
4500
5000
5500
6000
6500

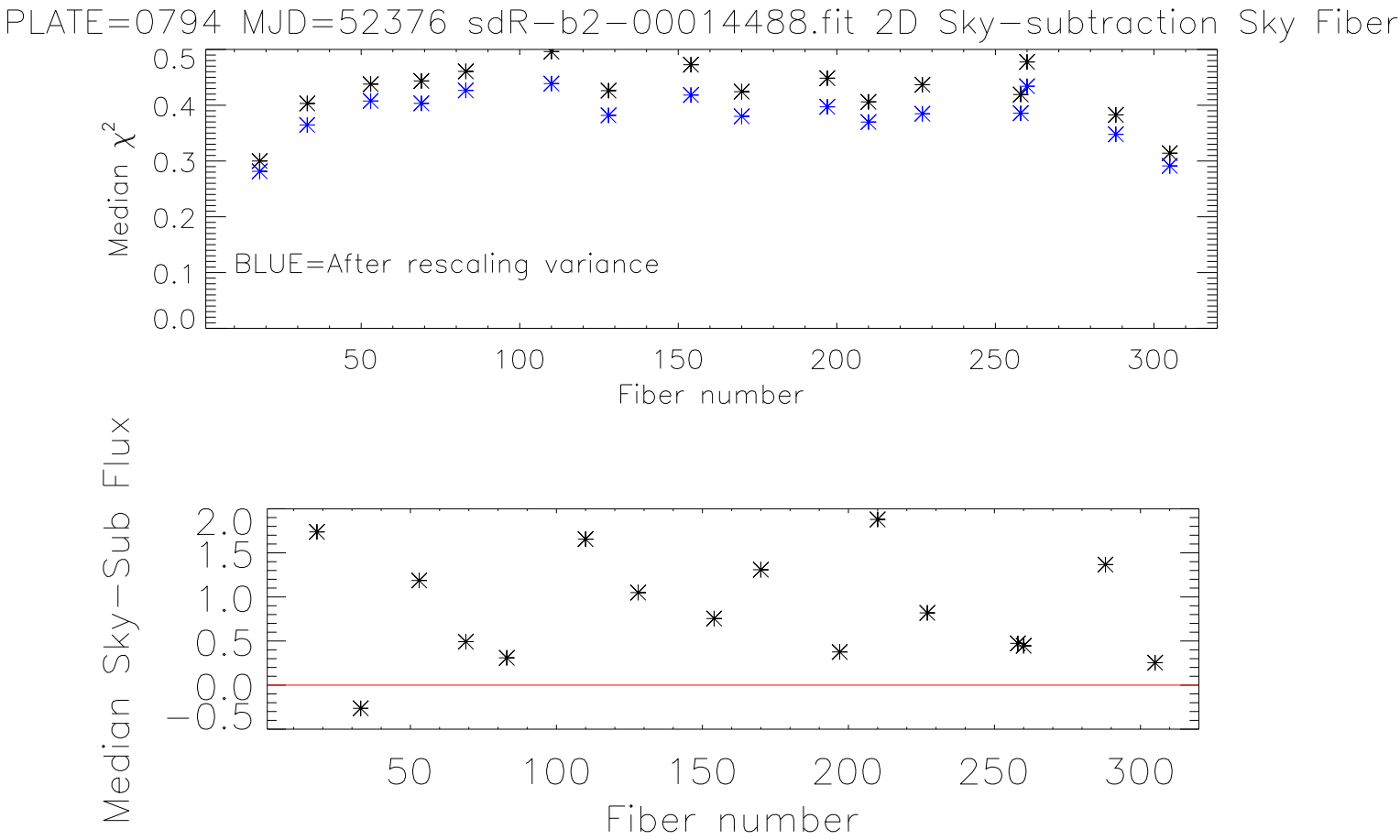

PLATE=0794 MJD=52376 Smooth superflat for sdR-b2-00014488.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

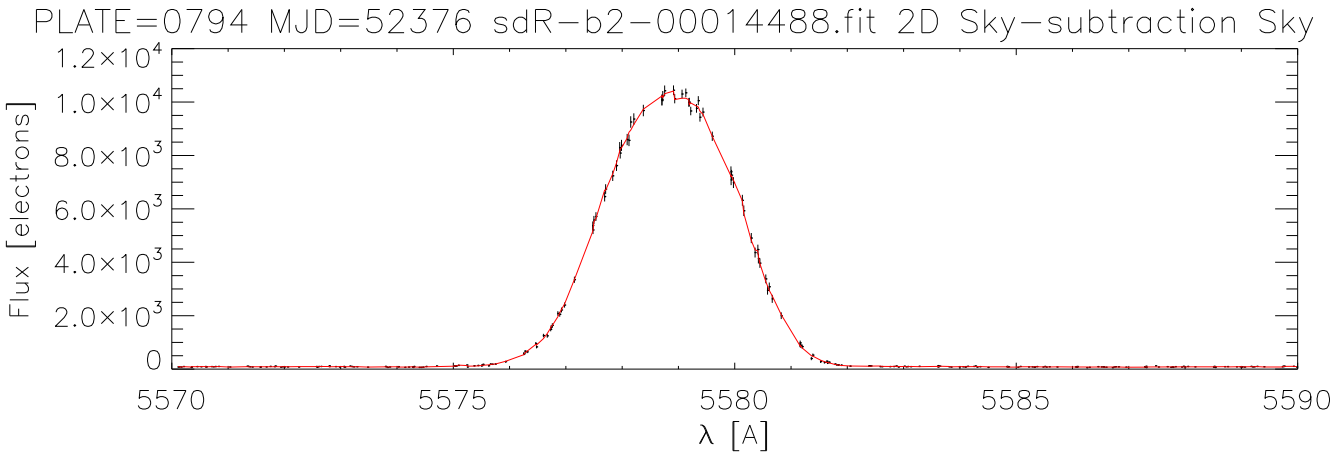

PLATE=0794 MJD=52376 sdR-b2-00014488.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0
1
2
3
4
50
100
150
200
250
300
Fiber number

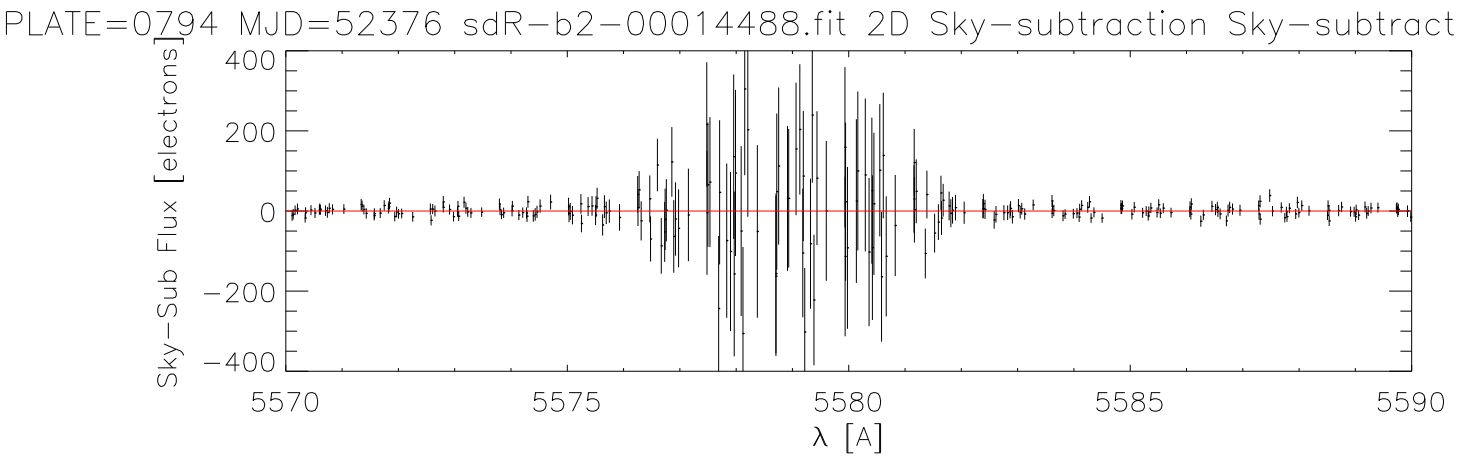

PLATE=0794 MJD=52376 sdR-b2-00014488.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

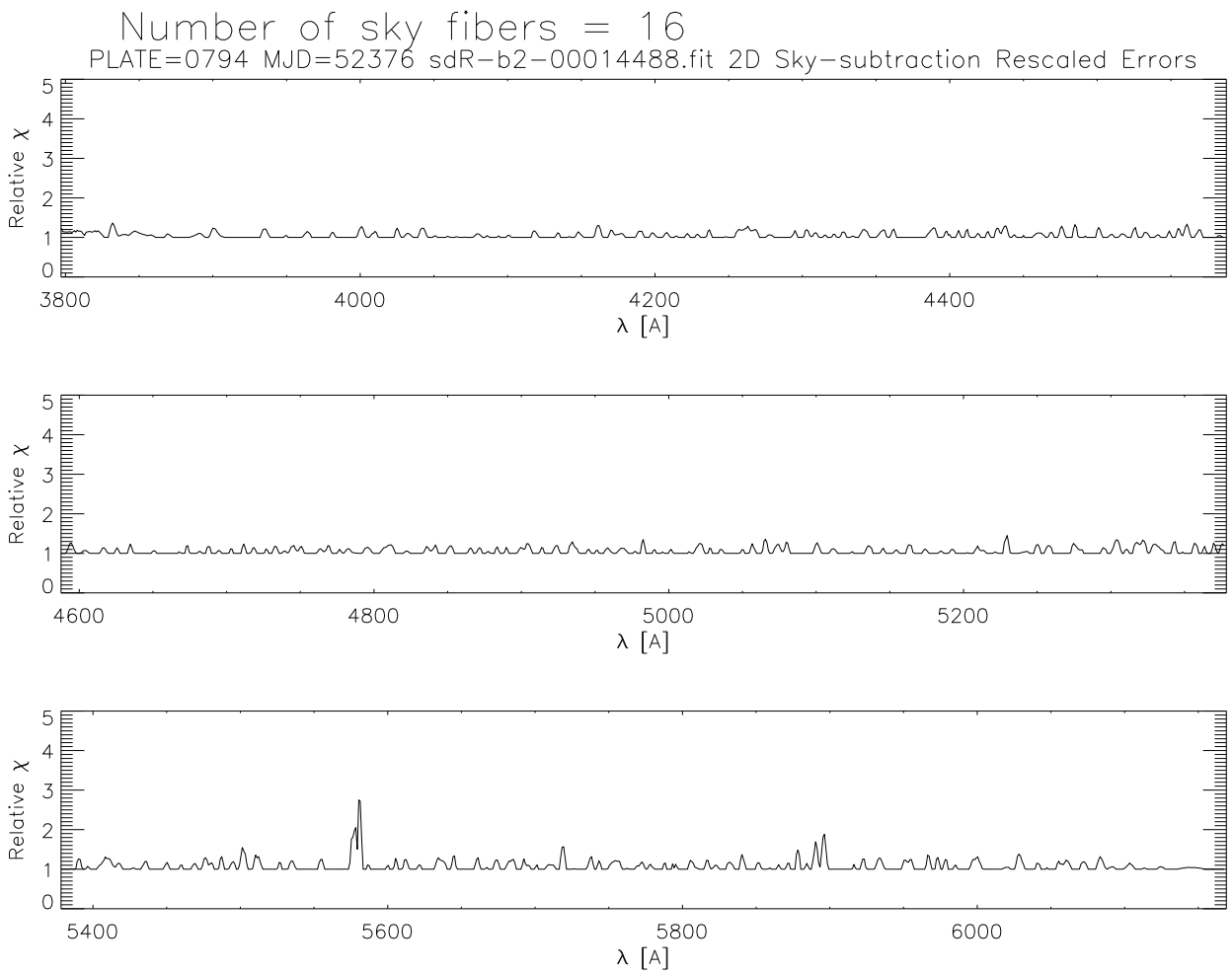

PLATE=0794 MJD=52376 sdR-b2-00014488.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

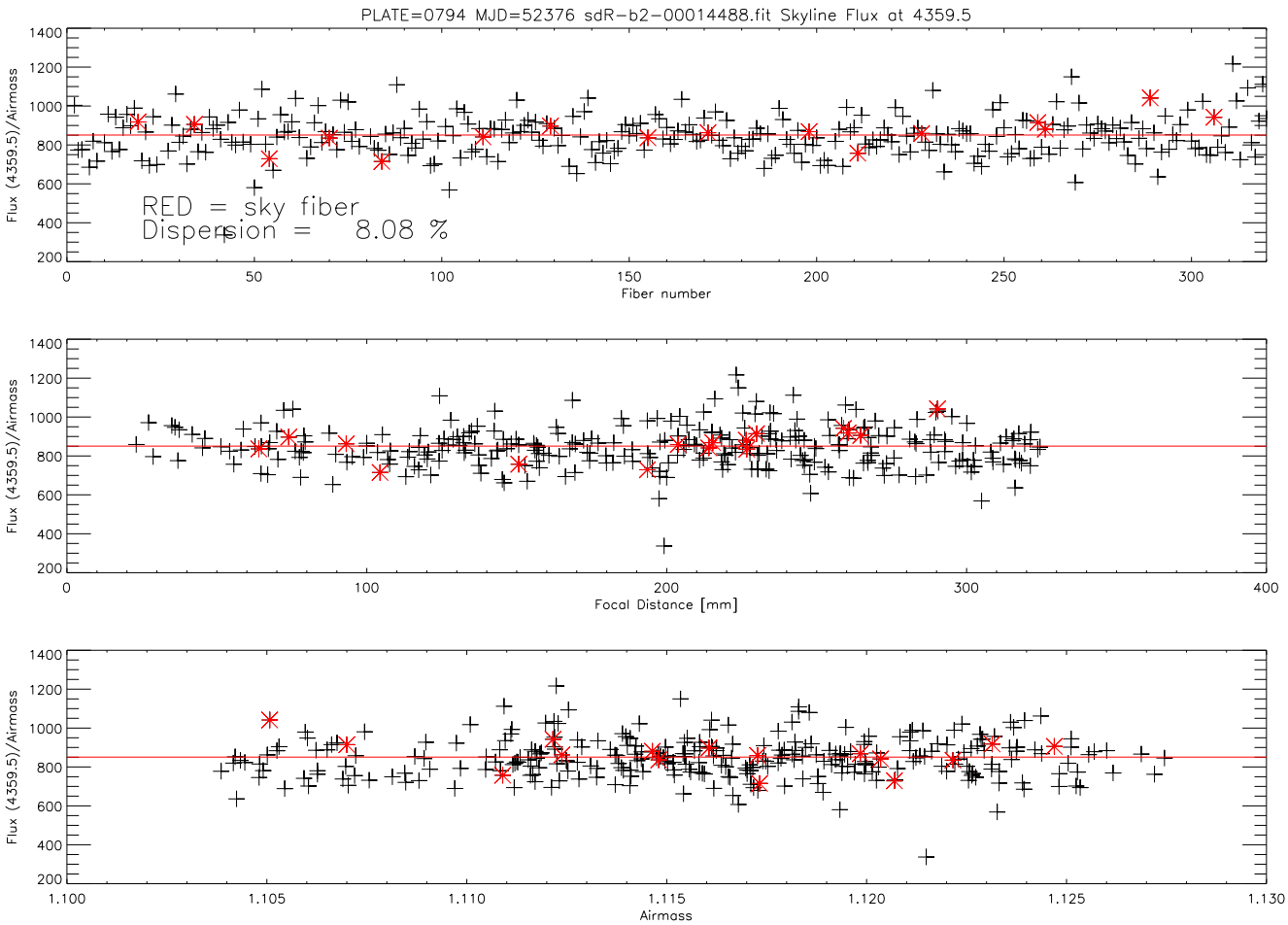

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b2-00014488.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

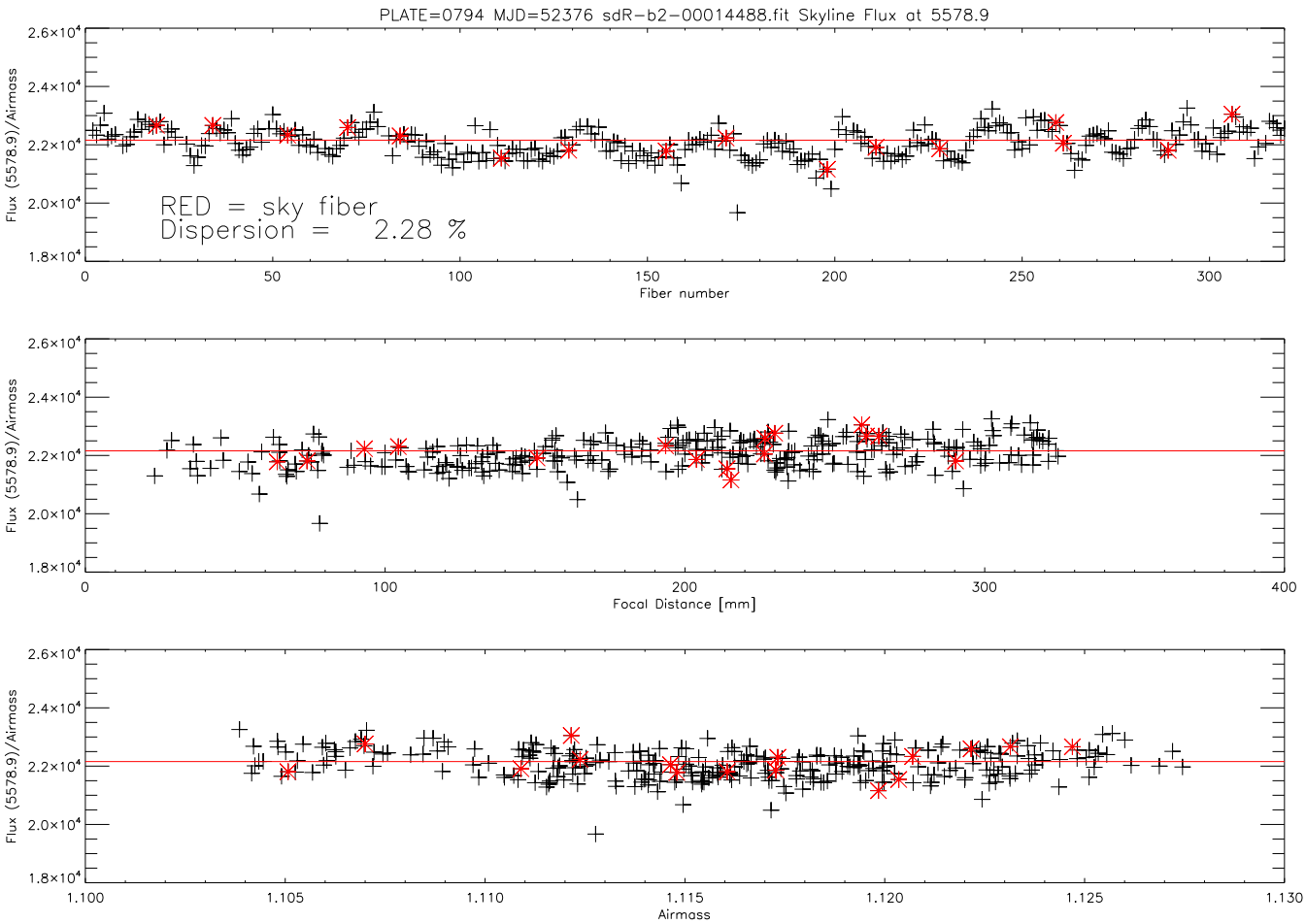

PLATE=0794 MJD=52376 sdR-b2-00014488.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

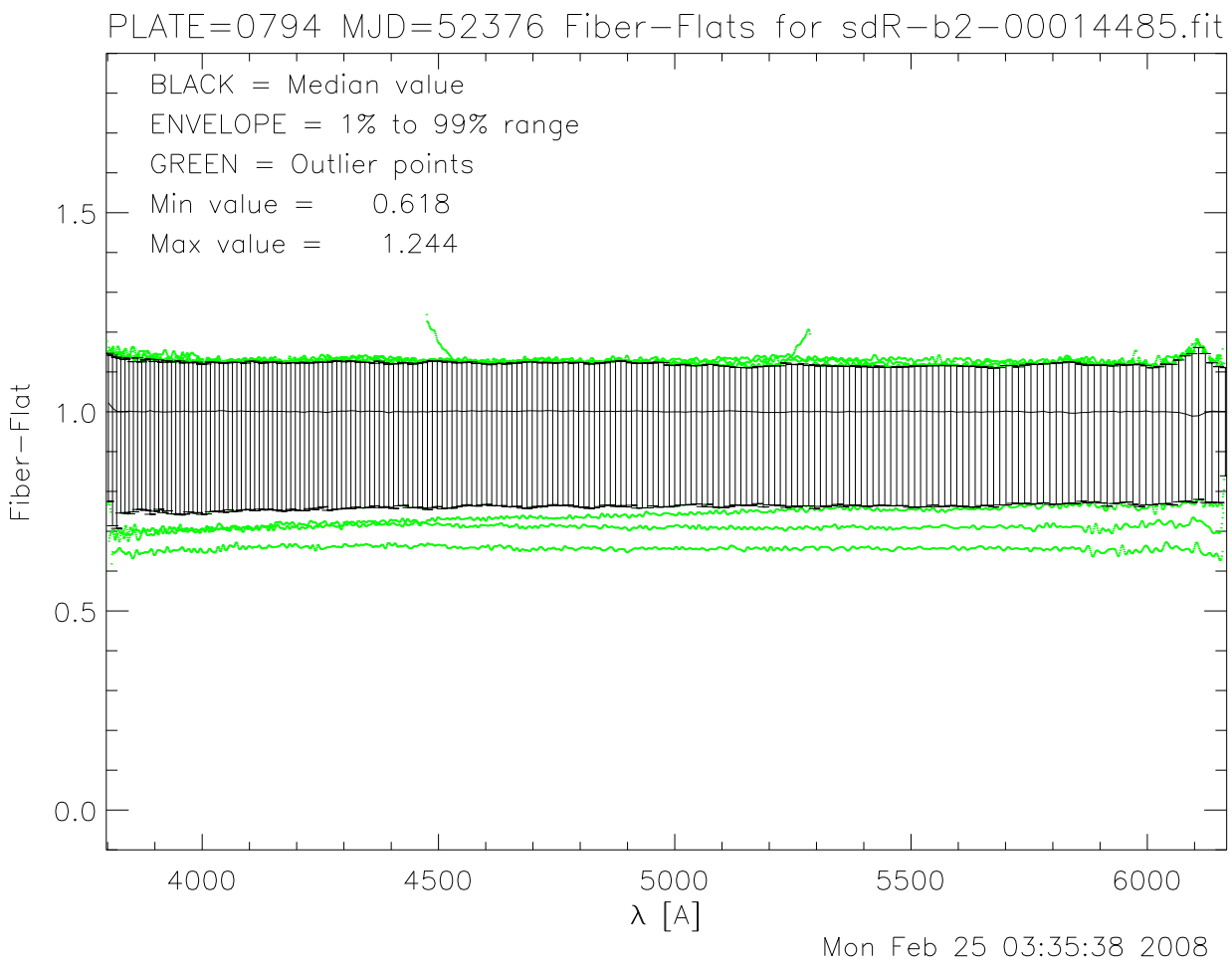

PLATE=0794 MJD=52376 sdR-b2-00014488.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

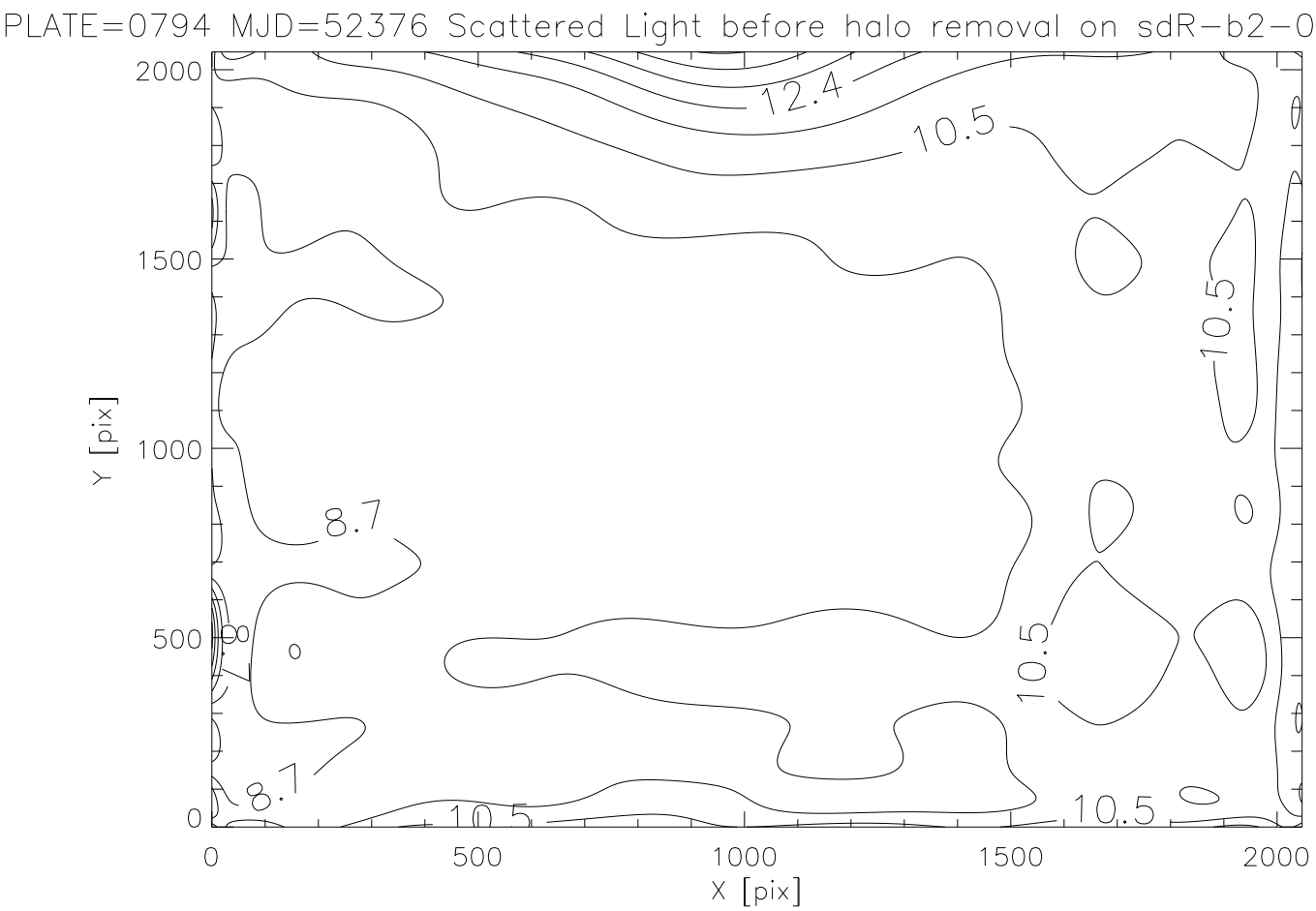

PLATE=0794 MJD=52376 sdR-b2-00014488.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

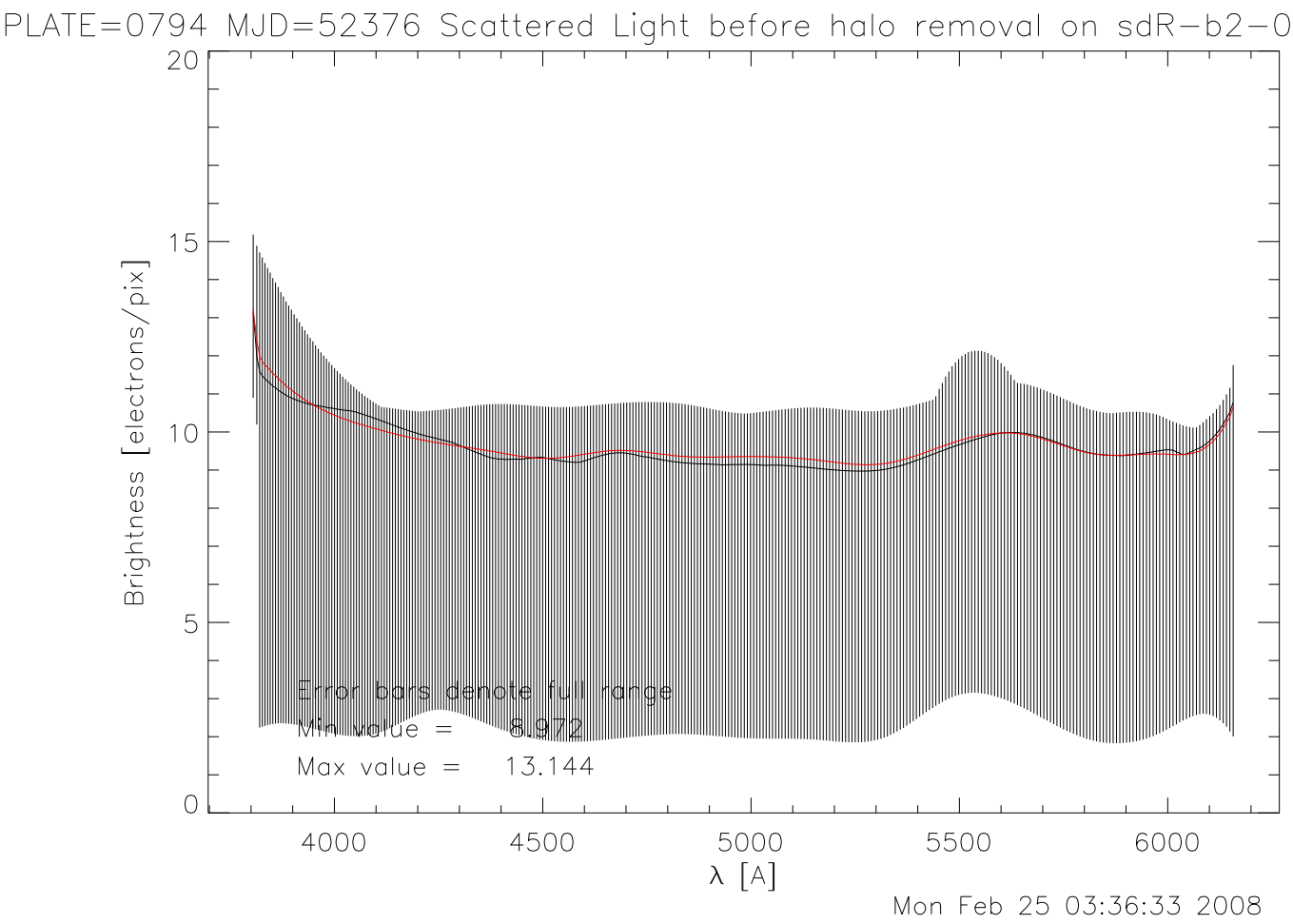

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b2-00014488.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

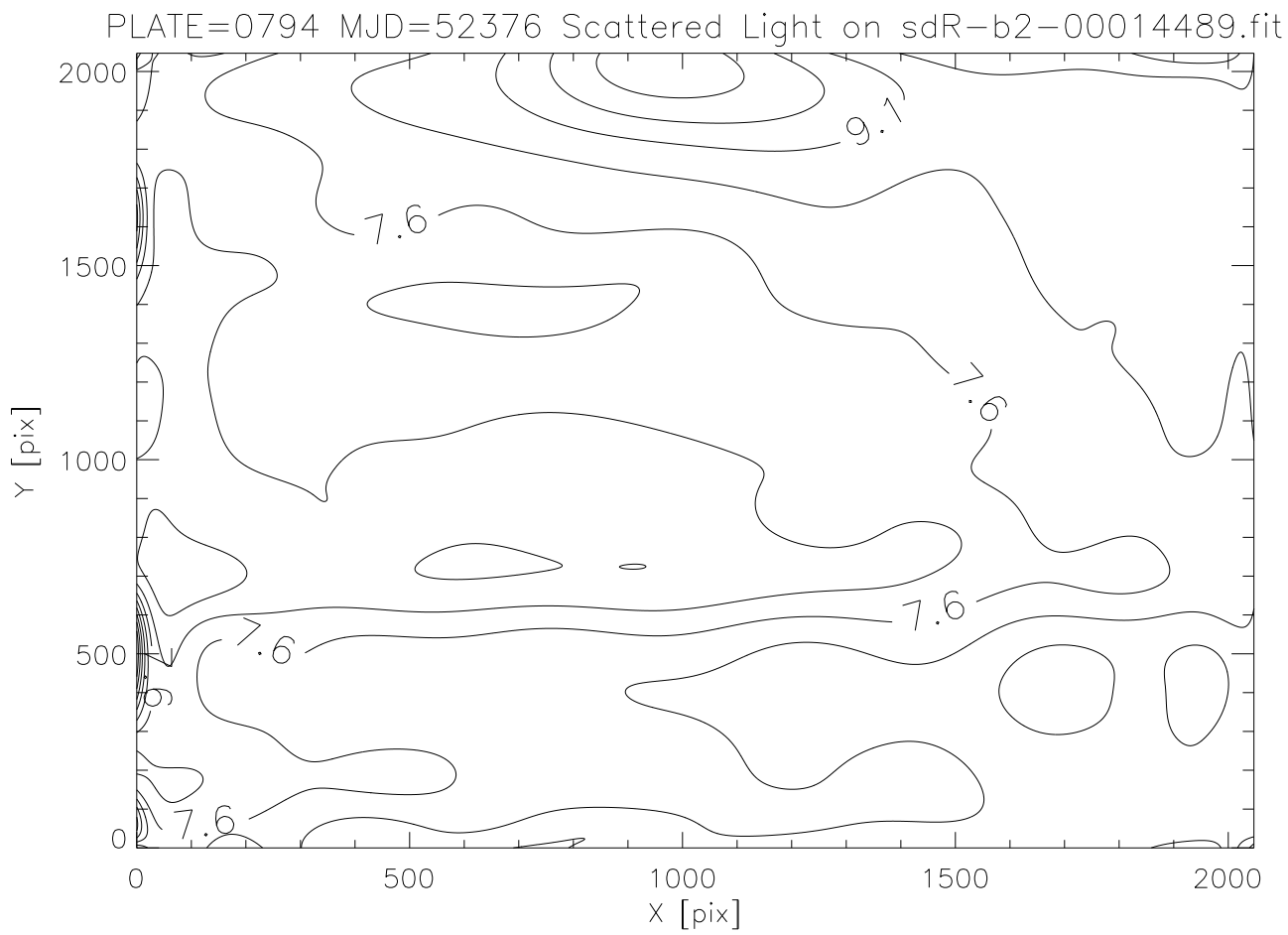

PLATE=0794 MJD=52376 sdR-b2-00014488.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 8.08 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

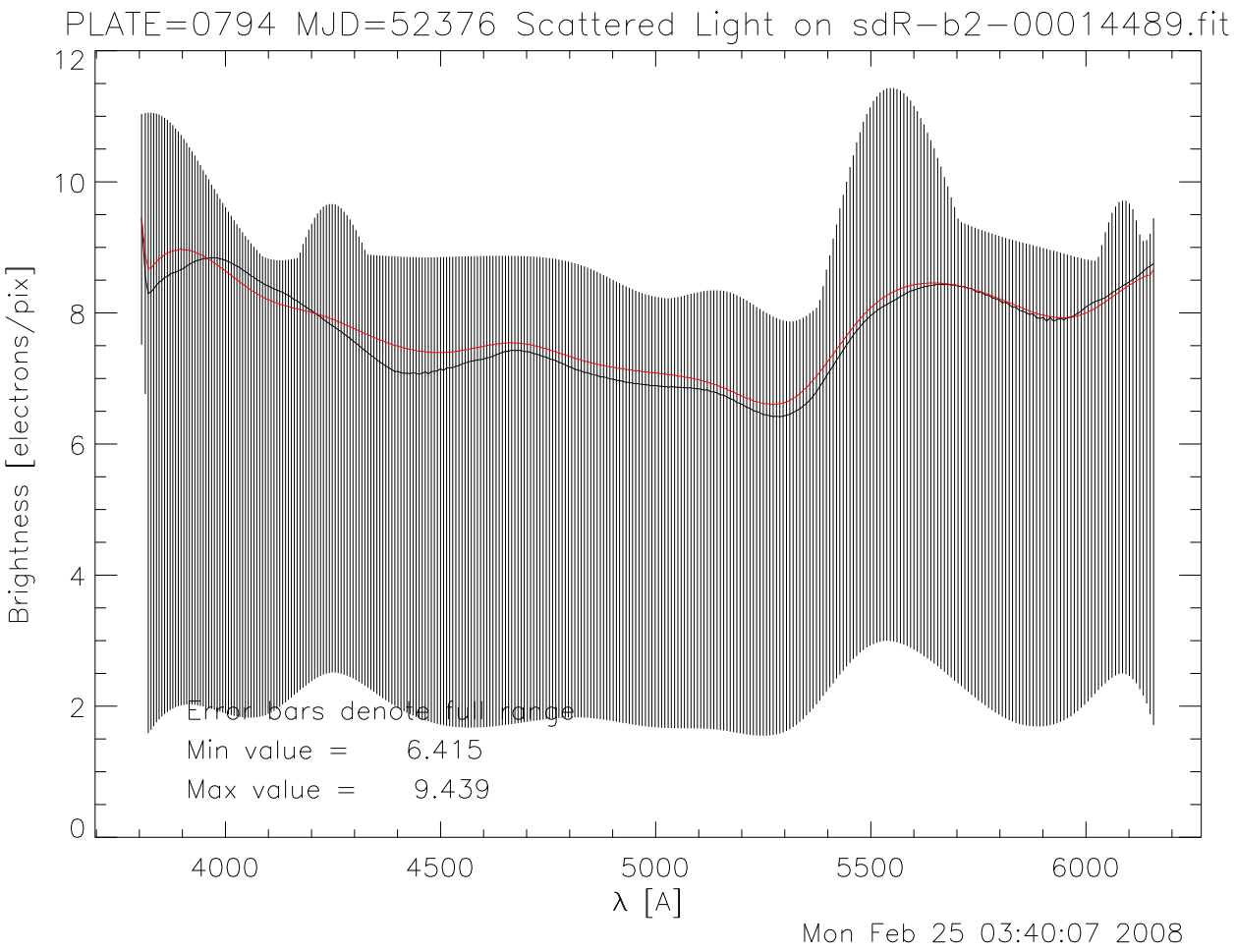

PLATE=0794 MJD=52376 sdR-b2-00014488.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.28 %
Fiber number
Focal Distance [mm]
Airmass

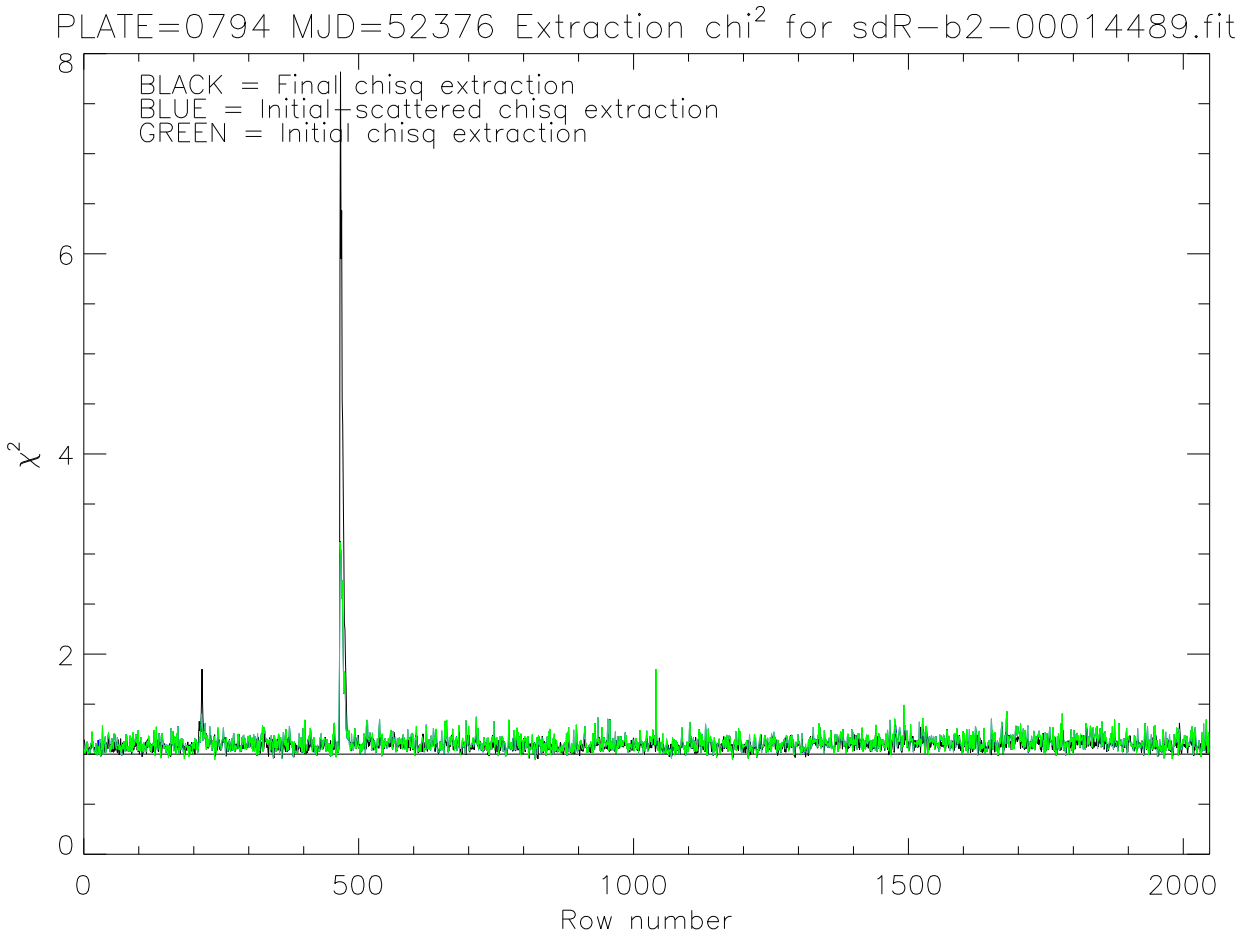

PLATE=0794 MJD=52376 Fiber-Flats for sdR-b2-00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.618
Max value = 1.244
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:35:38 2008

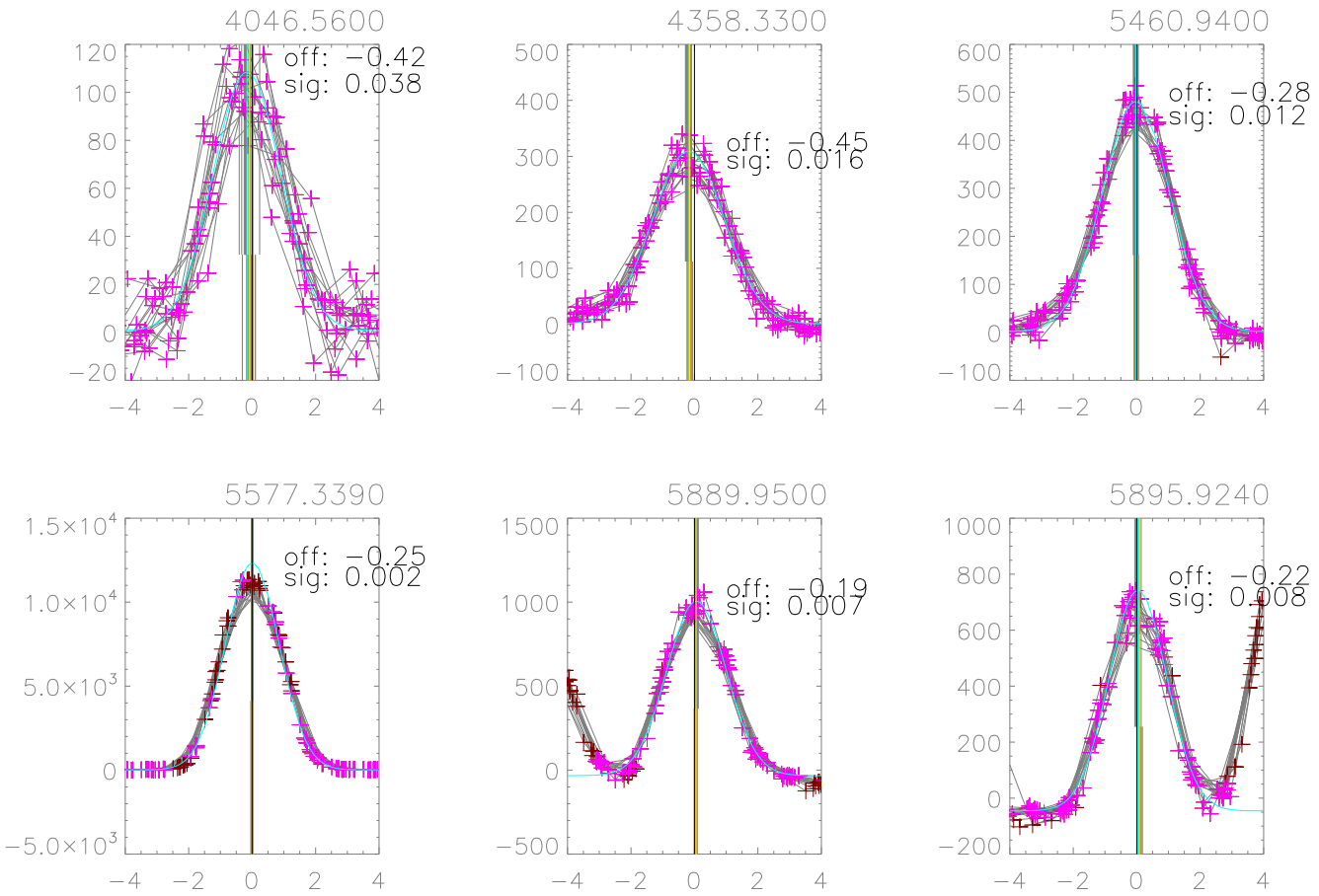

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b2-00014489.f
12.4
10.5
10.5
8.7
0
10.5
8.7
10.5
10.5
0
0
500
1000
1500
2000
Y [pix]
X [pix]

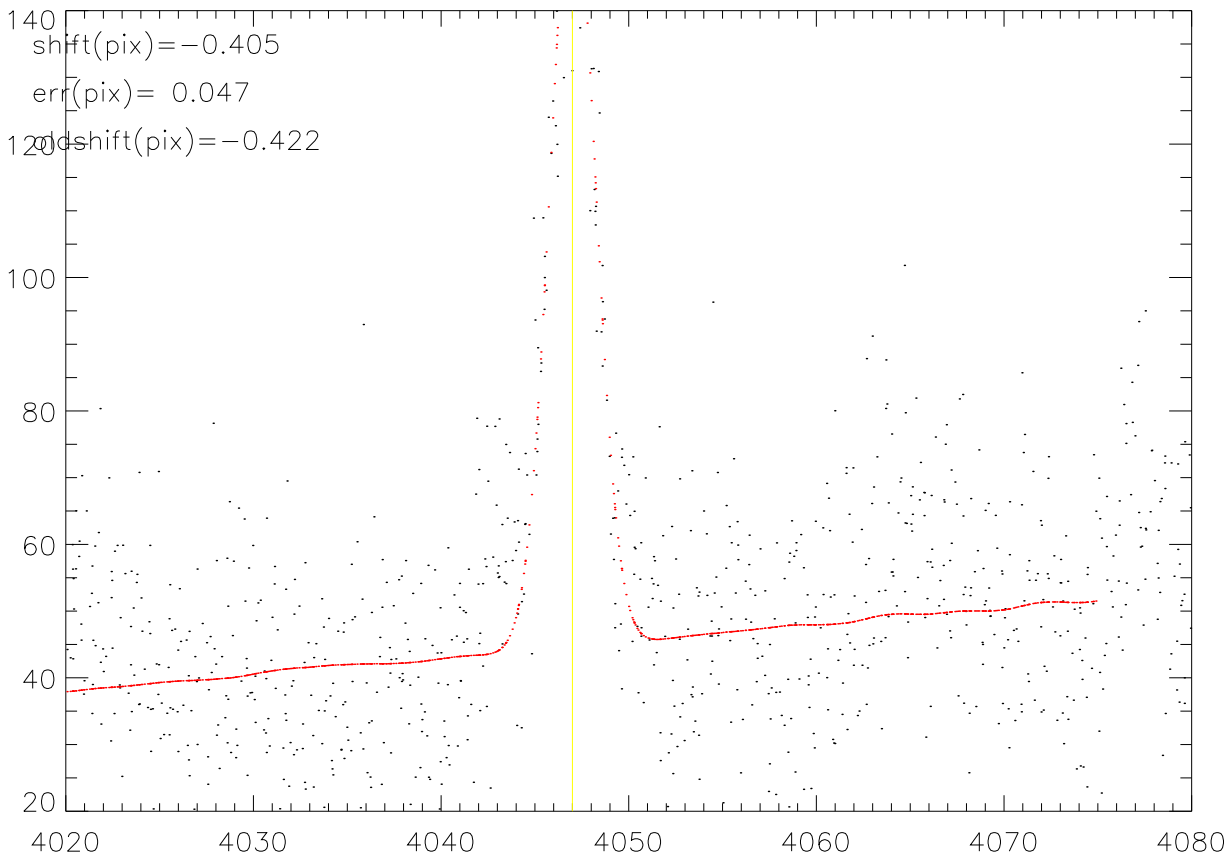

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b2-00014489.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.972
Max value = 13.144
Mon Feb 25 03:36:33 2008

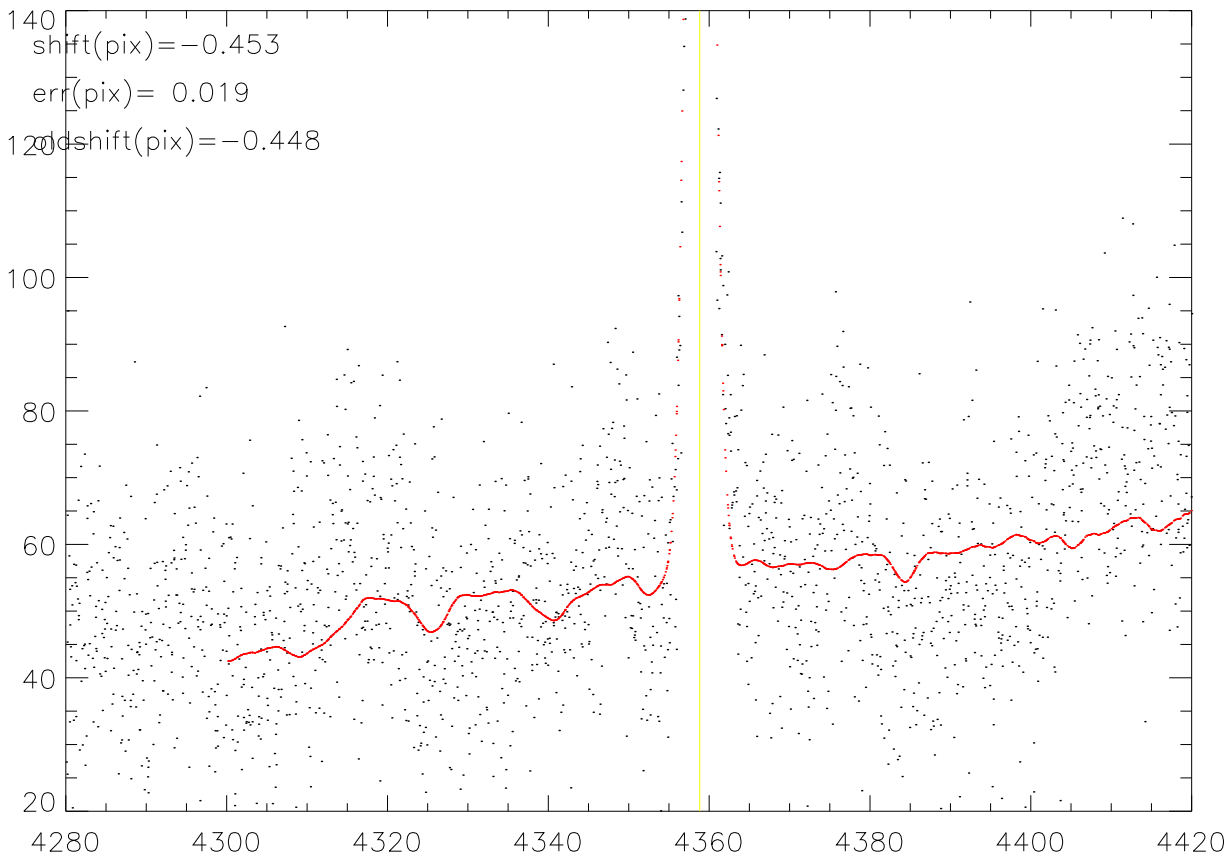

PLATE=0794 MJD=52376 Scattered Light on sdR-b2-00014489.fit
9.1
7.6
7.6
7.6
7.6
7.6
Y [pix]
X [pix]
0
500
1000
1500
2000

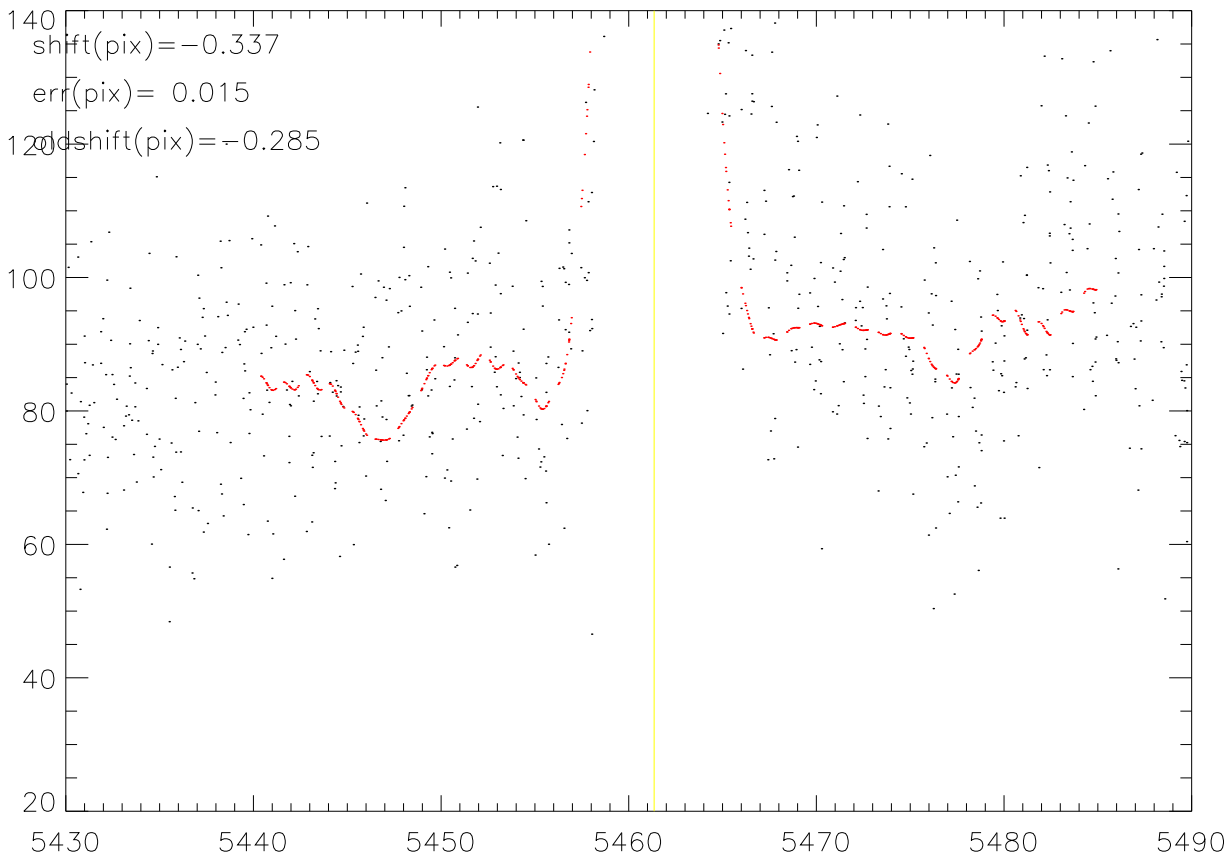

PLATE=0794 MJD=52376 Scattered Light on sdR-b2-00014489.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.415
Max value = 9.439
Mon Feb 25 03:40:07 2008

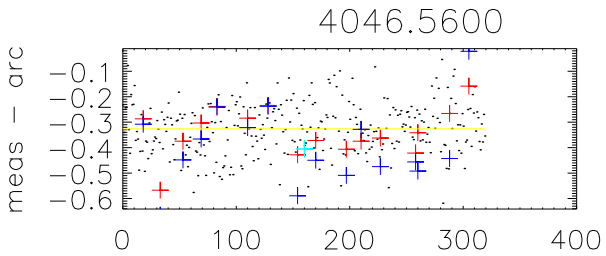

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-b2-00014489.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

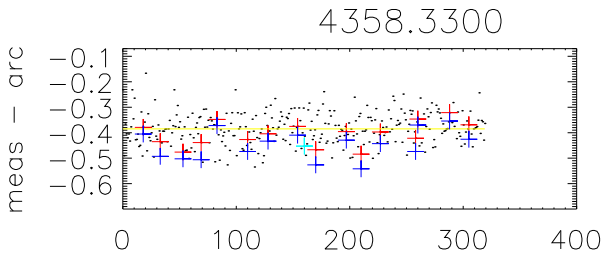

4046.5600
off: −0.42
sig: 0.038
4358.3300
off: −0.45
sig: 0.016
5460.9400
off: −0.28
sig: 0.012
5577.3390
off: −0.25
sig: 0.002
5889.9500
off: −0.19
sig: 0.007
5895.9240
off: −0.22
sig: 0.008

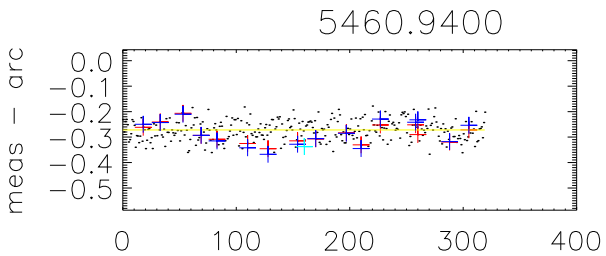

shift(pix)=−0.405
err(pix)= 0.047
oldshift(pix)=−0.422
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

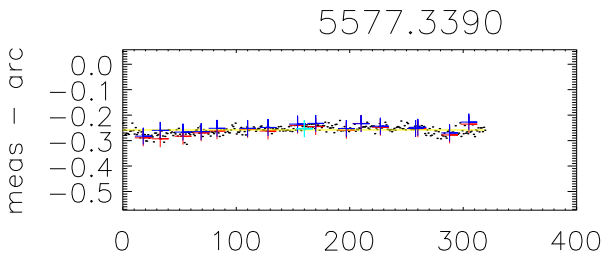

shift(pix)=−0.453
err(pix)= 0.019
oldshift(pix)=−0.448
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

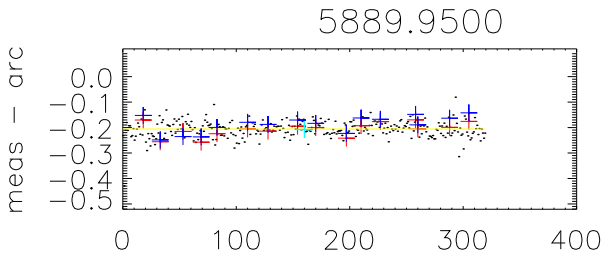

shift(pix)=−0.337
err(pix)= 0.015
oldshift(pix)=−0.285
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

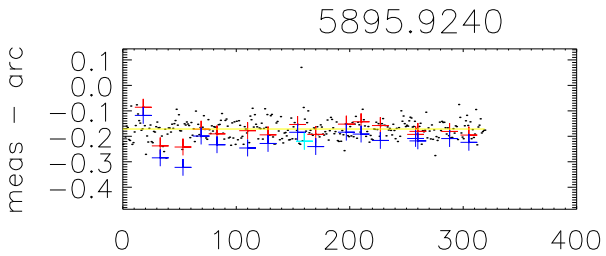

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

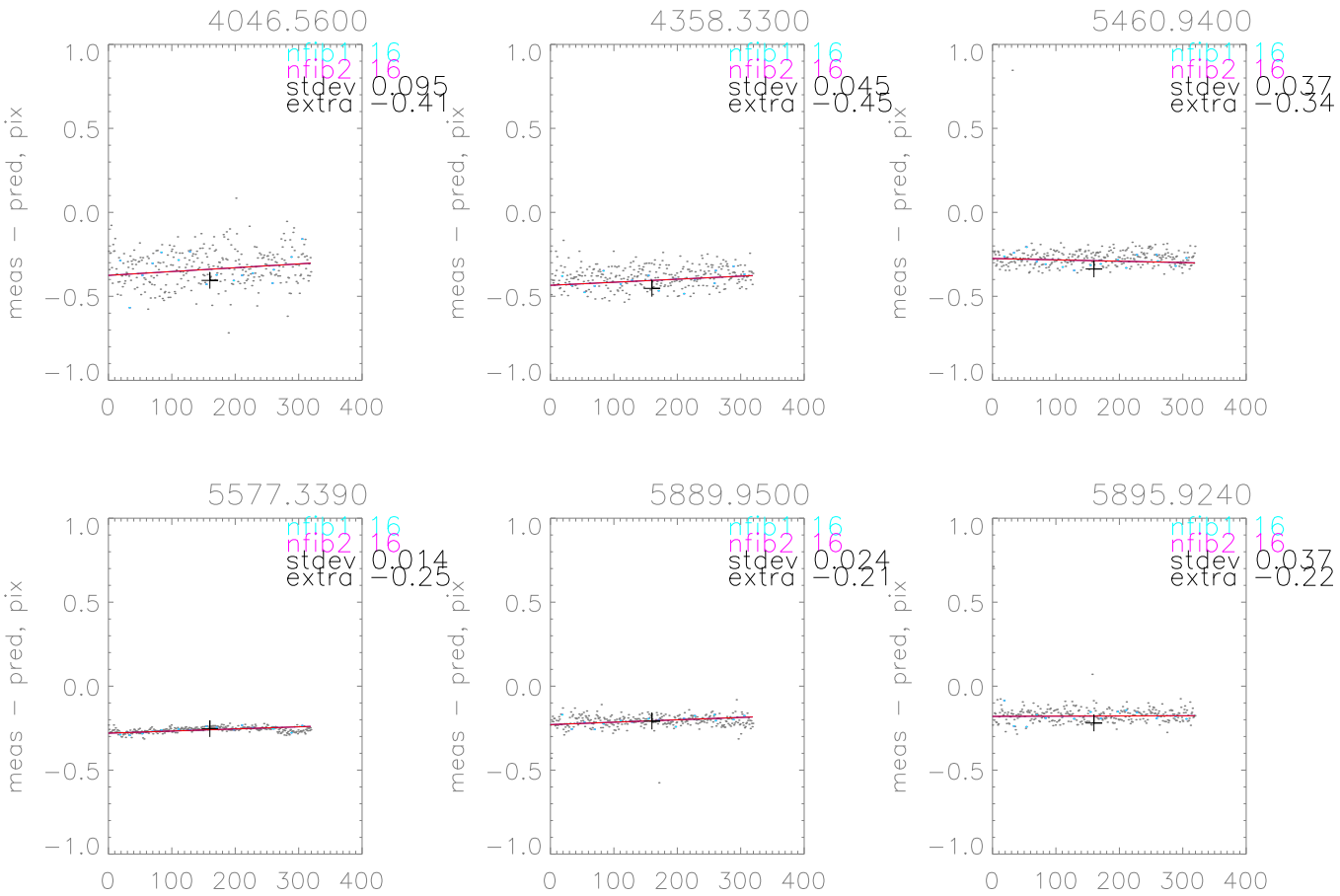

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

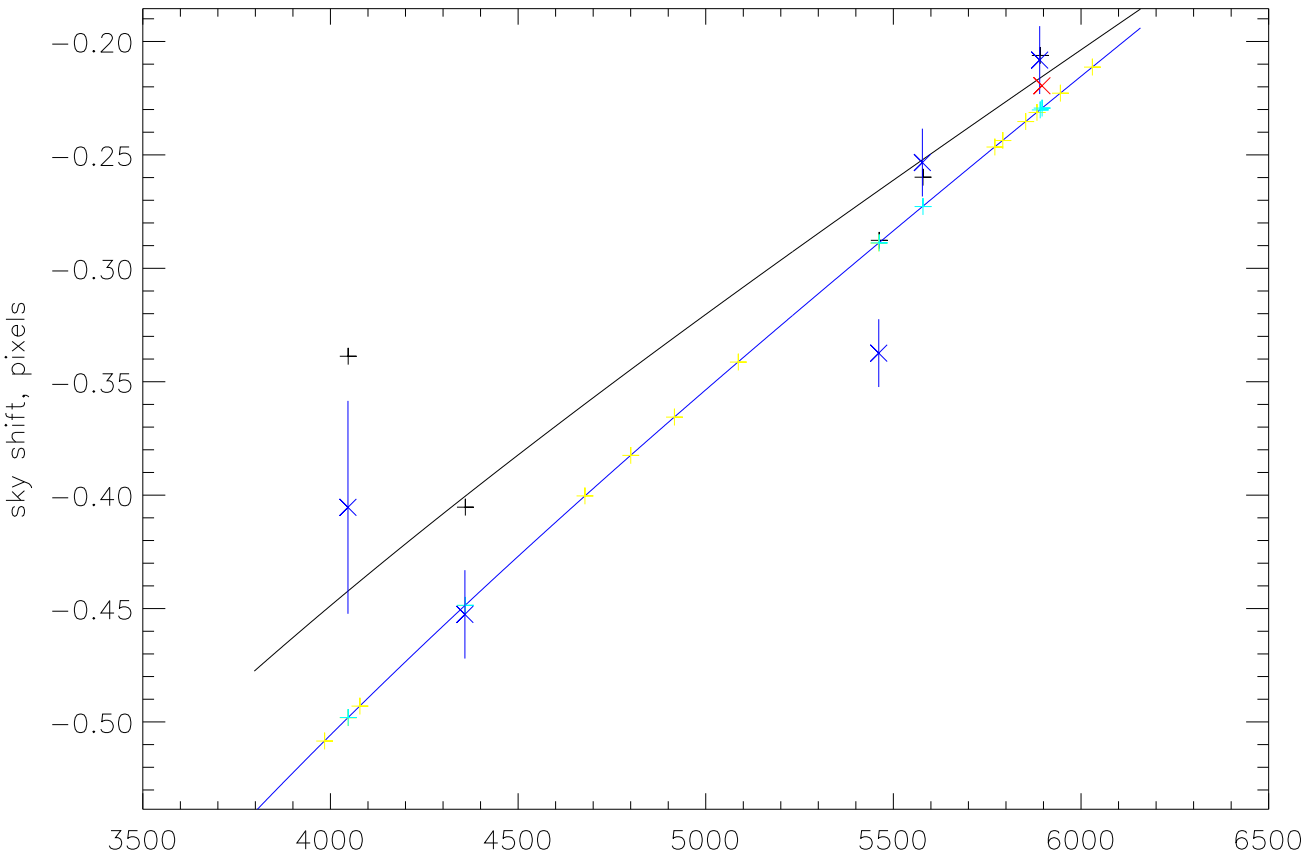

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

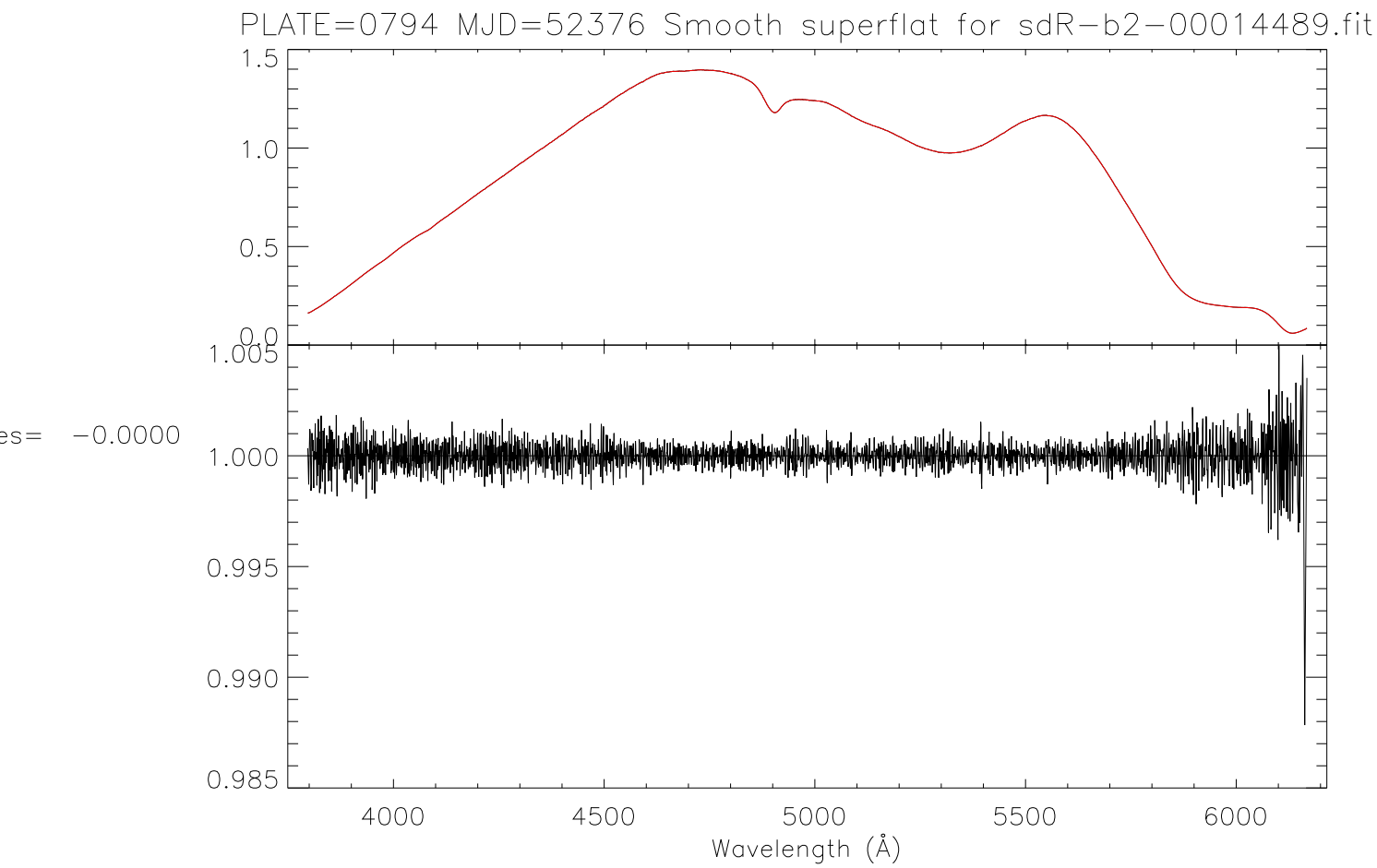

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

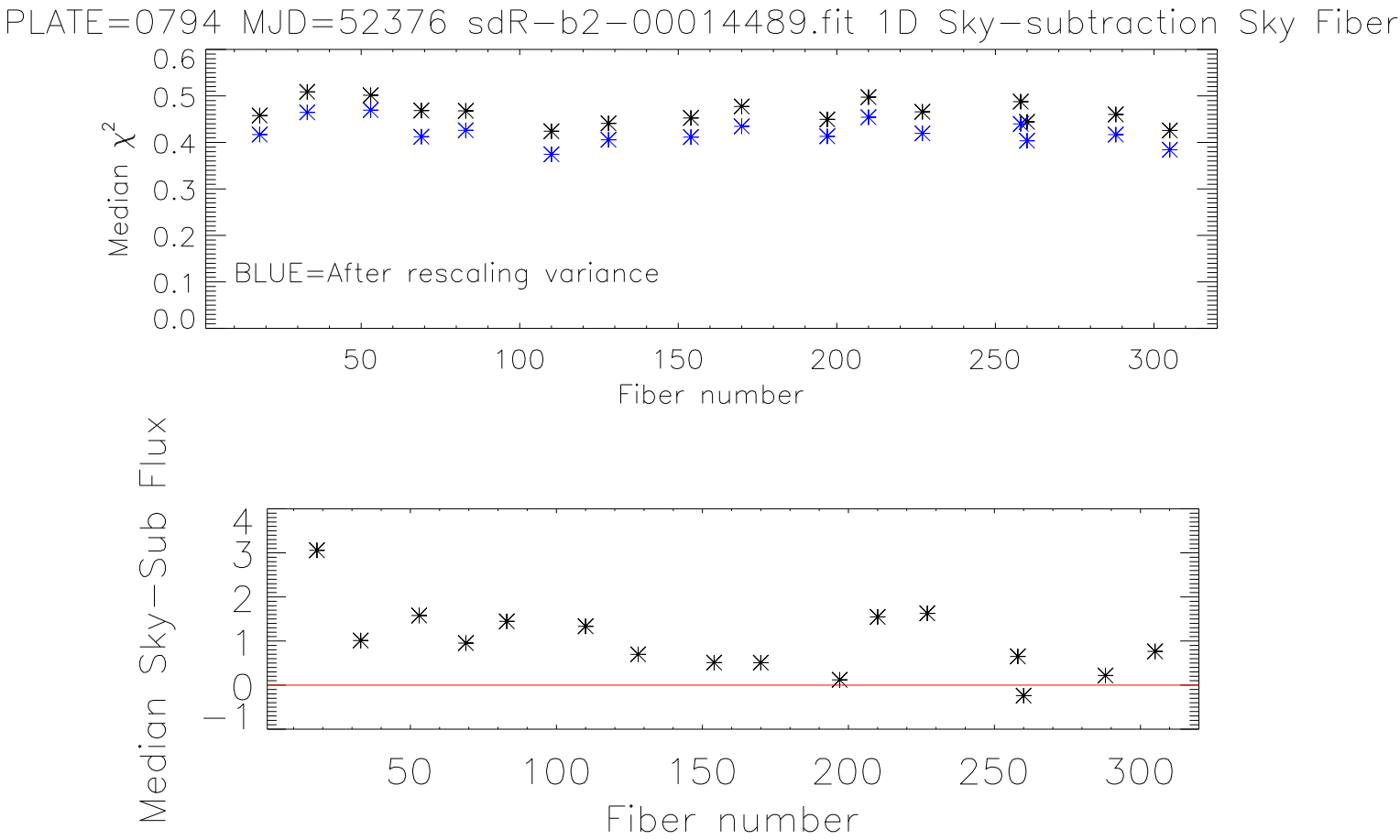

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

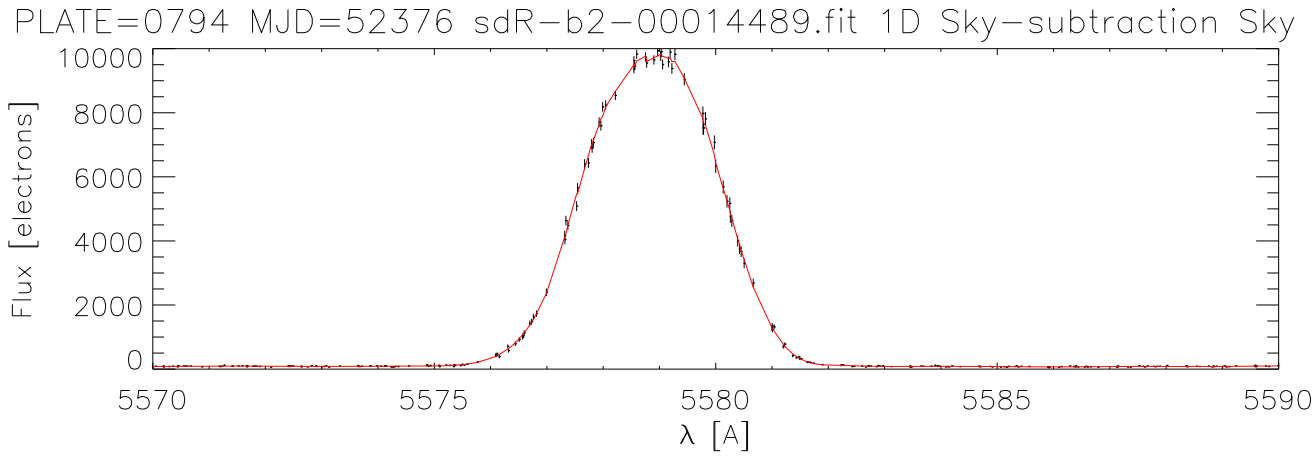

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

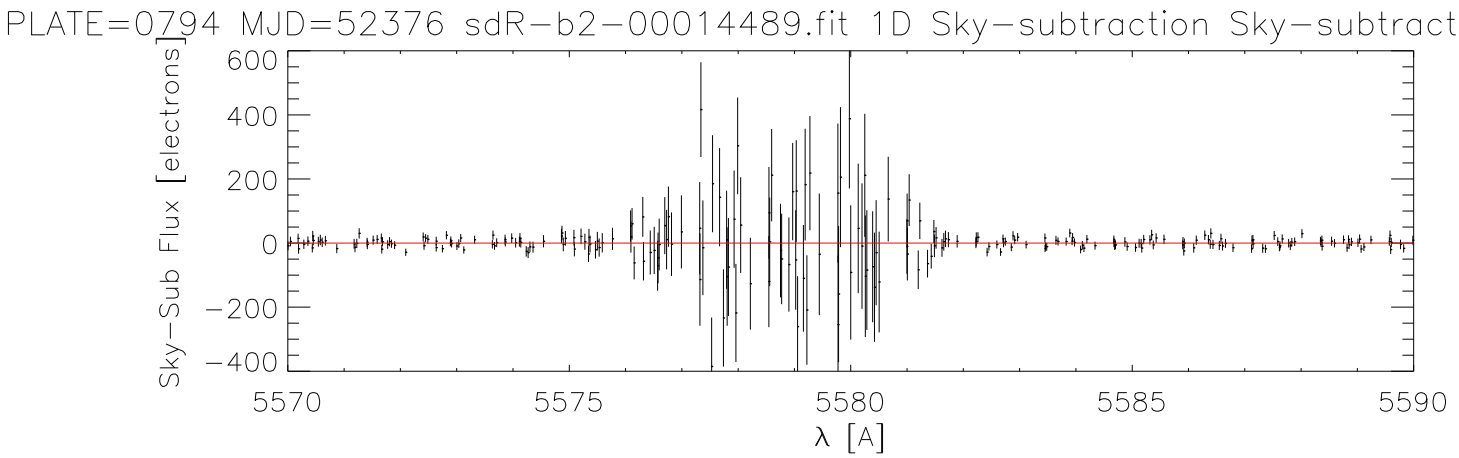

4046.5600
nfib1 16
nfib2 16
stdev 0.095
extra −0.41
4358.3300
nfib1 16
nfib2 16
stdev 0.045
extra −0.45
5460.9400
nfib1 16
nfib2 16
stdev 0.037
extra −0.34
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra −0.25
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra −0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.037
extra −0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

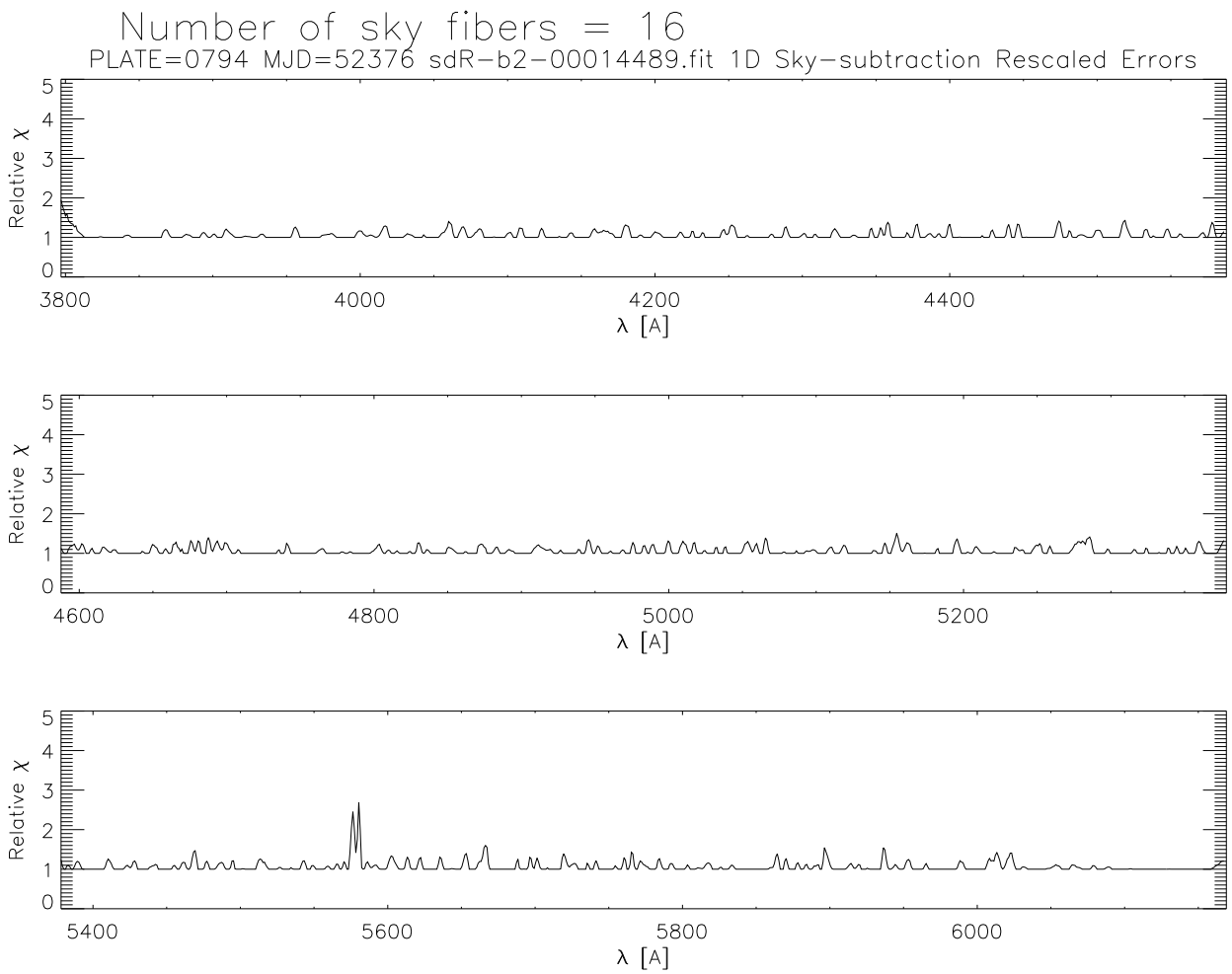

−0.20
−0.25
−0.30
−0.35
−0.40
−0.45
−0.50
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

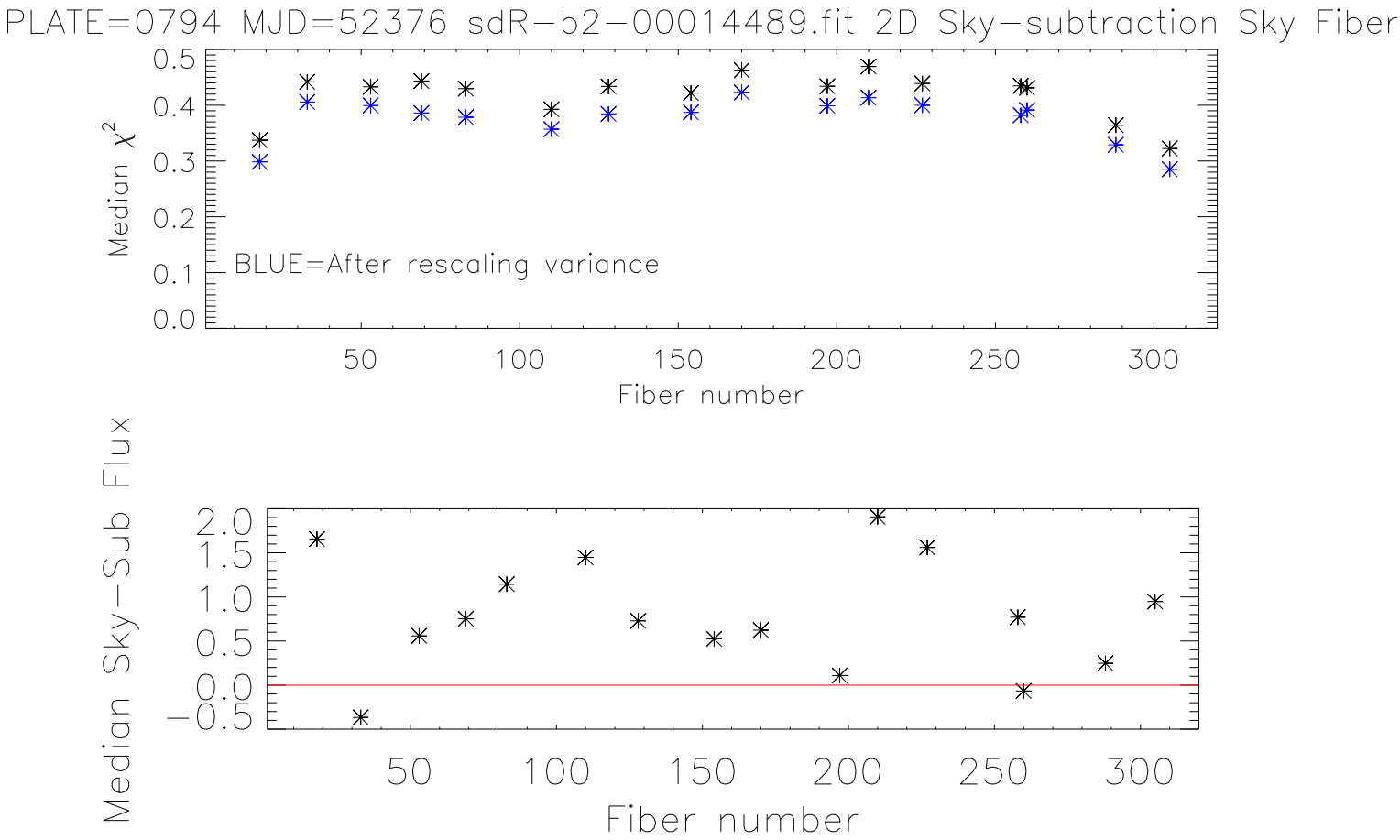

PLATE=0794 MJD=52376 Smooth superflat for sdR-b2-00014489.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
0.985
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

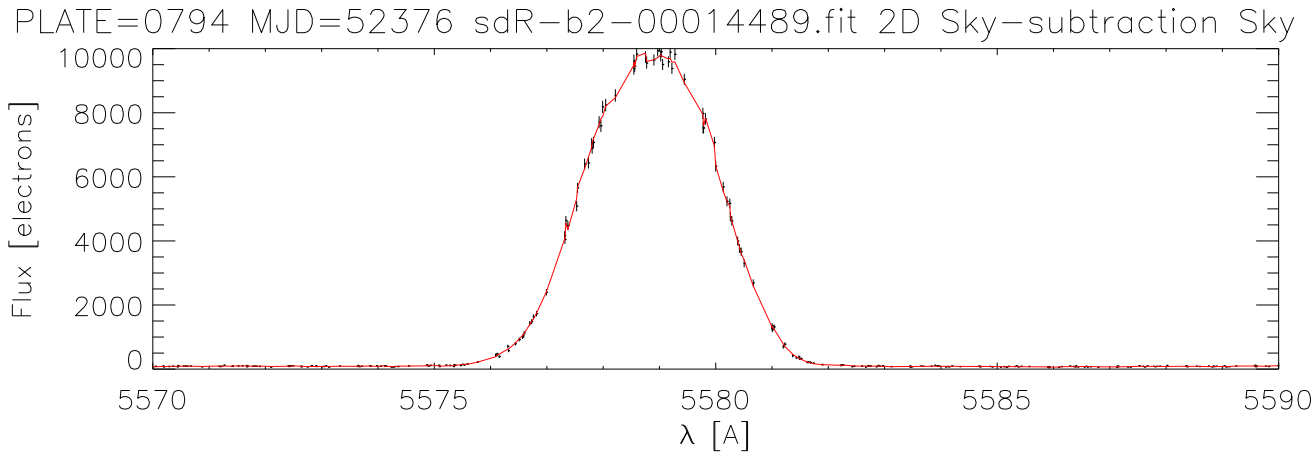

PLATE=0794 MJD=52376 sdR-b2-00014489.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

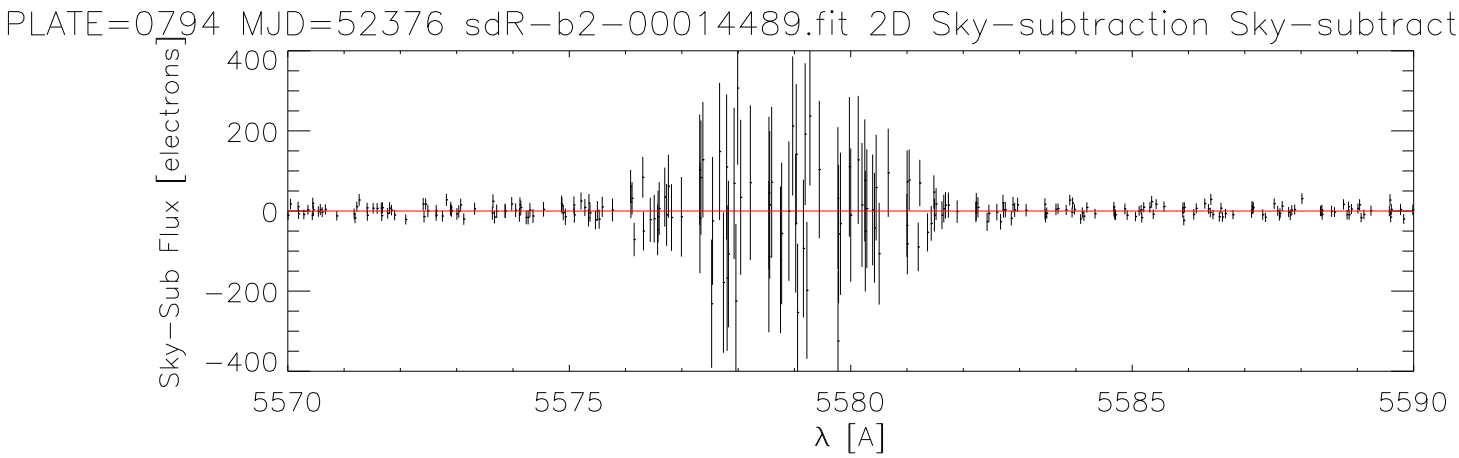

PLATE=0794 MJD=52376 sdR-b2-00014489.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

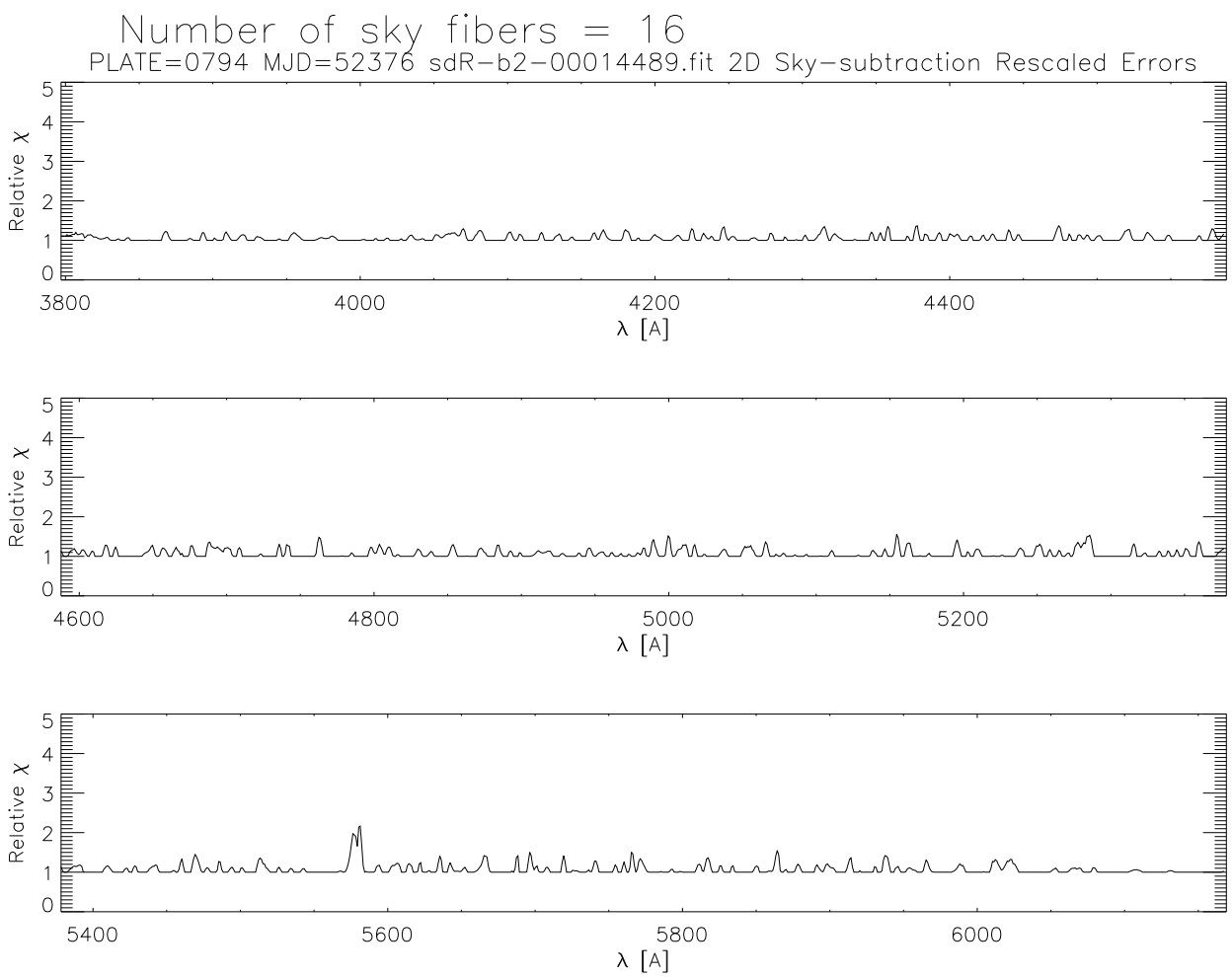

PLATE=0794 MJD=52376 sdR-b2-00014489.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

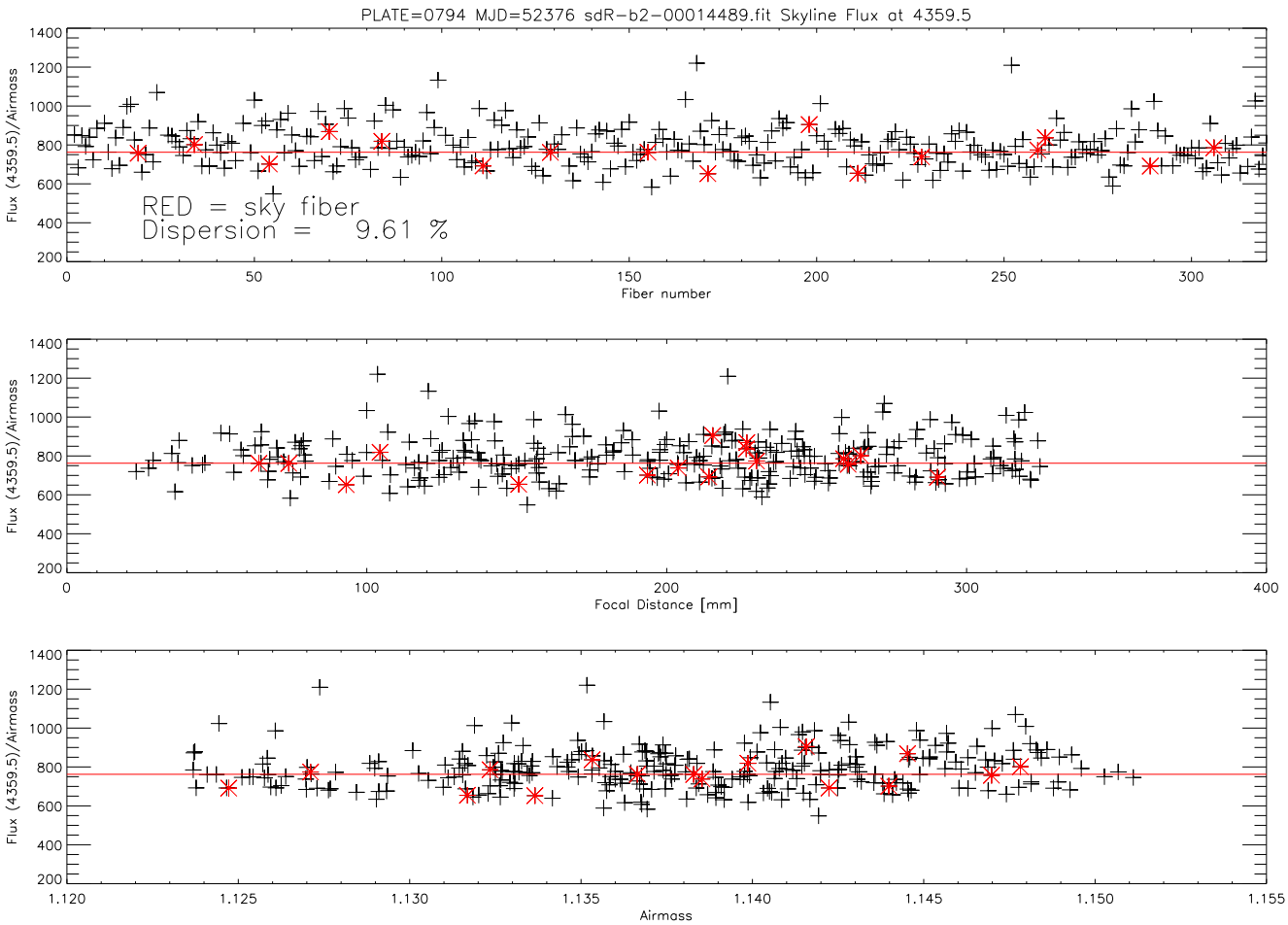

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b2-00014489.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

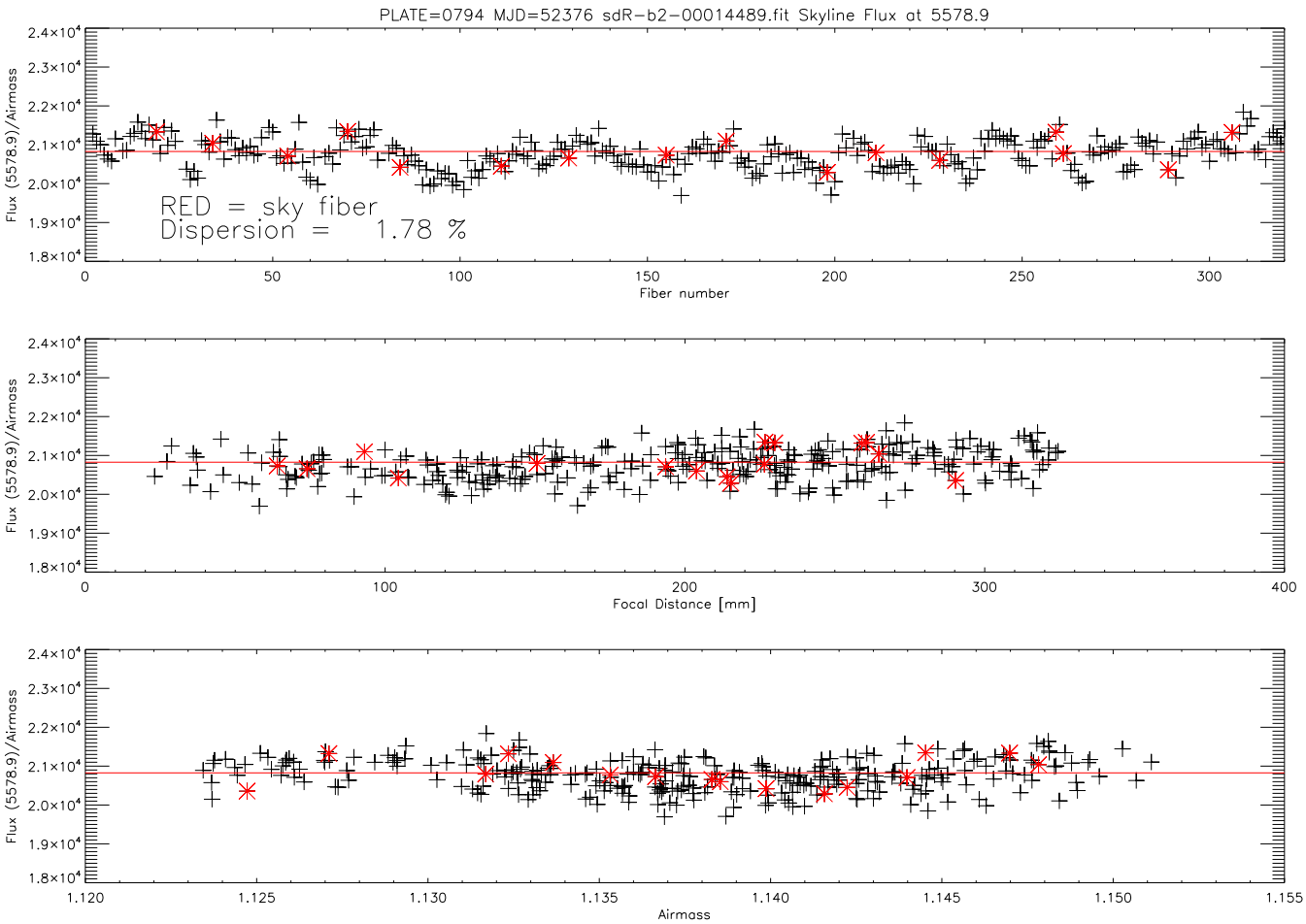

PLATE=0794 MJD=52376 sdR-b2-00014489.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

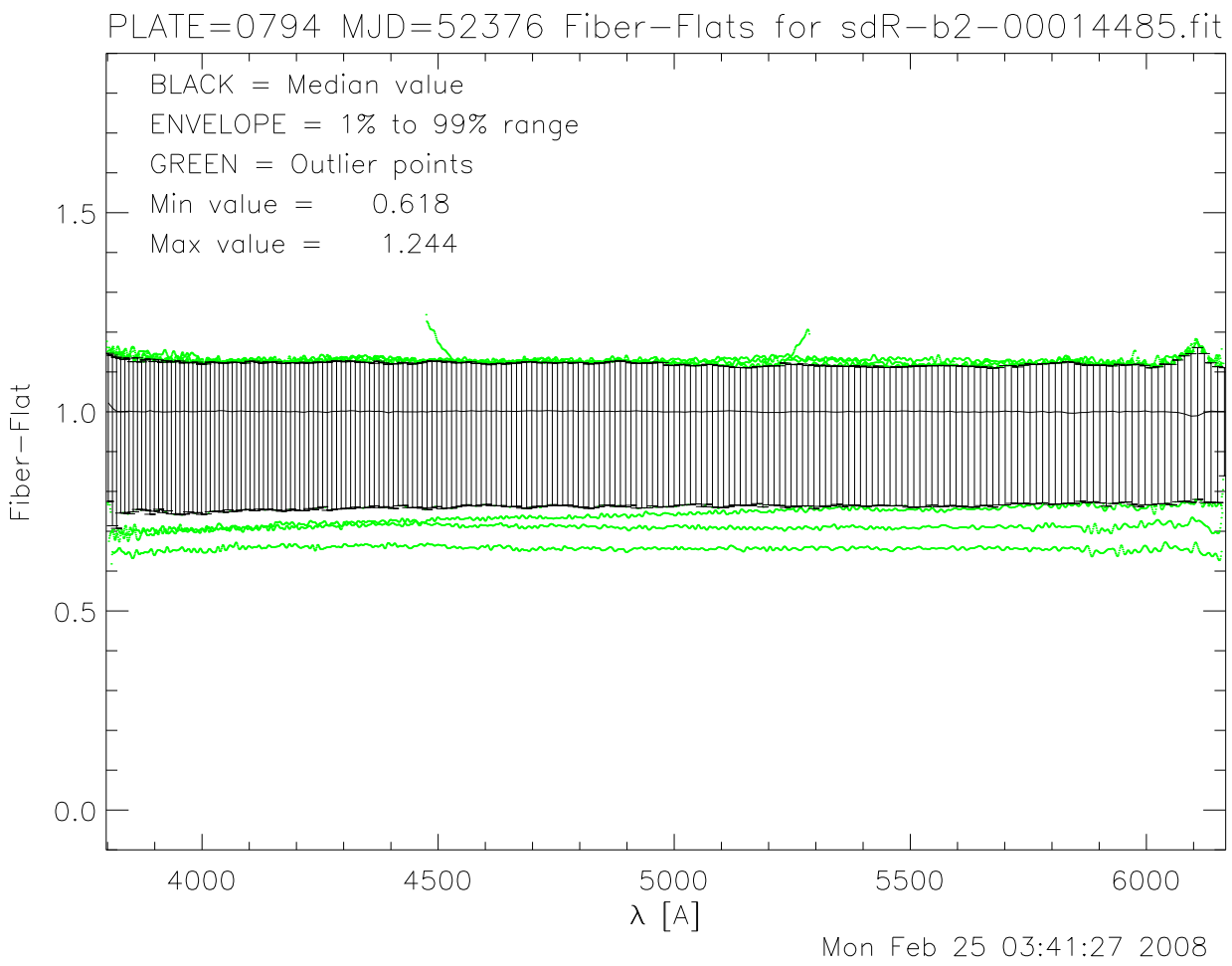

PLATE=0794 MJD=52376 sdR-b2-00014489.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

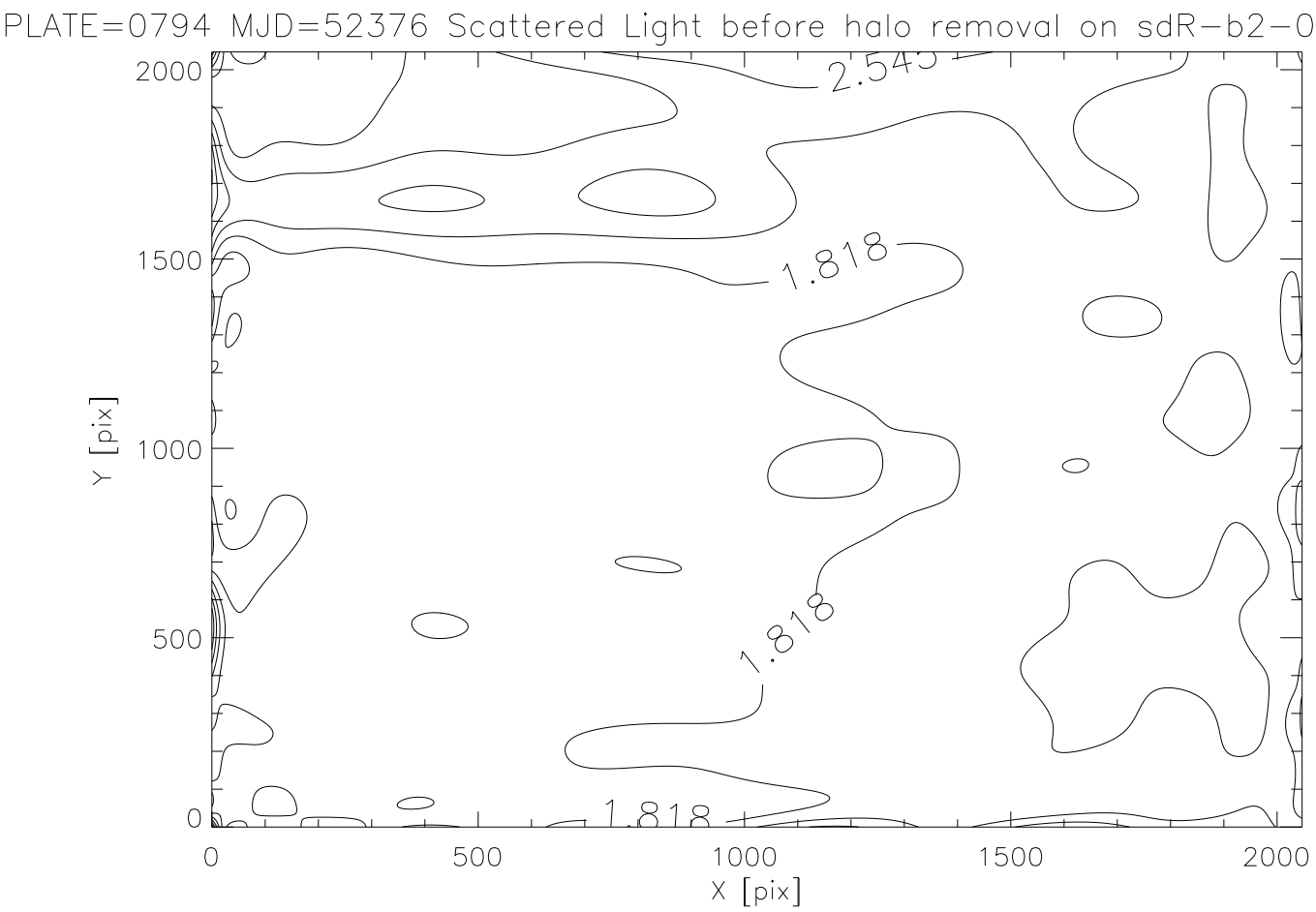

PLATE=0794 MJD=52376 sdR-b2-00014489.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

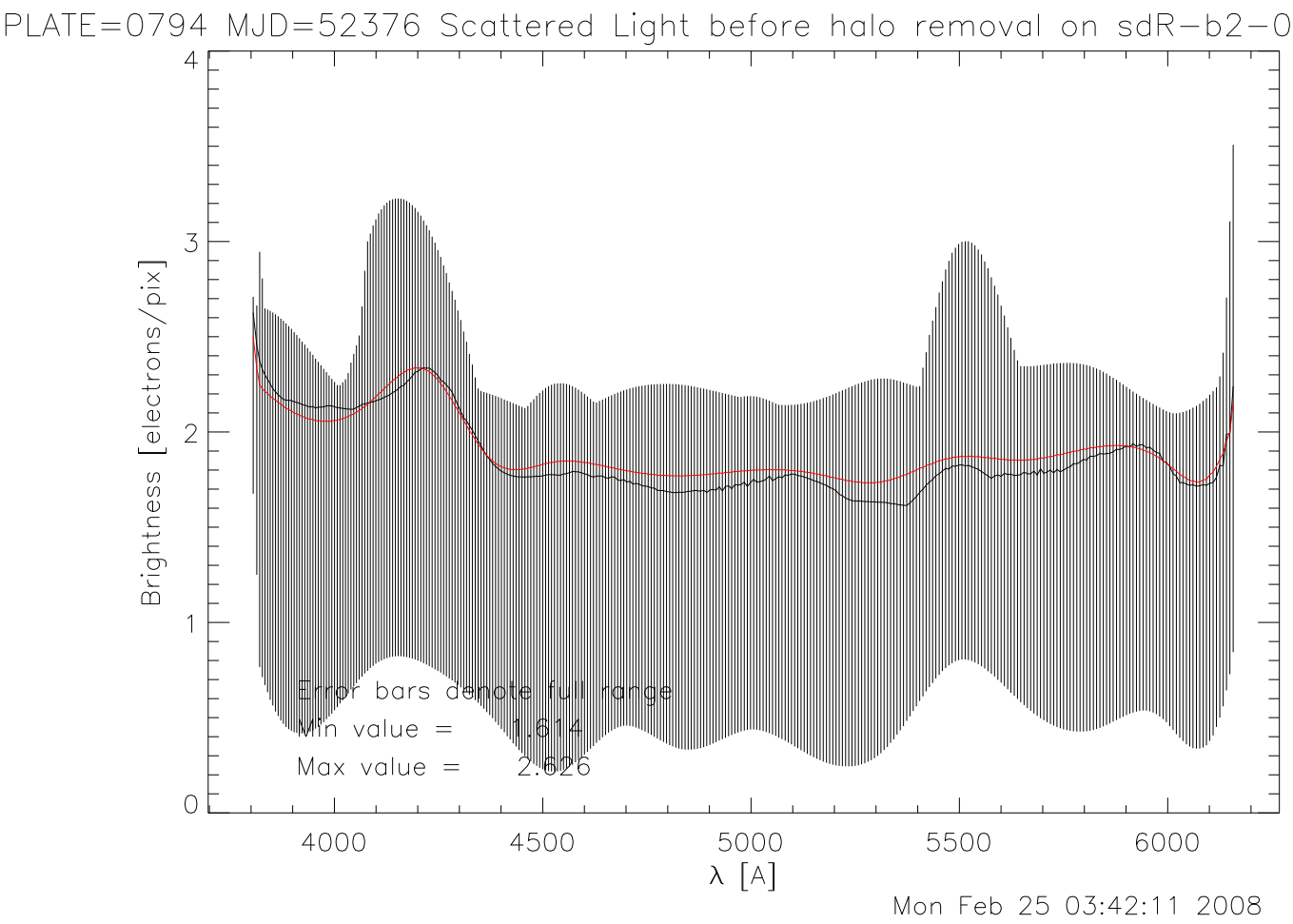

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b2-00014489.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

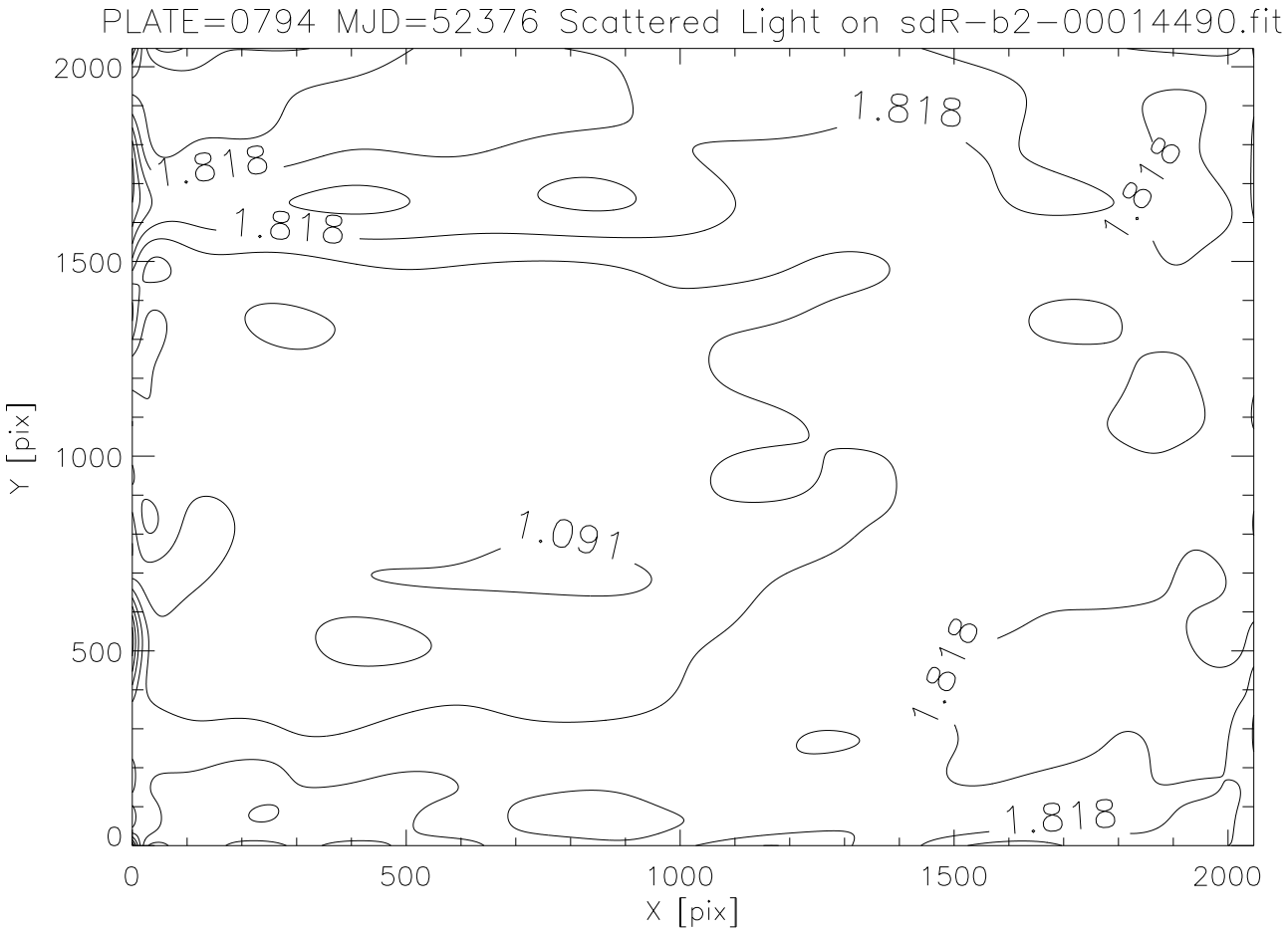

PLATE=0794 MJD=52376 sdR-b2-00014489.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.61 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

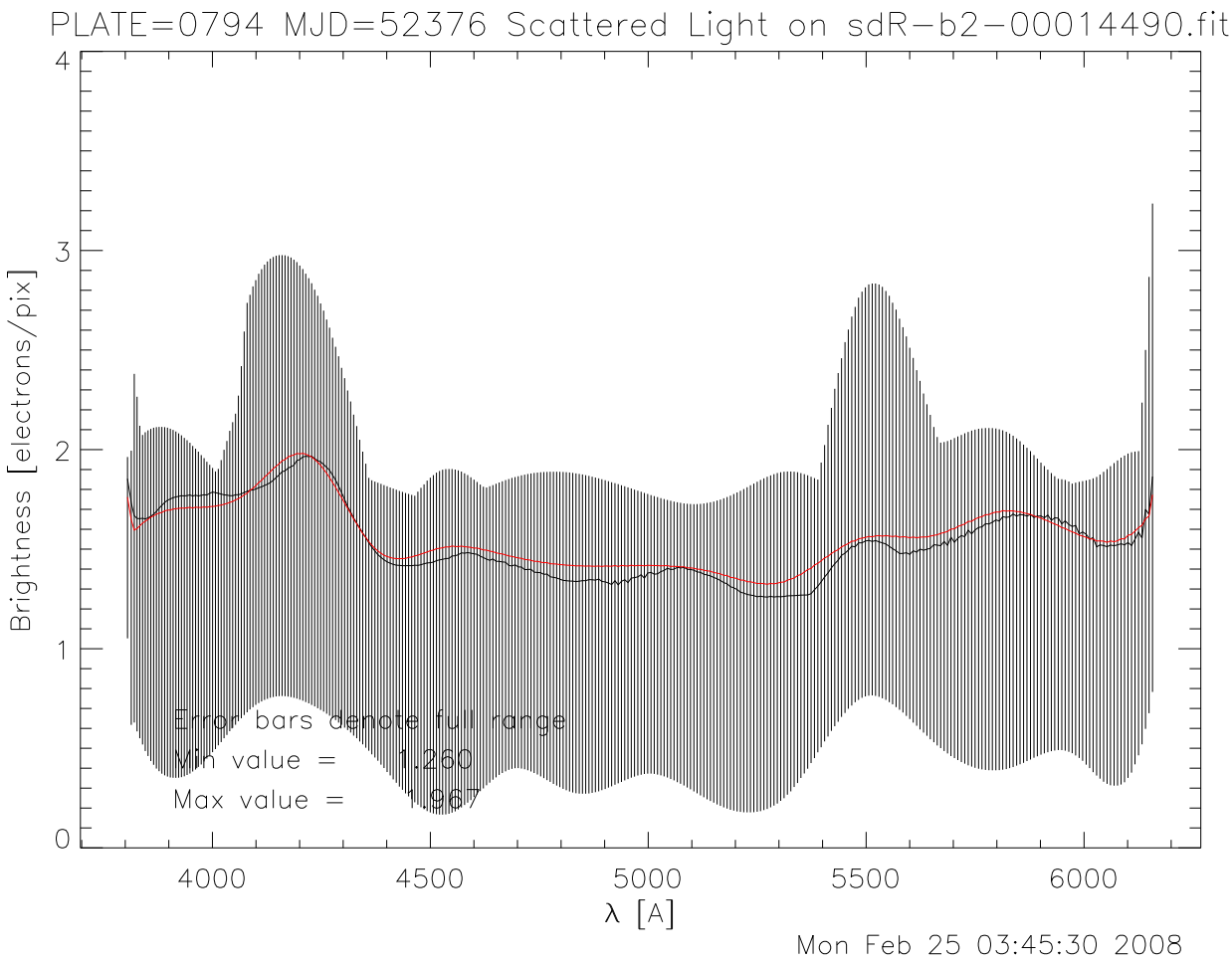

PLATE=0794 MJD=52376 sdR-b2-00014489.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.78 %
Fiber number
Focal Distance [mm]
Airmass

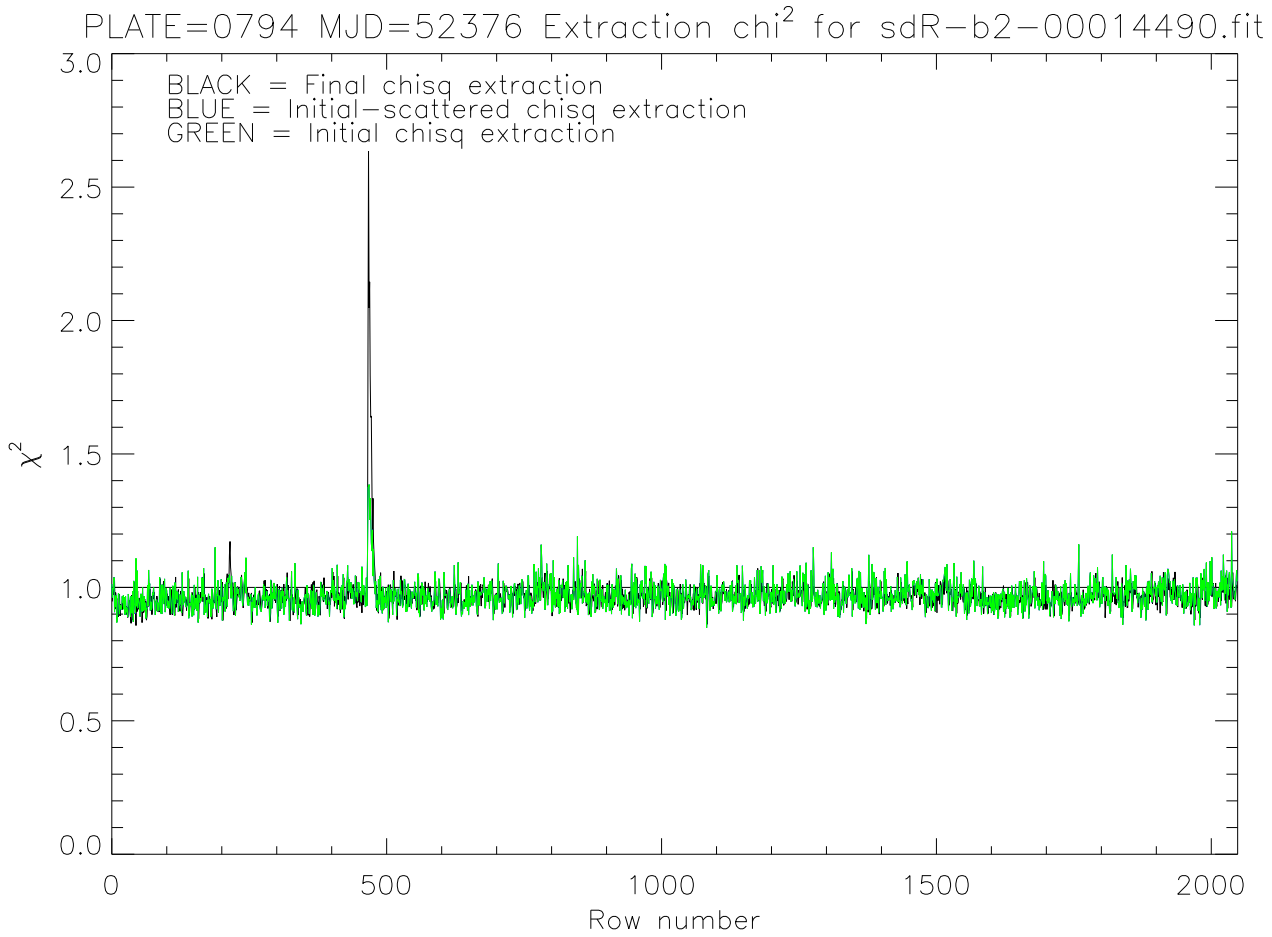

PLATE=0794 MJD=52376 Fiber-Flats for sdR-b2-00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.618
Max value = 1.244
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 03:41:27 2008

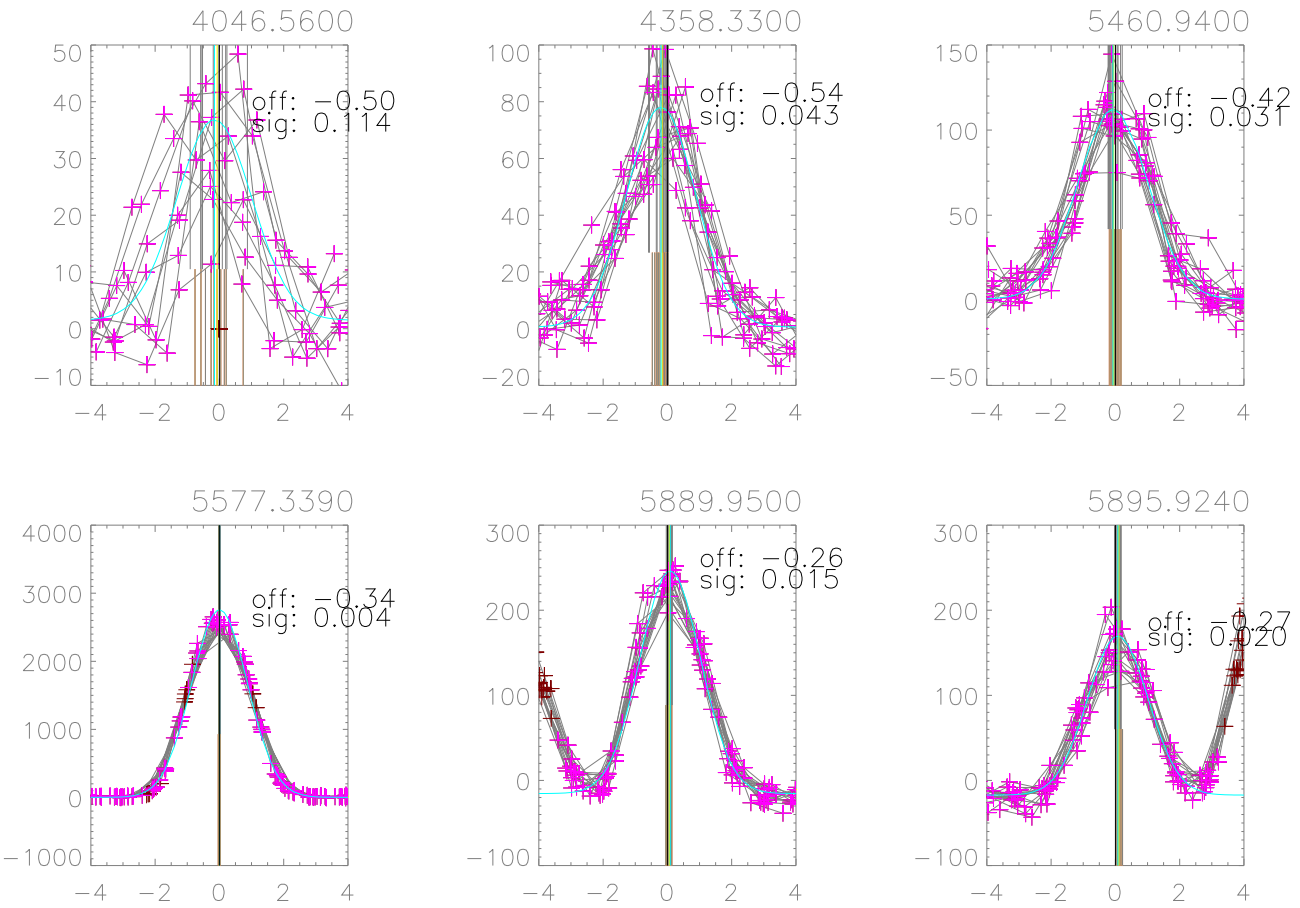

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR−b2−00014490.f
2.545
1.818
1.818
1.818
0
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

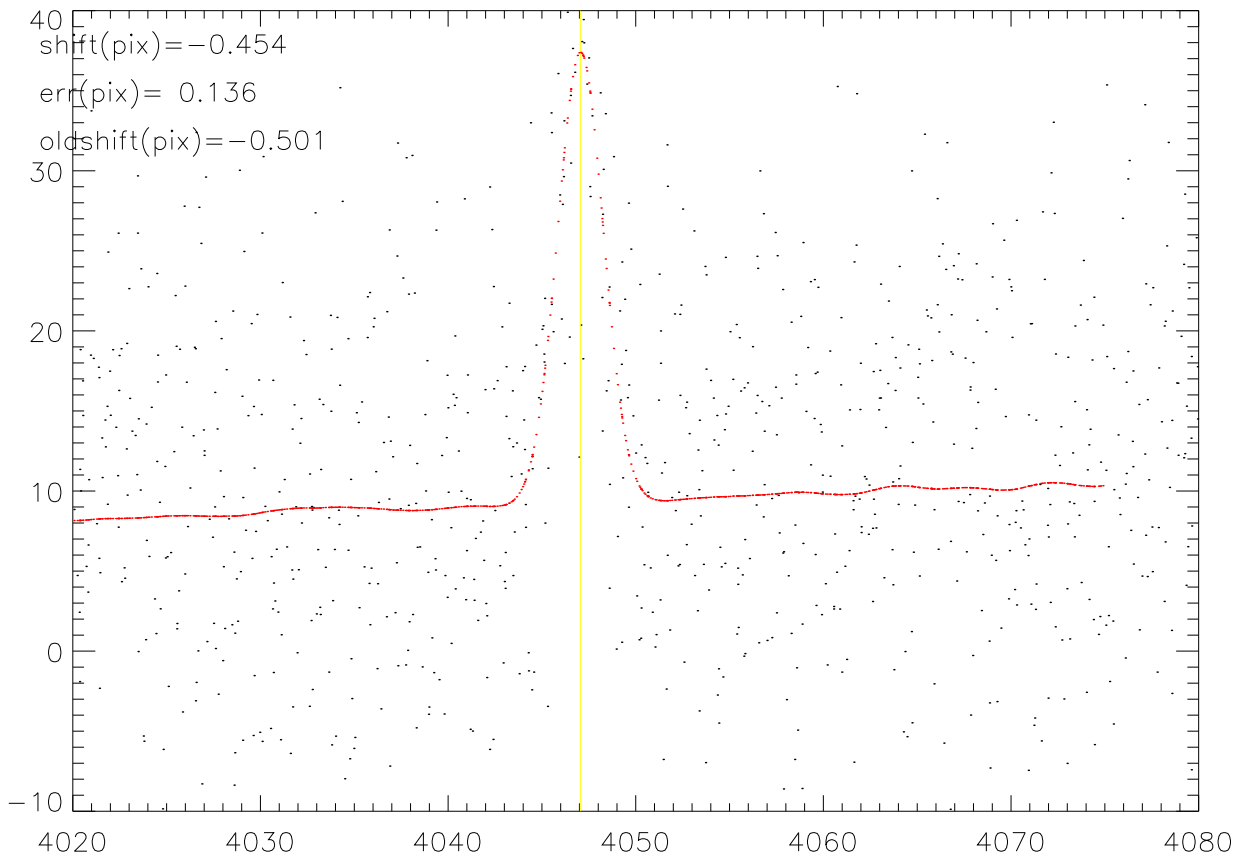

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-b2-00014490.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.614
Max value = 2.626
Mon Feb 25 03:42:11 2008

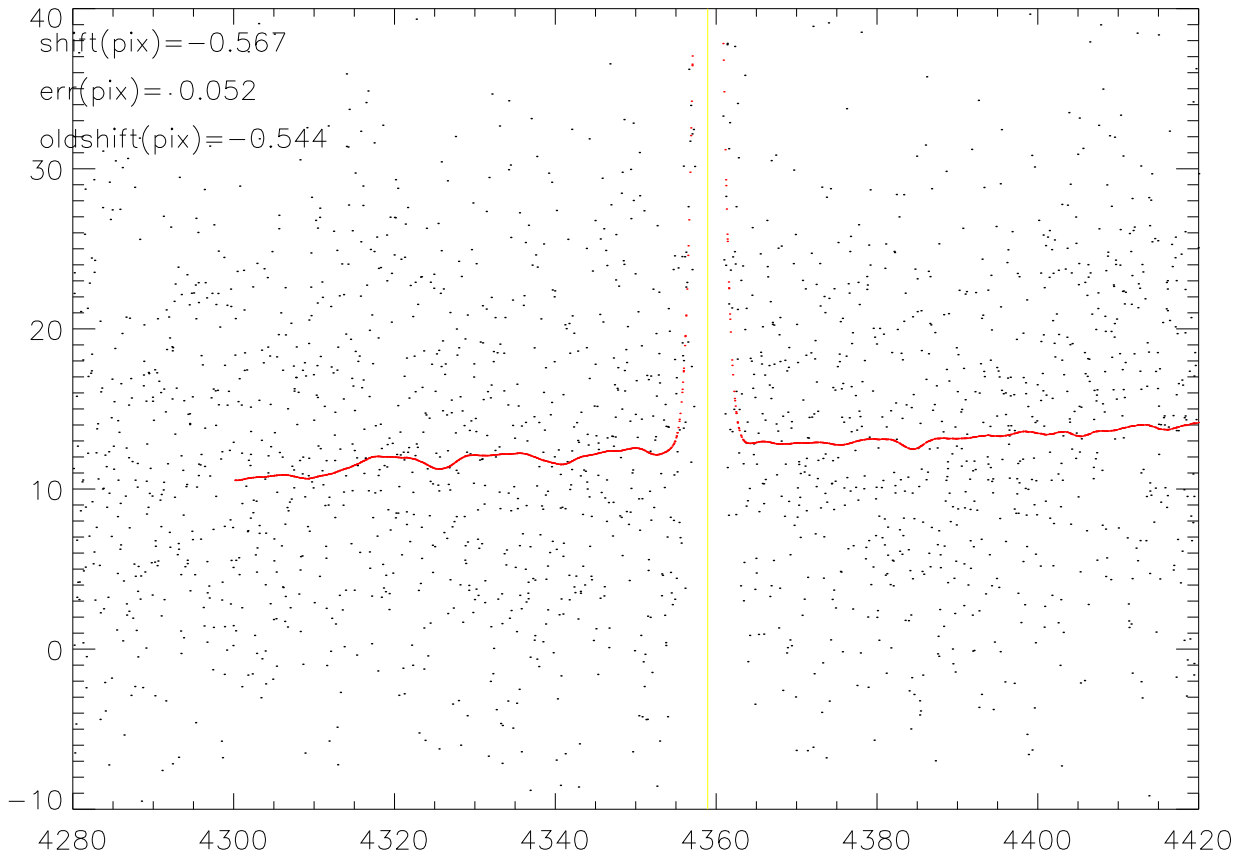

PLATE=0794 MJD=52376 Scattered Light on sdR-b2-00014490.fit
1.818
1.818
1.818
1.818
1.091
1.818
1.818
Y [pix]
X [pix]
0
500
1000
1500
2000

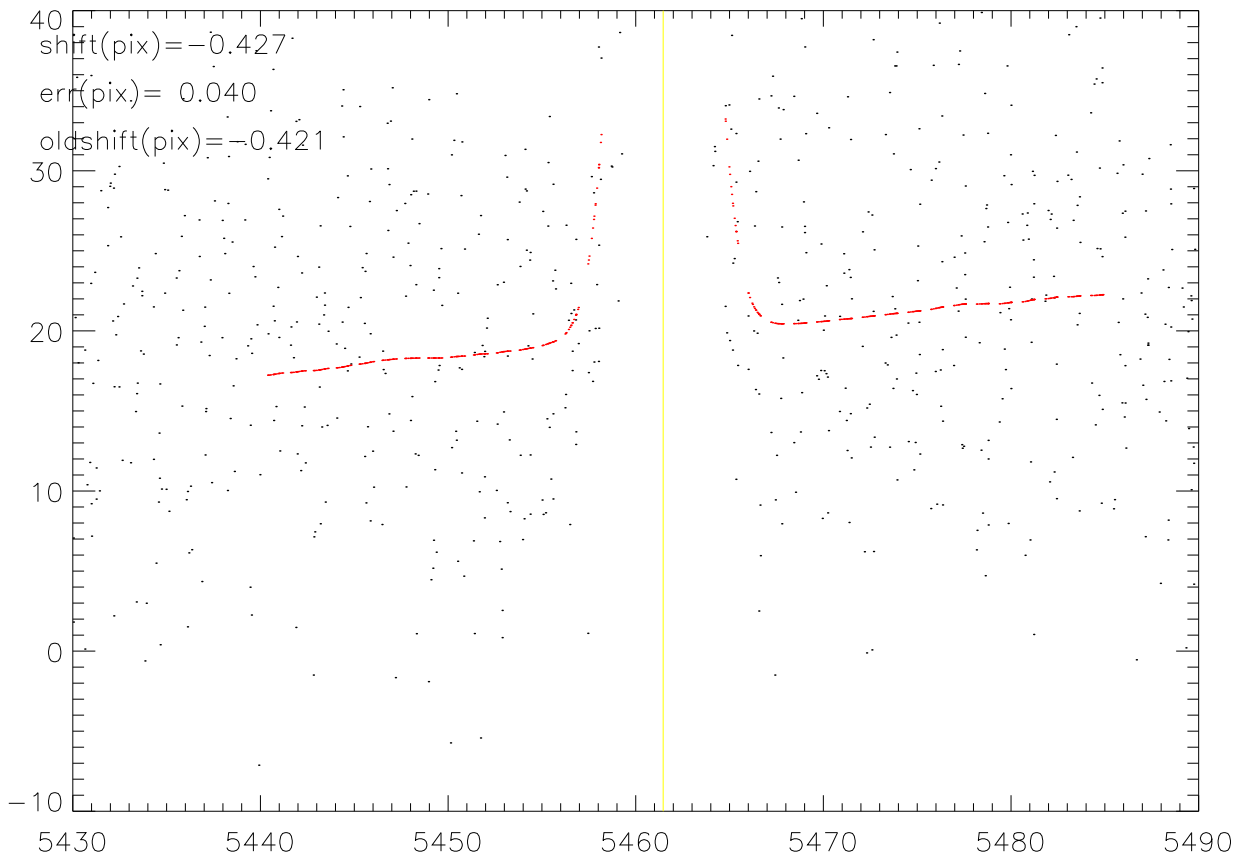

PLATE=0794 MJD=52376 Scattered Light on sdR-b2-00014490.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.260
Max value = 1.967
Mon Feb 25 03:45:30 2008

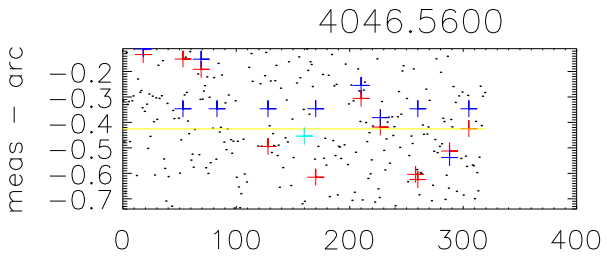

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-b2-00014490.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

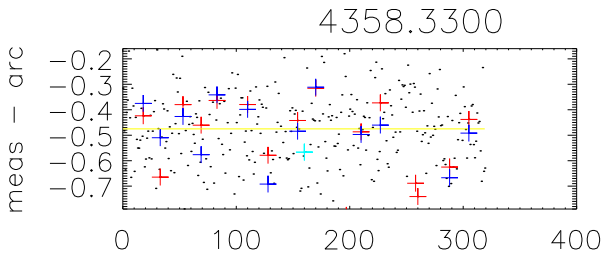

4046.5600
off: −0.50
sig: 0.114
4358.3300
off: −0.54
sig: 0.043
5460.9400
off: −0.42
sig: 0.031
5577.3390
off: −0.34
sig: 0.004
5889.9500
off: −0.26
sig: 0.015
5895.9240
off: −0.27
sig: 0.020

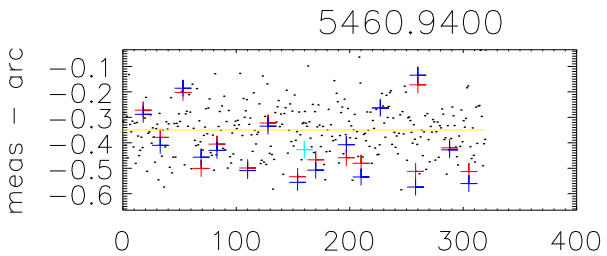

shift(pix)=−0.454
err(pix)= 0.136
oldshift(pix)=−0.501
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

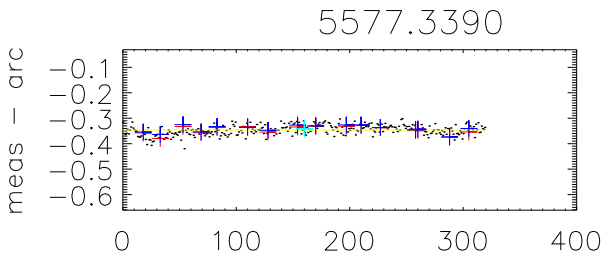

shift(pix)=−0.567
err(pix)=0.052
oldshift(pix)=−0.544
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

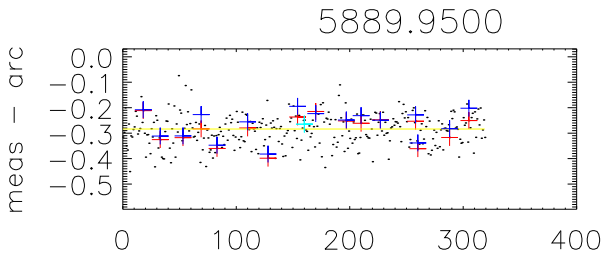

shift(pix)=−0.427
err(pix)= 0.040
oldshift(pix)=−0.421
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

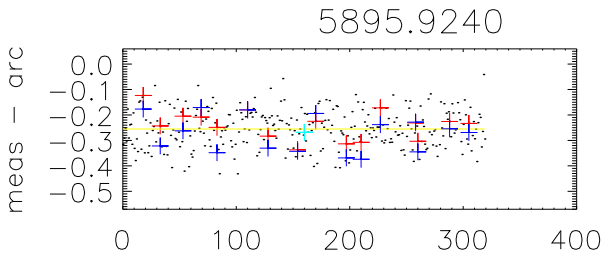

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

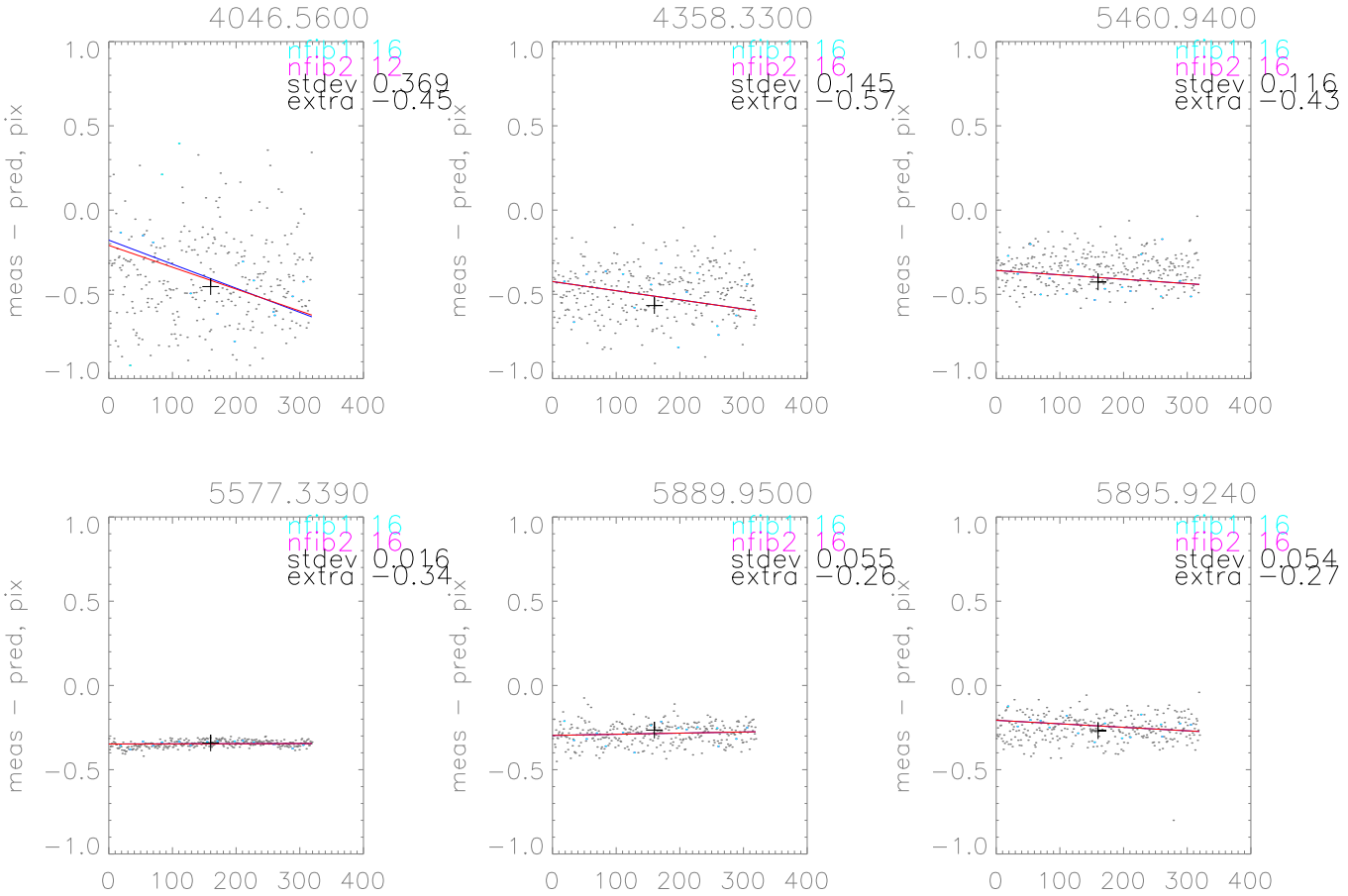

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

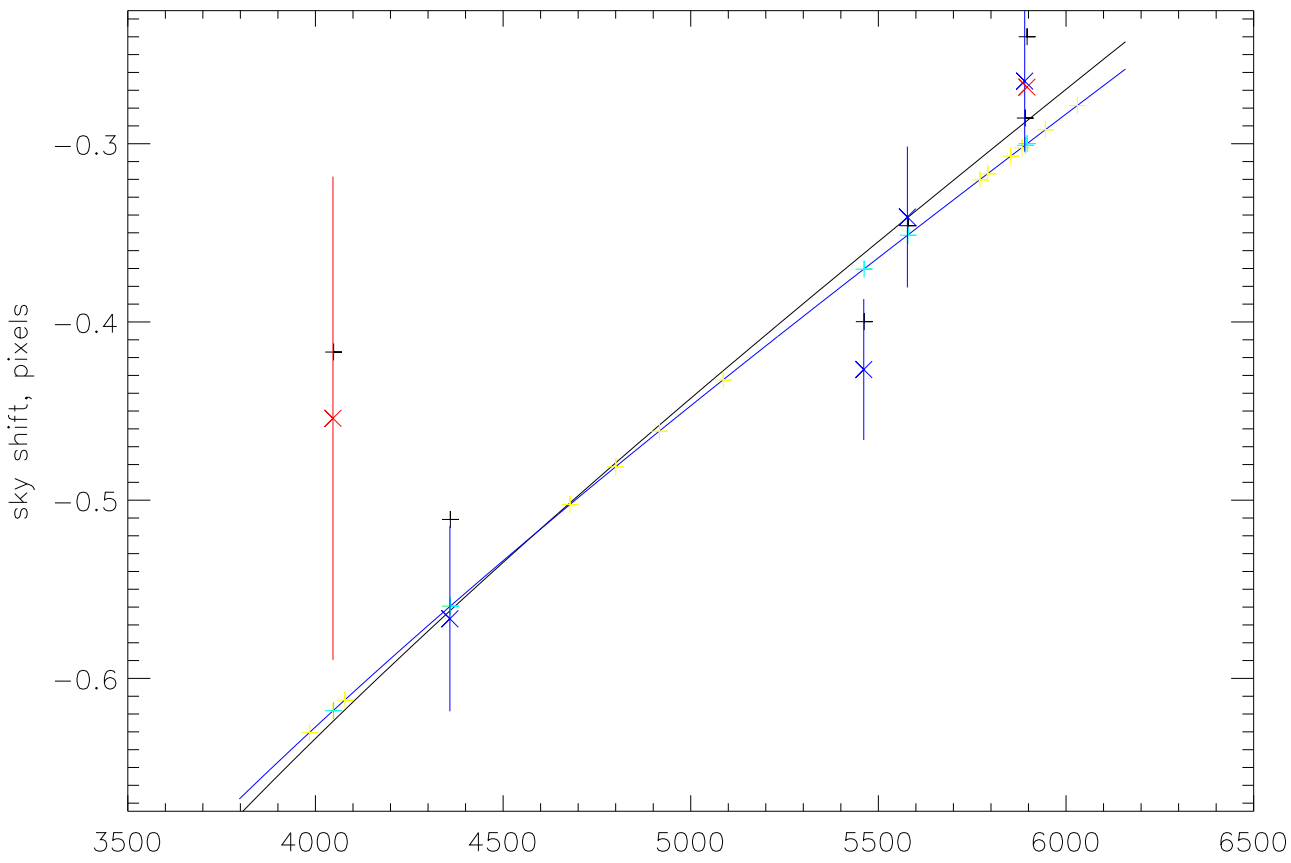

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

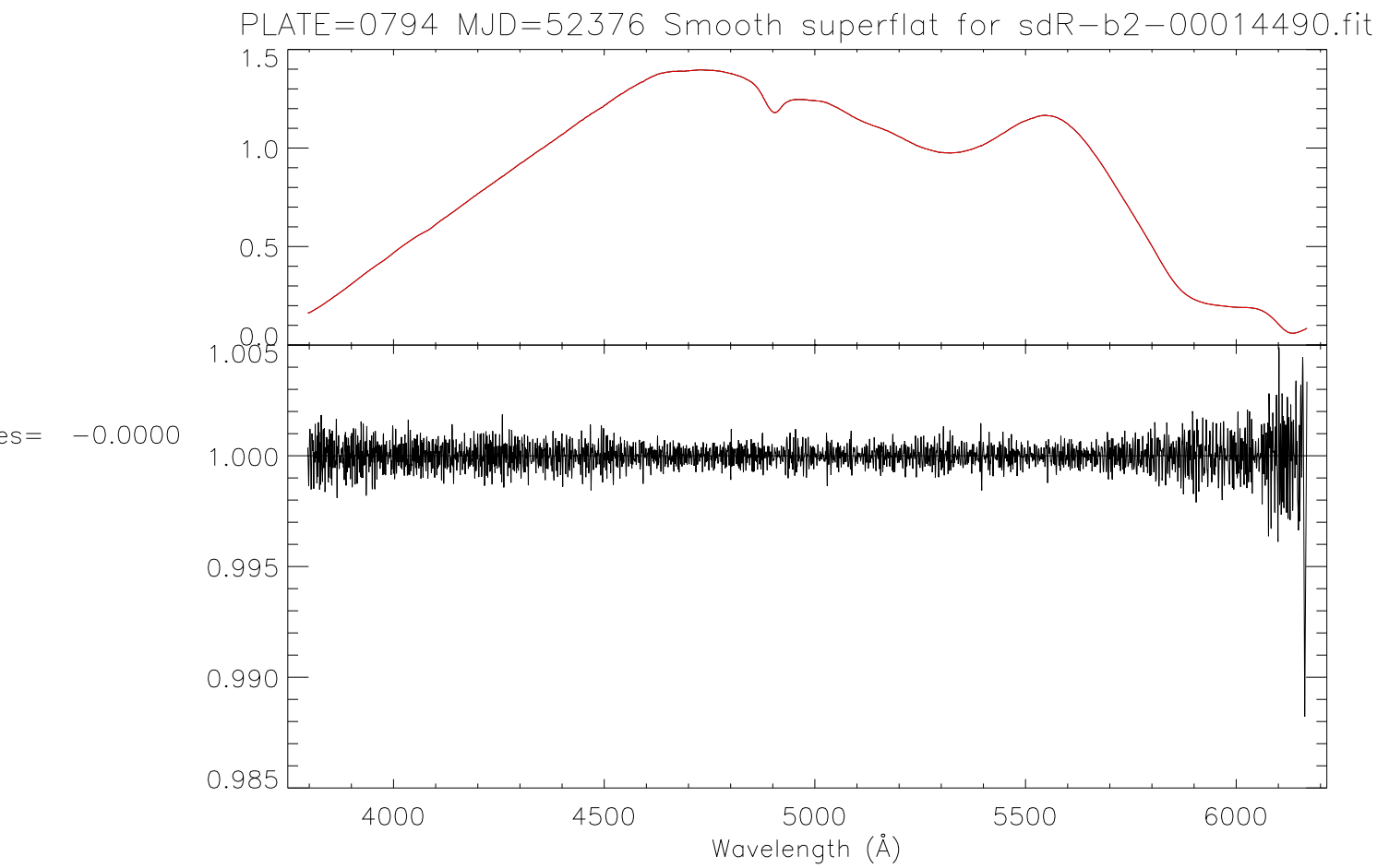

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

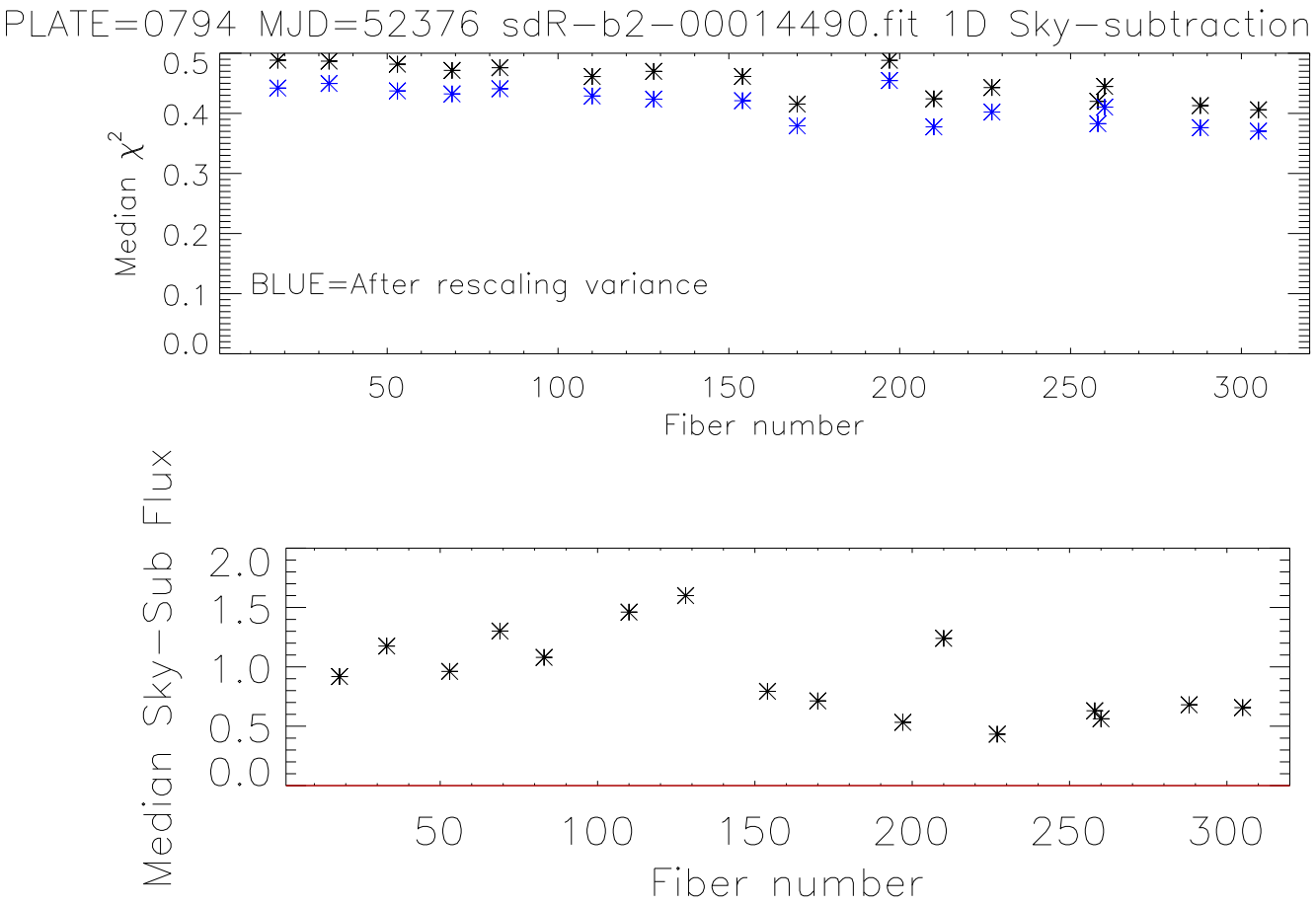

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

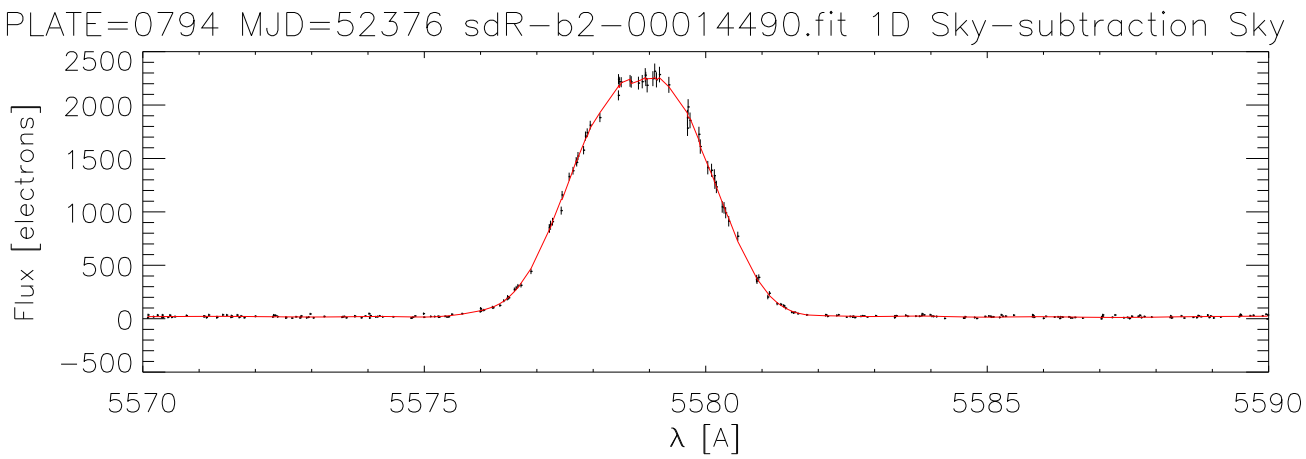

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

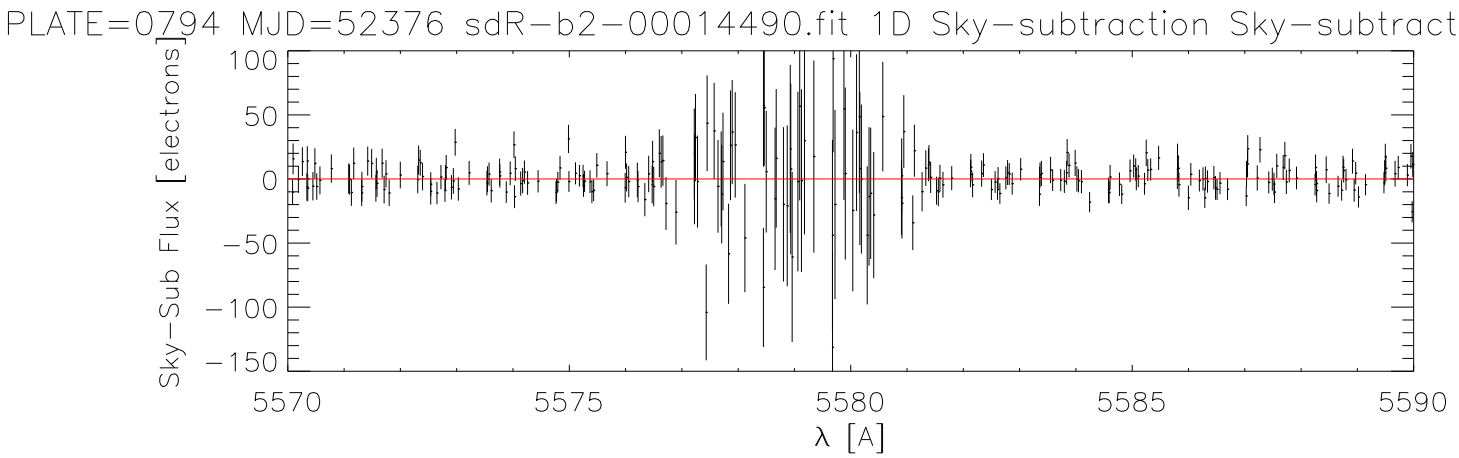

4046.5600
nfib1 16
nfib2 12
stdev 0.369
extra −0.45
4358.3300
nfib1 16
nfib2 16
stdev 0.145
extra −0.57
5460.9400
nfib1 16
nfib2 16
stdev 0.116
extra −0.43
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.34
5889.9500
nfib1 16
nfib2 16
stdev 0.055
extra −0.26
5895.9240
nfib1 16
nfib2 16
stdev 0.054
extra −0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

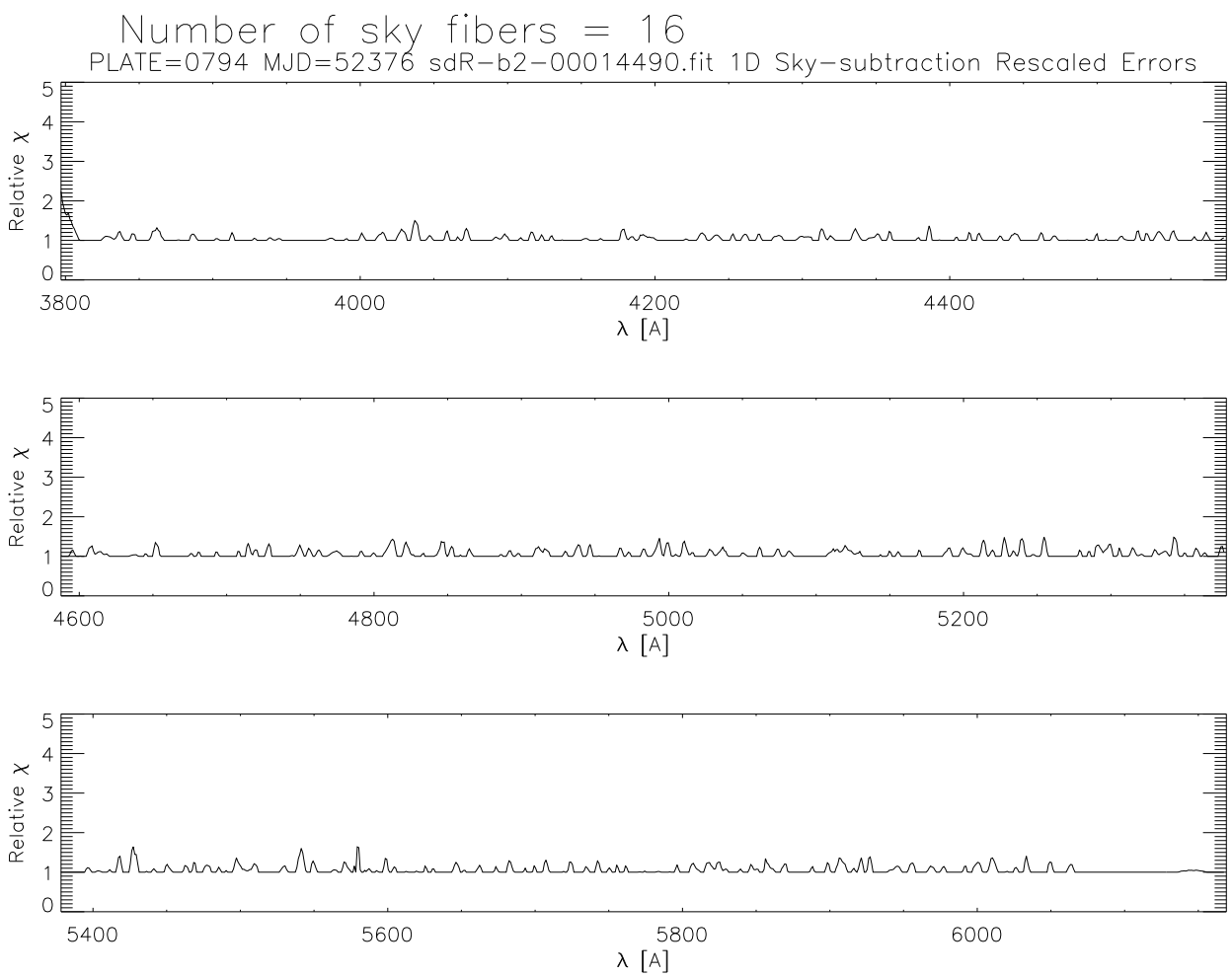

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500

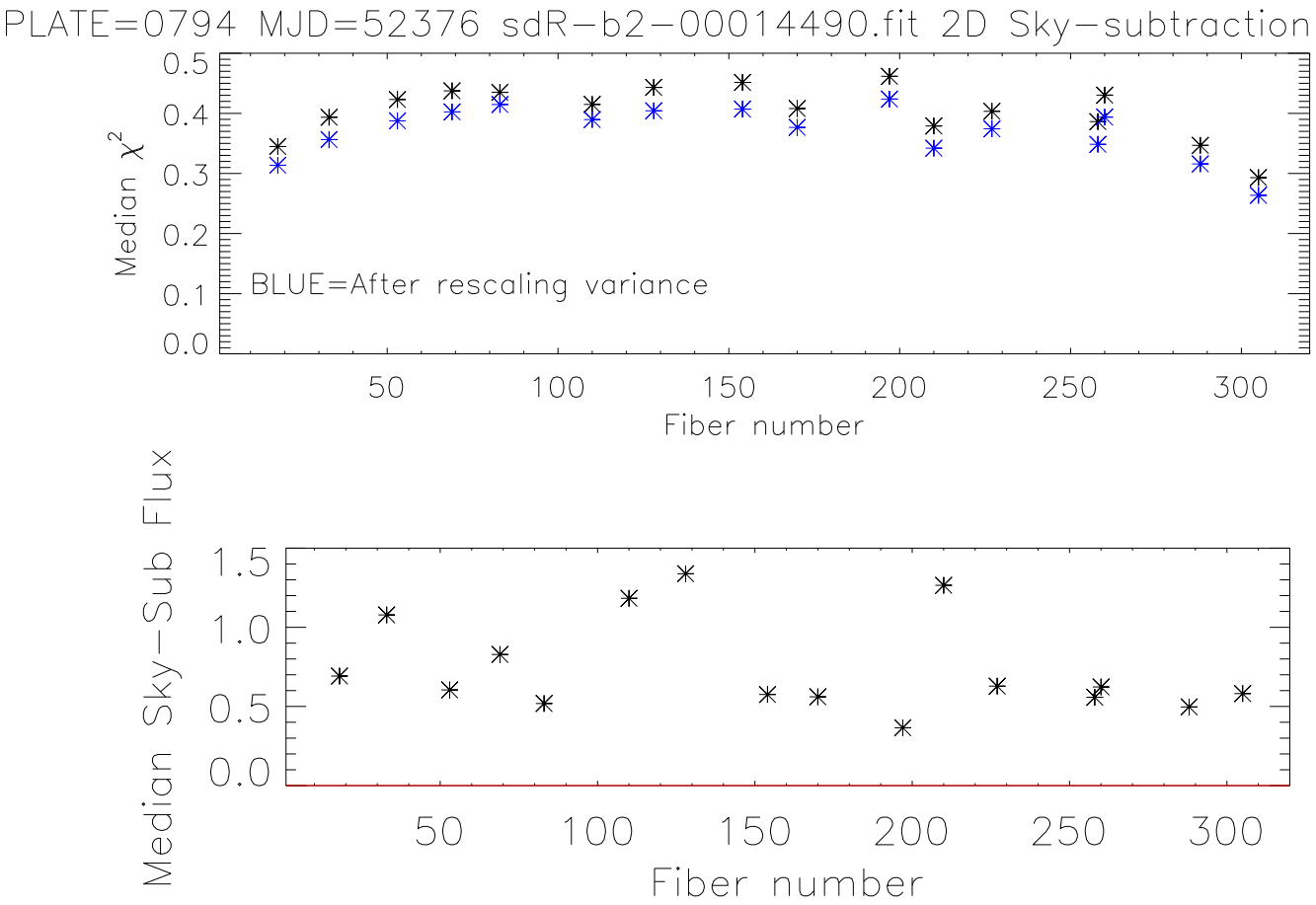

PLATE=0794 MJD=52376 Smooth superflat for sdR-b2-00014490.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
0.985
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

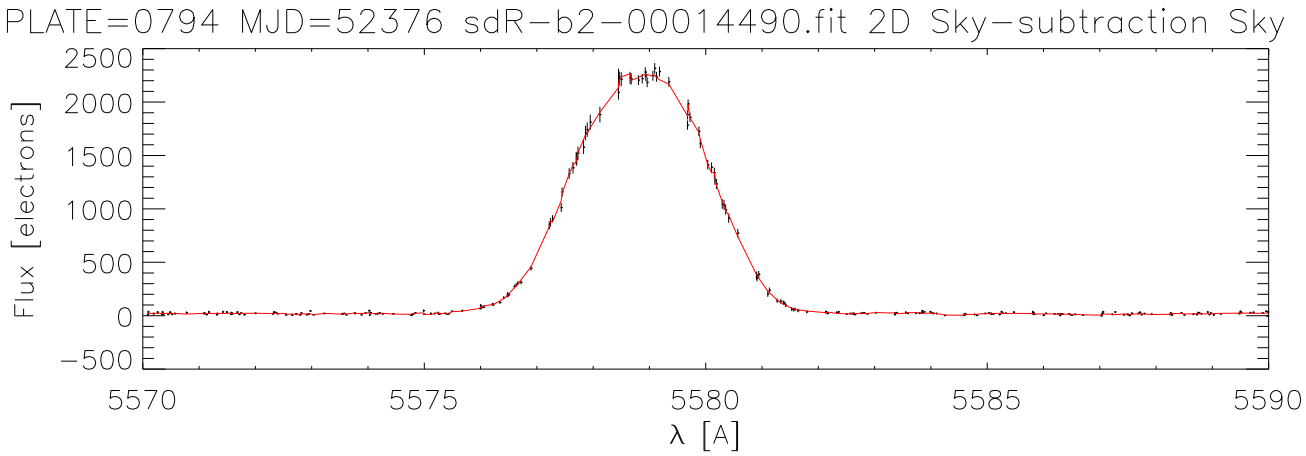

PLATE=0794 MJD=52376 sdR-b2-00014490.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0.0
0.5
1.0
1.5
2.0
50
100
150
200
250
300
Fiber number

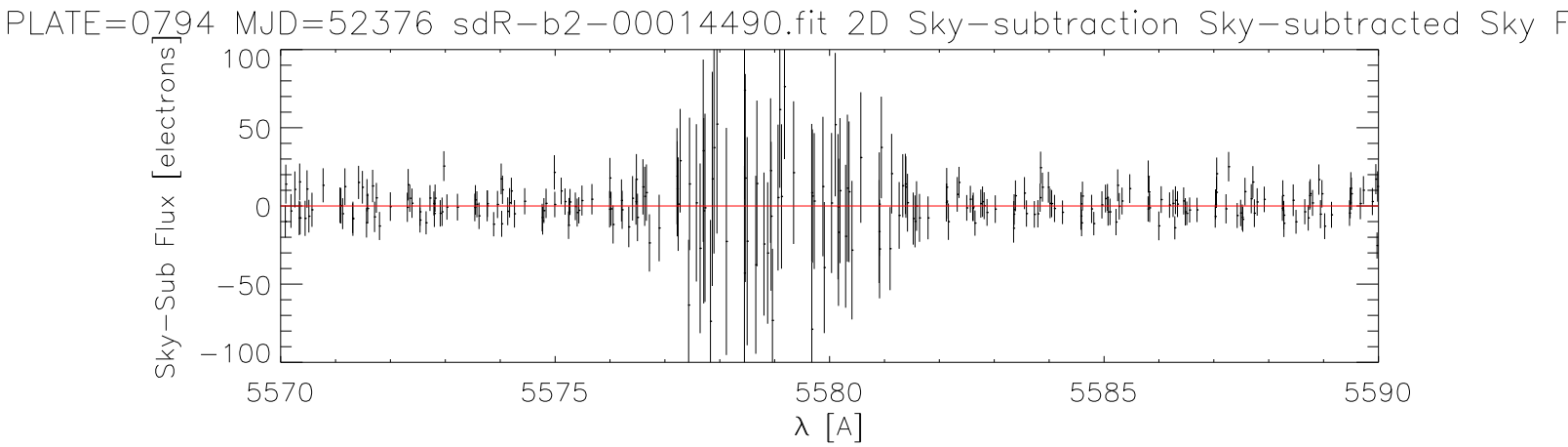

PLATE=0794 MJD=52376 sdR-b2-00014490.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

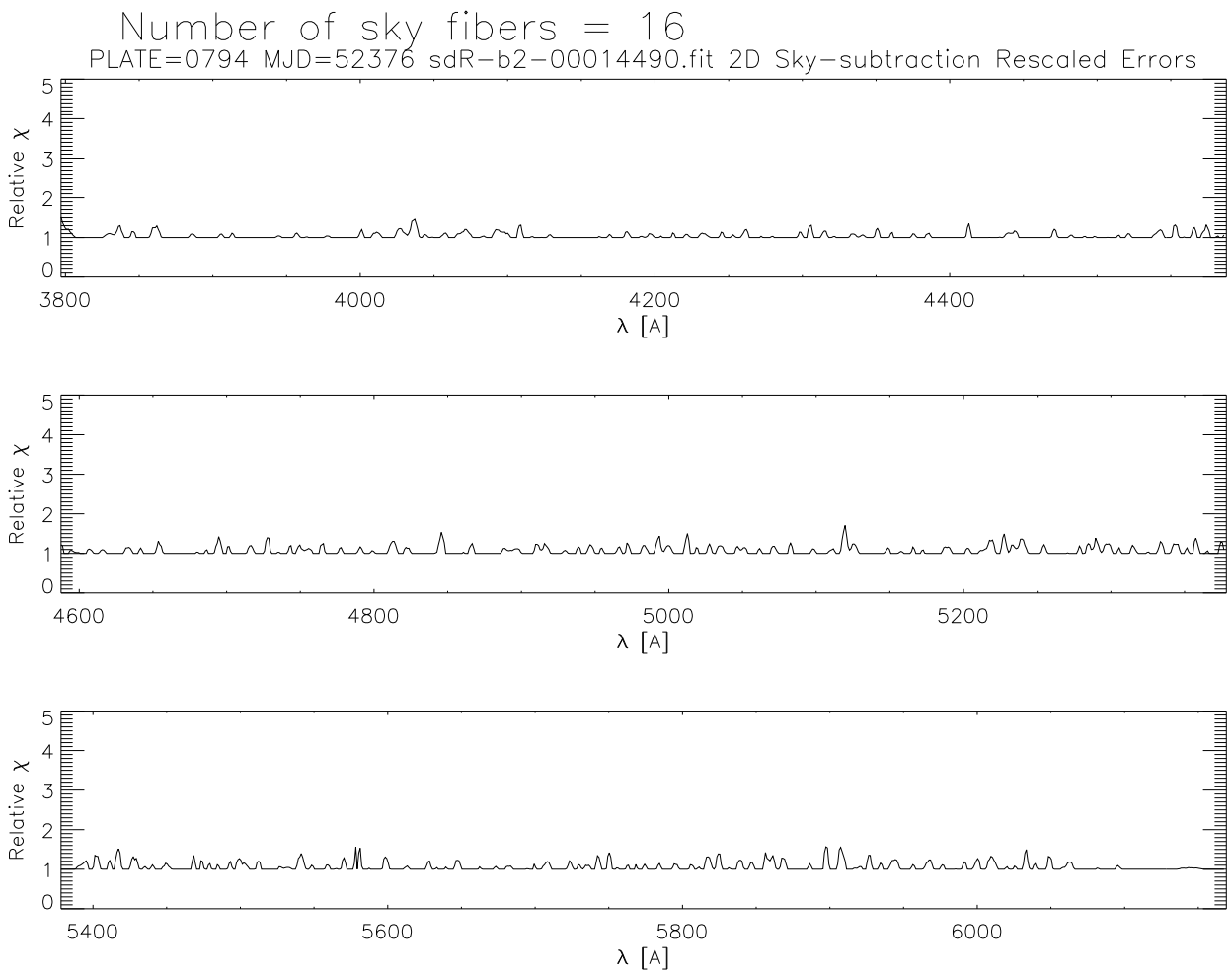

PLATE=0794 MJD=52376 sdR-b2-00014490.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

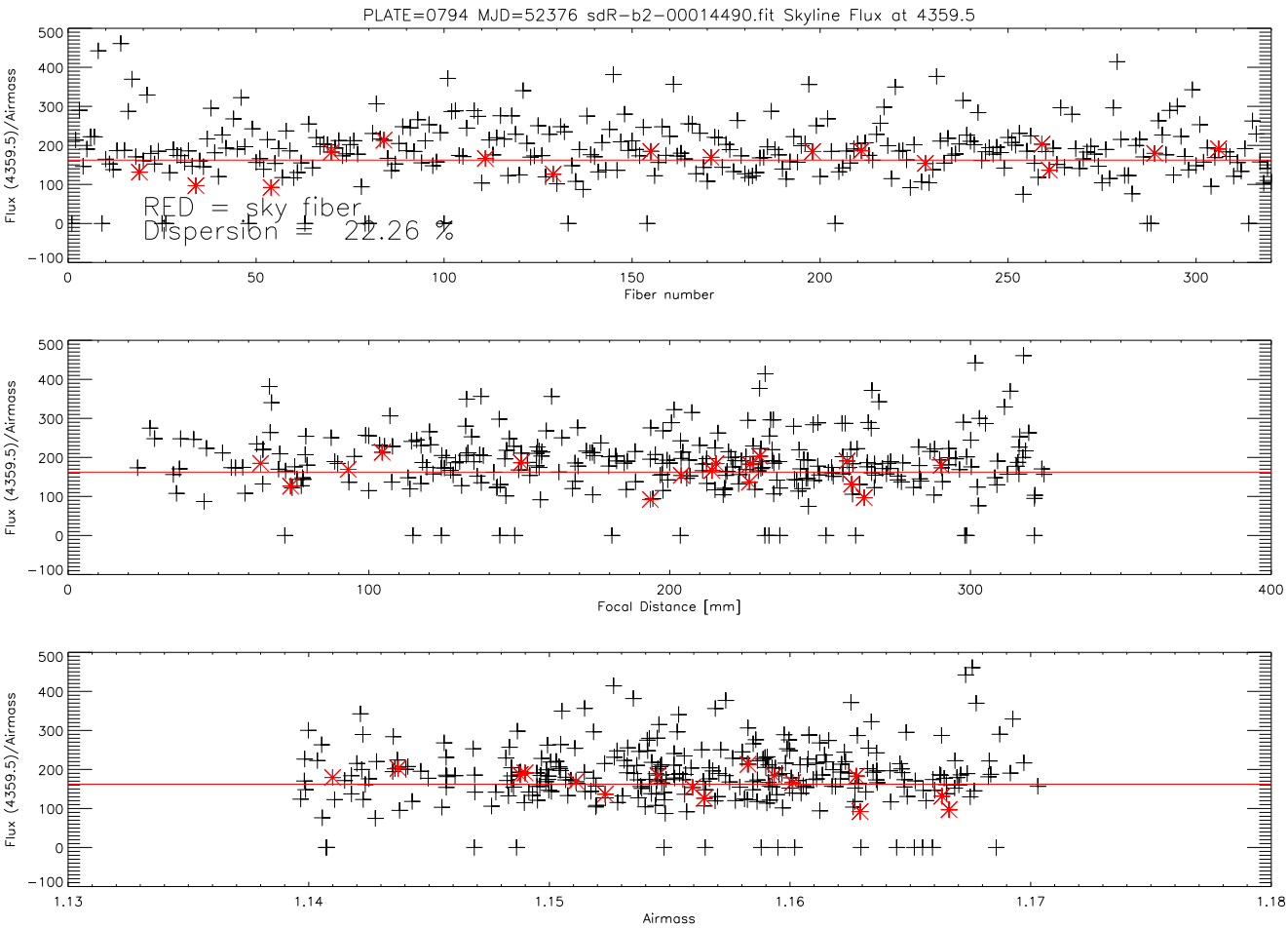

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b2-00014490.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

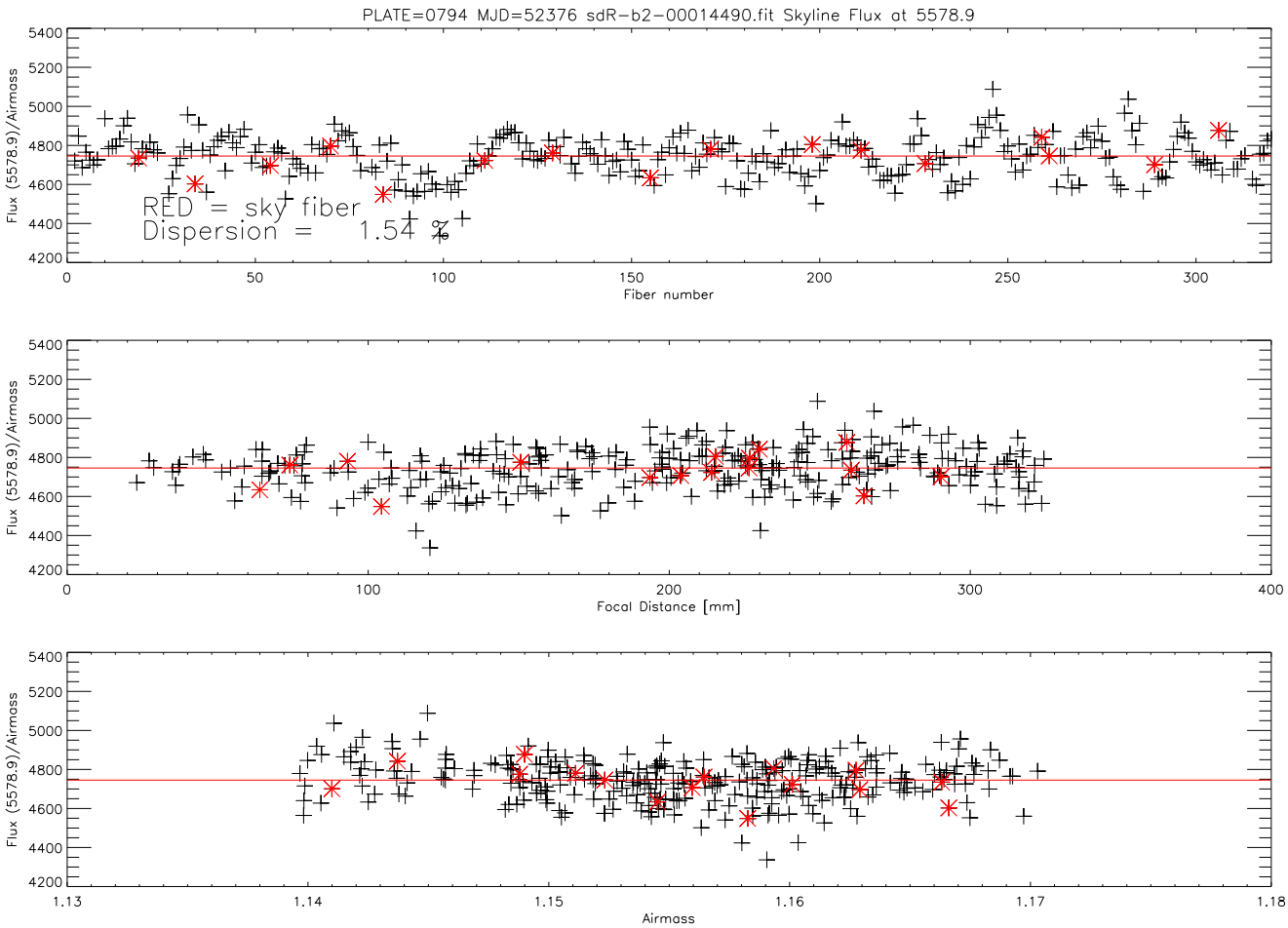

PLATE=0794 MJD=52376 sdR-b2-00014490.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

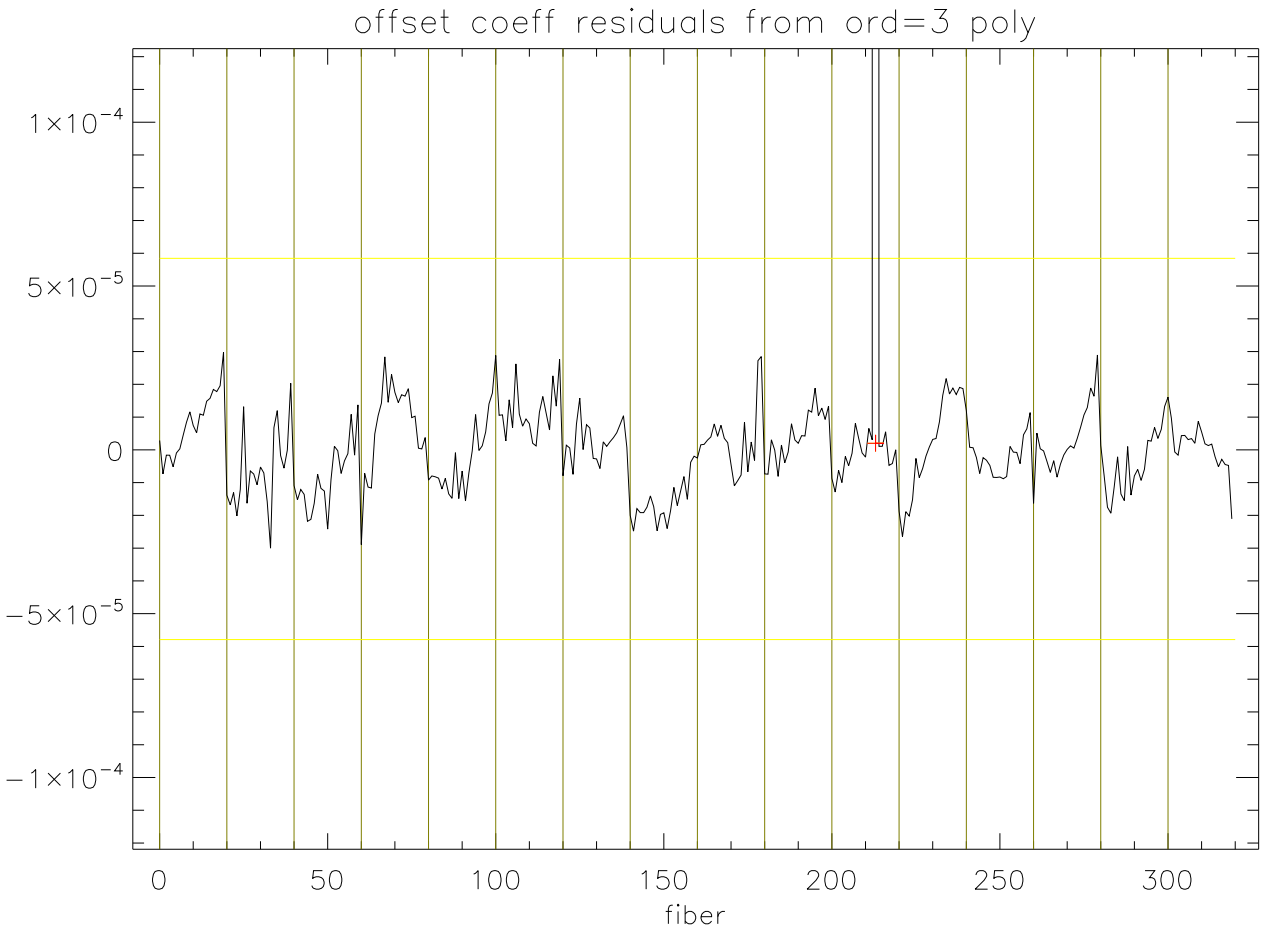

PLATE=0794 MJD=52376 sdR-b2-00014490.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

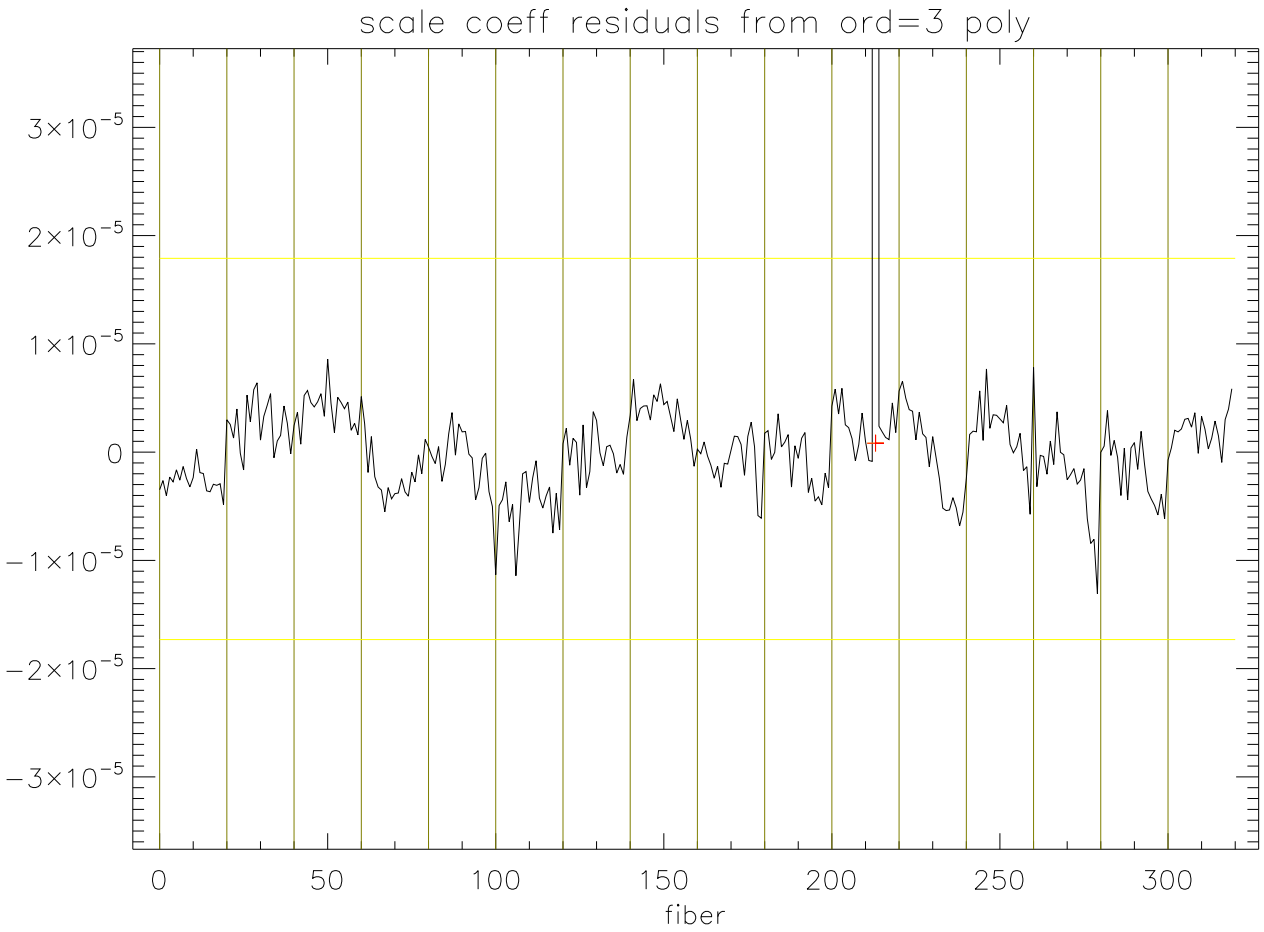

PLATE=0794 MJD=52376 sdR-b2-00014490.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

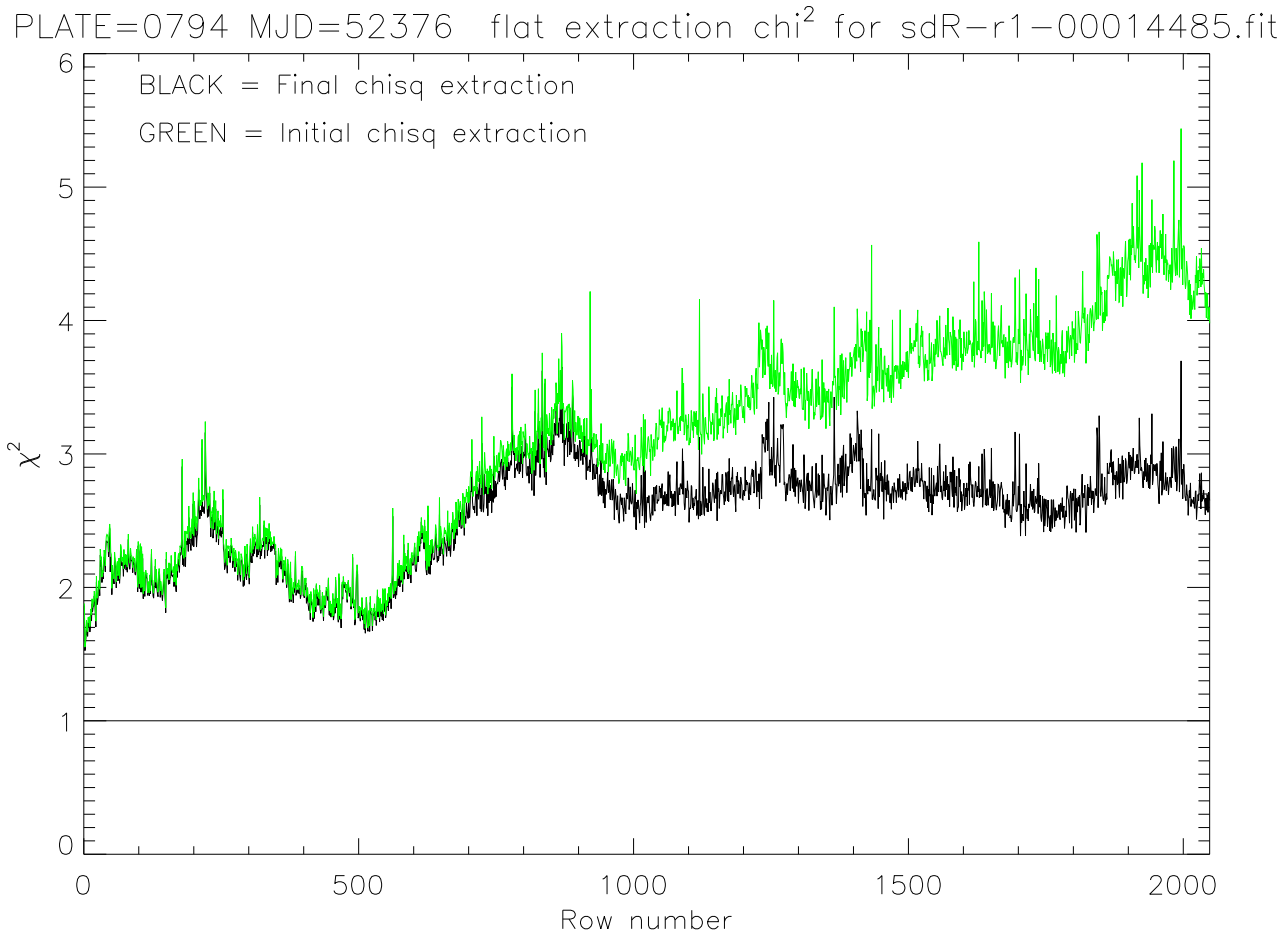

Number of sky fibers = 16
PLATE=0794 MJD=52376 sdR-b2-00014490.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

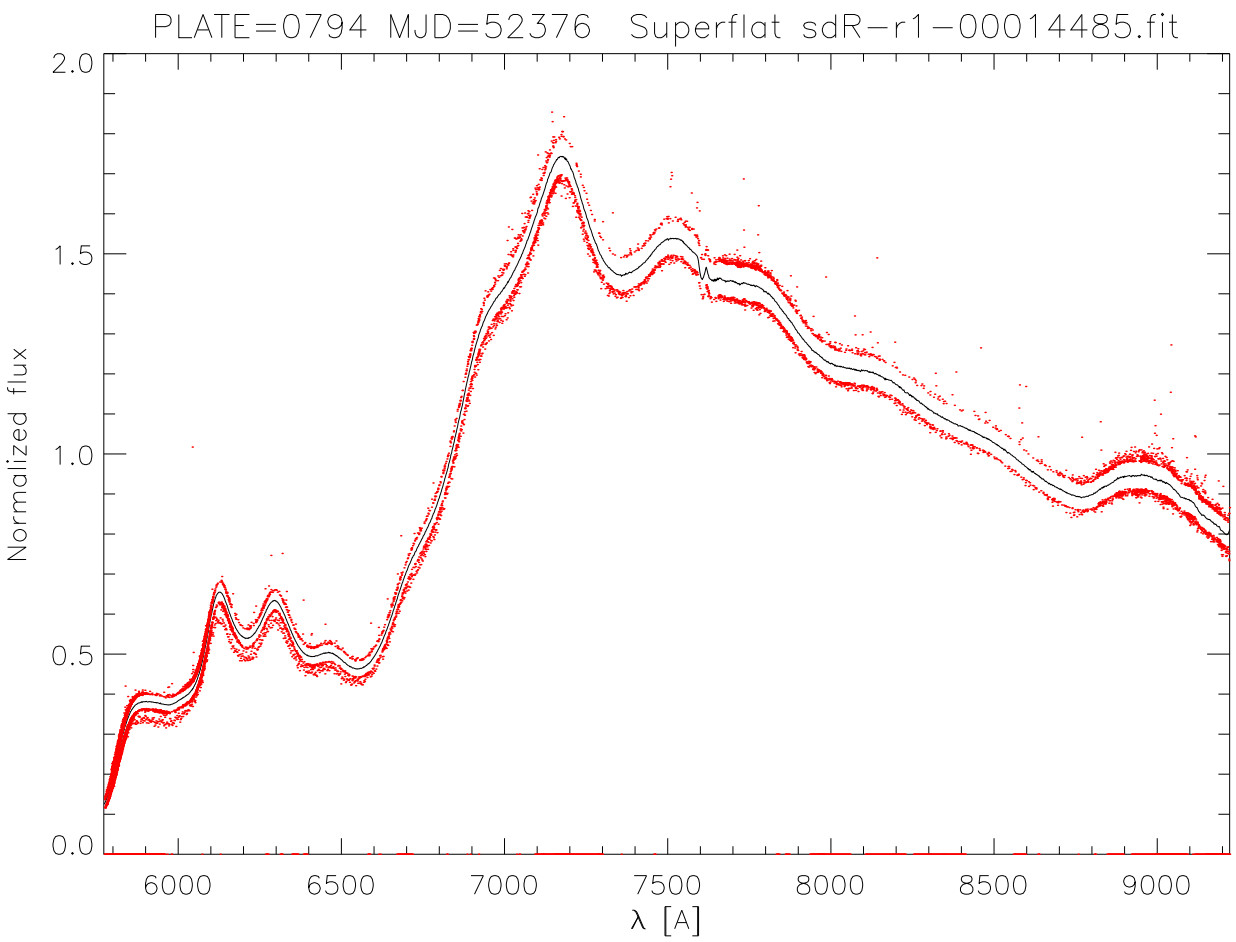

PLATE=0794 MJD=52376 sdR-b2-00014490.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 22.26 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

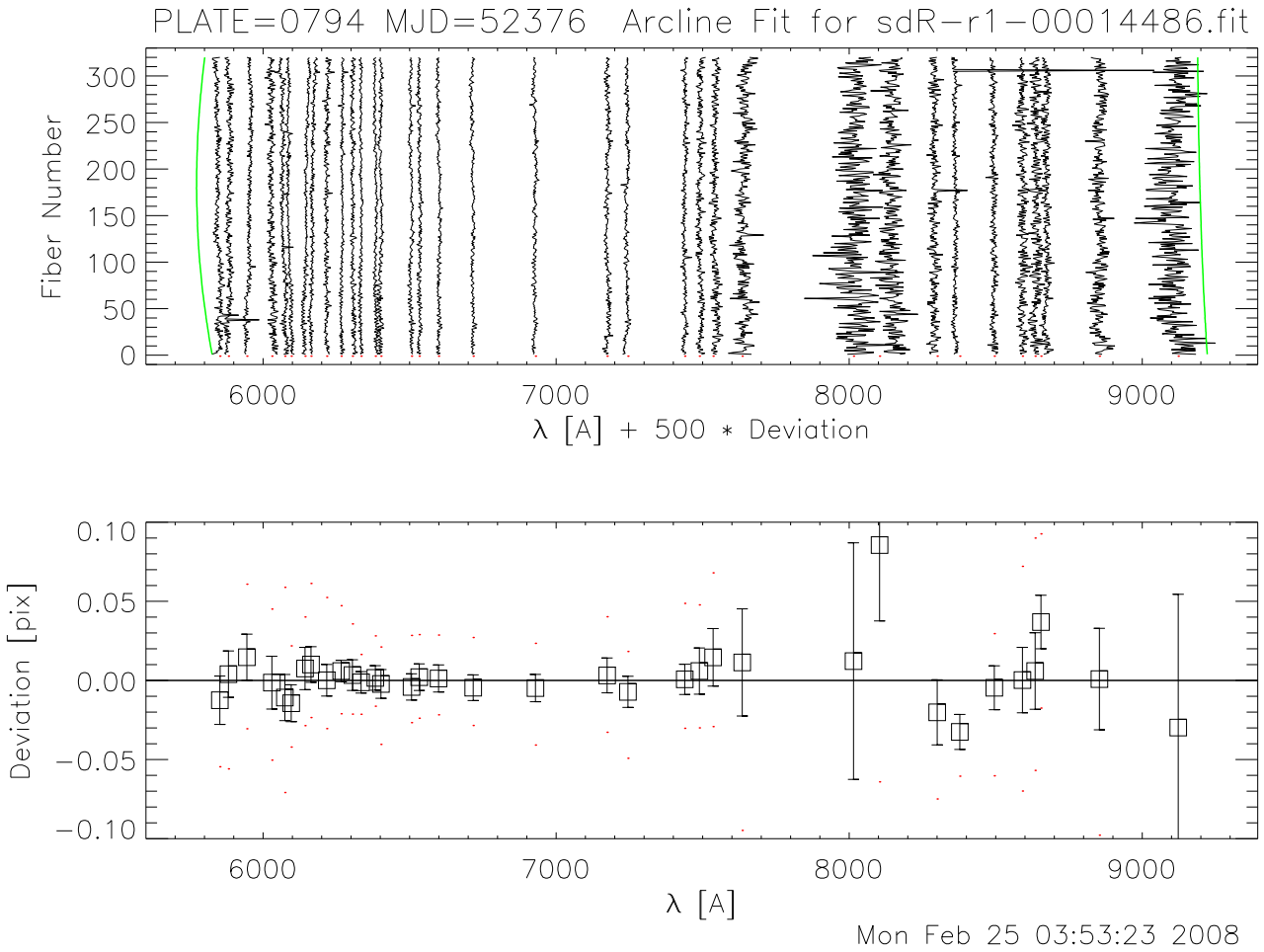

PLATE=0794 MJD=52376 sdR-b2-00014490.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.54 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

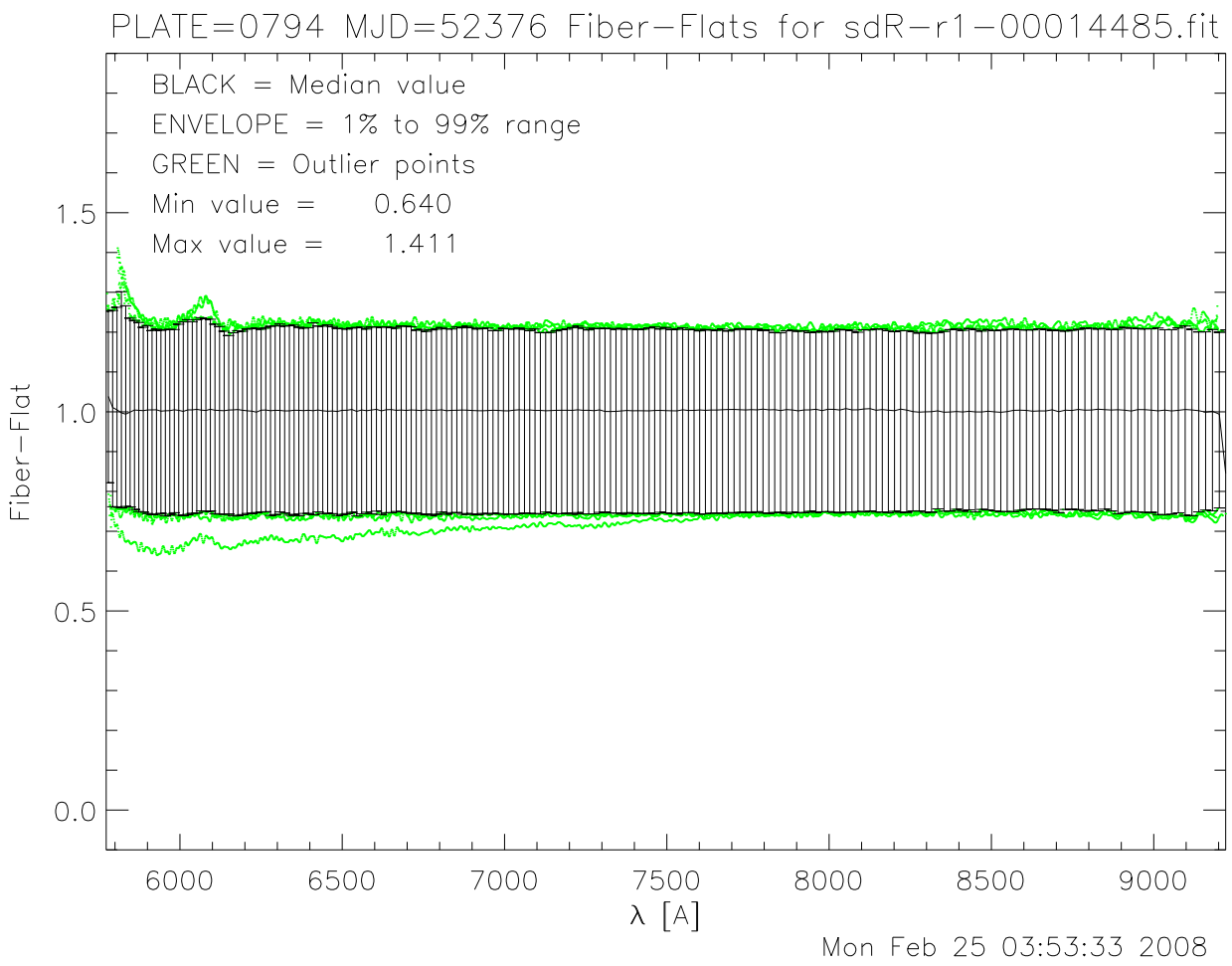

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

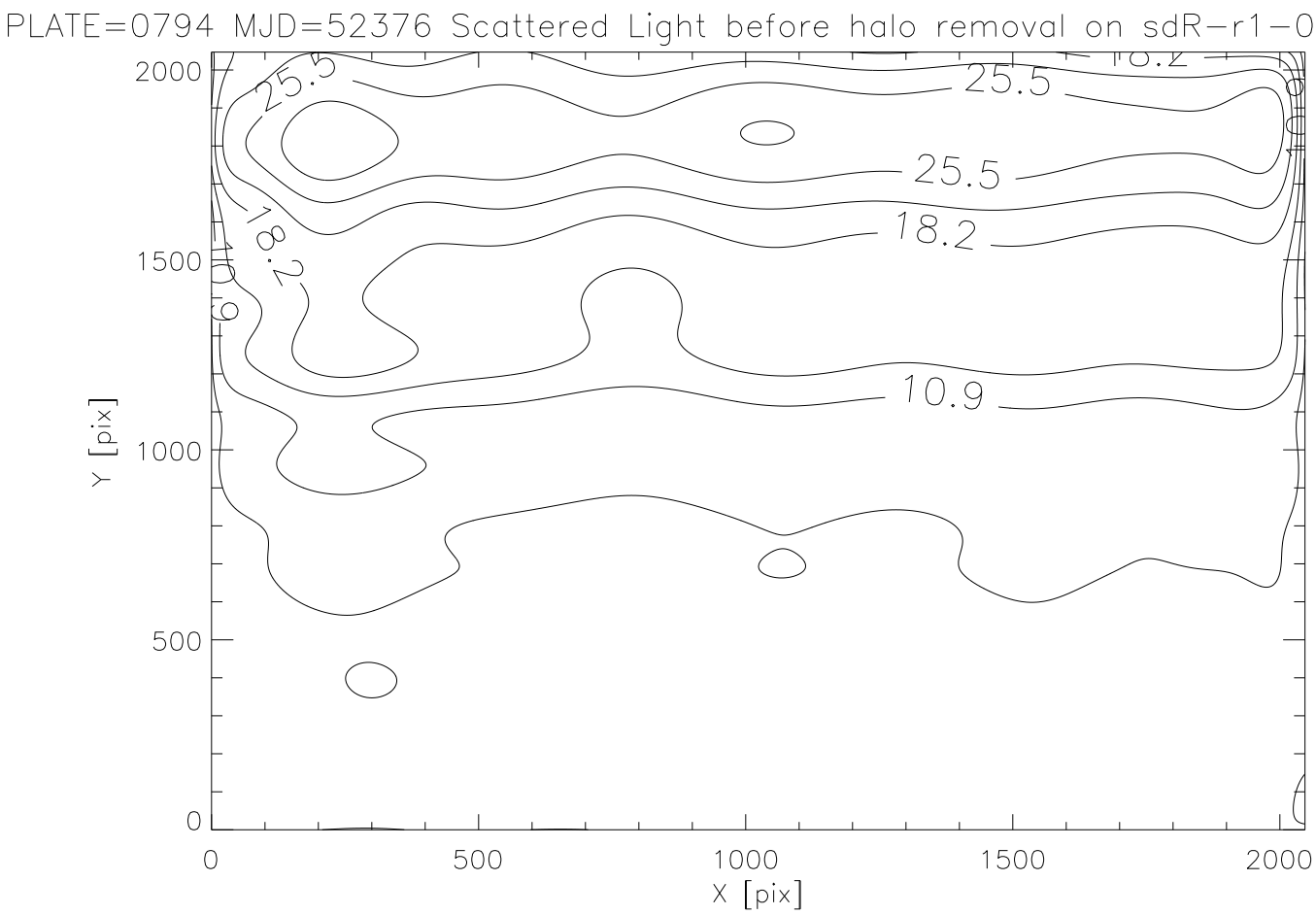

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

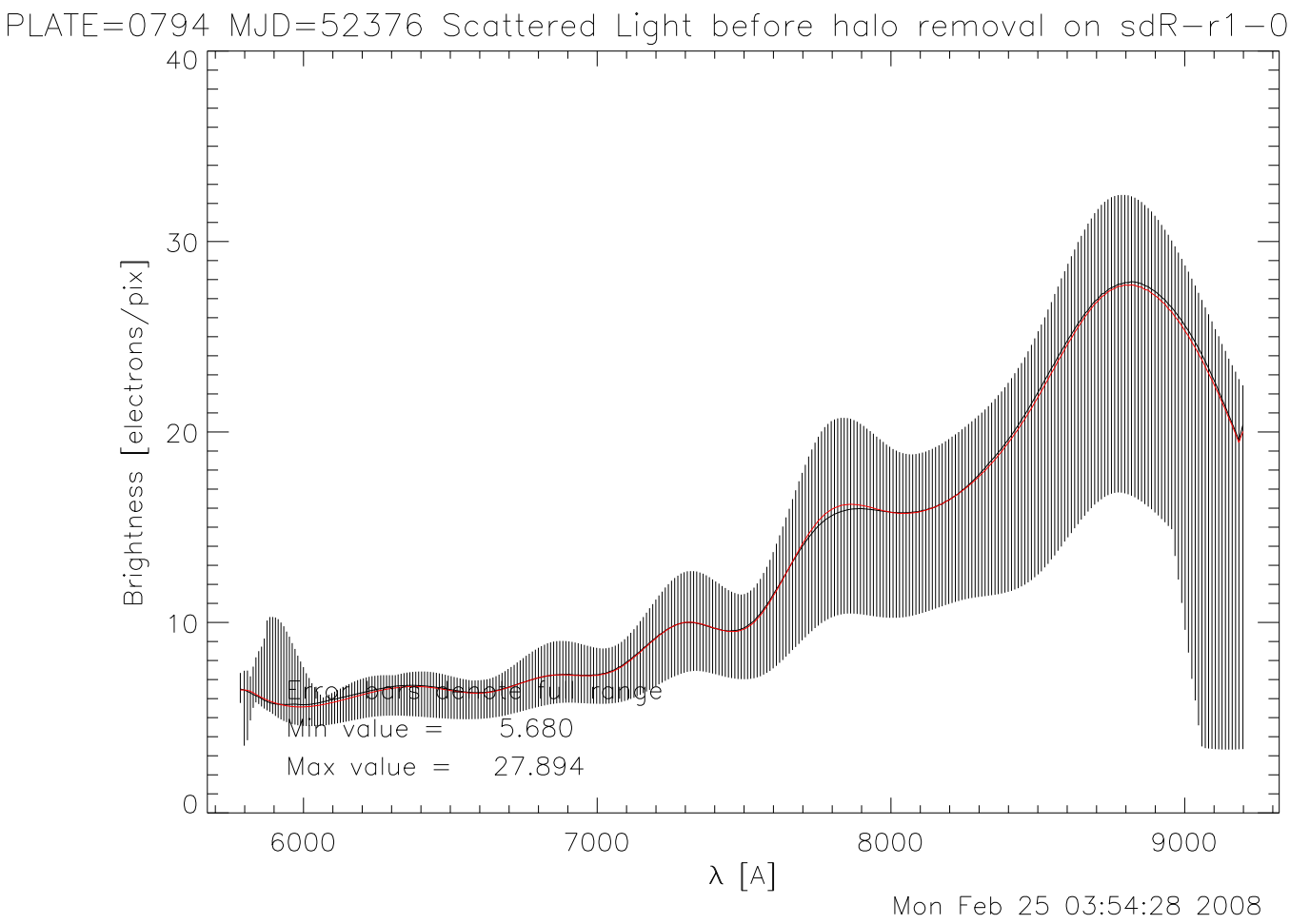

PLATE=0794 MJD=52376 flat extraction chi^2 for sdR−r1−00014485.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

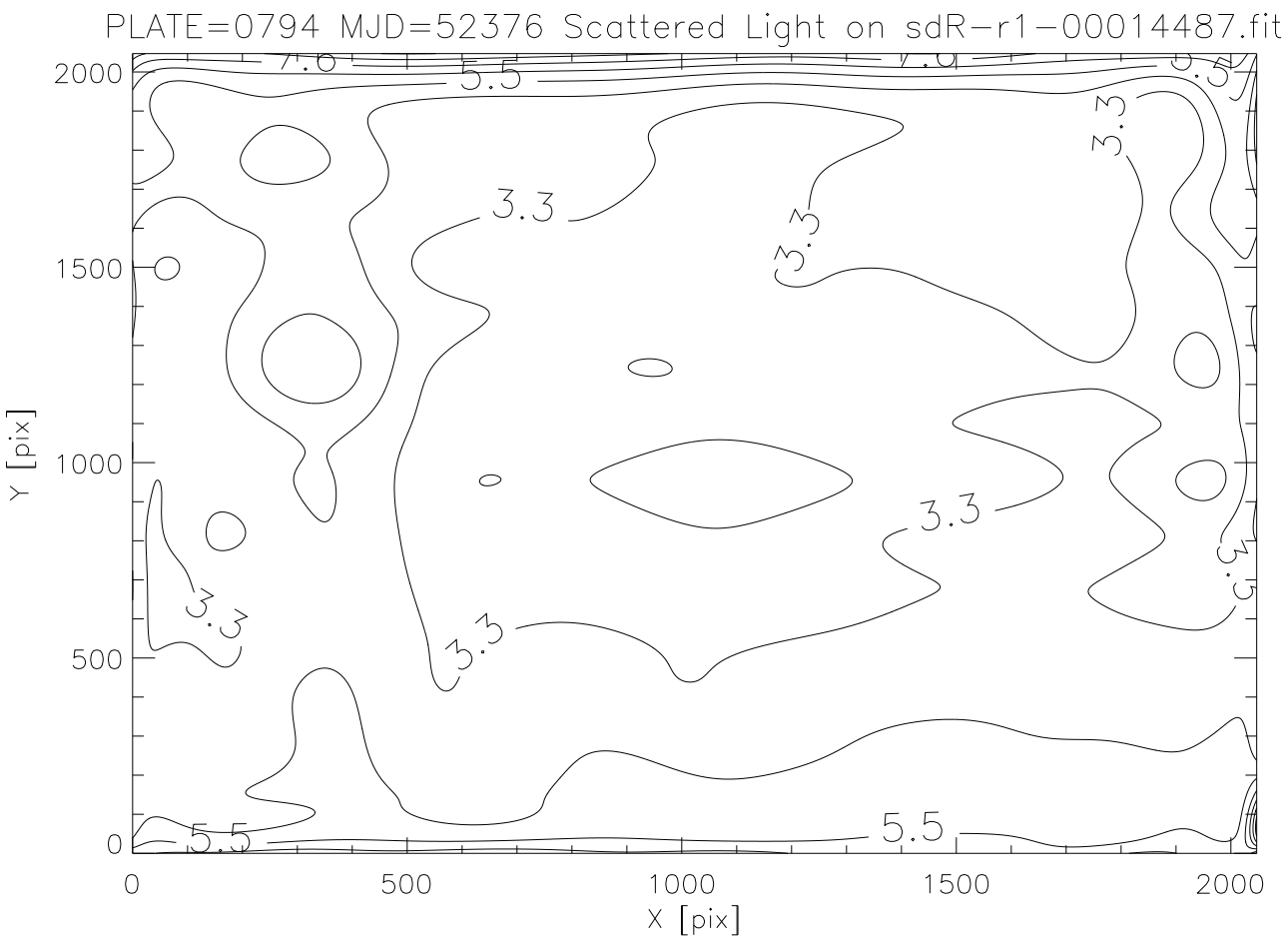

PLATE=0794 MJD=52376 Superflat sdR-r1-00014485.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

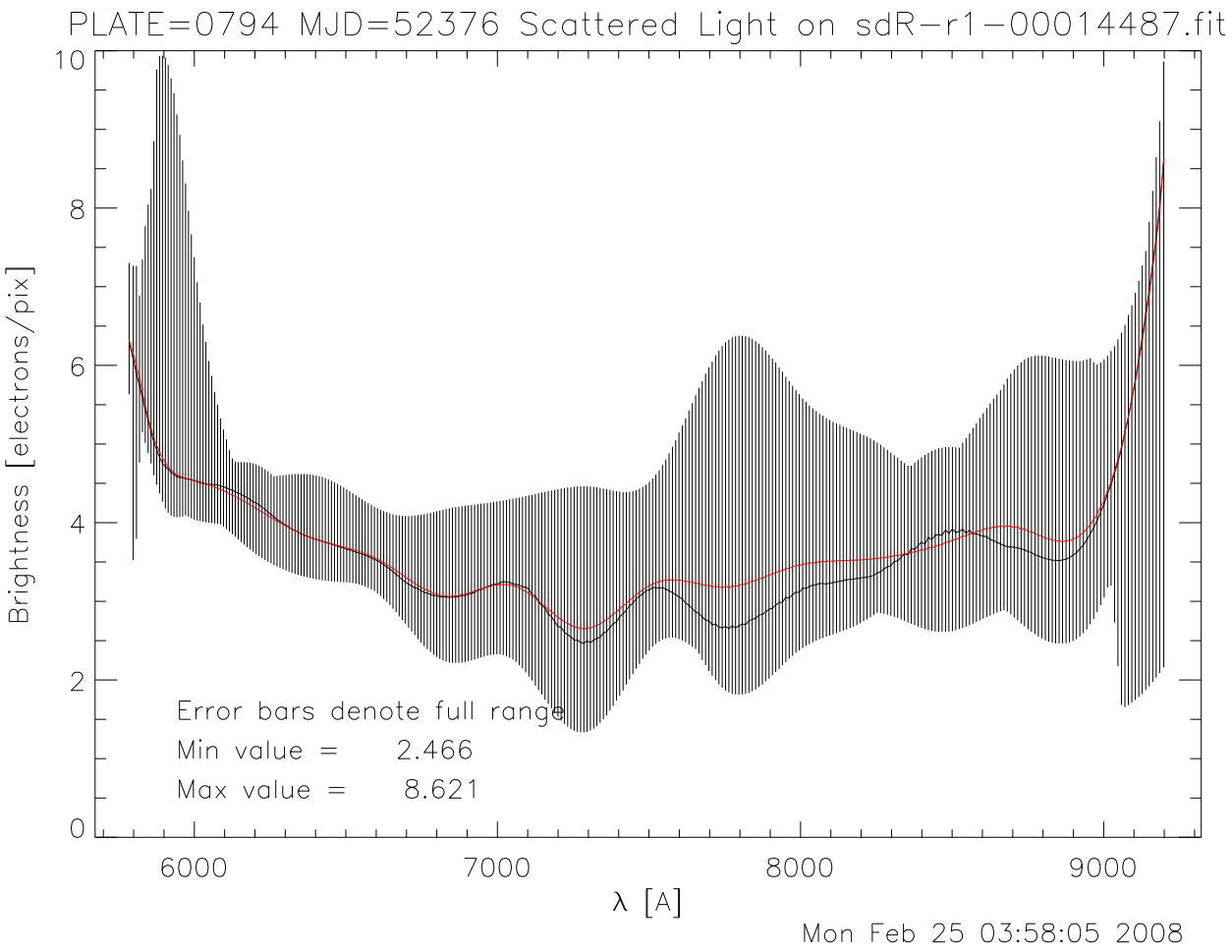

PLATE=0794 MJD=52376 Arcline Fit for sdR-r1-00014486.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 25 03:53:23 2008

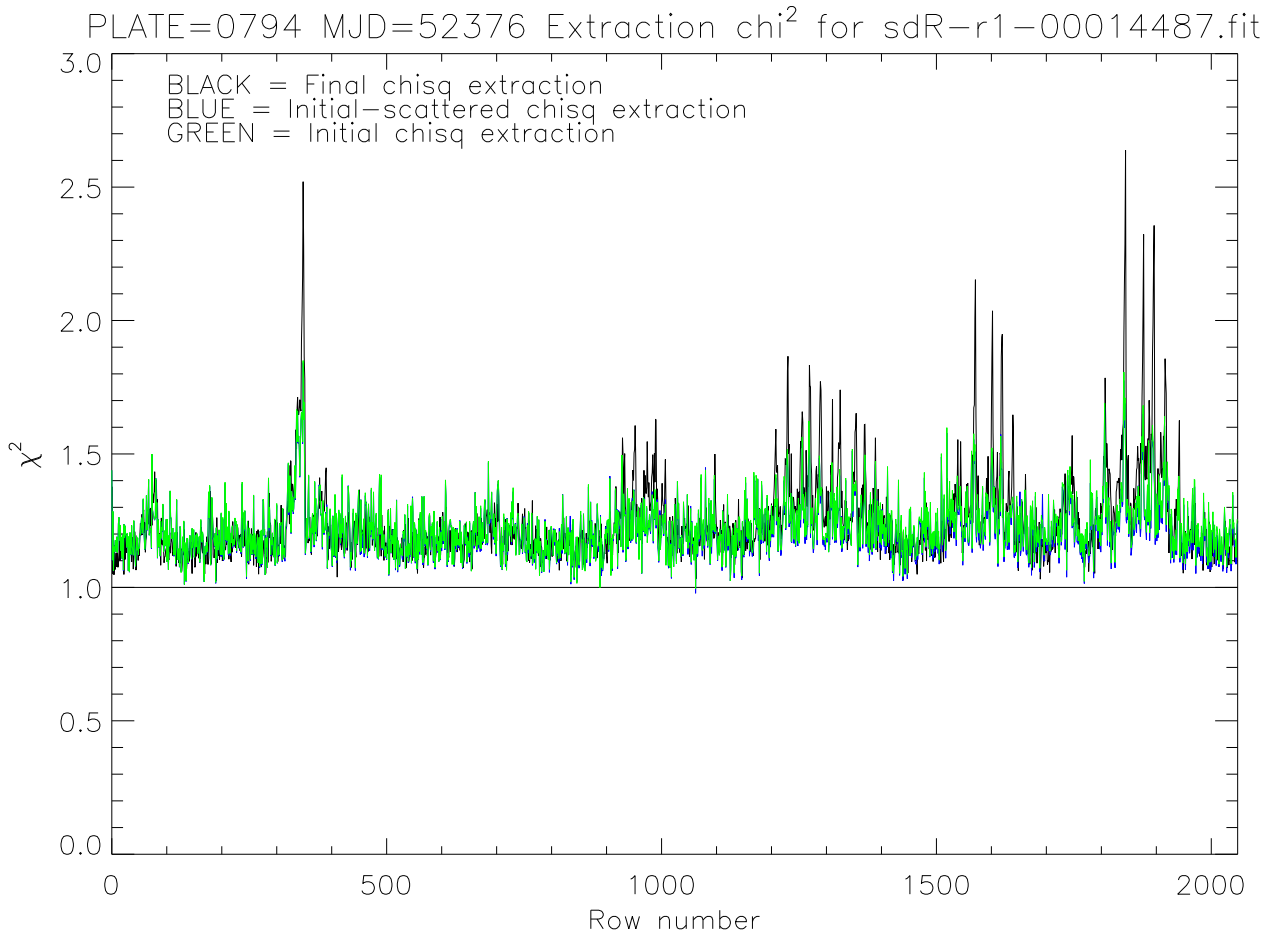

PLATE=0794 MJD=52376 Fiber−Flats for sdR−r1−00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.640
Max value = 1.411
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 03:53:33 2008

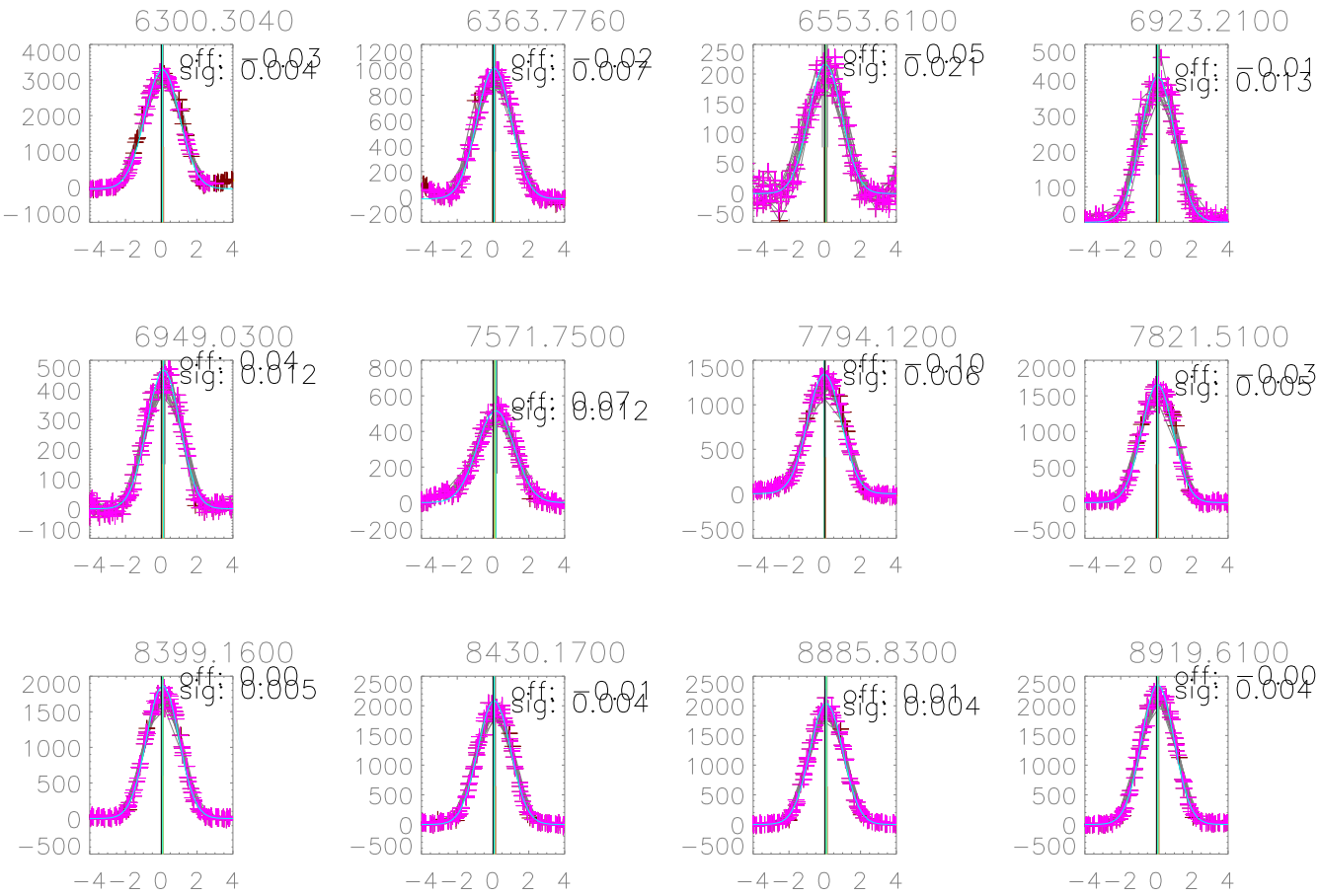

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r1-00014487.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

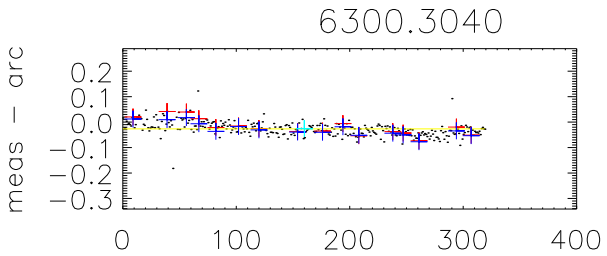

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r1-00014487.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.680
Max value = 27.894
Mon Feb 25 03:54:28 2008

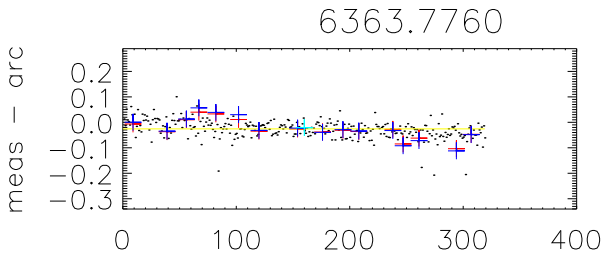

PLATE=0794 MJD=52376 Scattered Light on sdR-r1-00014487.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3

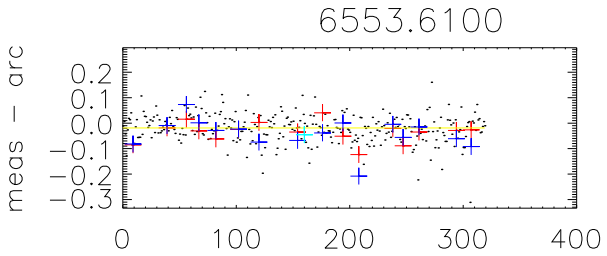

PLATE=0794 MJD=52376 Scattered Light on sdR-r1-00014487.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.466
Max value = 8.621
Mon Feb 25 03:58:05 2008

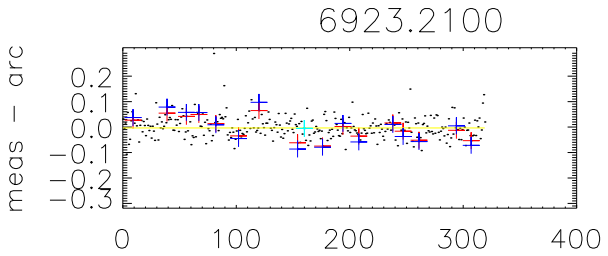

PLATE=0794 MJD=52376 Extraction chi^2 for sdR−r1−00014487.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

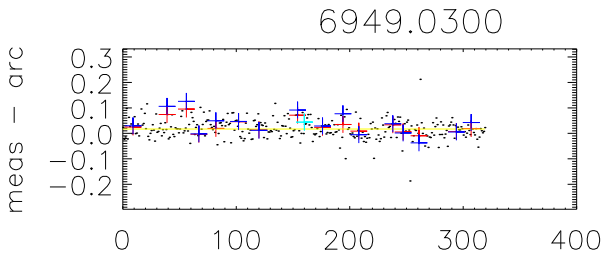

6300.3040
off: −0.03
sig: 0.004
6363.7760
off: −0.02
sig: 0.007
6553.6100
off: −0.05
sig: 0.021
6923.2100
off: −0.01
sig: 0.013
6949.0300
off: 0.04
sig: 0.012
7571.7500
off: 0.07
sig: 0.012
7794.1200
off: −0.10
sig: 0.008
7821.5100
off: −0.03
sig: 0.005
8399.1600
off: 0.00
sig: 0.005
8430.1700
off: −0.01
sig: 0.004
8885.8300
off: 0.01
sig: 0.004
8919.6100
off: −0.00
sig: 0.004

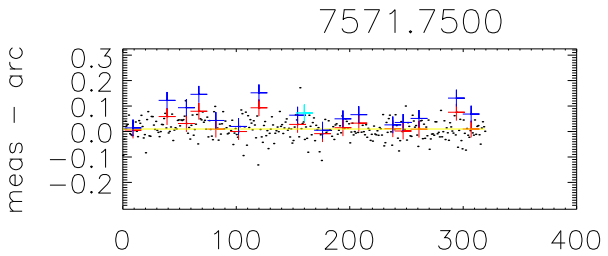

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

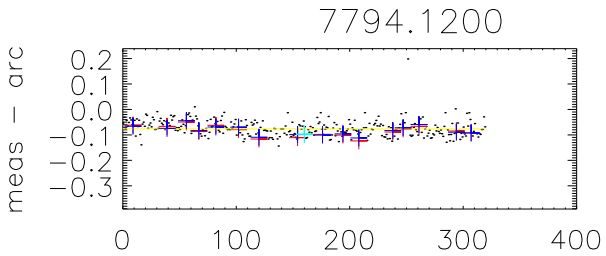

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

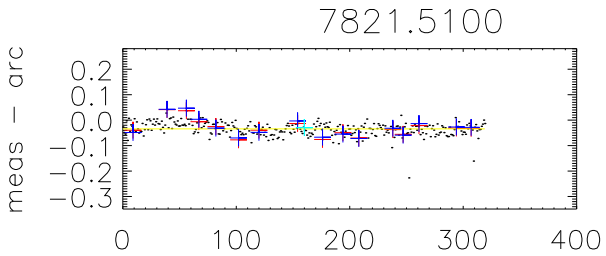

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

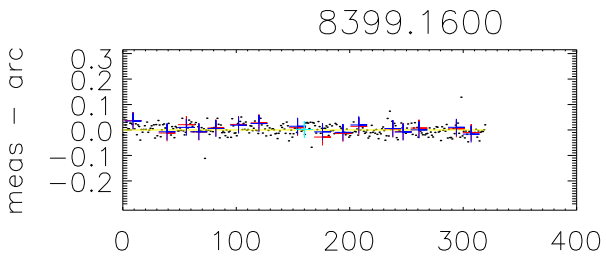

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

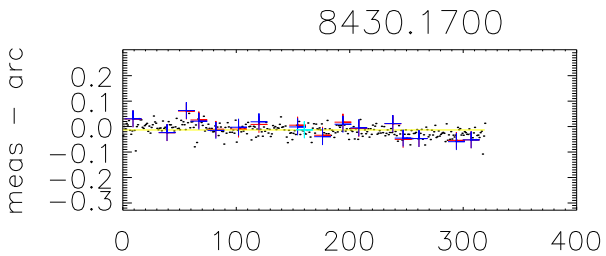

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

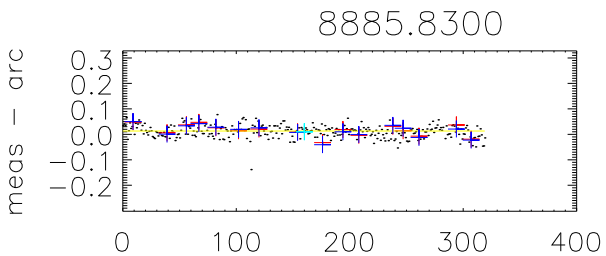

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

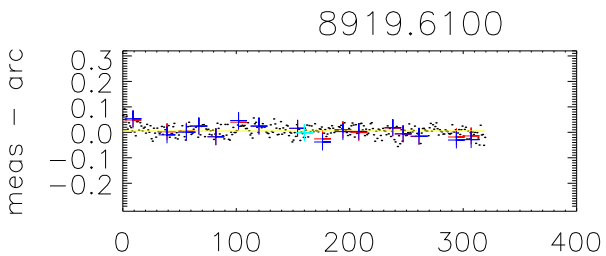

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

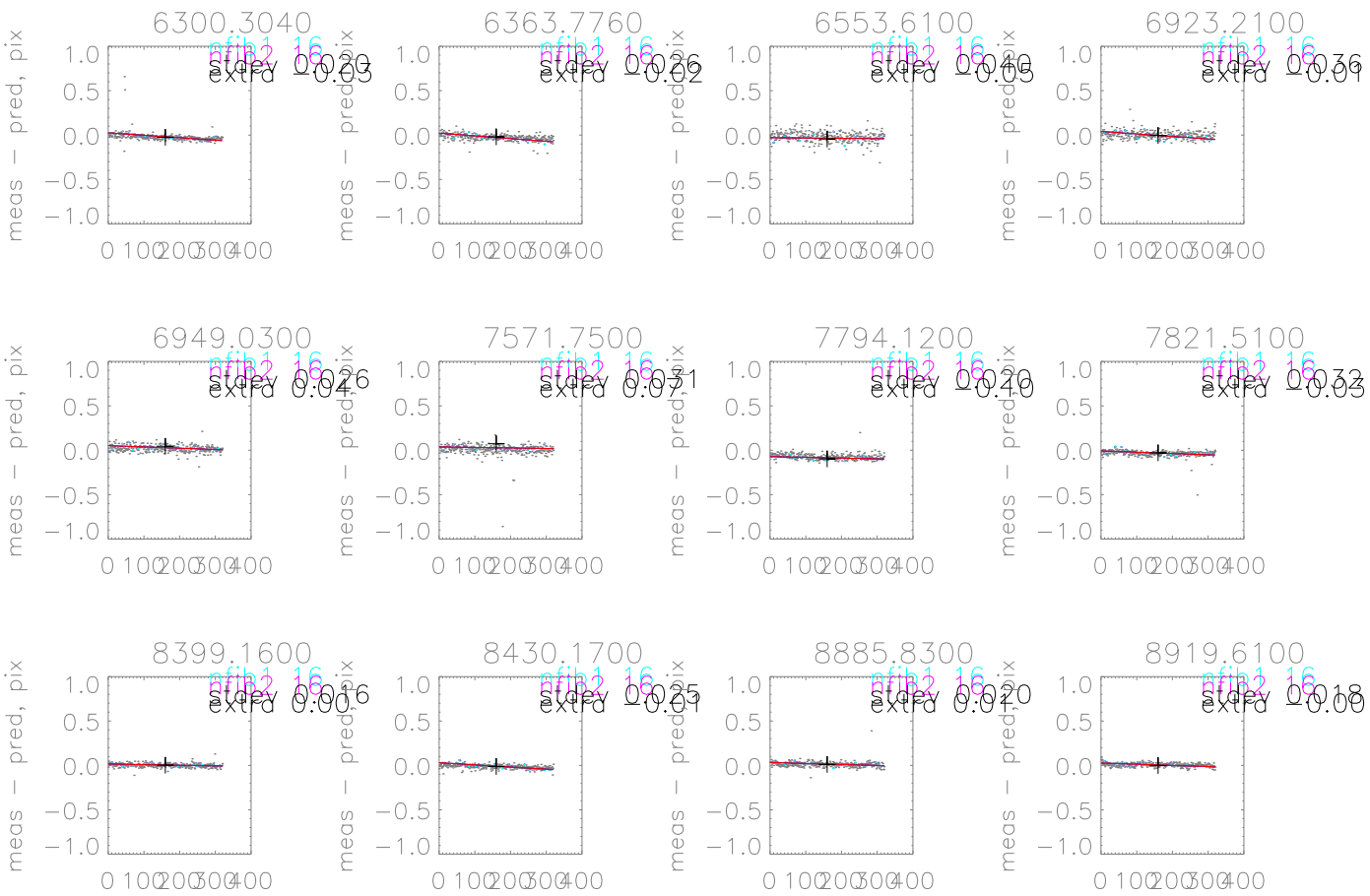

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

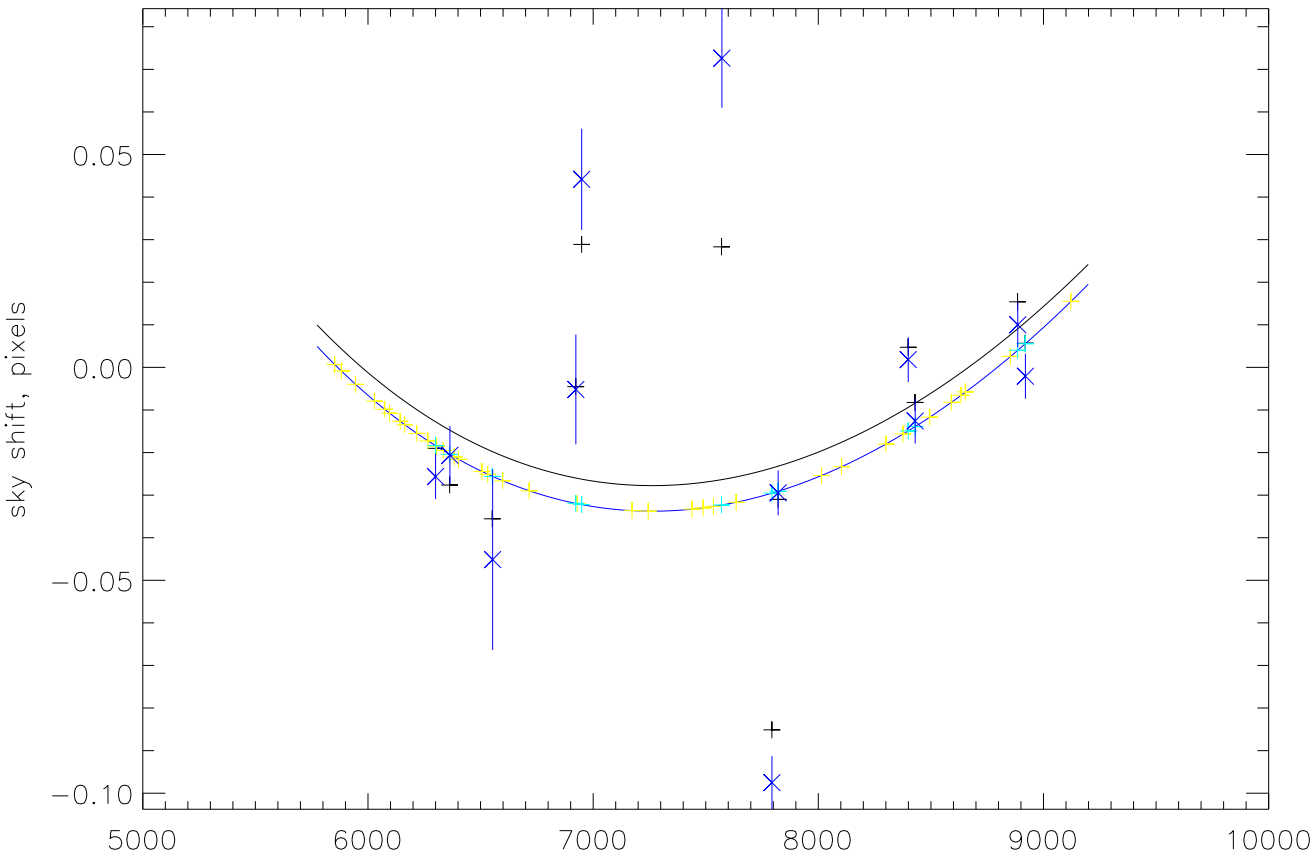

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

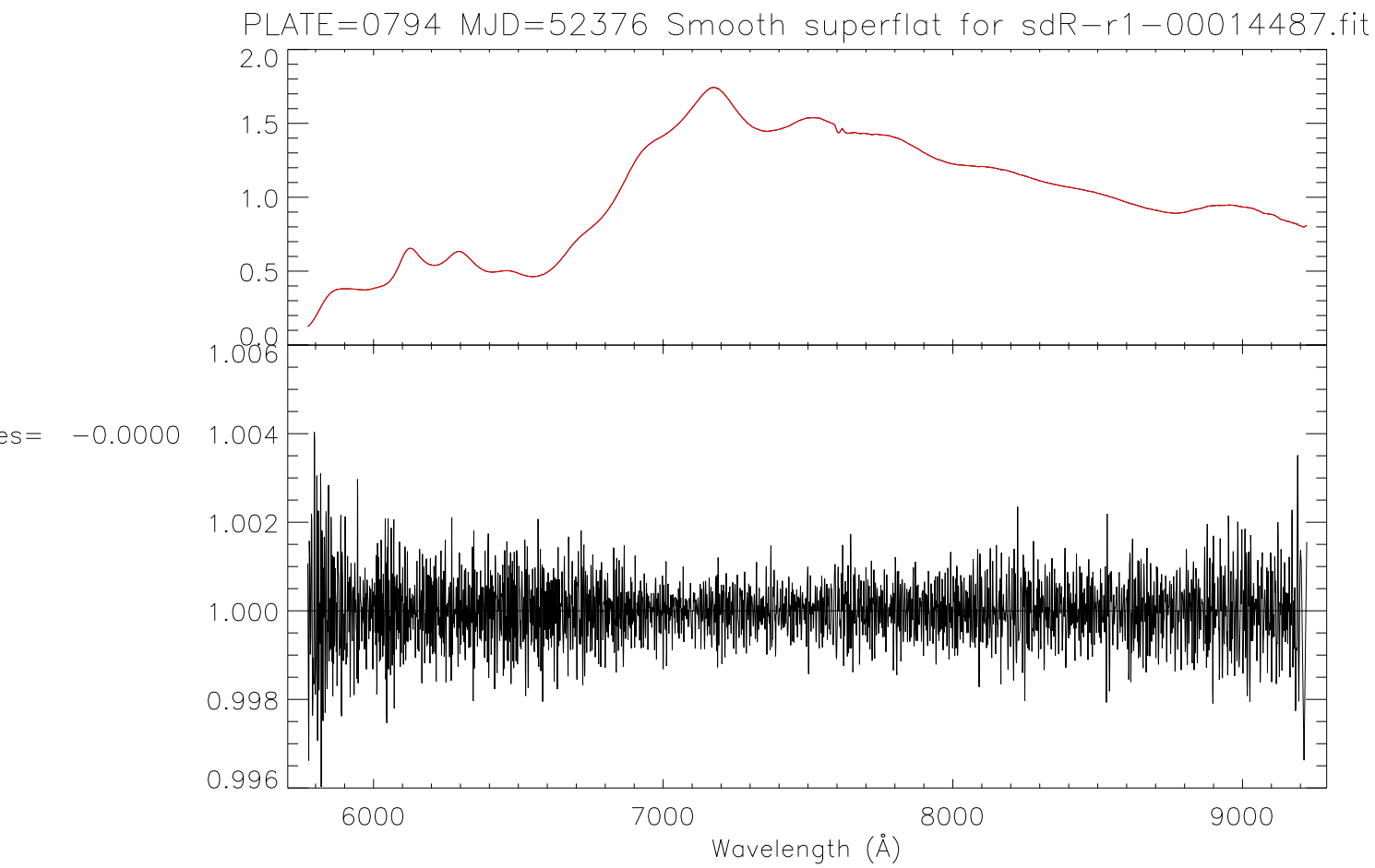

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

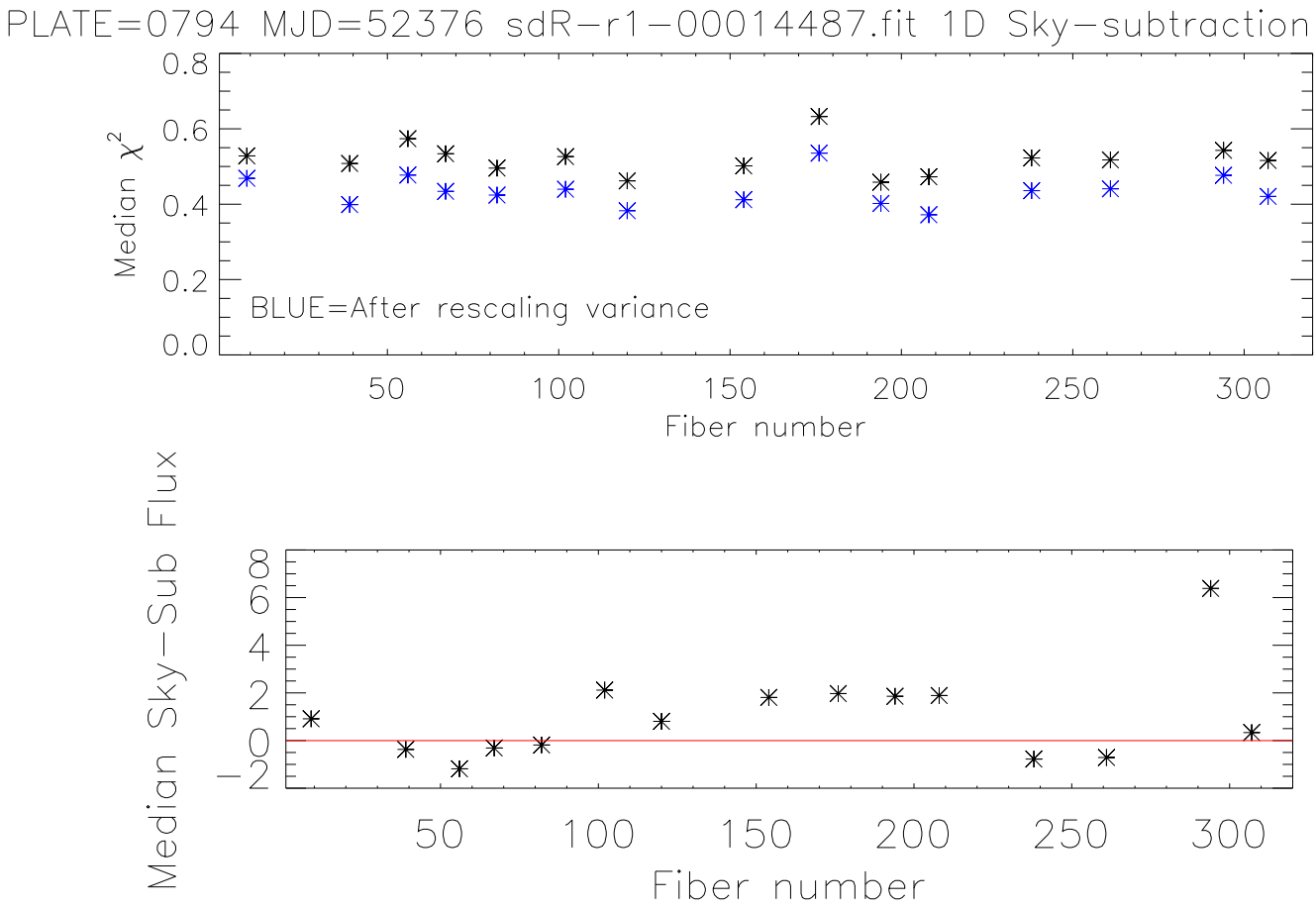

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

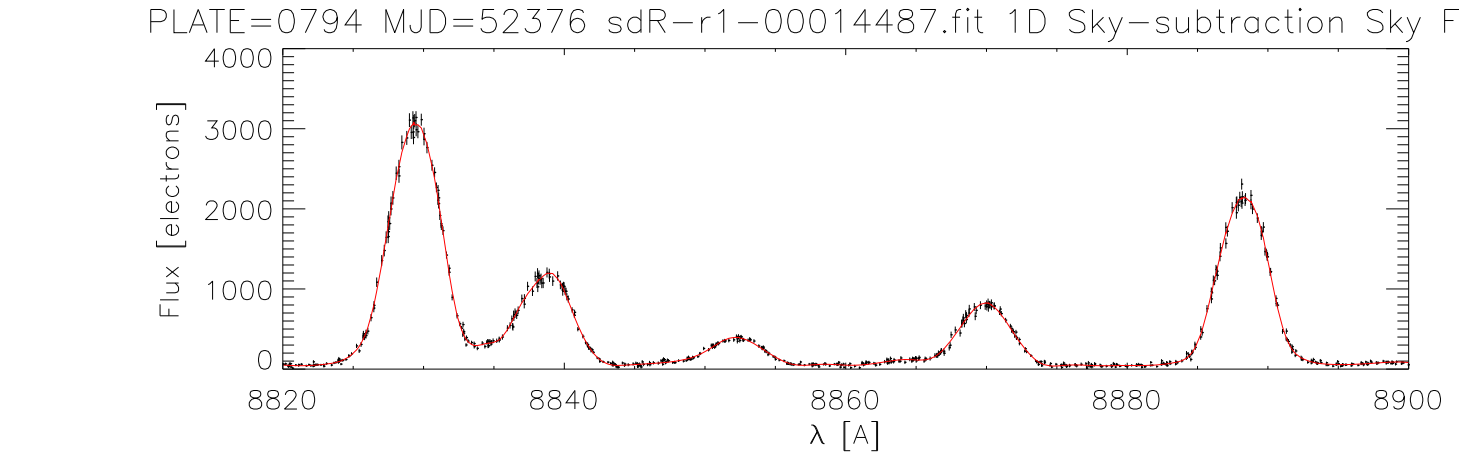

6300.3040
stdev 0.03
extra −0.03
6363.7760
stdev 0.02
extra −0.02
6553.6100
stdev 0.05
extra −0.05
6923.2100
stdev 0.01
extra −0.01
6949.0300
stdev 0.04
extra 0.04
7571.7500
stdev 0.07
extra 0.07
7794.1200
stdev 0.40
extra −0.40
7821.5100
stdev 0.03
extra −0.03
8399.1600
stdev 0.00
extra 0.00
8430.1700
stdev 0.01
extra −0.01
8885.8300
stdev 0.02
extra 0.02
8919.6100
stdev 0.00
extra −0.00
meas − pred, pix
mfbx1 16
mfbx2 16

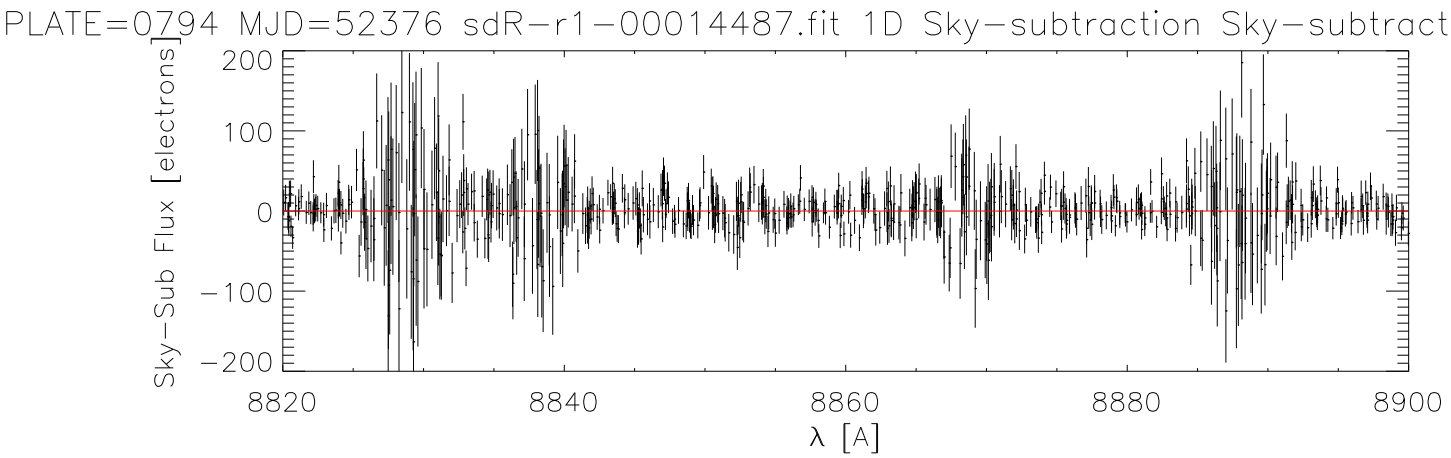

sky shift, pixels
0.05
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000

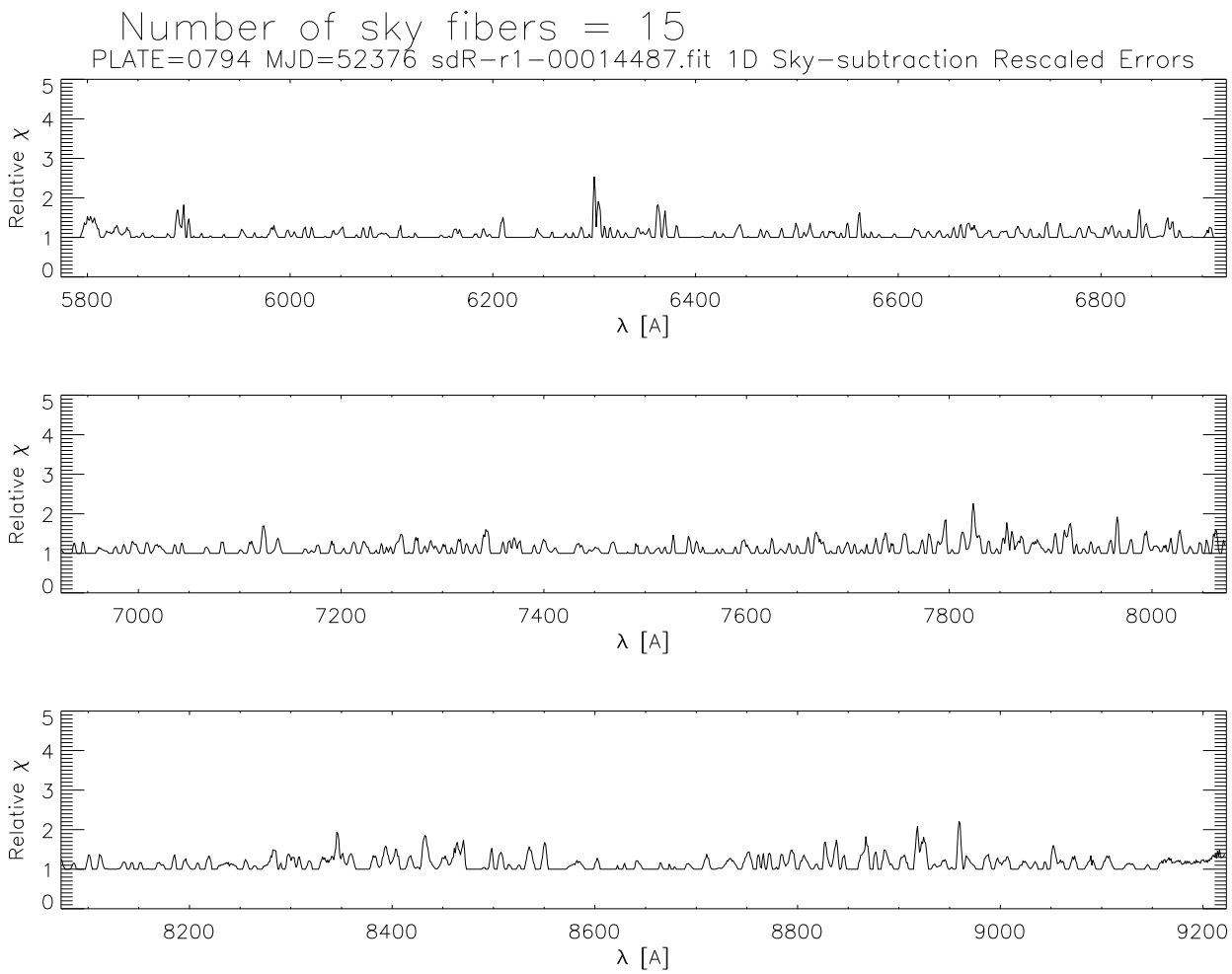

PLATE=0794 MJD=52376 Smooth superflat for sdR-r1-00014487.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.006
1.004
1.002
1.000
0.998
0.996
6000
7000
8000
9000
Wavelength (Å)

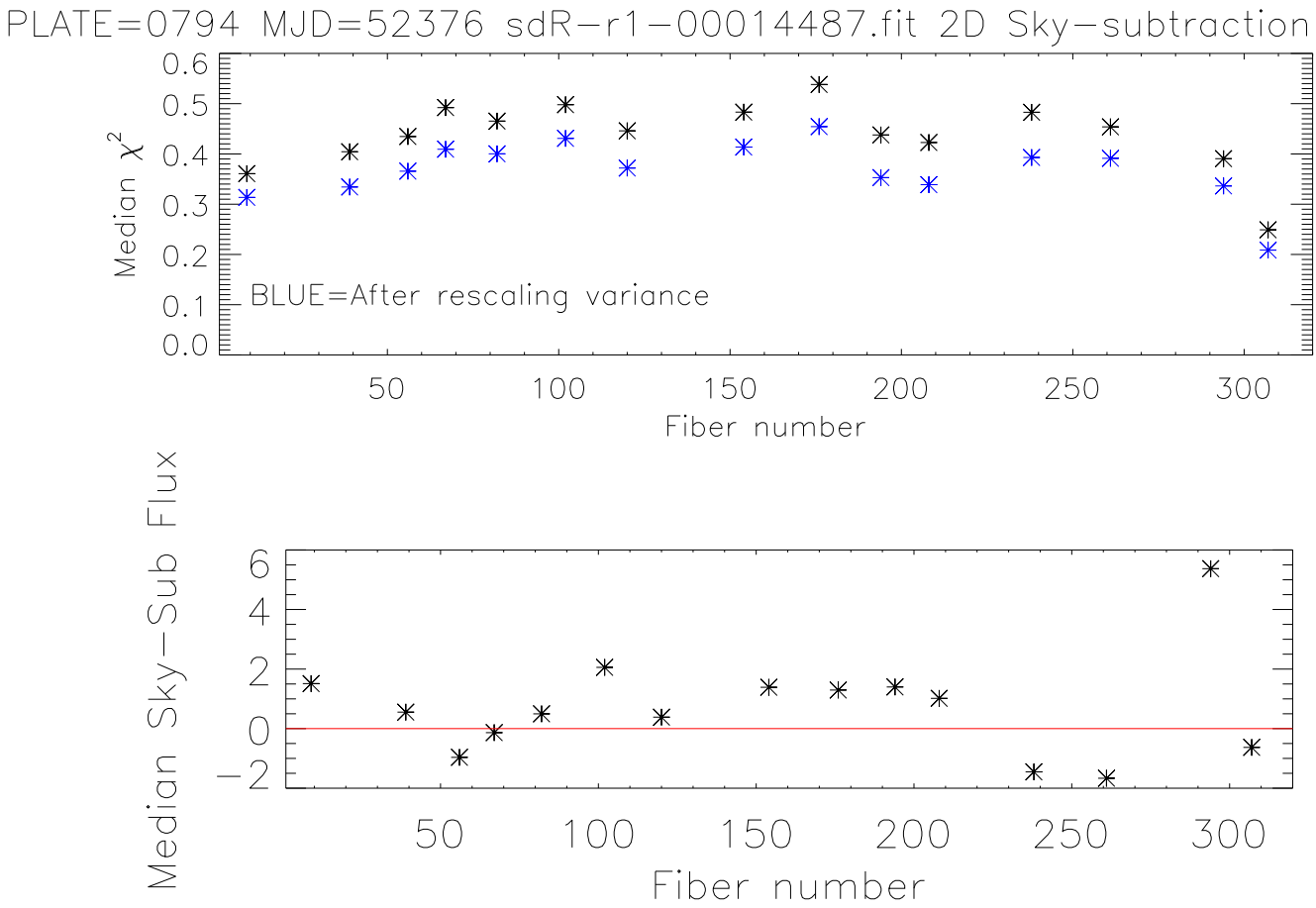

PLATE=0794 MJD=52376 sdR-r1-00014487.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

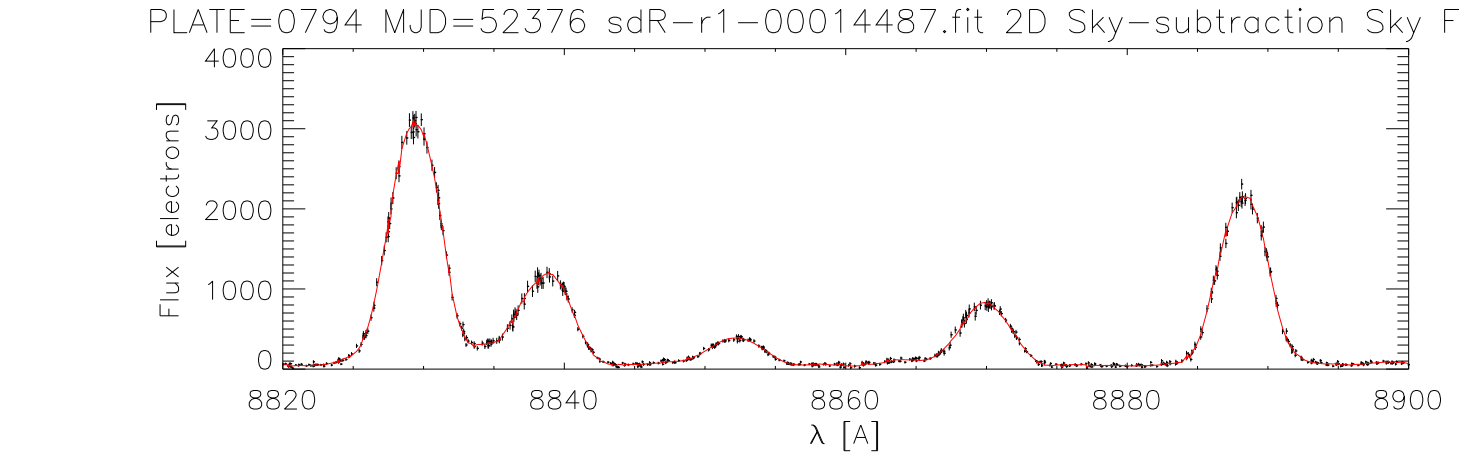
Median Sky-Sub Flux
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

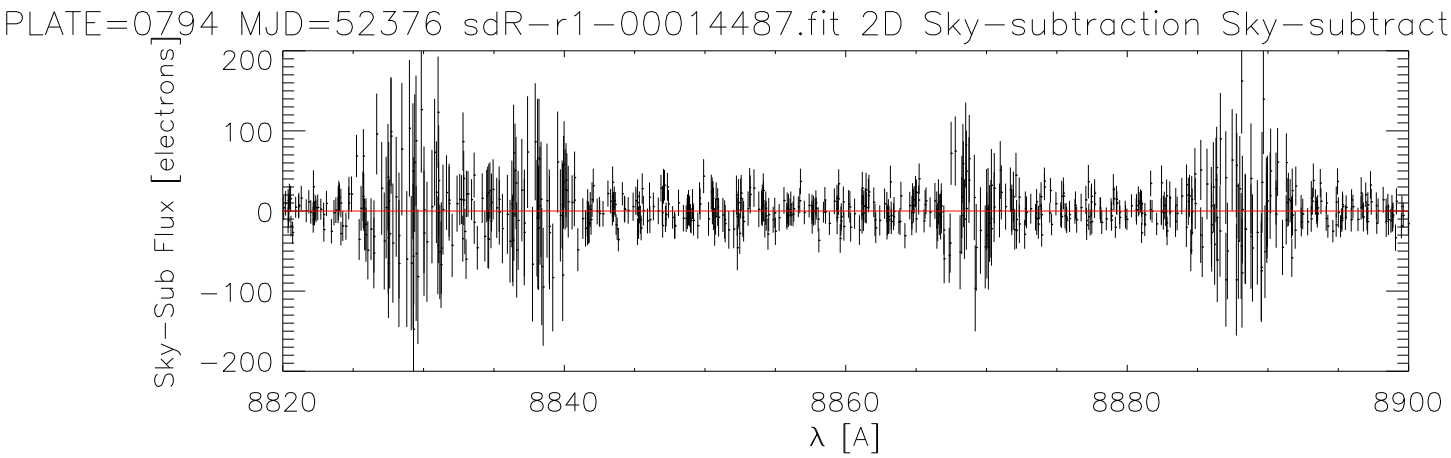

PLATE=0794 MJD=52376 sdR-r1-00014487.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

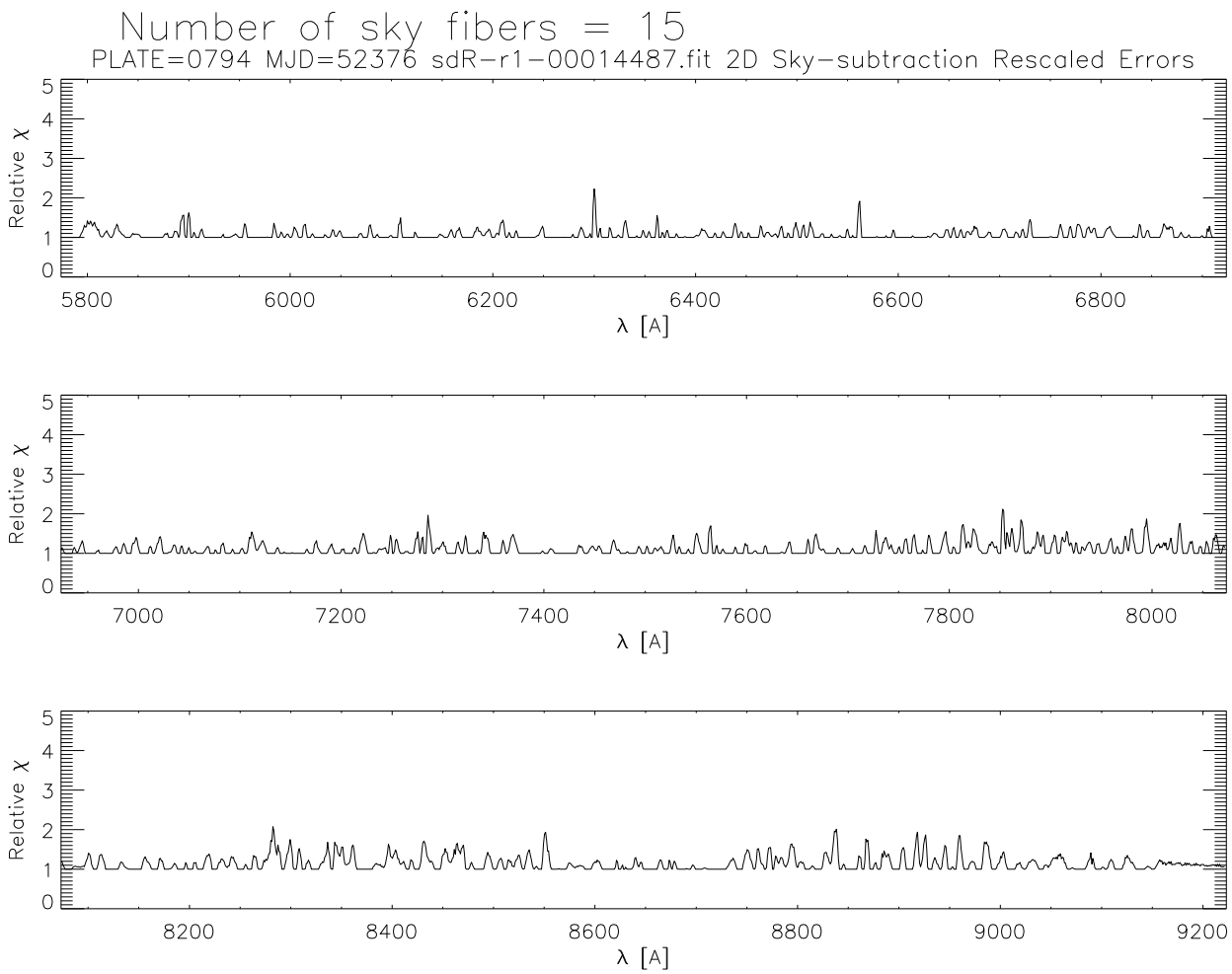

PLATE=0794 MJD=52376 sdR-r1-00014487.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

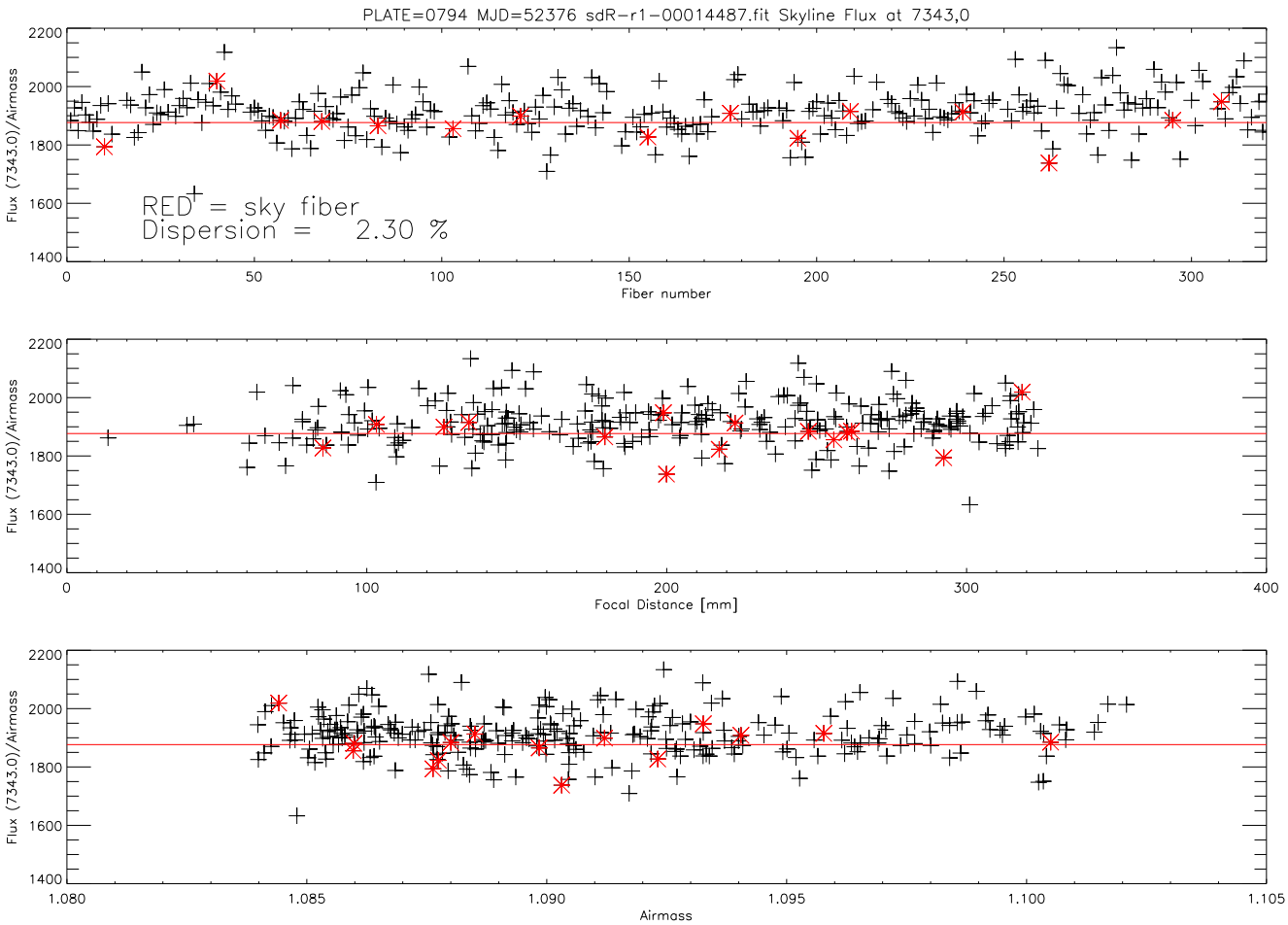

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r1-00014487.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

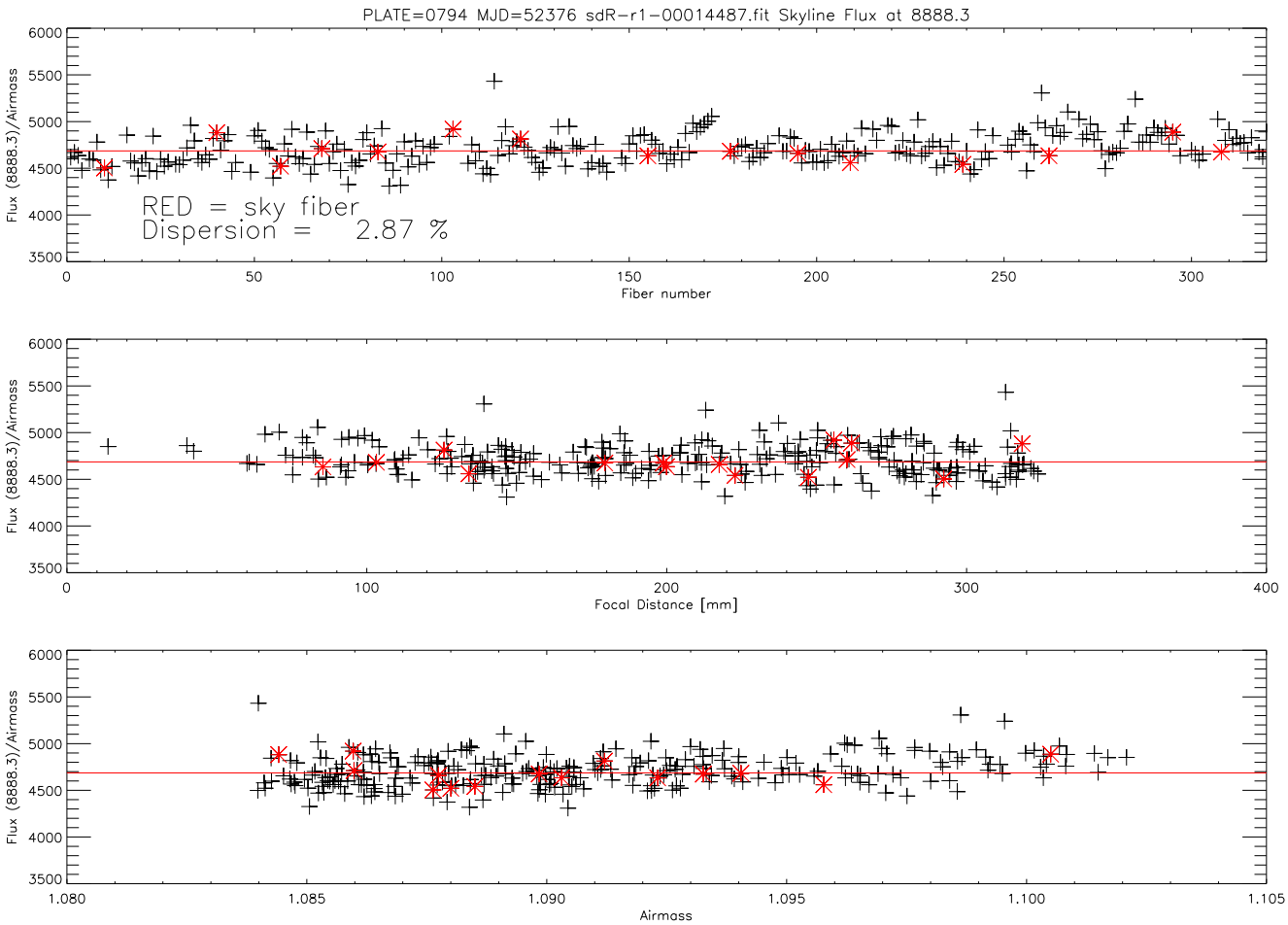

PLATE=0794 MJD=52376 sdR-r1-00014487.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

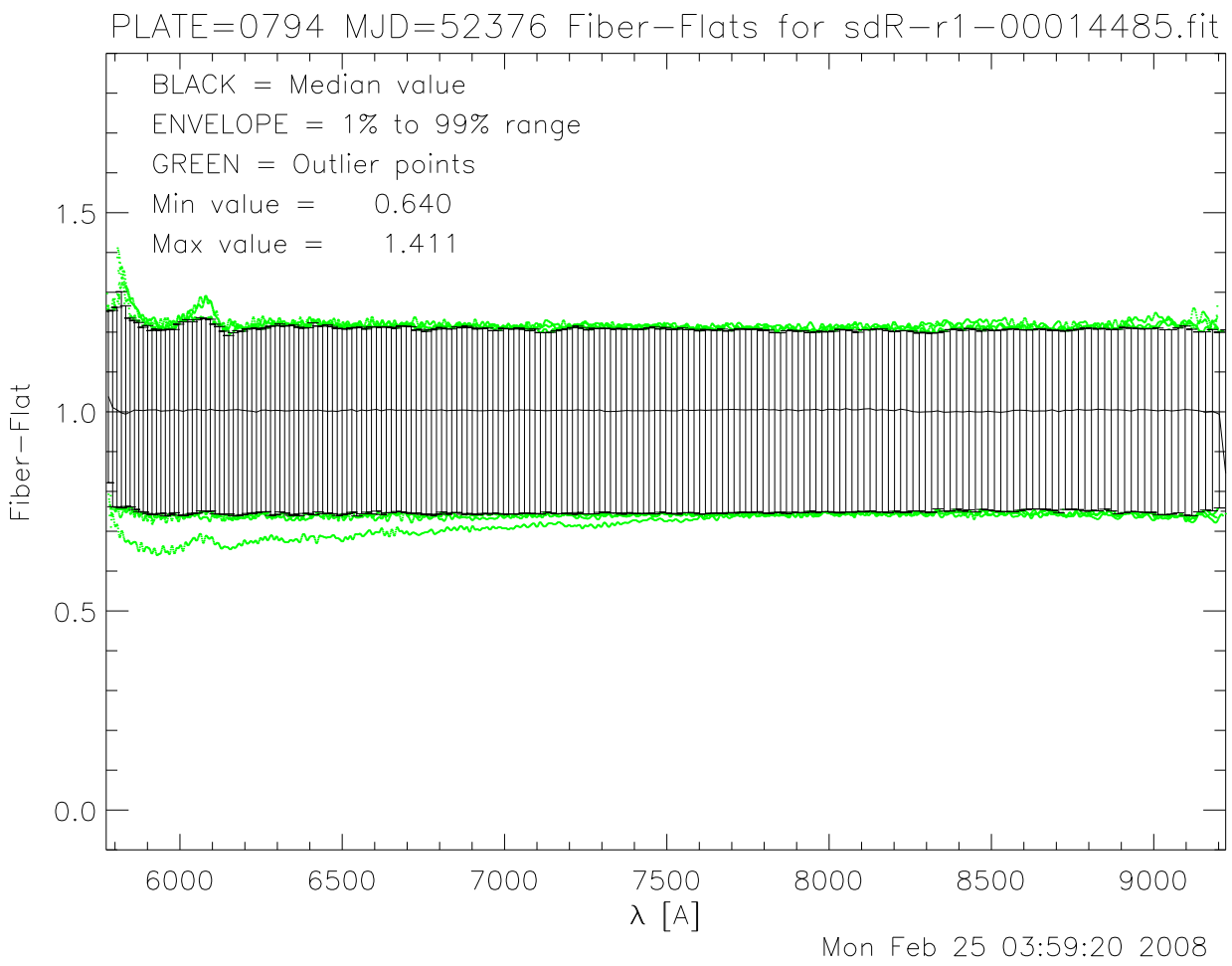

PLATE=0794 MJD=52376 sdR-r1-00014487.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

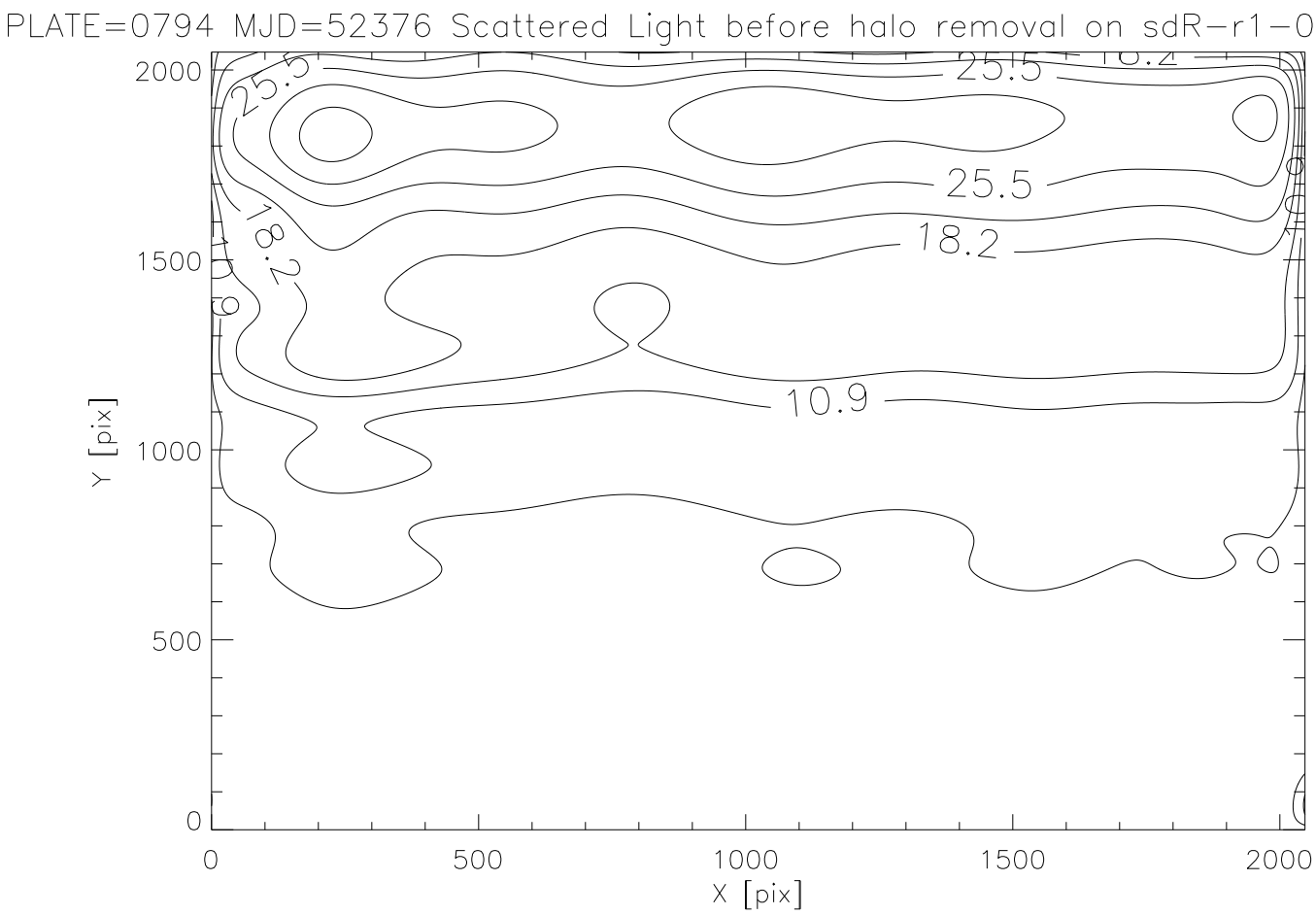

PLATE=0794 MJD=52376 sdR-r1-00014487.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

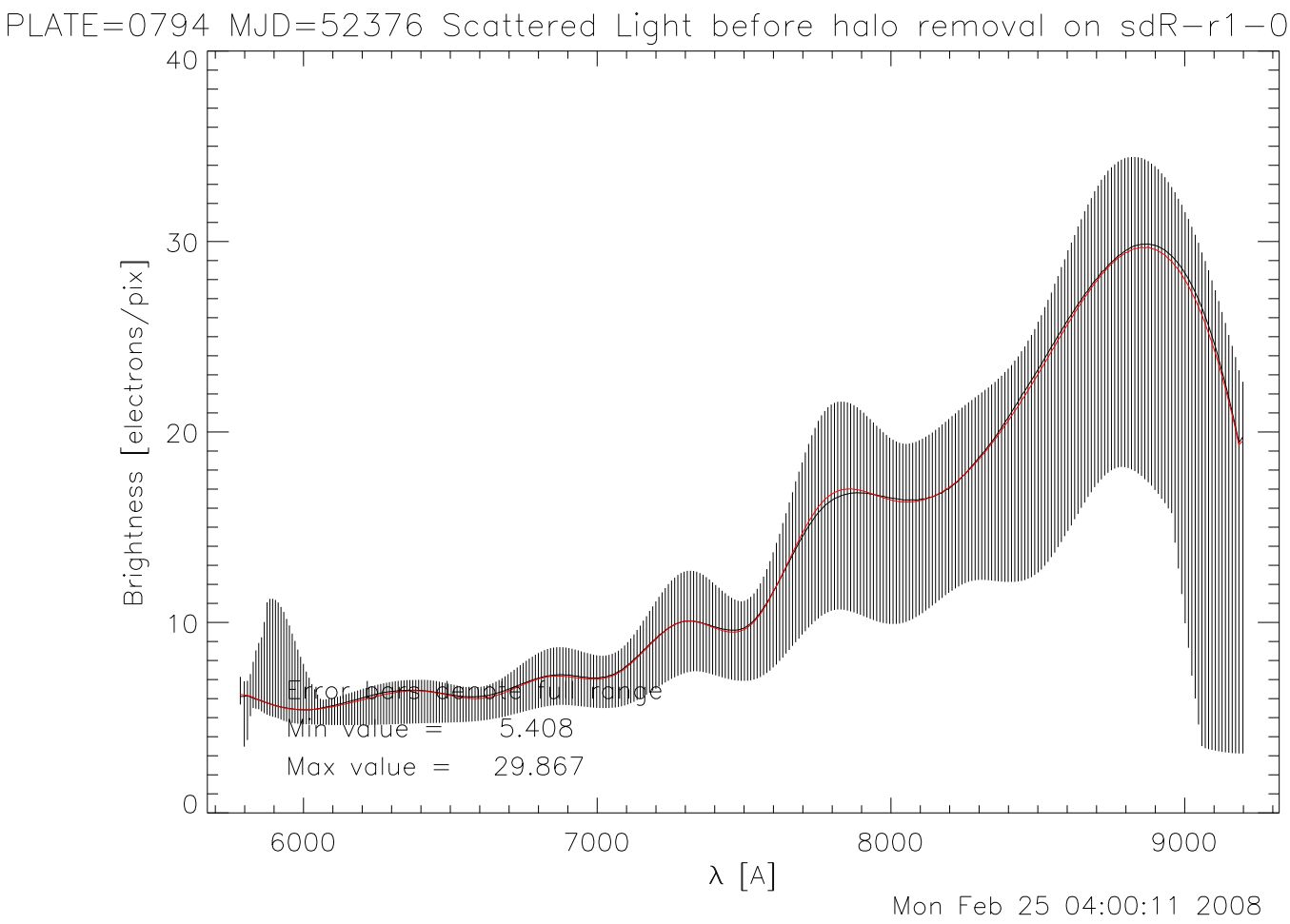

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r1-00014487.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

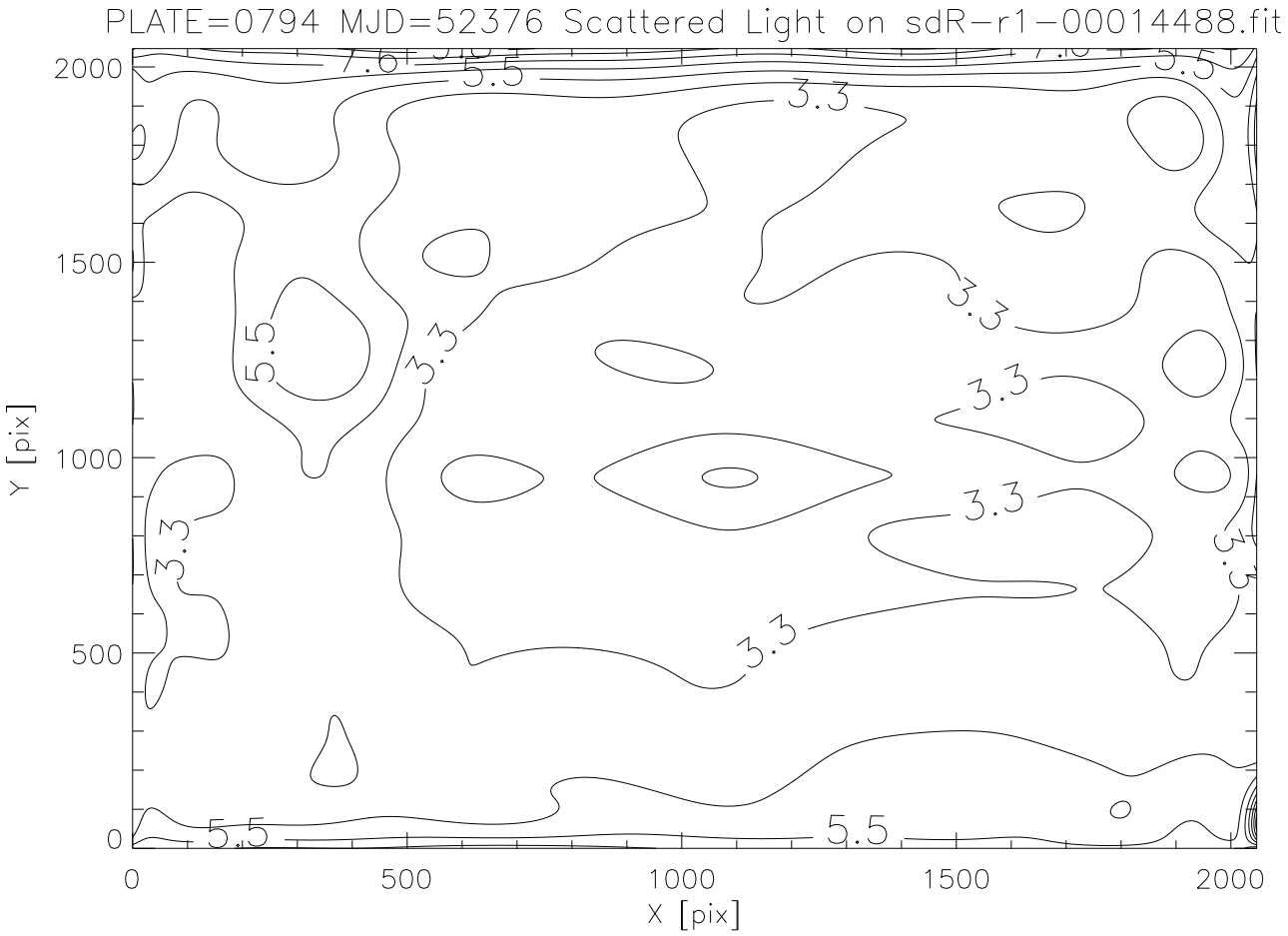

PLATE=0794 MJD=52376 sdR-r1-00014487.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.30 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

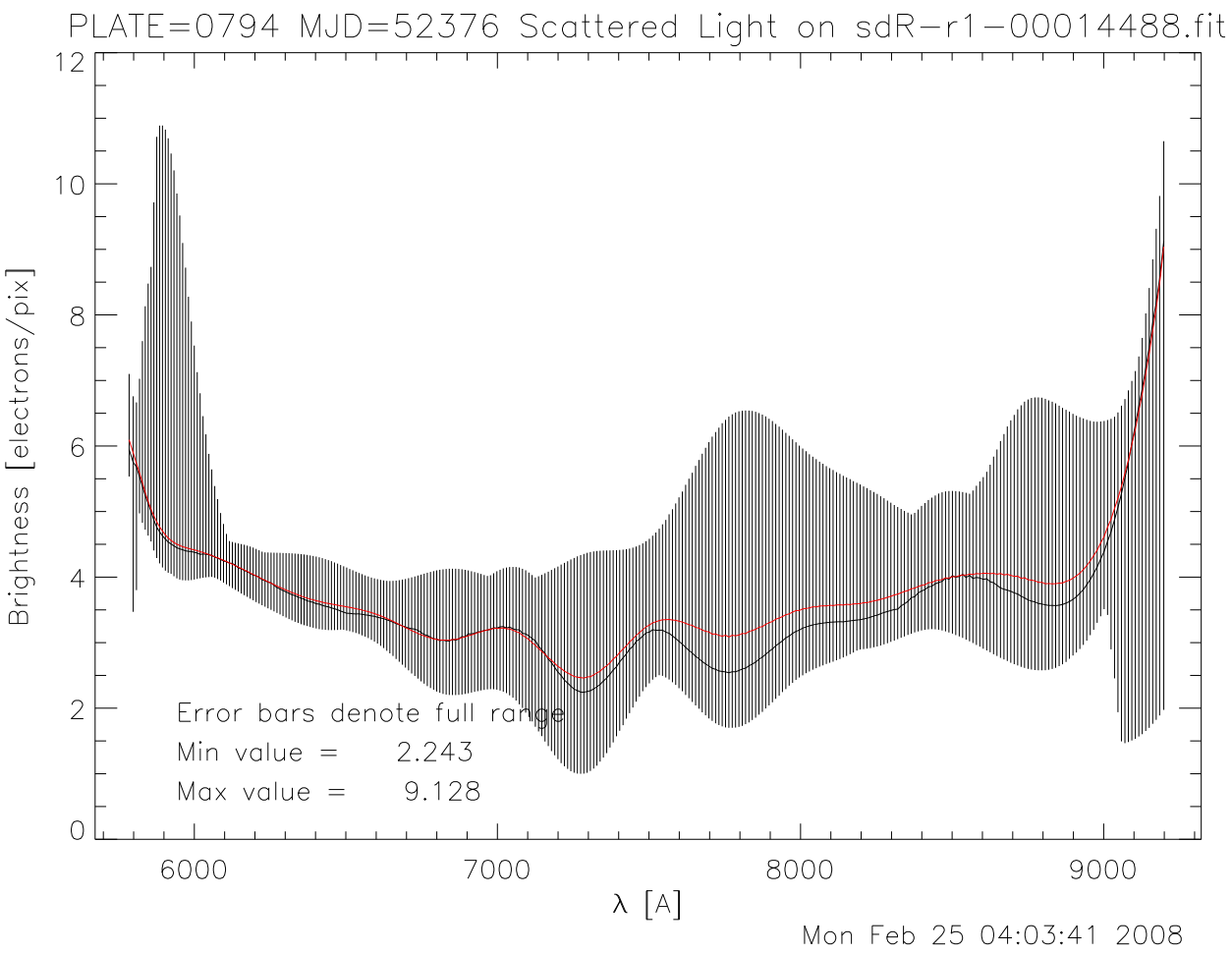

PLATE=0794 MJD=52376 sdR-r1-00014487.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.87 %
Fiber number
Focal Distance [mm]
Airmass

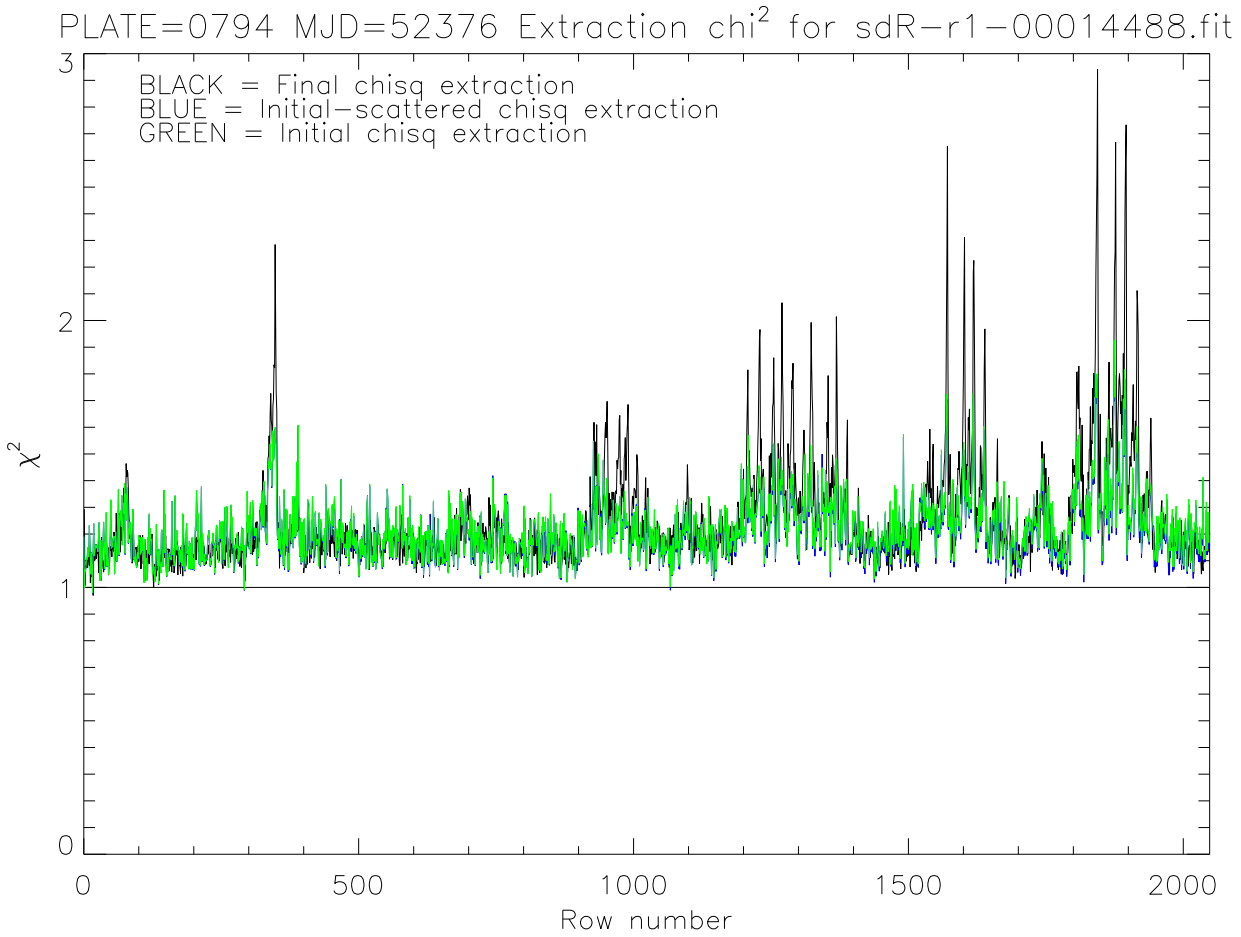

PLATE=0794 MJD=52376 Fiber−Flats for sdR−r1−00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.640
Max value = 1.411
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 03:59:20 2008

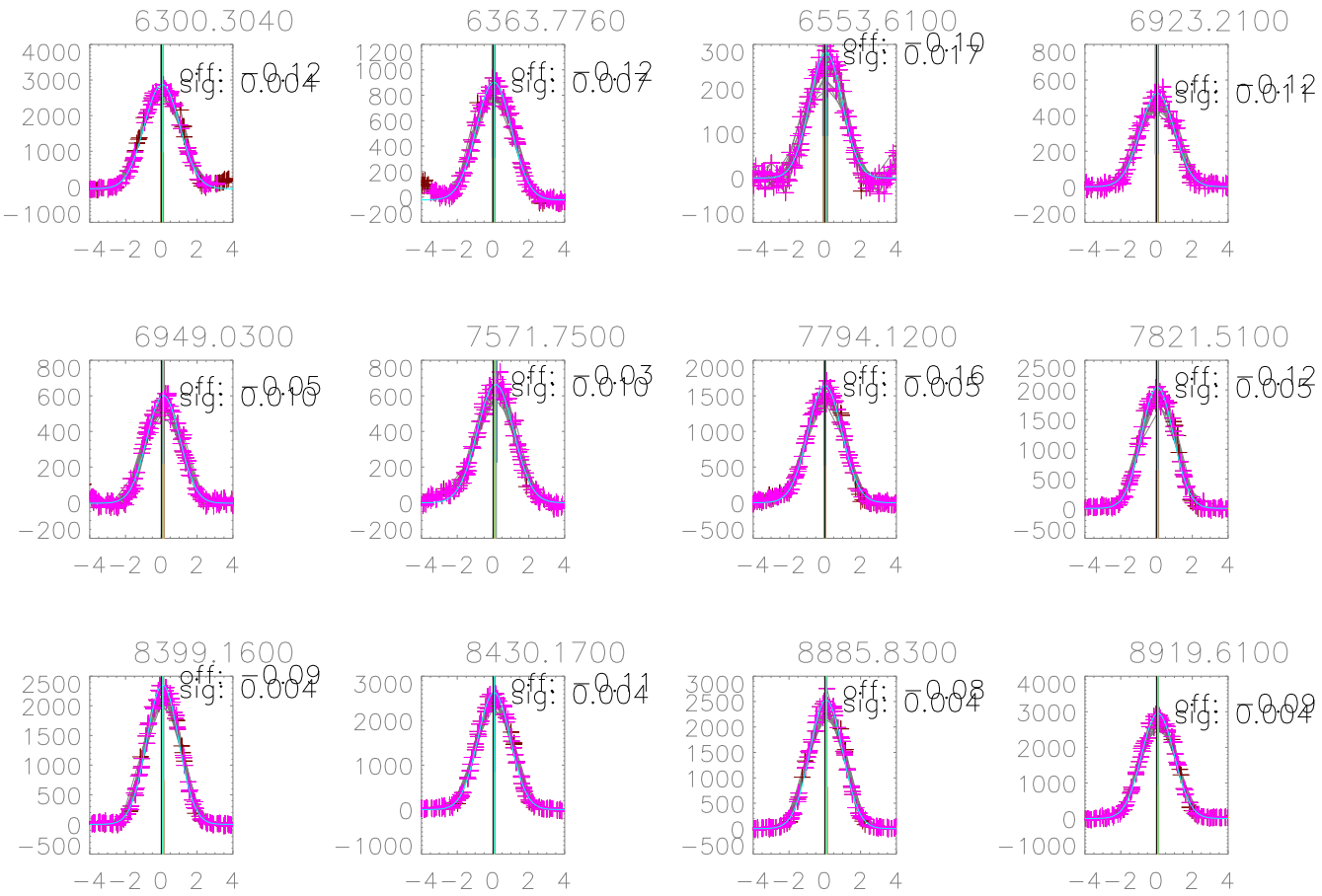

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR−r1−00014488.fi
25.5
25.5
25.5
18.2
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

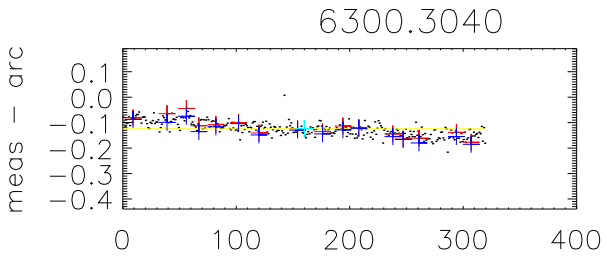

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r1-00014488.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.408
Max value = 29.867
Mon Feb 25 04:00:11 2008

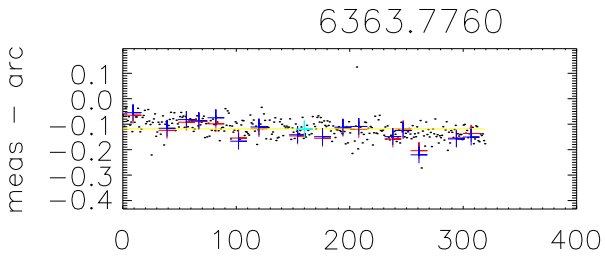

PLATE=0794 MJD=52376 Scattered Light on sdR-r1-00014488.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3

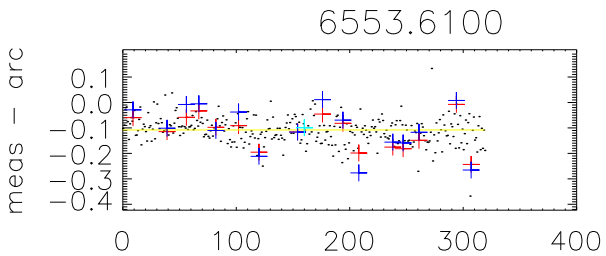

PLATE=0794 MJD=52376 Scattered Light on sdR-r1-00014488.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.243
Max value = 9.128
Mon Feb 25 04:03:41 2008

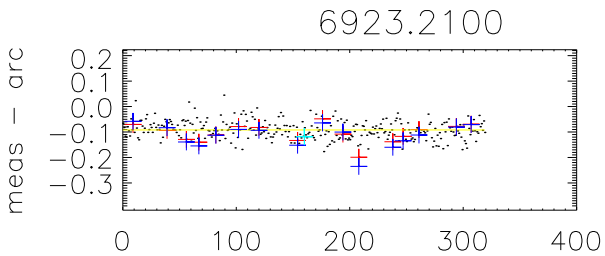

PLATE=0794 MJD=52376 Extraction chi^2 for sdR−r1−00014488.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

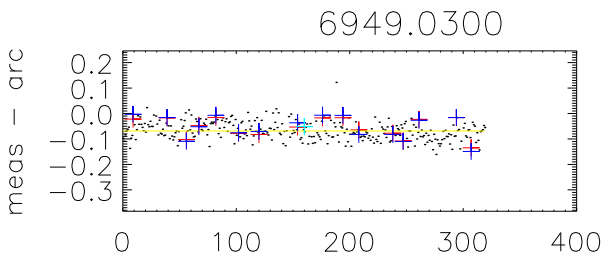

6300.3040
off: −0.12
sig: 0.004
6363.7760
off: −0.12
sig: 0.007
6553.6100
off: −0.10
sig: 0.017
6923.2100
off: −0.12
sig: 0.011
6949.0300
off: −0.05
sig: 0.010
7571.7500
off: −0.03
sig: 0.010
7794.1200
off: −0.16
sig: 0.005
7821.5100
off: −0.12
sig: 0.003
8399.1600
off: −0.09
sig: 0.004
8430.1700
off: −0.11
sig: 0.004
8885.8300
off: −0.08
sig: 0.004
8919.6100
off: −0.09
sig: 0.004

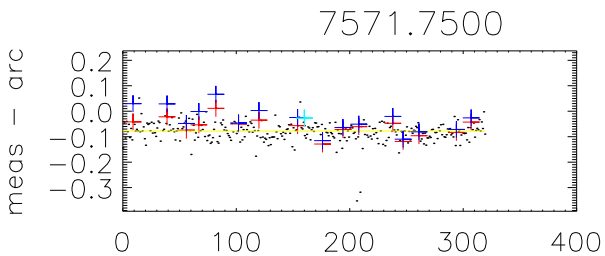

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

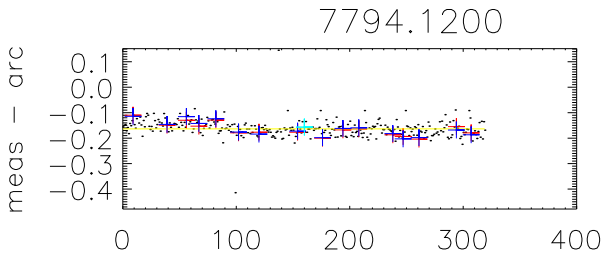

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

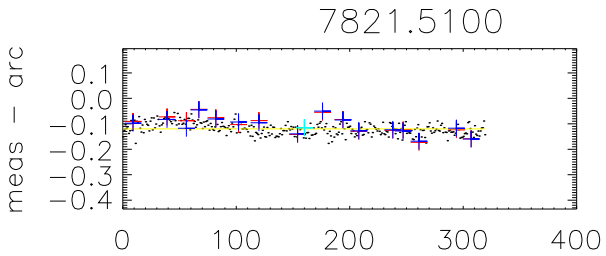

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

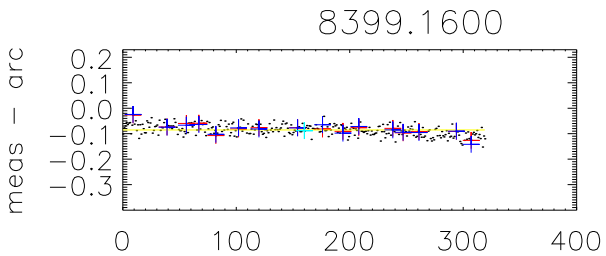

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

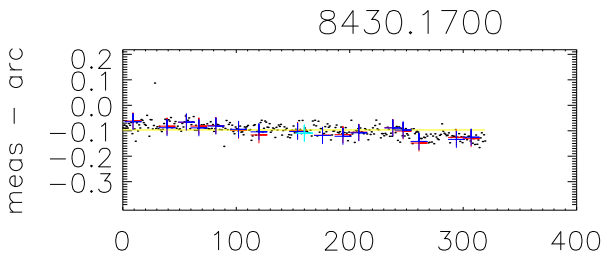

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

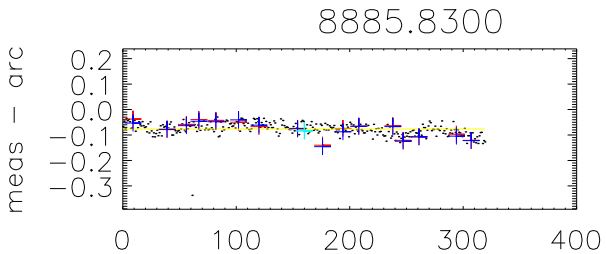

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

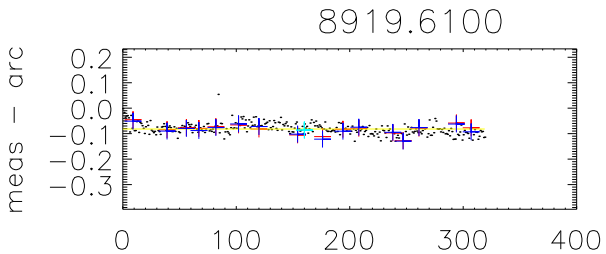

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

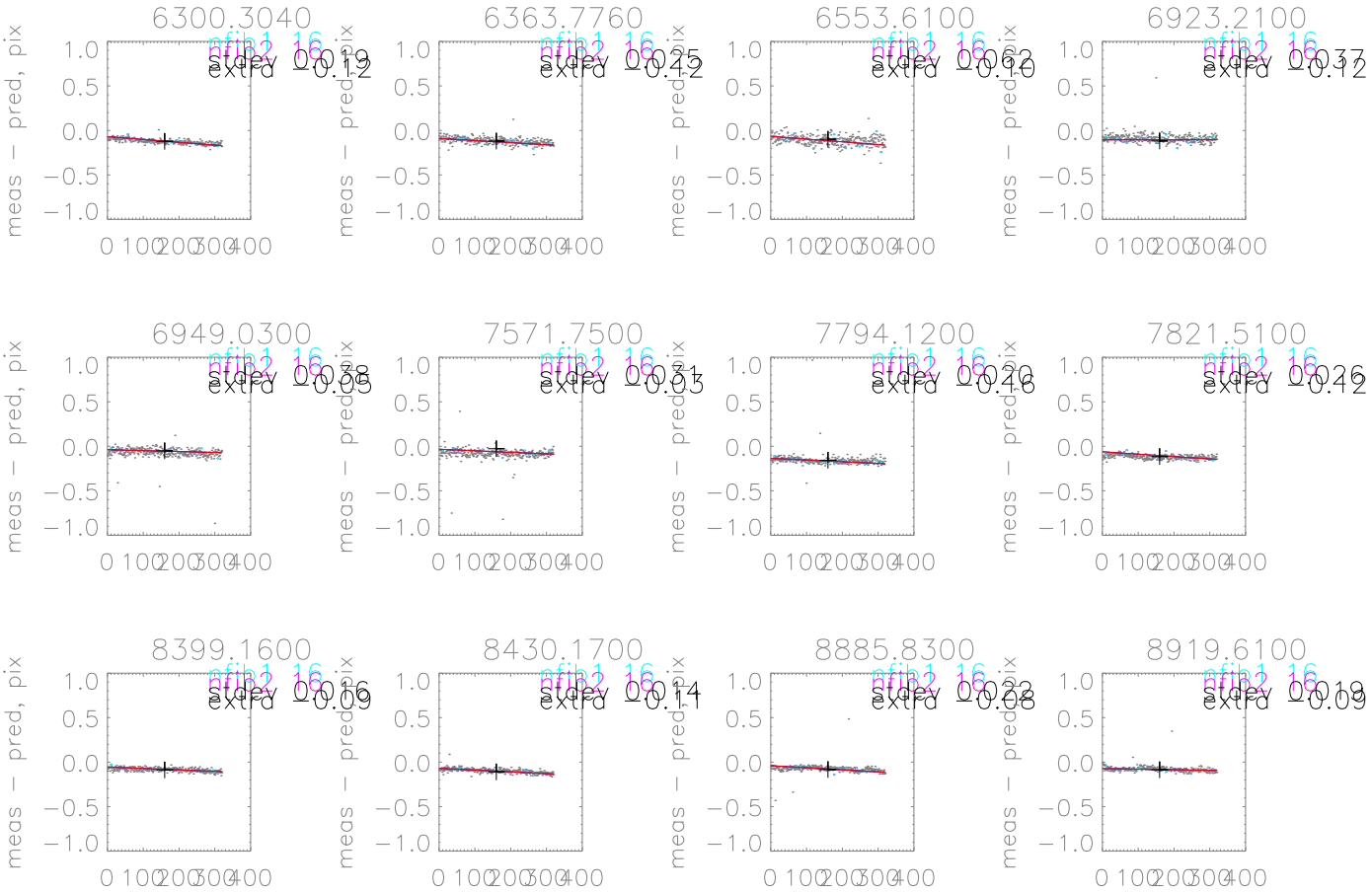

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

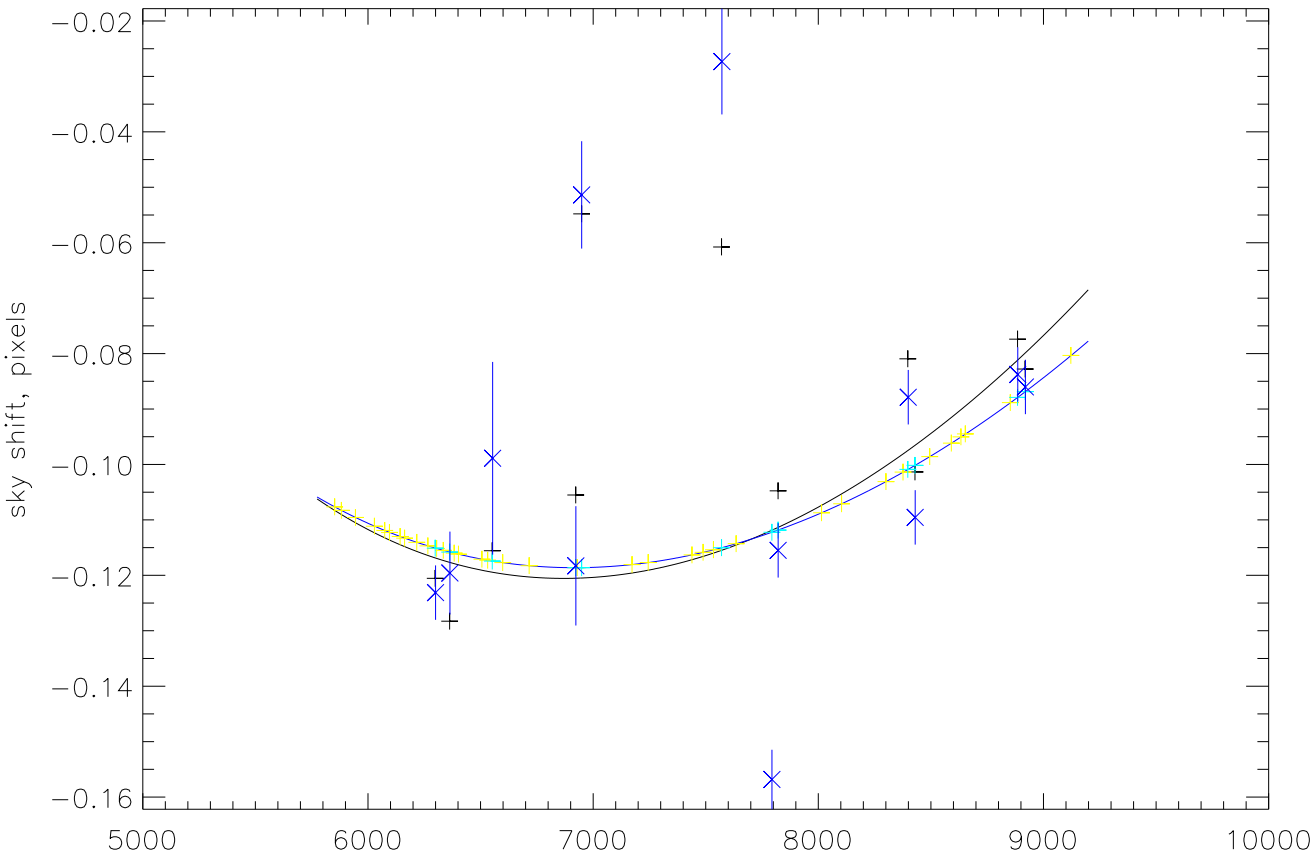

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

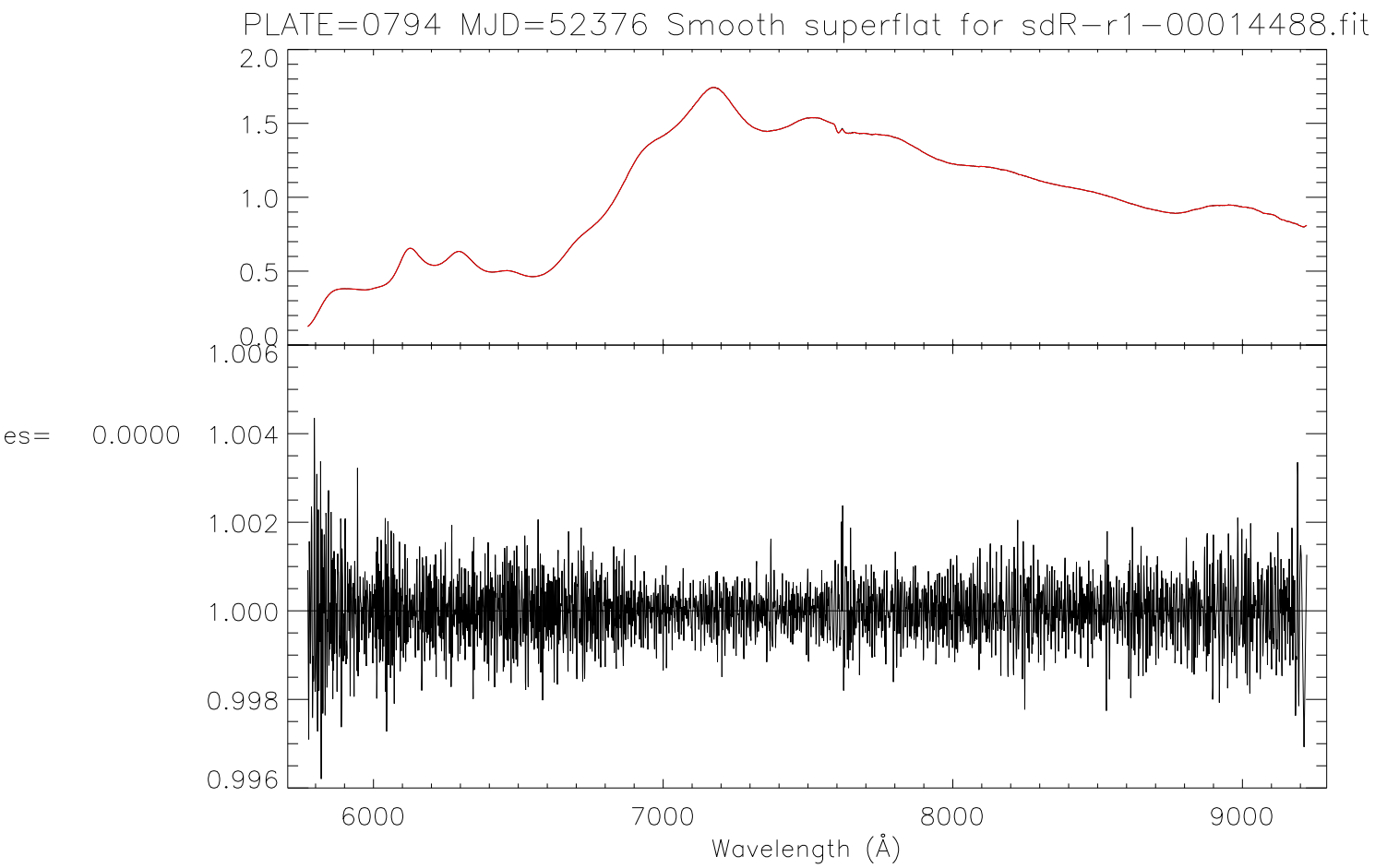

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

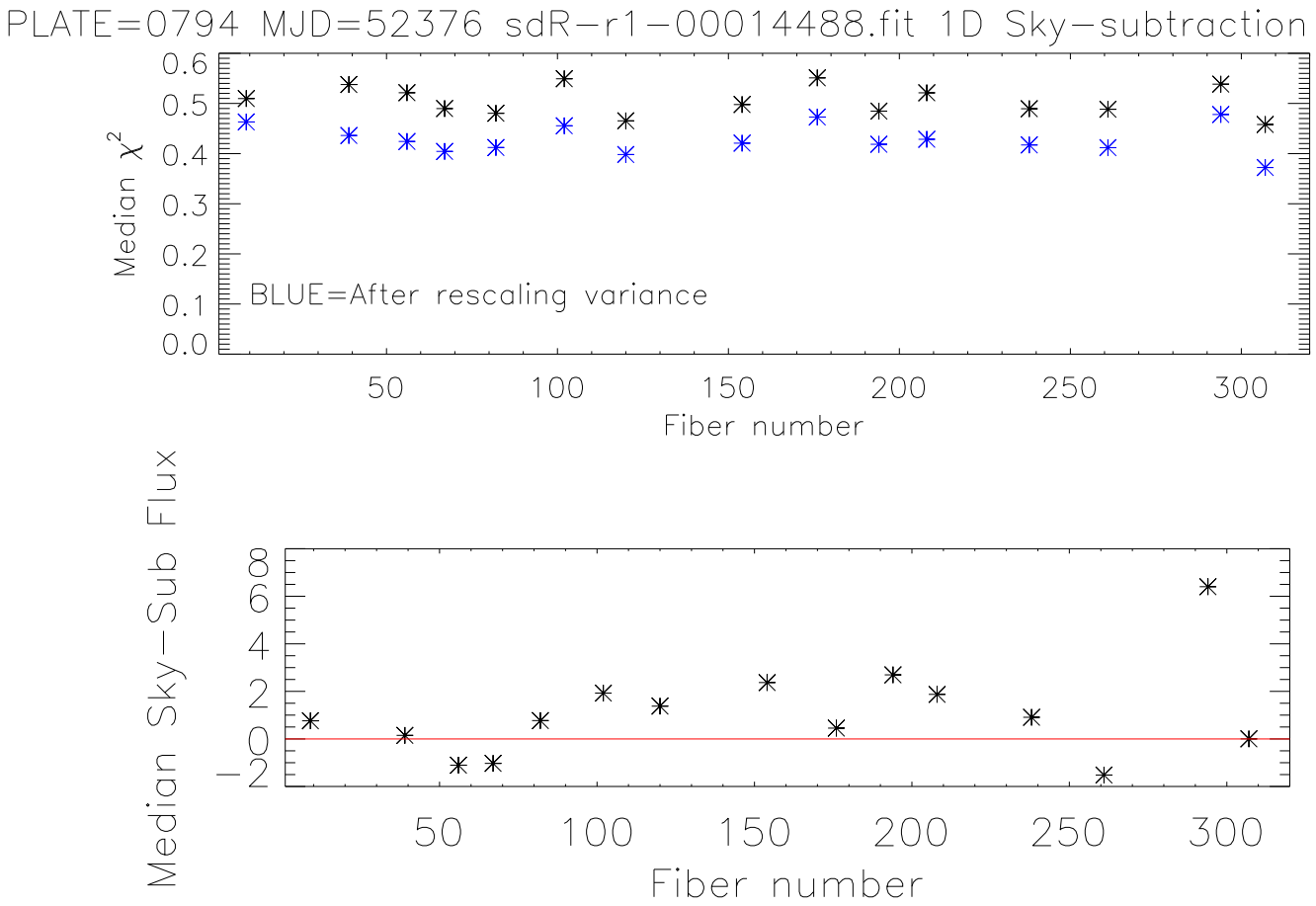

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

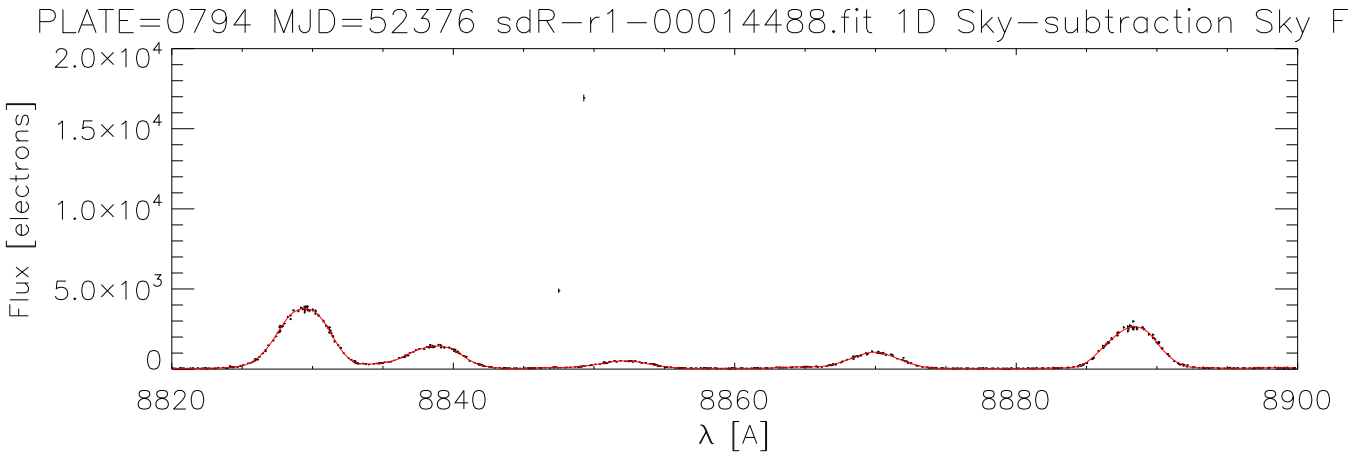

6300.3040
stdev 0.19
extra 0.12
6363.7760
stdev 0.25
extra 0.42
6553.6100
stdev 0.22
extra 0.10
6923.2100
stdev 0.37
extra 0.12
6949.0300
stdev 0.38
extra 0.05
7571.7500
stdev 0.31
extra 0.03
7794.1200
stdev 0.20
extra 0.46
7821.5100
stdev 0.26
extra 0.42
8399.1600
stdev 0.16
extra 0.09
8430.1700
stdev 0.14
extra 0.11
8885.8300
stdev 0.22
extra 0.08
8919.6100
stdev 0.19
extra 0.09
meas − pred, pix
mfib1 16
mfib2 16

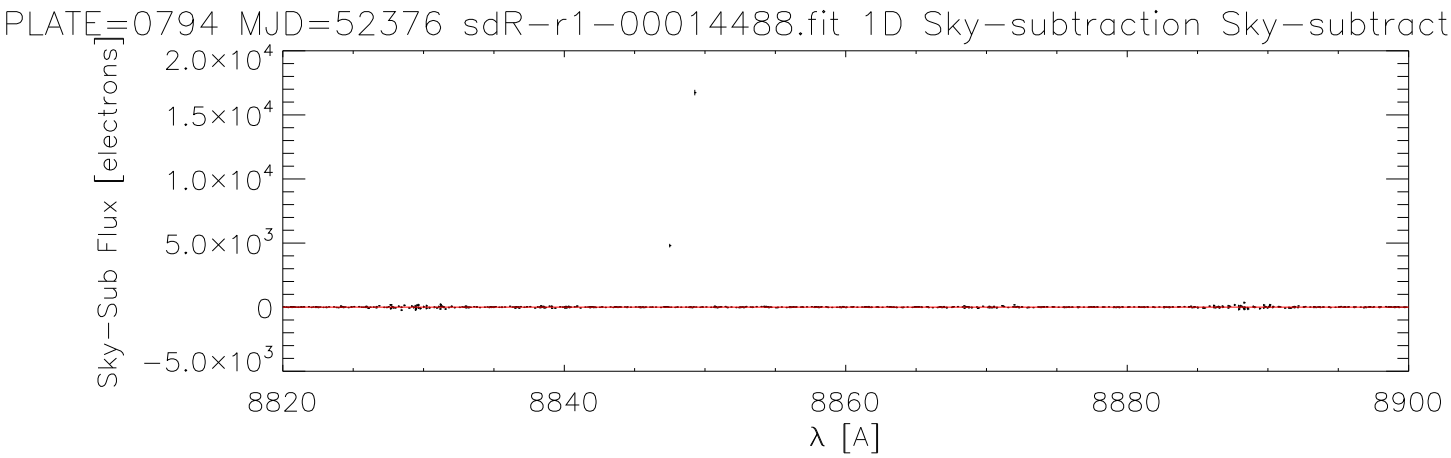

−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
sky shift, pixels
5000
6000
7000
8000
9000
10000

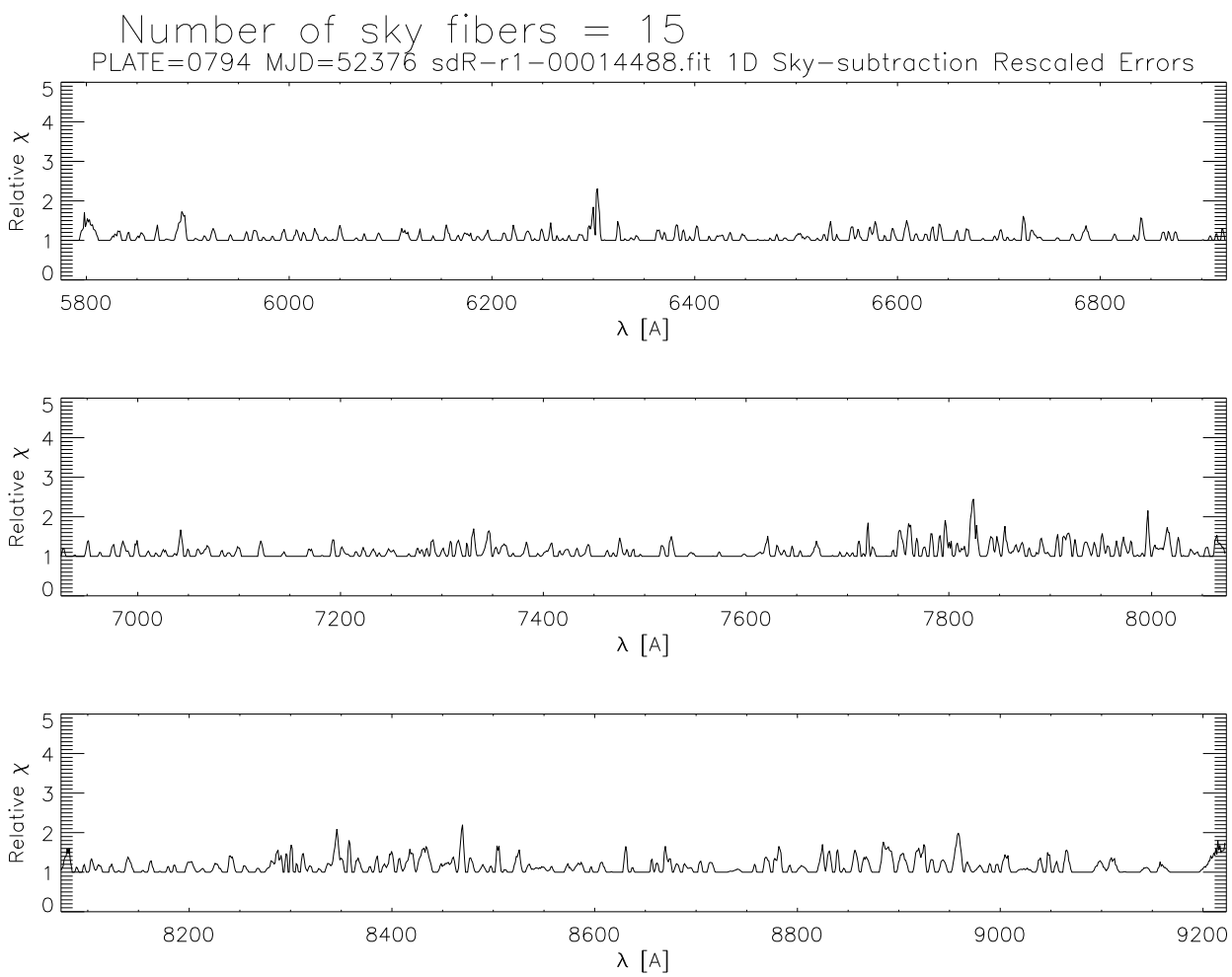

PLATE=0794 MJD=52376 Smooth superflat for sdR-r1-00014488.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
6000
7000
8000
9000
Wavelength (Å)

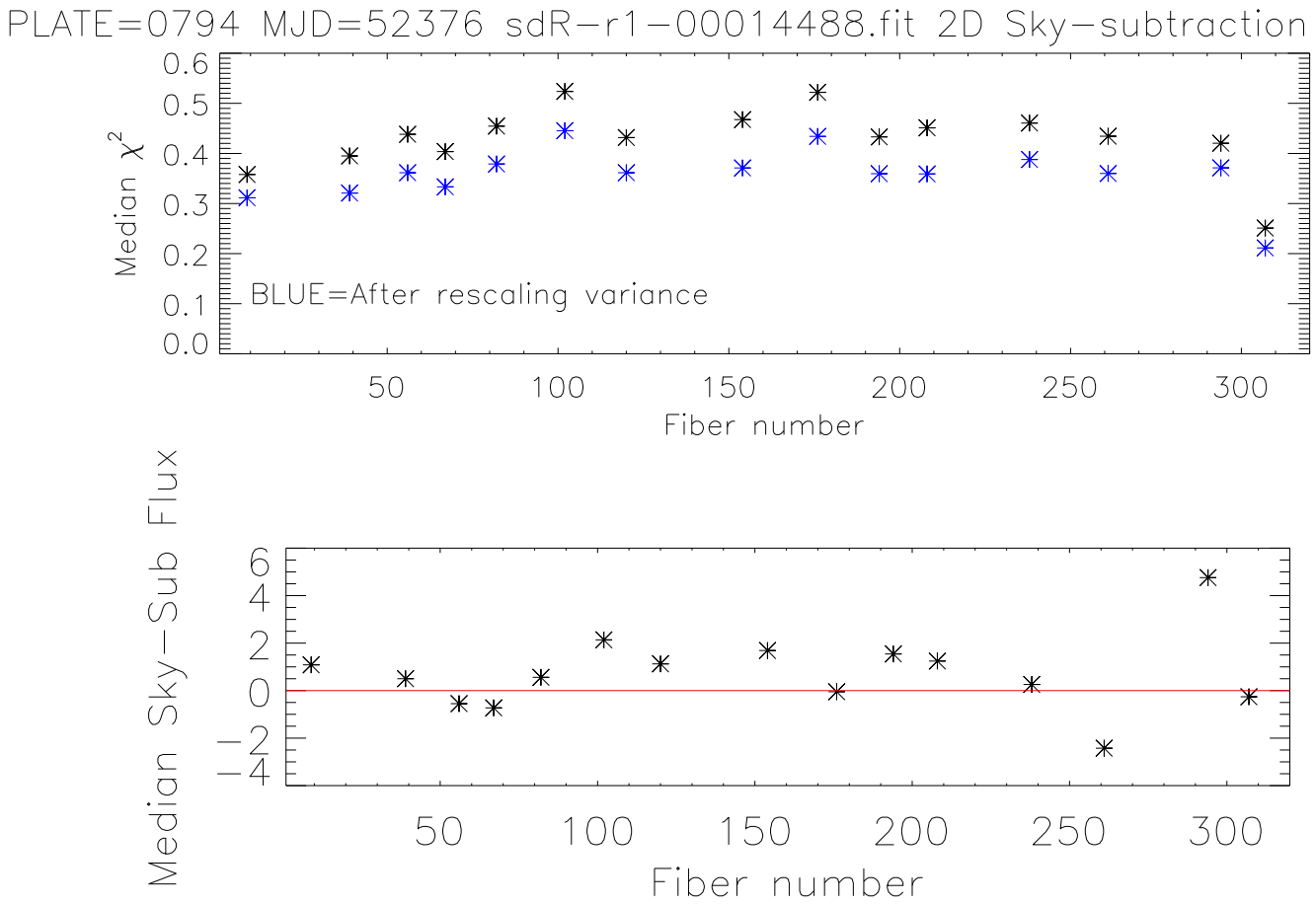
es= 0.0000

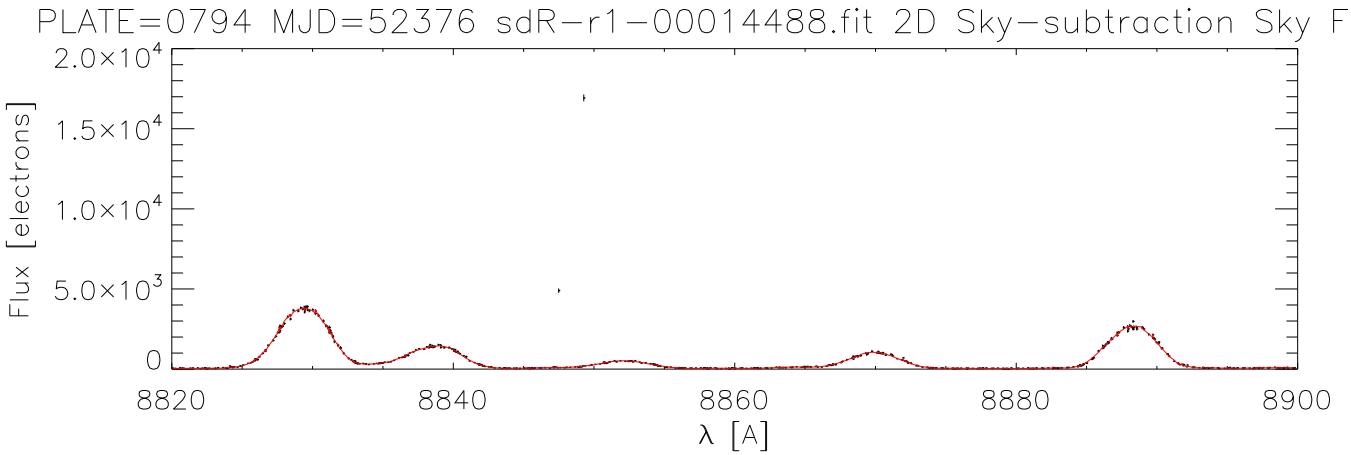

PLATE=0794 MJD=52376 sdR-r1-00014488.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

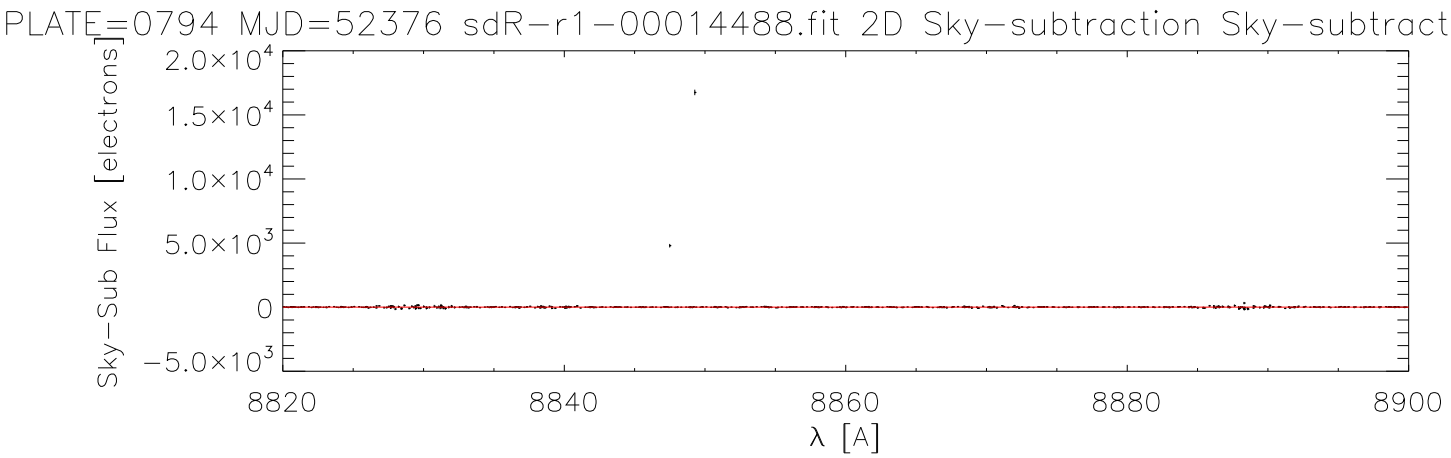

PLATE=0794 MJD=52376 sdR-r1-00014488.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

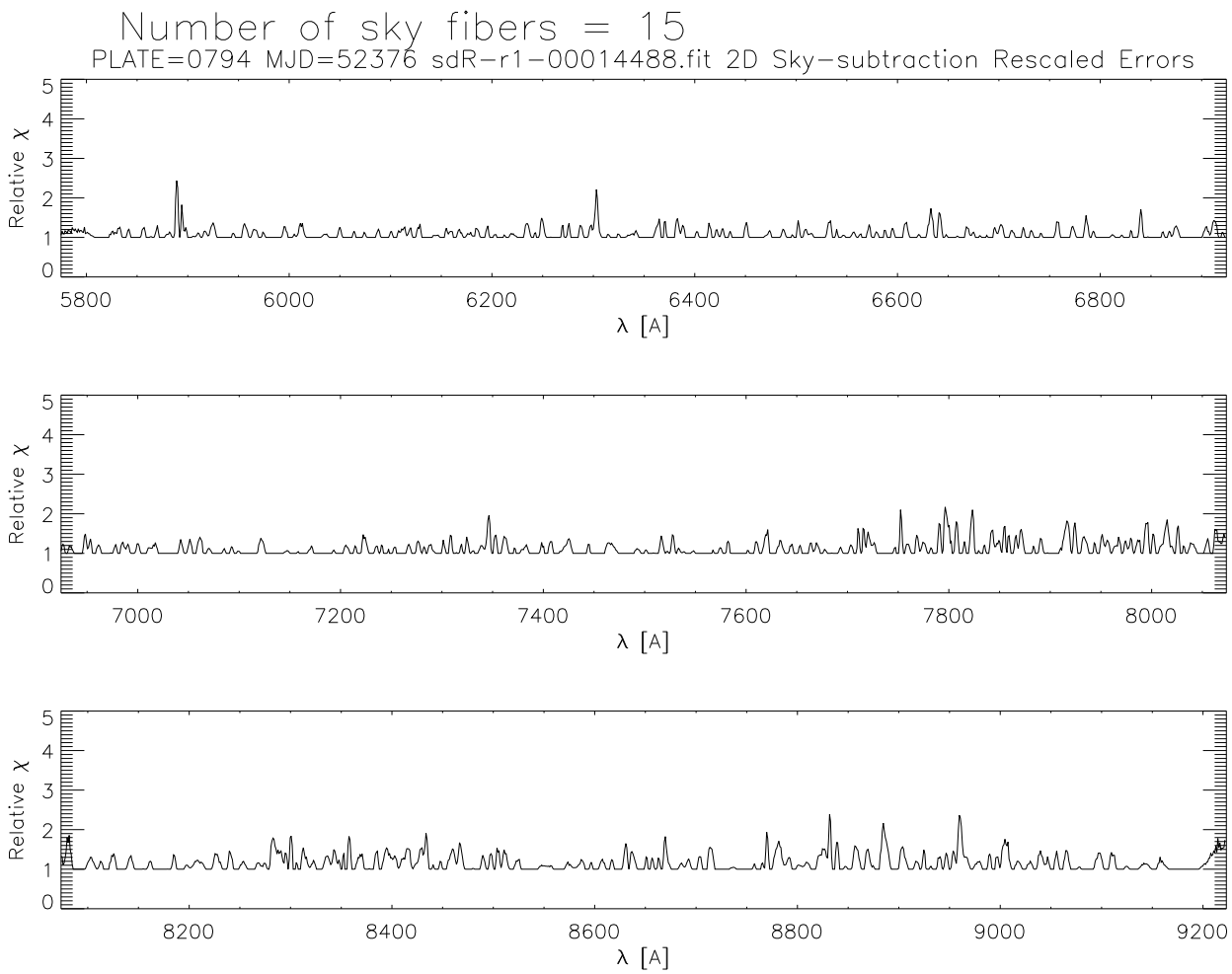

PLATE=0794 MJD=52376 sdR-r1-00014488.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
-5.0×10^3
8820
8840
8860
8880
8900
λ [A]

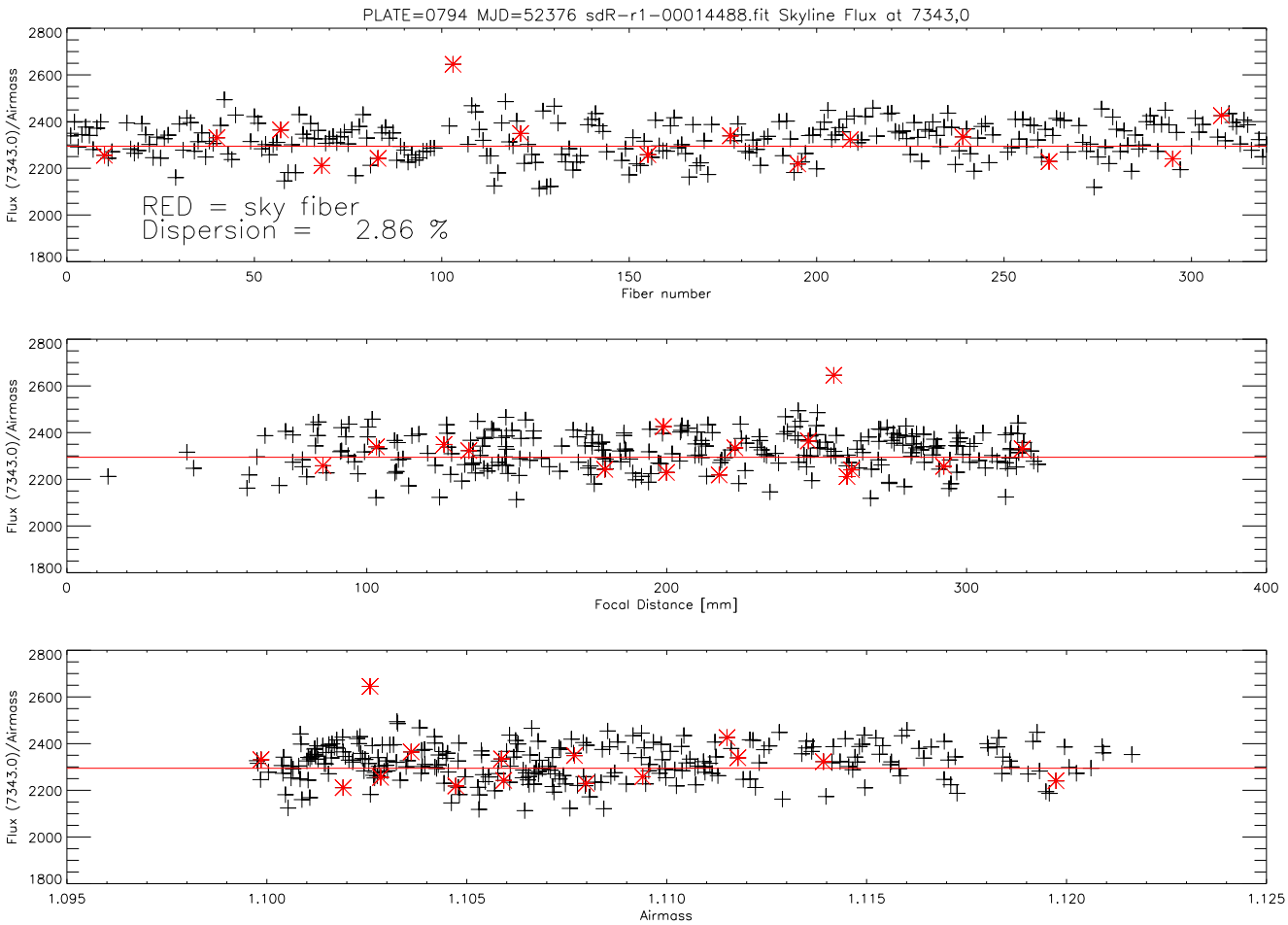

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r1-00014488.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

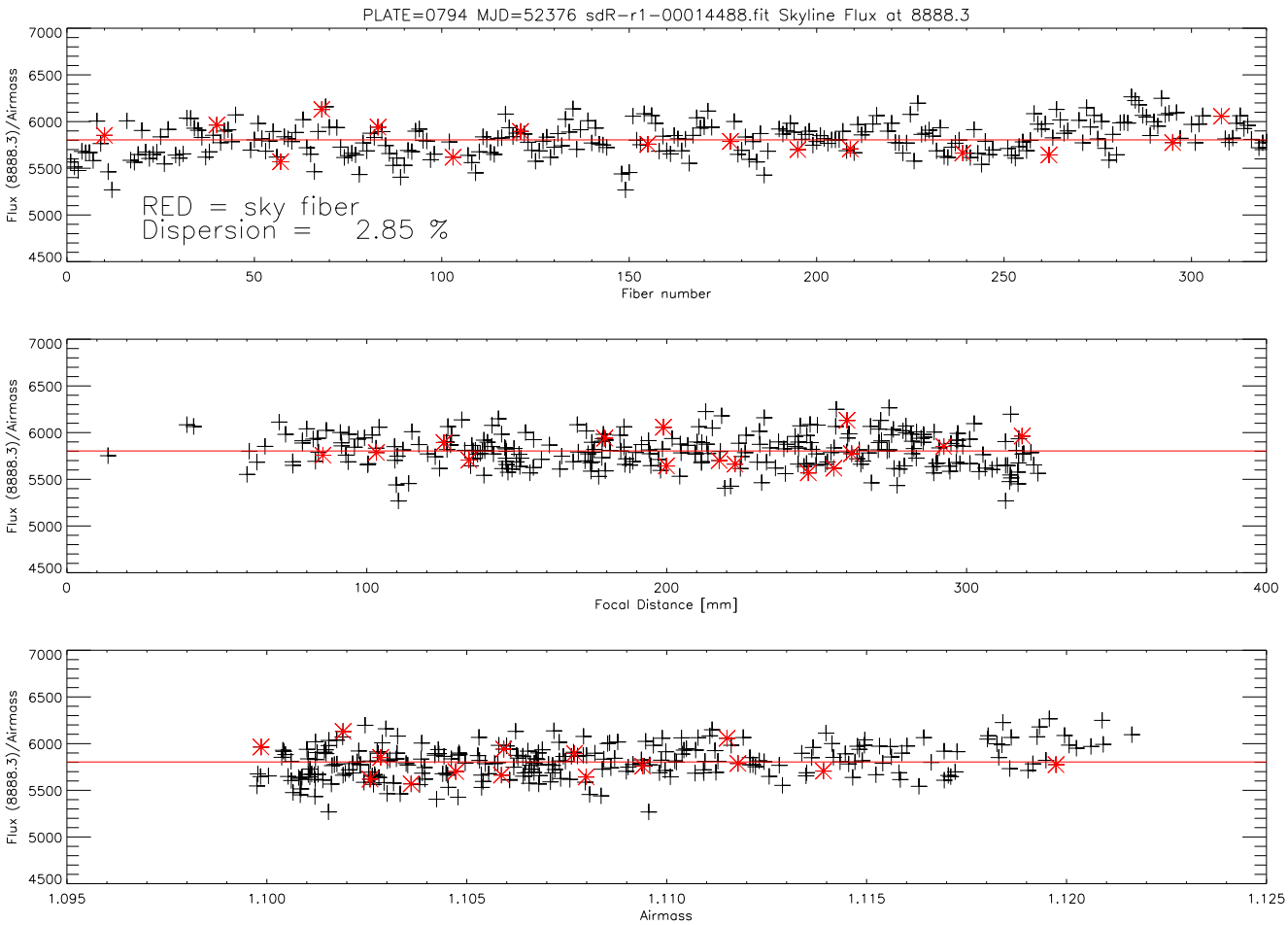

PLATE=0794 MJD=52376 sdR-r1-00014488.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

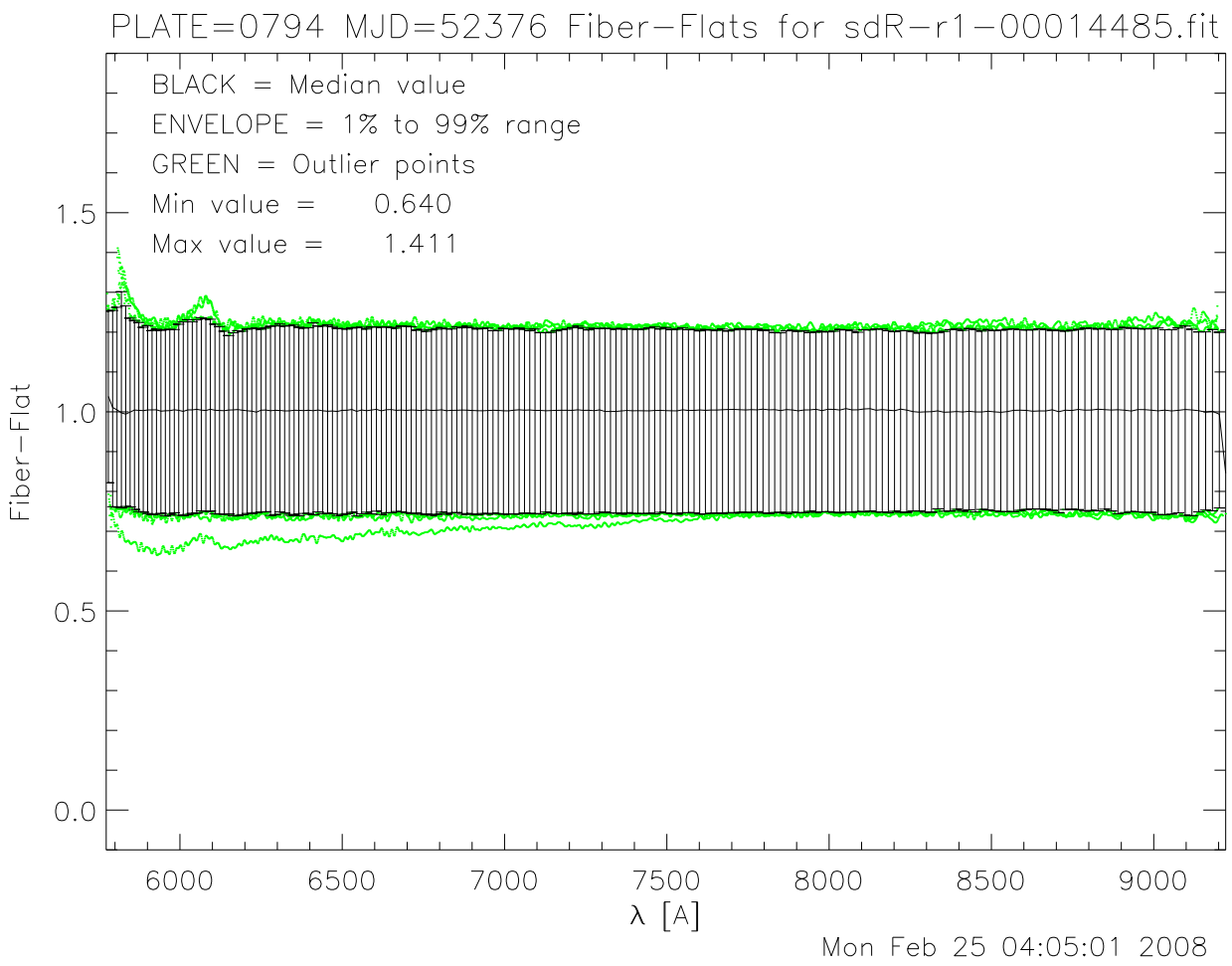

PLATE=0794 MJD=52376 sdR-r1-00014488.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

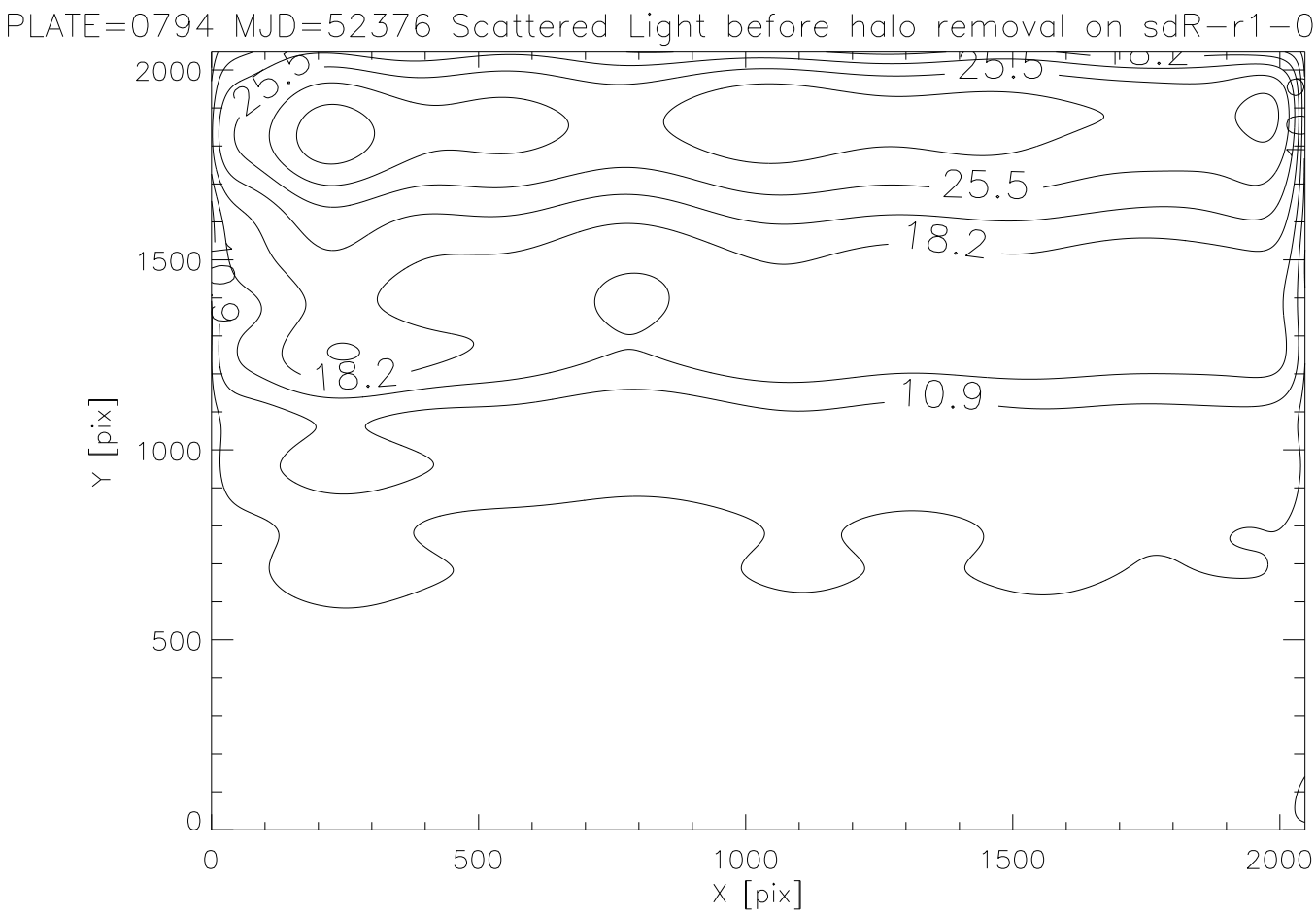

PLATE=0794 MJD=52376 sdR-r1-00014488.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
-5.0×10^3
8820
8840
8860
8880
8900
λ [A]

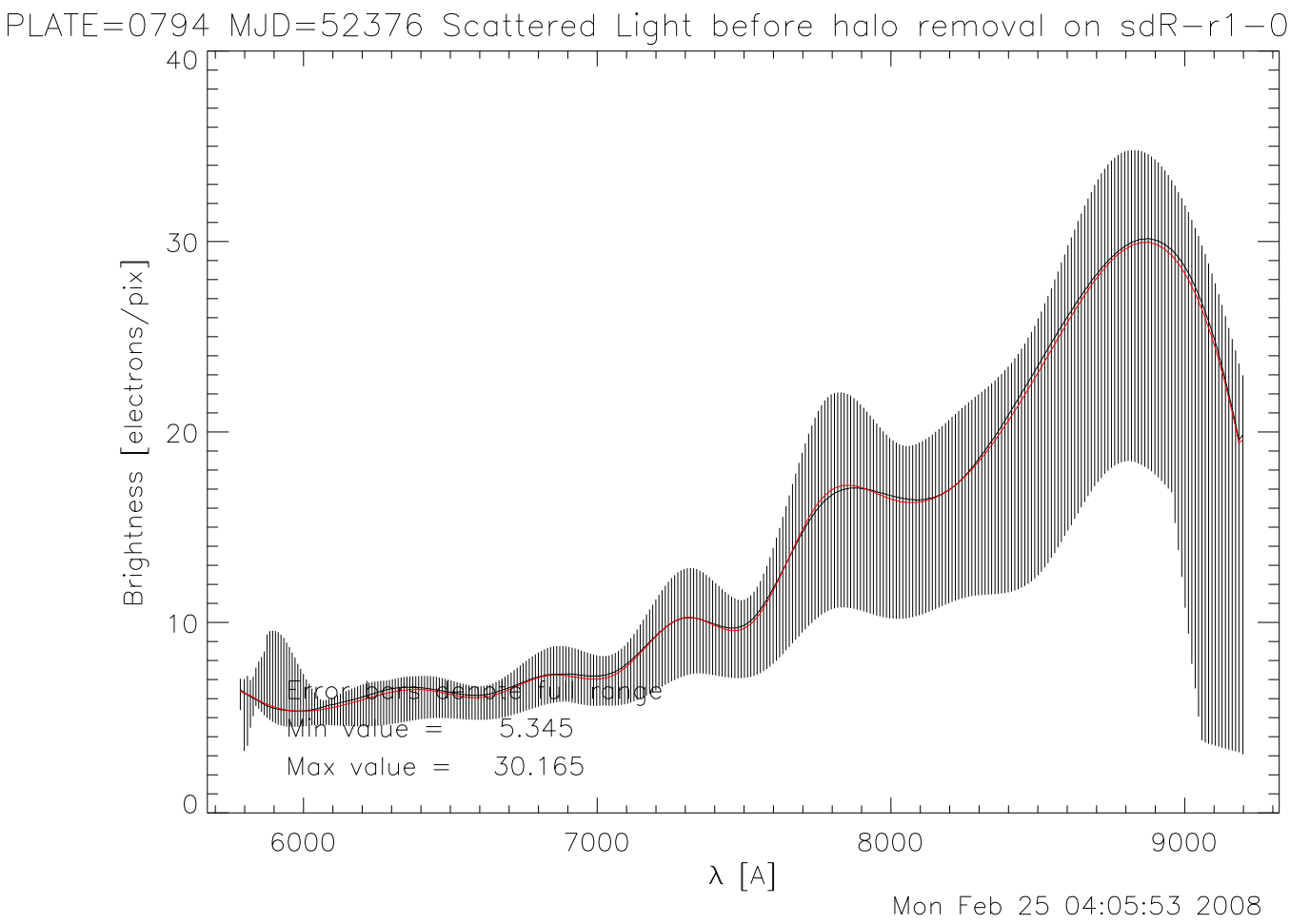

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r1-00014488.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

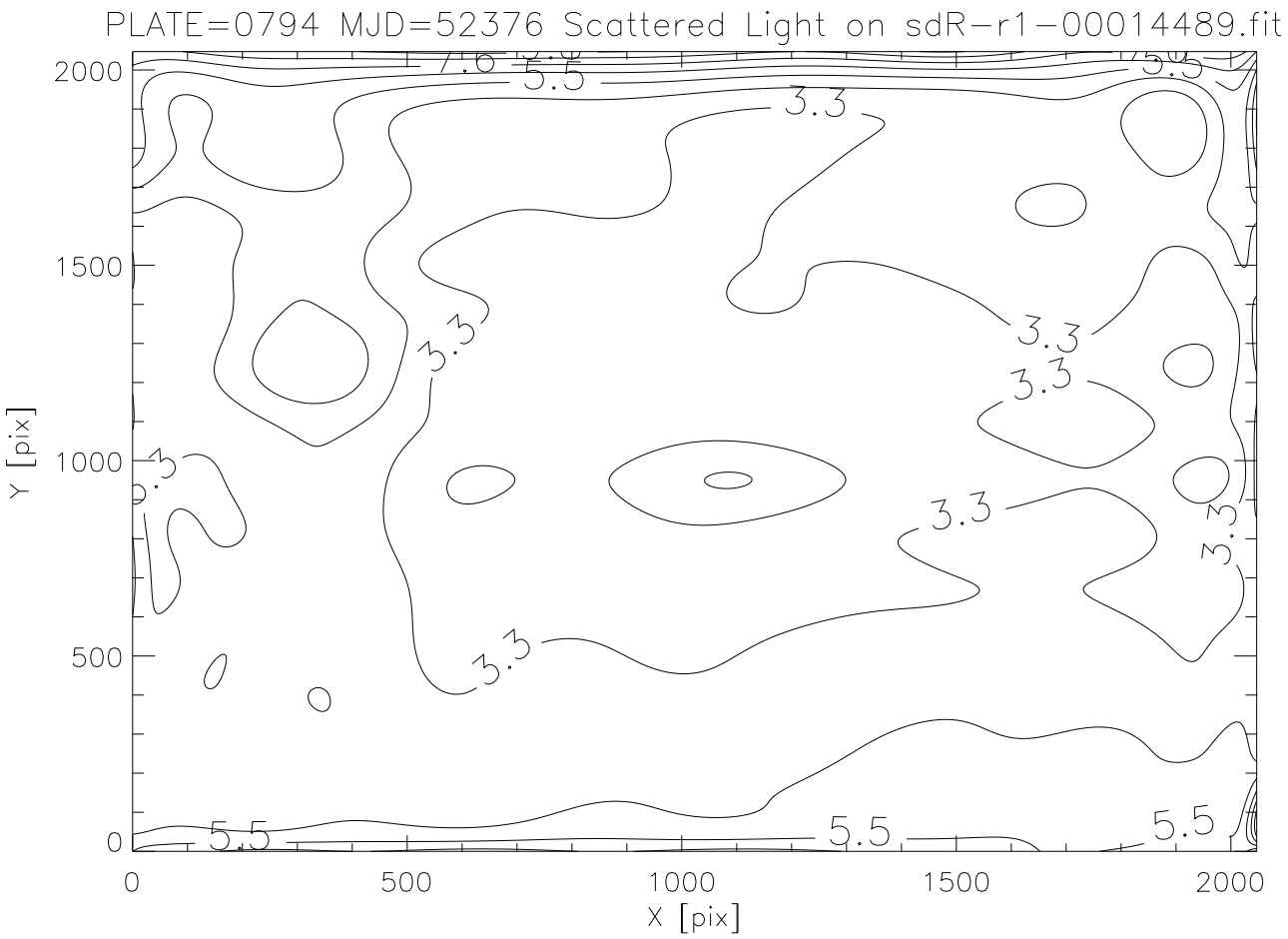

PLATE=0794 MJD=52376 sdR-r1-00014488.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.86 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

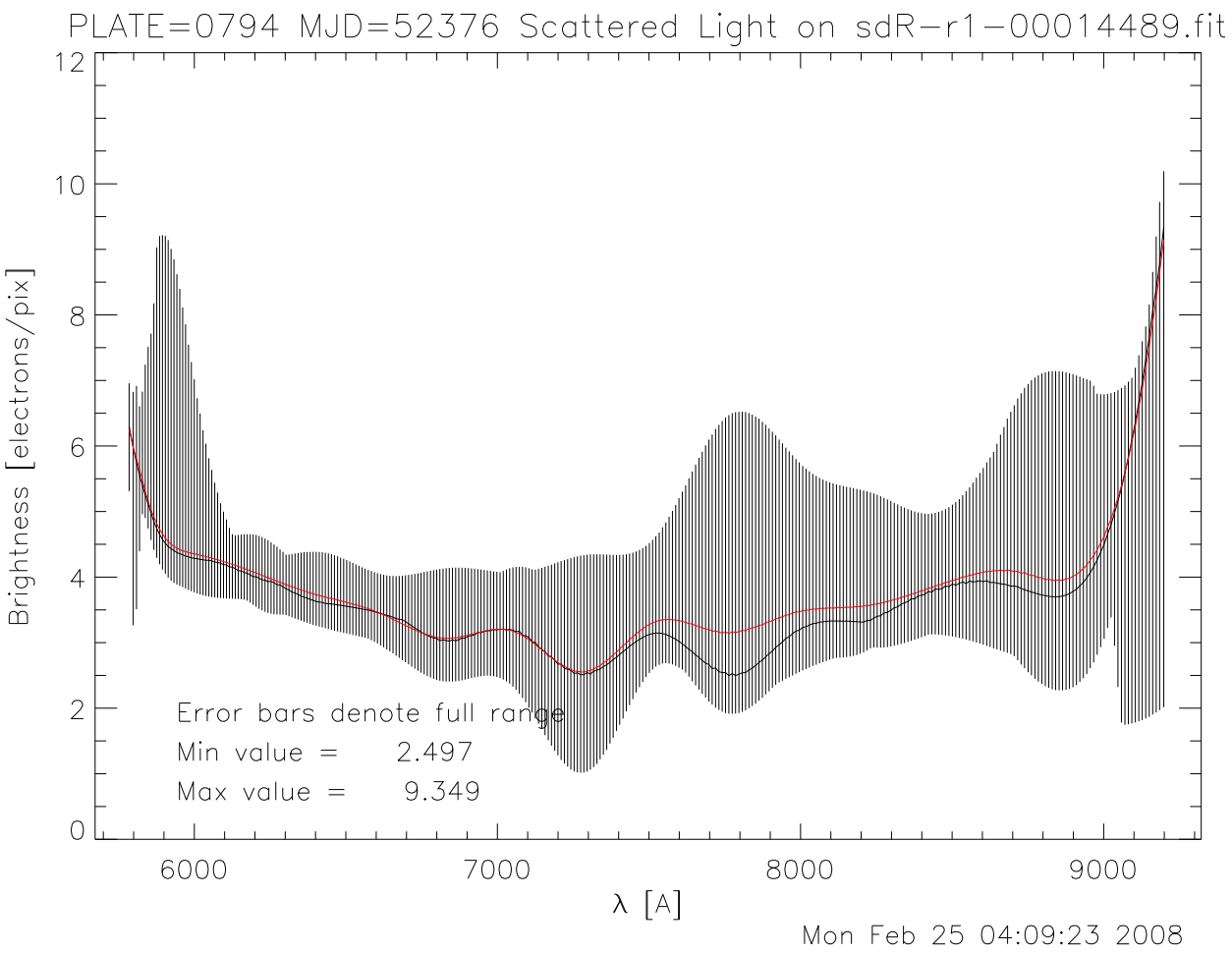

PLATE=0794 MJD=52376 sdR-r1-00014488.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.85 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

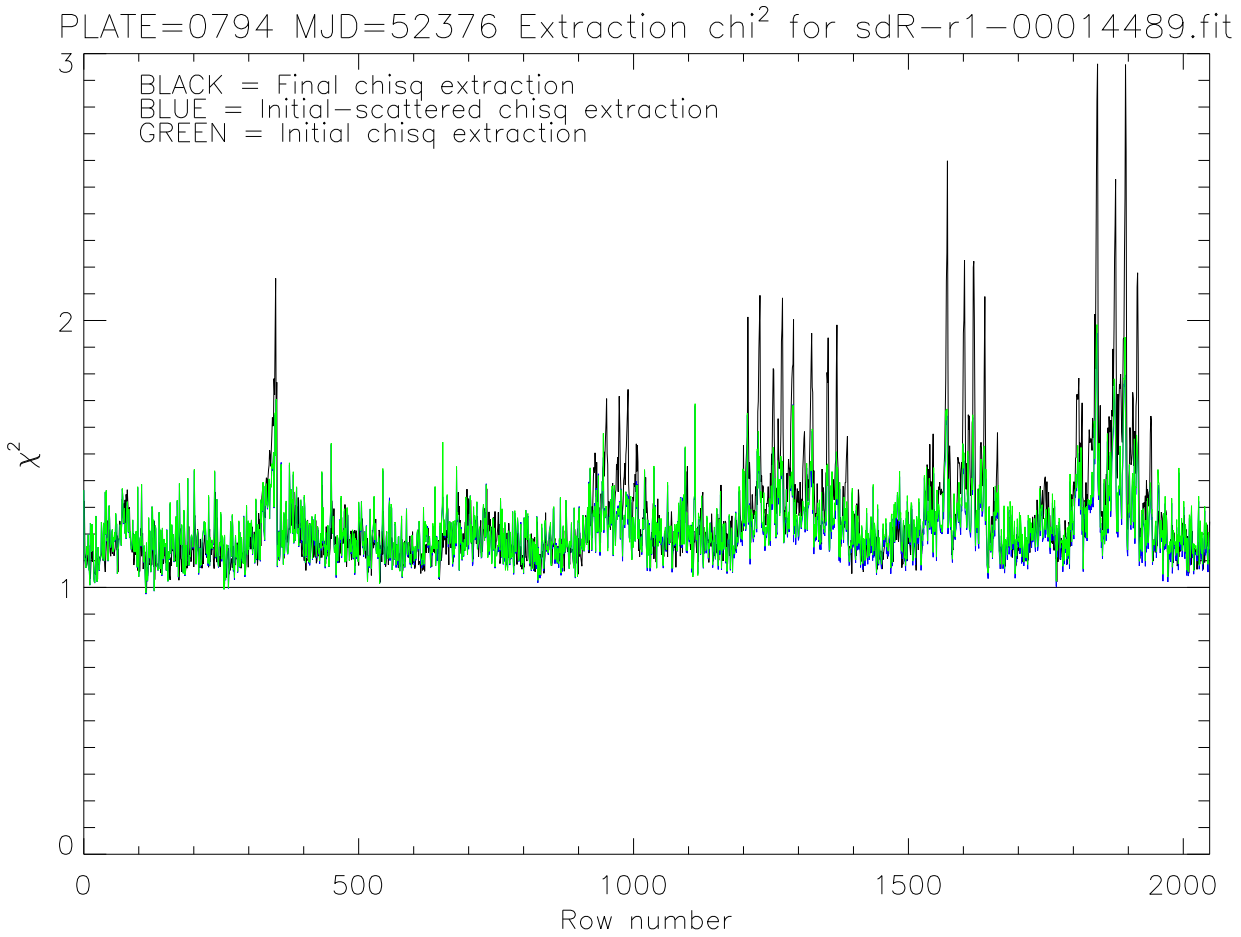

PLATE=0794 MJD=52376 Fiber−Flats for sdR−r1−00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.640
Max value = 1.411
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 04:05:01 2008

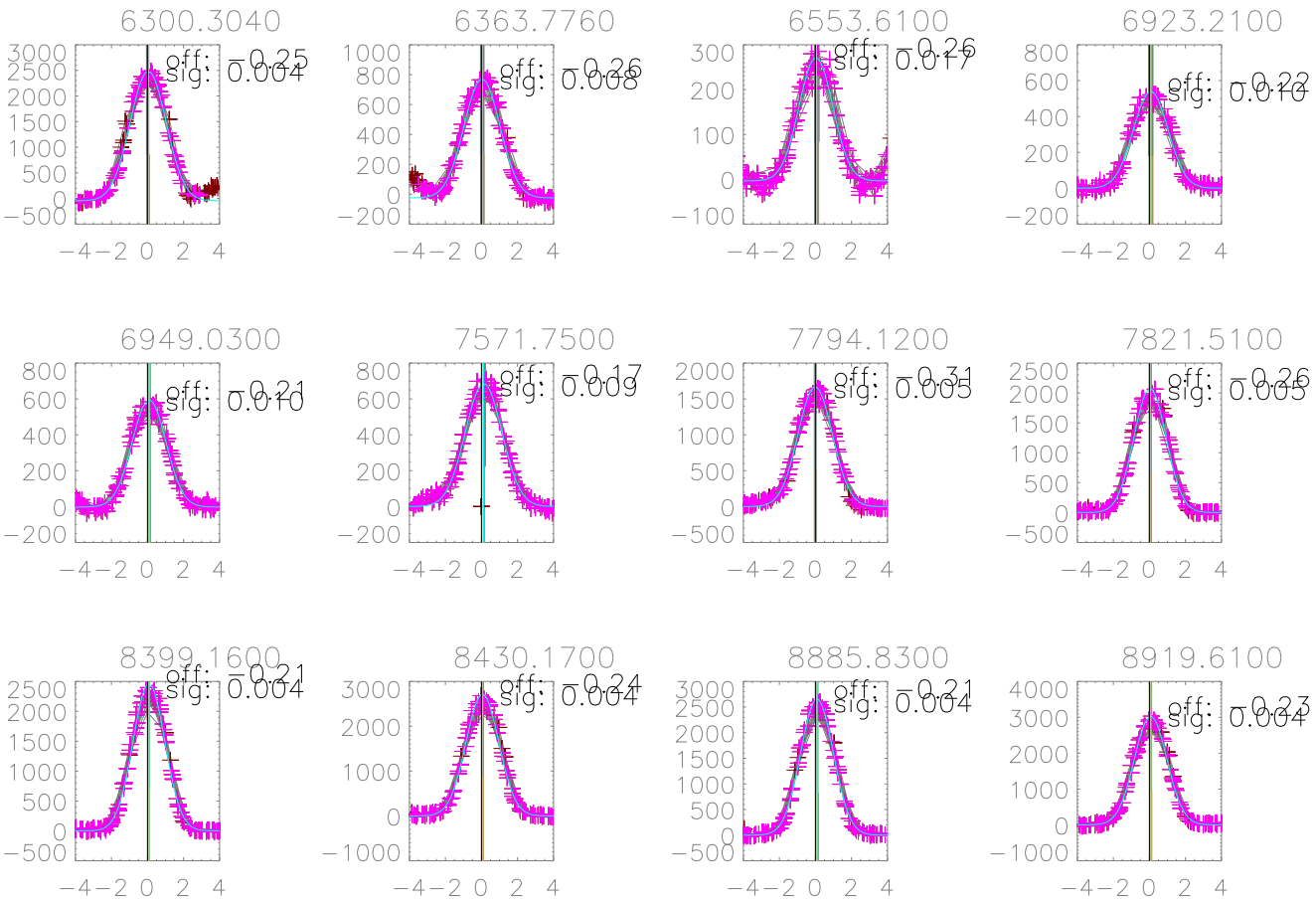

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR−r1−00014489.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

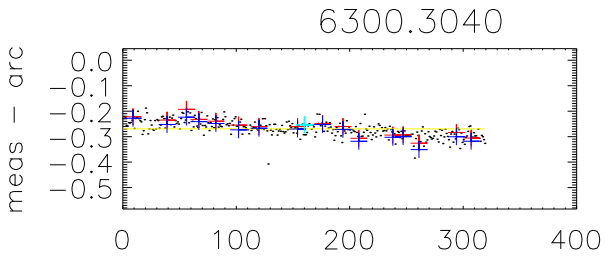

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r1-00014489.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.345
Max value = 30.165
Mon Feb 25 04:05:53 2008

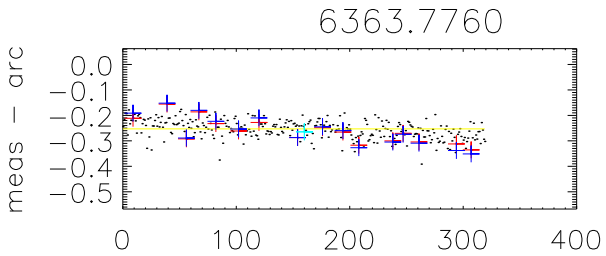

PLATE=0794 MJD=52376 Scattered Light on sdR-r1-00014489.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3

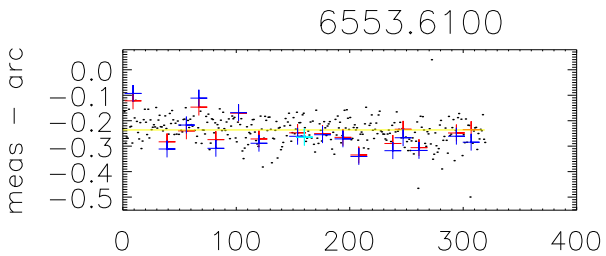

PLATE=0794 MJD=52376 Scattered Light on sdR-r1-00014489.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.497
Max value = 9.349
Mon Feb 25 04:09:23 2008

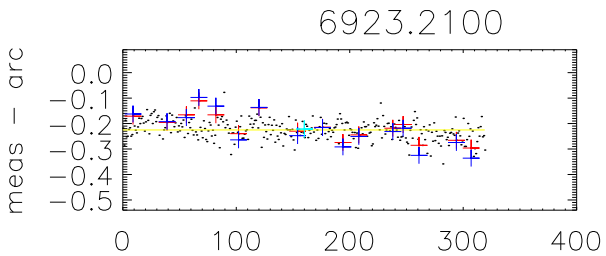

PLATE=0794 MJD=52376 Extraction chi^2 for sdR−r1−00014489.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

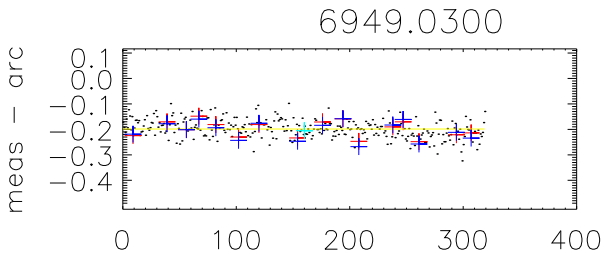

6300.3040
off: −0.25
sig: 0.004
6363.7760
off: −0.26
sig: 0.008
6553.6100
off: −0.26
sig: 0.017
6923.2100
off: −0.22
sig: 0.010
6949.0300
off: −0.21
sig: 0.010
7571.7500
off: −0.17
sig: 0.009
7794.1200
off: −0.31
sig: 0.005
7821.5100
off: −0.26
sig: 0.005
8399.1600
off: −0.21
sig: 0.004
8430.1700
off: −0.24
sig: 0.004
8885.8300
off: −0.21
sig: 0.004
8919.6100
off: −0.23
sig: 0.004

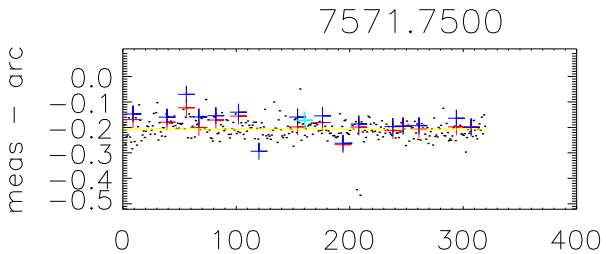

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

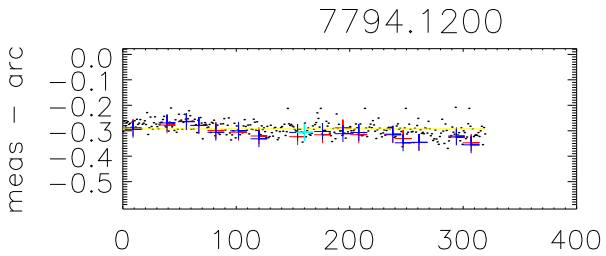

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

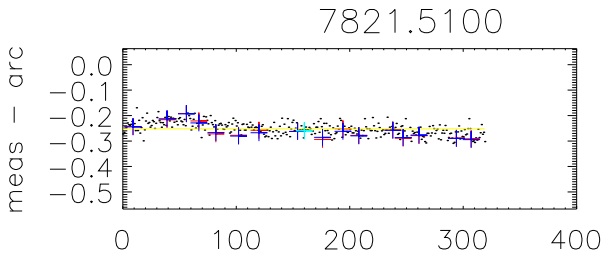

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

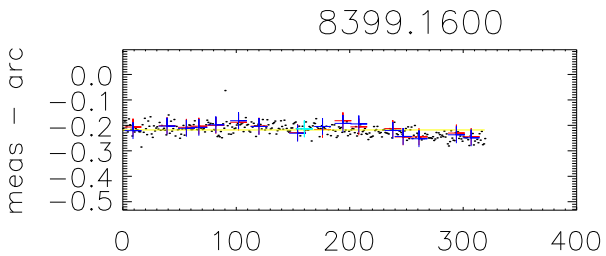

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

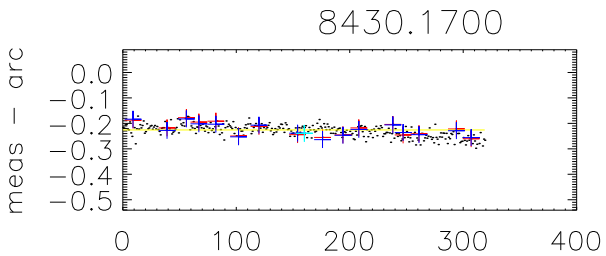

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

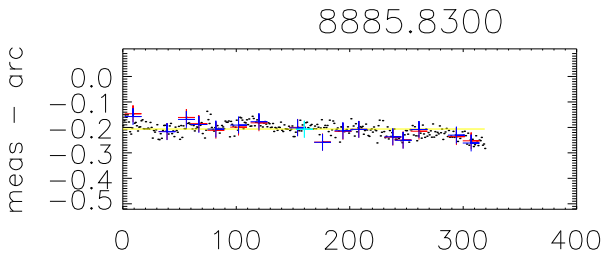

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

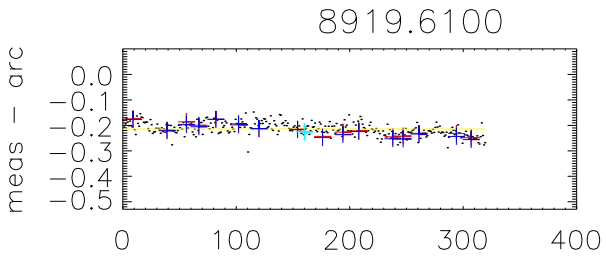

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

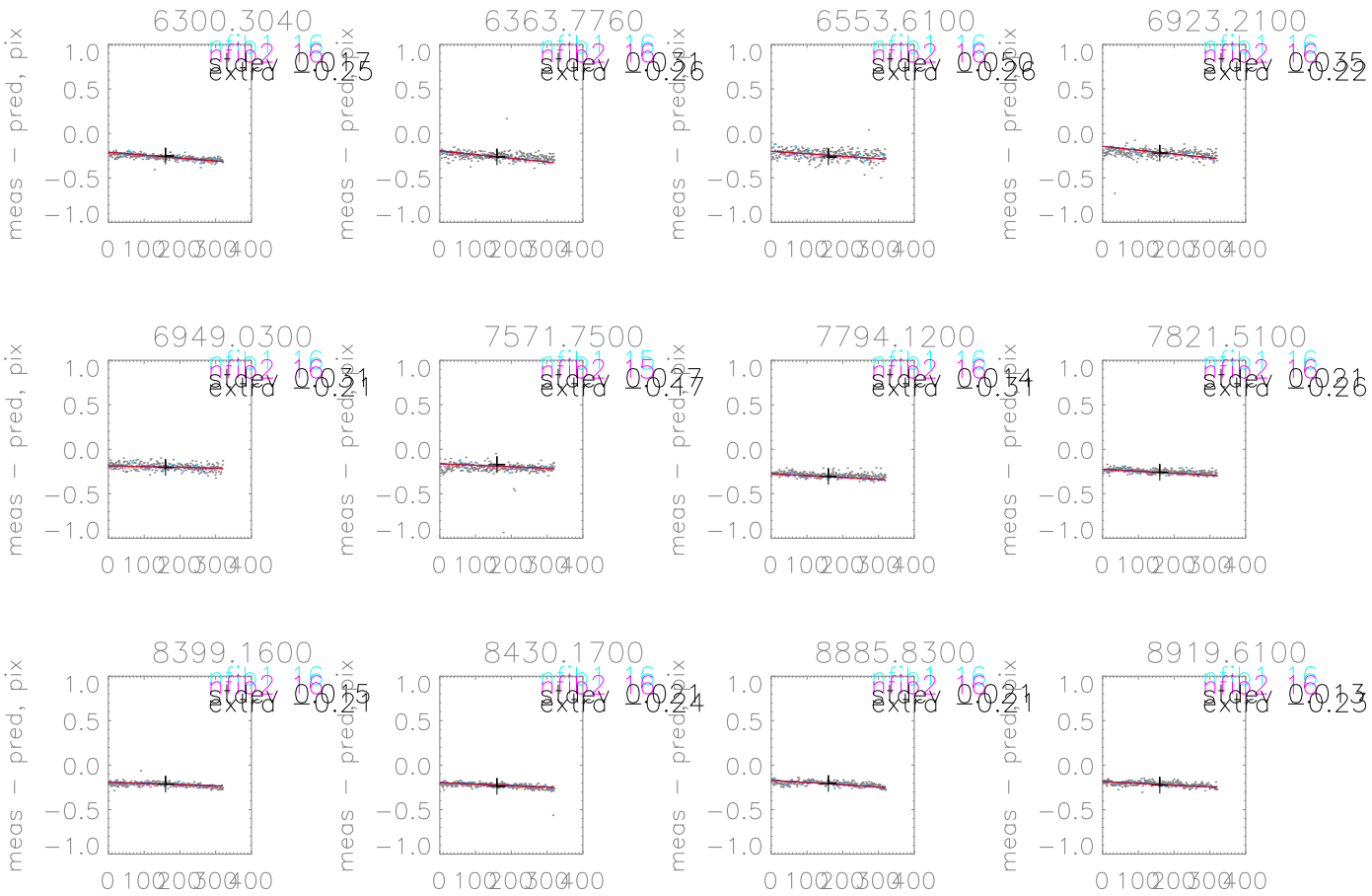

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

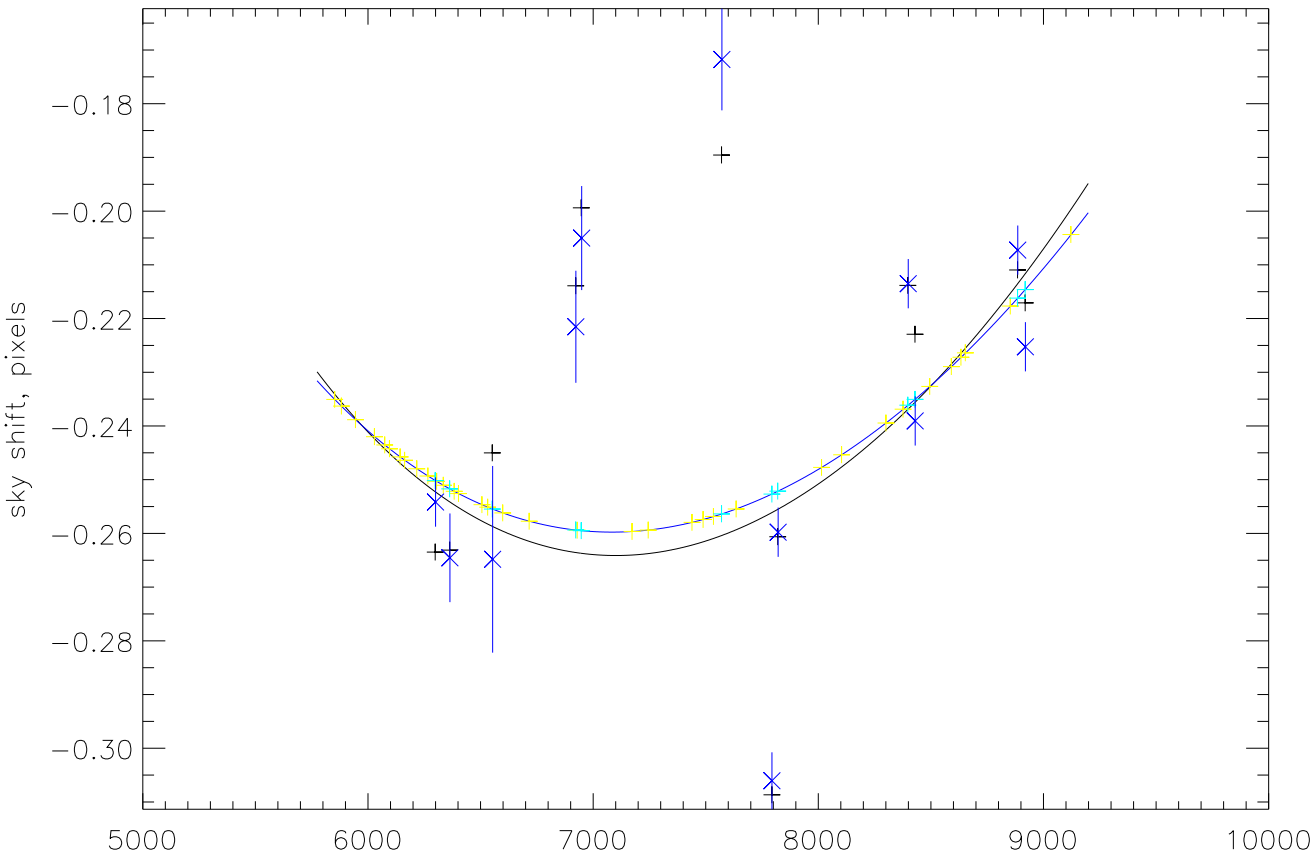

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

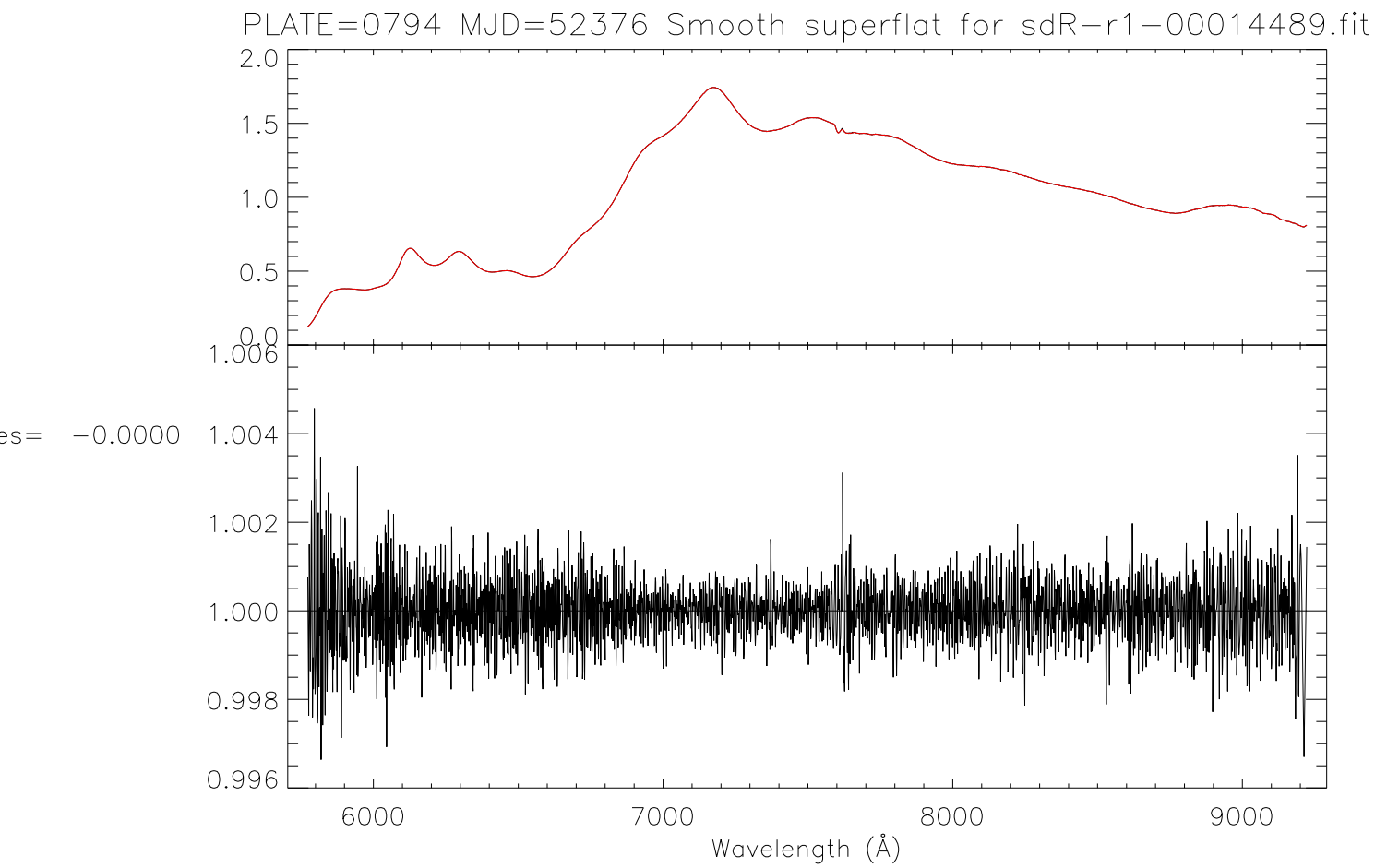

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

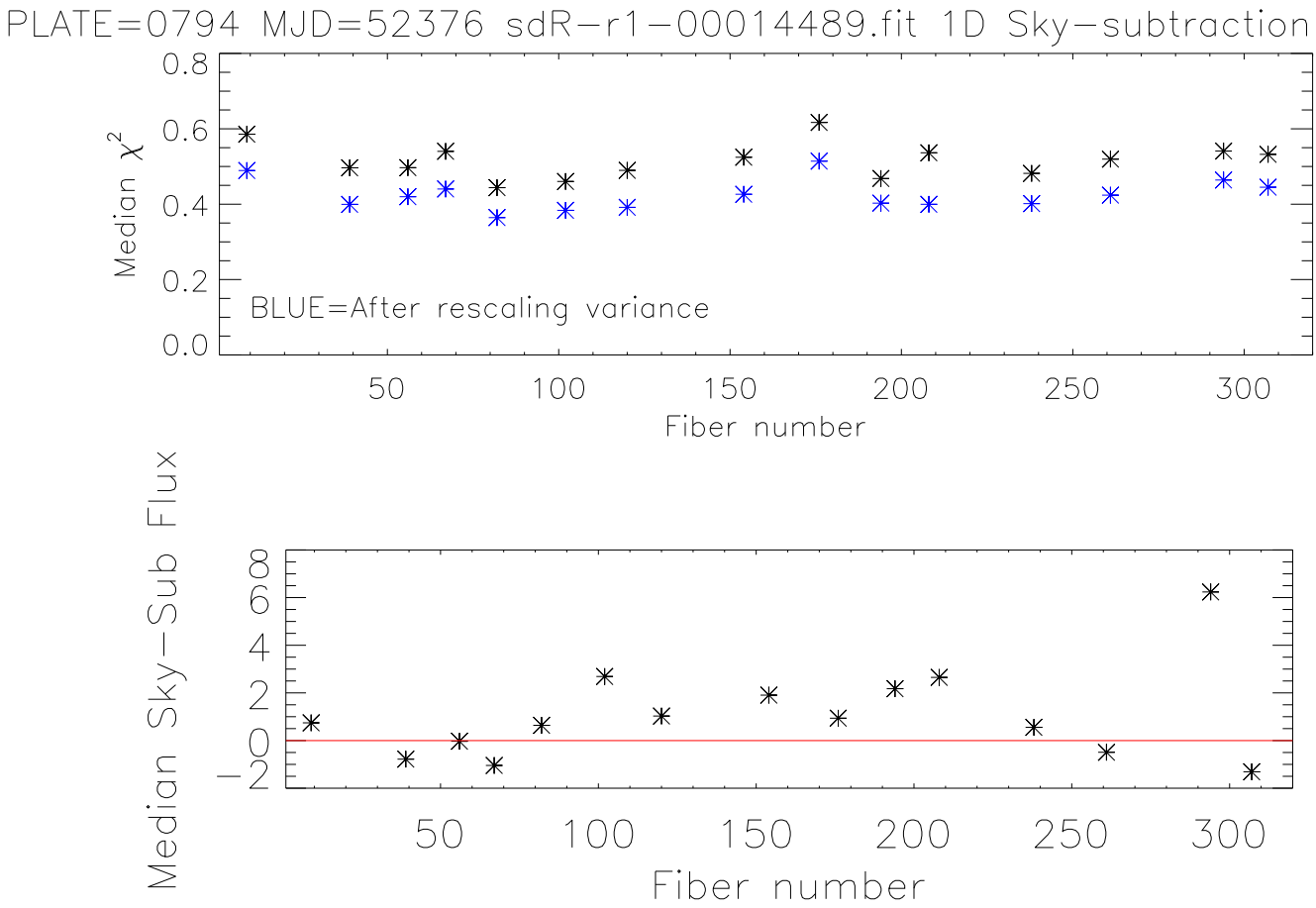

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

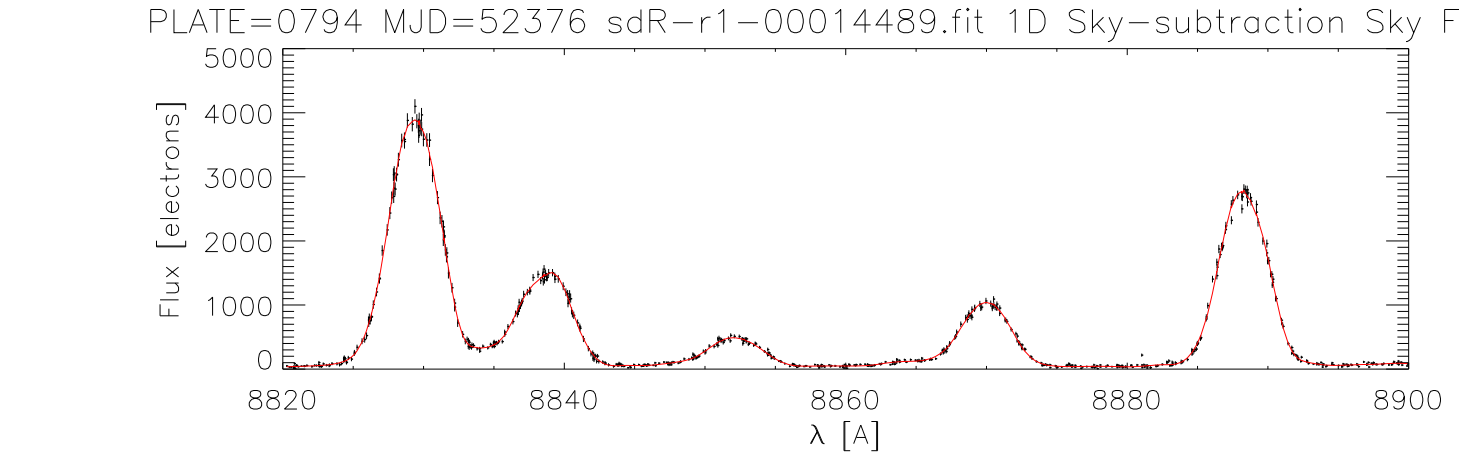

6300.3040
mfib1 16
mfib2 16
stdev 0.17
extra 0.25
6363.7760
mfib1 16
mfib2 16
stdev 0.31
extra 0.26
6553.6100
mfib1 16
mfib2 16
stdev 0.50
extra 0.26
6923.2100
mfib1 16
mfib2 16
stdev 0.35
extra 0.22
6949.0300
mfib1 16
mfib2 16
stdev 0.31
extra 0.21
7571.7500
mfib1 15
mfib2 16
stdev 0.27
extra 0.47
7794.1200
mfib1 16
mfib2 16
stdev 0.14
extra 0.31
7821.5100
mfib1 16
mfib2 16
stdev 0.21
extra 0.26
8399.1600
mfib1 16
mfib2 16
stdev 0.15
extra 0.21
8430.1700
mfib1 16
mfib2 16
stdev 0.21
extra 0.24
8885.8300
mfib1 16
mfib2 16
stdev 0.21
extra 0.21
8919.6100
mfib1 16
mfib2 16
stdev 0.13
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

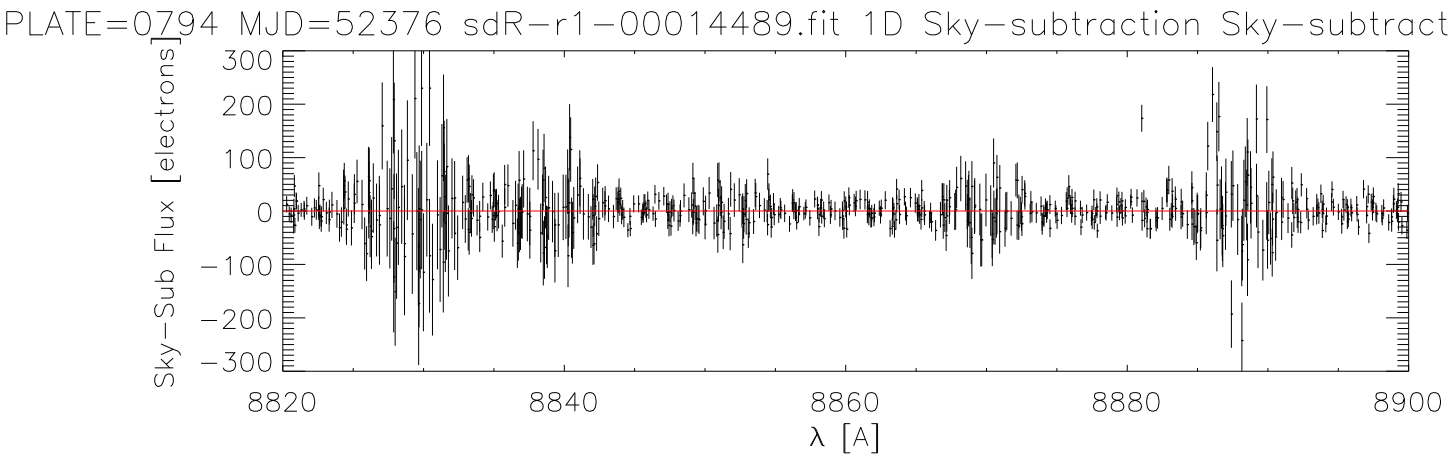

sky shift, pixels
−0.18
−0.20
−0.22
−0.24
−0.26
−0.28
−0.30
5000
6000
7000
8000
9000
10000

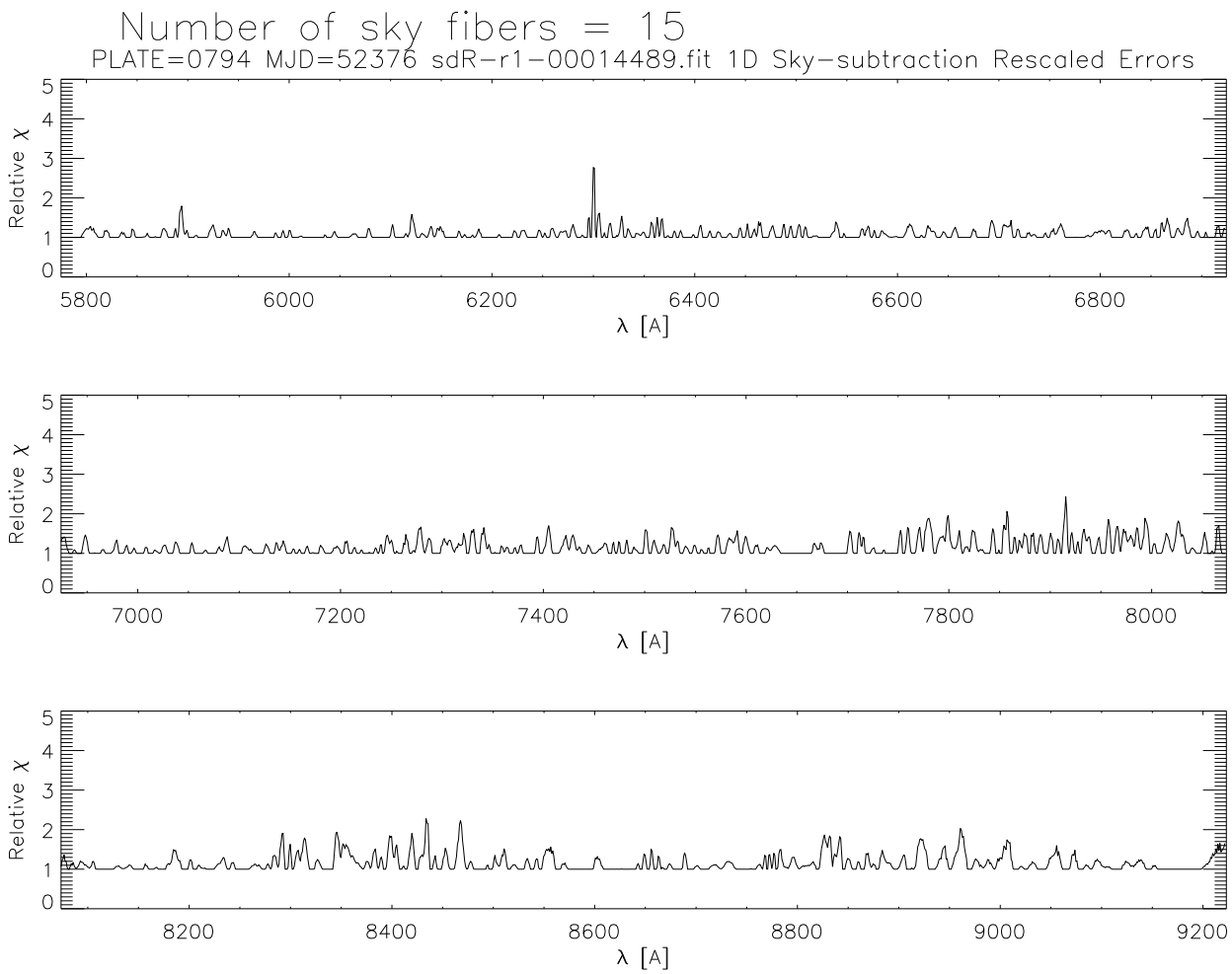

PLATE=0794 MJD=52376 Smooth superflat for sdR-r1-00014489.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.006
1.004
1.002
1.000
0.998
0.996
6000
7000
8000
9000
Wavelength (Å)

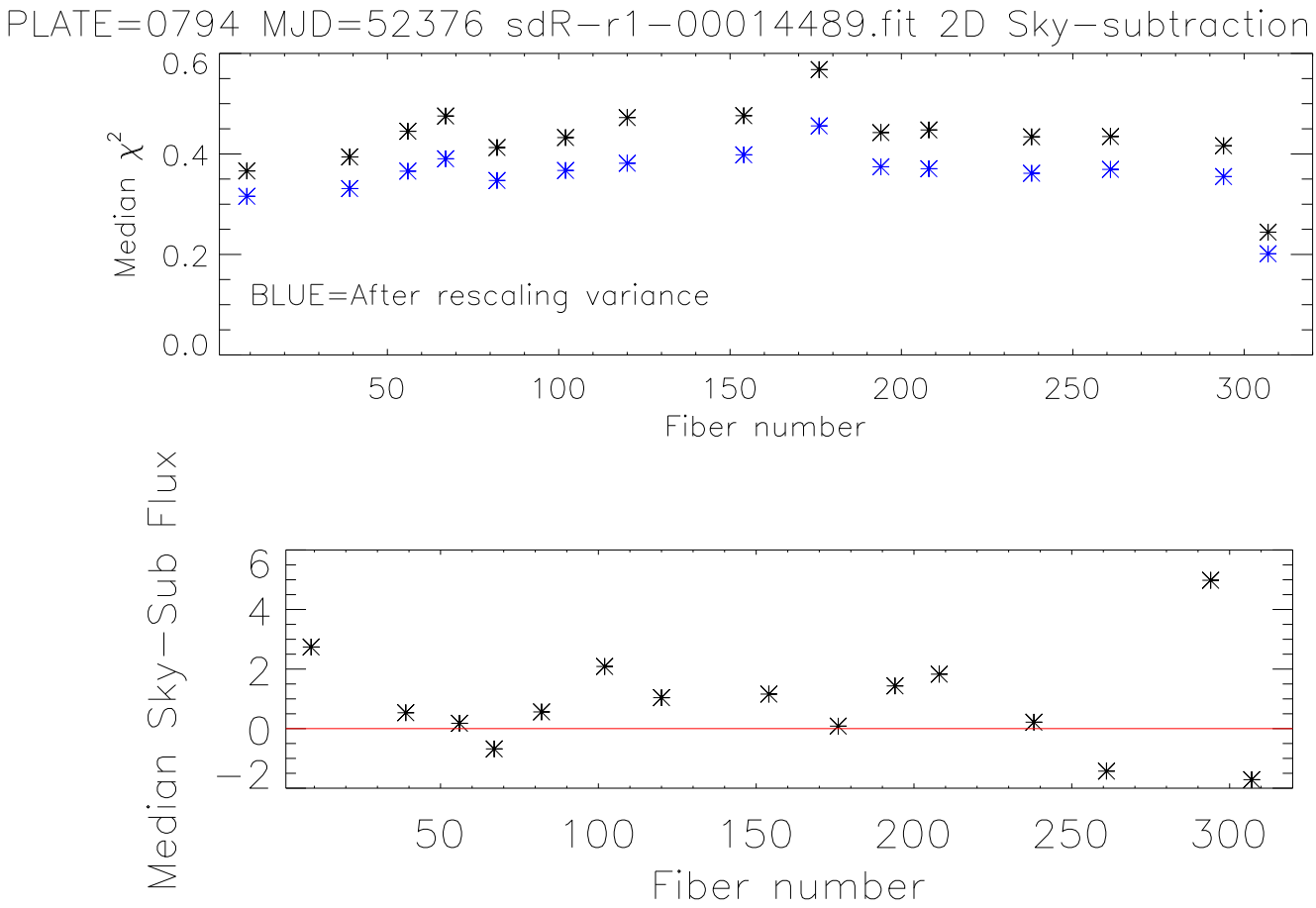

PLATE=0794 MJD=52376 sdR-r1-00014489.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

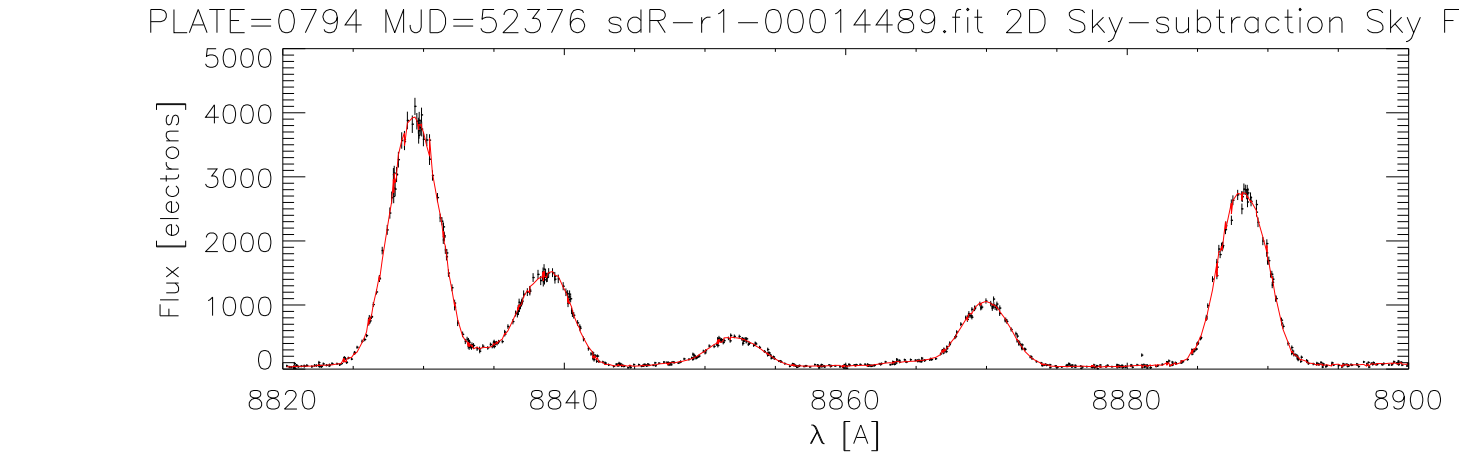
Median Sky-Sub Flux
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

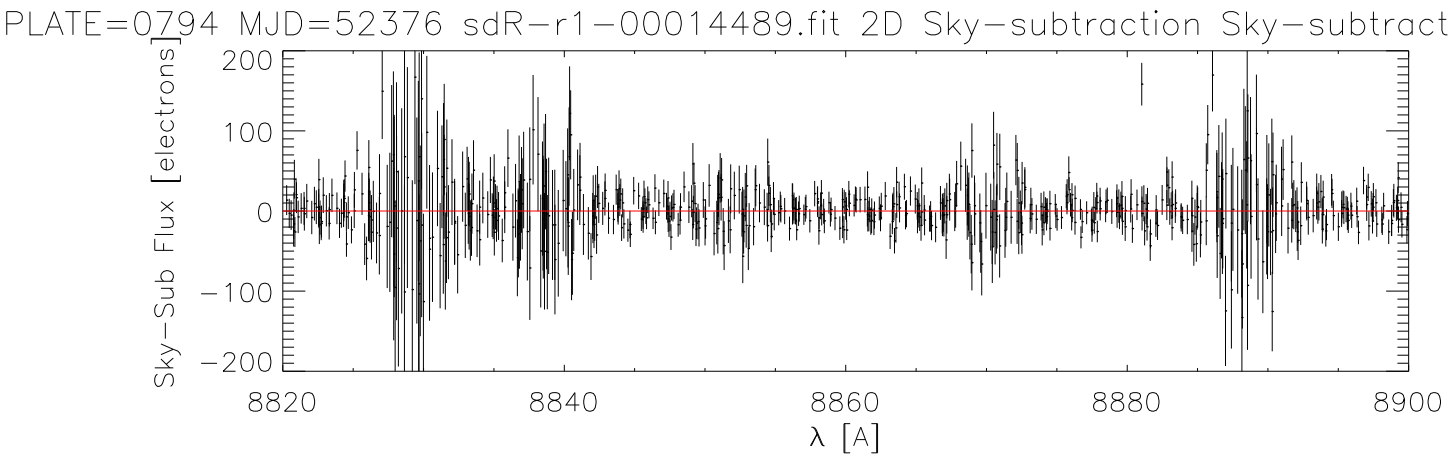

PLATE=0794 MJD=52376 sdR-r1-00014489.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

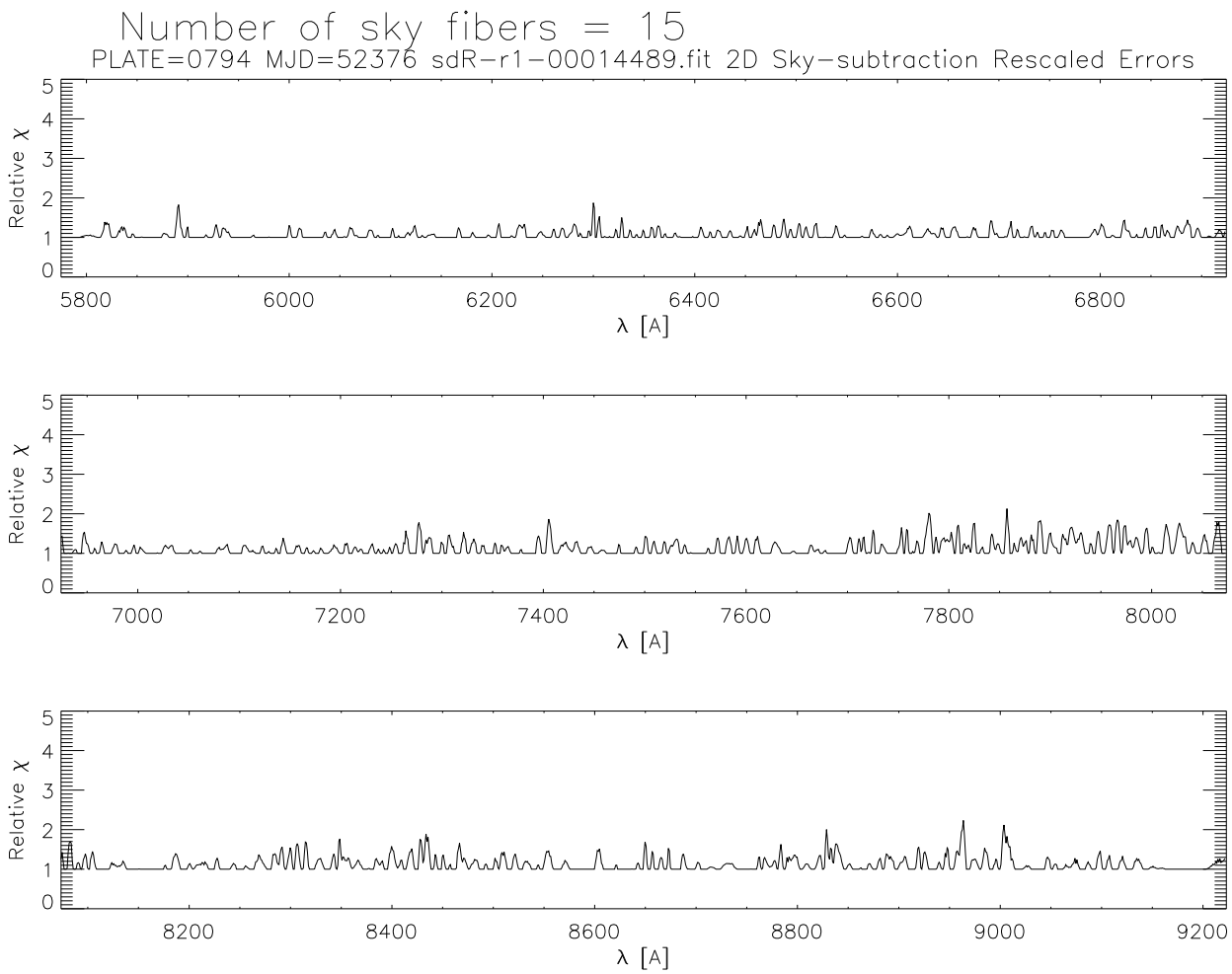

PLATE=0794 MJD=52376 sdR-r1-00014489.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

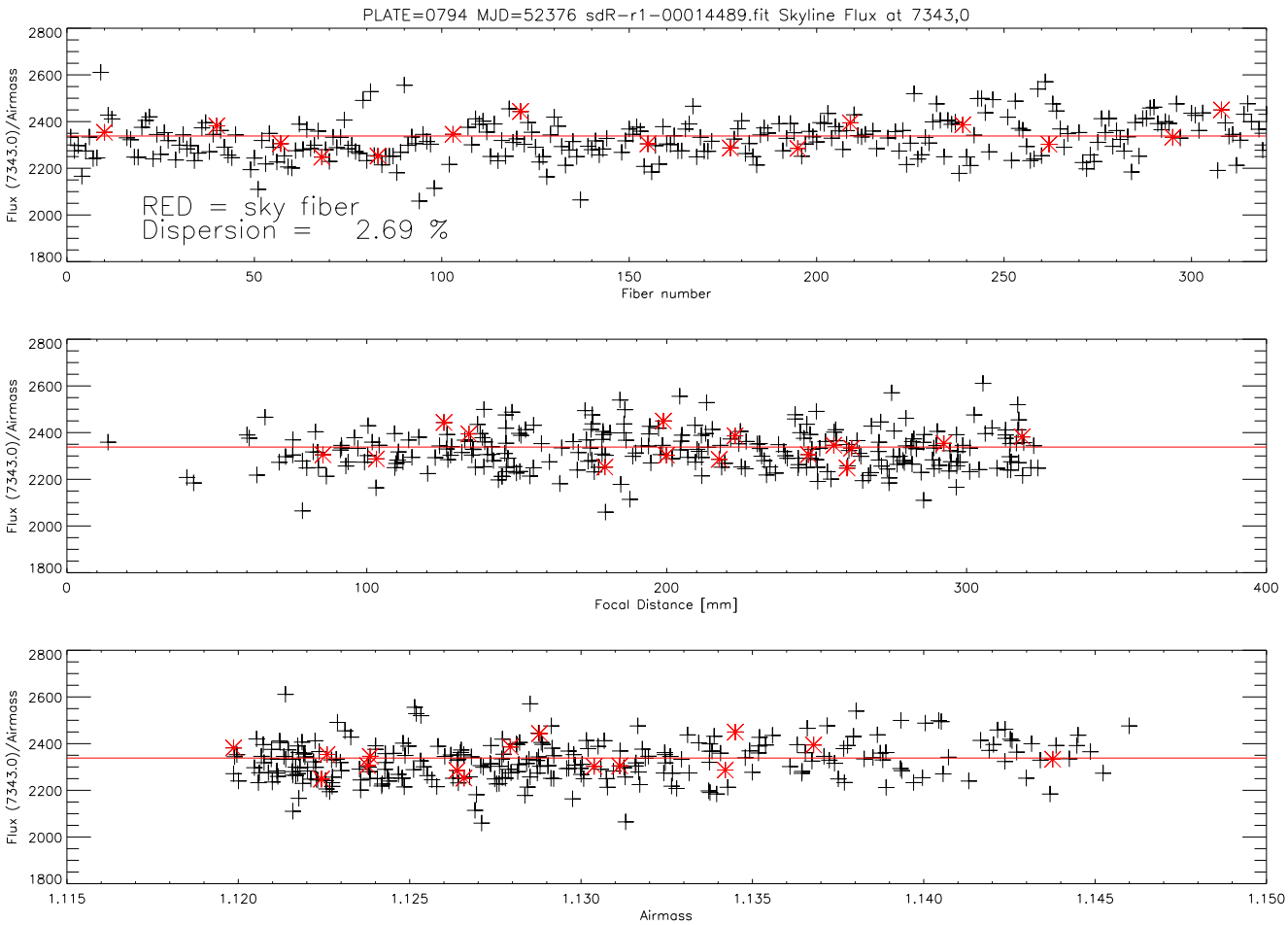

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r1-00014489.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

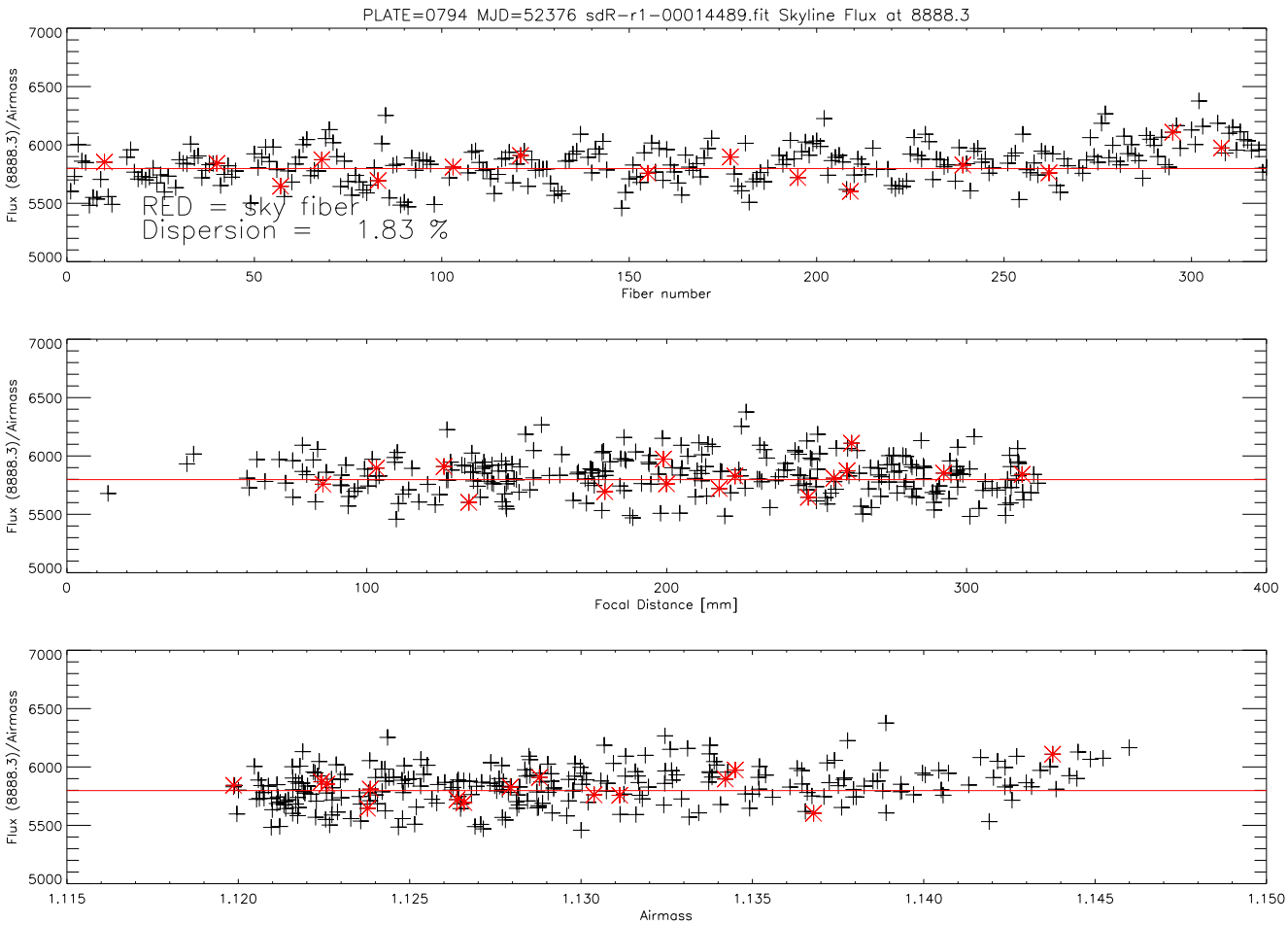

PLATE=0794 MJD=52376 sdR-r1-00014489.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

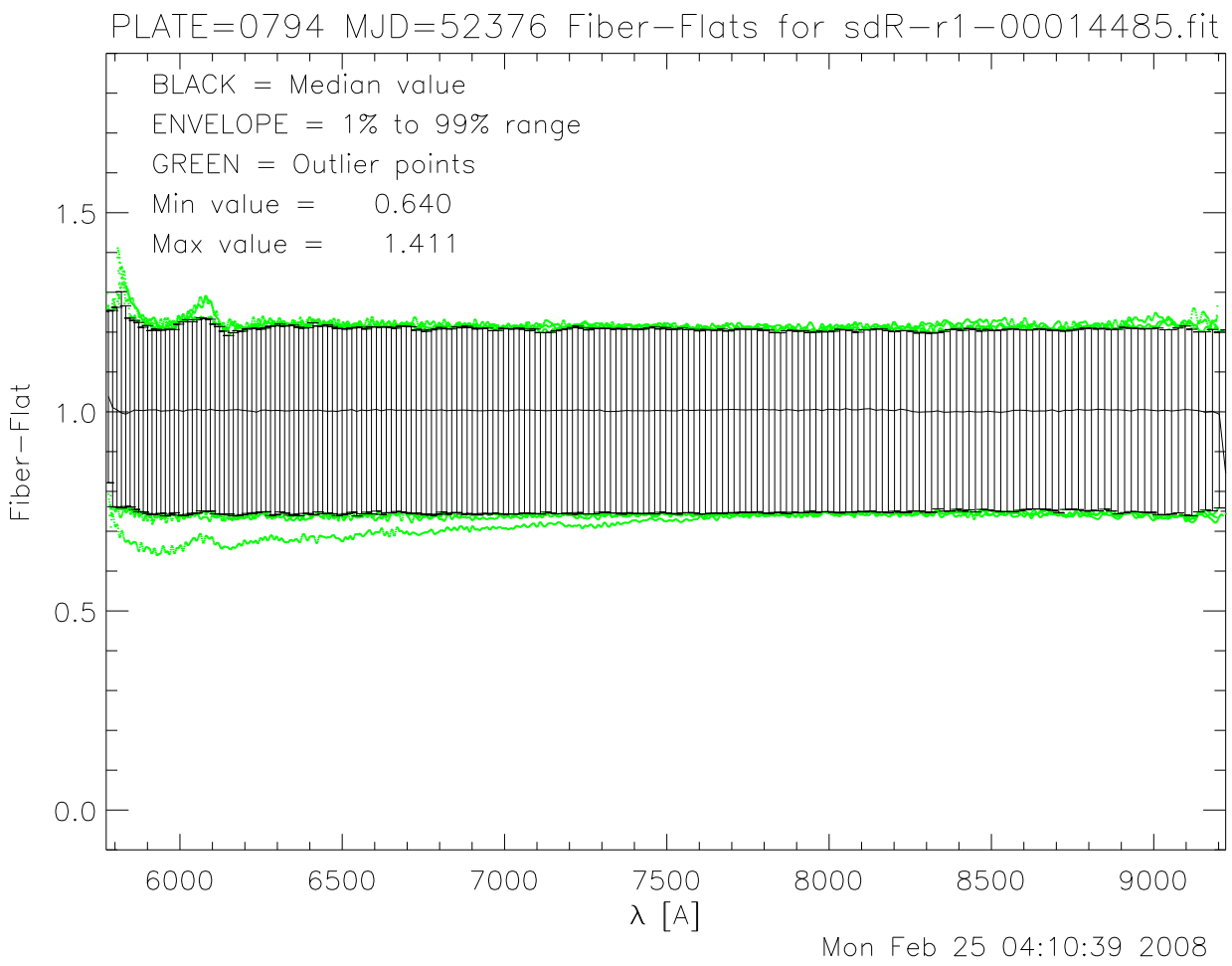

PLATE=0794 MJD=52376 sdR-r1-00014489.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

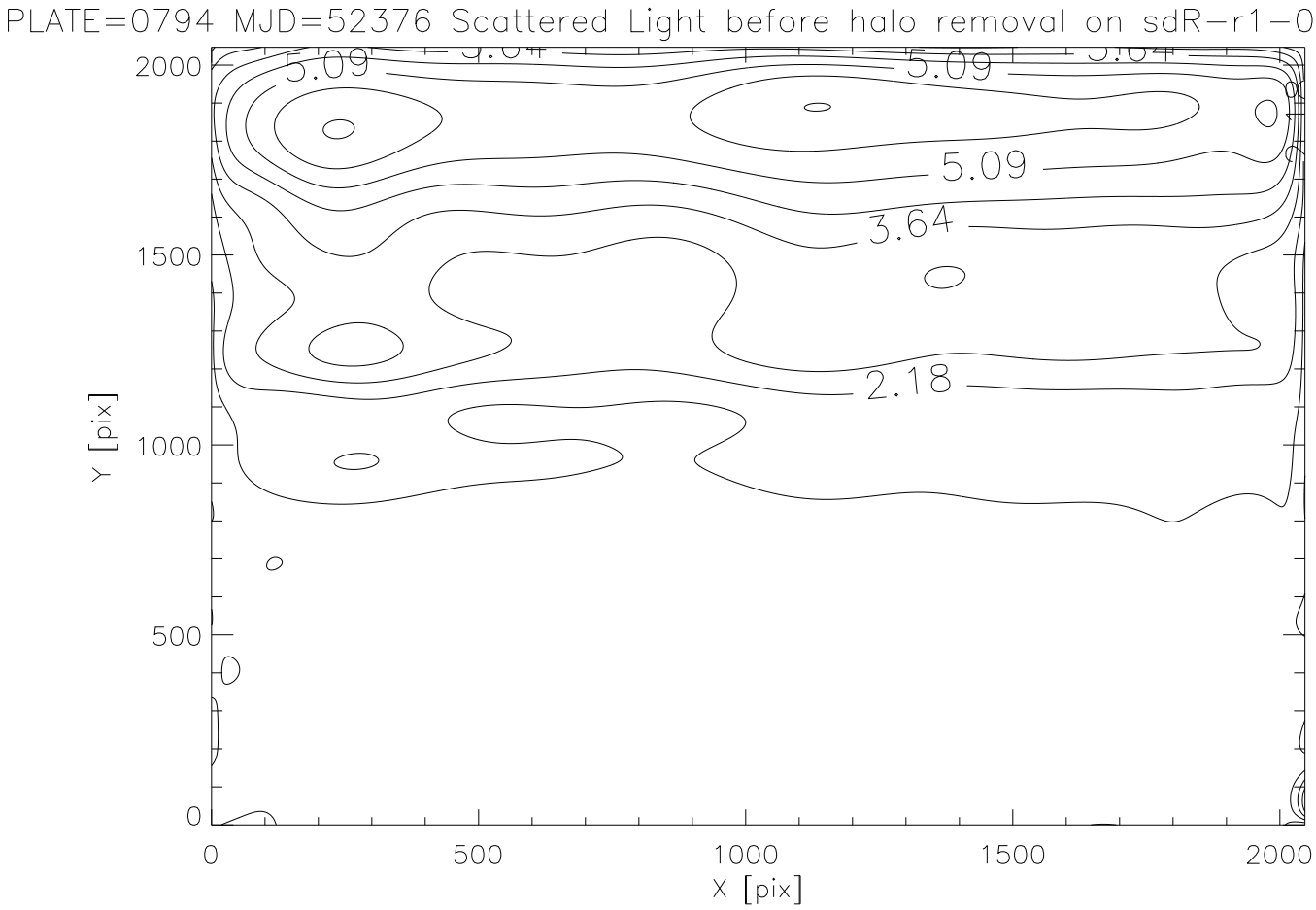

PLATE=0794 MJD=52376 sdR-r1-00014489.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

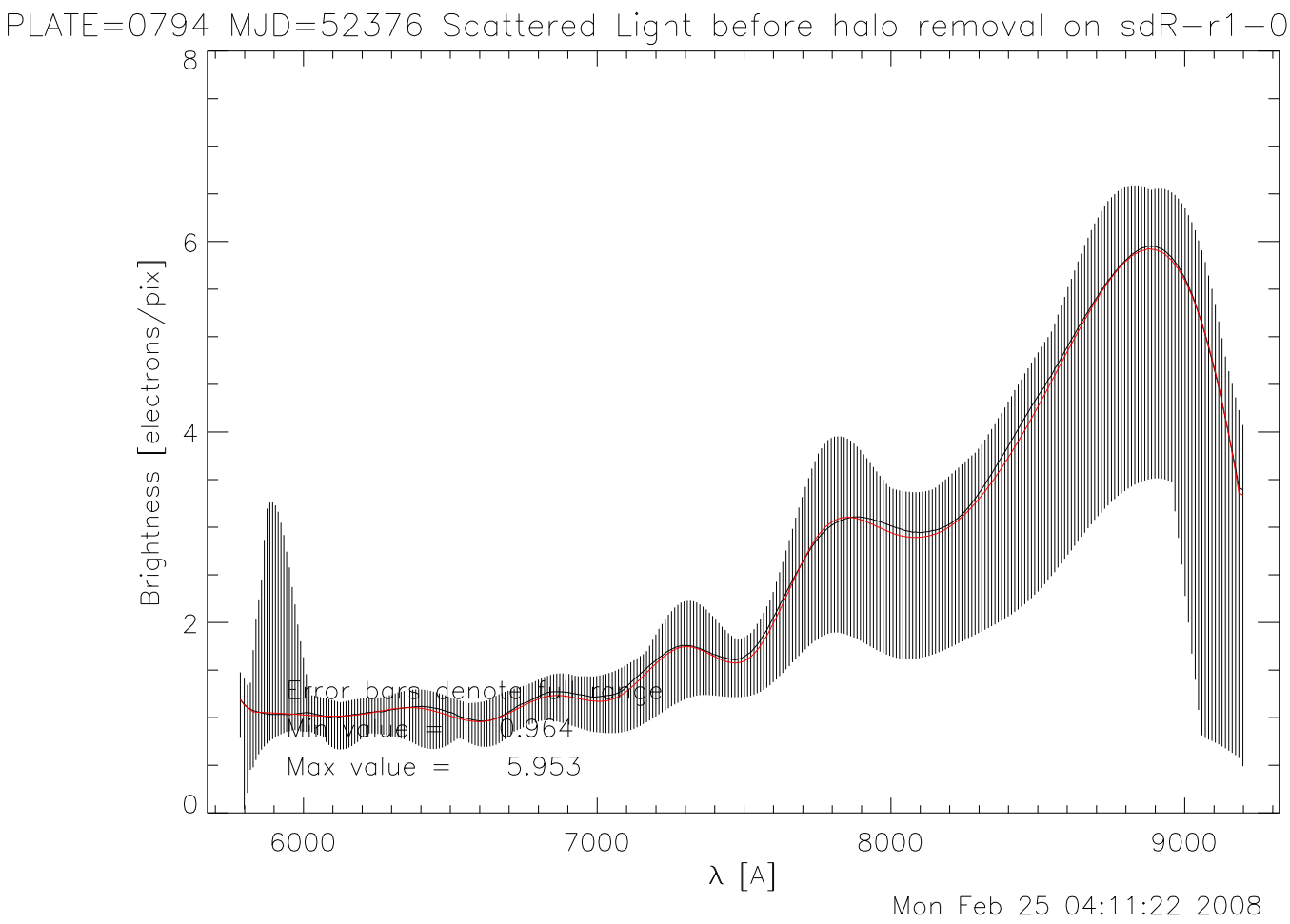

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r1-00014489.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

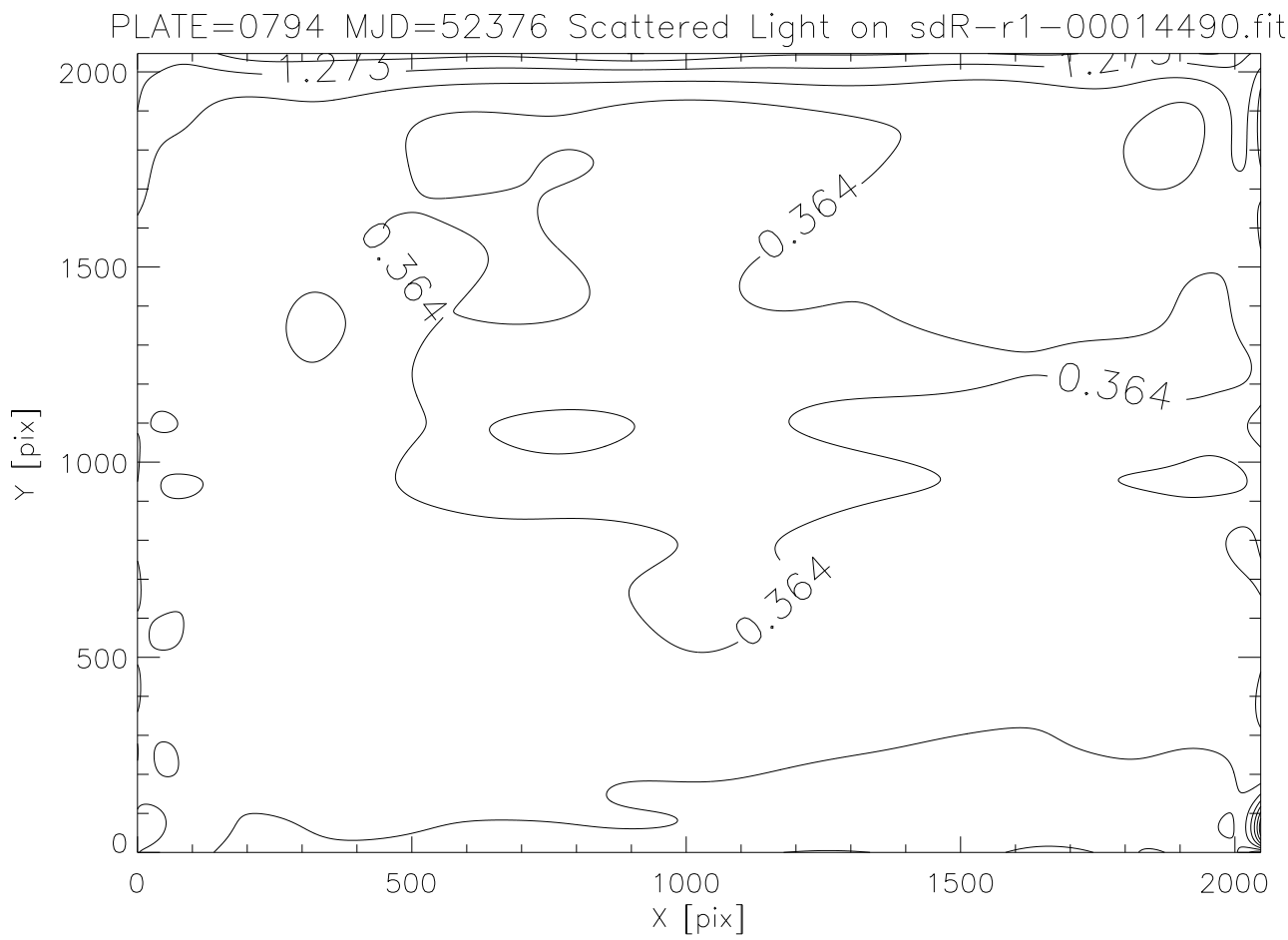

PLATE=0794 MJD=52376 sdR-r1-00014489.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.69 %
Fiber number
Focal Distance [mm]
Airmass

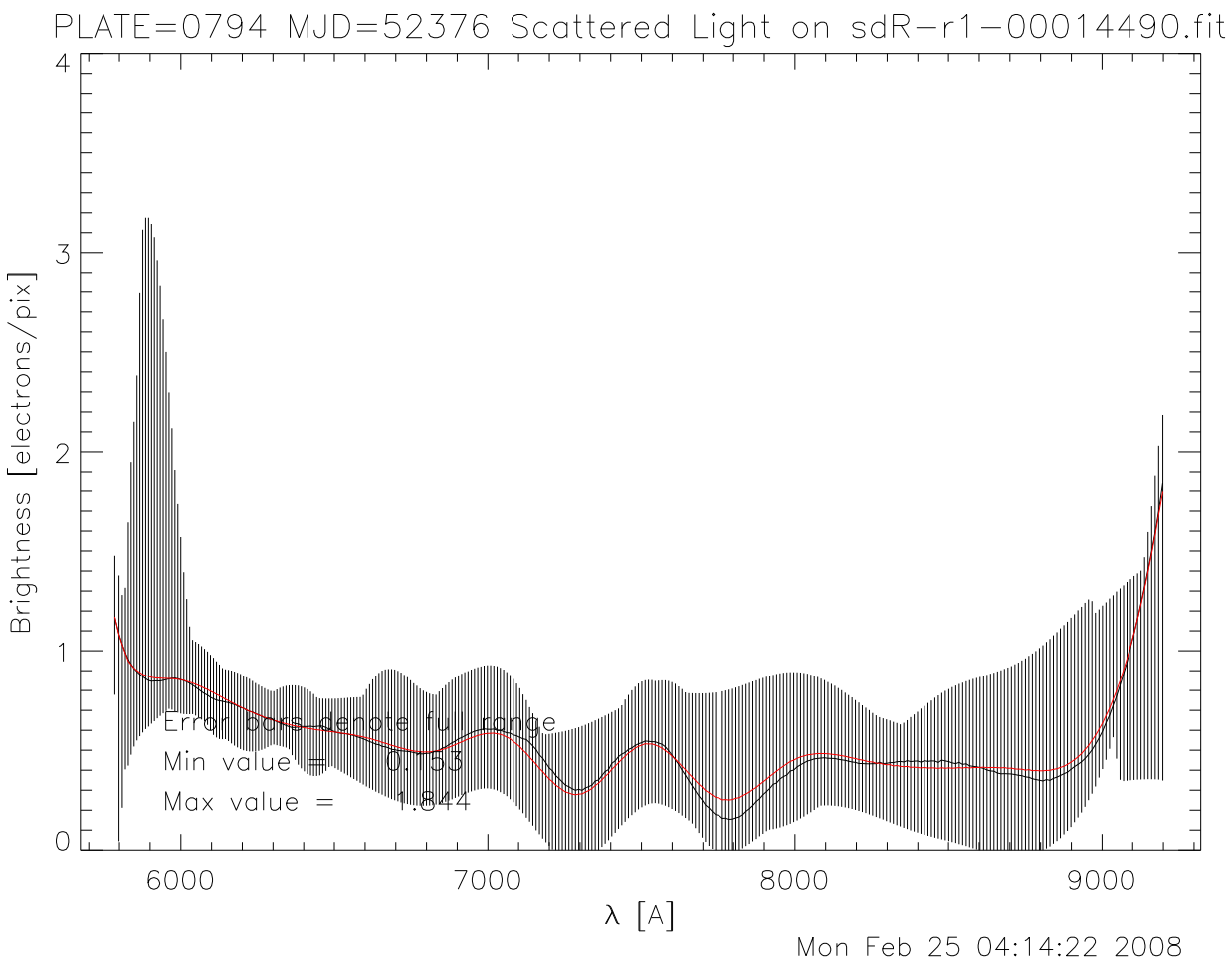

PLATE=0794 MJD=52376 sdR-r1-00014489.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.83 %
Fiber number
Focal Distance [mm]
Airmass

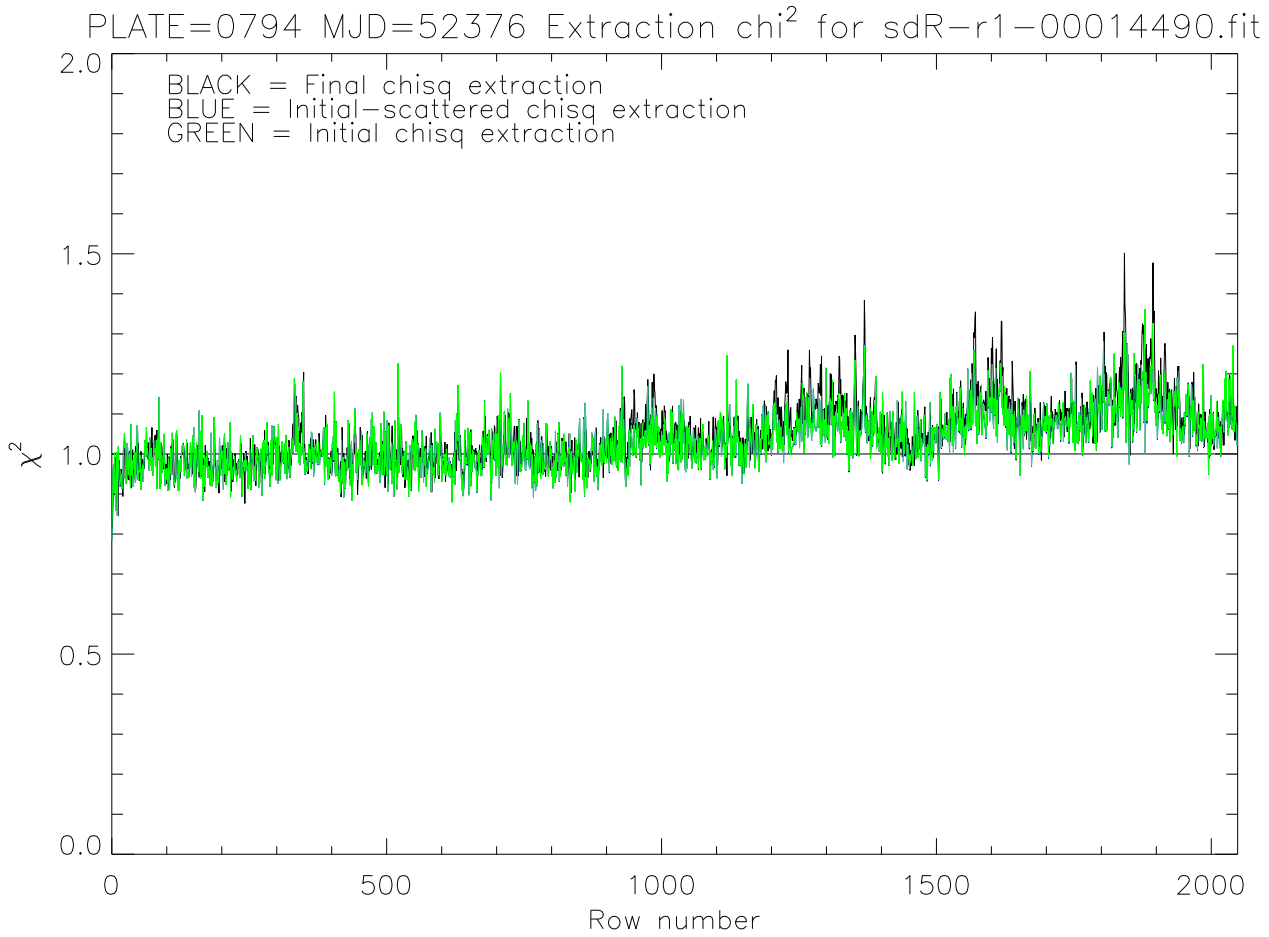

PLATE=0794 MJD=52376 Fiber−Flats for sdR−r1−00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.640
Max value = 1.411
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 04:10:39 2008

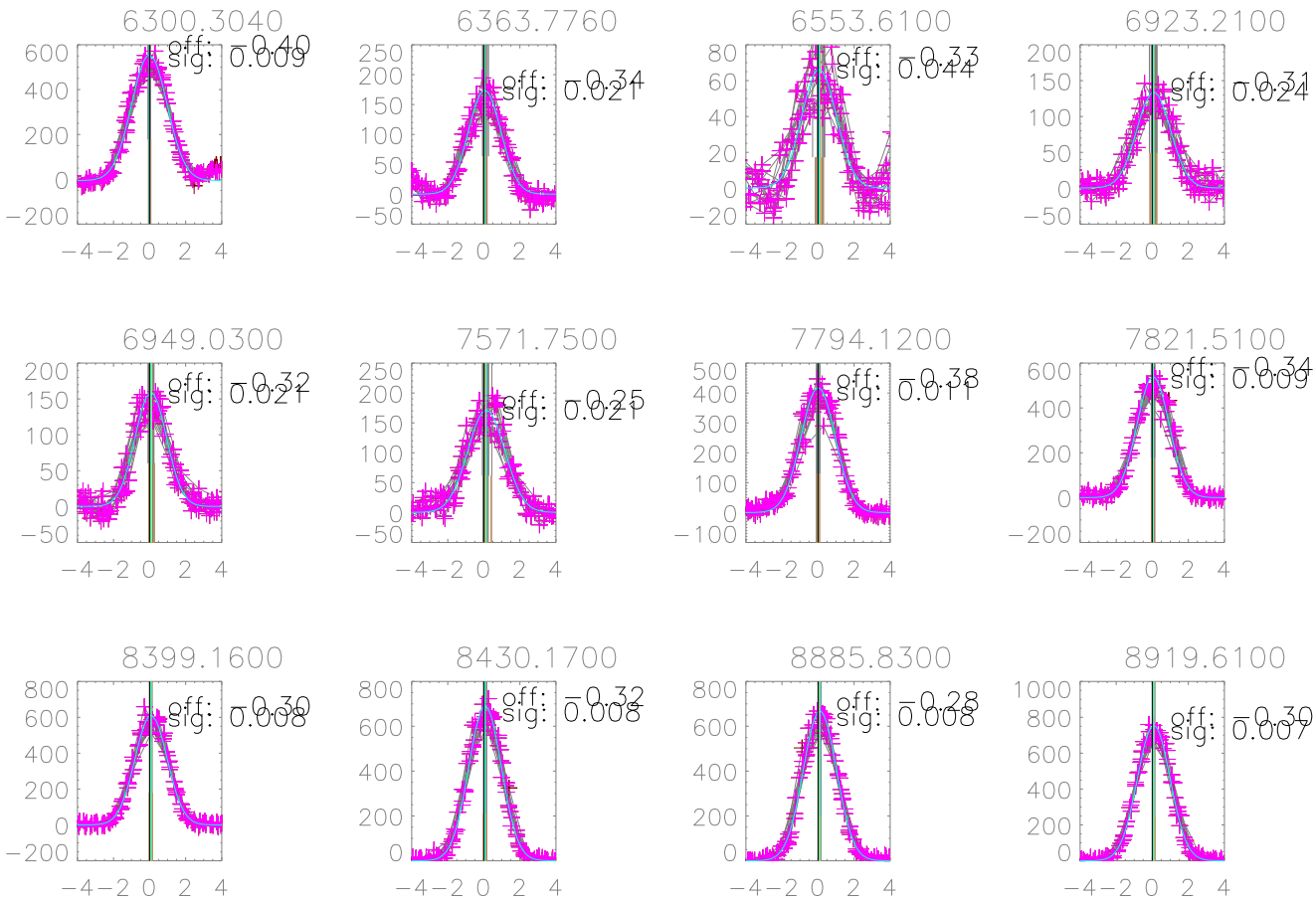

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r1-00014490.fi
5.09
5.09
5.09
3.64
2.18
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

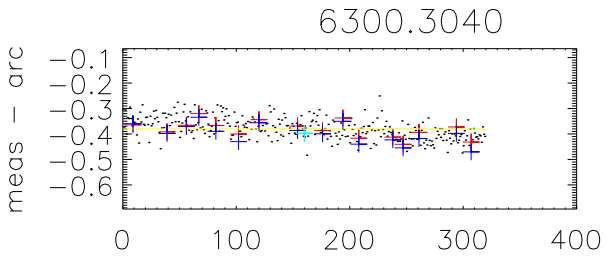

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r1-00014490.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.964
Max value = 5.953
Mon Feb 25 04:11:22 2008

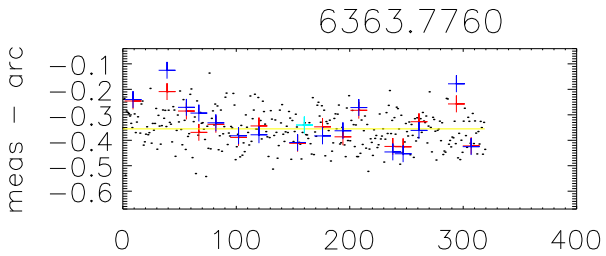

PLATE=0794 MJD=52376 Scattered Light on sdR-r1-00014490.fit
1.273
0.364
0.364
0.364
0.364
0
0
0
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

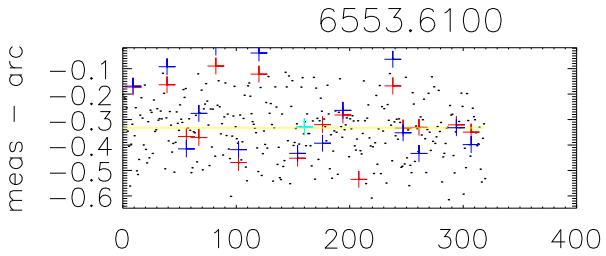

PLATE=0794 MJD=52376 Scattered Light on sdR-r1-00014490.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.153
Max value = 1.844
Mon Feb 25 04:14:22 2008

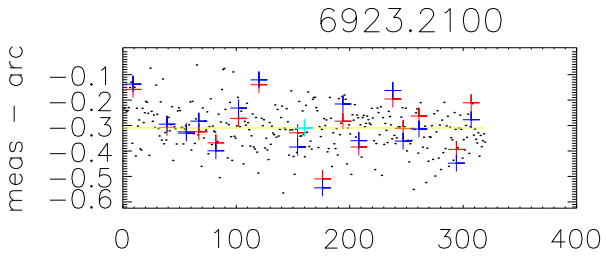

PLATE=0794 MJD=52376 Extraction chi^2 for sdR−r1−00014490.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

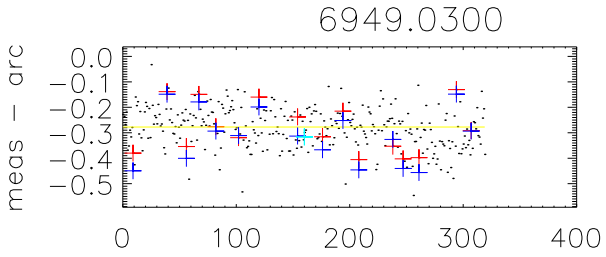

6300.3040
off: −0.40
sig: 0.009
6363.7760
off: −0.34
sig: 0.021
6553.6100
off: −0.33
sig: 0.044
6923.2100
off: −0.31
sig: 0.024
6949.0300
off: −0.32
sig: 0.021
7571.7500
off: −0.25
sig: 0.021
7794.1200
off: −0.38
sig: 0.011
7821.5100
off: −0.34
sig: 0.009
8399.1600
off: −0.30
sig: 0.008
8430.1700
off: −0.32
sig: 0.008
8885.8300
off: −0.28
sig: 0.008
8919.6100
off: −0.39
sig: 0.007

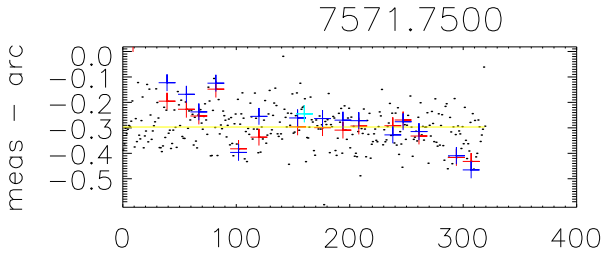

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

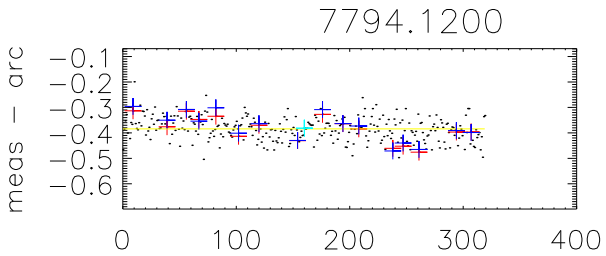

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

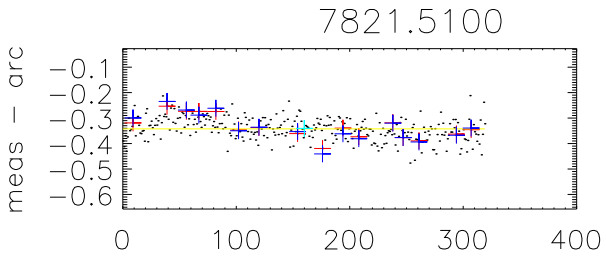

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

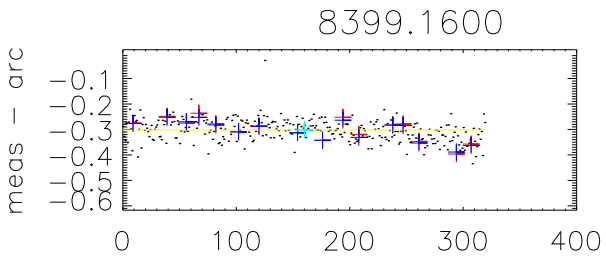

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

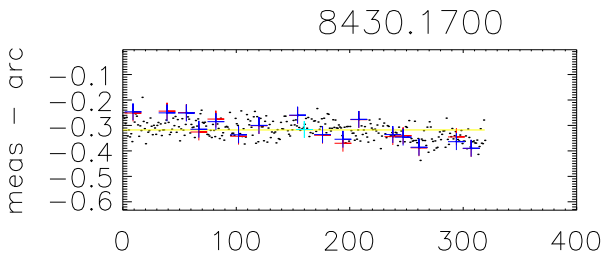

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

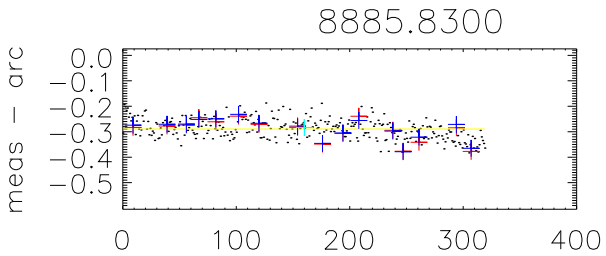

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

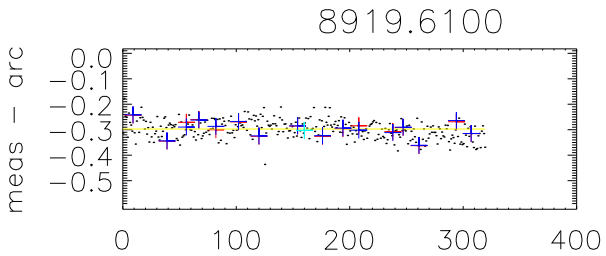

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

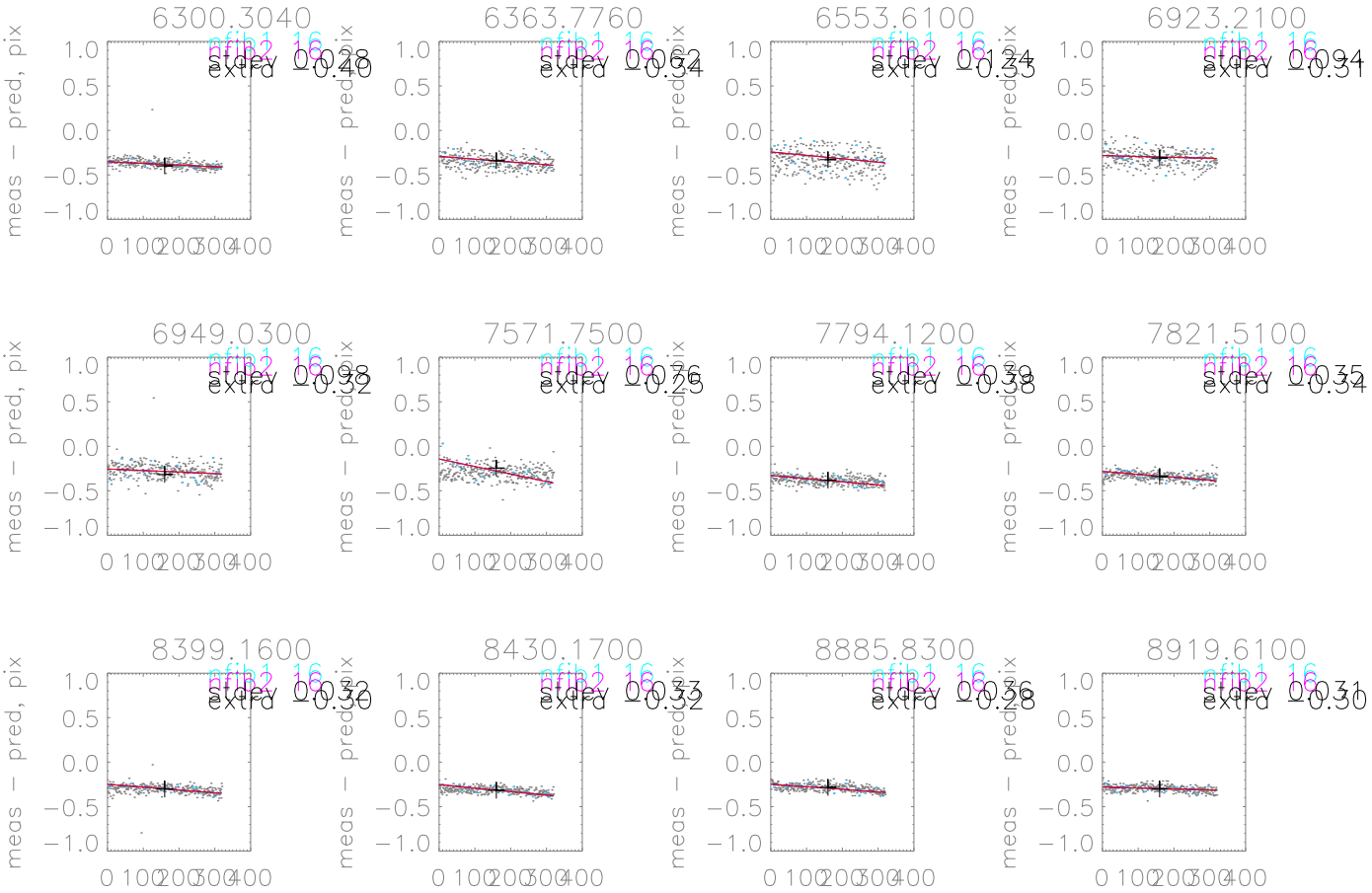

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

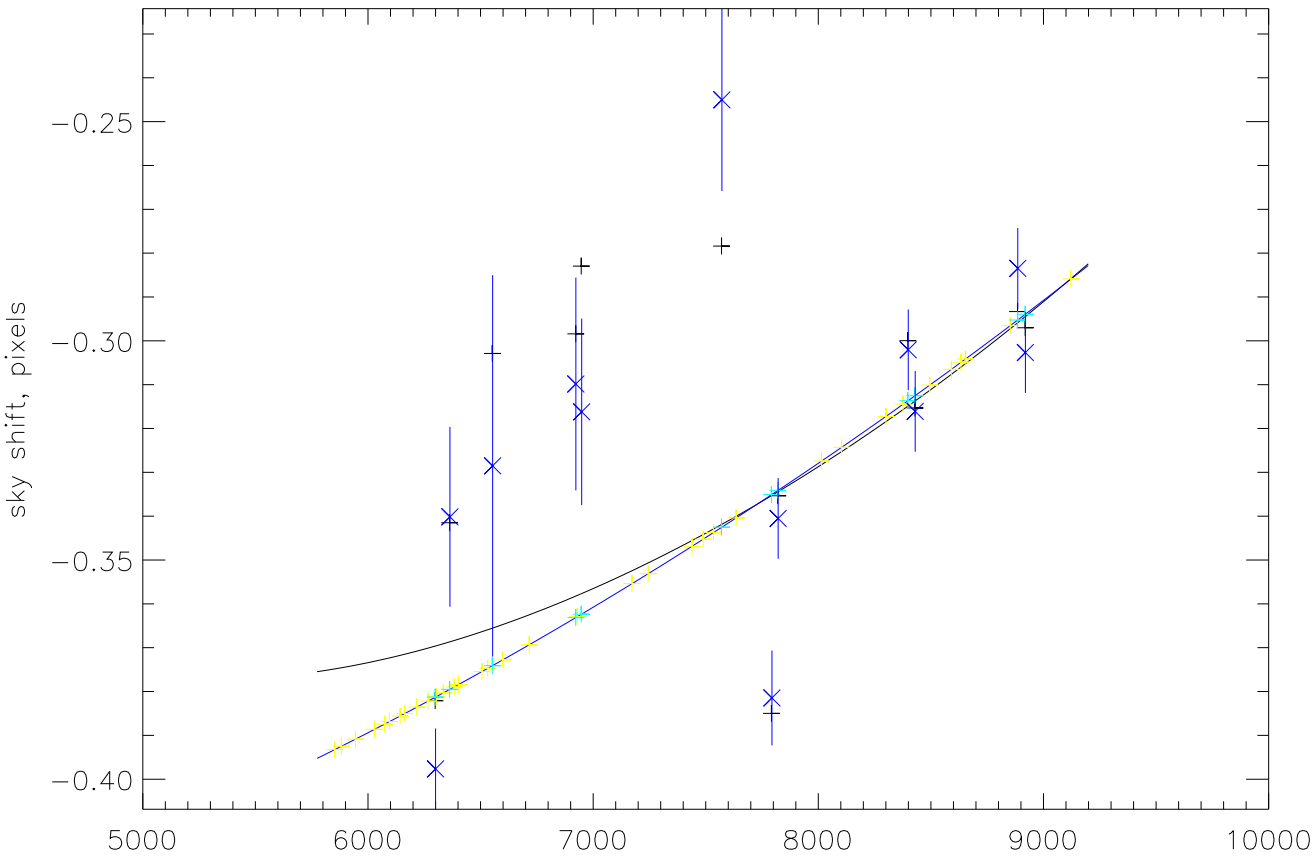

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

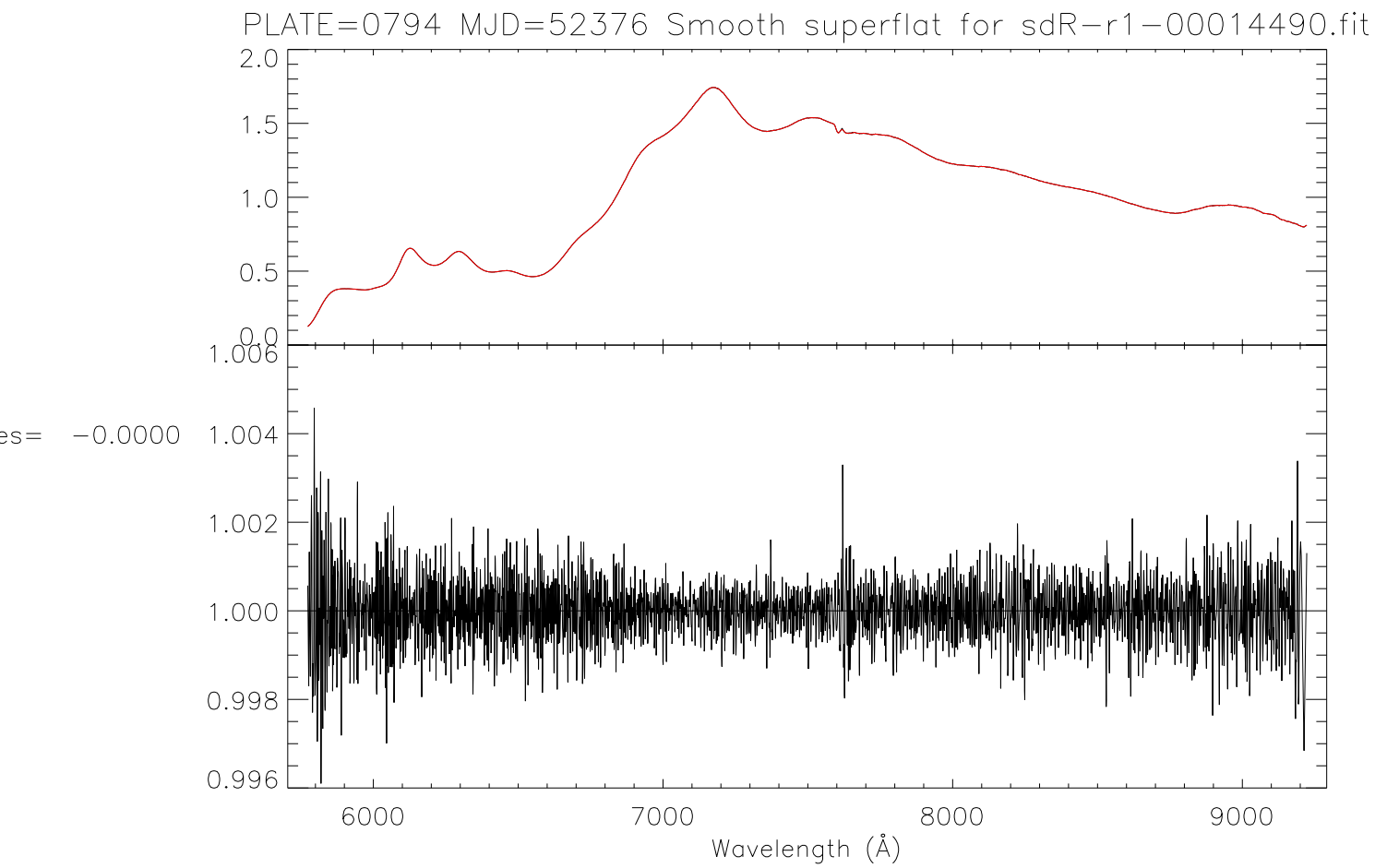

8430.1700
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

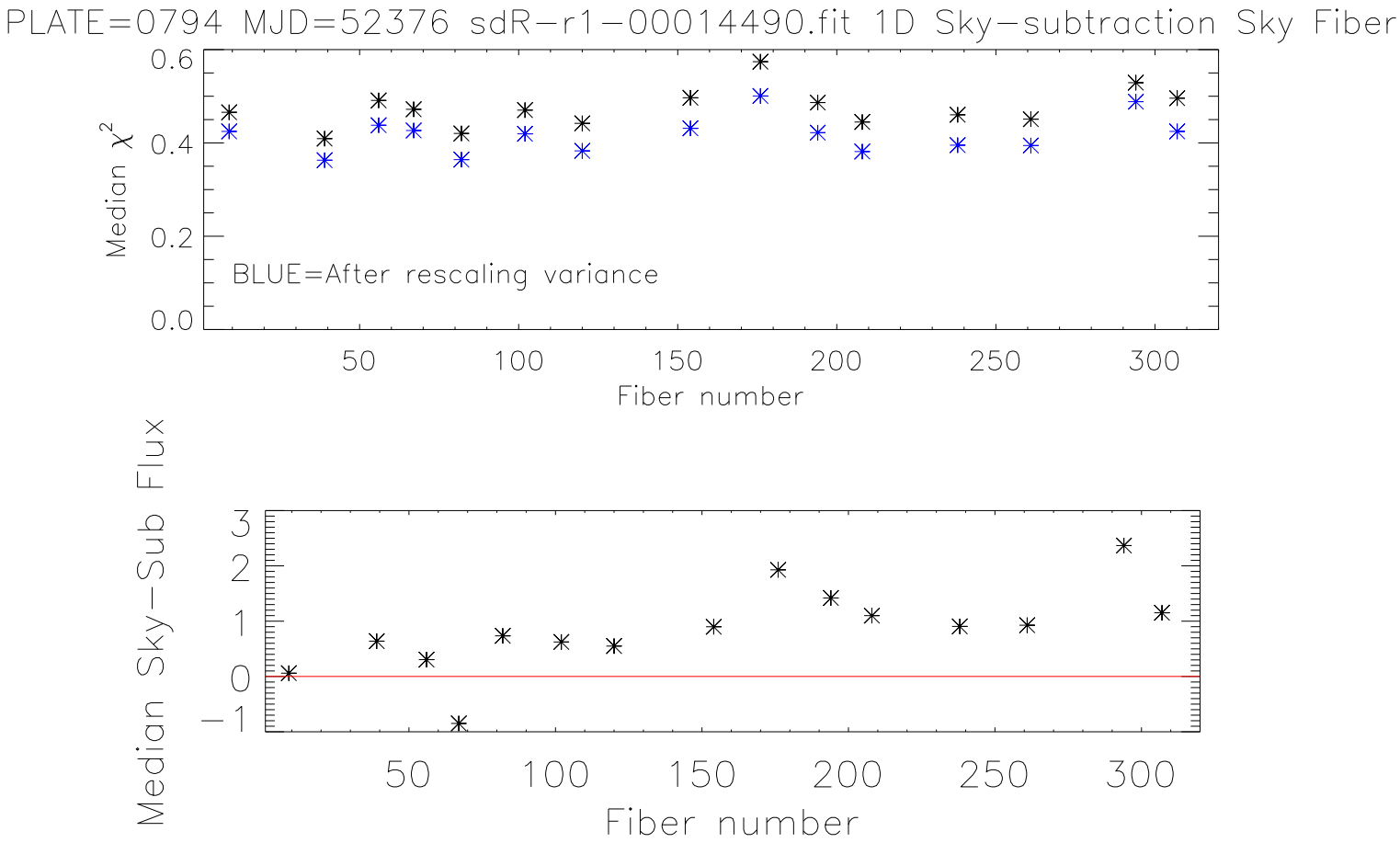

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

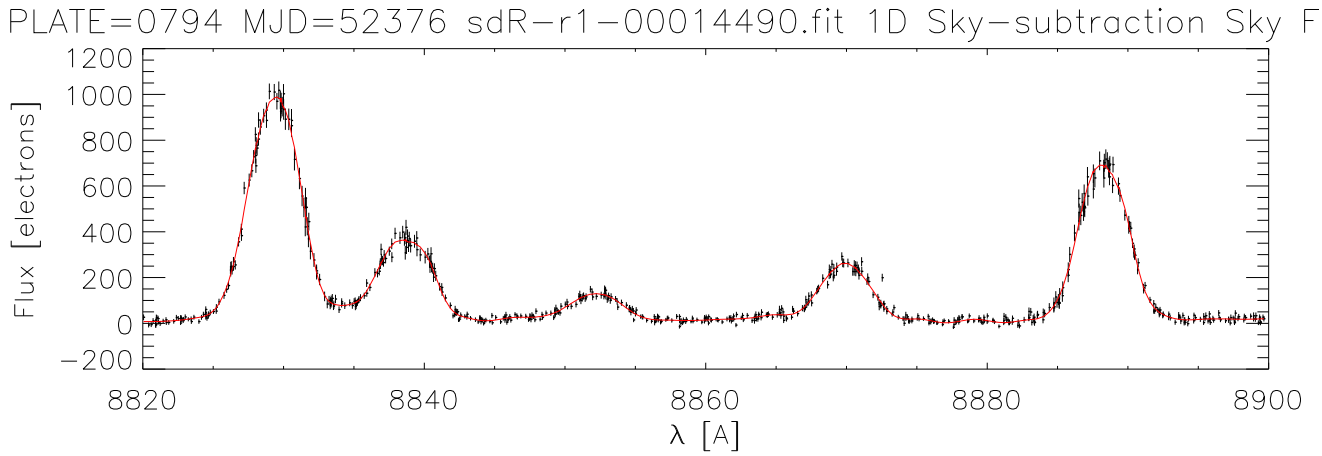

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

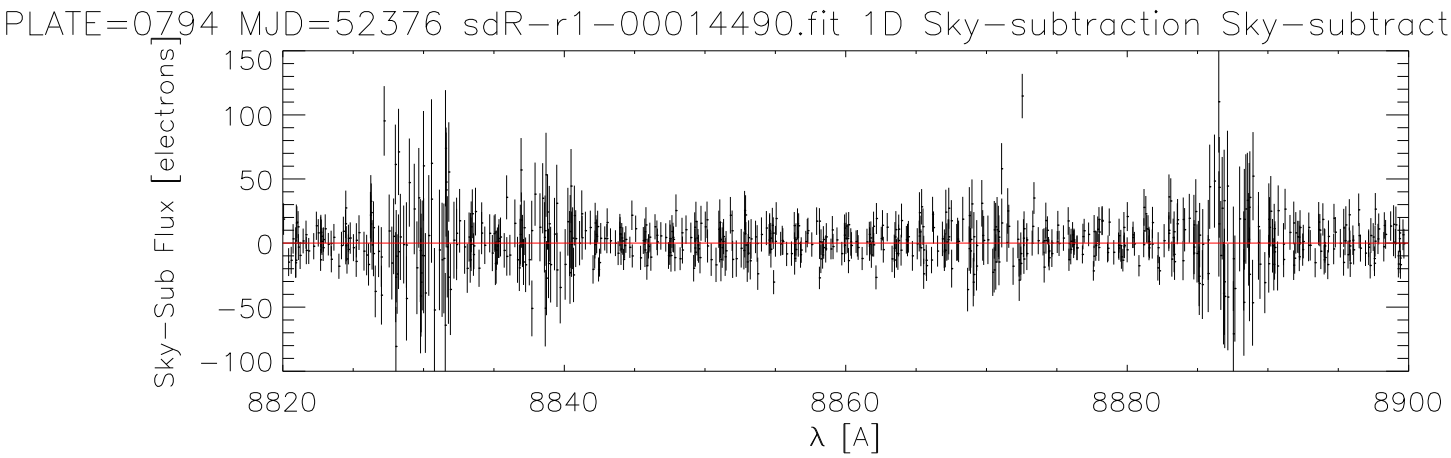

6300.3040
stdev 0.28
extra 0.40
6363.7760
stdev 0.62
extra 0.54
6553.6100
stdev 1.24
extra 0.33
6923.2100
stdev 0.94
extra 0.31
6949.0300
stdev 0.98
extra 0.32
7571.7500
stdev 0.76
extra 0.25
7794.1200
stdev 0.39
extra 0.38
7821.5100
stdev 0.35
extra 0.34
8399.1600
stdev 0.32
extra 0.30
8430.1700
stdev 0.33
extra 0.32
8885.8300
stdev 0.36
extra 0.28
8919.6100
stdev 0.31
extra 0.30
meas − pred, pix
mfhd2 16

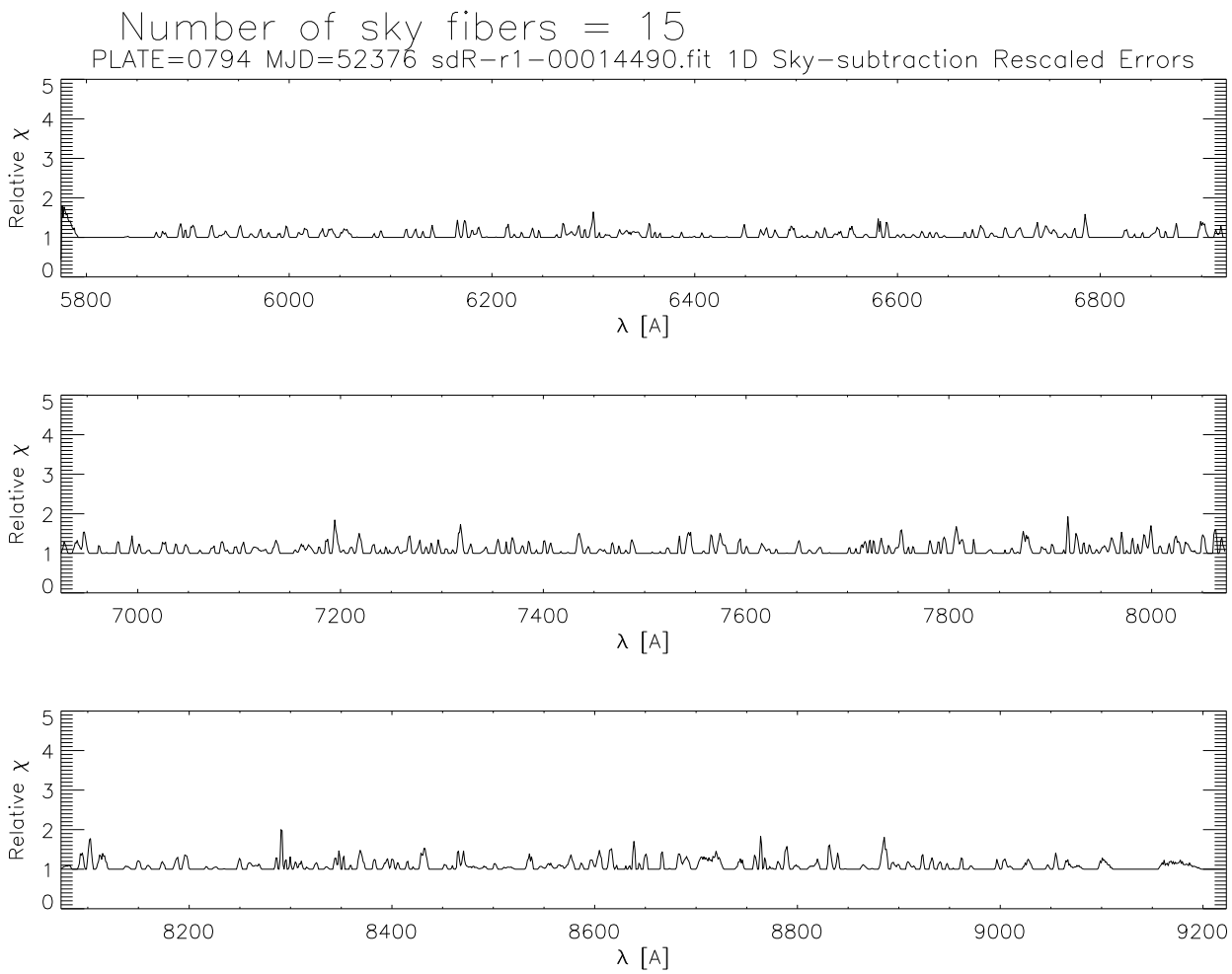

sky shift, pixels
−0.25
−0.30
−0.35
−0.40
5000
6000
7000
8000
9000
10000

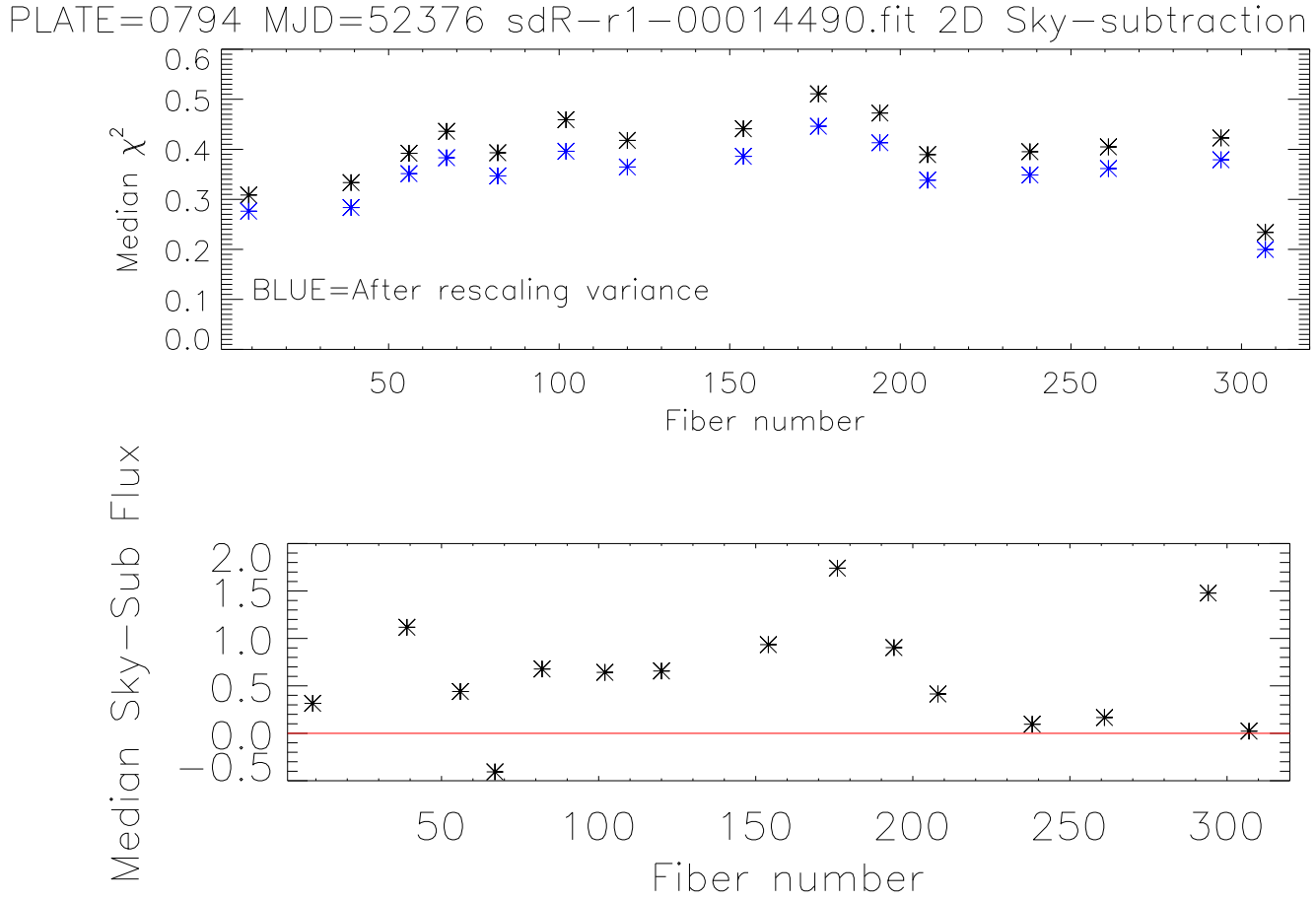

PLATE=0794 MJD=52376 Smooth superflat for sdR-r1-00014490.fit
2.0
1.5
1.0
0.5
0.0
1.006
es= −0.0000 1.004
1.002
1.000
0.998
0.996
6000
7000
8000
9000
Wavelength (Å)

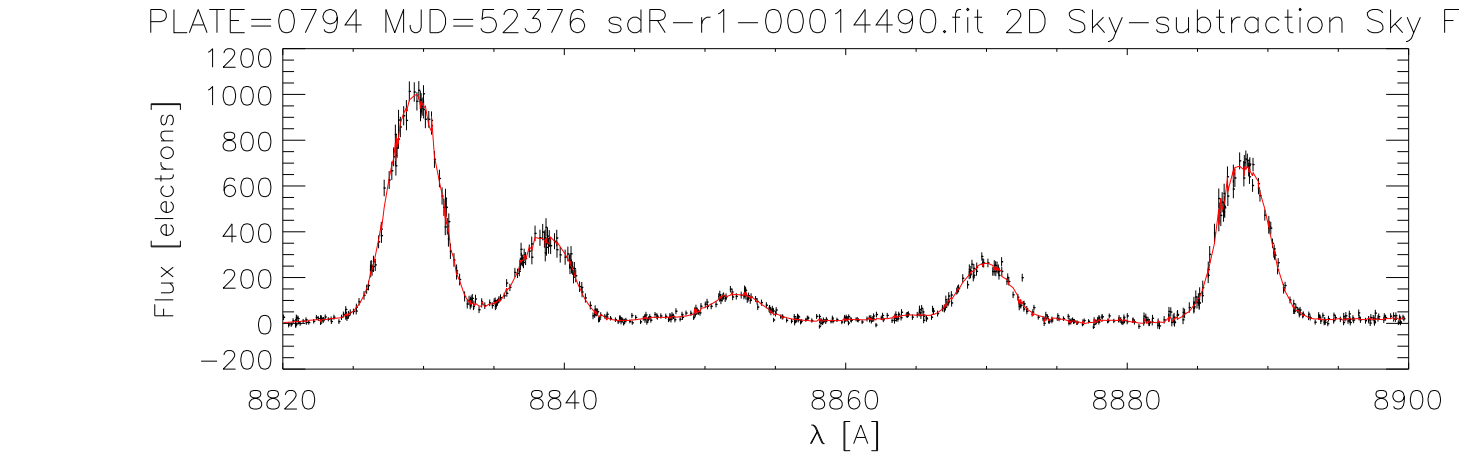

PLATE=0794 MJD=52376 sdR-r1-00014490.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

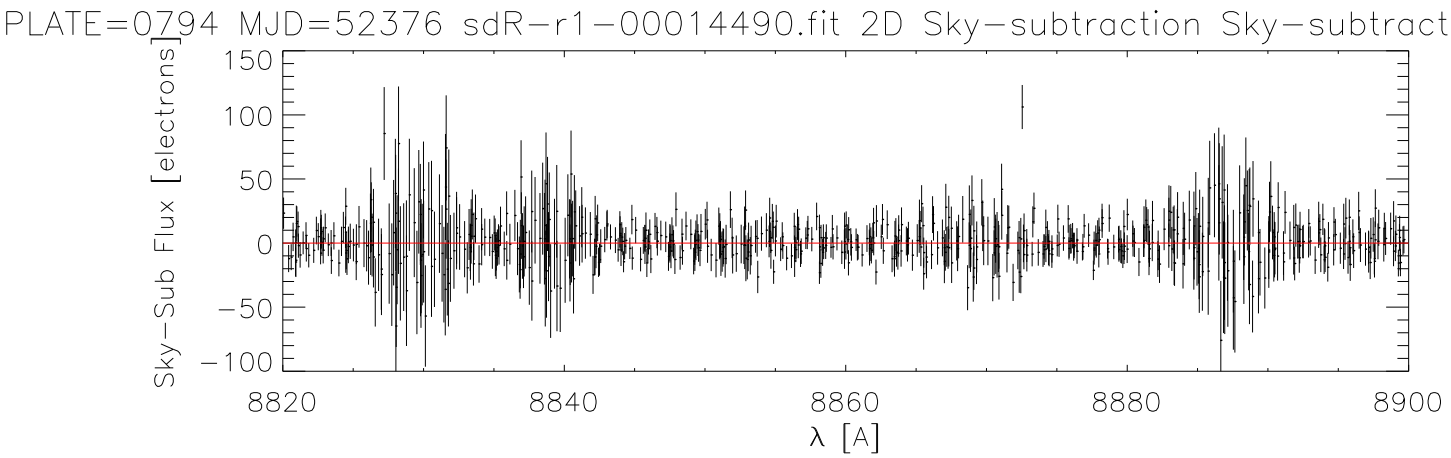

PLATE=0794 MJD=52376 sdR-r1-00014490.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

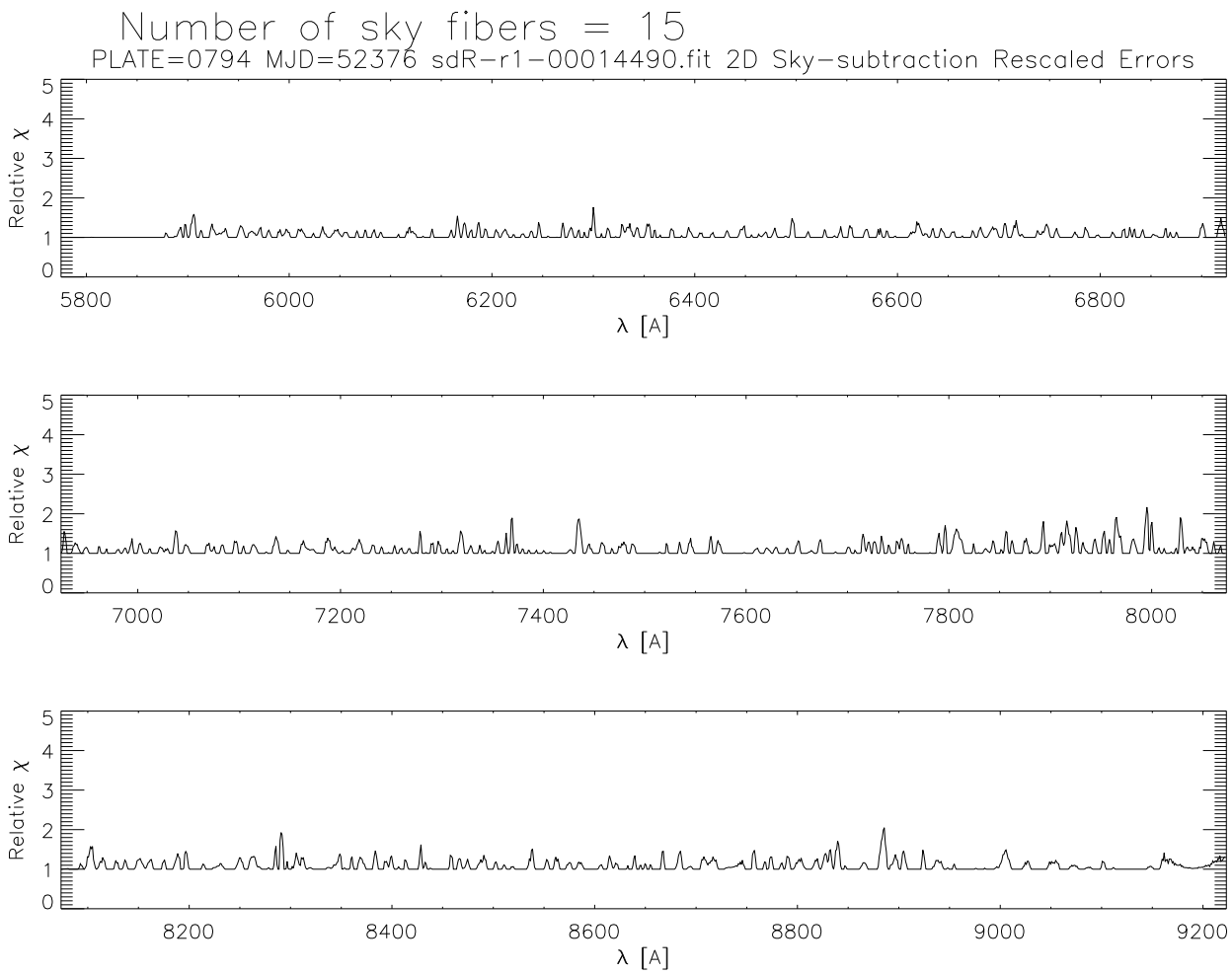

PLATE=0794 MJD=52376 sdR-r1-00014490.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

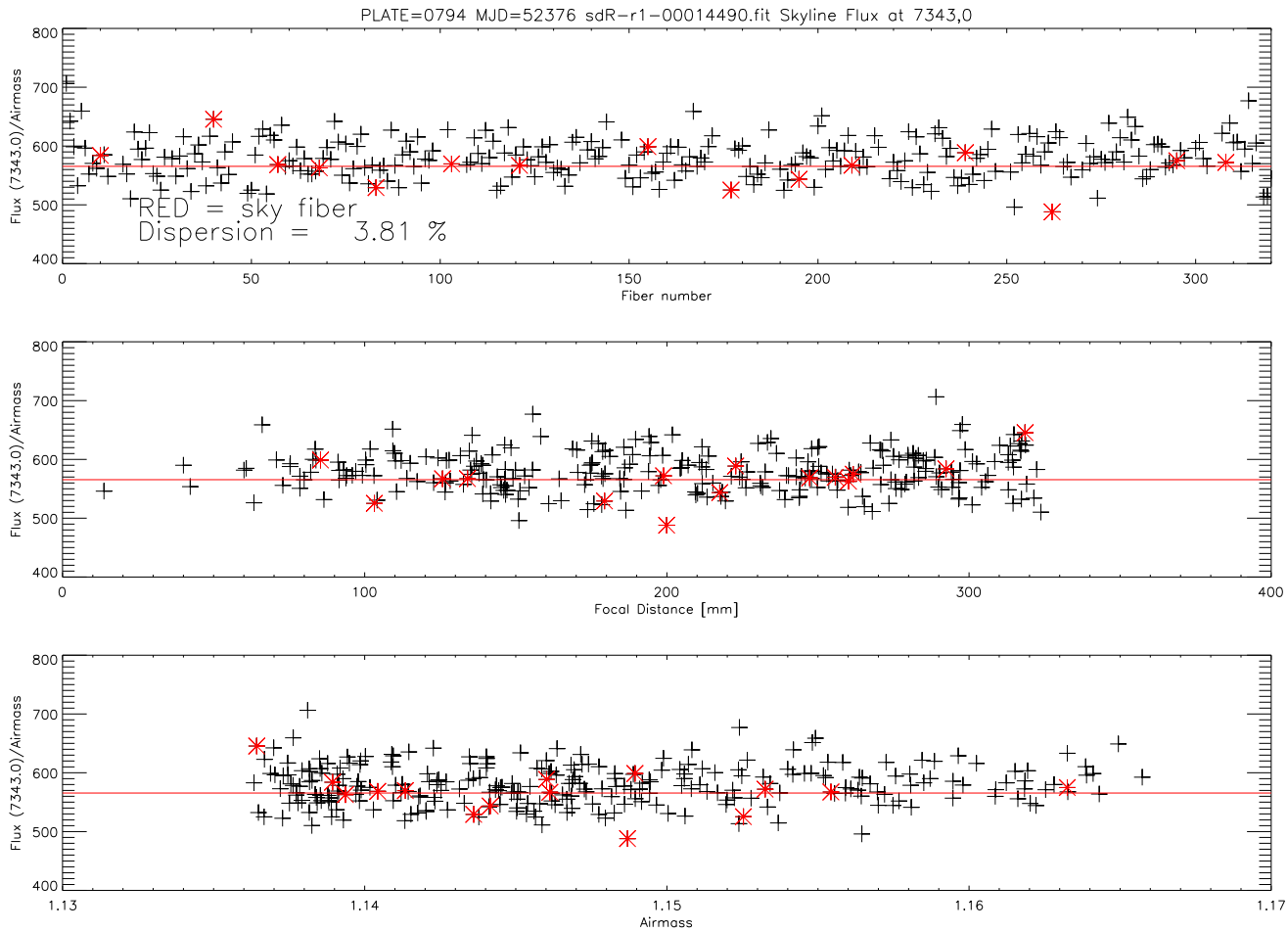

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r1-00014490.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

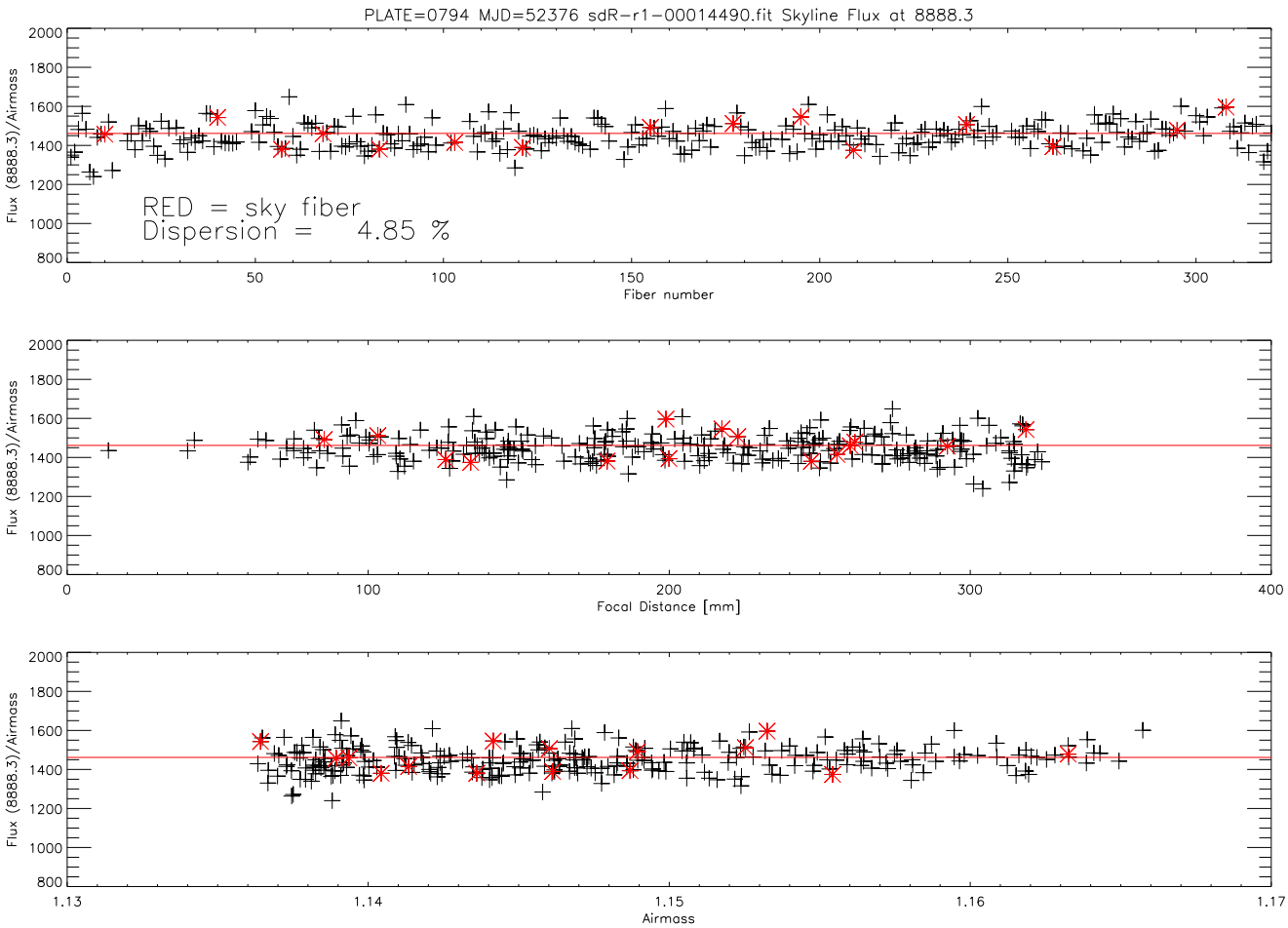

PLATE=0794 MJD=52376 sdR-r1-00014490.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

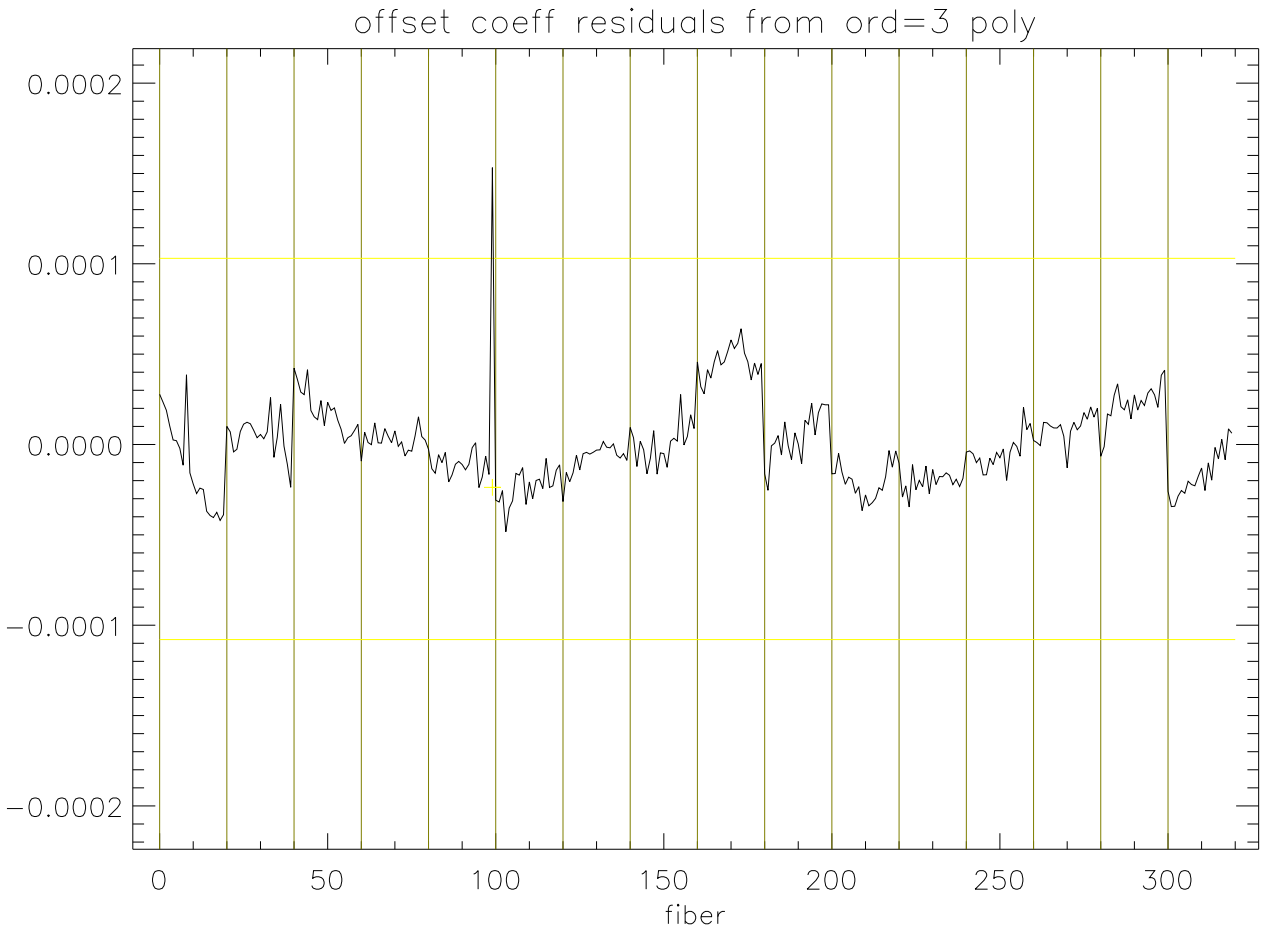

PLATE=0794 MJD=52376 sdR-r1-00014490.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

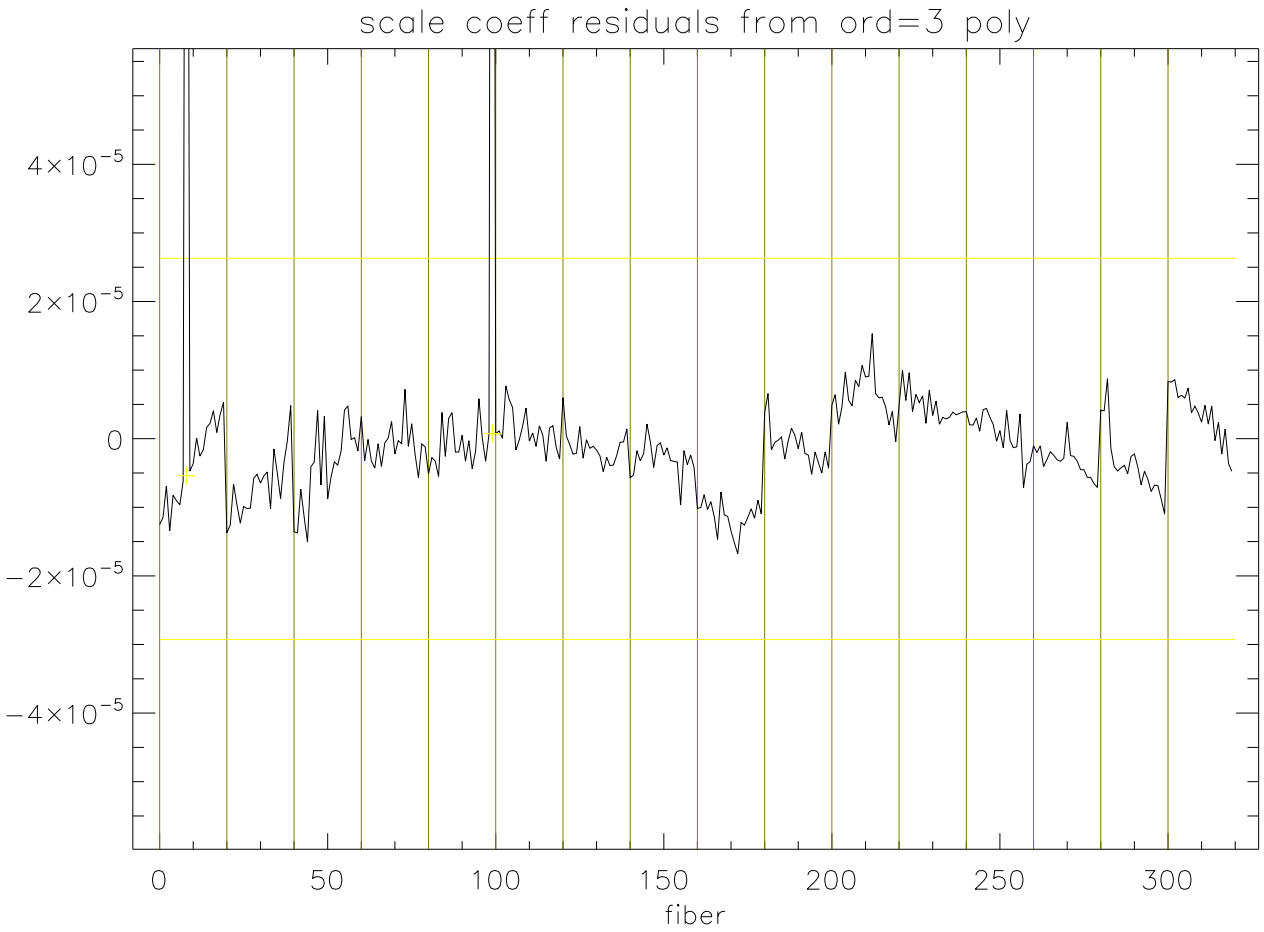

PLATE=0794 MJD=52376 sdR-r1-00014490.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

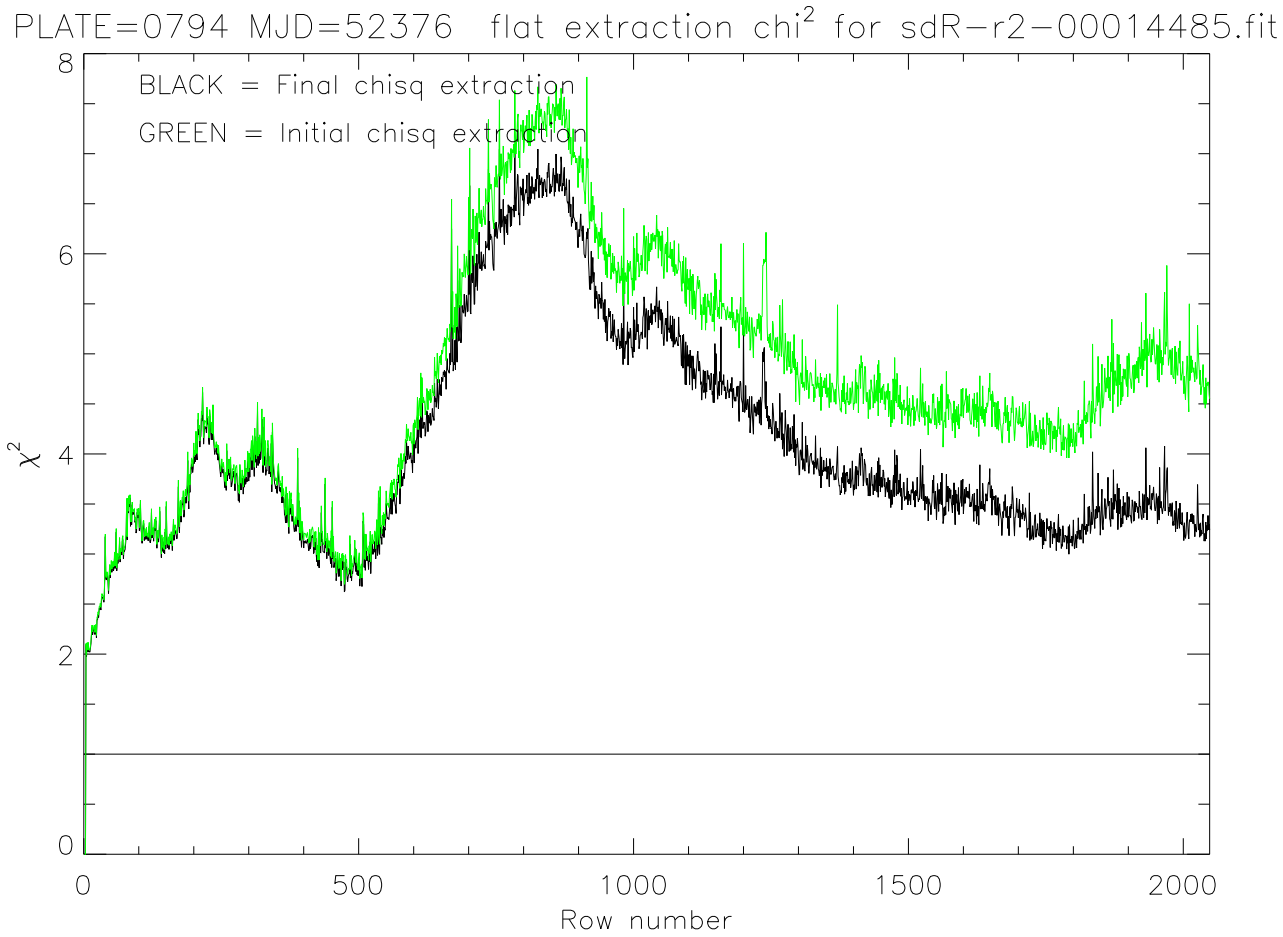

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r1-00014490.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

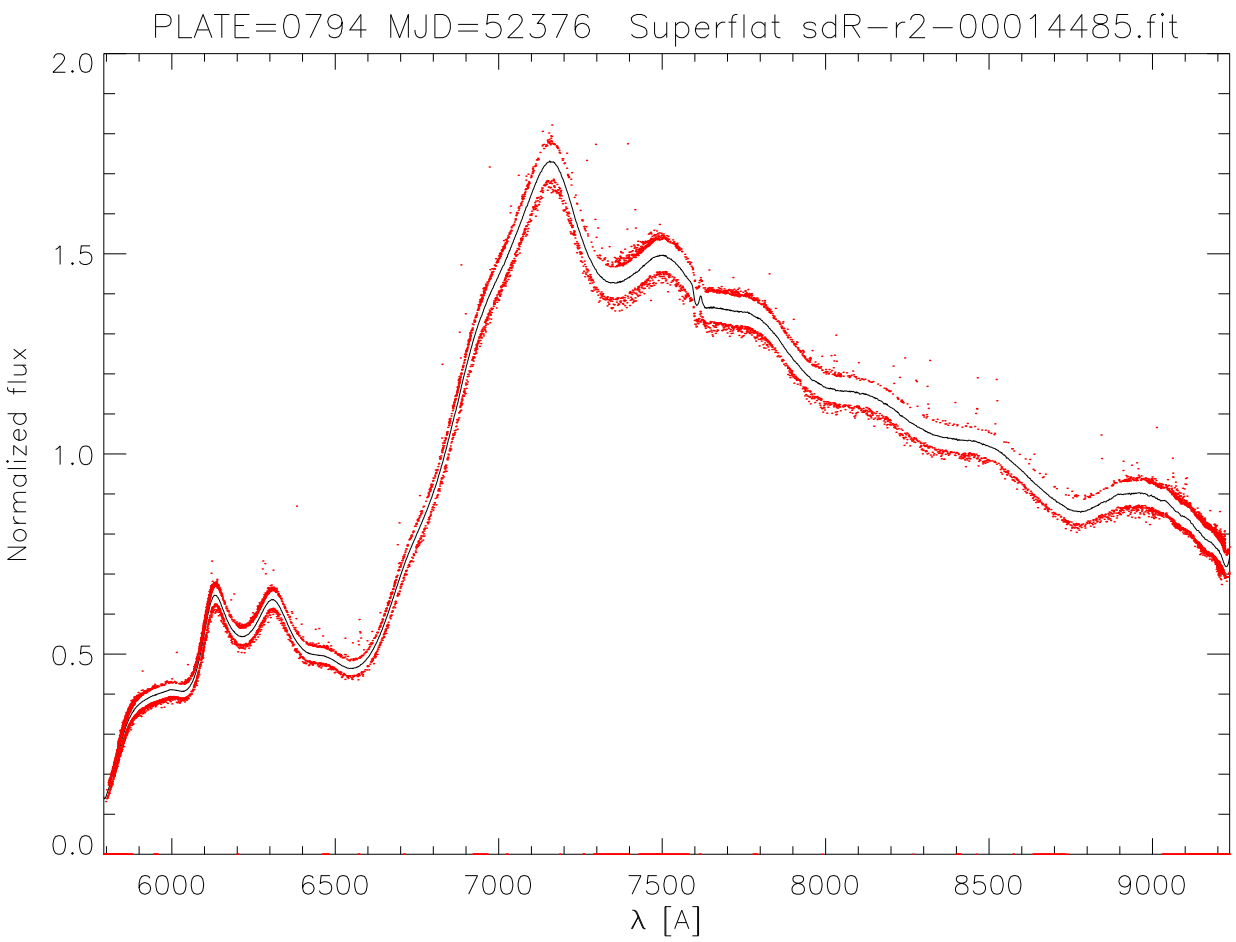

PLATE=0794 MJD=52376 sdR-r1-00014490.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.81 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

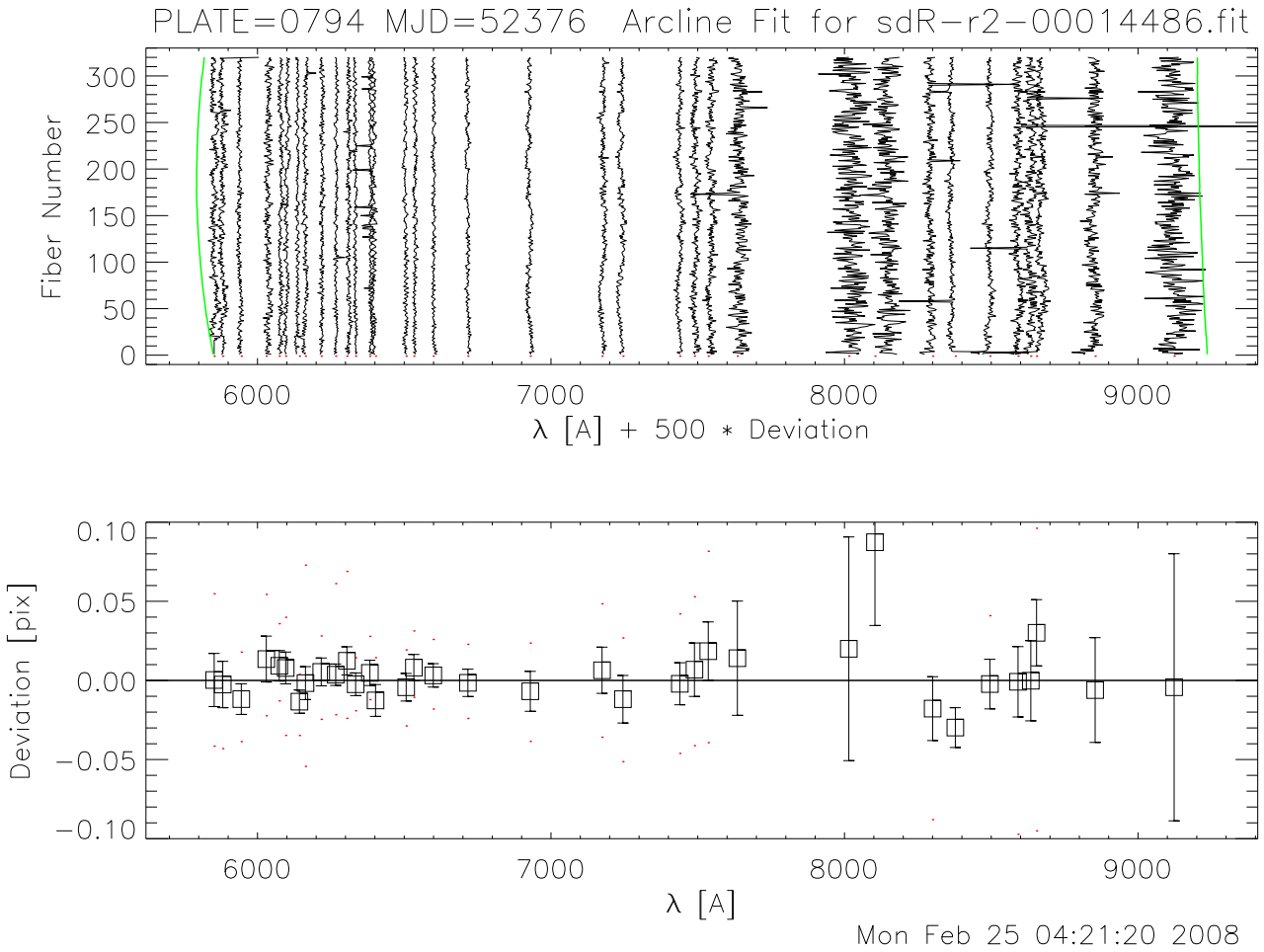

PLATE=0794 MJD=52376 sdR-r1-00014490.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.85 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass


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

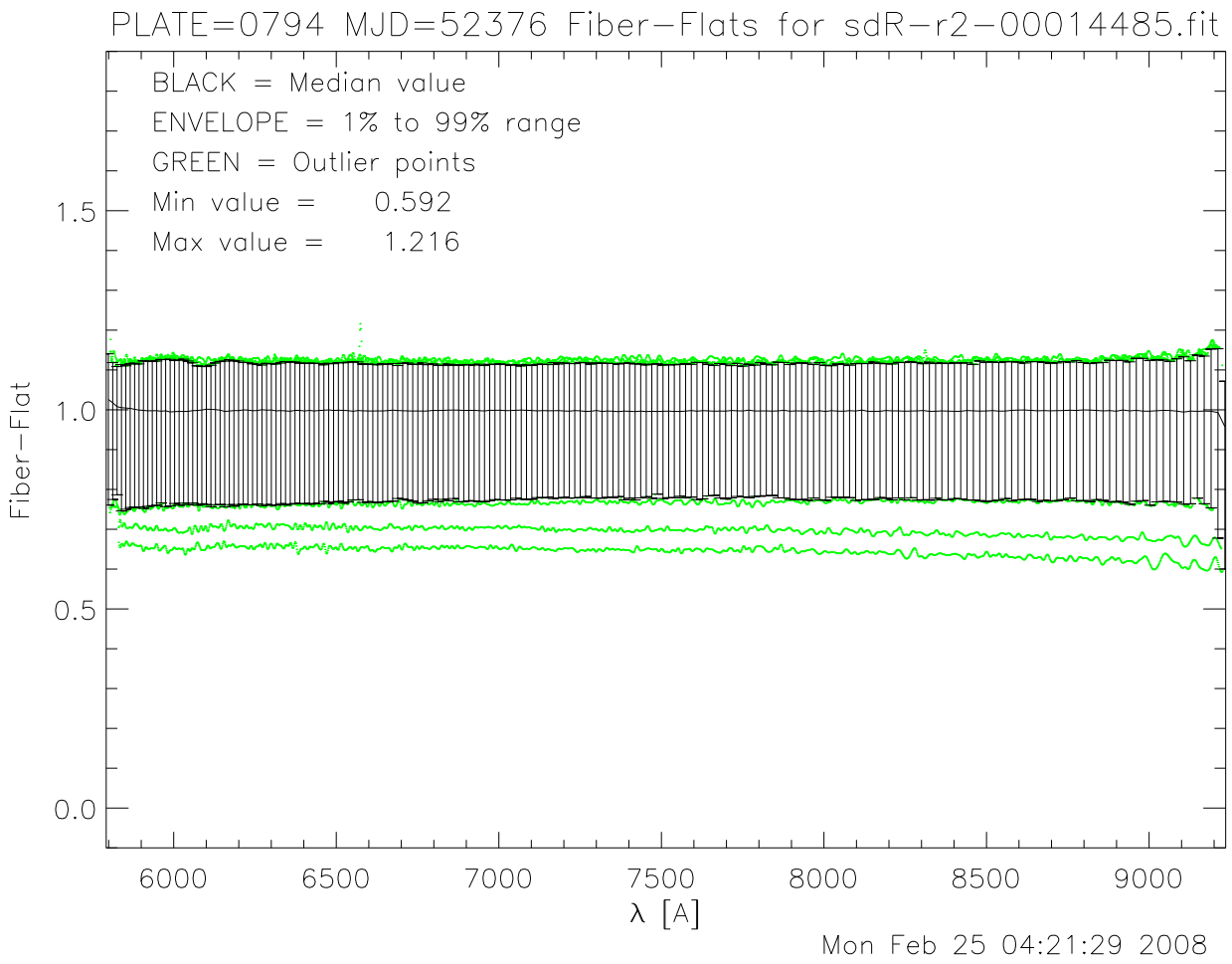

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

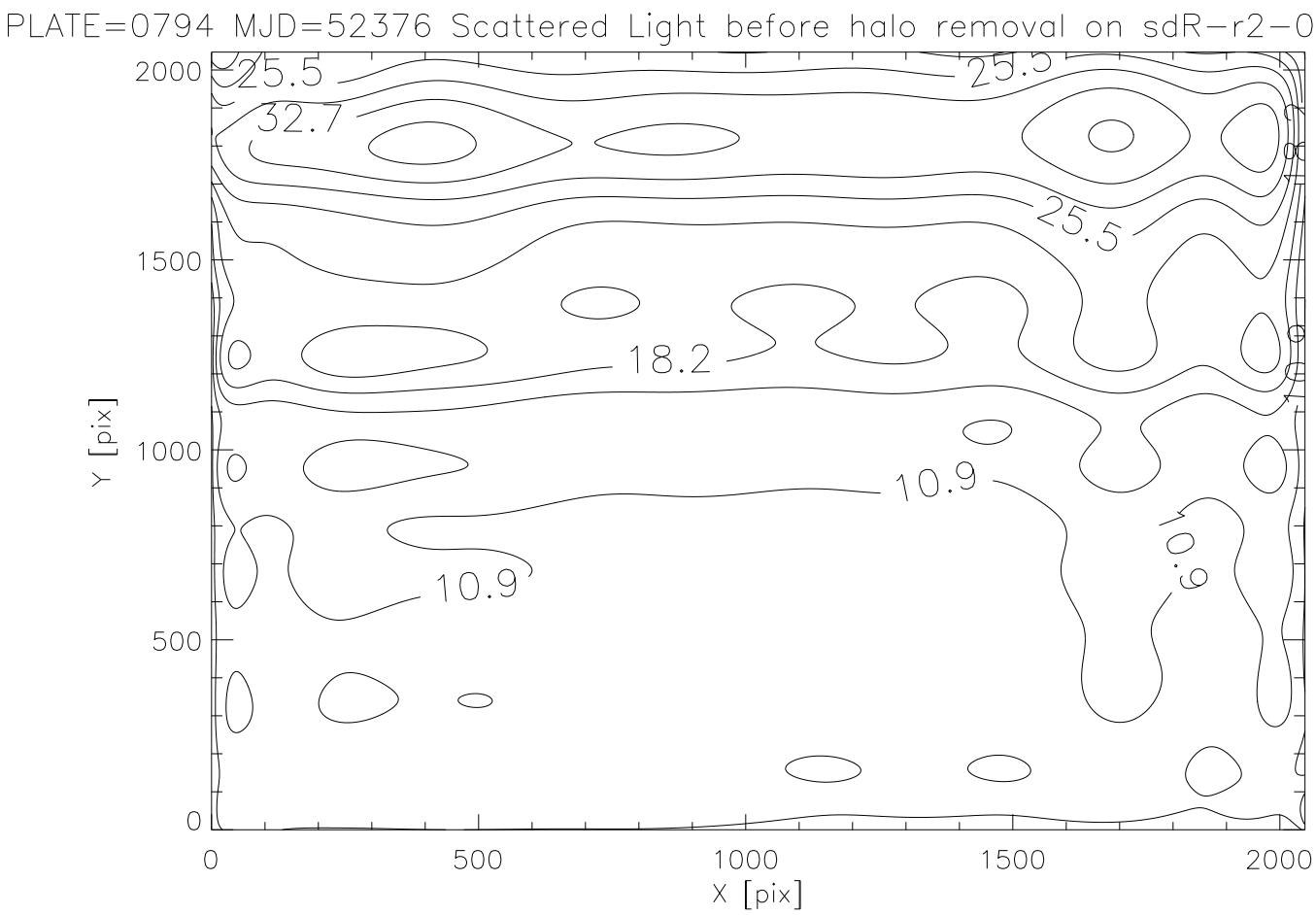

PLATE=0794 MJD=52376 flat extraction chi^2 for sdR−r2−00014485.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

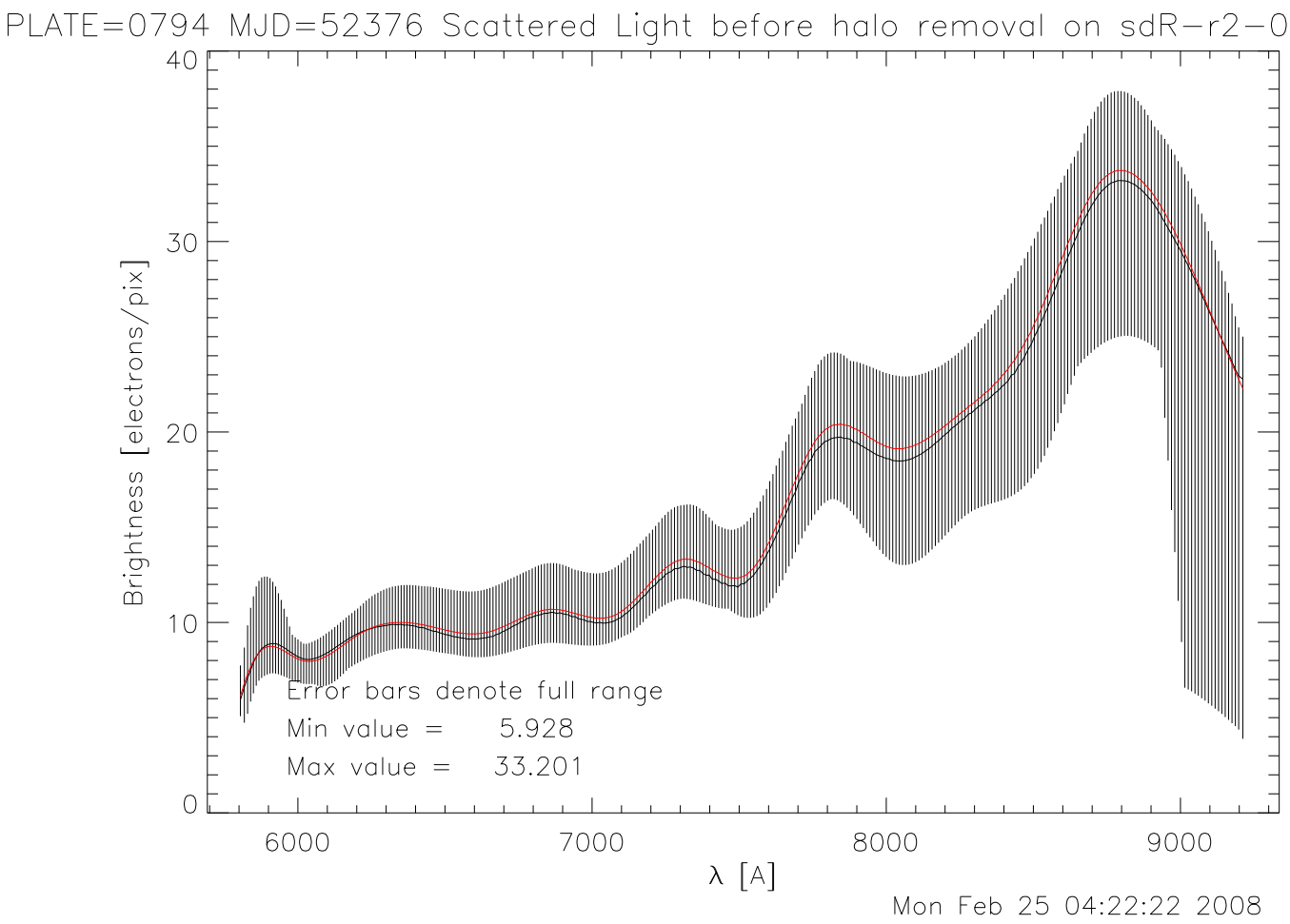

PLATE=0794 MJD=52376 Superflat sdR-r2-00014485.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

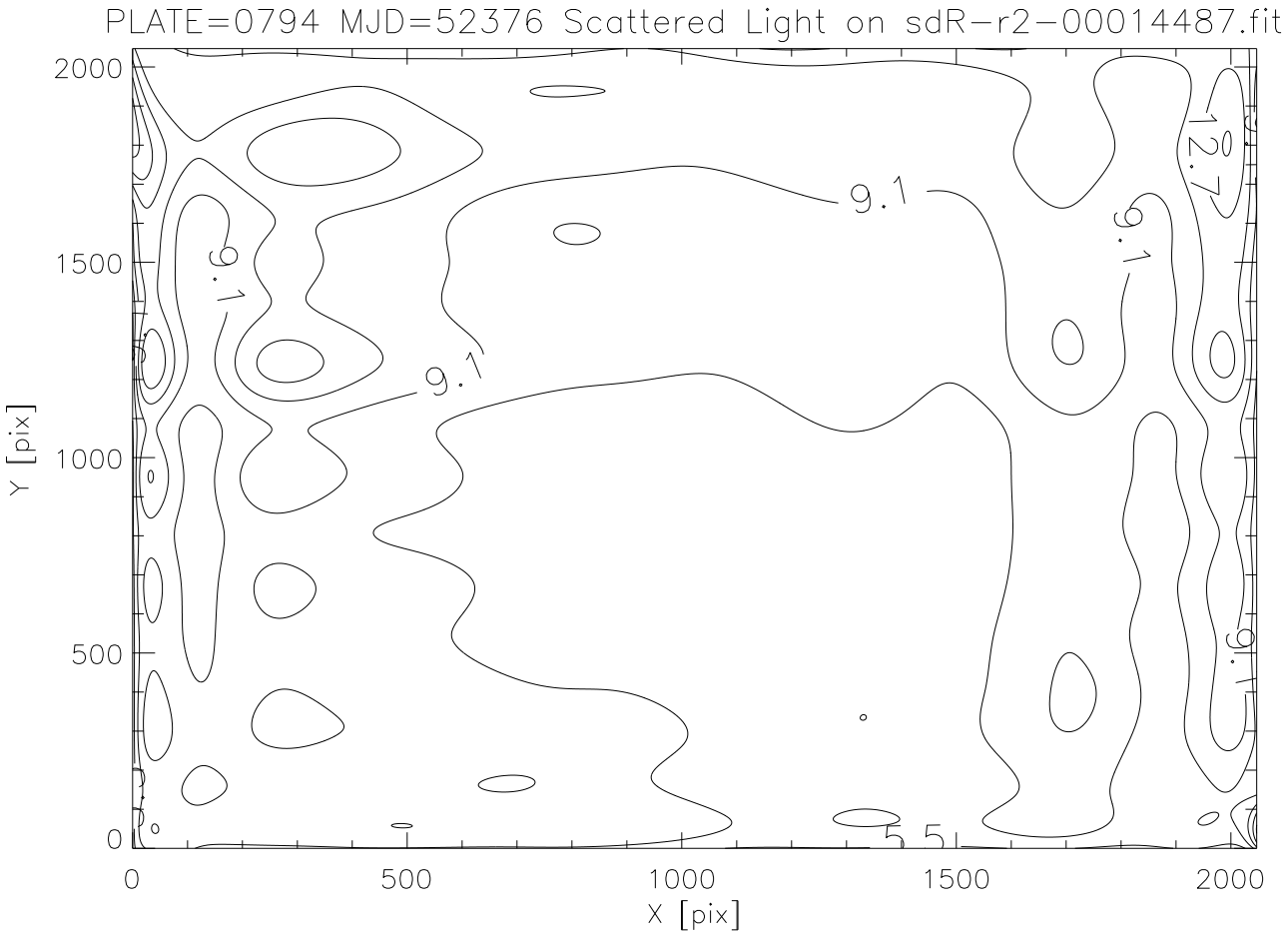

PLATE=0794 MJD=52376 Arcline Fit for sdR-r2-00014486.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation

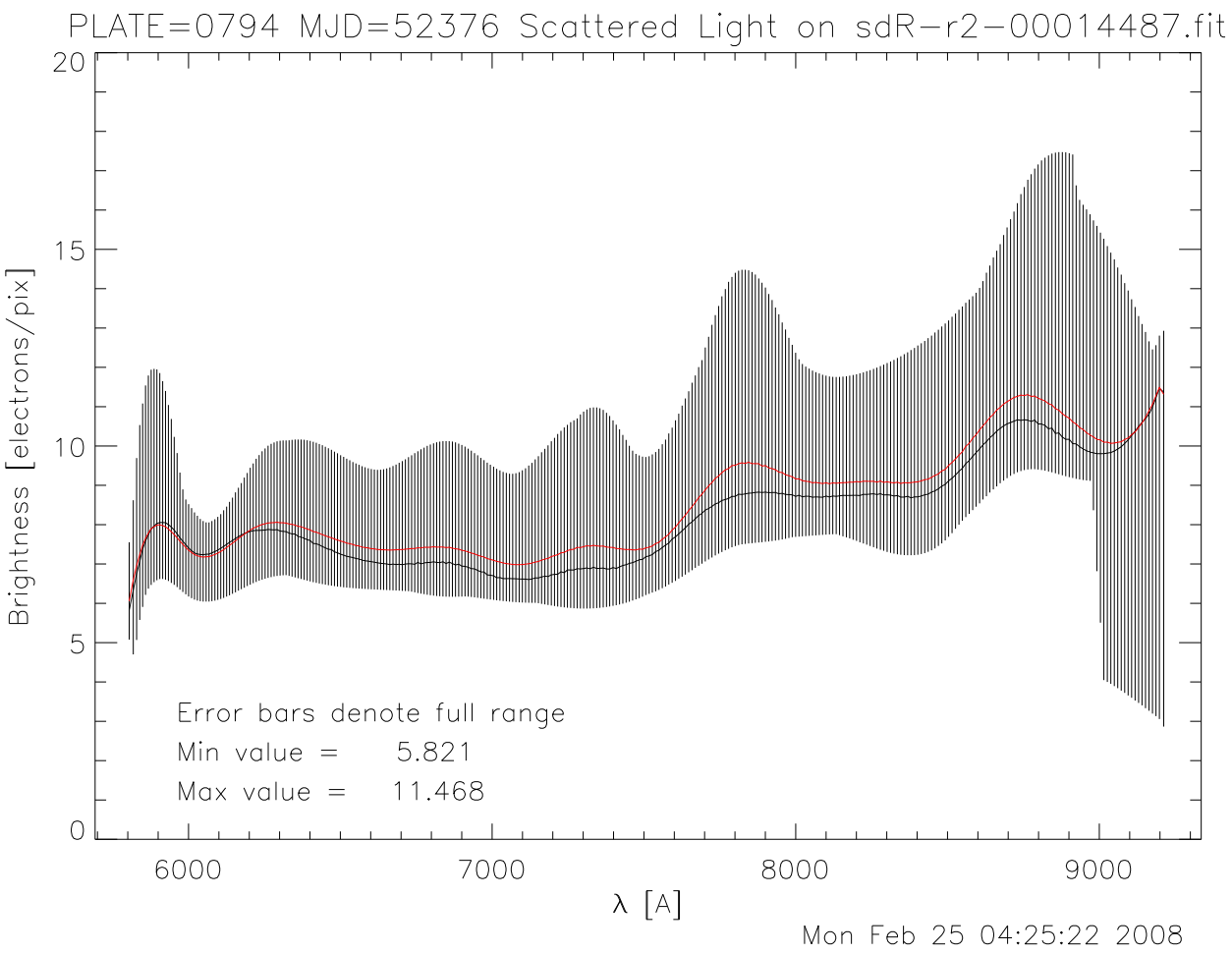
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 25 04:21:20 2008

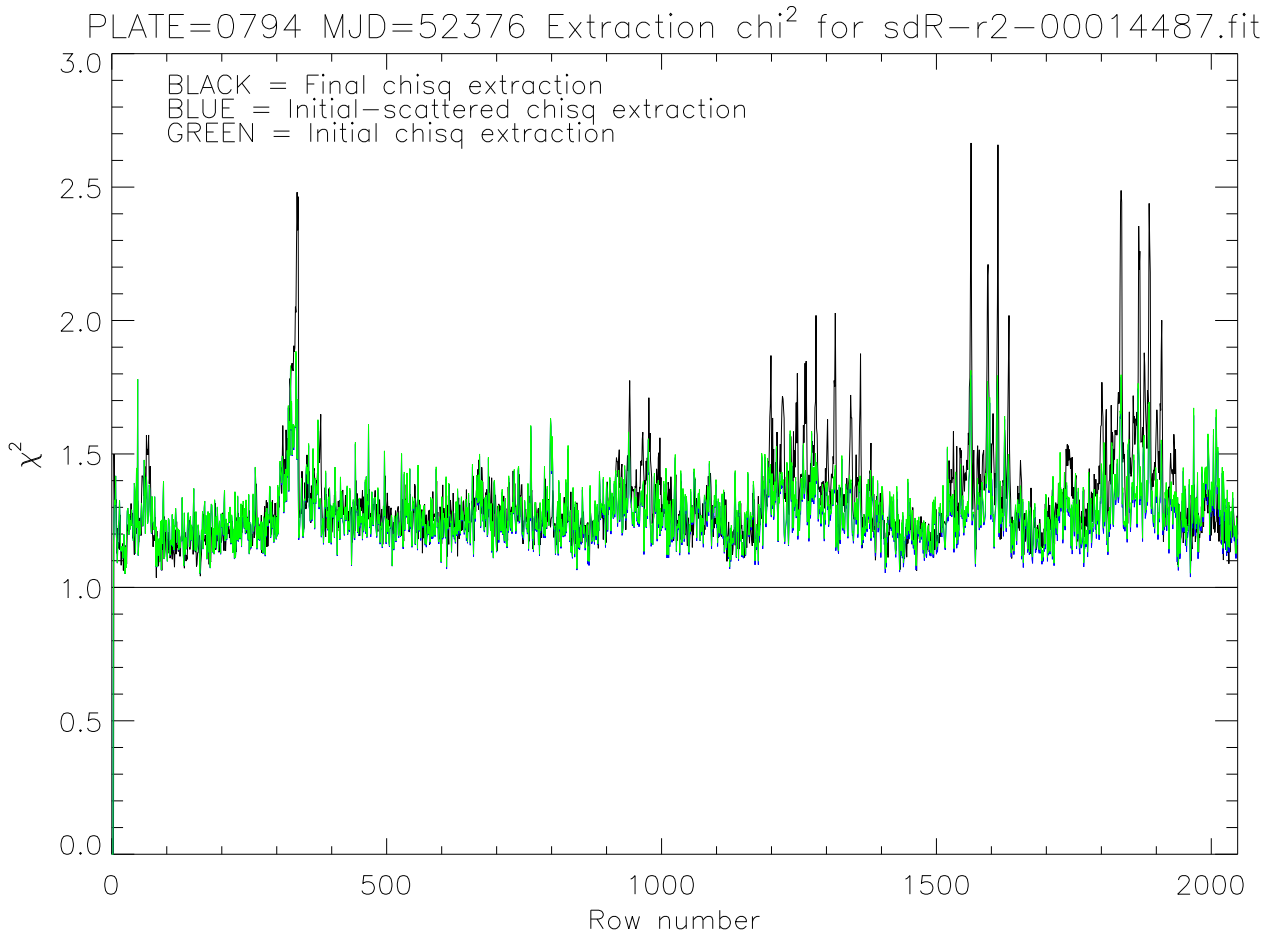

PLATE=0794 MJD=52376 Fiber−Flats for sdR−r2−00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.592
Max value = 1.216
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 04:21:29 2008

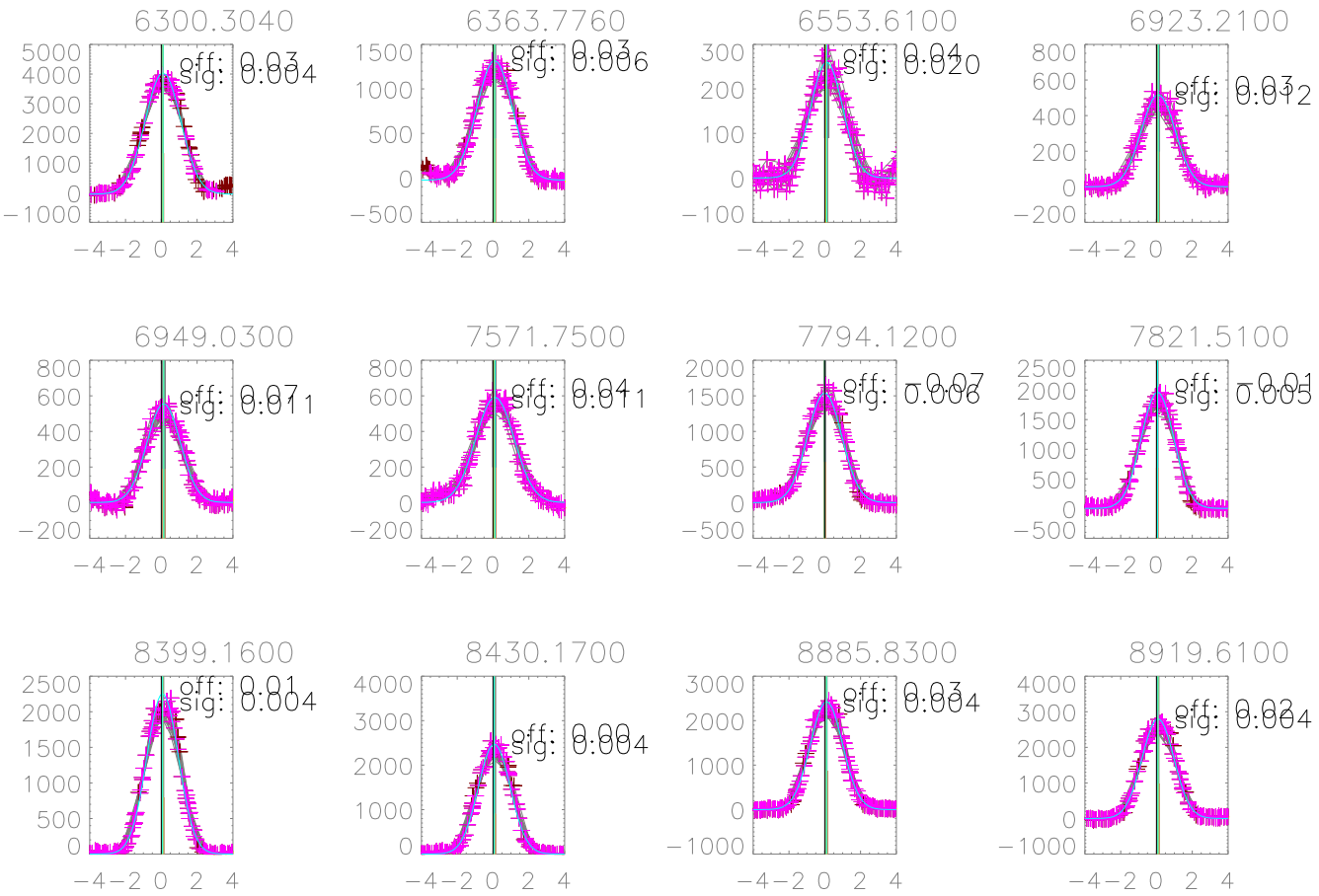

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r2-00014487.fi
25.5
32.7
25.5
25.5
18.2
10.9
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

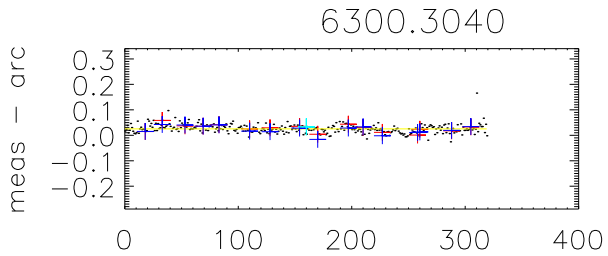

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r2-00014487.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.928
Max value = 33.201
Mon Feb 25 04:22:22 2008

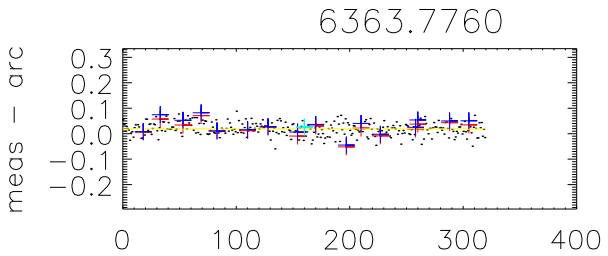

PLATE=0794 MJD=52376 Scattered Light on sdR-r2-00014487.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
9.1
9.1
9.1
12.7
9.1
5.5

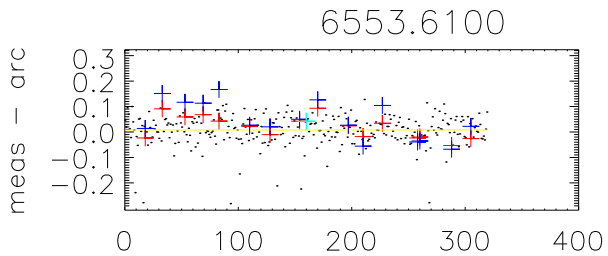

PLATE=0794 MJD=52376 Scattered Light on sdR-r2-00014487.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.821
Max value = 11.468
Mon Feb 25 04:25:22 2008

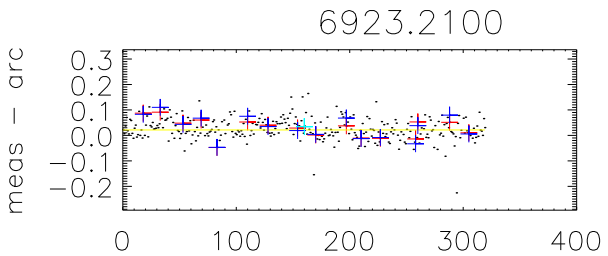

PLATE=0794 MJD=52376 Extraction chi^2 for sdR−r2−00014487.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

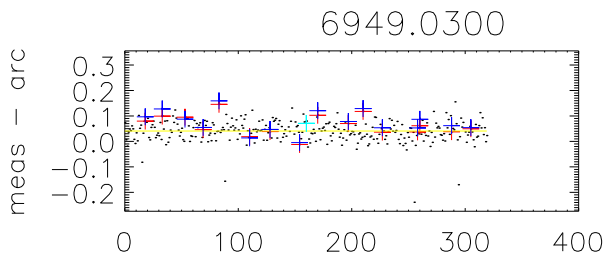

6300.3040
off: 0.03
sig: 0.004
6363.7760
off: 0.03
sig: 0.006
6553.6100
off: 0.04
sig: 0.020
6923.2100
off: 0.03
sig: 0.012
6949.0300
off: 0.07
sig: 0.011
7571.7500
off: 0.04
sig: 0.011
7794.1200
off: -0.07
sig: 0.006
7821.5100
off: -0.01
sig: 0.005
8399.1600
off: 0.01
sig: 0.004
8430.1700
off: 0.00
sig: 0.004
8885.8300
off: 0.03
sig: 0.004
8919.6100
off: 0.02
sig: 0.004

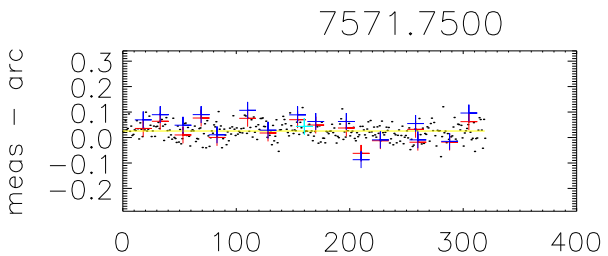

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

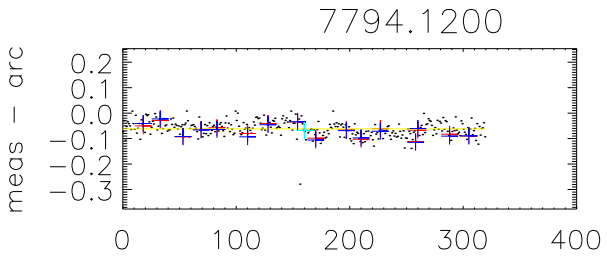

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

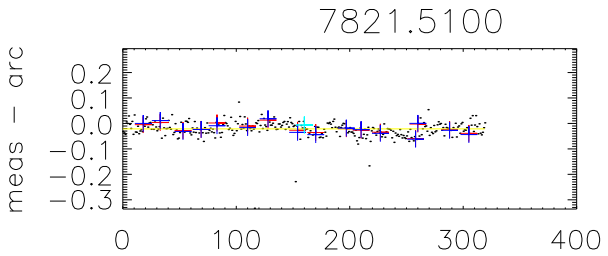

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

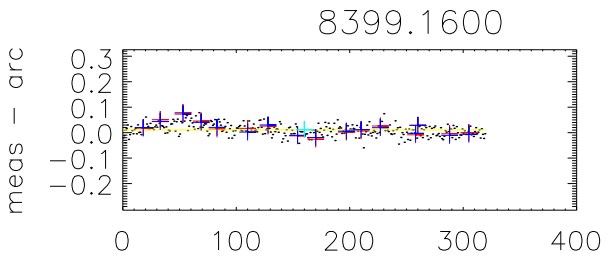

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

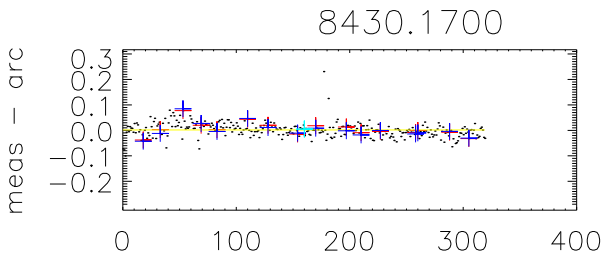

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

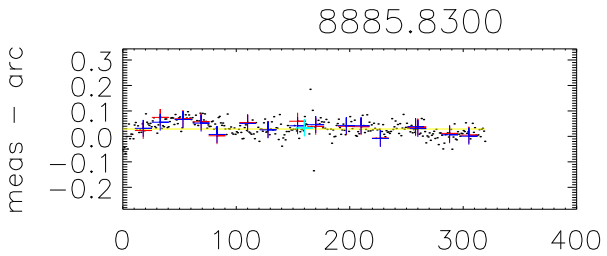

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

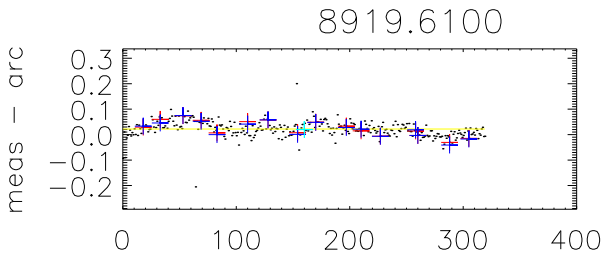

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

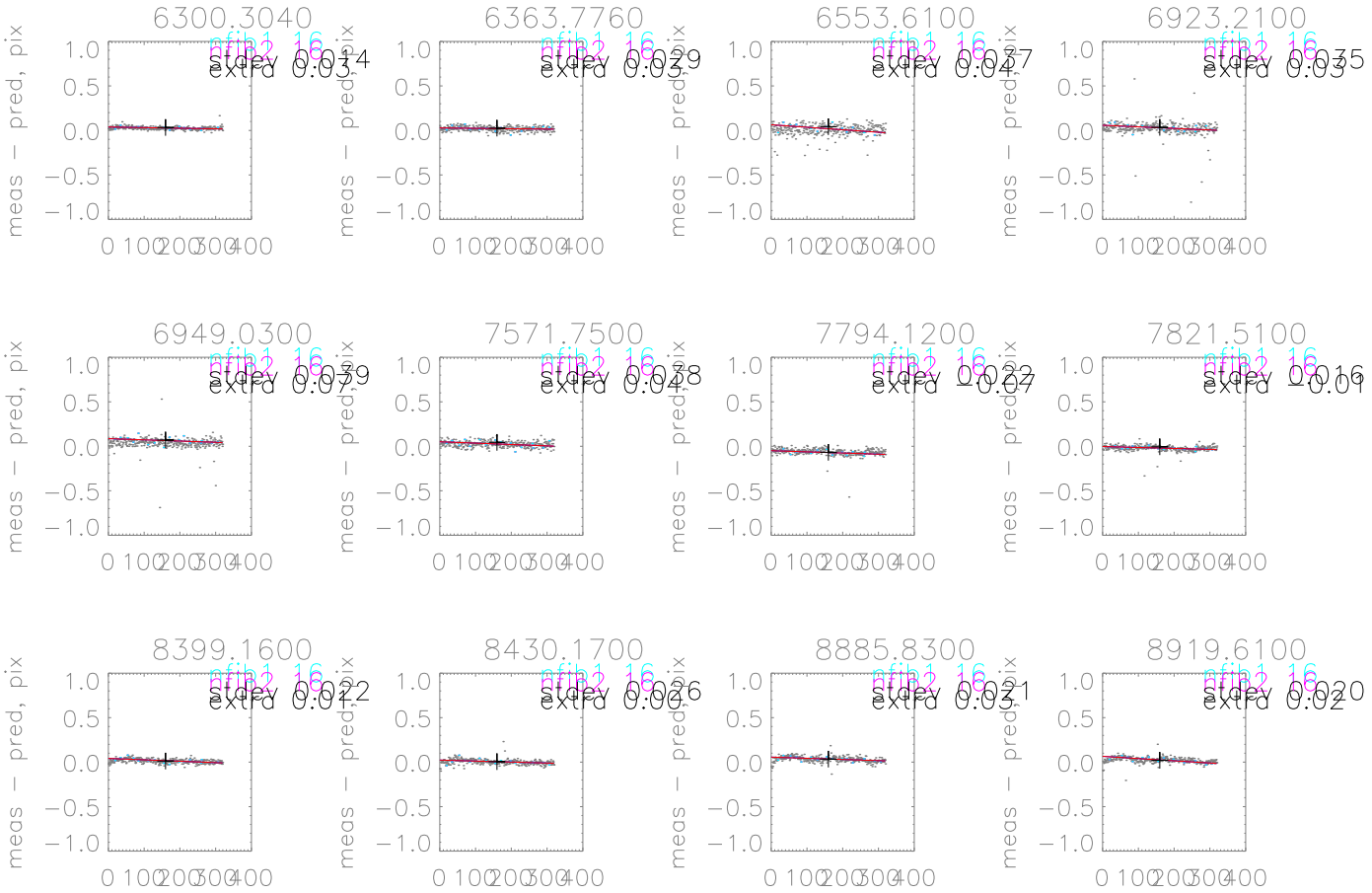

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

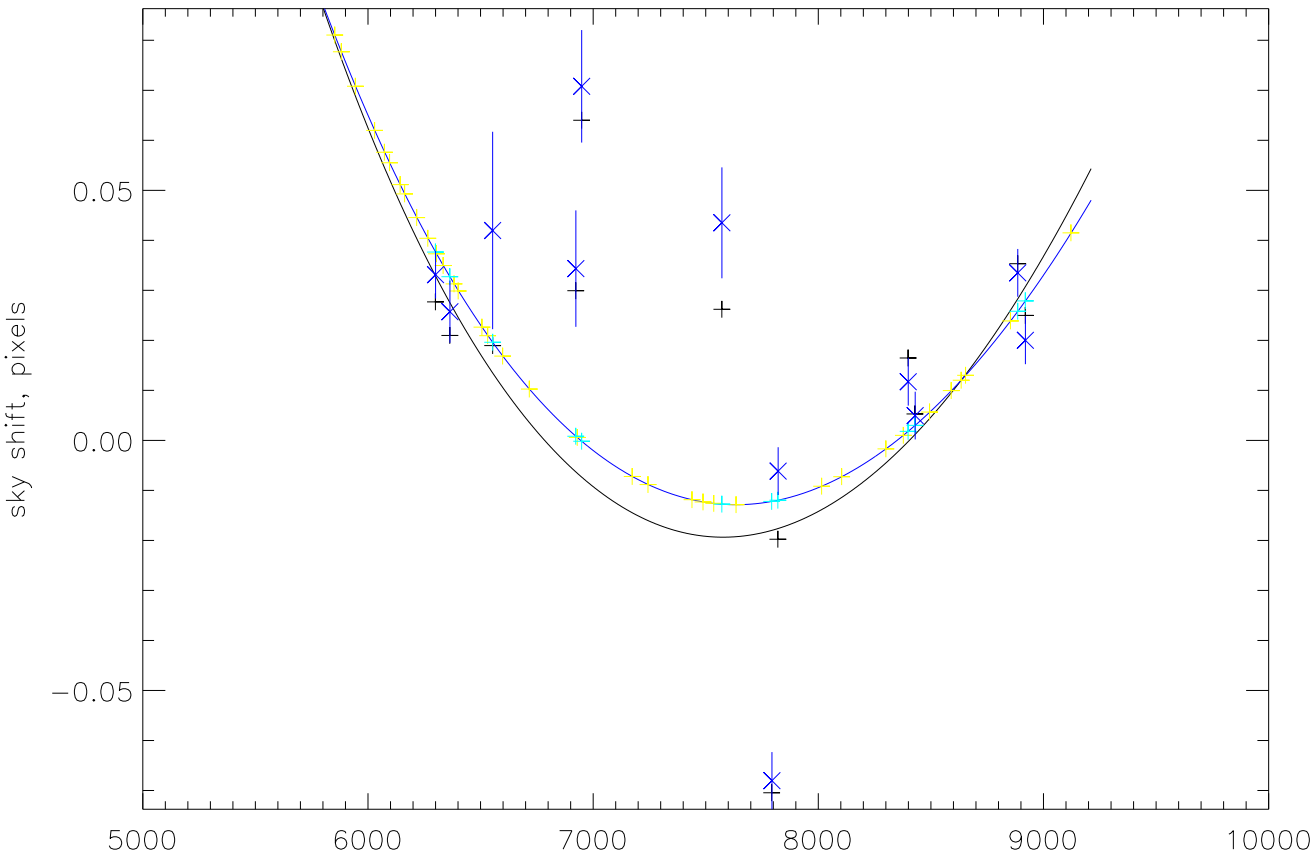

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

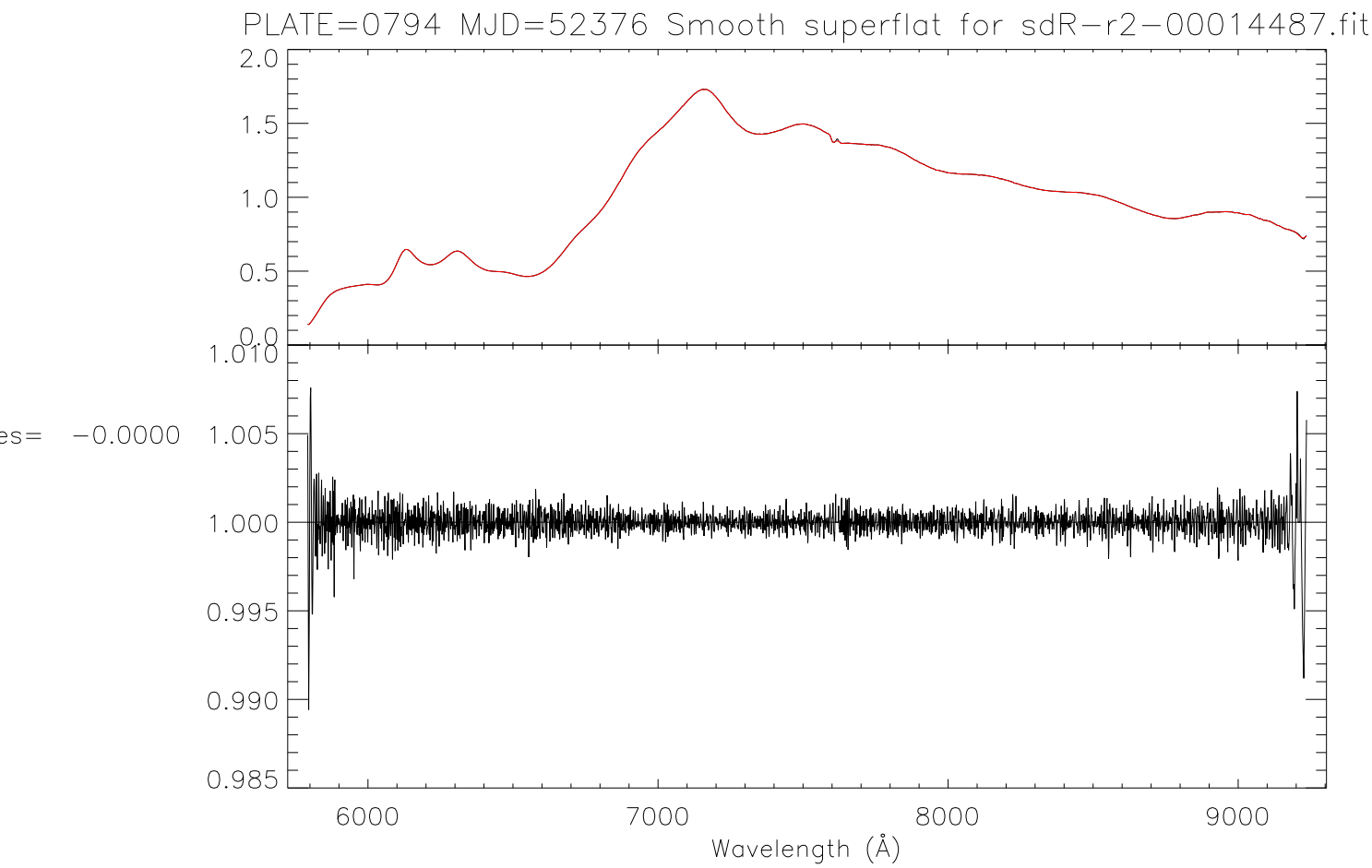

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

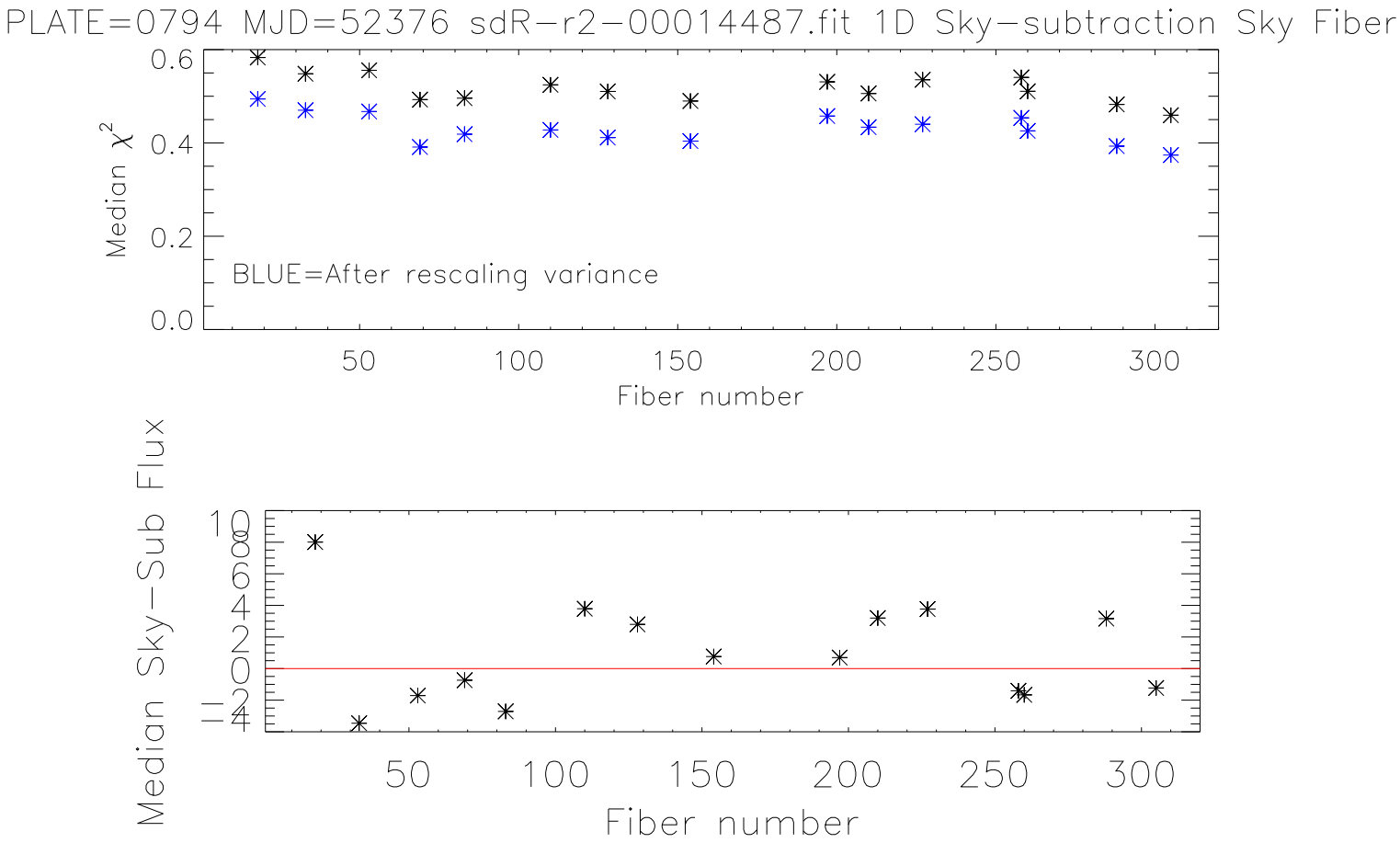

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

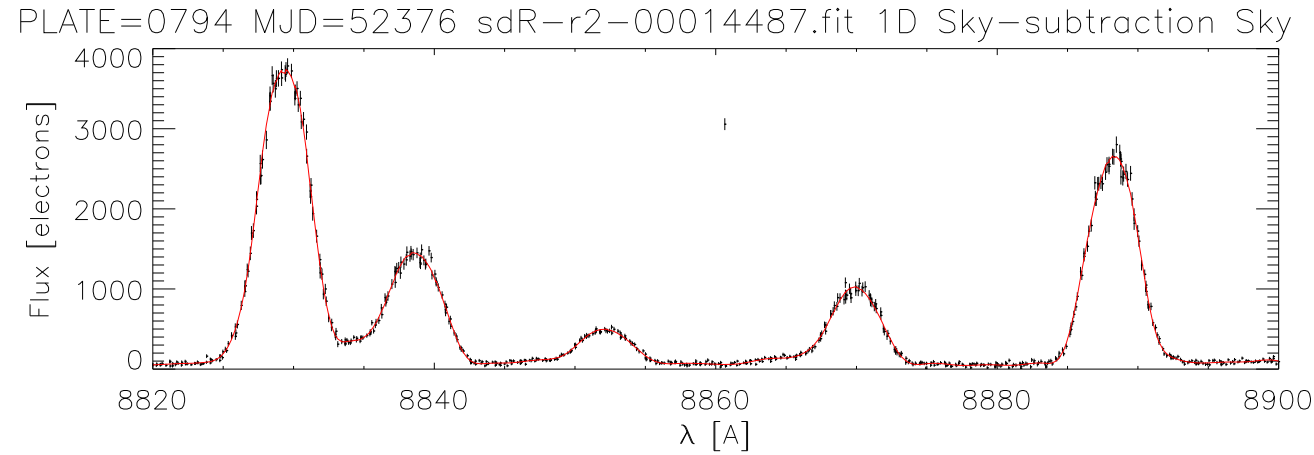

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

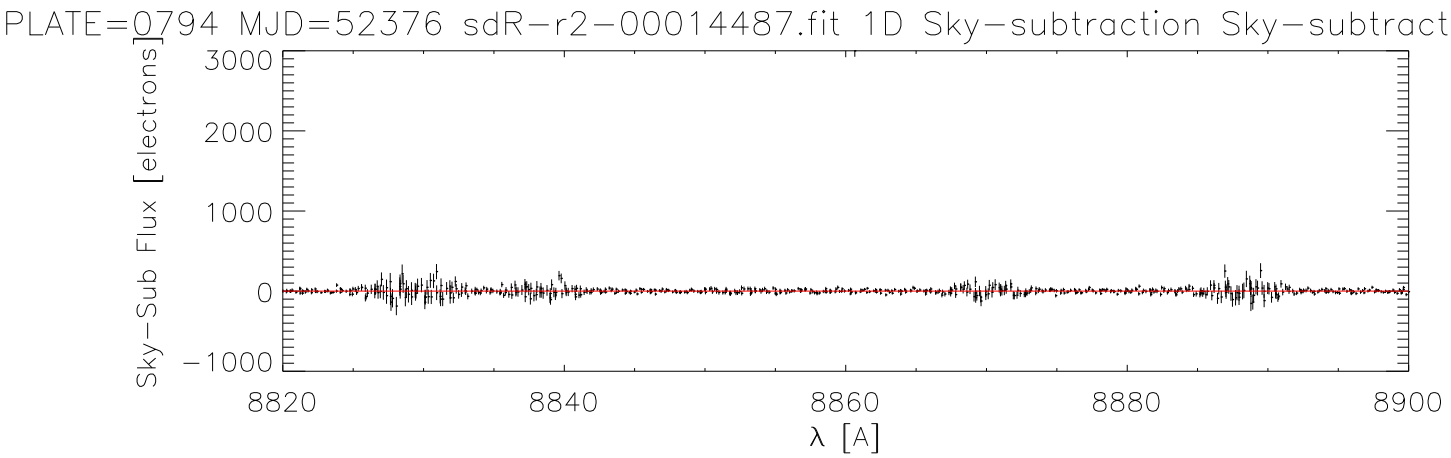

6300.3040
stdev 0.014
extra 0.03
6363.7760
stdev 0.029
extra 0.03
6553.6100
stdev 0.037
extra 0.04
6923.2100
stdev 0.035
extra 0.03
6949.0300
stdev 0.039
extra 0.07
7571.7500
stdev 0.038
extra 0.04
7794.1200
stdev 0.022
extra −0.07
7821.5100
stdev 0.016
extra −0.01
8399.1600
stdev 0.022
extra 0.01
8430.1700
stdev 0.026
extra 0.00
8885.8300
stdev 0.021
extra 0.03
8919.6100
stdev 0.020
extra 0.02
meas − pred, pix
mfbx1 16
mfbx2 16

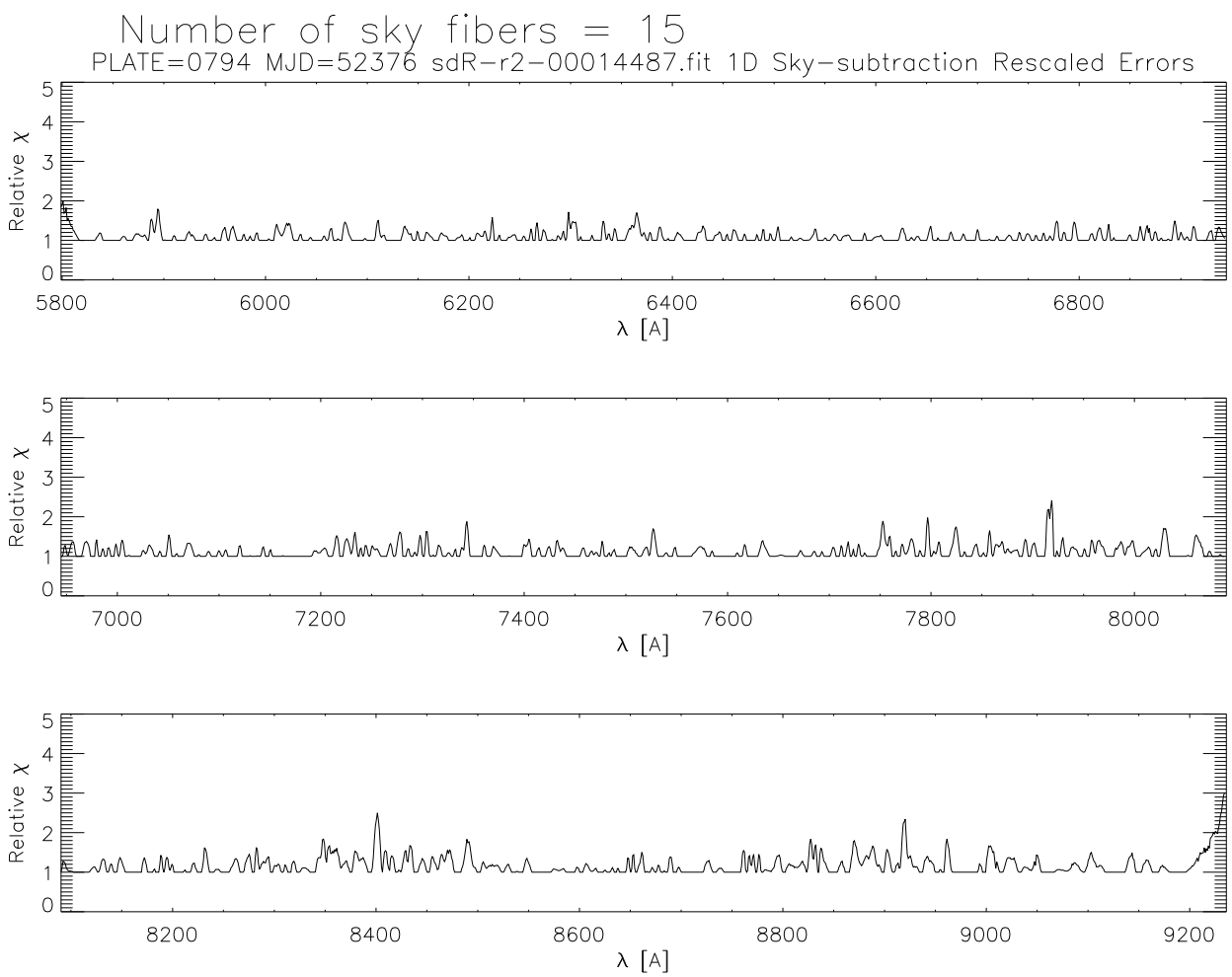

sky shift, pixels
0.05
0.00
−0.05
5000
6000
7000
8000
9000
10000

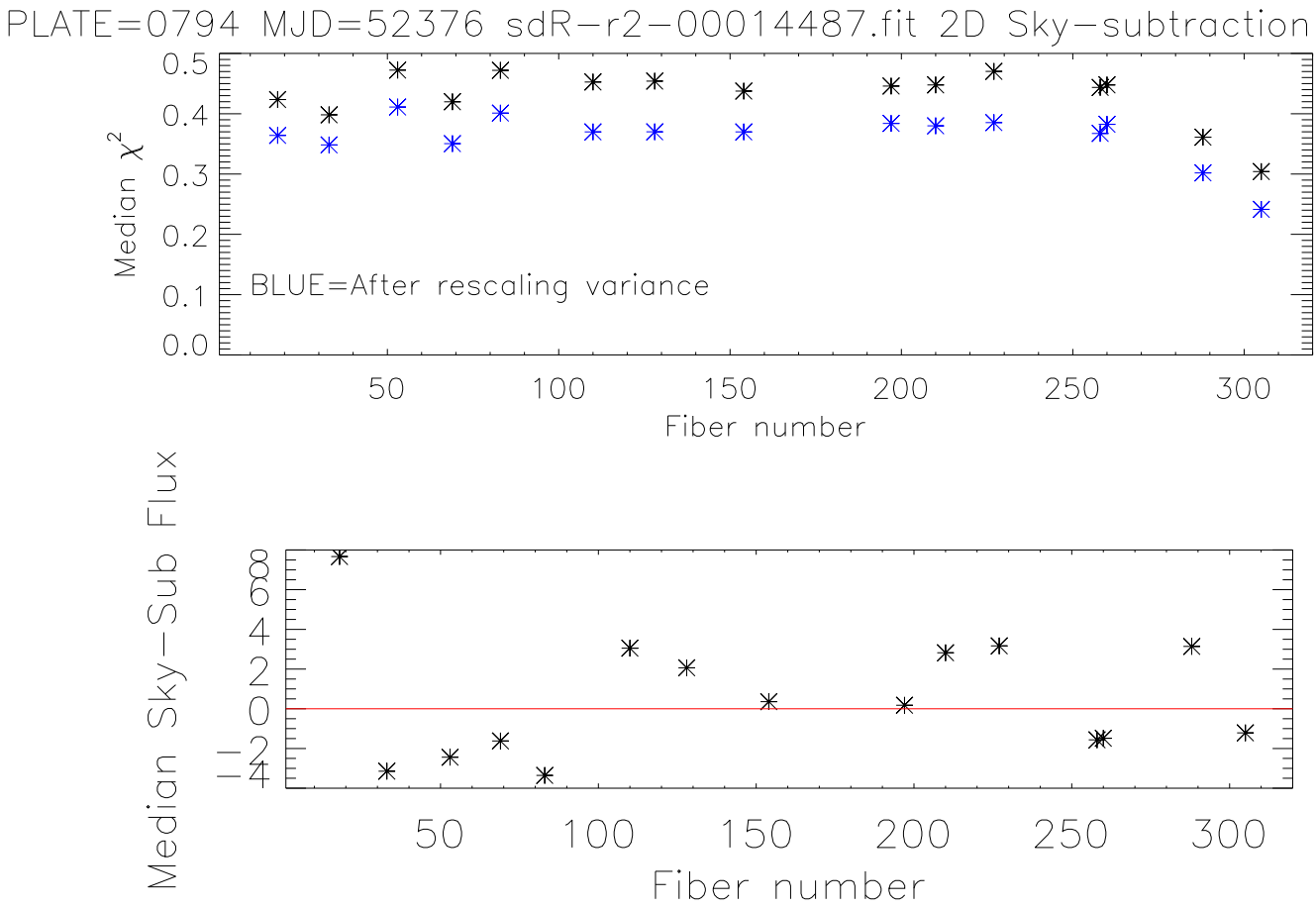

PLATE=0794 MJD=52376 Smooth superflat for sdR-r2-00014487.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

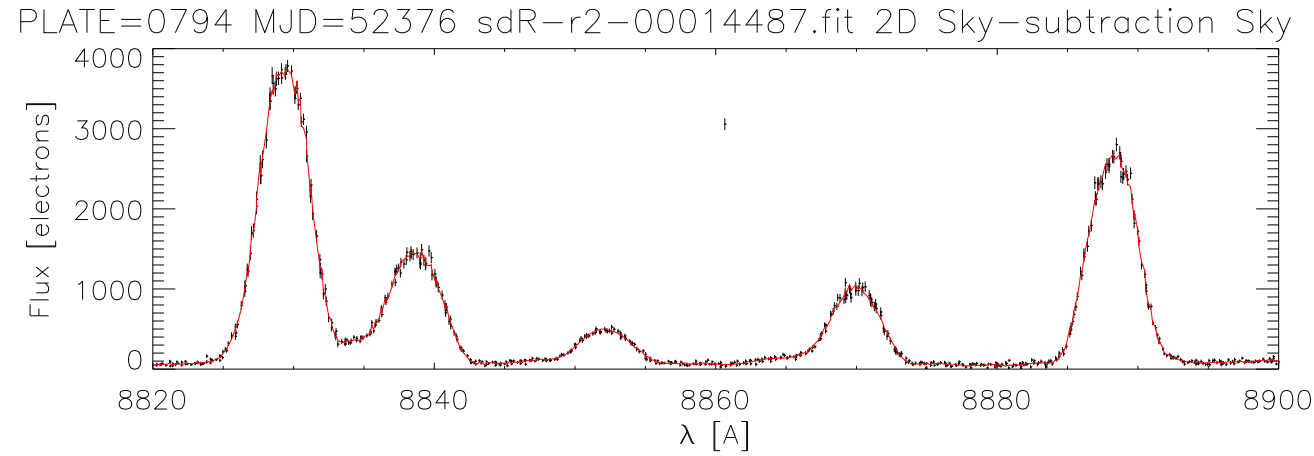

PLATE=0794 MJD=52376 sdR-r2-00014487.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-10
-8
-6
-4
-2
0
2
4
6
8
10
50
100
150
200
250
300
Fiber number

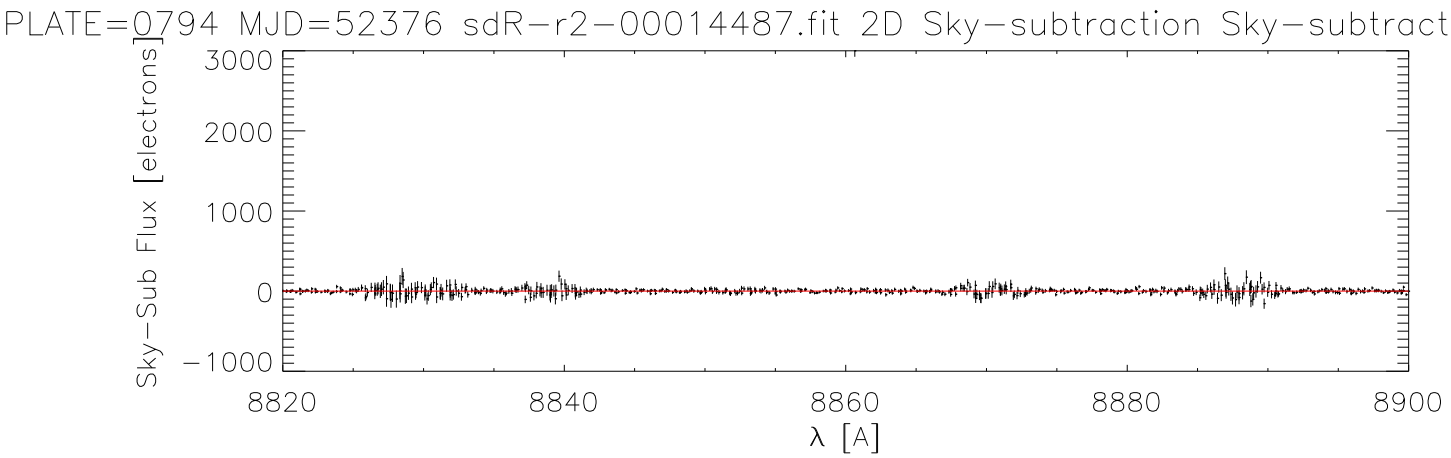

PLATE=0794 MJD=52376 sdR-r2-00014487.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

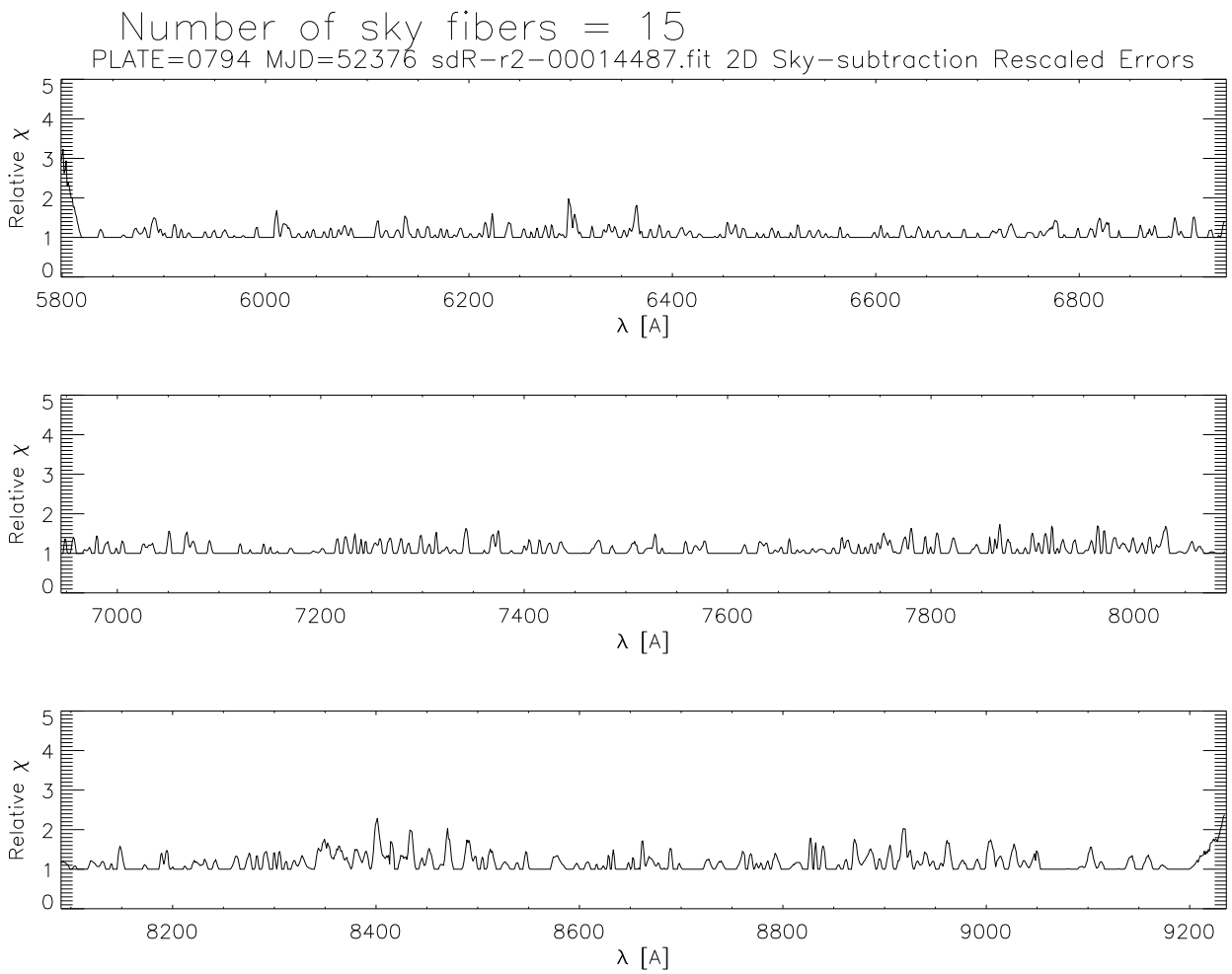

PLATE=0794 MJD=52376 sdR-r2-00014487.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

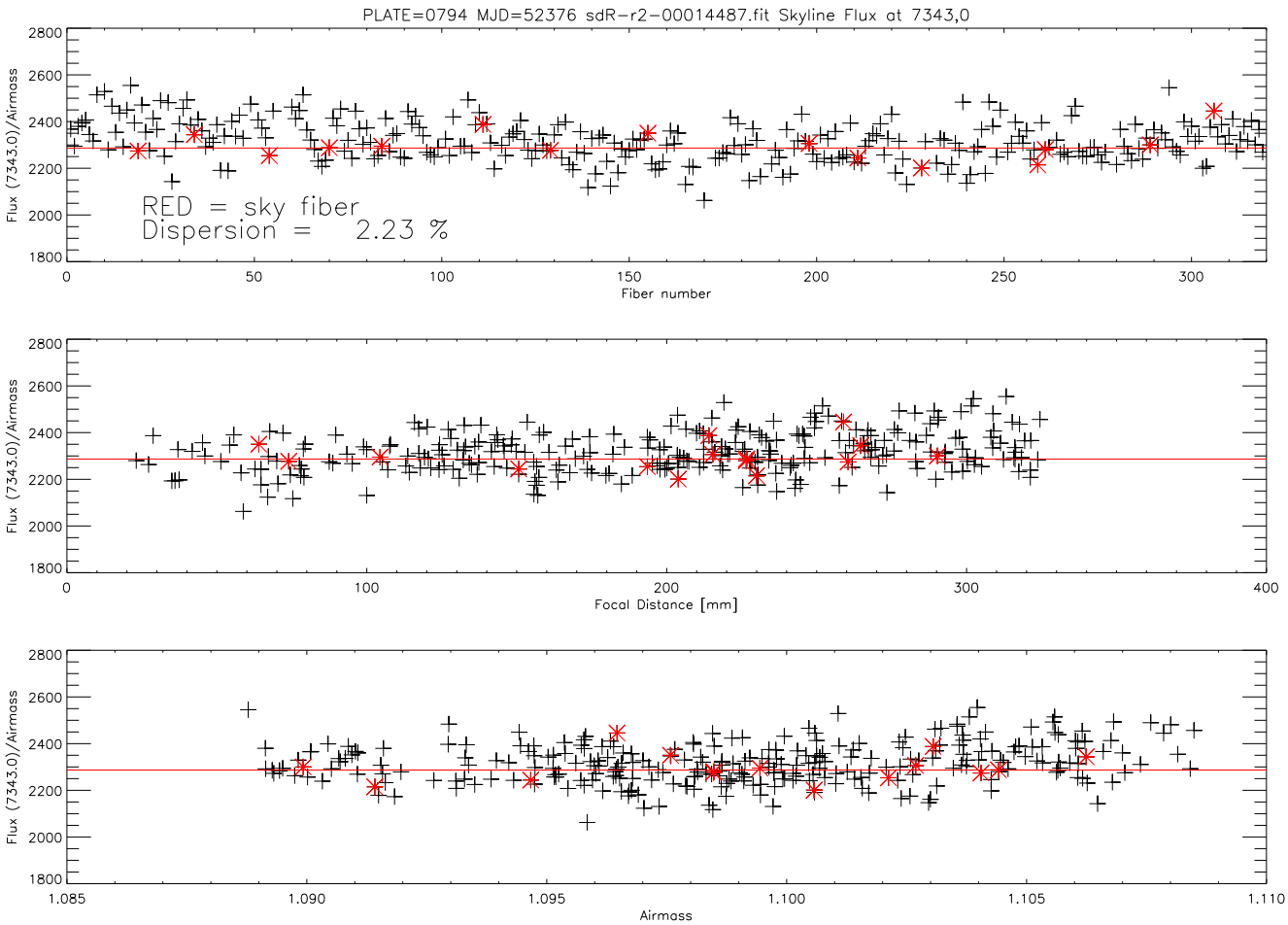

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r2-00014487.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

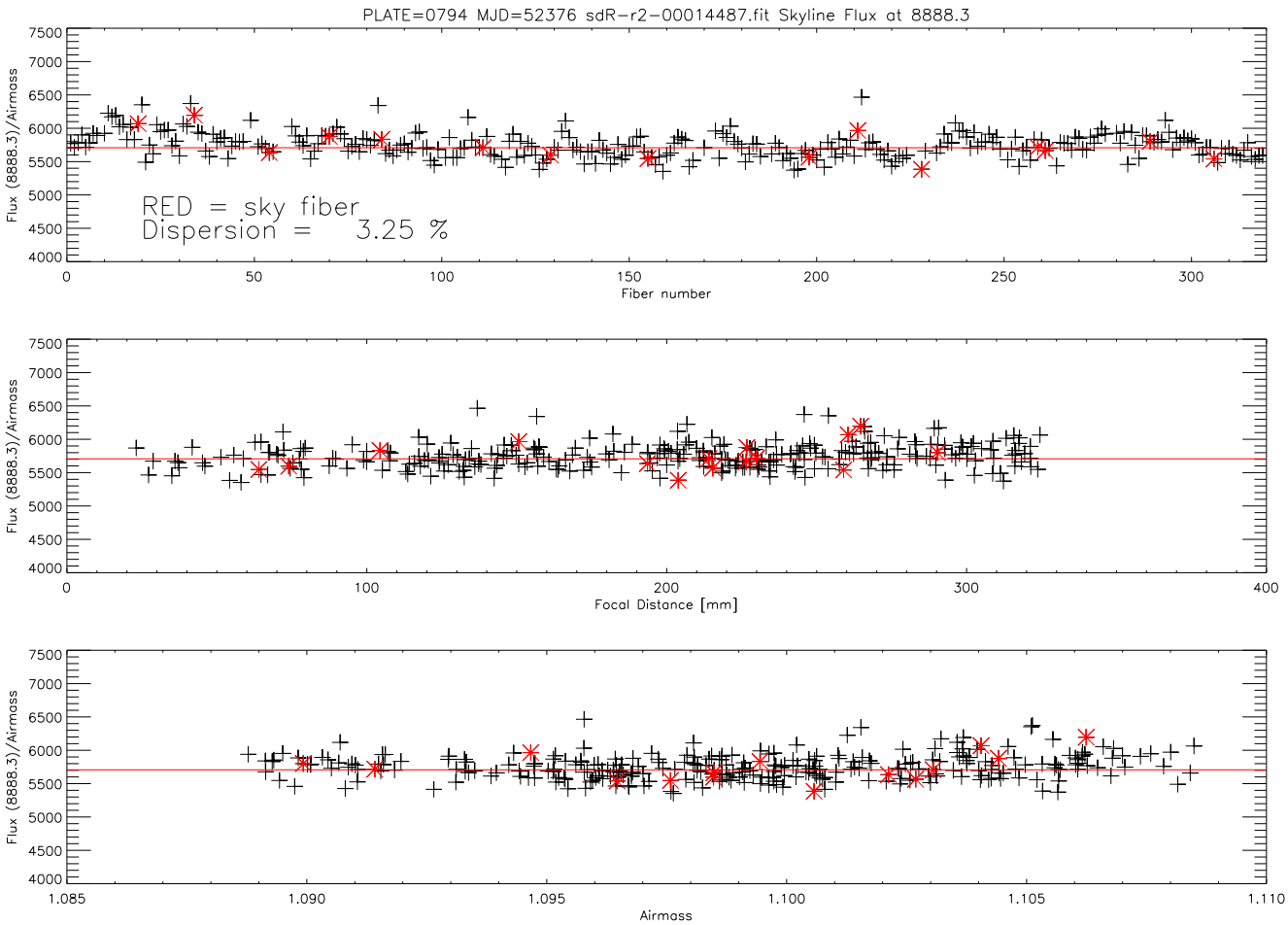

PLATE=0794 MJD=52376 sdR-r2-00014487.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

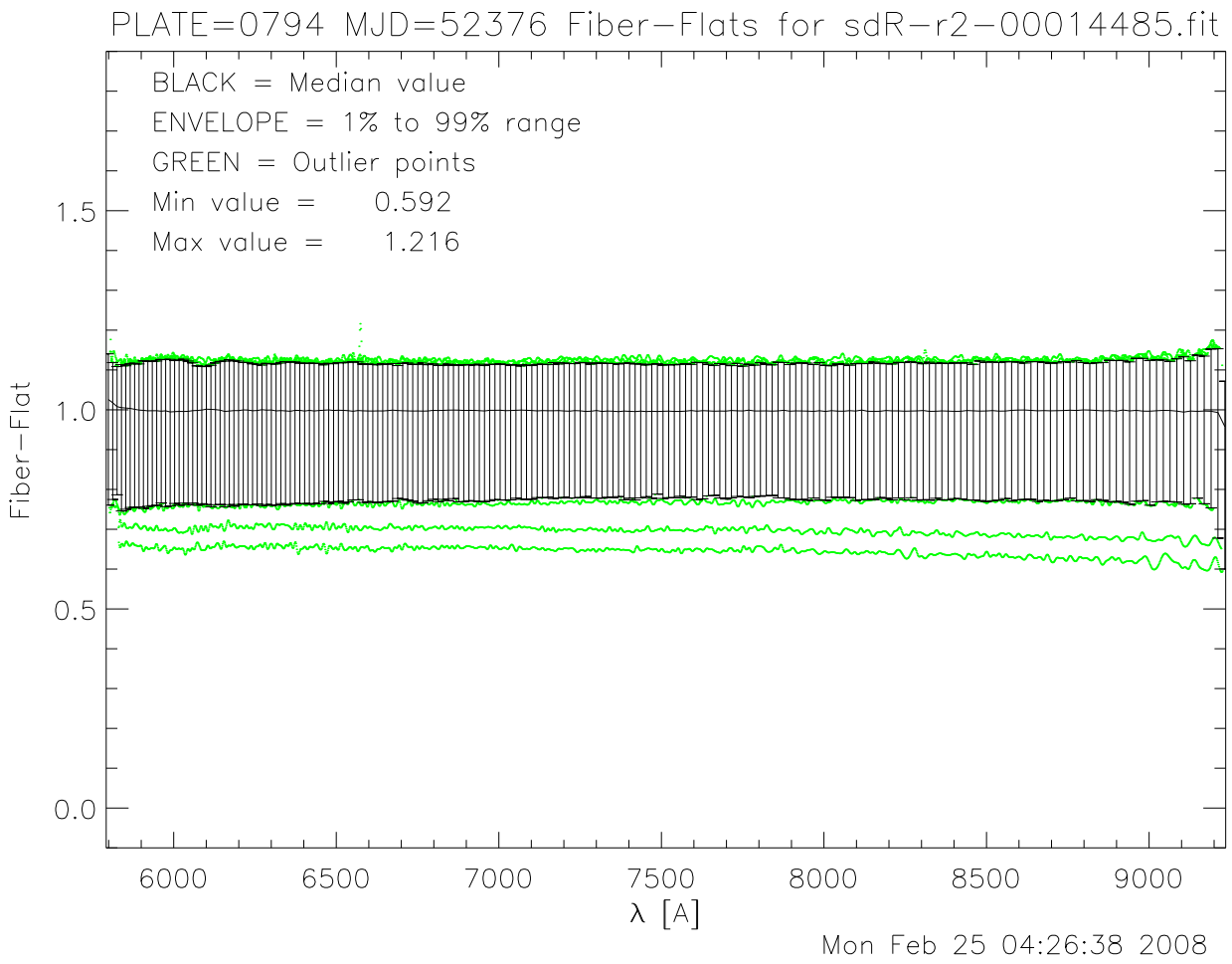

PLATE=0794 MJD=52376 sdR-r2-00014487.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

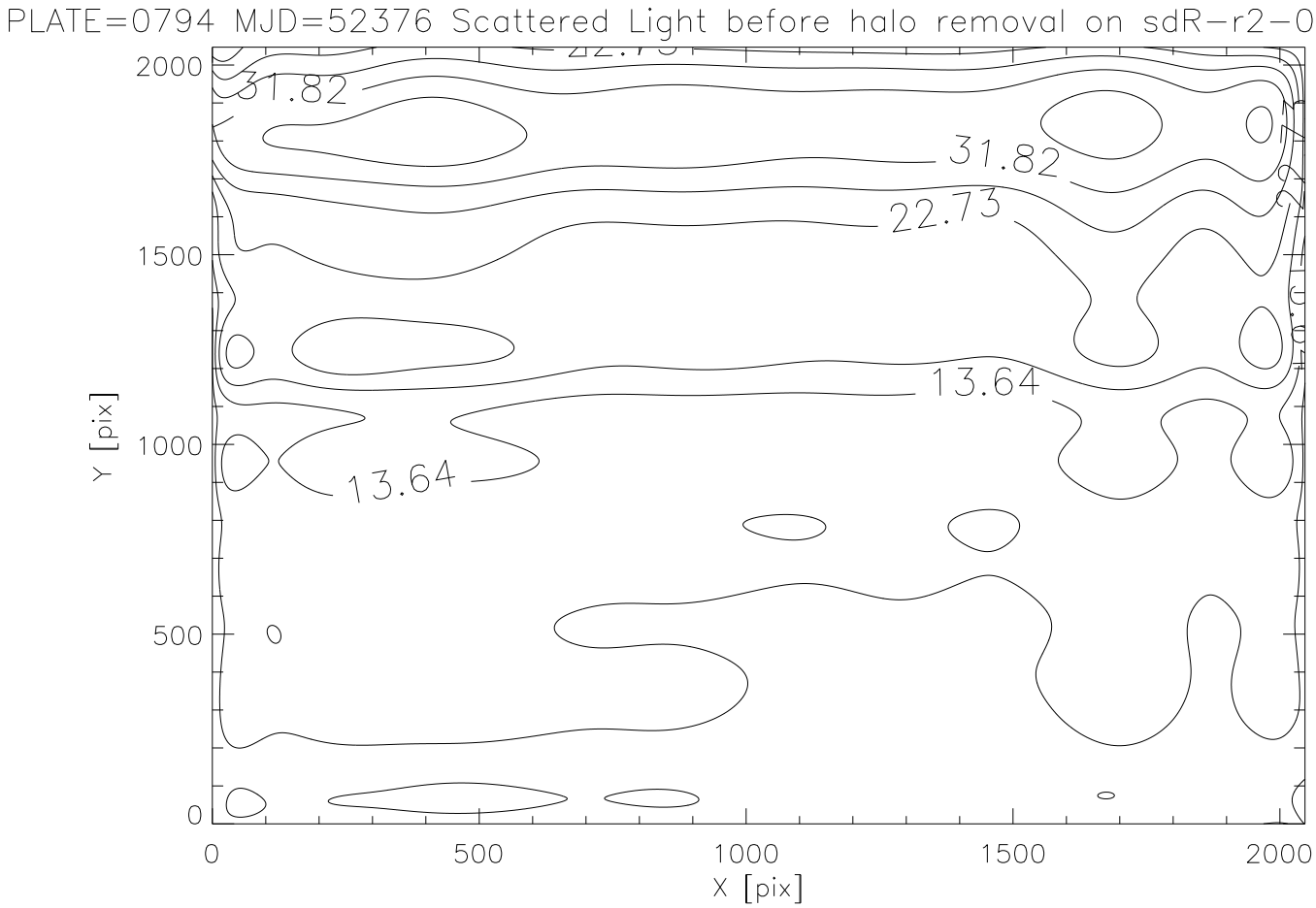

PLATE=0794 MJD=52376 sdR-r2-00014487.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

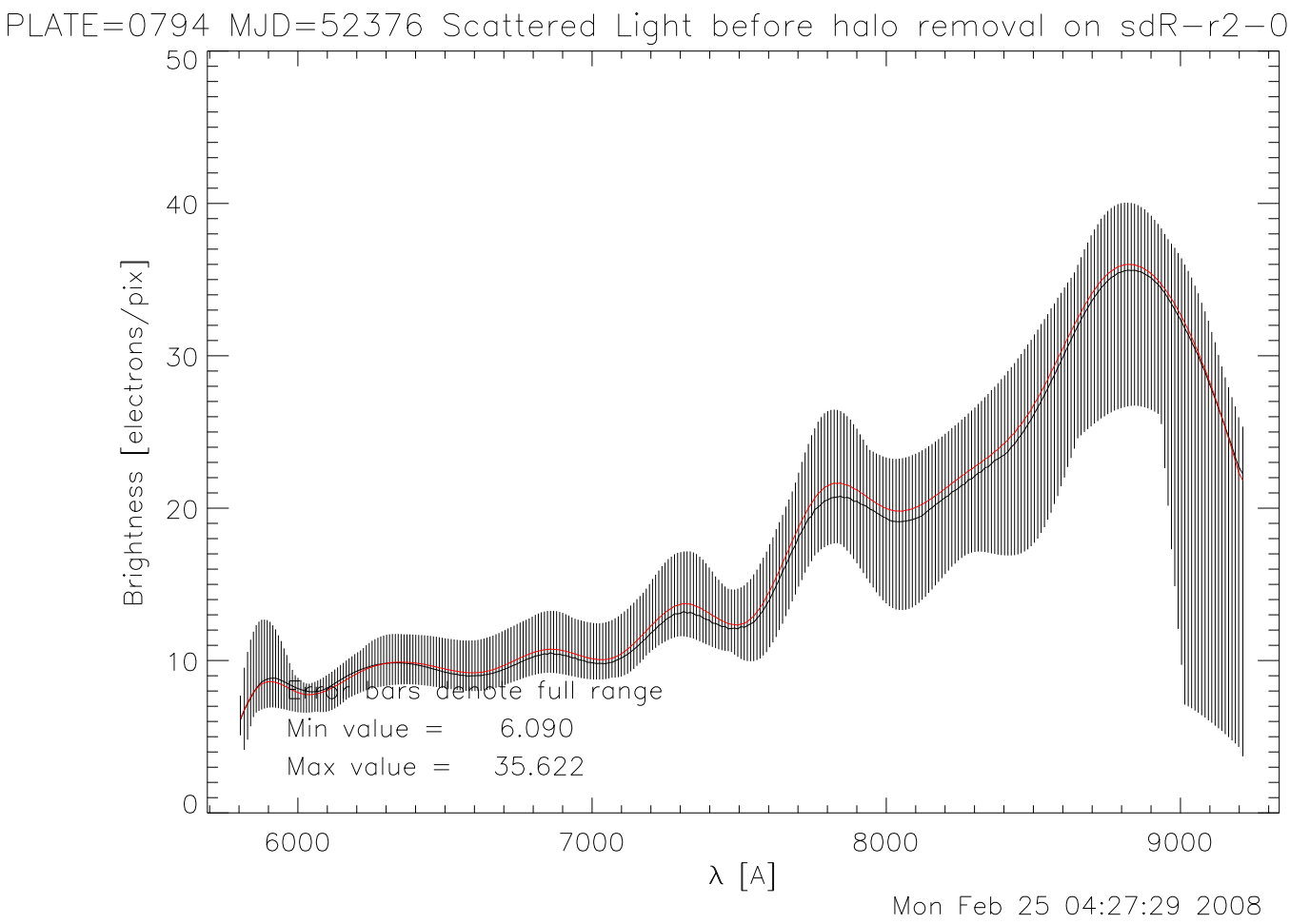

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r2-00014487.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

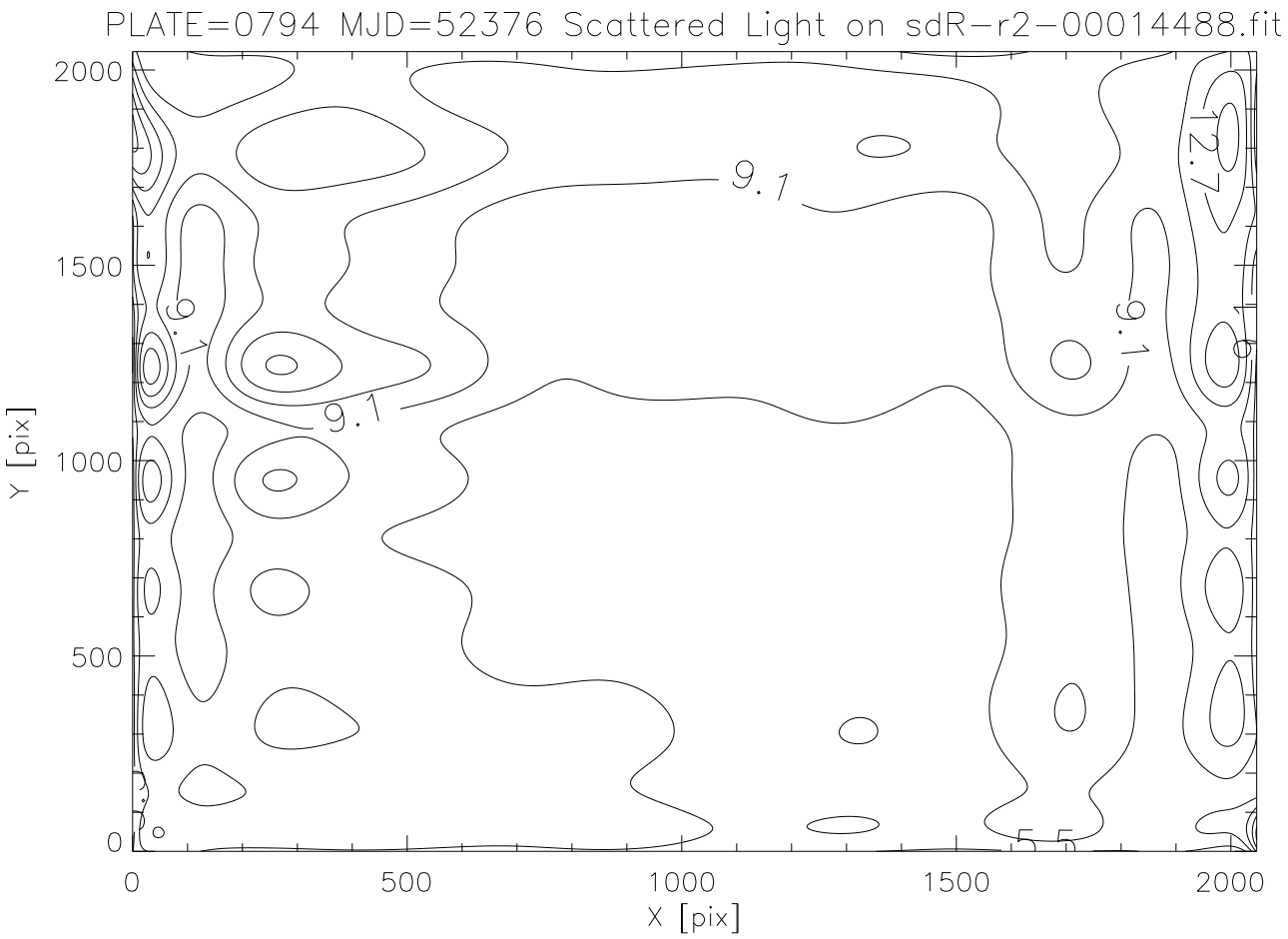

PLATE=0794 MJD=52376 sdR-r2-00014487.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.23 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

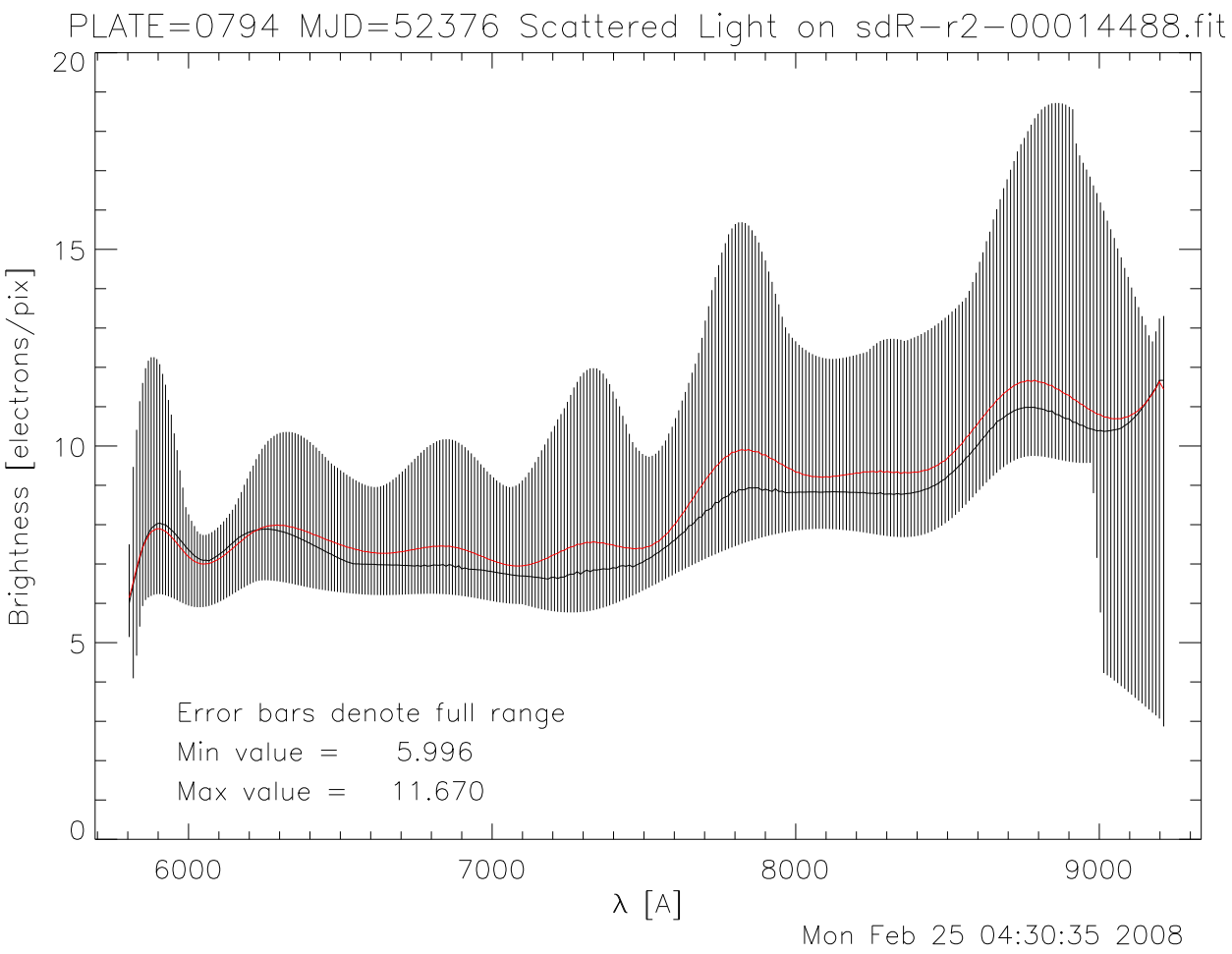

PLATE=0794 MJD=52376 sdR-r2-00014487.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.25 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

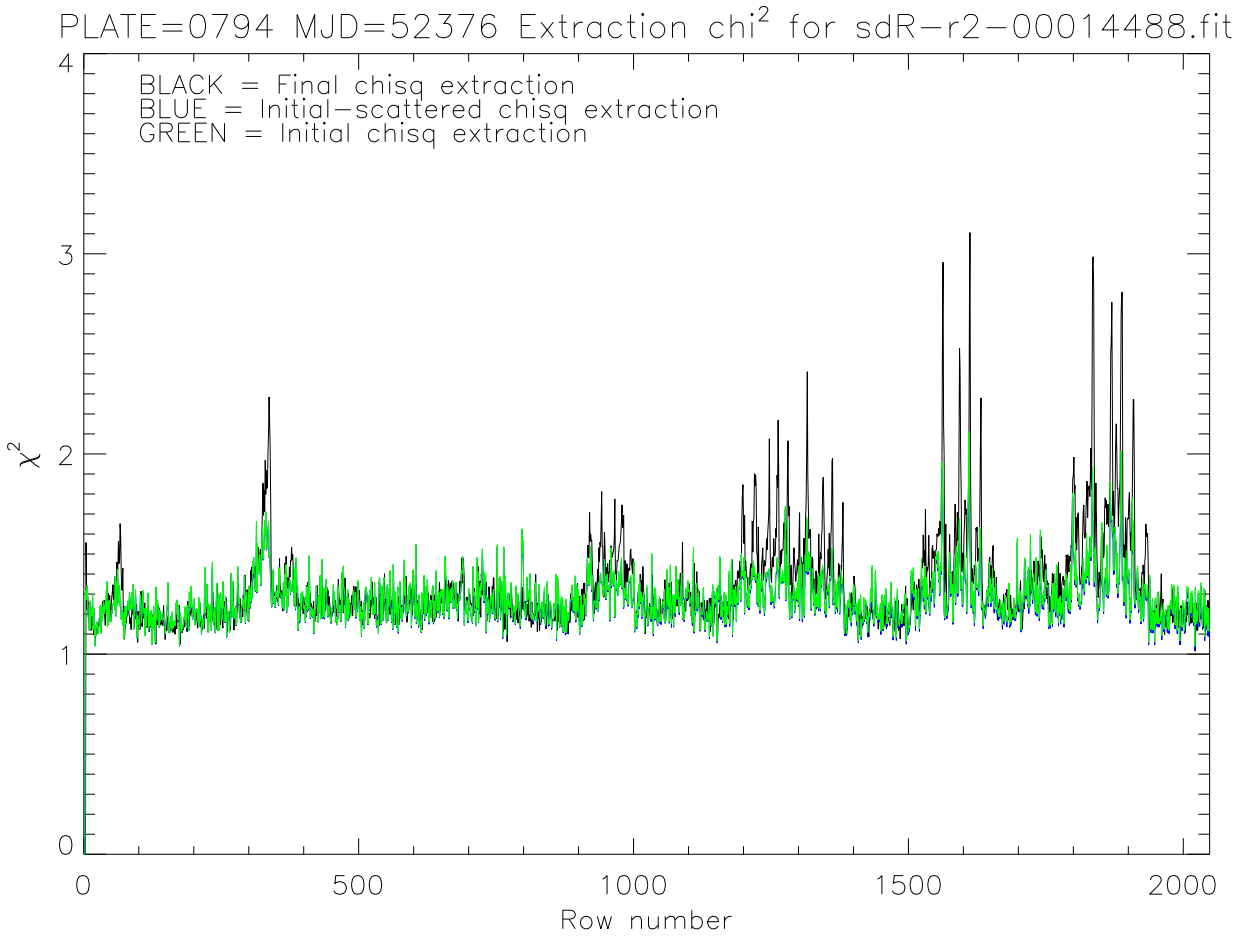

PLATE=0794 MJD=52376 Fiber−Flats for sdR−r2−00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.592
Max value = 1.216
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 04:26:38 2008

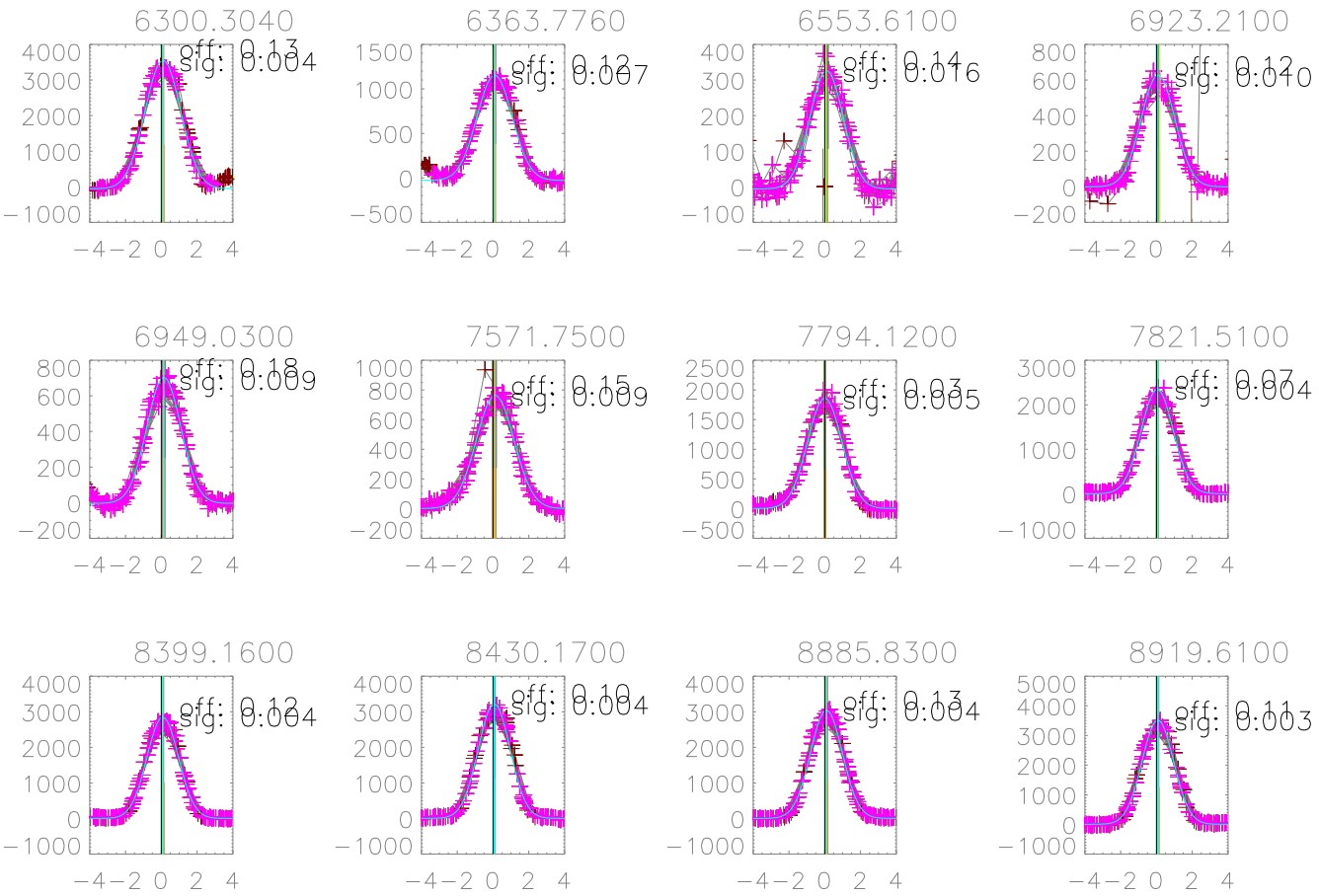

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r2-00014488.fi
31.82
31.82
22.73
13.64
13.64
0
Y [pix]
X [pix]
0
500
1000
1500
2000

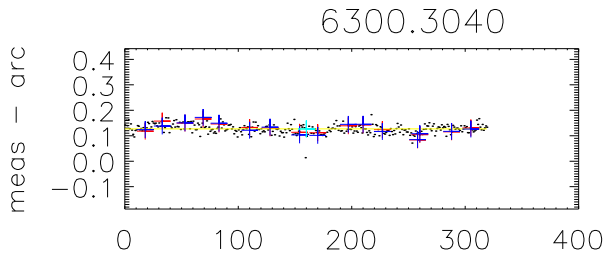

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r2-00014488.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.090
Max value = 35.622
Mon Feb 25 04:27:29 2008

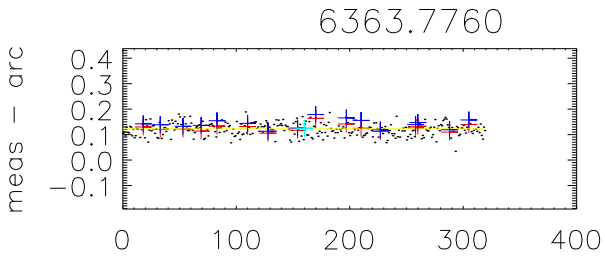

PLATE=0794 MJD=52376 Scattered Light on sdR-r2-00014488.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
9.1
9.1
12.7
5.5

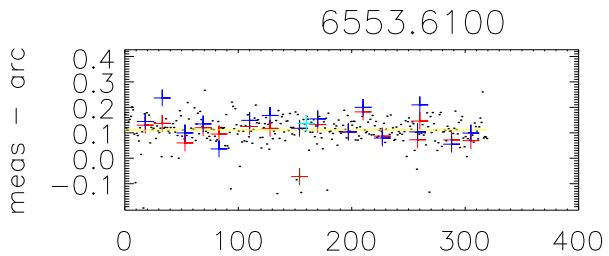

PLATE=0794 MJD=52376 Scattered Light on sdR-r2-00014488.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.996
Max value = 11.670
Mon Feb 25 04:30:35 2008

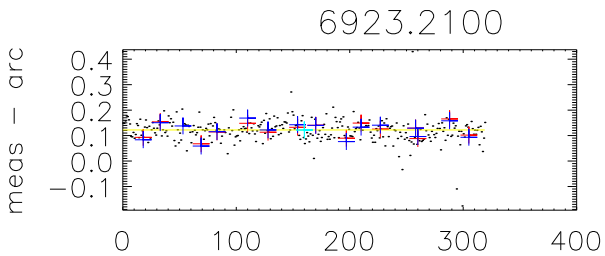

PLATE=0794 MJD=52376 Extraction chi^2 for sdR−r2−00014488.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

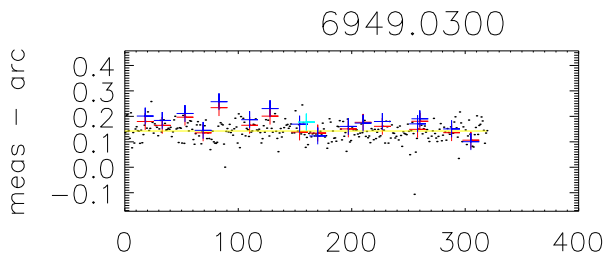

6300.3040
off: 0.13
sig: 0.004
6363.7760
off: 0.12
sig: 0.007
6553.6100
off: 0.14
sig: 0.016
6923.2100
off: 0.12
sig: 0.010
6949.0300
off: 0.18
sig: 0.009
7571.7500
off: 0.15
sig: 0.009
7794.1200
off: 0.03
sig: 0.005
7821.5100
off: 0.07
sig: 0.004
8399.1600
off: 0.12
sig: 0.004
8430.1700
off: 0.10
sig: 0.004
8885.8300
off: 0.13
sig: 0.004
8919.6100
off: 0.11
sig: 0.003

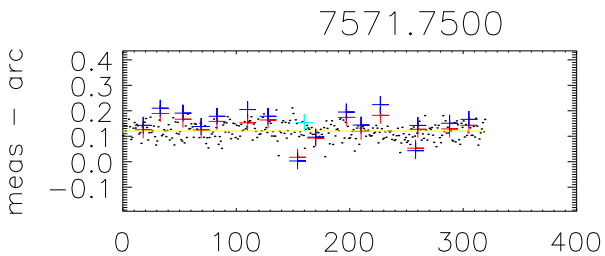

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

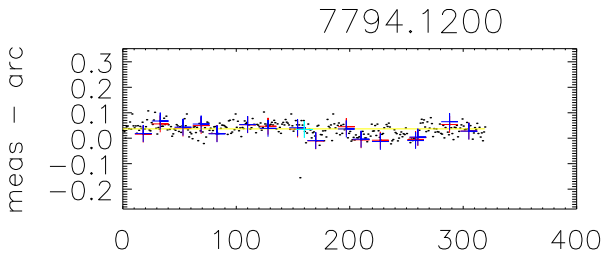

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

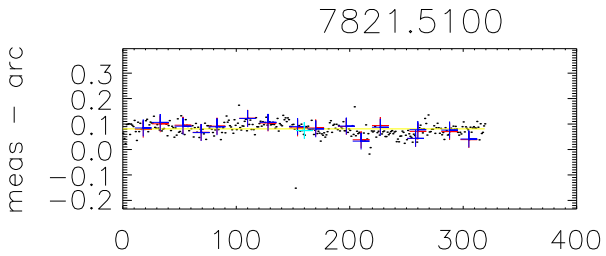

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

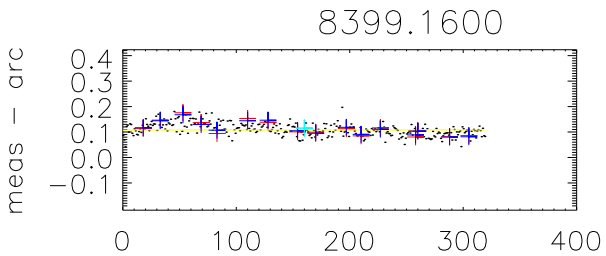

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

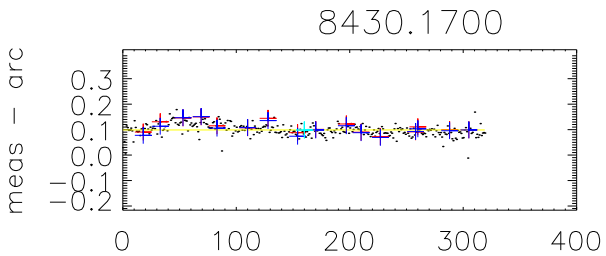

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

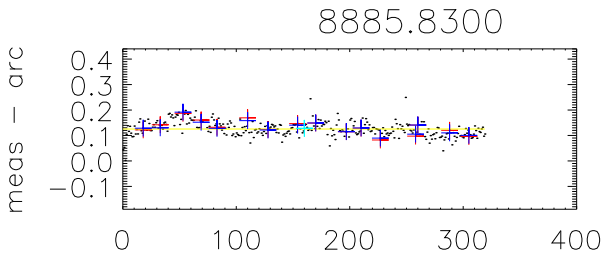

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

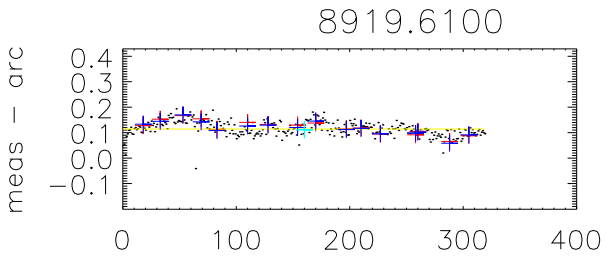

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

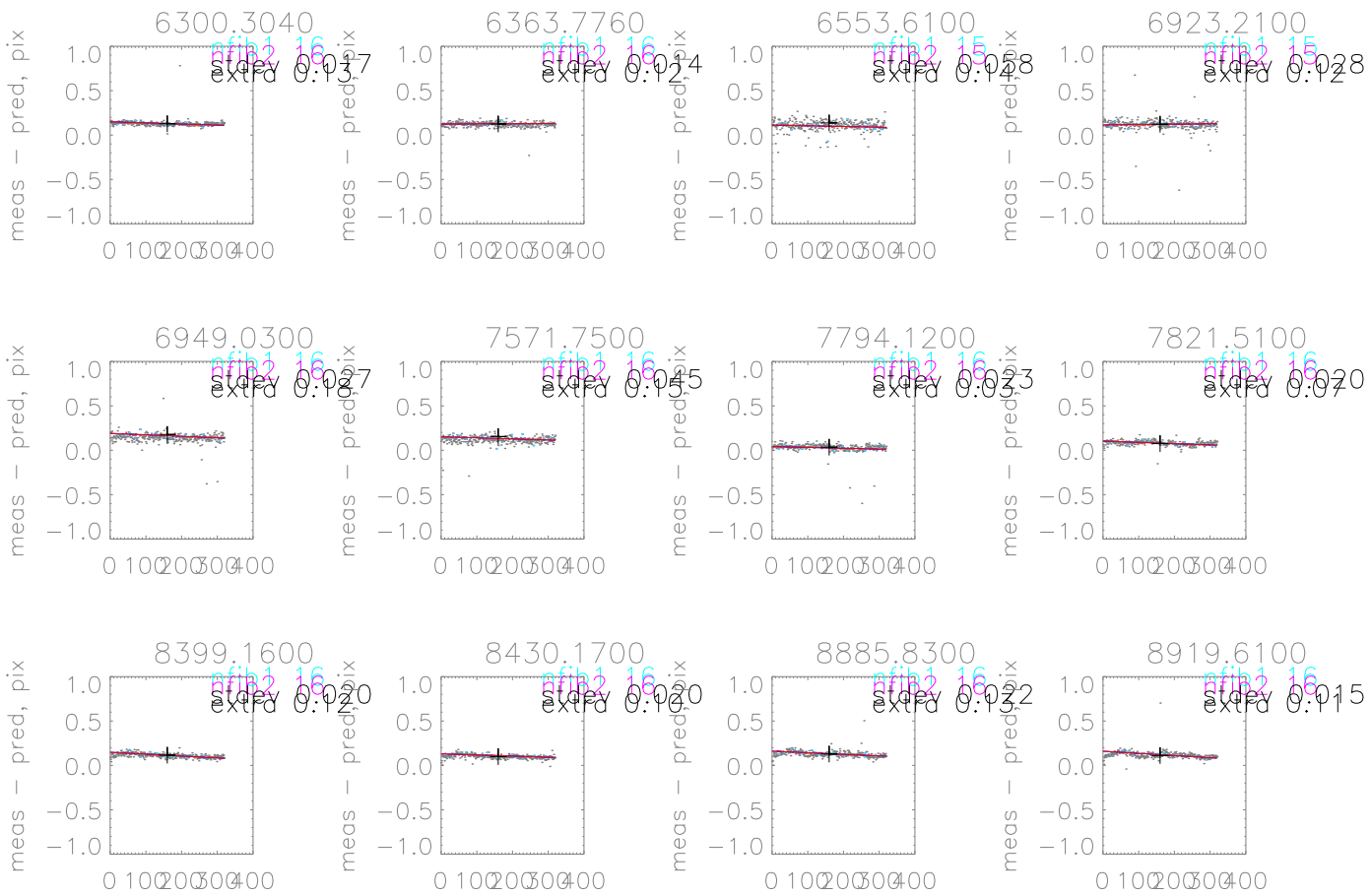

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

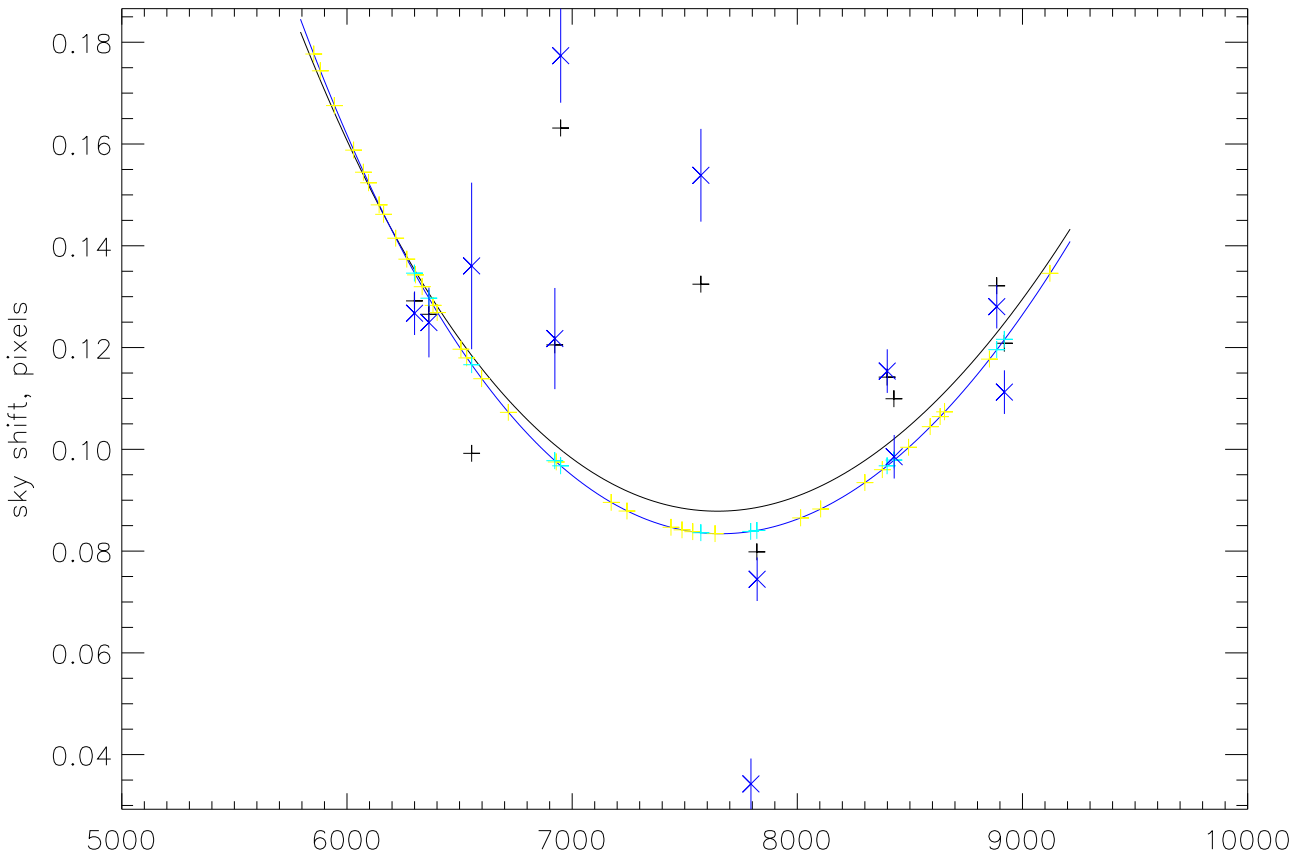

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

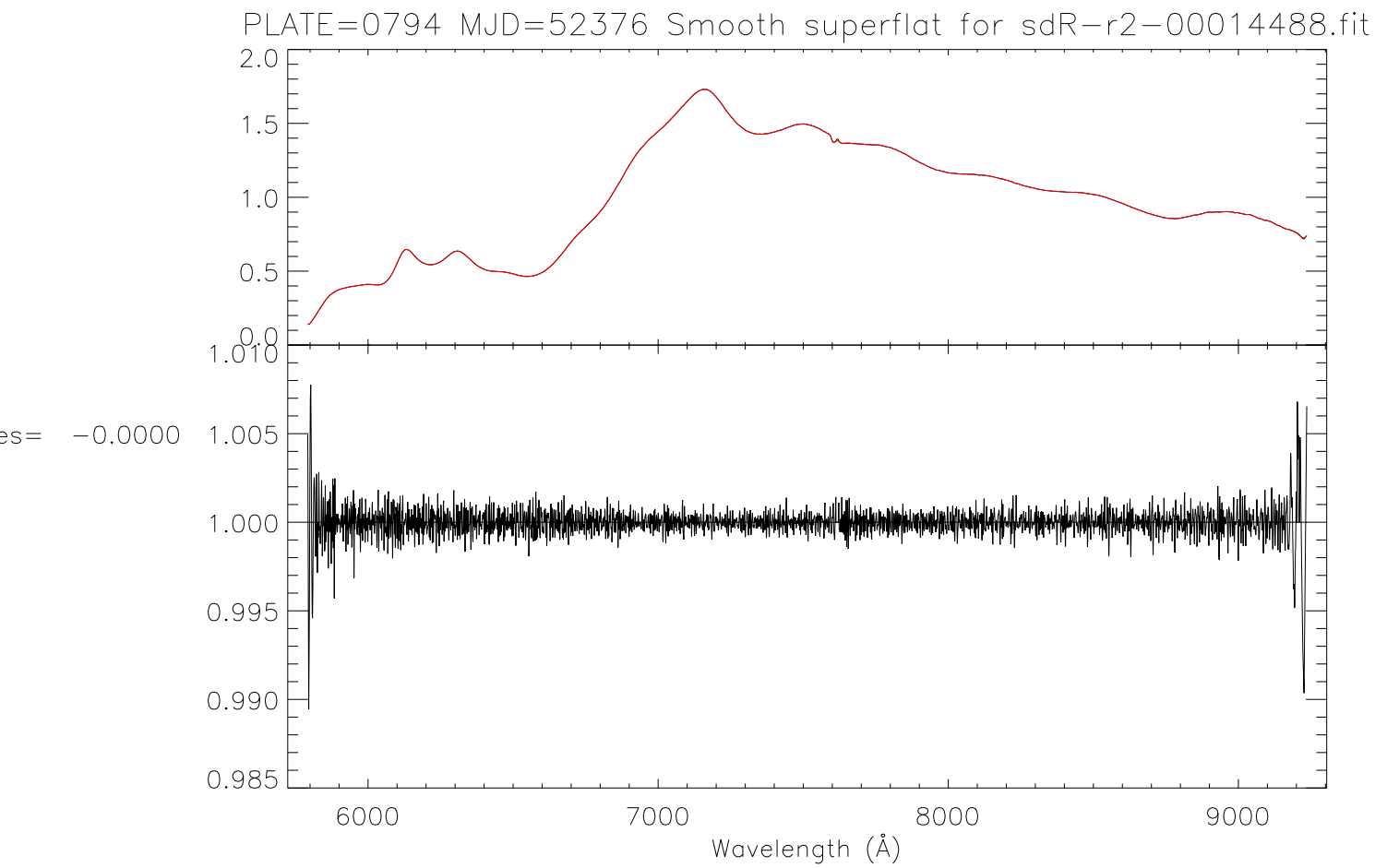

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

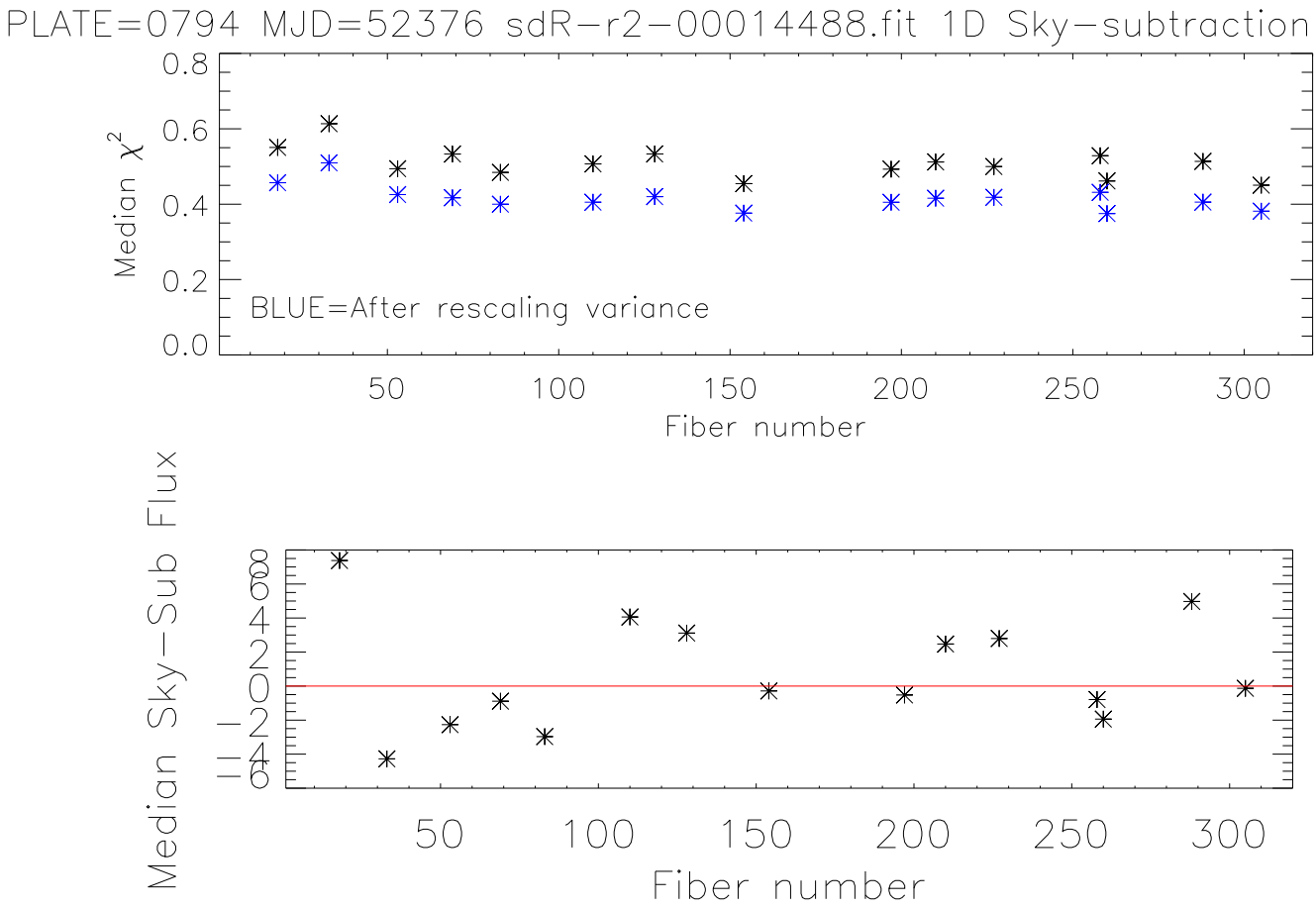

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

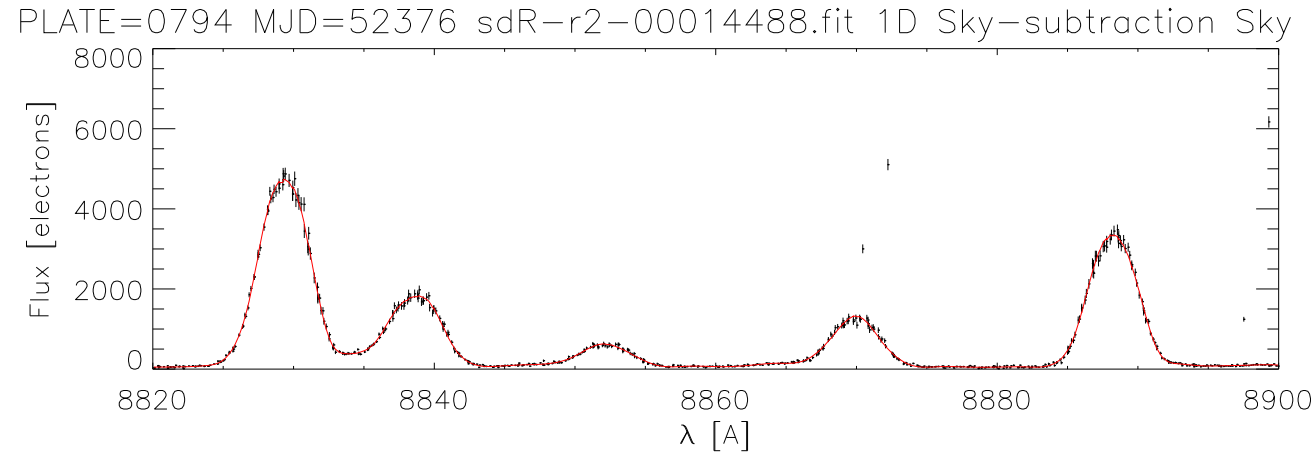

6300.3040
stdev 0.017
extra 0.13
6363.7760
stdev 0.014
extra 0.12
6553.6100
stdev 0.028
extra 0.14
6923.2100
stdev 0.028
extra 0.12
6949.0300
stdev 0.027
extra 0.18
7571.7500
stdev 0.045
extra 0.15
7794.1200
stdev 0.023
extra 0.03
7821.5100
stdev 0.020
extra 0.07
8399.1600
stdev 0.020
extra 0.12
8430.1700
stdev 0.020
extra 0.10
8885.8300
stdev 0.022
extra 0.13
8919.6100
stdev 0.015
extra 0.11
meas − pred, pix
mfb32 16
mfb32 15

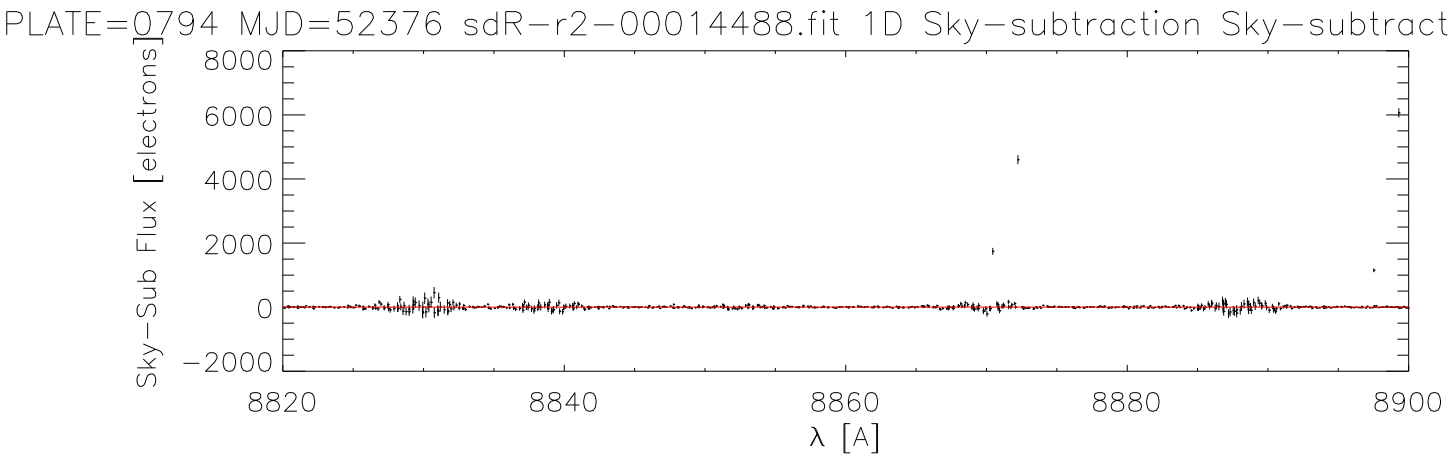

sky shift, pixels
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
5000
6000
7000
8000
9000
10000

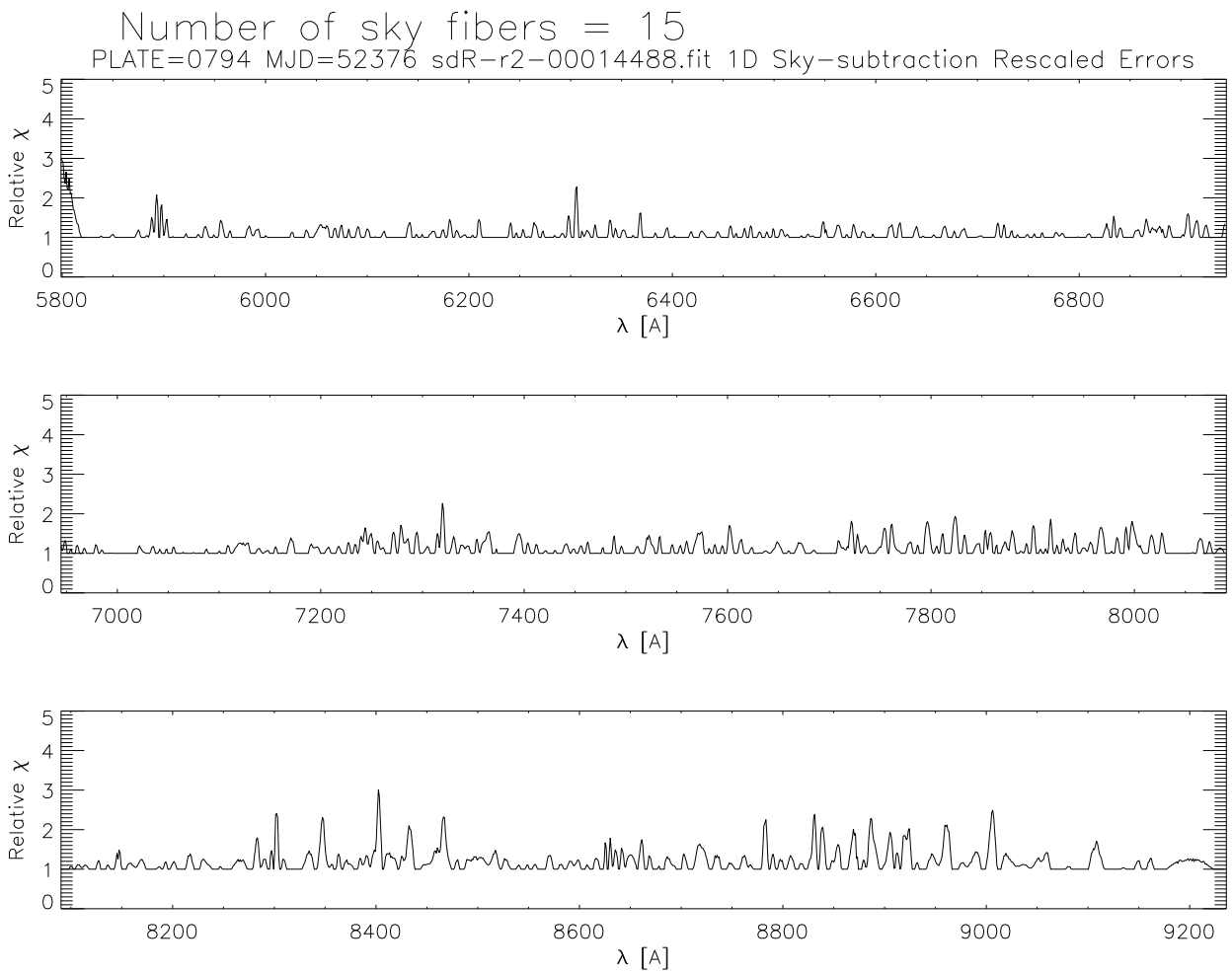

PLATE=0794 MJD=52376 Smooth superflat for sdR-r2-00014488.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

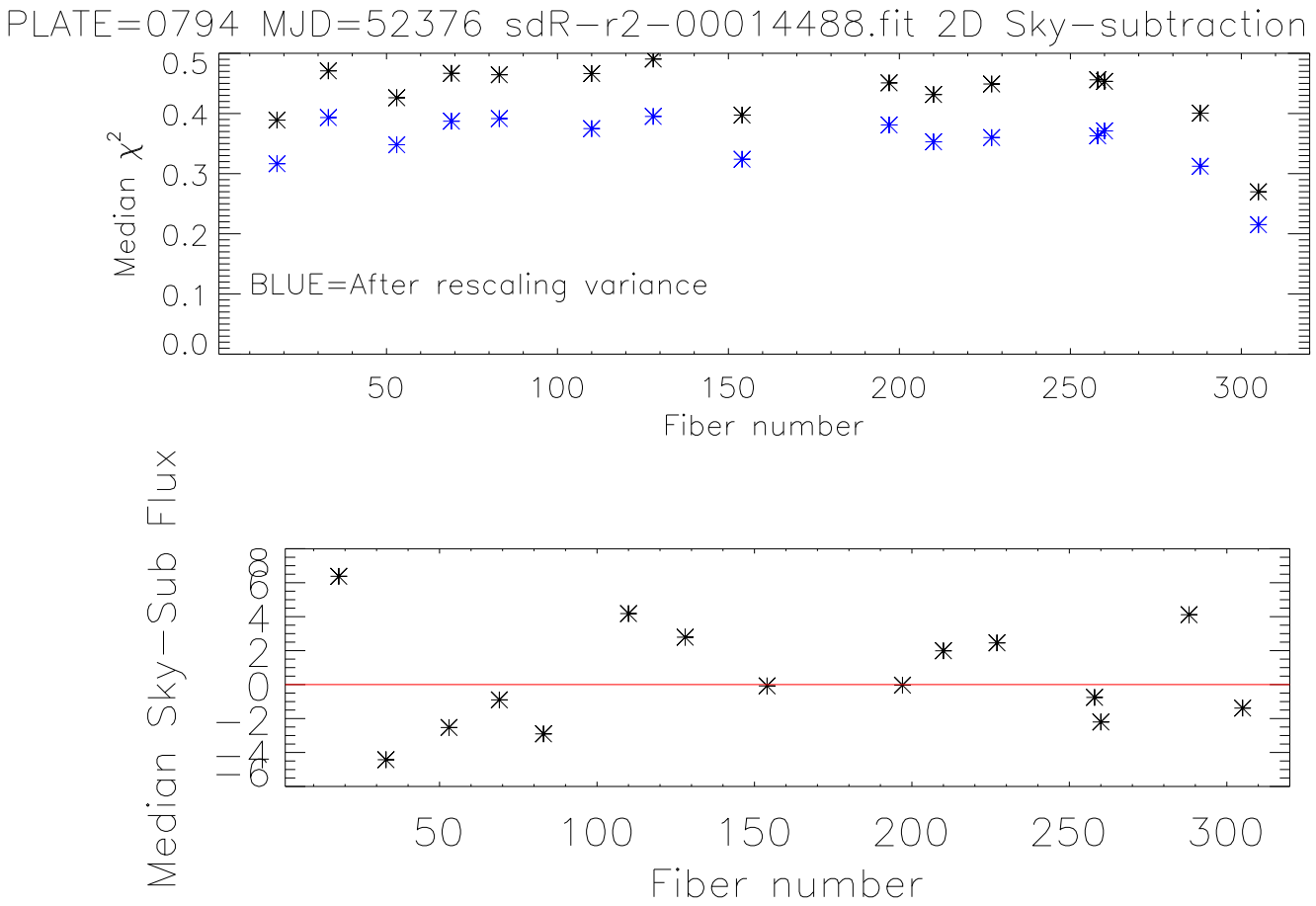

PLATE=0794 MJD=52376 sdR-r2-00014488.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

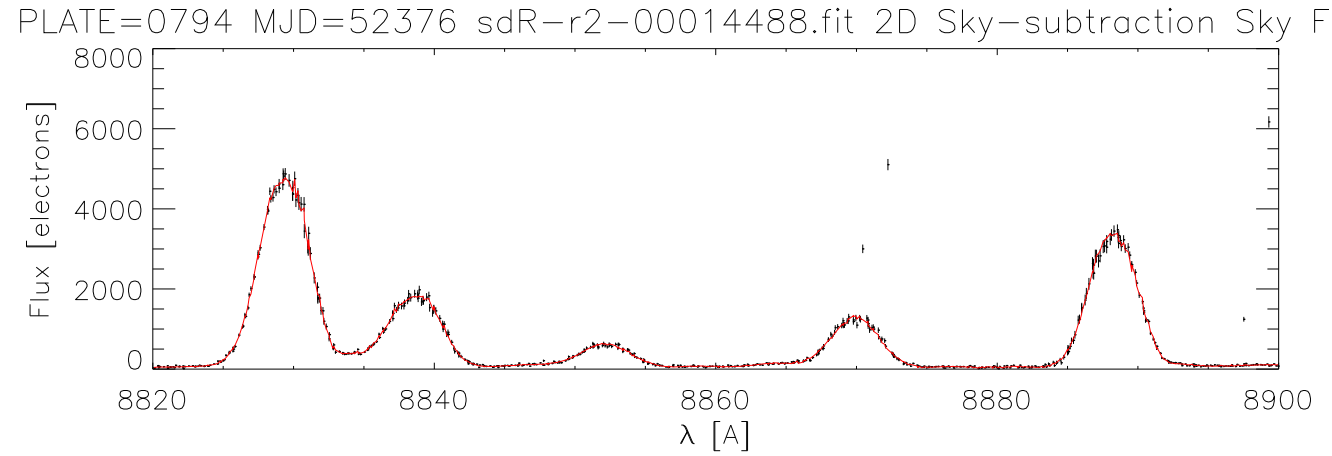
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

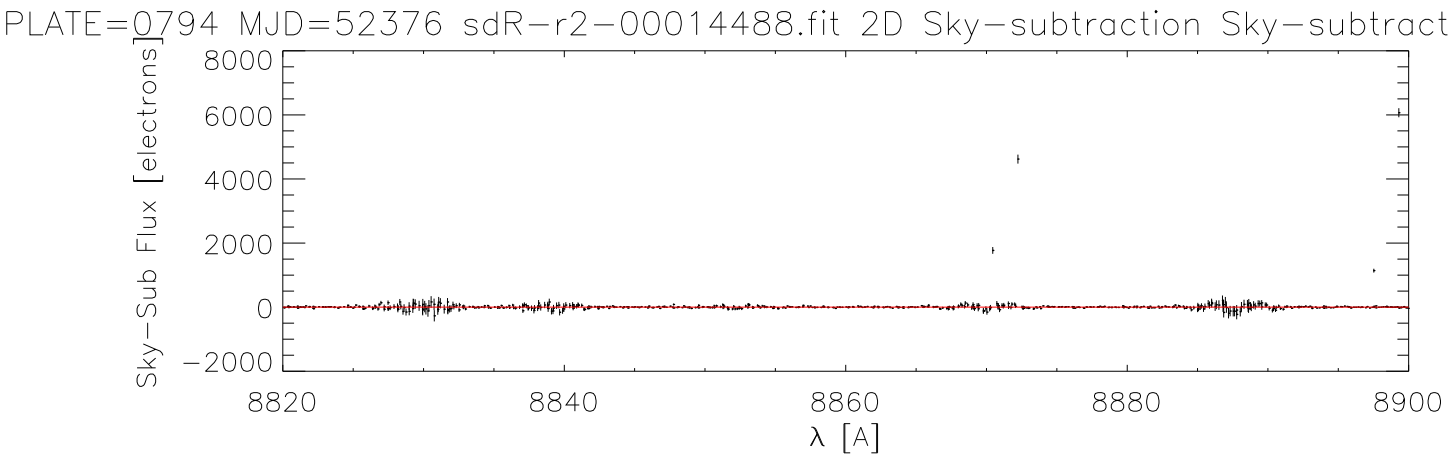

PLATE=0794 MJD=52376 sdR-r2-00014488.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

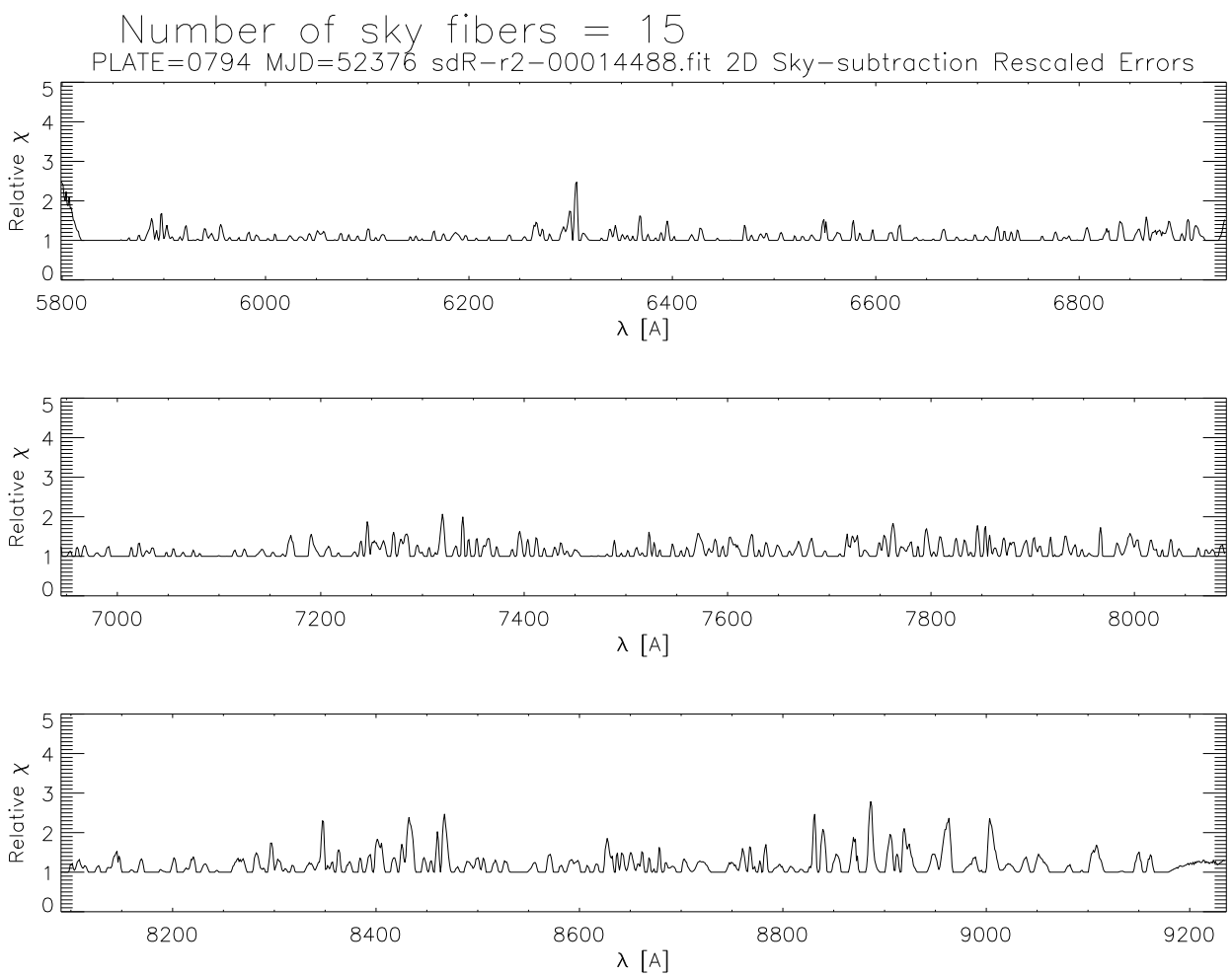

PLATE=0794 MJD=52376 sdR-r2-00014488.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

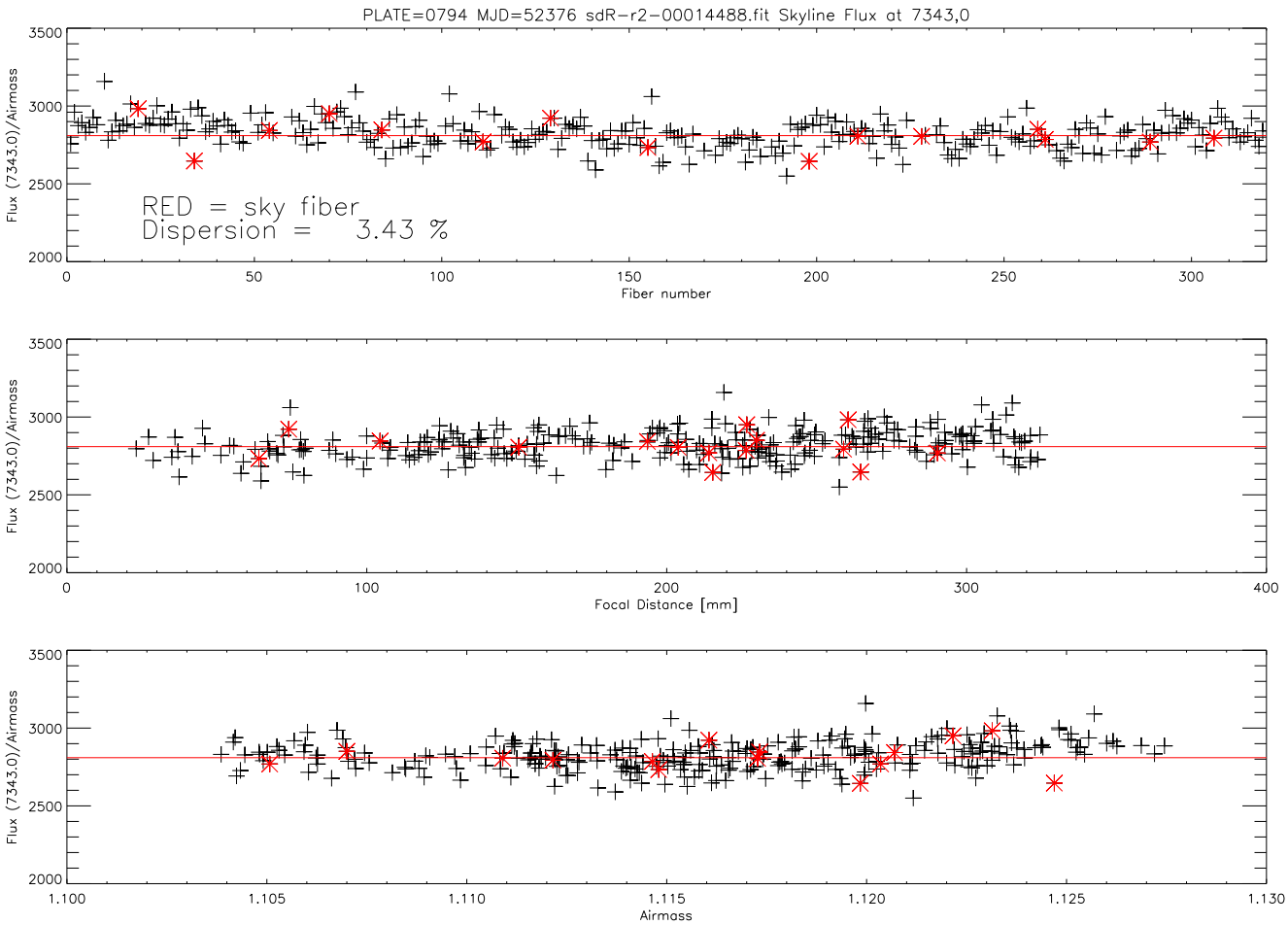

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r2-00014488.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

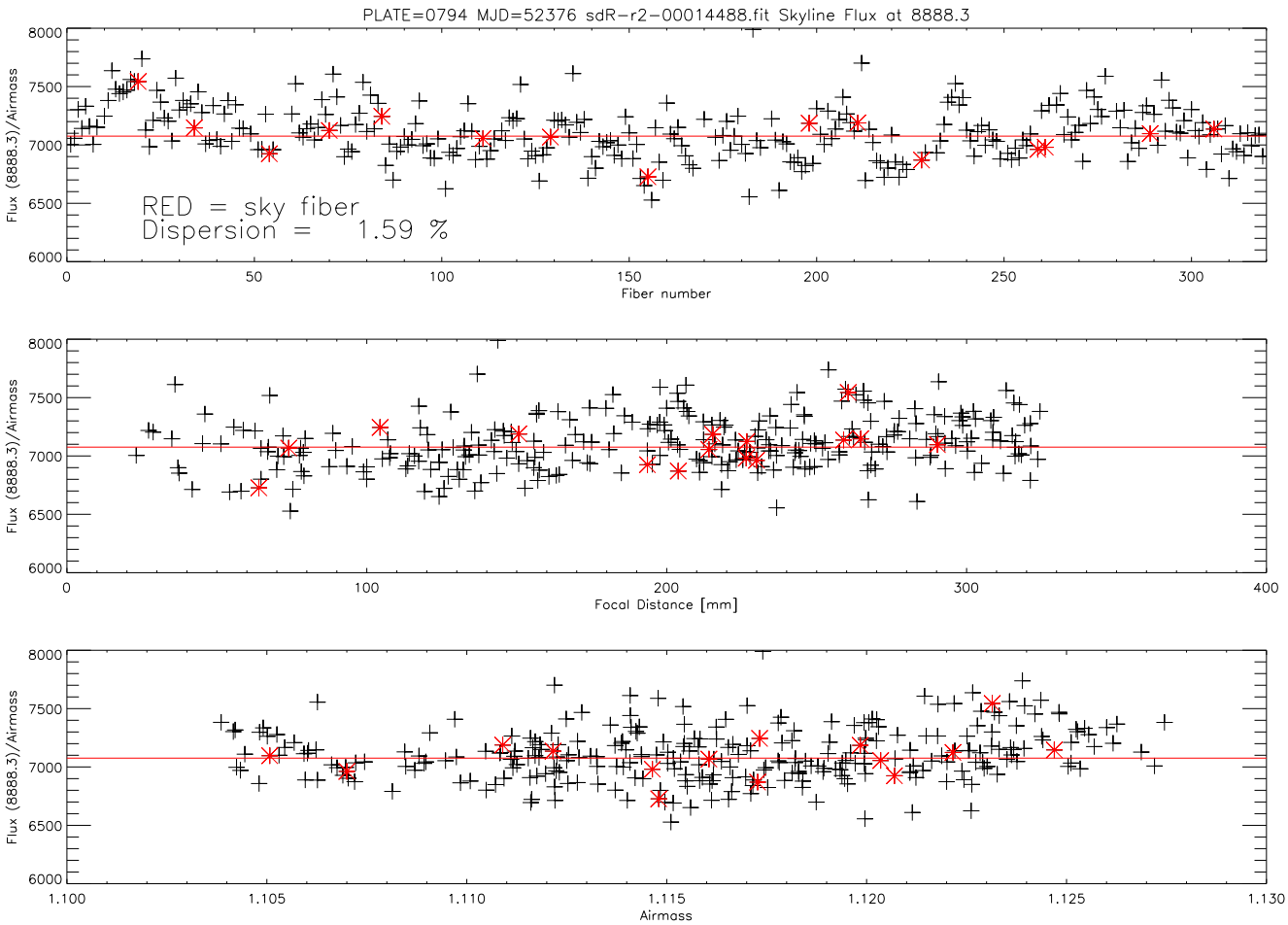

PLATE=0794 MJD=52376 sdR-r2-00014488.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

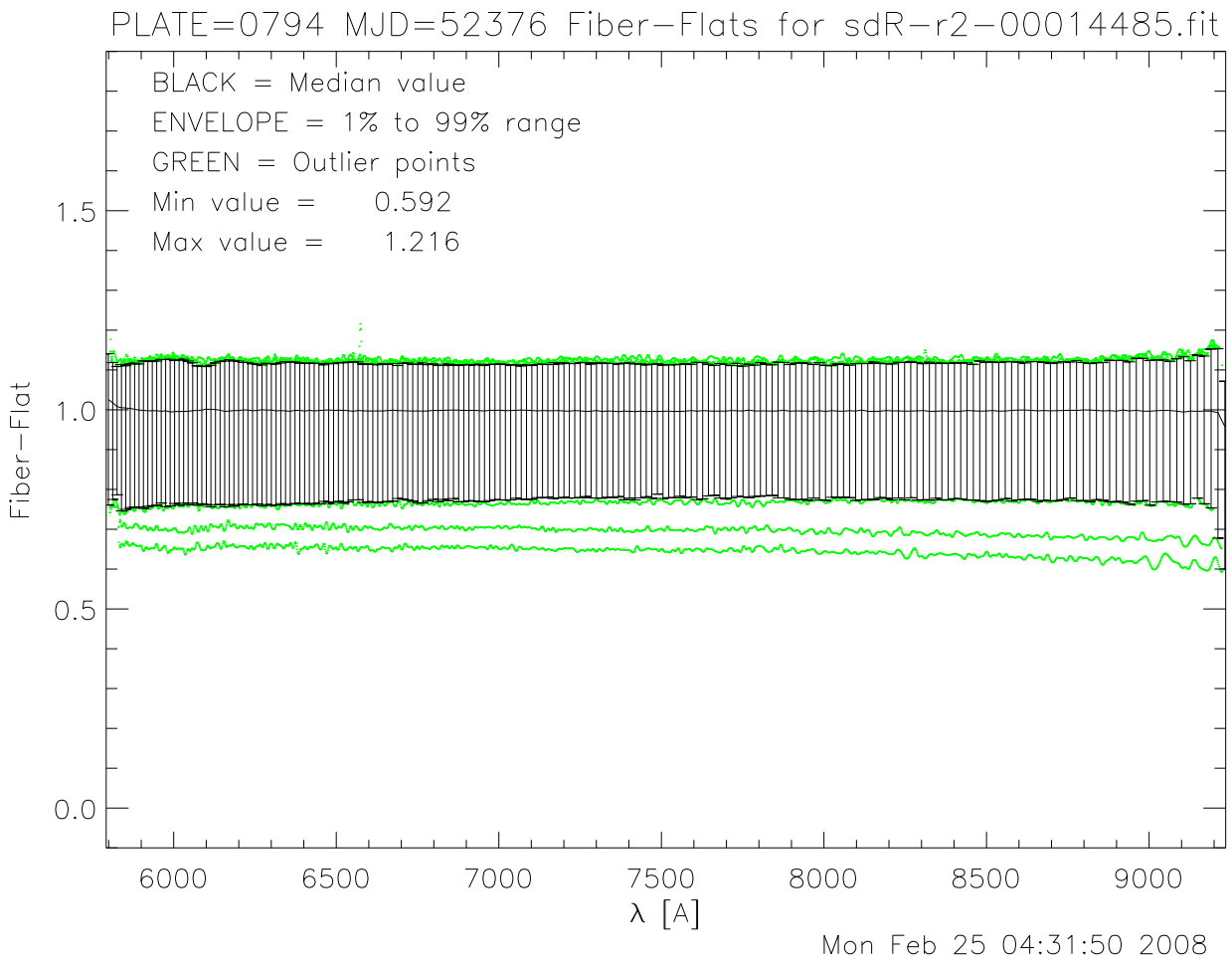

PLATE=0794 MJD=52376 sdR-r2-00014488.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

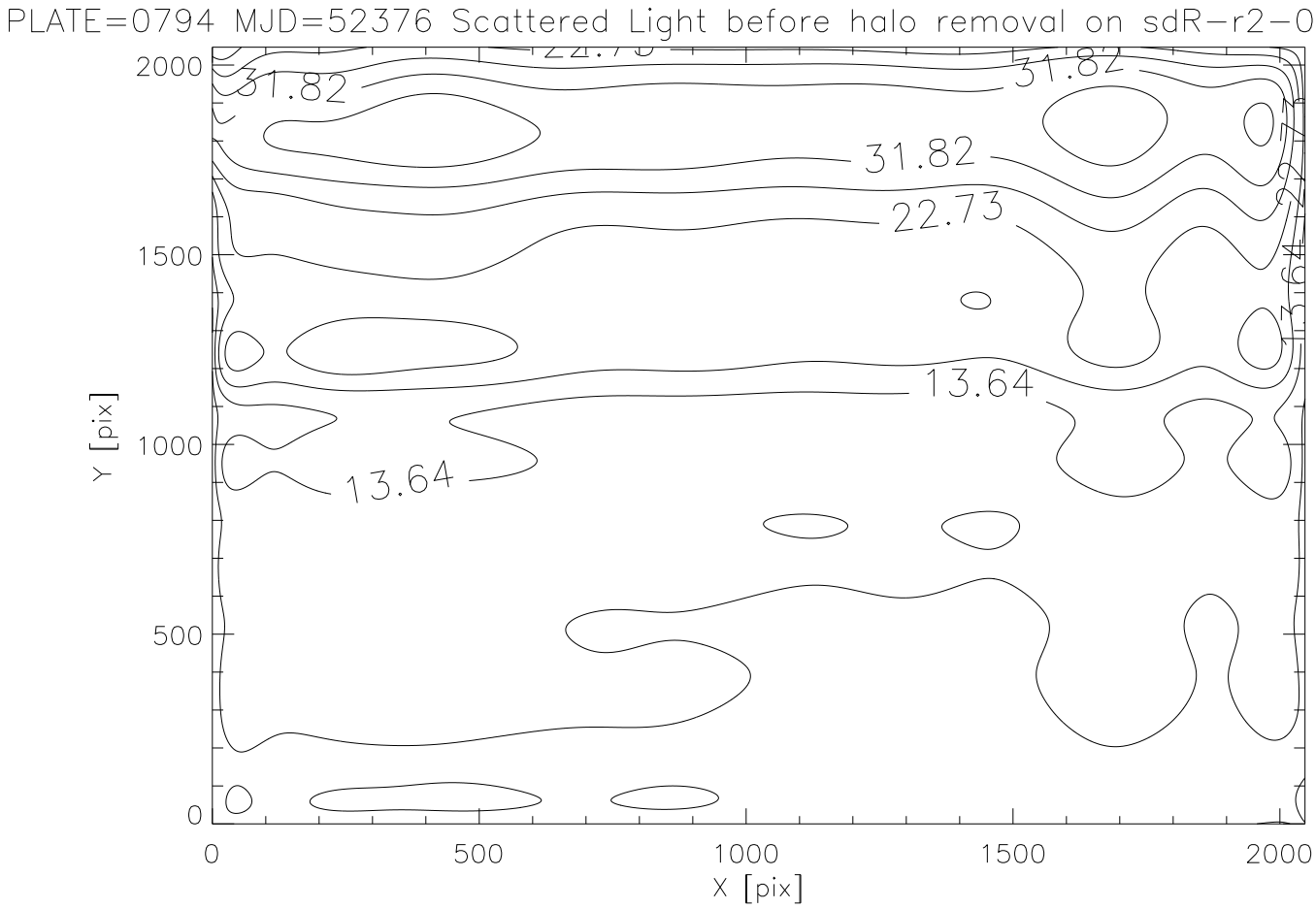

PLATE=0794 MJD=52376 sdR-r2-00014488.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

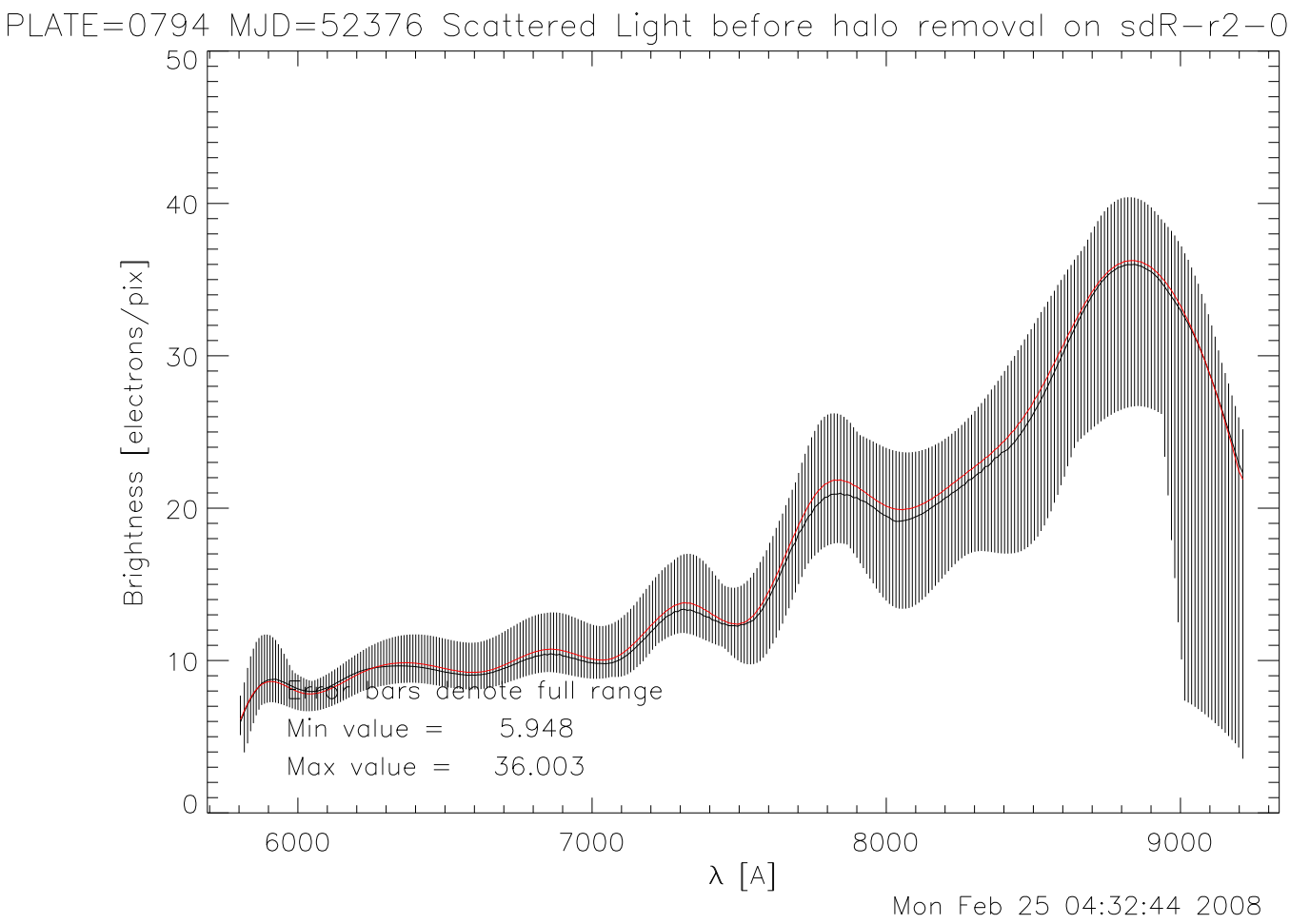

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r2-00014488.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

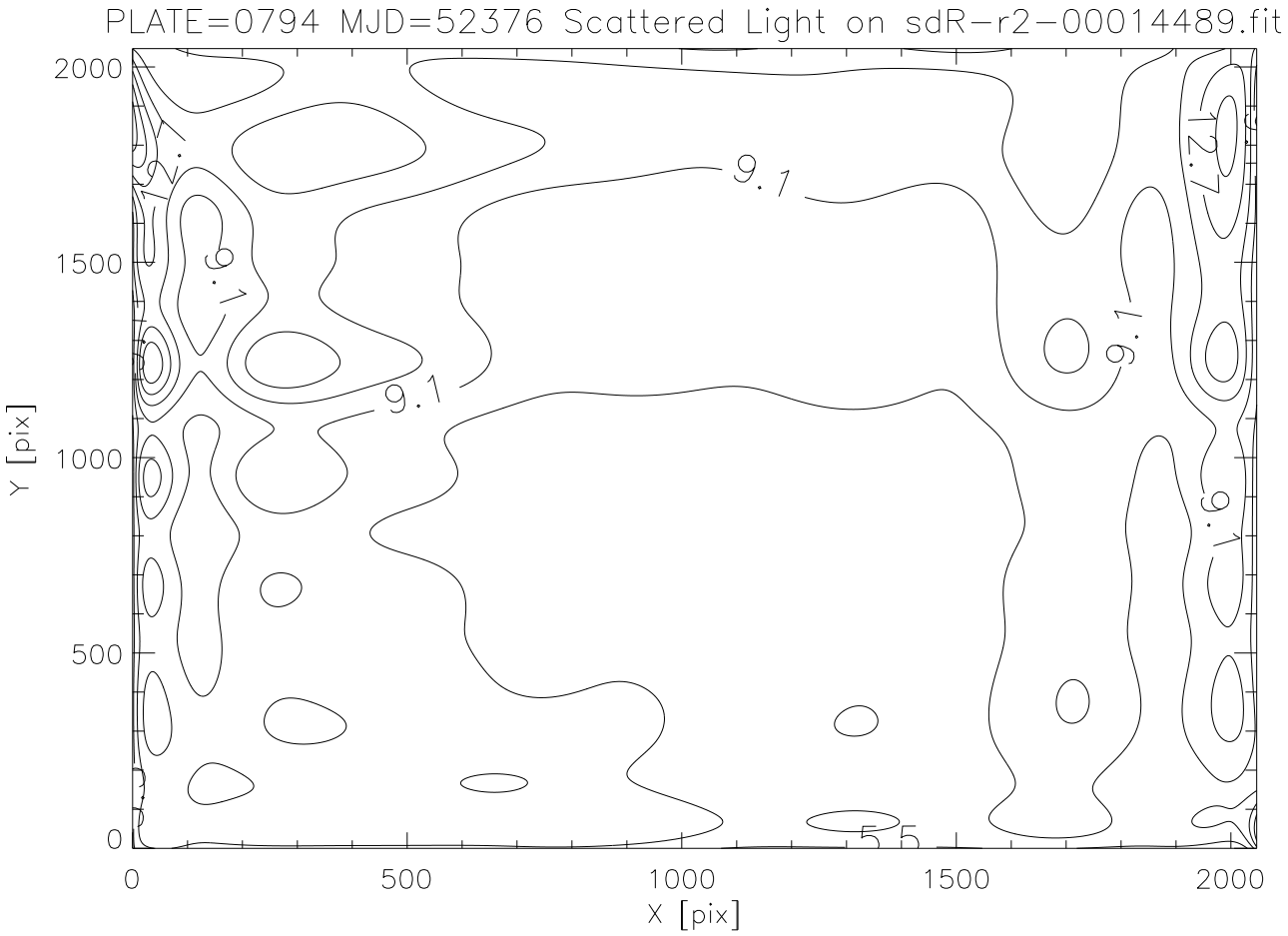

PLATE=0794 MJD=52376 sdR-r2-00014488.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.43 %
Fiber number
Focal Distance [mm]
Airmass

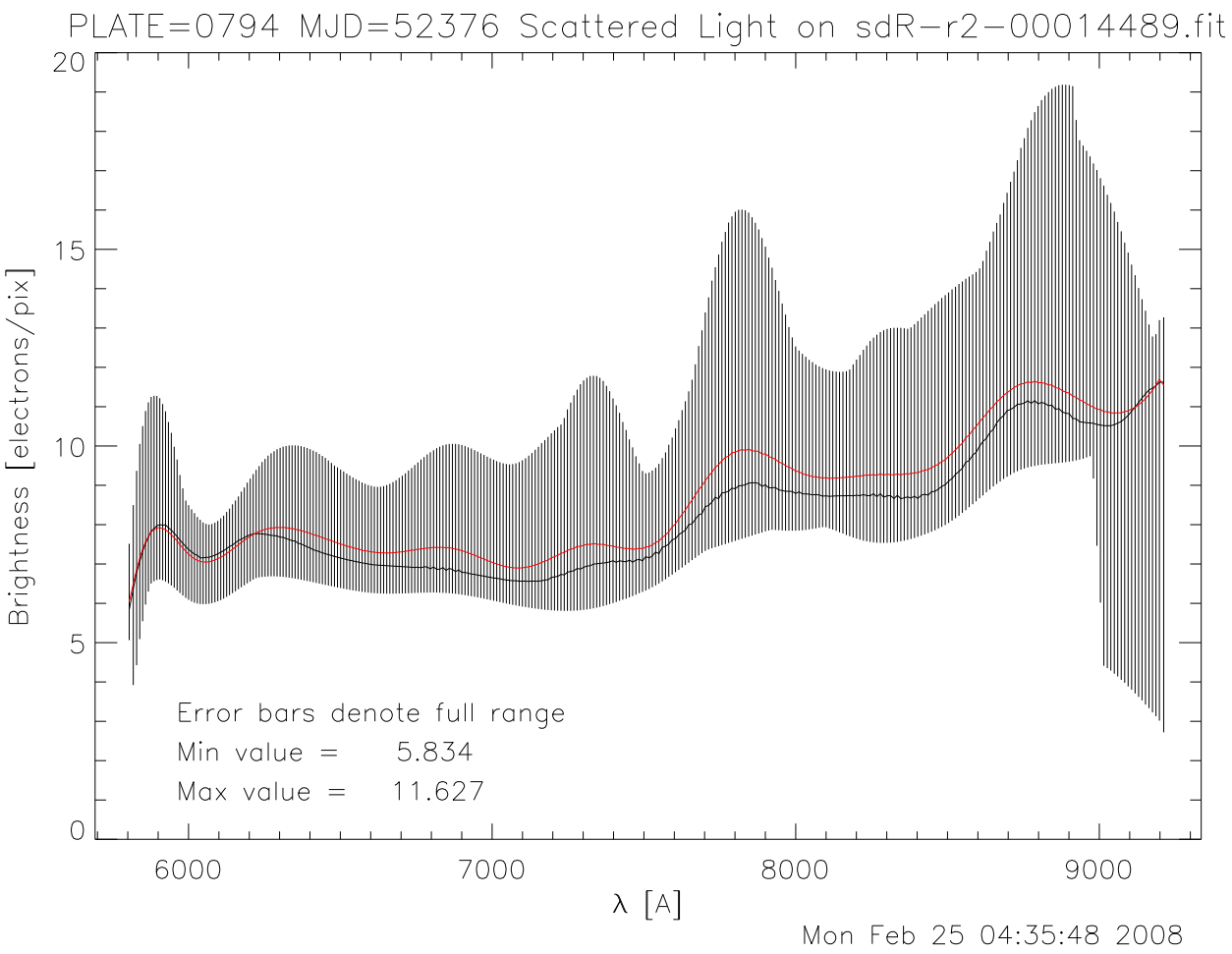

PLATE=0794 MJD=52376 sdR-r2-00014488.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.59 %
Fiber number
Focal Distance [mm]
Airmass

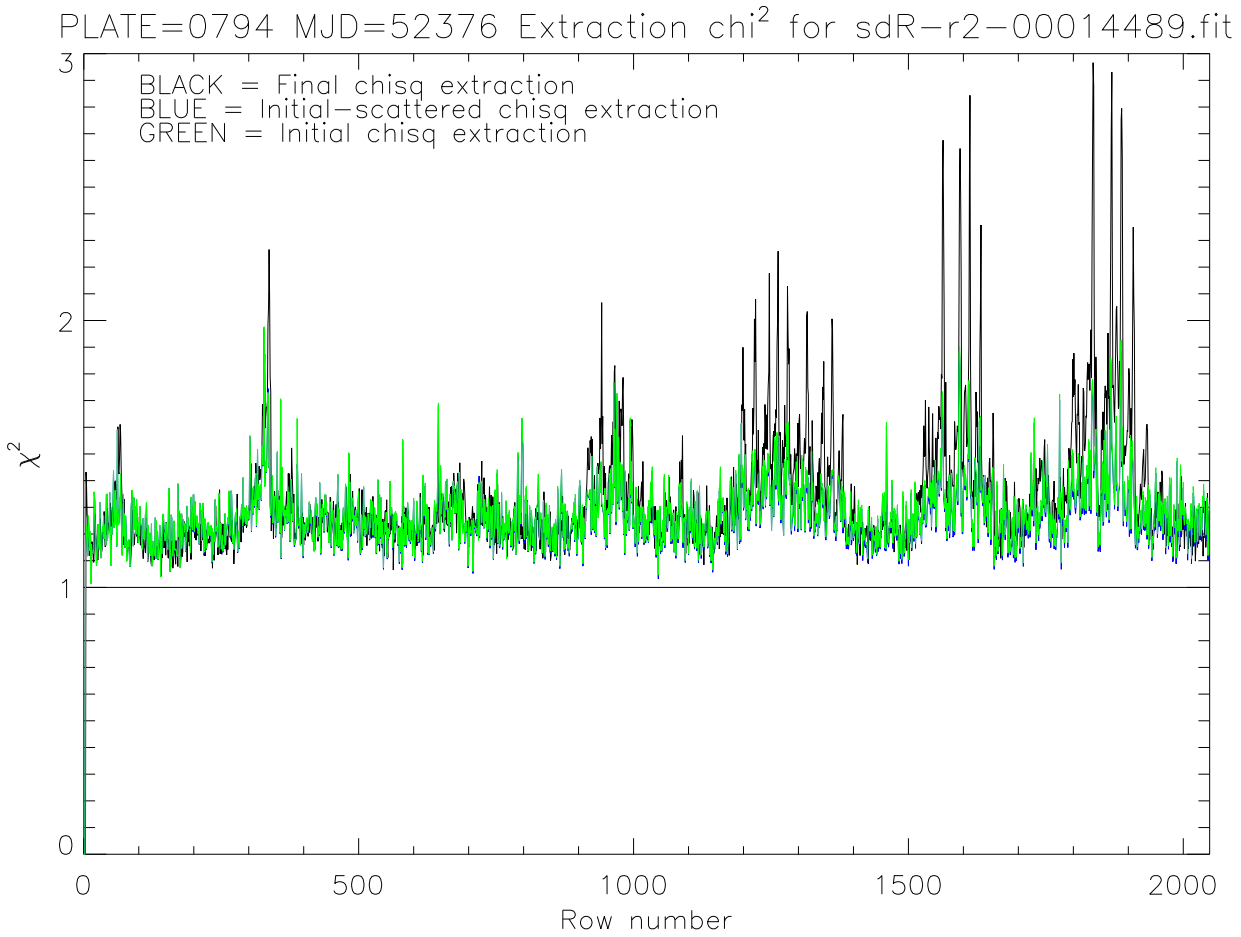

PLATE=0794 MJD=52376 Fiber−Flats for sdR−r2−00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.592
Max value = 1.216
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 04:31:50 2008

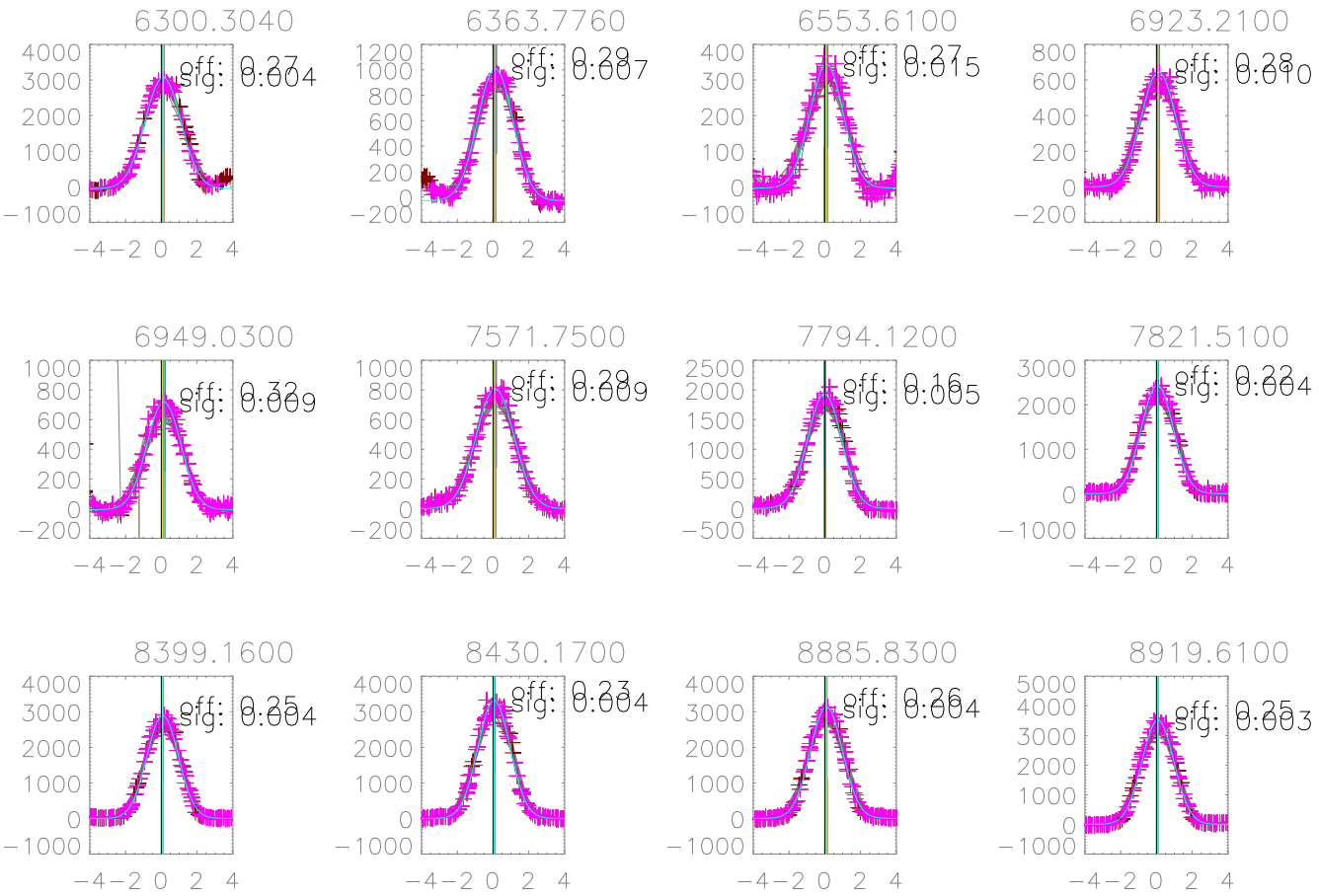

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r2-00014489.fi
31.82
31.82
31.82
22.73
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

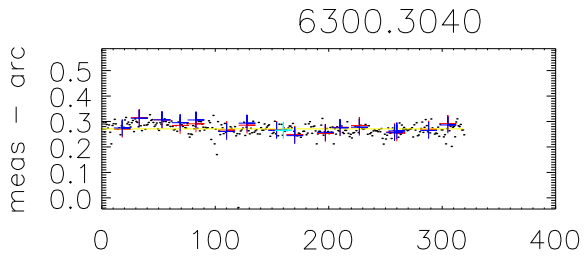

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r2-00014489.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.948
Max value = 36.003
Mon Feb 25 04:32:44 2008

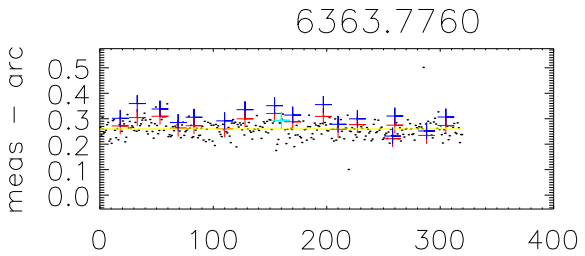

PLATE=0794 MJD=52376 Scattered Light on sdR-r2-00014489.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
9.1
9.1
9.1
9.1
9.1
5.5

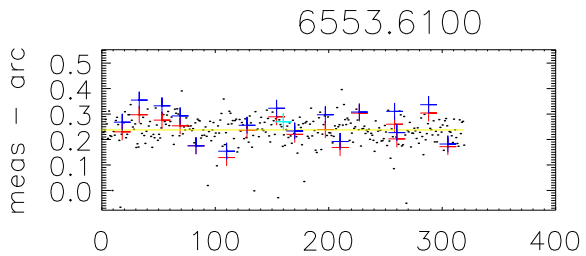

PLATE=0794 MJD=52376 Scattered Light on sdR-r2-00014489.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.834
Max value = 11.627
Mon Feb 25 04:35:48 2008

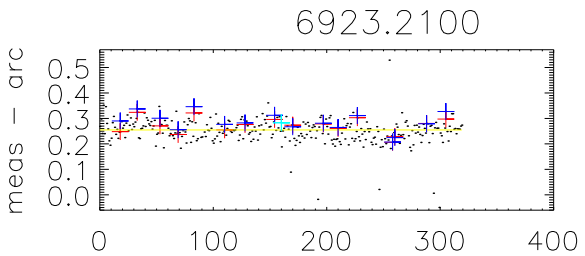

PLATE=0794 MJD=52376 Extraction chi^2 for sdR−r2−00014489.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

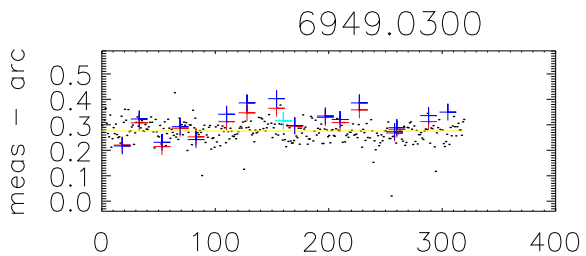

6300.3040
off: 0.27
sig: 0.004
6363.7760
off: 0.29
sig: 0.007
6553.6100
off: 0.27
sig: 0.015
6923.2100
off: 0.28
sig: 0.010
6949.0300
off: 0.32
sig: 0.009
7571.7500
off: 0.29
sig: 0.009
7794.1200
off: 0.16
sig: 0.005
7821.5100
off: 0.22
sig: 0.004
8399.1600
off: 0.25
sig: 0.004
8430.1700
off: 0.23
sig: 0.004
8885.8300
off: 0.26
sig: 0.004
8919.6100
off: 0.25
sig: 0.003

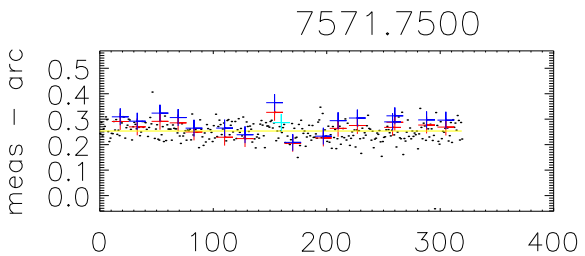

6300.3040
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

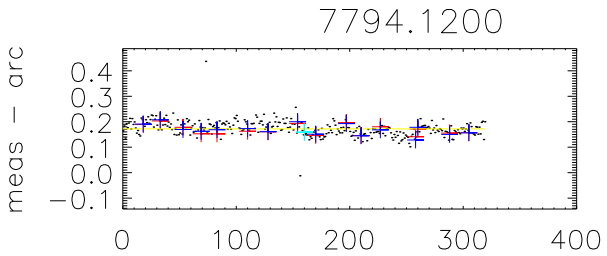

6363.7760
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

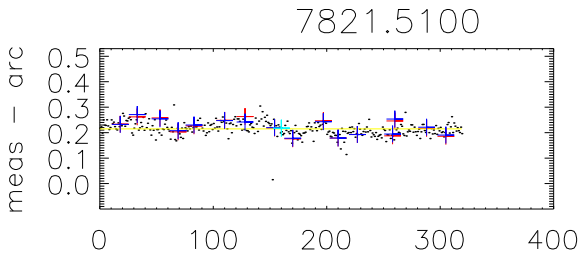

6553.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

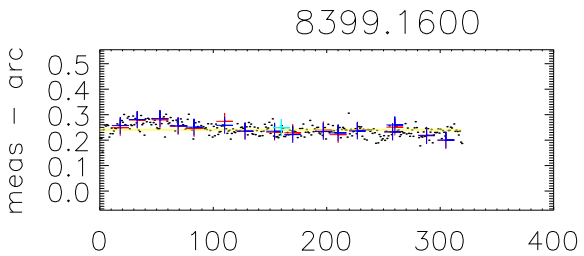

6923.2100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

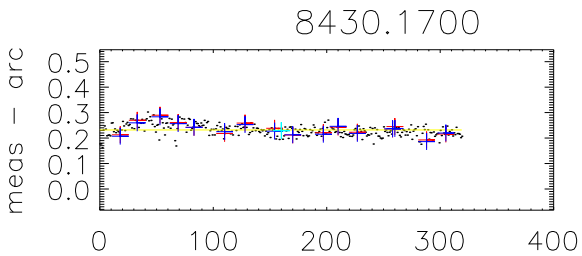

6949.0300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

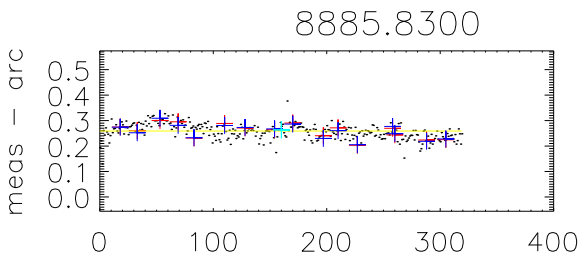

7571.7500
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

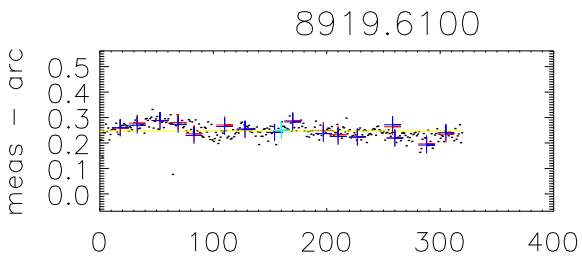

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

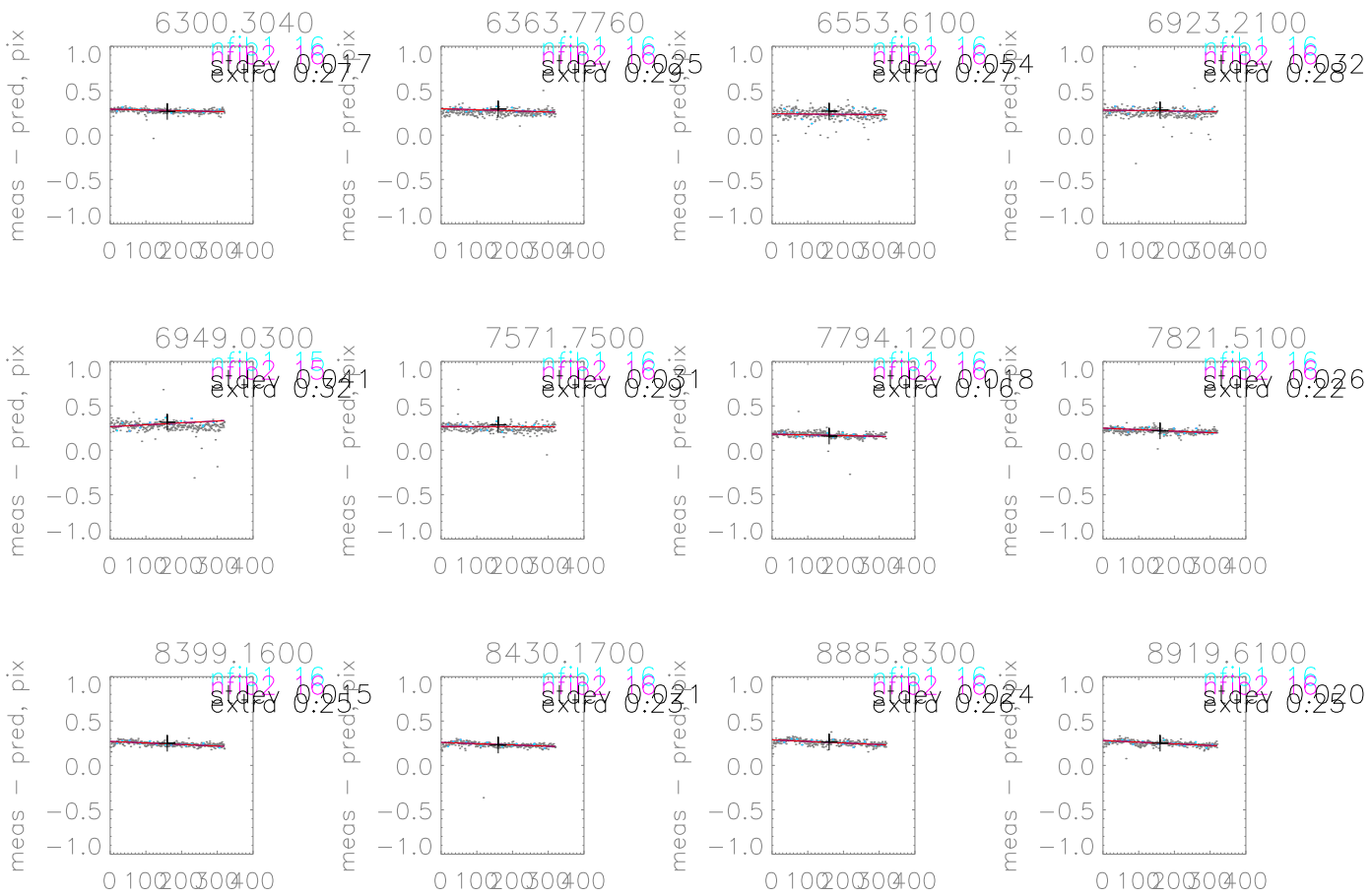

7821.5100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

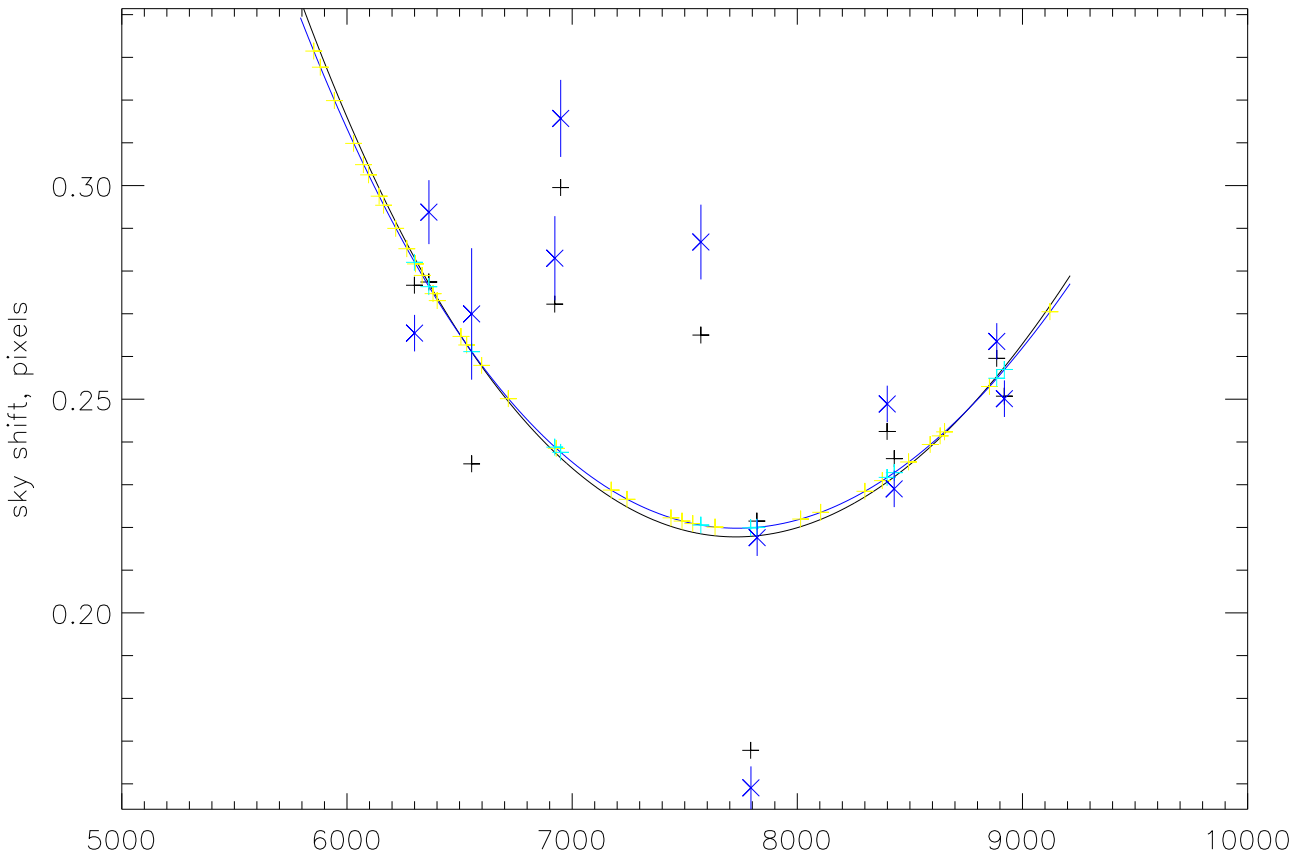

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

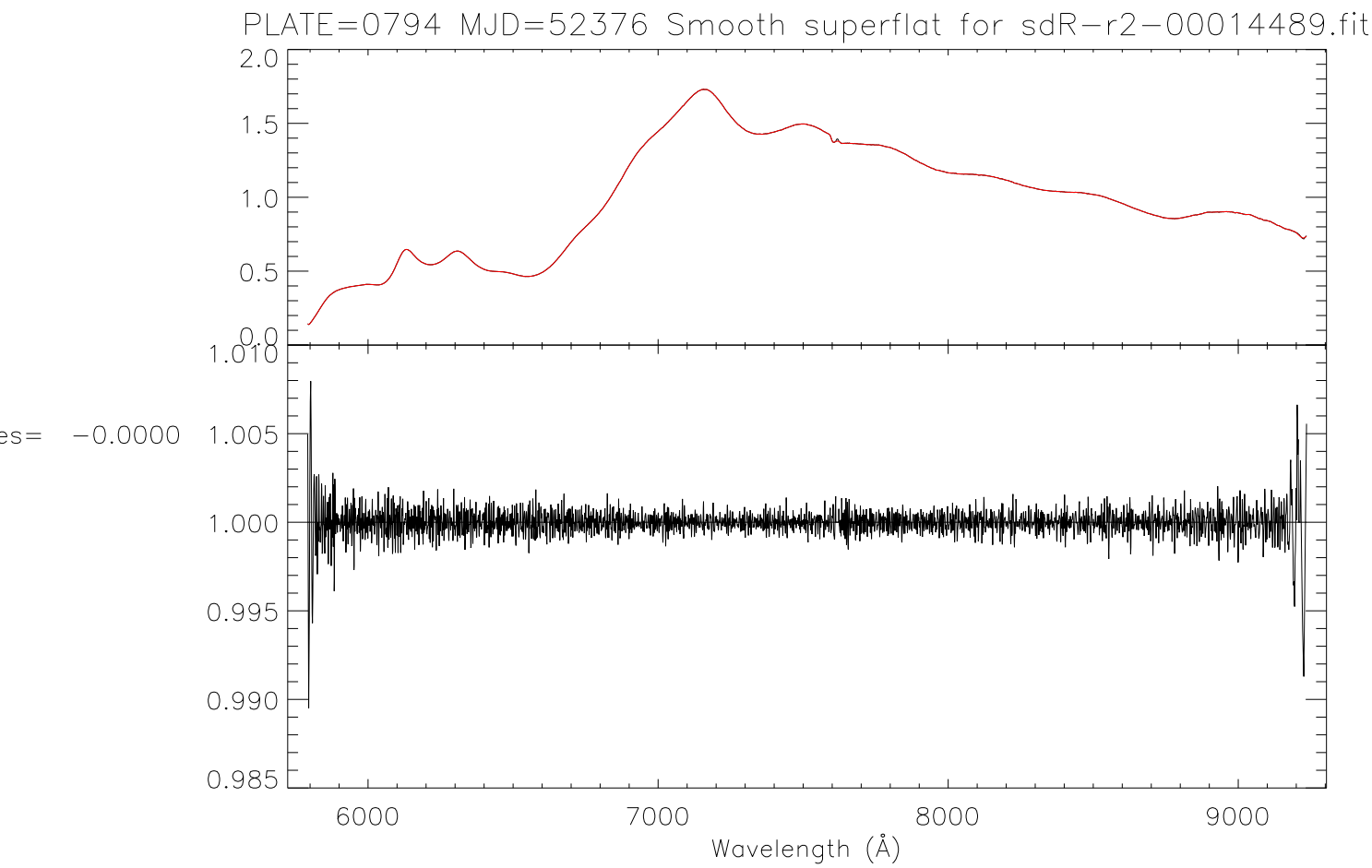

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

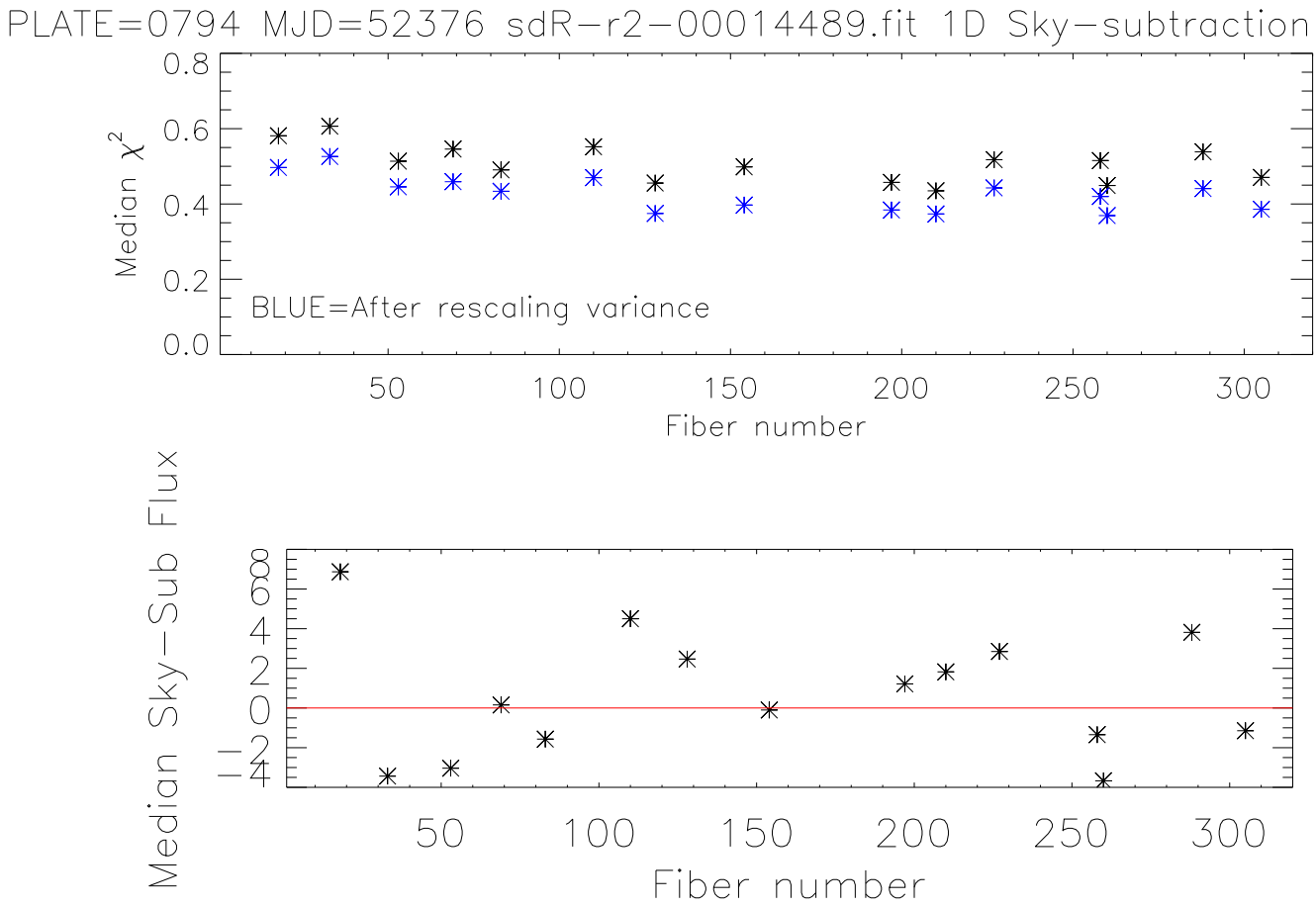

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

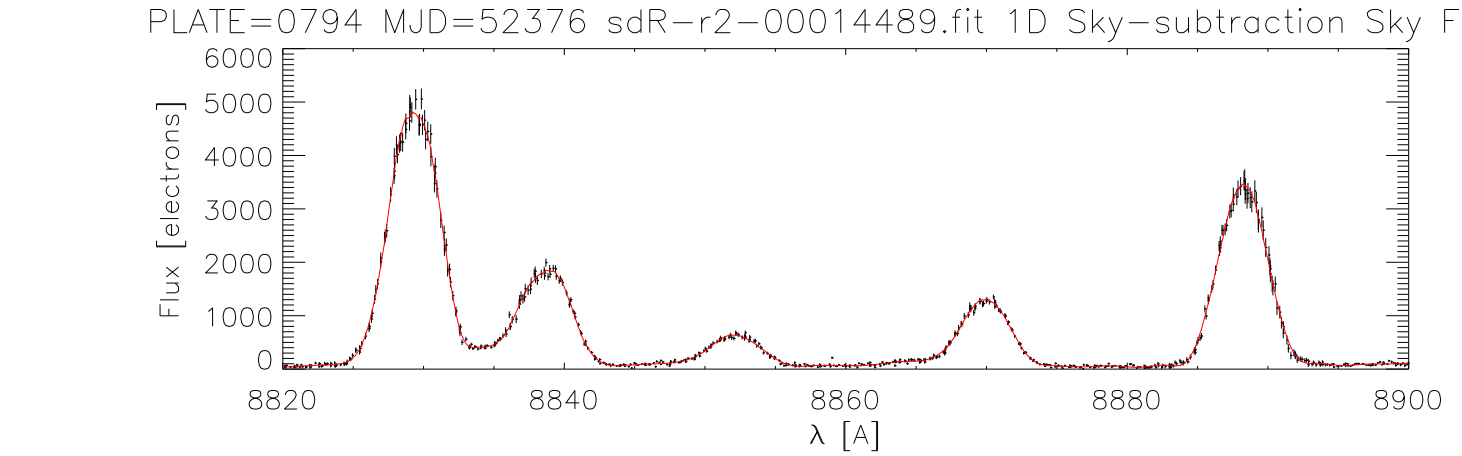

6300.3040
mfhd2 16
stdev 0.017
extra 0.27
6363.7760
mfhd2 16
stdev 0.025
extra 0.26
6553.6100
mfhd2 16
stdev 0.054
extra 0.27
6923.2100
mfhd2 16
stdev 0.032
extra 0.28
6949.0300
mfhd1 15
mfhd2 16
stdev 0.041
extra 0.32
7571.7500
mfhd1 16
mfhd2 16
stdev 0.031
extra 0.29
7794.1200
mfhd1 16
mfhd2 16
stdev 0.018
extra 0.16
7821.5100
mfhd1 16
mfhd2 16
stdev 0.026
extra 0.22
8399.1600
mfhd1 16
mfhd2 16
stdev 0.025
extra 0.25
8430.1700
mfhd1 16
mfhd2 16
stdev 0.021
extra 0.23
8885.8300
mfhd1 16
mfhd2 16
stdev 0.024
extra 0.26
8919.6100
mfhd1 16
mfhd2 16
stdev 0.020
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

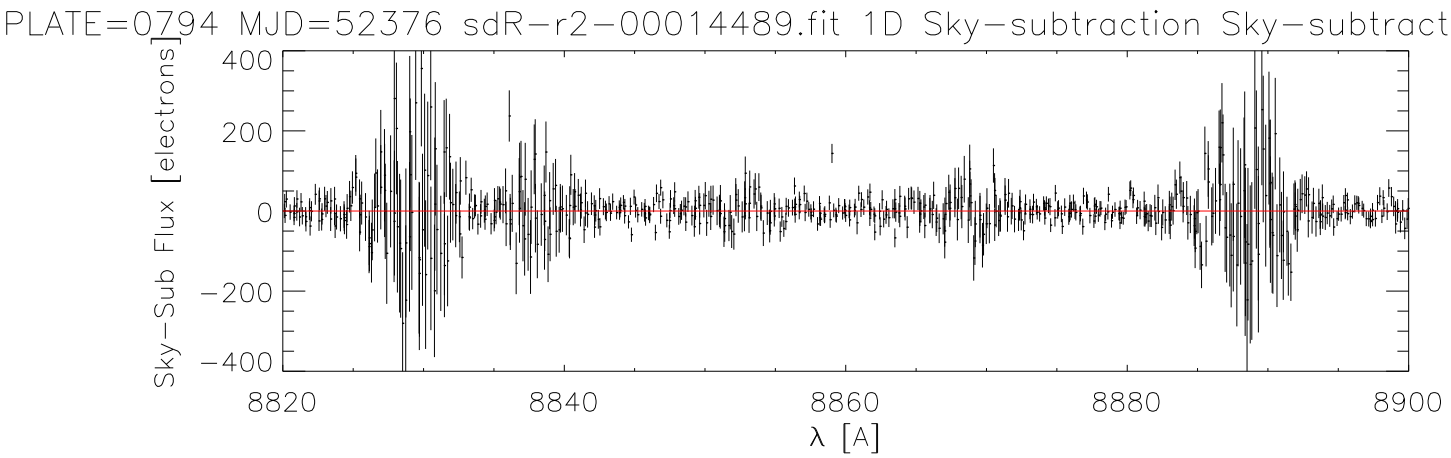

sky shift, pixels
0.30
0.25
0.20
5000
6000
7000
8000
9000
10000

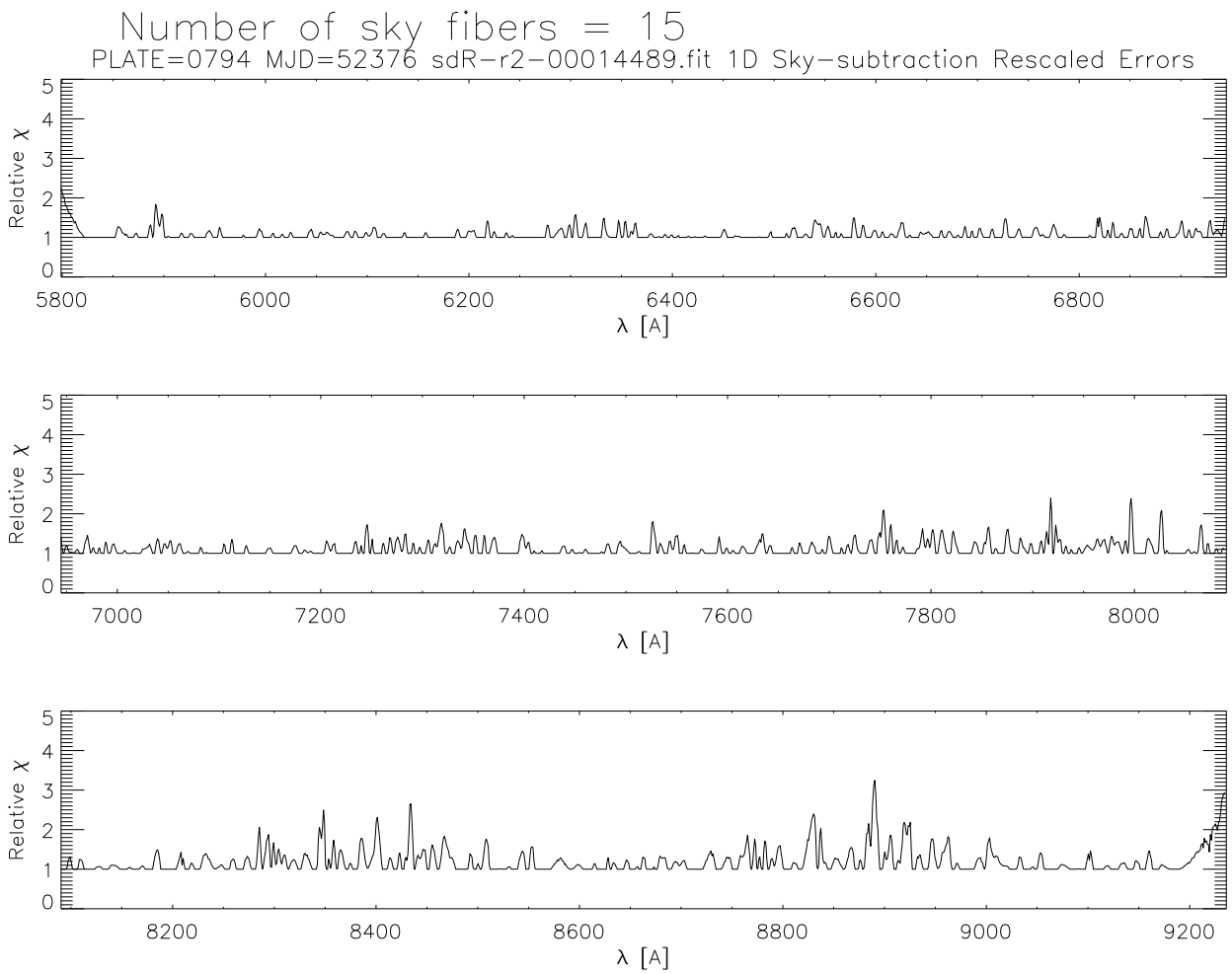

PLATE=0794 MJD=52376 Smooth superflat for sdR-r2-00014489.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

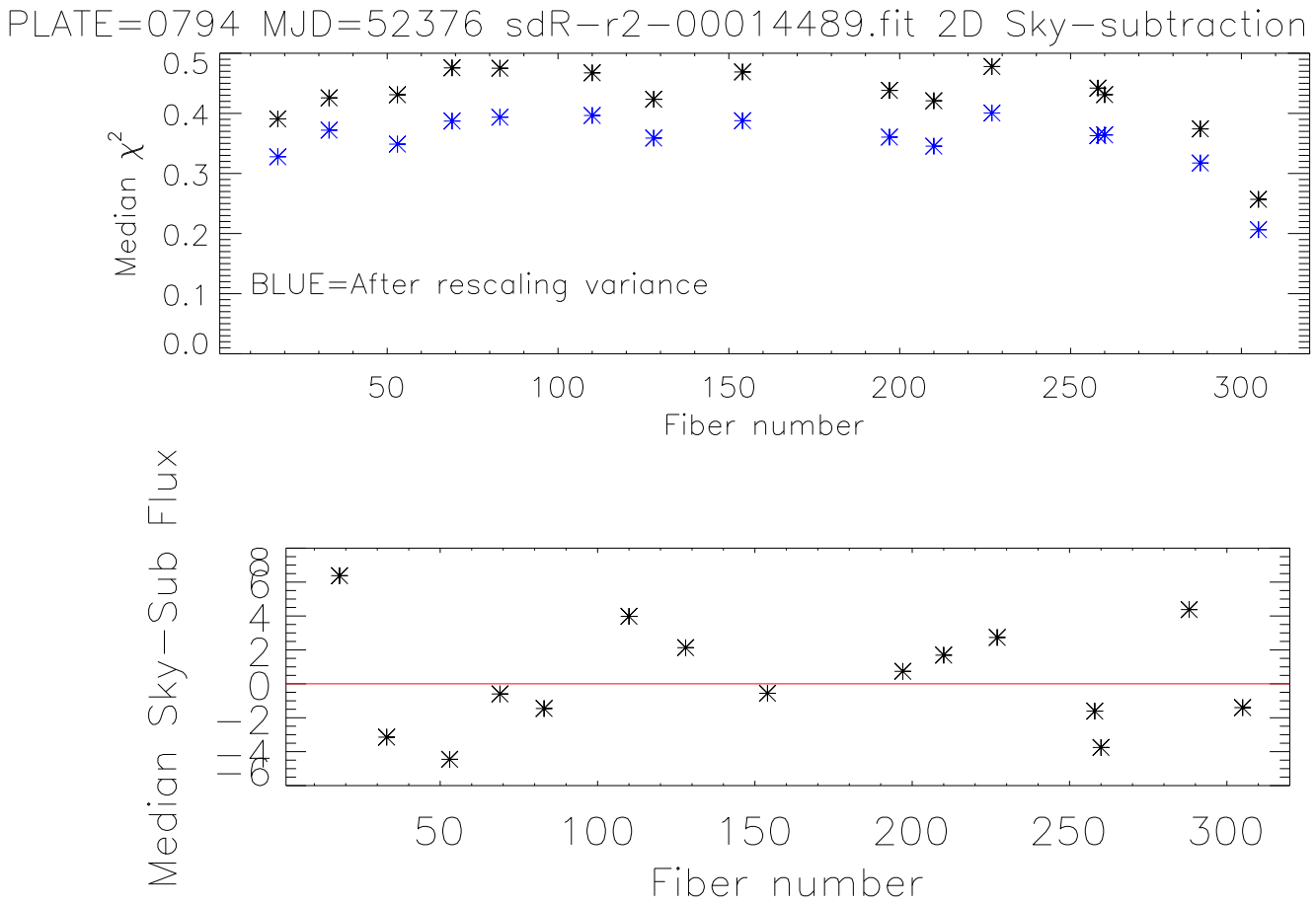

PLATE=0794 MJD=52376 sdR-r2-00014489.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

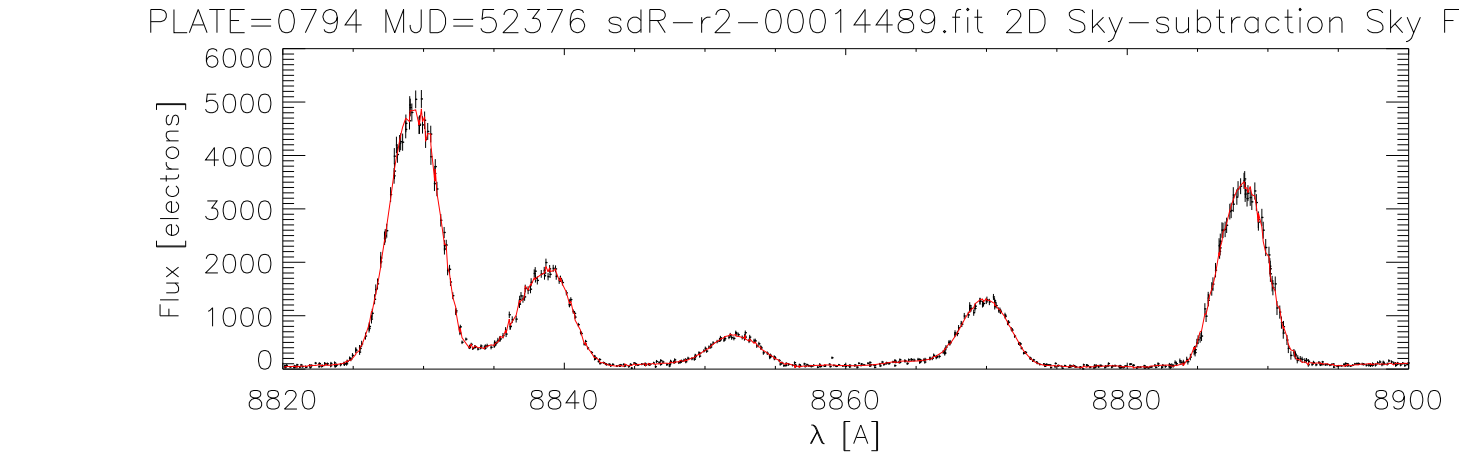
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

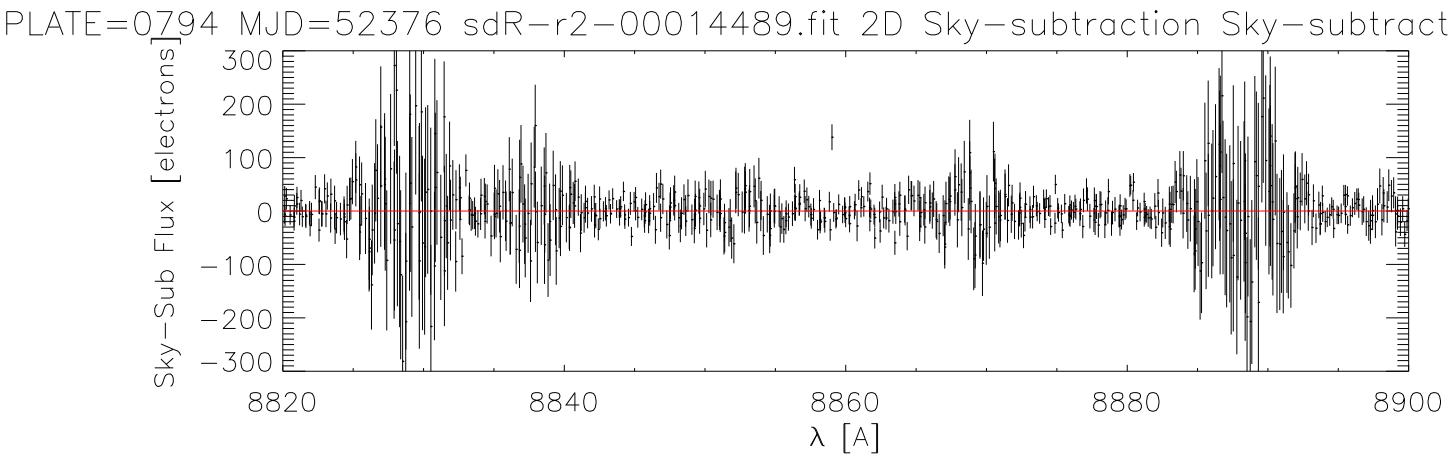

PLATE=0794 MJD=52376 sdR-r2-00014489.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

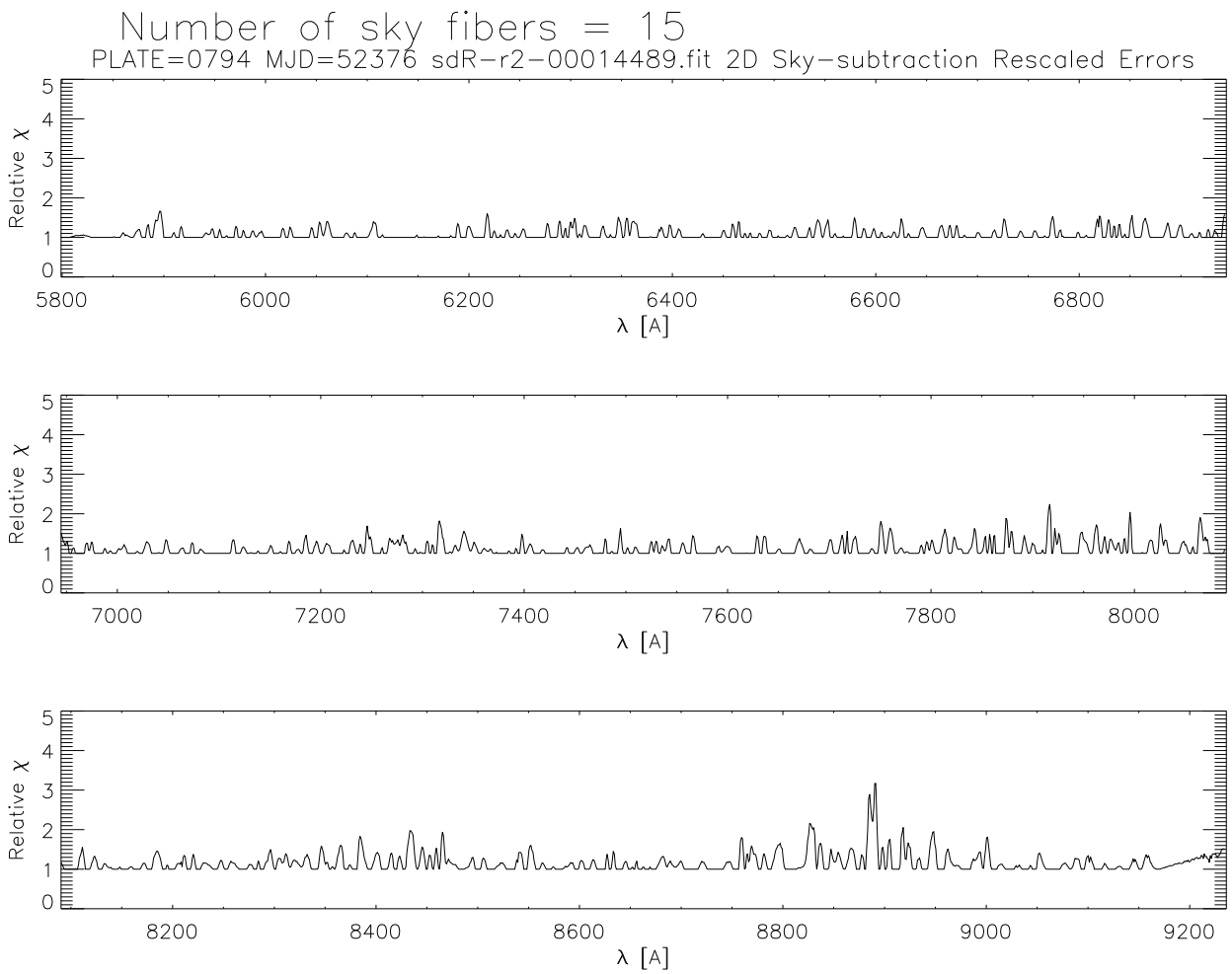

PLATE=0794 MJD=52376 sdR-r2-00014489.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

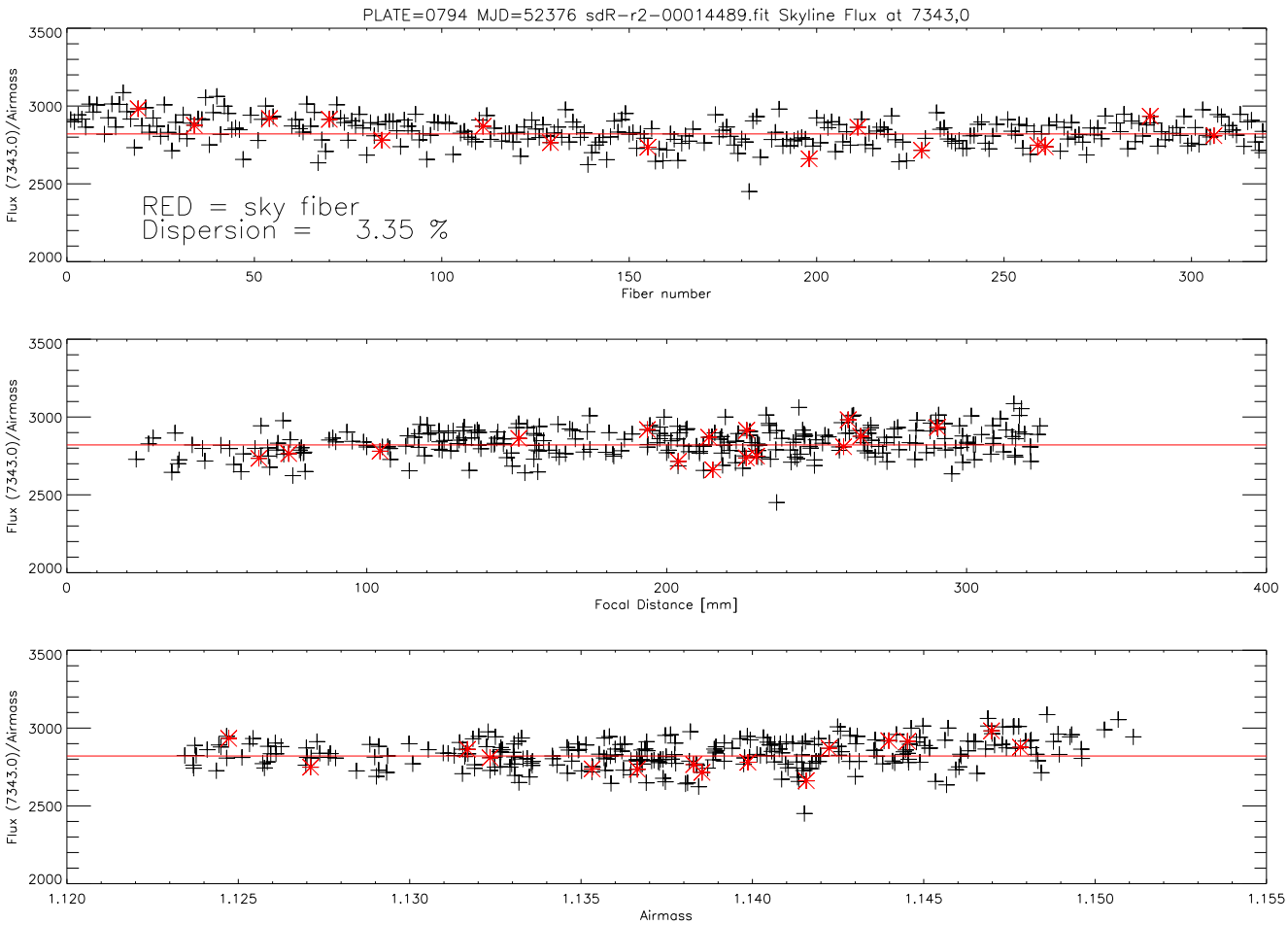

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r2-00014489.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

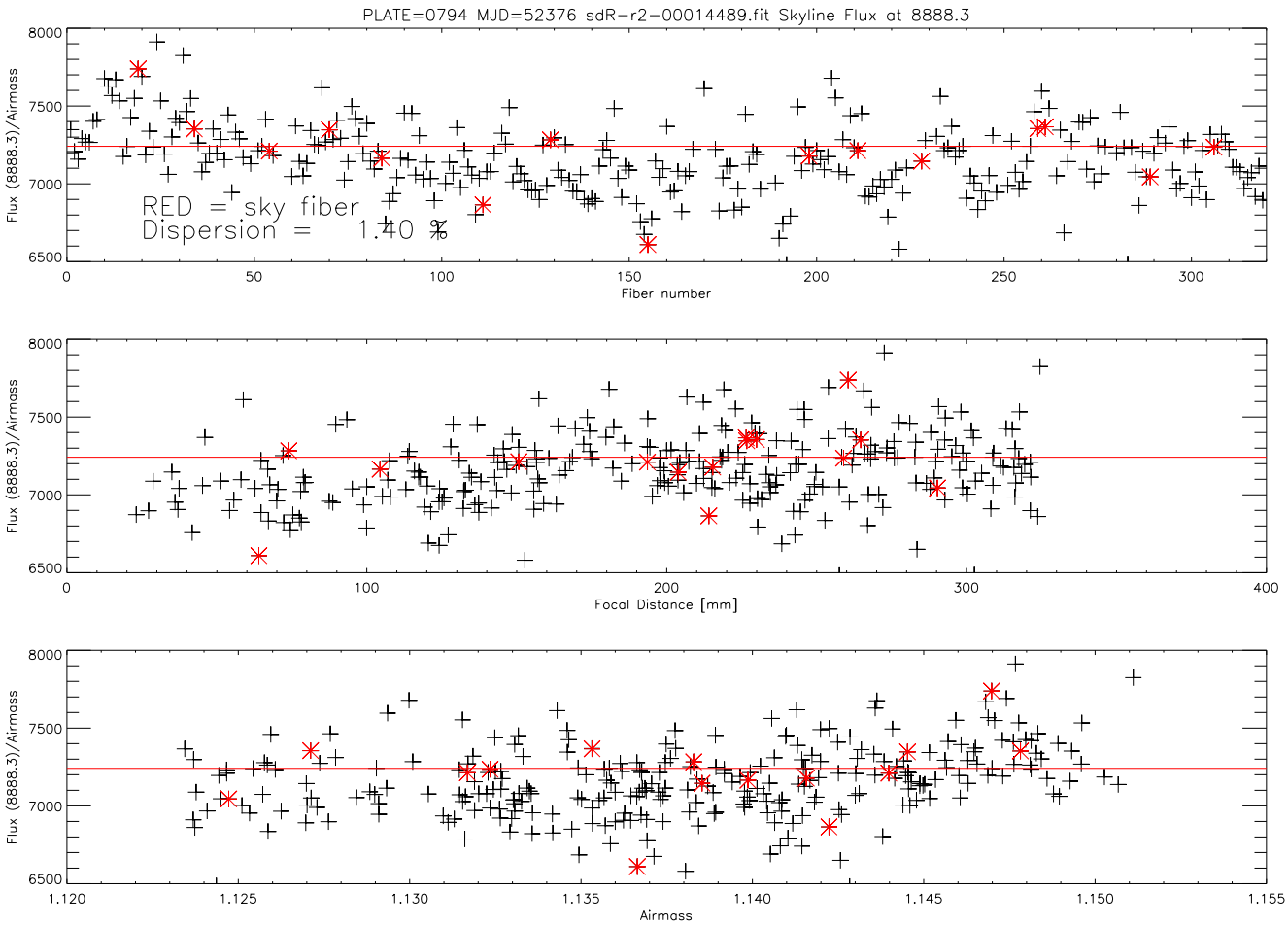

PLATE=0794 MJD=52376 sdR-r2-00014489.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

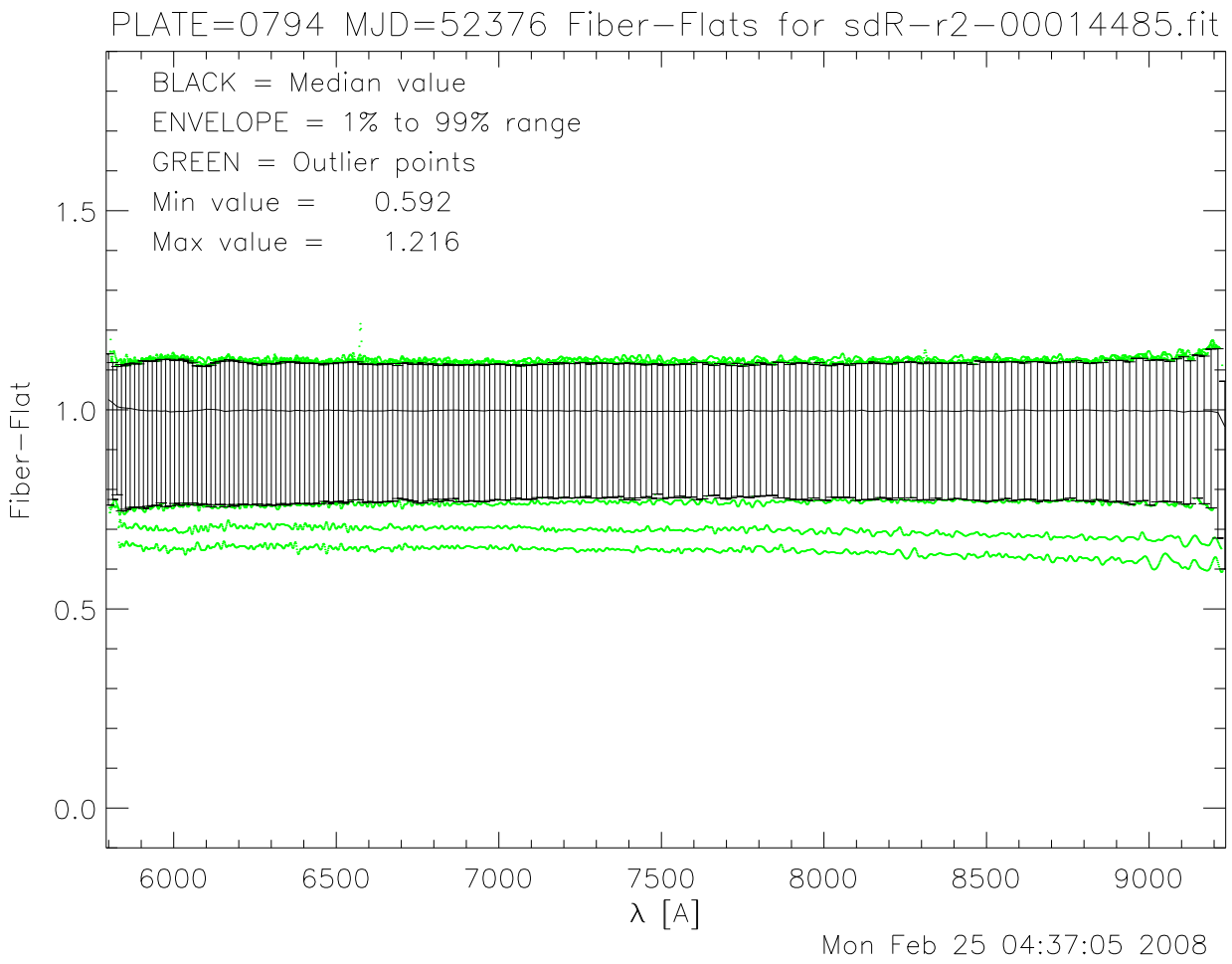

PLATE=0794 MJD=52376 sdR-r2-00014489.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

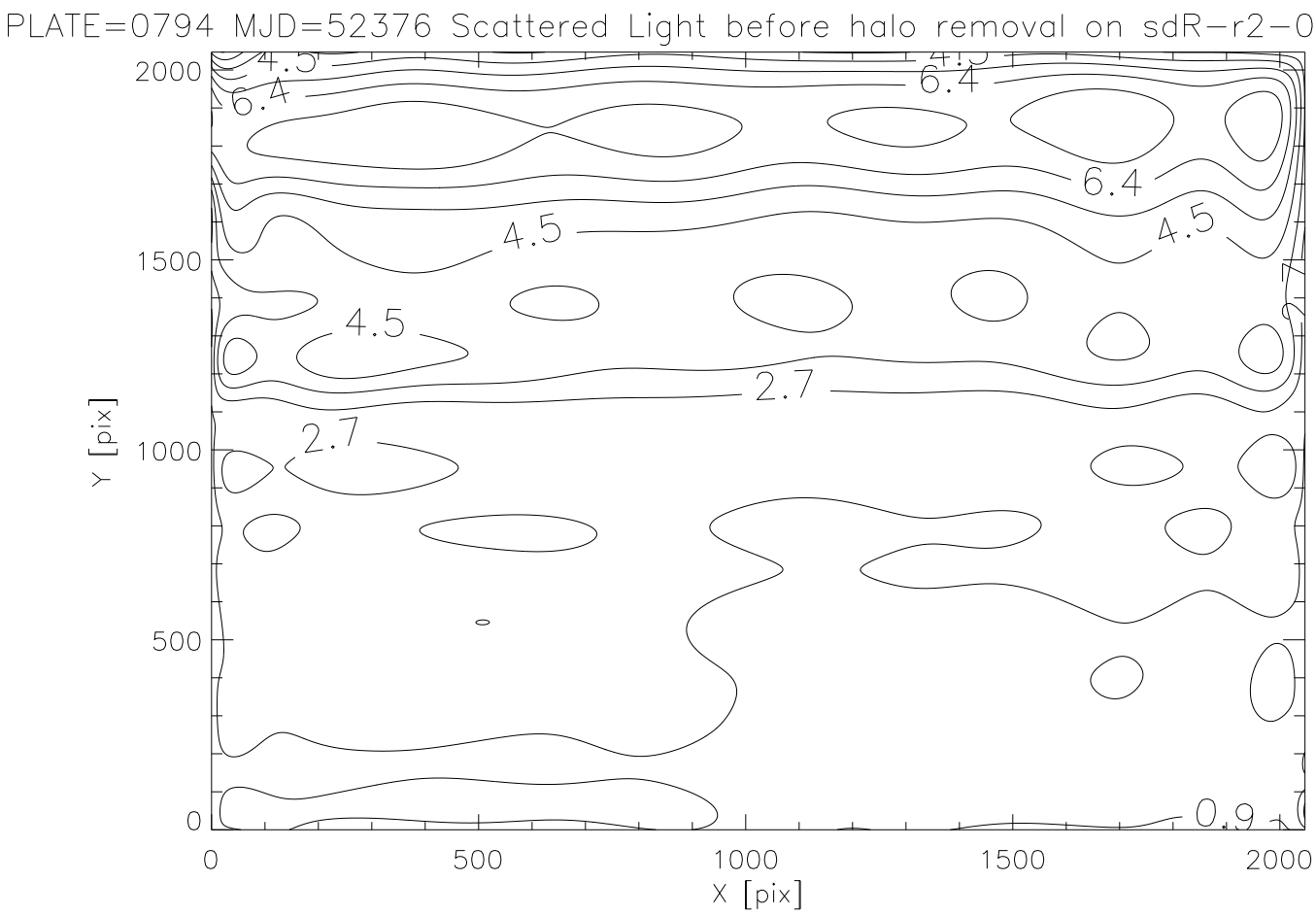

PLATE=0794 MJD=52376 sdR-r2-00014489.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

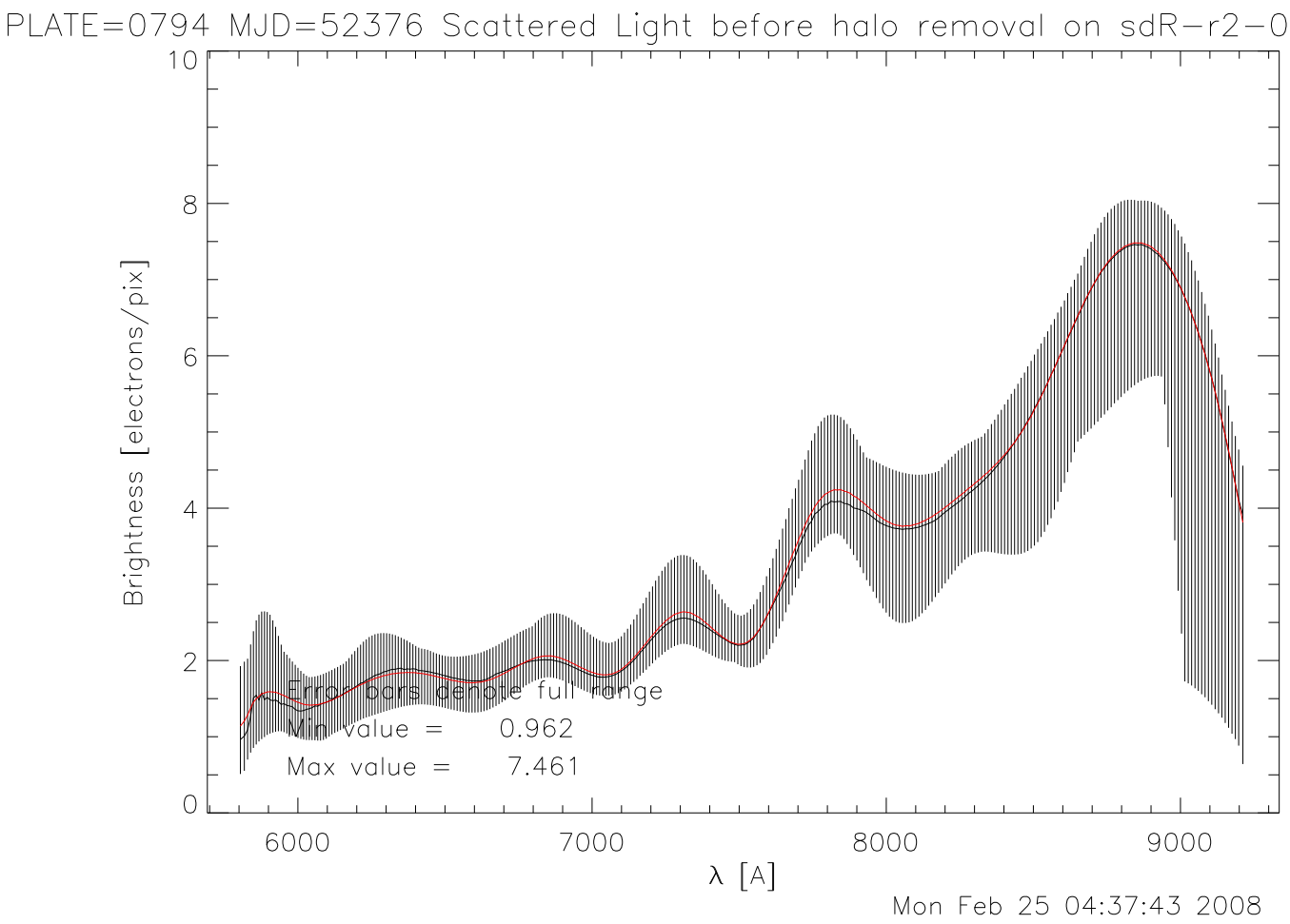

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r2-00014489.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

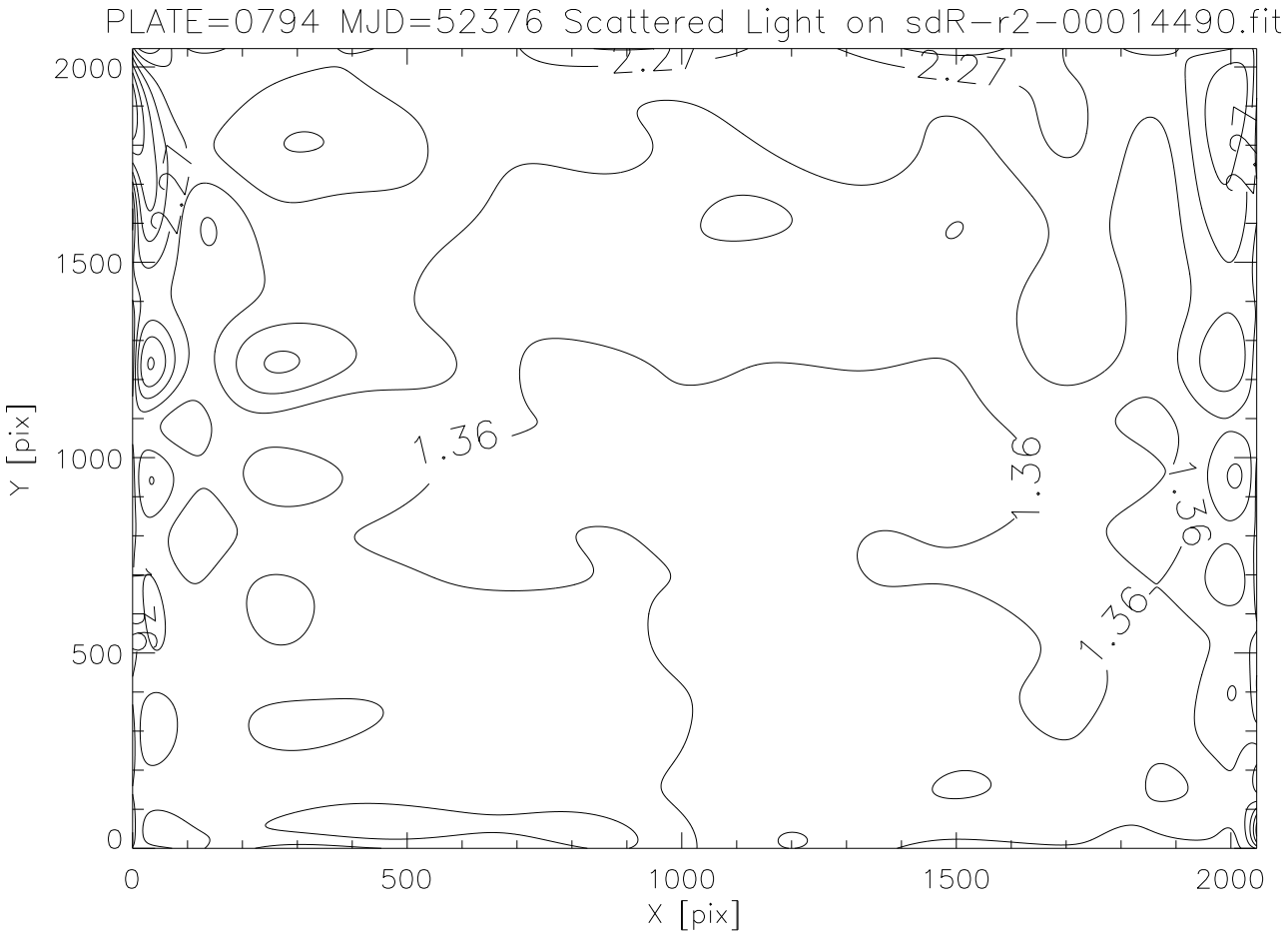

PLATE=0794 MJD=52376 sdR-r2-00014489.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.35 %
Fiber number
Focal Distance [mm]
Airmass

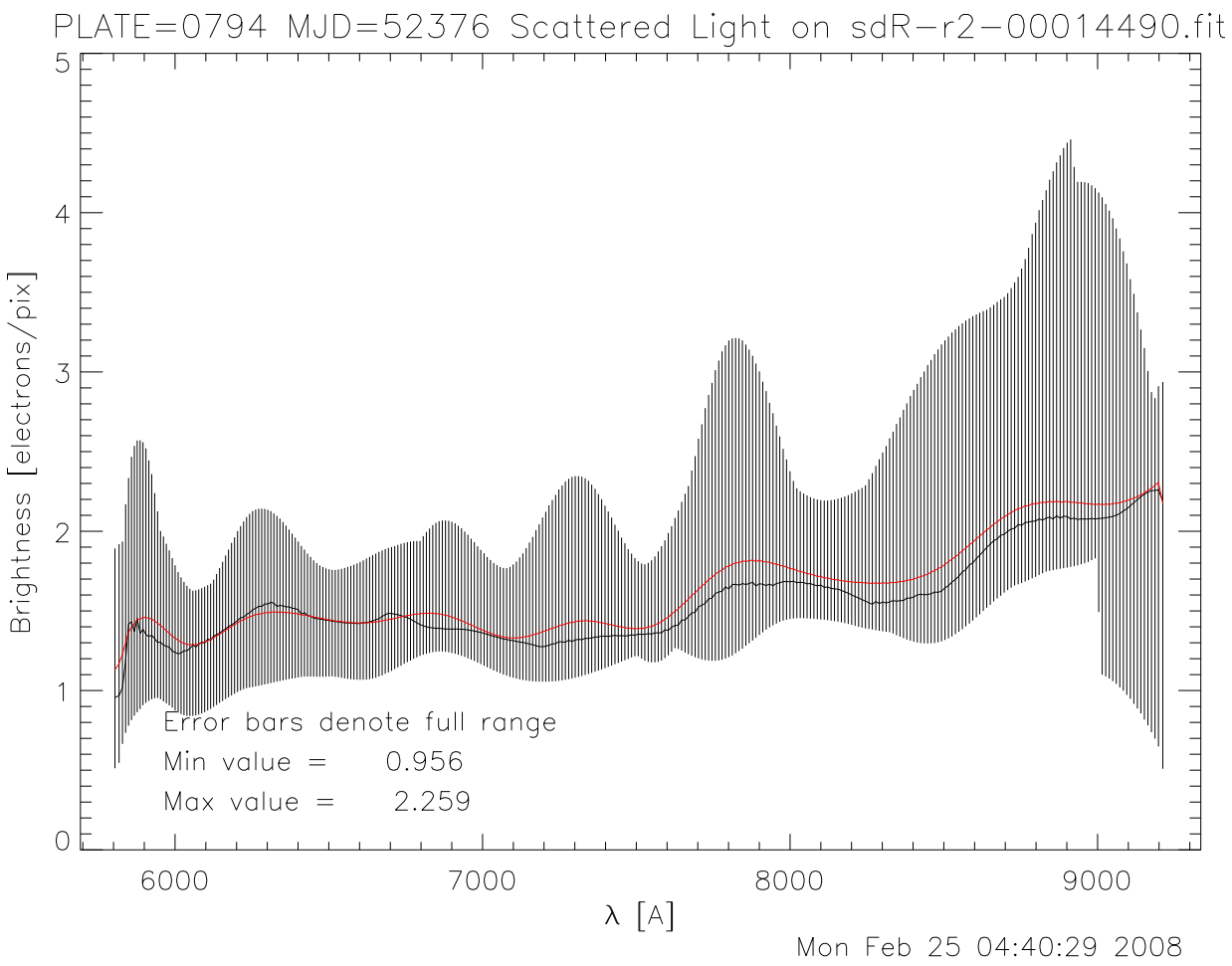

PLATE=0794 MJD=52376 sdR-r2-00014489.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.40 %
Fiber number
Focal Distance [mm]
Airmass

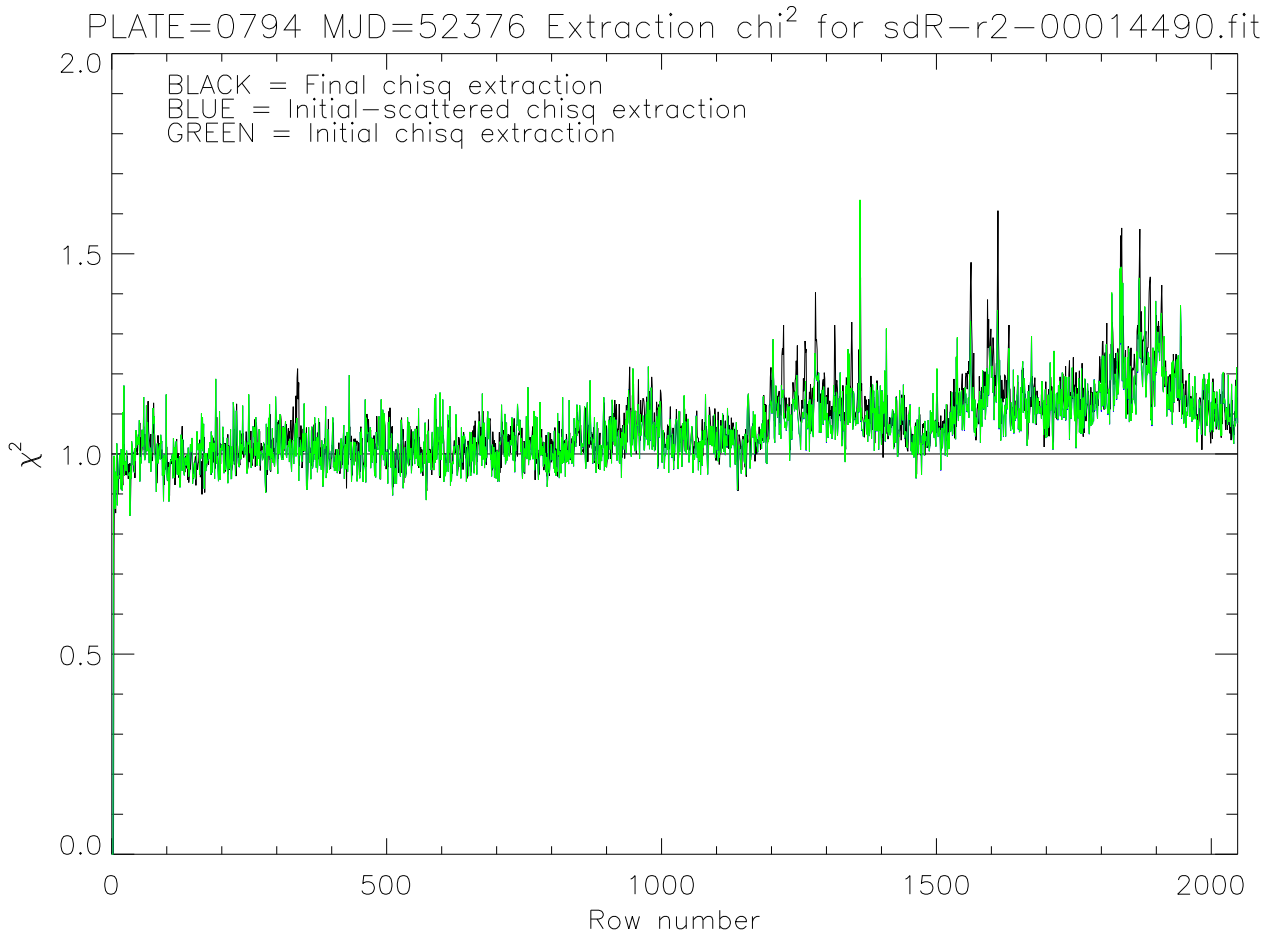

PLATE=0794 MJD=52376 Fiber−Flats for sdR−r2−00014485.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.592
Max value = 1.216
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 04:37:05 2008

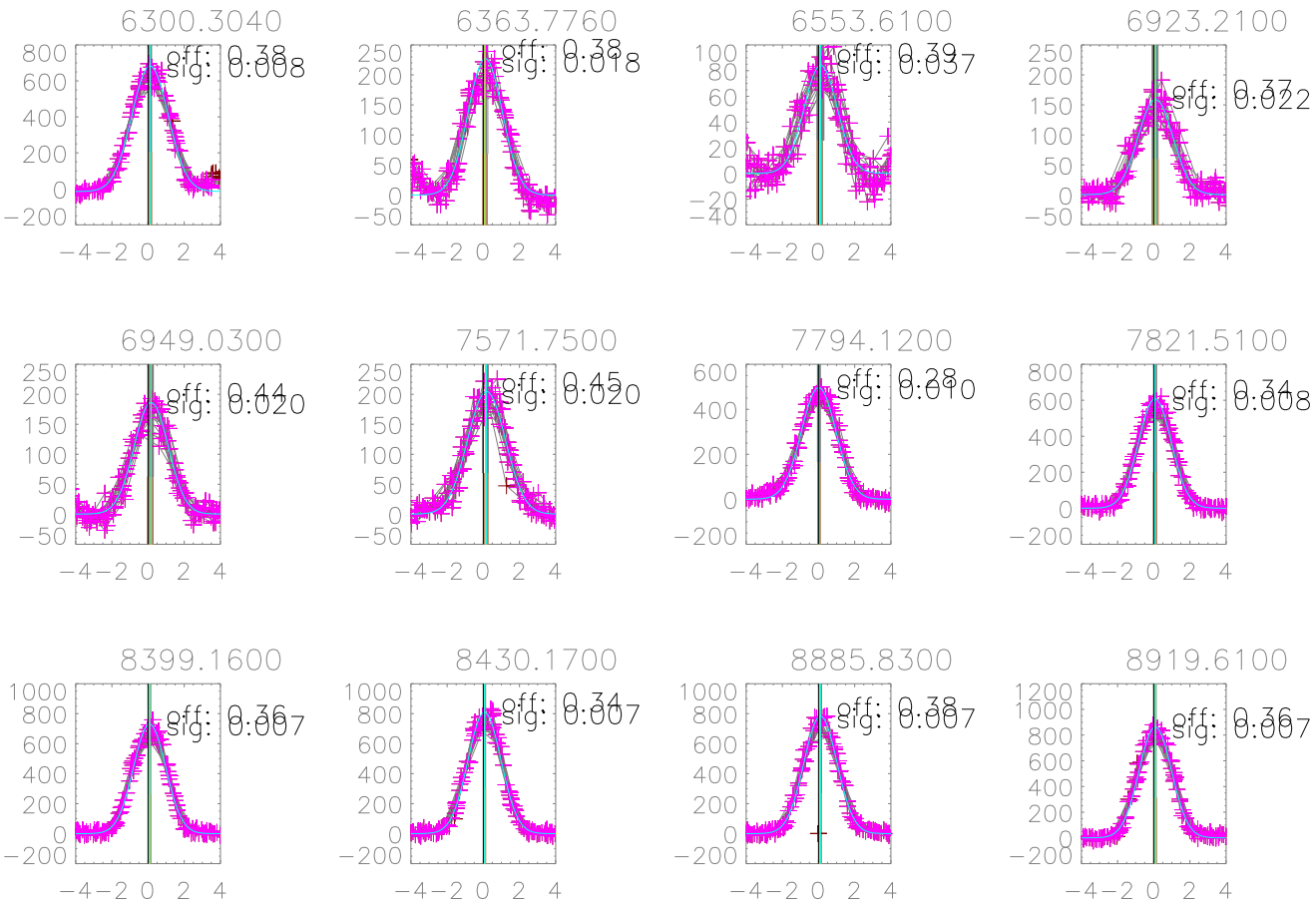

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r2-00014490.fi
4.5
6.4
6.4
6.4
4.5
4.5
4.5
2.7
2.7
0.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

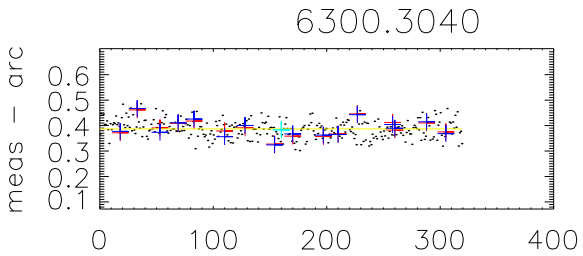

PLATE=0794 MJD=52376 Scattered Light before halo removal on sdR-r2-00014490.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.962
Max value = 7.461
Mon Feb 25 04:37:43 2008

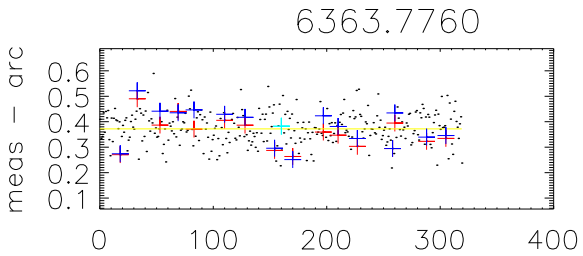

PLATE=0794 MJD=52376 Scattered Light on sdR-r2-00014490.fit
2.27
2.27
2.27
1.36
1.36
1.36
1.36
0
0
0

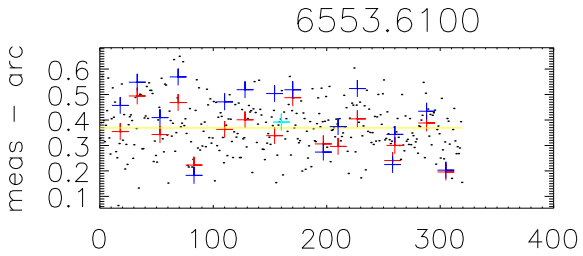

PLATE=0794 MJD=52376 Scattered Light on sdR-r2-00014490.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.956
Max value = 2.259
Mon Feb 25 04:40:29 2008

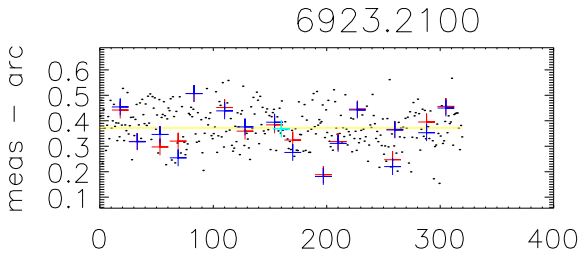

PLATE=0794 MJD=52376 Extraction chi^2 for sdR-r2-00014490.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

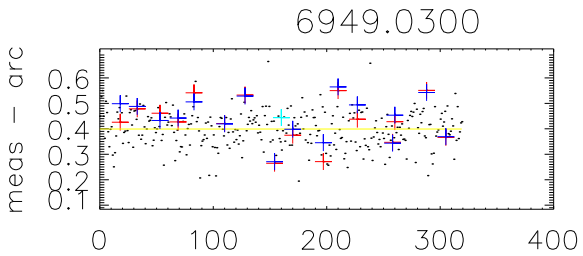

6300.3040
off: 0.38
sig: 0.008
6363.7760
off: 0.38
sig: 0.018
6553.6100
off: 0.39
sig: 0.037
6923.2100
off: 0.37
sig: 0.022
6949.0300
off: 0.44
sig: 0.020
7571.7500
off: 0.45
sig: 0.020
7794.1200
off: 0.28
sig: 0.010
7821.5100
off: 0.34
sig: 0.008
8399.1600
off: 0.36
sig: 0.007
8430.1700
off: 0.34
sig: 0.007
8885.8300
off: 0.38
sig: 0.007
8919.6100
off: 0.36
sig: 0.007

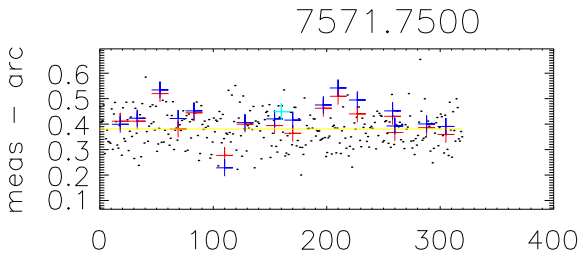

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

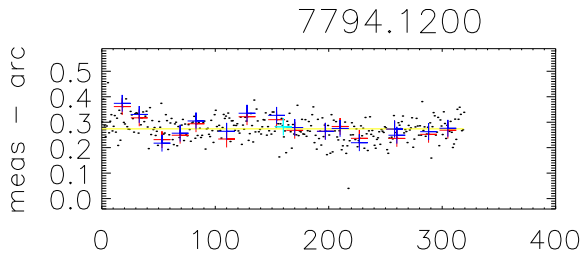

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

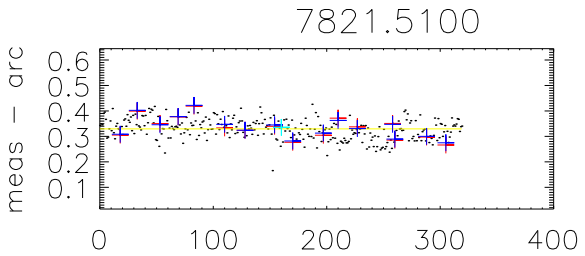

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

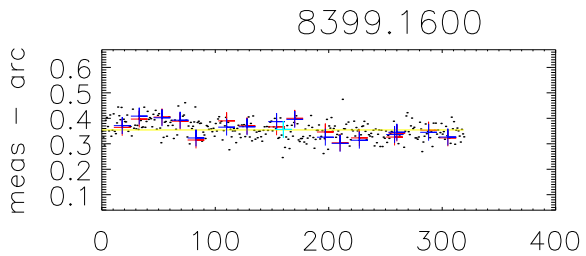

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

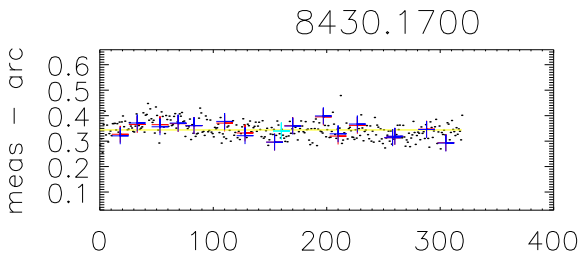

6949.0300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

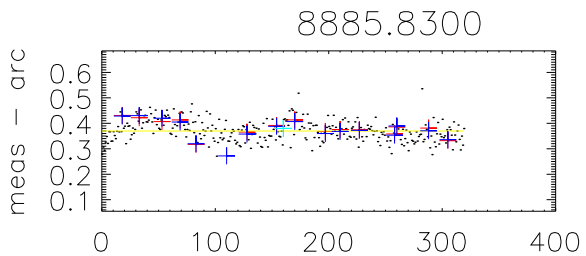

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

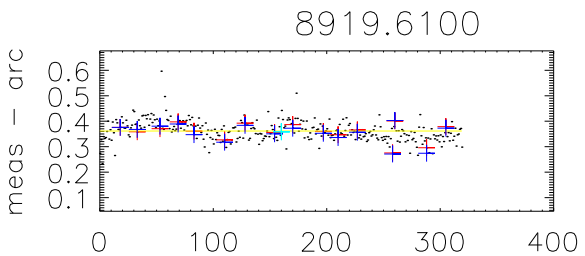

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

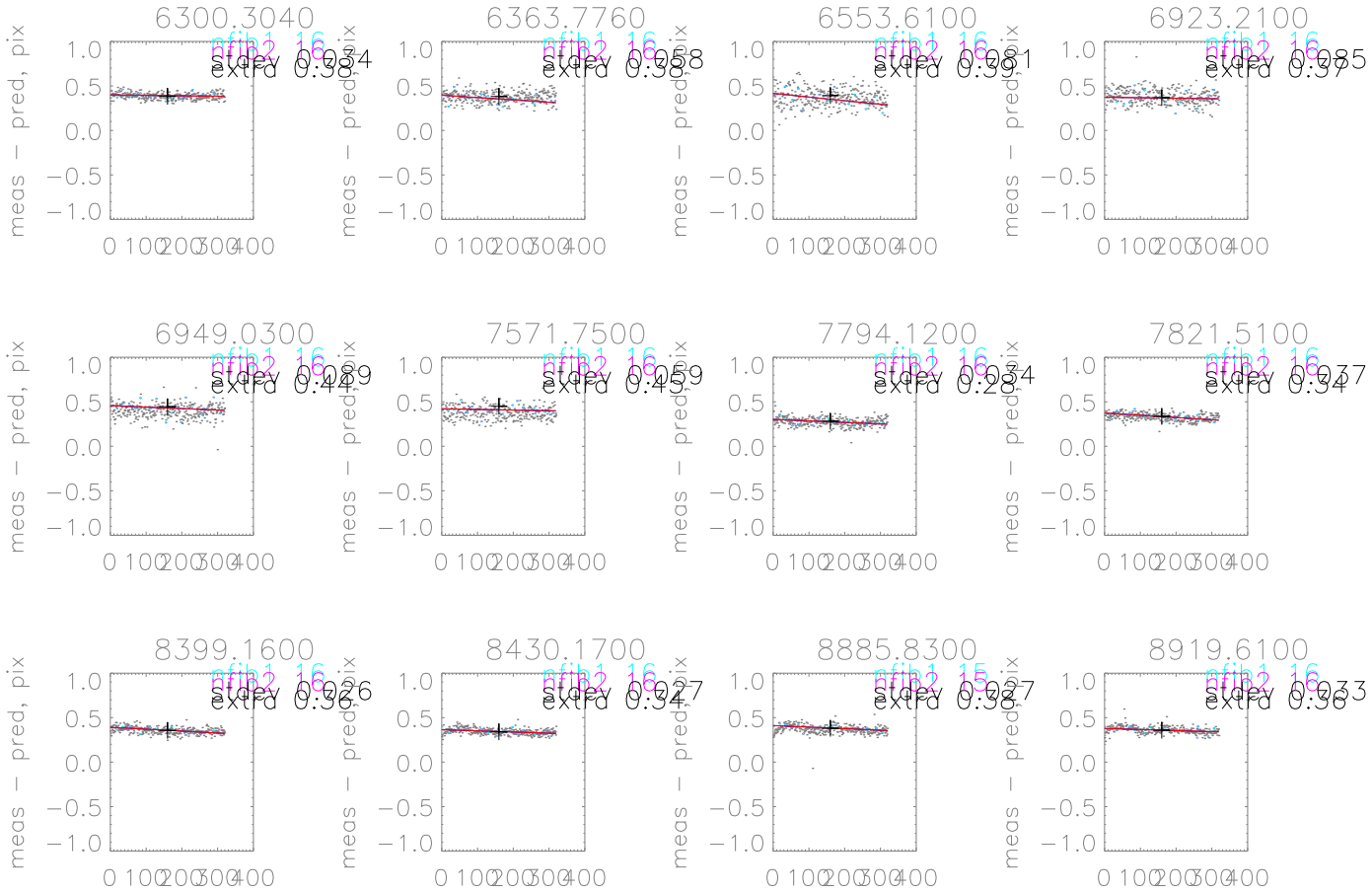

7821.5100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

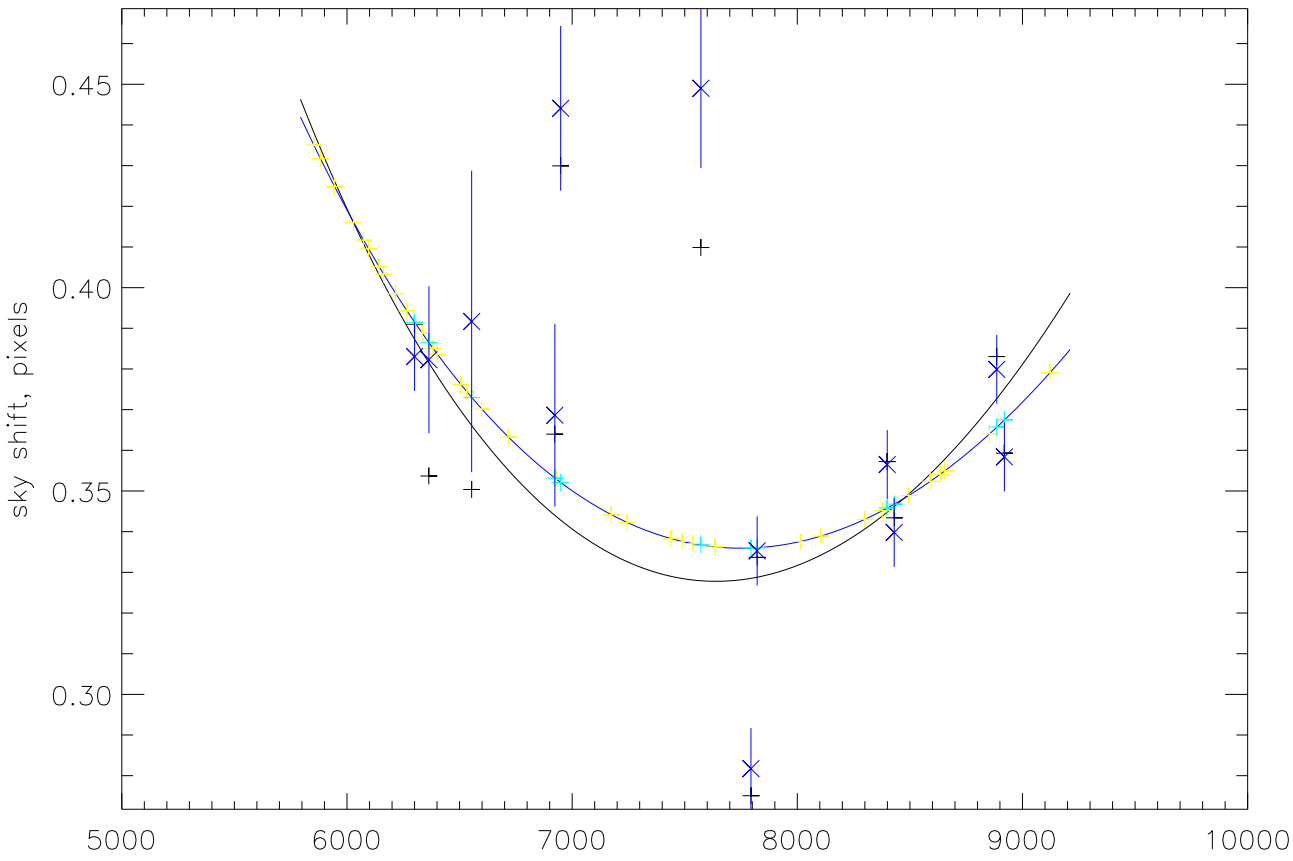

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

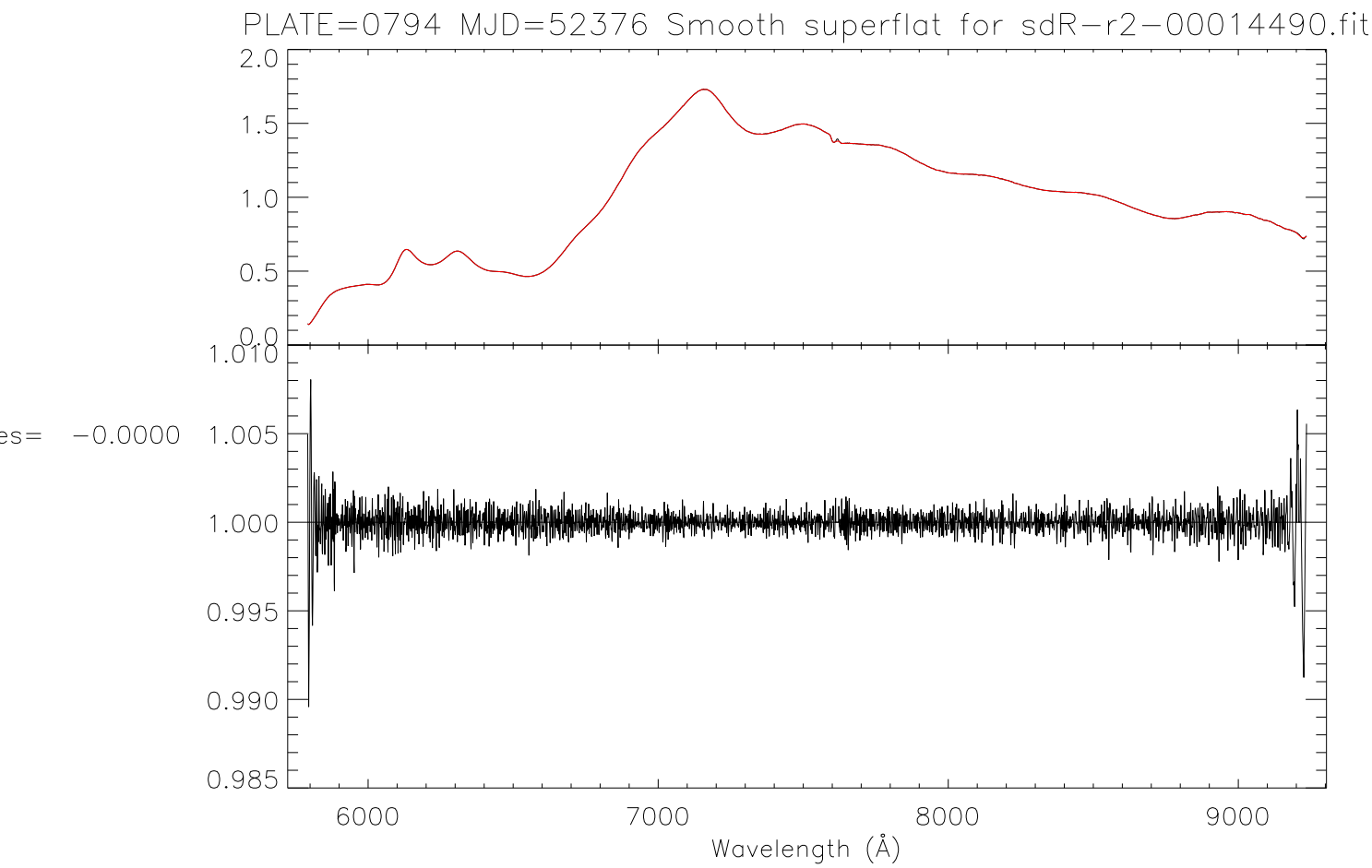

8430.1700
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

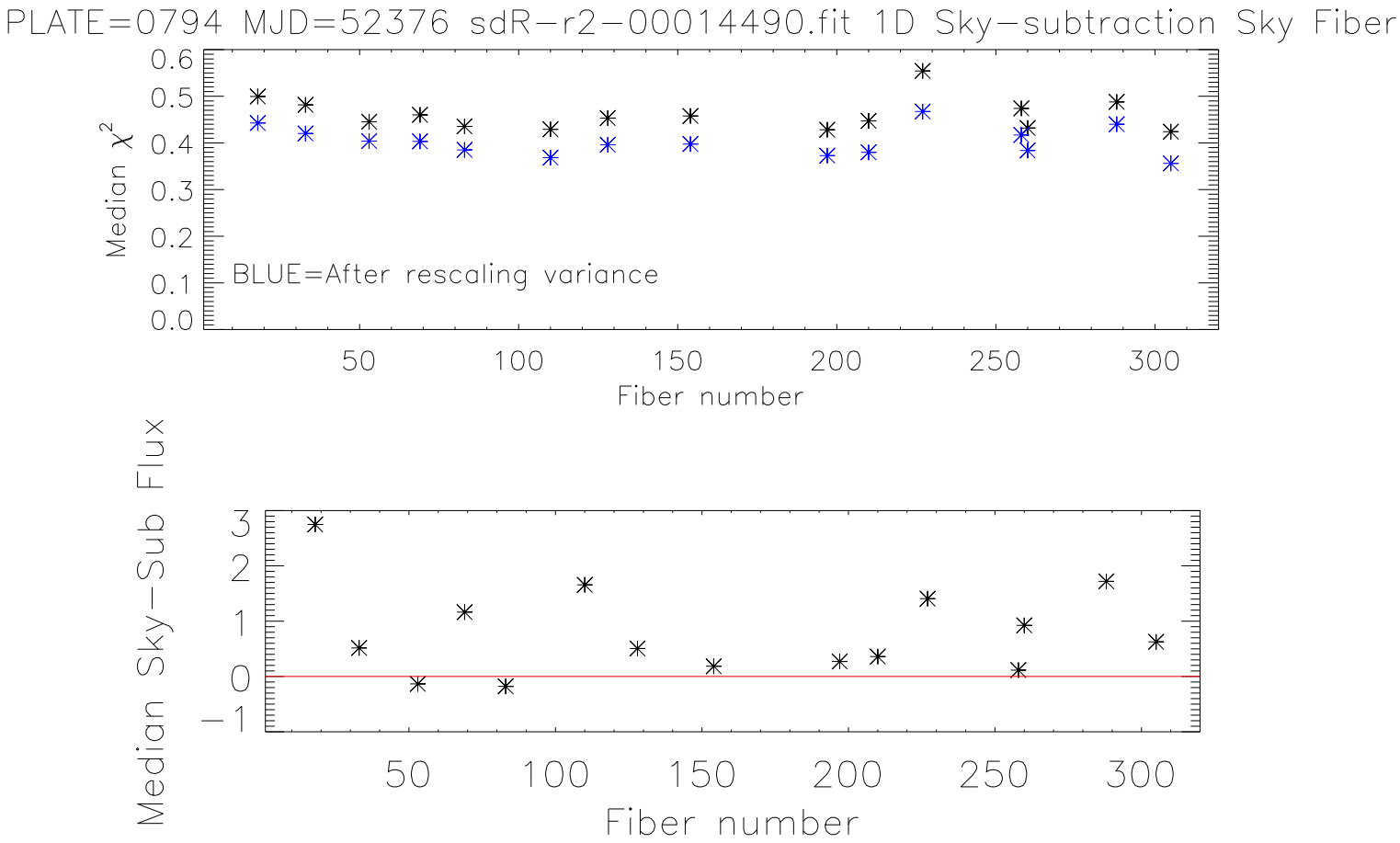

8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

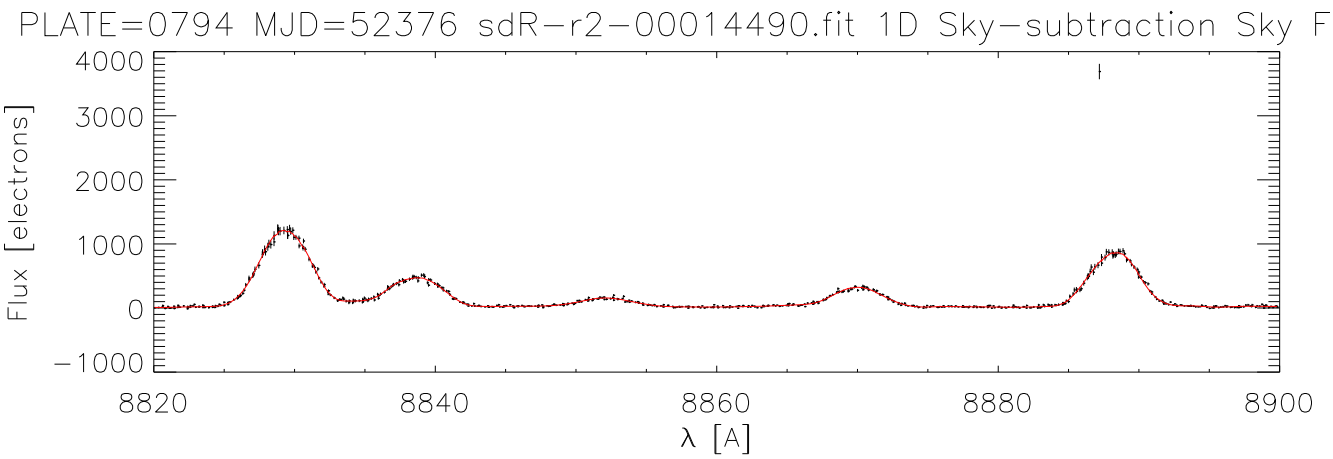

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

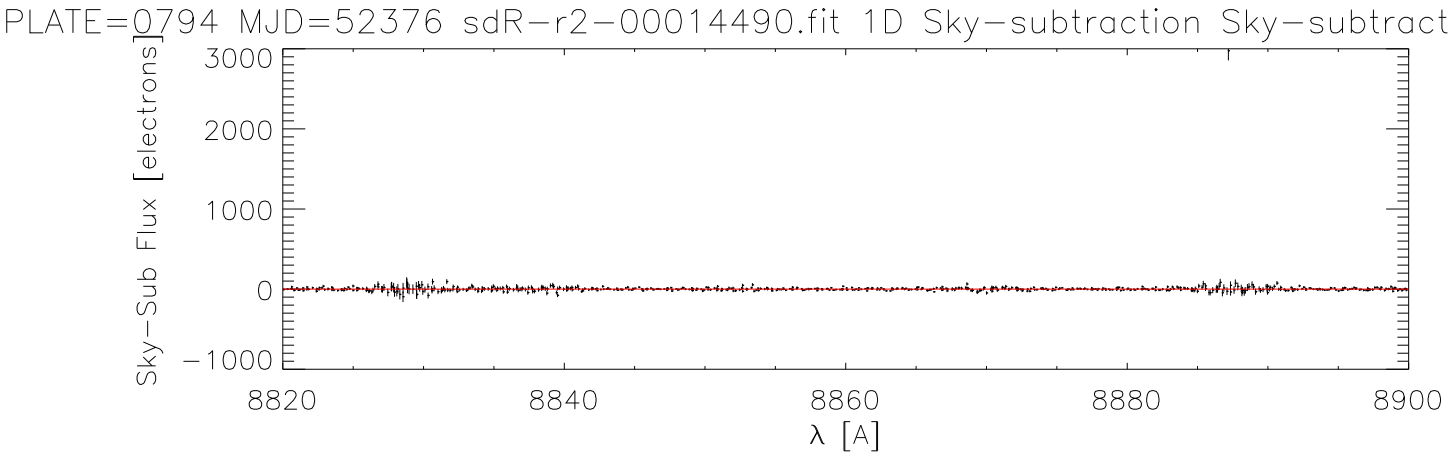

6300.3040
mfib1 16
mfib2 16
stdev 0.034
extra 0.38
6363.7760
mfib1 16
mfib2 16
stdev 0.058
extra 0.38
6553.6100
mfib1 16
mfib2 16
stdev 0.081
extra 0.39
6923.2100
mfib1 16
mfib2 16
stdev 0.085
extra 0.37
6949.0300
mfib1 16
mfib2 16
stdev 0.089
extra 0.44
7571.7500
mfib1 16
mfib2 16
stdev 0.059
extra 0.45
7794.1200
mfib1 16
mfib2 16
stdev 0.034
extra 0.28
7821.5100
mfib1 16
mfib2 16
stdev 0.037
extra 0.34
8399.1600
mfib1 16
mfib2 16
stdev 0.026
extra 0.36
8430.1700
mfib1 16
mfib2 16
stdev 0.027
extra 0.34
8885.8300
mfib1 15
mfib2 16
stdev 0.027
extra 0.38
8919.6100
mfib1 16
mfib2 16
stdev 0.033
extra 0.38
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

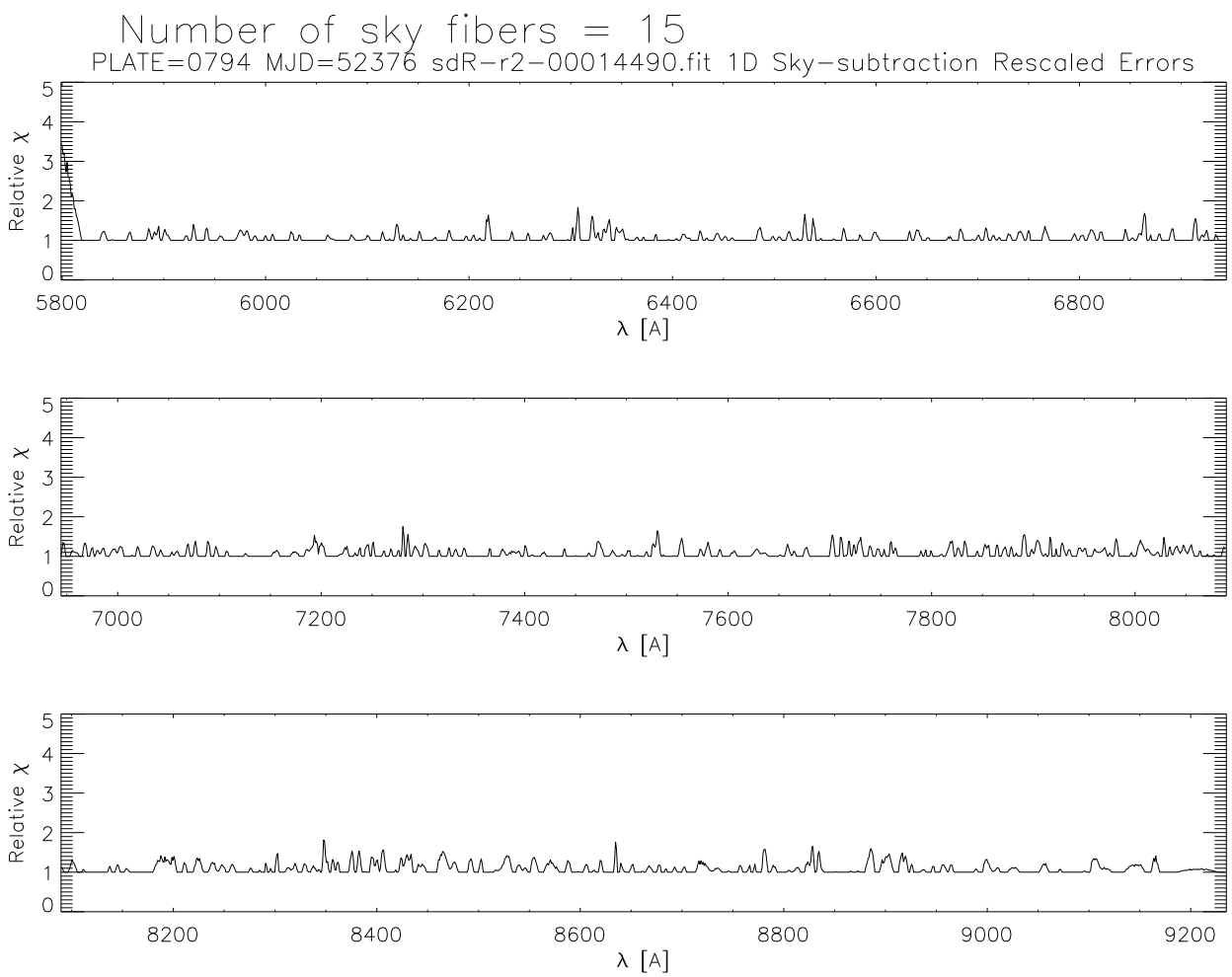

0.45
0.40
0.35
0.30
sky shift, pixels
5000
6000
7000
8000
9000
10000

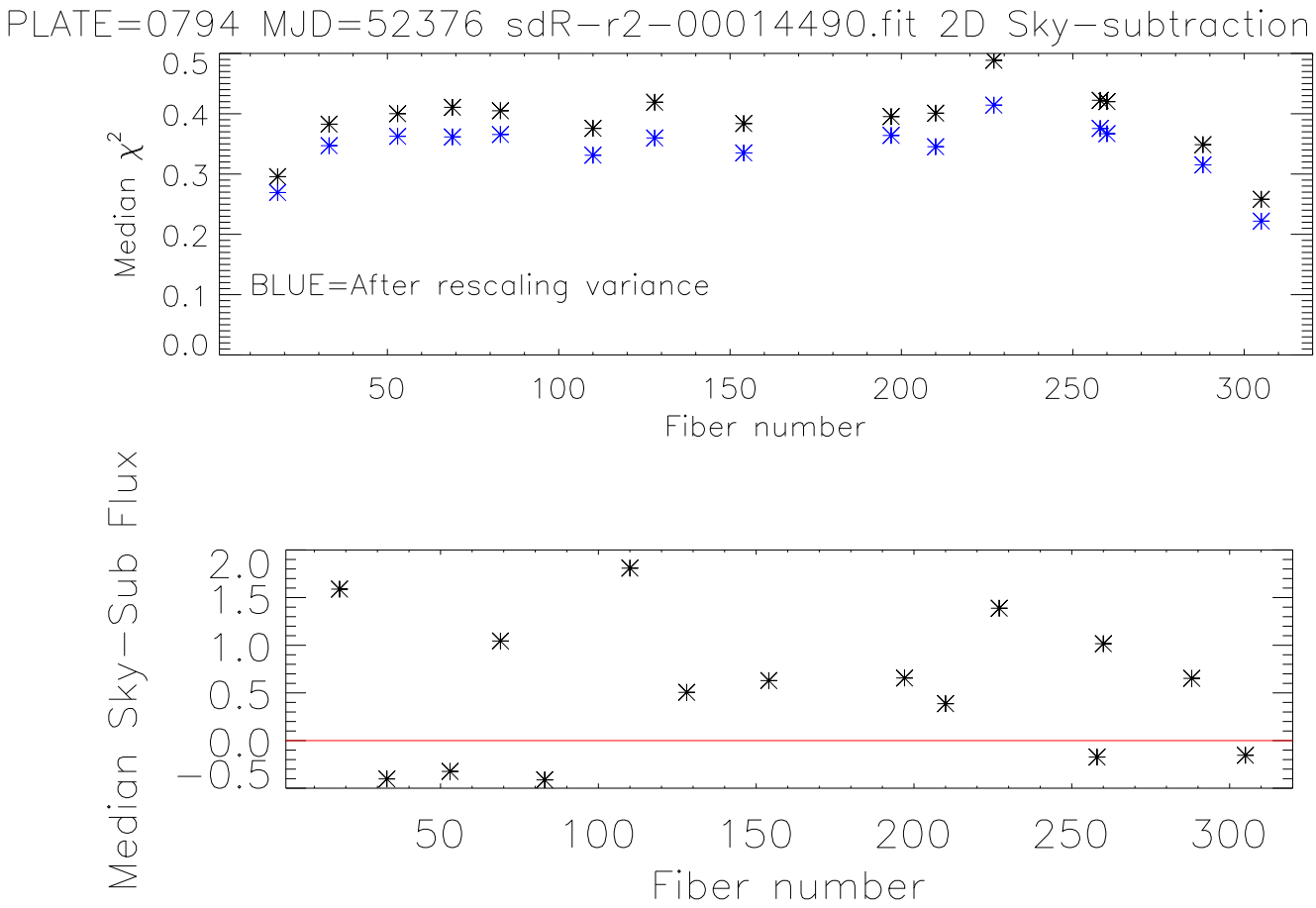

PLATE=0794 MJD=52376 Smooth superflat for sdR-r2-00014490.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

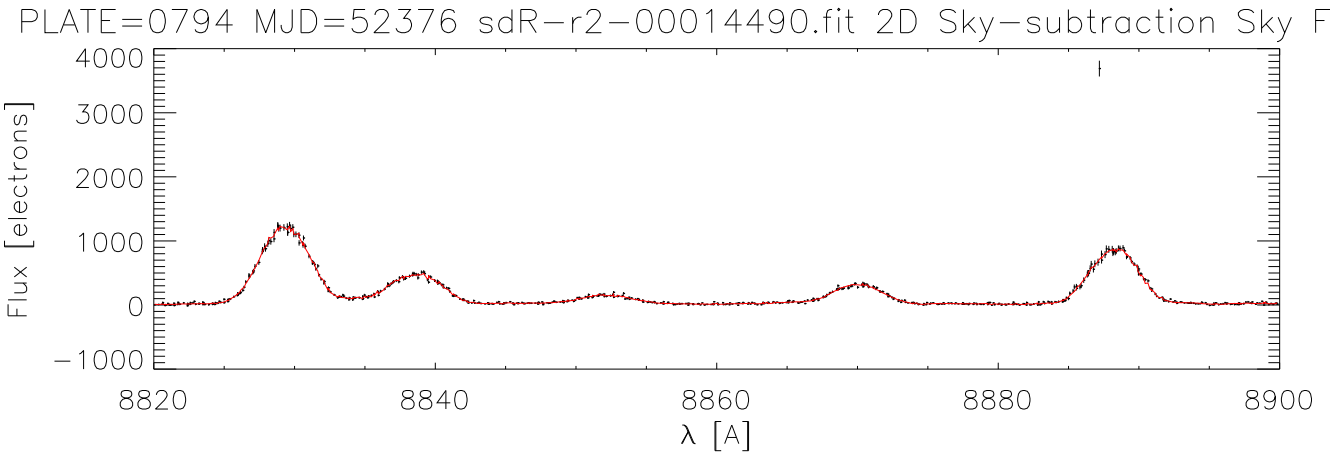

PLATE=0794 MJD=52376 sdR-r2-00014490.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

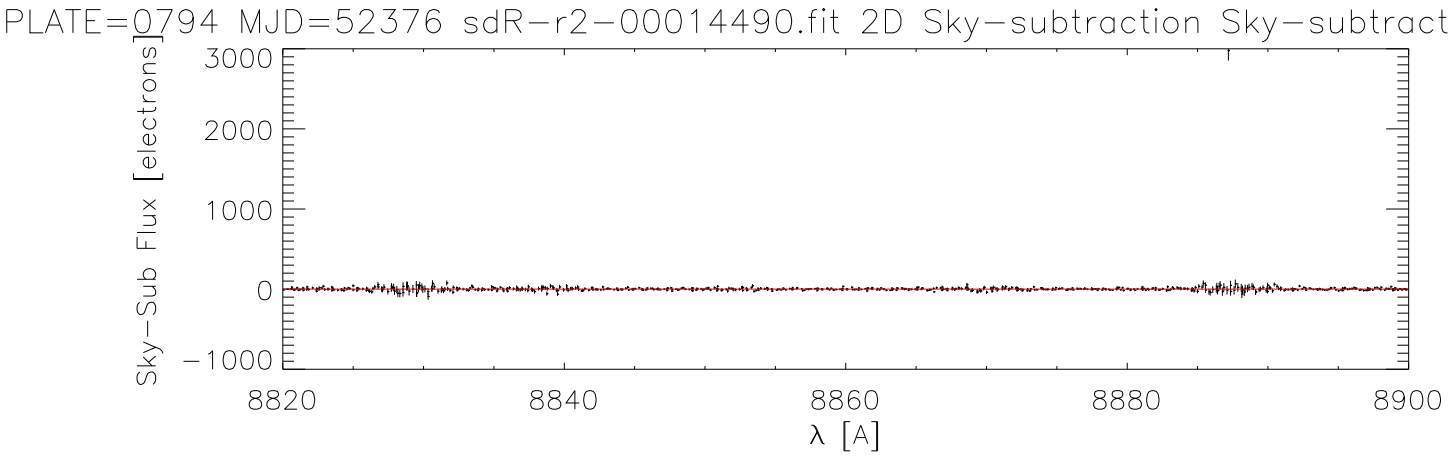

PLATE=0794 MJD=52376 sdR-r2-00014490.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

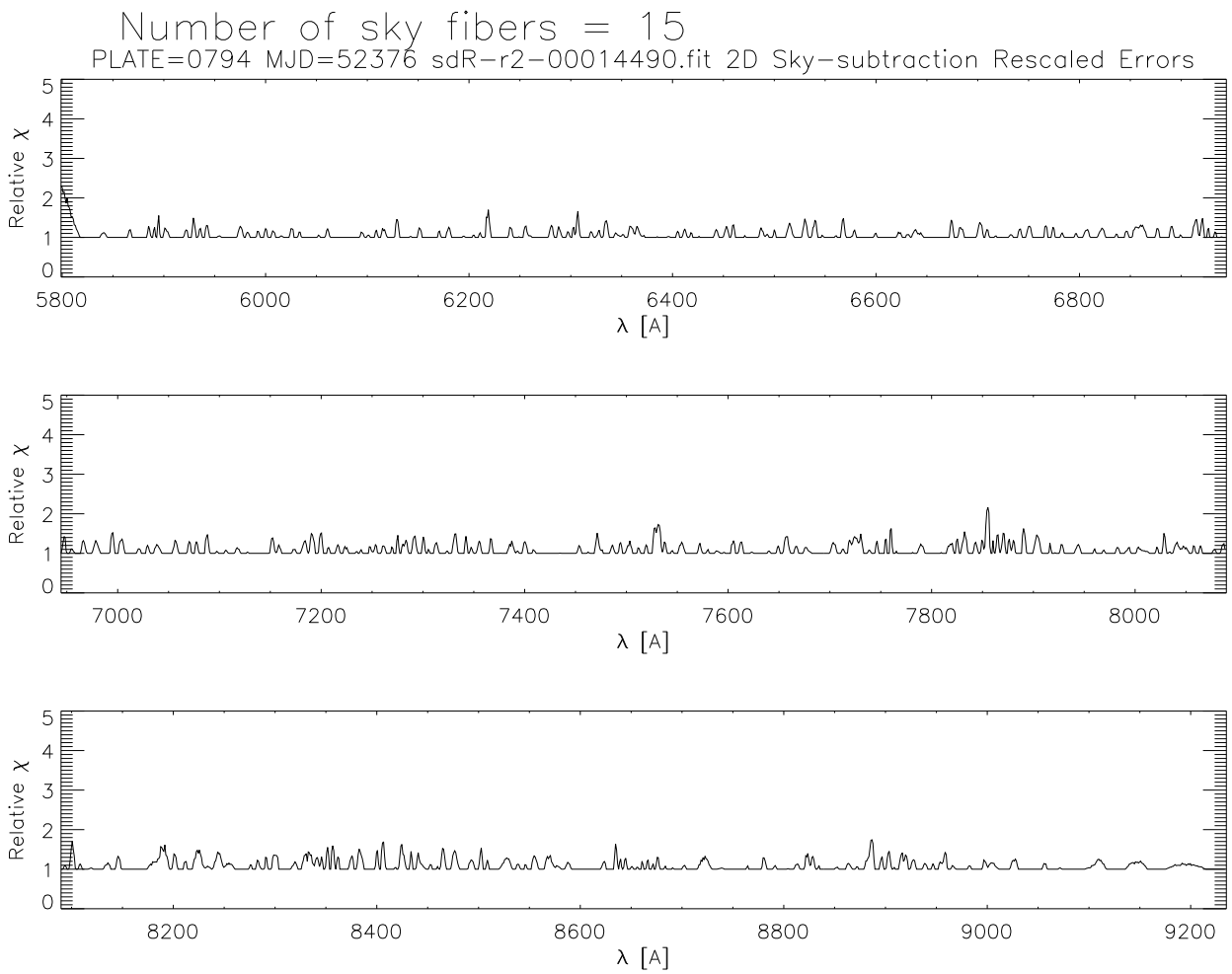

PLATE=0794 MJD=52376 sdR-r2-00014490.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

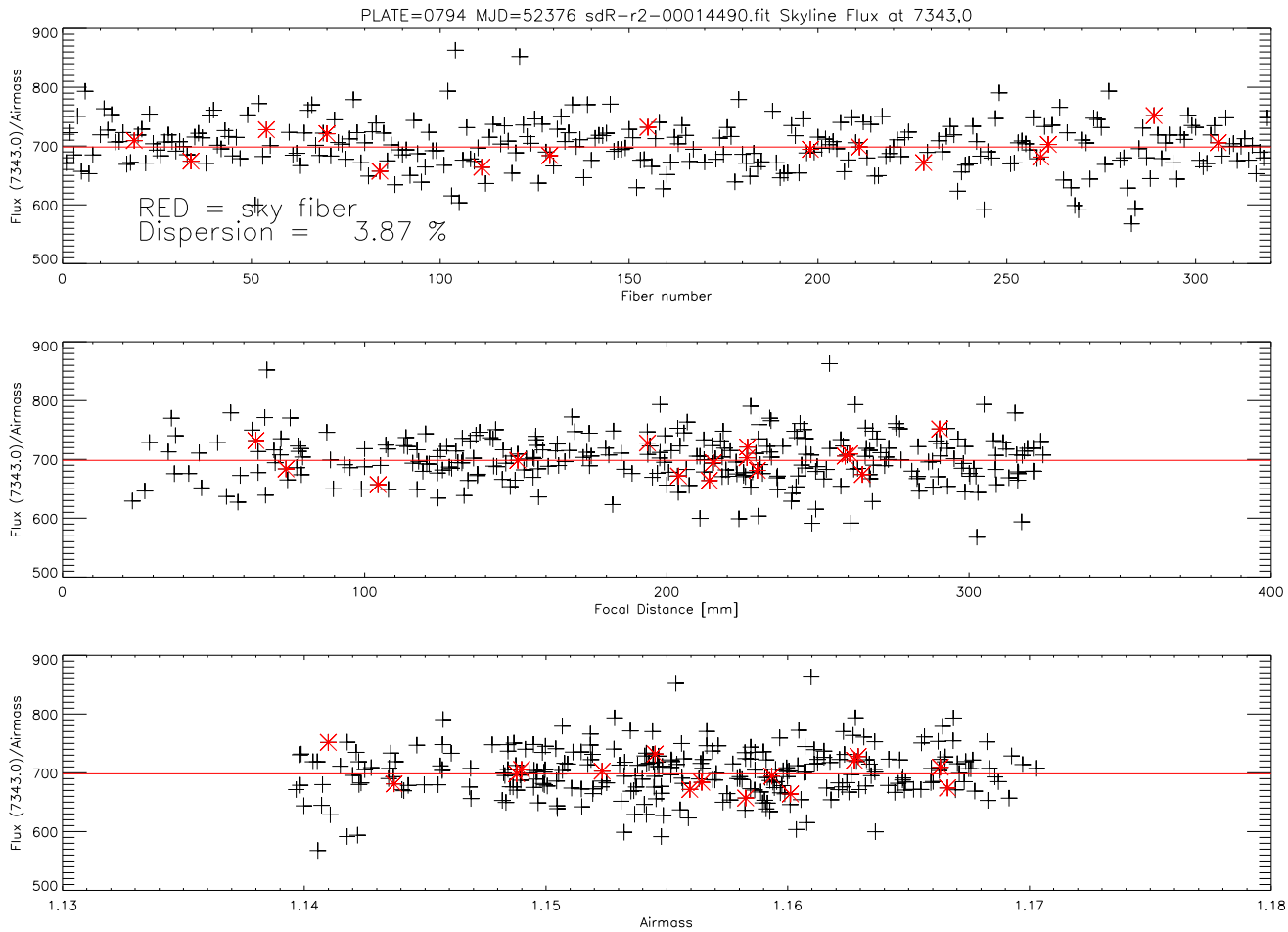

Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r2-00014490.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

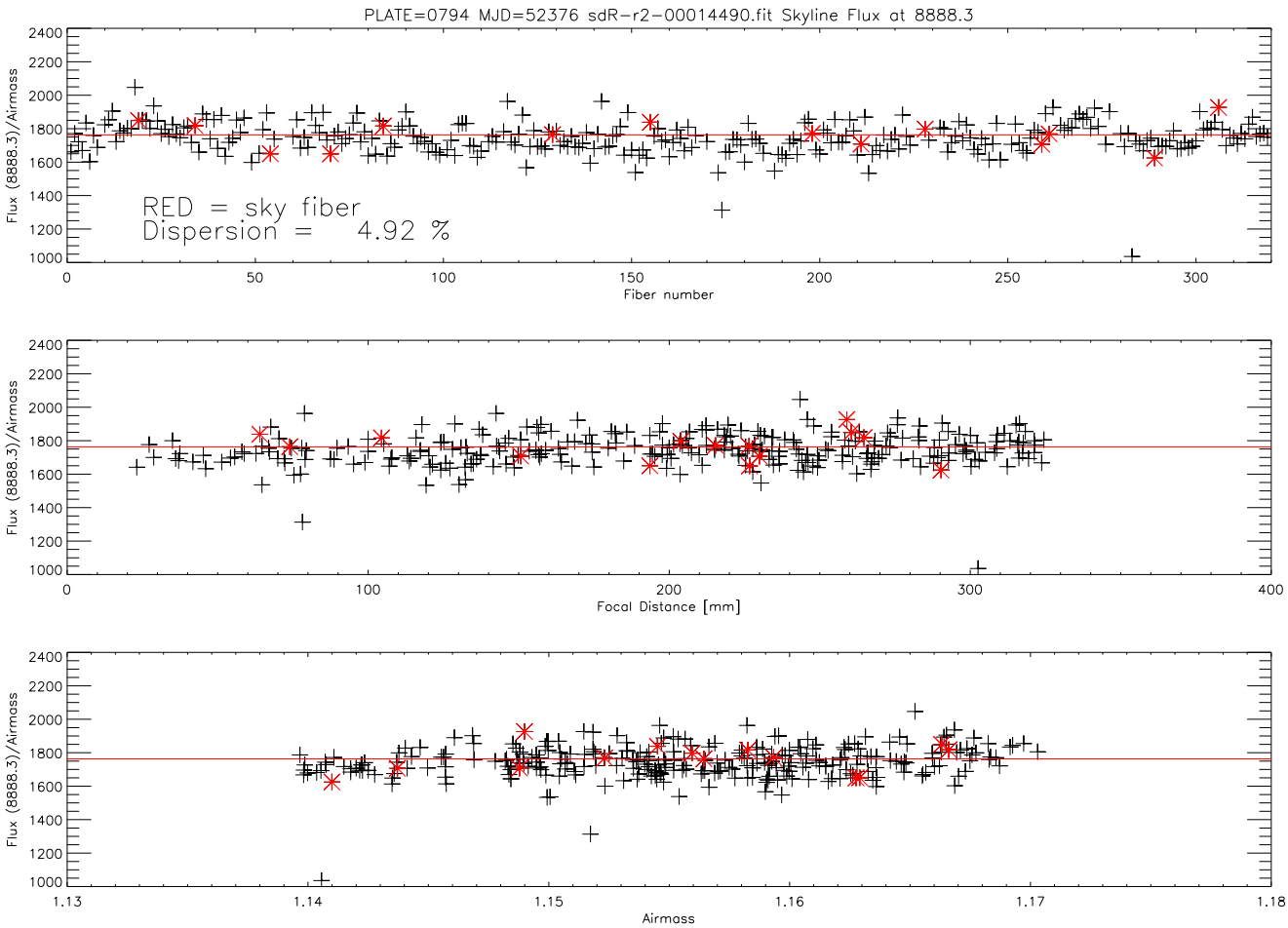

PLATE=0794 MJD=52376 sdR-r2-00014490.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0794 MJD=52376 sdR-r2-00014490.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


PLATE=0794 MJD=52376 sdR-r2-00014490.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=0794 MJD=52376 sdR-r2-00014490.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=0794 MJD=52376 sdR-r2-00014490.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.87 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=0794 MJD=52376 sdR-r2-00014490.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.92 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass