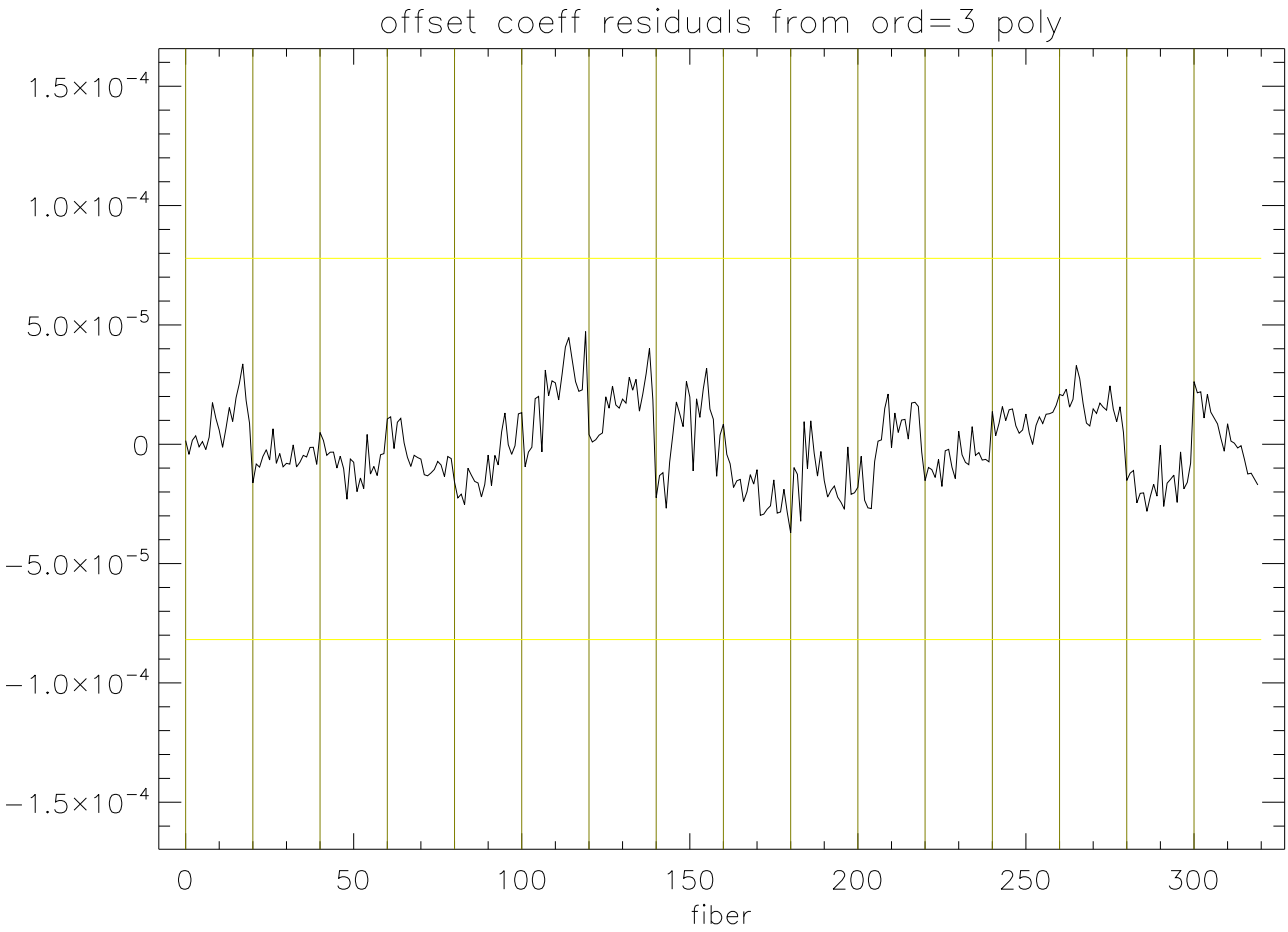
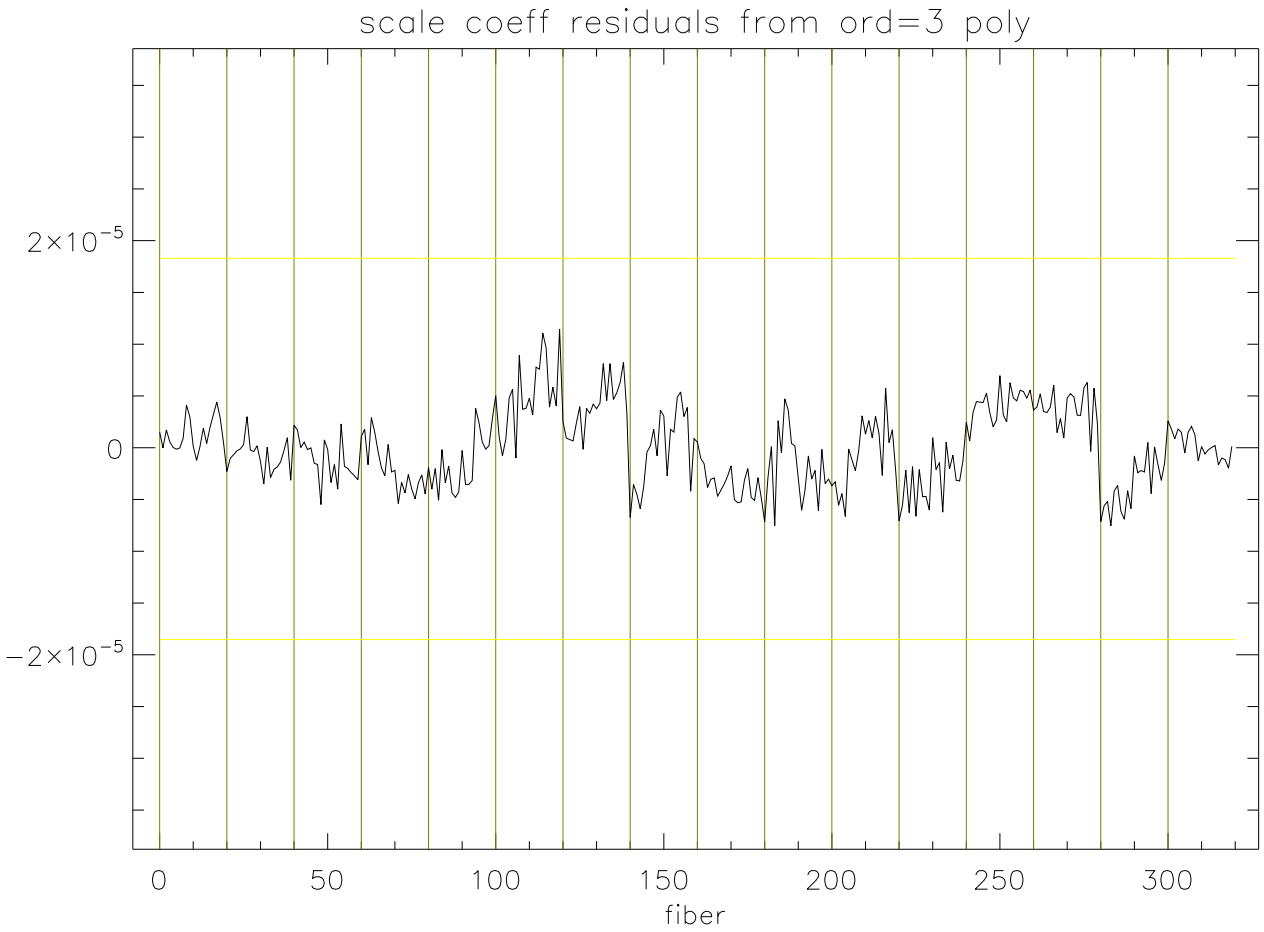
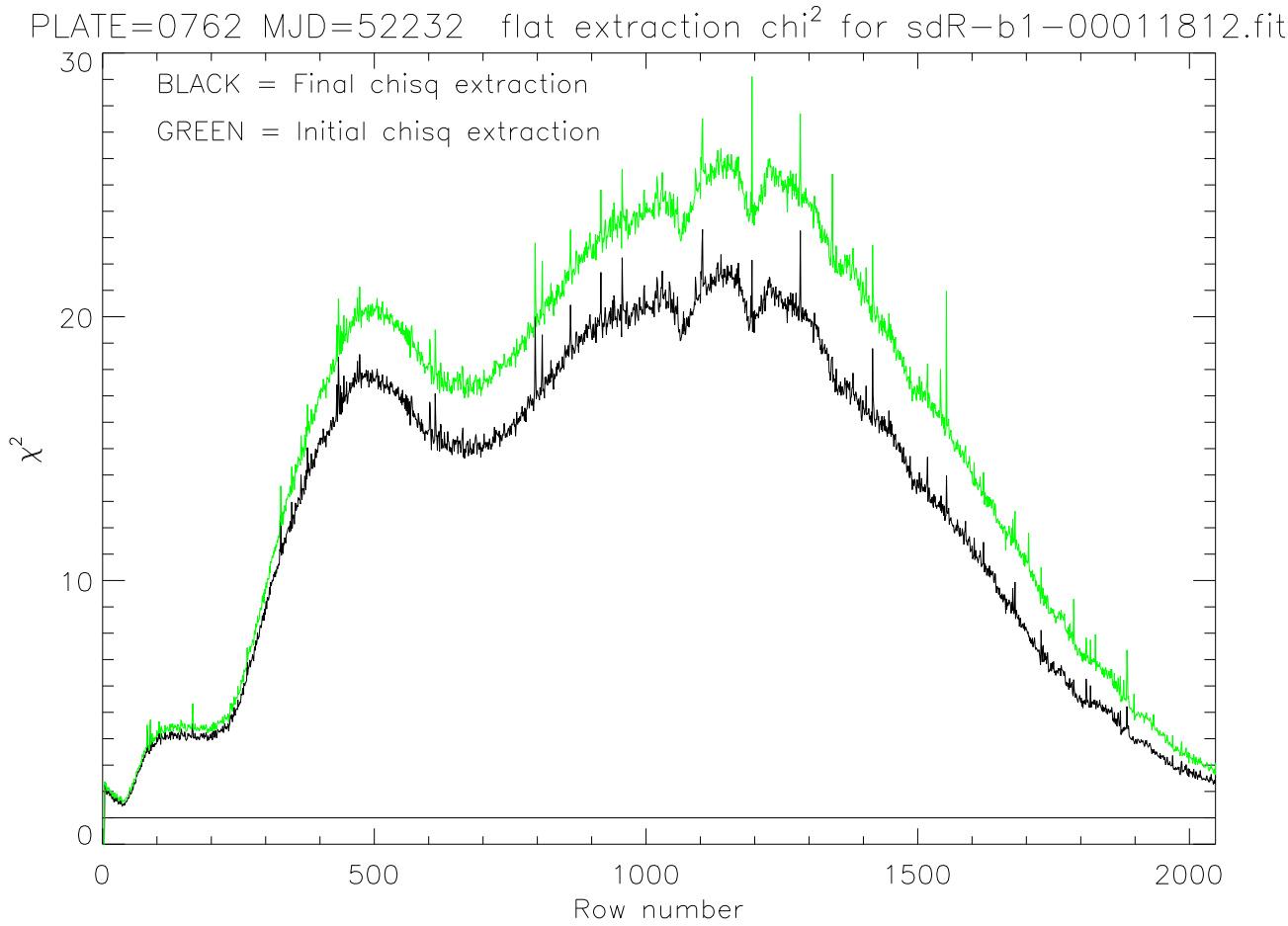
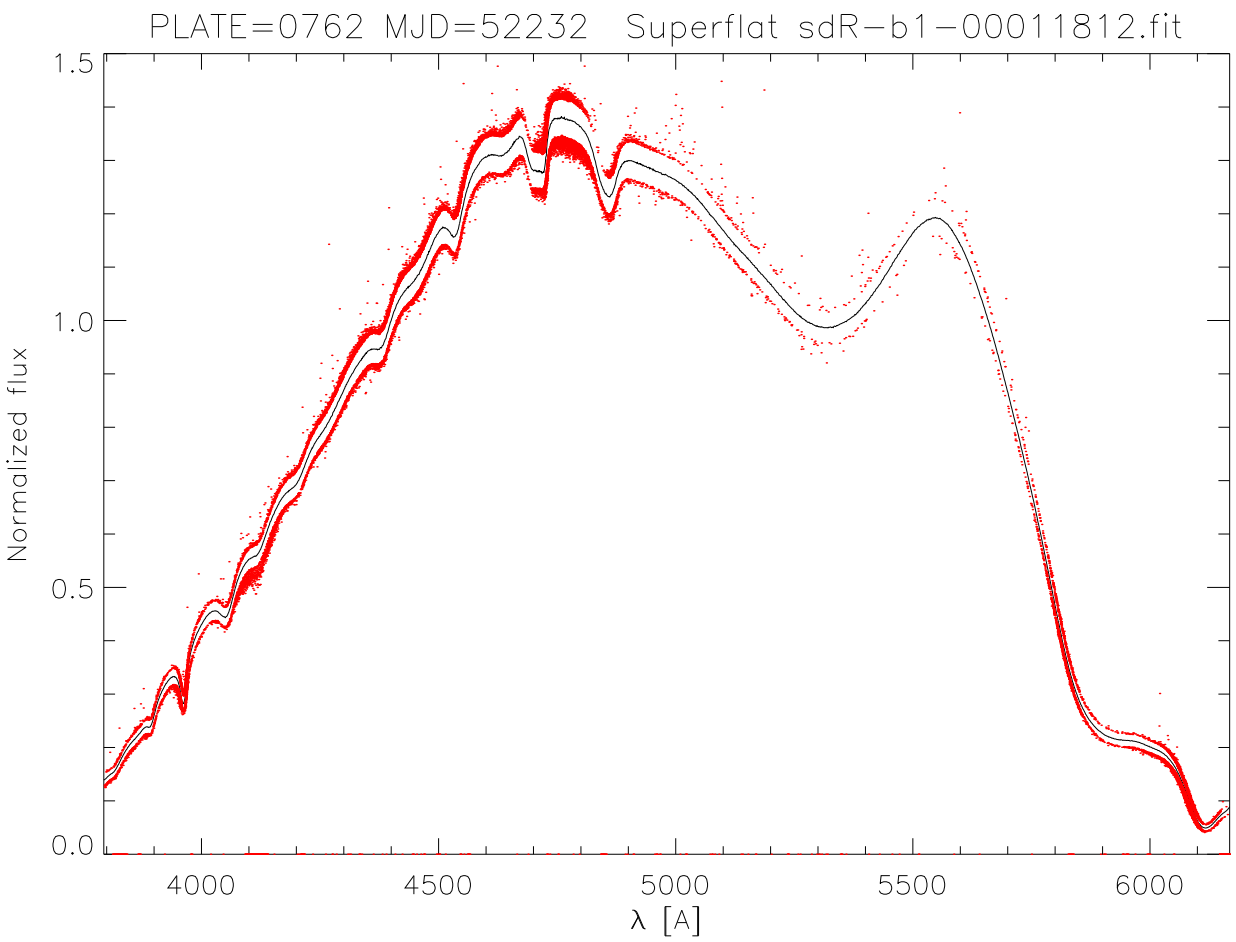
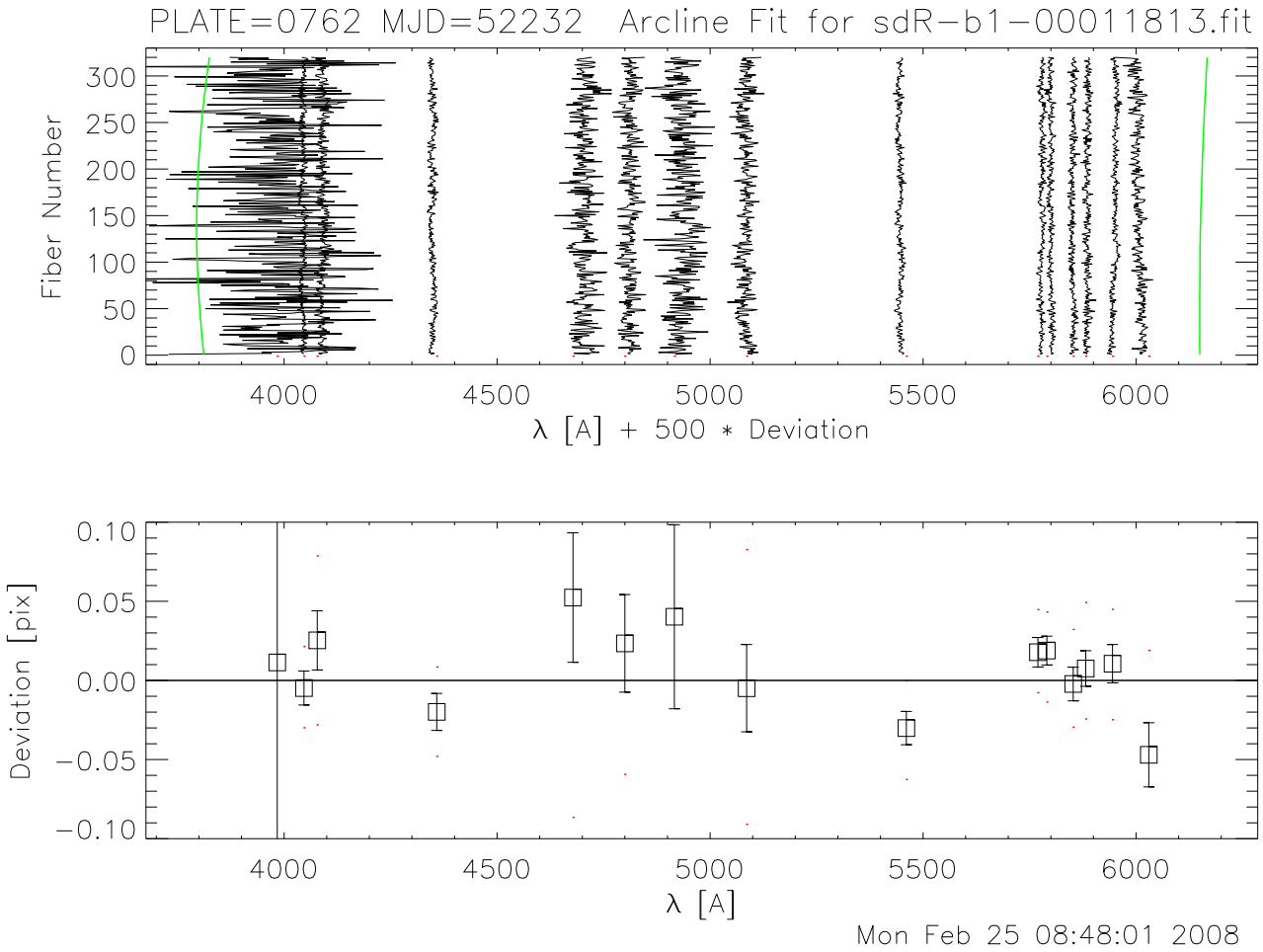
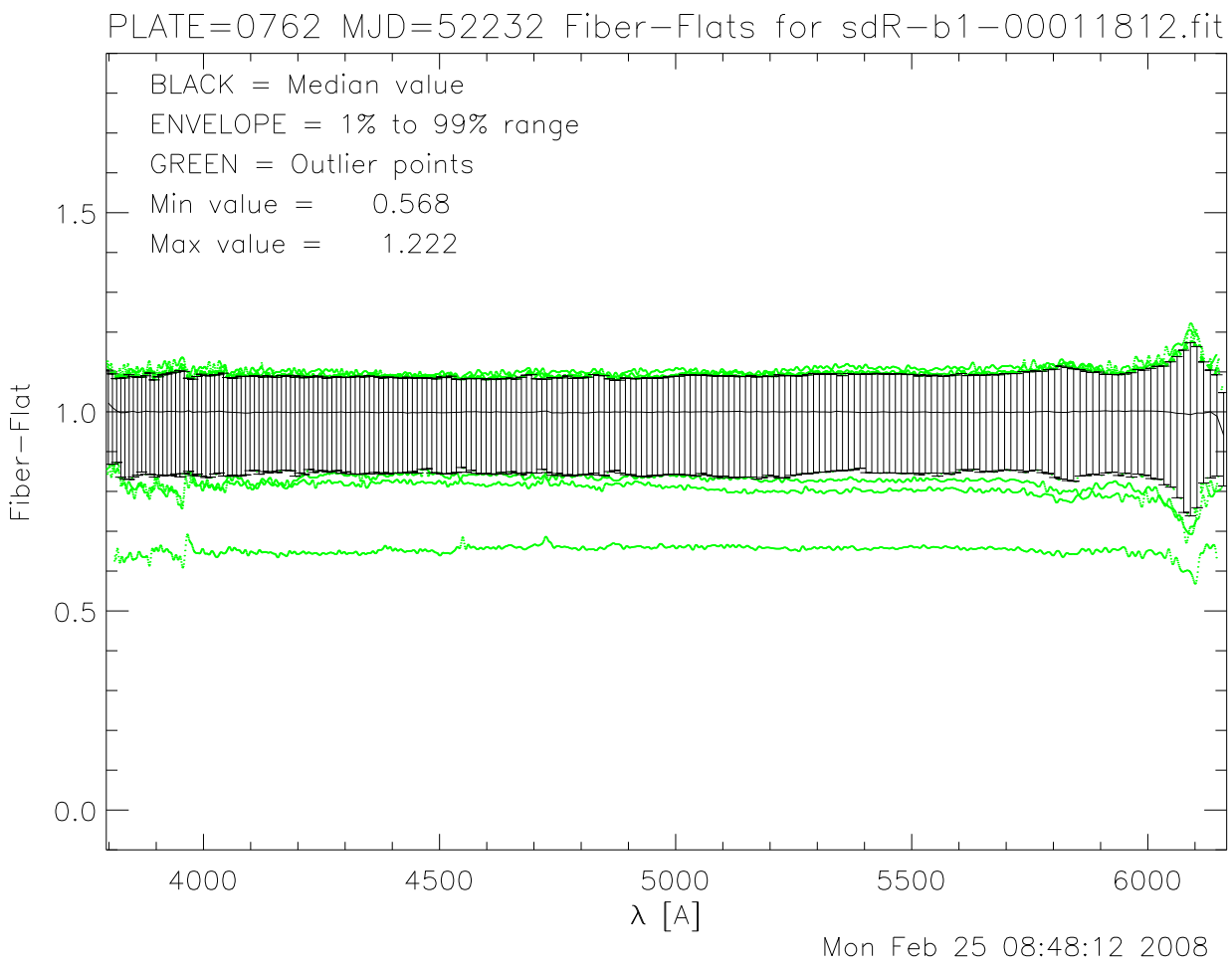

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

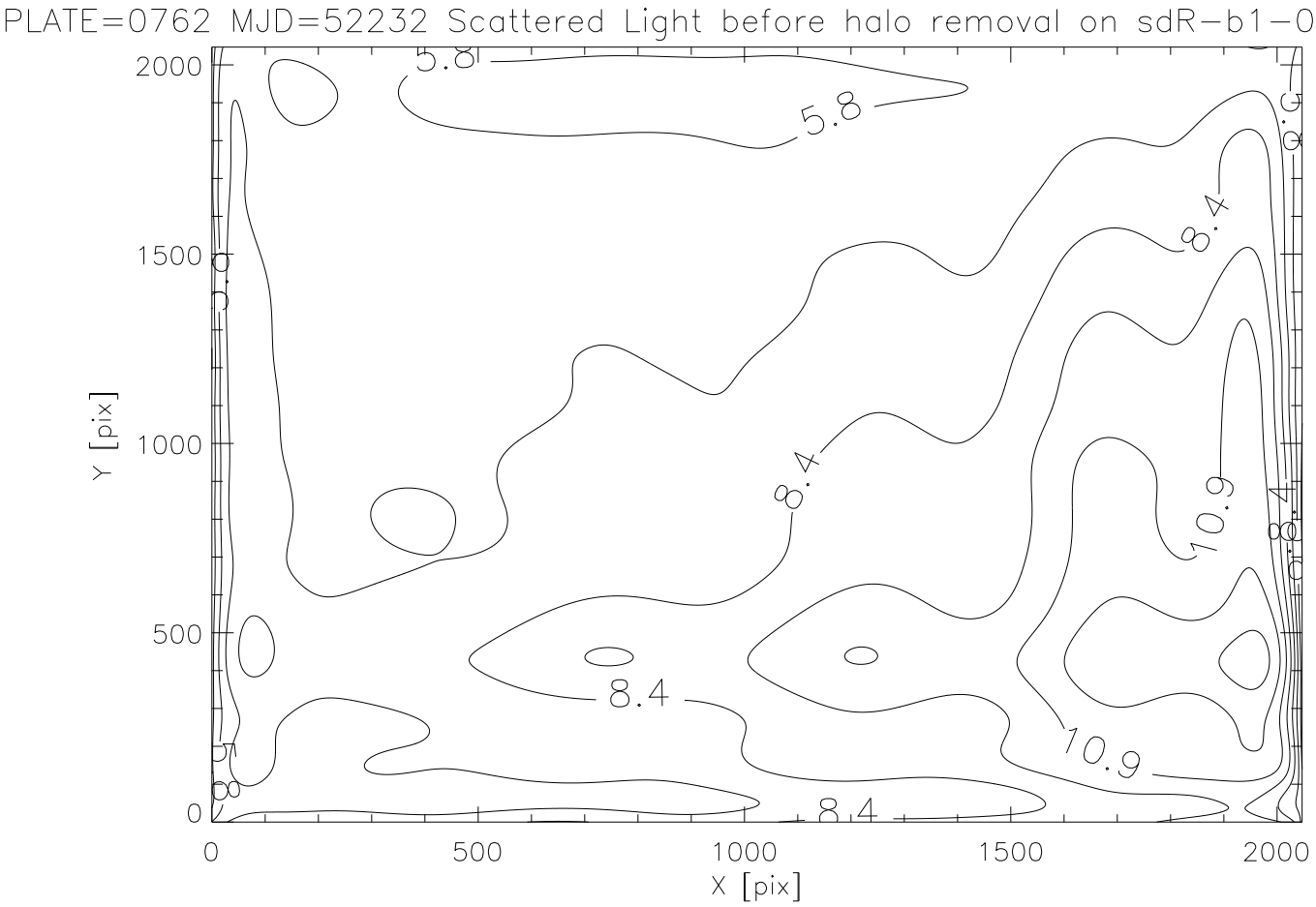

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

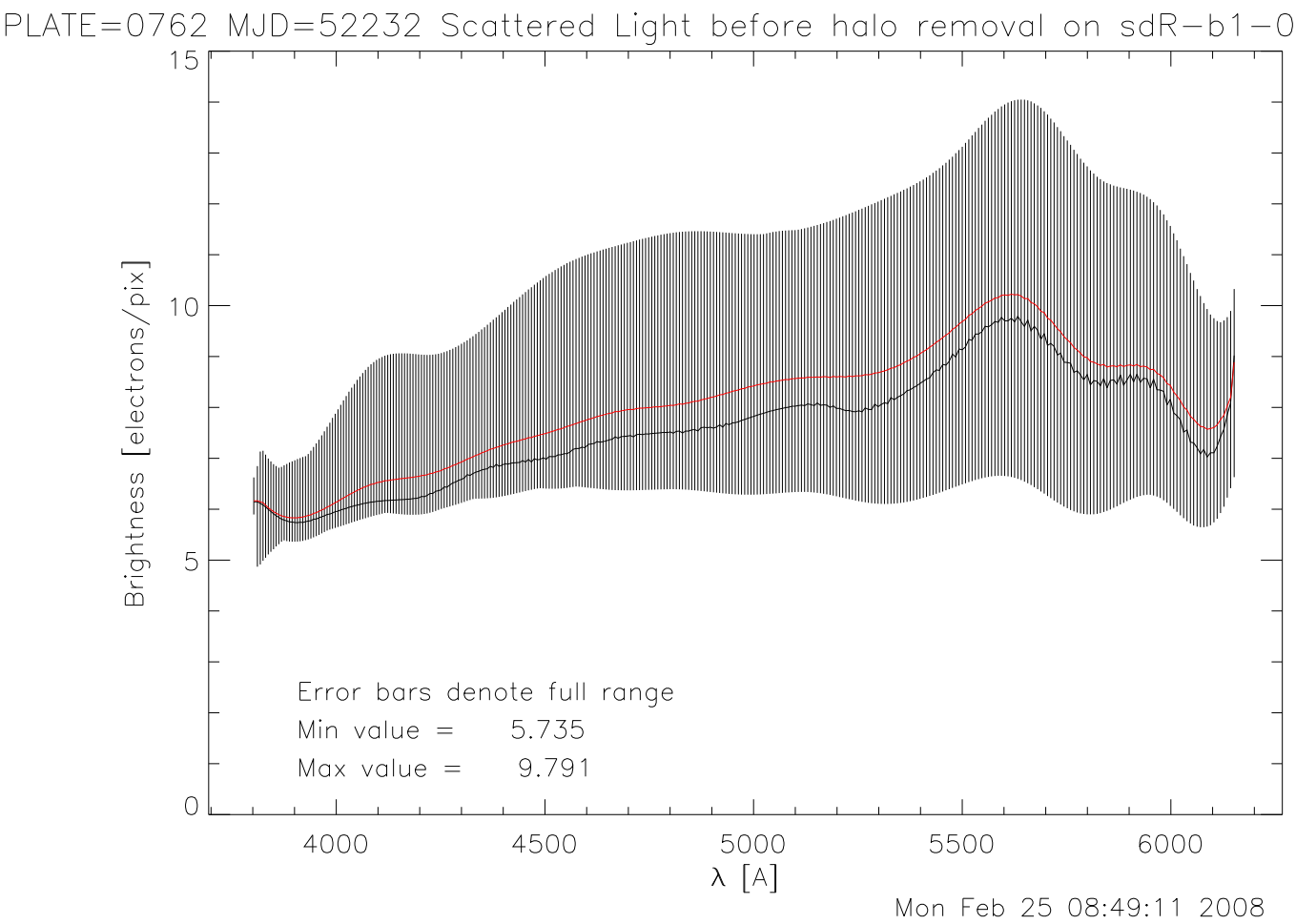

PLATE=0762 MJD=52232 flat extraction chi^2 for sdR−b1−00011812.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
0
500
1000
1500
2000
Row number

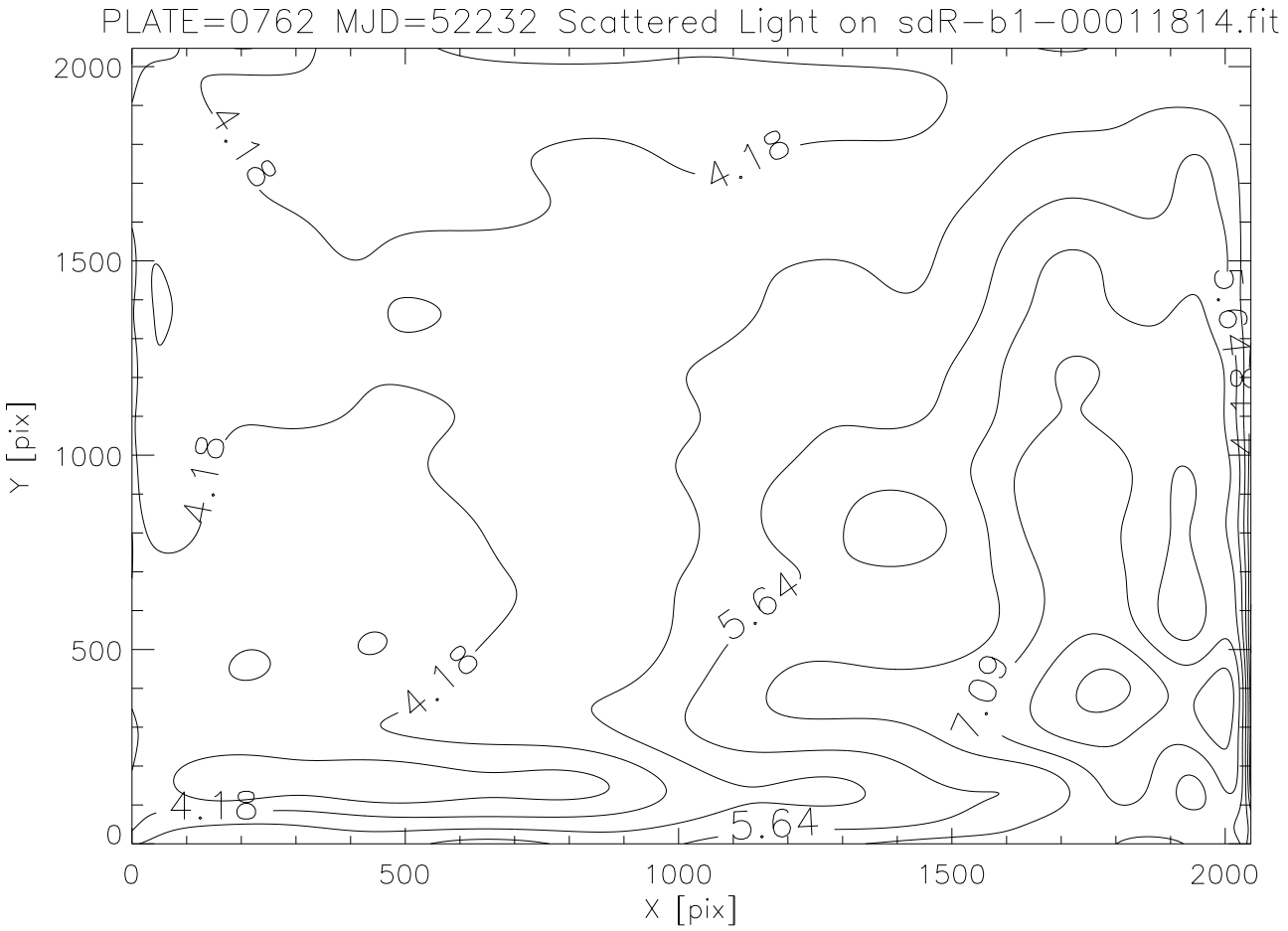

PLATE=0762 MJD=52232 Superflat sdR-b1-00011812.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

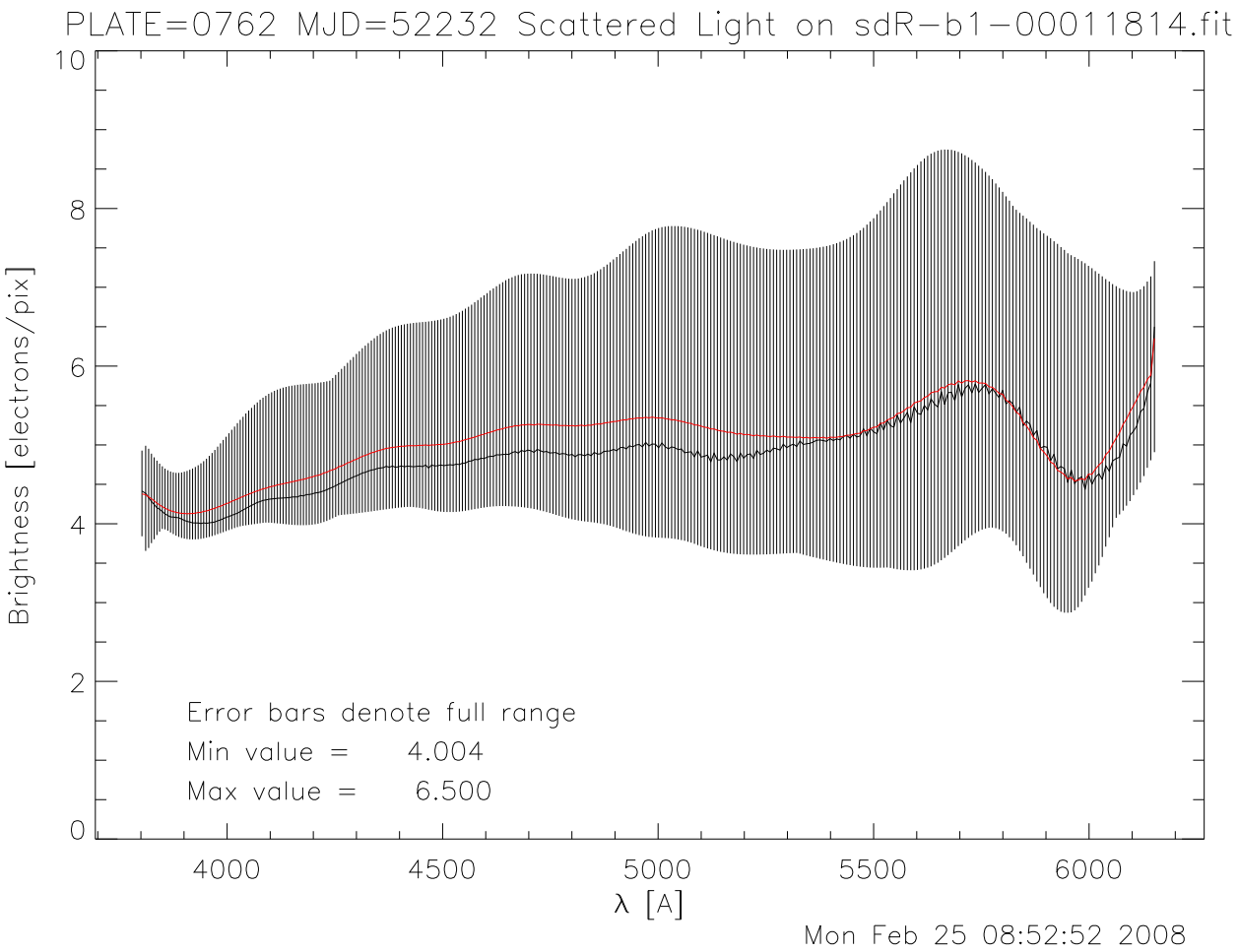

PLATE=0762 MJD=52232 Arcline Fit for sdR-b1-00011813.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 08:48:01 2008

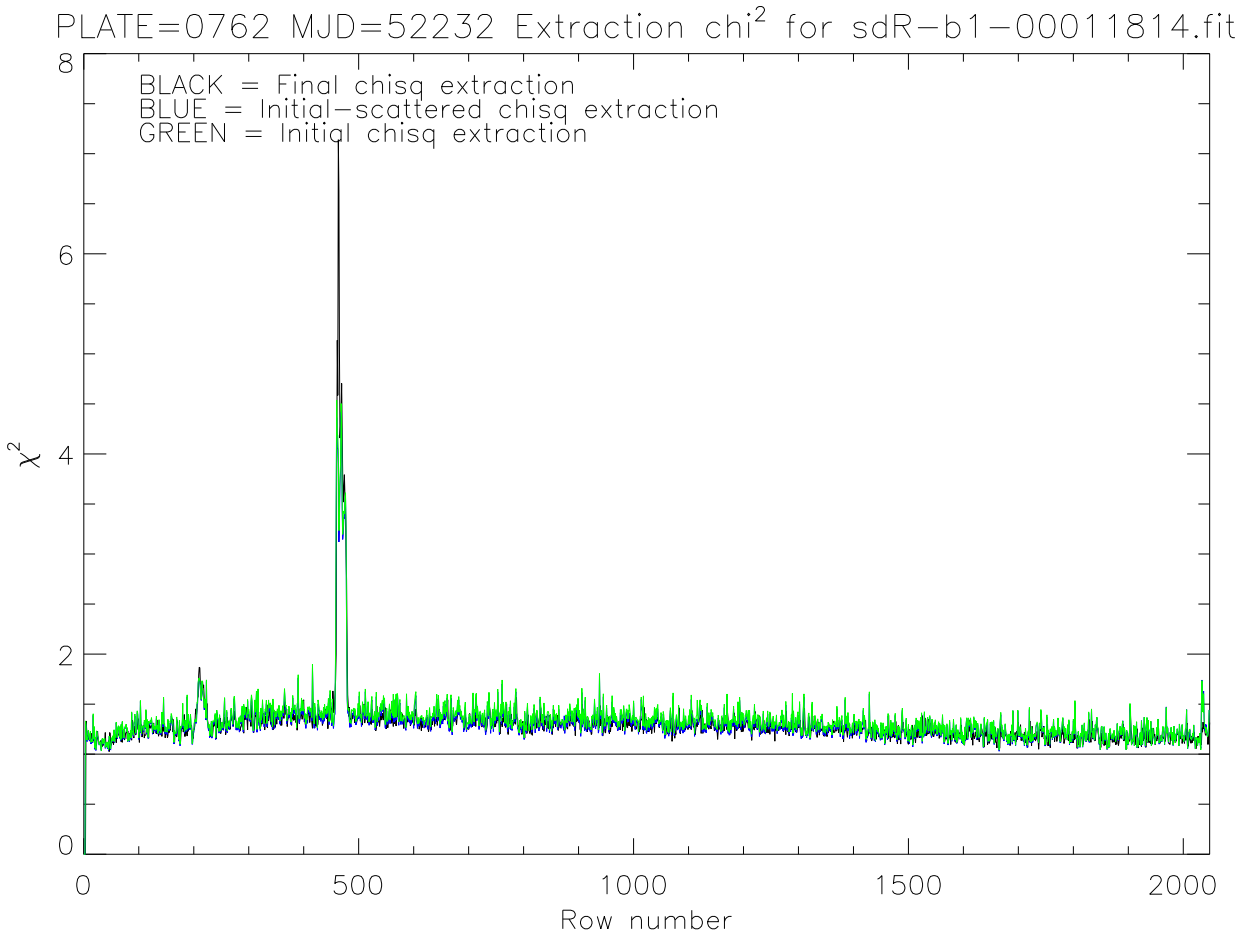

PLATE=0762 MJD=52232 Fiber−Flats for sdR−b1−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.568
Max value = 1.222
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 08:48:12 2008

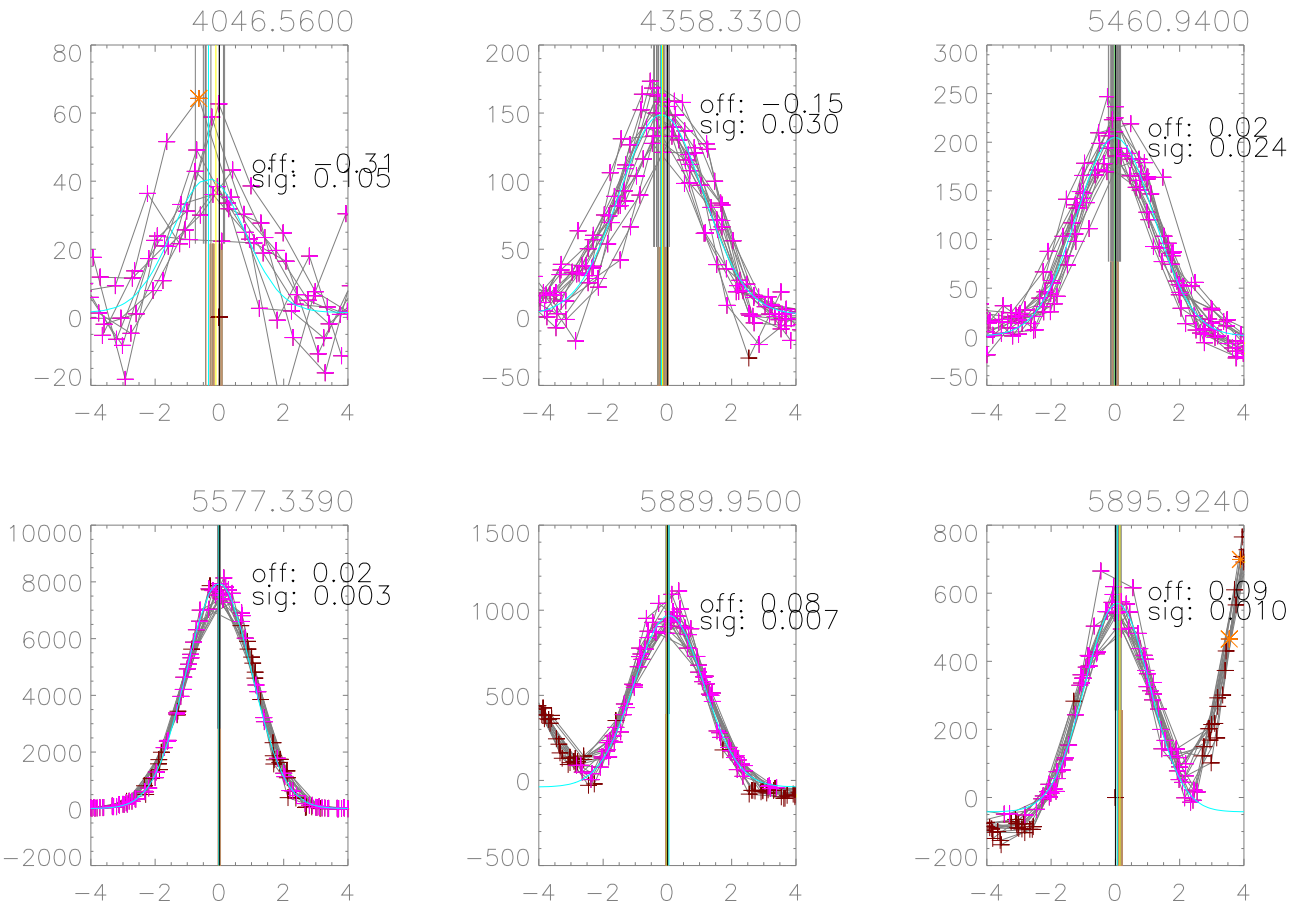

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR−b1−00011814.f
5.8
8.4
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

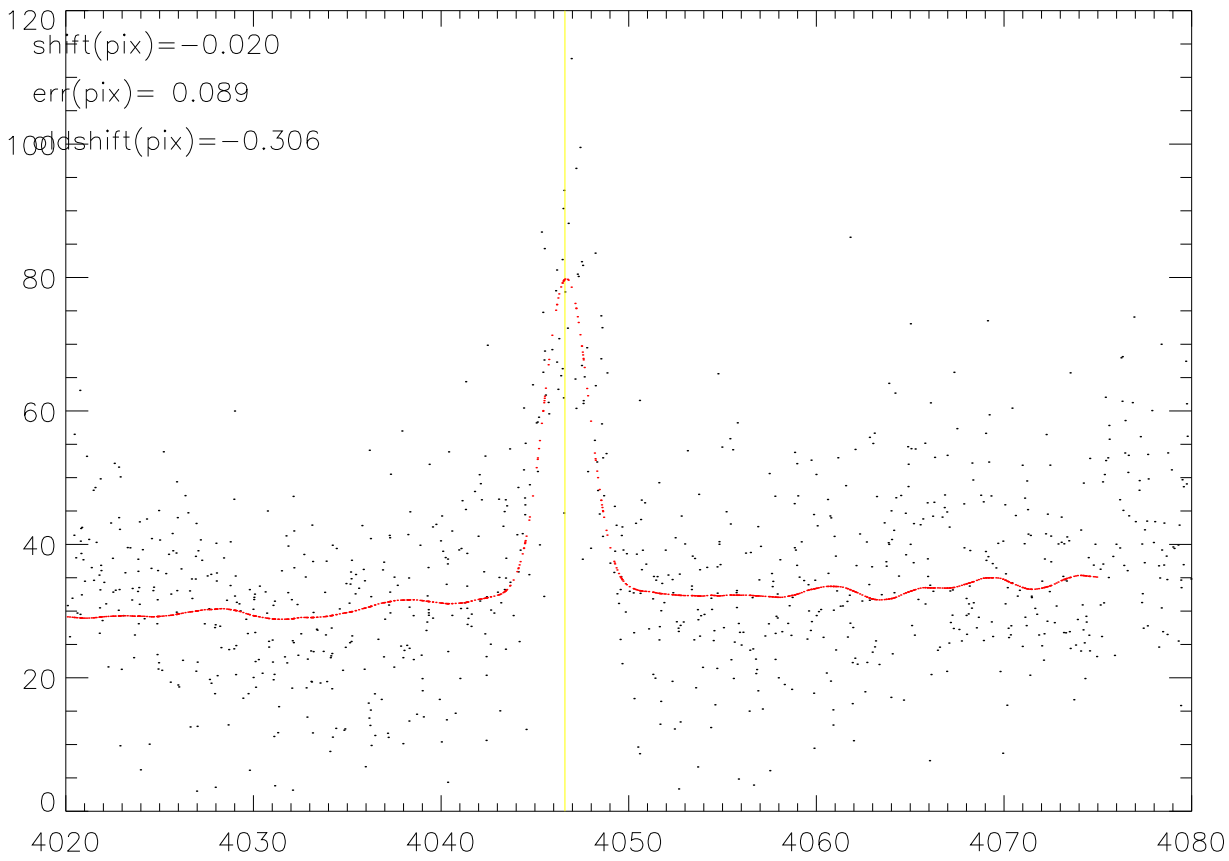

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b1-00011814.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.735
Max value = 9.791
Mon Feb 25 08:49:11 2008

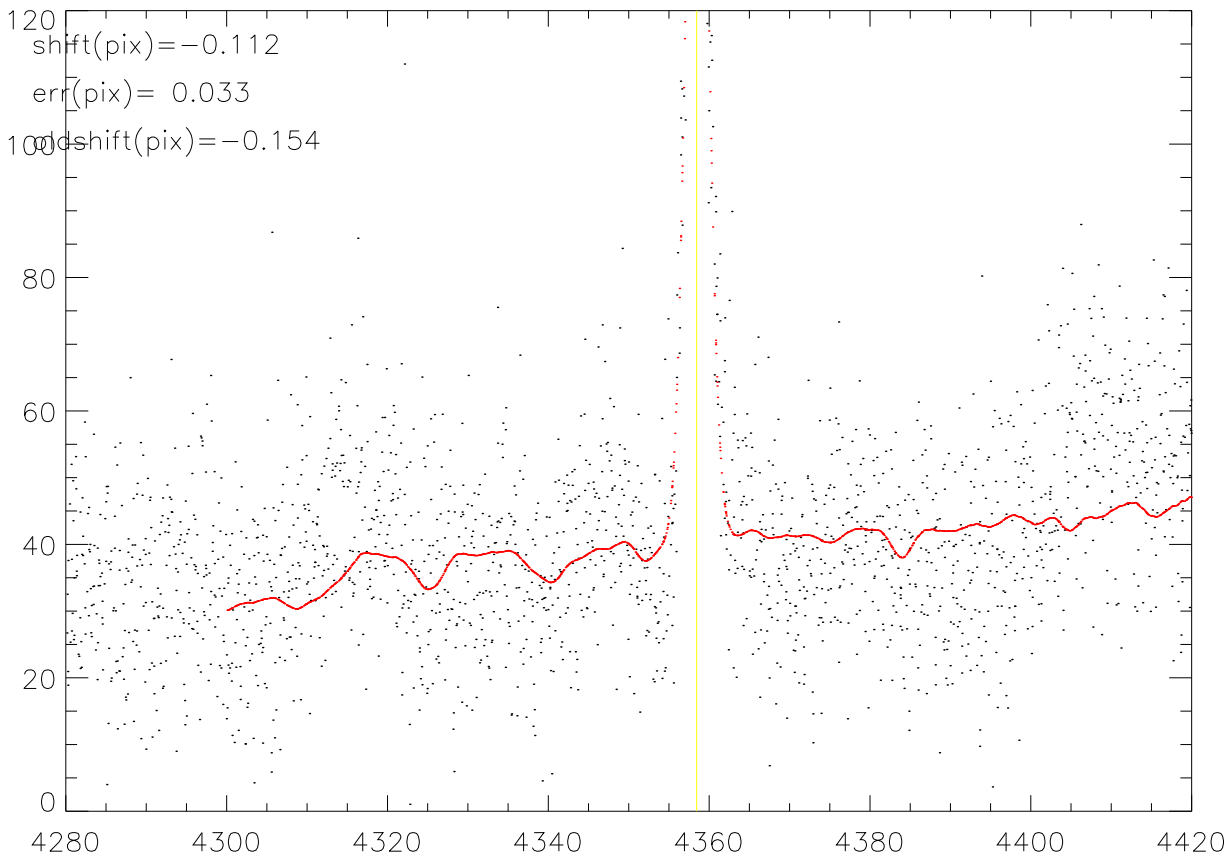

PLATE=0762 MJD=52232 Scattered Light on sdR-b1-00011814.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.18
5.64
7.09
0

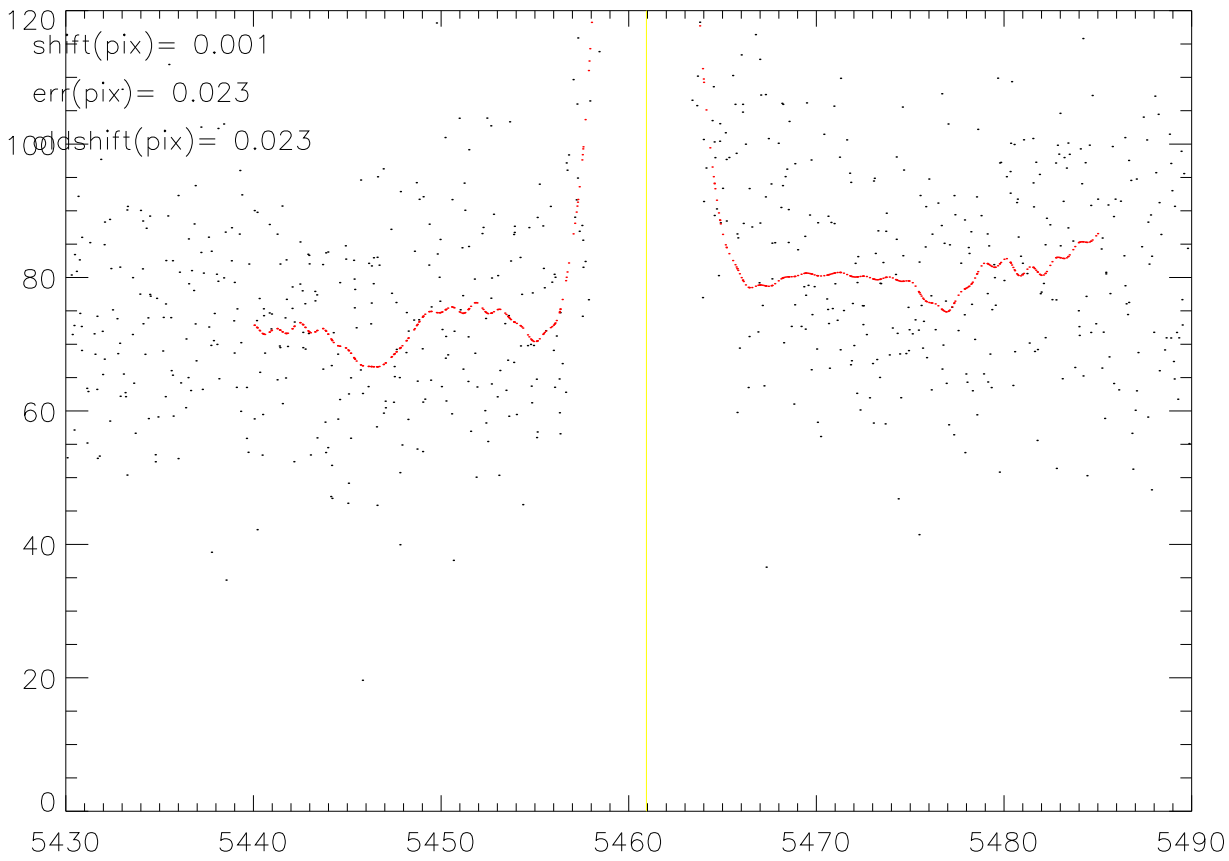

PLATE=0762 MJD=52232 Scattered Light on sdR-b1-00011814.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.004
Max value = 6.500
Mon Feb 25 08:52:52 2008

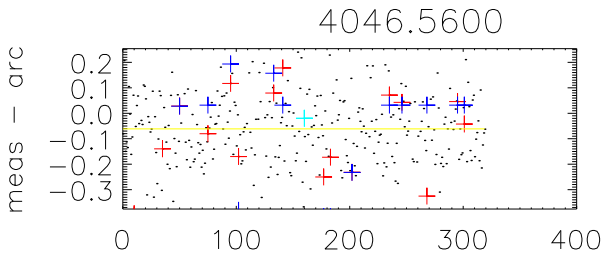

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-b1-00011814.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

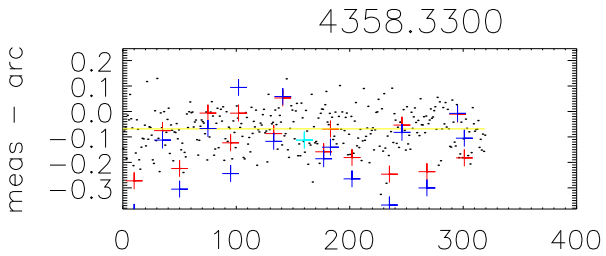

4046.5600
off: −0.31
sig: 0.105
4358.3300
off: −0.15
sig: 0.030
5460.9400
off: 0.02
sig: 0.024
5577.3390
off: 0.02
sig: 0.003
5889.9500
off: 0.08
sig: 0.007
5895.9240
off: 0.09
sig: 0.010

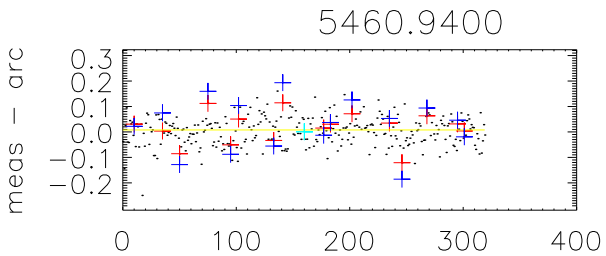

shift(pix)=−0.020
err(pix)= 0.089
oldshift(pix)=−0.306
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

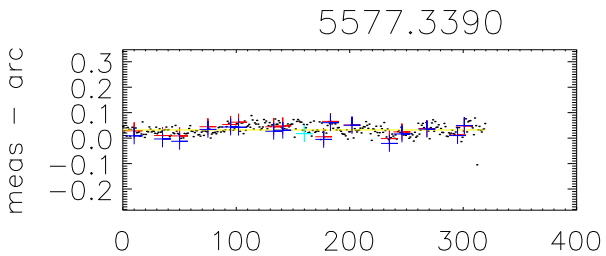

shift(pix)=−0.112
err(pix)= 0.033
oldshift(pix)=−0.154
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

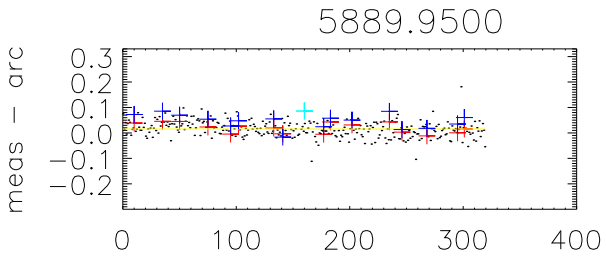

shift(pix)= 0.001
err(pix)= 0.023
oldshift(pix)= 0.023
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

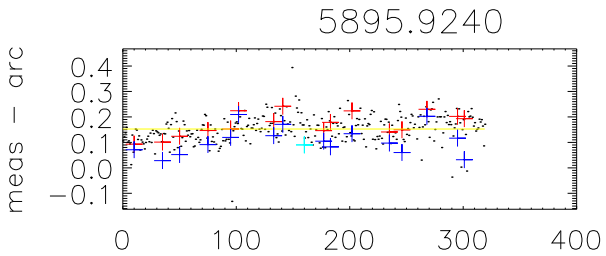

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

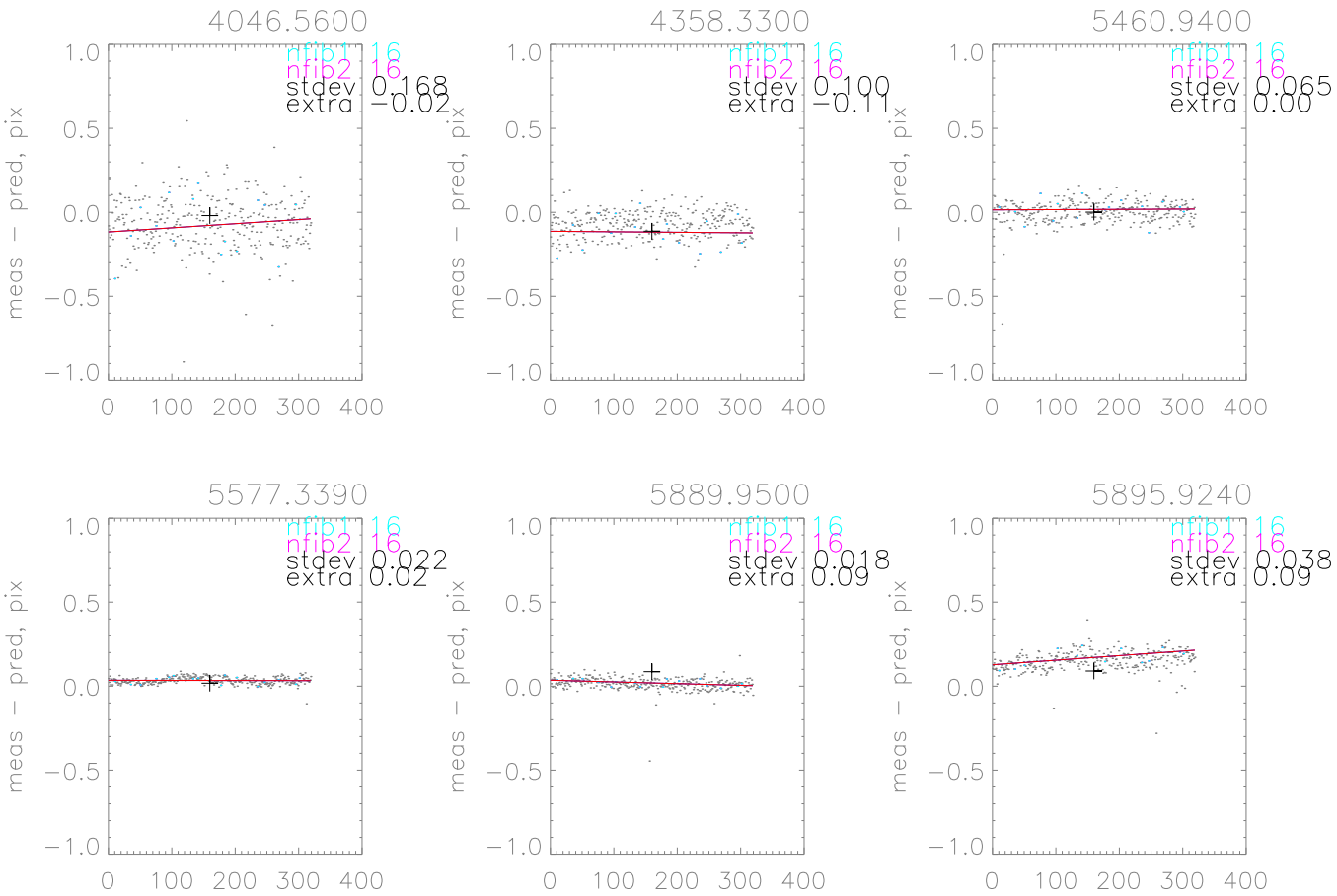

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

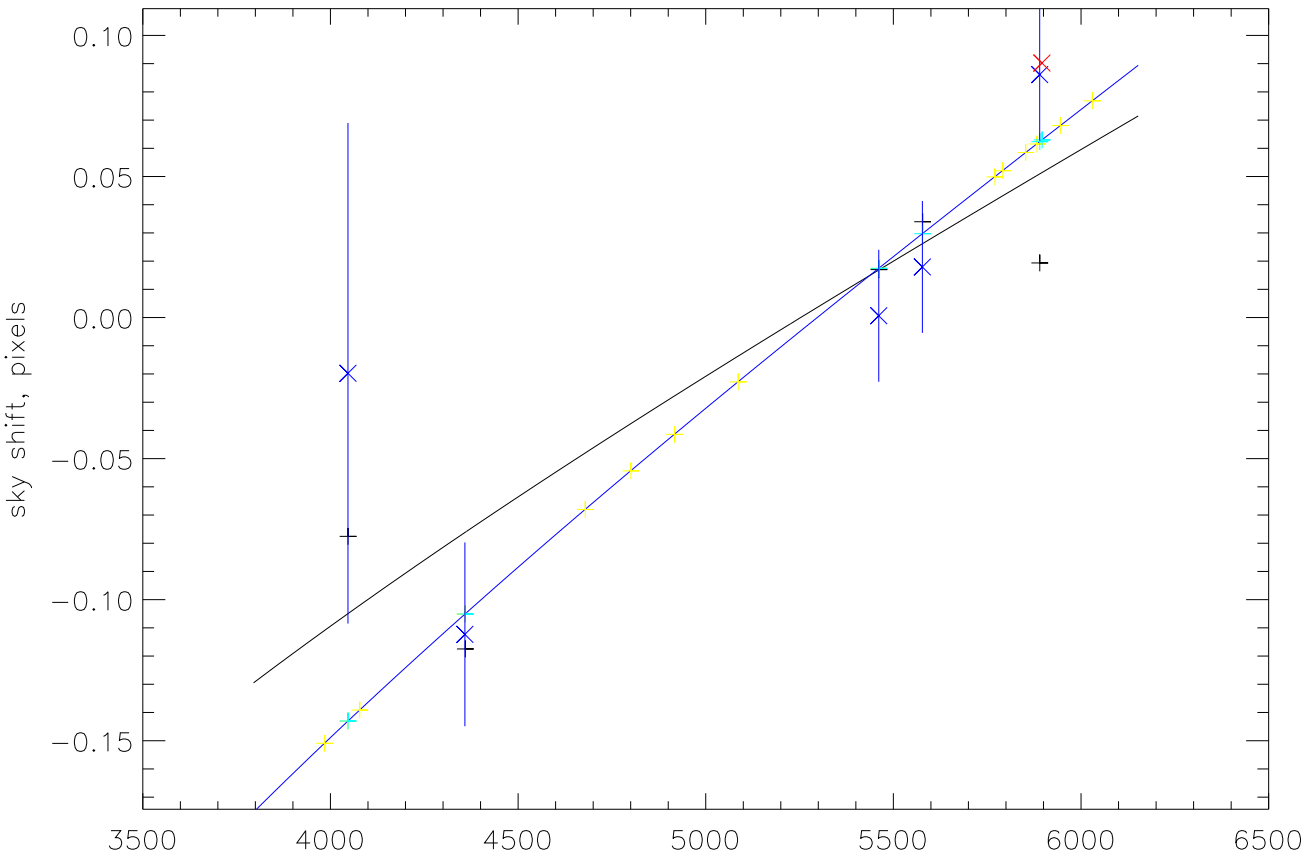

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

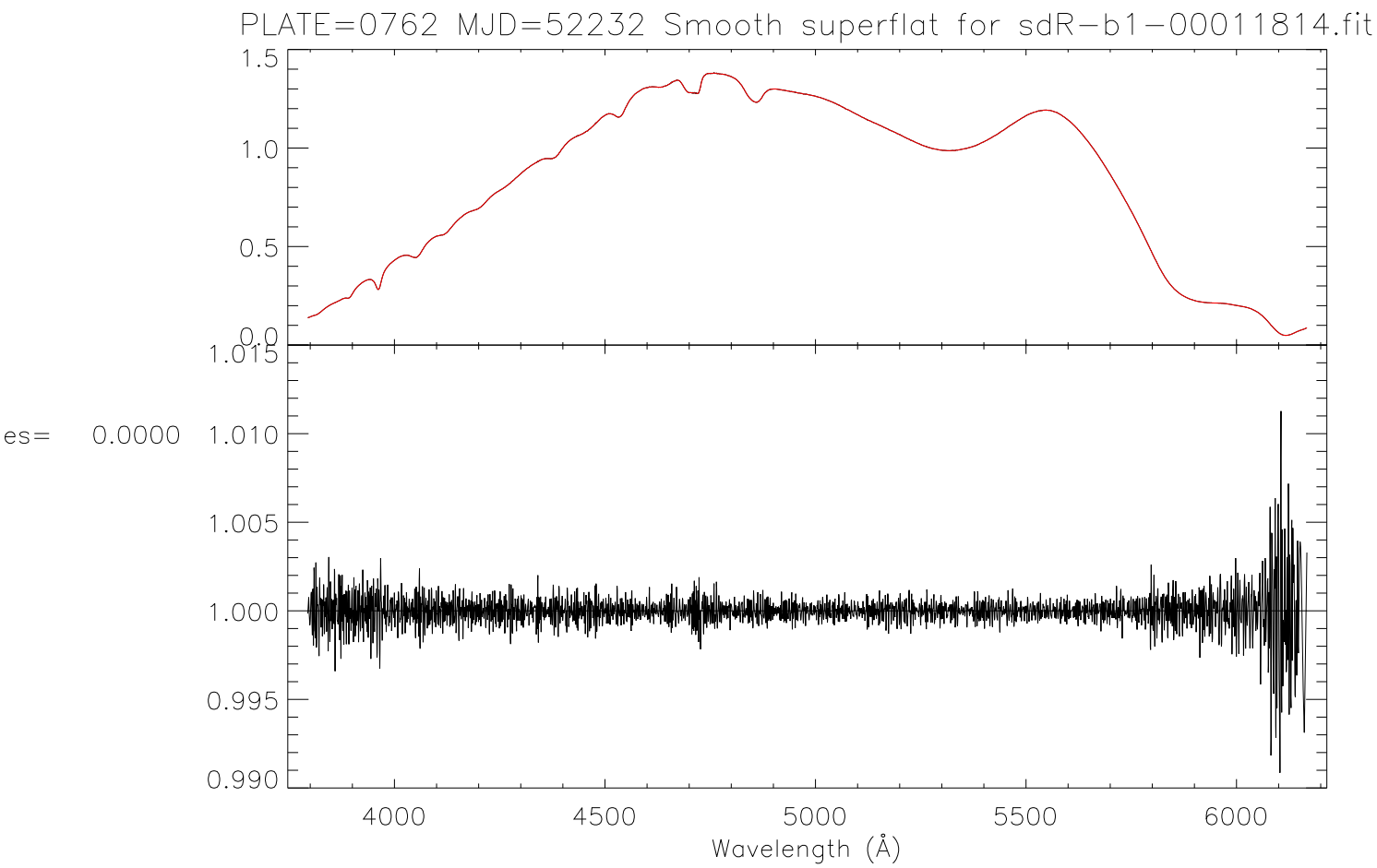

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

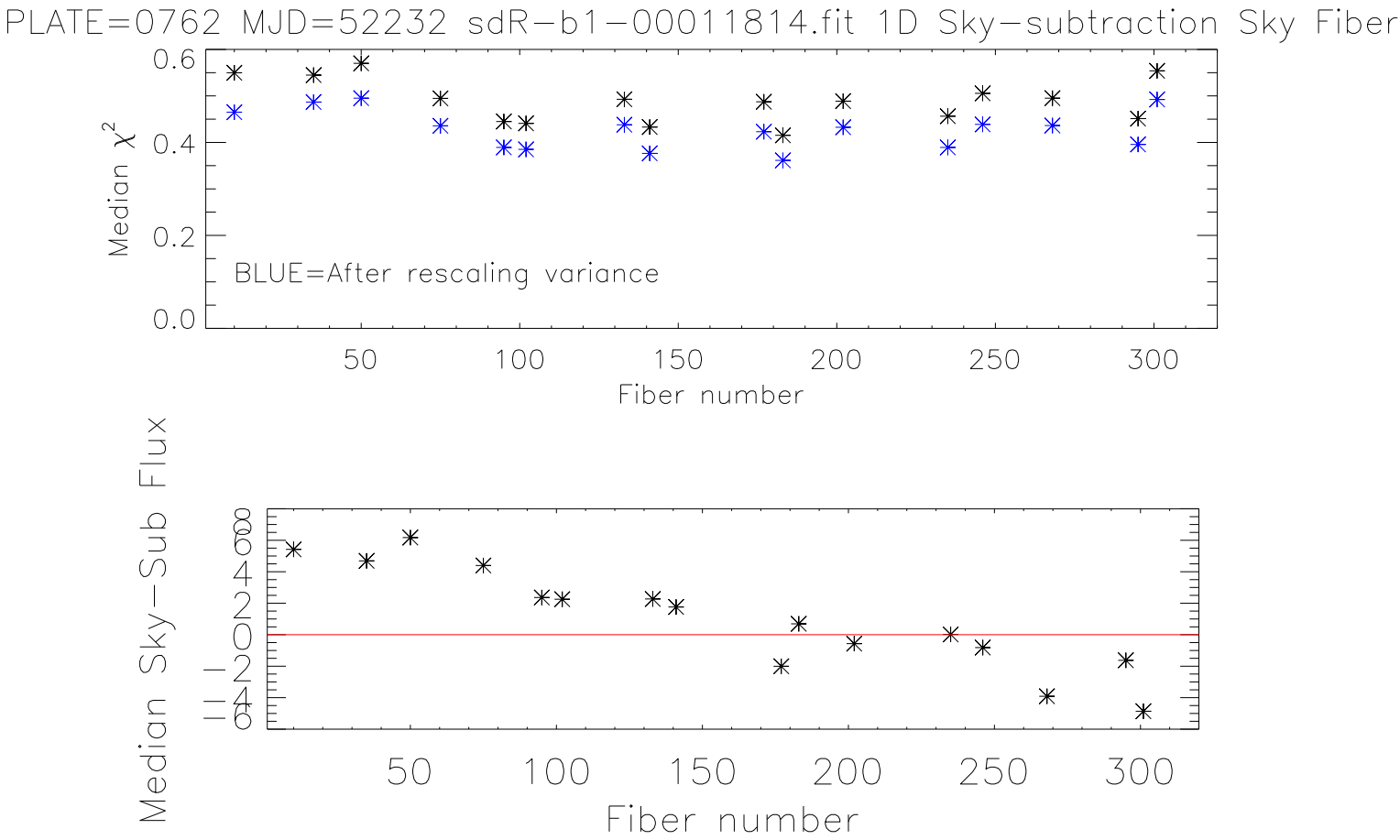

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

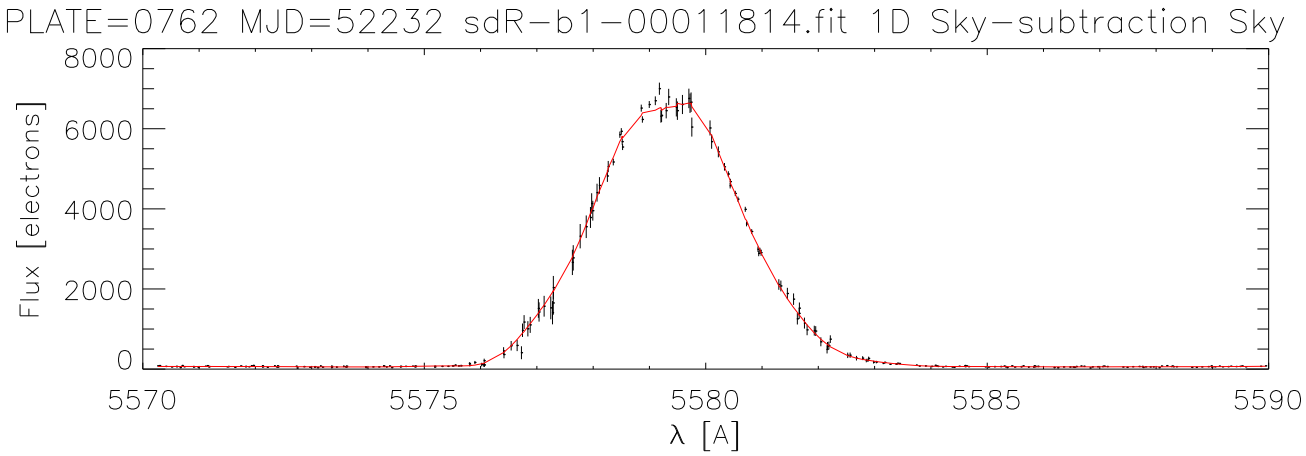

4046.5600
nfib1 16
nfib2 16
stdev 0.168
extra −0.02
4358.3300
nfib1 16
nfib2 16
stdev 0.100
extra −0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.065
extra 0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra 0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.018
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.038
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

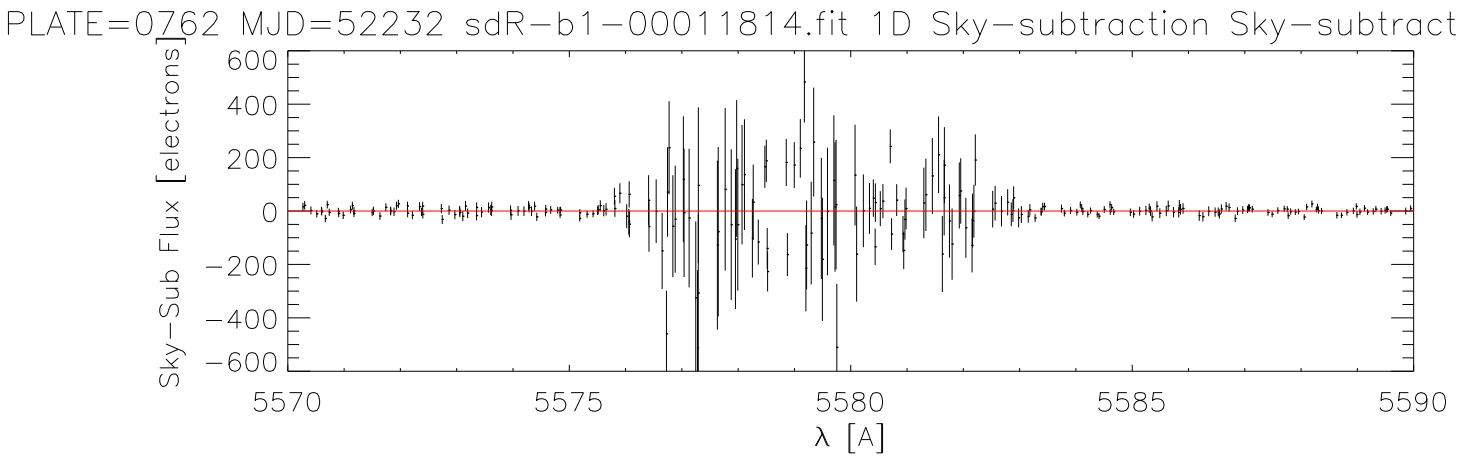

0.10
0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

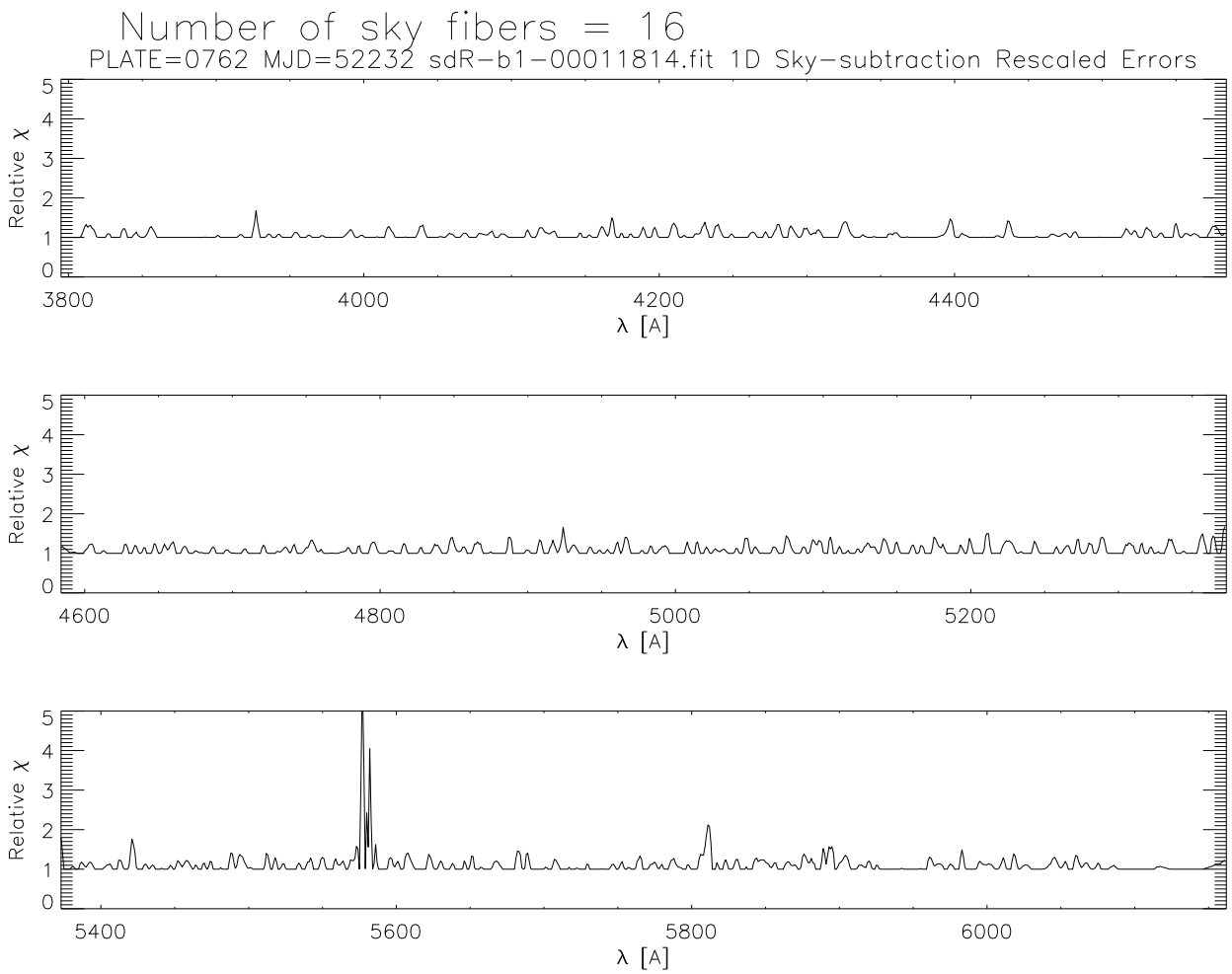

PLATE=0762 MJD=52232 Smooth superflat for sdR-b1-00011814.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

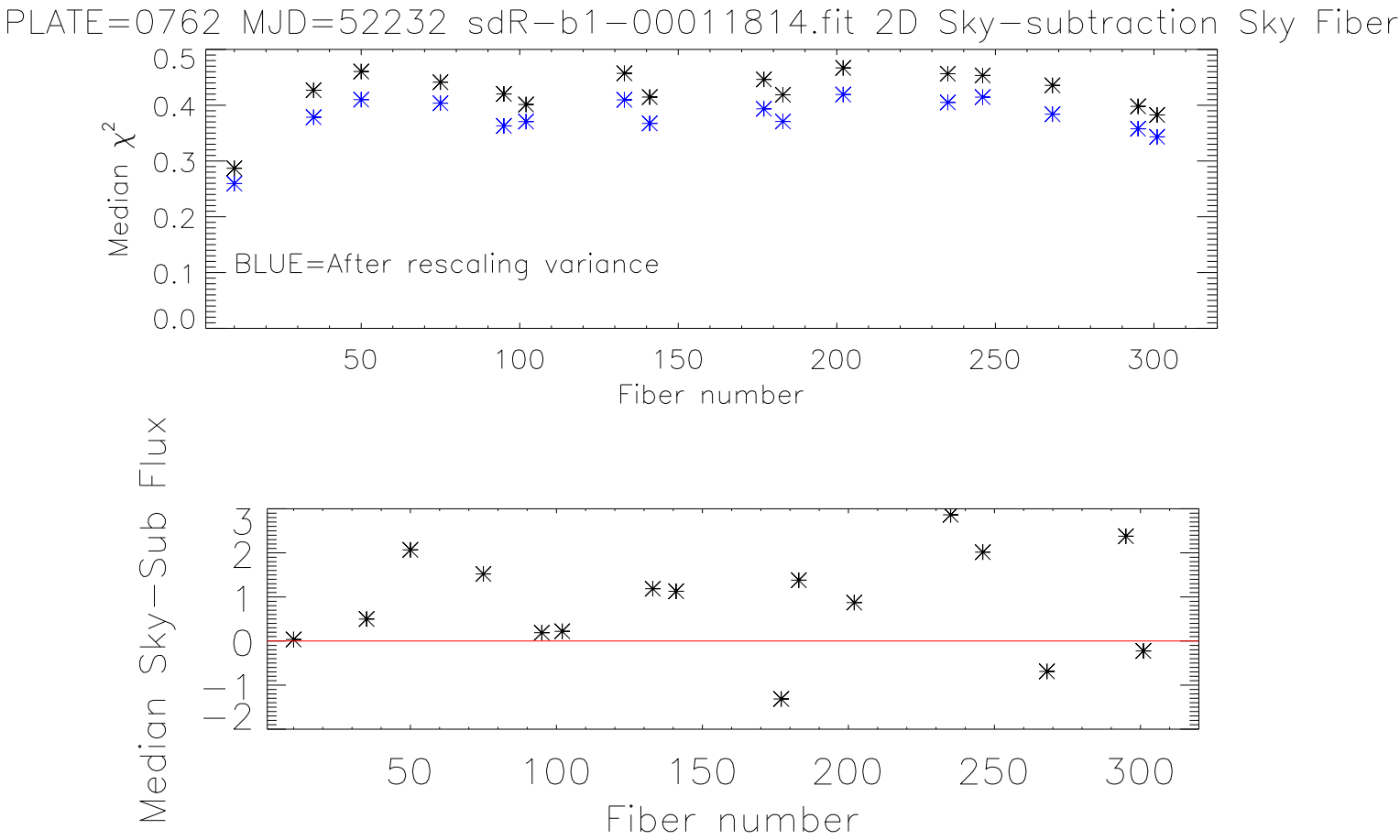
es= 0.0000

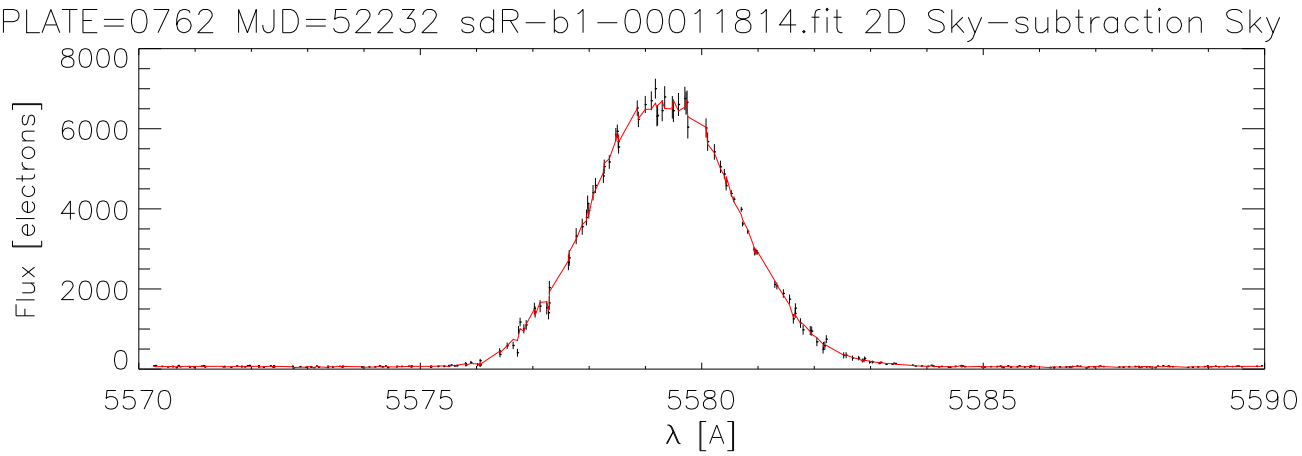

PLATE=0762 MJD=52232 sdR-b1-00011814.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-10
-9
-8
-7
-6
50
100
150
200
250
300
Fiber number

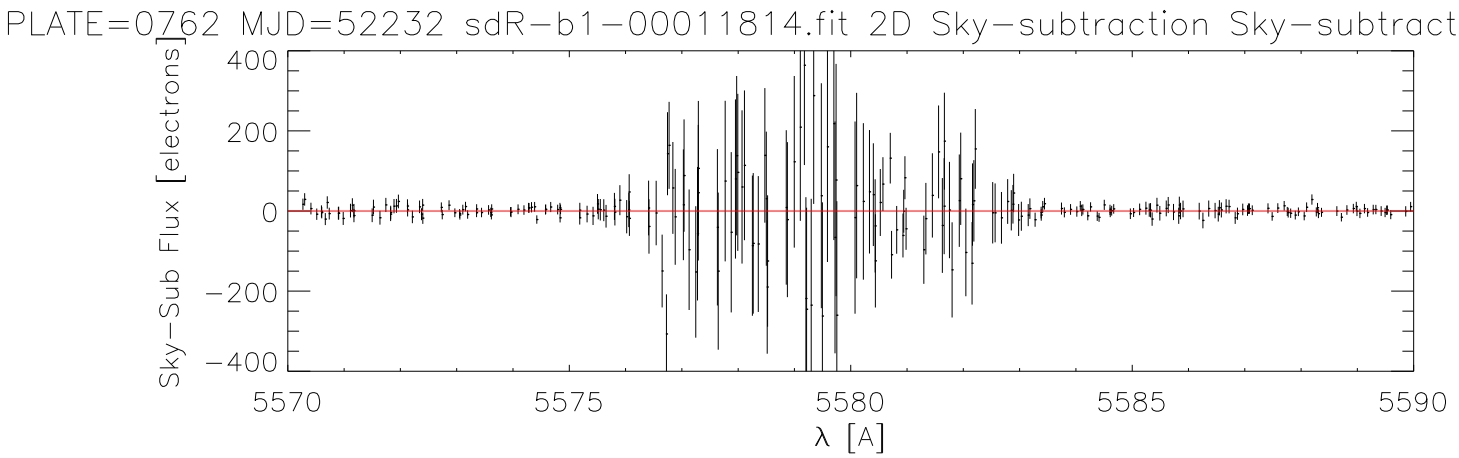

PLATE=0762 MJD=52232 sdR-b1-00011814.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

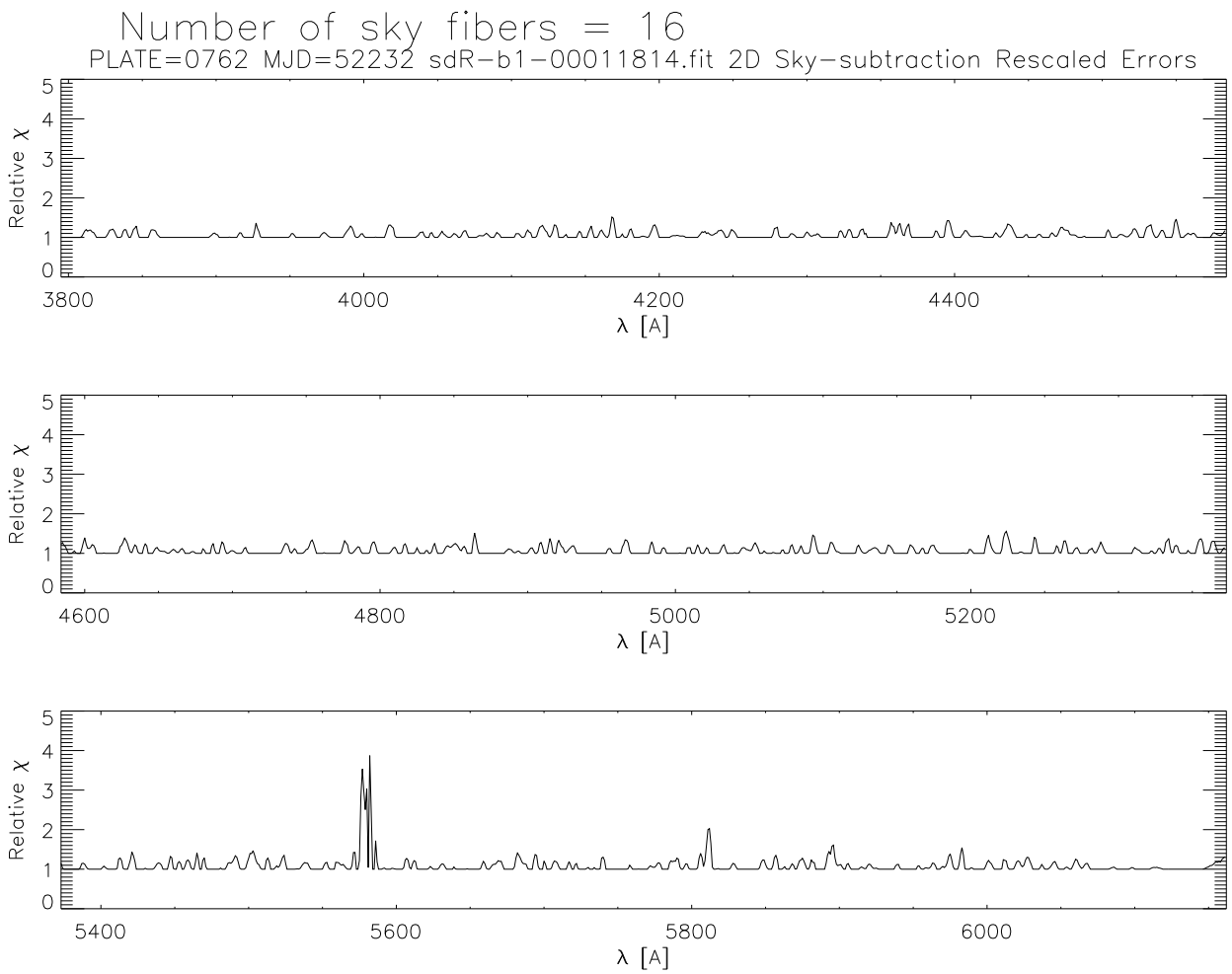

PLATE=0762 MJD=52232 sdR-b1-00011814.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

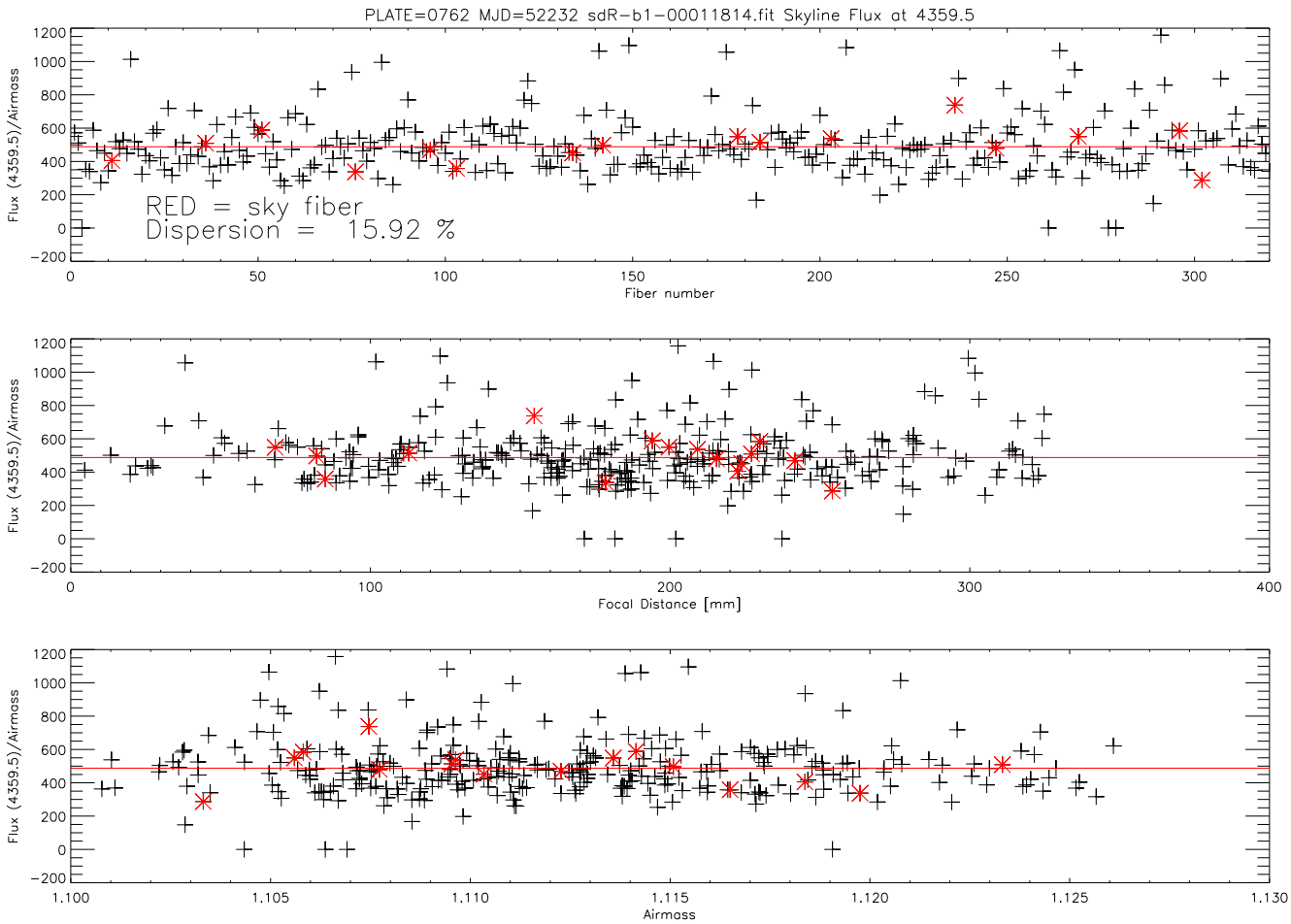

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b1-00011814.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

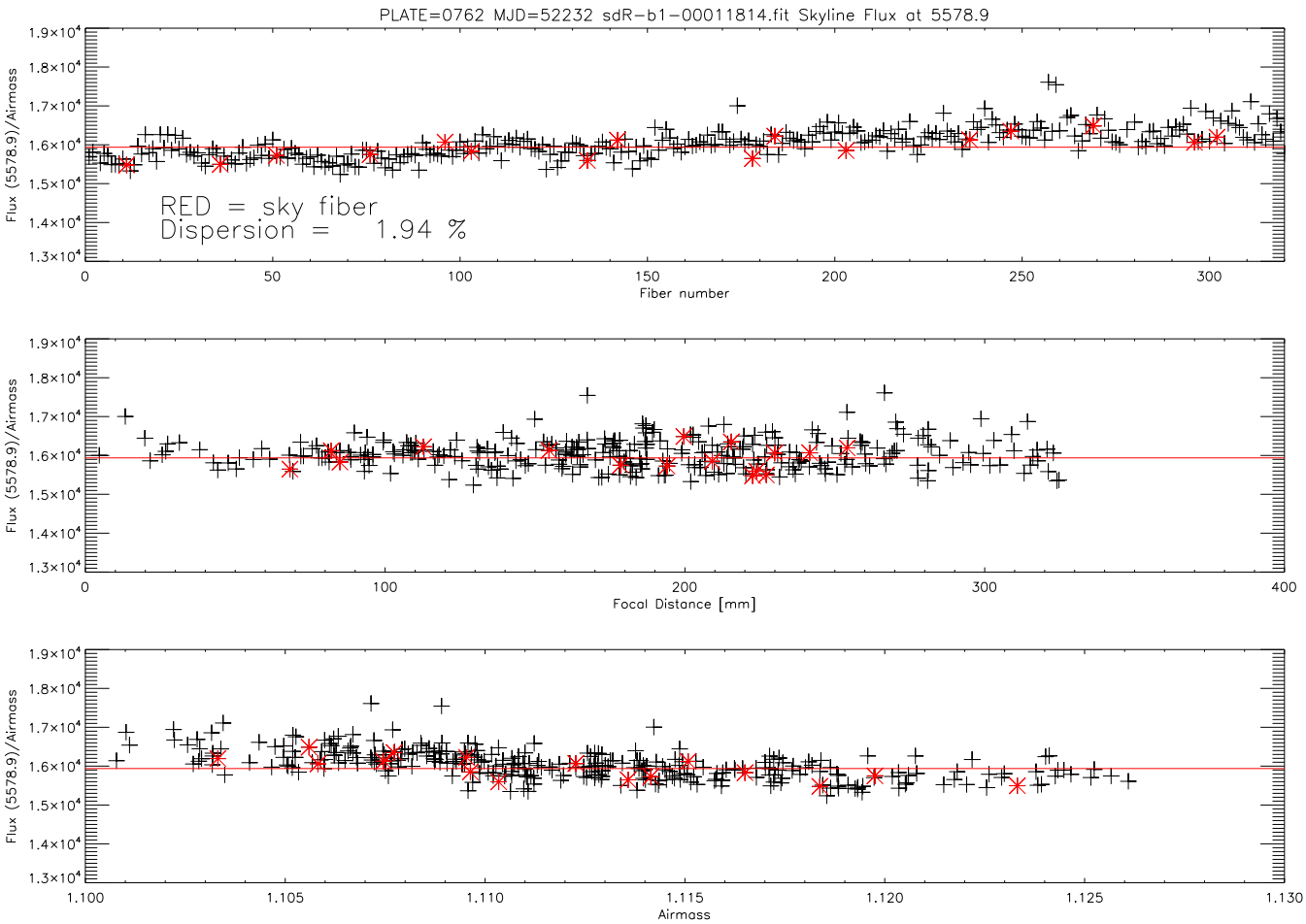

PLATE=0762 MJD=52232 sdR-b1-00011814.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

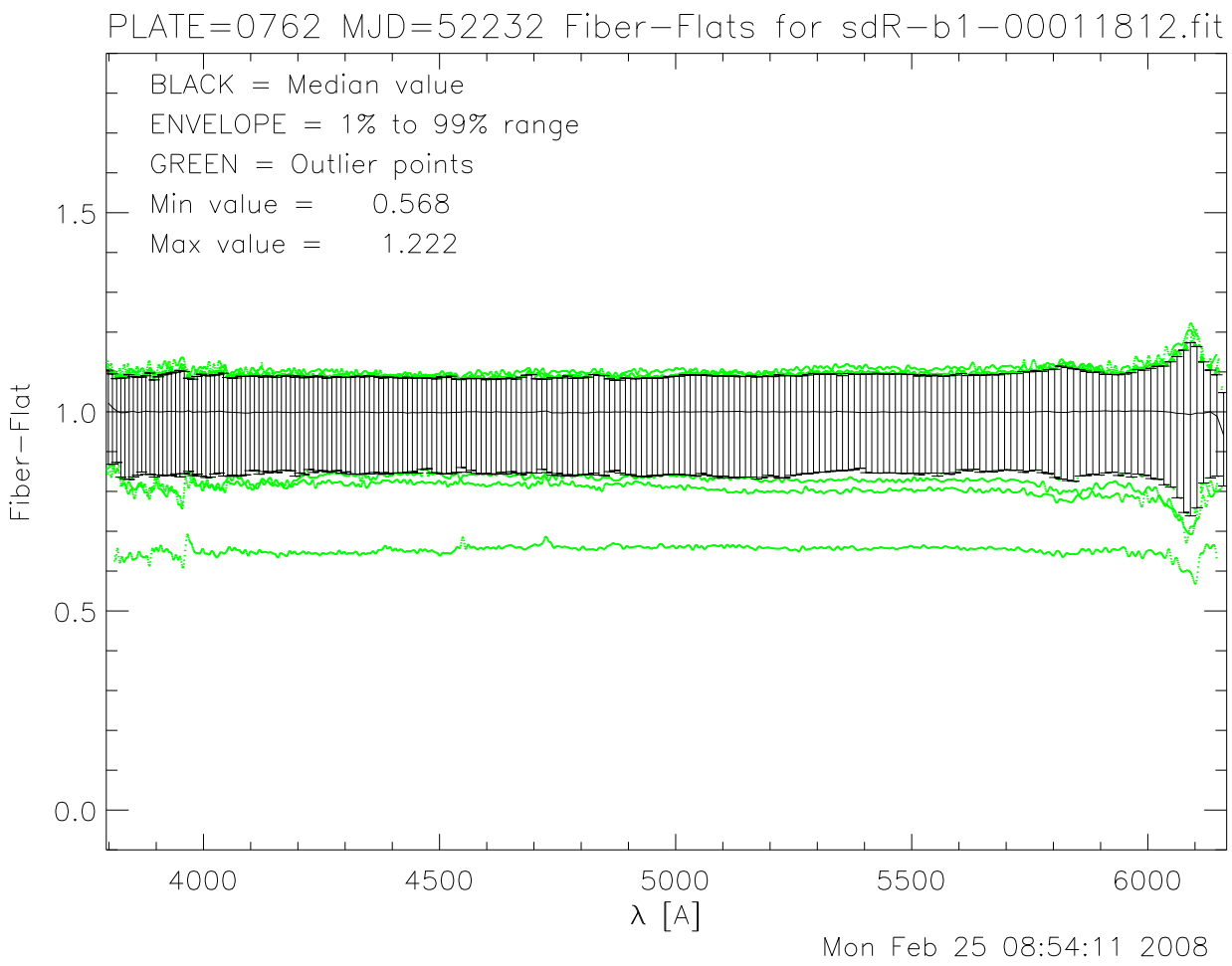

PLATE=0762 MJD=52232 sdR-b1-00011814.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

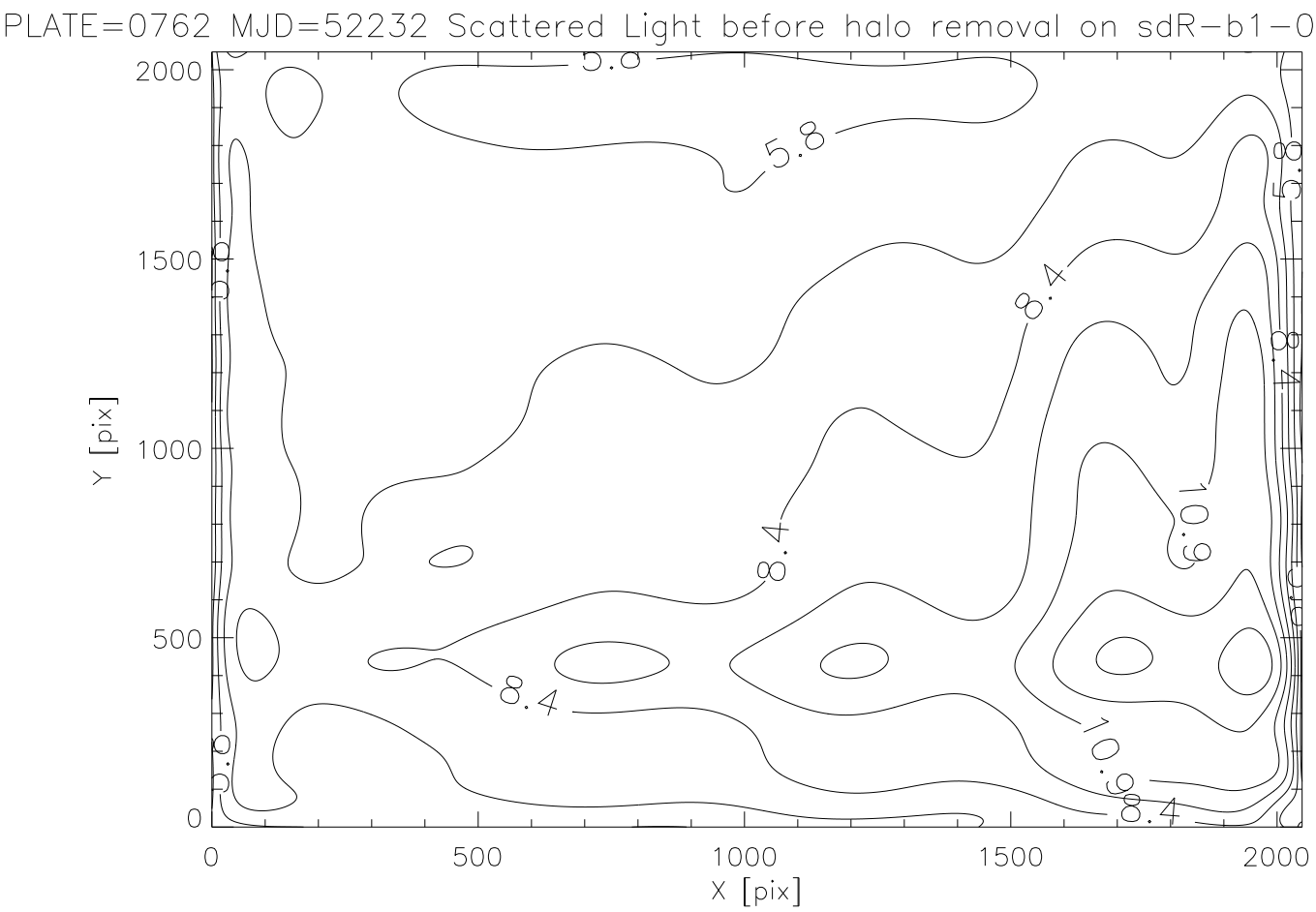

PLATE=0762 MJD=52232 sdR-b1-00011814.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

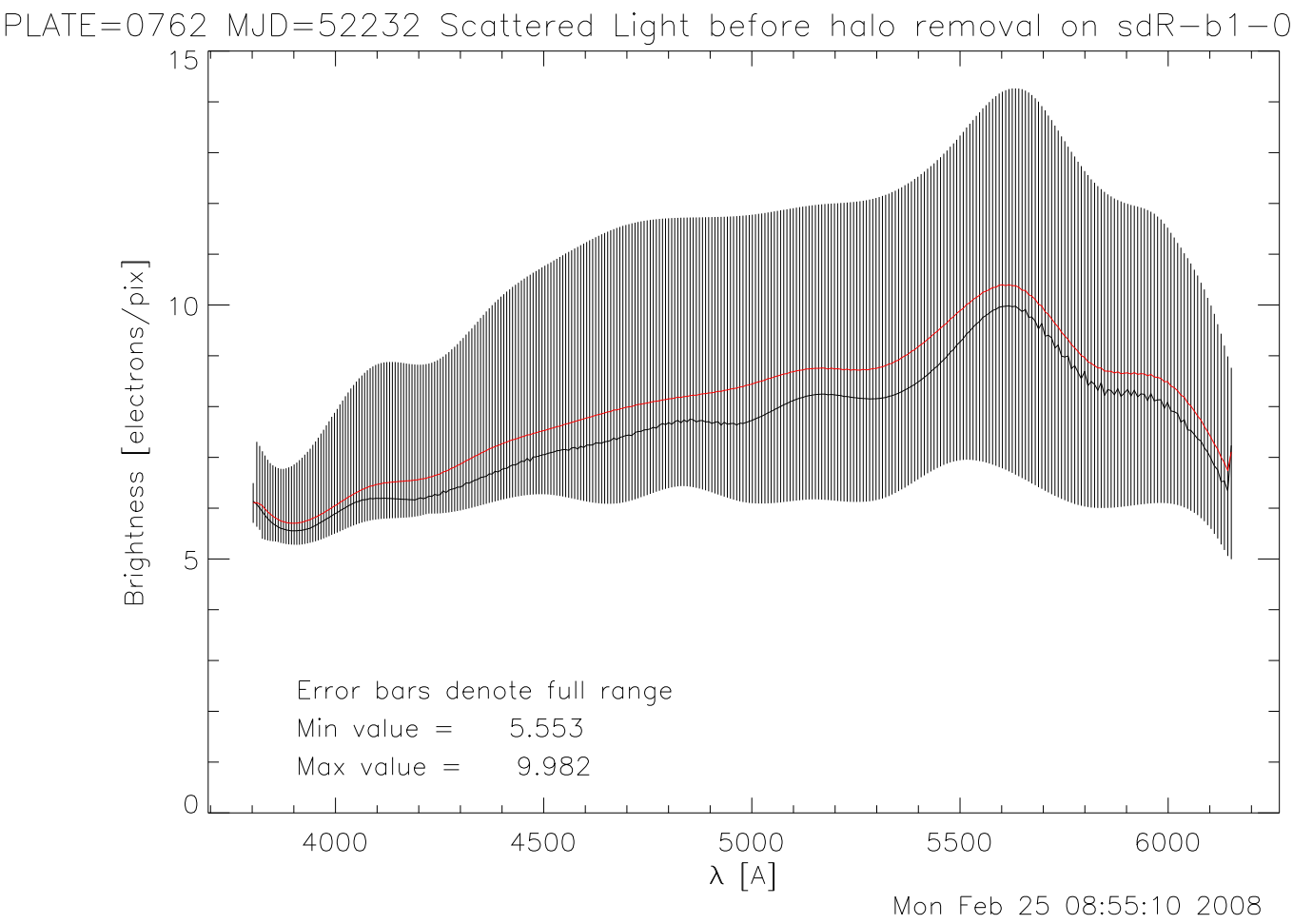

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b1-00011814.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

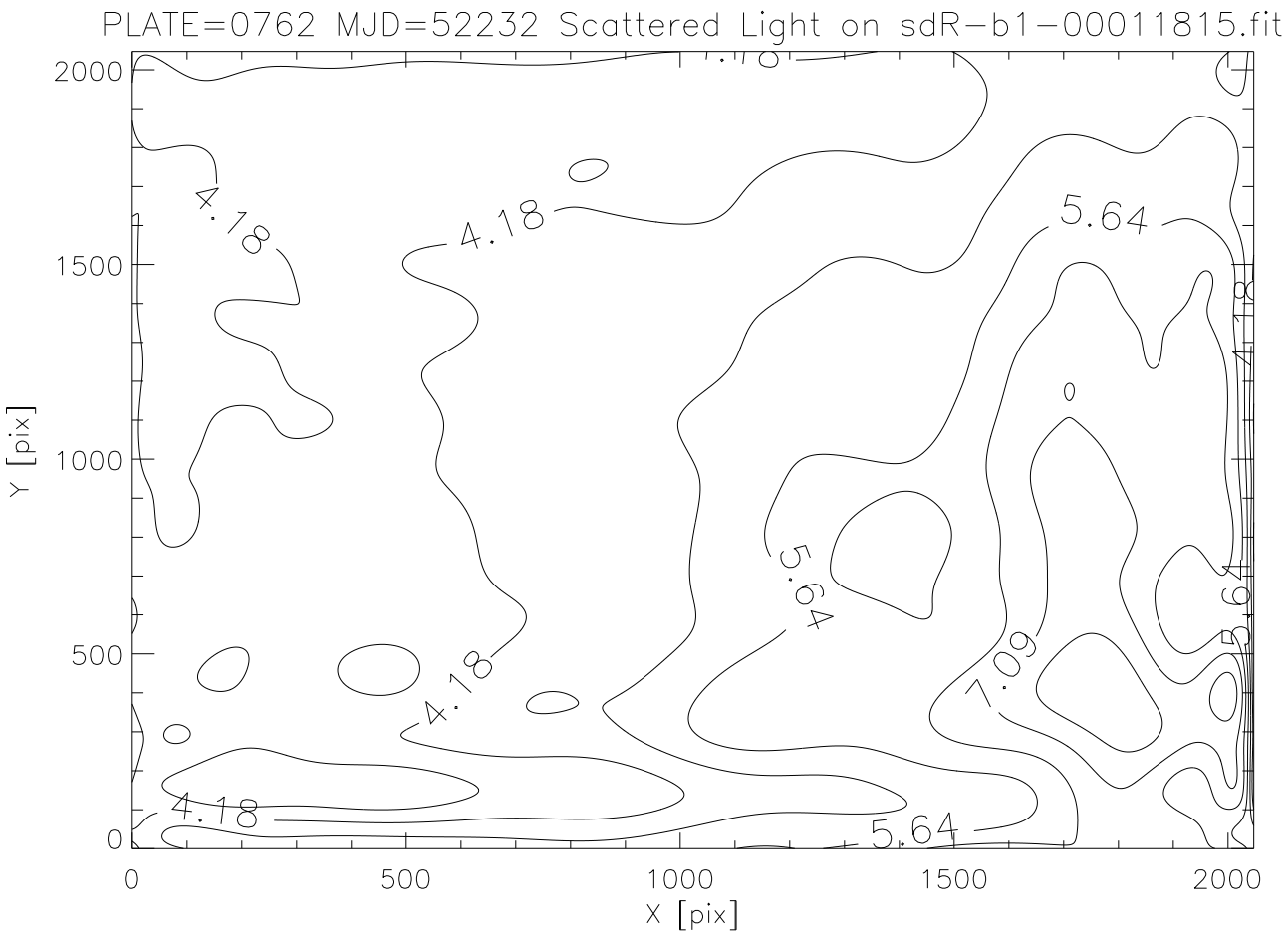

PLATE=0762 MJD=52232 sdR-b1-00011814.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 15.92 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

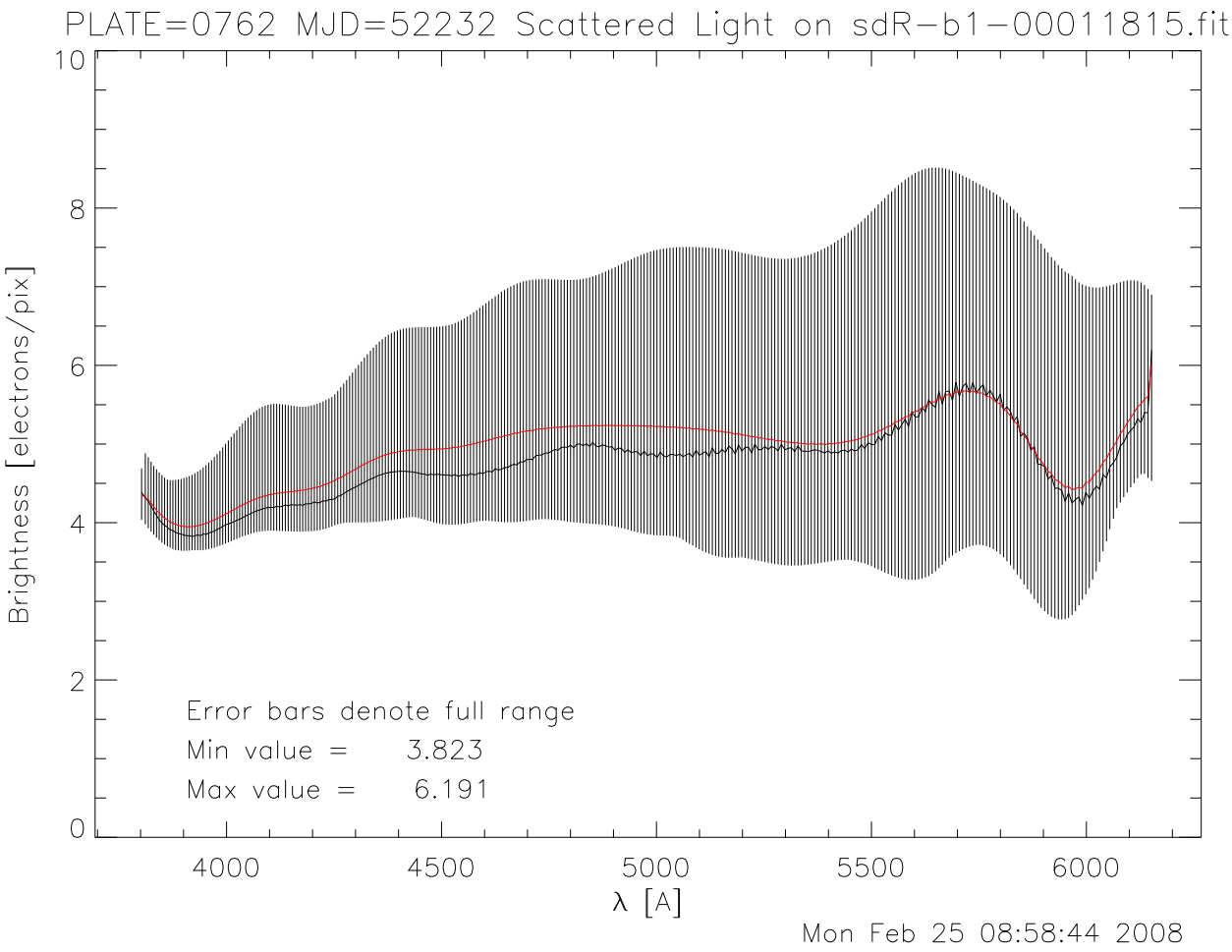

PLATE=0762 MJD=52232 sdR-b1-00011814.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.94 %
Fiber number
Focal Distance [mm]
Airmass

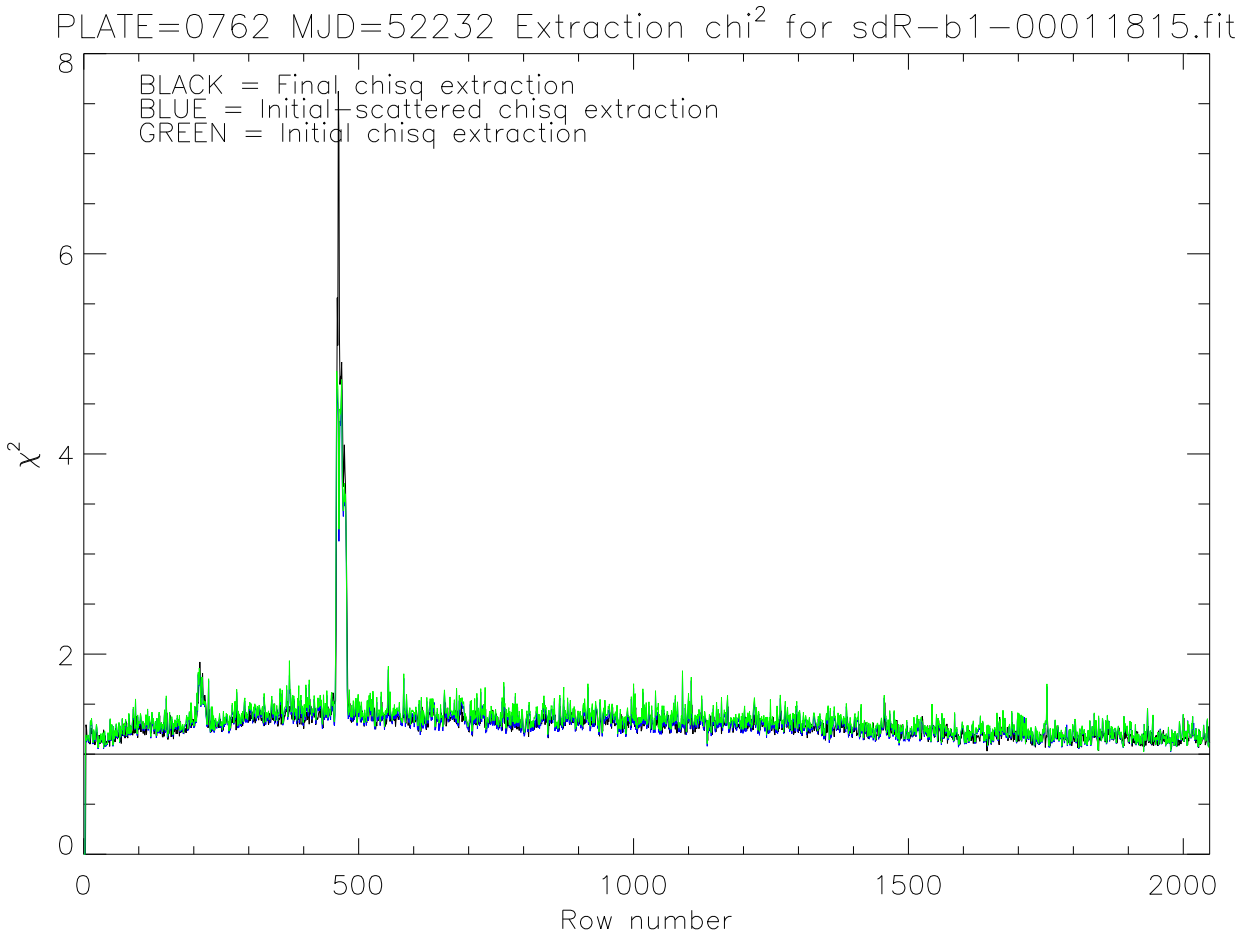

PLATE=0762 MJD=52232 Fiber−Flats for sdR−b1−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.568
Max value = 1.222
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 08:54:11 2008

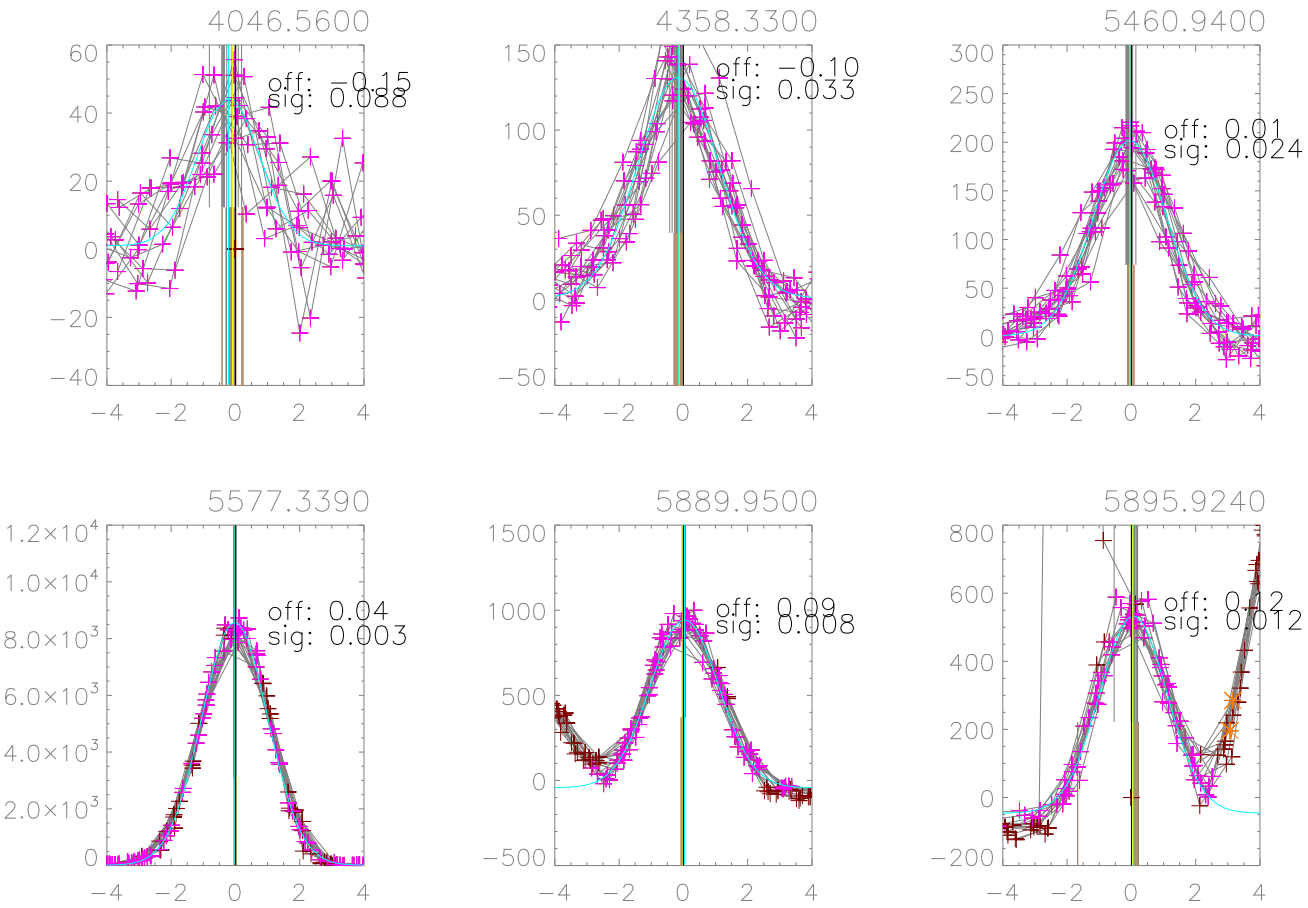

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR−b1−00011815.f
5.8
5.8
5.8
8.4
8.4
8.4
10.9
10.9
10.9
8.4
8.4
5.8
5.8
5.8
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

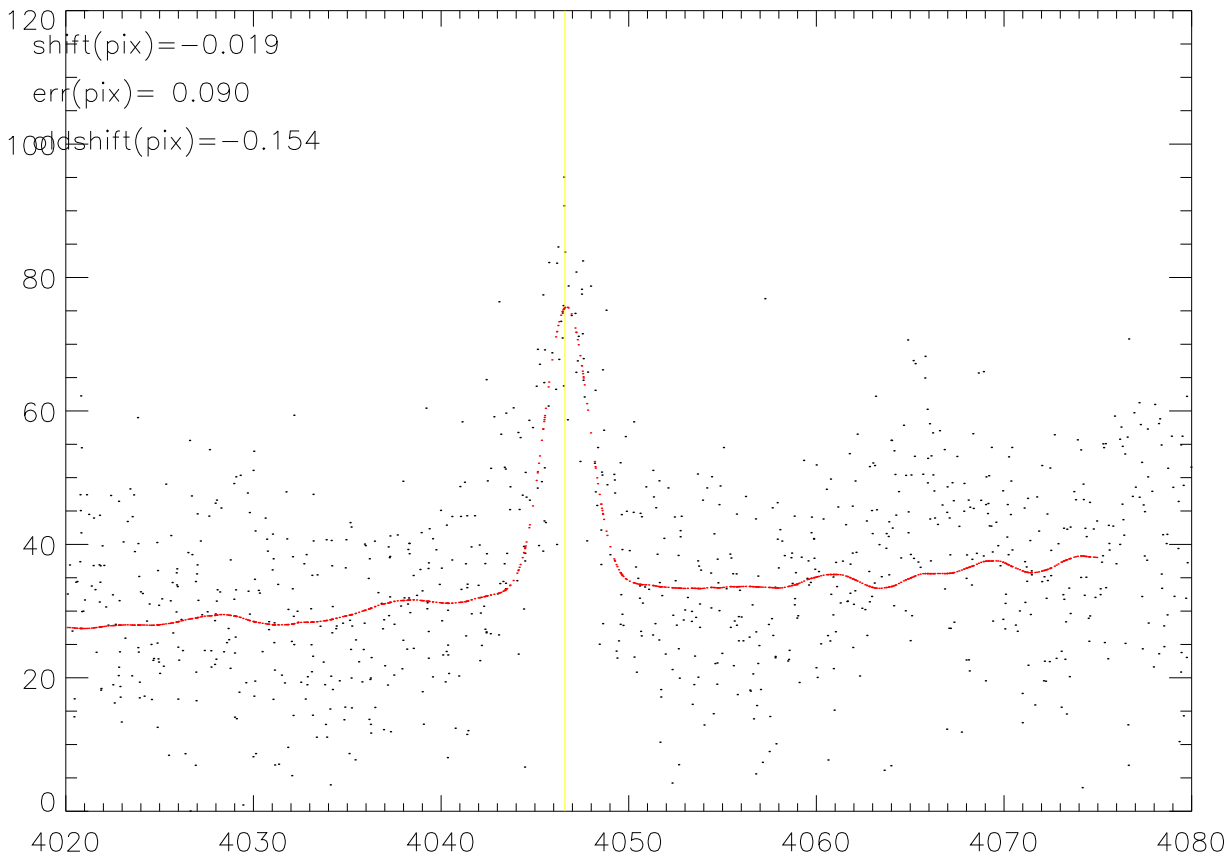

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b1-00011815.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.553
Max value = 9.982
Mon Feb 25 08:55:10 2008

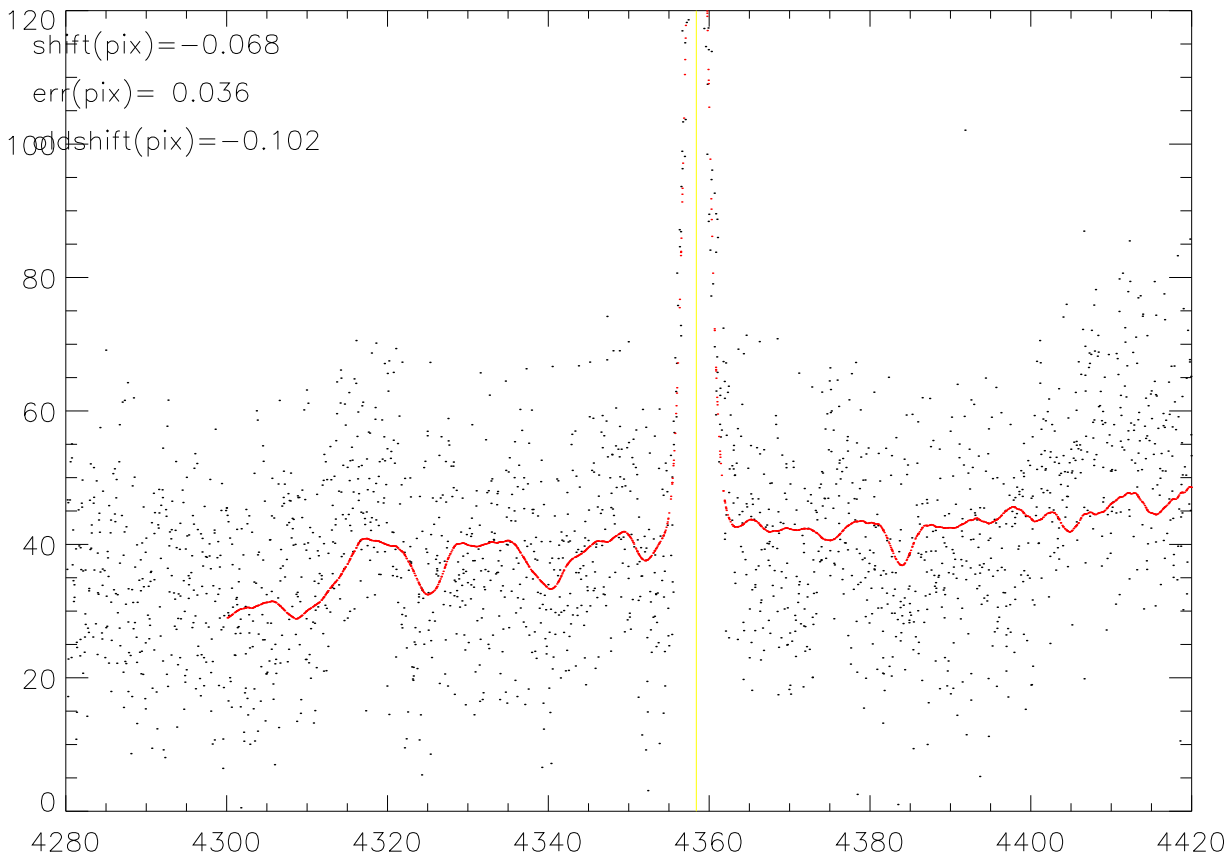

PLATE=0762 MJD=52232 Scattered Light on sdR-b1-00011815.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.18
5.64
7.09
0

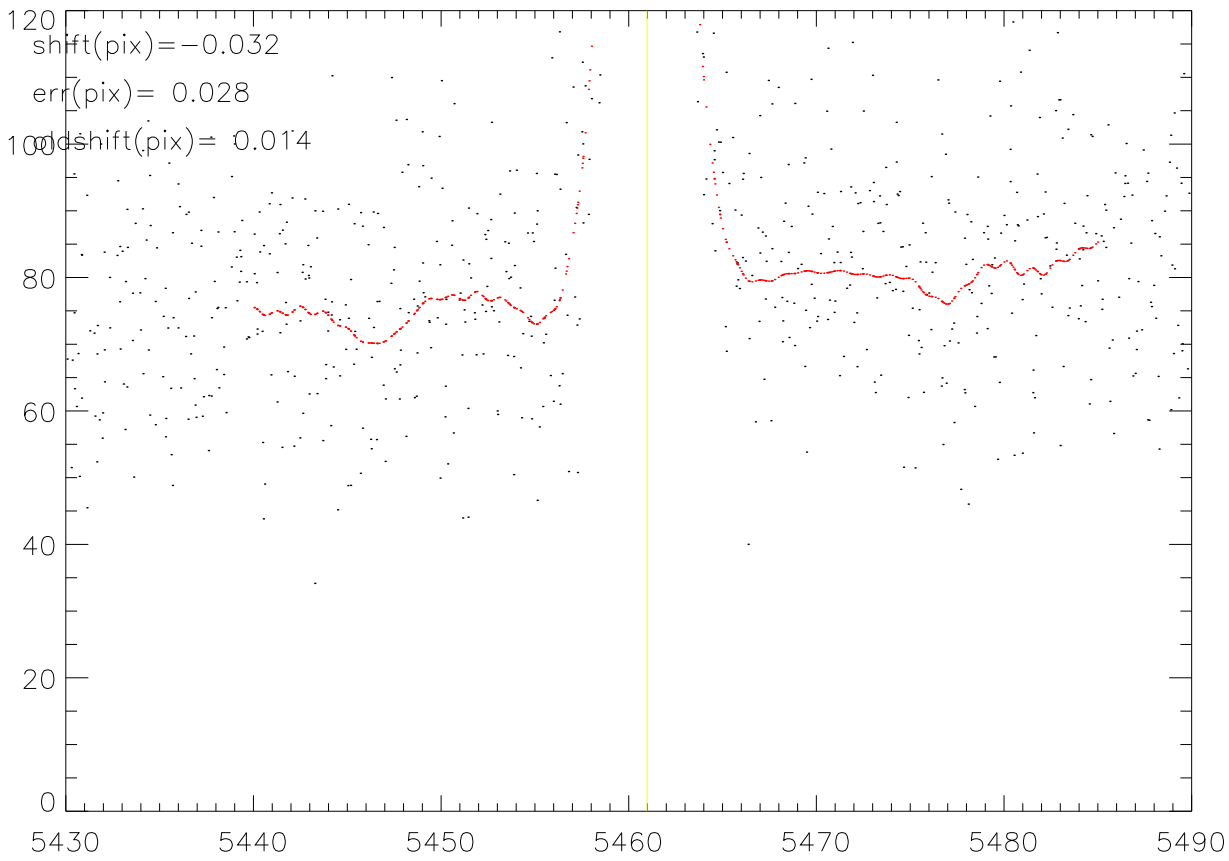

PLATE=0762 MJD=52232 Scattered Light on sdR-b1-00011815.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.823
Max value = 6.191
Mon Feb 25 08:58:44 2008

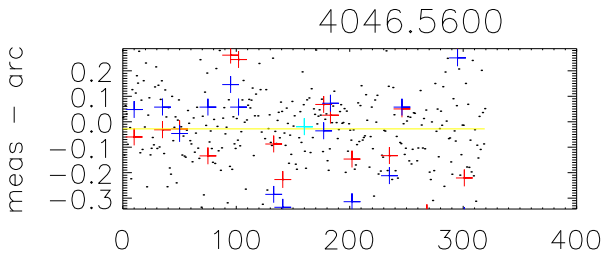

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-b1-00011815.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

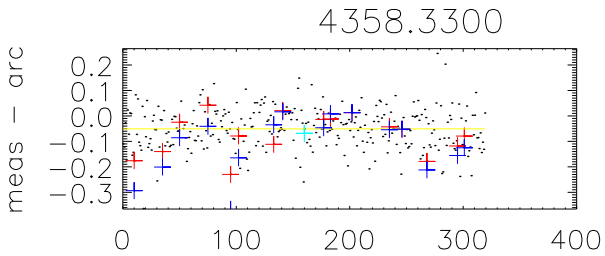

4046.5600
off: −0.15
sig: 0.088
4358.3300
off: −0.10
sig: 0.033
5460.9400
off: 0.01
sig: 0.024
5577.3390
off: 0.04
sig: 0.003
5889.9500
off: 0.09
sig: 0.008
5895.9240
off: 0.12
sig: 0.012

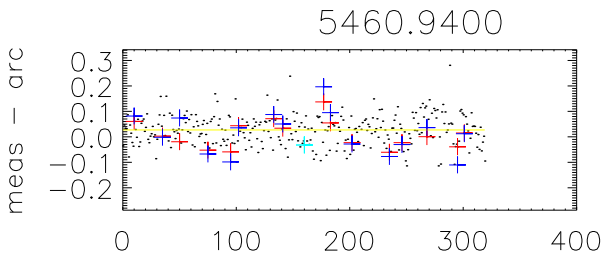

shift(pix)=−0.019
err(pix)= 0.090
oldshift(pix)=−0.154
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

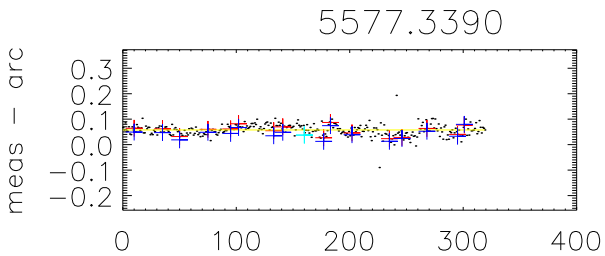

shift(pix)=−0.068
err(pix)= 0.036
oldshift(pix)=−0.102
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

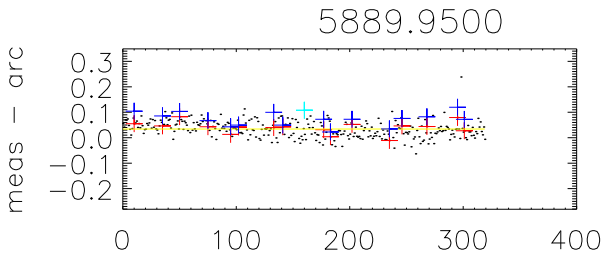

shift(pix)=−0.032
err(pix)= 0.028
oldshift(pix)= 0.014
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

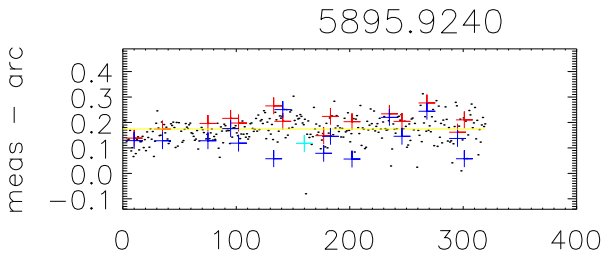

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

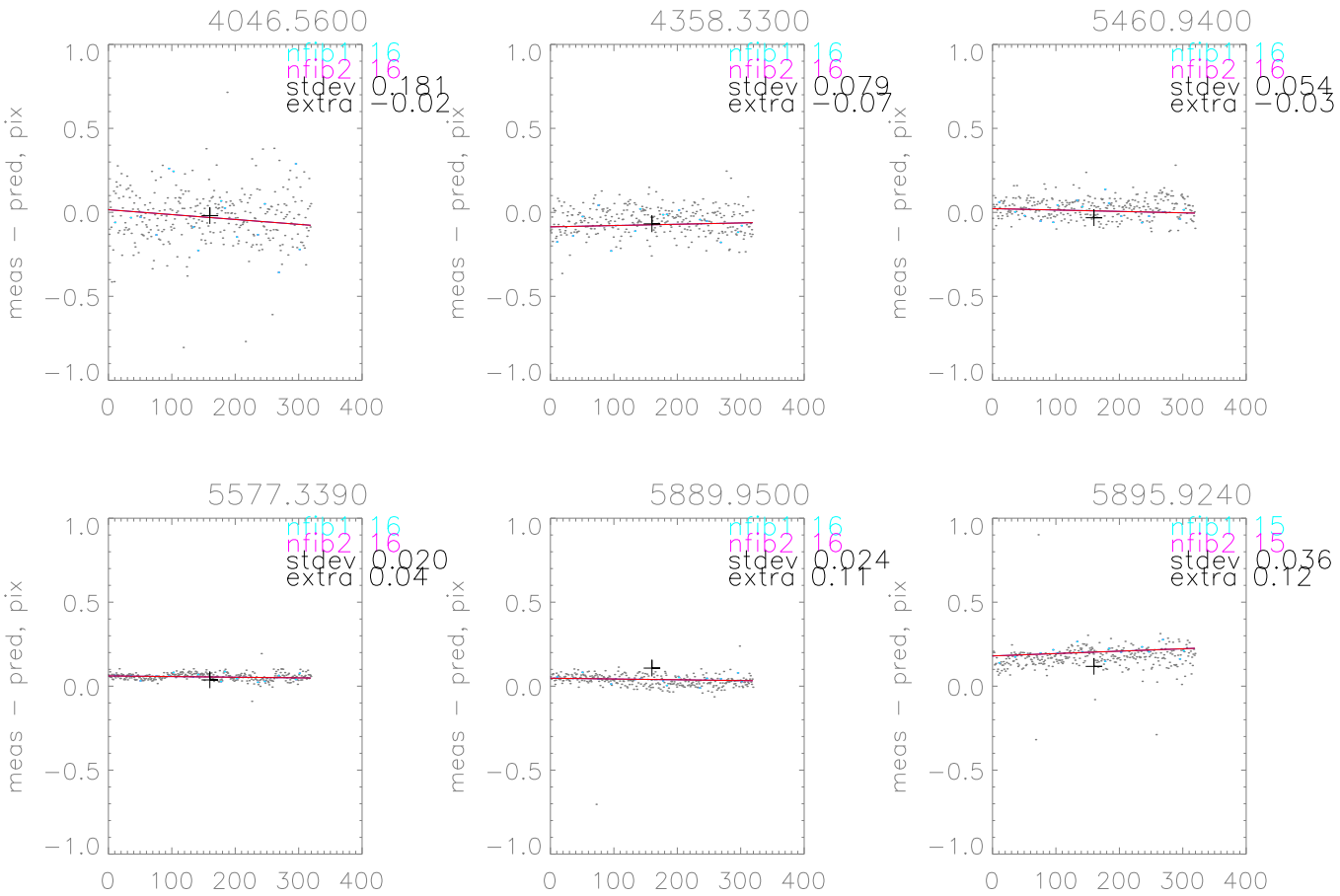

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

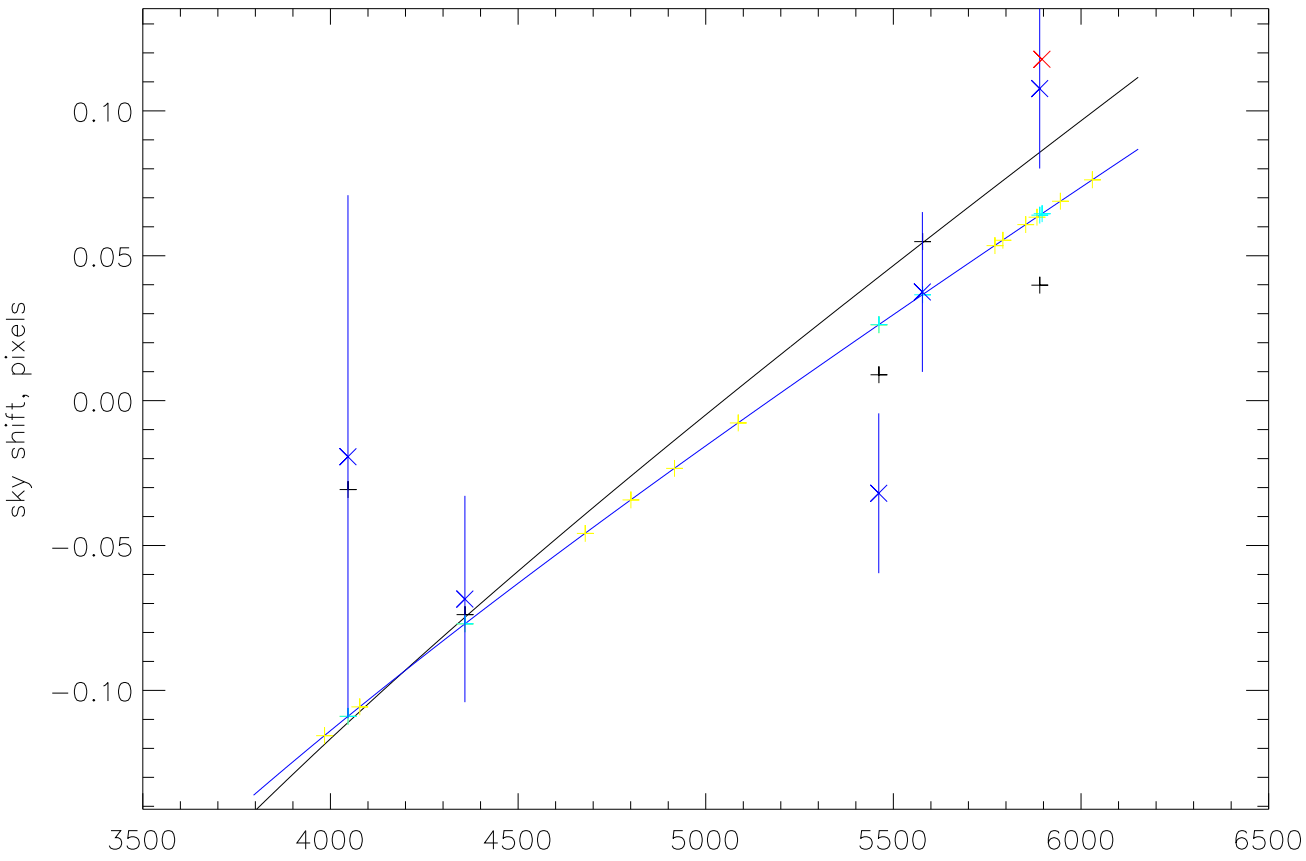

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

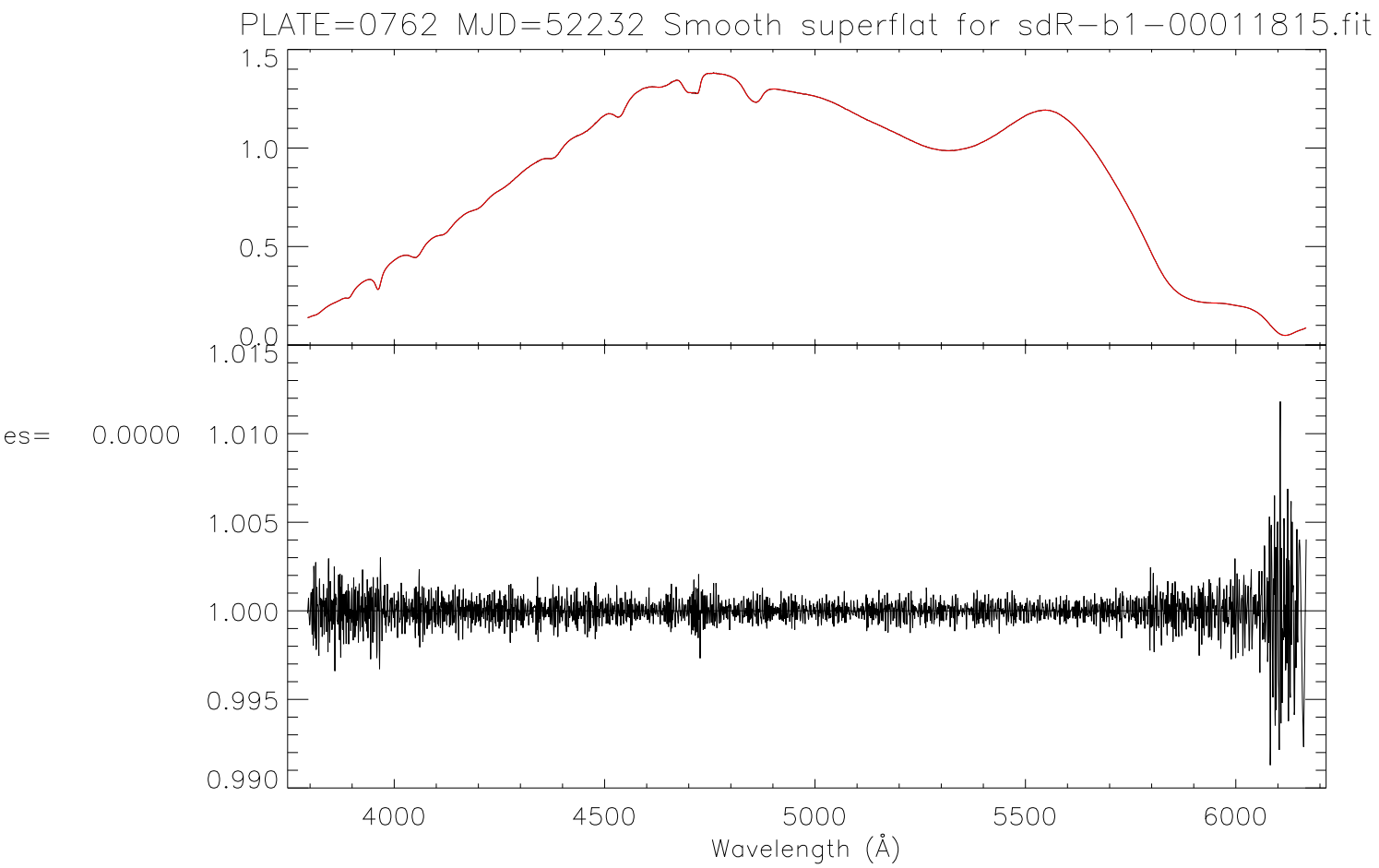

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

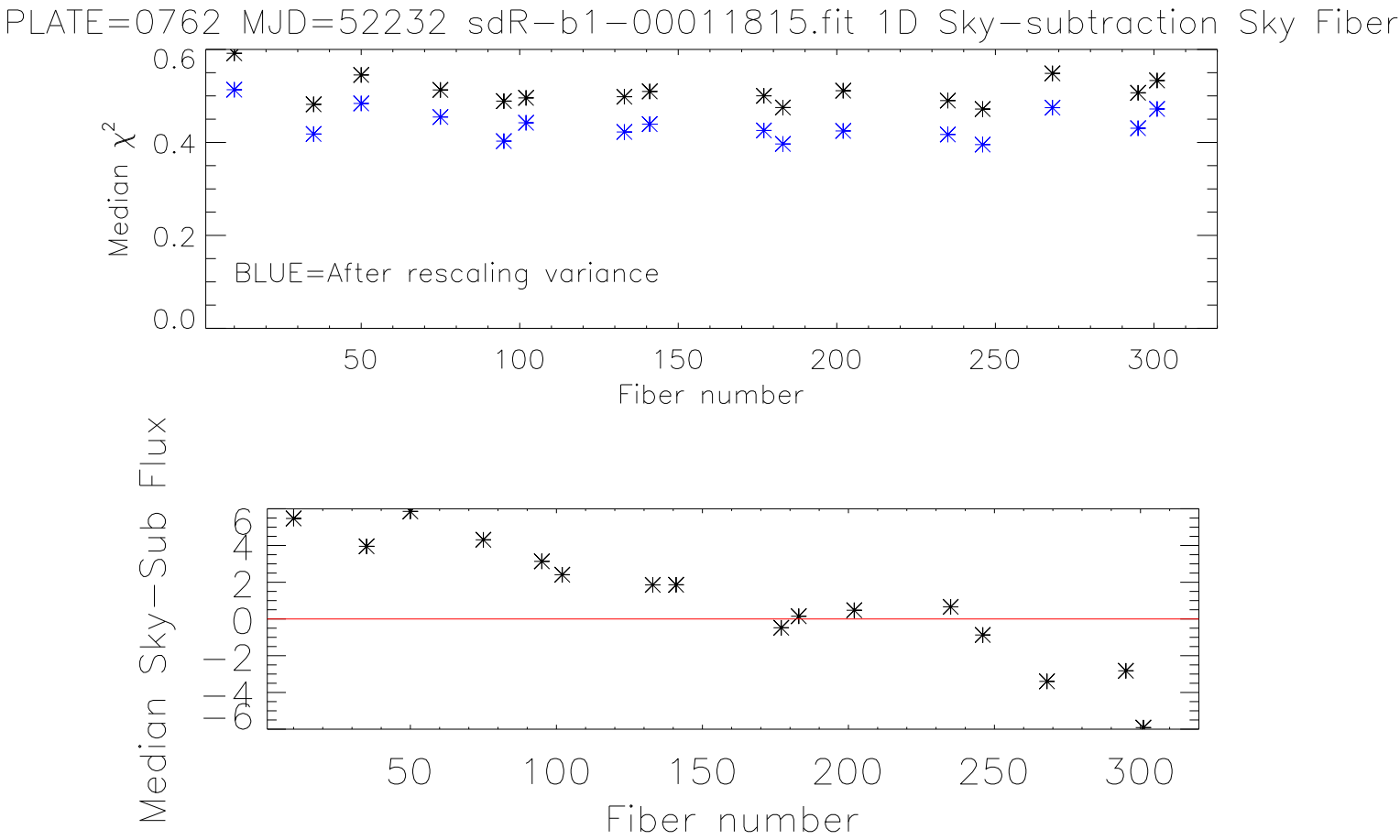

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

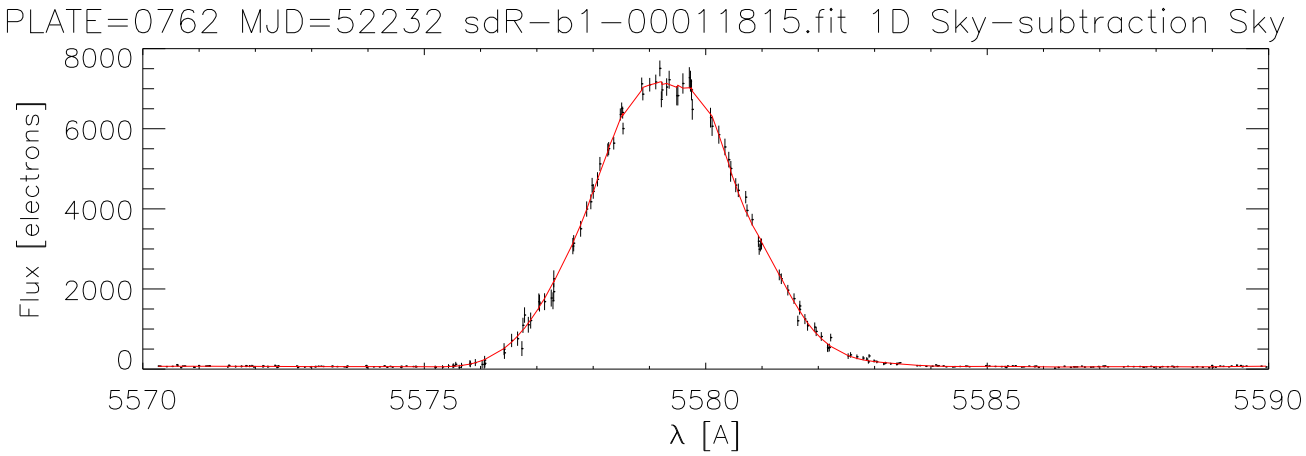

4046.5600
nfib1 16
nfib2 16
stdev 0.181
extra −0.02
4358.3300
nfib1 16
nfib2 16
stdev 0.079
extra −0.07
5460.9400
nfib1 16
nfib2 16
stdev 0.054
extra −0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra 0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra 0.11
5895.9240
nfib1 15
nfib2 15
stdev 0.036
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

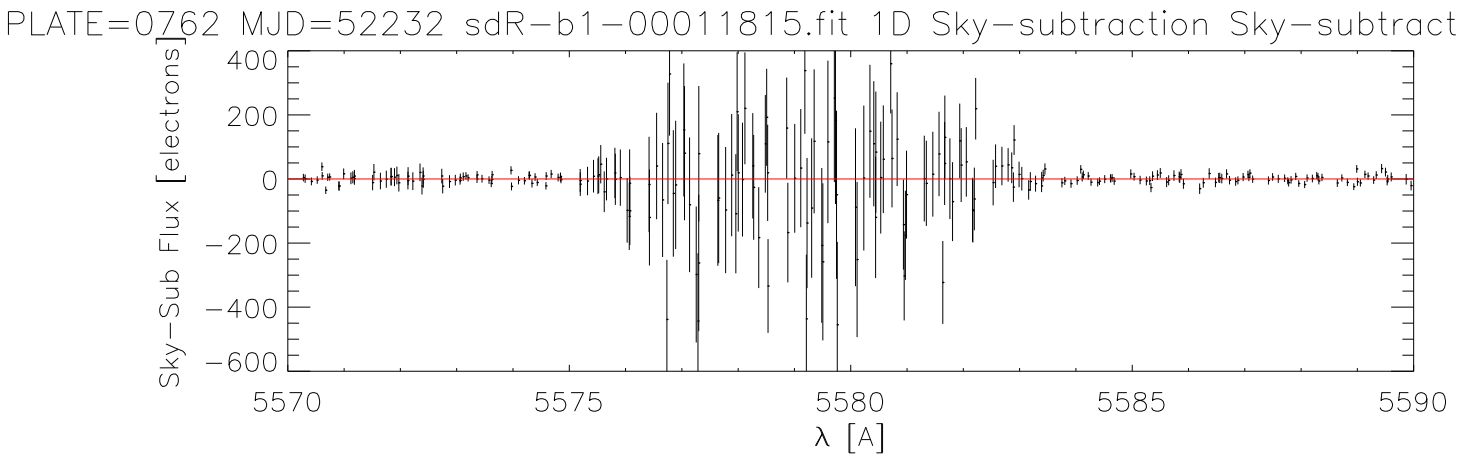

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

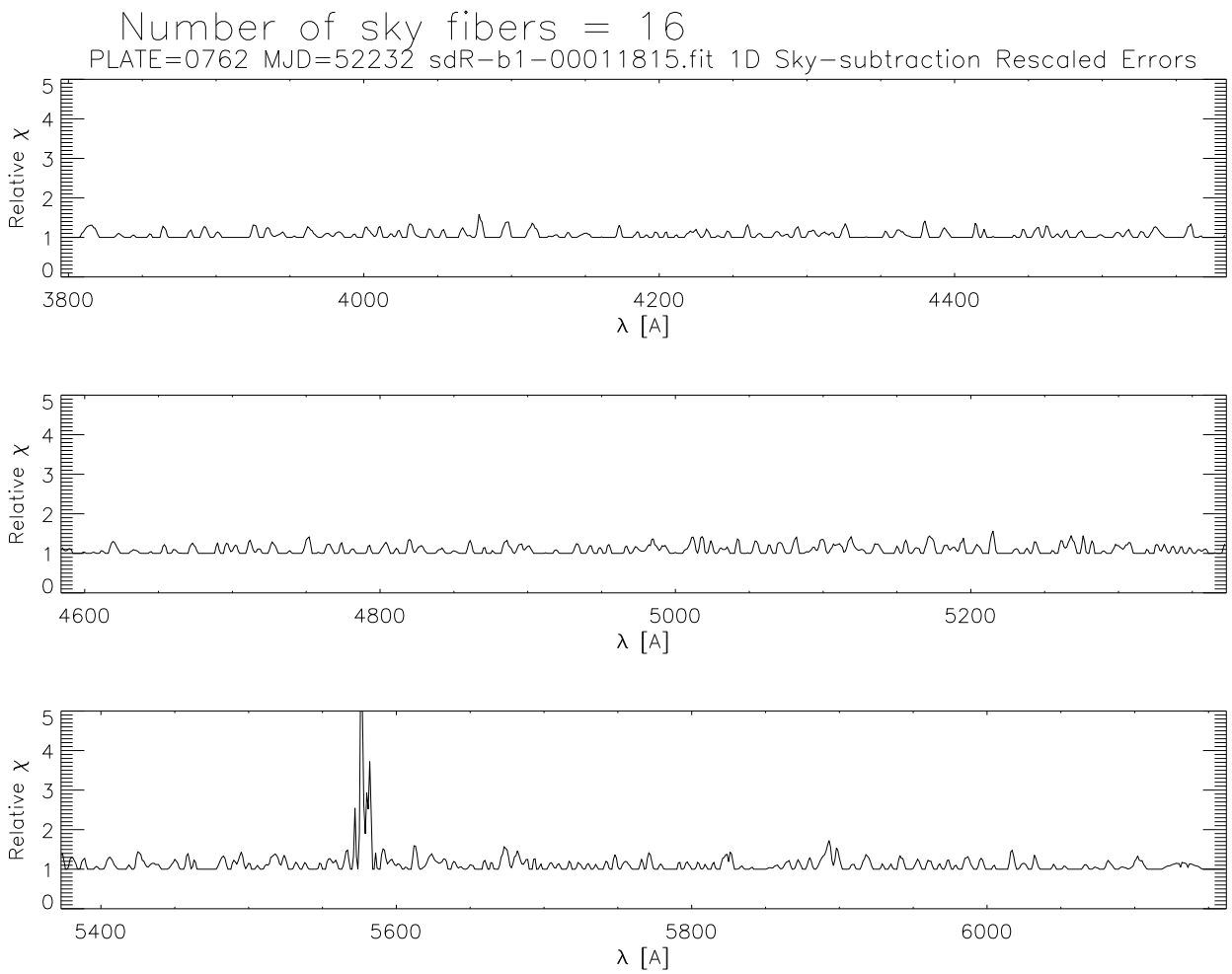

PLATE=0762 MJD=52232 Smooth superflat for sdR-b1-00011815.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

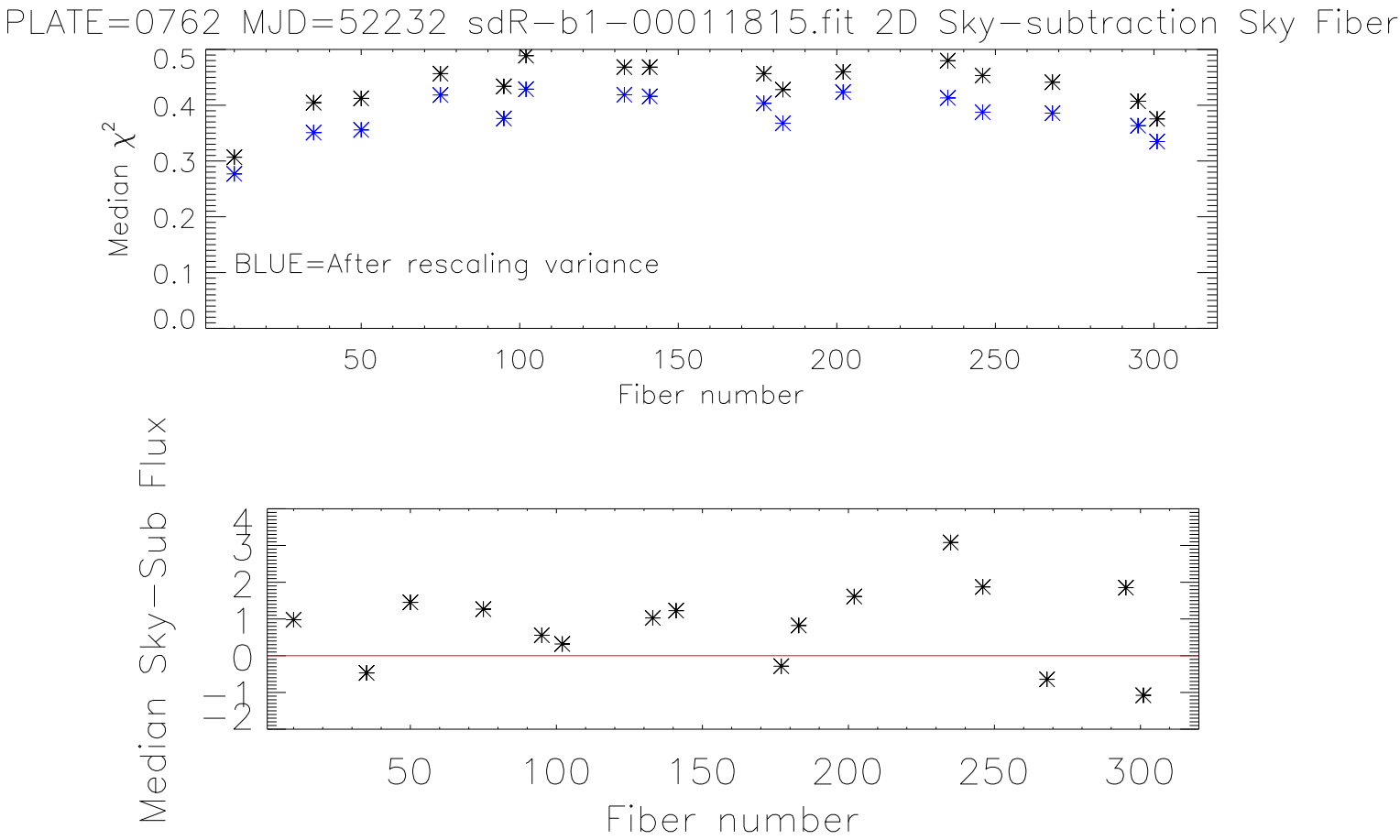
es= 0.0000

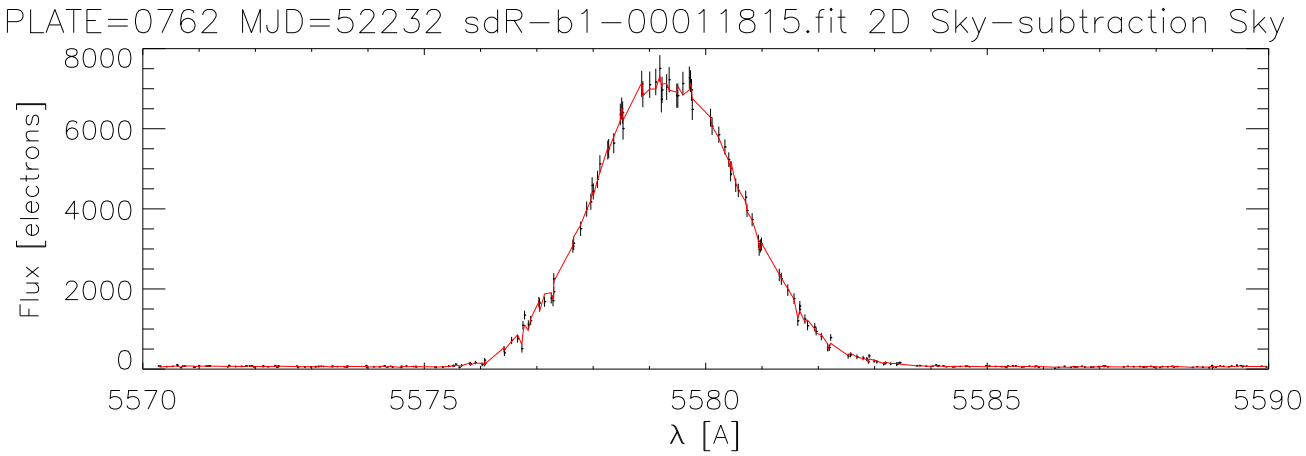

PLATE=0762 MJD=52232 sdR-b1-00011815.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

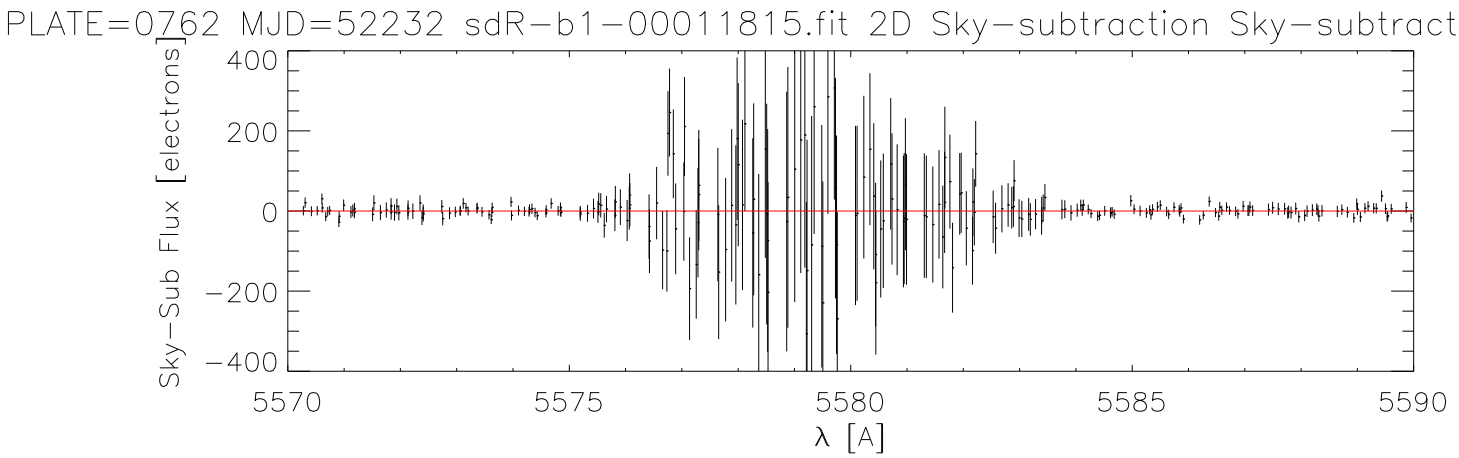

PLATE=0762 MJD=52232 sdR-b1-00011815.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

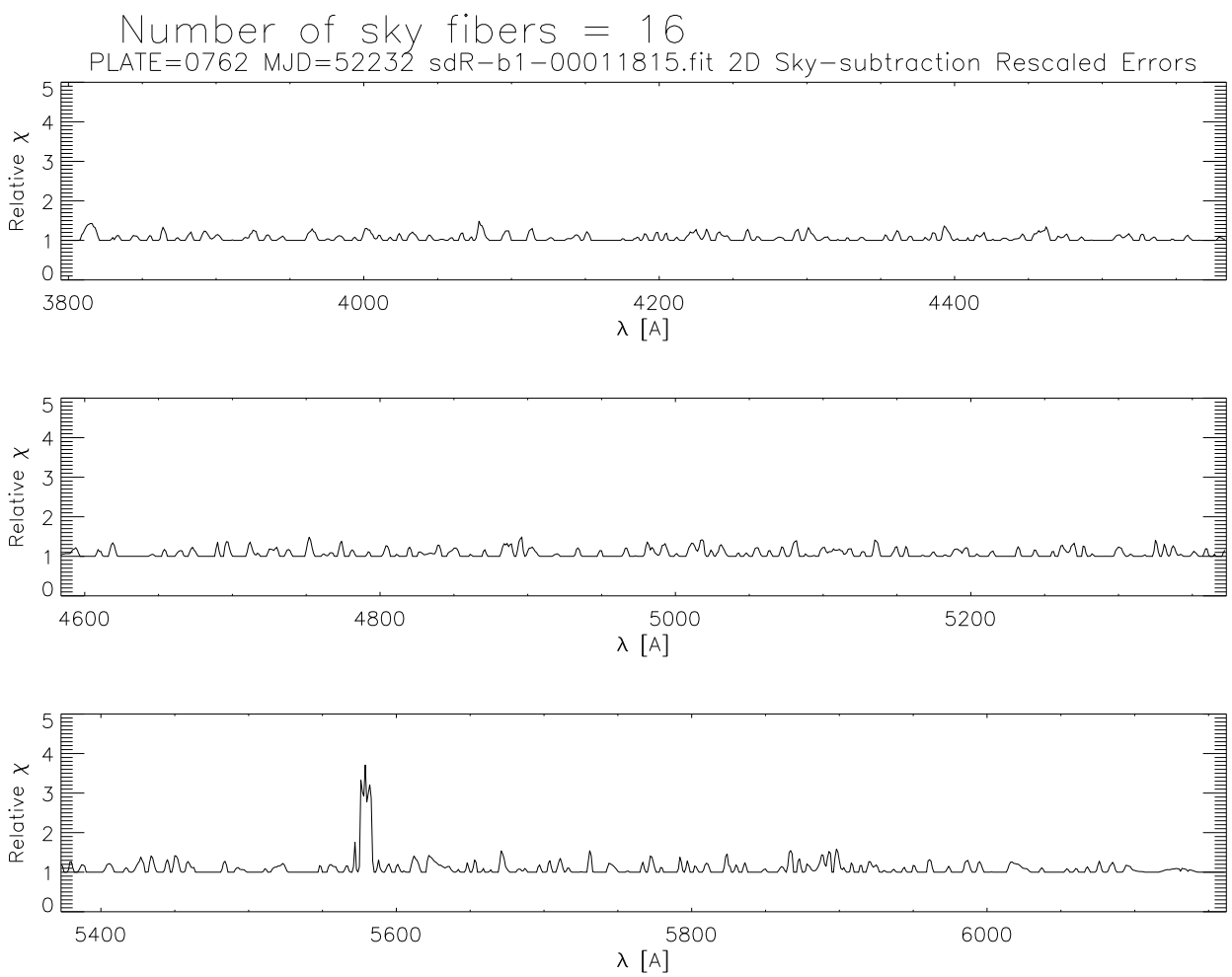

PLATE=0762 MJD=52232 sdR-b1-00011815.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

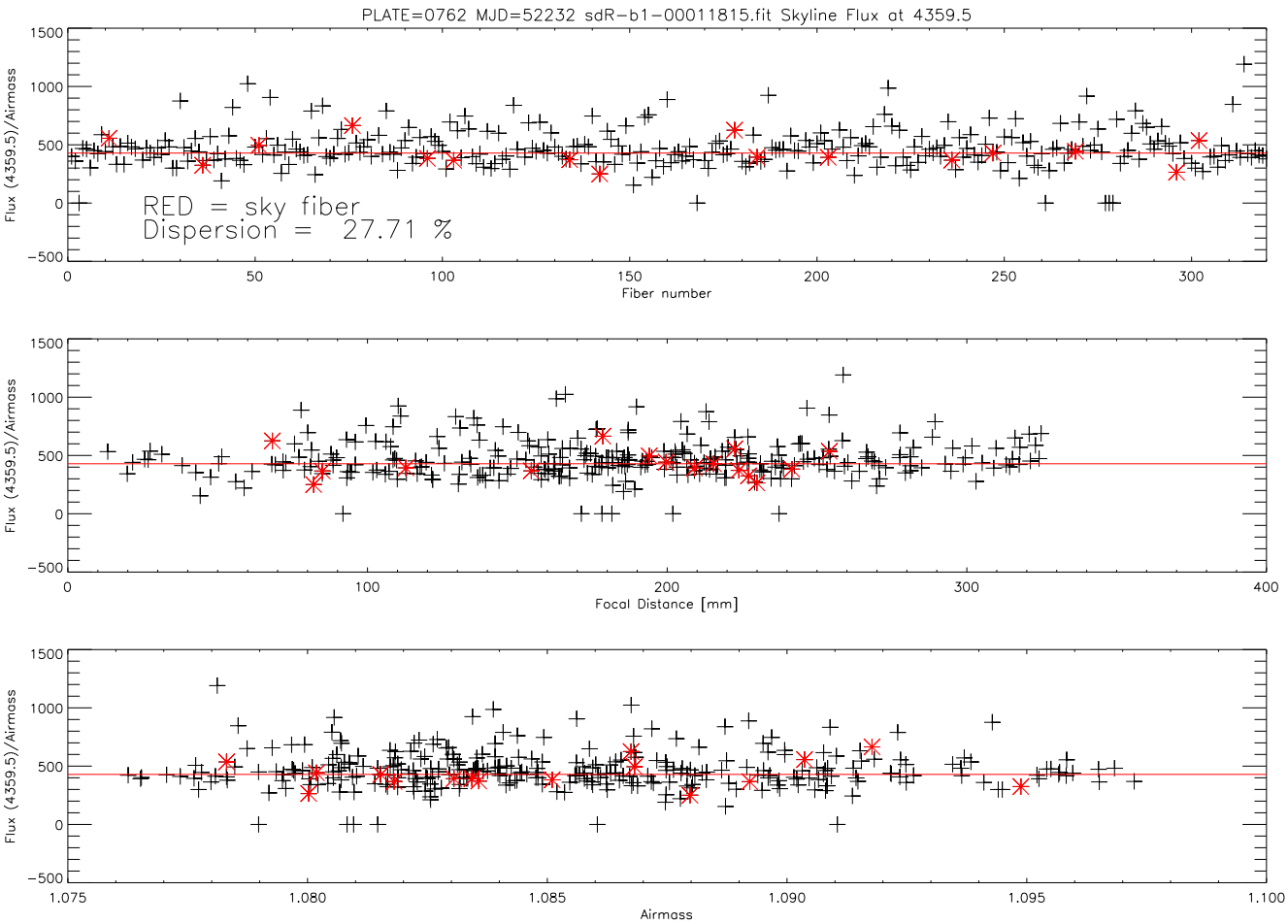

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b1-00011815.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

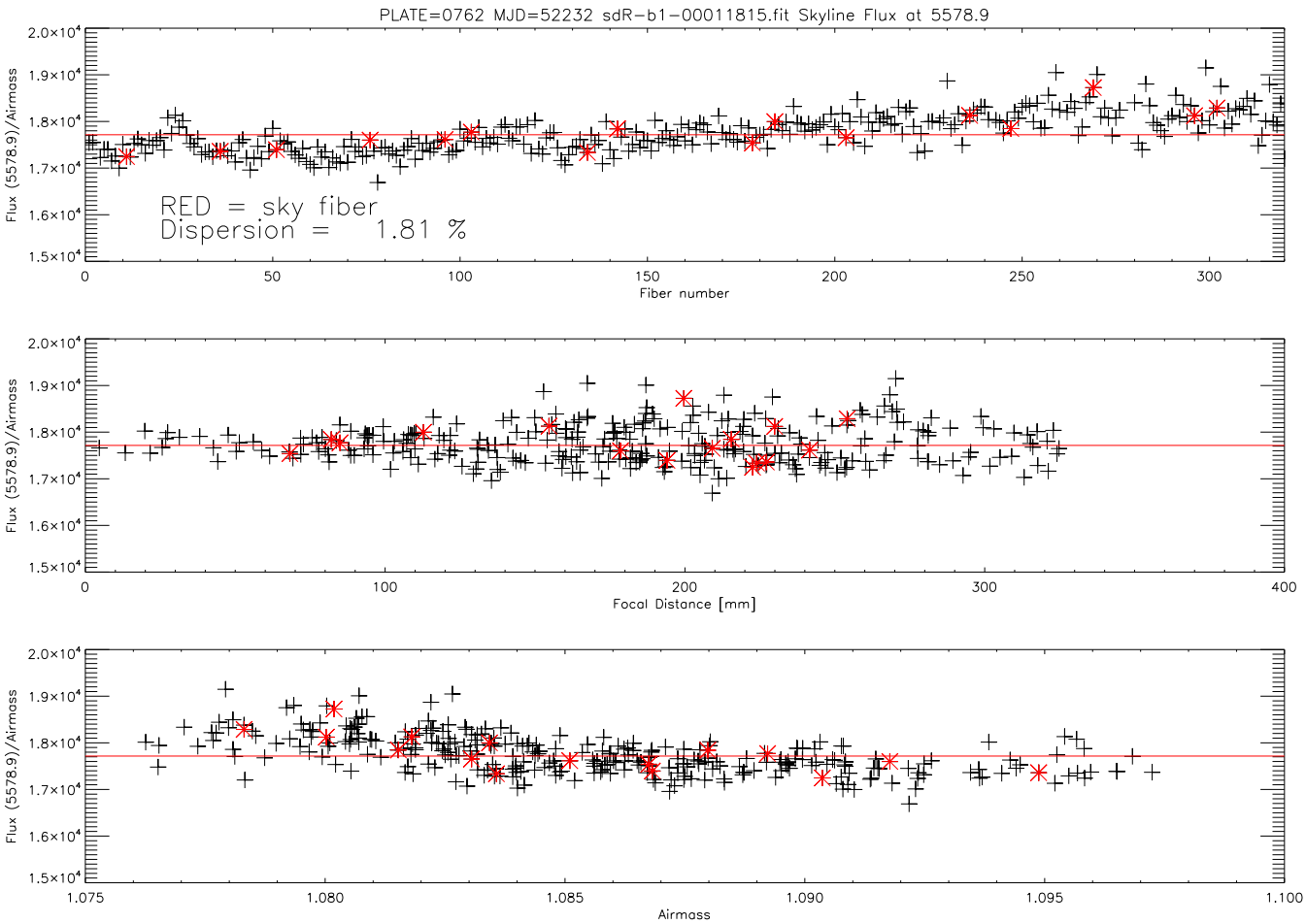

PLATE=0762 MJD=52232 sdR-b1-00011815.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

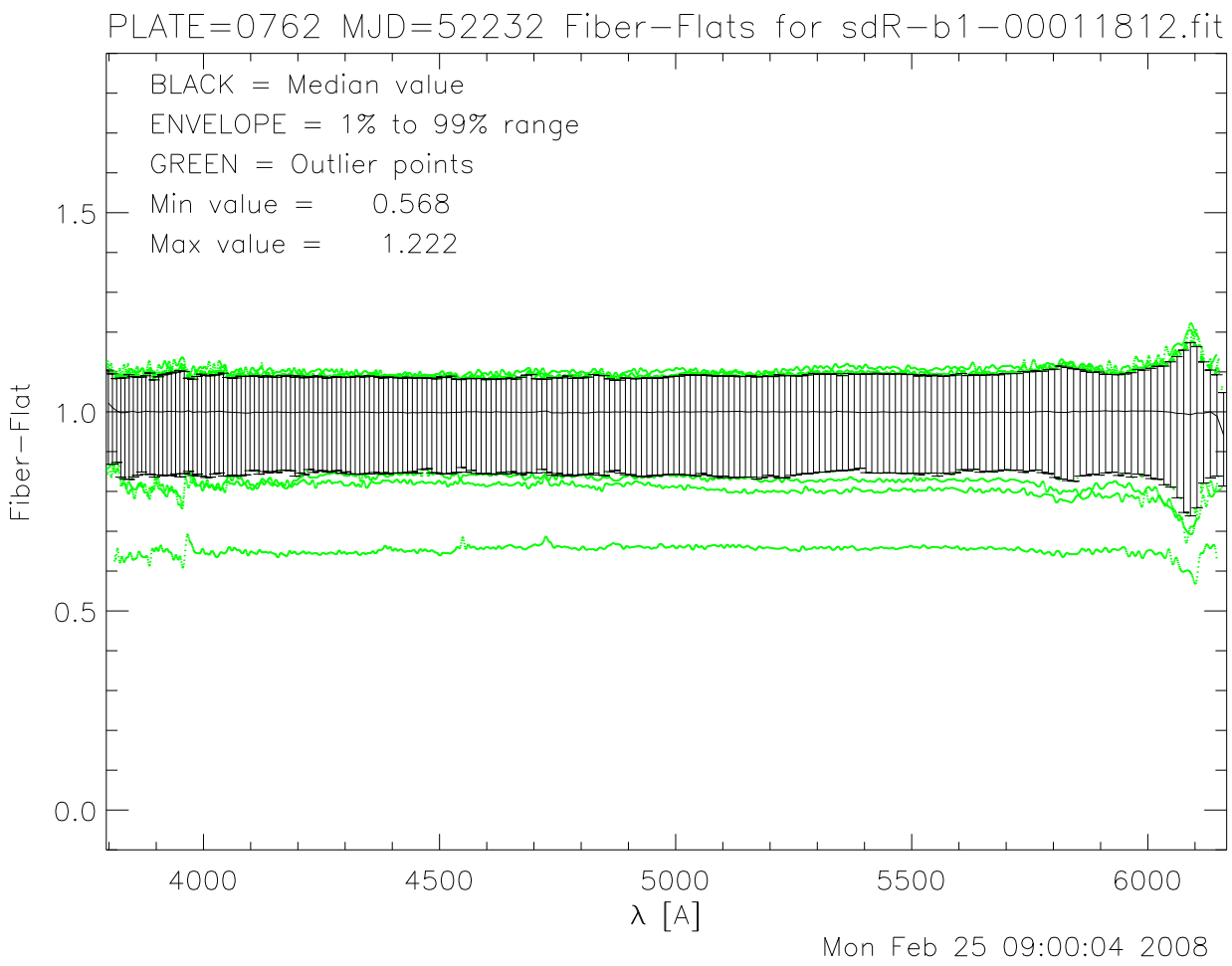

PLATE=0762 MJD=52232 sdR-b1-00011815.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

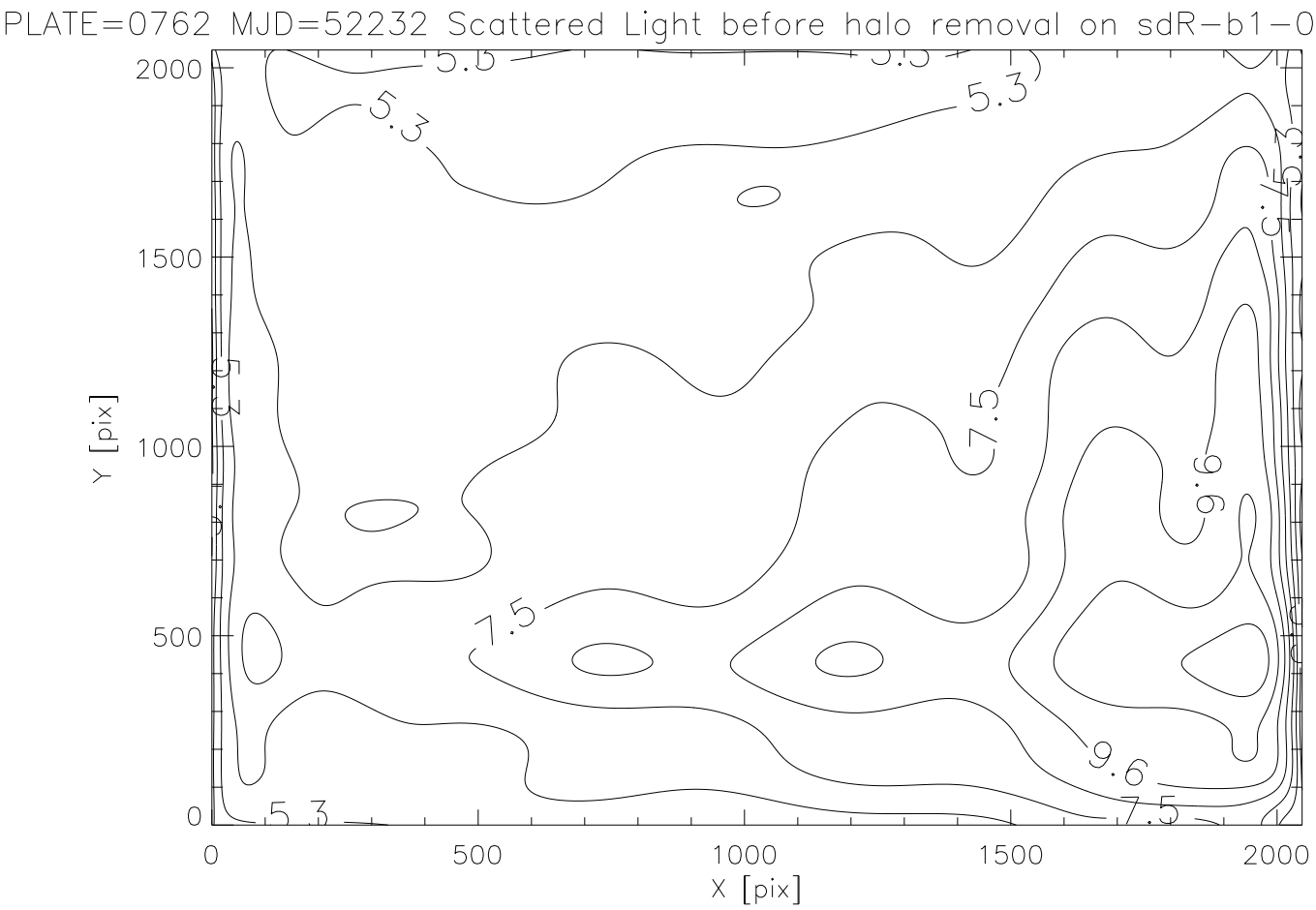

PLATE=0762 MJD=52232 sdR-b1-00011815.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

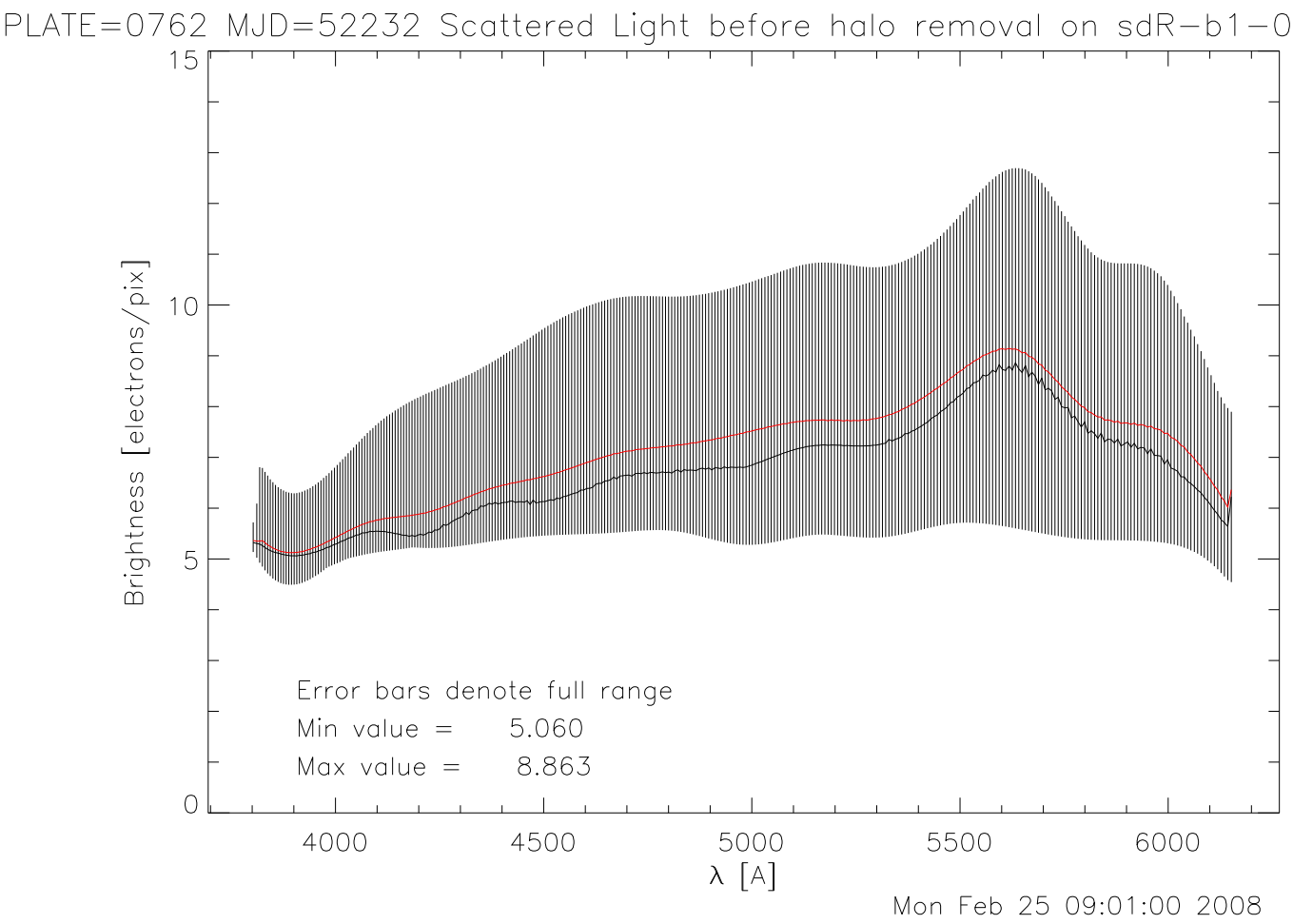

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b1-00011815.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

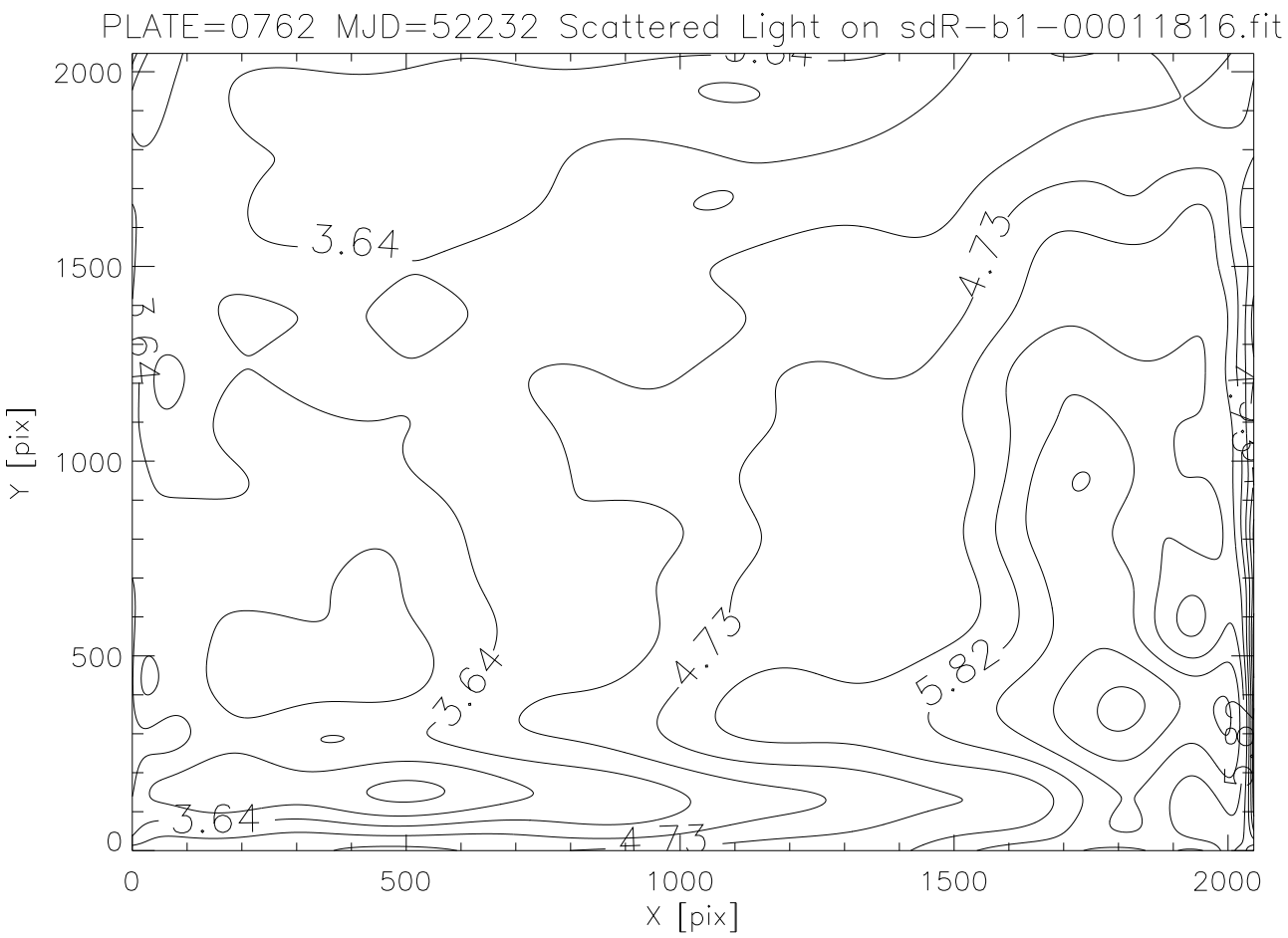

PLATE=0762 MJD=52232 sdR-b1-00011815.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 27.71 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

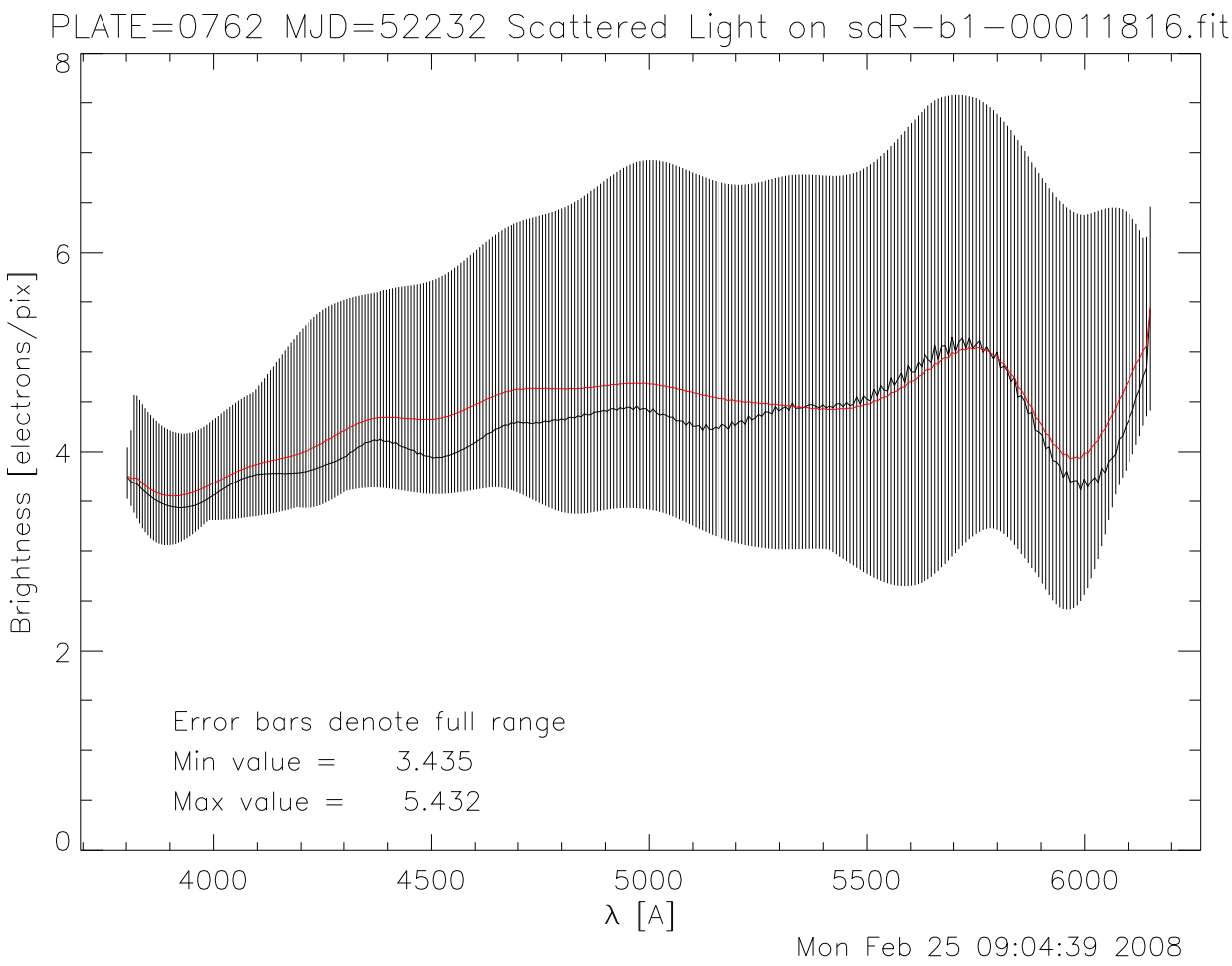

PLATE=0762 MJD=52232 sdR-b1-00011815.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.81 %
Fiber number
Focal Distance [mm]
Airmass

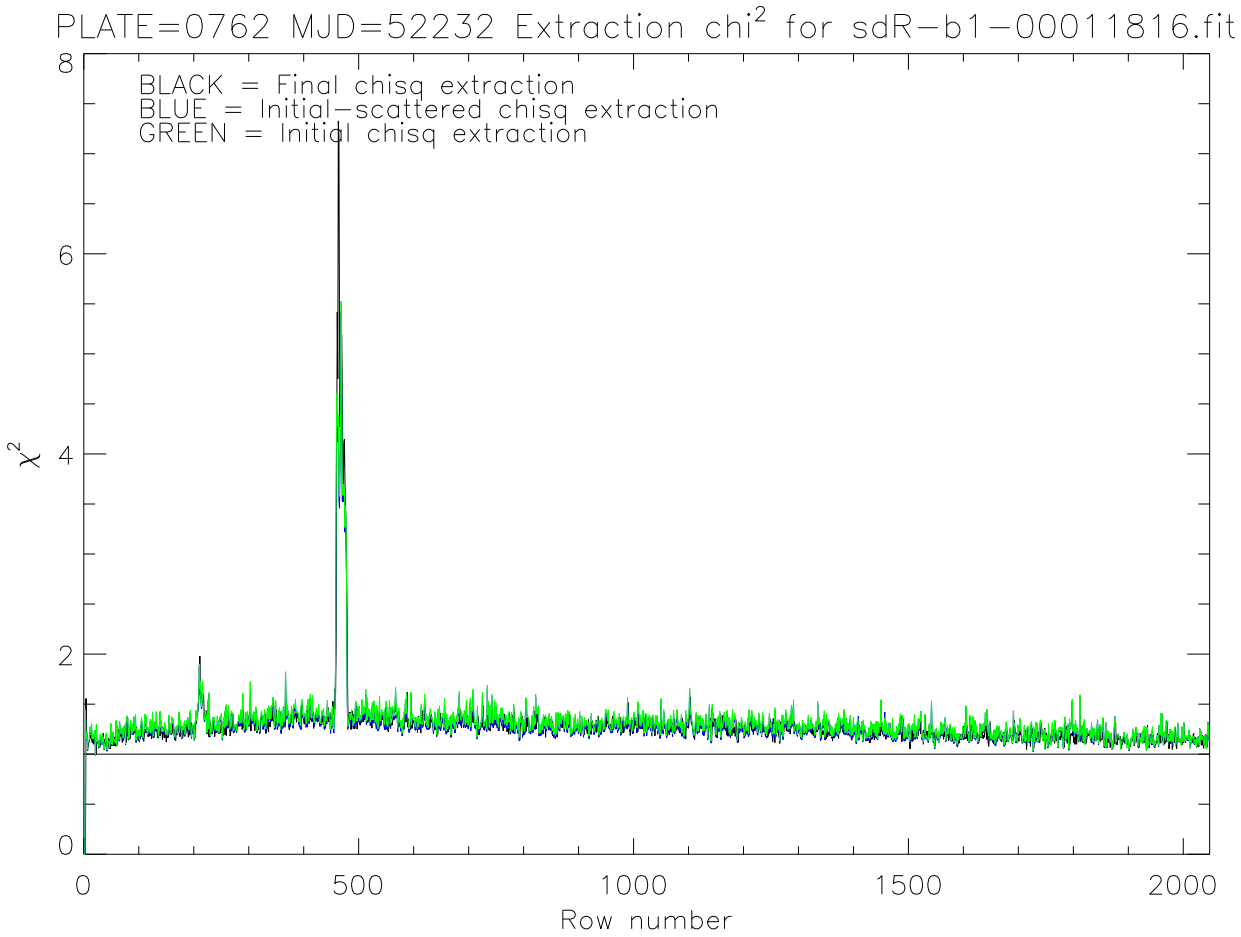

PLATE=0762 MJD=52232 Fiber-Flats for sdR-b1-00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.568
Max value = 1.222
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:00:04 2008

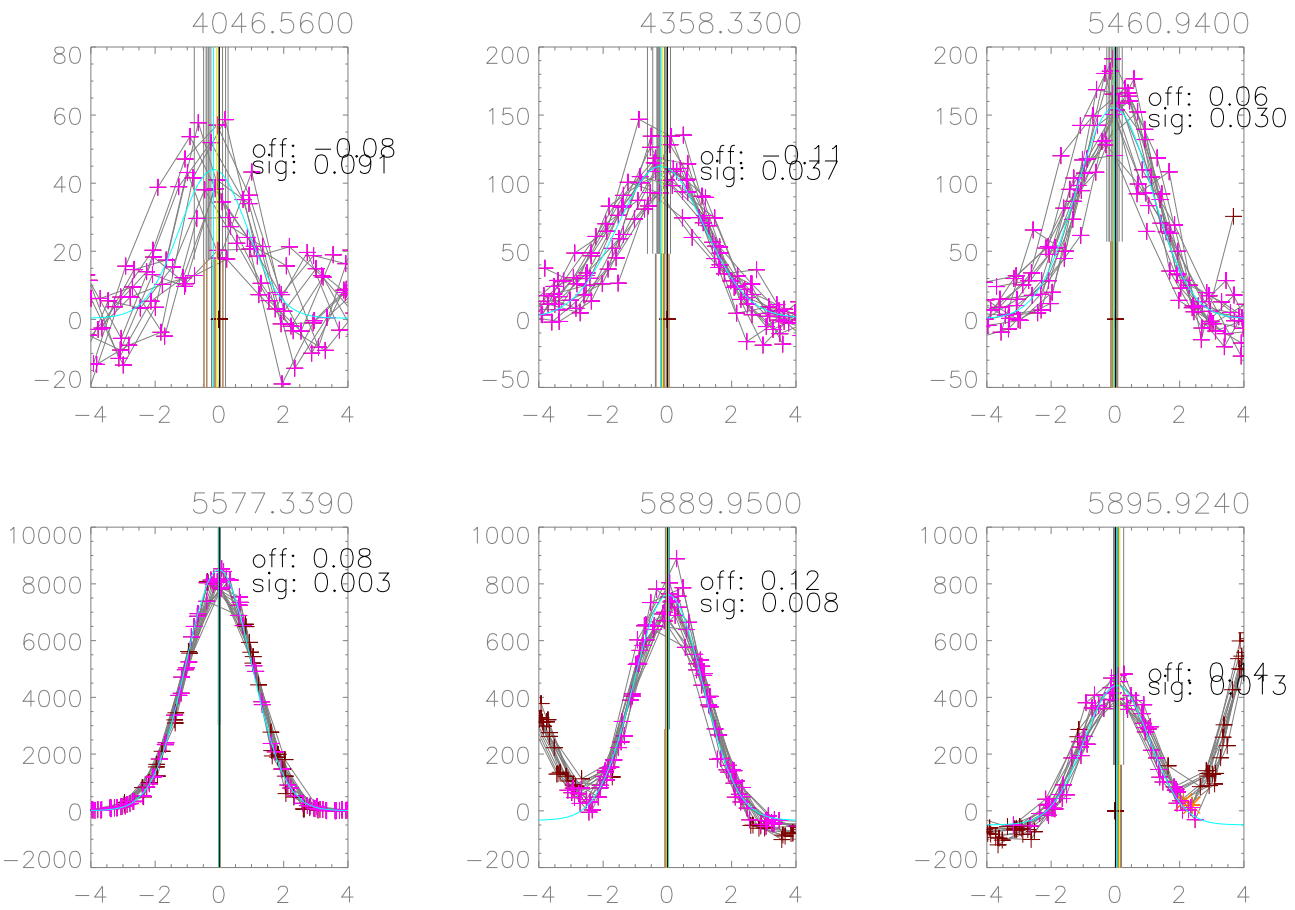

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR−b1−00011816.f
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3
7.5
9.6

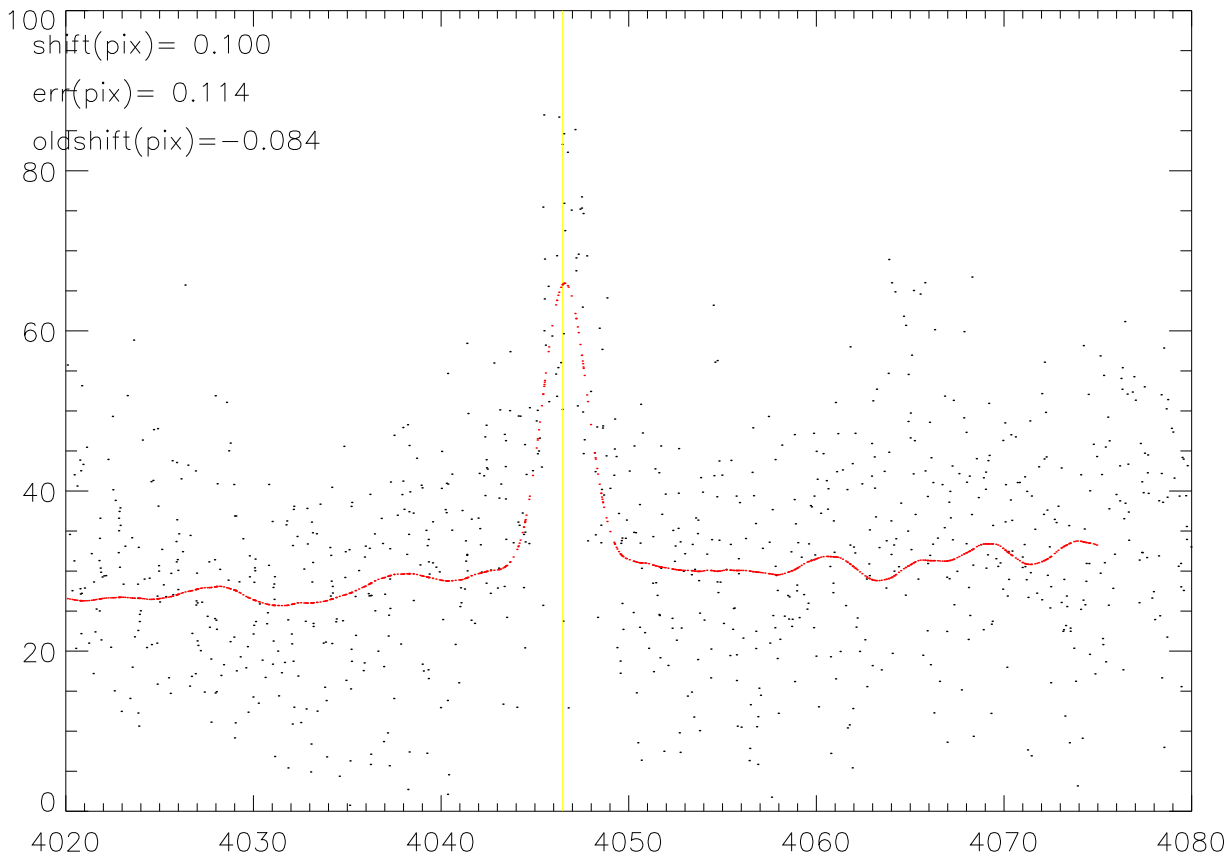

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b1-00011816.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 5.060
Max value = 8.863
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:01:00 2008

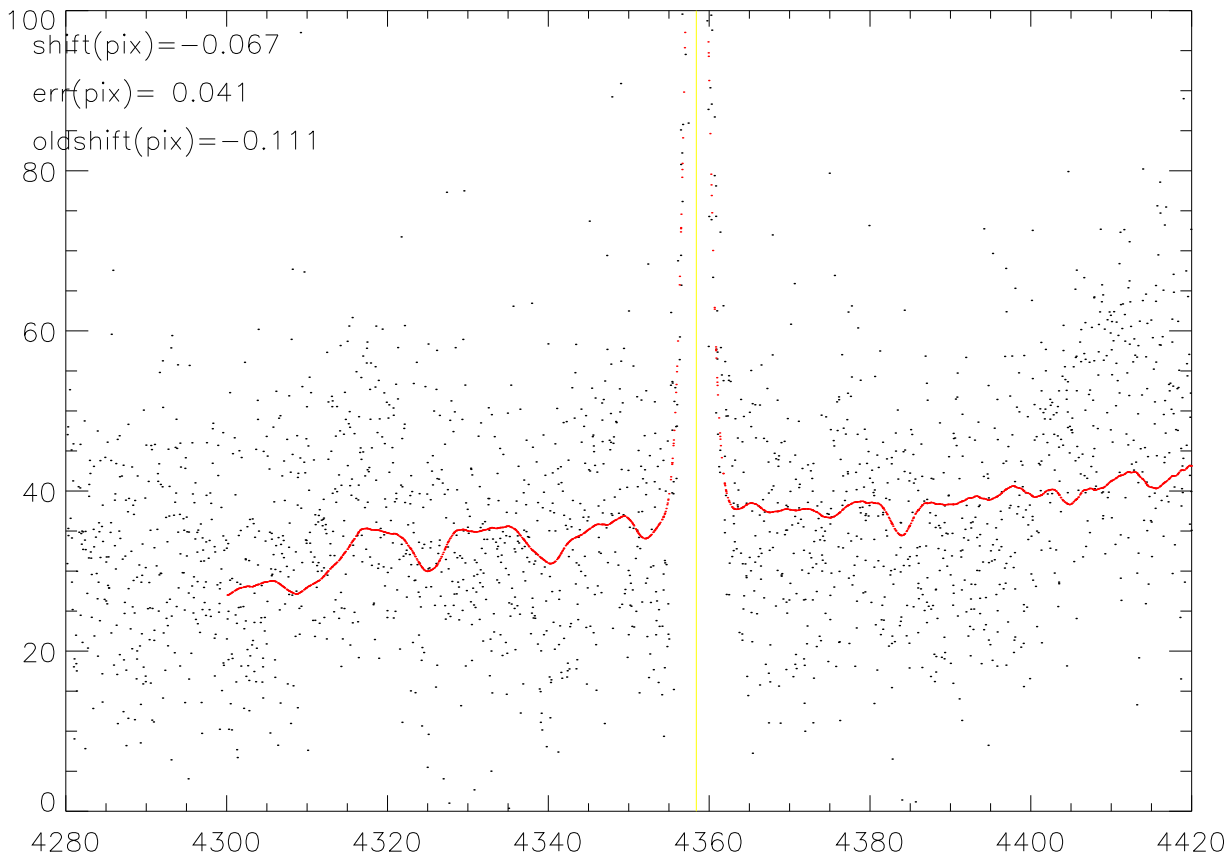

PLATE=0762 MJD=52232 Scattered Light on sdR-b1-00011816.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.64
4.73
5.82

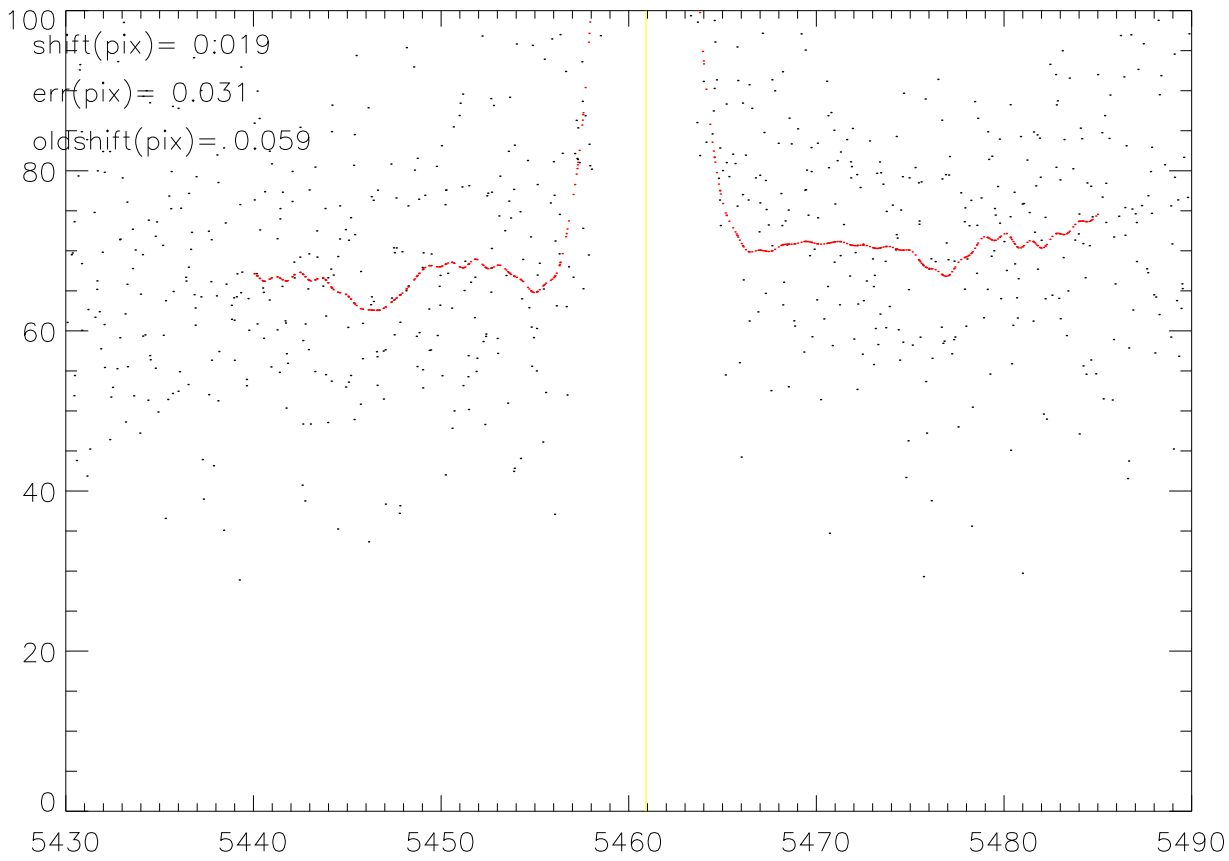

PLATE=0762 MJD=52232 Scattered Light on sdR-b1-00011816.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.435
Max value = 5.432
Mon Feb 25 09:04:39 2008

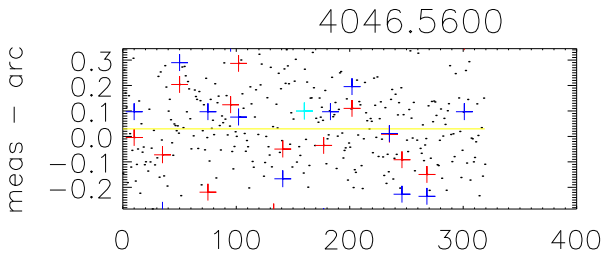

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-b1-00011816.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

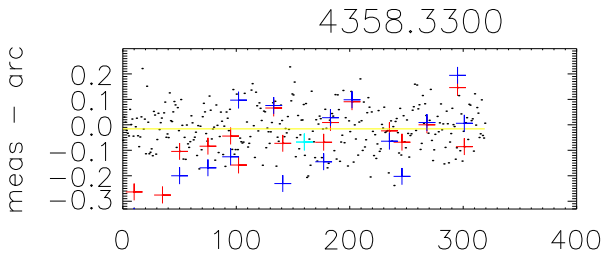

4046.5600
off: −0.08
sig: 0.091
4358.3300
off: −0.11
sig: 0.037
5460.9400
off: 0.06
sig: 0.030
5577.3390
off: 0.08
sig: 0.003
5889.9500
off: 0.12
sig: 0.008
5895.9240
off: 0.14
sig: 0.013

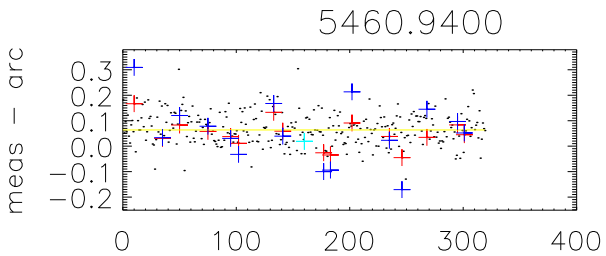

shift(pix)= 0.100
err(pix)= 0.114
oldshift(pix)=-0.084
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

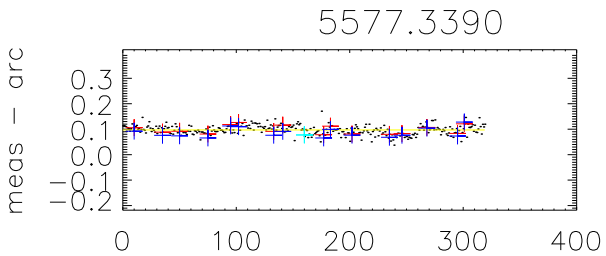

shift(pix)=−0.067
err(pix)= 0.041
oldshift(pix)=−0.111
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

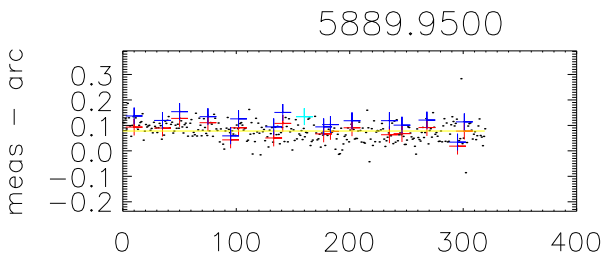

shift(pix)= 0.019
err(pix)= 0.031
oldshift(pix)= 0.059
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

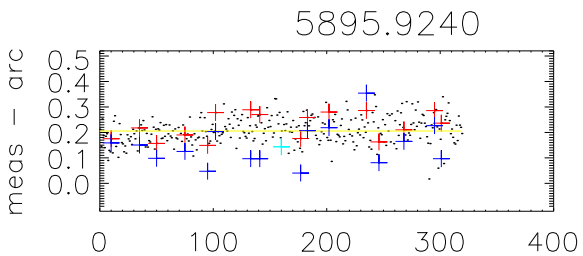

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

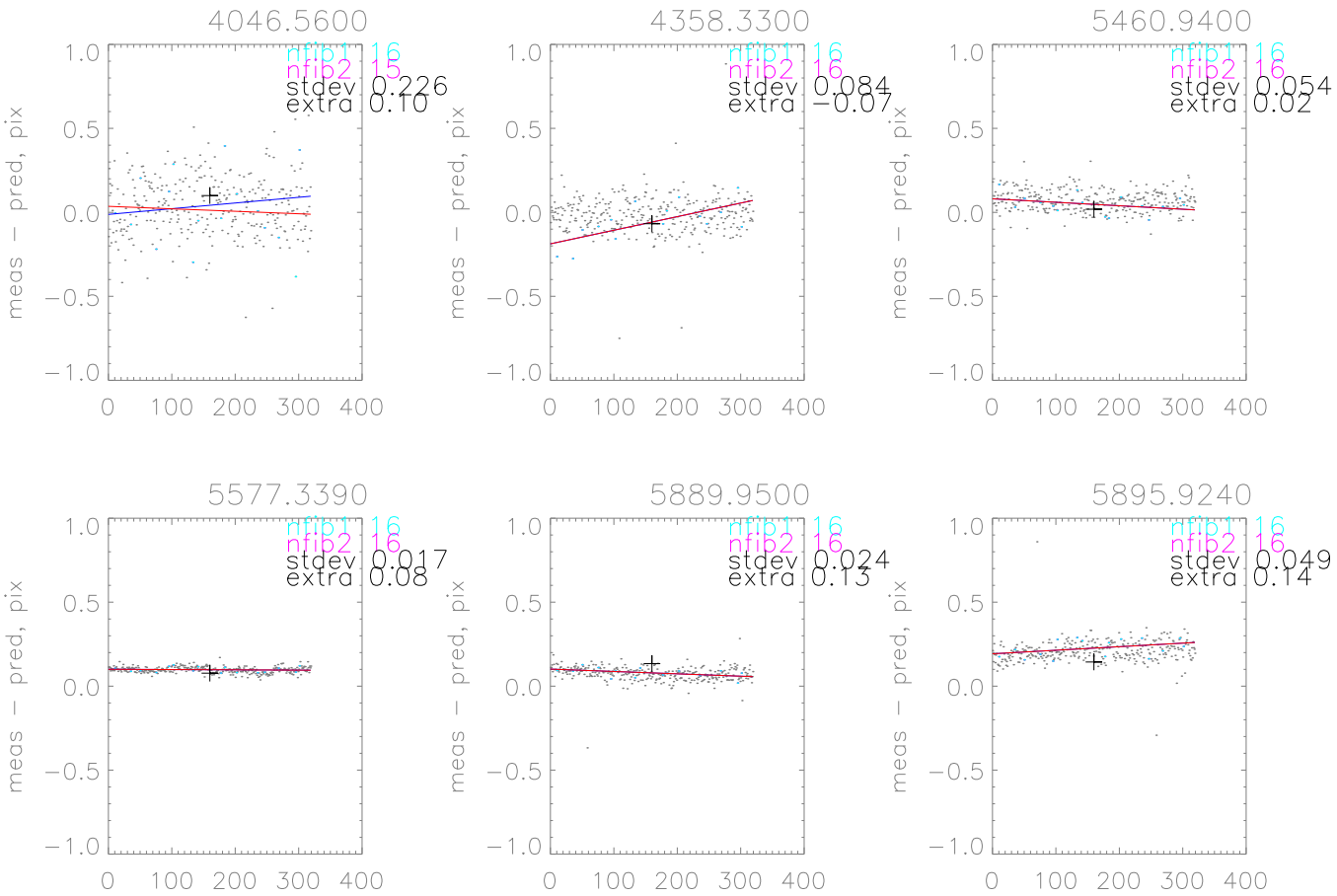

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

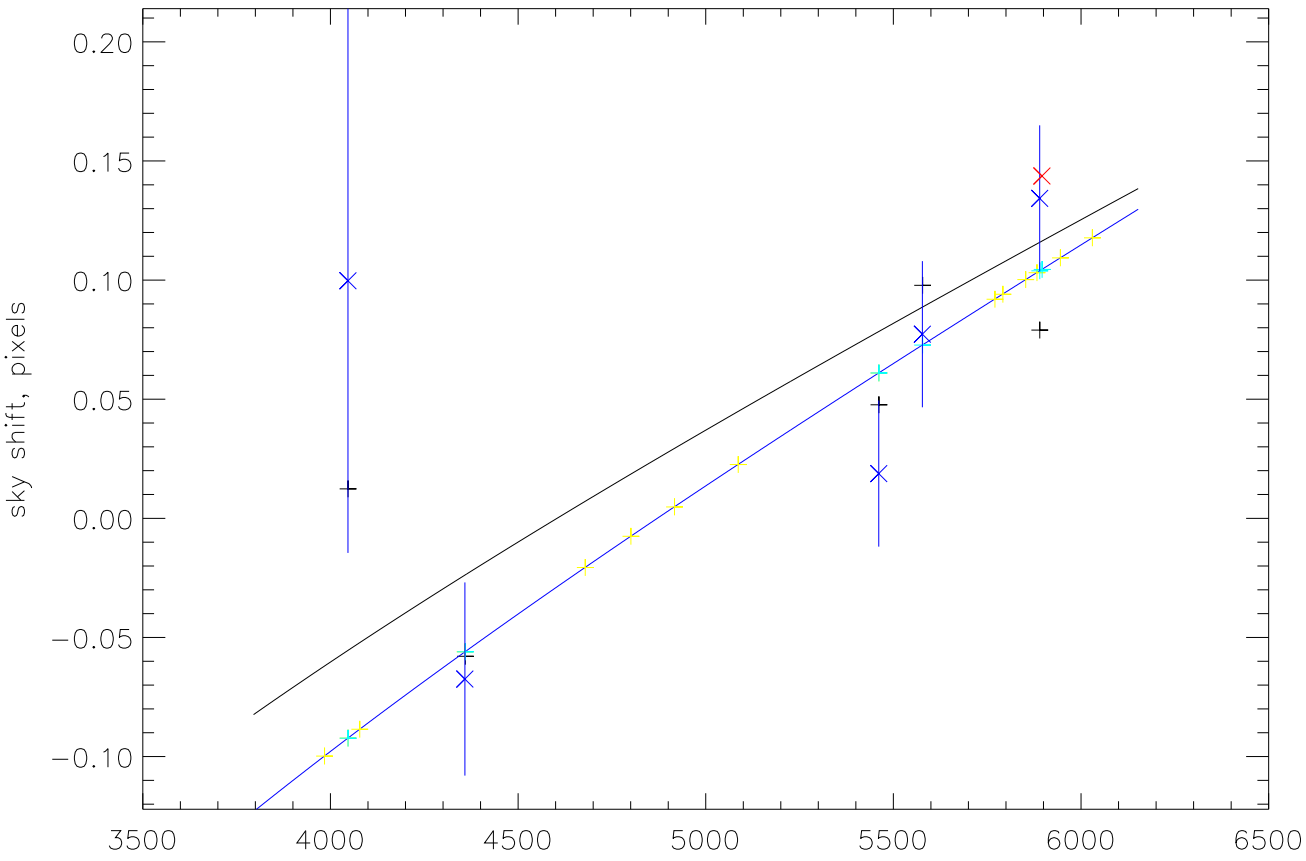

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

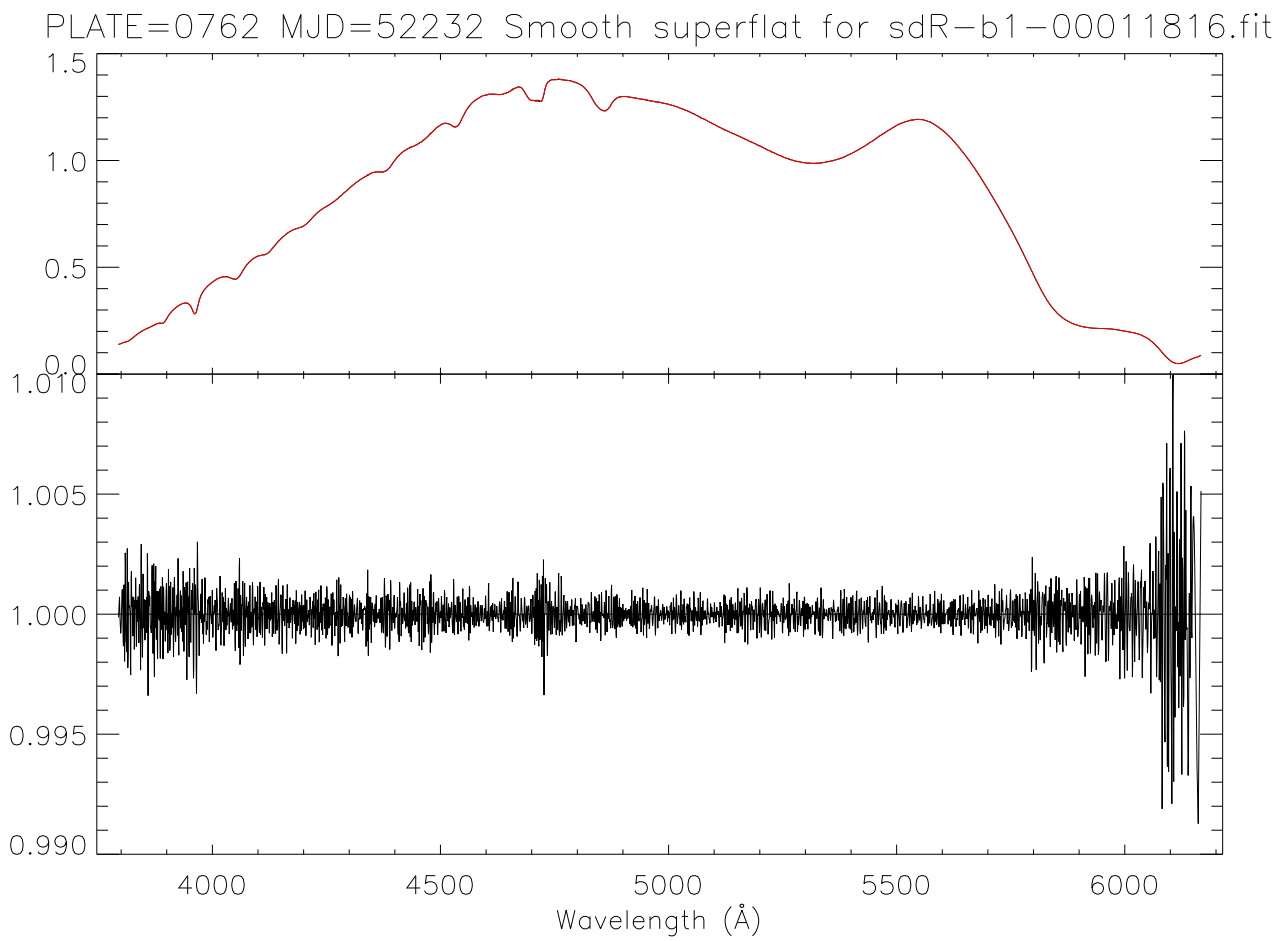

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

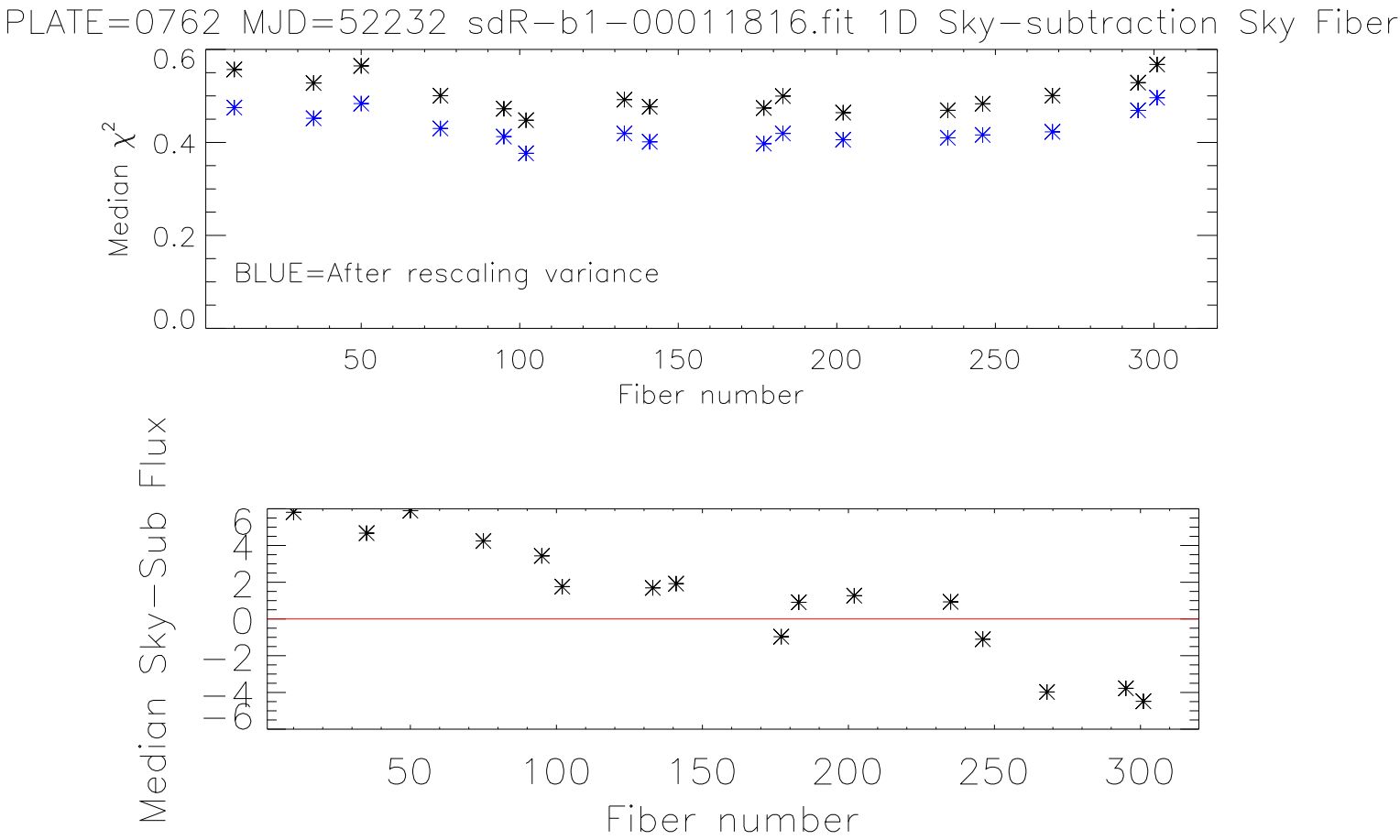

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

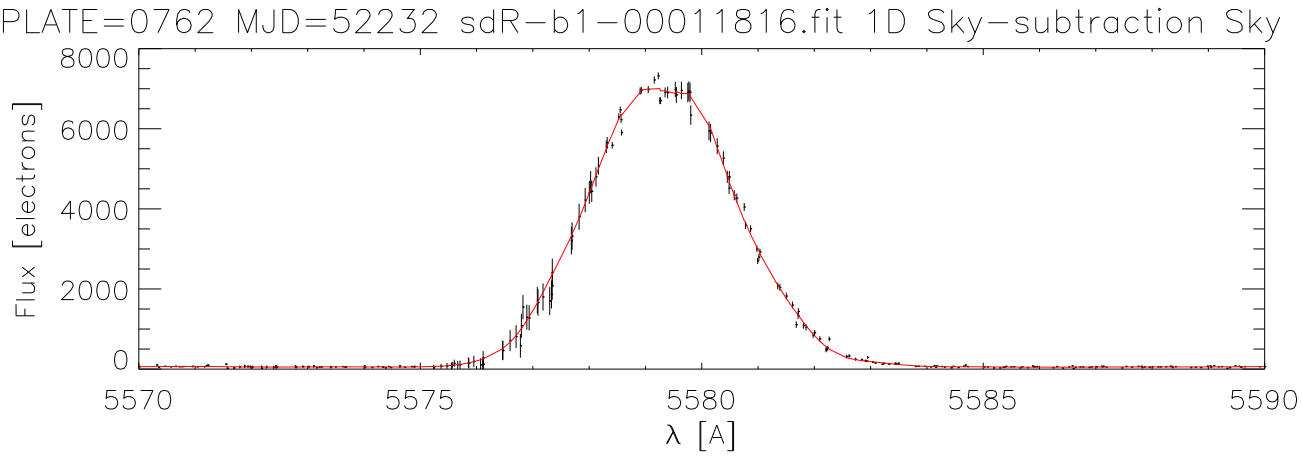

4046.5600
nfib1 16
nfib2 15
stdev 0.226
extra 0.10
4358.3300
nfib1 16
nfib2 16
stdev 0.084
extra −0.07
5460.9400
nfib1 16
nfib2 16
stdev 0.054
extra 0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra 0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.049
extra 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

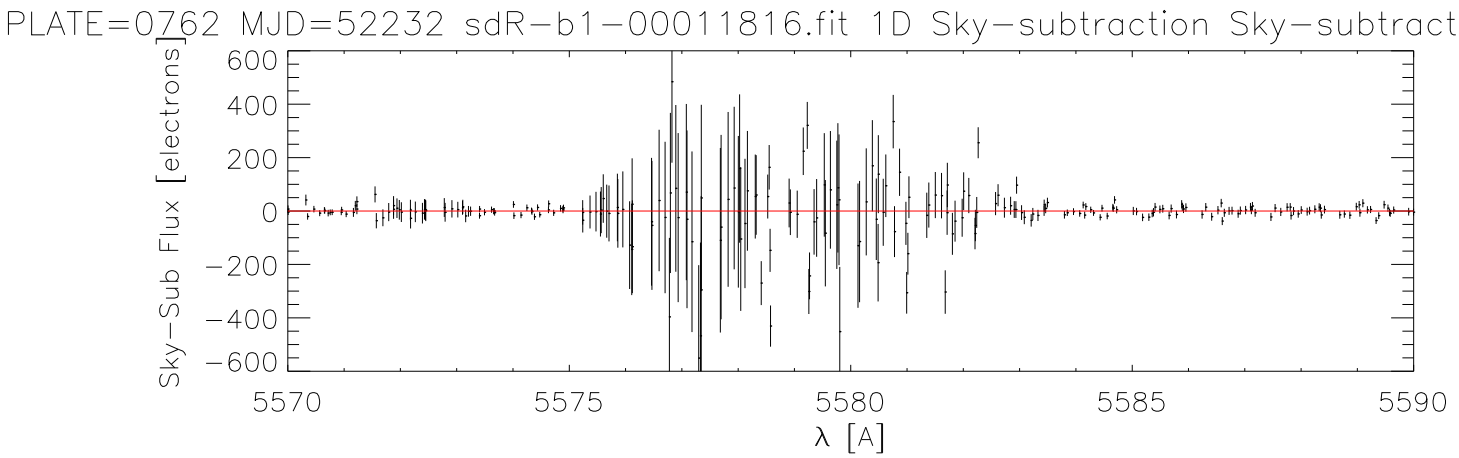

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

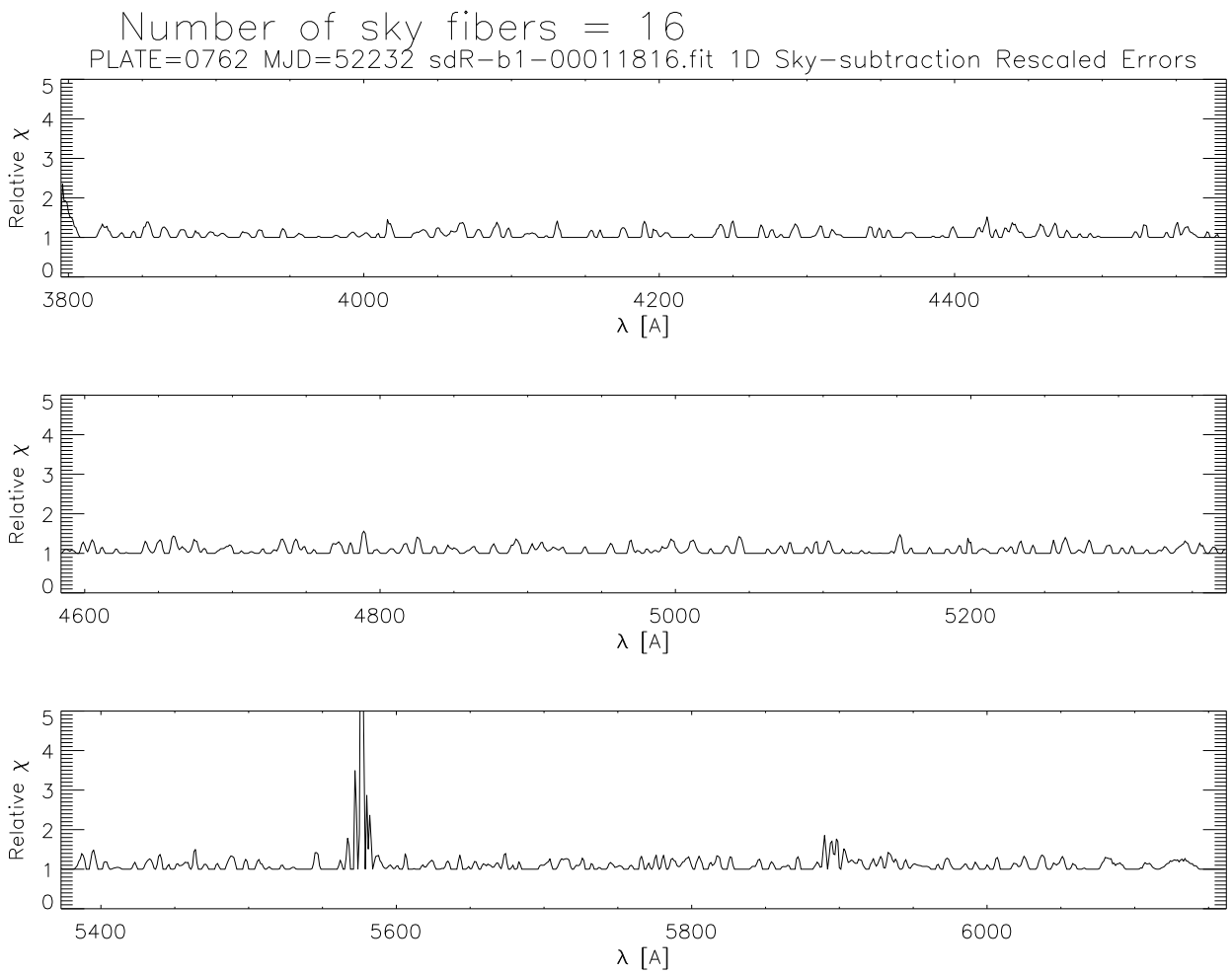
es= 0.0000

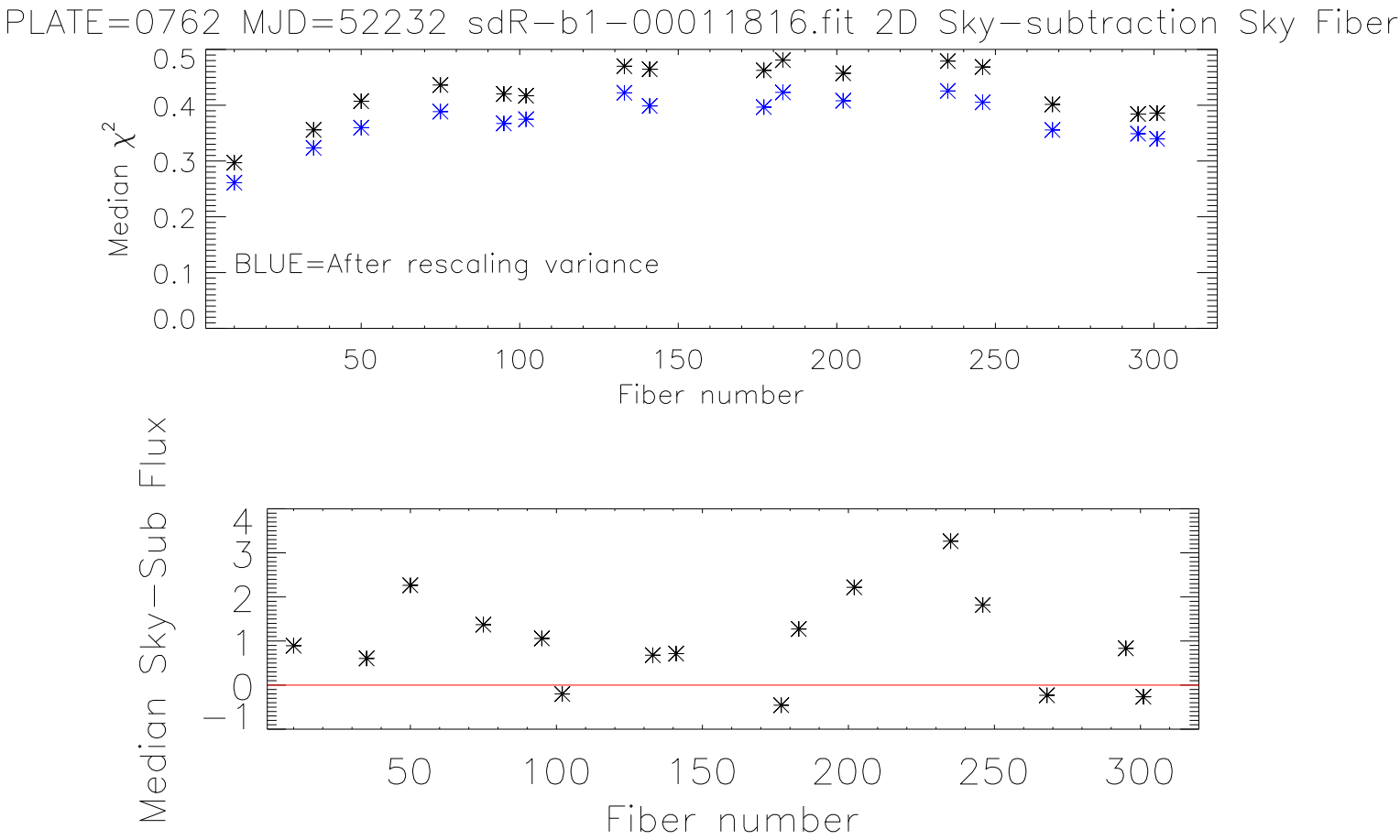

PLATE=0762 MJD=52232 Smooth superflat for sdR-b1-00011816.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

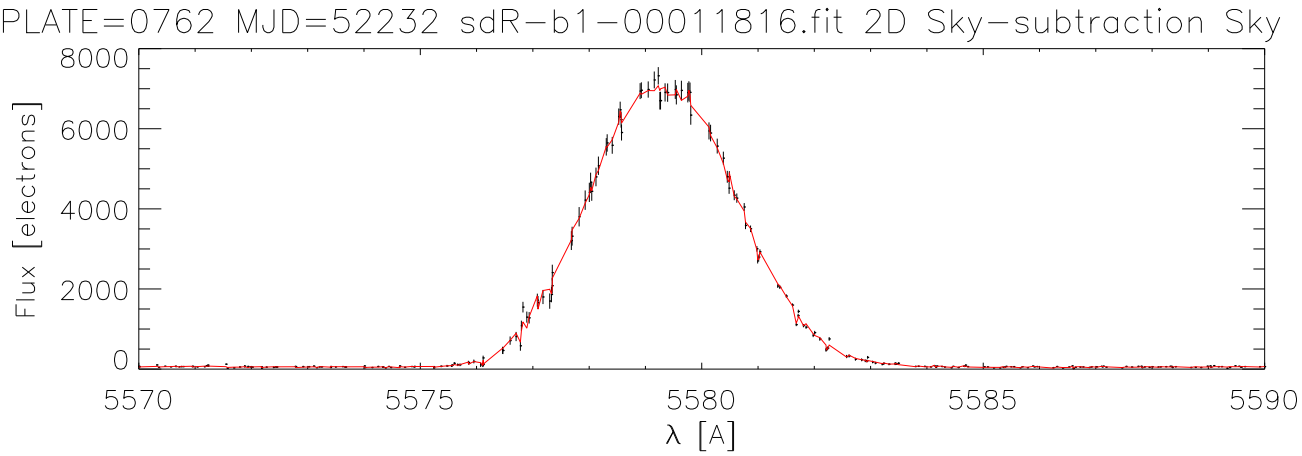

PLATE=0762 MJD=52232 sdR-b1-00011816.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

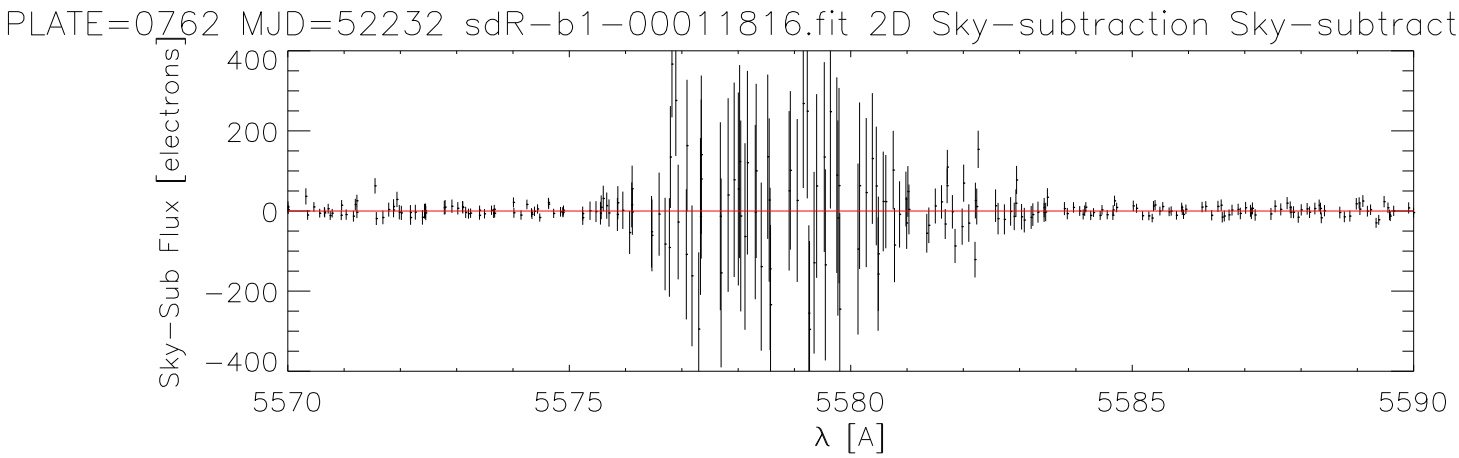

PLATE=0762 MJD=52232 sdR-b1-00011816.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

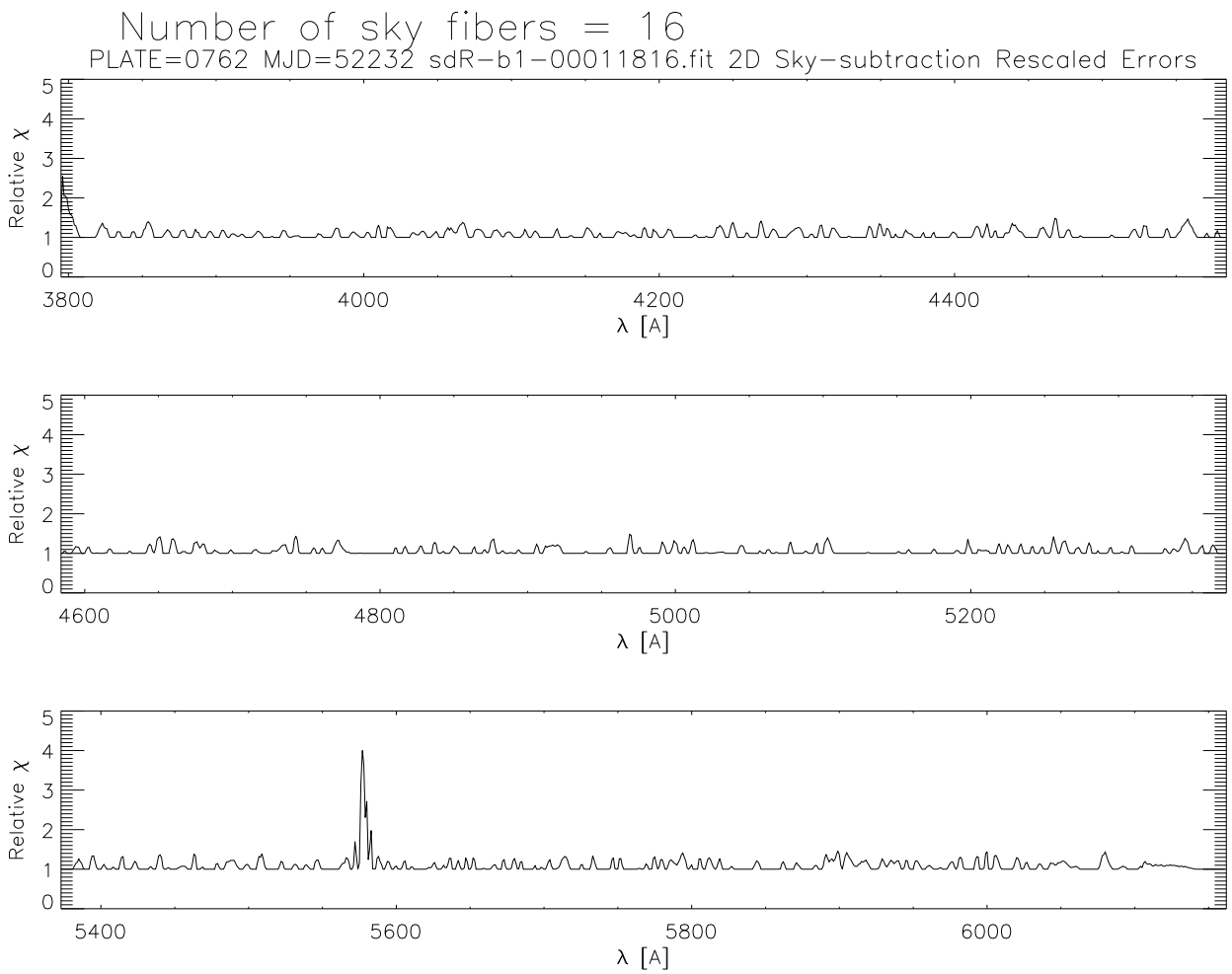

PLATE=0762 MJD=52232 sdR-b1-00011816.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

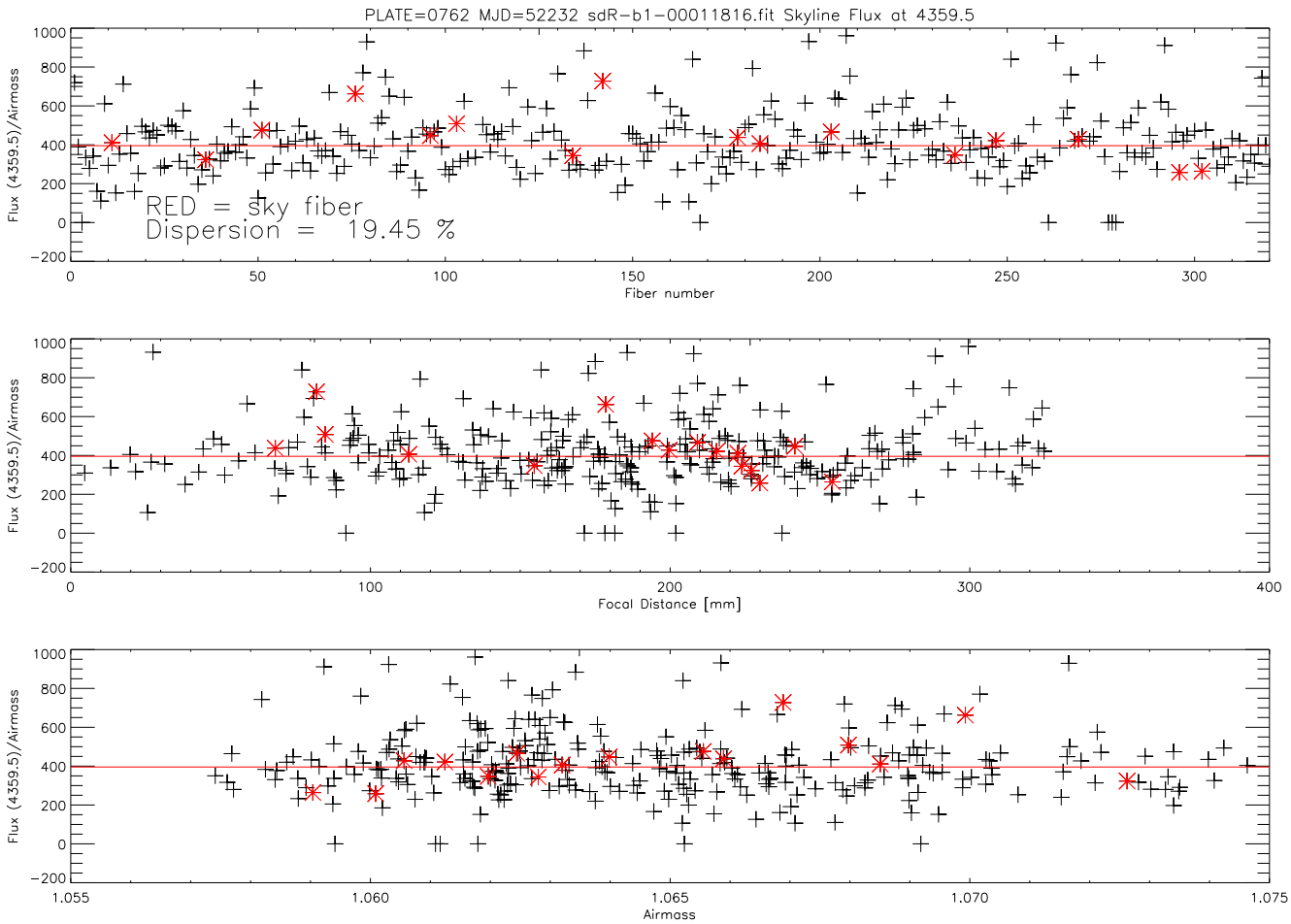

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b1-00011816.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

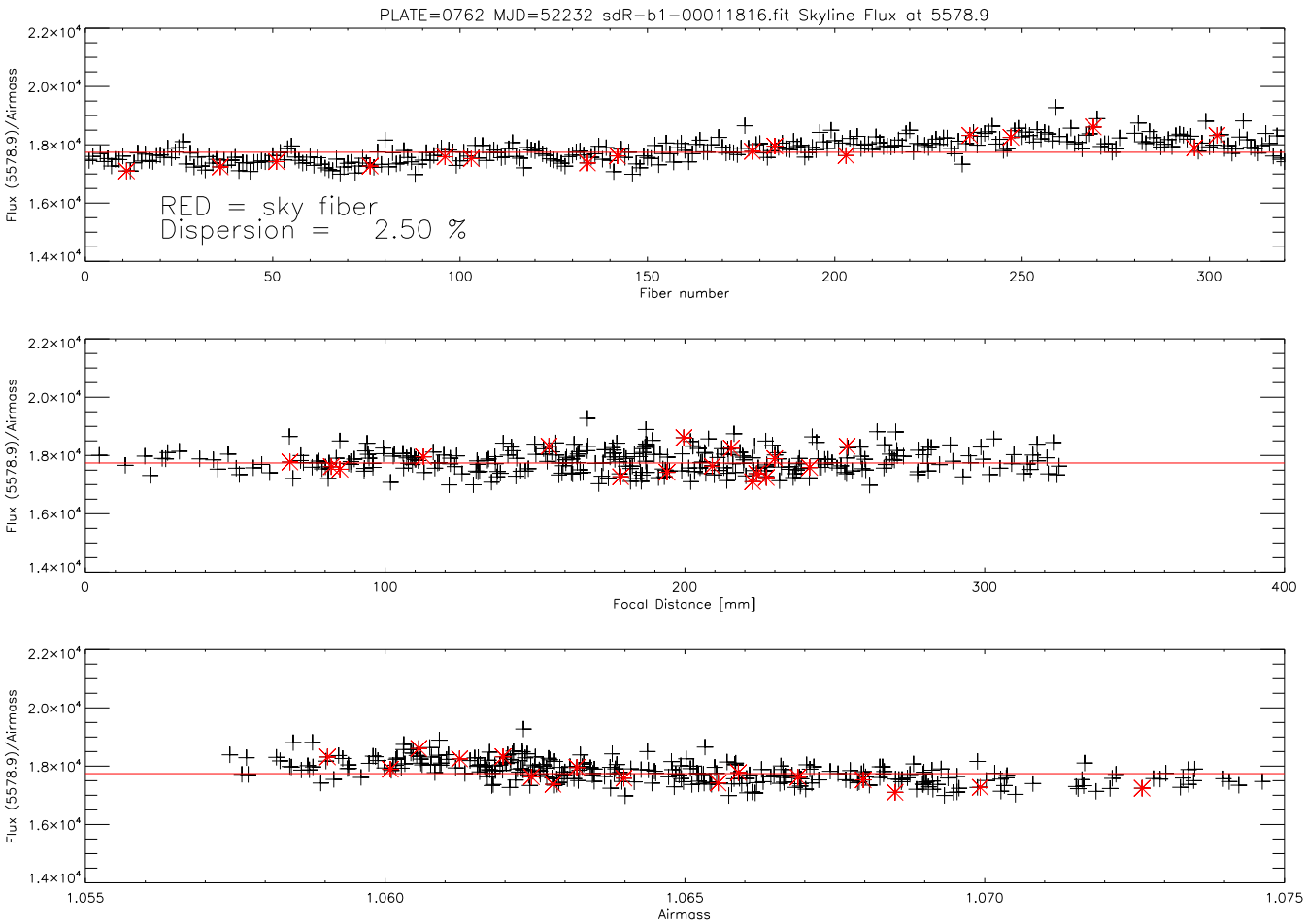

PLATE=0762 MJD=52232 sdR-b1-00011816.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

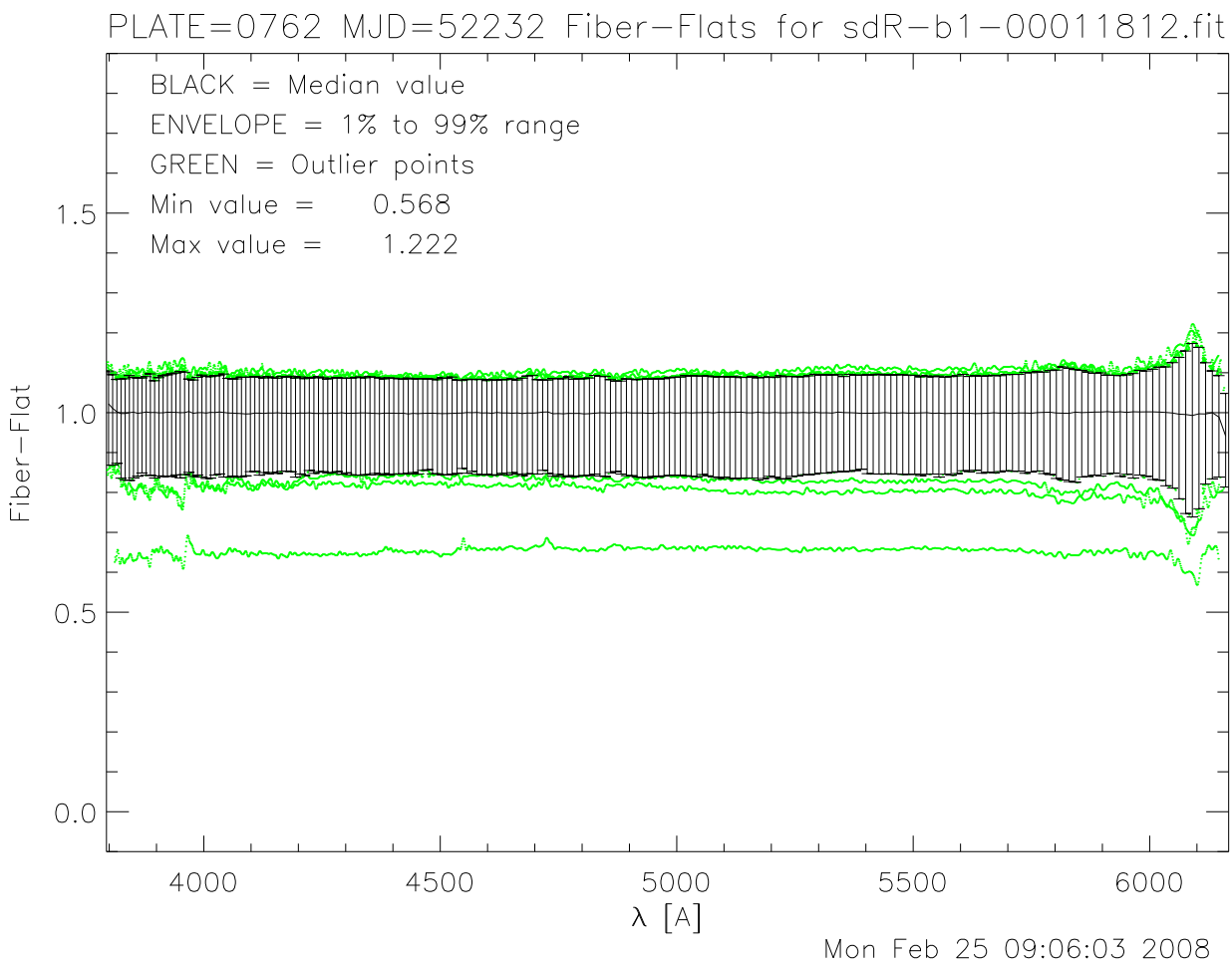

PLATE=0762 MJD=52232 sdR-b1-00011816.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

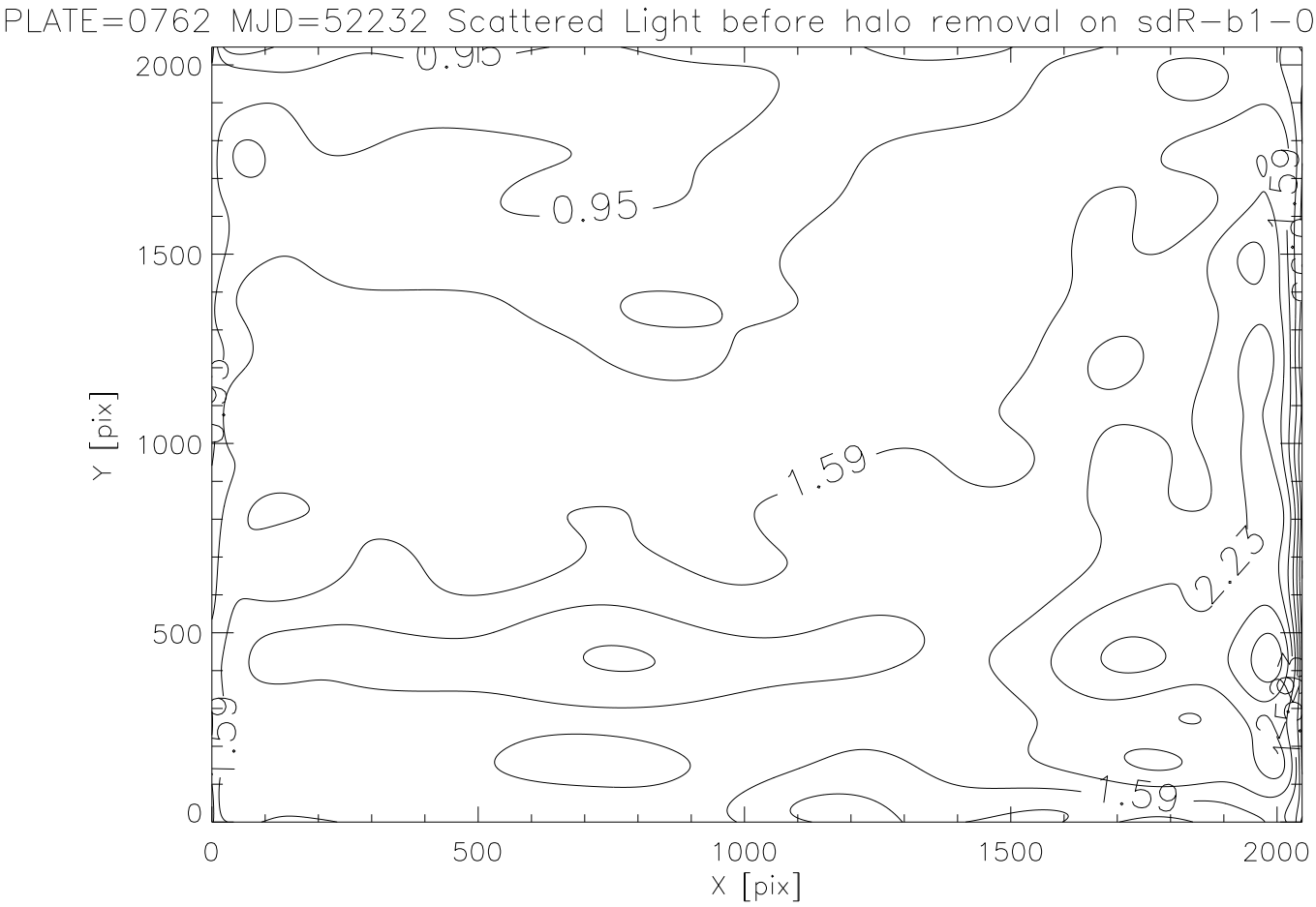

PLATE=0762 MJD=52232 sdR-b1-00011816.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

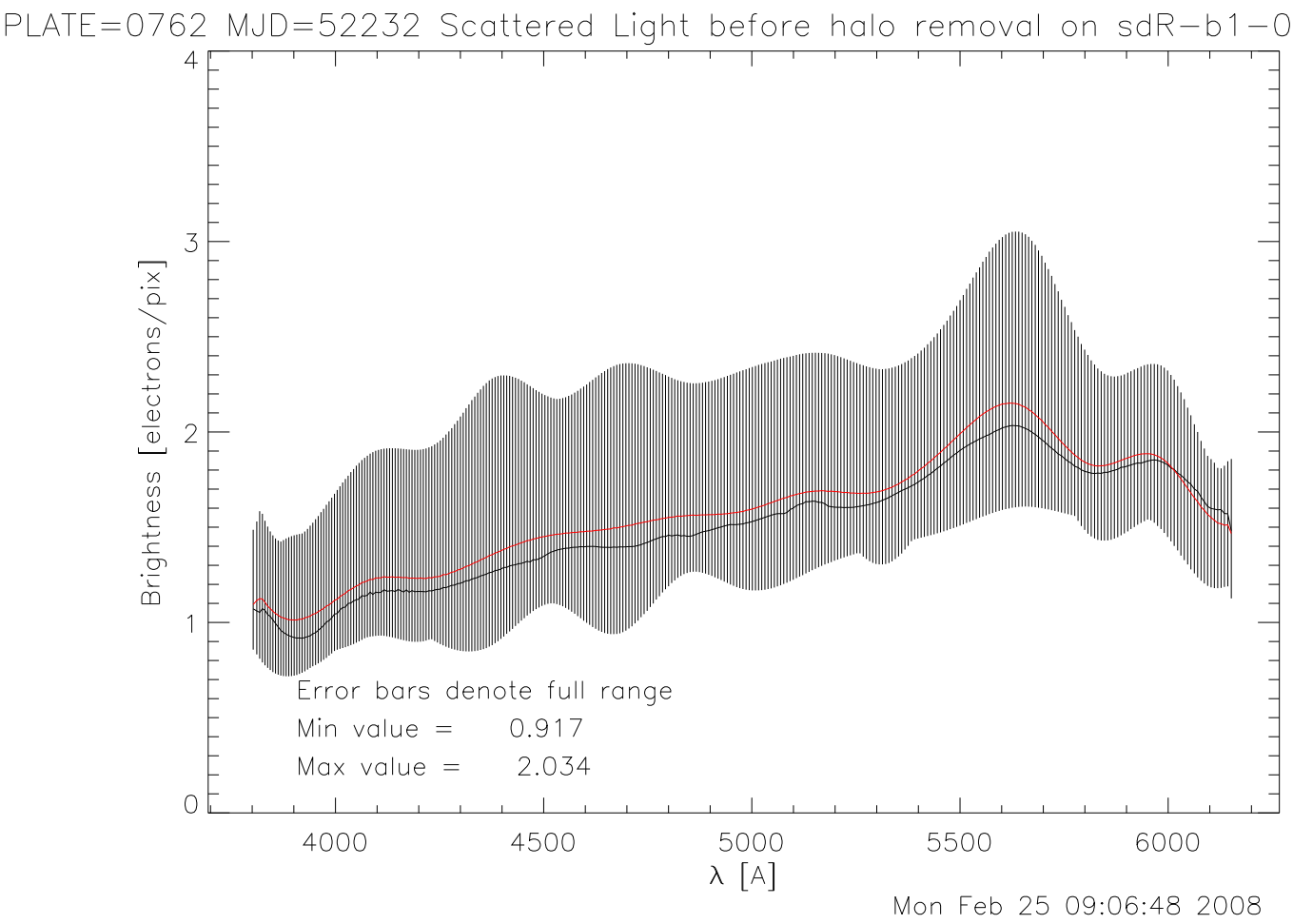

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b1-00011816.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

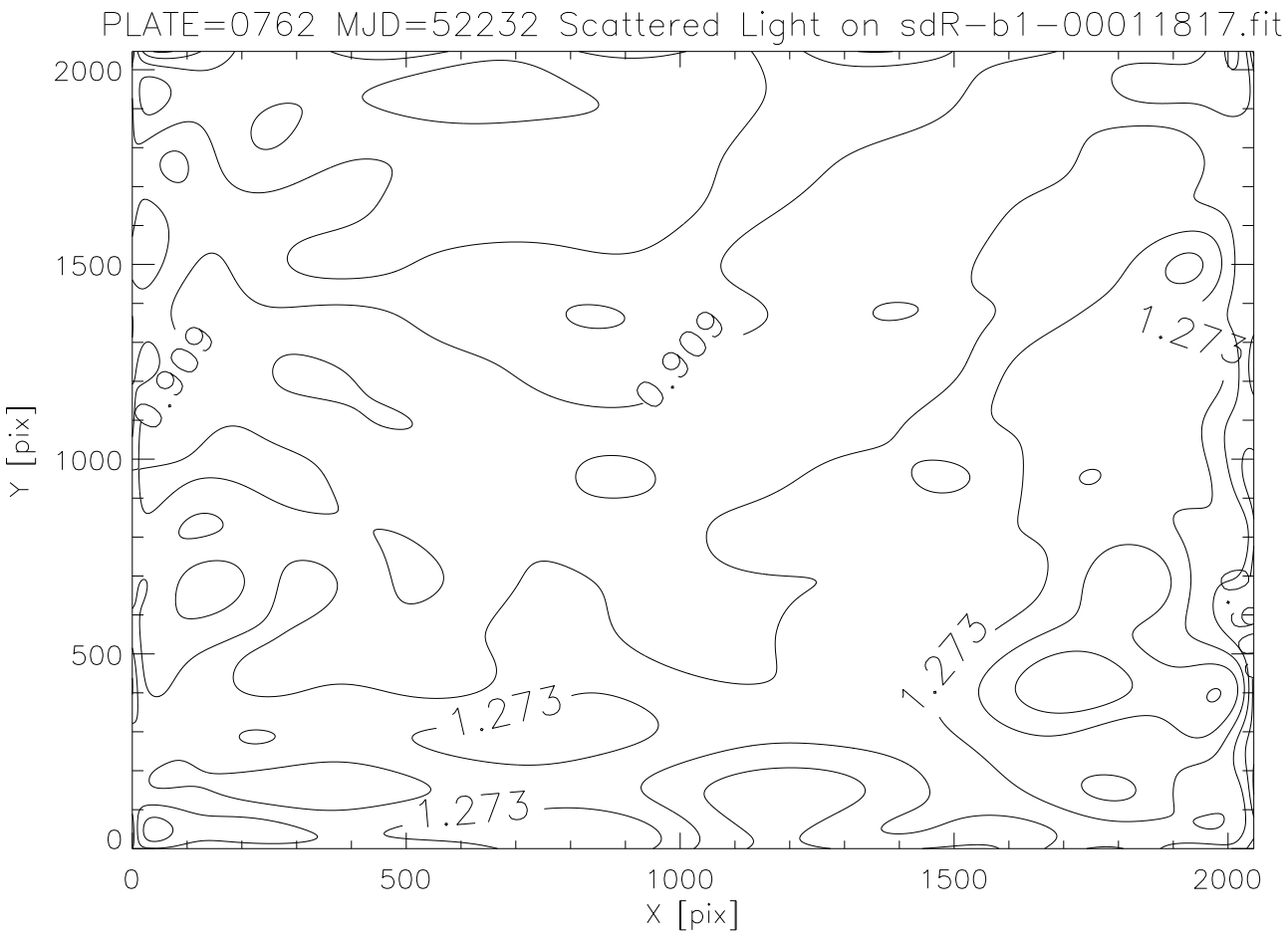

PLATE=0762 MJD=52232 sdR-b1-00011816.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 19.45 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

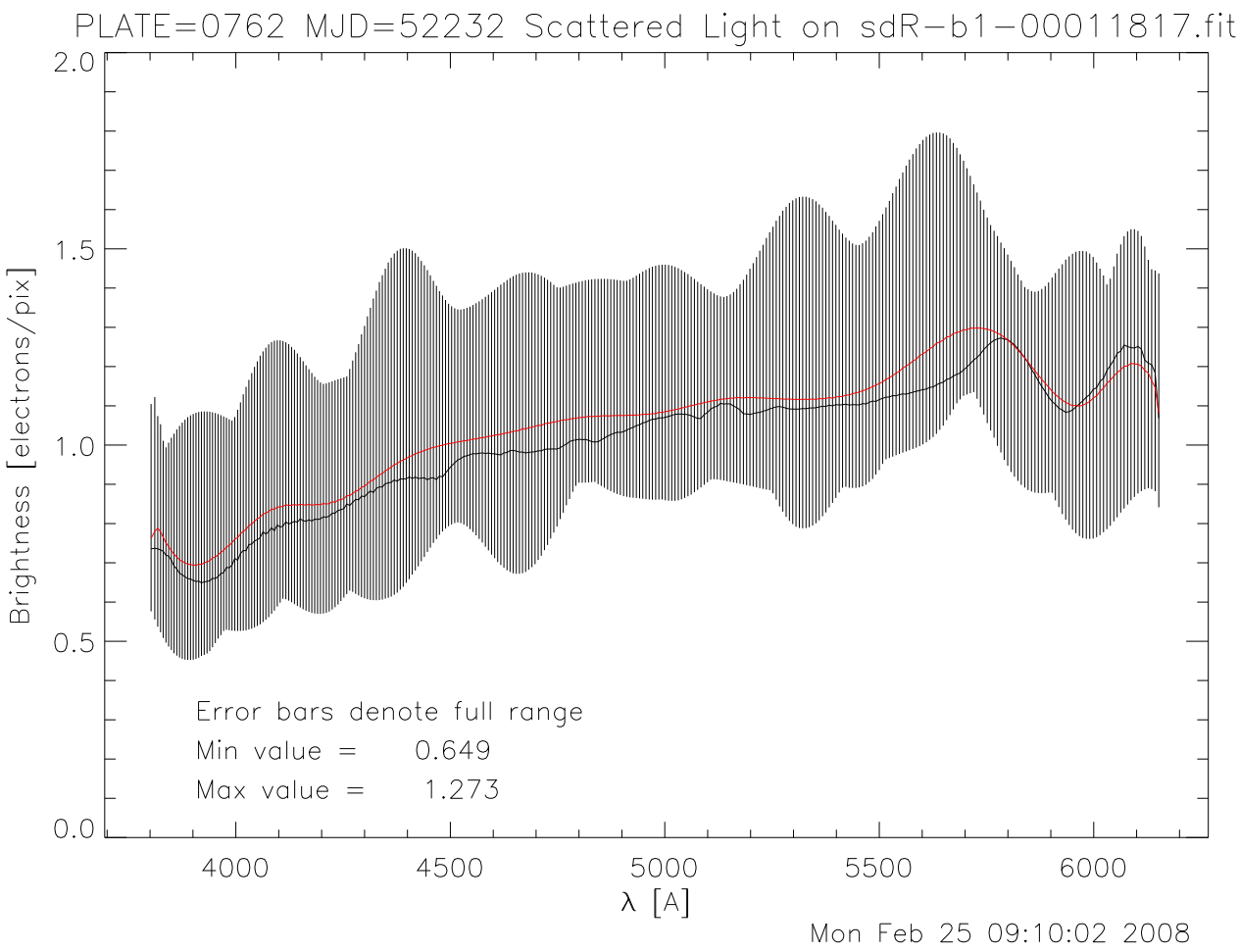

PLATE=0762 MJD=52232 sdR-b1-00011816.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.50 %
Fiber number
Focal Distance [mm]
Airmass

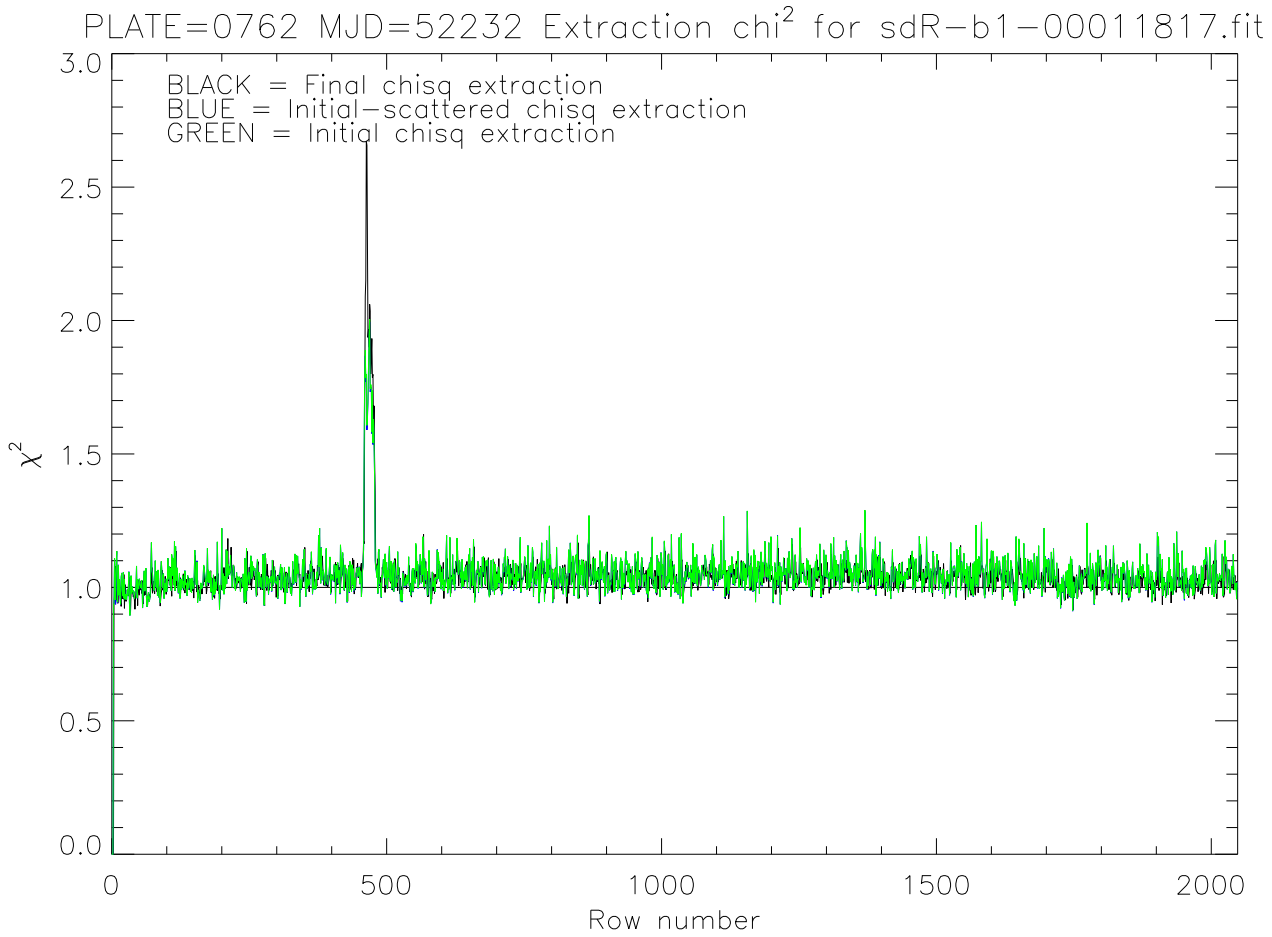

PLATE=0762 MJD=52232 Fiber−Flats for sdR−b1−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.568
Max value = 1.222
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:06:03 2008

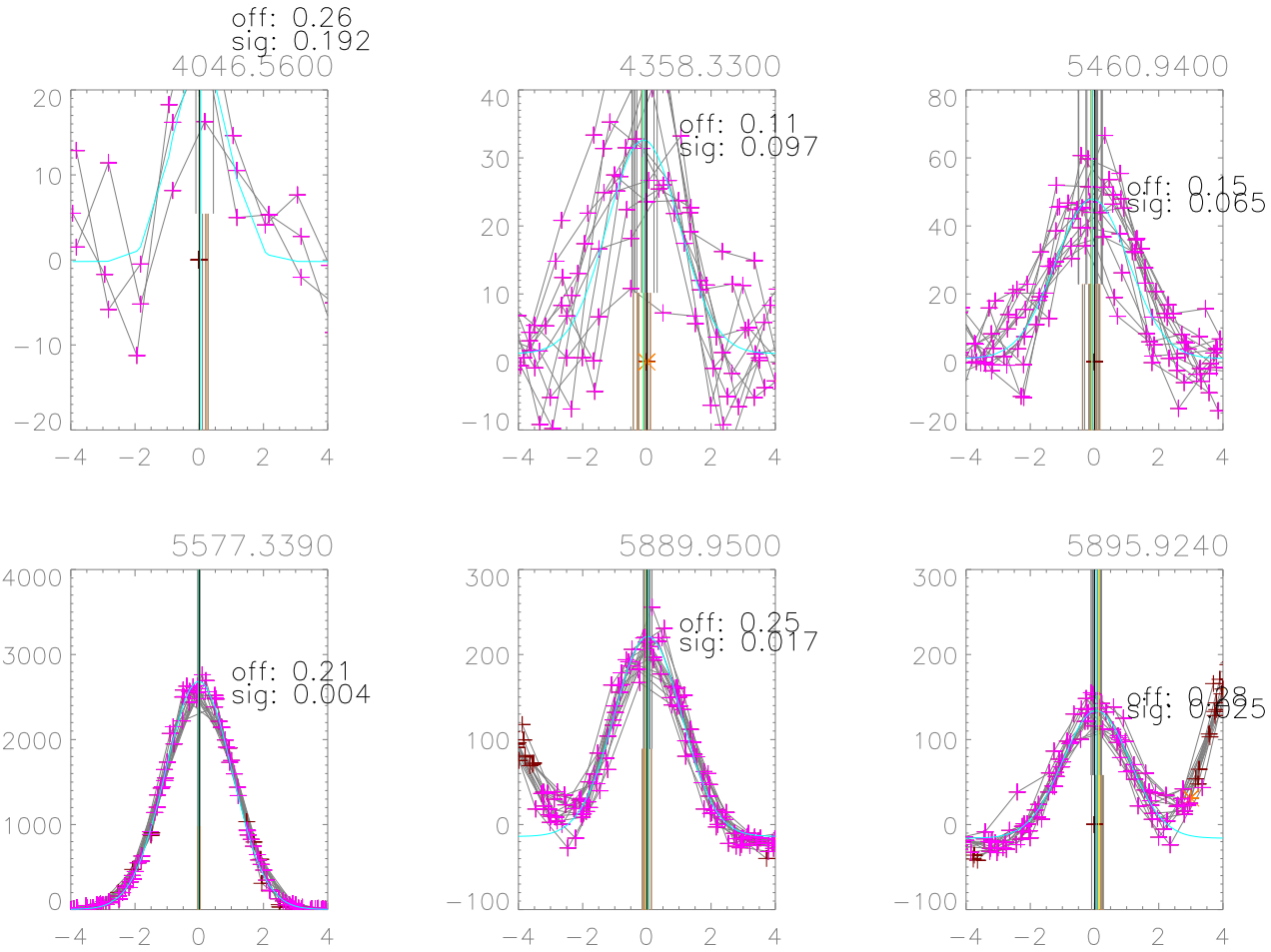

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR−b1−00011817.f
0.95
0.95
1.59
1.59
1.59
1.59
2.23
2.23
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

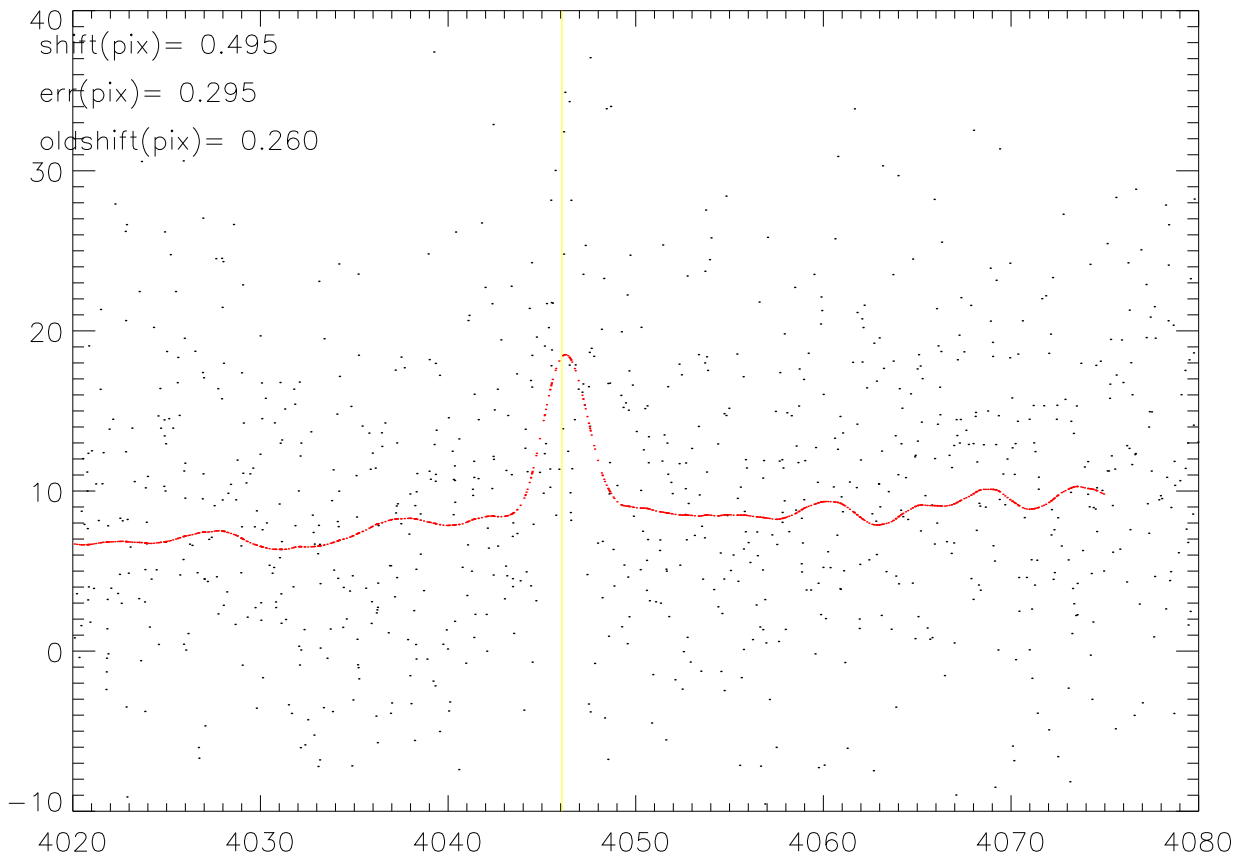

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b1-00011817.f
Brightness [electrons/pix]
0
1
2
3
4
Error bars denote full range
Min value = 0.917
Max value = 2.034
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:06:48 2008

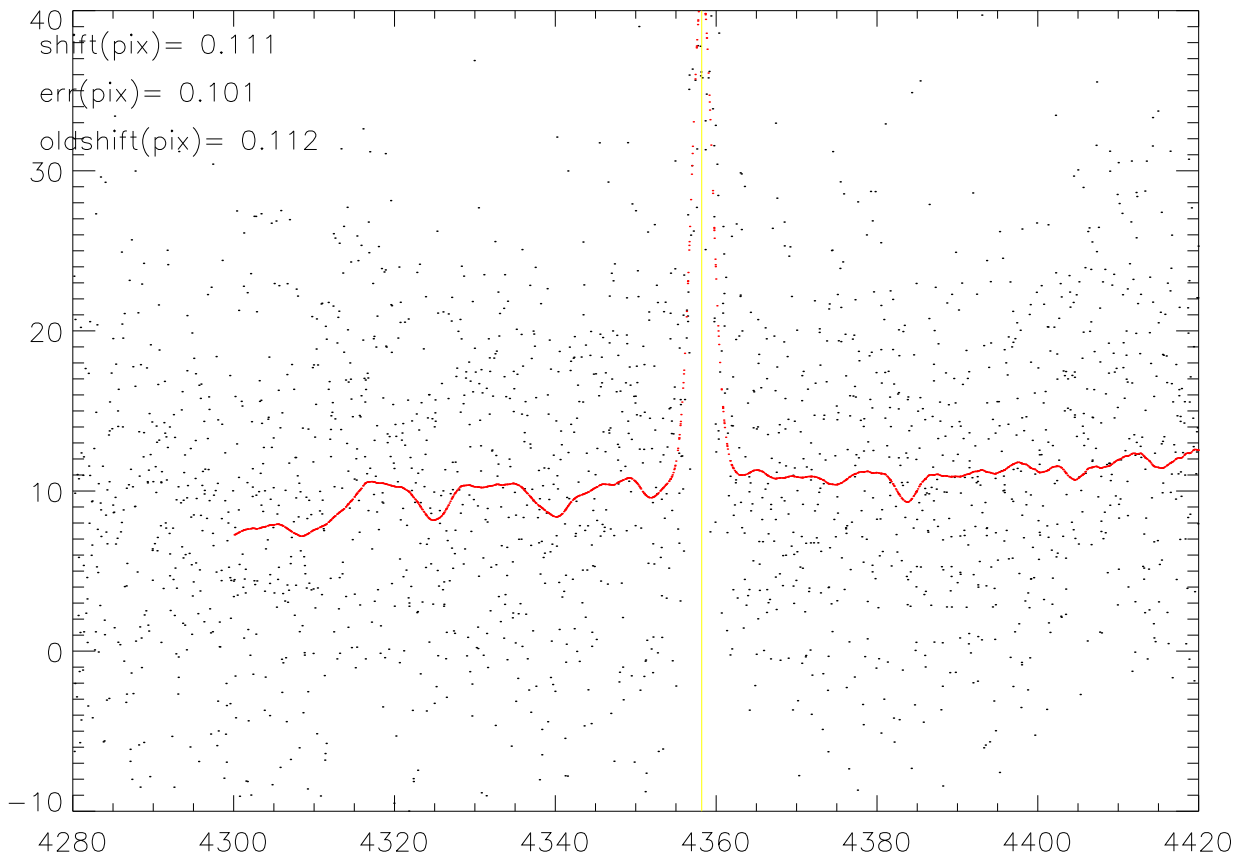

PLATE=0762 MJD=52232 Scattered Light on sdR-b1-00011817.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0.909
0.909
1.273
1.273
1.273
1.273

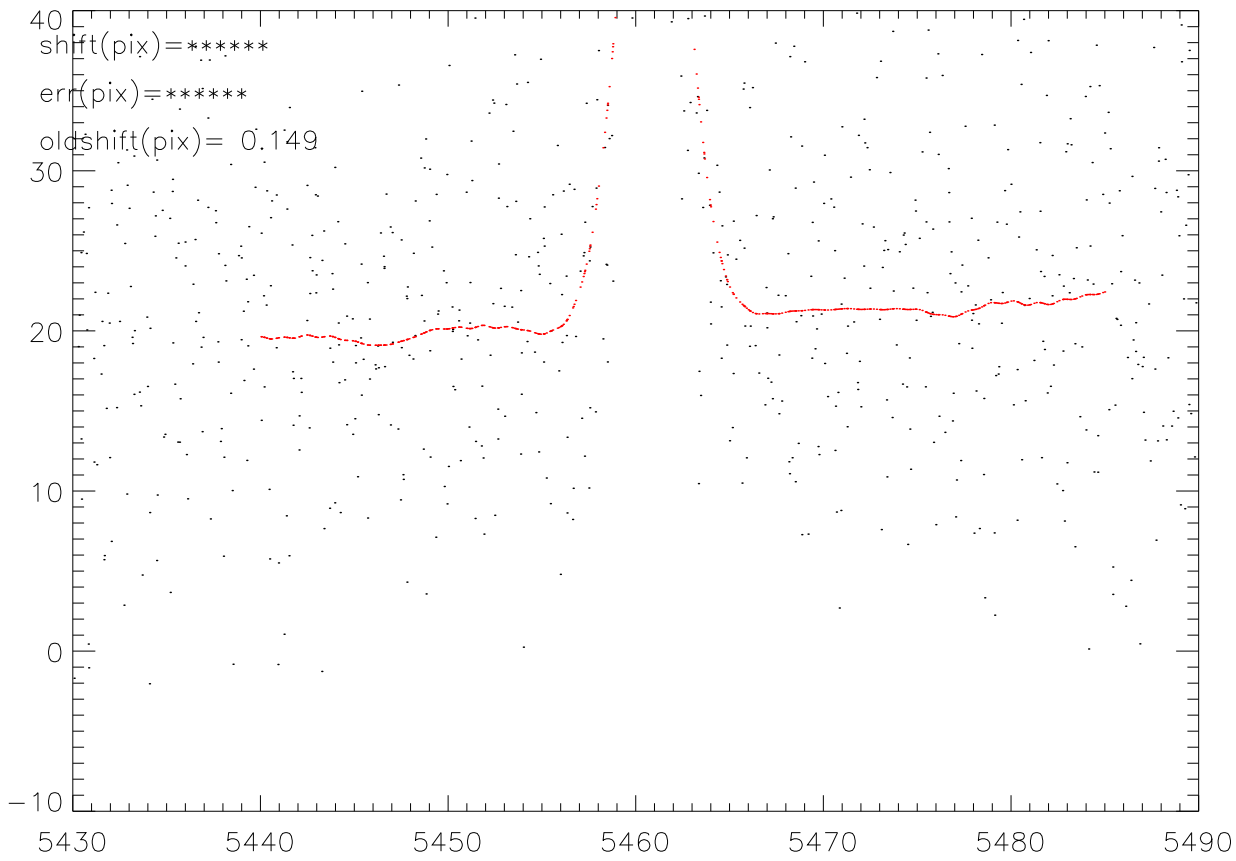

PLATE=0762 MJD=52232 Scattered Light on sdR-b1-00011817.fit
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.649
Max value = 1.273
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:10:02 2008

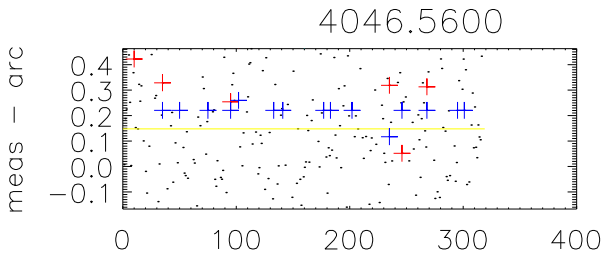

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-b1-00011817.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

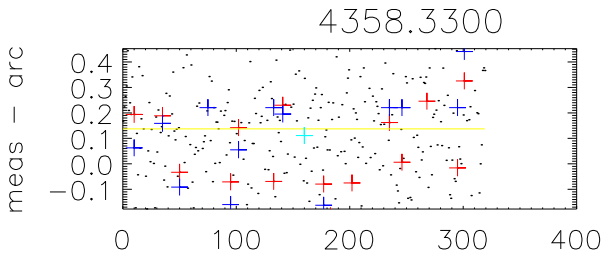

4046.5600
off: 0.26
sig: 0.192
4358.3300
off: 0.11
sig: 0.097
5460.9400
off: 0.15
sig: 0.065
5577.3390
off: 0.21
sig: 0.004
5889.9500
off: 0.25
sig: 0.017
5895.9240

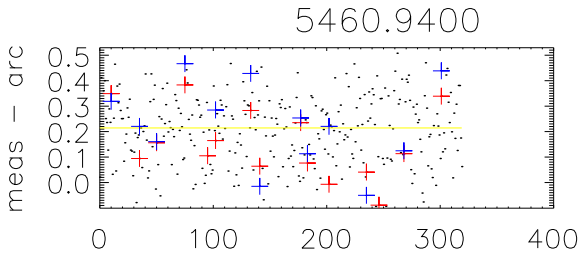

shift(pix)= 0.495
err(pix)= 0.295
oldshift(pix)= 0.260
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

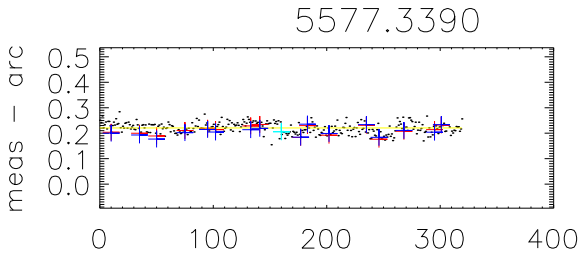

shift(pix)= 0.111
err(pix)= 0.101
oldshift(pix)= 0.112
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

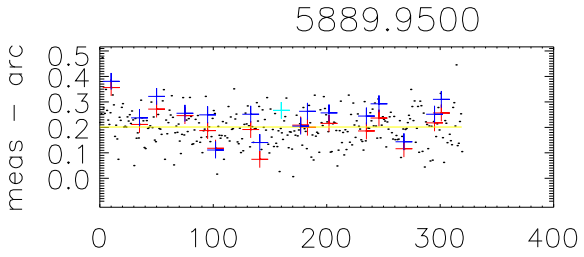

shift(pix)=******
err(pix)=******
oldshift(pix)= 0.149
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

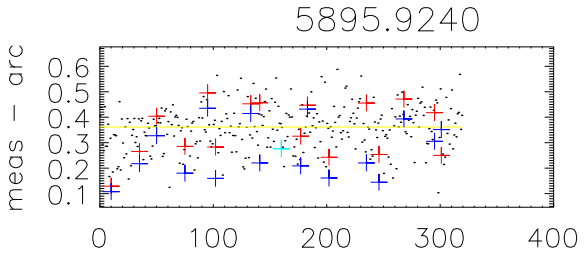

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

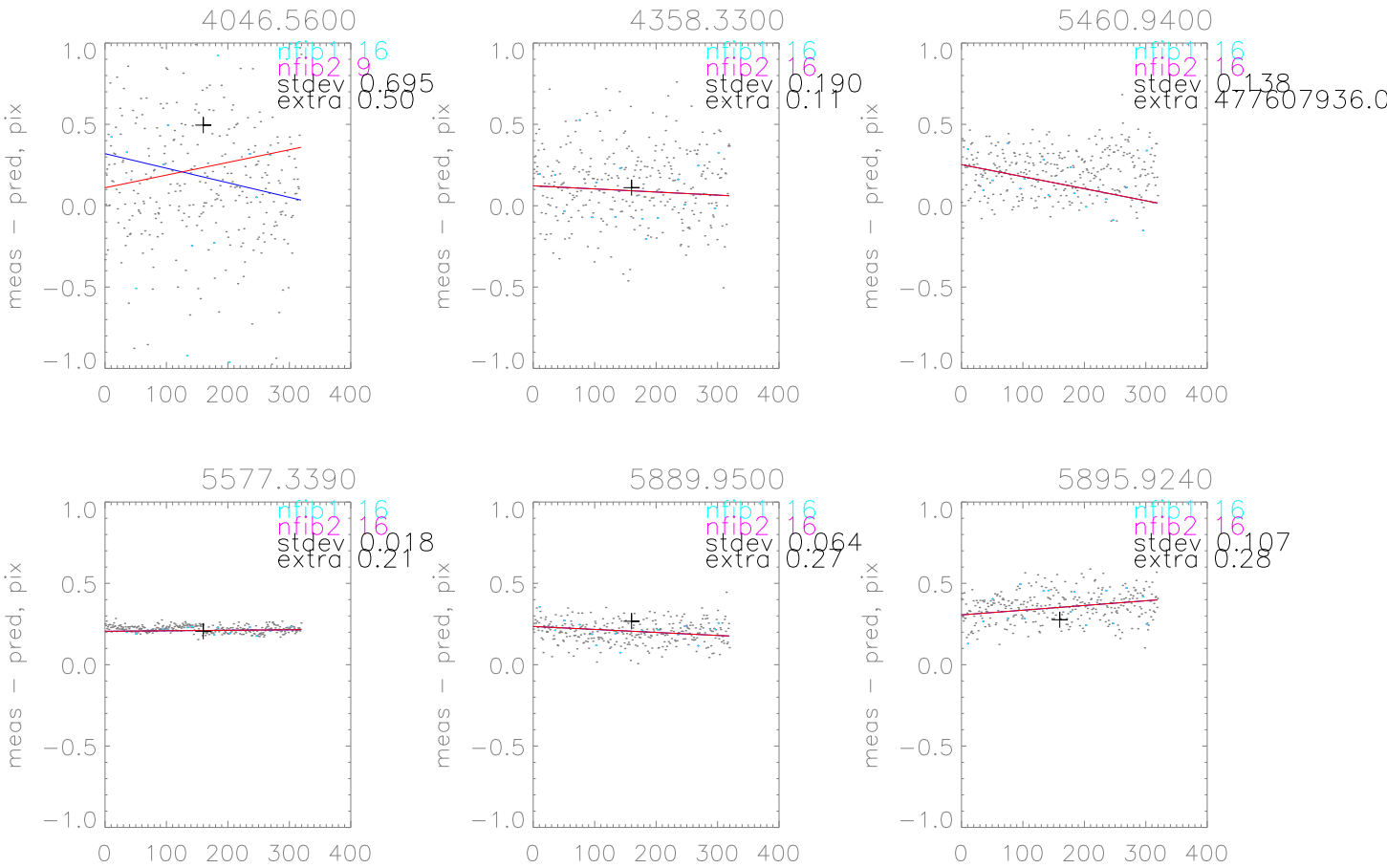

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

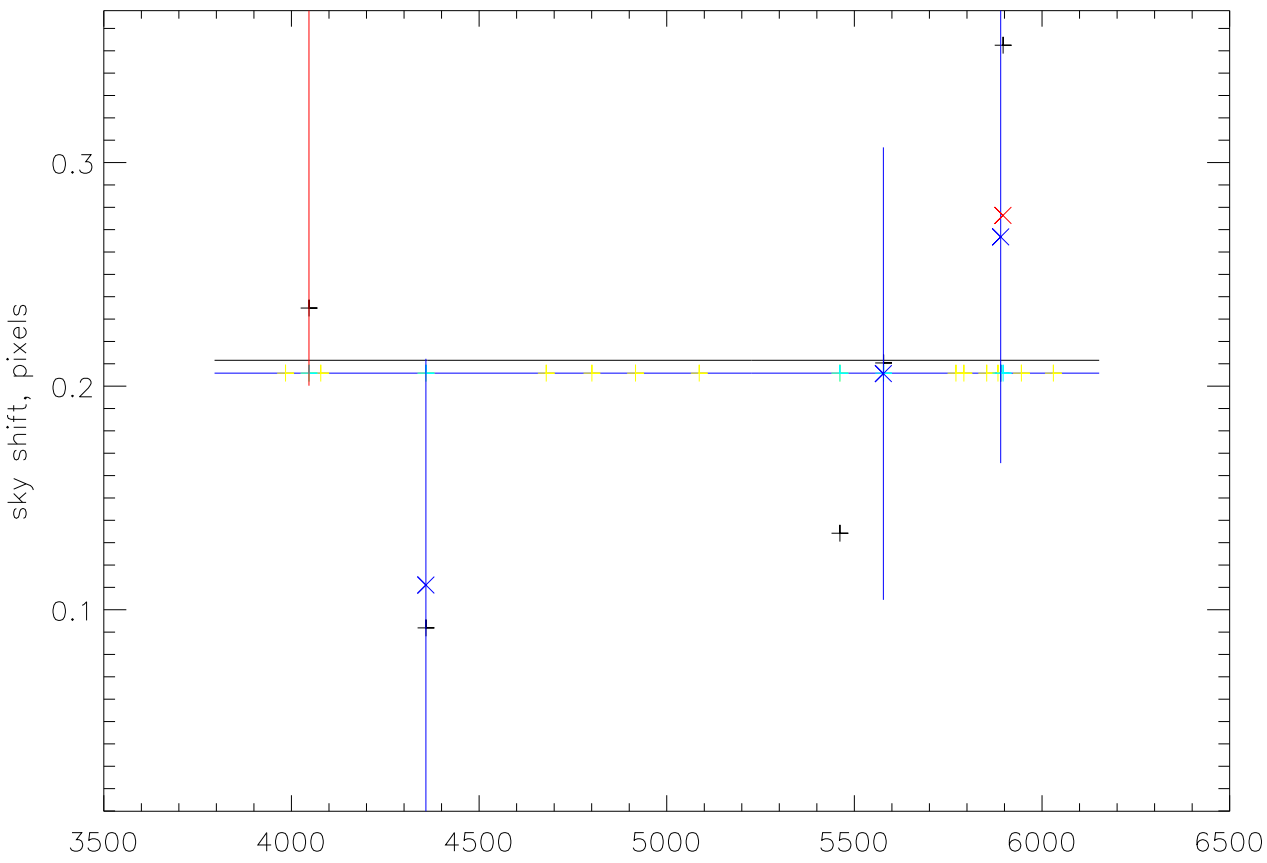

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

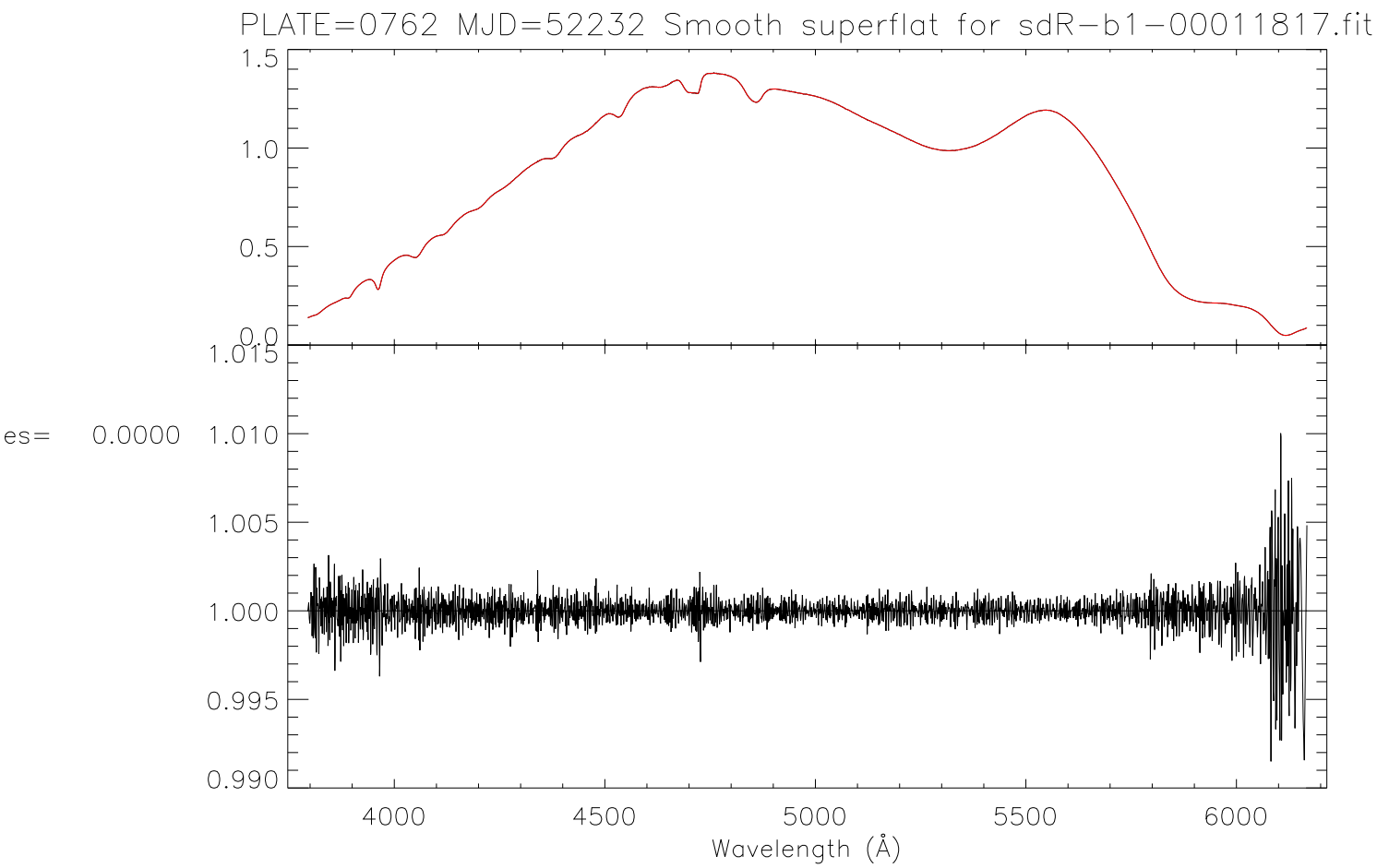

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

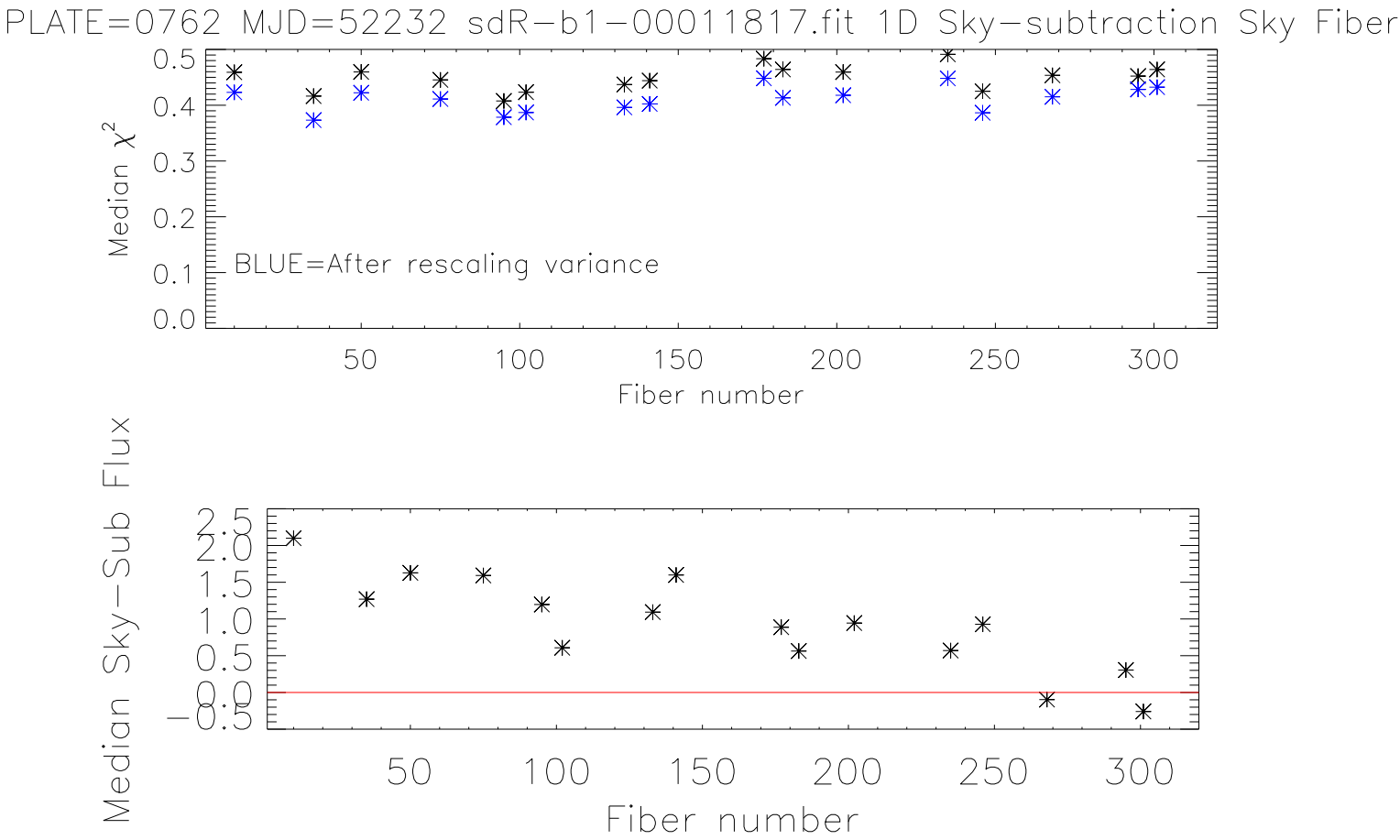

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

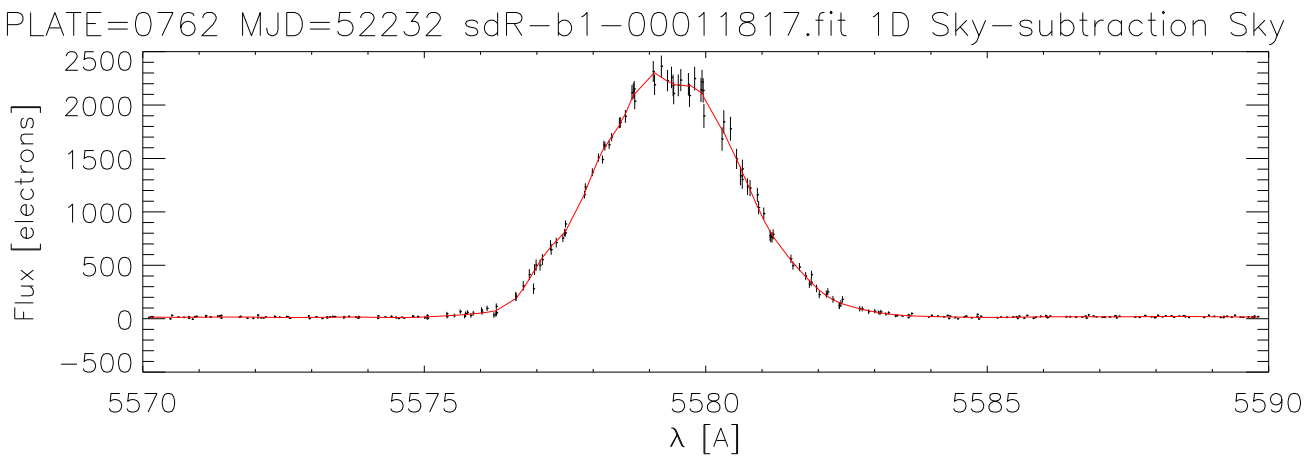

4046.5600
nfib1 16
nfib2 9
stdev 0.695
extra 0.50
4358.3300
nfib1 16
nfib2 16
stdev 0.190
extra 0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.138
extra 477607936.0
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra 0.21
5889.9500
nfib1 16
nfib2 16
stdev 0.064
extra 0.27
5895.9240
nfib1 16
nfib2 16
stdev 0.107
extra 0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

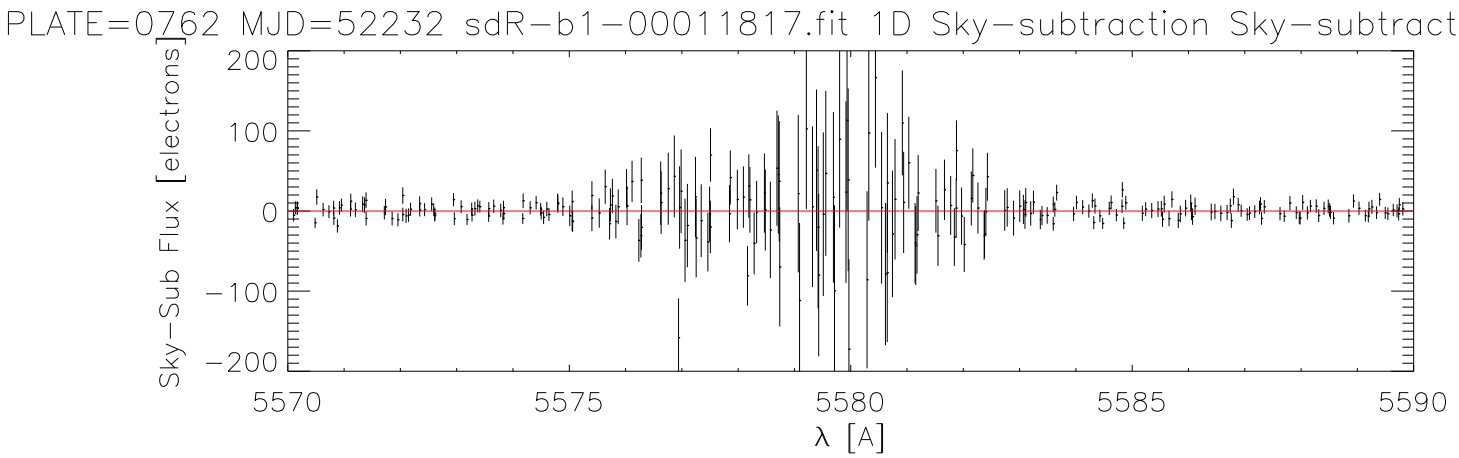

sky shift, pixels
0.3
0.2
0.1
3500
4000
4500
5000
5500
6000
6500

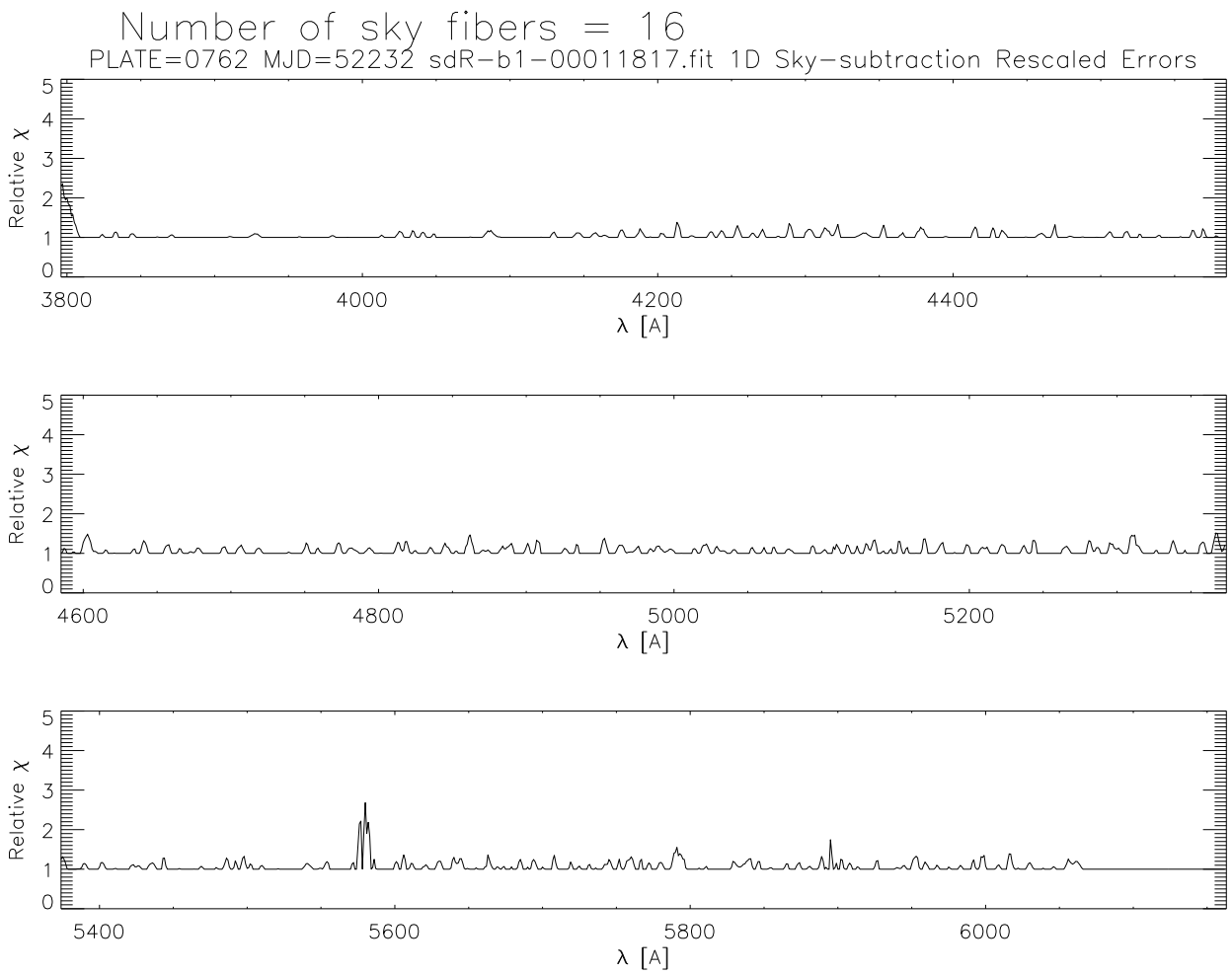

PLATE=0762 MJD=52232 Smooth superflat for sdR-b1-00011817.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

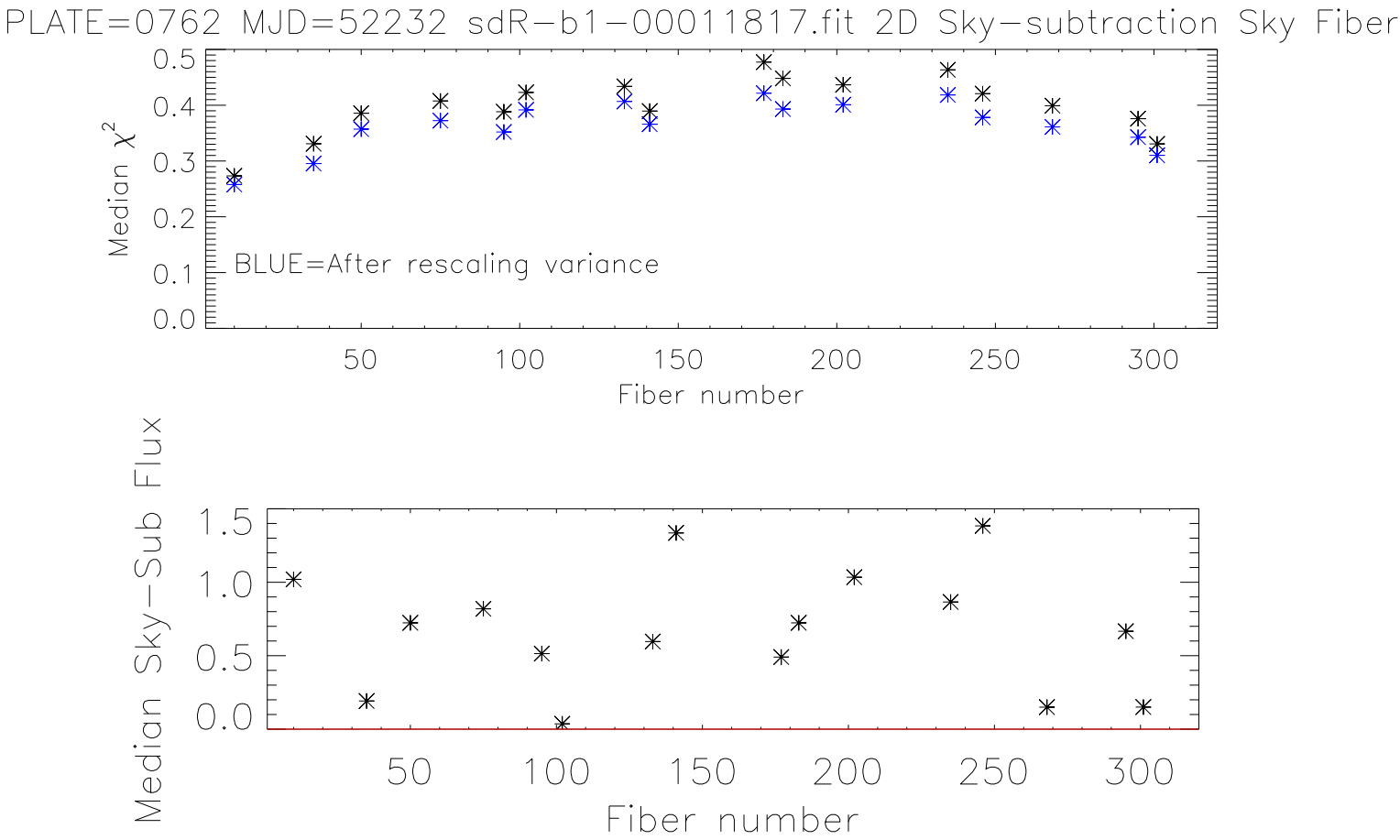
es= 0.0000

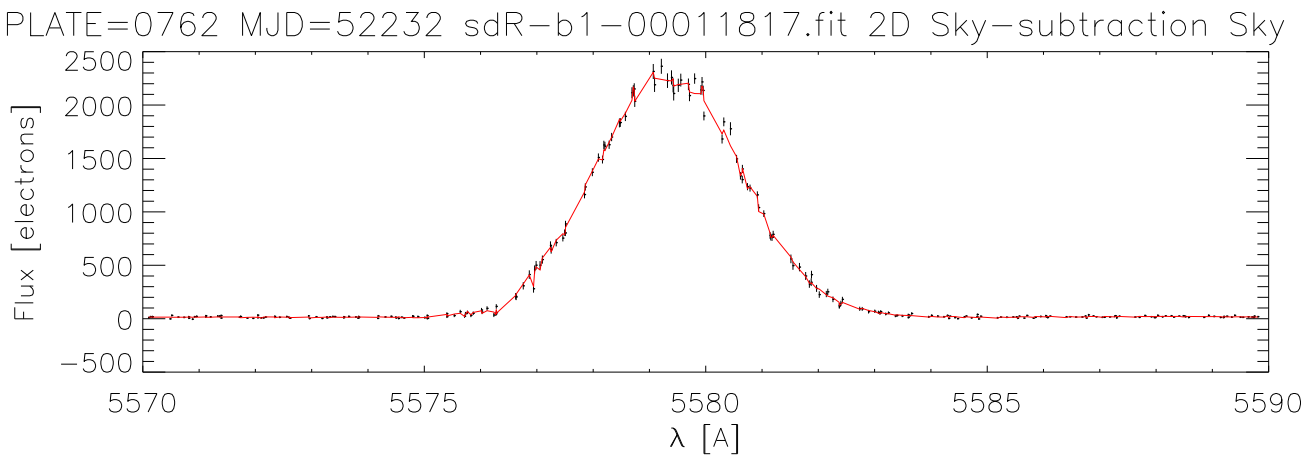

PLATE=0762 MJD=52232 sdR-b1-00011817.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

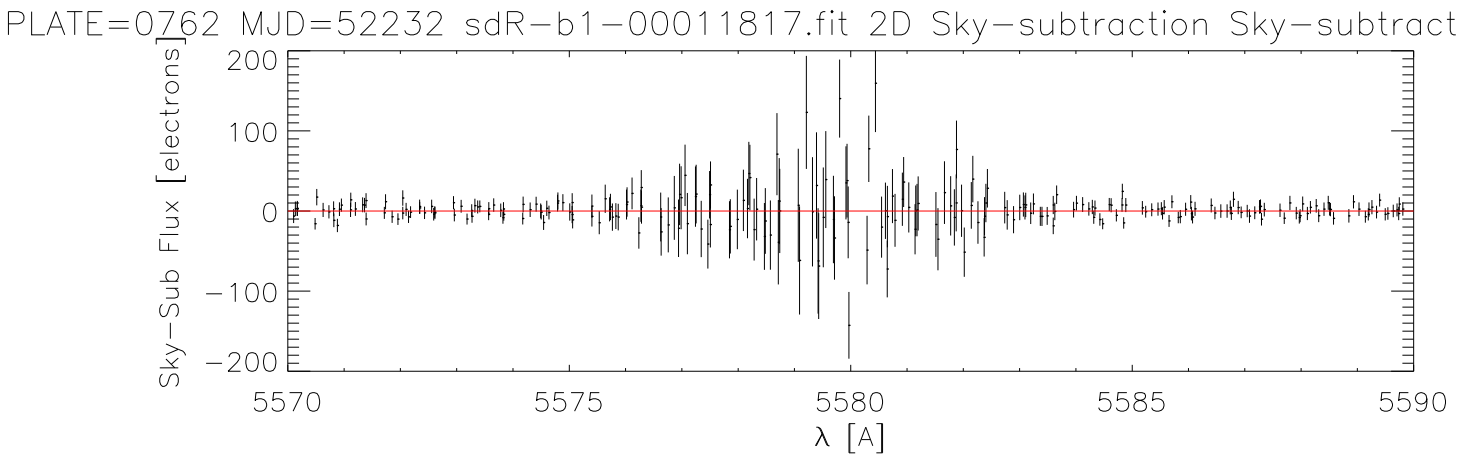

PLATE=0762 MJD=52232 sdR-b1-00011817.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

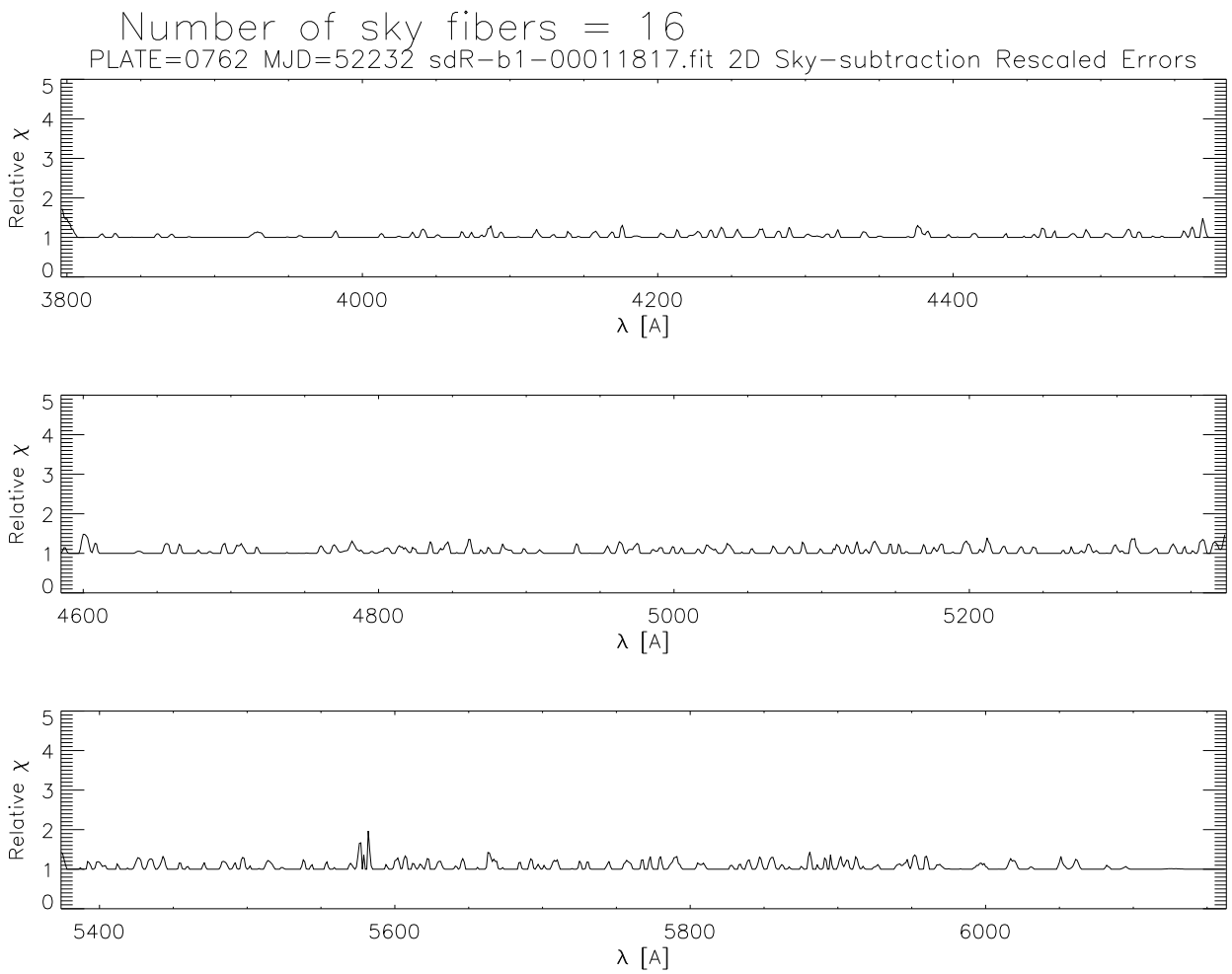

PLATE=0762 MJD=52232 sdR-b1-00011817.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

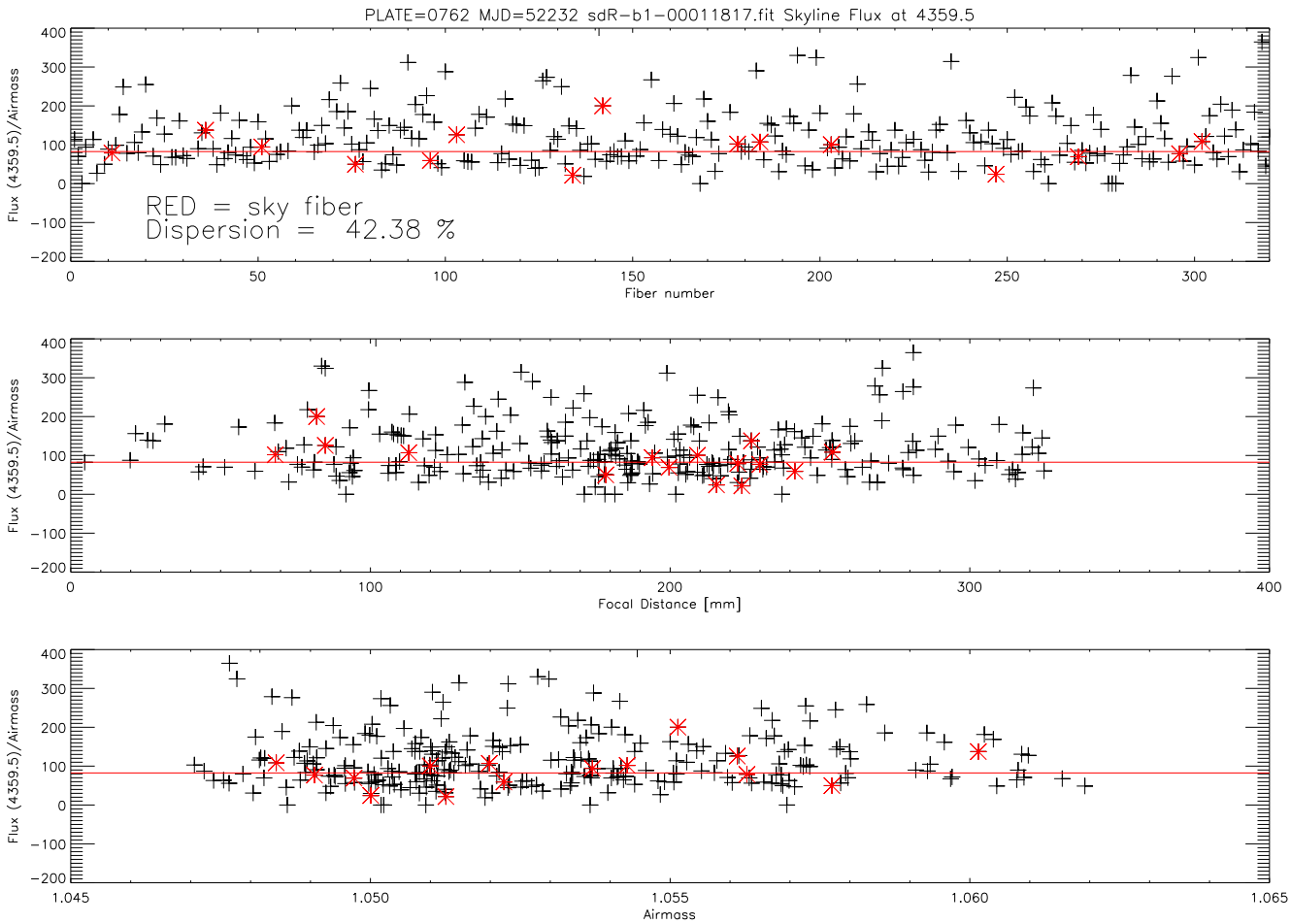

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b1-00011817.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

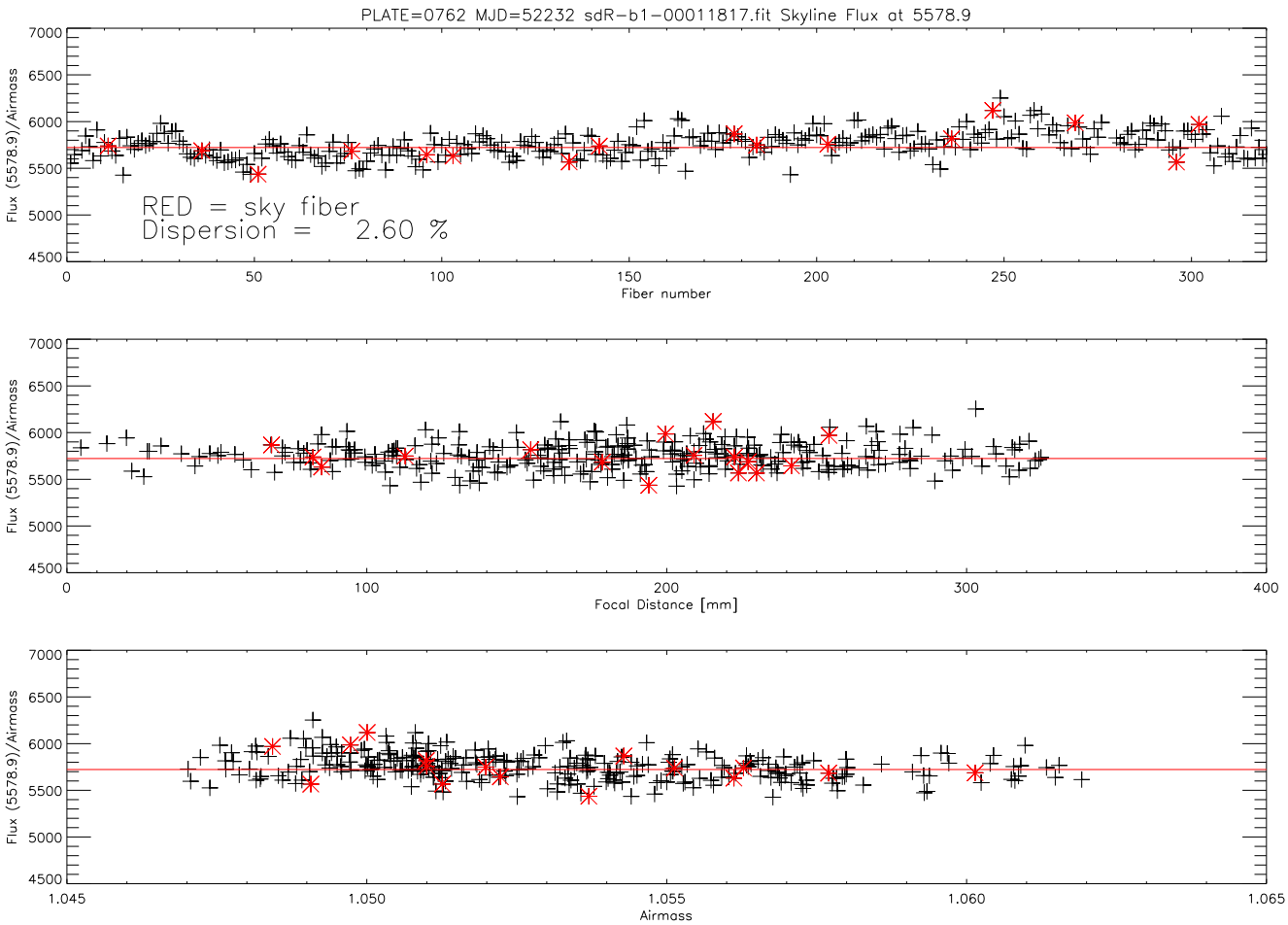

PLATE=0762 MJD=52232 sdR-b1-00011817.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

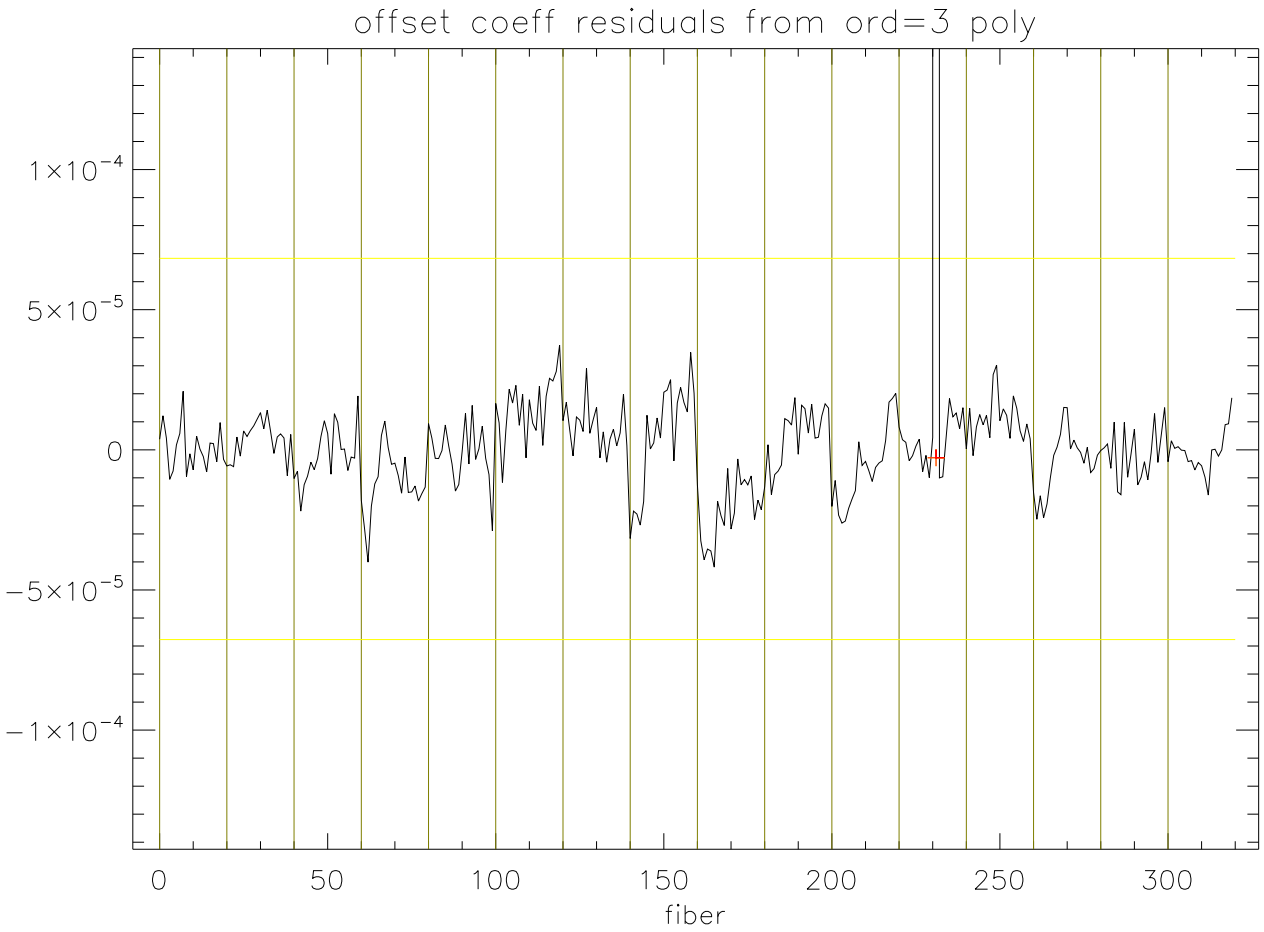

PLATE=0762 MJD=52232 sdR-b1-00011817.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

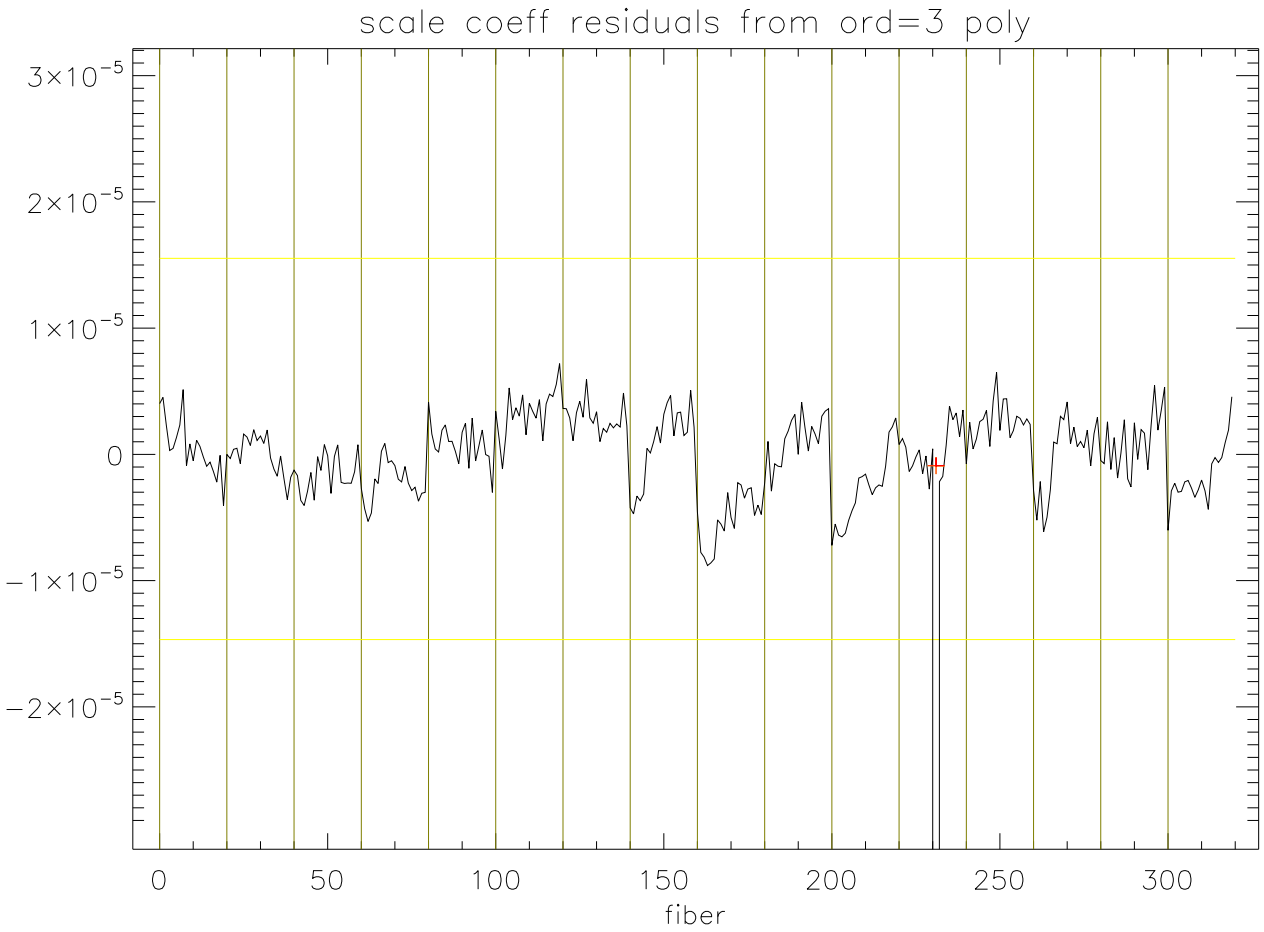

PLATE=0762 MJD=52232 sdR-b1-00011817.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

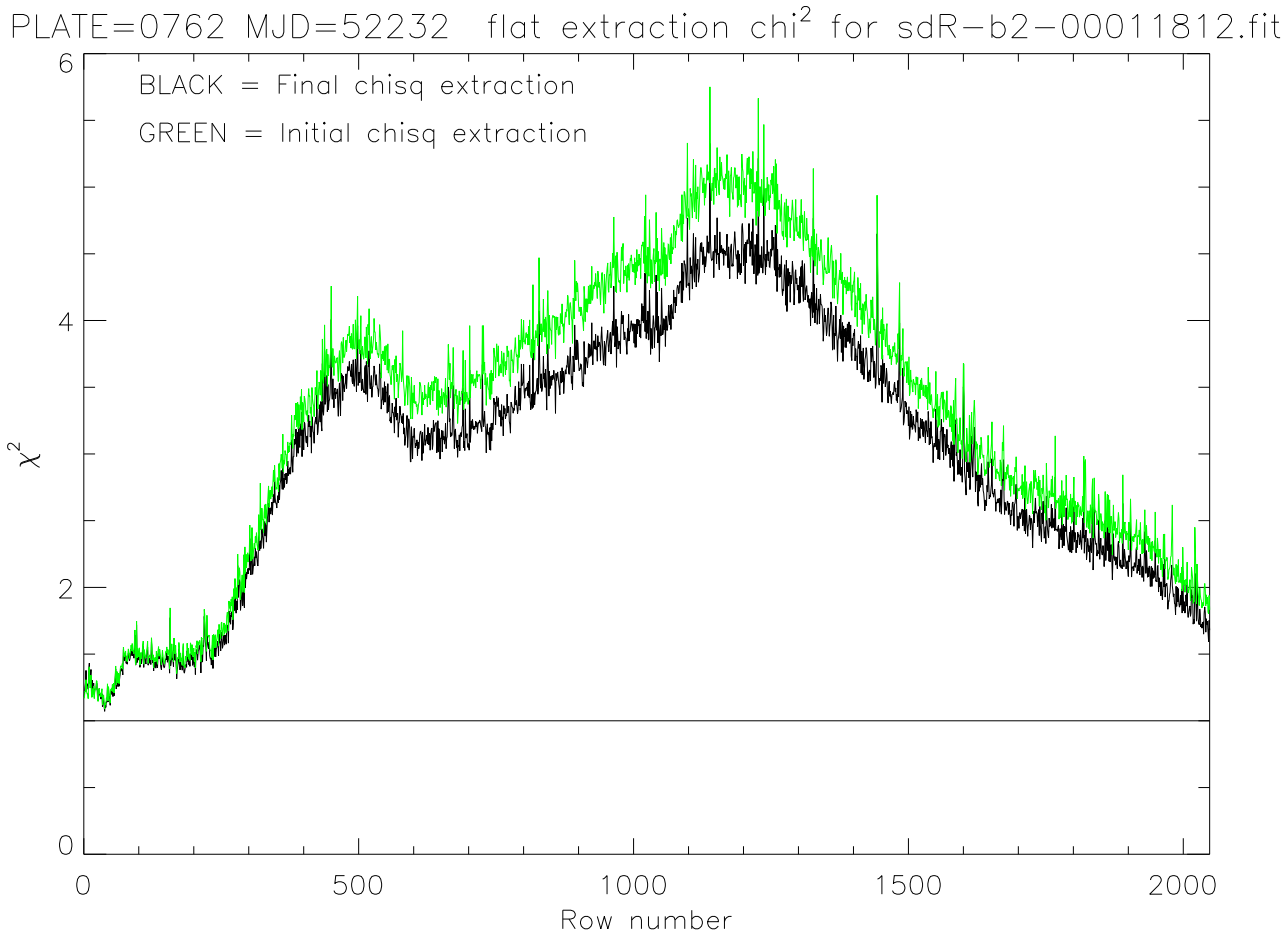

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b1-00011817.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

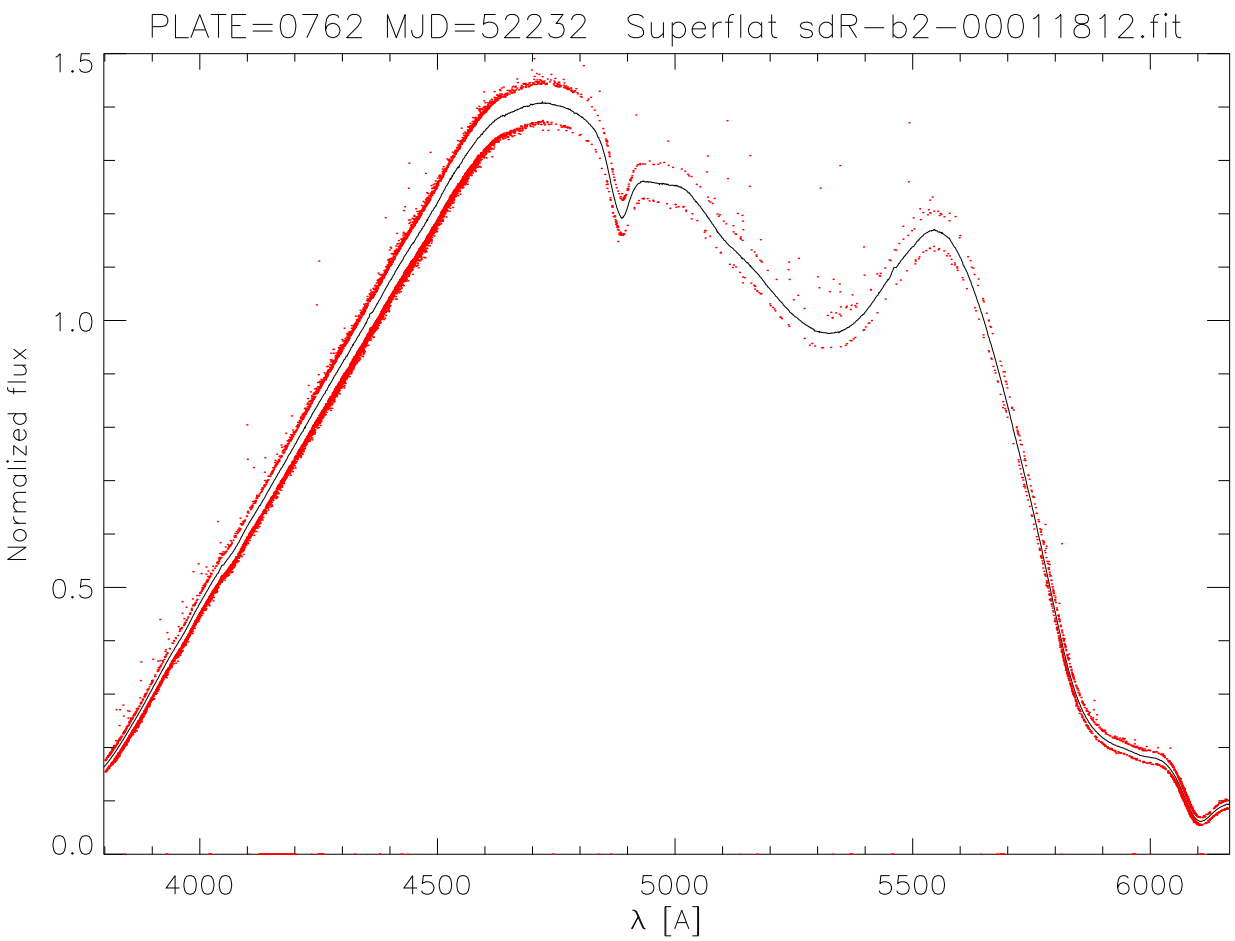

PLATE=0762 MJD=52232 sdR-b1-00011817.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 42.38 %
Fiber number
Focal Distance [mm]
Airmass

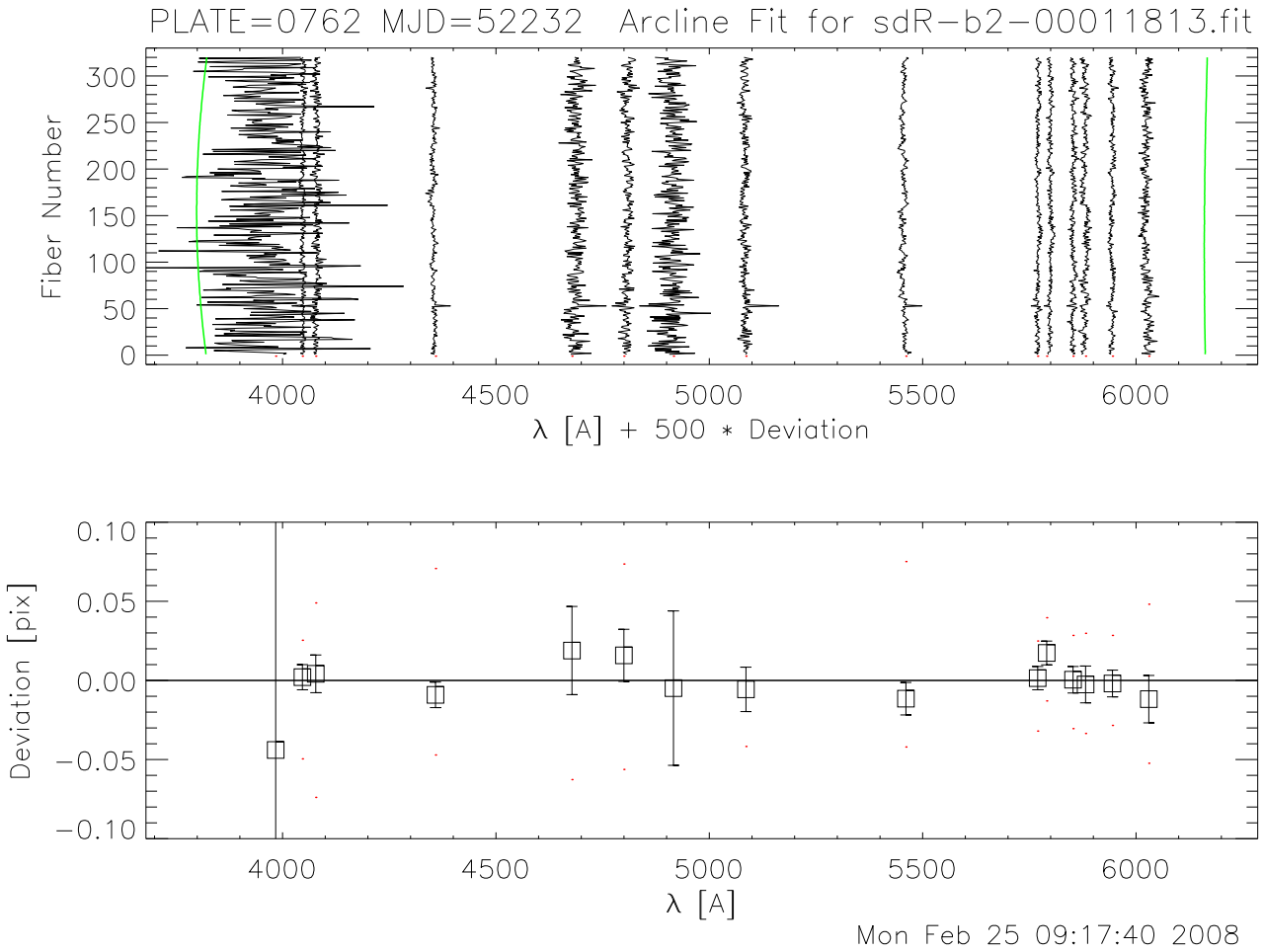

PLATE=0762 MJD=52232 sdR-b1-00011817.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.60 %
Fiber number
Focal Distance [mm]
Airmass

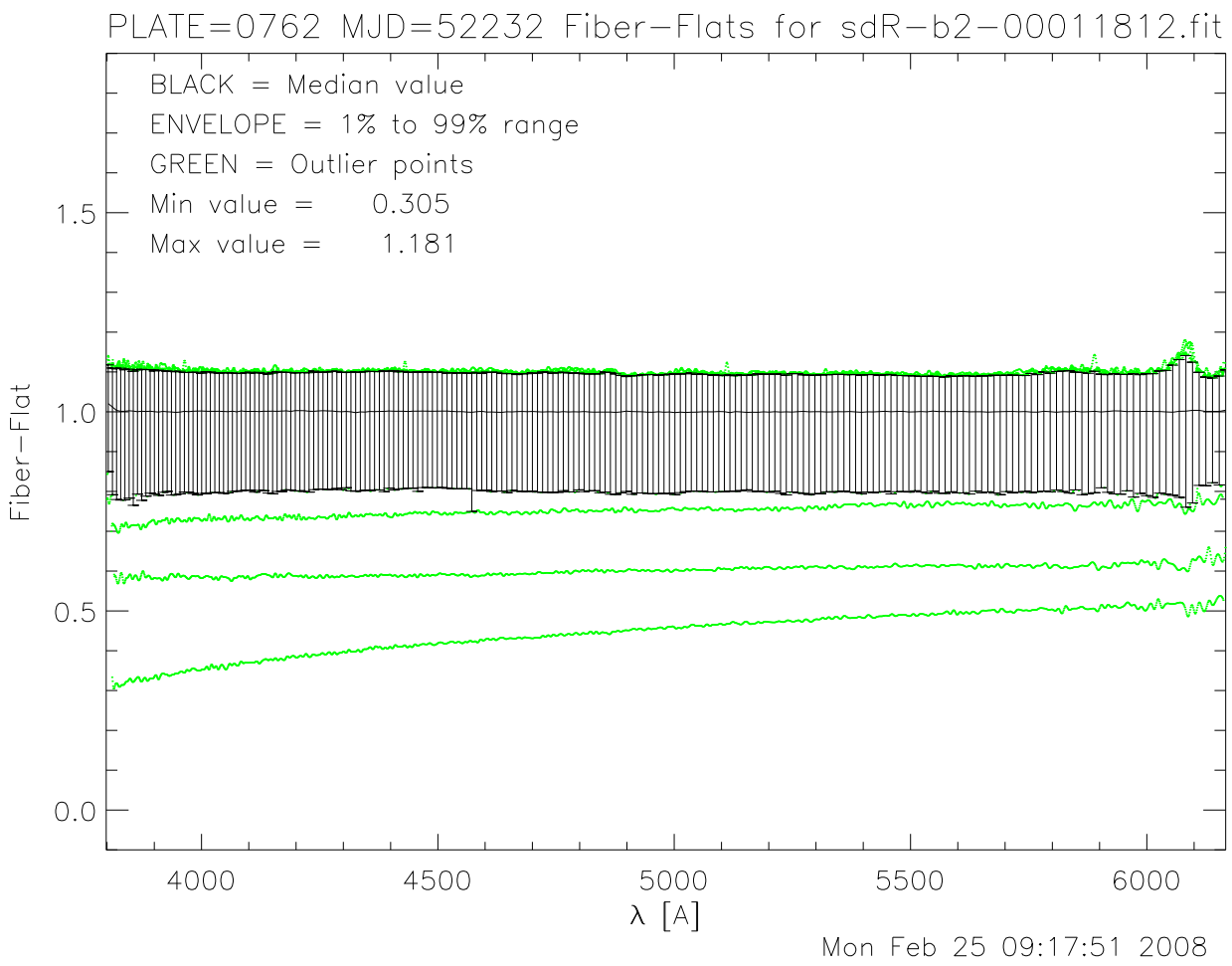

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

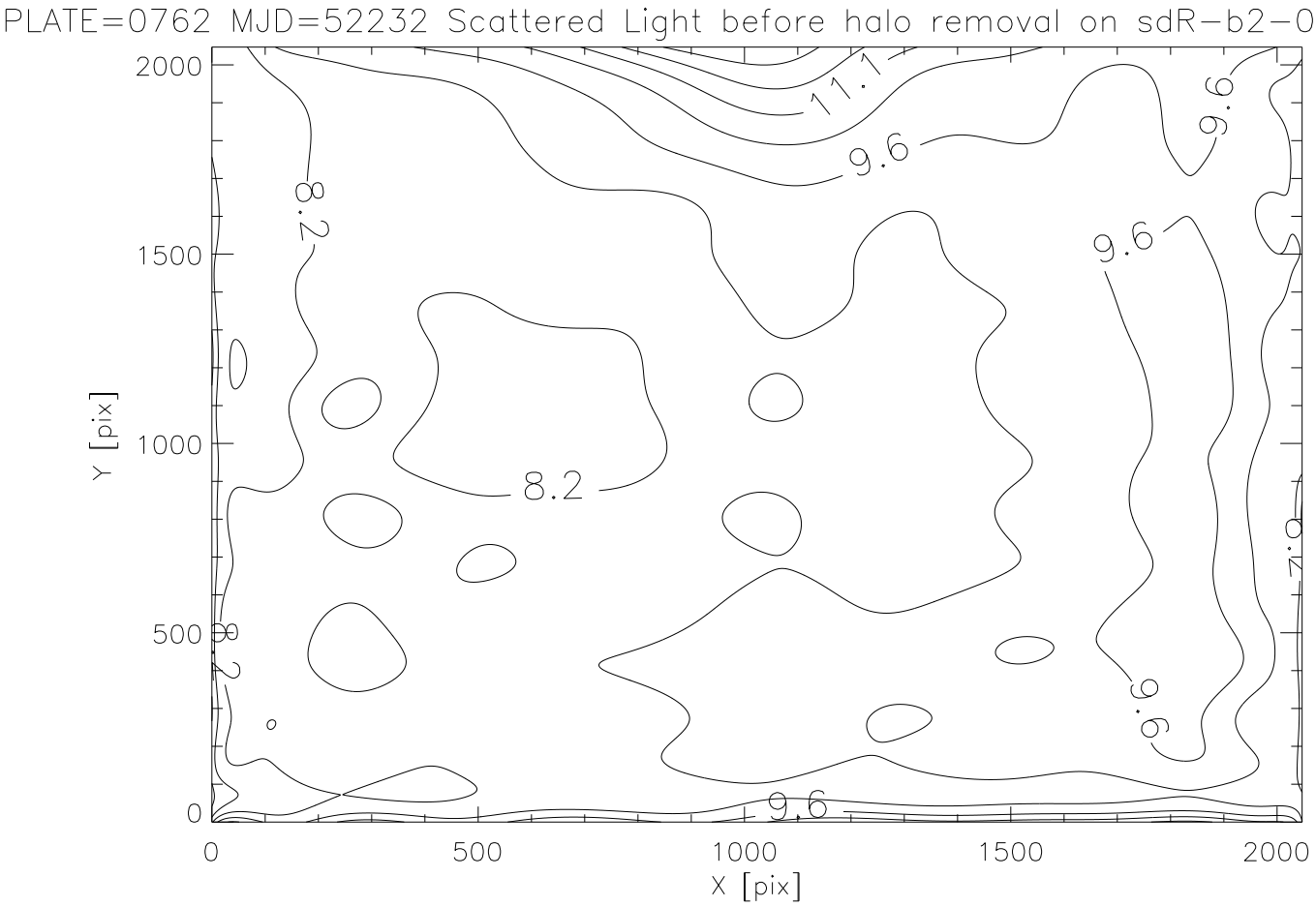

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

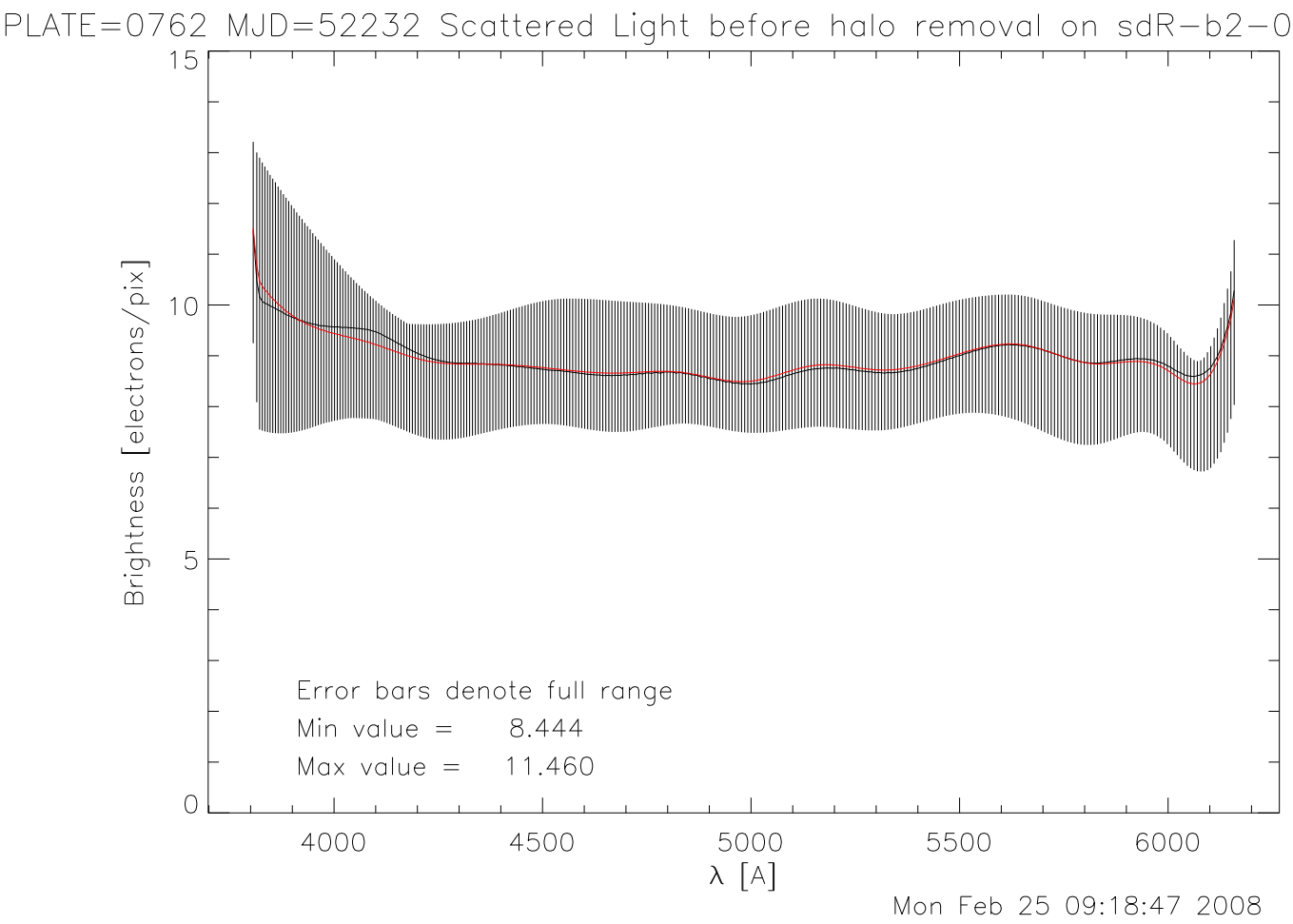

PLATE=0762 MJD=52232 flat extraction chi^2 for sdR−b2−00011812.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

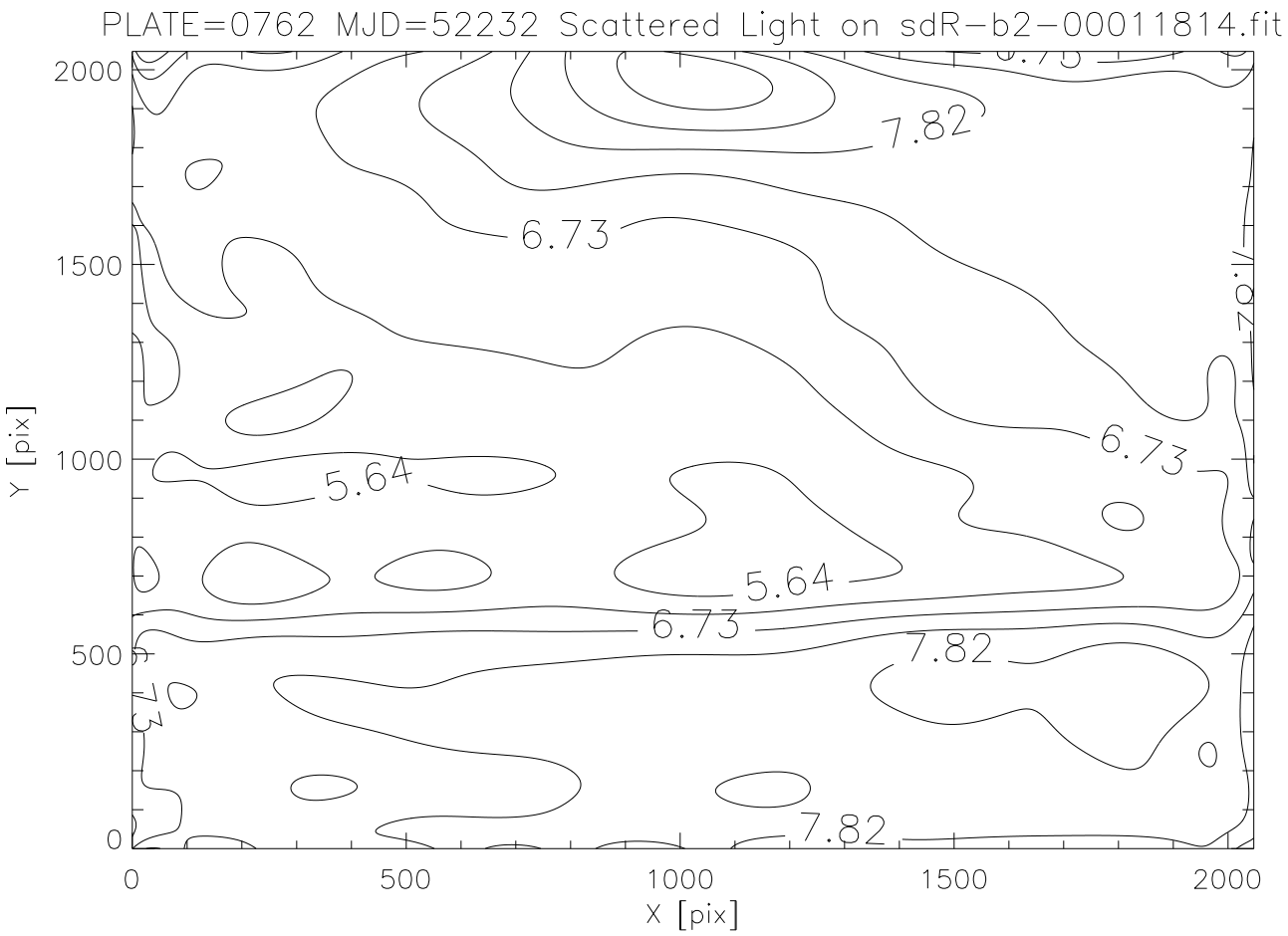

PLATE=0762 MJD=52232 Superflat sdR-b2-00011812.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

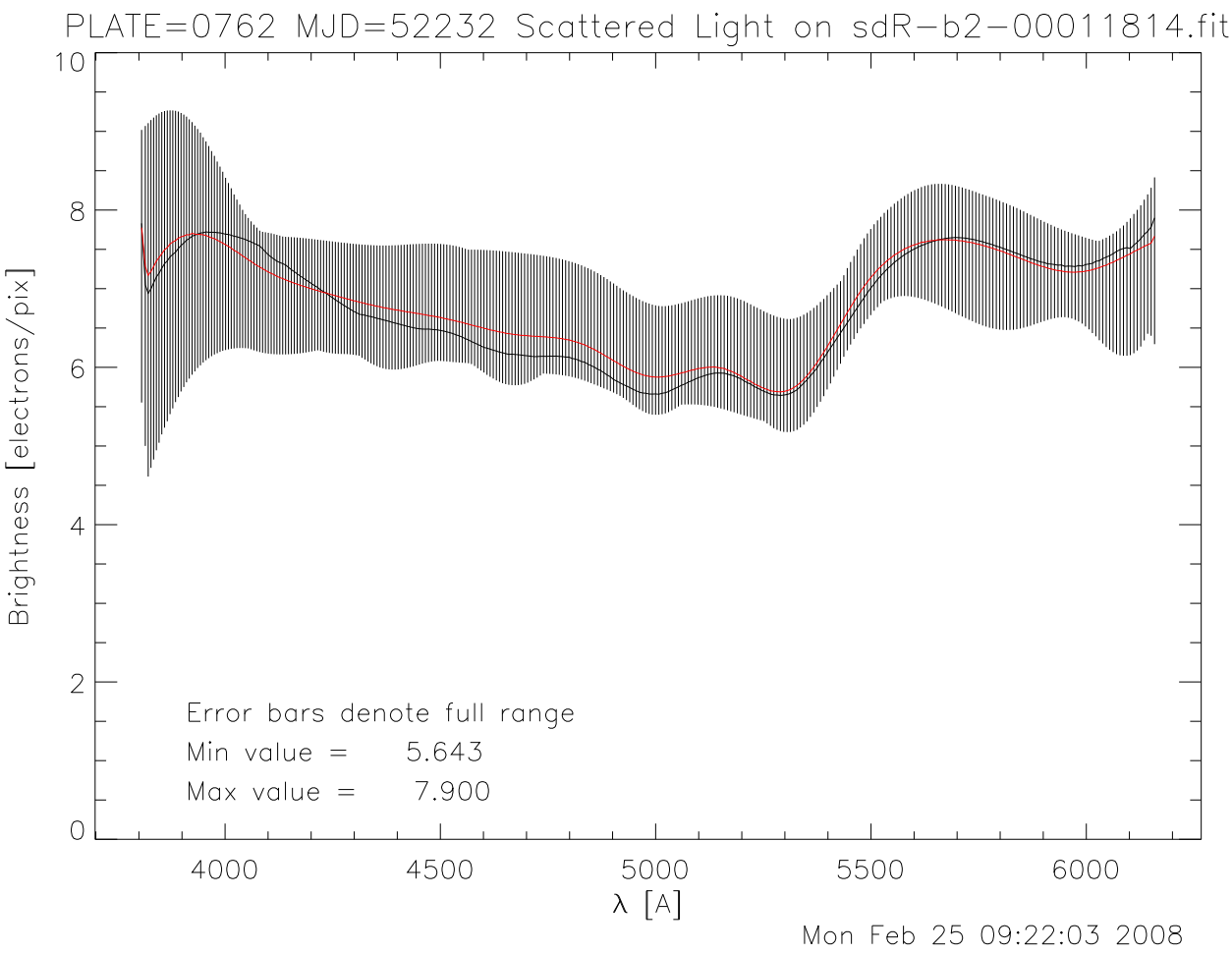

PLATE=0762 MJD=52232 Arcline Fit for sdR-b2-00011813.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:17:40 2008

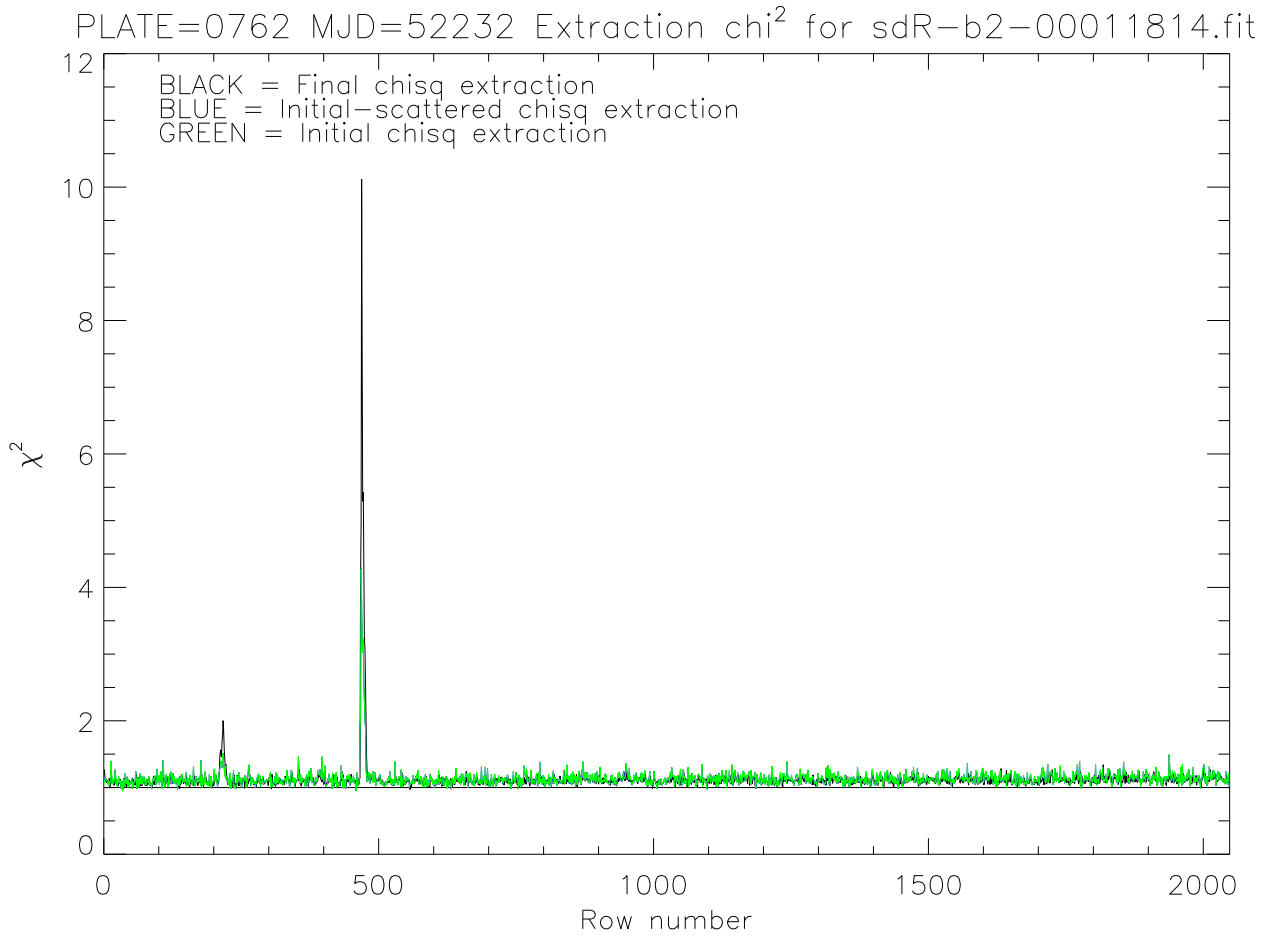

PLATE=0762 MJD=52232 Fiber-Flats for sdR-b2-00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.305
Max value = 1.181
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:17:51 2008

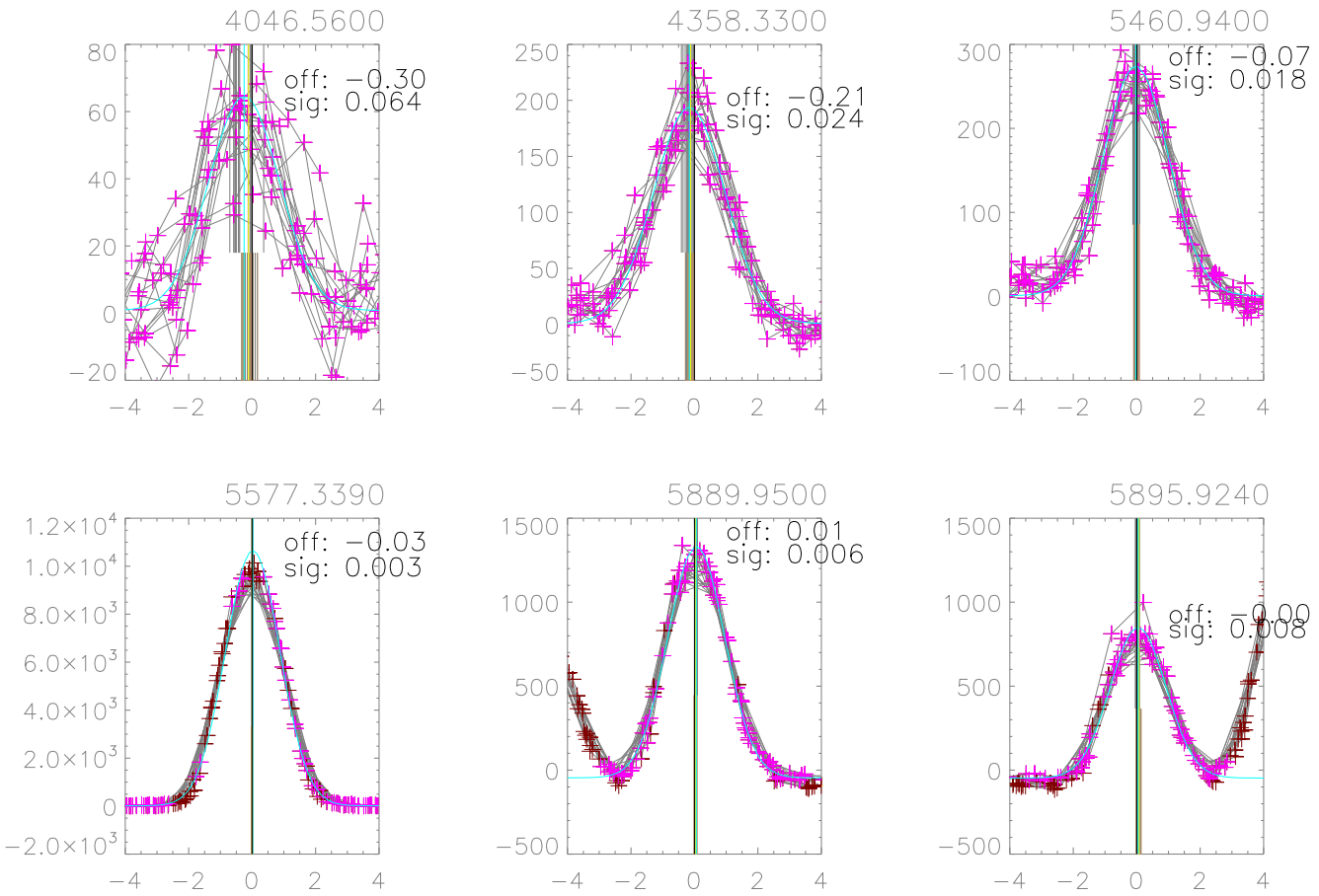

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b2-00011814.f
11.1
9.6
9.6
8.2
9.6
8.2
8.2
8.2
9.6
9.6
9.6
0
500
1000
1500
2000
X [pix]
Y [pix]

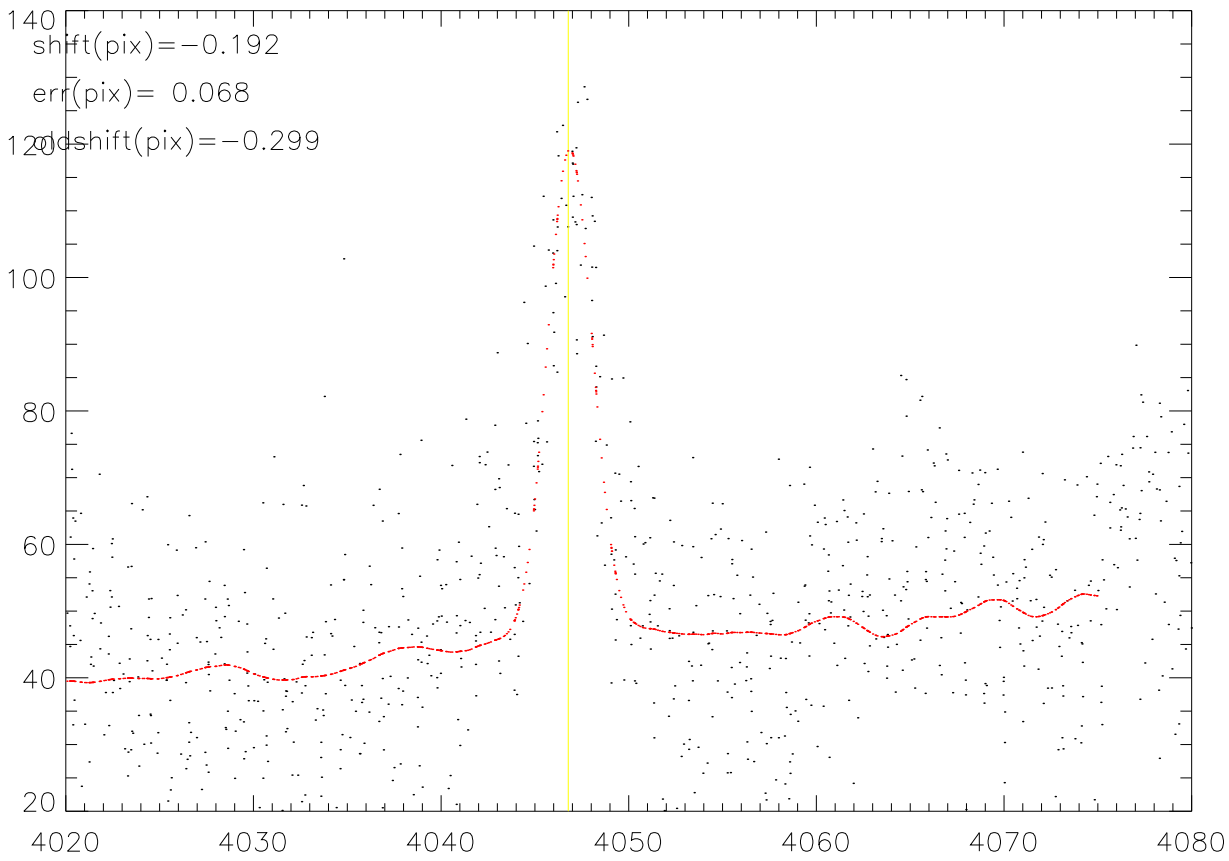

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b2-00011814.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.444
Max value = 11.460
Mon Feb 25 09:18:47 2008

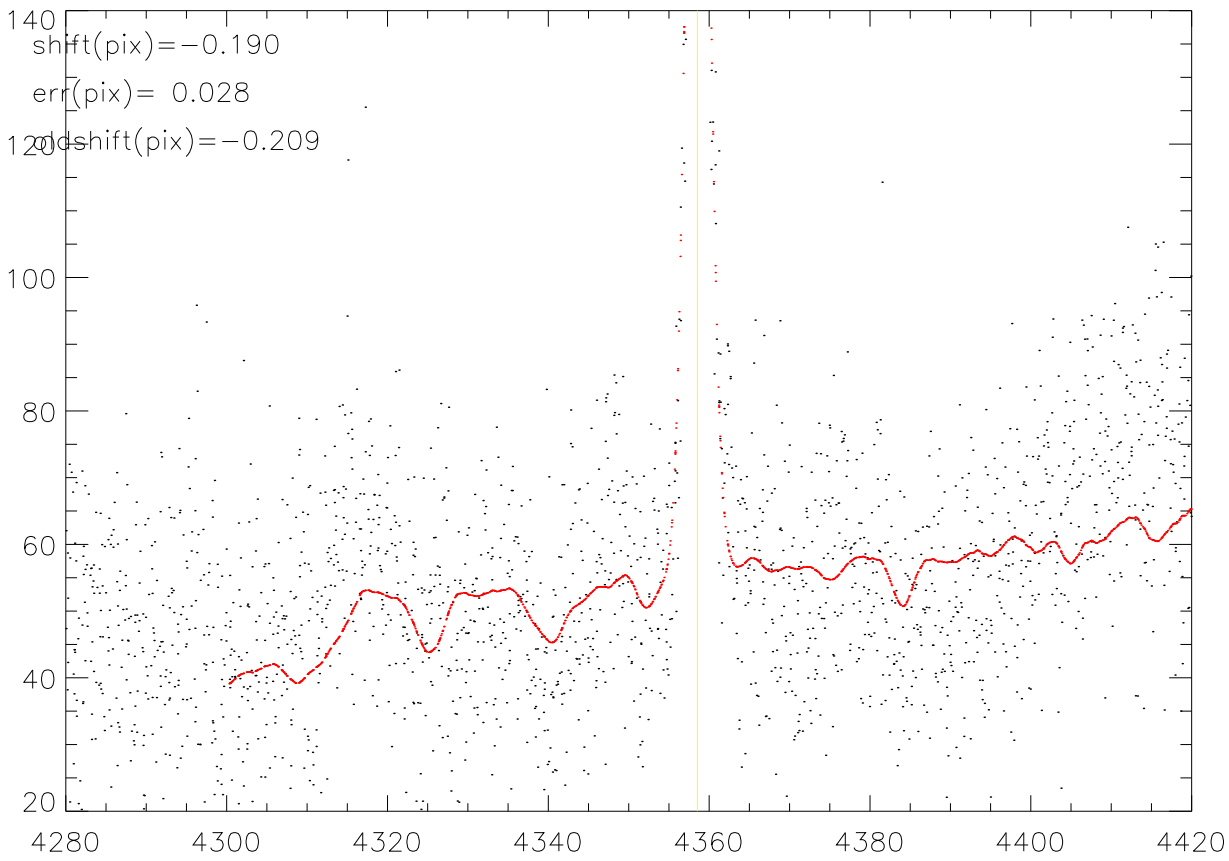

PLATE=0762 MJD=52232 Scattered Light on sdR-b2-00011814.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.82
6.73
5.64
6.73
5.64
6.73
7.82
0
7.82

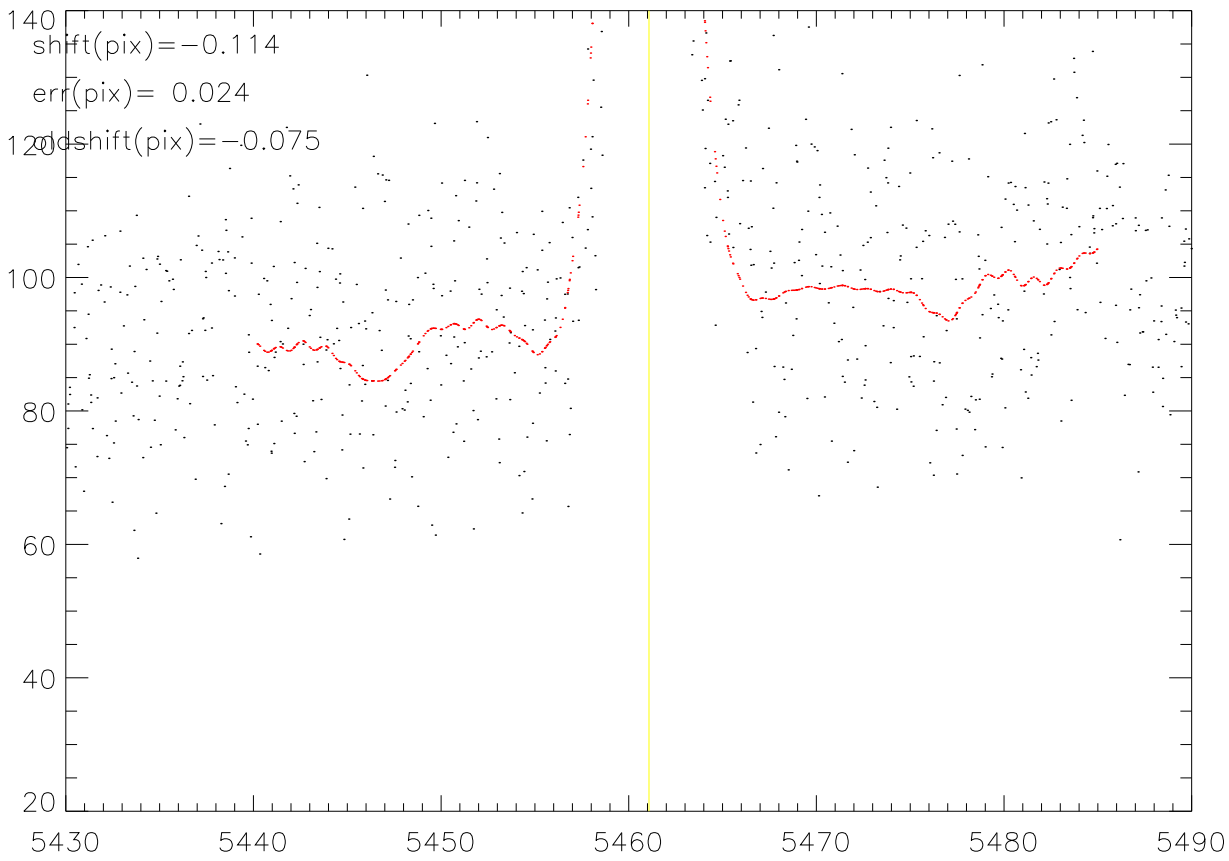

PLATE=0762 MJD=52232 Scattered Light on sdR-b2-00011814.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.643
Max value = 7.900
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:22:03 2008

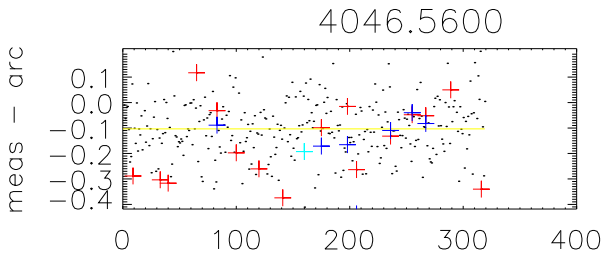

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-b2-00011814.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

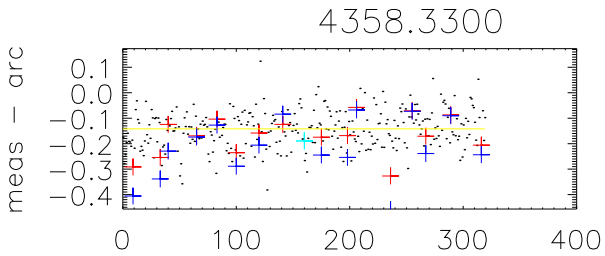

4046.5600
off: −0.30
sig: 0.064
4358.3300
off: −0.21
sig: 0.024
5460.9400
off: −0.07
sig: 0.018
5577.3390
off: −0.03
sig: 0.003
5889.9500
off: 0.01
sig: 0.006
5895.9240
off: −0.00
sig: 0.008

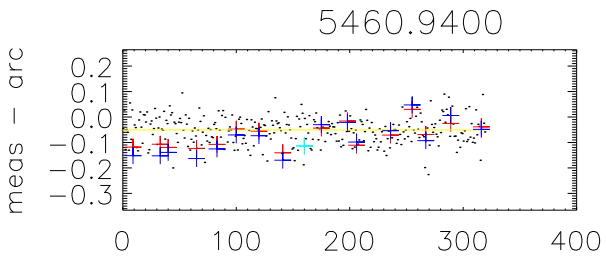

shift(pix)=−0.192
err(pix)= 0.068
oldshift(pix)=−0.299
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

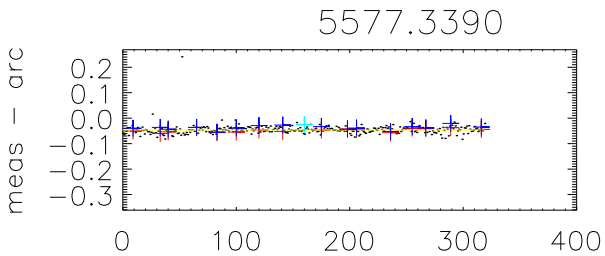

shift(pix)=−0.190
err(pix)= 0.028
oldshift(pix)=−0.209
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

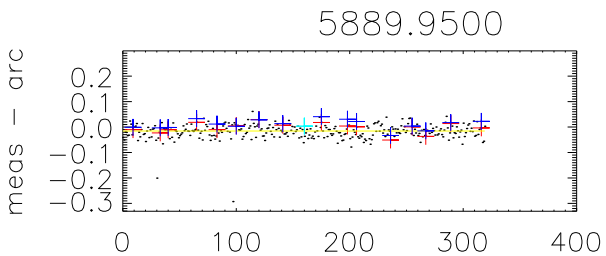

shift(pix)=−0.114
err(pix)= 0.024
oldshift(pix)=−0.075
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

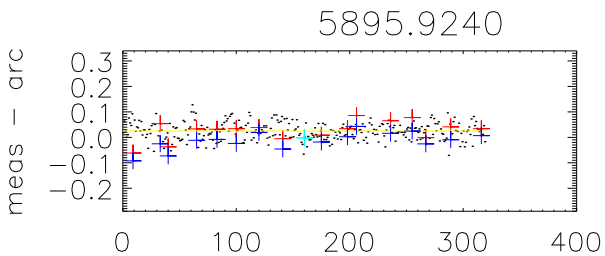

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

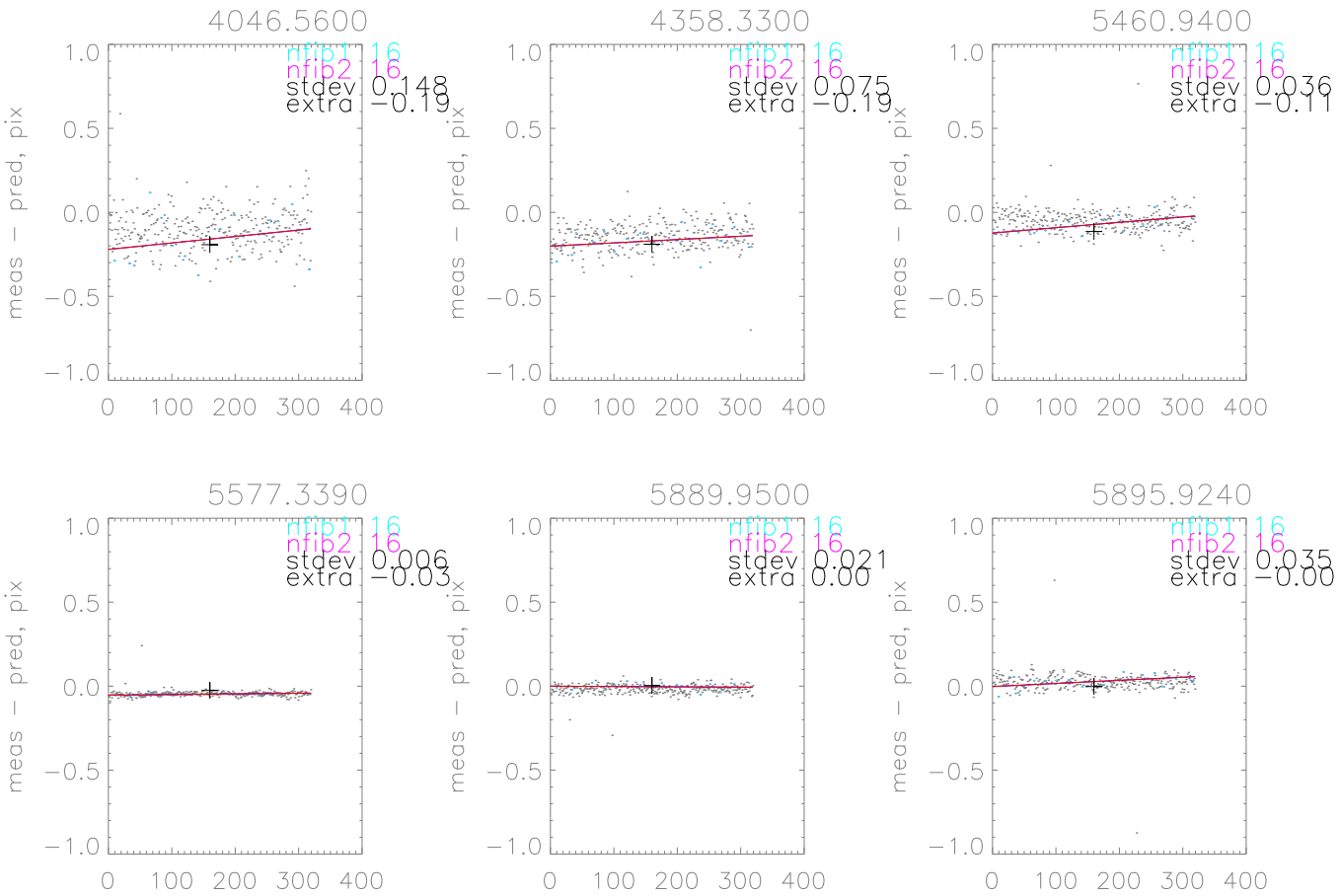

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

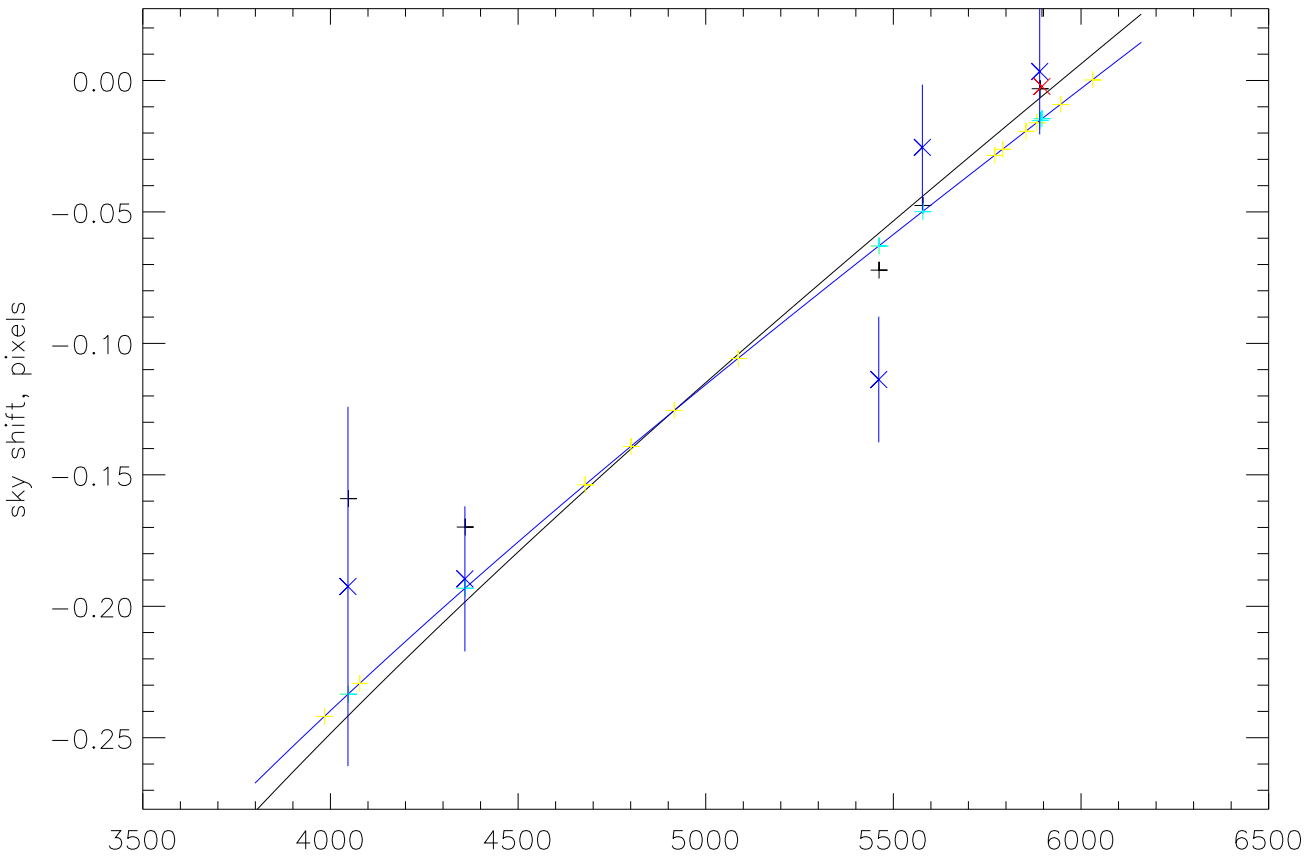

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

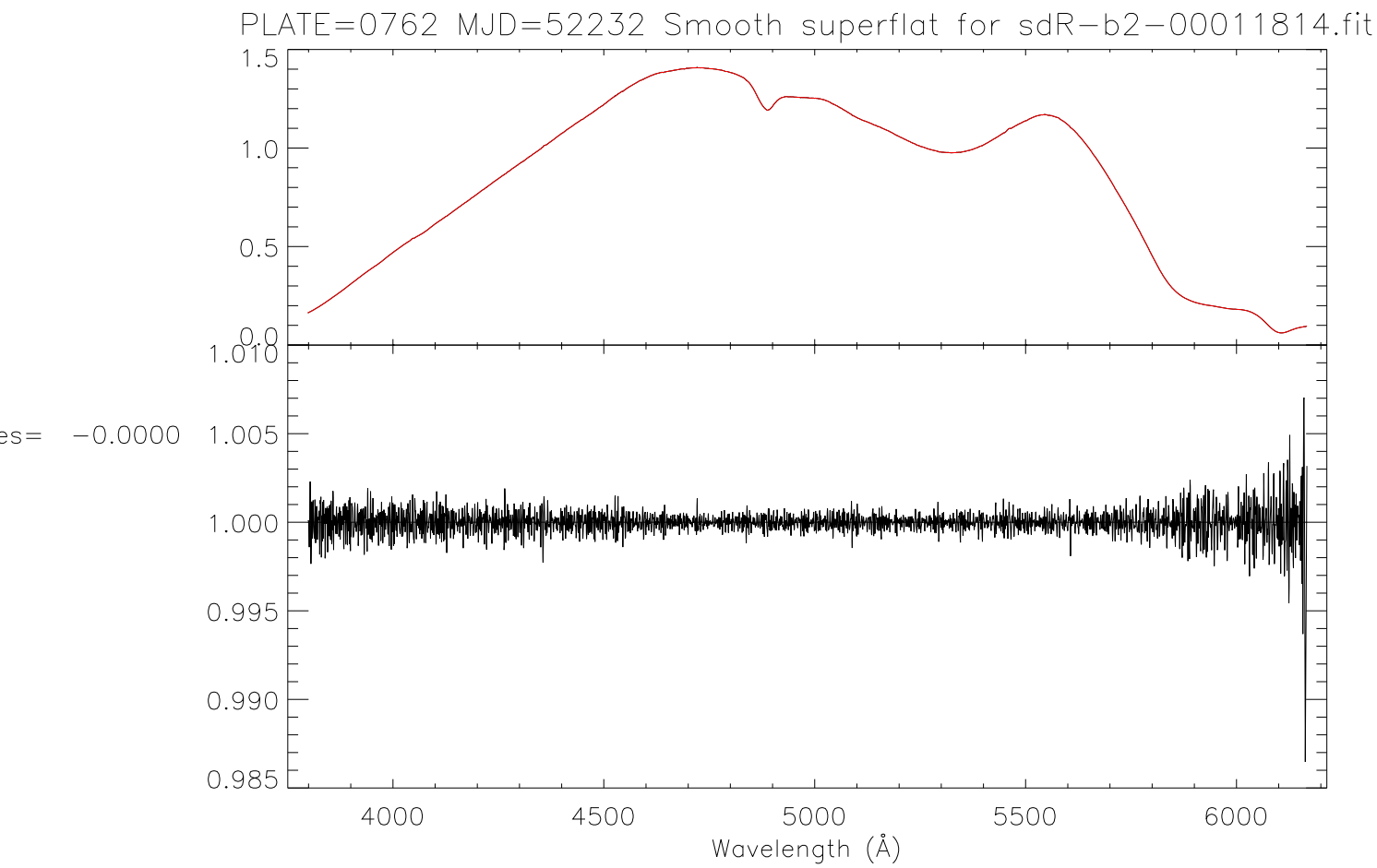

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

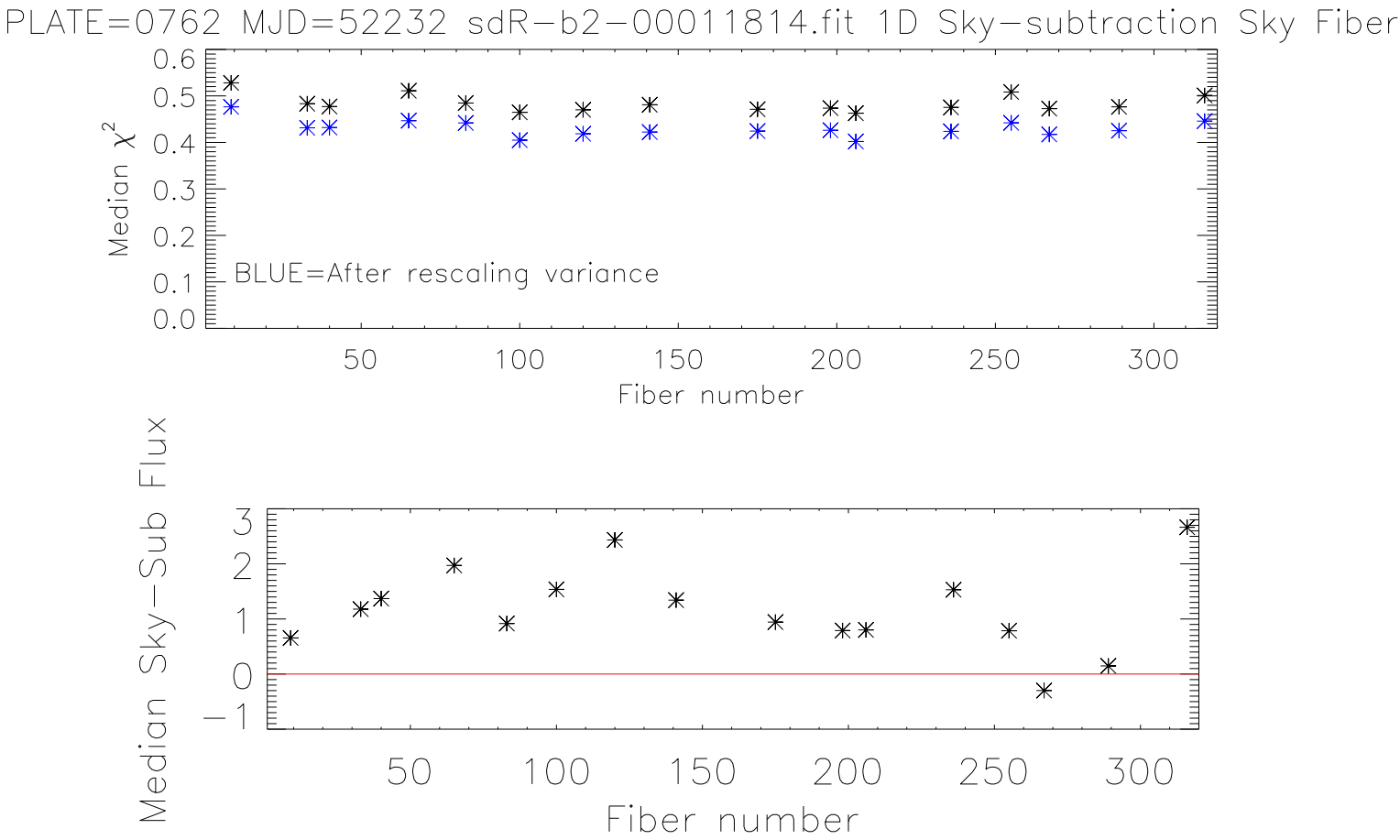

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

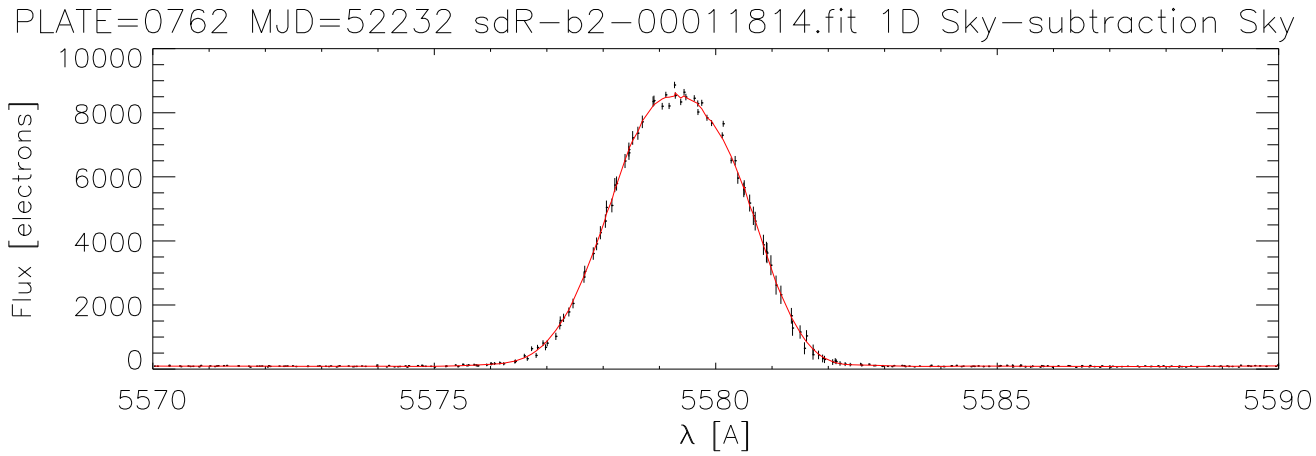

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

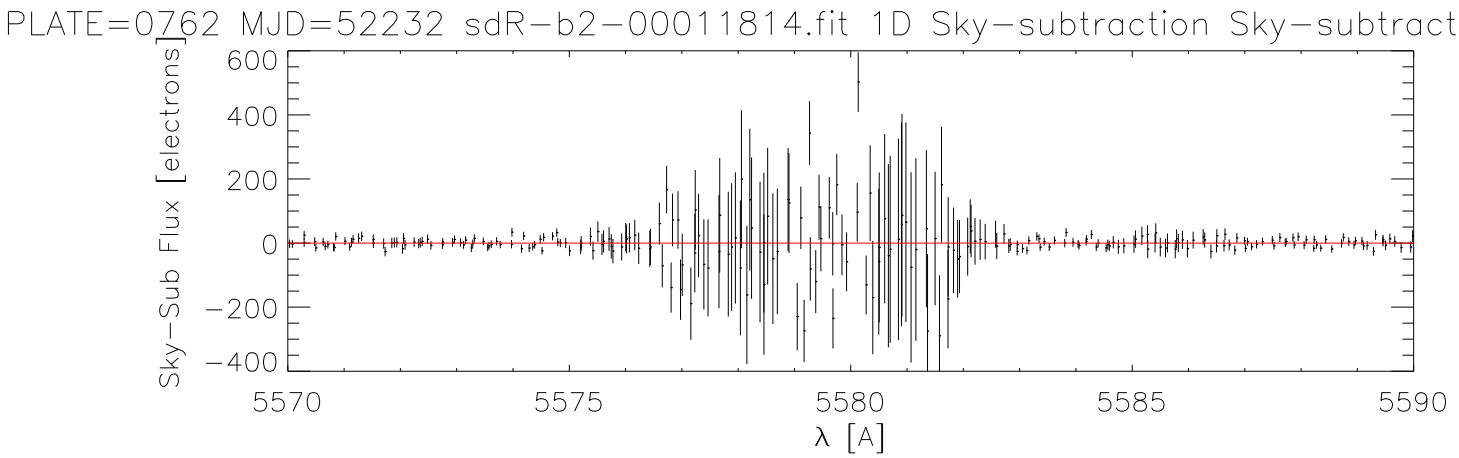

4046.5600
nfib1 16
nfib2 16
stdev 0.148
extra −0.19
4358.3300
nfib1 16
nfib2 16
stdev 0.075
extra −0.19
5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra −0.11
5577.3390
nfib1 16
nfib2 16
stdev 0.006
extra −0.03
5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra 0.00
5895.9240
nfib1 16
nfib2 16
stdev 0.035
extra −0.00
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

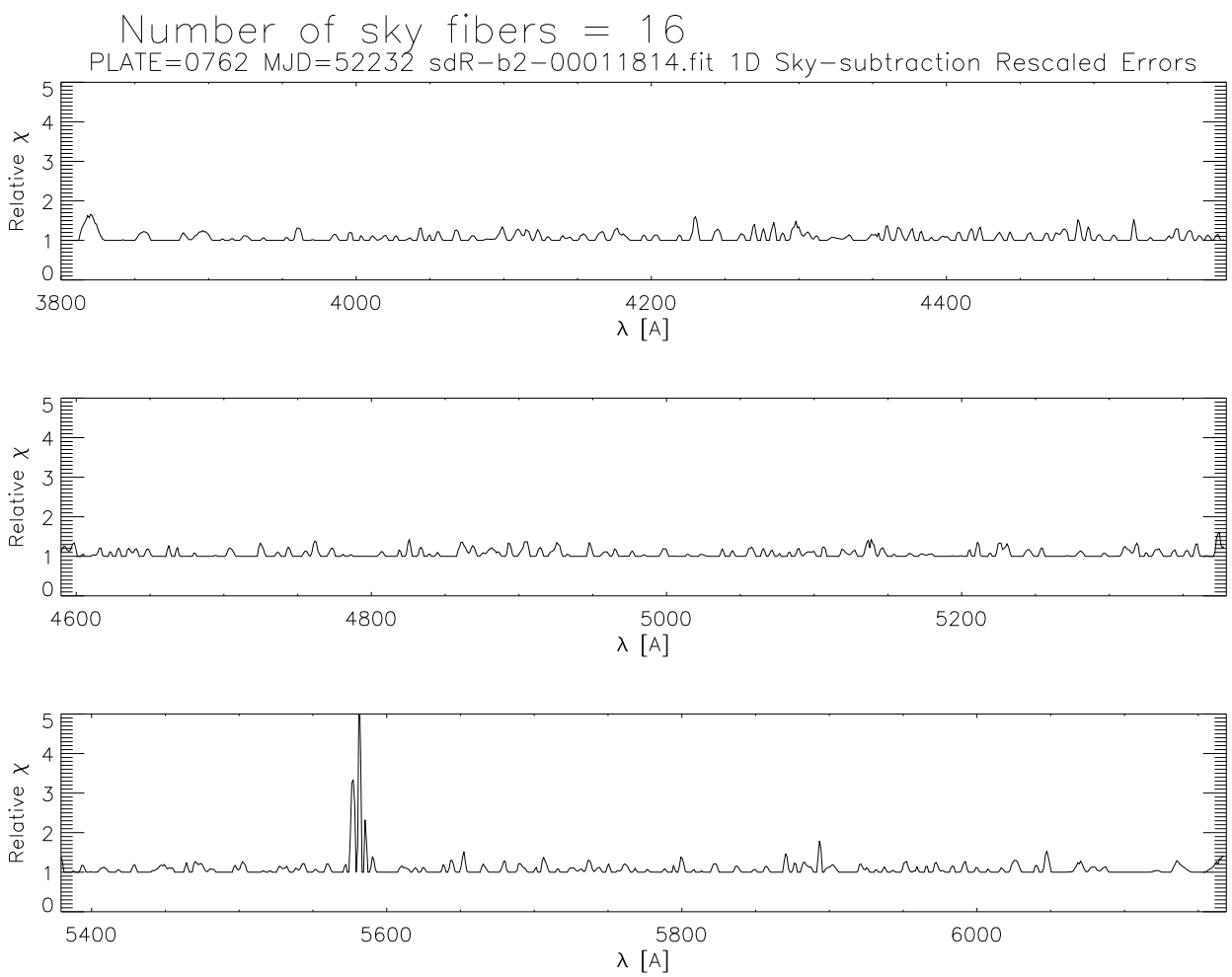

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

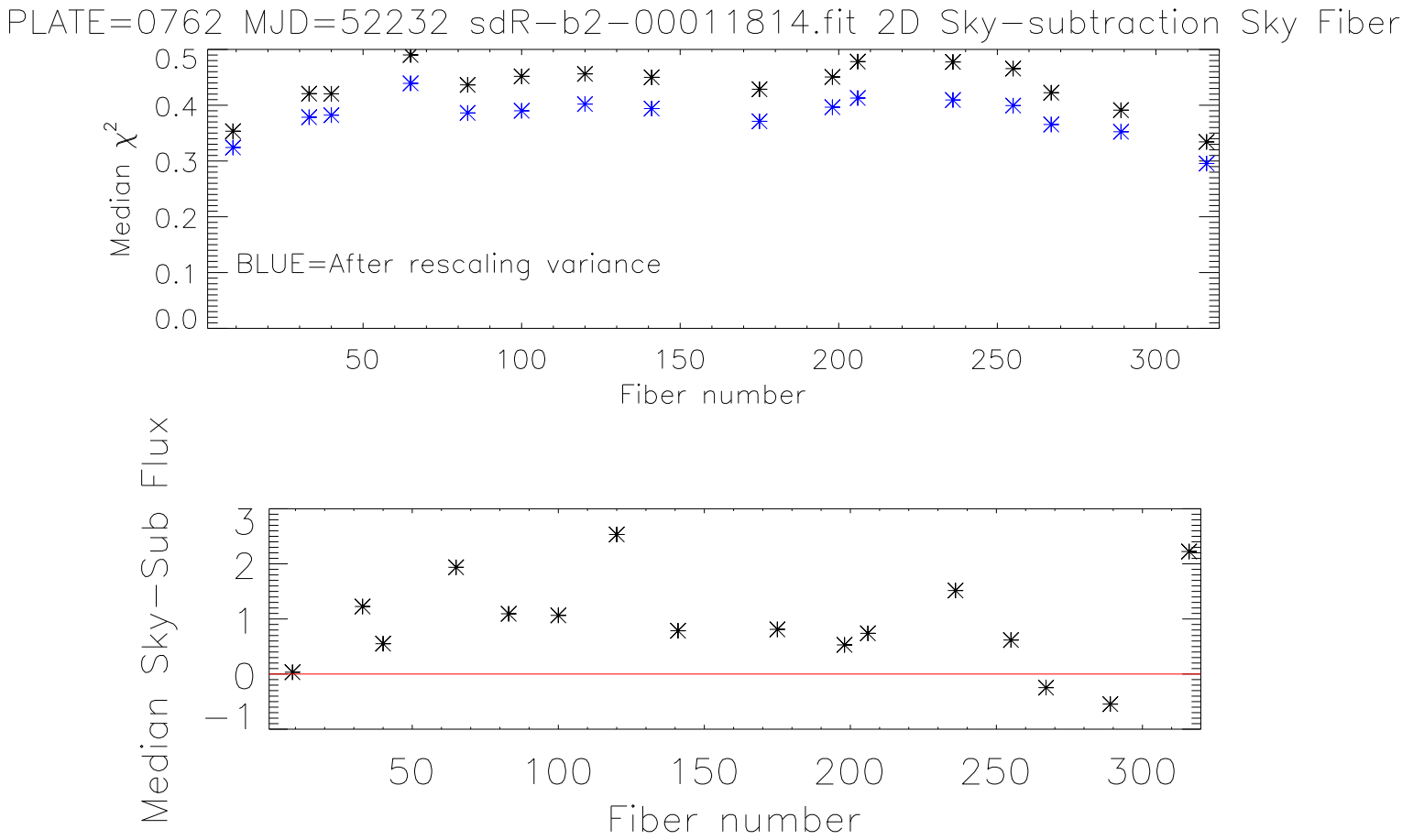

PLATE=0762 MJD=52232 Smooth superflat for sdR-b2-00011814.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

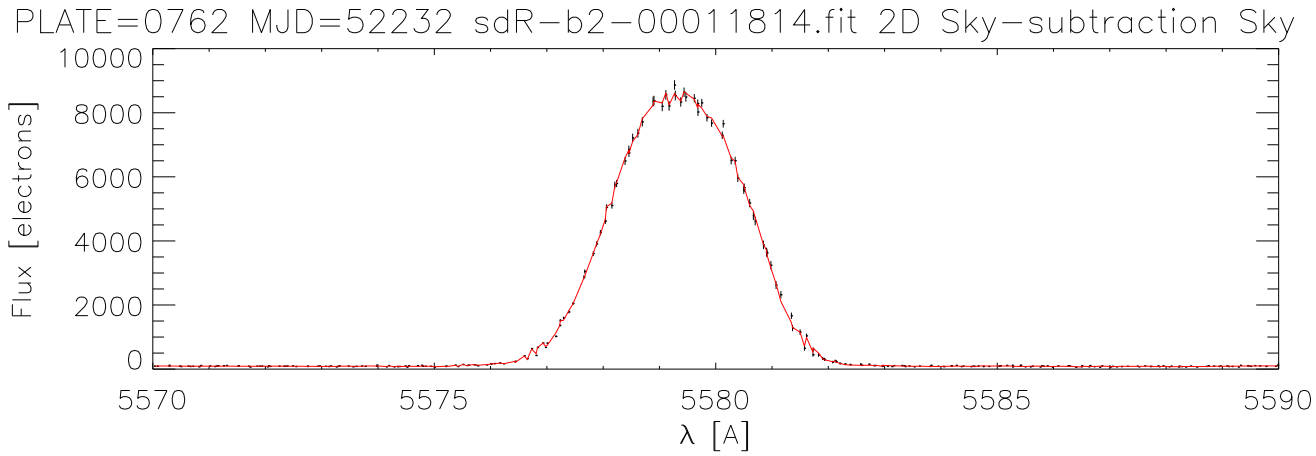

PLATE=0762 MJD=52232 sdR-b2-00011814.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

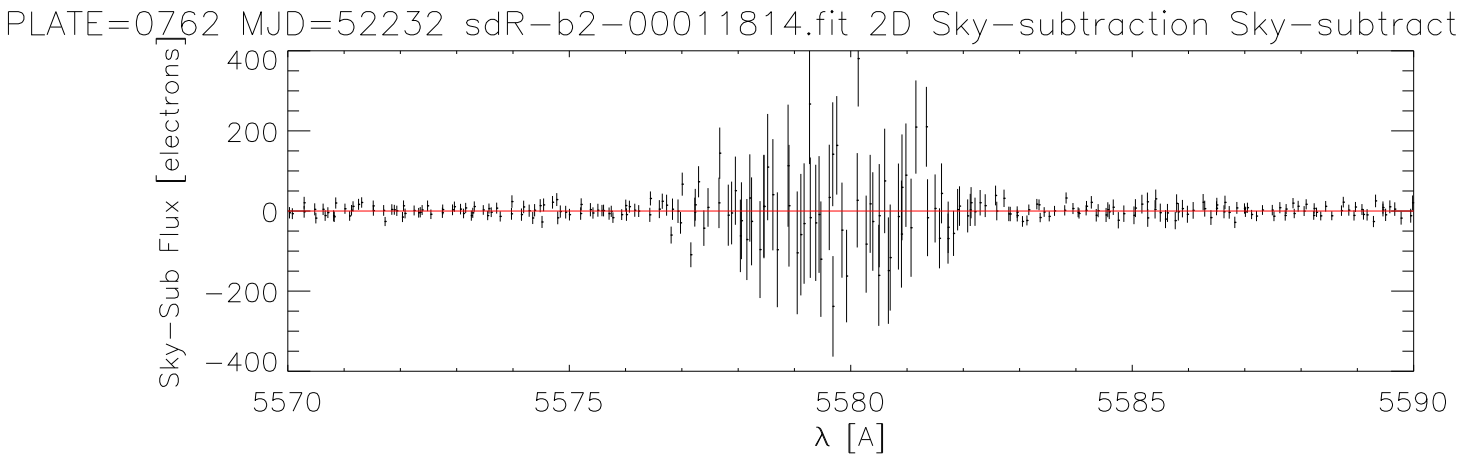

PLATE=0762 MJD=52232 sdR-b2-00011814.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

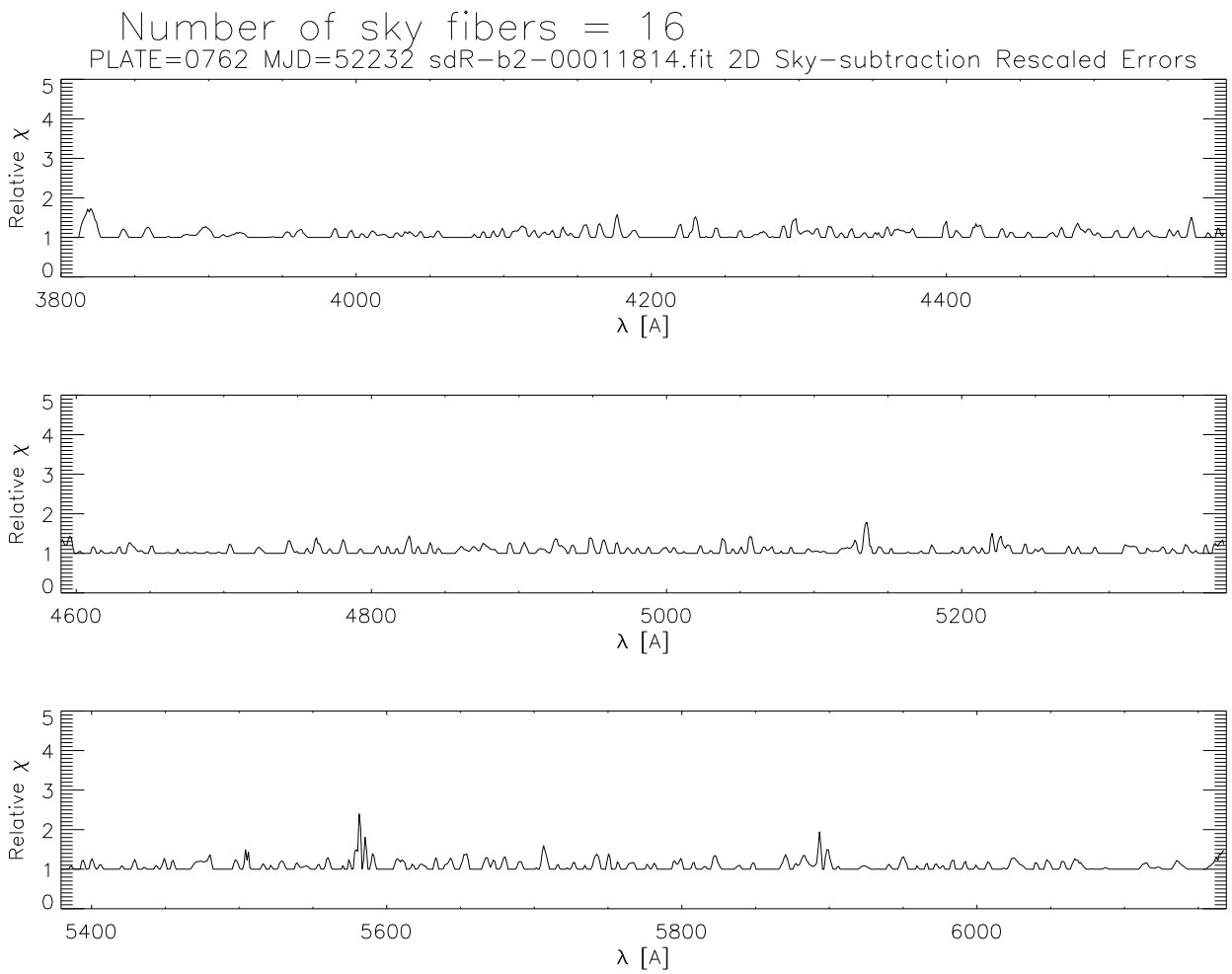

PLATE=0762 MJD=52232 sdR-b2-00011814.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

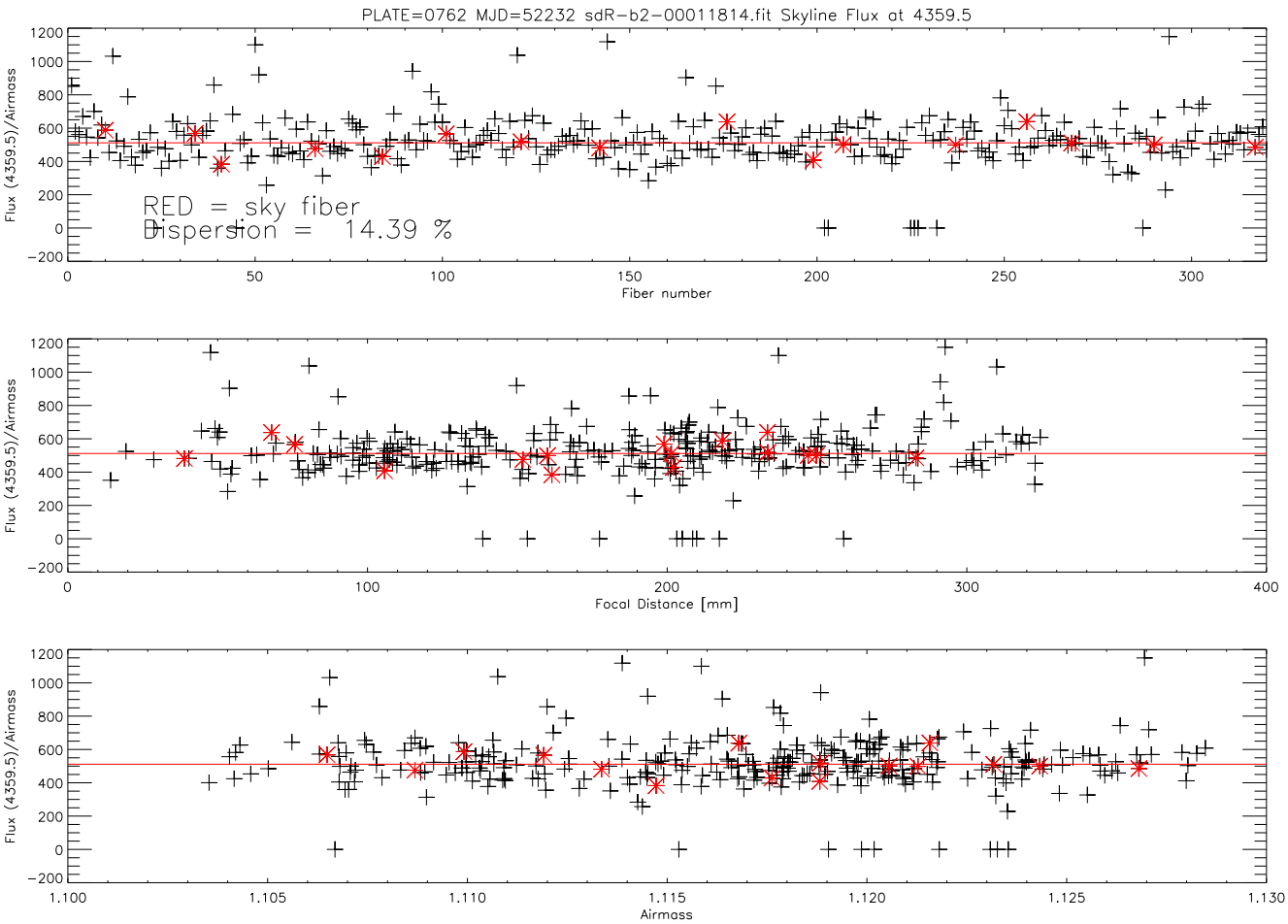

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b2-00011814.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

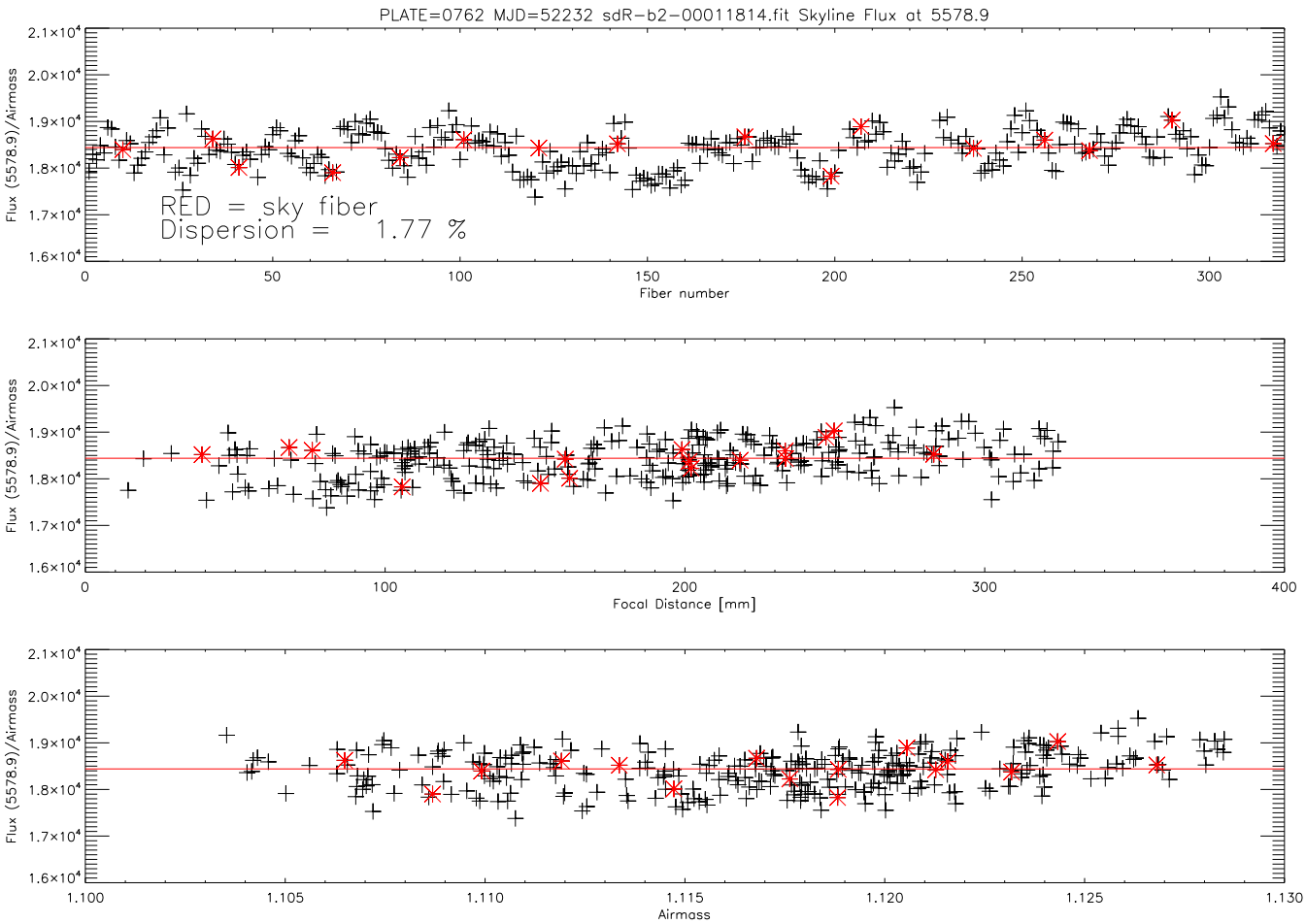

PLATE=0762 MJD=52232 sdR-b2-00011814.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

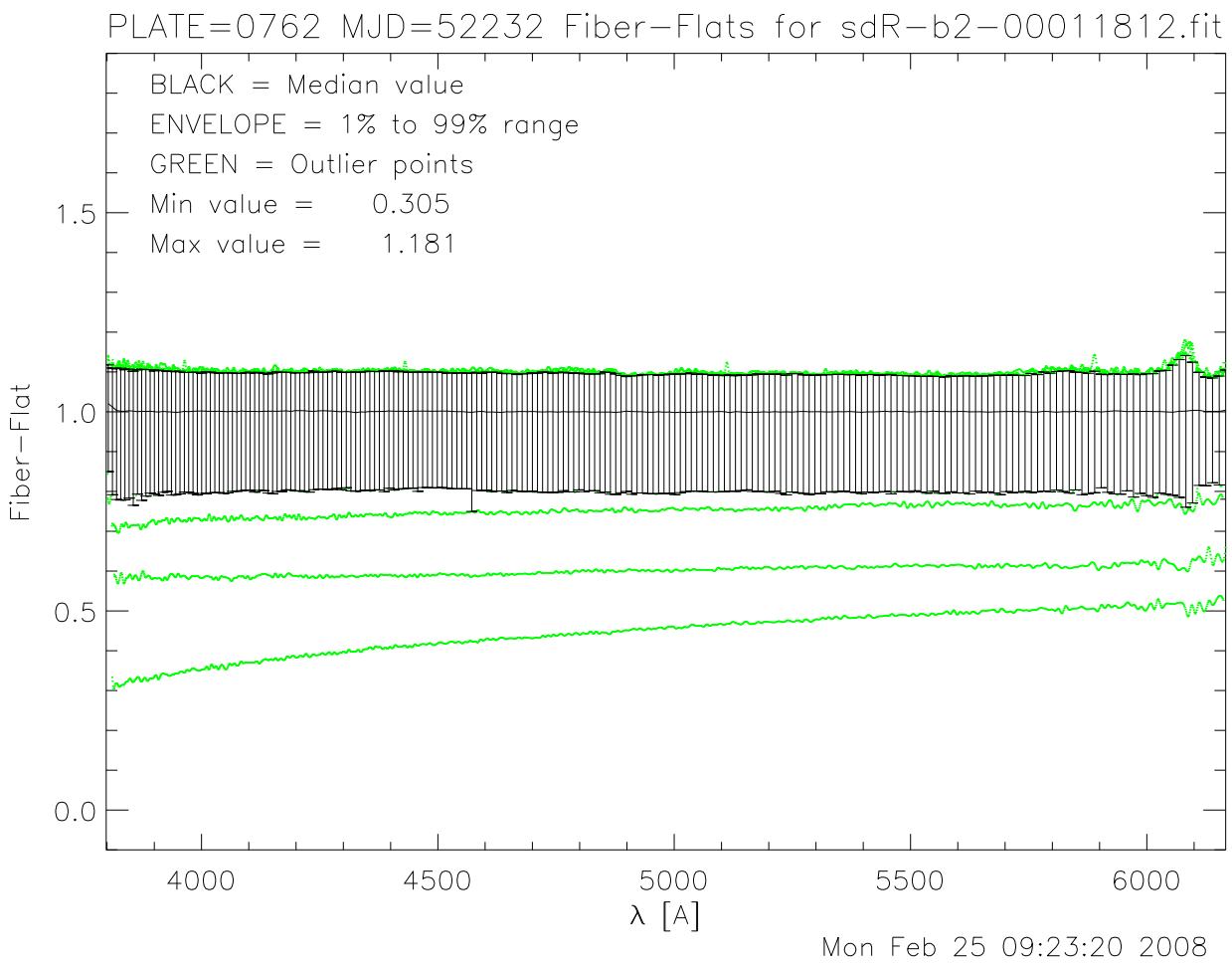

PLATE=0762 MJD=52232 sdR-b2-00011814.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

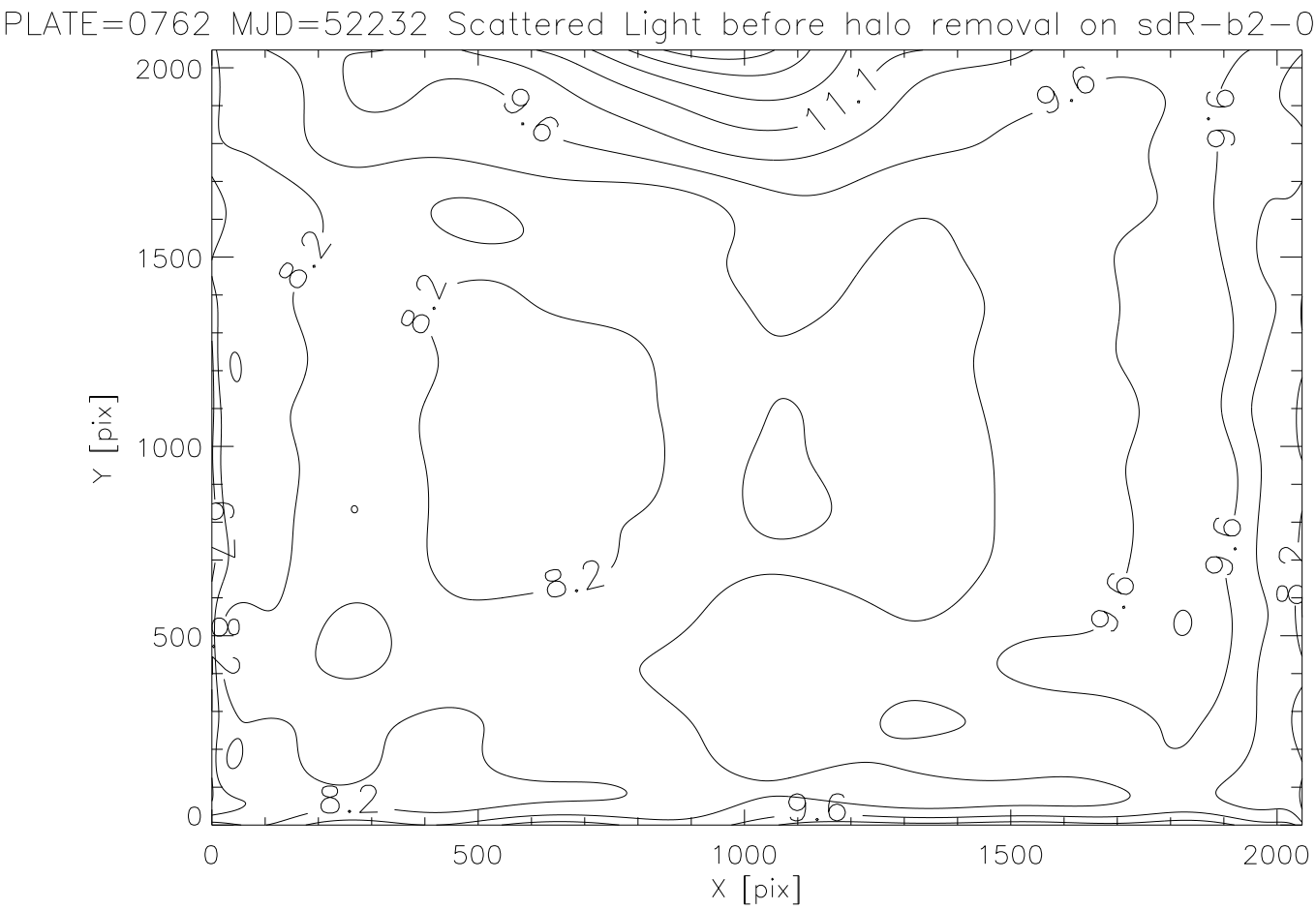

PLATE=0762 MJD=52232 sdR-b2-00011814.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

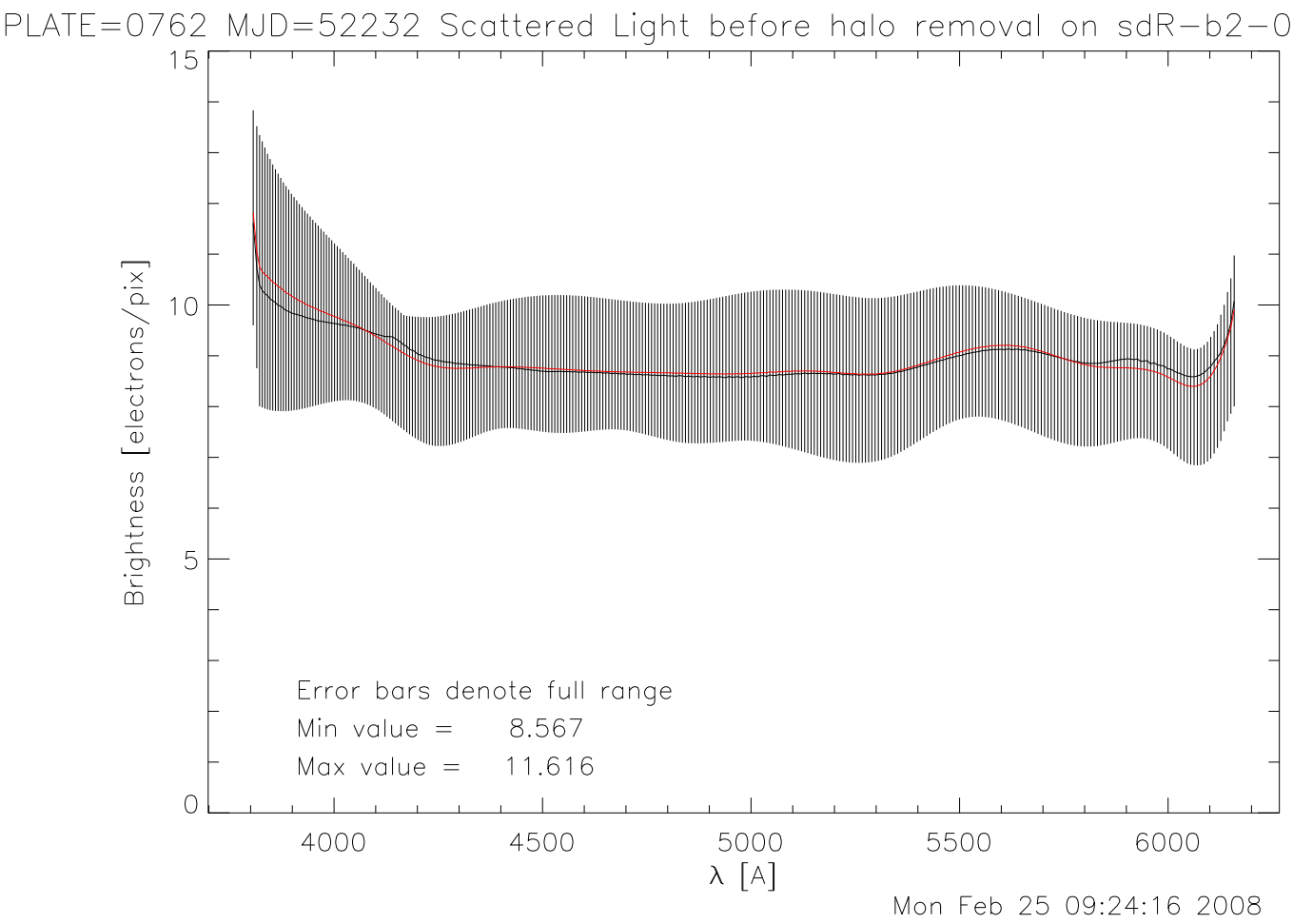

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b2-00011814.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

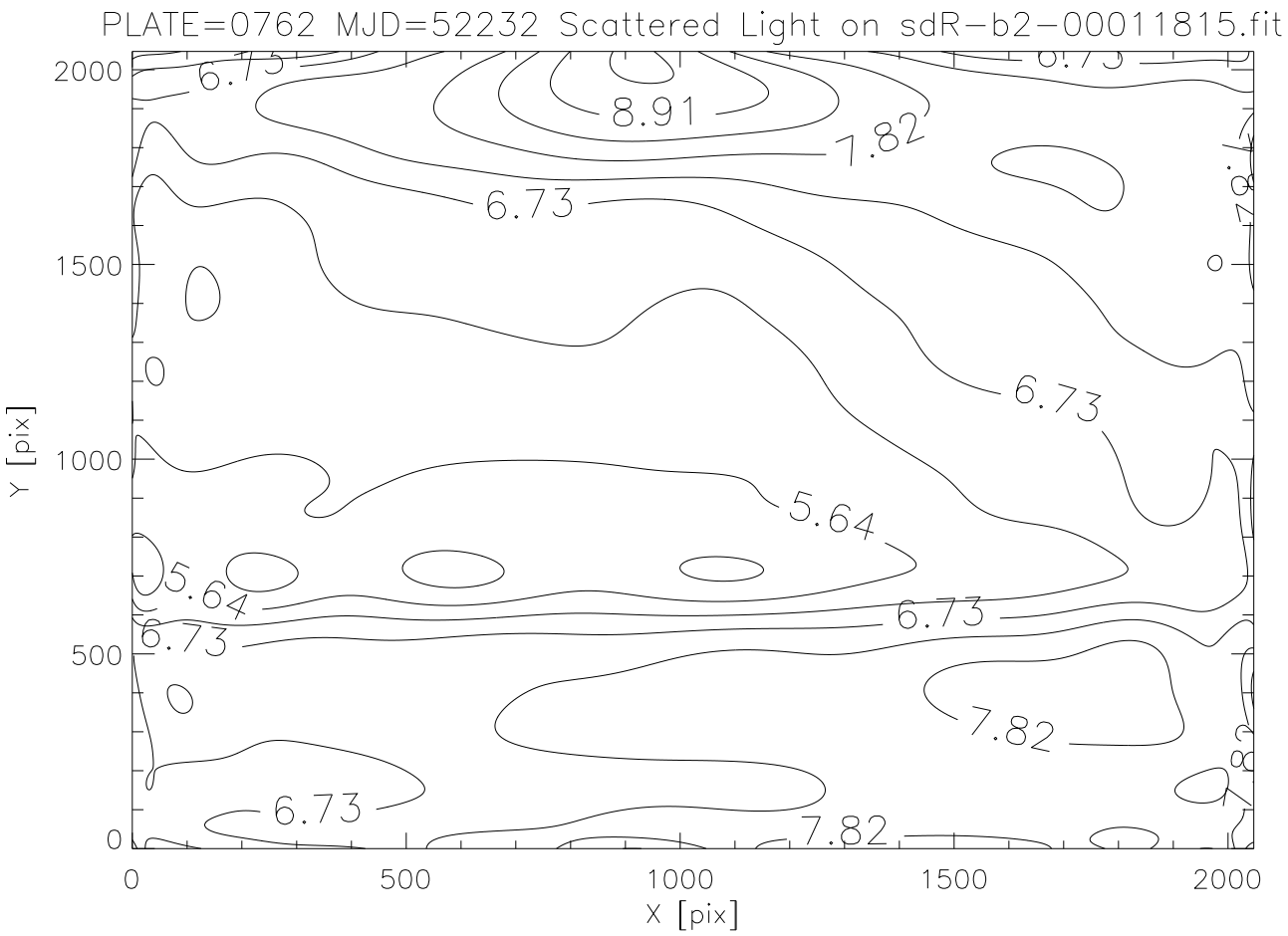

PLATE=0762 MJD=52232 sdR-b2-00011814.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 14.39 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

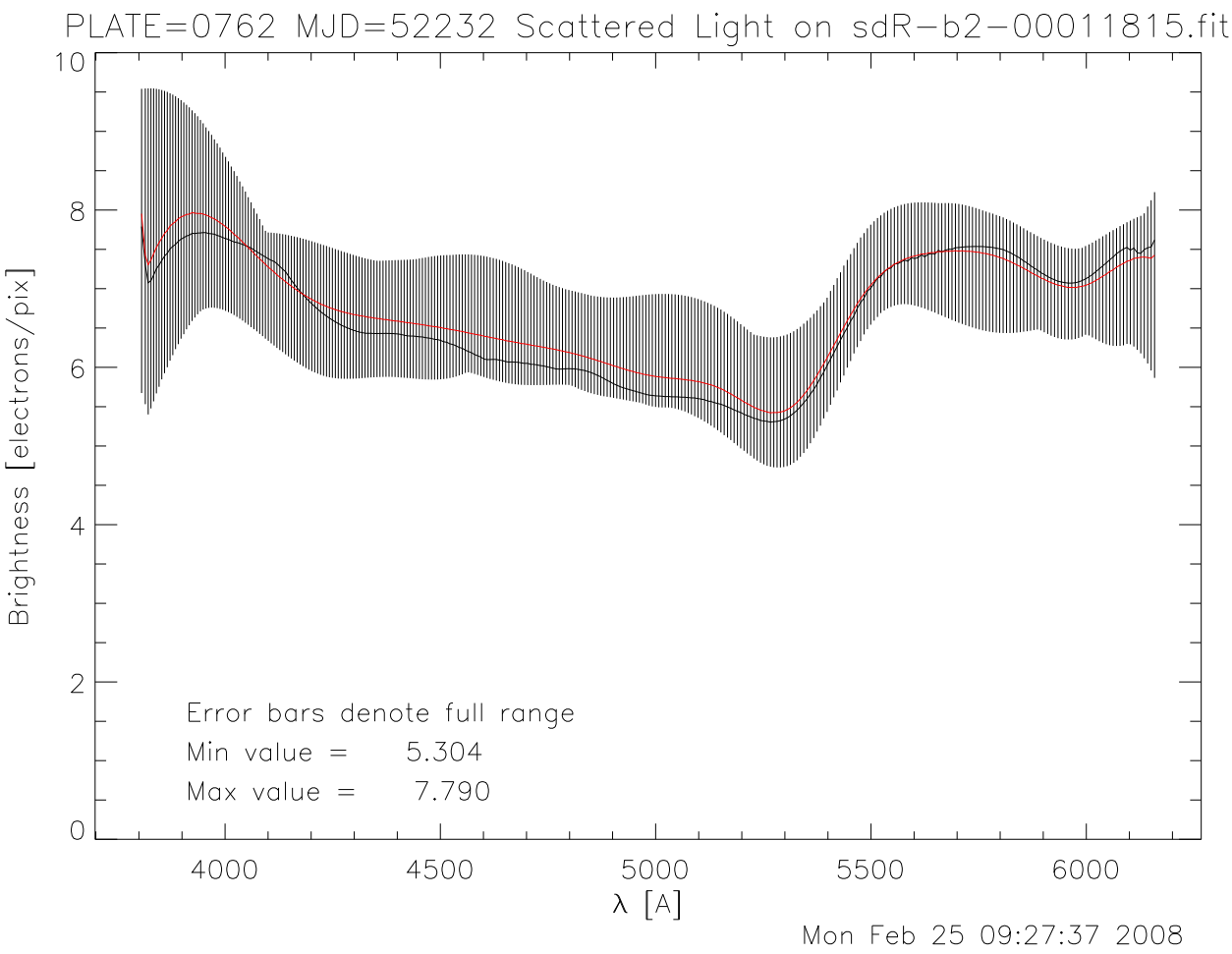

PLATE=0762 MJD=52232 sdR-b2-00011814.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.77 %
Fiber number
Focal Distance [mm]
Airmass

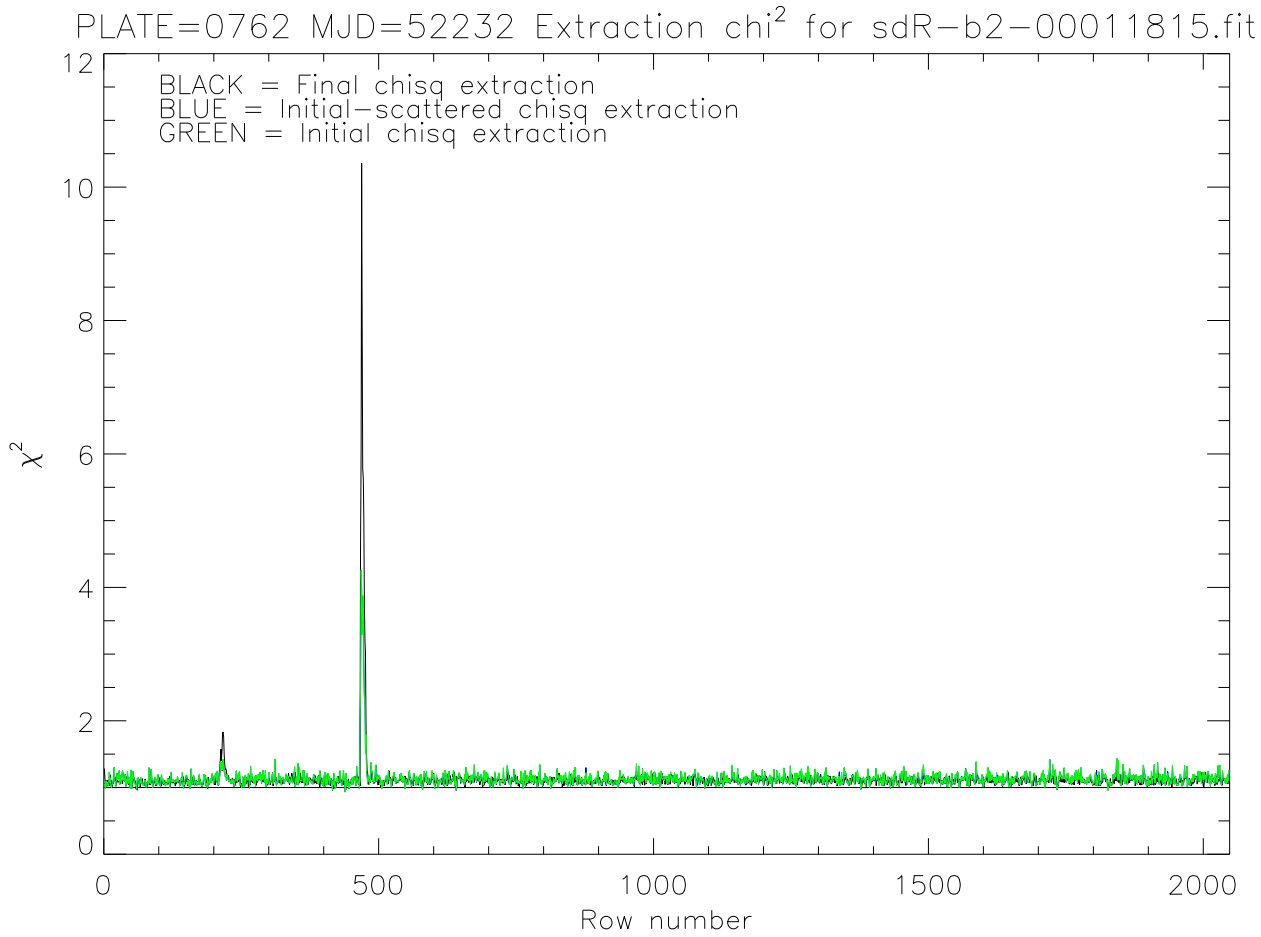

PLATE=0762 MJD=52232 Fiber-Flats for sdR-b2-00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.305
Max value = 1.181
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:23:20 2008

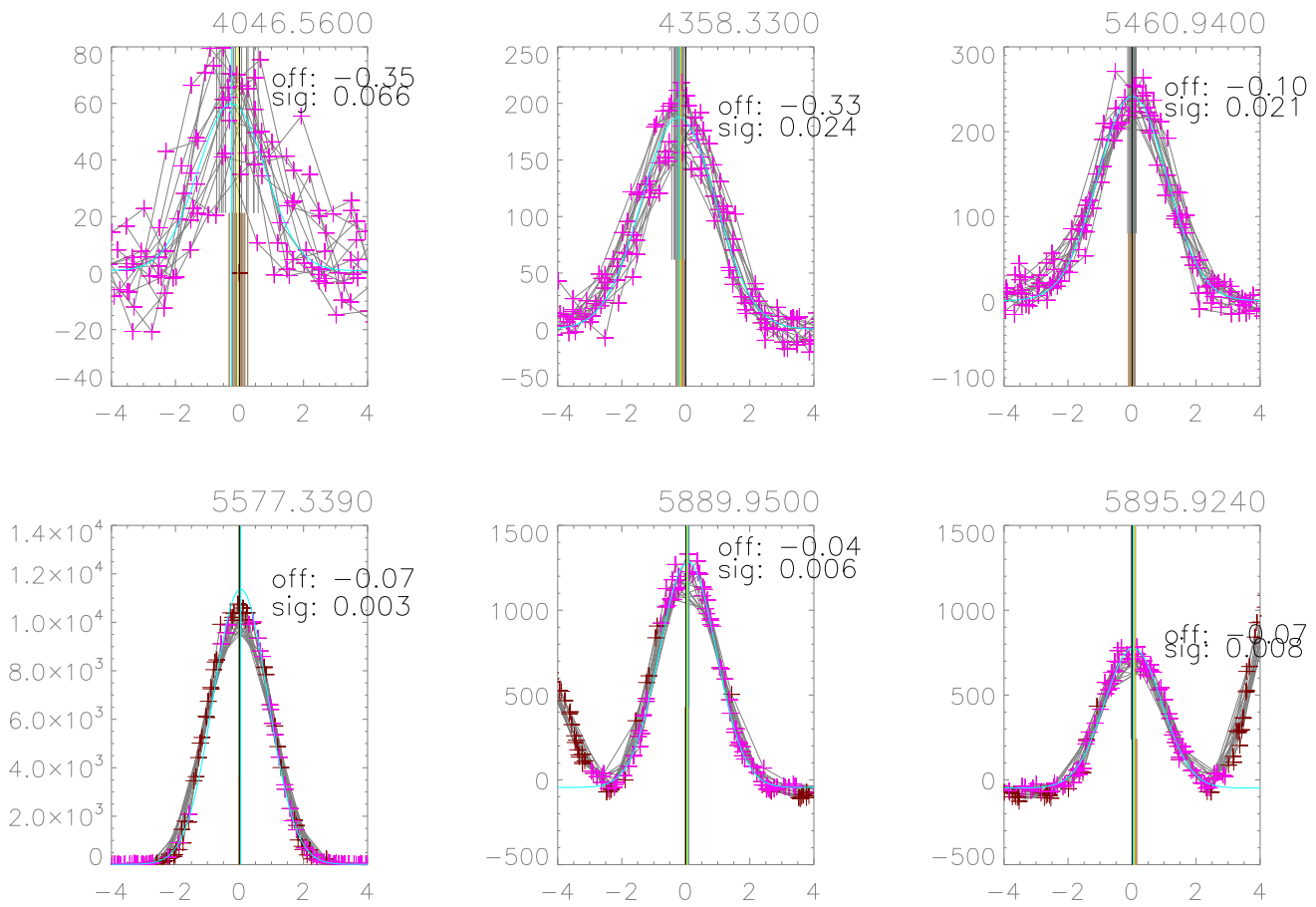

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b2-00011815.f
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
9.6
11.1
0

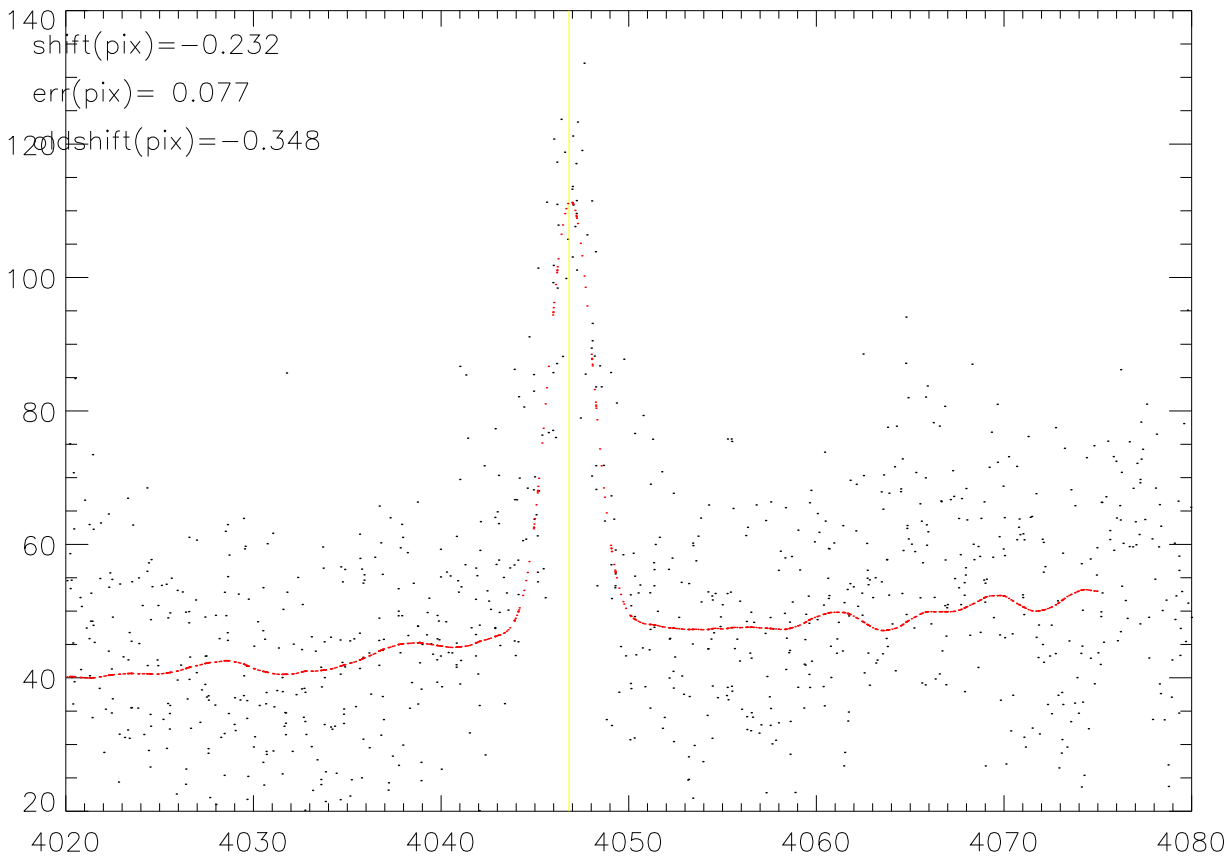

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b2-00011815.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.567
Max value = 11.616
Mon Feb 25 09:24:16 2008

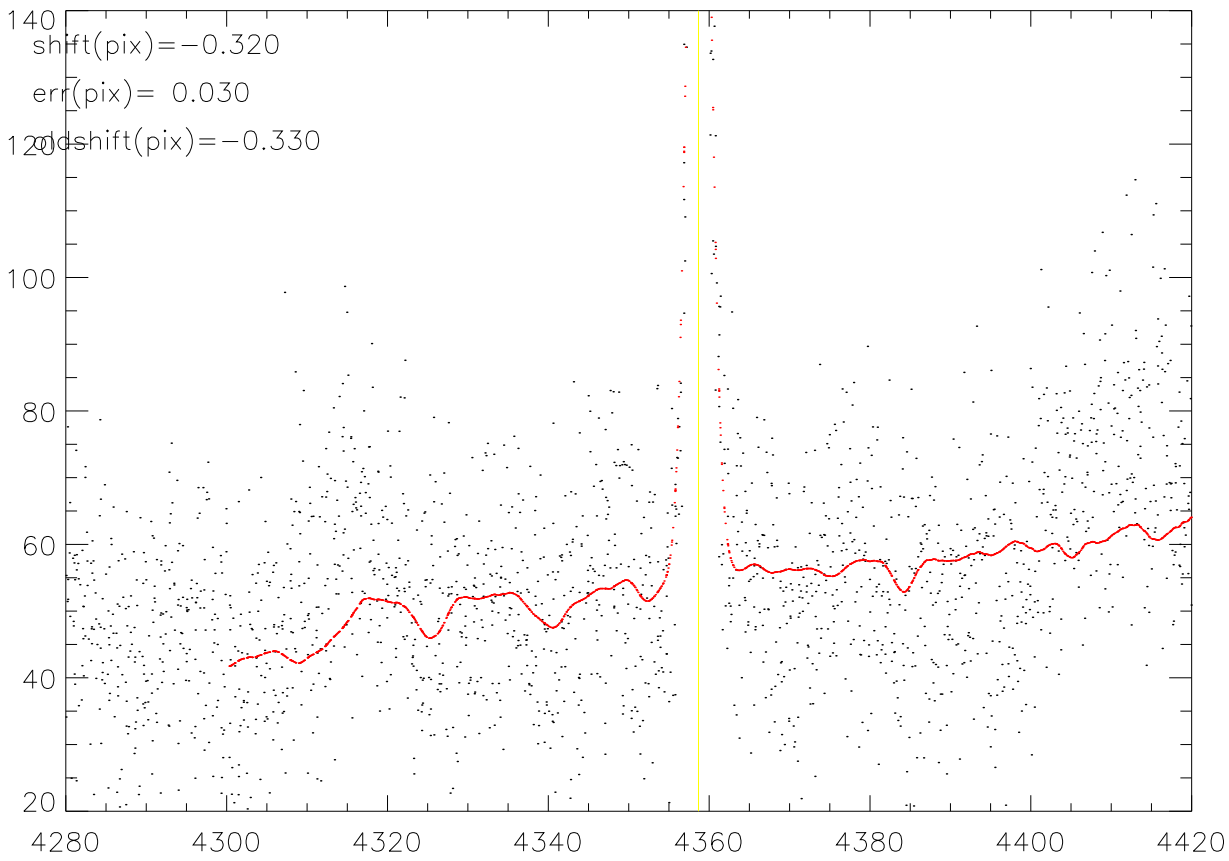

PLATE=0762 MJD=52232 Scattered Light on sdR-b2-00011815.fit
6.73
8.91
7.82
6.73
6.73
5.64
5.64
6.73
6.73
7.82
6.73
7.82
Y [pix]
X [pix]
0
500
1000
1500
2000

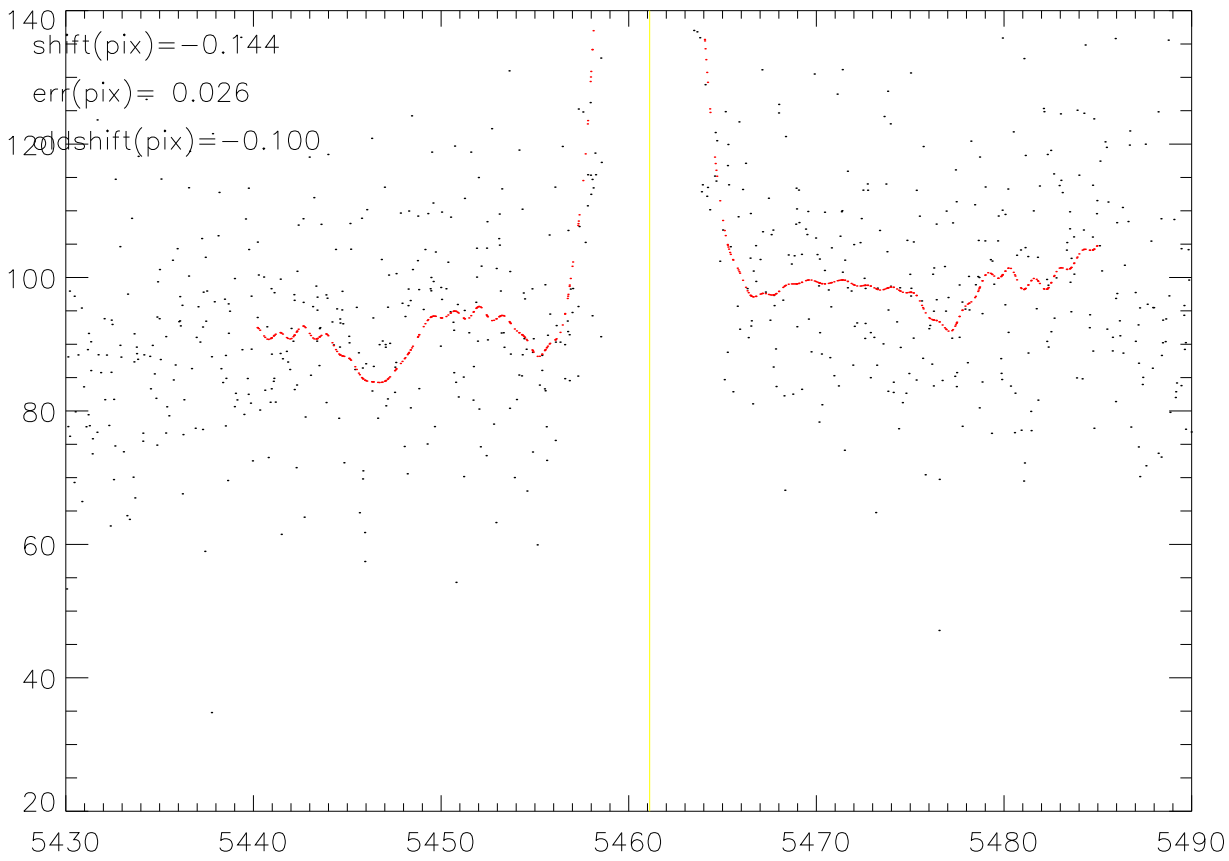

PLATE=0762 MJD=52232 Scattered Light on sdR-b2-00011815.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.304
Max value = 7.790
Mon Feb 25 09:27:37 2008

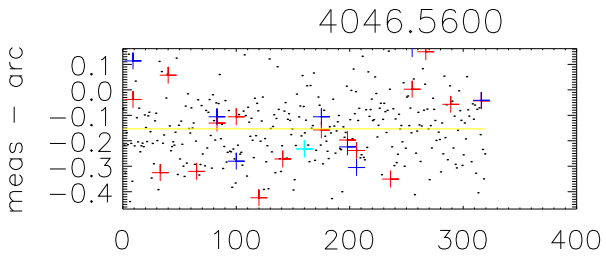

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-b2-00011815.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

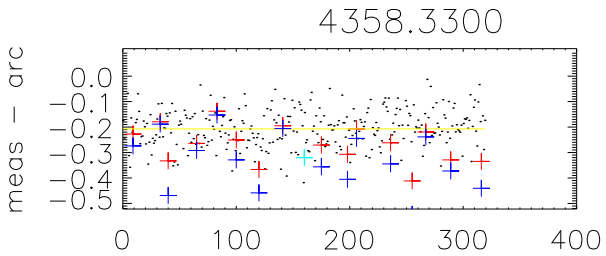

4046.5600
off: −0.35
sig: 0.066
4358.3300
off: −0.33
sig: 0.024
5460.9400
off: −0.10
sig: 0.021
5577.3390
off: −0.07
sig: 0.003
5889.9500
off: −0.04
sig: 0.006
5895.9240
off: −0.07
sig: 0.008

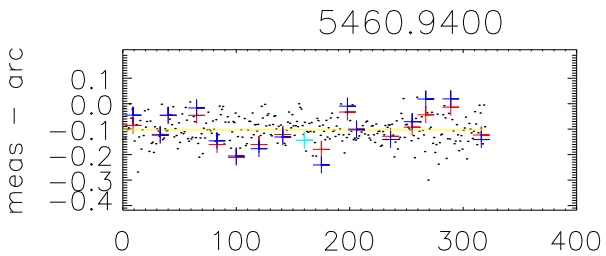

shift(pix)=−0.232
err(pix)= 0.077
oldshift(pix)=−0.348
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

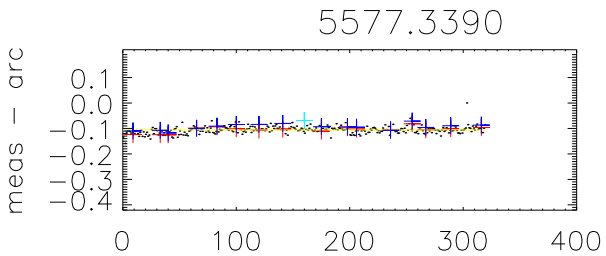

shift(pix)=−0.320
err(pix)= 0.030
oldshift(pix)=−0.330
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

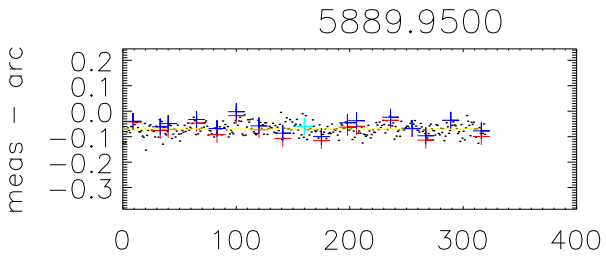

shift(pix)=−0.144
err(pix)= 0.026
oldshift(pix)=−0.100
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

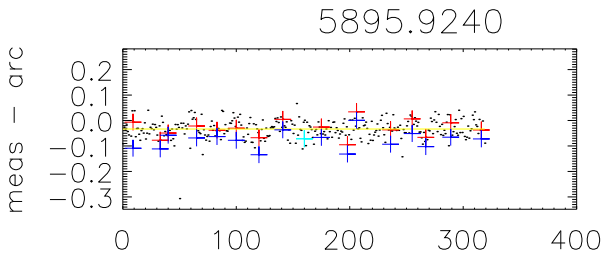

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

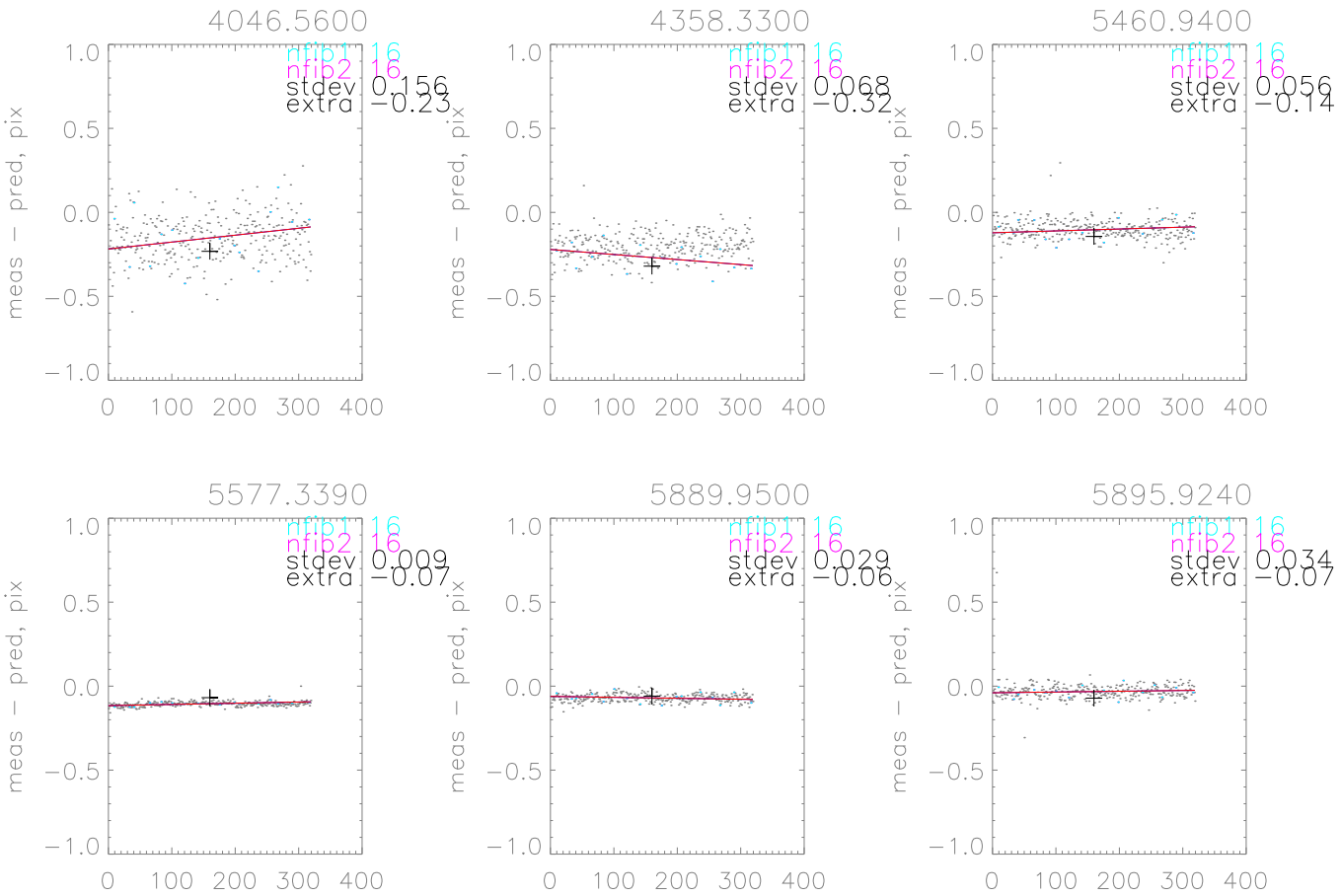

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

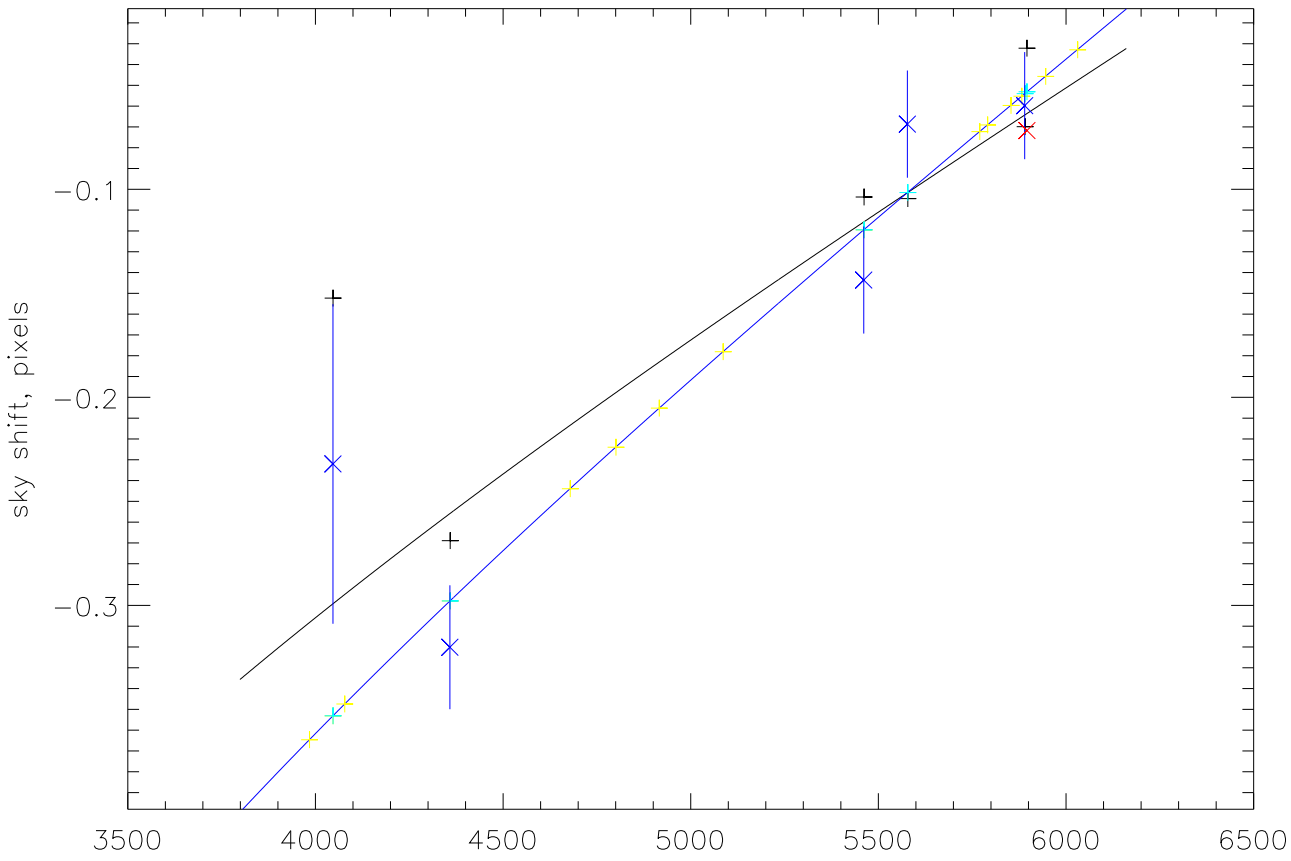

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

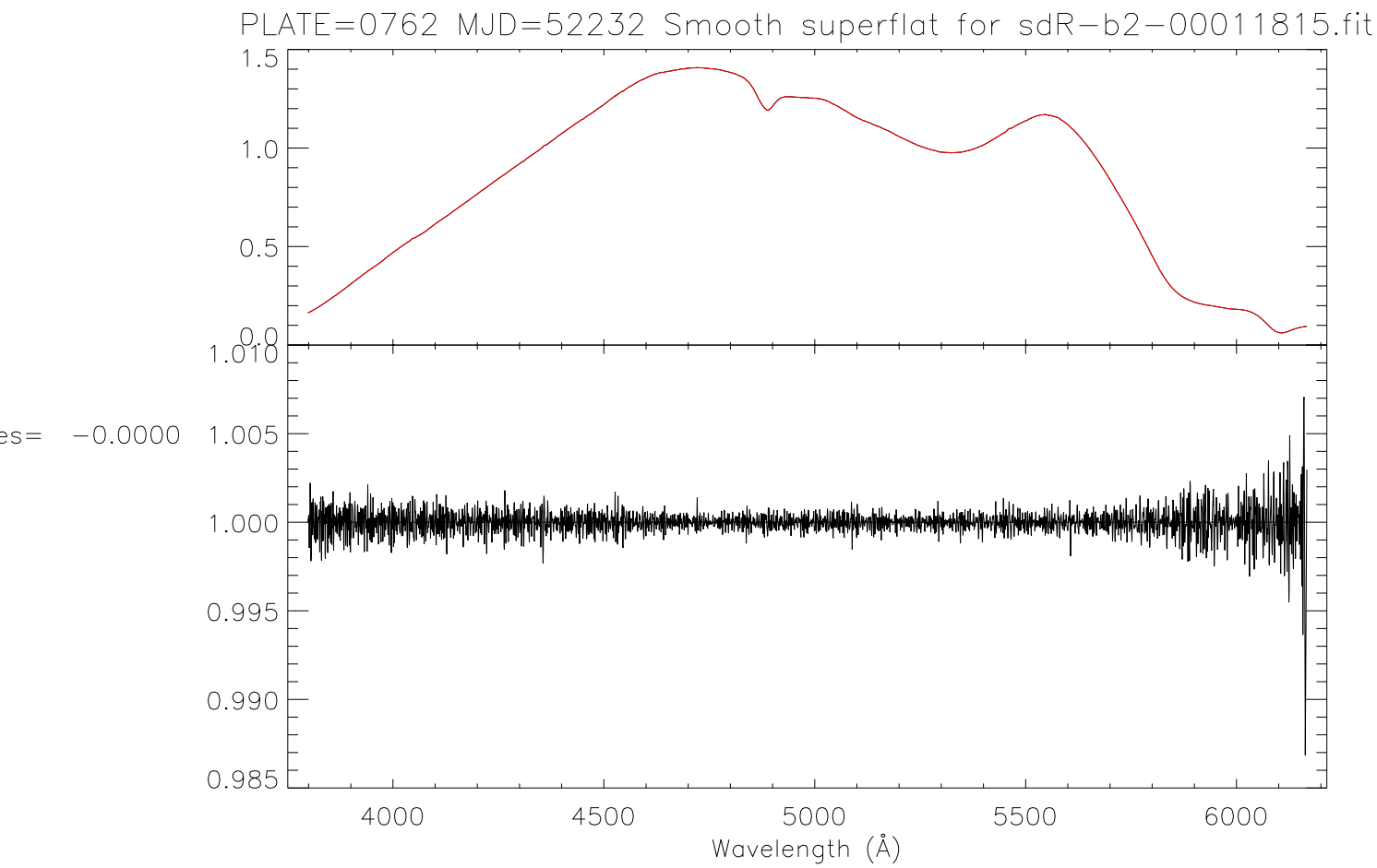

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

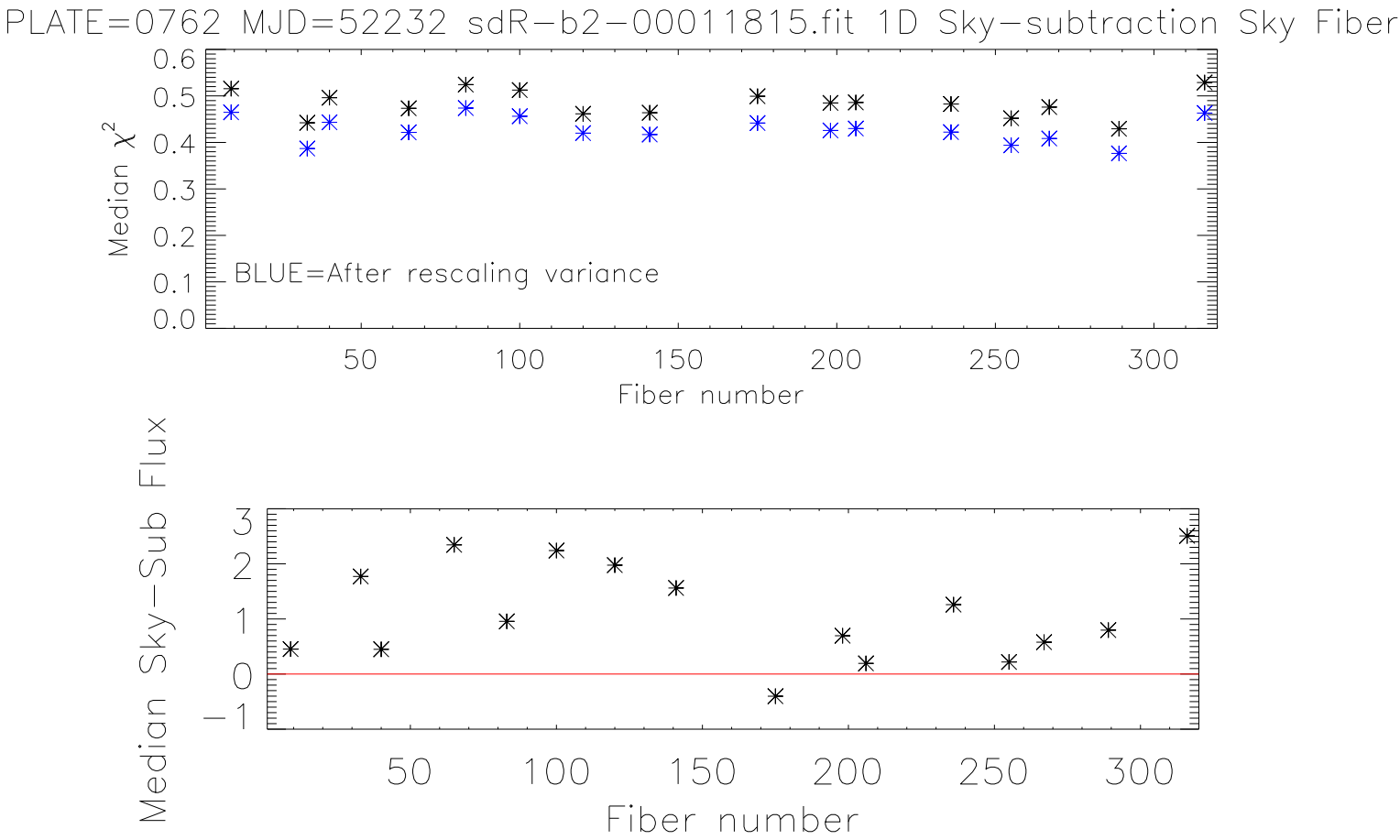

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

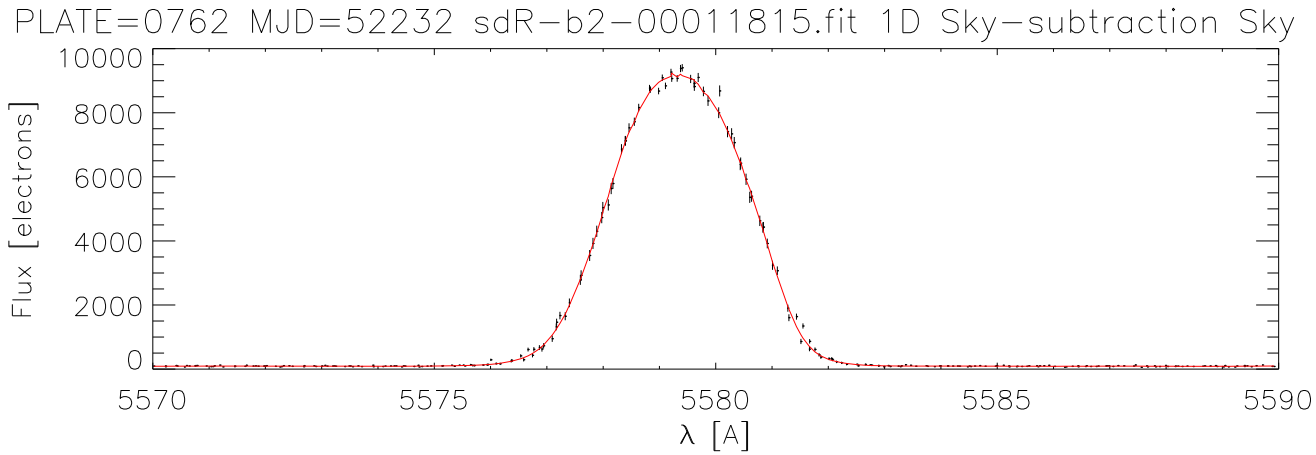

4046.5600
nfib1 16
nfib2 16
stdev 0.156
extra −0.23
4358.3300
nfib1 16
nfib2 16
stdev 0.068
extra −0.32
5460.9400
nfib1 16
nfib2 16
stdev 0.056
extra −0.14
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra −0.07
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra −0.06
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra −0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

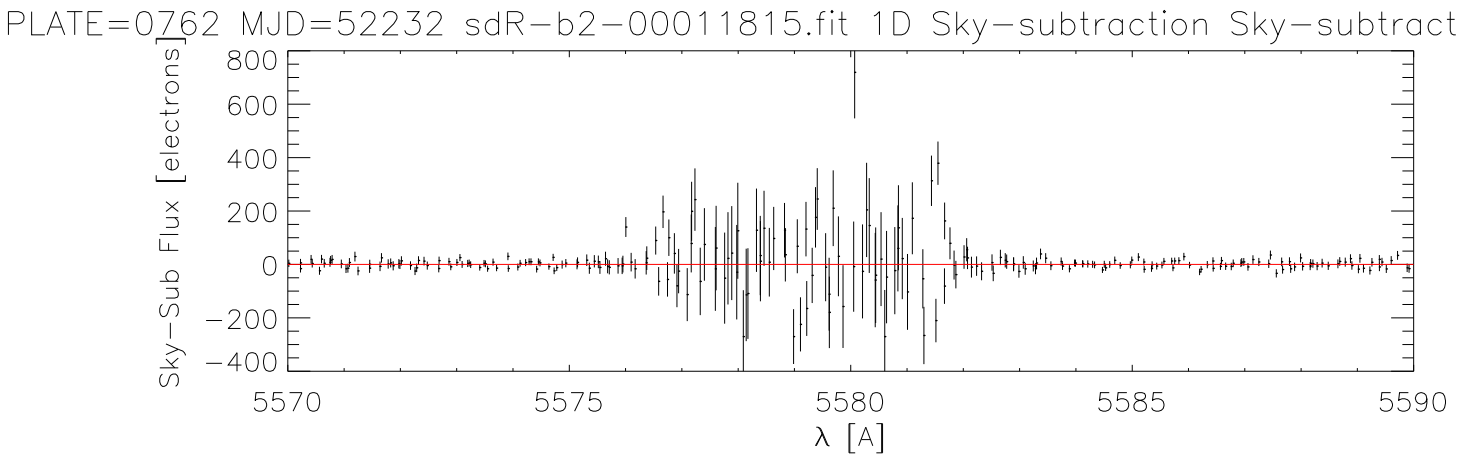

sky shift, pixels
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

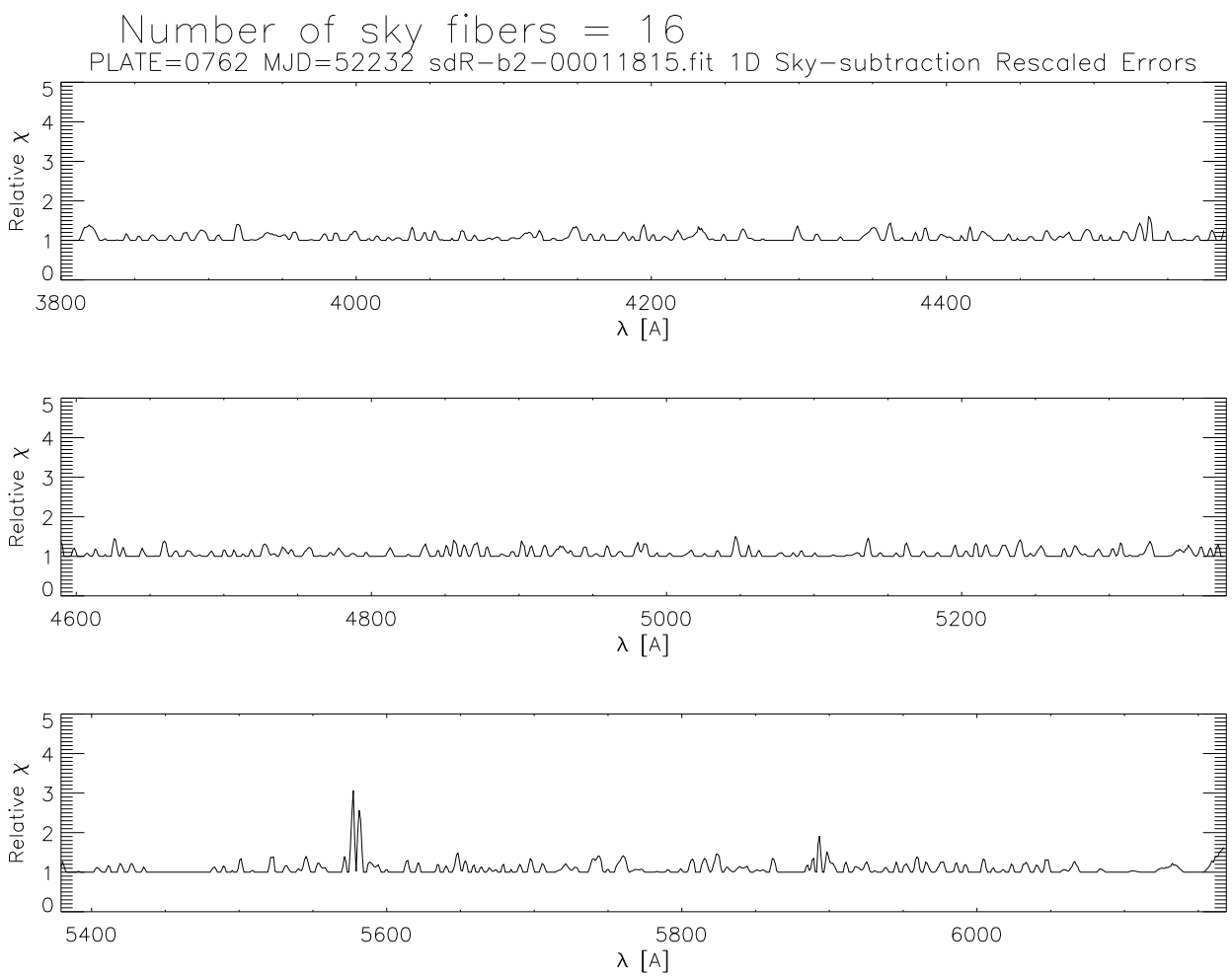

PLATE=0762 MJD=52232 Smooth superflat for sdR-b2-00011815.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

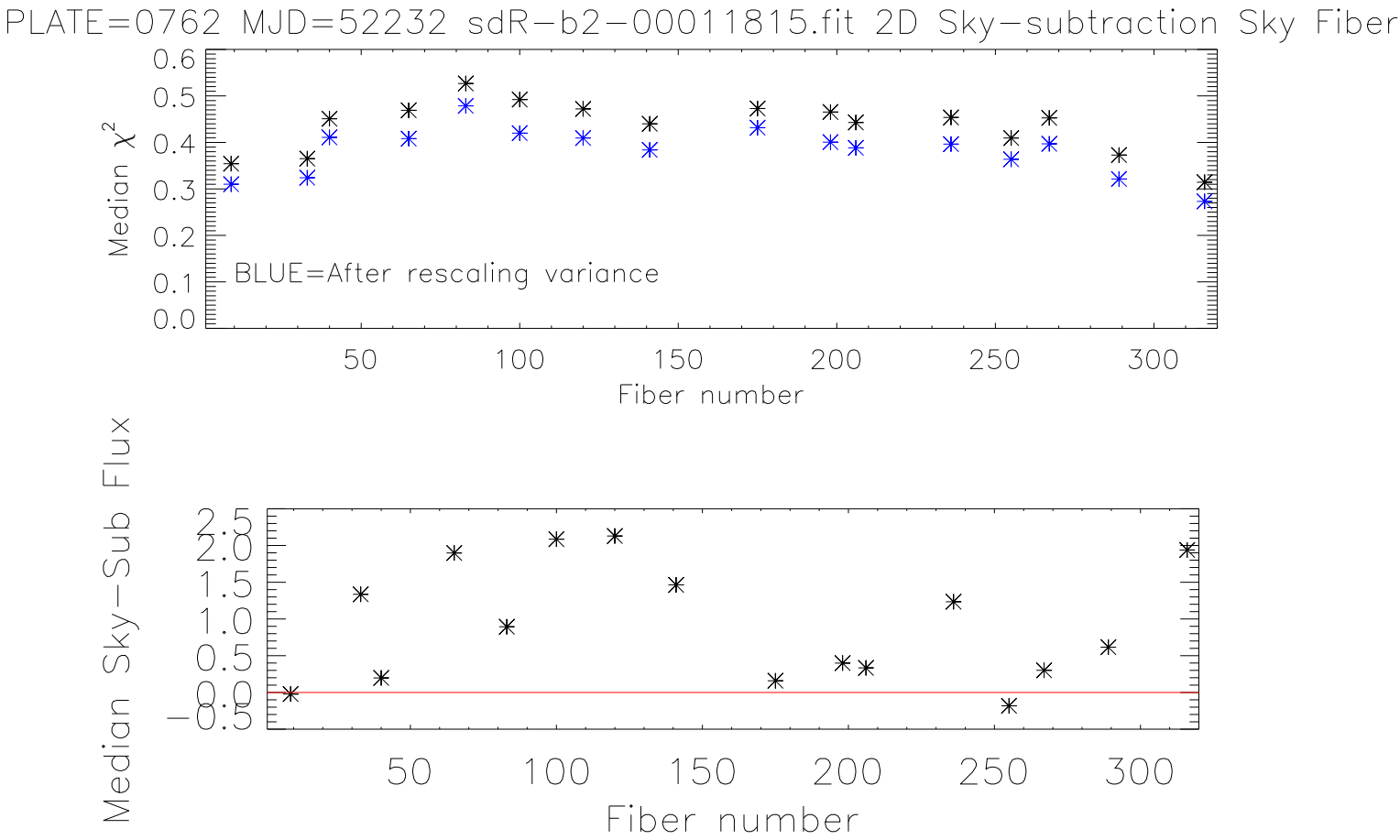
es= −0.0000

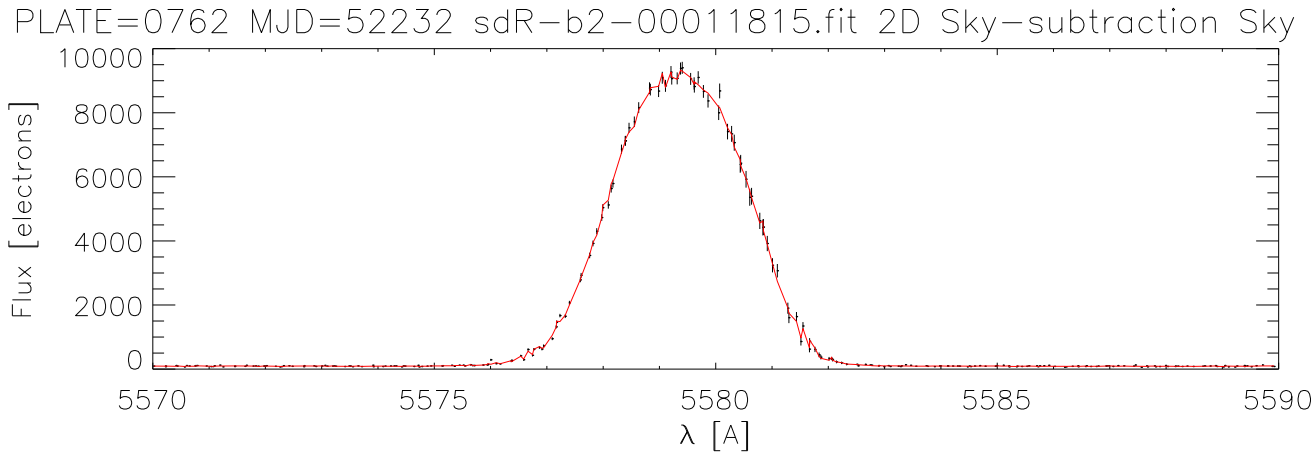

PLATE=0762 MJD=52232 sdR-b2-00011815.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

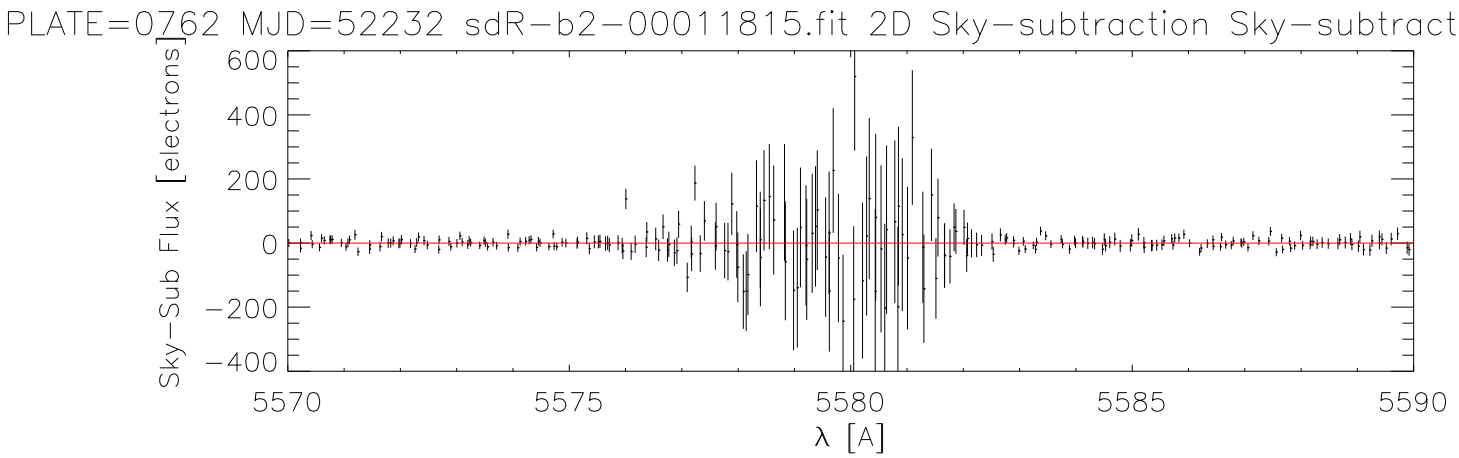

PLATE=0762 MJD=52232 sdR-b2-00011815.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

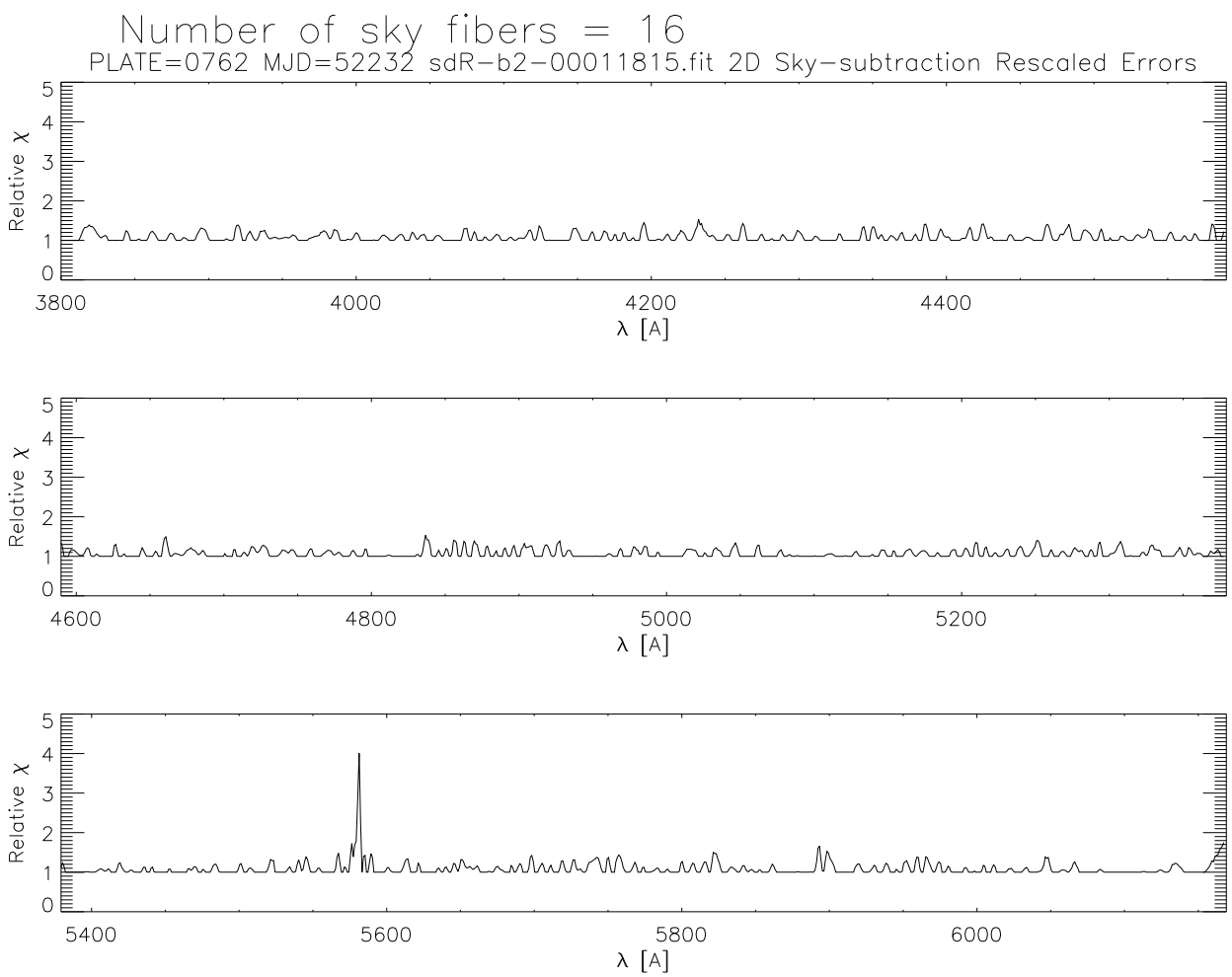

PLATE=0762 MJD=52232 sdR-b2-00011815.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

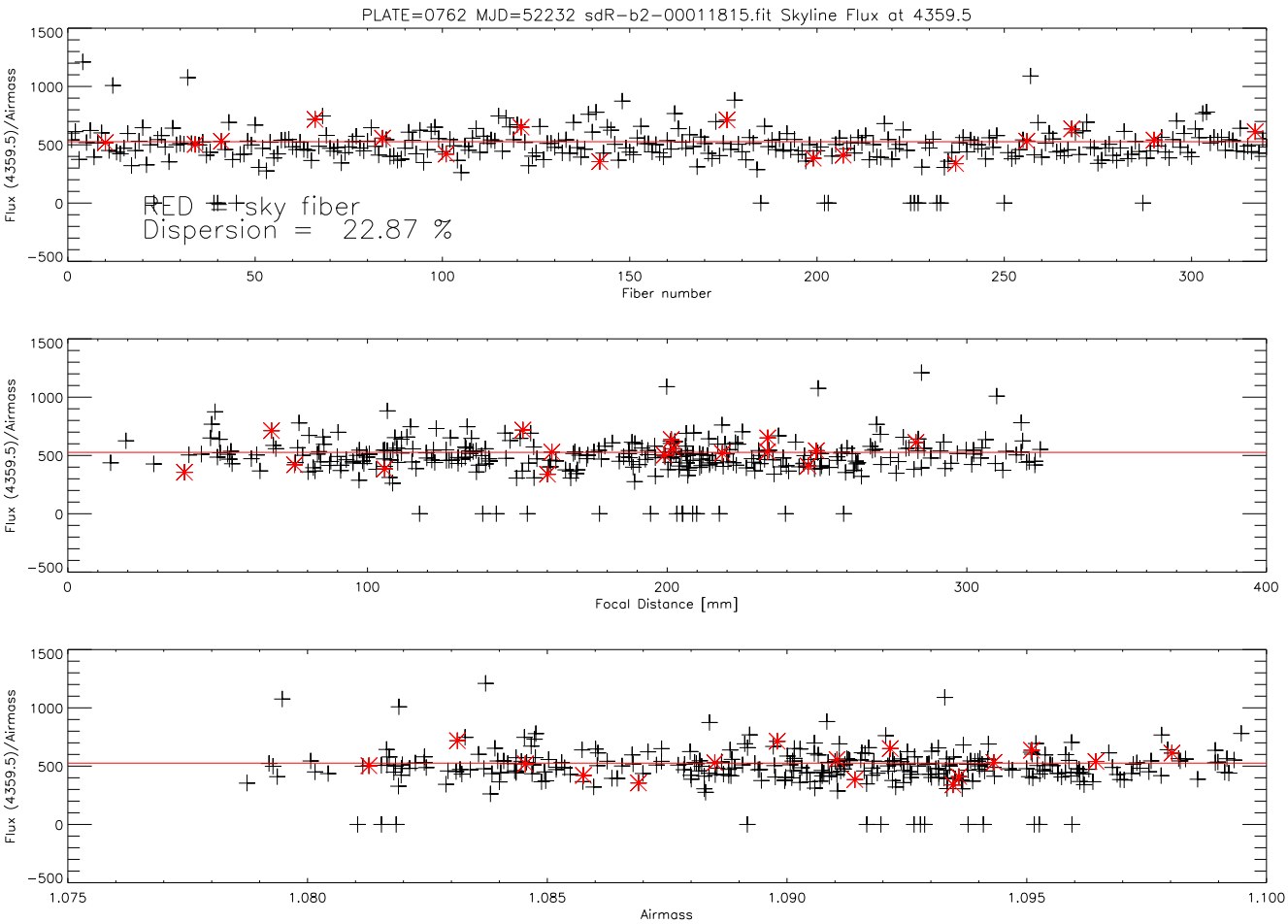

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b2-00011815.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

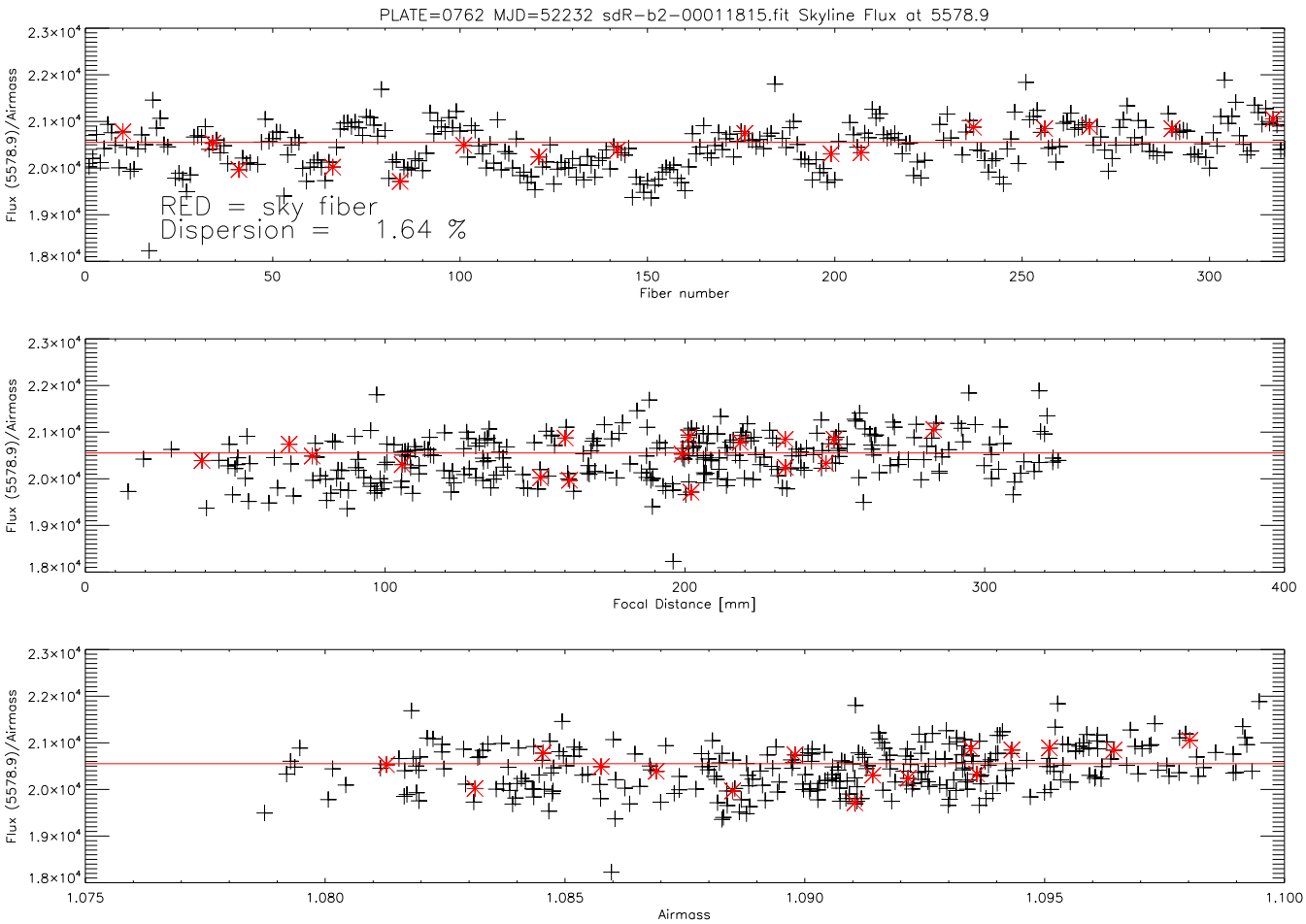

PLATE=0762 MJD=52232 sdR-b2-00011815.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

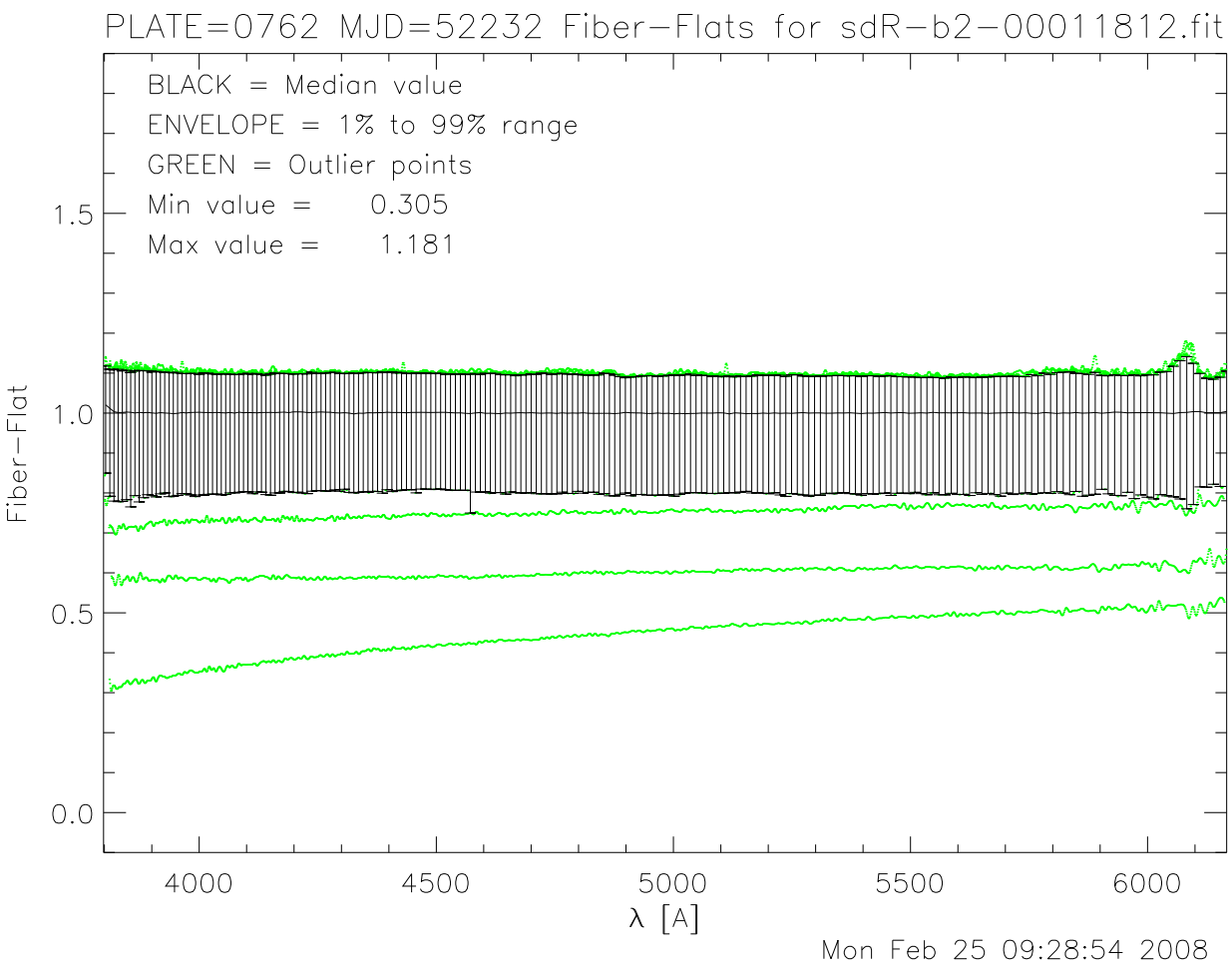

PLATE=0762 MJD=52232 sdR-b2-00011815.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

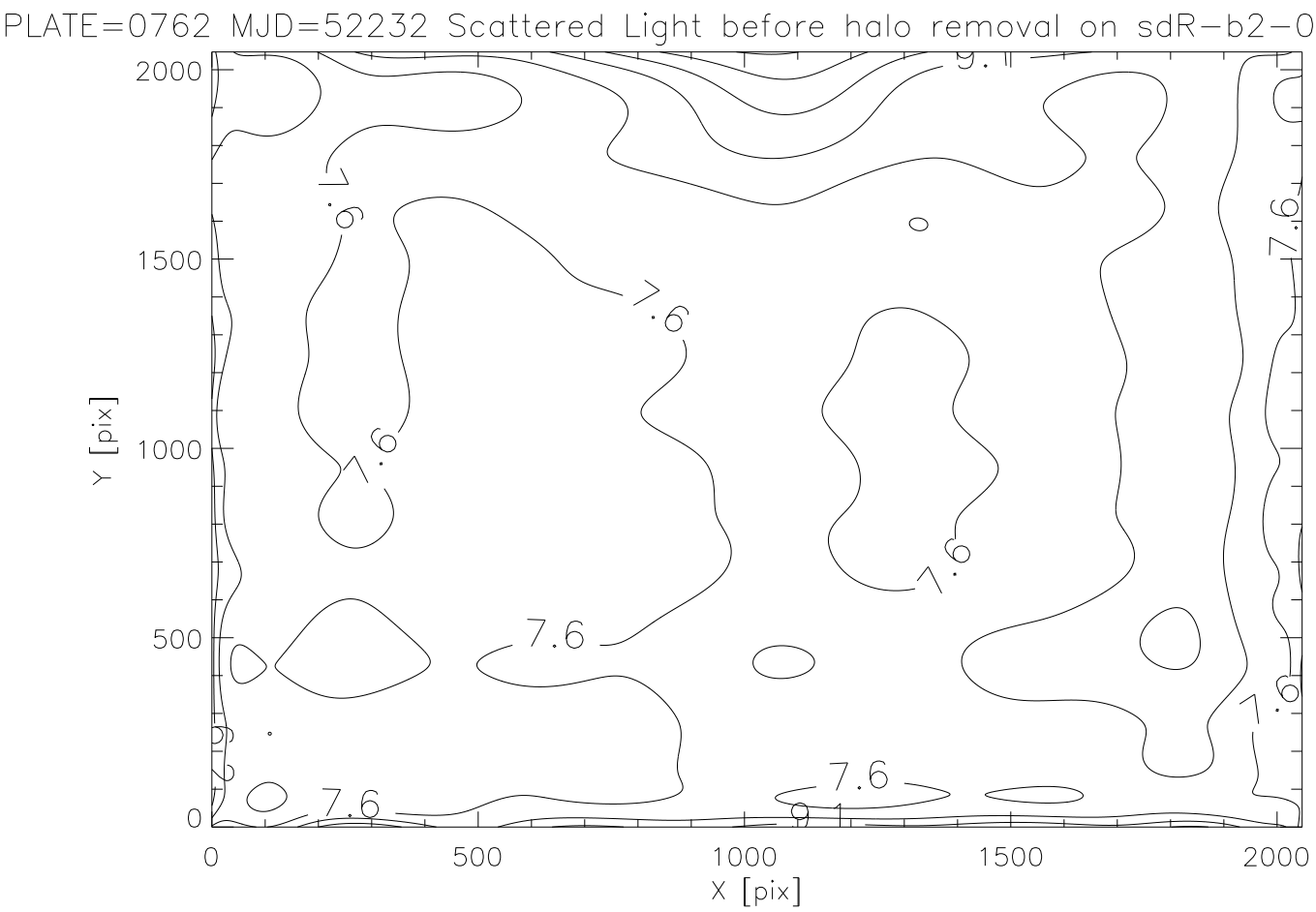

PLATE=0762 MJD=52232 sdR-b2-00011815.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

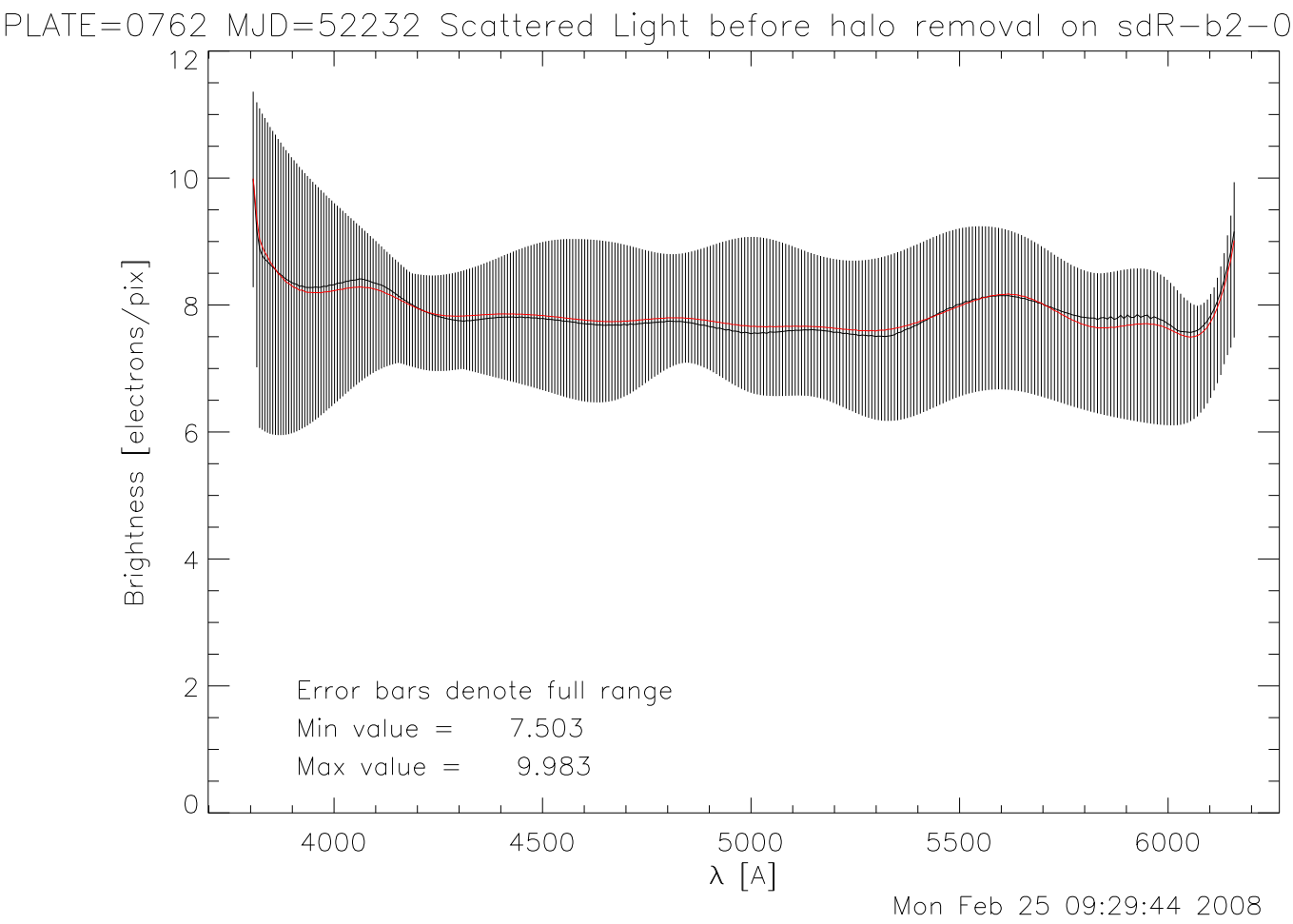

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-b2-00011815.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

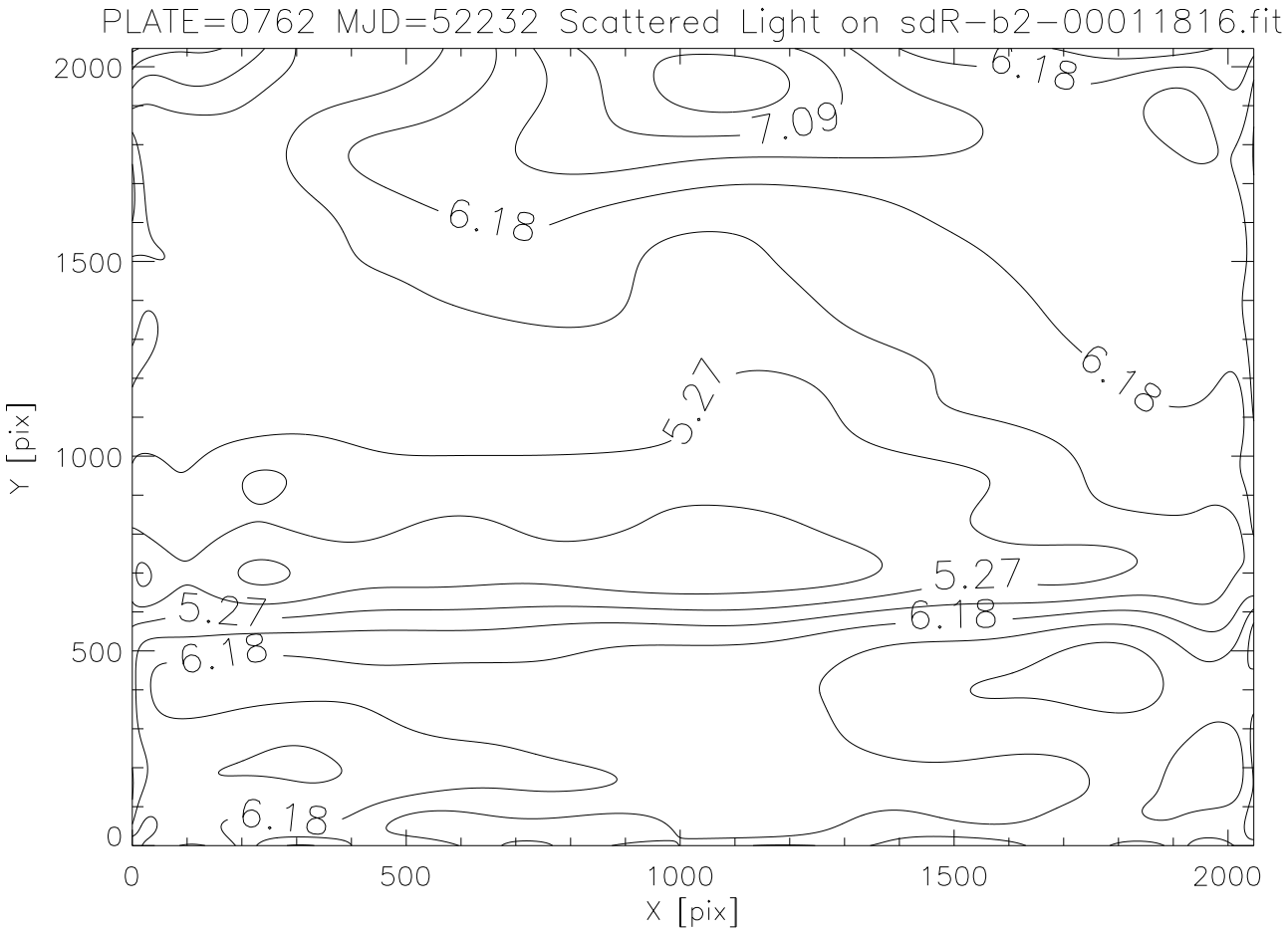

PLATE=0762 MJD=52232 sdR-b2-00011815.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED sky fiber
Dispersion = 22.87 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

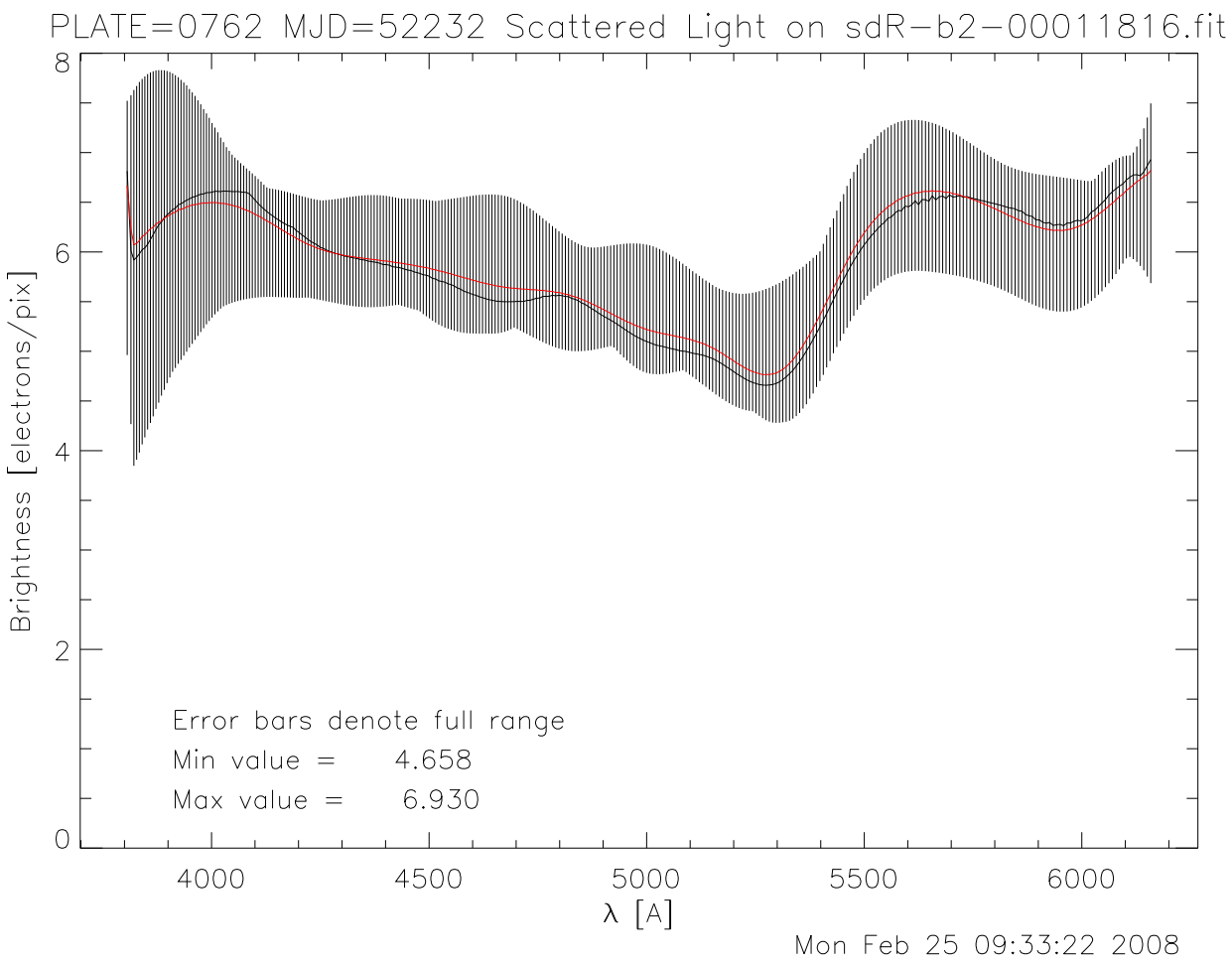

PLATE=0762 MJD=52232 sdR-b2-00011815.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.64 %
Fiber number
Focal Distance [mm]
Airmass

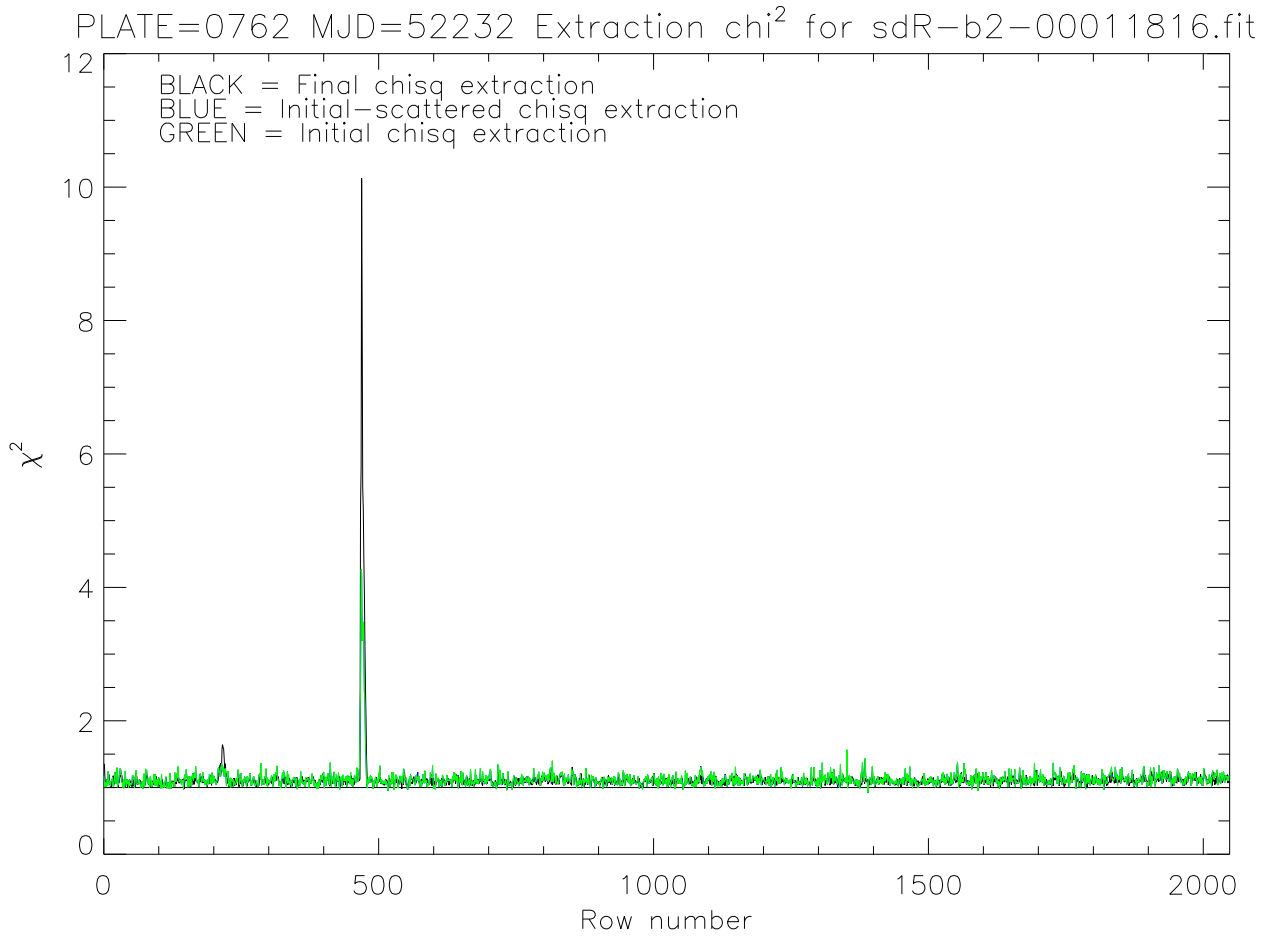

PLATE=0762 MJD=52232 Fiber-Flats for sdR-b2-00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.305
Max value = 1.181
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:28:54 2008

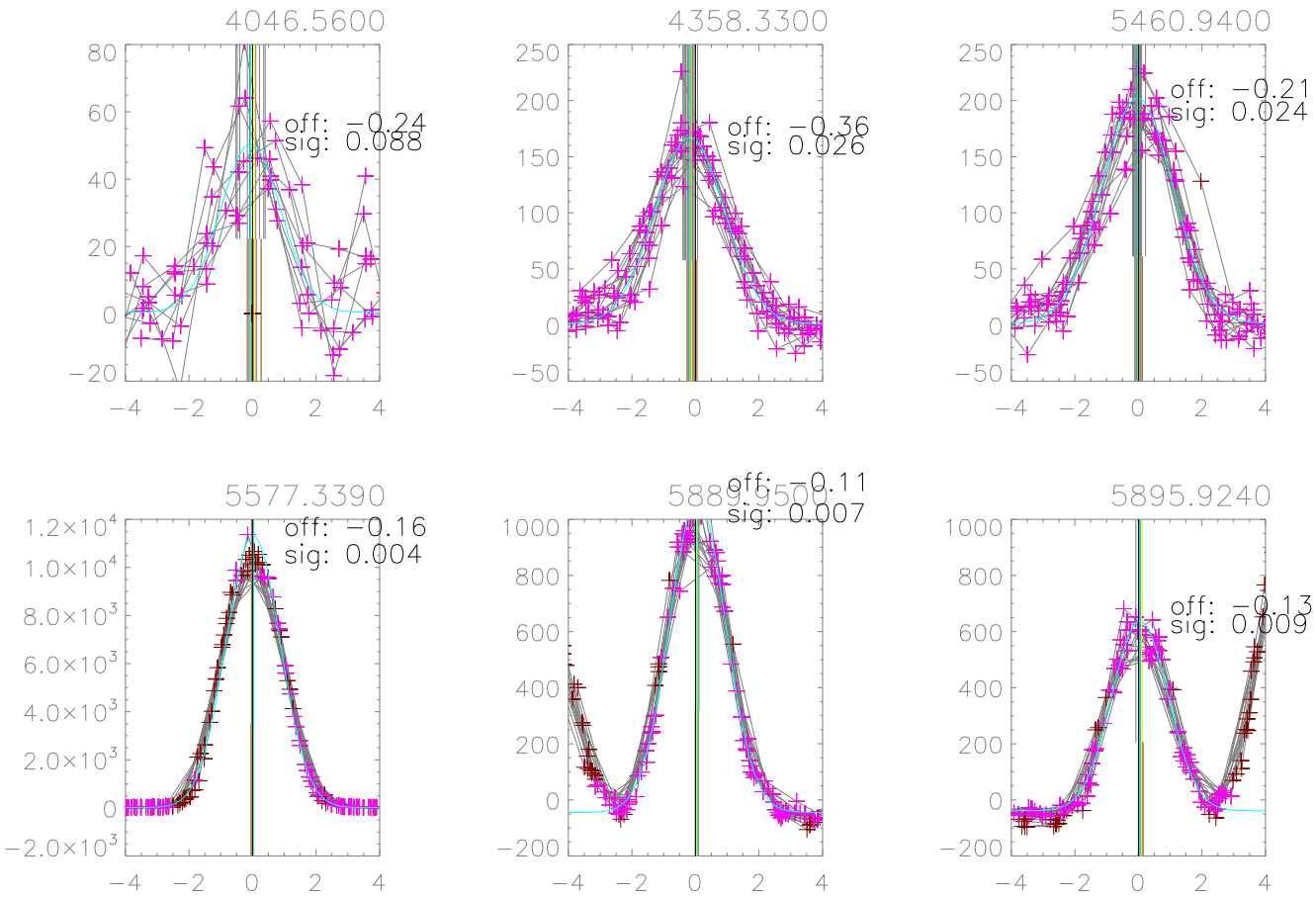

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b2-00011816.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
7.6
7.6
7.6
7.6
7.6
7.6
7.6

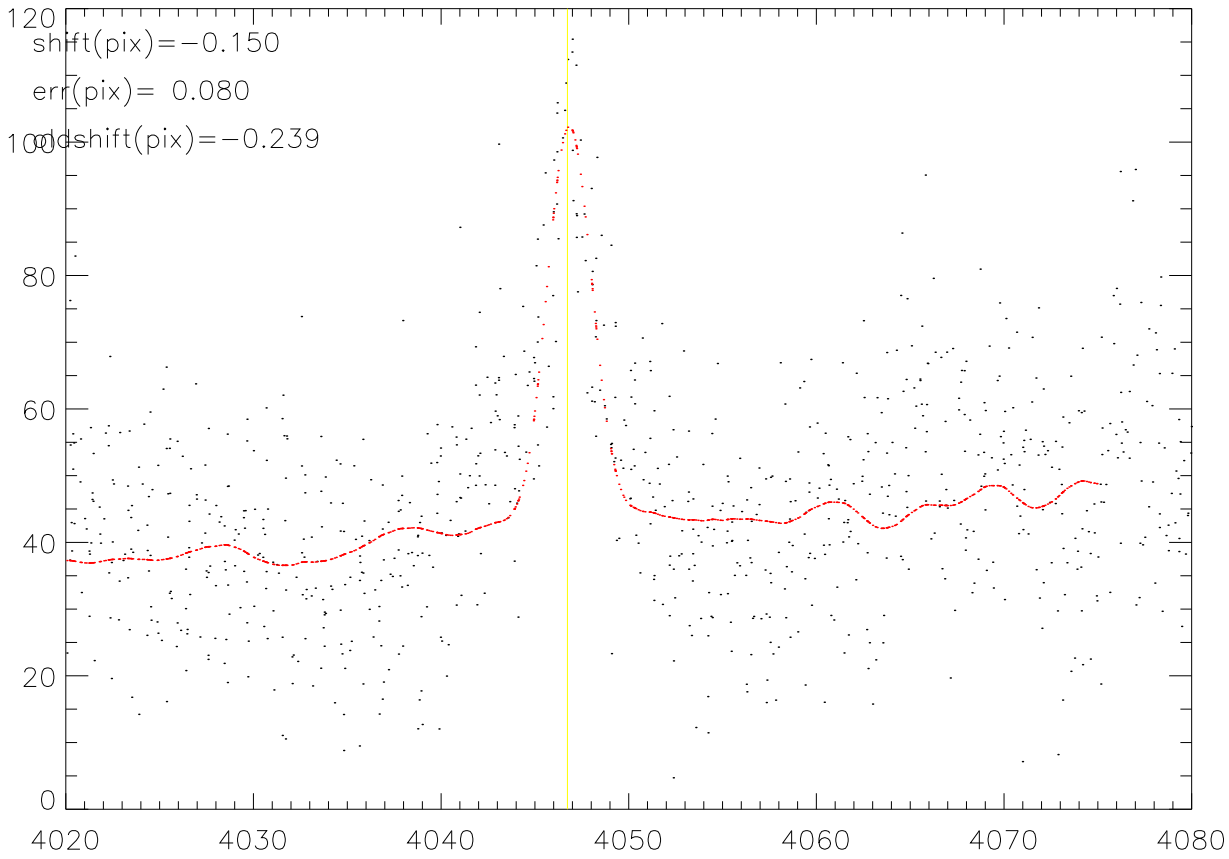

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b2-00011816.f
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 7.503
Max value = 9.983
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:29:44 2008

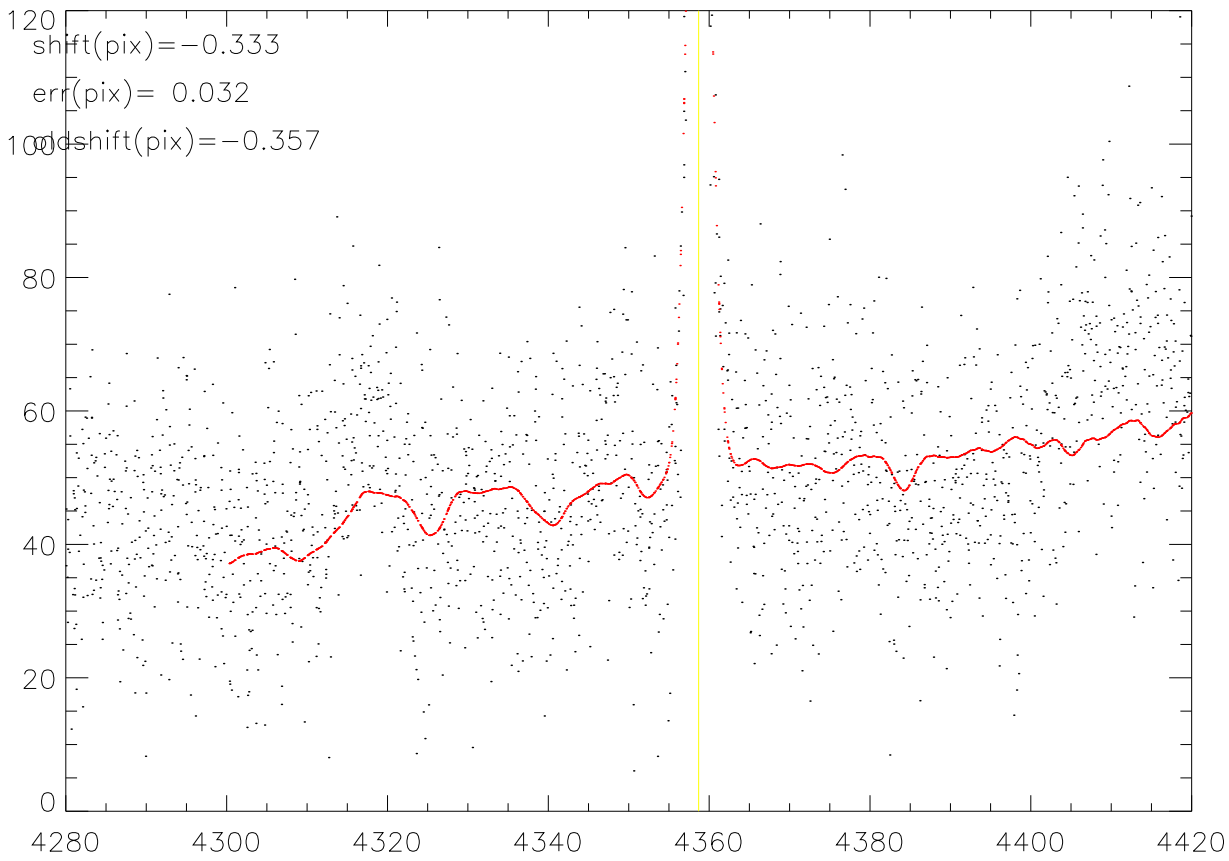

PLATE=0762 MJD=52232 Scattered Light on sdR-b2-00011816.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.18
7.09
6.18
6.18
5.27
5.27
5.27
6.18
6.18
6.18

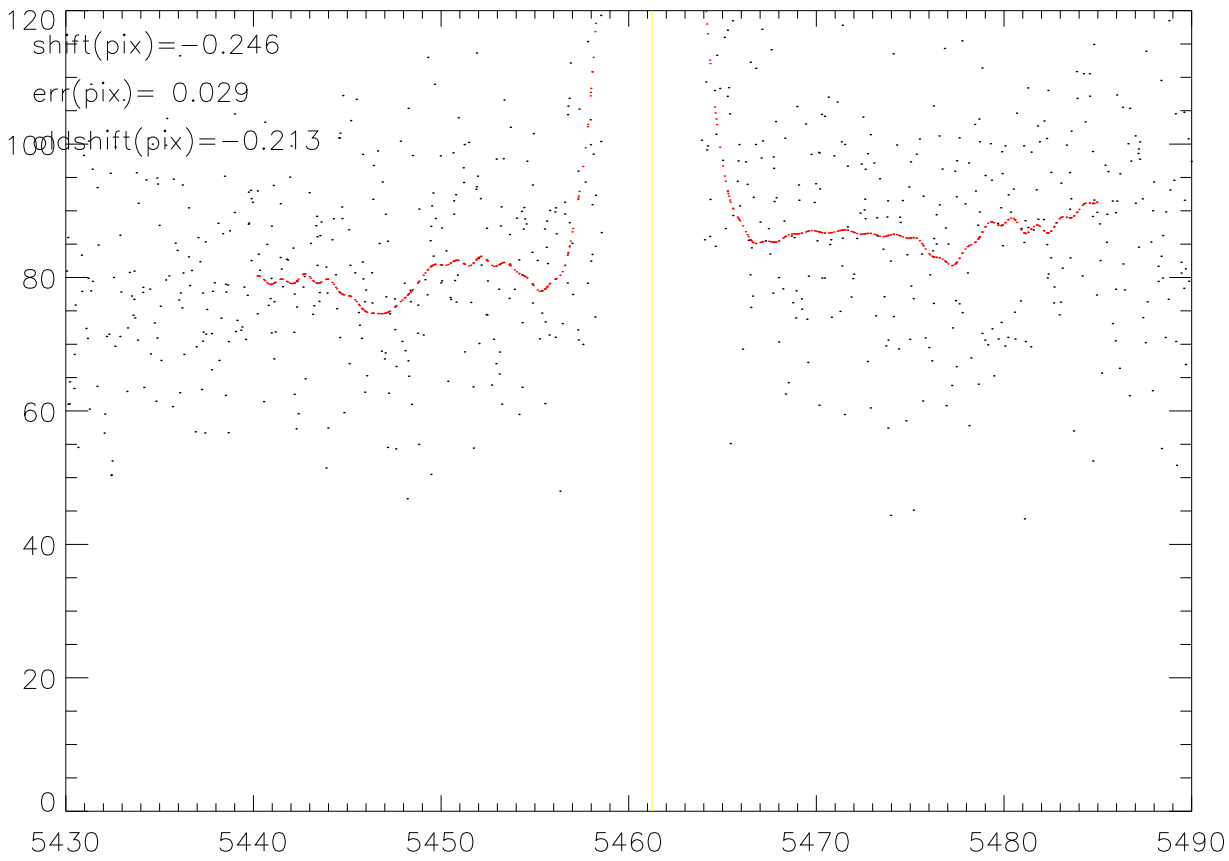

PLATE=0762 MJD=52232 Scattered Light on sdR-b2-00011816.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.658
Max value = 6.930
Mon Feb 25 09:33:22 2008

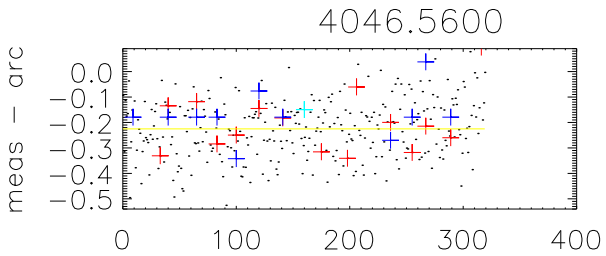

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-b2-00011816.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

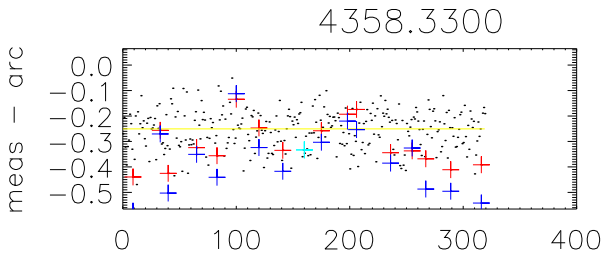

4046.5600
off: −0.24
sig: 0.088
4358.3300
off: −0.36
sig: 0.026
5460.9400
off: −0.21
sig: 0.024
5577.3390
off: −0.16
sig: 0.004
5889.9500
off: −0.11
sig: 0.007
5895.9240
off: −0.13
sig: 0.009

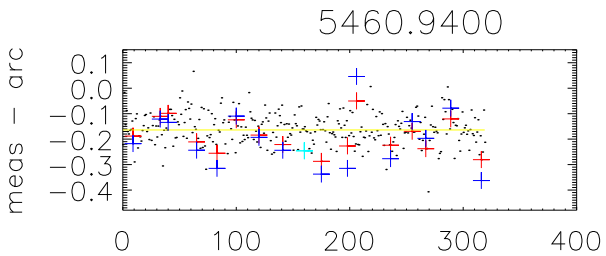

shift(pix)=−0.150
err(pix)= 0.080
oldshift(pix)=−0.239
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

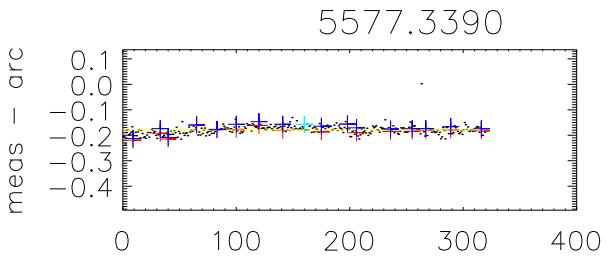

shift(pix)=−0.333
err(pix)= 0.032
oldshift(pix)=−0.357
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

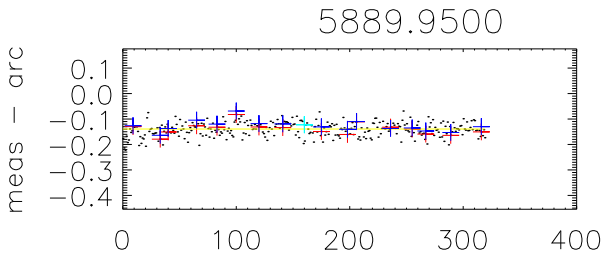

shift(pix)=−0.246
err(pix)= 0.029
oldshift(pix)=−0.213
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

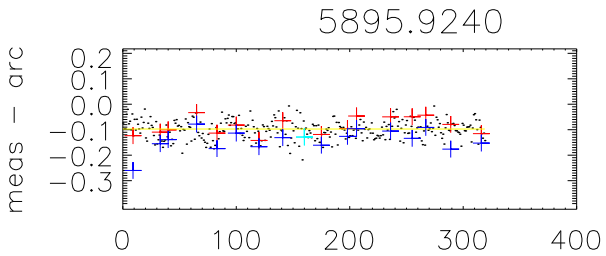

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

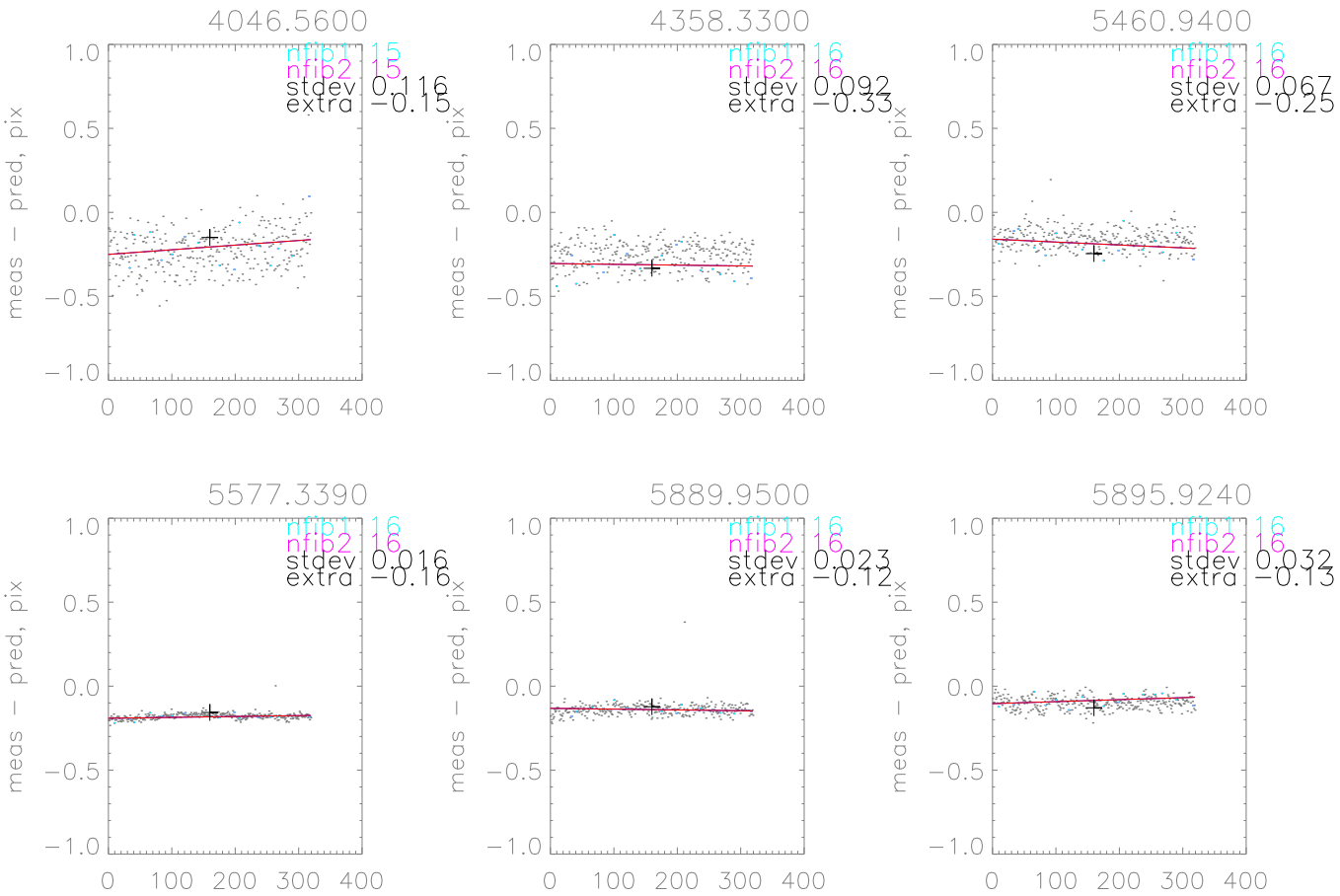

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

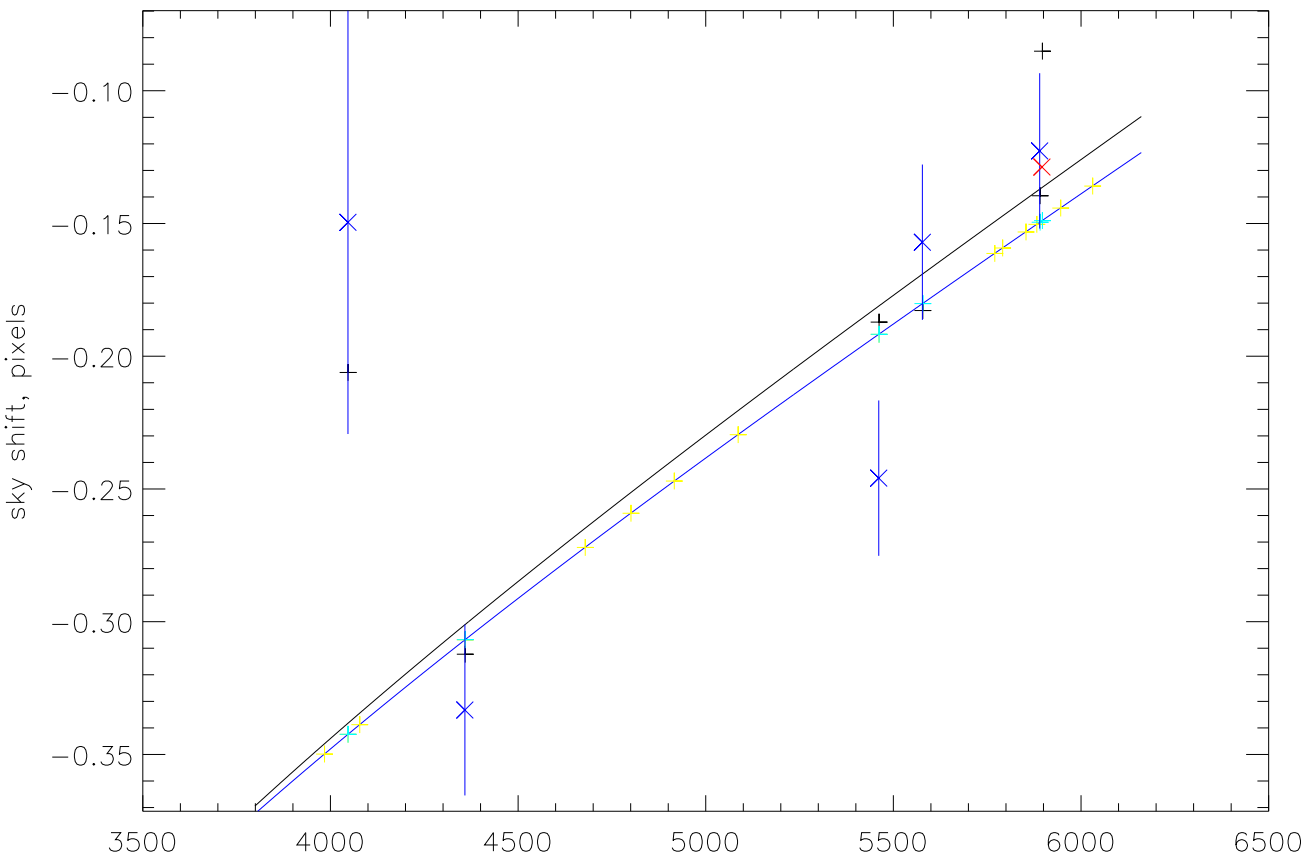

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

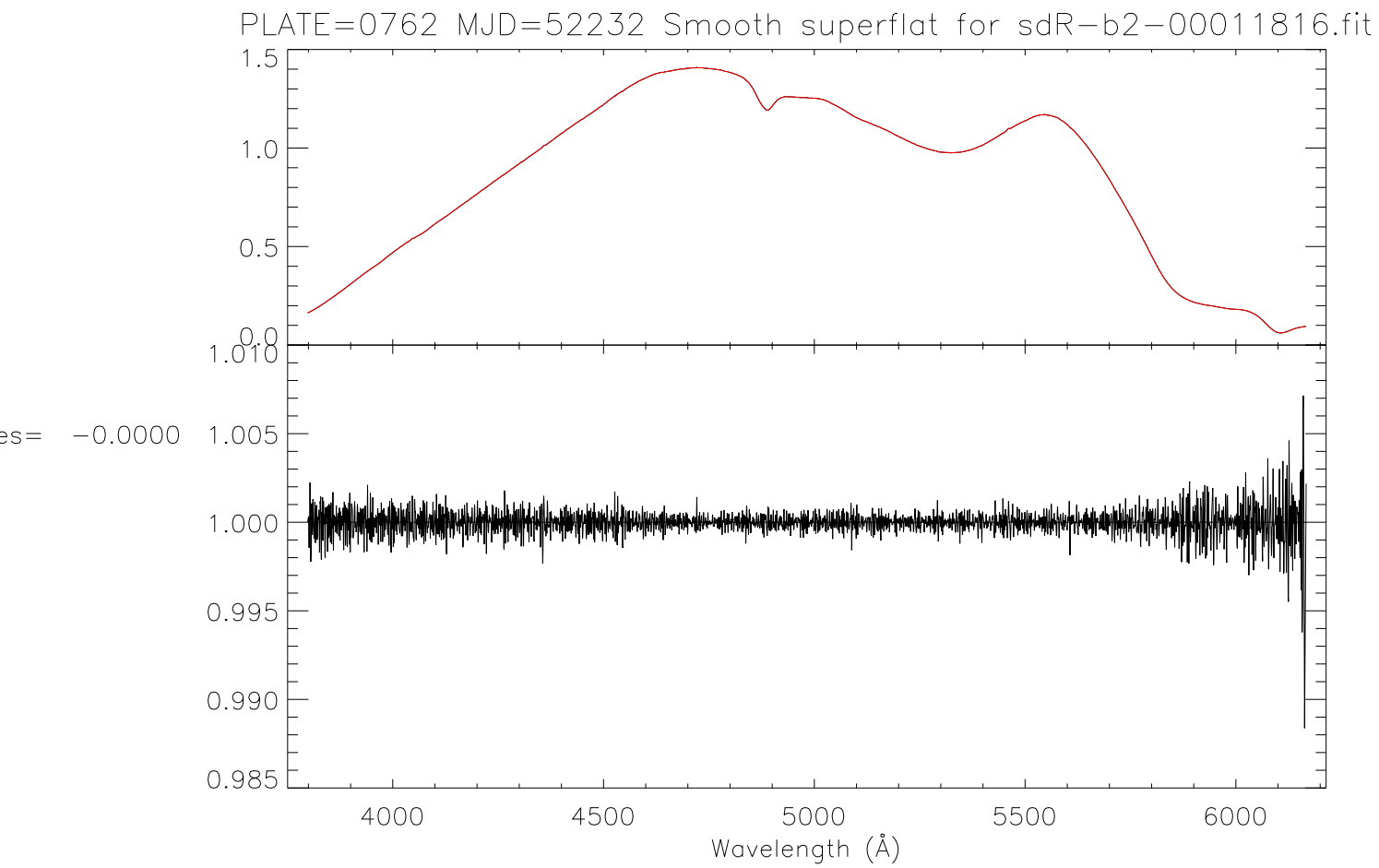

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

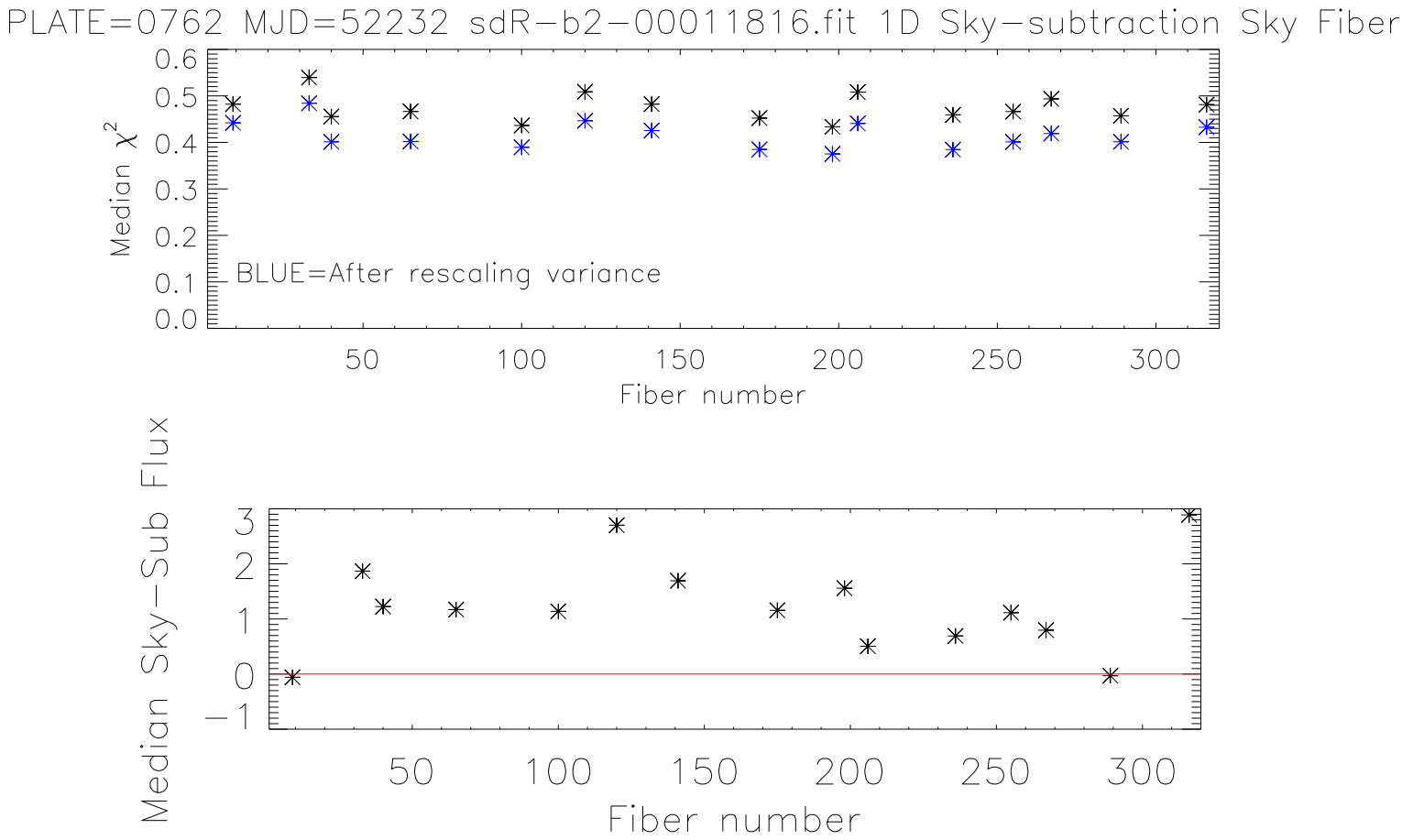

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

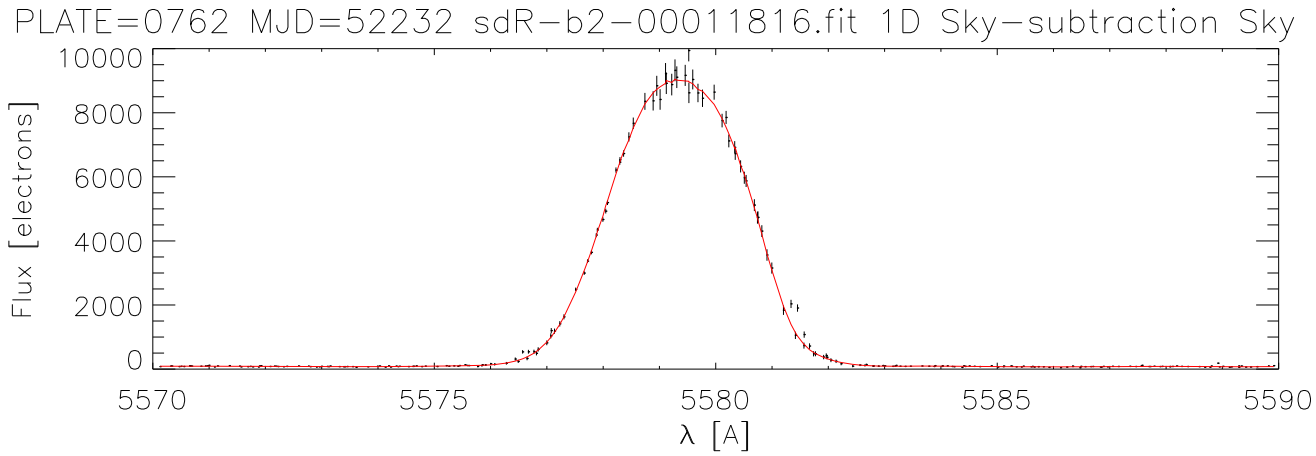

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

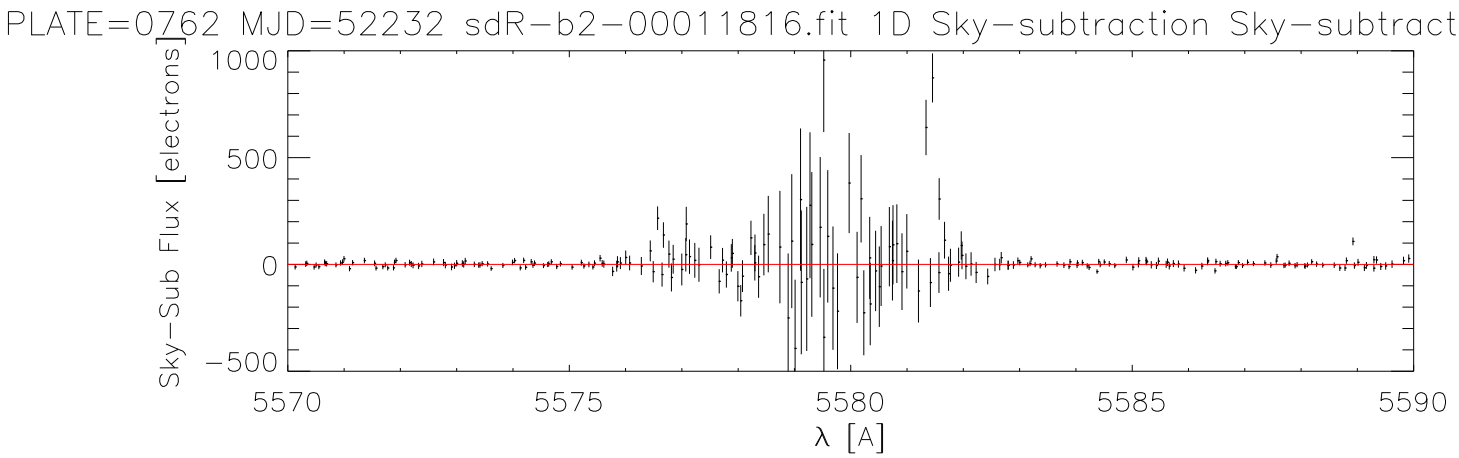

4046.5600
nfib1 15
nfib2 15
stdev 0.116
extra −0.15
4358.3300
nfib1 16
nfib2 16
stdev 0.092
extra −0.33
5460.9400
nfib1 16
nfib2 16
stdev 0.067
extra −0.25
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra −0.12
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

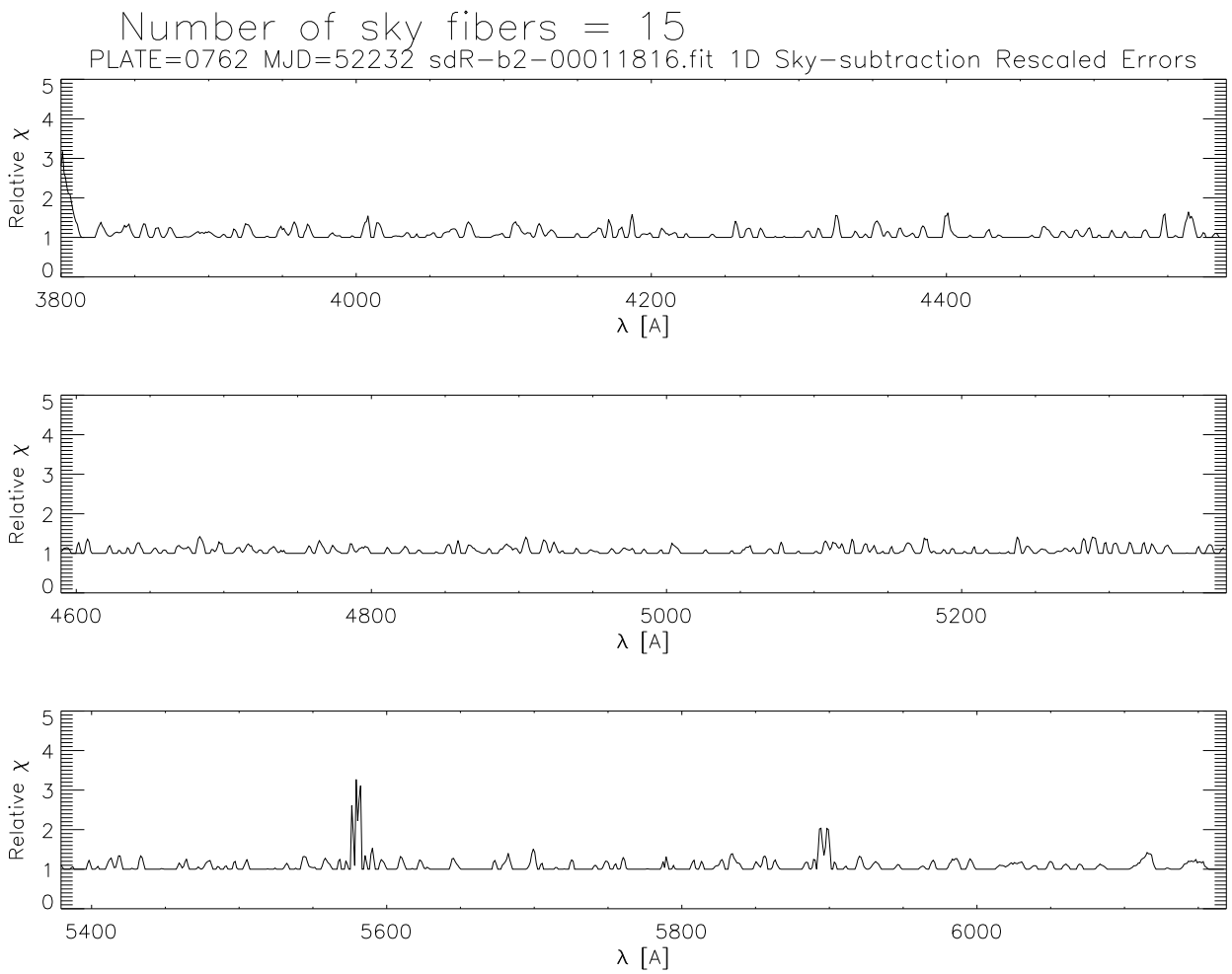

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
3500
4000
4500
5000
5500
6000
6500

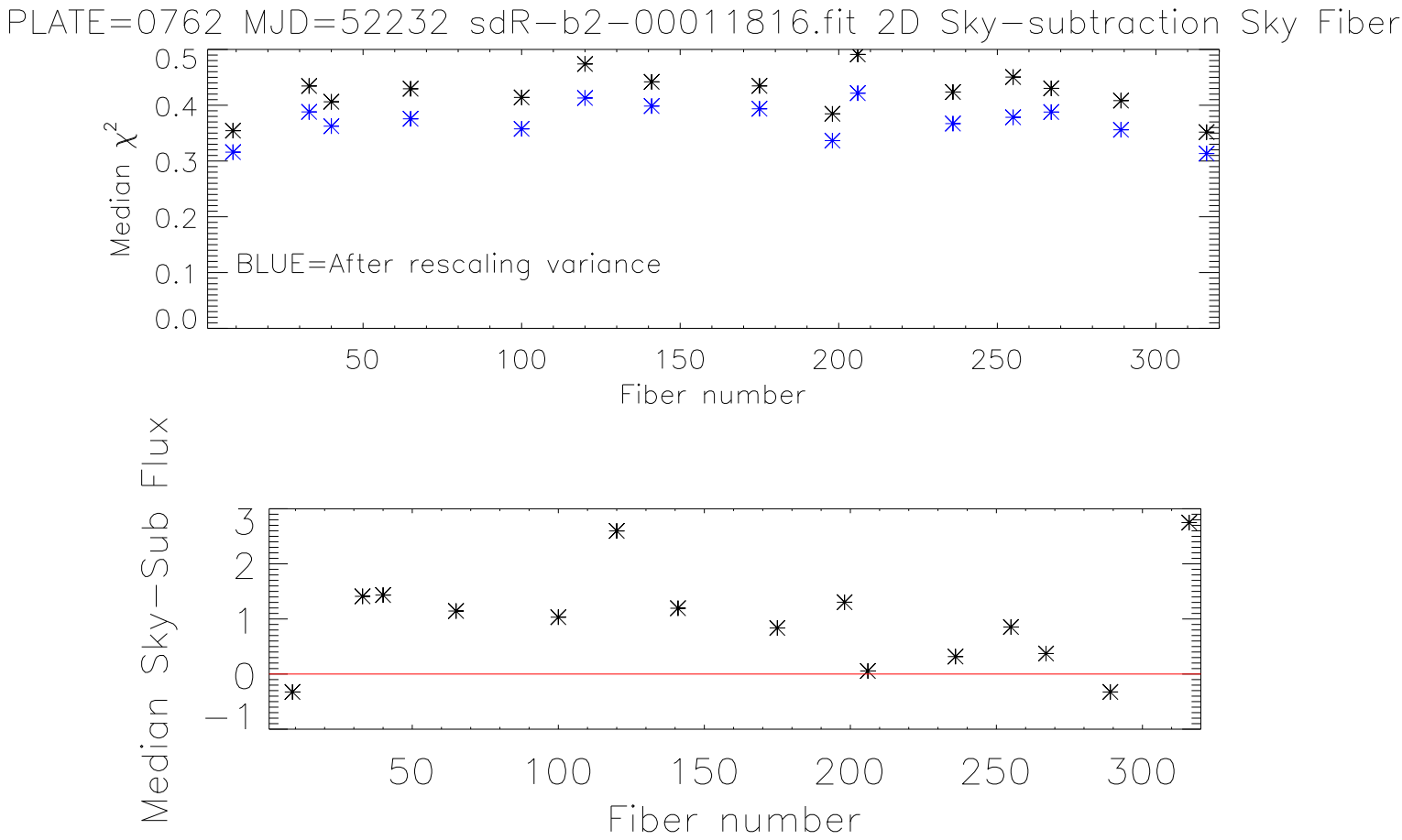

PLATE=0762 MJD=52232 Smooth superflat for sdR-b2-00011816.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

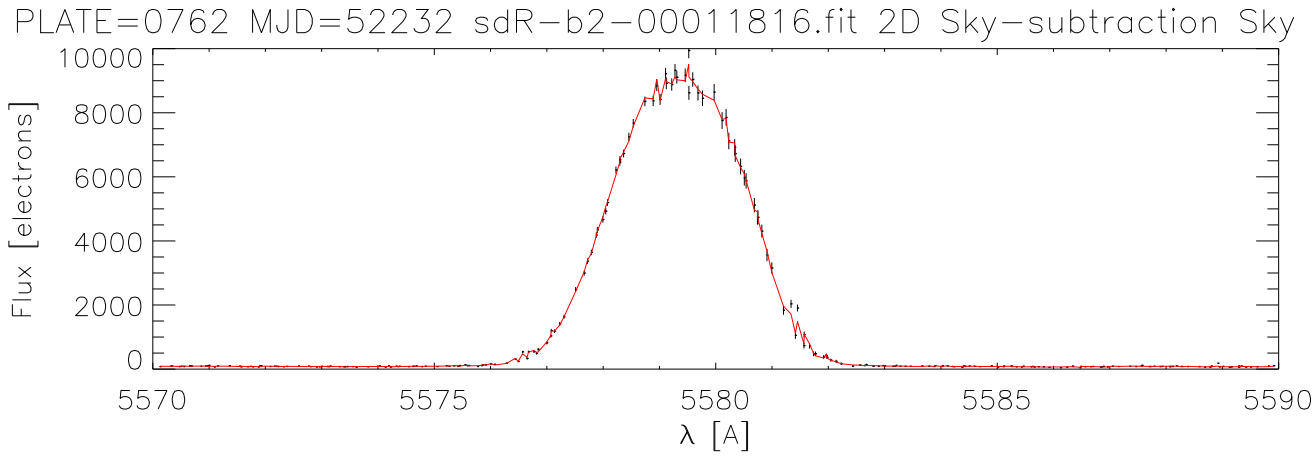

PLATE=0762 MJD=52232 sdR-b2-00011816.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

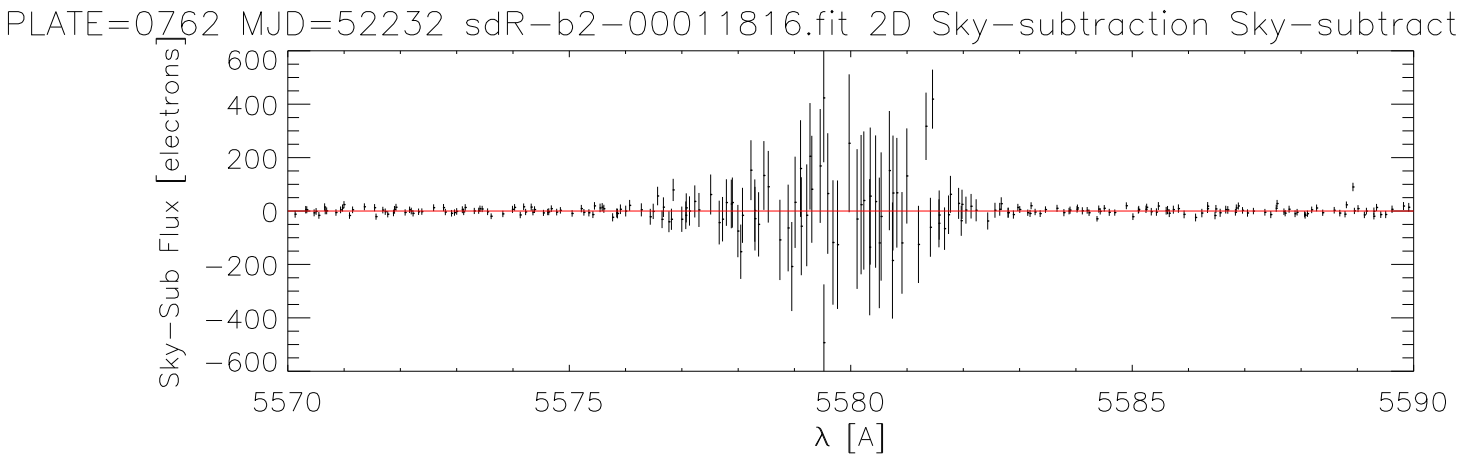

PLATE=0762 MJD=52232 sdR-b2-00011816.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

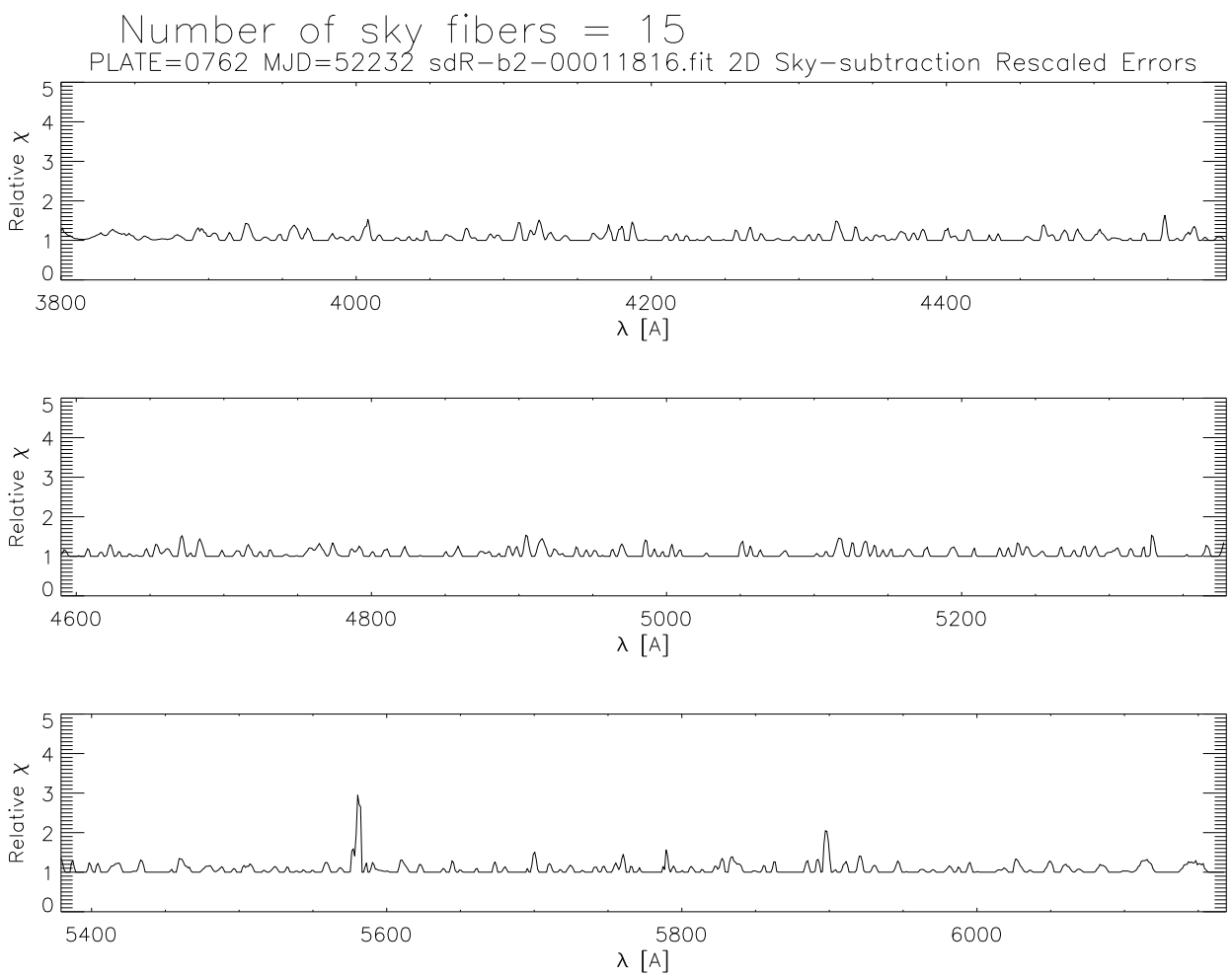

PLATE=0762 MJD=52232 sdR-b2-00011816.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

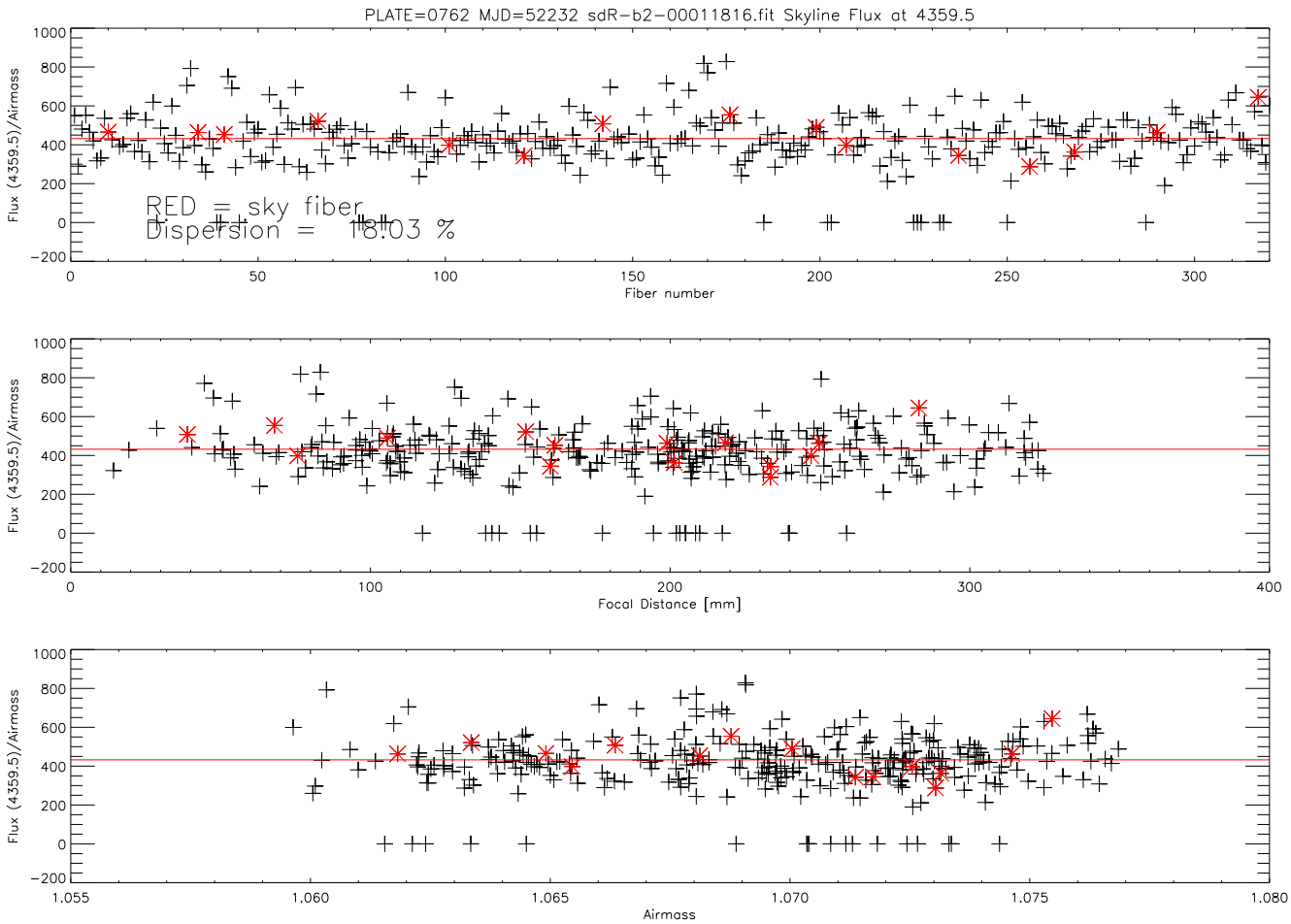

Number of sky fibers = 15
PLATE=0762 MJD=52232 sdR-b2-00011816.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

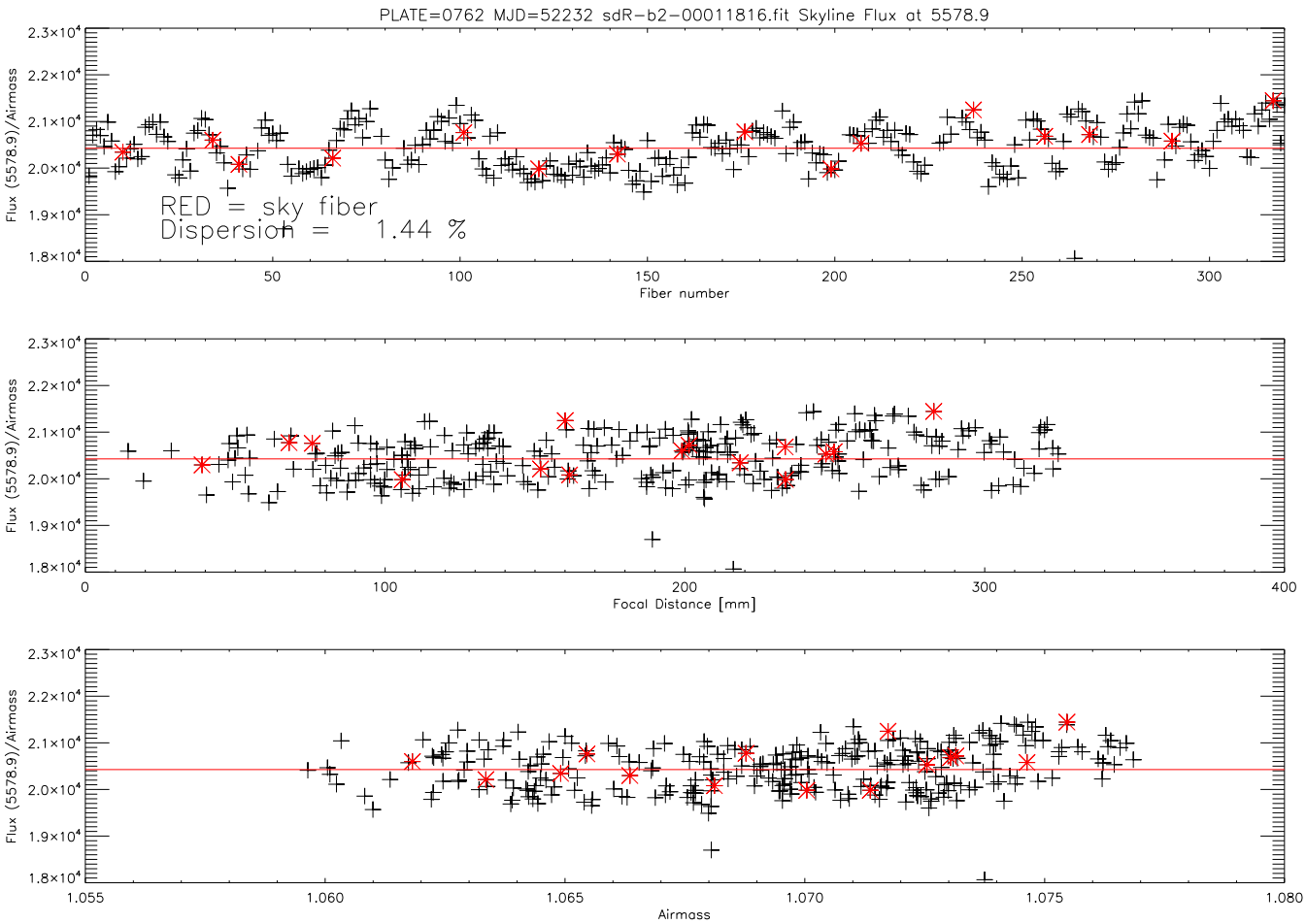

PLATE=0762 MJD=52232 sdR-b2-00011816.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

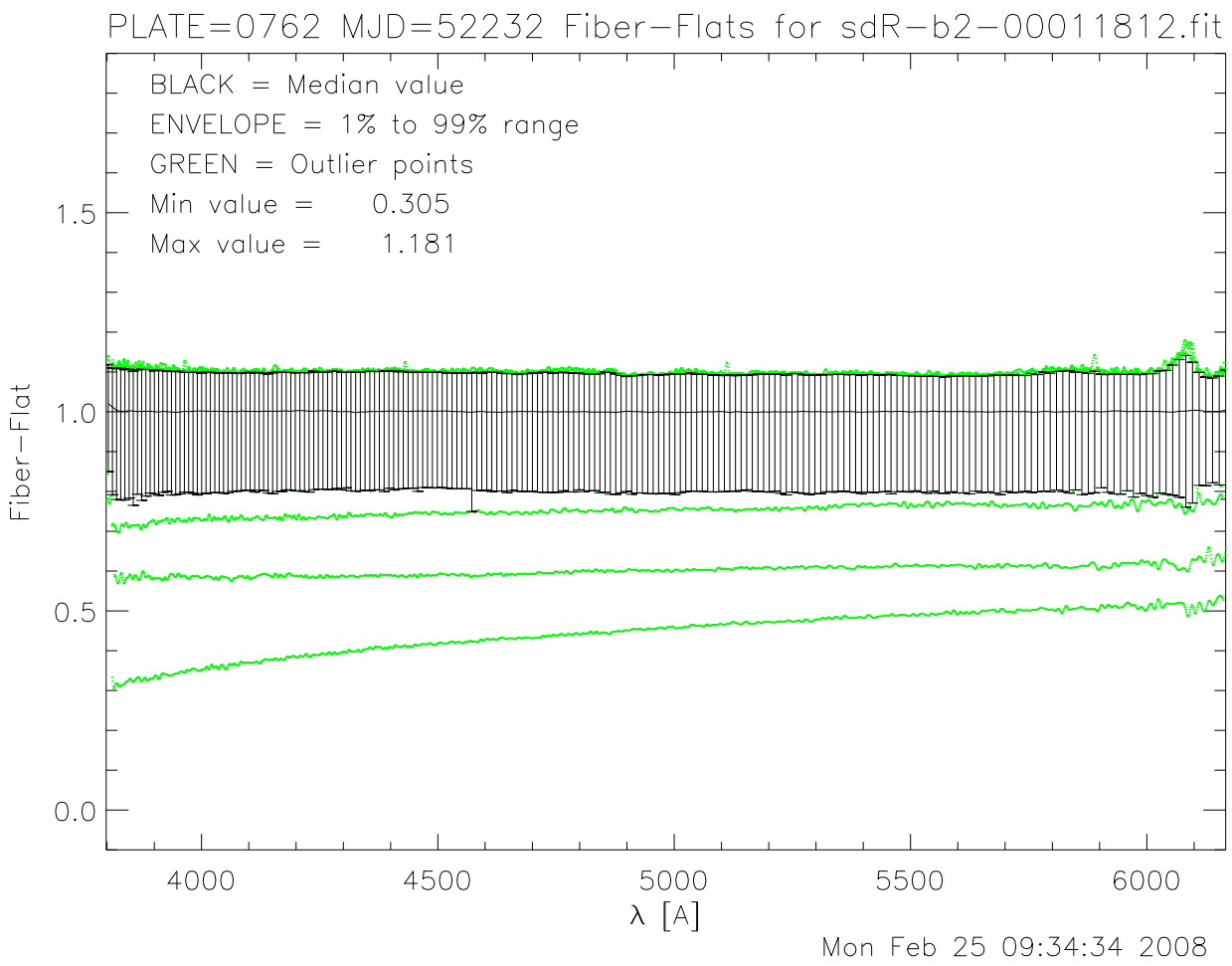

PLATE=0762 MJD=52232 sdR-b2-00011816.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

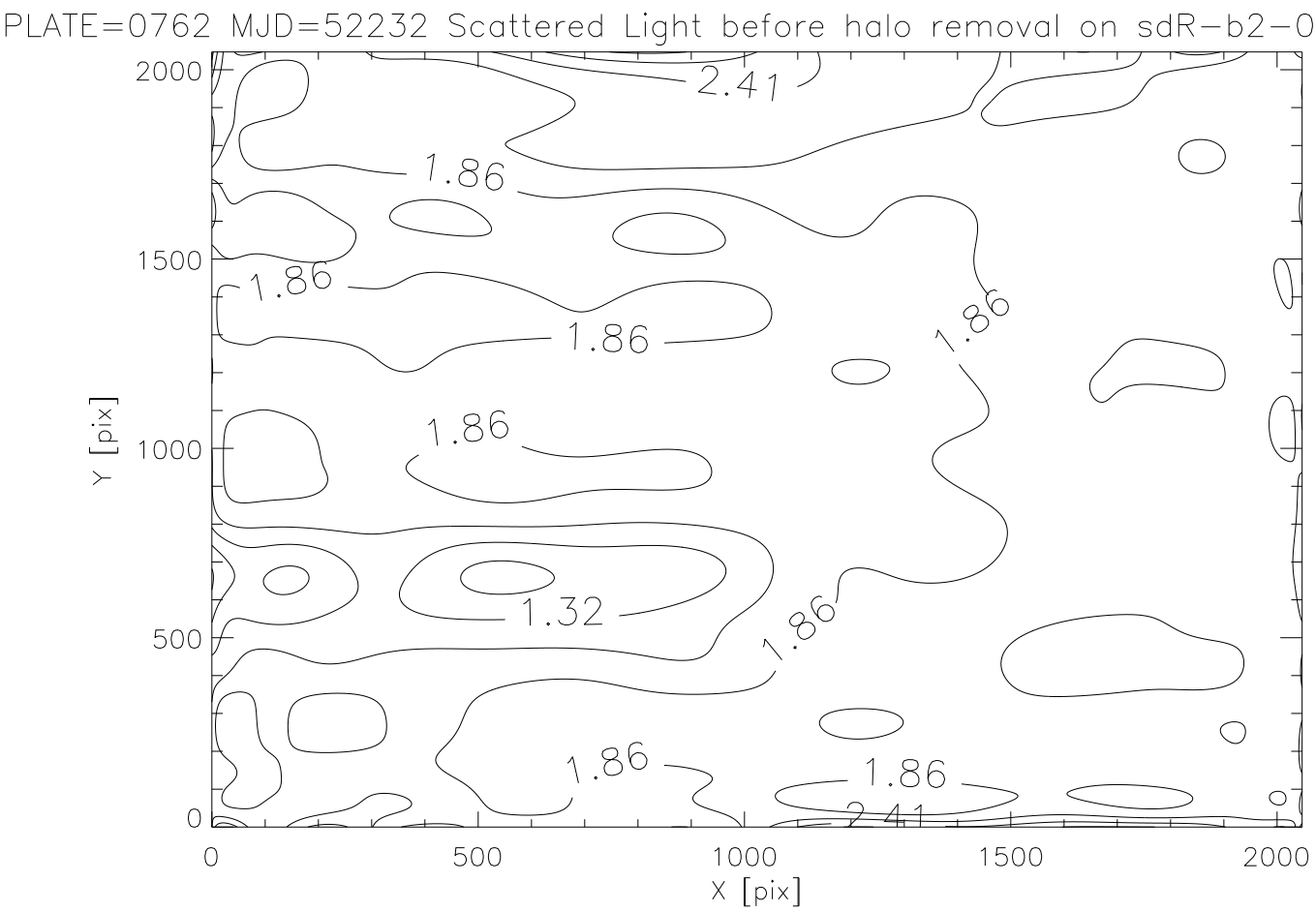

PLATE=0762 MJD=52232 sdR-b2-00011816.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

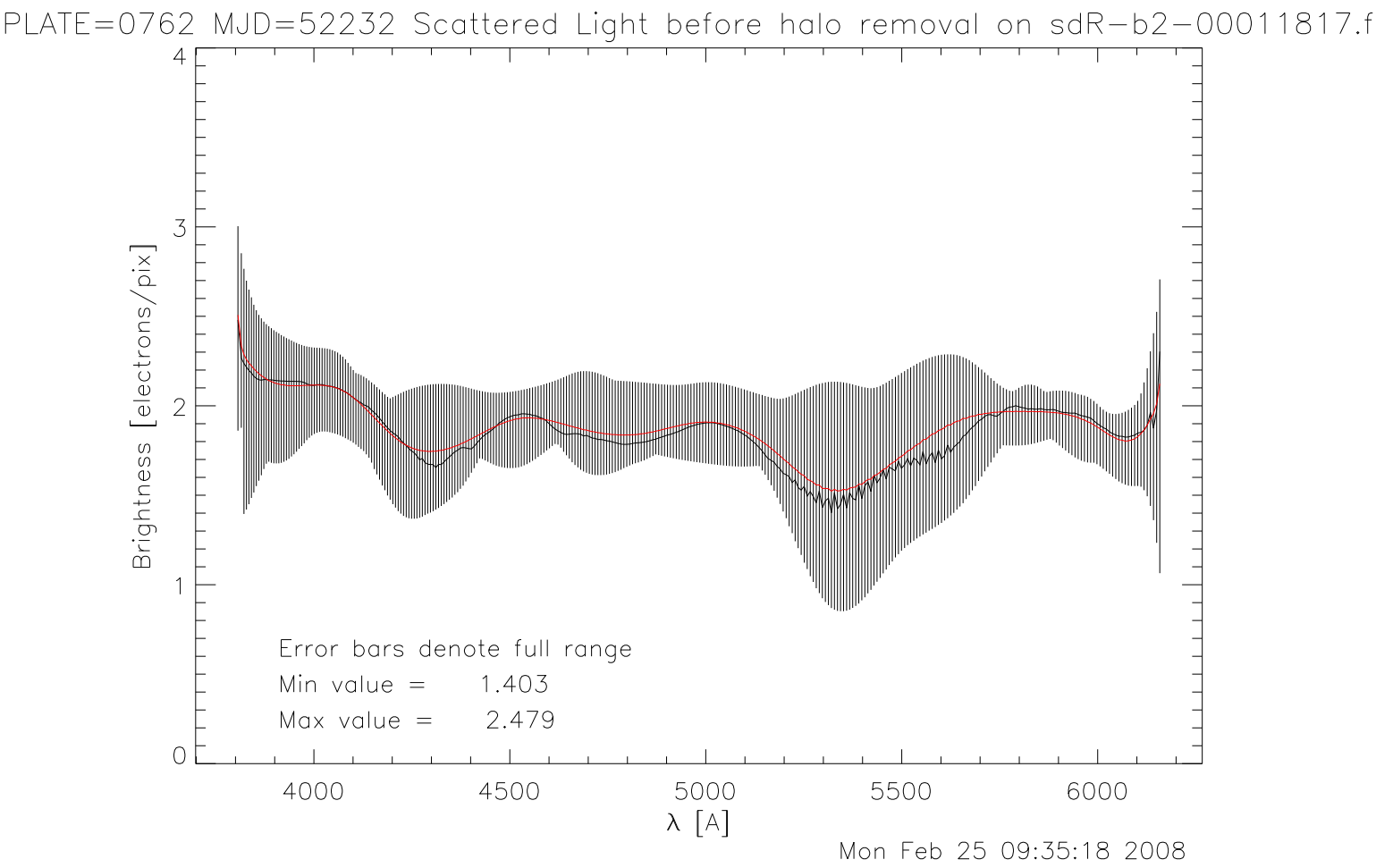

Number of sky fibers = 15
PLATE=0762 MJD=52232 sdR-b2-00011816.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

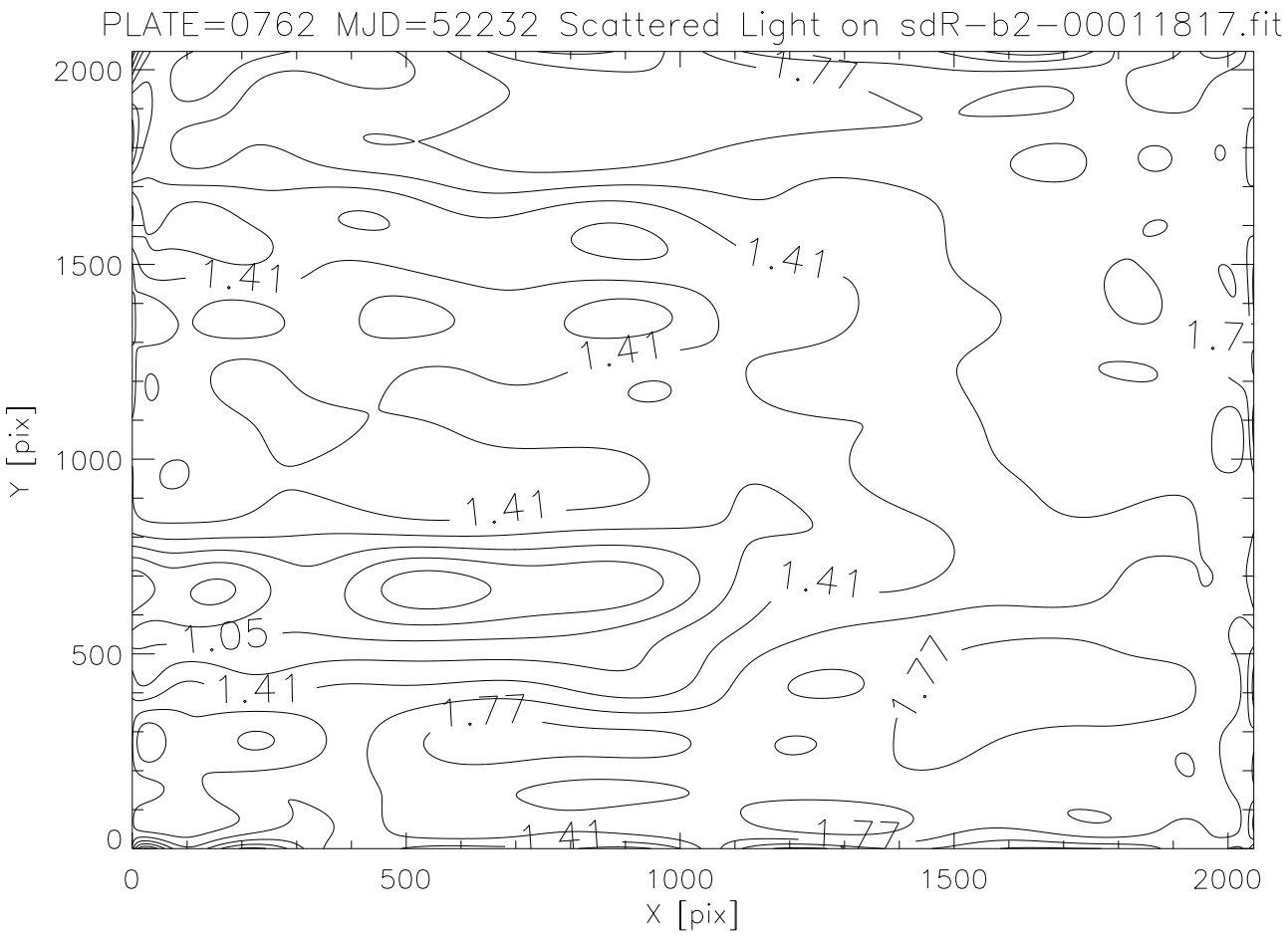

PLATE=0762 MJD=52232 sdR-b2-00011816.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 18.03 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

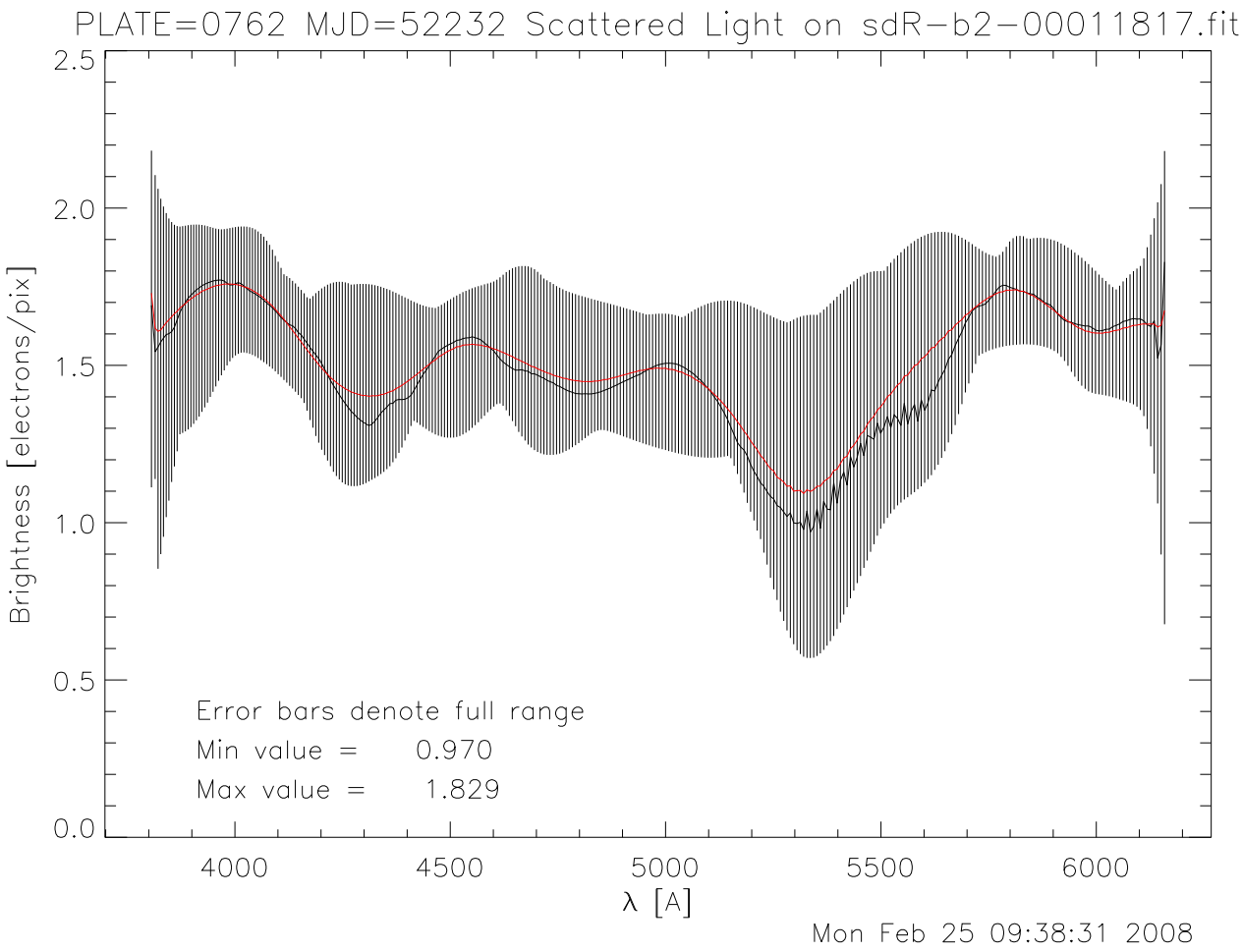

PLATE=0762 MJD=52232 sdR-b2-00011816.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.44 %
Fiber number
Focal Distance [mm]
Airmass

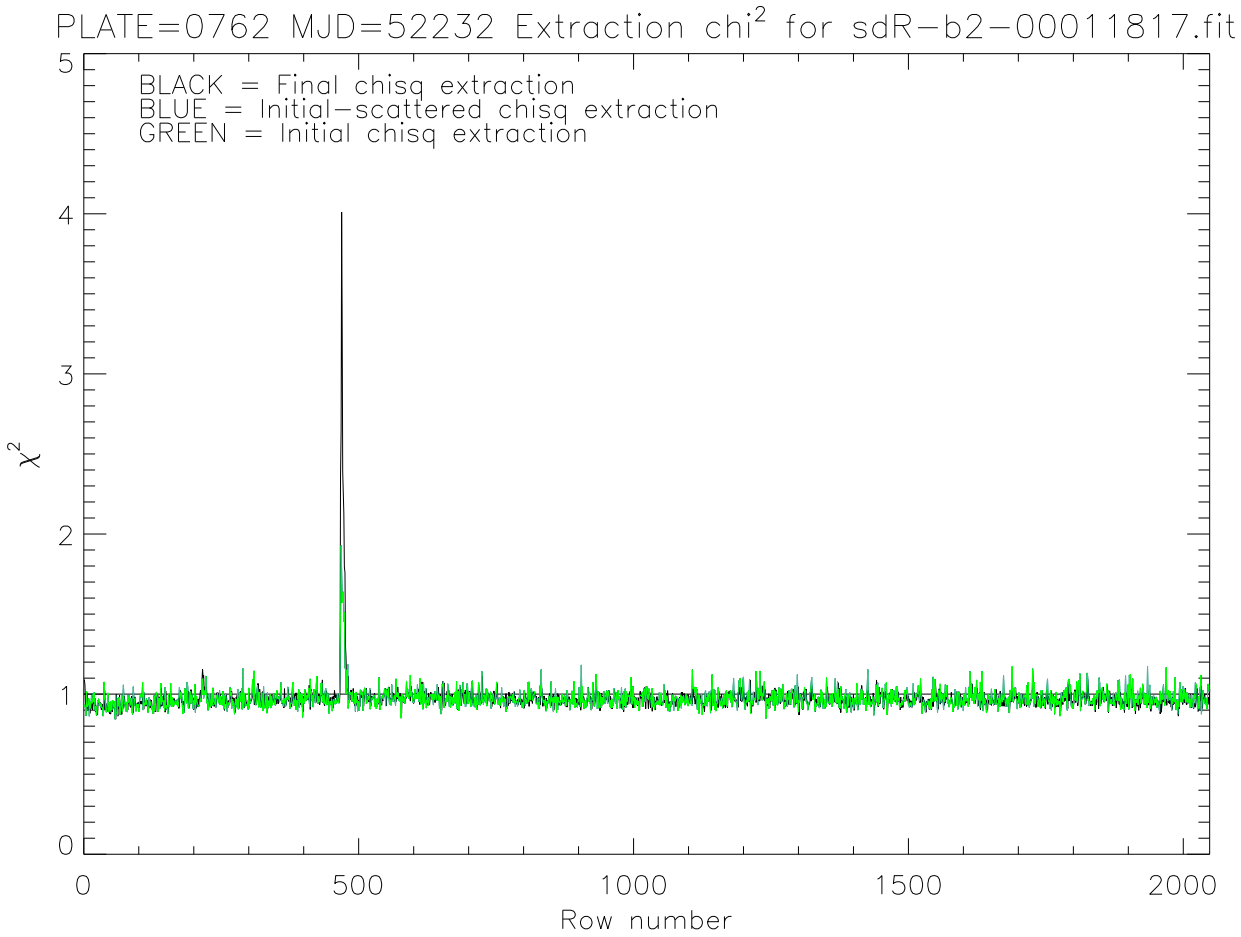

PLATE=0762 MJD=52232 Fiber-Flats for sdR-b2-00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.305
Max value = 1.181
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:34:34 2008

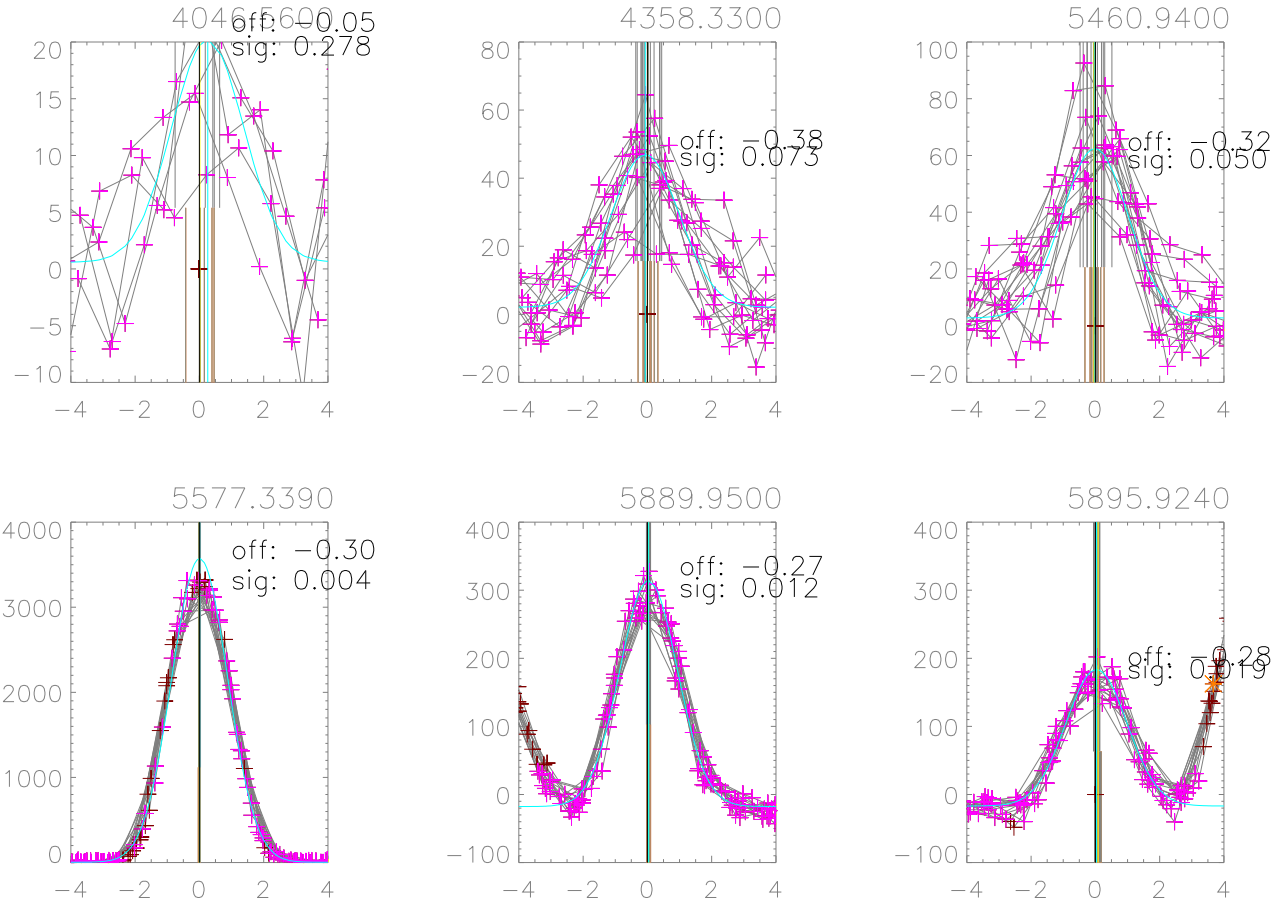

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-b2-00011817.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.41
1.86
1.86
1.86
1.86
1.86
1.32
1.86
1.86
1.86
2.41

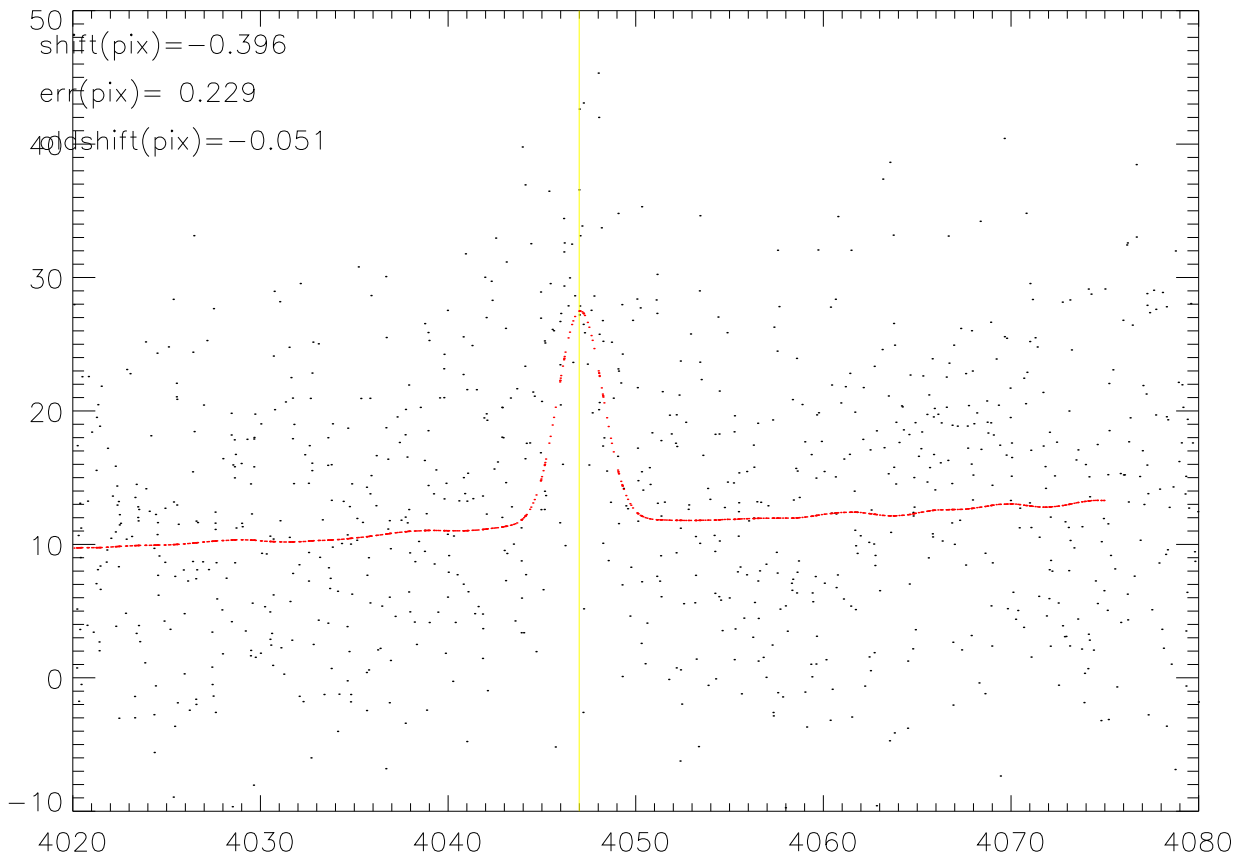

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR−b2−00011817.f
Brightness [electrons/pix]
0
1
2
3
4
Error bars denote full range
Min value = 1.403
Max value = 2.479
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:35:18 2008

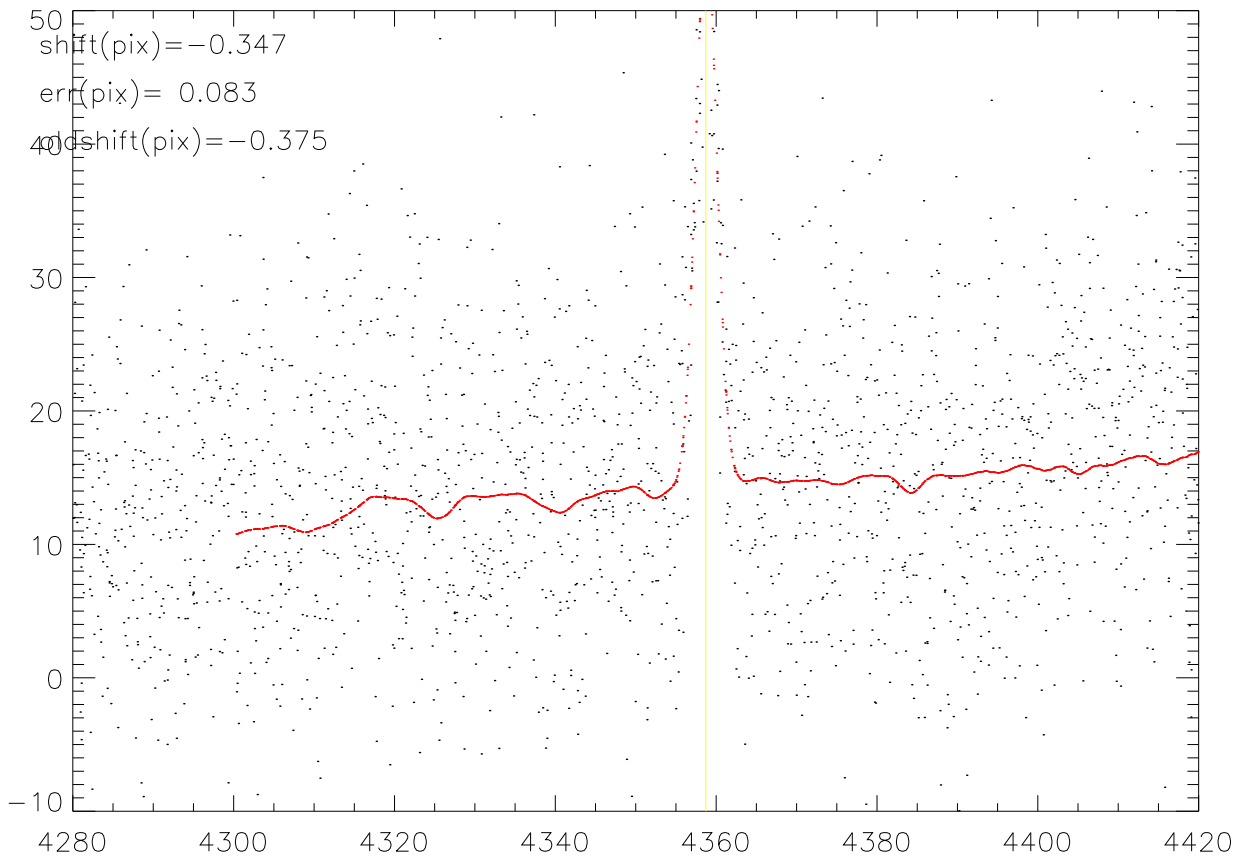

PLATE=0762 MJD=52232 Scattered Light on sdR-b2-00011817.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
1.41
1.77
1.05
0

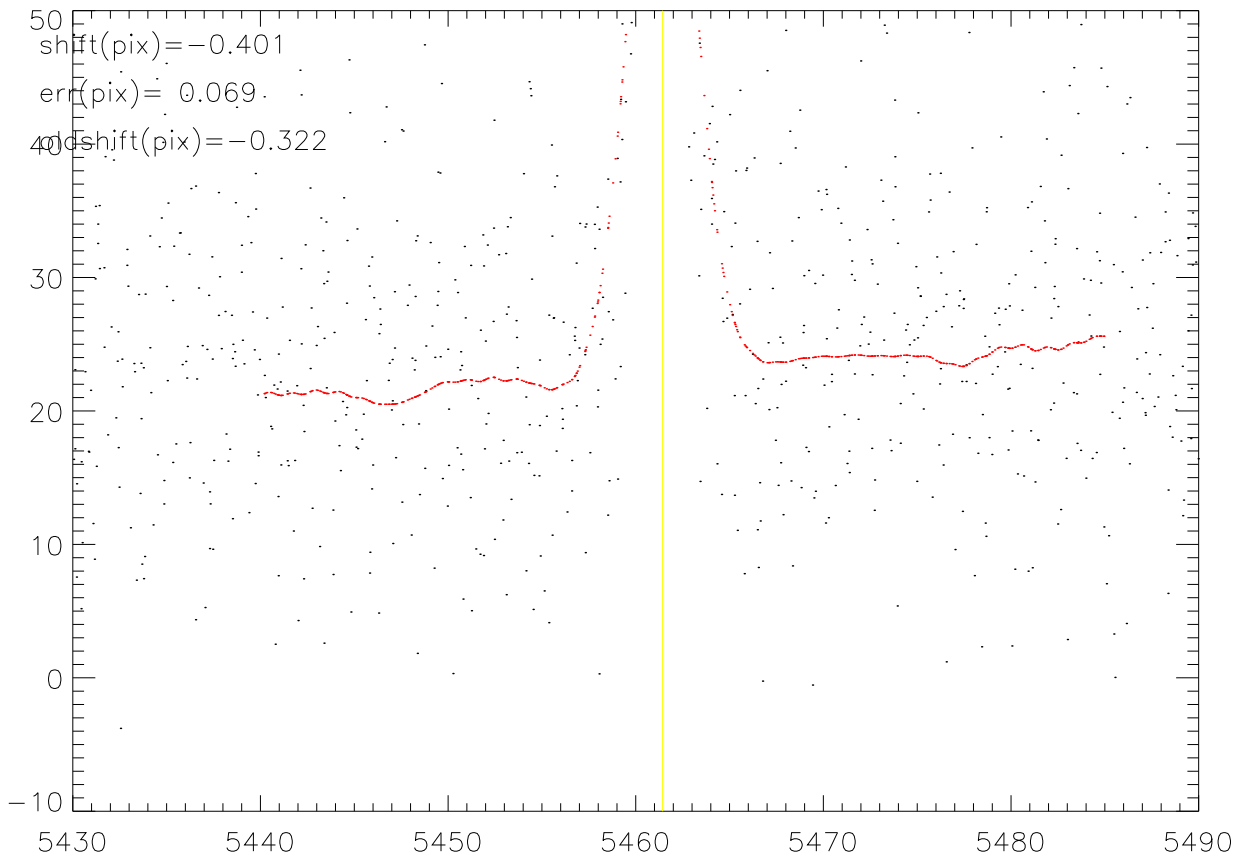

PLATE=0762 MJD=52232 Scattered Light on sdR-b2-00011817.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.970
Max value = 1.829
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 09:38:31 2008

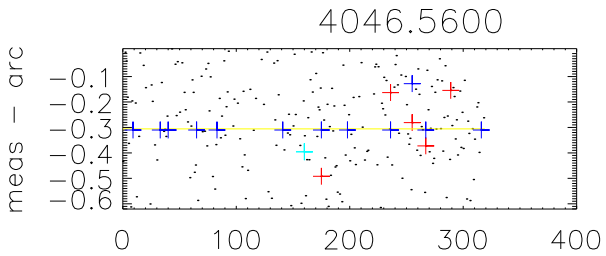

PLATE=0762 MJD=52232 Extraction chi^2 for sdR−b2−00011817.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

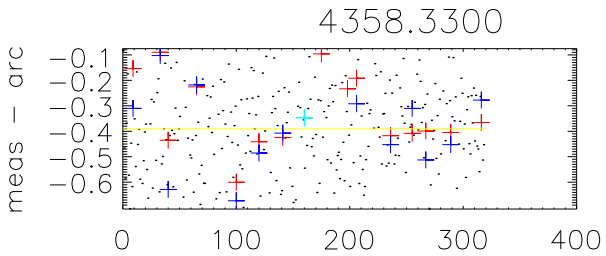

4046.5600
off: −0.05
sig: 0.278
4358.3300
off: −0.38
sig: 0.073
5460.9400
off: −0.32
sig: 0.050
5577.3390
off: −0.30
sig: 0.004
5889.9500
off: −0.27
sig: 0.012
5895.9240
off: −0.28
sig: 0.019

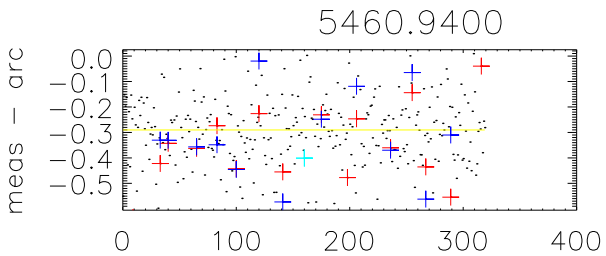

shift(pix)=−0.396
err(pix)= 0.229
addshift(pix)=−0.051
50
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

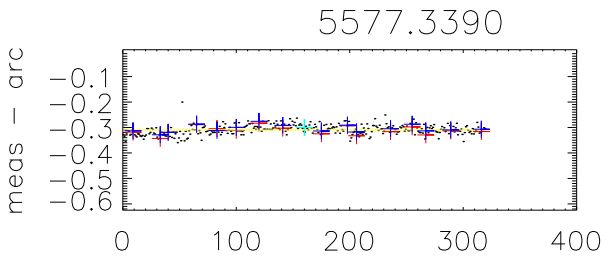

shift(pix)=−0.347
err(pix)= 0.083
addshift(pix)=−0.375
50
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

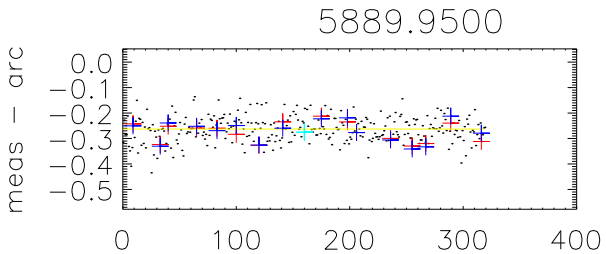

shift(pix)=−0.401
err(pix)= 0.069
oldshift(pix)=−0.322
50
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

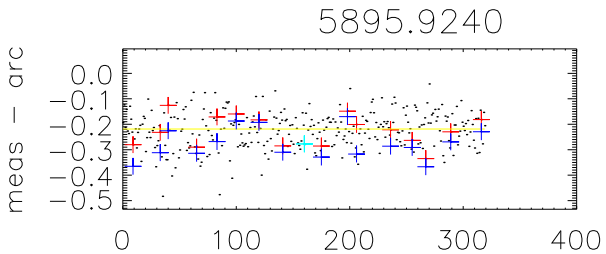

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

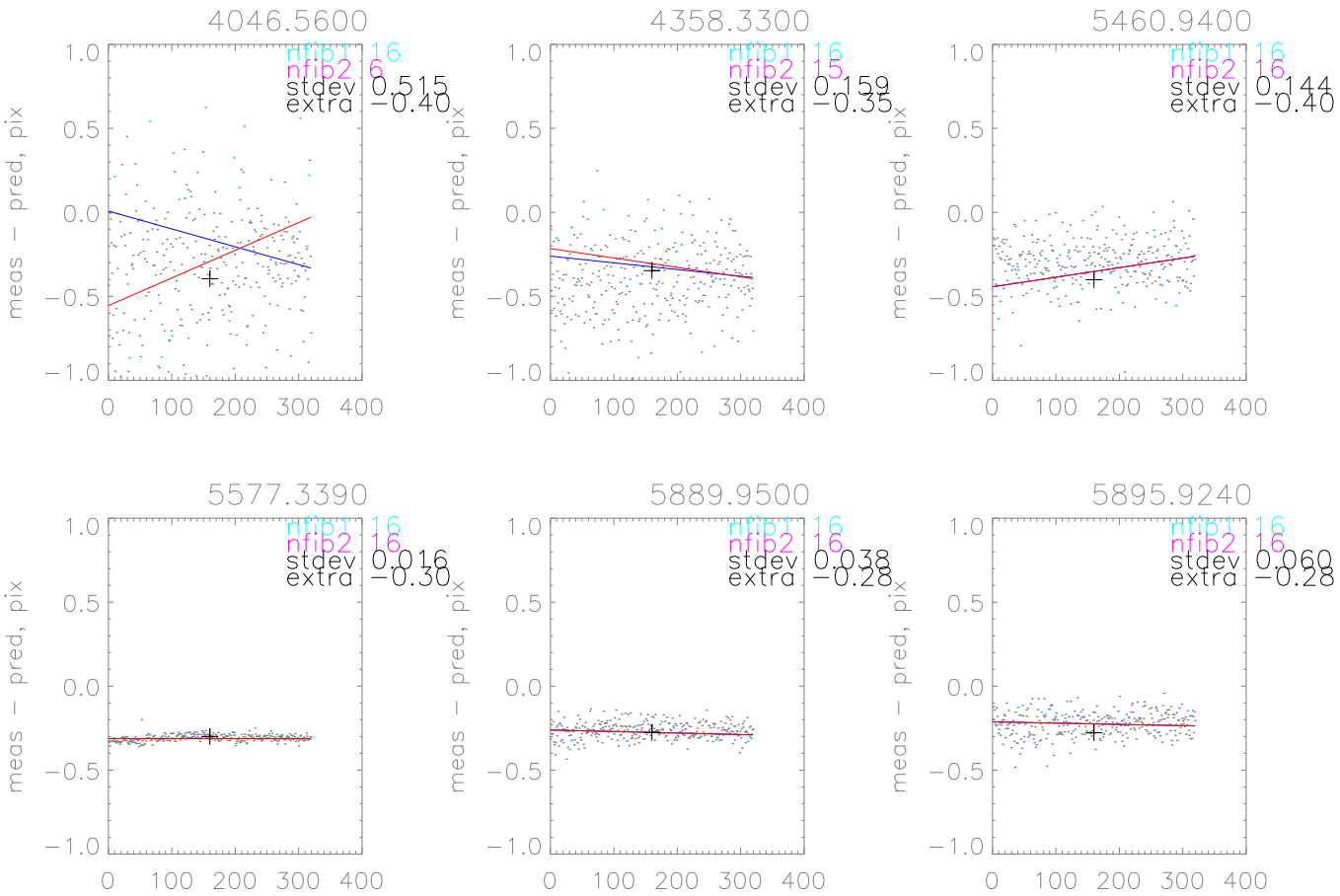

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

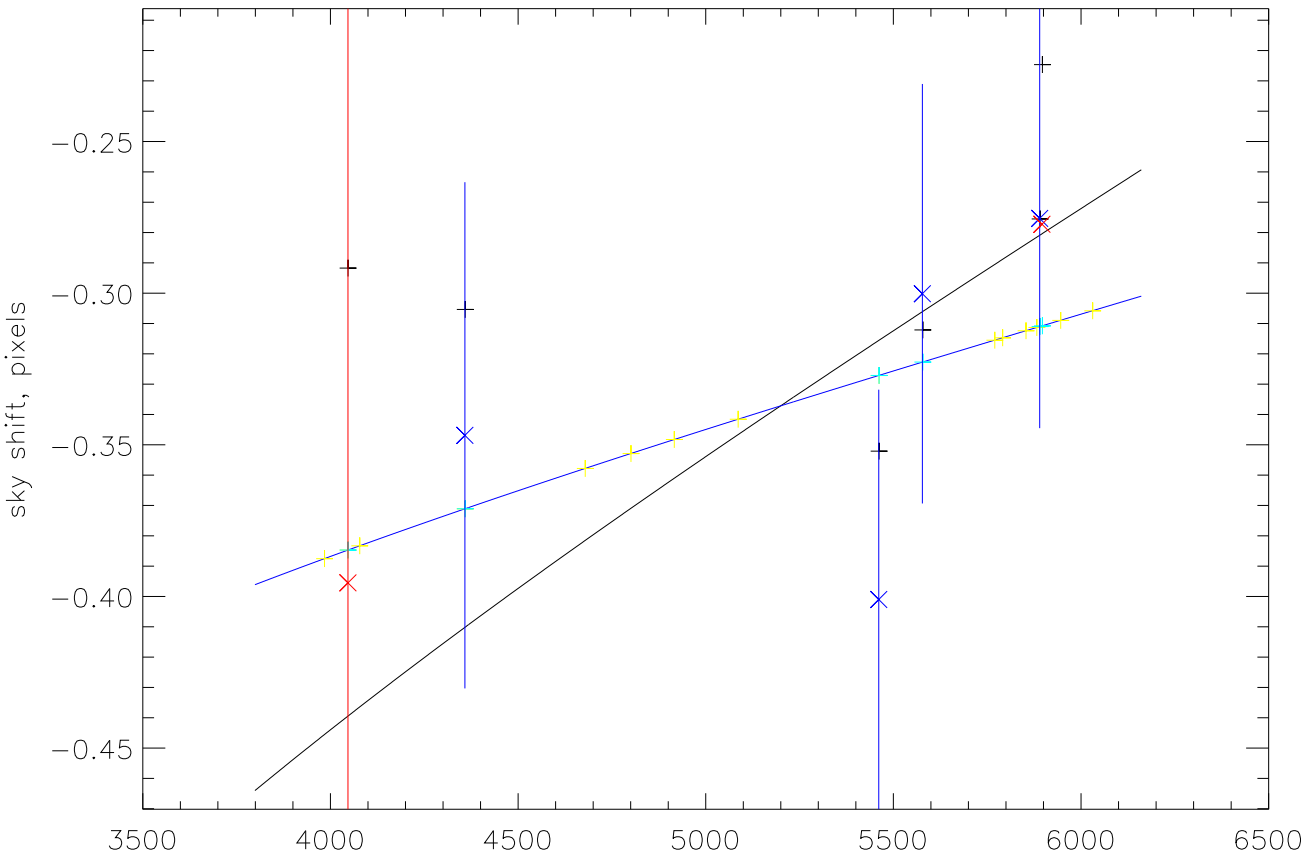

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

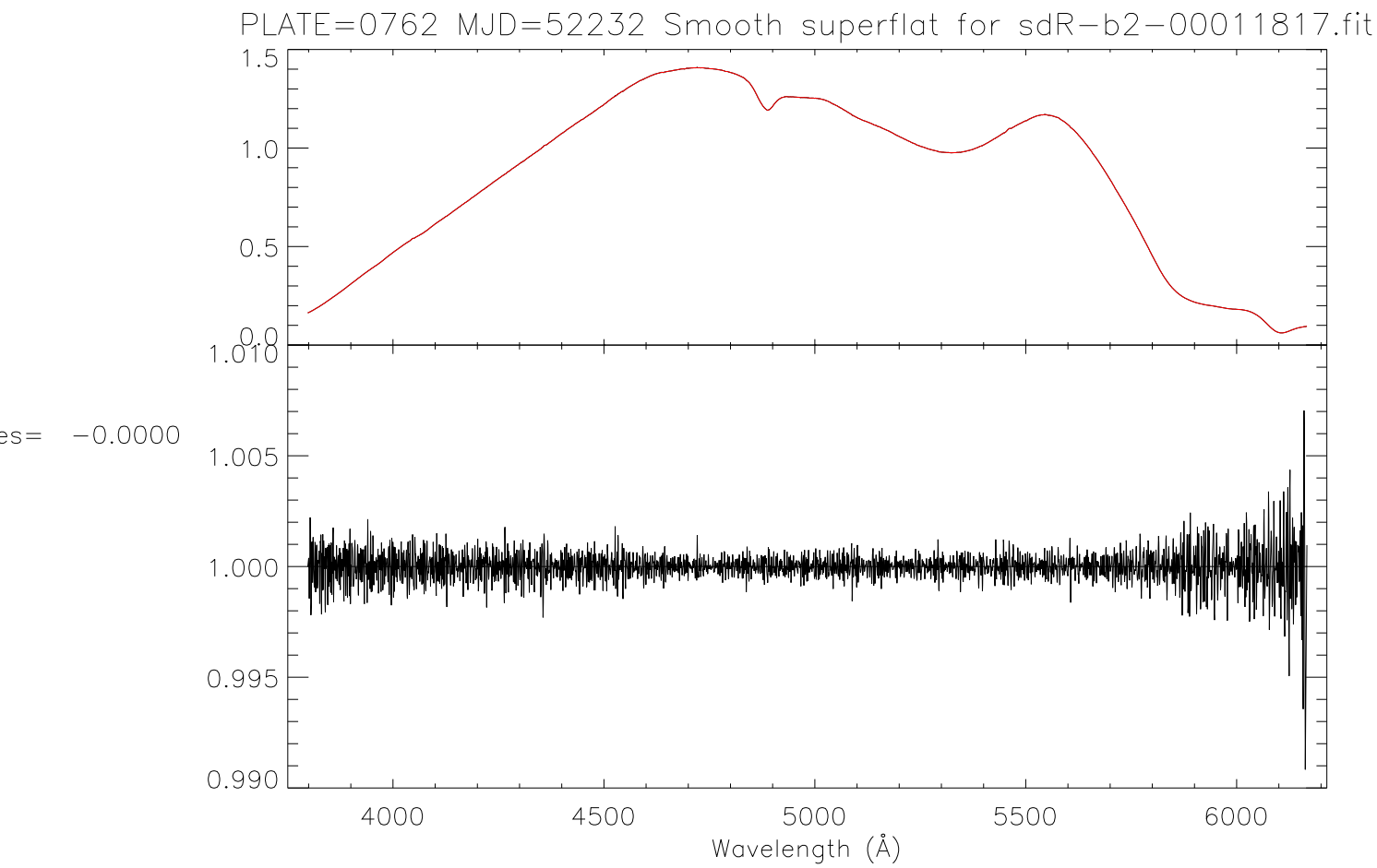

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

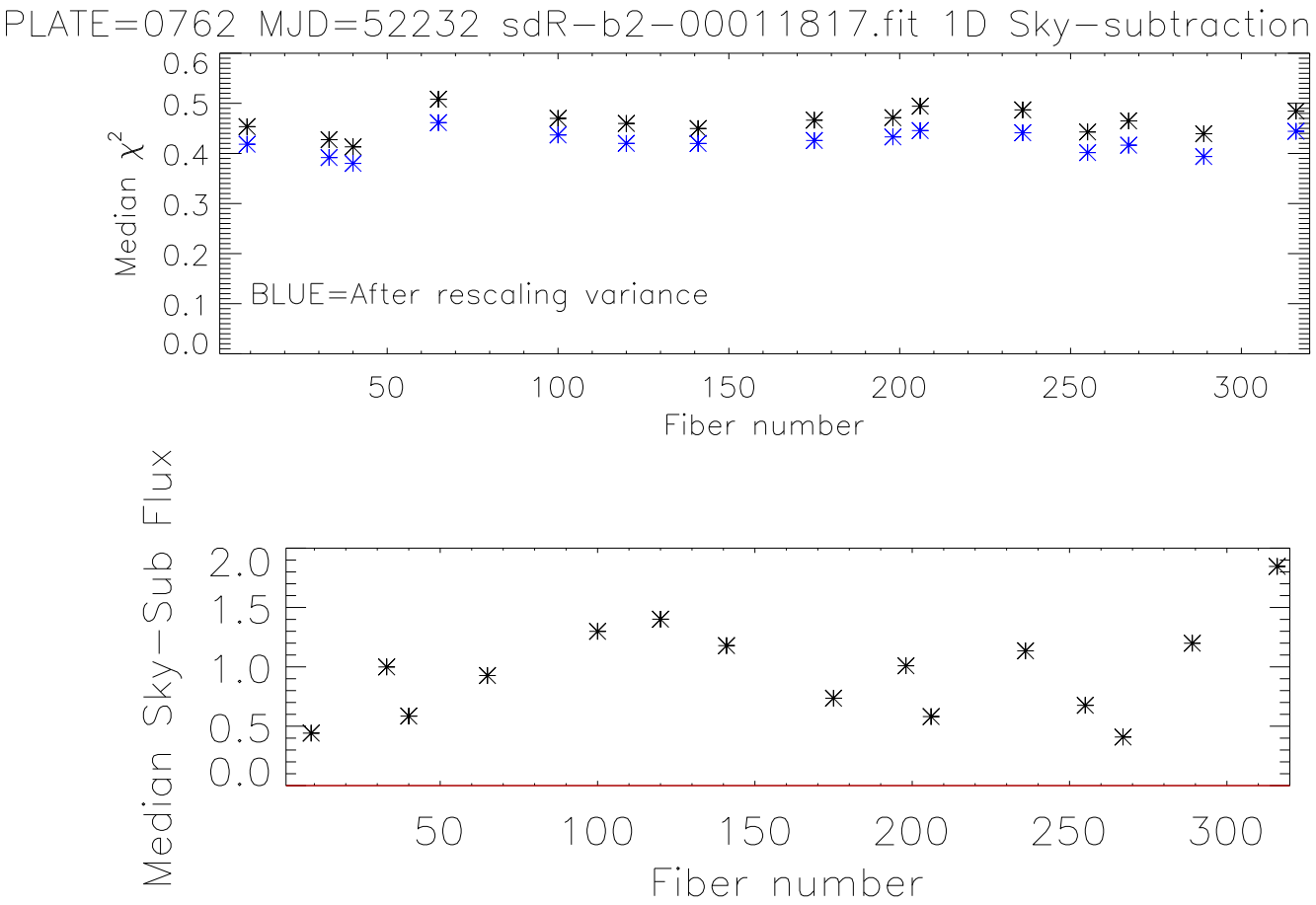

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

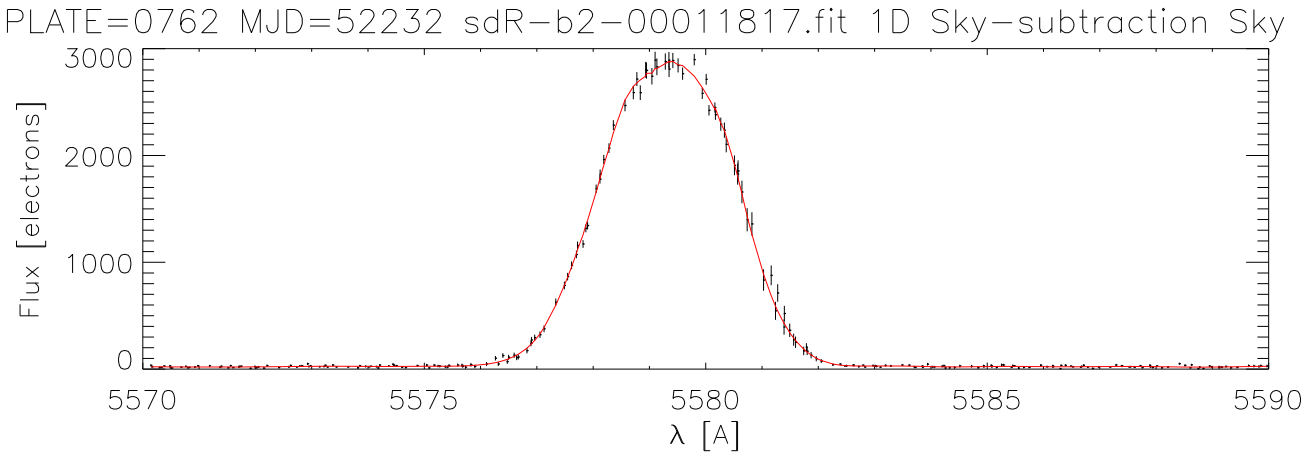

4046.5600
nfib1 16
nfib2 6
stdev 0.515
extra −0.40
4358.3300
nfib1 16
nfib2 15
stdev 0.159
extra −0.35
5460.9400
nfib1 16
nfib2 16
stdev 0.144
extra −0.40
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.30
5889.9500
nfib1 16
nfib2 16
stdev 0.038
extra −0.28
5895.9240
nfib1 16
nfib2 16
stdev 0.060
extra −0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

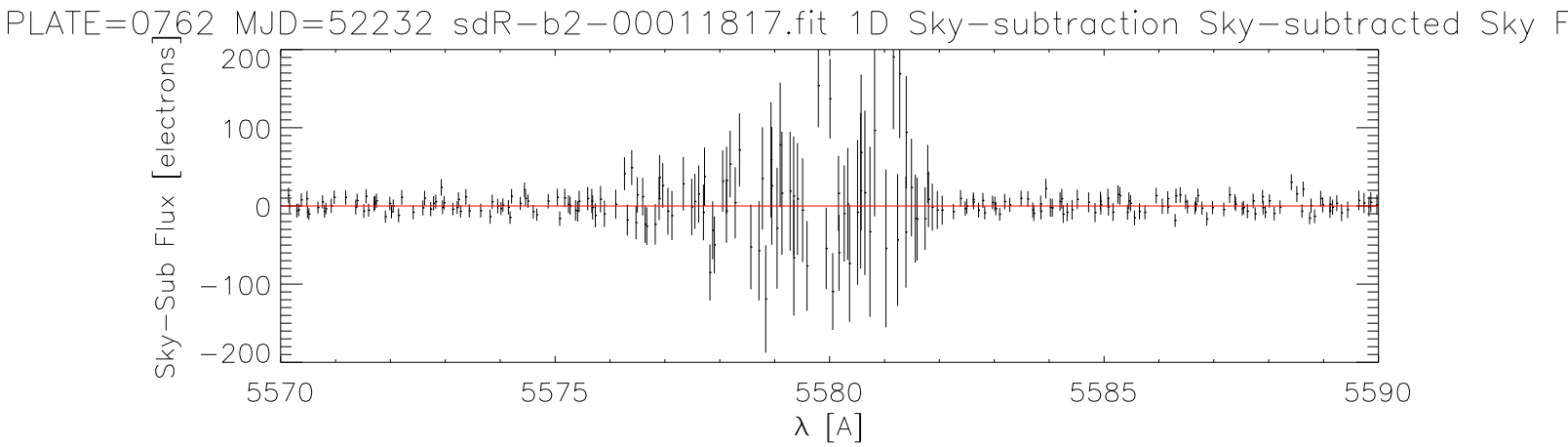

sky shift, pixels
−0.25
−0.30
−0.35
−0.40
−0.45
3500
4000
4500
5000
5500
6000
6500

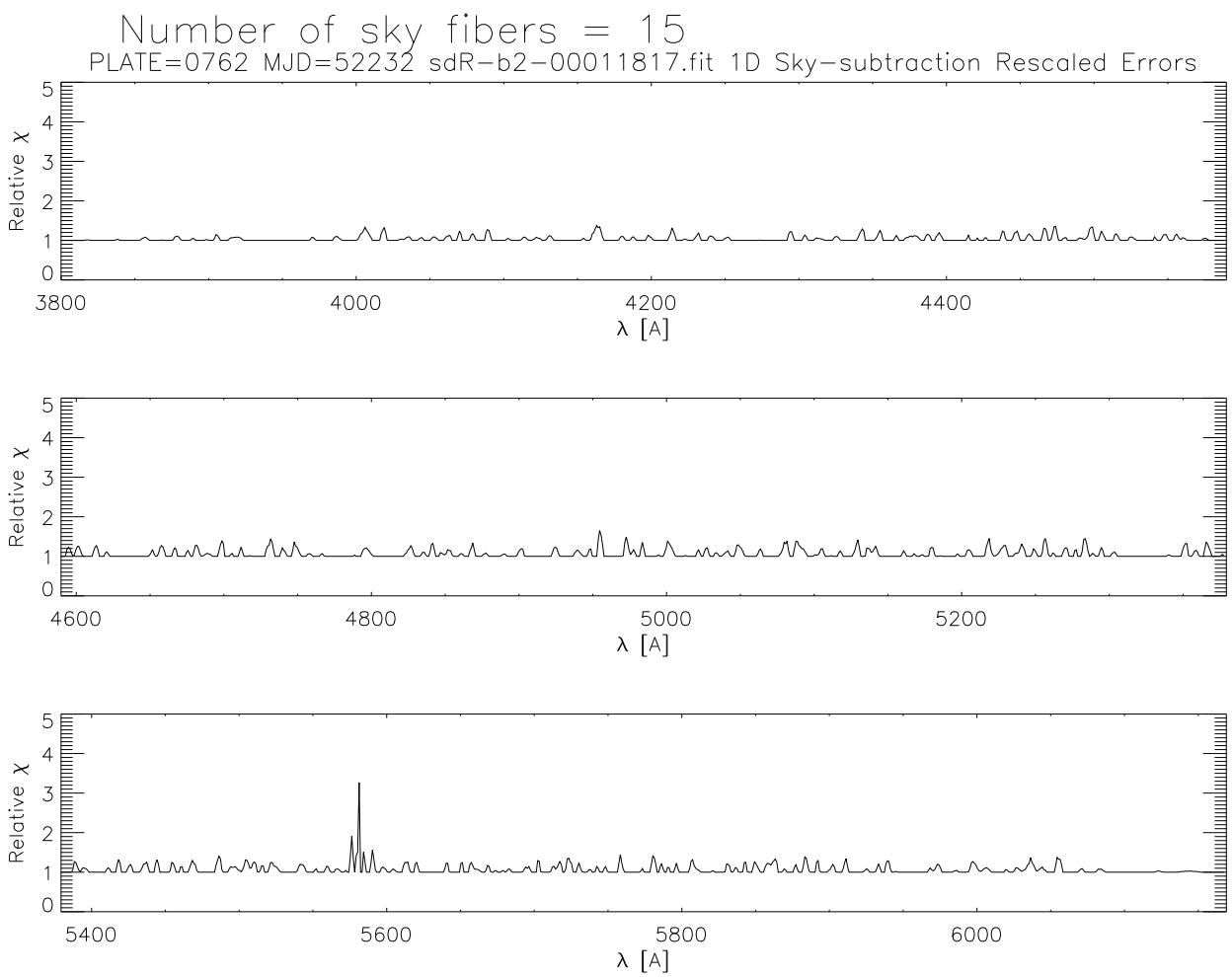

PLATE=0762 MJD=52232 Smooth superflat for sdR-b2-00011817.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

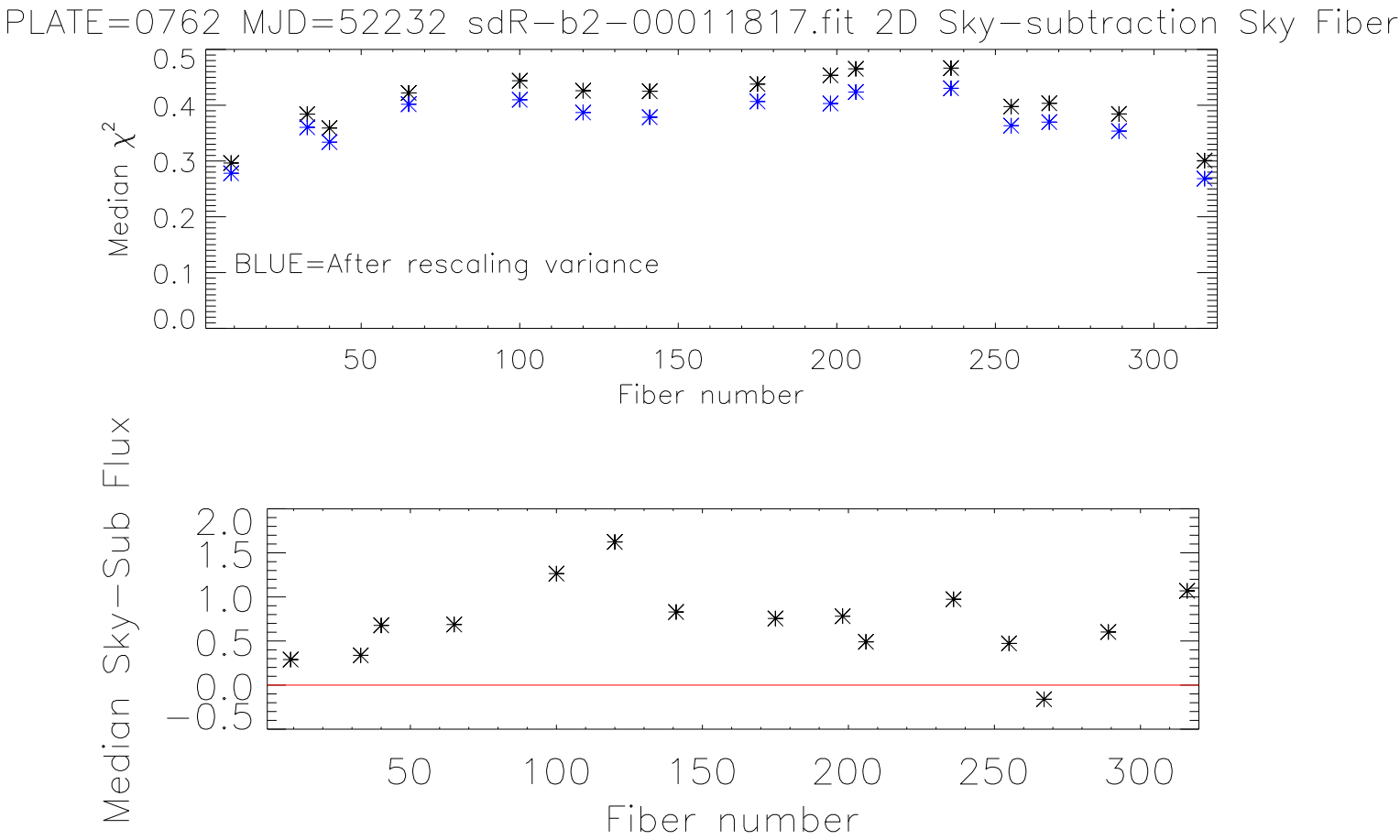
es= −0.0000

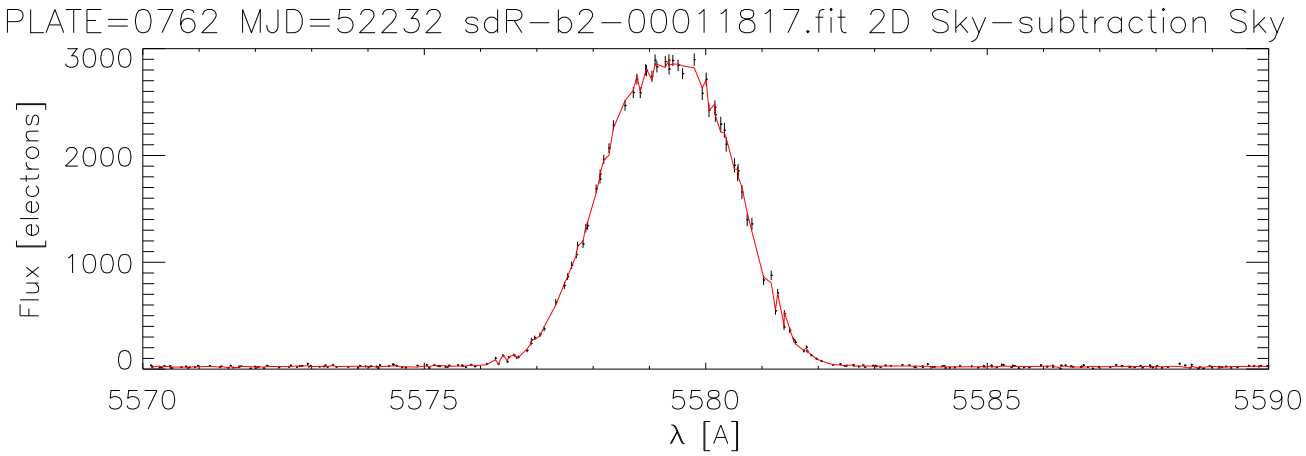

PLATE=0762 MJD=52232 sdR-b2-00011817.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

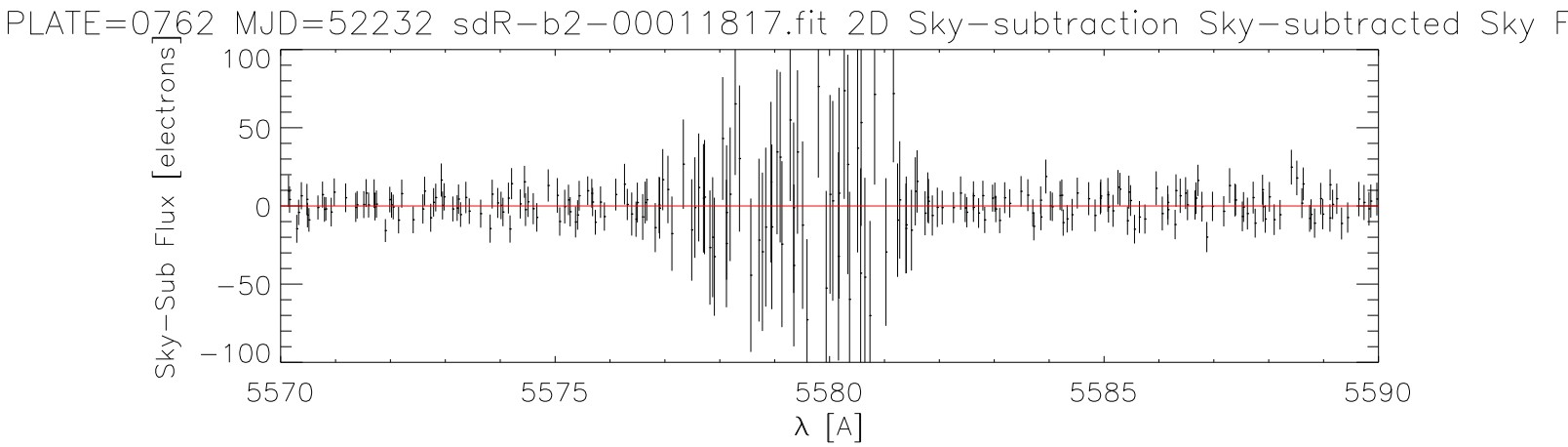

PLATE=0762 MJD=52232 sdR-b2-00011817.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

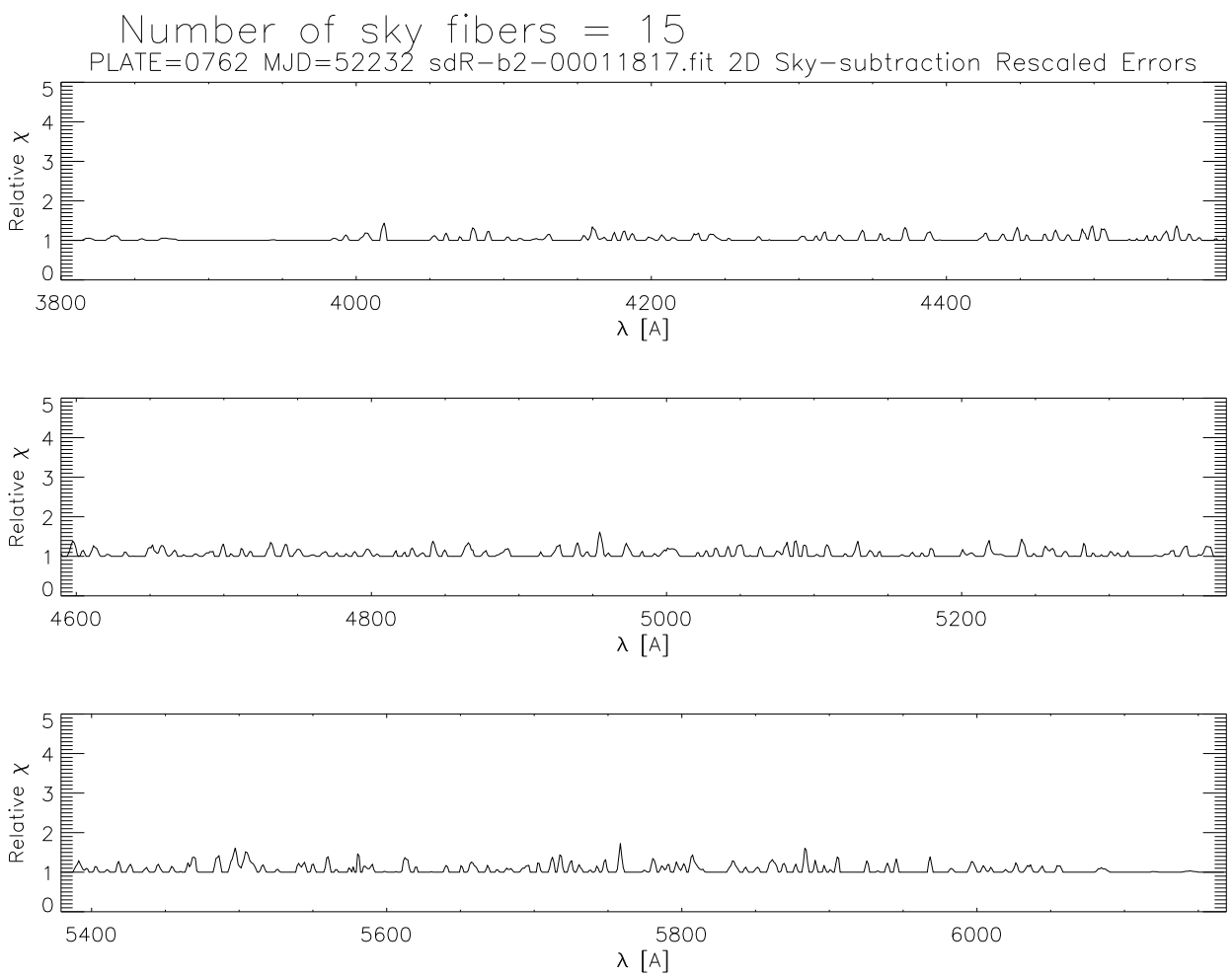

PLATE=0762 MJD=52232 sdR-b2-00011817.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

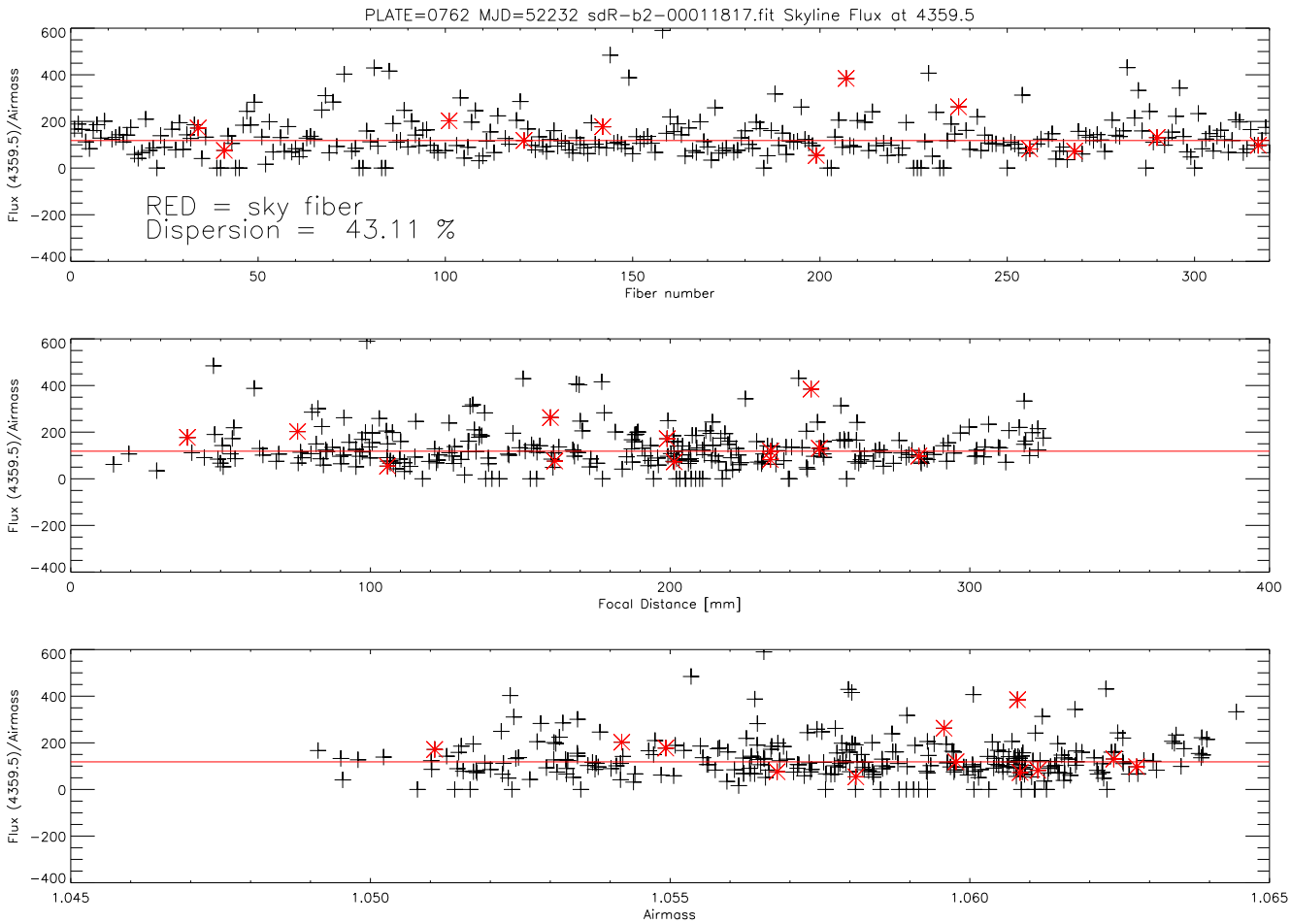

Number of sky fibers = 15
PLATE=0762 MJD=52232 sdR-b2-00011817.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

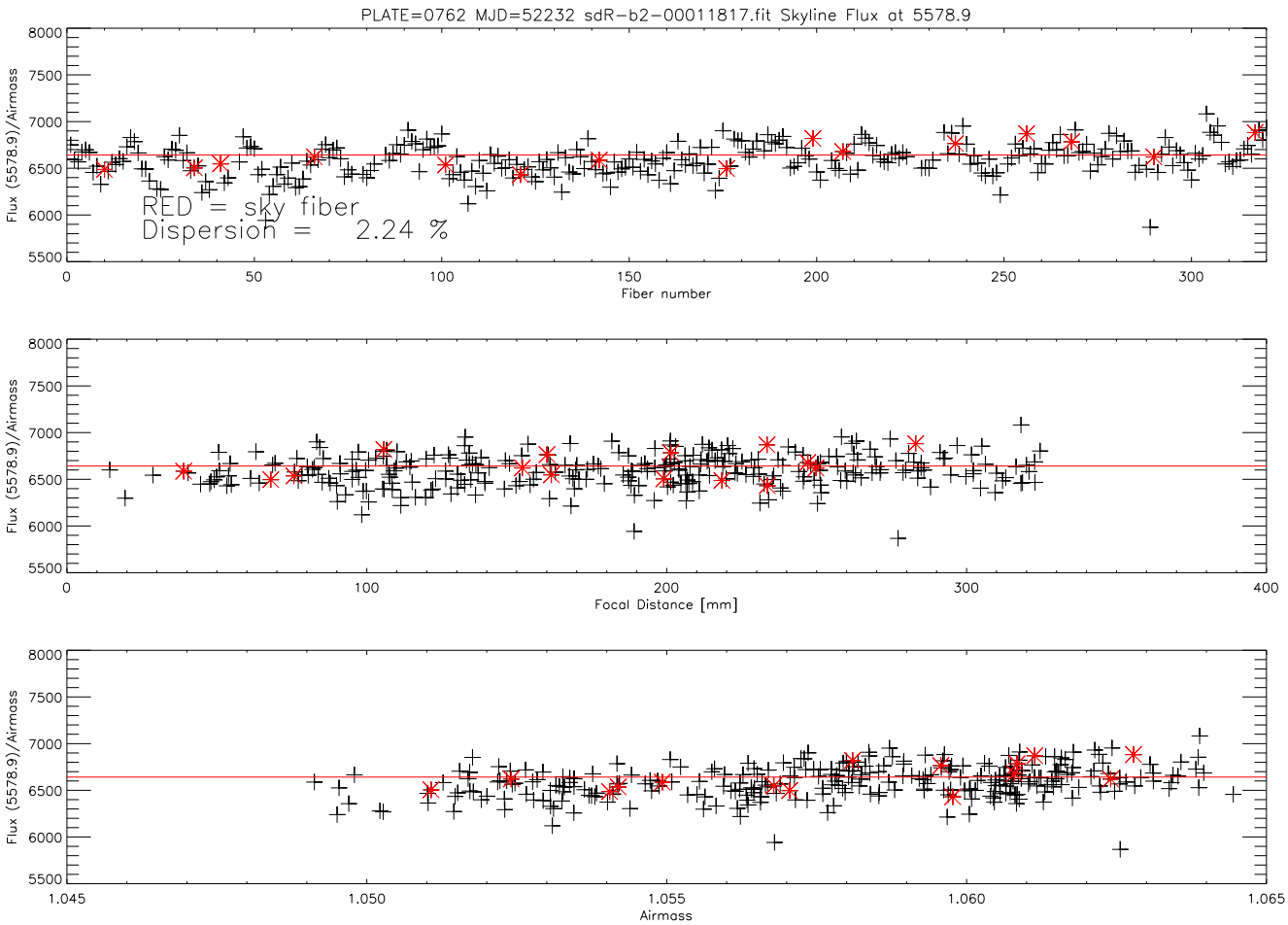

PLATE=0762 MJD=52232 sdR-b2-00011817.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

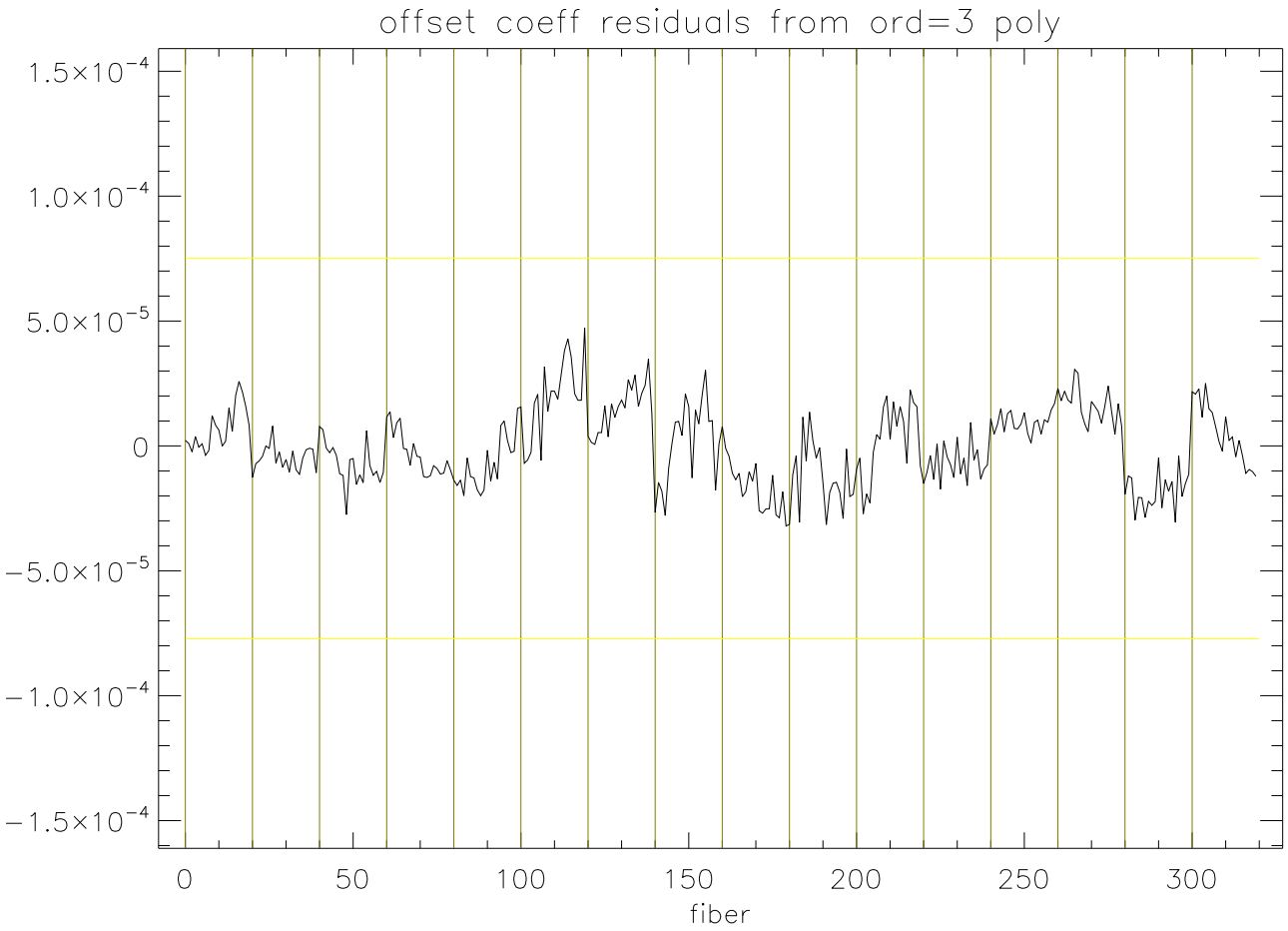

PLATE=0762 MJD=52232 sdR-b2-00011817.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

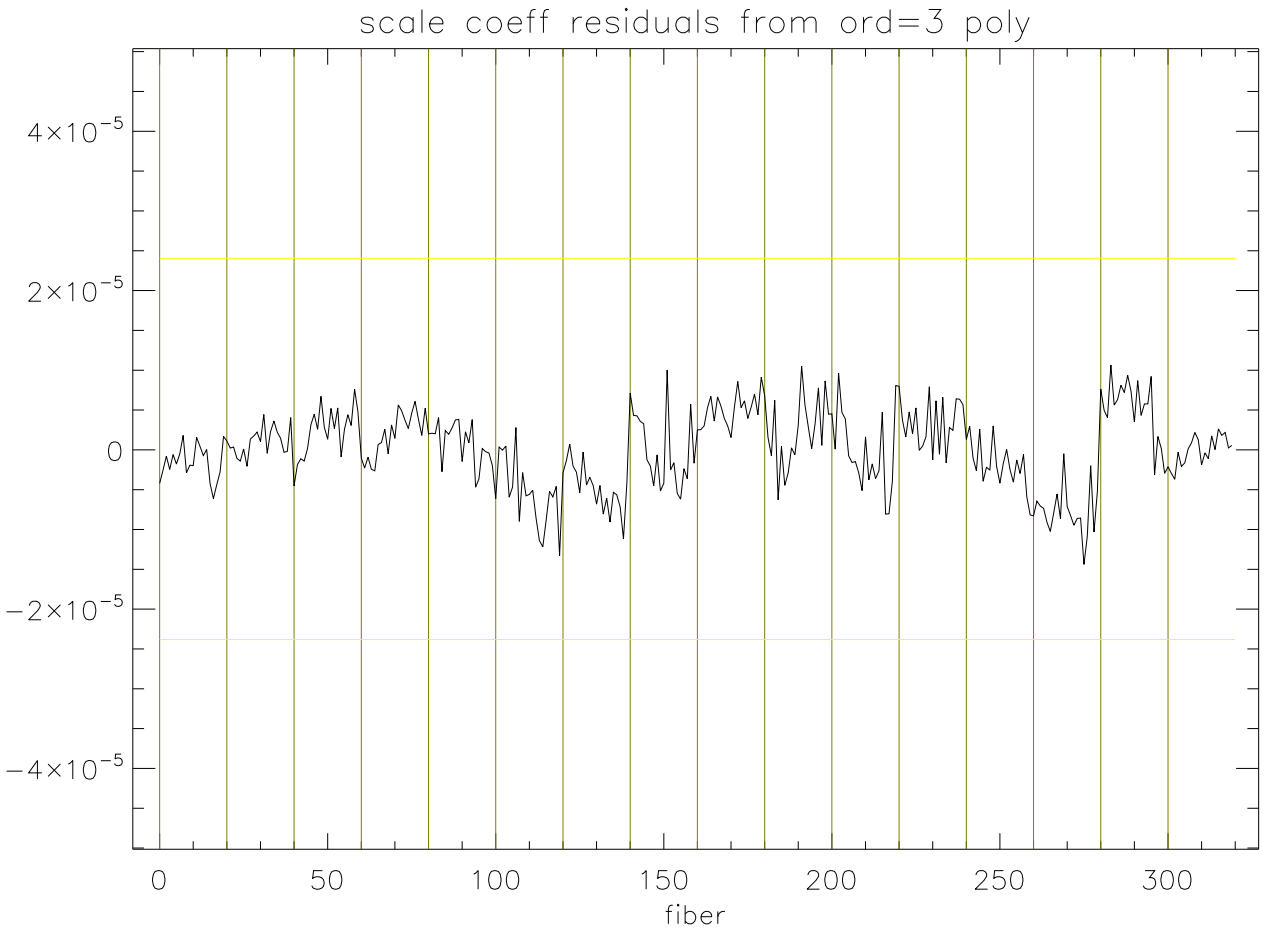

PLATE=0762 MJD=52232 sdR-b2-00011817.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

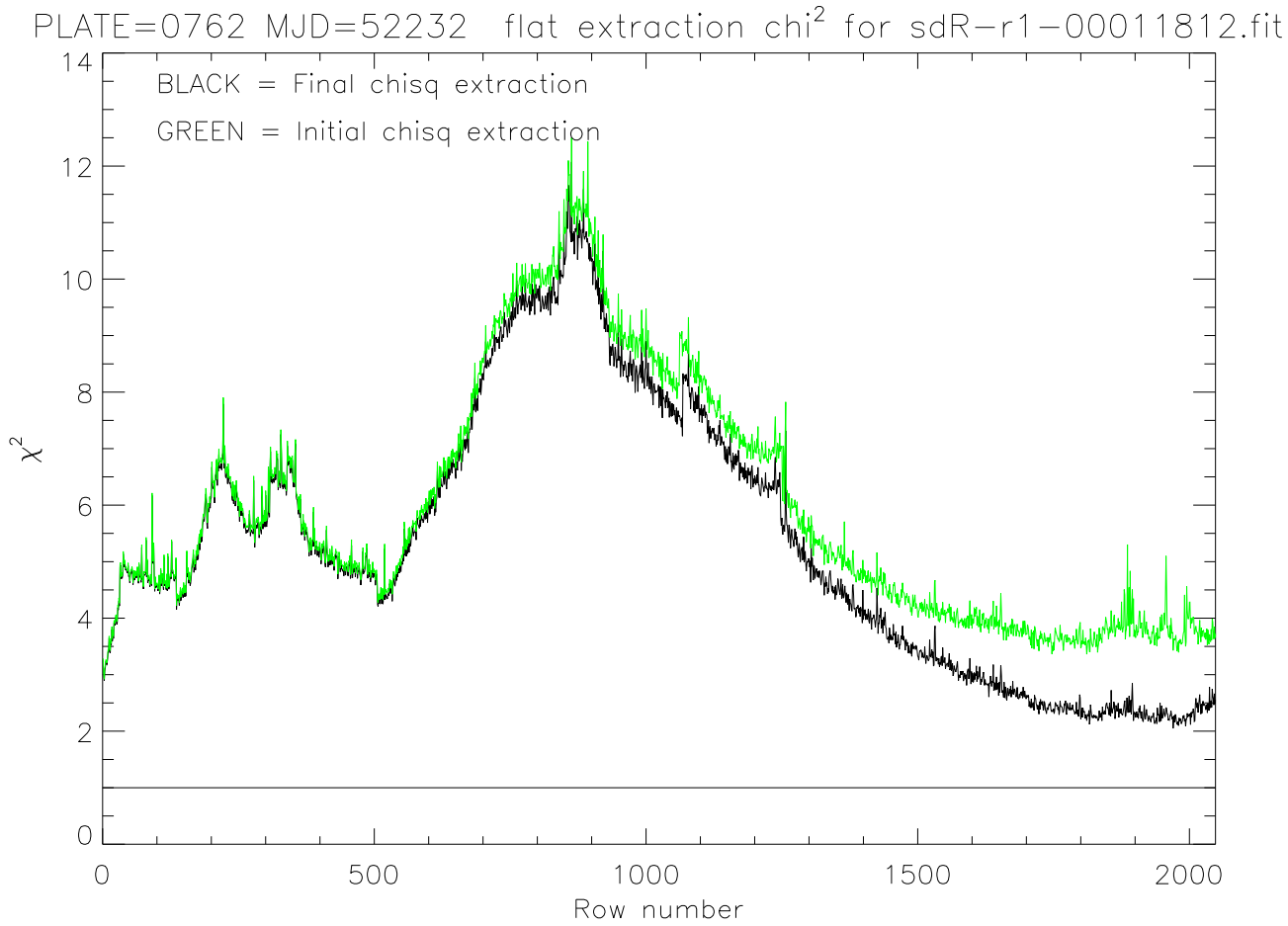

Number of sky fibers = 15
PLATE=0762 MJD=52232 sdR-b2-00011817.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

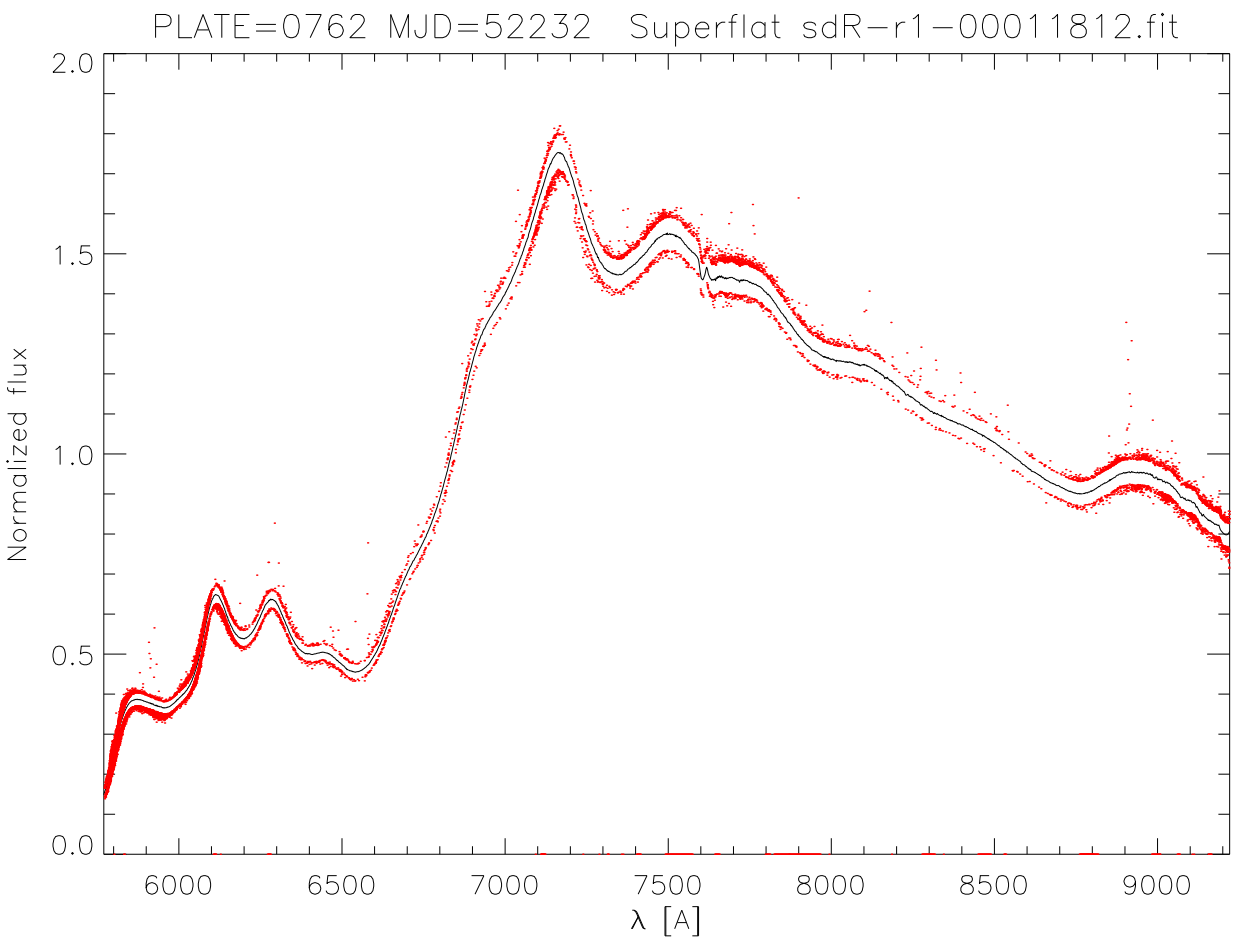

PLATE=0762 MJD=52232 sdR-b2-00011817.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 43.11 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

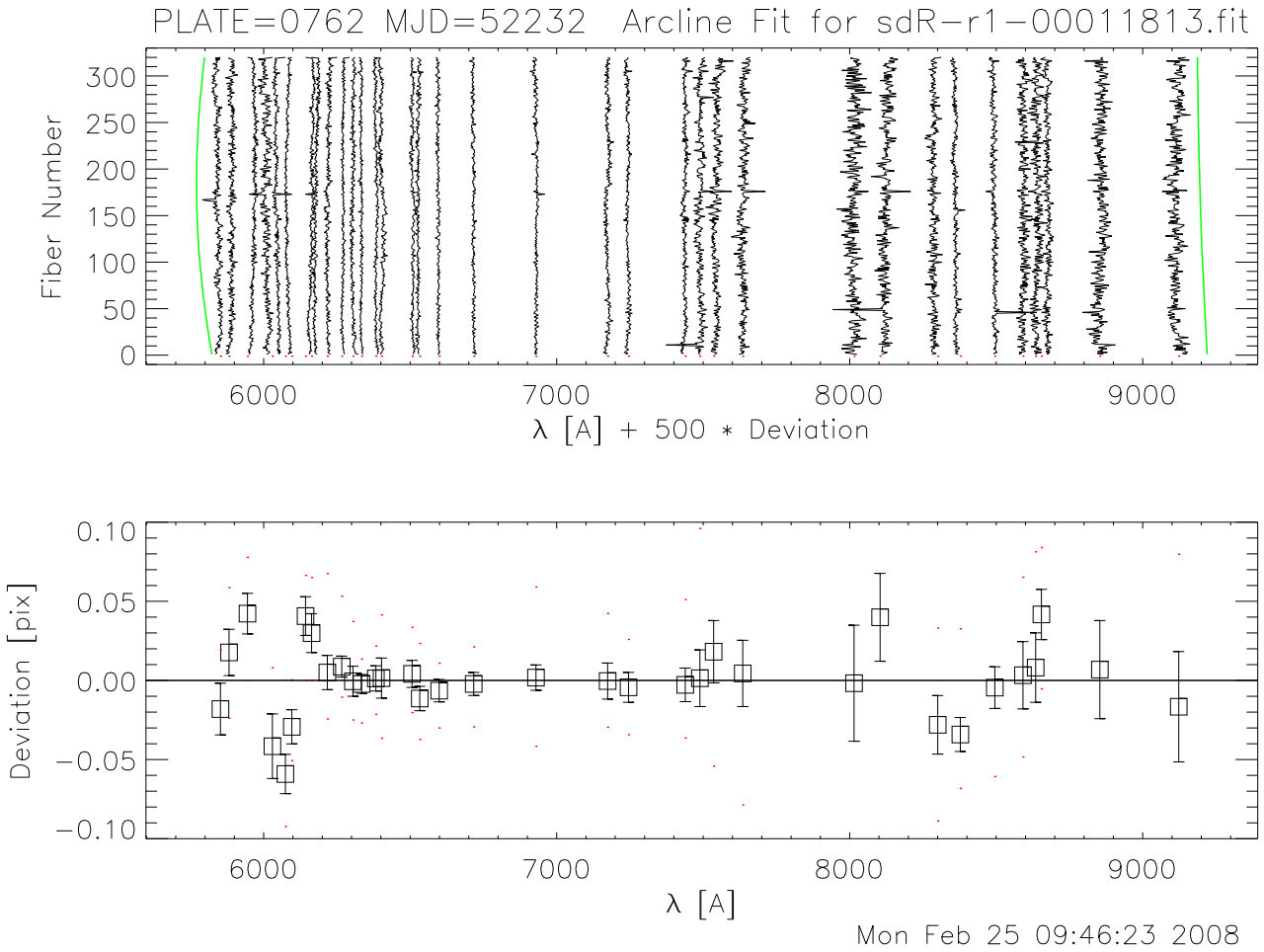

PLATE=0762 MJD=52232 sdR-b2-00011817.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.24 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

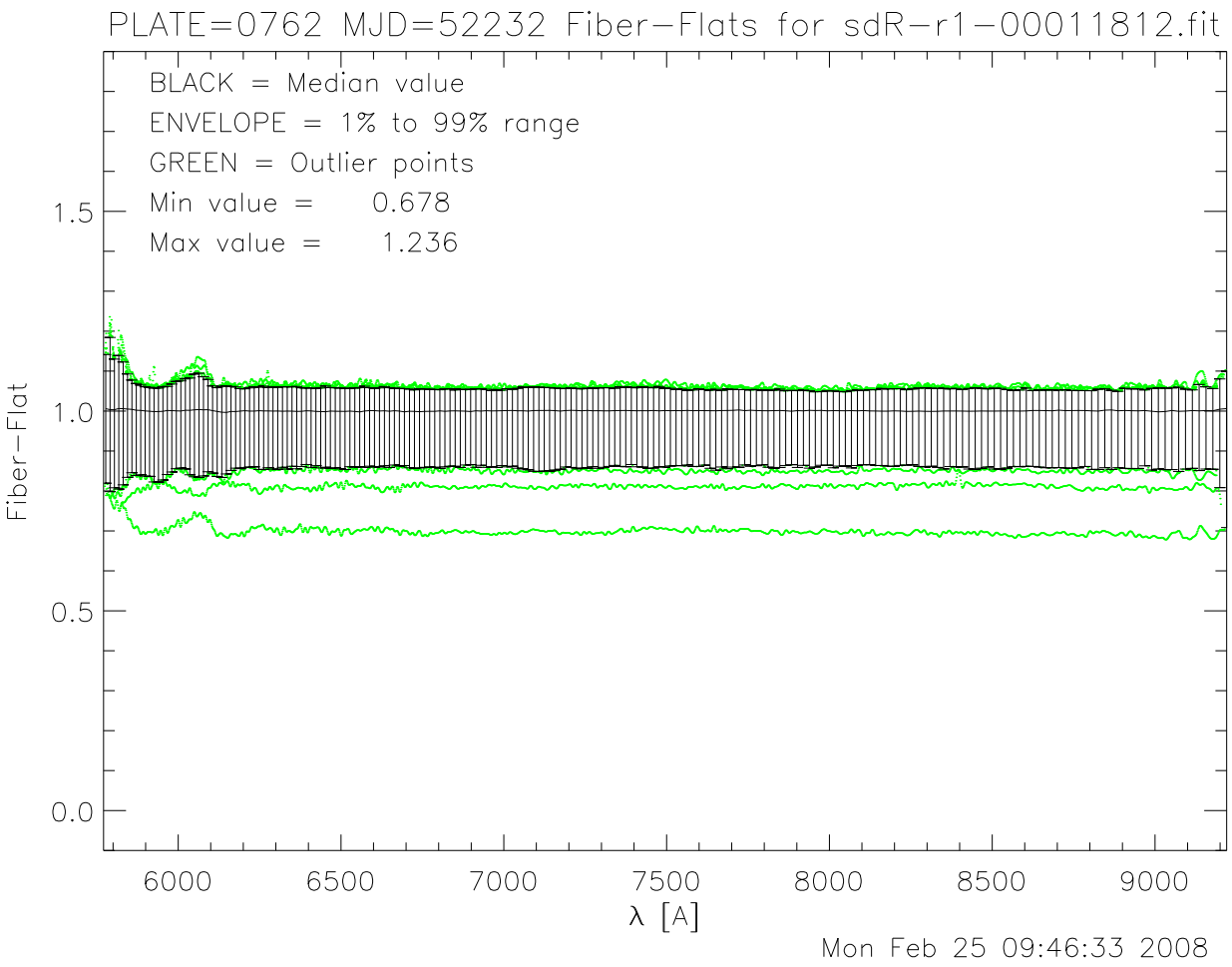

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

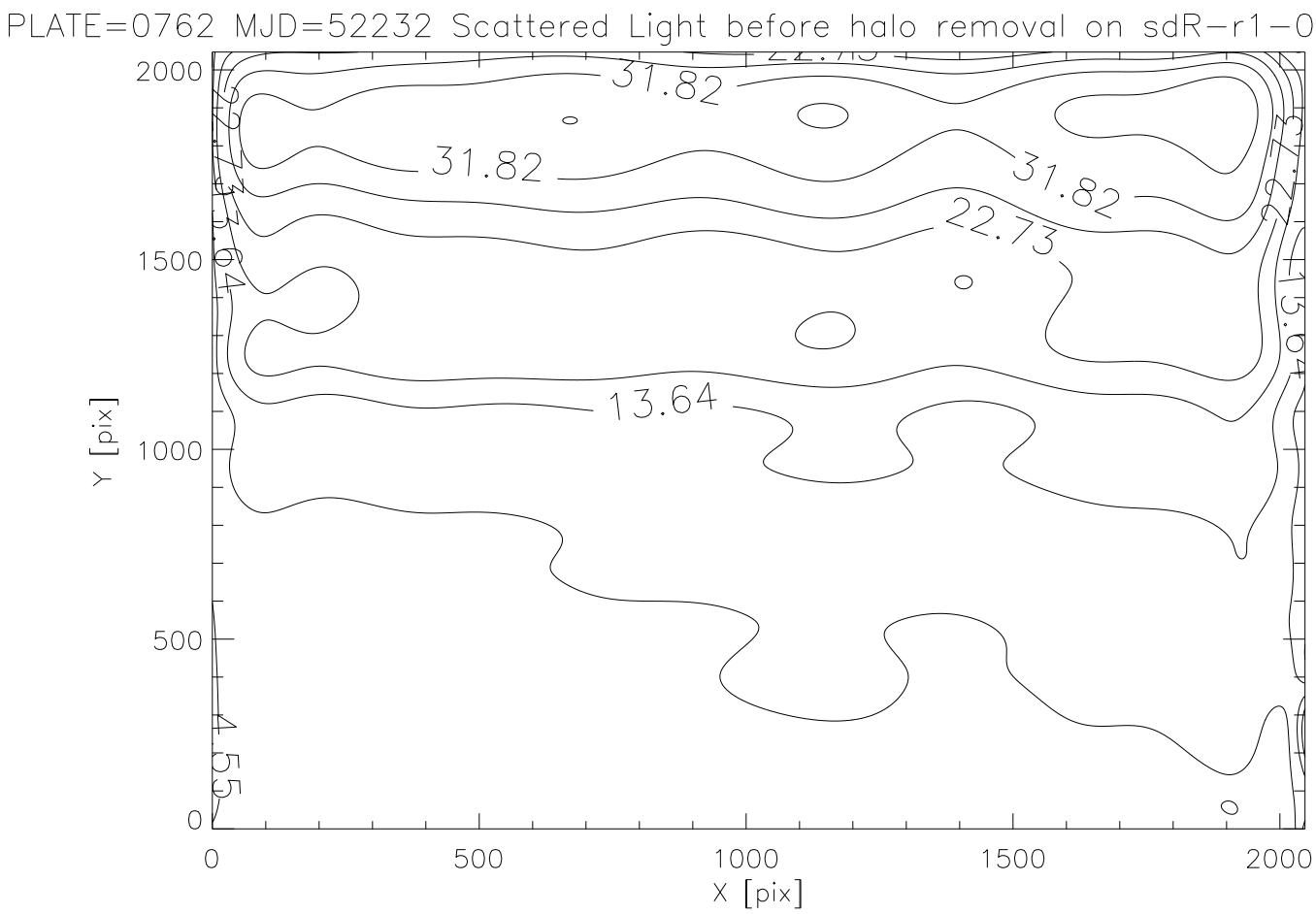

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

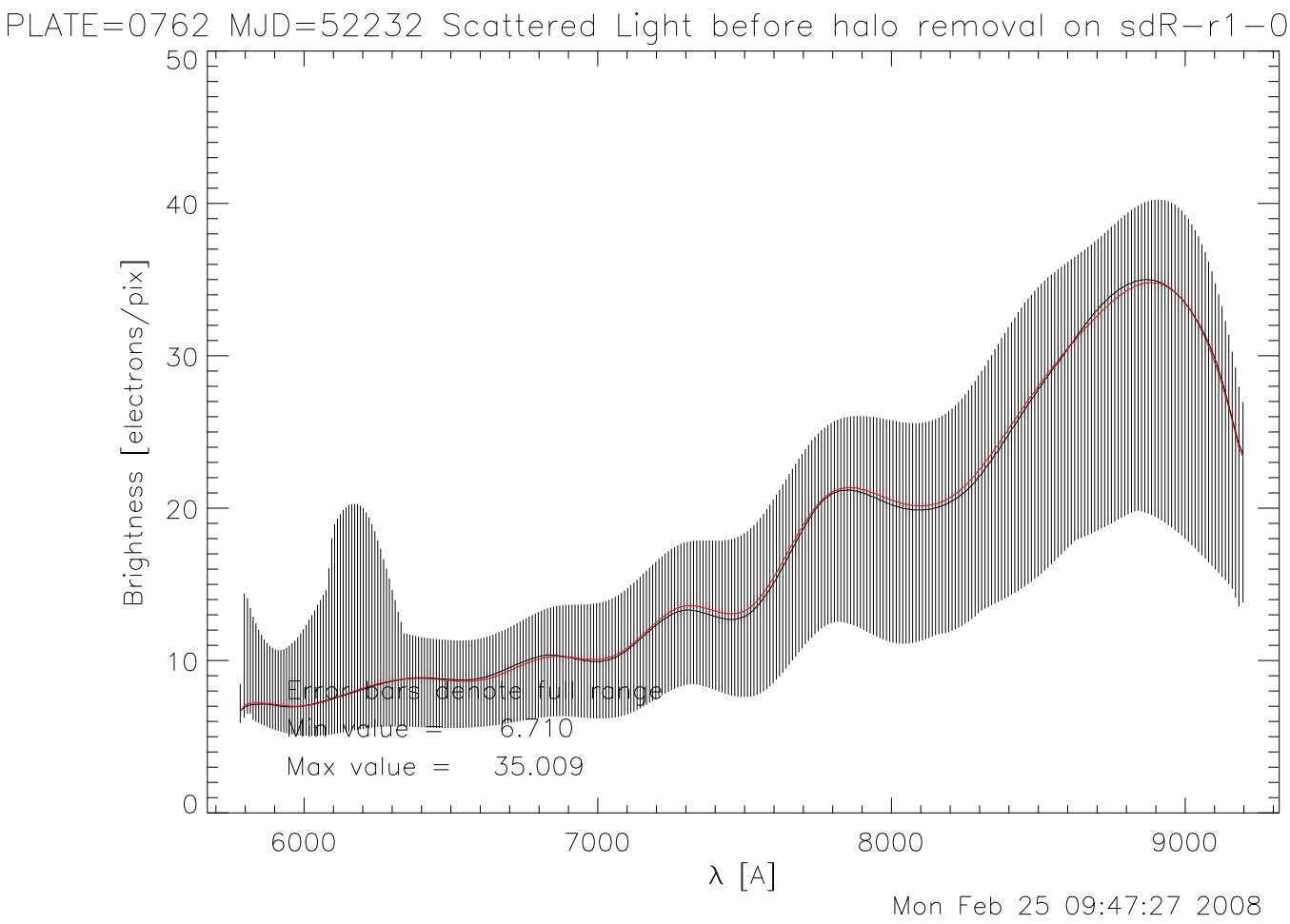

PLATE=0762 MJD=52232 flat extraction chi^2 for sdR−r1−00011812.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

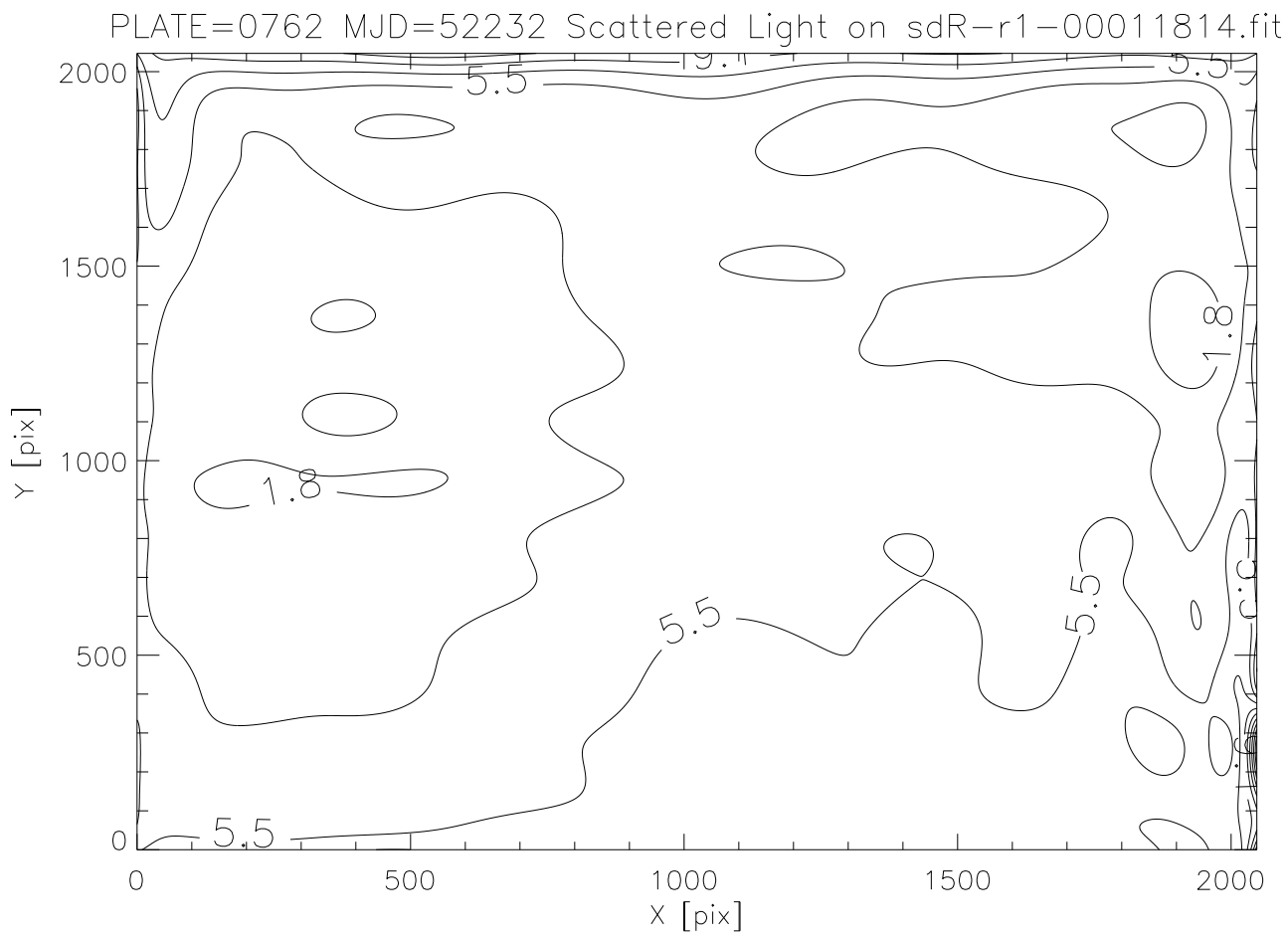

PLATE=0762 MJD=52232 Superflat sdR-r1-00011812.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

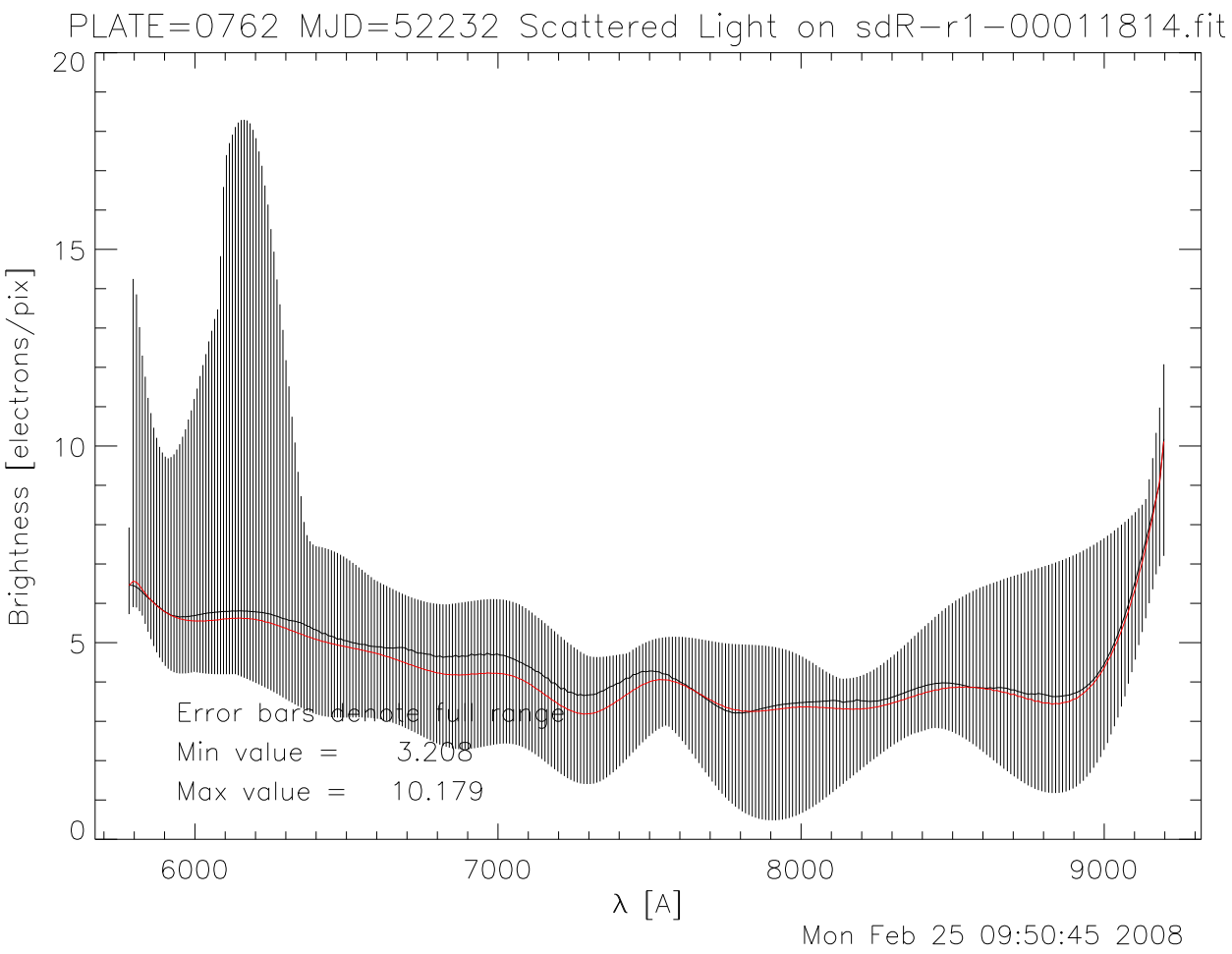

PLATE=0762 MJD=52232 Arcline Fit for sdR-r1-00011813.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 25 09:46:23 2008

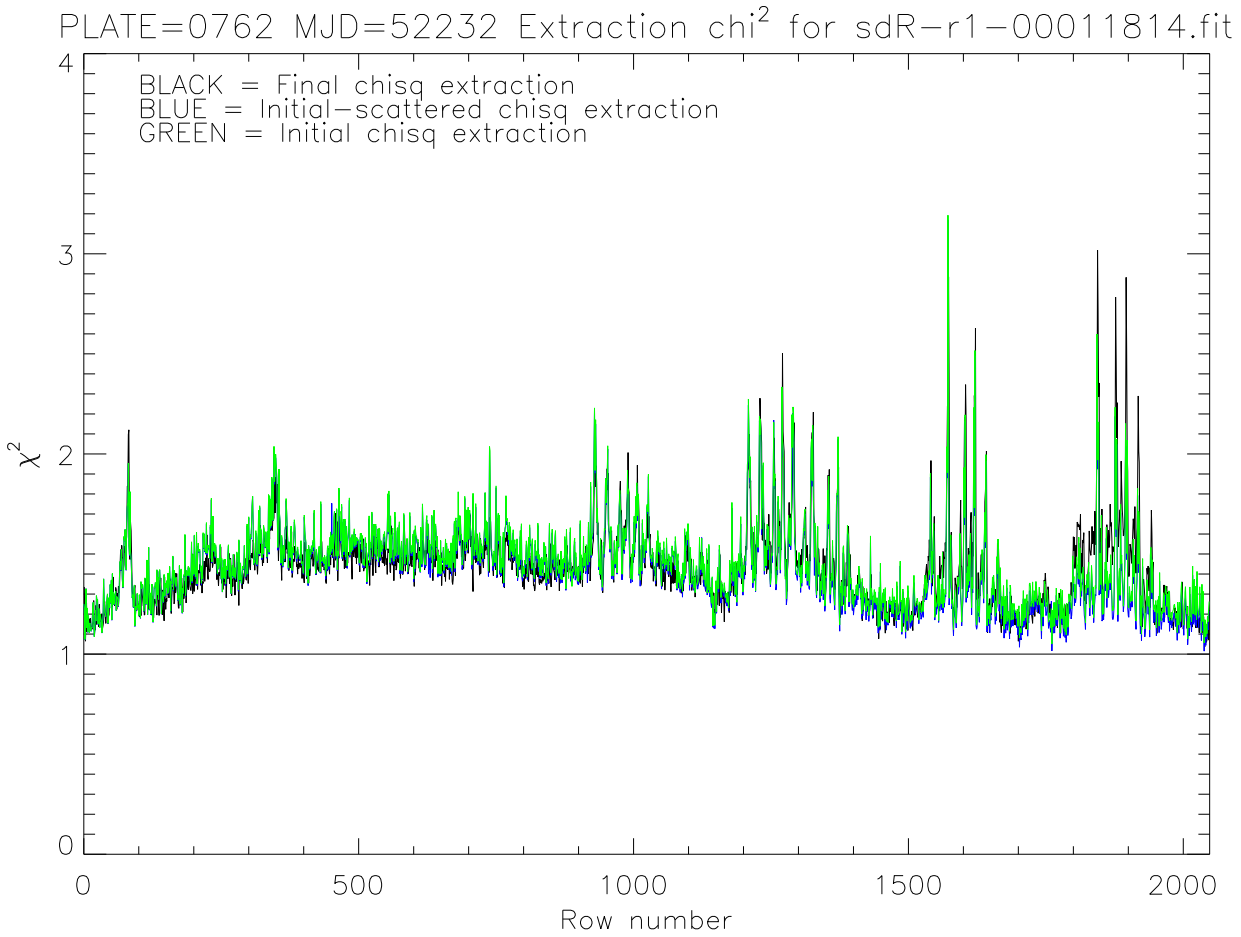

PLATE=0762 MJD=52232 Fiber−Flats for sdR−r1−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.678
Max value = 1.236
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 09:46:33 2008

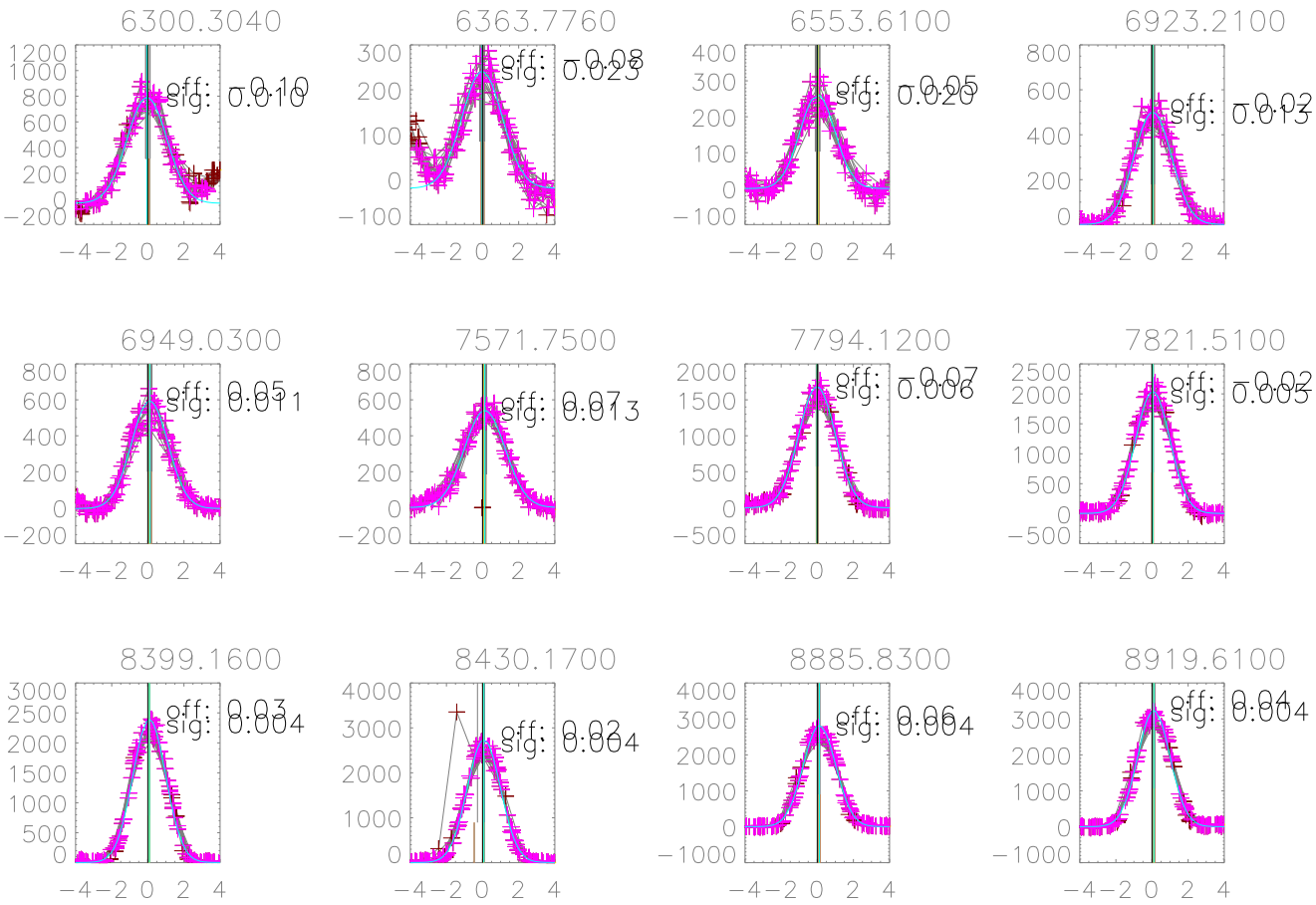

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r1-00011814.fi
31.82
31.82
31.82
22.73
22.73
13.64
13.64
4.55
0
Y [pix]
X [pix]
0
500
1000
1500
2000

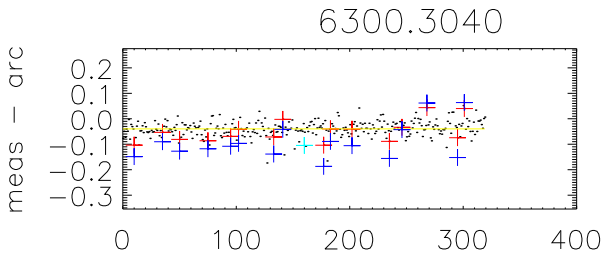

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r1-00011814.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.710
Max value = 35.009
Mon Feb 25 09:47:27 2008

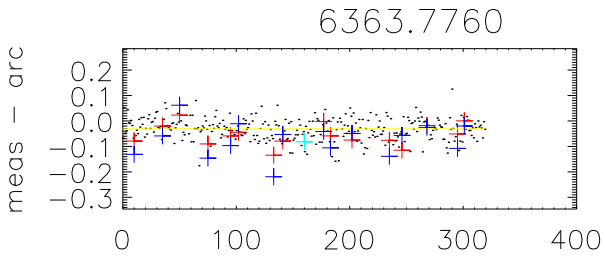

PLATE=0762 MJD=52232 Scattered Light on sdR-r1-00011814.fit
5.5
5.5
1.8
1.8
5.5
5.5
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

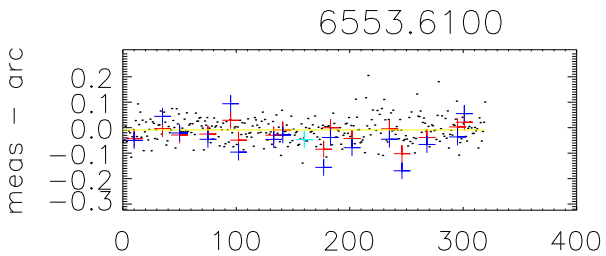

PLATE=0762 MJD=52232 Scattered Light on sdR-r1-00011814.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.208
Max value = 10.179
Mon Feb 25 09:50:45 2008

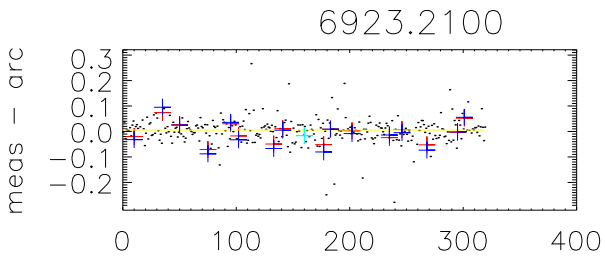

PLATE=0762 MJD=52232 Extraction chi^2 for sdR−r1−00011814.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

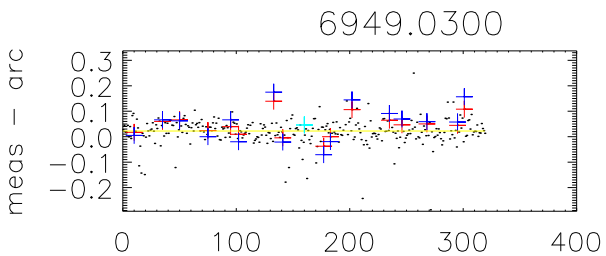

6300.3040
off: -0.10
sig: 0.010
6363.7760
off: -0.08
sig: 0.023
6553.6100
off: -0.05
sig: 0.020
6923.2100
off: -0.02
sig: 0.013
6949.0300
off: 0.05
sig: 0.011
7571.7500
off: 0.07
sig: 0.013
7794.1200
off: -0.07
sig: 0.006
7821.5100
off: -0.02
sig: 0.005
8399.1600
off: 0.03
sig: 0.004
8430.1700
off: 0.02
sig: 0.004
8885.8300
off: 0.06
sig: 0.004
8919.6100
off: 0.04
sig: 0.004

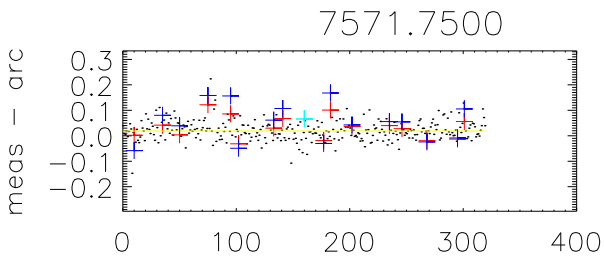

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

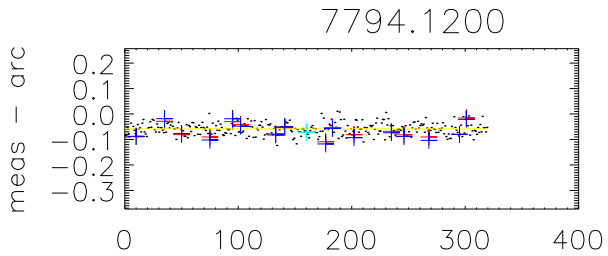

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

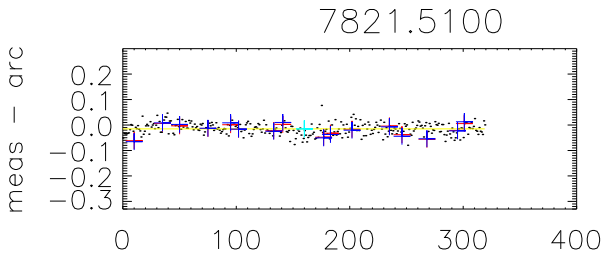

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

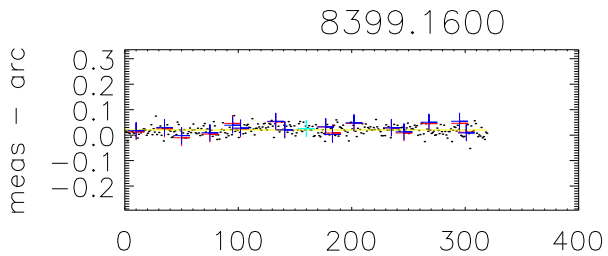

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

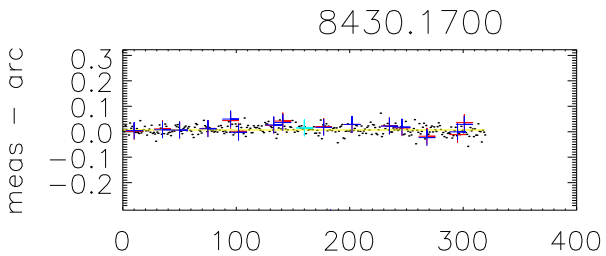

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

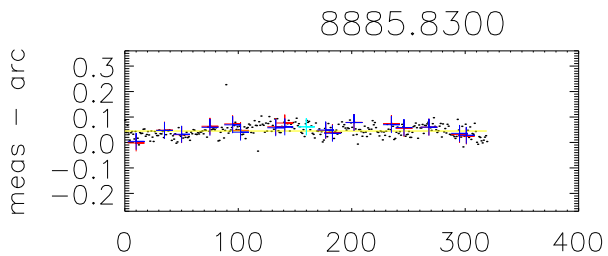

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

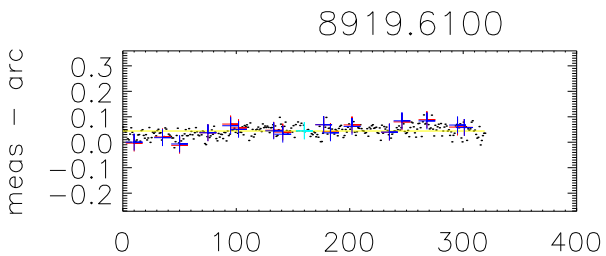

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

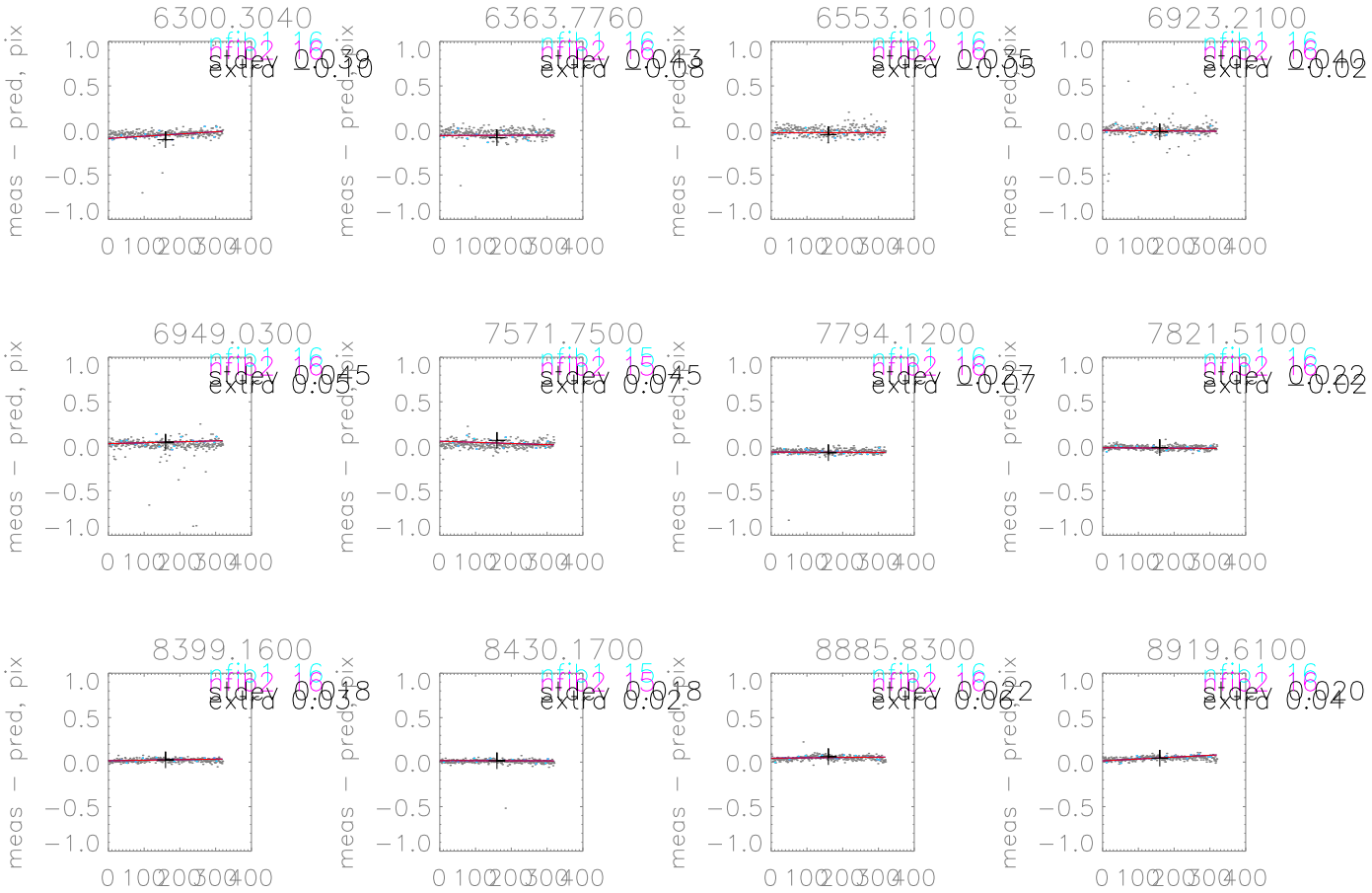

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

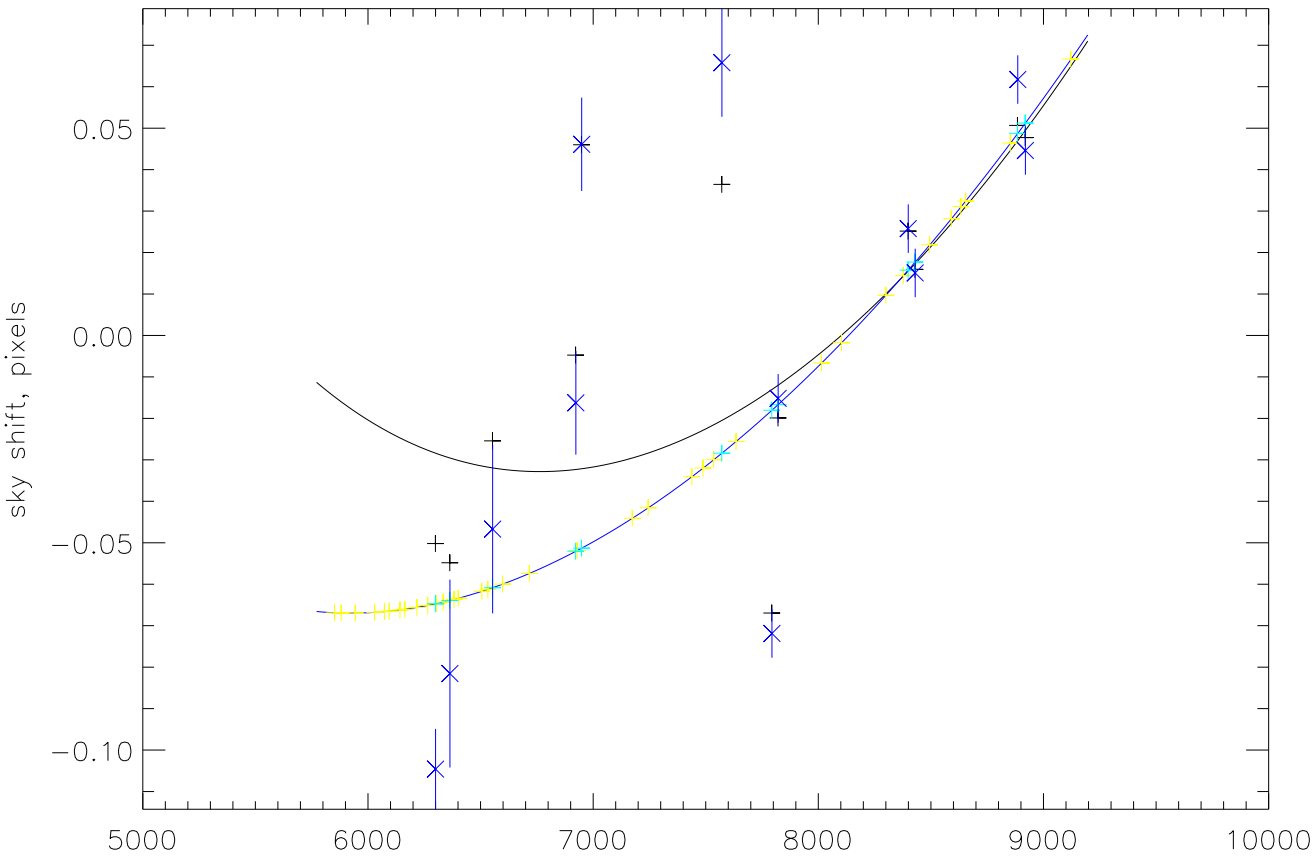

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

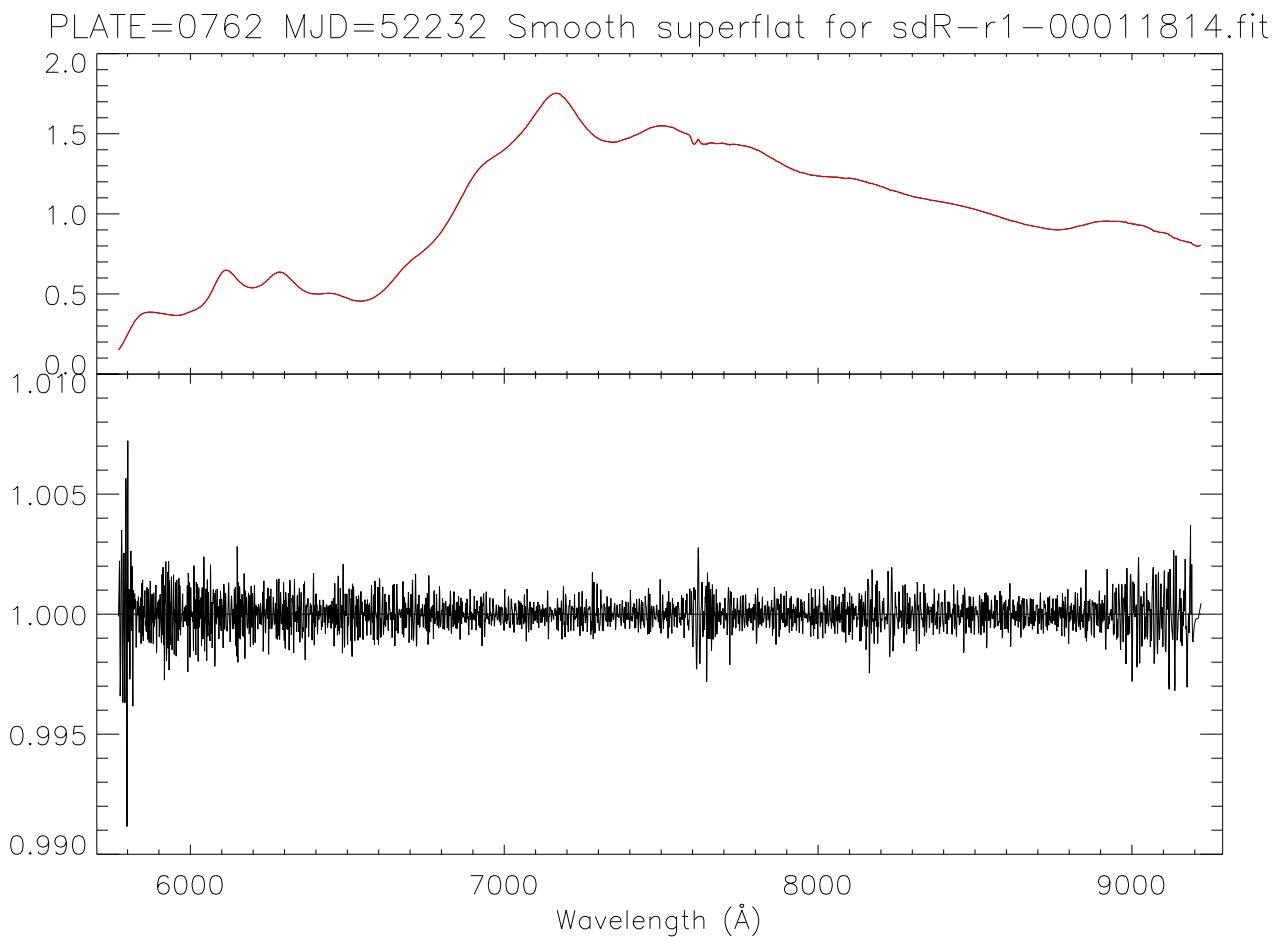

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

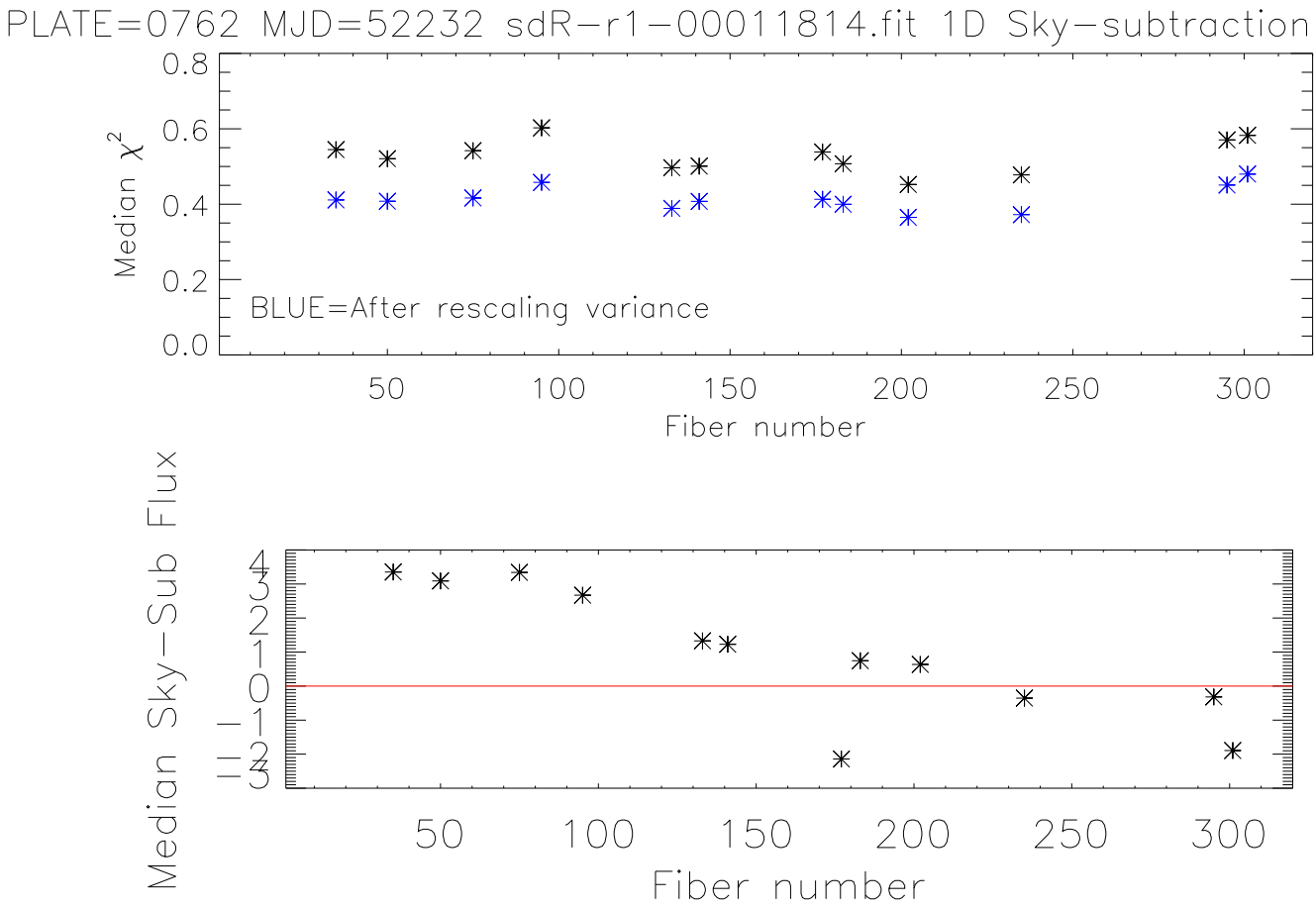

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6300.3040
mfib1 16
mfib2 16
stdev 0.039
extra −0.010
6363.7760
mfib1 16
mfib2 16
stdev 0.043
extra −0.008
6553.6100
mfib1 16
mfib2 16
stdev 0.035
extra −0.005
6923.2100
mfib1 16
mfib2 16
stdev 0.040
extra −0.002
6949.0300
mfib1 16
mfib2 16
stdev 0.045
extra 0.005
7571.7500
mfib1 15
mfib2 16
stdev 0.045
extra 0.007
7794.1200
mfib1 16
mfib2 16
stdev 0.027
extra −0.007
7821.5100
mfib1 16
mfib2 16
stdev 0.022
extra −0.002
8399.1600
mfib1 16
mfib2 16
stdev 0.038
extra 0.003
8430.1700
mfib1 15
mfib2 16
stdev 0.018
extra 0.002
8885.8300
mfib1 16
mfib2 16
stdev 0.022
extra 0.006
8919.6100
mfib1 16
mfib2 16
stdev 0.020
extra 0.004
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

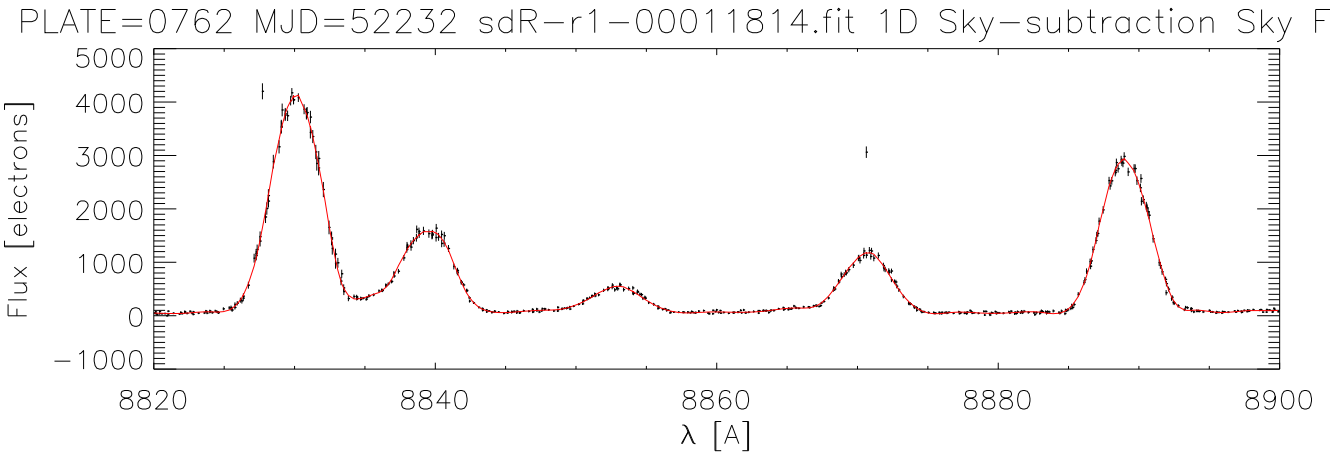

sky shift, pixels
0.05
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000

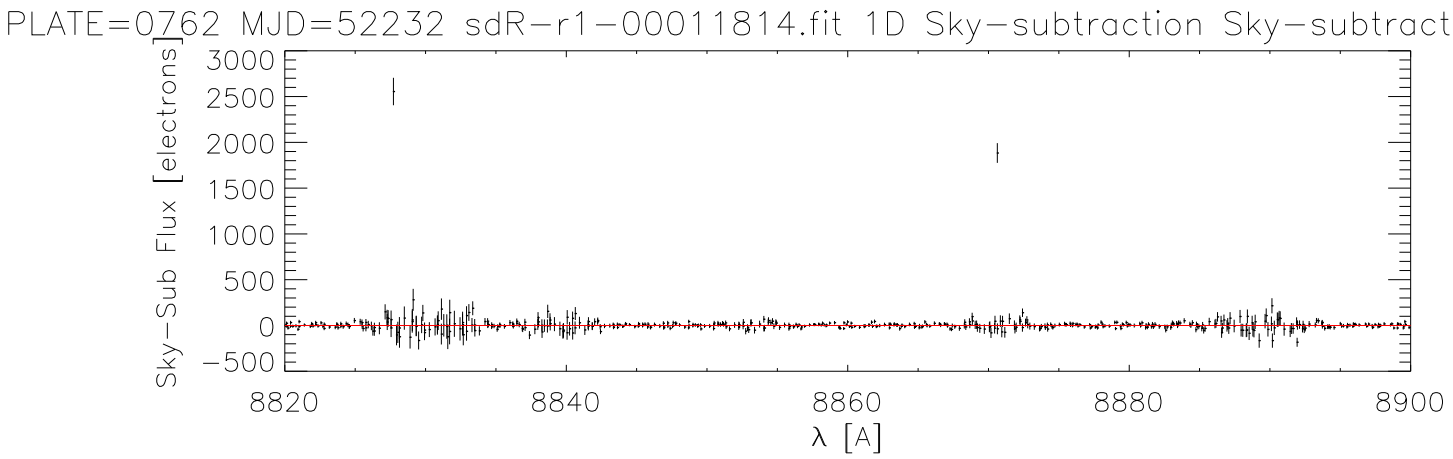
es= 0.0000

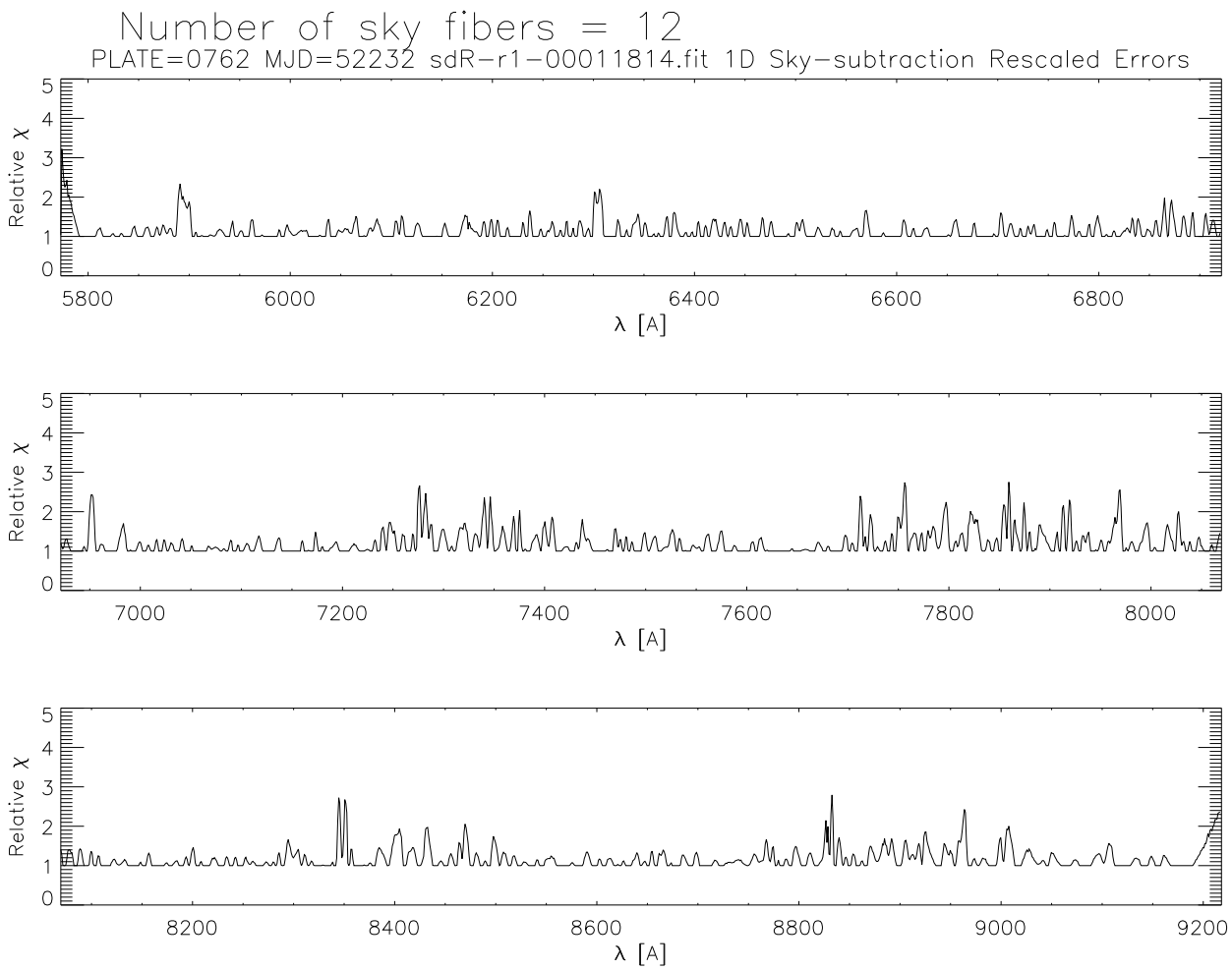

PLATE=0762 MJD=52232 Smooth superflat for sdR-r1-00011814.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

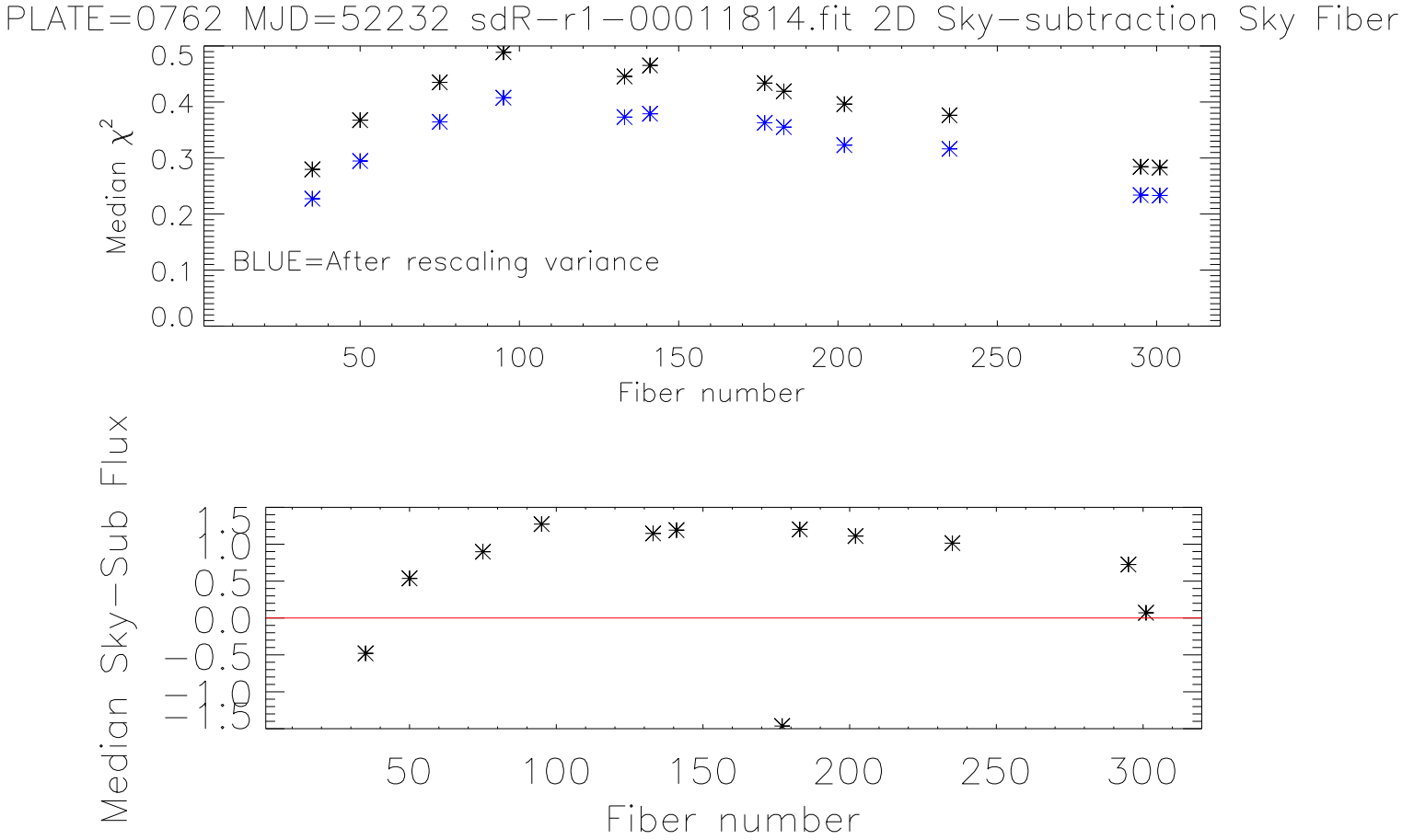

PLATE=0762 MJD=52232 sdR-r1-00011814.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

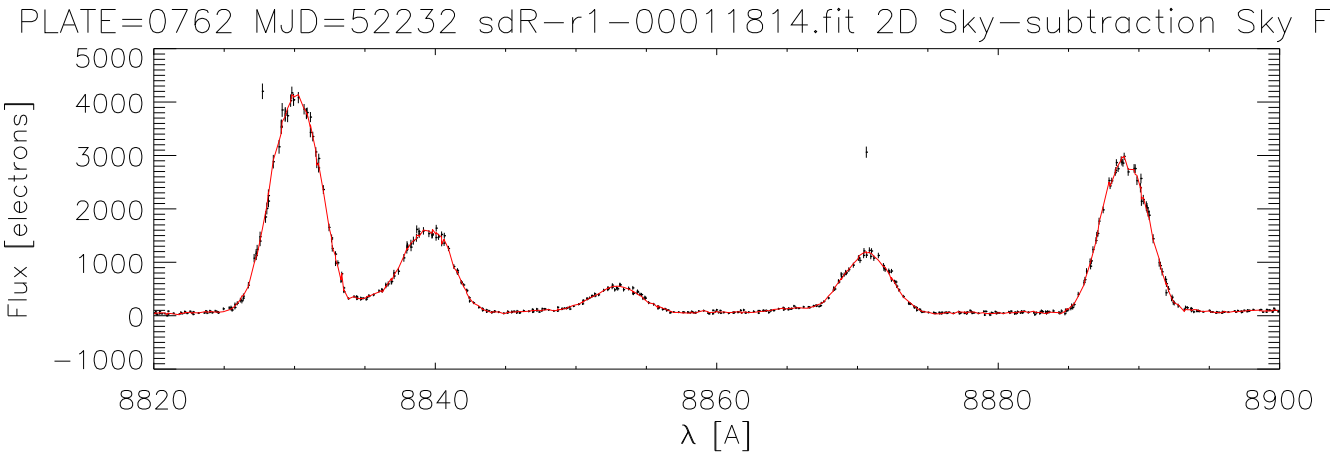
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

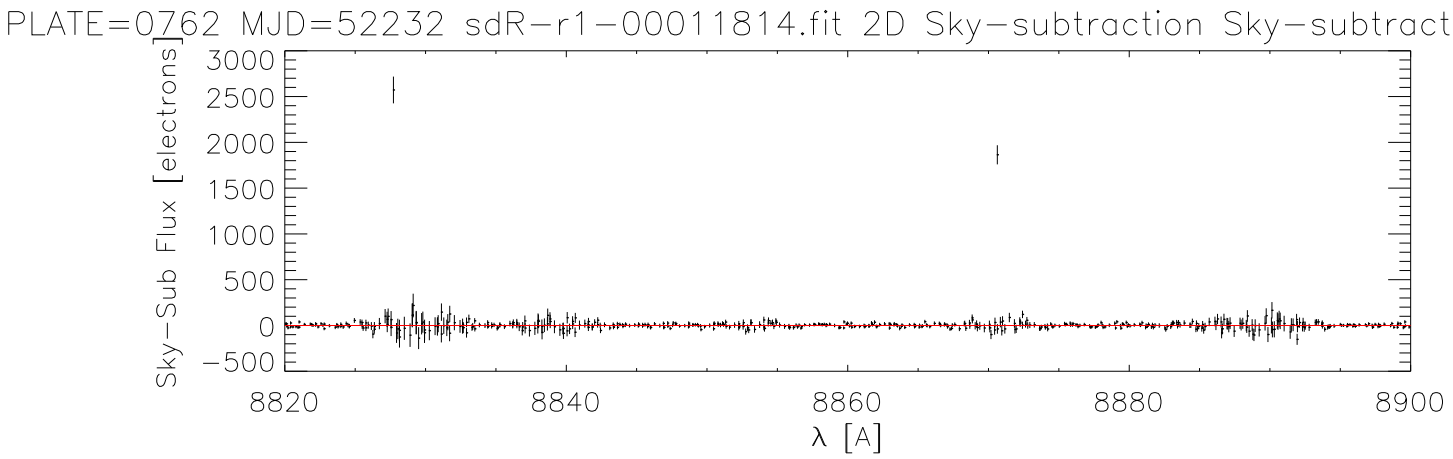

PLATE=0762 MJD=52232 sdR-r1-00011814.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

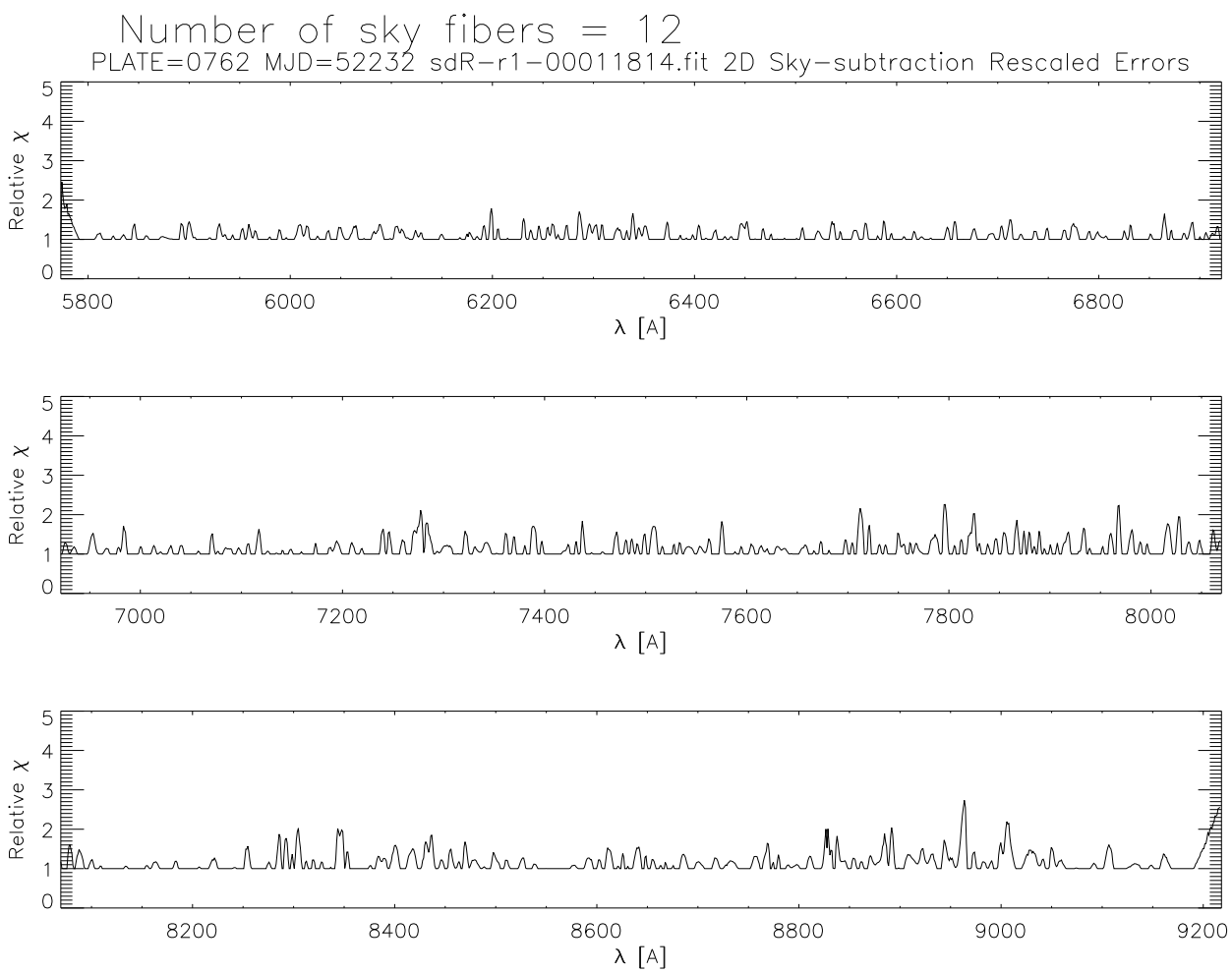

PLATE=0762 MJD=52232 sdR-r1-00011814.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

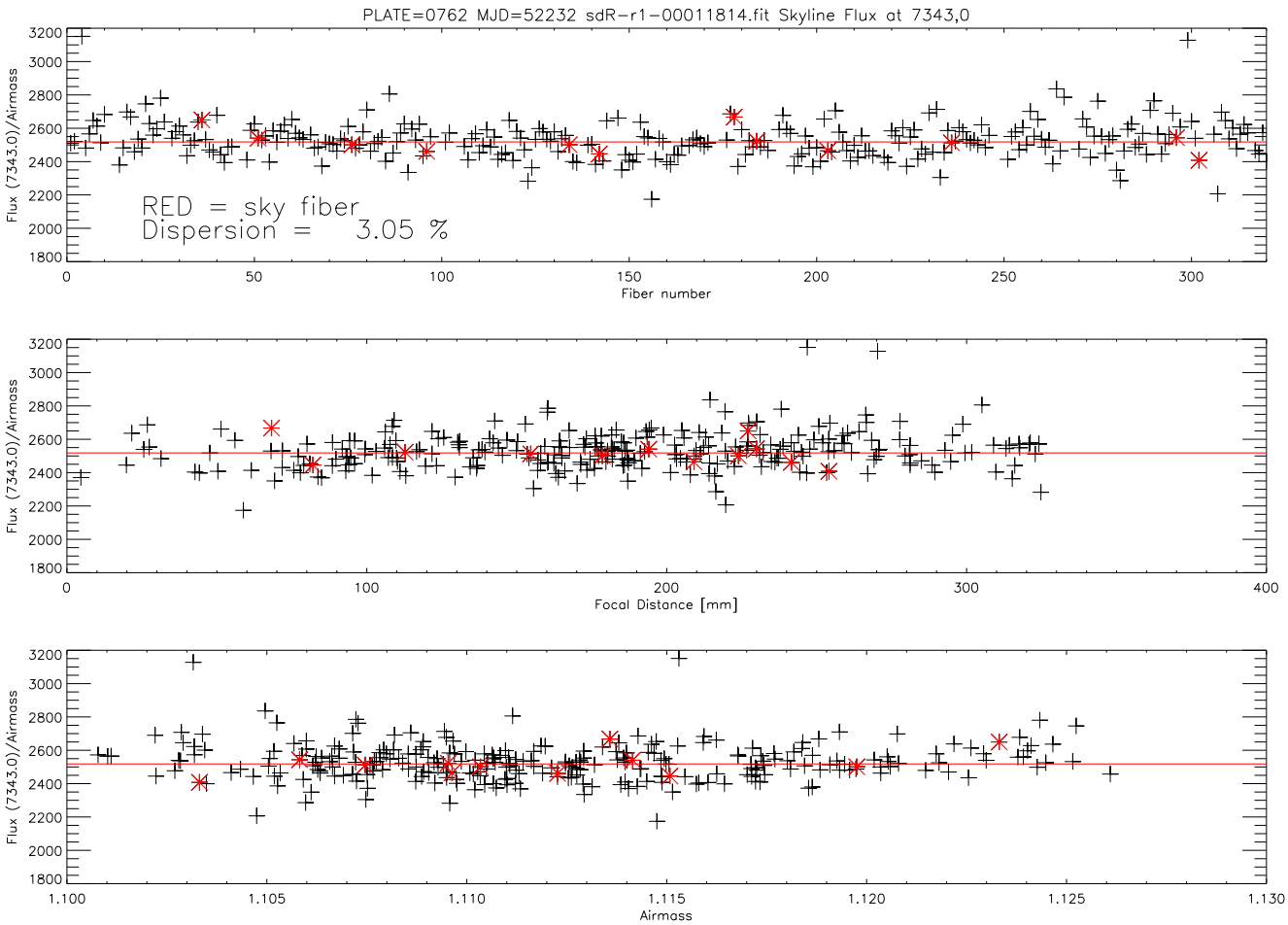

Number of sky fibers = 12
PLATE=0762 MJD=52232 sdR-r1-00011814.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

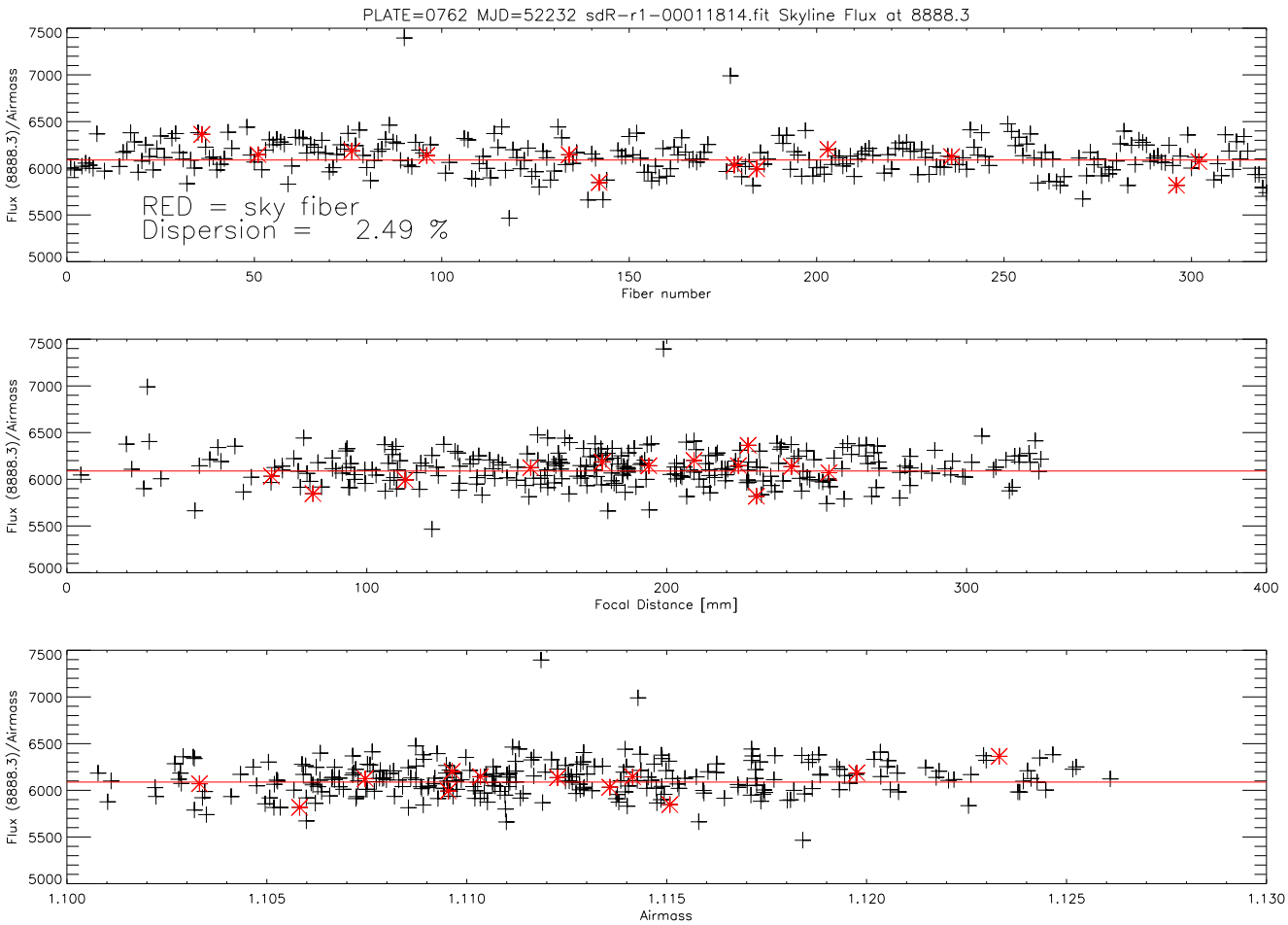

PLATE=0762 MJD=52232 sdR-r1-00011814.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

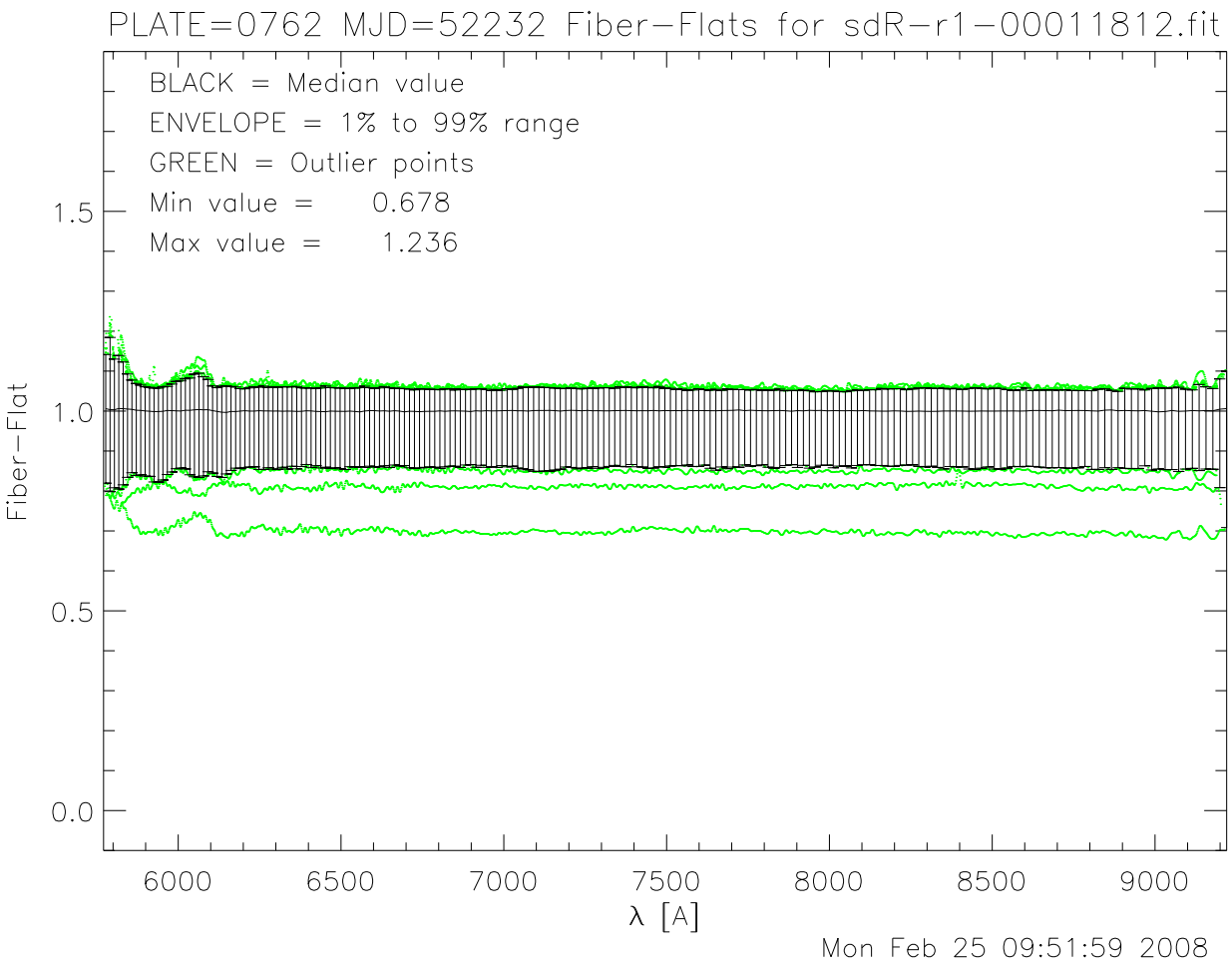

PLATE=0762 MJD=52232 sdR-r1-00011814.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

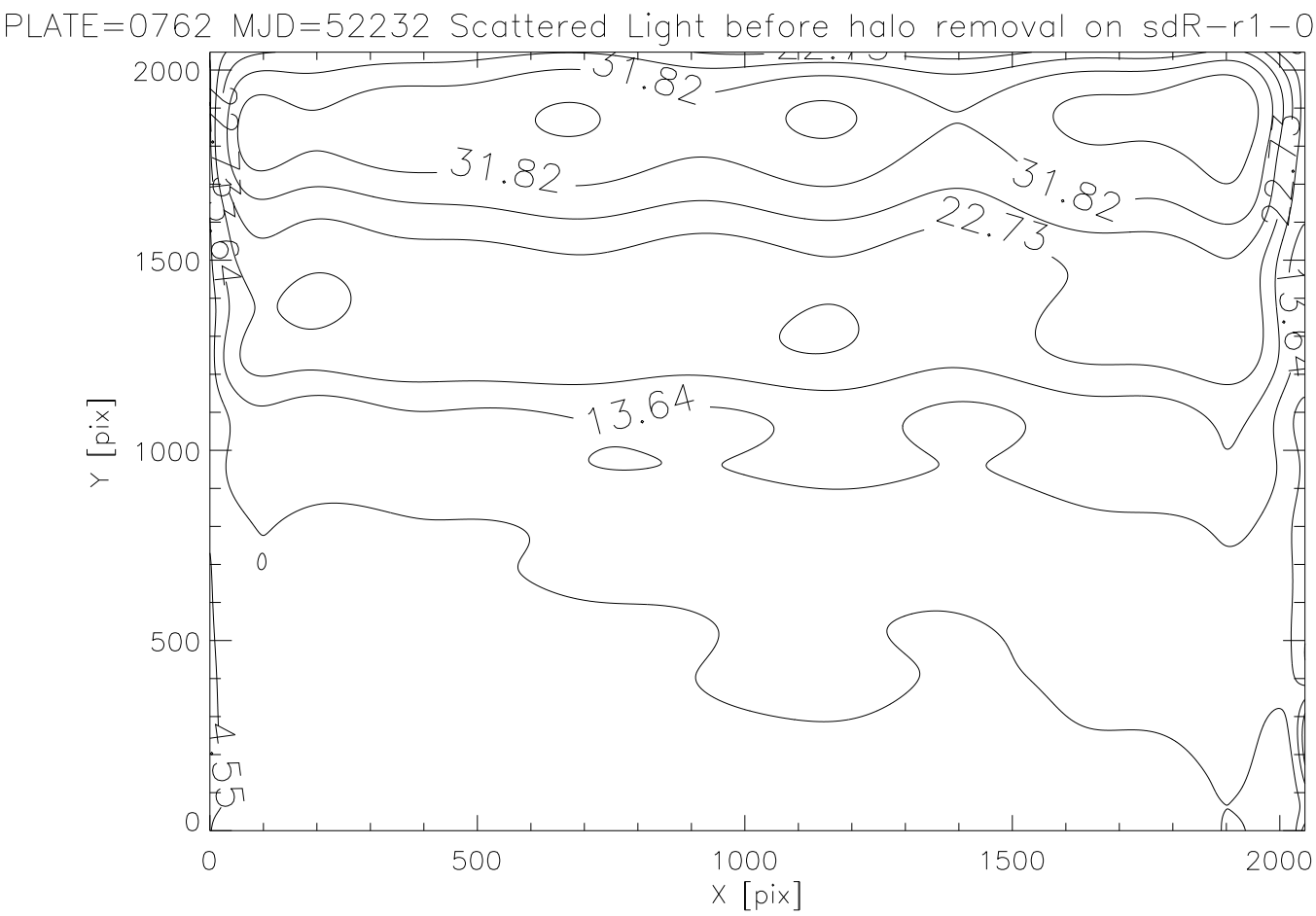

PLATE=0762 MJD=52232 sdR-r1-00011814.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

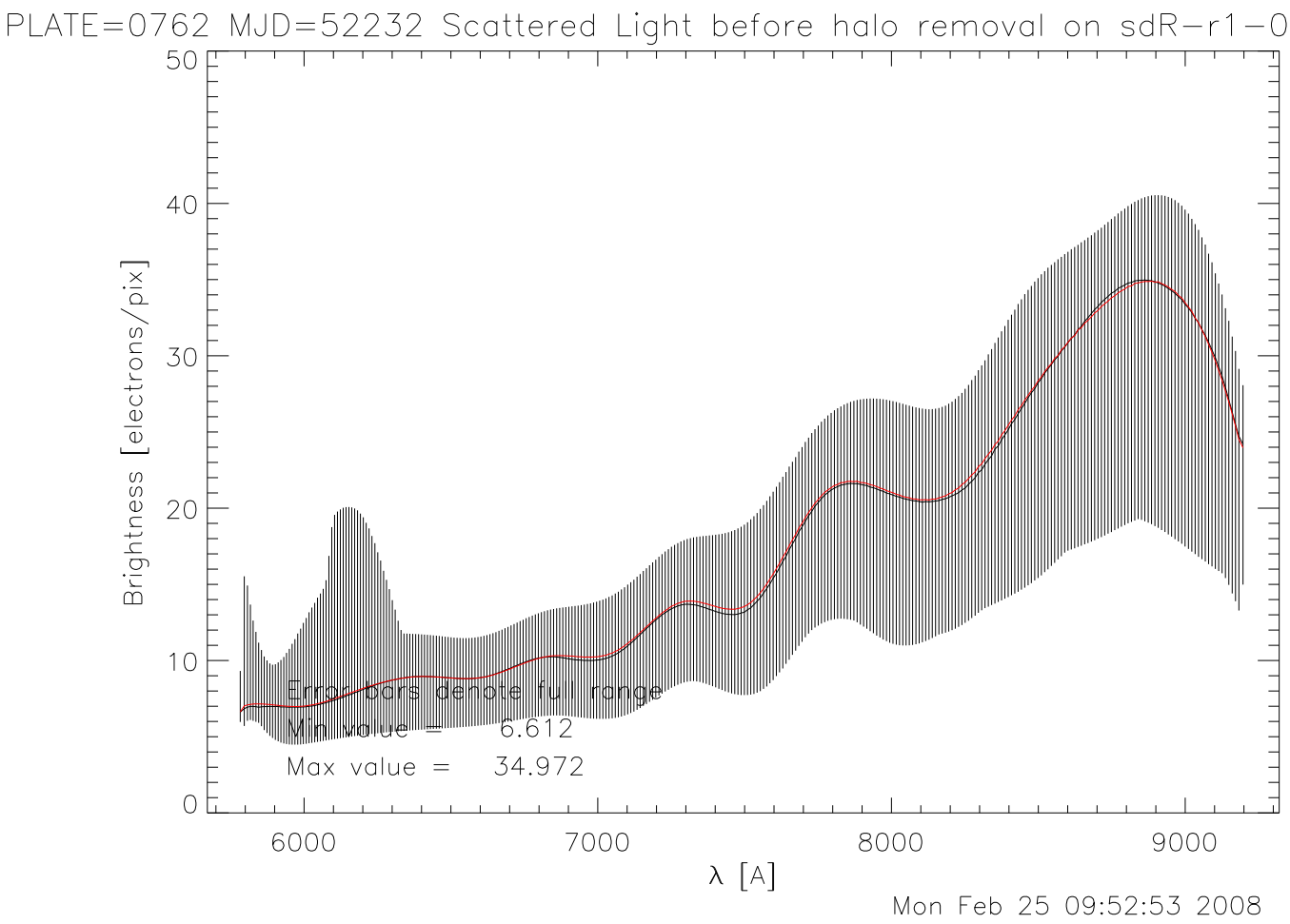

Number of sky fibers = 12
PLATE=0762 MJD=52232 sdR-r1-00011814.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

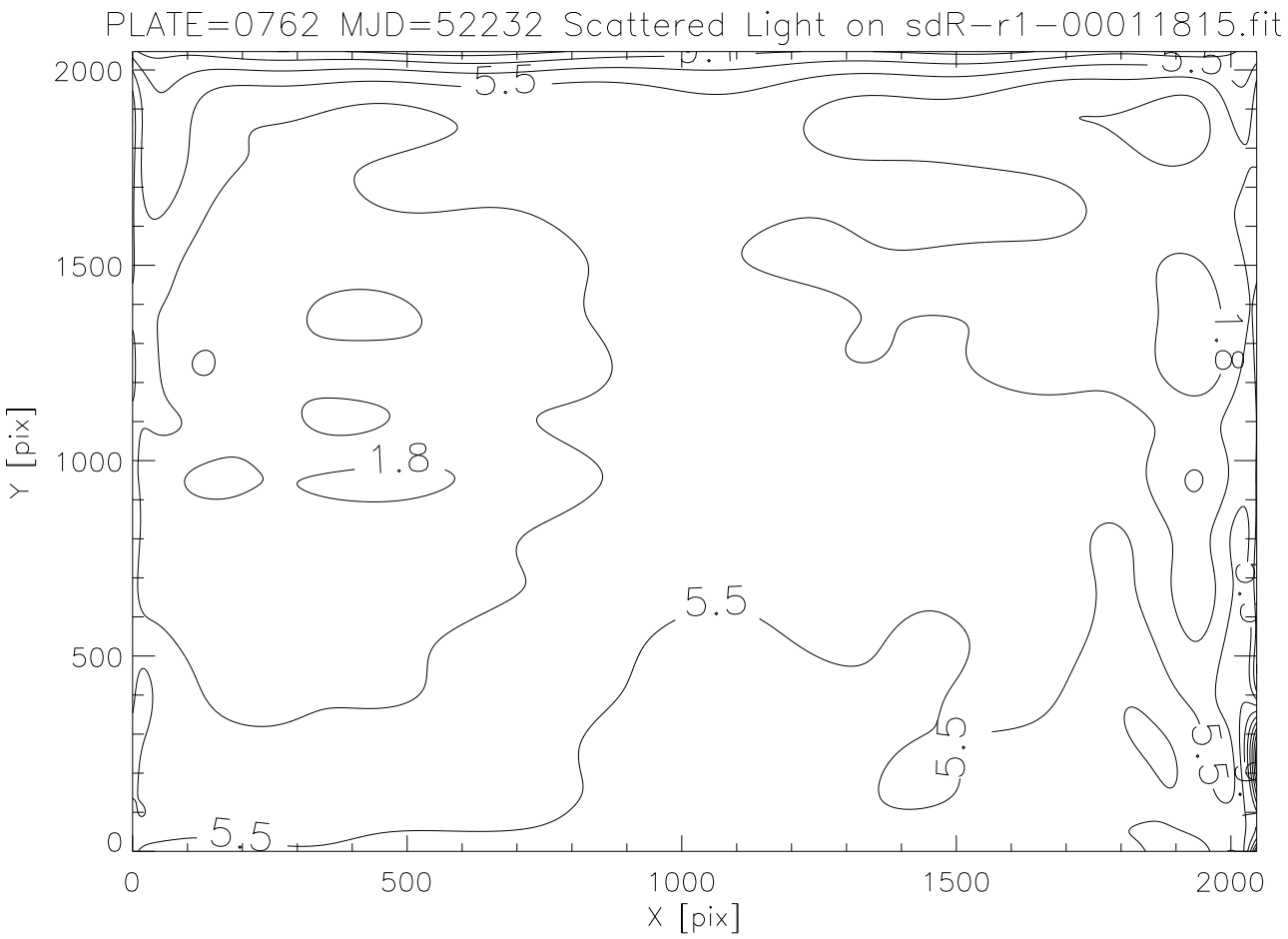

PLATE=0762 MJD=52232 sdR-r1-00011814.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.05 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

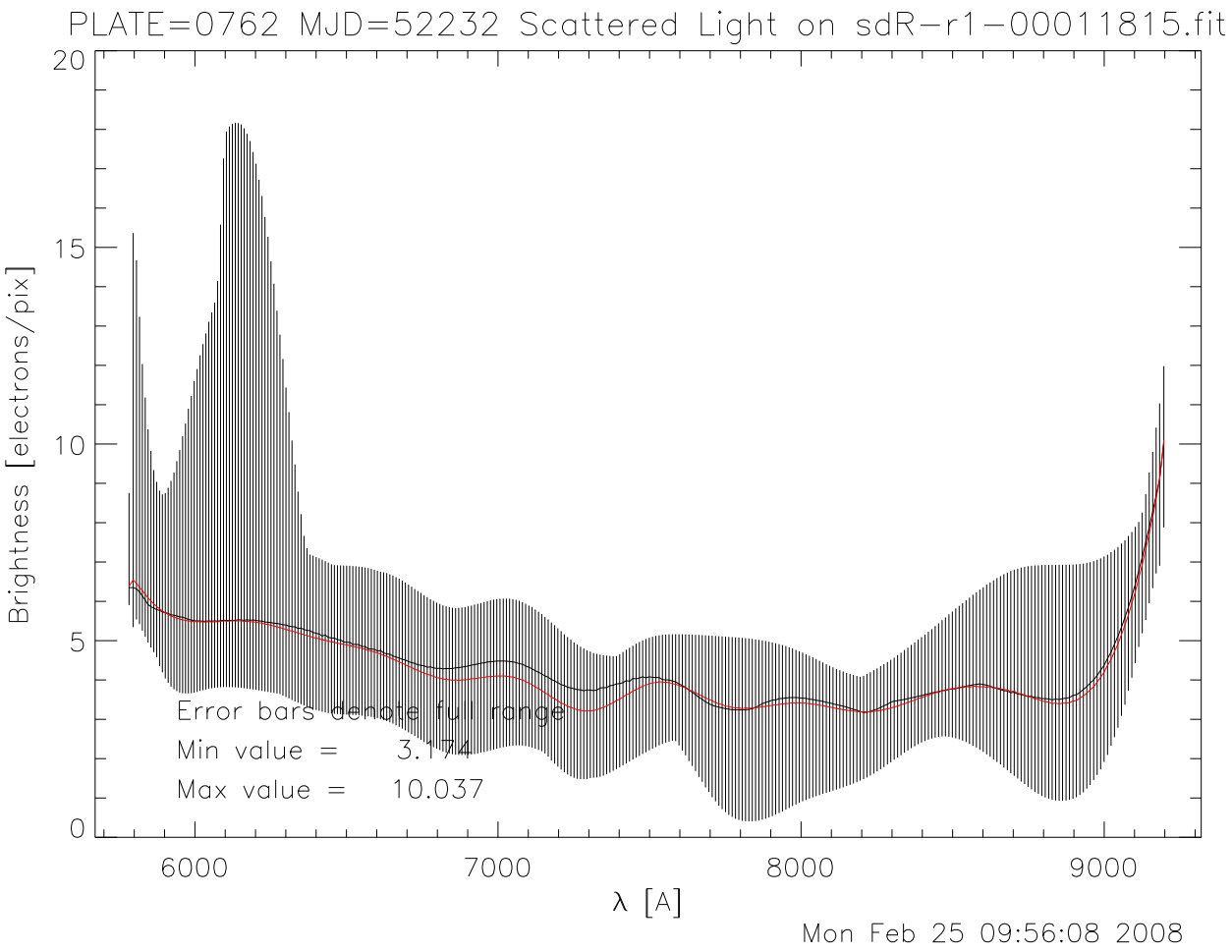

PLATE=0762 MJD=52232 sdR-r1-00011814.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.49 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

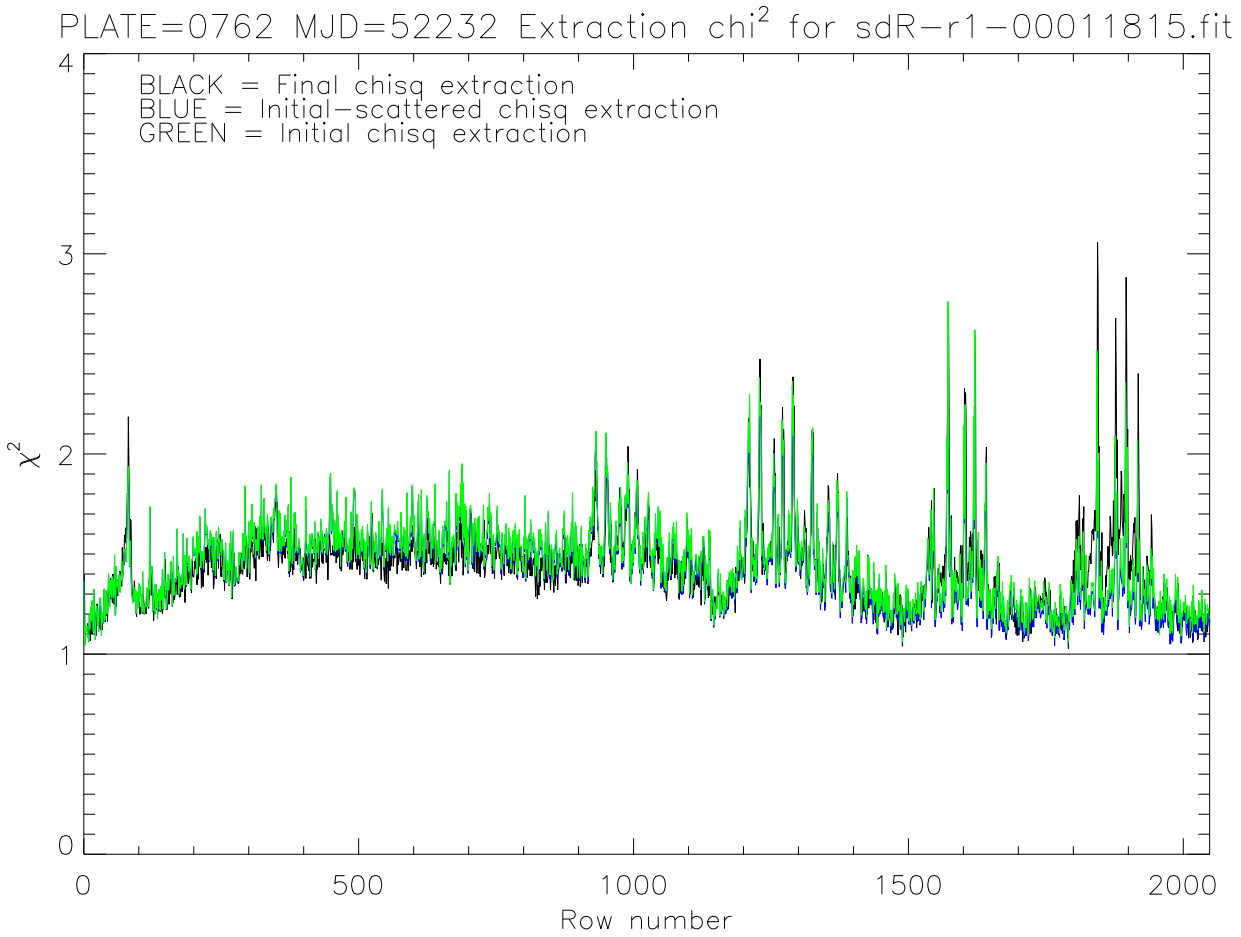

PLATE=0762 MJD=52232 Fiber−Flats for sdR−r1−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.678
Max value = 1.236
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 09:51:59 2008

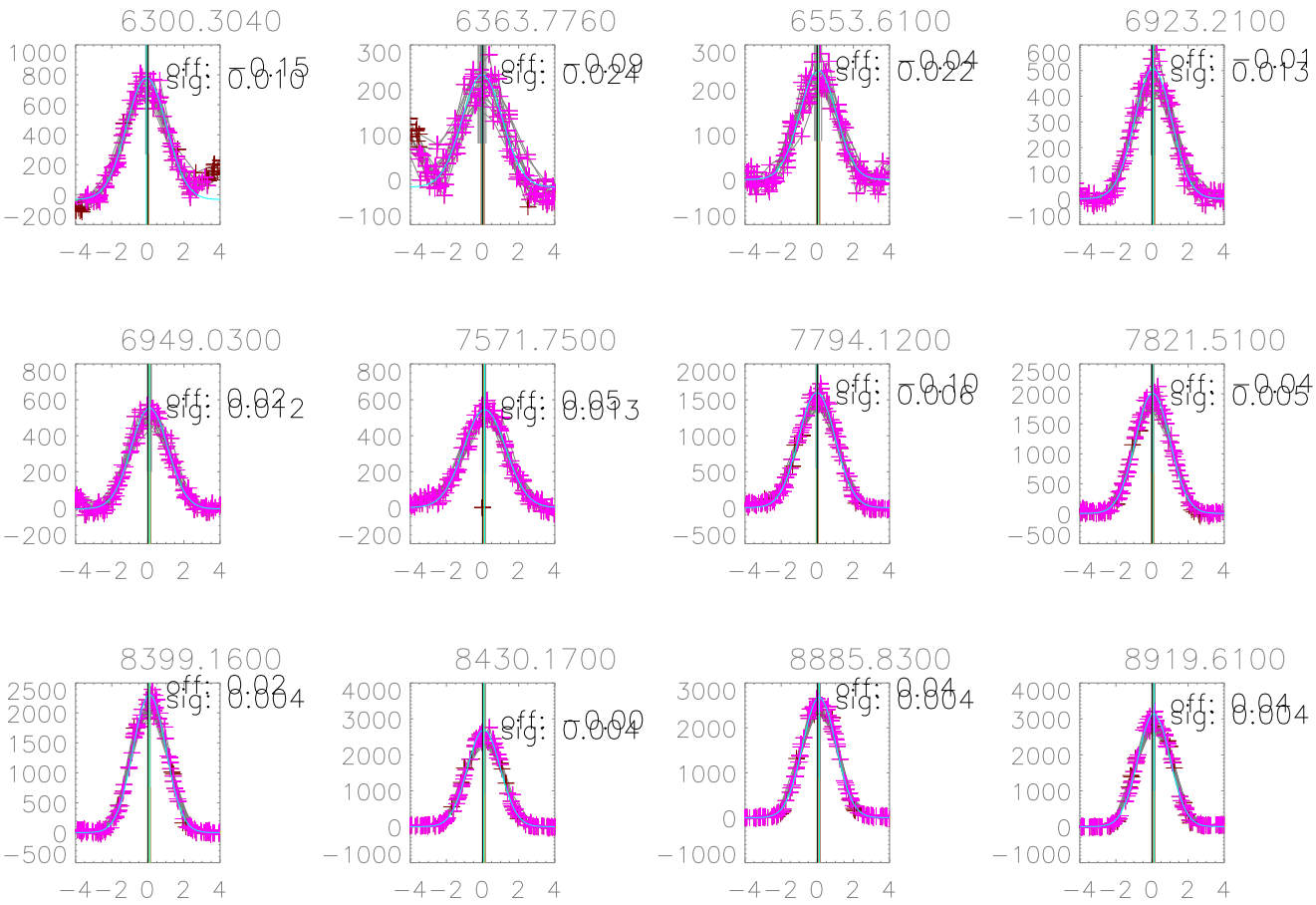

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r1-00011815.fi
31.82
31.82
31.82
22.73
22.73
13.64
13.64
4.55
0
Y [pix]
X [pix]
0
500
1000
1500
2000

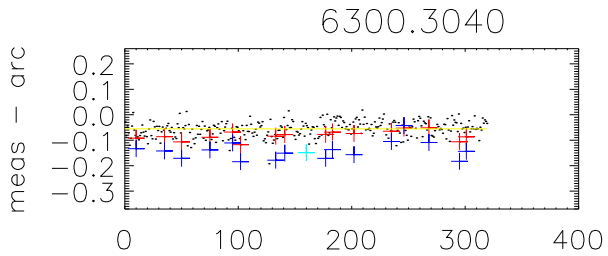

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r1-00011815.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.612
Max value = 34.972
Mon Feb 25 09:52:53 2008

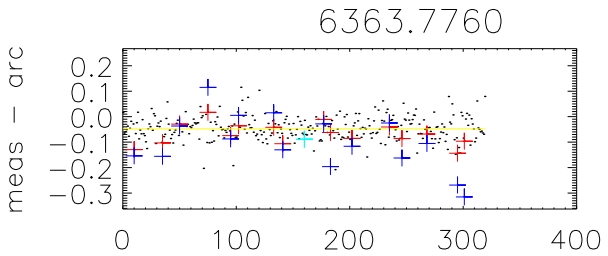

PLATE=0762 MJD=52232 Scattered Light on sdR−r1−00011815.fit
5.5
1.8
0
5.5
5.5
5.5
1.8
0
5.5
5.5
5.5
5.5
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

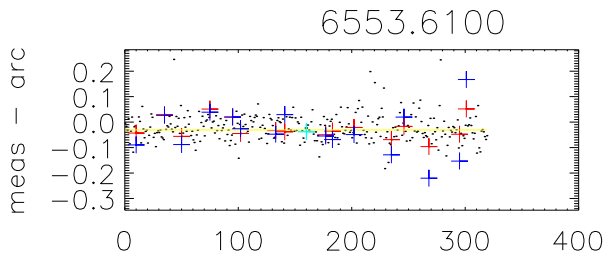

PLATE=0762 MJD=52232 Scattered Light on sdR-r1-00011815.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.174
Max value = 10.037
Mon Feb 25 09:56:08 2008

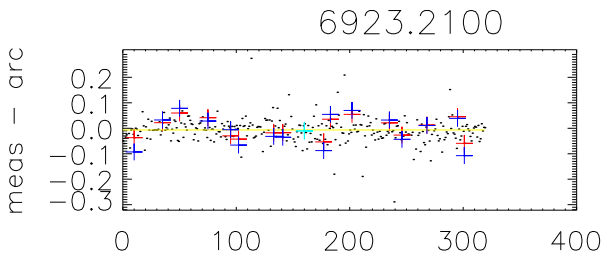

PLATE=0762 MJD=52232 Extraction chi^2 for sdR−r1−00011815.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

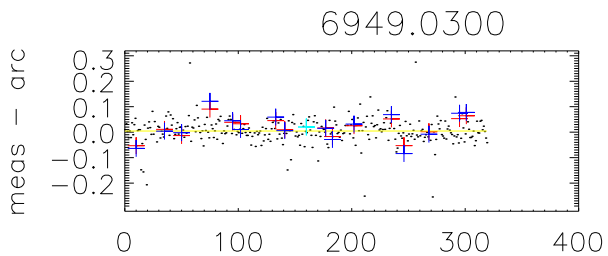

6300.3040
off: −0.15
sig: 0.010
6363.7760
off: −0.09
sig: 0.024
6553.6100
off: −0.04
sig: 0.022
6923.2100
off: −0.01
sig: 0.013
6949.0300
off: 0.02
sig: 0.012
7571.7500
off: 0.05
sig: 0.013
7794.1200
off: −0.10
sig: 0.006
7821.5100
off: −0.04
sig: 0.005
8399.1600
off: 0.02
sig: 0.004
8430.1700
off: −0.00
sig: 0.004
8885.8300
off: 0.04
sig: 0.004
8919.6100
off: 0.04
sig: 0.004

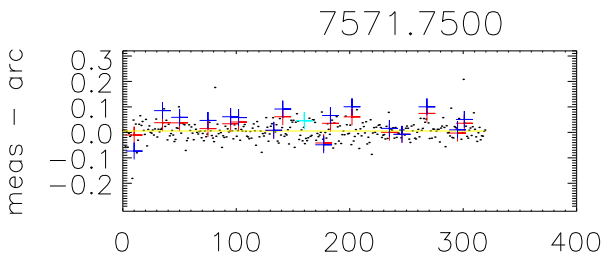

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

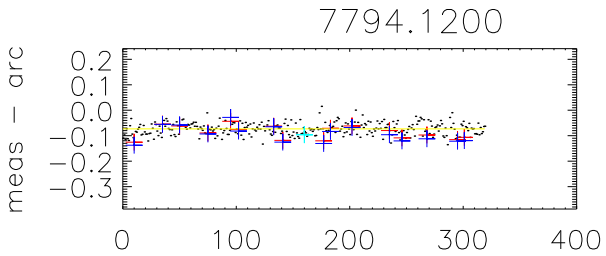

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

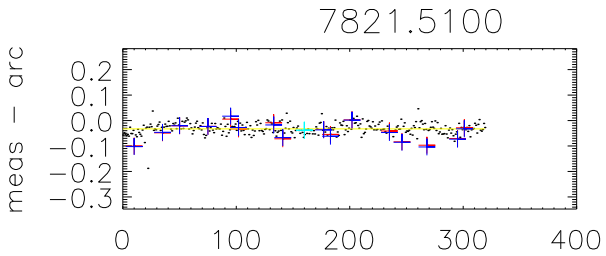

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

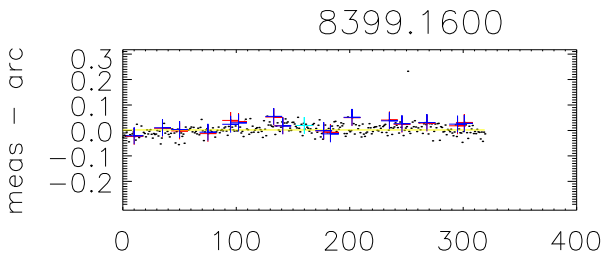

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

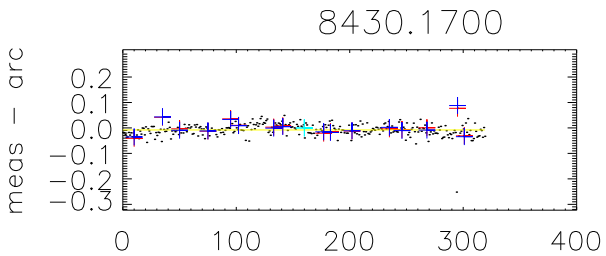

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

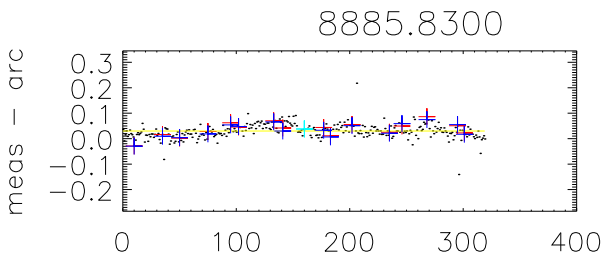

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

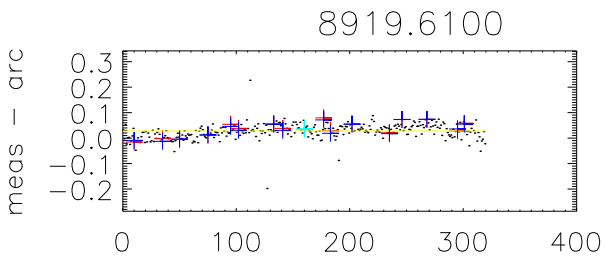

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

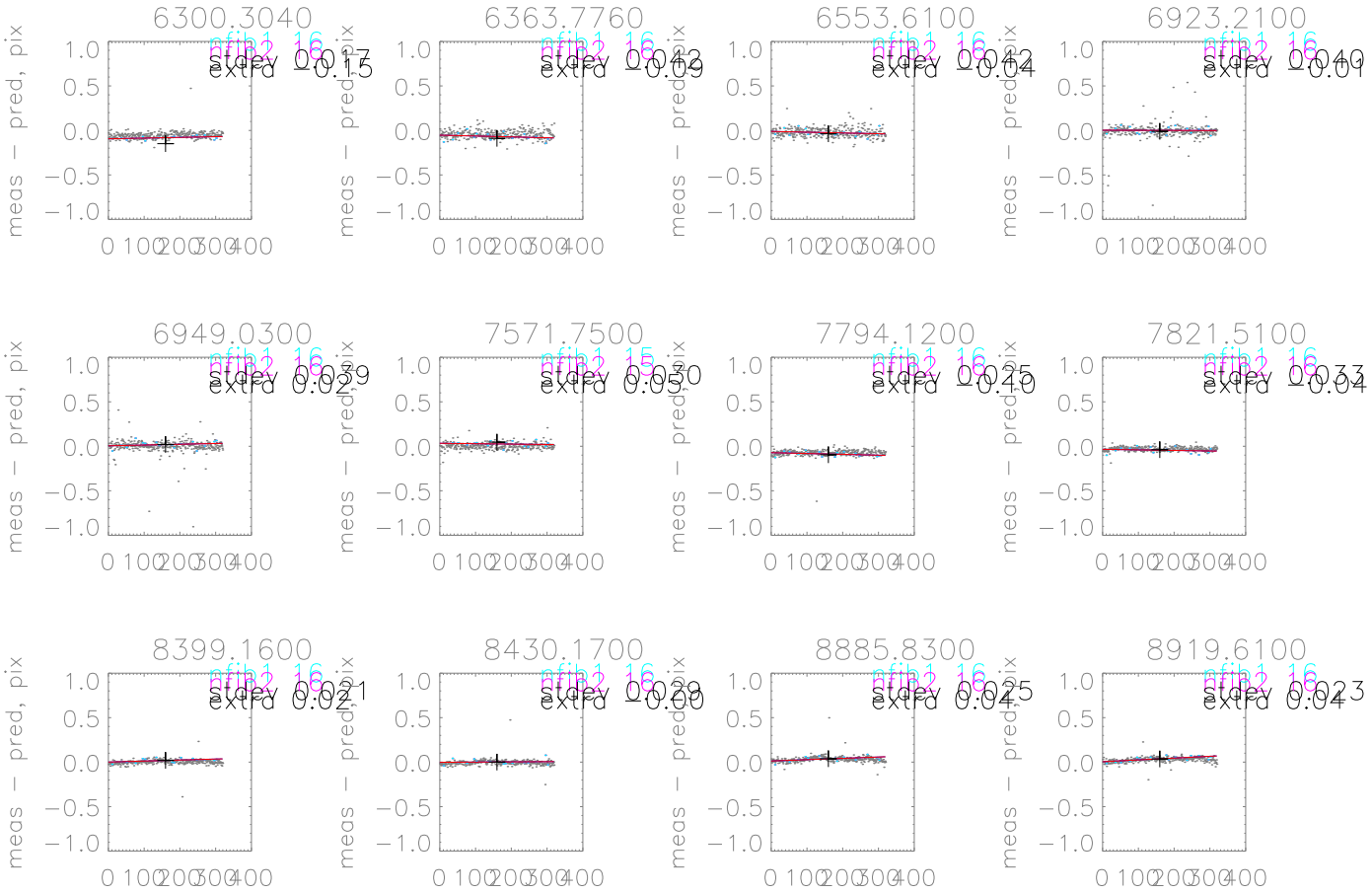

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

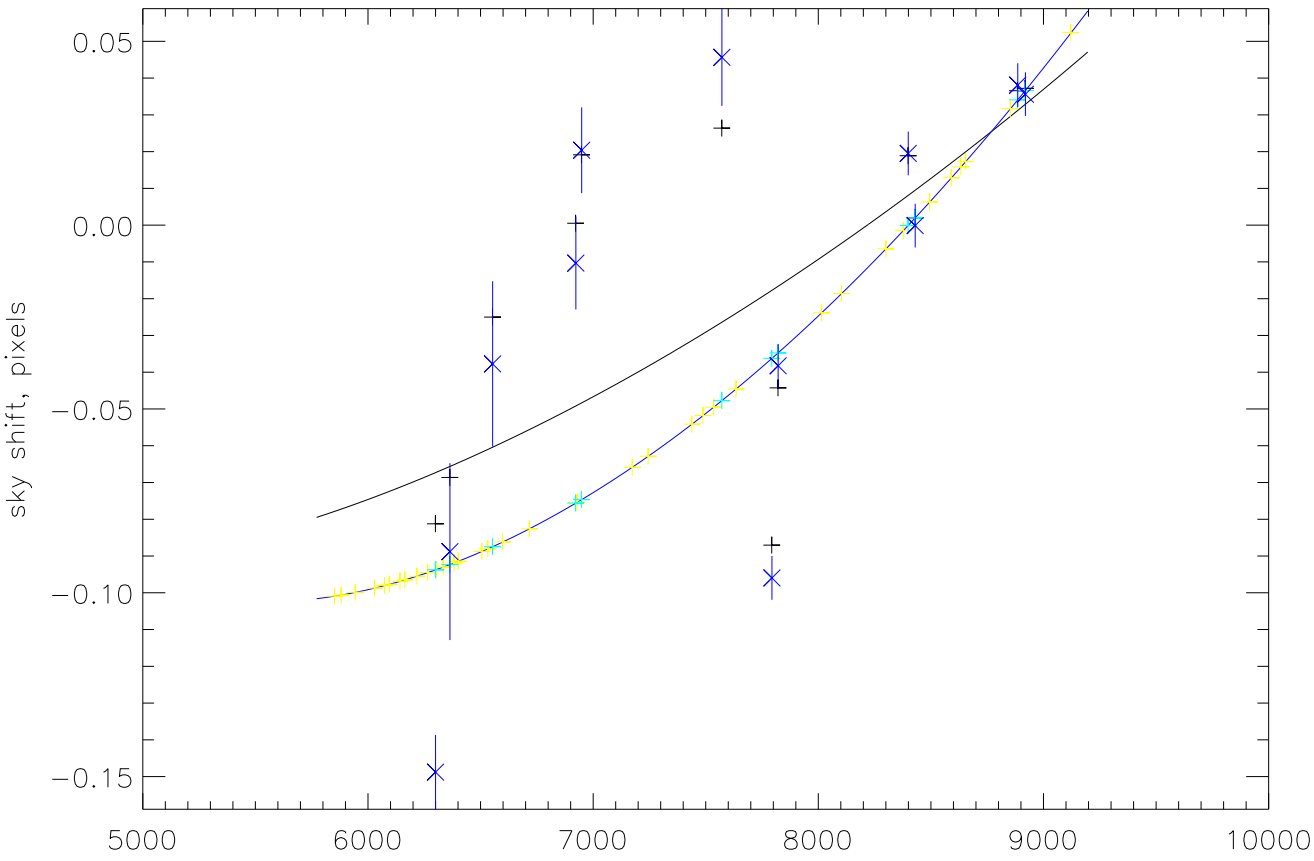

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

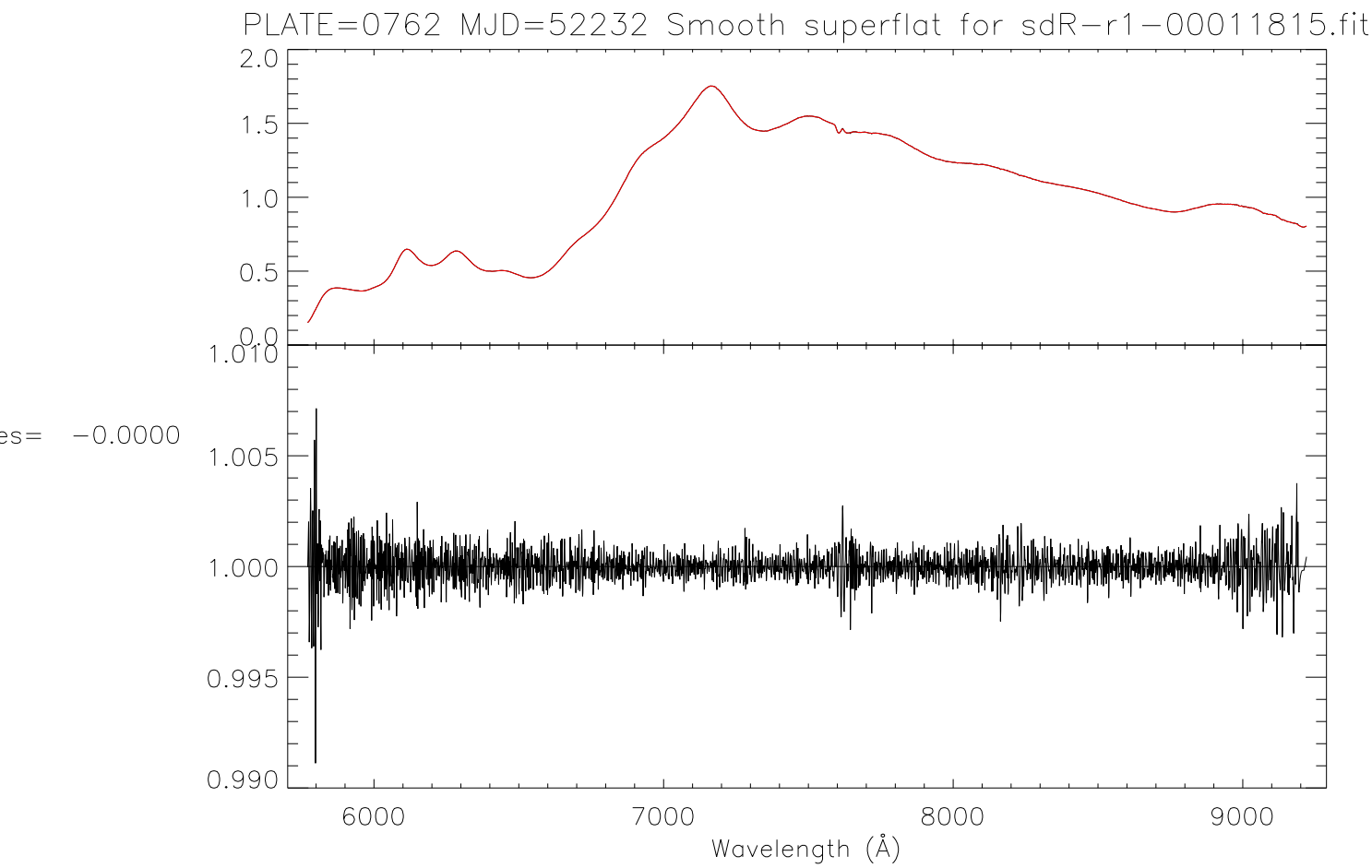

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

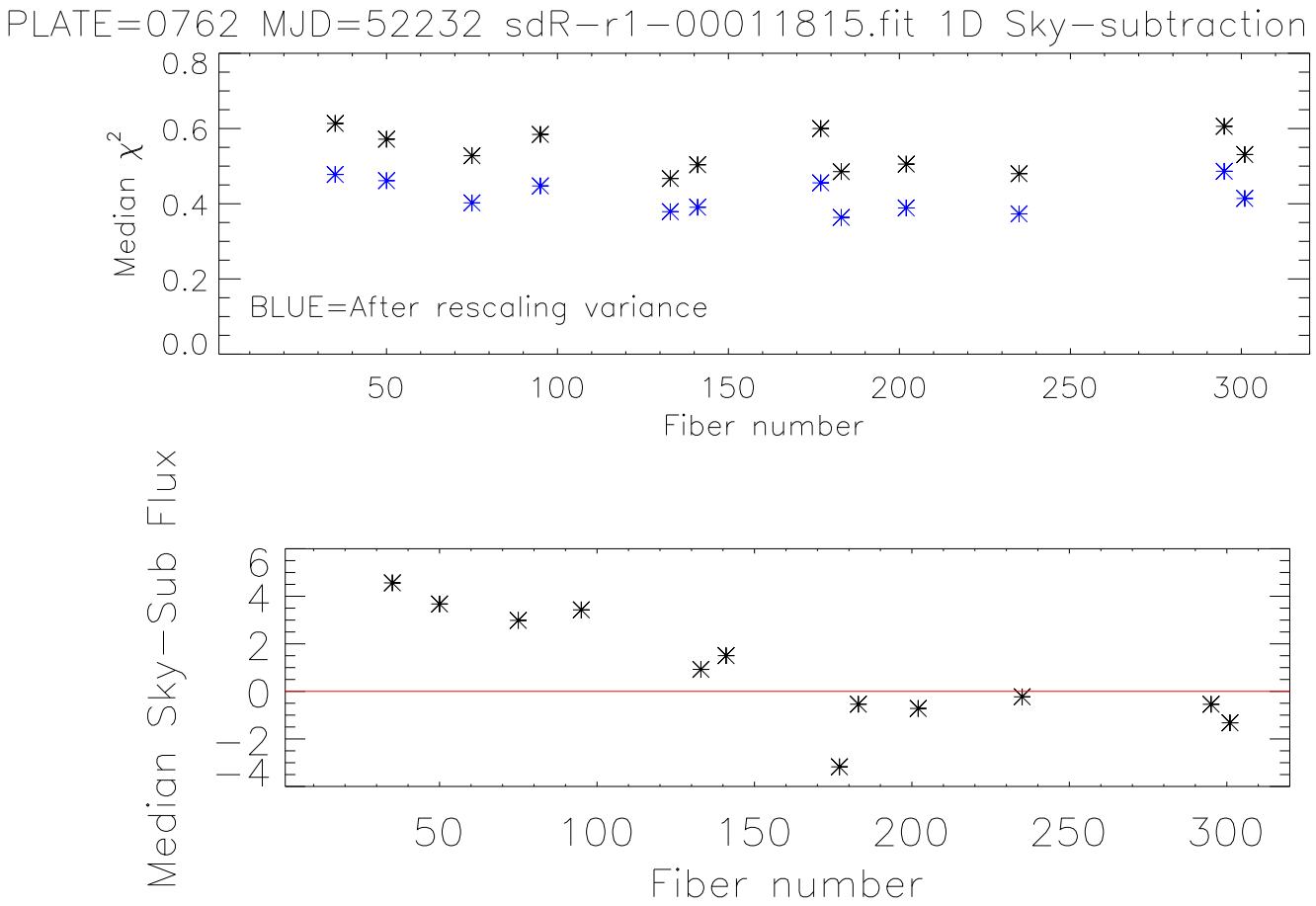

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

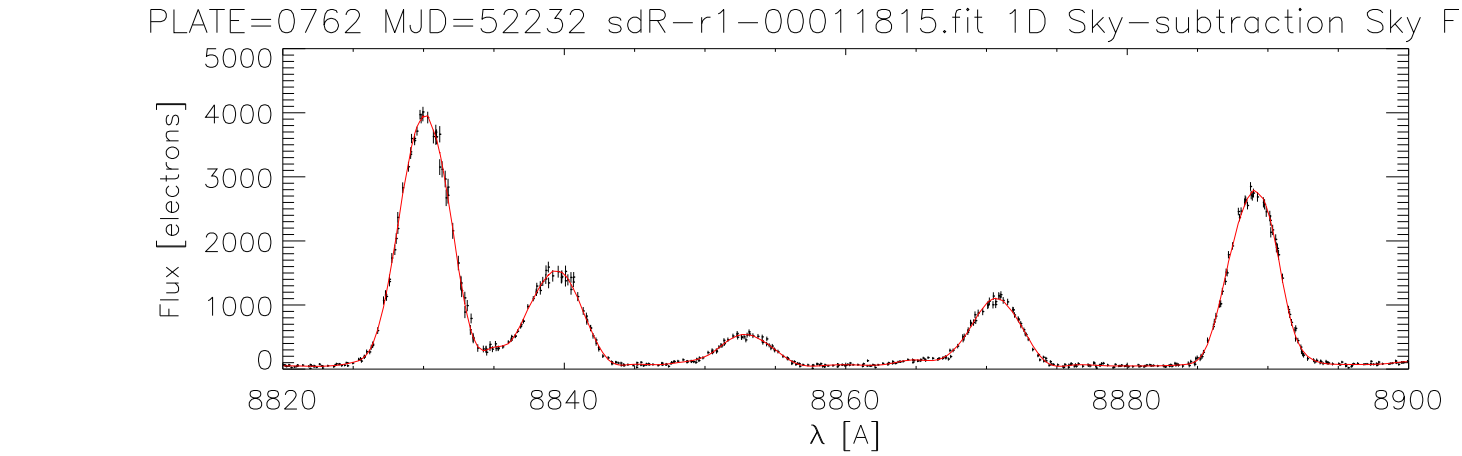

6300.3040
mfib1 16
mfib2 16
stdev 0.017
extra −0.15
6363.7760
mfib1 16
mfib2 16
stdev 0.042
extra −0.09
6553.6100
mfib1 16
mfib2 16
stdev 0.042
extra −0.04
6923.2100
mfib1 16
mfib2 16
stdev 0.040
extra −0.01
6949.0300
mfib1 16
mfib2 16
stdev 0.039
extra 0.02
7571.7500
mfib1 15
mfib2 16
stdev 0.030
extra 0.05
7794.1200
mfib1 16
mfib2 16
stdev 0.025
extra −0.40
7821.5100
mfib1 16
mfib2 16
stdev 0.033
extra −0.04
8399.1600
mfib1 16
mfib2 16
stdev 0.021
extra 0.02
8430.1700
mfib1 16
mfib2 16
stdev 0.029
extra −0.00
8885.8300
mfib1 16
mfib2 16
stdev 0.025
extra 0.04
8919.6100
mfib1 16
mfib2 16
stdev 0.023
extra 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

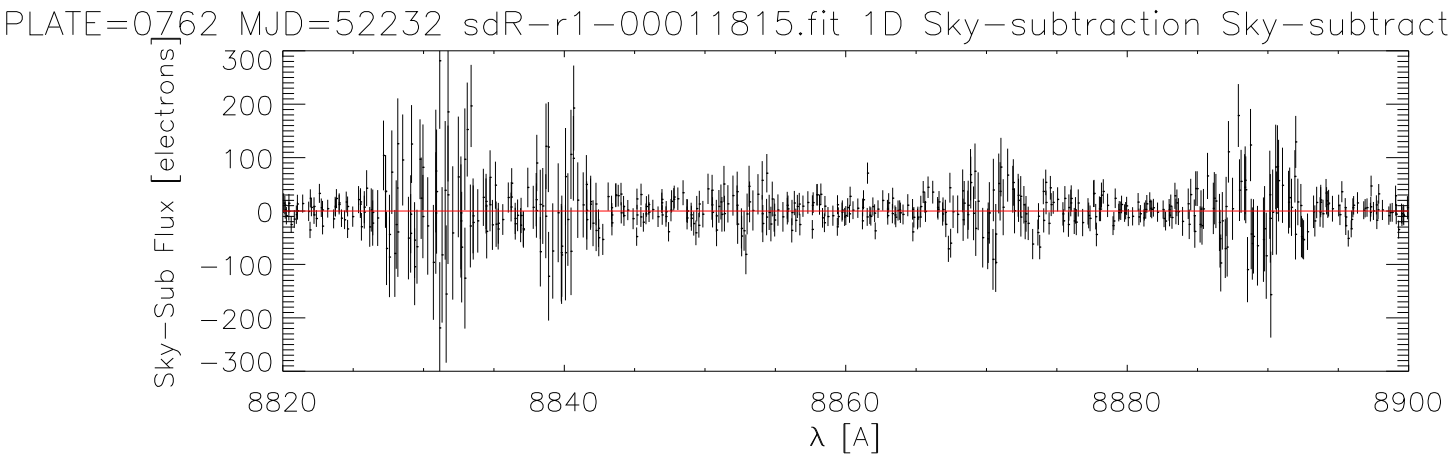

0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

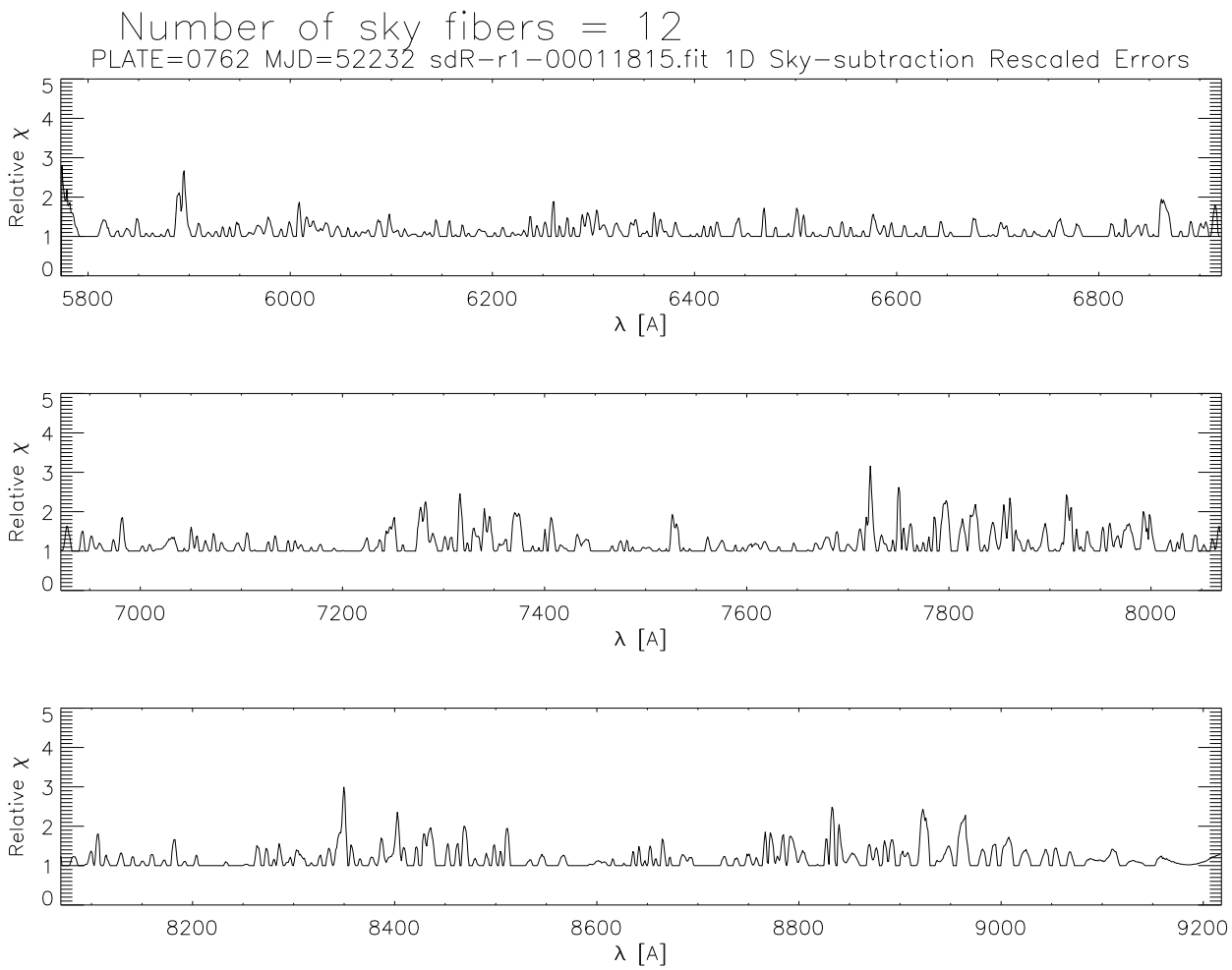

PLATE=0762 MJD=52232 Smooth superflat for sdR-r1-00011815.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

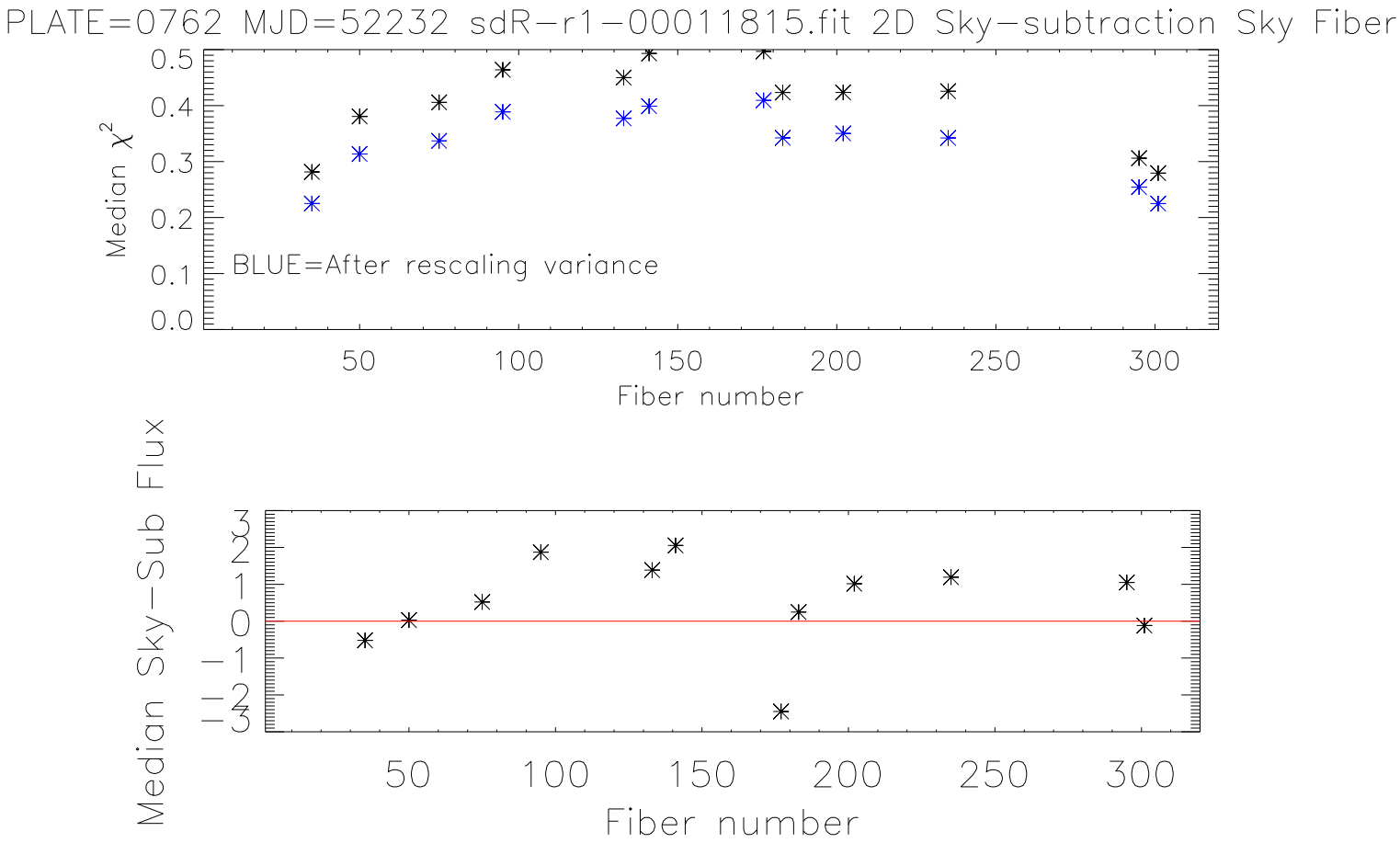
es= −0.0000

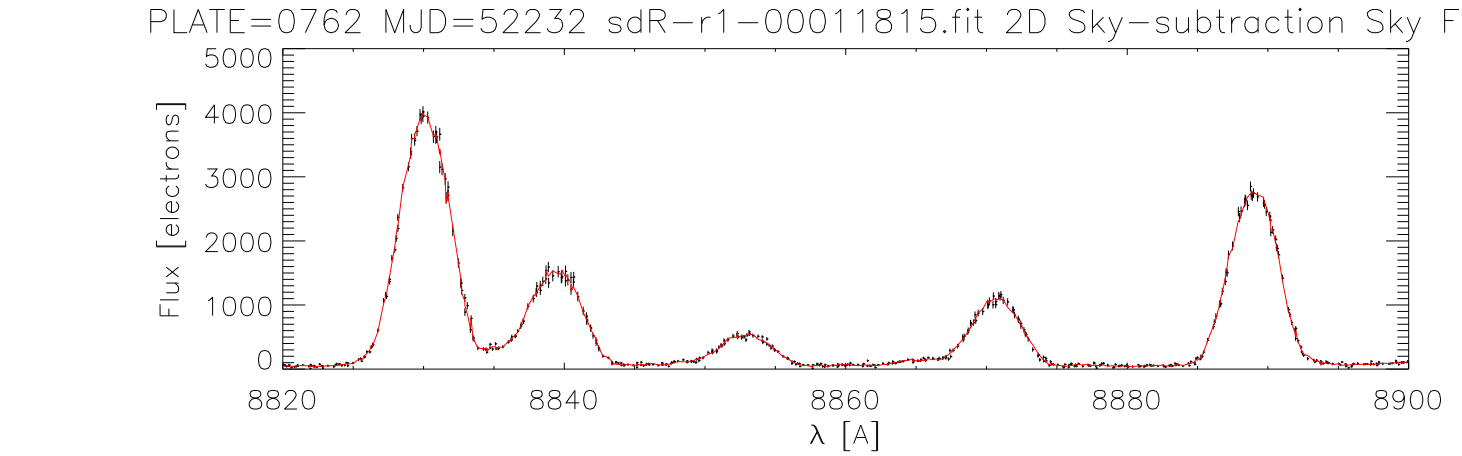

PLATE=0762 MJD=52232 sdR-r1-00011815.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

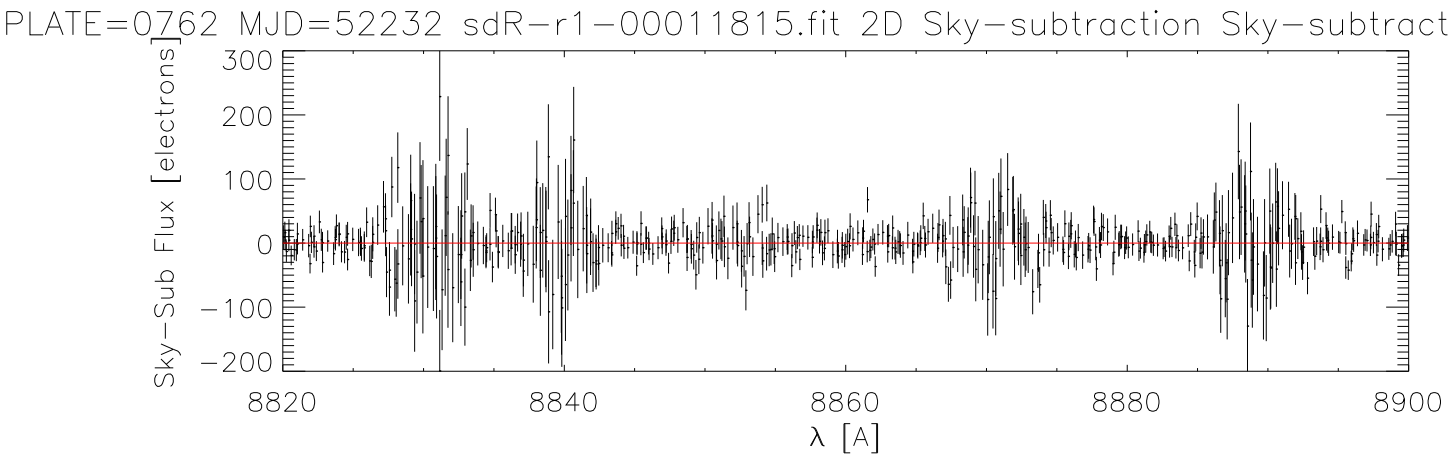

PLATE=0762 MJD=52232 sdR-r1-00011815.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

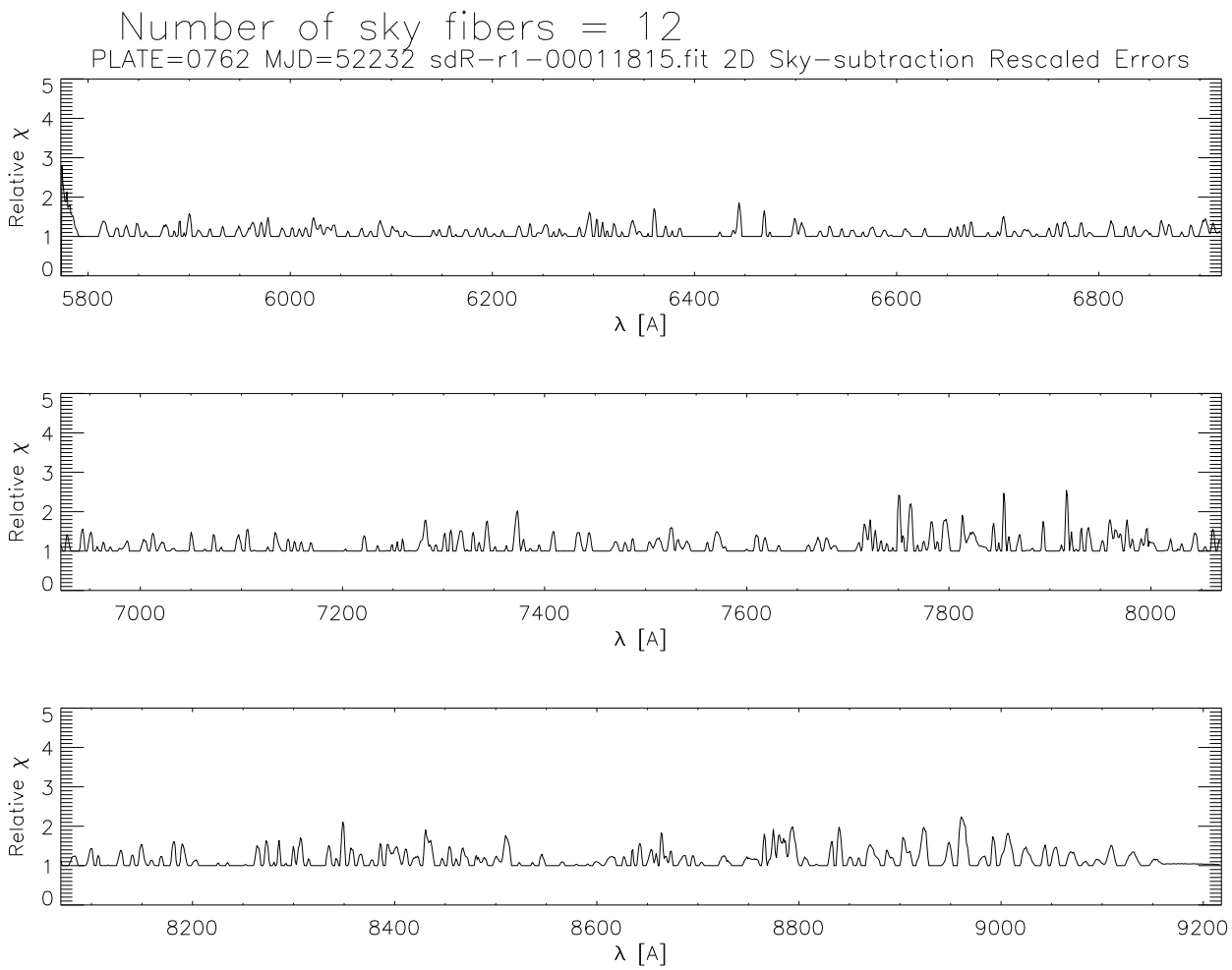

PLATE=0762 MJD=52232 sdR-r1-00011815.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

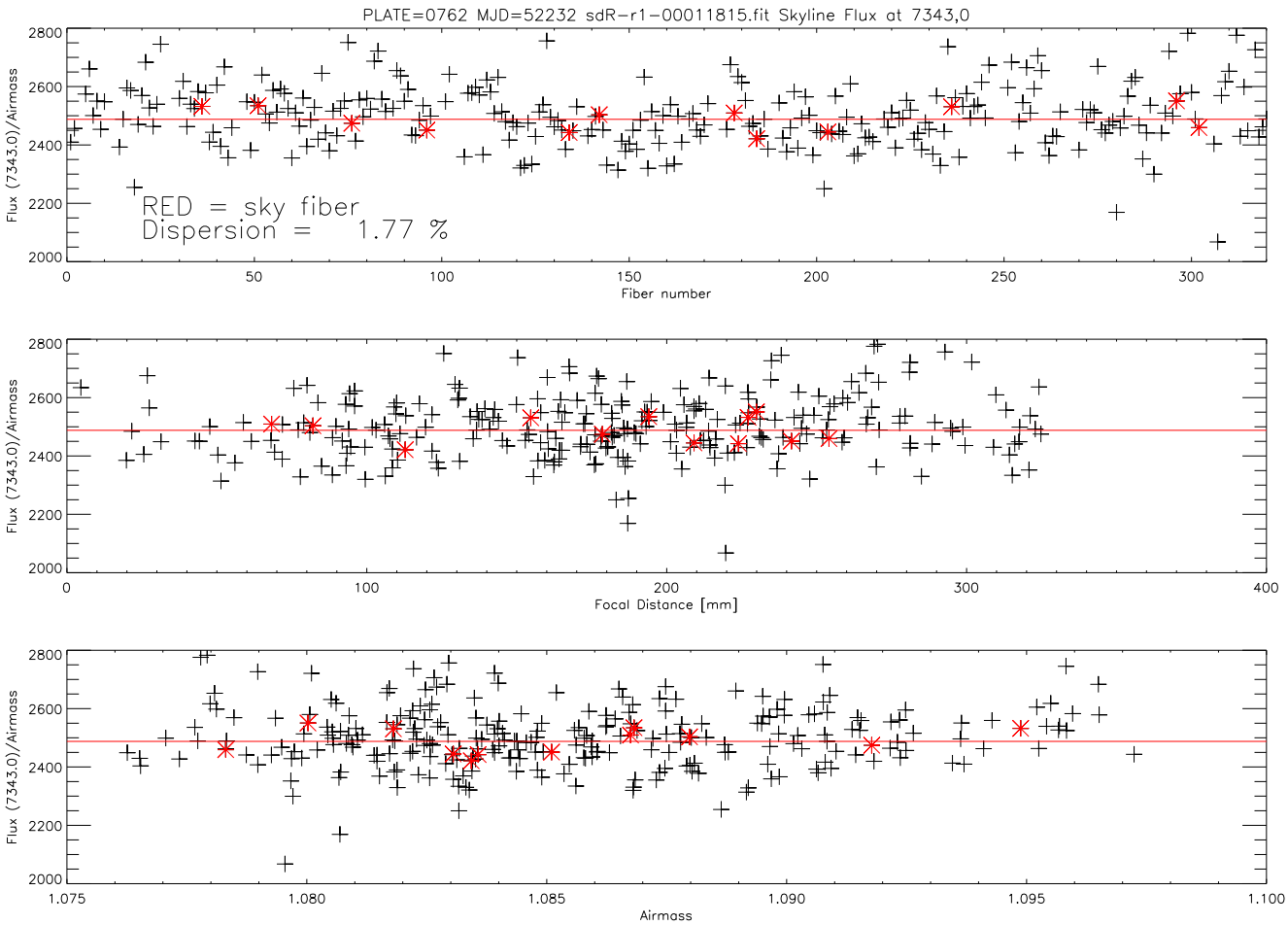

Number of sky fibers = 12
PLATE=0762 MJD=52232 sdR-r1-00011815.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

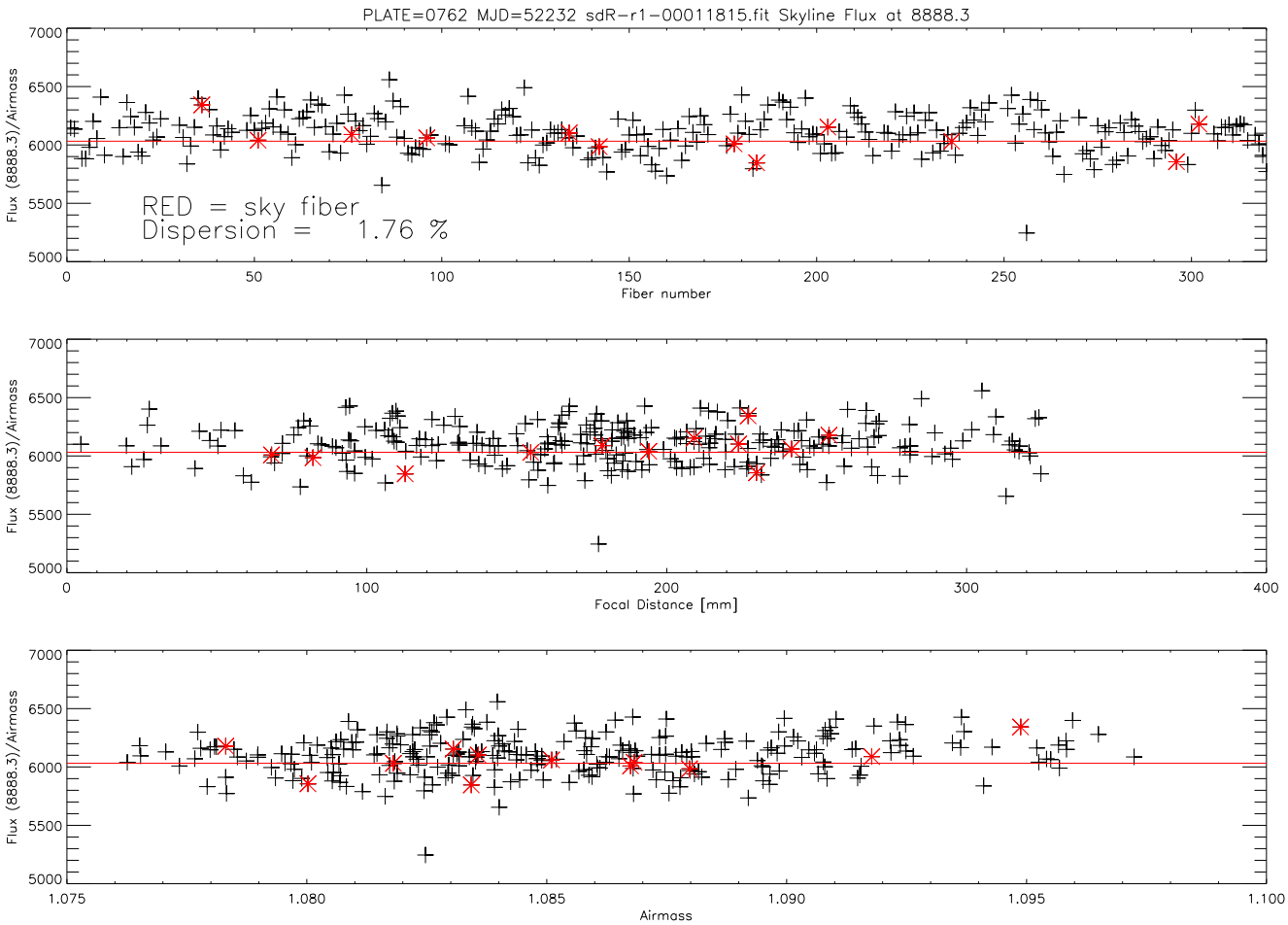

PLATE=0762 MJD=52232 sdR-r1-00011815.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

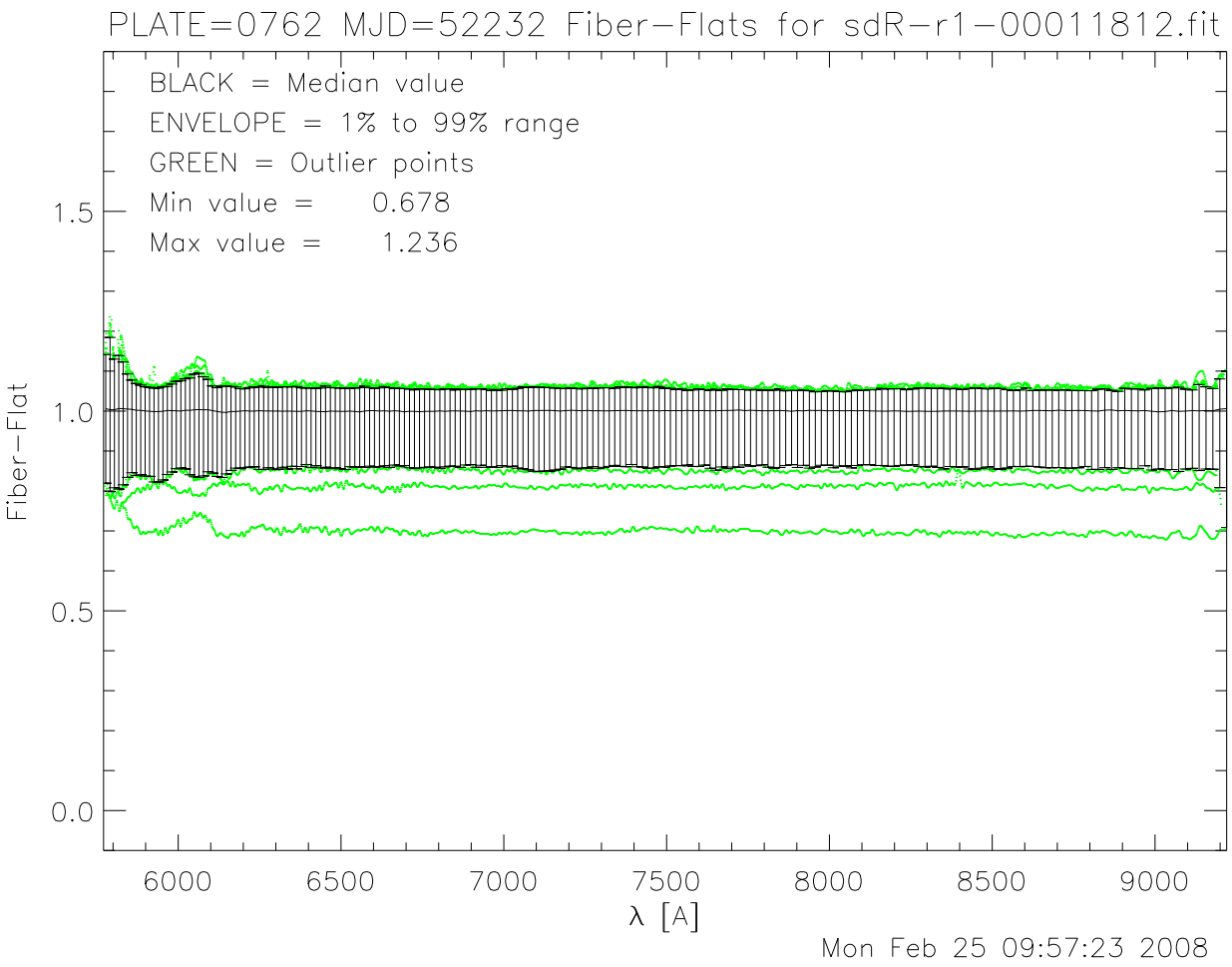

PLATE=0762 MJD=52232 sdR-r1-00011815.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

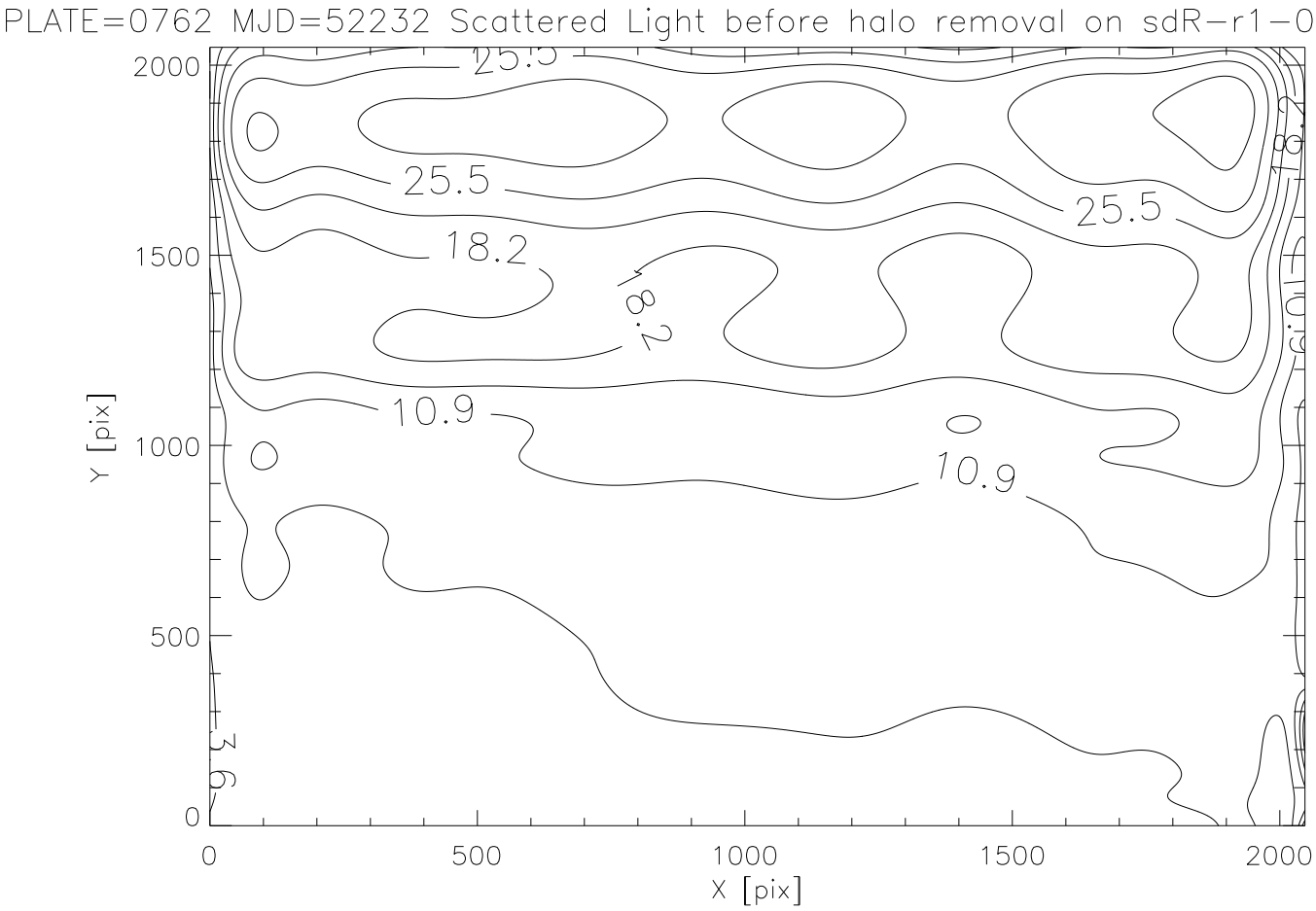

PLATE=0762 MJD=52232 sdR-r1-00011815.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

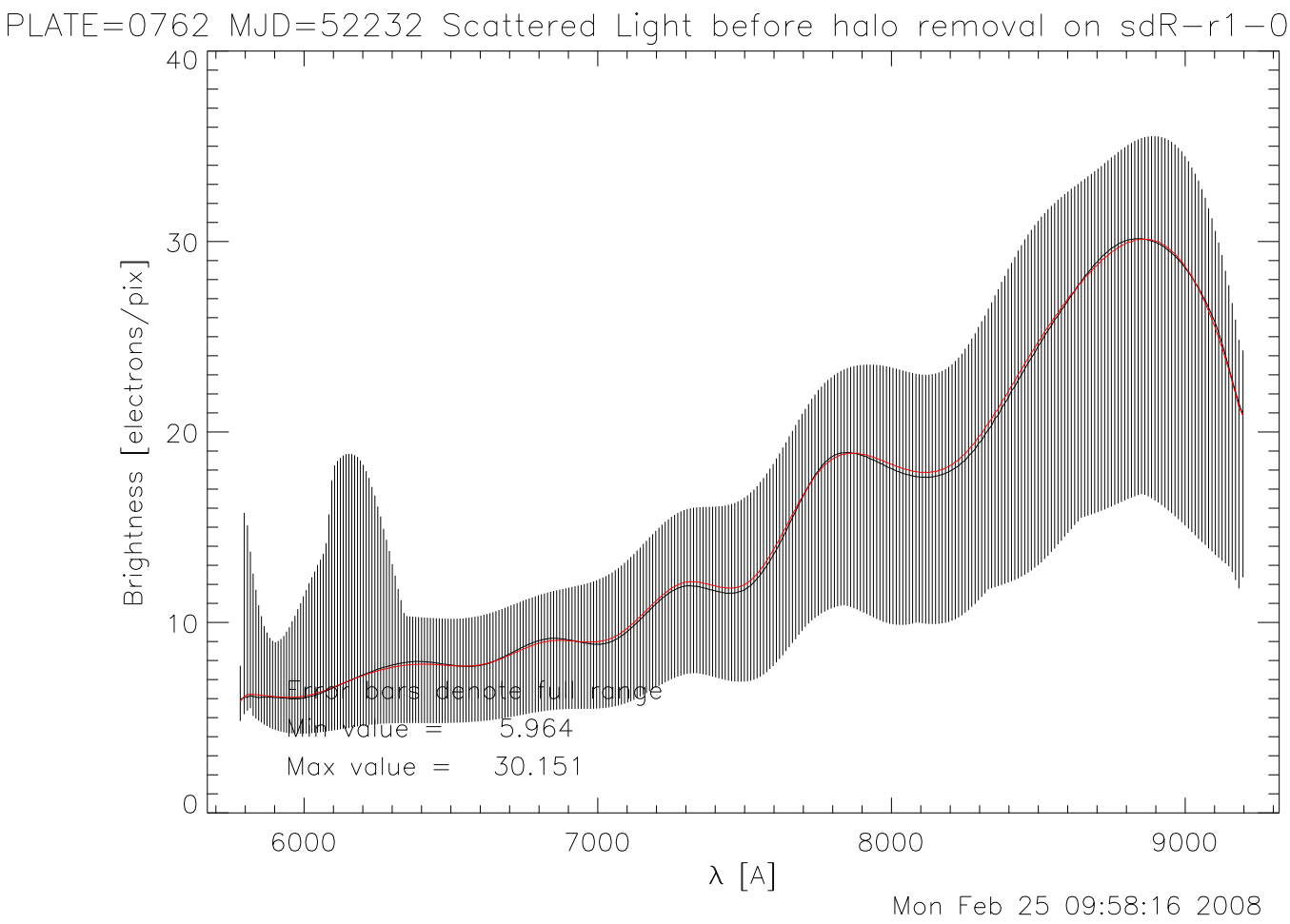

Number of sky fibers = 12
PLATE=0762 MJD=52232 sdR-r1-00011815.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

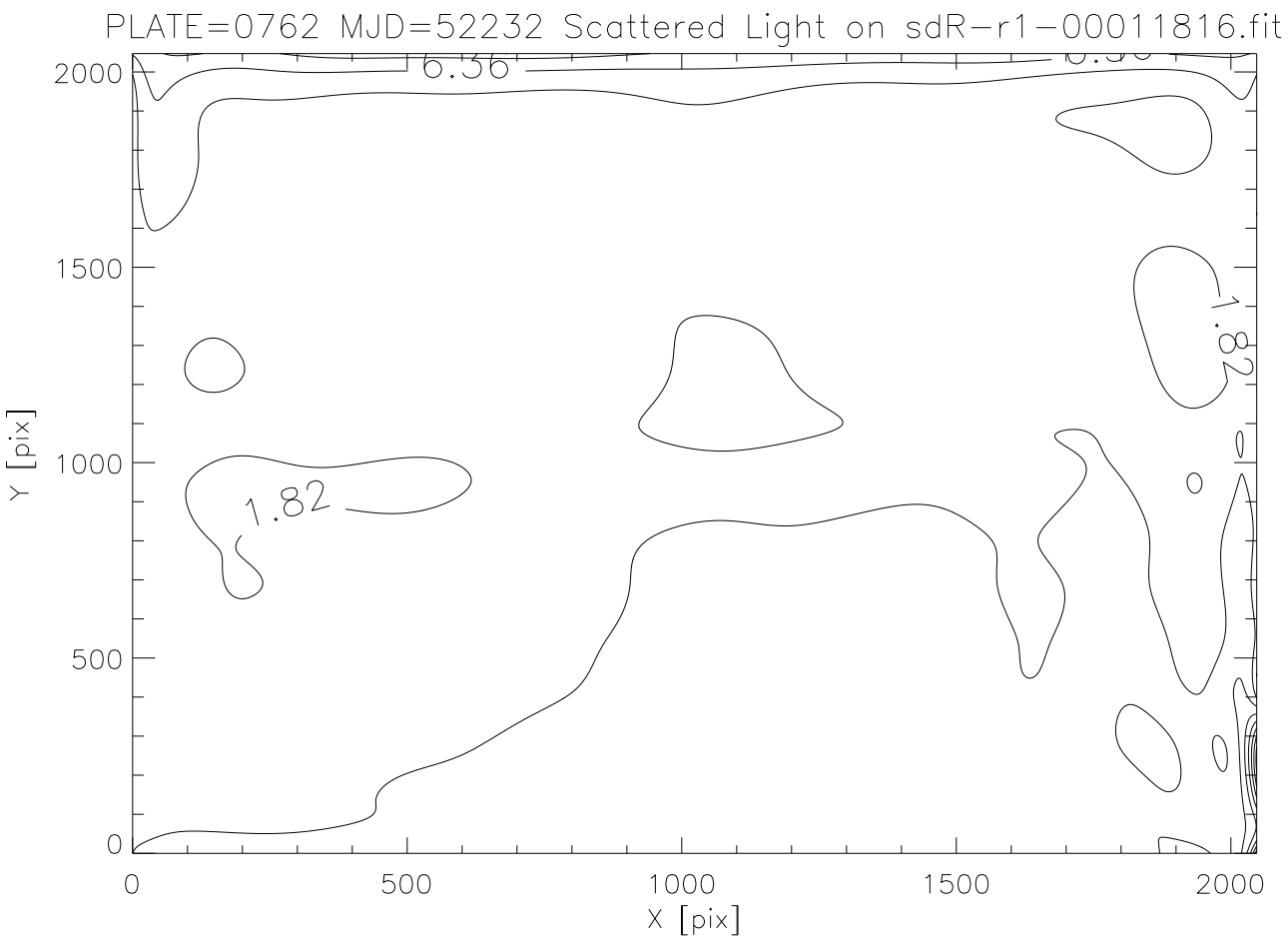

PLATE=0762 MJD=52232 sdR-r1-00011815.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.77 %
Fiber number
Focal Distance [mm]
Airmass

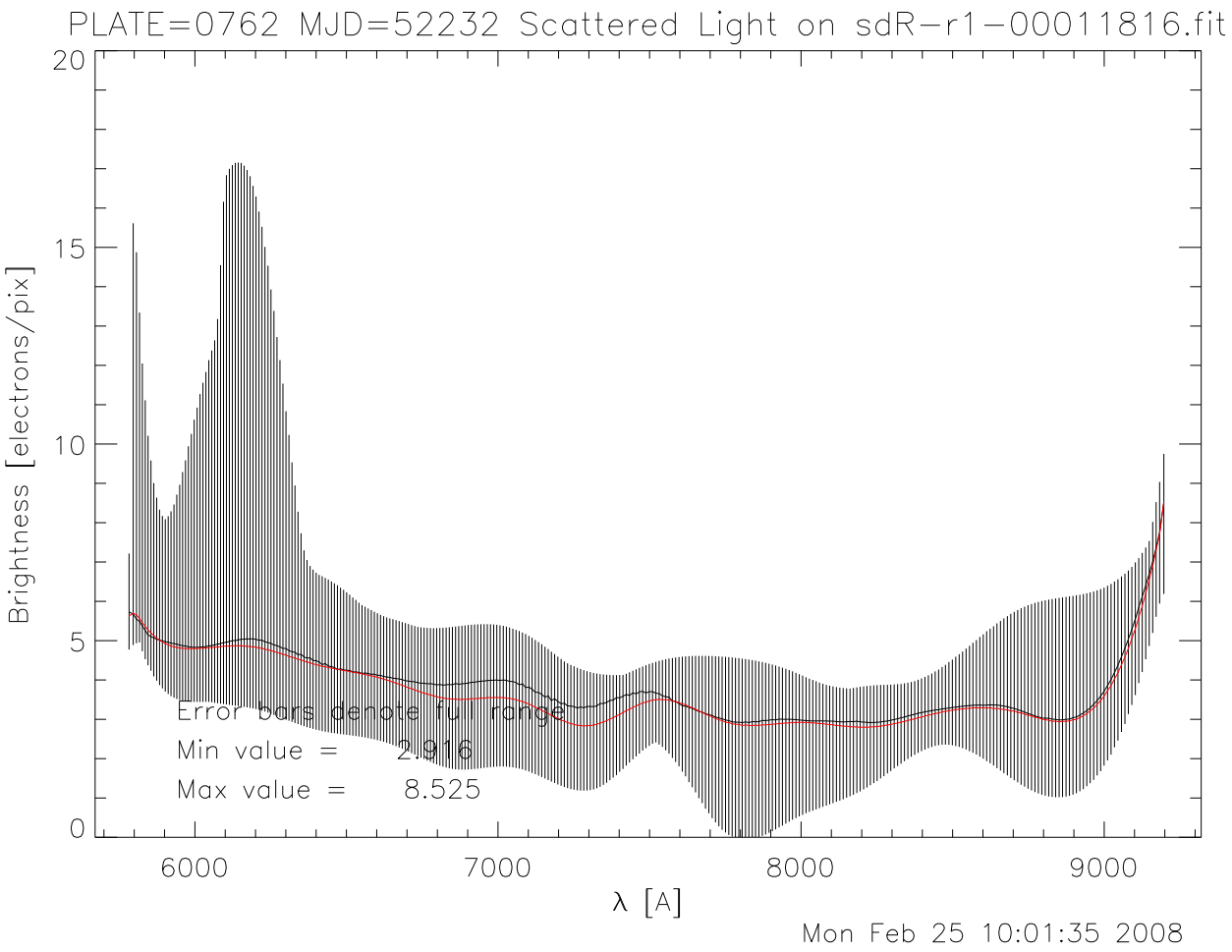

PLATE=0762 MJD=52232 sdR-r1-00011815.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.76 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

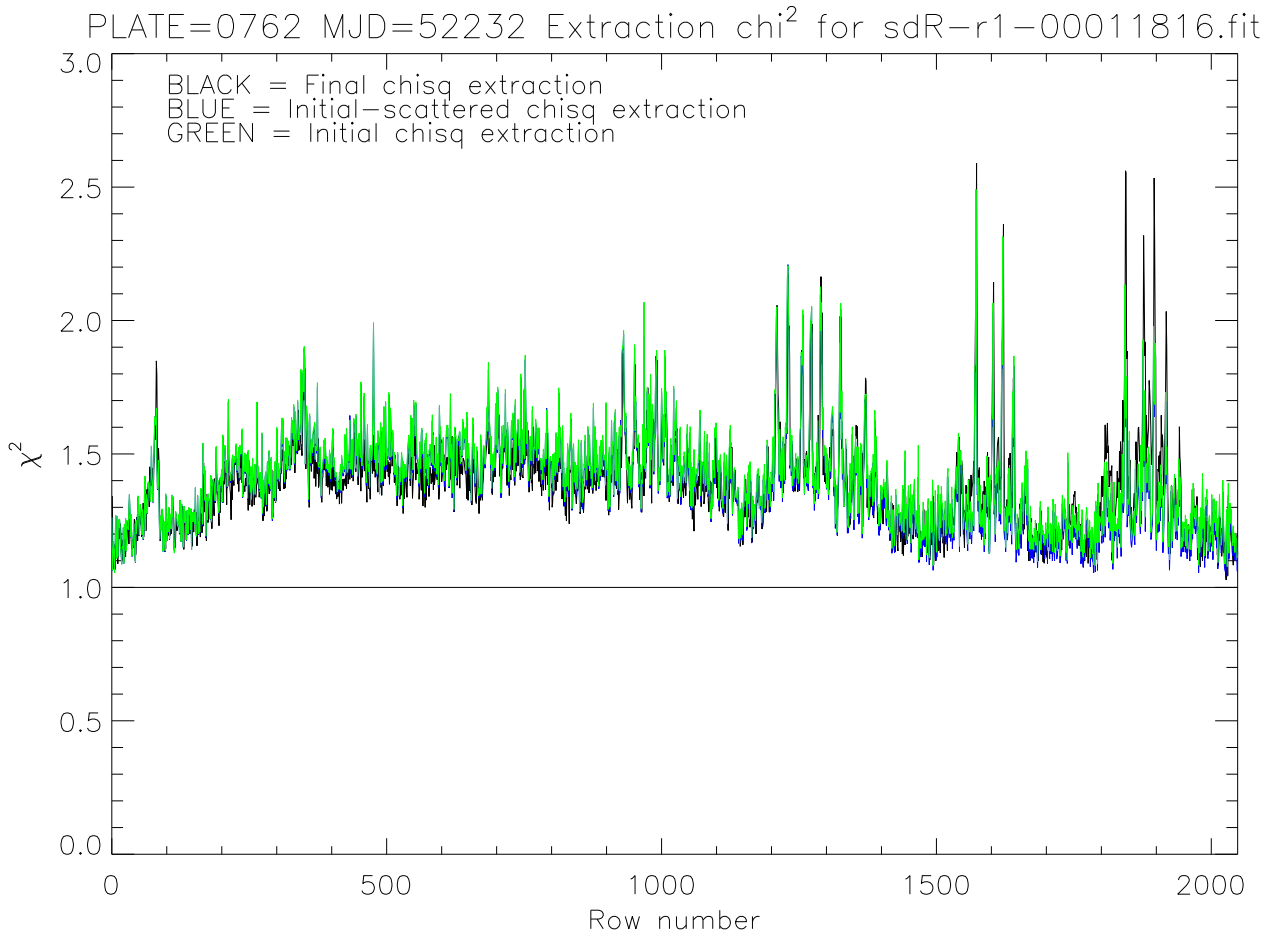

PLATE=0762 MJD=52232 Fiber−Flats for sdR−r1−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.678
Max value = 1.236
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 09:57:23 2008

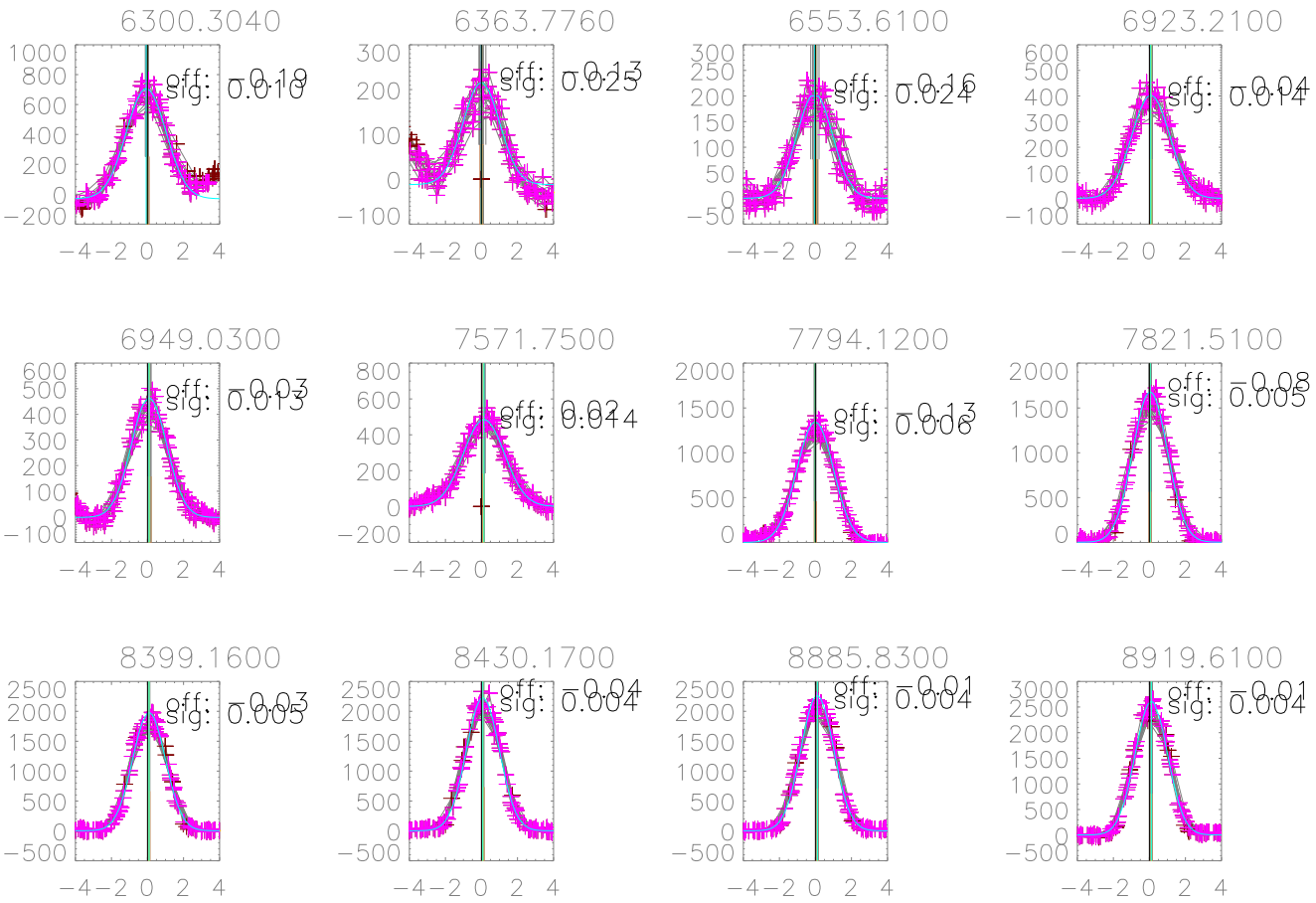

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r1-00011816.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
3.6
Y [pix]
X [pix]
0
500
1000
1500
2000

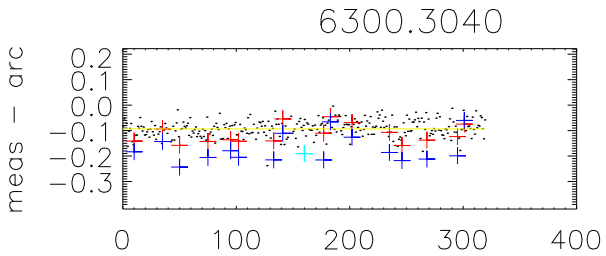

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r1-00011816.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.964
Max value = 30.151
Mon Feb 25 09:58:16 2008

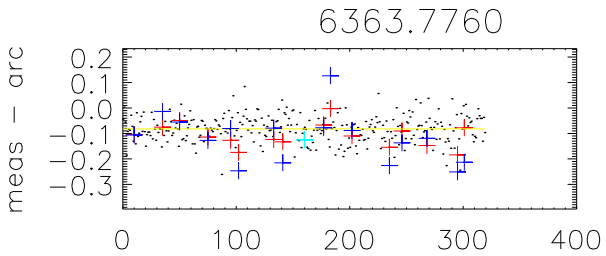

PLATE=0762 MJD=52232 Scattered Light on sdR-r1-00011816.fit
6.36
1.82
1.82
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

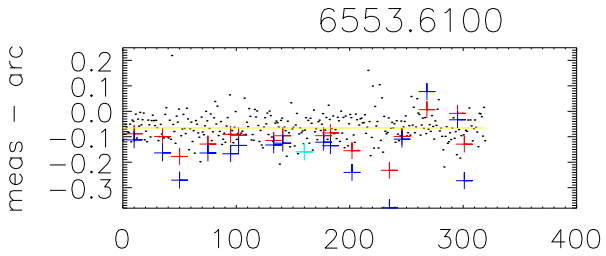

PLATE=0762 MJD=52232 Scattered Light on sdR-r1-00011816.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.916
Max value = 8.525
Mon Feb 25 10:01:35 2008

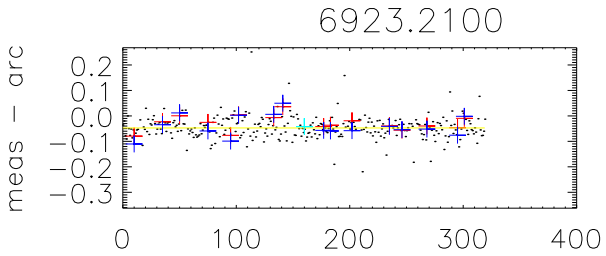

PLATE=0762 MJD=52232 Extraction chi^2 for sdR−r1−00011816.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

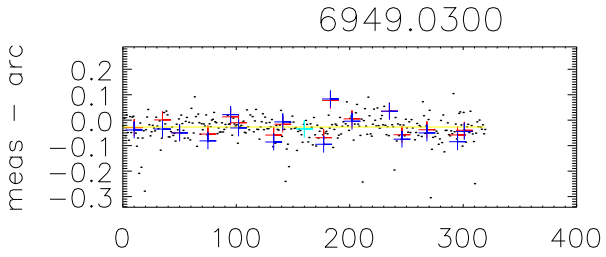

6300.3040
off: −0.19
sig: 0.010
6363.7760
off: −0.13
sig: 0.025
6553.6100
off: −0.16
sig: 0.024
6923.2100
off: −0.04
sig: 0.014
6949.0300
off: −0.03
sig: 0.013
7571.7500
off: 0.02
sig: 0.044
7794.1200
off: −0.13
sig: 0.006
7821.5100
off: −0.08
sig: 0.005
8399.1600
off: −0.03
sig: 0.005
8430.1700
off: −0.04
sig: 0.004
8885.8300
off: −0.01
sig: 0.004
8919.6100
off: −0.01
sig: 0.004

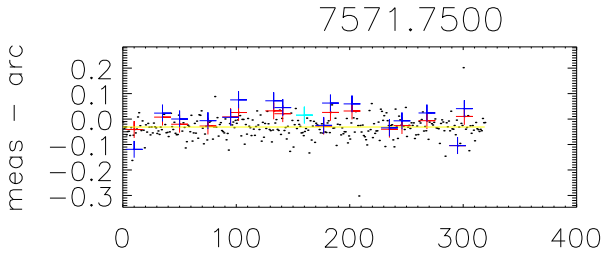

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

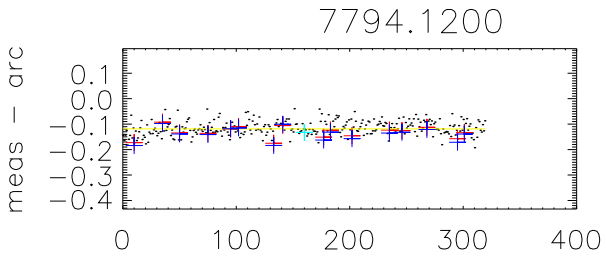

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

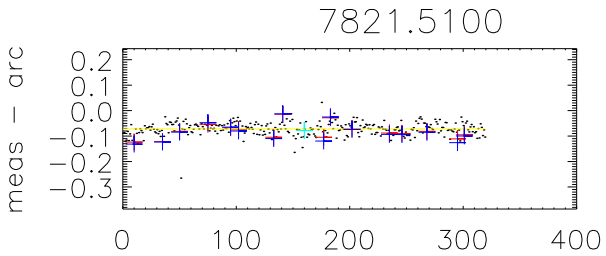

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

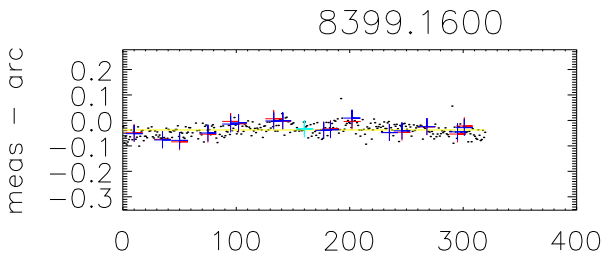

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

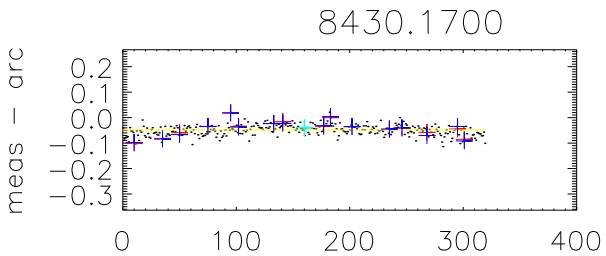

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

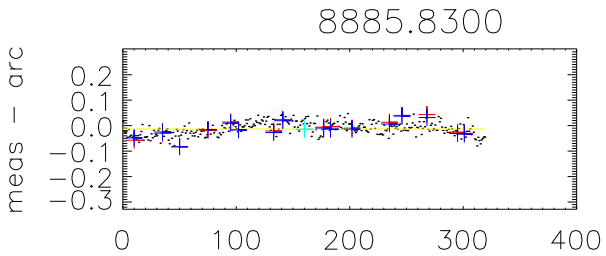

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

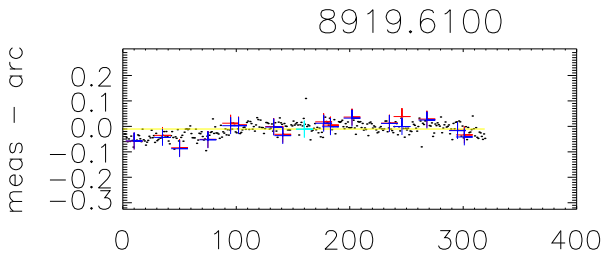

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

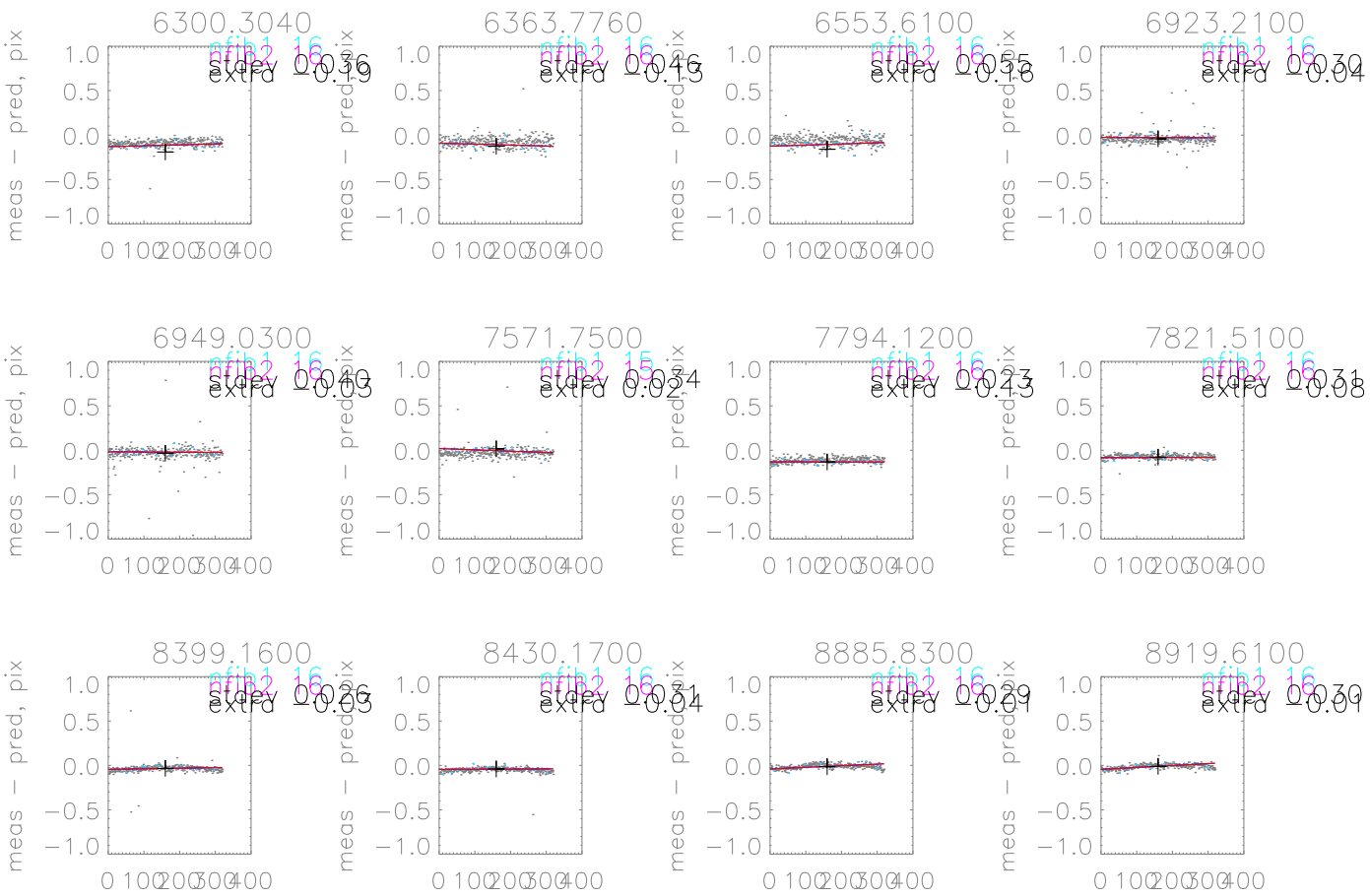

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

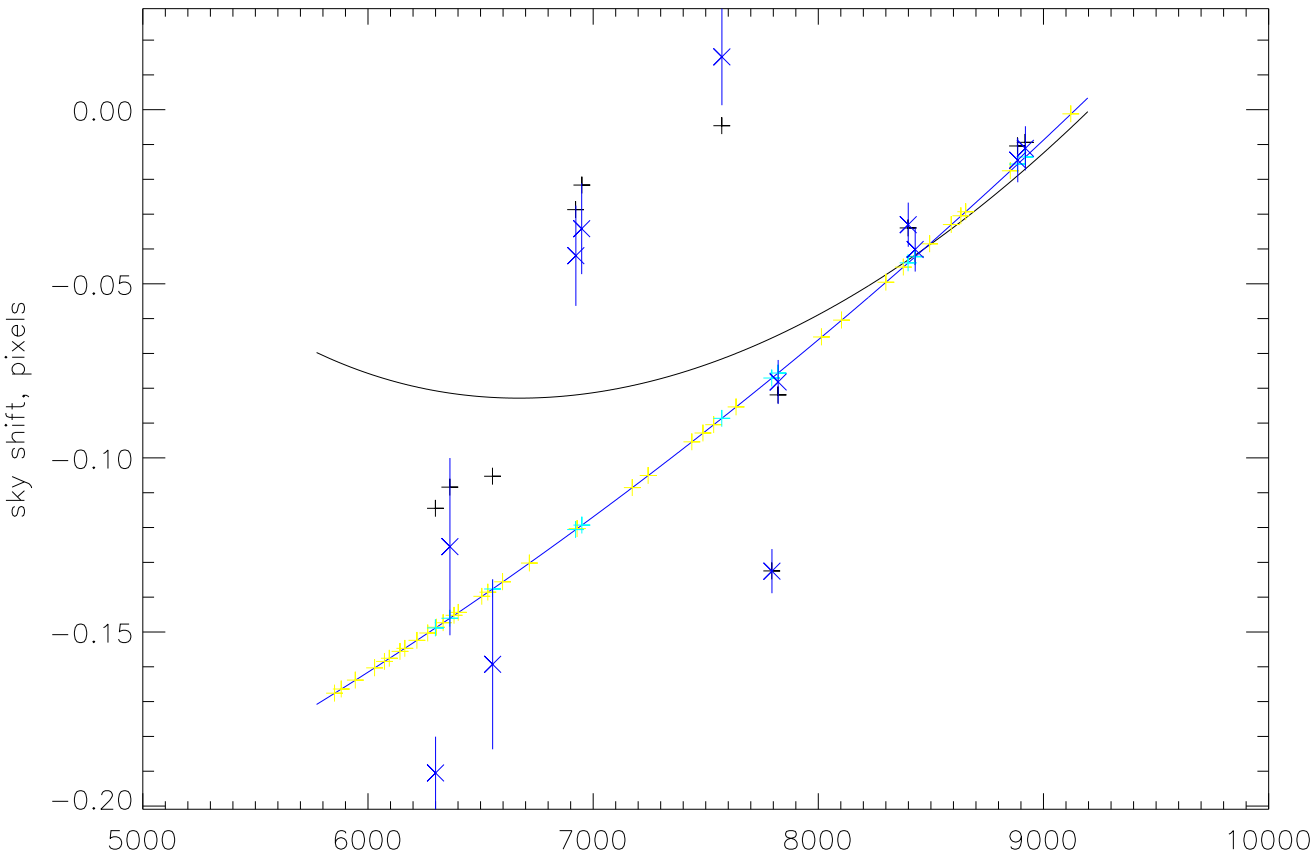

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

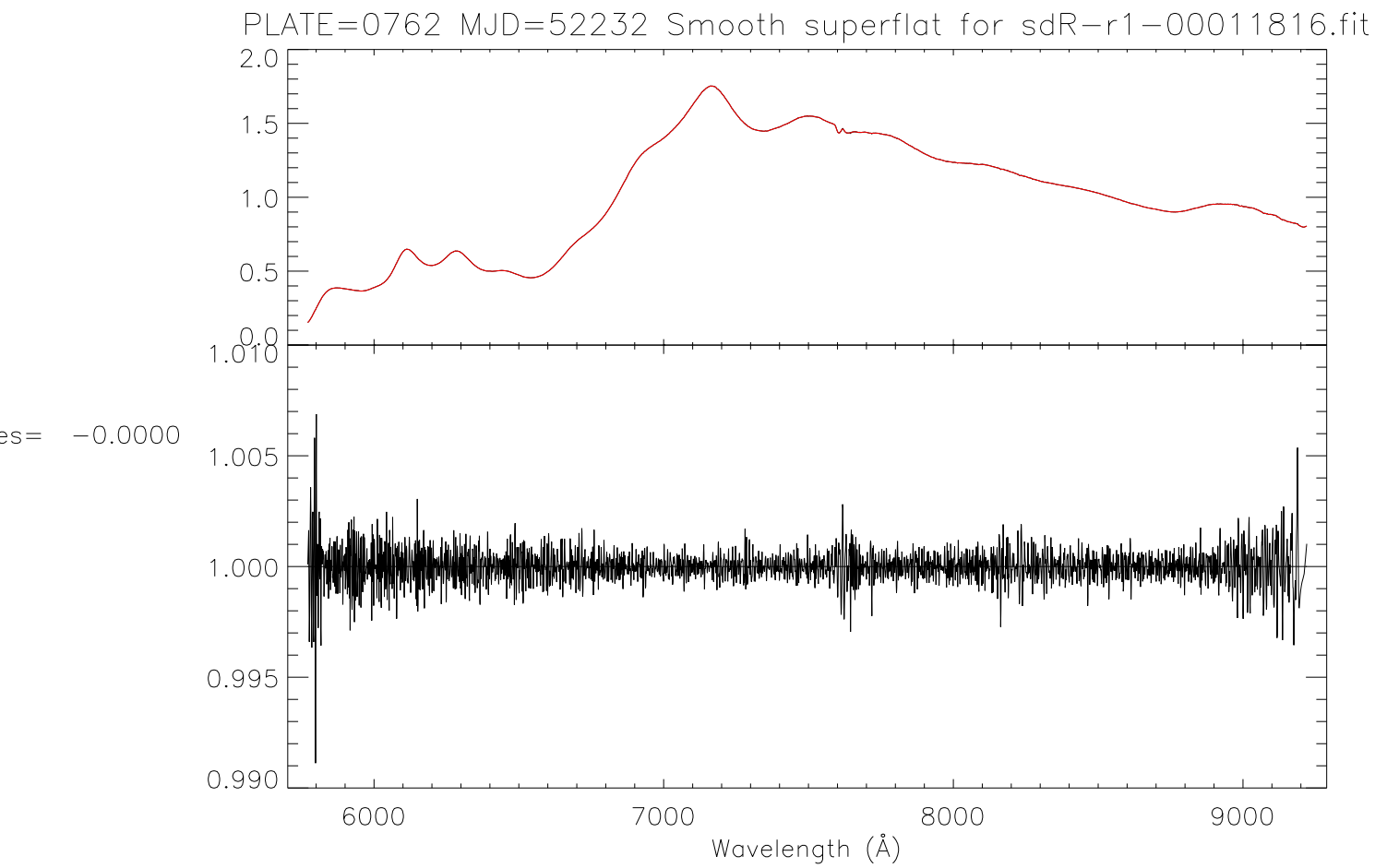

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

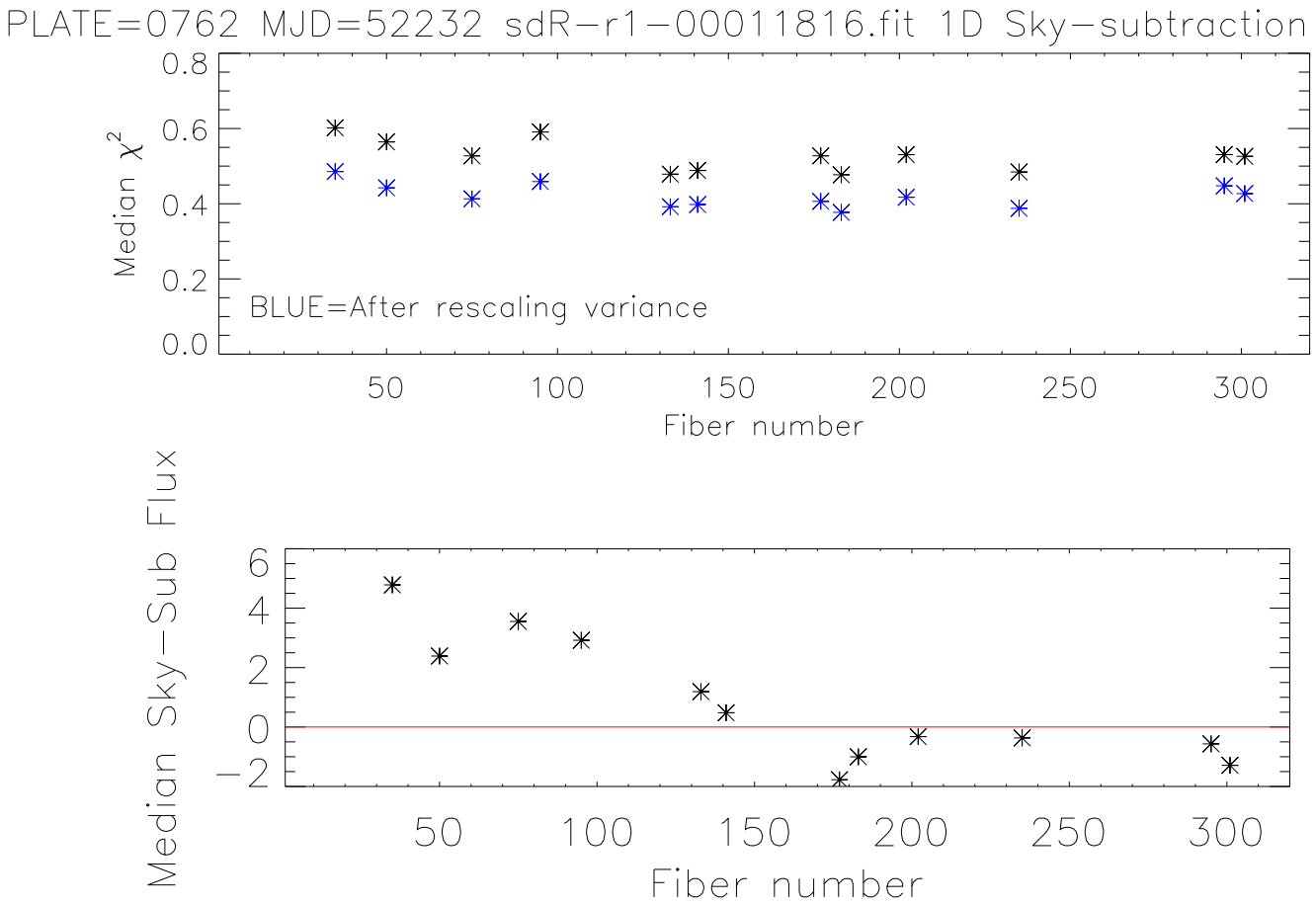

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

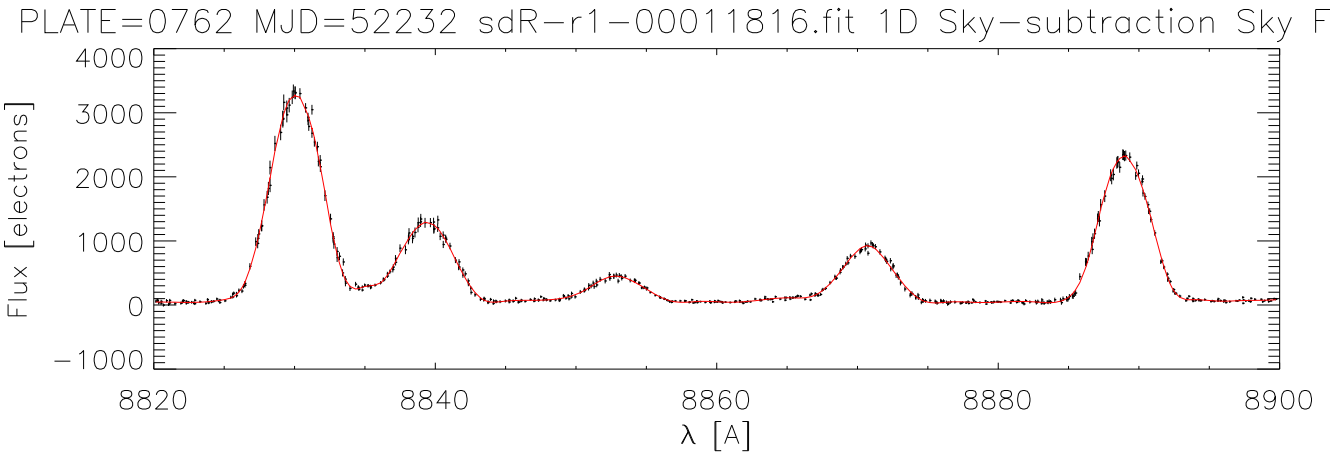

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

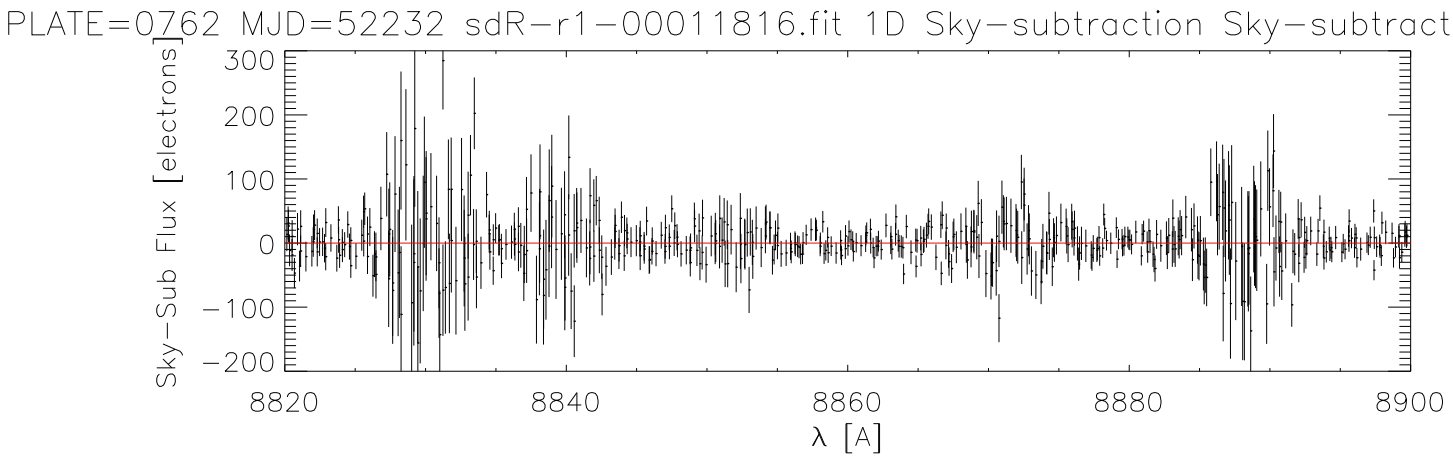

6300.3040
mfhd2 16
stdev 0.036
extrd 0.019
6363.7760
mfhd2 16
stdev 0.046
extrd 0.013
6553.6100
mfhd2 16
stdev 0.055
extrd 0.018
6923.2100
mfhd2 16
stdev 0.030
extrd 0.004
6949.0300
mfhd2 16
stdev 0.040
extrd 0.003
7571.7500
mfhd2 15
stdev 0.034
extrd 0.022
7794.1200
mfhd2 16
stdev 0.023
extrd 0.013
7821.5100
mfhd2 16
stdev 0.031
extrd 0.008
8399.1600
mfhd2 16
stdev 0.026
extrd 0.003
8430.1700
mfhd2 16
stdev 0.031
extrd 0.004
8885.8300
mfhd2 16
stdev 0.029
extrd 0.001
8919.6100
mfhd2 16
stdev 0.030
extrd 0.001
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

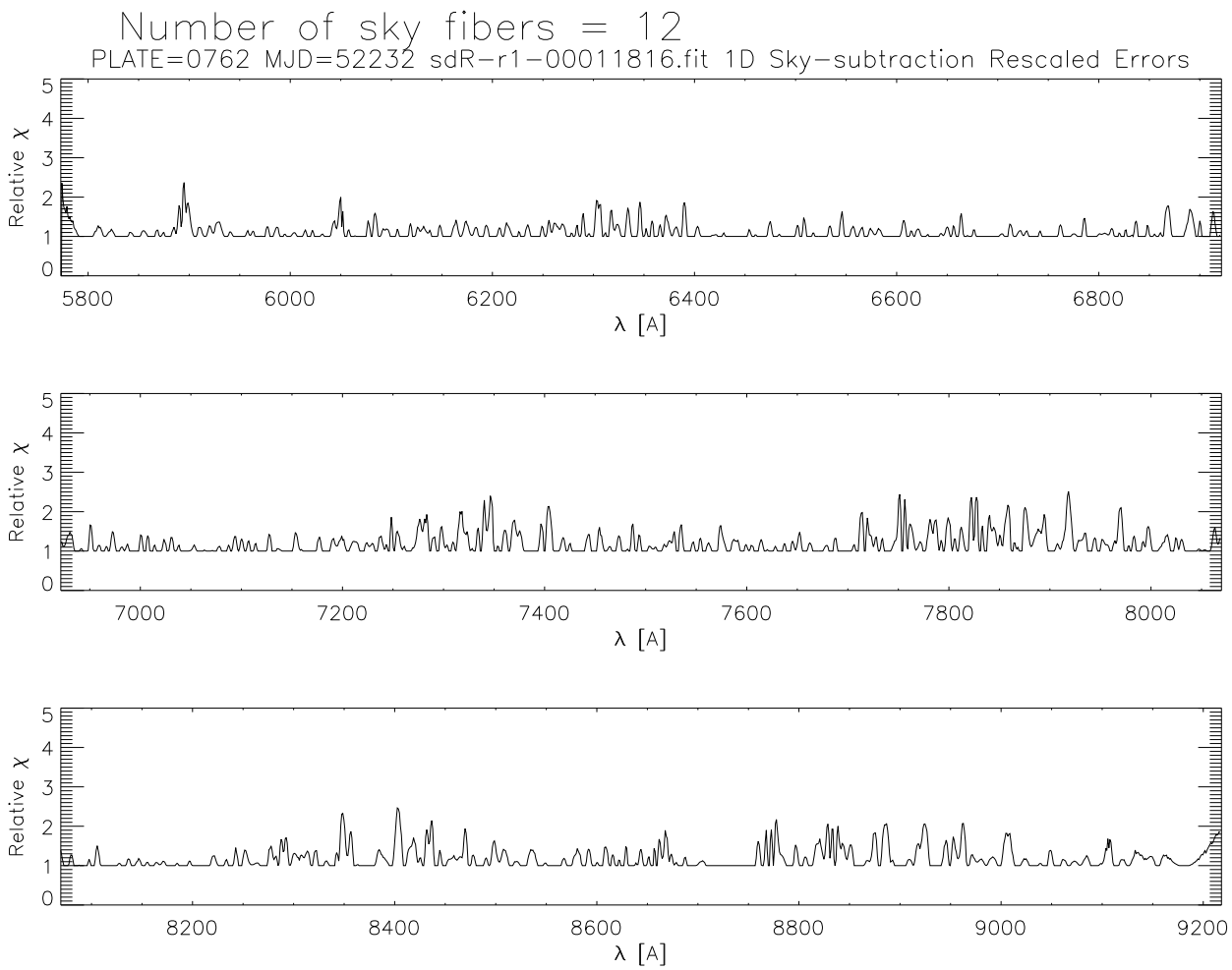

0.00
−0.05
−0.10
−0.15
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

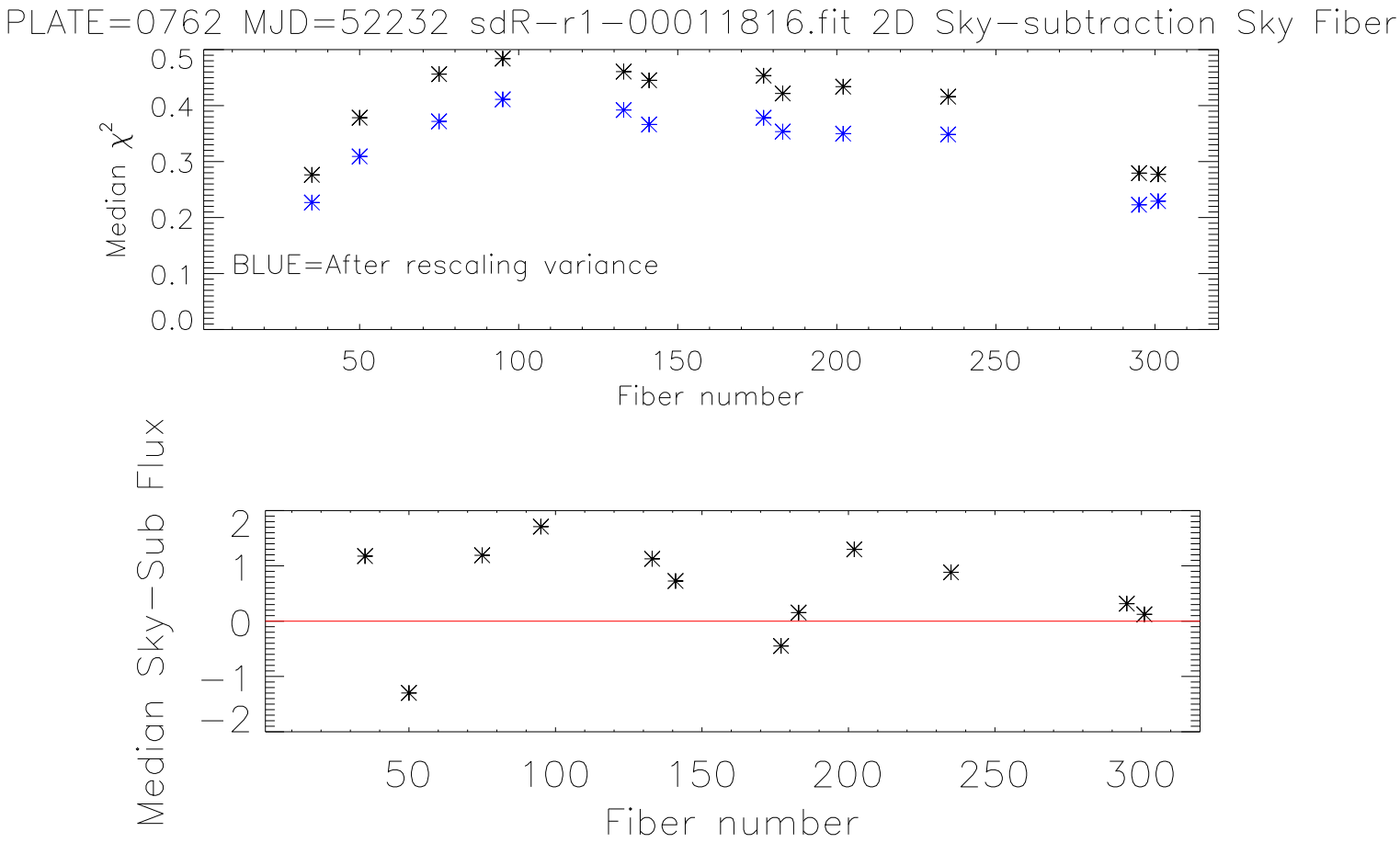

PLATE=0762 MJD=52232 Smooth superflat for sdR−r1−00011816.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

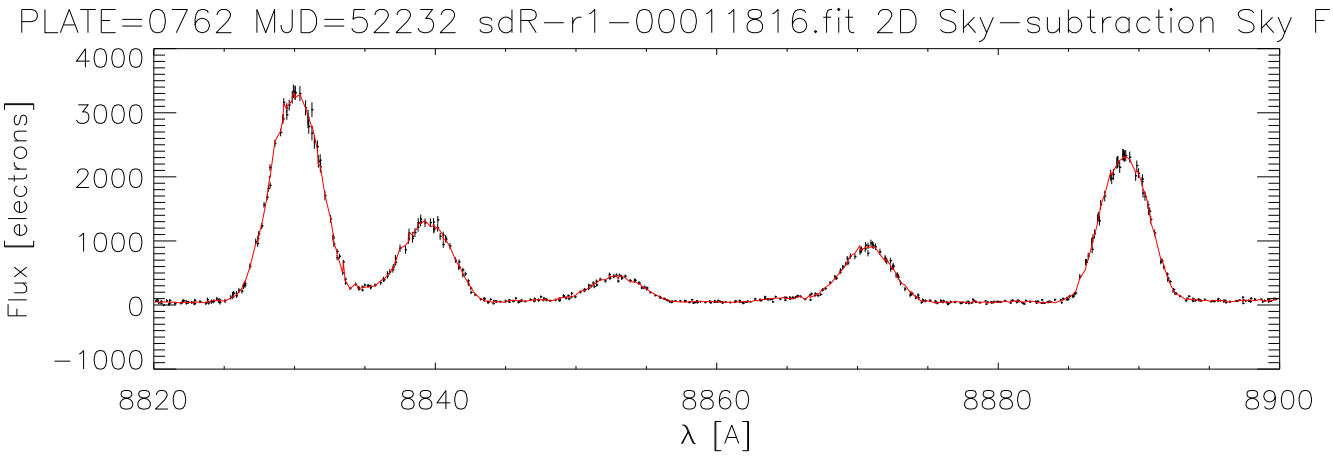

PLATE=0762 MJD=52232 sdR-r1-00011816.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

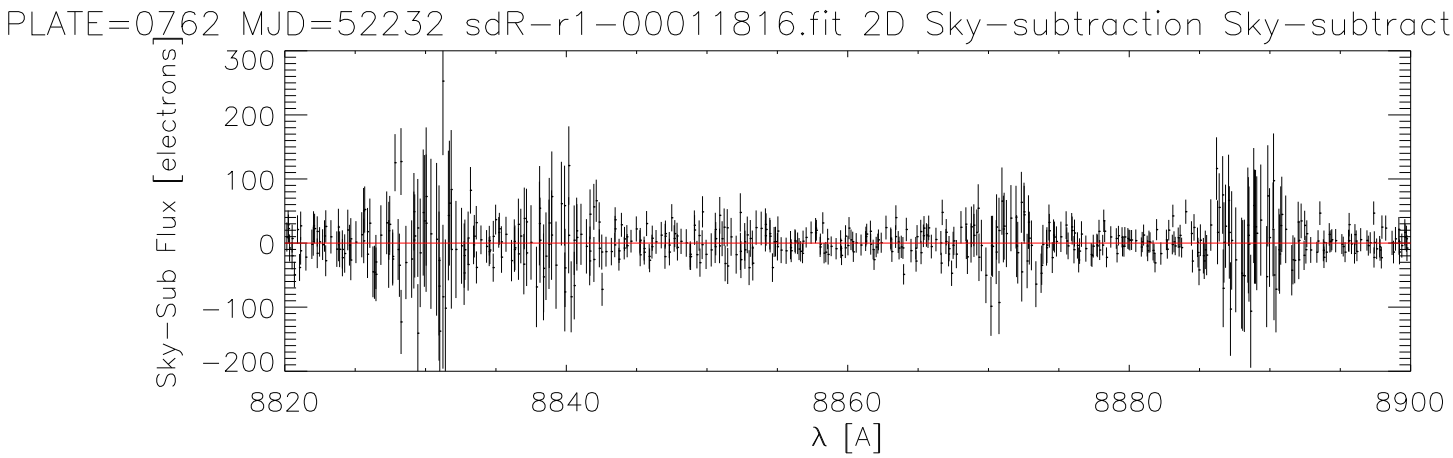

PLATE=0762 MJD=52232 sdR-r1-00011816.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

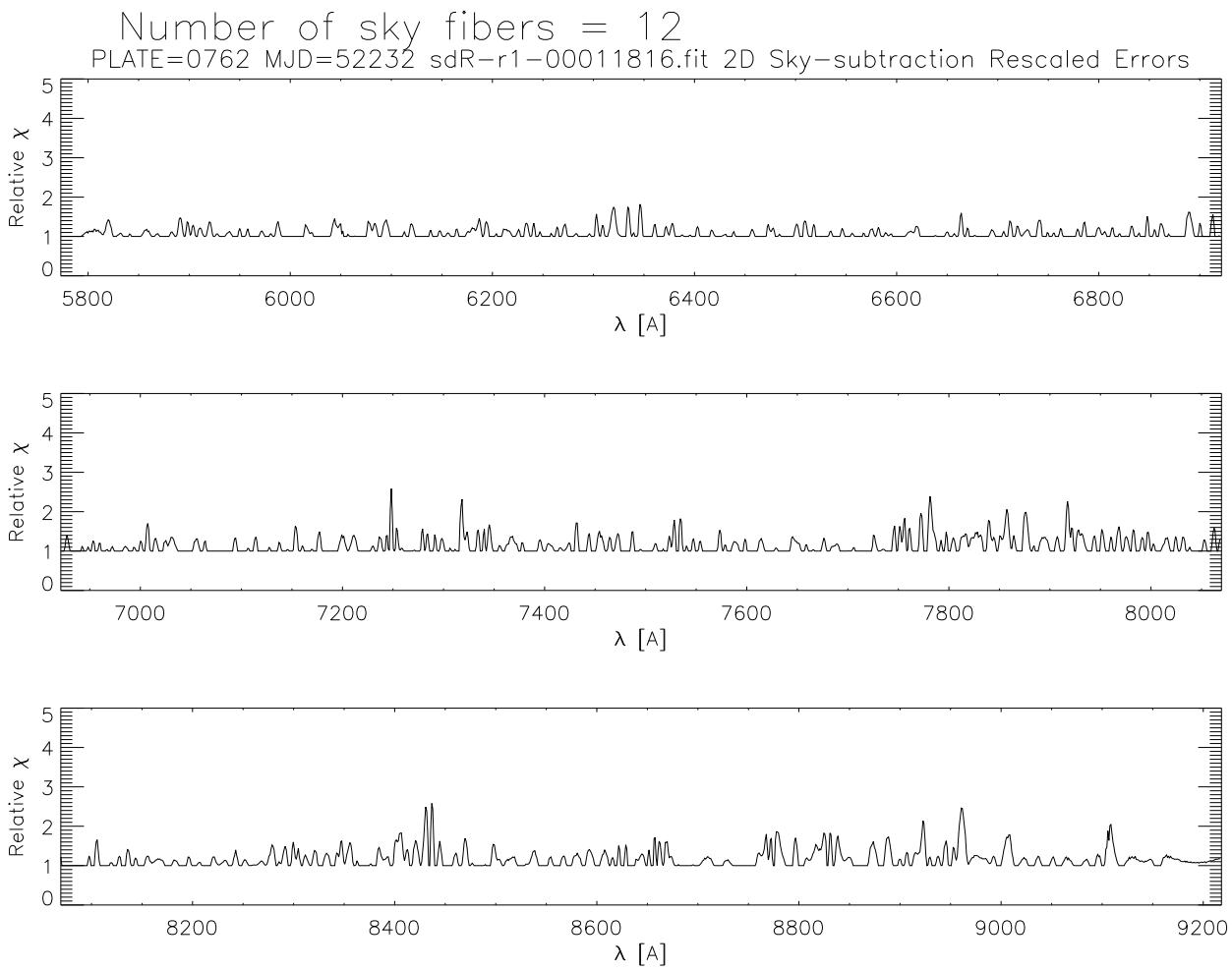

PLATE=0762 MJD=52232 sdR-r1-00011816.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

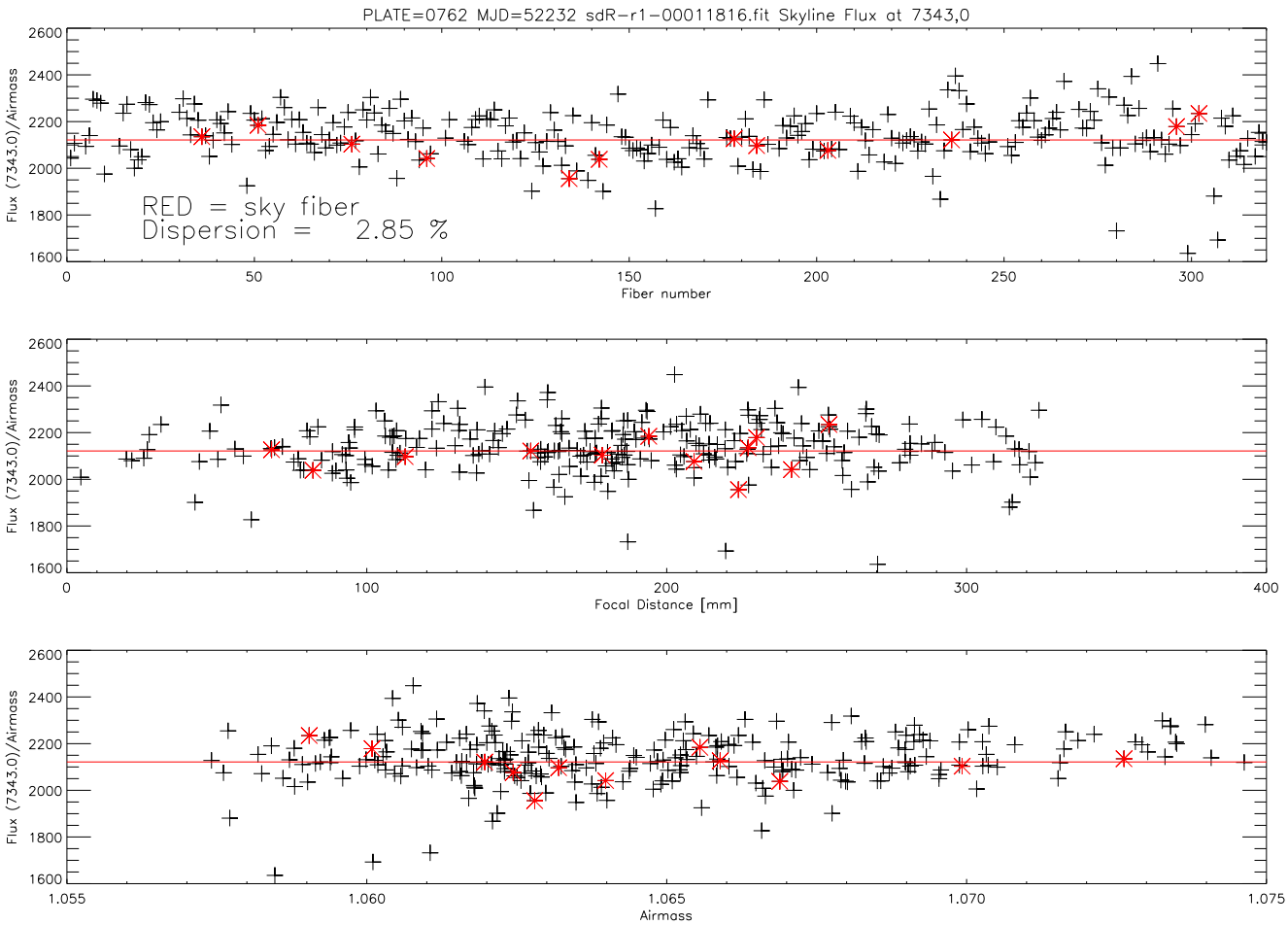

Number of sky fibers = 12
PLATE=0762 MJD=52232 sdR-r1-00011816.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

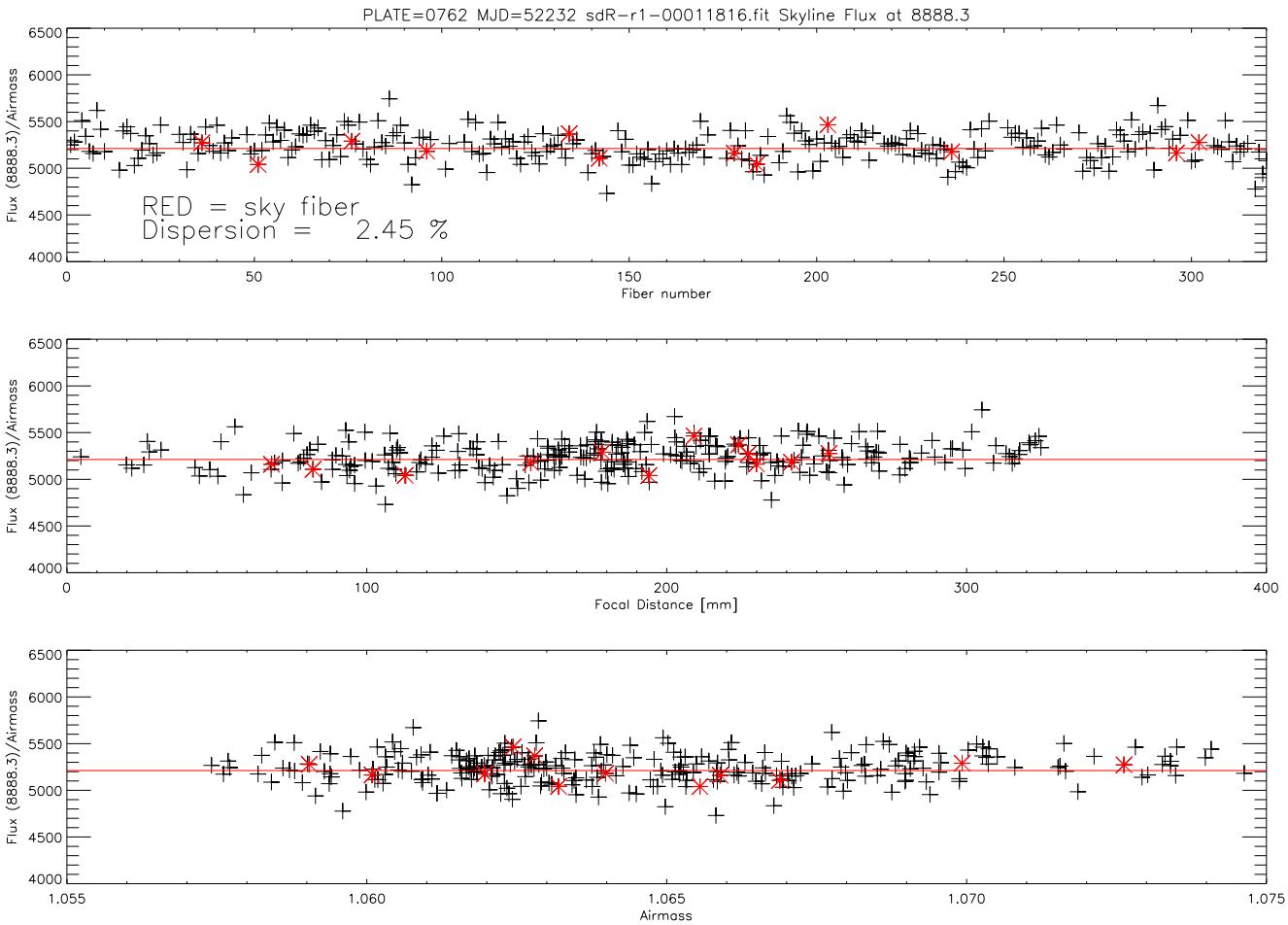

PLATE=0762 MJD=52232 sdR-r1-00011816.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
2
1
0
−1
−2
50
100
150
200
250
300
Fiber number

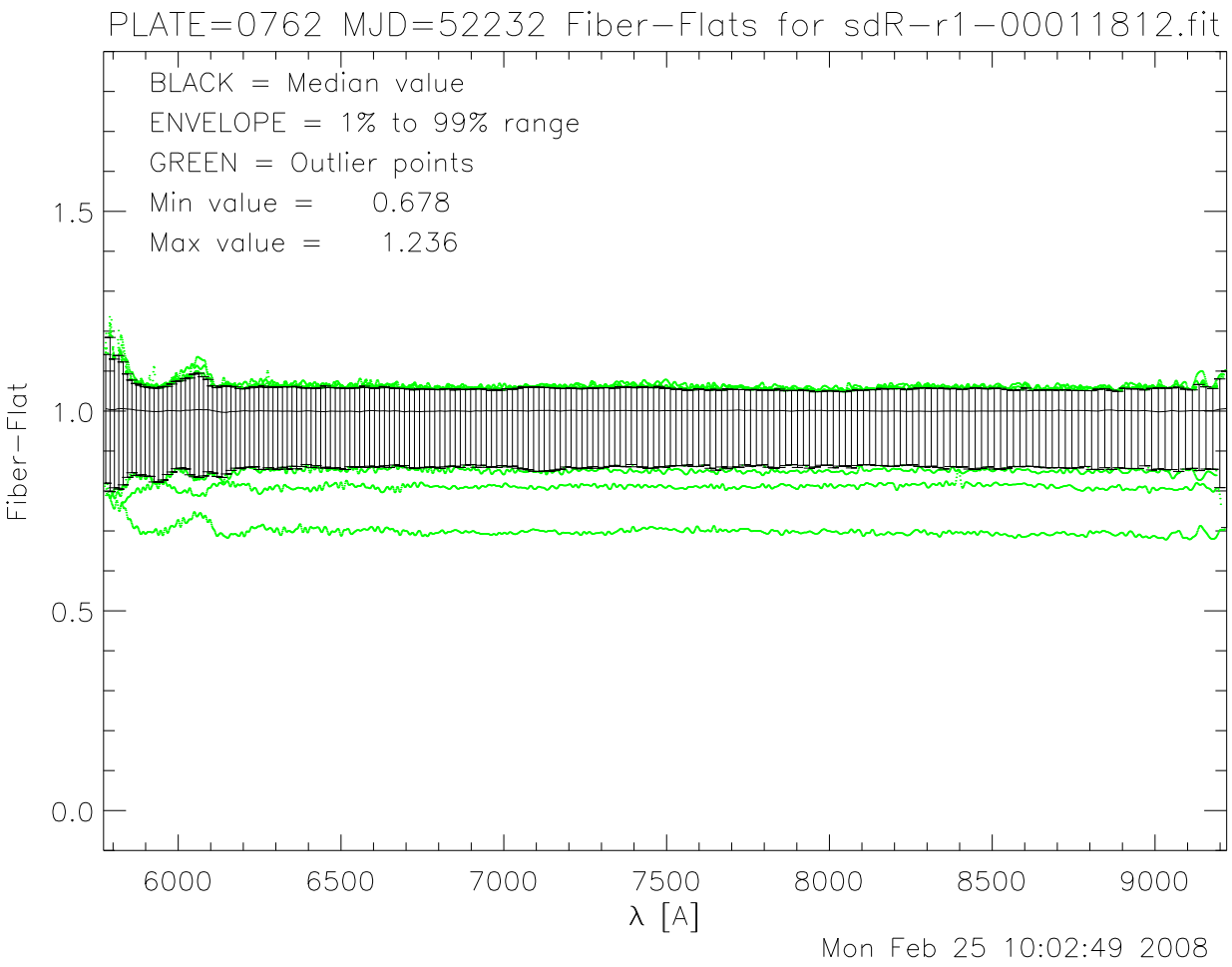

PLATE=0762 MJD=52232 sdR-r1-00011816.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

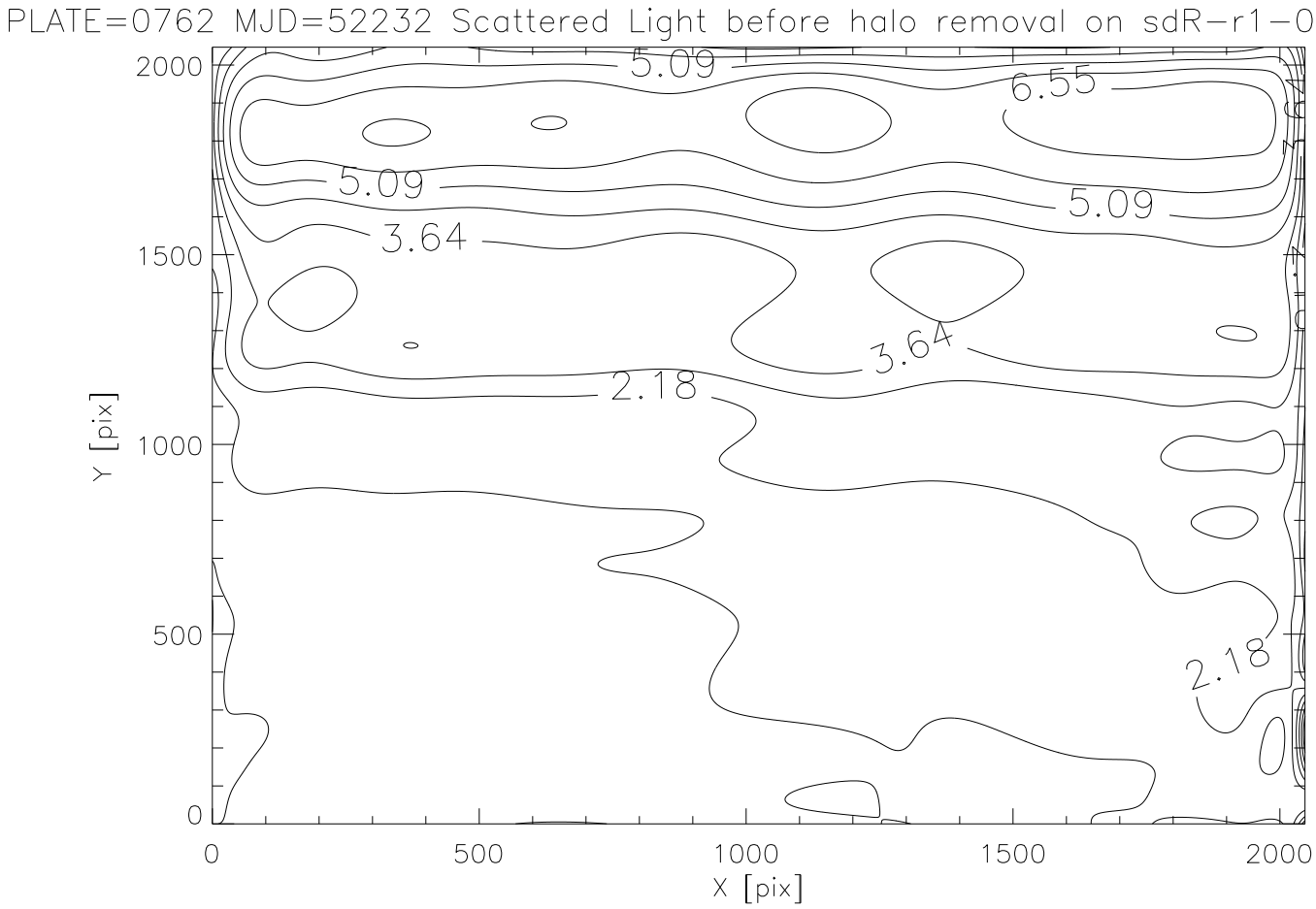

PLATE=0762 MJD=52232 sdR-r1-00011816.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

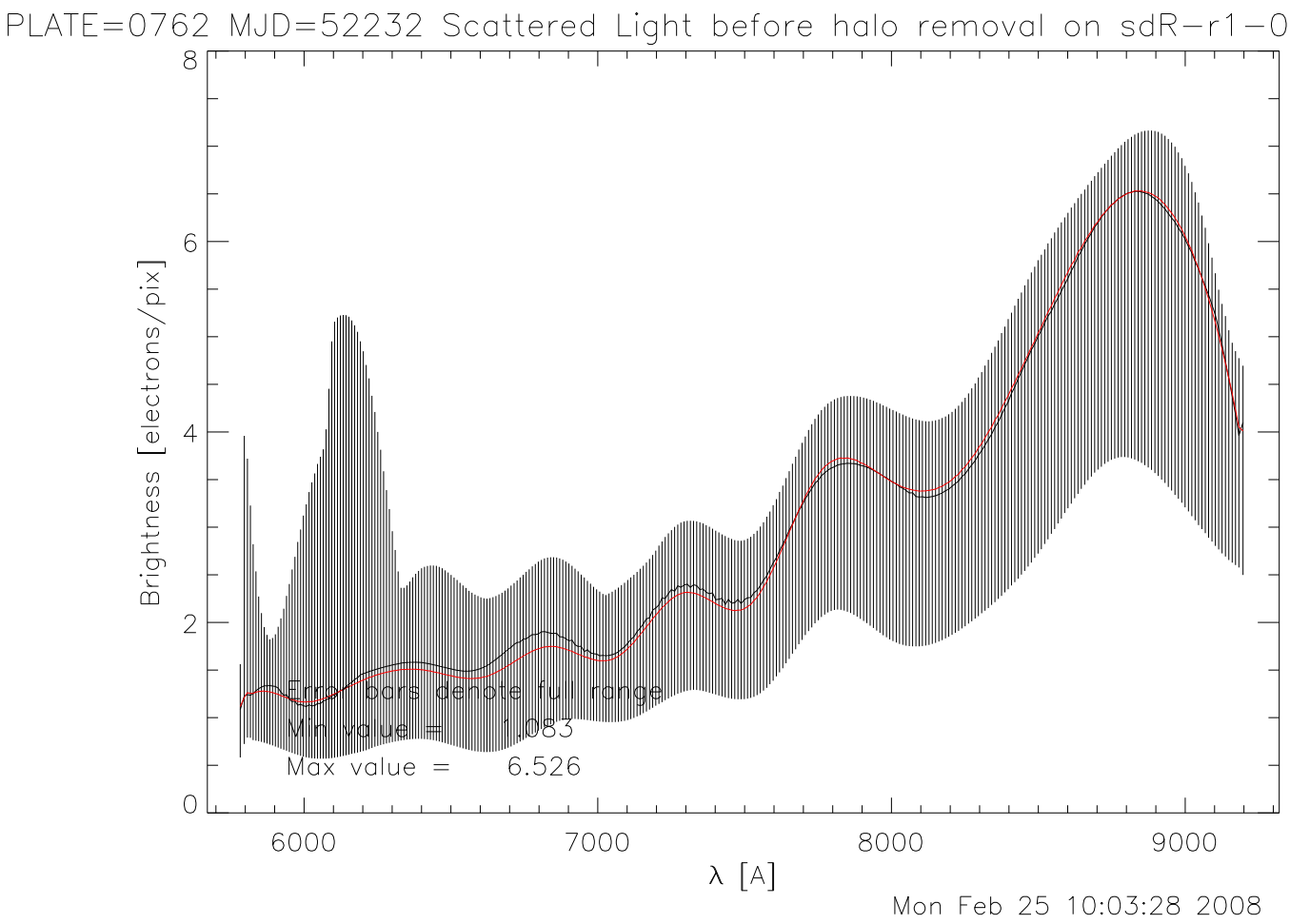

Number of sky fibers = 12
PLATE=0762 MJD=52232 sdR-r1-00011816.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

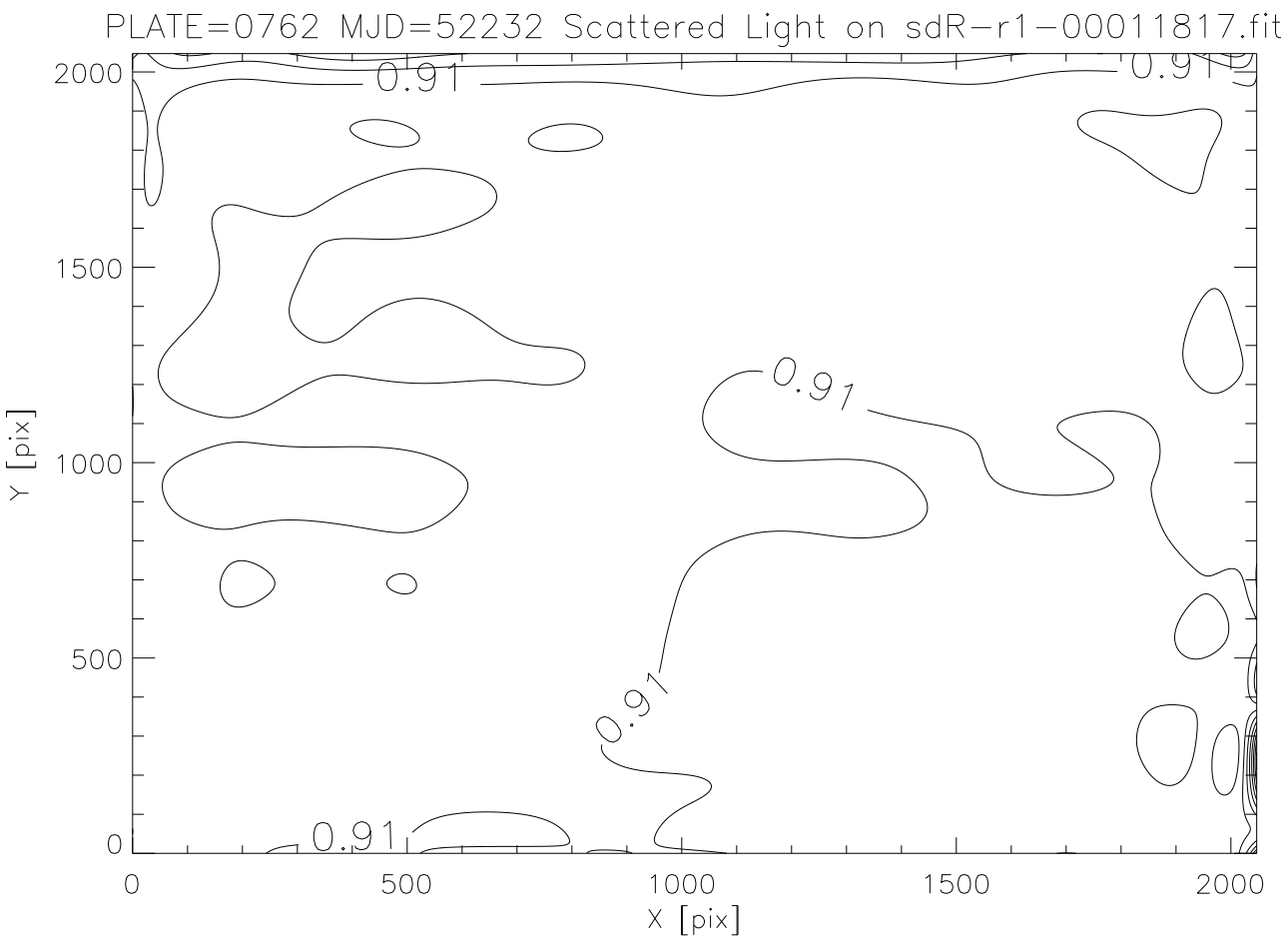

PLATE=0762 MJD=52232 sdR-r1-00011816.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.85 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

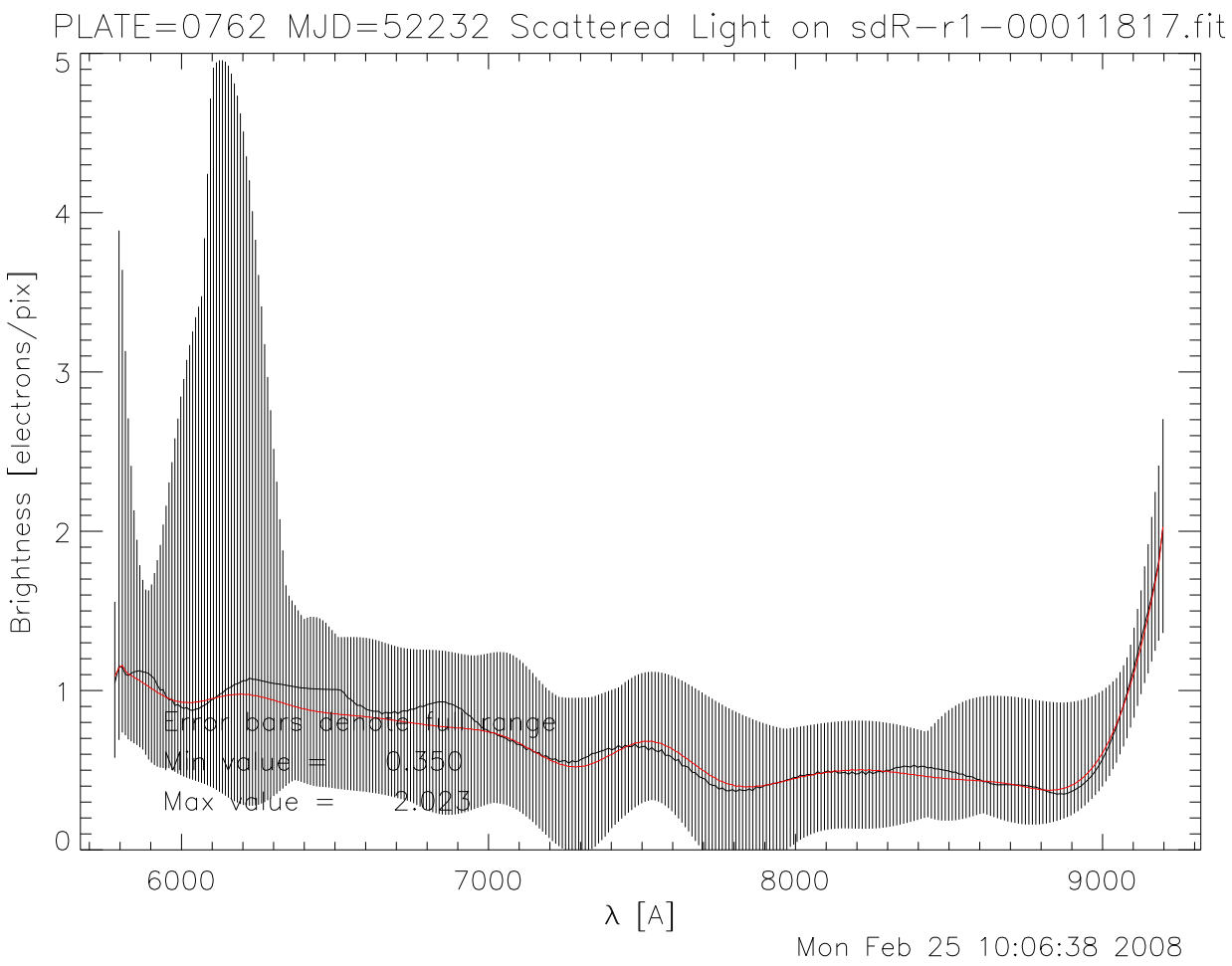

PLATE=0762 MJD=52232 sdR-r1-00011816.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.45 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

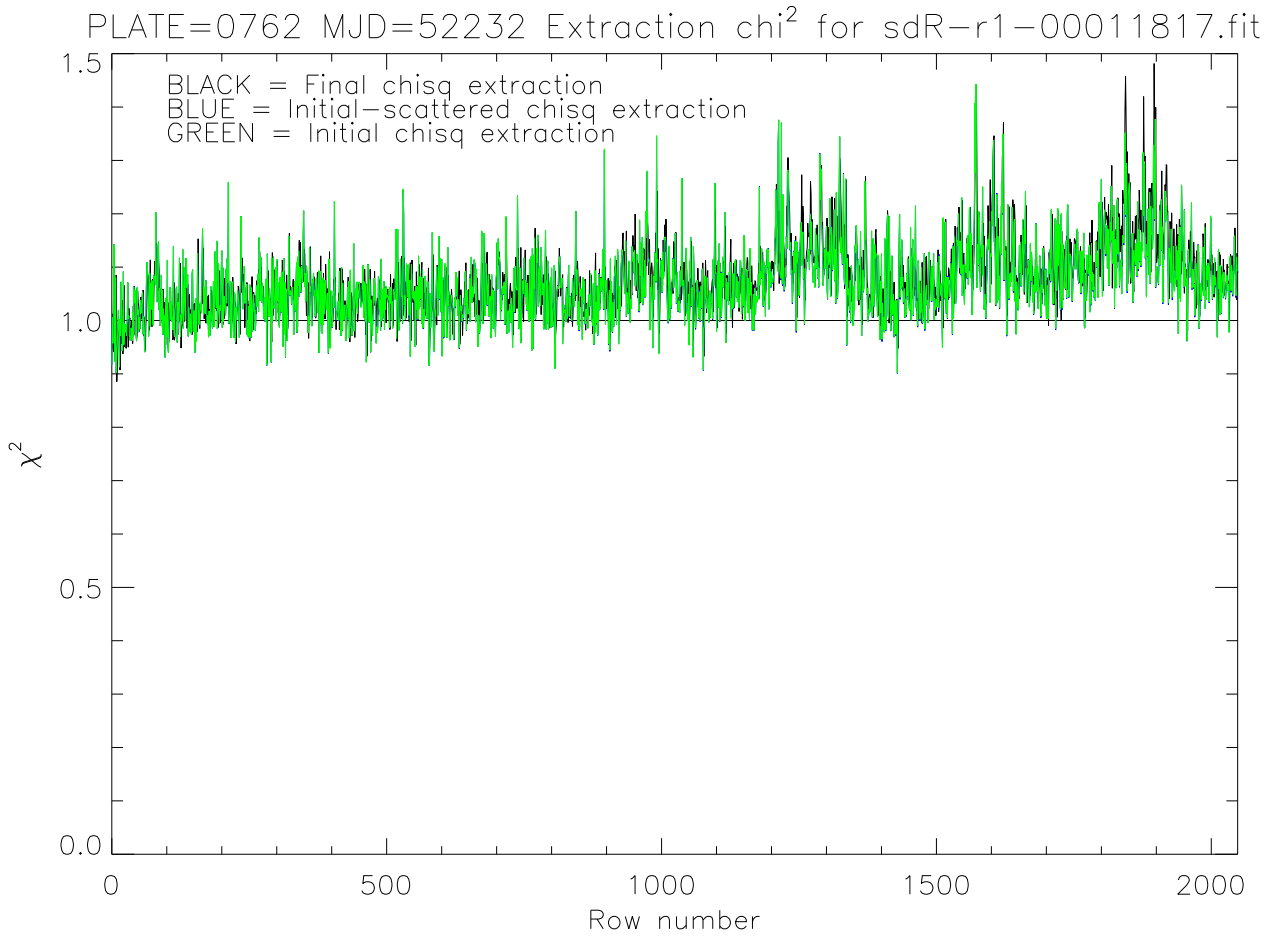

PLATE=0762 MJD=52232 Fiber−Flats for sdR−r1−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.678
Max value = 1.236
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 10:02:49 2008

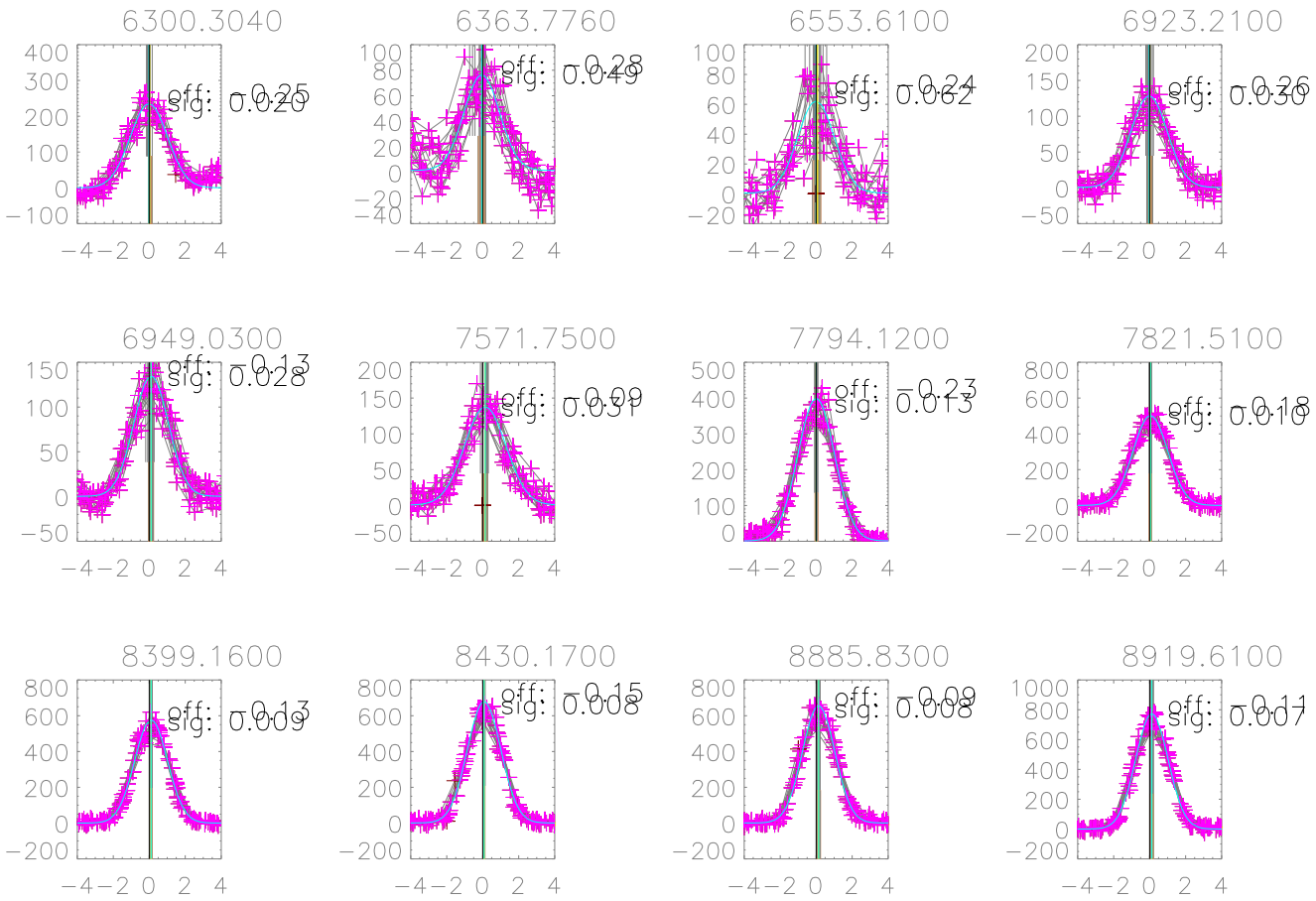

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r1-00011817.fi
5.09
6.55
5.09
5.09
3.64
3.64
2.18
2.18
Y [pix]
X [pix]
0
500
1000
1500
2000

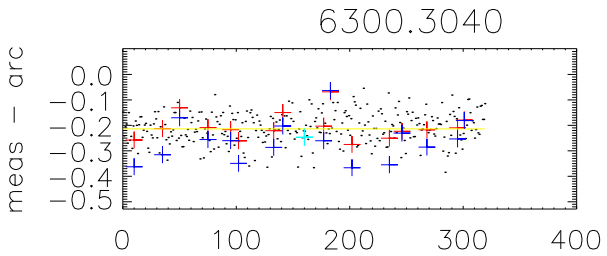

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r1-00011817.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.083
Max value = 6.526
Mon Feb 25 10:03:28 2008

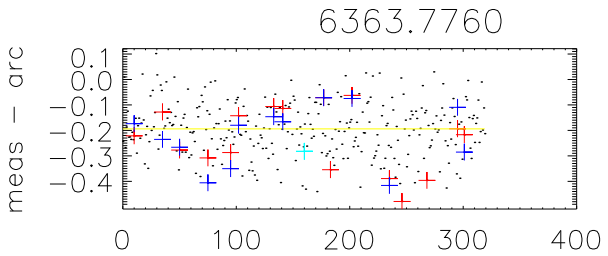

PLATE=0762 MJD=52232 Scattered Light on sdR−r1−00011817.fit
0.91
0.91
0.91
0.91
0.91
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

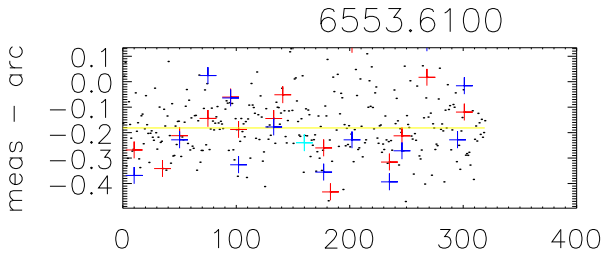

PLATE=0762 MJD=52232 Scattered Light on sdR-r1-00011817.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.350
Max value = 2.023
Mon Feb 25 10:06:38 2008

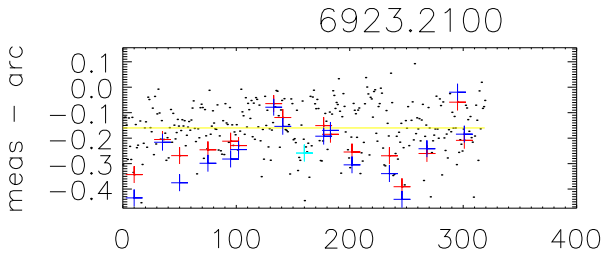

PLATE=0762 MJD=52232 Extraction chi^2 for sdR−r1−00011817.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

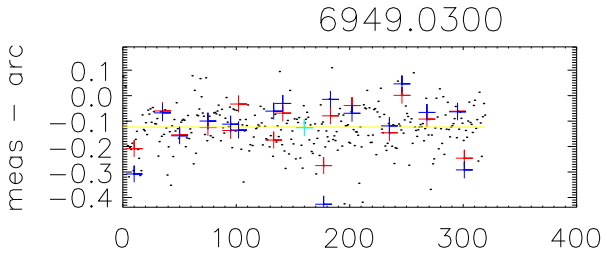

6300.3040
off: −0.25
sig: 0.020
6363.7760
off: −0.28
sig: 0.049
6553.6100
off: −0.24
sig: 0.062
6923.2100
off: −0.26
sig: 0.030
6949.0300
off: −0.13
sig: 0.028
7571.7500
off: −0.09
sig: 0.031
7794.1200
off: −0.23
sig: 0.013
7821.5100
off: −0.18
sig: 0.010
8399.1600
off: −0.13
sig: 0.009
8430.1700
off: −0.15
sig: 0.008
8885.8300
off: −0.09
sig: 0.008
8919.6100
off: −0.11
sig: 0.007

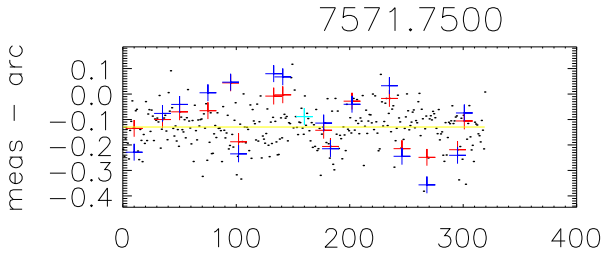

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

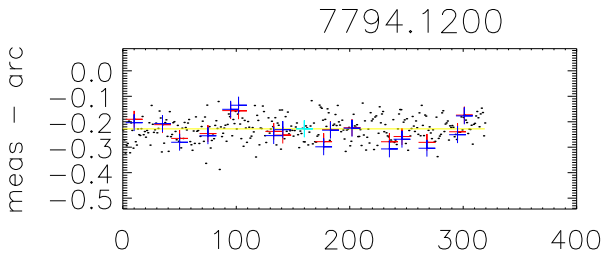

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

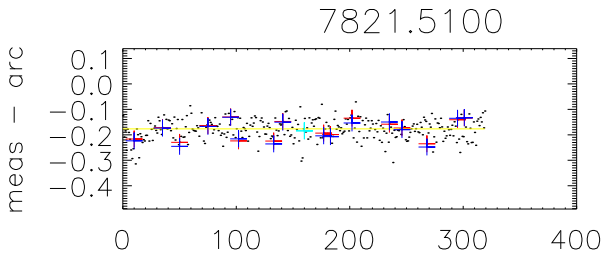

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

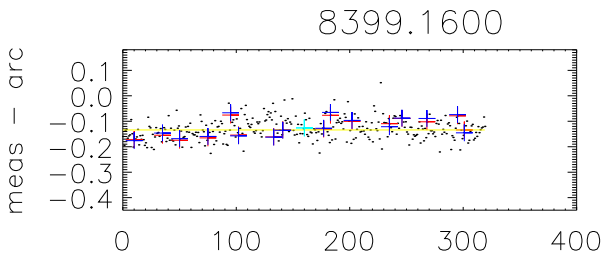

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

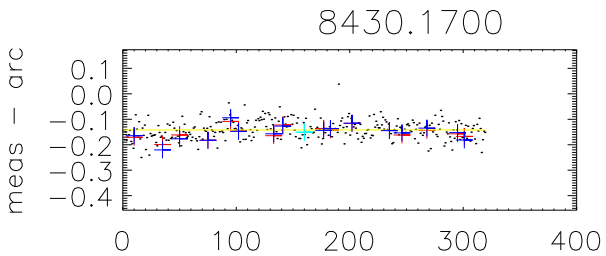

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

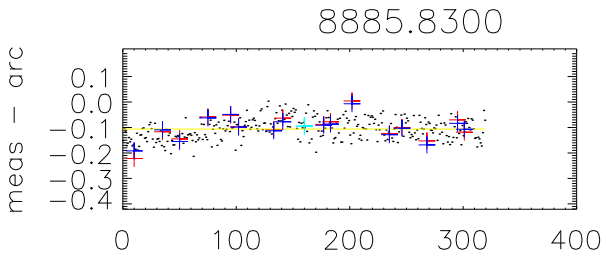

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

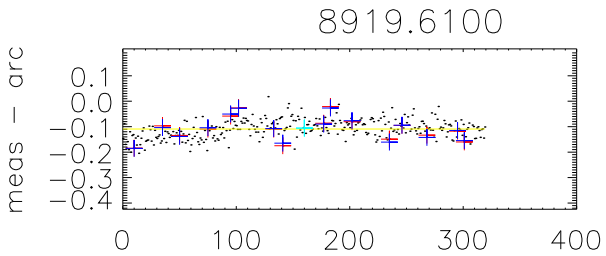

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

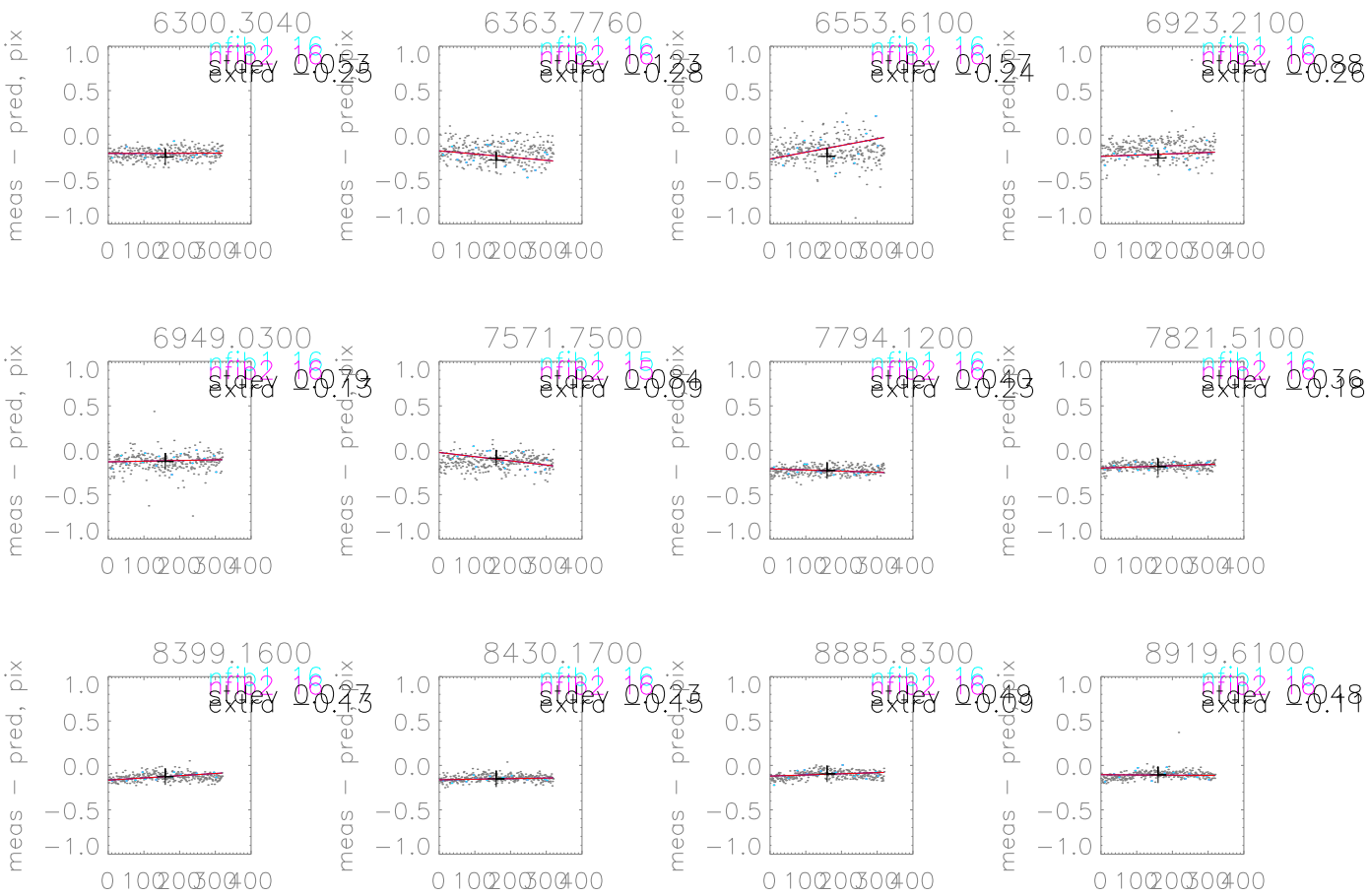

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

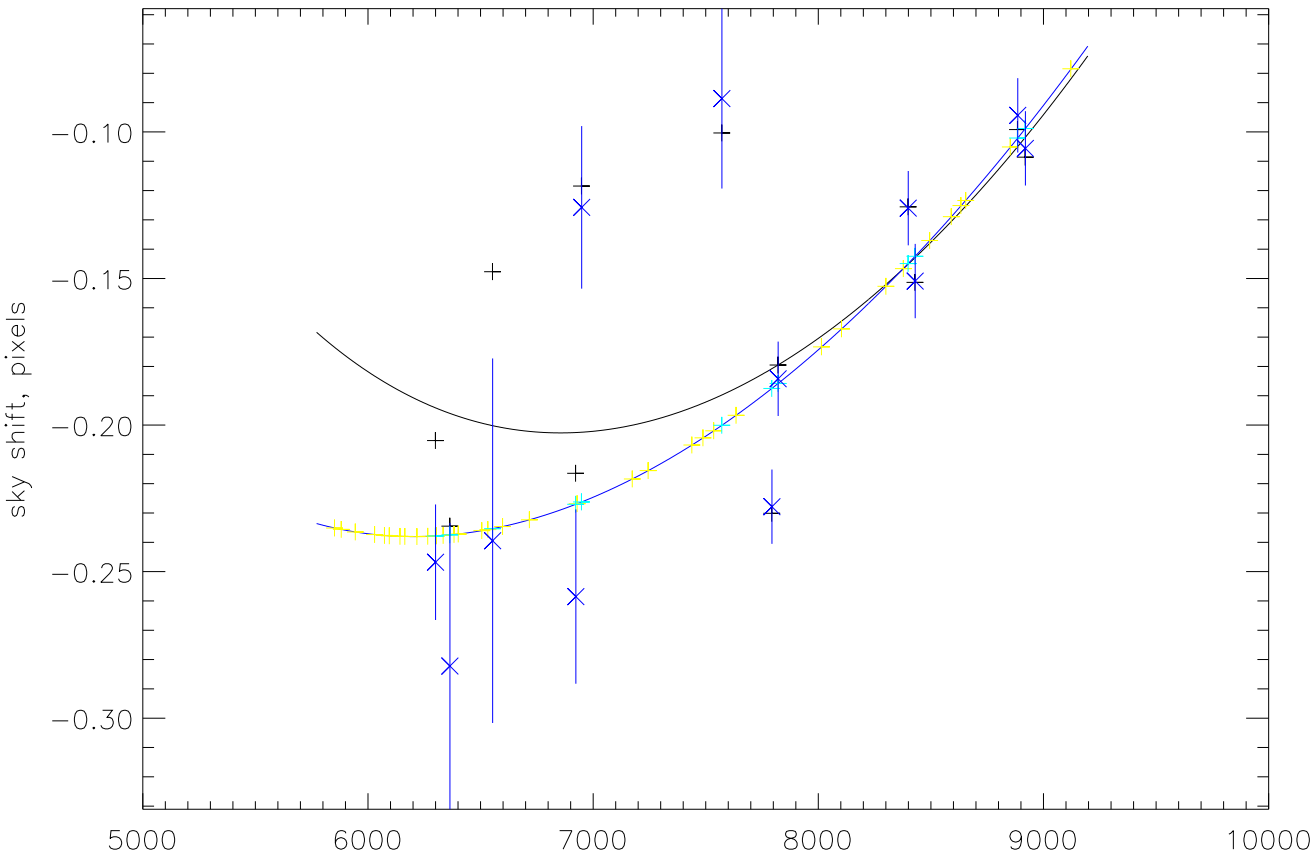

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

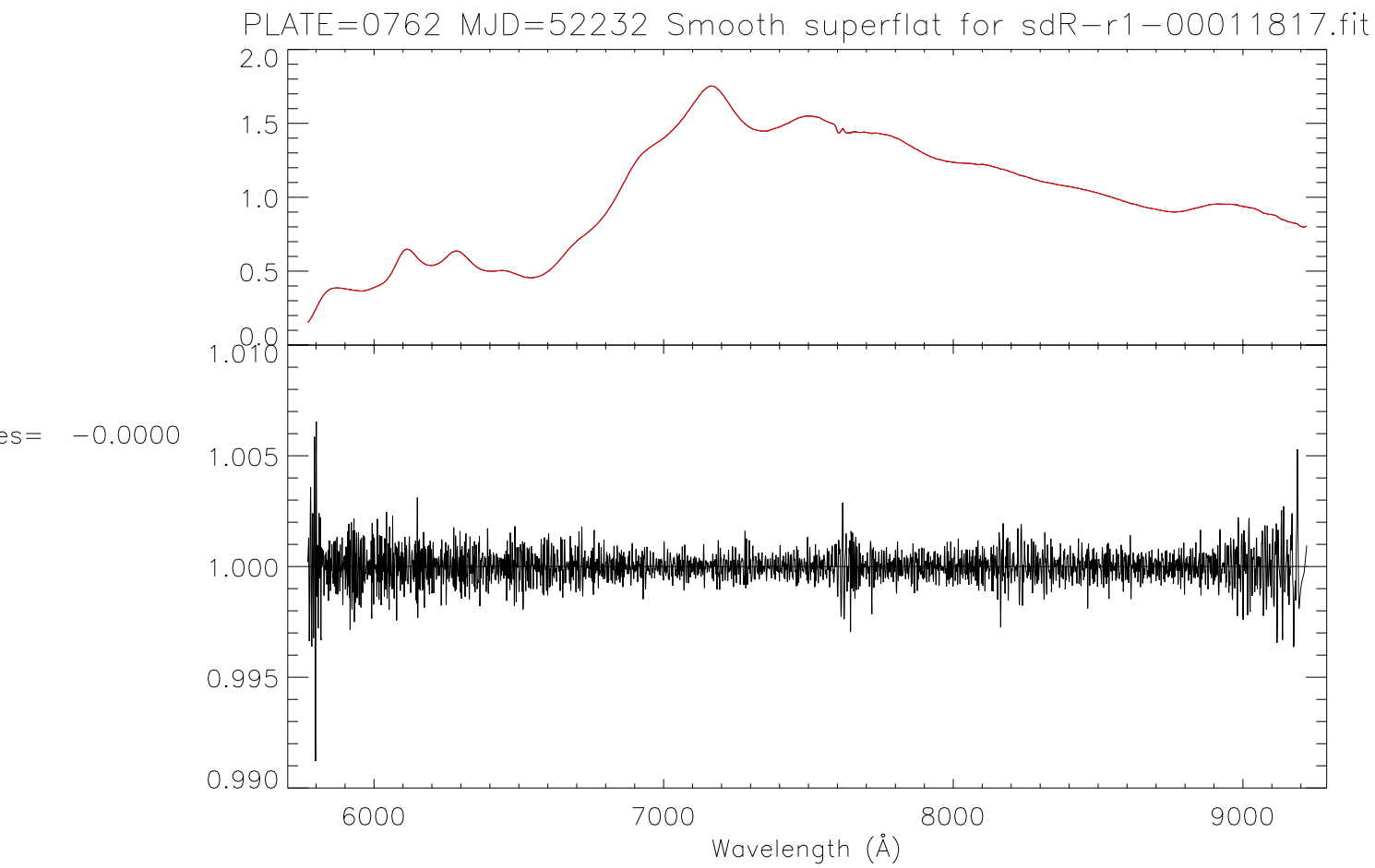

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

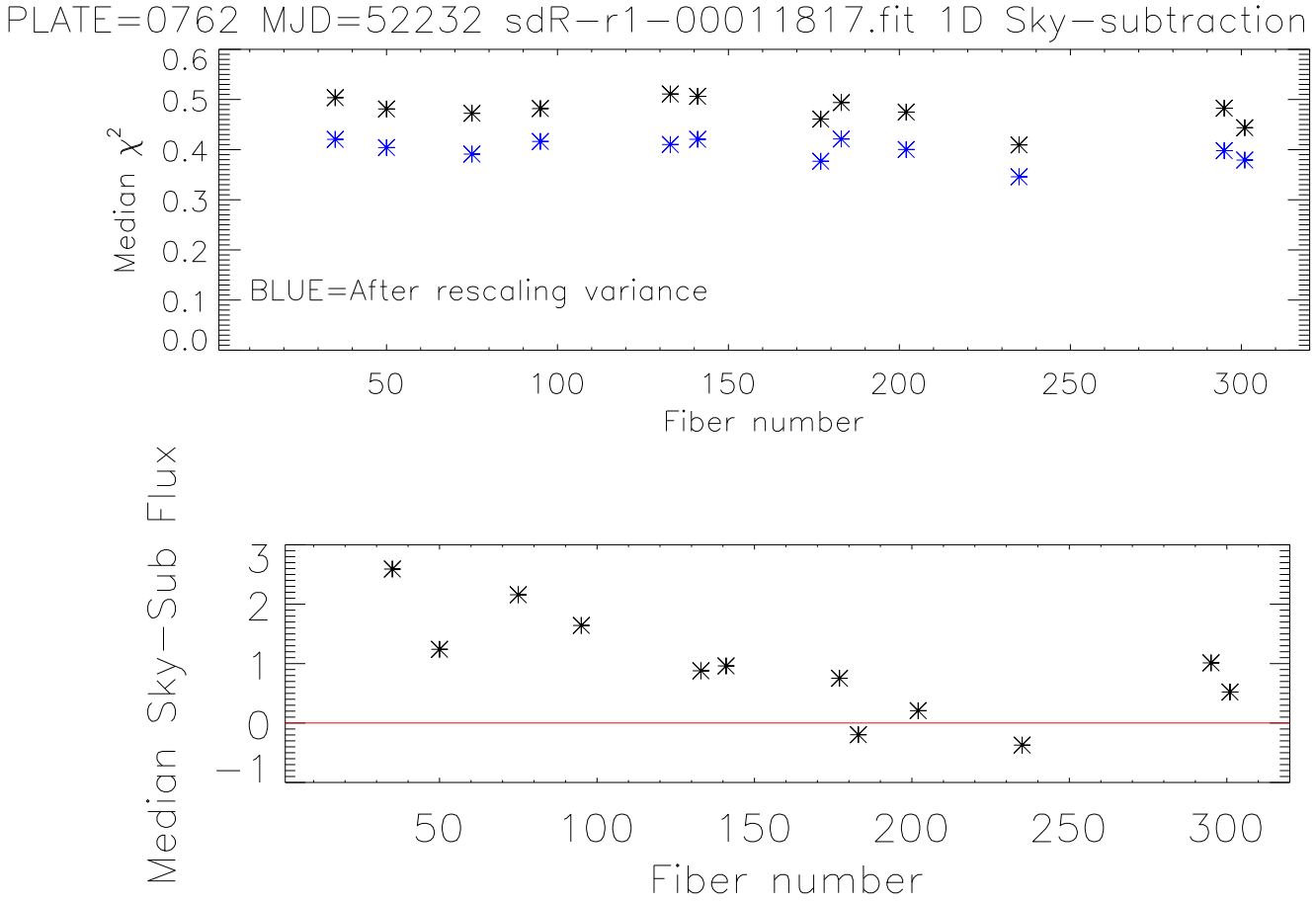

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

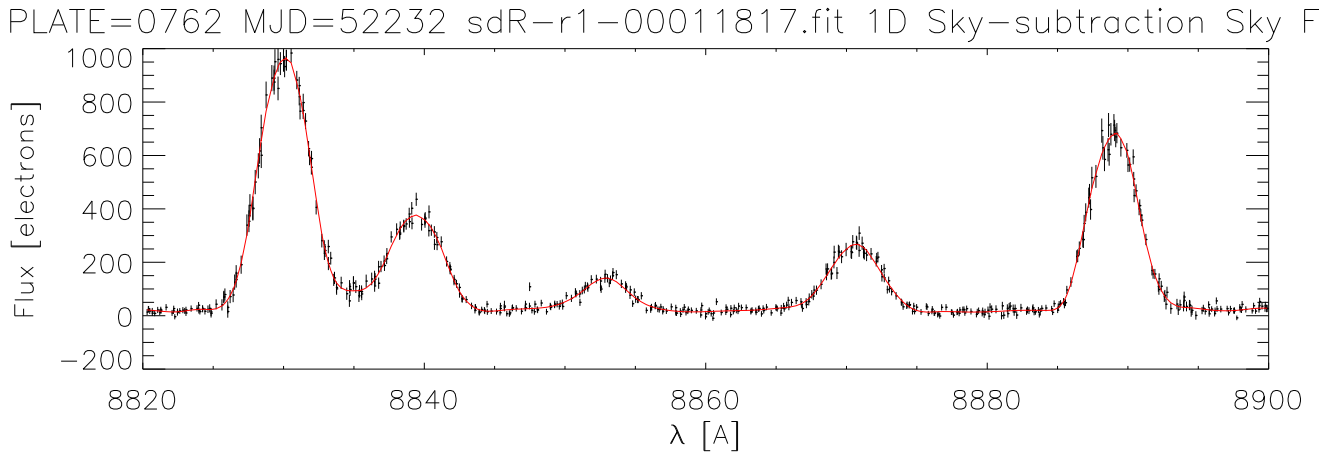

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

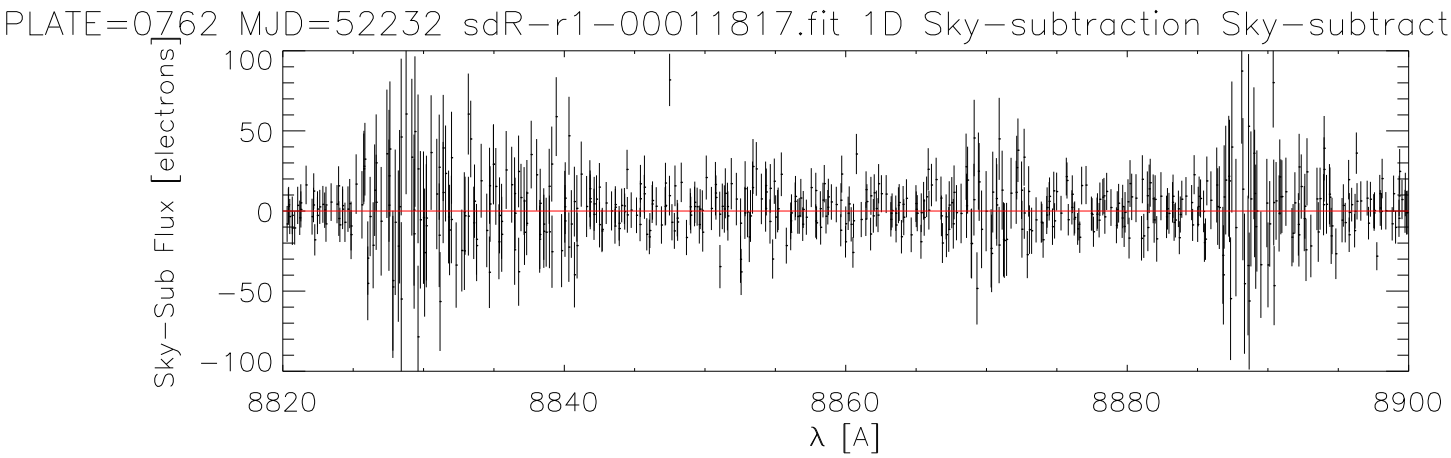

6300.3040
mfib1 16
mfib2 16
stdev 0.053
extra 0.25
6363.7760
mfib1 16
mfib2 16
stdev 0.123
extra 0.28
6553.6100
mfib1 16
mfib2 16
stdev 0.157
extra 0.24
6923.2100
mfib1 16
mfib2 16
stdev 0.088
extra 0.26
6949.0300
mfib1 16
mfib2 16
stdev 0.079
extra 0.13
7571.7500
mfib1 15
mfib2 16
stdev 0.084
extra 0.09
7794.1200
mfib1 16
mfib2 16
stdev 0.040
extra 0.23
7821.5100
mfib1 16
mfib2 16
stdev 0.036
extra 0.18
8399.1600
mfib1 16
mfib2 16
stdev 0.027
extra 0.43
8430.1700
mfib1 16
mfib2 16
stdev 0.023
extra 0.45
8885.8300
mfib1 16
mfib2 16
stdev 0.049
extra 0.09
8919.6100
mfib1 16
mfib2 16
stdev 0.048
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

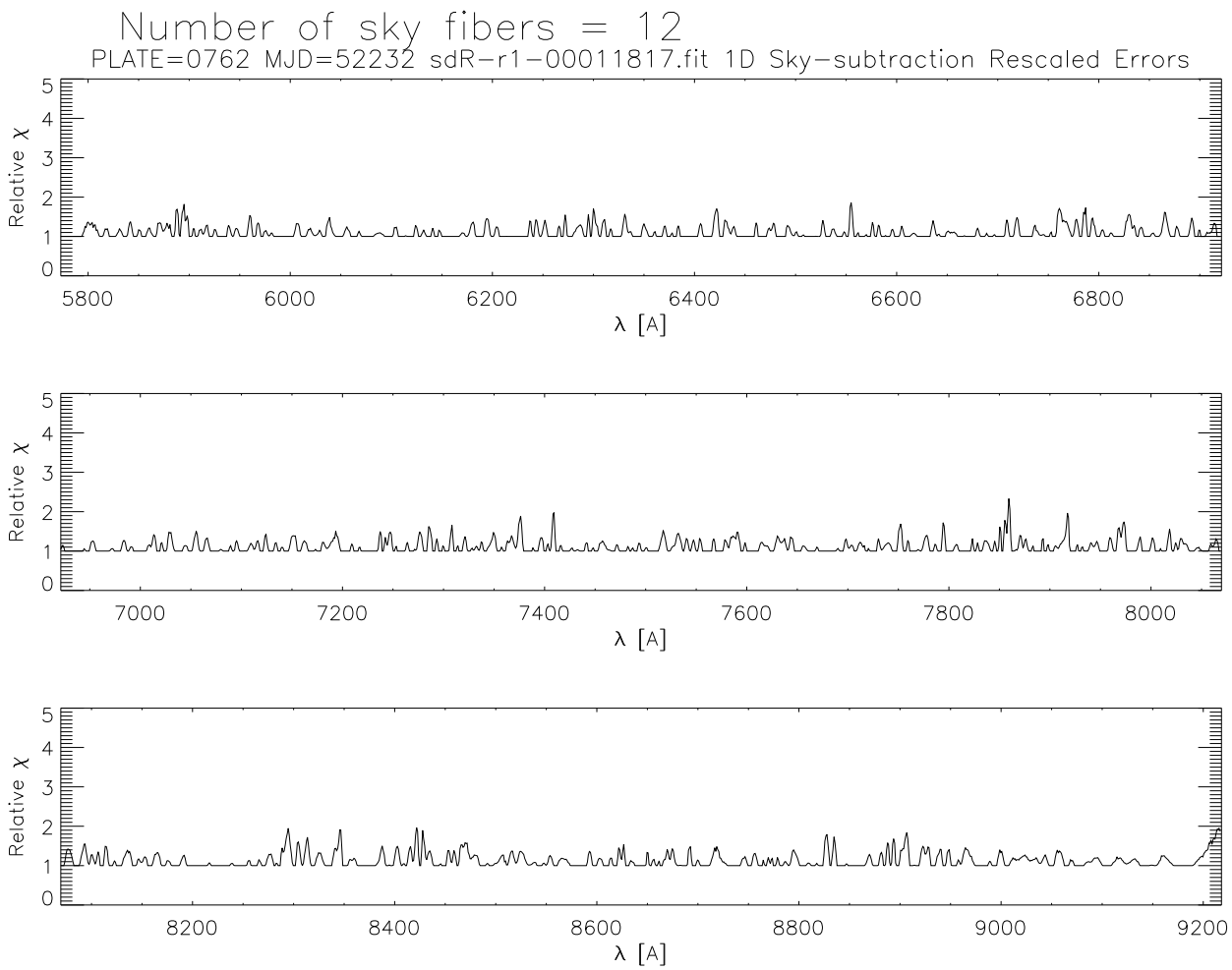

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
5000
6000
7000
8000
9000
10000

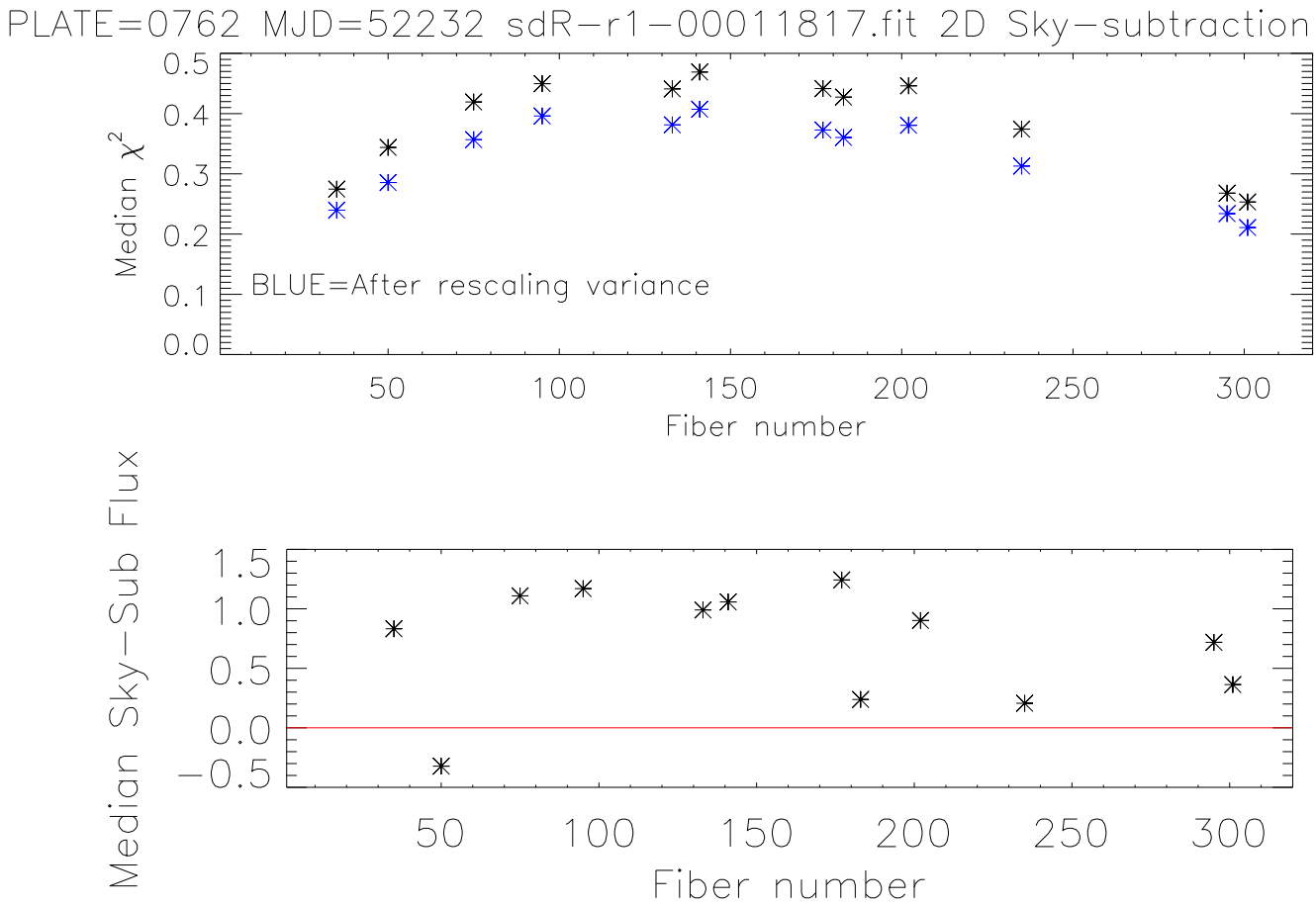

PLATE=0762 MJD=52232 Smooth superflat for sdR-r1-00011817.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

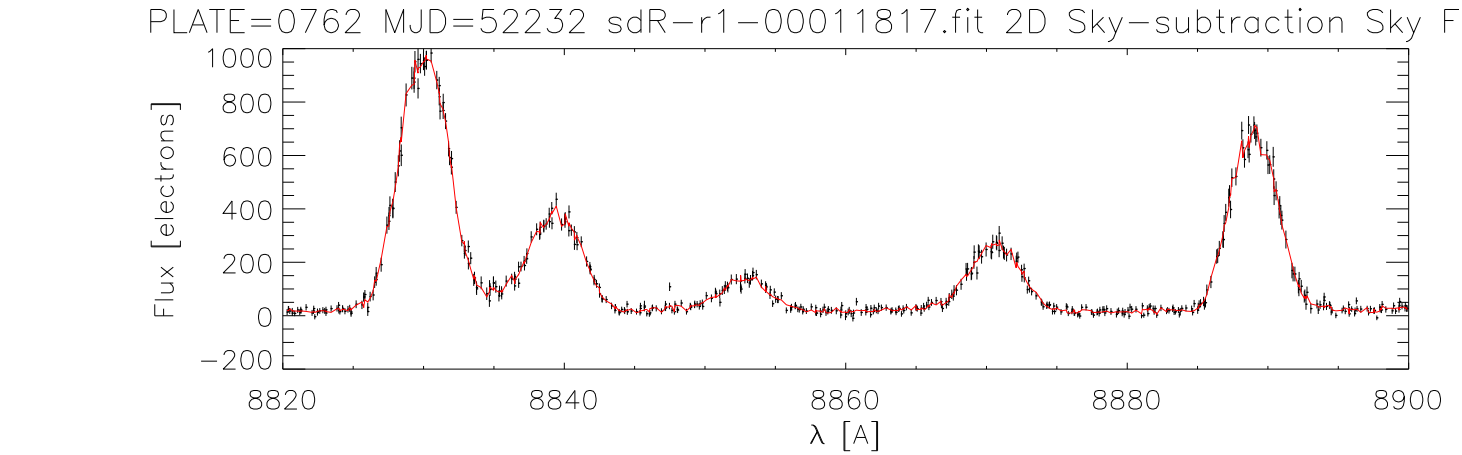

PLATE=0762 MJD=52232 sdR-r1-00011817.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

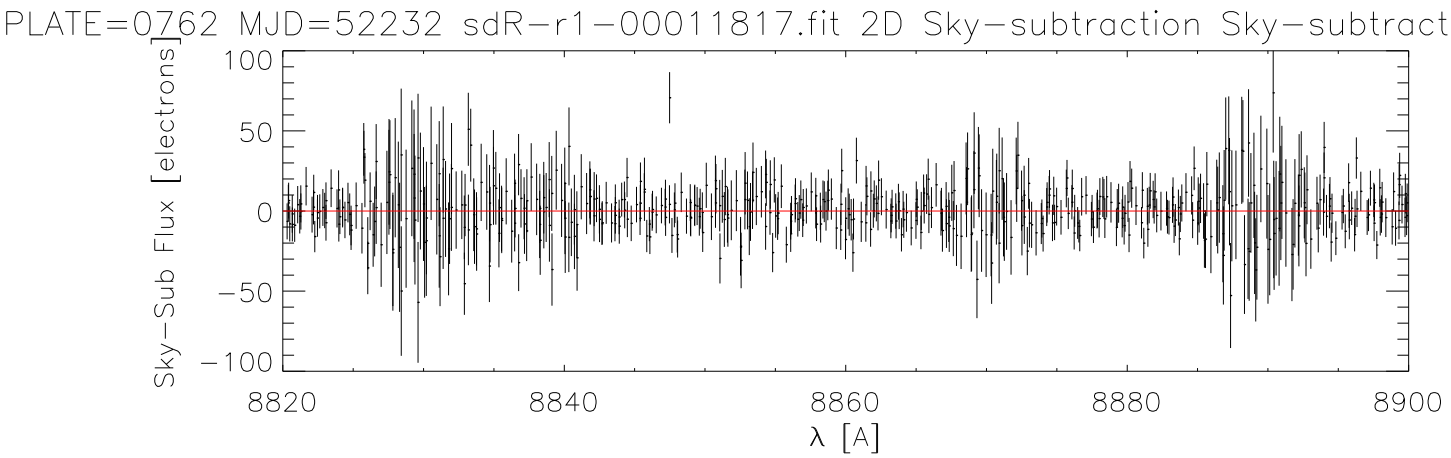

PLATE=0762 MJD=52232 sdR-r1-00011817.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

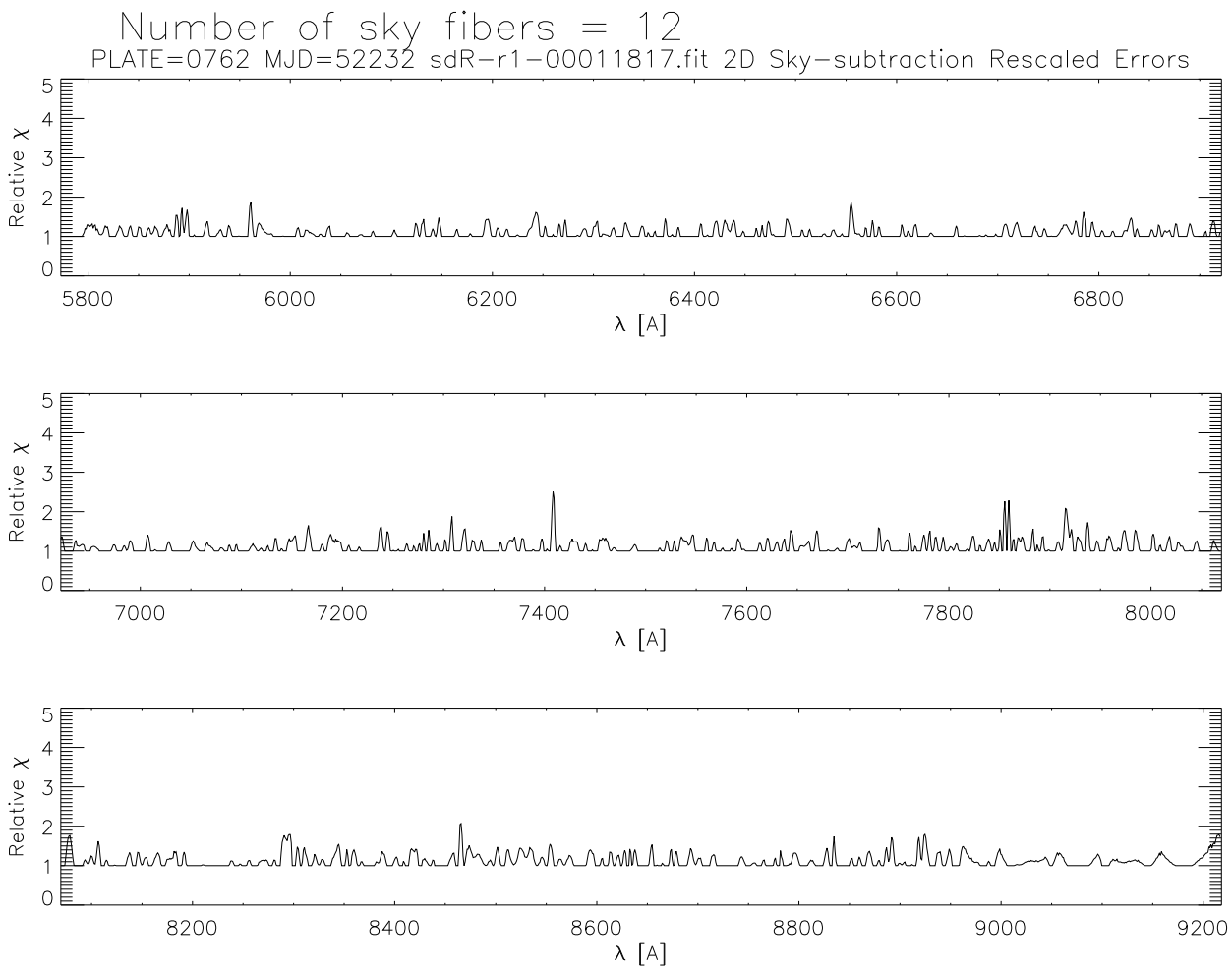

PLATE=0762 MJD=52232 sdR-r1-00011817.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

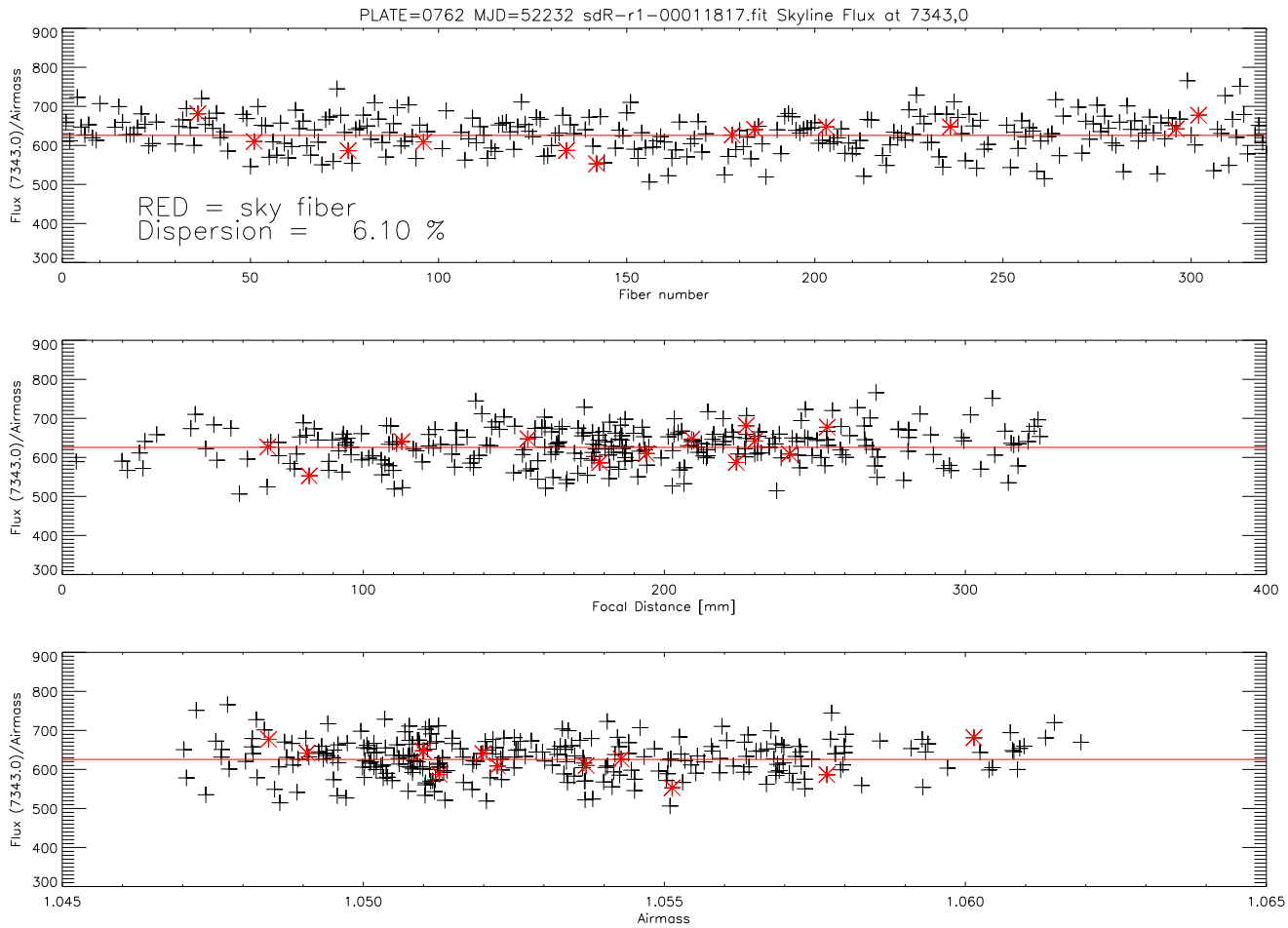

Number of sky fibers = 12
PLATE=0762 MJD=52232 sdR-r1-00011817.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

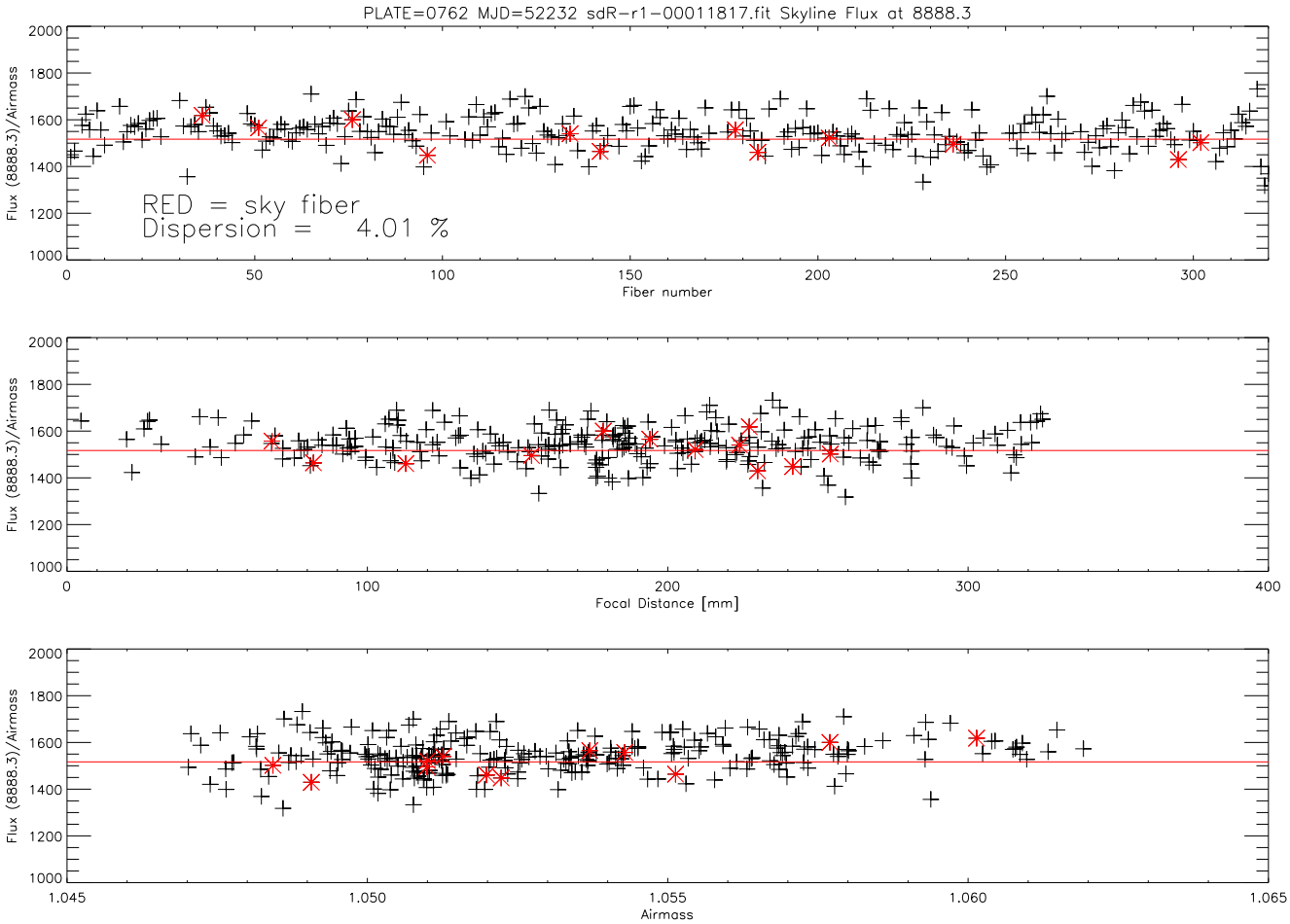

PLATE=0762 MJD=52232 sdR-r1-00011817.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−0.5
0.0
0.5
1.0
1.5
50
100
150
200
250
300
Fiber number

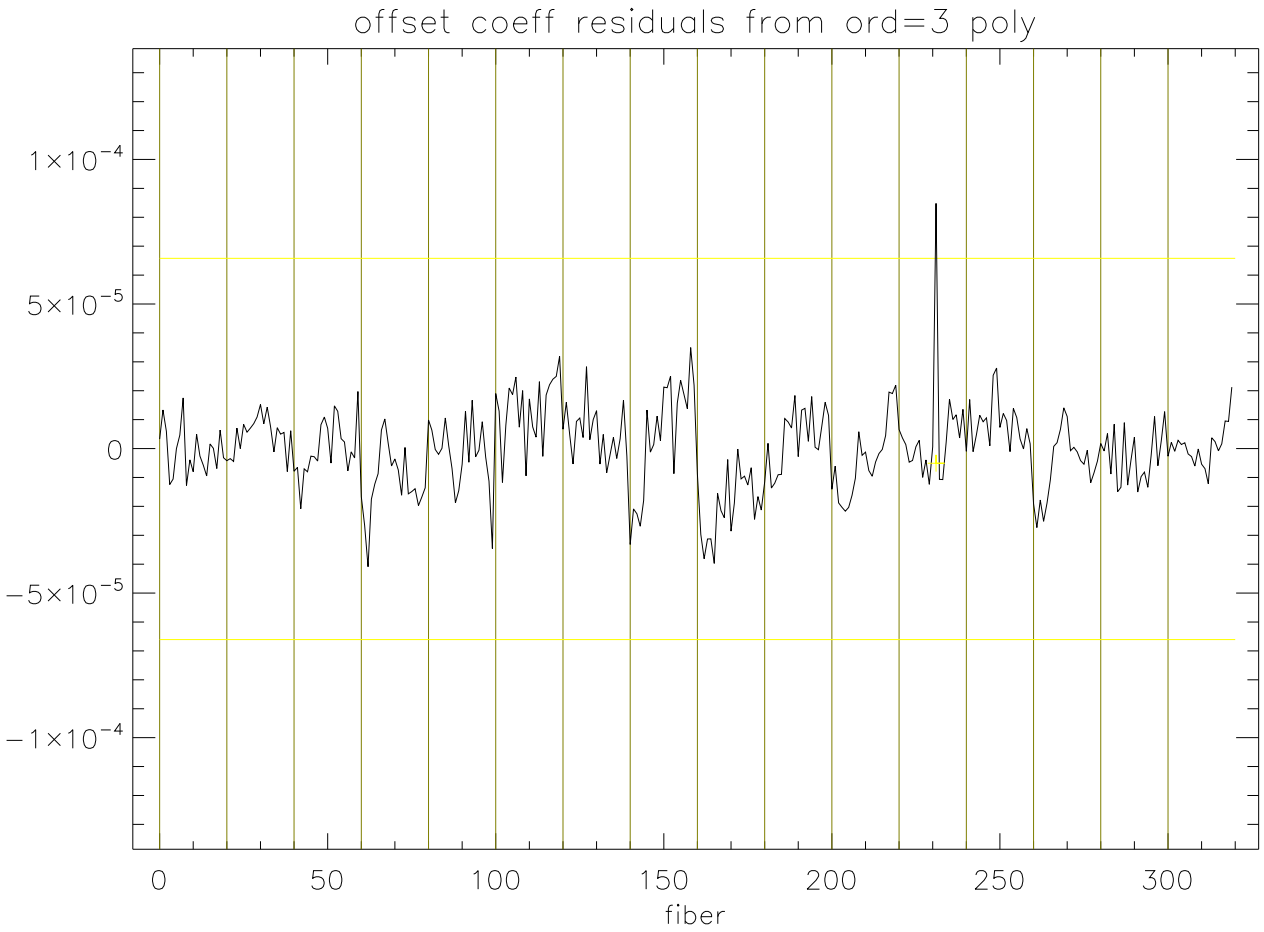

PLATE=0762 MJD=52232 sdR-r1-00011817.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1000
800
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

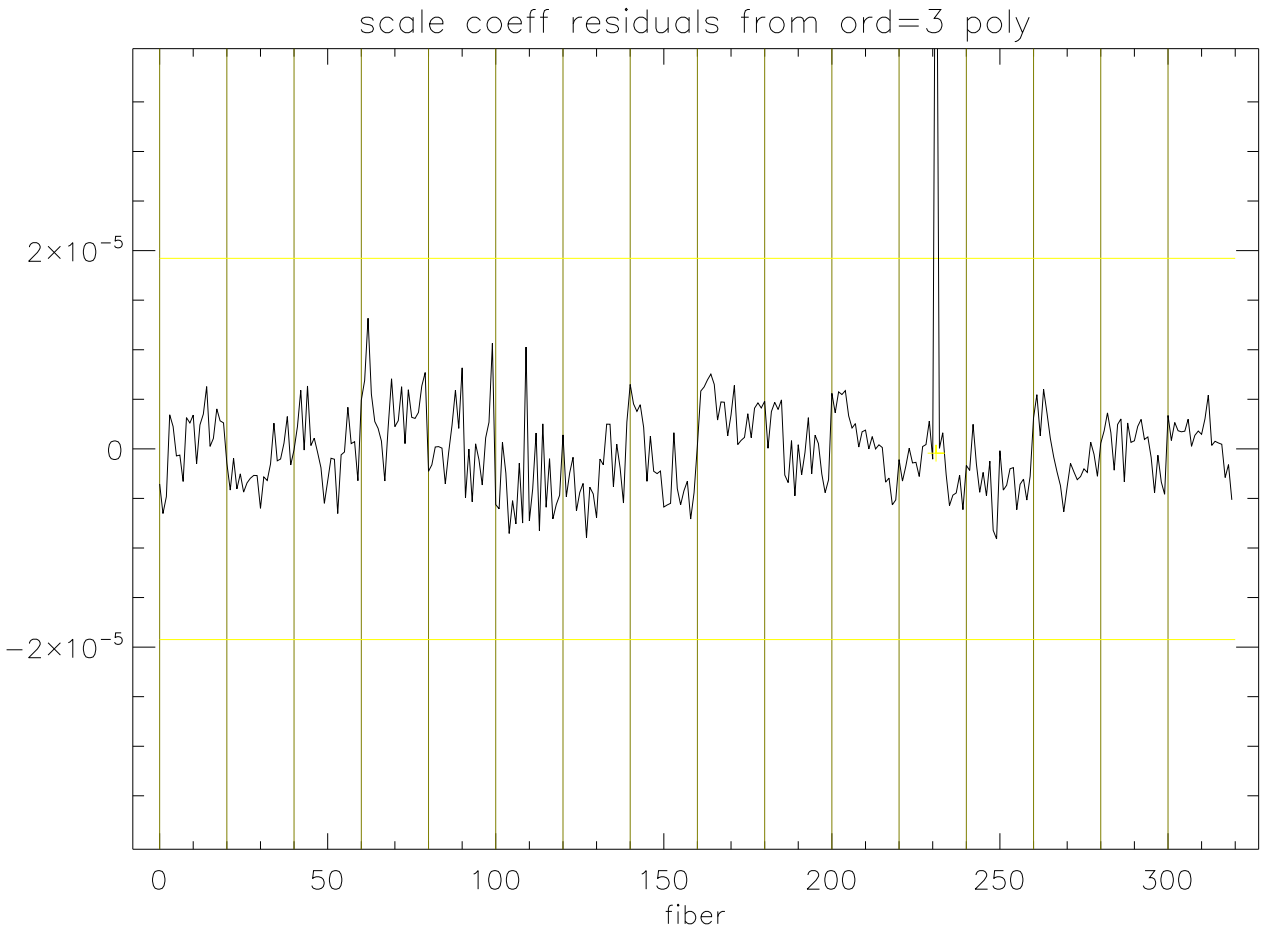

PLATE=0762 MJD=52232 sdR-r1-00011817.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
8820
8840
8860
8880
8900
λ [A]

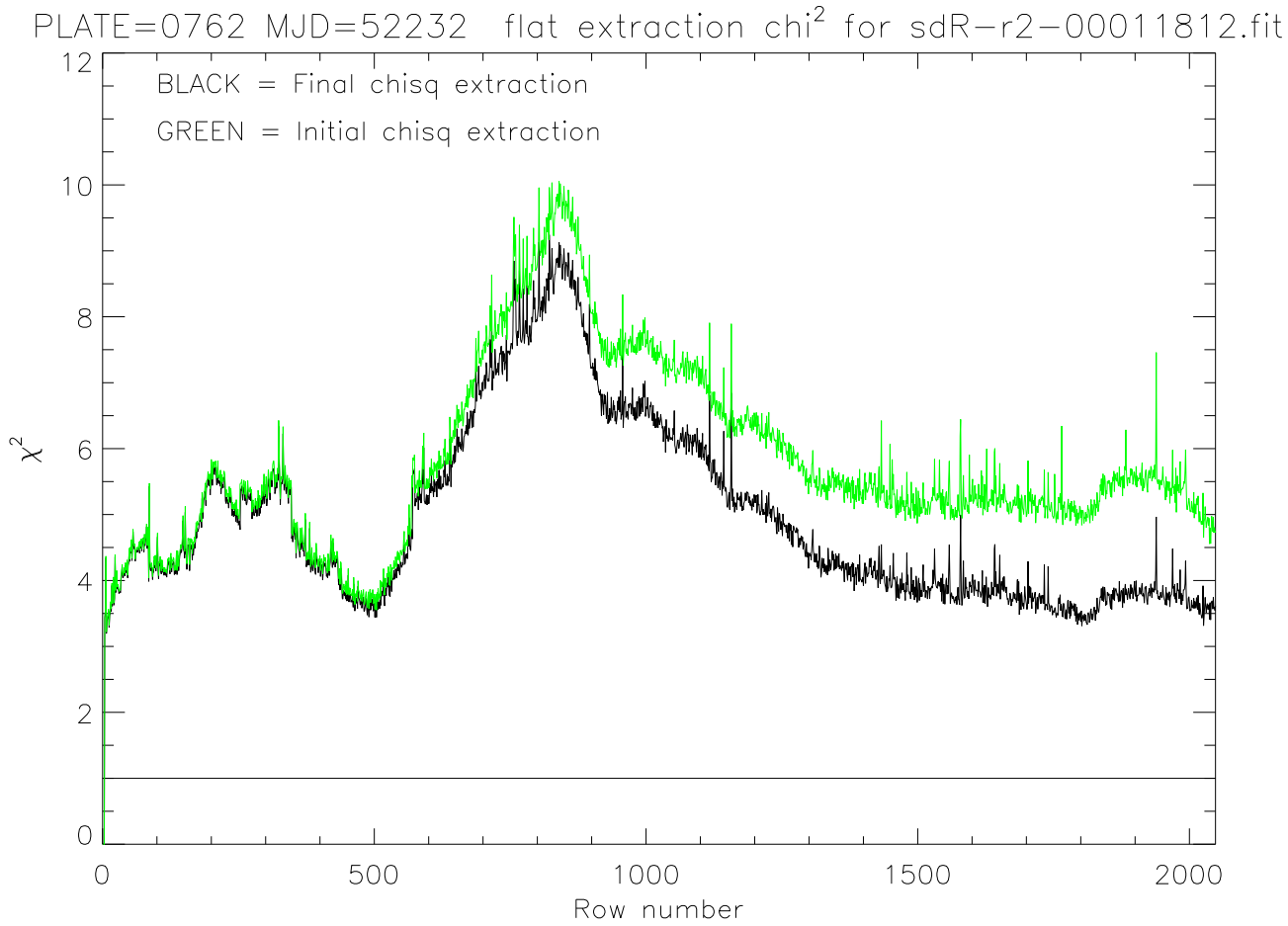

Number of sky fibers = 12
PLATE=0762 MJD=52232 sdR-r1-00011817.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

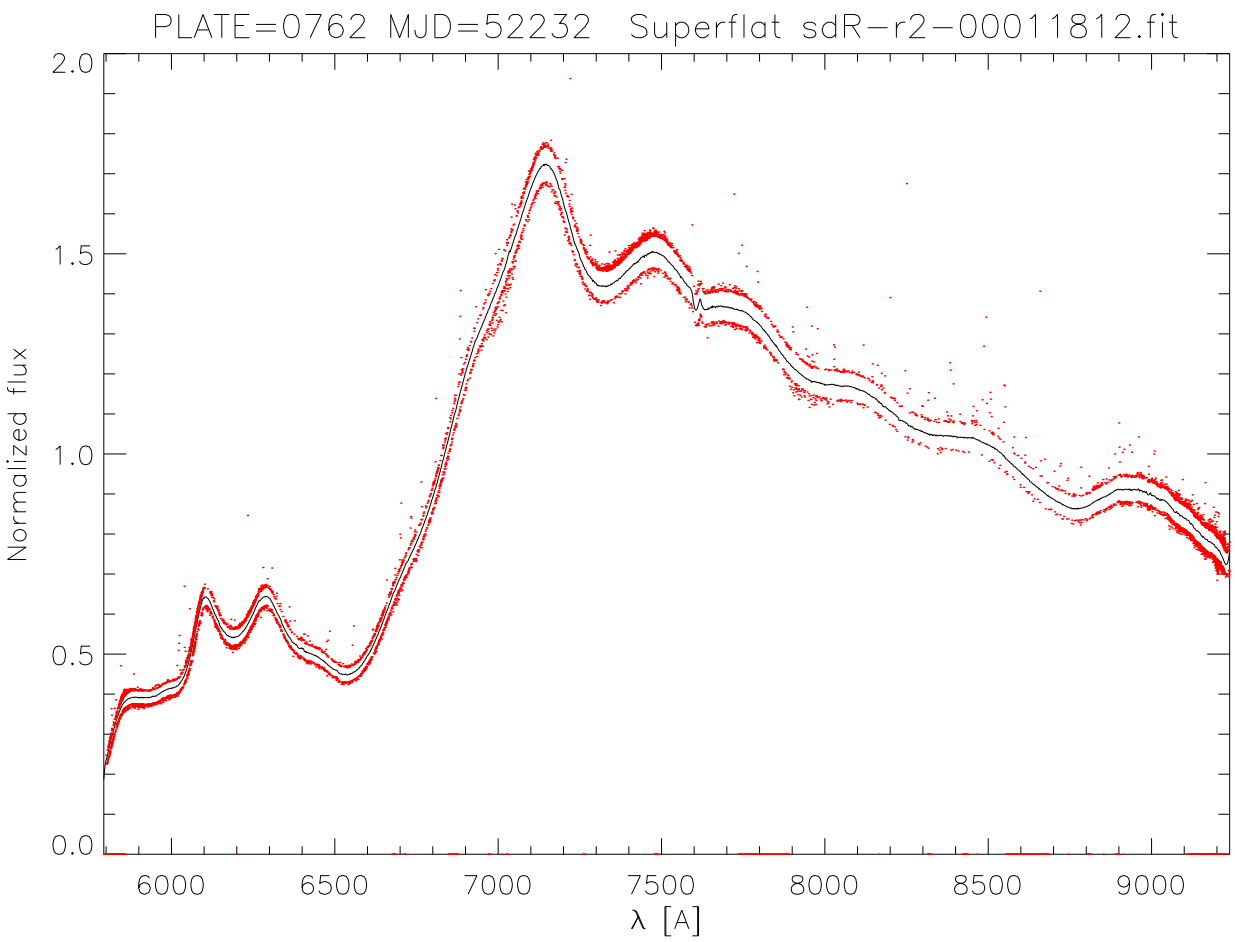

PLATE=0762 MJD=52232 sdR-r1-00011817.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 6.10 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

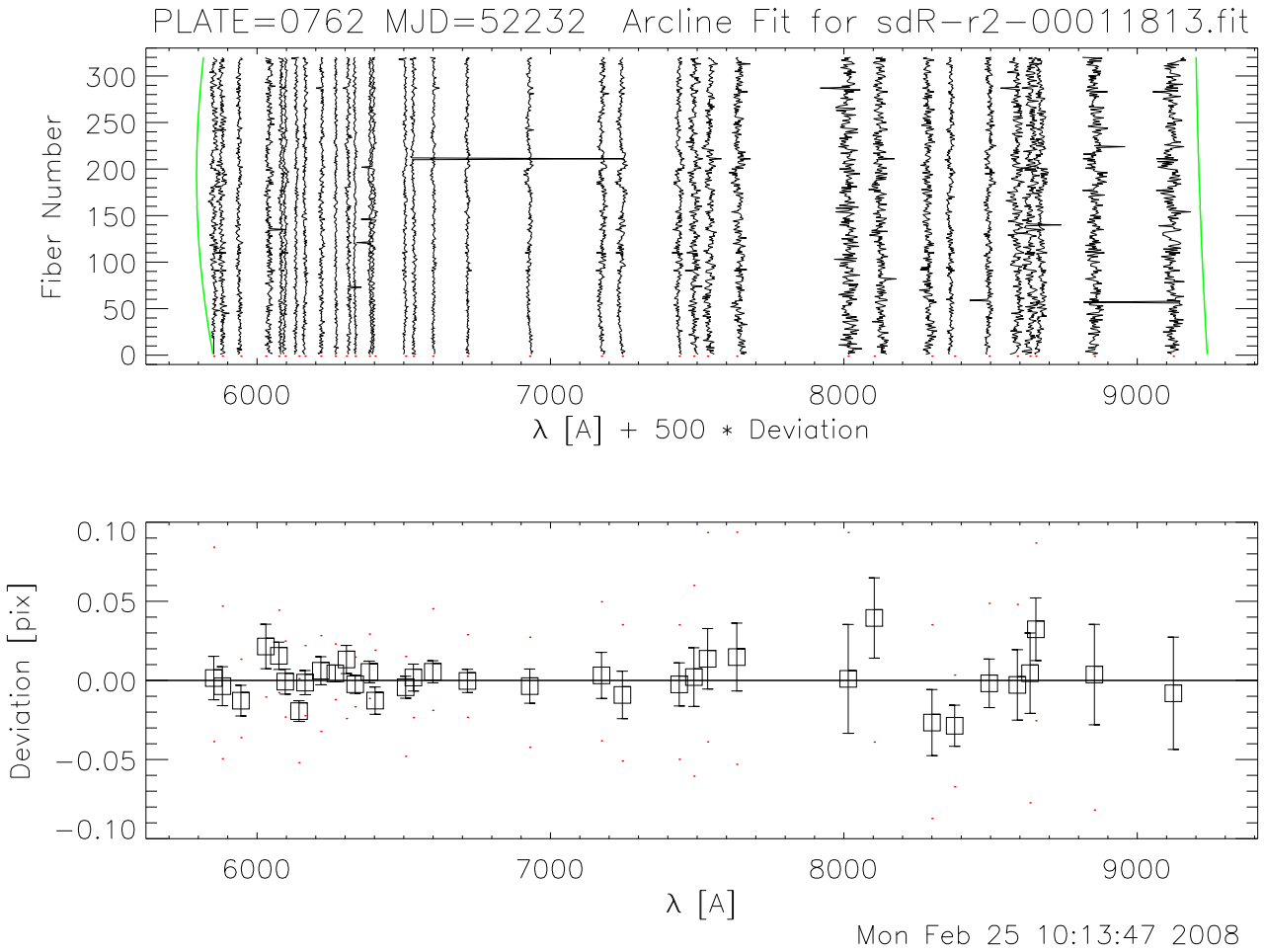

PLATE=0762 MJD=52232 sdR-r1-00011817.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.01 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

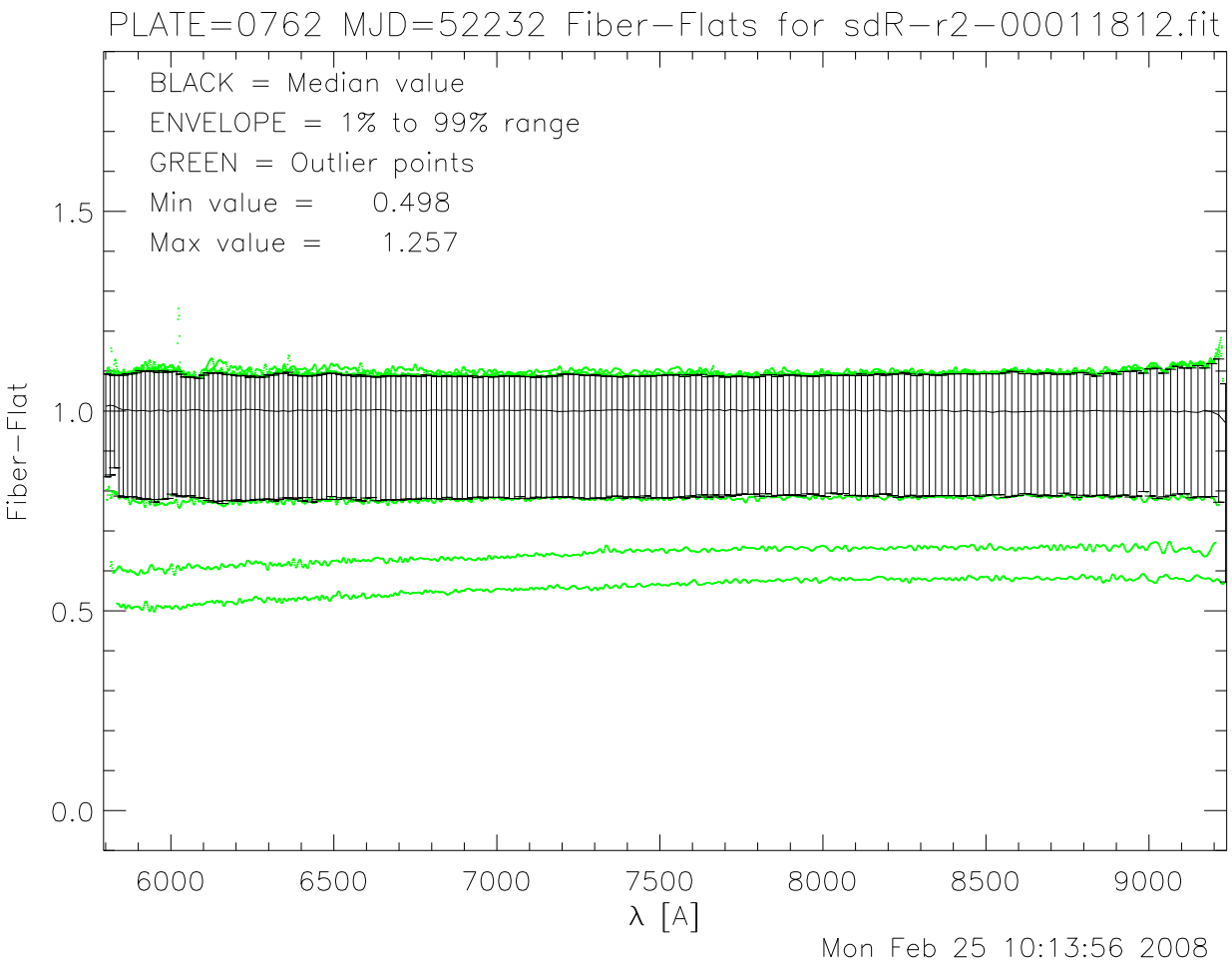

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

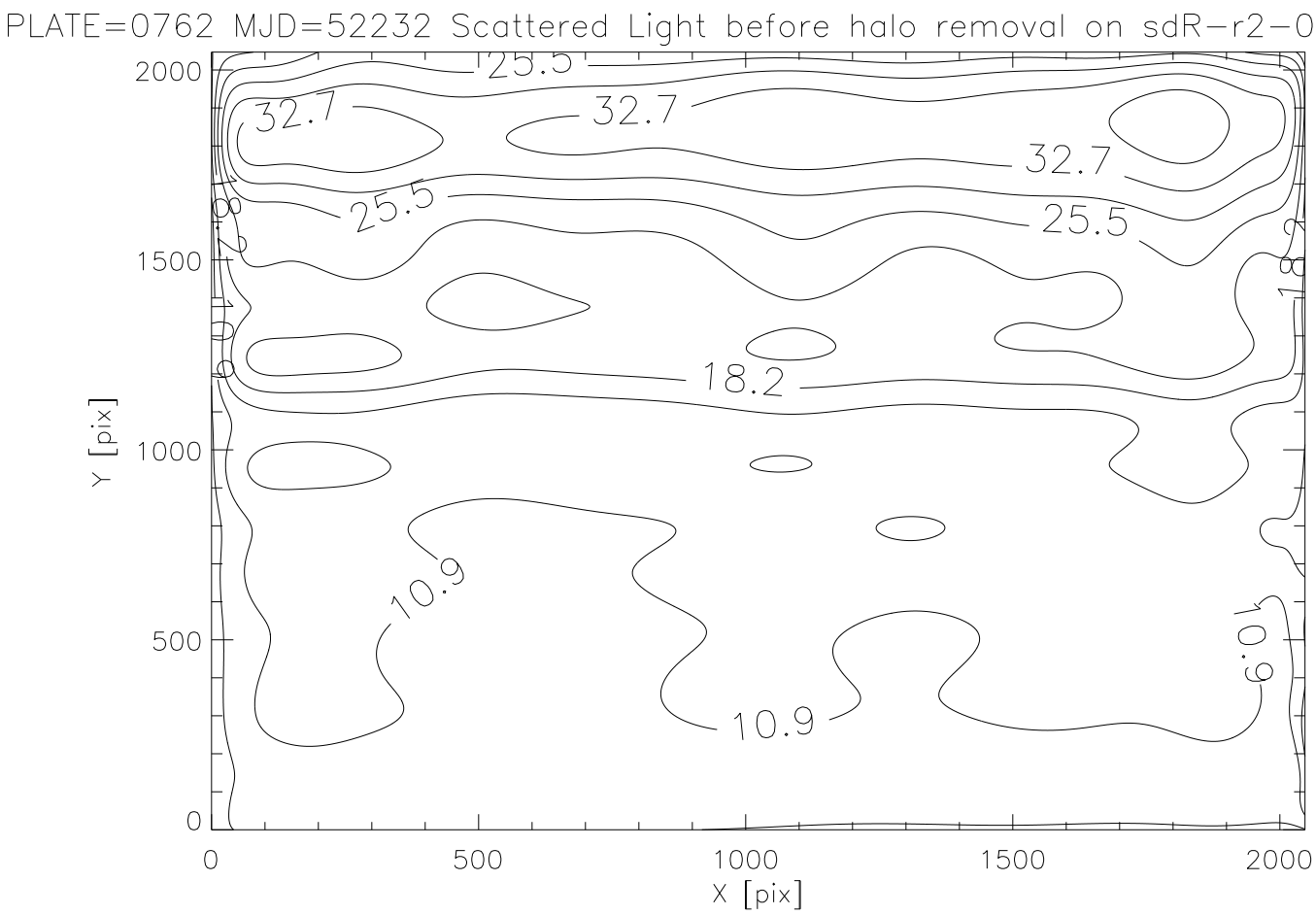

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

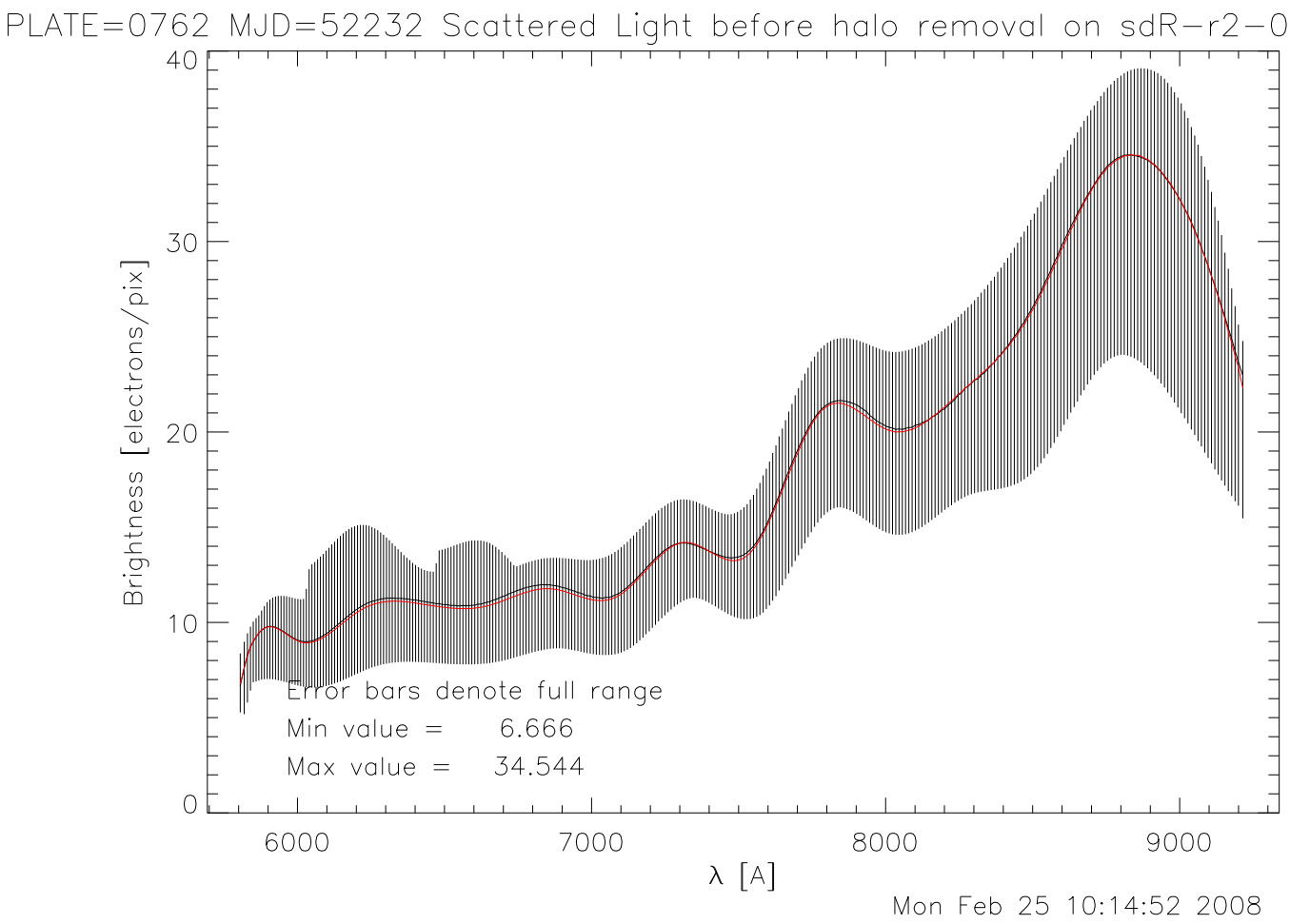

PLATE=0762 MJD=52232 flat extraction chi^2 for sdR−r2−00011812.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

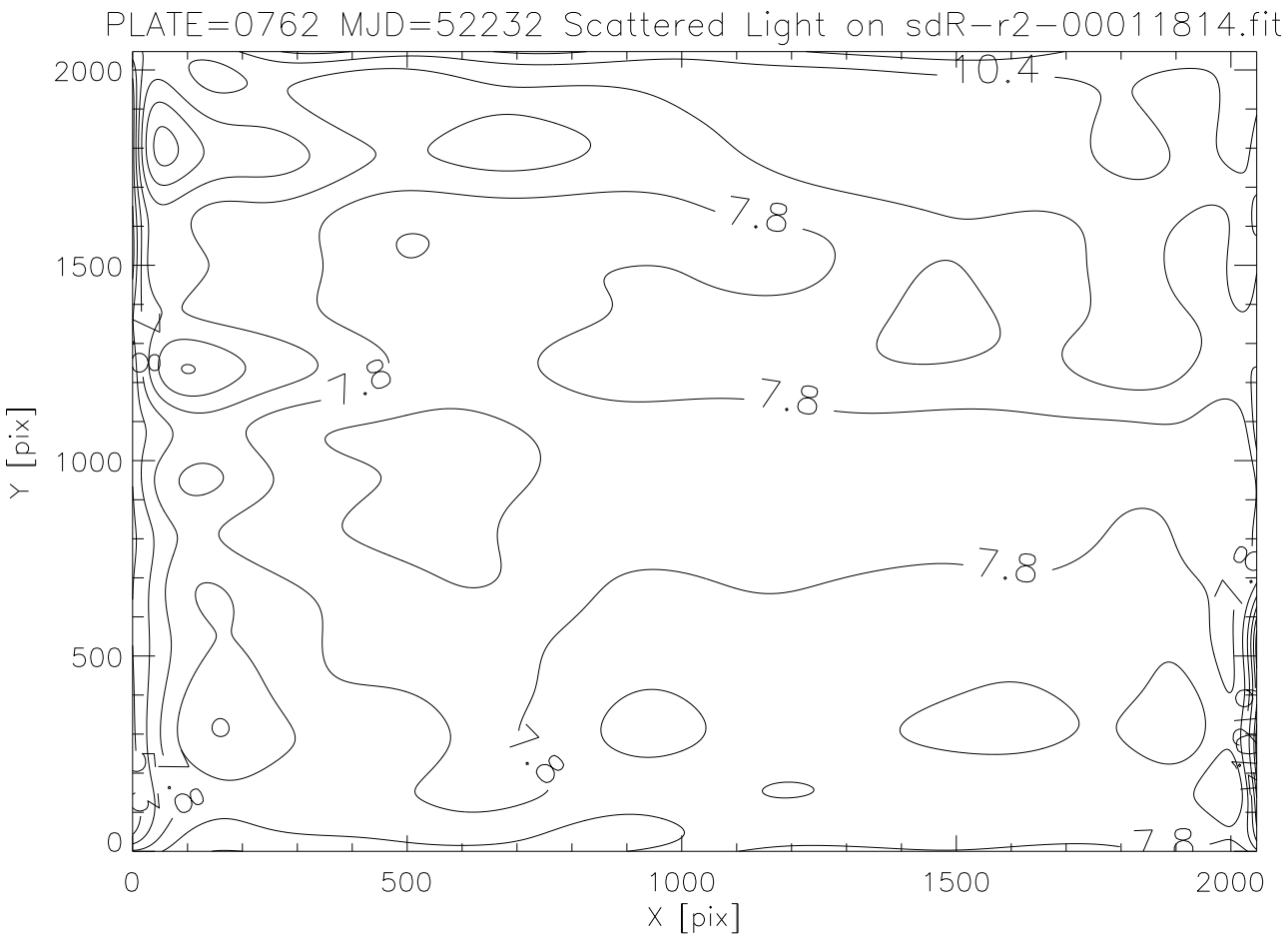

PLATE=0762 MJD=52232 Superflat sdR-r2-00011812.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

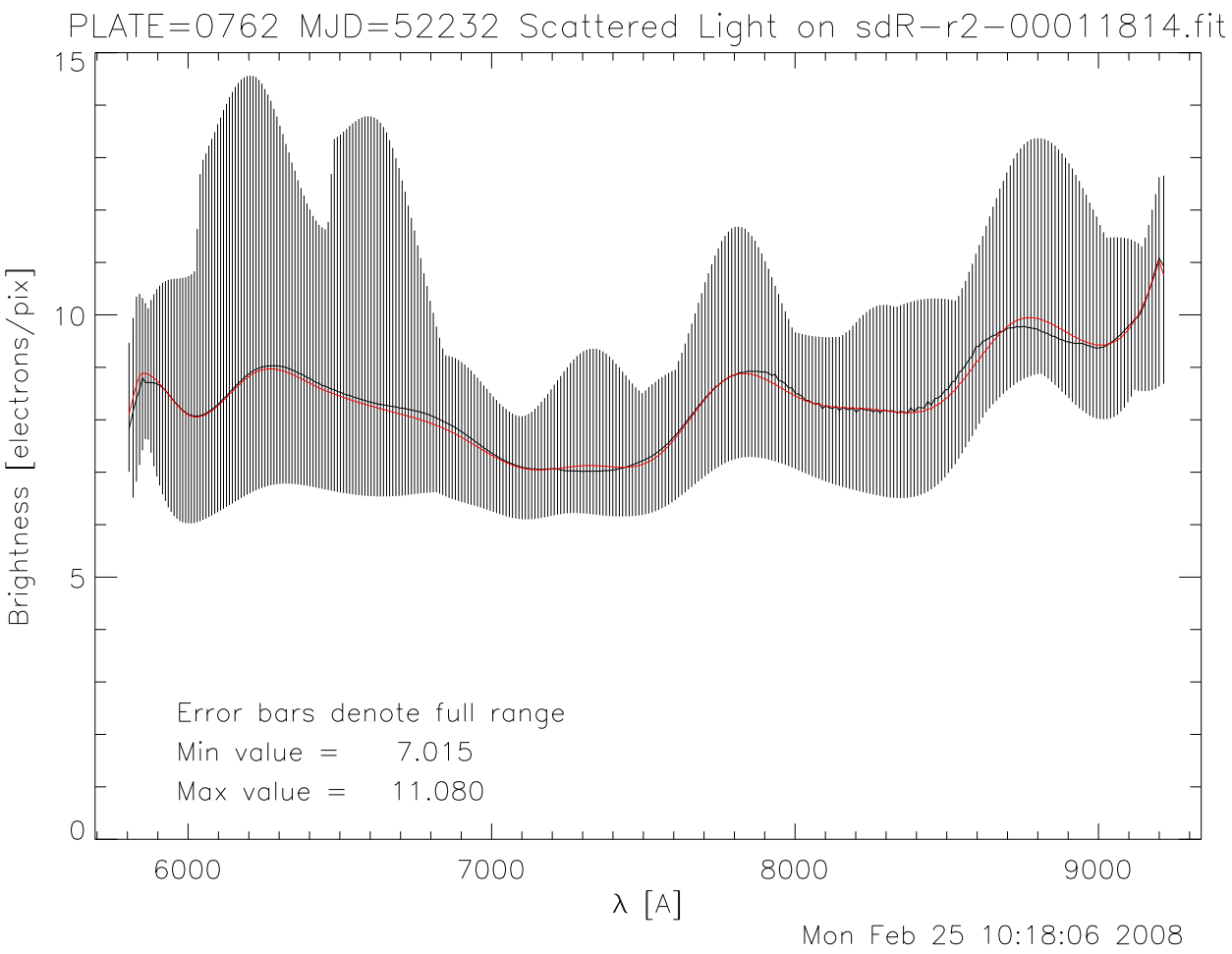

PLATE=0762 MJD=52232 Arcline Fit for sdR-r2-00011813.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
0.10
0.05
0.00
−0.05
−0.10
Deviation [pix]
6000
7000
8000
9000
λ [A]
Mon Feb 25 10:13:47 2008

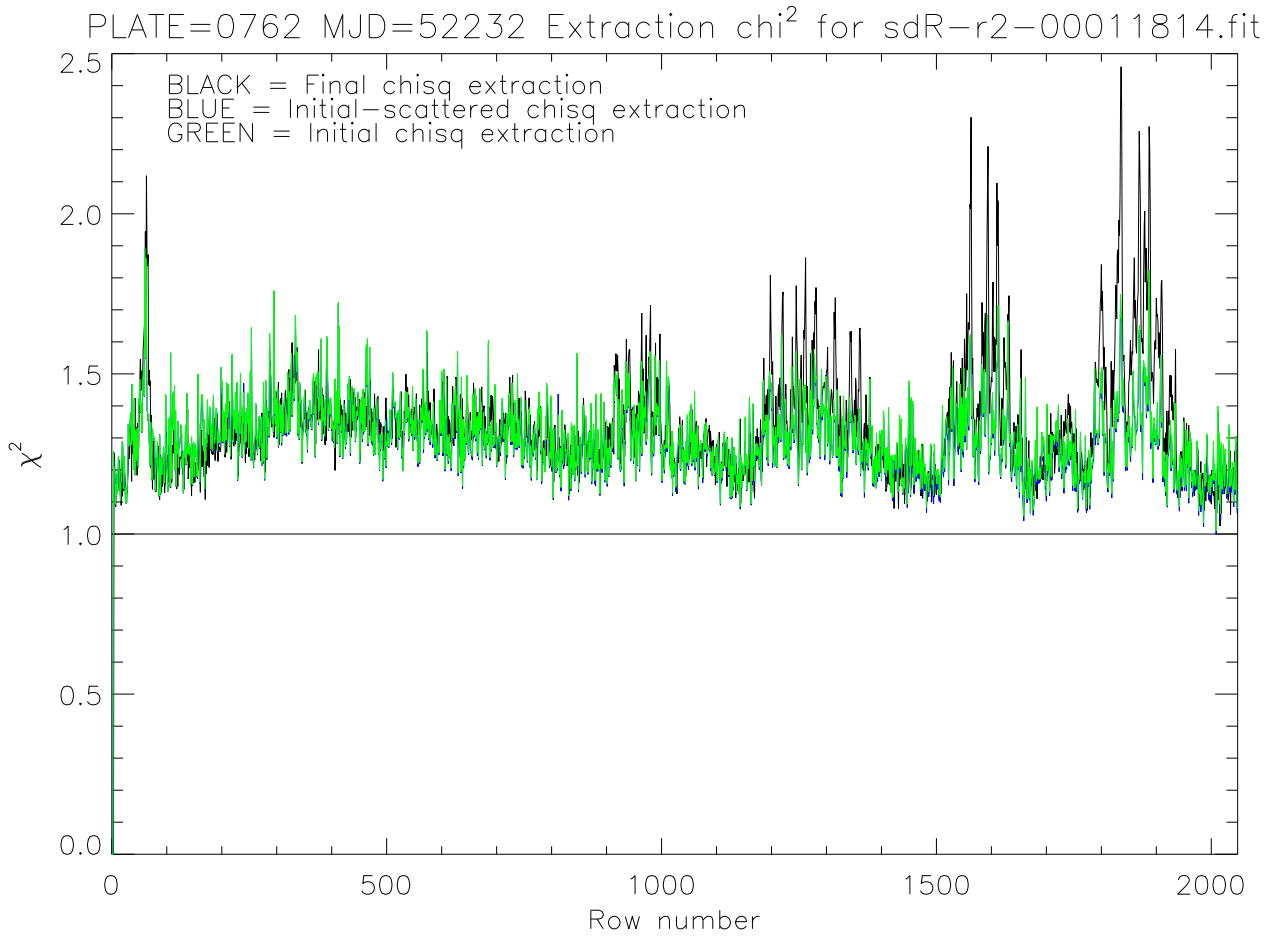

PLATE=0762 MJD=52232 Fiber-Flats for sdR-r2-00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.498
Max value = 1.257
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 10:13:56 2008

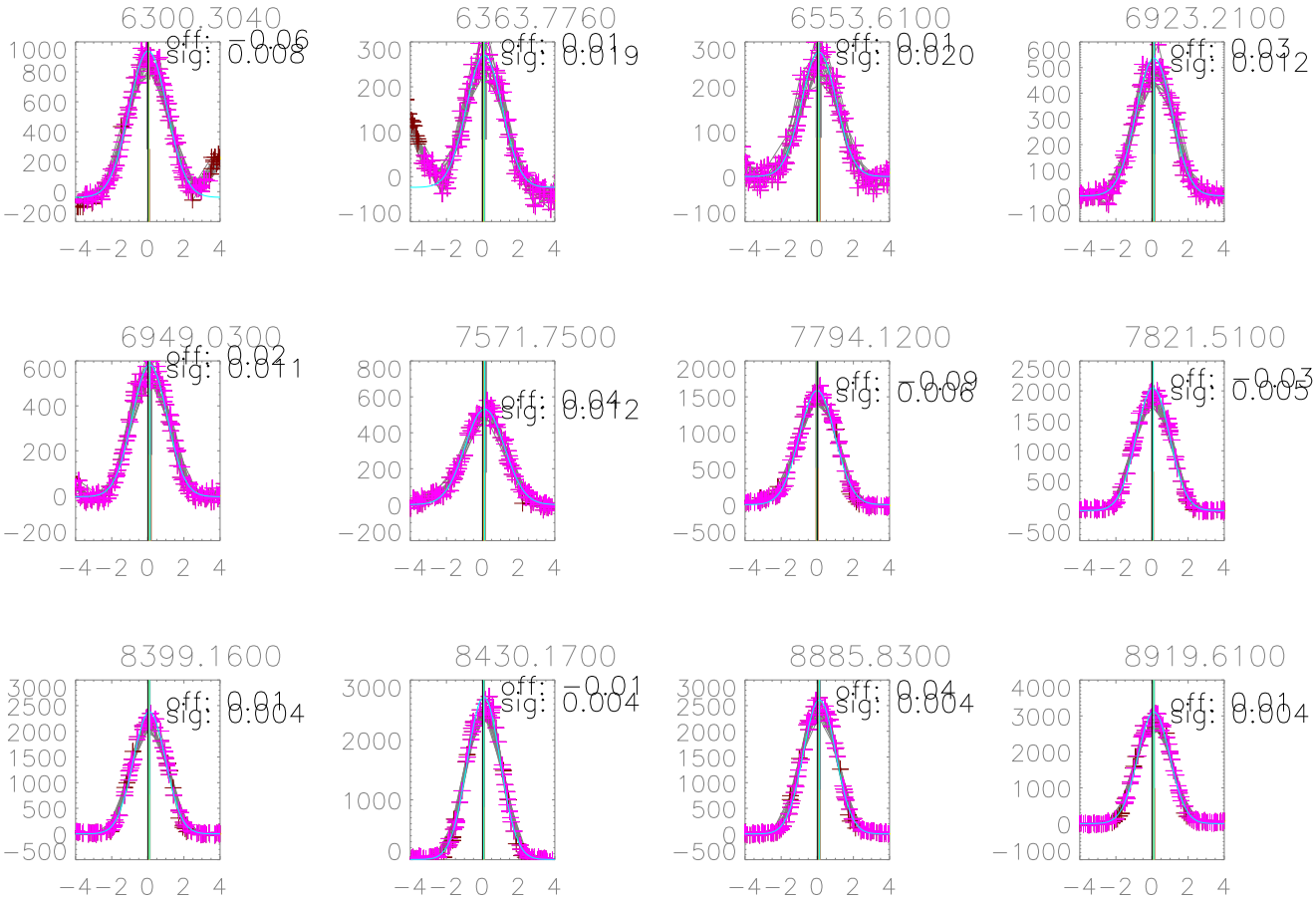

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r2-00011814.fi
25.5
32.7
32.7
32.7
25.5
25.5
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

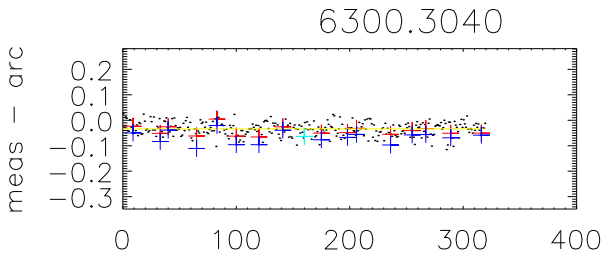

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r2-00011814.fi
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.666
Max value = 34.544
Mon Feb 25 10:14:52 2008

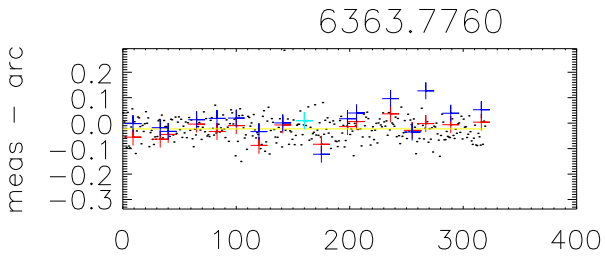

PLATE=0762 MJD=52232 Scattered Light on sdR-r2-00011814.fit
10.4
7.8
7.8
7.8
7.8
7.8
7.8
7.8
7.8
Y [pix]
X [pix]
0
500
1000
1500
2000

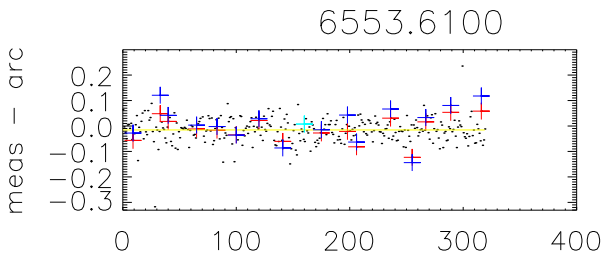

PLATE=0762 MJD=52232 Scattered Light on sdR-r2-00011814.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.015
Max value = 11.080
Mon Feb 25 10:18:06 2008

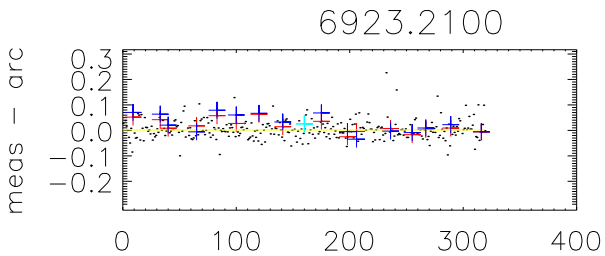

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-r2-00011814.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

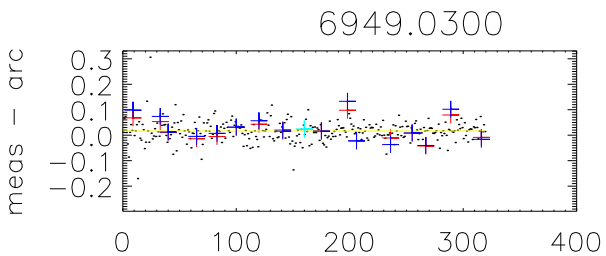

6300.3040
off: −0.06
sig: 0.008
6363.7760
off: 0.01
sig: 0.019
6553.6100
off: 0.01
sig: 0.020
6923.2100
off: 0.03
sig: 0.012
6949.0300
off: 0.02
sig: 0.011
7571.7500
off: 0.04
sig: 0.012
7794.1200
off: −0.09
sig: 0.006
7821.5100
off: −0.03
sig: 0.005
8399.1600
off: 0.01
sig: 0.004
8430.1700
off: −0.01
sig: 0.004
8885.8300
off: 0.04
sig: 0.004
8919.6100
off: 0.01
sig: 0.004

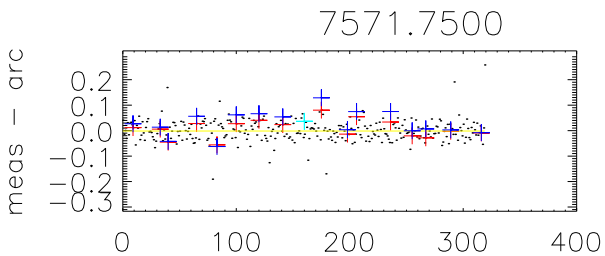

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

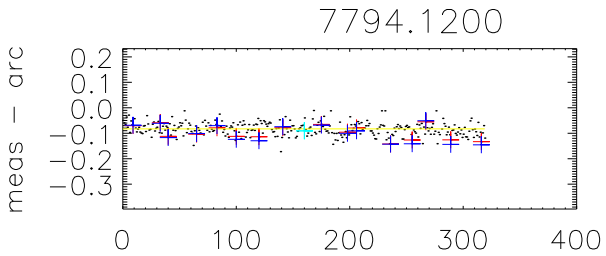

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

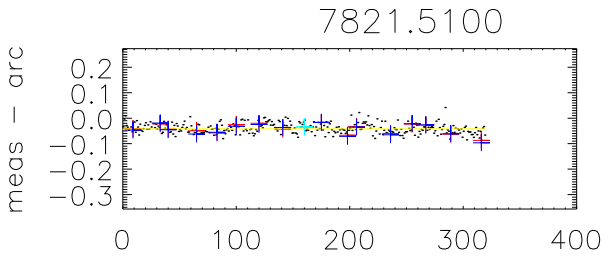

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

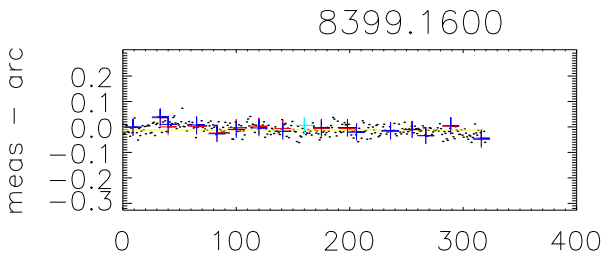

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

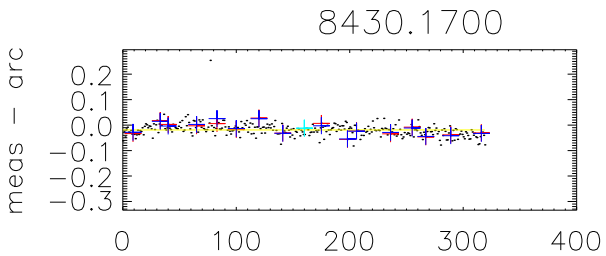

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

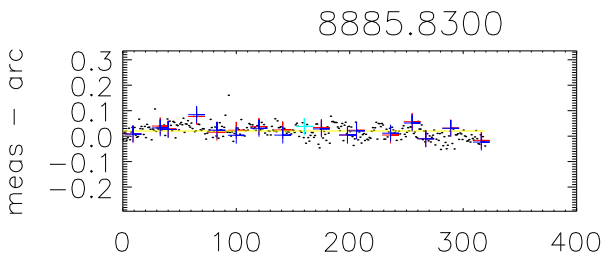

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

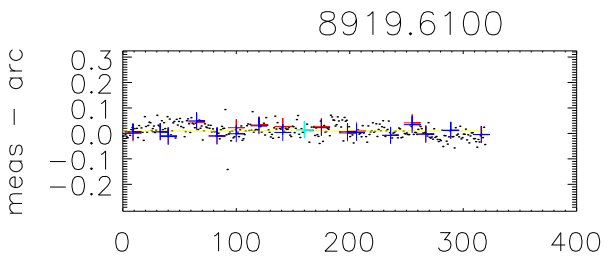

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

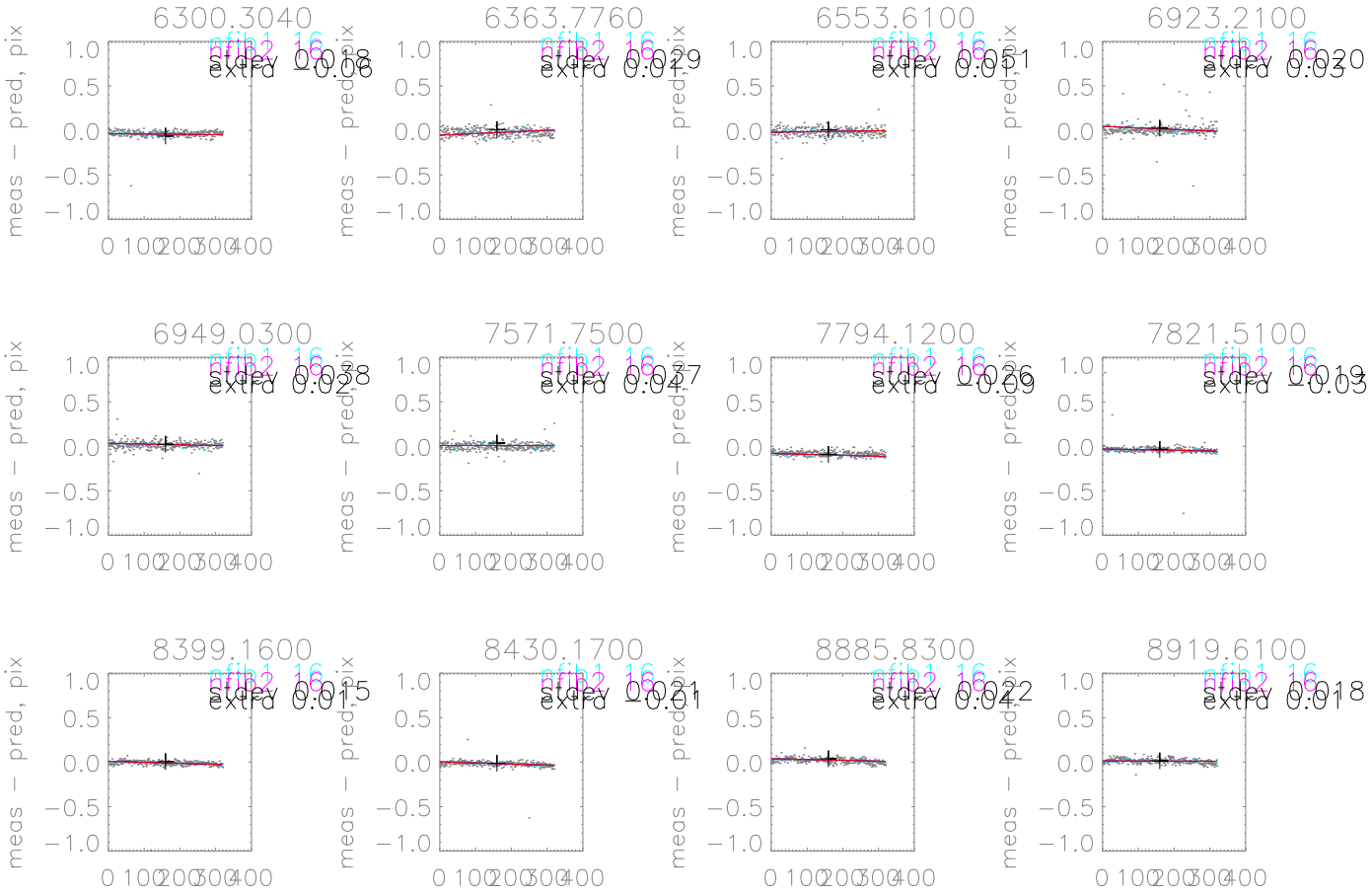

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

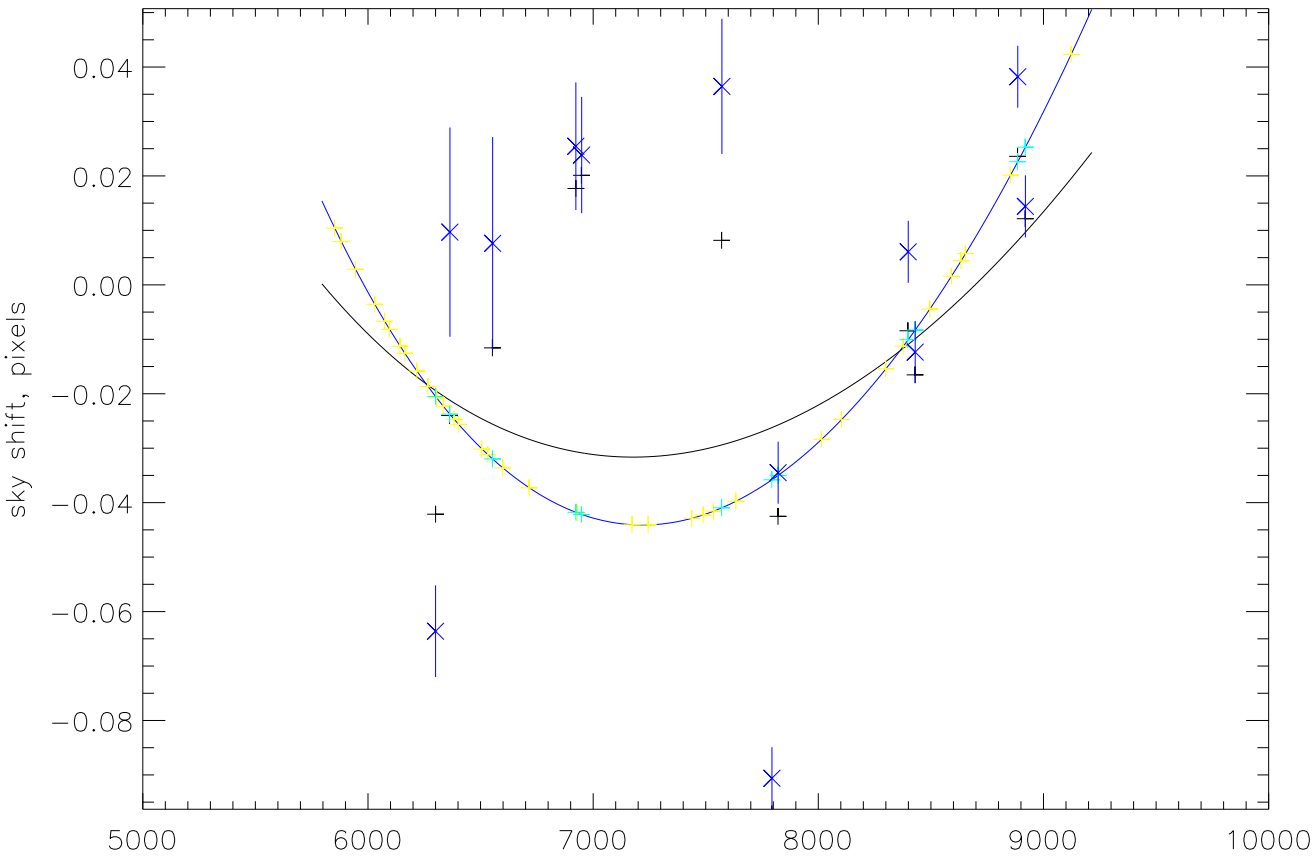

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

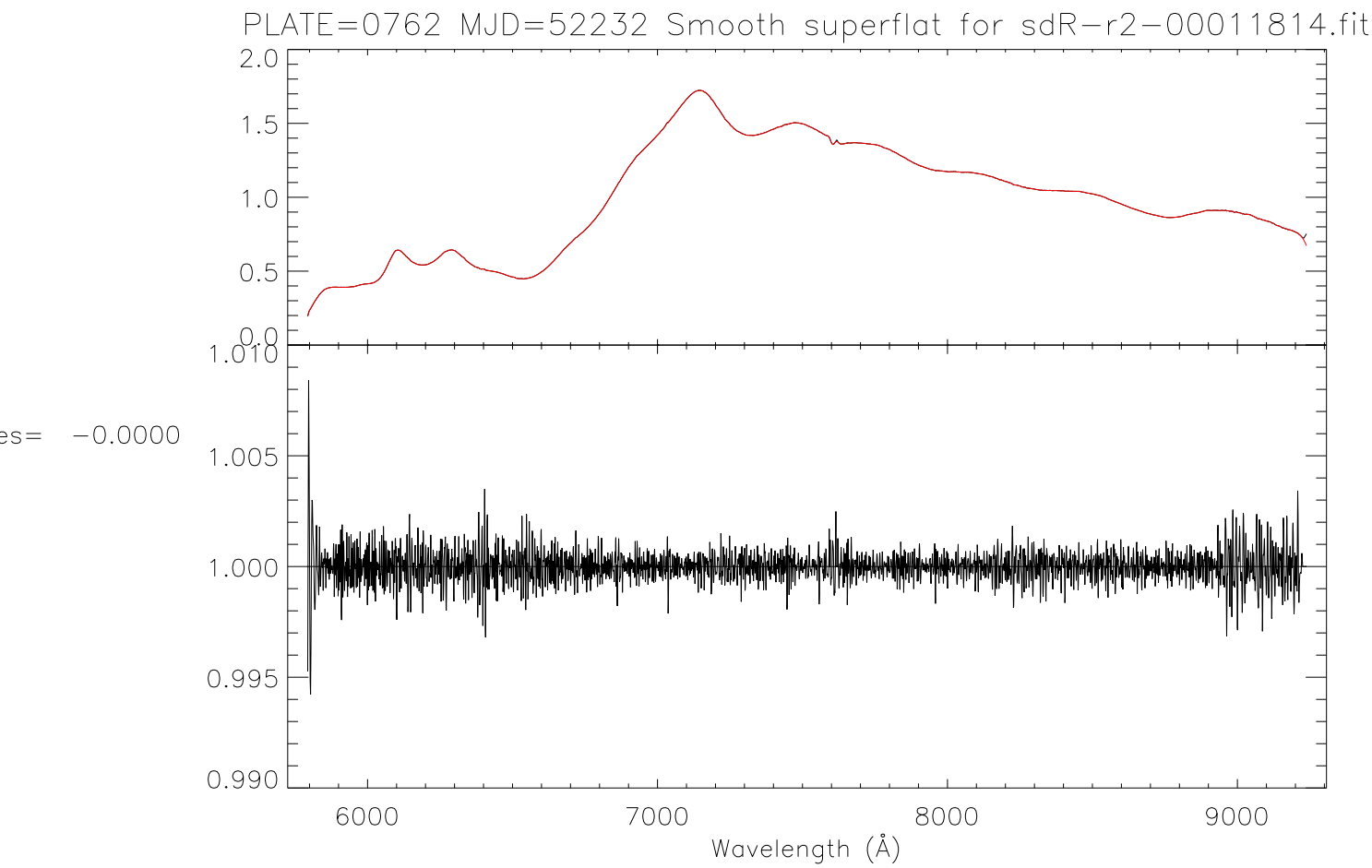

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

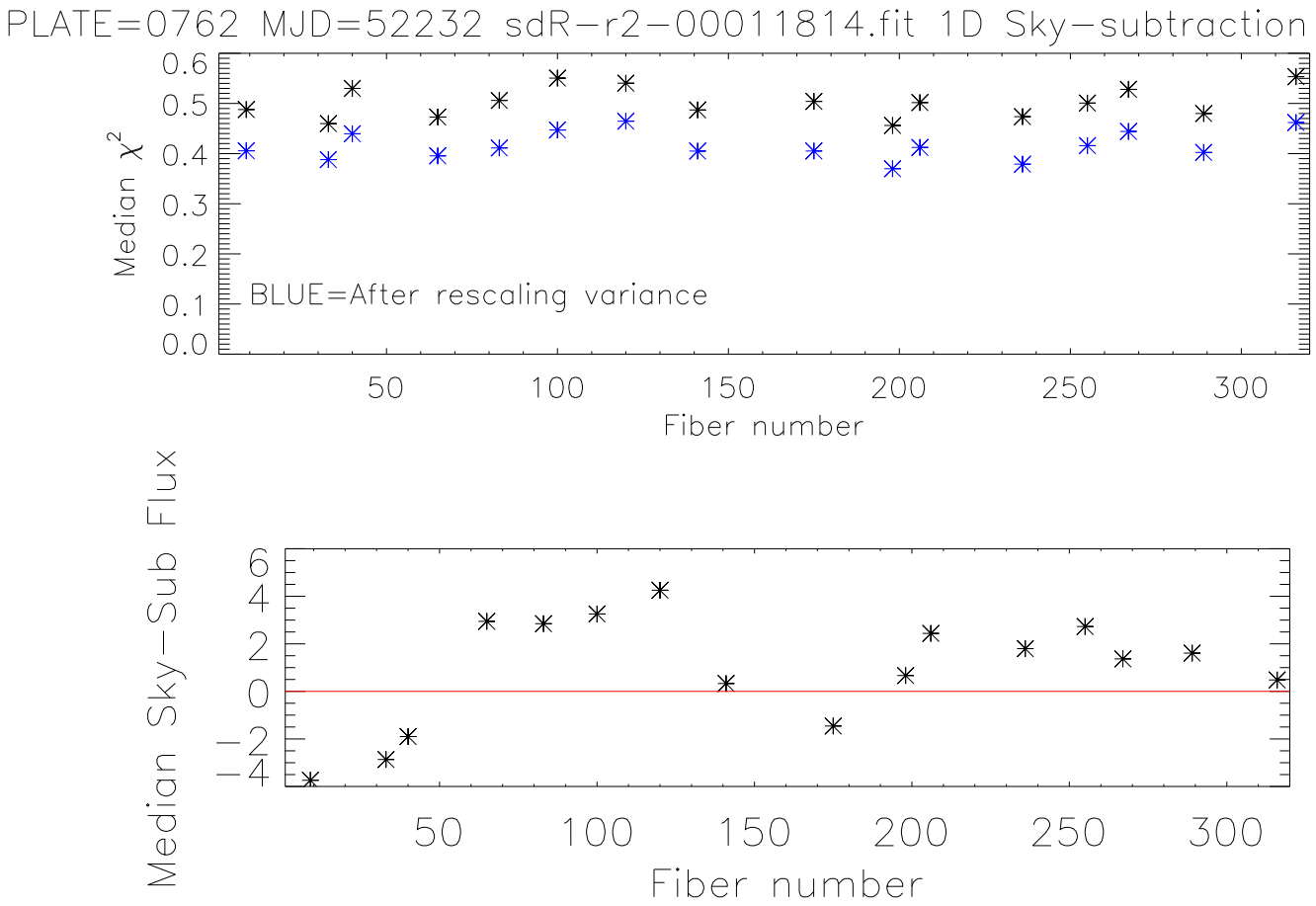

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

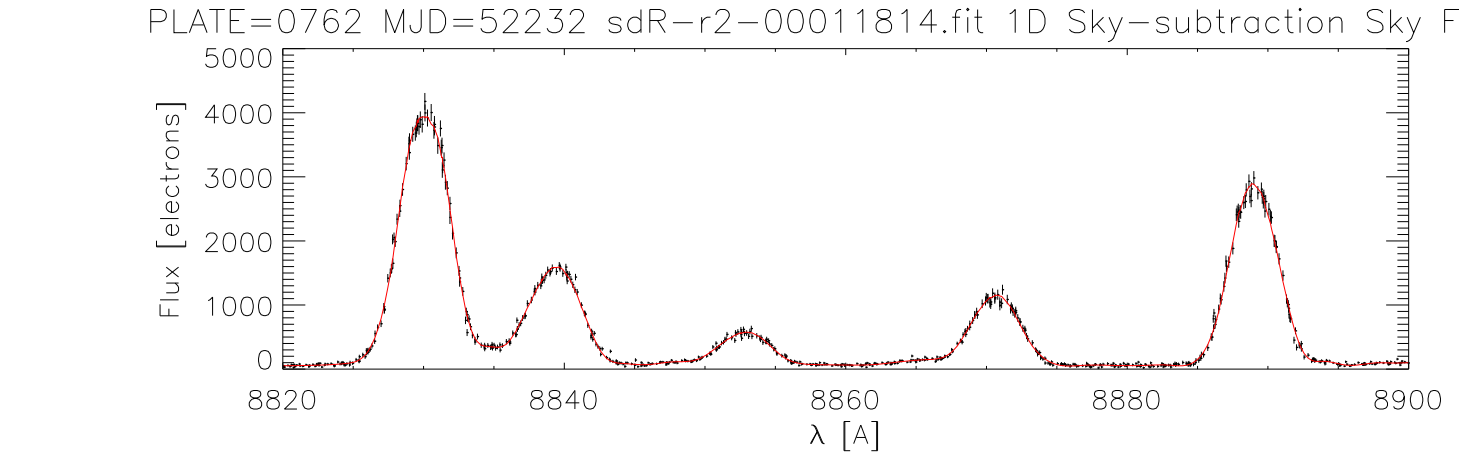

6300.3040
stdev 0.018
extra −0.06
6363.7760
stdev 0.029
extra 0.01
6553.6100
stdev 0.051
extra 0.01
6923.2100
stdev 0.020
extra 0.03
6949.0300
stdev 0.038
extra 0.02
7571.7500
stdev 0.037
extra 0.04
7794.1200
stdev 0.026
extra −0.09
7821.5100
stdev 0.019
extra −0.03
8399.1600
stdev 0.015
extra 0.01
8430.1700
stdev 0.021
extra −0.01
8885.8300
stdev 0.022
extra 0.04
8919.6100
stdev 0.018
extra 0.01
meas − pred, pix
mfb32 16

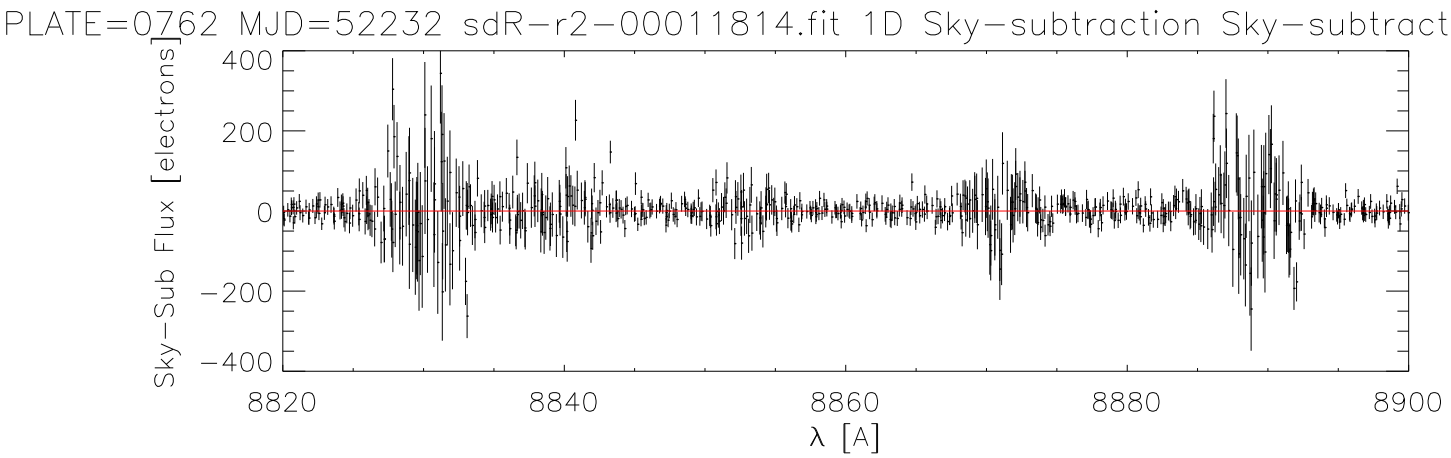

sky shift, pixels
0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
5000
6000
7000
8000
9000
10000

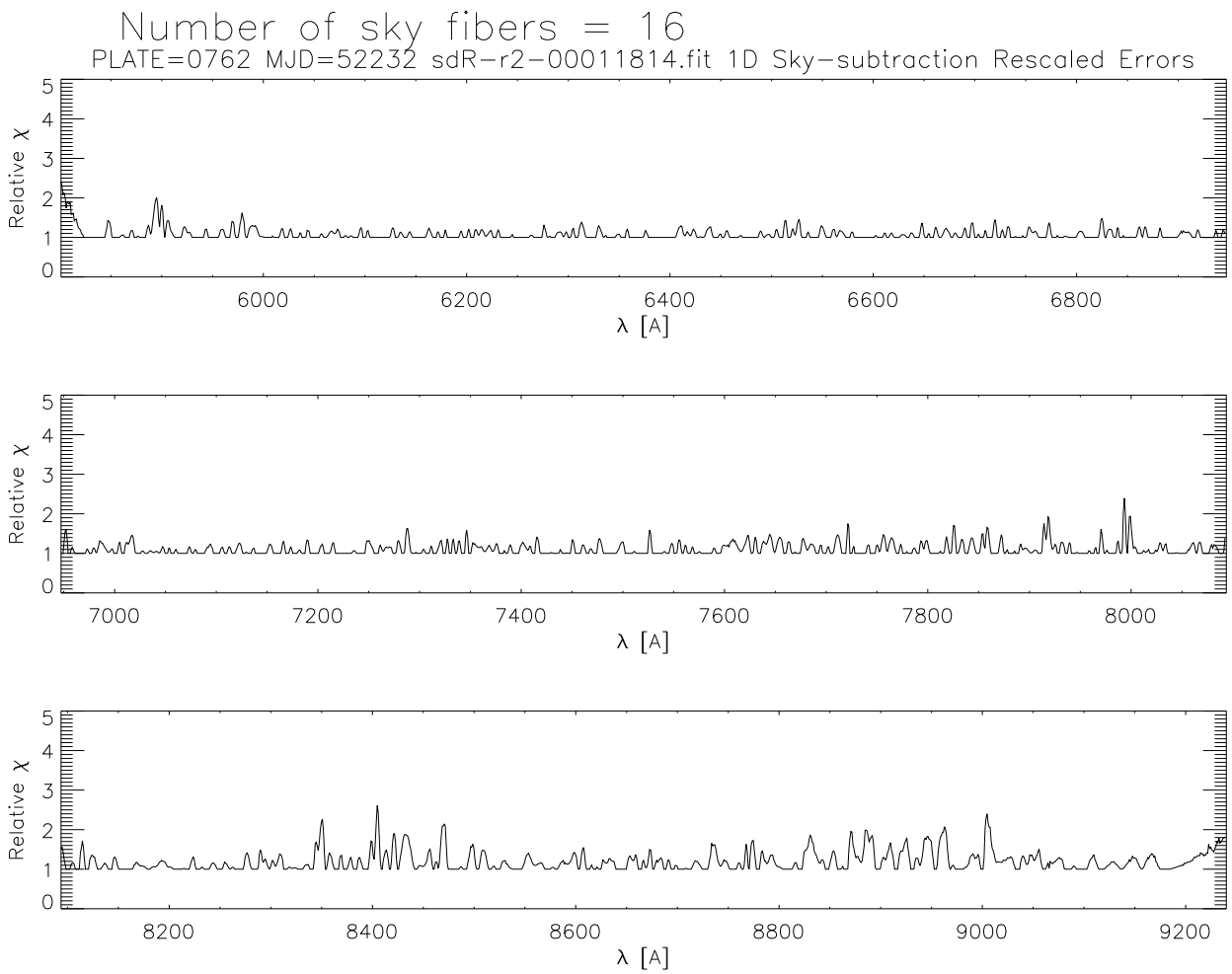

PLATE=0762 MJD=52232 Smooth superflat for sdR-r2-00011814.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

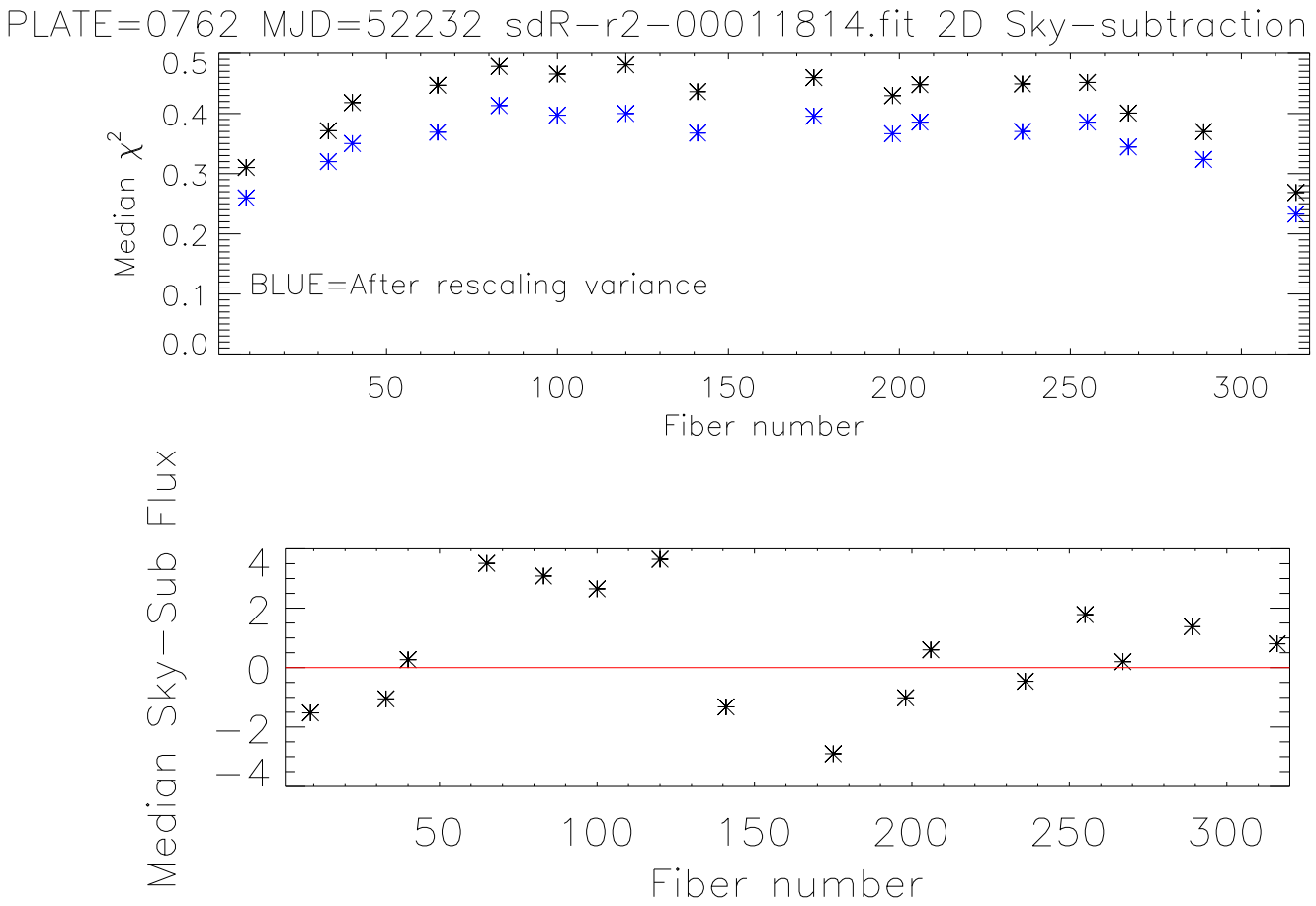
es= −0.0000

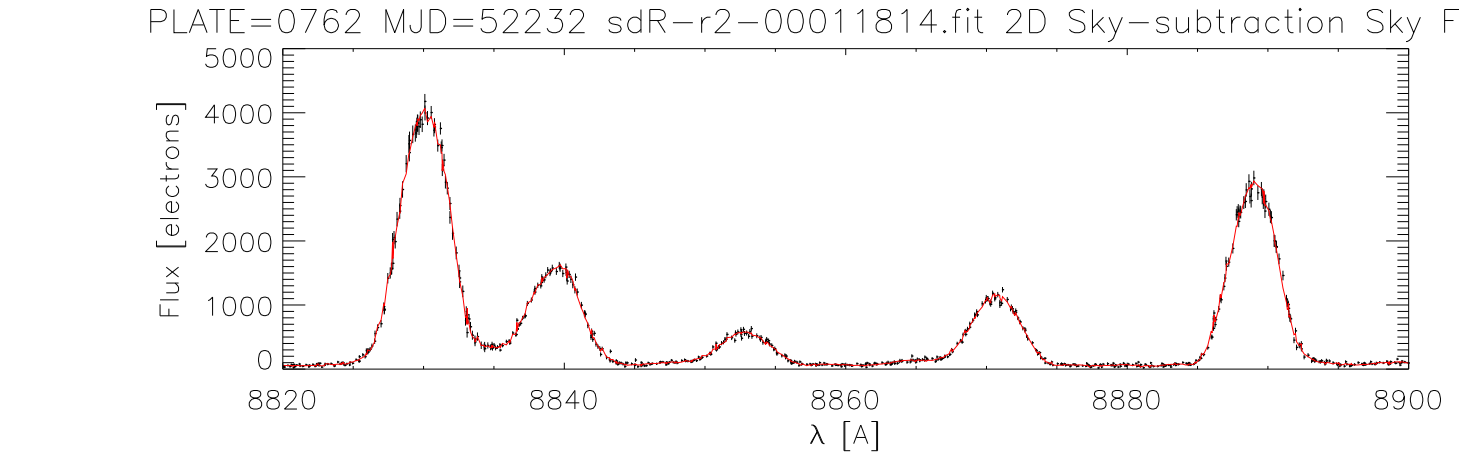

PLATE=0762 MJD=52232 sdR-r2-00011814.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

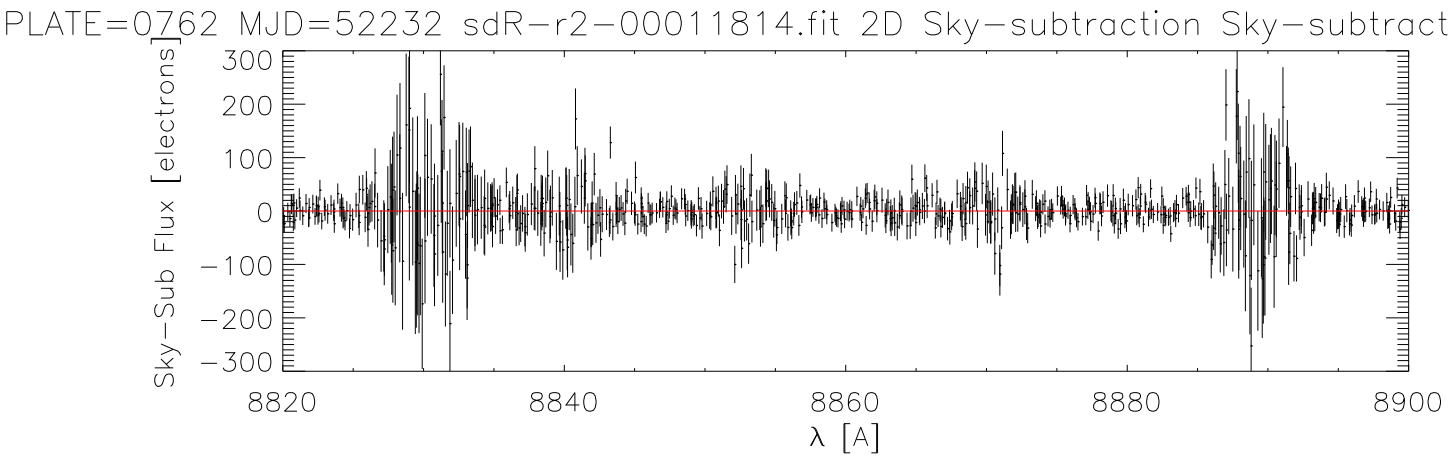

PLATE=0762 MJD=52232 sdR-r2-00011814.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

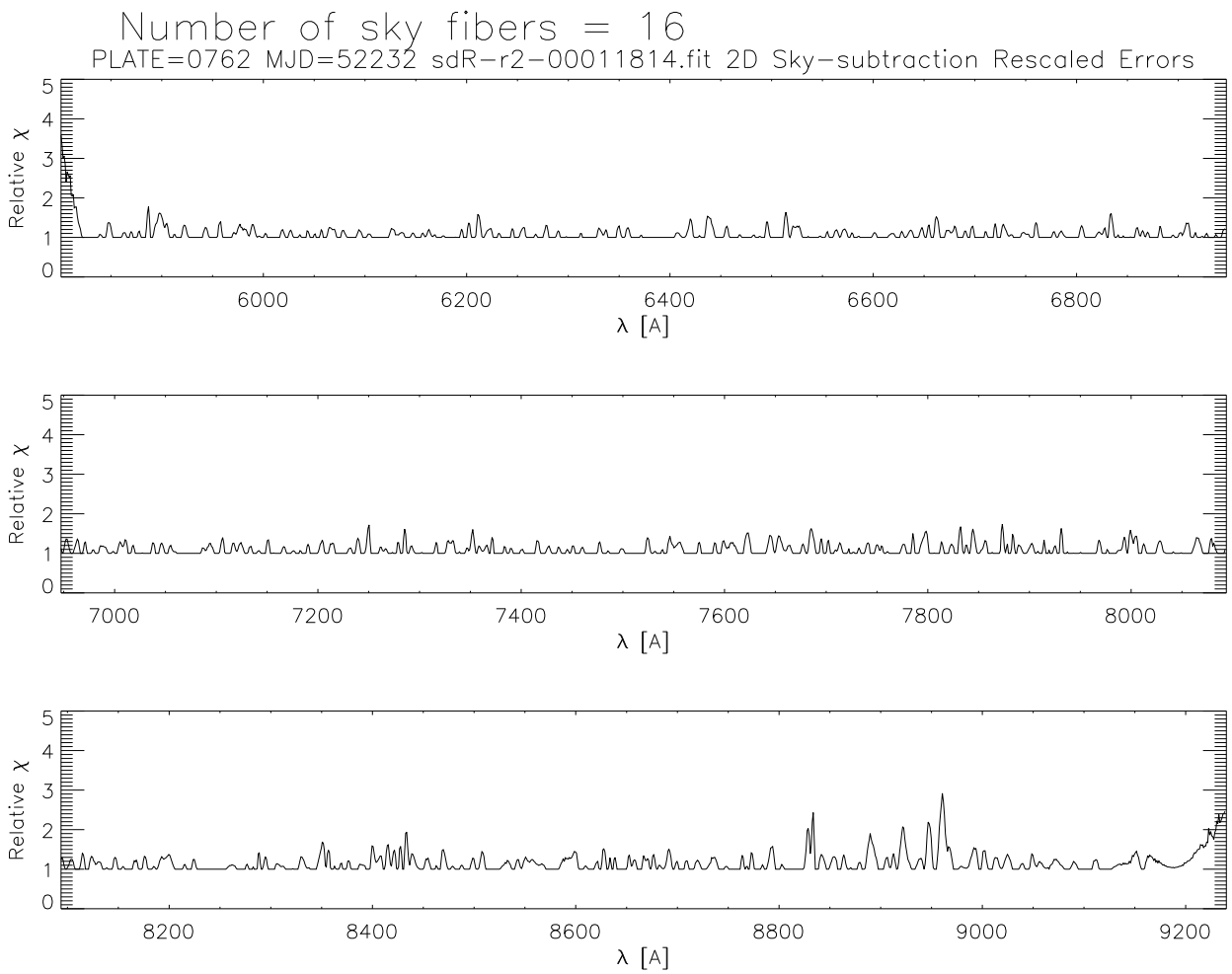

PLATE=0762 MJD=52232 sdR-r2-00011814.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

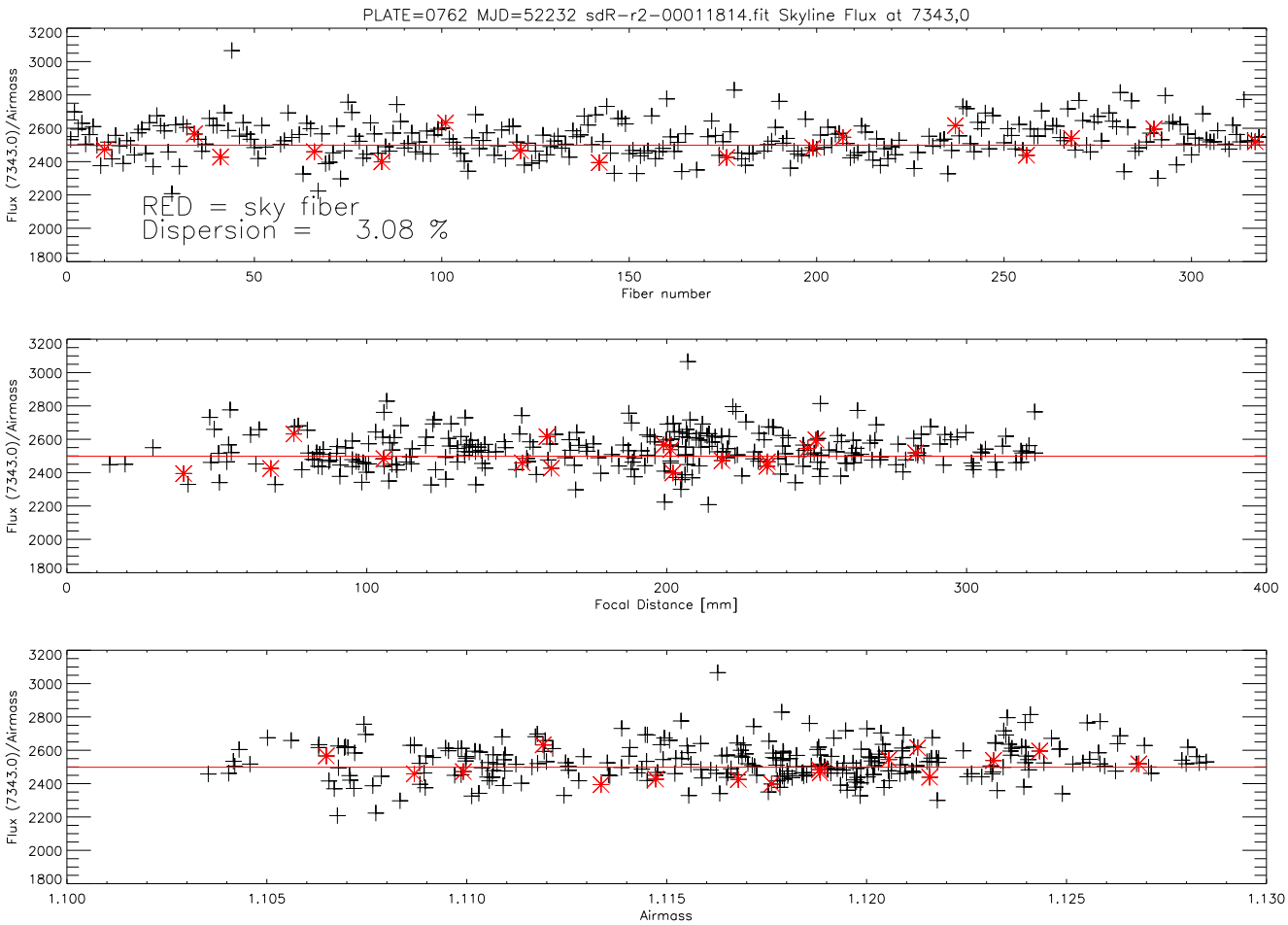

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-r2-00011814.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

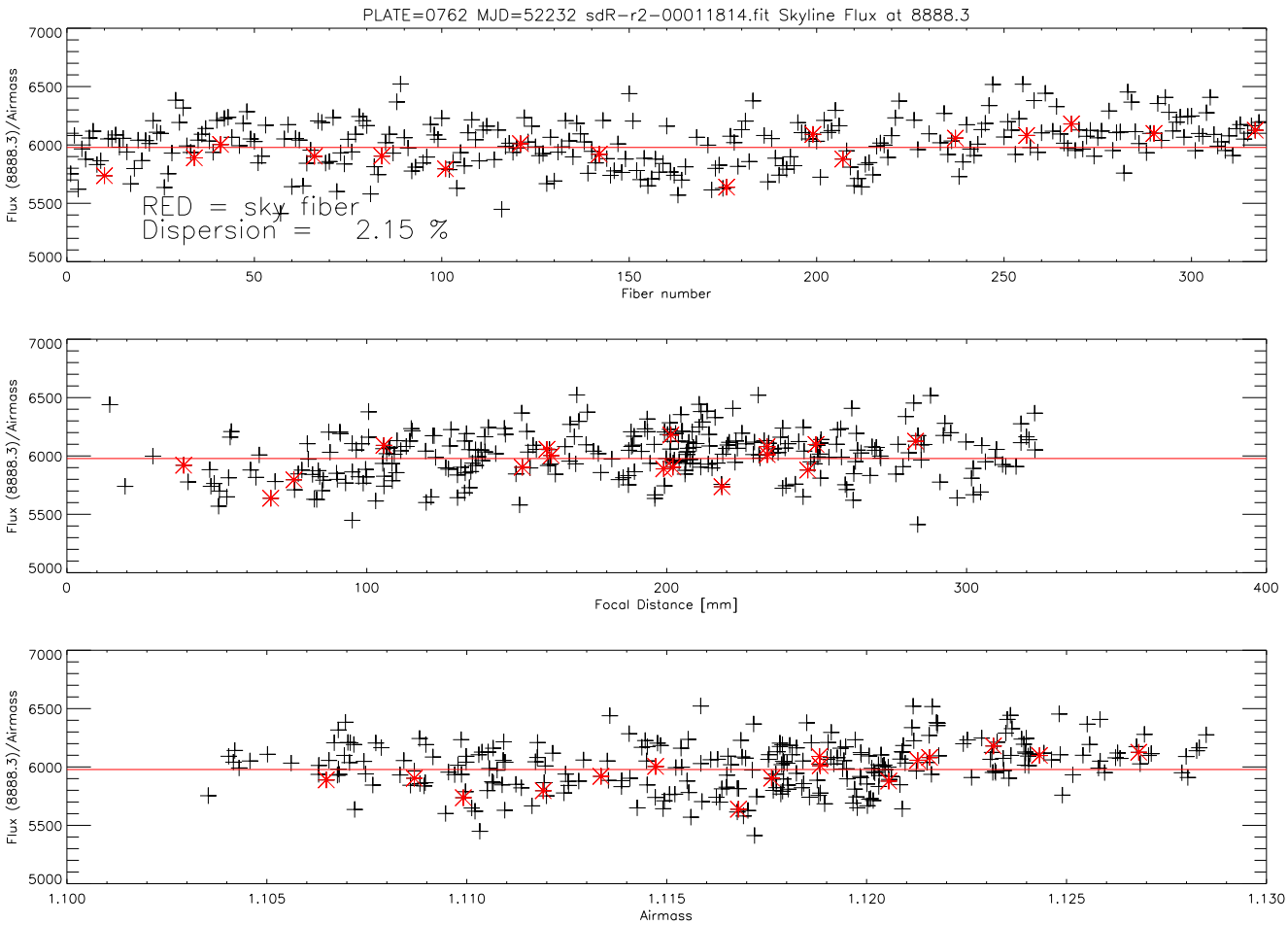

PLATE=0762 MJD=52232 sdR-r2-00011814.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

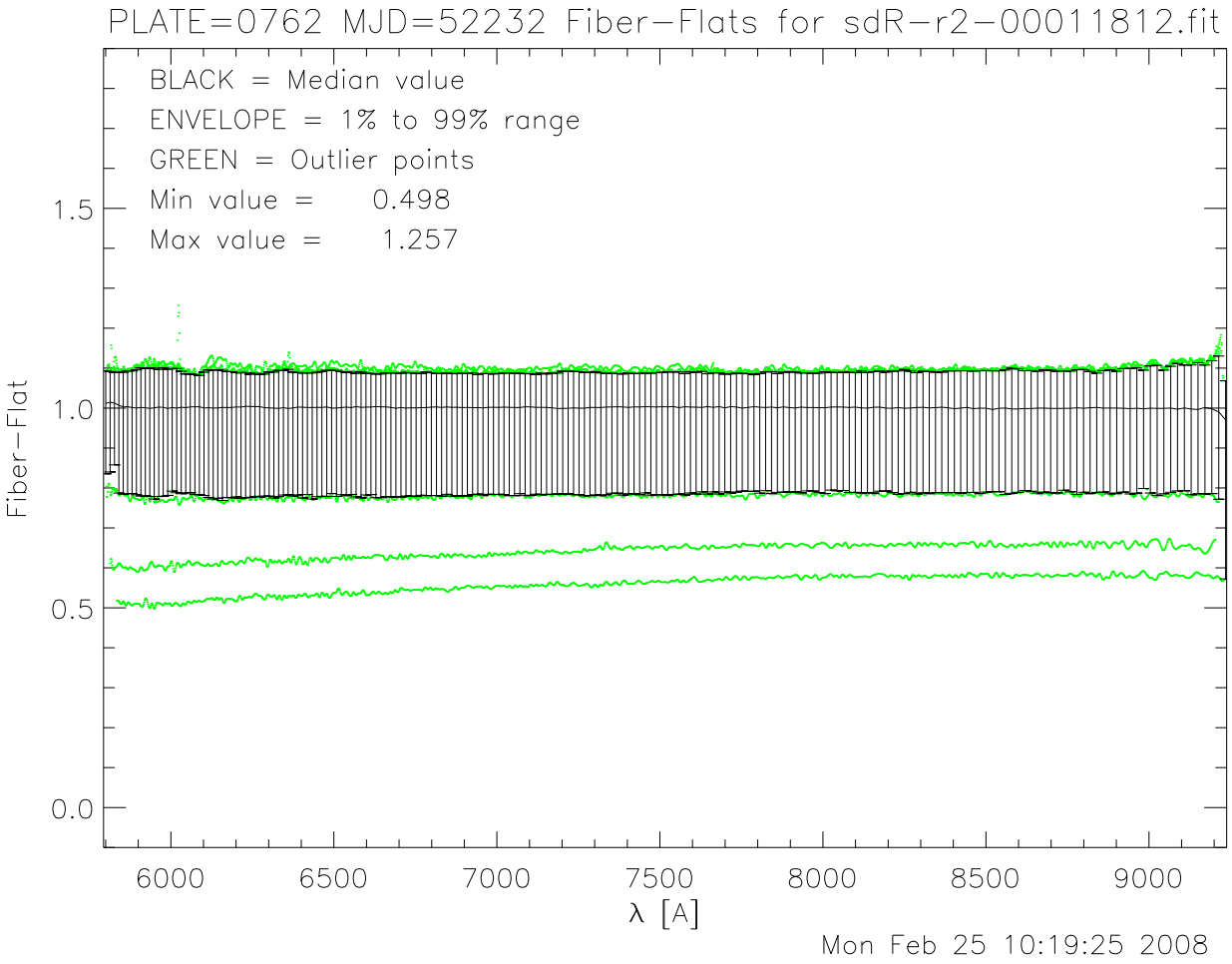

PLATE=0762 MJD=52232 sdR-r2-00011814.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

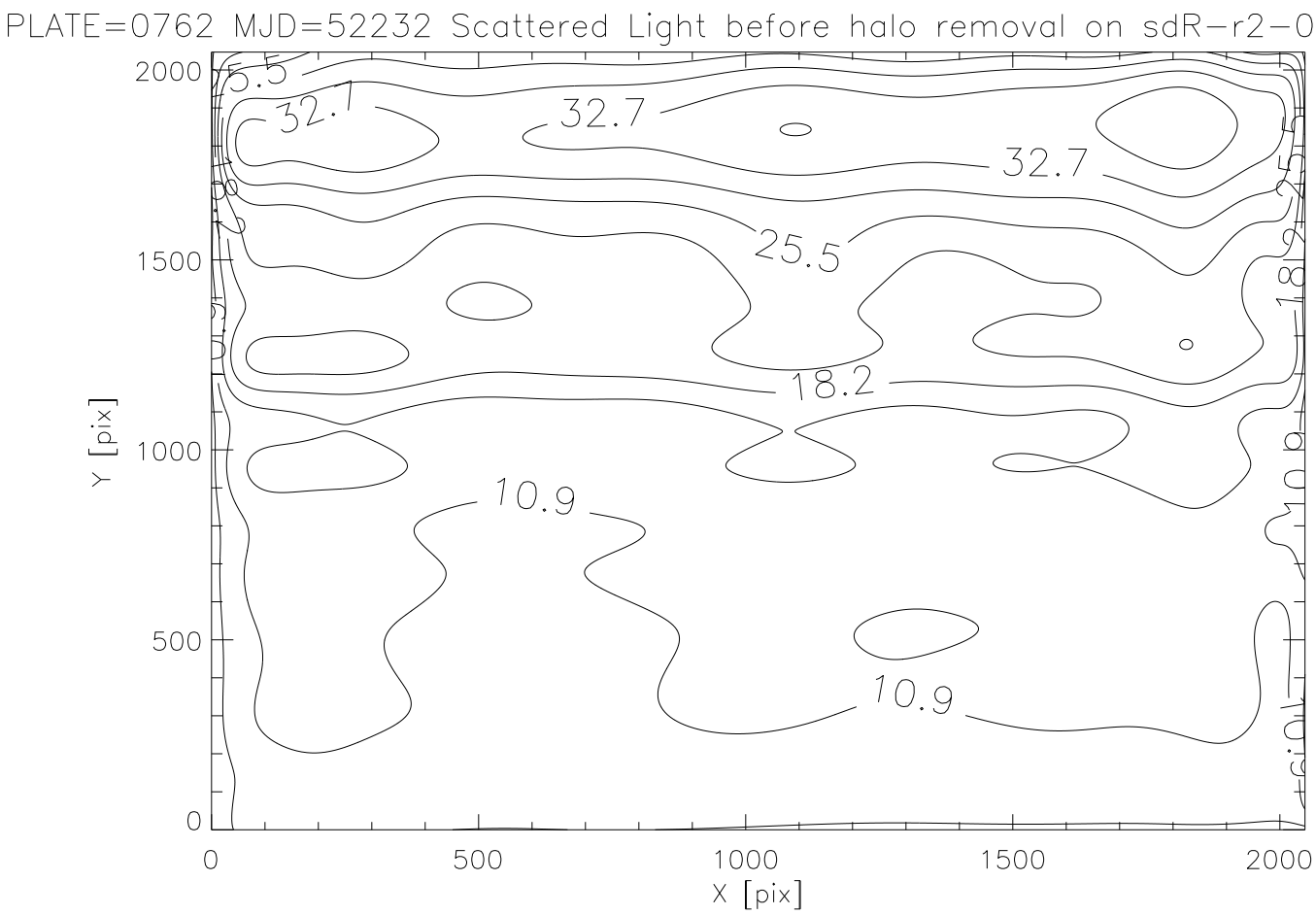

PLATE=0762 MJD=52232 sdR-r2-00011814.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

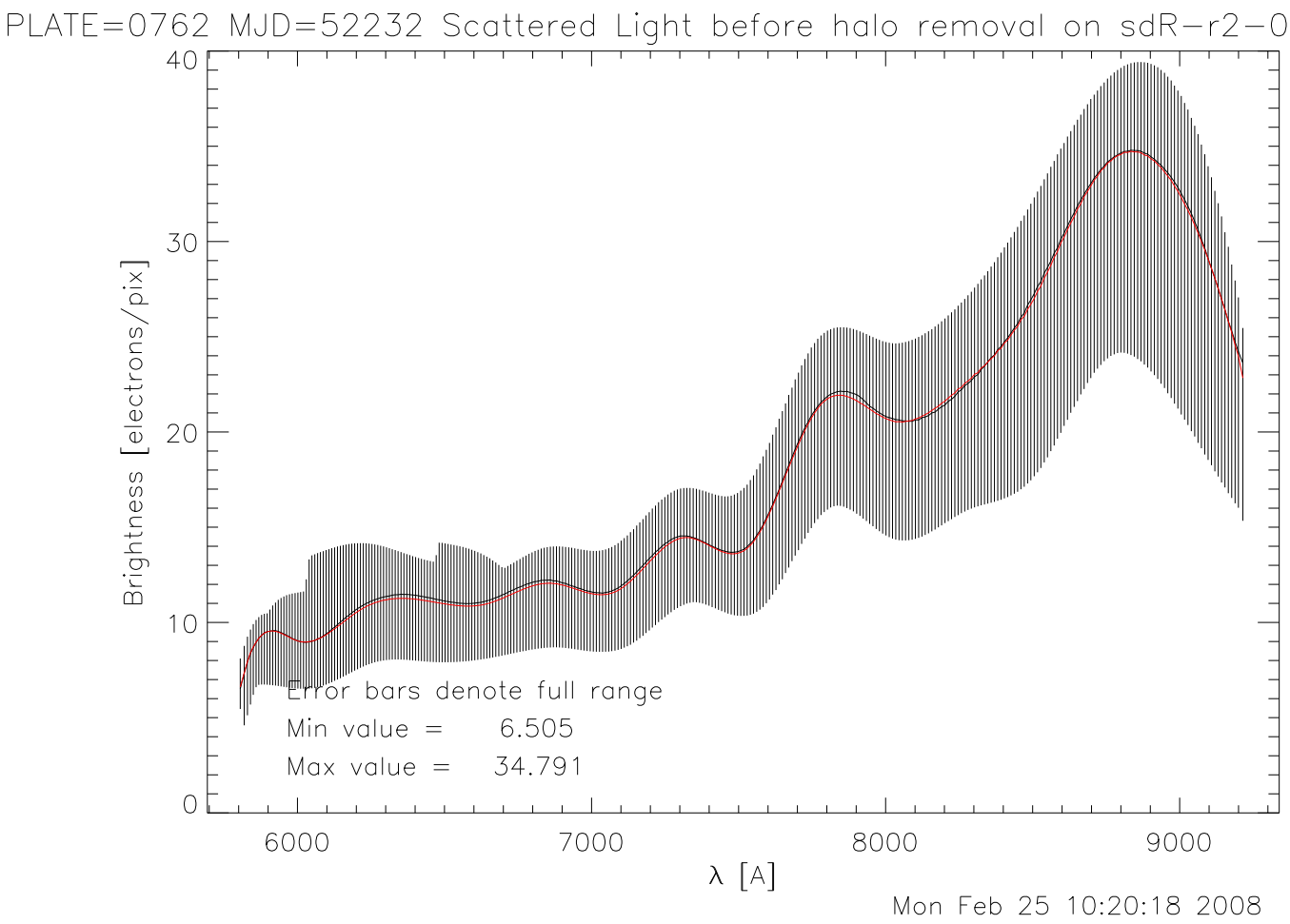

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-r2-00011814.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

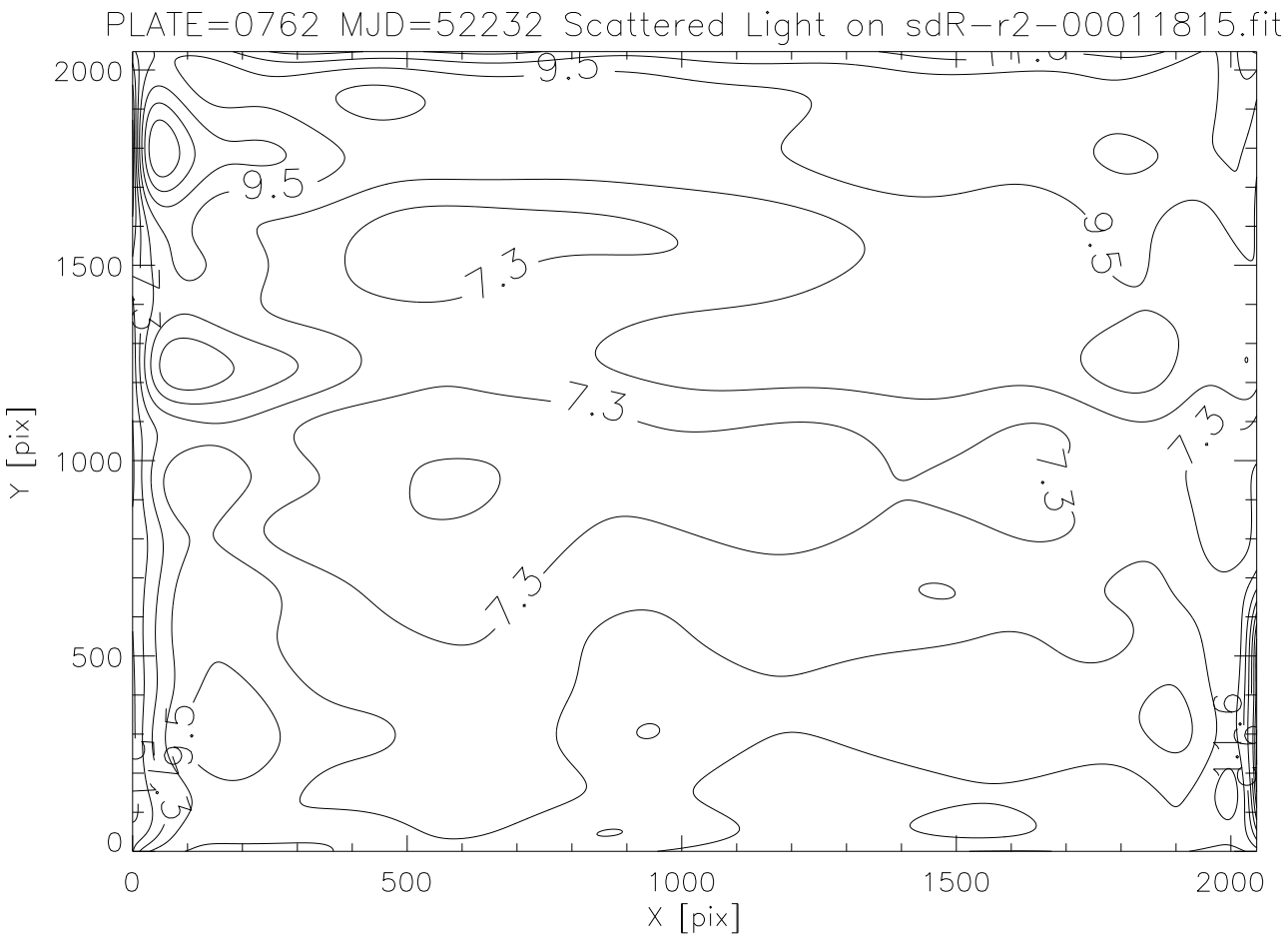

PLATE=0762 MJD=52232 sdR-r2-00011814.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.08 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

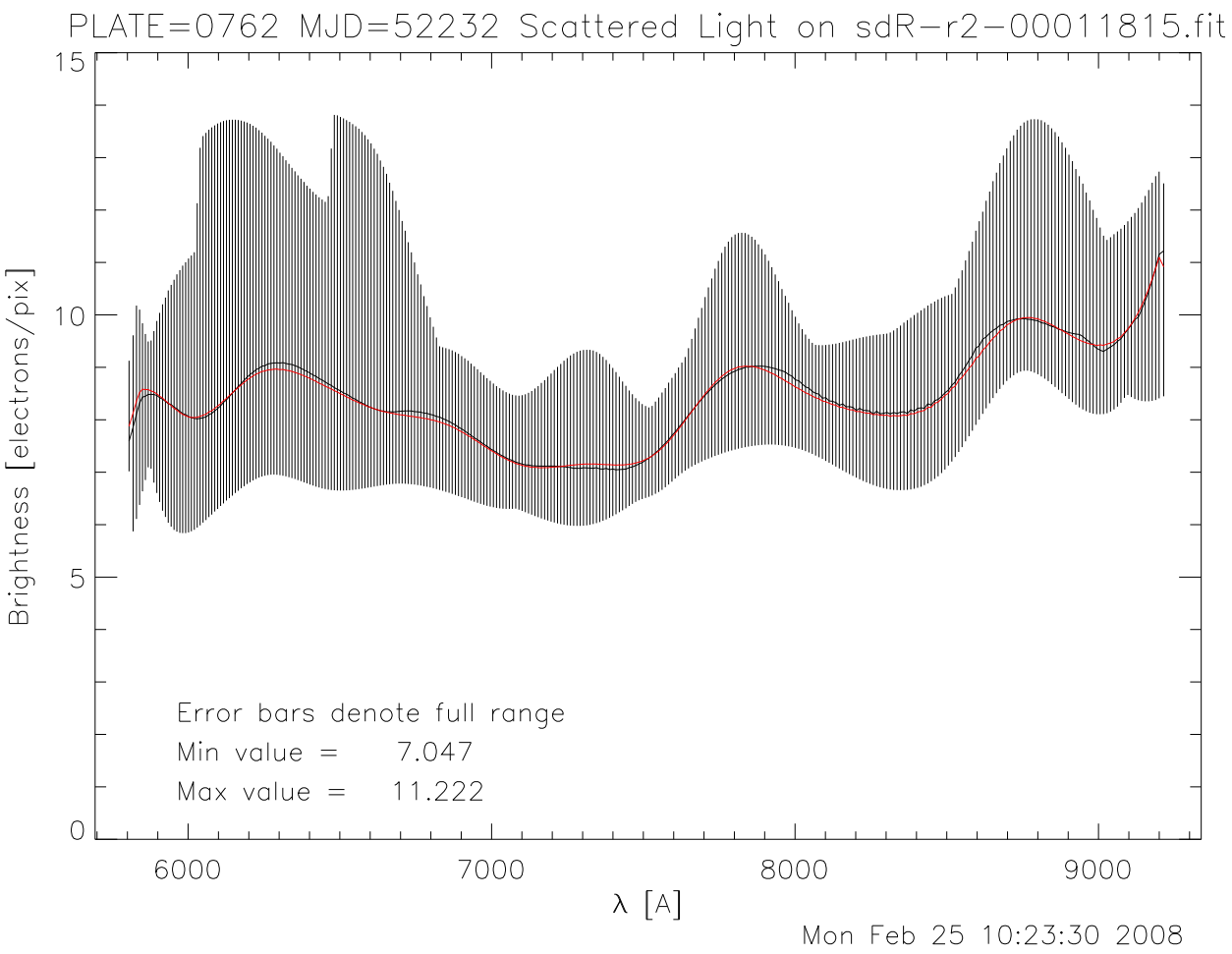

PLATE=0762 MJD=52232 sdR-r2-00011814.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.15 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

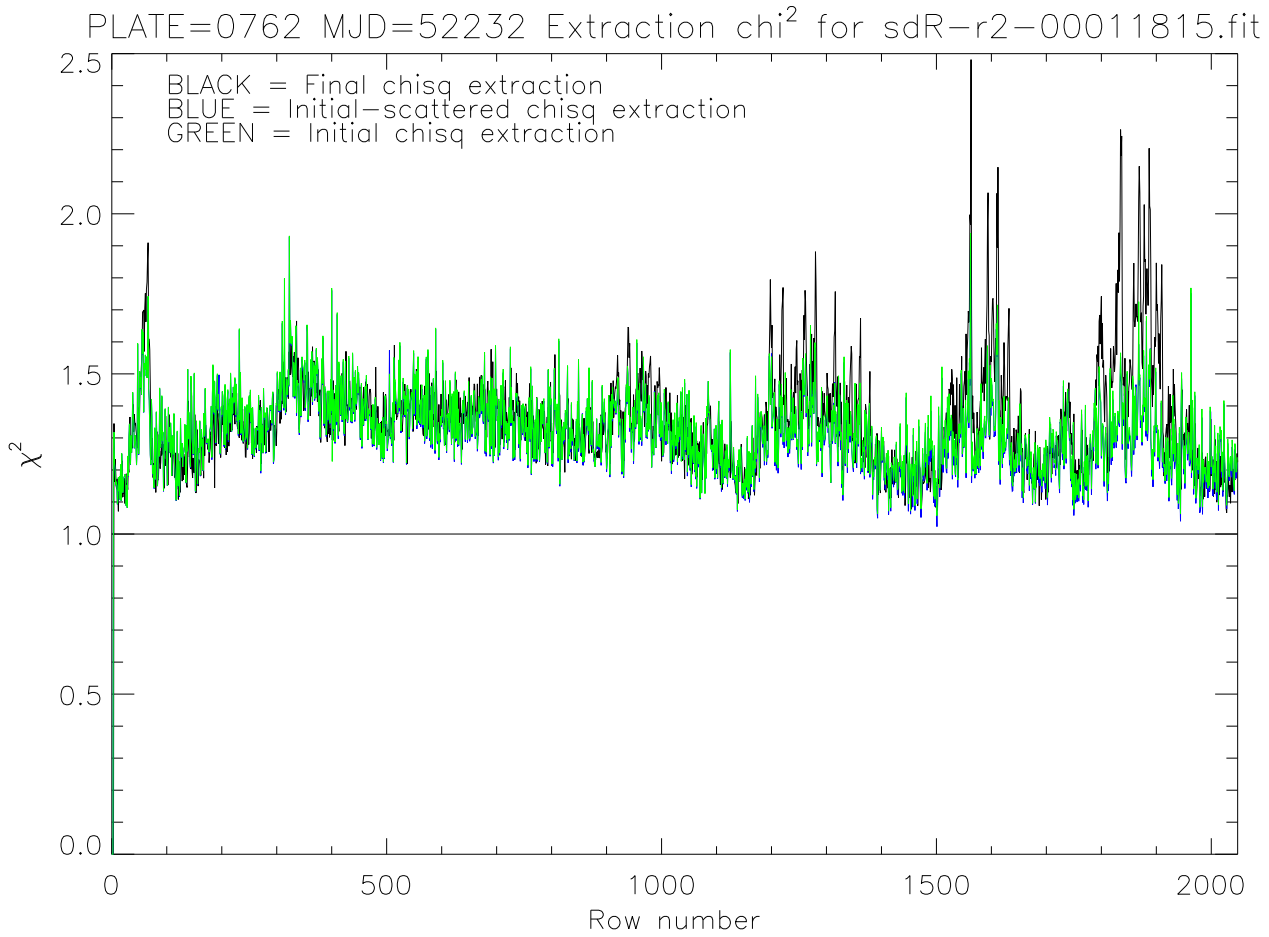

PLATE=0762 MJD=52232 Fiber−Flats for sdR−r2−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.498
Max value = 1.257
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 10:19:25 2008

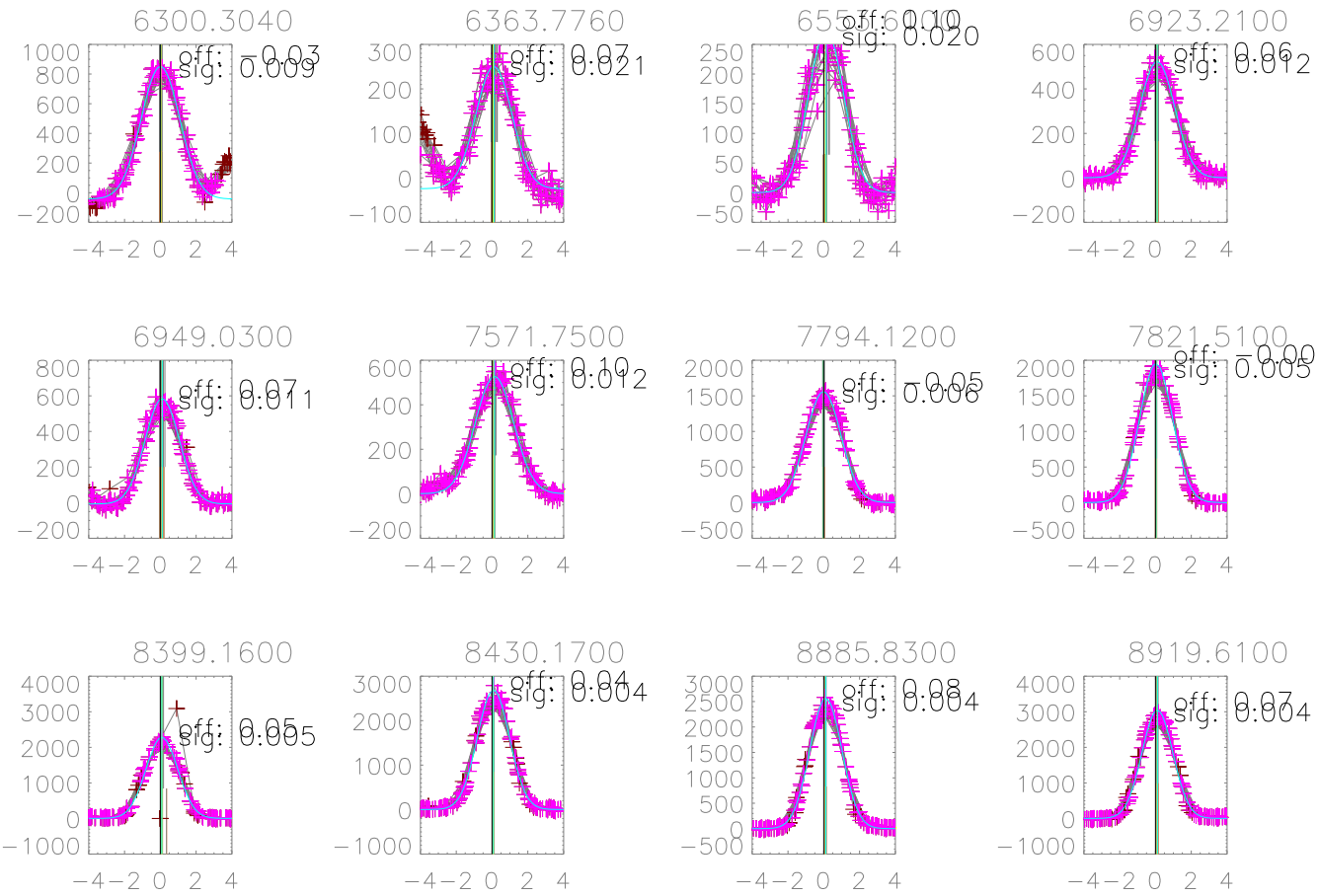

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r2-00011815.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
25.5
32.7
32.7
32.7
25.5
18.2
10.9
10.9

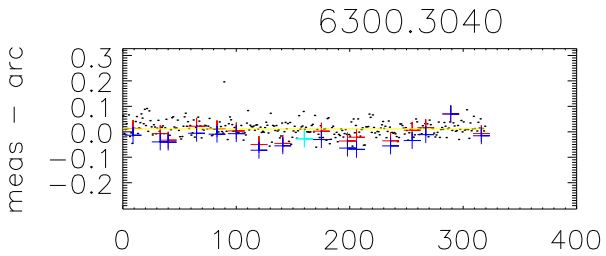

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r2-00011815.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.505
Max value = 34.791
Mon Feb 25 10:20:18 2008

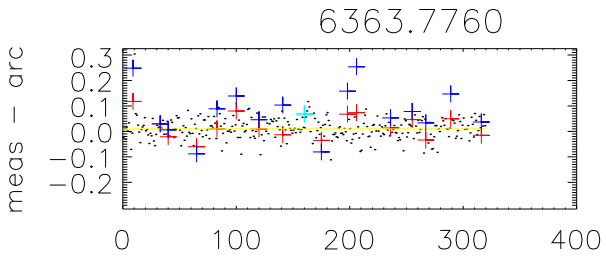

PLATE=0762 MJD=52232 Scattered Light on sdR-r2-00011815.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.5
7.3

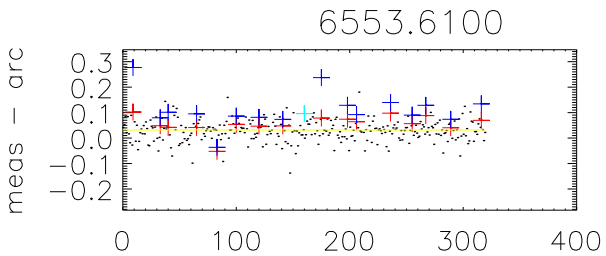

PLATE=0762 MJD=52232 Scattered Light on sdR-r2-00011815.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.047
Max value = 11.222
Mon Feb 25 10:23:30 2008

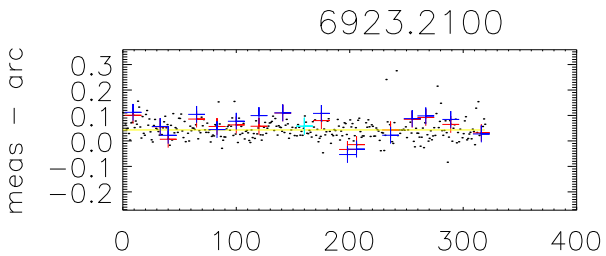

PLATE=0762 MJD=52232 Extraction chi^2 for sdR-r2-00011815.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

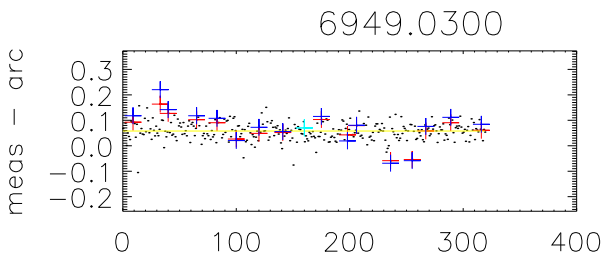

6300.3040
off: −0.03
sig: 0.009
6363.7760
off: 0.07
sig: 0.021
6555.6010
sig: 0.020
6923.2100
off: 0.06
sig: 0.012
6949.0300
off: 0.07
sig: 0.011
7571.7500
off: 0.10
sig: 0.012
7794.1200
off: −0.05
sig: 0.006
7821.5100
off: −0.00
sig: 0.005
8399.1600
off: 0.05
sig: 0.005
8430.1700
off: 0.04
sig: 0.004
8885.8300
off: 0.08
sig: 0.004
8919.6100
off: 0.07
sig: 0.004

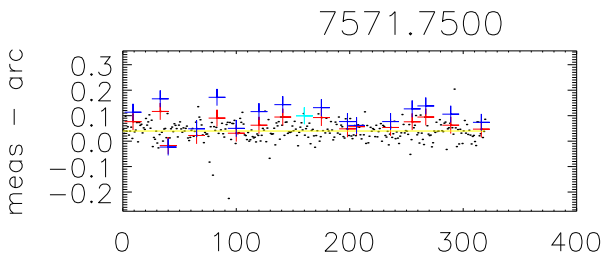

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

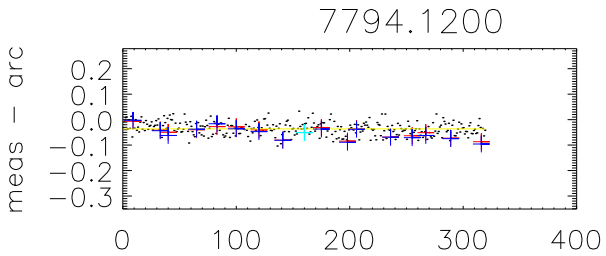

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

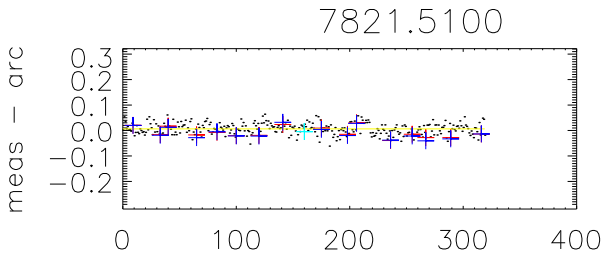

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

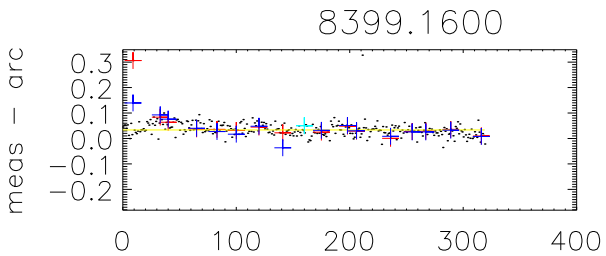

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

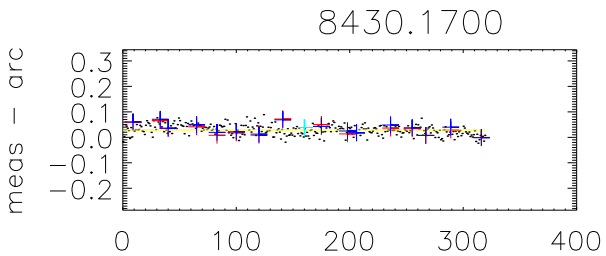

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

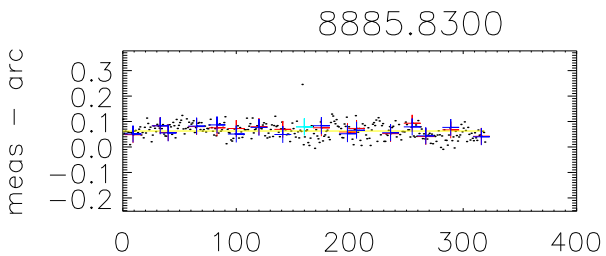

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

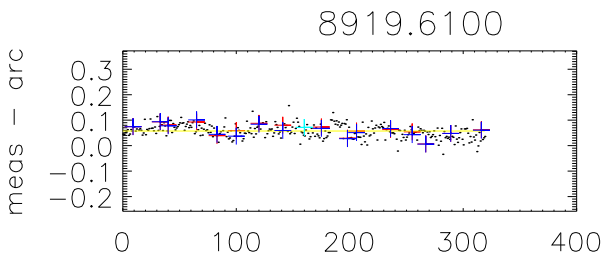

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

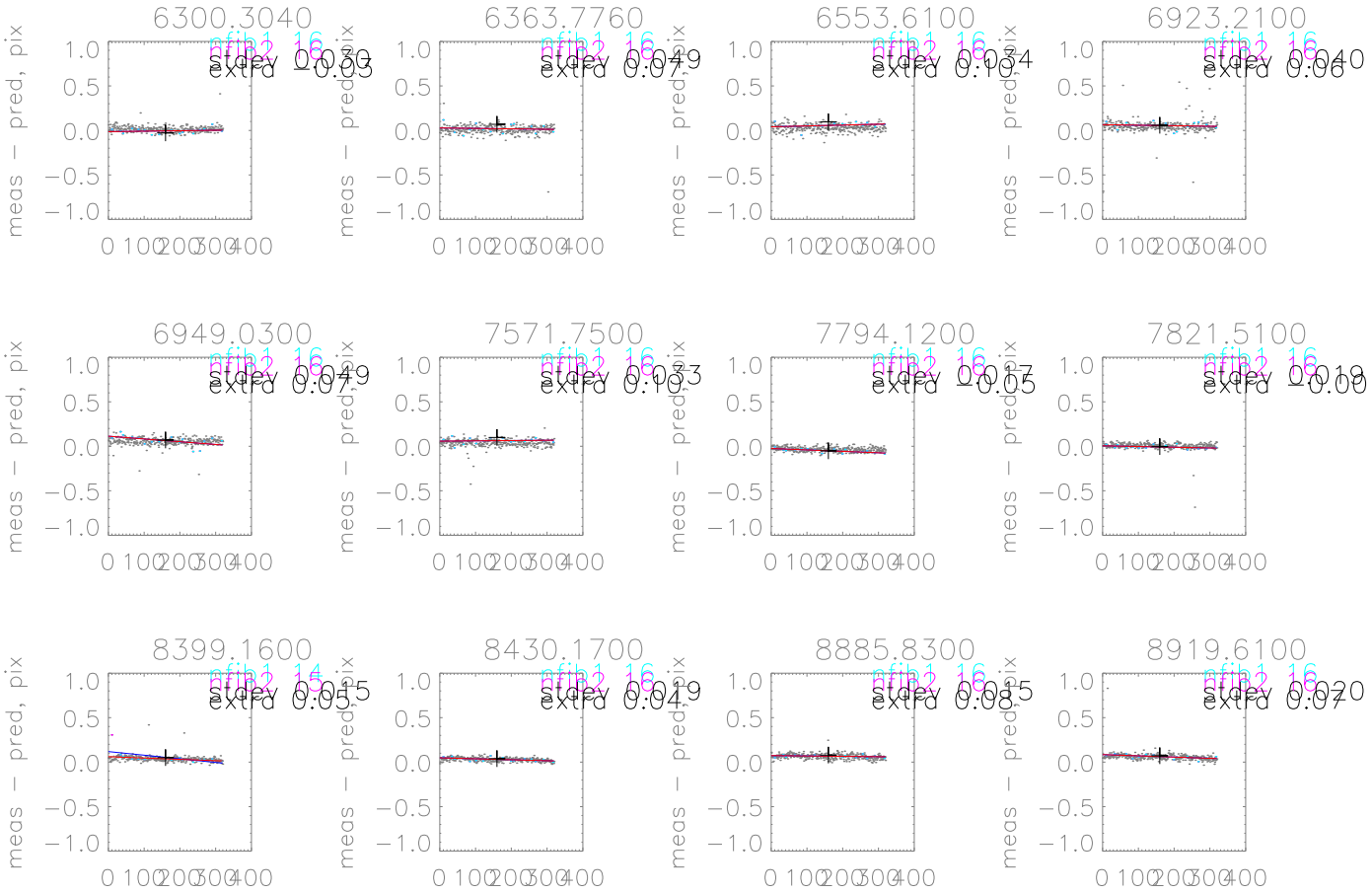

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

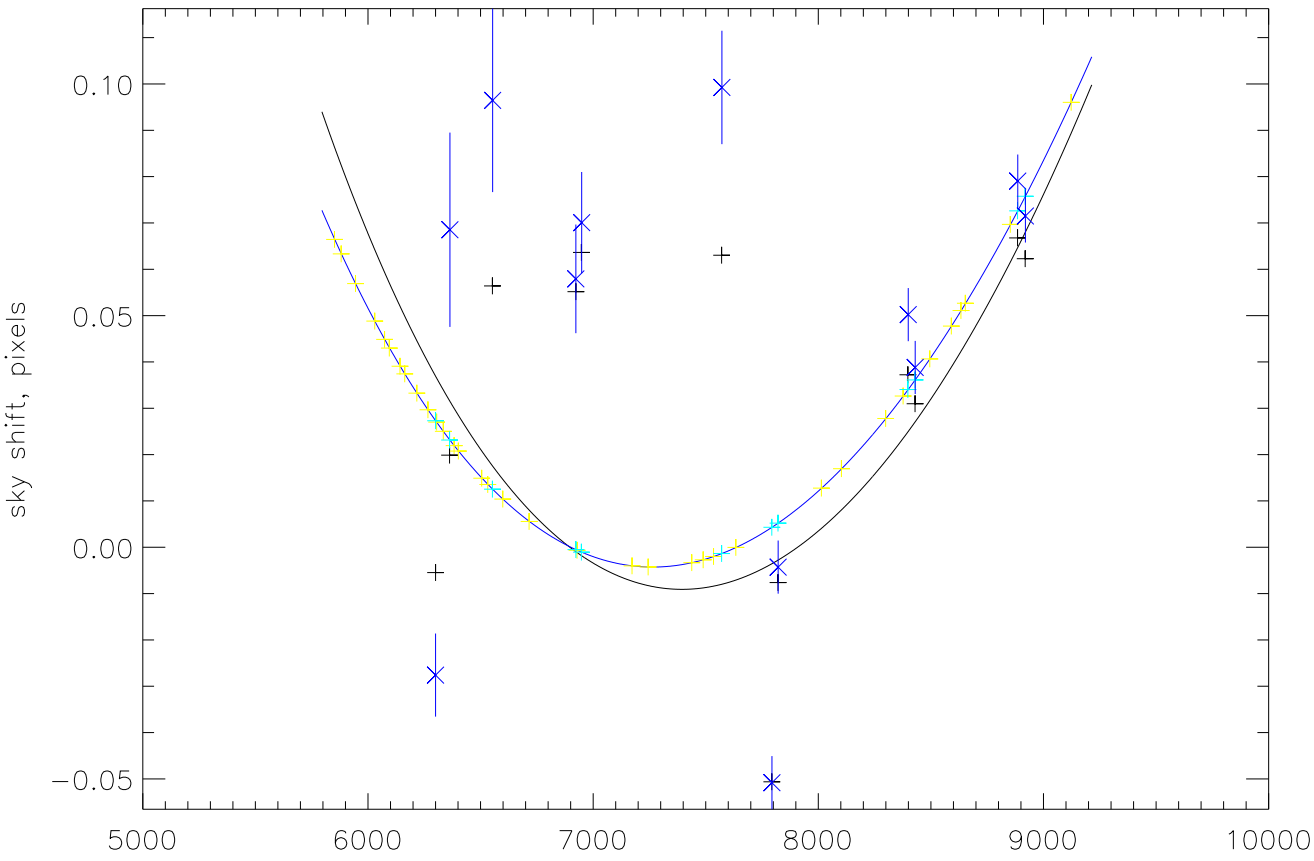

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

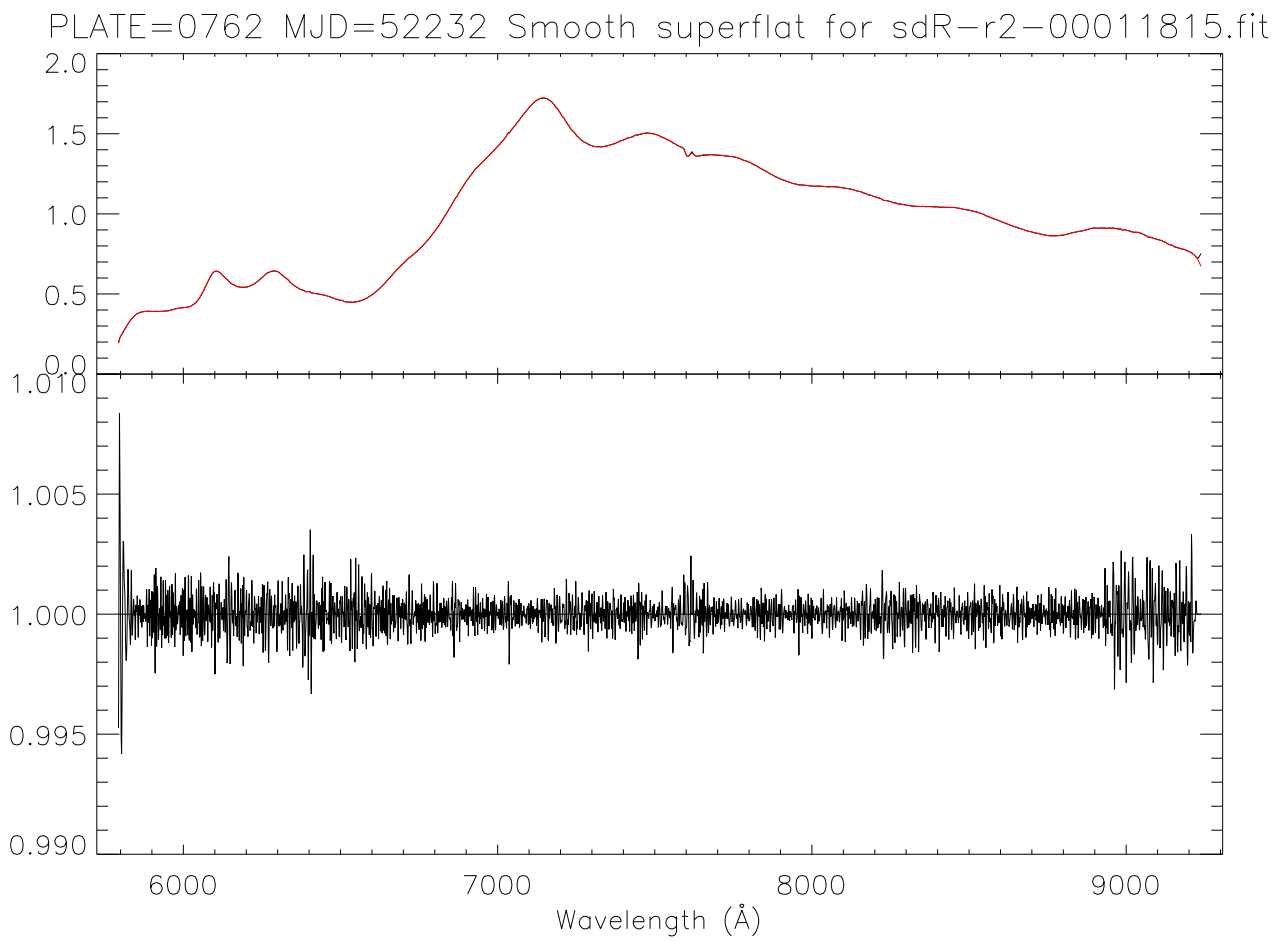

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

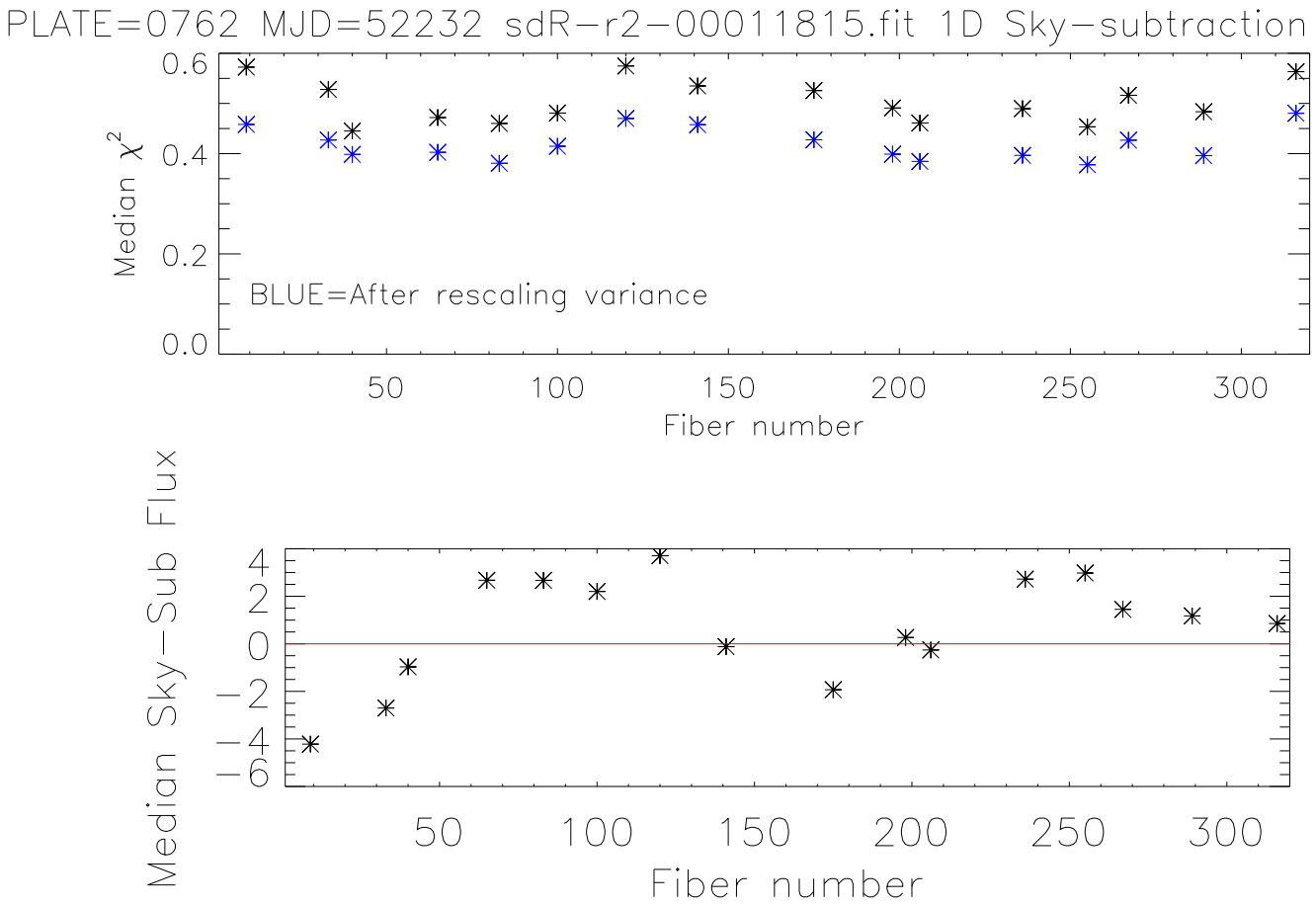

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

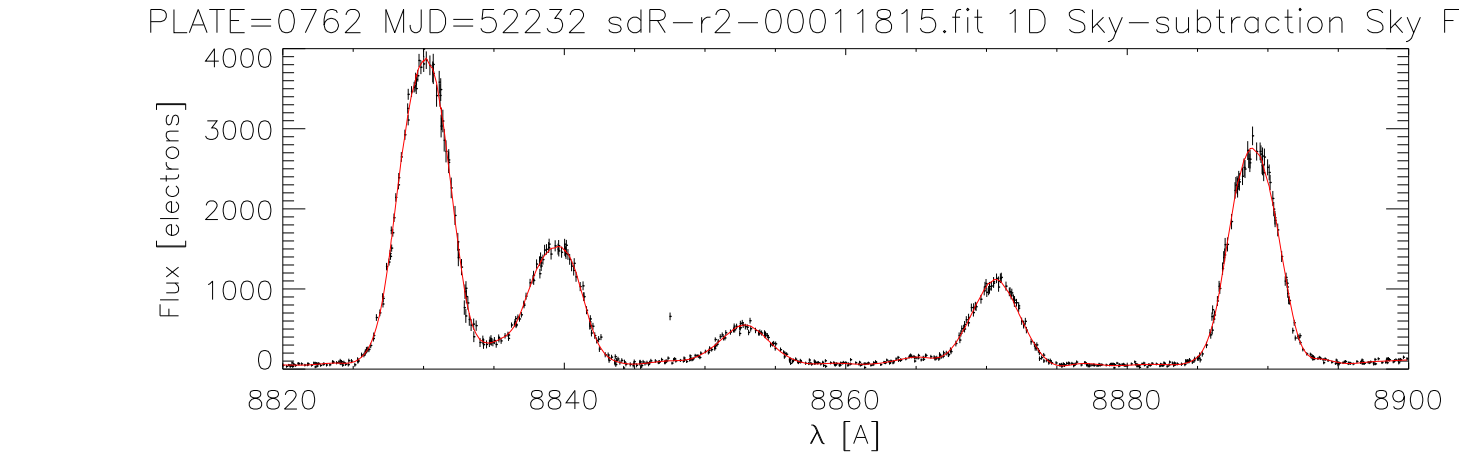

6300.3040
stdev 0.030
extra −0.003
6363.7760
stdev 0.049
extra 0.017
6553.6100
stdev 0.034
extra 0.004
6923.2100
stdev 0.040
extra 0.006
6949.0300
stdev 0.049
extra 0.017
7571.7500
stdev 0.033
extra 0.003
7794.1200
stdev 0.017
extra −0.005
7821.5100
stdev 0.019
extra −0.000
8399.1600
stdev 0.055
extra 0.005
8430.1700
stdev 0.049
extra 0.004
8885.8300
stdev 0.045
extra 0.008
8919.6100
stdev 0.020
extra 0.007
meas − pred, pix

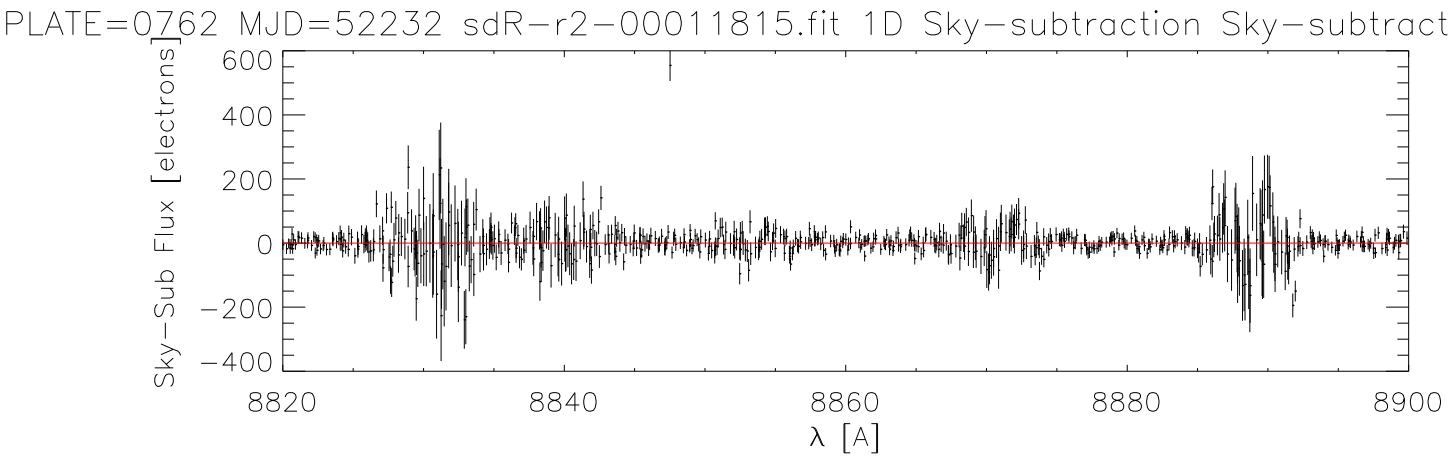

0.10
0.05
0.00
−0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

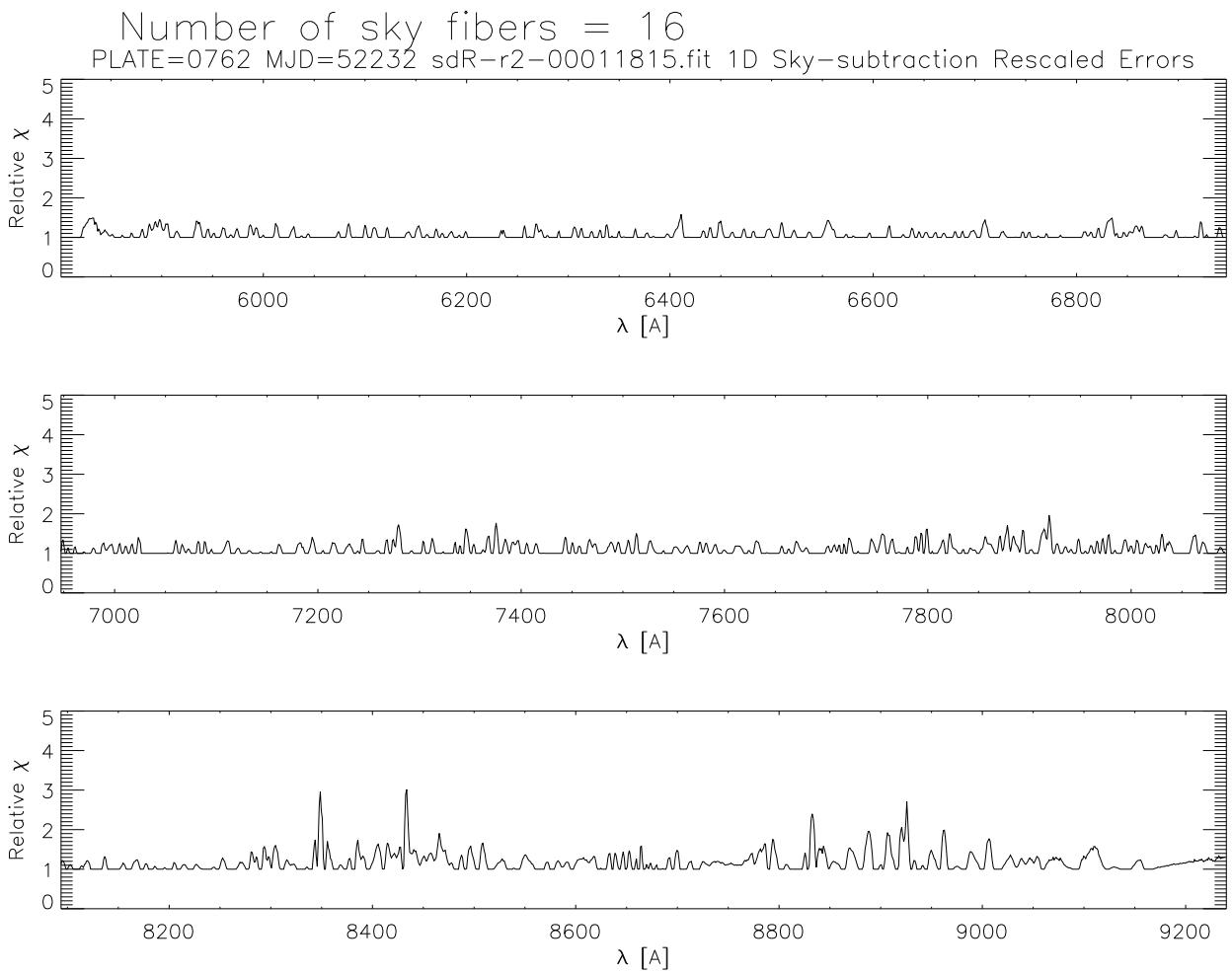
es= −0.0000

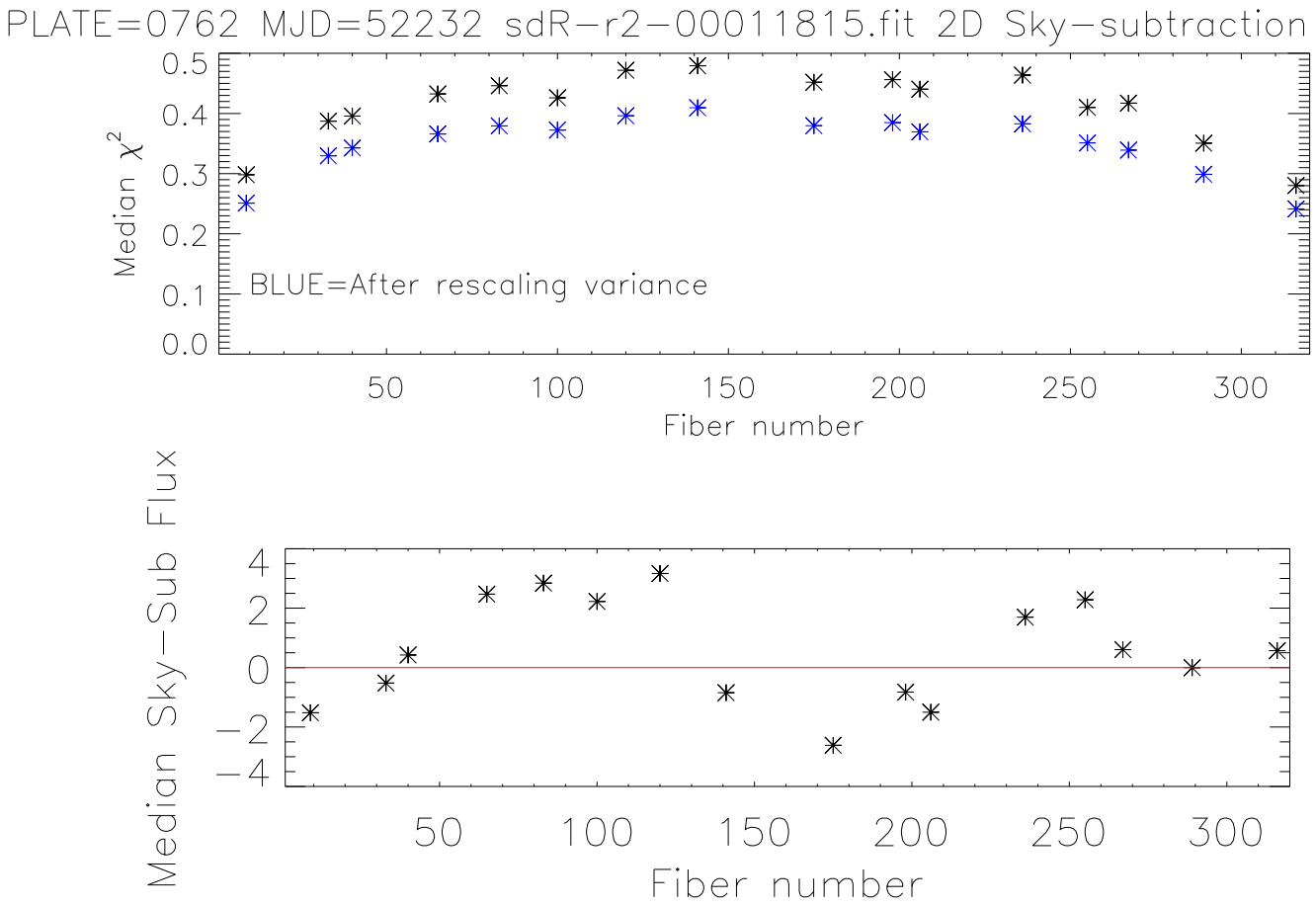

PLATE=0762 MJD=52232 Smooth superflat for sdR−r2−00011815.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

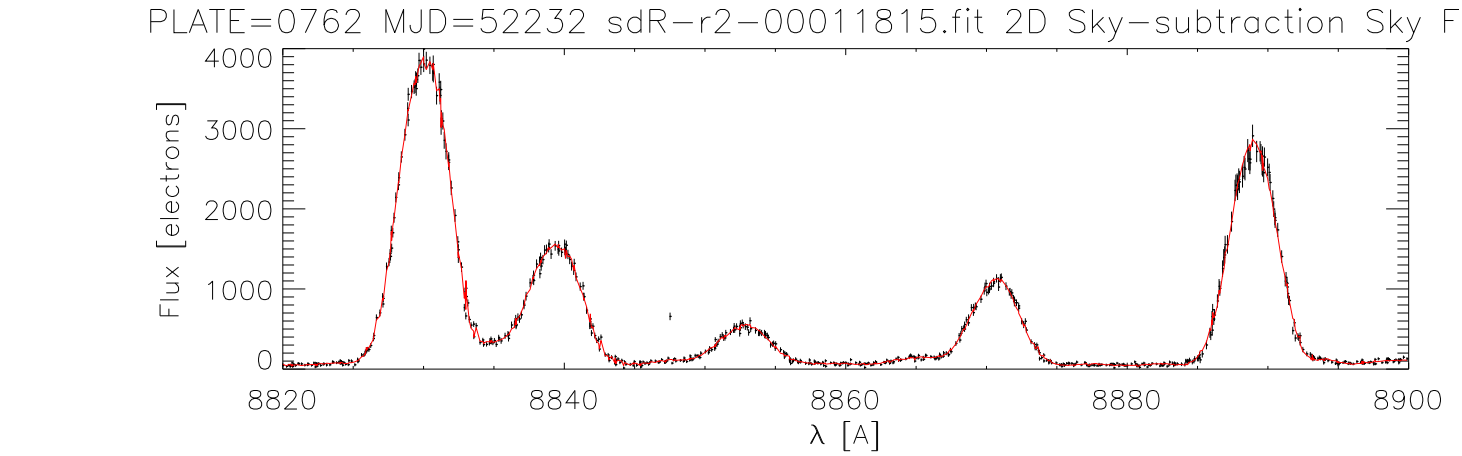

PLATE=0762 MJD=52232 sdR-r2-00011815.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

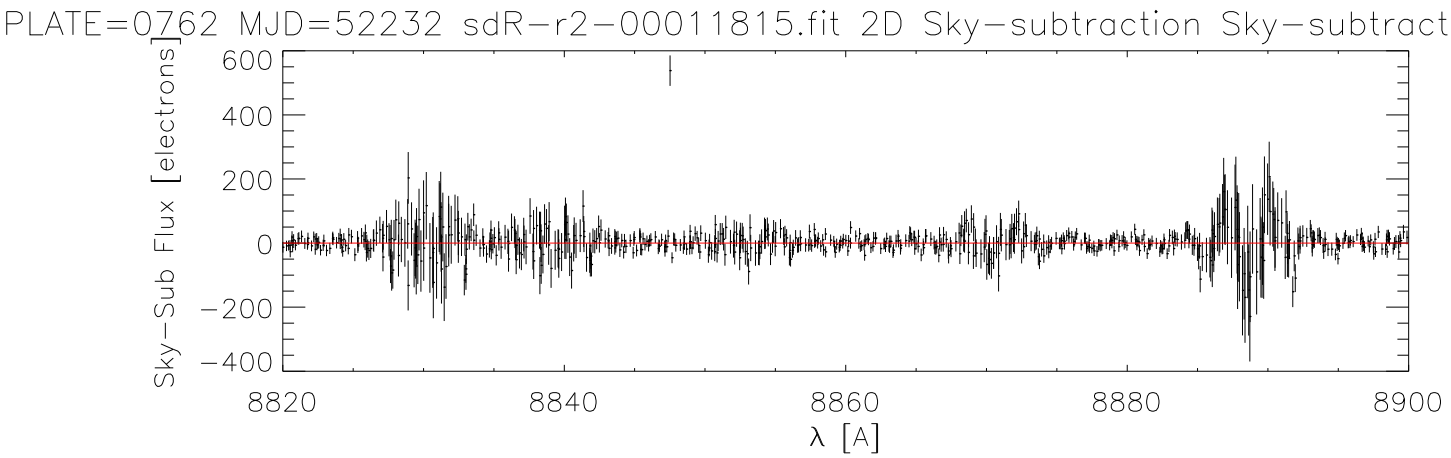

PLATE=0762 MJD=52232 sdR-r2-00011815.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

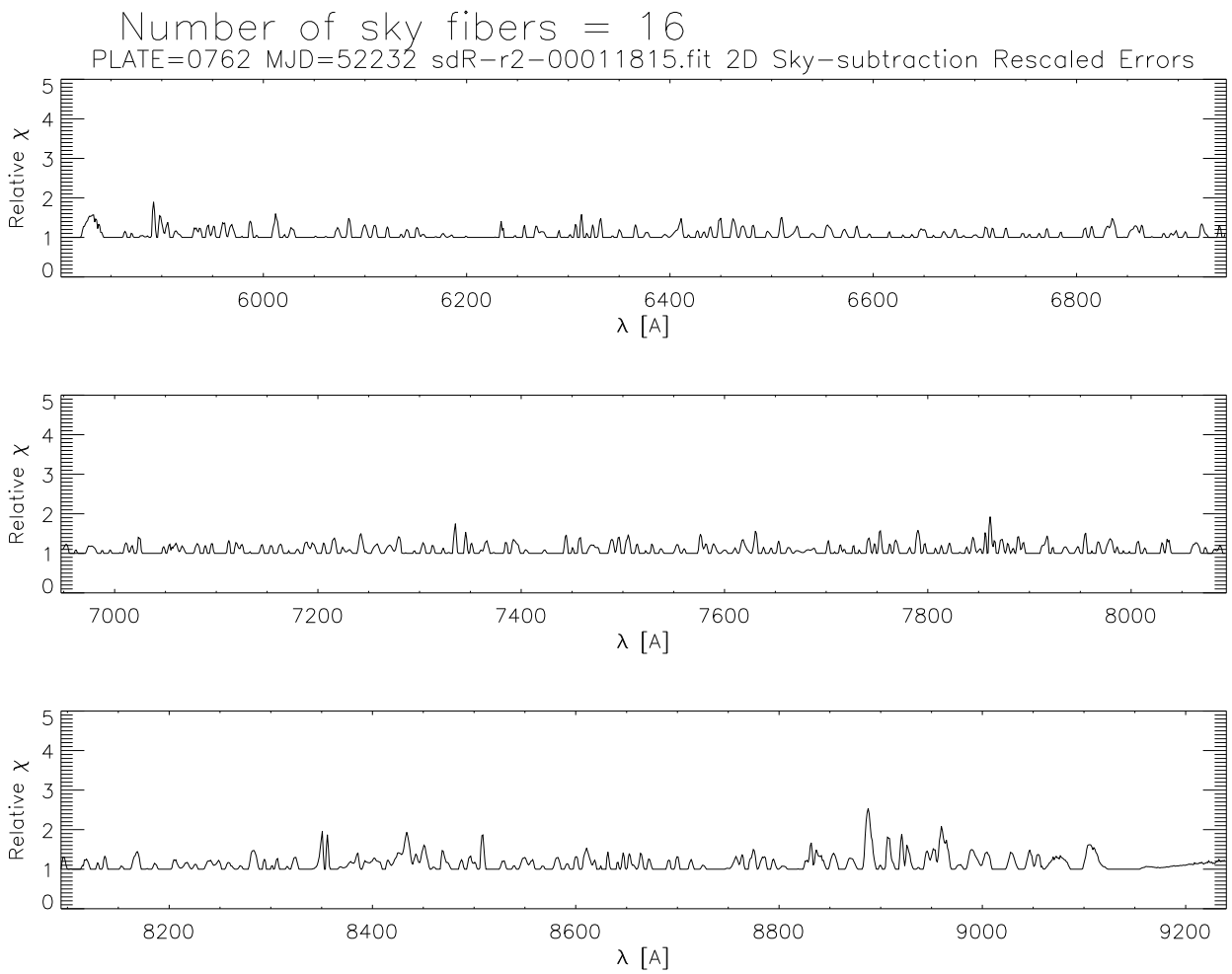

PLATE=0762 MJD=52232 sdR-r2-00011815.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

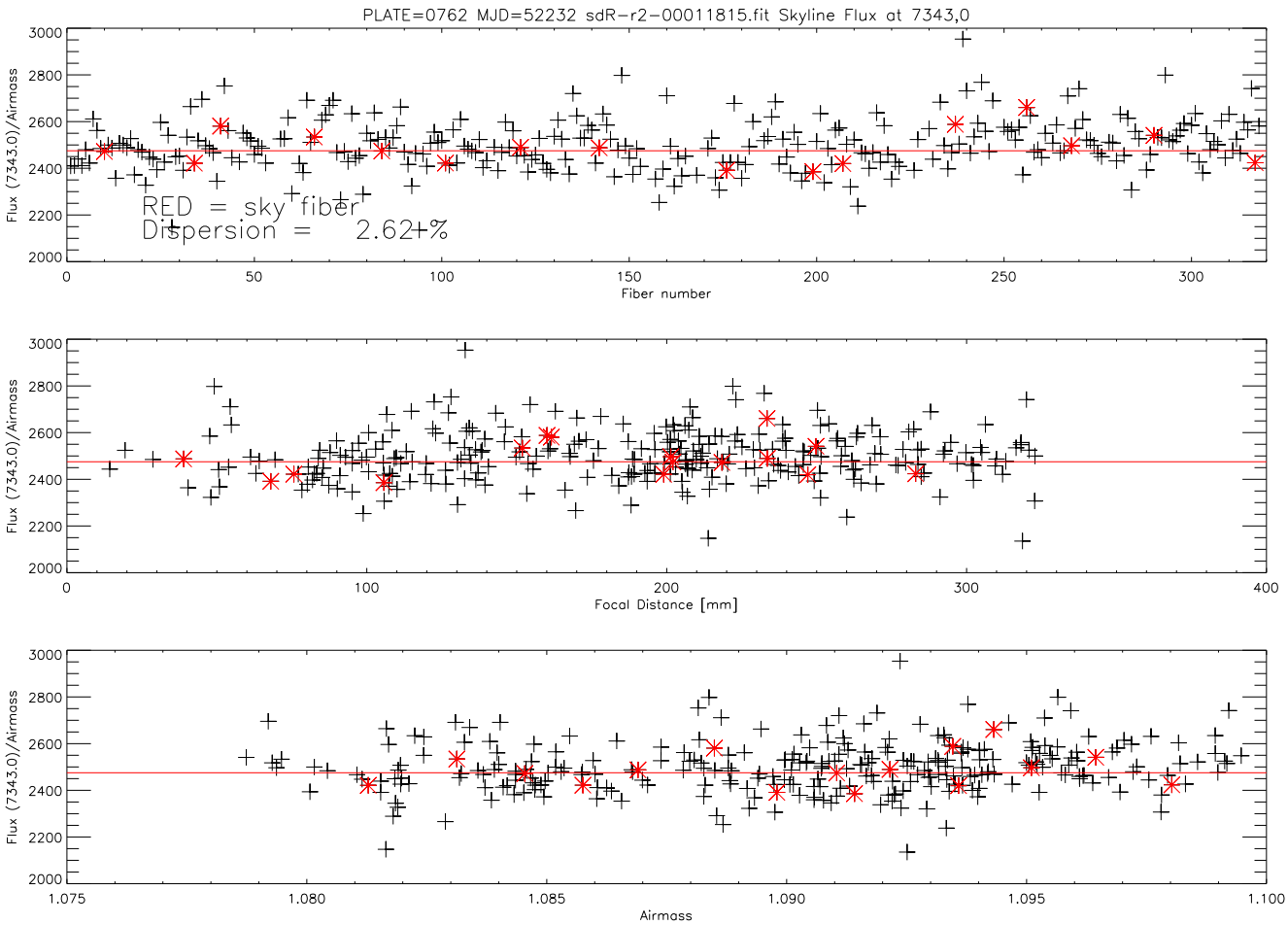

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-r2-00011815.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

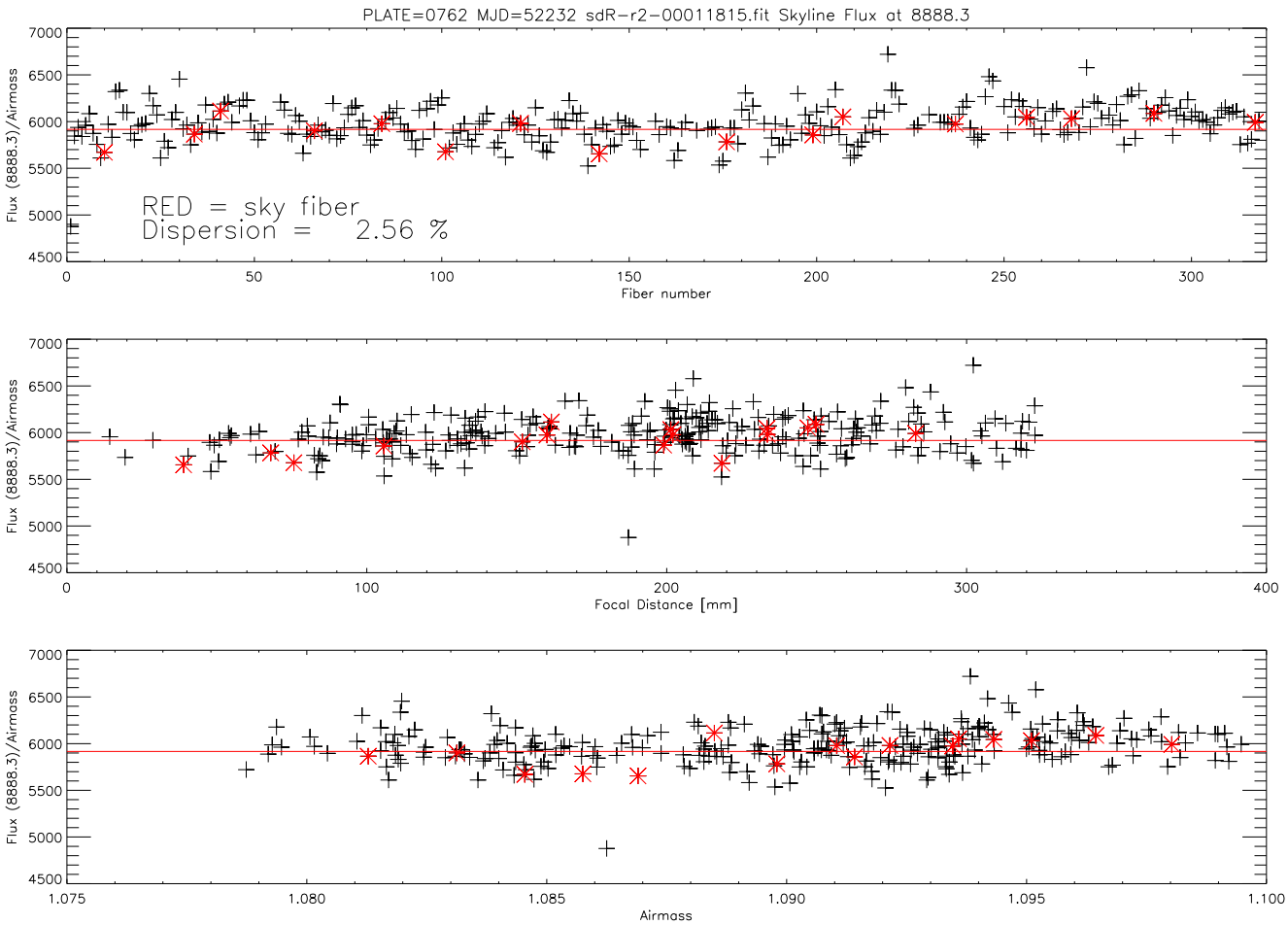

PLATE=0762 MJD=52232 sdR-r2-00011815.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

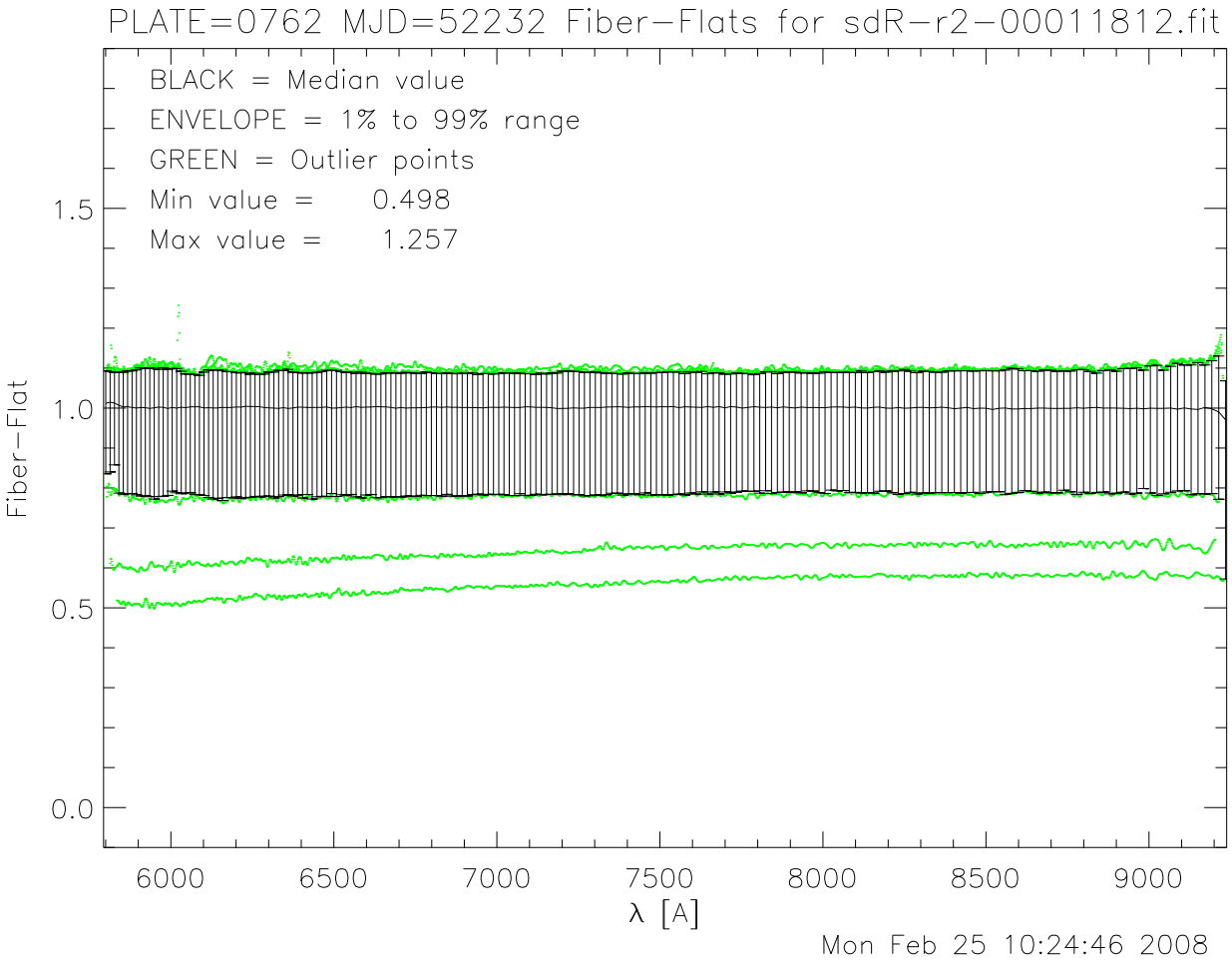

PLATE=0762 MJD=52232 sdR-r2-00011815.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

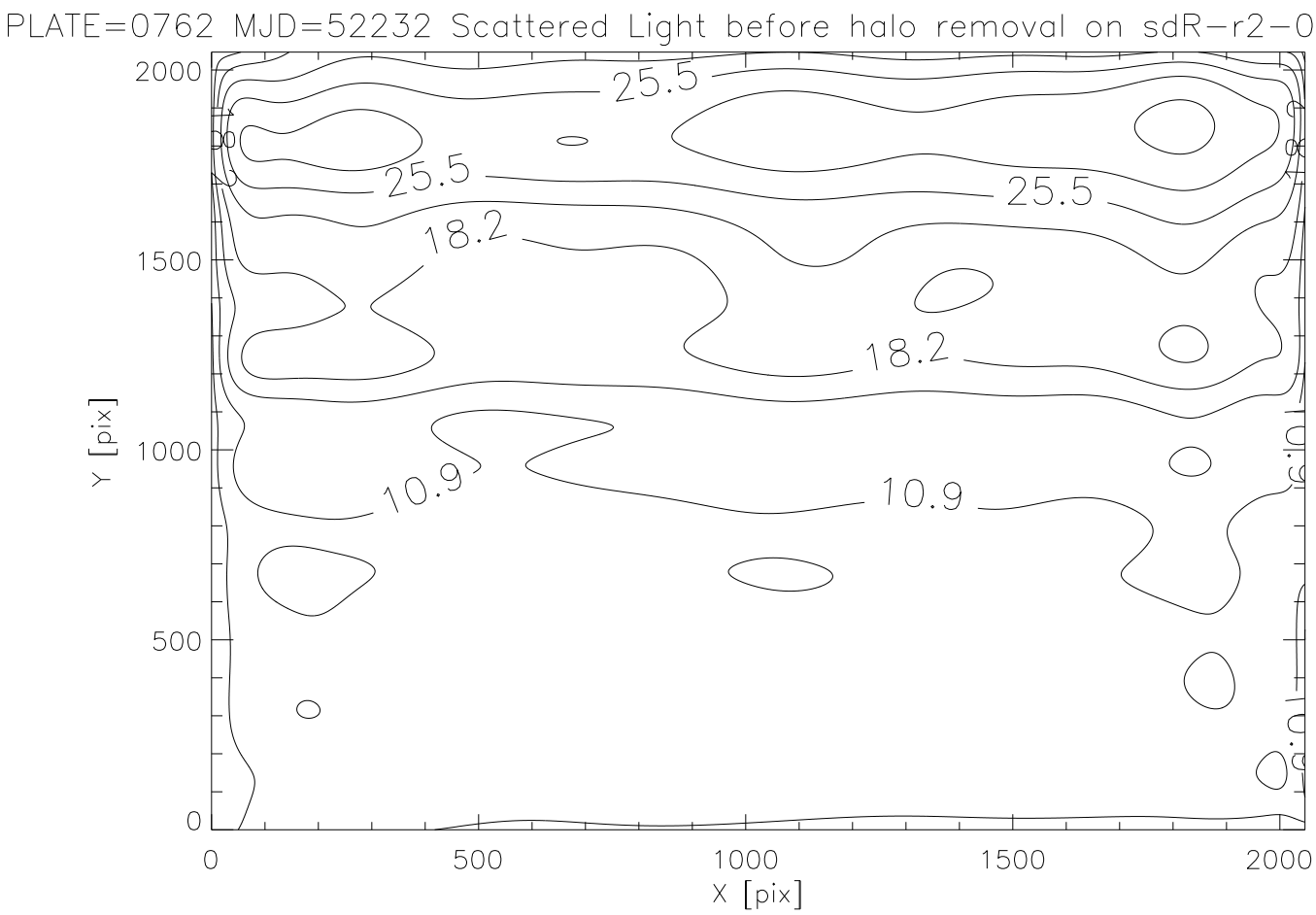

PLATE=0762 MJD=52232 sdR-r2-00011815.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

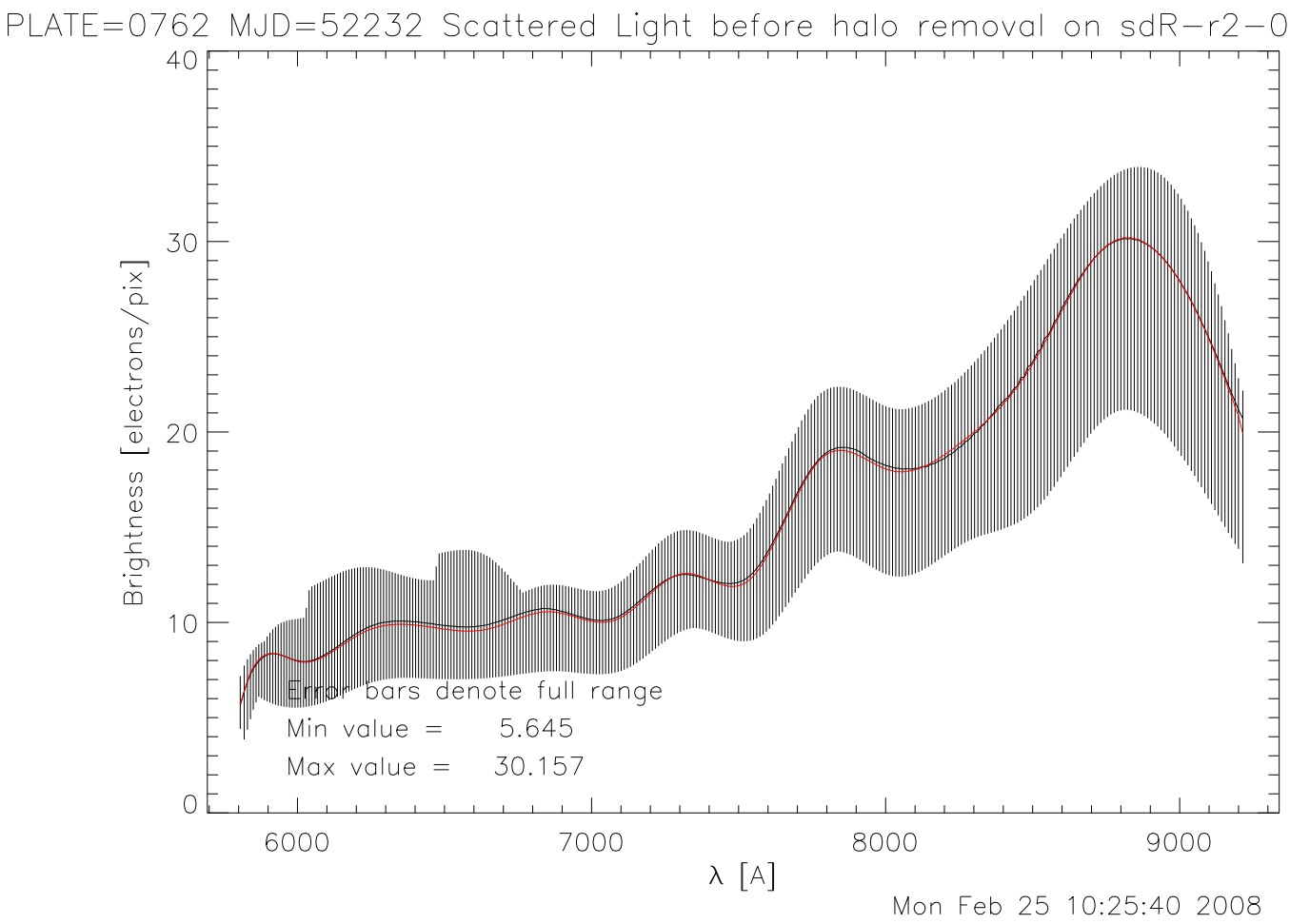

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-r2-00011815.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

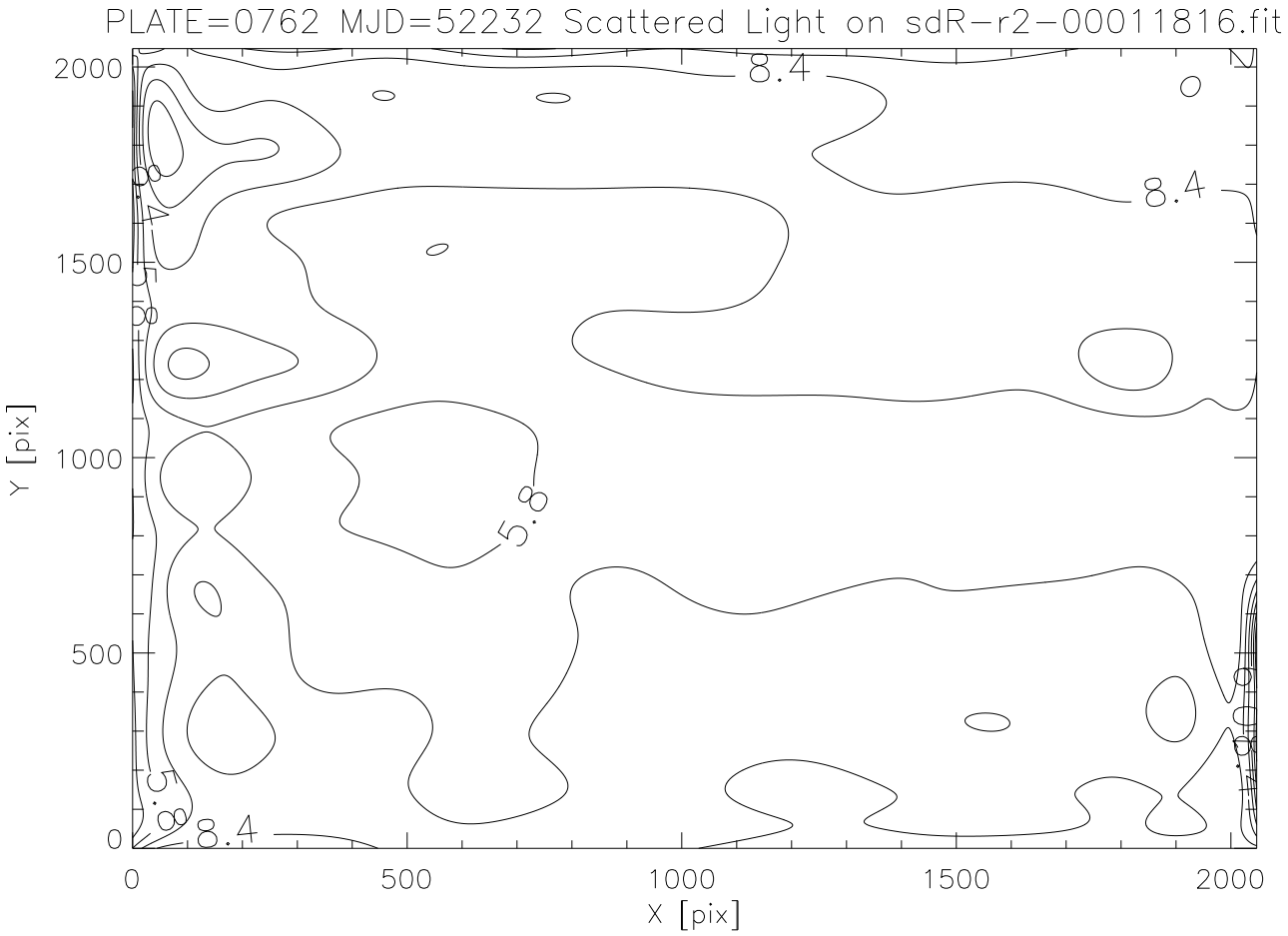

PLATE=0762 MJD=52232 sdR-r2-00011815.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.62+%
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

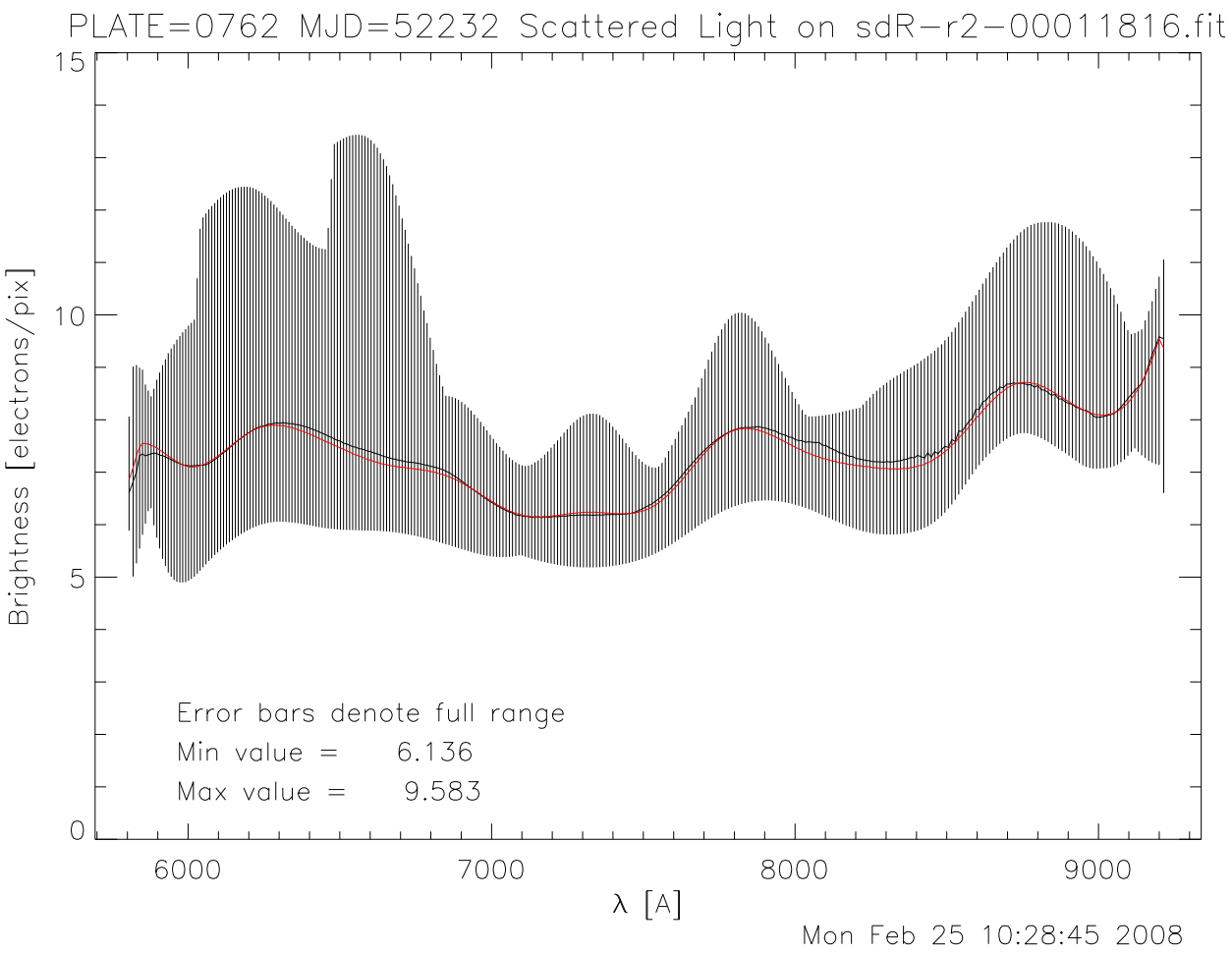

PLATE=0762 MJD=52232 sdR-r2-00011815.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.56 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

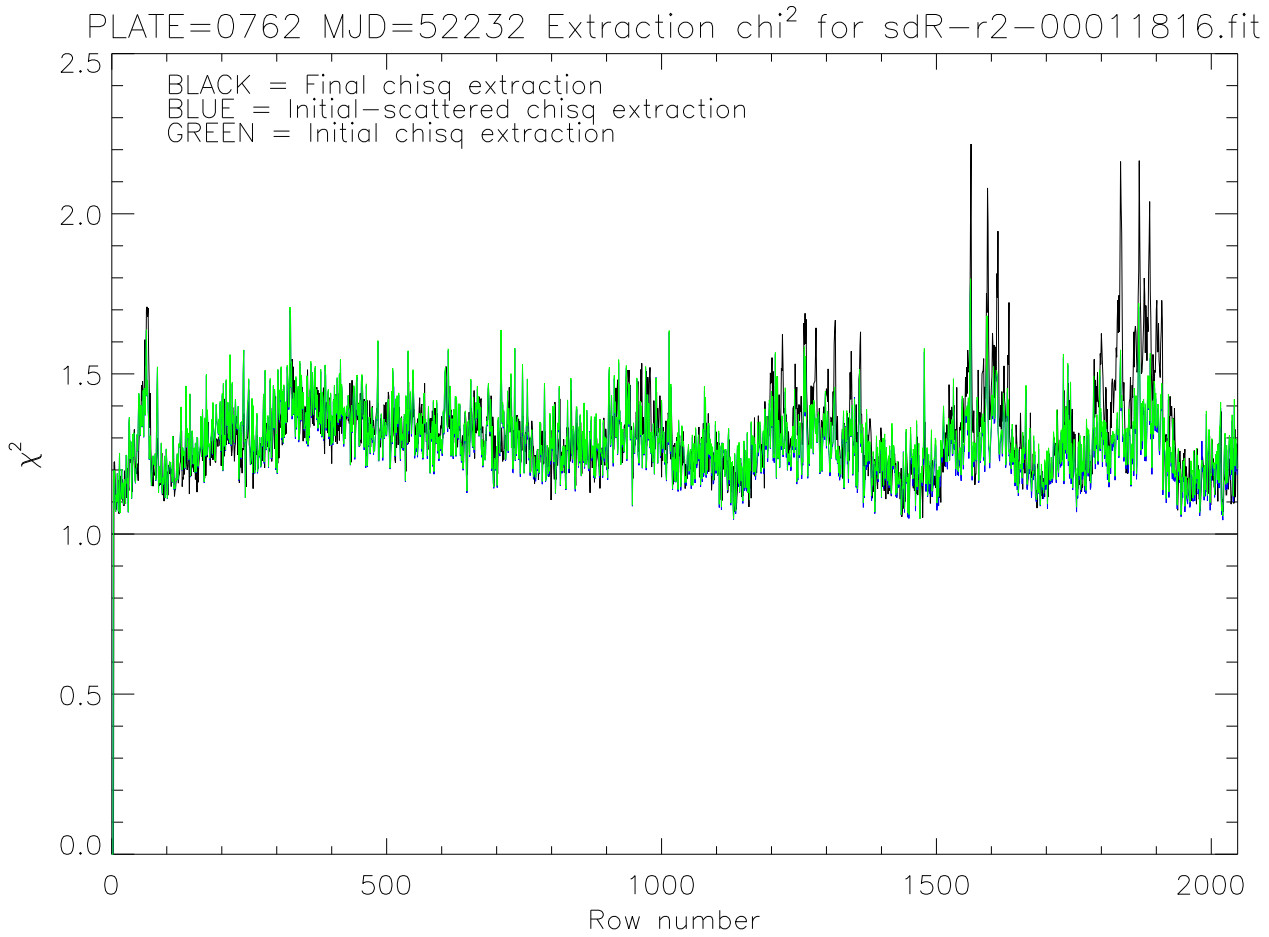

PLATE=0762 MJD=52232 Fiber−Flats for sdR−r2−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.498
Max value = 1.257
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 10:24:46 2008

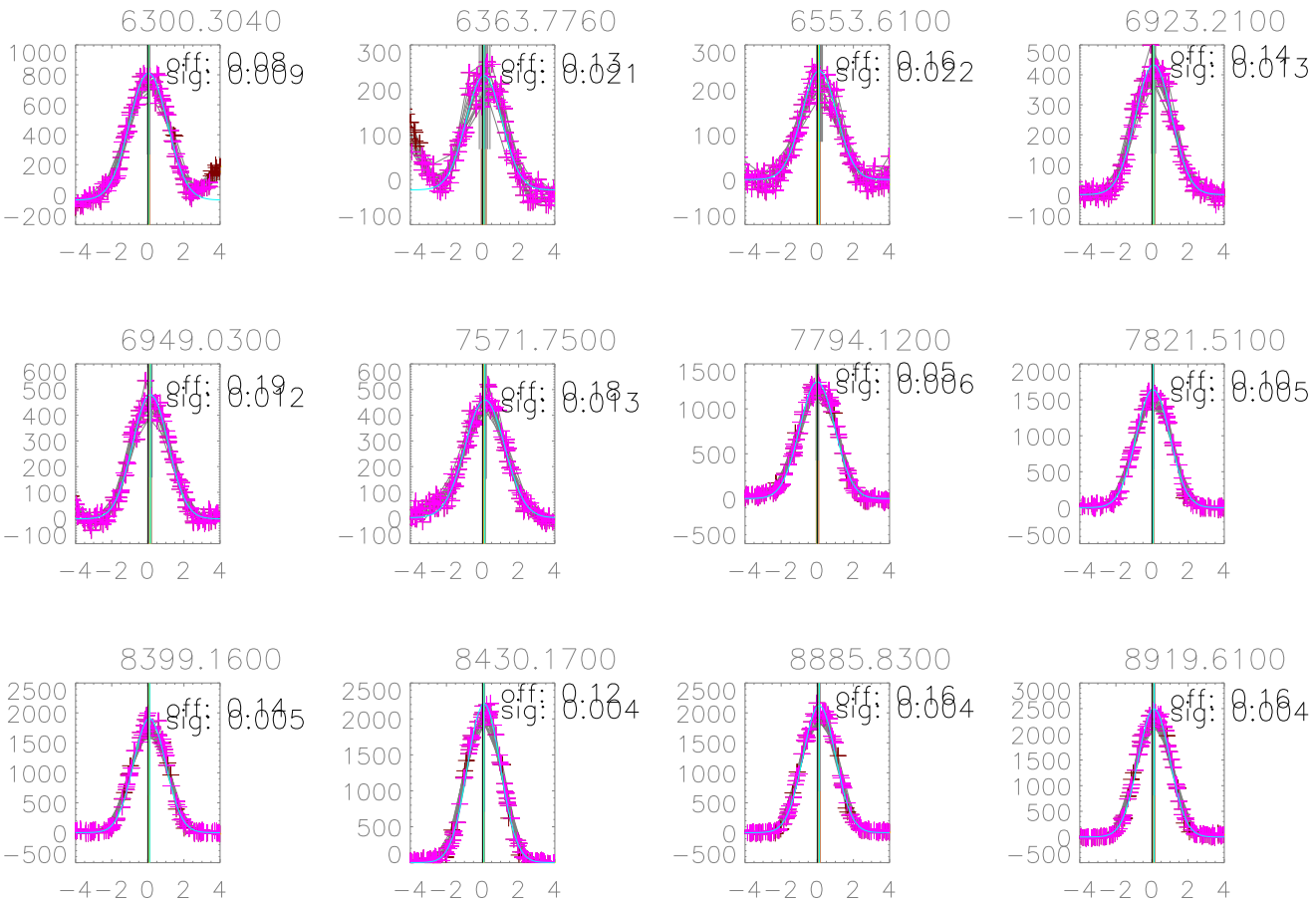

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r2-00011816.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

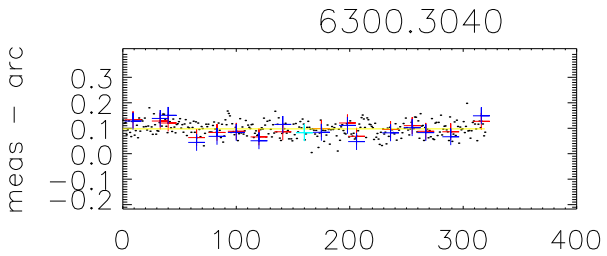

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r2-00011816.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.645
Max value = 30.157
Mon Feb 25 10:25:40 2008

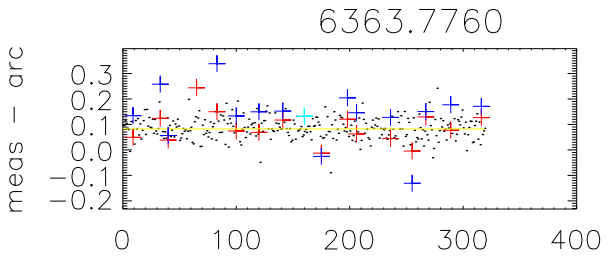

PLATE=0762 MJD=52232 Scattered Light on sdR-r2-00011816.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
5.8

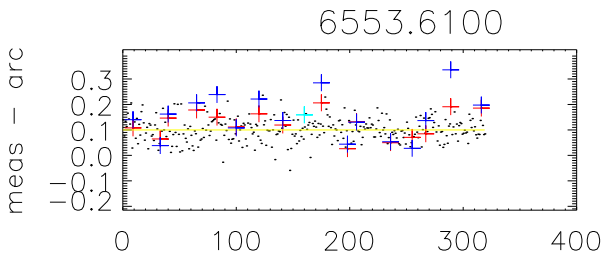

PLATE=0762 MJD=52232 Scattered Light on sdR-r2-00011816.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.136
Max value = 9.583
Mon Feb 25 10:28:45 2008

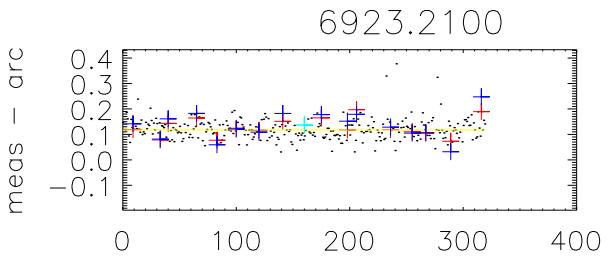

PLATE=0762 MJD=52232 Extraction chi^2 for sdR−r2−00011816.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

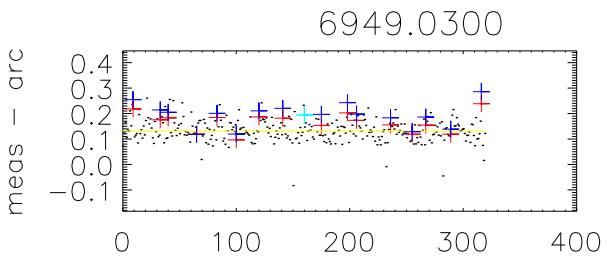

6300.3040
off: 0.08
sig: 0.009
6363.7760
off: 0.13
sig: 0.021
6553.6100
off: 0.16
sig: 0.022
6923.2100
off: 0.14
sig: 0.013
6949.0300
off: 0.19
sig: 0.012
7571.7500
off: 0.18
sig: 0.013
7794.1200
off: 0.05
sig: 0.006
7821.5100
off: 0.10
sig: 0.005
8399.1600
off: 0.14
sig: 0.005
8430.1700
off: 0.12
sig: 0.004
8885.8300
off: 0.16
sig: 0.004
8919.6100
off: 0.16
sig: 0.004

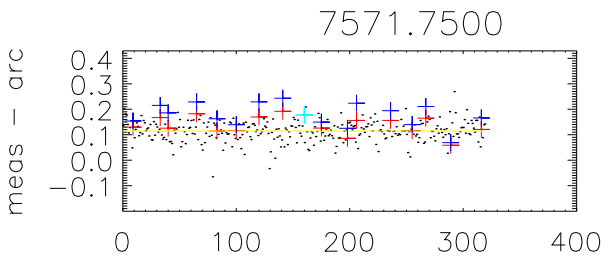

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

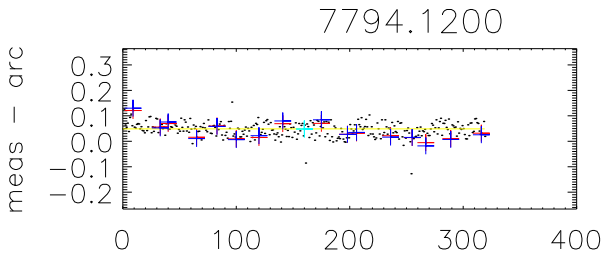

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

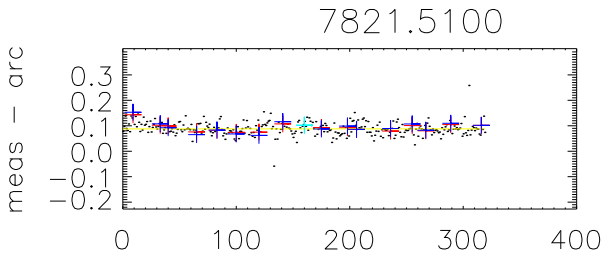

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

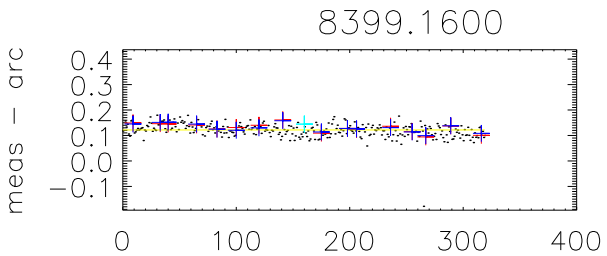

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

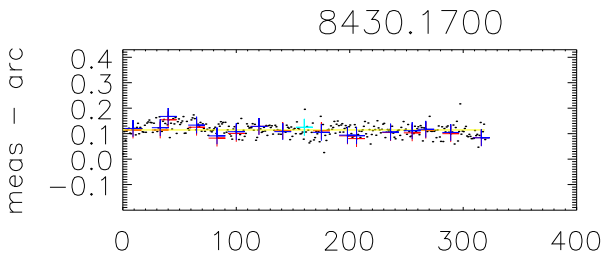

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

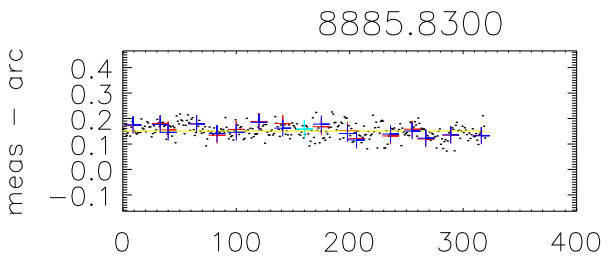

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

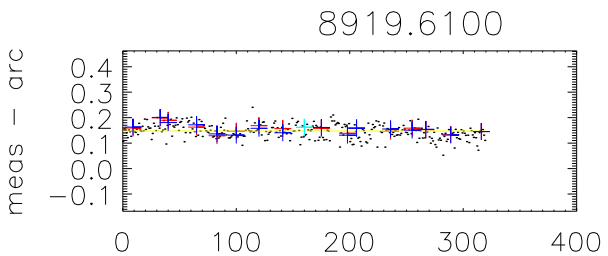

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

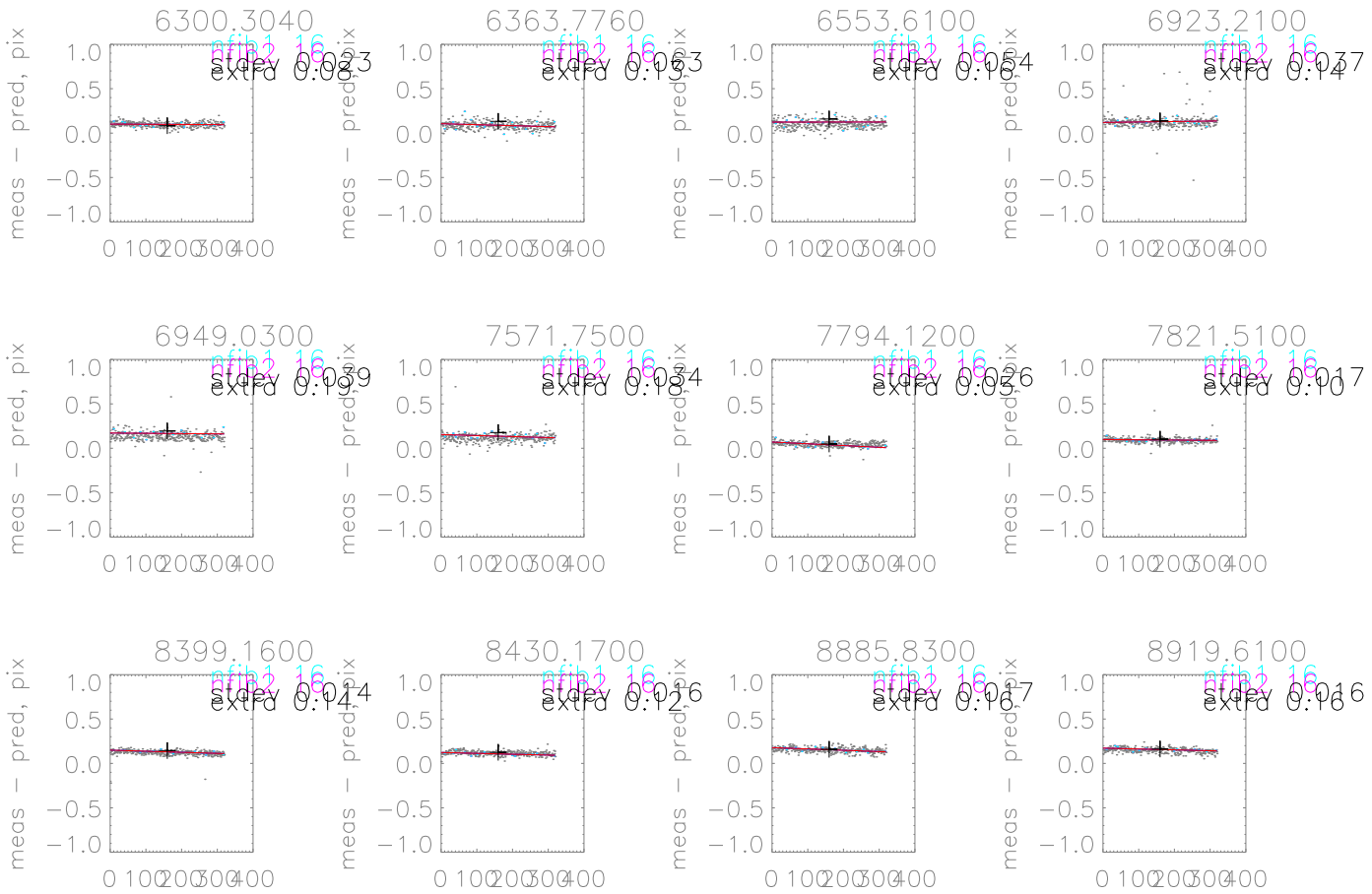

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

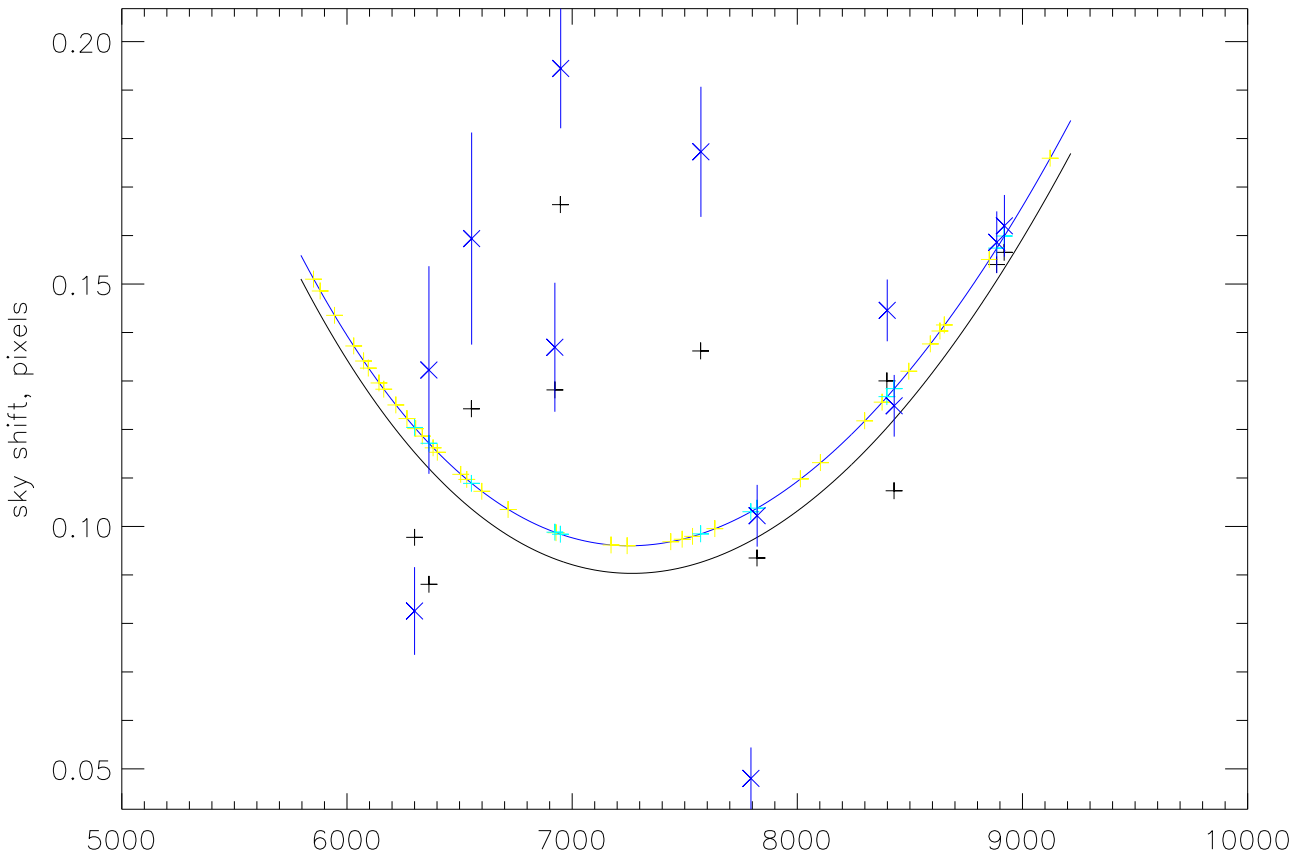

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

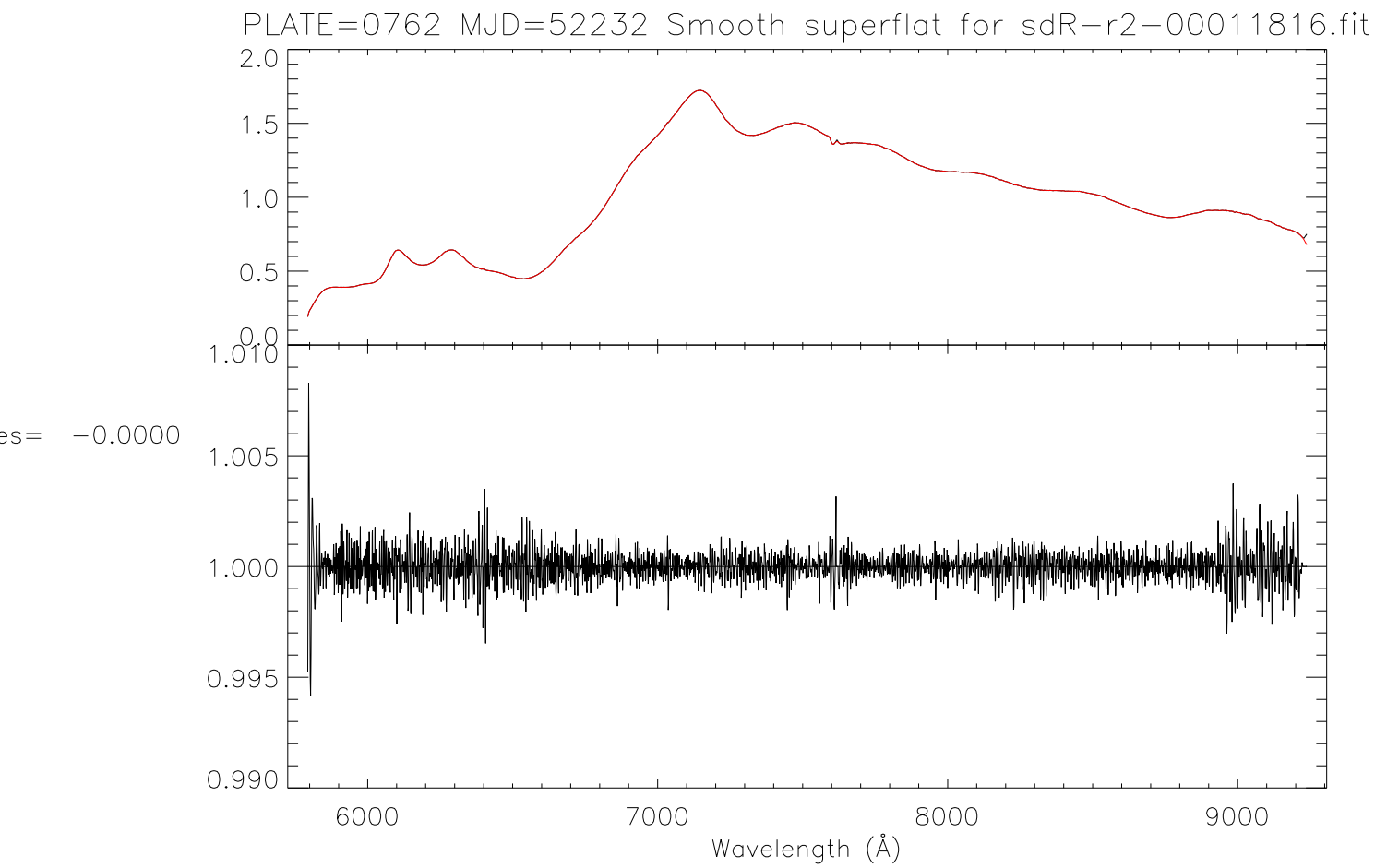

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

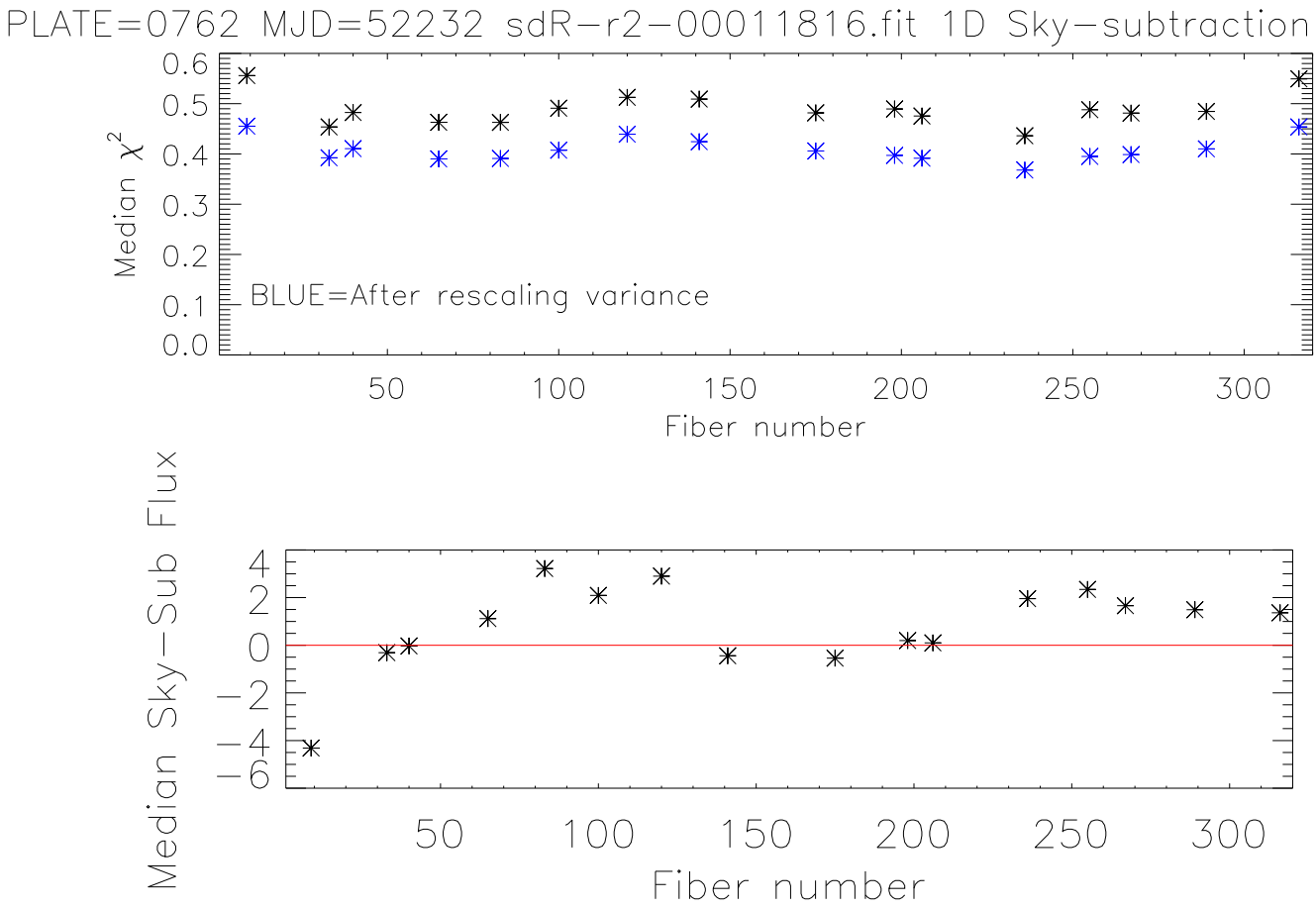

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

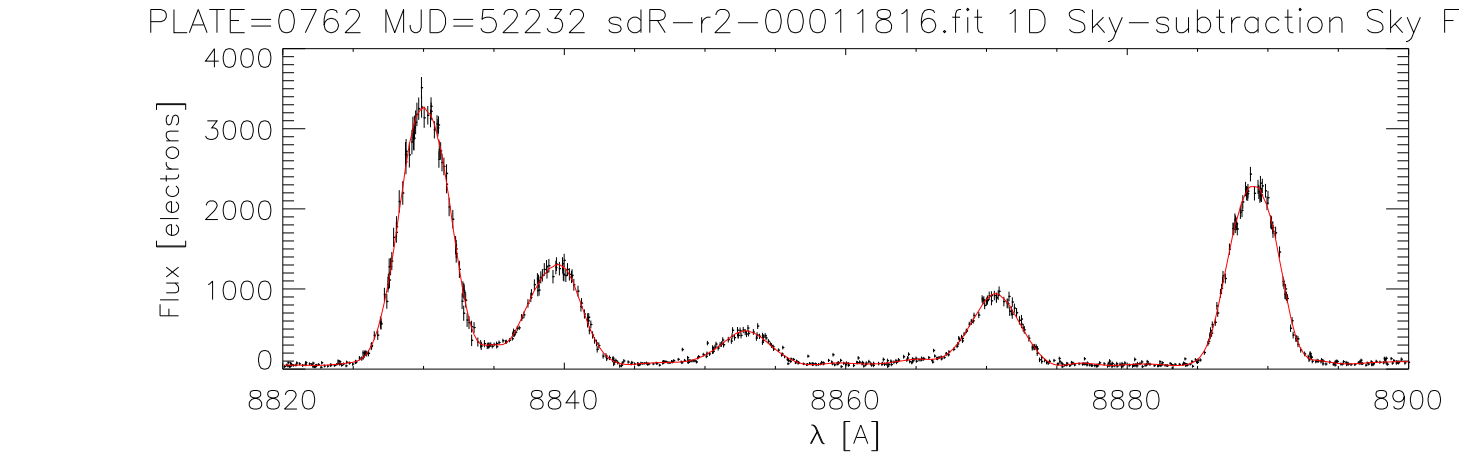

6300.3040
stdev 0.023
extra 0.08
6363.7760
stdev 0.053
extra 0.15
6553.6100
stdev 0.054
extra 0.16
6923.2100
stdev 0.037
extra 0.14
6949.0300
stdev 0.039
extra 0.19
7571.7500
stdev 0.034
extra 0.18
7794.1200
stdev 0.026
extra 0.05
7821.5100
stdev 0.017
extra 0.10
8399.1600
stdev 0.014
extra 0.14
8430.1700
stdev 0.016
extra 0.12
8885.8300
stdev 0.017
extra 0.16
8919.6100
stdev 0.016
extra 0.16
meas − pred, pix
mfb21 16
mfb22 16

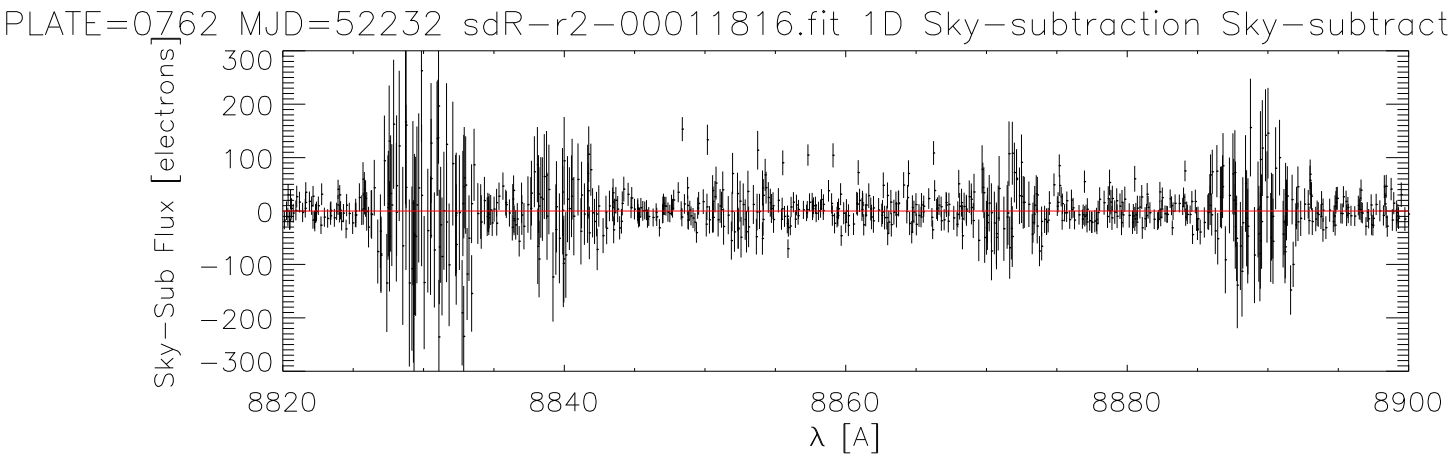

0.20
0.15
0.10
0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

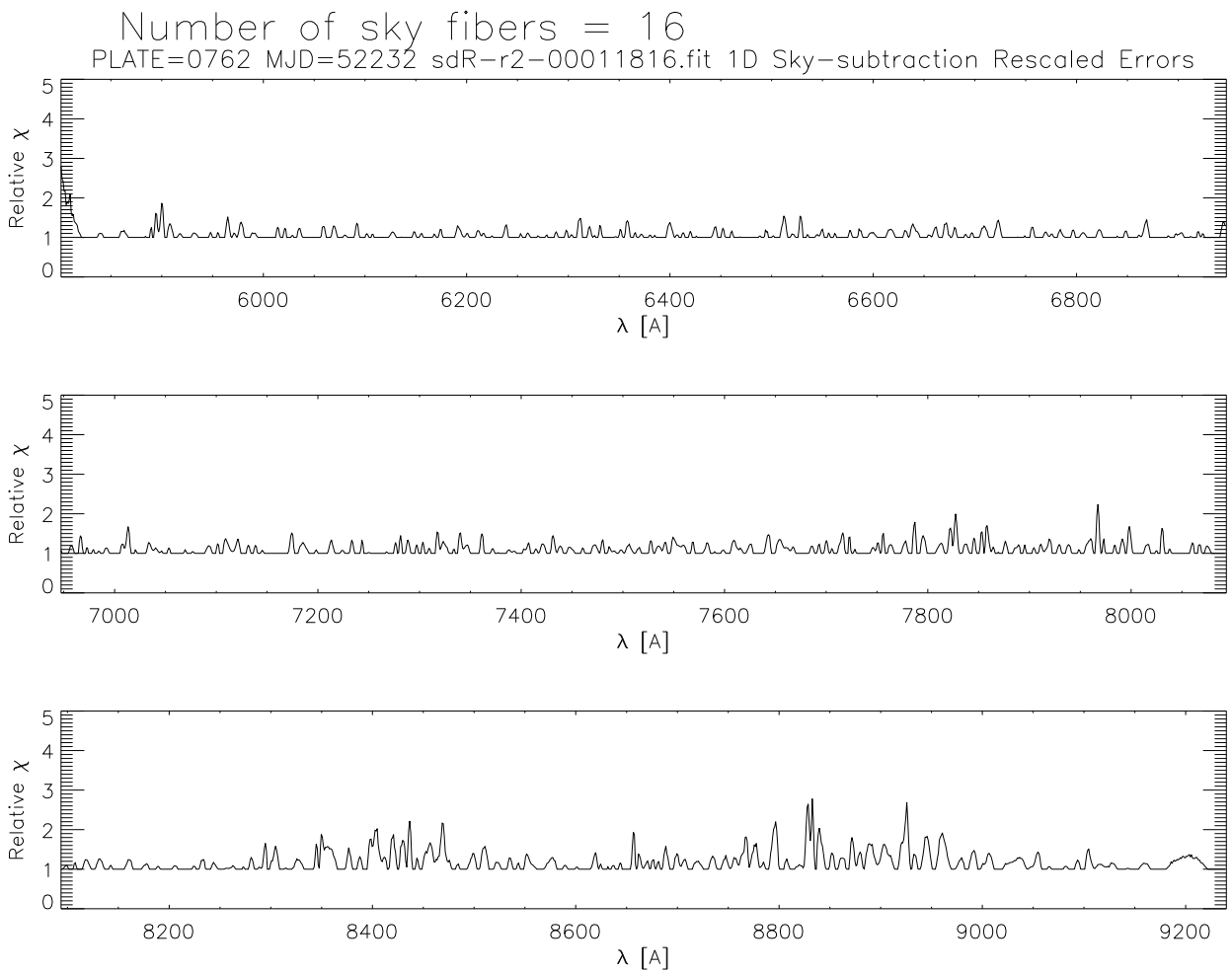

PLATE=0762 MJD=52232 Smooth superflat for sdR-r2-00011816.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

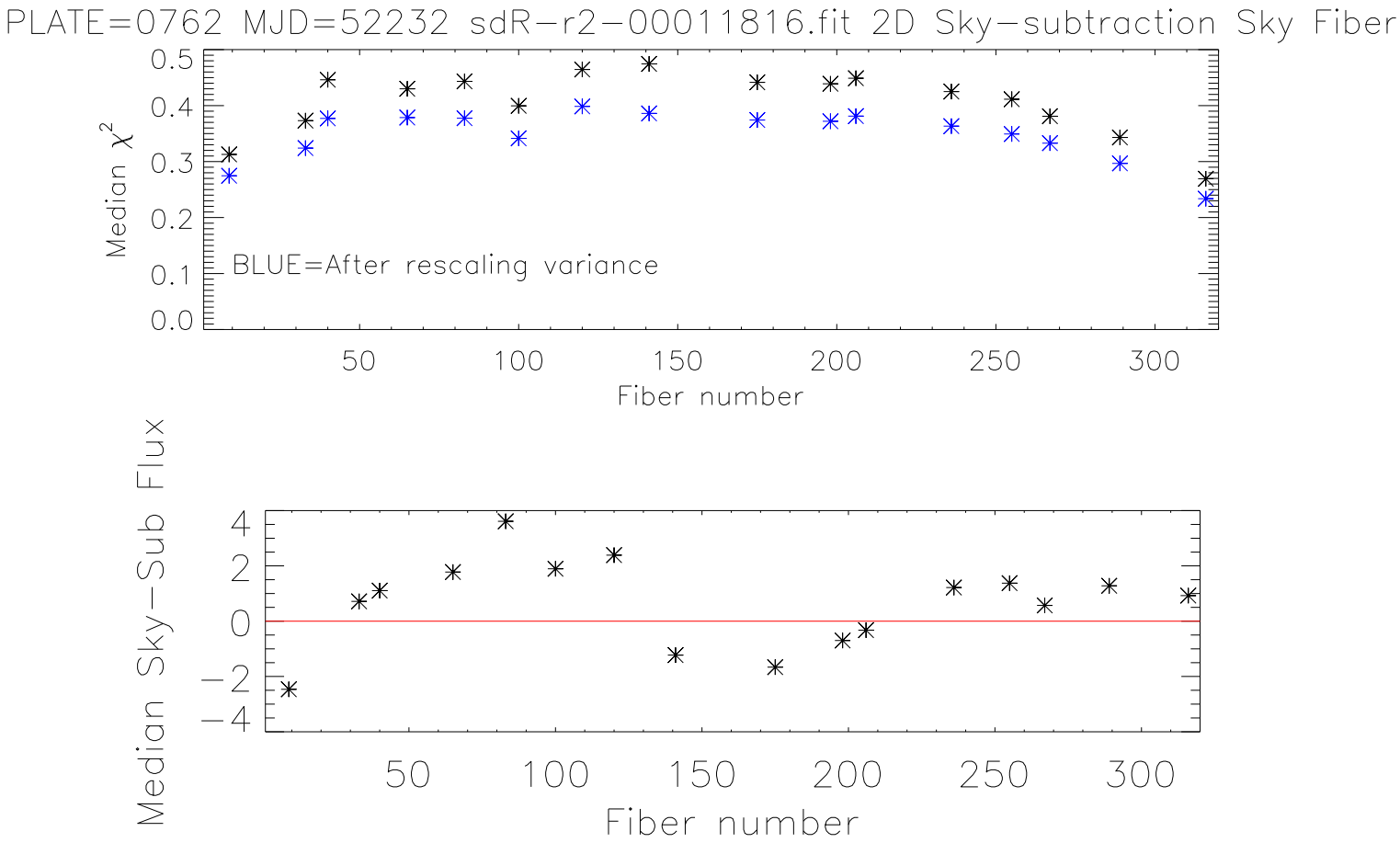
es= −0.0000

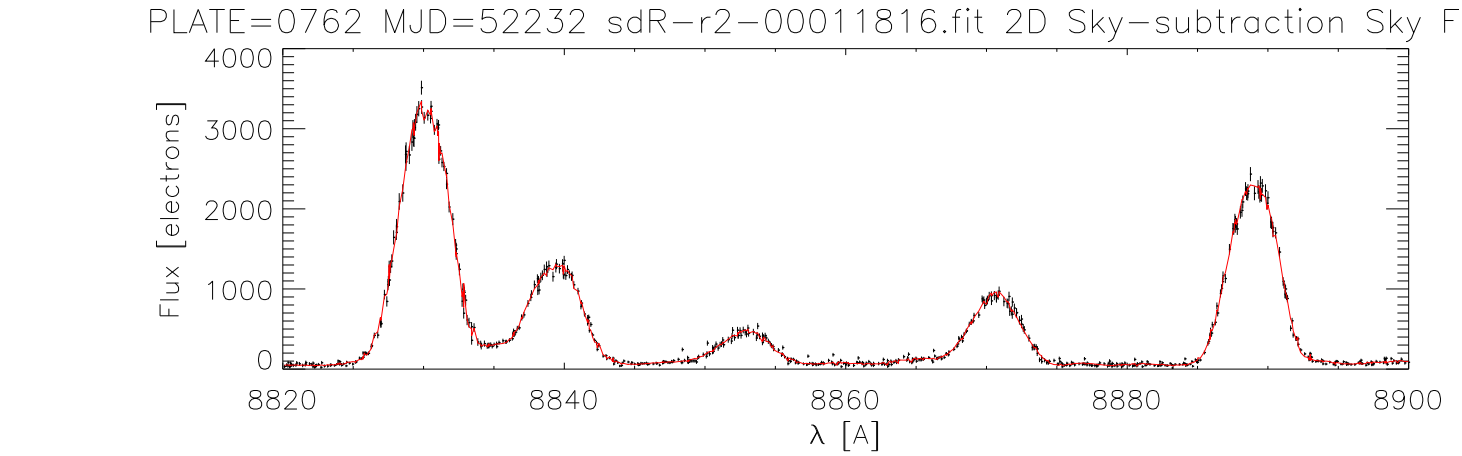

PLATE=0762 MJD=52232 sdR-r2-00011816.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

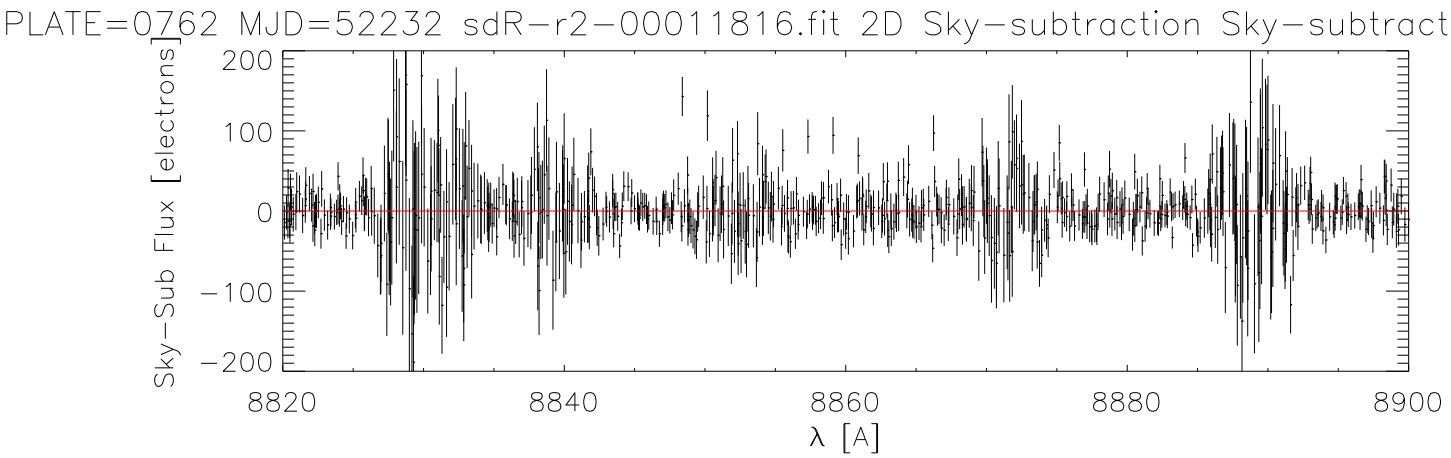

PLATE=0762 MJD=52232 sdR-r2-00011816.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

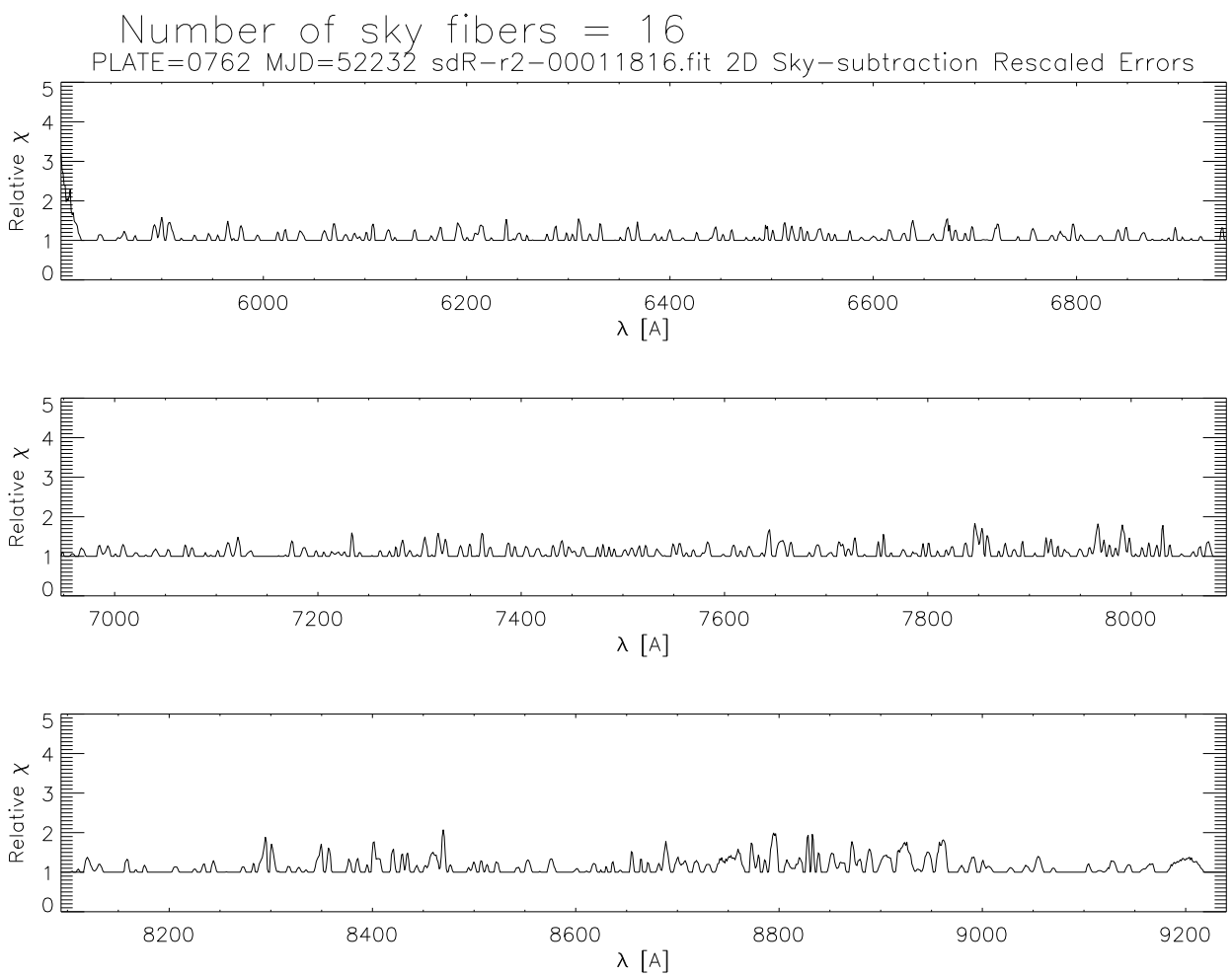

PLATE=0762 MJD=52232 sdR-r2-00011816.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

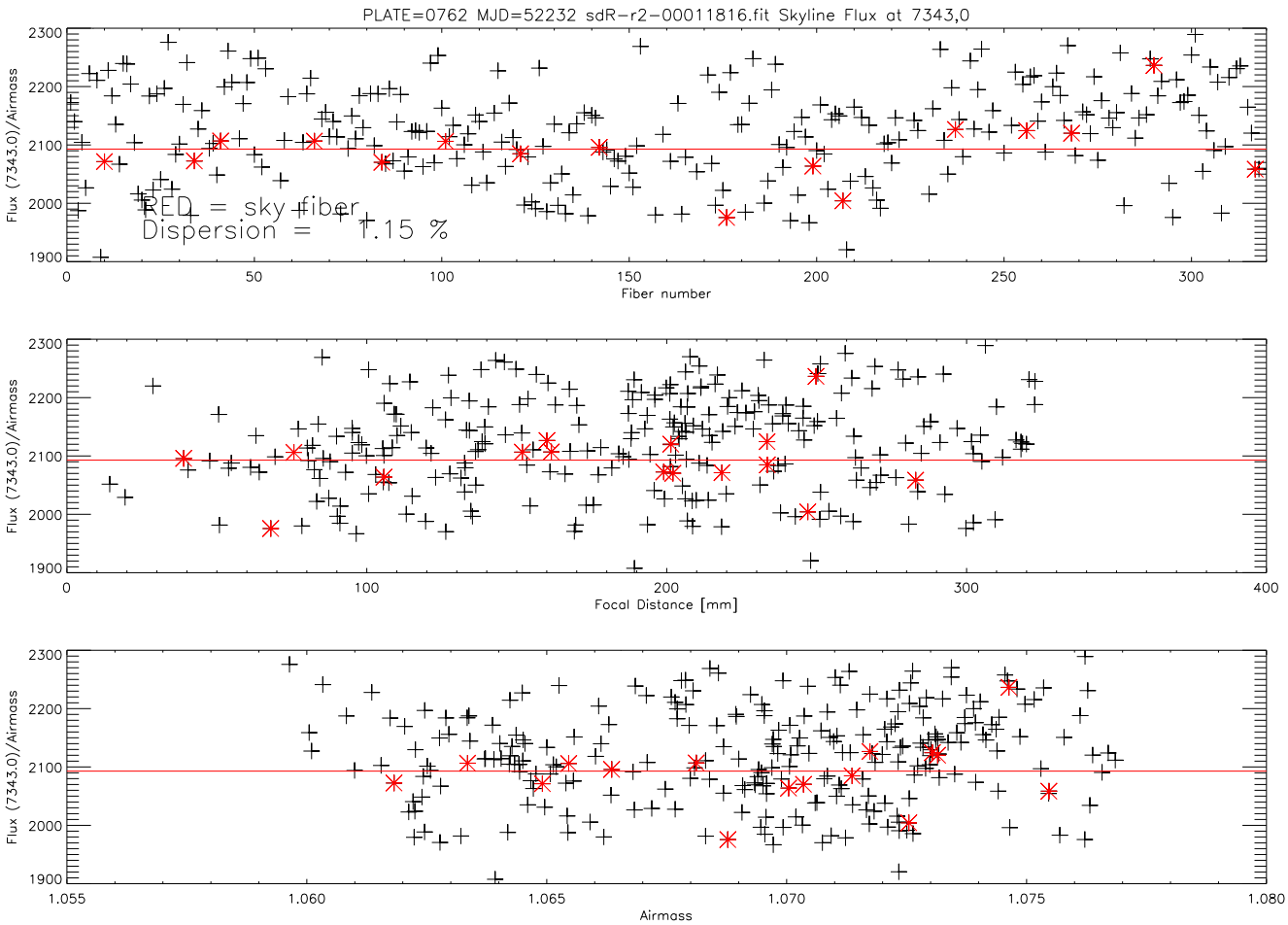

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-r2-00011816.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

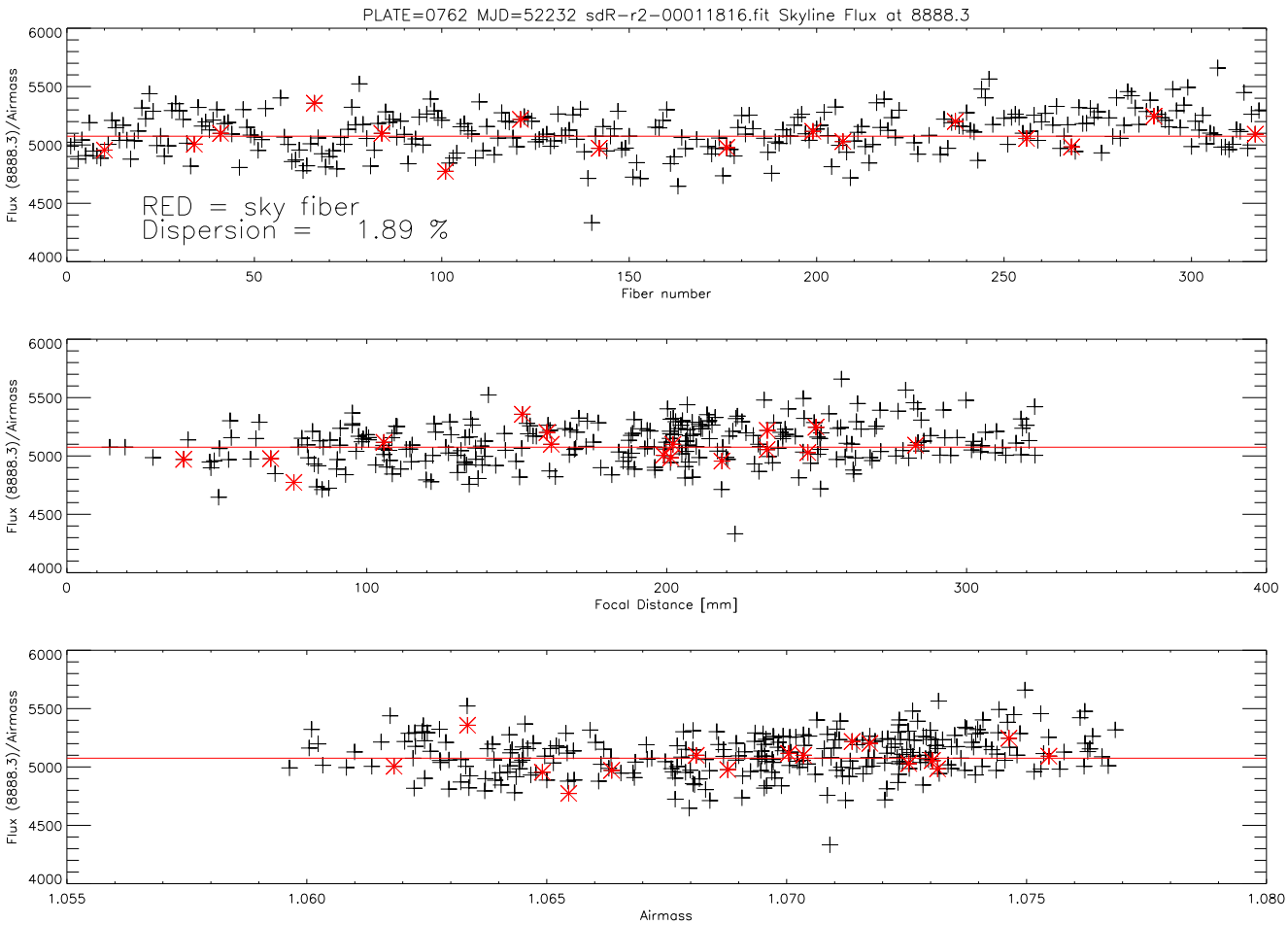

PLATE=0762 MJD=52232 sdR-r2-00011816.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

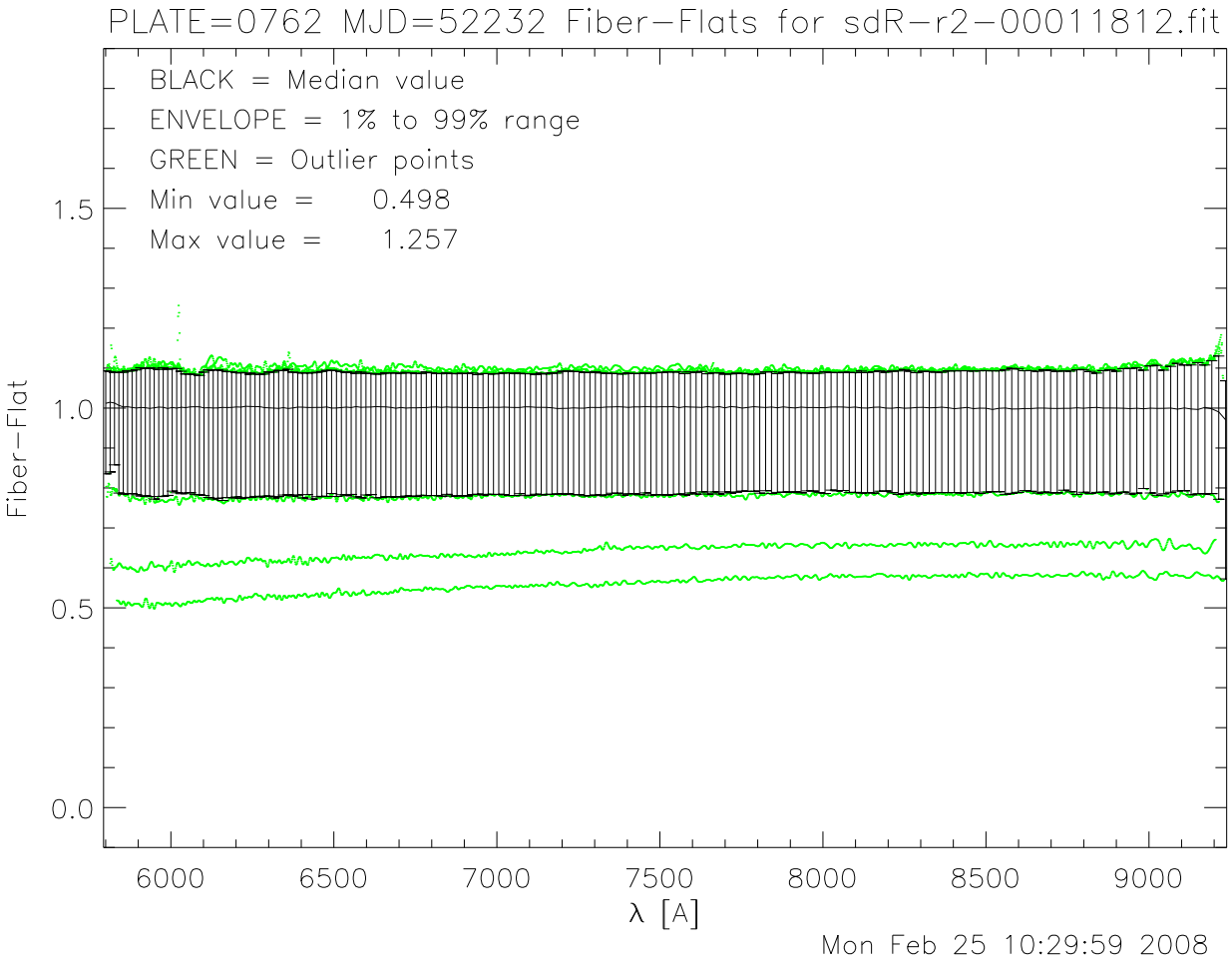

PLATE=0762 MJD=52232 sdR-r2-00011816.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

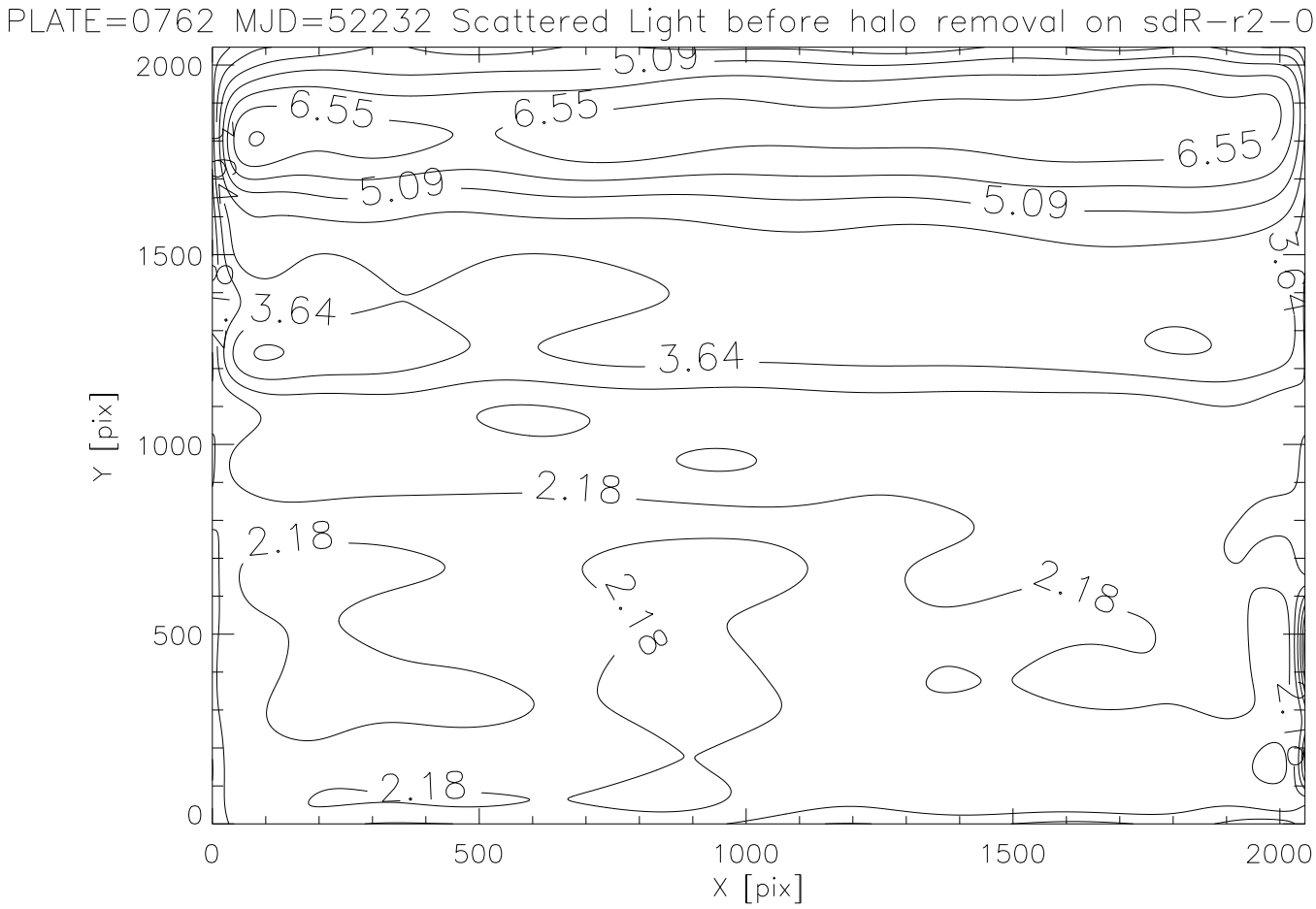

PLATE=0762 MJD=52232 sdR-r2-00011816.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

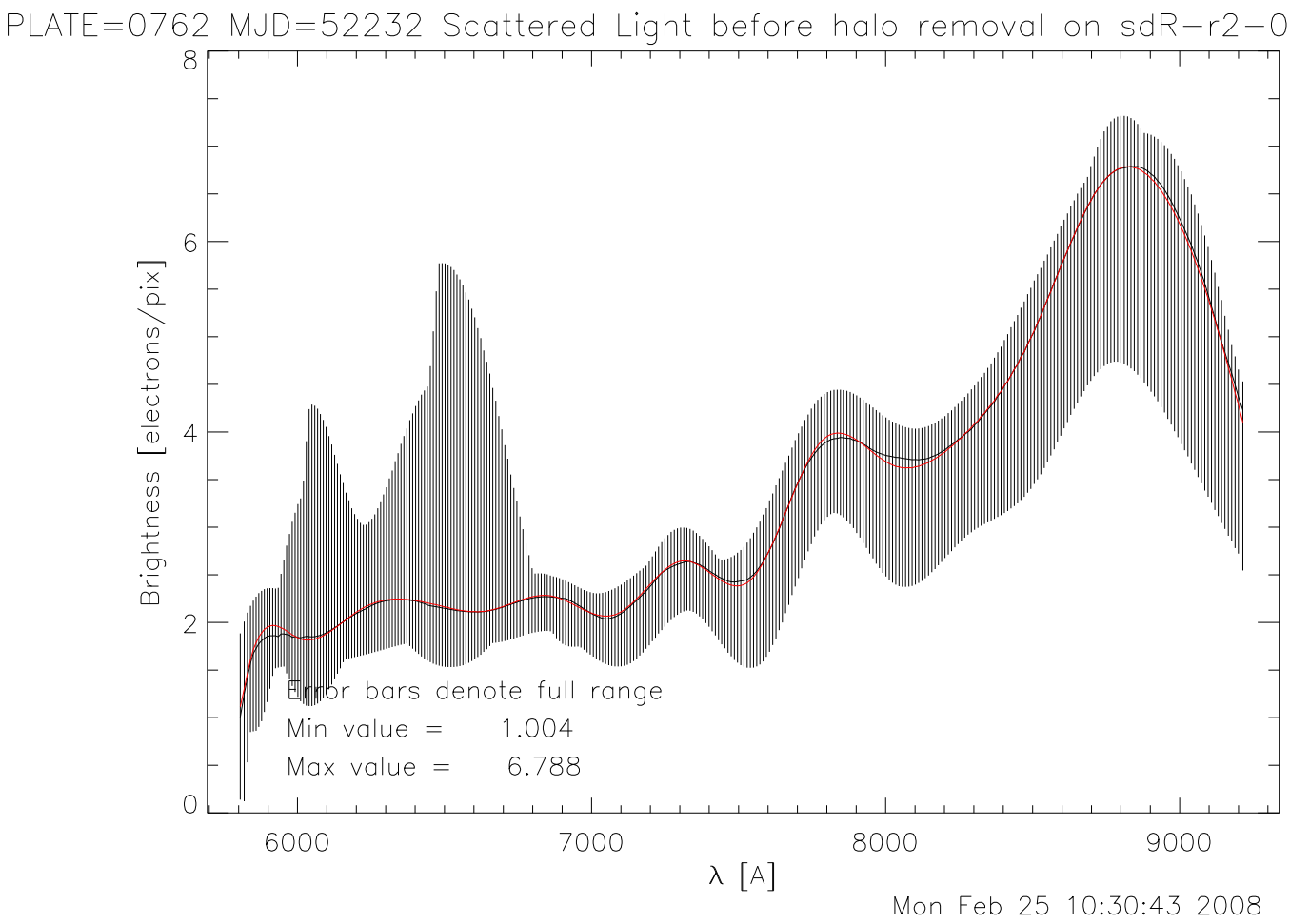

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-r2-00011816.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

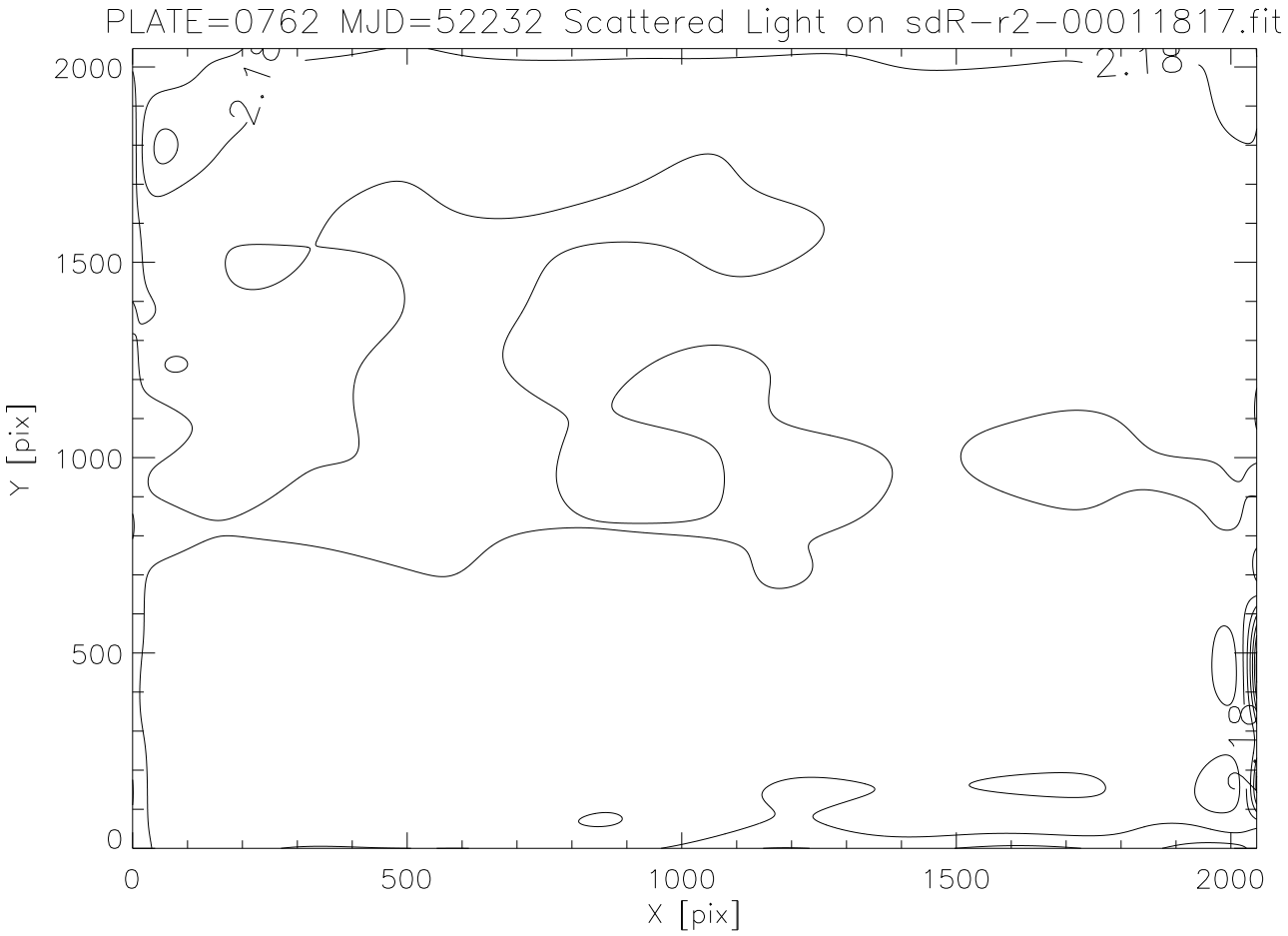

PLATE=0762 MJD=52232 sdR-r2-00011816.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 7.15 %
Flux (7343.0)/Airmass
Fiber number
Focal Distance [mm]
Airmass

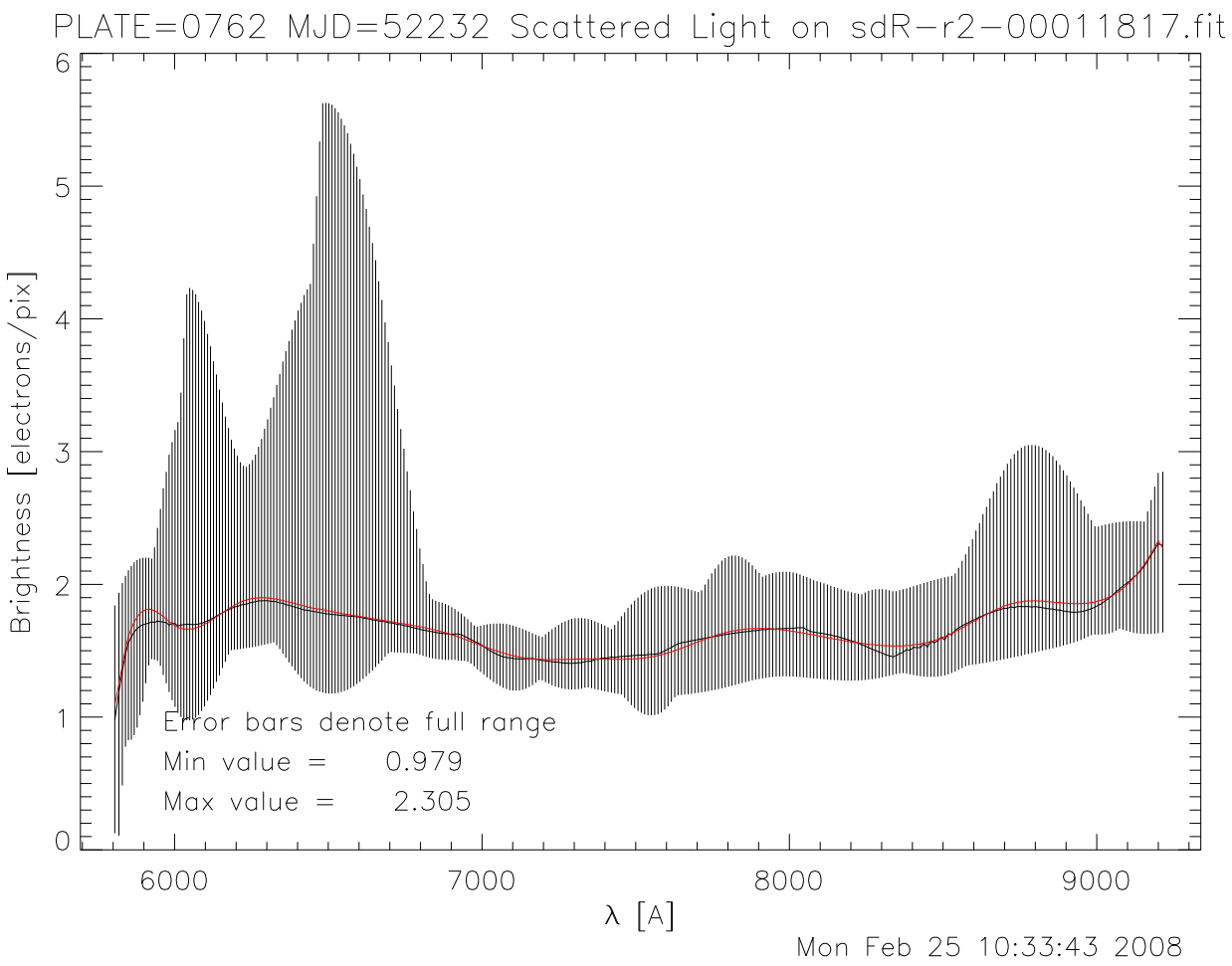

PLATE=0762 MJD=52232 sdR-r2-00011816.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.89 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

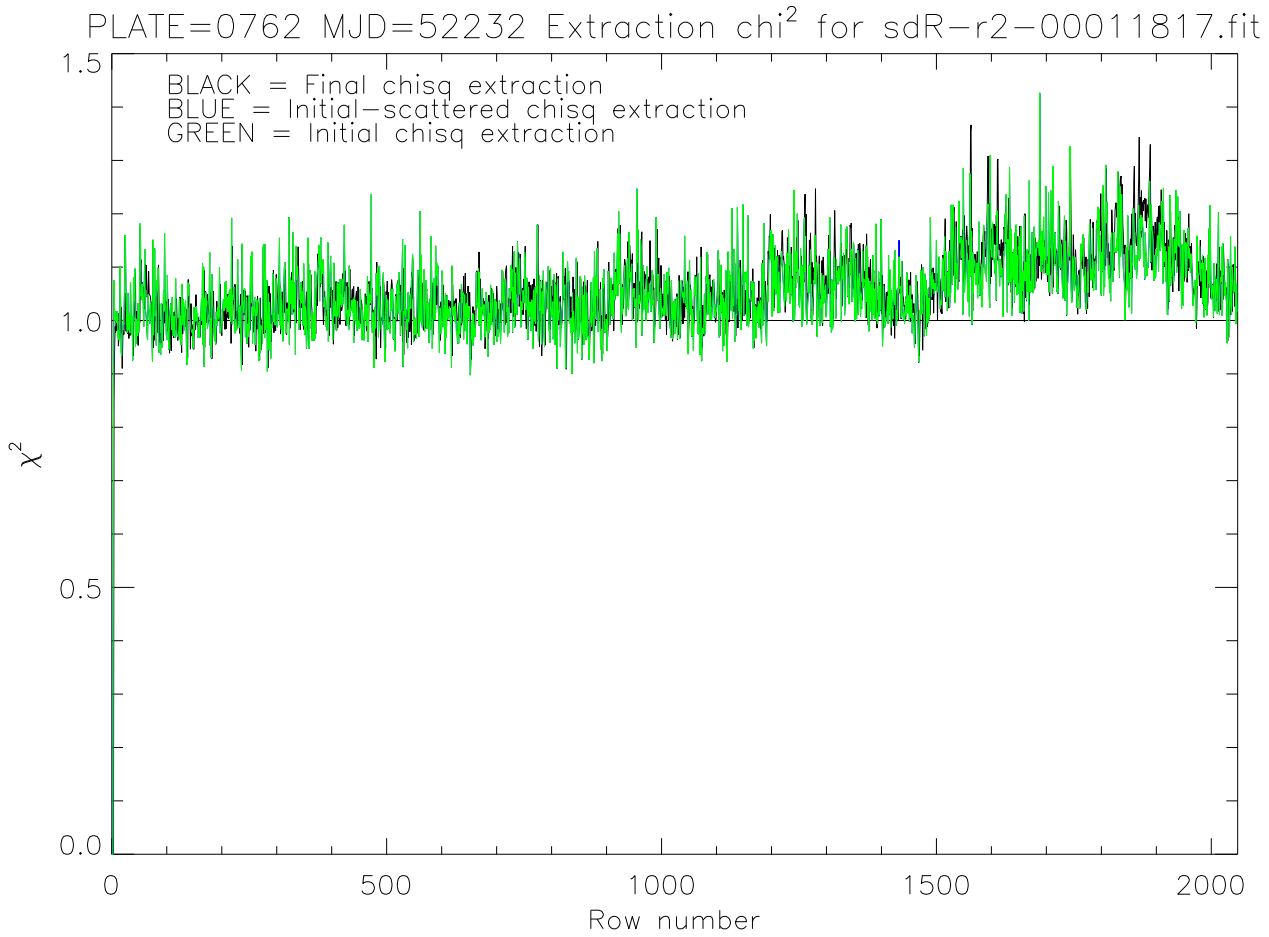

PLATE=0762 MJD=52232 Fiber−Flats for sdR−r2−00011812.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.498
Max value = 1.257
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 10:29:59 2008

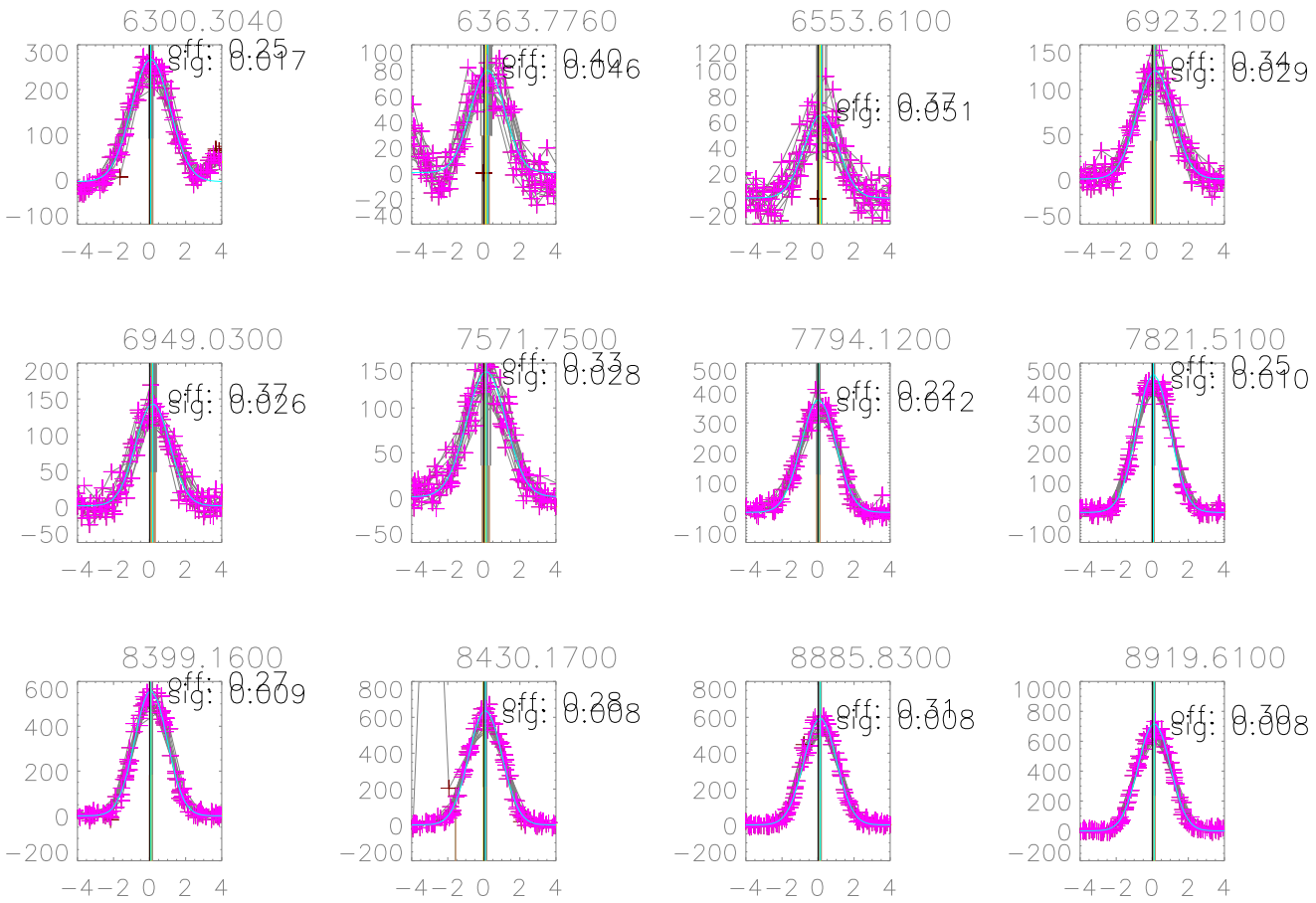

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r2-00011817.fi
5.09
6.55
6.55
6.55
5.09
5.09
3.64
3.64
3.64
2.18
2.18
2.18
2.18
2.18
2.18
Y [pix]
X [pix]
0
500
1000
1500
2000

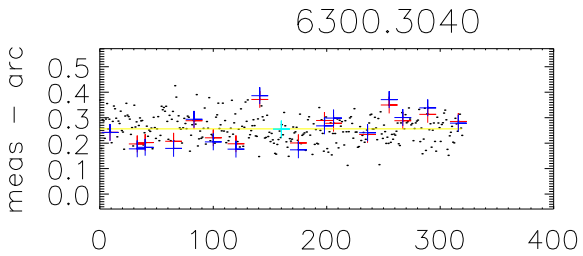

PLATE=0762 MJD=52232 Scattered Light before halo removal on sdR-r2-00011817.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.004
Max value = 6.788
Mon Feb 25 10:30:43 2008

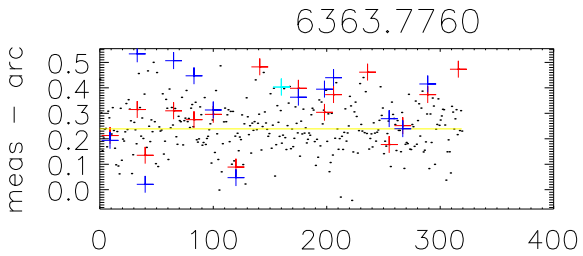

PLATE=0762 MJD=52232 Scattered Light on sdR-r2-00011817.fit
2.18
2.18
2.18
2.18
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

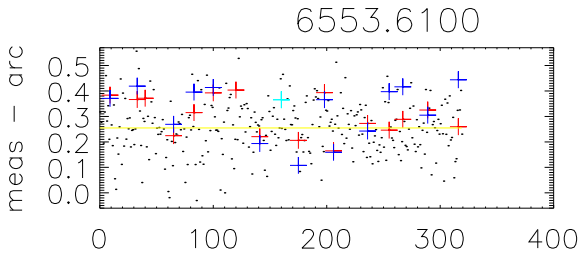

PLATE=0762 MJD=52232 Scattered Light on sdR-r2-00011817.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.979
Max value = 2.305
Mon Feb 25 10:33:43 2008

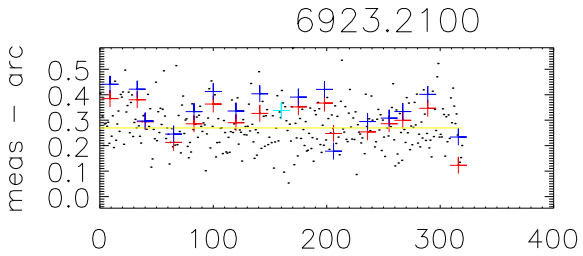

PLATE=0762 MJD=52232 Extraction chi^2 for sdR−r2−00011817.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

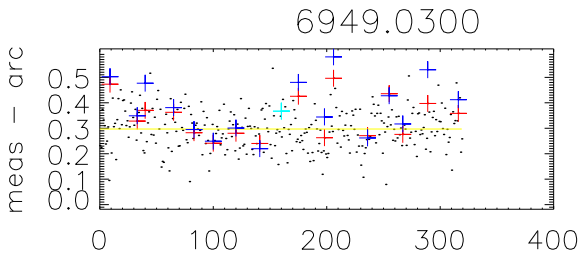

6300.3040
off: 0.25
sig: 0.017
6363.7760
off: 0.40
sig: 0.046
6553.6100
off: 0.37
sig: 0.051
6923.2100
off: 0.34
sig: 0.029
6949.0300
off: 0.37
sig: 0.026
7571.7500
off: 0.33
sig: 0.028
7794.1200
off: 0.22
sig: 0.012
7821.5100
off: 0.25
sig: 0.010
8399.1600
off: 0.27
sig: 0.009
8430.1700
off: 0.28
sig: 0.008
8885.8300
off: 0.31
sig: 0.008
8919.6100
off: 0.30
sig: 0.008

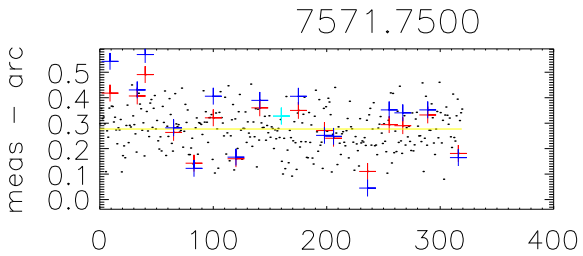

6300.3040
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

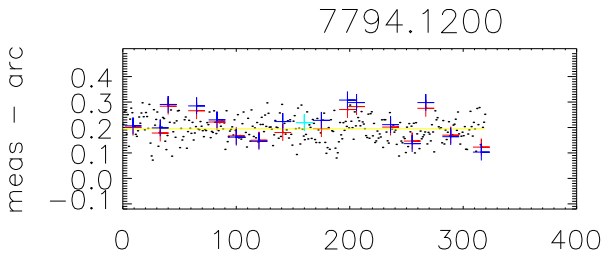

6363.7760
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

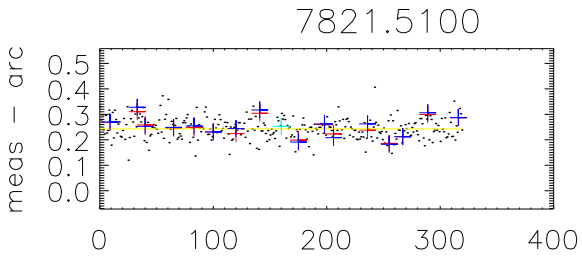

6553.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

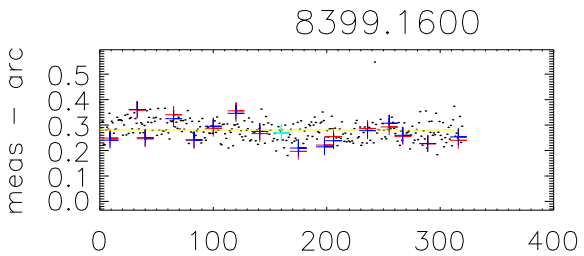

6923.2100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

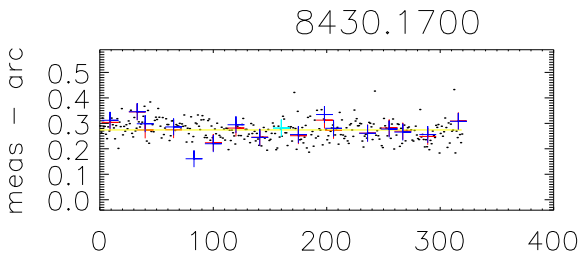

6949.0300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

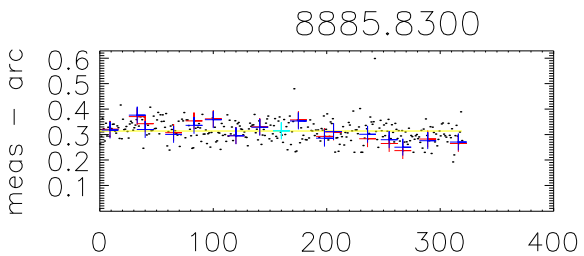

7571.7500
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

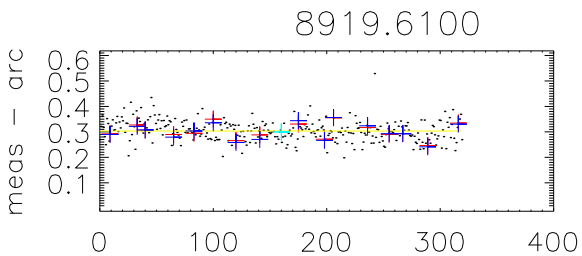

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

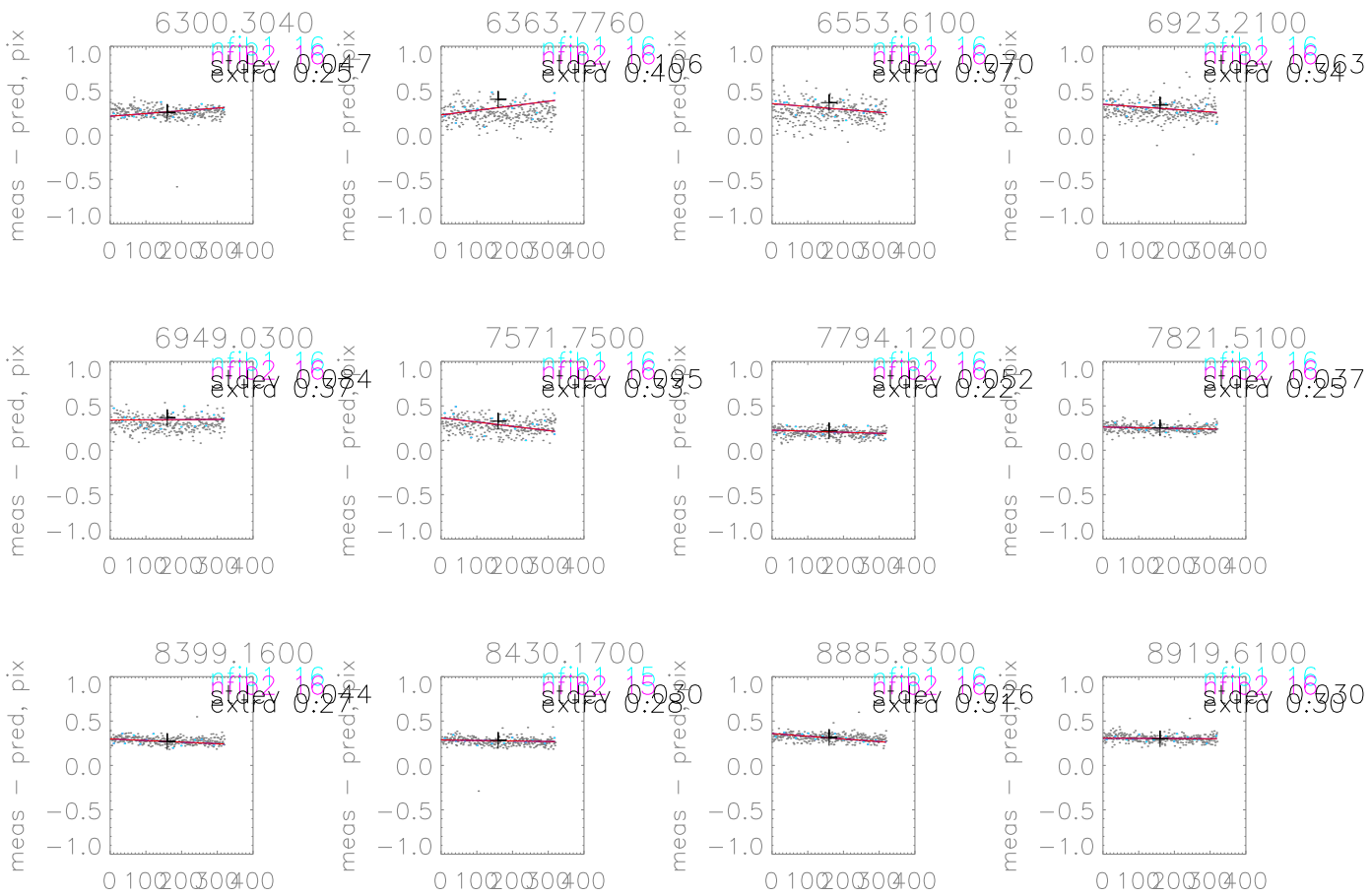

7821.5100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

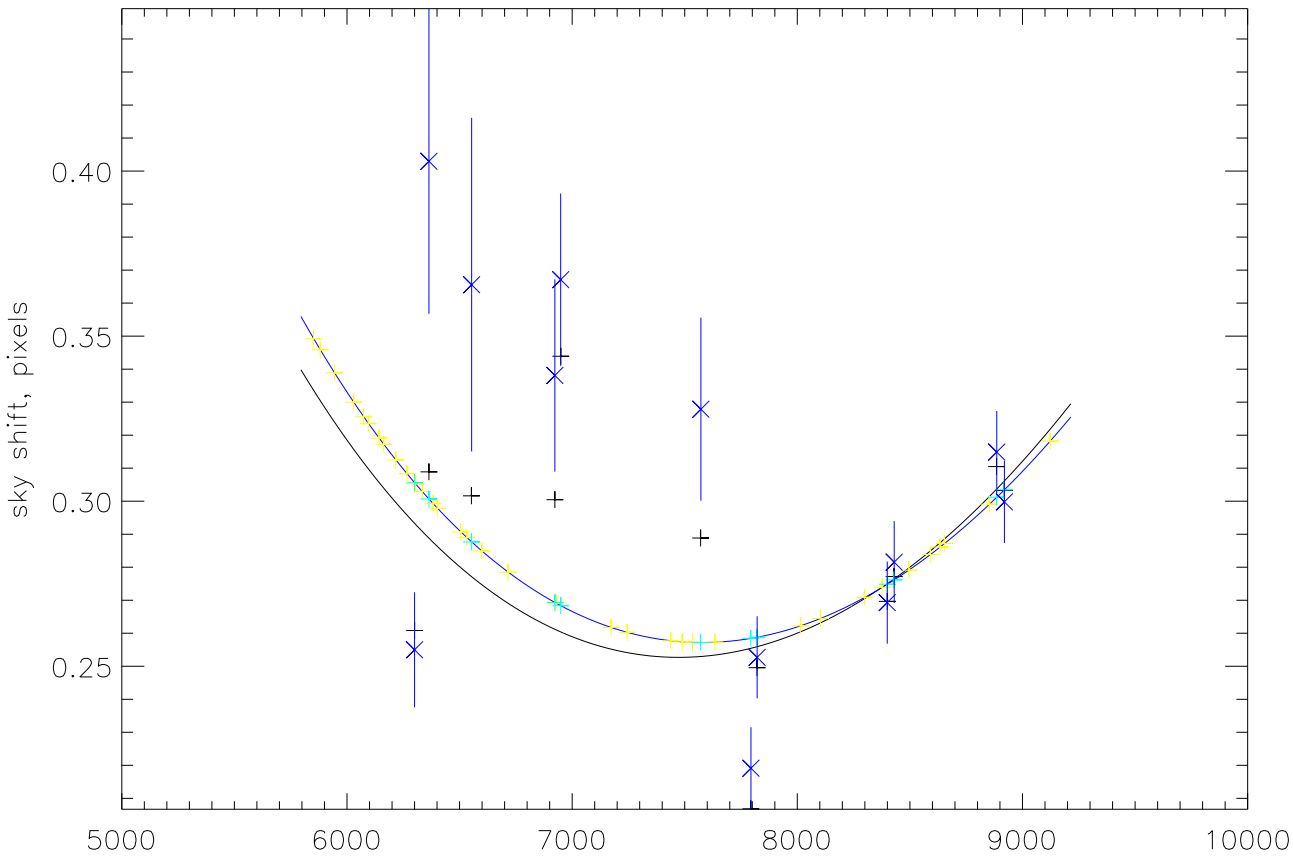

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

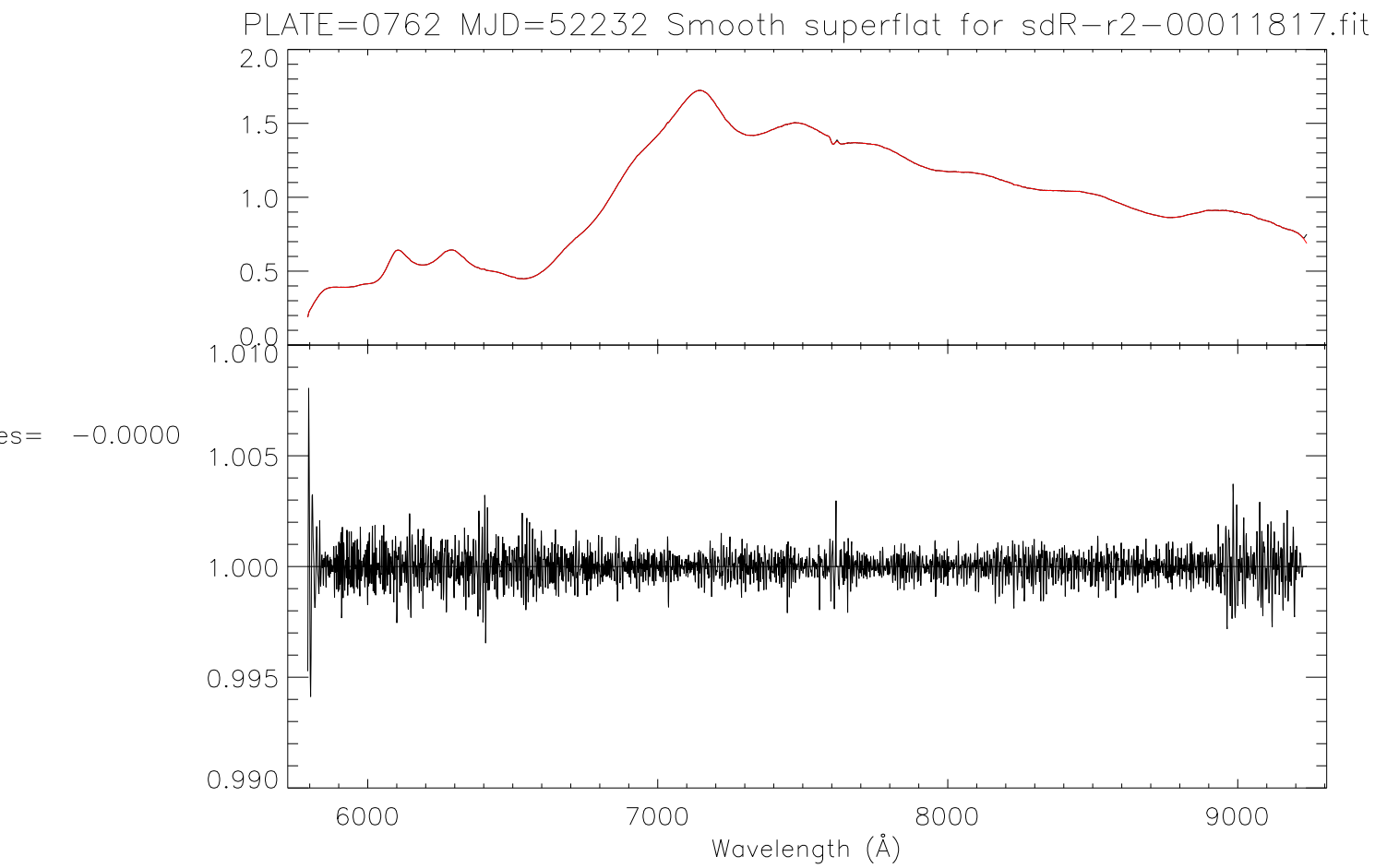

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

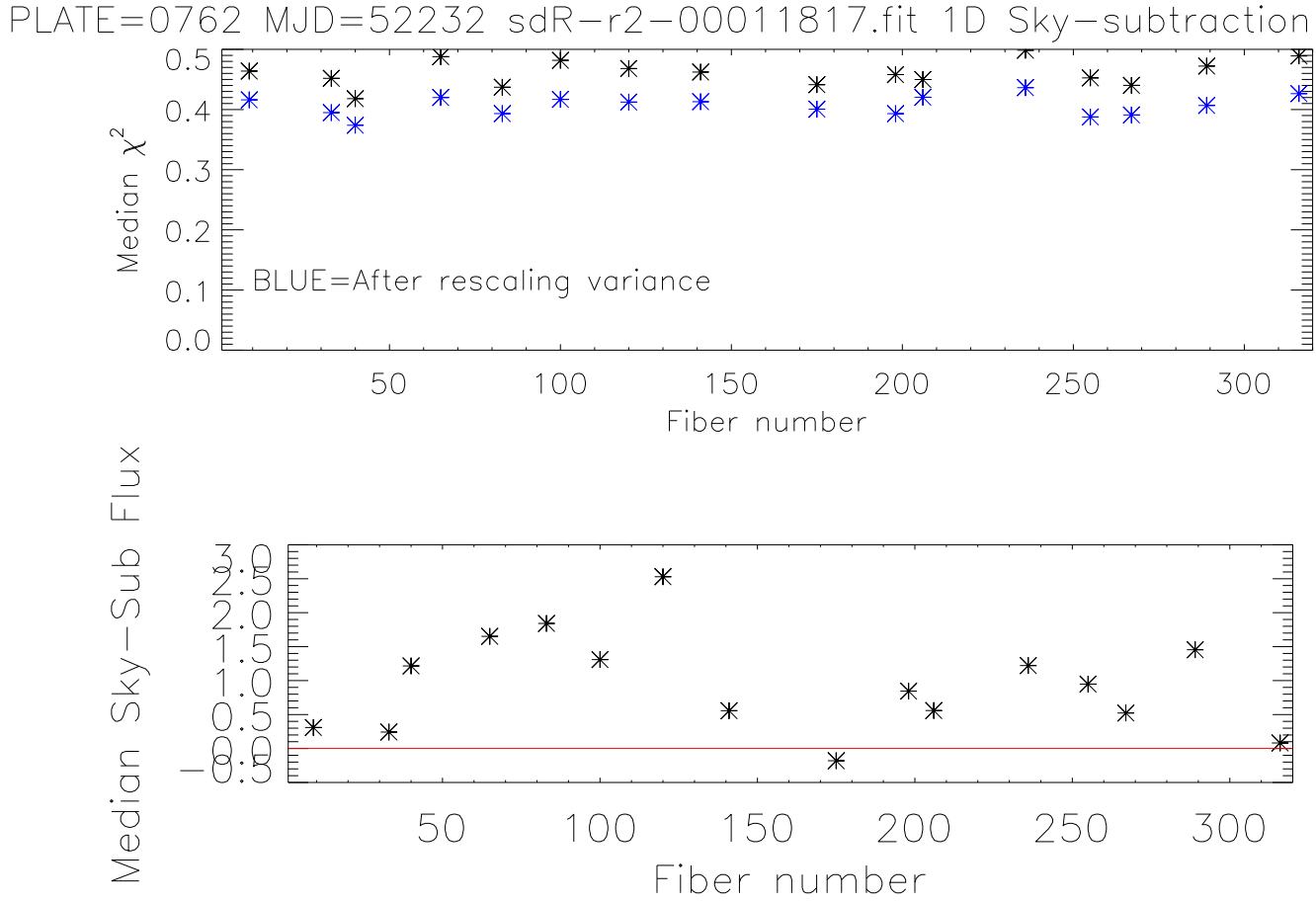

8919.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

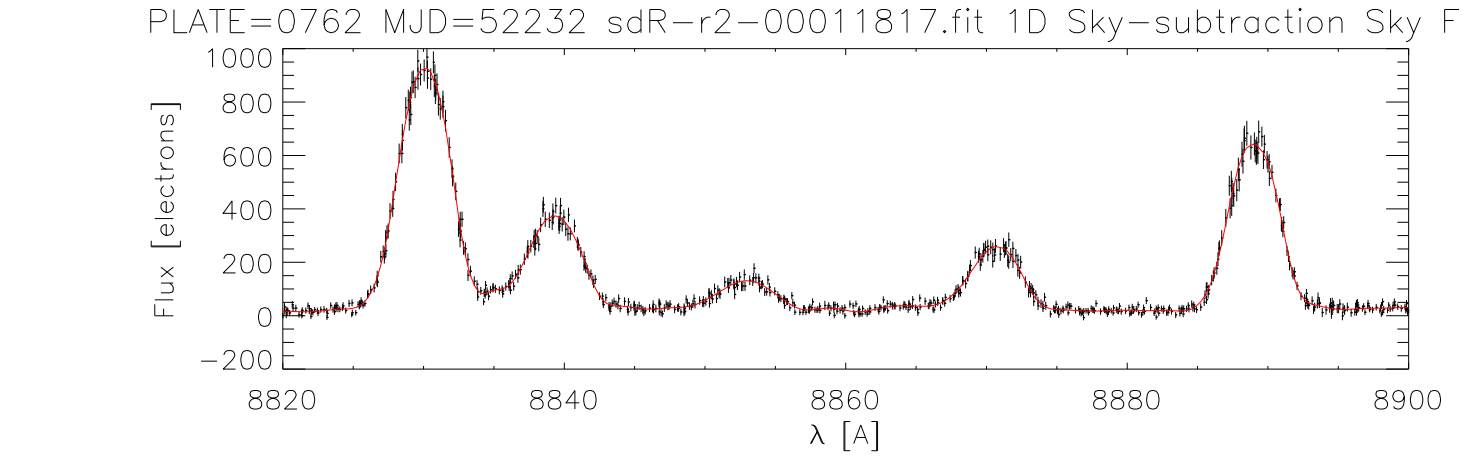

6300.3040
mfib1 16
mfib2 16
stdev 0.047
extra 0.25
6363.7760
mfib1 16
mfib2 16
stdev 0.106
extra 0.40
6553.6100
mfib1 16
mfib2 16
stdev 0.070
extra 0.37
6923.2100
mfib1 16
mfib2 16
stdev 0.063
extra 0.34
6949.0300
mfib1 16
mfib2 16
stdev 0.084
extra 0.37
7571.7500
mfib1 16
mfib2 16
stdev 0.095
extra 0.33
7794.1200
mfib1 16
mfib2 16
stdev 0.052
extra 0.22
7821.5100
mfib1 16
mfib2 16
stdev 0.037
extra 0.25
8399.1600
mfib1 16
mfib2 16
stdev 0.044
extra 0.27
8430.1700
mfib1 15
mfib2 16
stdev 0.030
extra 0.28
8885.8300
mfib1 16
mfib2 16
stdev 0.026
extra 0.31
8919.6100
mfib1 16
mfib2 16
stdev 0.030
extra 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

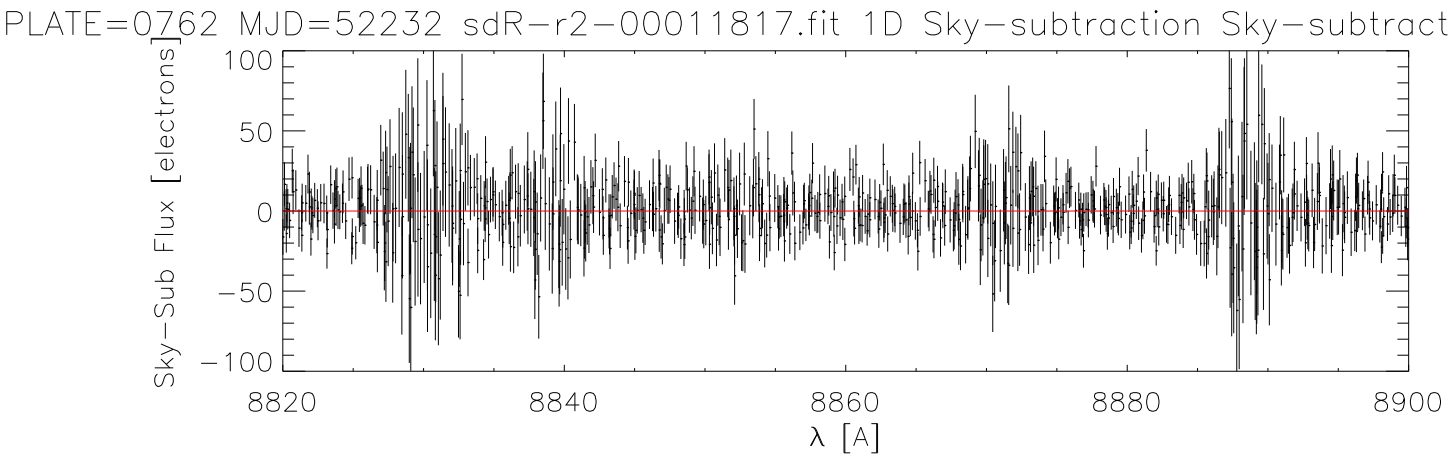

sky shift, pixels
0.40
0.35
0.30
0.25
5000
6000
7000
8000
9000
10000

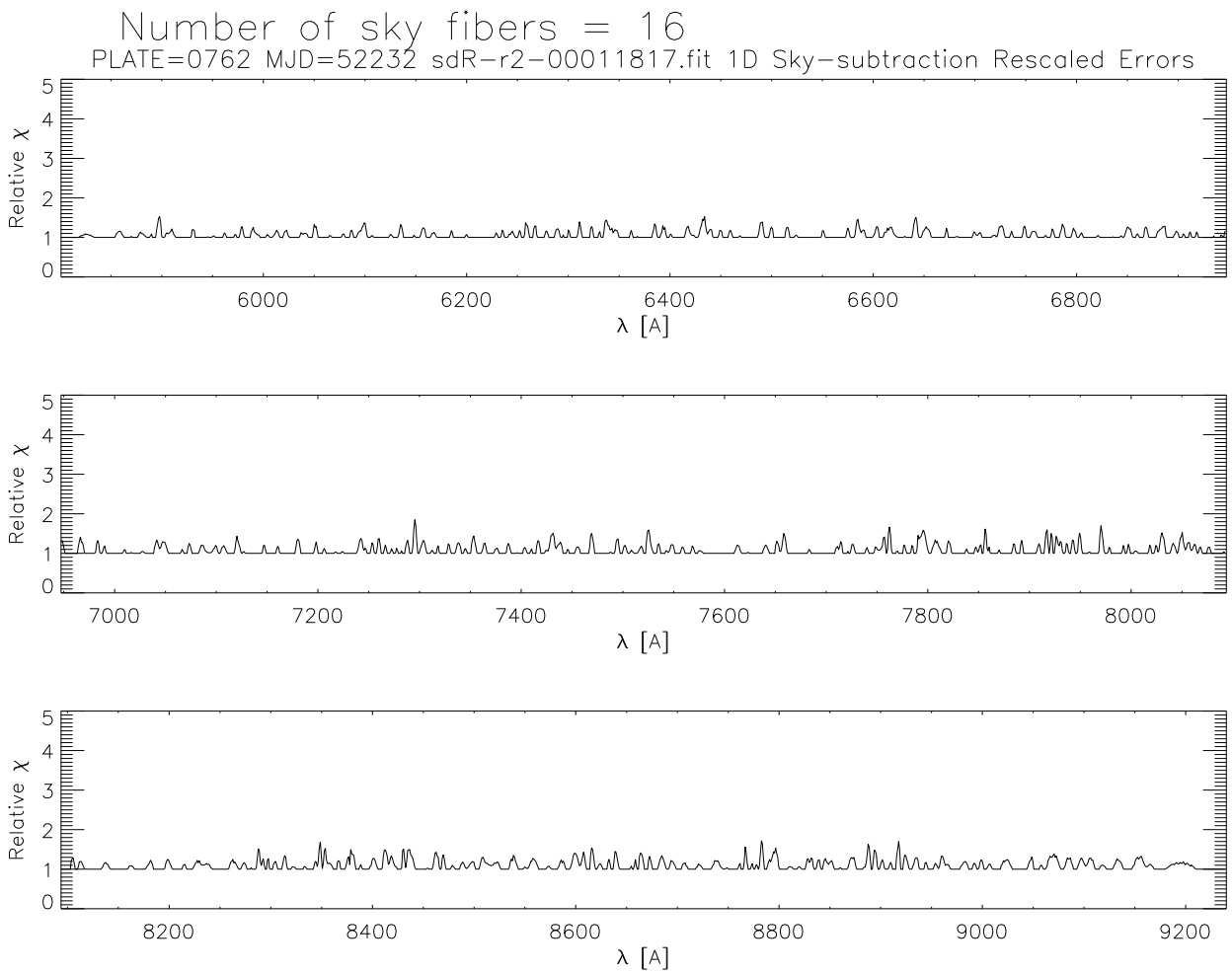

PLATE=0762 MJD=52232 Smooth superflat for sdR-r2-00011817.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

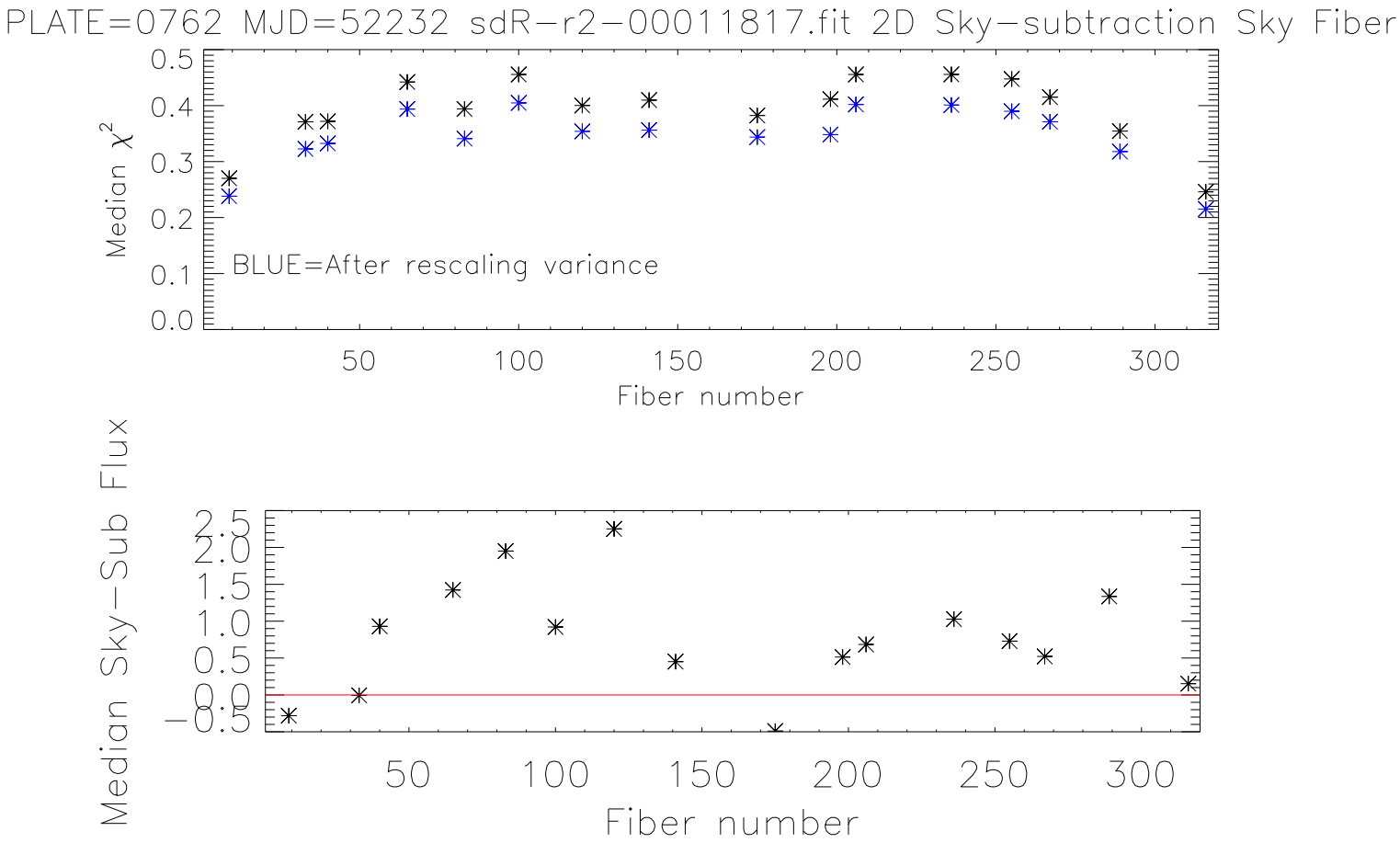
es= −0.0000

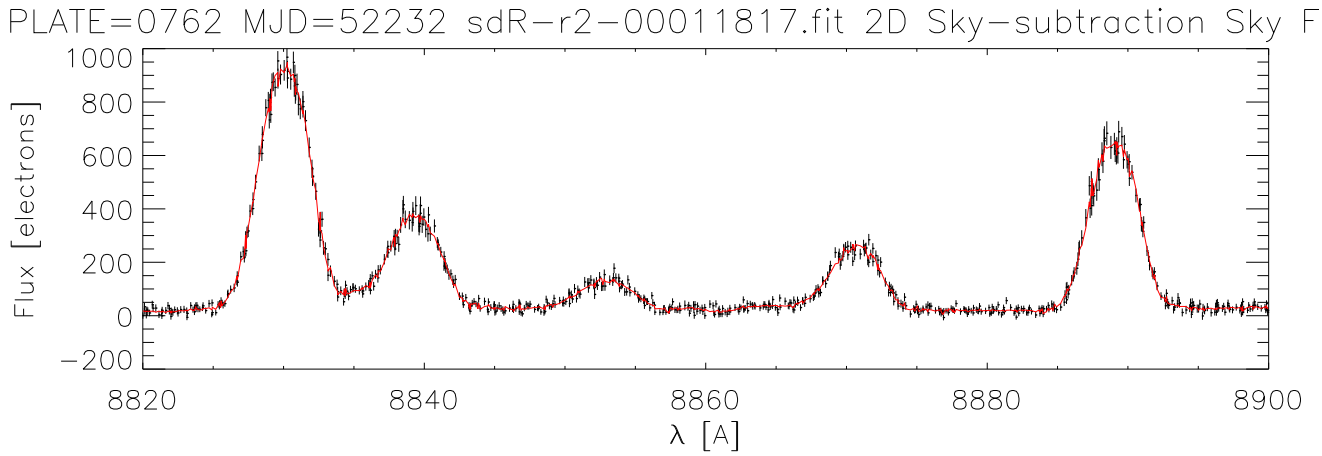

PLATE=0762 MJD=52232 sdR-r2-00011817.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

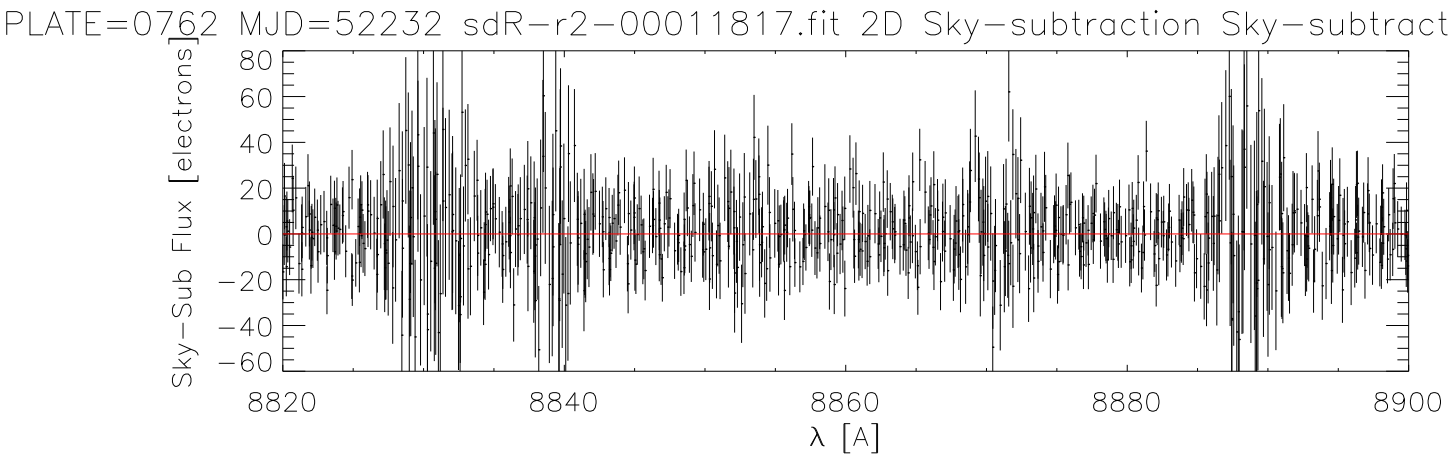

PLATE=0762 MJD=52232 sdR-r2-00011817.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

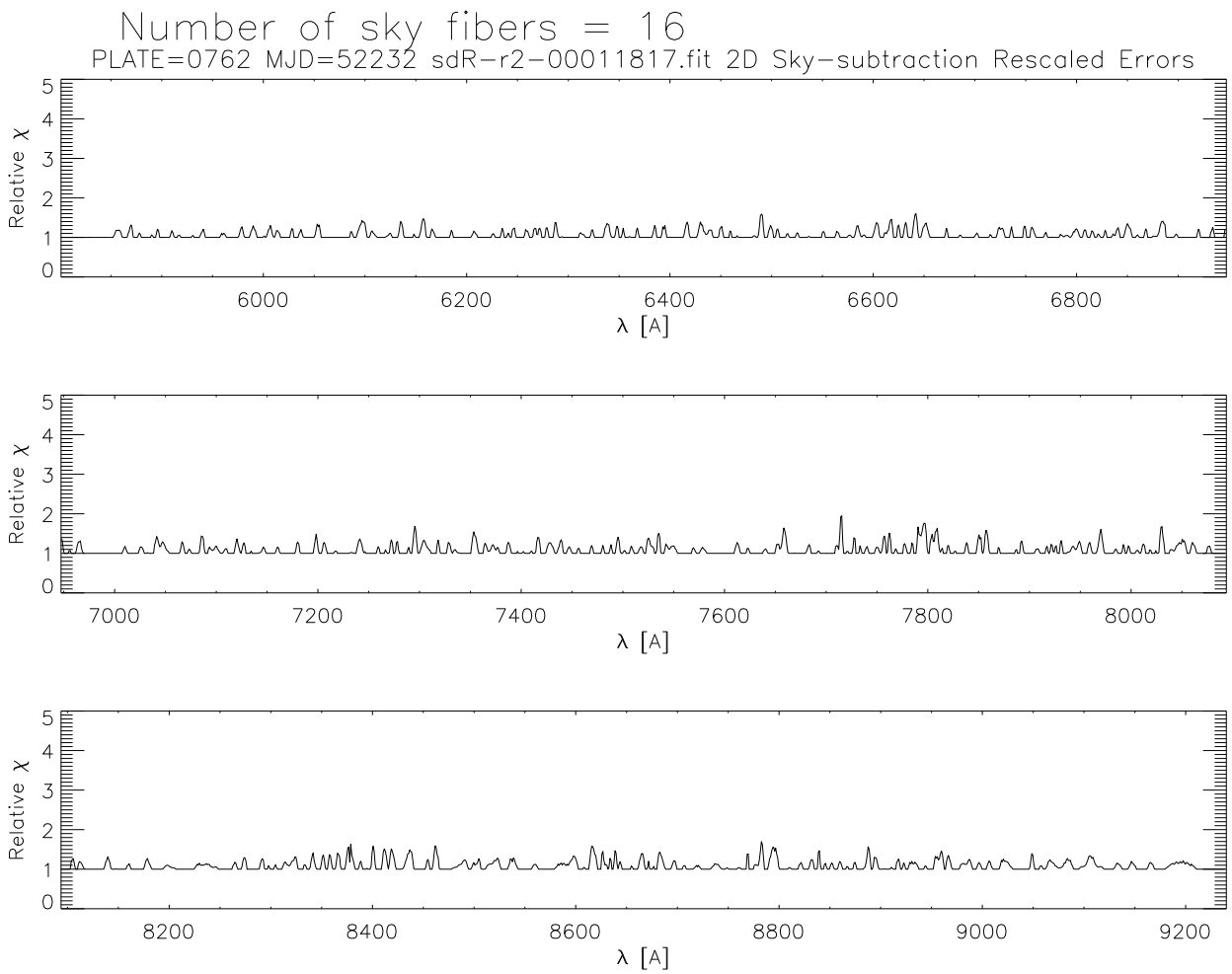

PLATE=0762 MJD=52232 sdR-r2-00011817.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

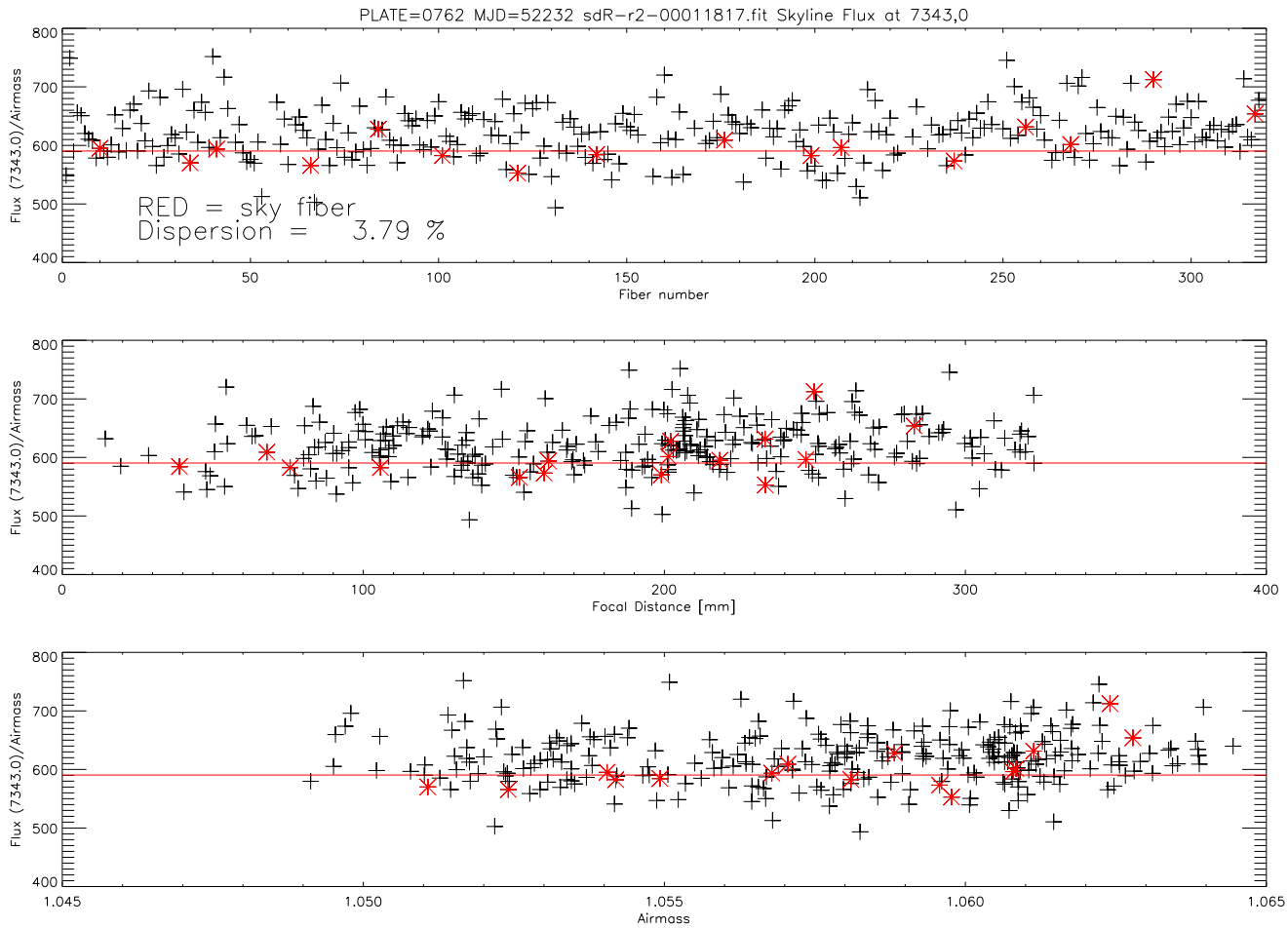

Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-r2-00011817.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

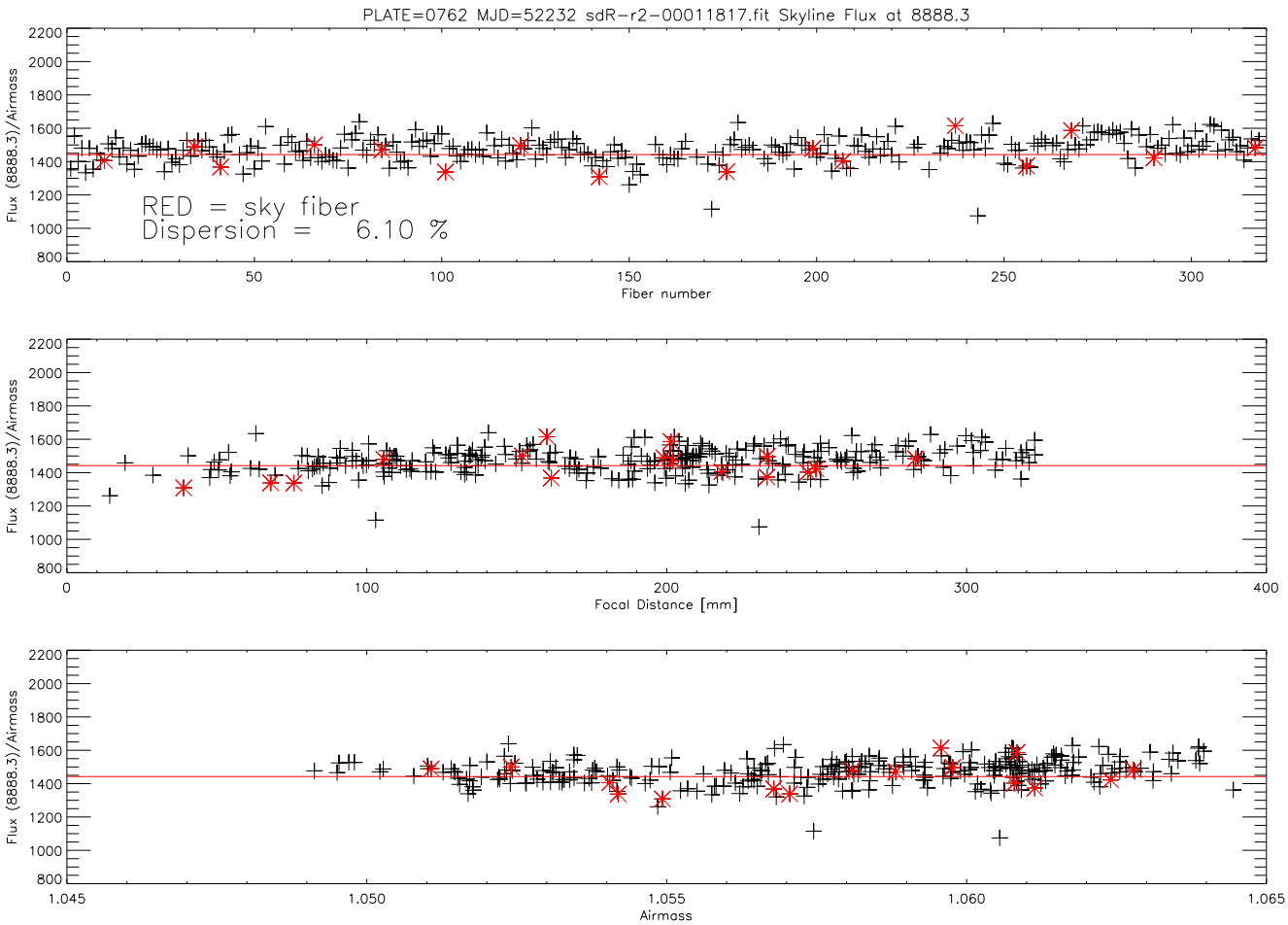

PLATE=0762 MJD=52232 sdR-r2-00011817.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0762 MJD=52232 sdR-r2-00011817.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]


PLATE=0762 MJD=52232 sdR-r2-00011817.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
80
60
40
20
0
-20
-40
-60
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=0762 MJD=52232 sdR-r2-00011817.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=0762 MJD=52232 sdR-r2-00011817.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.79 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=0762 MJD=52232 sdR-r2-00011817.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 6.10 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass