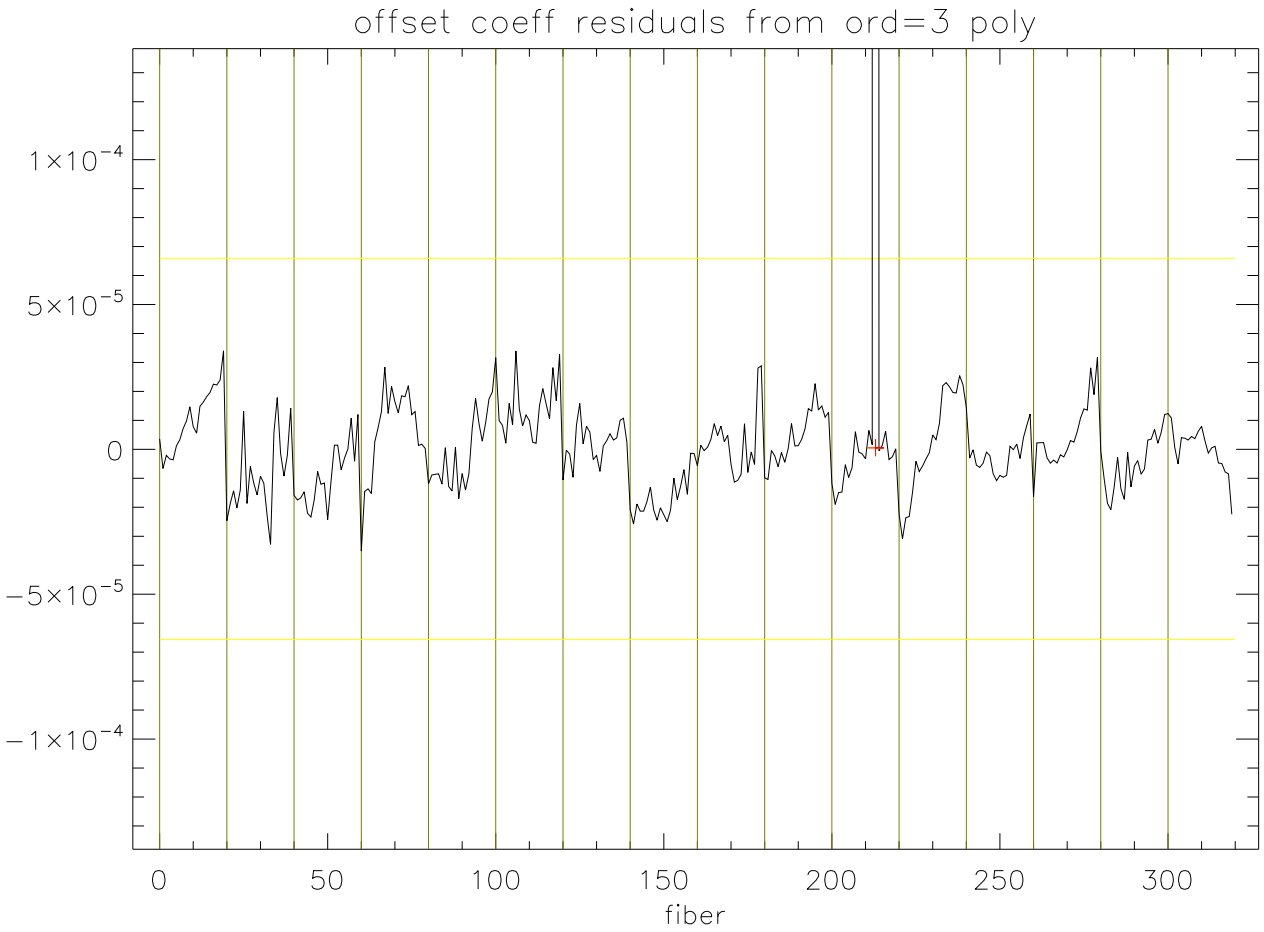
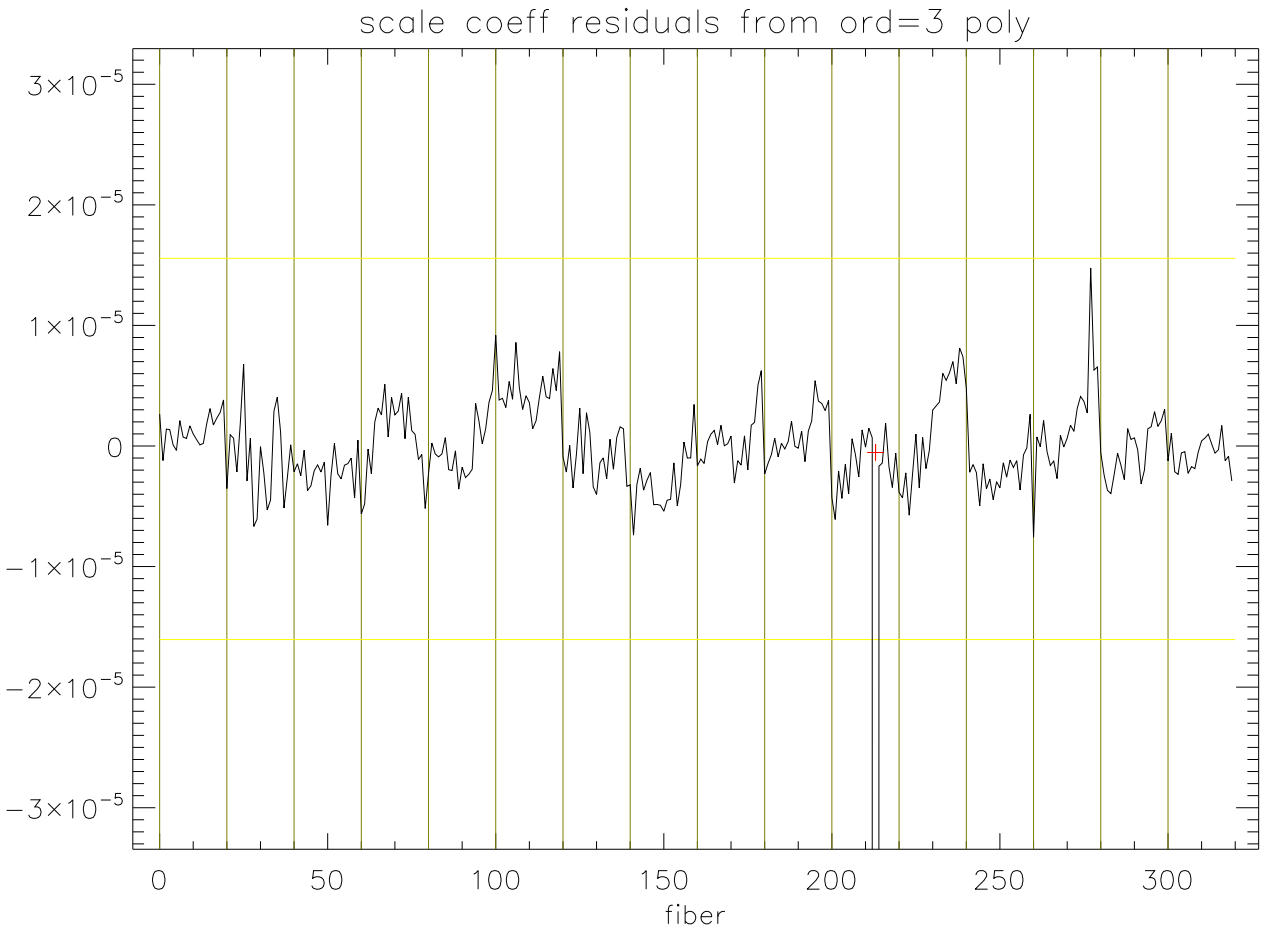
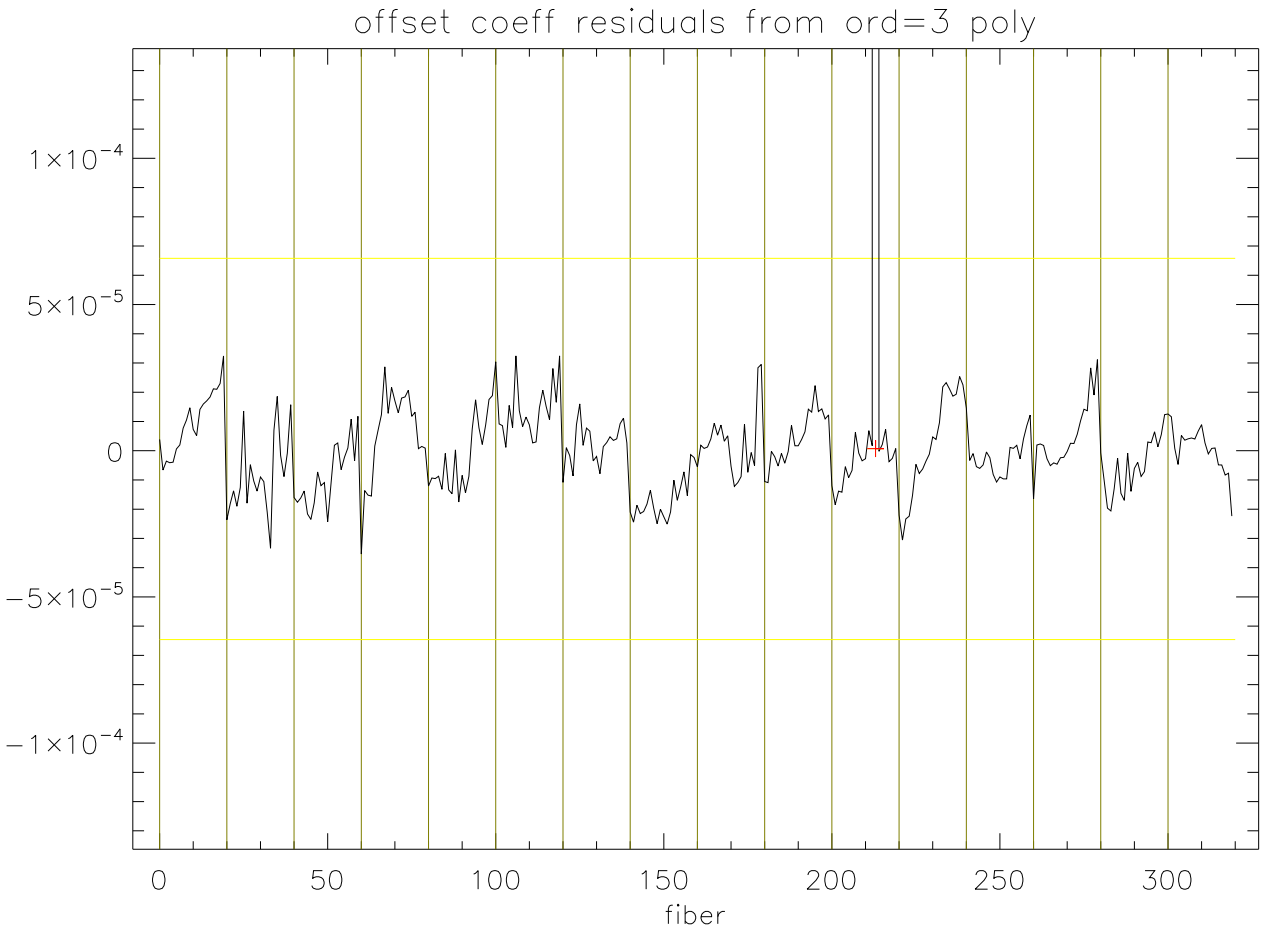
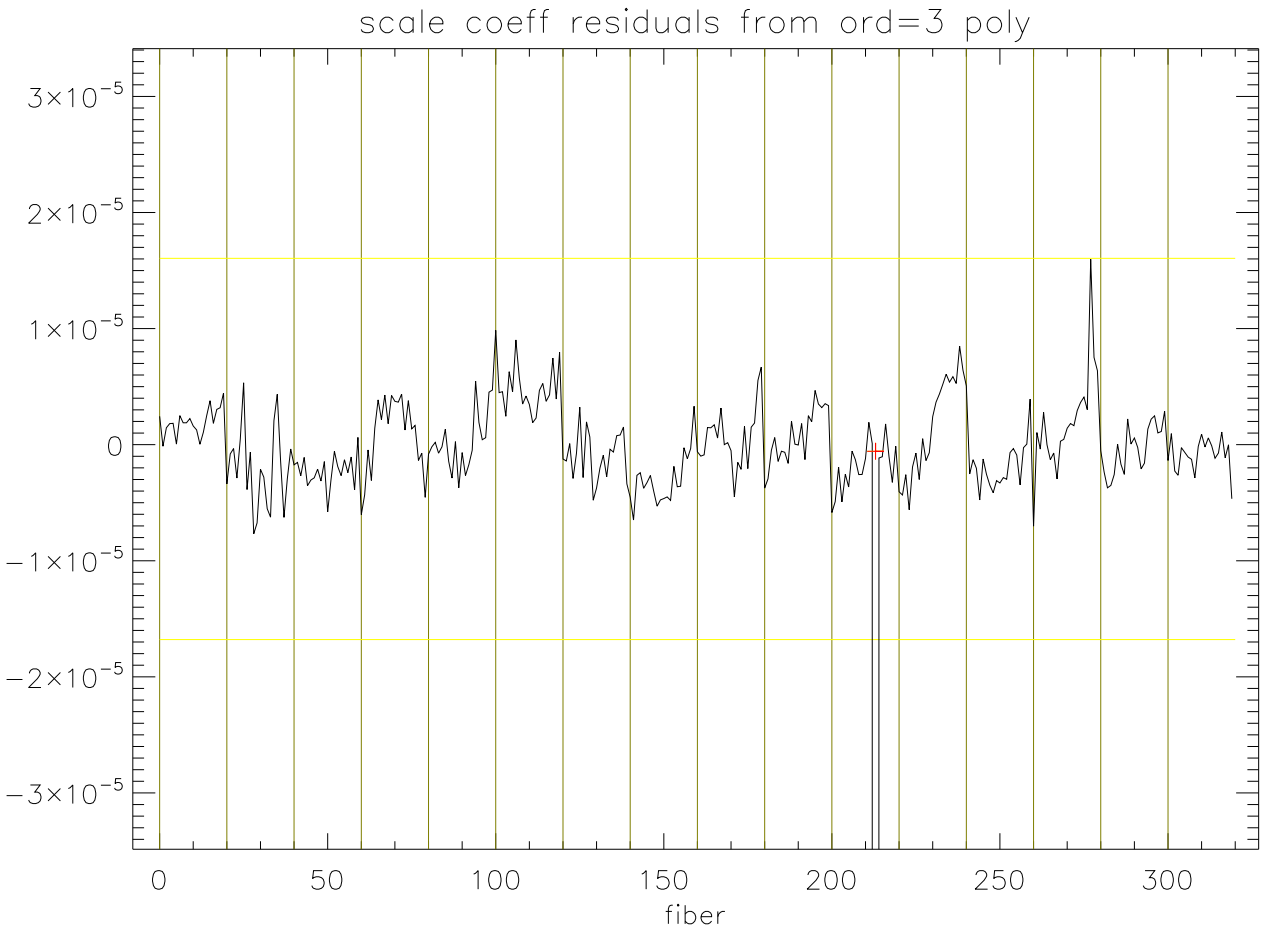
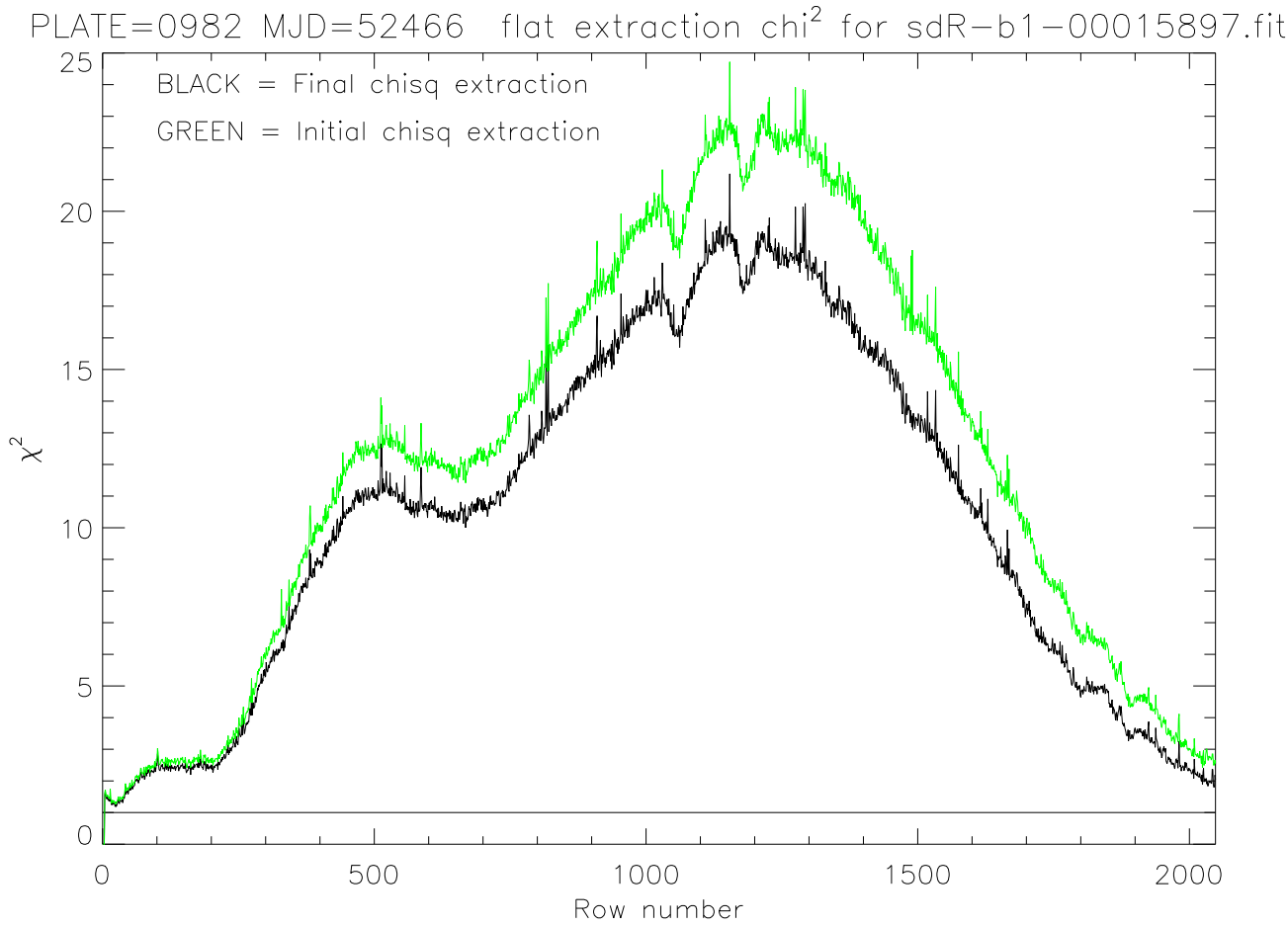
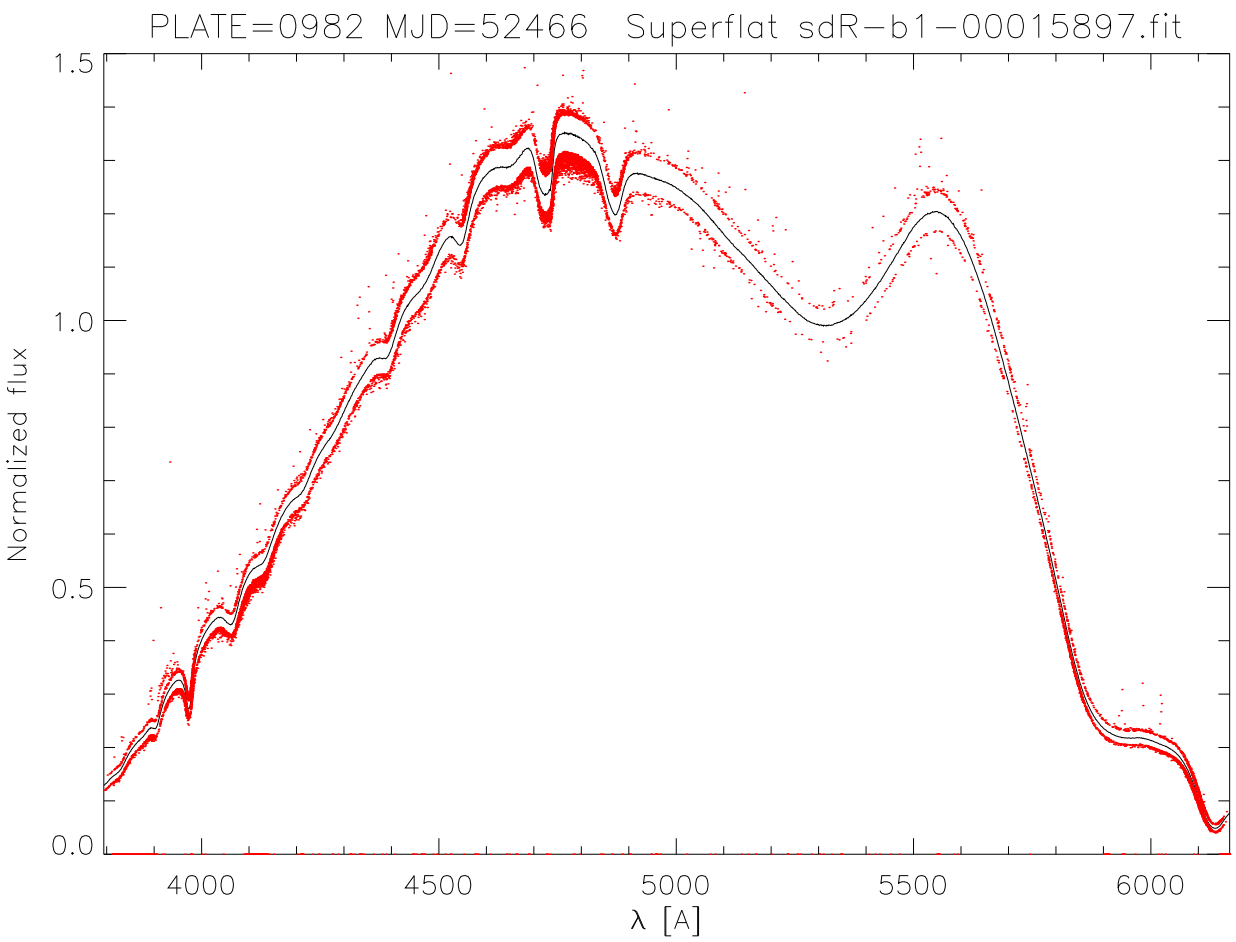

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

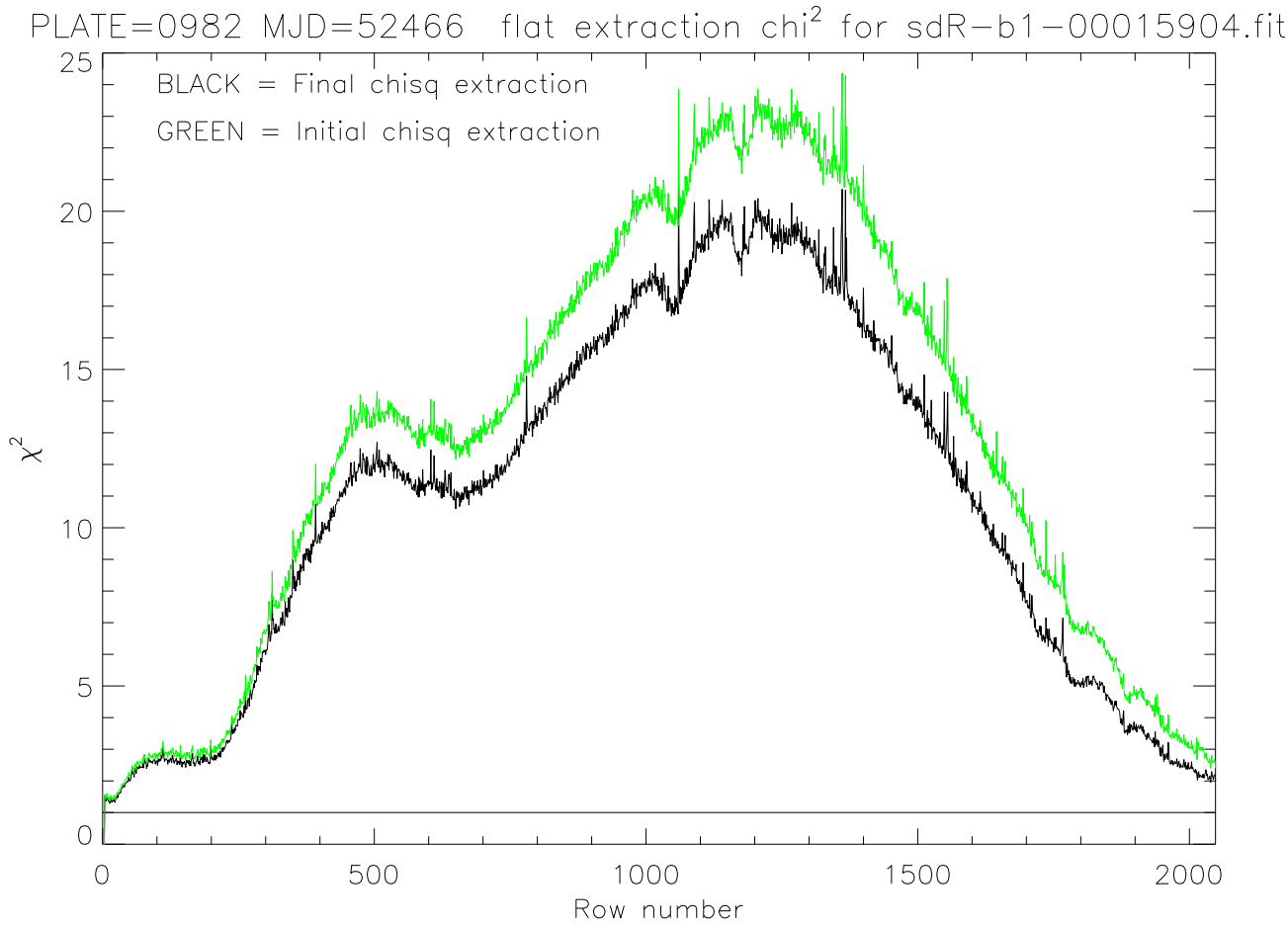

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

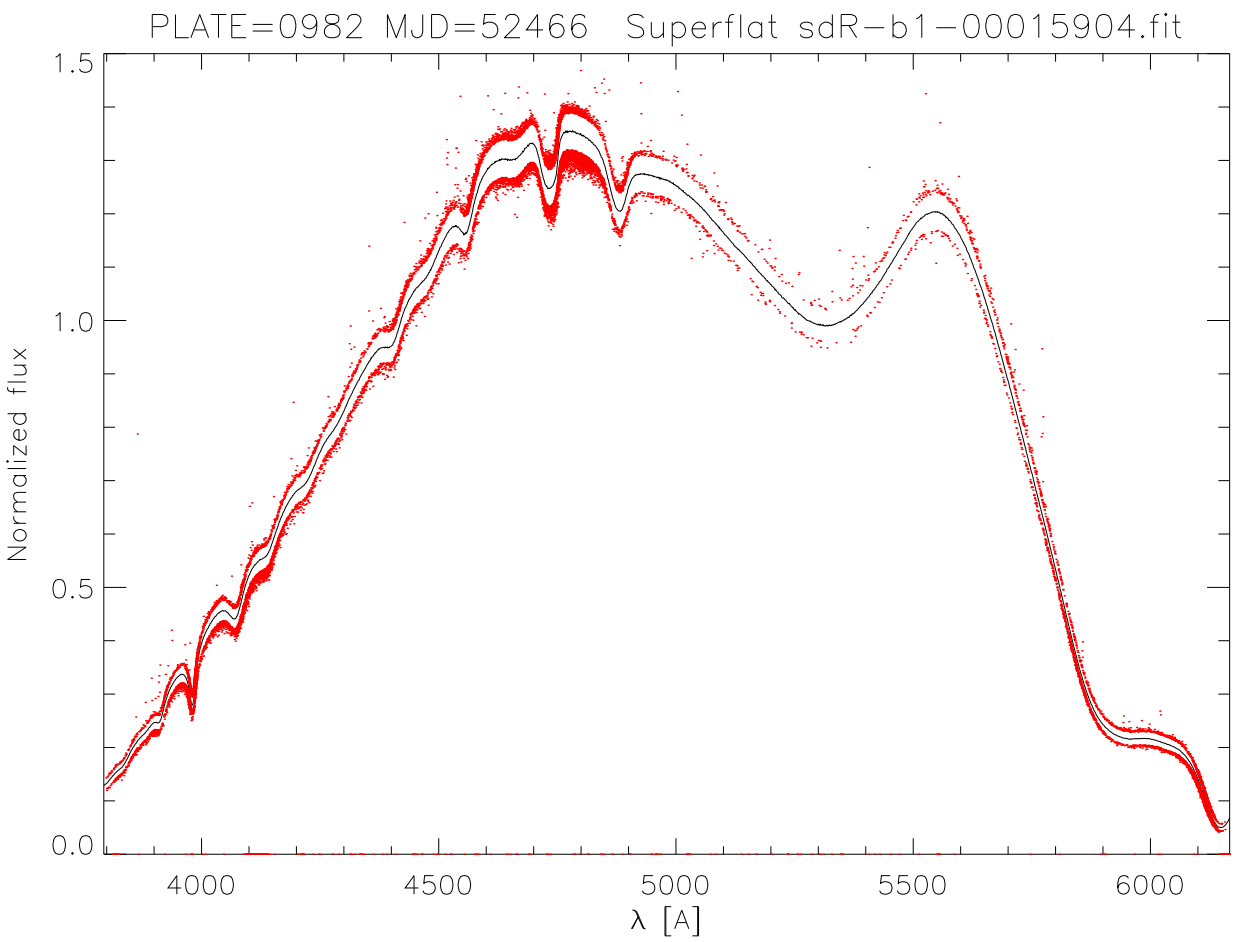

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

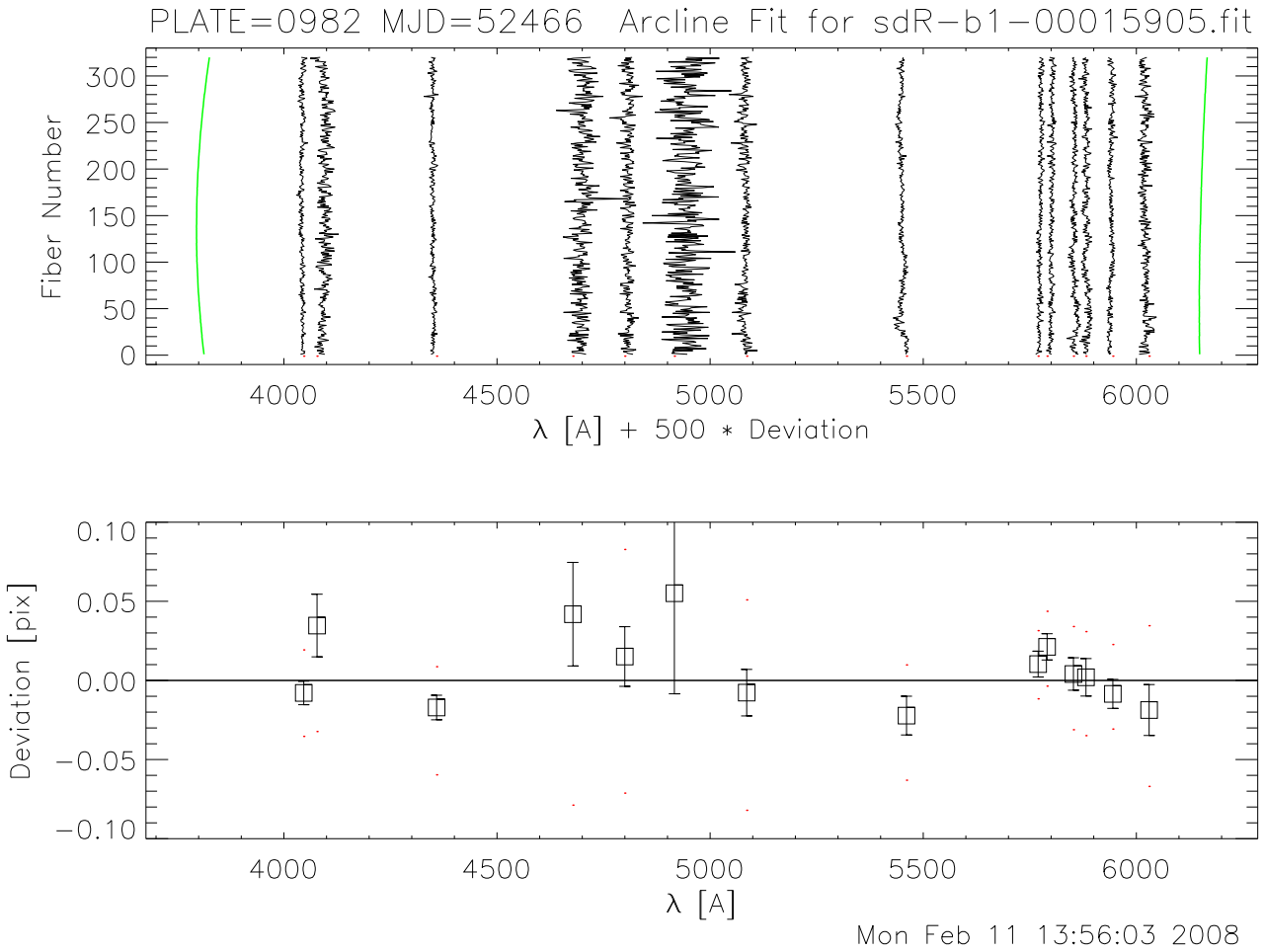

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

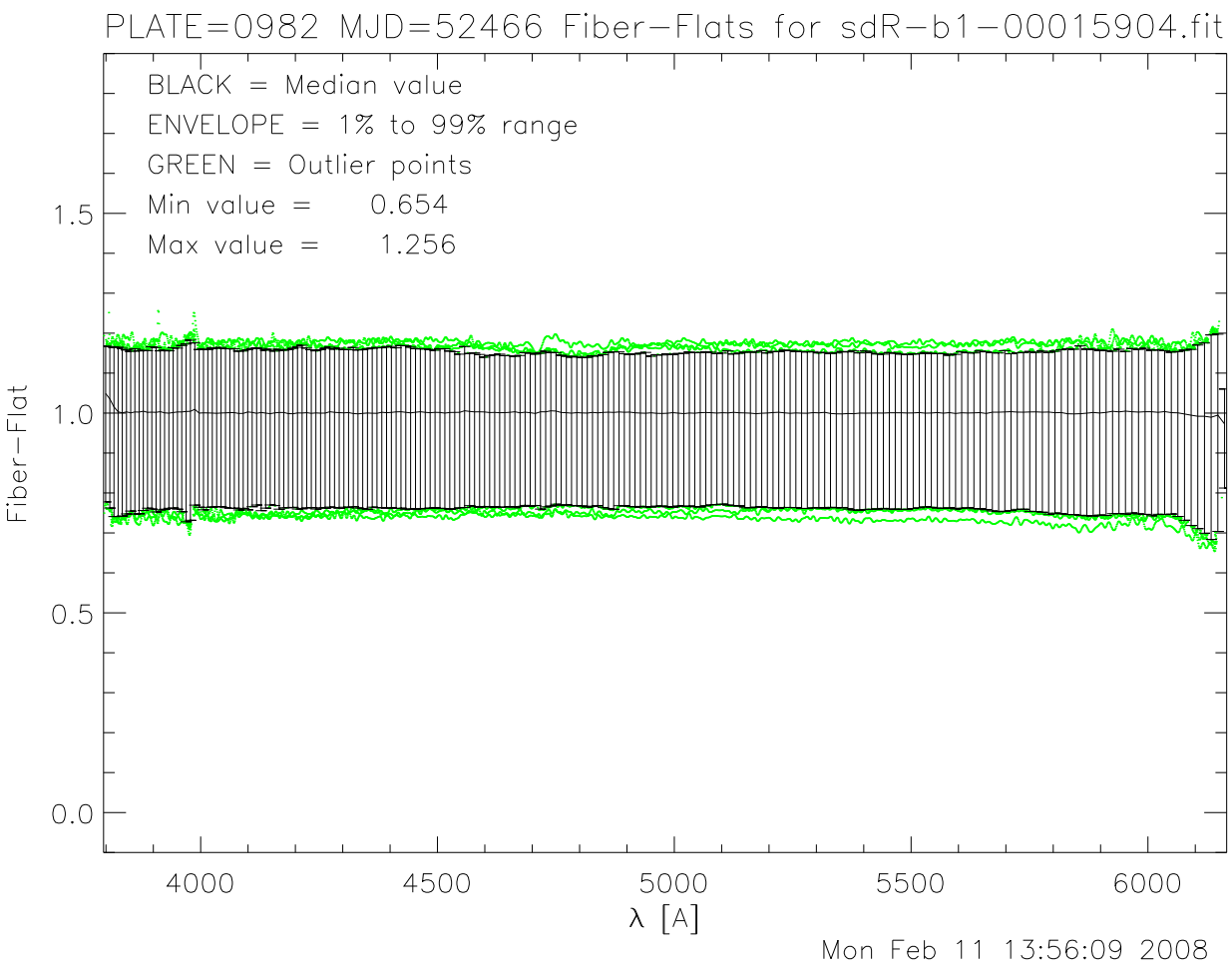

PLATE=0982 MJD=52466 flat extraction chi^2 for sdR−b1−00015897.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

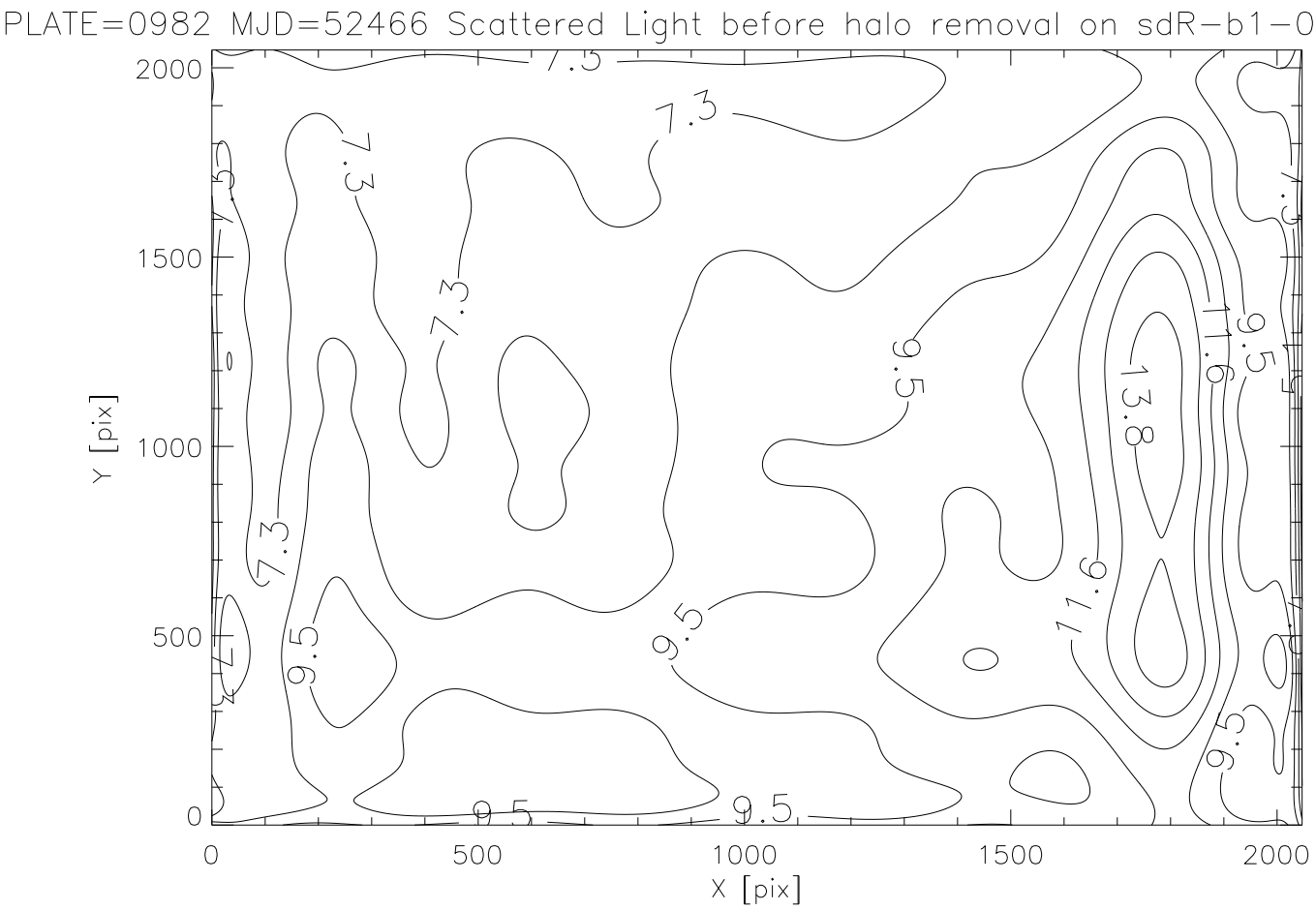

PLATE=0982 MJD=52466 Superflat sdR-b1-00015897.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

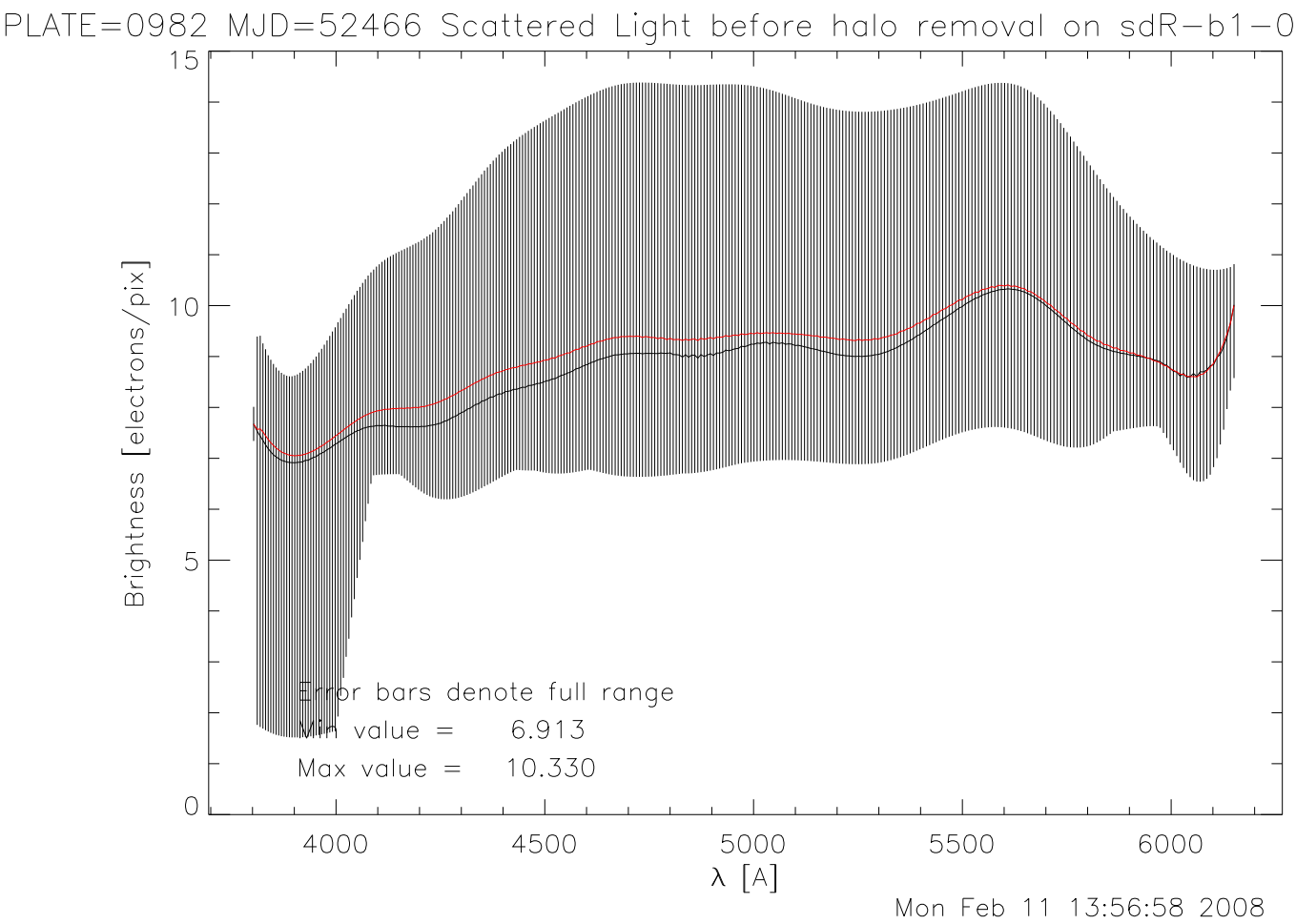

PLATE=0982 MJD=52466 flat extraction chi^2 for sdR−b1−00015904.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

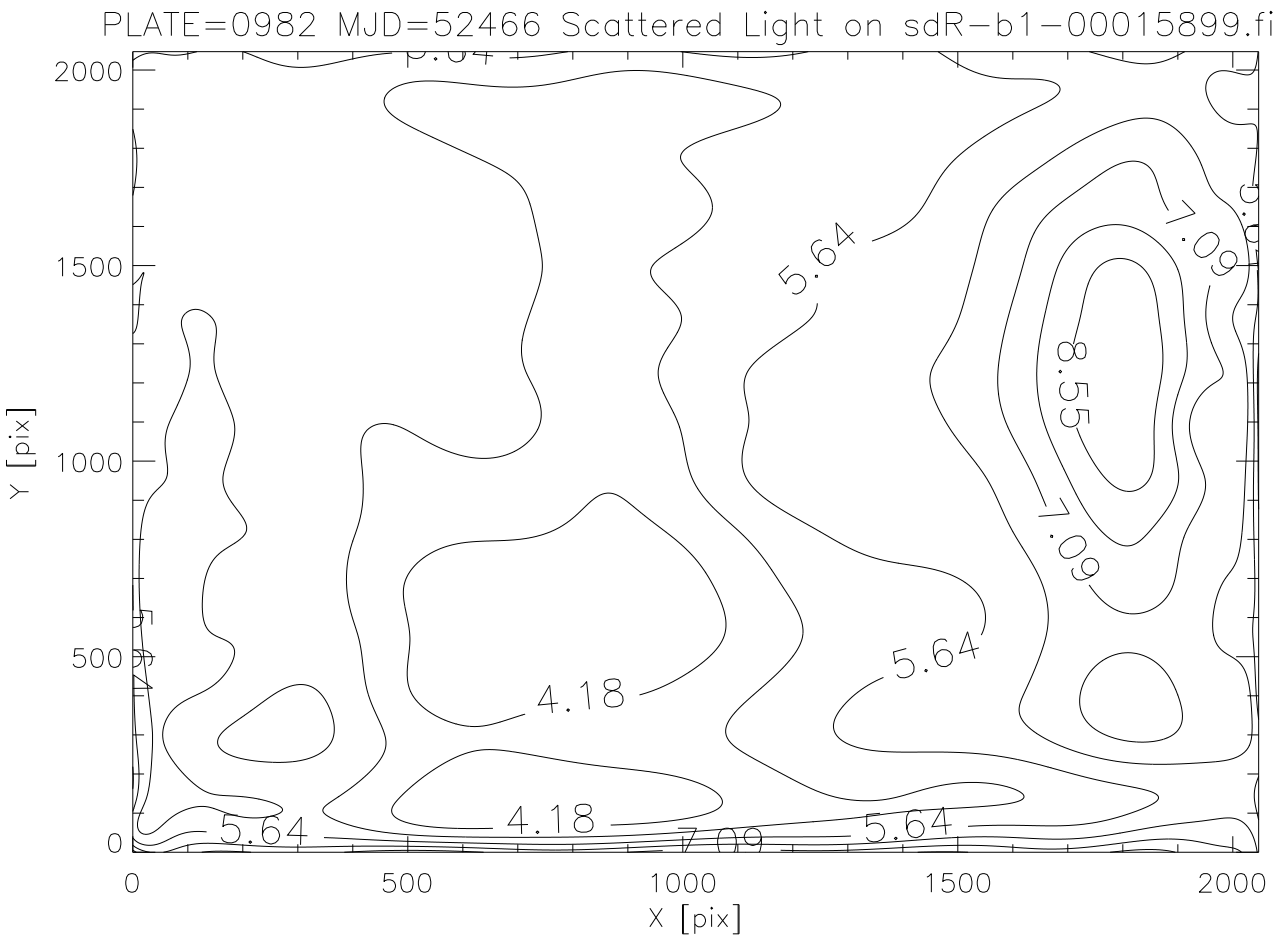

PLATE=0982 MJD=52466 Superflat sdR-b1-00015904.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

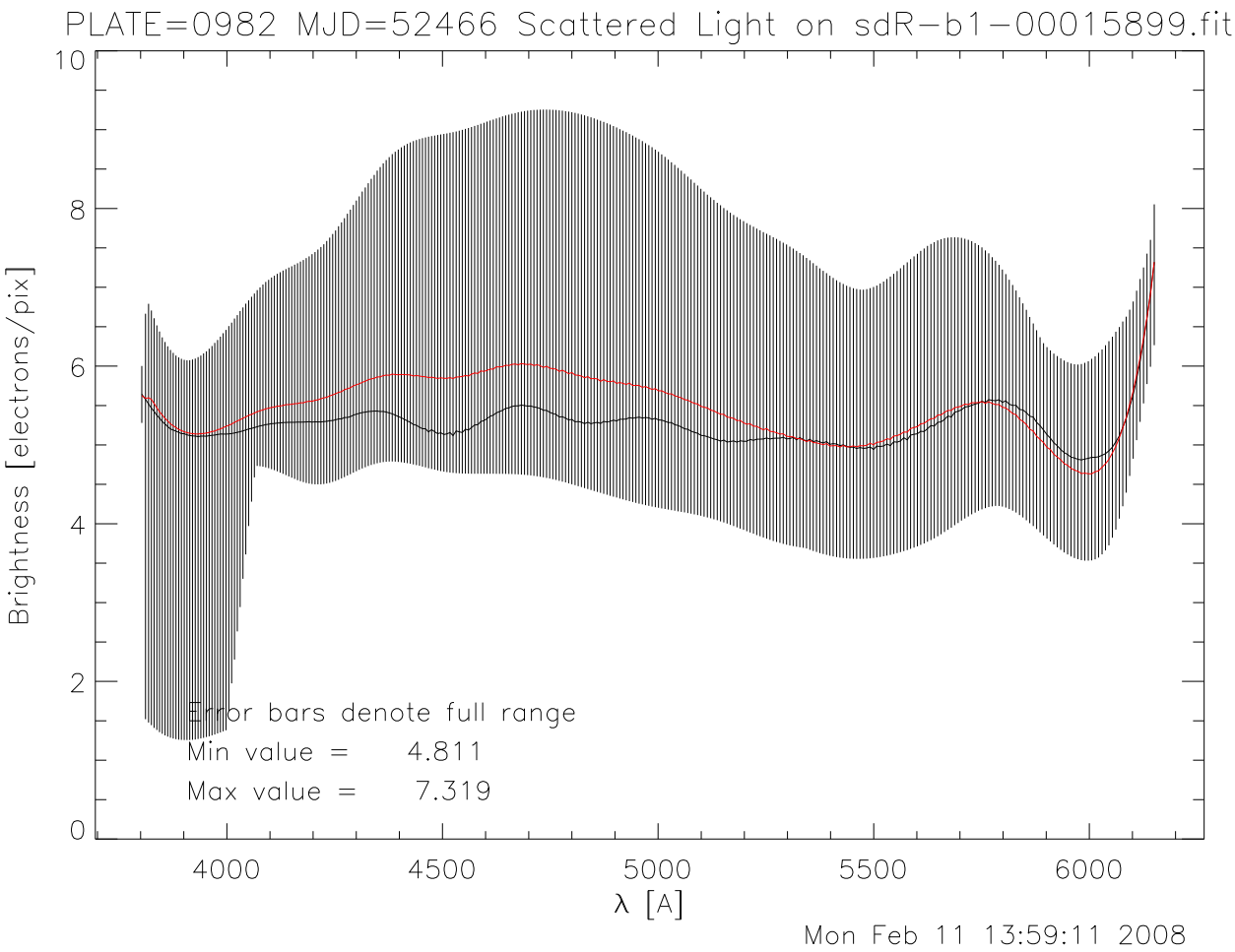

PLATE=0982 MJD=52466 Arcline Fit for sdR-b1-00015905.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 13:56:03 2008

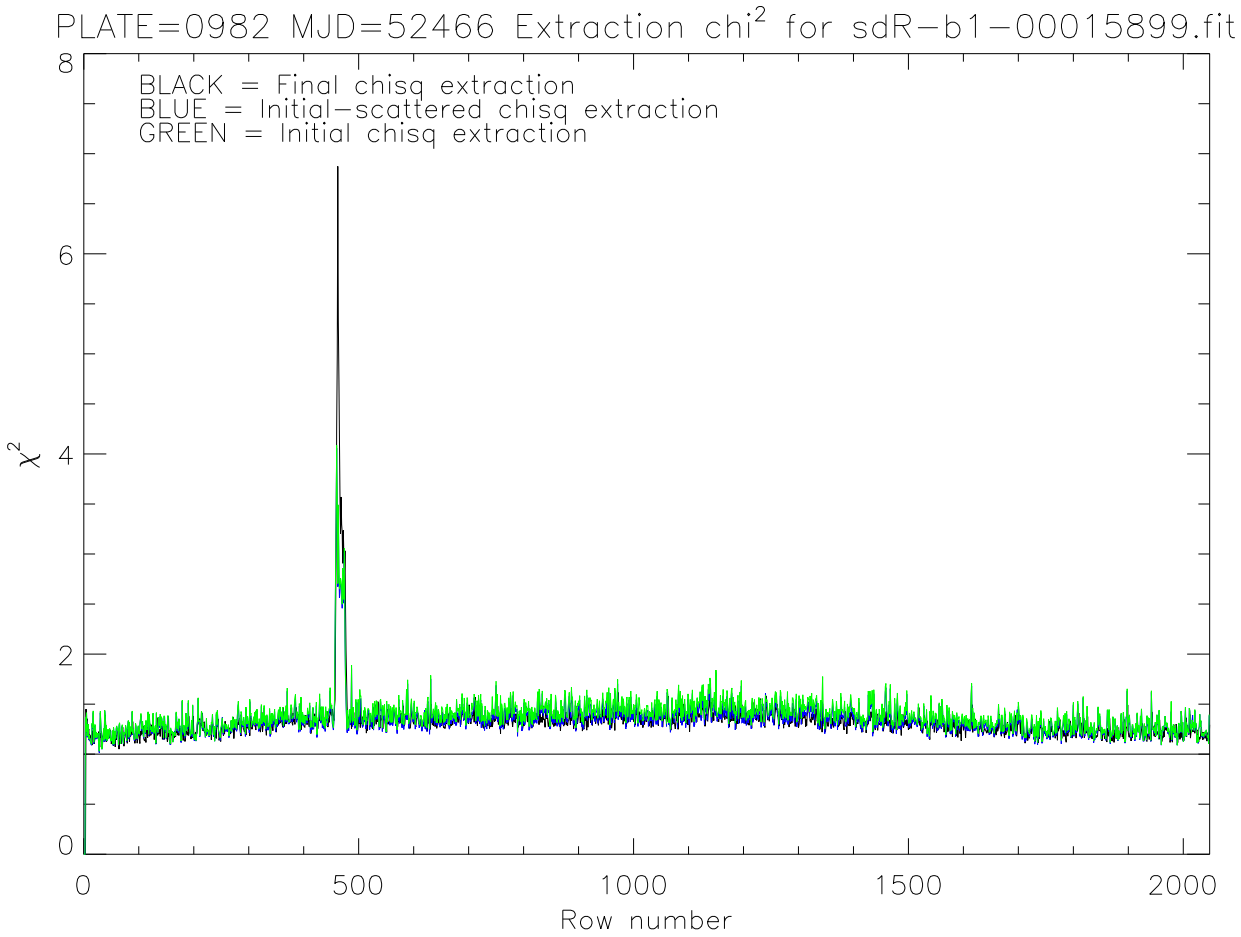

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b1-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.256
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 13:56:09 2008

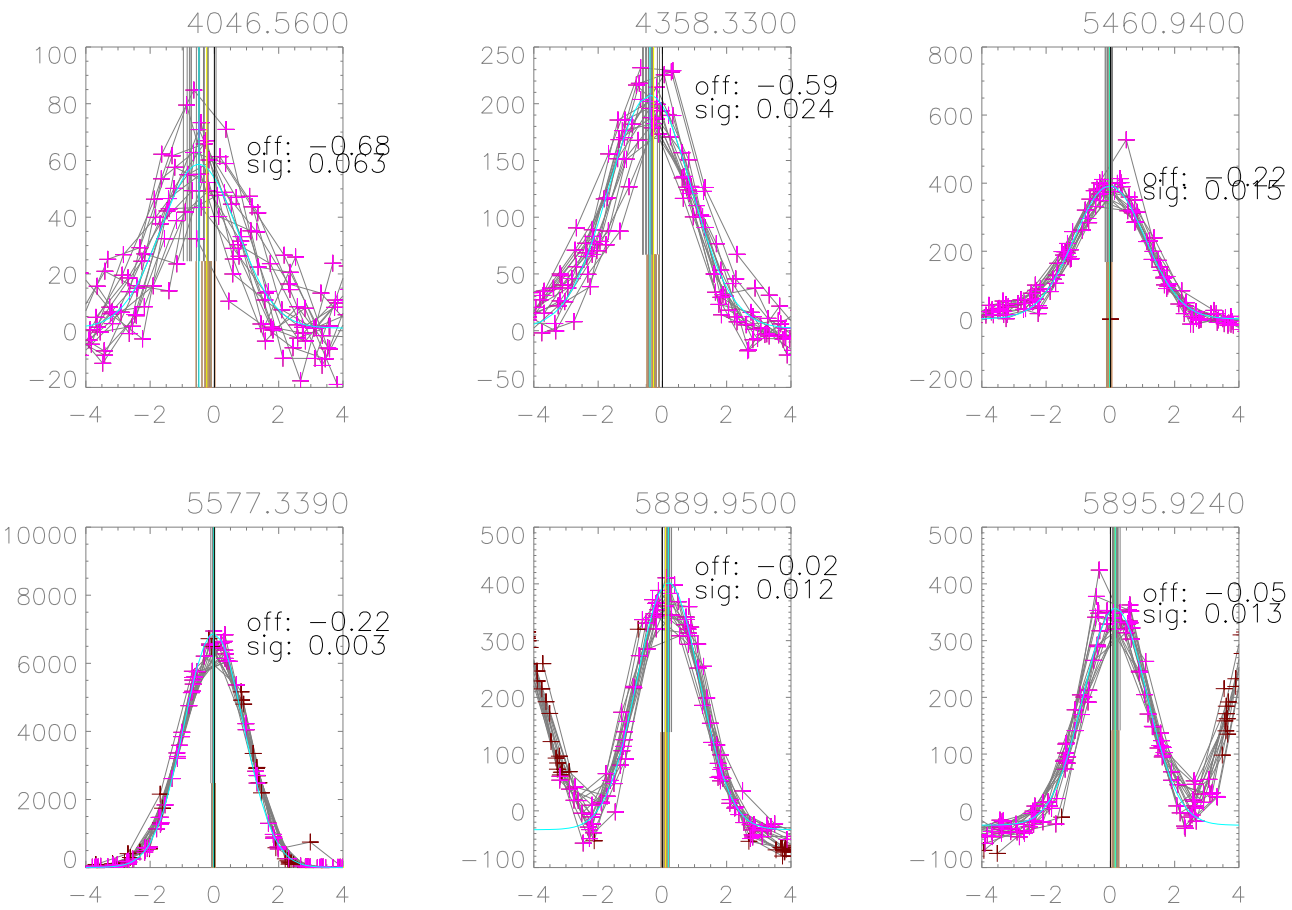

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR−b1−00015899.f
7.3
7.3
7.3
7.3
7.3
9.5
9.5
9.5
9.5
9.5
11.6
11.6
13.8
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

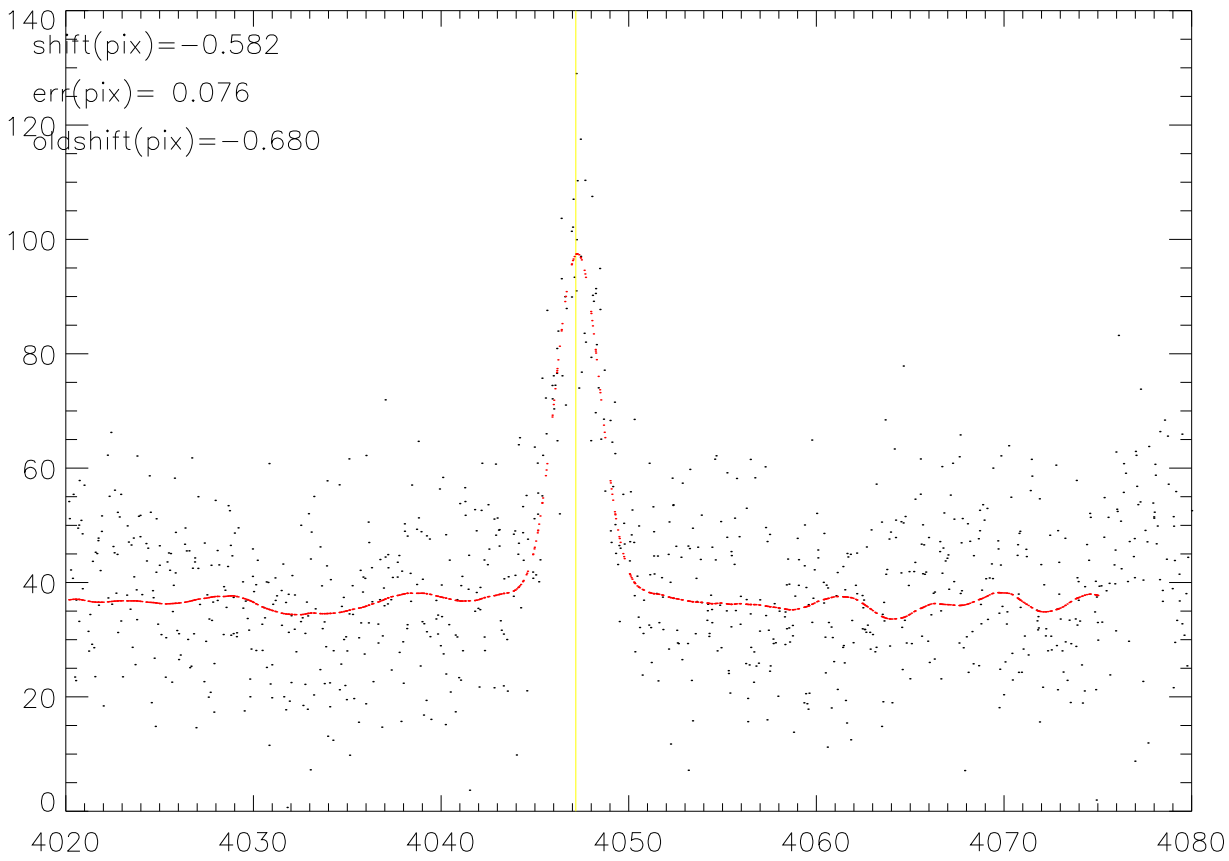

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b1-00015899.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 6.913
Max value = 10.330
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 13:56:58 2008

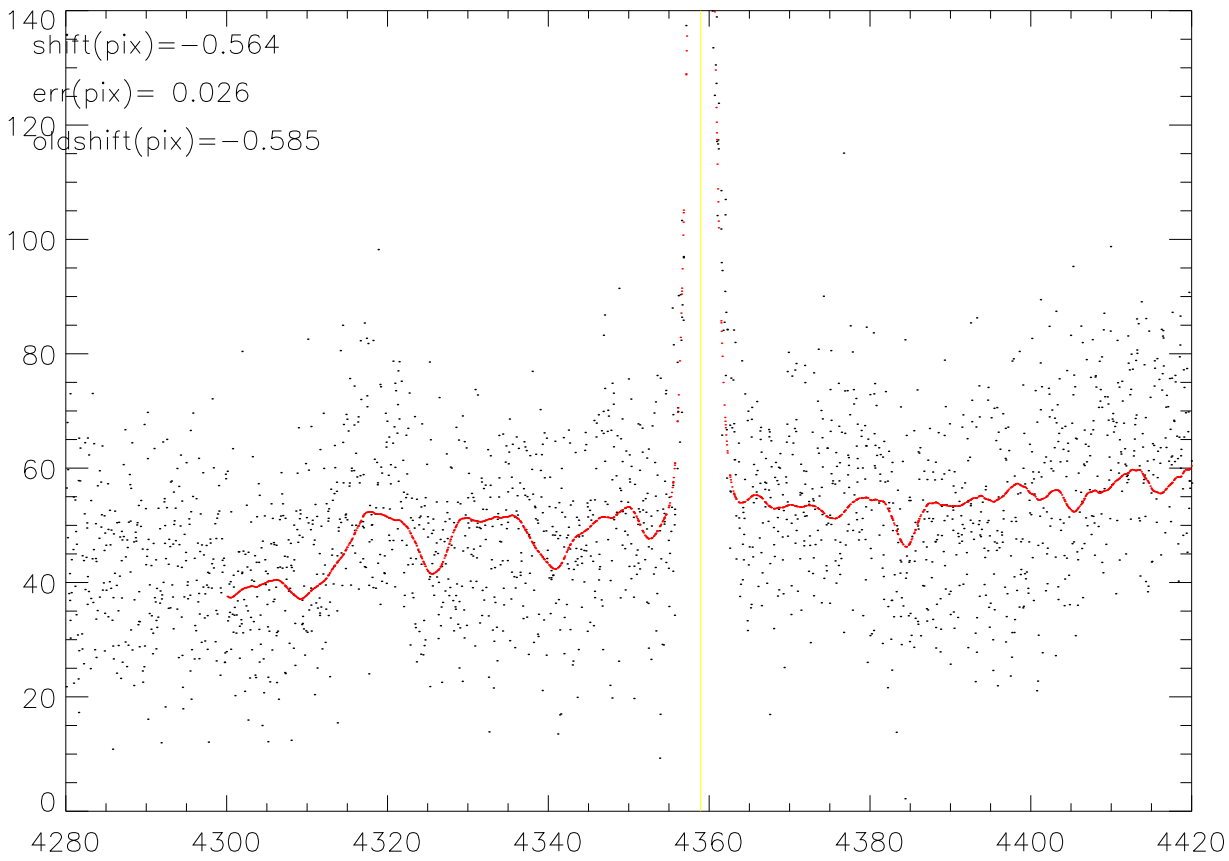

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015899.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.64
4.18
7.09
8.55
5.64
4.18
5.64
7.09
5.64

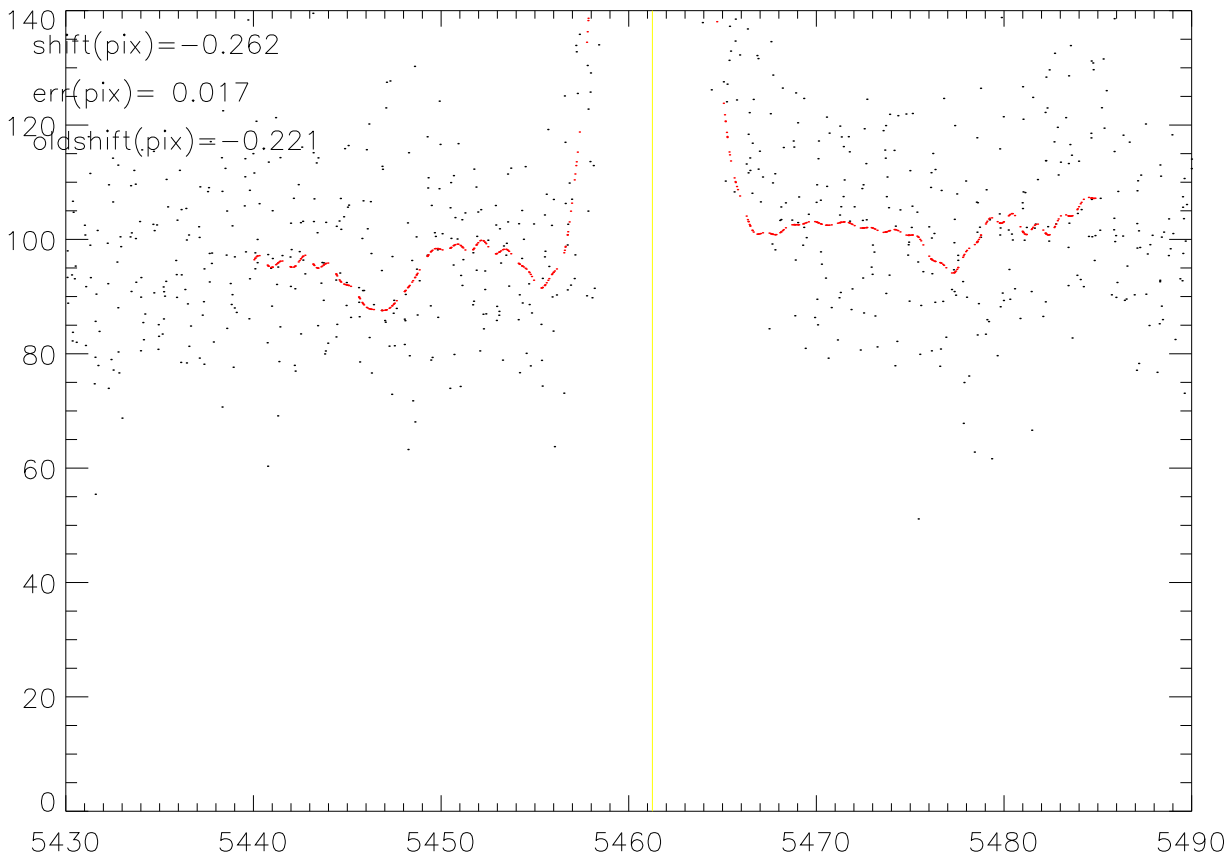

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015899.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.811
Max value = 7.319
Mon Feb 11 13:59:11 2008

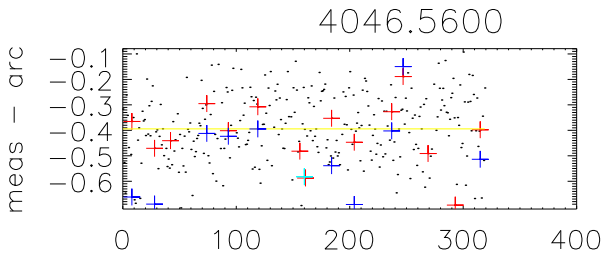

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−b1−00015899.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

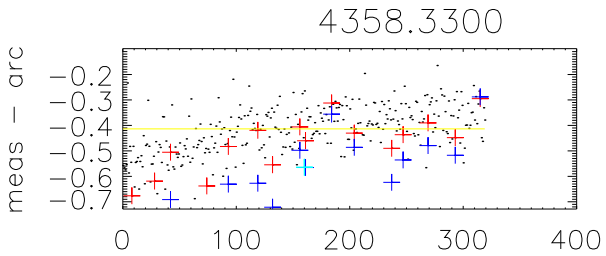

4046.5600
off: −0.68
sig: 0.063
4358.3300
off: −0.59
sig: 0.024
5460.9400
off: −0.22
sig: 0.015
5577.3390
off: −0.22
sig: 0.003
5889.9500
off: −0.02
sig: 0.012
5895.9240
off: −0.05
sig: 0.013

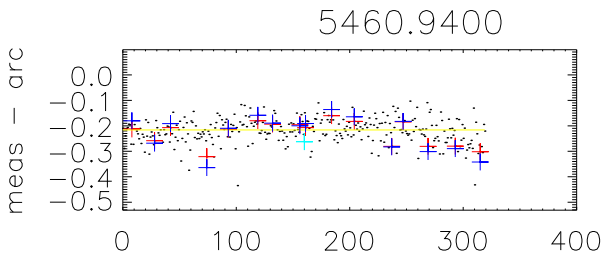

shift(pix)=−0.582
err(pix)= 0.076
oldshift(pix)=−0.680
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

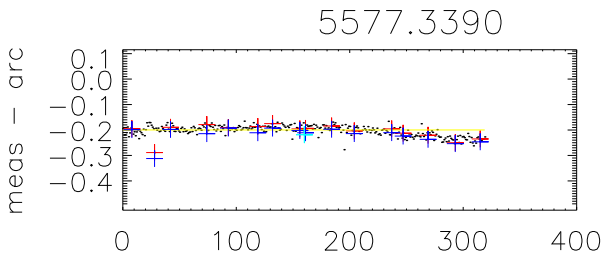

shift(pix)=−0.564
err(pix)= 0.026
oldshift(pix)=−0.585
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

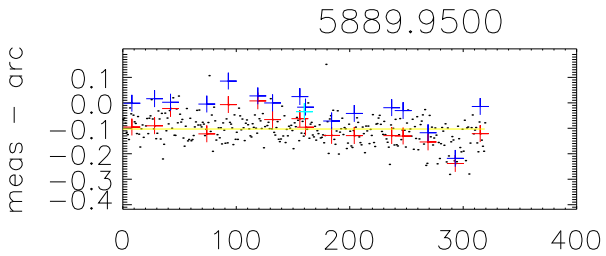

shift(pix)=−0.262
err(pix)= 0.017
oldshift(pix)=−0.221
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

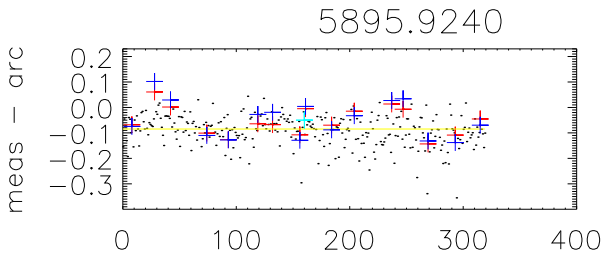

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

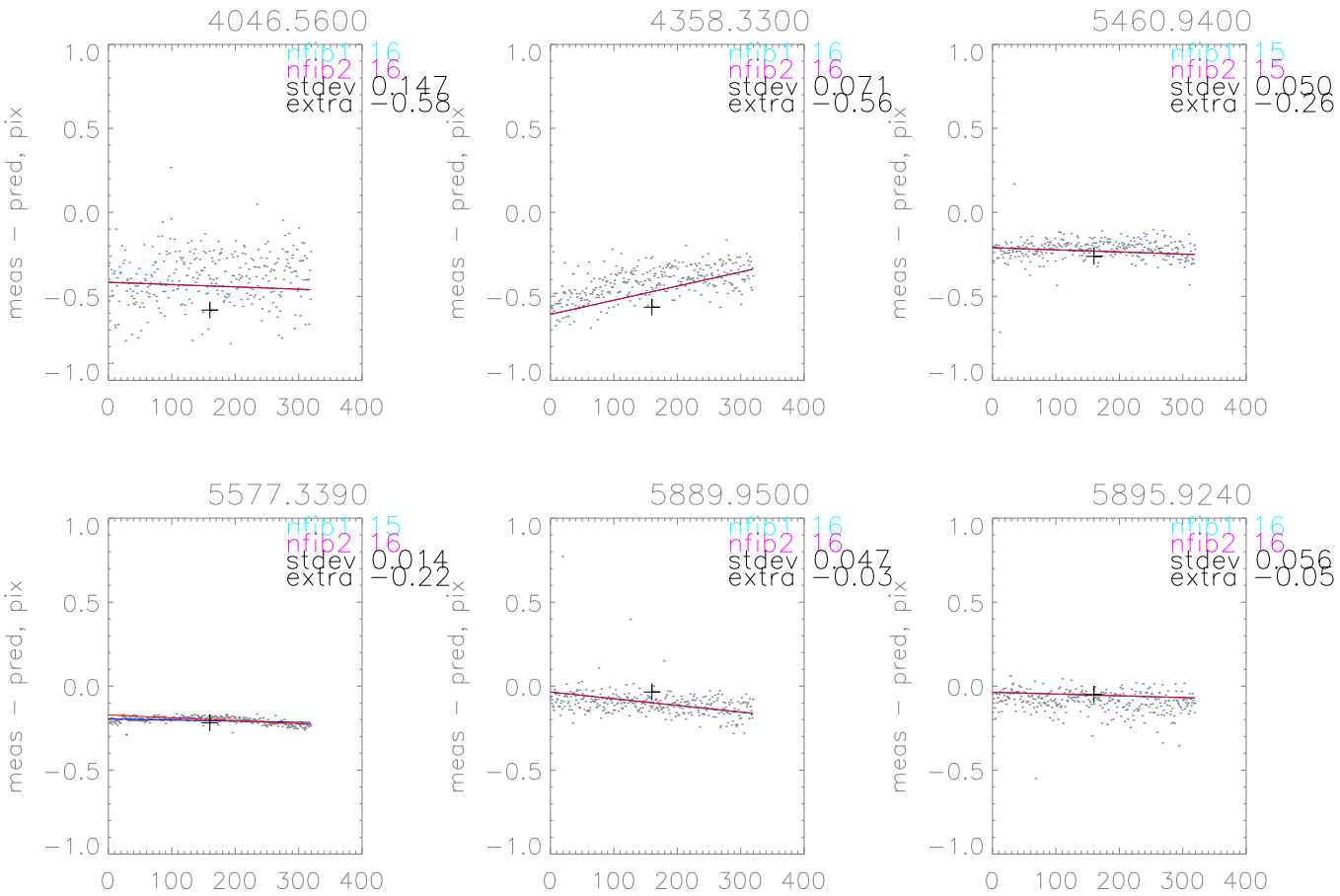

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

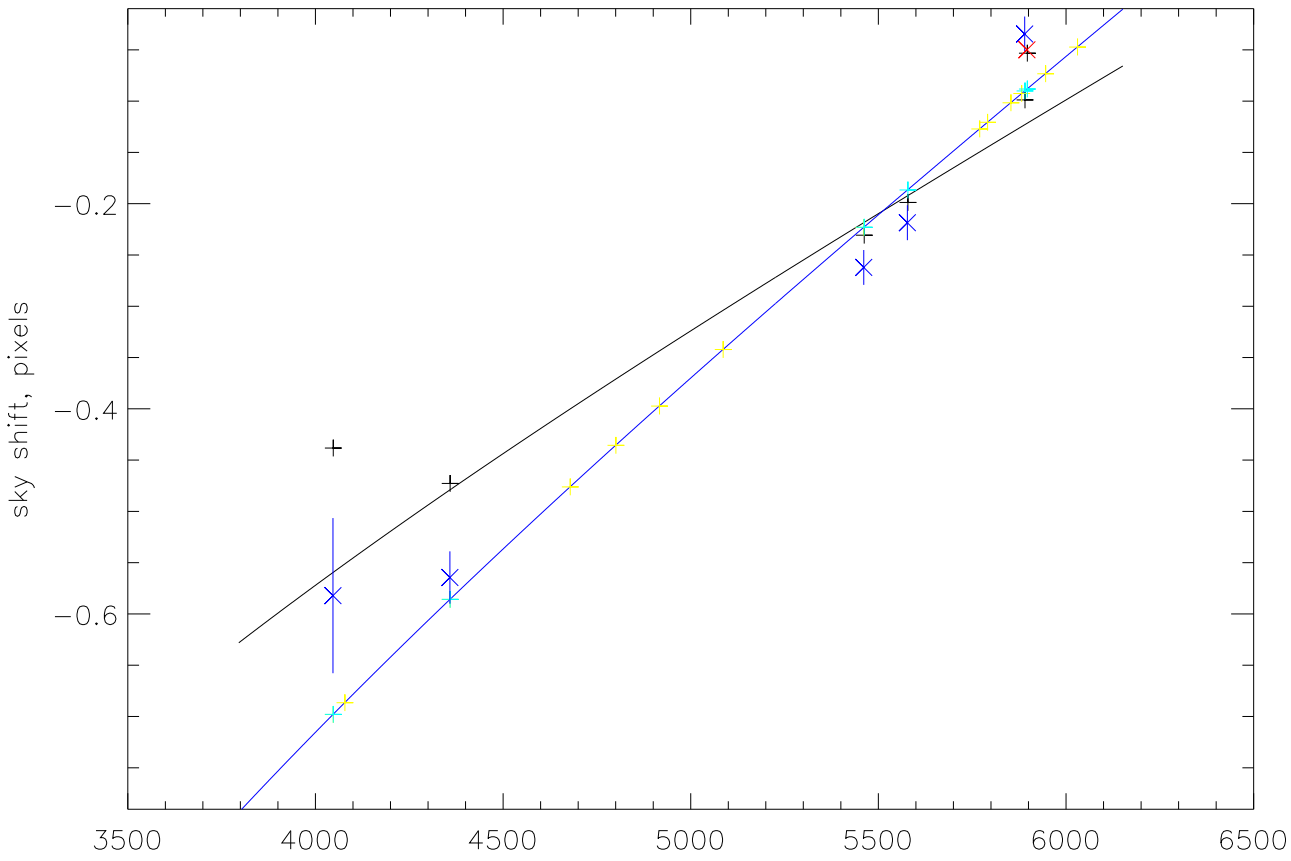

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

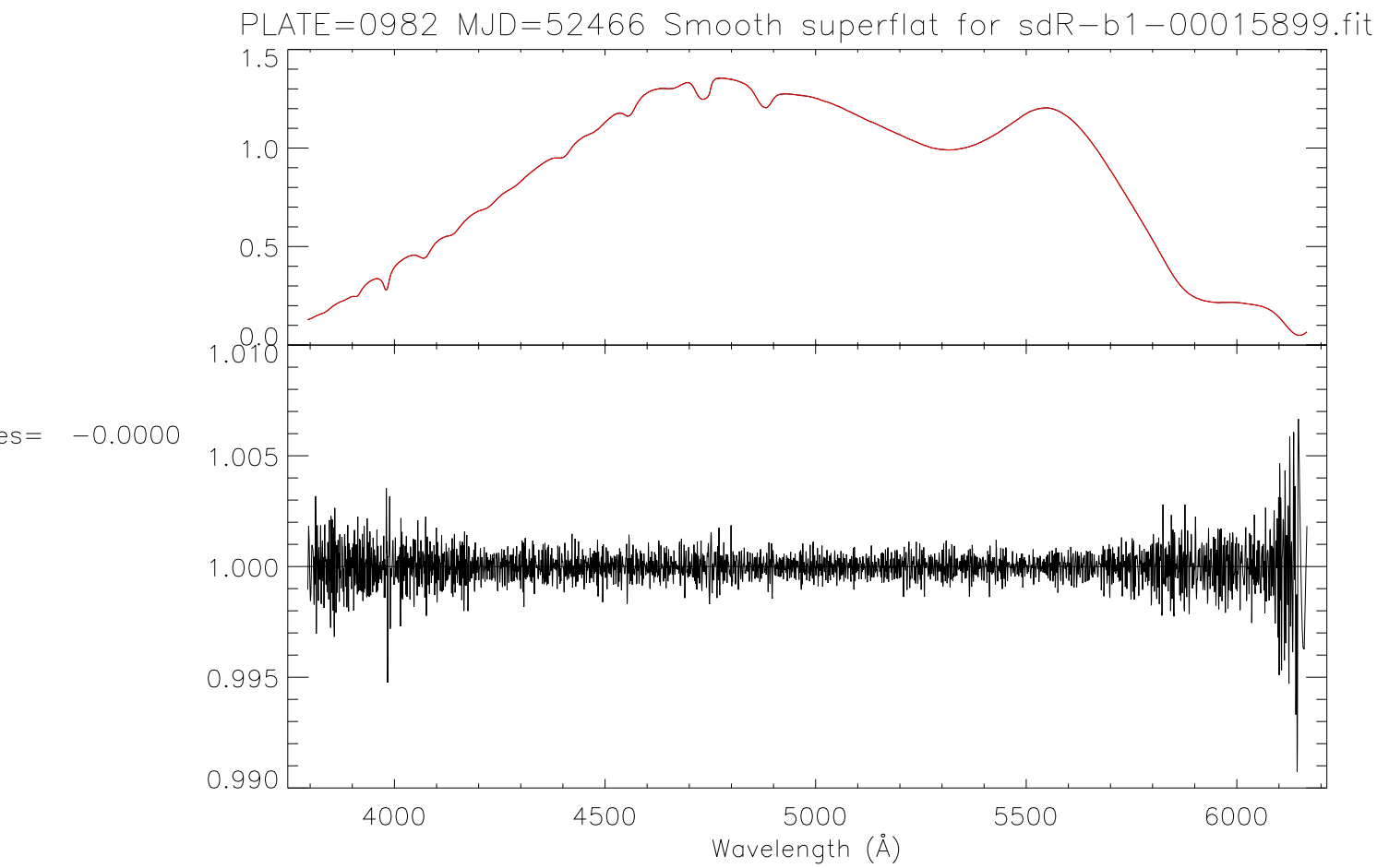

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

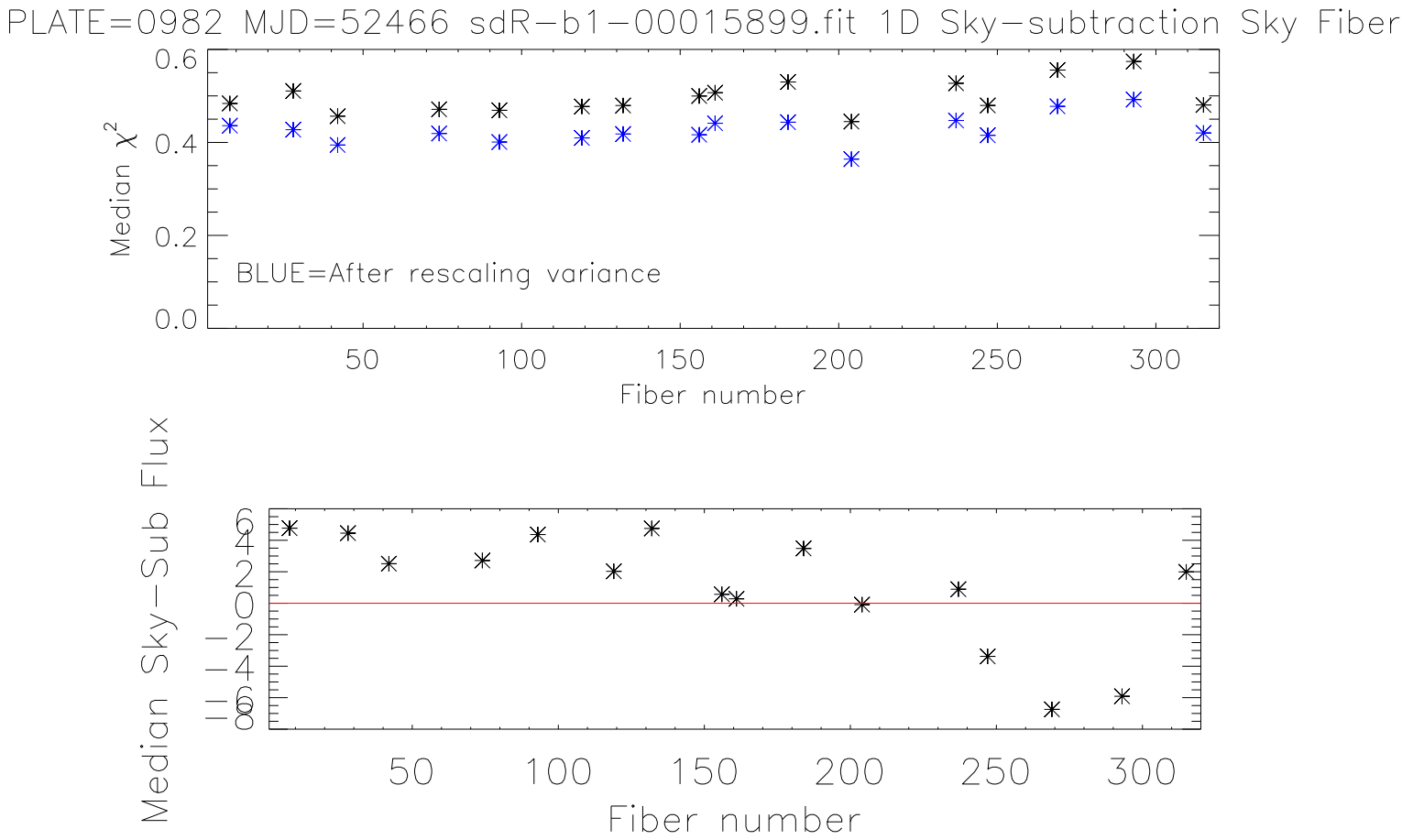

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

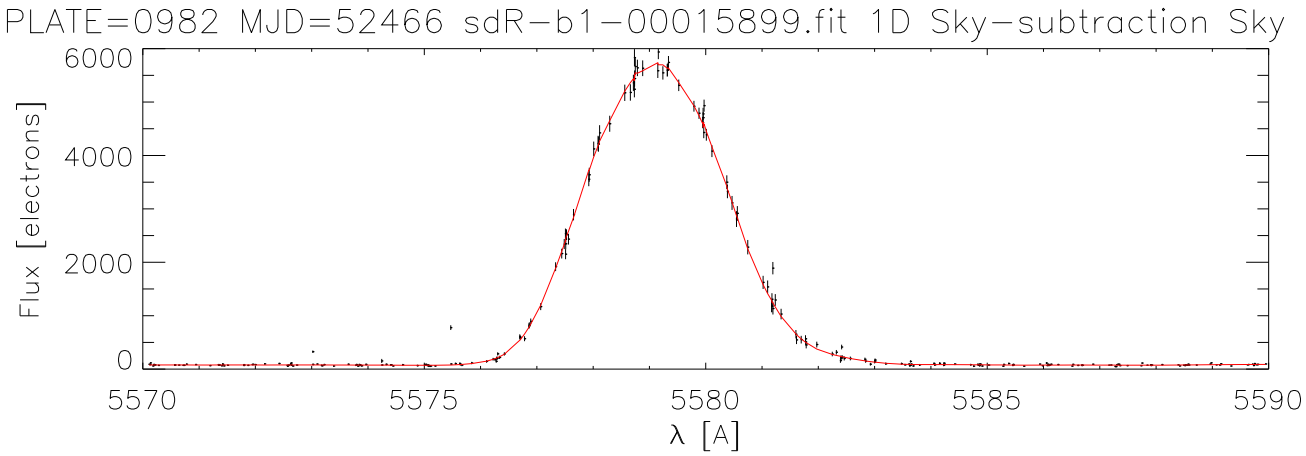

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

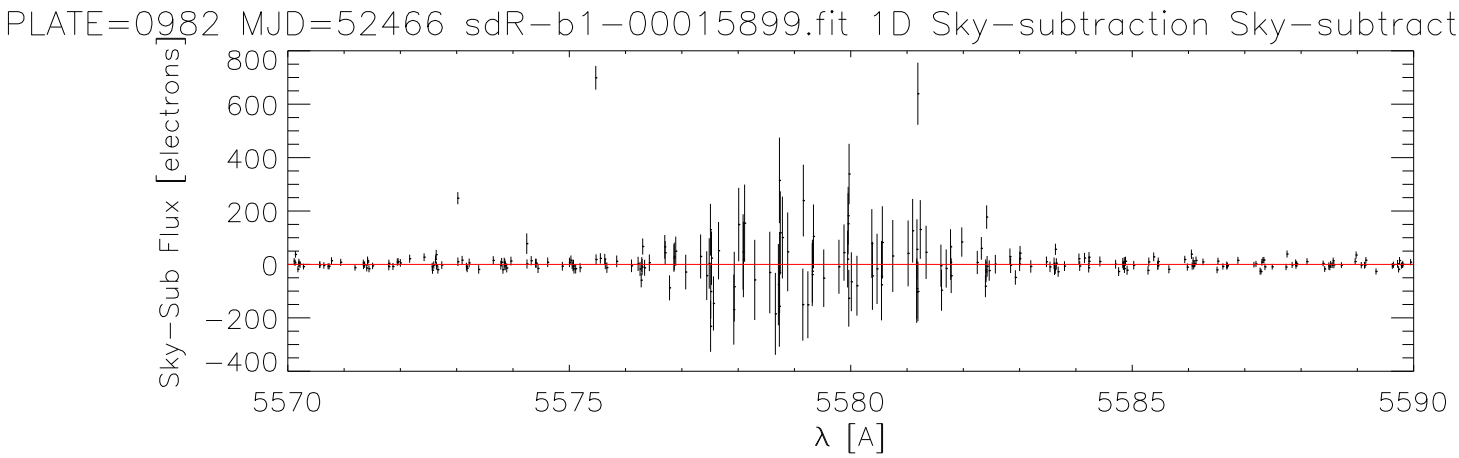

4046.5600
nfib1 16
nfib2 16
stdev 0.147
extra −0.58
4358.3300
nfib1 16
nfib2 16
stdev 0.071
extra −0.56
5460.9400
nfib1 15
nfib2 15
stdev 0.050
extra −0.26
5577.3390
nfib1 15
nfib2 16
stdev 0.014
extra −0.22
5889.9500
nfib1 16
nfib2 16
stdev 0.047
extra −0.03
5895.9240
nfib1 16
nfib2 16
stdev 0.056
extra −0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

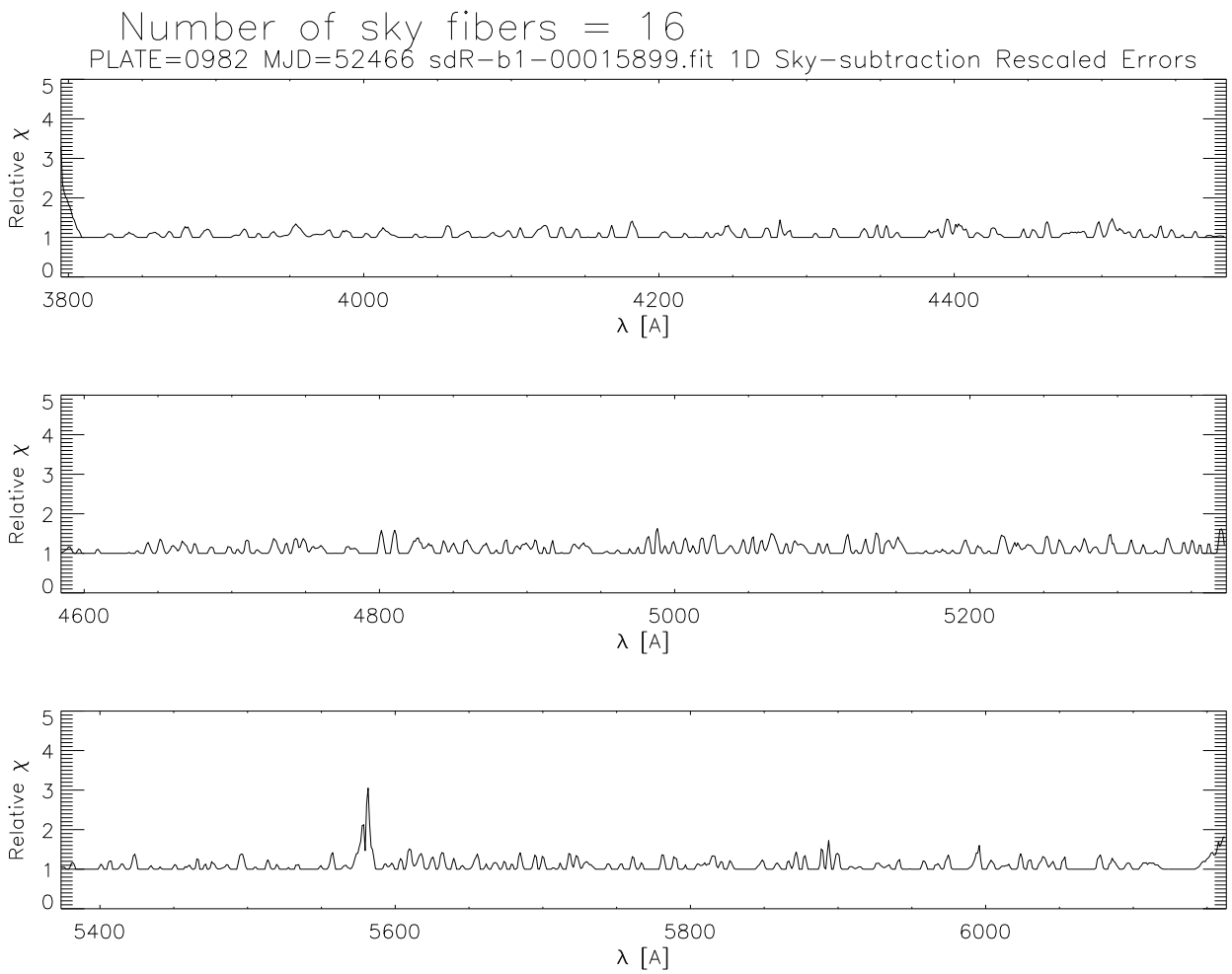

sky shift, pixels
−0.2
−0.4
−0.6
3500
4000
4500
5000
5500
6000
6500

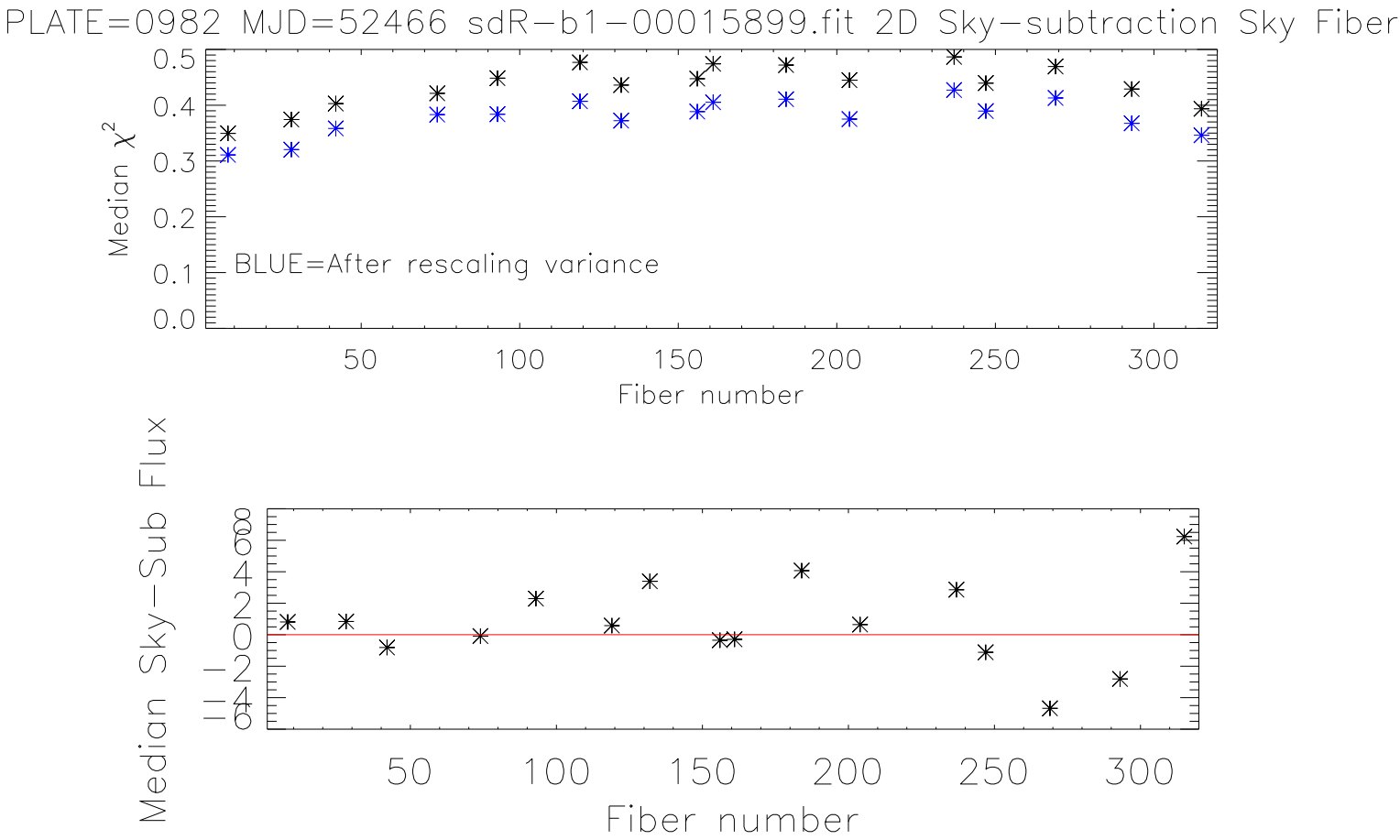

PLATE=0982 MJD=52466 Smooth superflat for sdR-b1-00015899.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

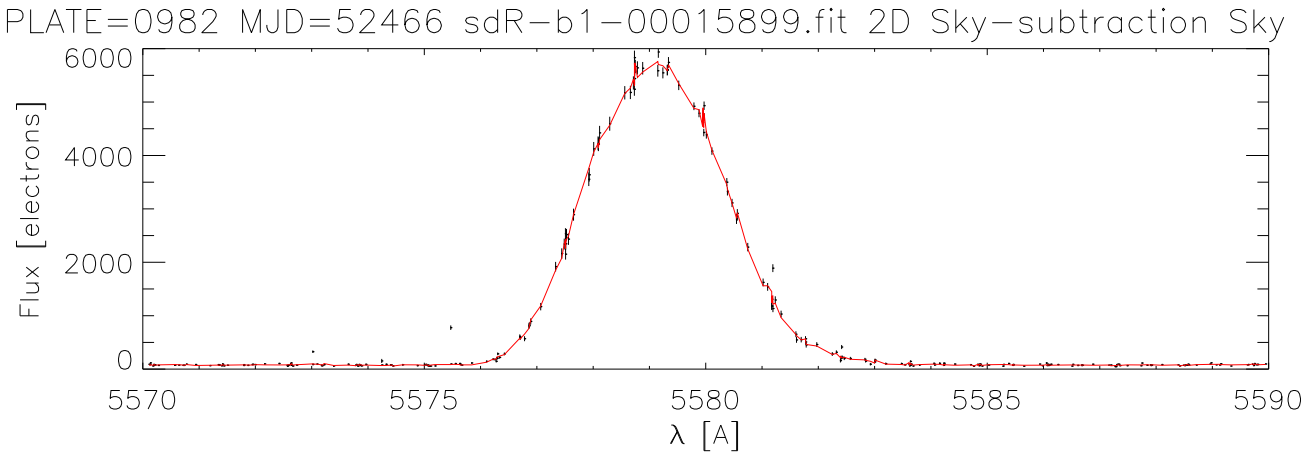

PLATE=0982 MJD=52466 sdR-b1-00015899.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

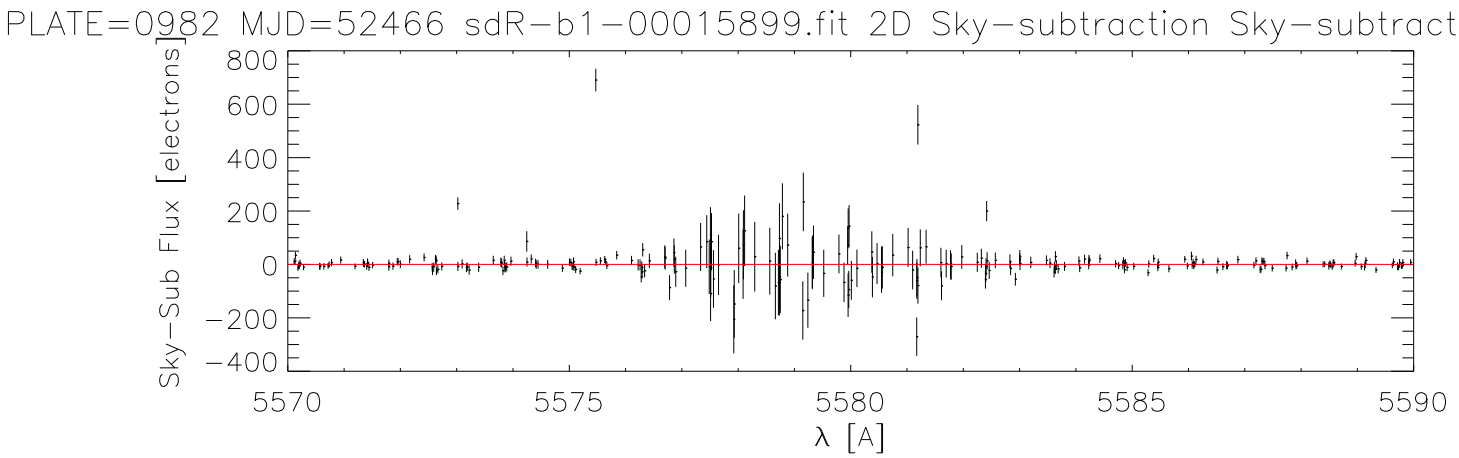

PLATE=0982 MJD=52466 sdR-b1-00015899.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

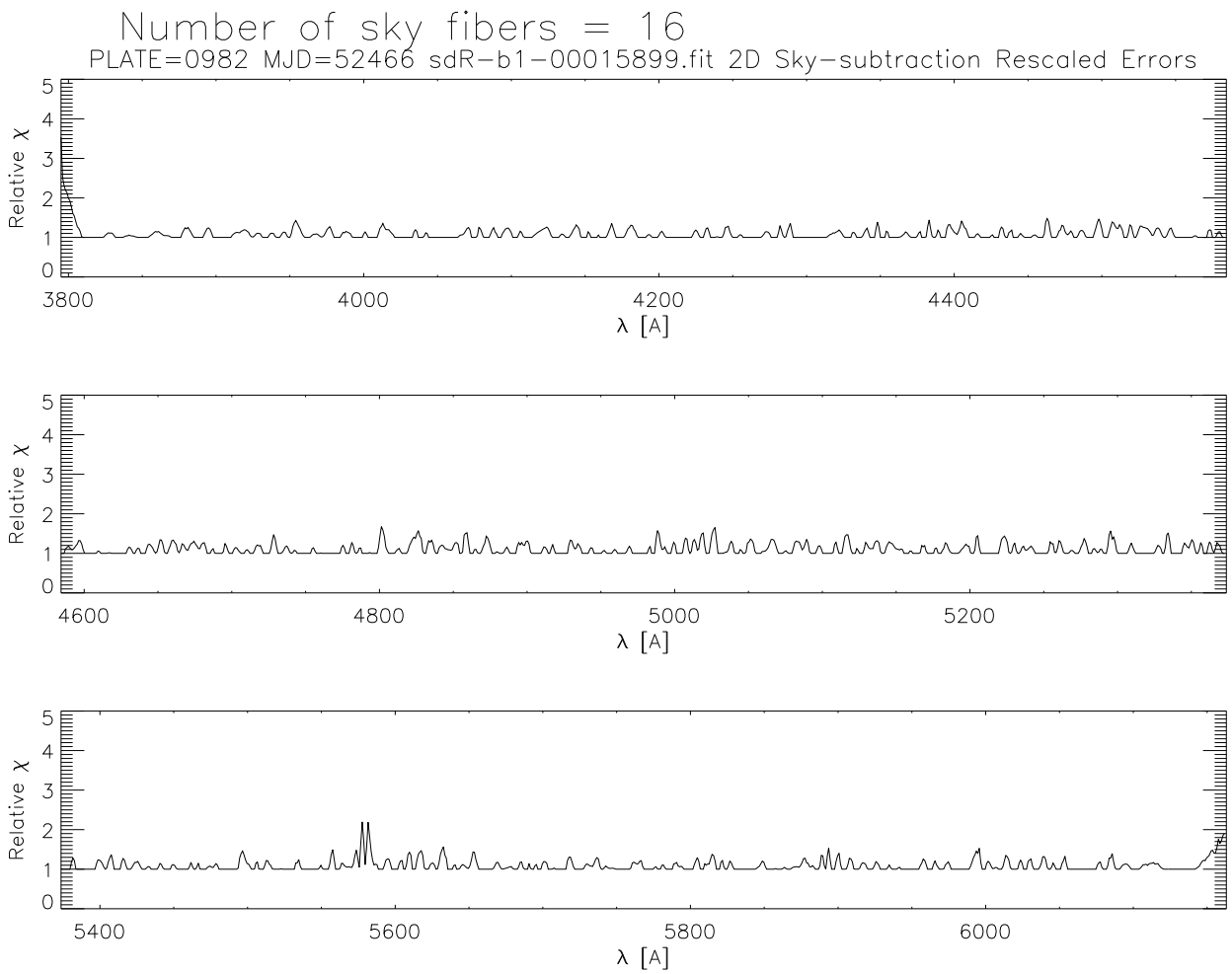

PLATE=0982 MJD=52466 sdR-b1-00015899.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

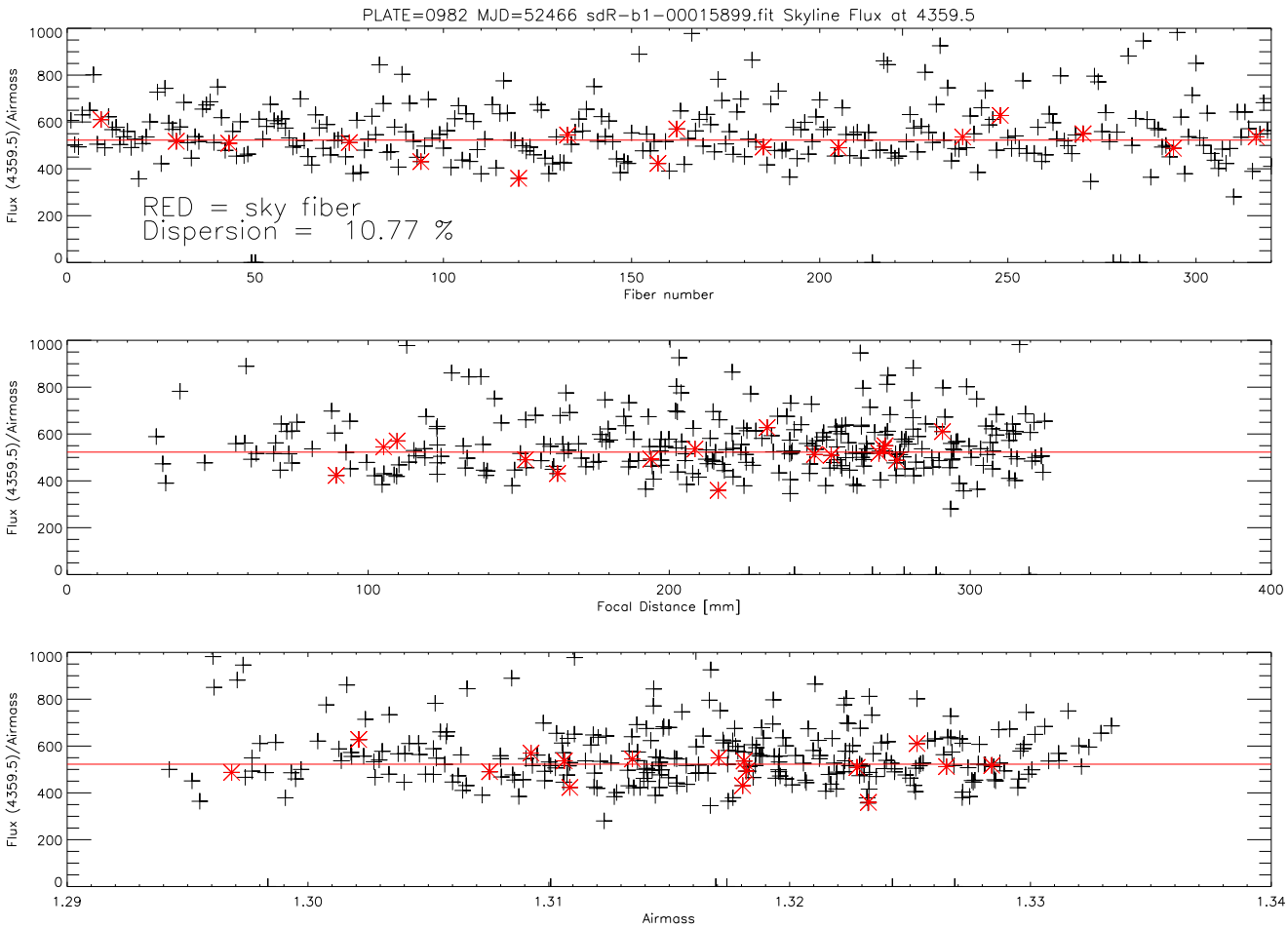

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015899.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

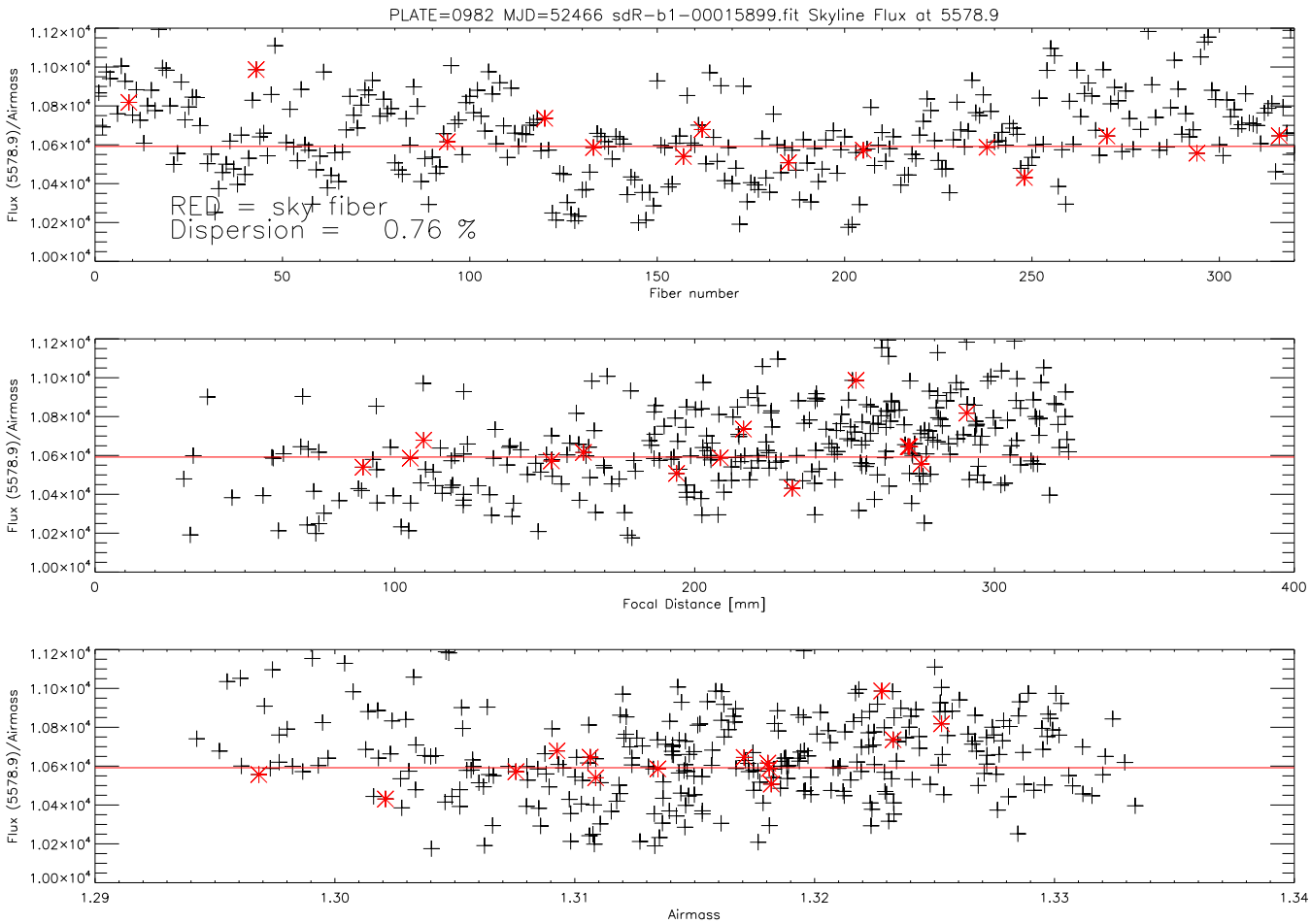

PLATE=0982 MJD=52466 sdR-b1-00015899.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

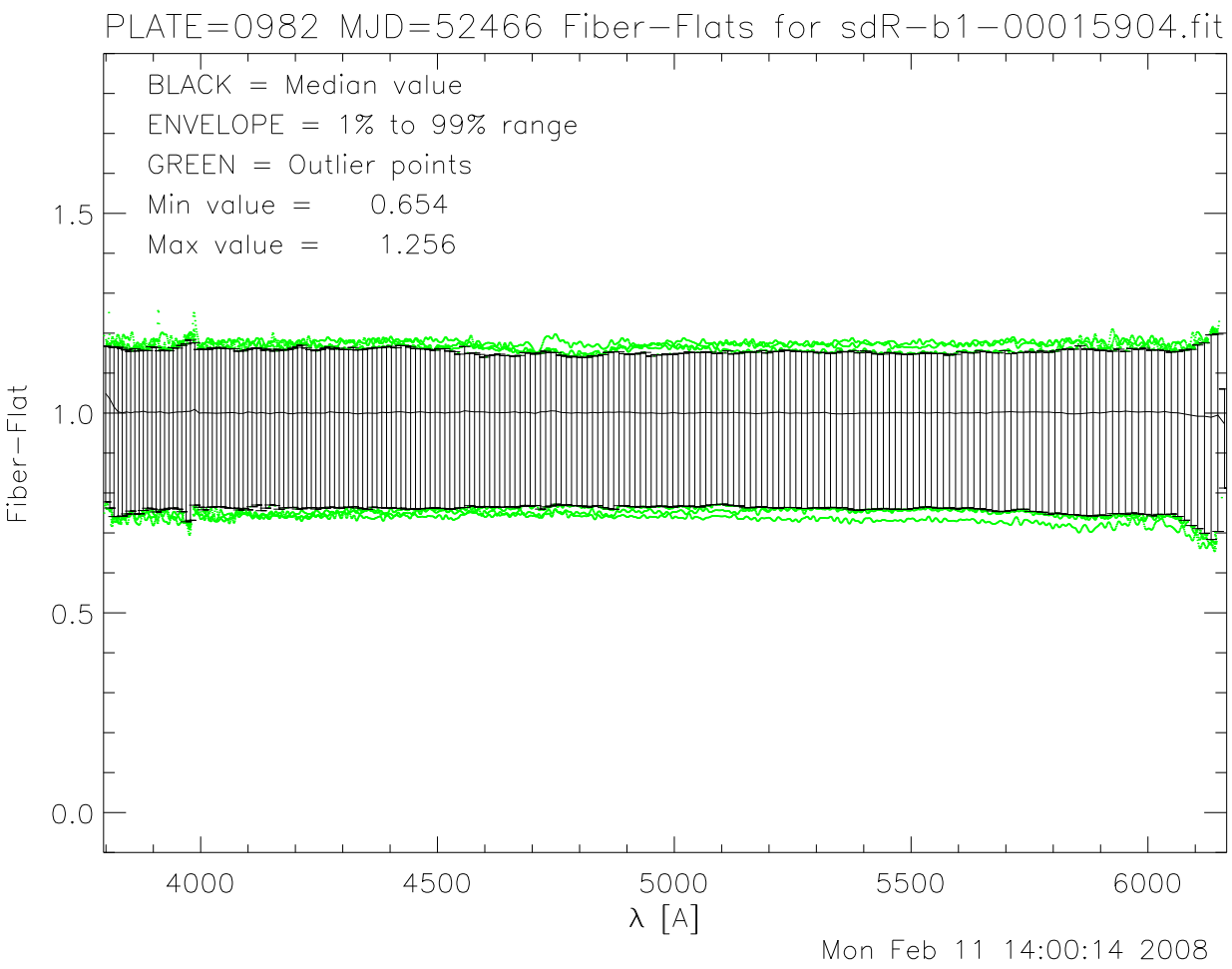

PLATE=0982 MJD=52466 sdR-b1-00015899.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

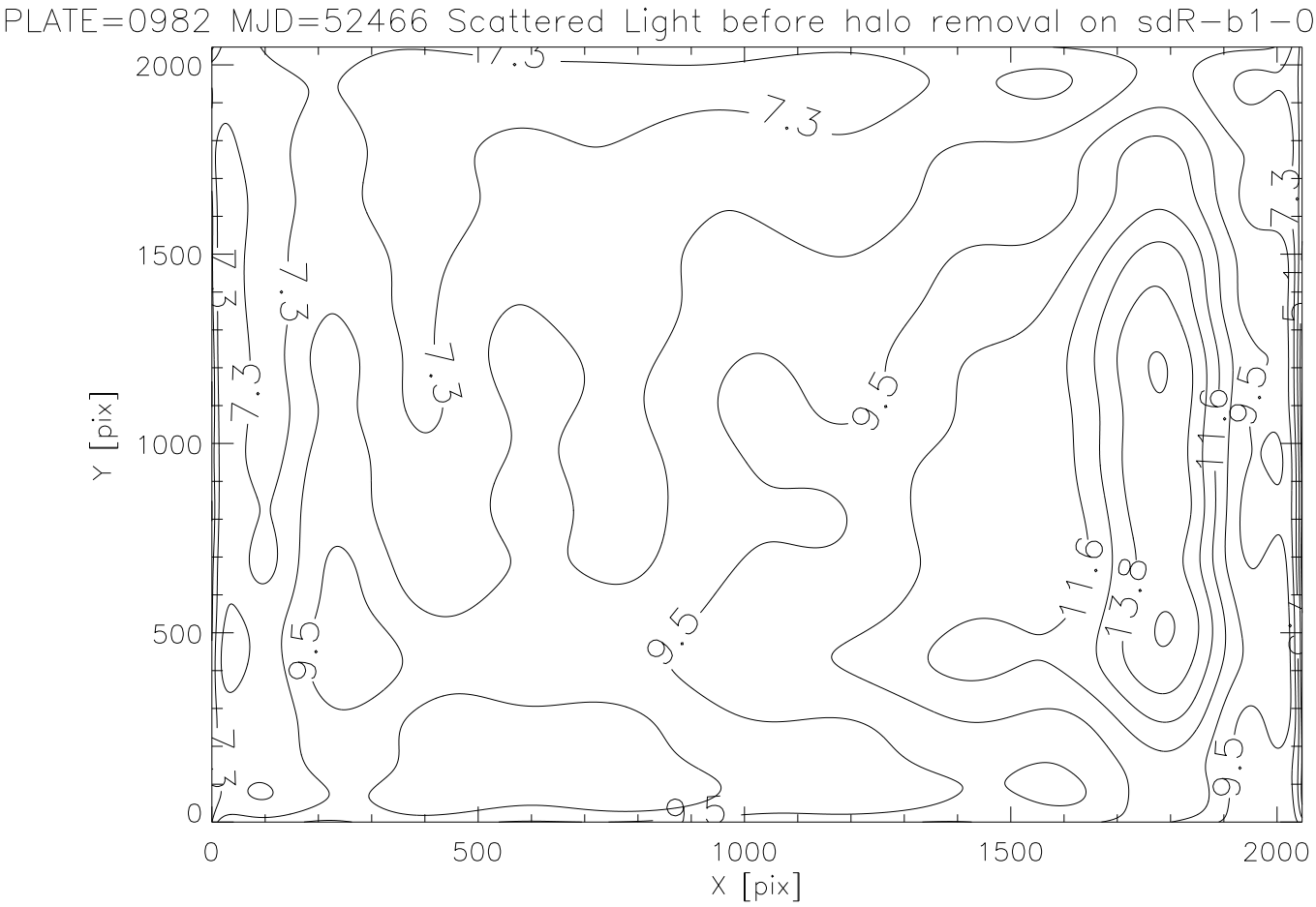

PLATE=0982 MJD=52466 sdR-b1-00015899.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

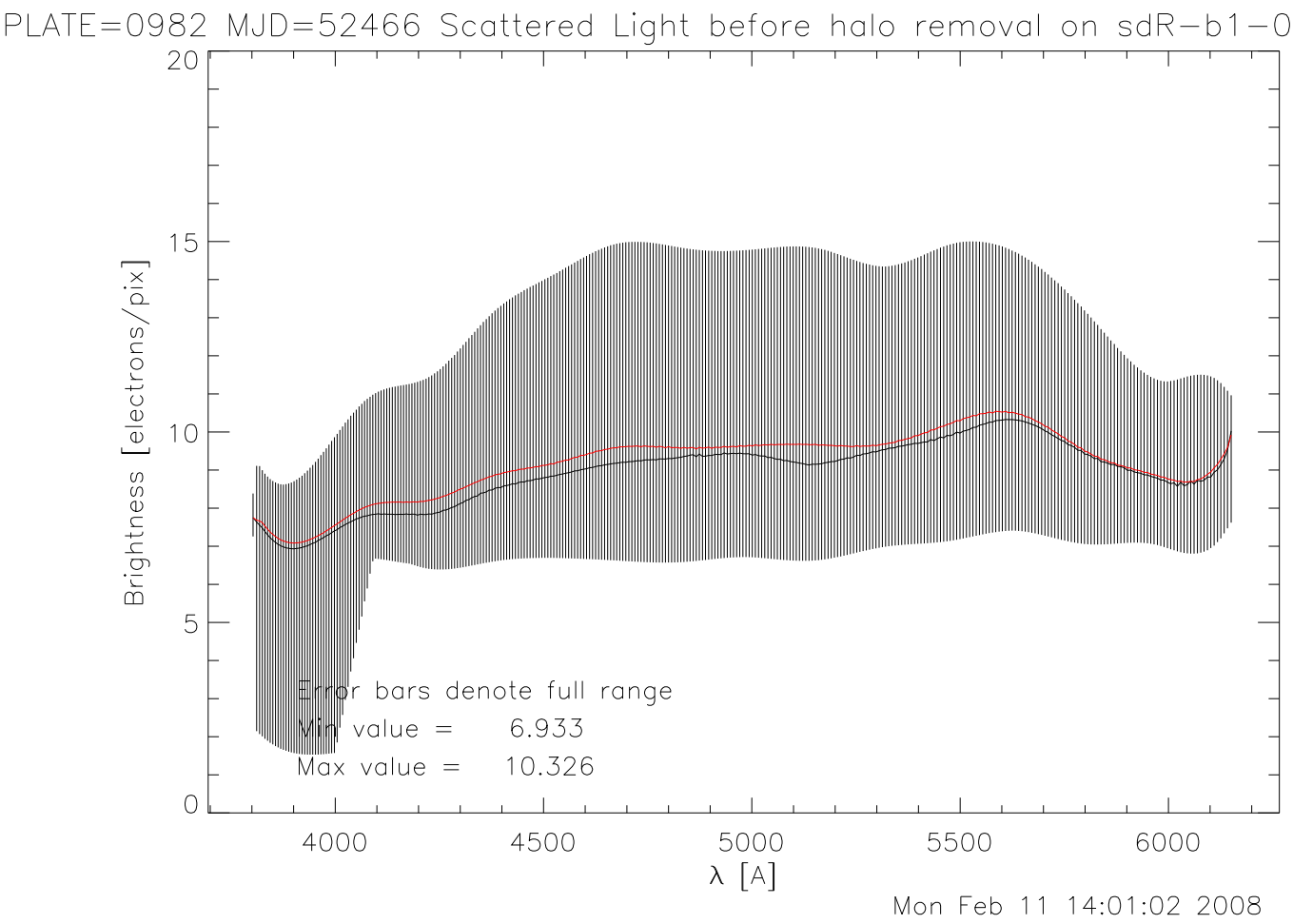

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015899.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

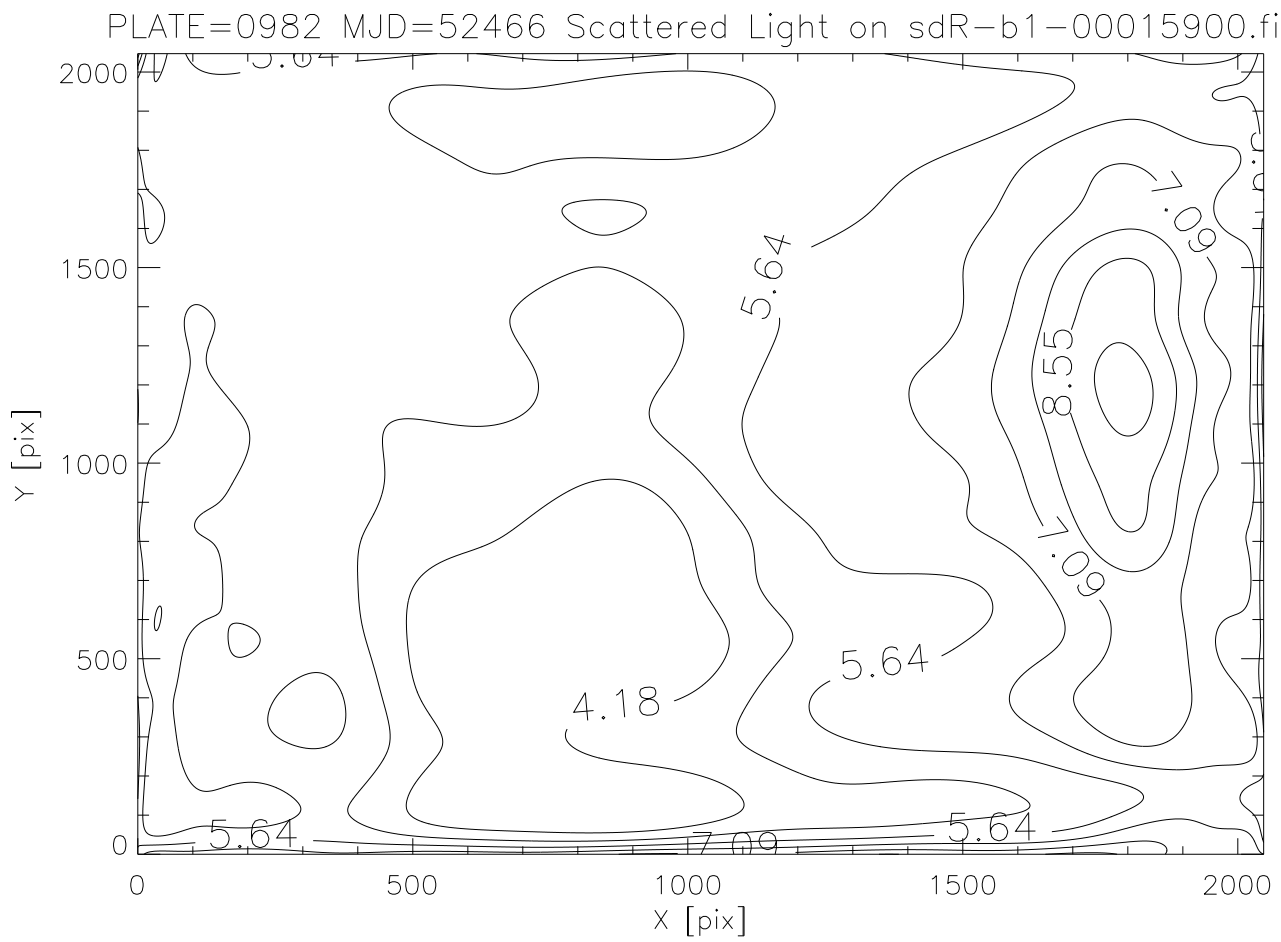

PLATE=0982 MJD=52466 sdR-b1-00015899.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.77 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

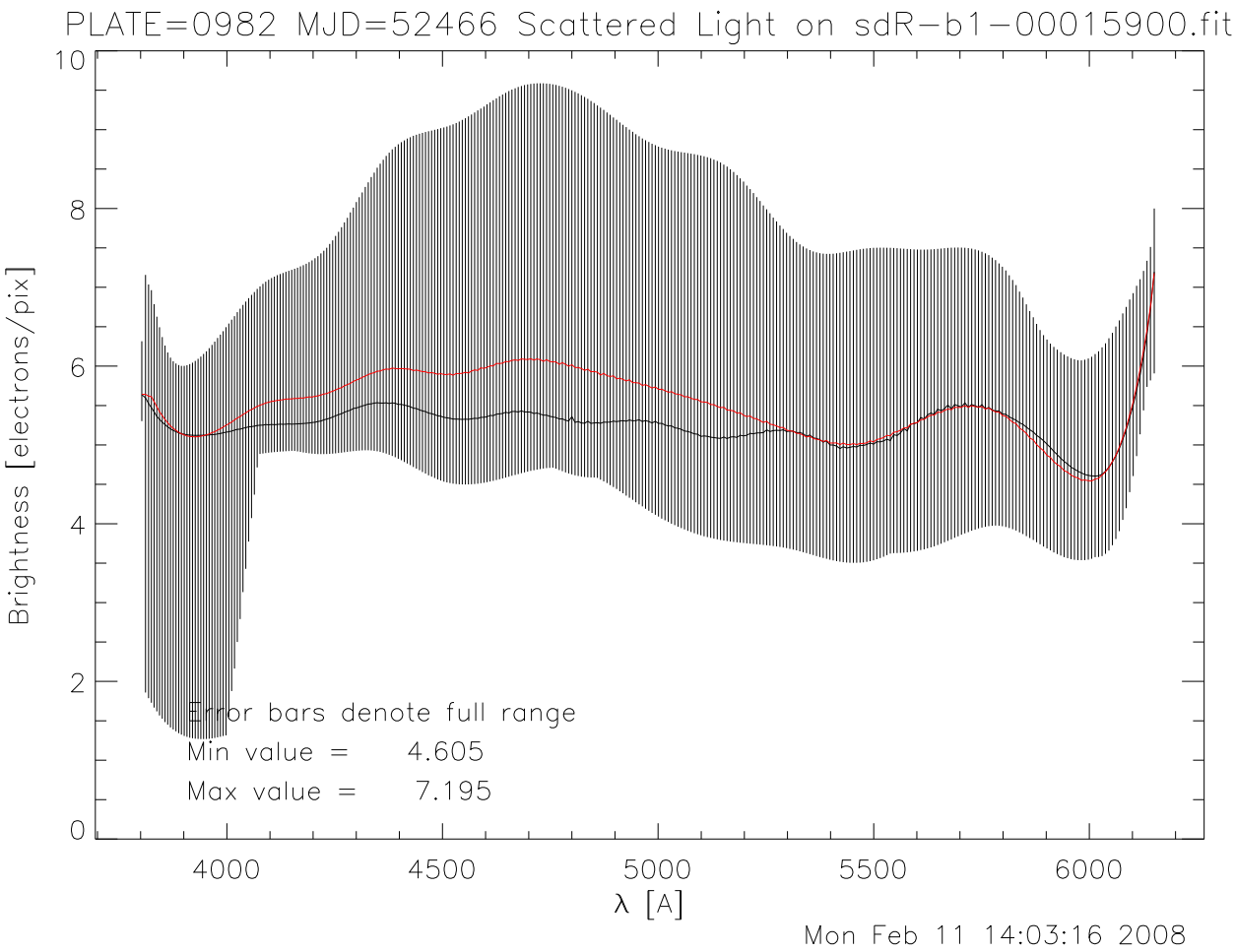

PLATE=0982 MJD=52466 sdR-b1-00015899.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.76 %
Fiber number
Focal Distance [mm]
Airmass

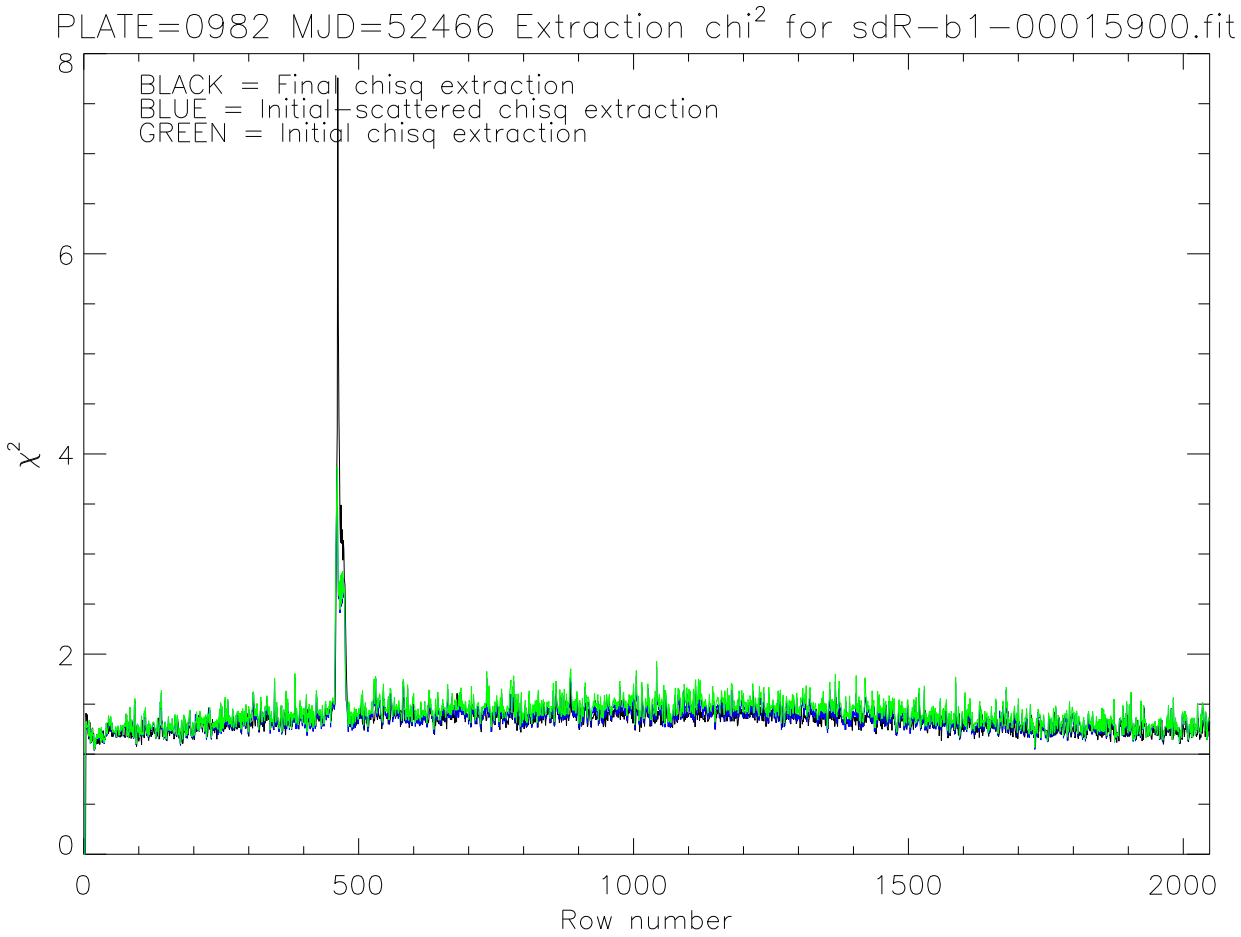

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b1-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.256
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:00:14 2008

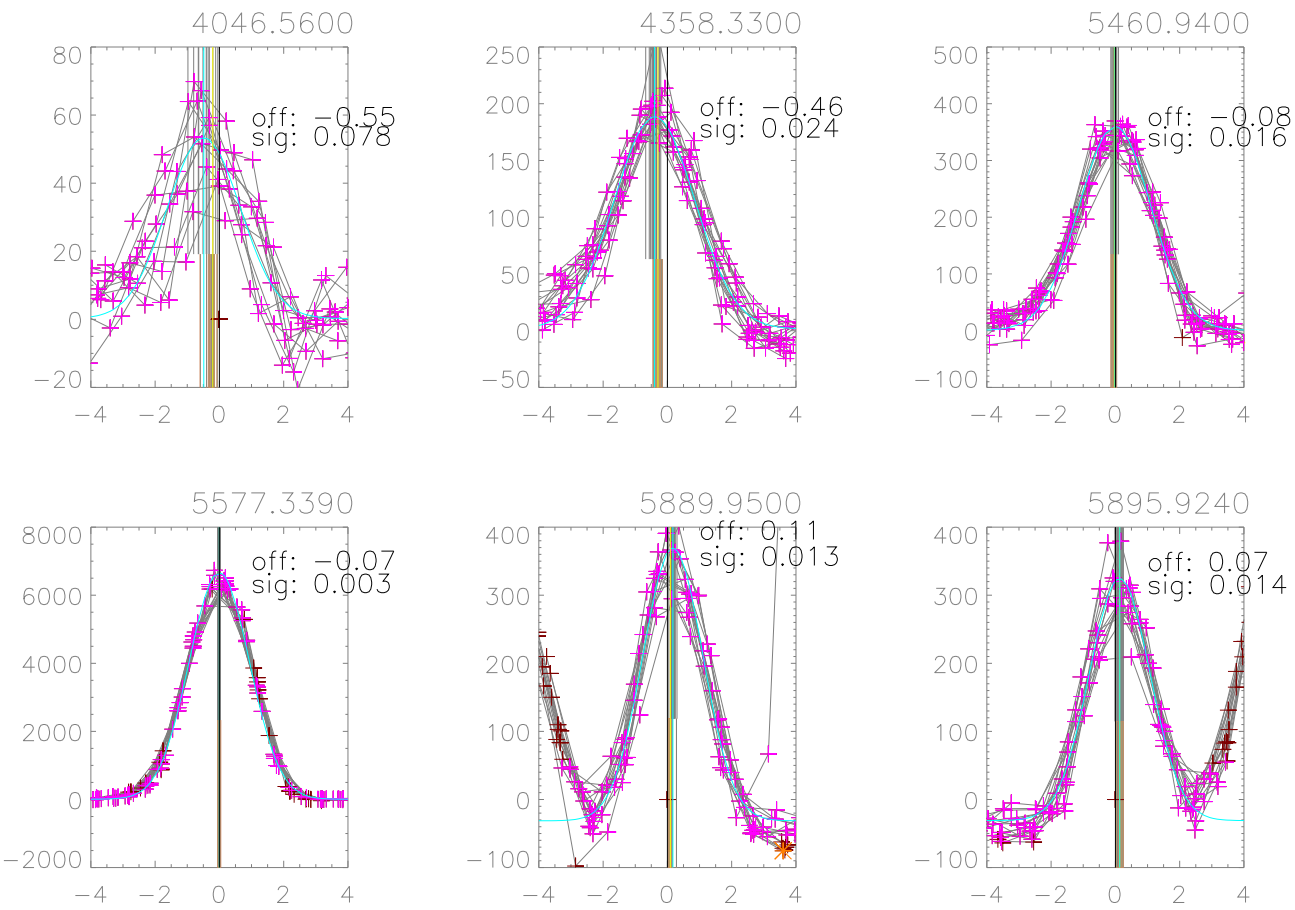

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR−b1−00015900.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.3
9.5
11.6
13.8

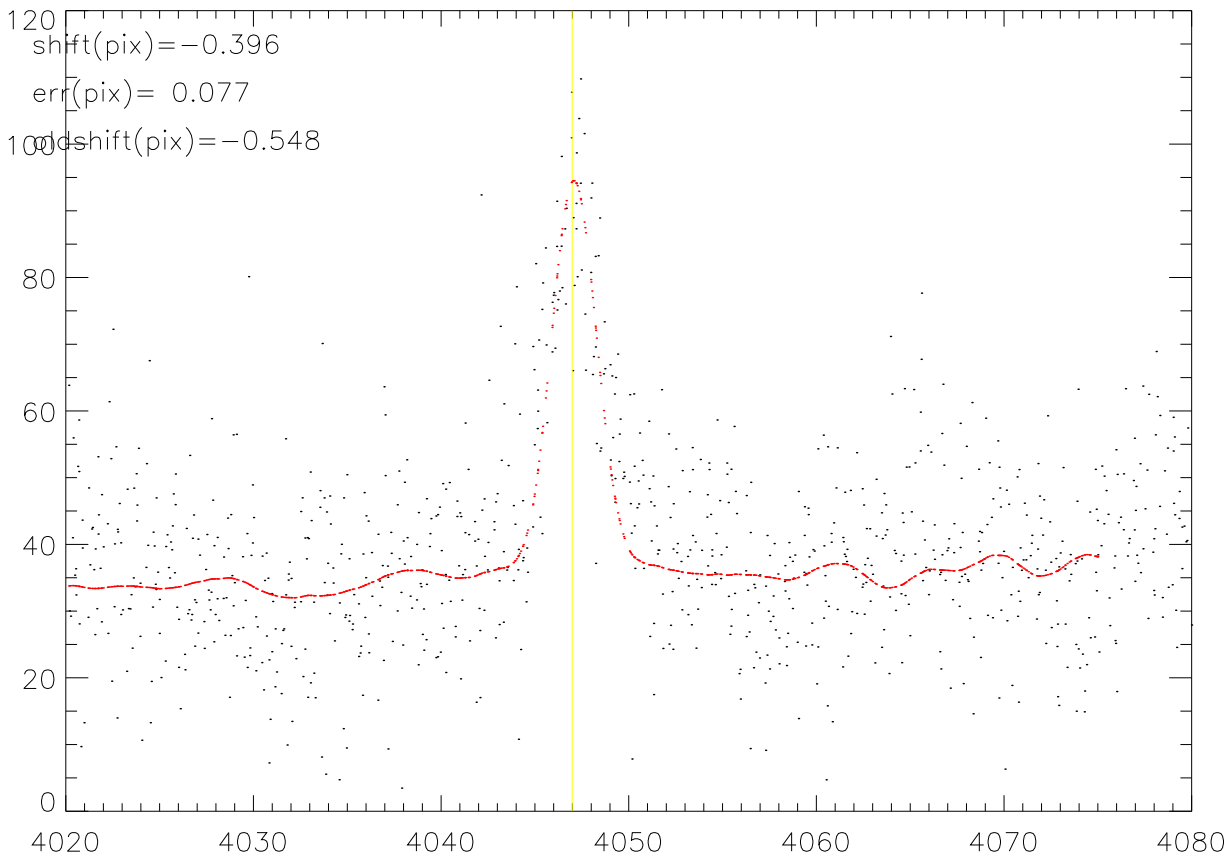

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b1-00015900.f
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.933
Max value = 10.326
Mon Feb 11 14:01:02 2008

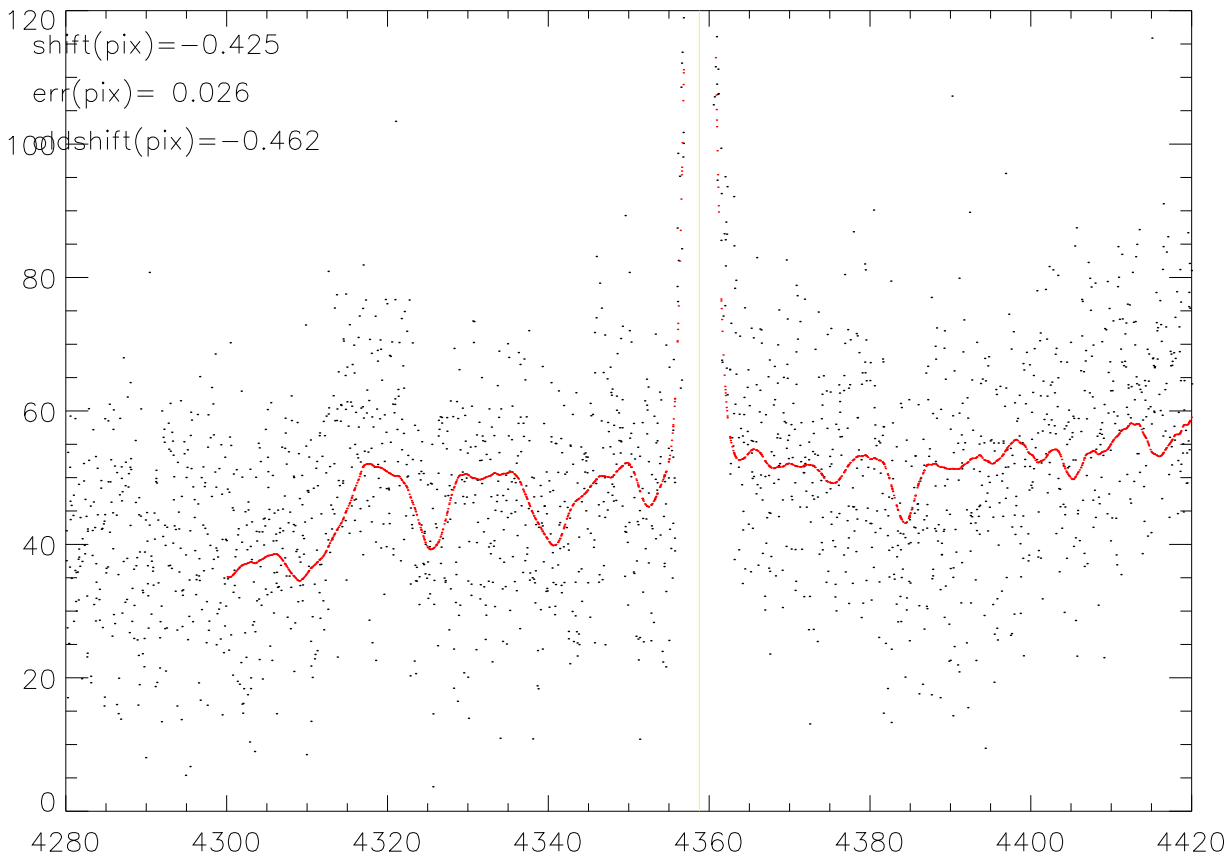

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015900.fit
5.64
7.09
8.55
7.09
5.64
4.18
5.64
5.64
7.09
5.64
0
500
1000
1500
2000
Y [pix]
X [pix]

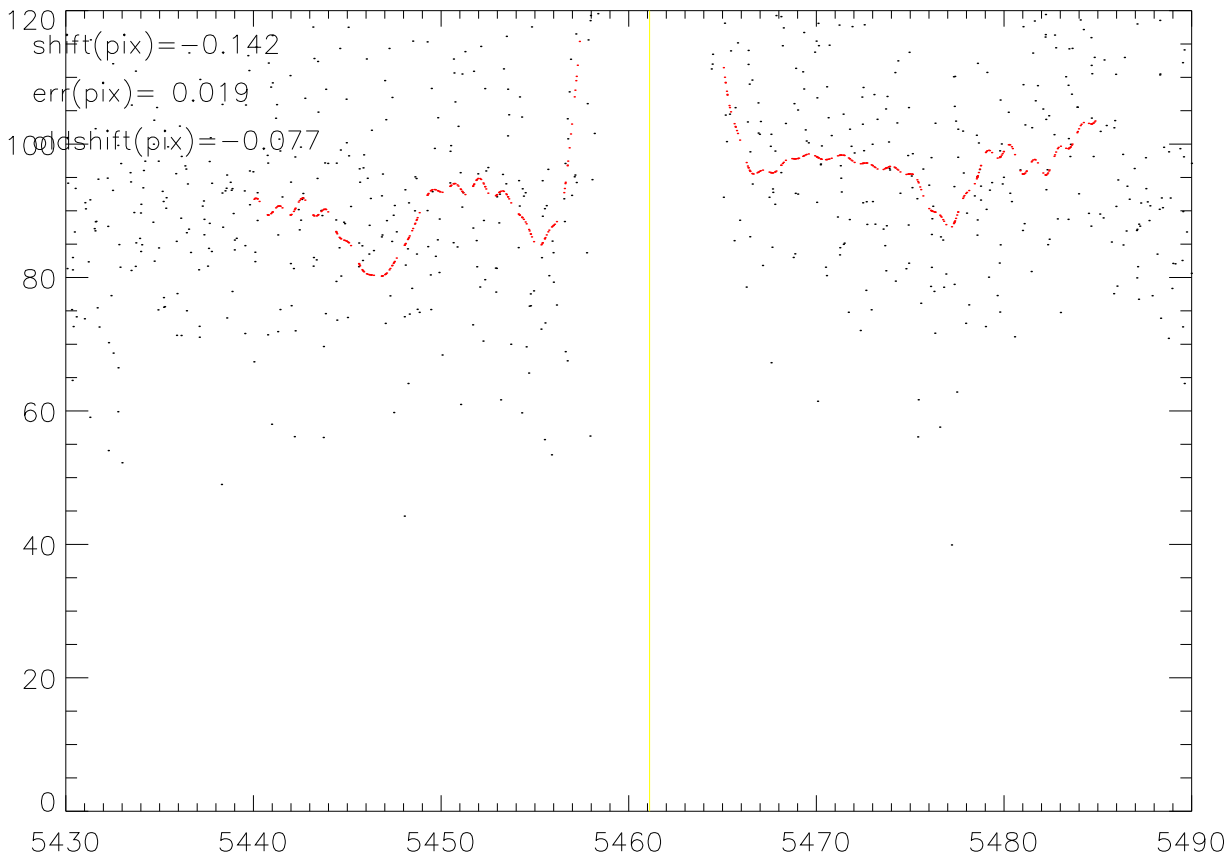

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015900.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.605
Max value = 7.195
Mon Feb 11 14:03:16 2008

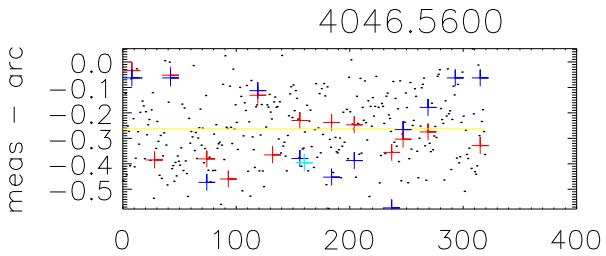

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-b1-00015900.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

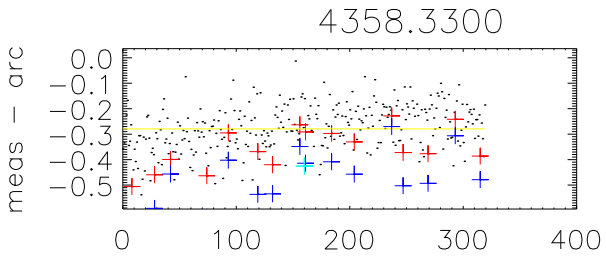

4046.5600
off: −0.55
sig: 0.078
4358.3300
off: −0.46
sig: 0.024
5460.9400
off: −0.08
sig: 0.016
5577.3390
off: −0.07
sig: 0.003
5889.9500
off: 0.11
sig: 0.013
5895.9240
off: 0.07
sig: 0.014

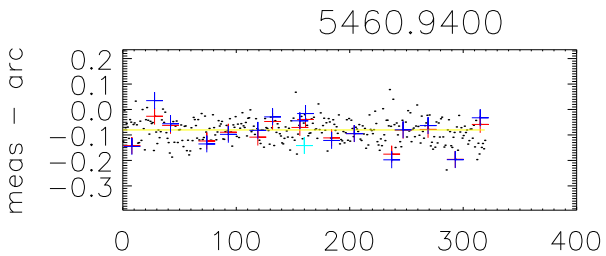

shift(pix)=−0.396
err(pix)= 0.077
oldshift(pix)=−0.548
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

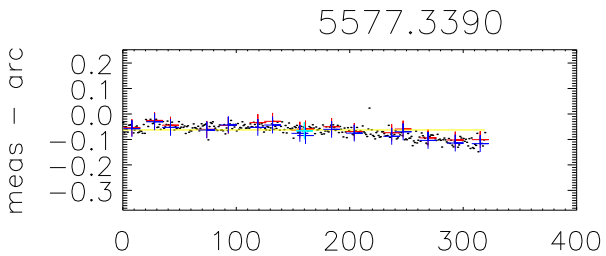

shift(pix)=−0.425
err(pix)= 0.026
oldshift(pix)=−0.462
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

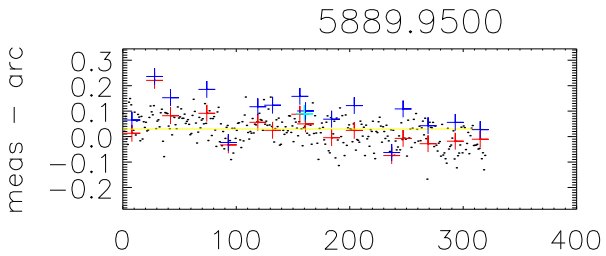

shift(pix)=−0.142
err(pix)= 0.019
oldshift(pix)=−0.077
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

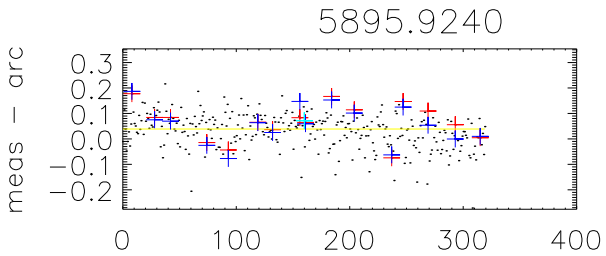

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

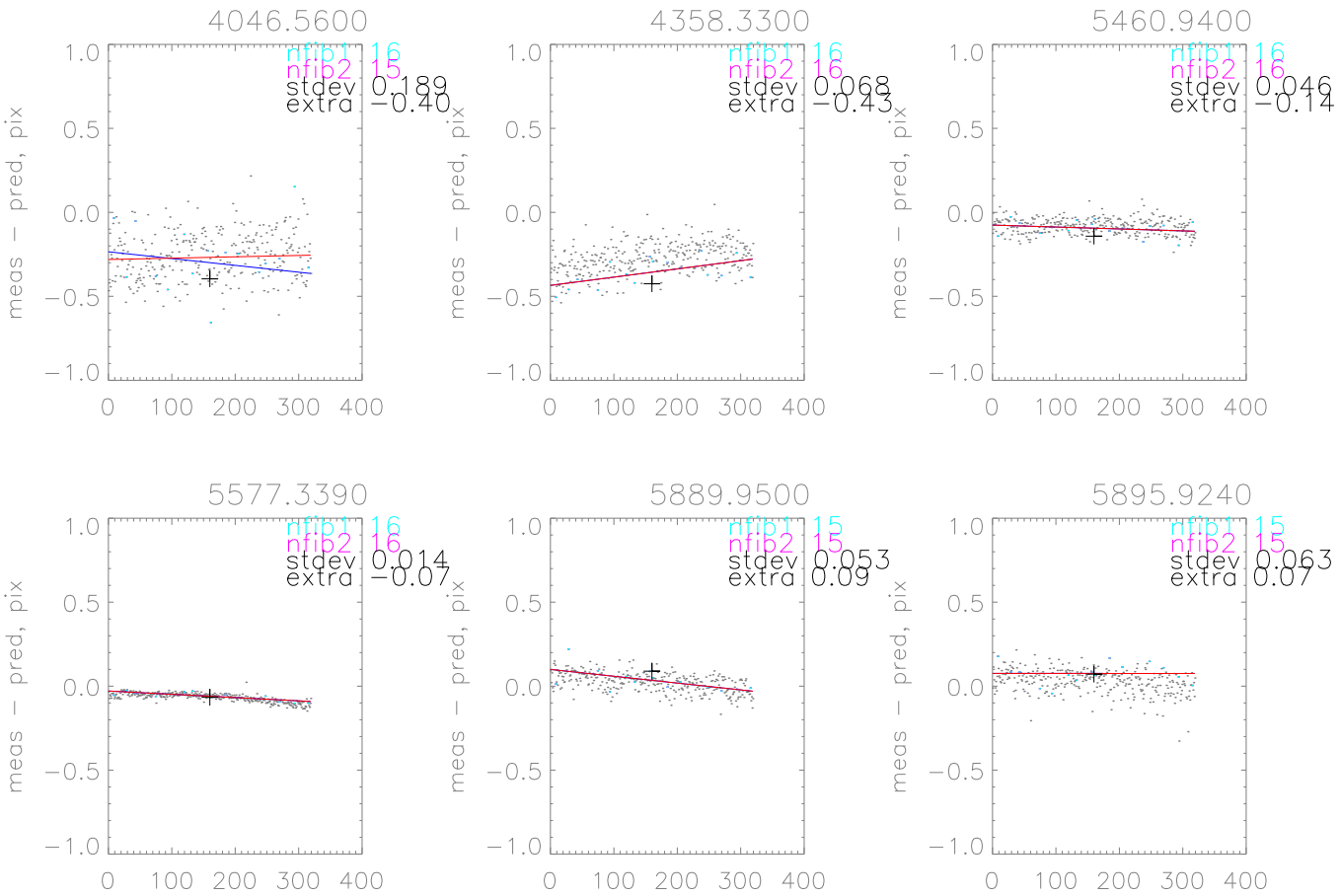

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

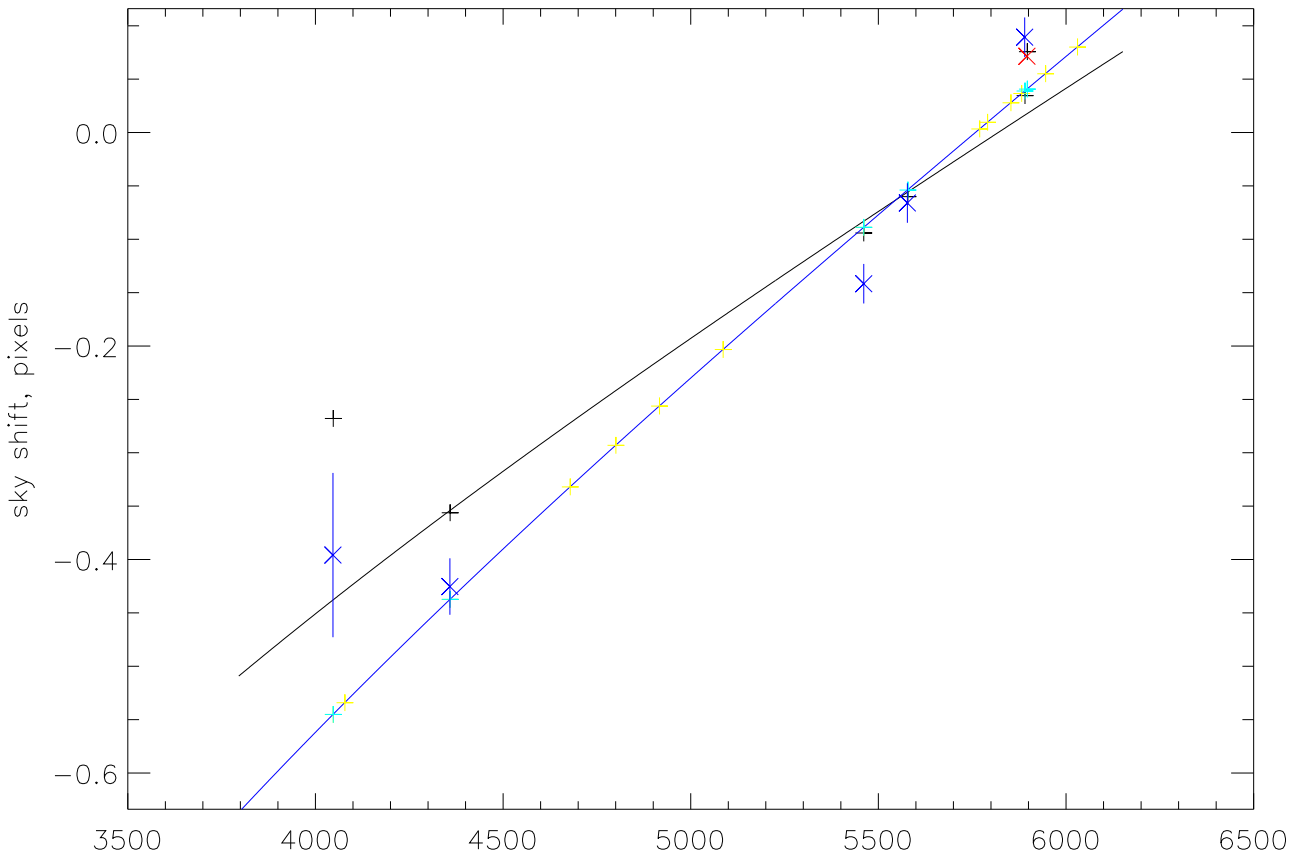

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

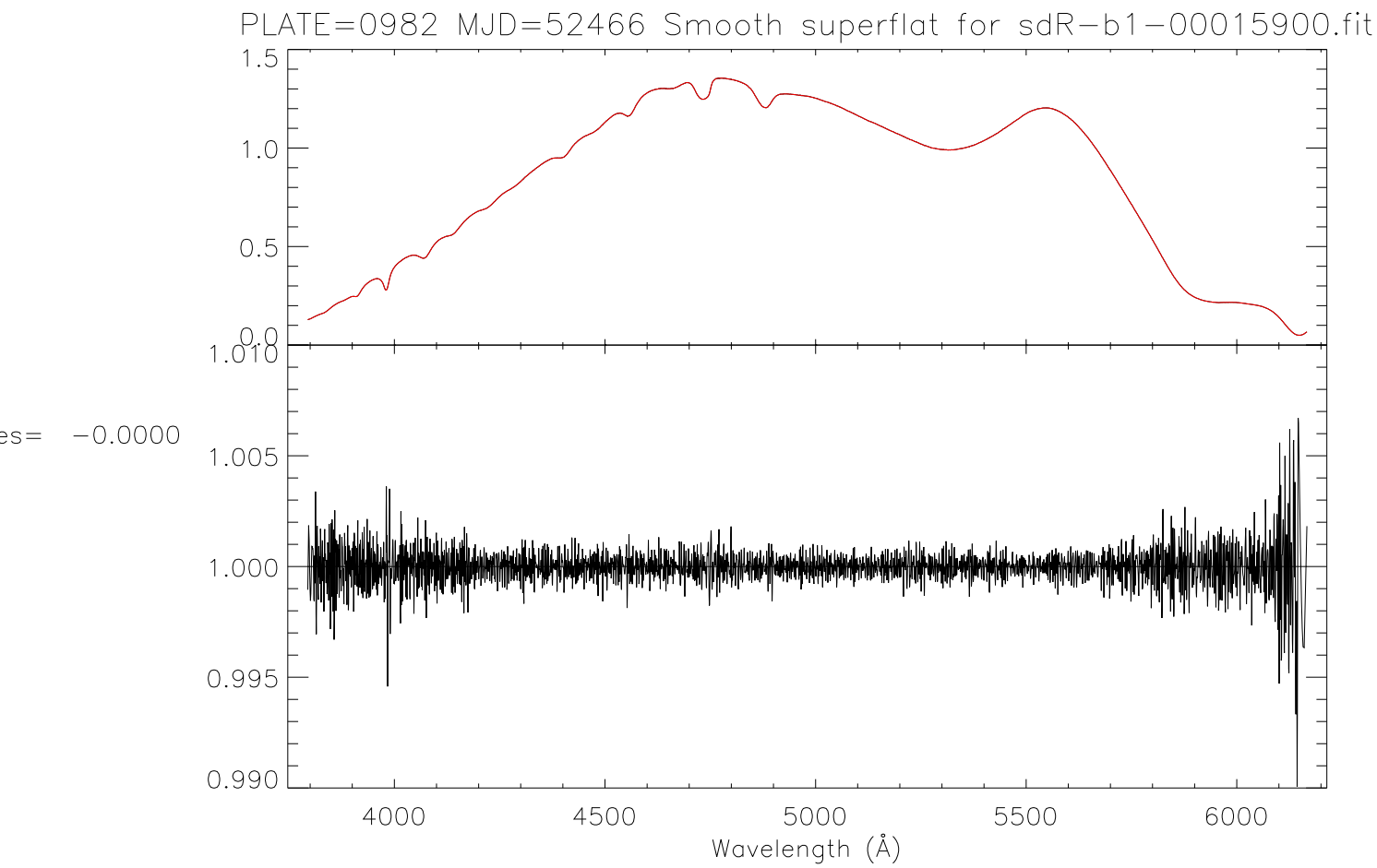

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

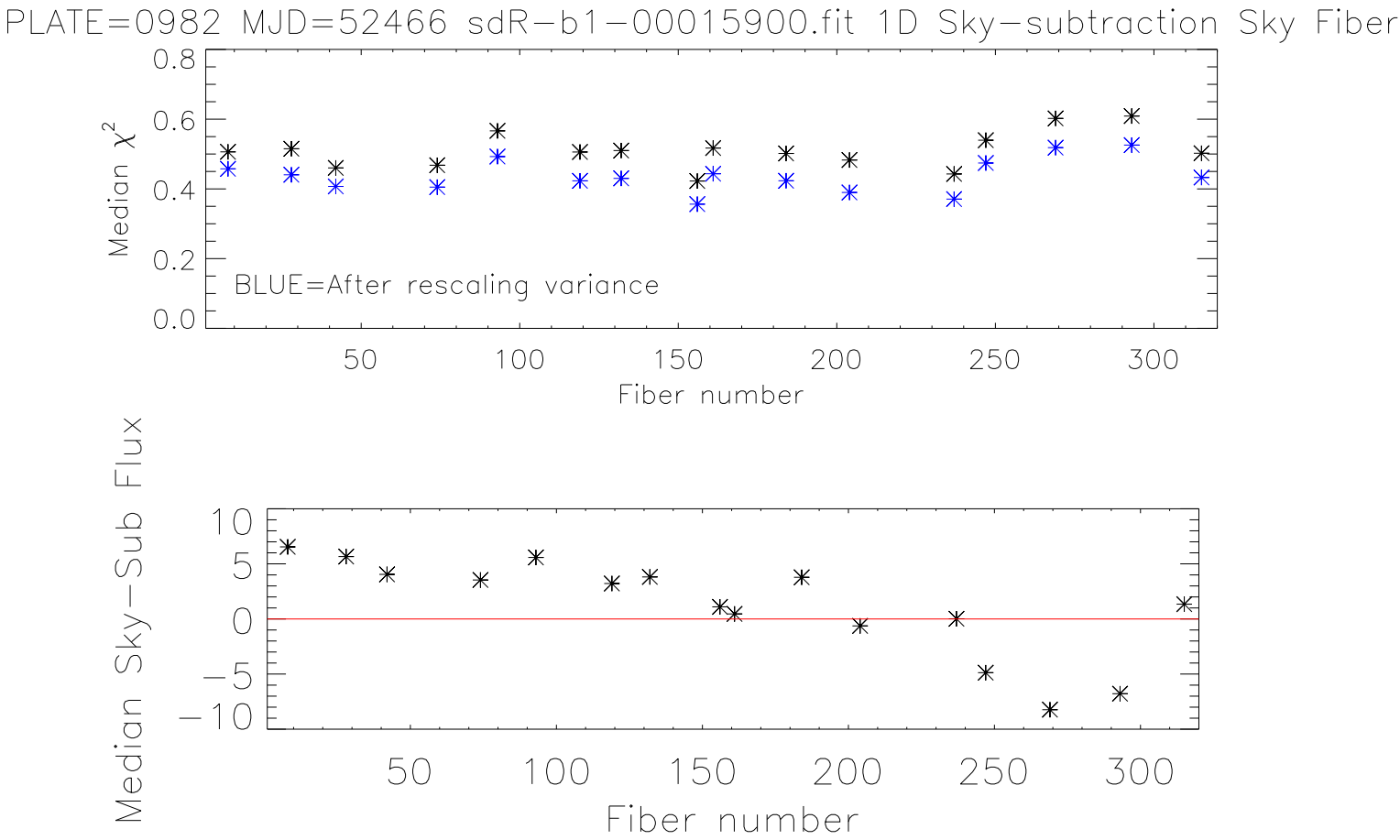

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

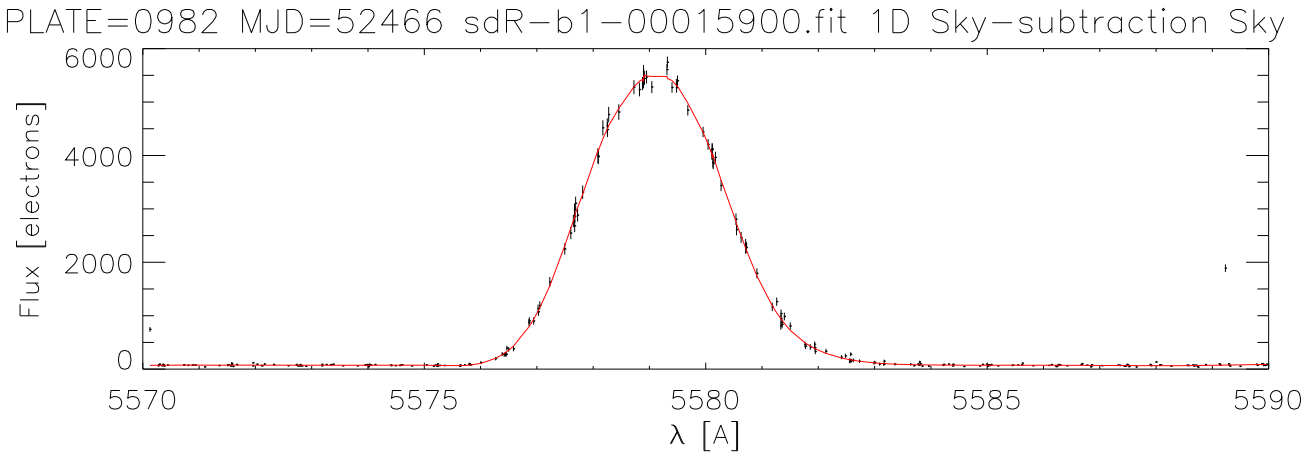

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

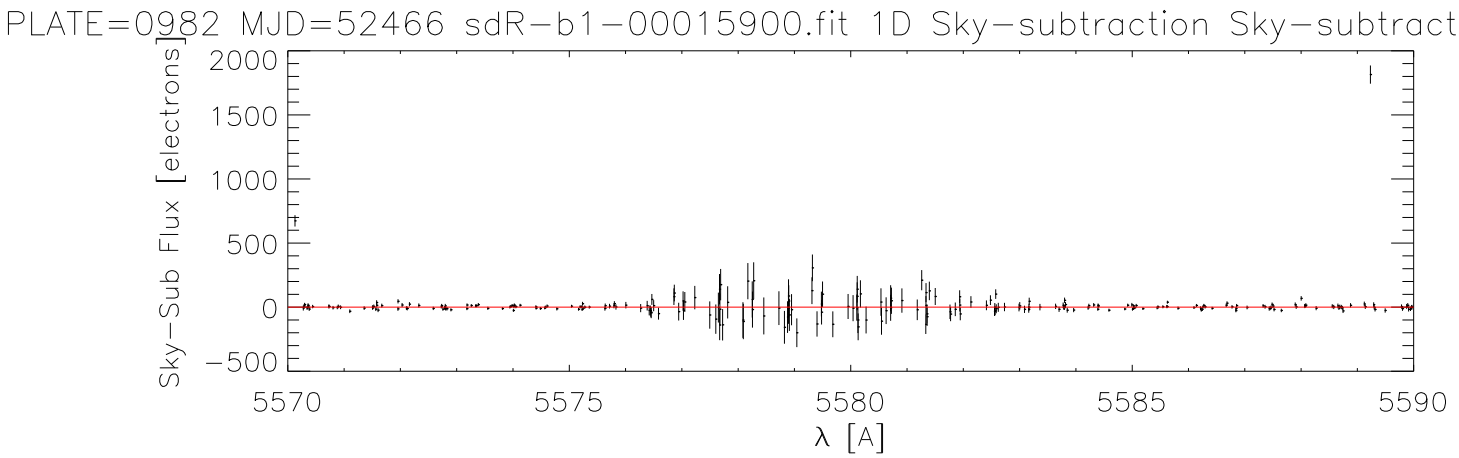

4046.5600
nfib1 16
nfib2 15
stdev 0.189
extra −0.40
4358.3300
nfib1 16
nfib2 16
stdev 0.068
extra −0.43
5460.9400
nfib1 16
nfib2 16
stdev 0.046
extra −0.14
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra −0.07
5889.9500
nfib1 15
nfib2 15
stdev 0.053
extra 0.09
5895.9240
nfib1 15
nfib2 15
stdev 0.063
extra 0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

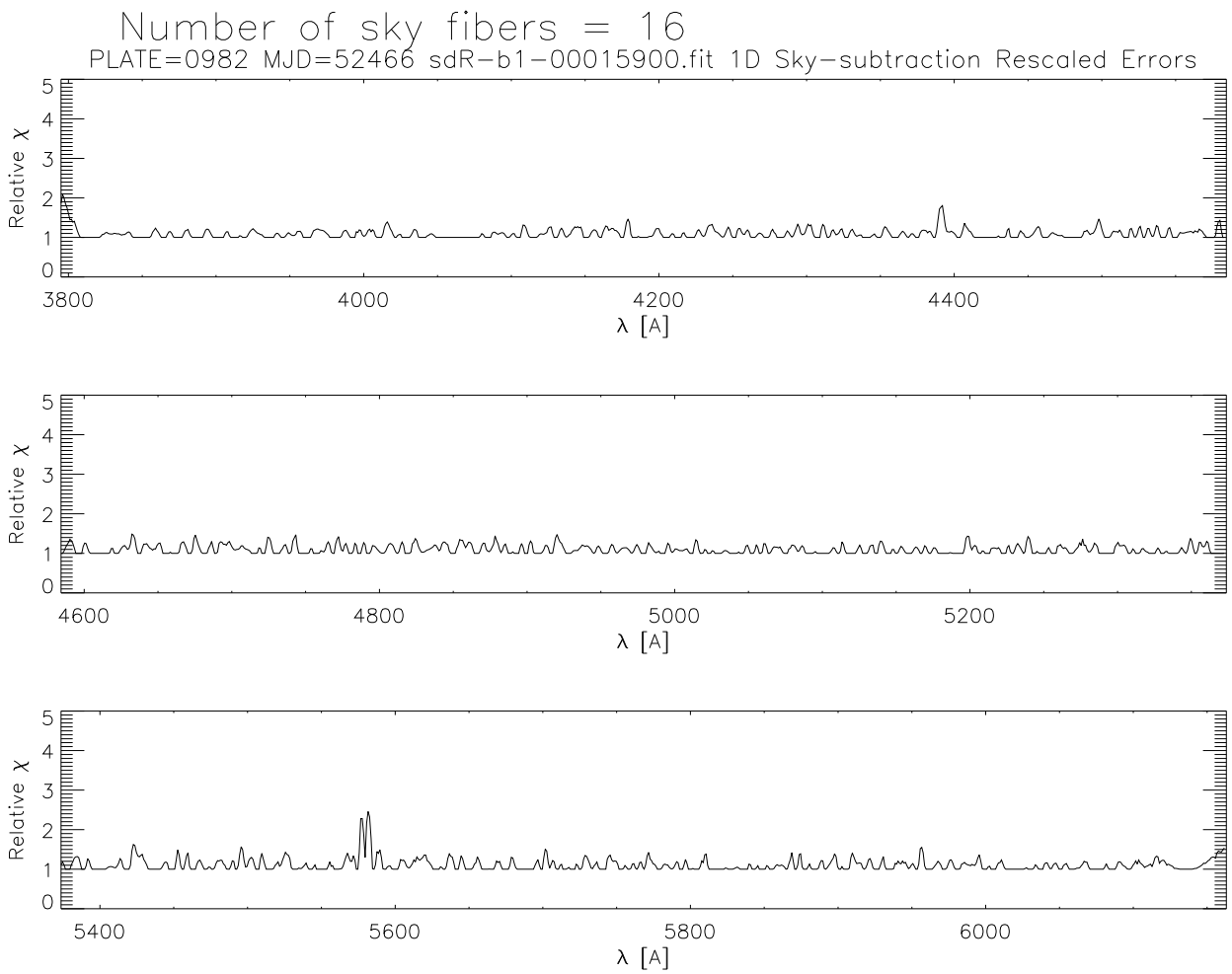

sky shift, pixels
0.0
−0.2
−0.4
−0.6
3500
4000
4500
5000
5500
6000
6500

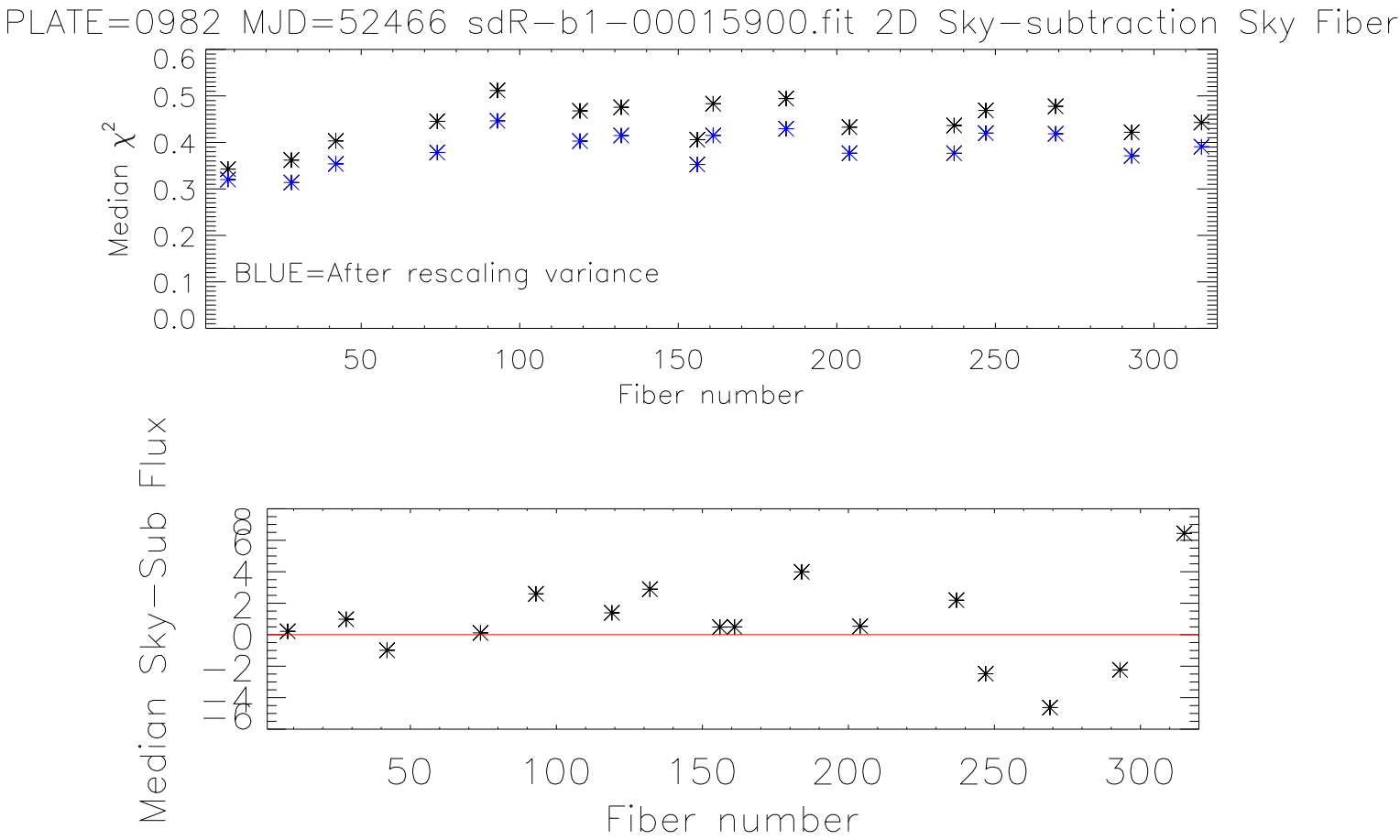

PLATE=0982 MJD=52466 Smooth superflat for sdR-b1-00015900.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

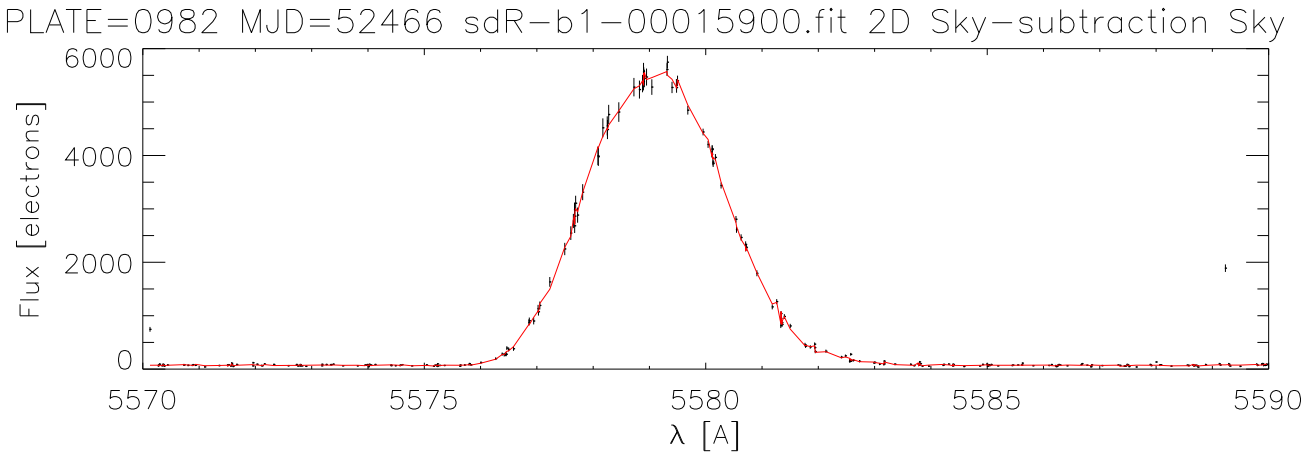

PLATE=0982 MJD=52466 sdR-b1-00015900.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

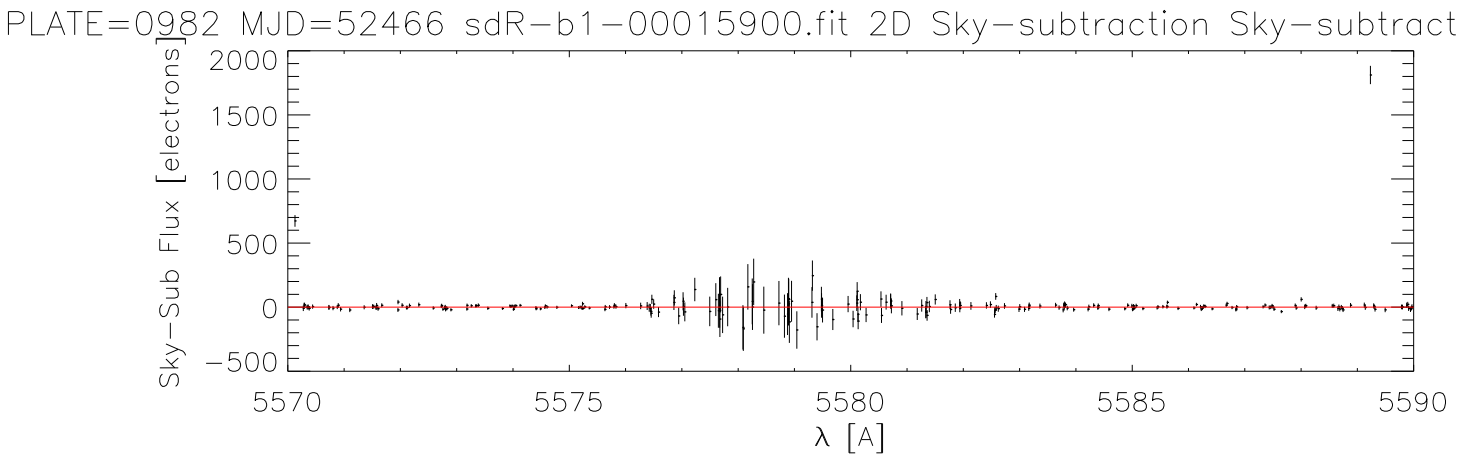

PLATE=0982 MJD=52466 sdR-b1-00015900.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

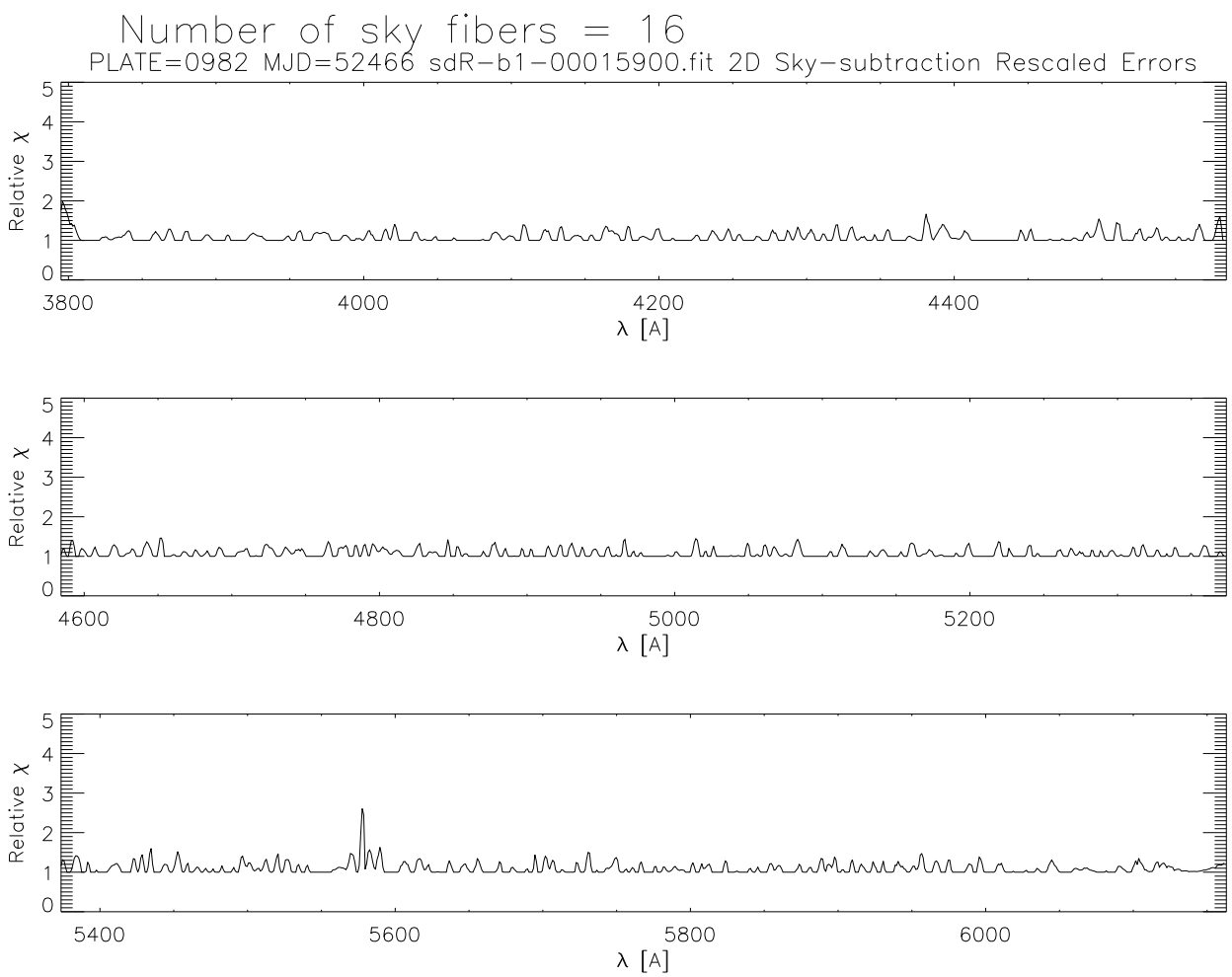

PLATE=0982 MJD=52466 sdR-b1-00015900.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

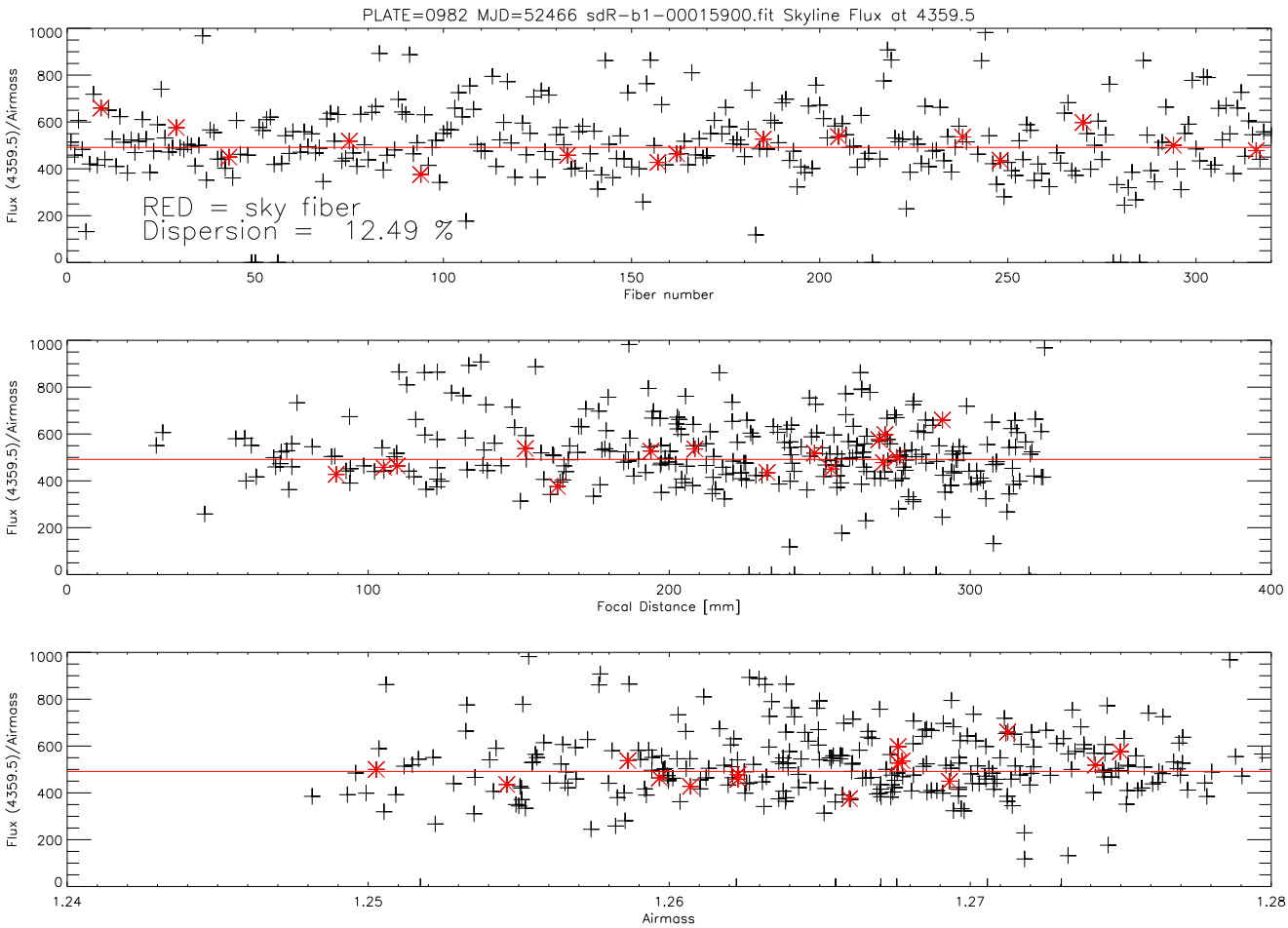

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015900.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

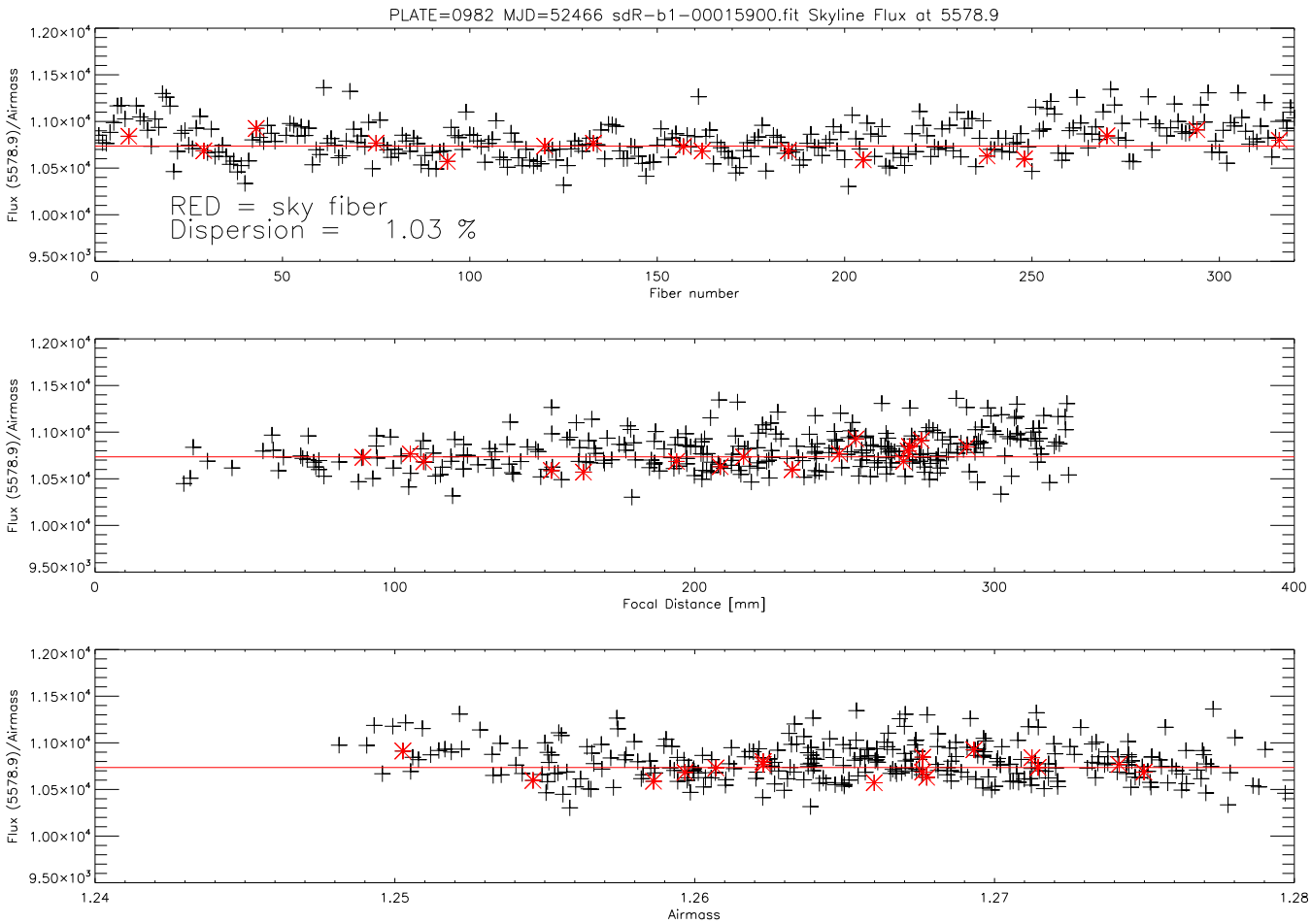

PLATE=0982 MJD=52466 sdR-b1-00015900.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

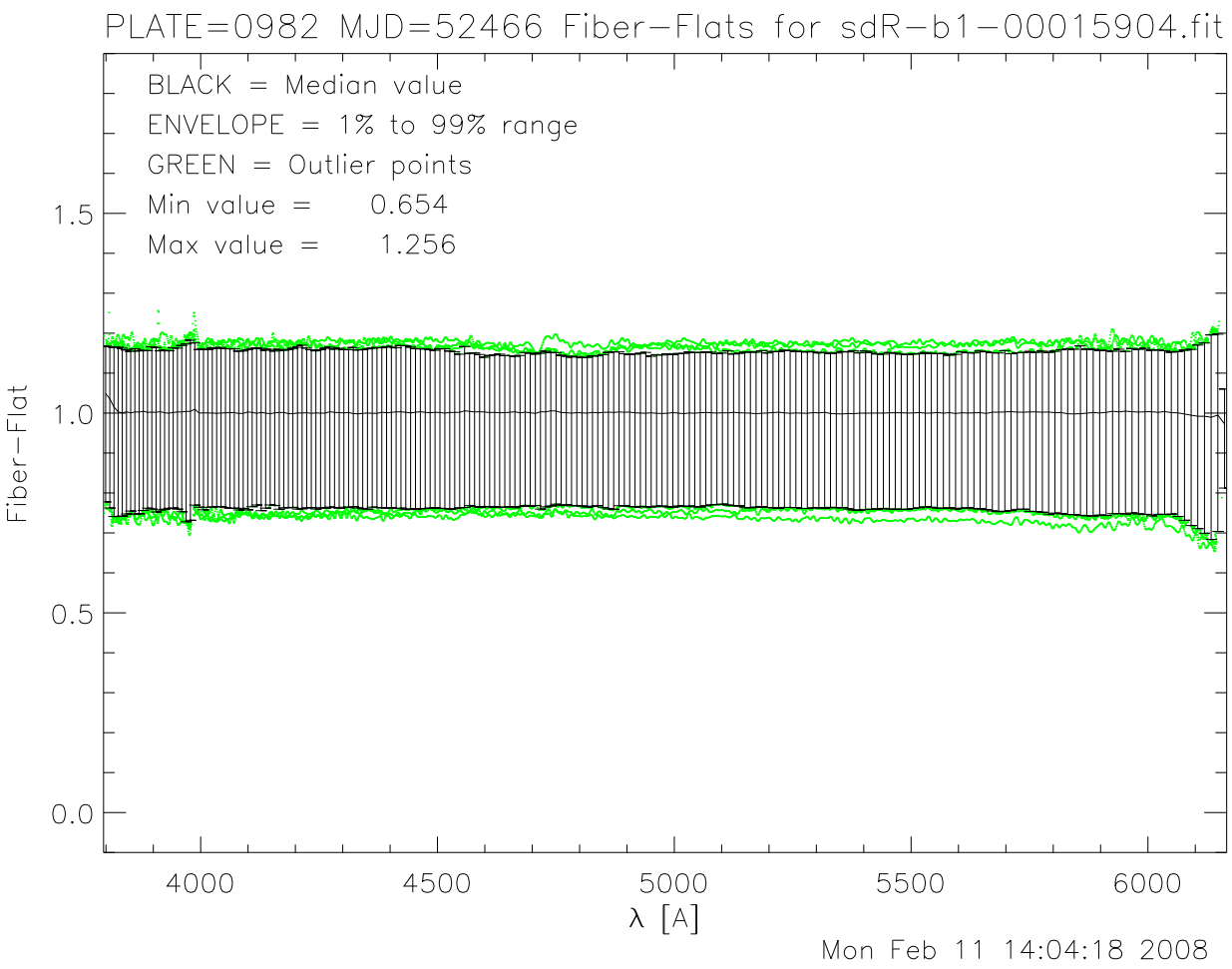

PLATE=0982 MJD=52466 sdR-b1-00015900.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

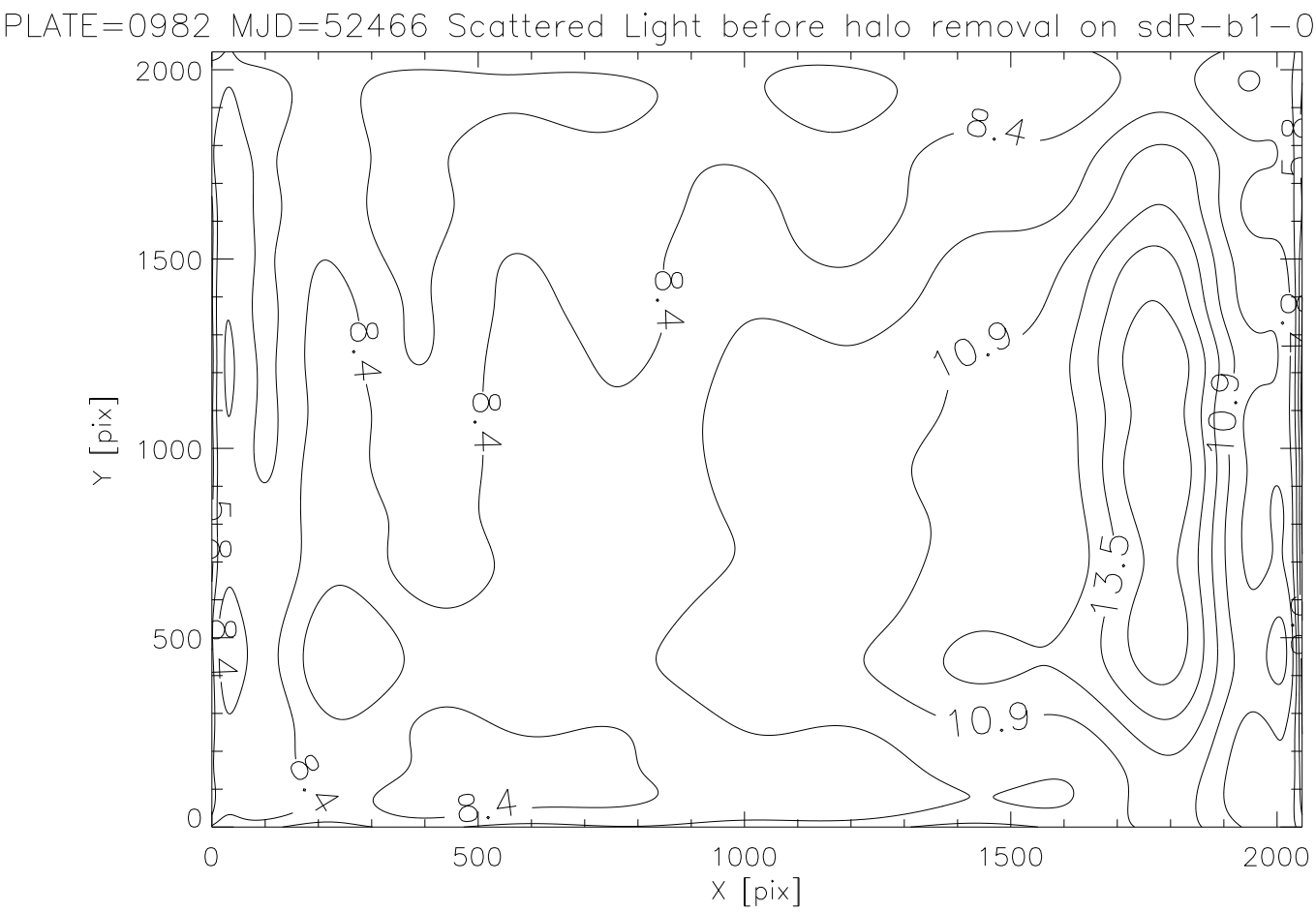

PLATE=0982 MJD=52466 sdR-b1-00015900.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

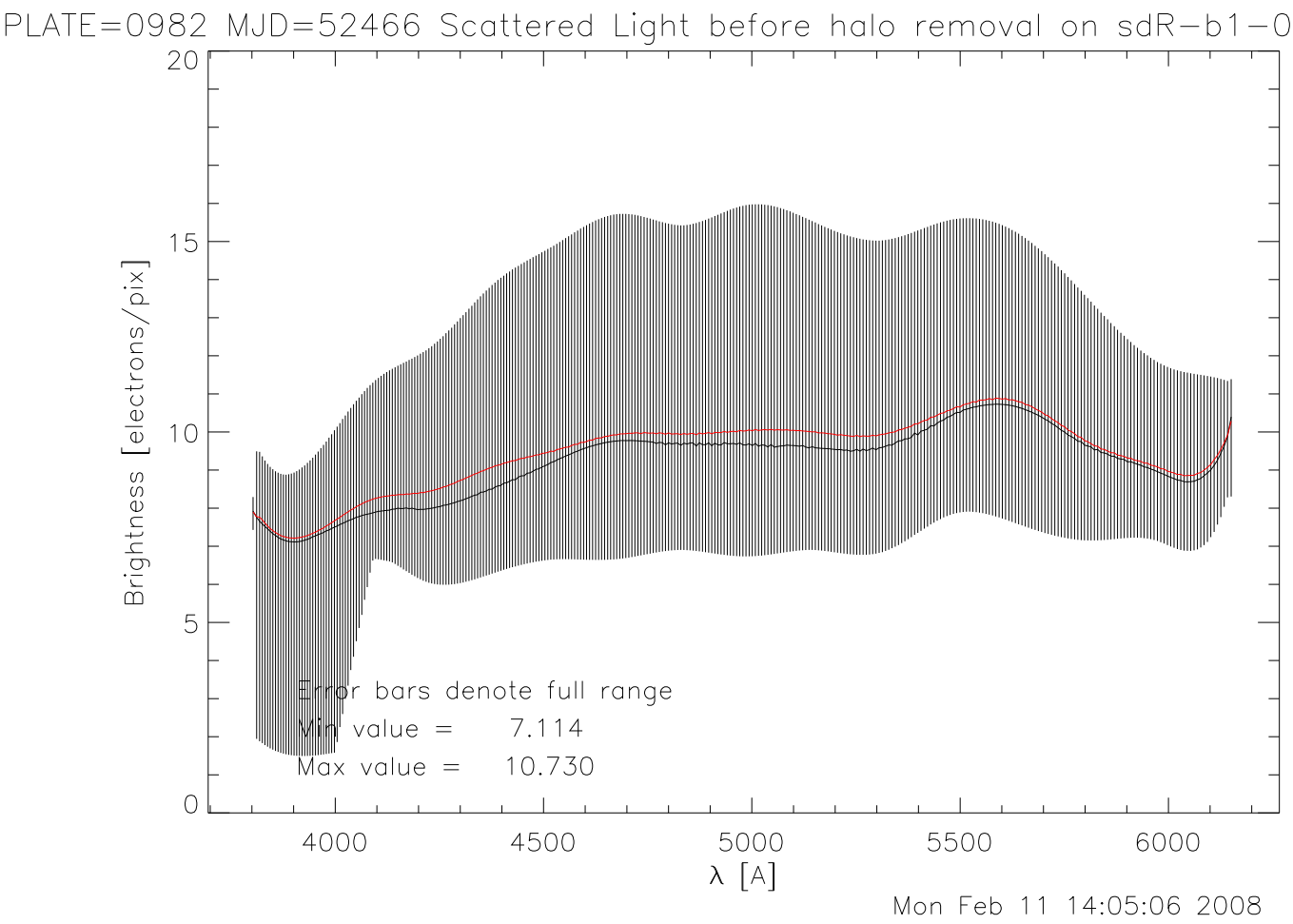

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015900.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

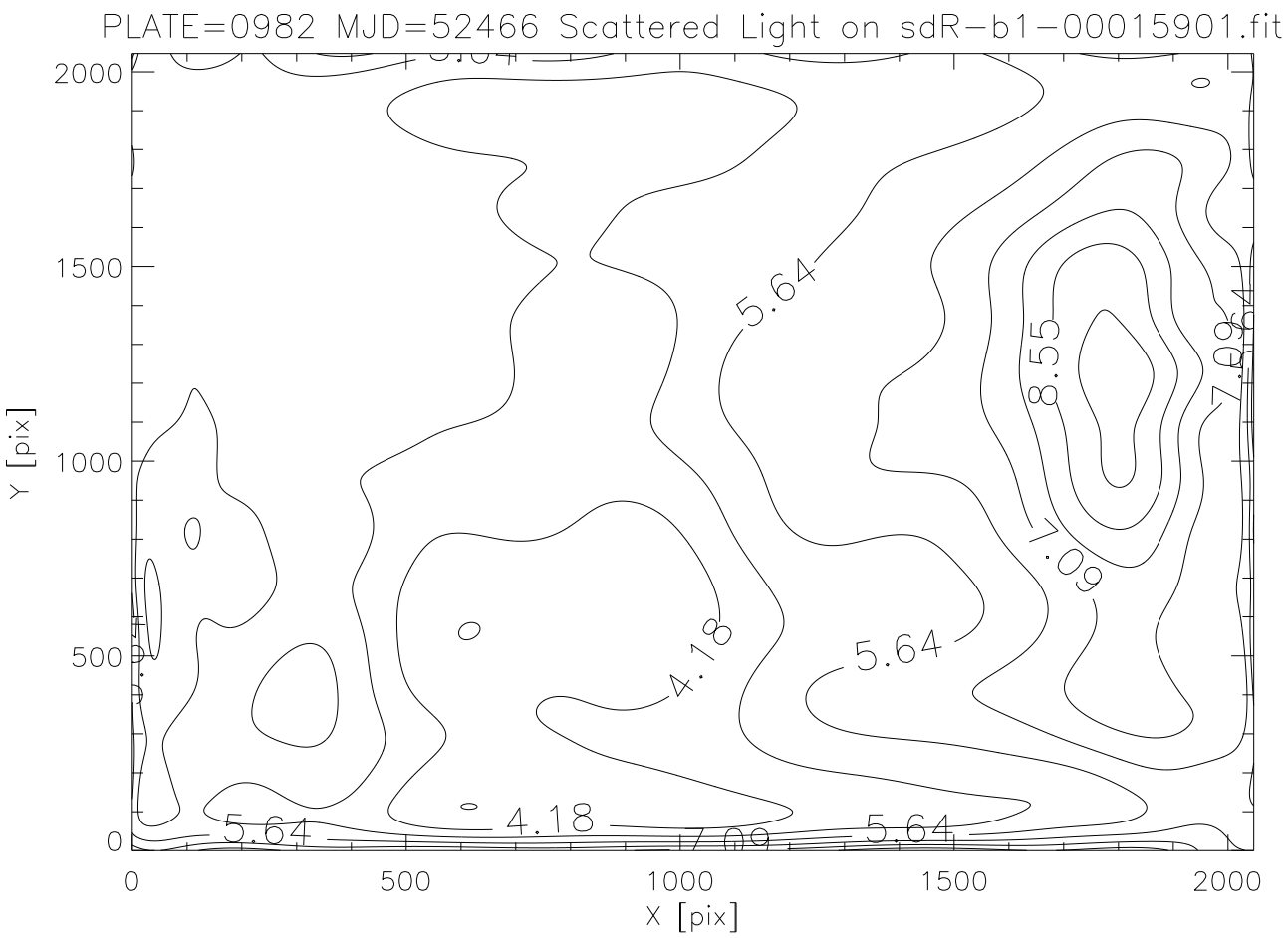

PLATE=0982 MJD=52466 sdR-b1-00015900.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.49 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

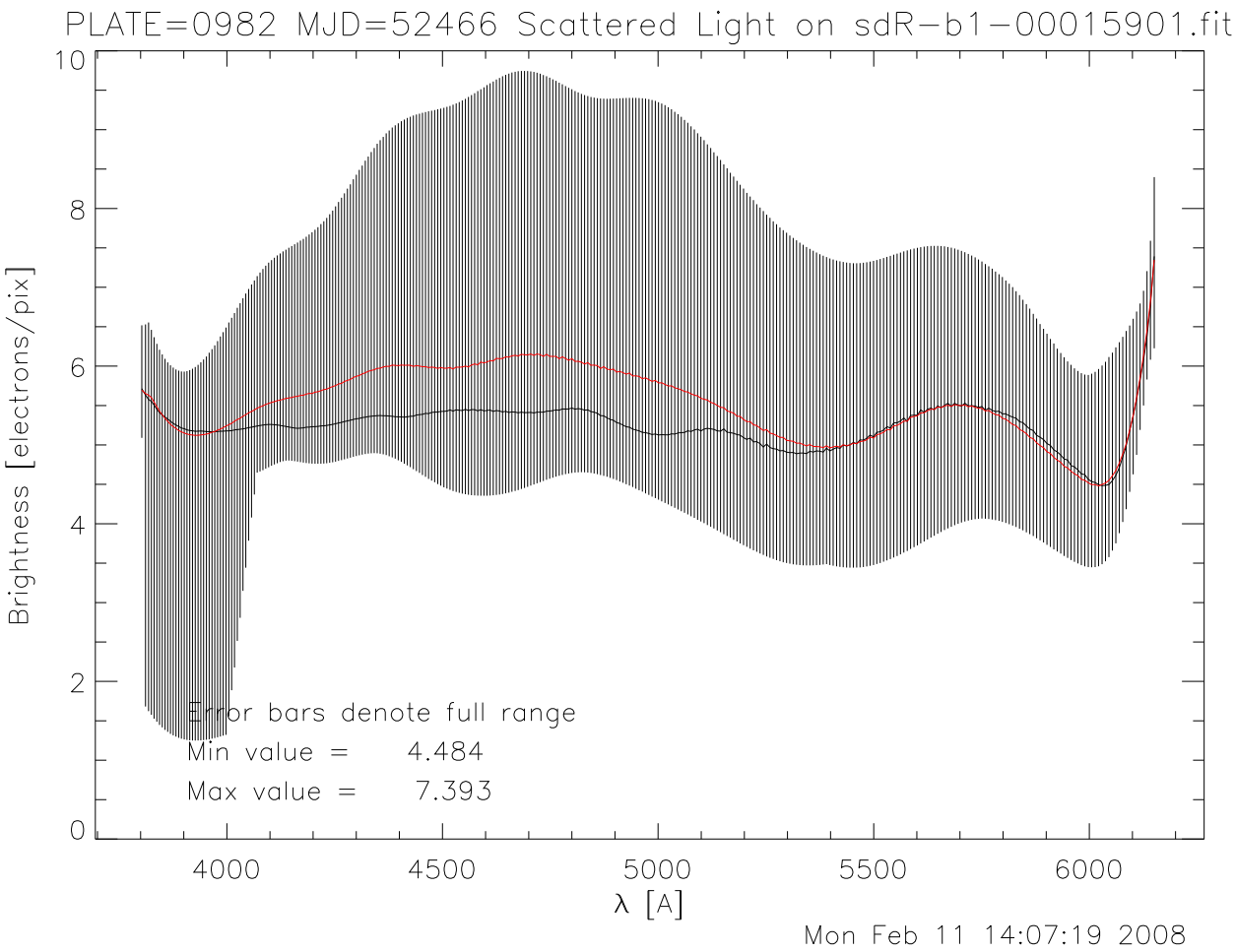

PLATE=0982 MJD=52466 sdR-b1-00015900.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.03 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

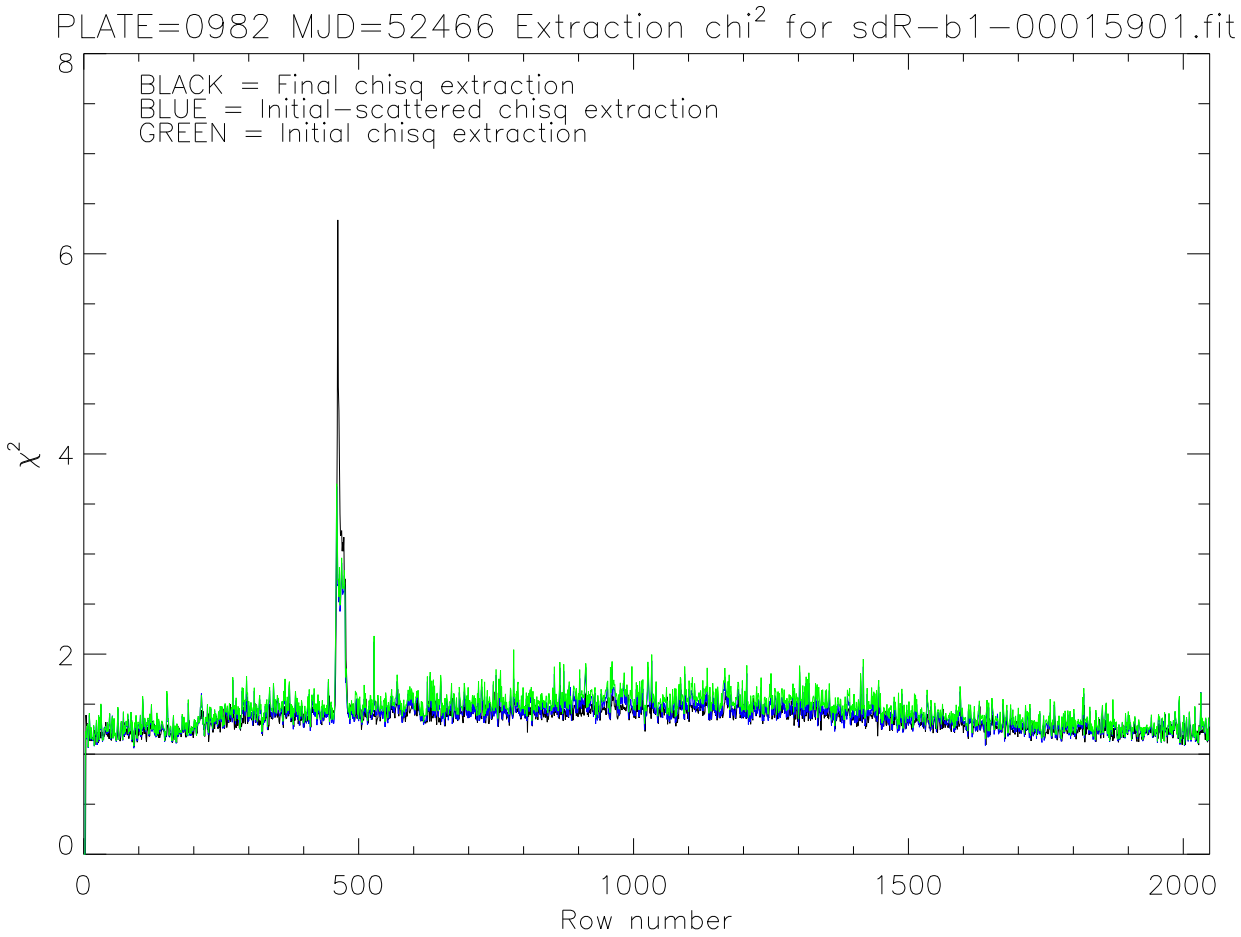

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b1-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.256
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:04:18 2008

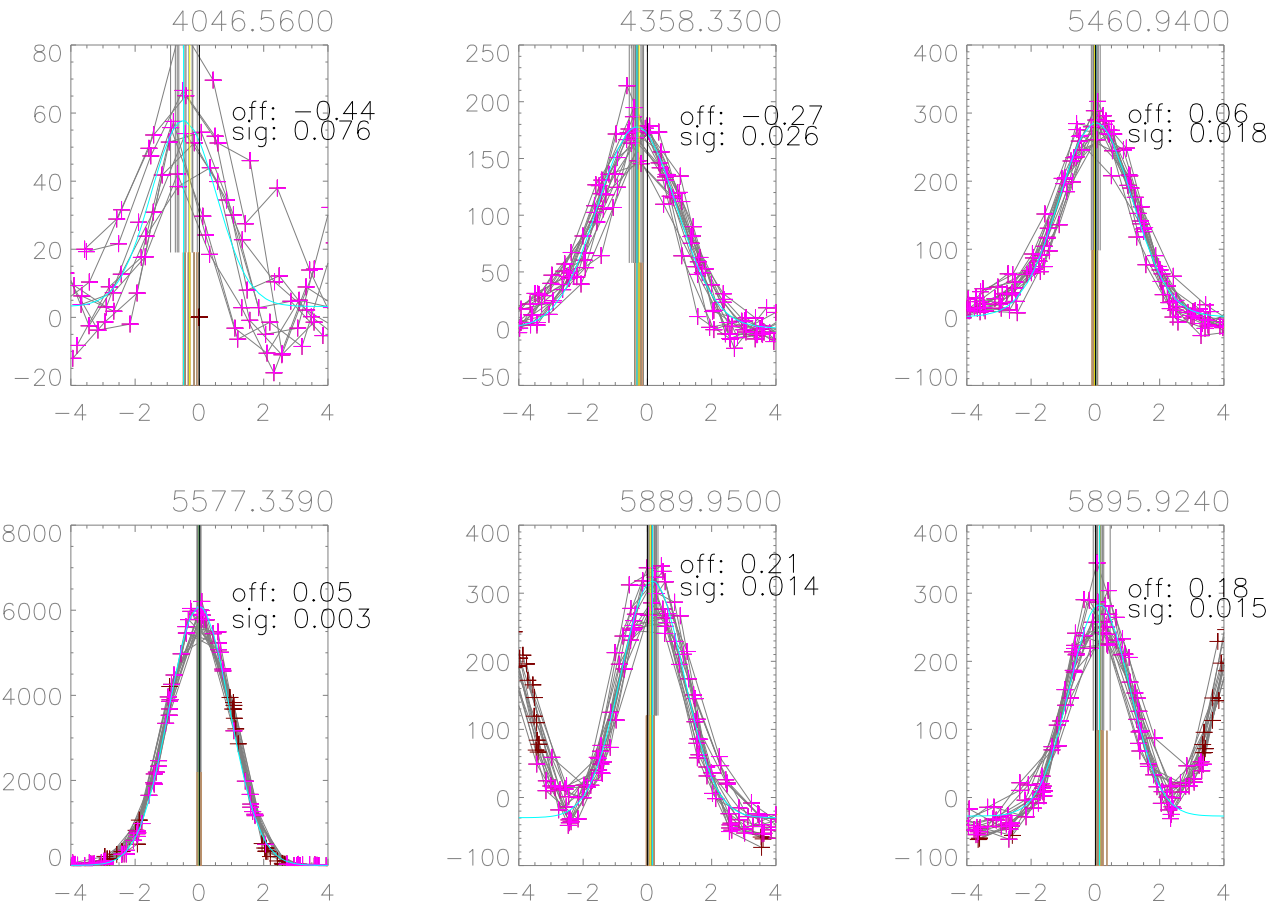

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR−b1−00015901.f
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
10.9
13.5

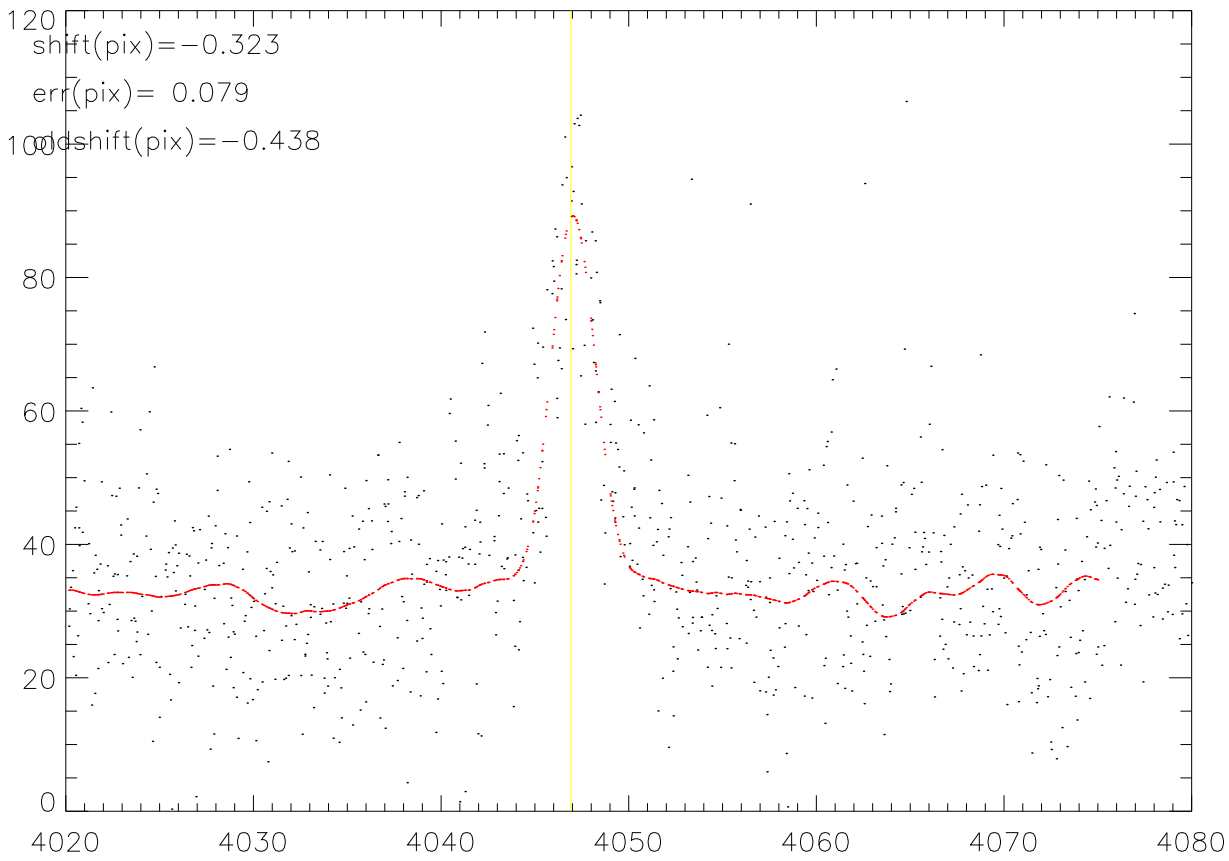

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b1-00015901.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.114
Max value = 10.730
Mon Feb 11 14:05:06 2008

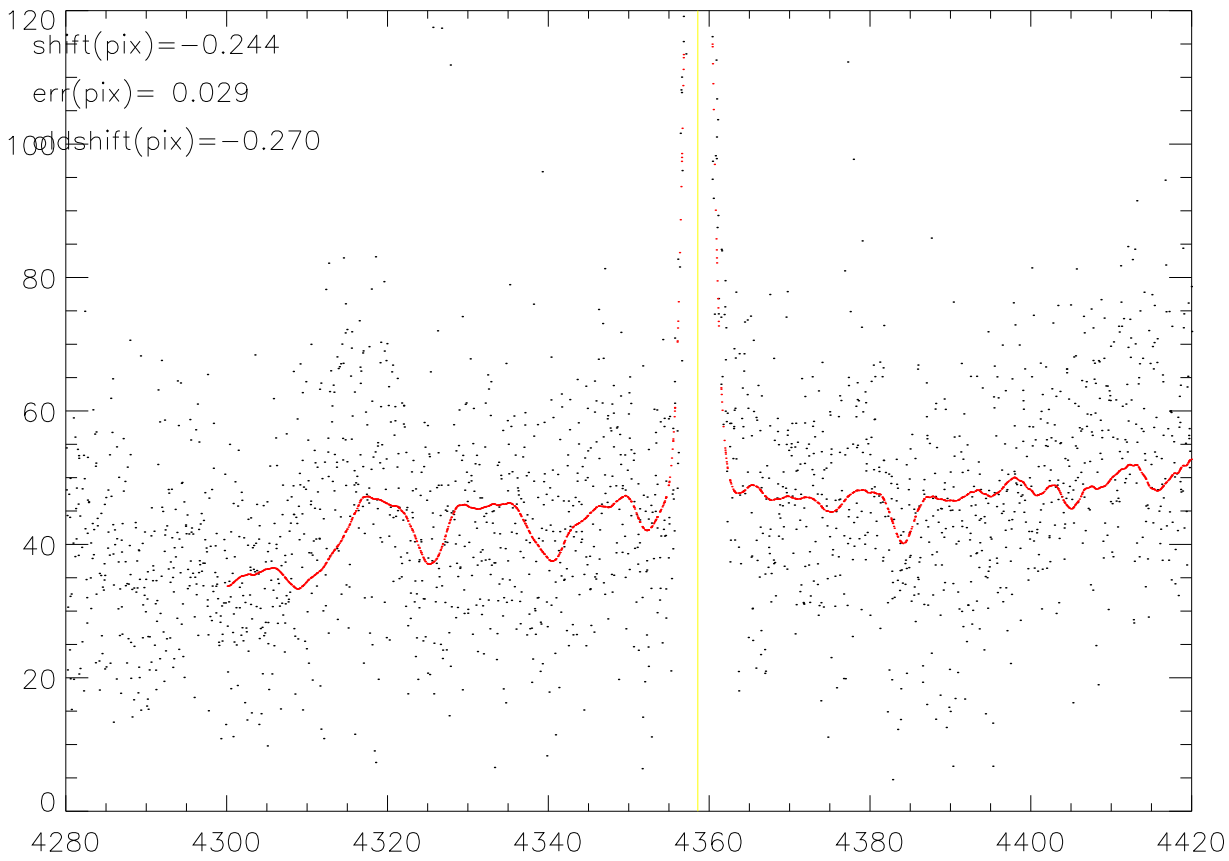

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015901.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.64
4.18
7.09
8.55
5.64
4.18
7.09
5.64
0

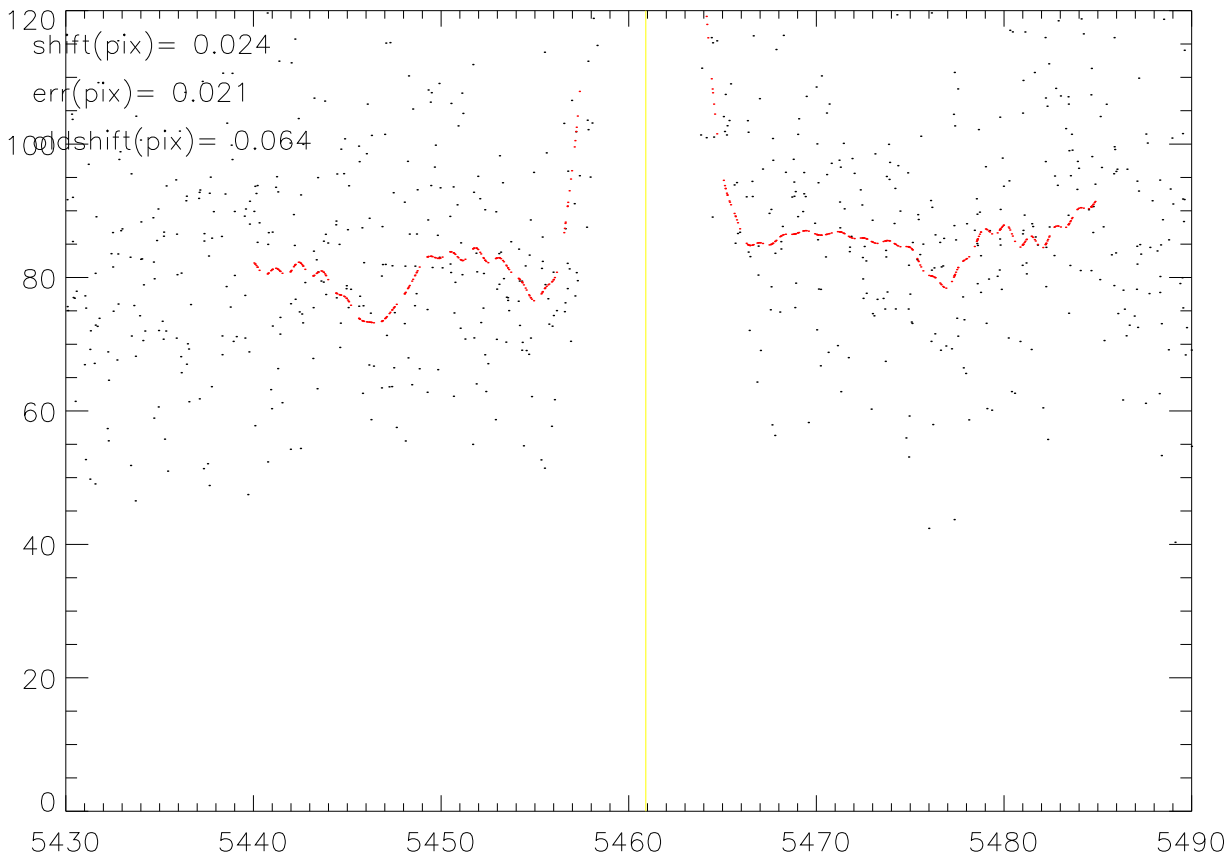

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015901.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.484
Max value = 7.393
Mon Feb 11 14:07:19 2008

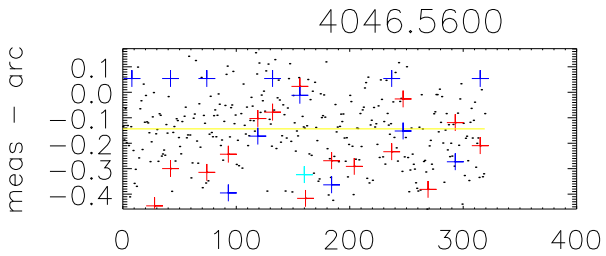

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-b1-00015901.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

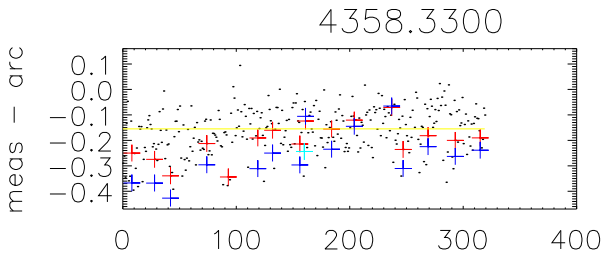

4046.5600
off: −0.44
sig: 0.076
4358.3300
off: −0.27
sig: 0.026
5460.9400
off: 0.06
sig: 0.018
5577.3390
off: 0.05
sig: 0.003
5889.9500
off: 0.21
sig: 0.014
5895.9240
off: 0.18
sig: 0.015

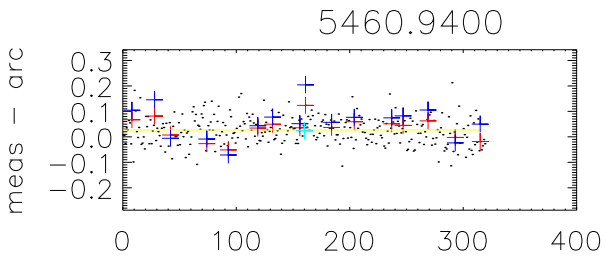

shift(pix)=−0.323
err(pix)= 0.079
oldshift(pix)=−0.438
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

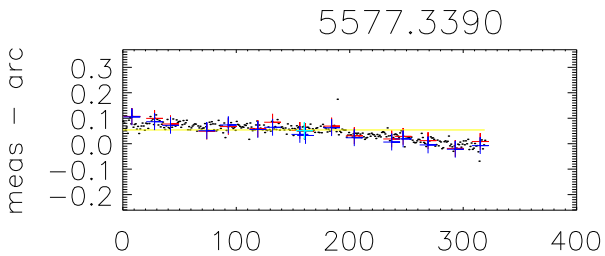

shift(pix)=−0.244
err(pix)= 0.029
oldshift(pix)=−0.270
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

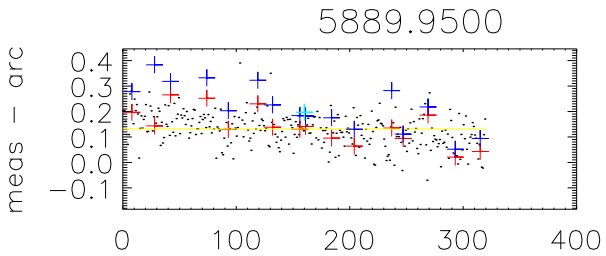

shift(pix)= 0.024
err(pix)= 0.021
oldshift(pix)= 0.064
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

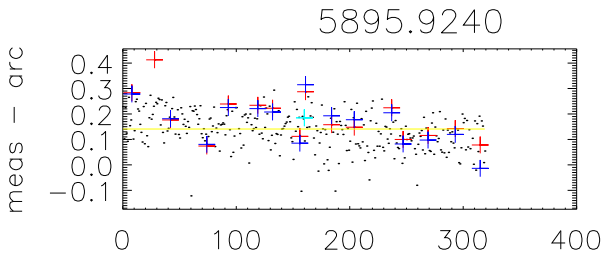

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

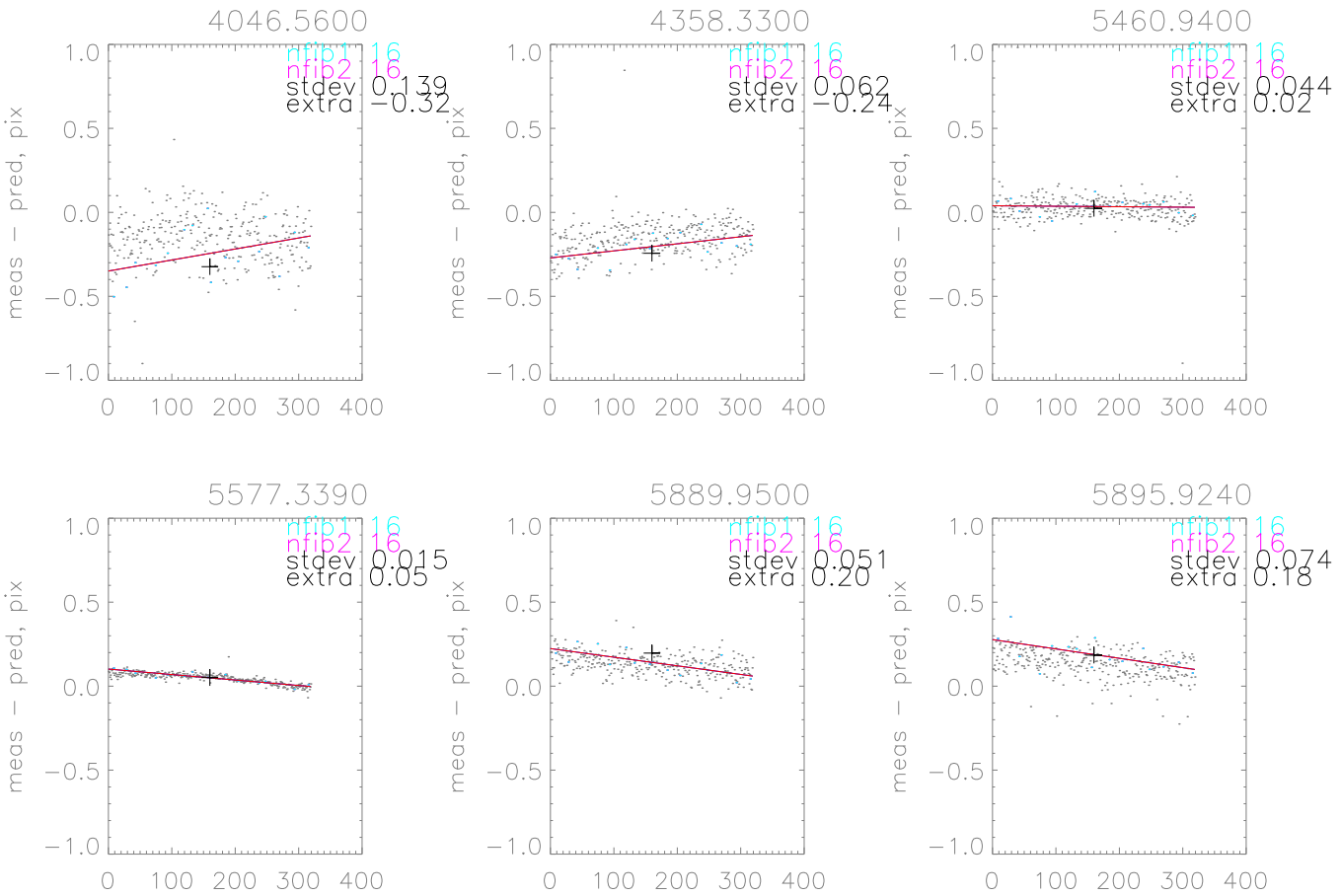

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

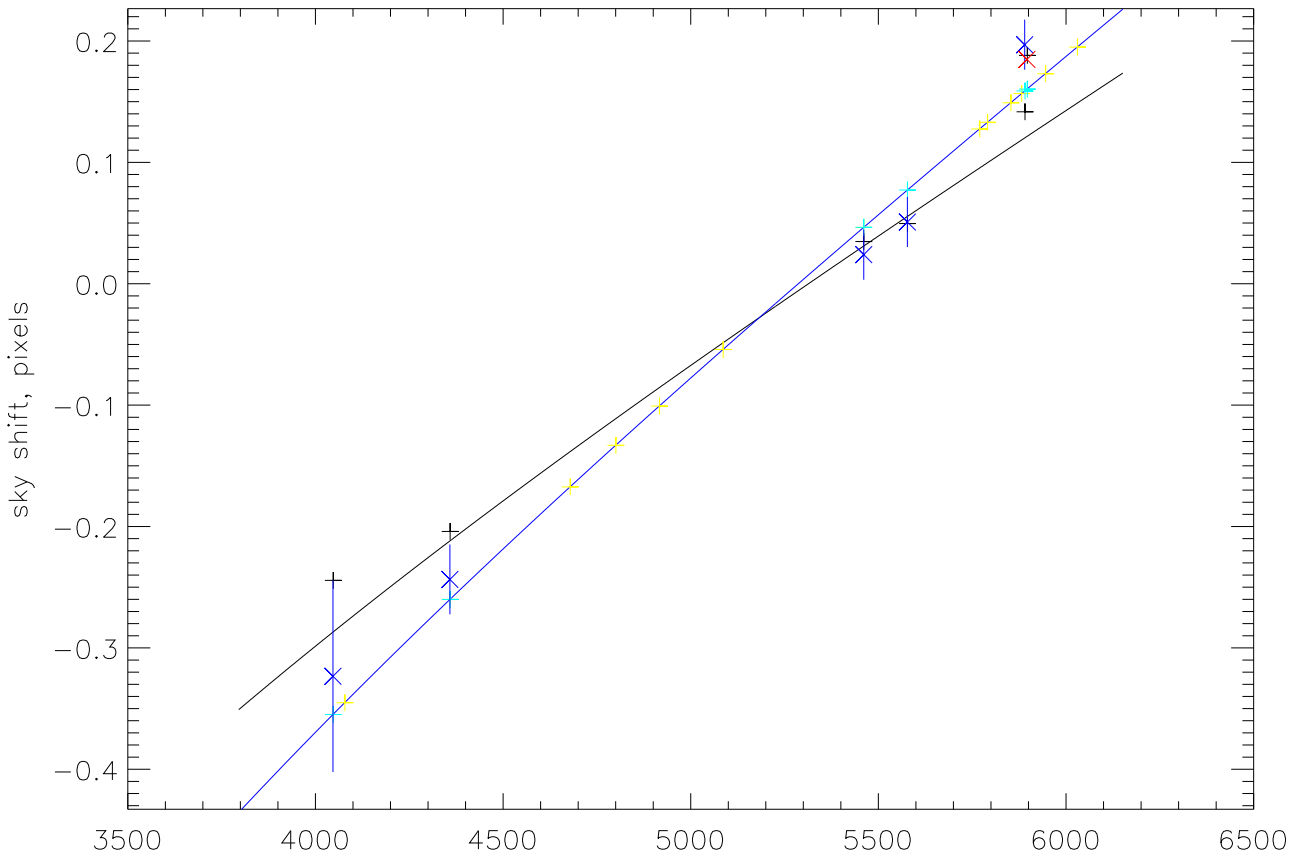

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

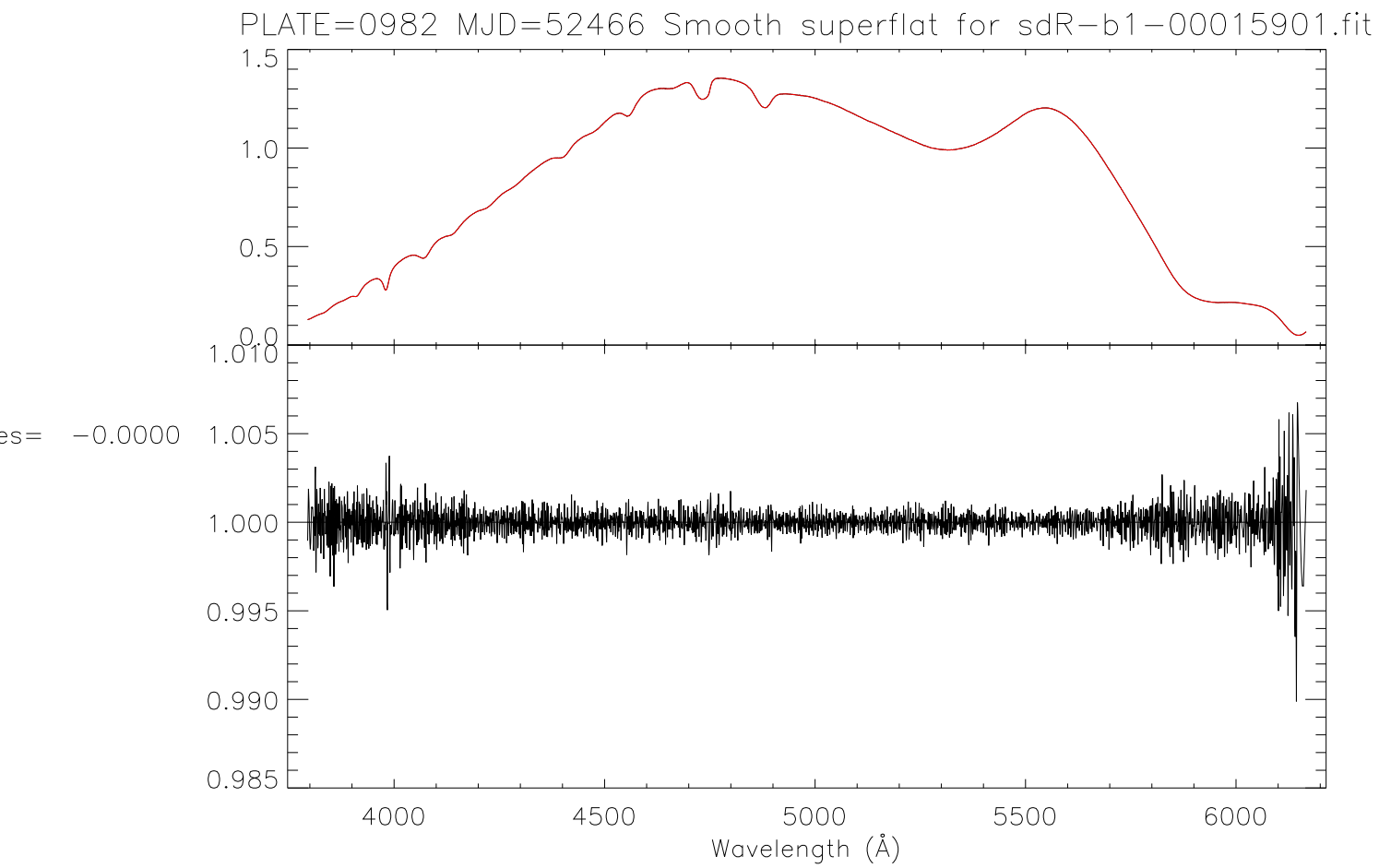

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

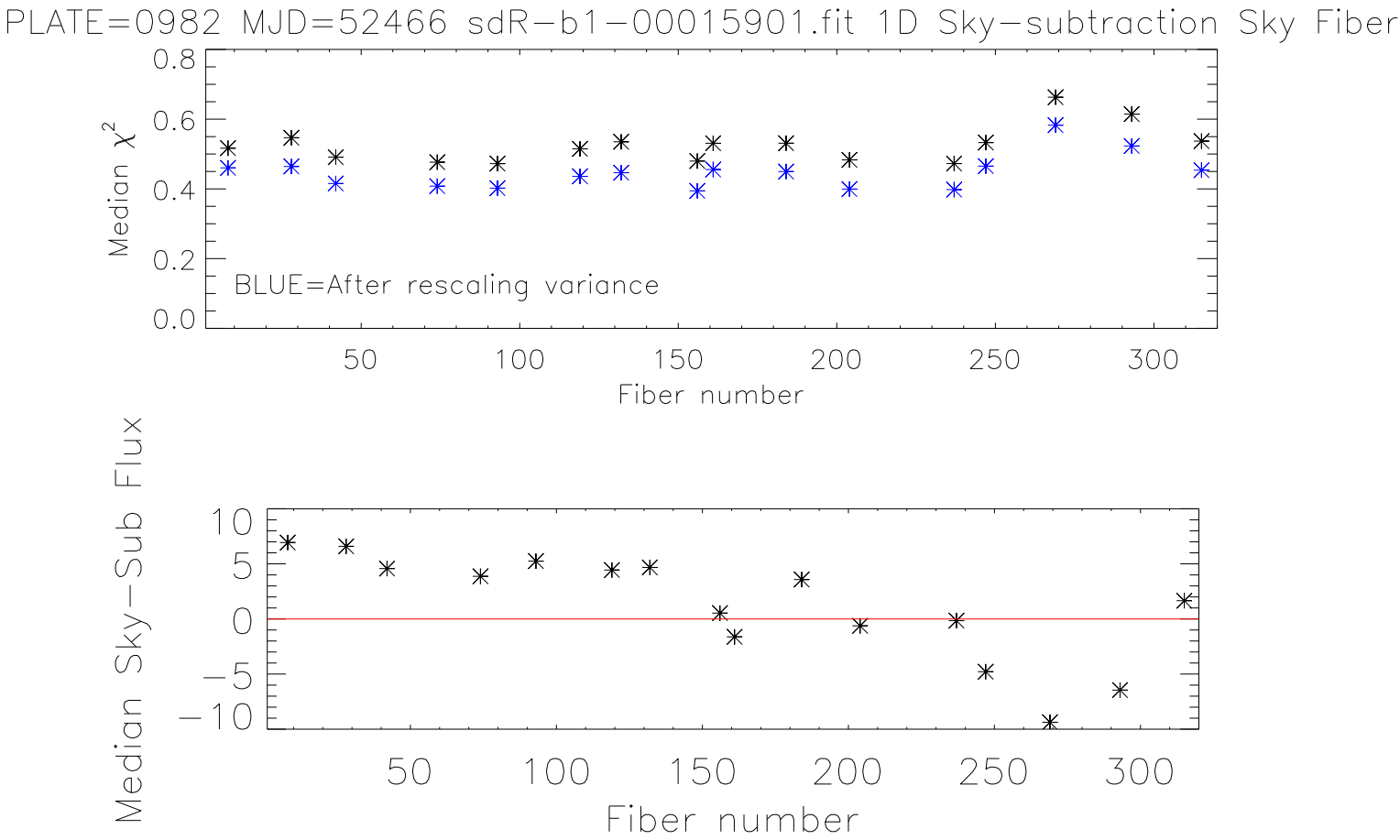

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

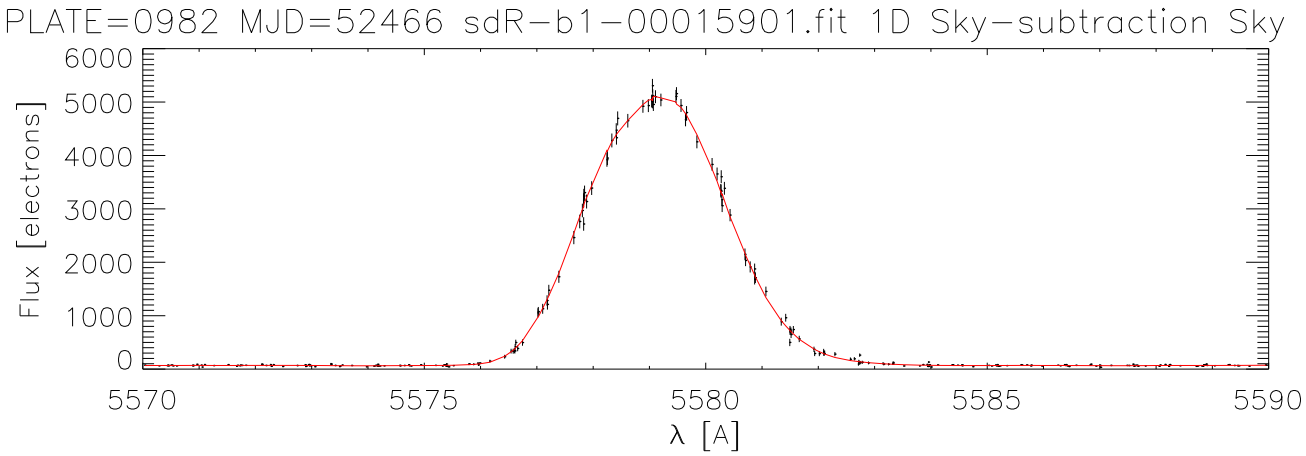

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

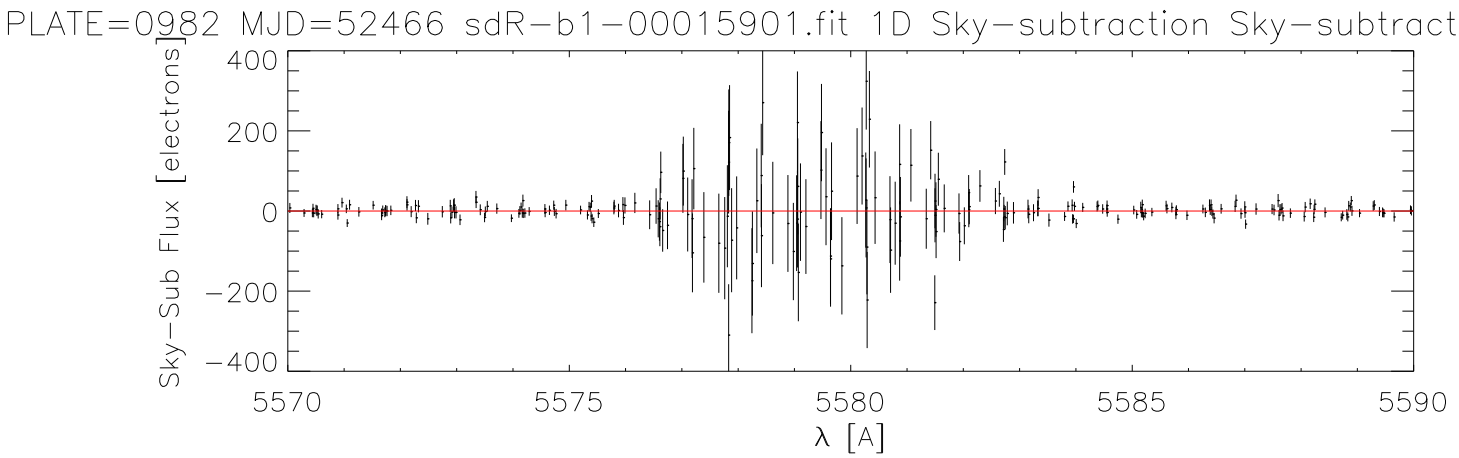

4046.5600
nfib1 16
nfib2 16
stdev 0.139
extra −0.32
4358.3300
nfib1 16
nfib2 16
stdev 0.062
extra −0.24
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra 0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.05
5889.9500
nfib1 16
nfib2 16
stdev 0.051
extra 0.20
5895.9240
nfib1 16
nfib2 16
stdev 0.074
extra 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

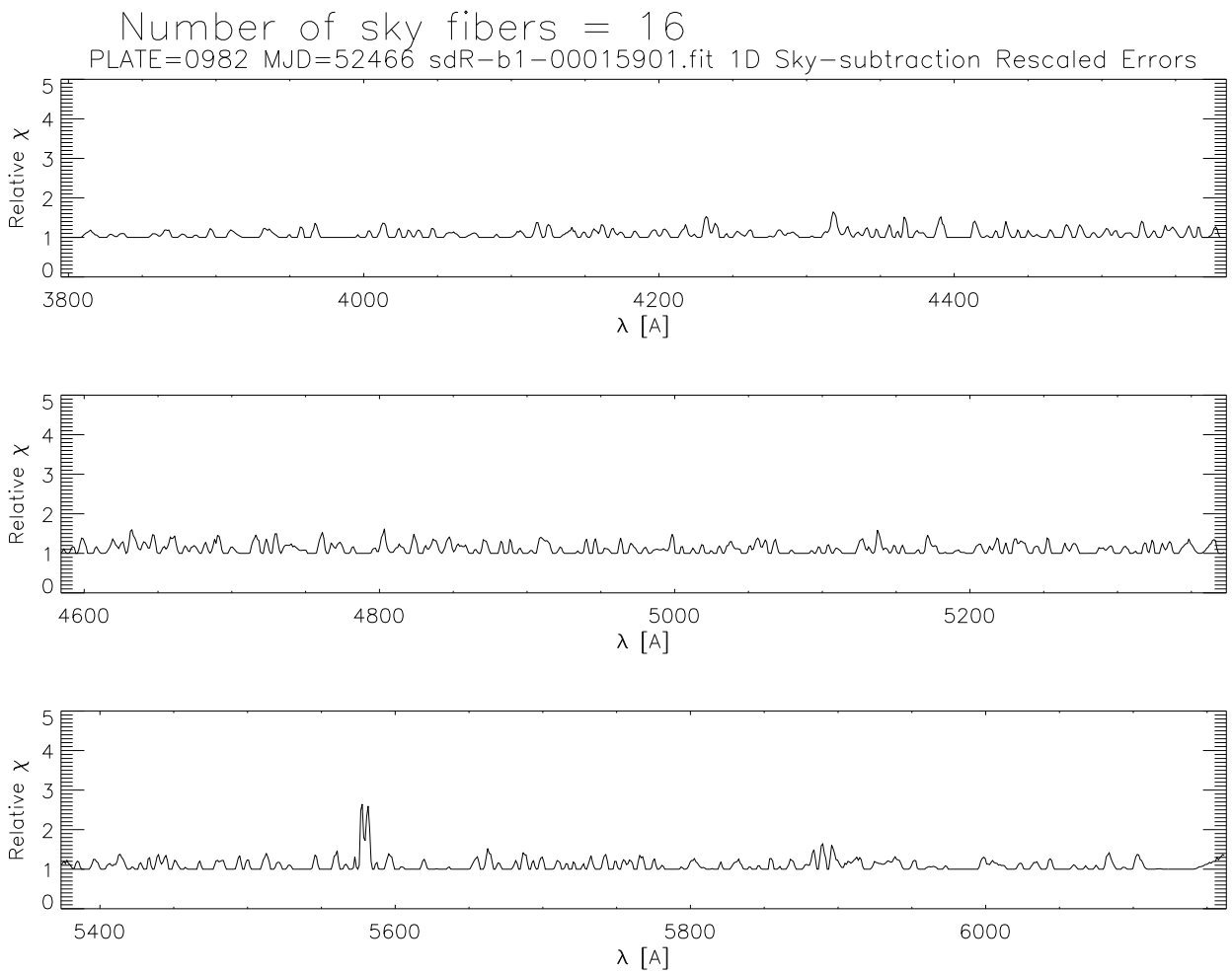

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

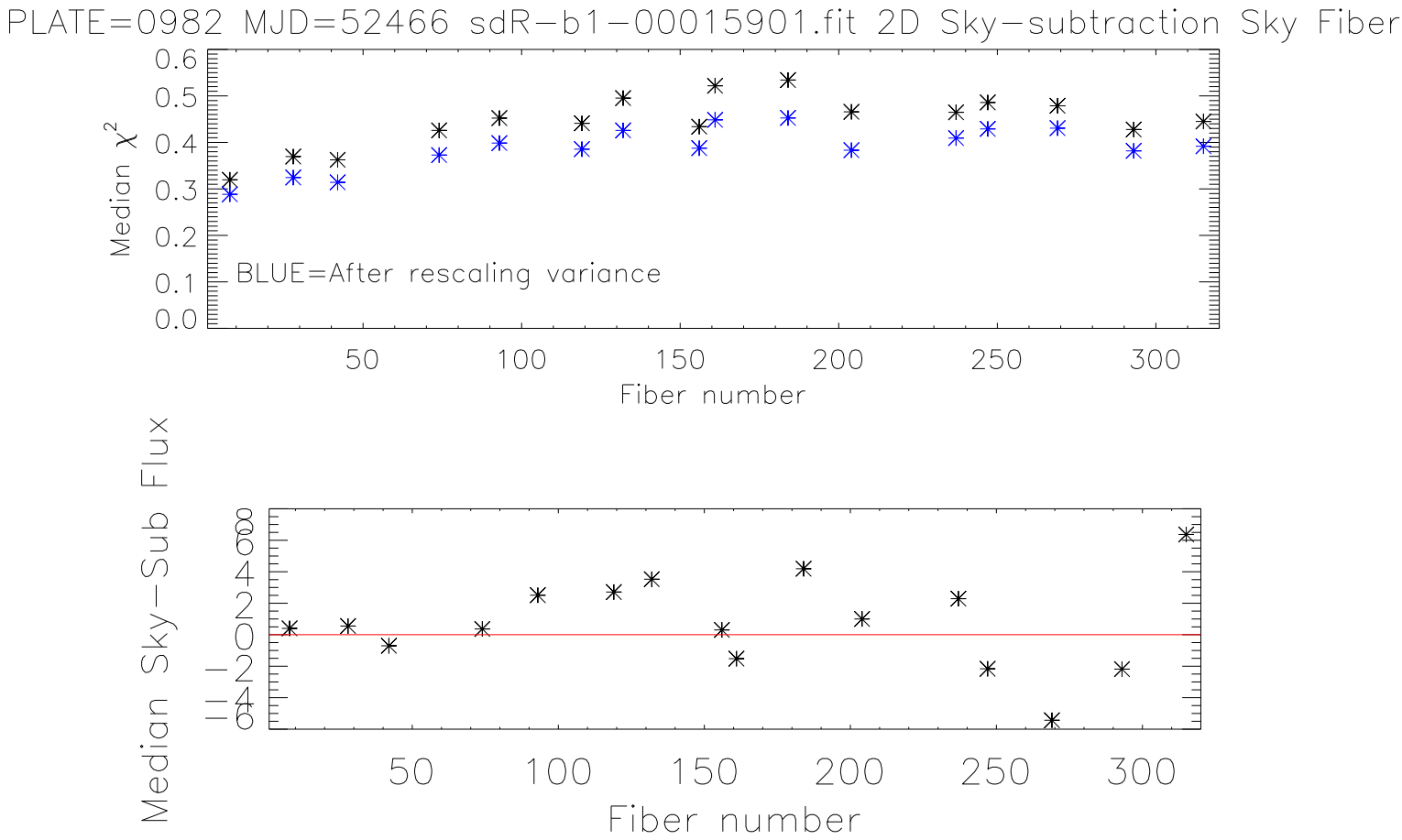

PLATE=0982 MJD=52466 Smooth superflat for sdR-b1-00015901.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

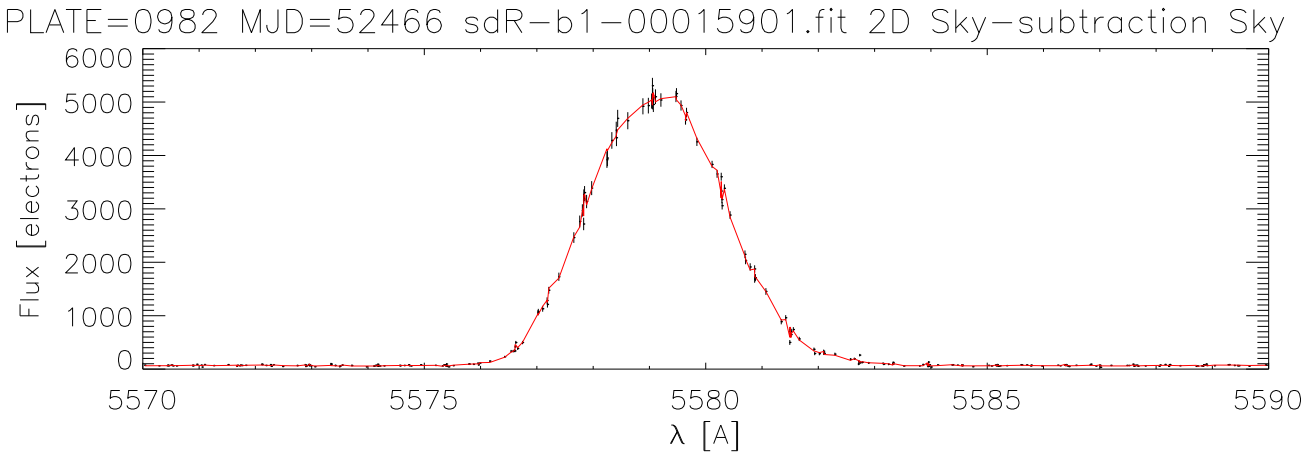

PLATE=0982 MJD=52466 sdR-b1-00015901.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

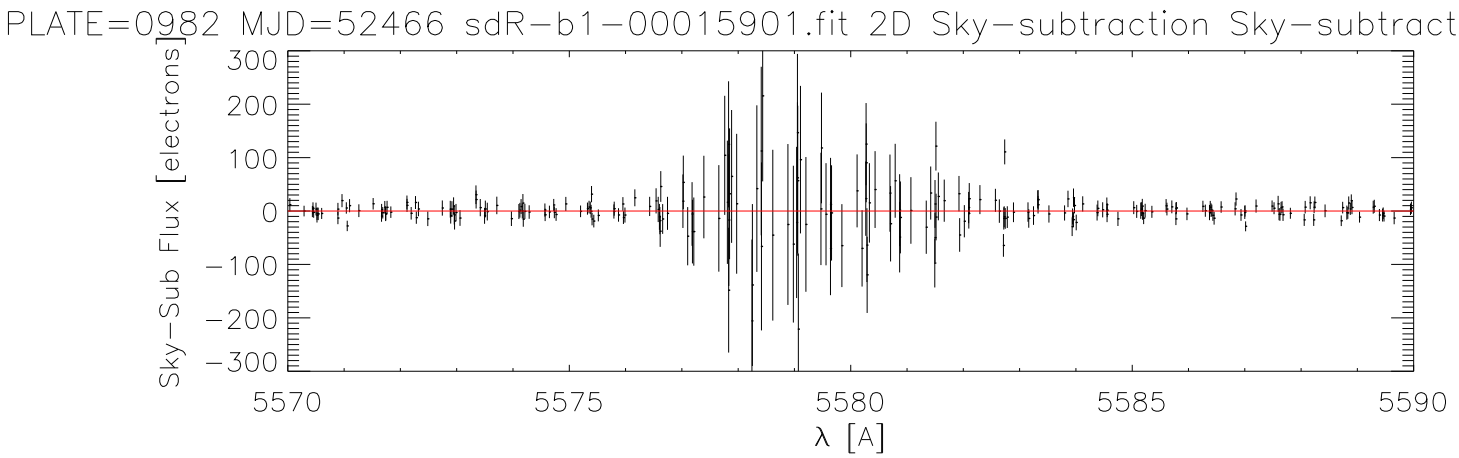

PLATE=0982 MJD=52466 sdR-b1-00015901.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

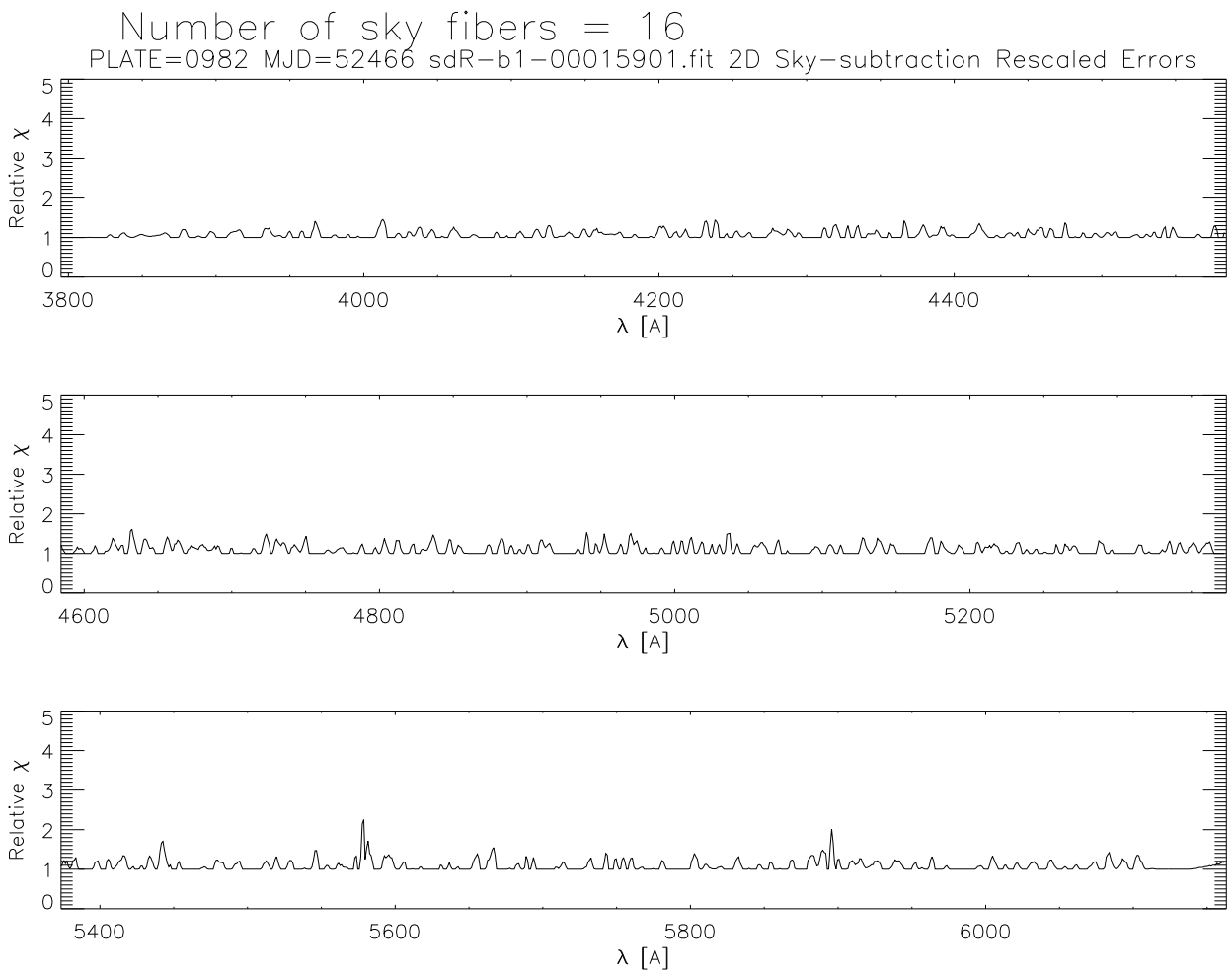

PLATE=0982 MJD=52466 sdR-b1-00015901.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

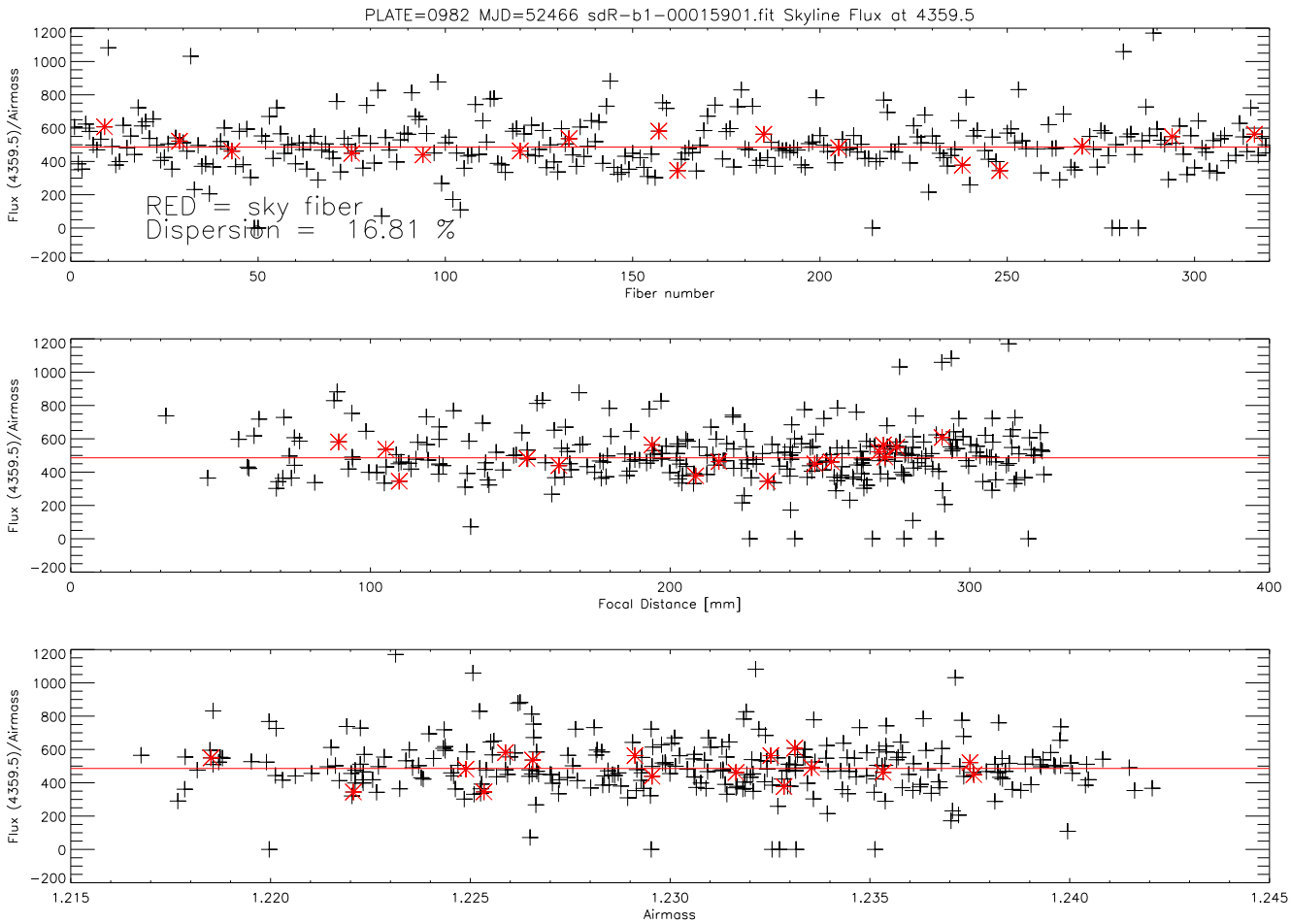

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015901.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

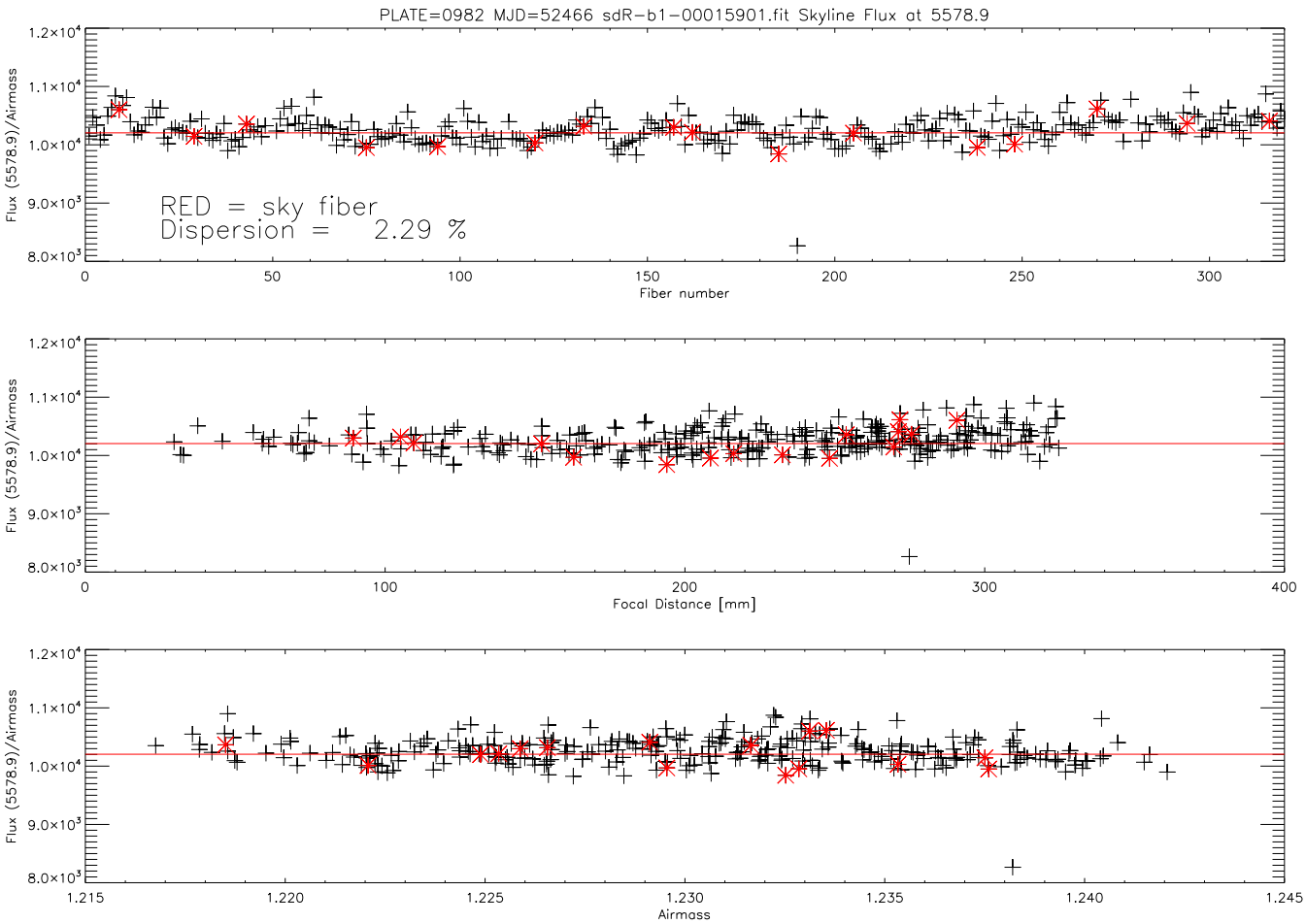

PLATE=0982 MJD=52466 sdR-b1-00015901.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

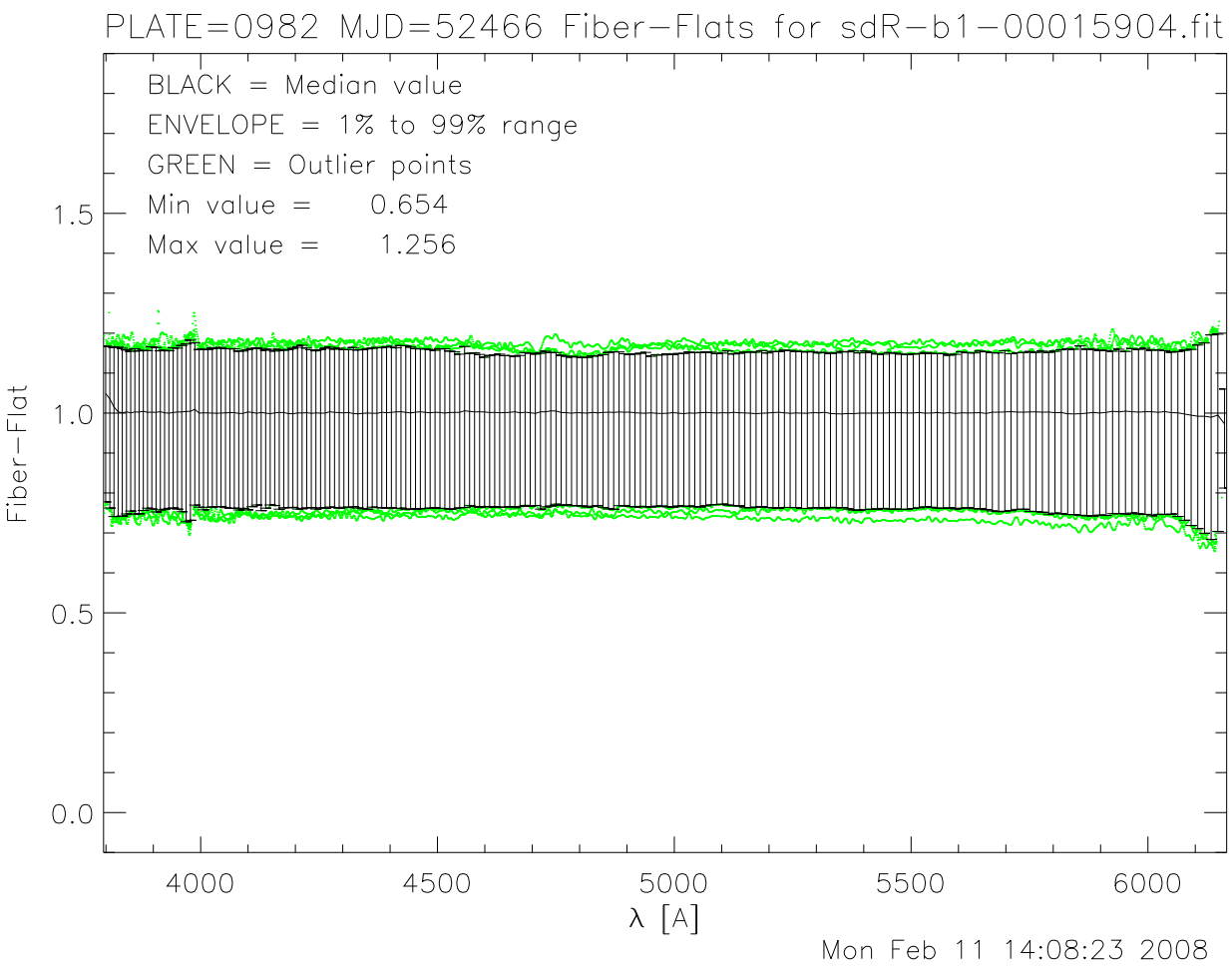

PLATE=0982 MJD=52466 sdR-b1-00015901.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

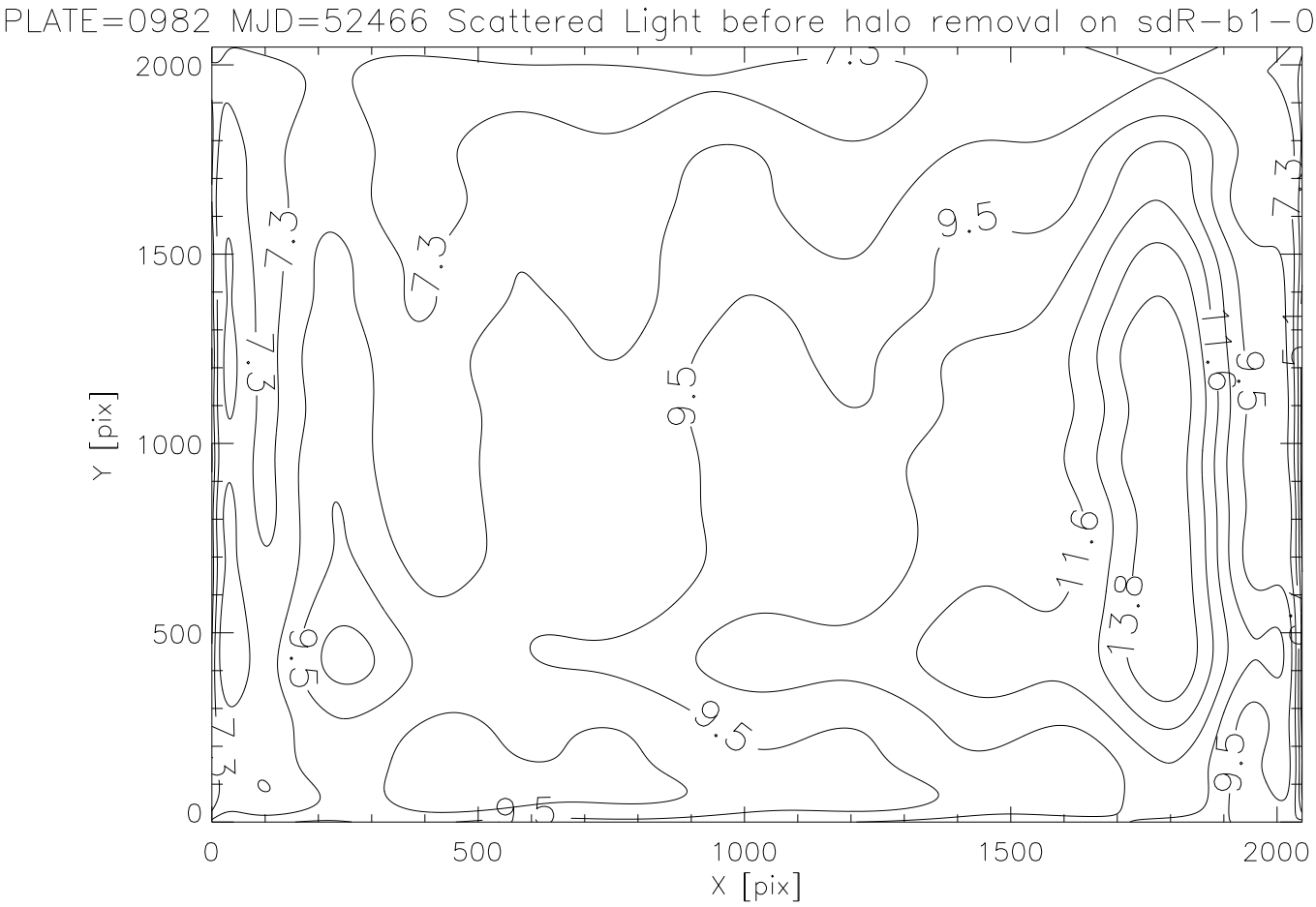

PLATE=0982 MJD=52466 sdR-b1-00015901.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

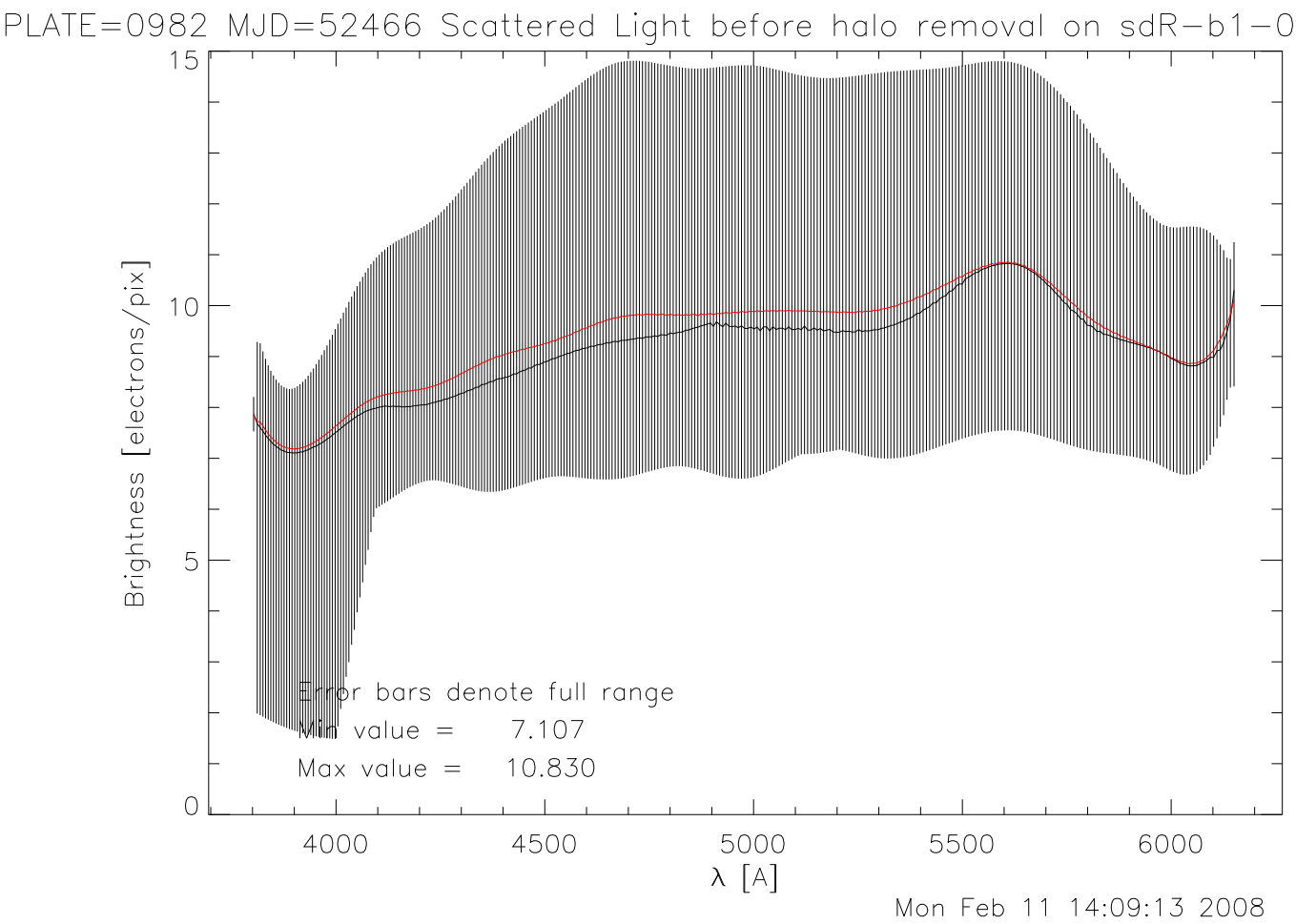

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015901.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

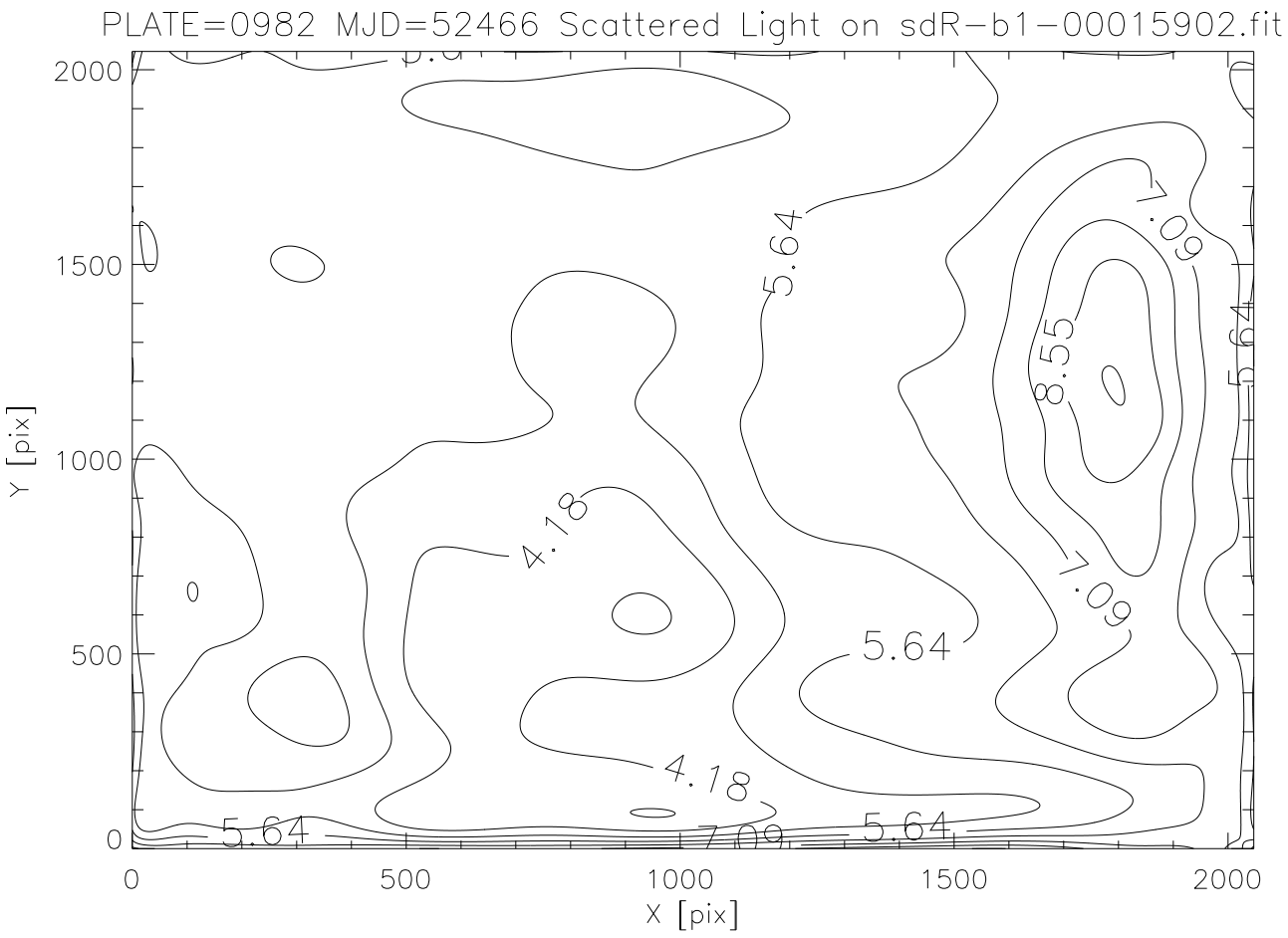

PLATE=0982 MJD=52466 sdR-b1-00015901.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 16.81 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

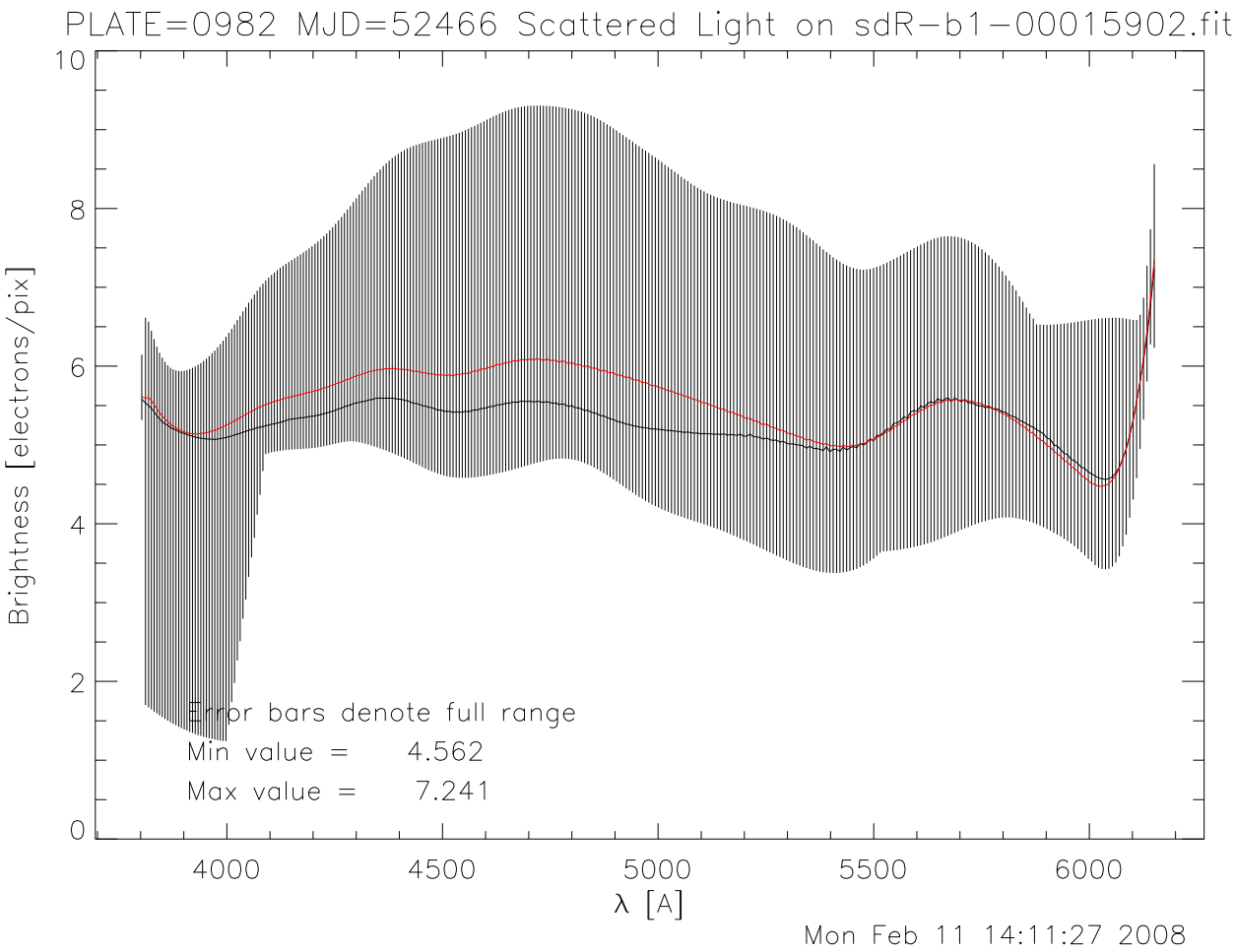

PLATE=0982 MJD=52466 sdR-b1-00015901.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.29 %
Fiber number
Focal Distance [mm]
Airmass

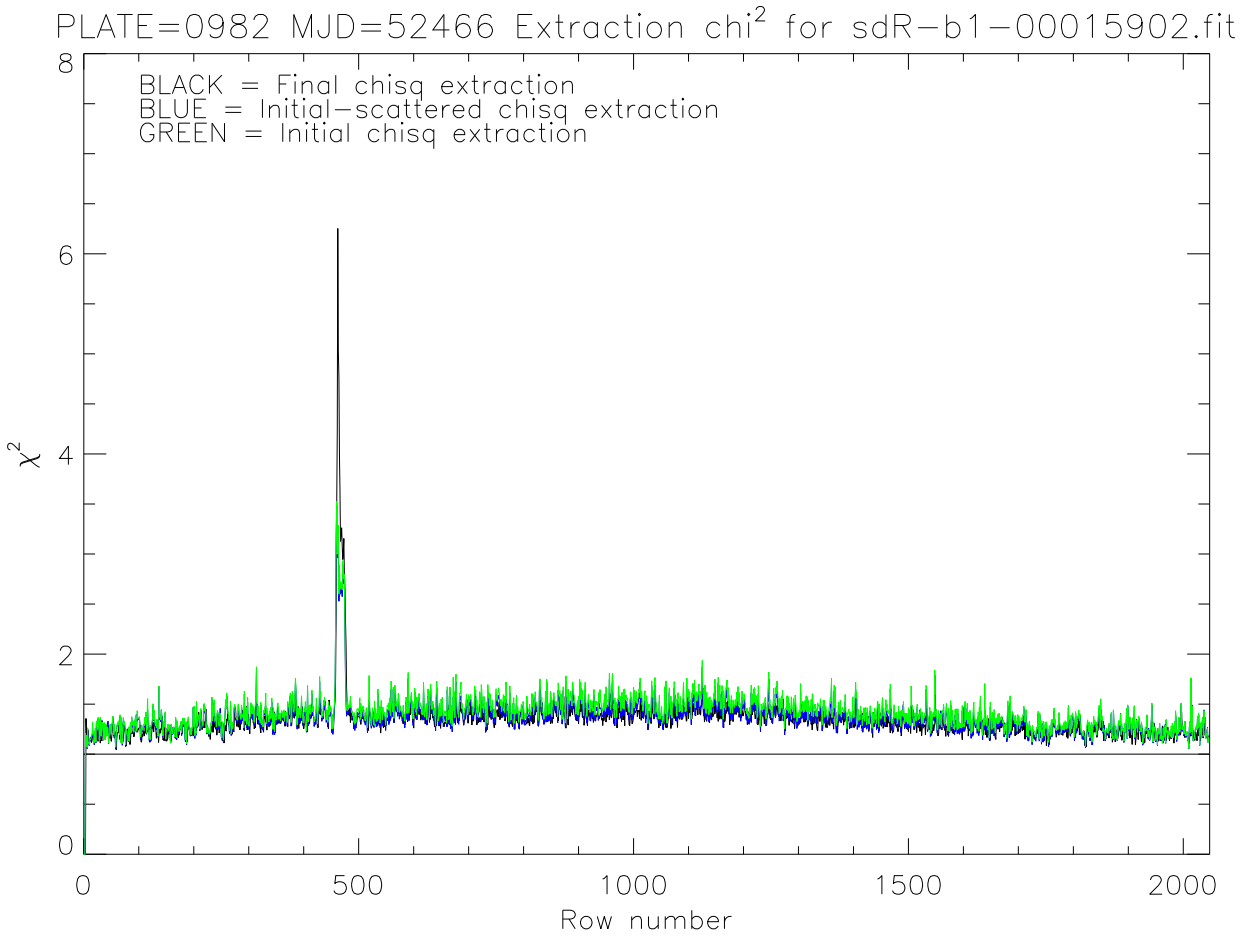

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b1-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.256
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:08:23 2008

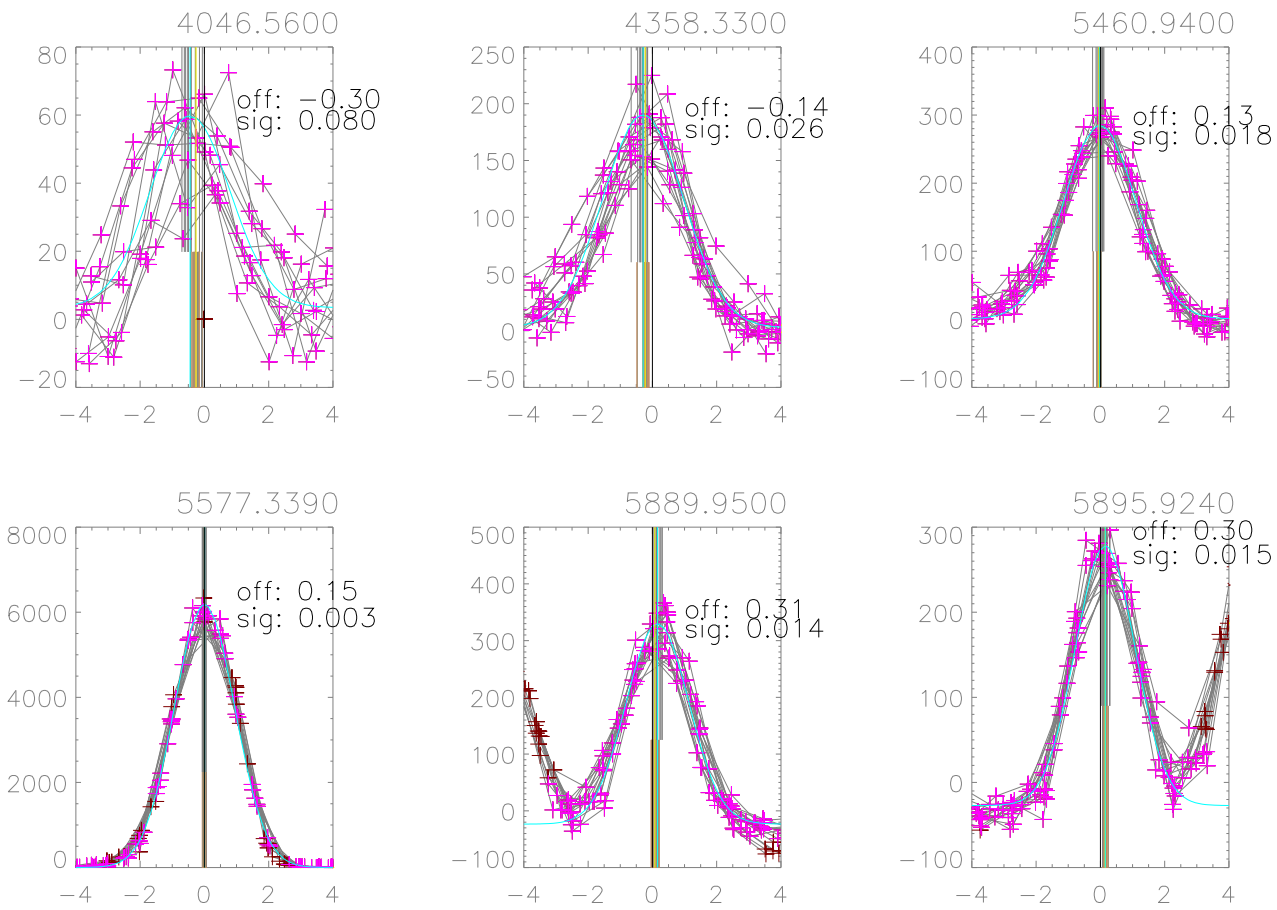

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR−b1−00015902.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.3
9.5
11.6
13.8

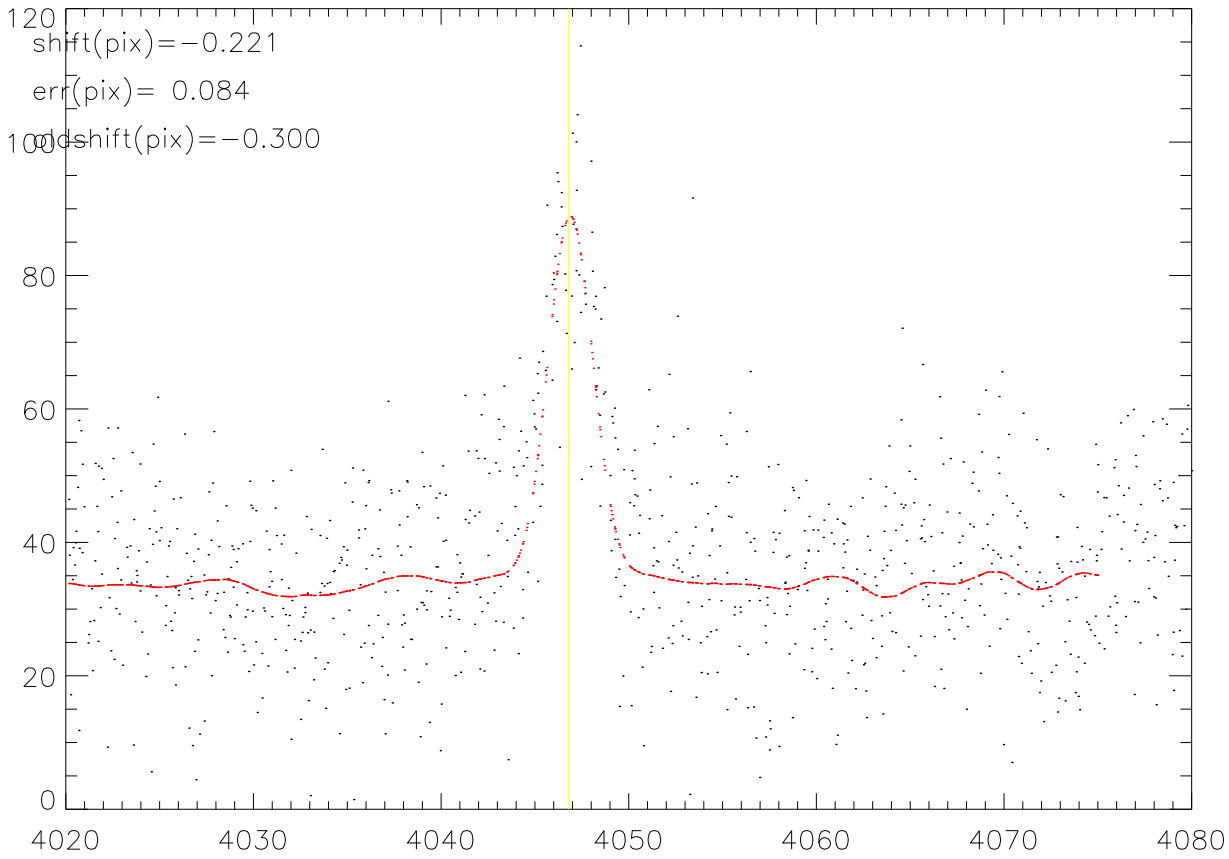

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b1-00015902.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 7.107
Max value = 10.830
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:09:13 2008

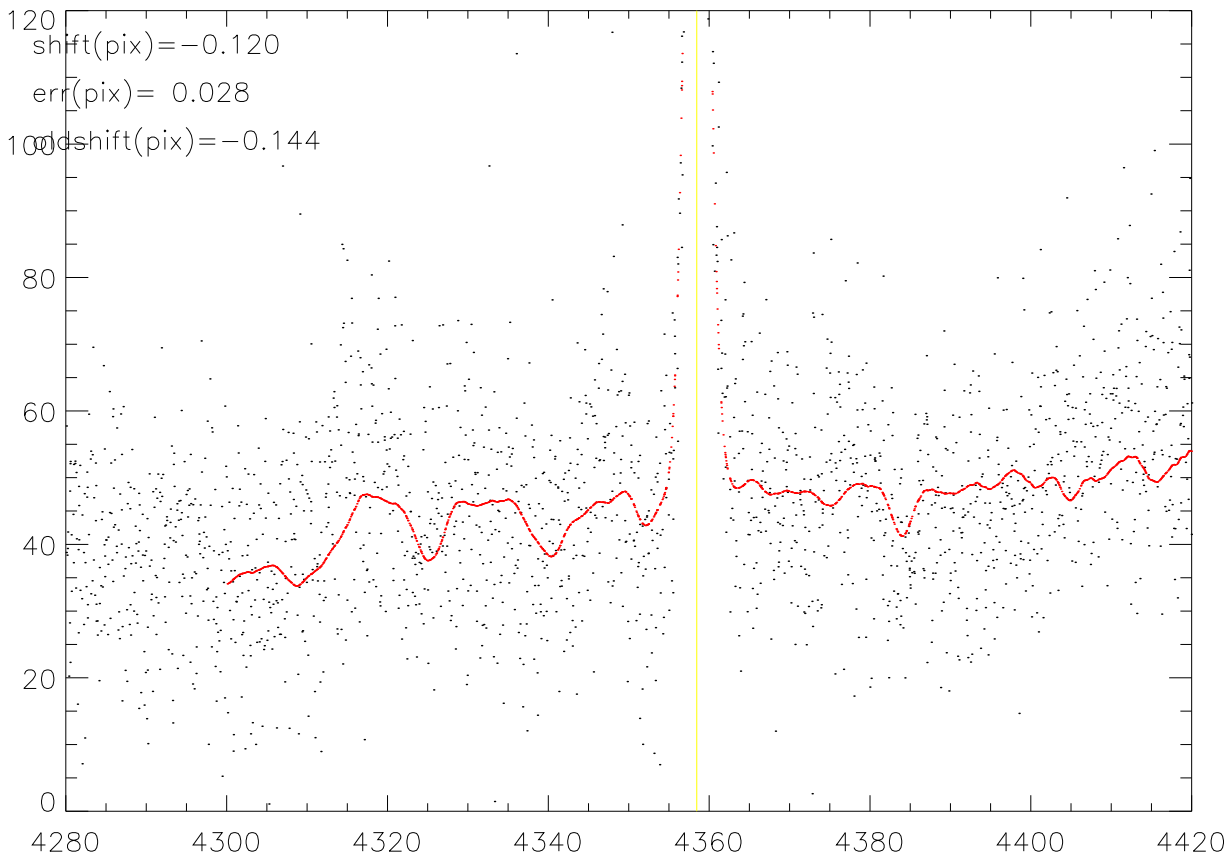

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015902.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.64
4.18
7.09
8.55
0

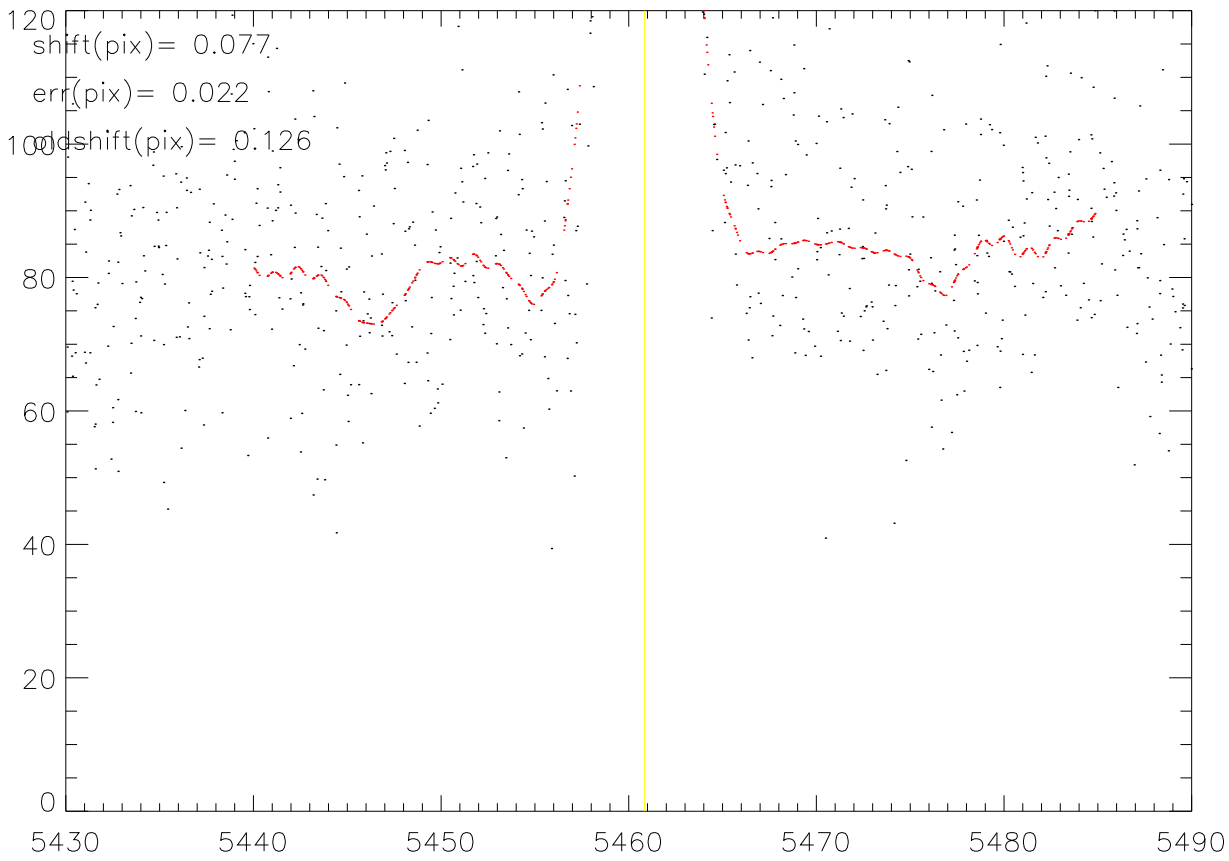

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015902.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.562
Max value = 7.241
Mon Feb 11 14:11:27 2008

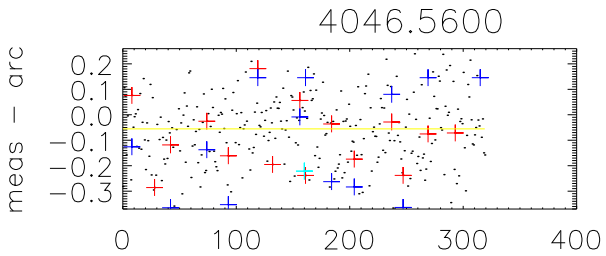

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−b1−00015902.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

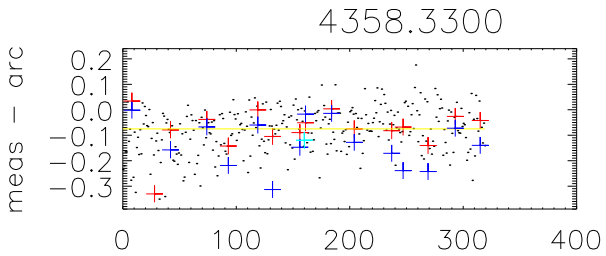

4046.5600
off: −0.30
sig: 0.080
4358.3300
off: −0.14
sig: 0.026
5460.9400
off: 0.13
sig: 0.018
5577.3390
off: 0.15
sig: 0.003
5889.9500
off: 0.31
sig: 0.014
5895.9240
off: 0.30
sig: 0.015

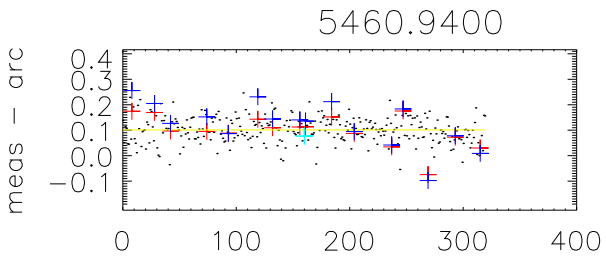

shift(pix)=−0.221
err(pix)= 0.084
oldshift(pix)=−0.300
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

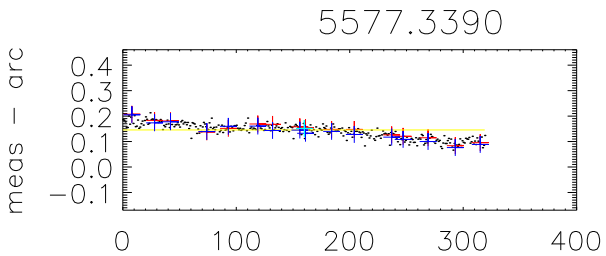

shift(pix)=−0.120
err(pix)= 0.028
oldshift(pix)=−0.144
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

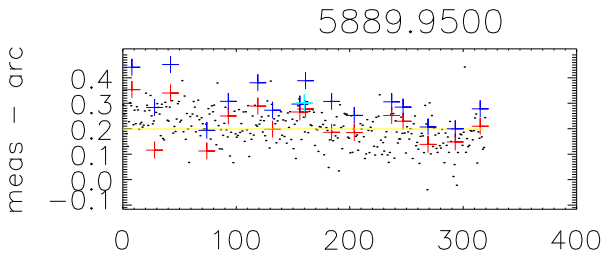

shift(pix)= 0.077
err(pix)= 0.022
oldshift(pix)= 0.126
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

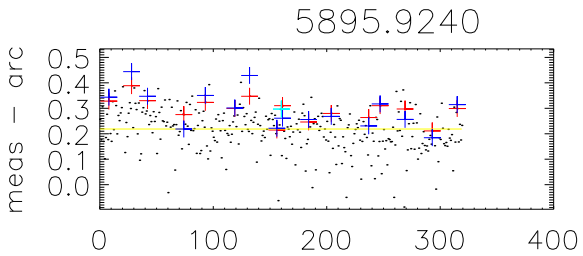

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

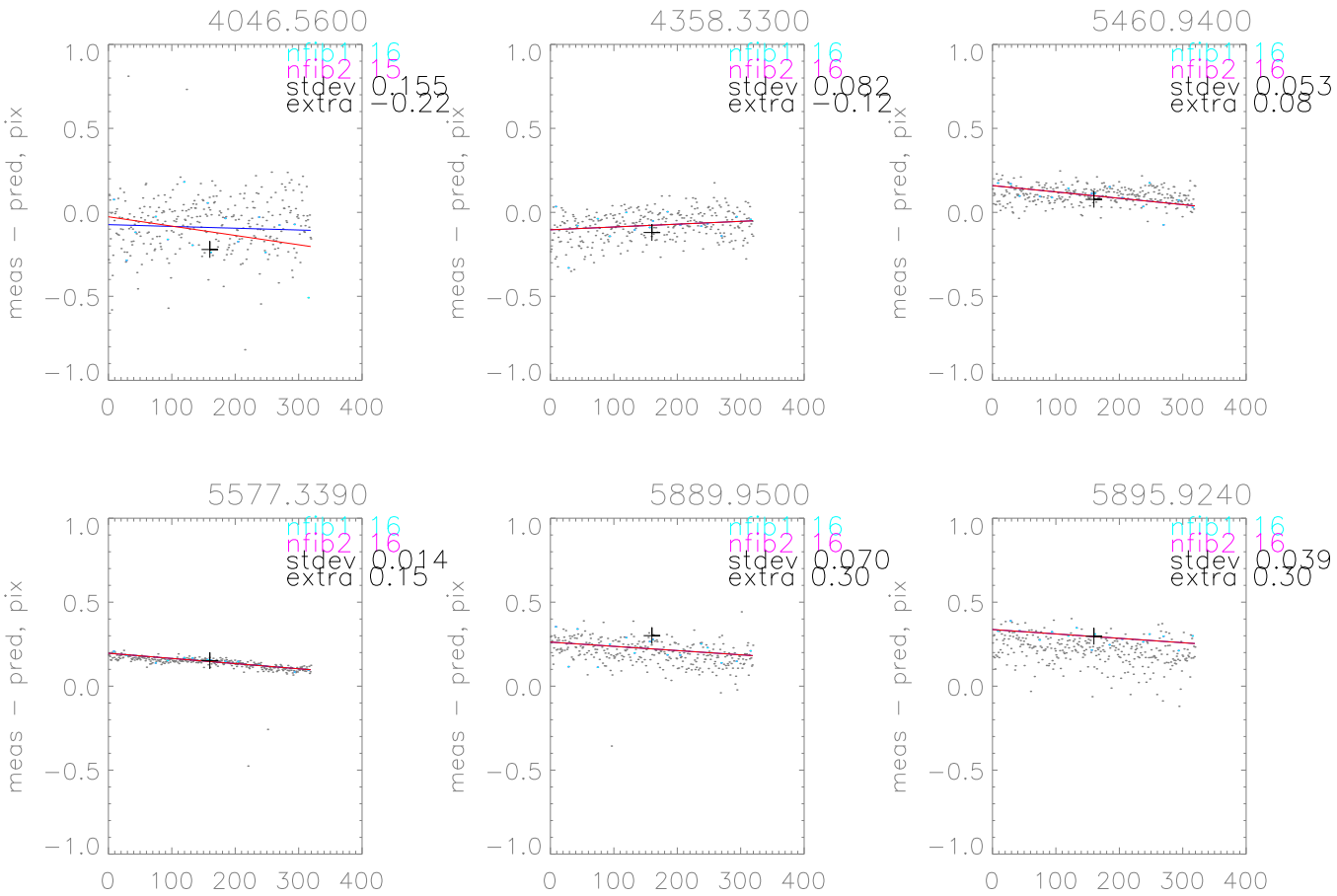

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

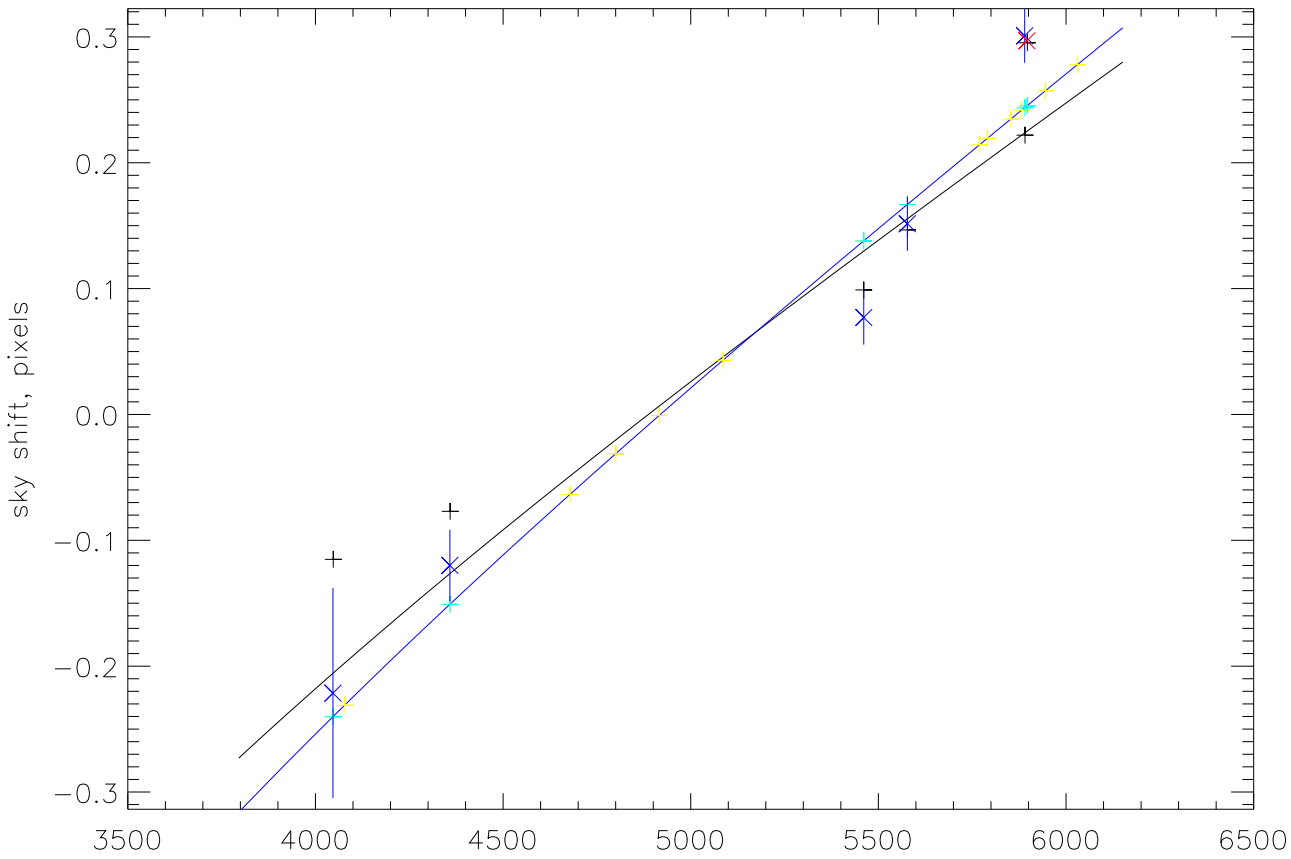

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

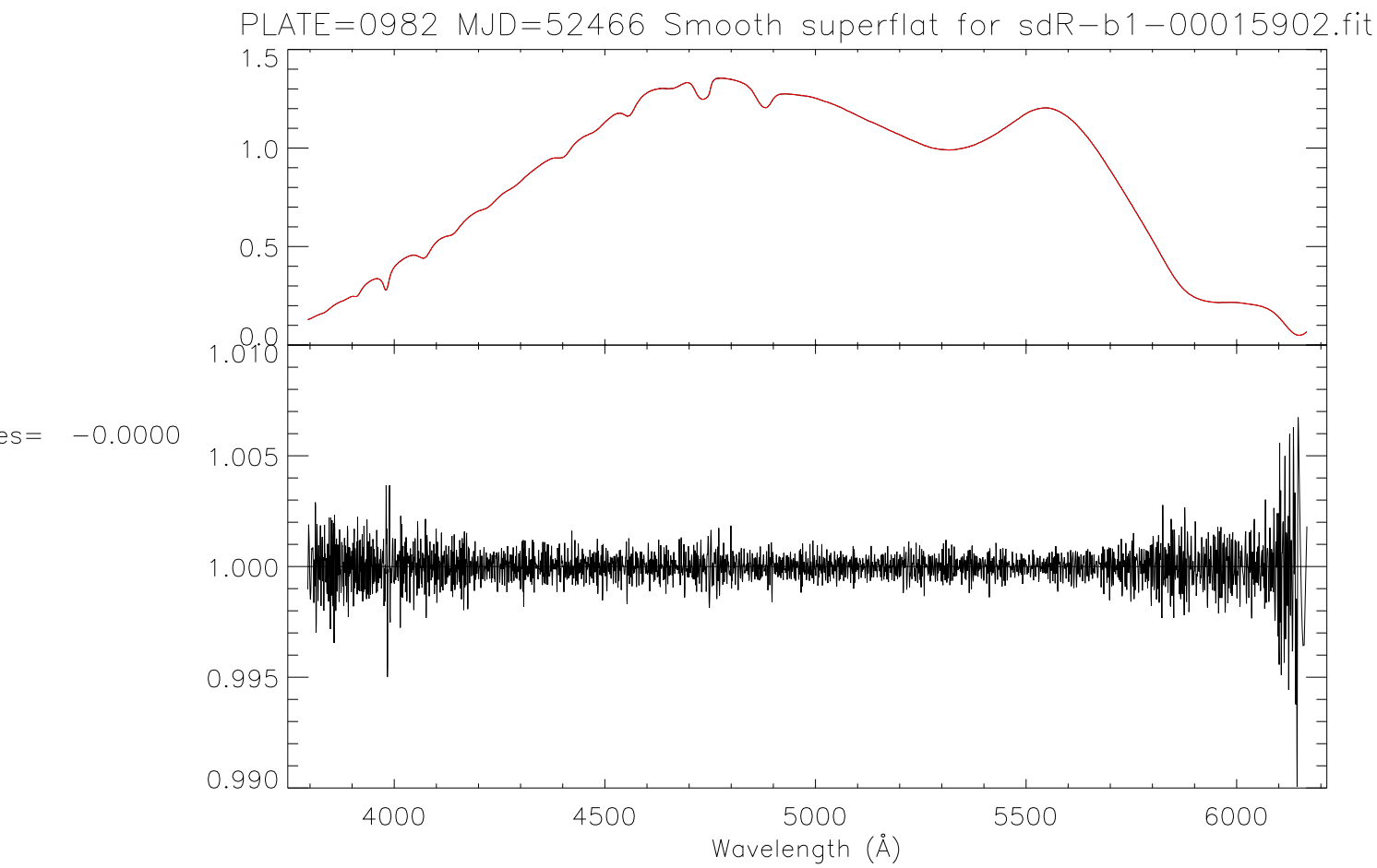

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

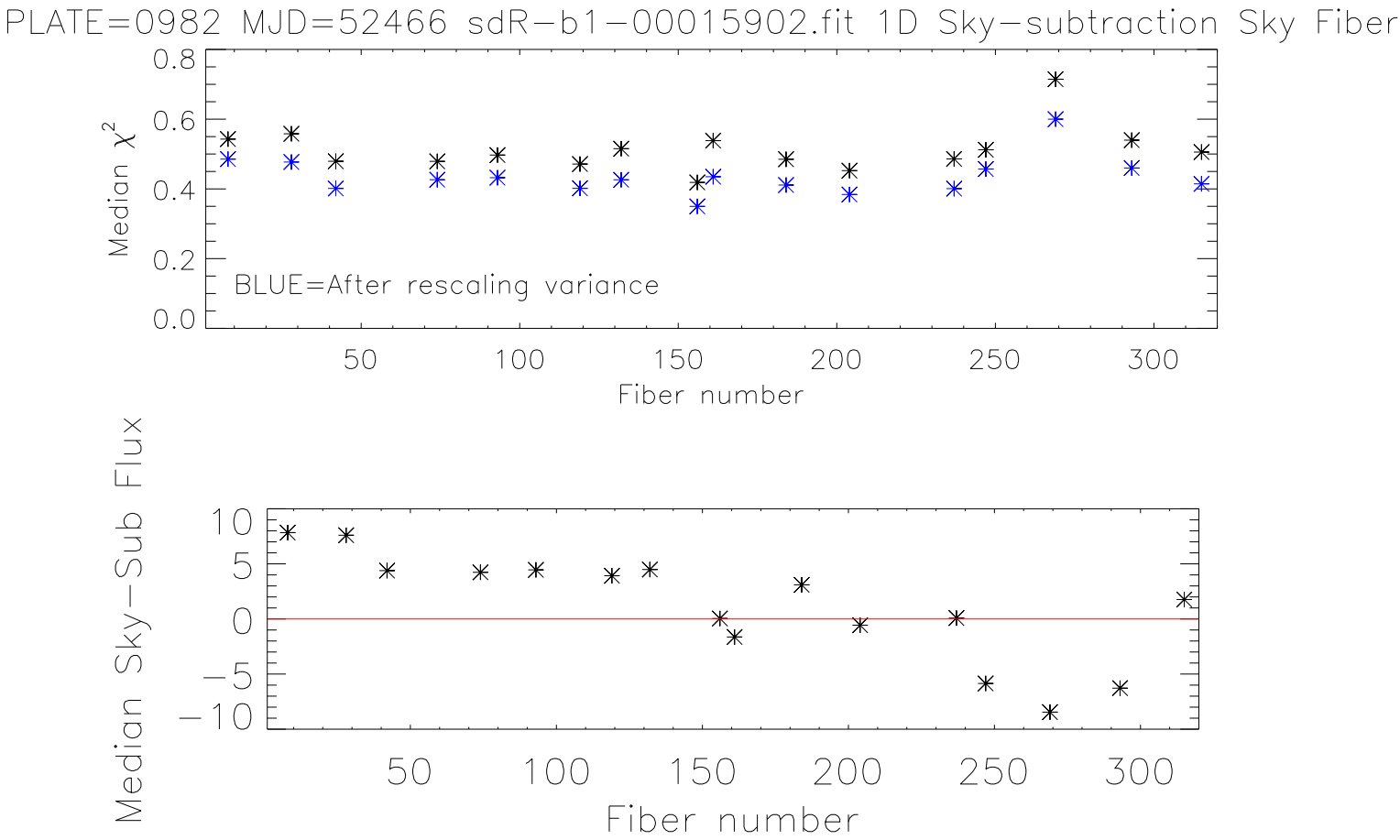

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

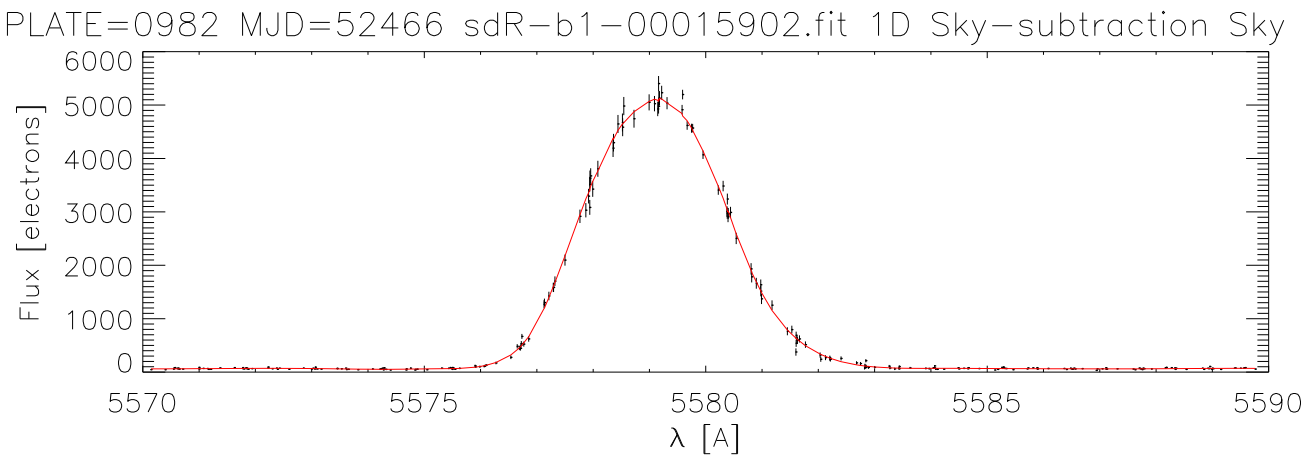

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

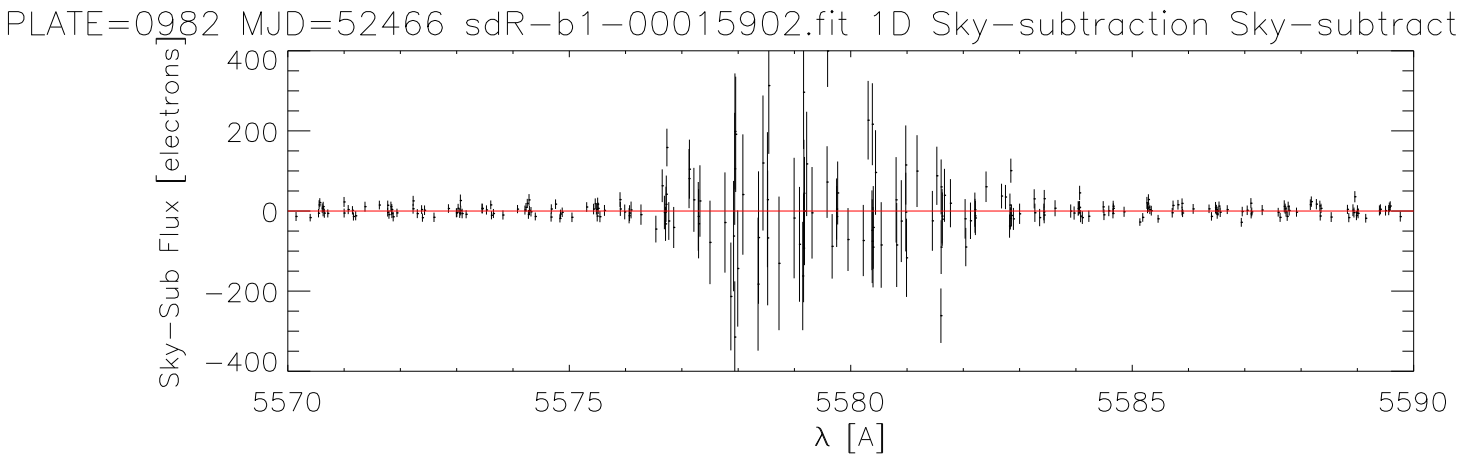

4046.5600
nfib1 16
nfib2 15
stdev 0.155
extra −0.22
4358.3300
nfib1 16
nfib2 16
stdev 0.082
extra −0.12
5460.9400
nfib1 16
nfib2 16
stdev 0.053
extra 0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.15
5889.9500
nfib1 16
nfib2 16
stdev 0.070
extra 0.30
5895.9240
nfib1 16
nfib2 16
stdev 0.039
extra 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

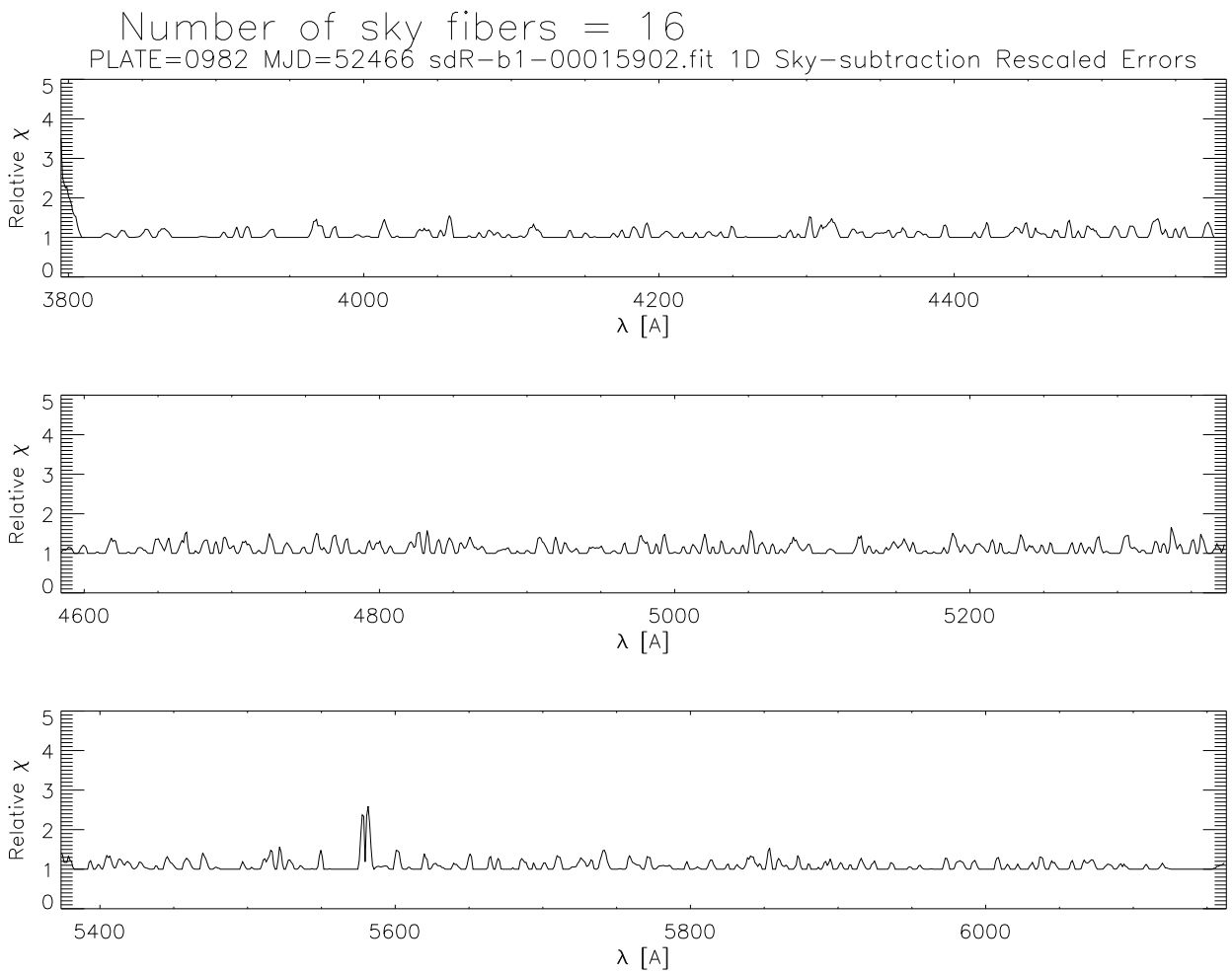

sky shift, pixels
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

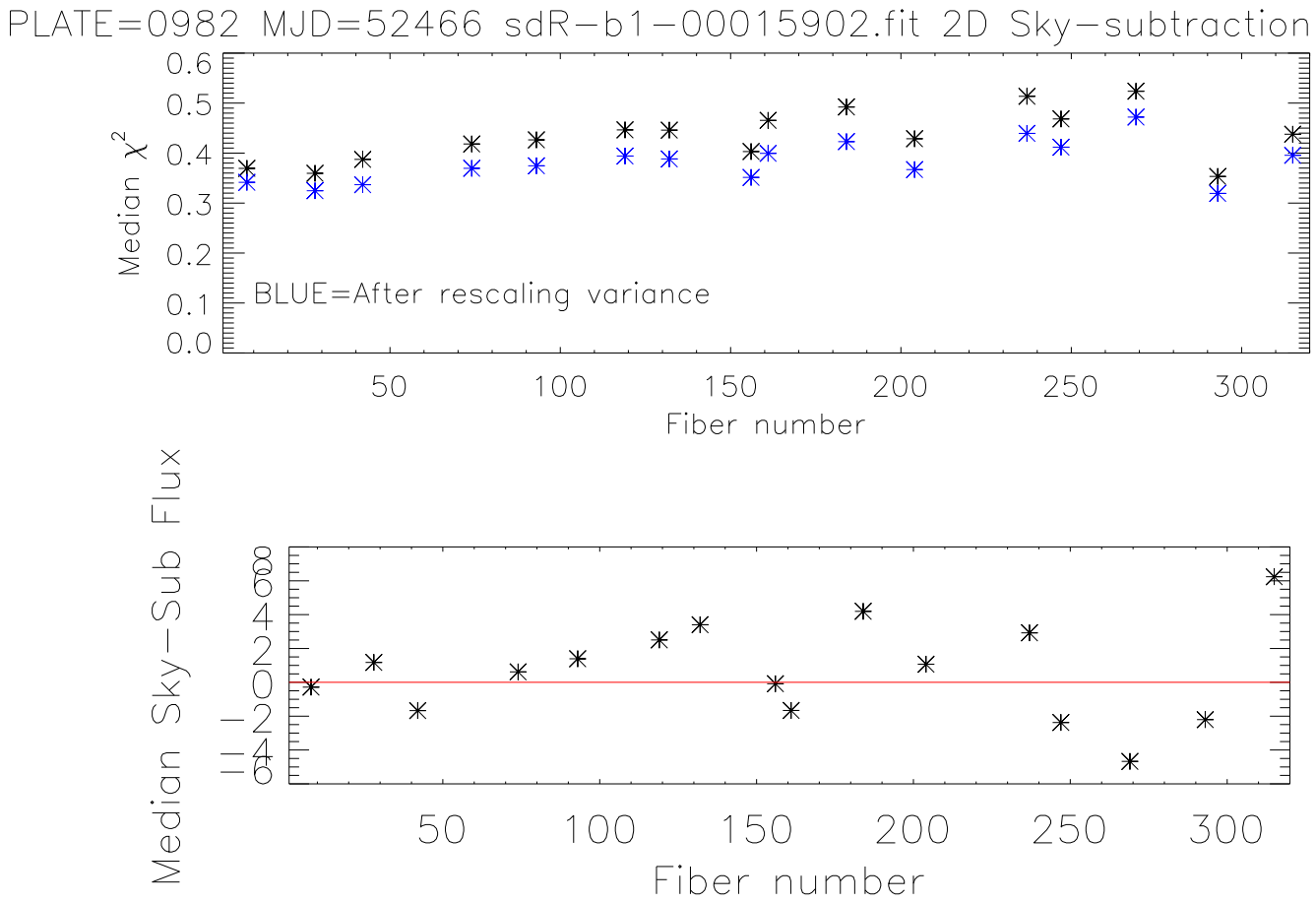

PLATE=0982 MJD=52466 Smooth superflat for sdR-b1-00015902.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

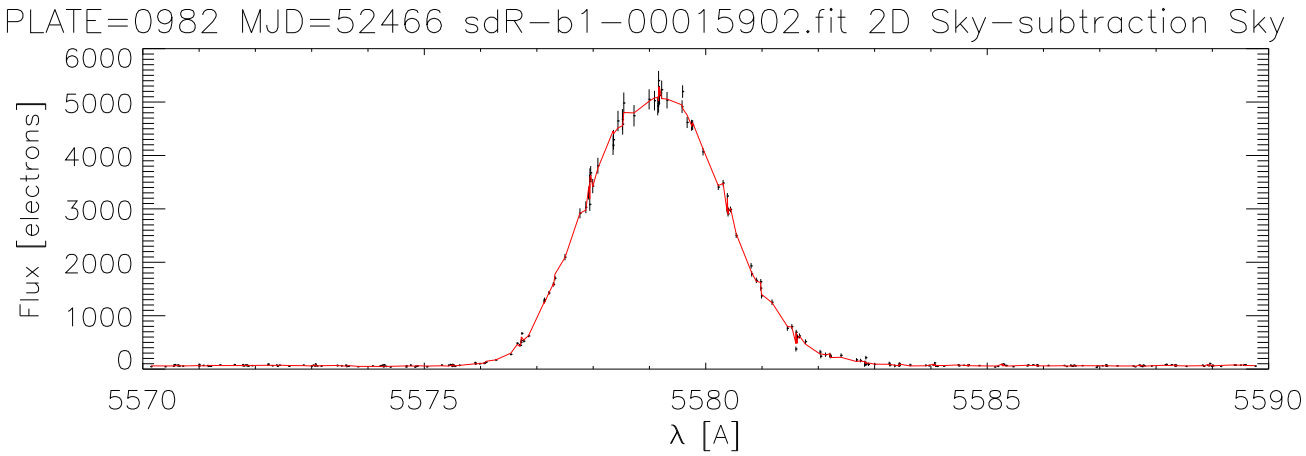

PLATE=0982 MJD=52466 sdR-b1-00015902.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

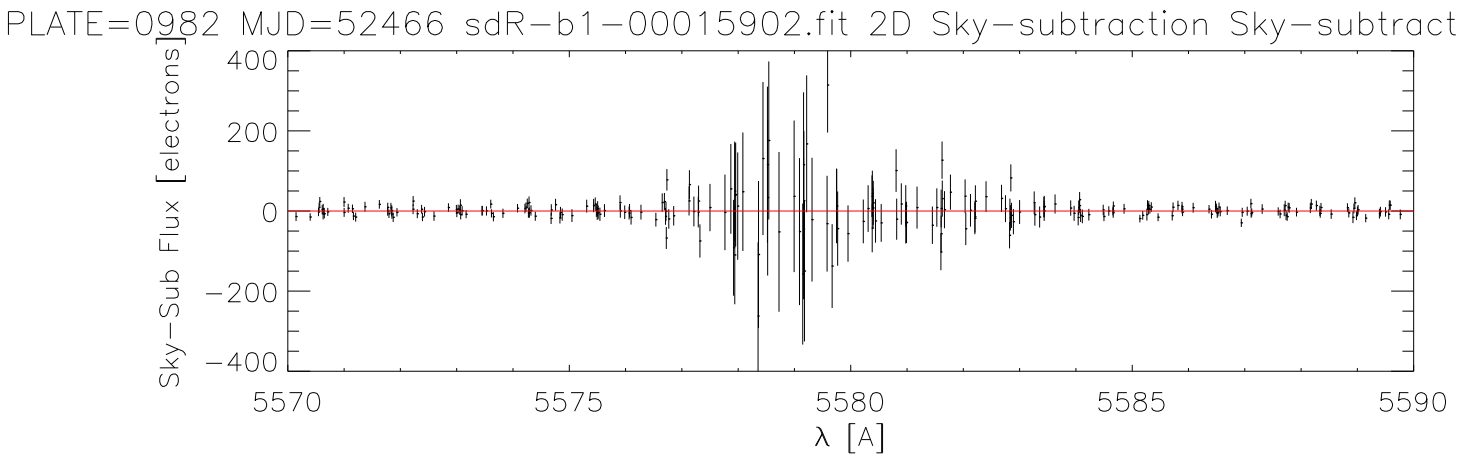

PLATE=0982 MJD=52466 sdR-b1-00015902.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

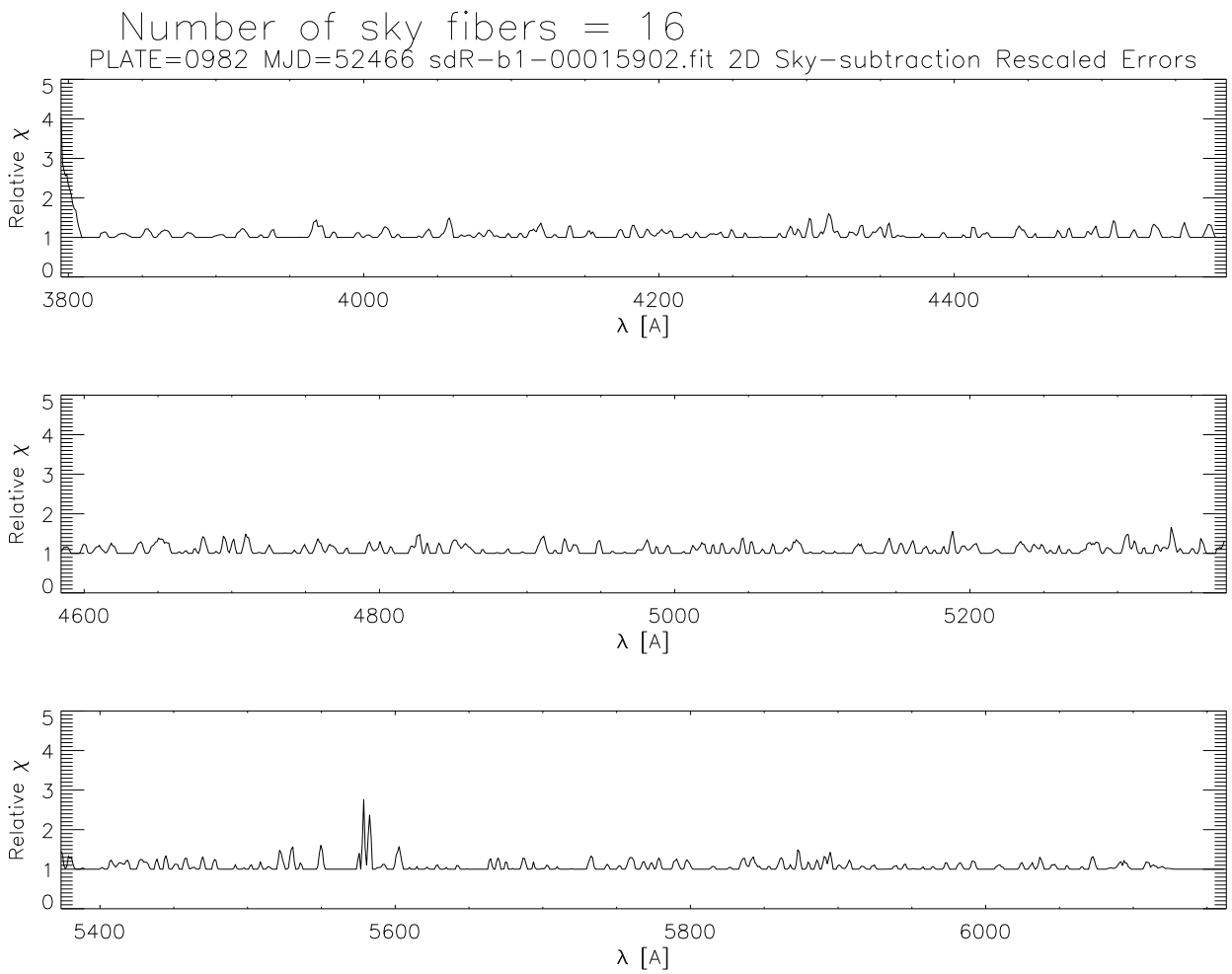

PLATE=0982 MJD=52466 sdR-b1-00015902.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

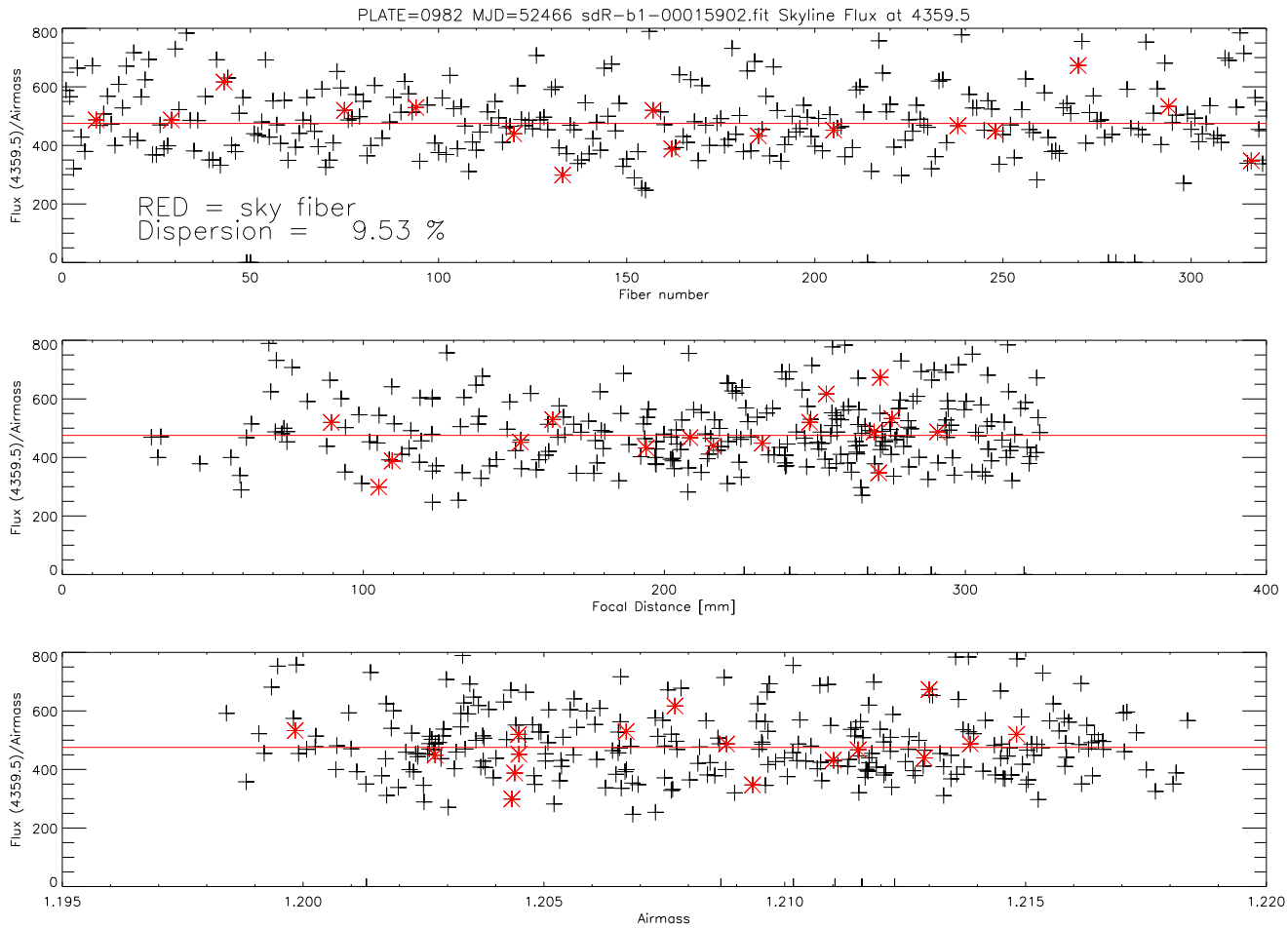

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015902.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

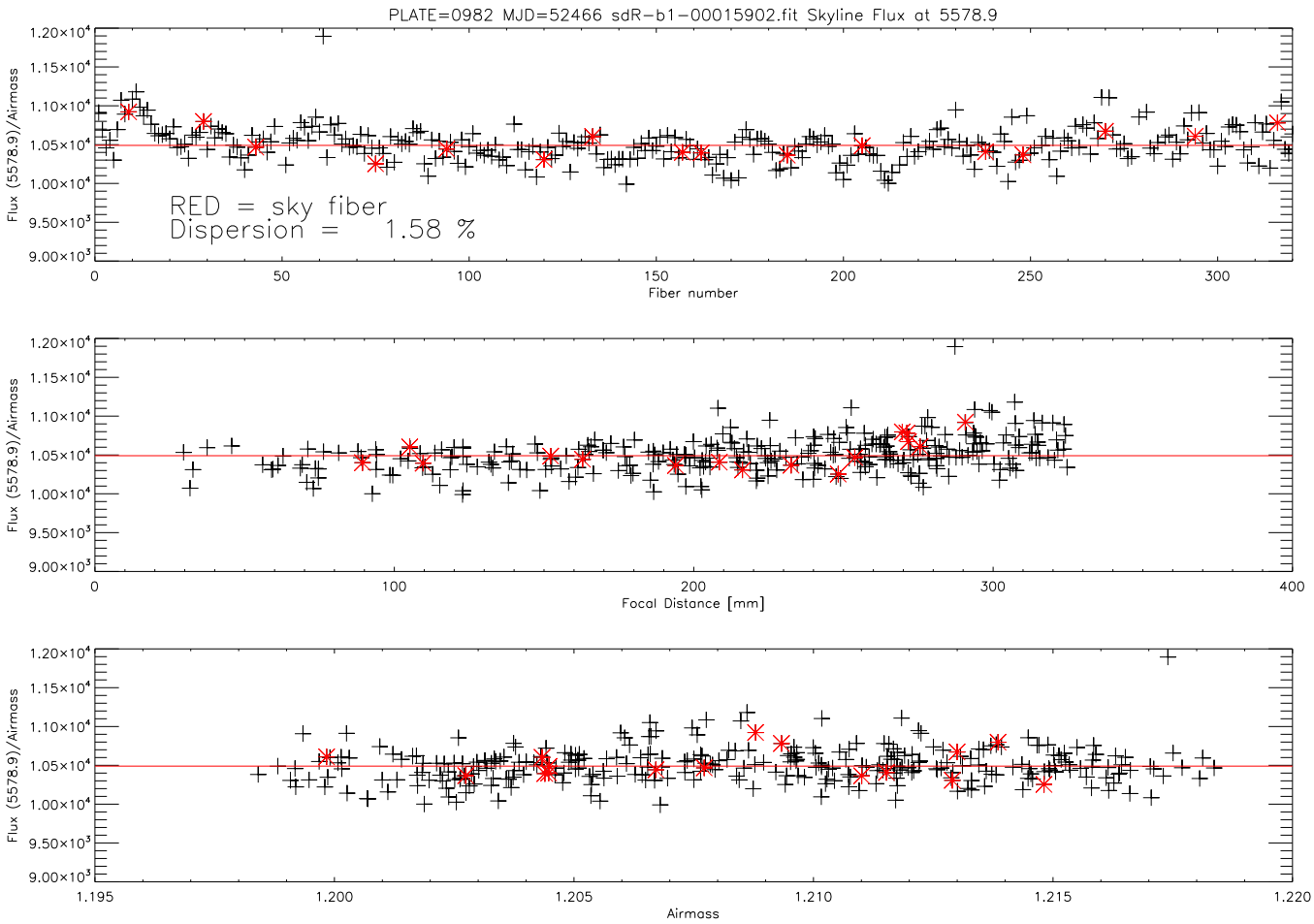

PLATE=0982 MJD=52466 sdR-b1-00015902.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

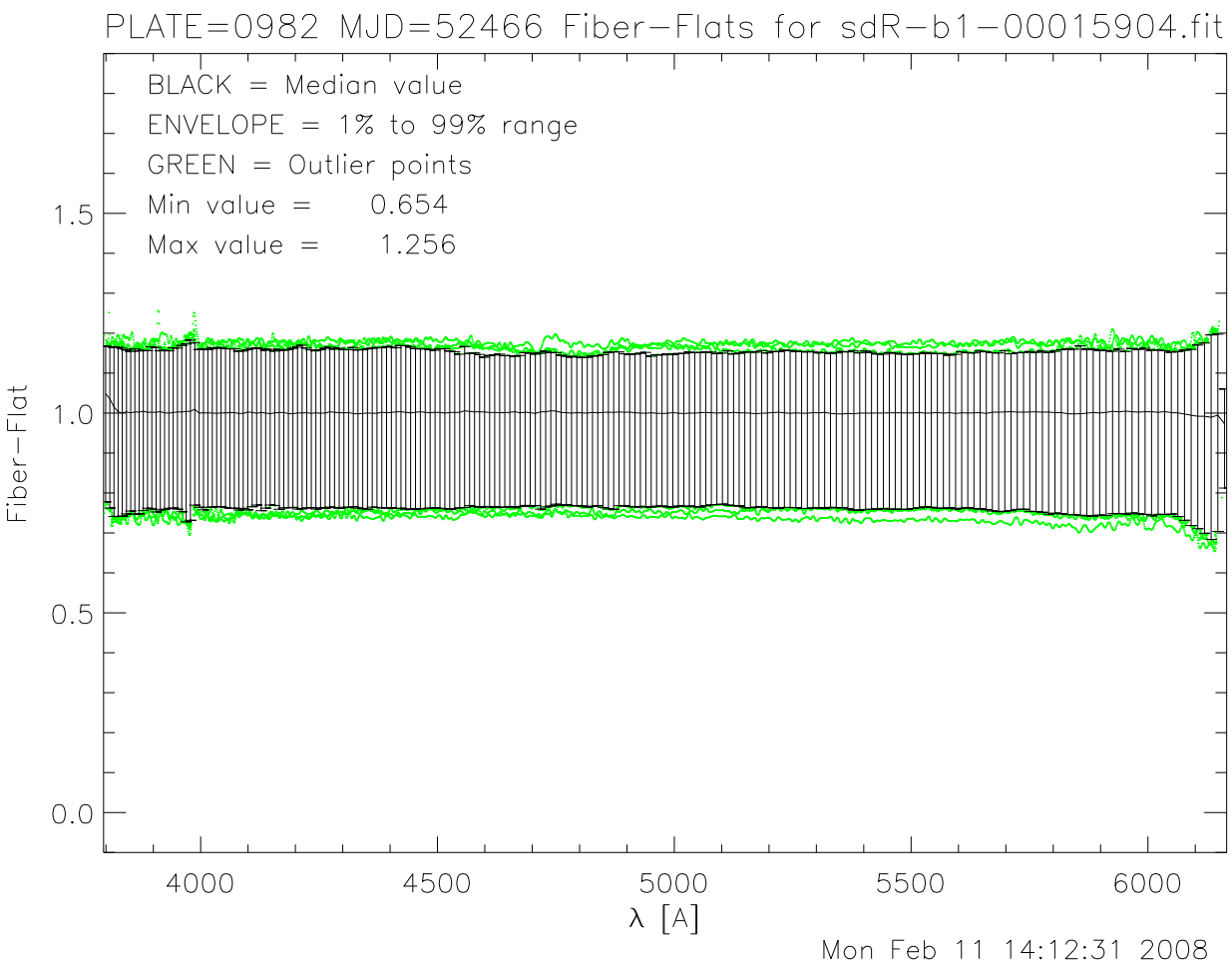

PLATE=0982 MJD=52466 sdR-b1-00015902.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

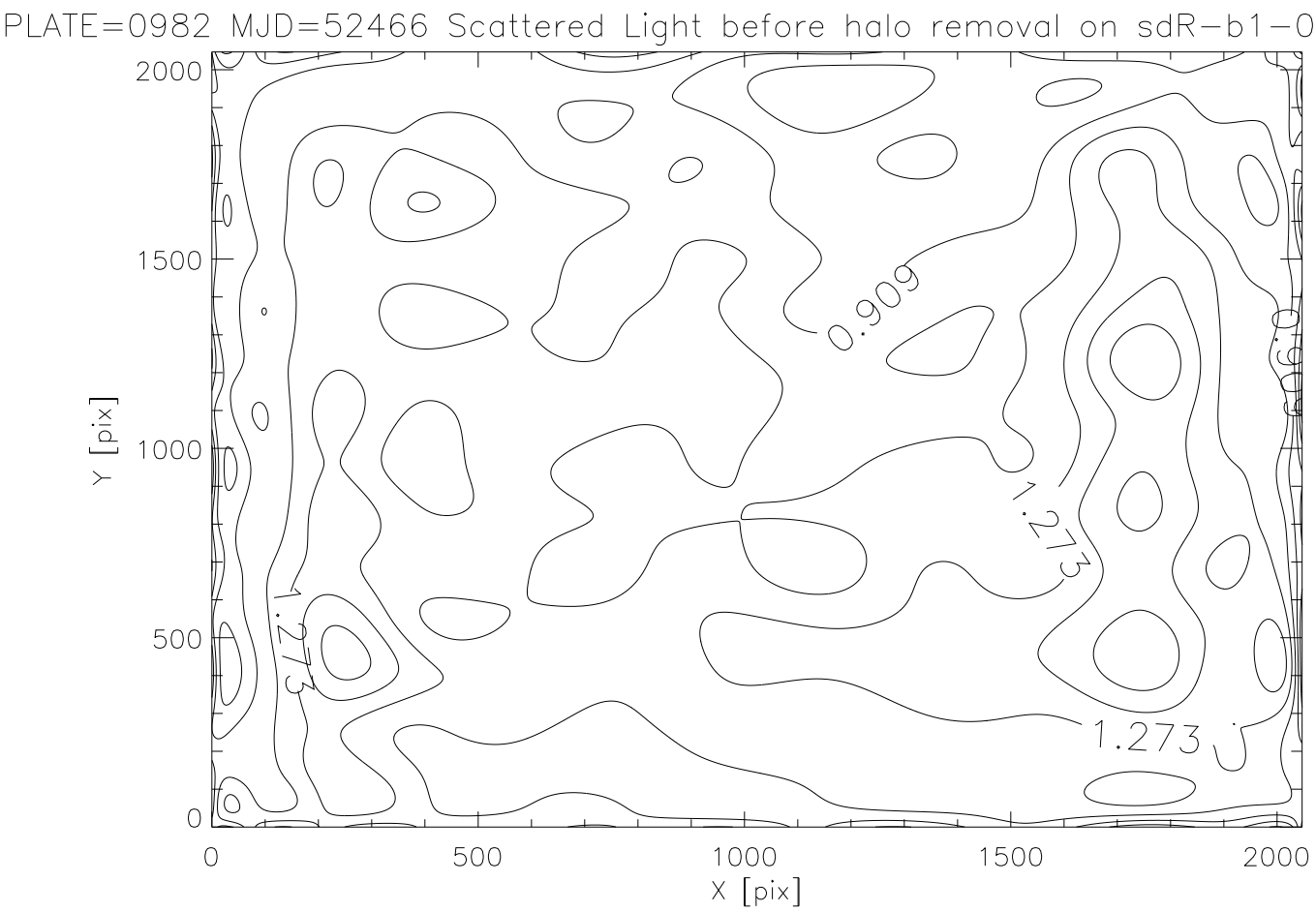

PLATE=0982 MJD=52466 sdR-b1-00015902.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

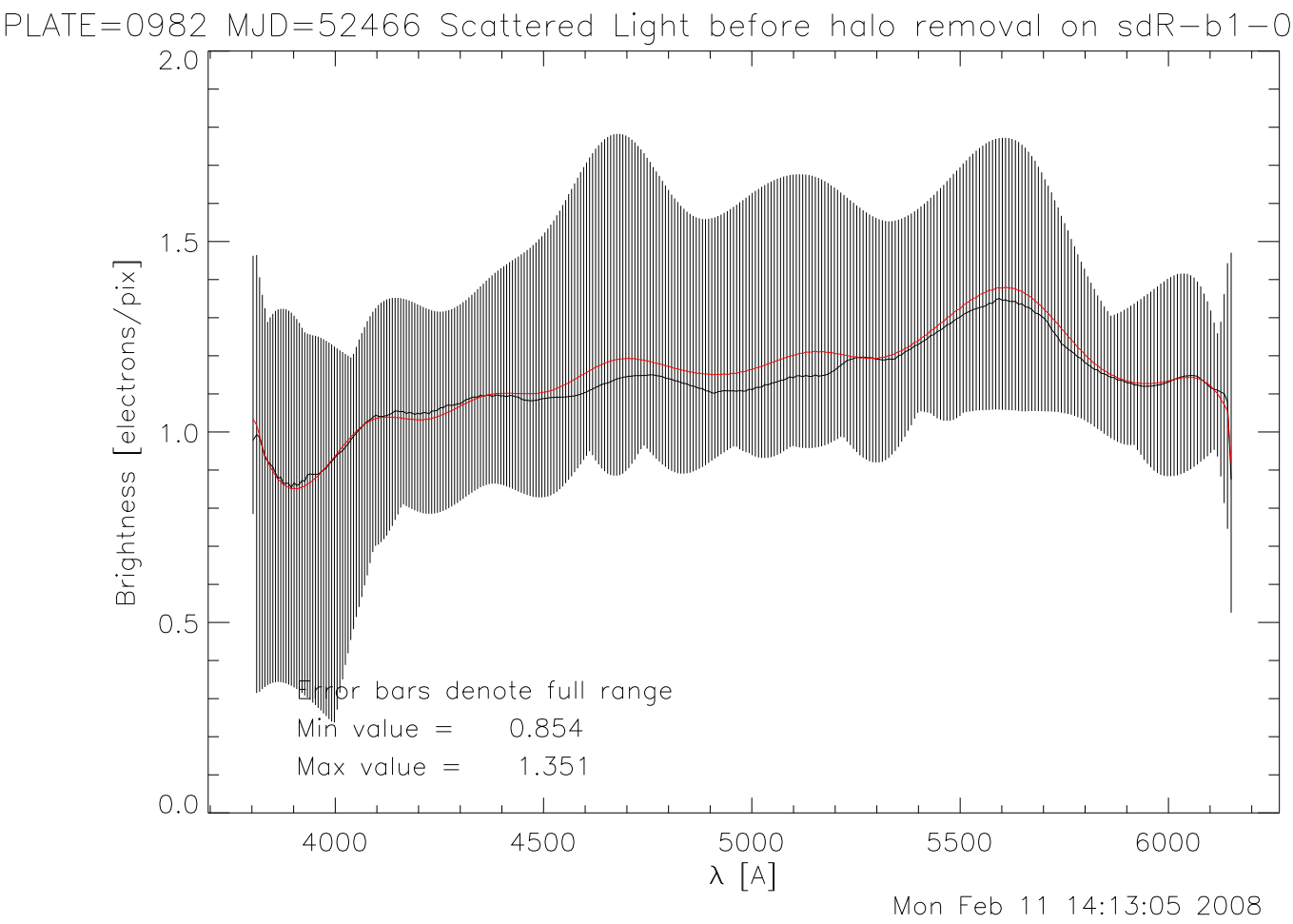

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015902.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

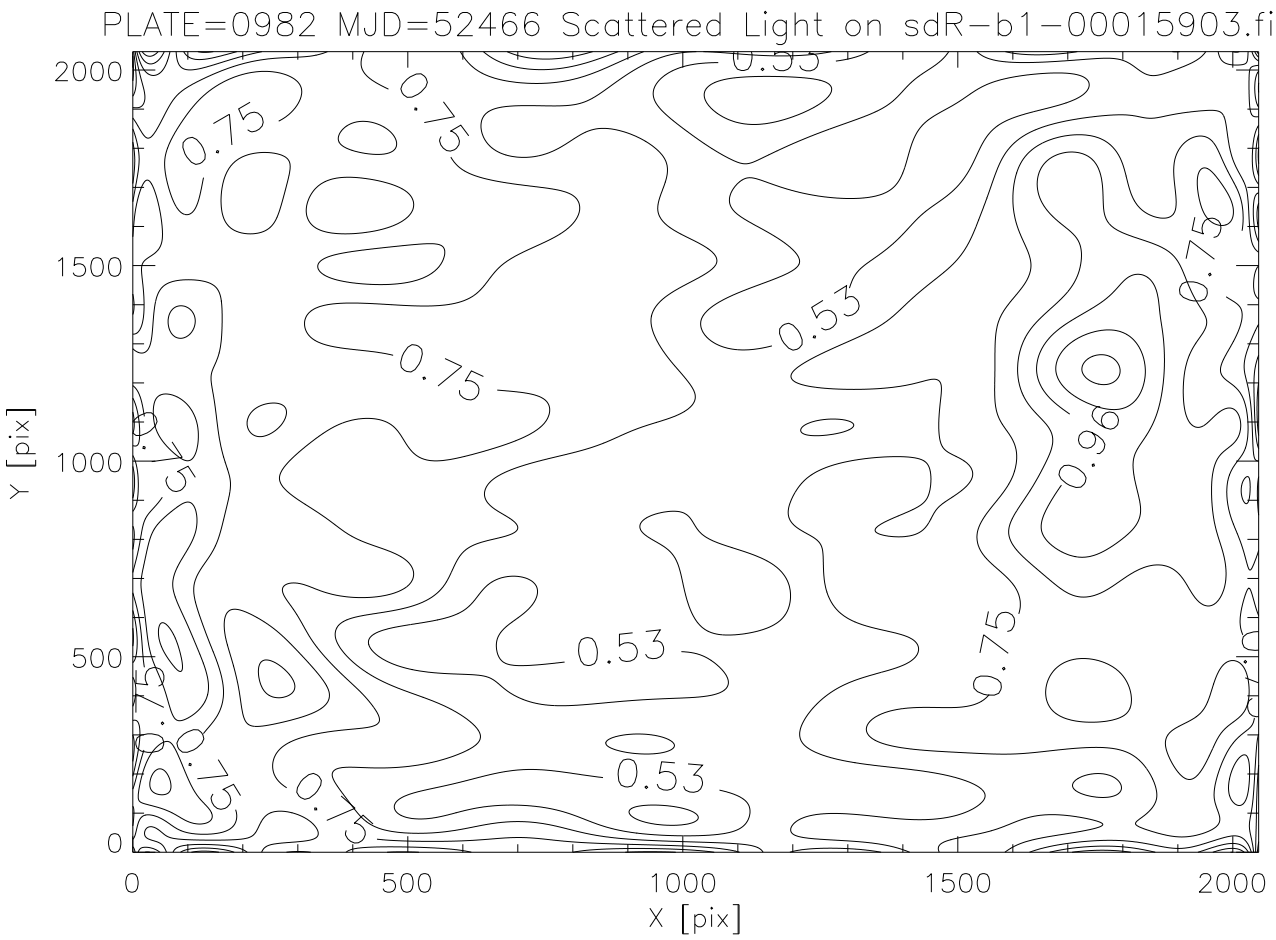

PLATE=0982 MJD=52466 sdR-b1-00015902.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.53 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

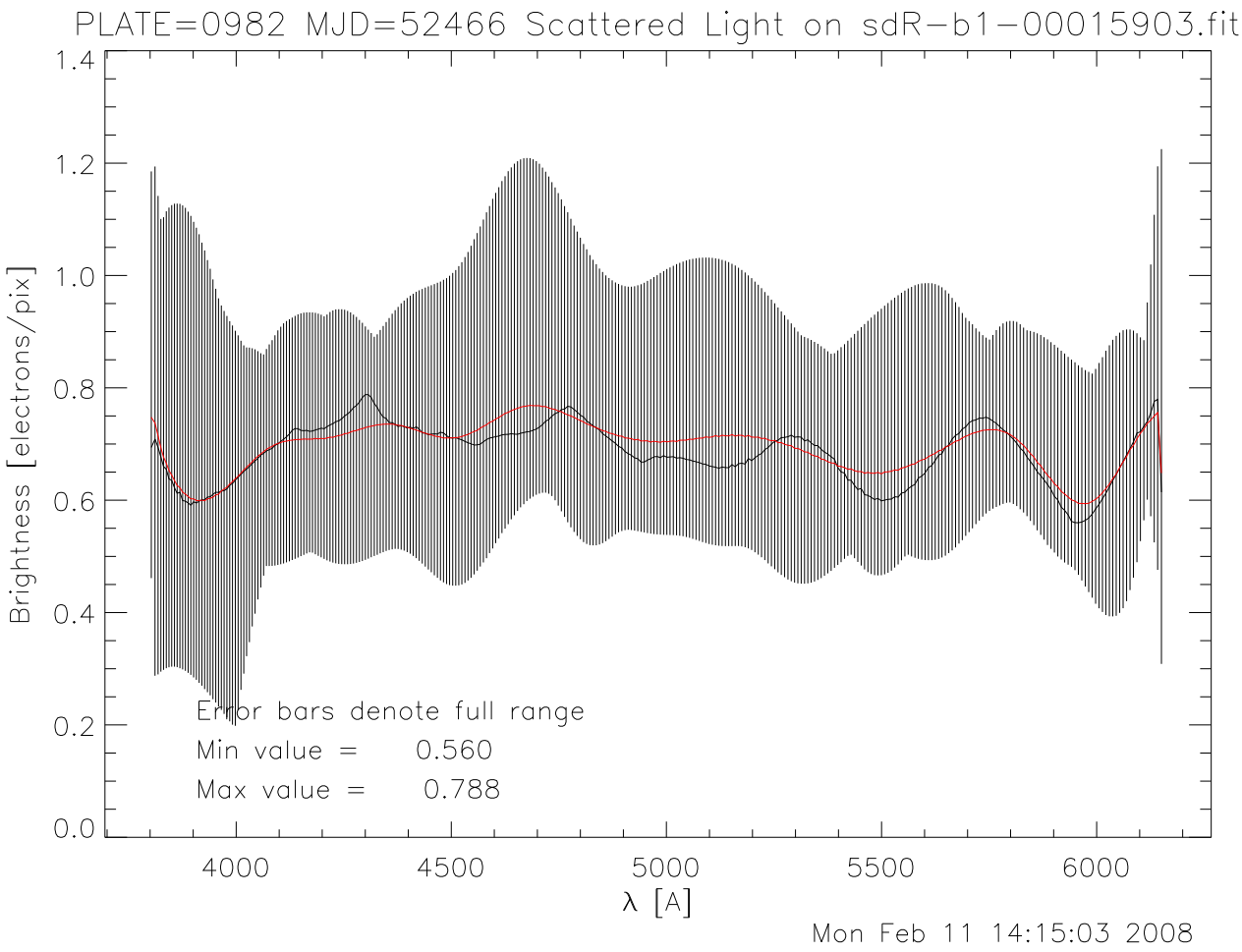

PLATE=0982 MJD=52466 sdR-b1-00015902.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.58 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

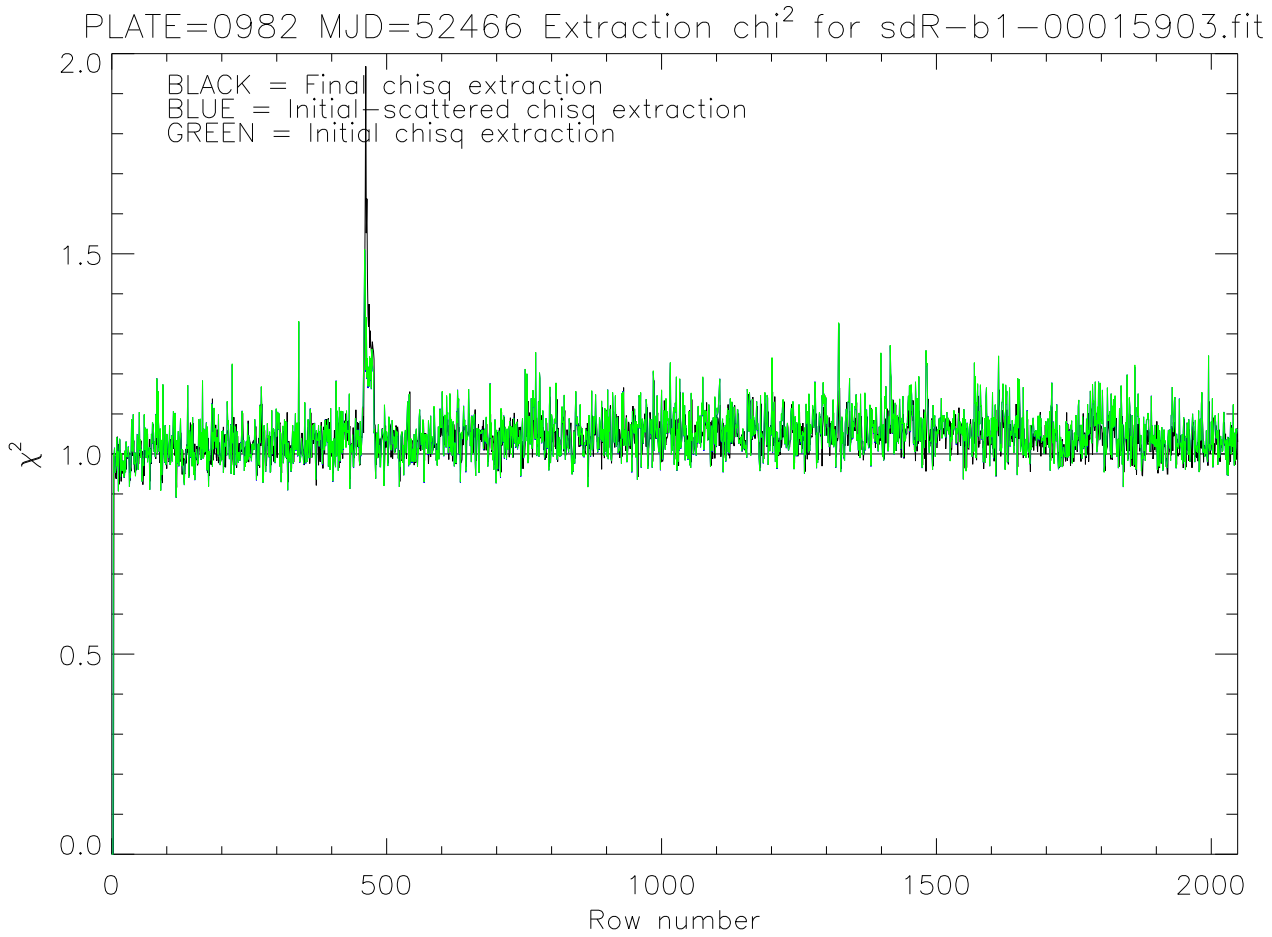

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b1-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.256
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:12:31 2008

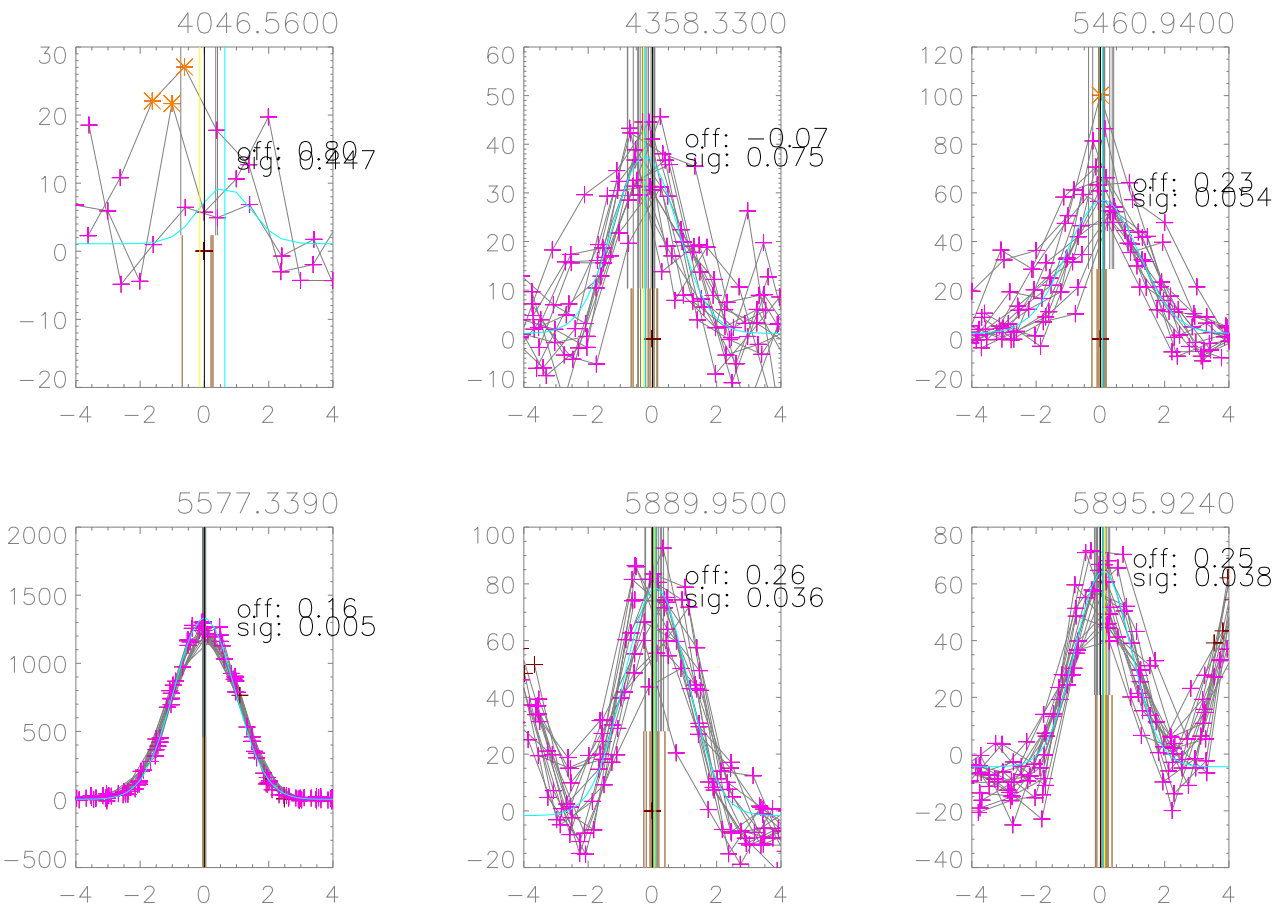

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR−b1−00015903.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0.909
1.273
1.273
1.273

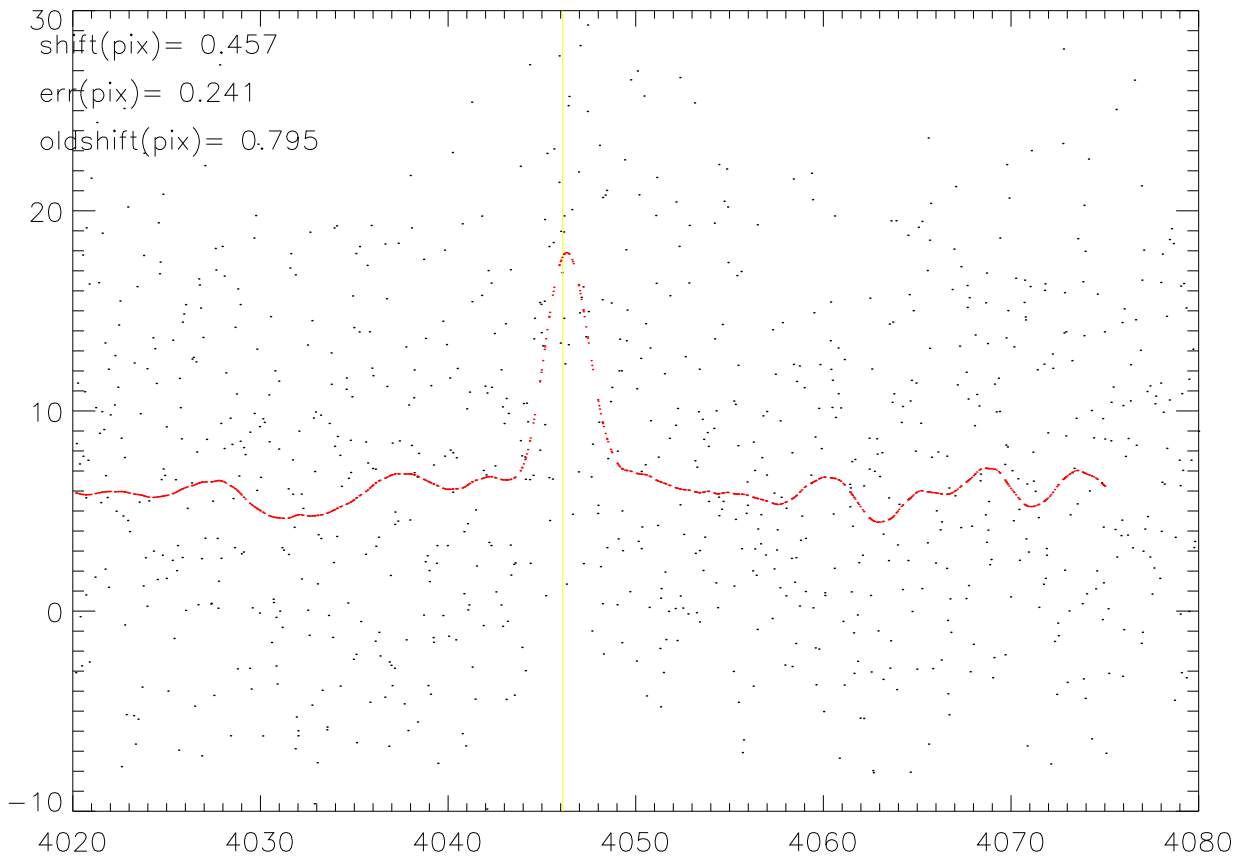

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b1-00015903.f
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.854
Max value = 1.351
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:13:05 2008

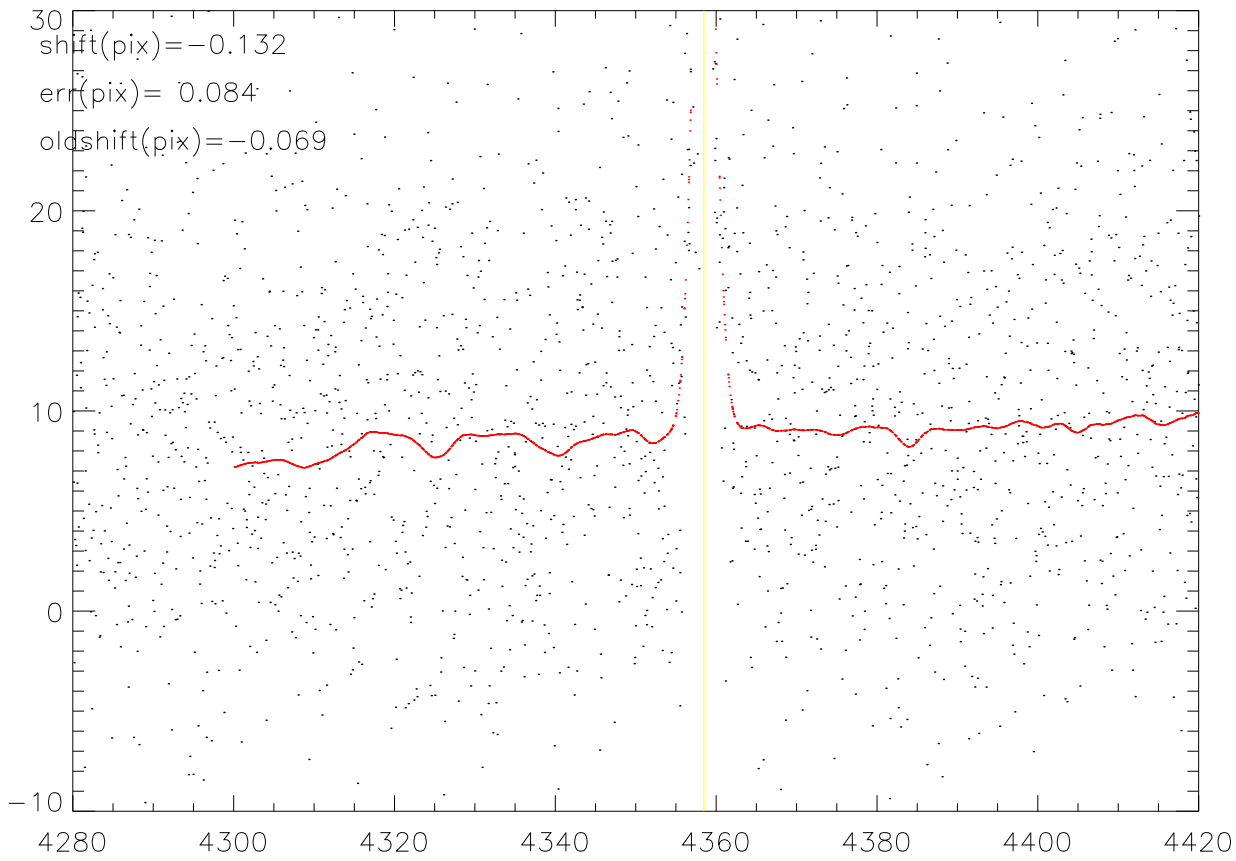

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015903.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0.53
0.75
0.96

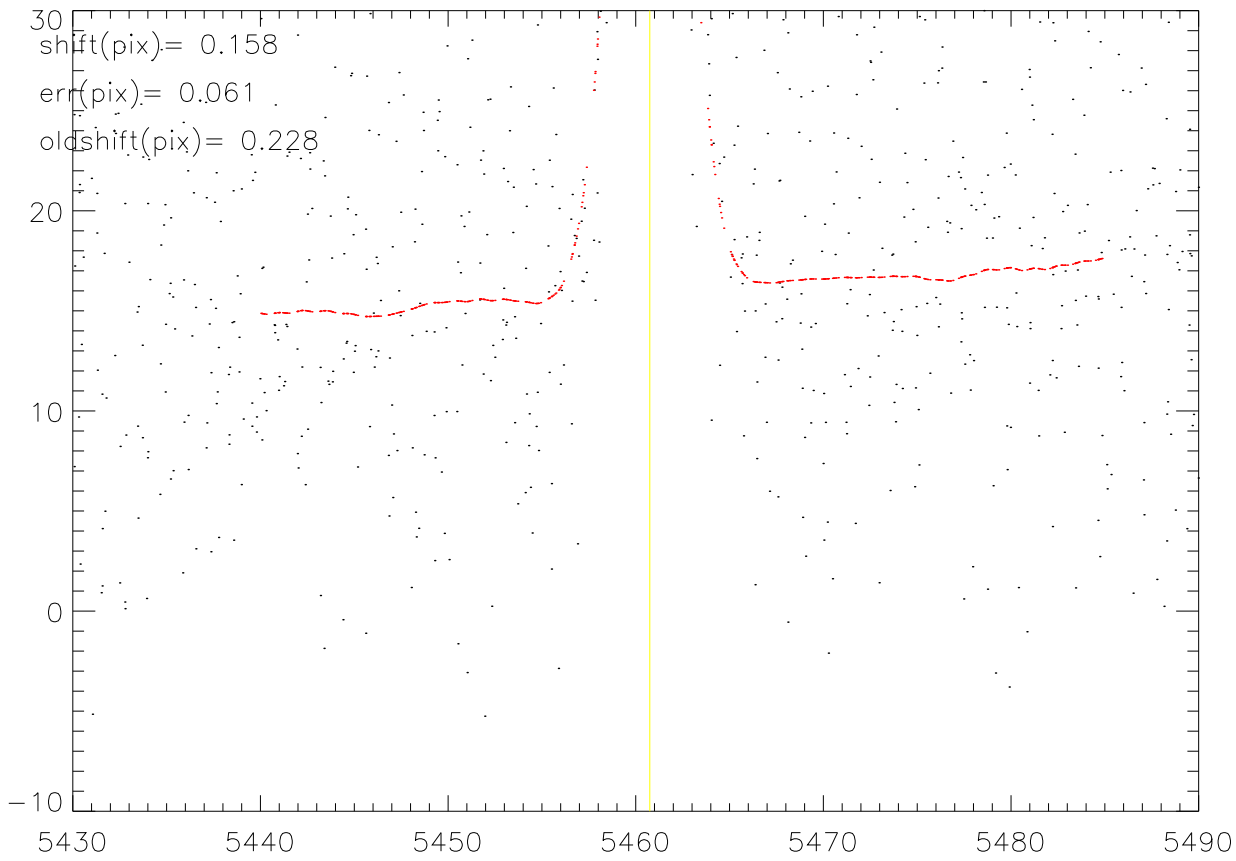

PLATE=0982 MJD=52466 Scattered Light on sdR-b1-00015903.fit
Brightness [electrons/pix]
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Error bars denote full range
Min value = 0.560
Max value = 0.788
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:15:03 2008

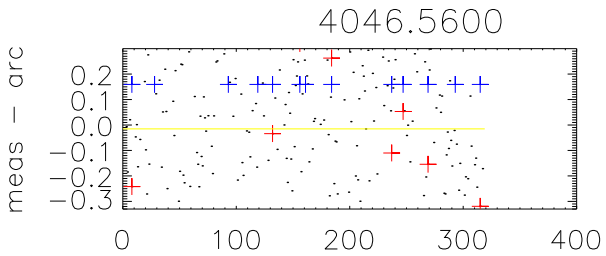

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-b1-00015903.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

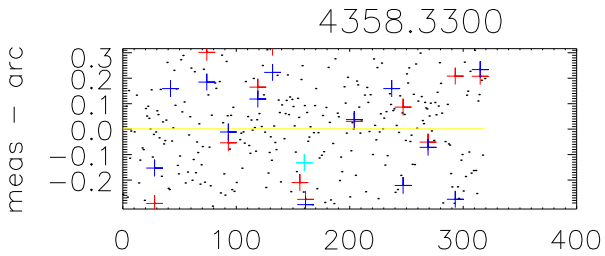

4046.5600
off: 0.80
sig: 0.447
4358.3300
off: −0.07
sig: 0.075
5460.9400
off: 0.23
sig: 0.054
5577.3390
off: 0.16
sig: 0.005
5889.9500
off: 0.26
sig: 0.036
5895.9240
off: 0.25
sig: 0.038

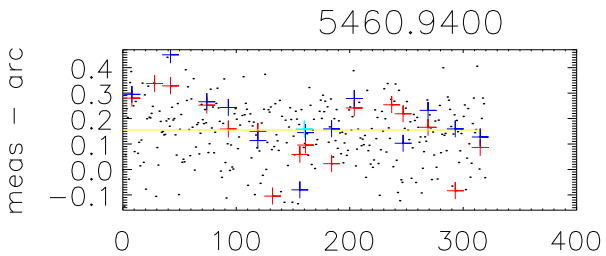

shift(pix)= 0.457
err(pix)= 0.241
oldshift(pix)= 0.795
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

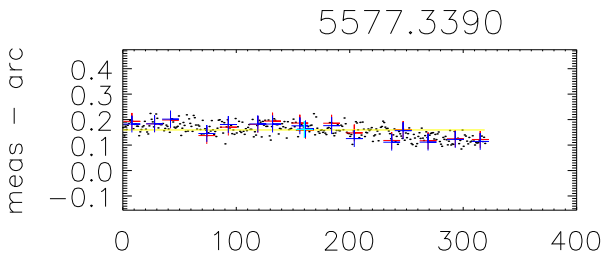

shift(pix)=−0.132
err(pix)= 0.084
oldshift(pix)=−0.069
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

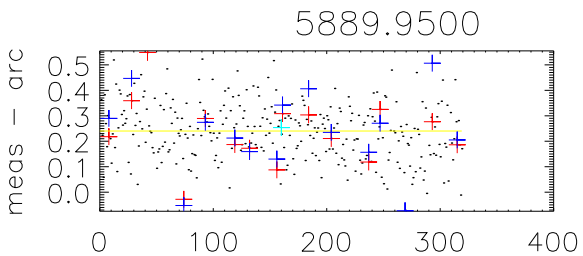

shift(pix)= 0.158
err(pix)= 0.061
oldshift(pix)= 0.228
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

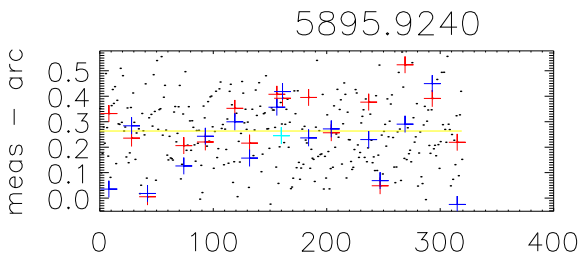

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

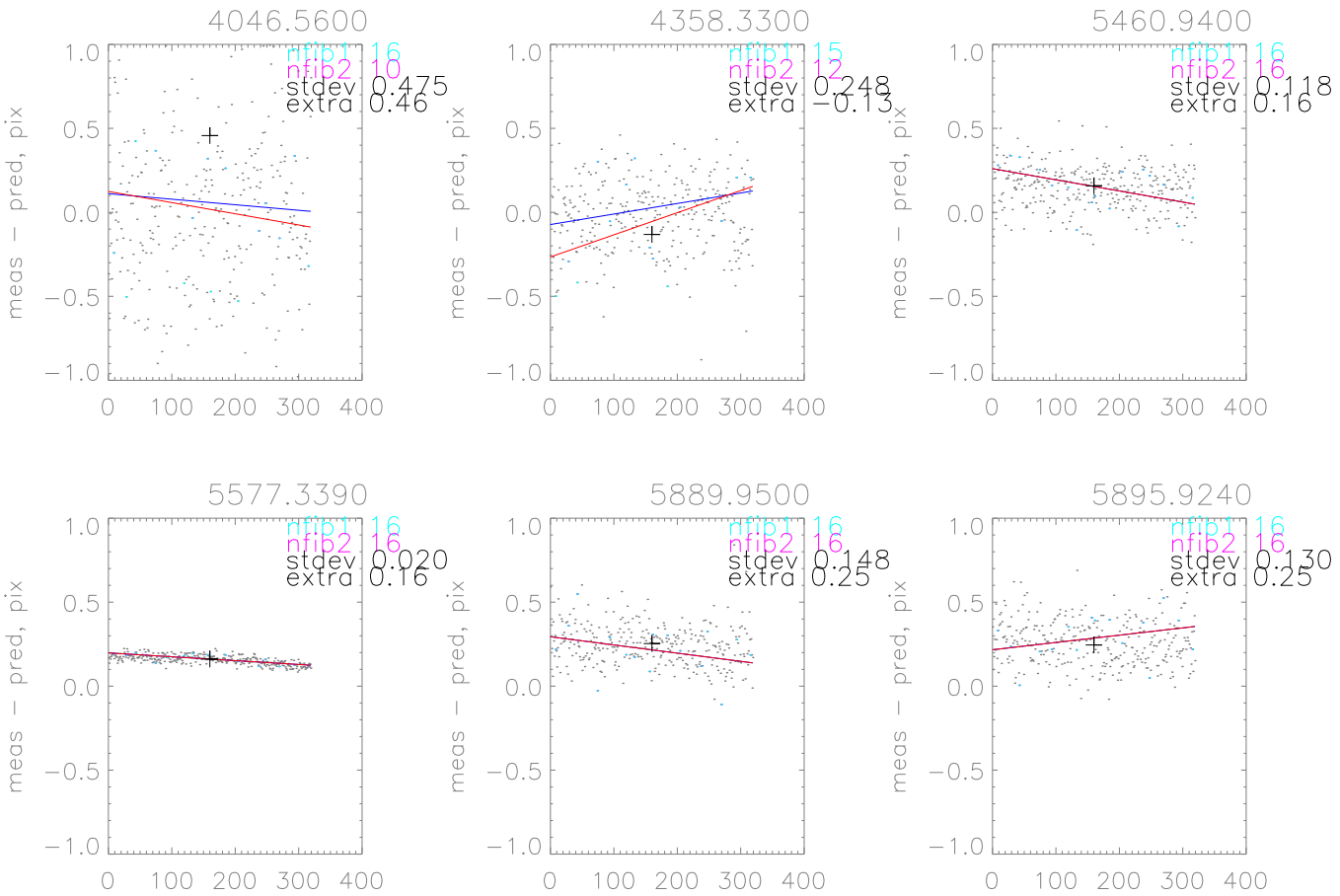

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

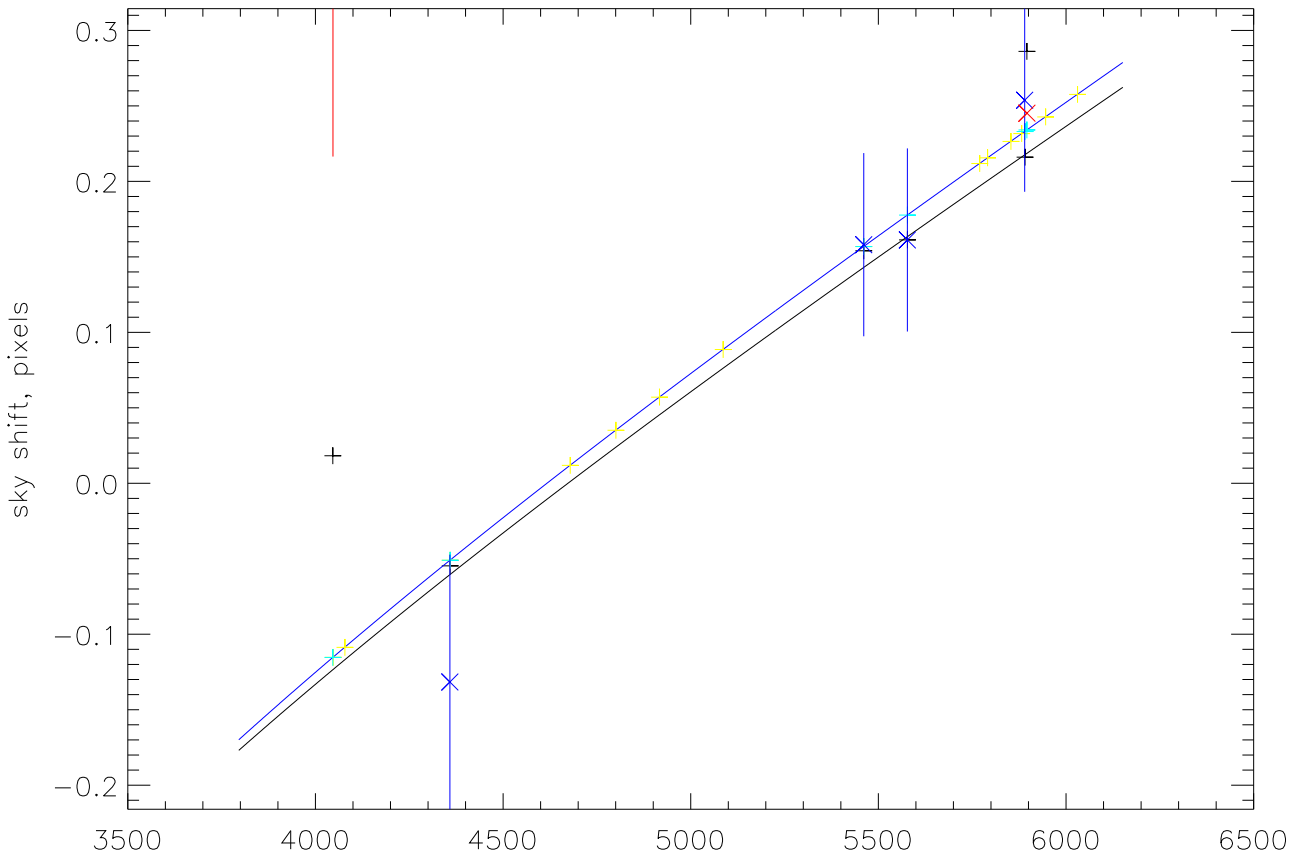

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

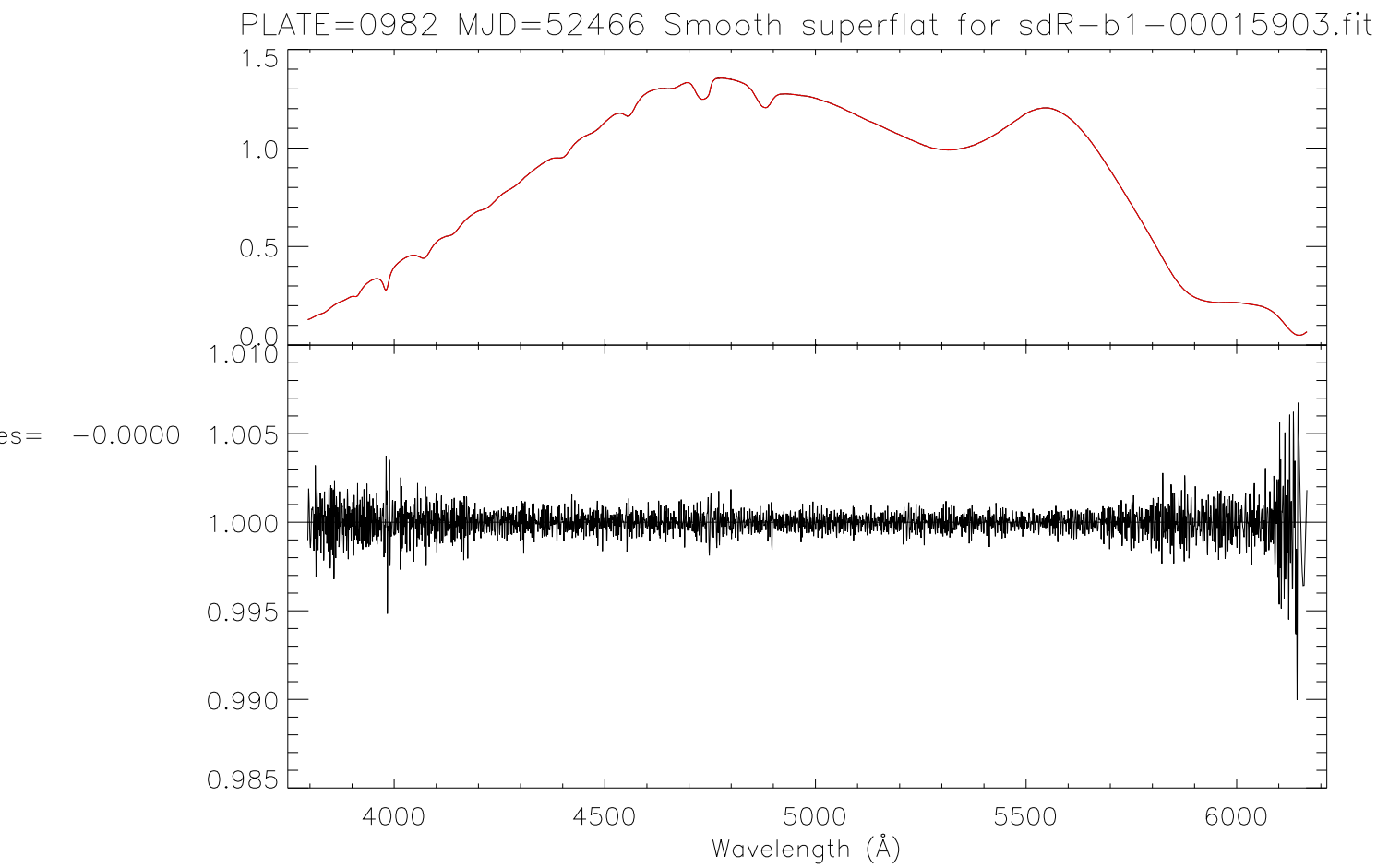

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

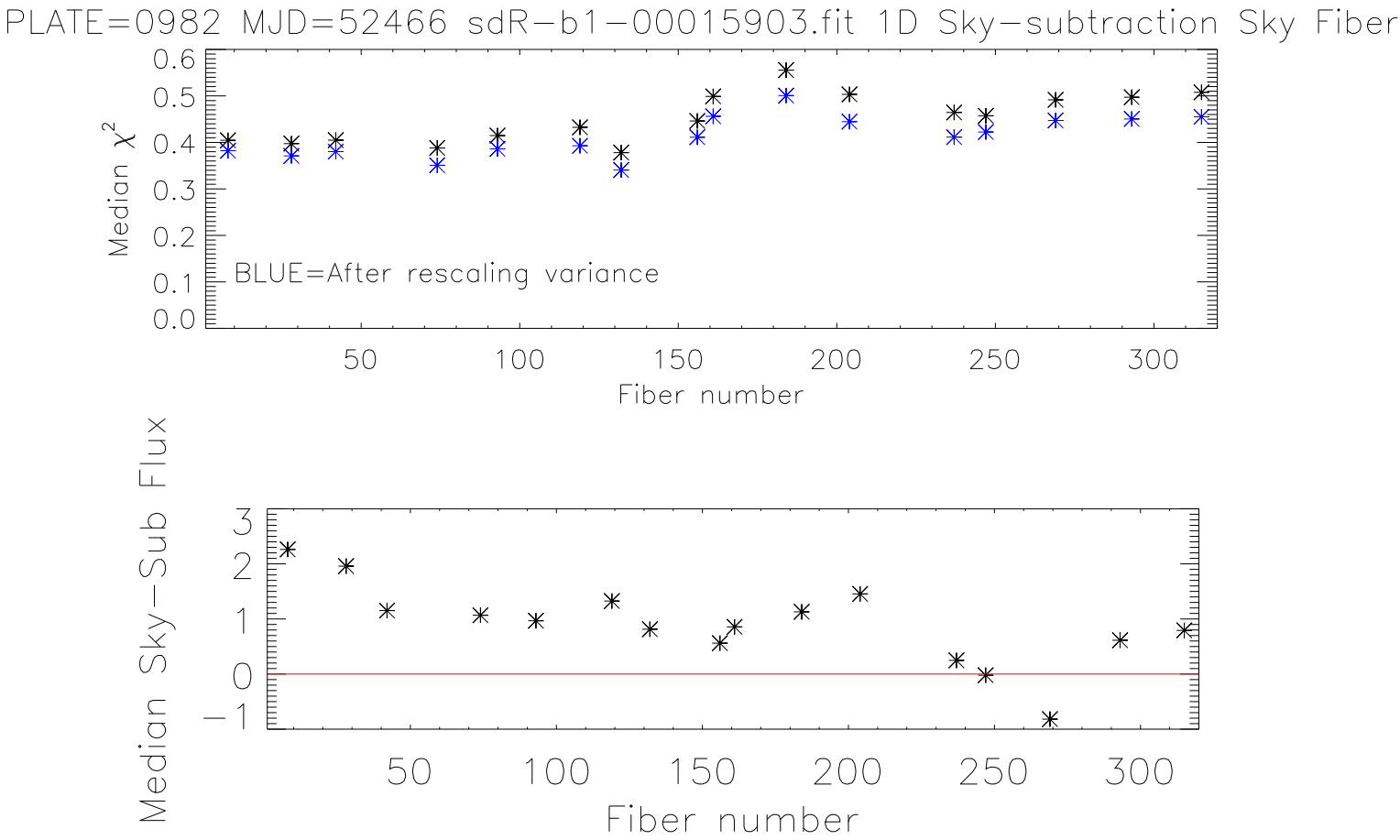

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

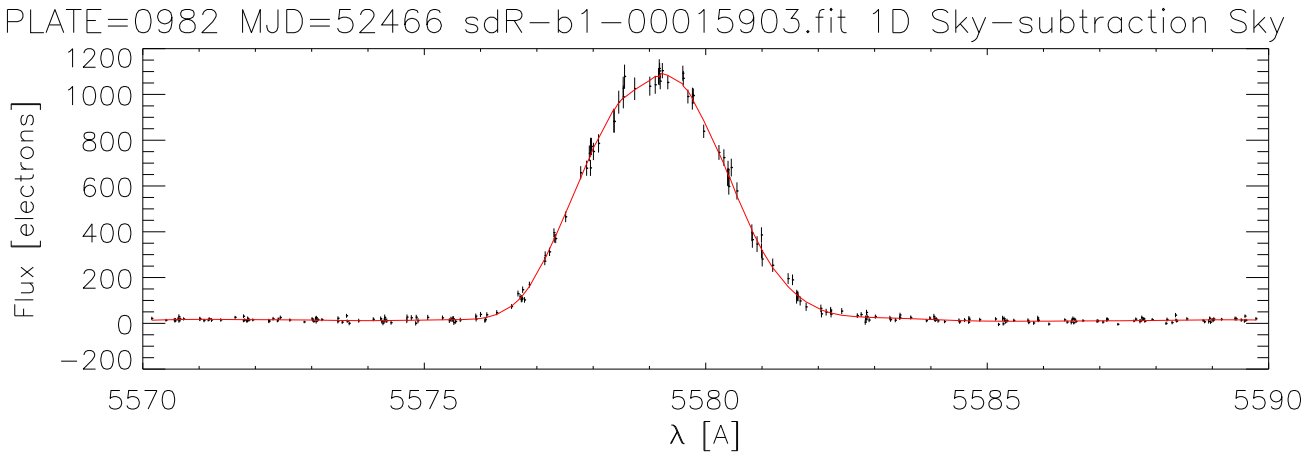

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

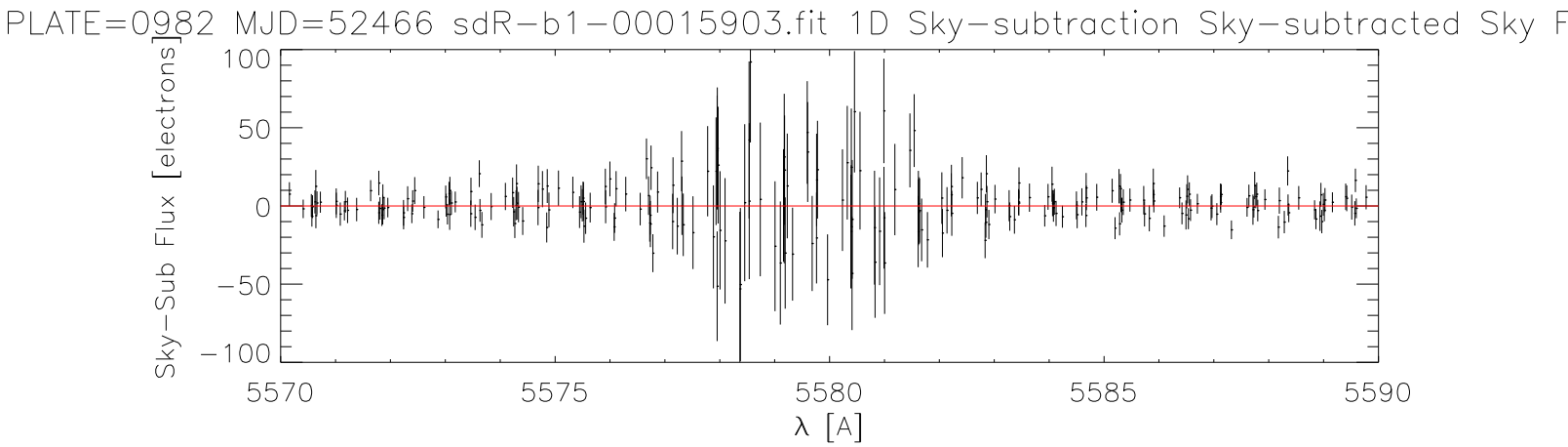

4046.5600
nfib1 16
nfib2 10
stdev 0.475
extra 0.46
4358.3300
nfib1 15
nfib2 12
stdev 0.248
extra −0.13
5460.9400
nfib1 16
nfib2 16
stdev 0.118
extra 0.16
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra 0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.148
extra 0.25
5895.9240
nfib1 16
nfib2 16
stdev 0.130
extra 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

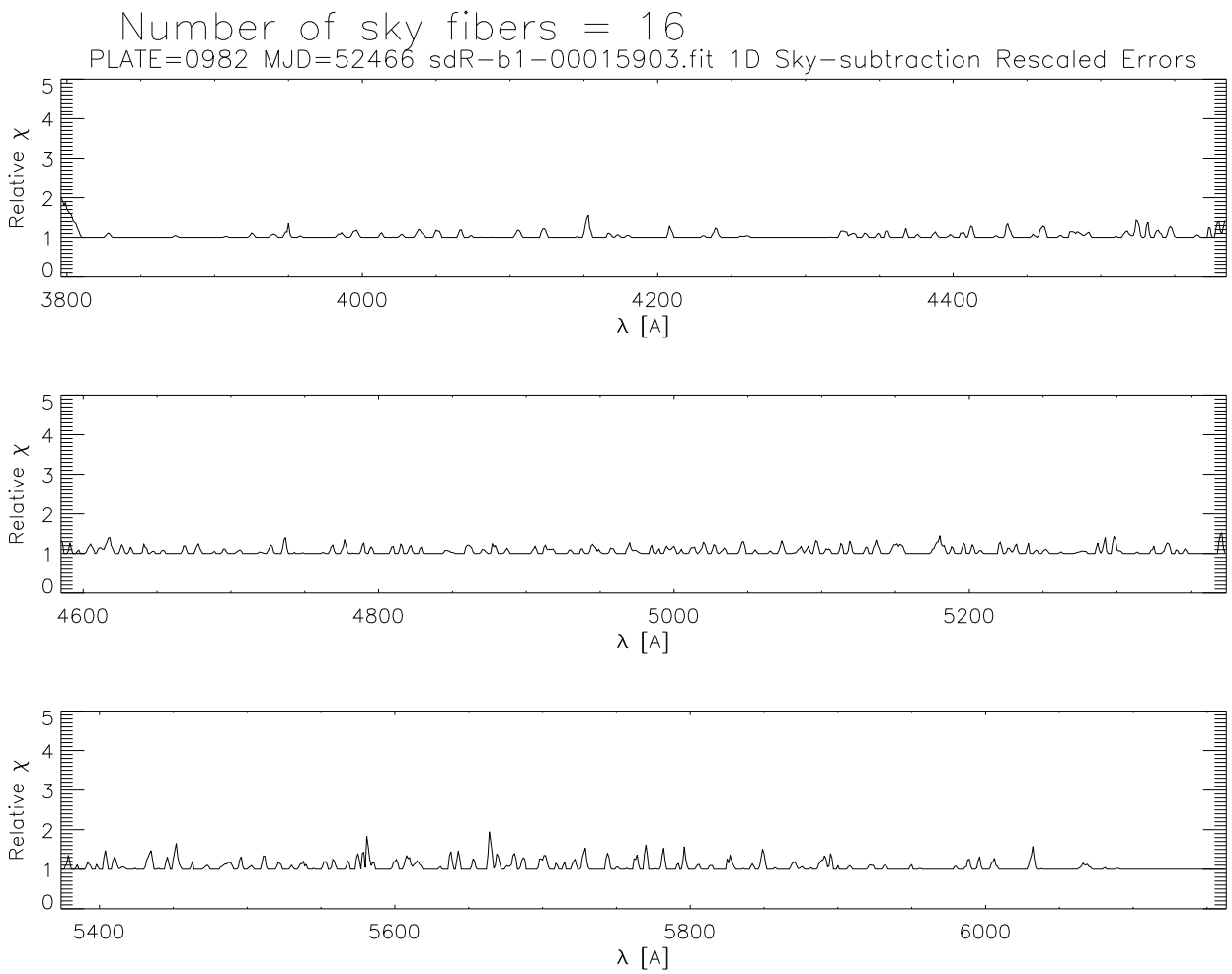

sky shift, pixels
0.3
0.2
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

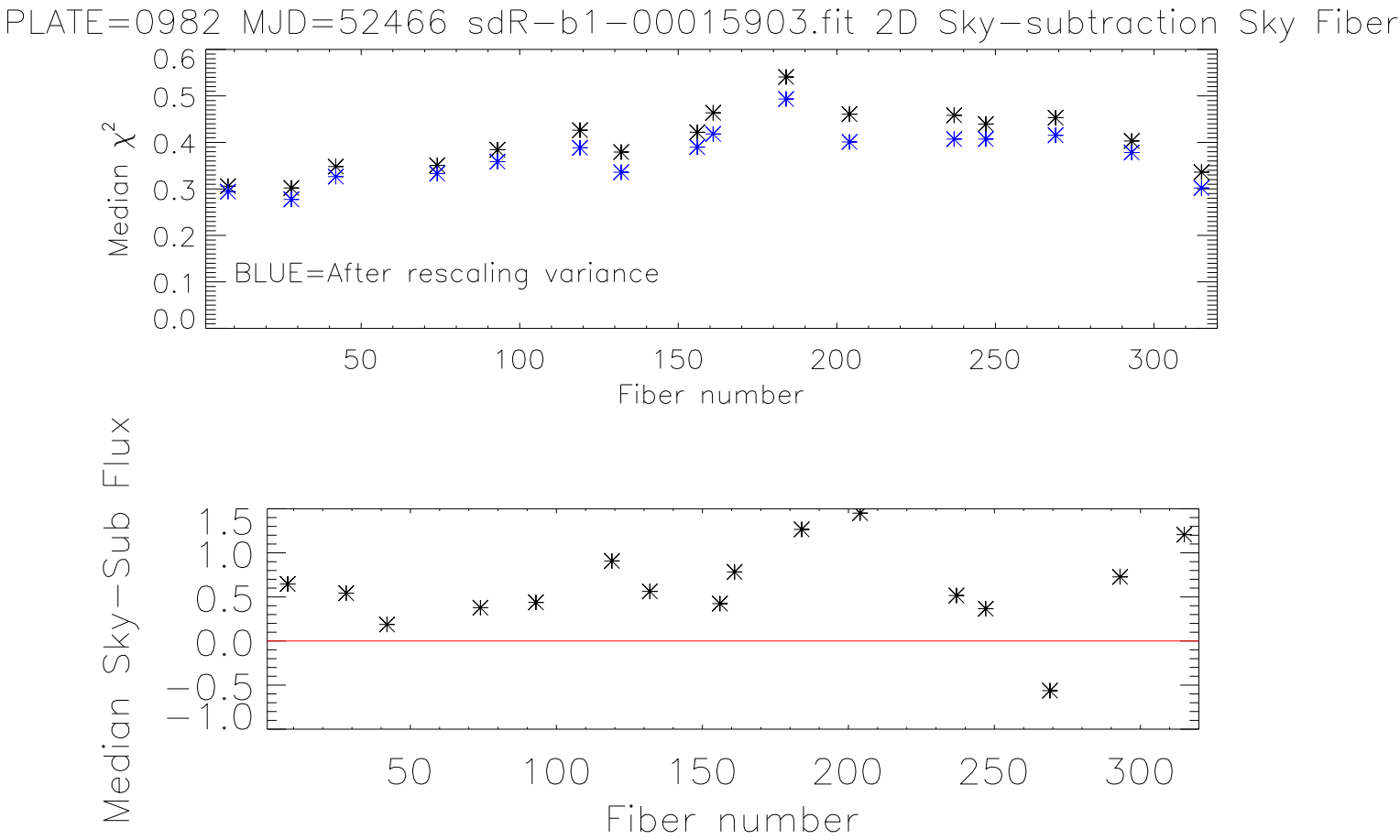

PLATE=0982 MJD=52466 Smooth superflat for sdR-b1-00015903.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

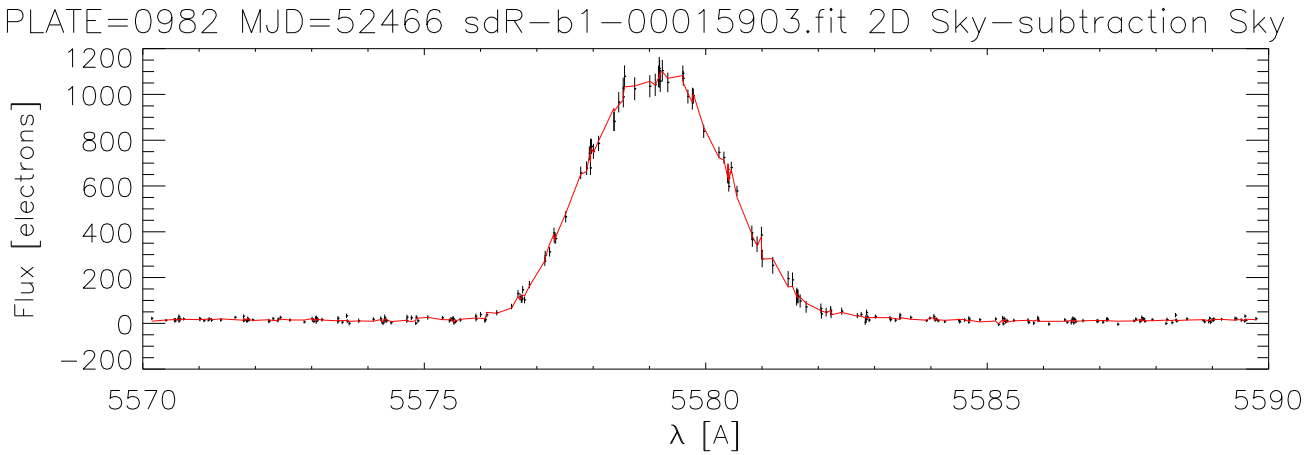

PLATE=0982 MJD=52466 sdR-b1-00015903.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

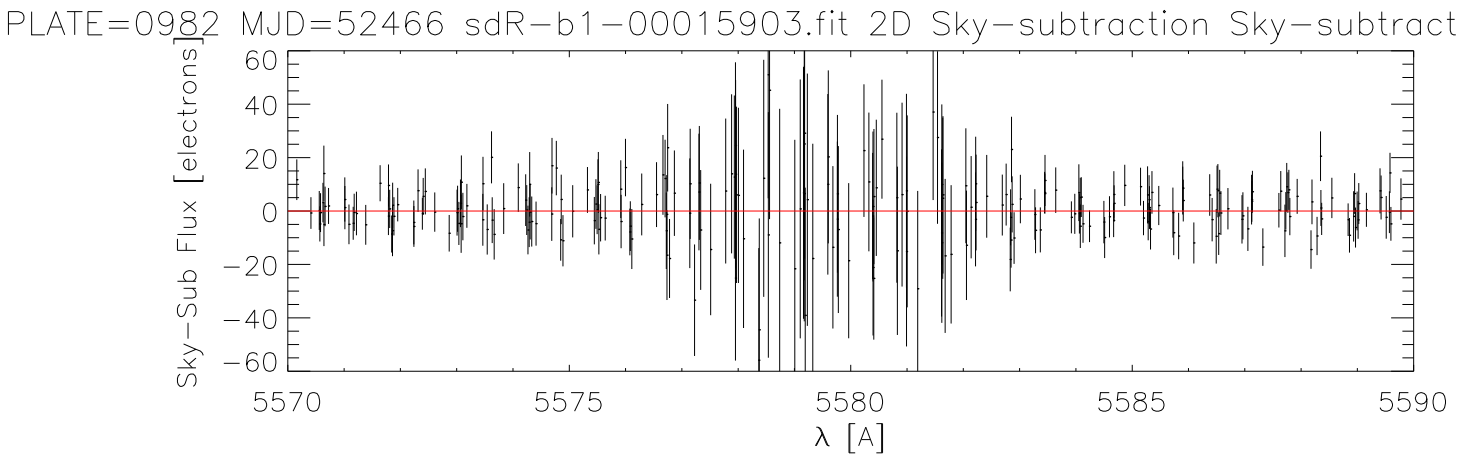

PLATE=0982 MJD=52466 sdR-b1-00015903.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

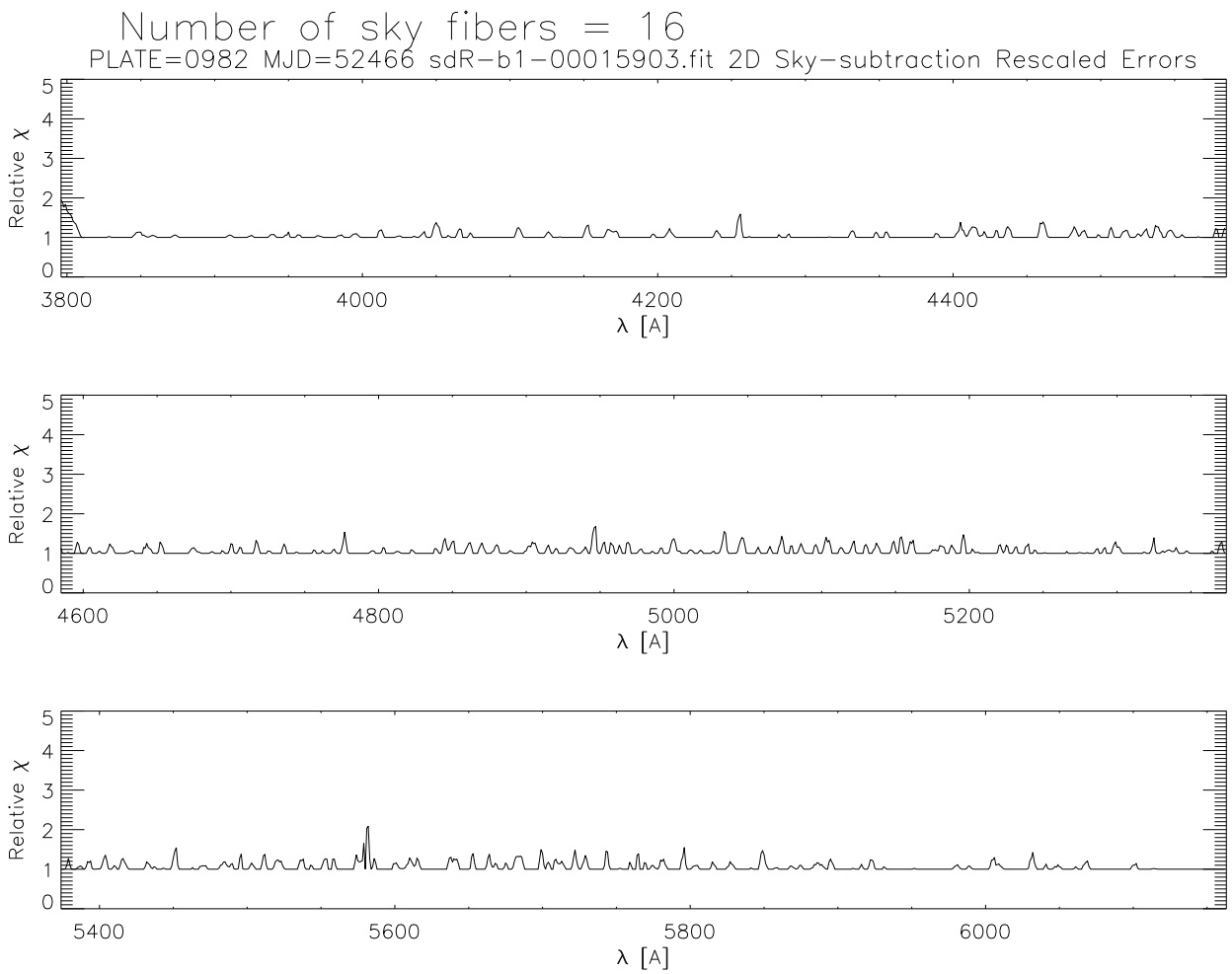

PLATE=0982 MJD=52466 sdR-b1-00015903.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

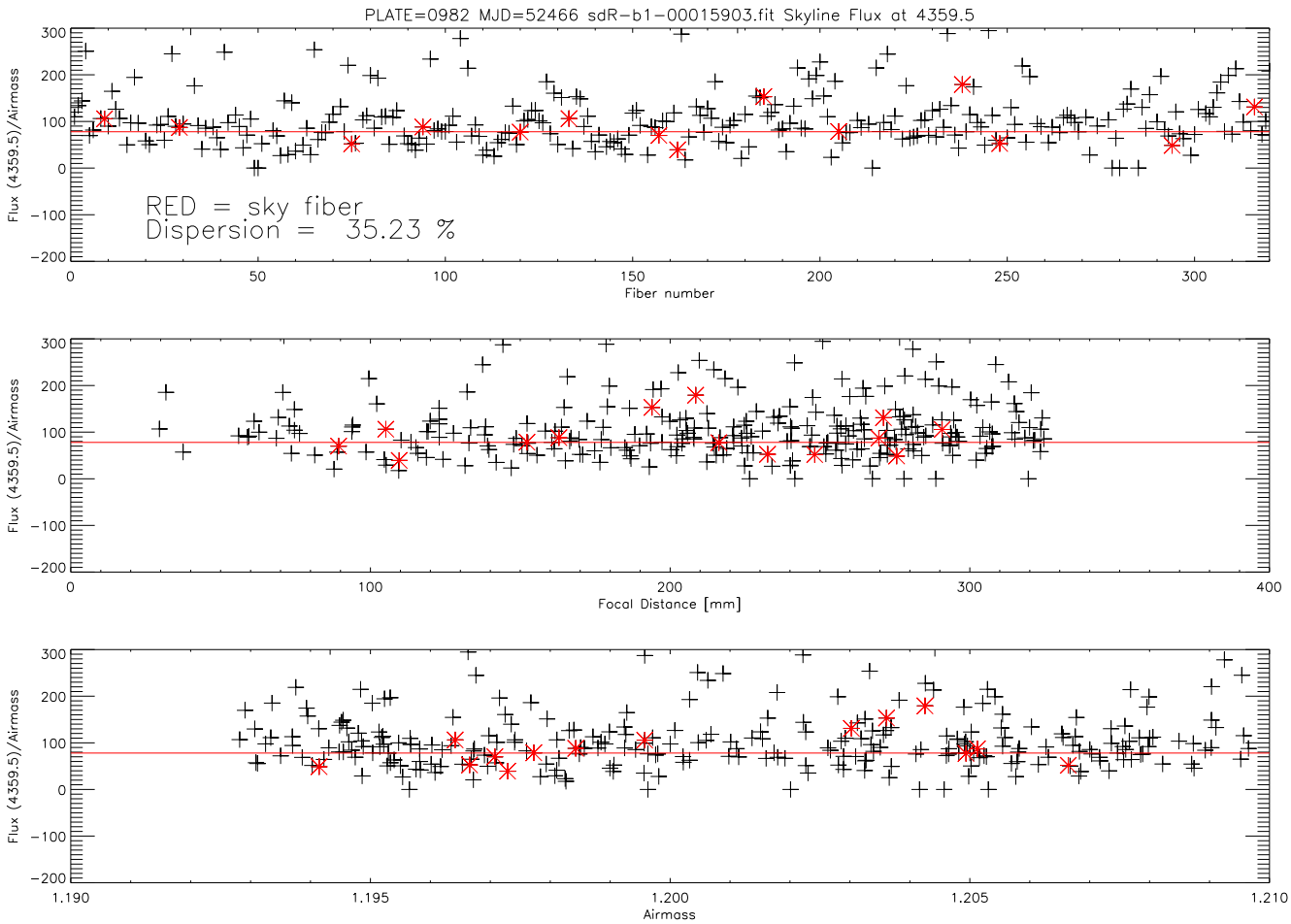

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015903.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

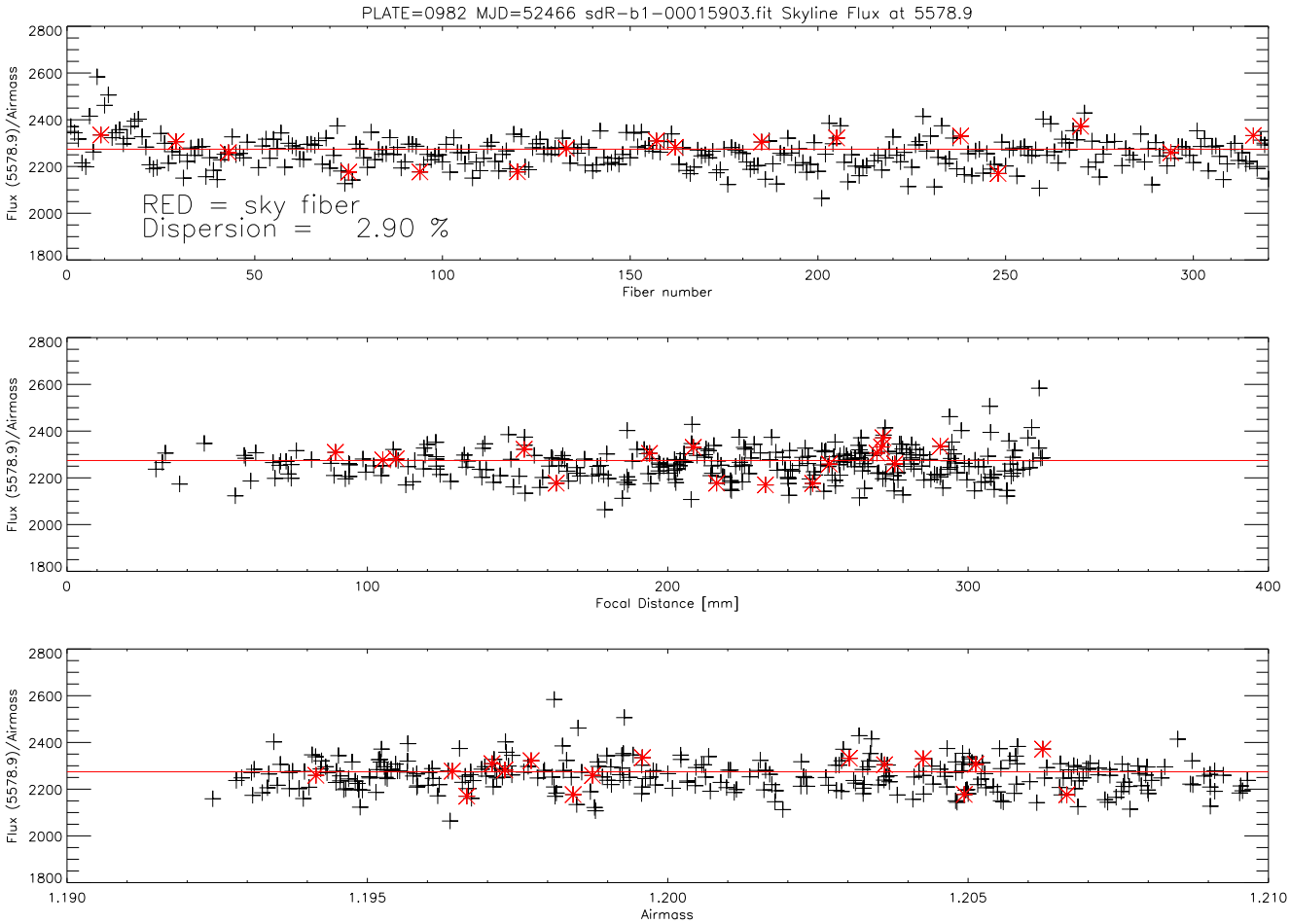

PLATE=0982 MJD=52466 sdR-b1-00015903.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

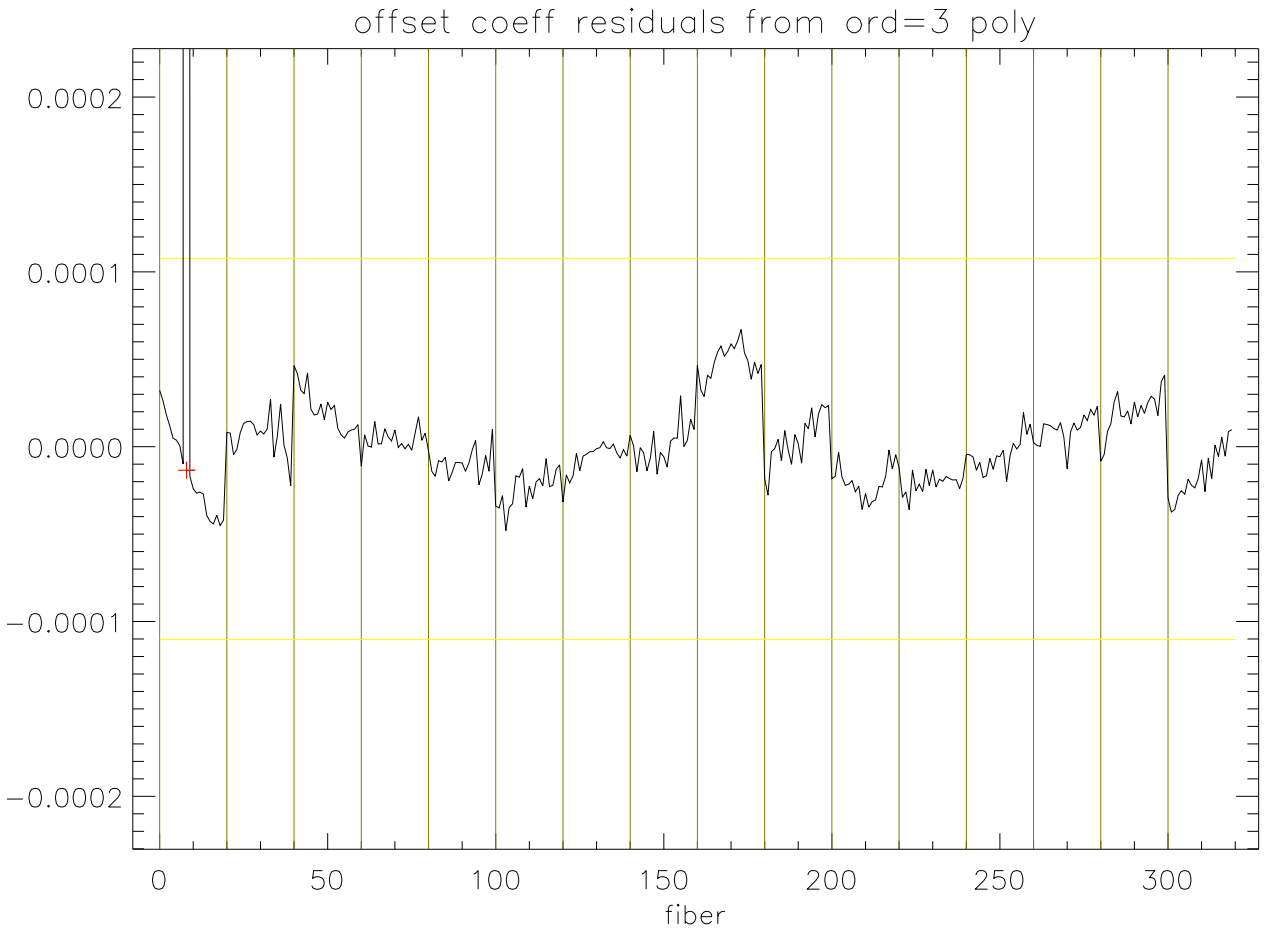

PLATE=0982 MJD=52466 sdR-b1-00015903.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

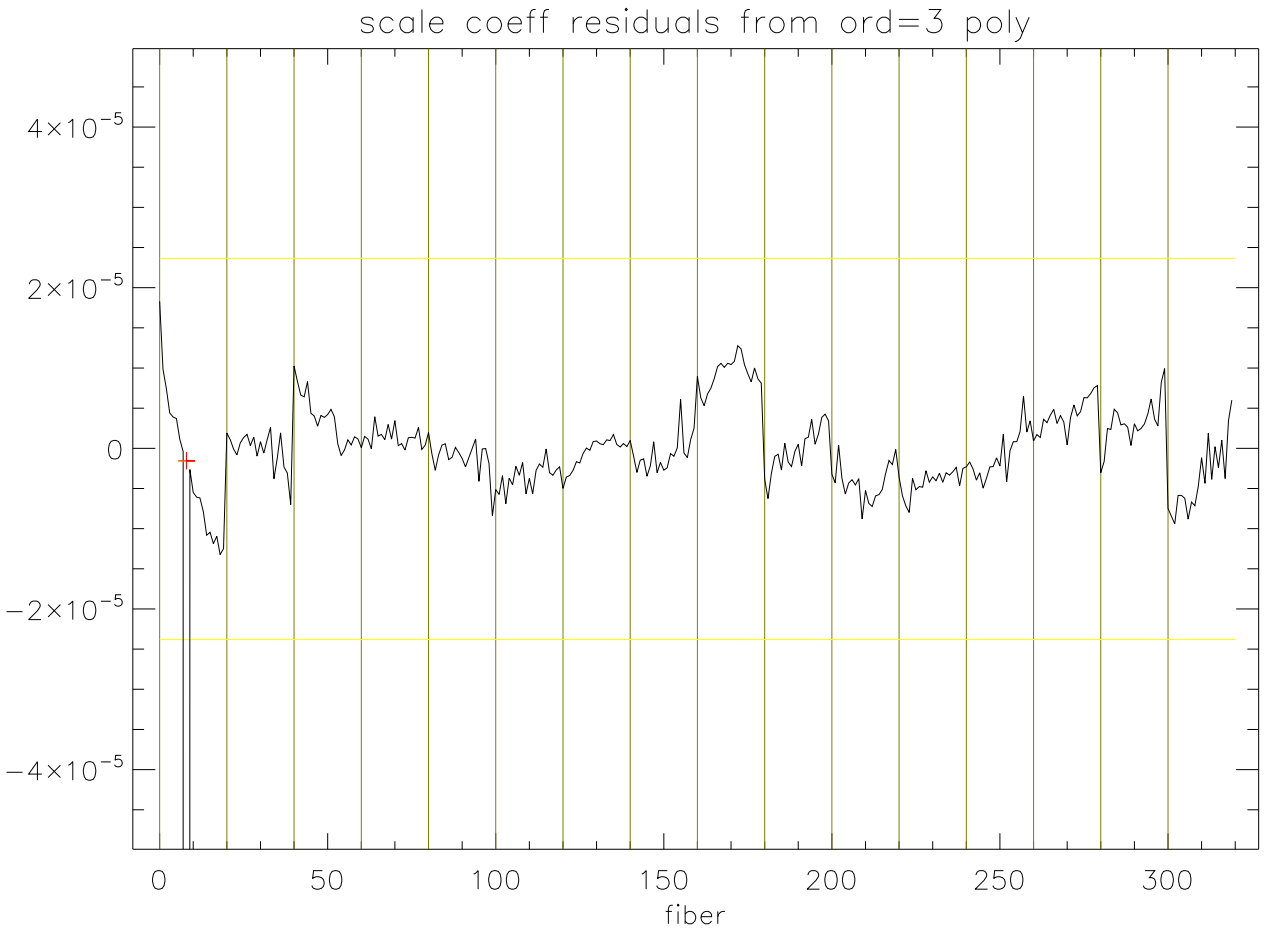

PLATE=0982 MJD=52466 sdR-b1-00015903.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
60
40
20
0
-20
-40
-60
5570
5575
5580
5585
5590
λ [A]

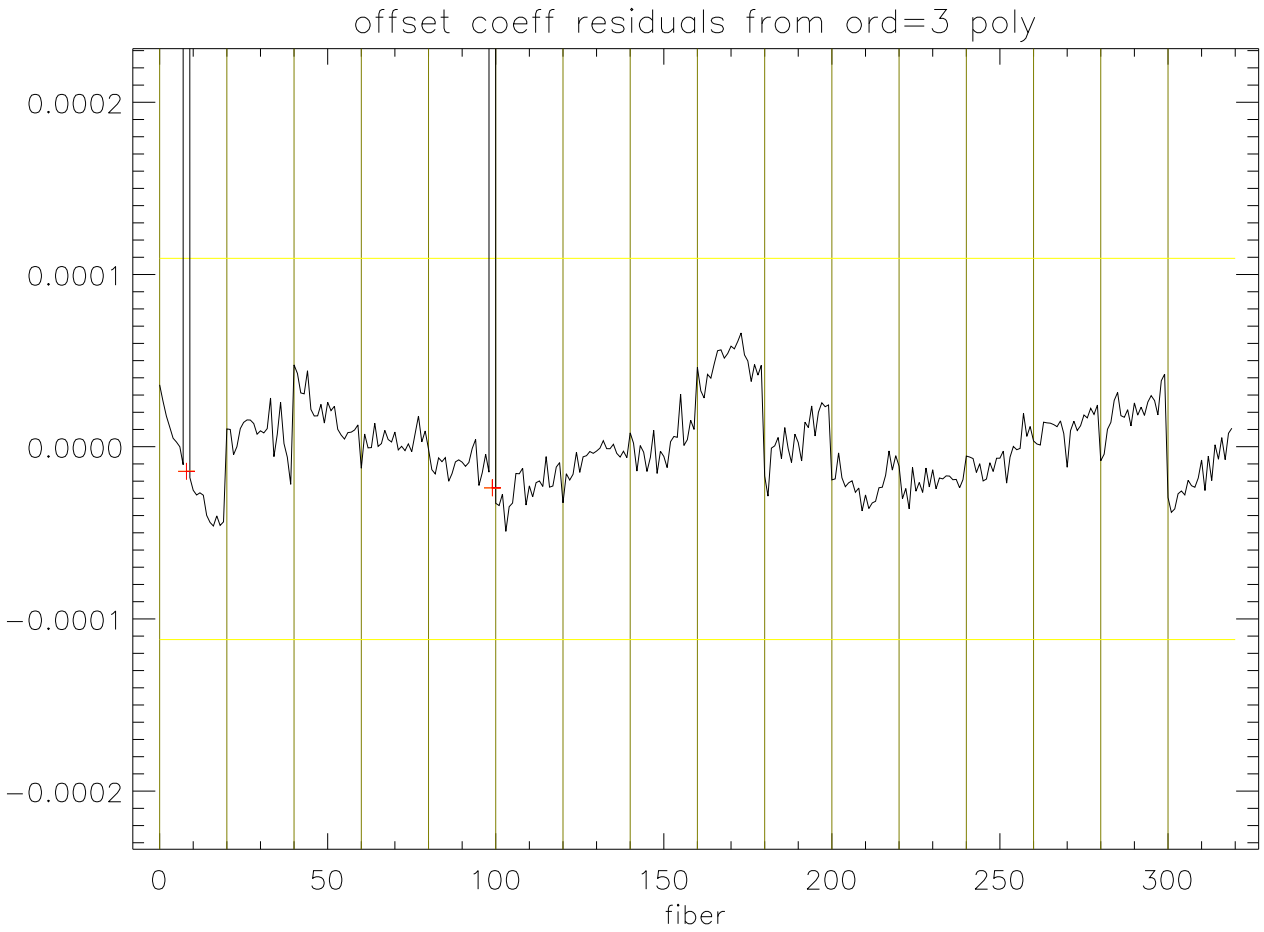

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b1-00015903.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

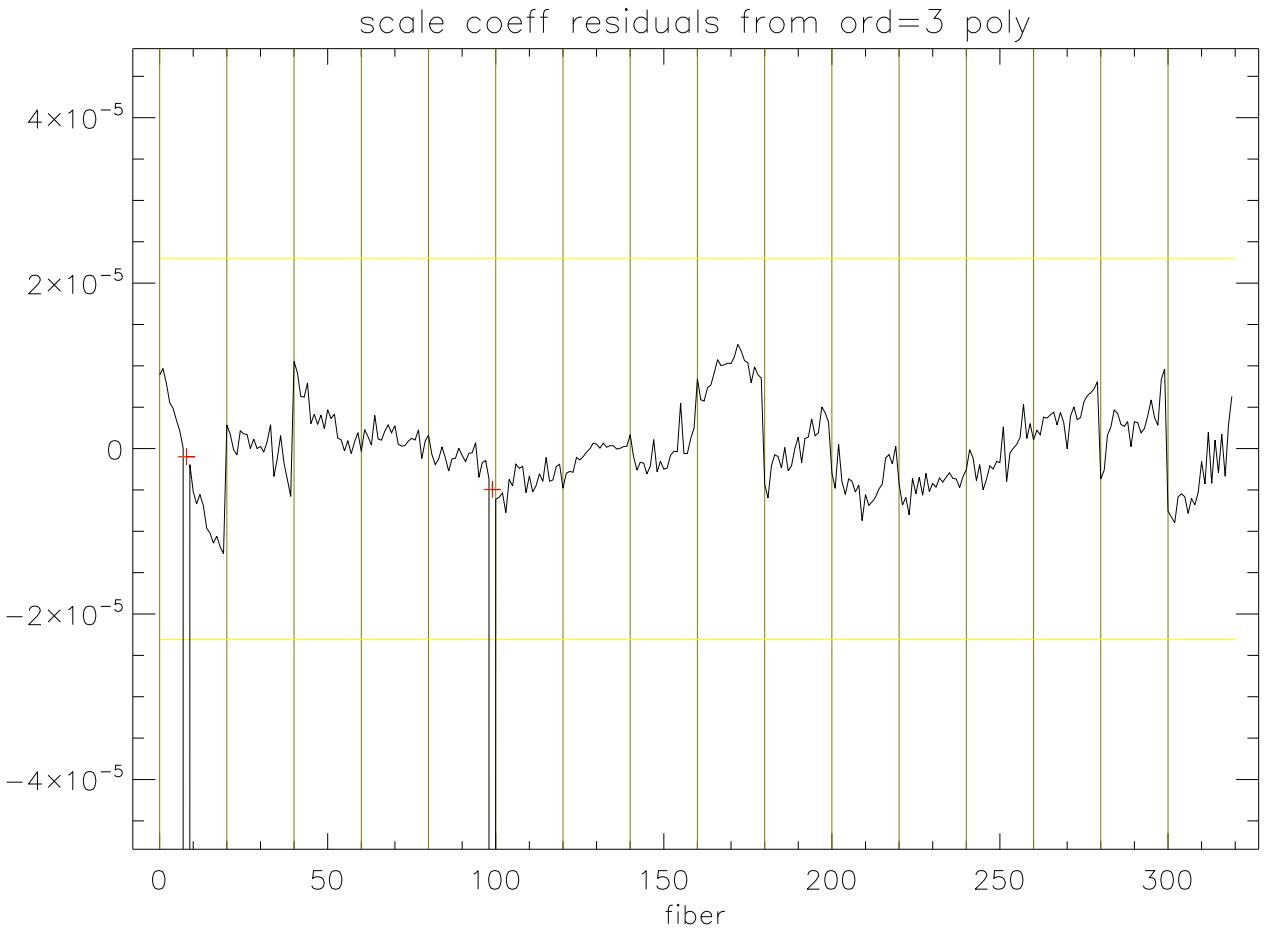

PLATE=0982 MJD=52466 sdR-b1-00015903.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 35.23 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

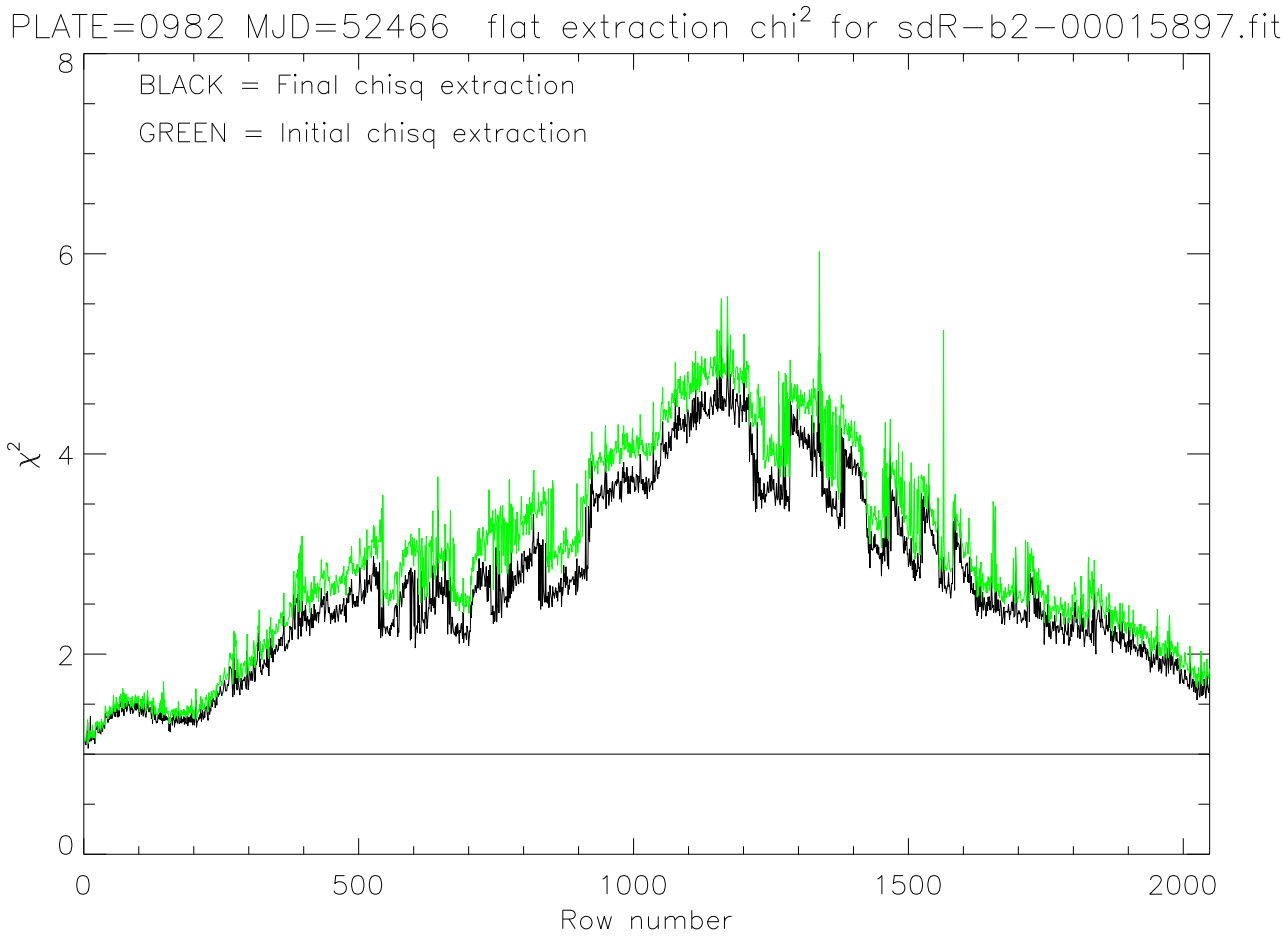

PLATE=0982 MJD=52466 sdR-b1-00015903.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.90 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

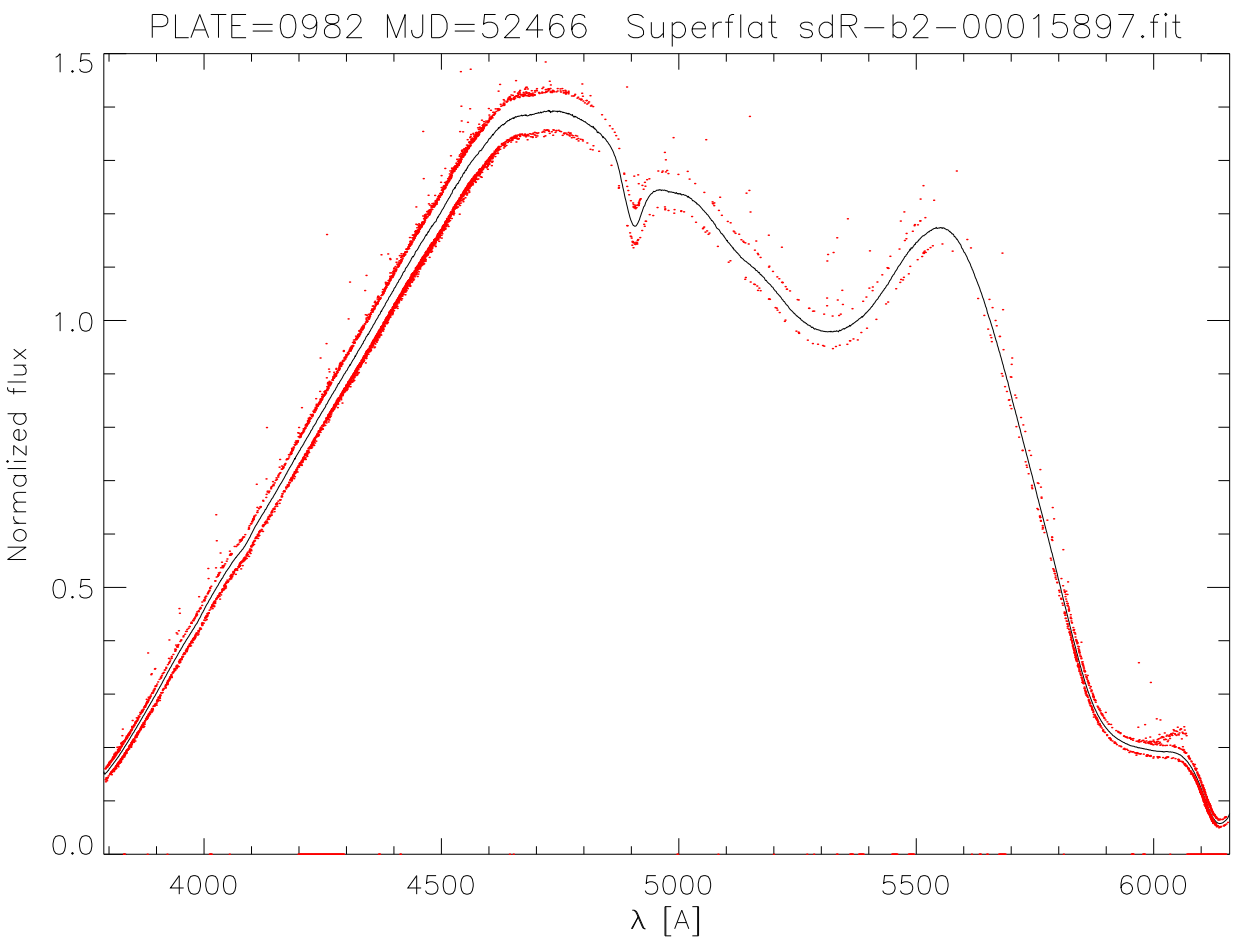

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

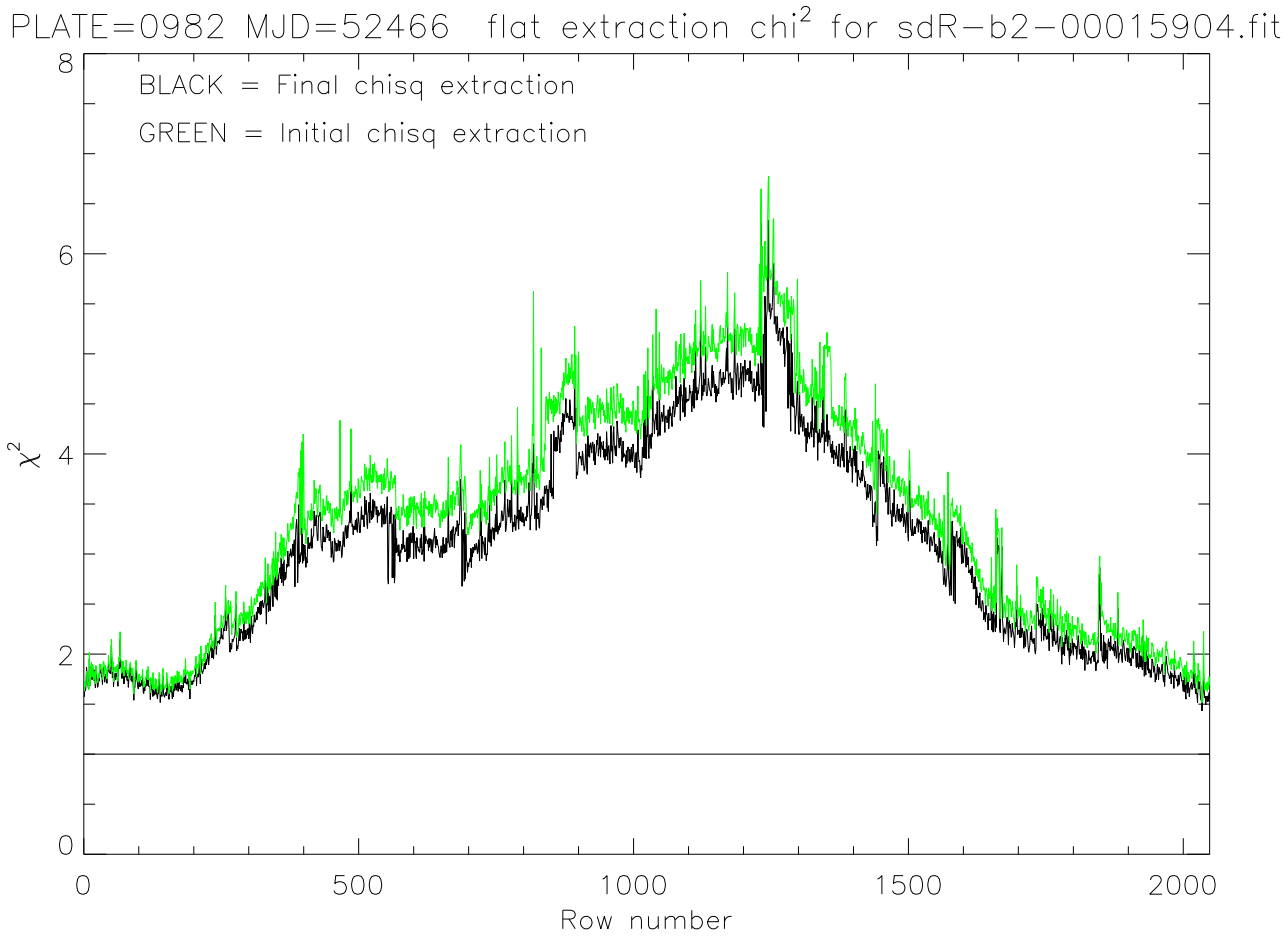

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

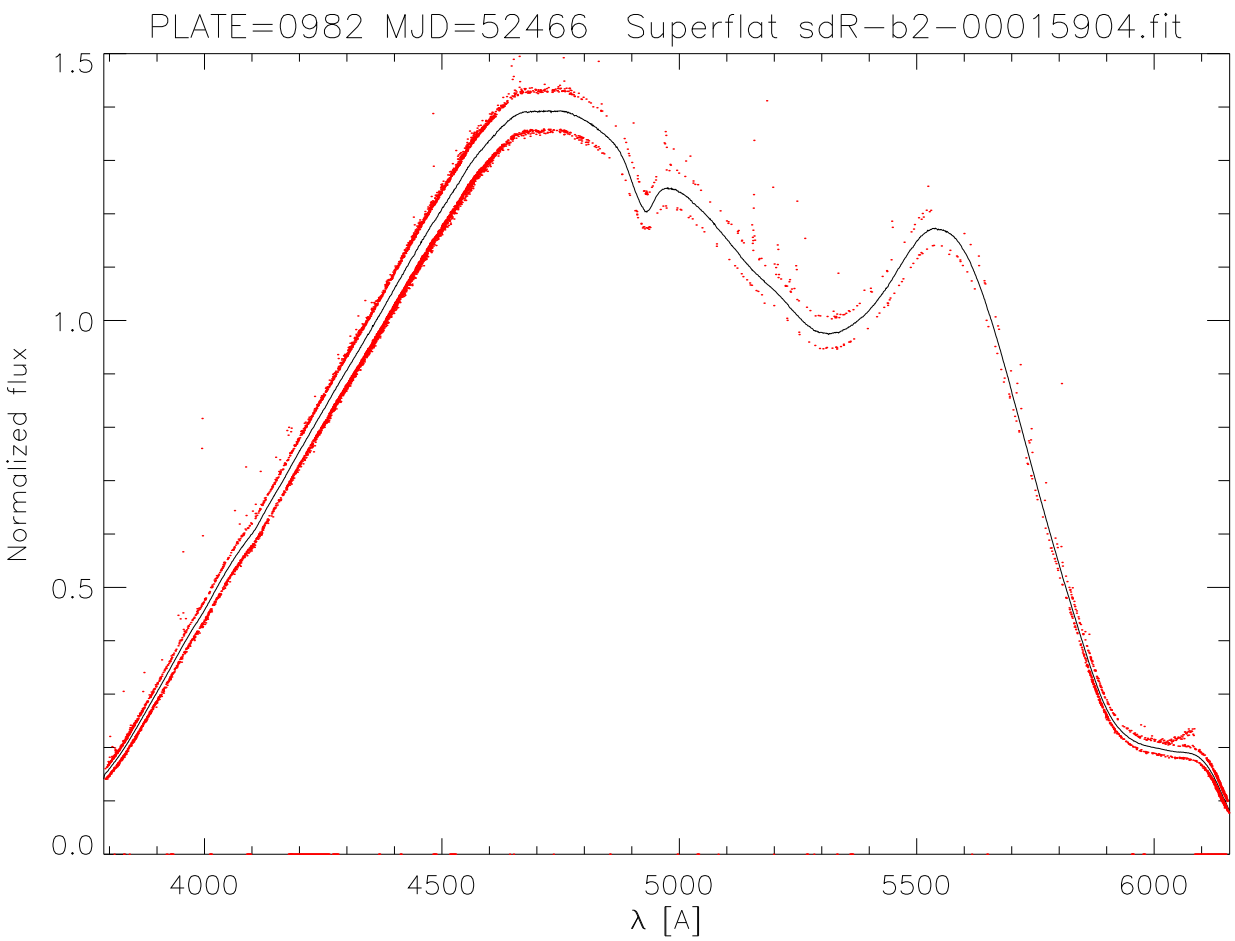

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

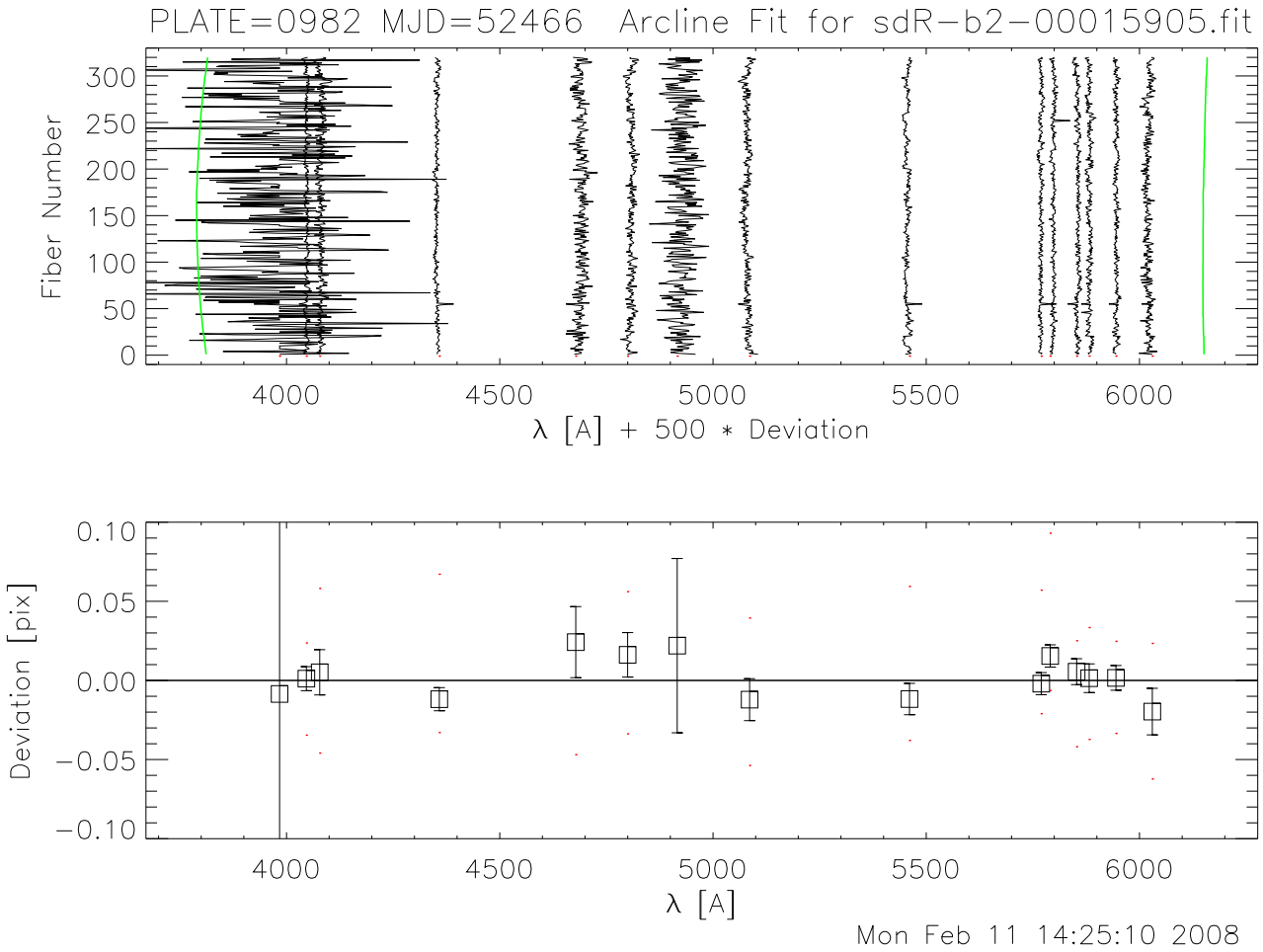

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

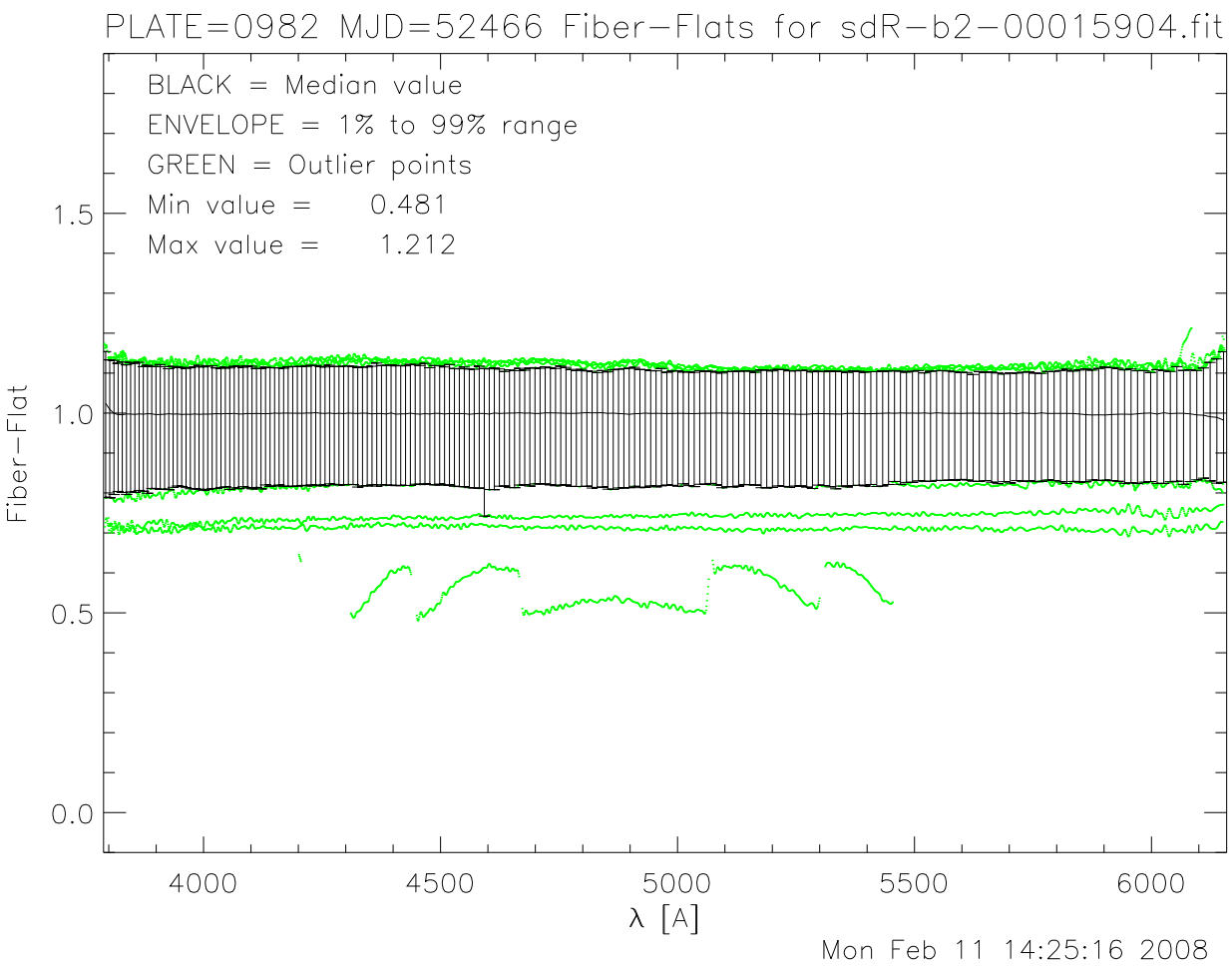

PLATE=0982 MJD=52466 flat extraction chi^2 for sdR−b2−00015897.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

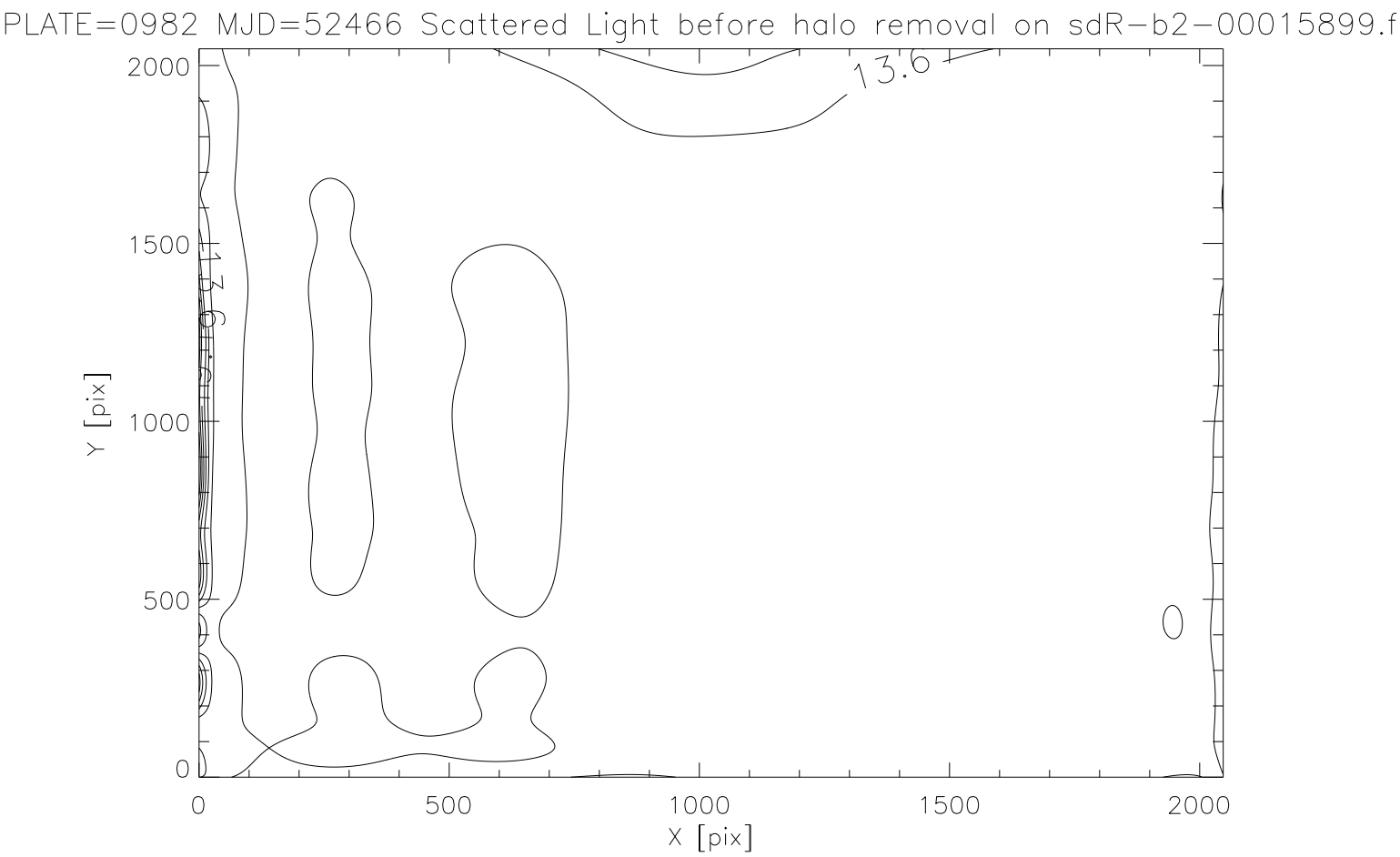

PLATE=0982 MJD=52466 Superflat sdR-b2-00015897.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

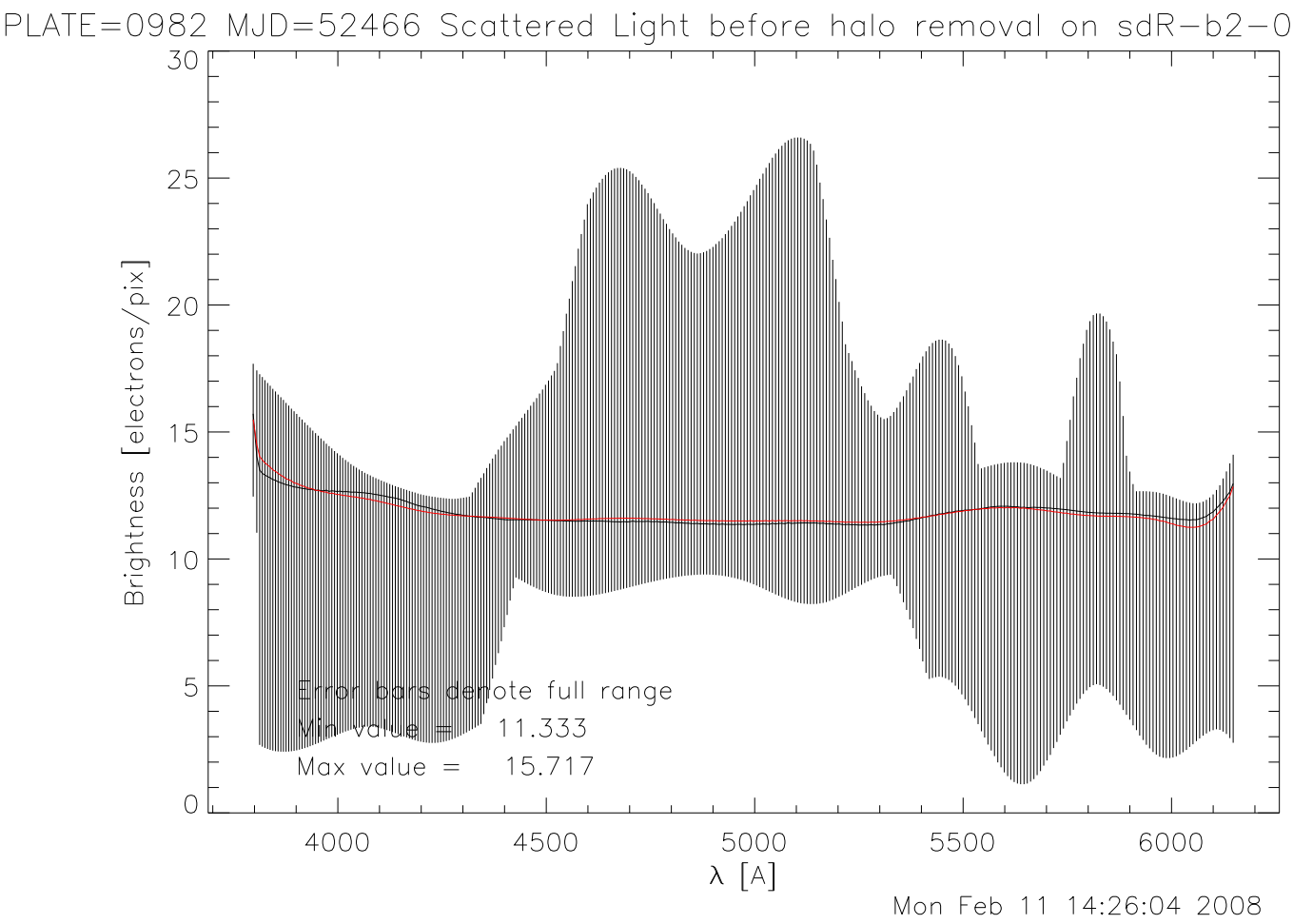

PLATE=0982 MJD=52466 flat extraction chi^2 for sdR−b2−00015904.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

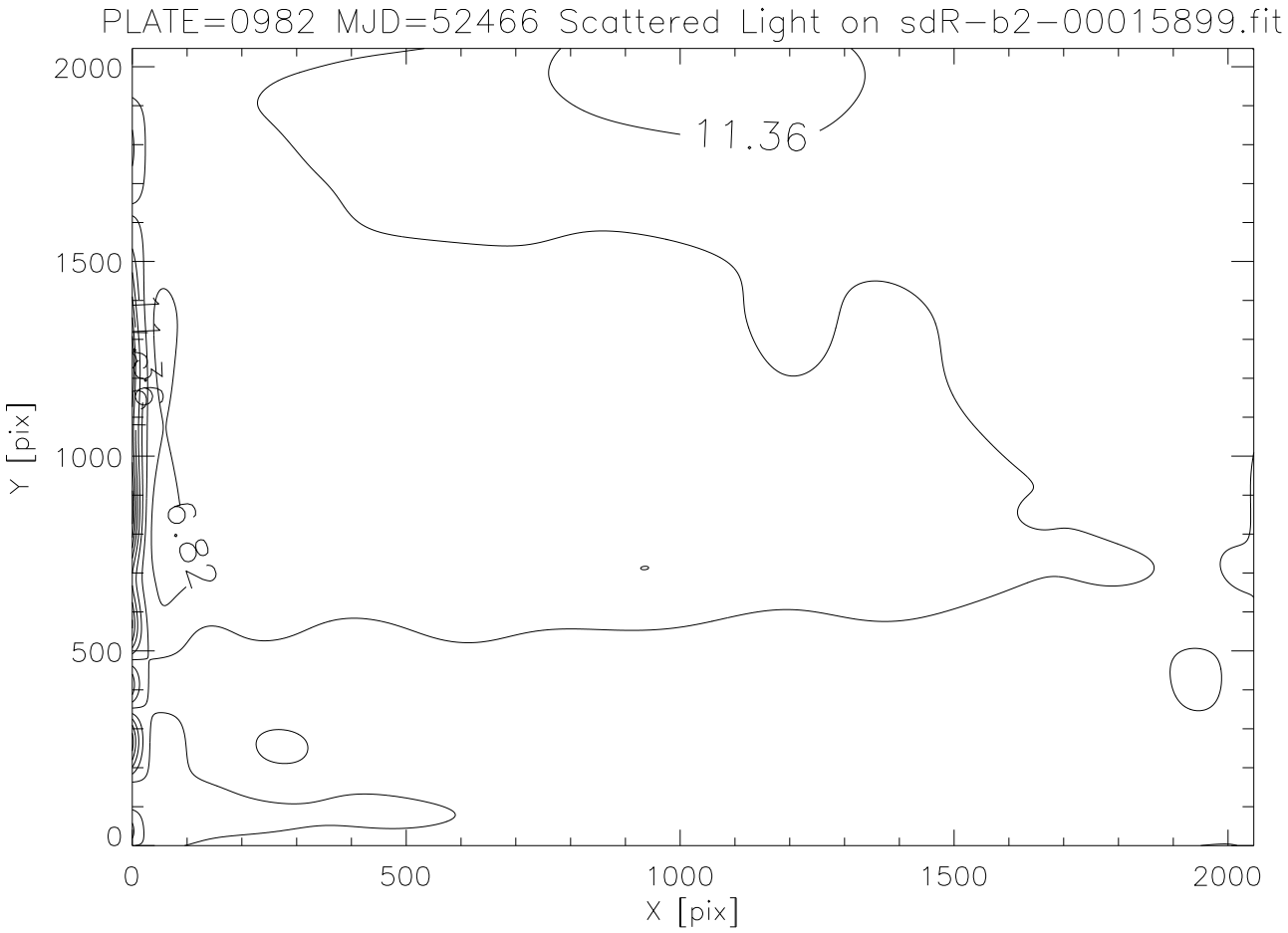

PLATE=0982 MJD=52466 Superflat sdR-b2-00015904.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

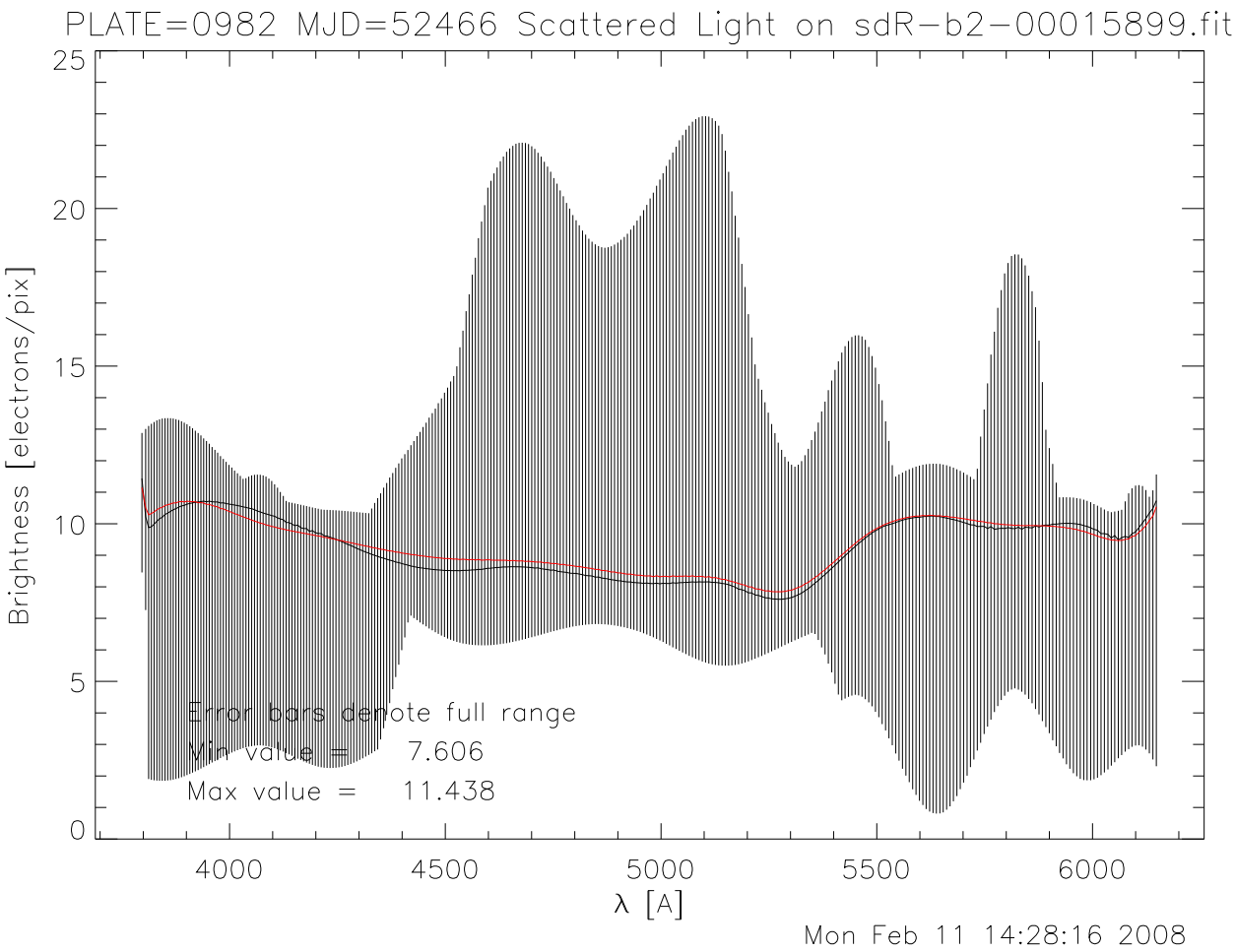

PLATE=0982 MJD=52466 Arcline Fit for sdR-b2-00015905.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:25:10 2008

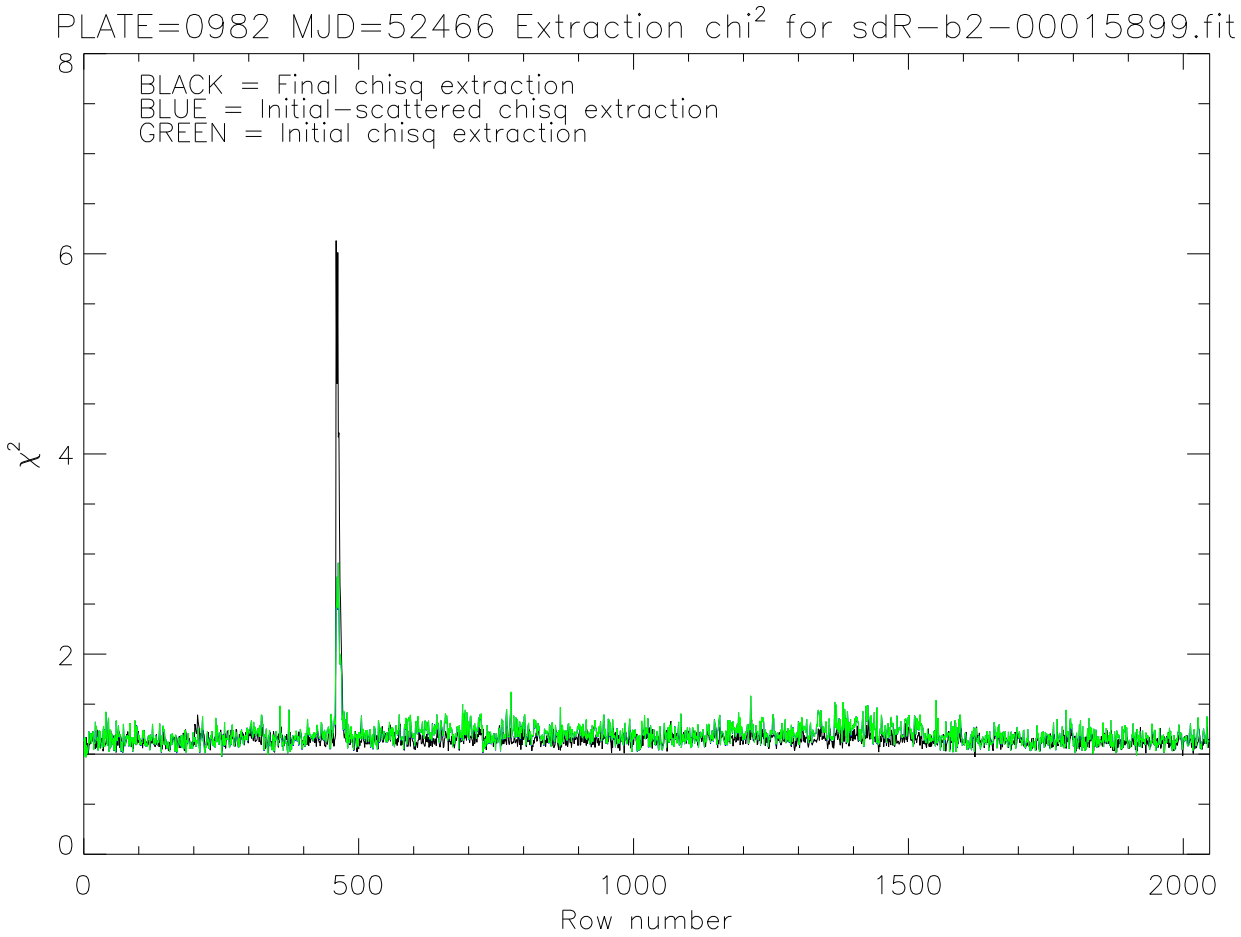

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b2-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.481
Max value = 1.212
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:25:16 2008

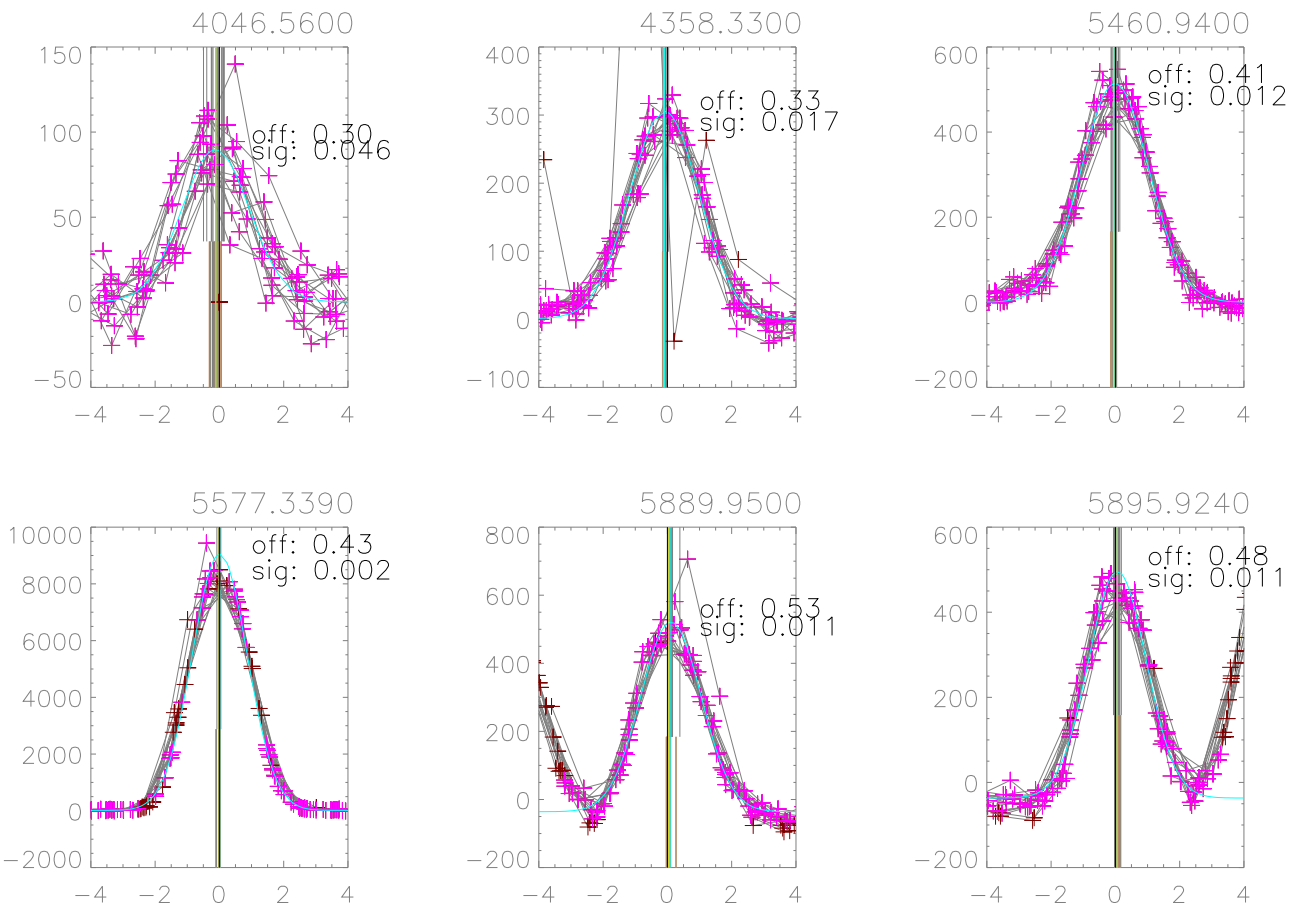

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b2-00015899.f
13.6
13.6
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

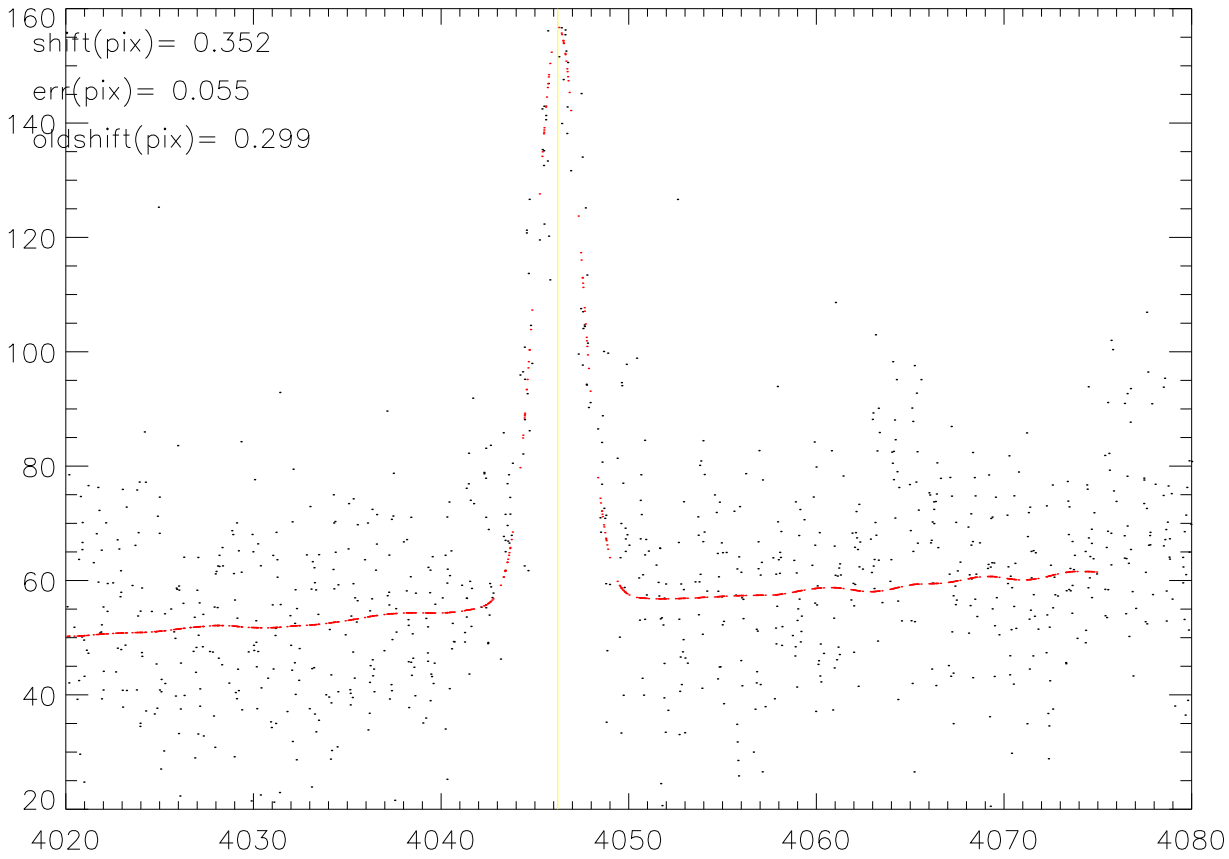

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b2-00015899.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.333
Max value = 15.717
Mon Feb 11 14:26:04 2008

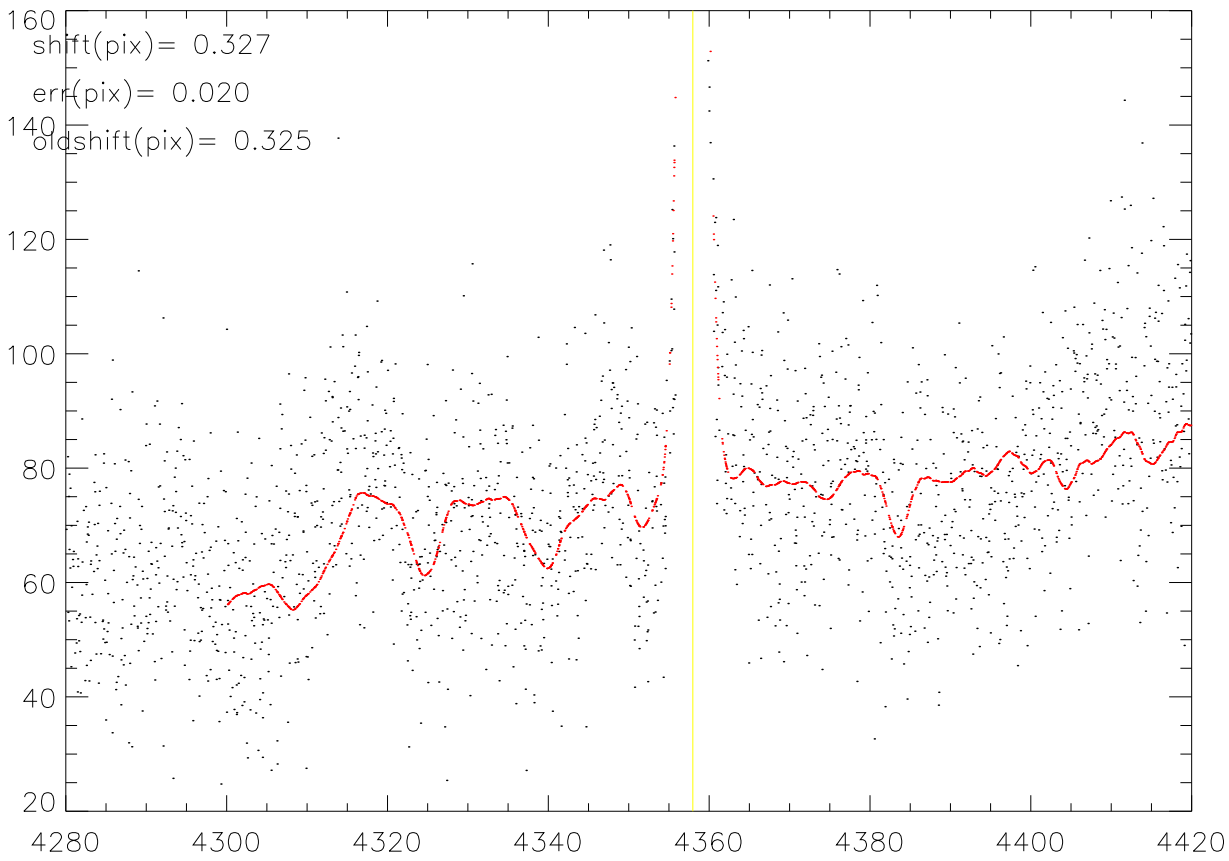

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015899.fit
11.36
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

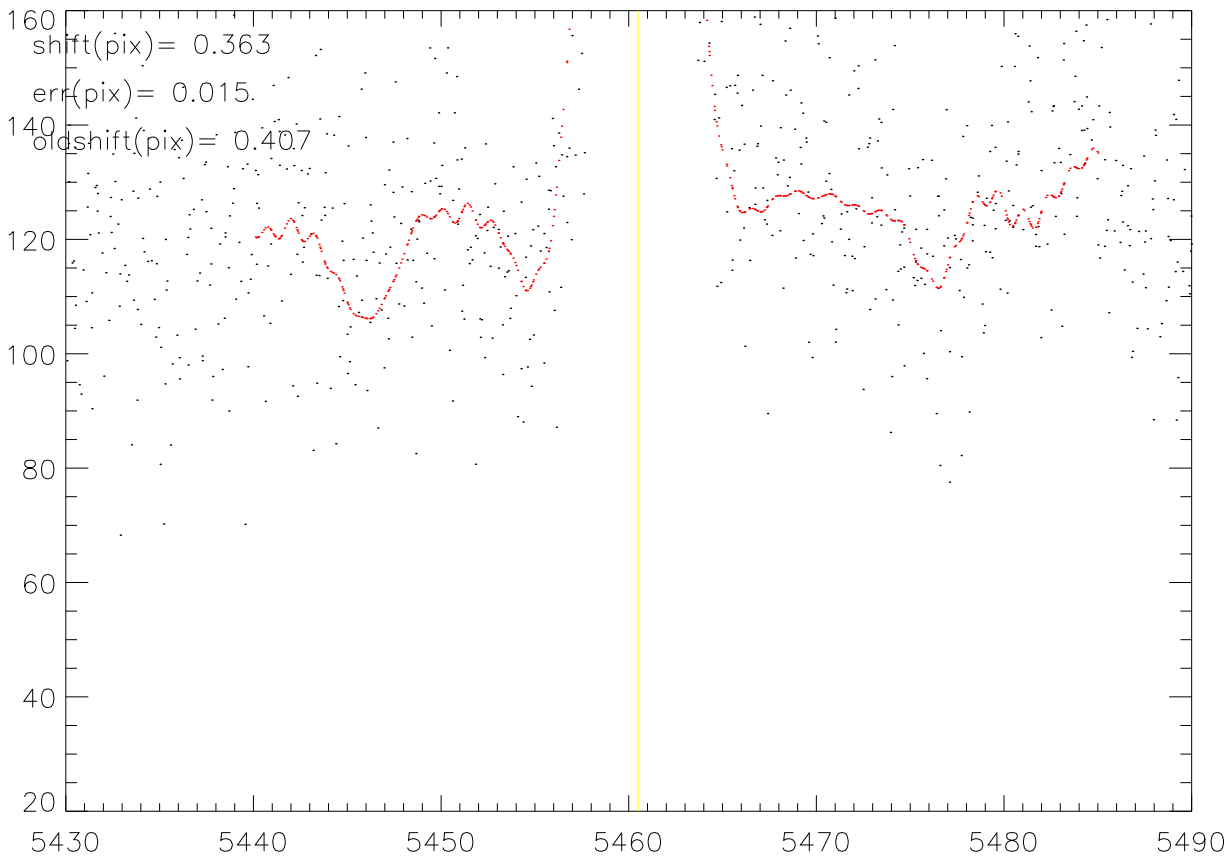

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015899.fit
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 7.606
Max value = 11.438
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:28:16 2008

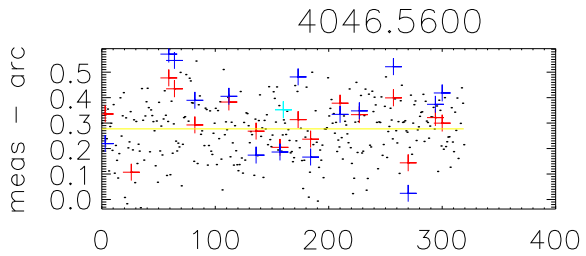

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-b2-00015899.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

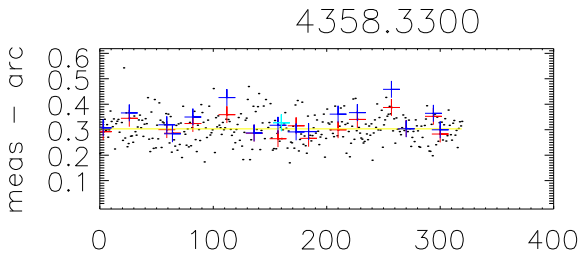

4046.5600
off: 0.30
sig: 0.046
4358.3300
off: 0.33
sig: 0.017
5460.9400
off: 0.41
sig: 0.012
5577.3390
off: 0.43
sig: 0.002
5889.9500
off: 0.53
sig: 0.011
5895.9240
off: 0.48
sig: 0.011

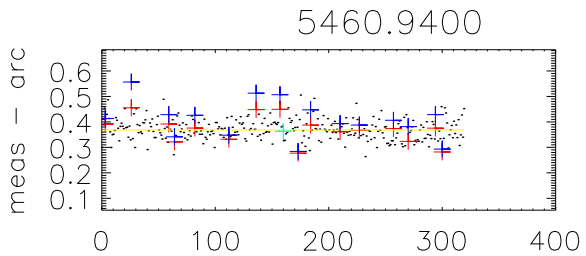

shift(pix)= 0.352
err(pix)= 0.055
oldshift(pix)= 0.299
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

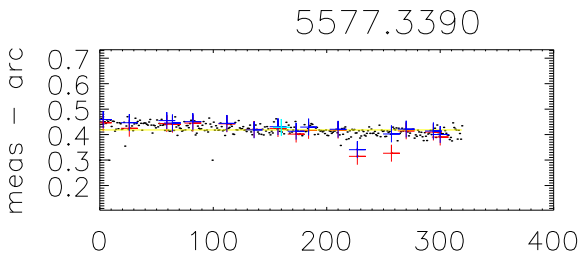

shift(pix)= 0.327
err(pix)= 0.020
oldshift(pix)= 0.325
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

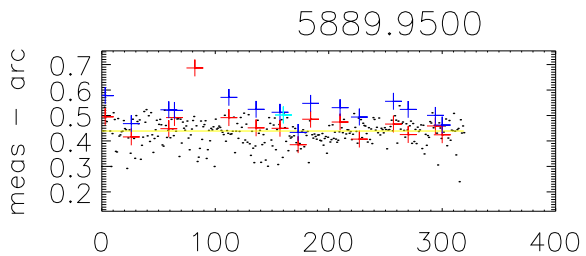

shift(pix)= 0.363
err(pix)= 0.015
oldshift(pix)= 0.407
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

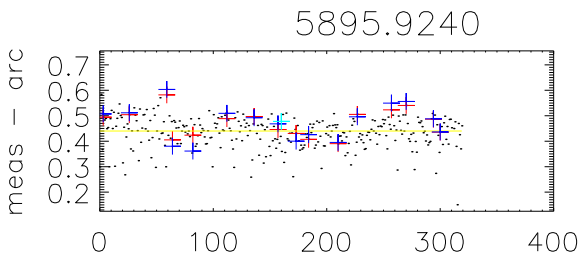

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

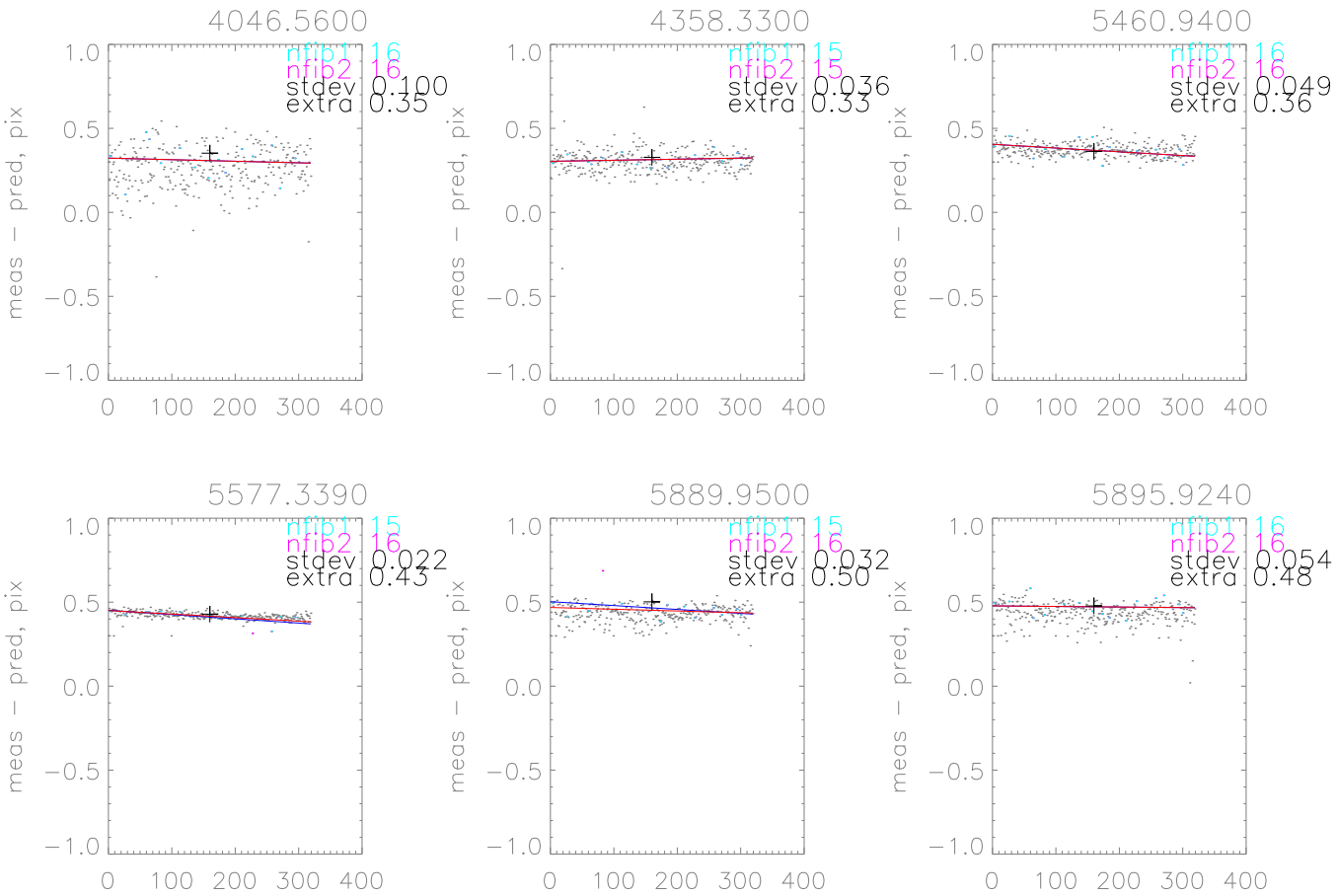

4358.3300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

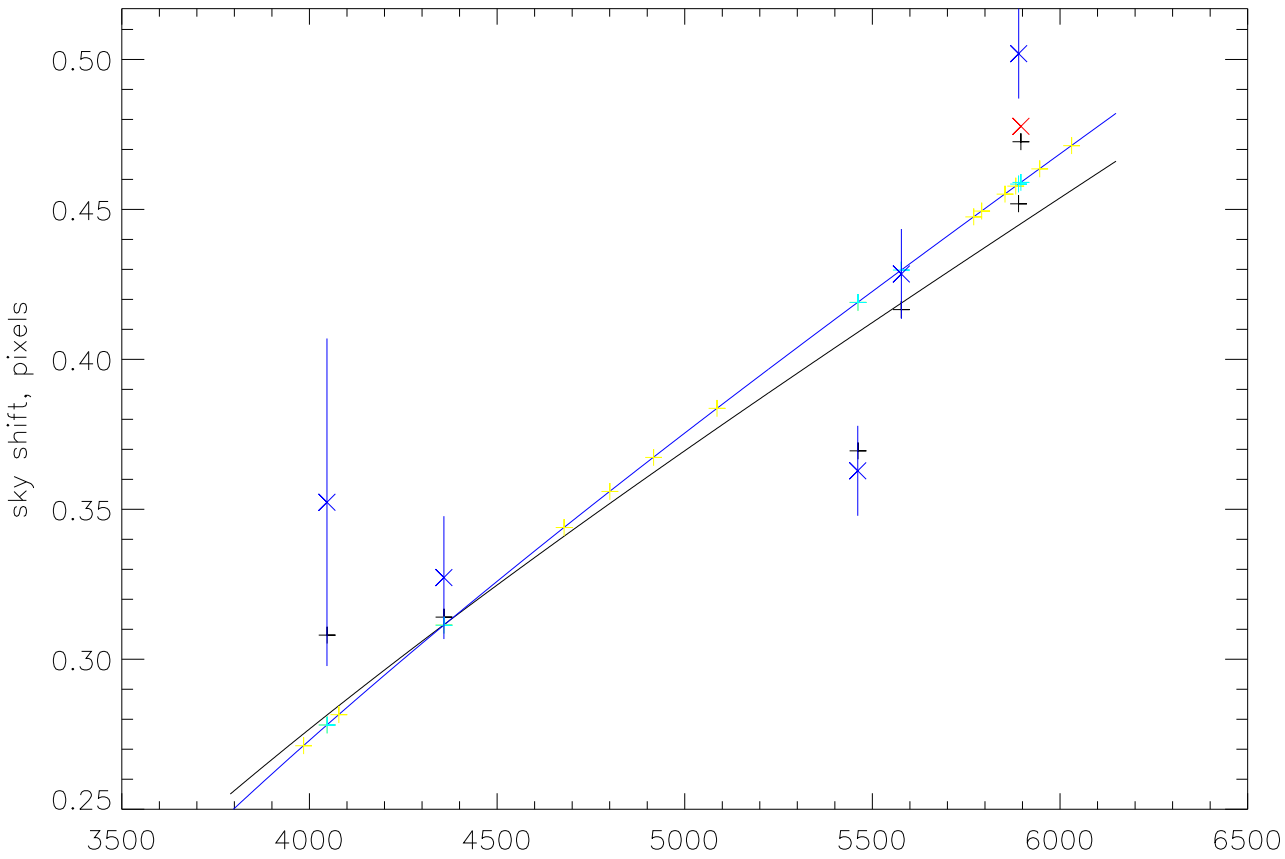

5460.9400
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

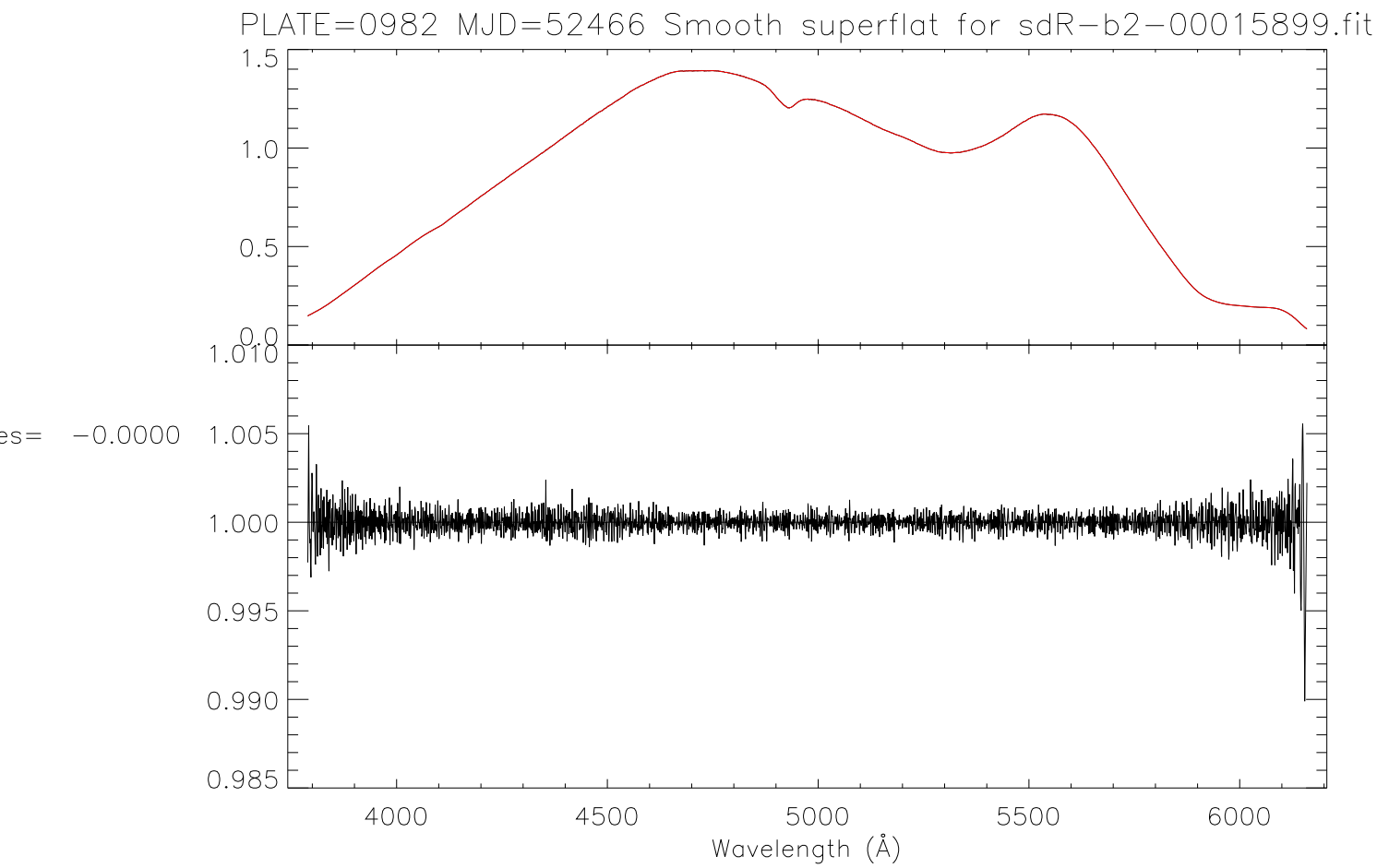

5577.3390
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400


5889.9500
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

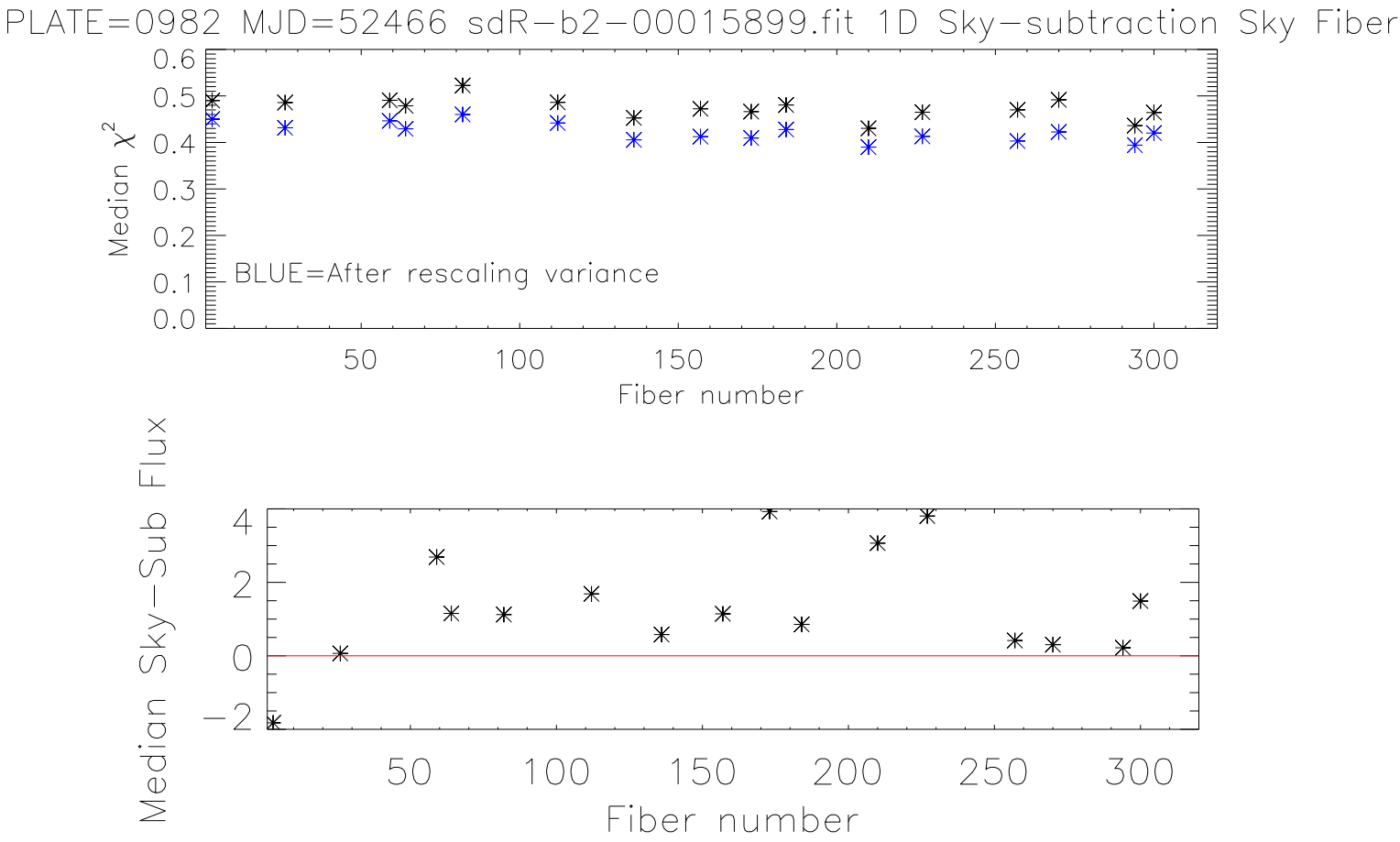

5895.9240
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

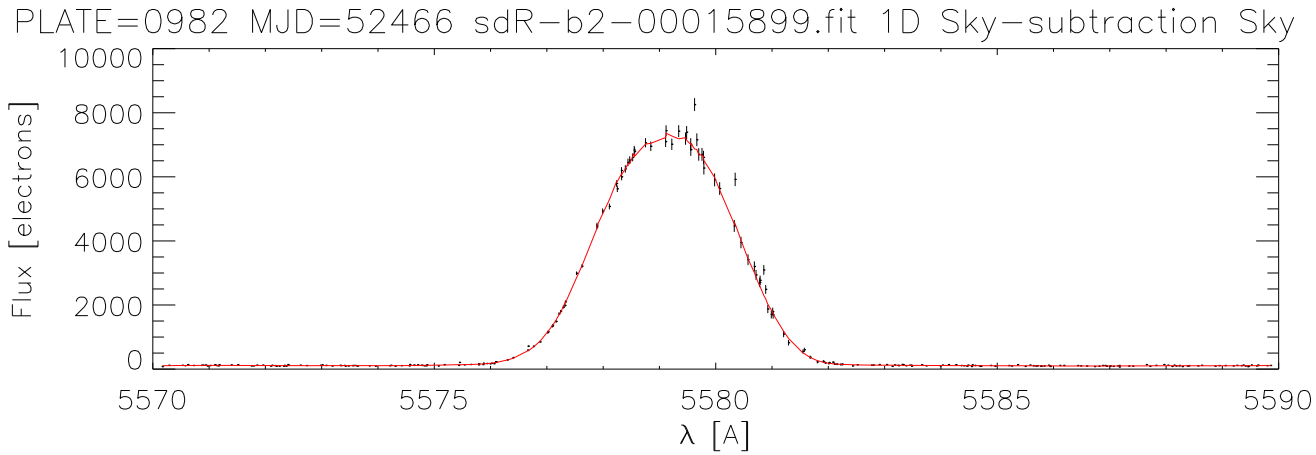

4046.5600
nfib1 16
nfib2 16
stdev 0.100
extra 0.35
4358.3300
nfib1 15
nfib2 15
stdev 0.036
extra 0.33
5460.9400
nfib1 16
nfib2 16
stdev 0.049
extra 0.36
5577.3390
nfib1 15
nfib2 16
stdev 0.022
extra 0.43
5889.9500
nfib1 15
nfib2 16
stdev 0.032
extra 0.50
5895.9240
nfib1 16
nfib2 16
stdev 0.054
extra 0.48
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

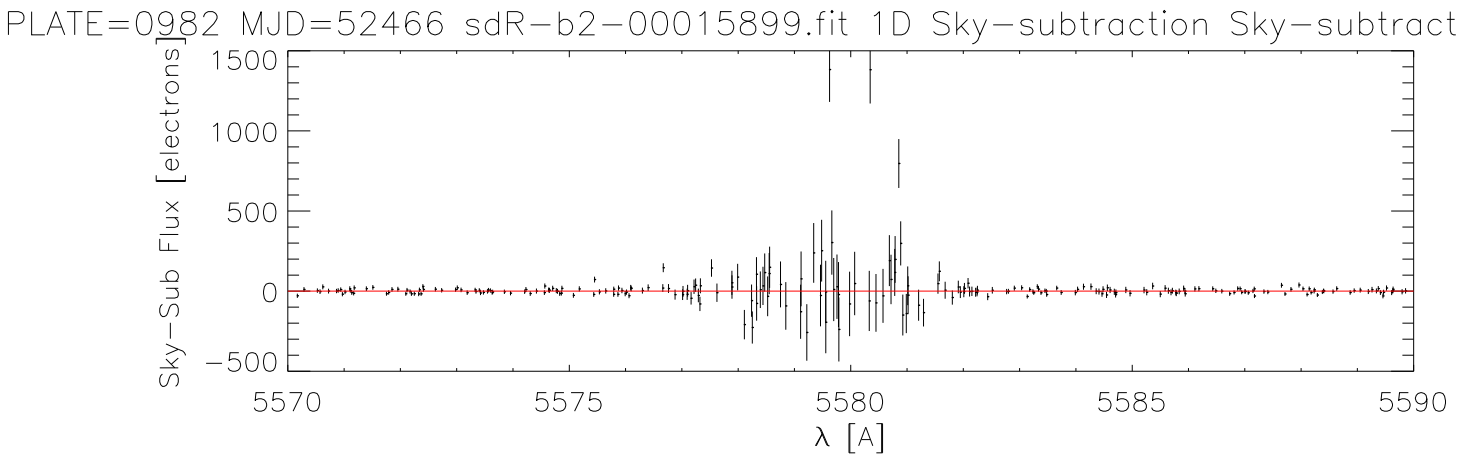

sky shift, pixels
0.50
0.45
0.40
0.35
0.30
0.25
3500
4000
4500
5000
5500
6000
6500

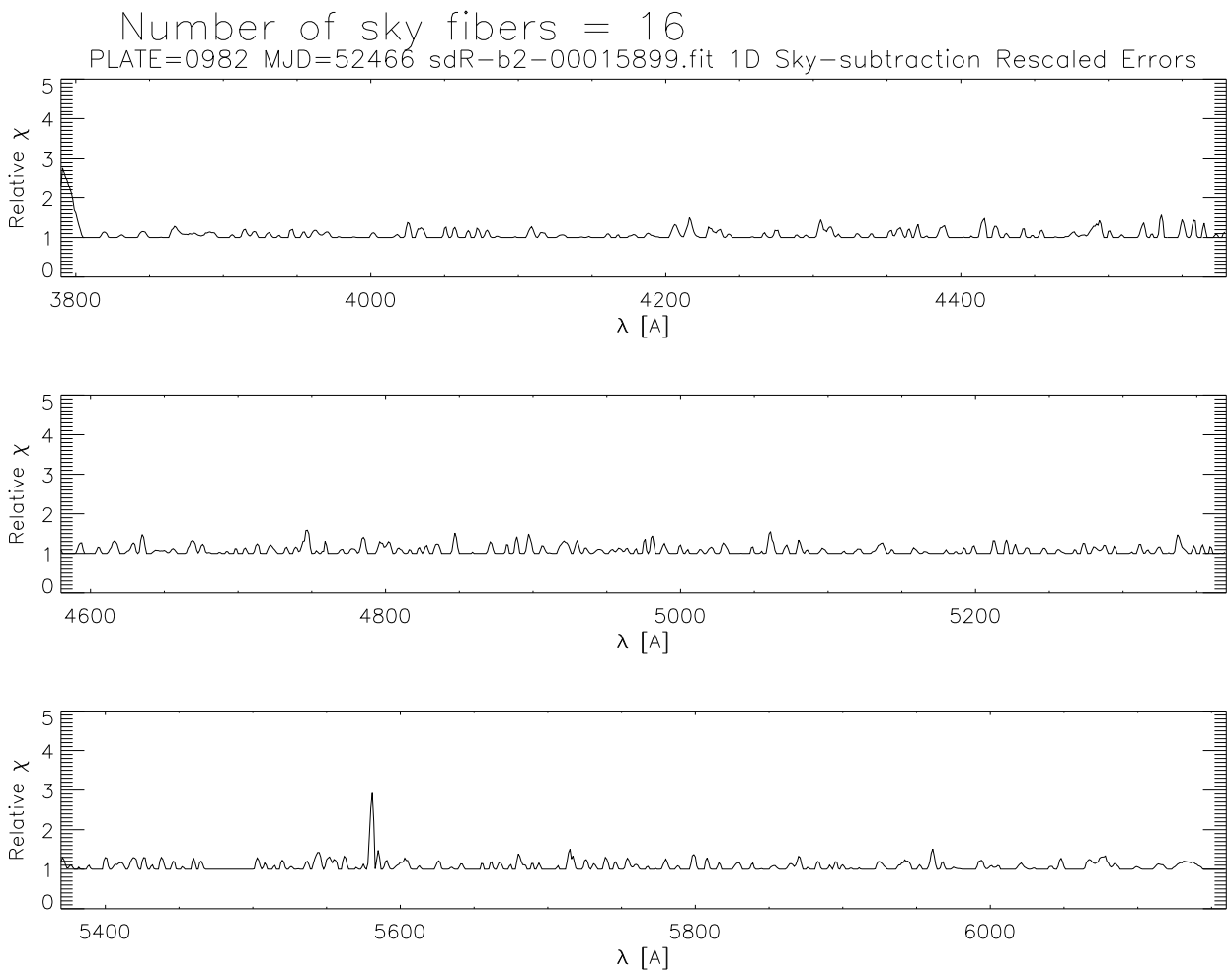

PLATE=0982 MJD=52466 Smooth superflat for sdR-b2-00015899.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

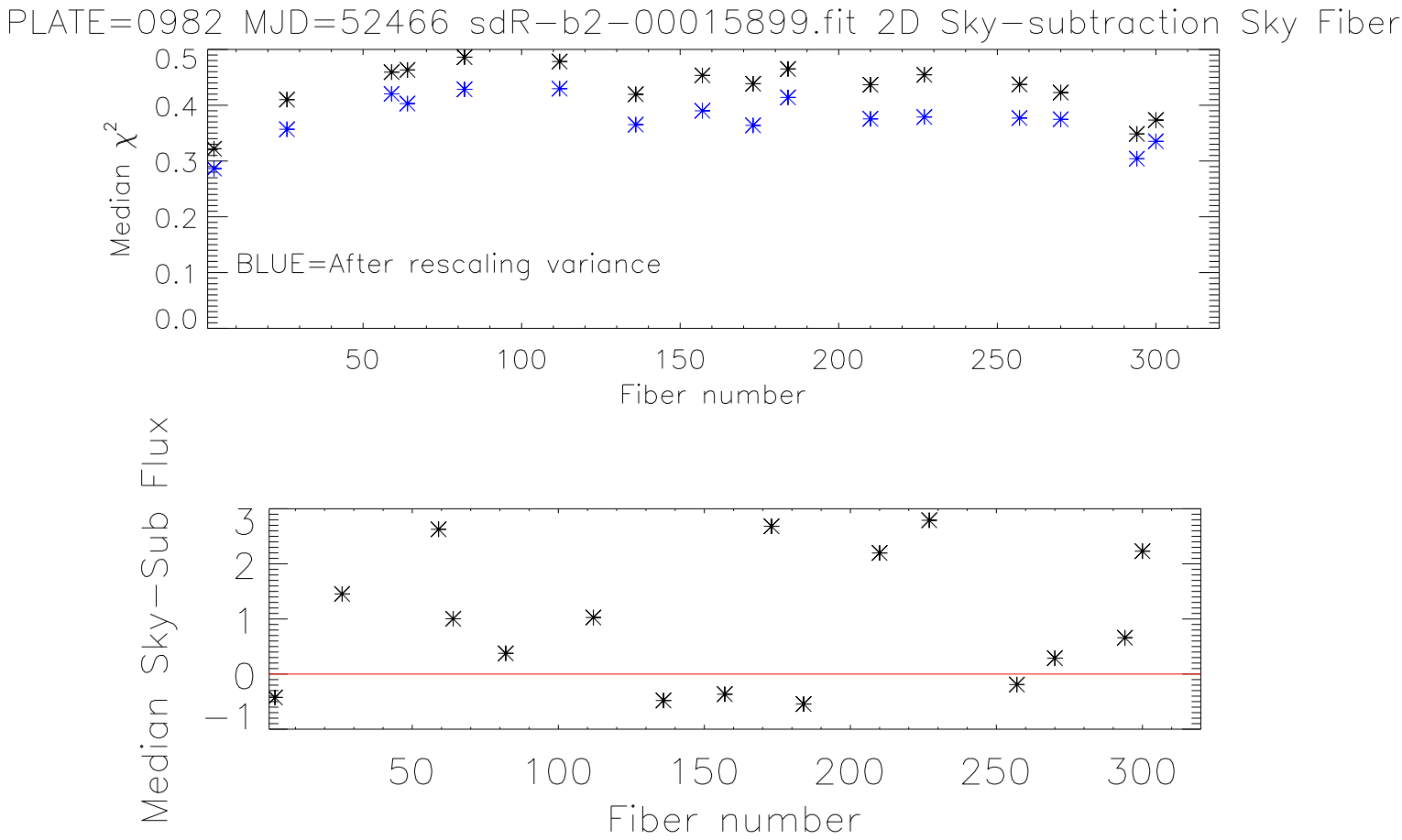
es= −0.0000

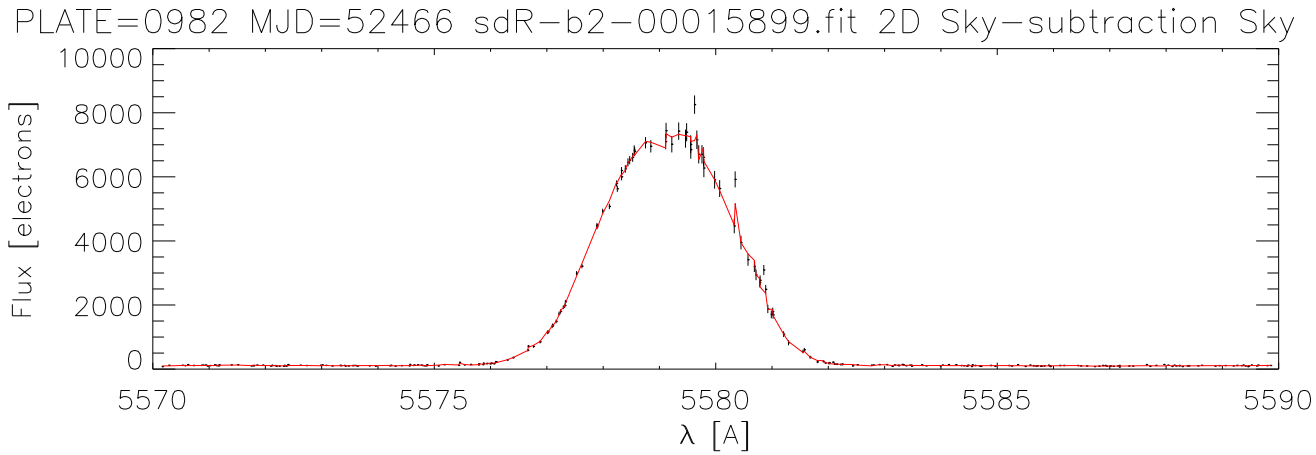

PLATE=0982 MJD=52466 sdR-b2-00015899.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

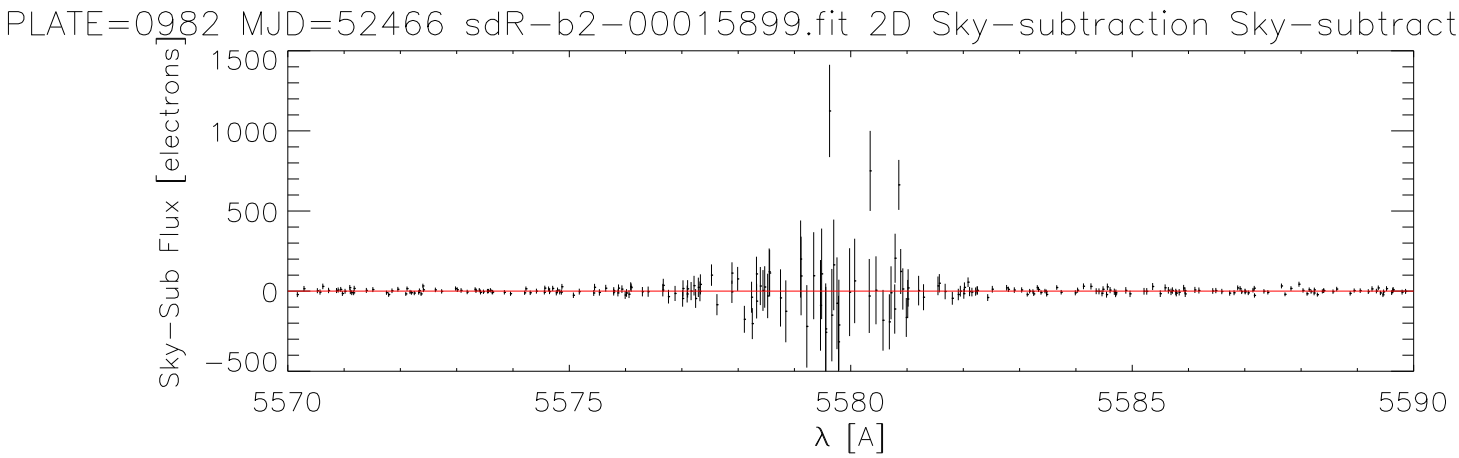

PLATE=0982 MJD=52466 sdR-b2-00015899.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

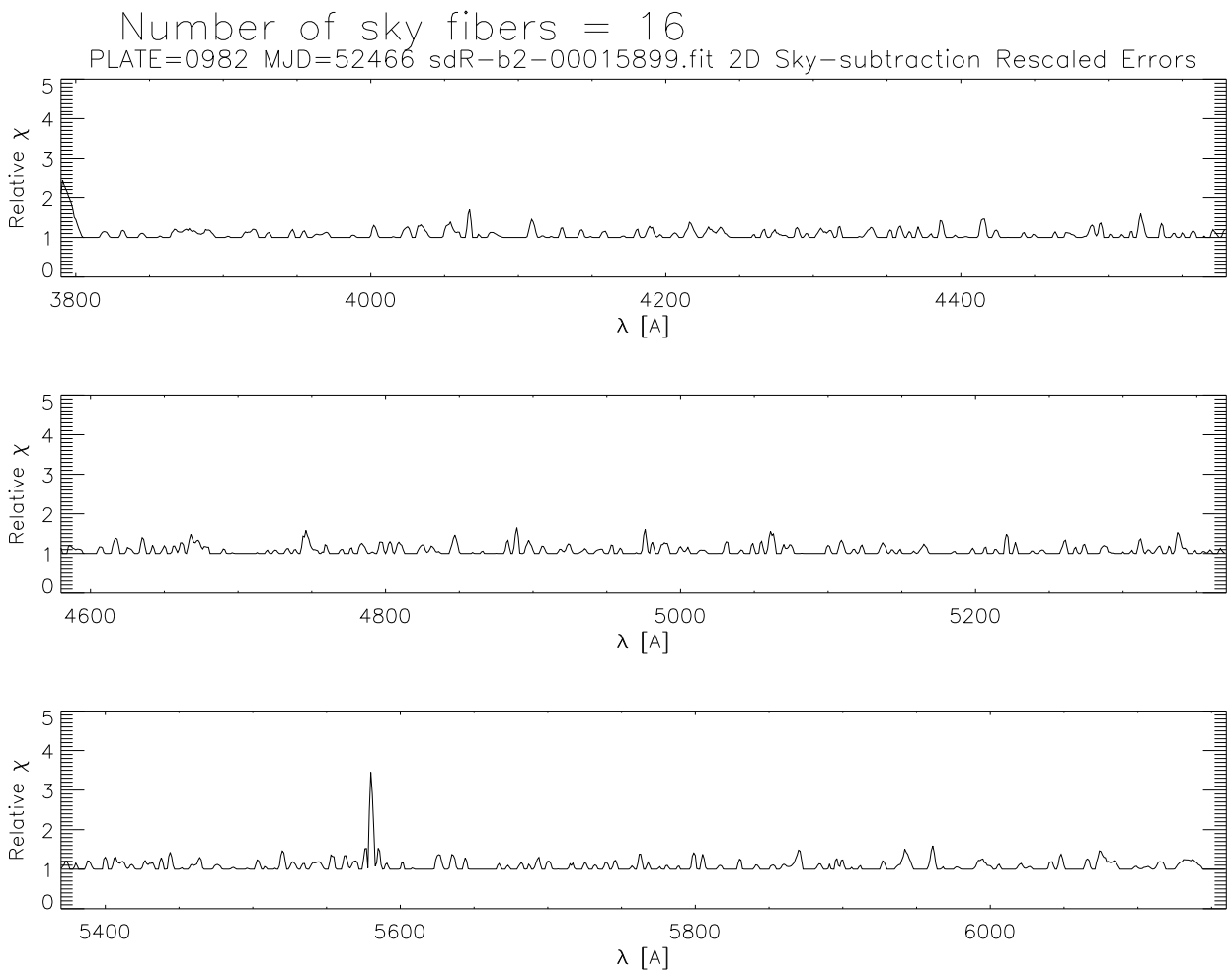

PLATE=0982 MJD=52466 sdR-b2-00015899.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

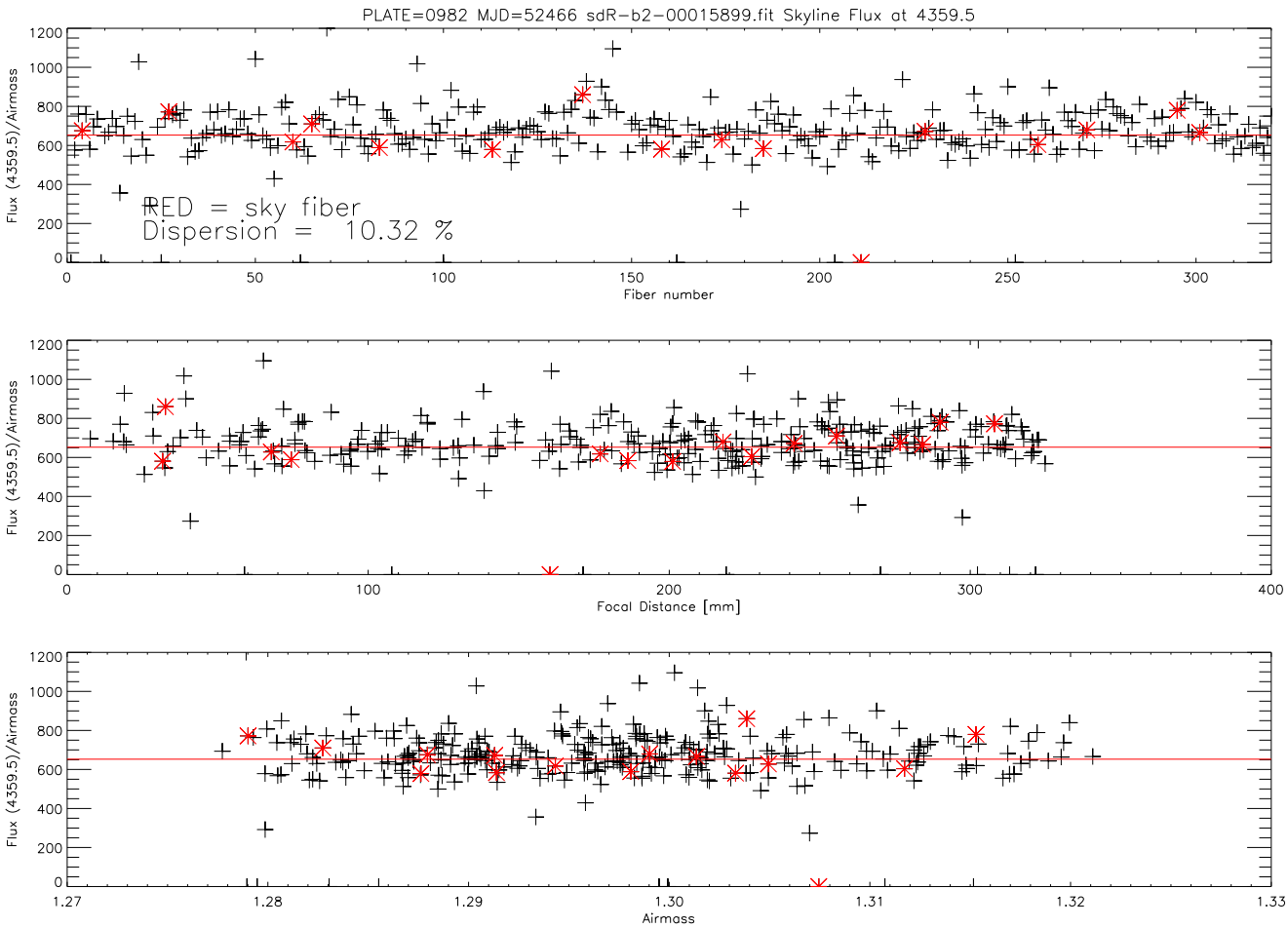

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b2-00015899.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

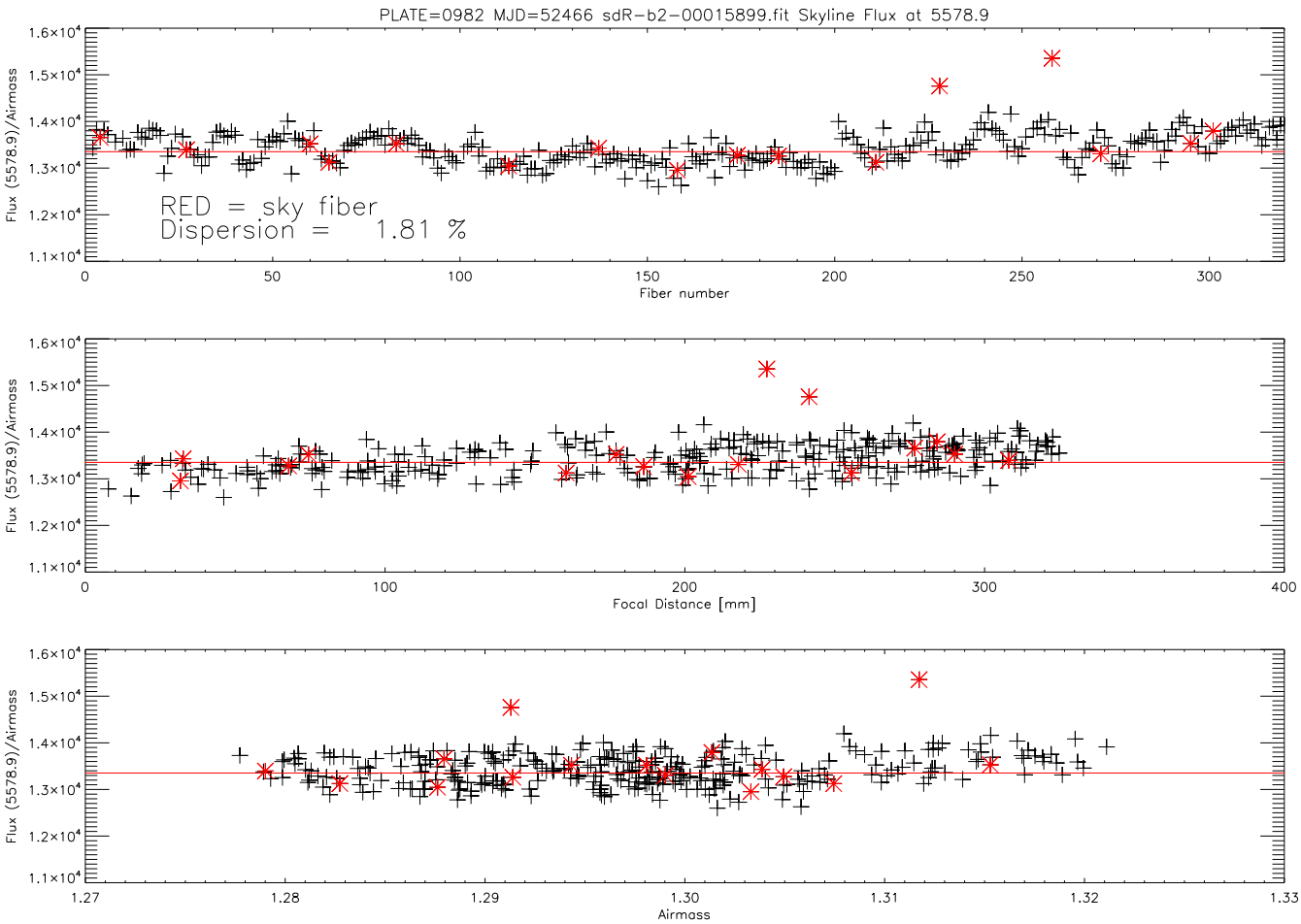

PLATE=0982 MJD=52466 sdR-b2-00015899.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

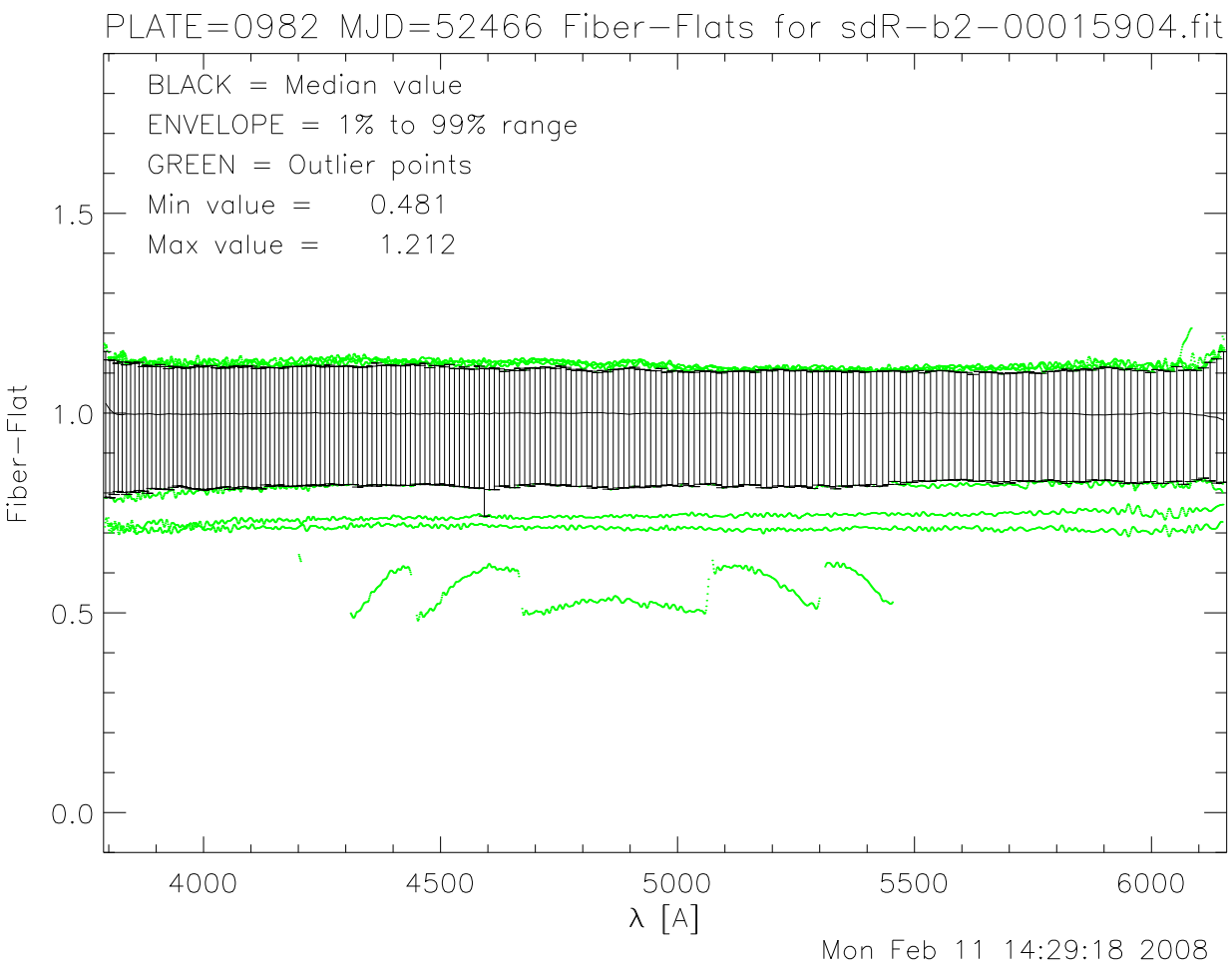

PLATE=0982 MJD=52466 sdR-b2-00015899.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

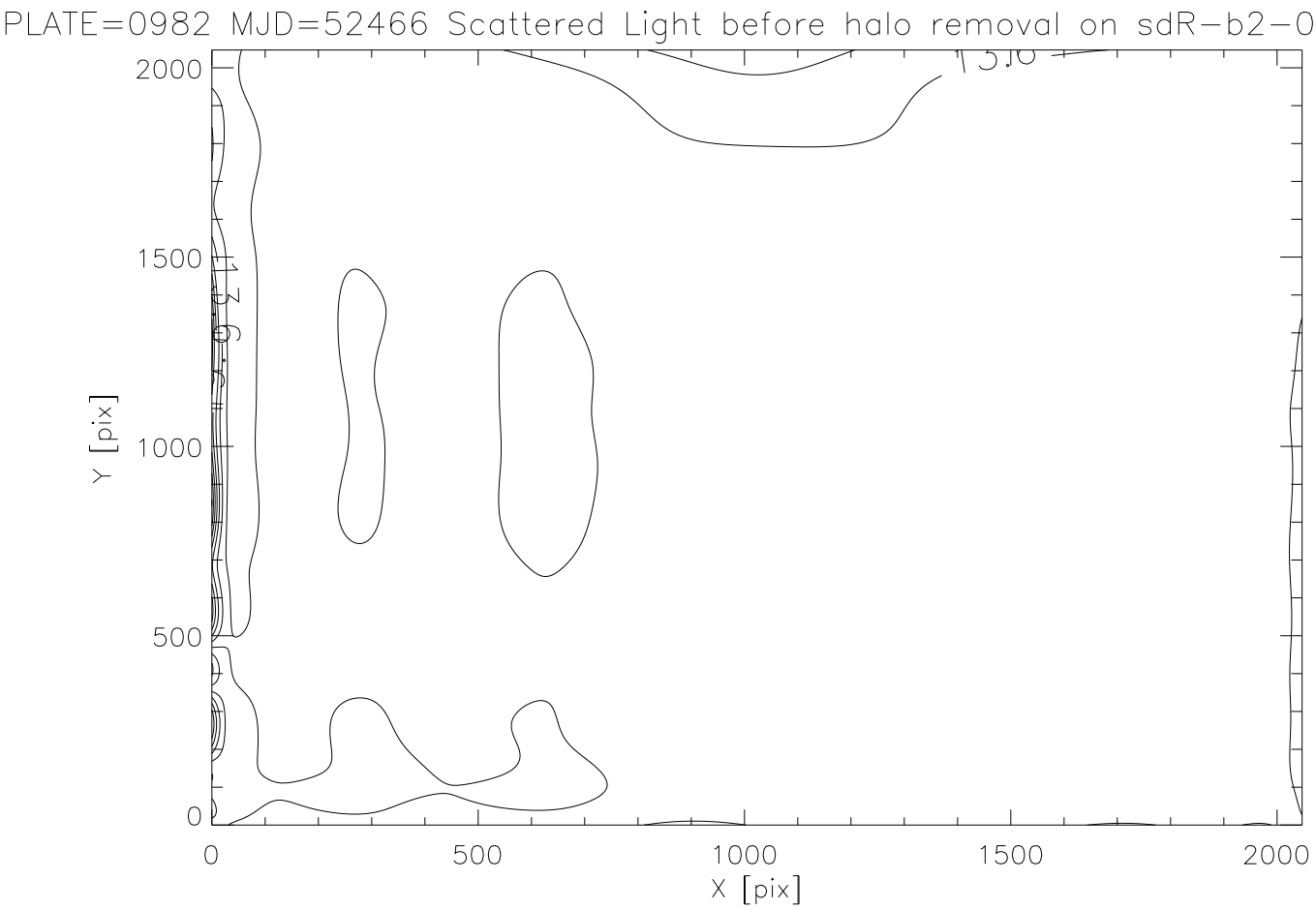

PLATE=0982 MJD=52466 sdR-b2-00015899.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

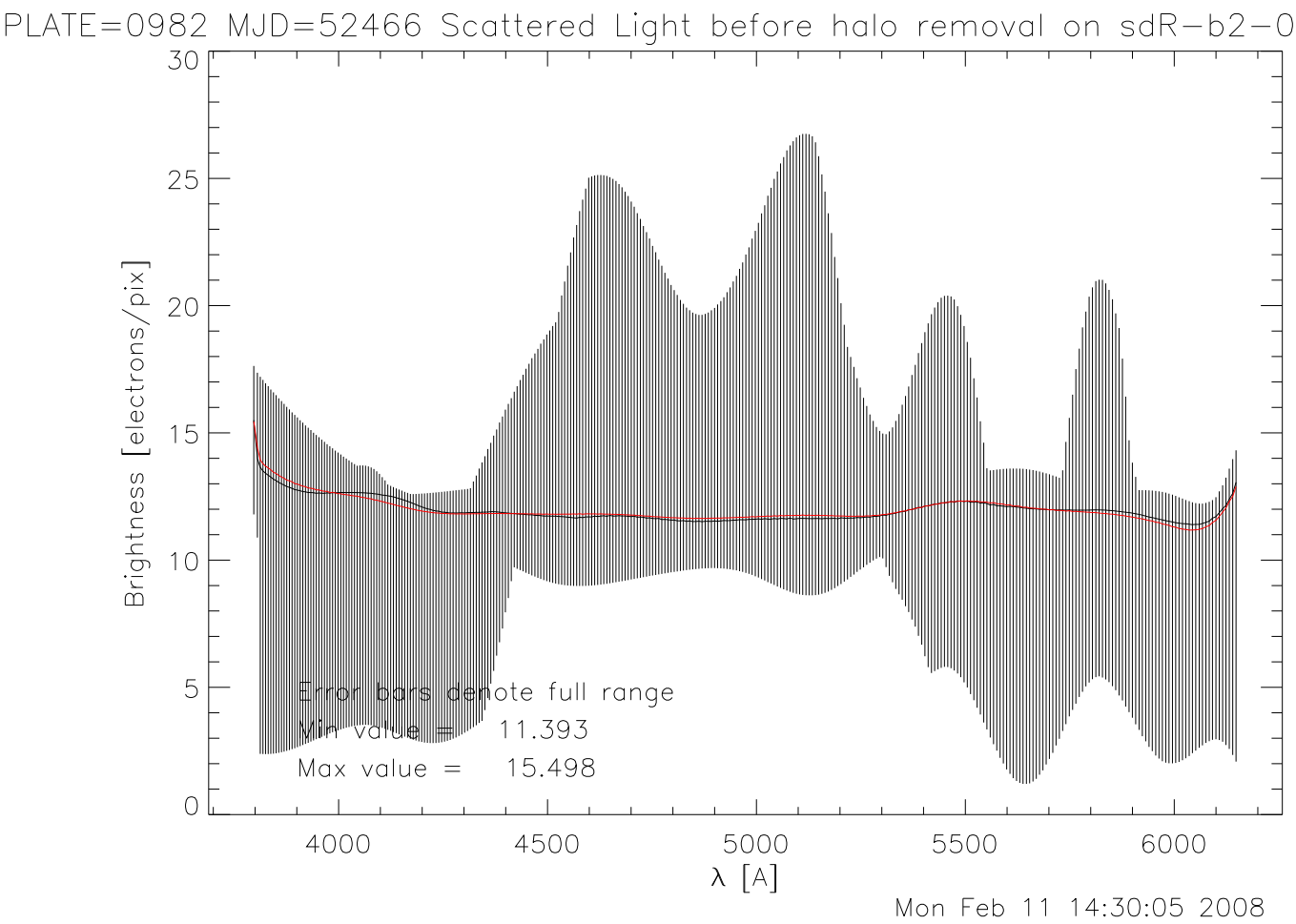

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-b2-00015899.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

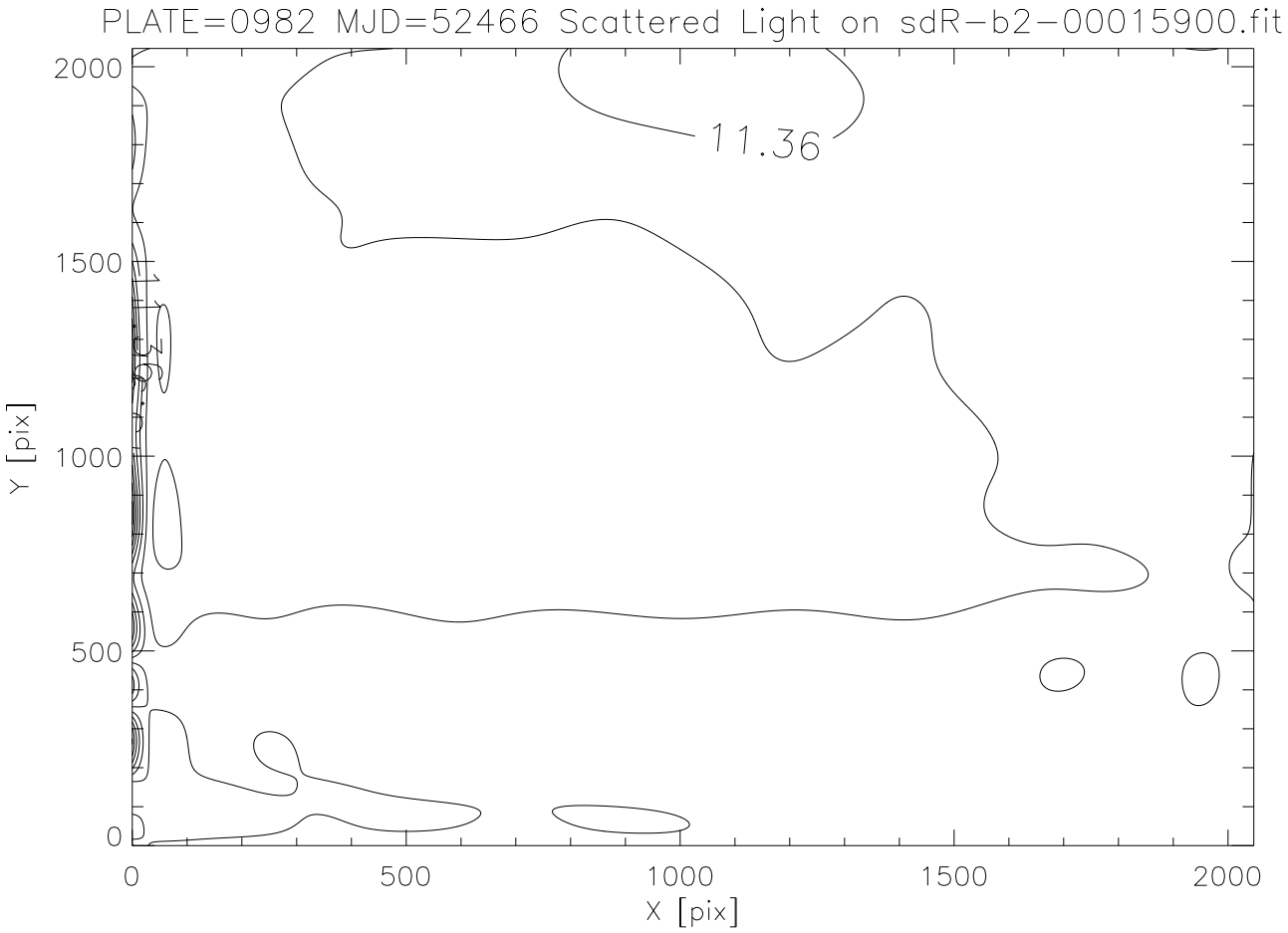

PLATE=0982 MJD=52466 sdR-b2-00015899.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.32 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

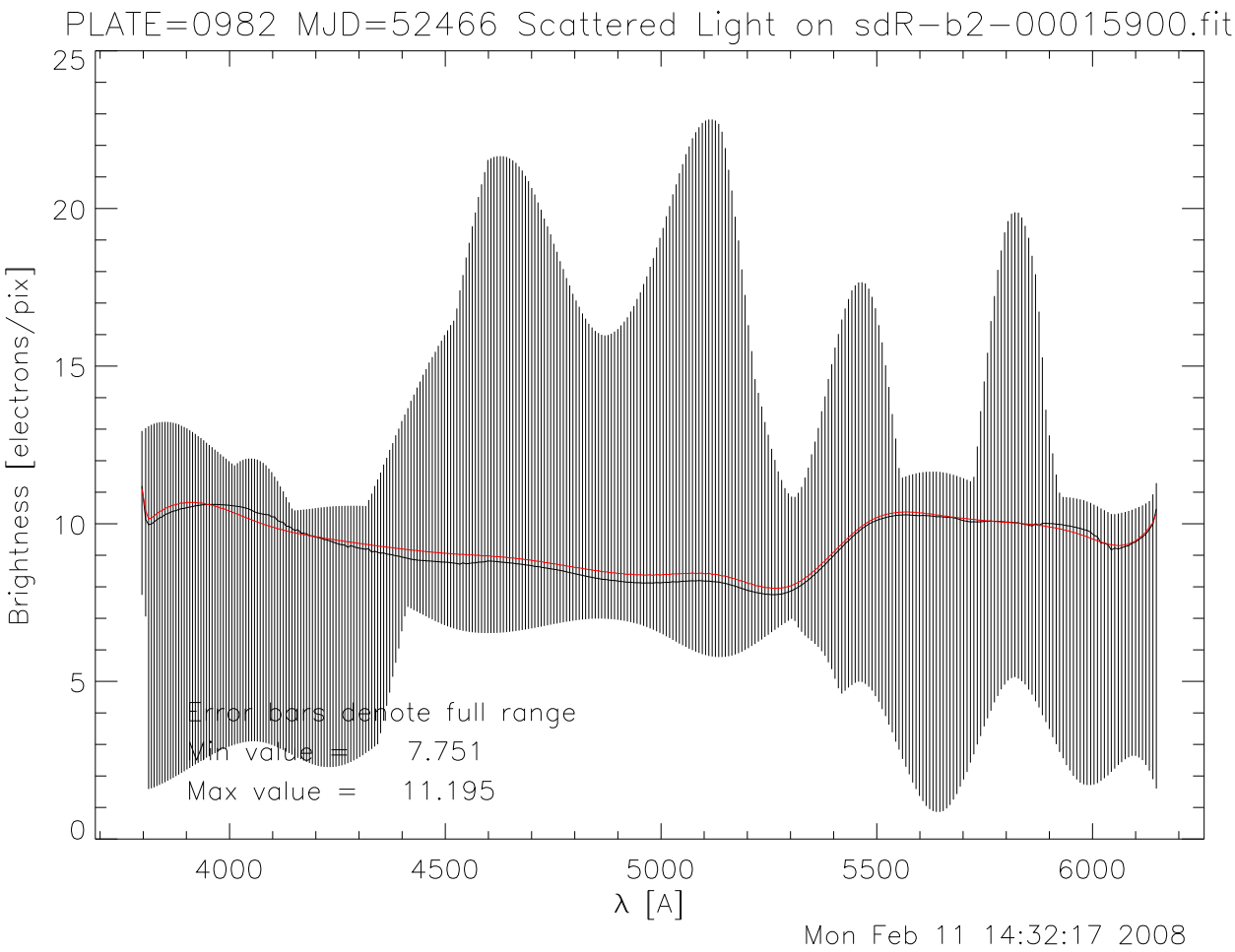

PLATE=0982 MJD=52466 sdR-b2-00015899.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.81 %
Fiber number
Focal Distance [mm]
Airmass

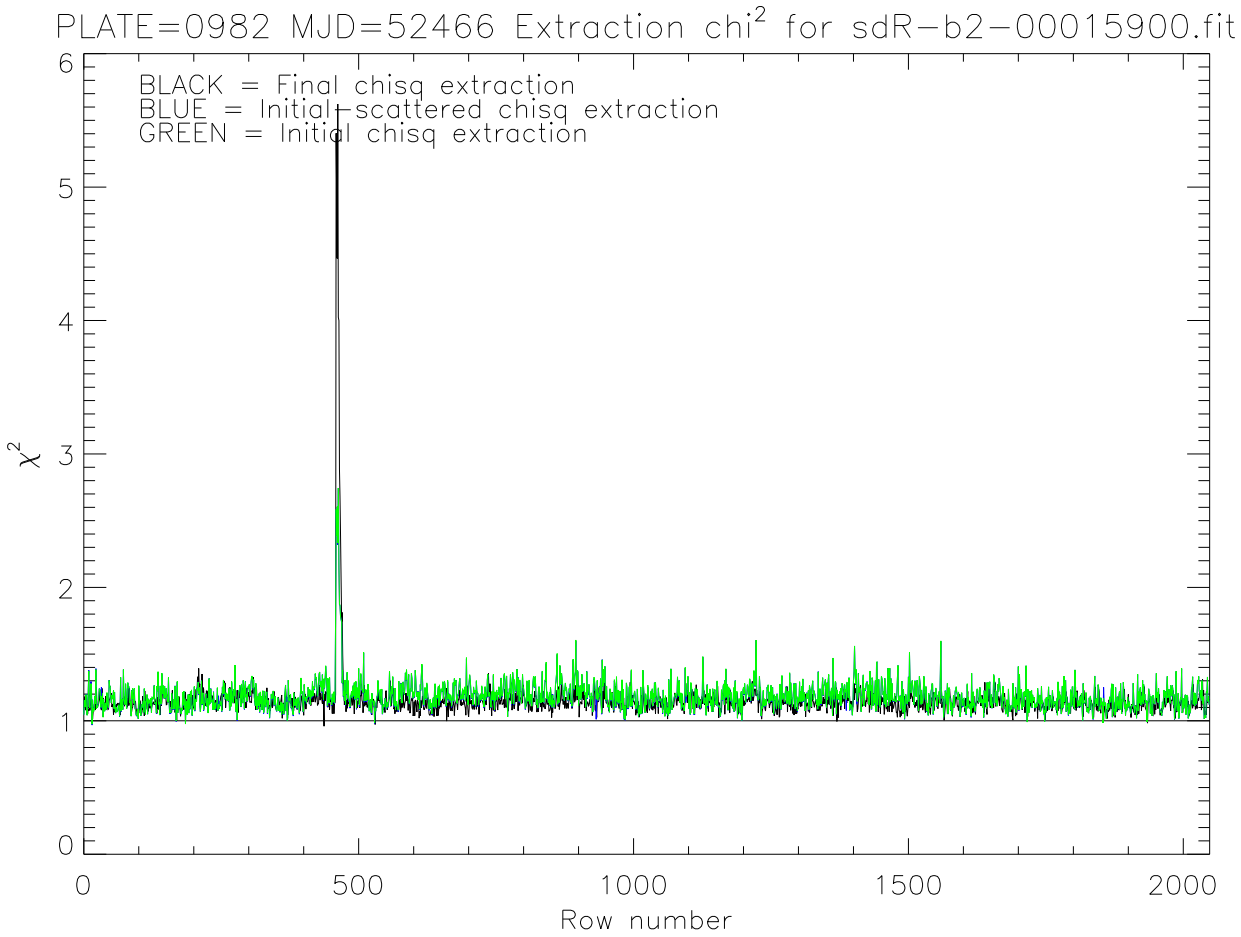

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b2-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.481
Max value = 1.212
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:29:18 2008

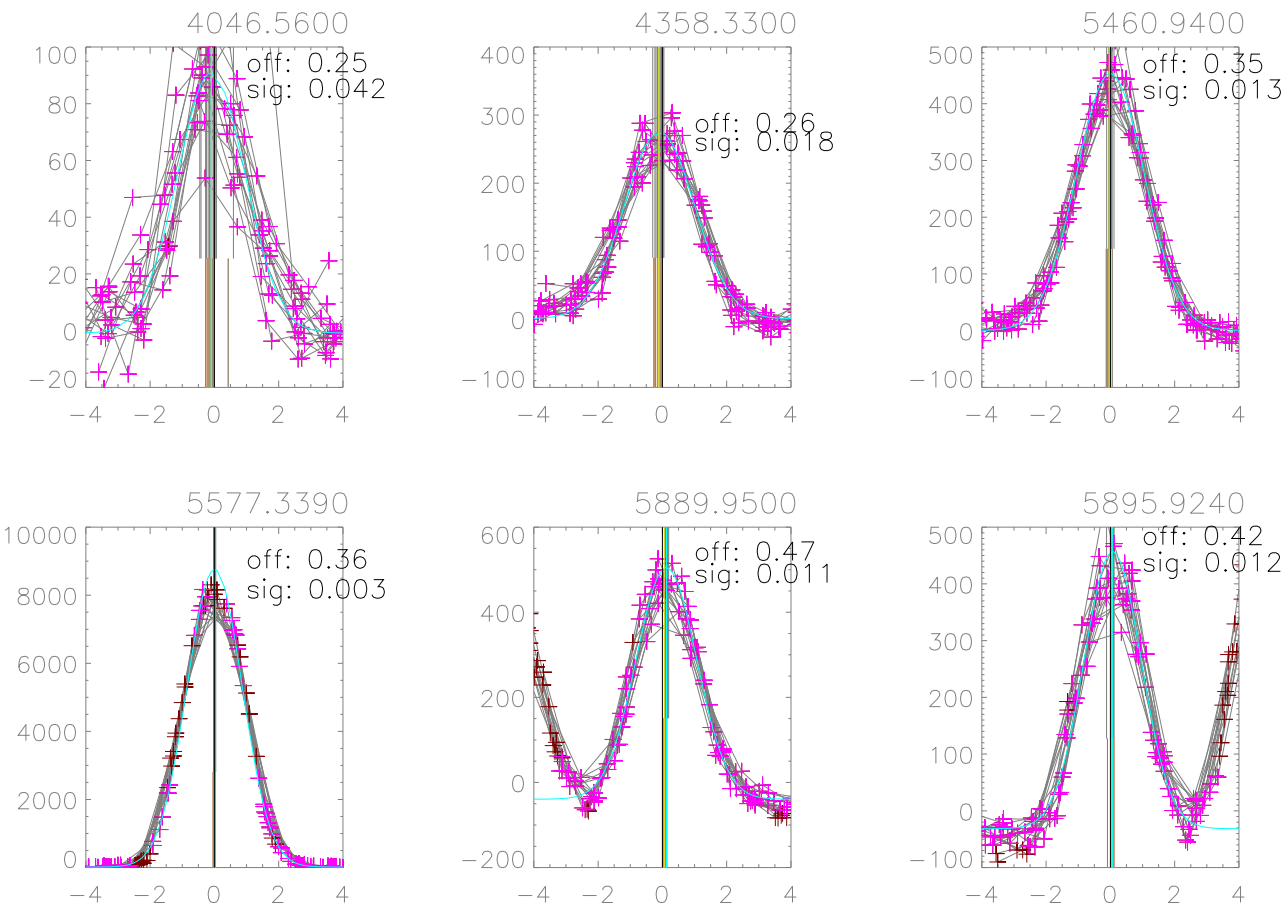

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR−b2−00015900.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

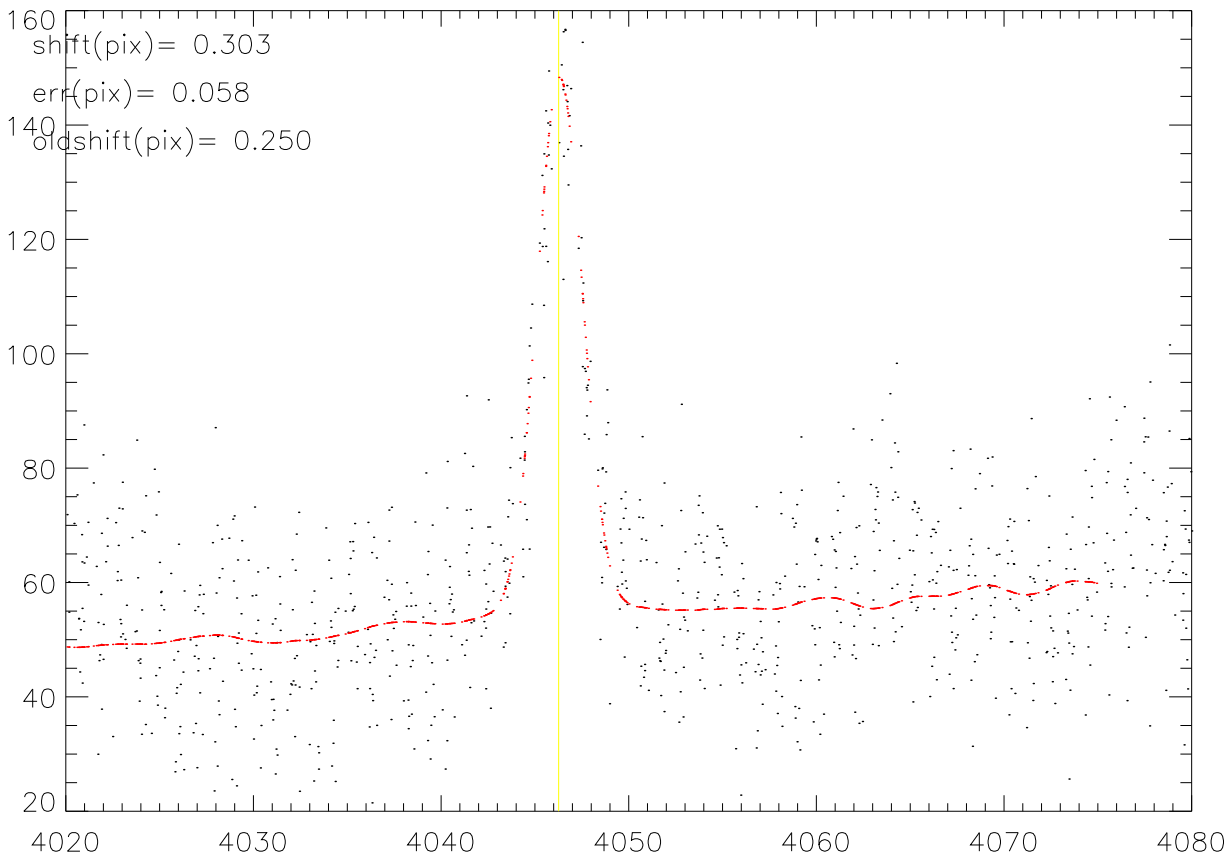

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b2-00015900.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.393
Max value = 15.498
Mon Feb 11 14:30:05 2008

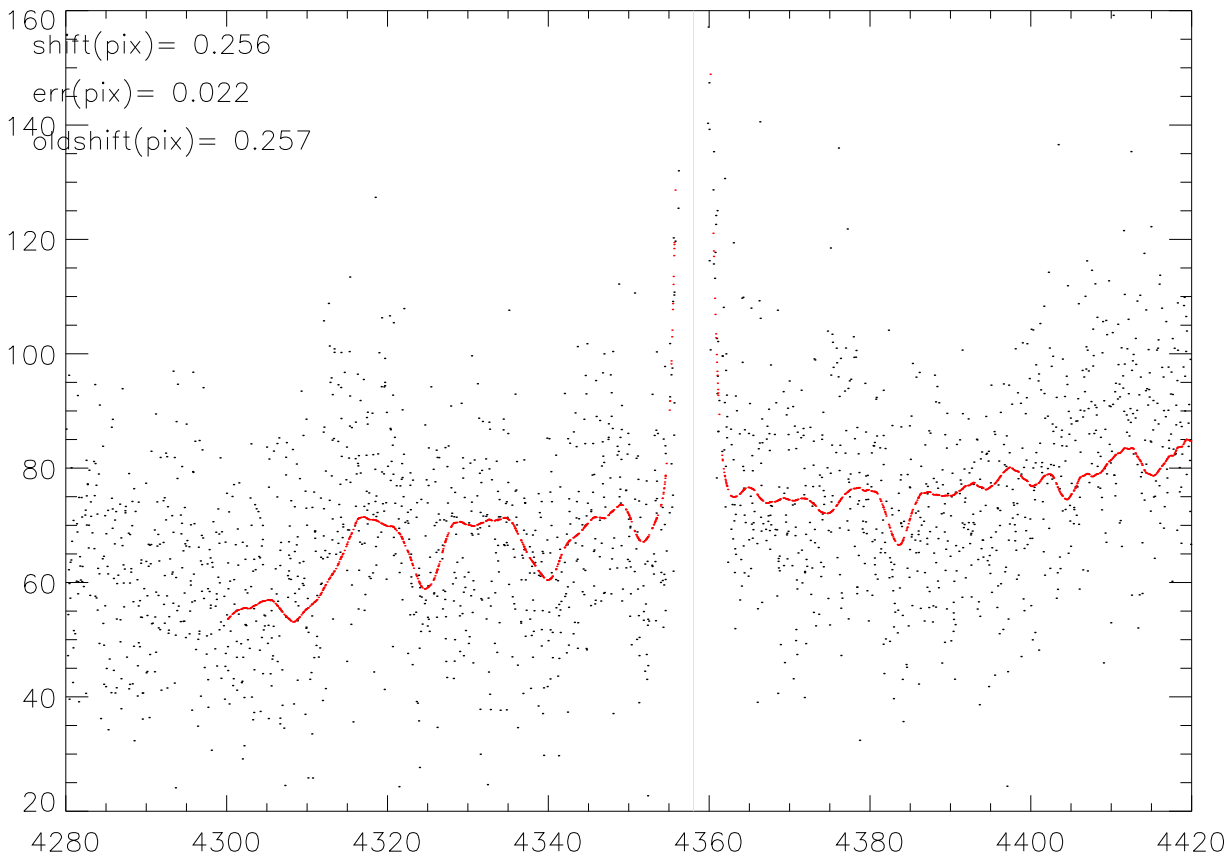

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015900.fit
11.36
11.36
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

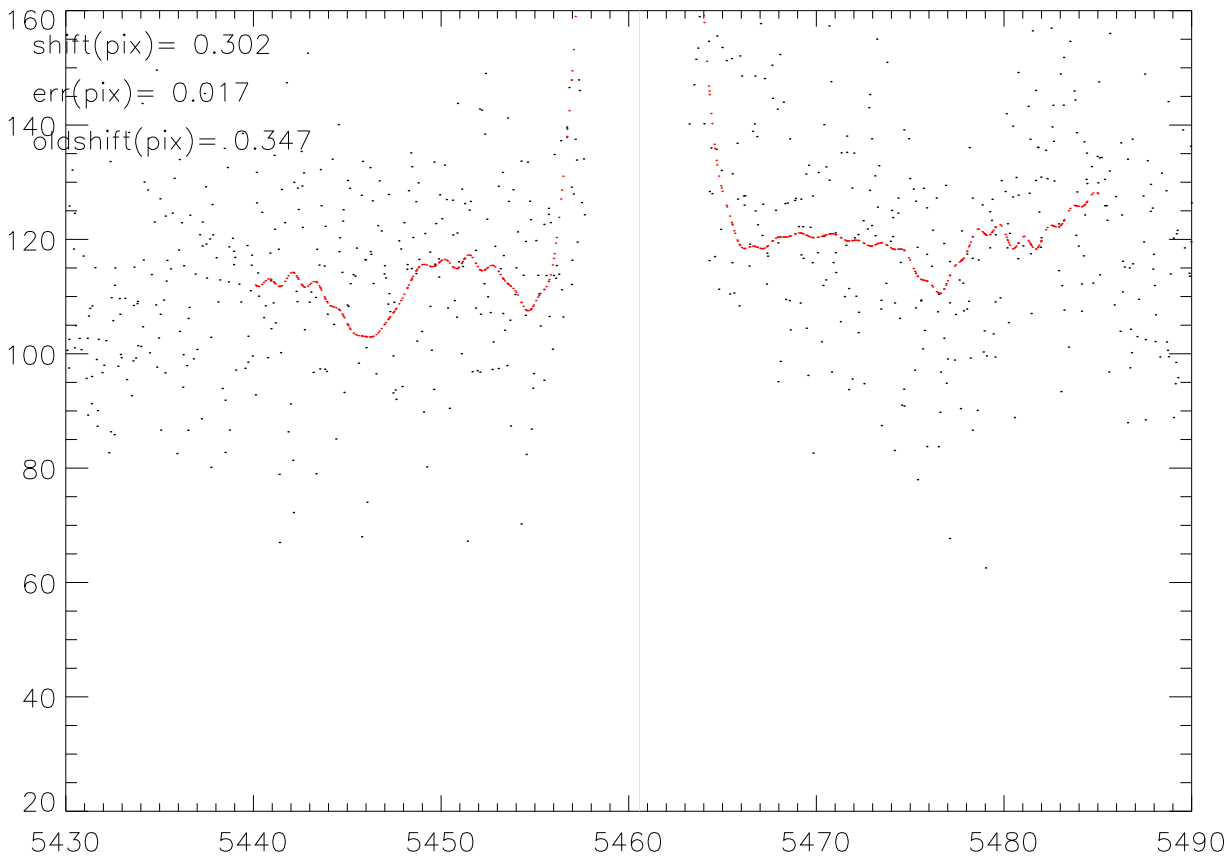

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015900.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.751
Max value = 11.195
Mon Feb 11 14:32:17 2008

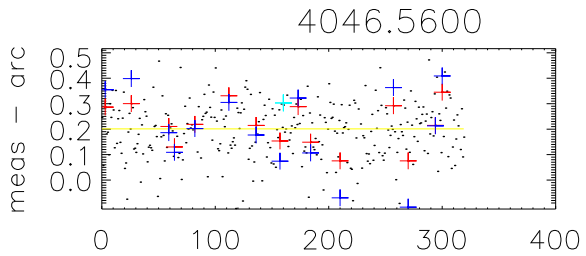

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-b2-00015900.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

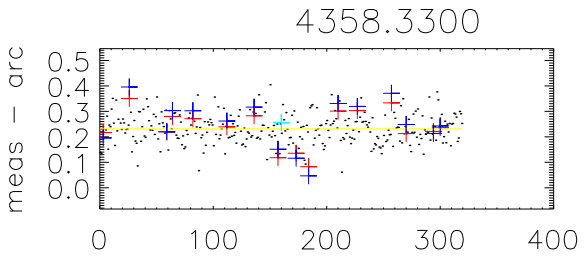

4046.5600
off: 0.25
sig: 0.042
4358.3300
off: 0.26
sig: 0.018
5460.9400
off: 0.35
sig: 0.013
5577.3390
off: 0.36
sig: 0.003
5889.9500
off: 0.47
sig: 0.011
5895.9240
off: 0.42
sig: 0.012

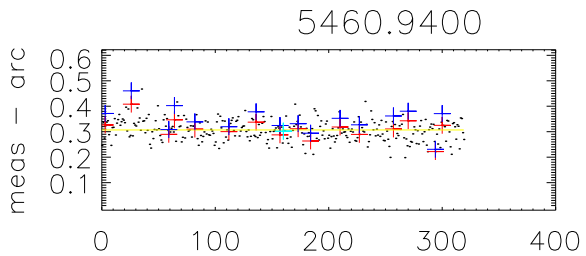

shift(pix)= 0.303
err(pix)= 0.058
oldshift(pix)= 0.250
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

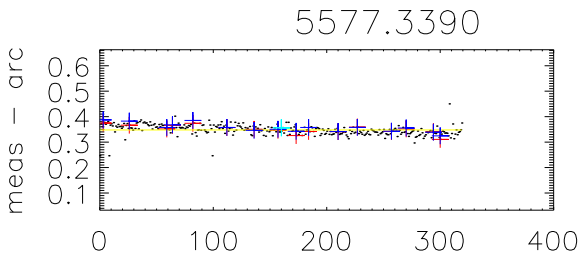

shift(pix)= 0.256
err(pix)= 0.022
oldshift(pix)= 0.257
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

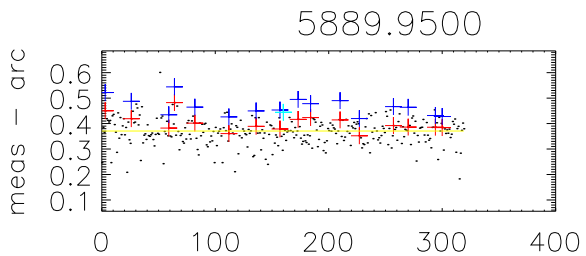

shift(pix)= 0.302
err(pix)= 0.017
oldshift(pix)= 0.347
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

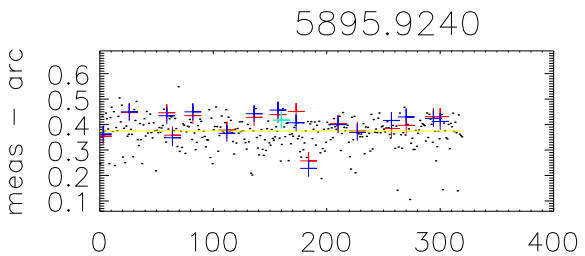

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

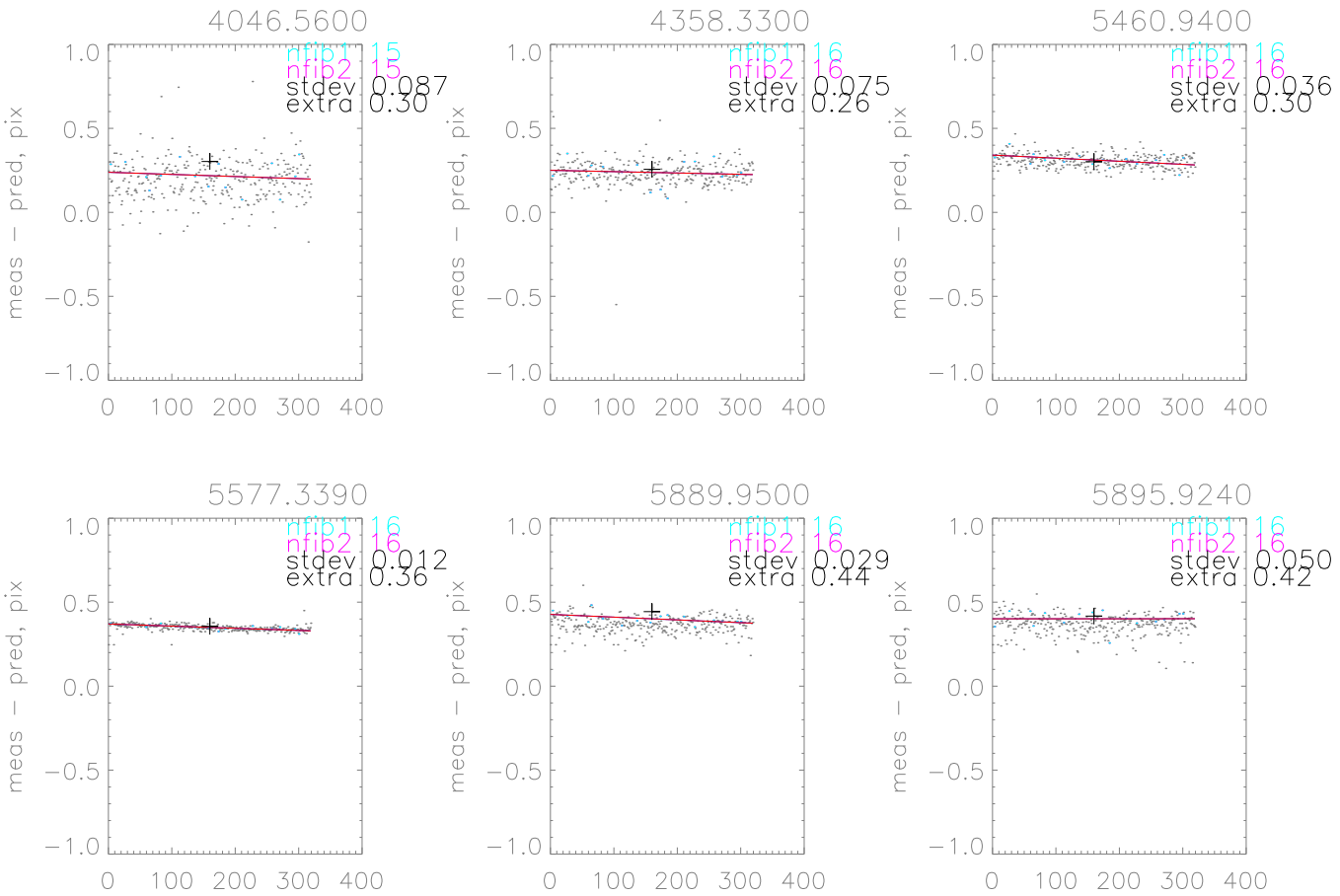

4358.3300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

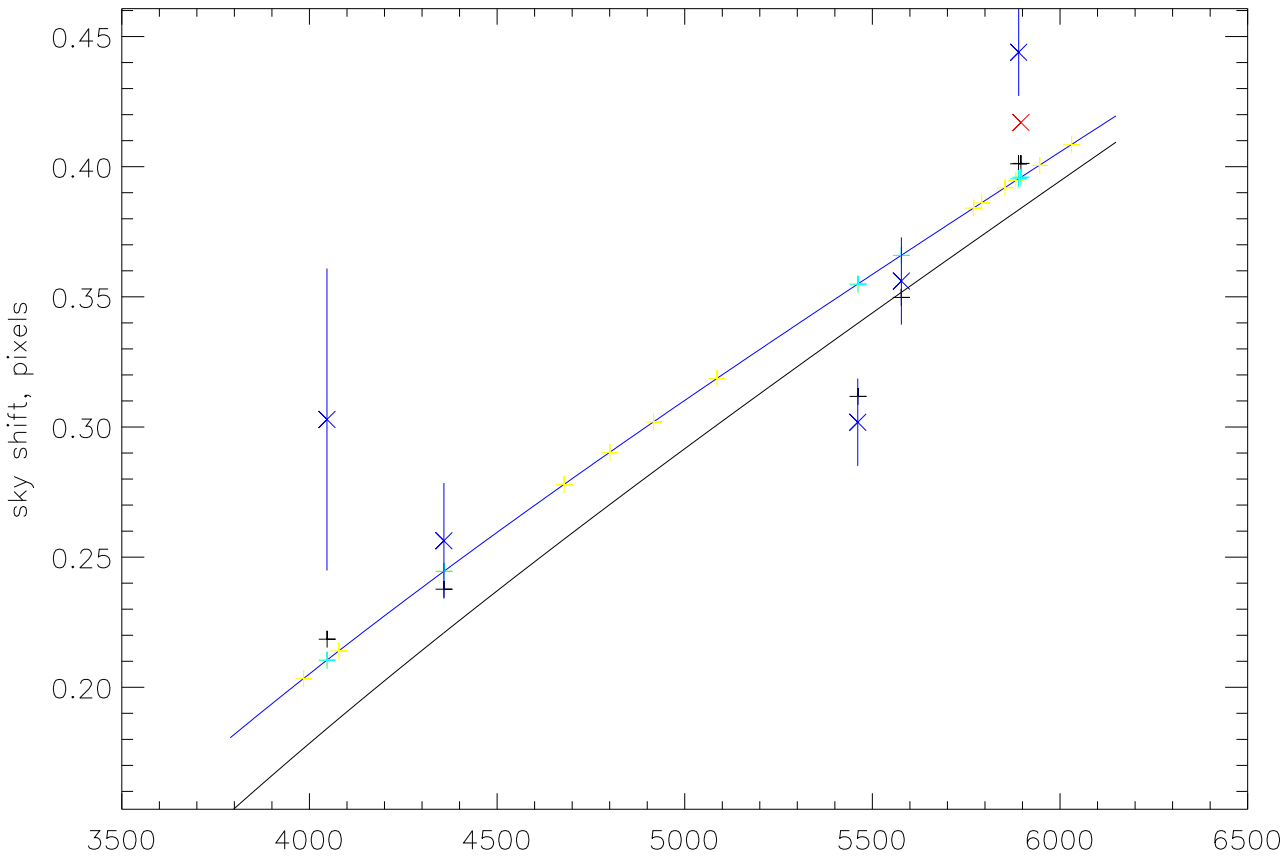

5460.9400
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

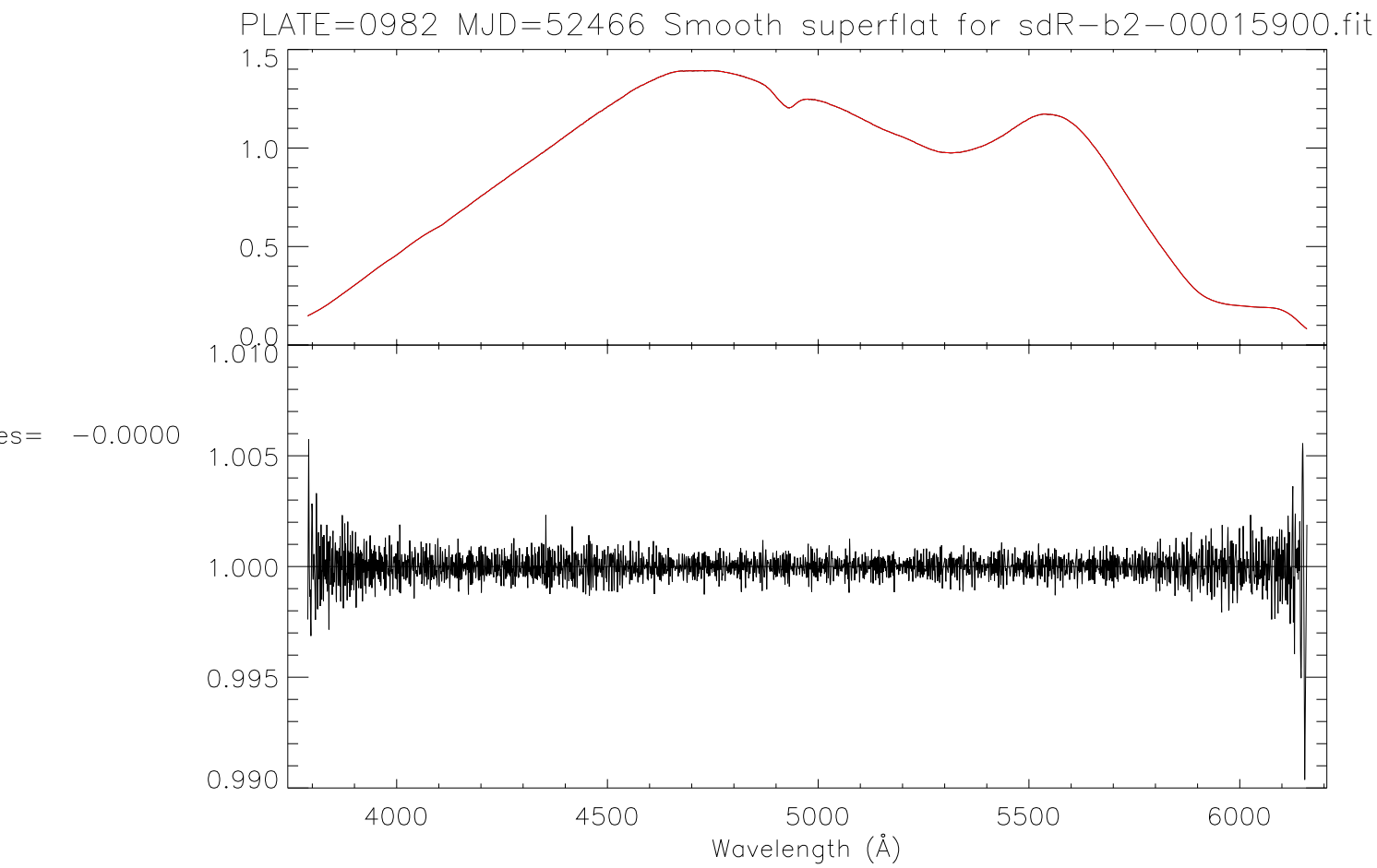

5577.3390
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

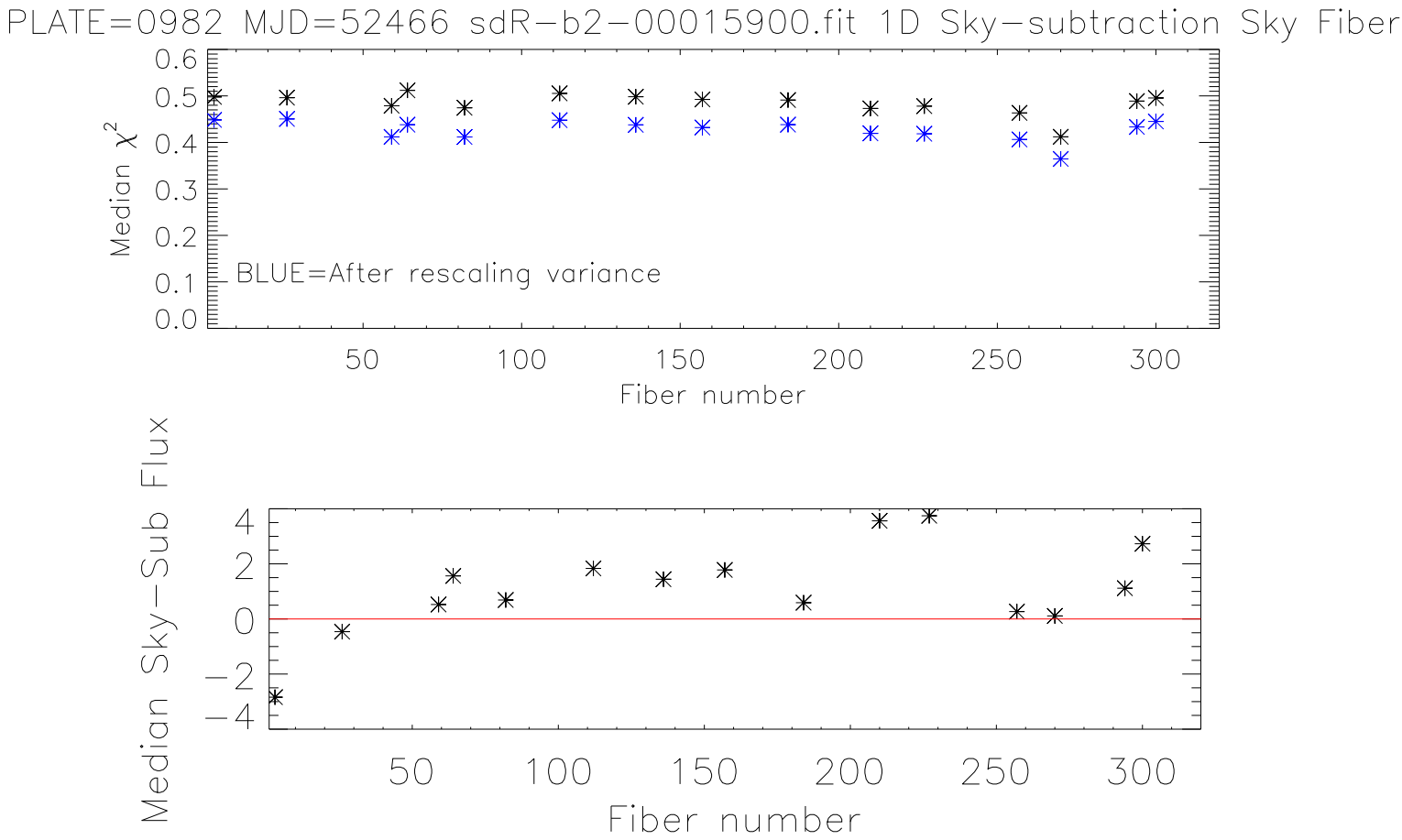

5889.9500
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

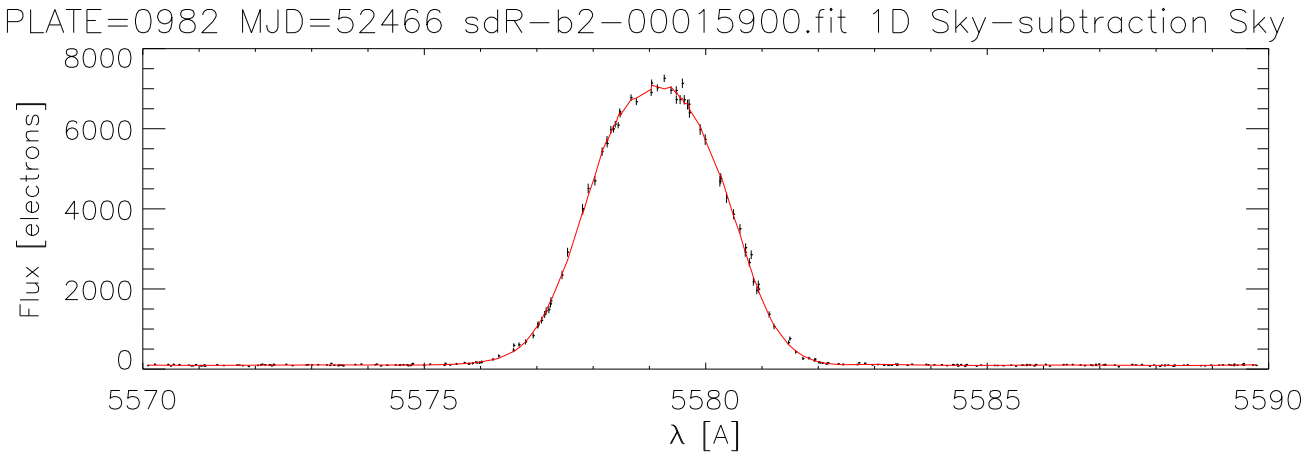

5895.9240
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

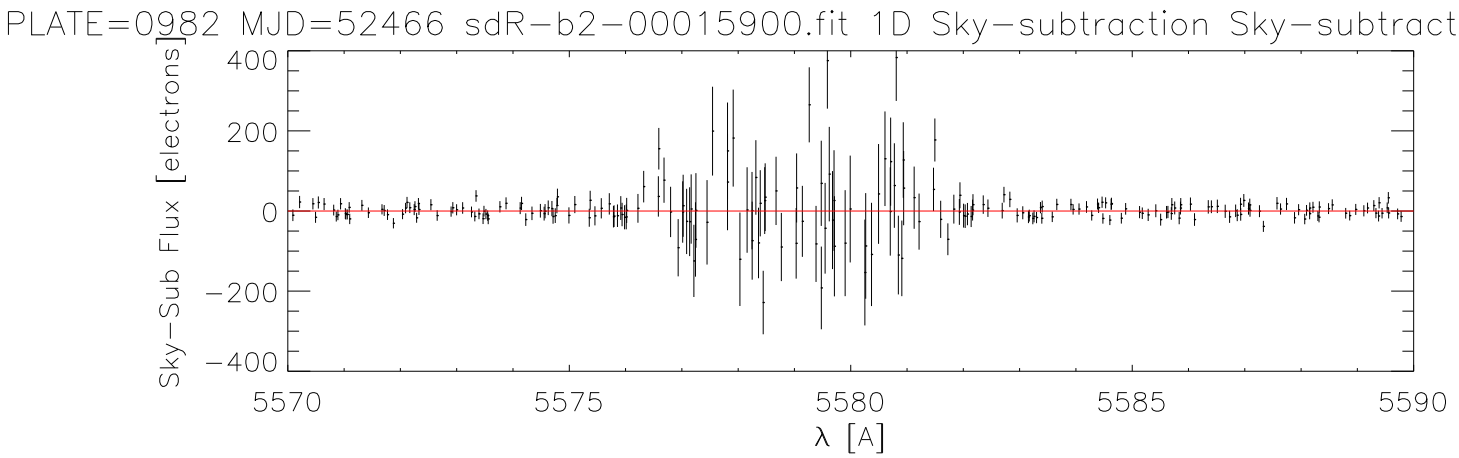

4046.5600
nfib1 15
nfib2 15
stdev 0.087
extra 0.30
4358.3300
nfib1 16
nfib2 16
stdev 0.075
extra 0.26
5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra 0.30
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.36
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra 0.44
5895.9240
nfib1 16
nfib2 16
stdev 0.050
extra 0.42
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

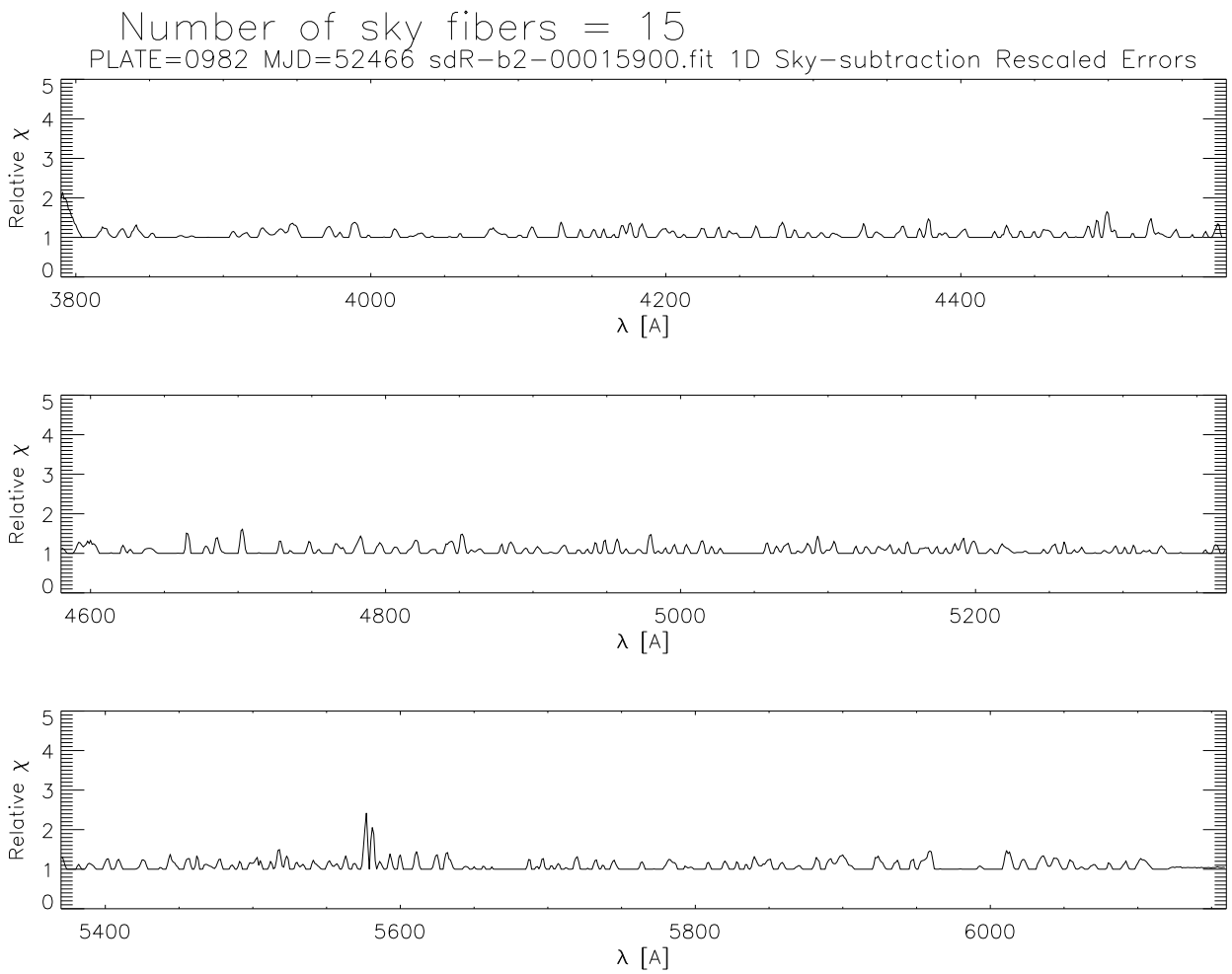

0.45
0.40
0.35
0.30
0.25
0.20
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

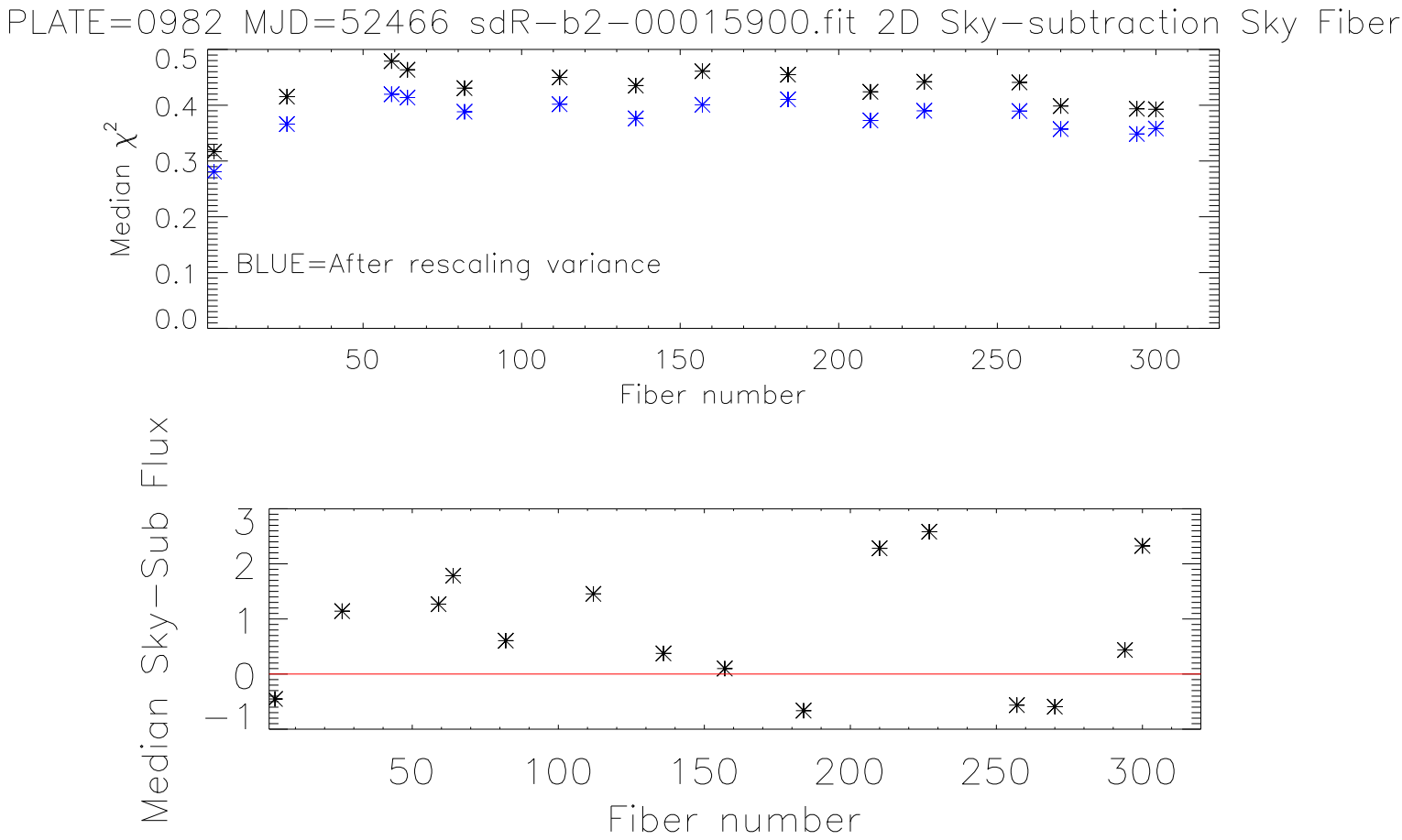

PLATE=0982 MJD=52466 Smooth superflat for sdR-b2-00015900.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

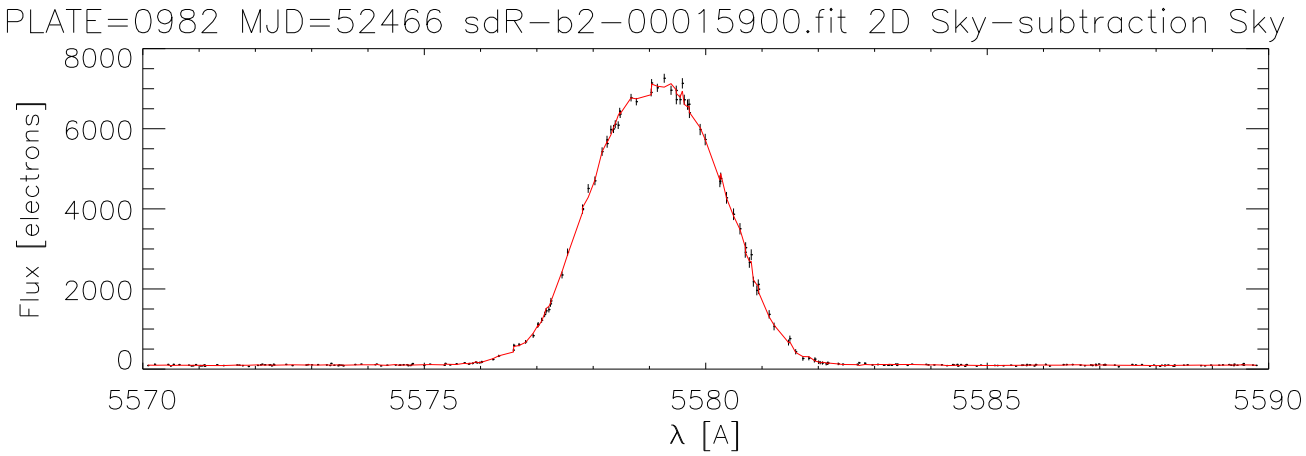

PLATE=0982 MJD=52466 sdR-b2-00015900.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

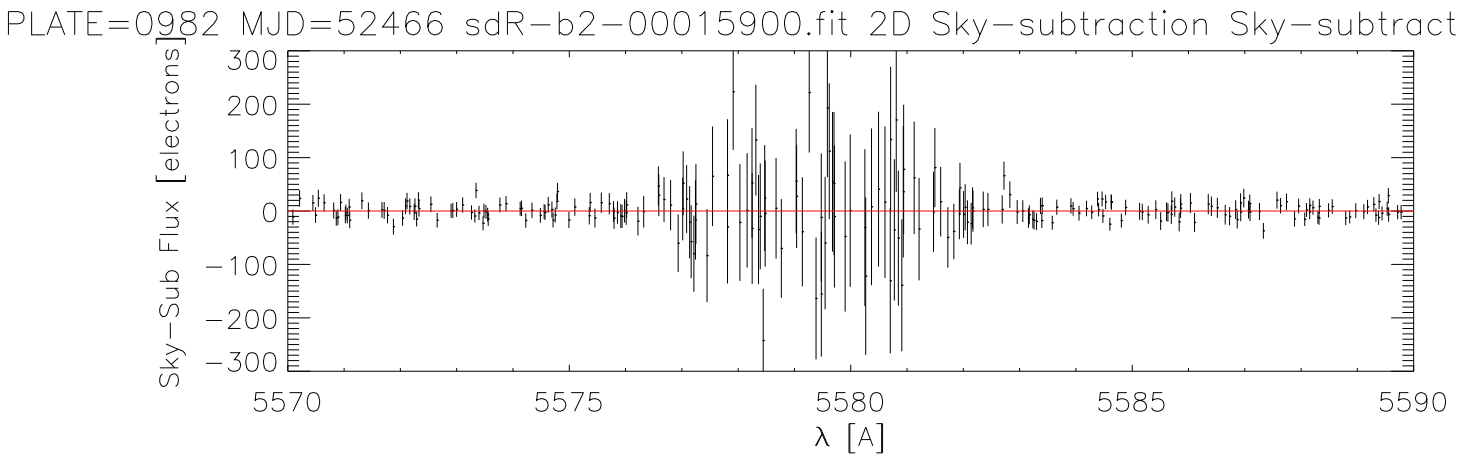

PLATE=0982 MJD=52466 sdR-b2-00015900.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

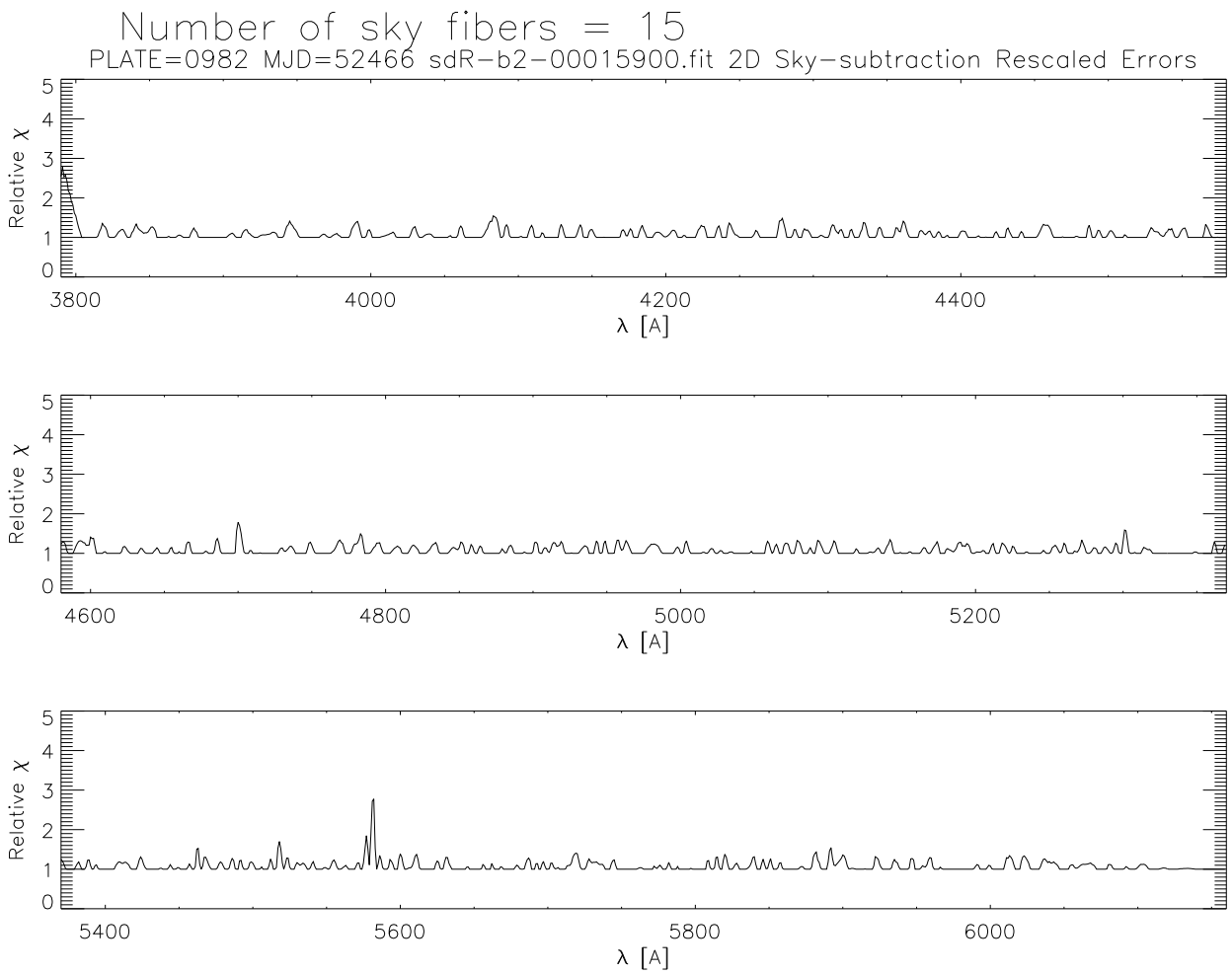

PLATE=0982 MJD=52466 sdR-b2-00015900.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

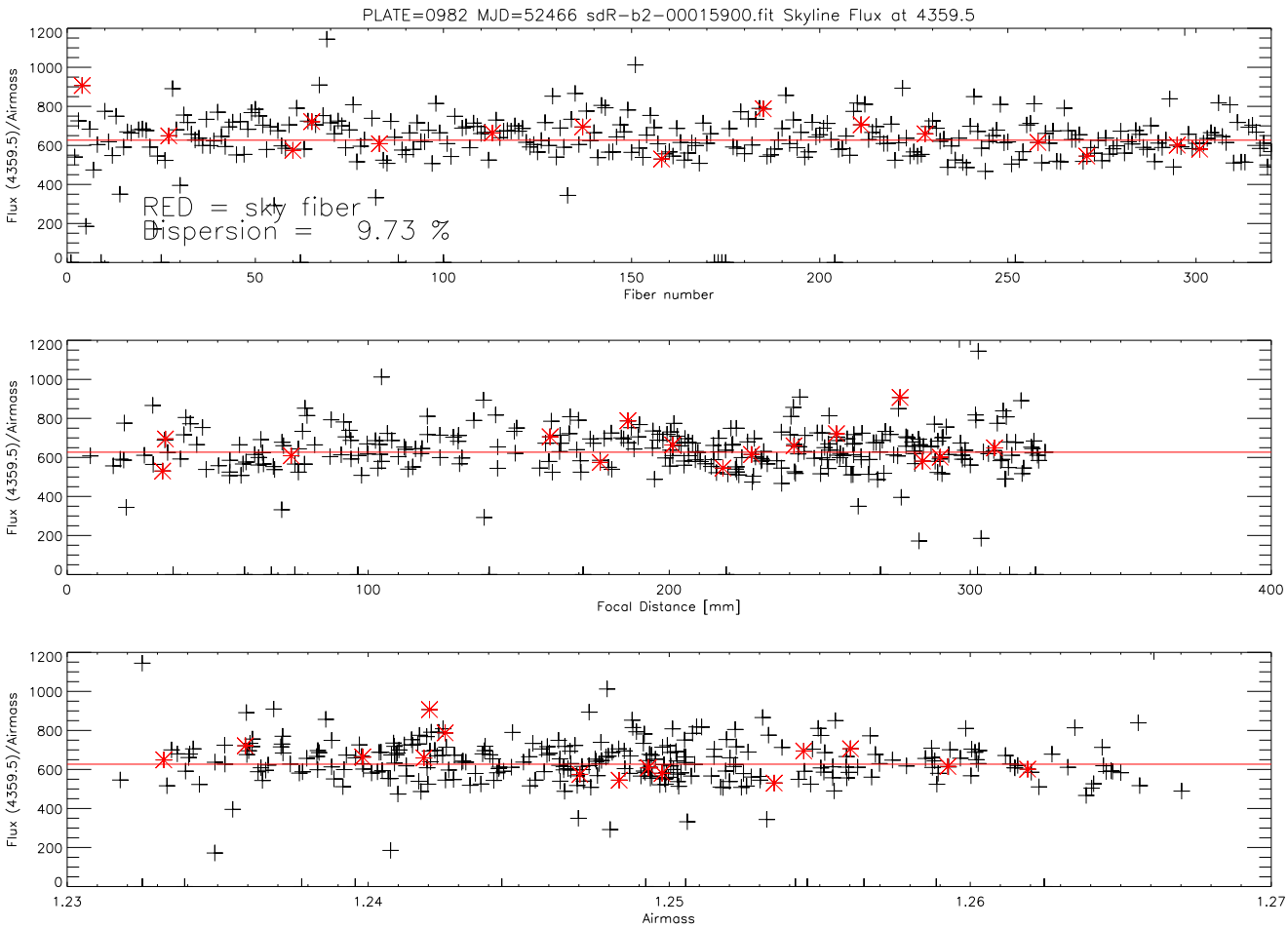

Number of sky fibers = 15
PLATE=0982 MJD=52466 sdR-b2-00015900.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

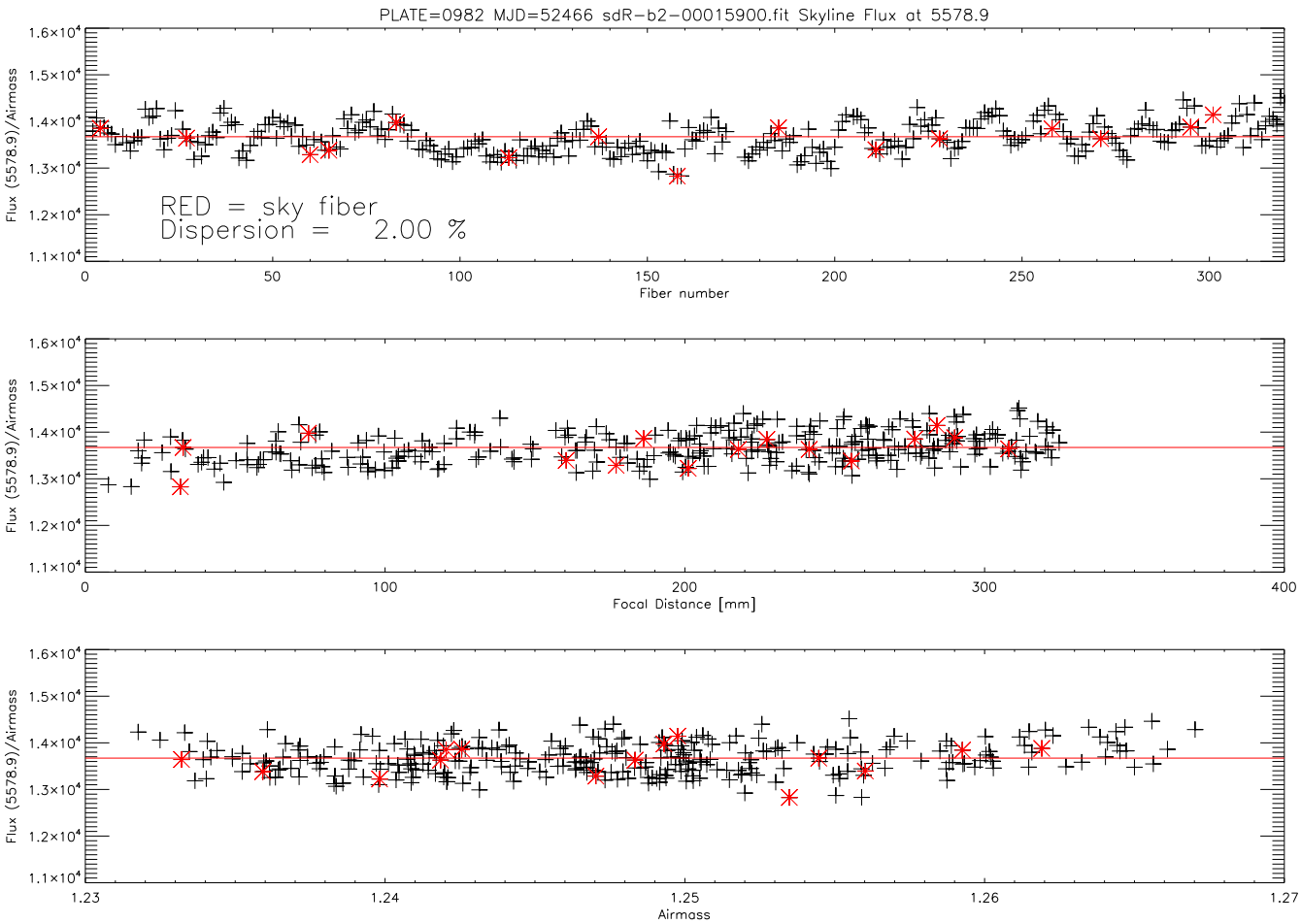

PLATE=0982 MJD=52466 sdR-b2-00015900.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

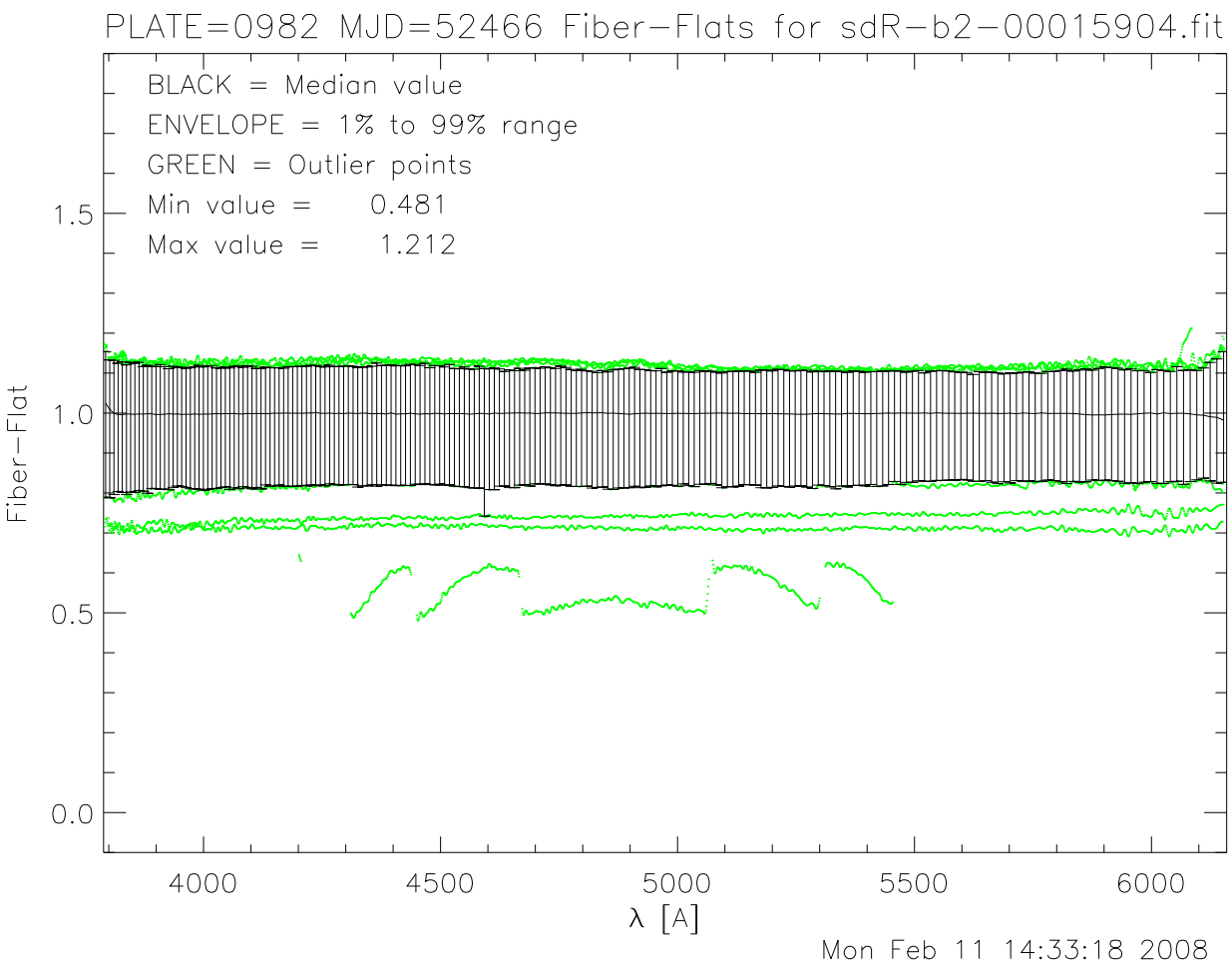

PLATE=0982 MJD=52466 sdR-b2-00015900.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

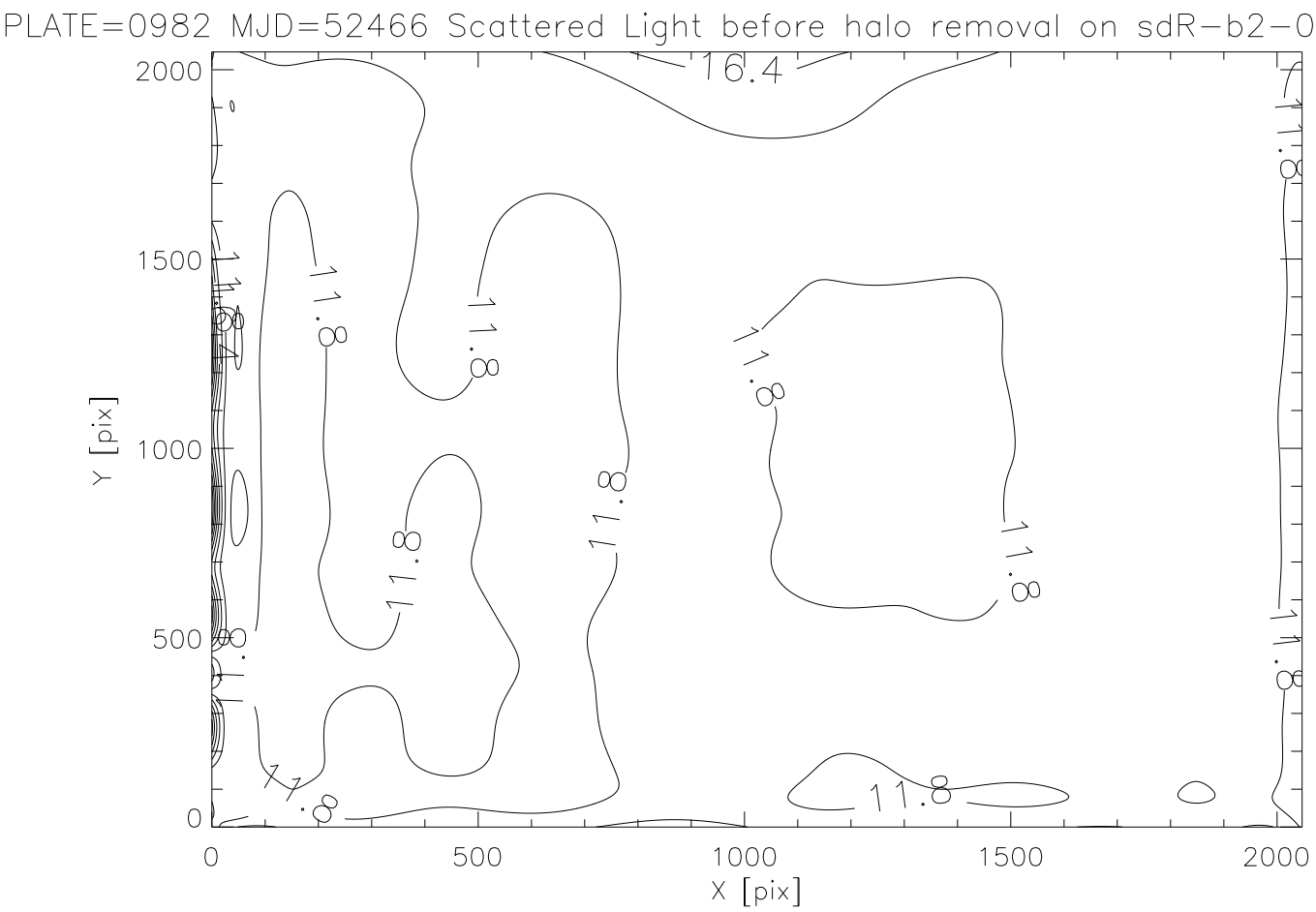

PLATE=0982 MJD=52466 sdR-b2-00015900.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

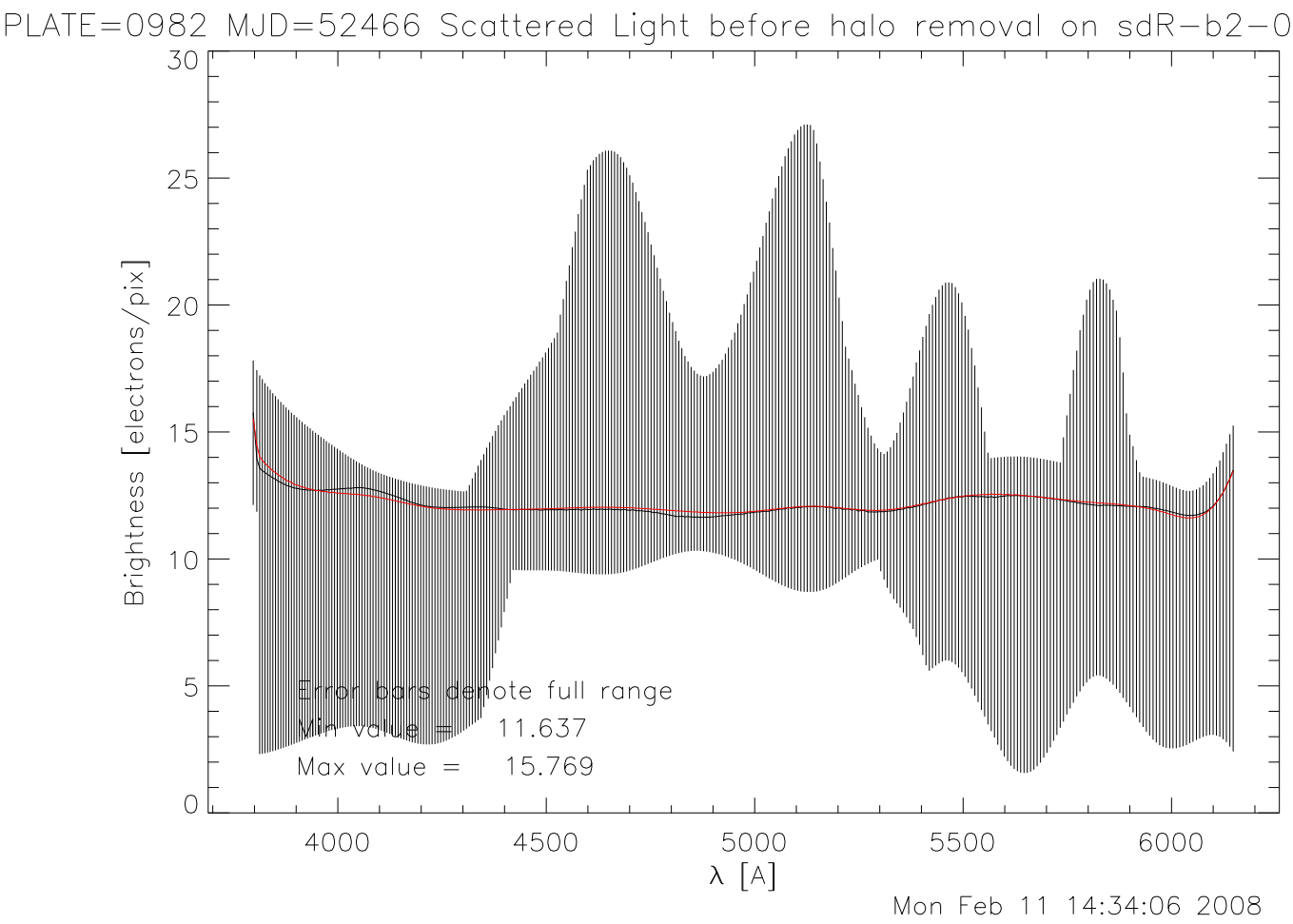

Number of sky fibers = 15
PLATE=0982 MJD=52466 sdR-b2-00015900.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

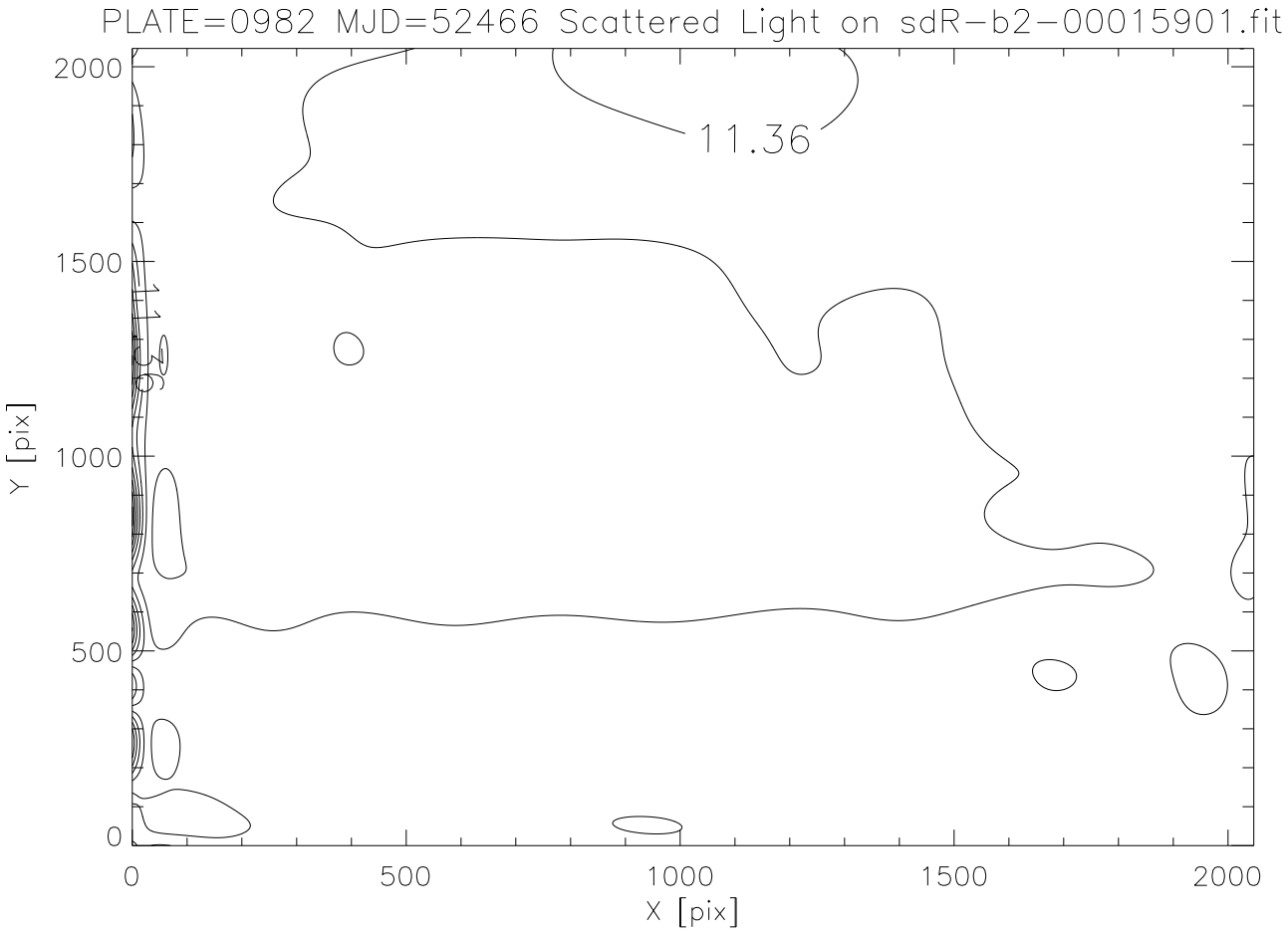

PLATE=0982 MJD=52466 sdR-b2-00015900.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 9.73 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

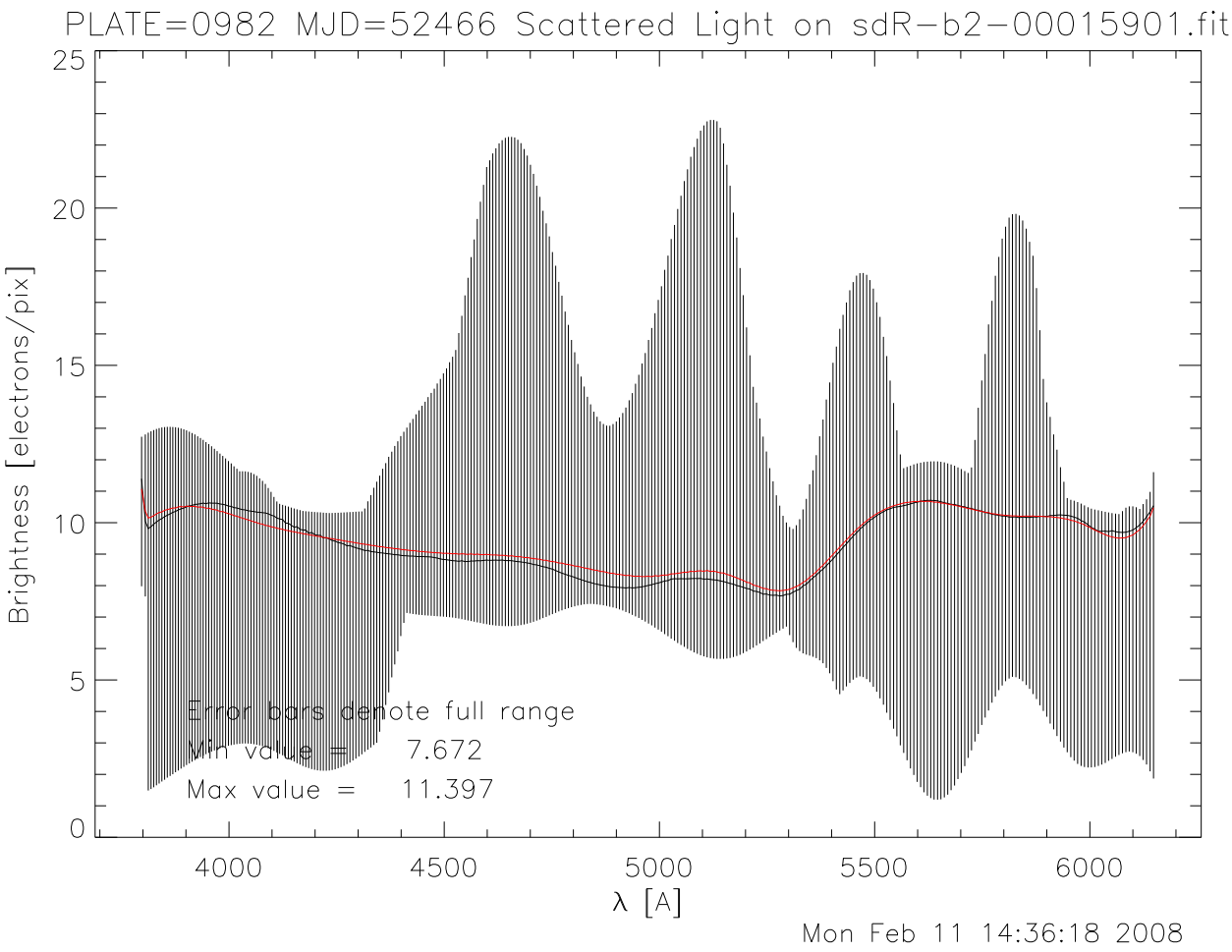

PLATE=0982 MJD=52466 sdR-b2-00015900.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.00 %
Fiber number
Focal Distance [mm]
Airmass

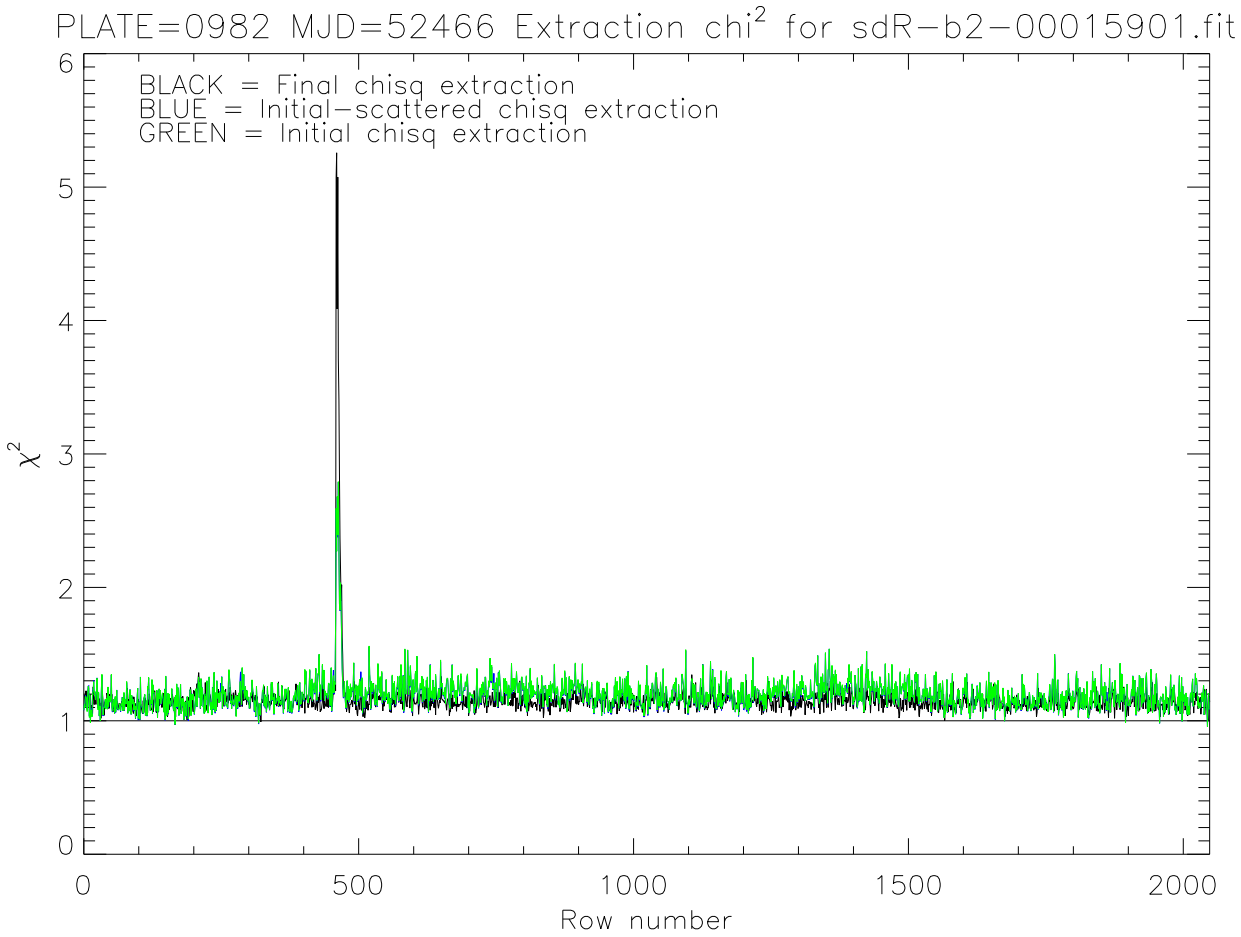

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b2-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.481
Max value = 1.212
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:33:18 2008

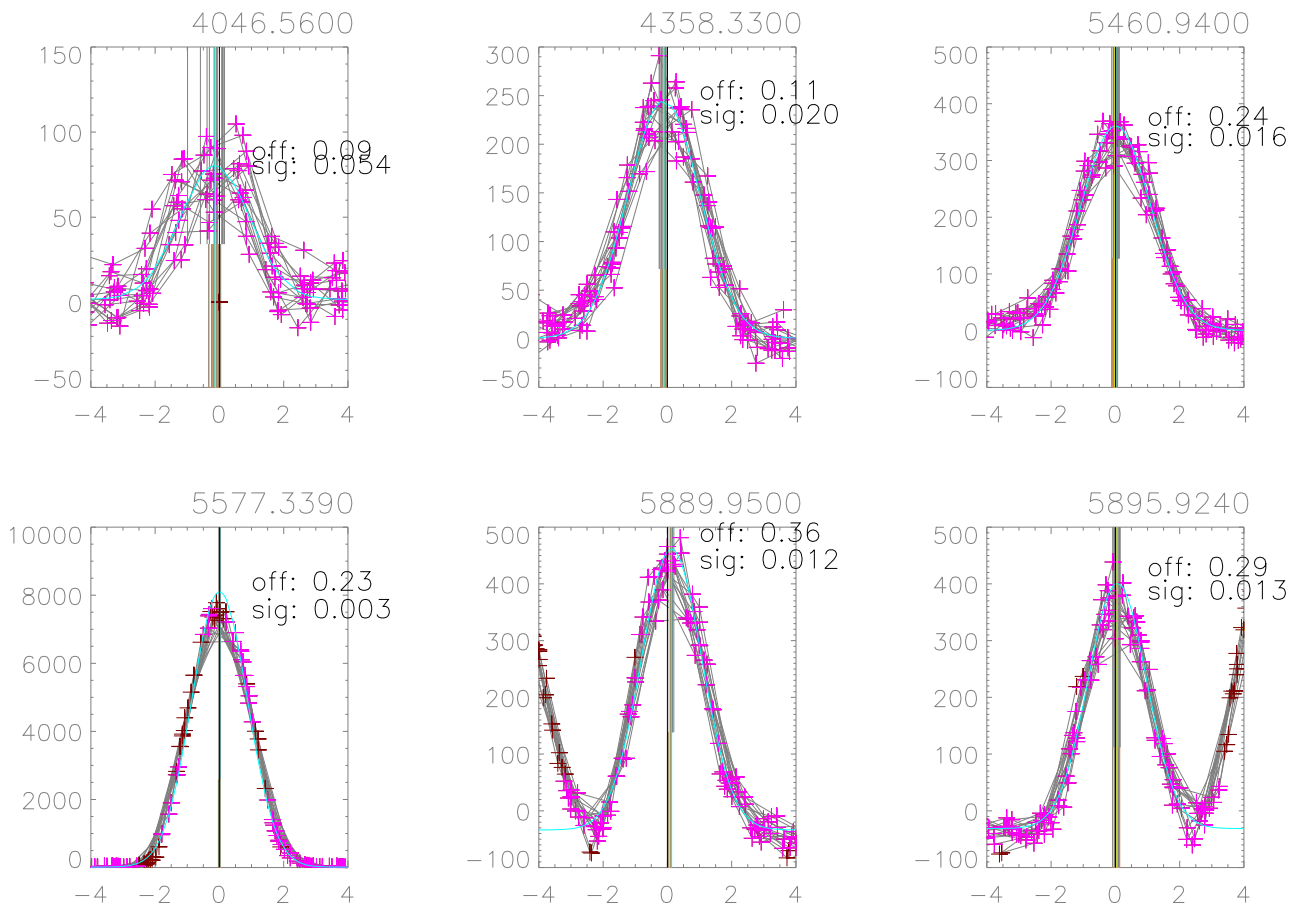

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b2-00015901.f
16.4
11.8
Y [pix]
X [pix]
0
500
1000
1500
2000

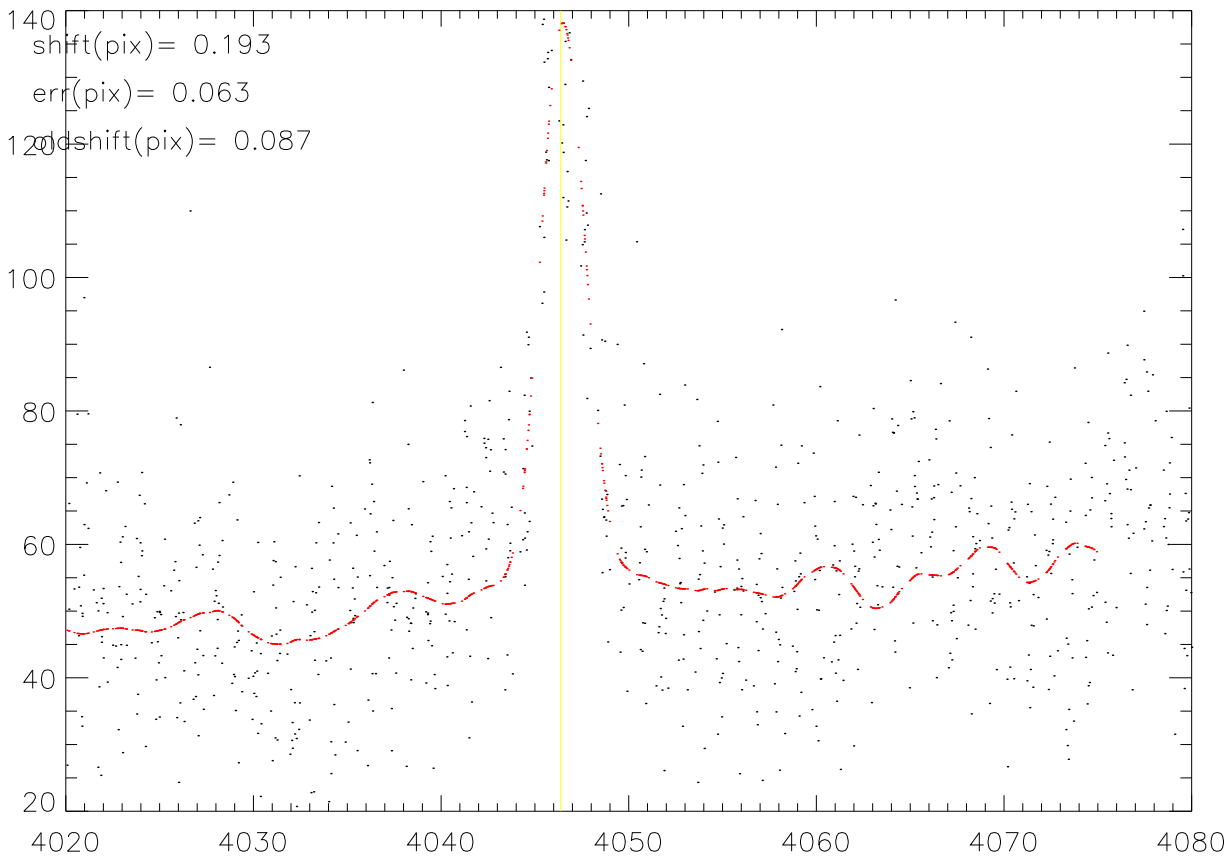

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b2-00015901.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.637
Max value = 15.769
Mon Feb 11 14:34:06 2008

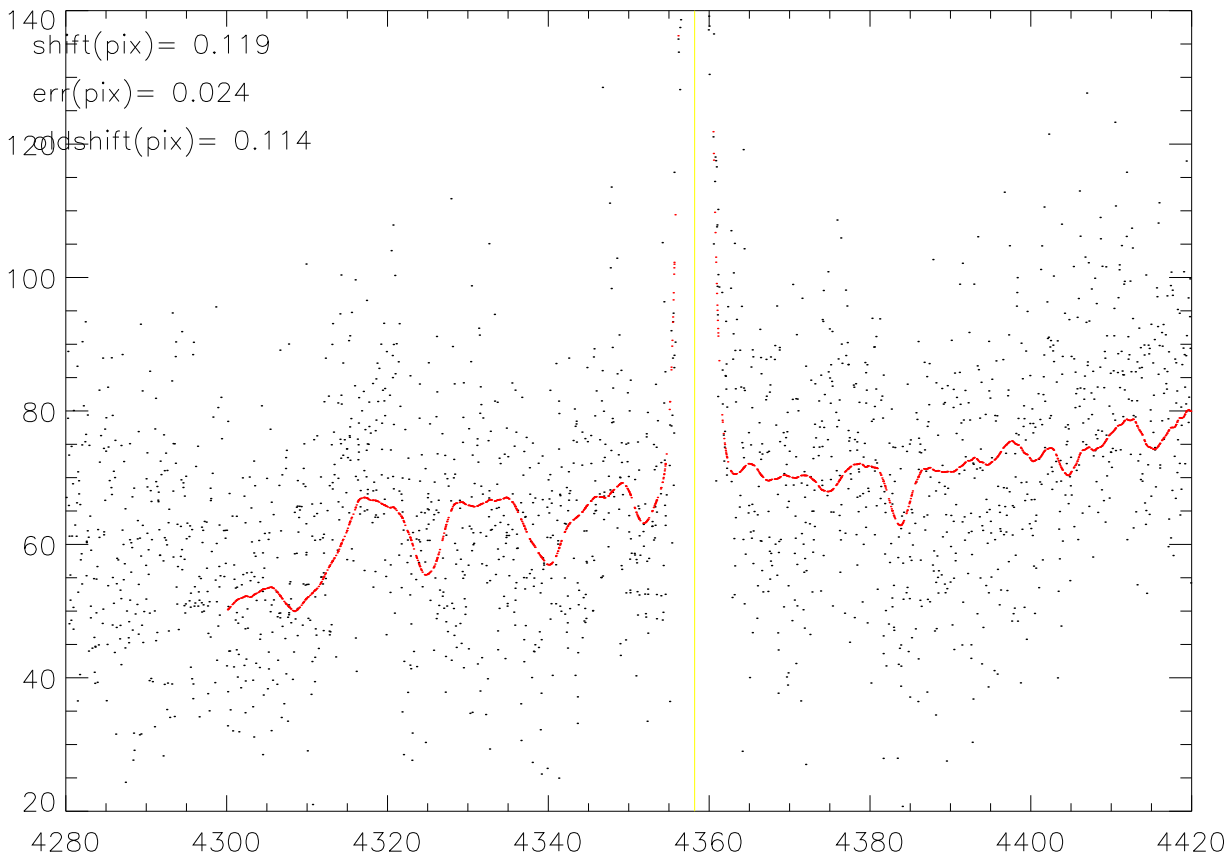

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015901.fit
11.36
11.36
Y [pix]
X [pix]
0
500
1000
1500
2000

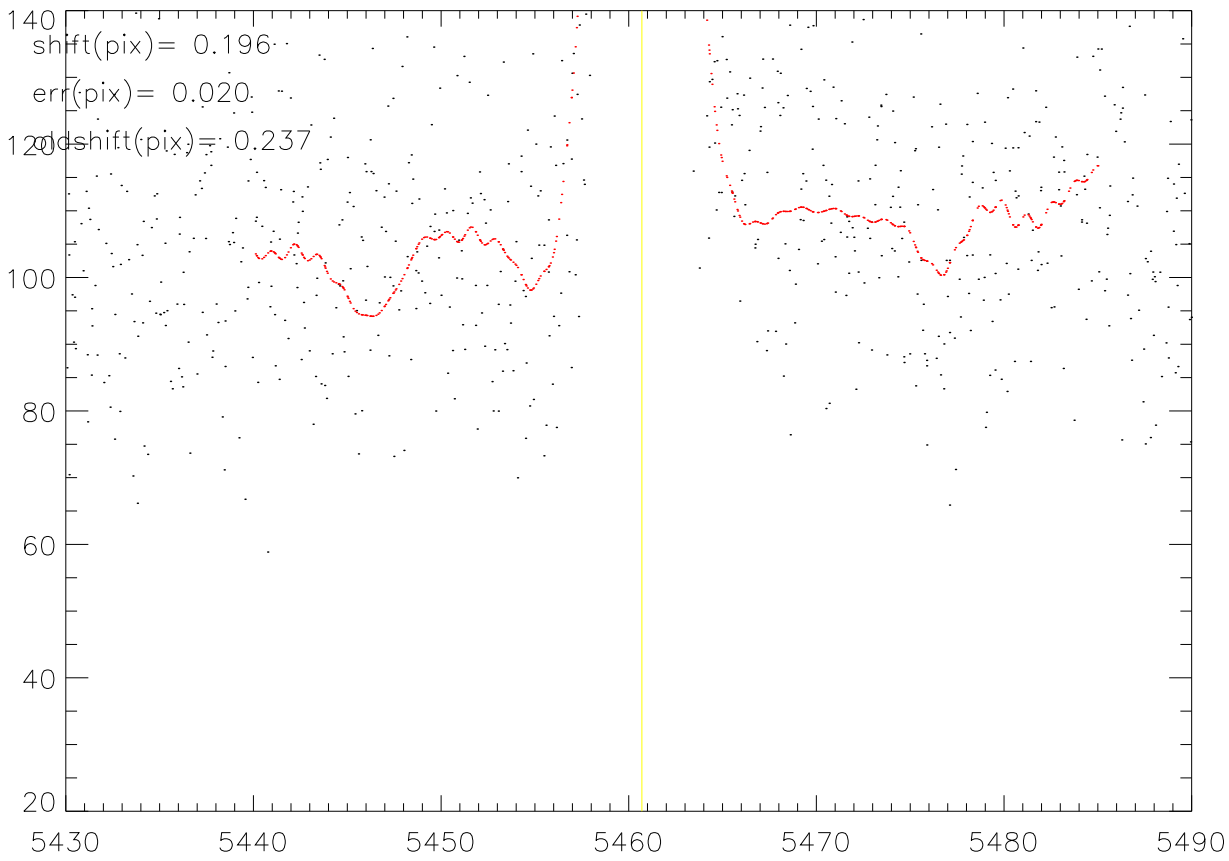

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015901.fit
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 7.672
Max value = 11.397
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:36:18 2008

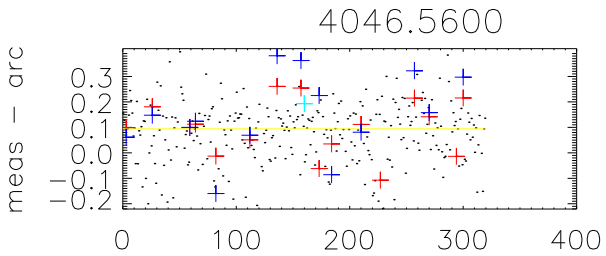

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-b2-00015901.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

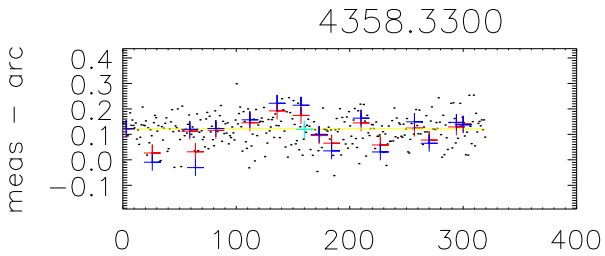

4046.5600
off: 0.09
sig: 0.054
4358.3300
off: 0.11
sig: 0.020
5460.9400
off: 0.24
sig: 0.016
5577.3390
off: 0.23
sig: 0.003
5889.9500
off: 0.36
sig: 0.012
5895.9240
off: 0.29
sig: 0.013

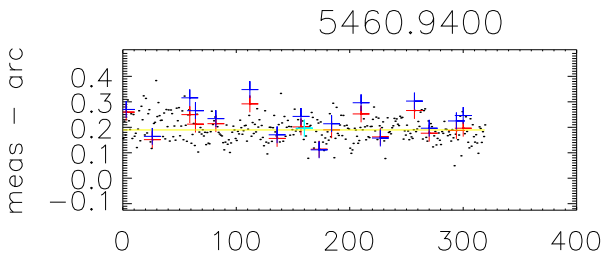

shift(pix)= 0.193
err(pix)= 0.063
oldshift(pix)= 0.087
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

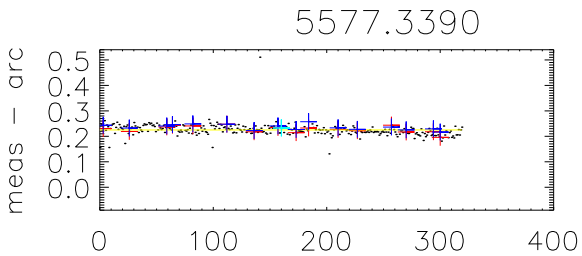

shift(pix)= 0.119
err(pix)= 0.024
oldshift(pix)= 0.114
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

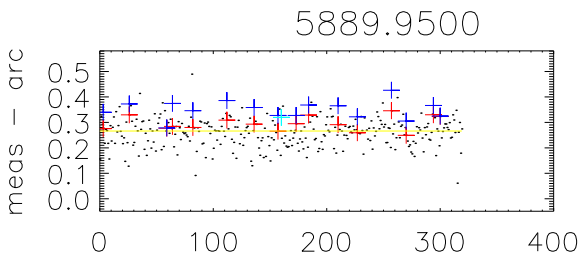

shift(pix)= 0.196
err(pix)= 0.020
oldshift(pix)= 0.237
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

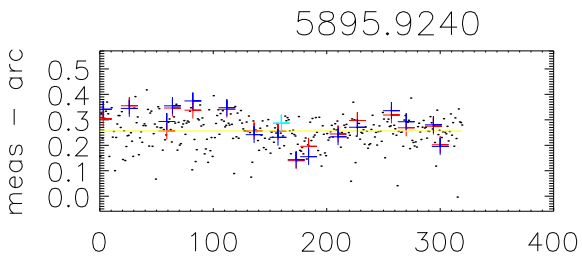

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

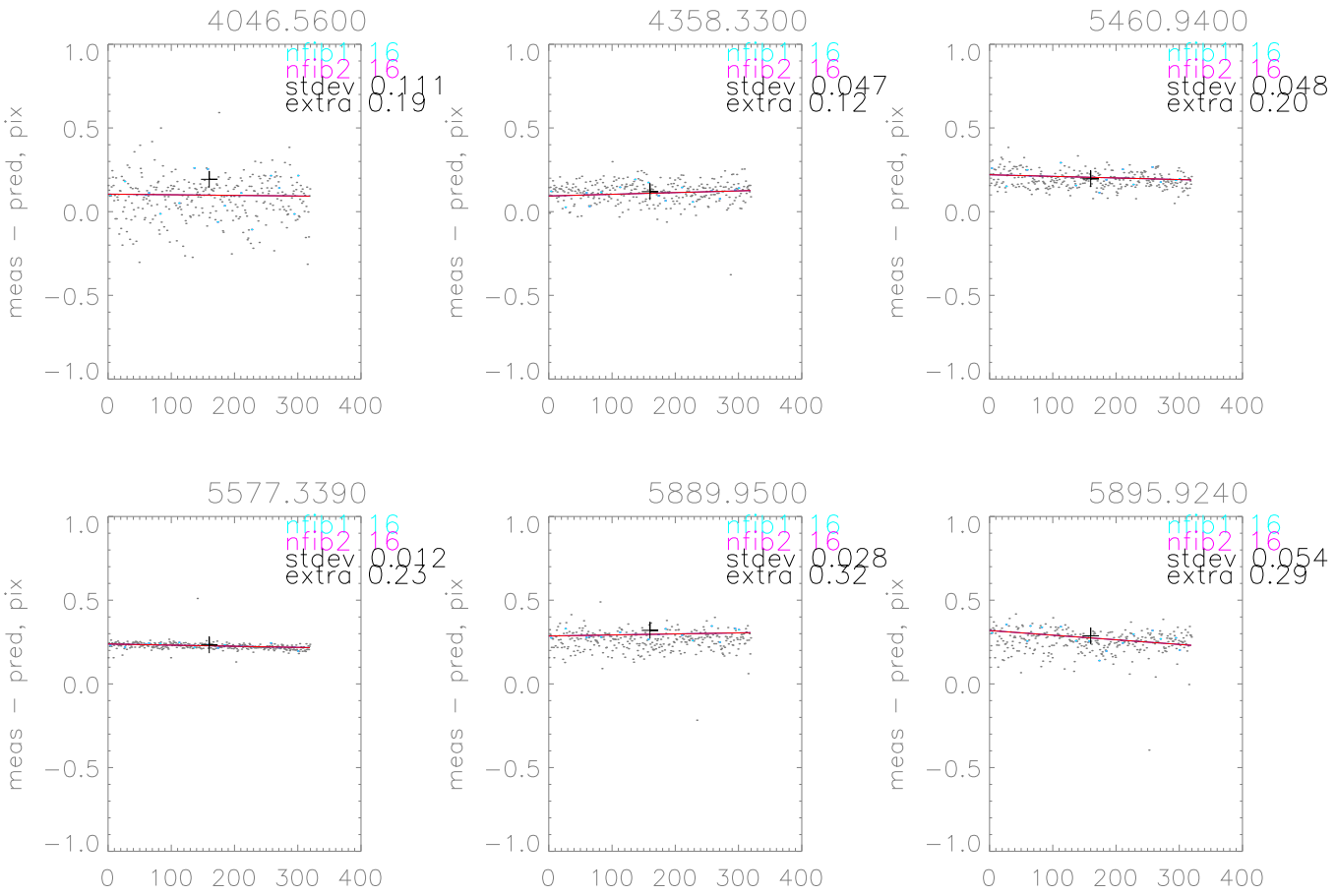

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

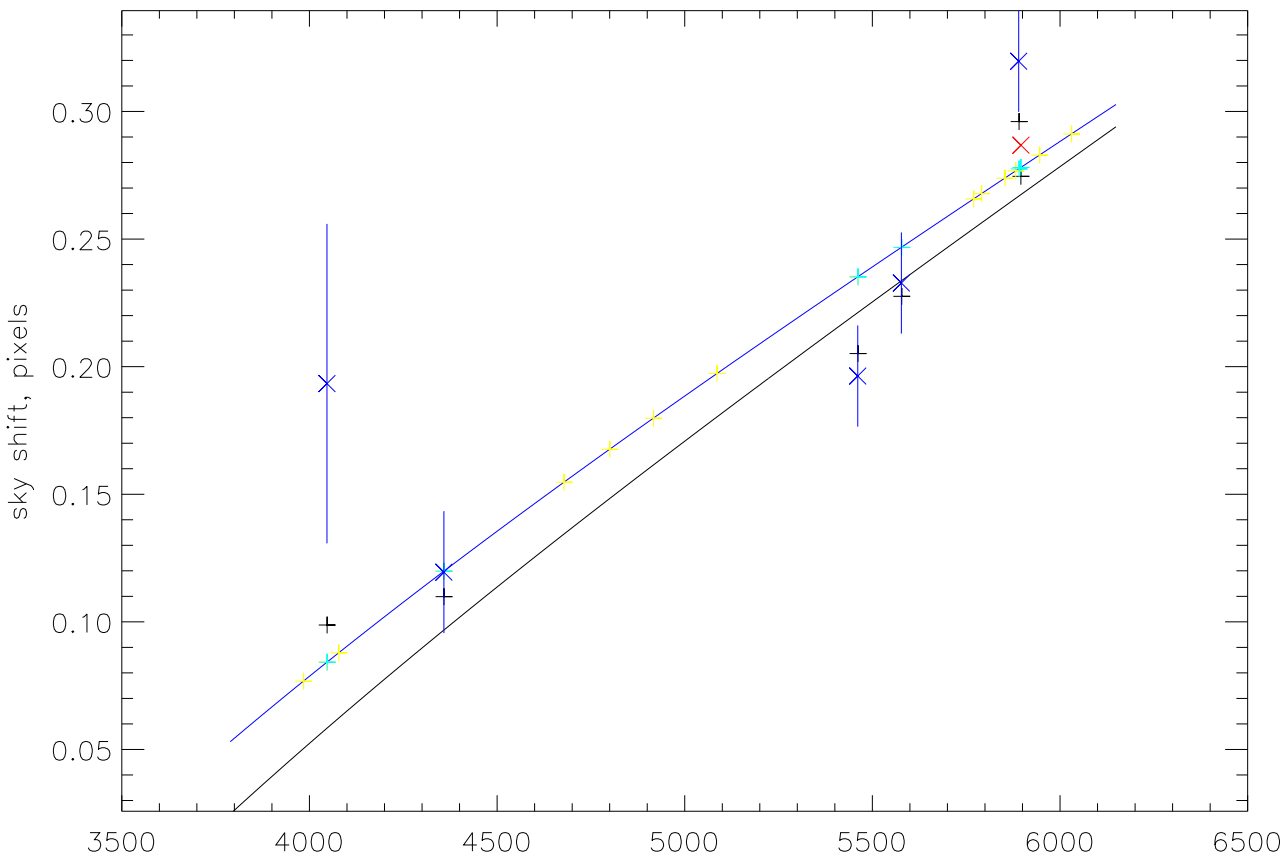

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

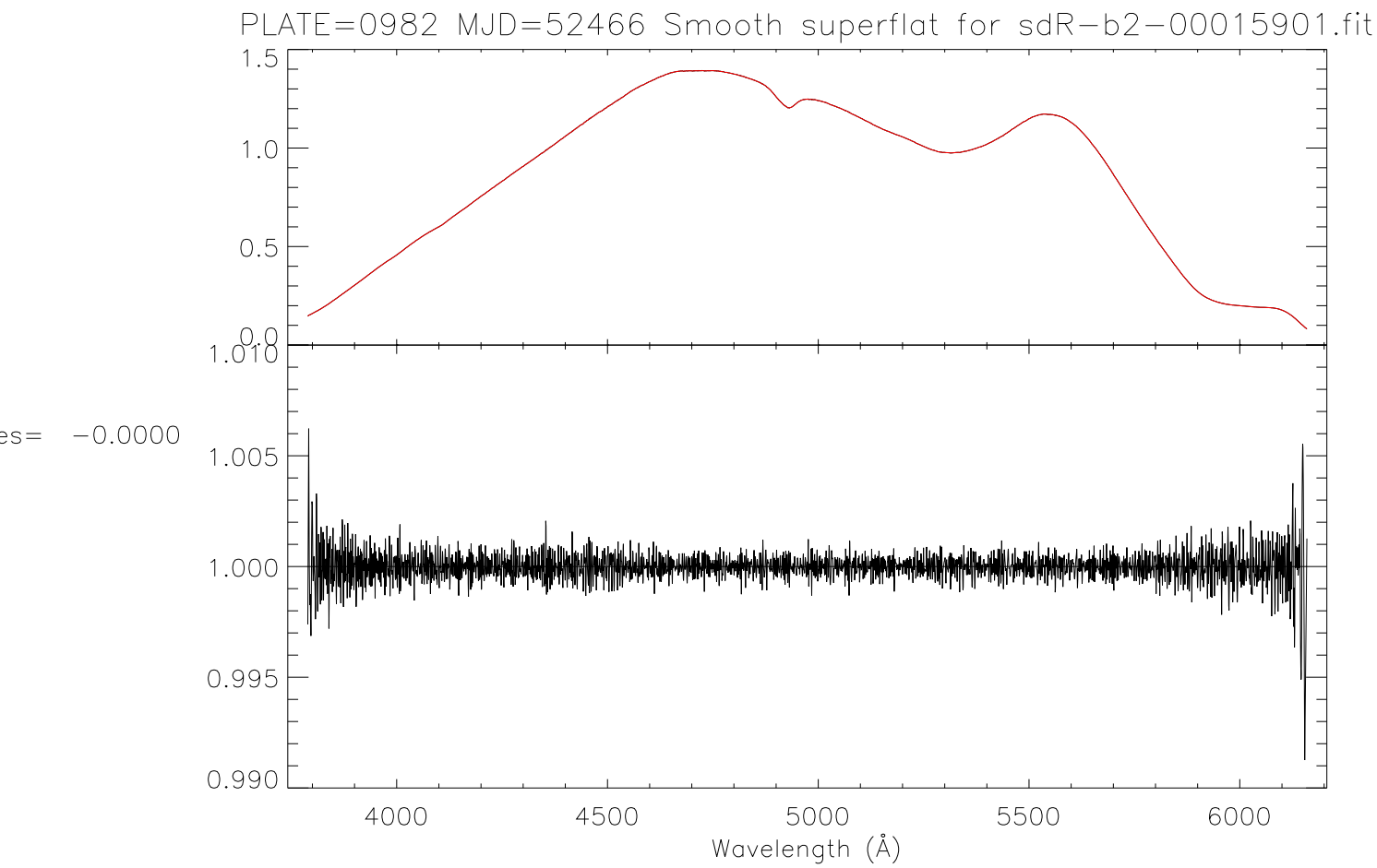

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

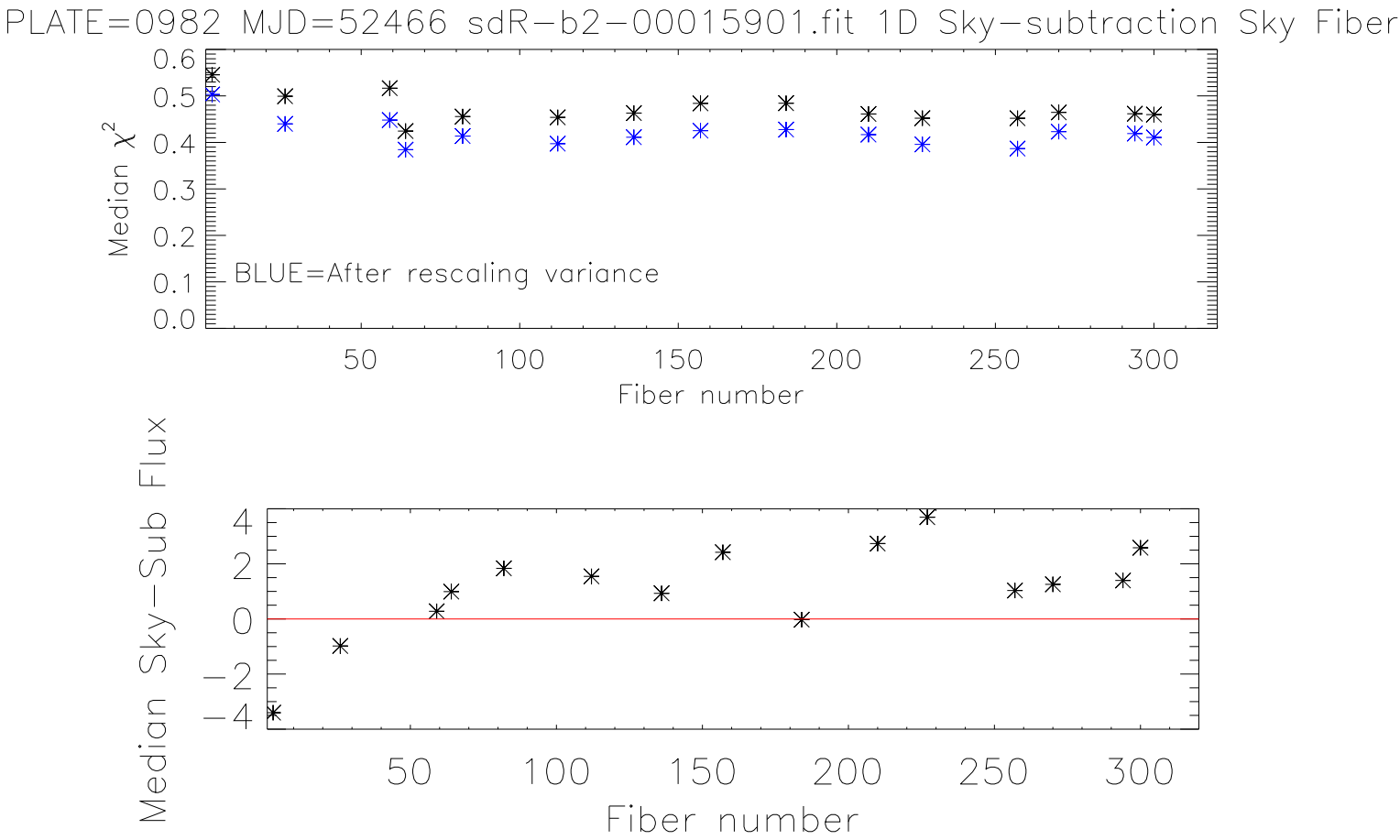

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

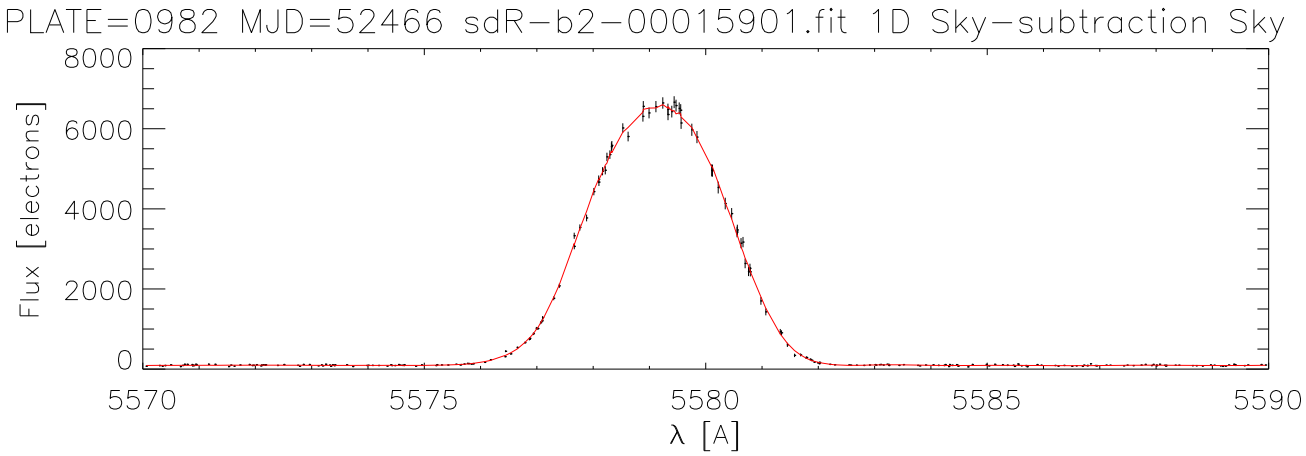

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

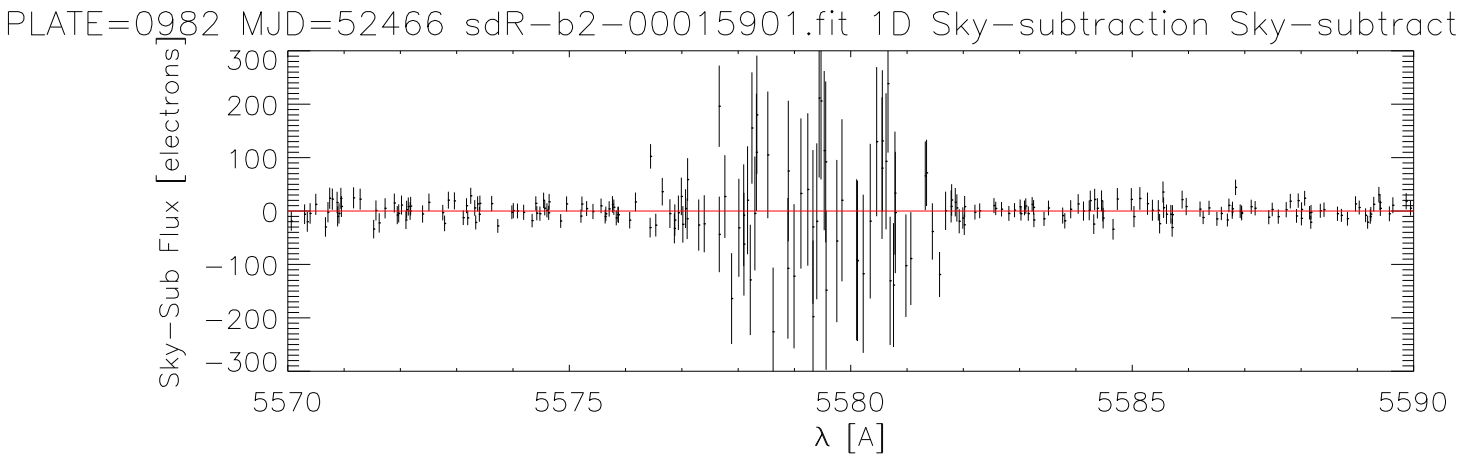

4046.5600
nfib1 16
nfib2 16
stdev 0.111
extra 0.19
4358.3300
nfib1 16
nfib2 16
stdev 0.047
extra 0.12
5460.9400
nfib1 16
nfib2 16
stdev 0.048
extra 0.20
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.23
5889.9500
nfib1 16
nfib2 16
stdev 0.028
extra 0.32
5895.9240
nfib1 16
nfib2 16
stdev 0.054
extra 0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

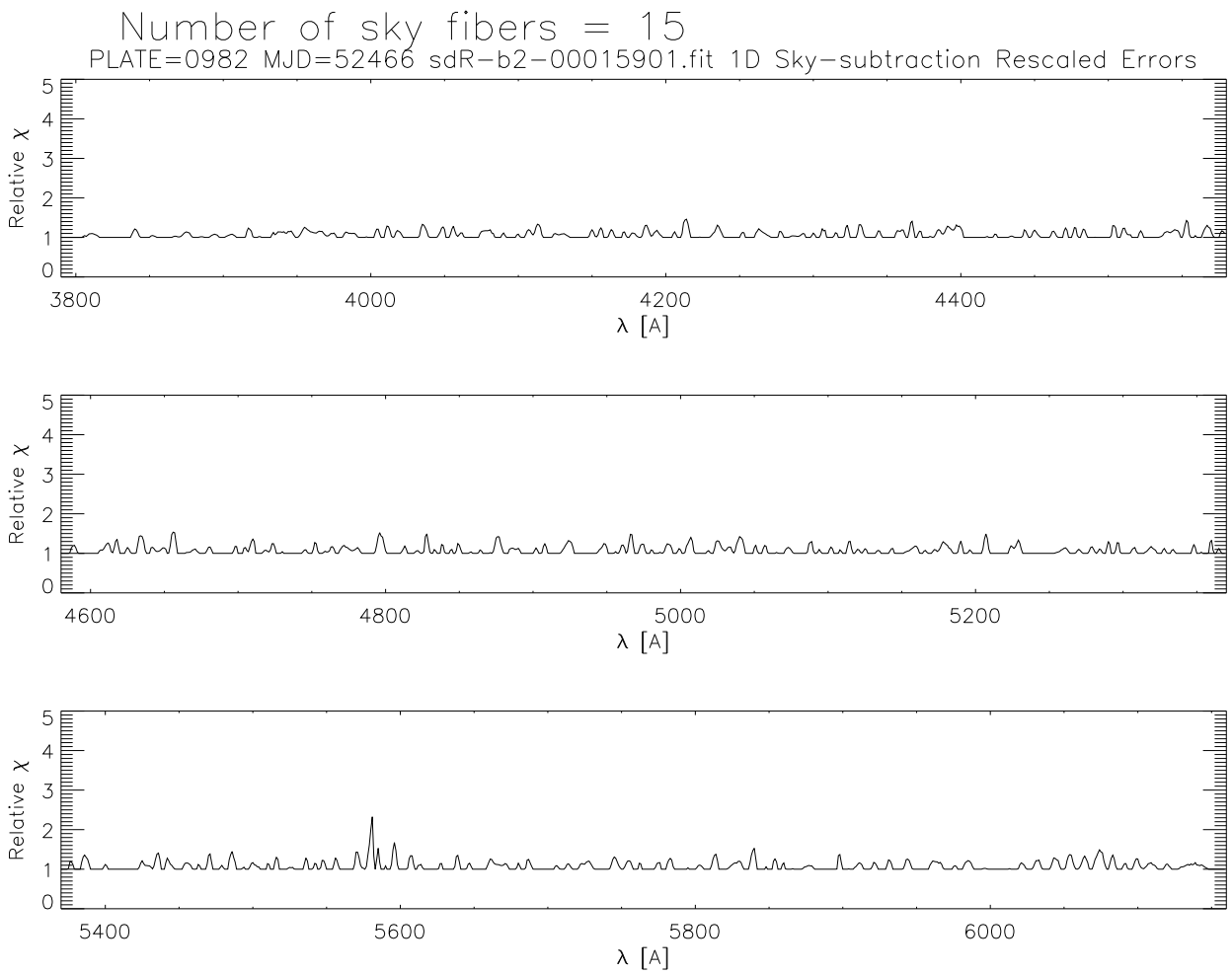

sky shift, pixels
0.30
0.25
0.20
0.15
0.10
0.05
3500
4000
4500
5000
5500
6000
6500

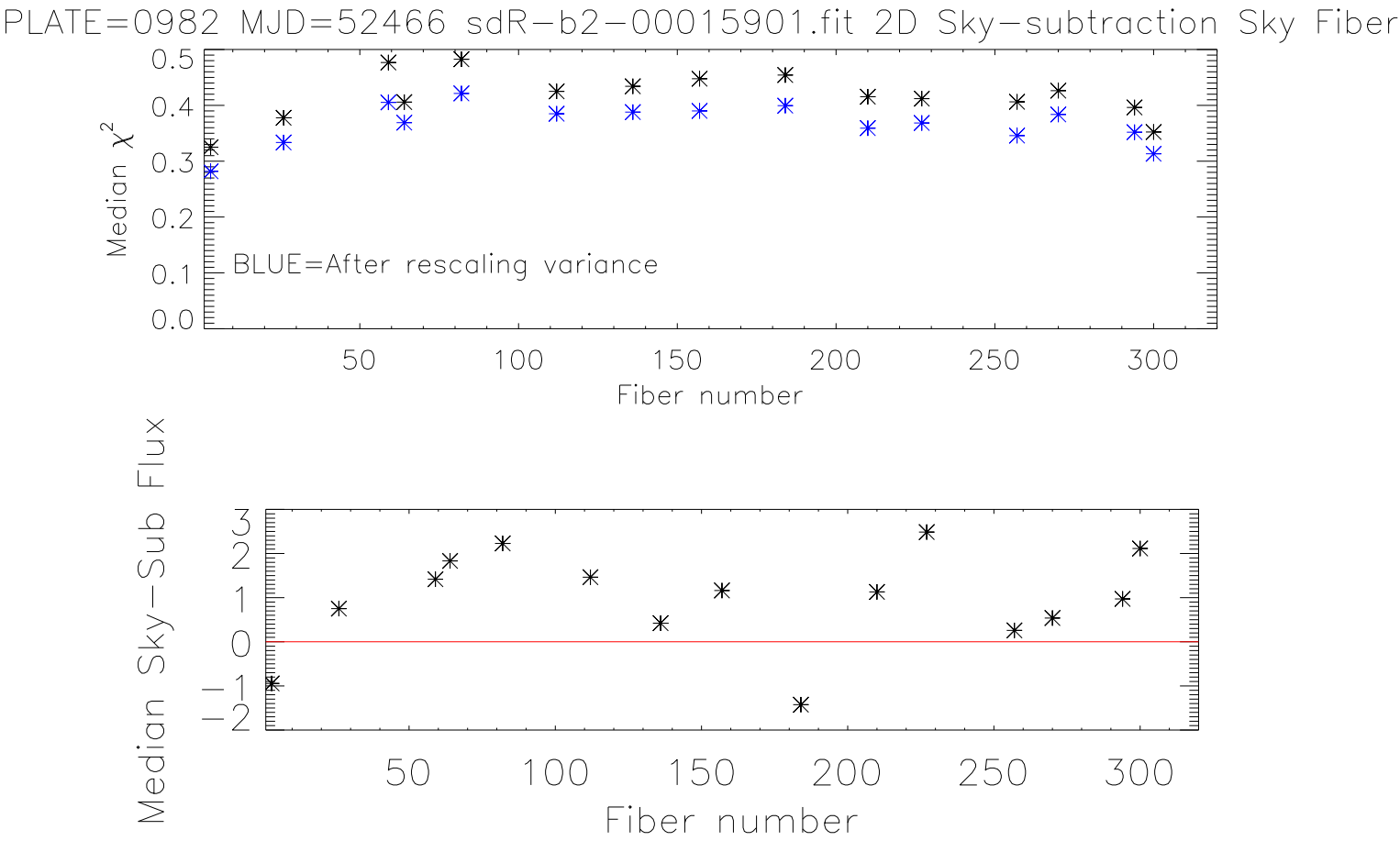

PLATE=0982 MJD=52466 Smooth superflat for sdR-b2-00015901.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

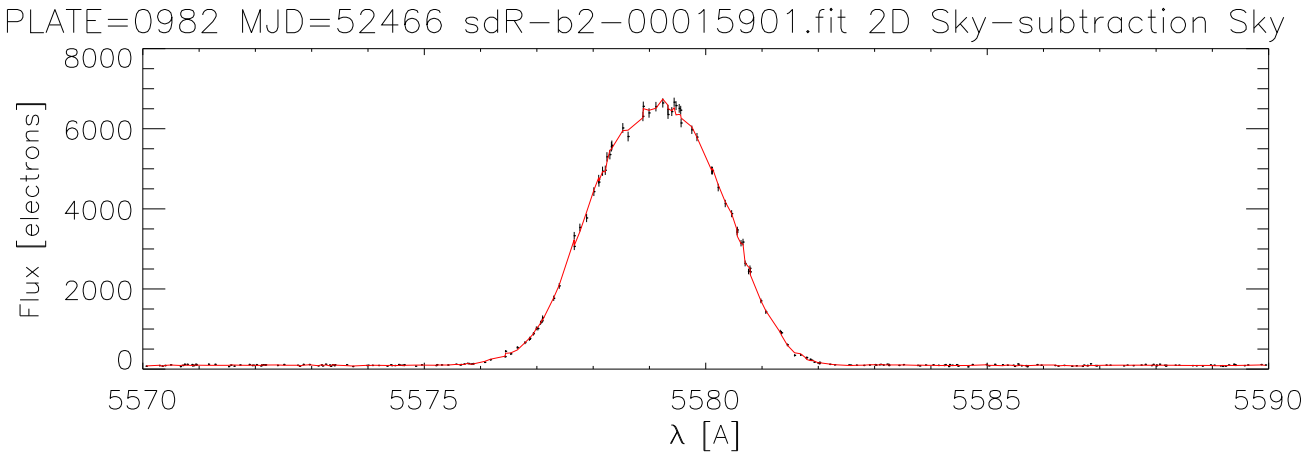

PLATE=0982 MJD=52466 sdR-b2-00015901.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

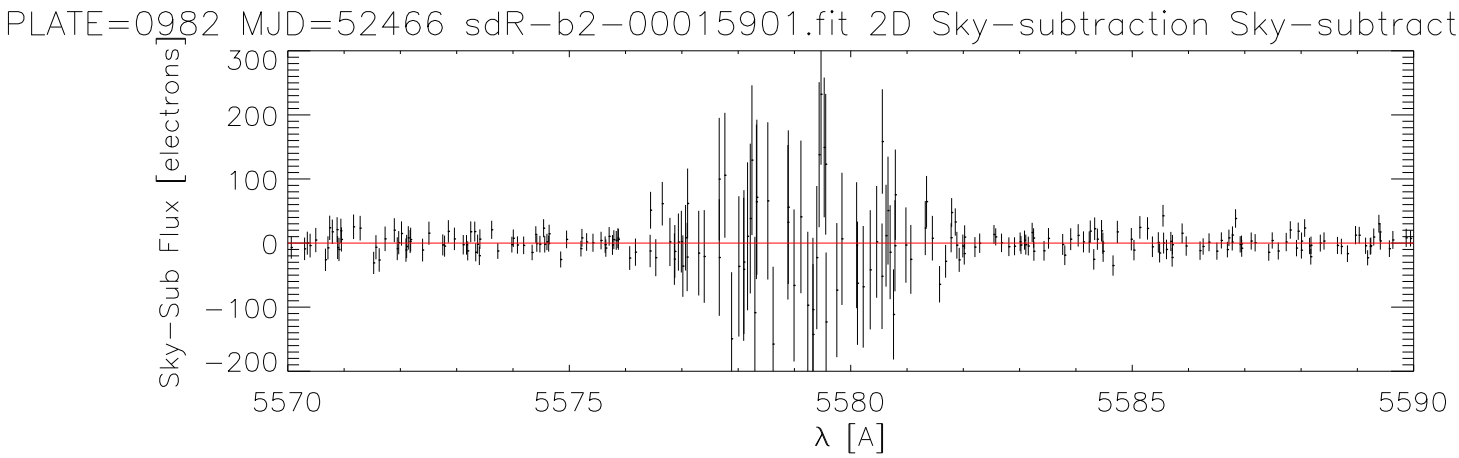

PLATE=0982 MJD=52466 sdR-b2-00015901.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

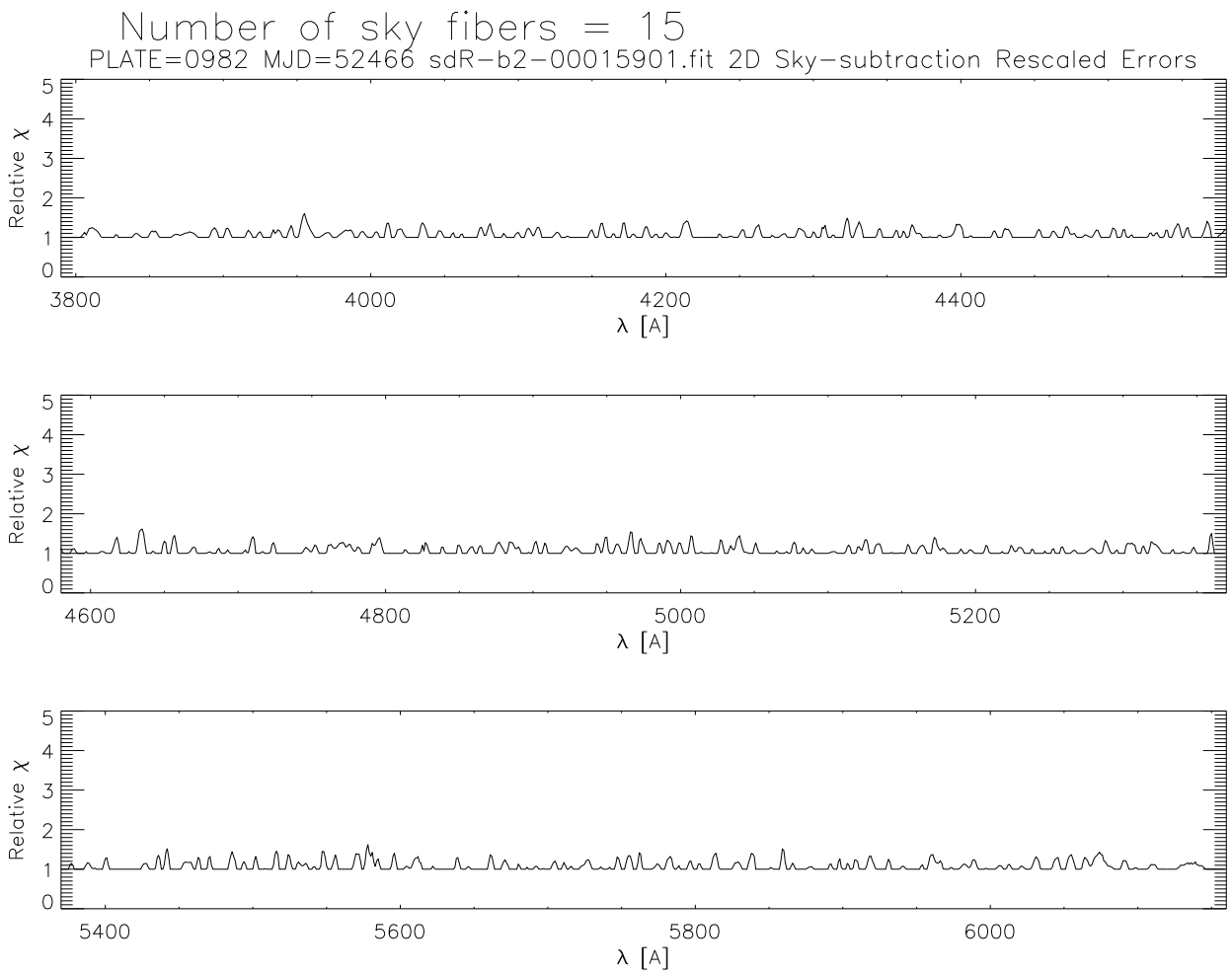

PLATE=0982 MJD=52466 sdR-b2-00015901.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

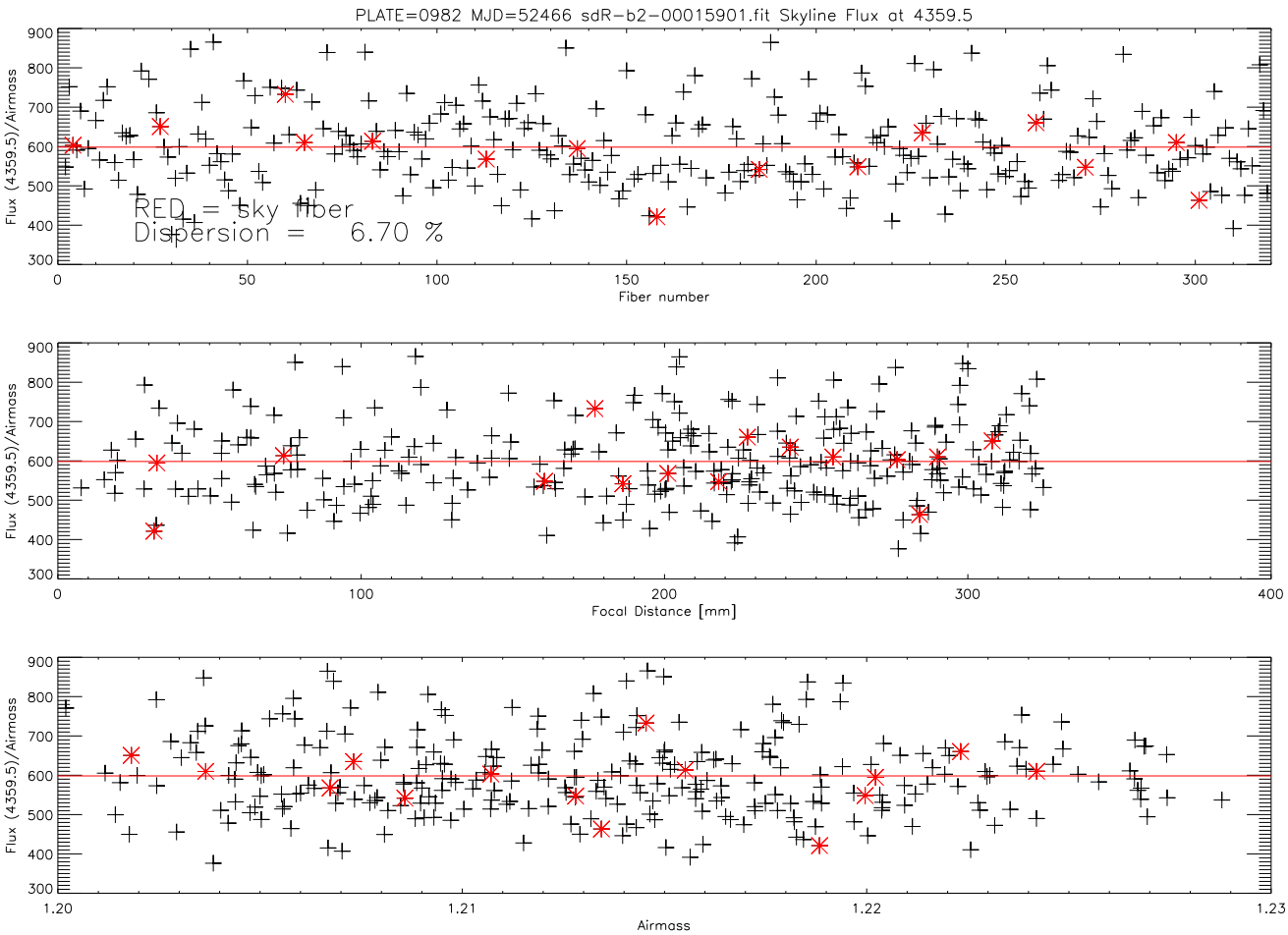

Number of sky fibers = 15
PLATE=0982 MJD=52466 sdR-b2-00015901.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

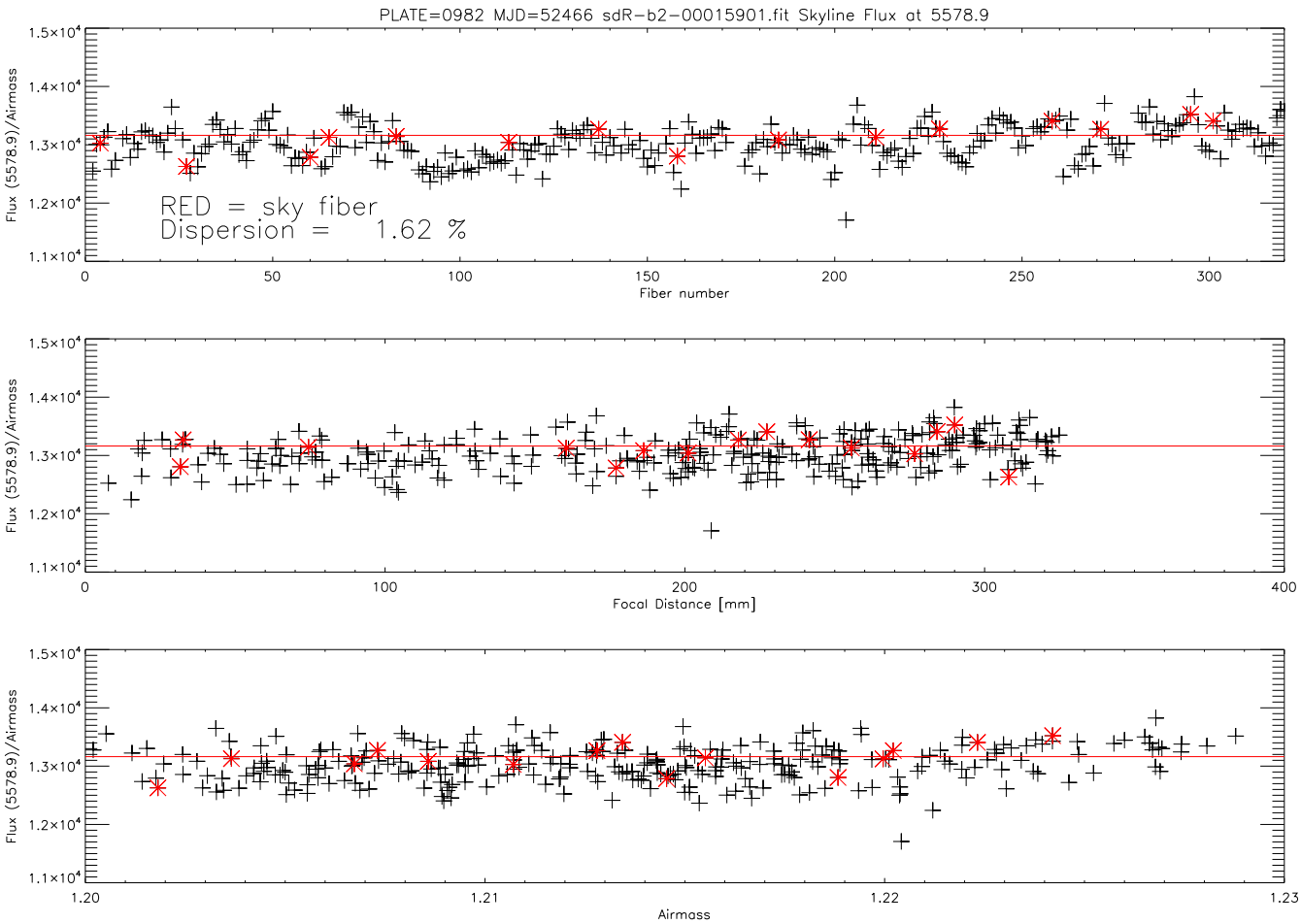

PLATE=0982 MJD=52466 sdR-b2-00015901.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

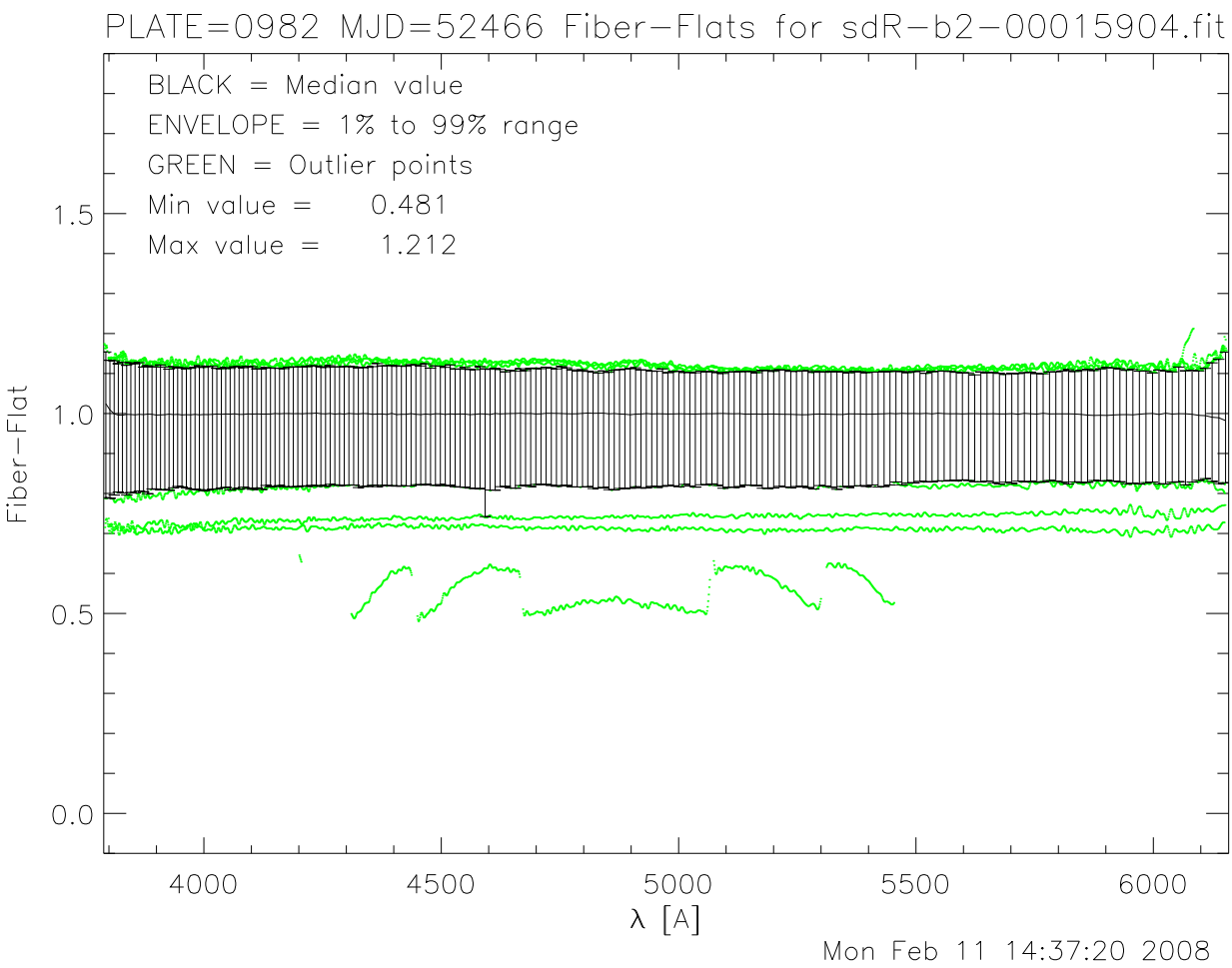

PLATE=0982 MJD=52466 sdR-b2-00015901.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

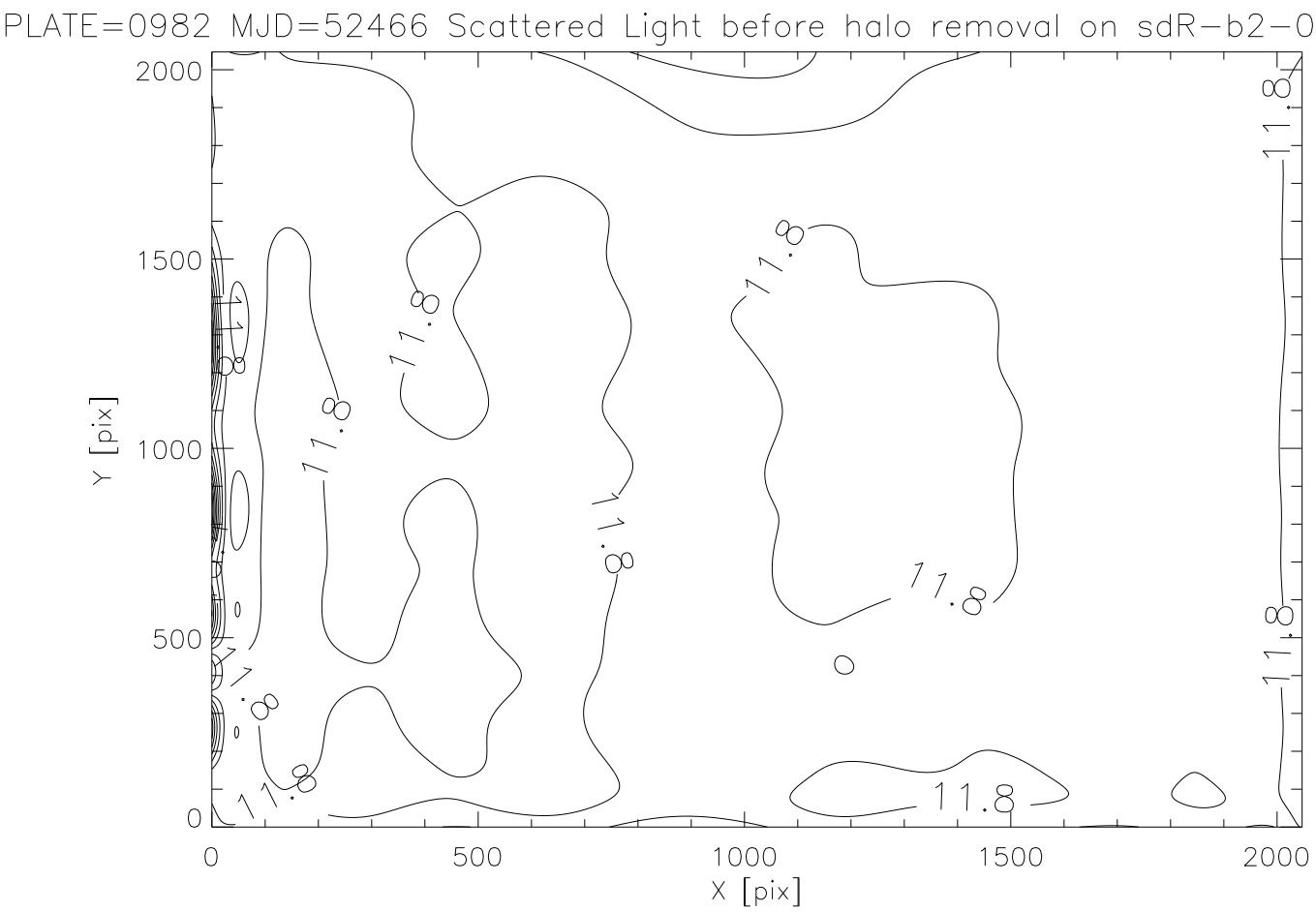

PLATE=0982 MJD=52466 sdR-b2-00015901.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

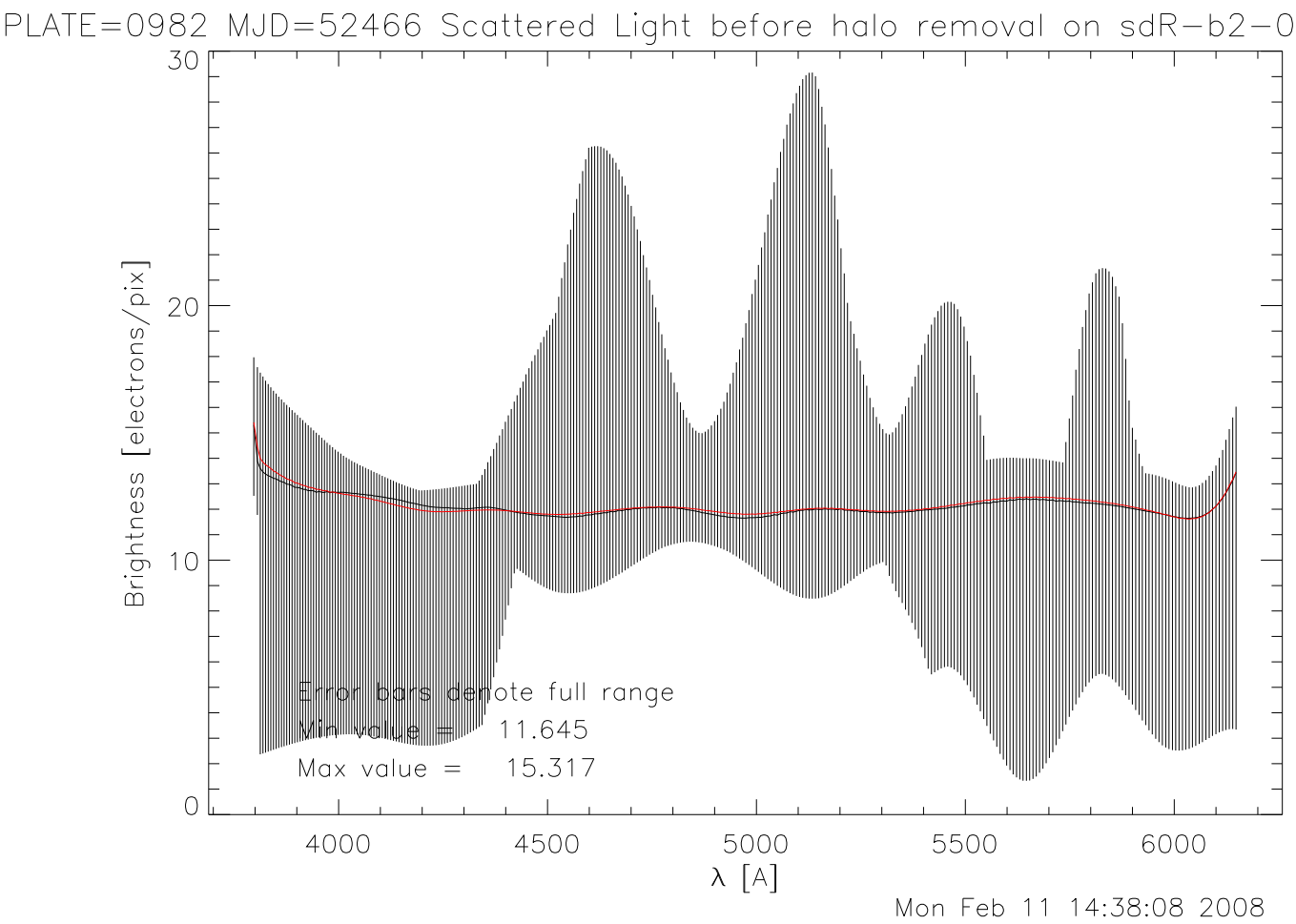

Number of sky fibers = 15
PLATE=0982 MJD=52466 sdR-b2-00015901.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

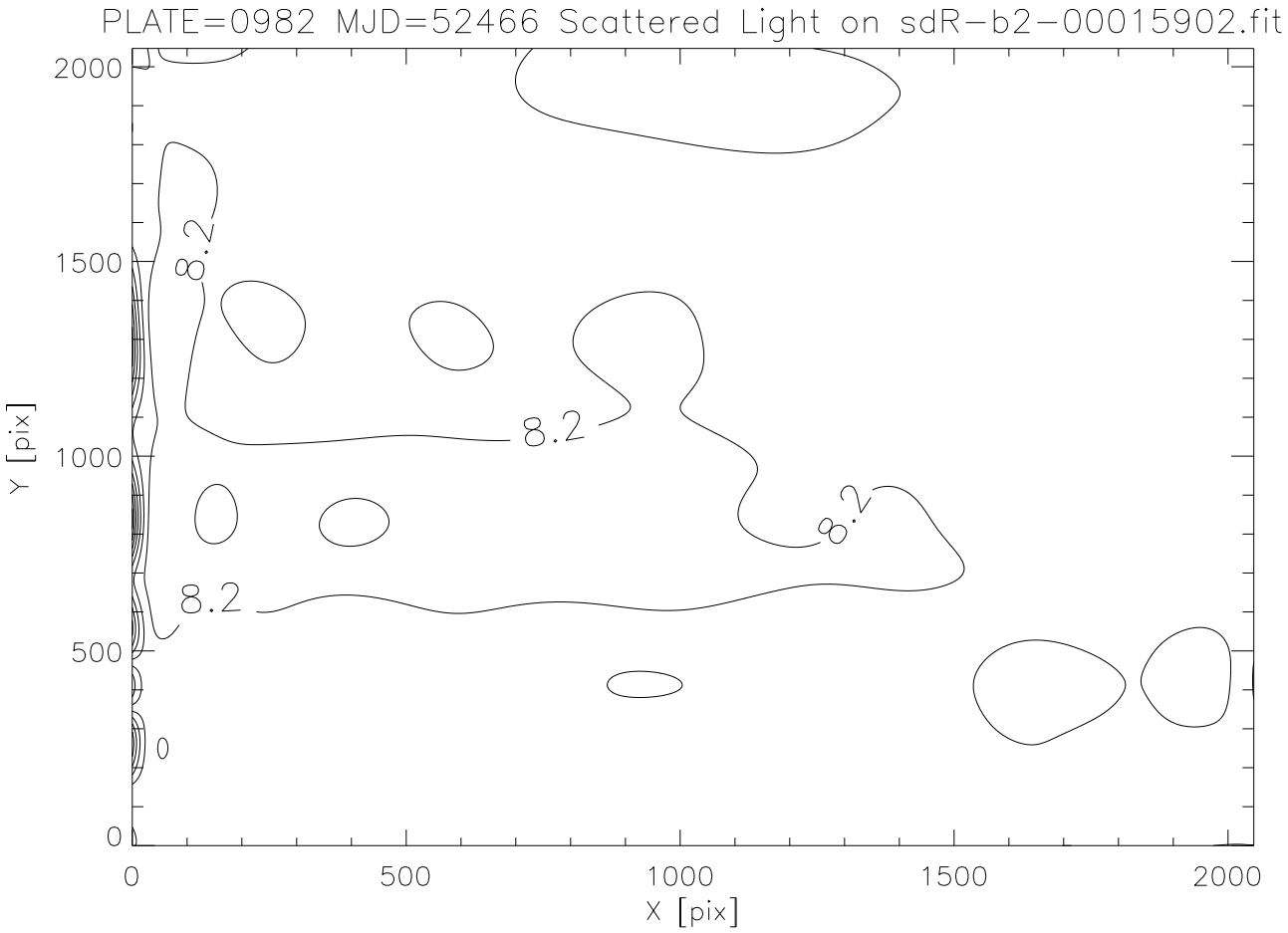

PLATE=0982 MJD=52466 sdR-b2-00015901.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 6.70 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

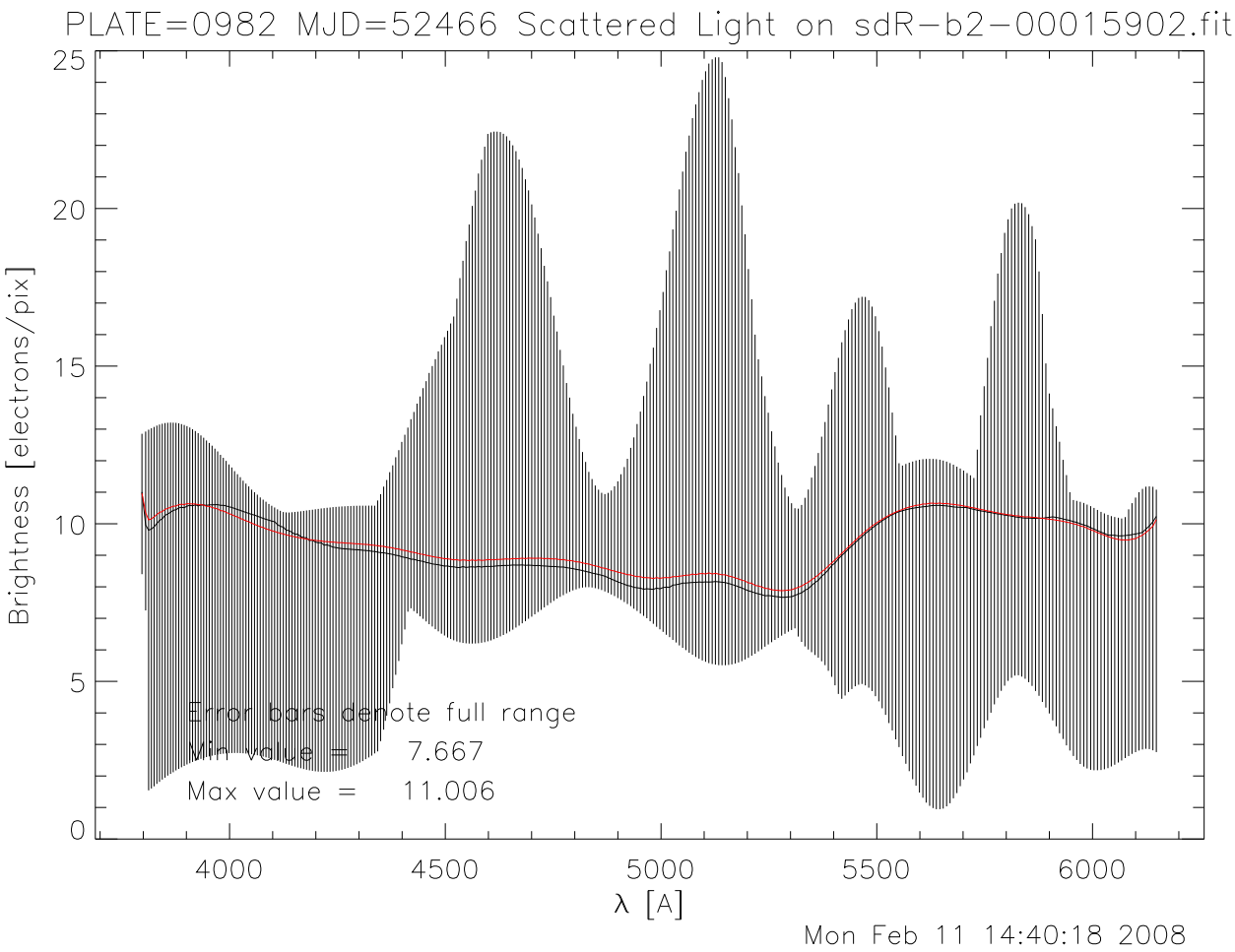

PLATE=0982 MJD=52466 sdR-b2-00015901.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.62 %
Fiber number
Focal Distance [mm]
Airmass

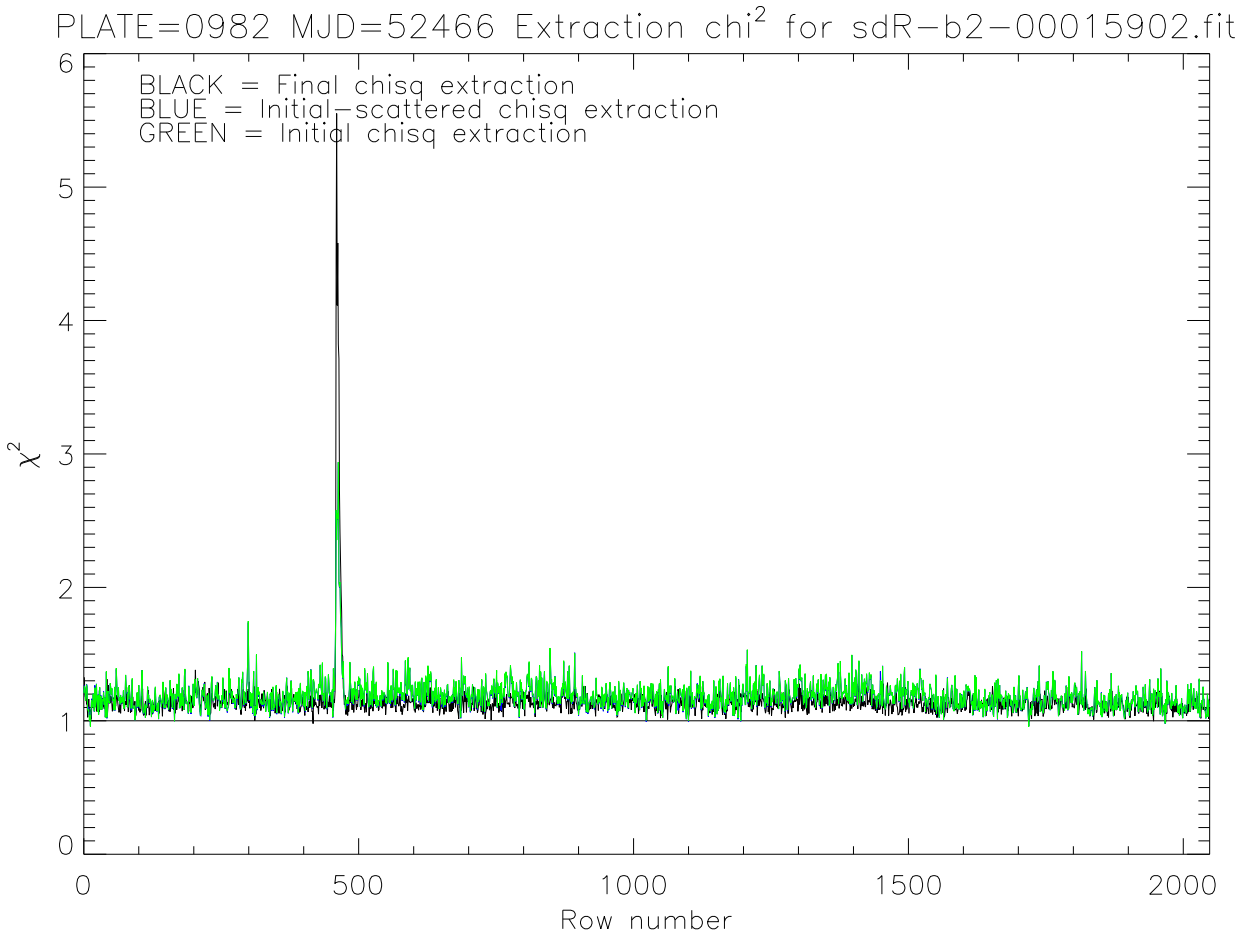

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b2-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.481
Max value = 1.212
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:37:20 2008

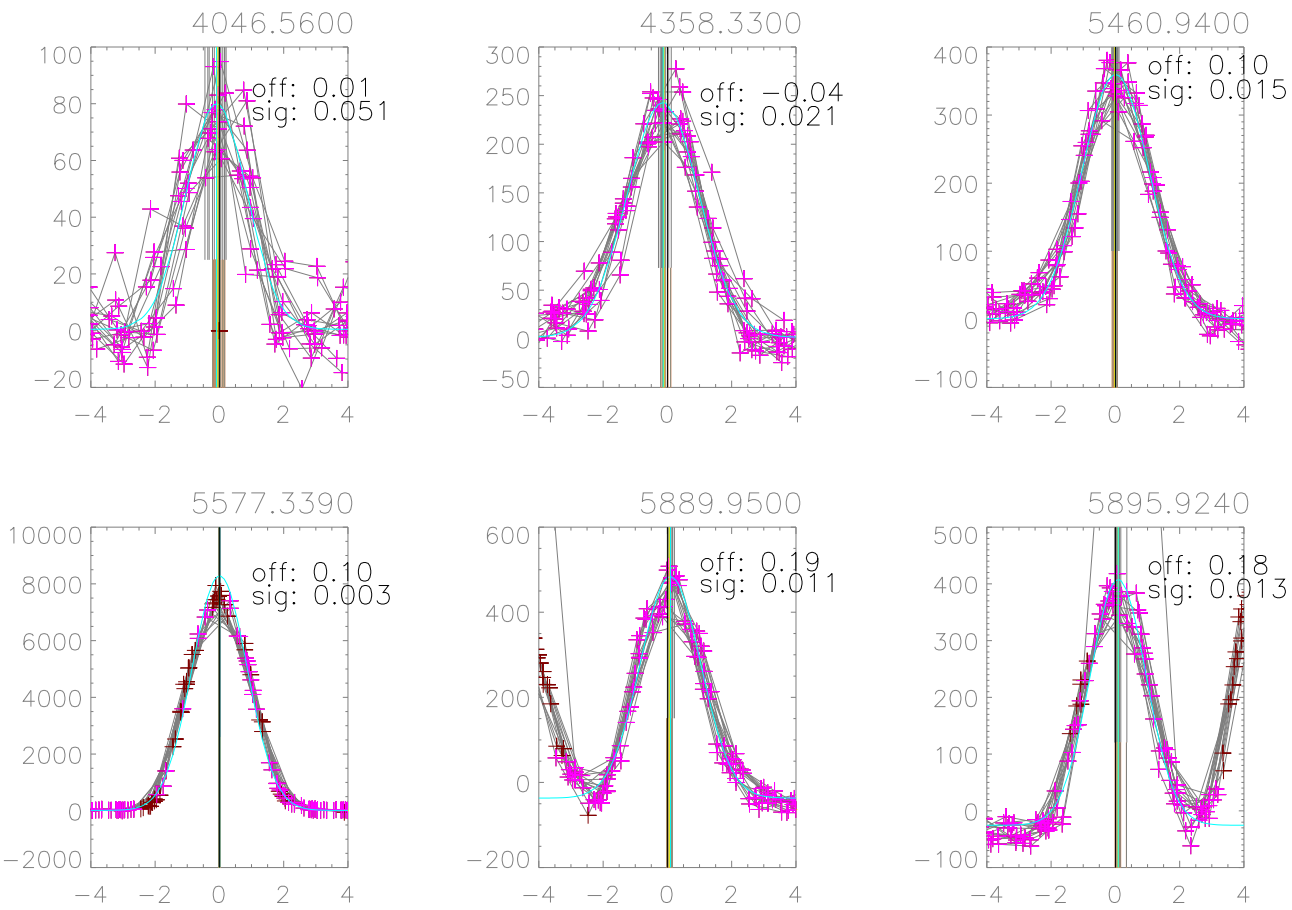

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b2-00015902.f
Y [pix]
X [pix]
0
500
1000
1500
2000
11.8
0

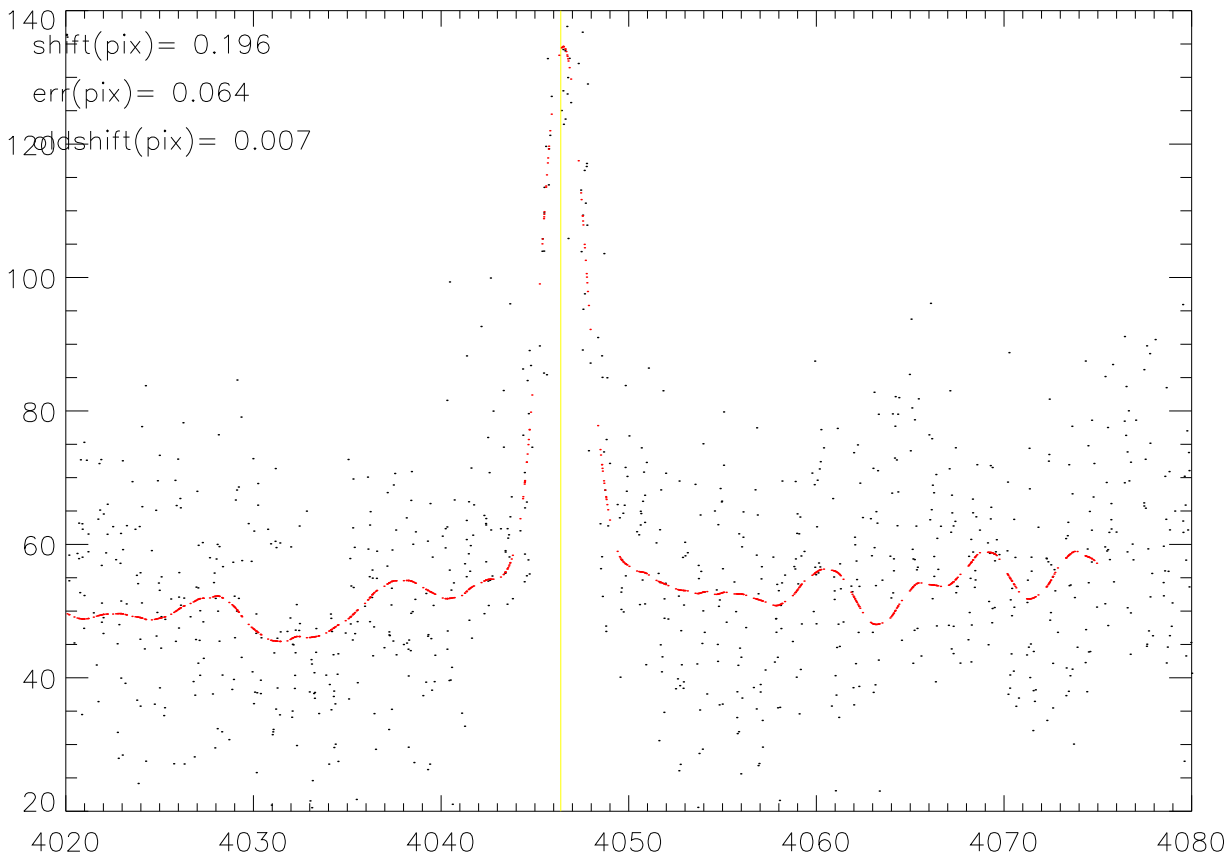

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b2-00015902.f
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 11.645
Max value = 15.317
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:38:08 2008

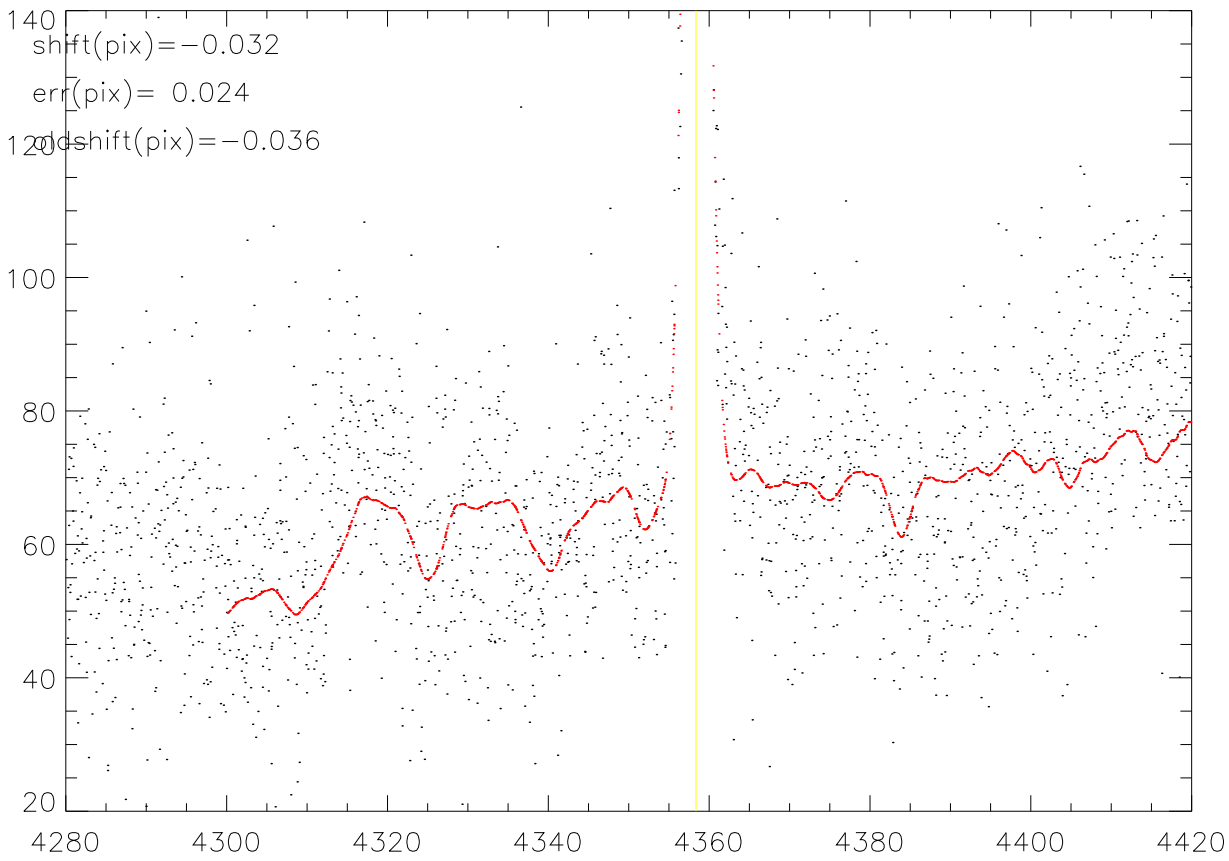

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015902.fit
2000
1500
1000
500
0
Y [pix]
8.2
8.2
8.2
8.2
0
0
500
1000
1500
2000
X [pix]

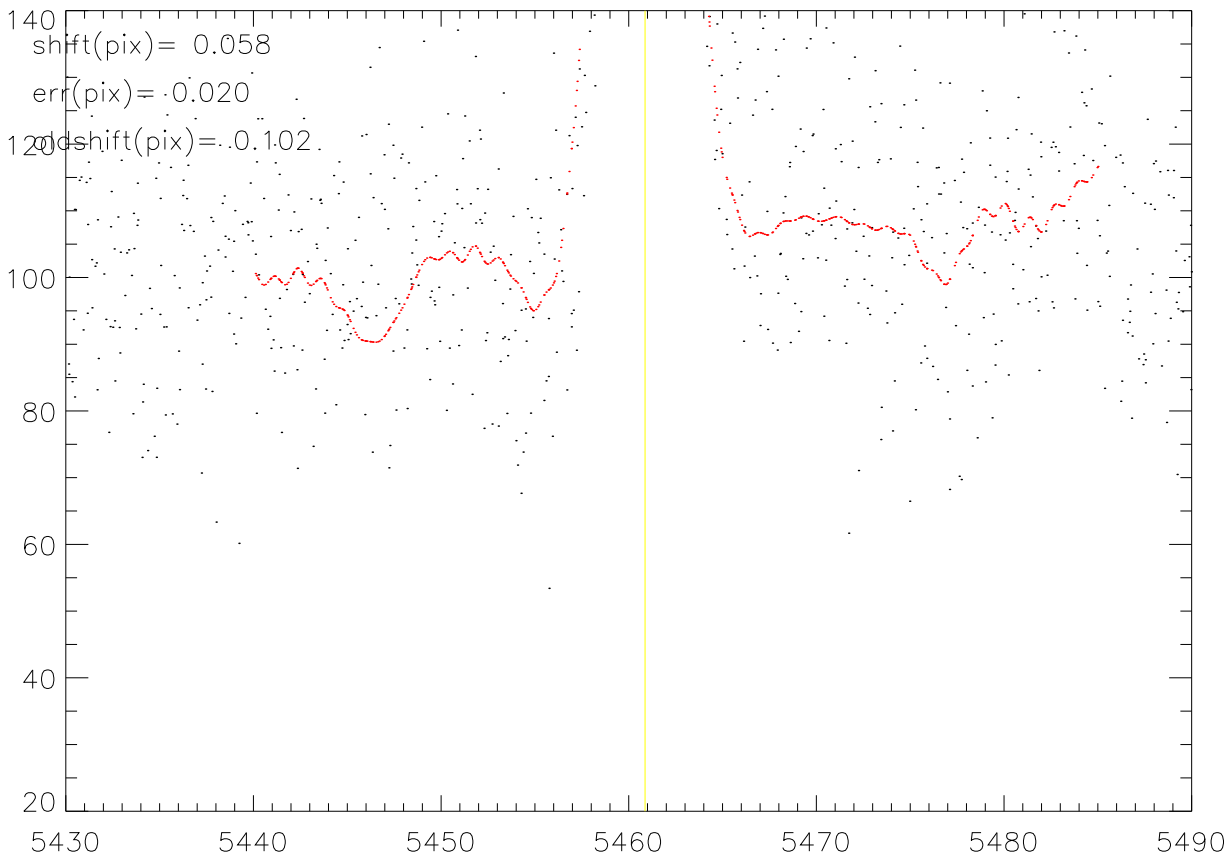

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015902.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.667
Max value = 11.006
Mon Feb 11 14:40:18 2008

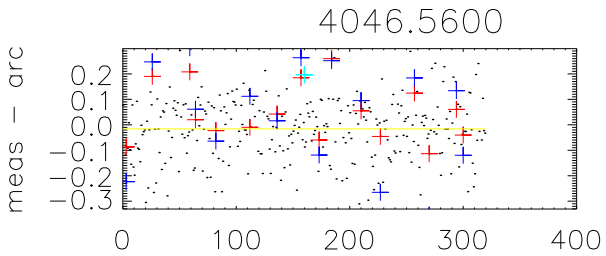

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-b2-00015902.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

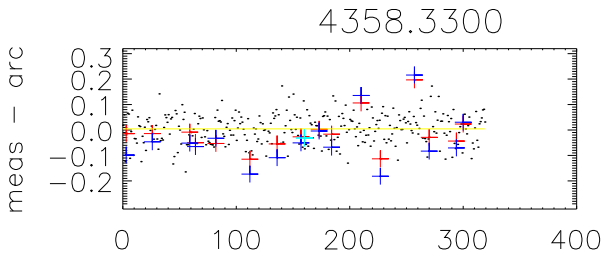

4046.5600
off: 0.01
sig: 0.051
4358.3300
off: −0.04
sig: 0.021
5460.9400
off: 0.10
sig: 0.015
5577.3390
off: 0.10
sig: 0.003
5889.9500
off: 0.19
sig: 0.011
5895.9240
off: 0.18
sig: 0.013

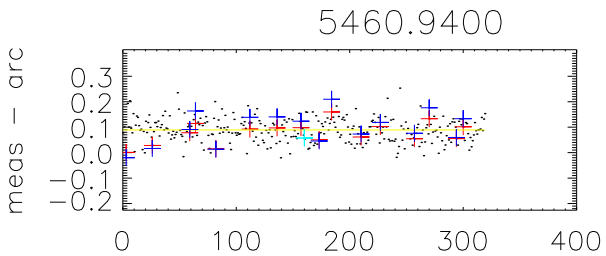

shift(pix)= 0.196
err(pix)= 0.064
oldshift(pix)= 0.007
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

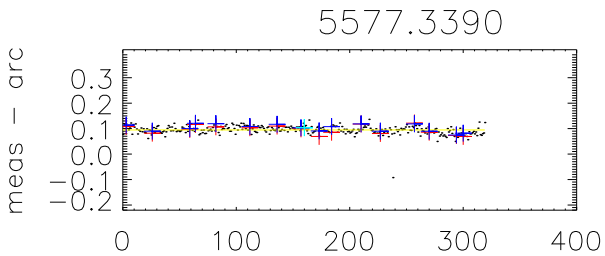

shift(pix)=−0.032
err(pix)= 0.024
oldshift(pix)=−0.036
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

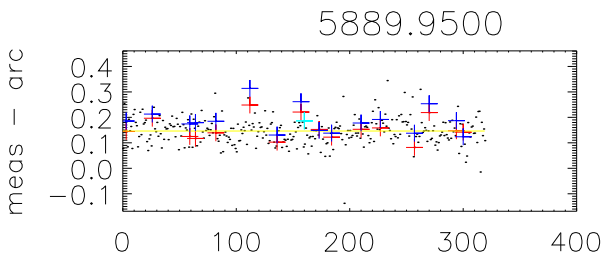

shift(pix)= 0.058
err(pix)= 0.020
oldshift(pix)= 0.102
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

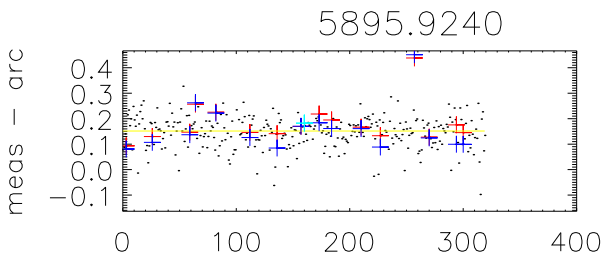

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

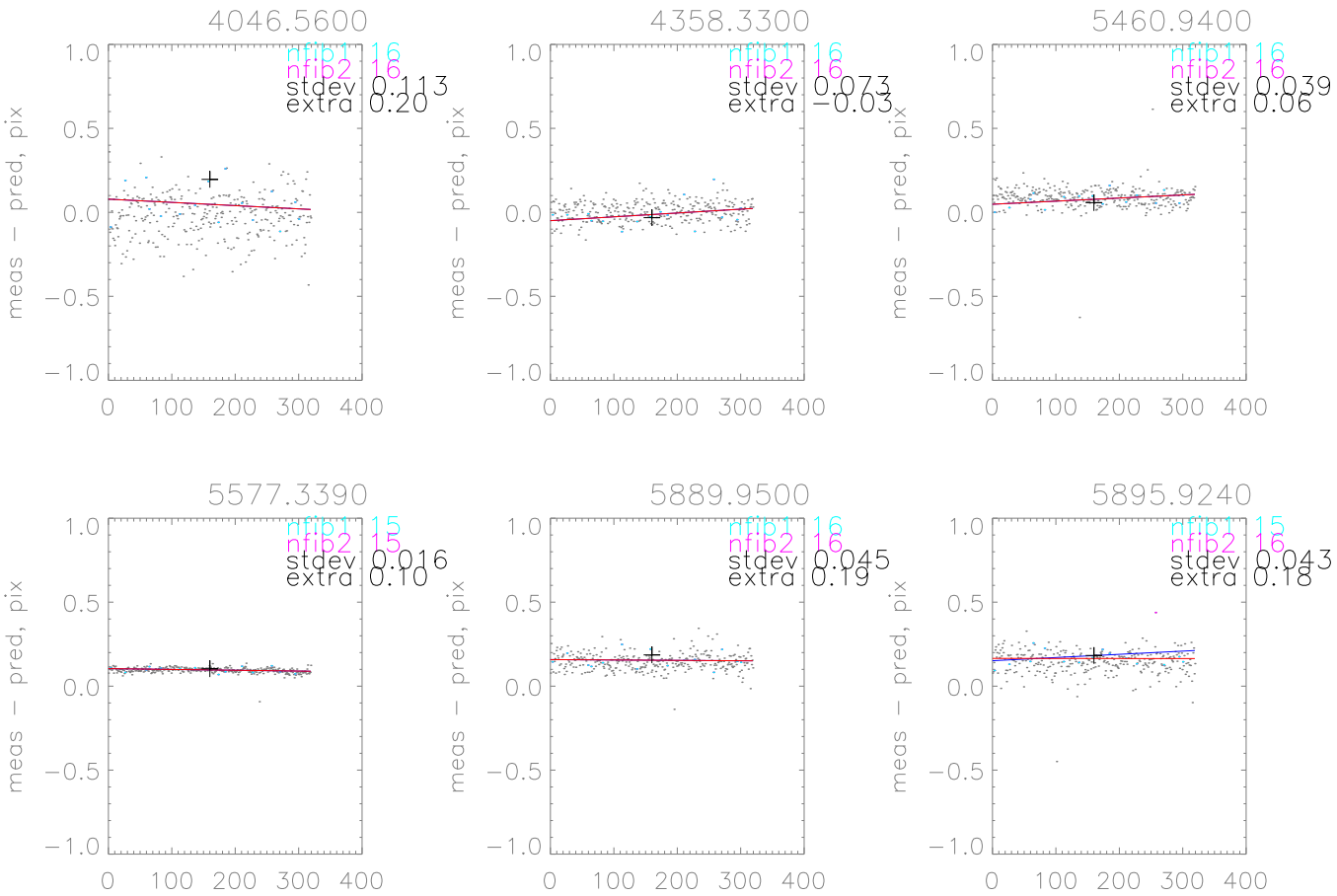

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

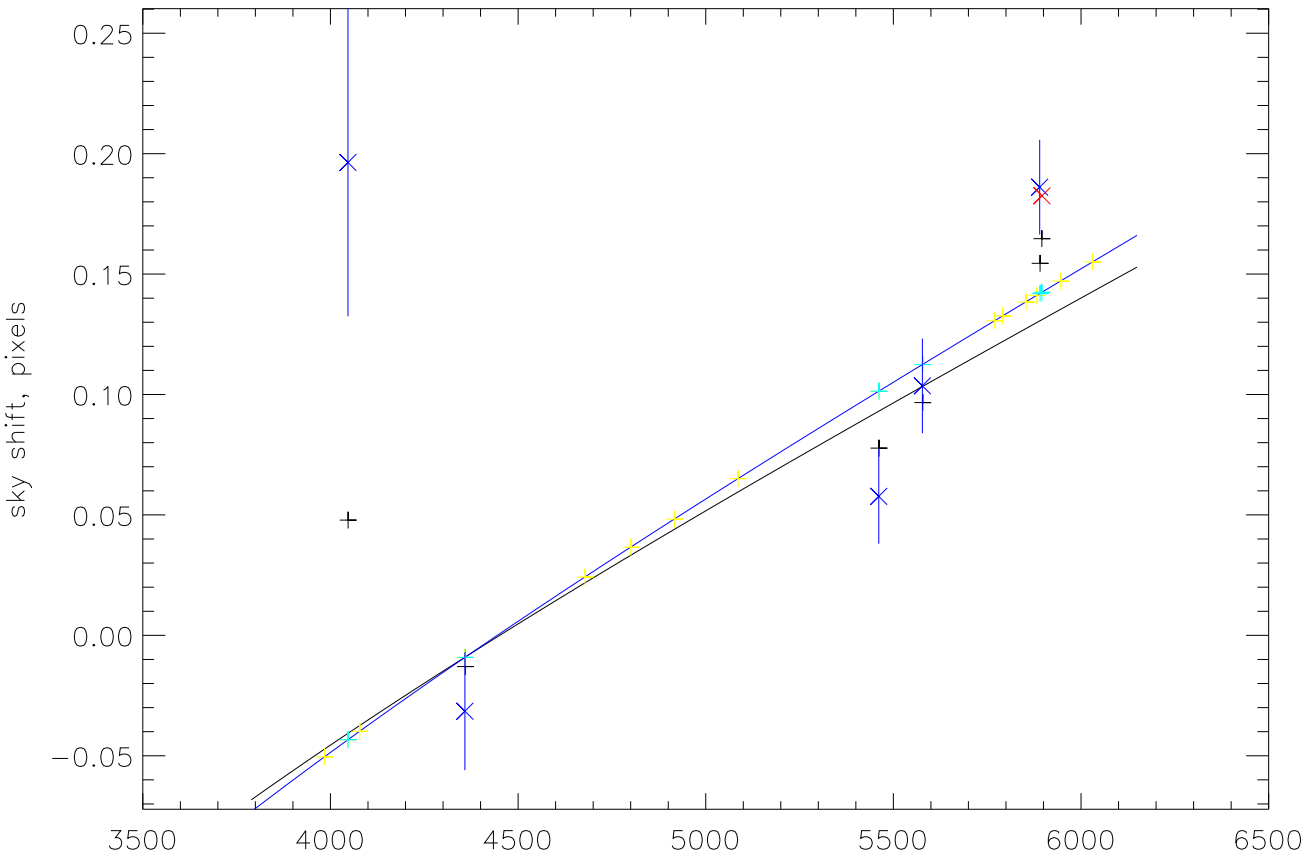

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

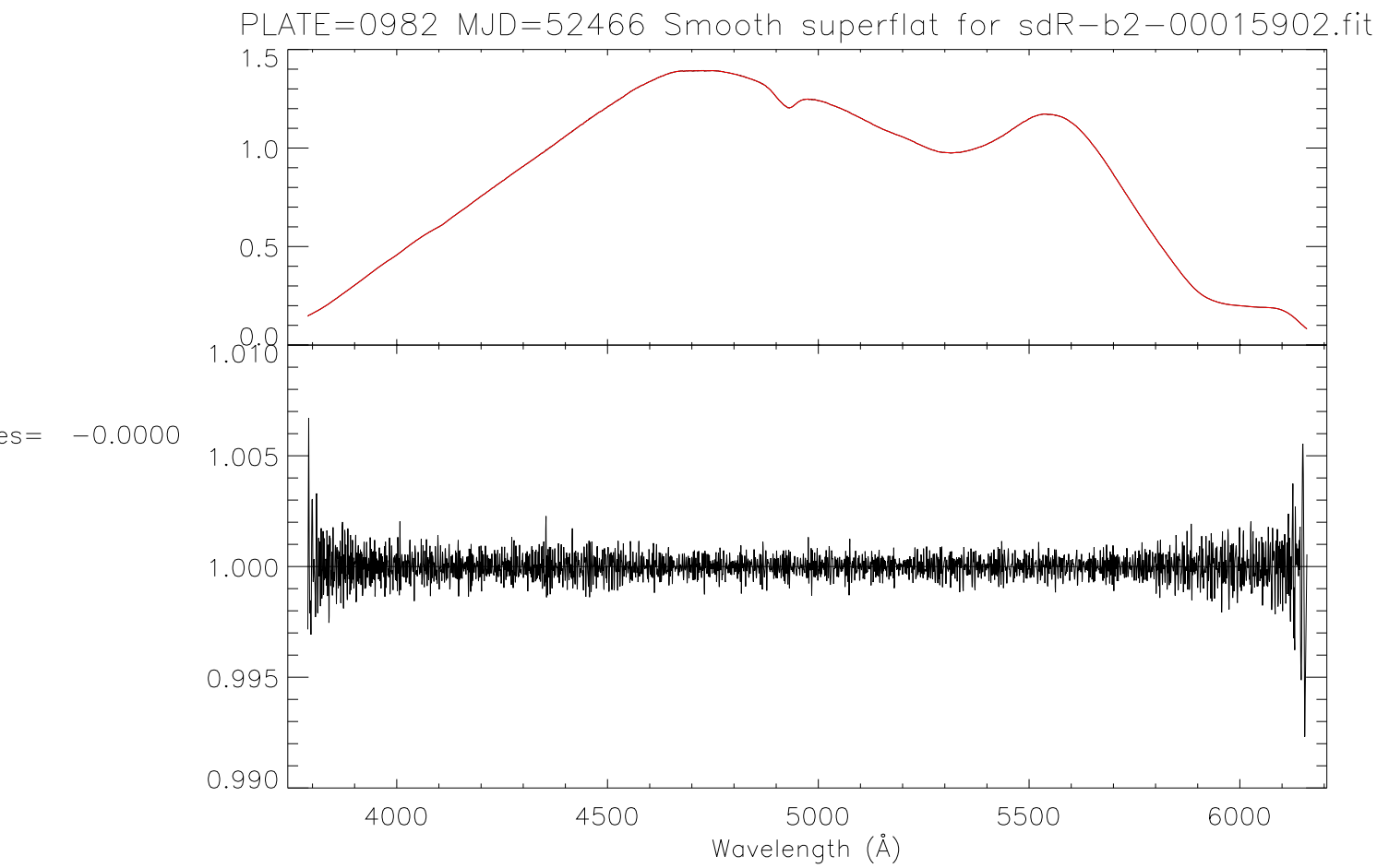

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

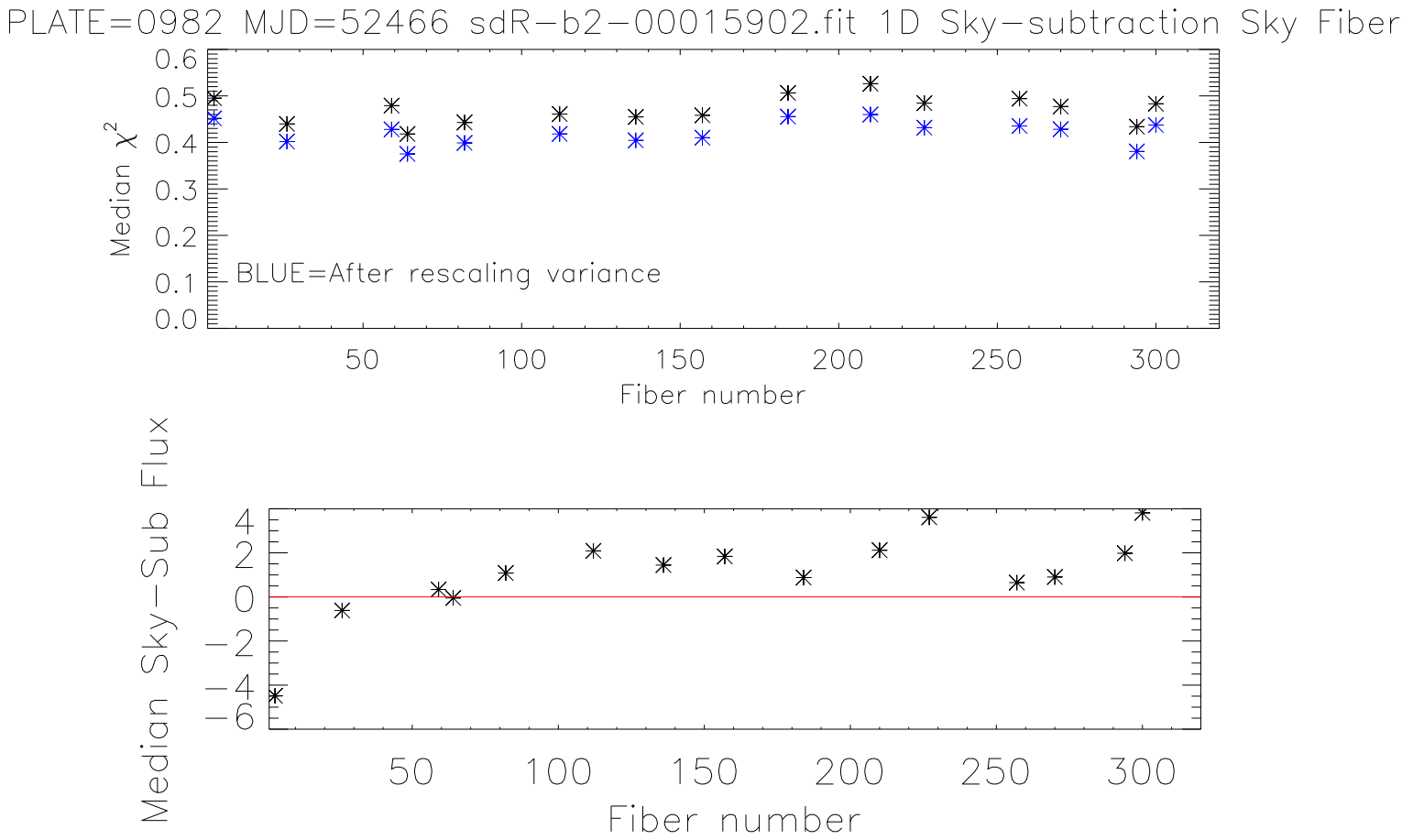

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

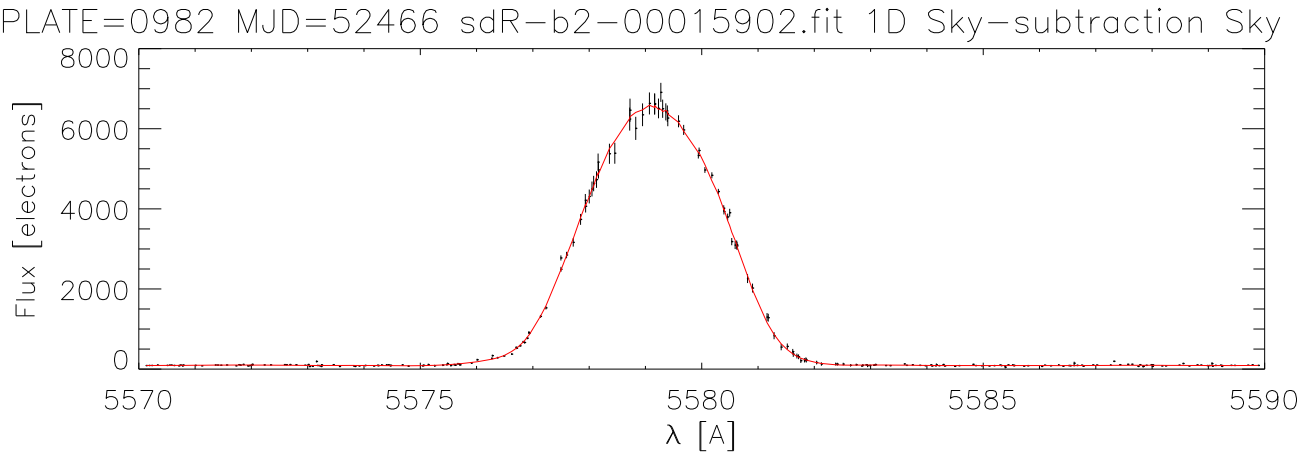

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

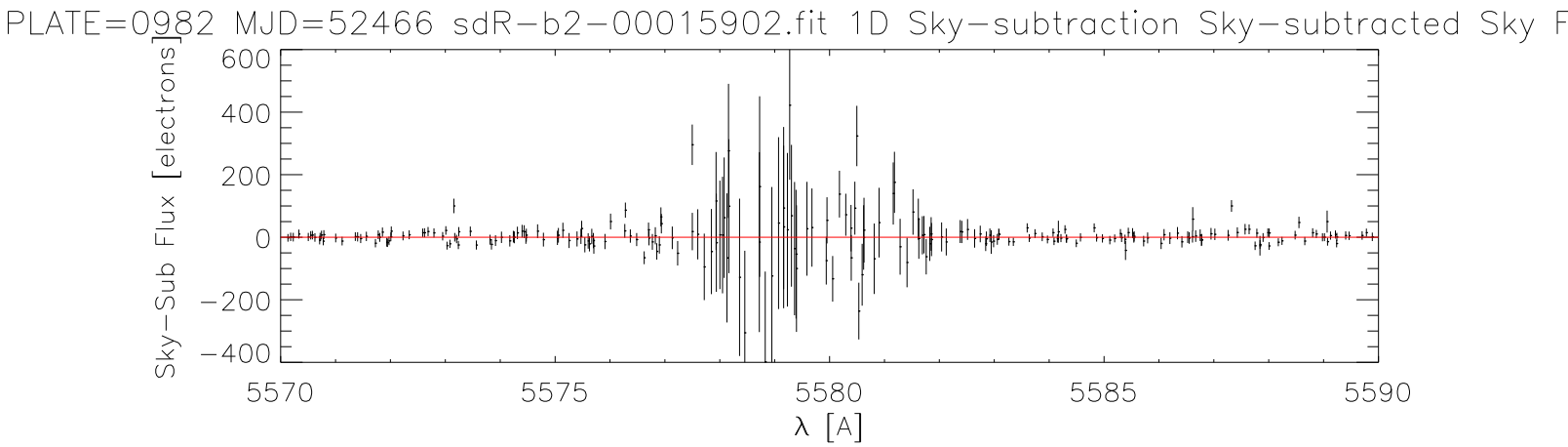

4046.5600
nfib1 16
nfib2 16
stdev 0.113
extra 0.20
4358.3300
nfib1 16
nfib2 16
stdev 0.073
extra −0.03
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra 0.06
5577.3390
nfib1 15
nfib2 15
stdev 0.016
extra 0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.045
extra 0.19
5895.9240
nfib1 15
nfib2 16
stdev 0.043
extra 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

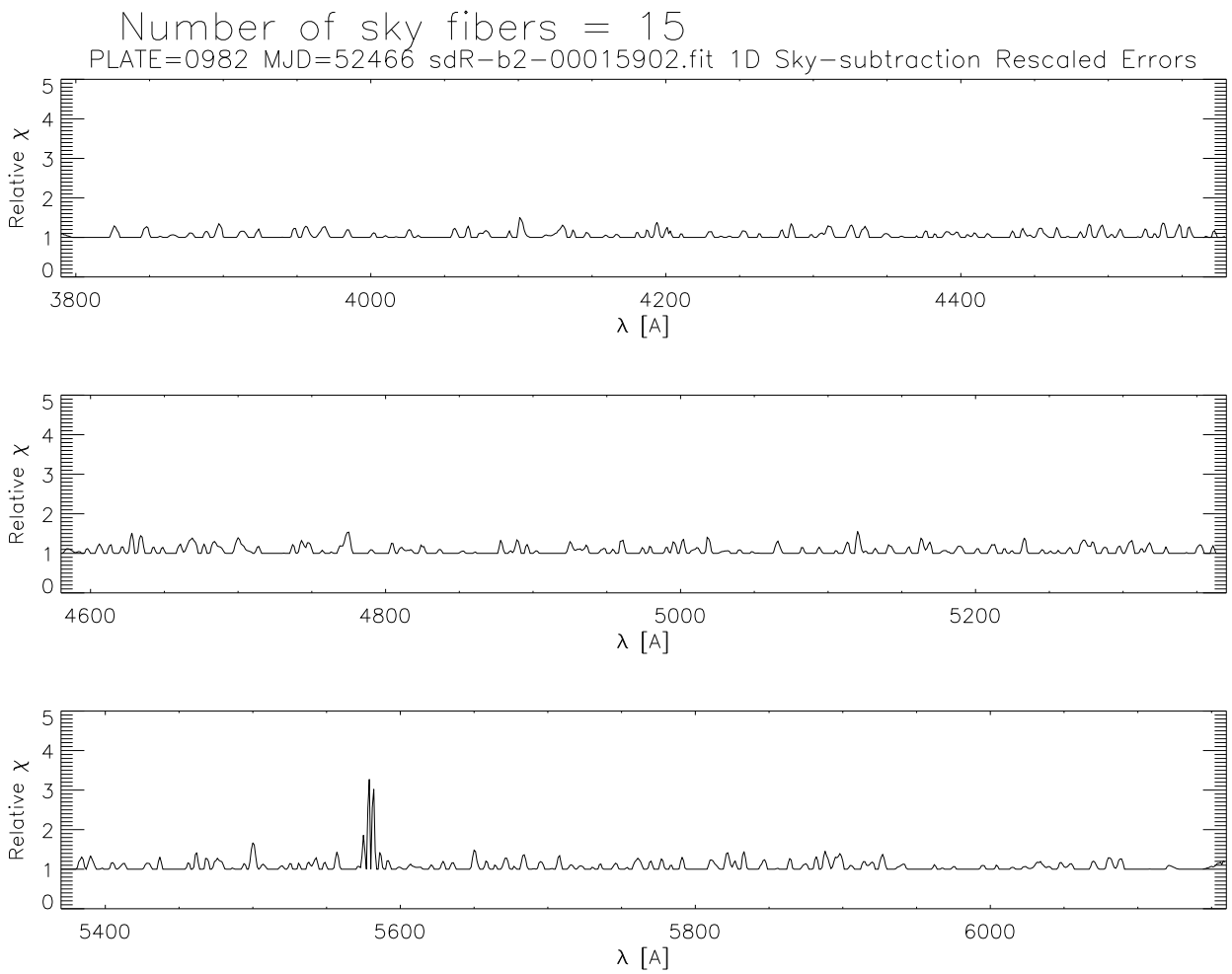

0.25
0.20
0.15
0.10
0.05
0.00
−0.05
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

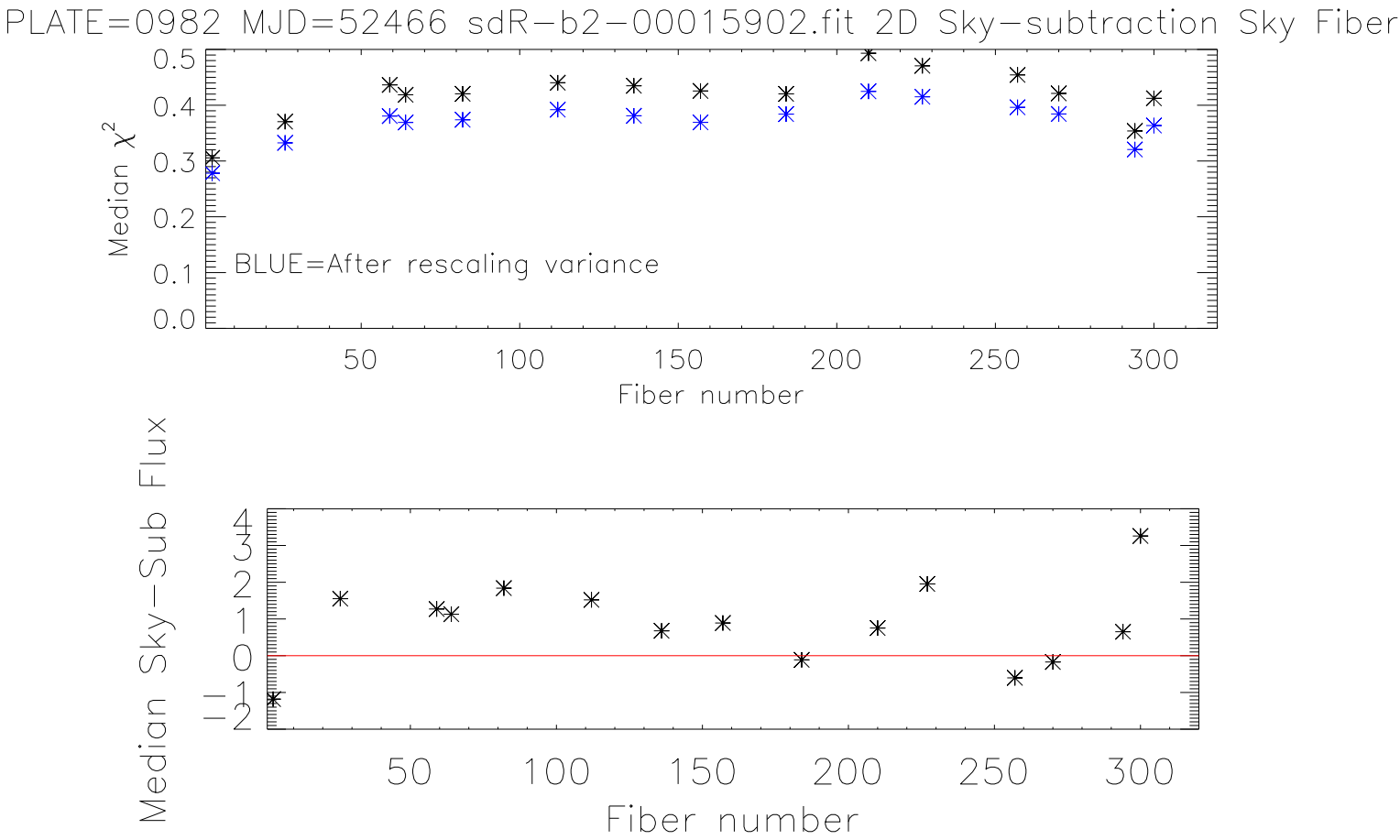

PLATE=0982 MJD=52466 Smooth superflat for sdR-b2-00015902.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

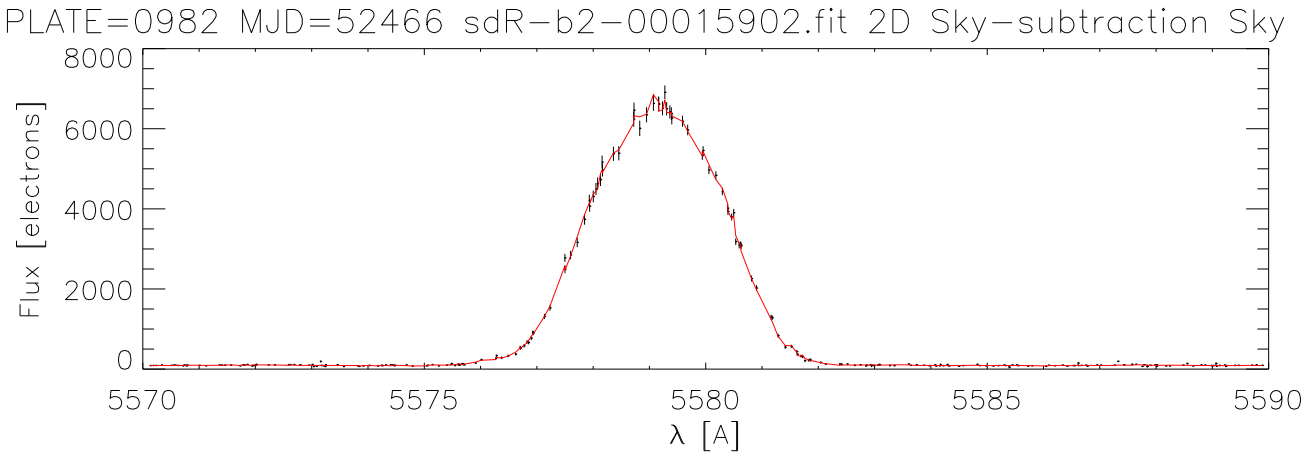

PLATE=0982 MJD=52466 sdR-b2-00015902.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

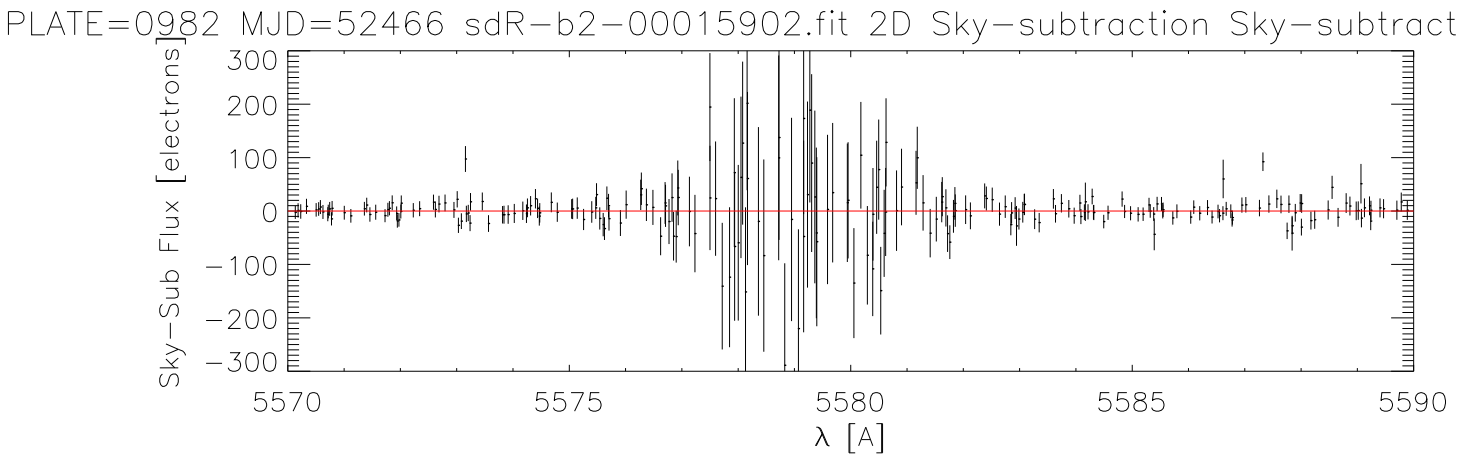

PLATE=0982 MJD=52466 sdR-b2-00015902.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

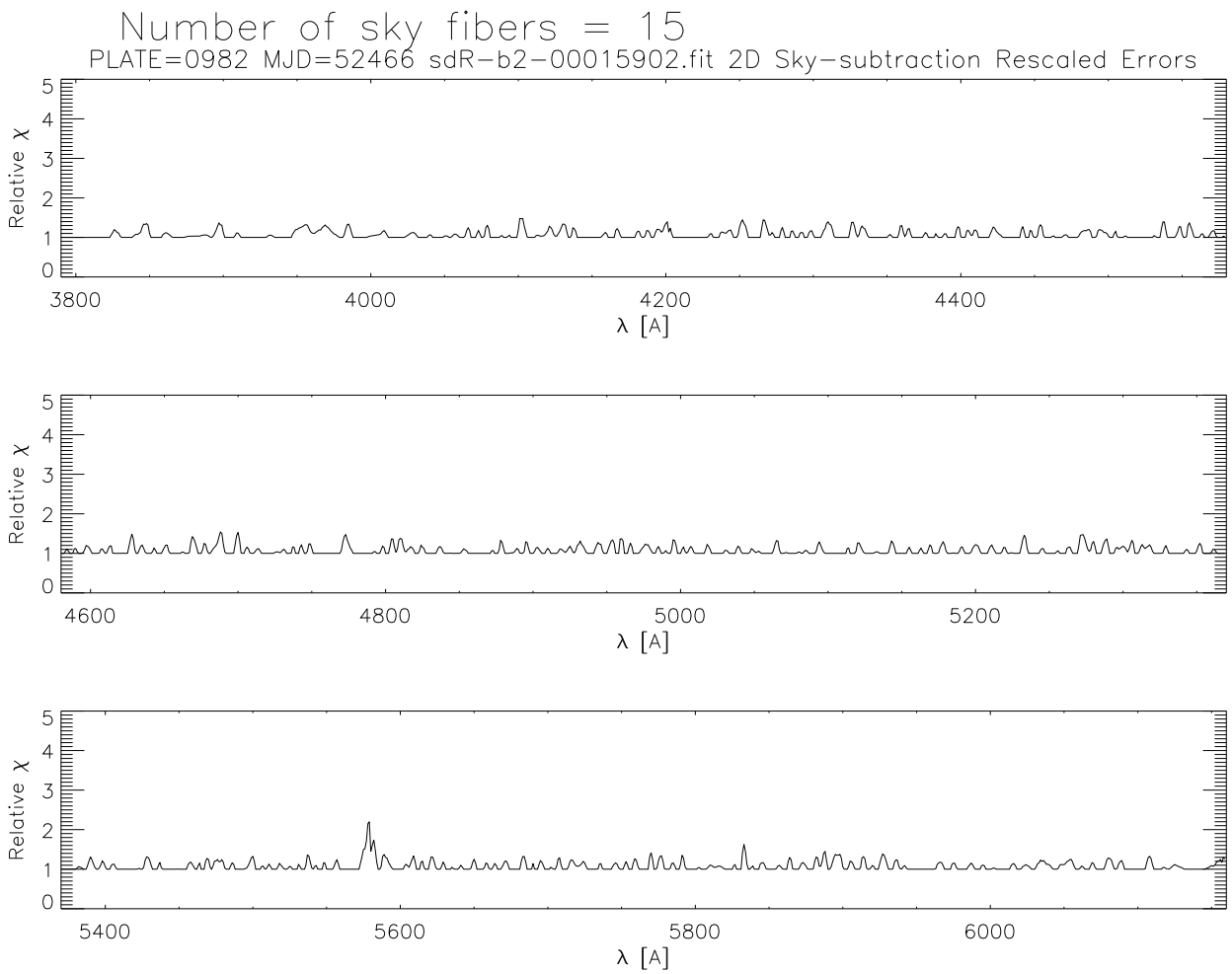

PLATE=0982 MJD=52466 sdR-b2-00015902.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

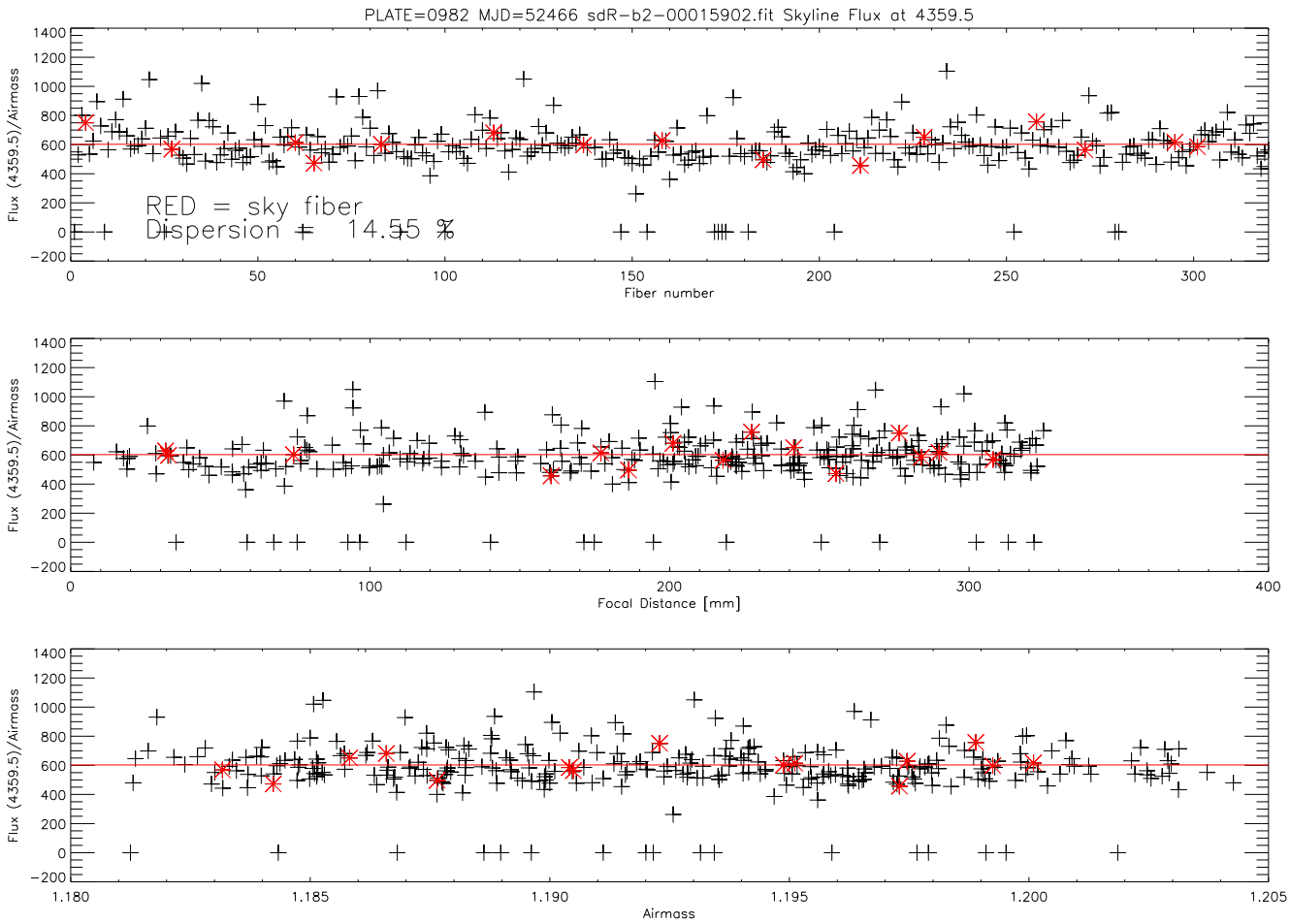

Number of sky fibers = 15
PLATE=0982 MJD=52466 sdR-b2-00015902.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

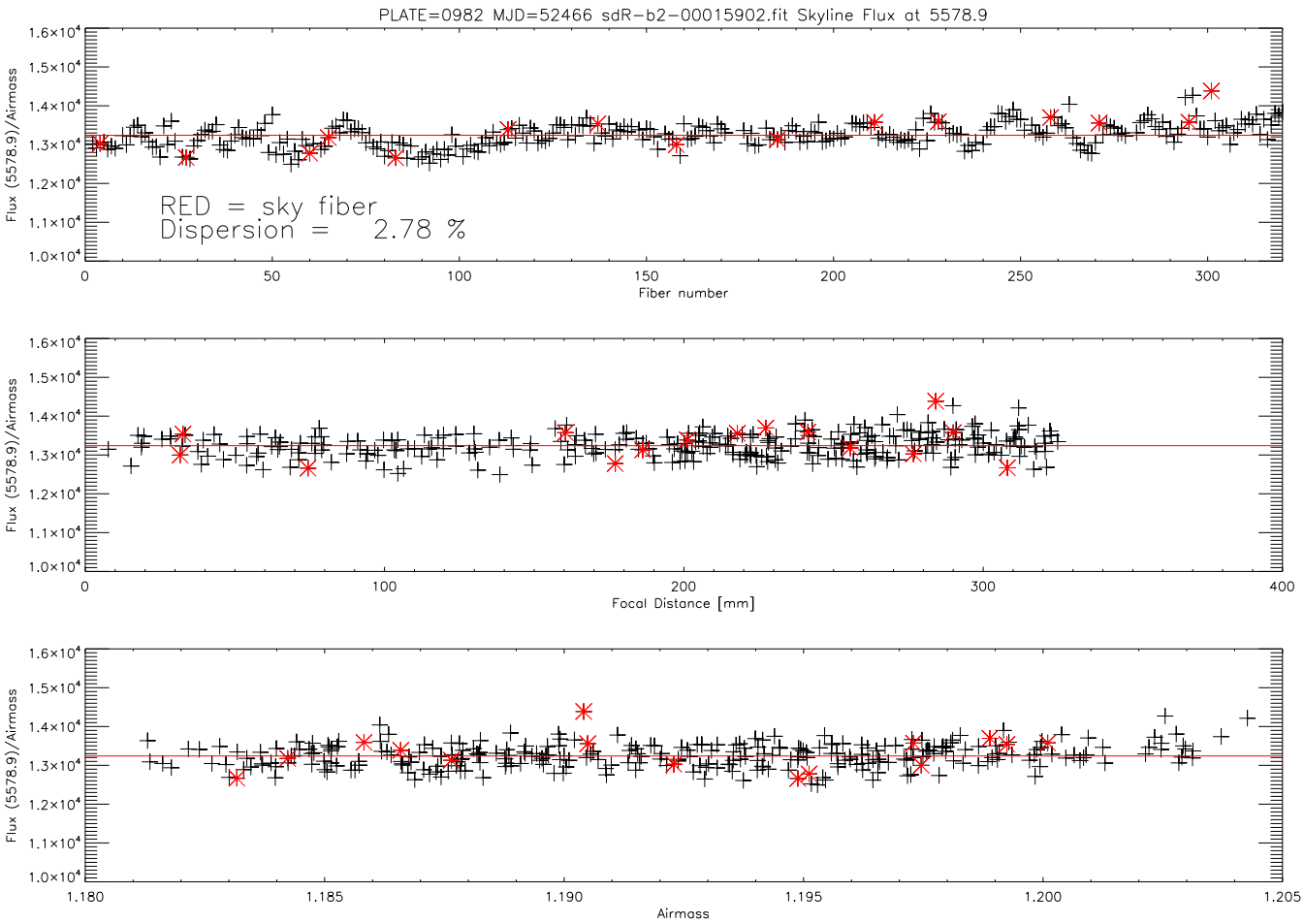

PLATE=0982 MJD=52466 sdR-b2-00015902.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

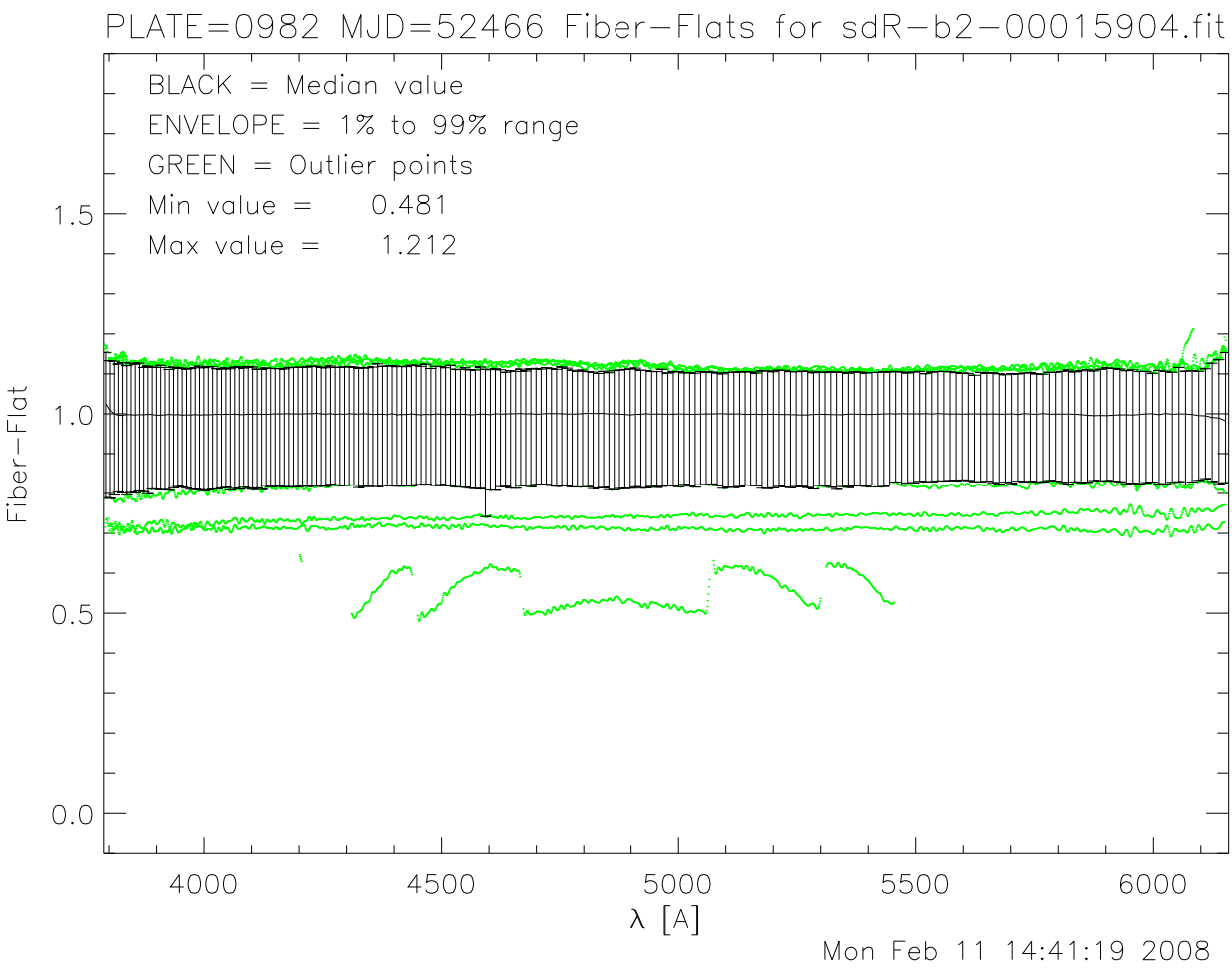

PLATE=0982 MJD=52466 sdR-b2-00015902.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

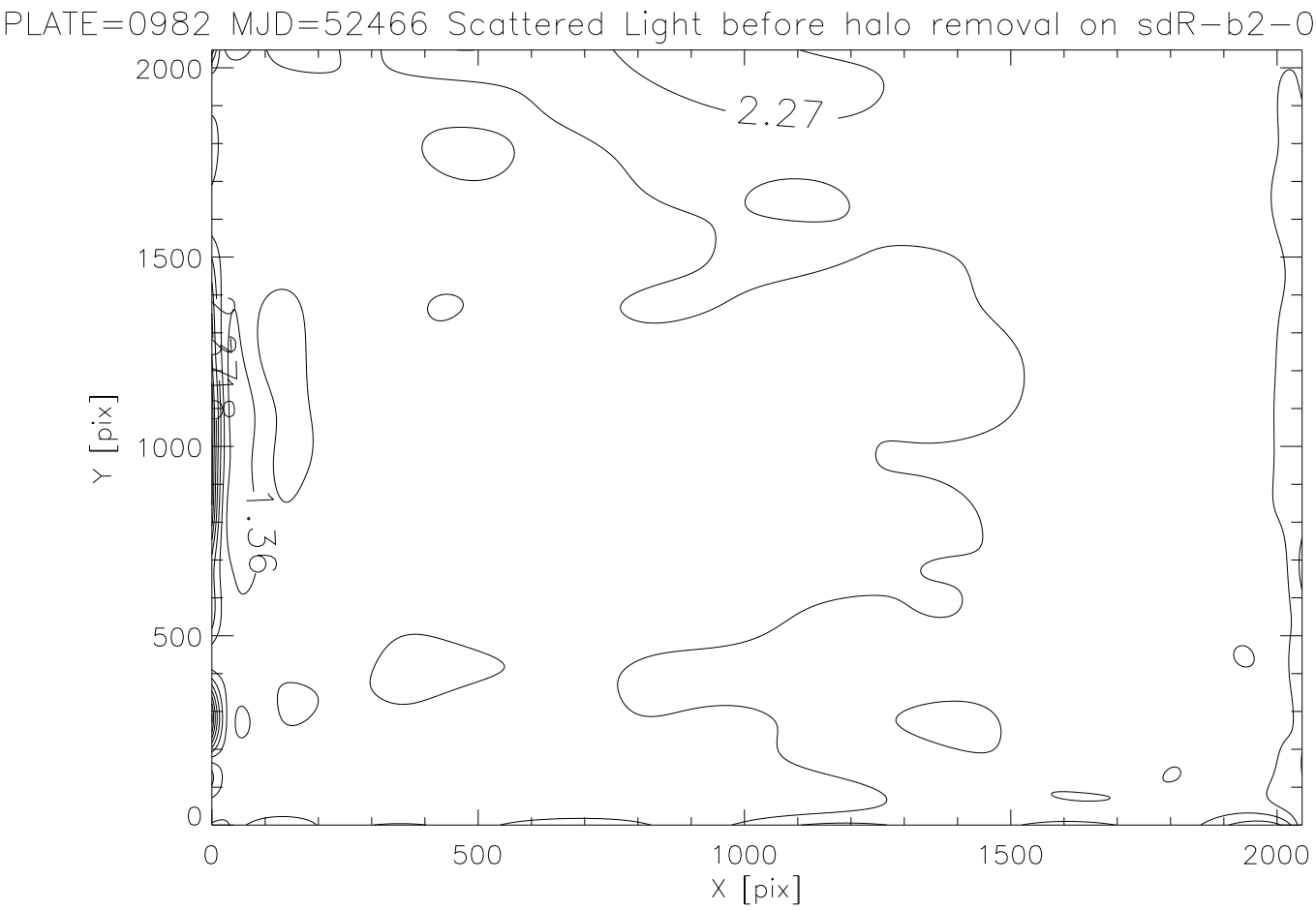

PLATE=0982 MJD=52466 sdR-b2-00015902.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

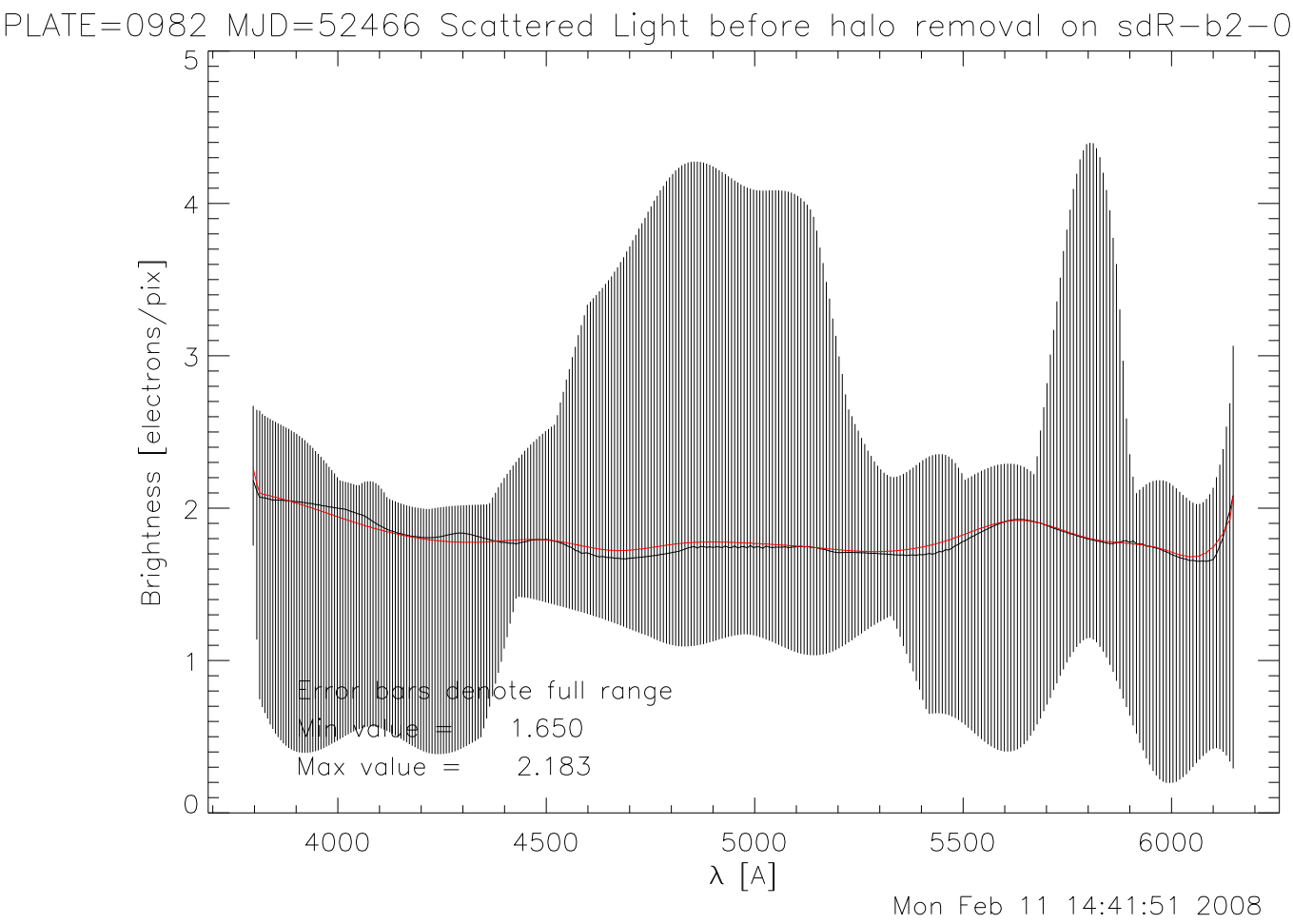

Number of sky fibers = 15
PLATE=0982 MJD=52466 sdR-b2-00015902.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

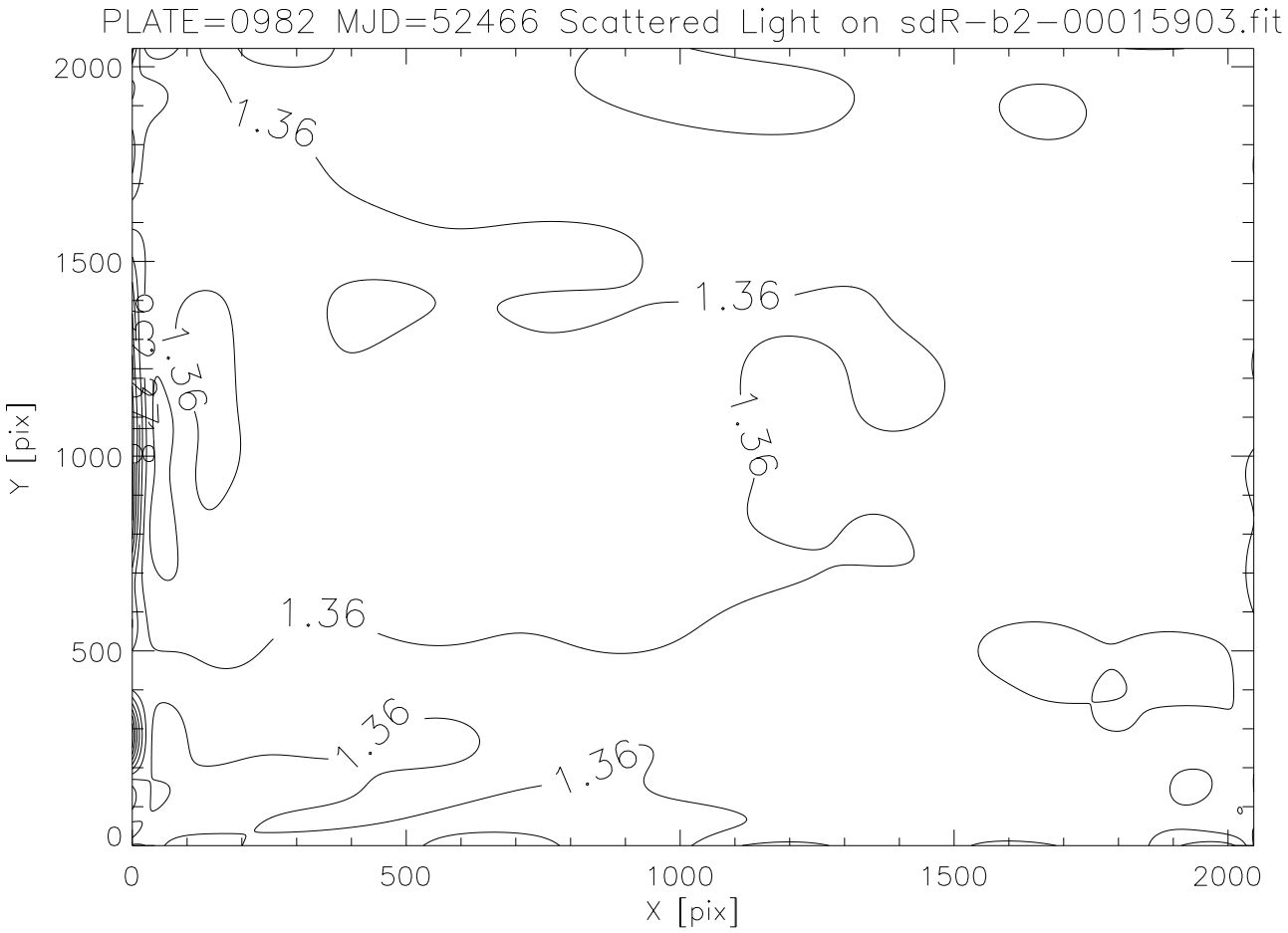

PLATE=0982 MJD=52466 sdR-b2-00015902.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.55 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

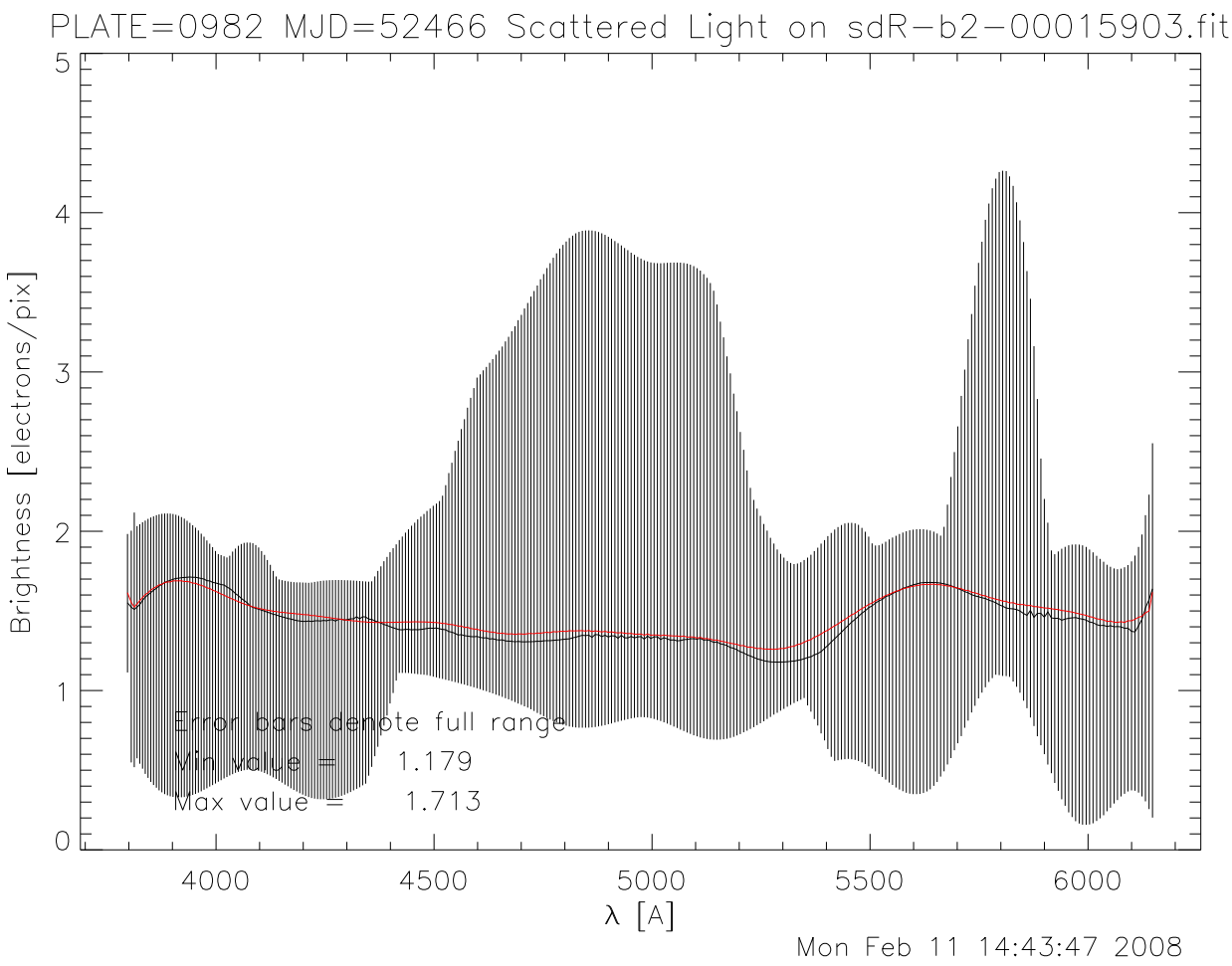

PLATE=0982 MJD=52466 sdR-b2-00015902.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.78 %
Fiber number
Focal Distance [mm]
Airmass

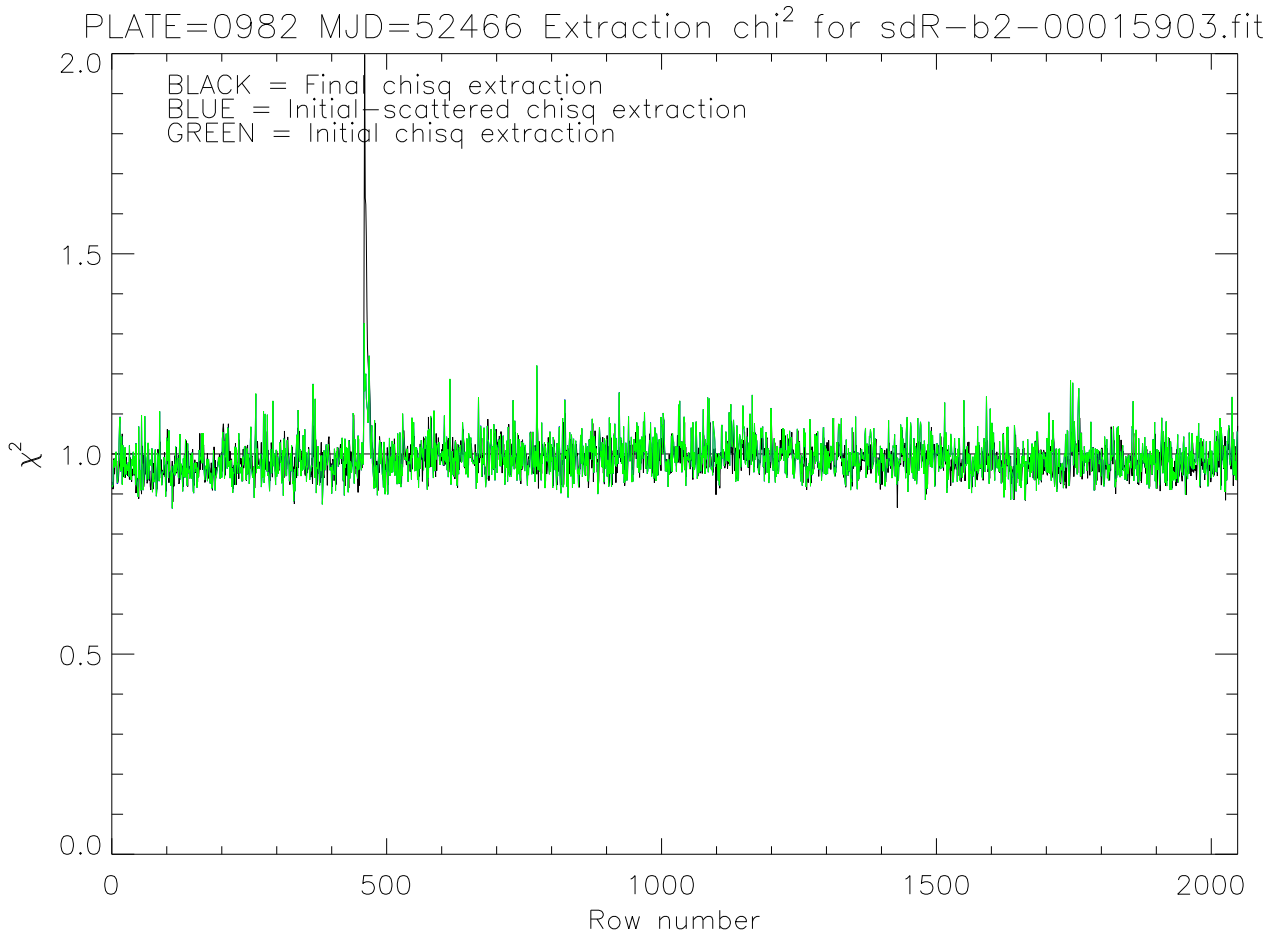

PLATE=0982 MJD=52466 Fiber-Flats for sdR-b2-00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.481
Max value = 1.212
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 14:41:19 2008

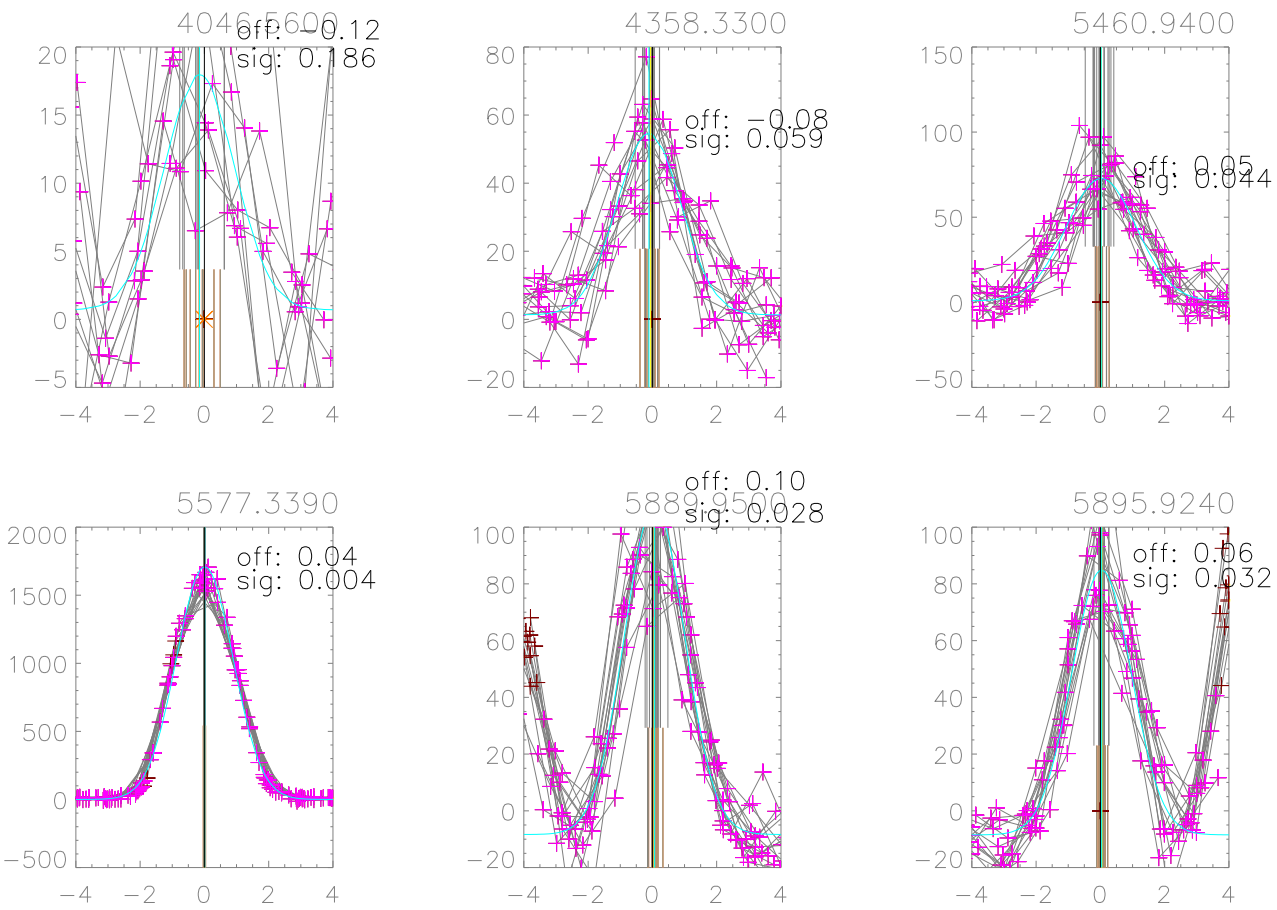

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR−b2−00015903.f
2.27
1.36
0
Y [pix]
X [pix]
0
500
1000
1500
2000

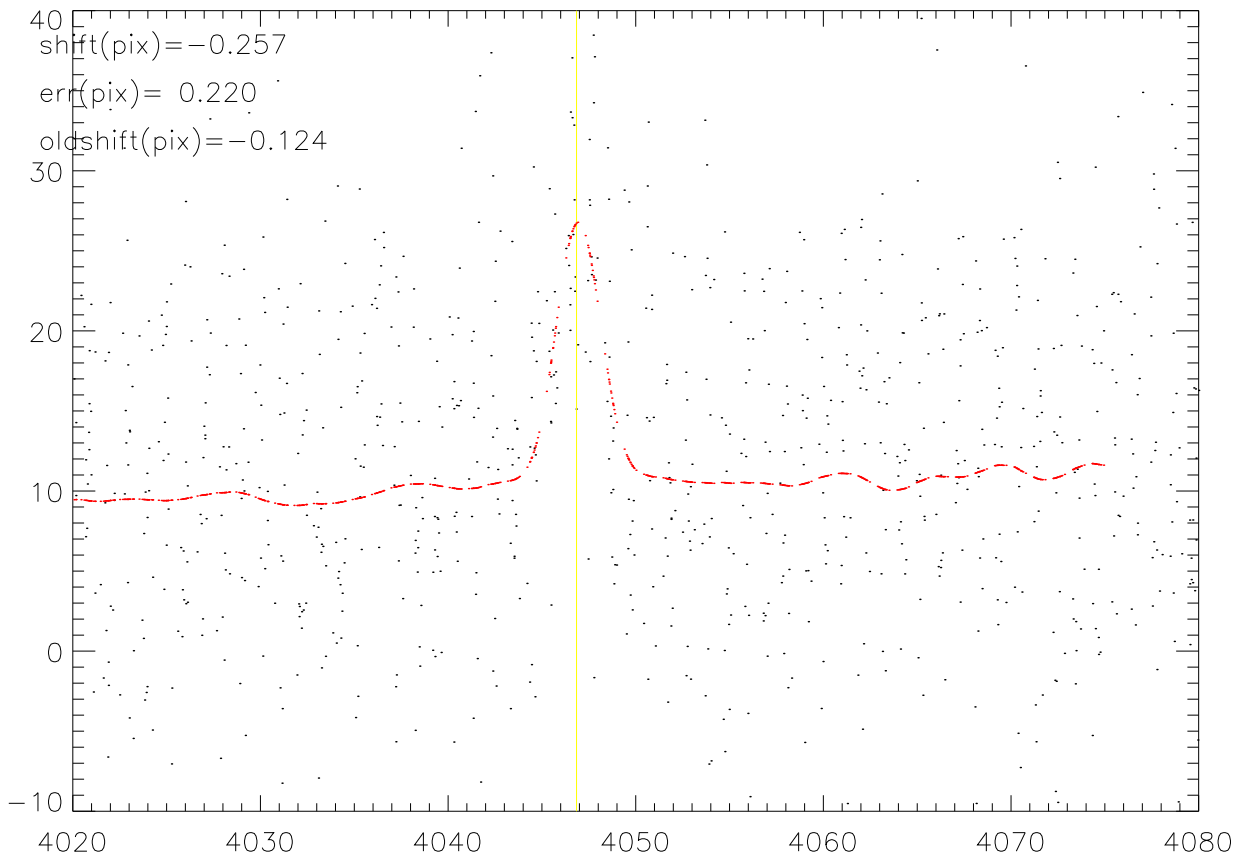

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-b2-00015903.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.650
Max value = 2.183
Mon Feb 11 14:41:51 2008

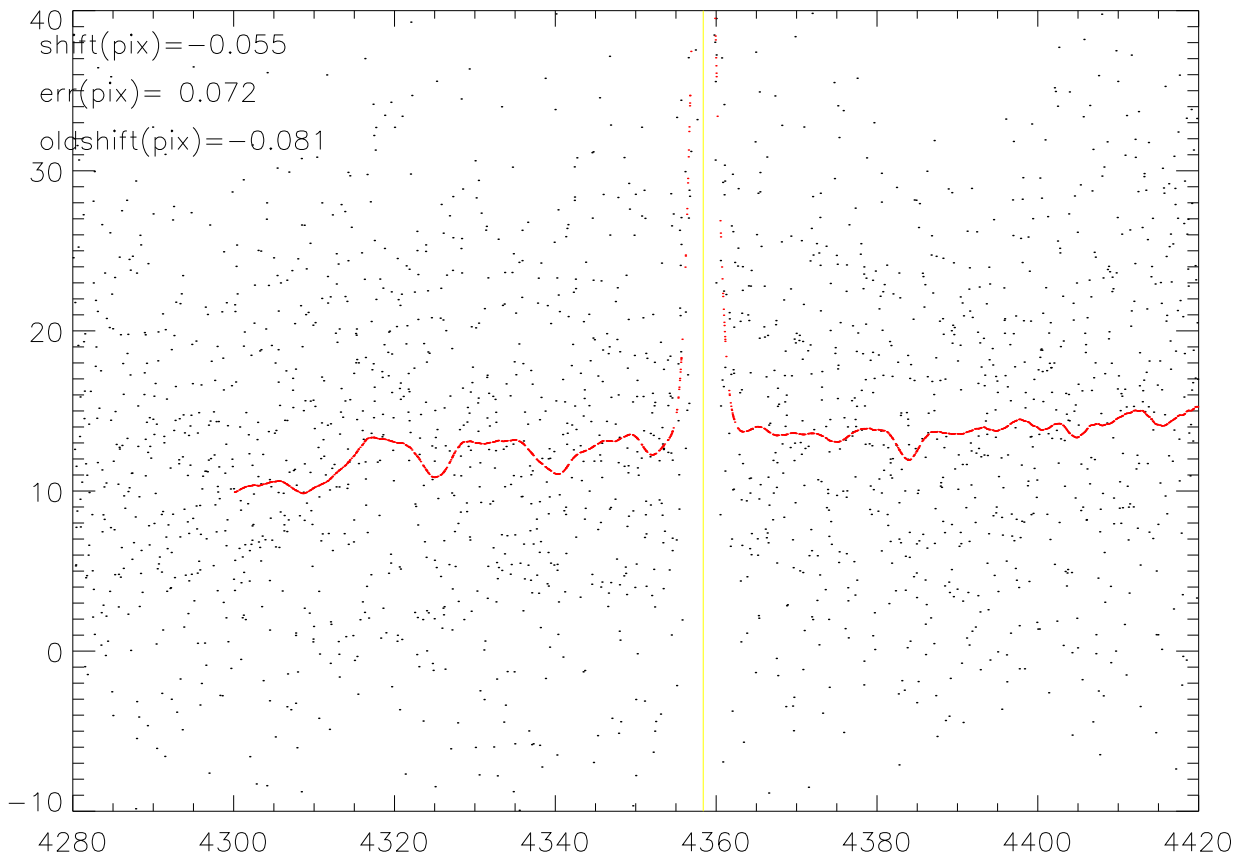

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015903.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
1.36
1.36
1.36
1.36
1.36
1.36
1.36

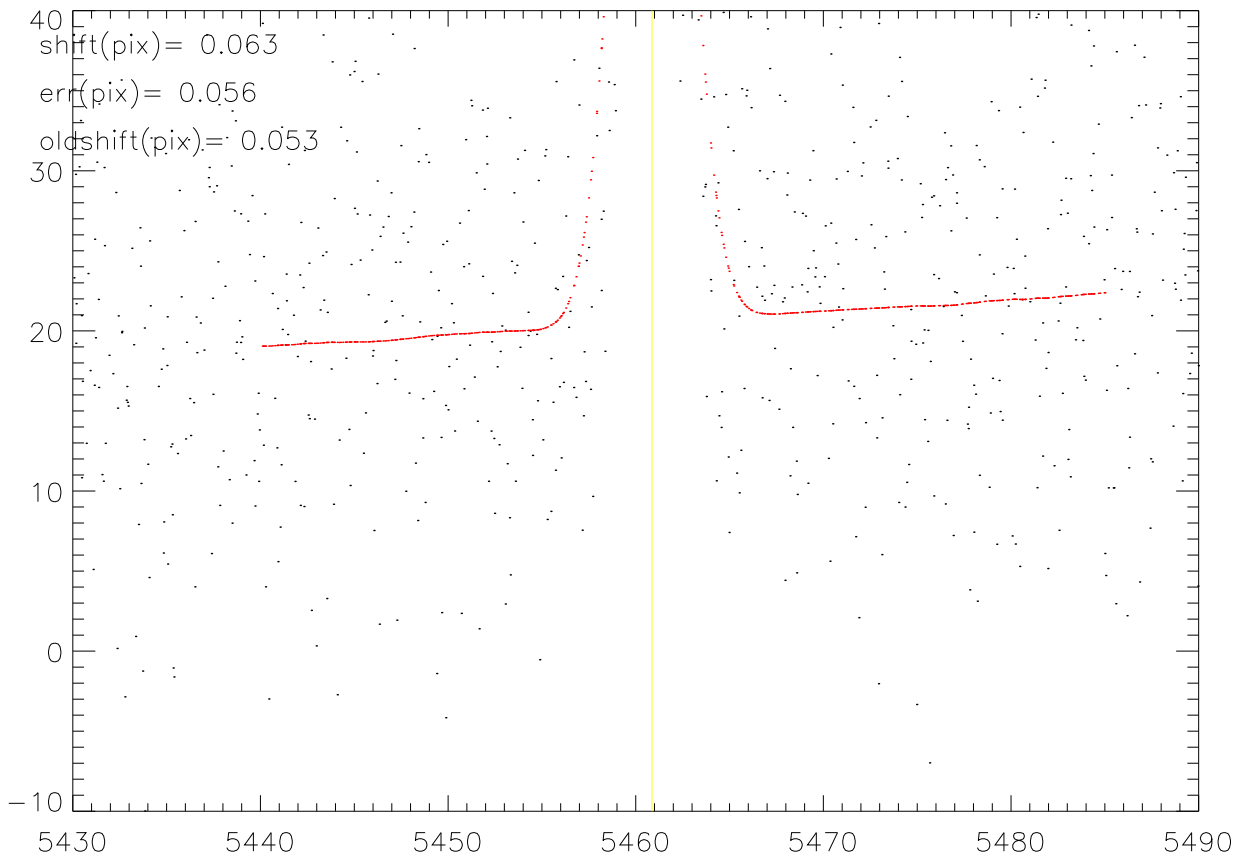

PLATE=0982 MJD=52466 Scattered Light on sdR-b2-00015903.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.179
Max value = 1.713
Mon Feb 11 14:43:47 2008

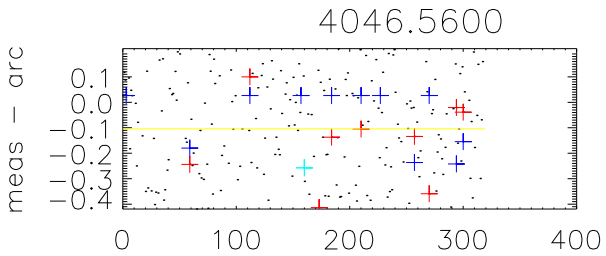

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-b2-00015903.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

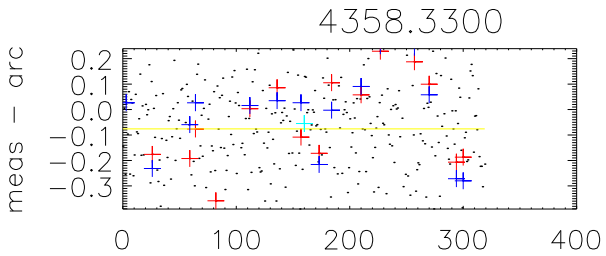

4046.5600
off: −0.12
sig: 0.186
4358.3300
off: −0.08
sig: 0.059
5460.9400
off: 0.05
sig: 0.044
5577.3390
off: 0.04
sig: 0.004
5889.9500
off: 0.10
sig: 0.028
5895.9240
off: 0.06
sig: 0.032

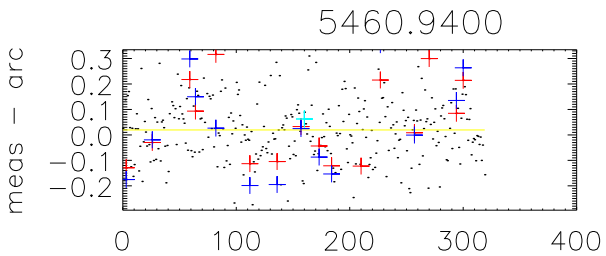

shift(pix)=−0.257
err(pix)= 0.220
oldshift(pix)=−0.124
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

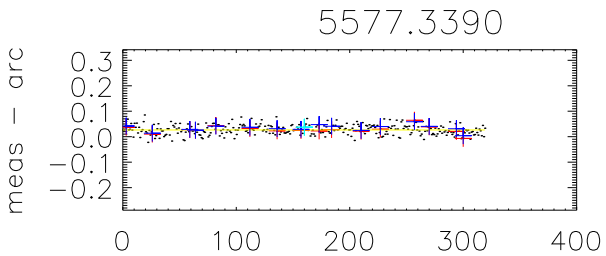

shift(pix)=−0.055
err(pix)= 0.072
oldshift(pix)=−0.081
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

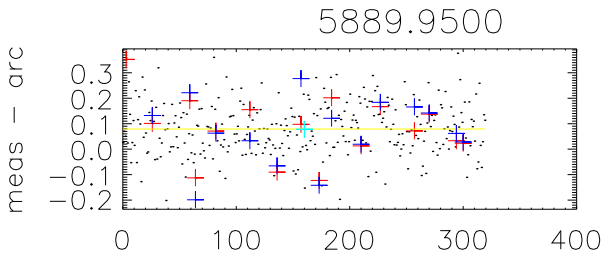

shift(pix)= 0.063
err(pix)= 0.056
oldshift(pix)= 0.053
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

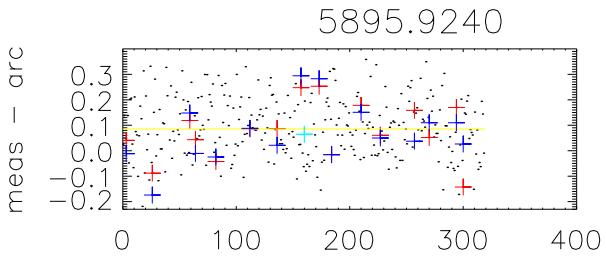

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

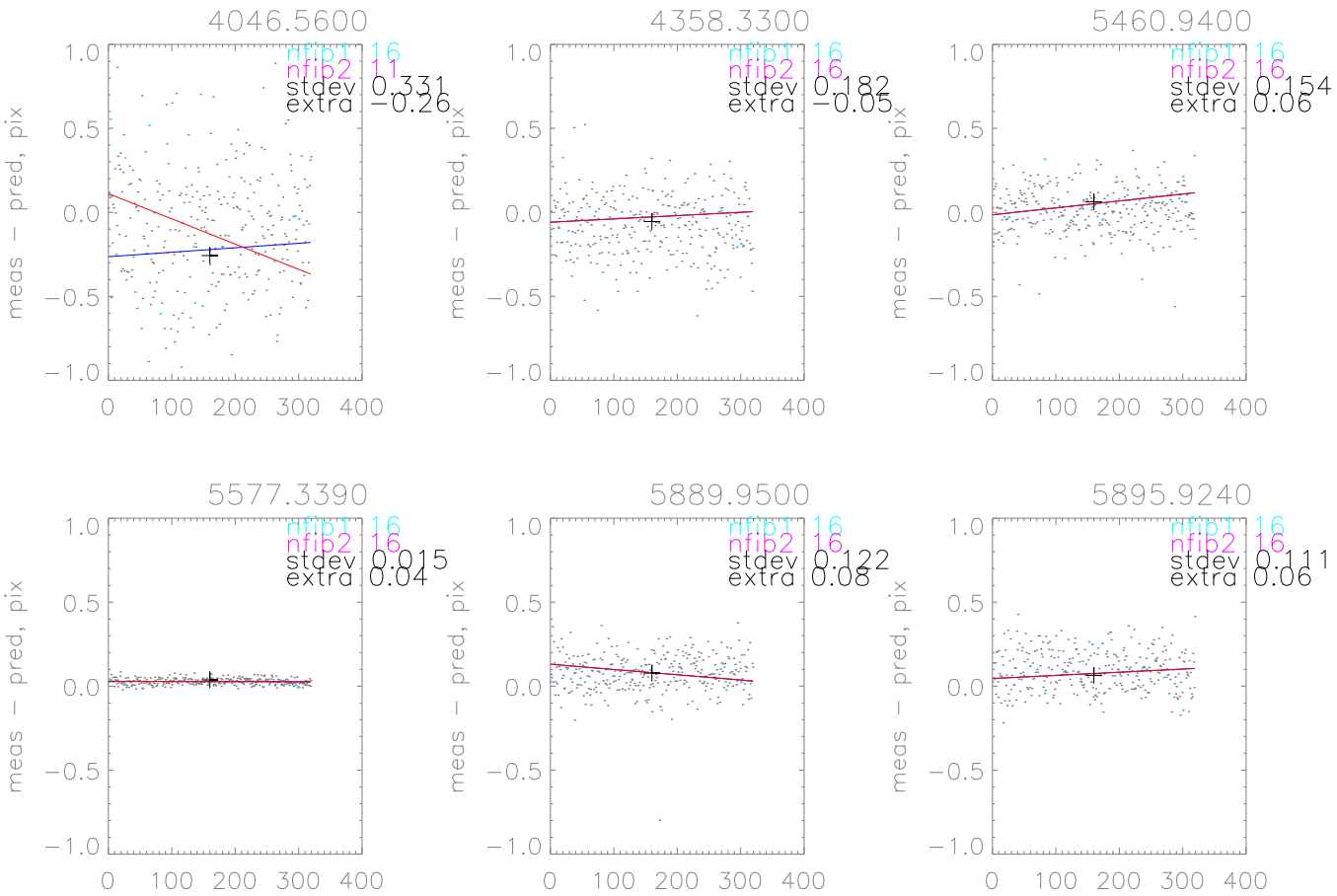

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

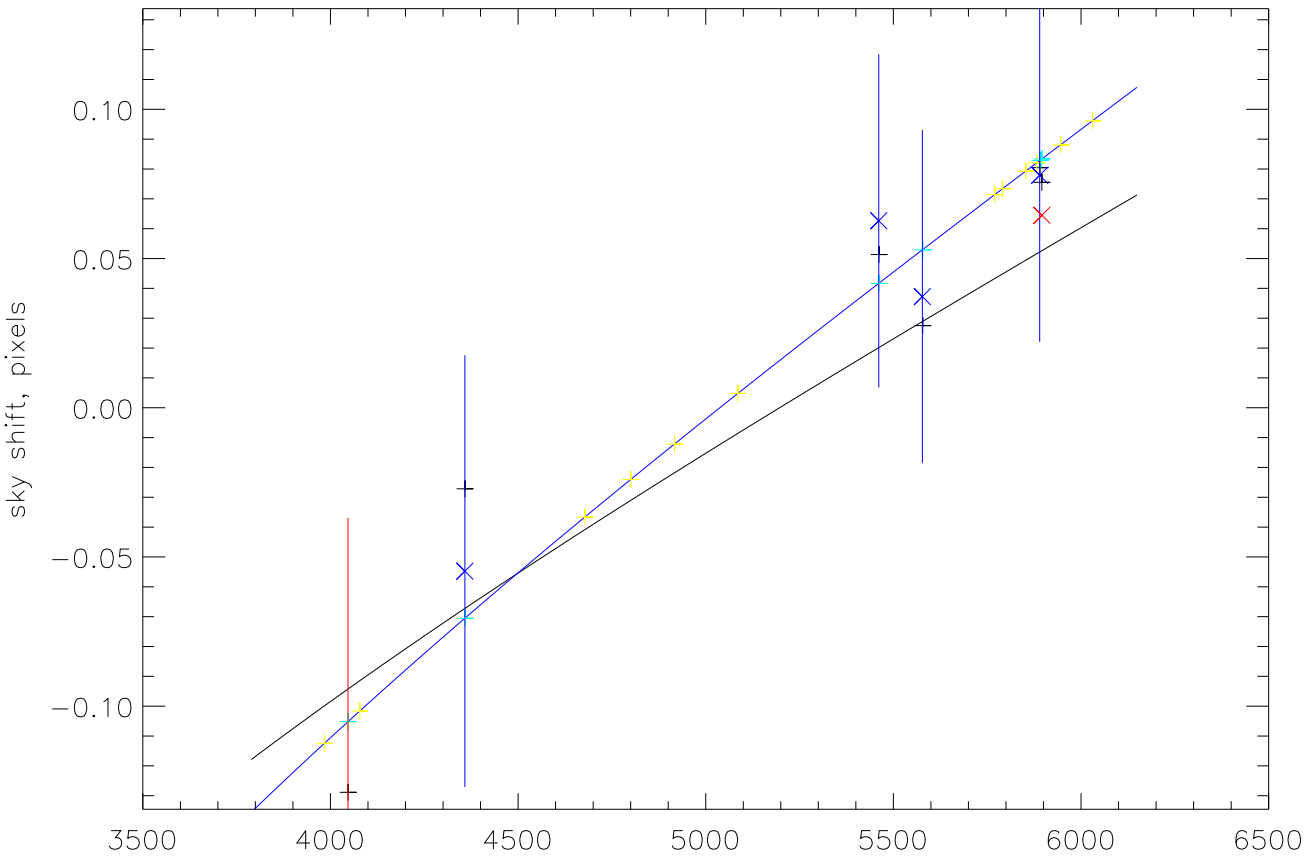

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

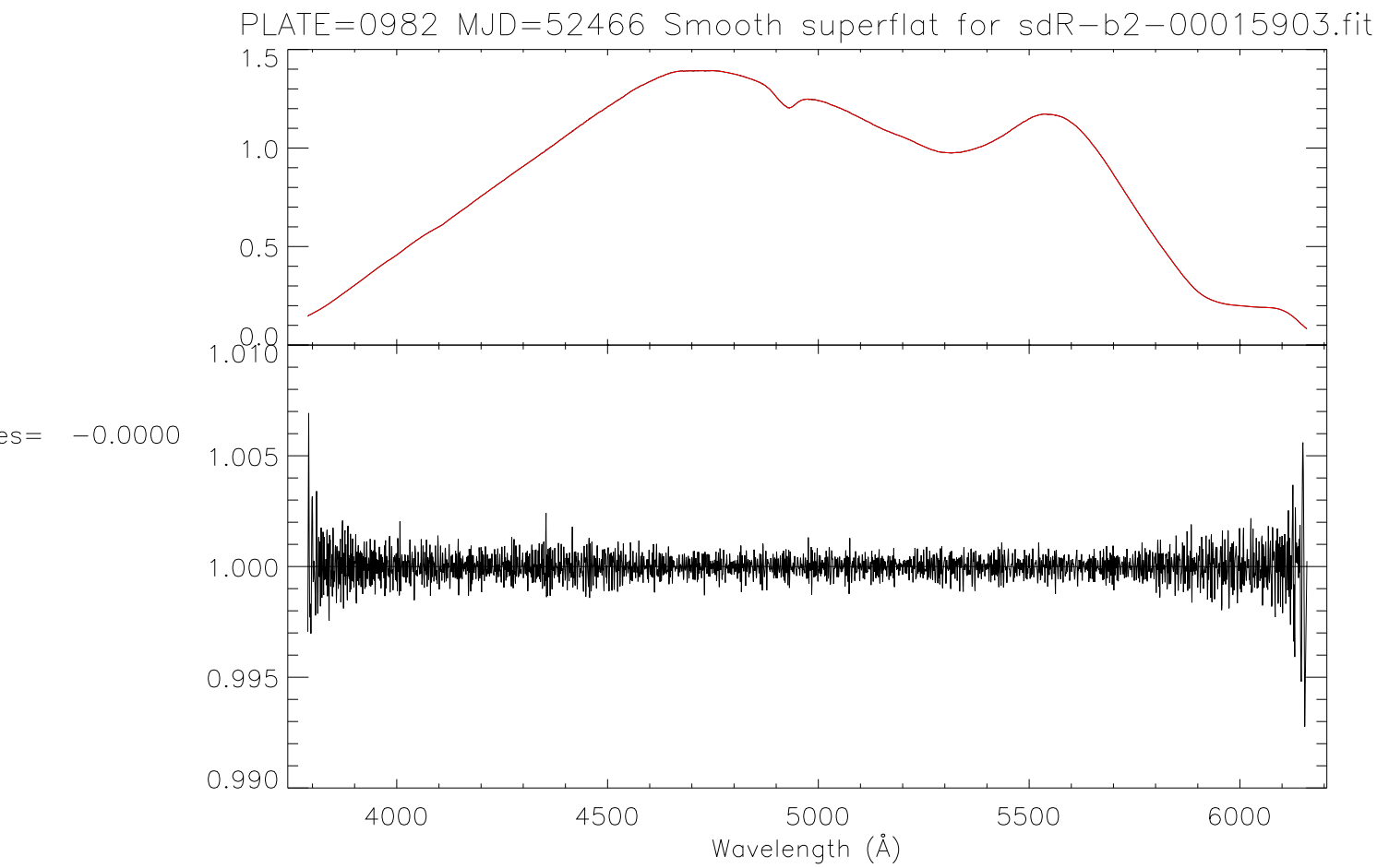

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

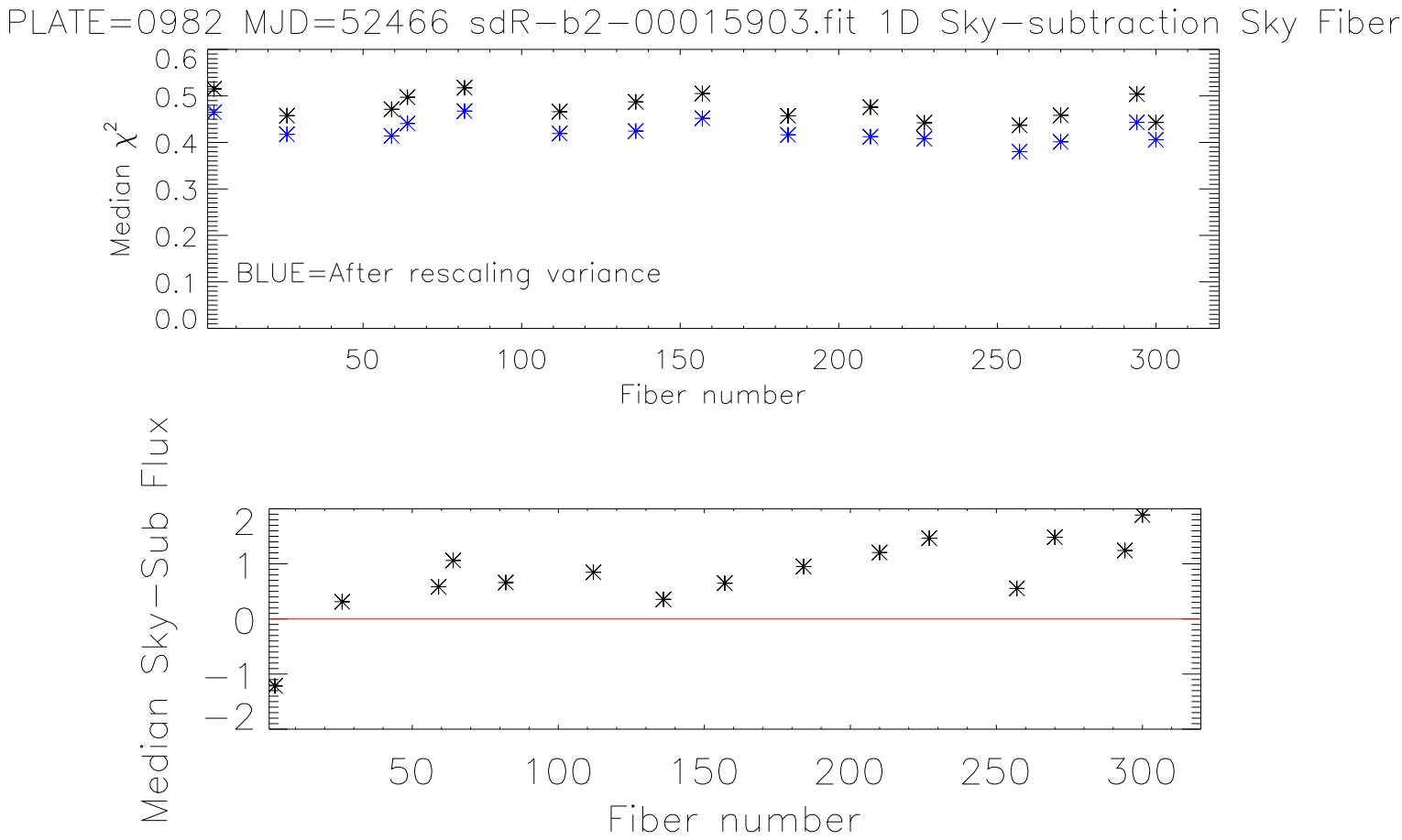

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

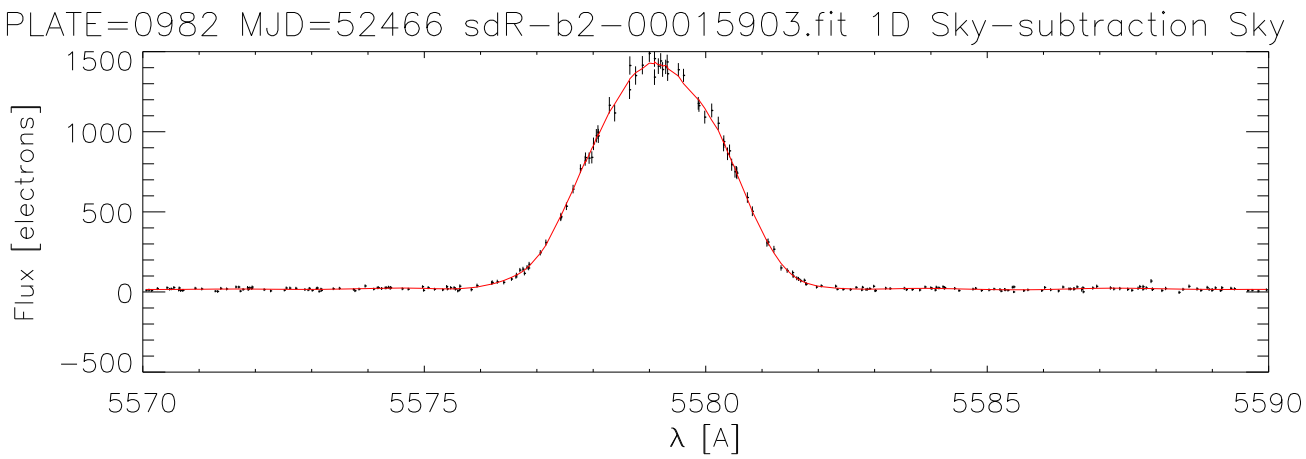

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

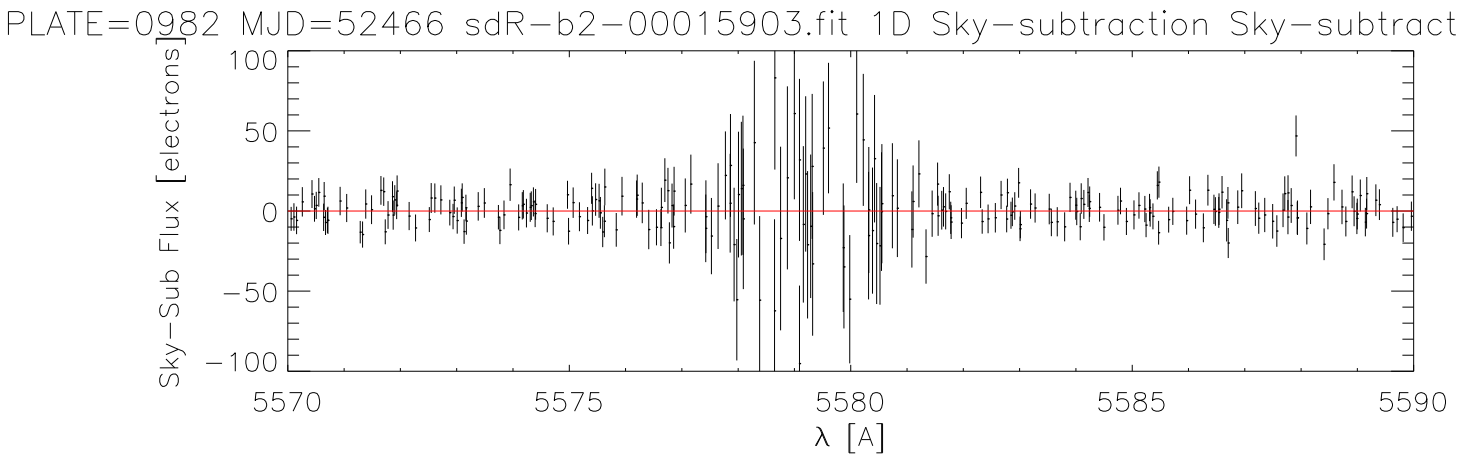

4046.5600
nfib1 16
nfib2 11
stdev 0.331
extra −0.26
4358.3300
nfib1 16
nfib2 16
stdev 0.182
extra −0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.154
extra 0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.122
extra 0.08
5895.9240
nfib1 16
nfib2 16
stdev 0.111
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

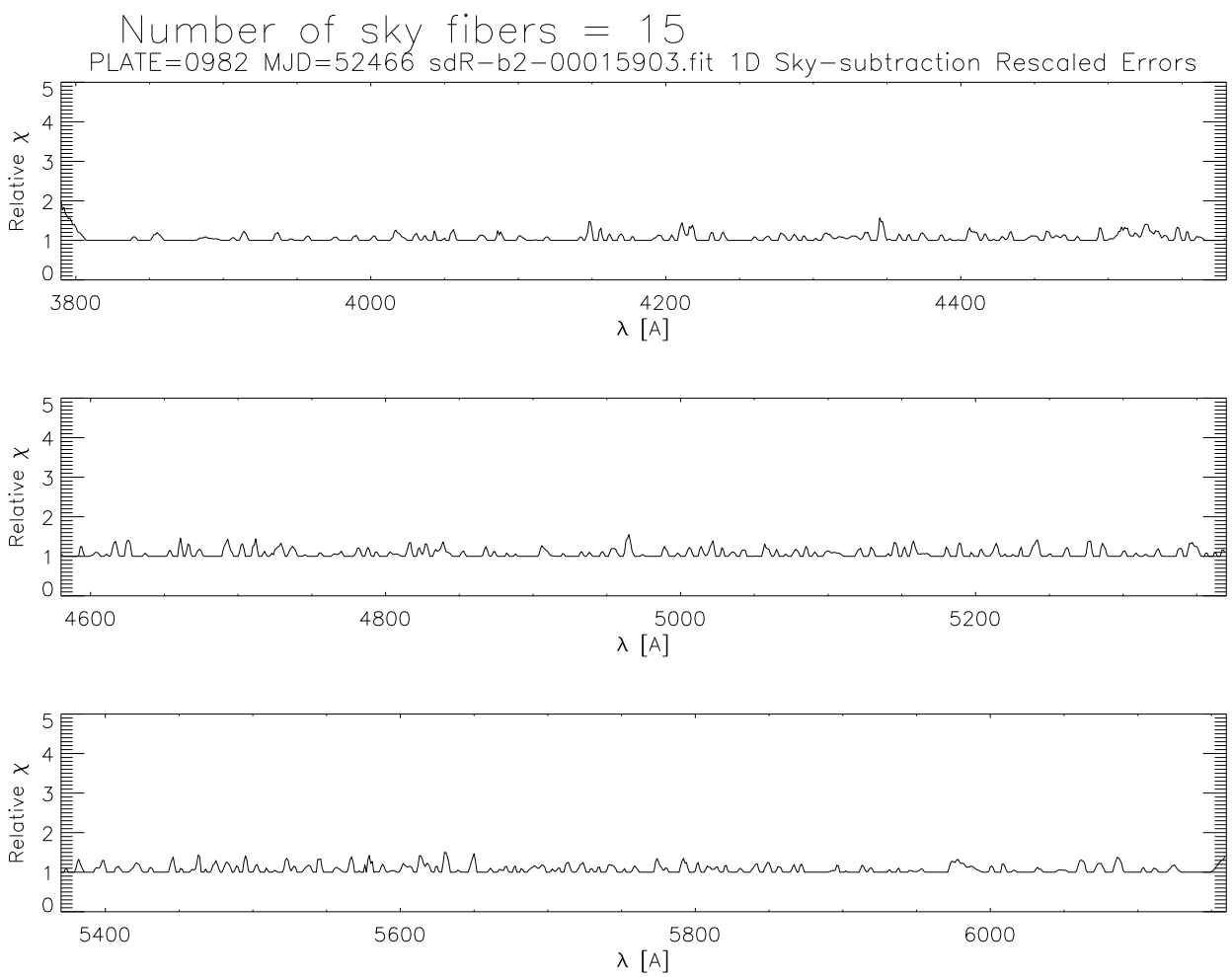

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

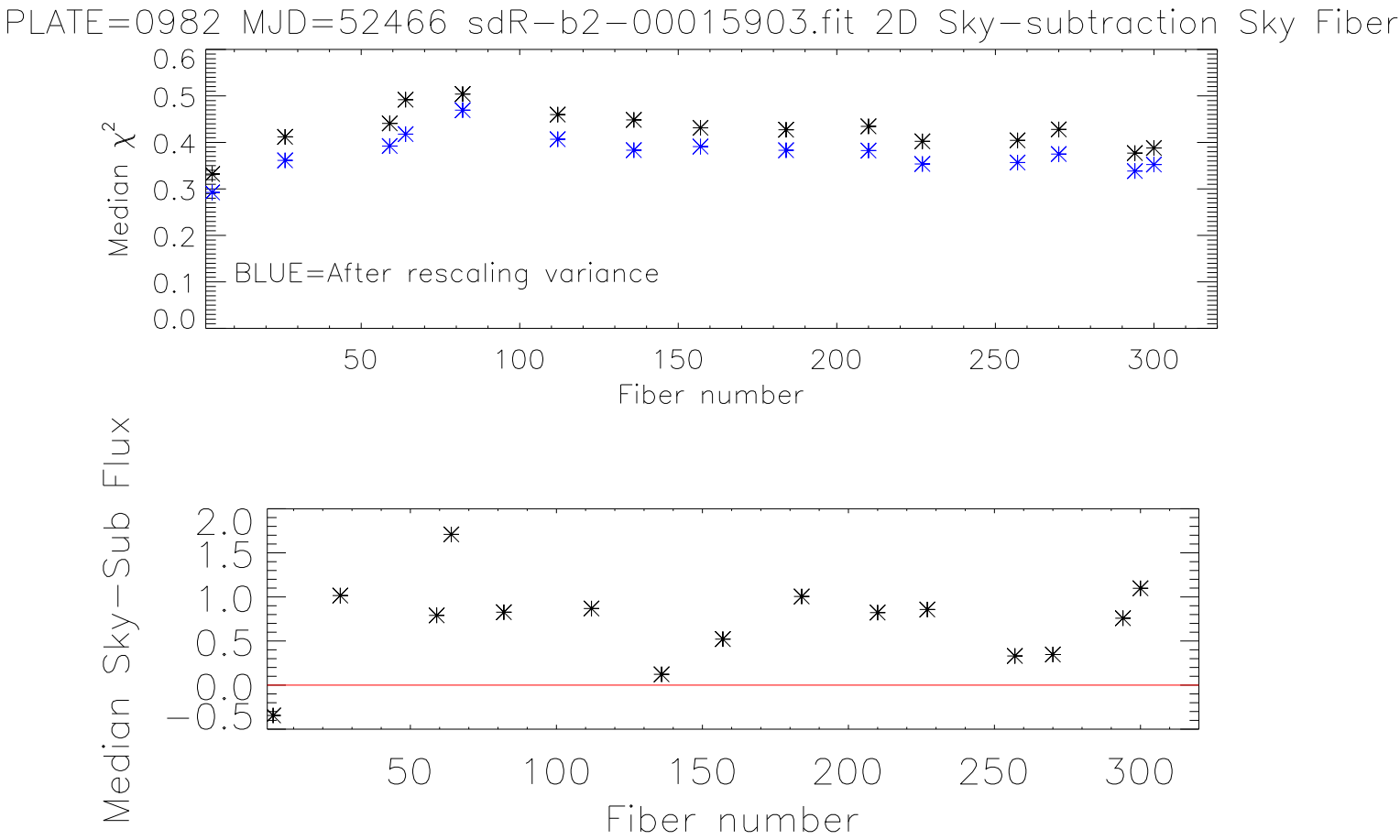

PLATE=0982 MJD=52466 Smooth superflat for sdR-b2-00015903.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

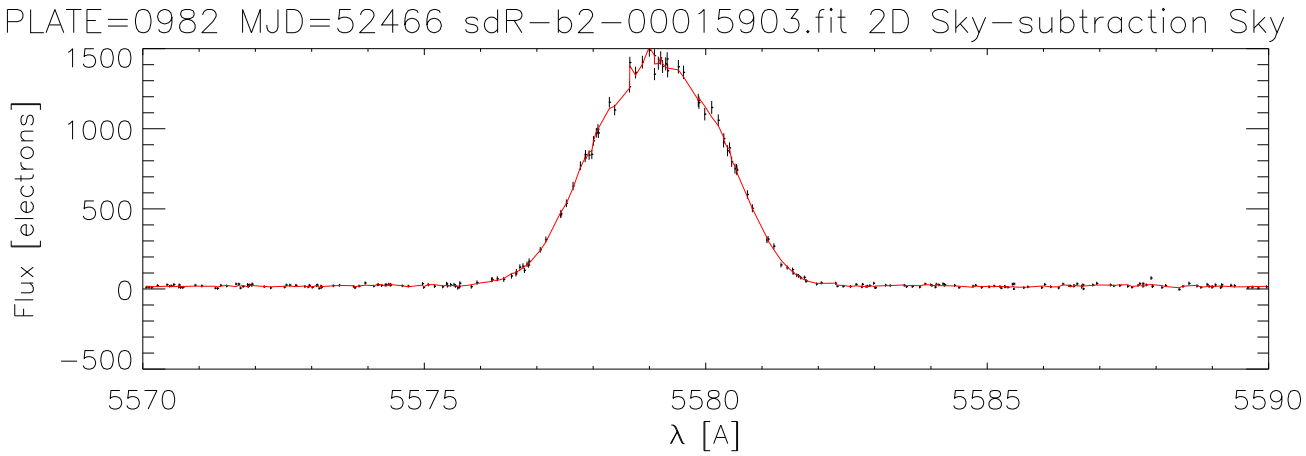

PLATE=0982 MJD=52466 sdR-b2-00015903.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

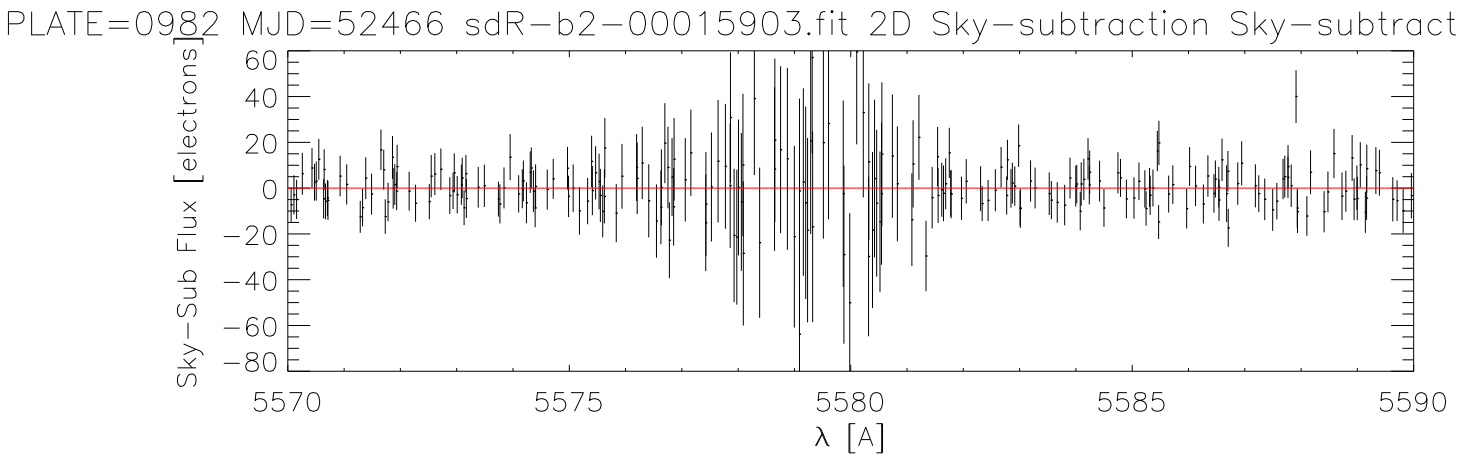

PLATE=0982 MJD=52466 sdR-b2-00015903.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

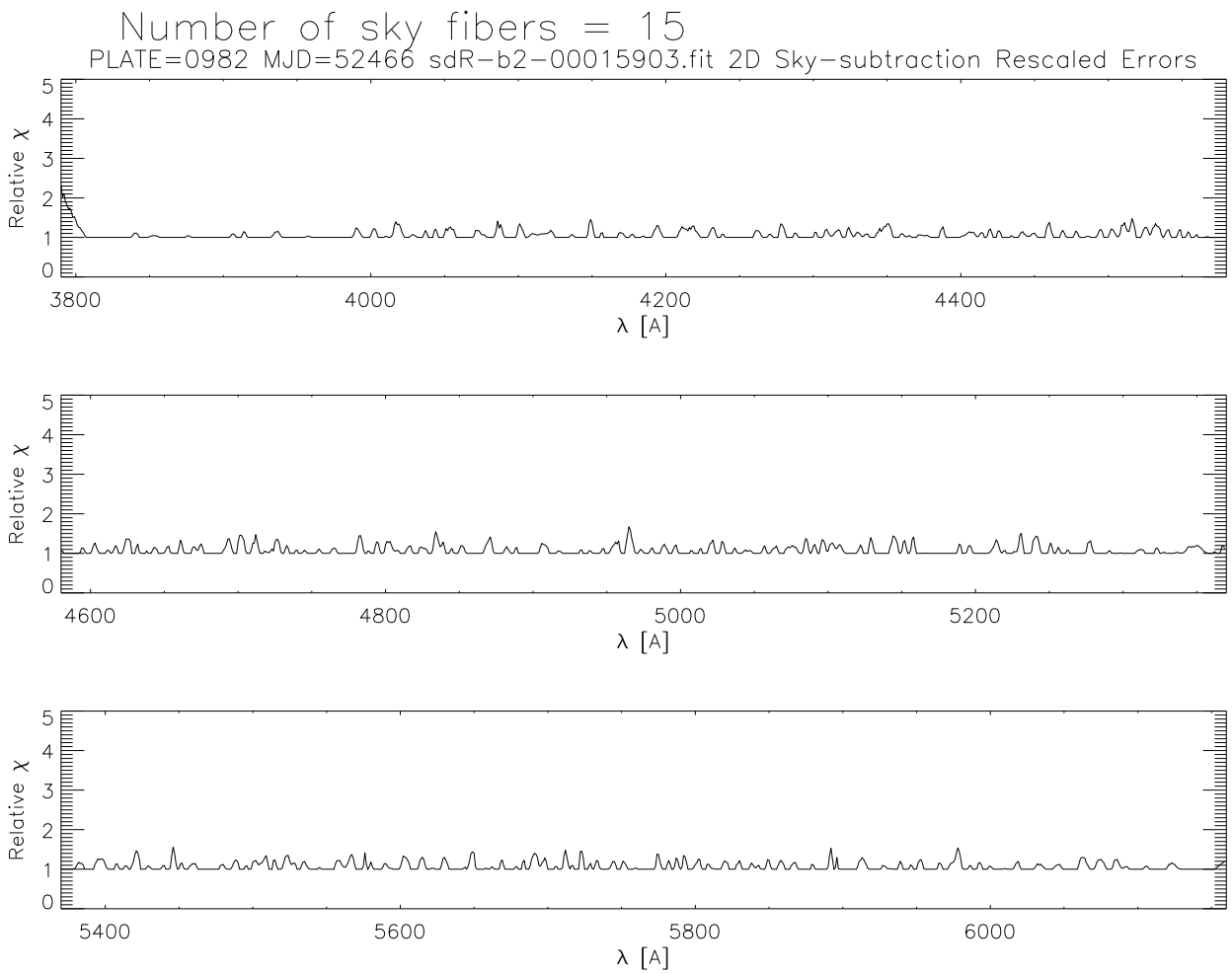

PLATE=0982 MJD=52466 sdR-b2-00015903.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

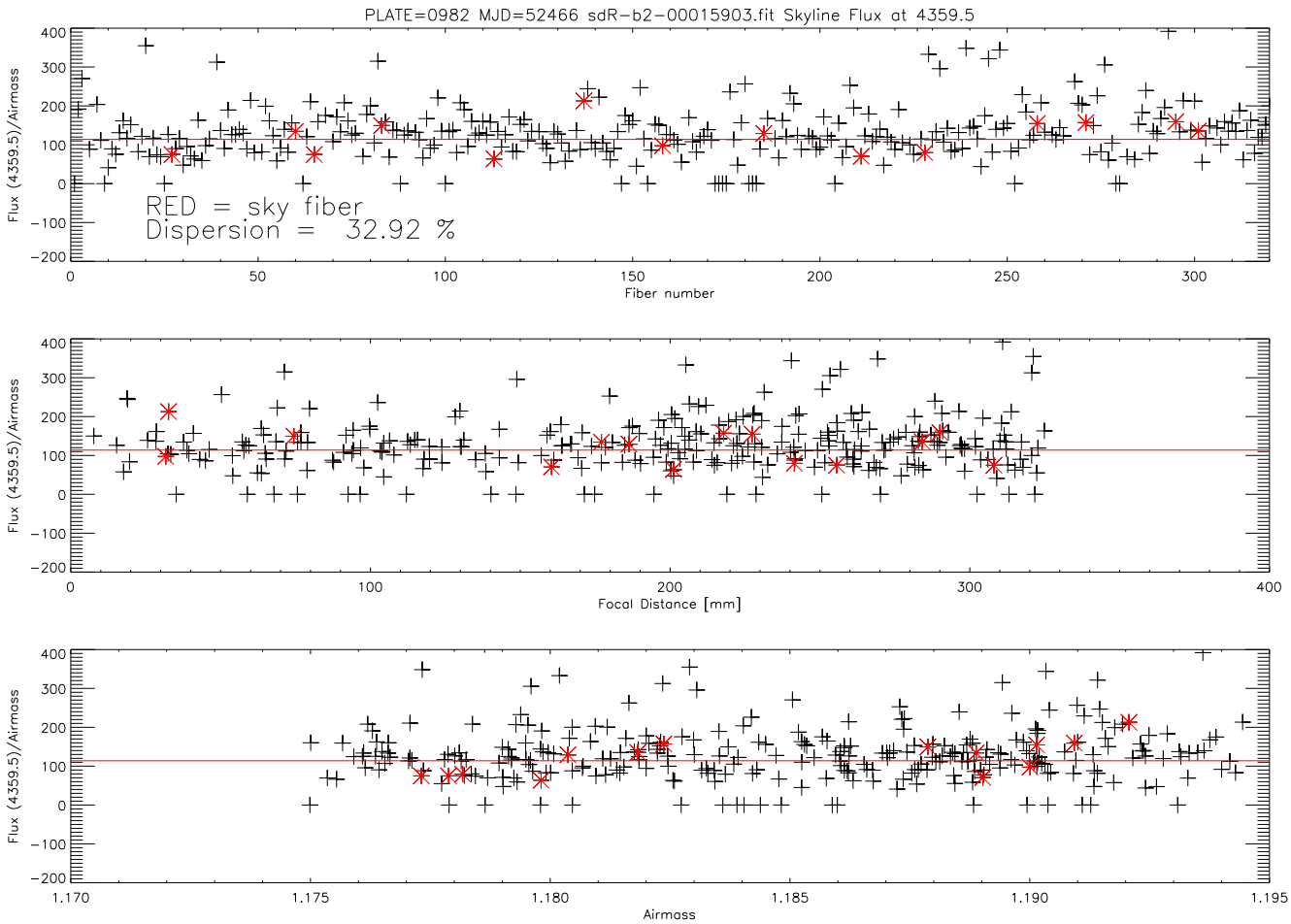

Number of sky fibers = 15
PLATE=0982 MJD=52466 sdR-b2-00015903.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

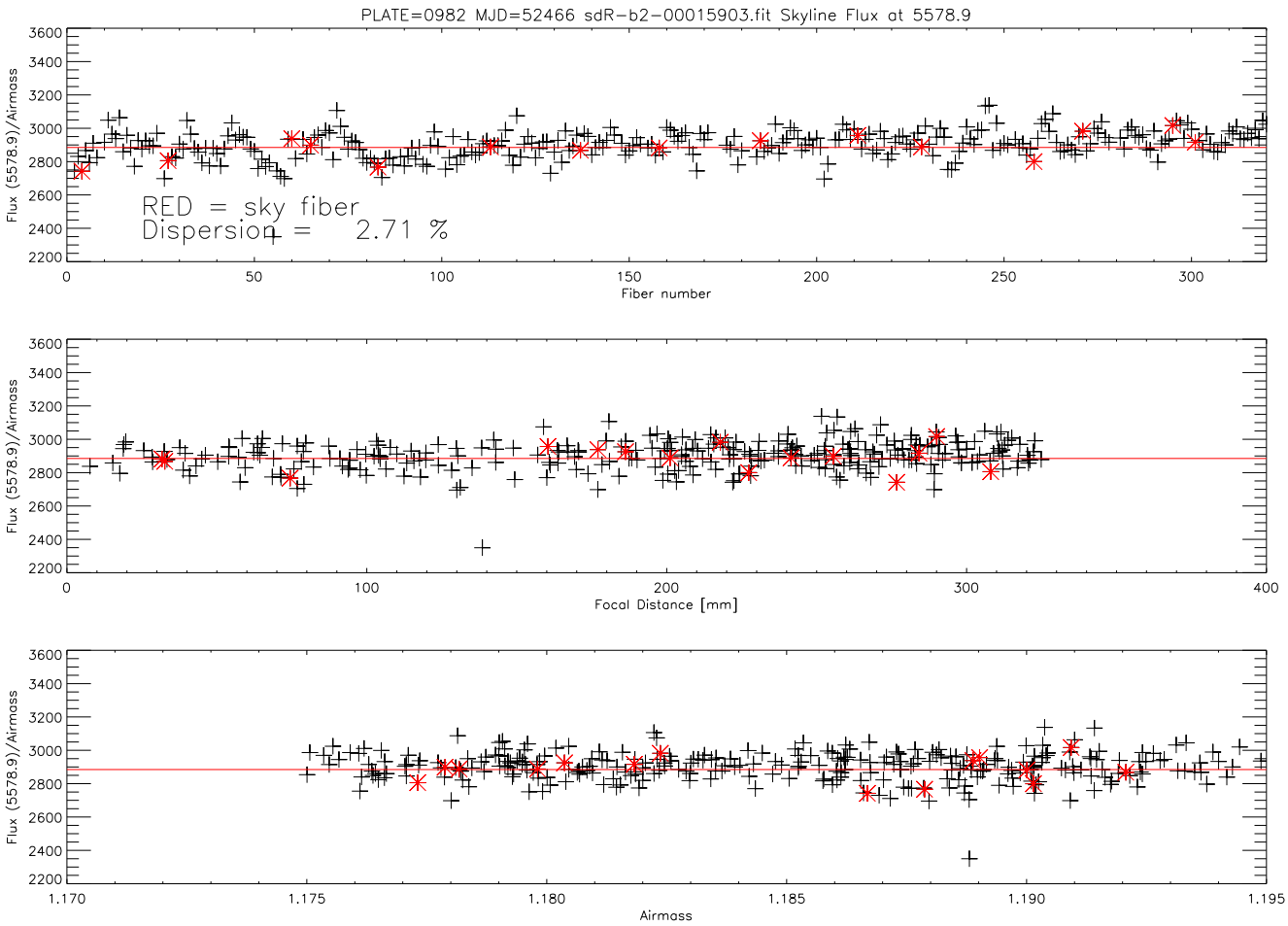

PLATE=0982 MJD=52466 sdR-b2-00015903.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

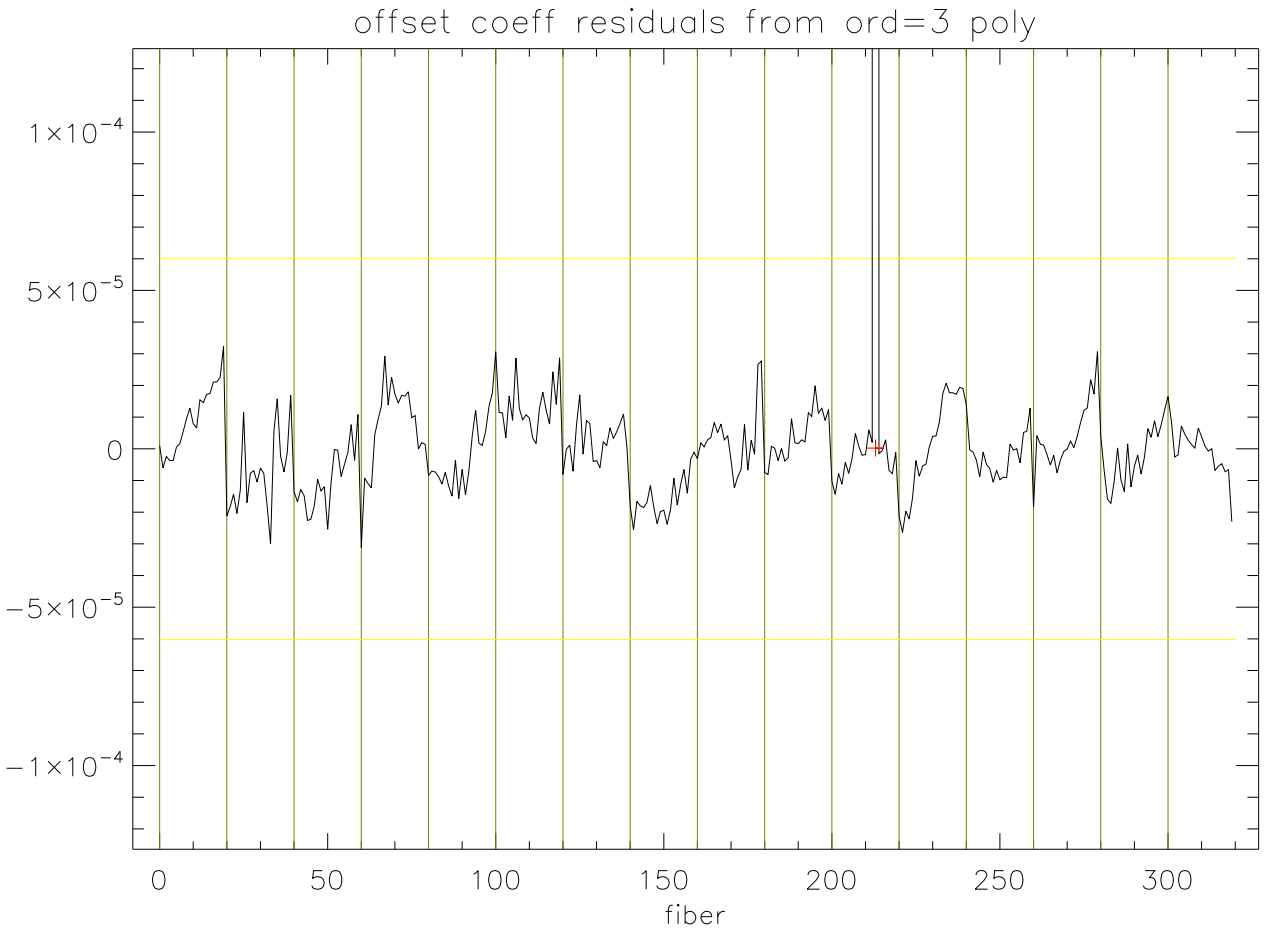

PLATE=0982 MJD=52466 sdR-b2-00015903.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

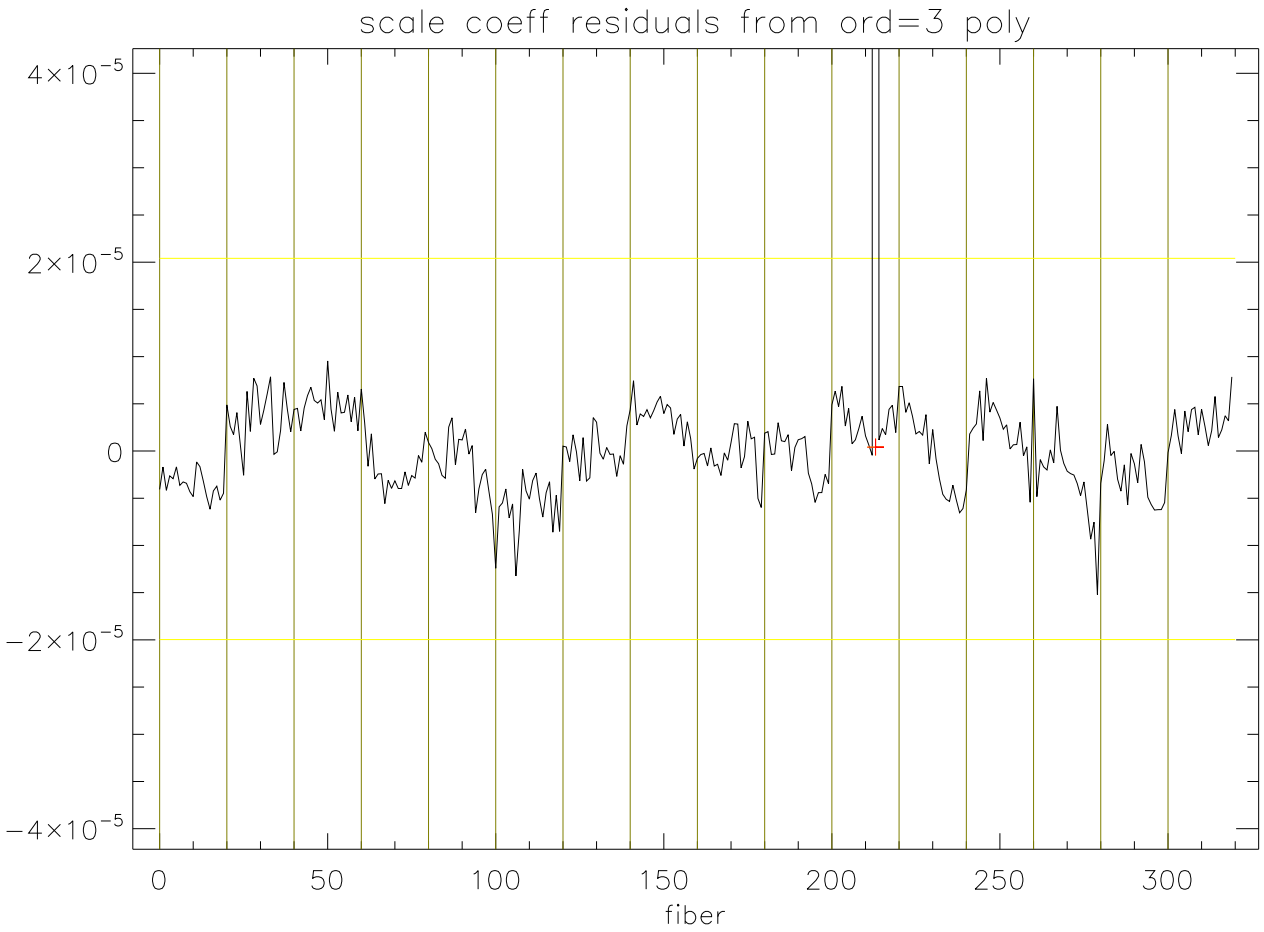

PLATE=0982 MJD=52466 sdR-b2-00015903.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
60
40
20
0
-20
-40
-60
-80
5570
5575
5580
5585
5590
λ [A]

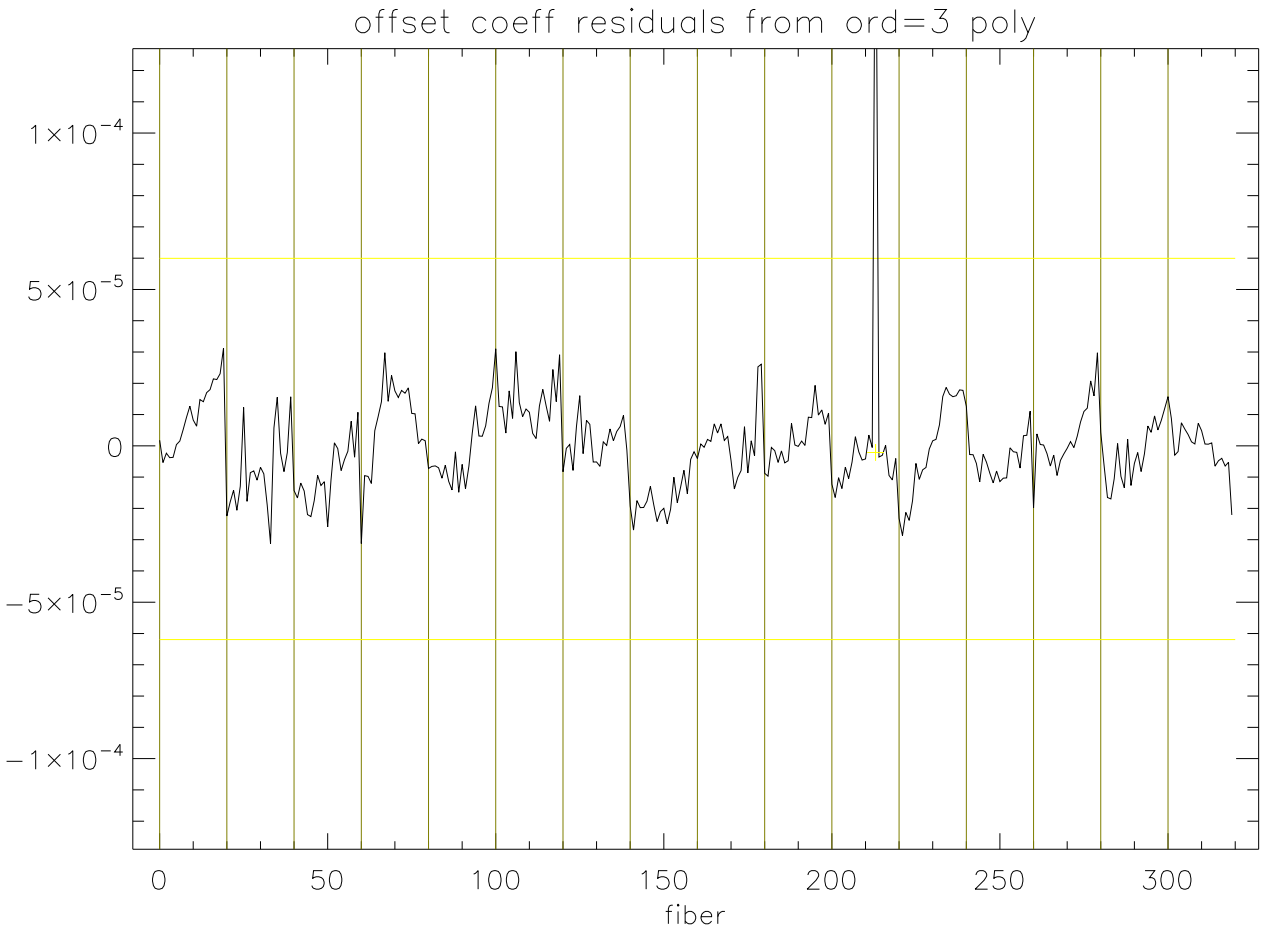

Number of sky fibers = 15
PLATE=0982 MJD=52466 sdR-b2-00015903.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

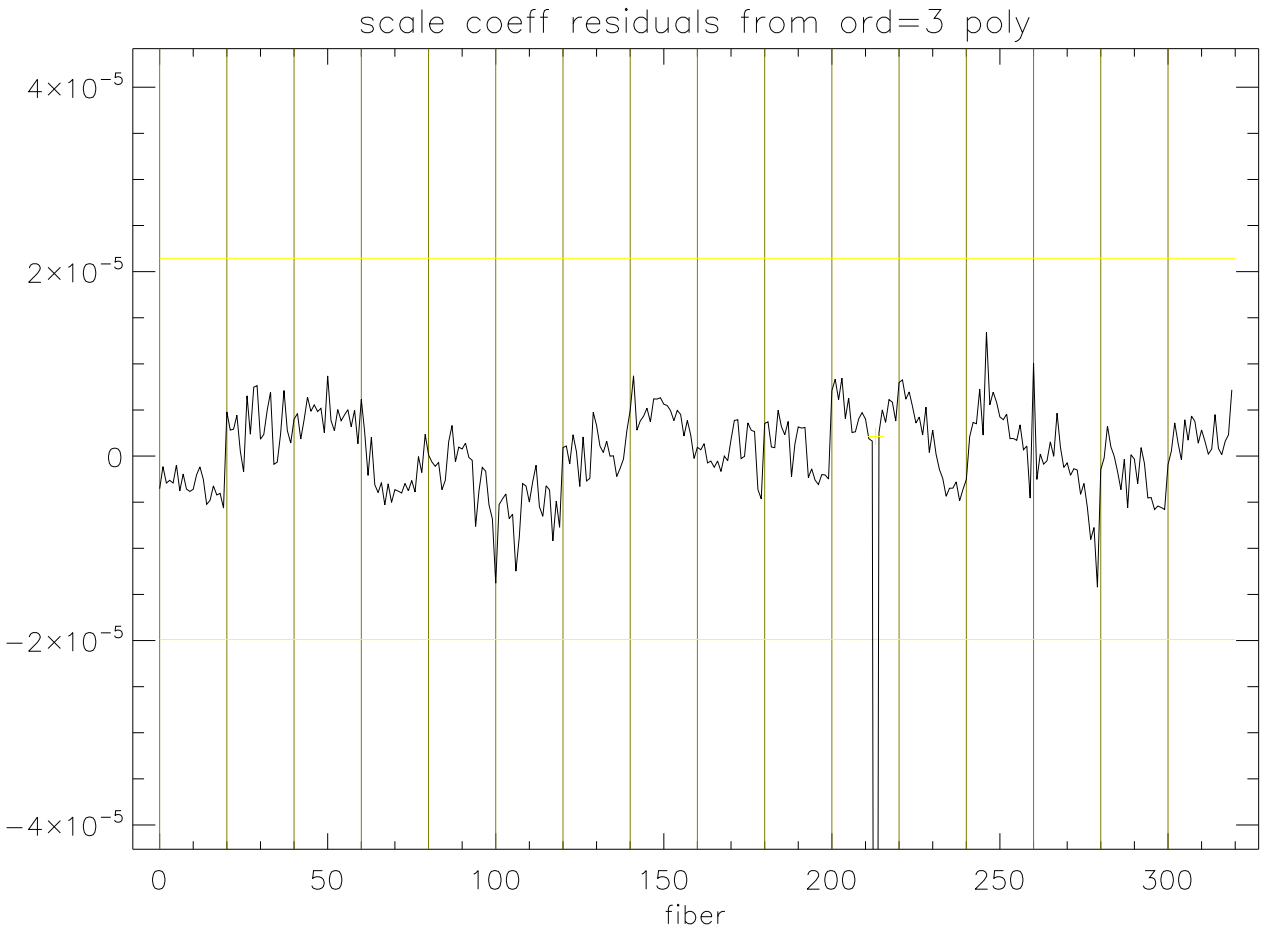

PLATE=0982 MJD=52466 sdR-b2-00015903.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 32.92 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

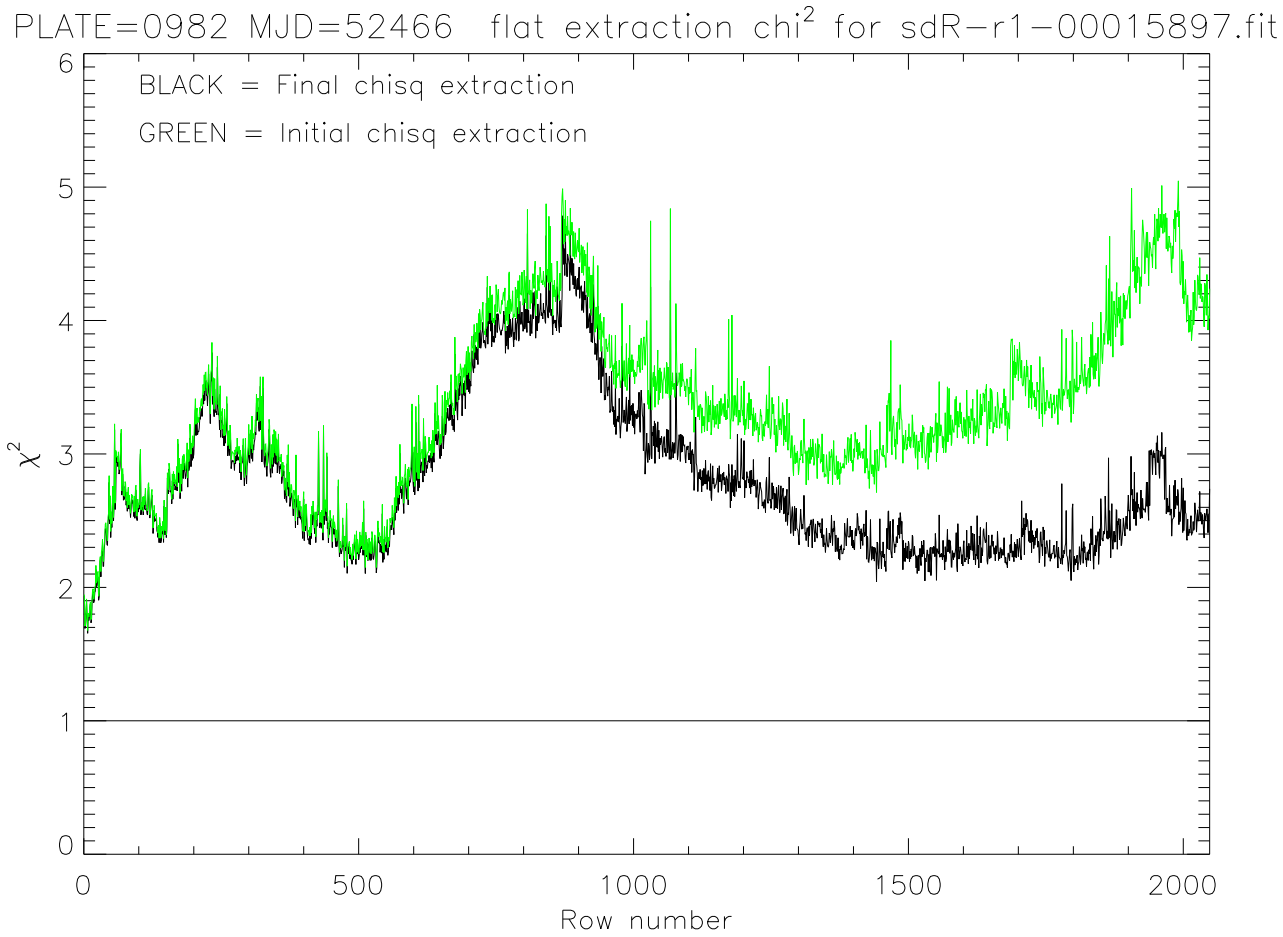

PLATE=0982 MJD=52466 sdR-b2-00015903.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.71 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

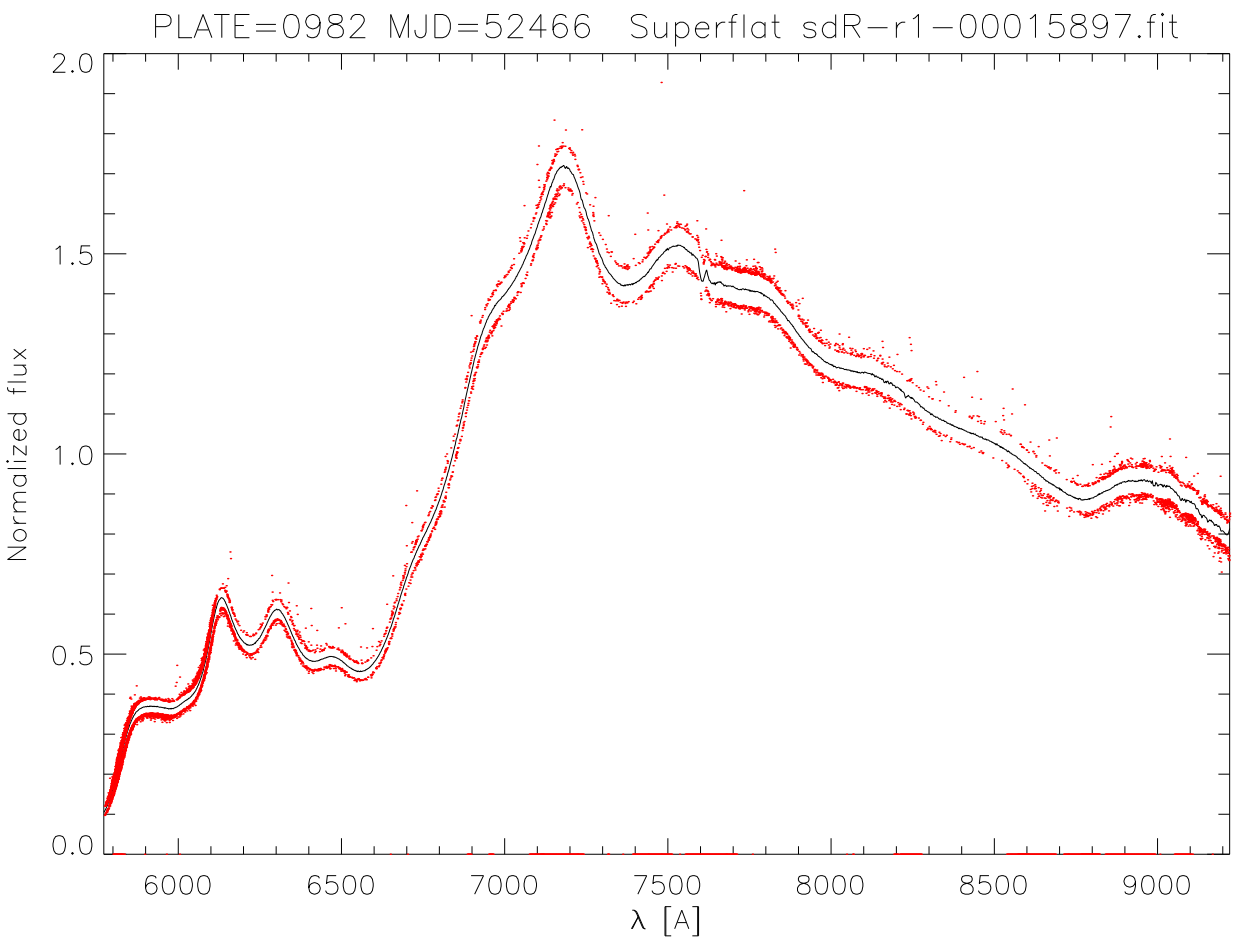

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

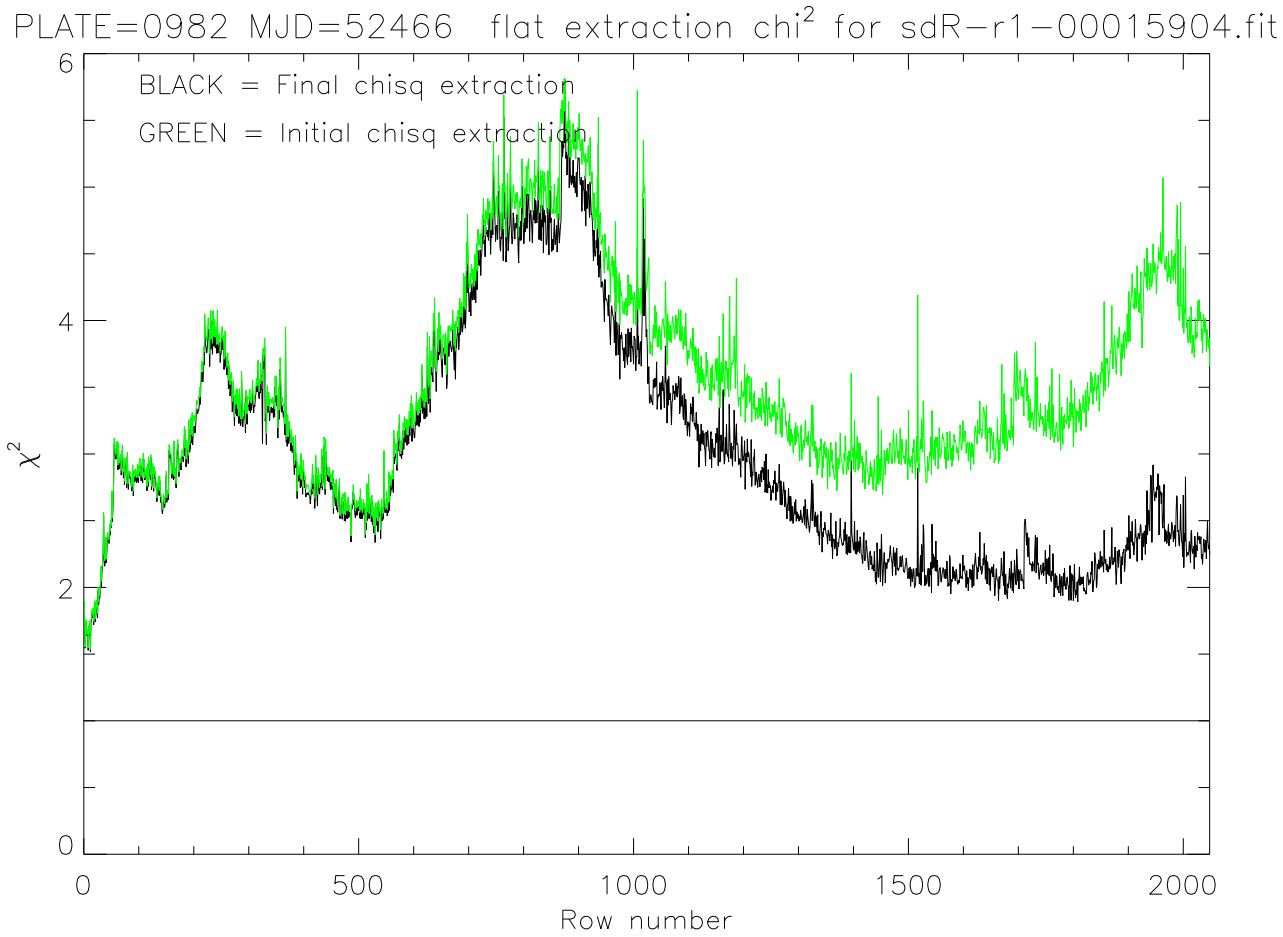

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

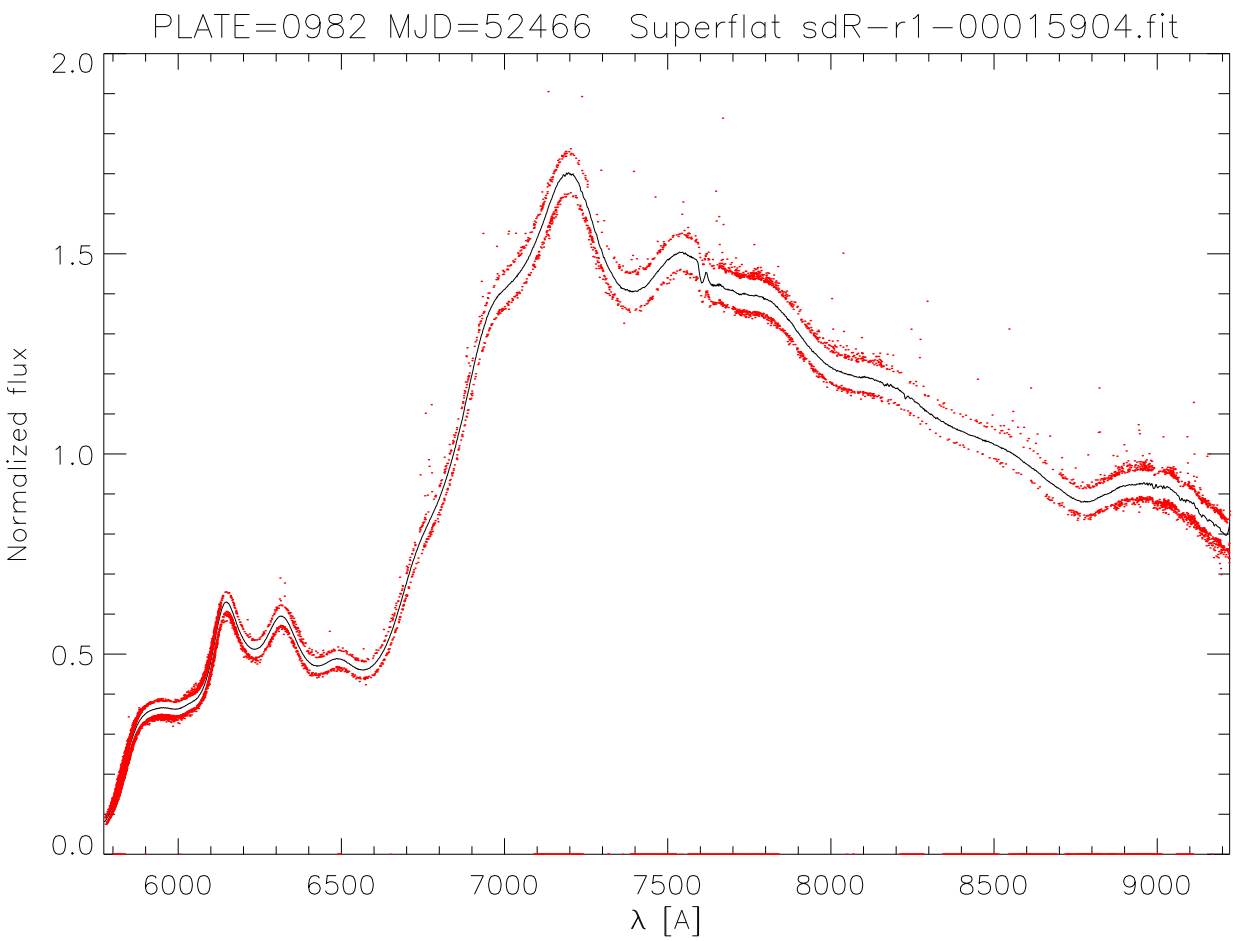

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

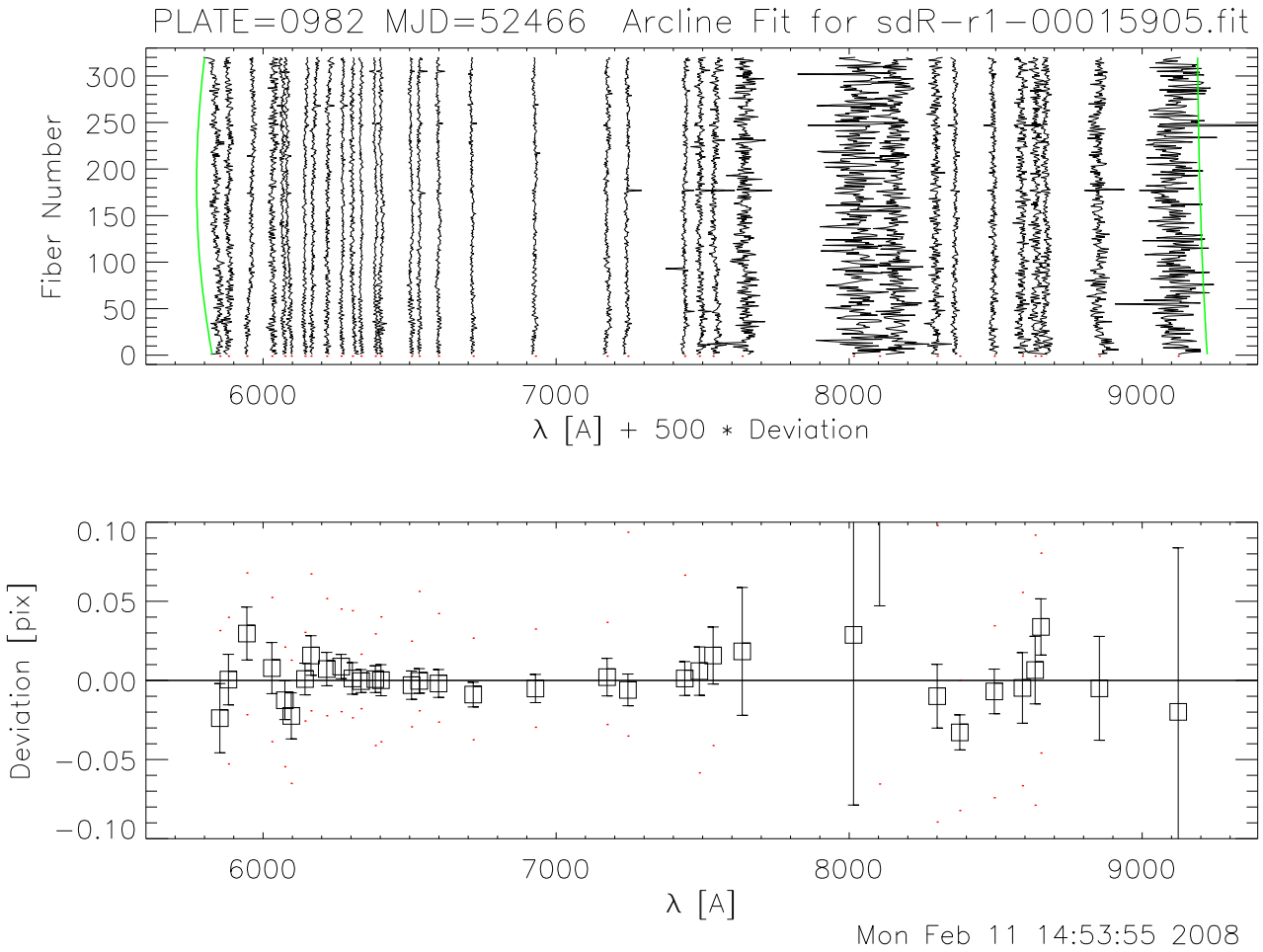

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

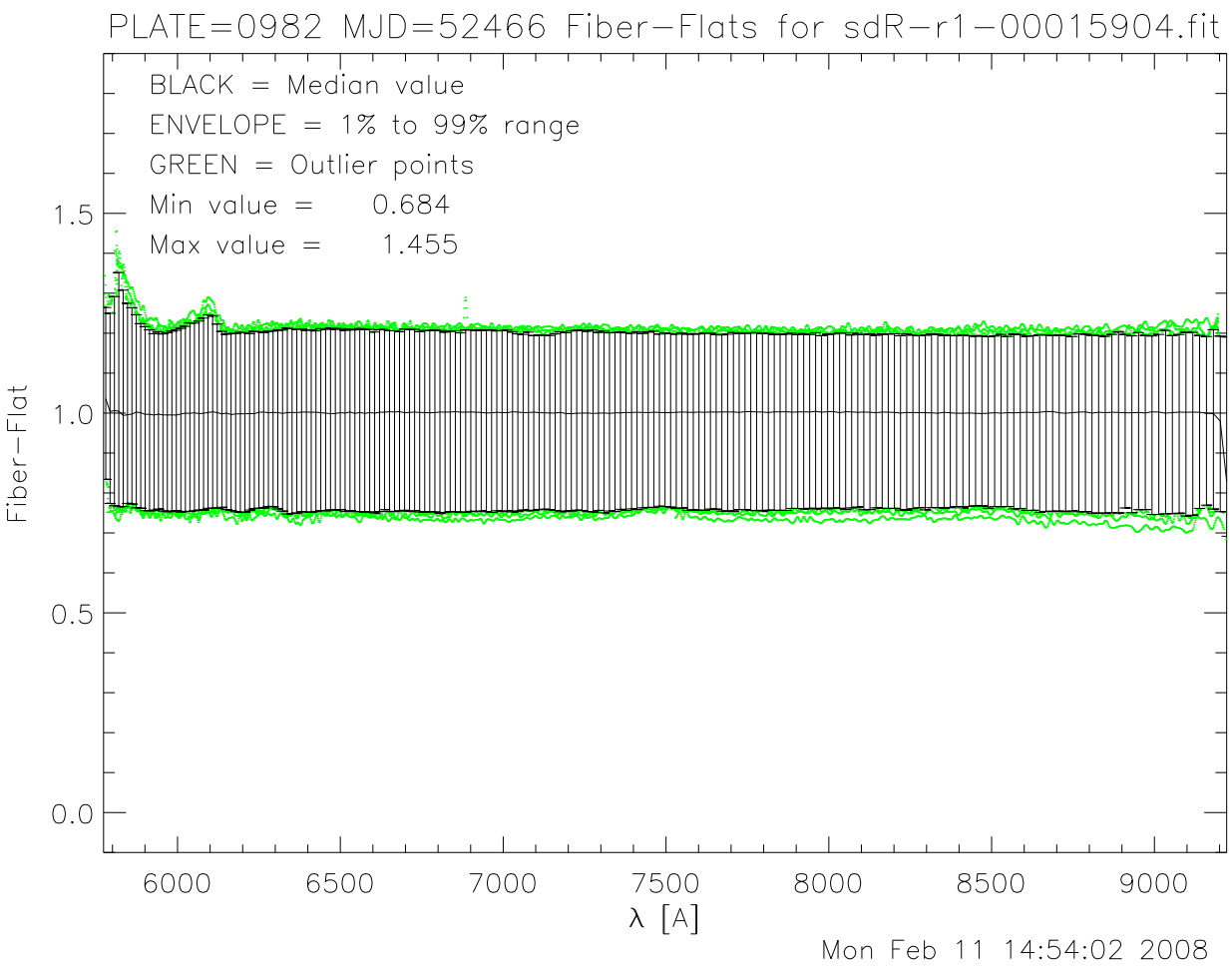

PLATE=0982 MJD=52466 flat extraction chi^2 for sdR−r1−00015897.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

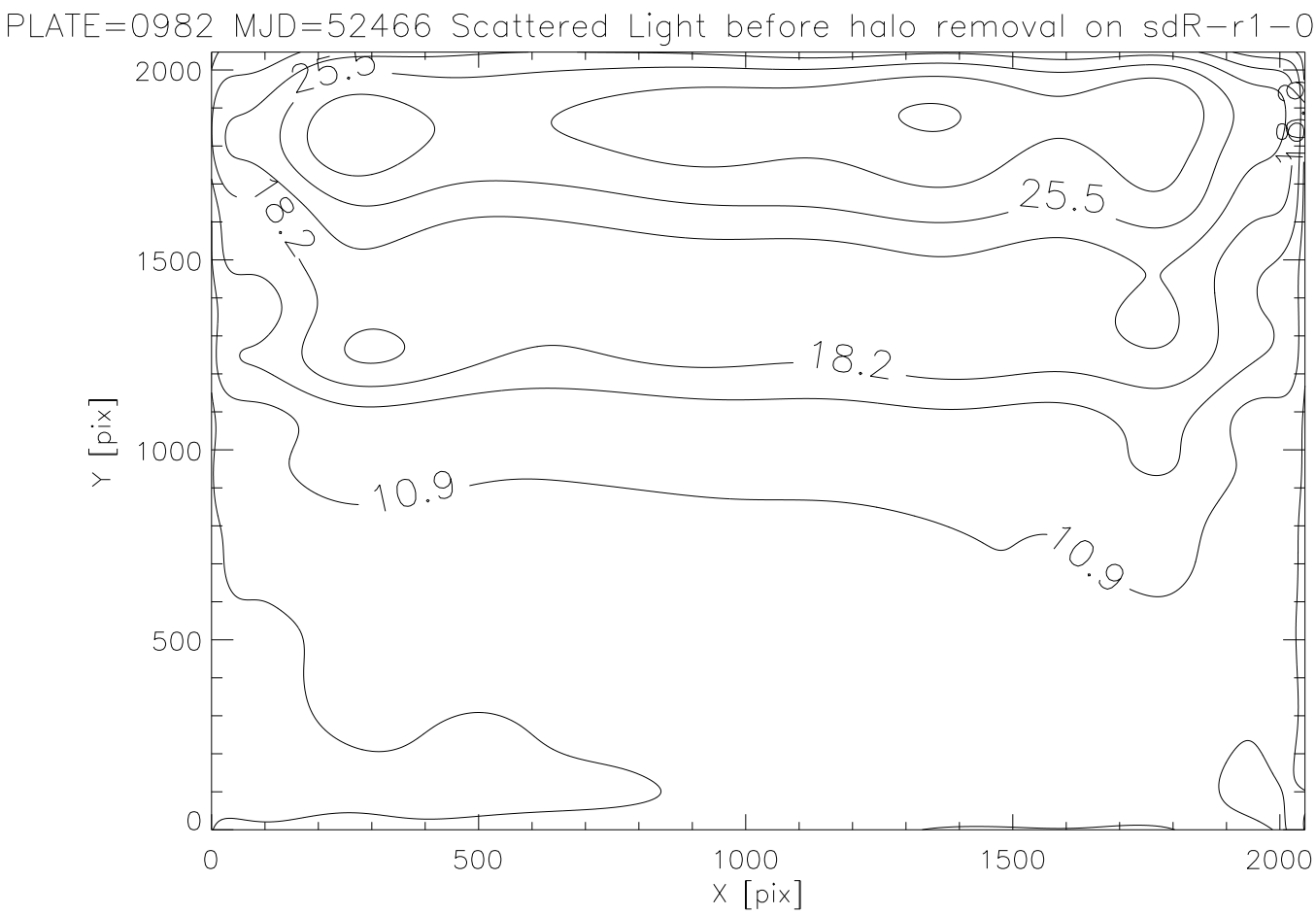

PLATE=0982 MJD=52466 Superflat sdR-r1-00015897.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

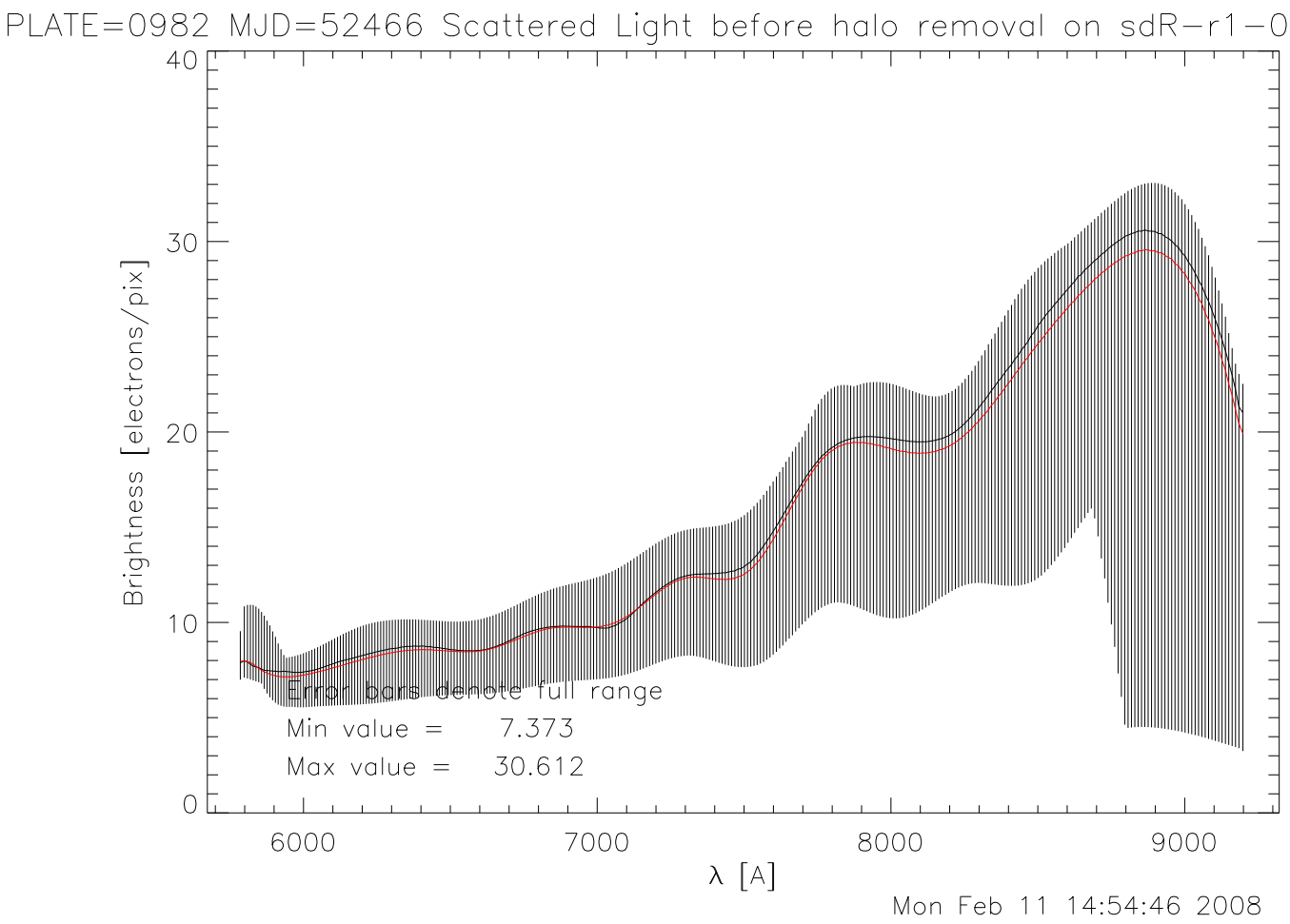

PLATE=0982 MJD=52466 flat extraction chi^2 for sdR−r1−00015904.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

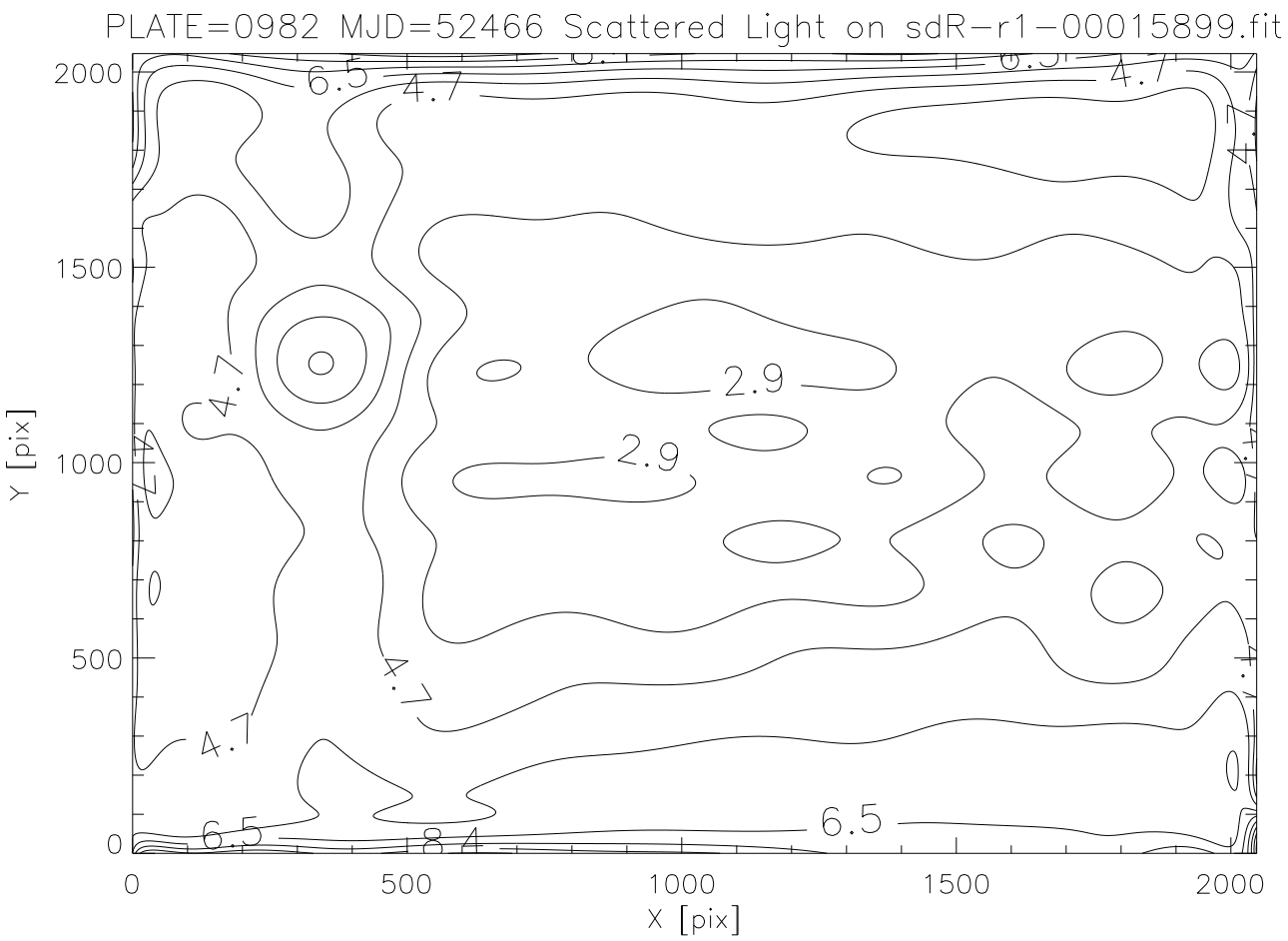

PLATE=0982 MJD=52466 Superflat sdR-r1-00015904.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

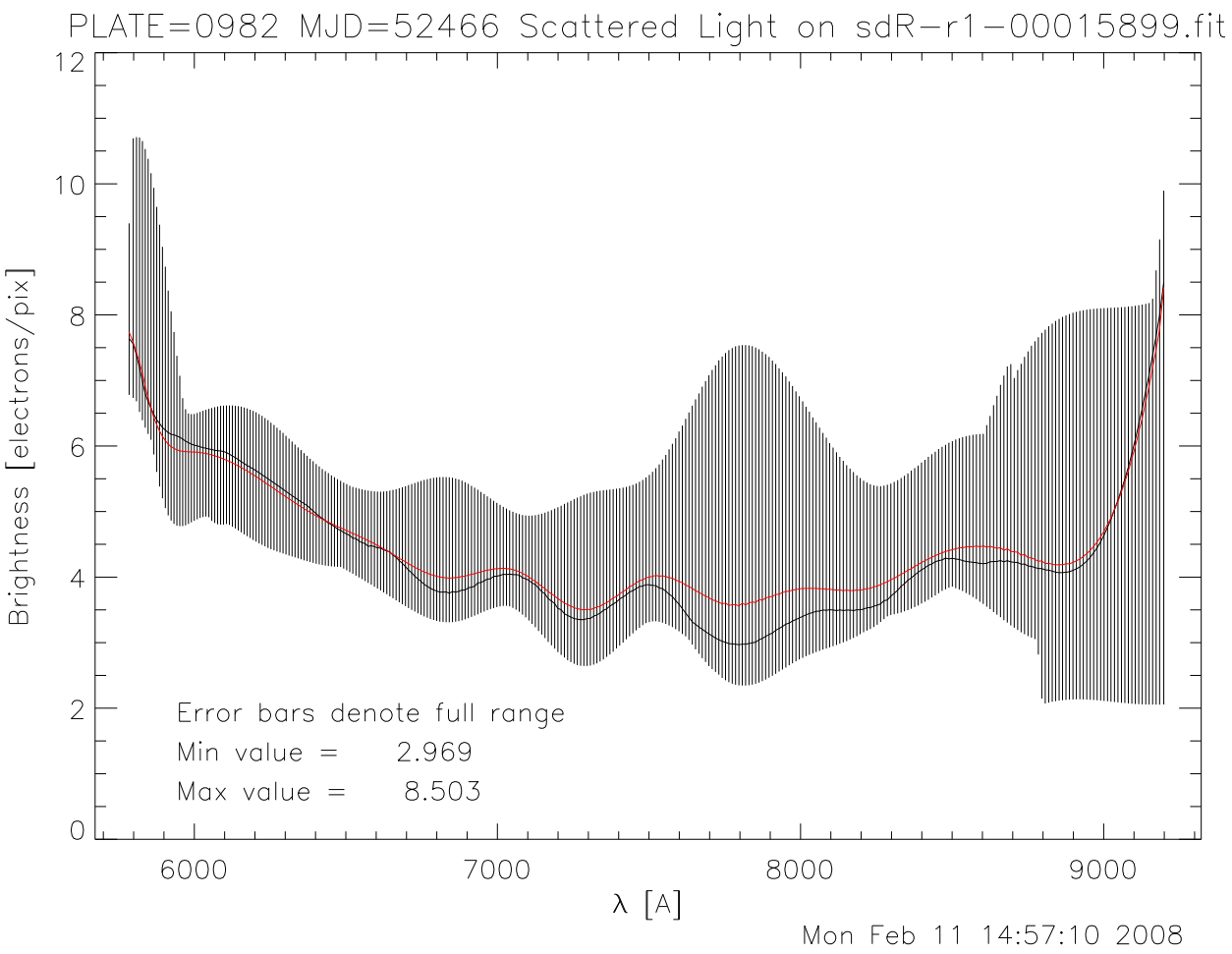

PLATE=0982 MJD=52466 Arcline Fit for sdR-r1-00015905.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 14:53:55 2008

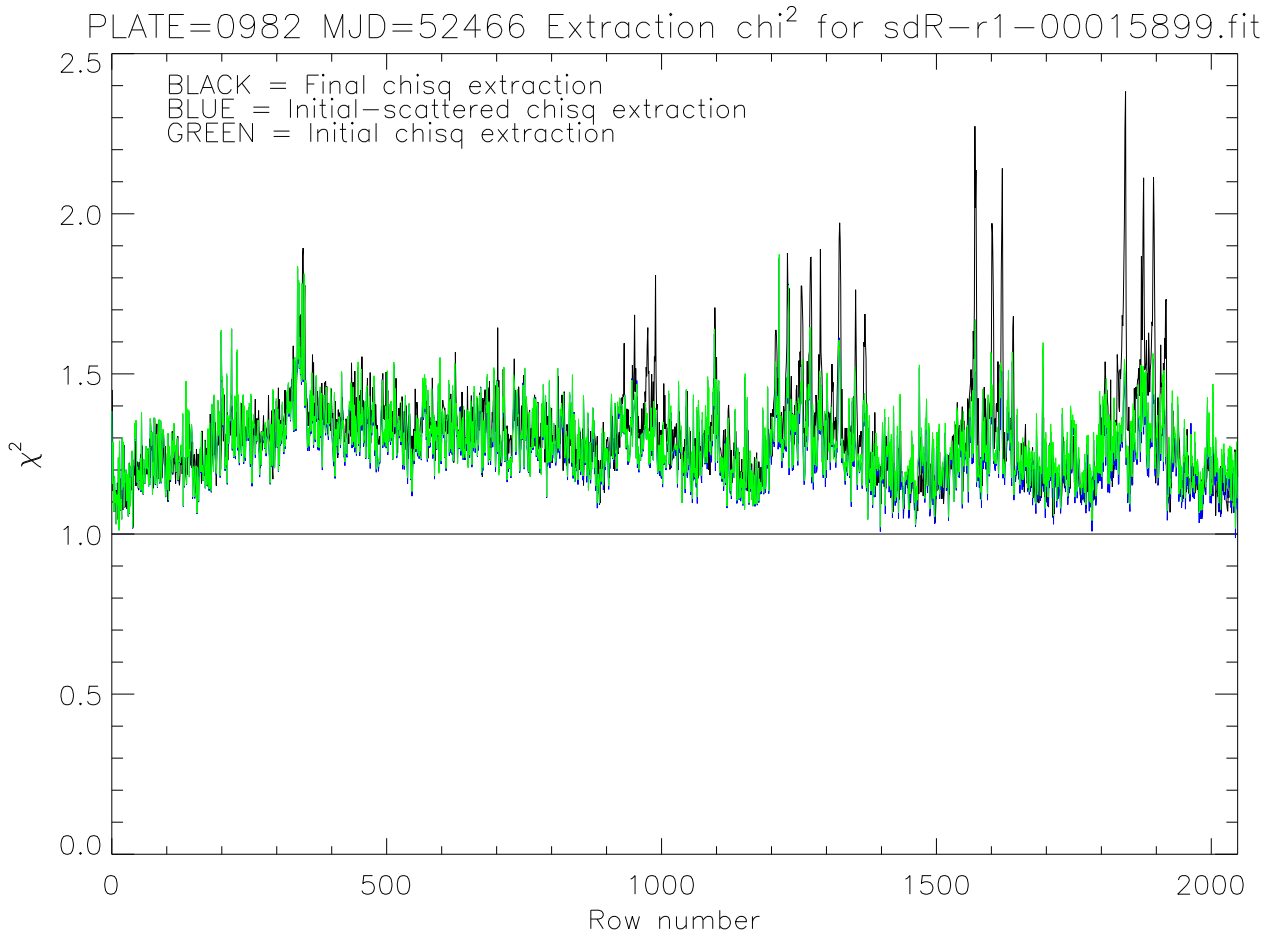

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r1−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.684
Max value = 1.455
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 14:54:02 2008

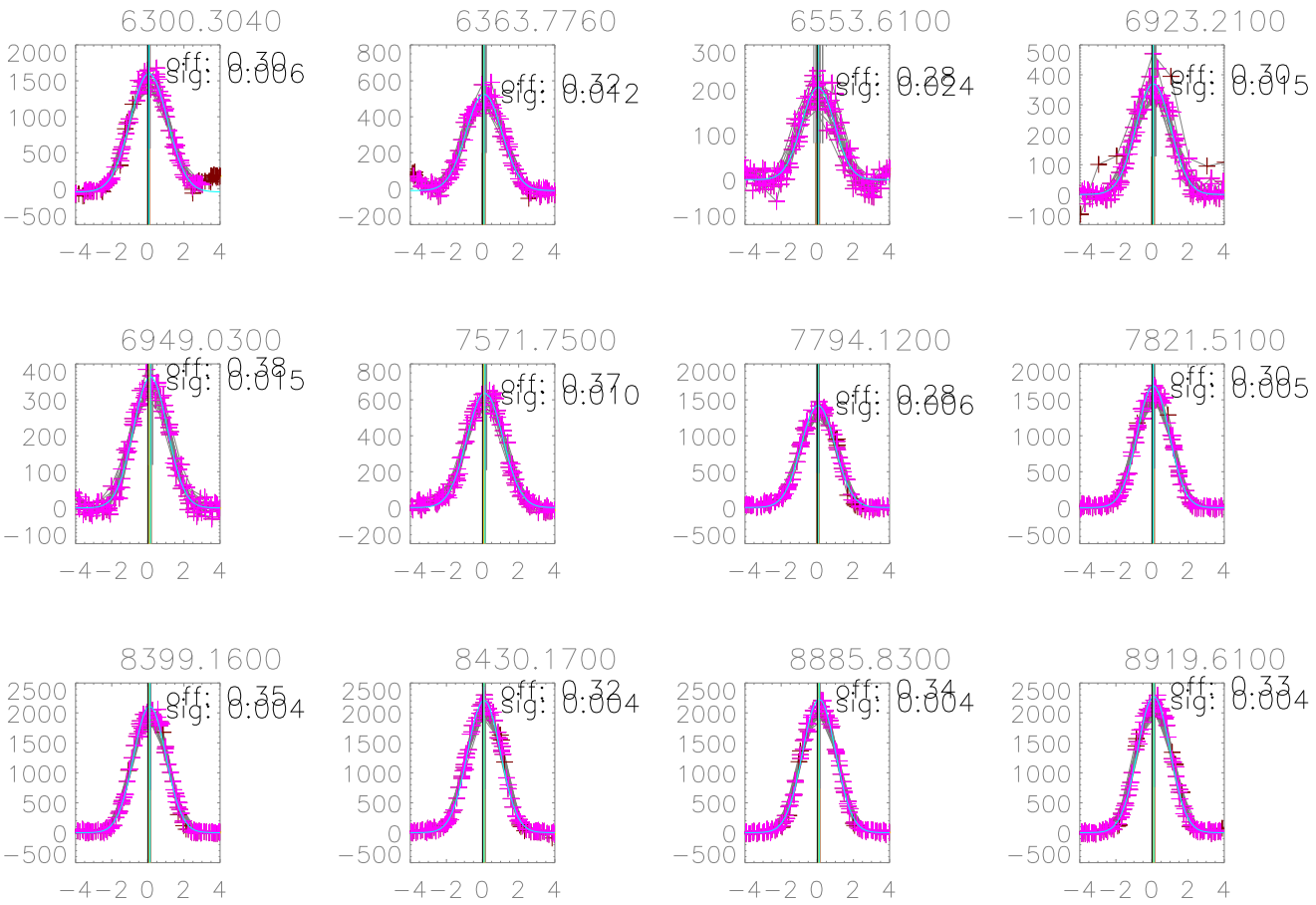

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015899.fi
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

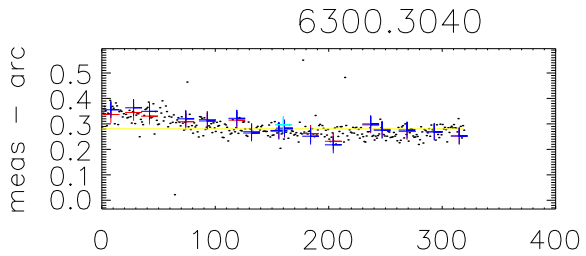

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015899.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.373
Max value = 30.612
Mon Feb 11 14:54:46 2008

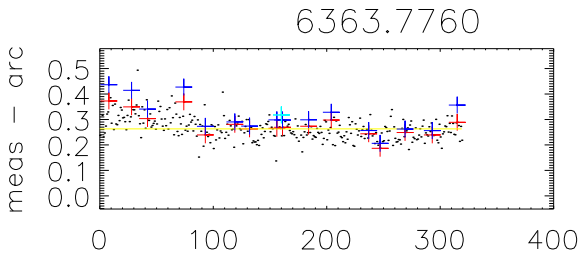

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015899.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
4.7
2.9
8.4

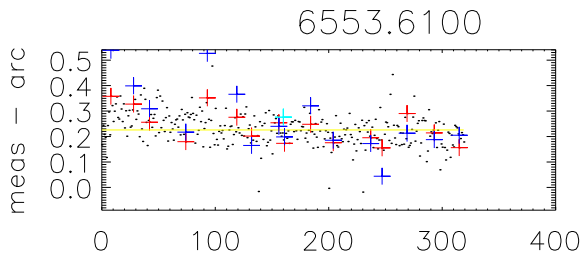

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015899.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.969
Max value = 8.503
Mon Feb 11 14:57:10 2008

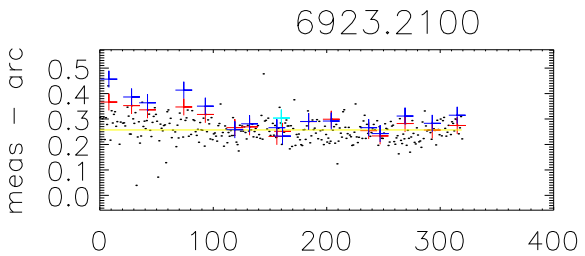

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r1−00015899.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

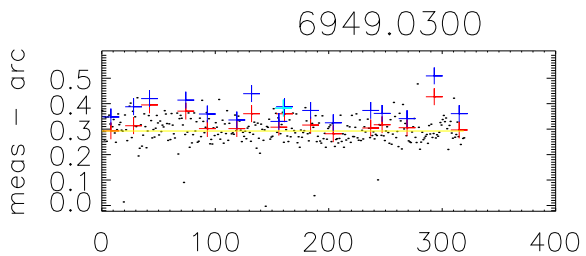

6300.3040
off: 0.30
sig: 0.006
6363.7760
off: 0.32
sig: 0.042
6553.6100
off: 0.28
sig: 0.024
6923.2100
off: 0.30
sig: 0.015
6949.0300
off: 0.38
sig: 0.015
7571.7500
off: 0.37
sig: 0.010
7794.1200
off: 0.28
sig: 0.006
7821.5100
off: 0.30
sig: 0.005
8399.1600
off: 0.35
sig: 0.004
8430.1700
off: 0.32
sig: 0.004
8885.8300
off: 0.34
sig: 0.004
8919.6100
off: 0.33
sig: 0.004

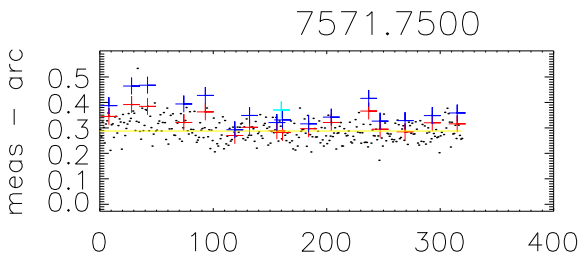

6300.3040
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

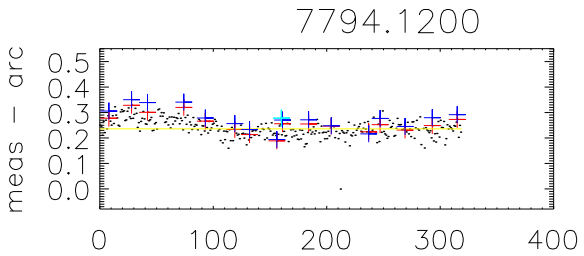

6363.7760
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

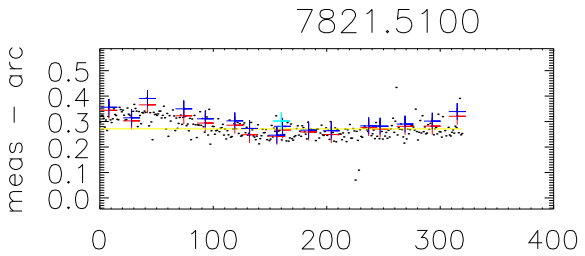

6553.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

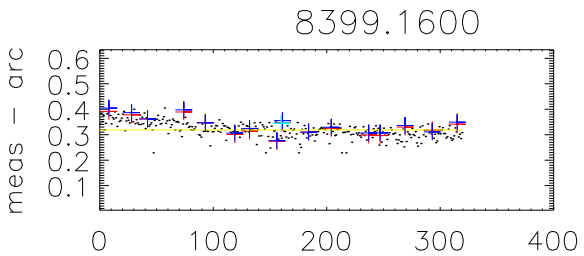

6923.2100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

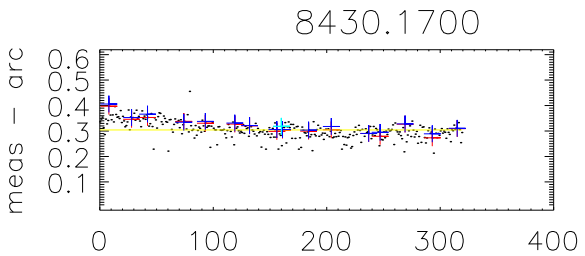

6949.0300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

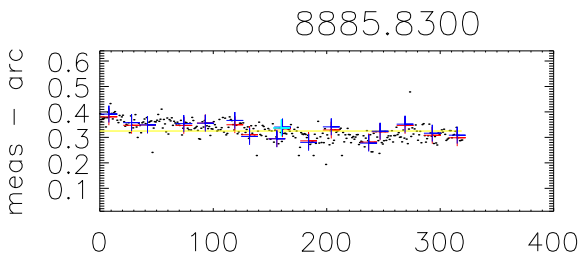

7571.7500
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

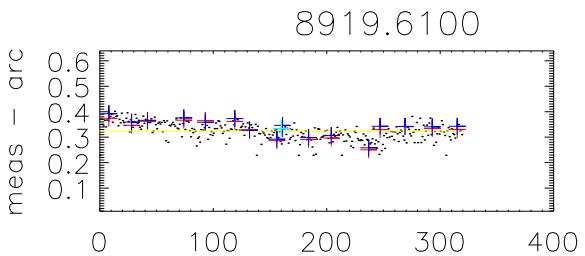

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

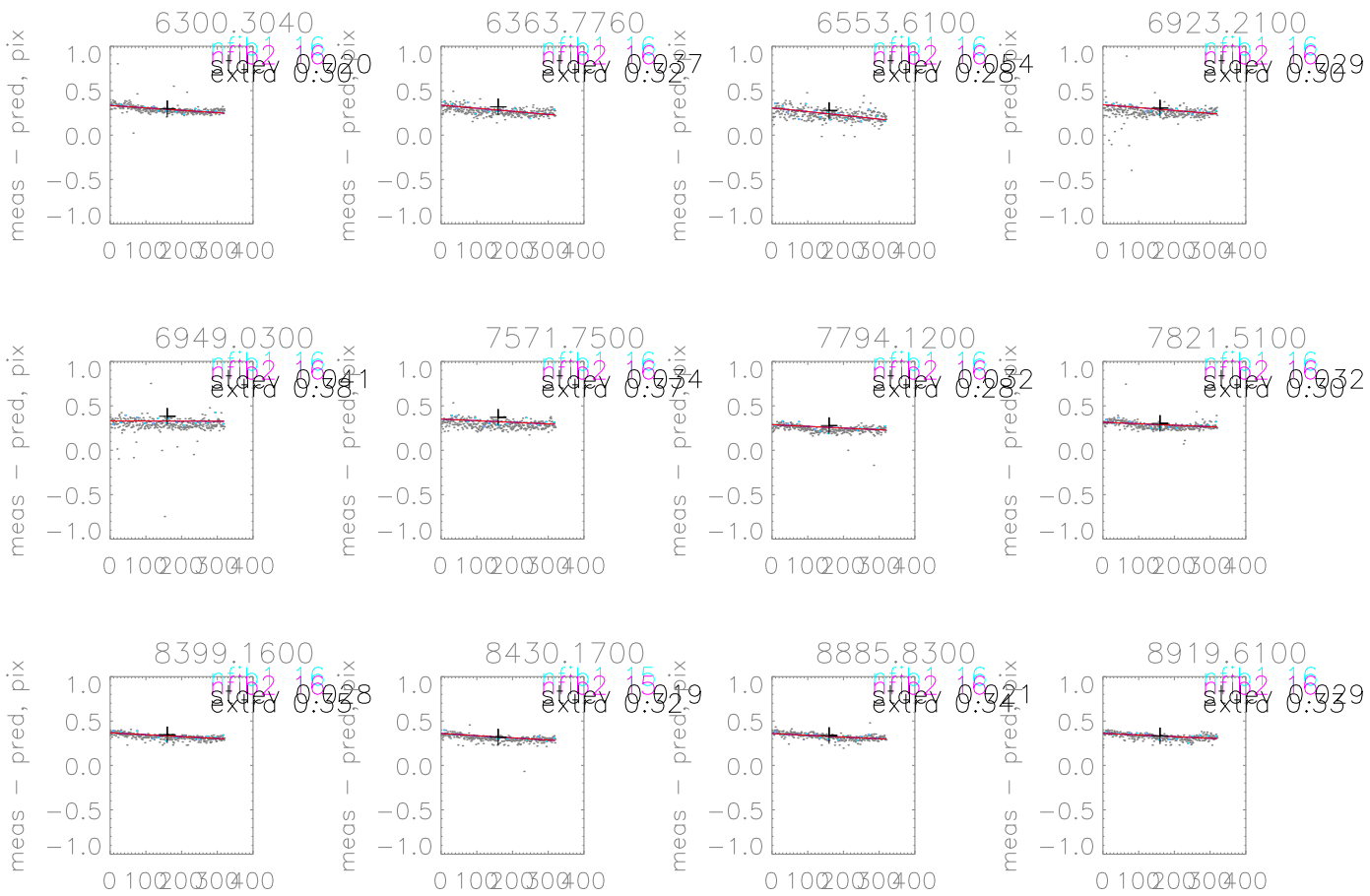

7821.5100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

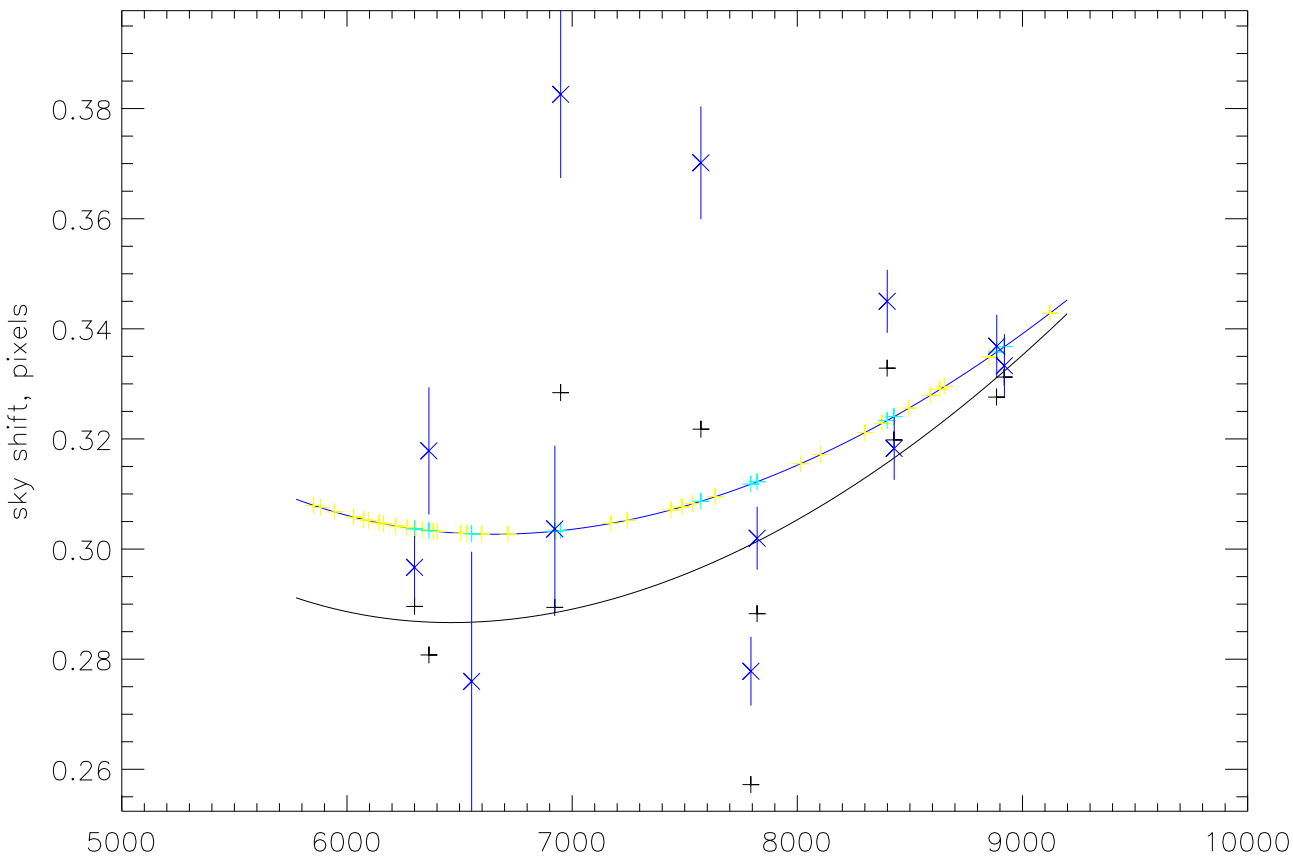

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

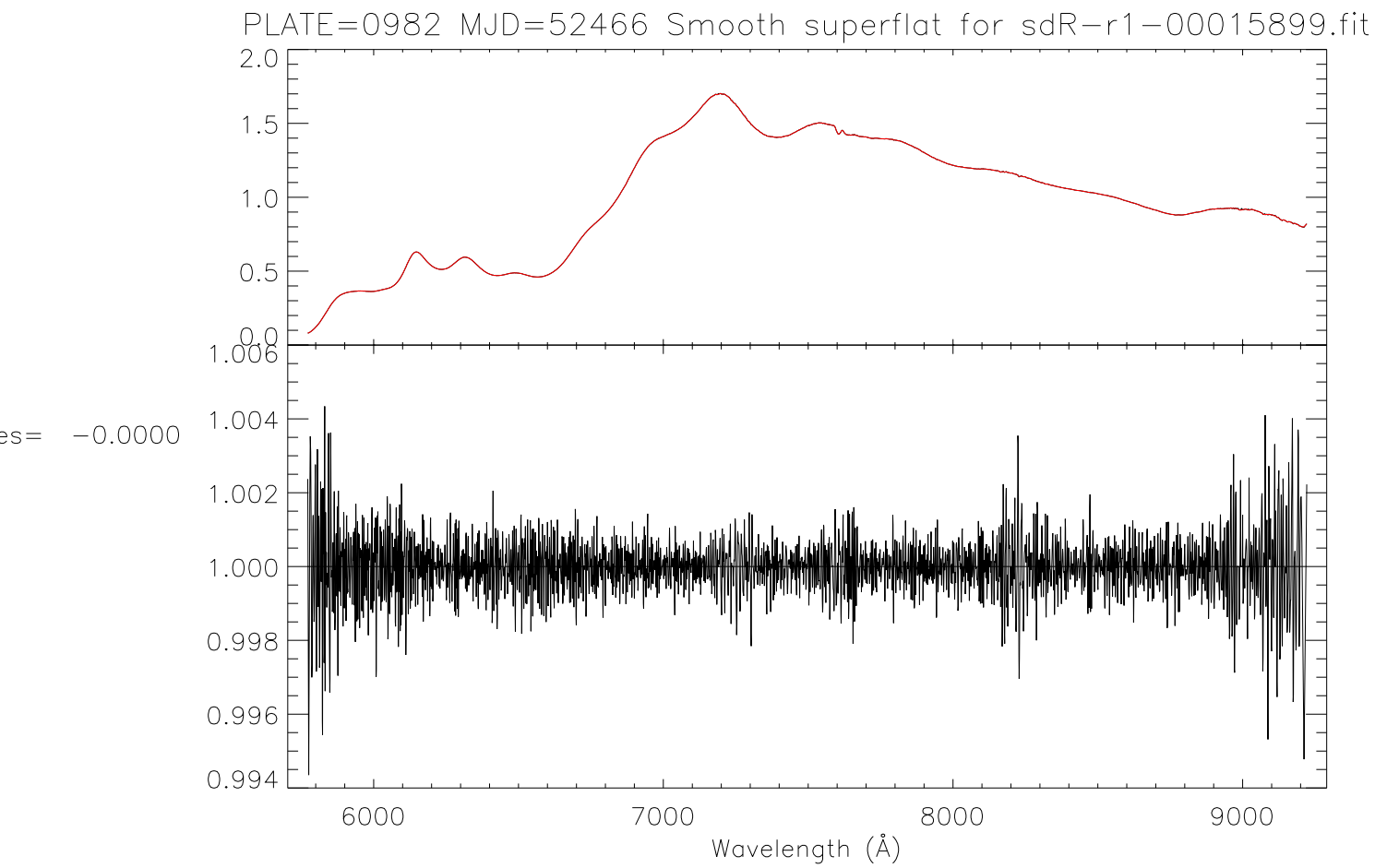

8430.1700
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


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

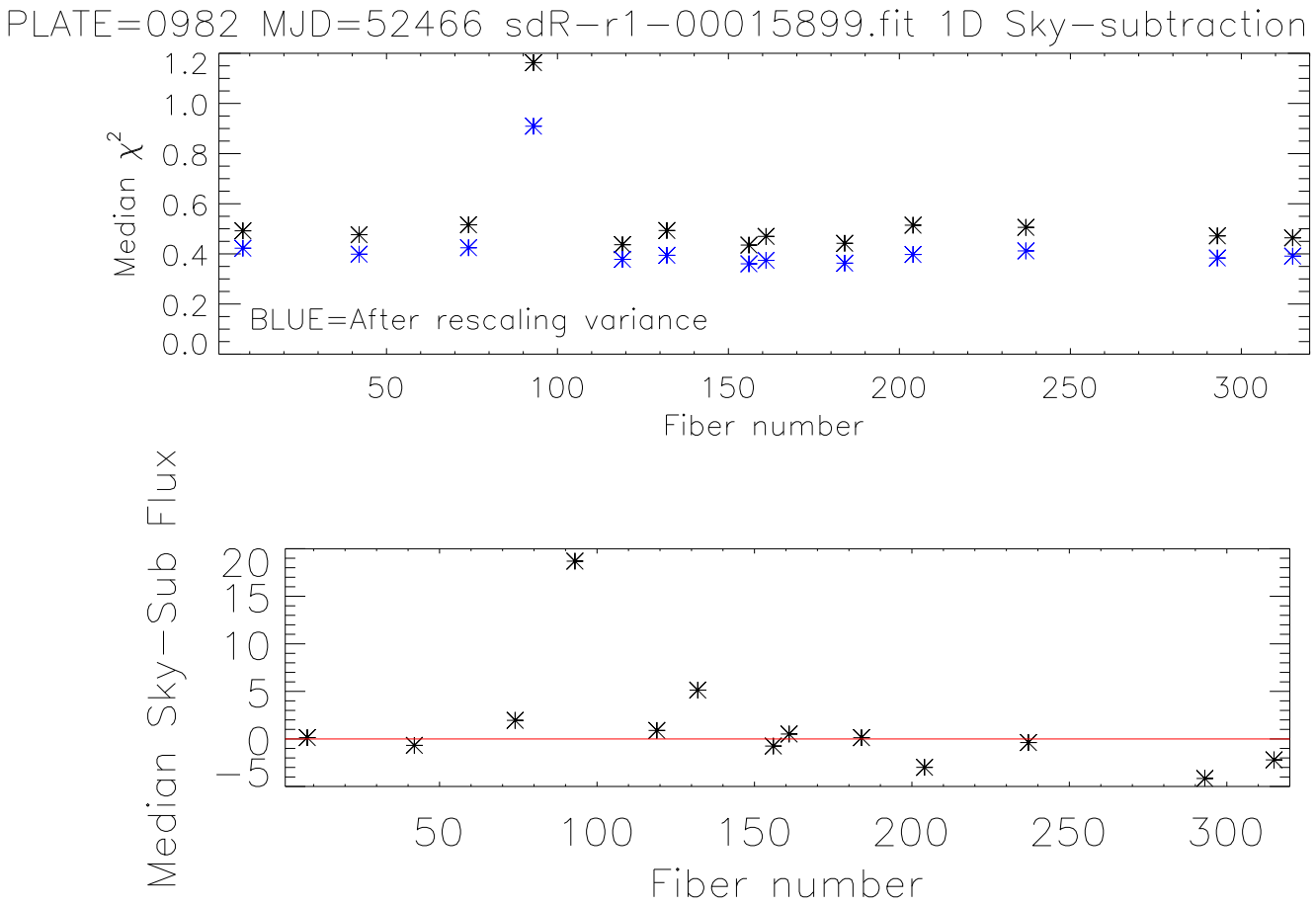

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

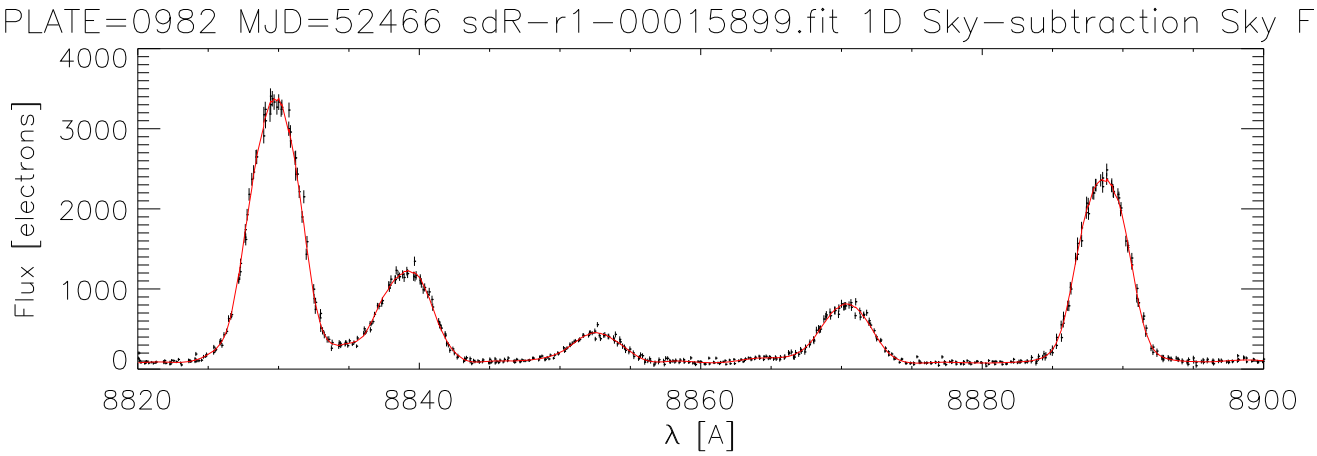

6300.3040
stdev 0.020
extra 0.36
6363.7760
stdev 0.027
extra 0.32
6553.6100
stdev 0.054
extra 0.28
6923.2100
stdev 0.029
extra 0.30
6949.0300
stdev 0.041
extra 0.38
7571.7500
stdev 0.034
extra 0.37
7794.1200
stdev 0.032
extra 0.28
7821.5100
stdev 0.032
extra 0.30
8399.1600
stdev 0.028
extra 0.33
8430.1700
stdev 0.019
extra 0.32
8885.8300
stdev 0.021
extra 0.34
8919.6100
stdev 0.029
extra 0.33
meas − pred, pix

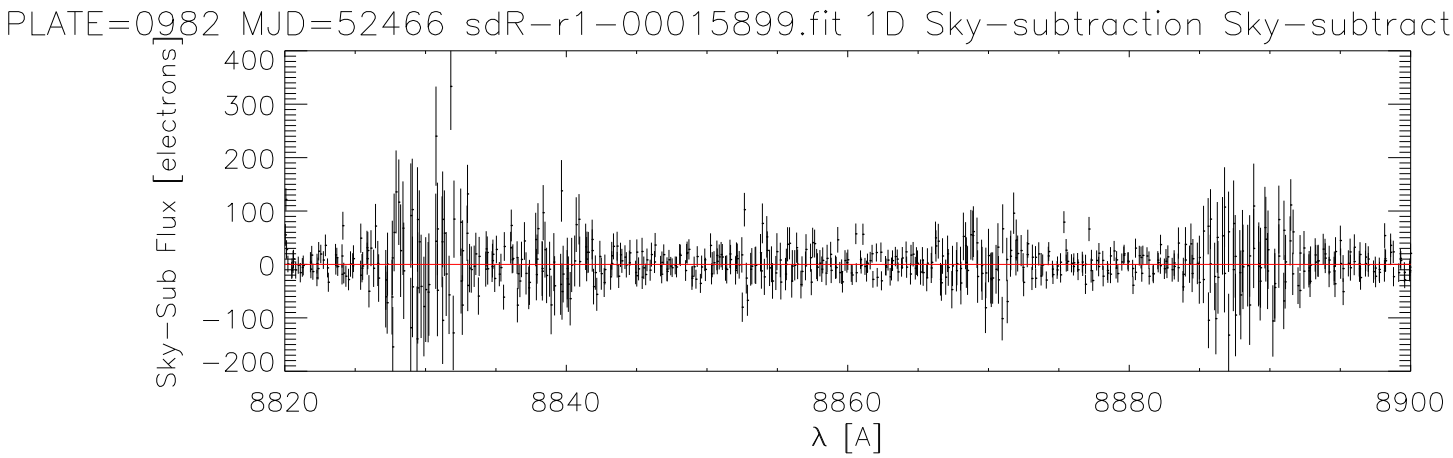

sky shift, pixels
0.38
0.36
0.34
0.32
0.30
0.28
0.26
5000
6000
7000
8000
9000
10000

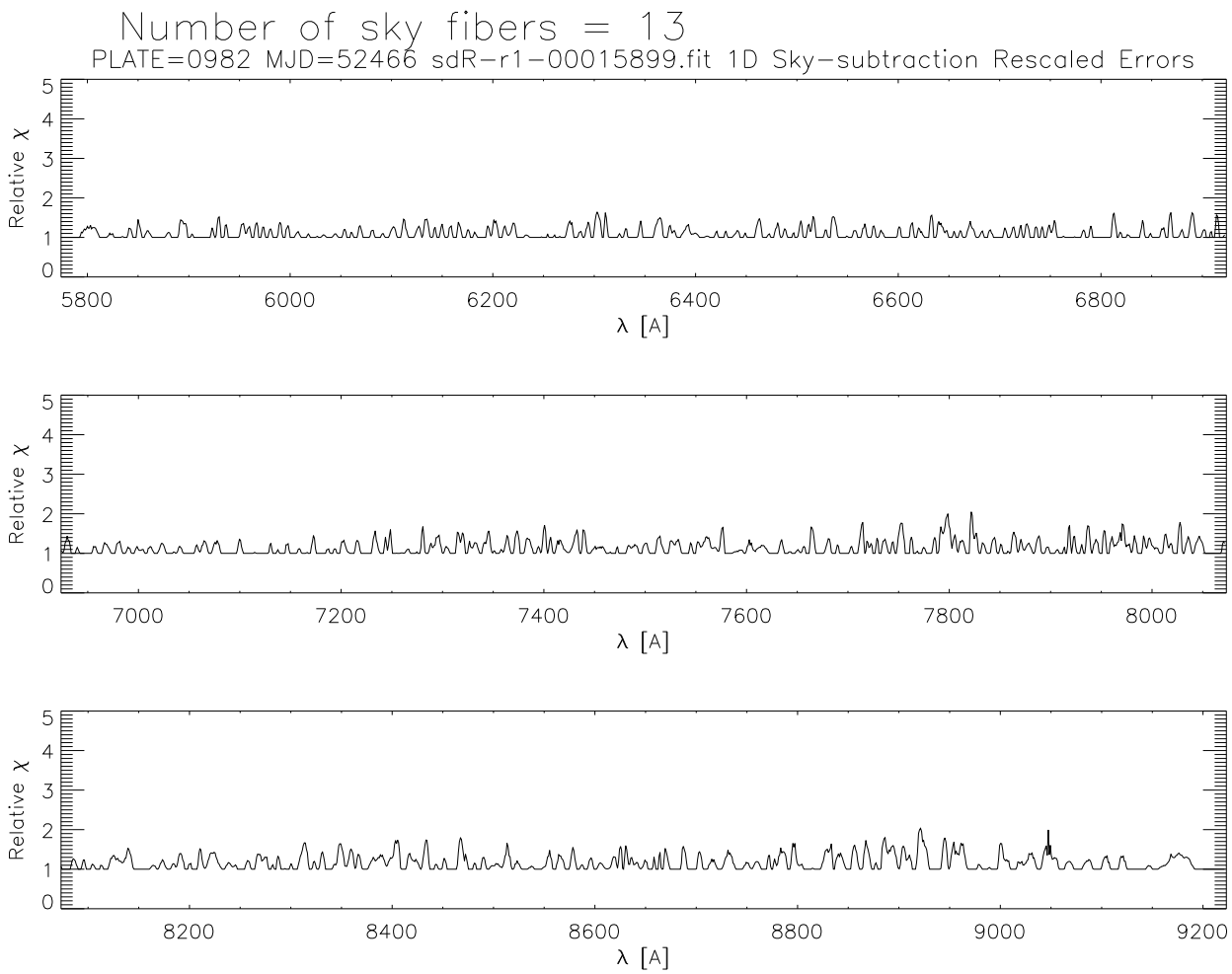

PLATE=0982 MJD=52466 Smooth superflat for sdR-r1-00015899.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

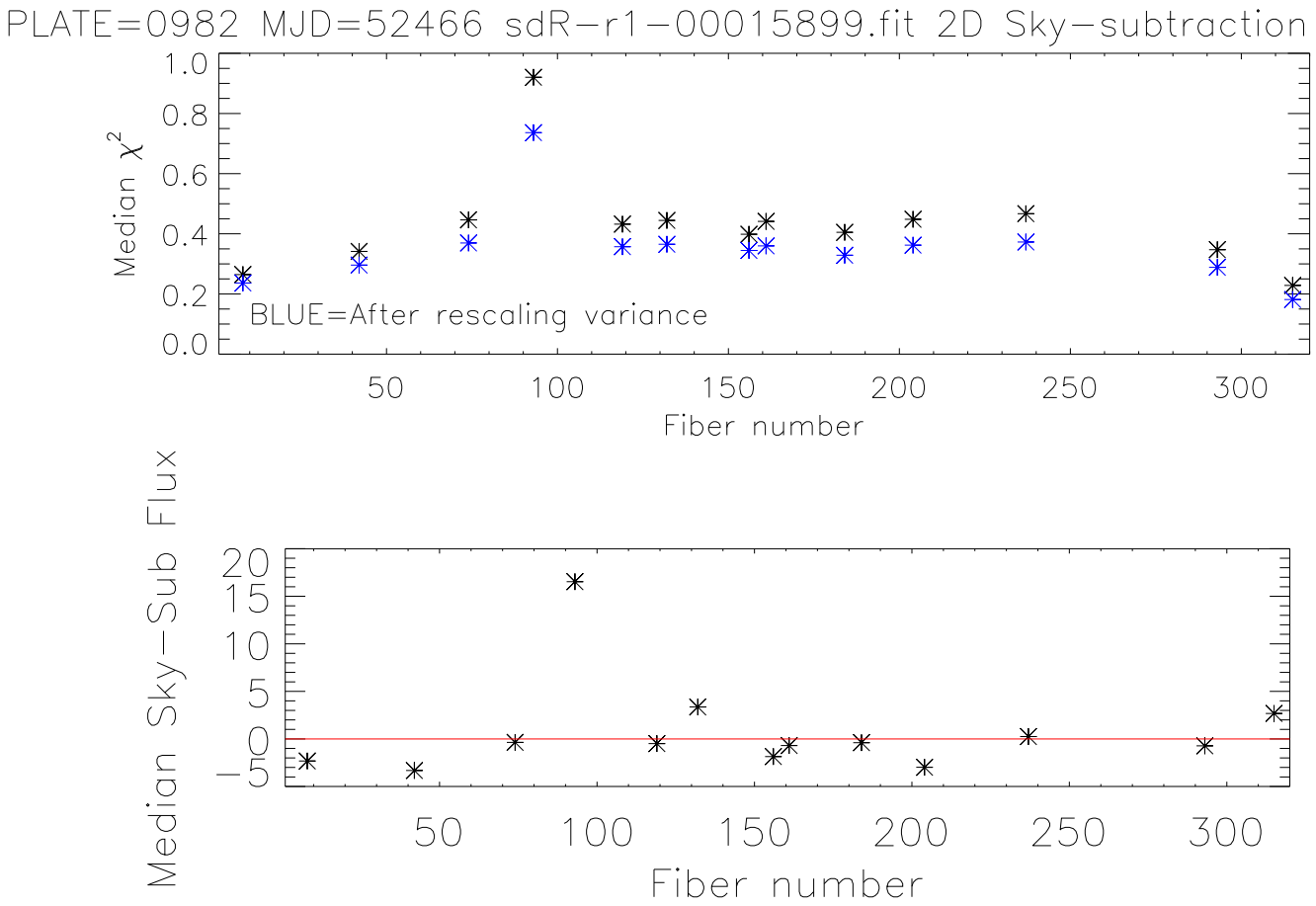
es= −0.0000

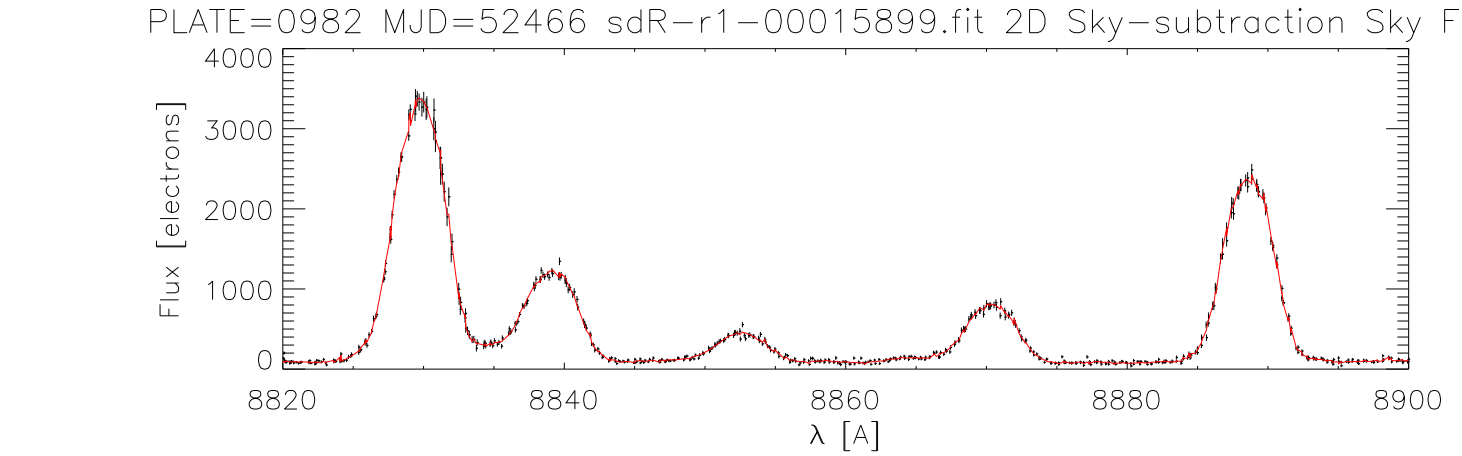

PLATE=0982 MJD=52466 sdR-r1-00015899.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

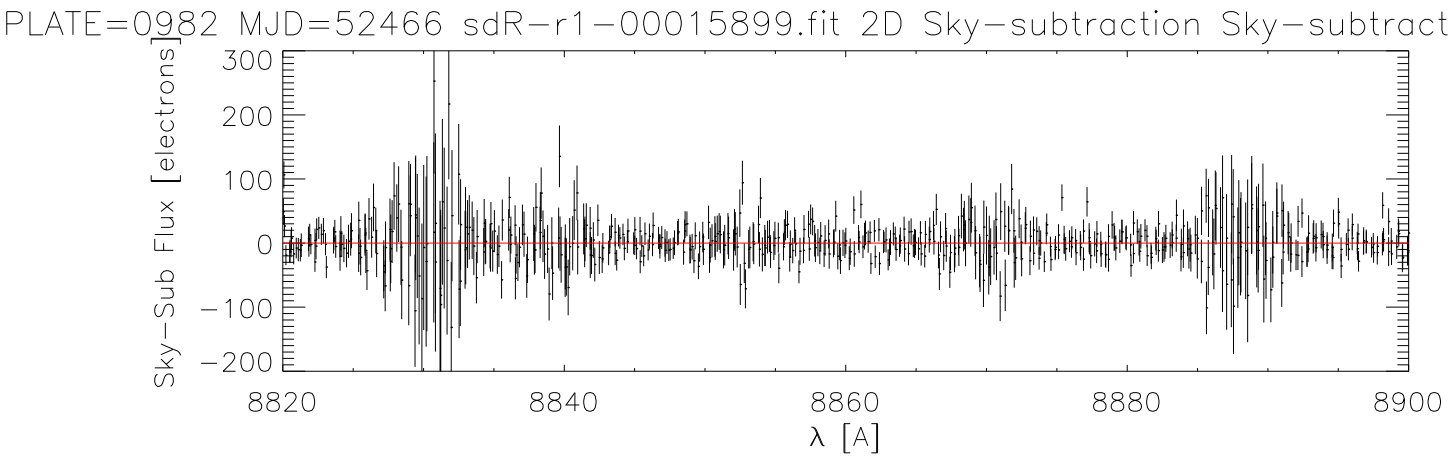

PLATE=0982 MJD=52466 sdR-r1-00015899.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

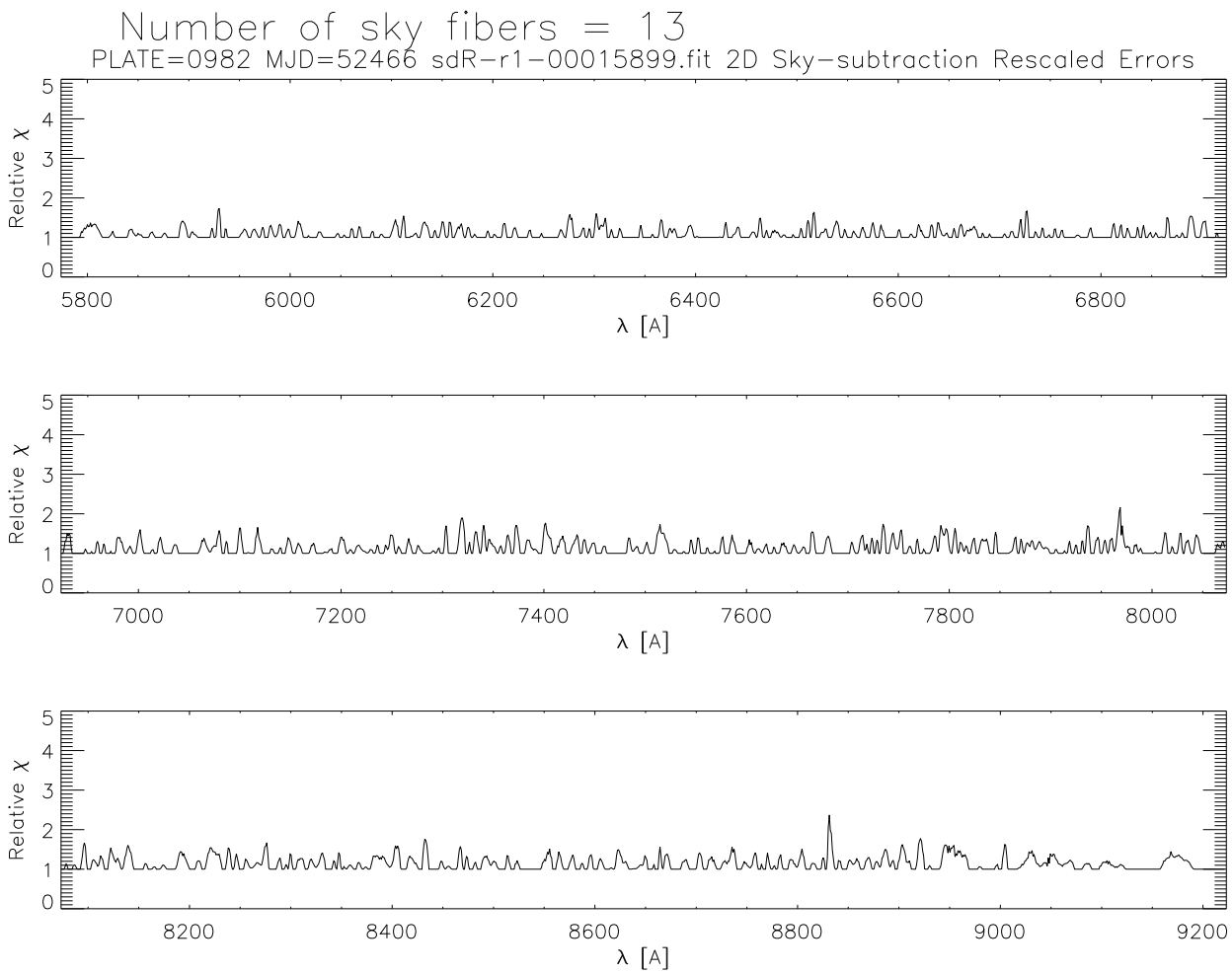

PLATE=0982 MJD=52466 sdR-r1-00015899.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

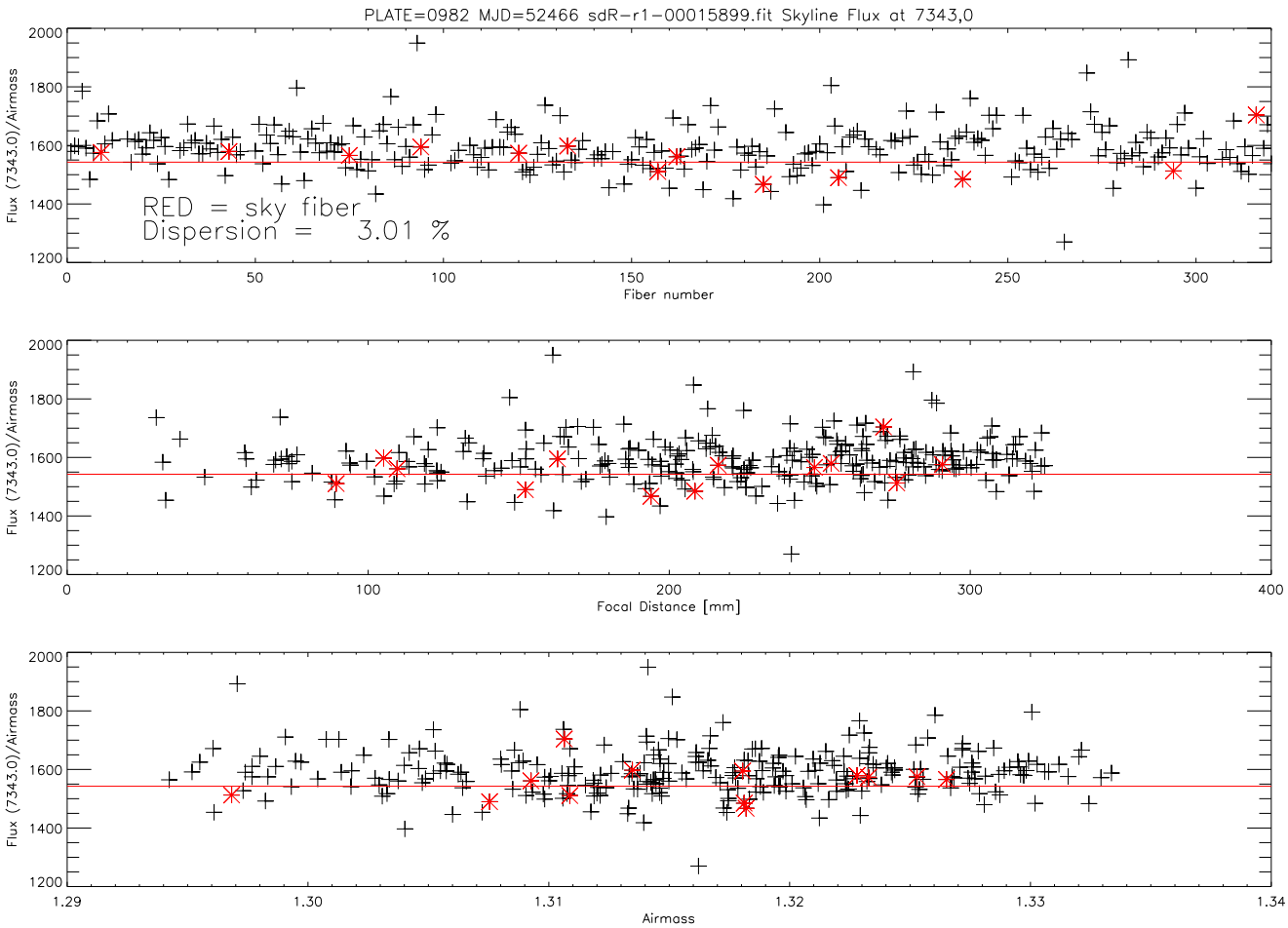

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015899.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

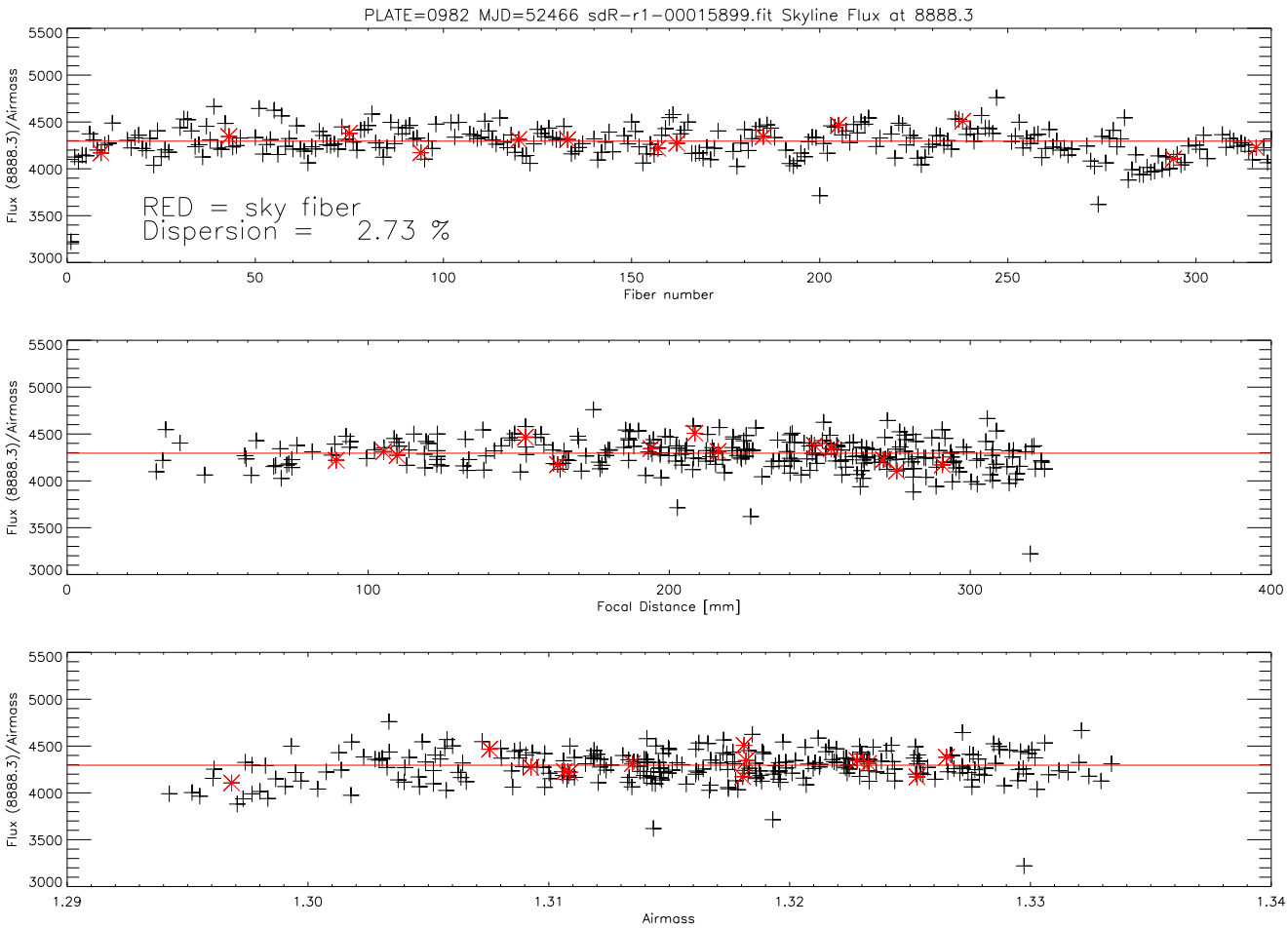

PLATE=0982 MJD=52466 sdR-r1-00015899.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

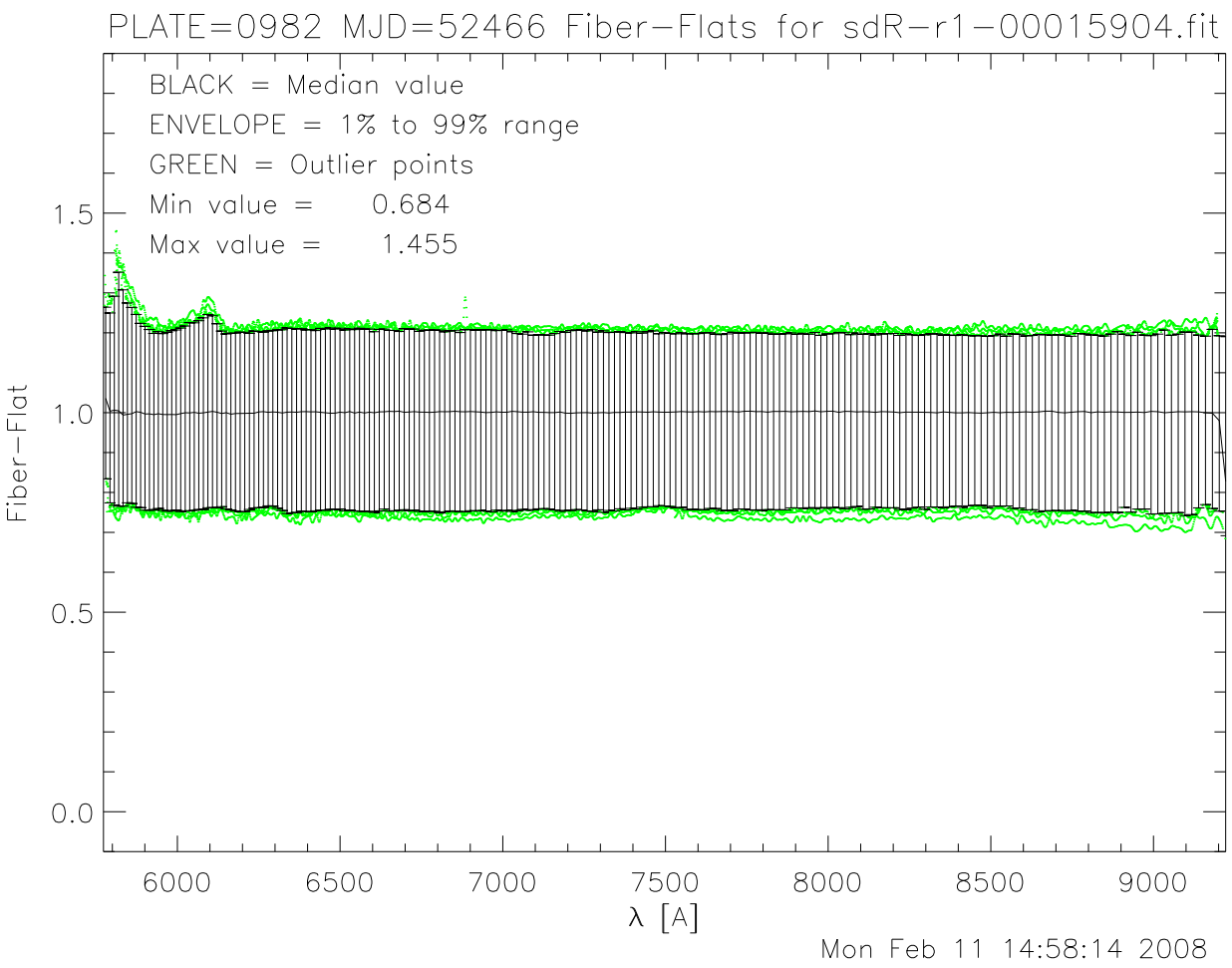

PLATE=0982 MJD=52466 sdR-r1-00015899.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

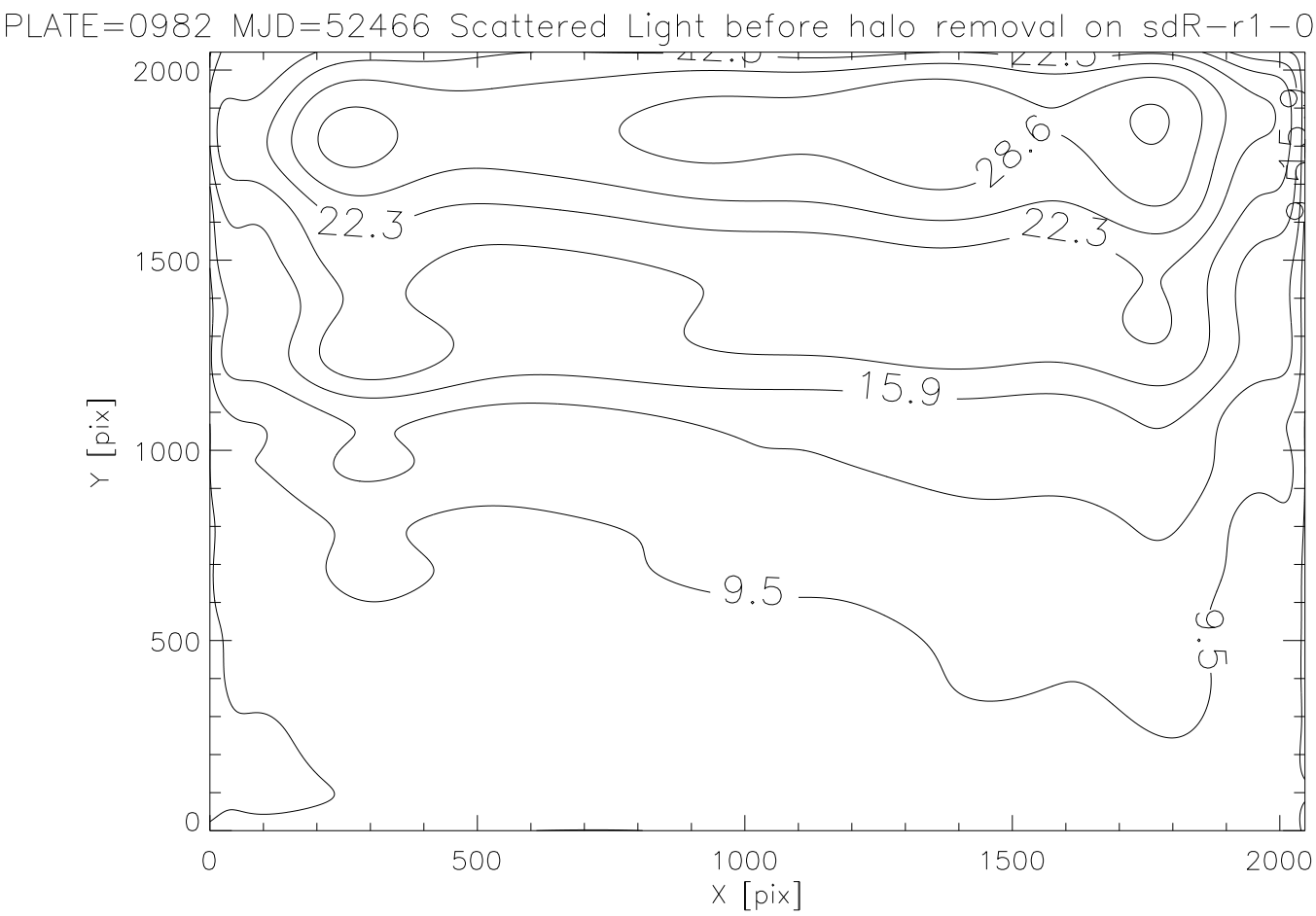

PLATE=0982 MJD=52466 sdR-r1-00015899.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

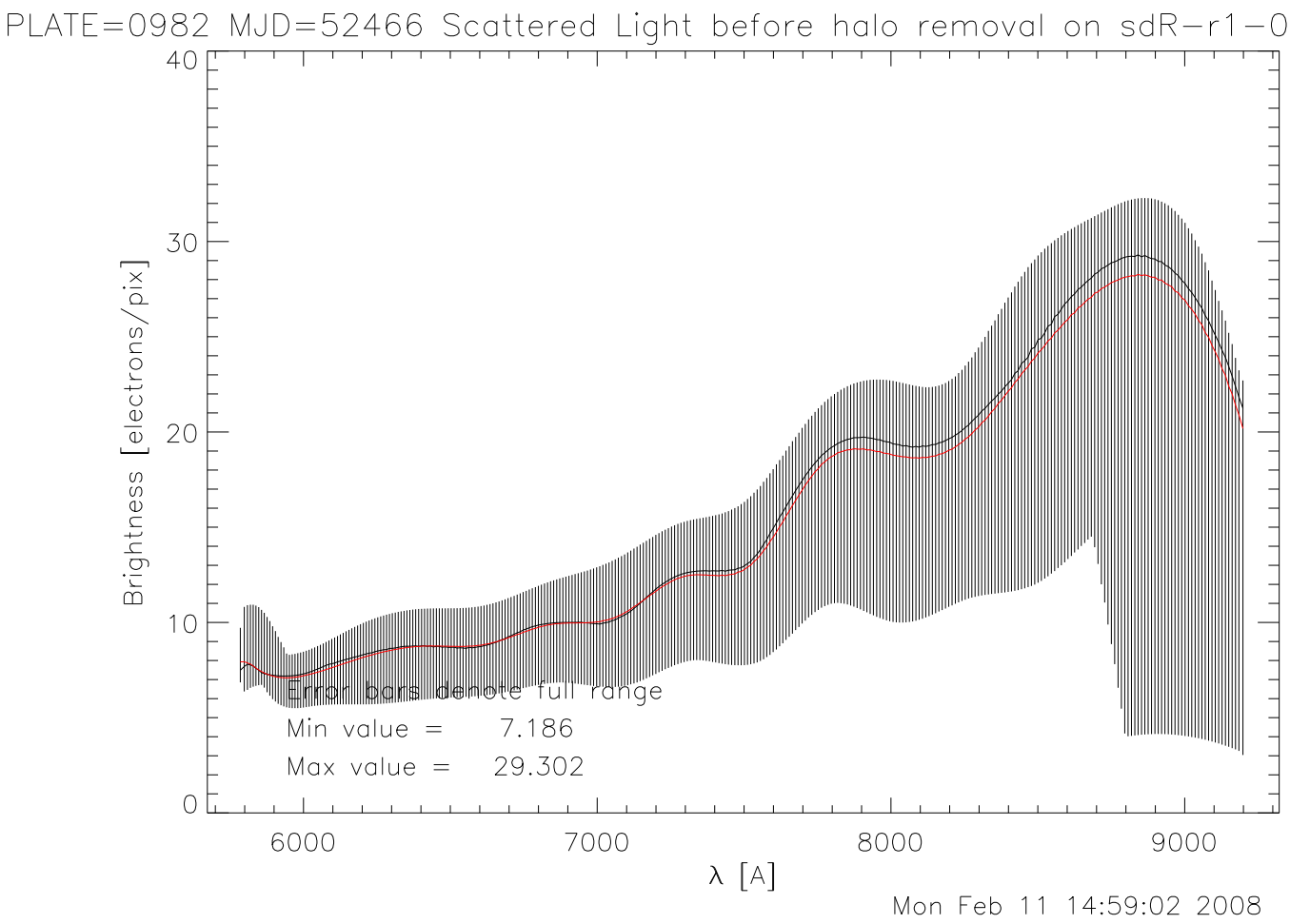

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015899.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

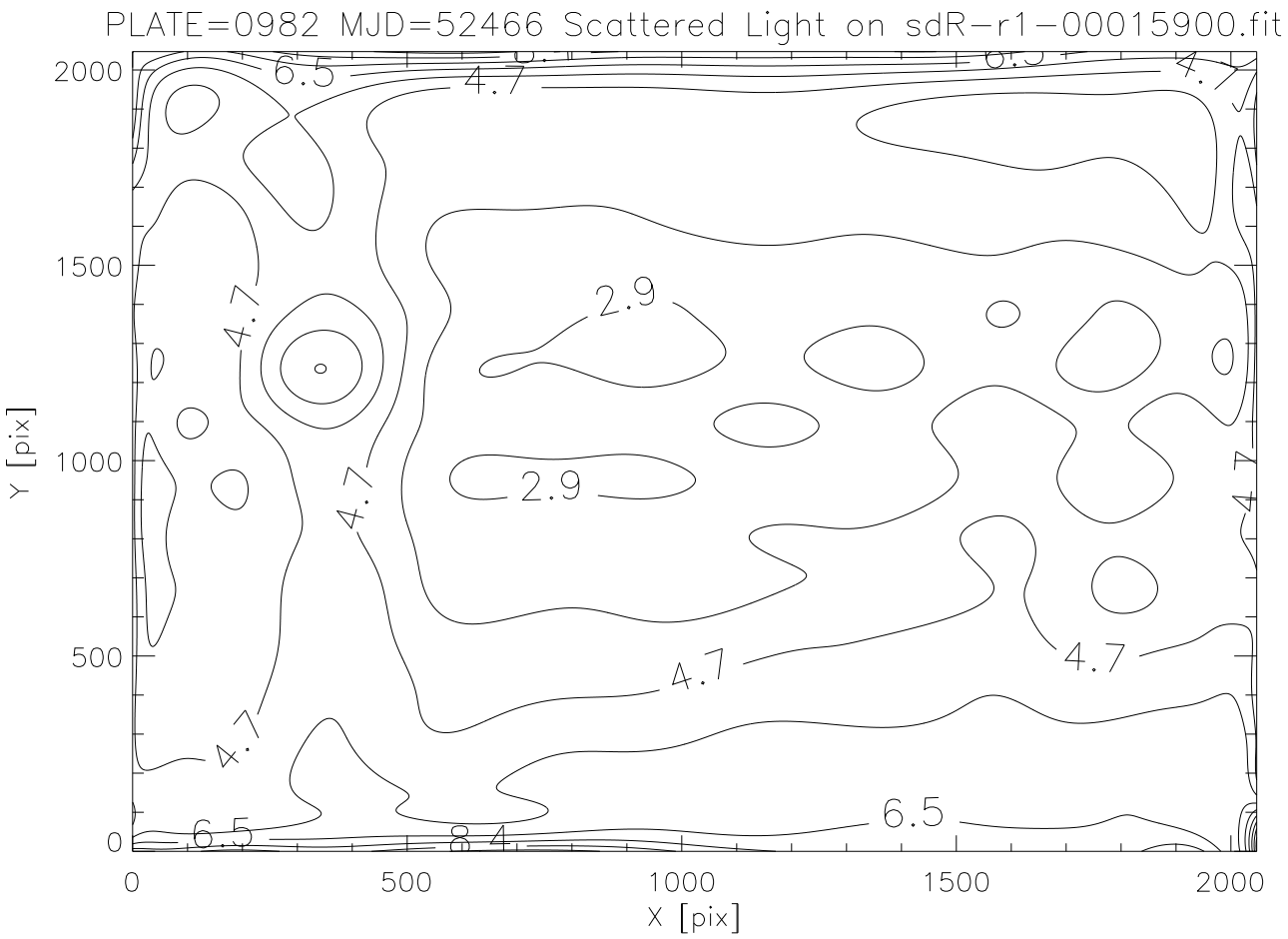

PLATE=0982 MJD=52466 sdR-r1-00015899.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.01 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

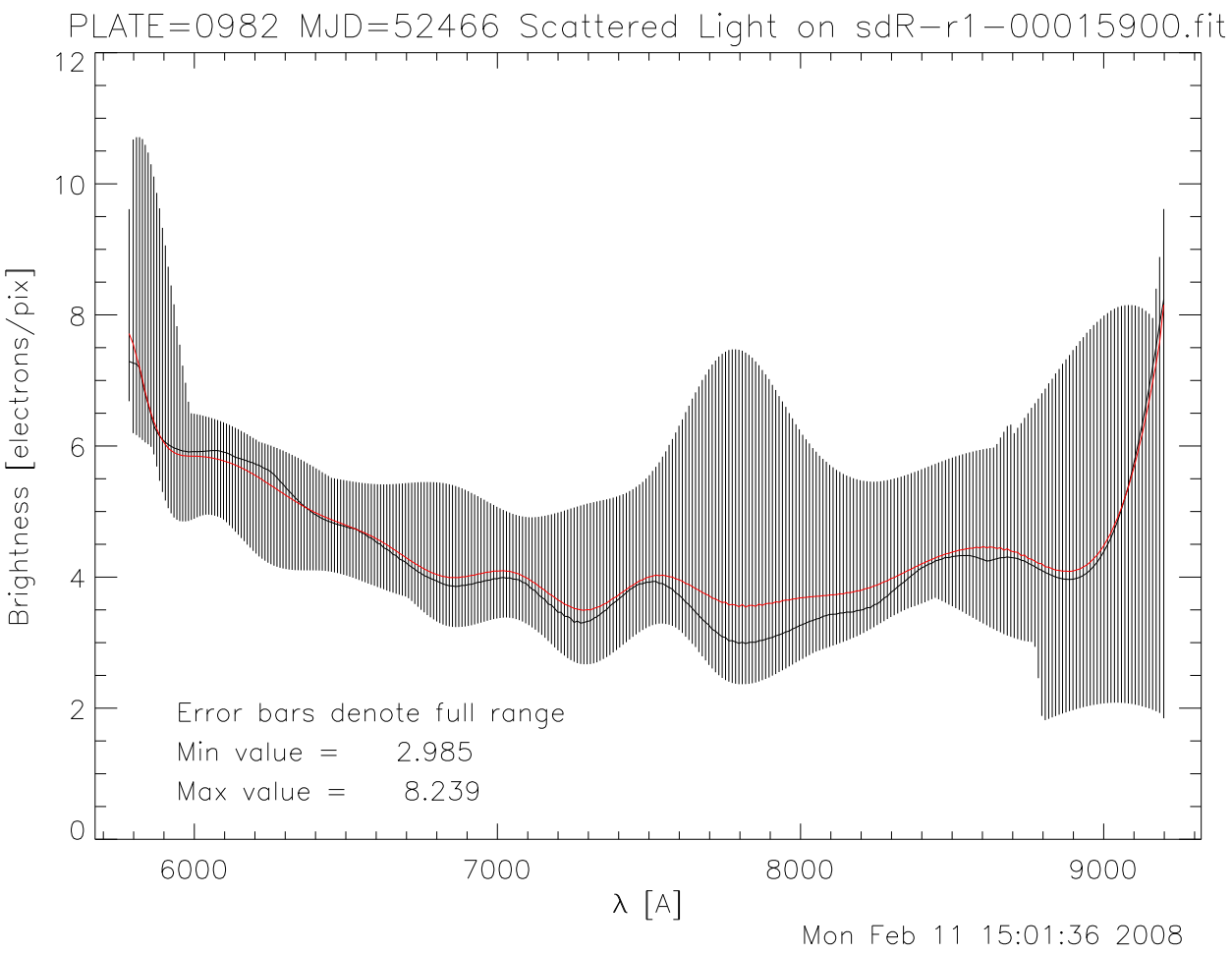

PLATE=0982 MJD=52466 sdR-r1-00015899.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.73 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

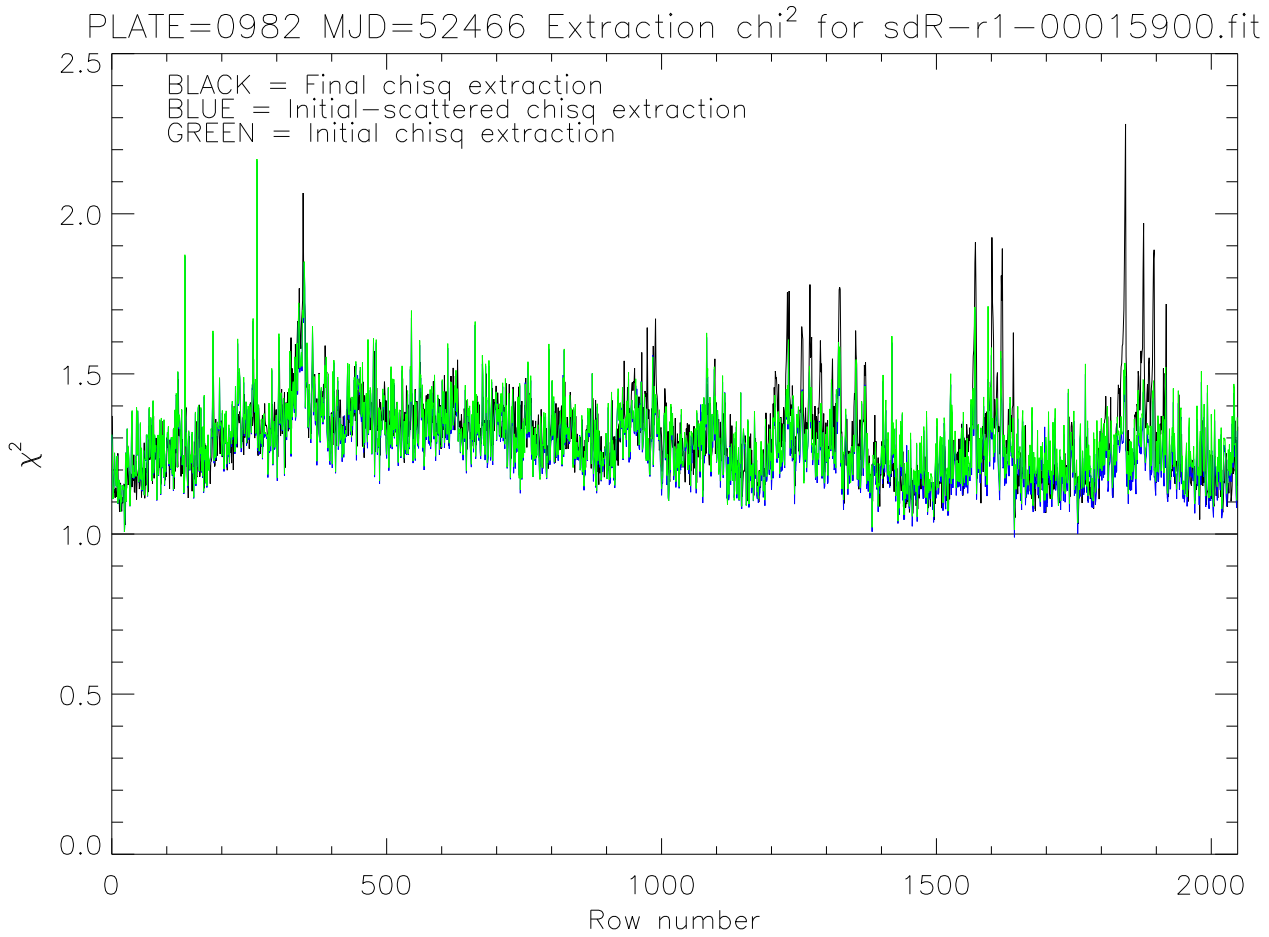

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r1−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.684
Max value = 1.455
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 14:58:14 2008

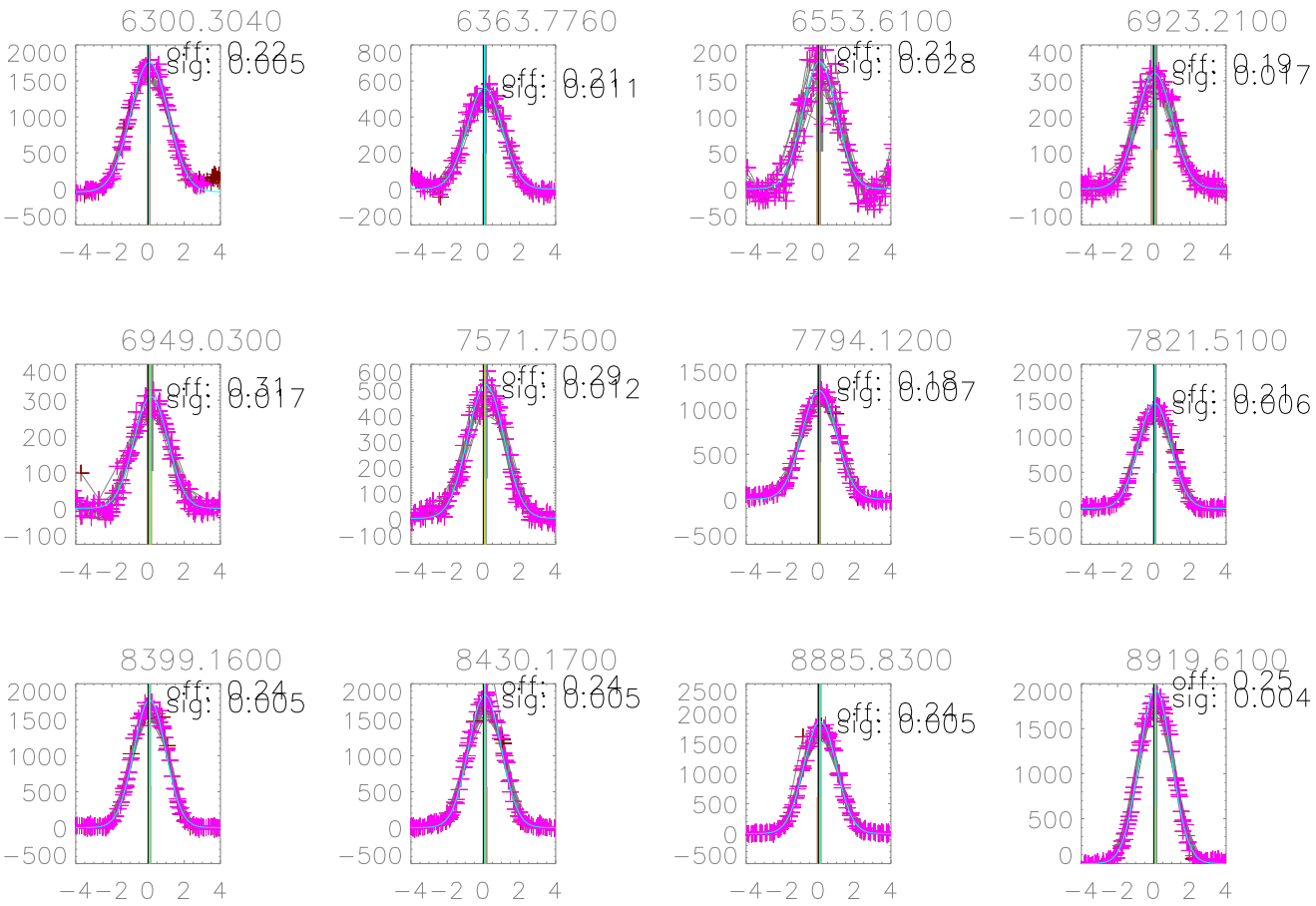

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR−r1−00015900.fi
28.6
22.3
22.3
15.9
9.5
5.6
Y [pix]
X [pix]
0
500
1000
1500
2000

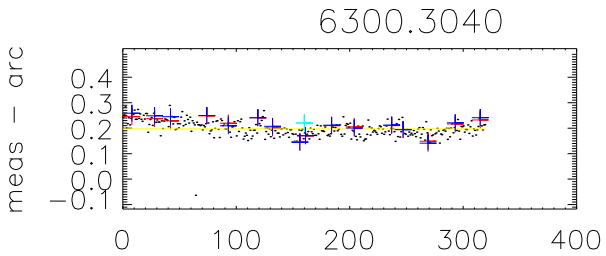

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015900.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.186
Max value = 29.302
Mon Feb 11 14:59:02 2008

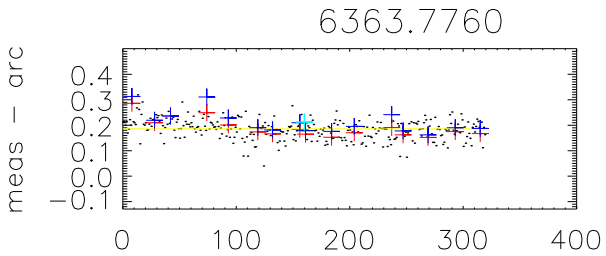

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015900.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
4.7
2.9
8.4

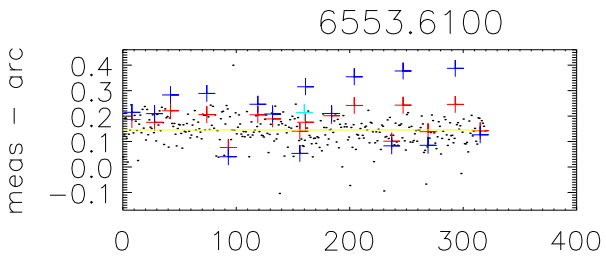

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015900.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.985
Max value = 8.239
Mon Feb 11 15:01:36 2008

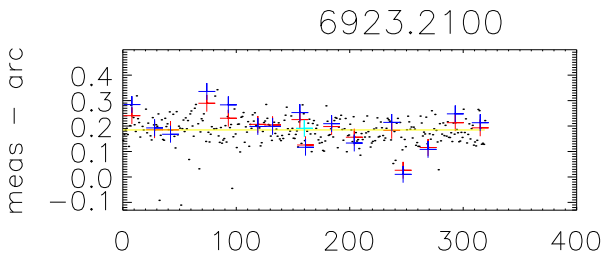

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r1−00015900.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

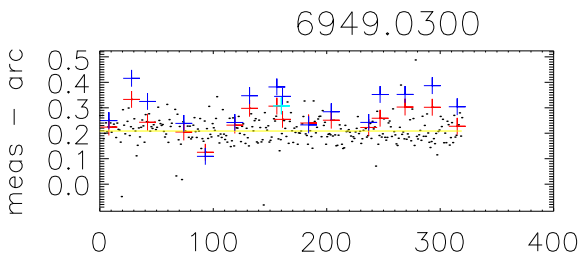

6300.3040
off: 0.22
sig: 0.005
6363.7760
off: 0.21
sig: 0.011
6553.6100
off: 0.21
sig: 0.028
6923.2100
off: 0.19
sig: 0.017
6949.0300
off: 0.31
sig: 0.017
7571.7500
off: 0.29
sig: 0.012
7794.1200
off: 0.18
sig: 0.007
7821.5100
off: 0.21
sig: 0.006
8399.1600
off: 0.24
sig: 0.005
8430.1700
off: 0.24
sig: 0.005
8885.8300
off: 0.24
sig: 0.005
8919.6100
off: 0.25
sig: 0.004

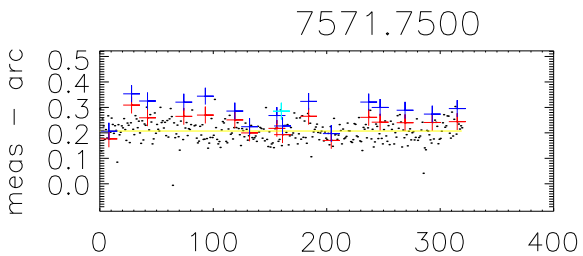

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

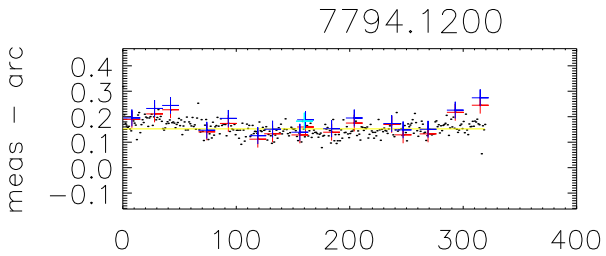

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

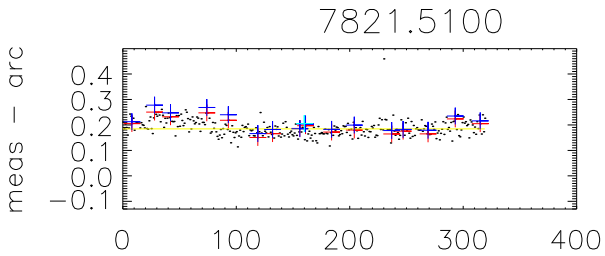

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

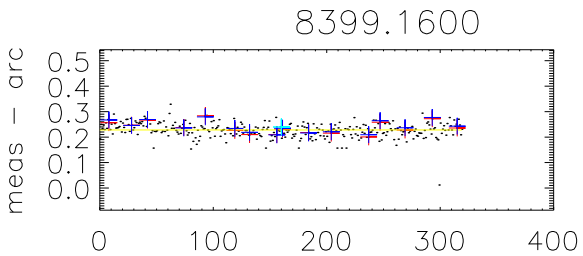

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

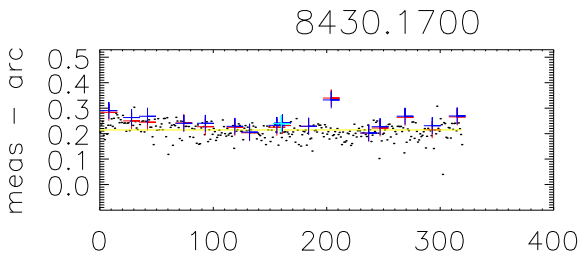

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

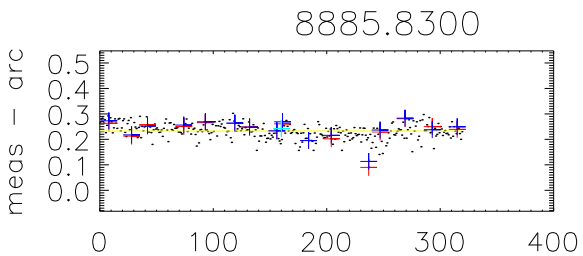

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

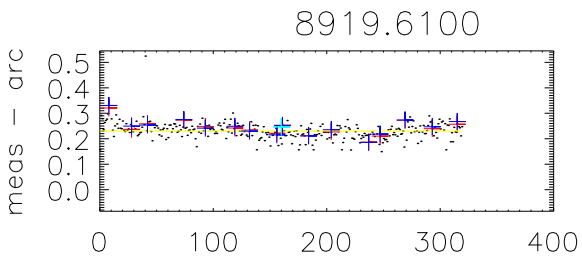

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

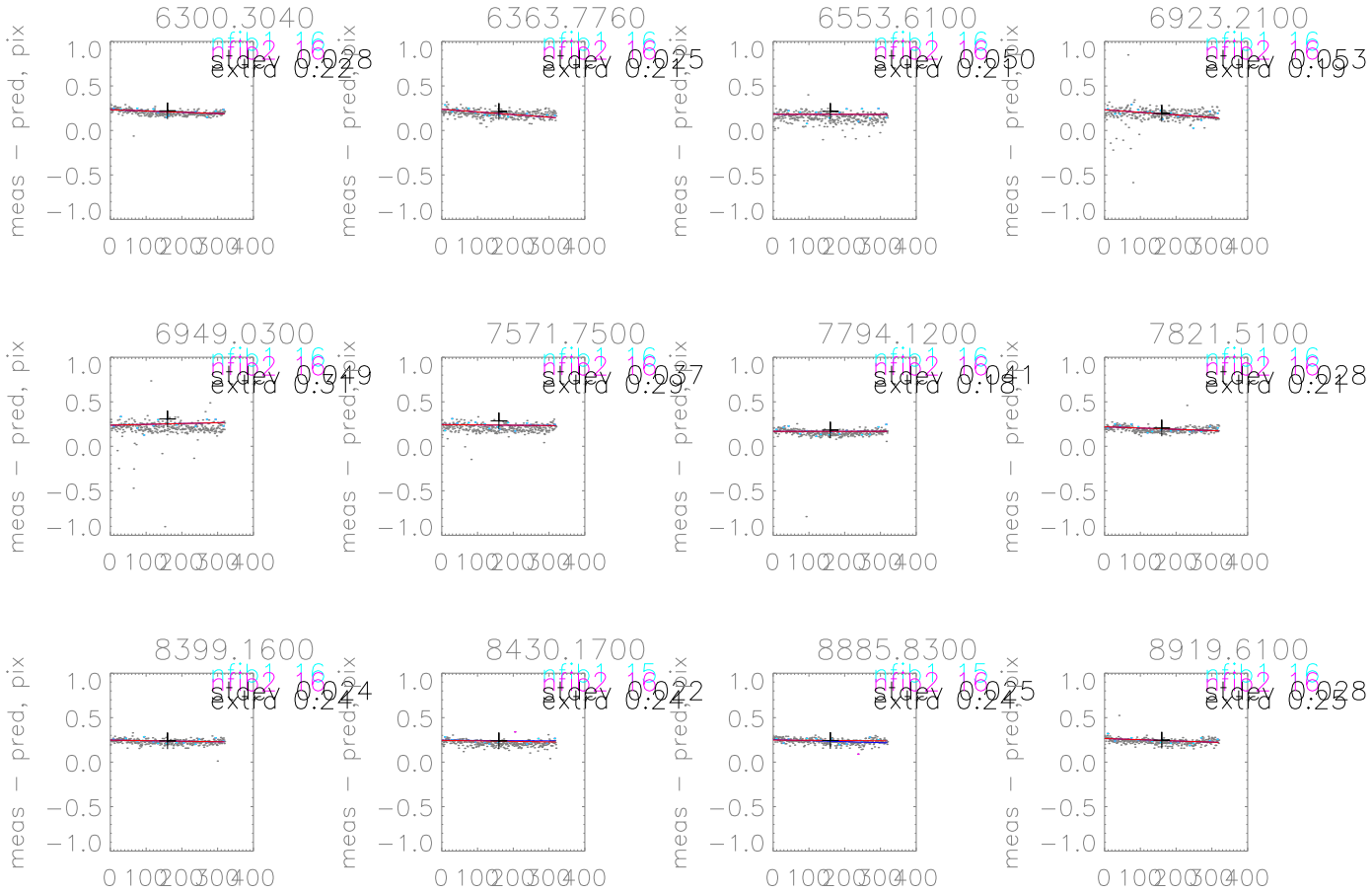

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

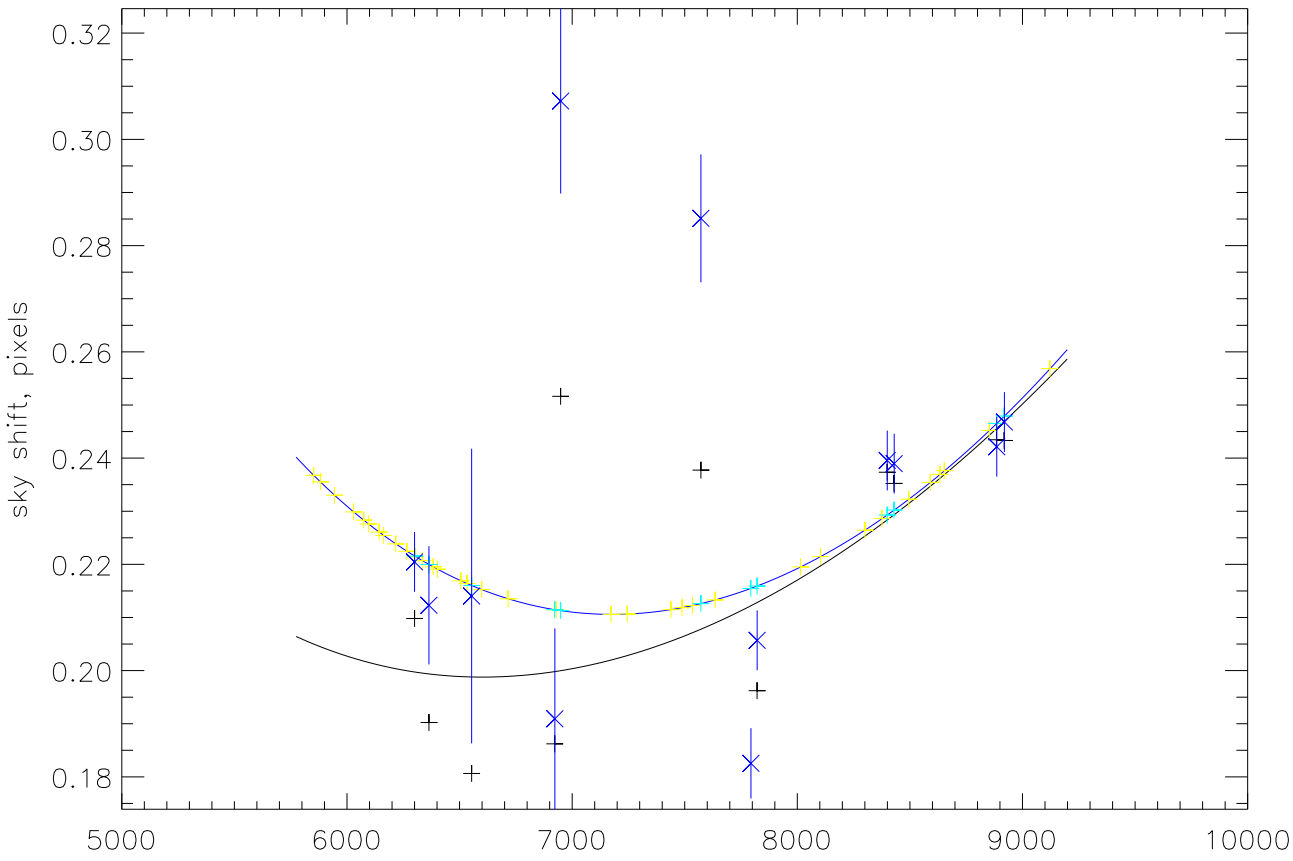

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

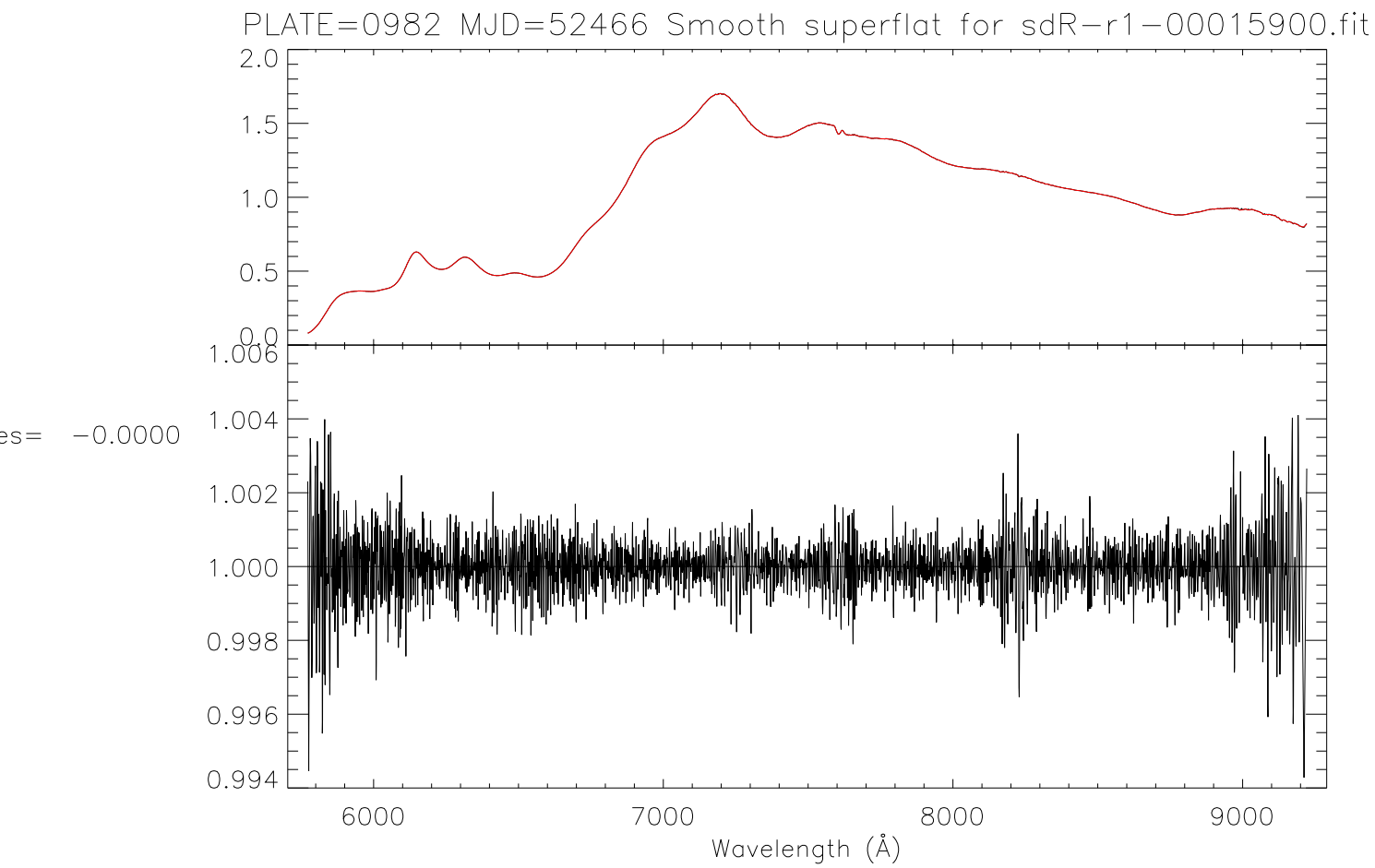

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

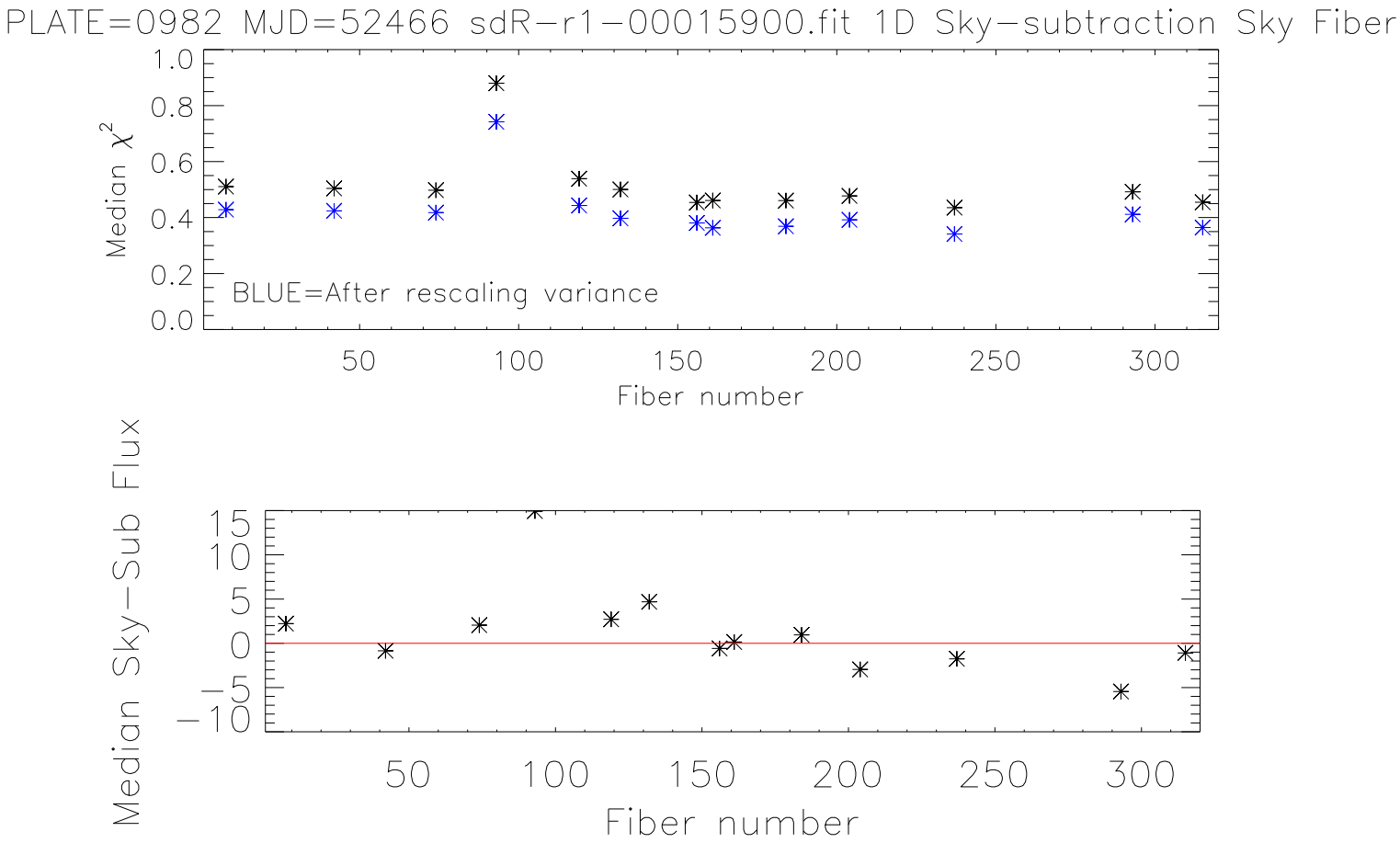

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

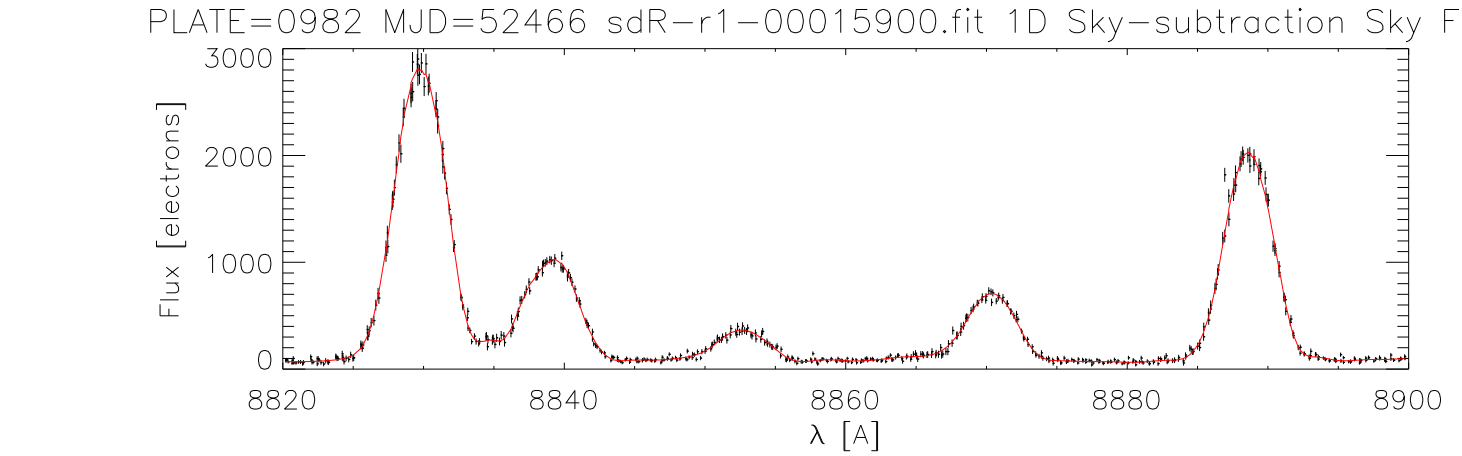

6300.3040
stdev 0.228
extra 0.228
6363.7760
stdev 0.225
extra 0.225
6553.6100
stdev 0.250
extra 0.250
6923.2100
stdev 0.153
extra 0.153
6949.0300
stdev 0.349
extra 0.349
7571.7500
stdev 0.237
extra 0.237
7794.1200
stdev 0.241
extra 0.241
7821.5100
stdev 0.228
extra 0.228
8399.1600
stdev 0.224
extra 0.224
8430.1700
stdev 0.222
extra 0.222
8885.8300
stdev 0.225
extra 0.224
8919.6100
stdev 0.228
extra 0.223
meas − pred, pix

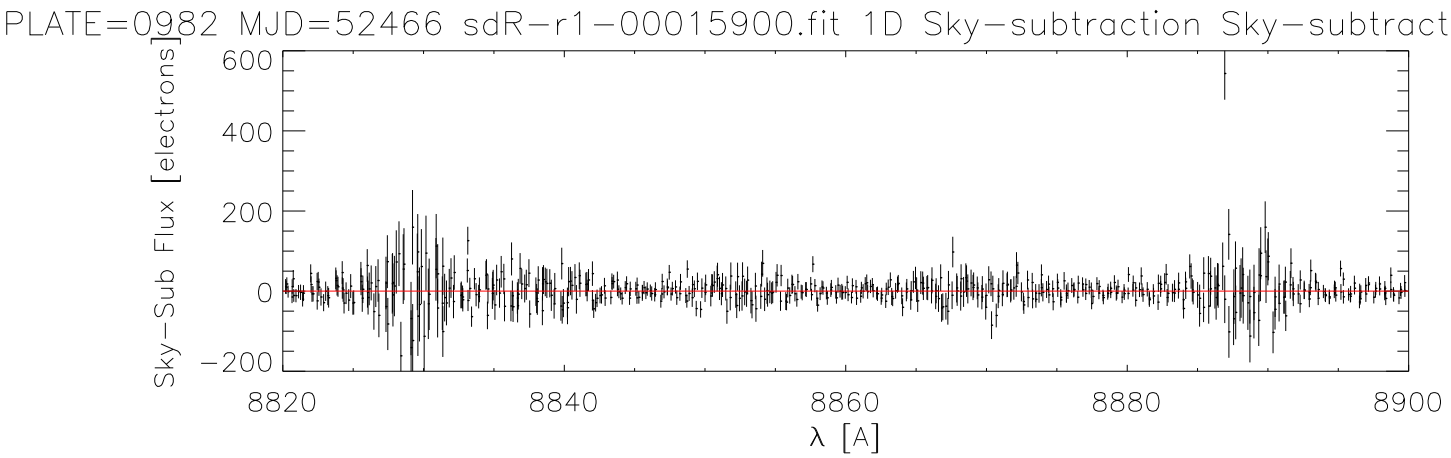

sky shift, pixels
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
5000
6000
7000
8000
9000
10000

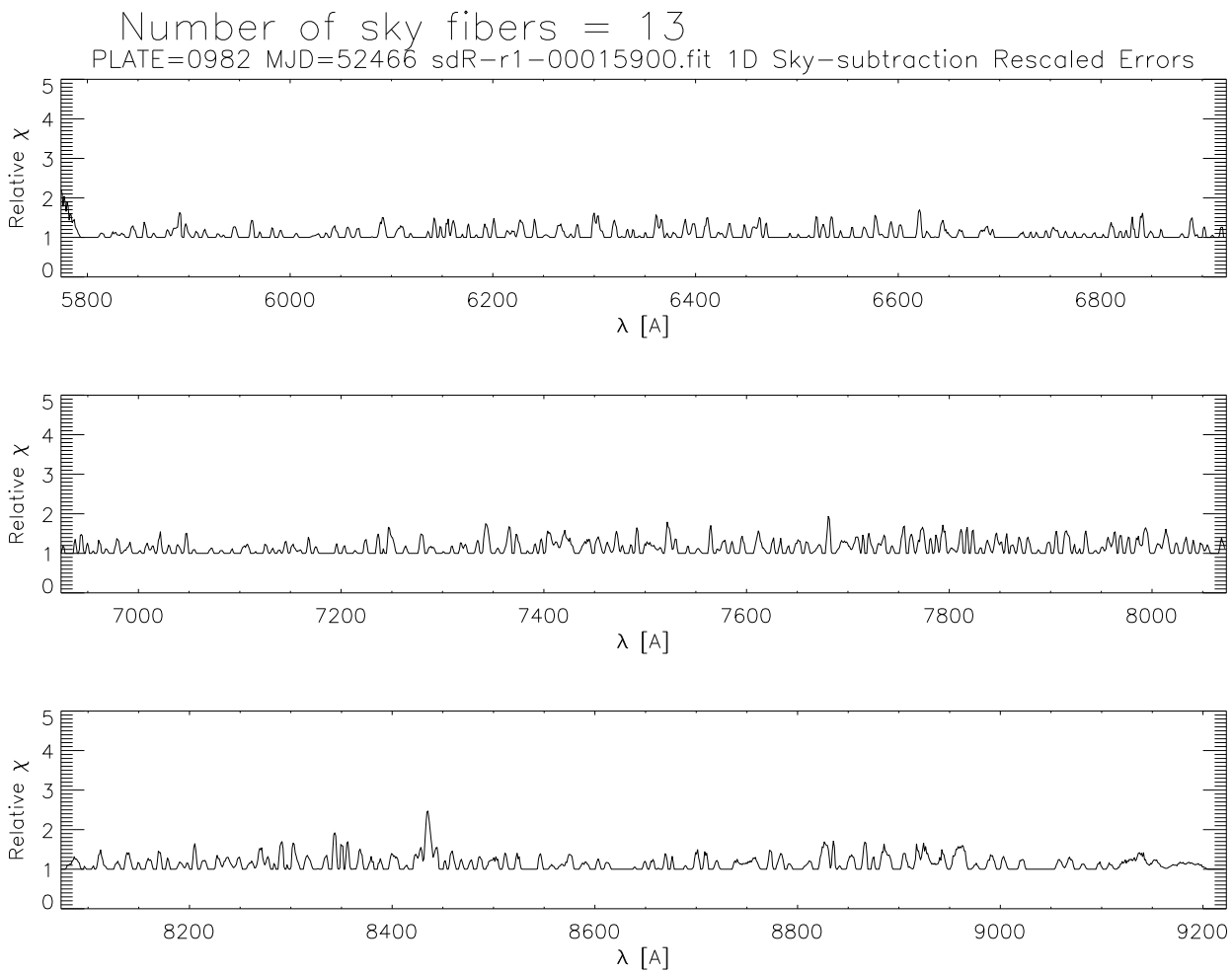

PLATE=0982 MJD=52466 Smooth superflat for sdR-r1-00015900.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

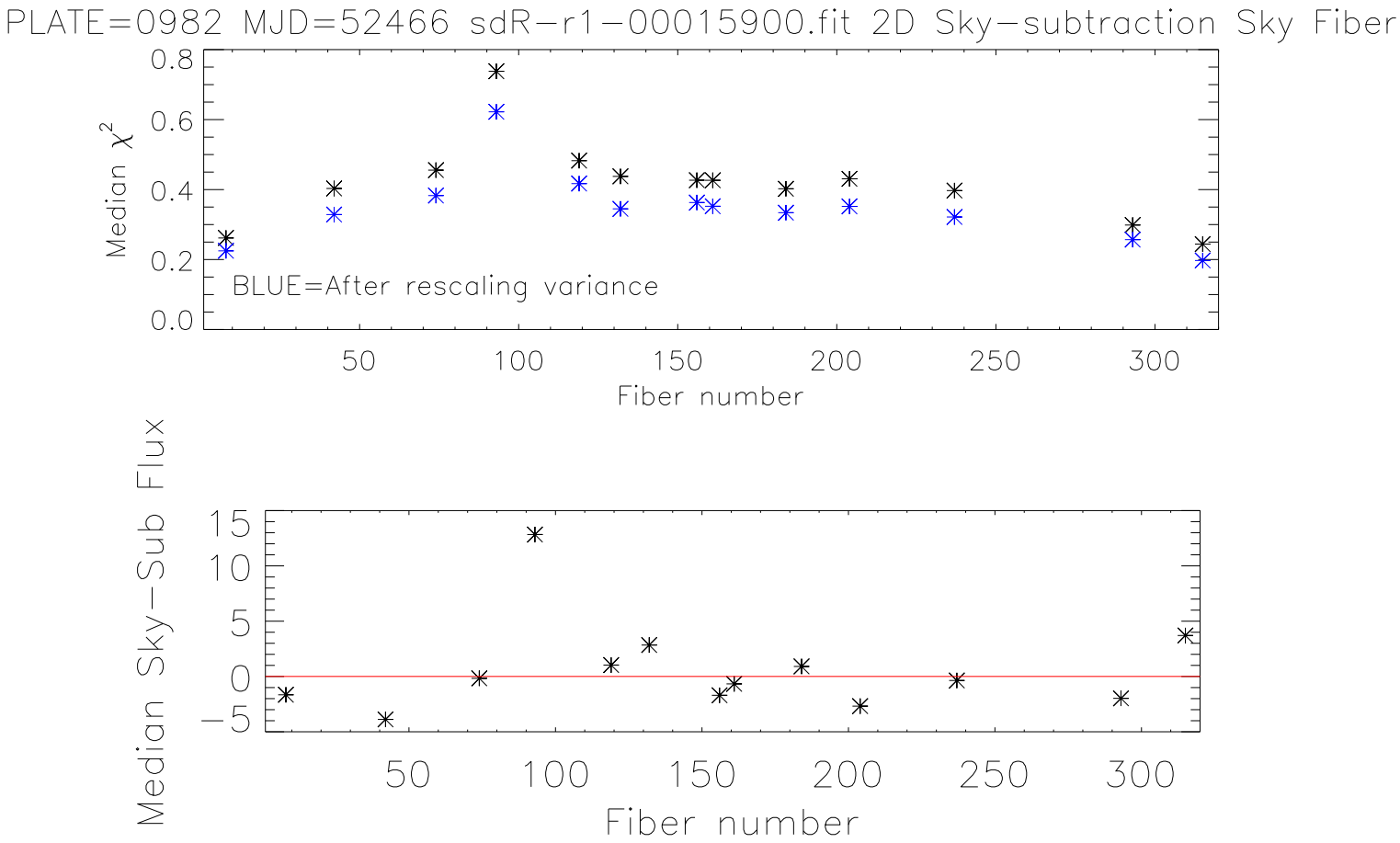
es= −0.0000

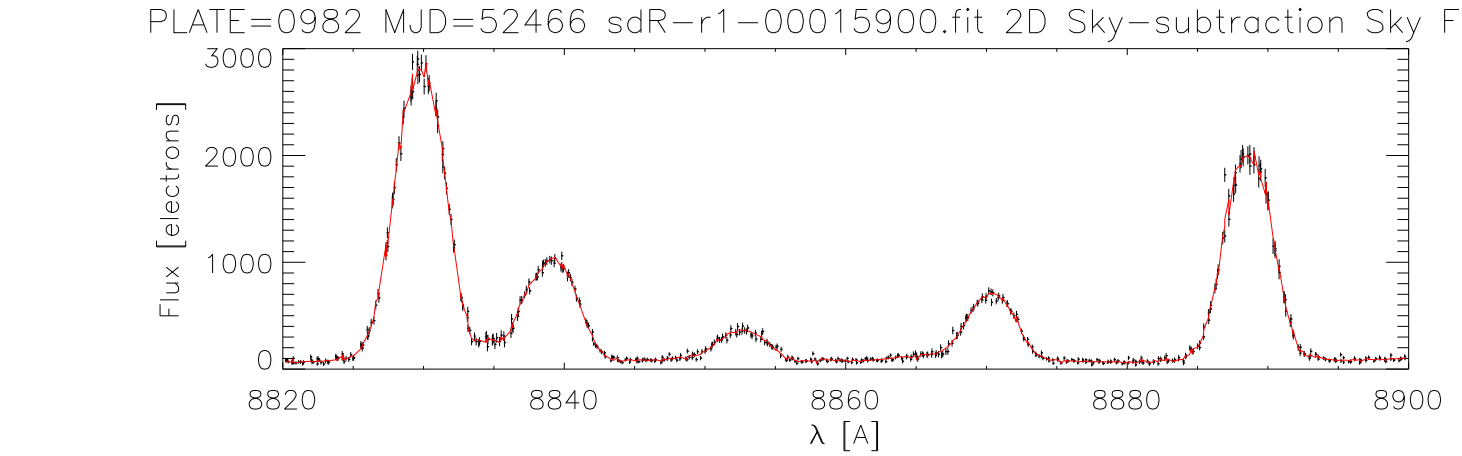

PLATE=0982 MJD=52466 sdR-r1-00015900.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

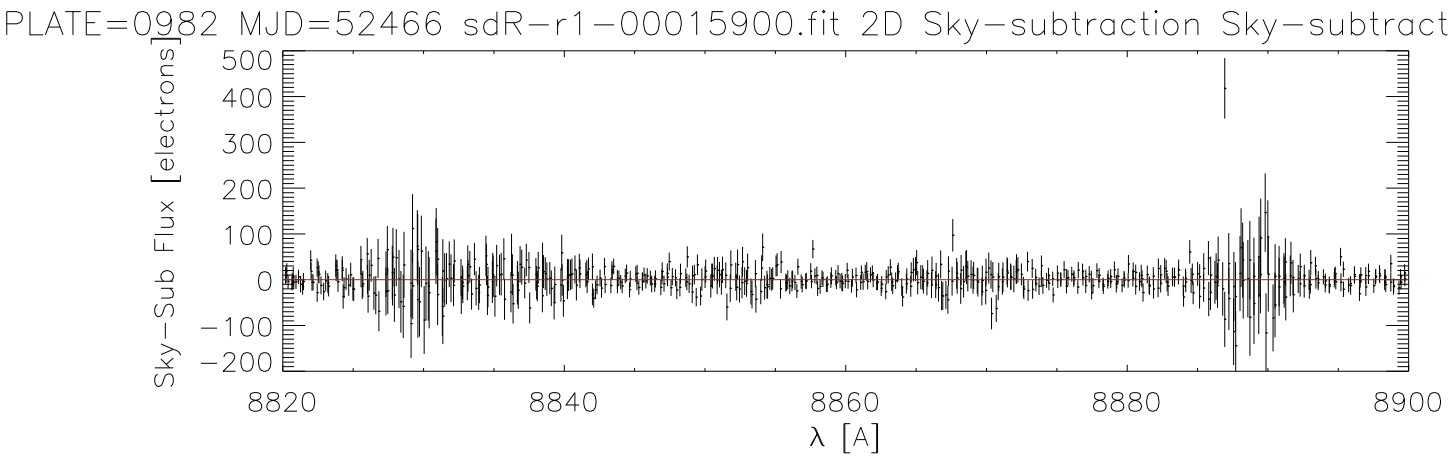

PLATE=0982 MJD=52466 sdR-r1-00015900.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

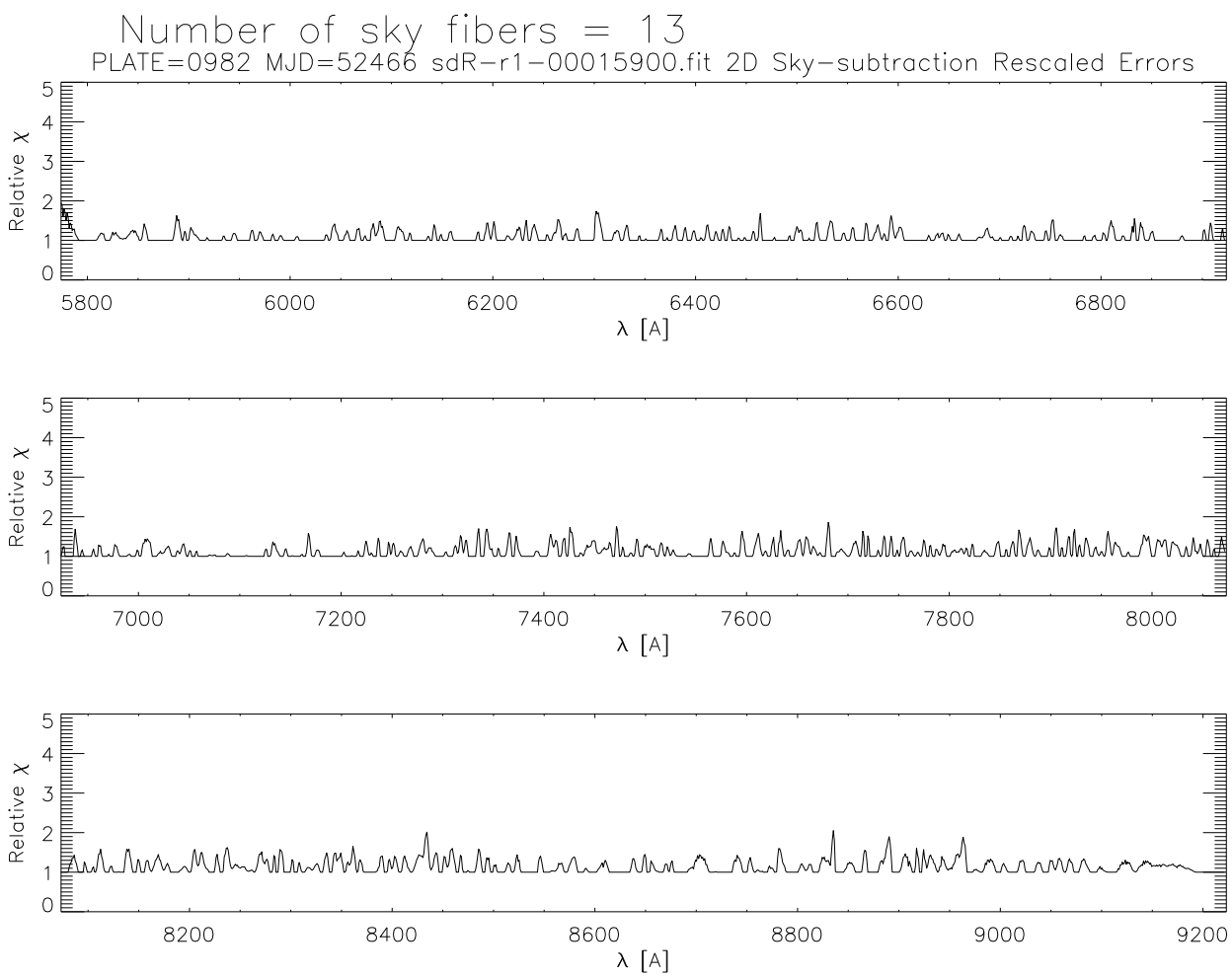

PLATE=0982 MJD=52466 sdR-r1-00015900.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

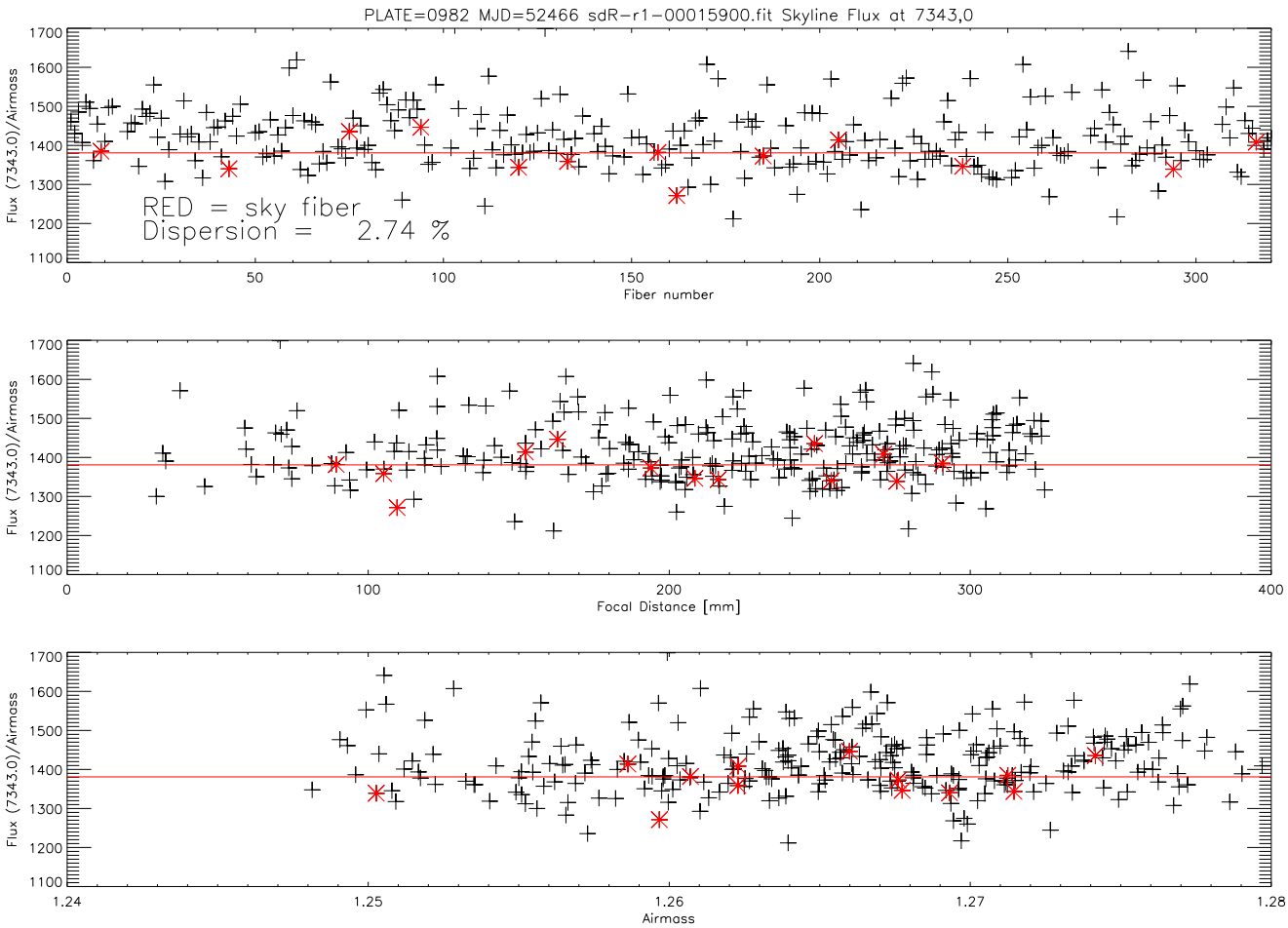

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015900.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

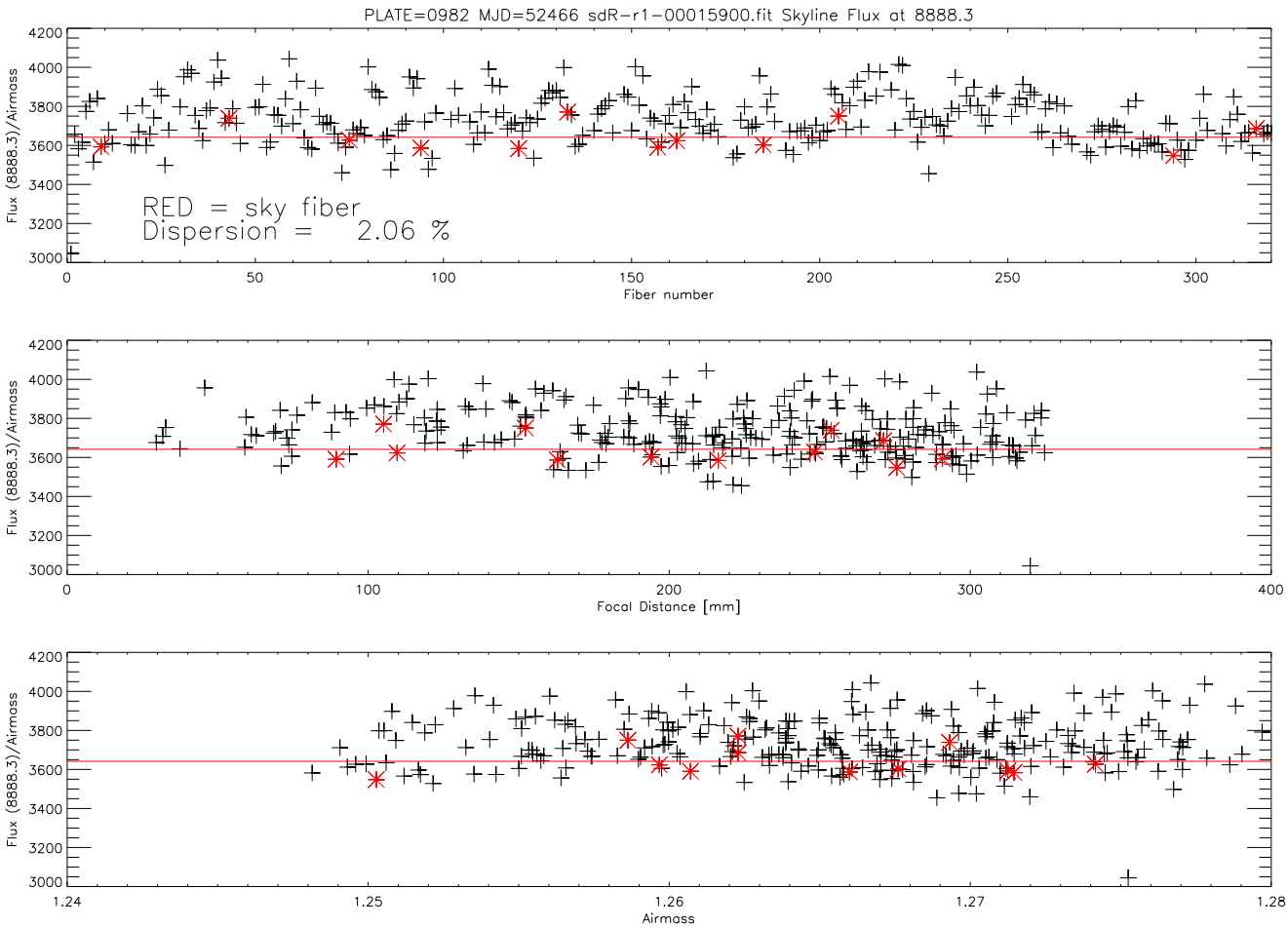

PLATE=0982 MJD=52466 sdR-r1-00015900.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

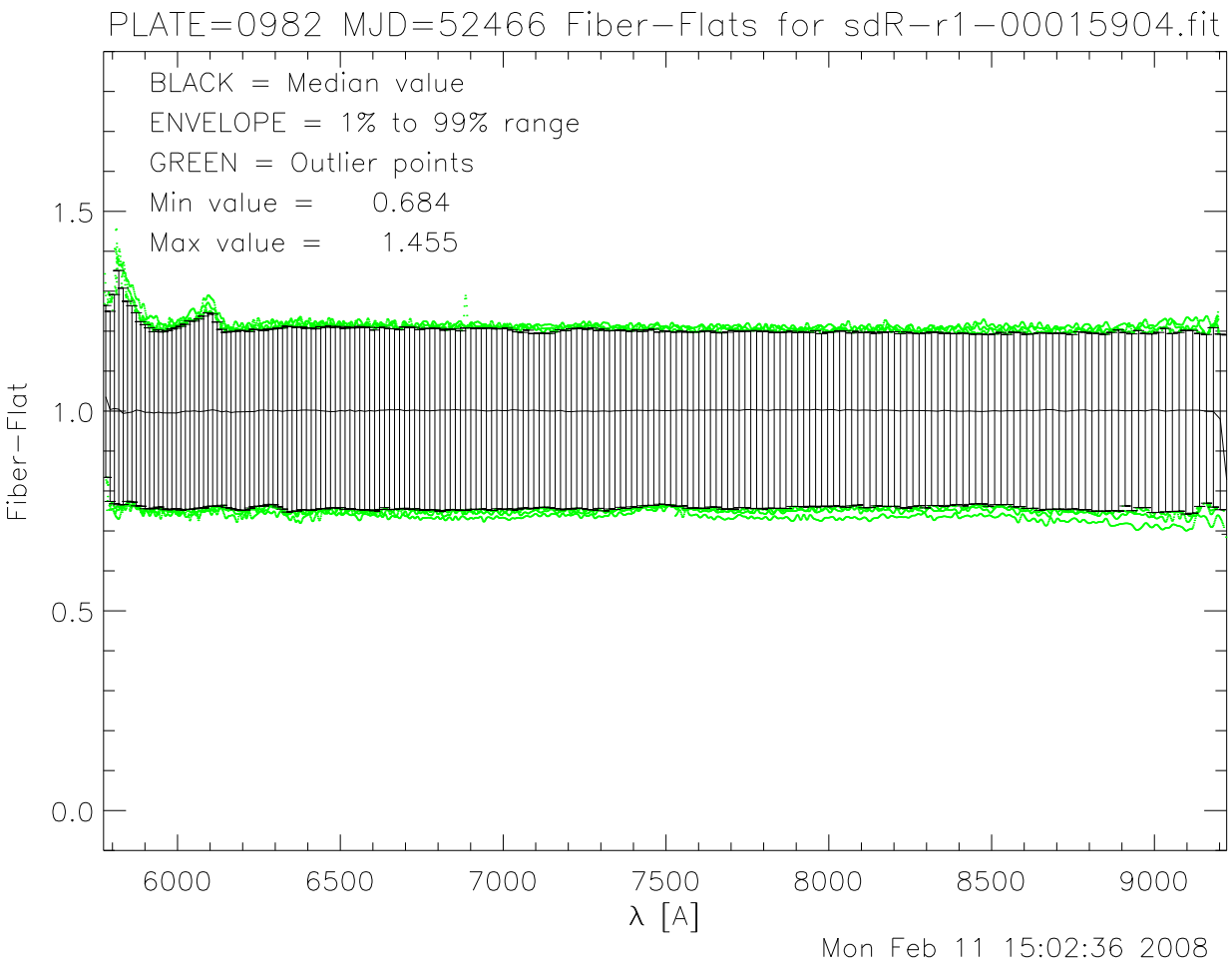

PLATE=0982 MJD=52466 sdR-r1-00015900.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

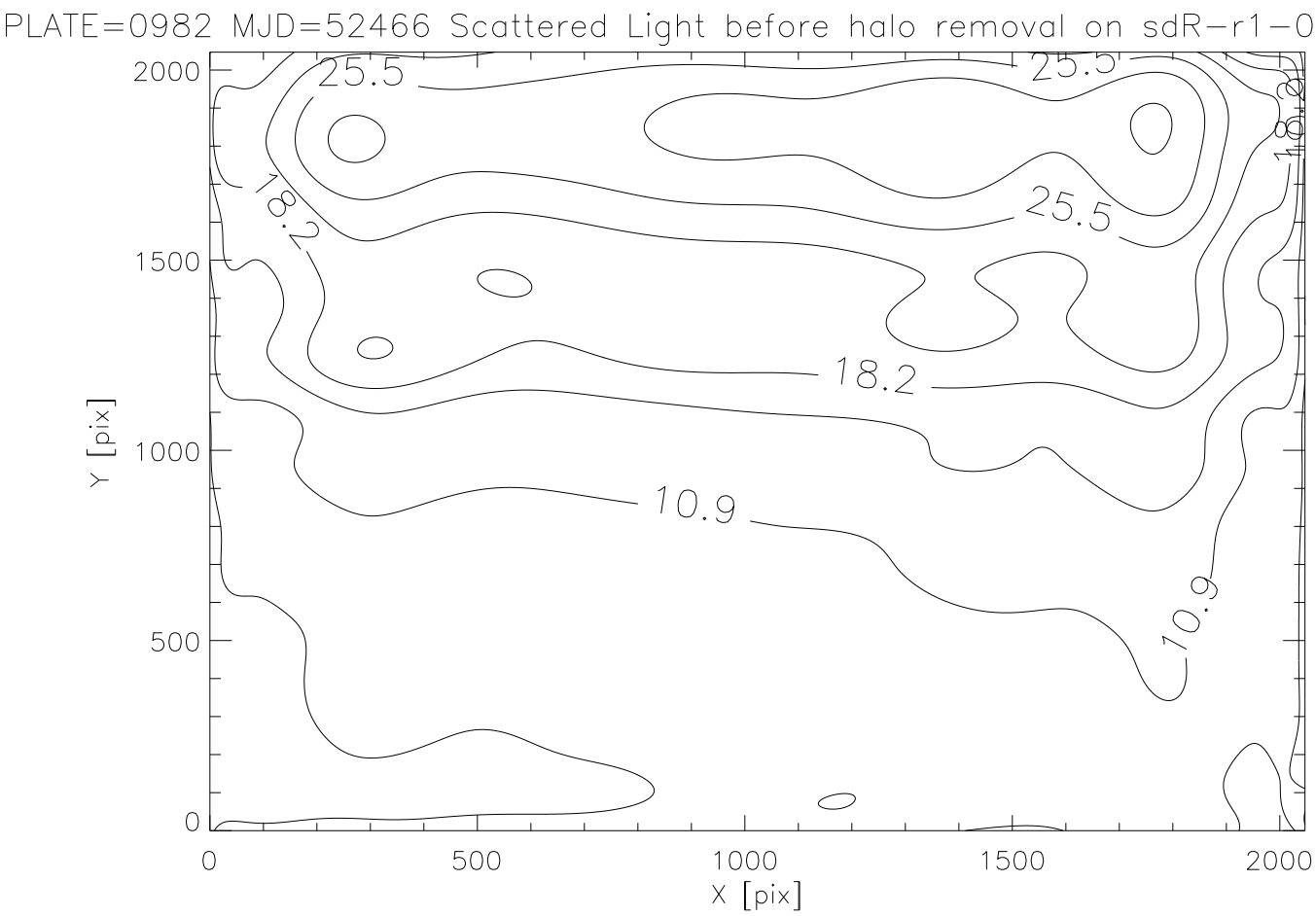

PLATE=0982 MJD=52466 sdR-r1-00015900.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
500
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

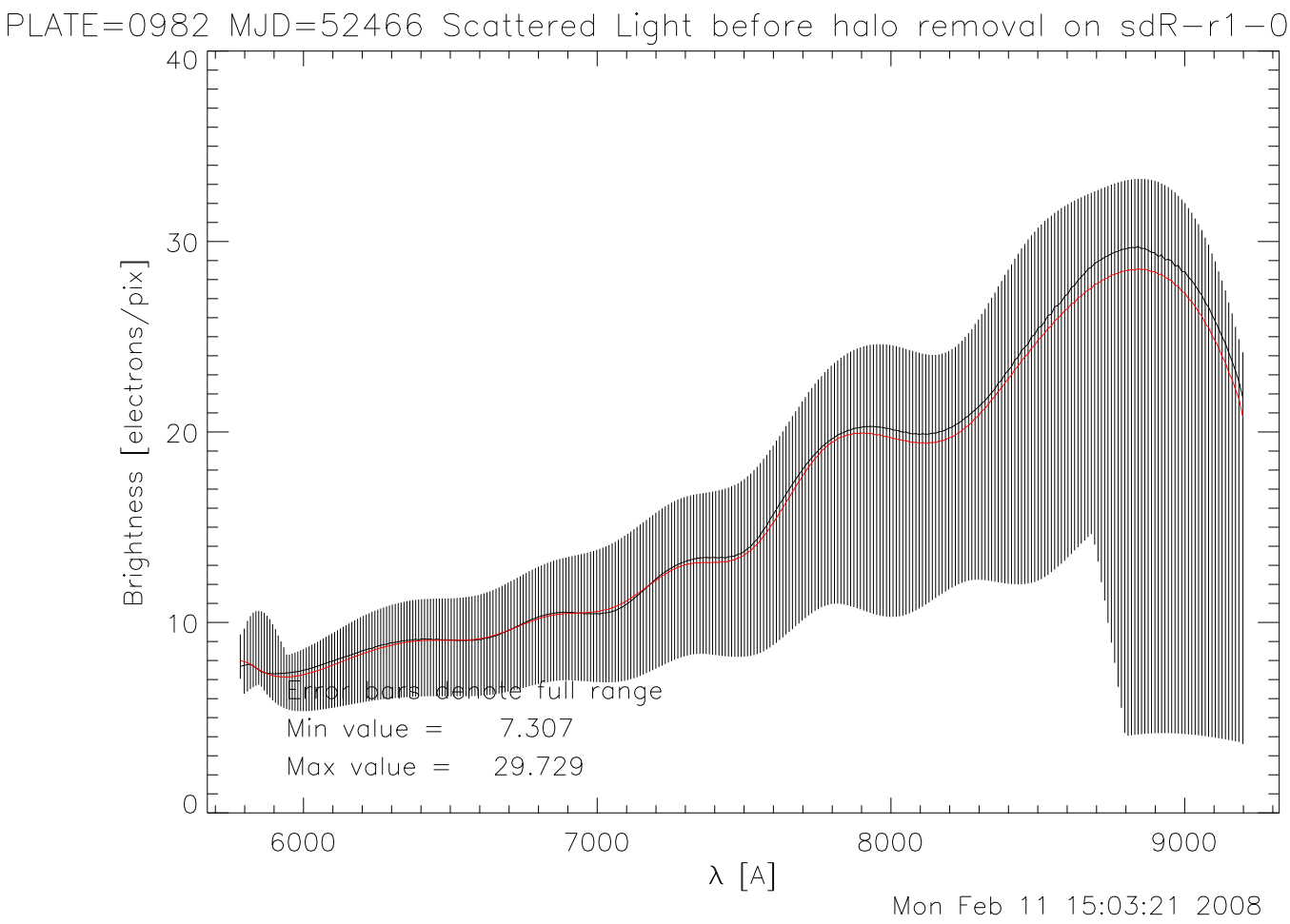

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015900.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

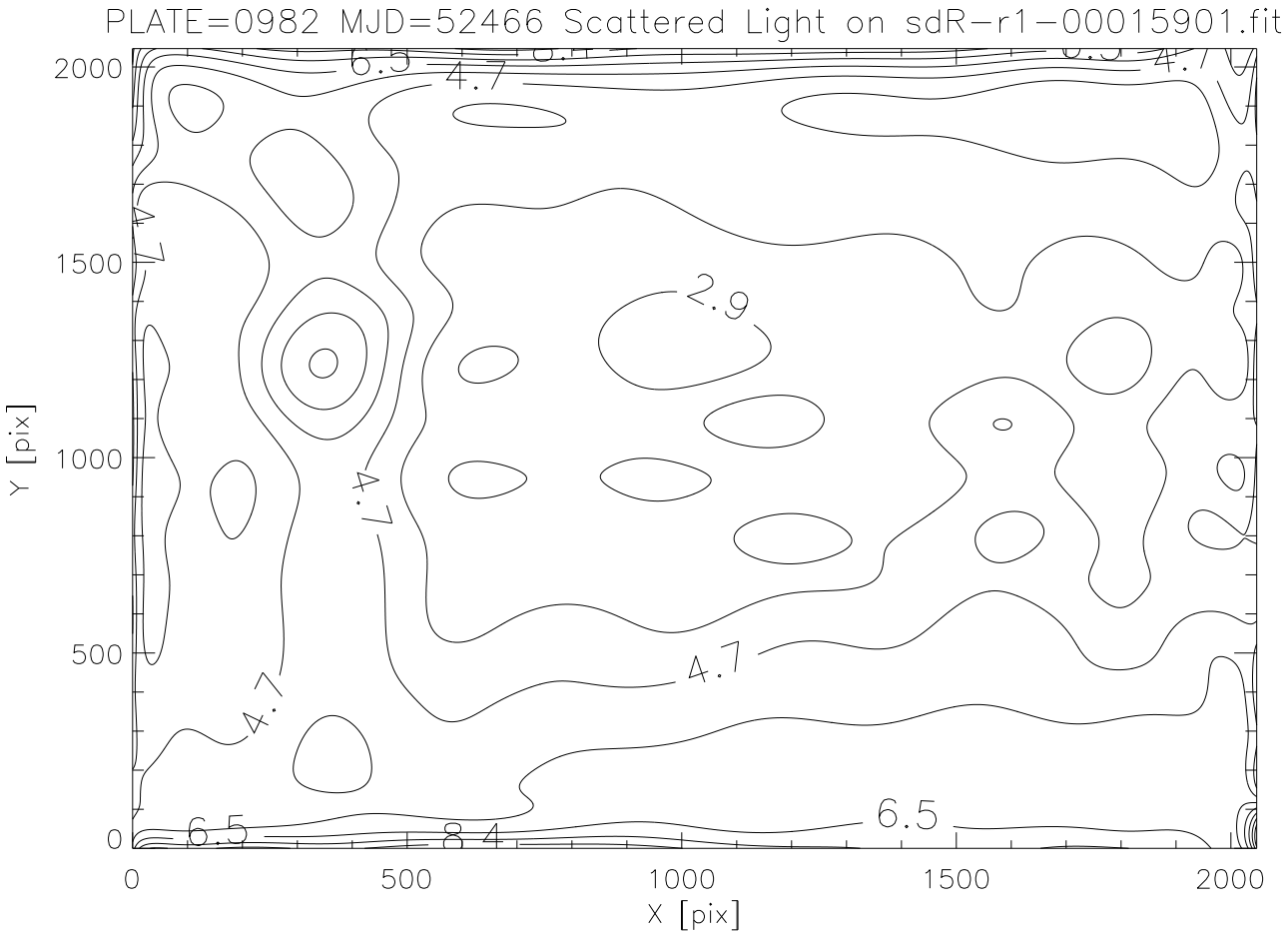

PLATE=0982 MJD=52466 sdR-r1-00015900.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.74 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

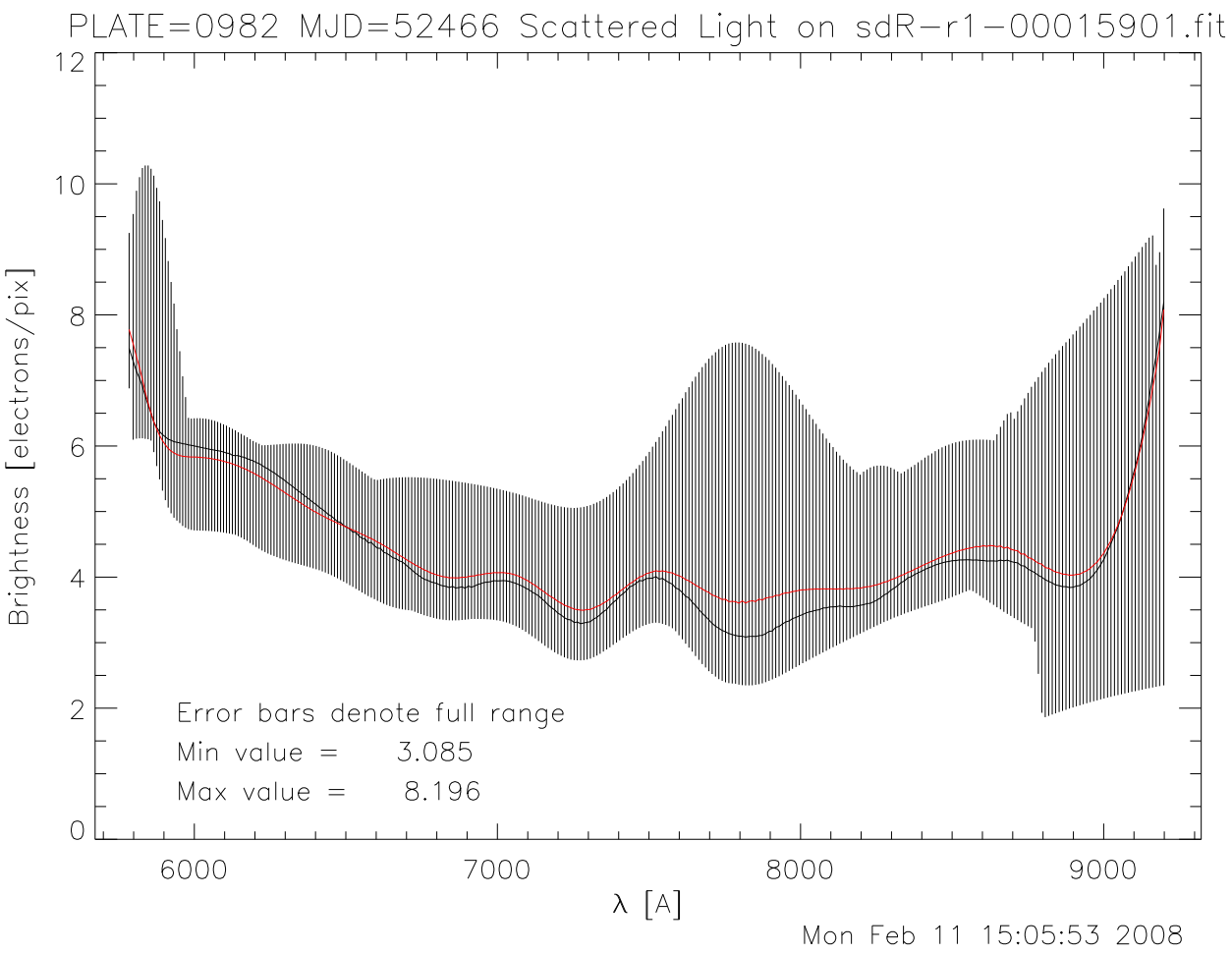

PLATE=0982 MJD=52466 sdR-r1-00015900.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.06 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

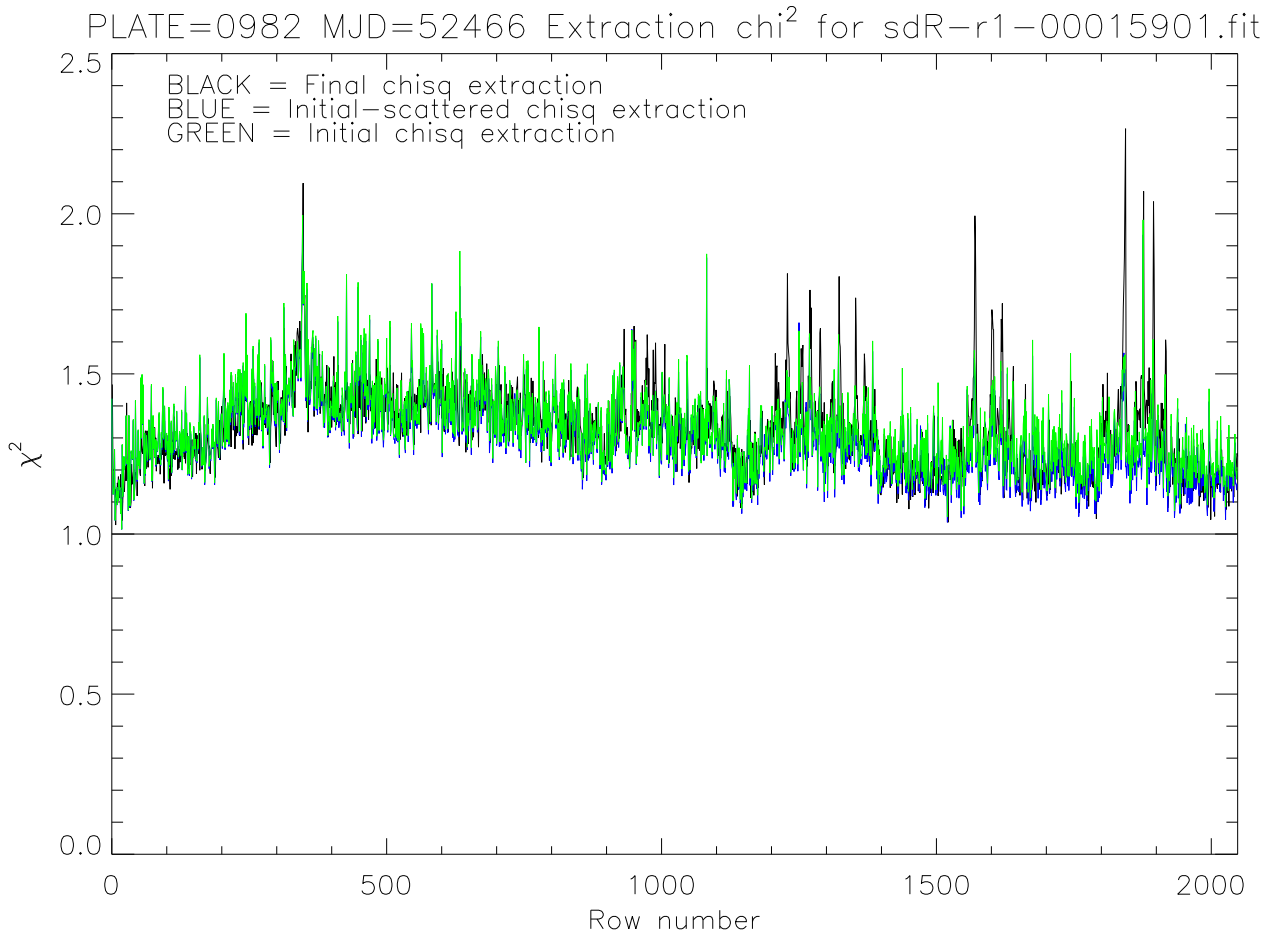

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r1−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.684
Max value = 1.455
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 15:02:36 2008

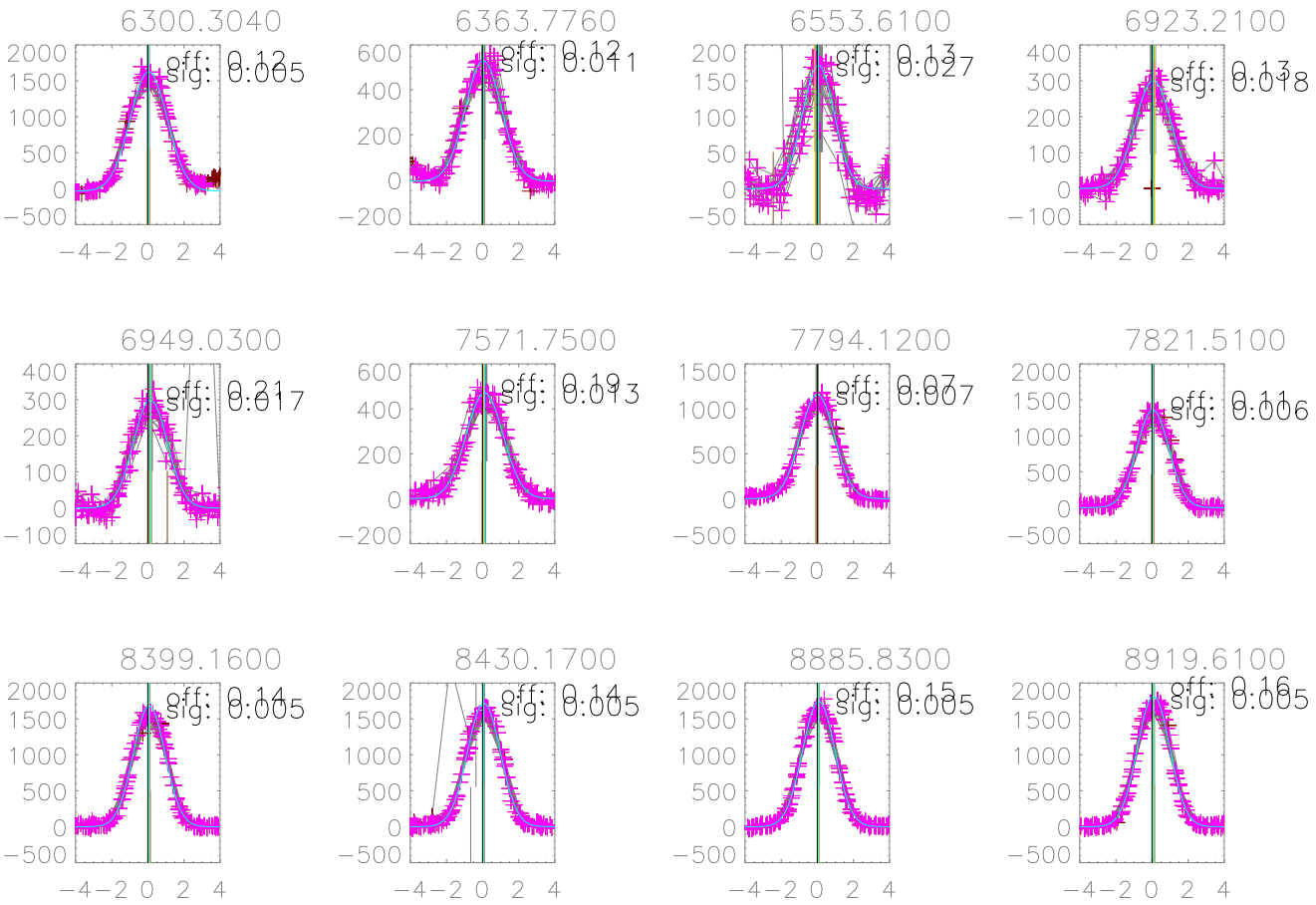

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015901.fi
25.5
25.5
18.2
25.5
18.2
18.2
10.9
10.9
0
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000

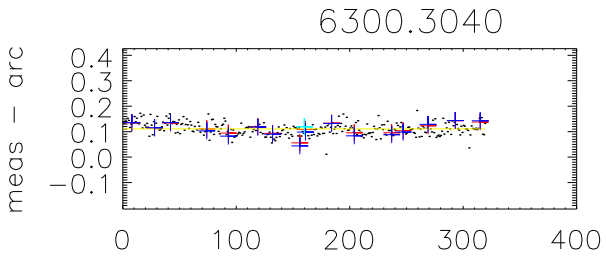

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015901.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.307
Max value = 29.729
Mon Feb 11 15:03:21 2008

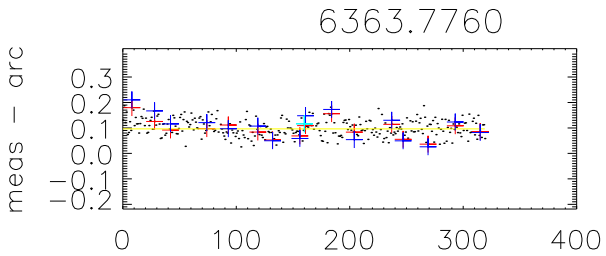

PLATE=0982 MJD=52466 Scattered Light on sdR−r1−00015901.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
4.7
2.9
8.4

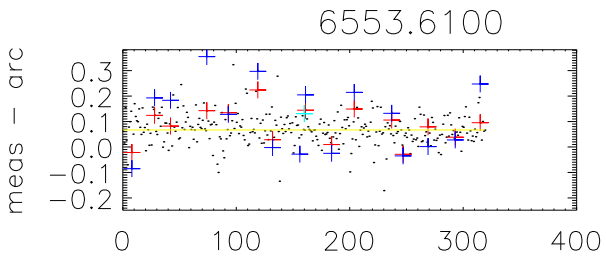

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015901.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.085
Max value = 8.196
Mon Feb 11 15:05:53 2008

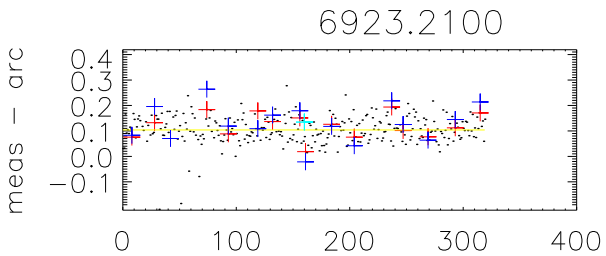

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r1−00015901.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

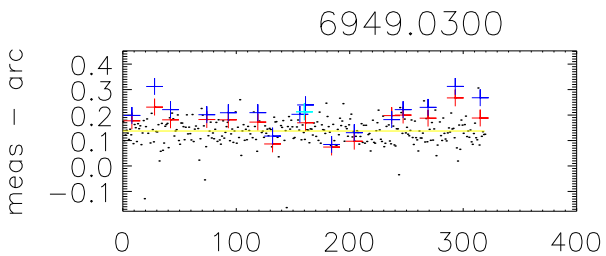

6300.3040
off: 0.12
sig: 0.005
6363.7760
off: 0.12
sig: 0.011
6553.6100
off: 0.13
sig: 0.027
6923.2100
off: 0.13
sig: 0.018
6949.0300
off: 0.21
sig: 0.017
7571.7500
off: 0.19
sig: 0.013
7794.1200
off: 0.07
sig: 0.007
7821.5100
off: 0.11
sig: 0.006
8399.1600
off: 0.14
sig: 0.005
8430.1700
off: 0.14
sig: 0.005
8885.8300
off: 0.15
sig: 0.005
8919.6100
off: 0.16
sig: 0.005

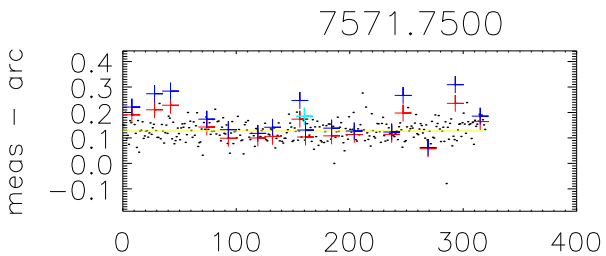

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

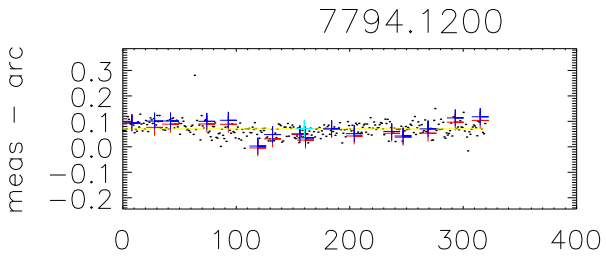

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

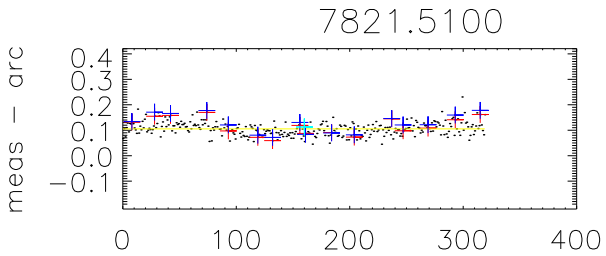

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

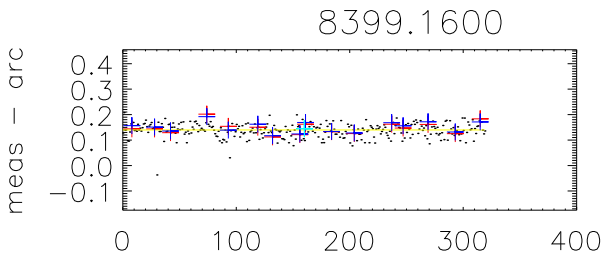

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

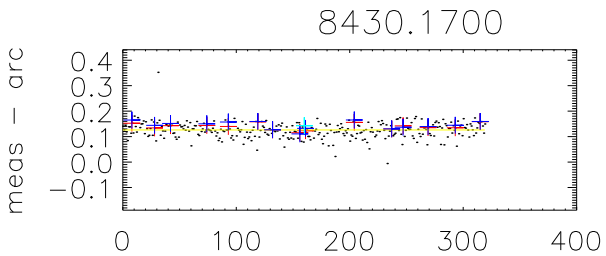

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

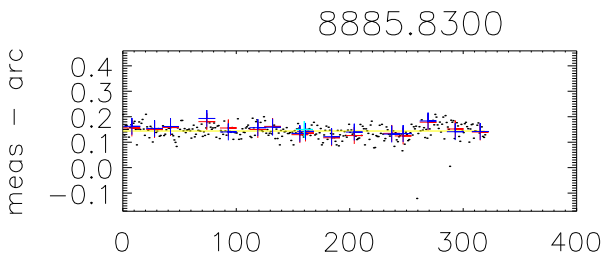

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

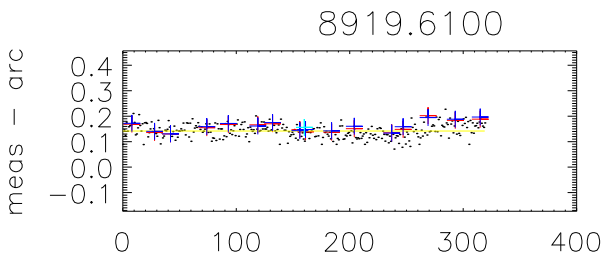

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

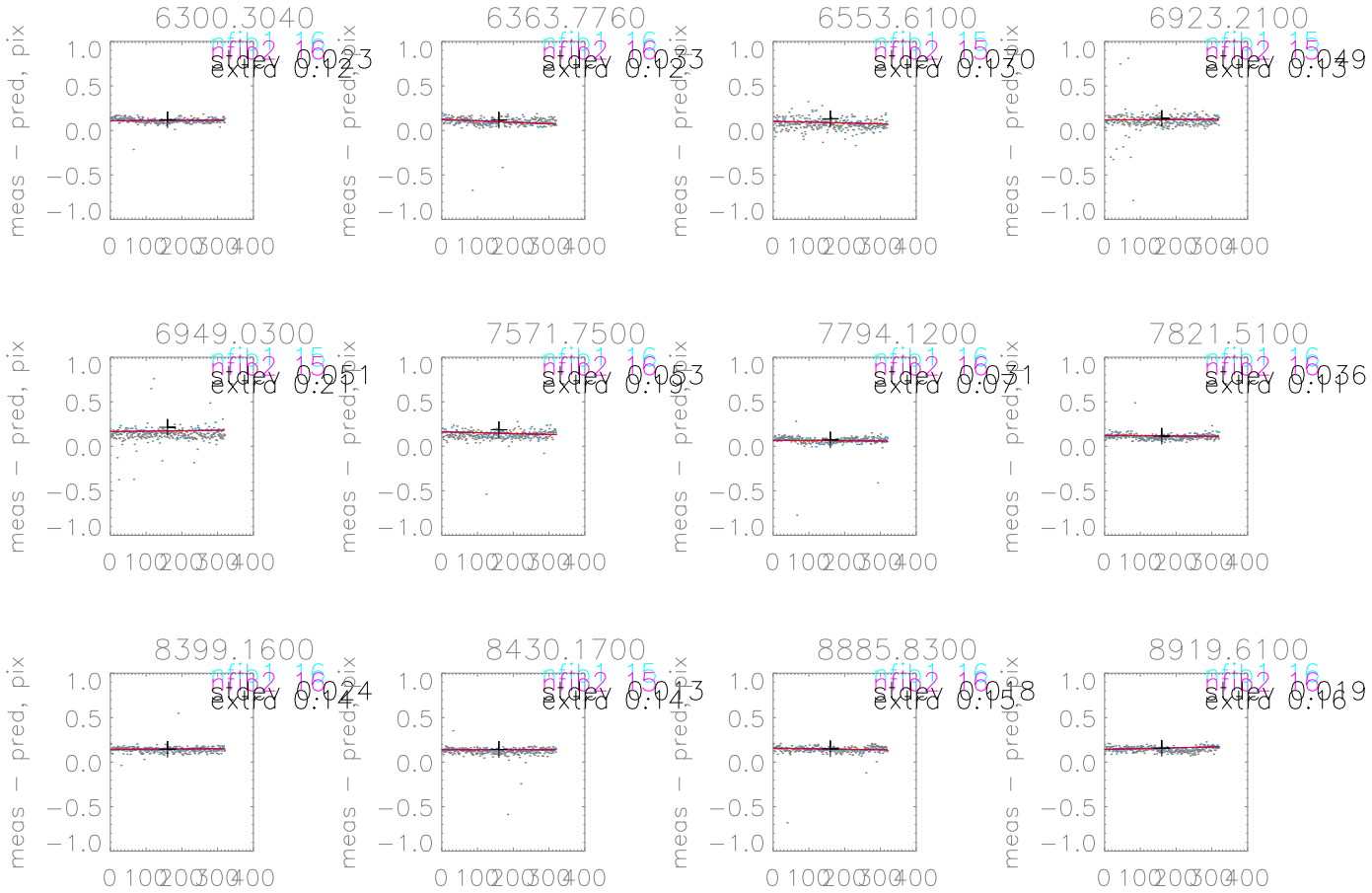

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

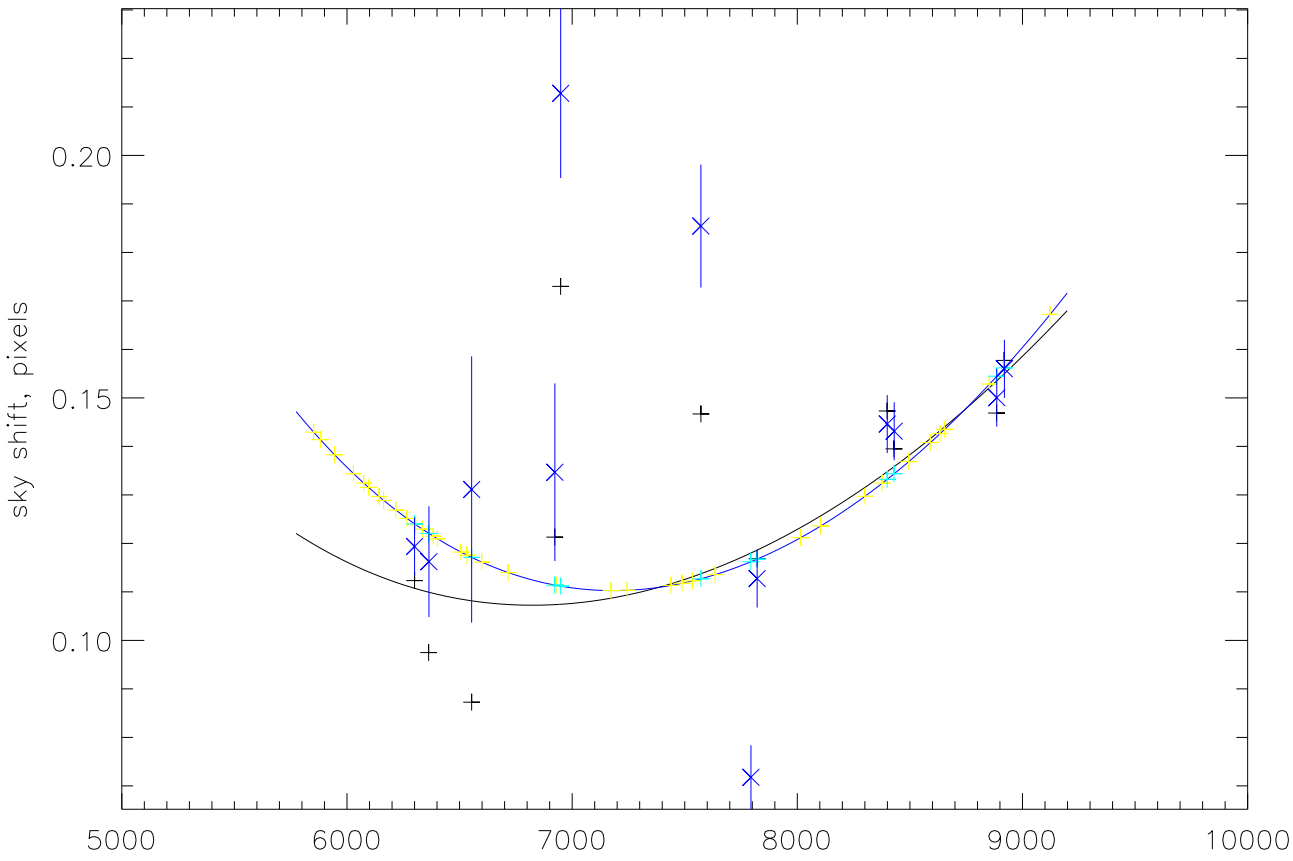

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

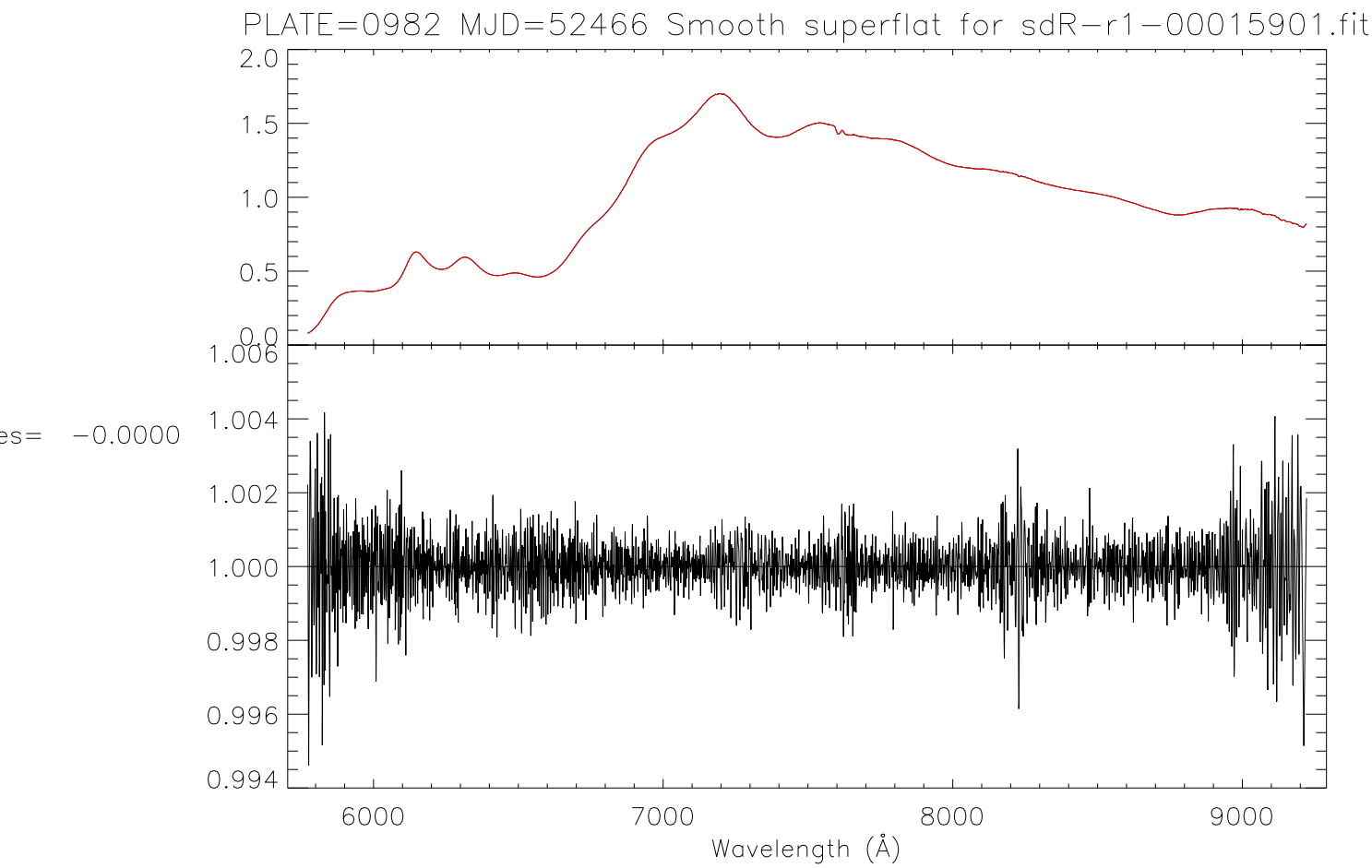

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

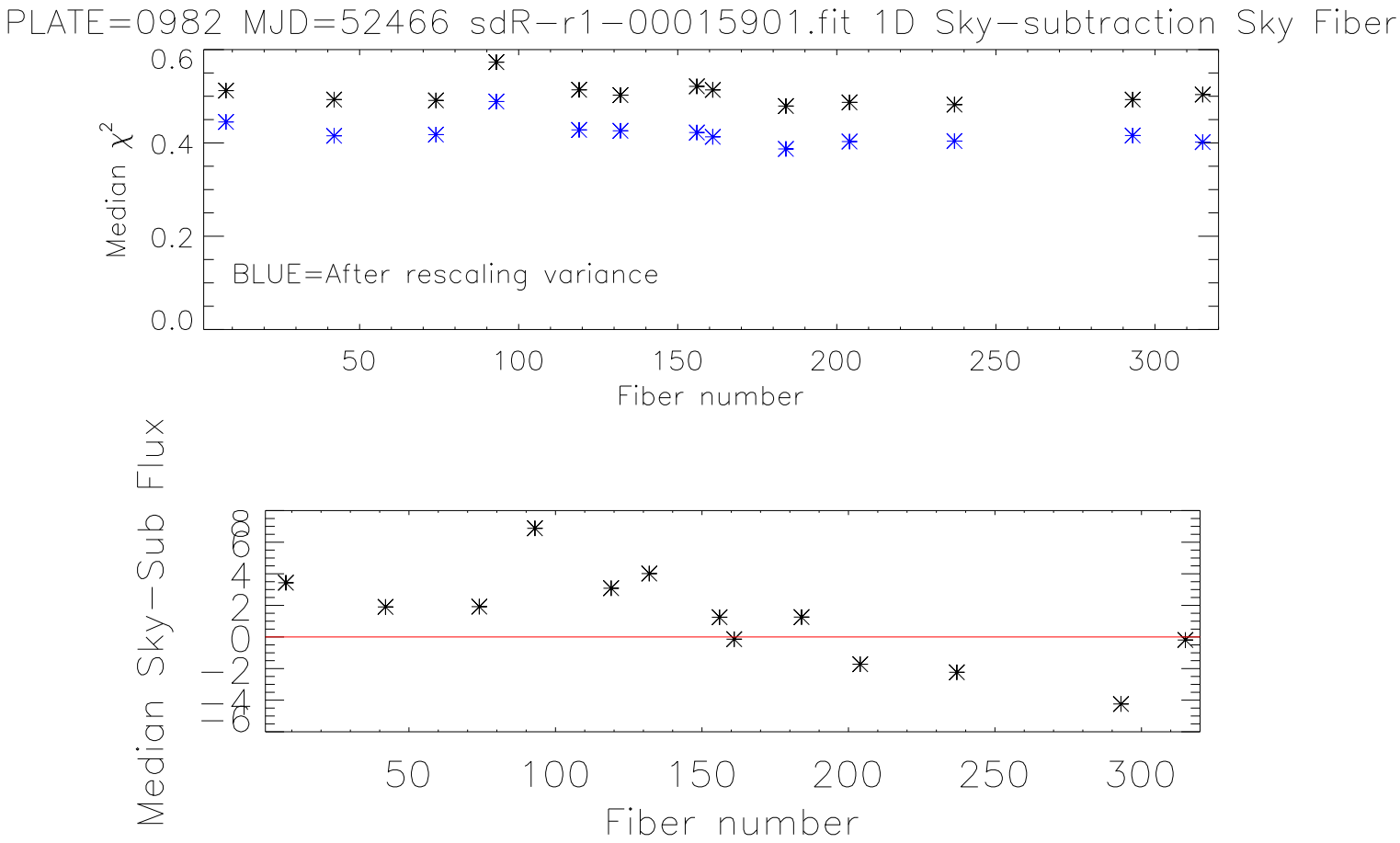

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

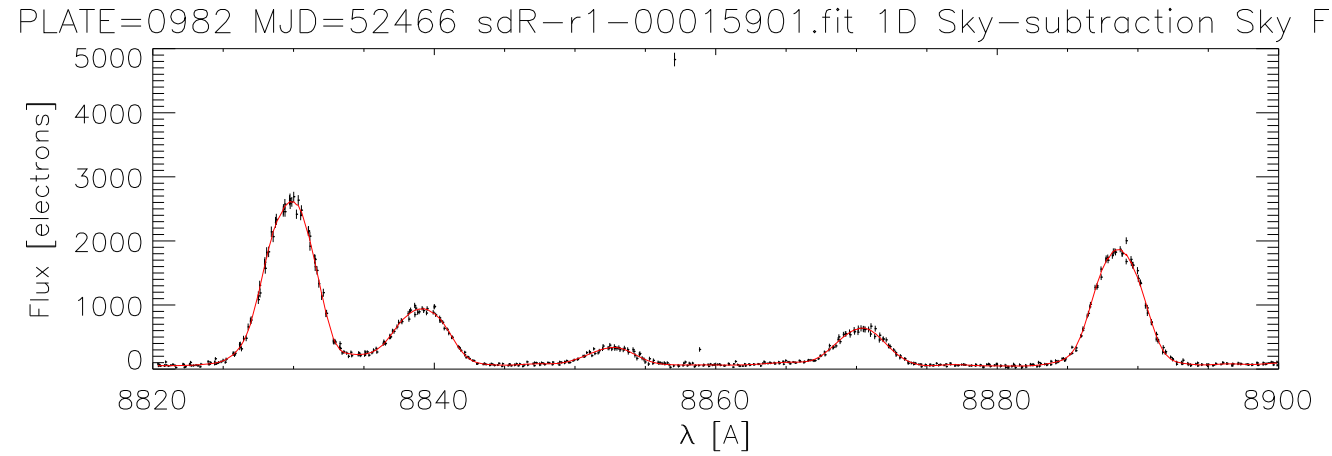

6300.3040
stdev 0.023
extra 0.12
6363.7760
stdev 0.023
extra 0.12
6553.6100
stdev 0.030
extra 0.13
6923.2100
stdev 0.049
extra 0.15
6949.0300
stdev 0.051
extra 0.21
7571.7500
stdev 0.053
extra 0.19
7794.1200
stdev 0.031
extra 0.07
7821.5100
stdev 0.036
extra 0.11
8399.1600
stdev 0.024
extra 0.14
8430.1700
stdev 0.013
extra 0.14
8885.8300
stdev 0.018
extra 0.15
8919.6100
stdev 0.019
extra 0.16
meas − pred, pix
mfib1 16
mfib2 15

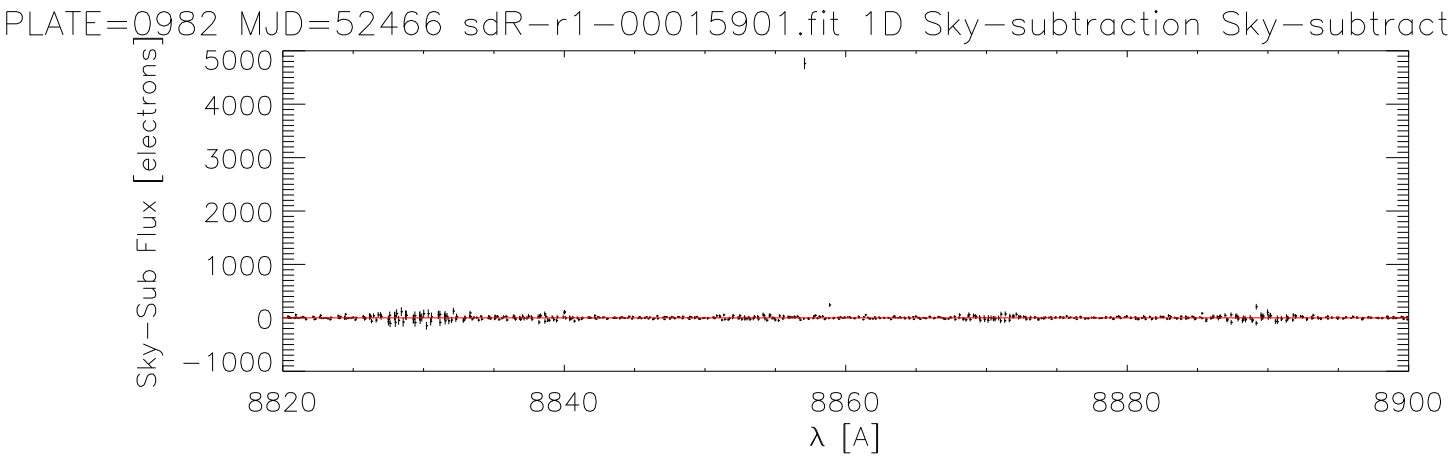

sky shift, pixels
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

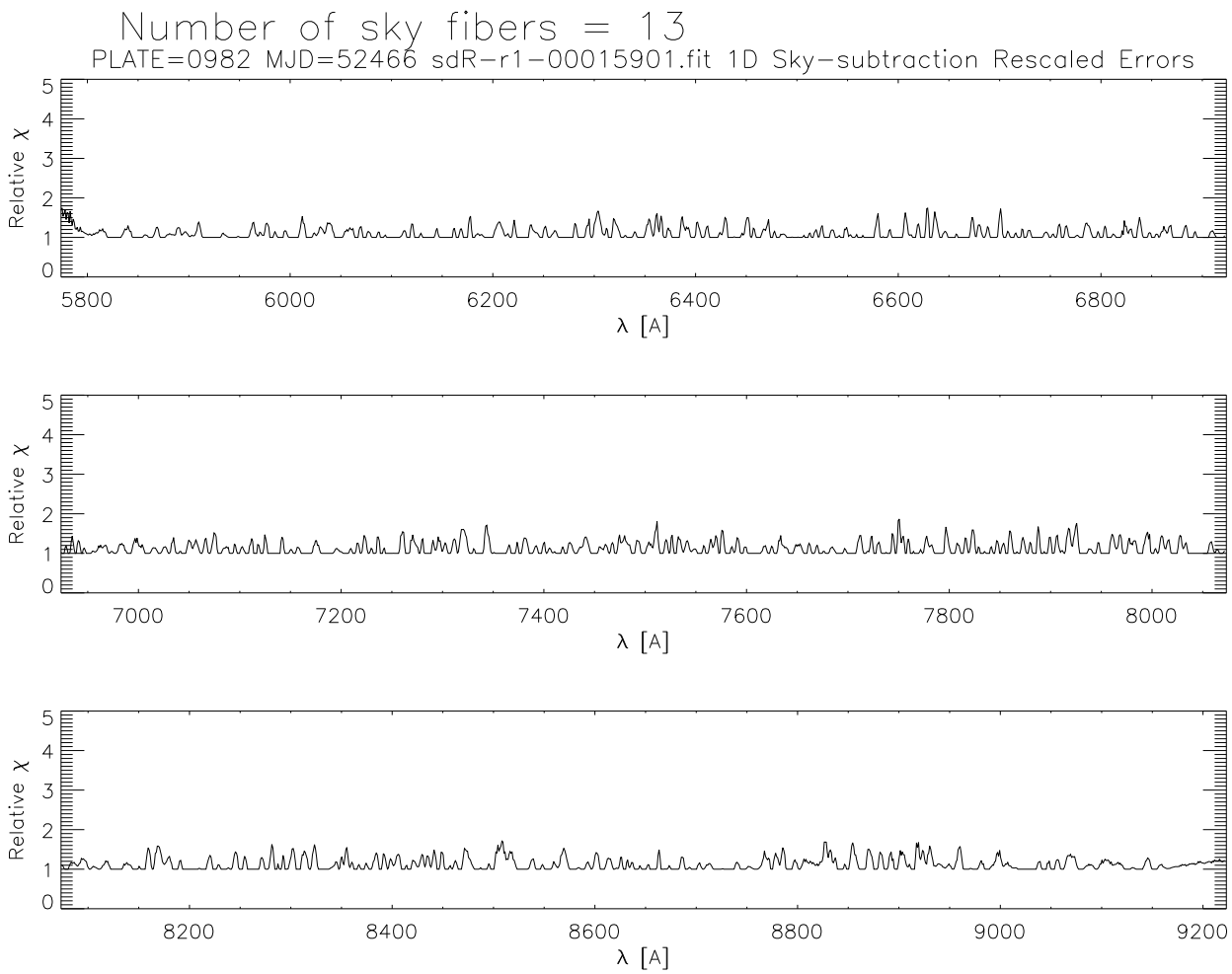

PLATE=0982 MJD=52466 Smooth superflat for sdR-r1-00015901.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

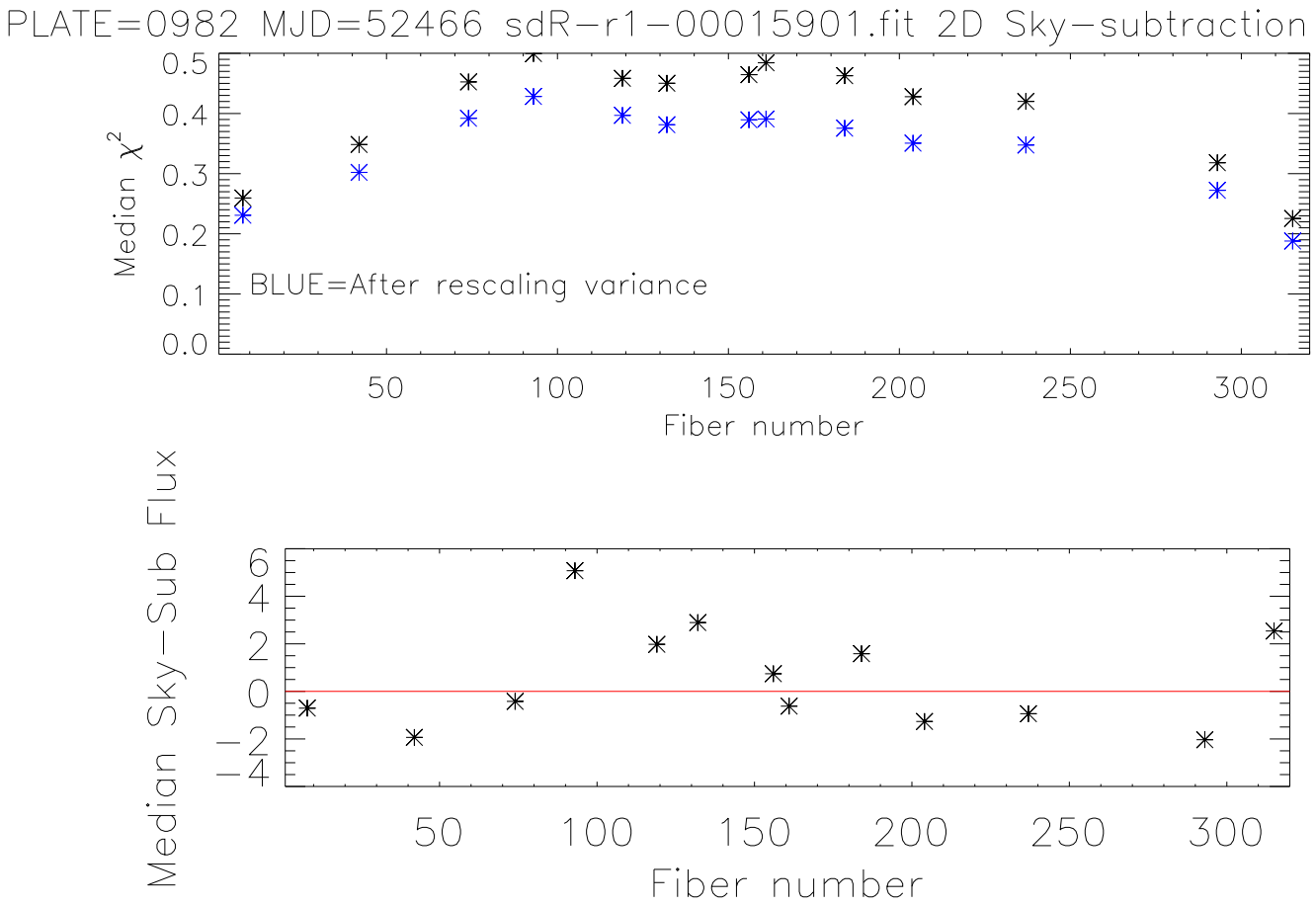
es= −0.0000

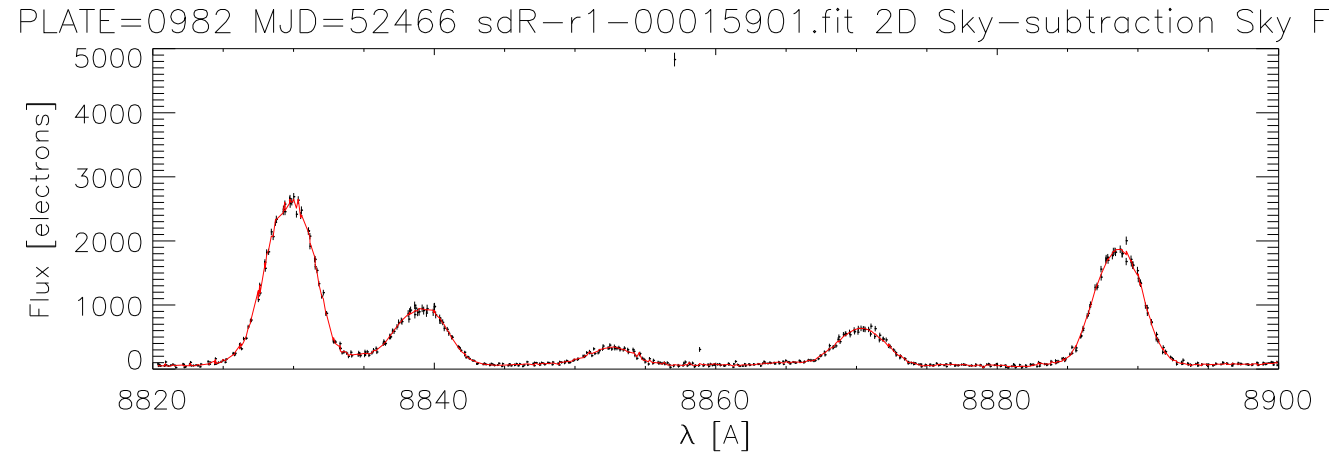

PLATE=0982 MJD=52466 sdR-r1-00015901.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

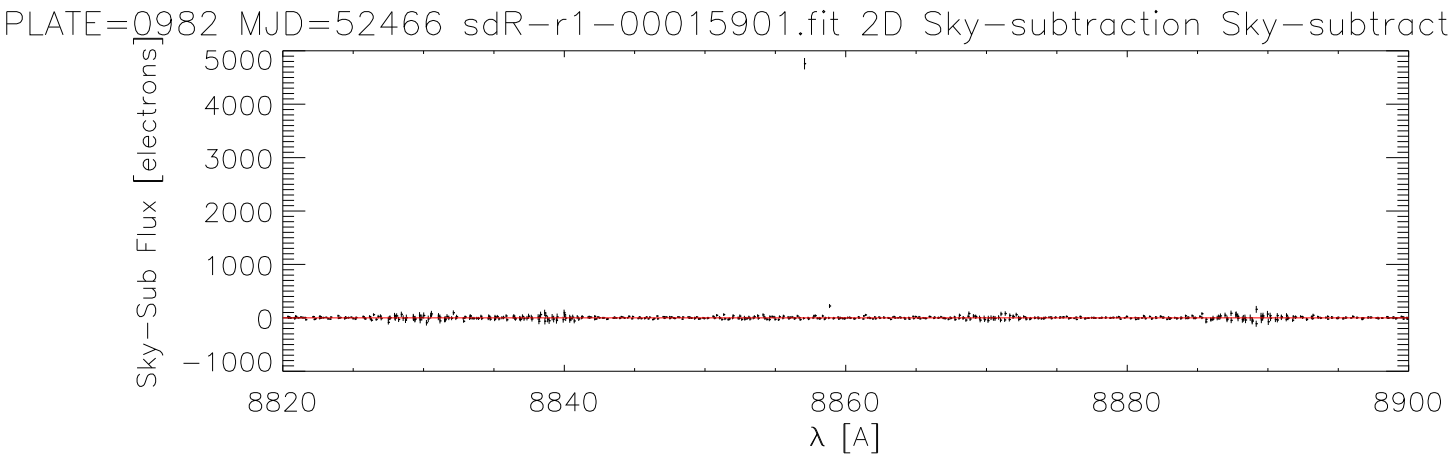

PLATE=0982 MJD=52466 sdR-r1-00015901.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

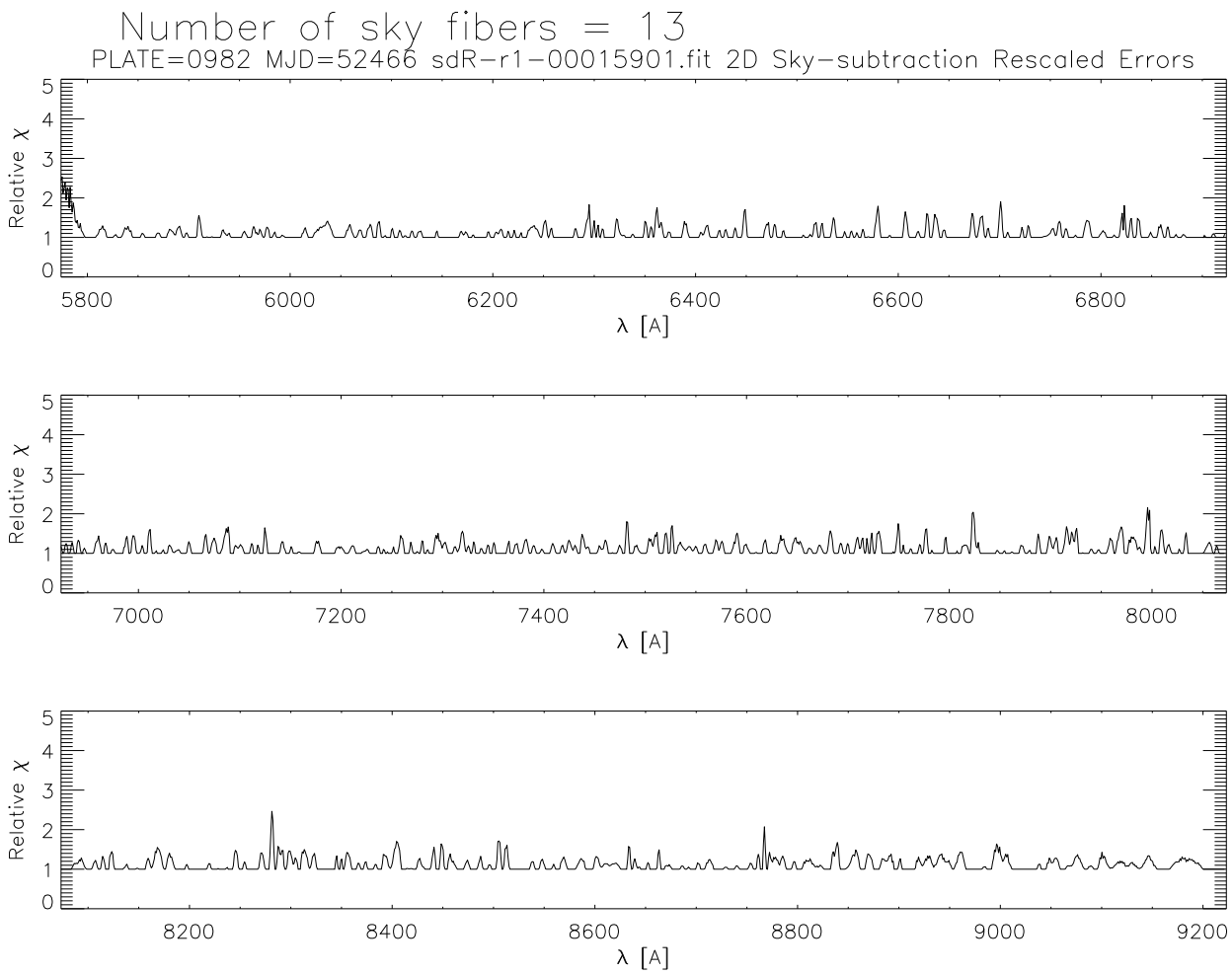

PLATE=0982 MJD=52466 sdR-r1-00015901.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

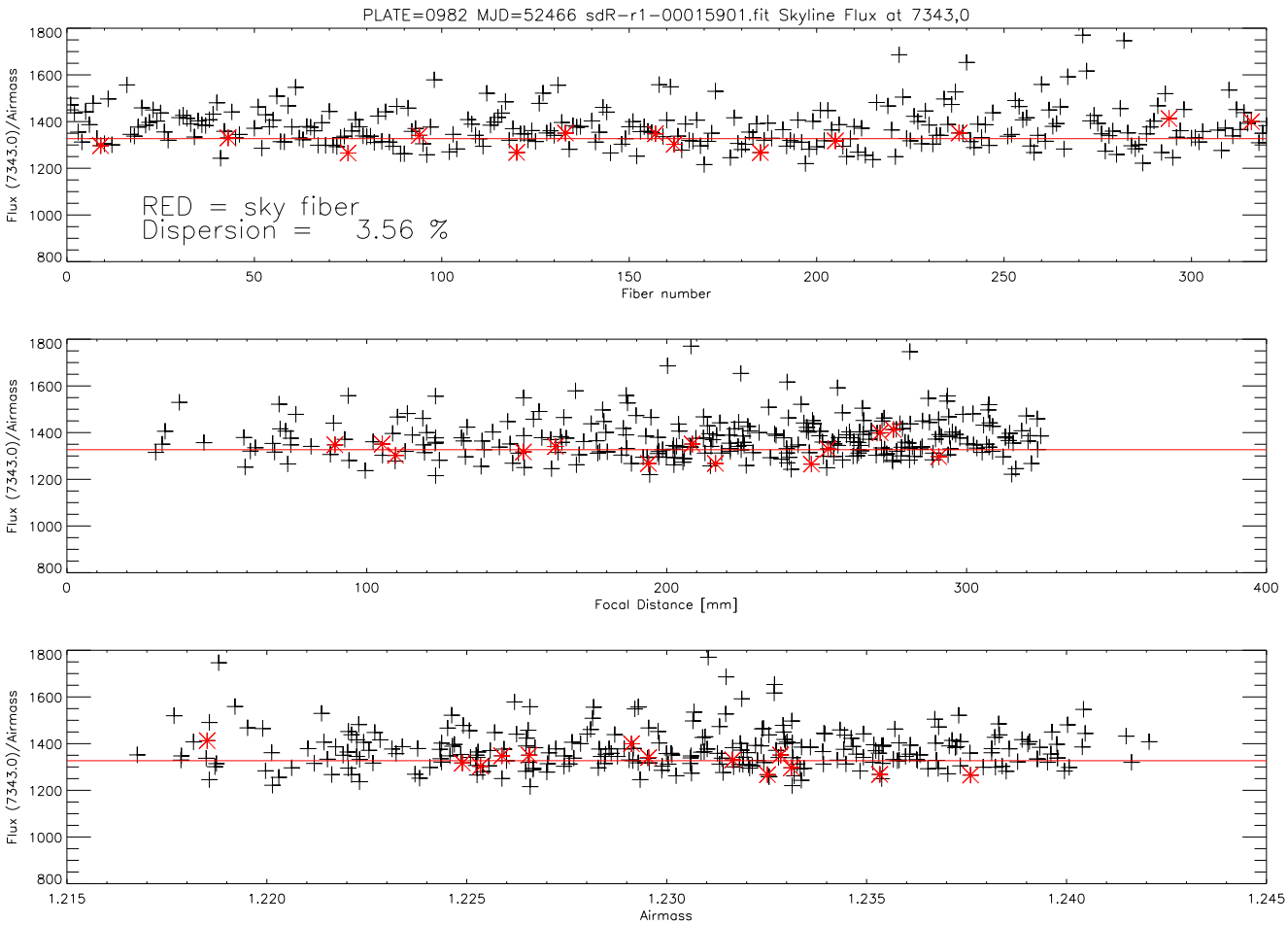

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015901.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

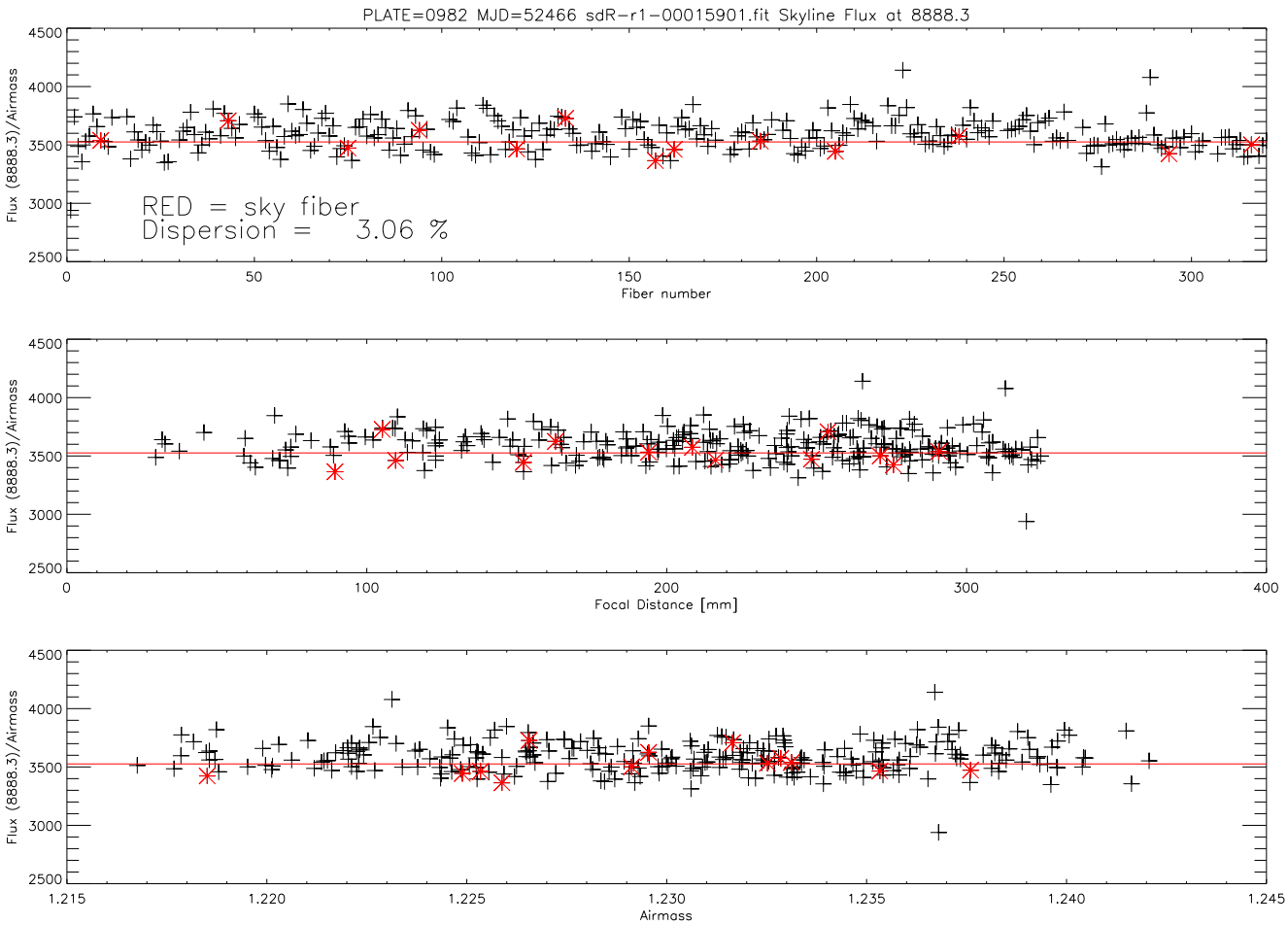

PLATE=0982 MJD=52466 sdR-r1-00015901.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

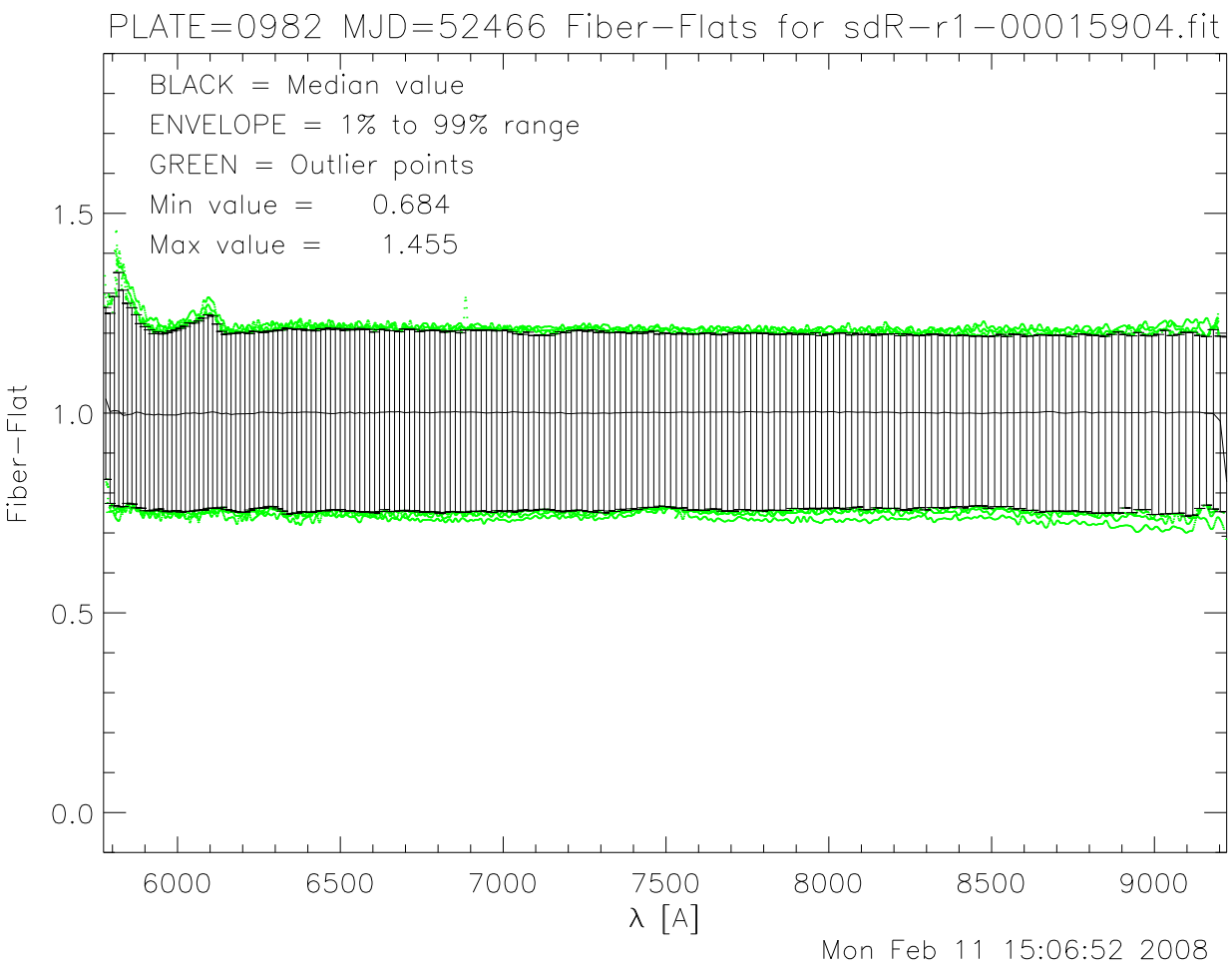

PLATE=0982 MJD=52466 sdR-r1-00015901.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

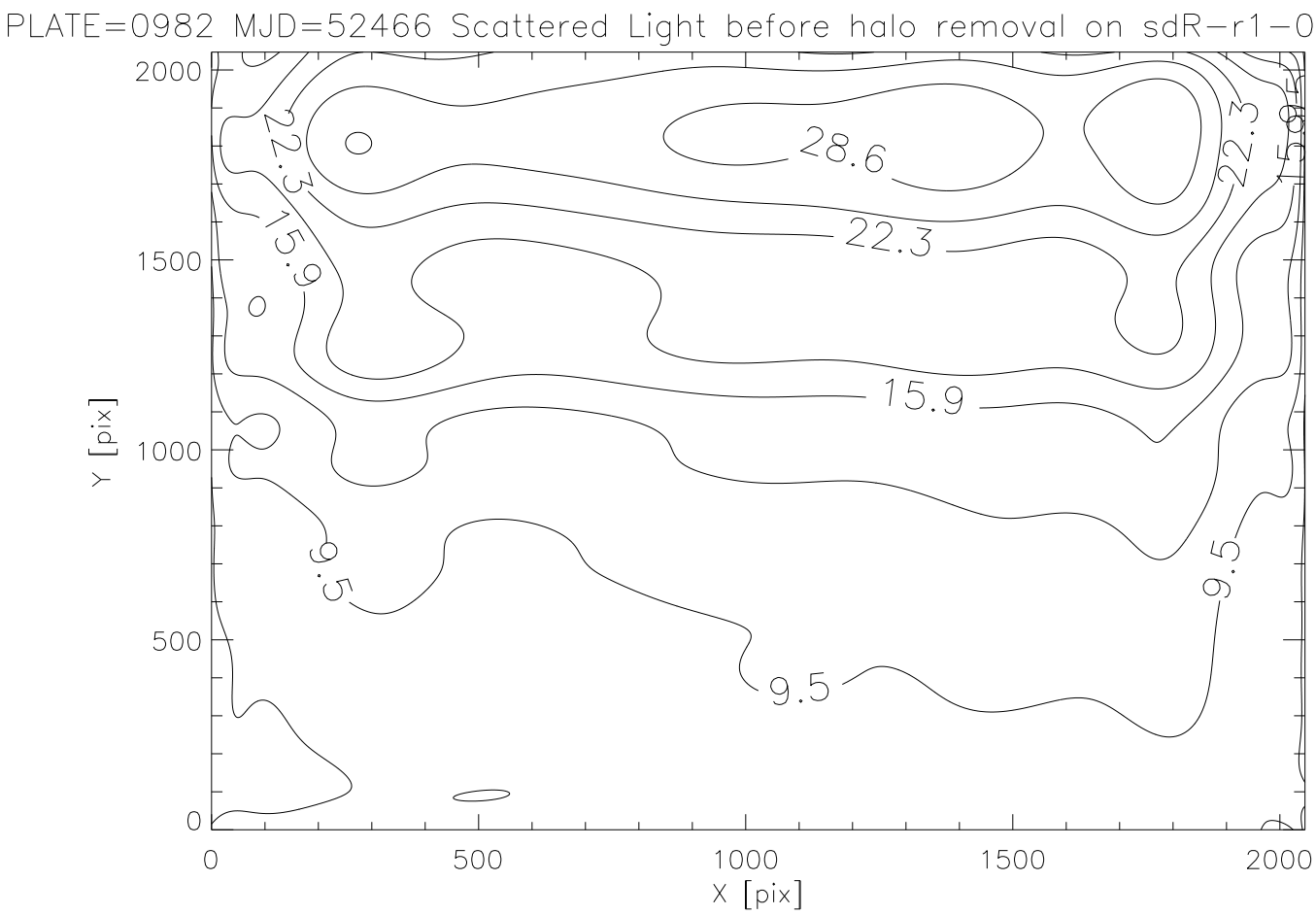

PLATE=0982 MJD=52466 sdR-r1-00015901.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

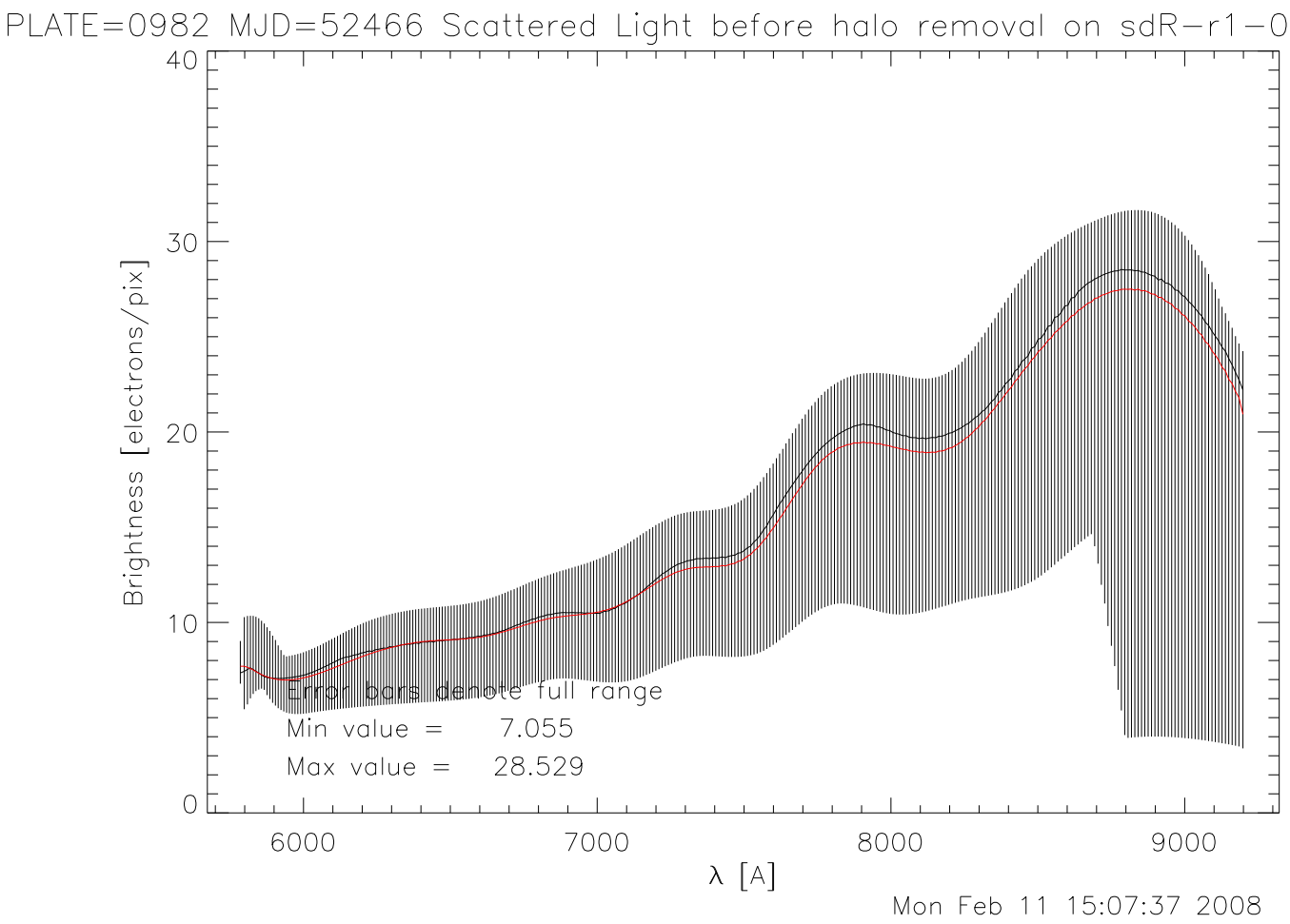

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015901.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

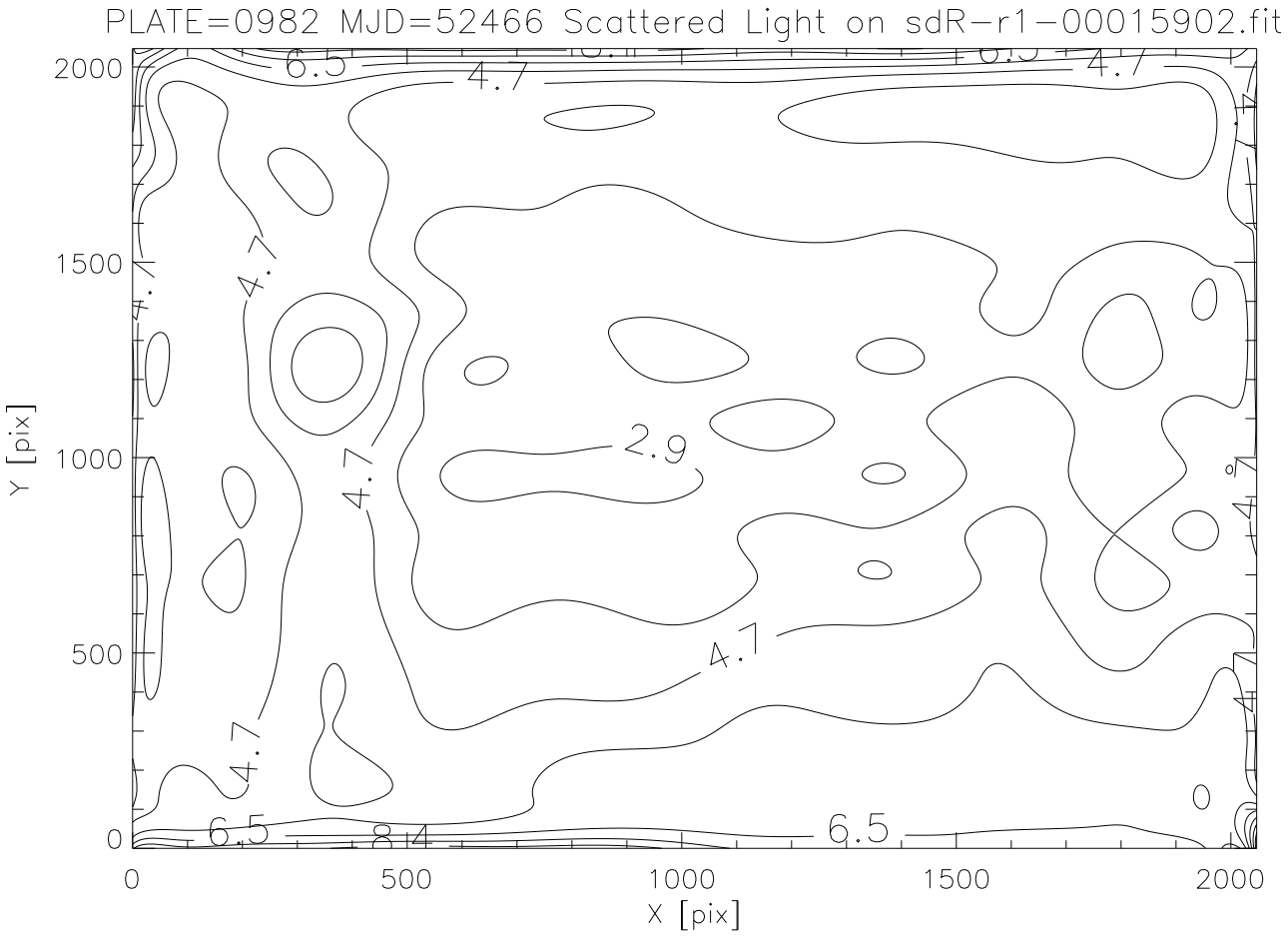

PLATE=0982 MJD=52466 sdR-r1-00015901.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.56 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

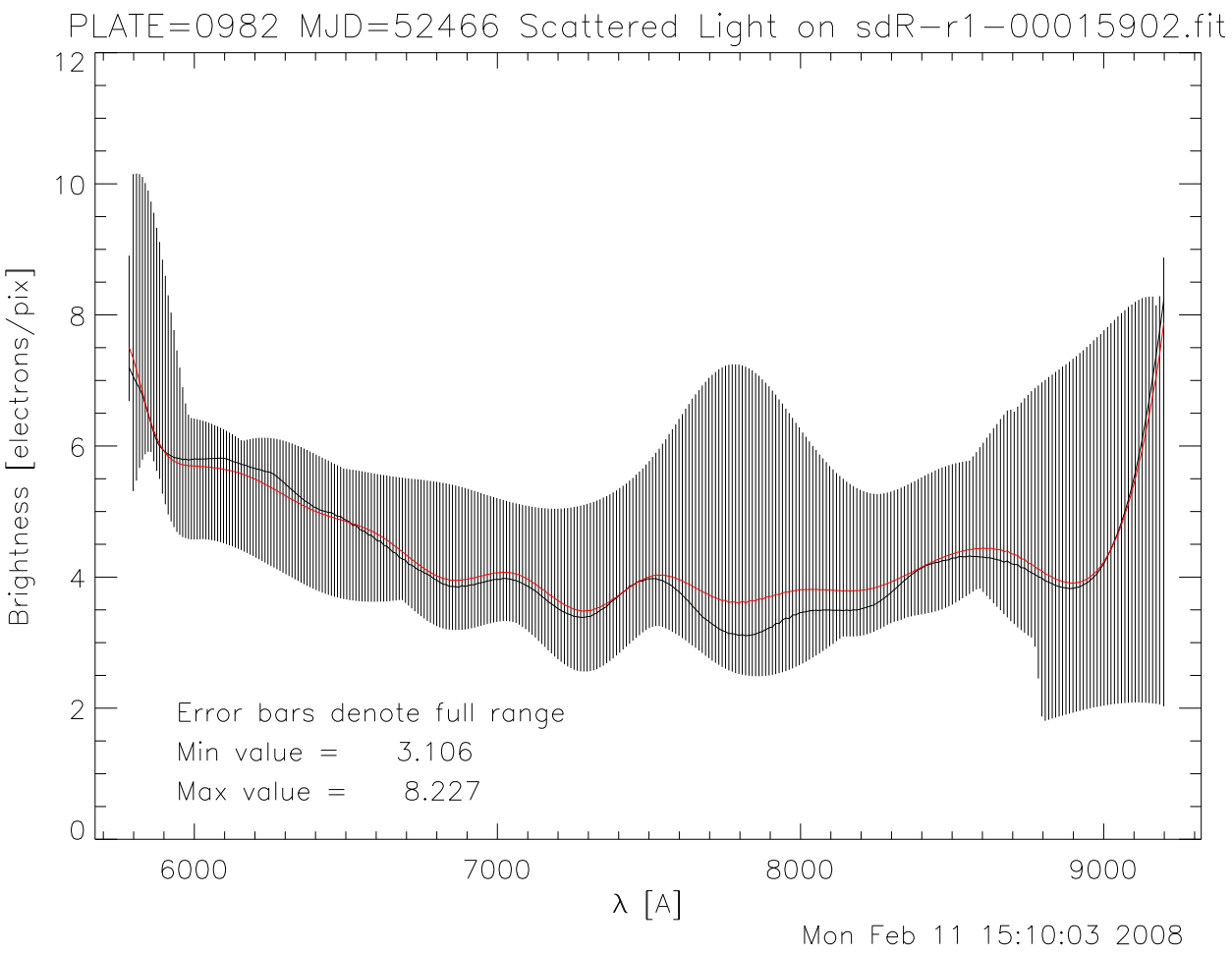

PLATE=0982 MJD=52466 sdR-r1-00015901.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.06 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

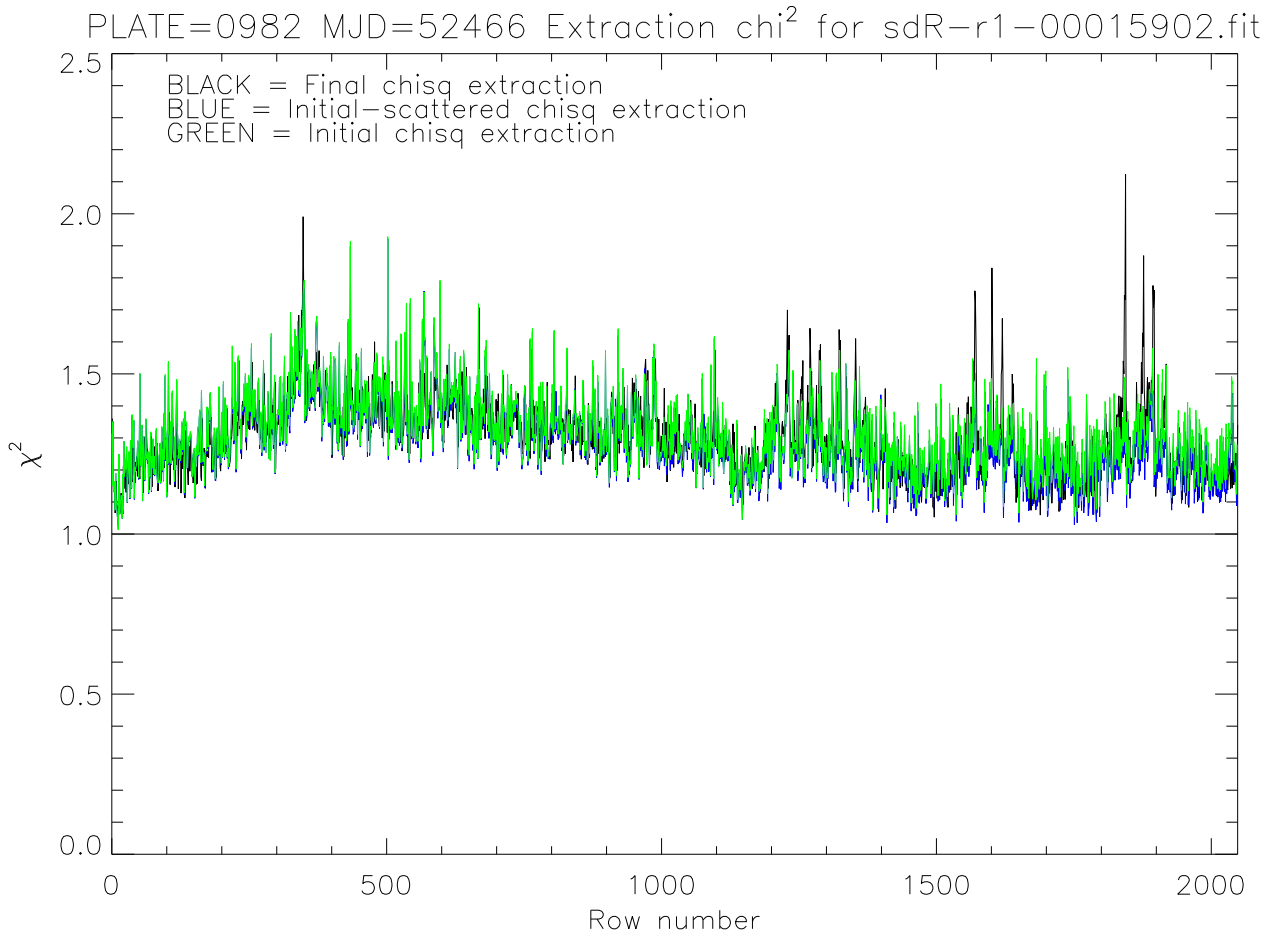

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r1−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.684
Max value = 1.455
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 15:06:52 2008

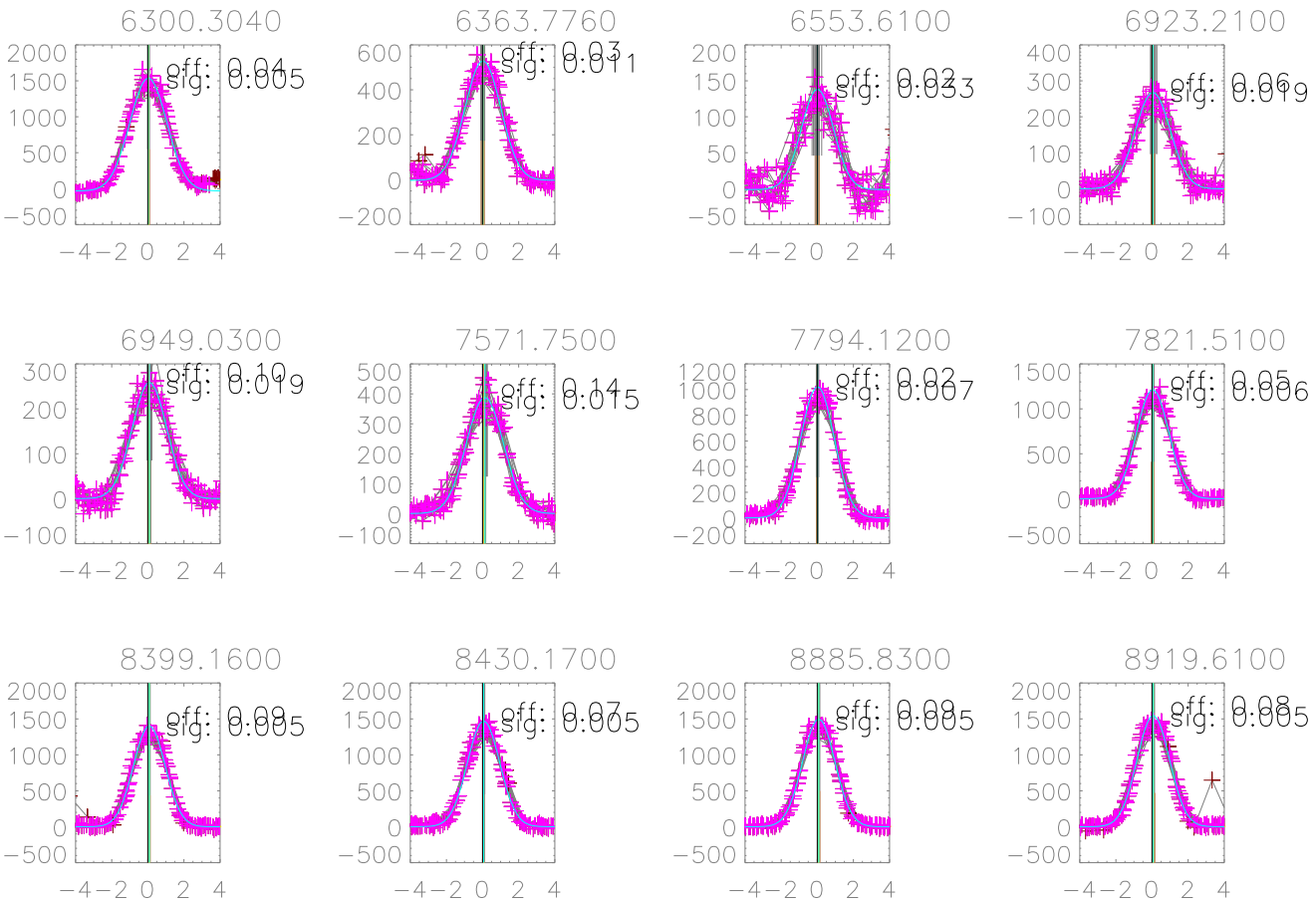

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015902.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
28.6
22.3
15.9
9.5

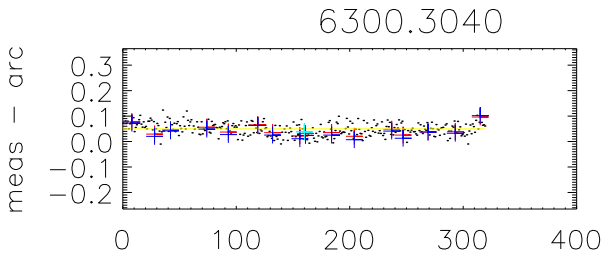

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015902.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.055
Max value = 28.529
Mon Feb 11 15:07:37 2008

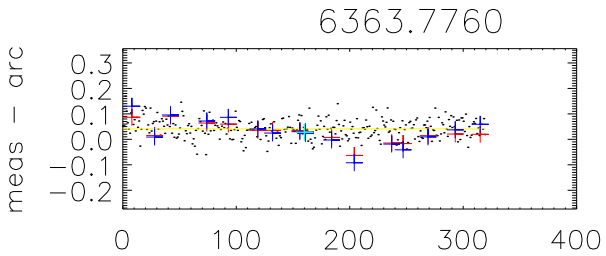

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015902.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
4.7
2.9
0

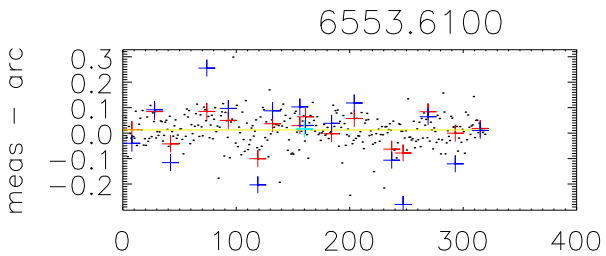

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015902.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.106
Max value = 8.227
Mon Feb 11 15:10:03 2008

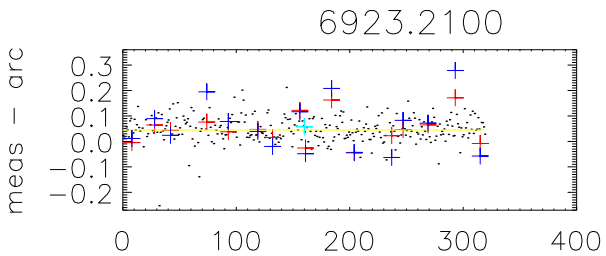

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r1−00015902.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

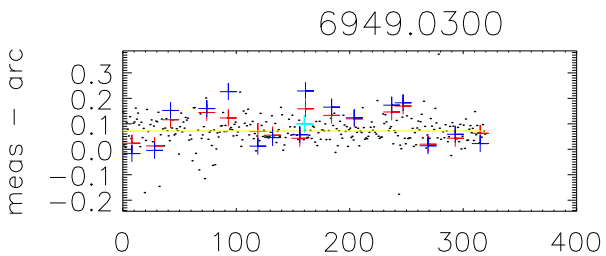

6300.3040
off: 0.04
sig: 0.005
6363.7760
off: 0.03
sig: 0.011
6553.6100
off: 0.02
sig: 0.033
6923.2100
off: 0.06
sig: 0.019
6949.0300
off: 0.10
sig: 0.019
7571.7500
off: 0.14
sig: 0.015
7794.1200
off: 0.02
sig: 0.007
7821.5100
off: 0.05
sig: 0.006
8399.1600
off: 0.08
sig: 0.005
8430.1700
off: 0.07
sig: 0.005
8885.8300
off: 0.08
sig: 0.005
8919.6100
off: 0.08
sig: 0.005

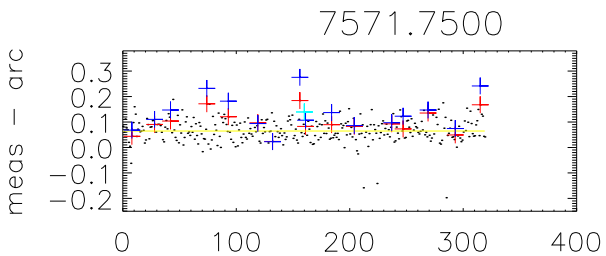

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

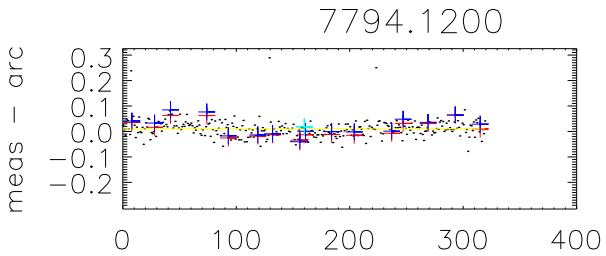

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

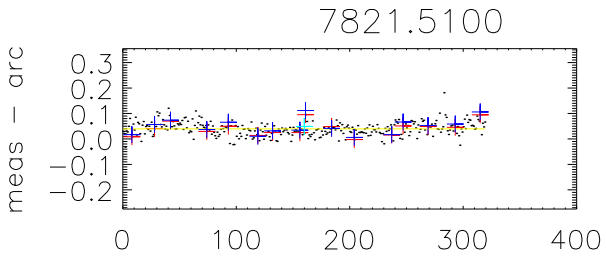

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

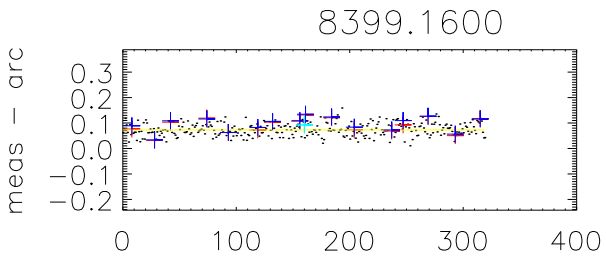

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

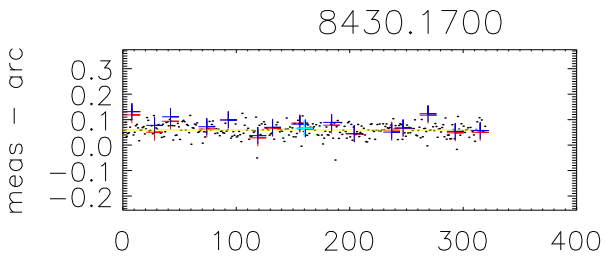

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

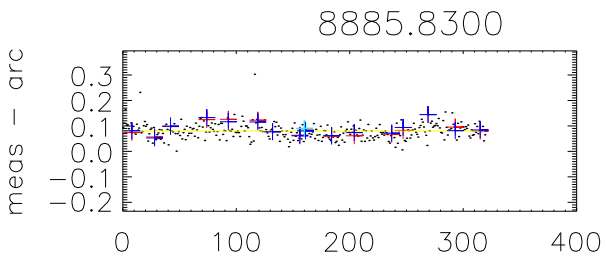

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

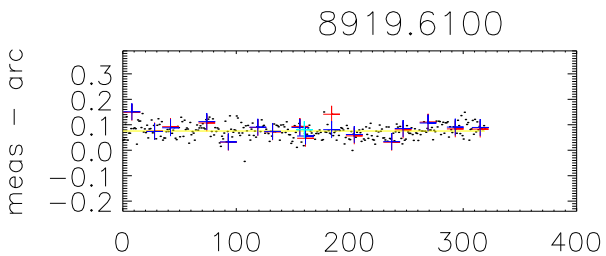

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

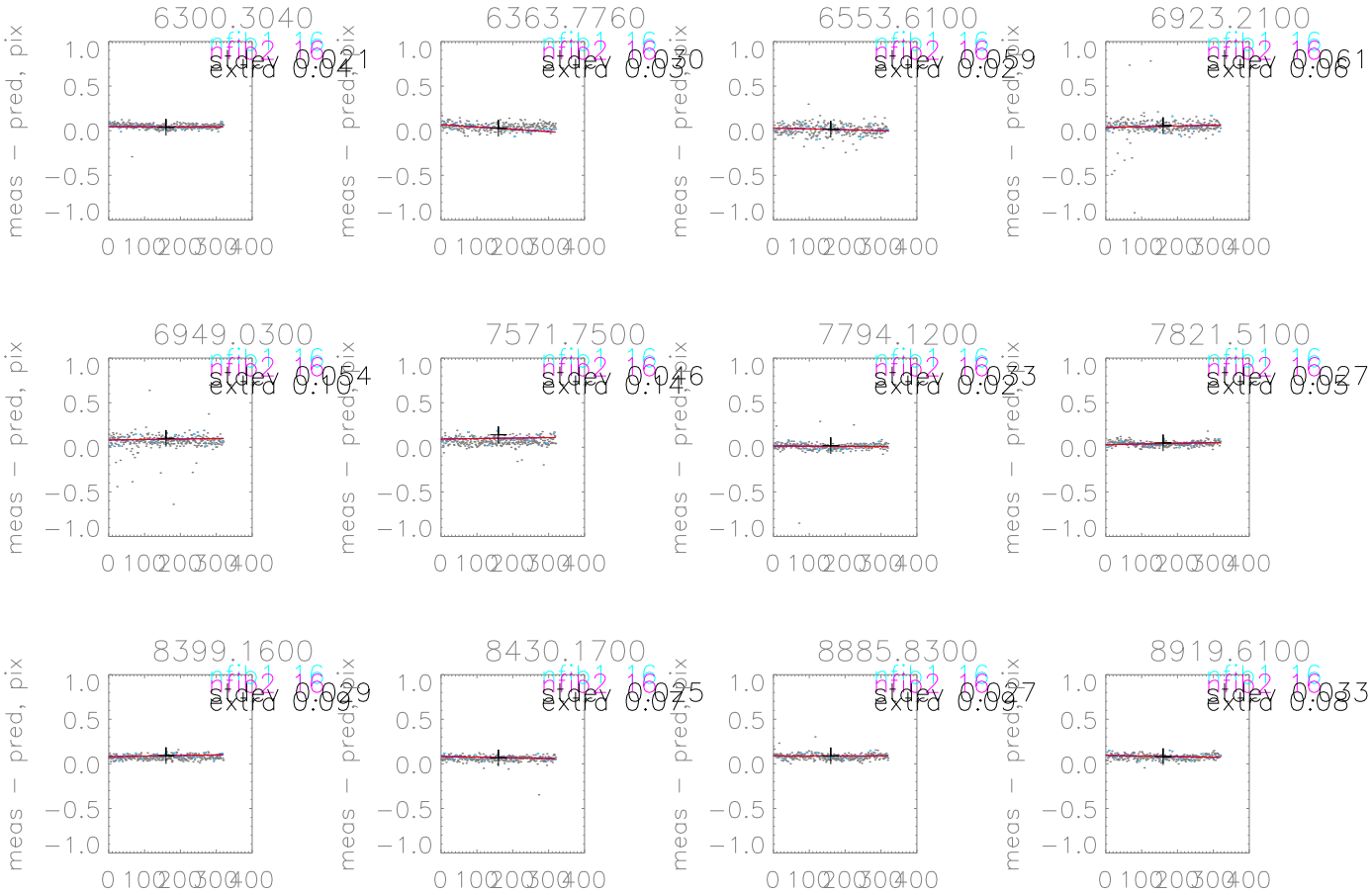

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

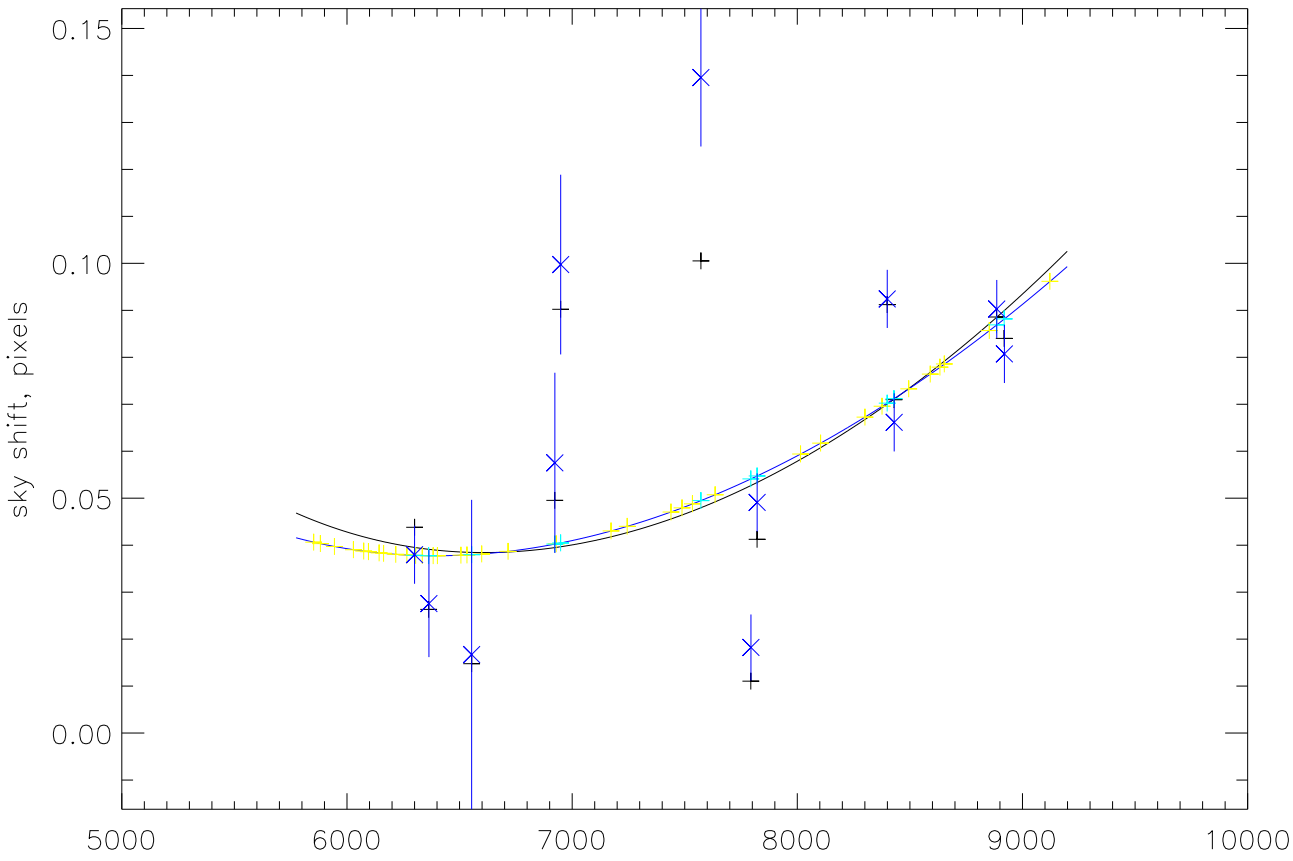

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

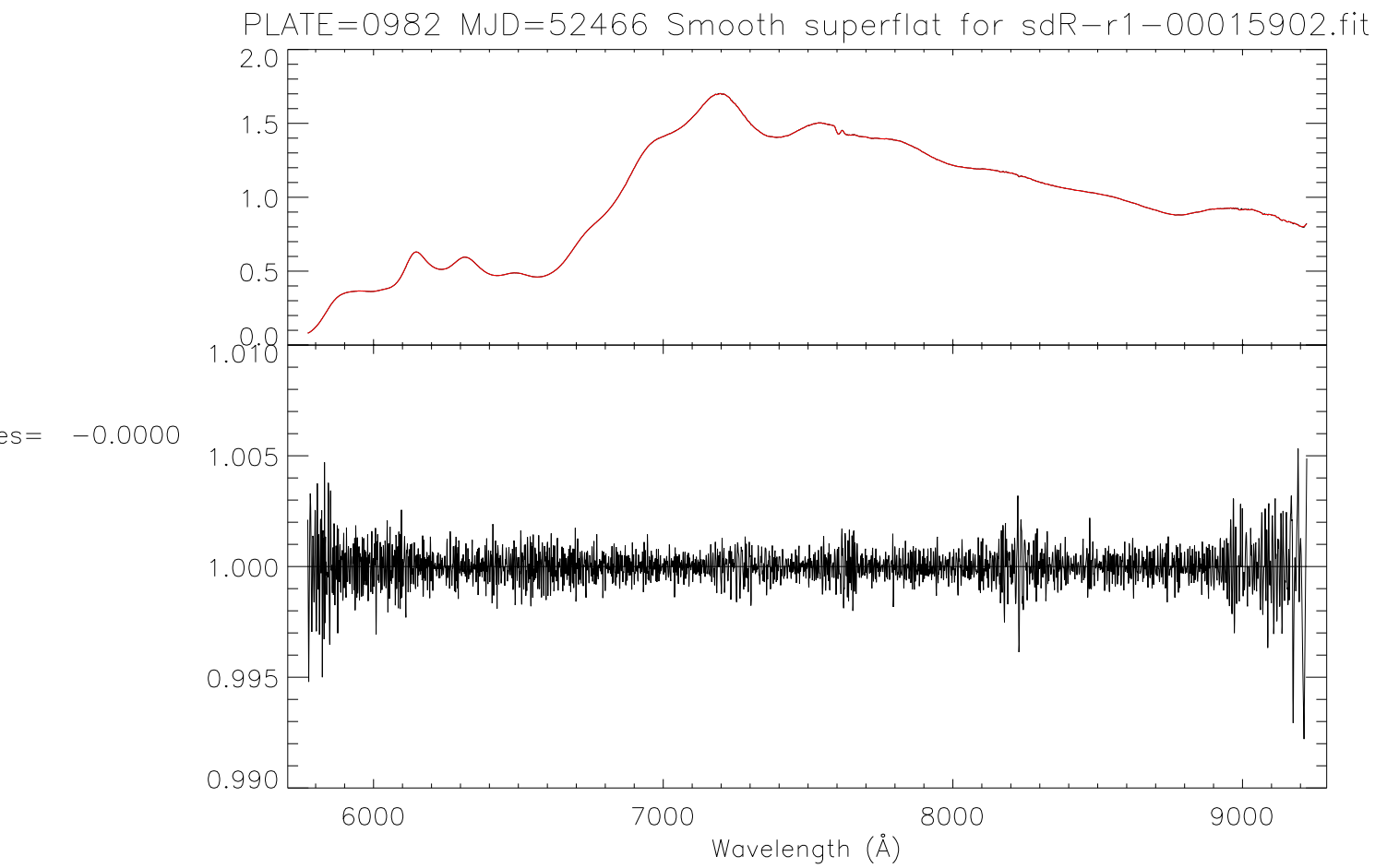

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

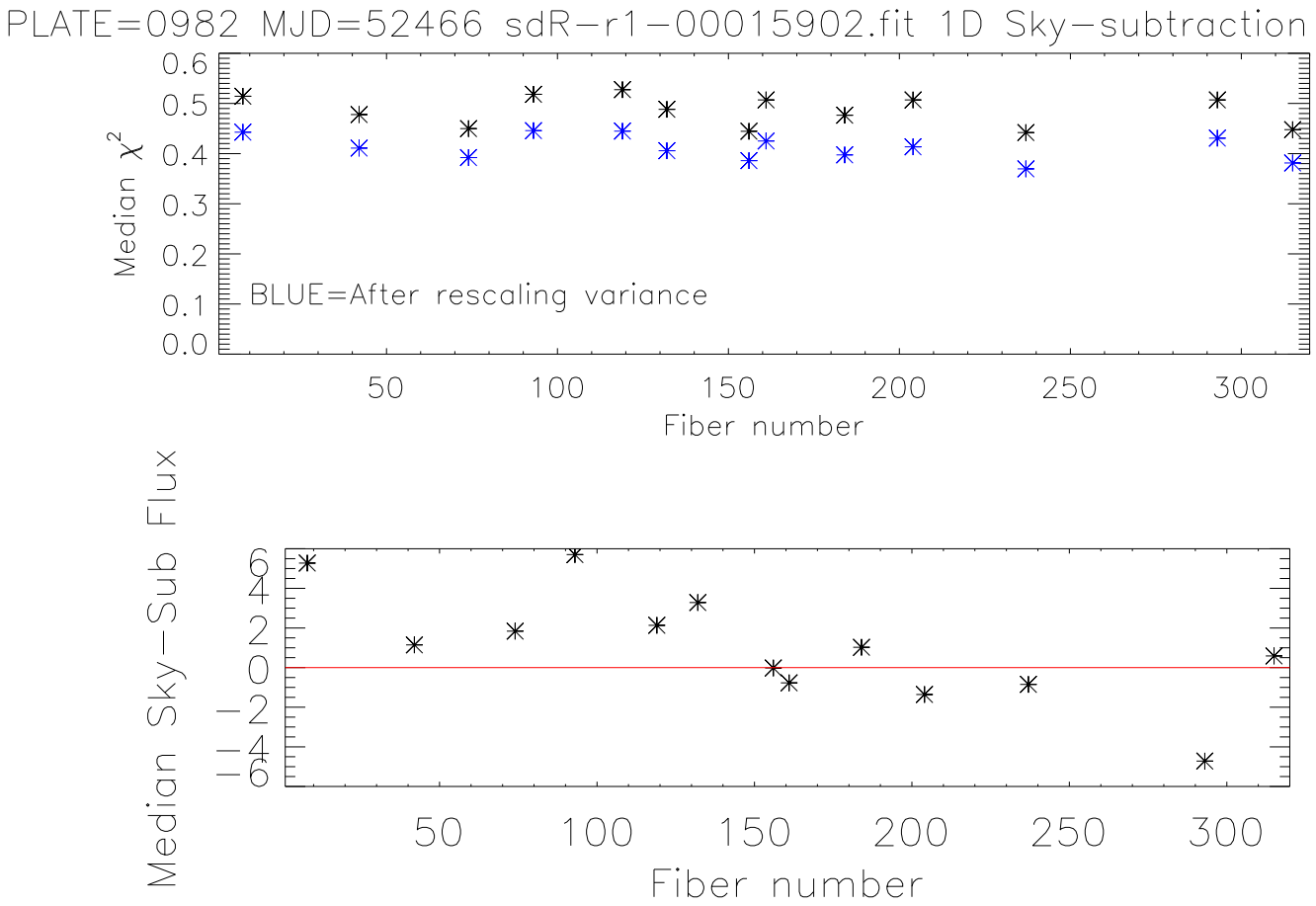

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

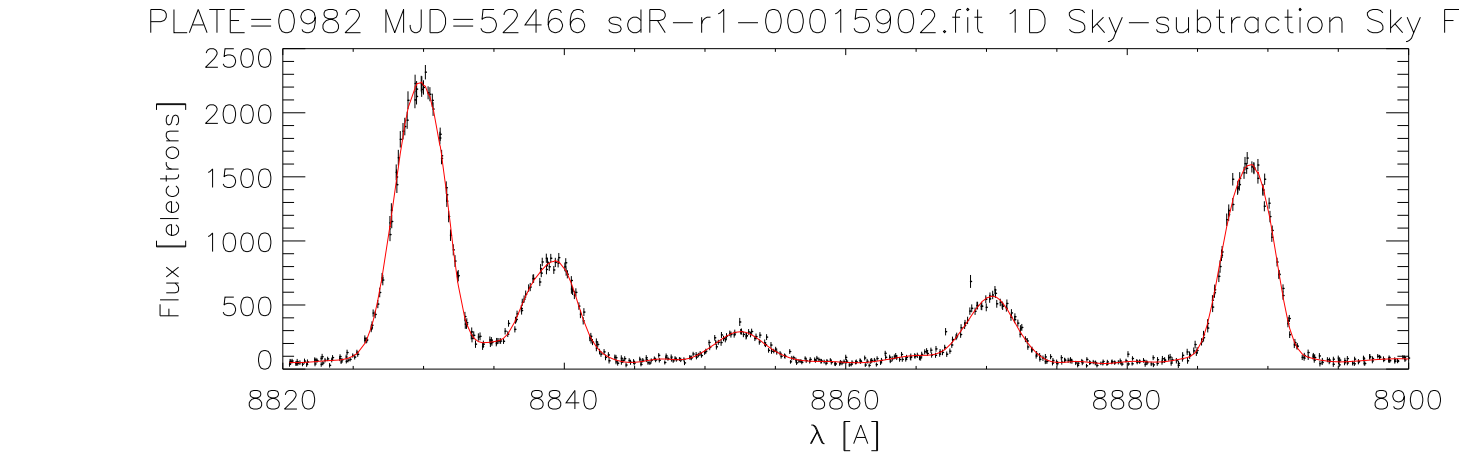

6300.3040
stdev 0.021
extra 0.04
6363.7760
stdev 0.030
extra 0.03
6553.6100
stdev 0.029
extra 0.02
6923.2100
stdev 0.061
extra 0.06
6949.0300
stdev 0.054
extra 0.10
7571.7500
stdev 0.046
extra 0.14
7794.1200
stdev 0.033
extra 0.02
7821.5100
stdev 0.027
extra 0.05
8399.1600
stdev 0.029
extra 0.09
8430.1700
stdev 0.025
extra 0.07
8885.8300
stdev 0.027
extra 0.09
8919.6100
stdev 0.033
extra 0.08
meas − pred, pix
mfhd2 16

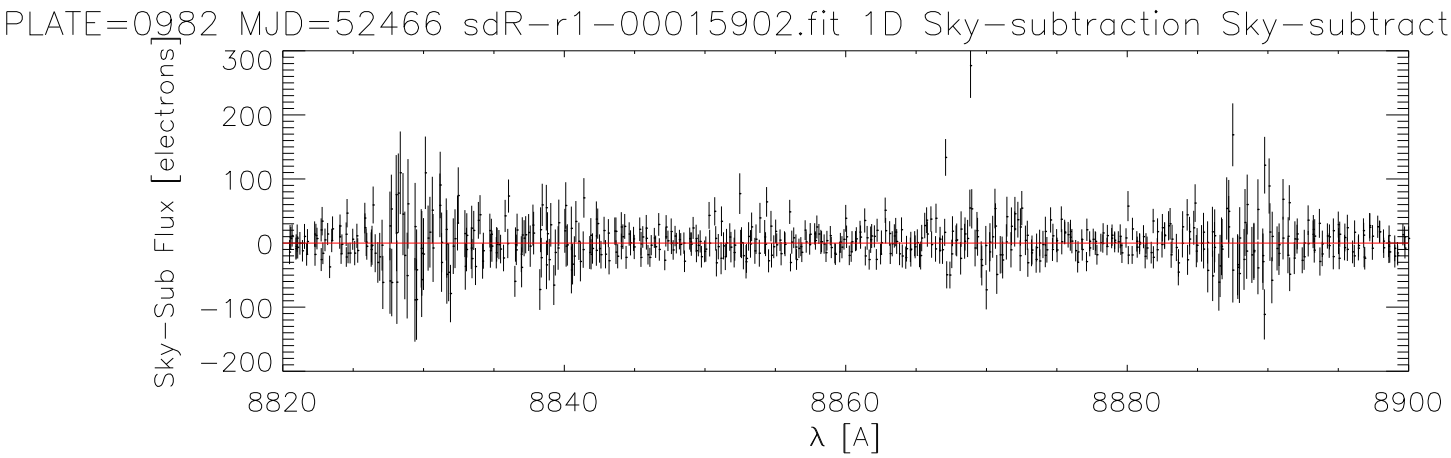

0.15
0.10
0.05
0.00
sky shift, pixels
5000
6000
7000
8000
9000
10000

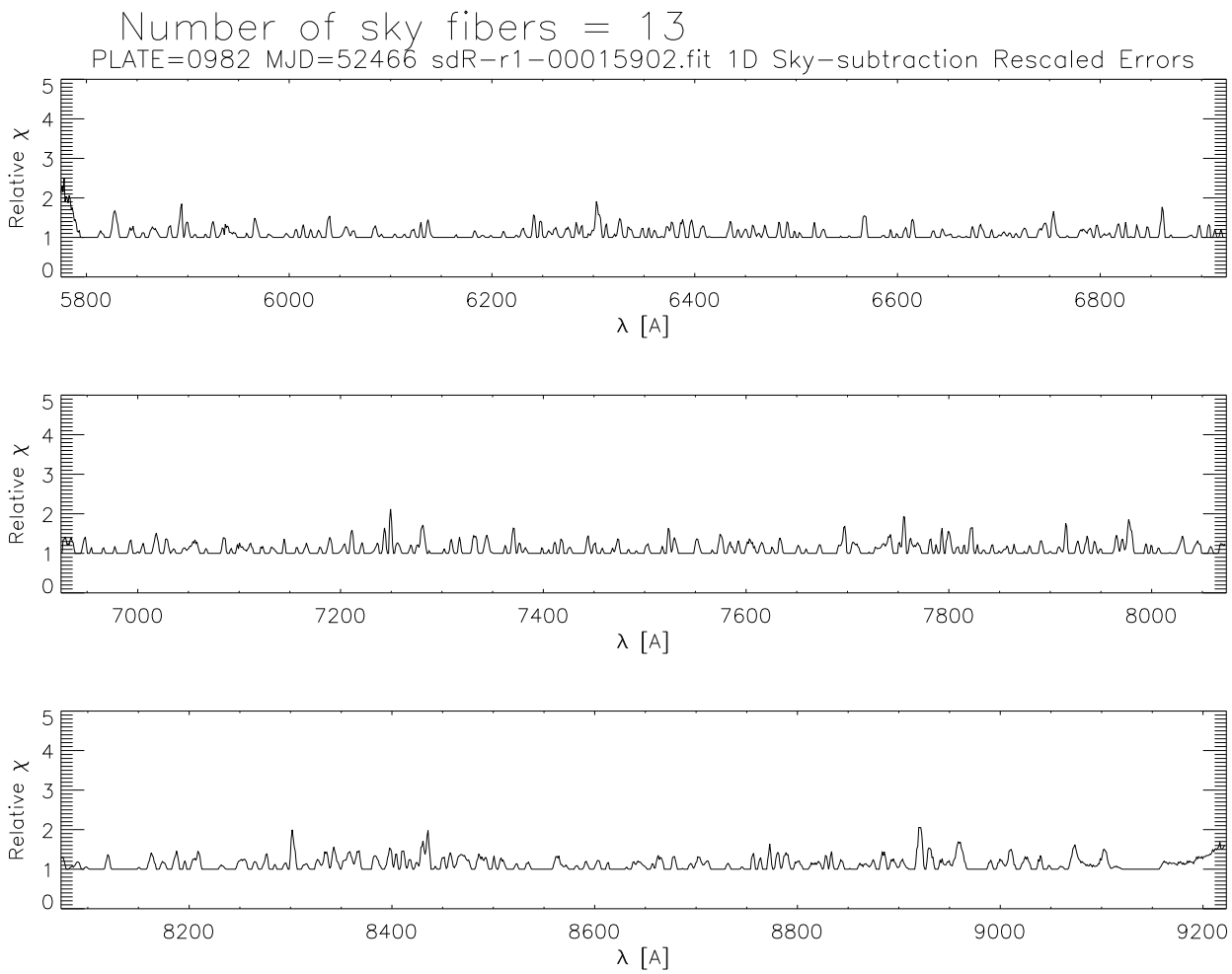

PLATE=0982 MJD=52466 Smooth superflat for sdR-r1-00015902.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

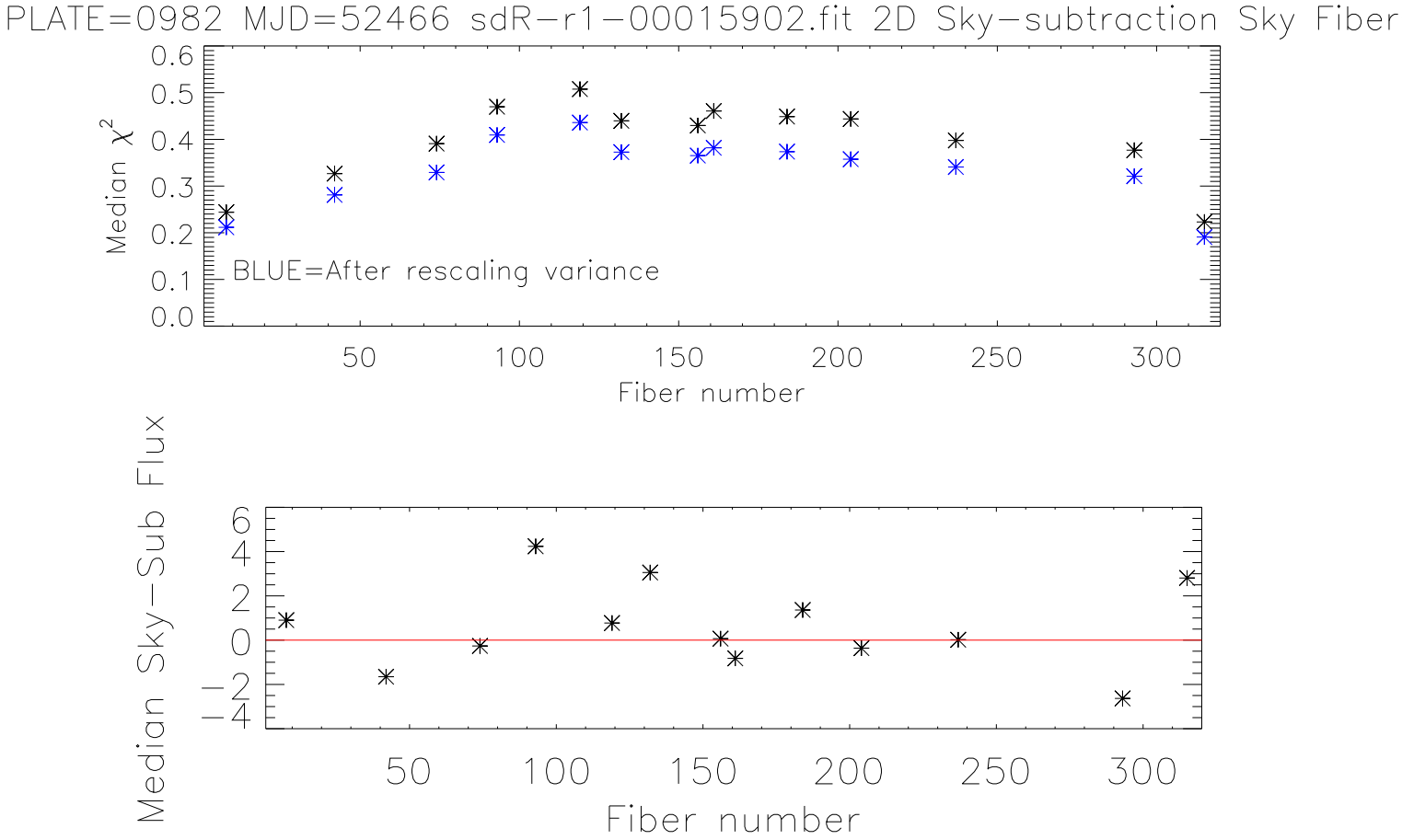
es= −0.0000

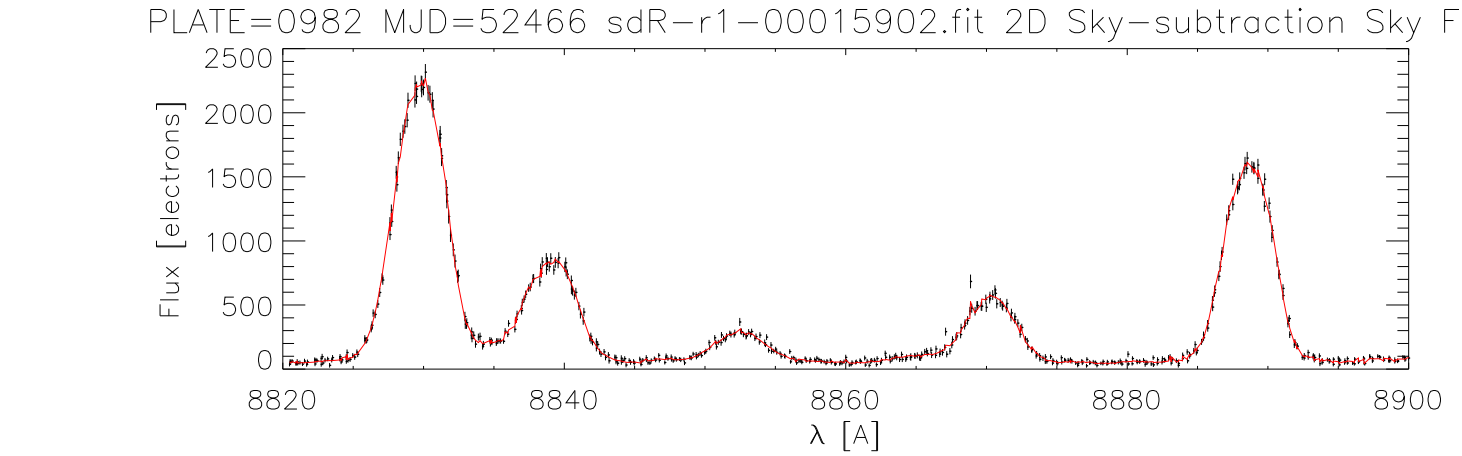

PLATE=0982 MJD=52466 sdR-r1-00015902.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

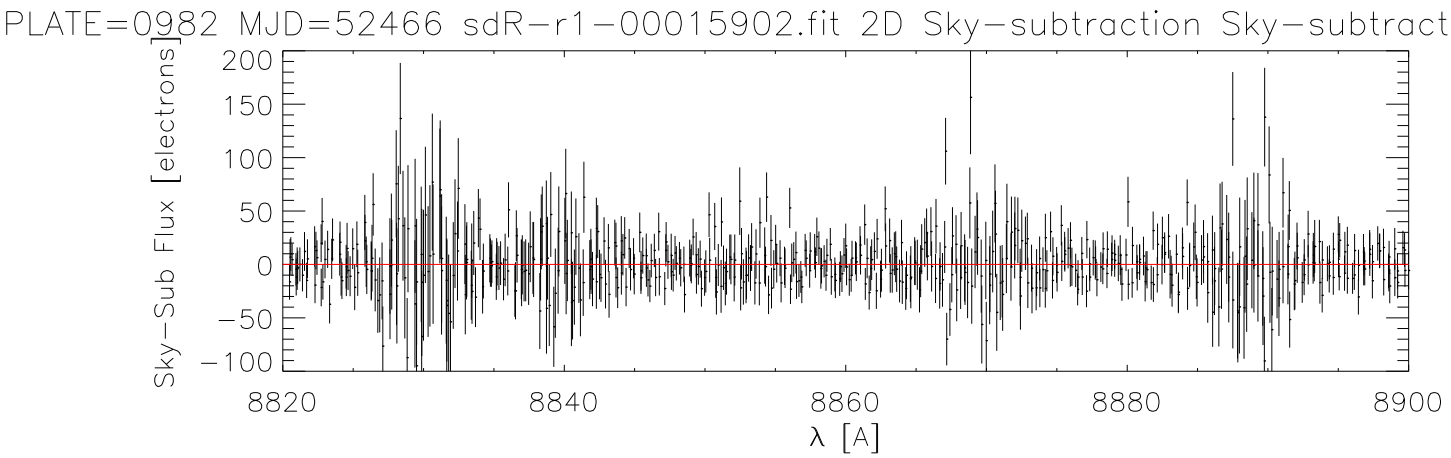

PLATE=0982 MJD=52466 sdR-r1-00015902.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

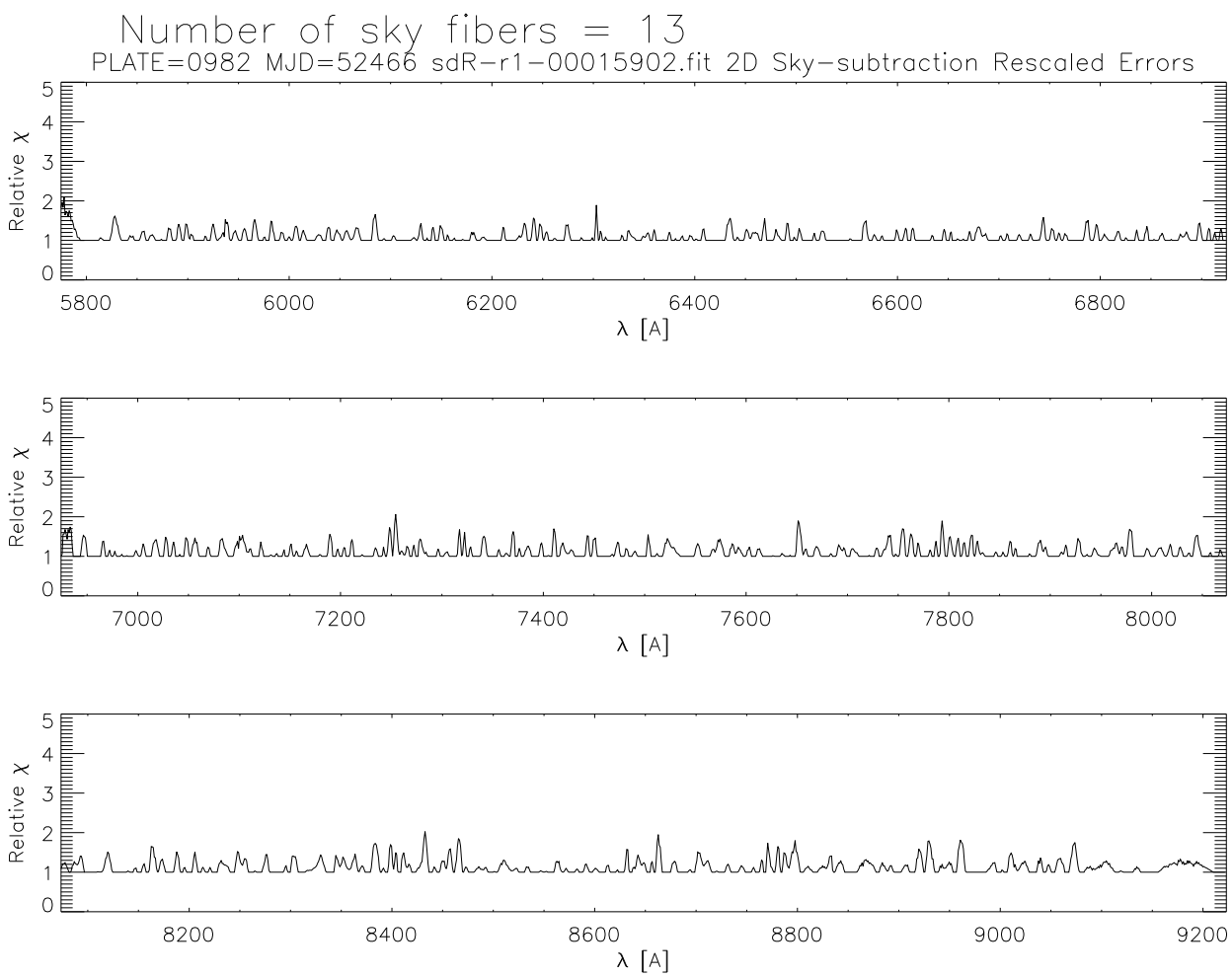

PLATE=0982 MJD=52466 sdR-r1-00015902.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

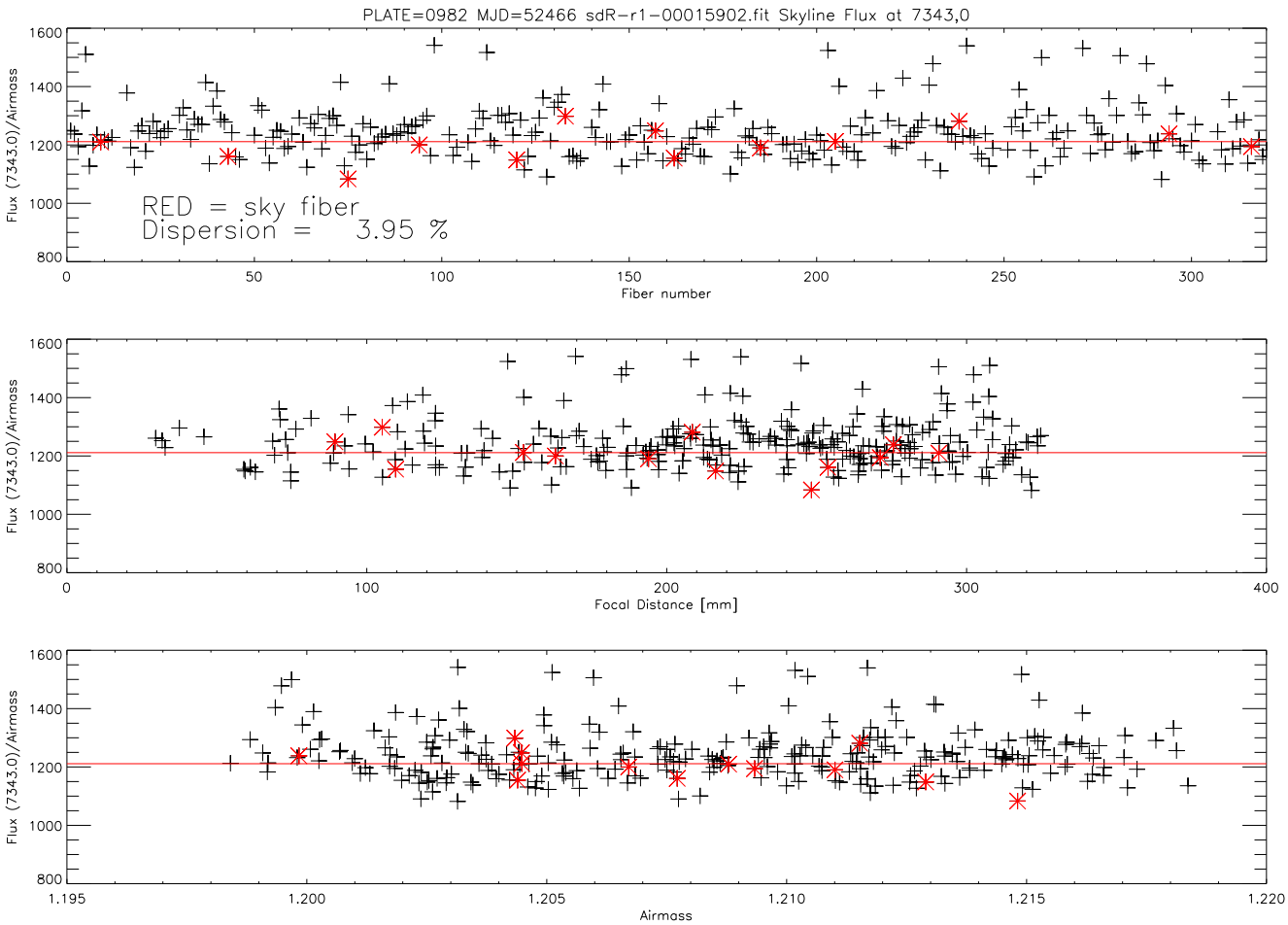

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015902.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

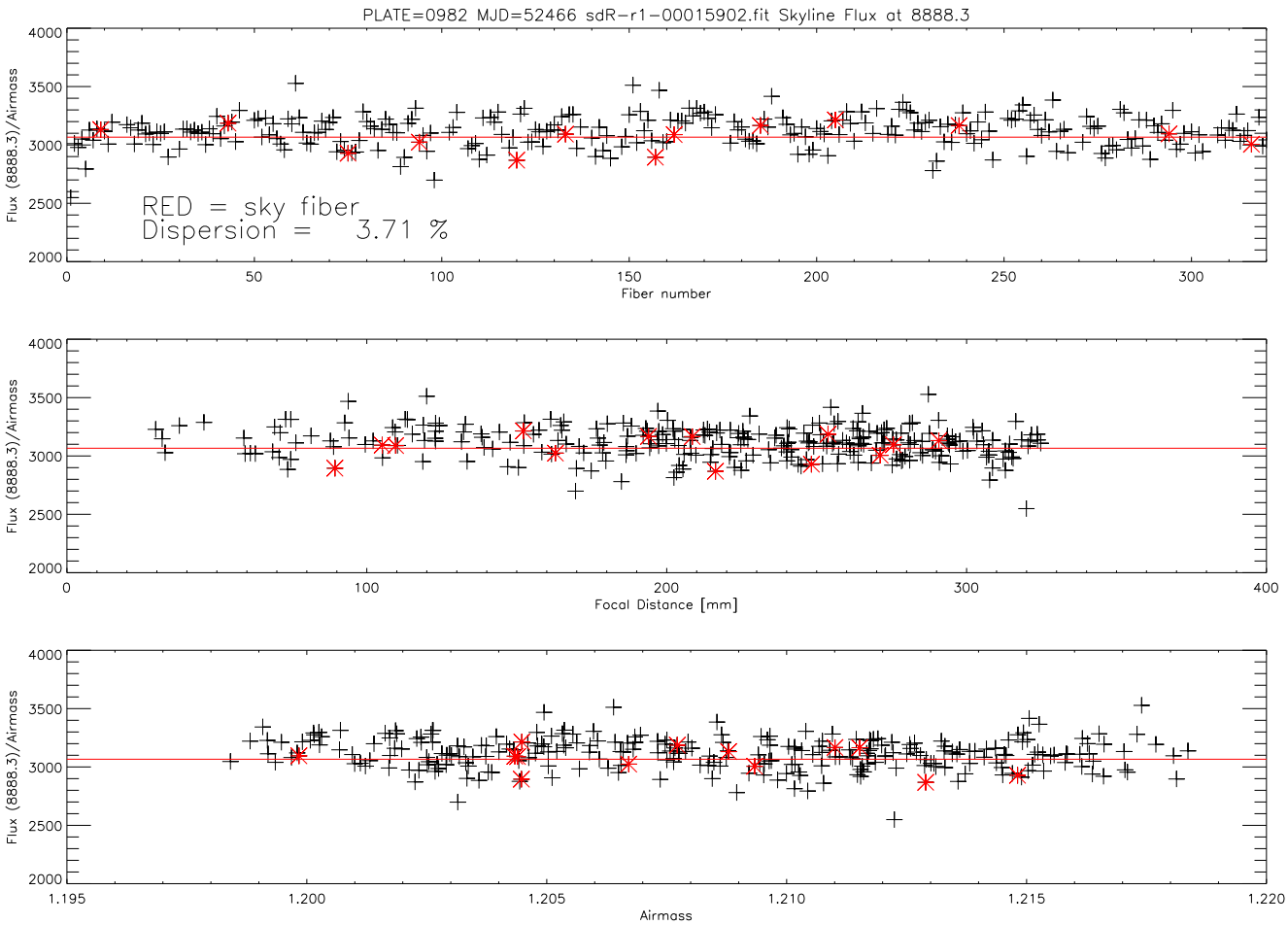

PLATE=0982 MJD=52466 sdR-r1-00015902.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

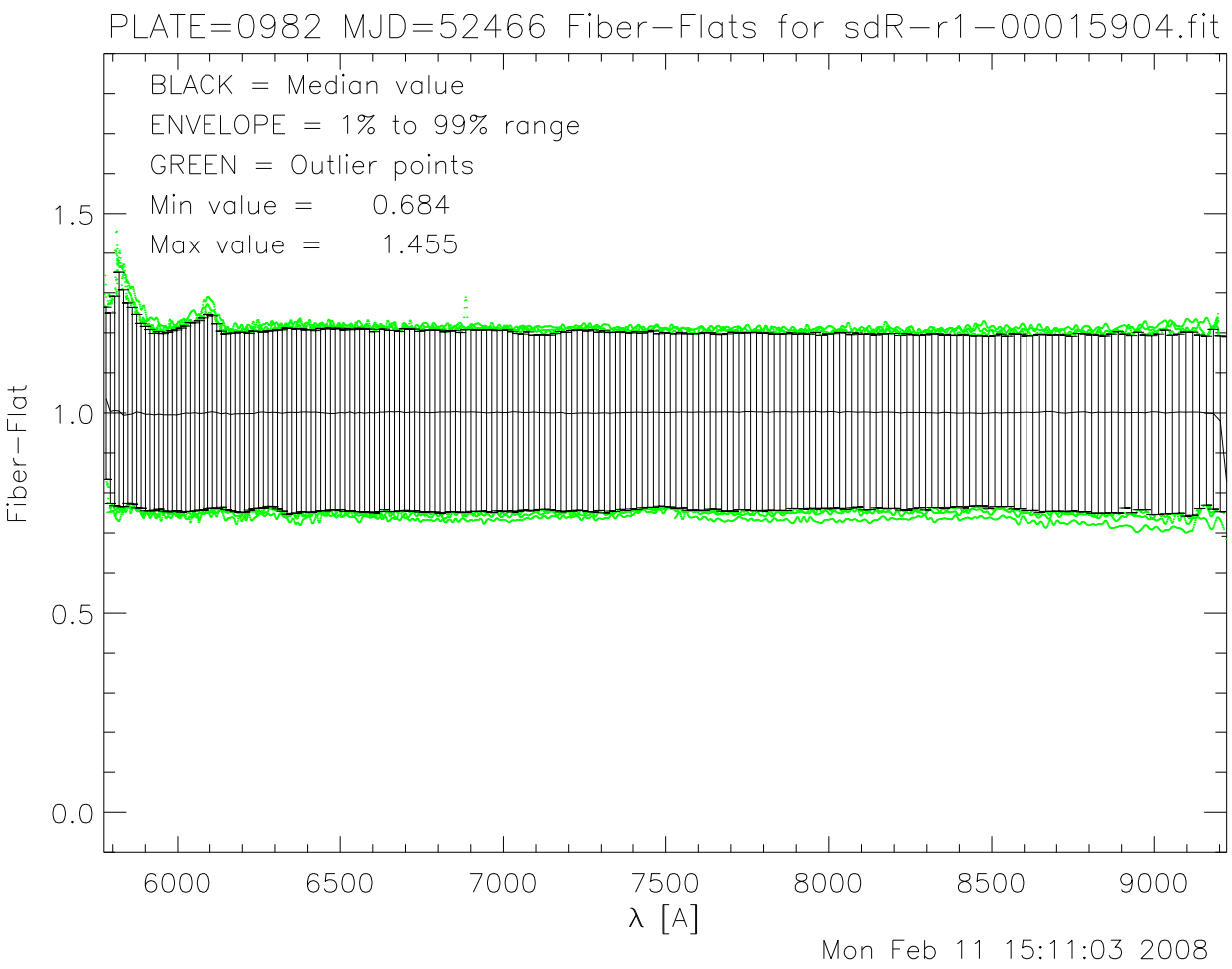

PLATE=0982 MJD=52466 sdR-r1-00015902.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

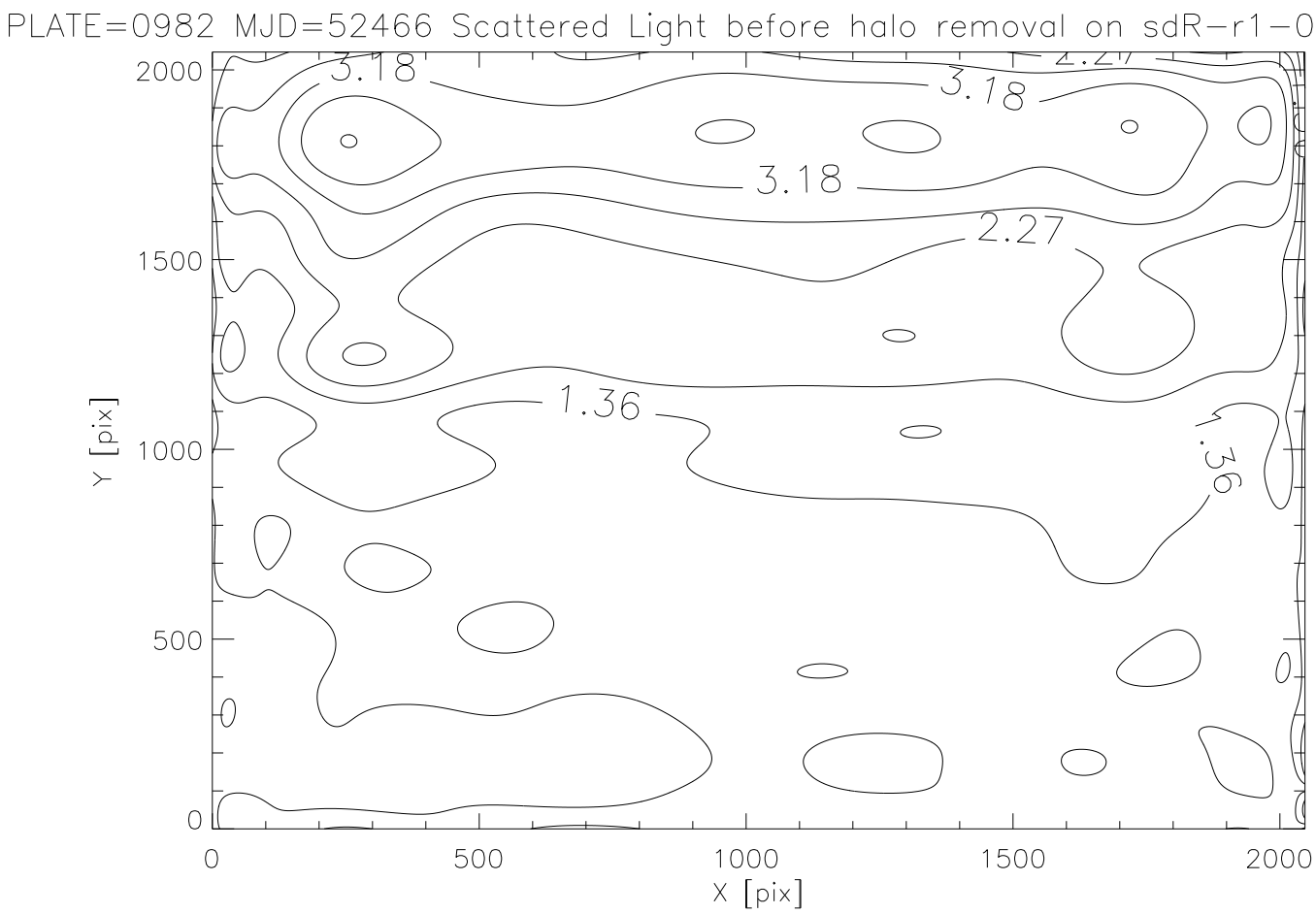

PLATE=0982 MJD=52466 sdR-r1-00015902.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

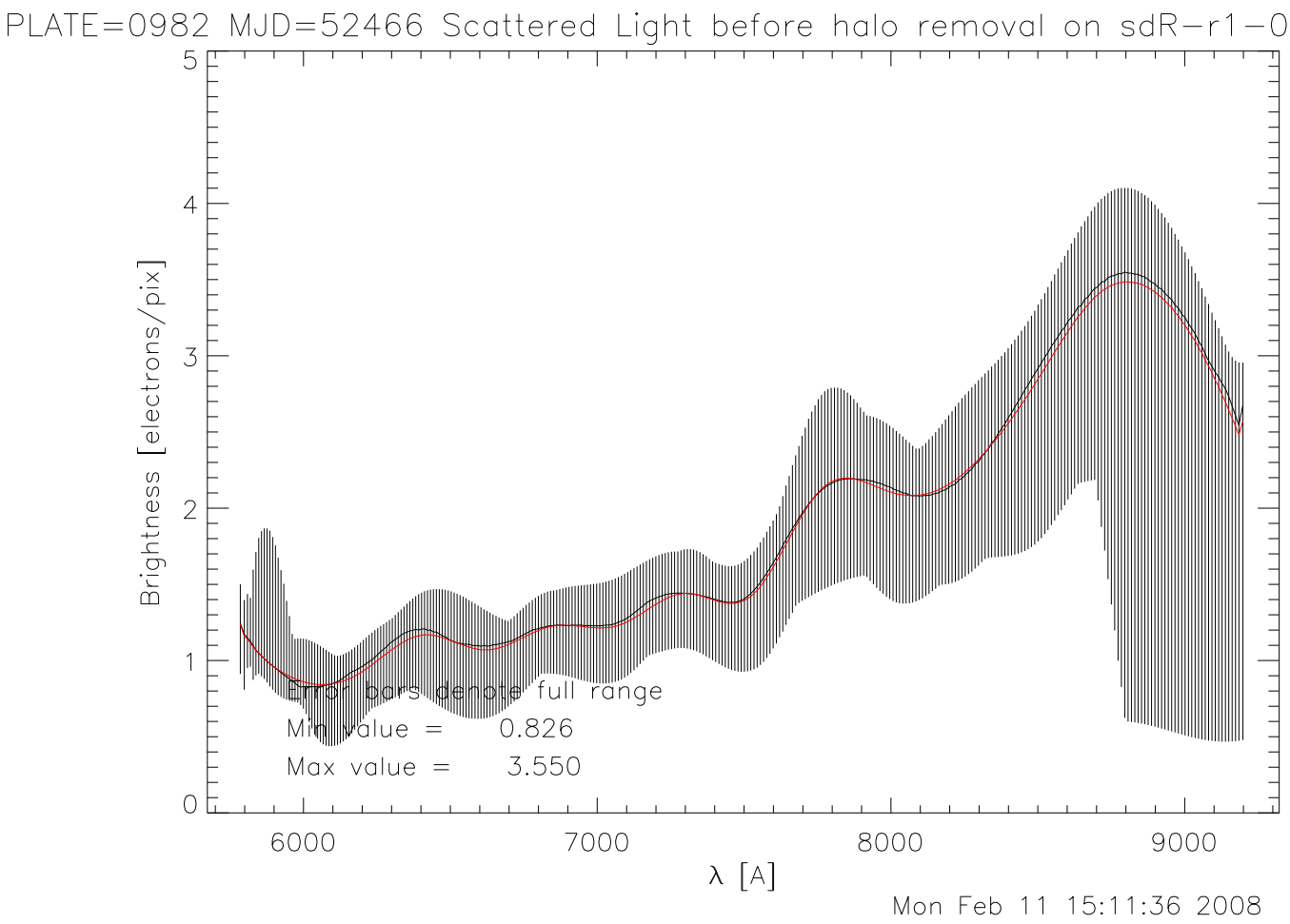

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015902.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

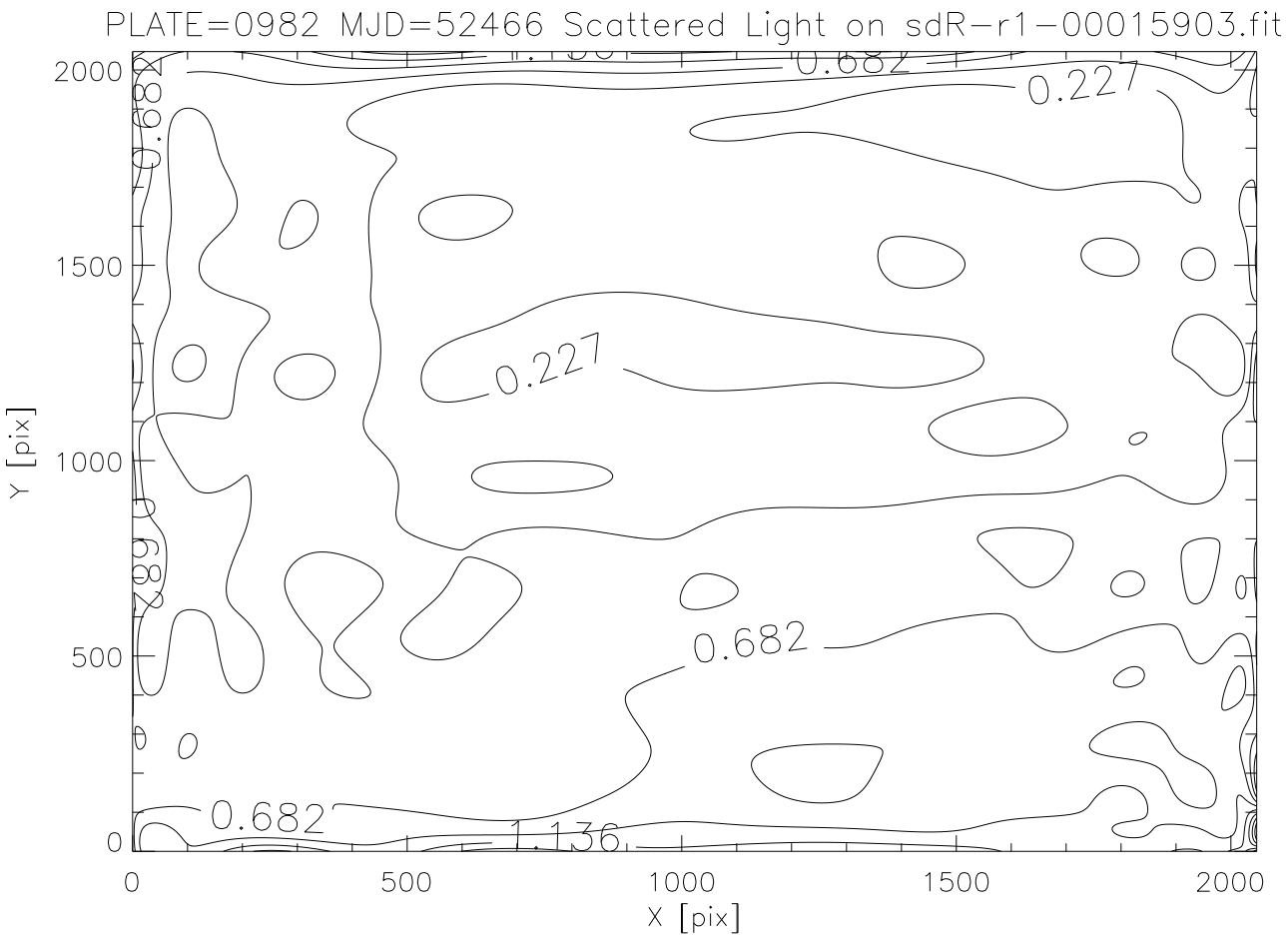

PLATE=0982 MJD=52466 sdR-r1-00015902.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.95 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

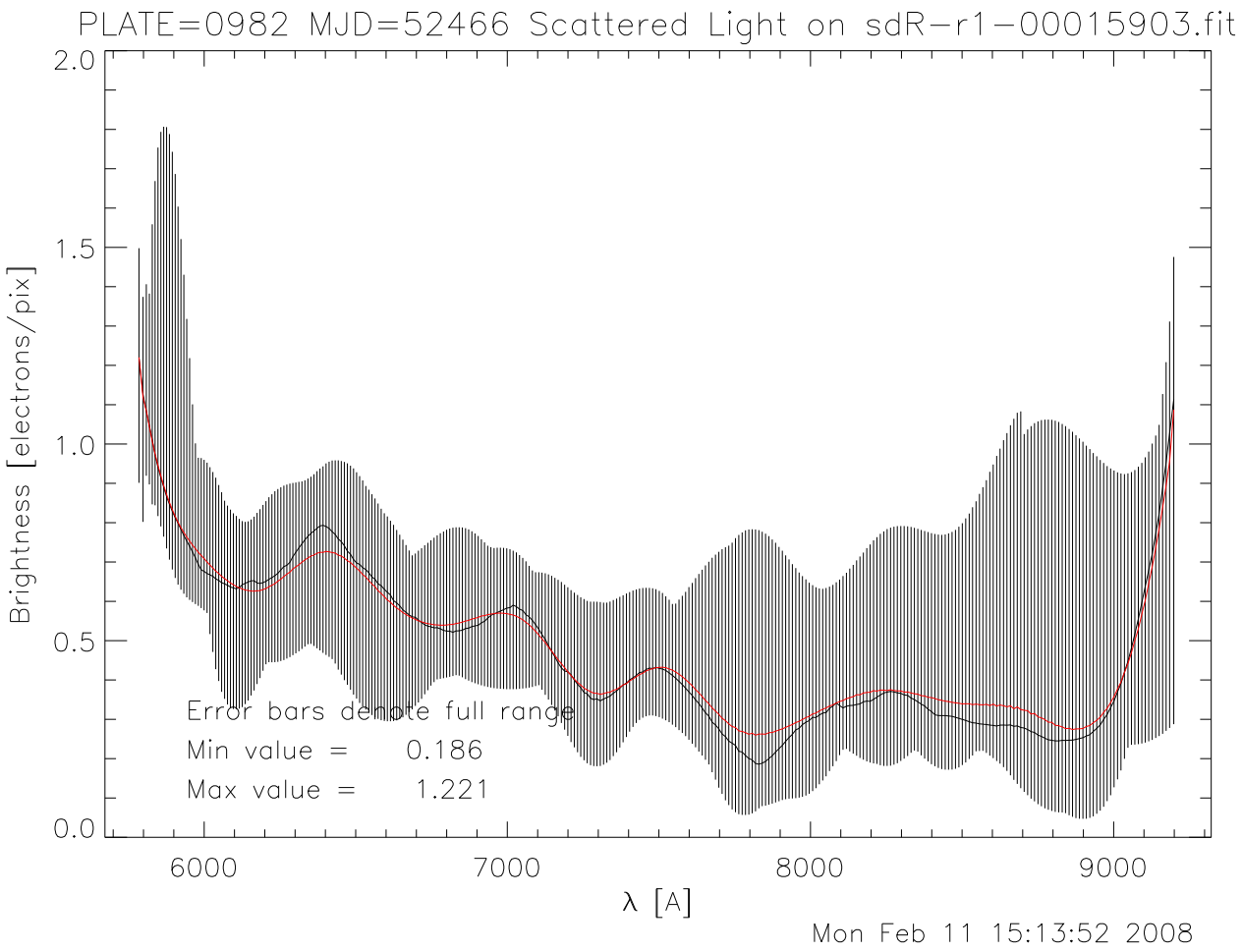

PLATE=0982 MJD=52466 sdR-r1-00015902.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.71 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

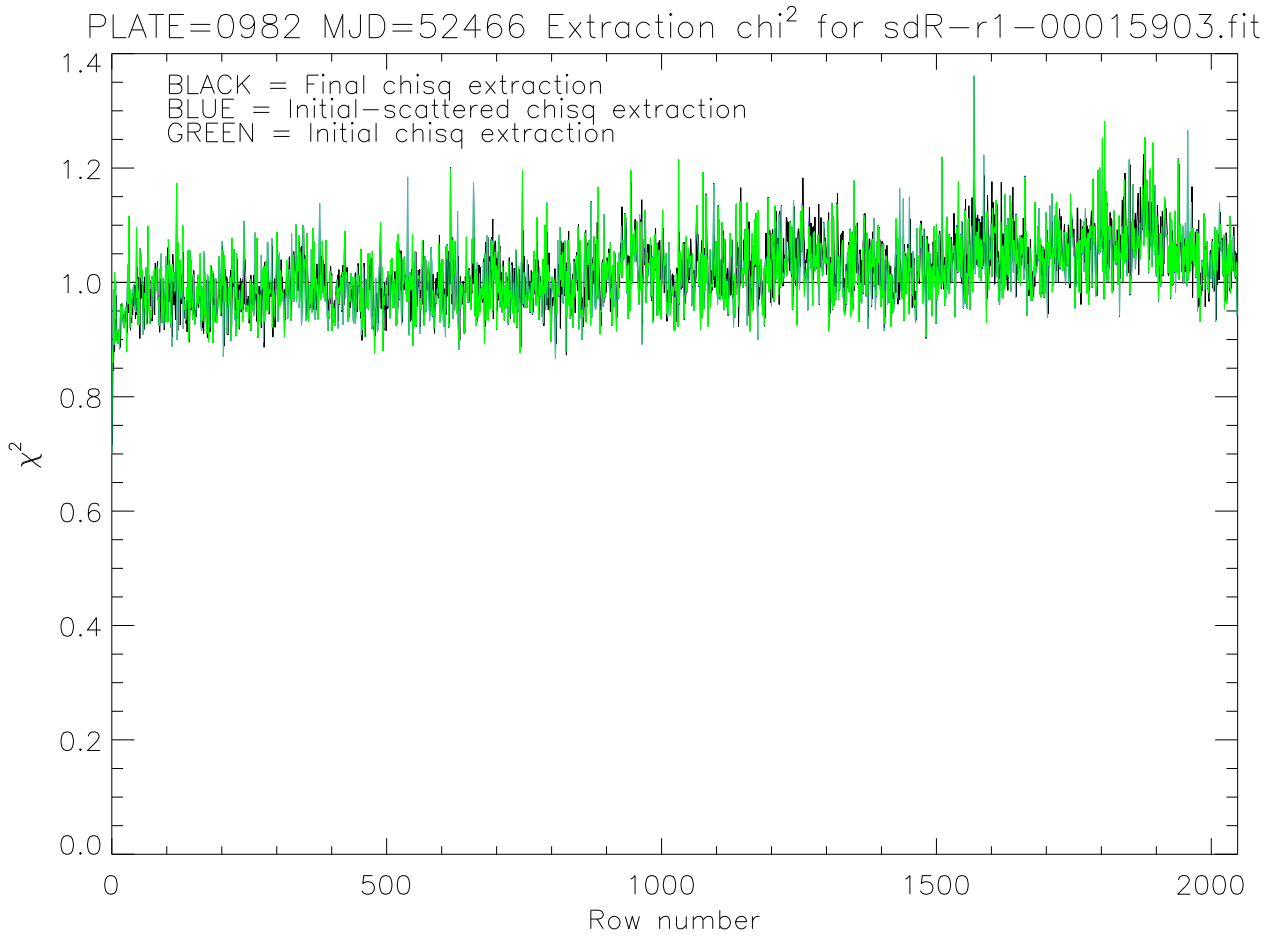

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r1−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.684
Max value = 1.455
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 15:11:03 2008

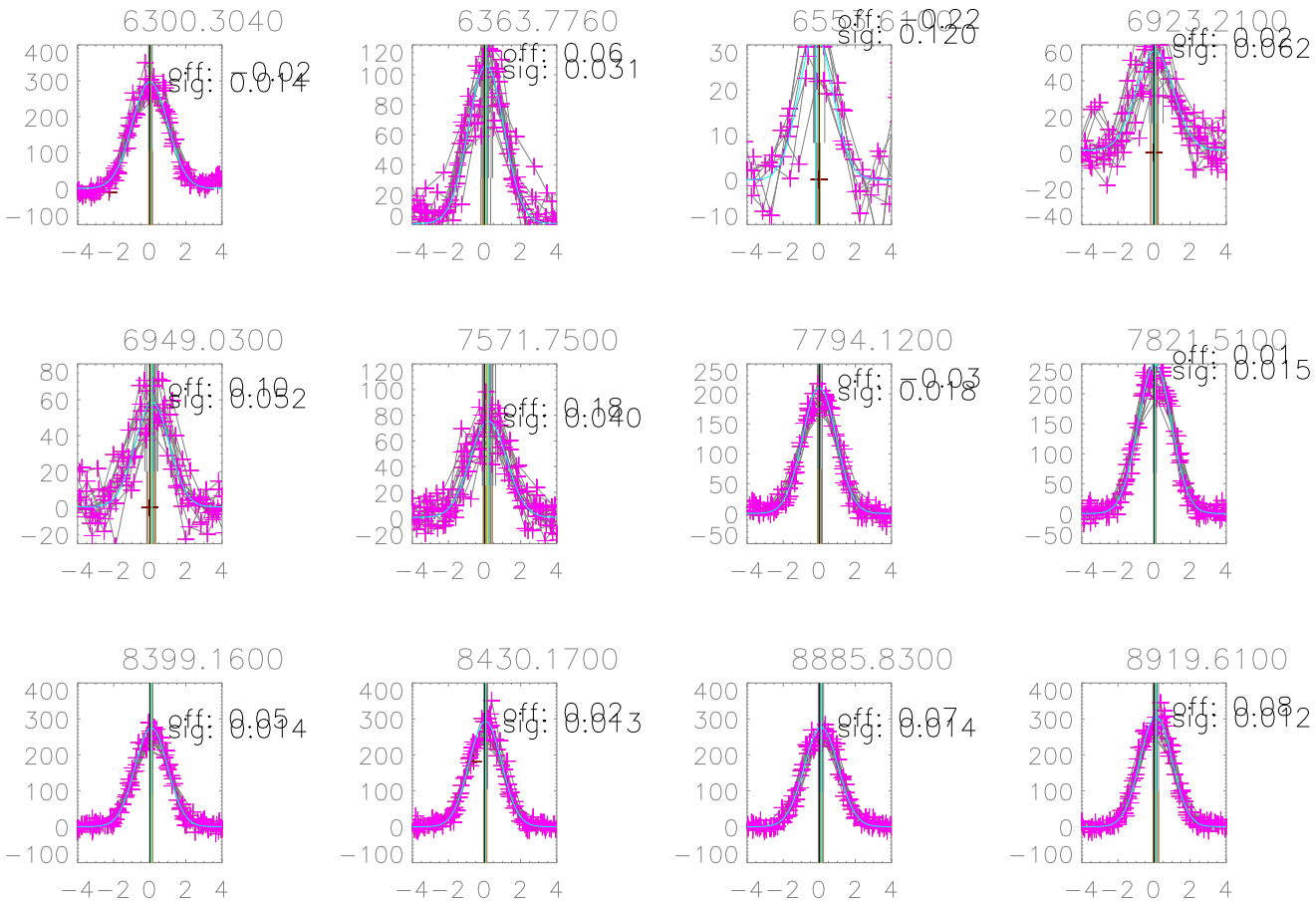

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015903.fi
3.18
3.18
3.18
2.27
1.36
1.36
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

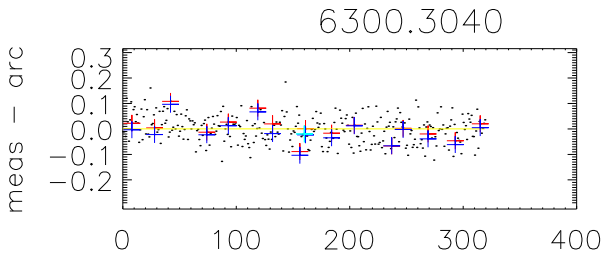

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r1-00015903.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.826
Max value = 3.550
Mon Feb 11 15:11:36 2008

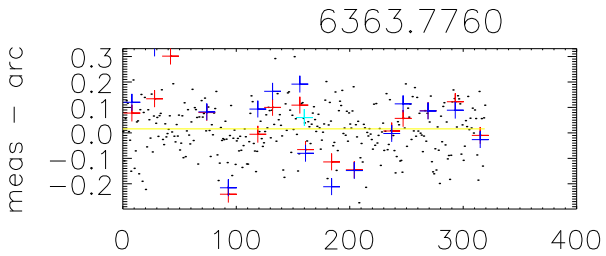

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015903.fit
0.682
0.227
0.227
0.682
0.682
1.136
0.682
0.227
0.682
0
0
0
500
1000
1500
2000
Y [pix]
X [pix]

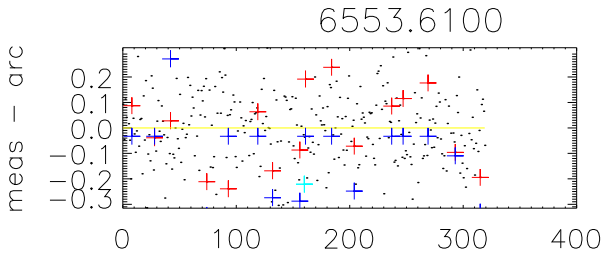

PLATE=0982 MJD=52466 Scattered Light on sdR-r1-00015903.fit
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 0.186
Max value = 1.221
Mon Feb 11 15:13:52 2008

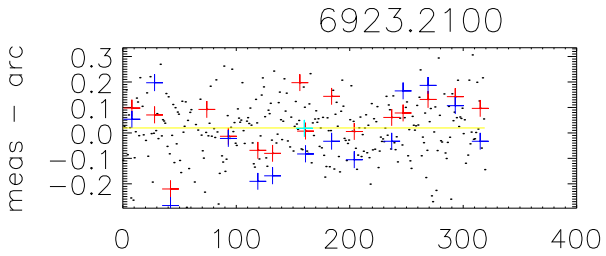

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r1−00015903.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
500
1000
1500
2000

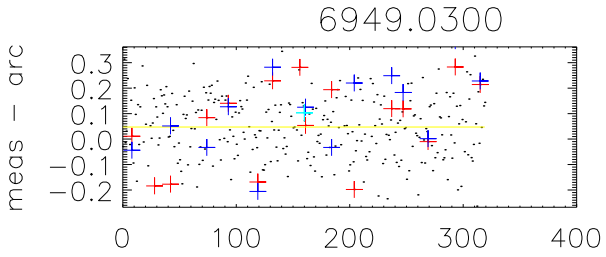

6300.3040
off: −0.02
sig: 0.014
6363.7760
off: 0.06
sig: 0.031
6553.6400
off: 0.22
sig: 0.120
6923.2100
off: 0.02
sig: 0.062
6949.0300
off: 0.10
sig: 0.052
7571.7500
off: 0.18
sig: 0.040
7794.1200
off: −0.03
sig: 0.018
7821.5100
off: 0.01
sig: 0.015
8399.1600
off: 0.05
sig: 0.014
8430.1700
off: 0.02
sig: 0.013
8885.8300
off: 0.07
sig: 0.014
8919.6100
off: 0.08
sig: 0.012

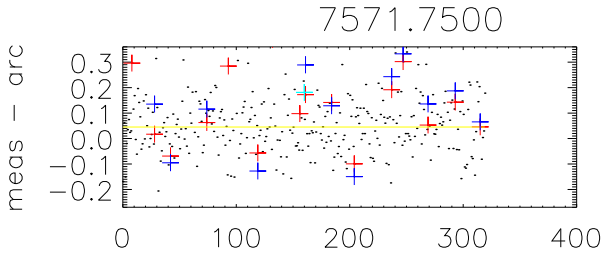

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

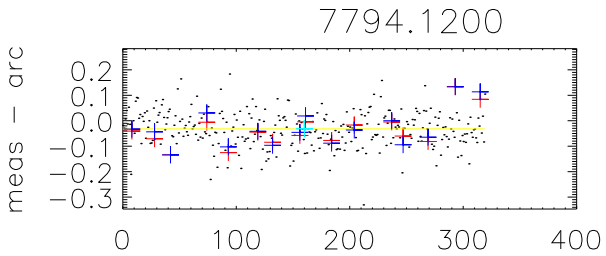

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

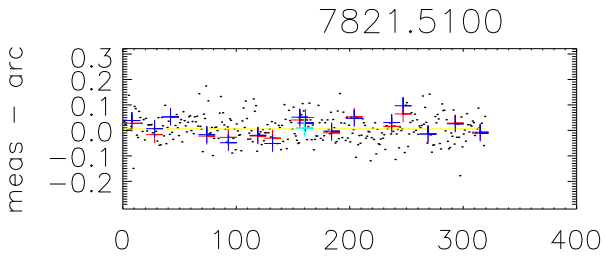

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

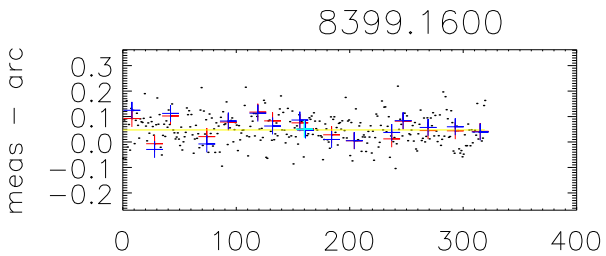

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

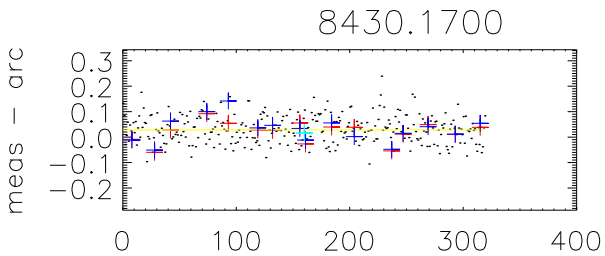

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

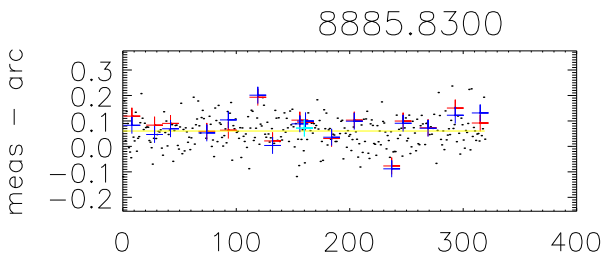

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

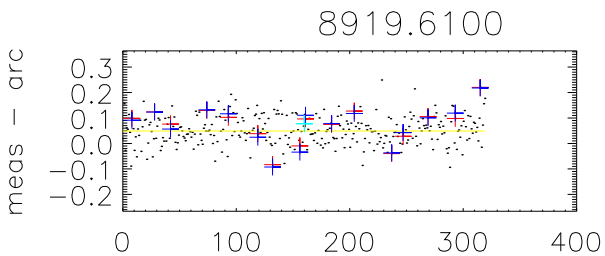

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

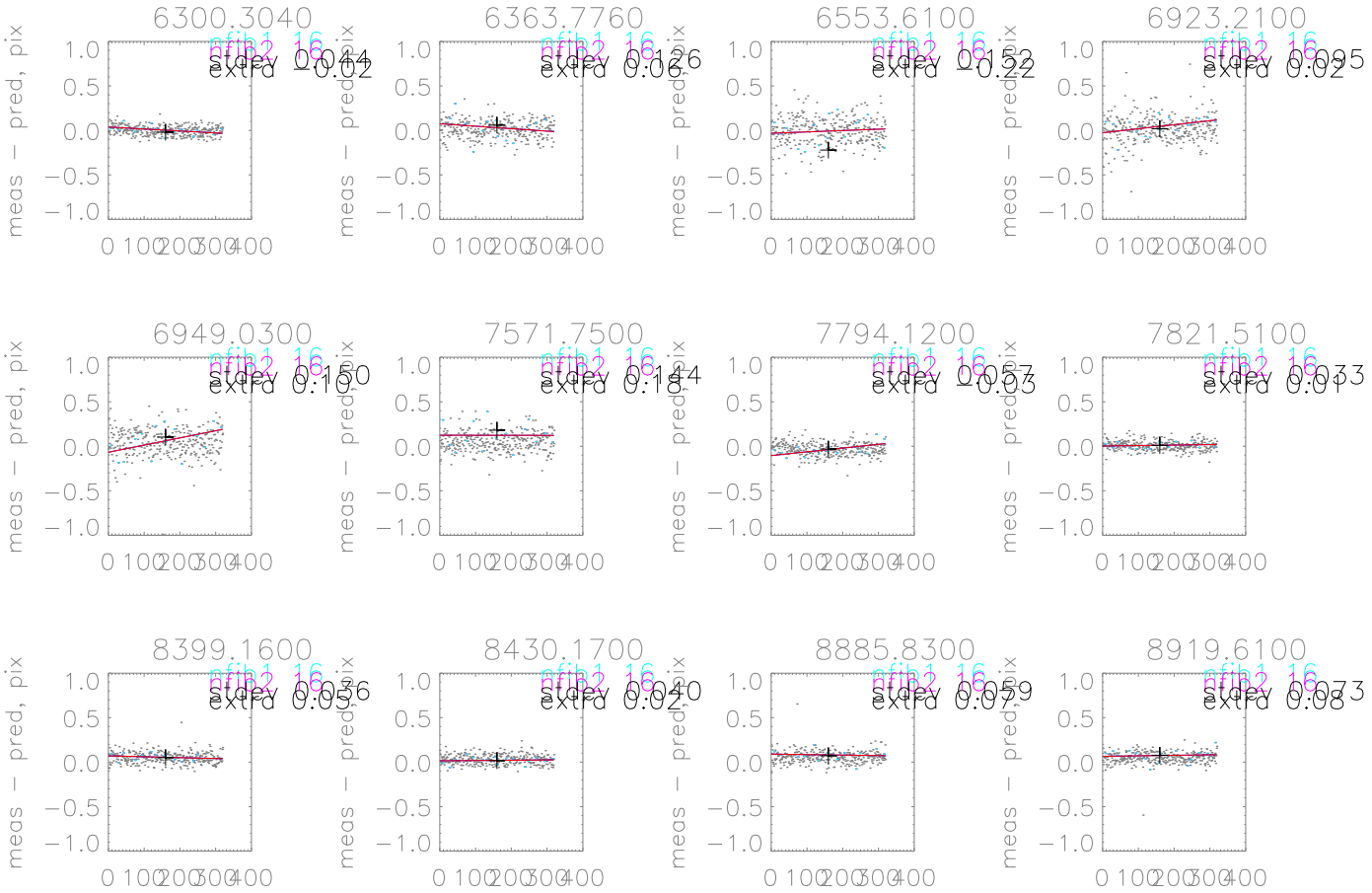

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

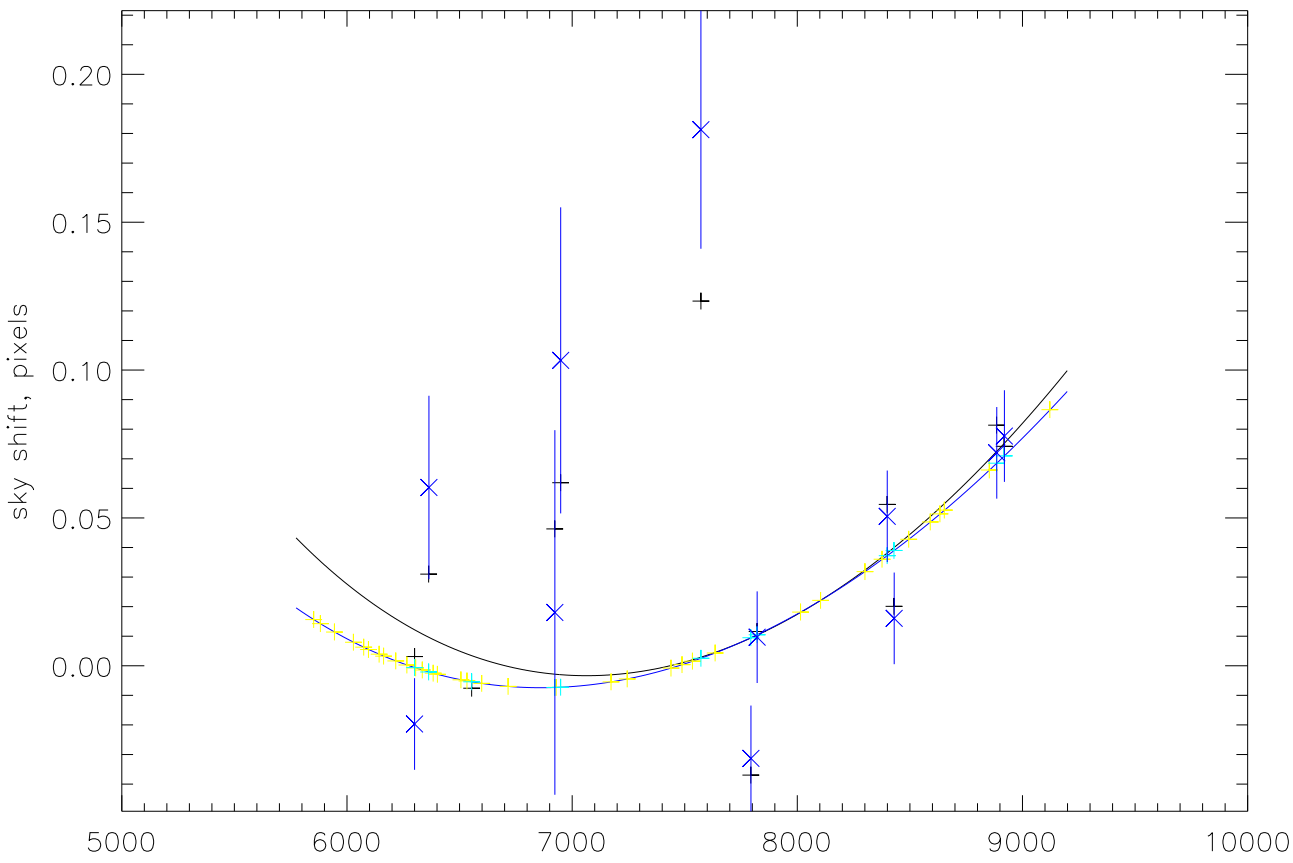

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

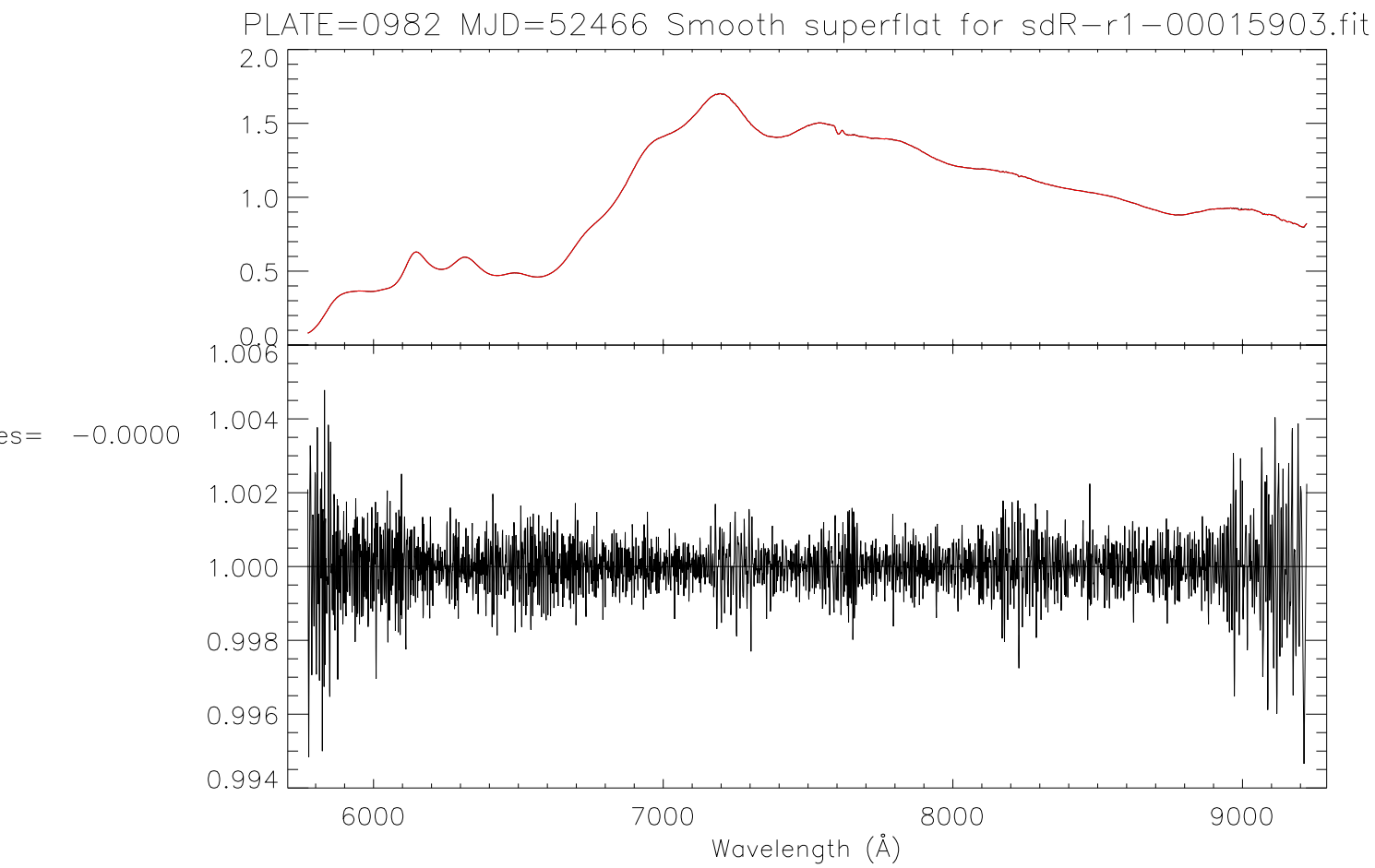

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

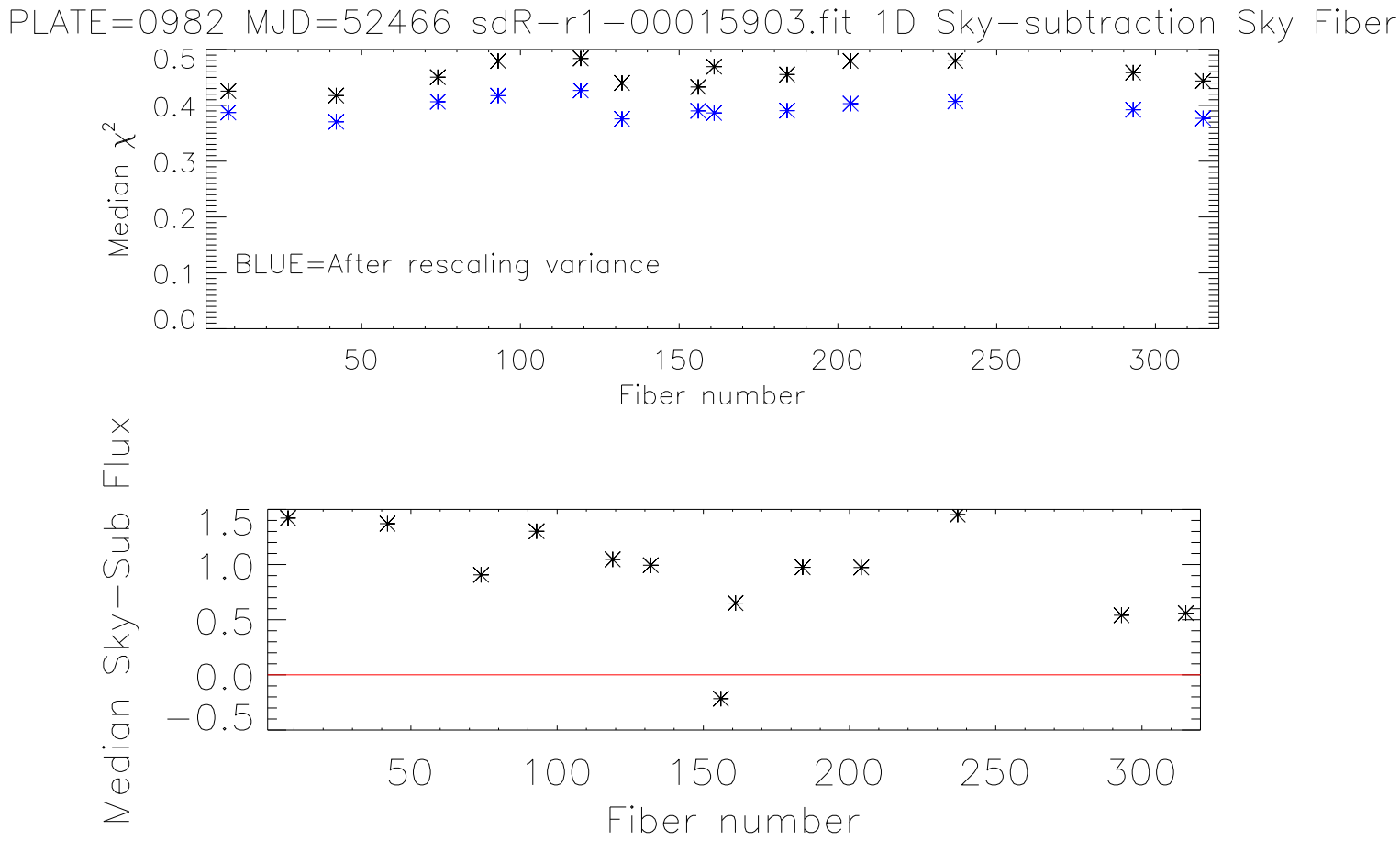

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

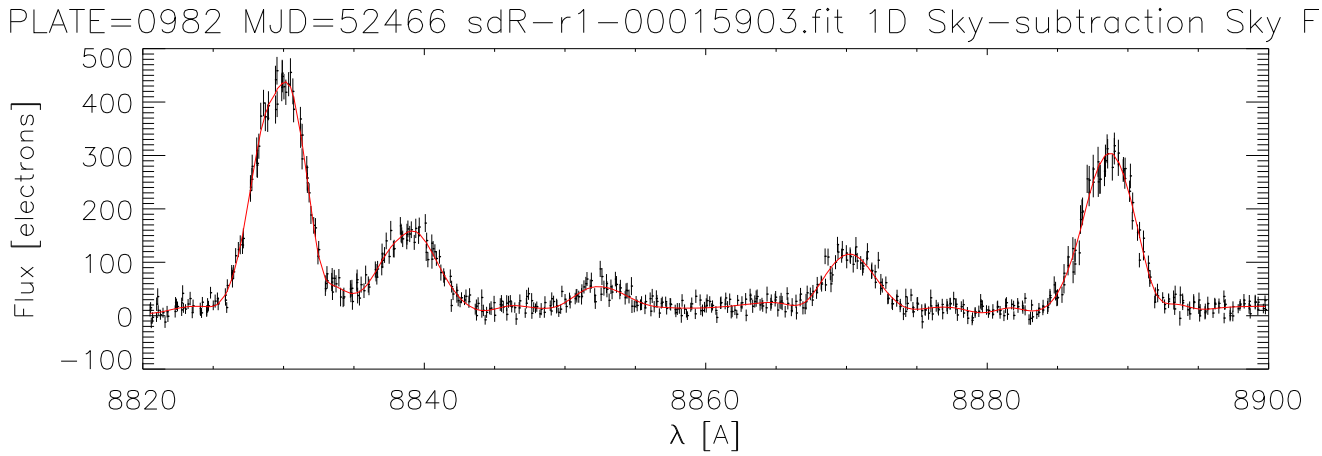

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

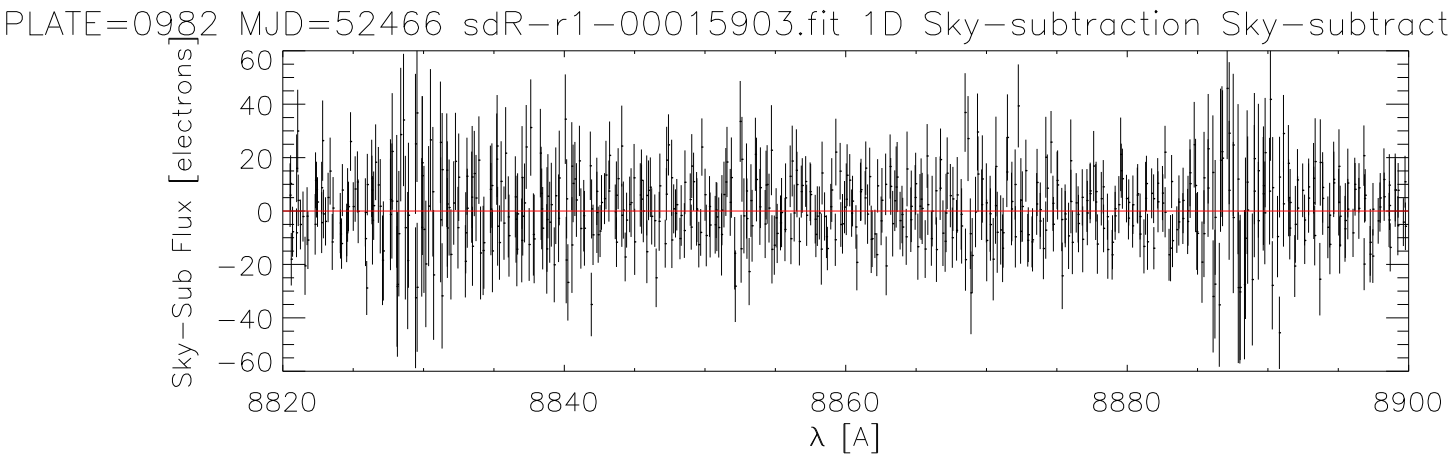

6300.3040
stdev 0.044
extra −0.02
6363.7760
stdev 0.126
extra 0.06
6553.6100
stdev 0.152
extra −0.22
6923.2100
stdev 0.095
extra 0.02
6949.0300
stdev 0.150
extra 0.10
7571.7500
stdev 0.144
extra 0.18
7794.1200
stdev 0.057
extra −0.03
7821.5100
stdev 0.033
extra 0.01
8399.1600
stdev 0.036
extra 0.05
8430.1700
stdev 0.040
extra 0.02
8885.8300
stdev 0.059
extra 0.07
8919.6100
stdev 0.073
extra 0.08
meas − pred, pix
mfb32 16

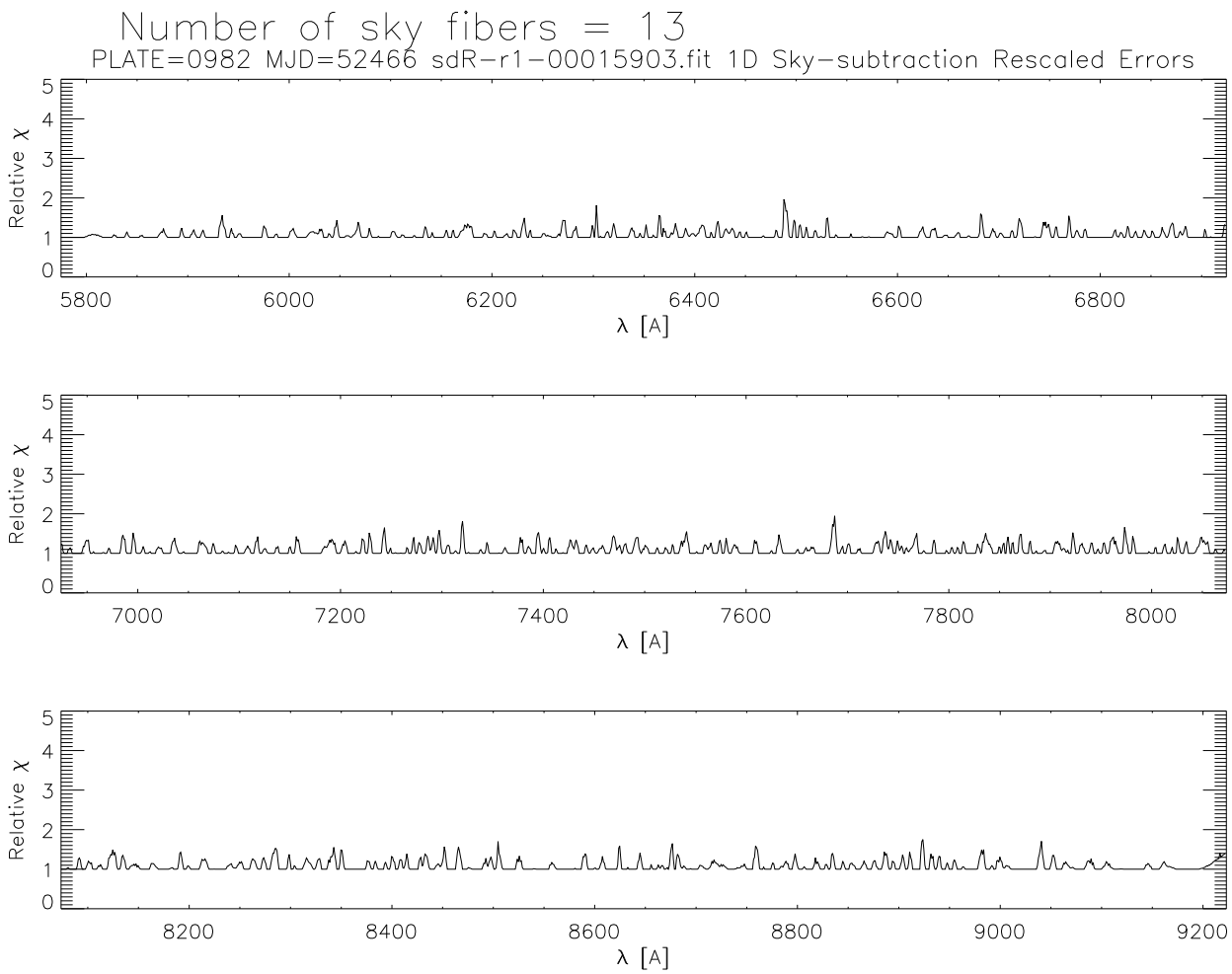

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
5000
6000
7000
8000
9000
10000

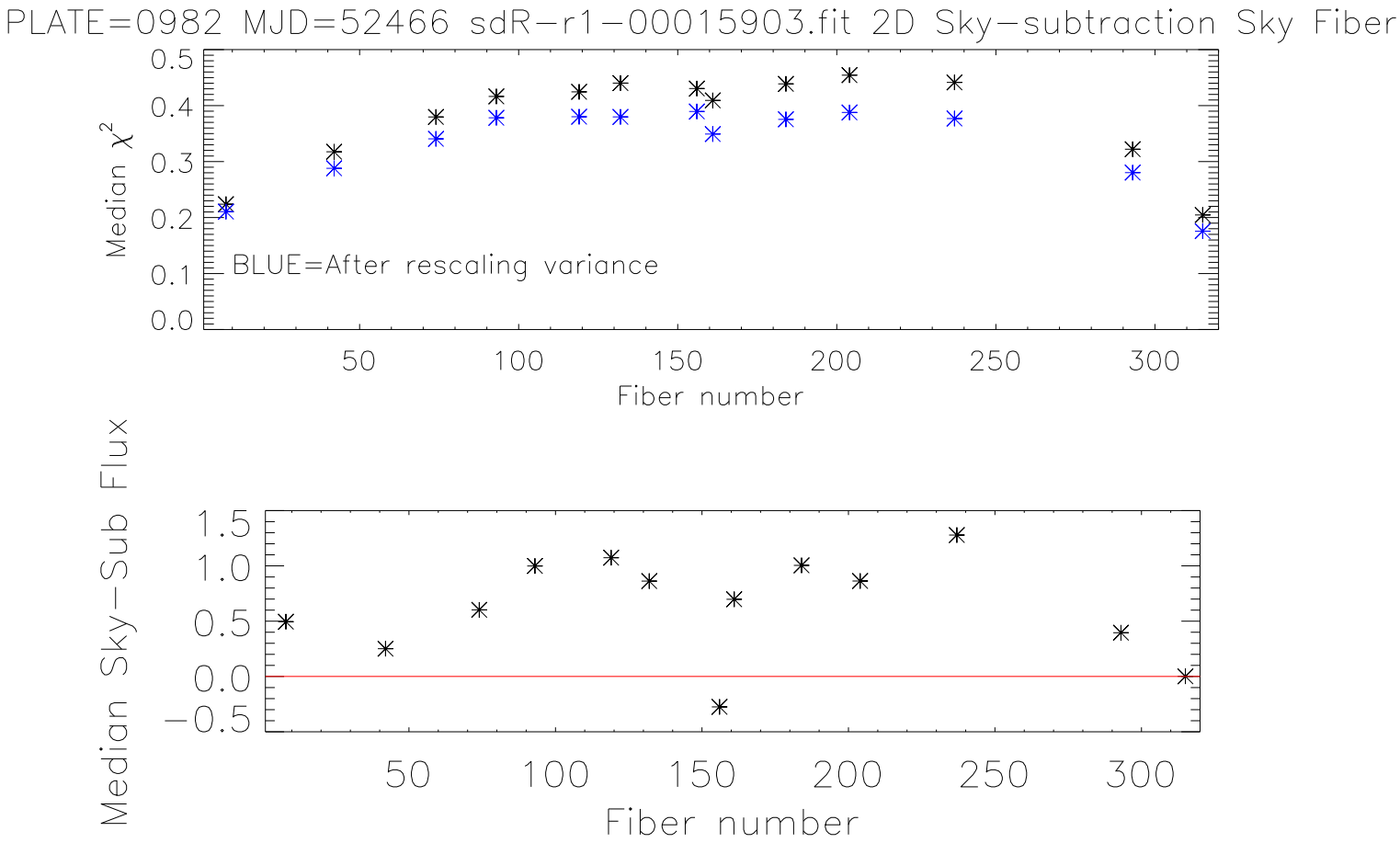

PLATE=0982 MJD=52466 Smooth superflat for sdR-r1-00015903.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

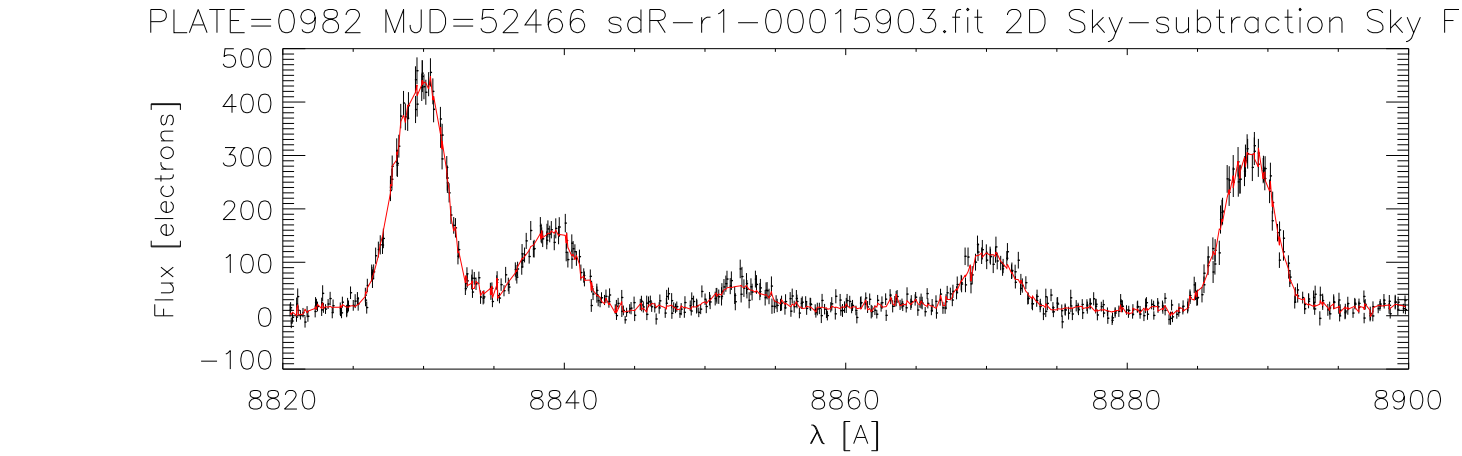

PLATE=0982 MJD=52466 sdR-r1-00015903.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

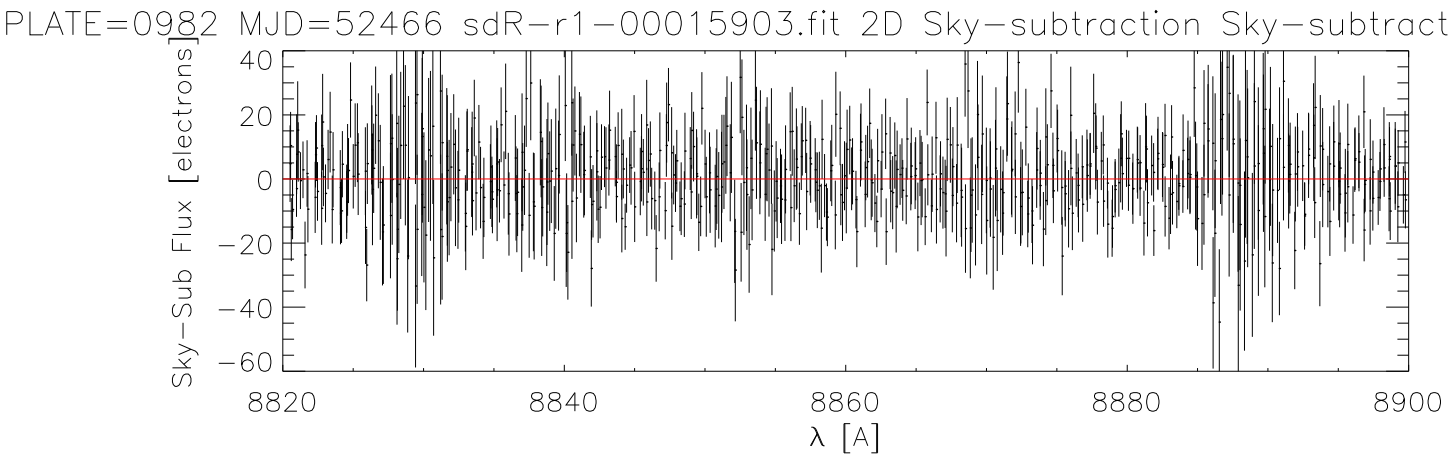

PLATE=0982 MJD=52466 sdR-r1-00015903.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
500
400
300
200
100
0
−100
8820
8840
8860
8880
8900
λ [A]

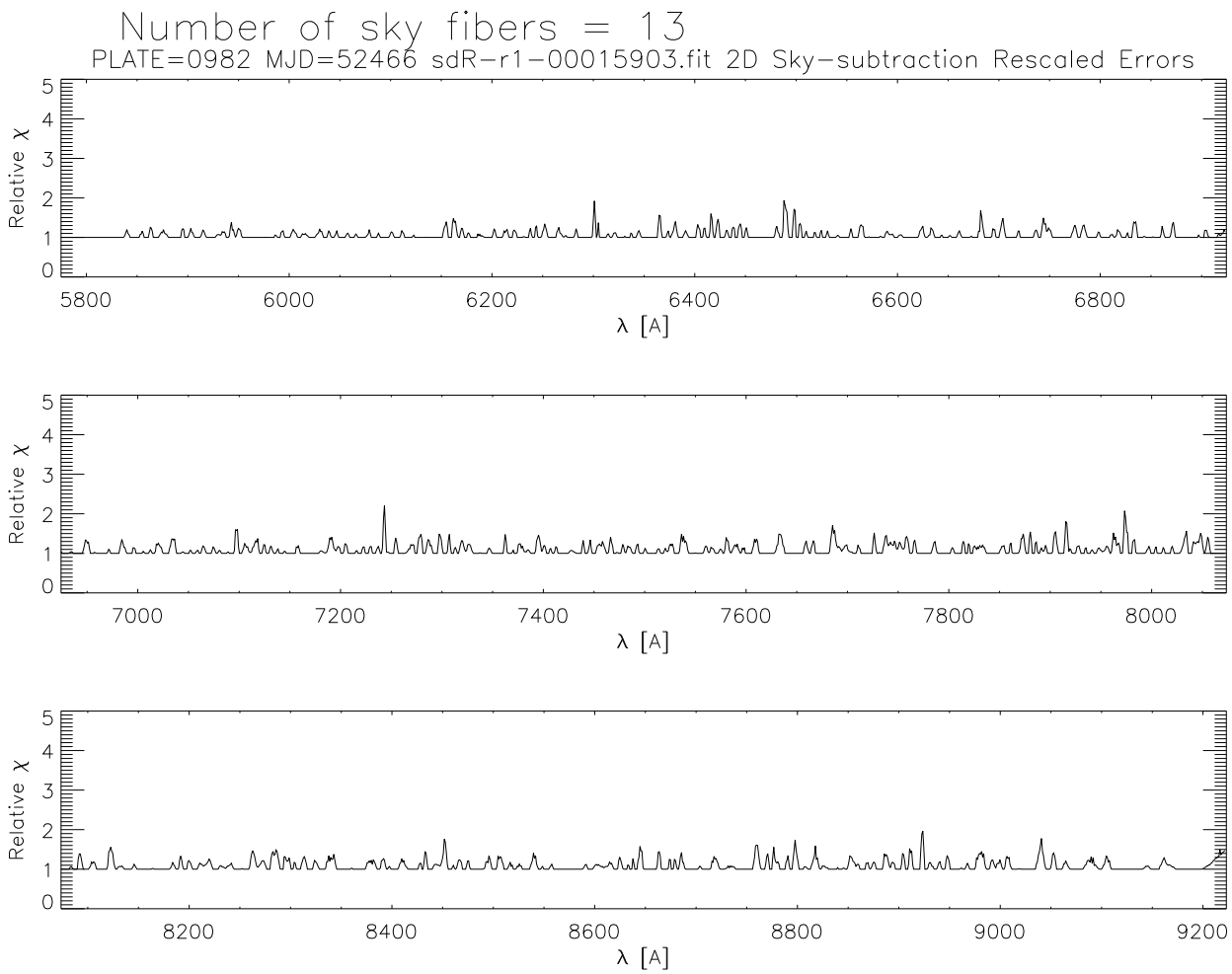

PLATE=0982 MJD=52466 sdR-r1-00015903.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
60
40
20
0
−20
−40
−60
8820
8840
8860
8880
8900
λ [A]

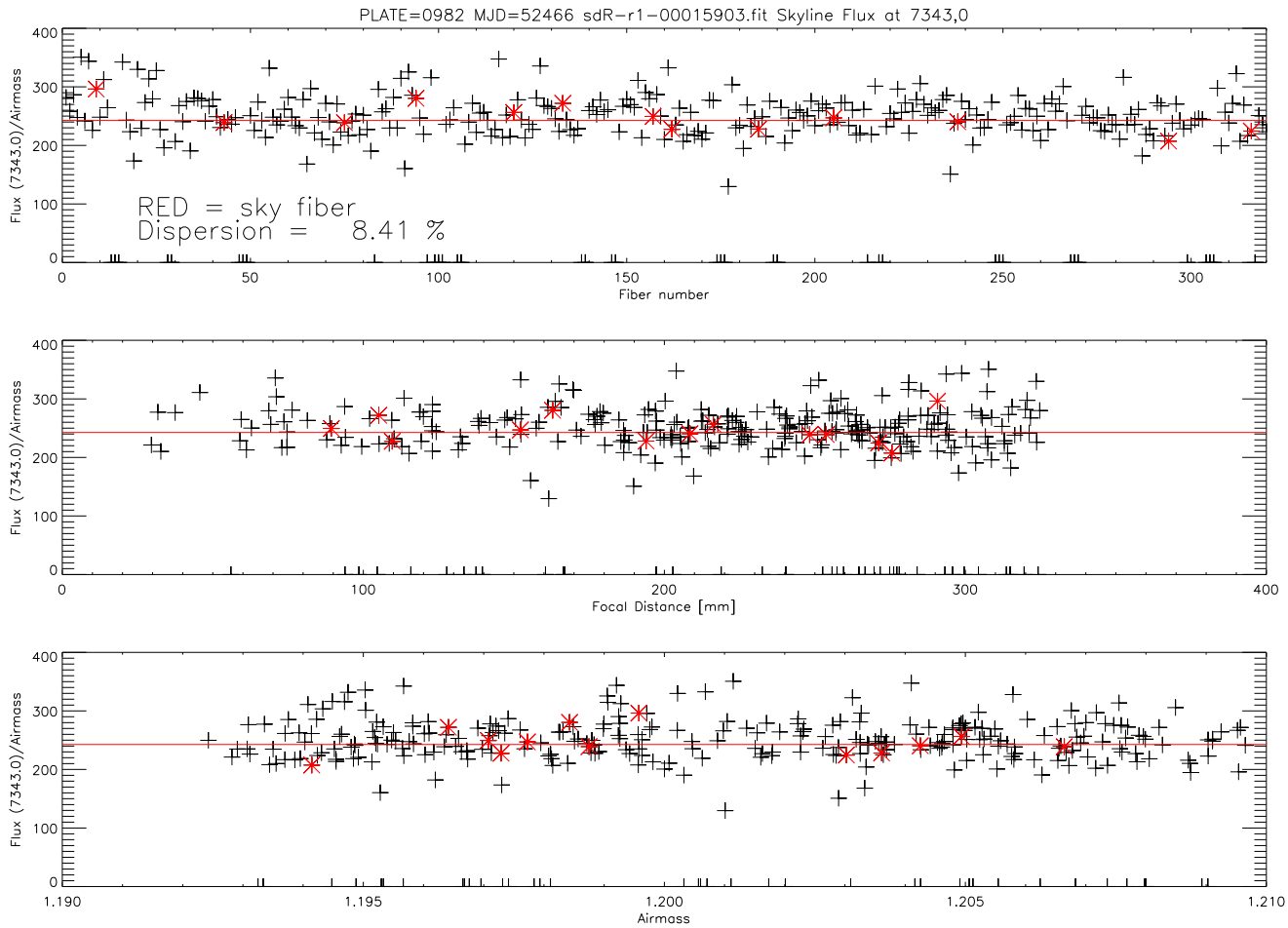

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015903.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

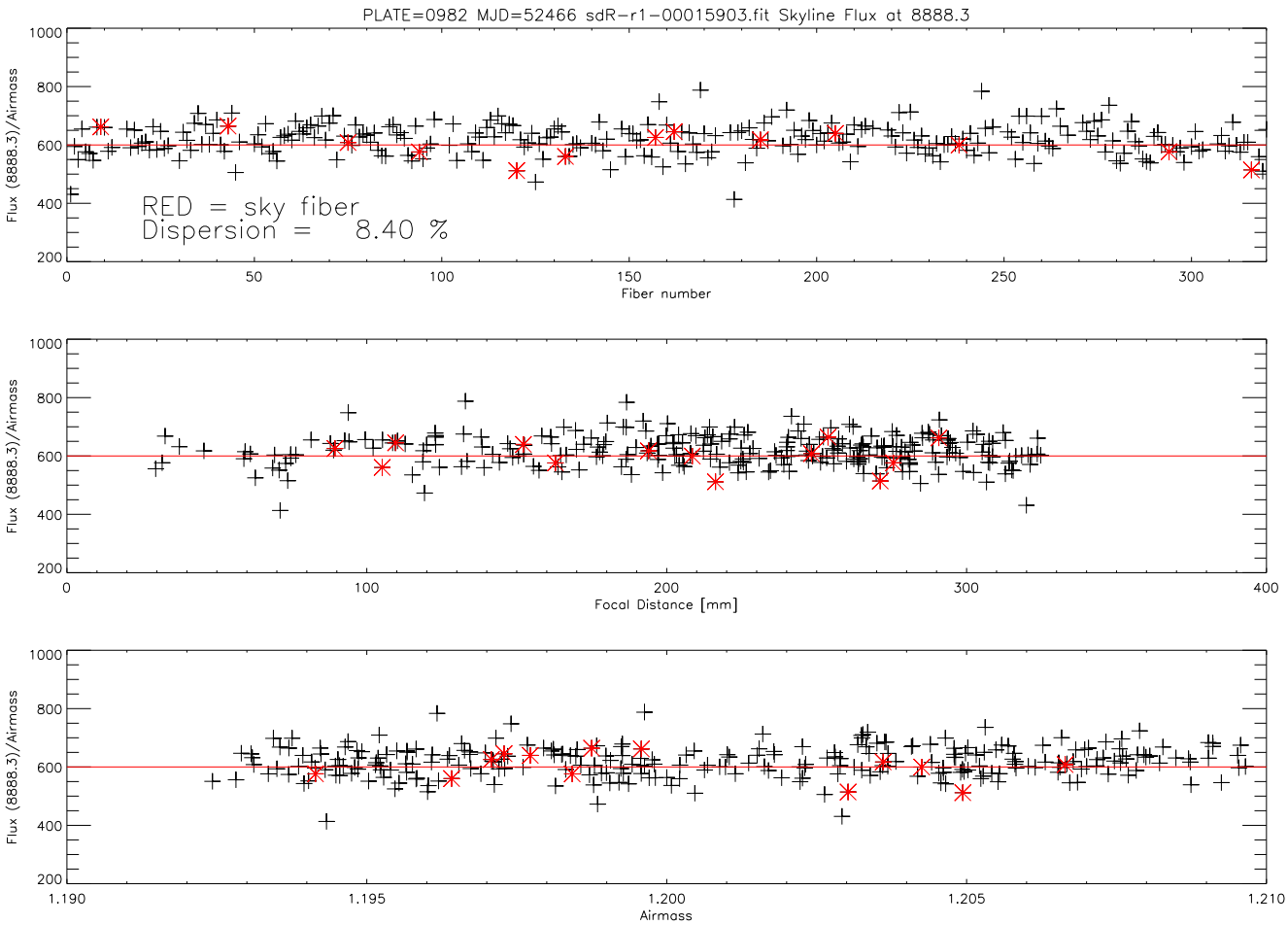

PLATE=0982 MJD=52466 sdR-r1-00015903.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

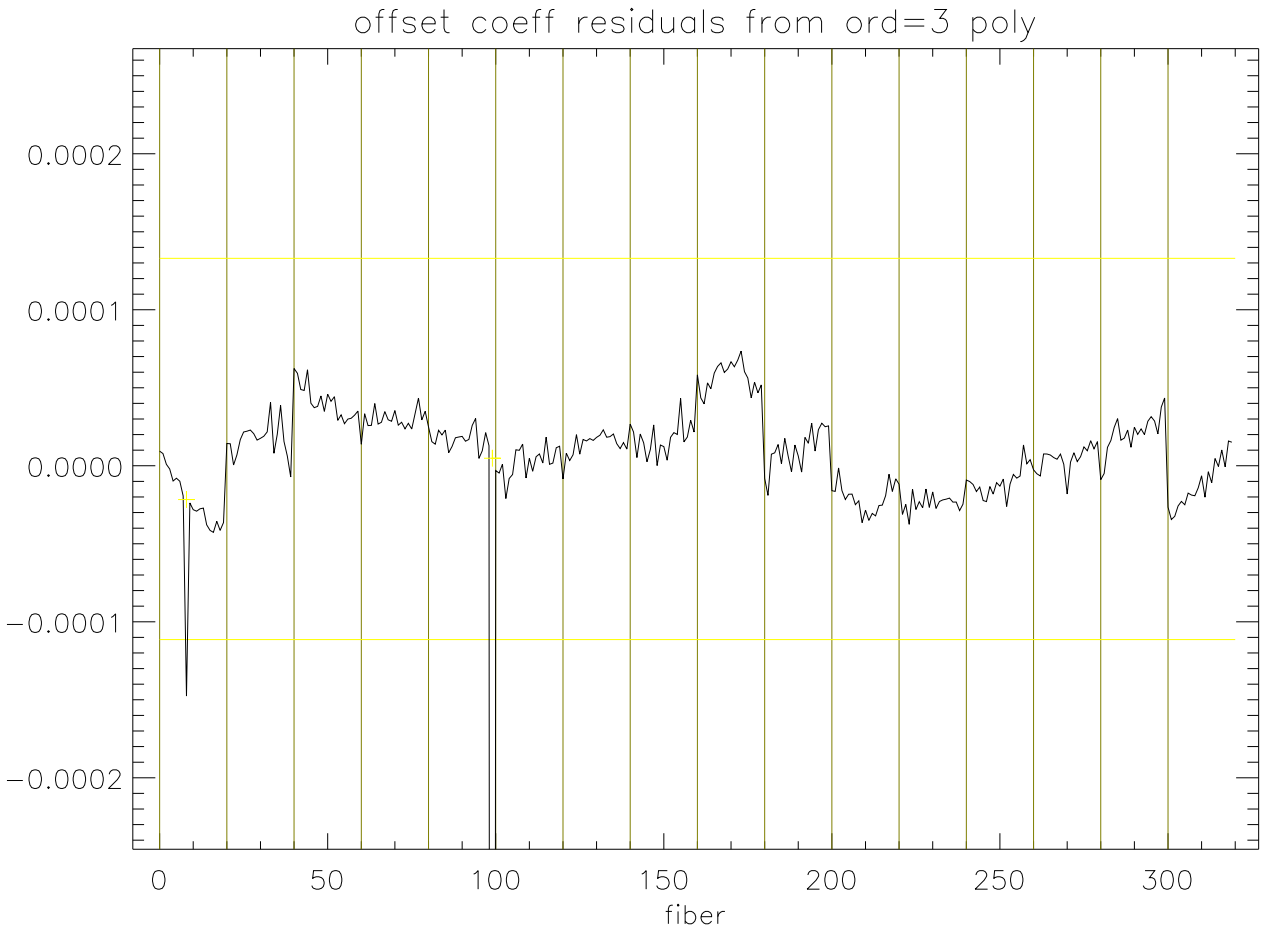

PLATE=0982 MJD=52466 sdR-r1-00015903.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
500
400
300
200
100
0
−100
8820
8840
8860
8880
8900
λ [A]

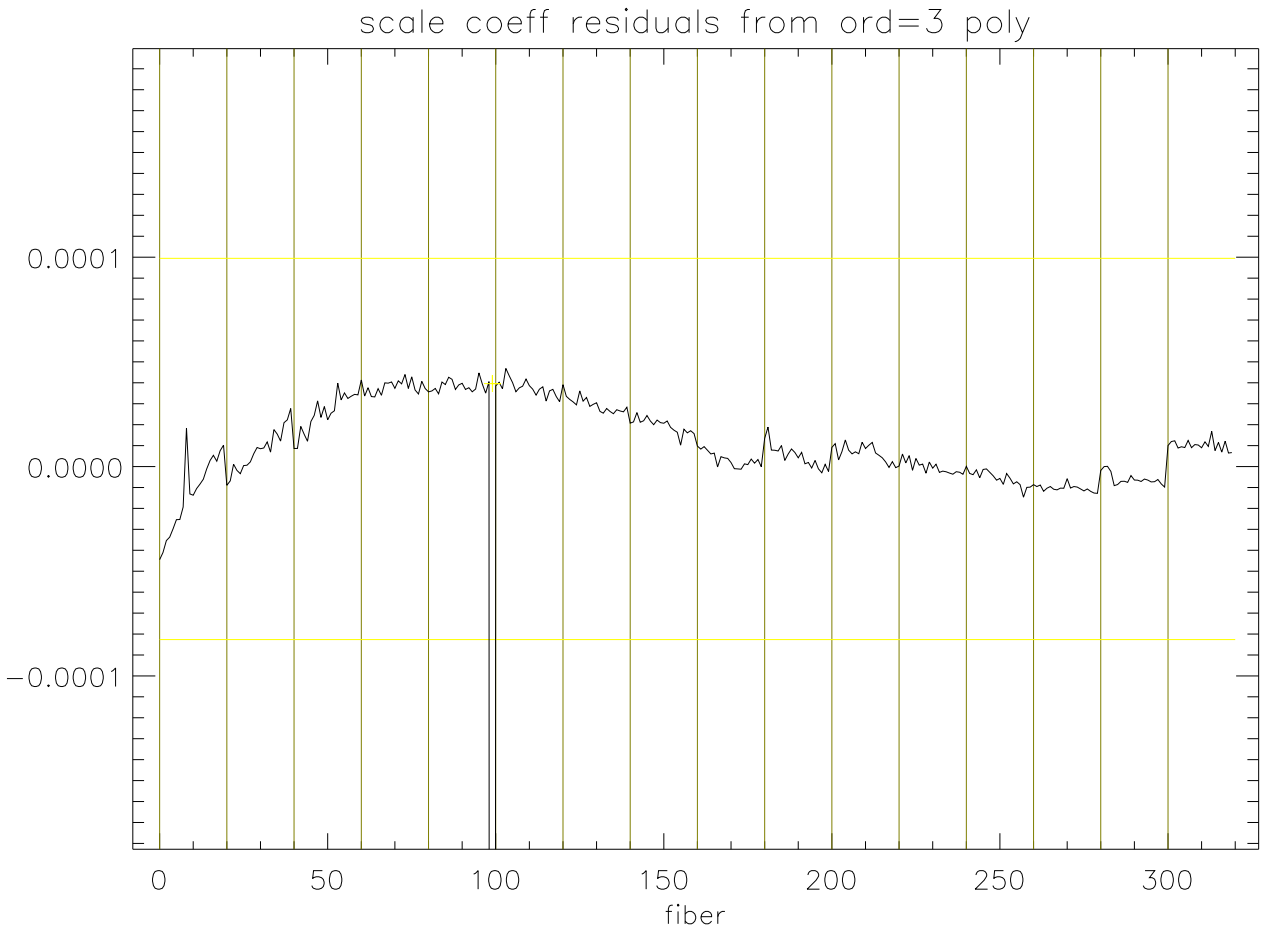

PLATE=0982 MJD=52466 sdR-r1-00015903.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
40
20
0
−20
−40
−60
8820
8840
8860
8880
8900
λ [A]

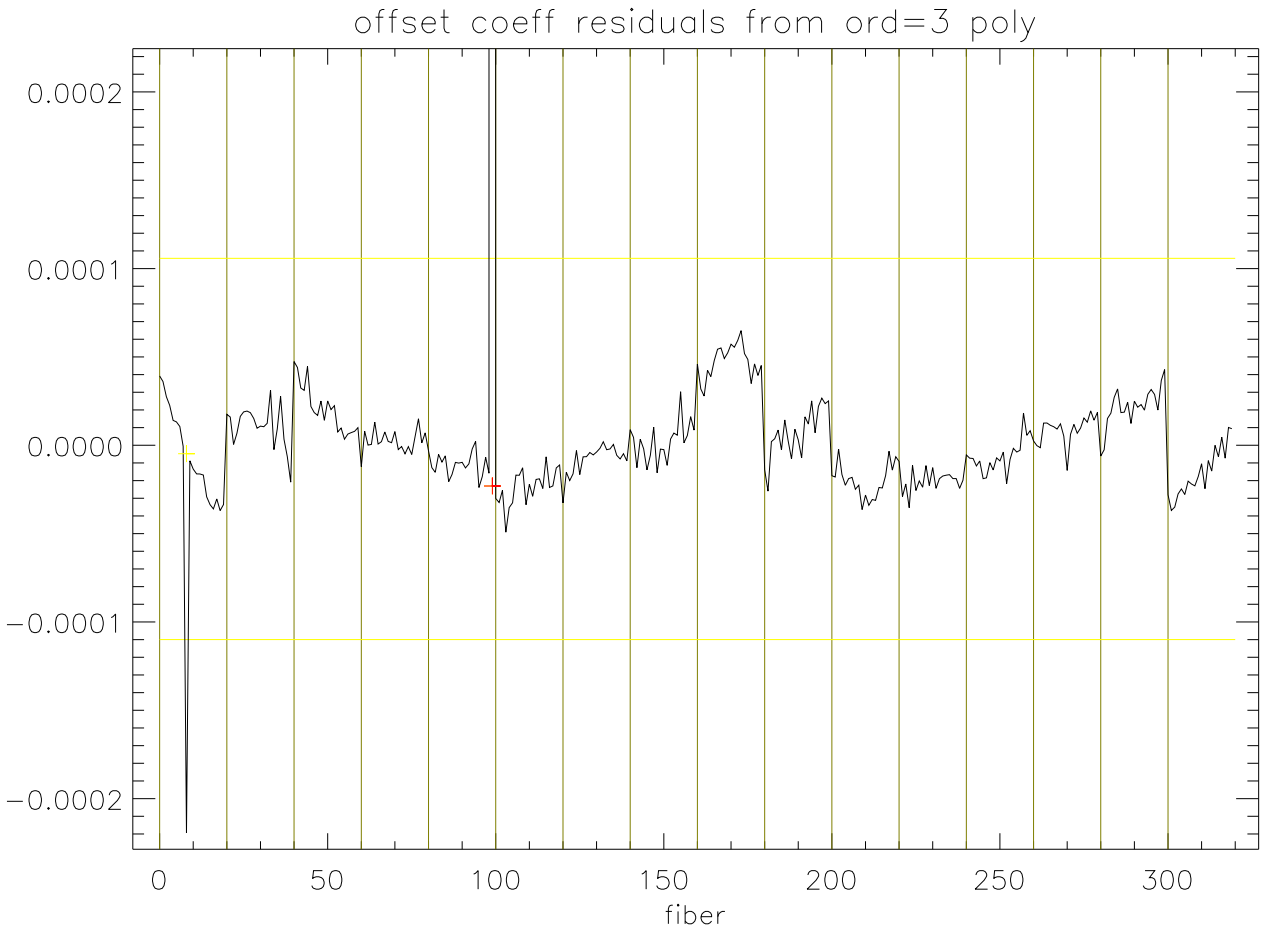

Number of sky fibers = 13
PLATE=0982 MJD=52466 sdR-r1-00015903.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

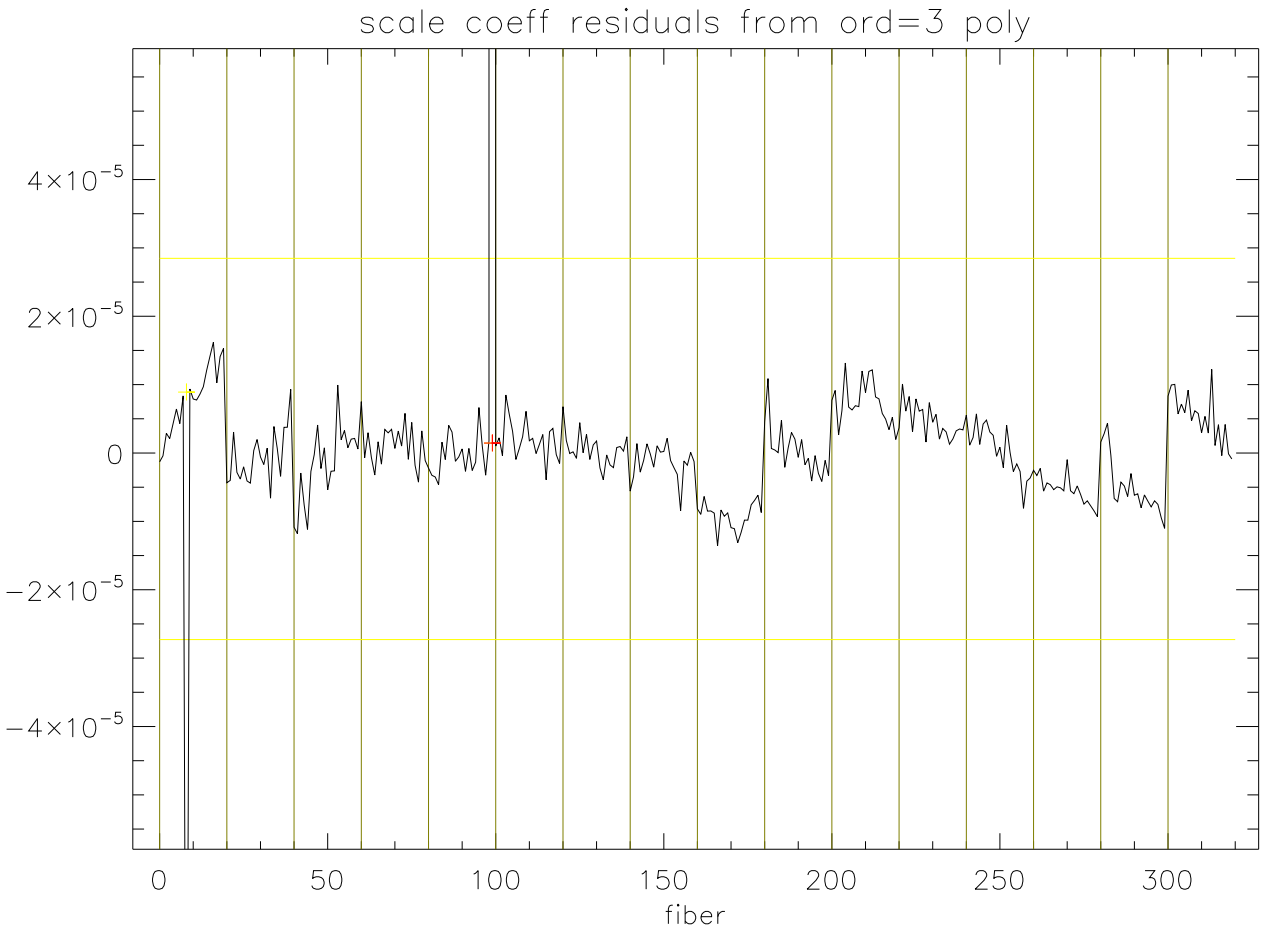

PLATE=0982 MJD=52466 sdR-r1-00015903.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 8.41 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

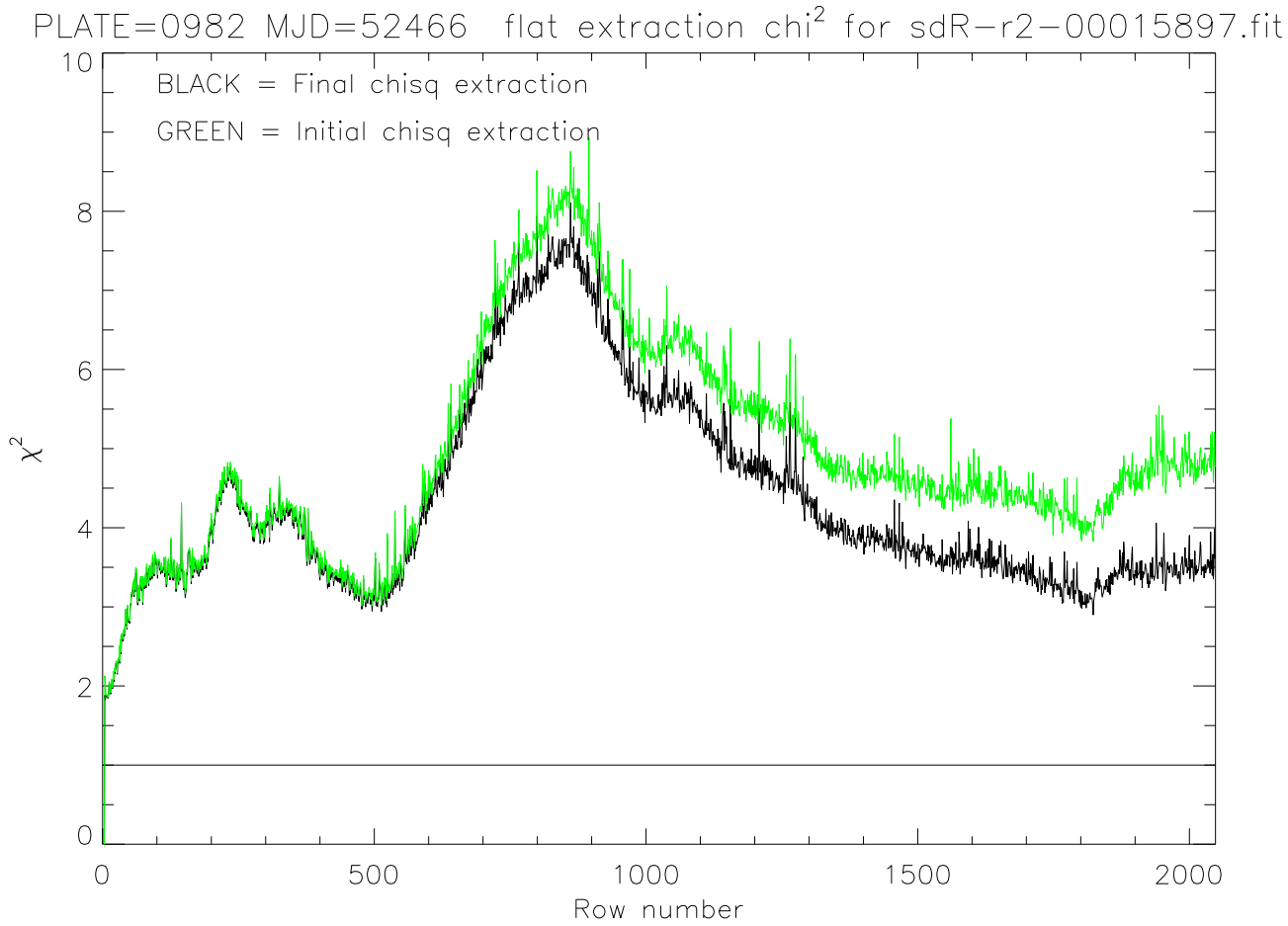

PLATE=0982 MJD=52466 sdR-r1-00015903.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 8.40 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

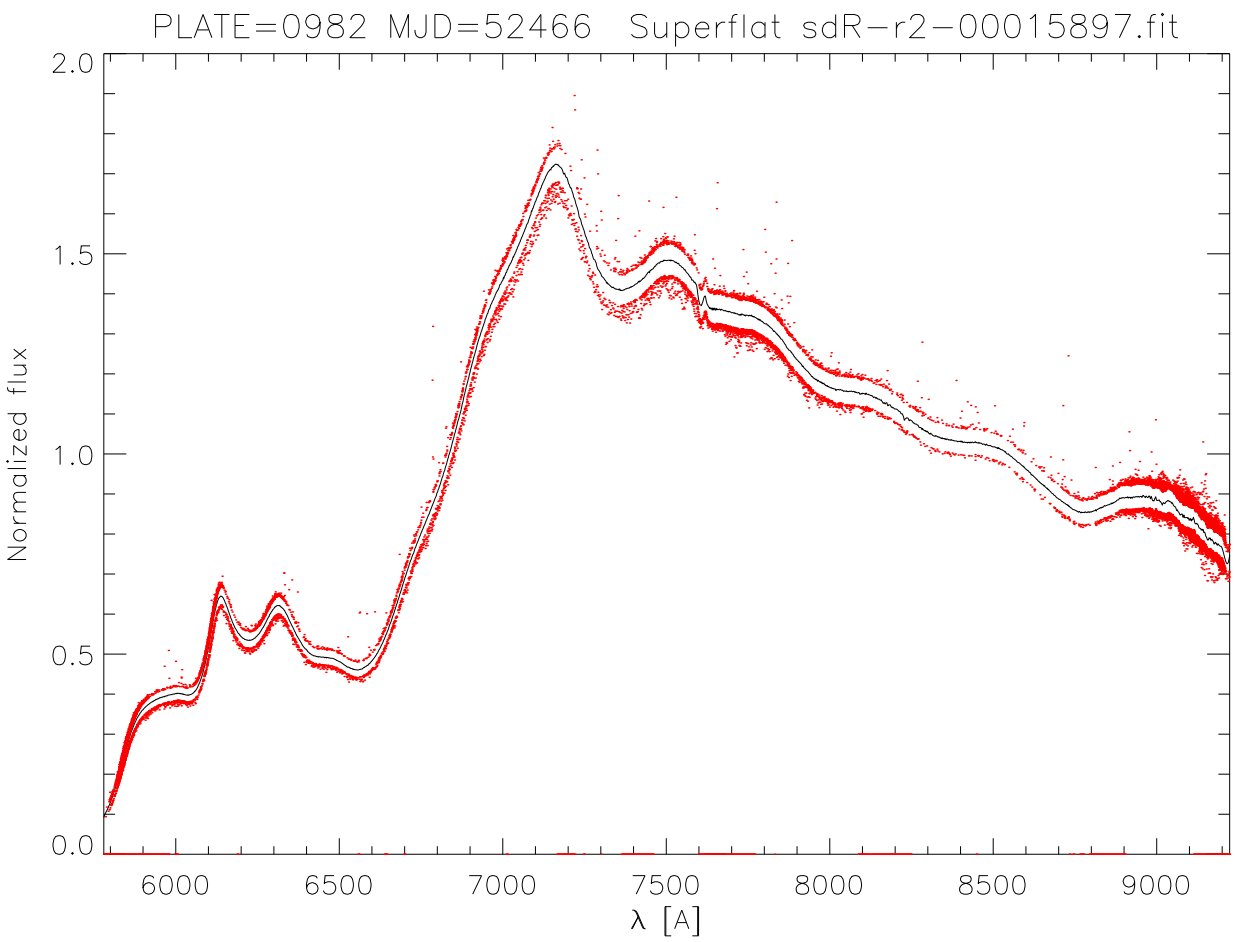

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

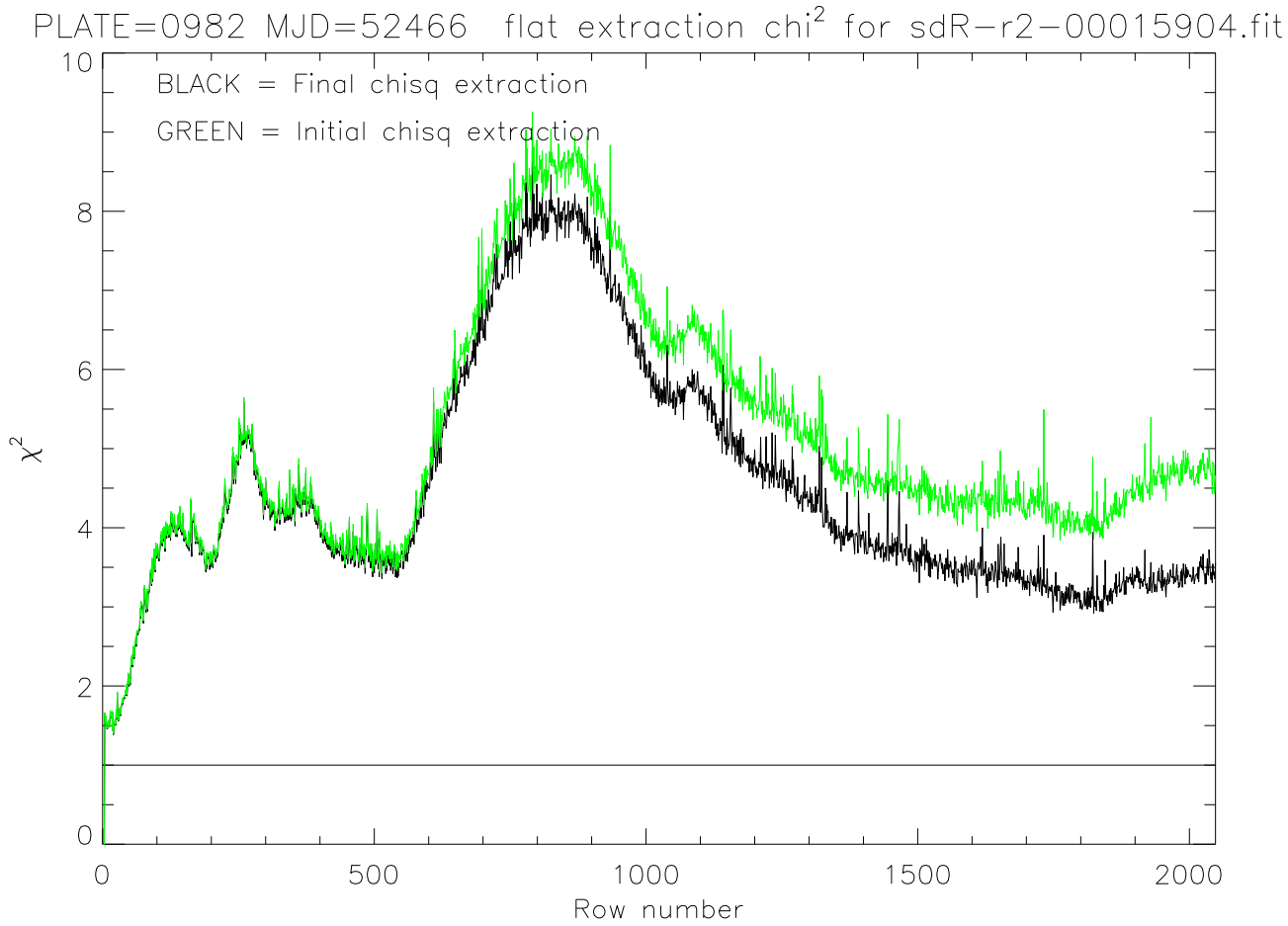

scale coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

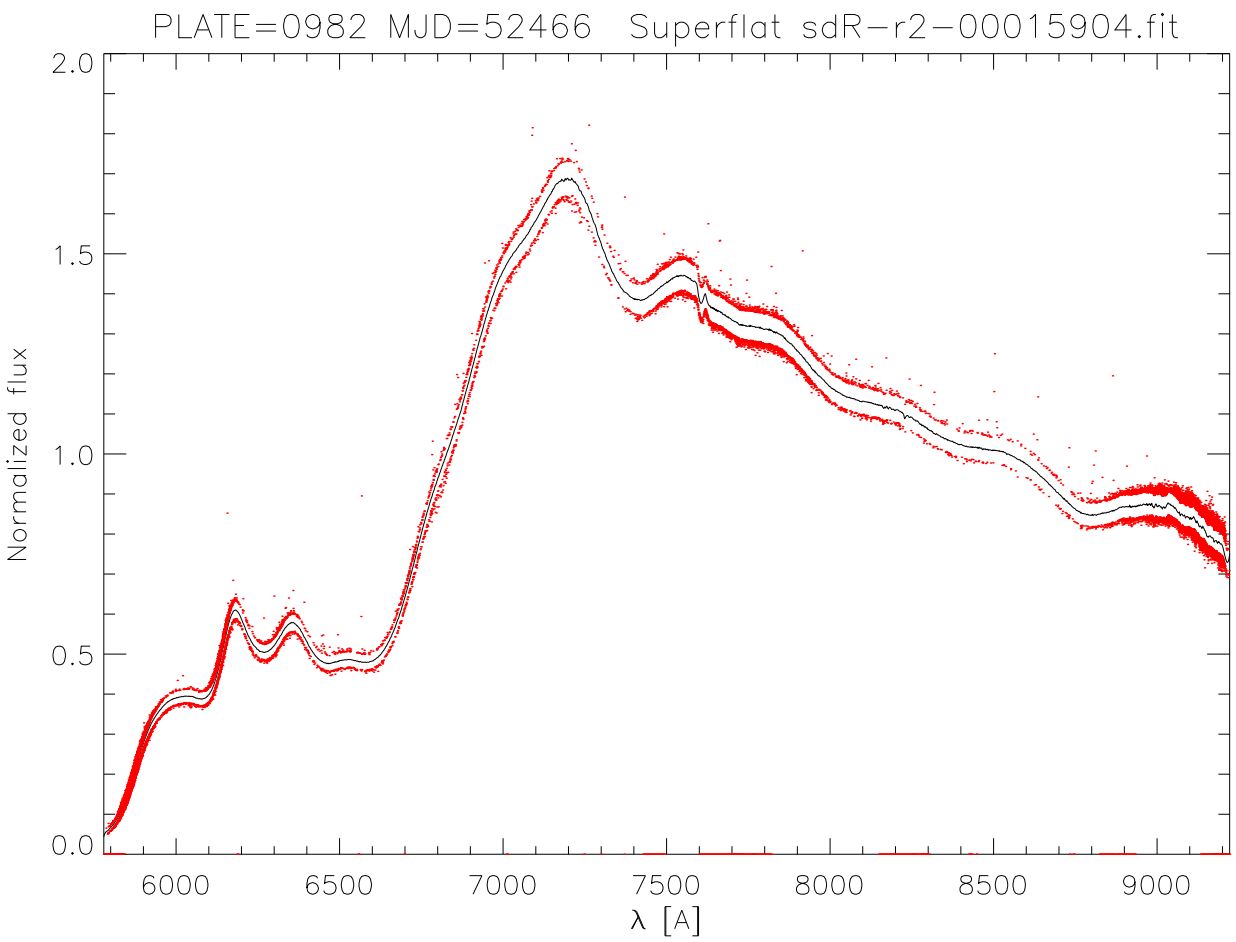

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

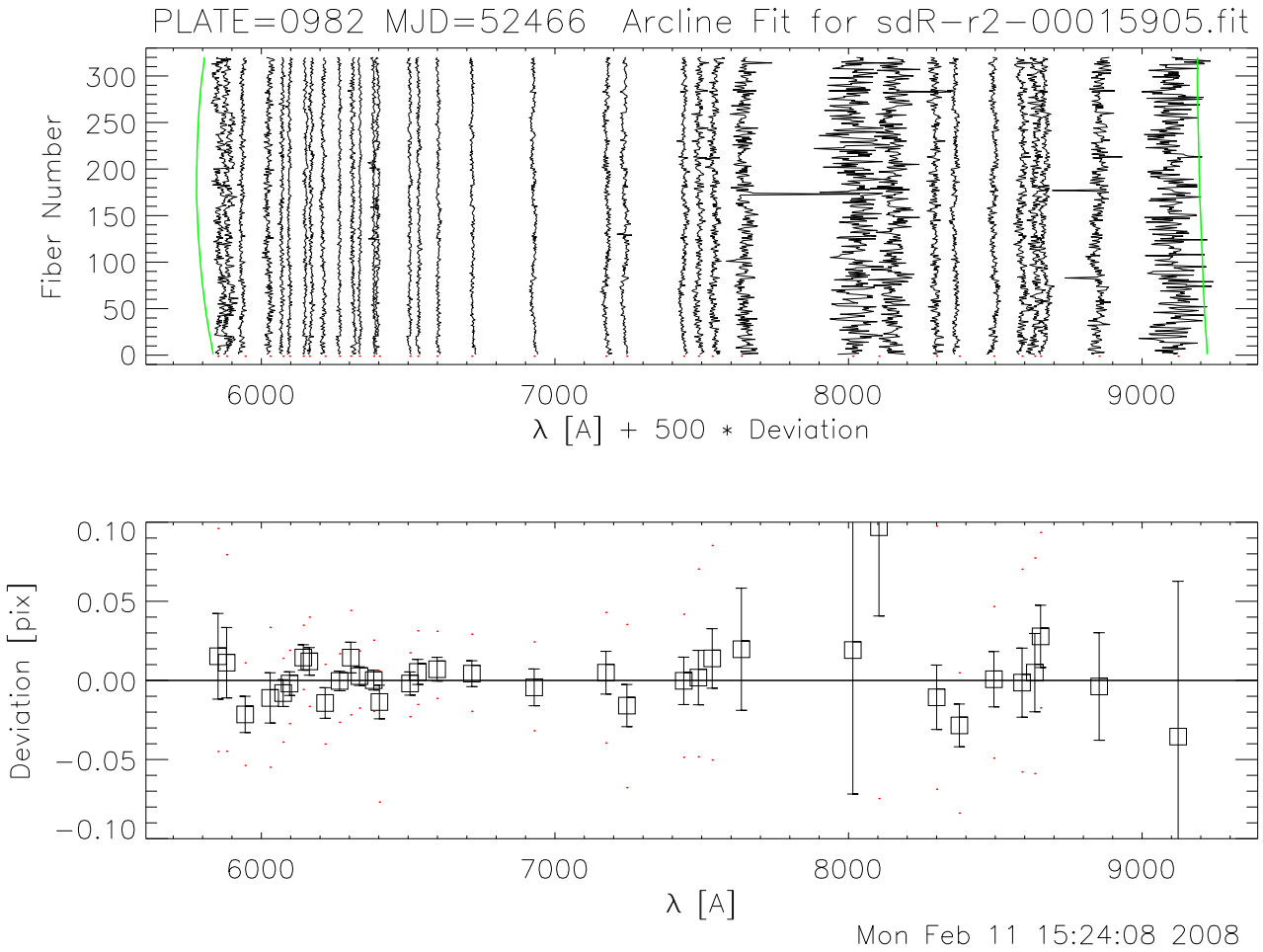

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

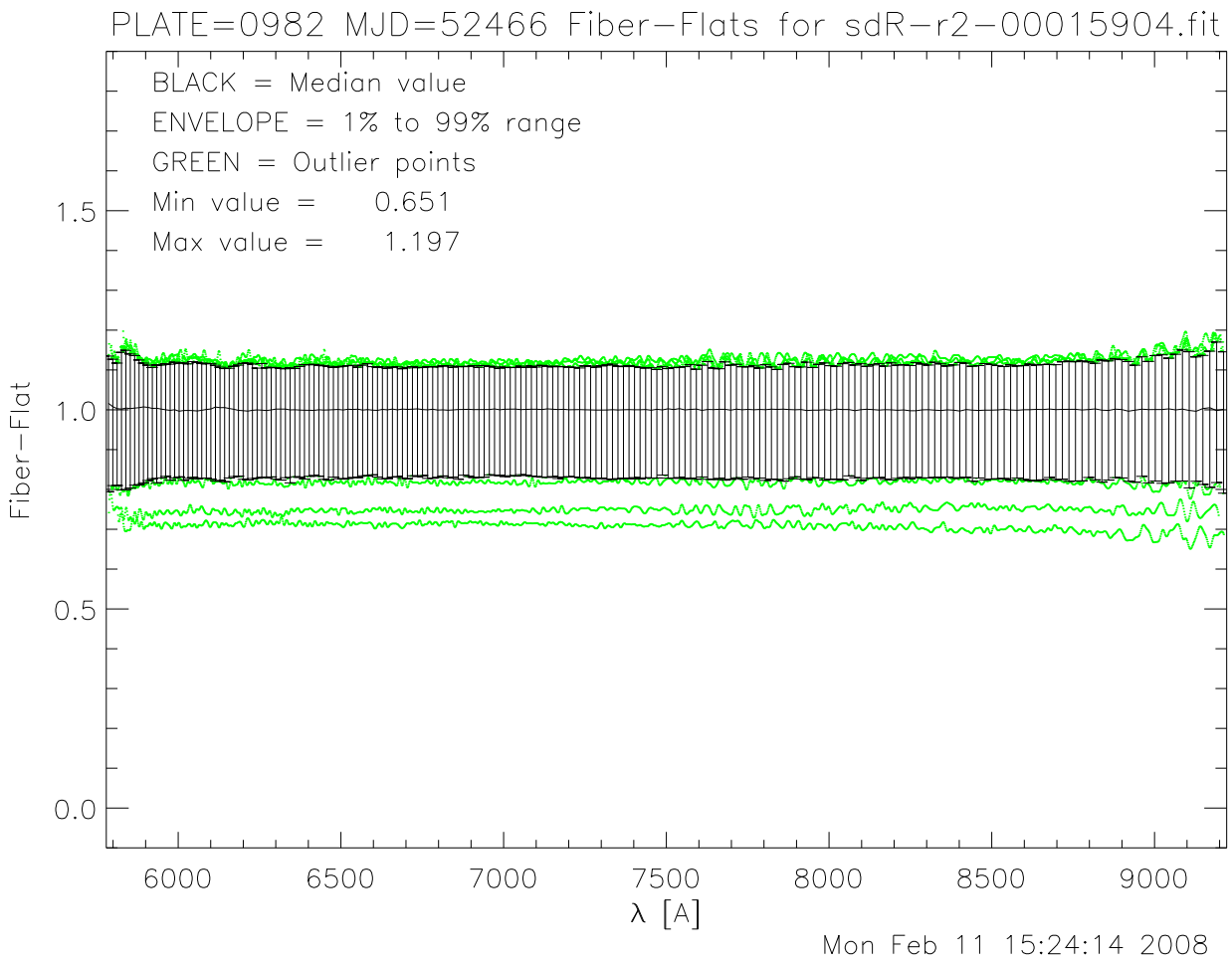

PLATE=0982 MJD=52466 flat extraction chi^2 for sdR−r2−00015897.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

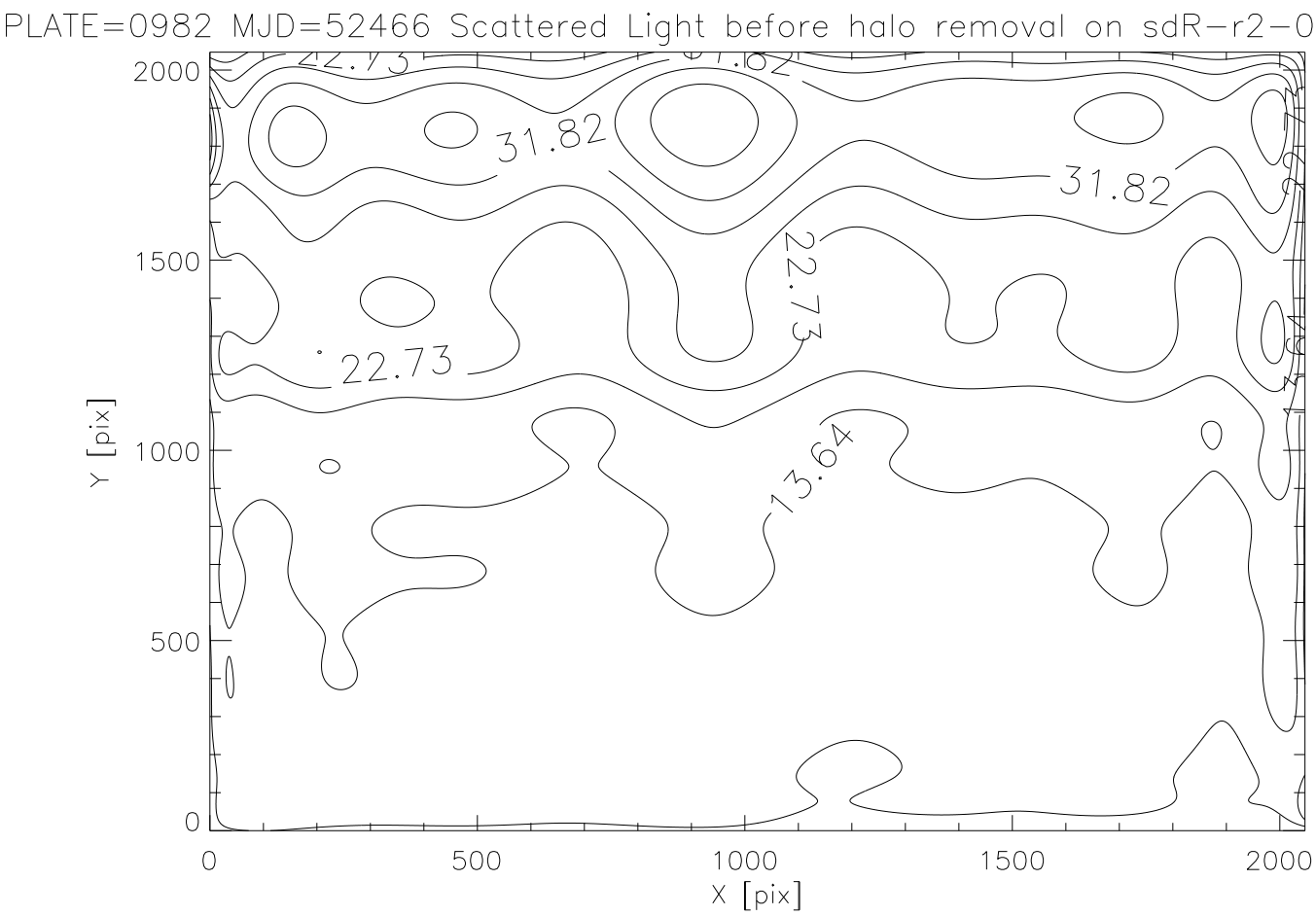

PLATE=0982 MJD=52466 Superflat sdR-r2-00015897.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

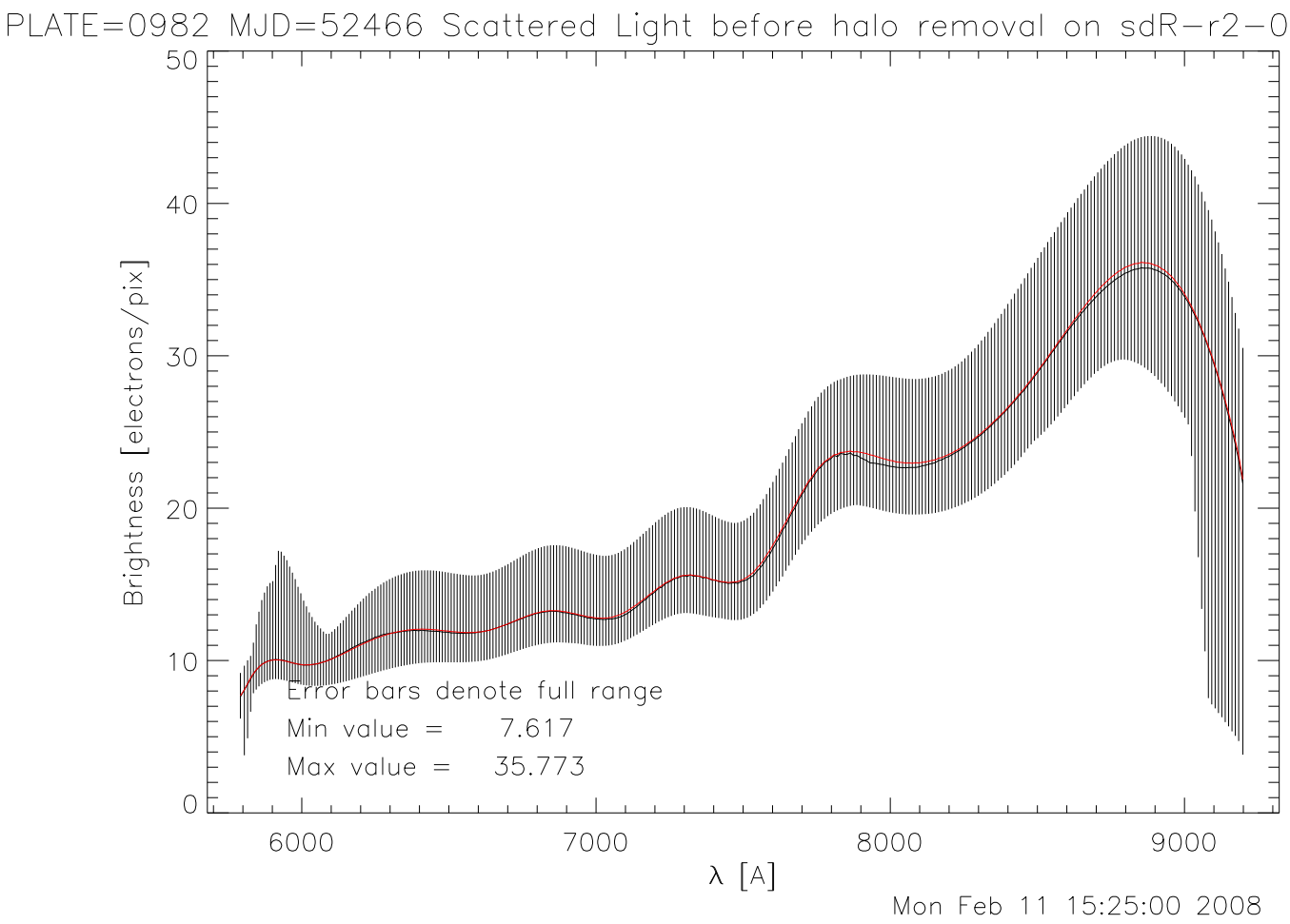

PLATE=0982 MJD=52466 flat extraction chi^2 for sdR−r2−00015904.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

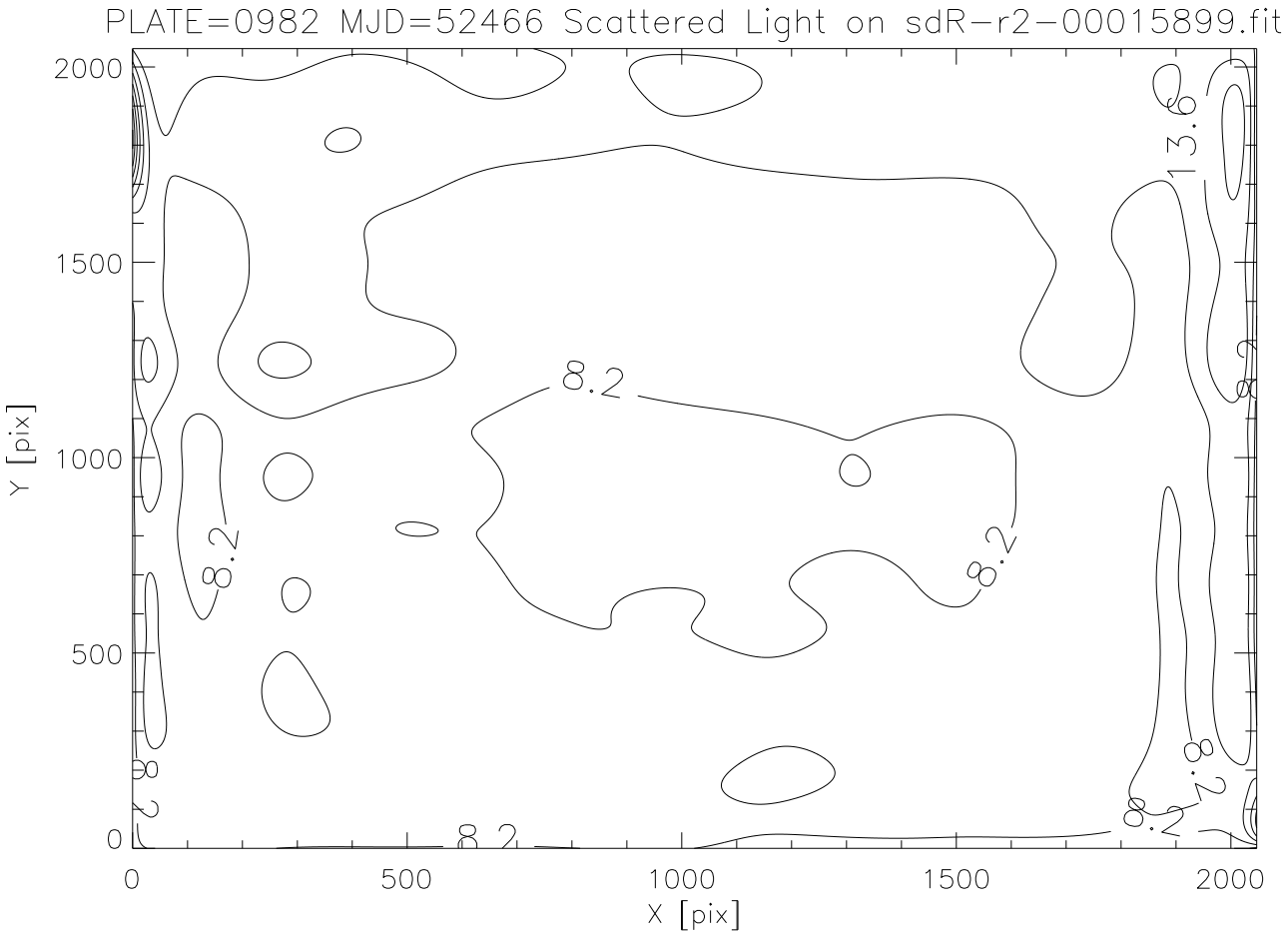

PLATE=0982 MJD=52466 Superflat sdR-r2-00015904.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

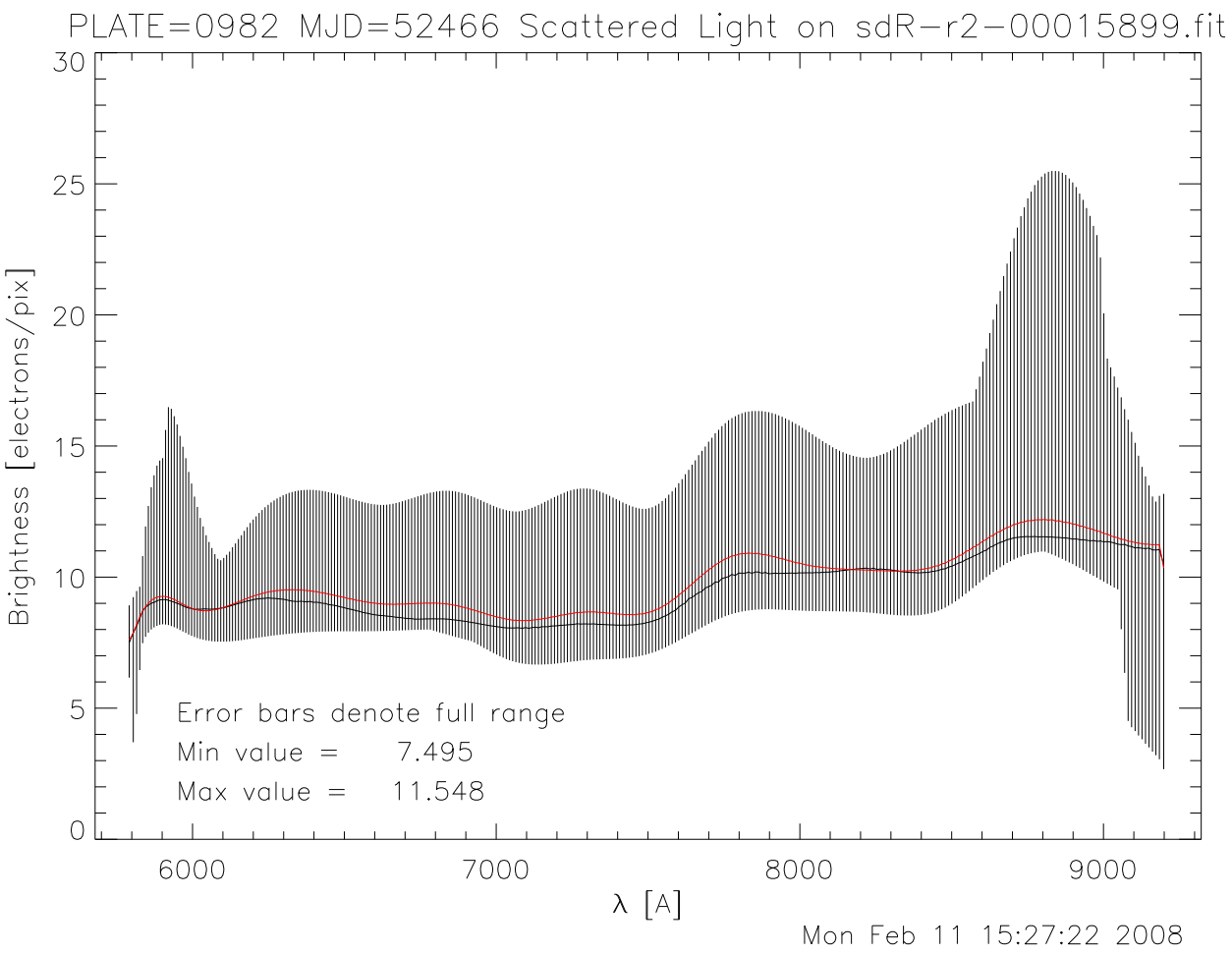

PLATE=0982 MJD=52466 Arcline Fit for sdR-r2-00015905.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 15:24:08 2008

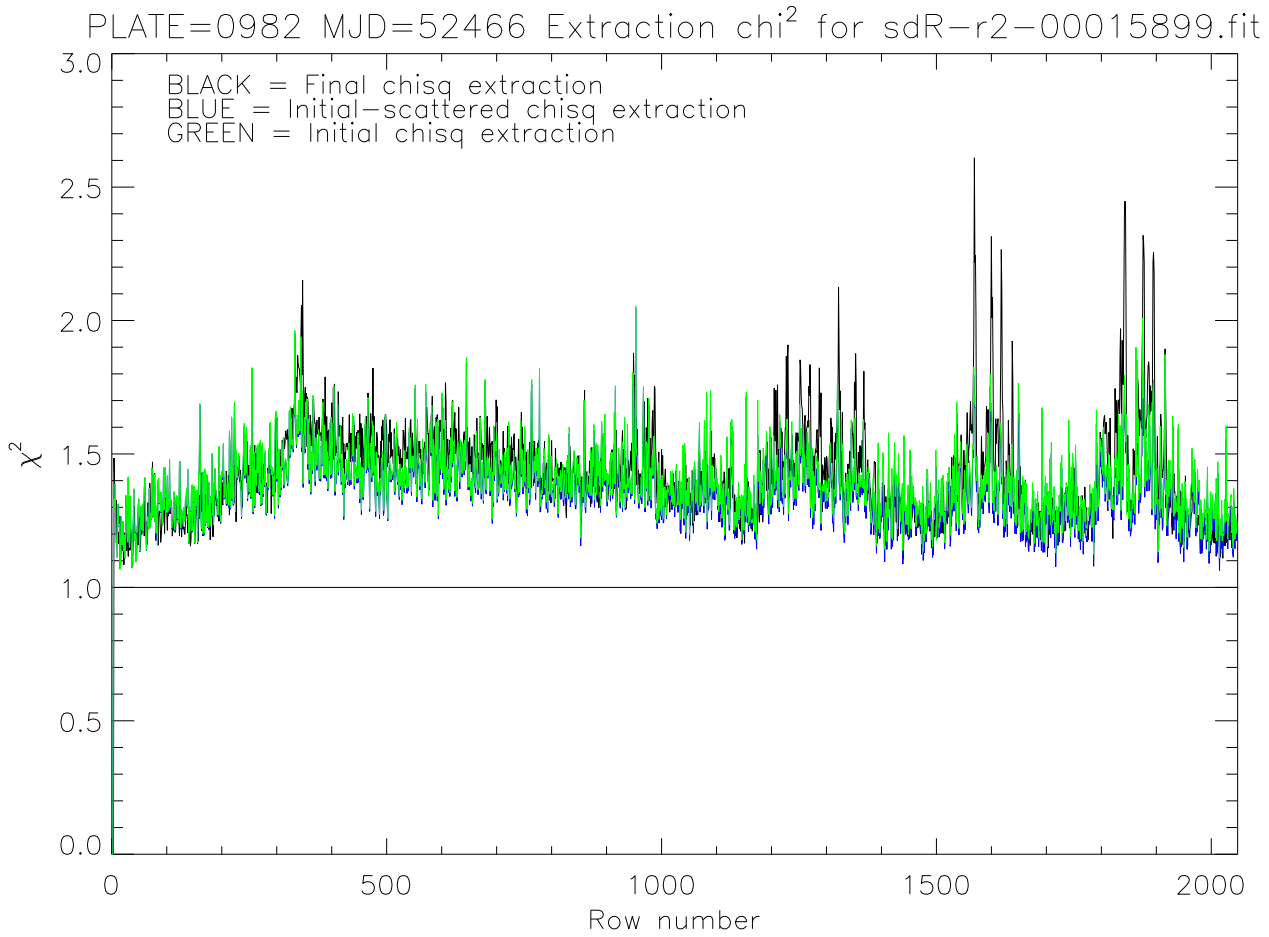

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r2−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.651
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 15:24:14 2008

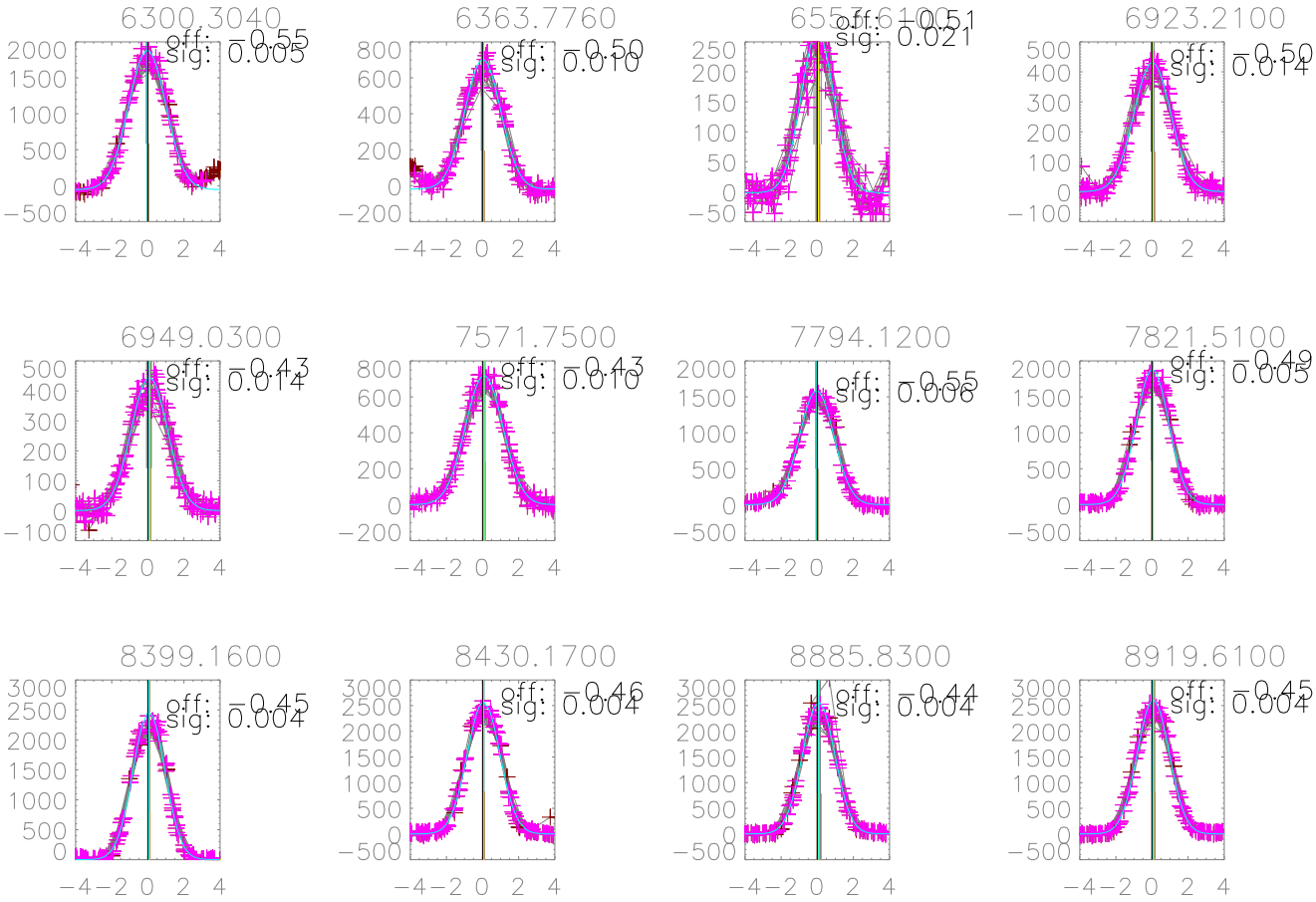

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015899.fi
31.82
31.82
22.73
22.73
13.64
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

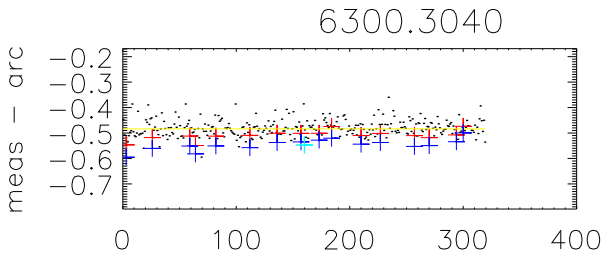

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015899.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.617
Max value = 35.773
Mon Feb 11 15:25:00 2008

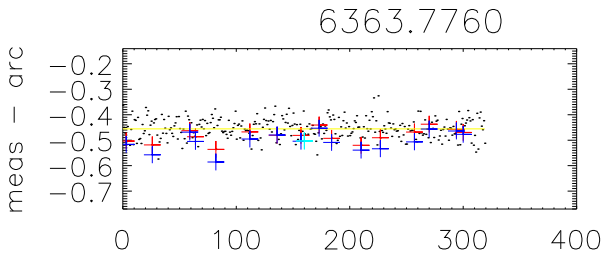

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015899.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
13.6

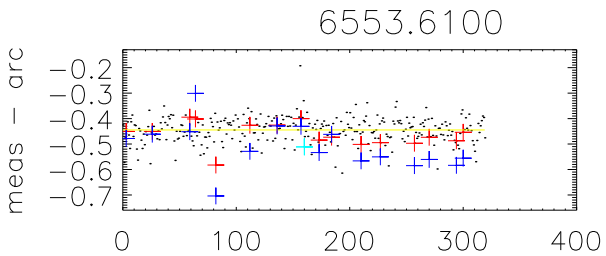

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015899.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.495
Max value = 11.548
Mon Feb 11 15:27:22 2008

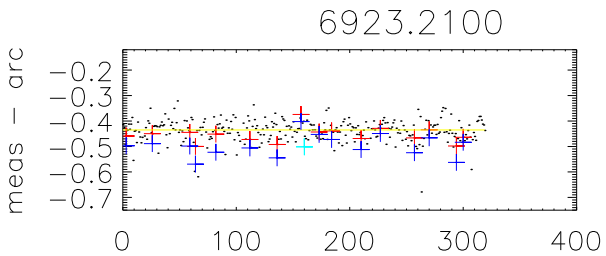

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r2−00015899.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

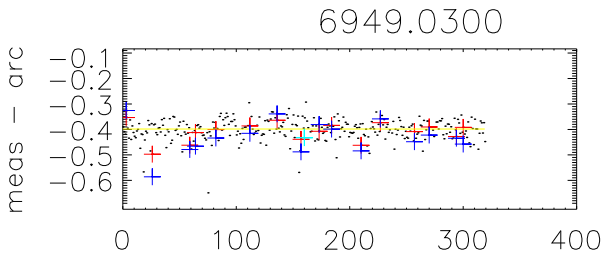

6300.3040
off: −0.55
sig: 0.005
6363.7760
off: −0.50
sig: 0.010
6557.6100
off: −0.51
sig: 0.021
6923.2100
off: −0.50
sig: 0.014
6949.0300
off: −0.43
sig: 0.014
7571.7500
off: −0.43
sig: 0.010
7794.1200
off: −0.55
sig: 0.006
7821.5100
off: −0.49
sig: 0.005
8399.1600
off: −0.45
sig: 0.004
8430.1700
off: −0.46
sig: 0.004
8885.8300
off: −0.44
sig: 0.004
8919.6100
off: −0.45
sig: 0.004

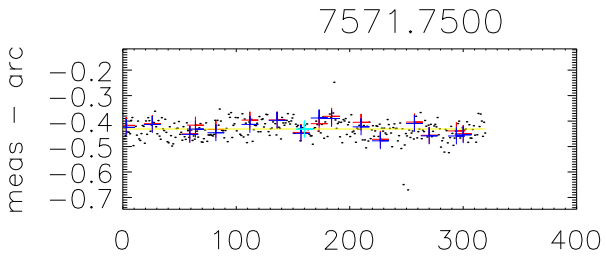

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

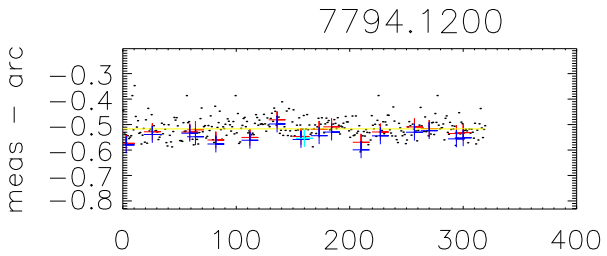

6363.7760
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

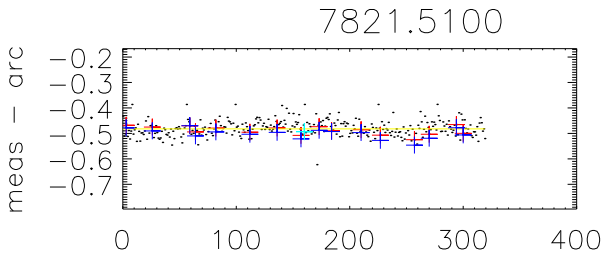

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

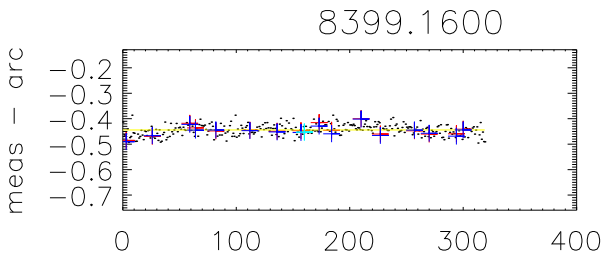

6923.2100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

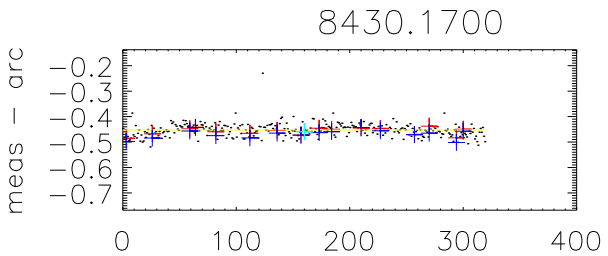

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

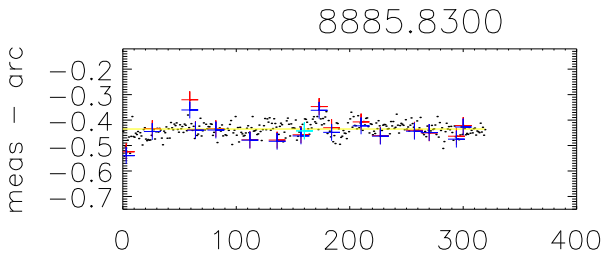

7571.7500
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

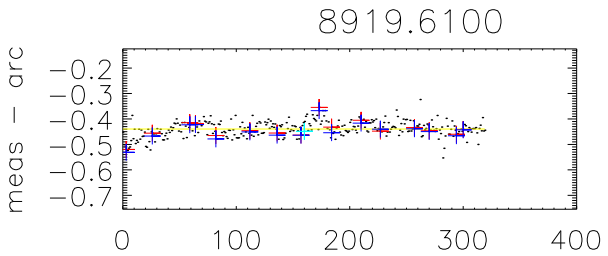

7794.1200
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

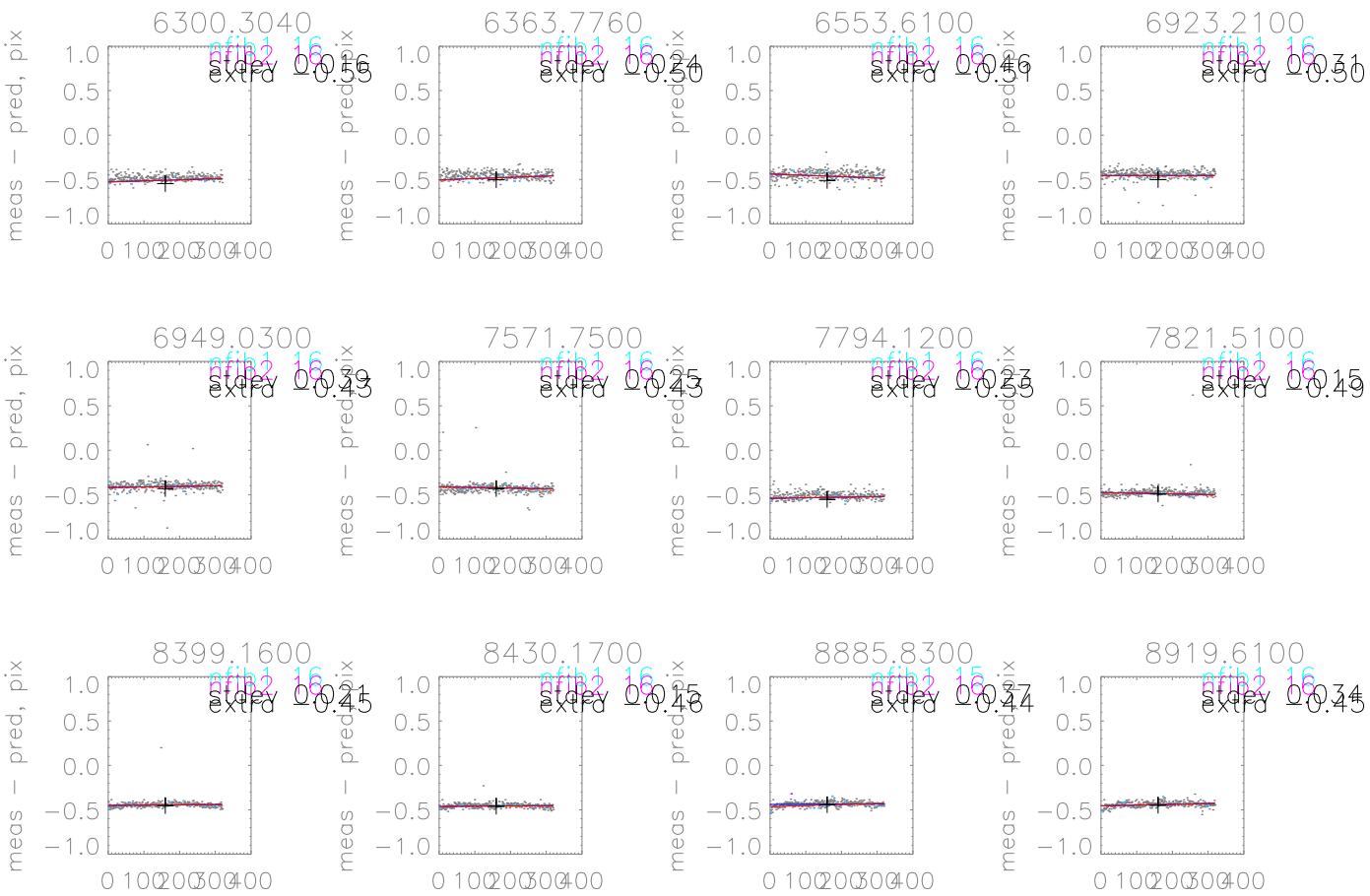

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

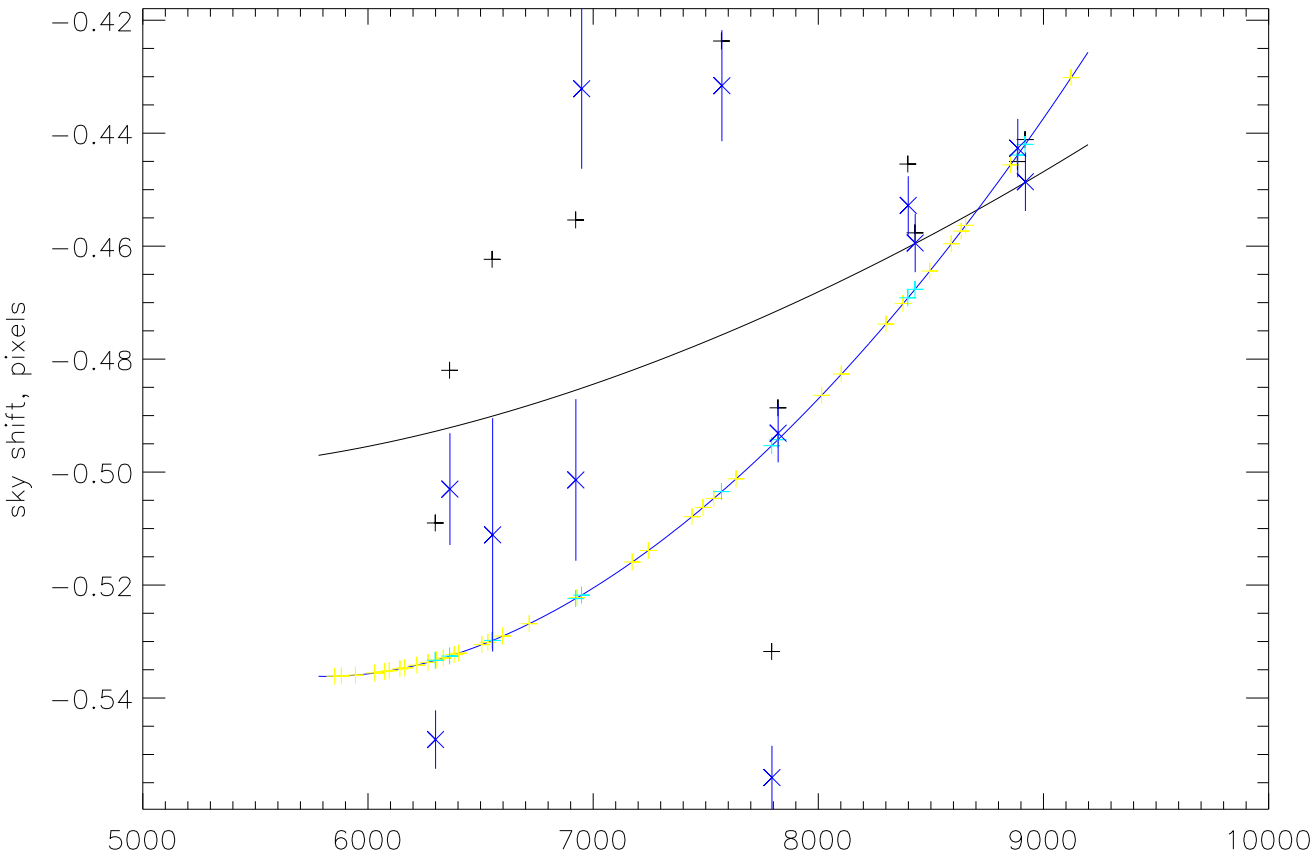

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

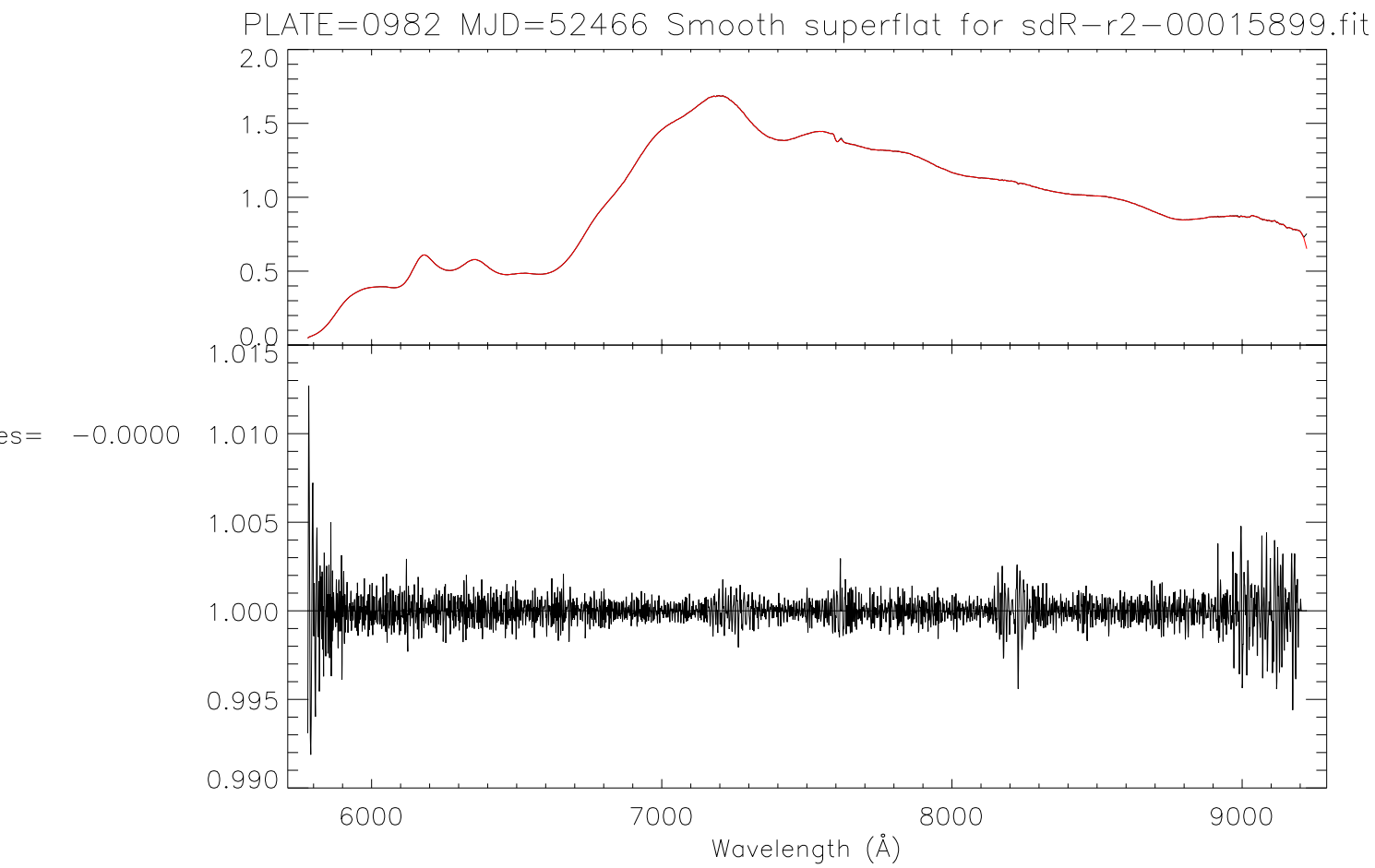

8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

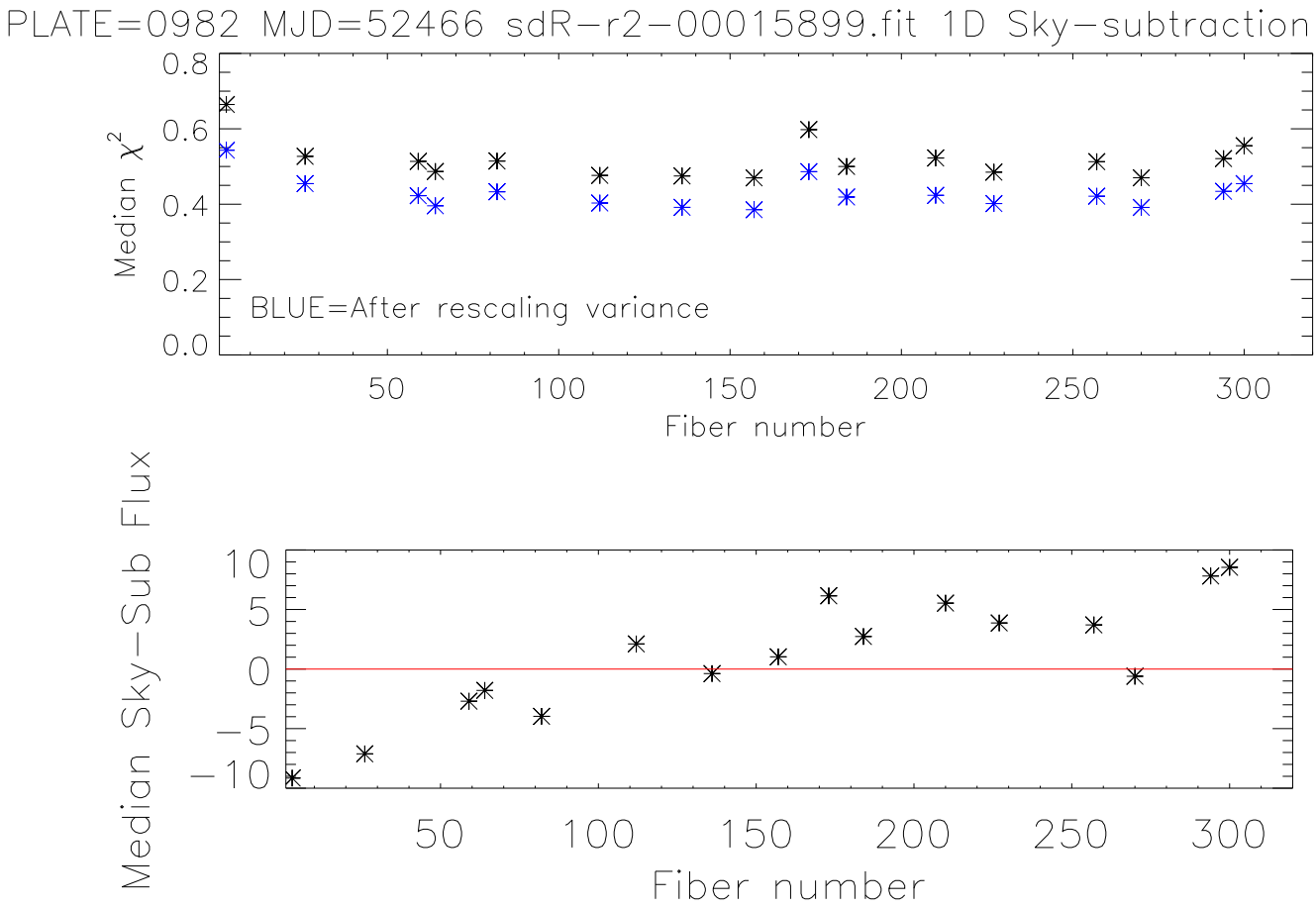

8885.8300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

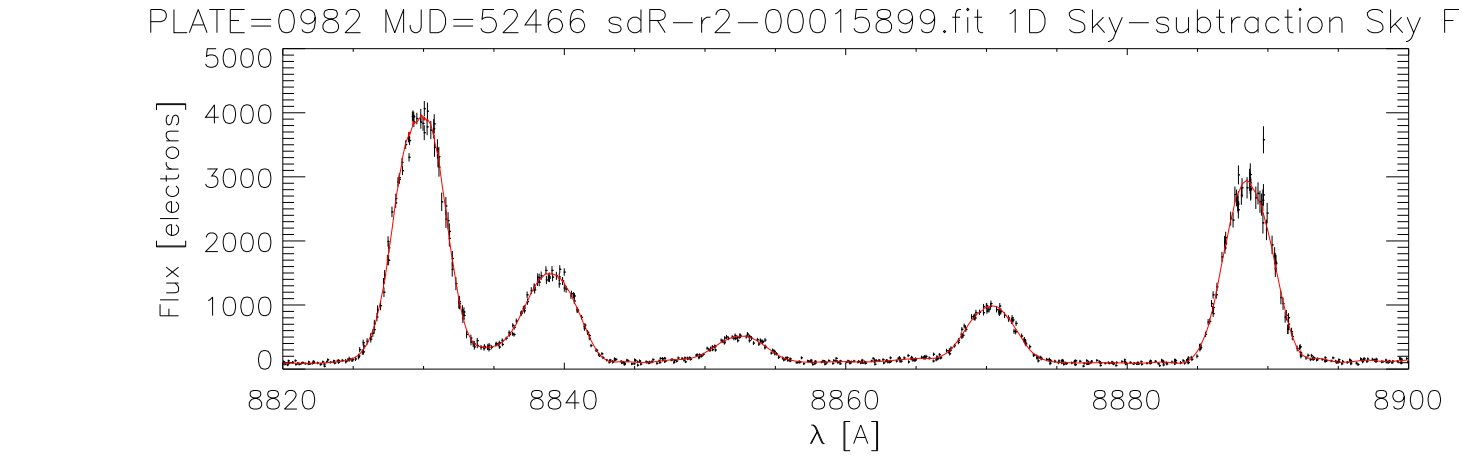

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib2 16
stdev 0.016
extrd 0.50
stdev 0.024
extrd 0.50
stdev 0.046
extrd 0.51
stdev 0.031
extrd 0.50
stdev 0.039
extrd 0.43
stdev 0.025
extrd 0.43
stdev 0.023
extrd 0.53
stdev 0.015
extrd 0.49
stdev 0.021
extrd 0.45
stdev 0.015
extrd 0.48
stdev 0.037
extrd 0.44
stdev 0.034
extrd 0.45

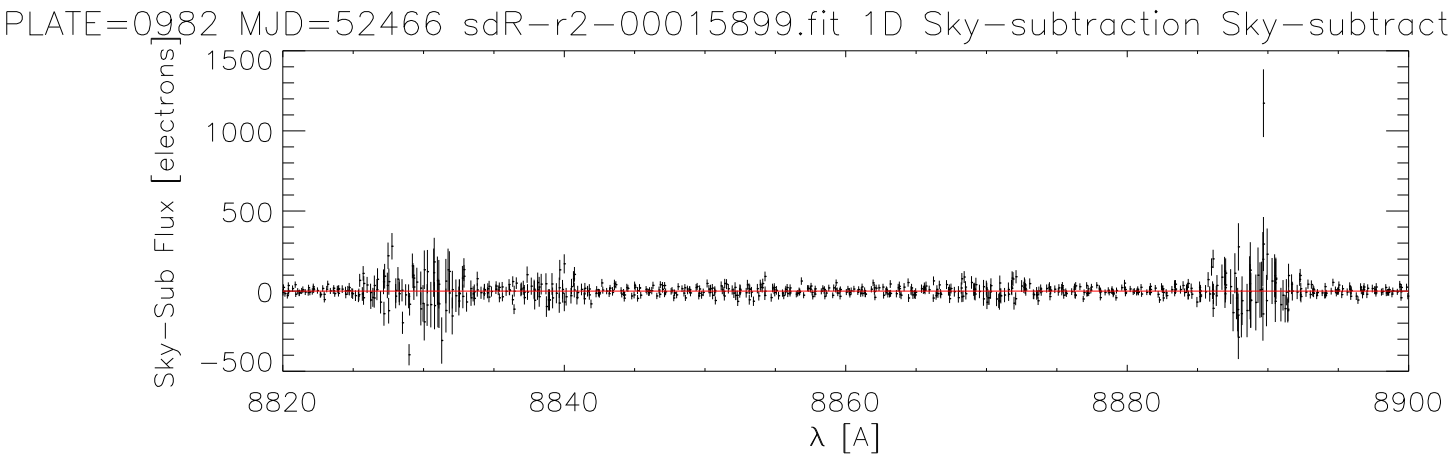

−0.42
−0.44
−0.46
−0.48
−0.50
−0.52
−0.54
sky shift, pixels
5000
6000
7000
8000
9000
10000

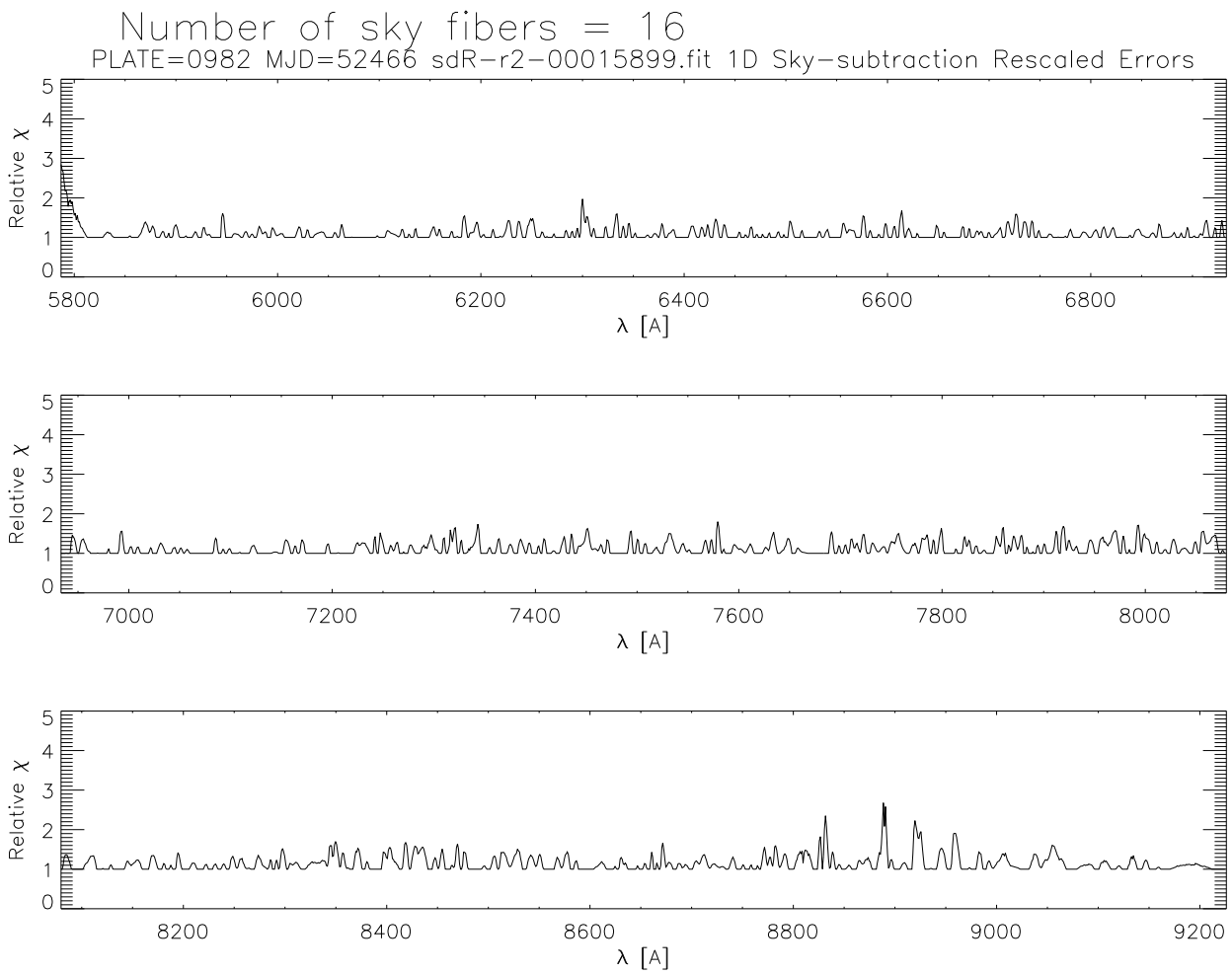

PLATE=0982 MJD=52466 Smooth superflat for sdR-r2-00015899.fit
es= -0.0000
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

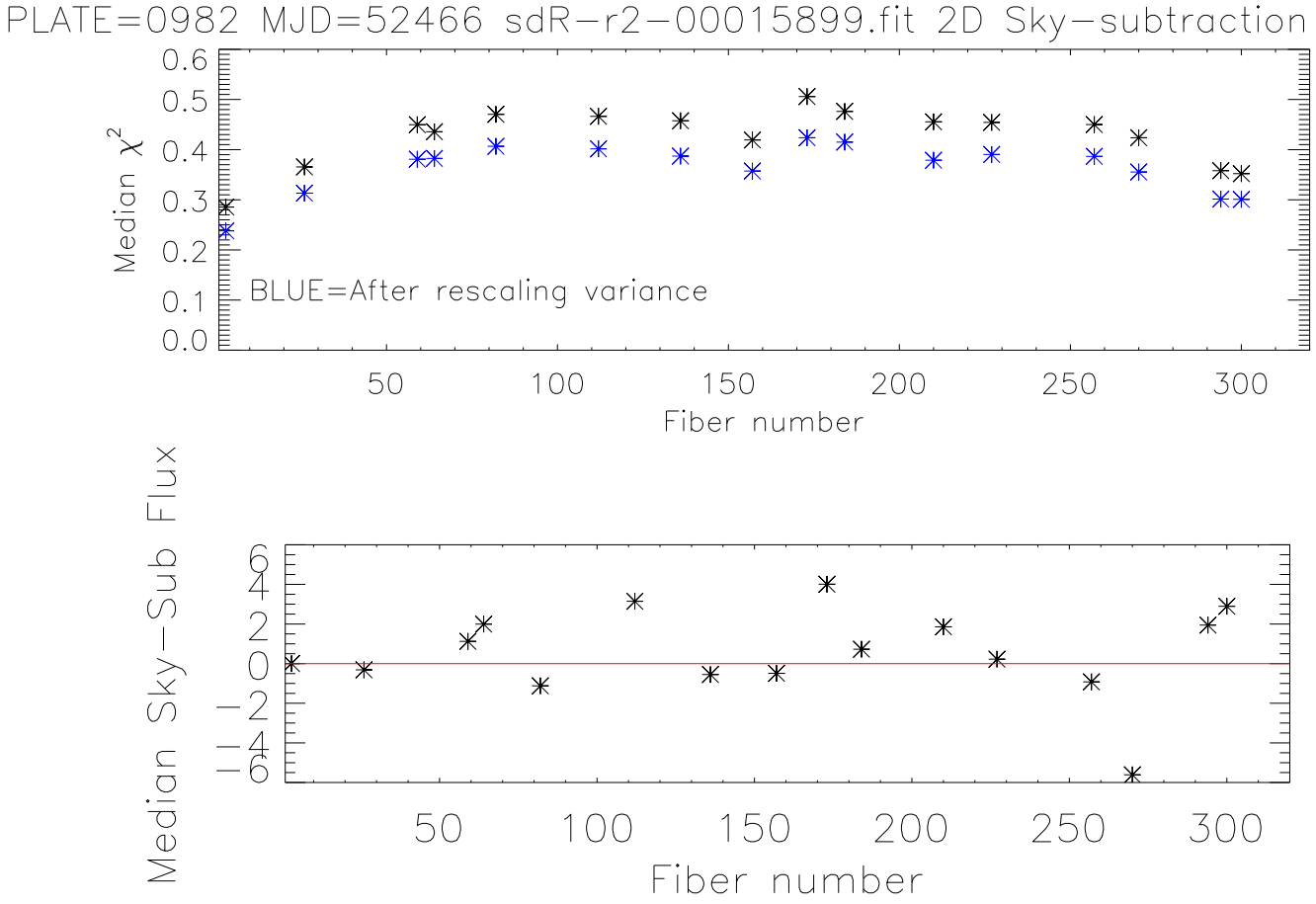

PLATE=0982 MJD=52466 sdR-r2-00015899.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

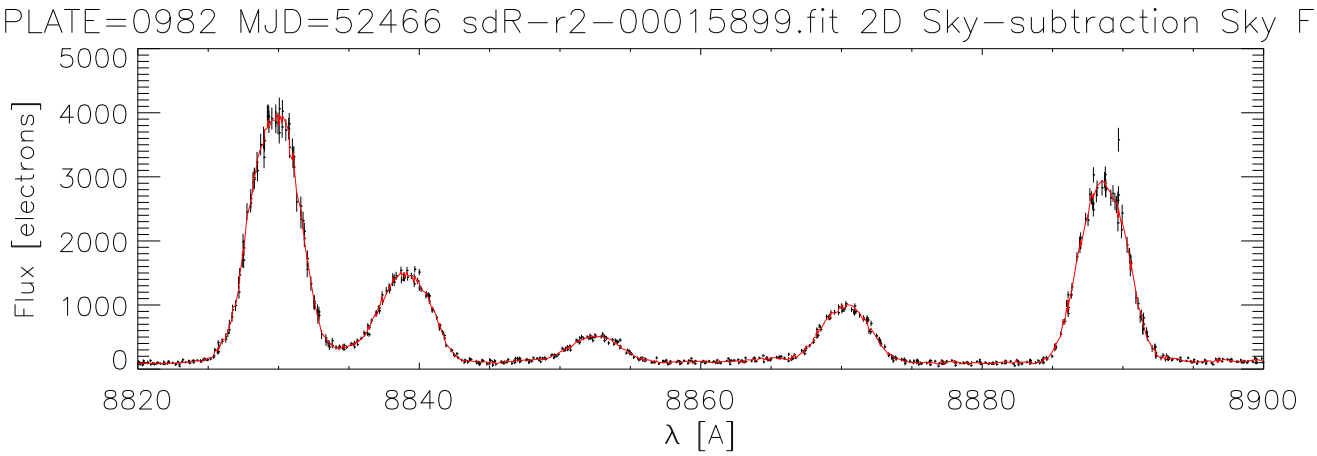
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

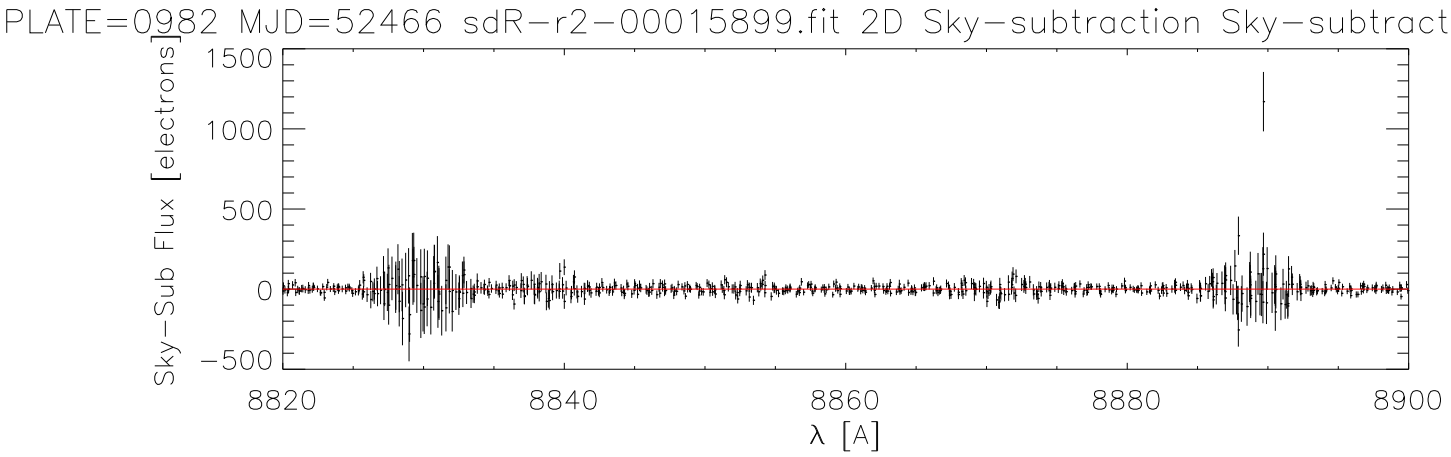

PLATE=0982 MJD=52466 sdR-r2-00015899.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

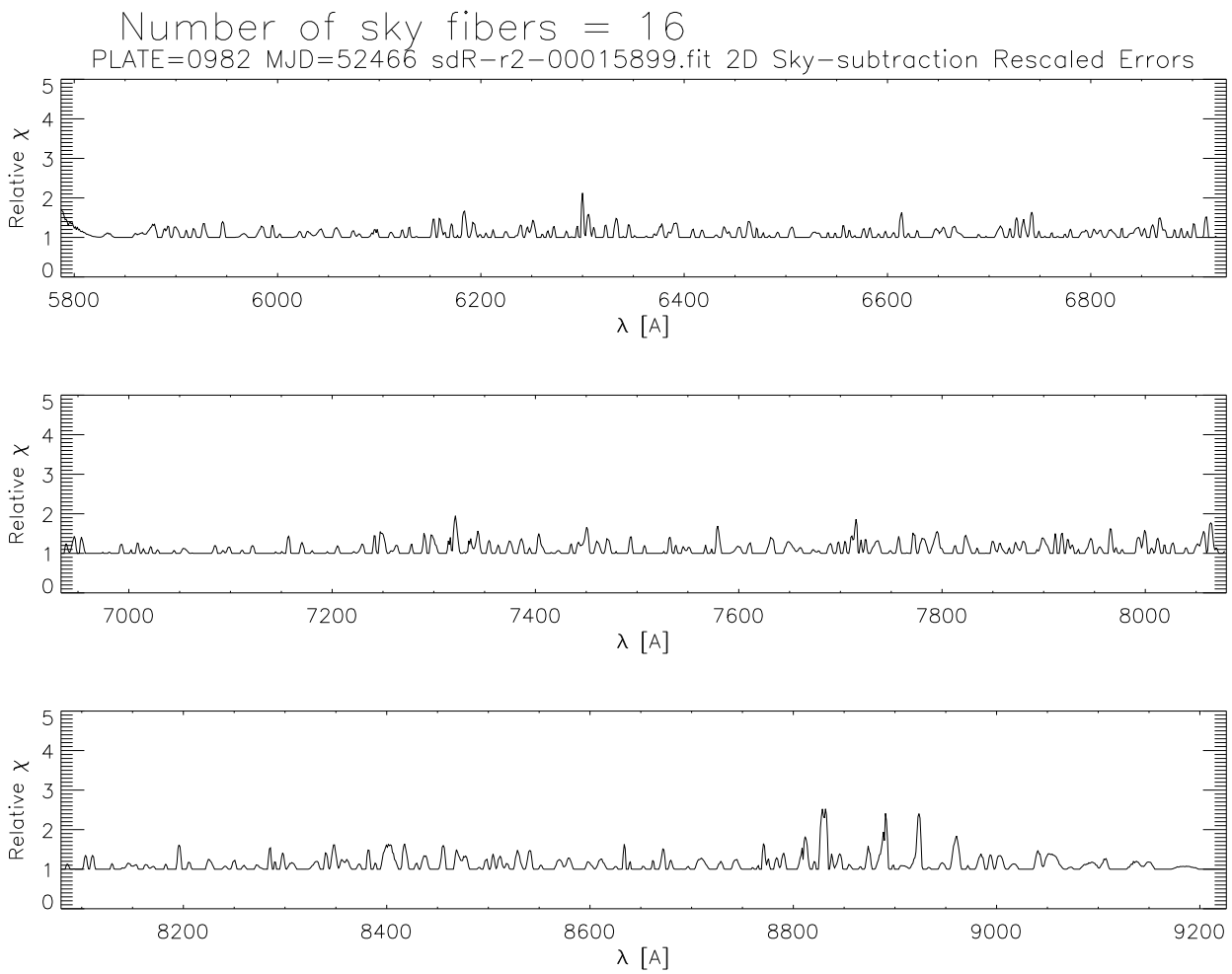

PLATE=0982 MJD=52466 sdR-r2-00015899.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

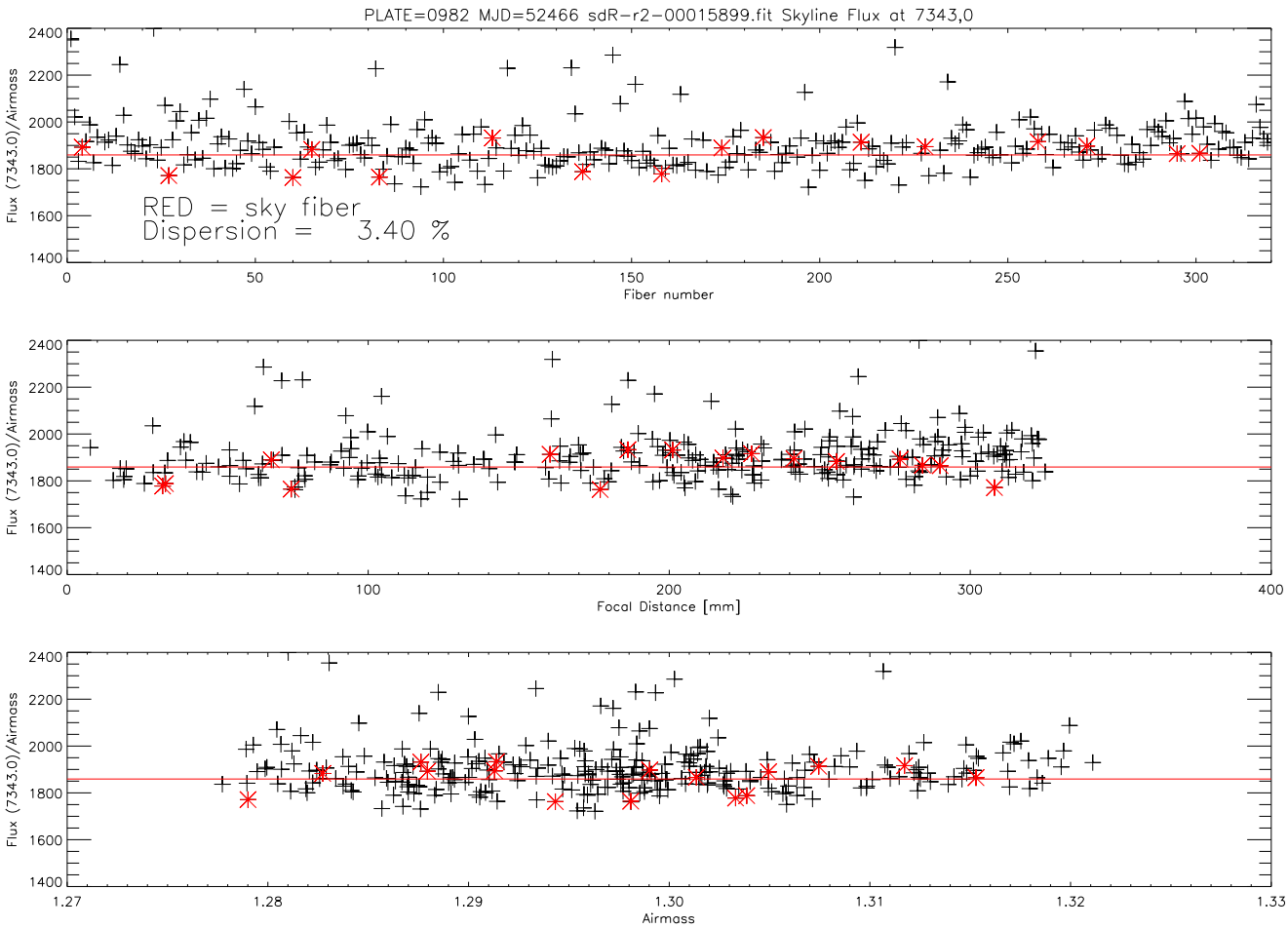

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015899.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

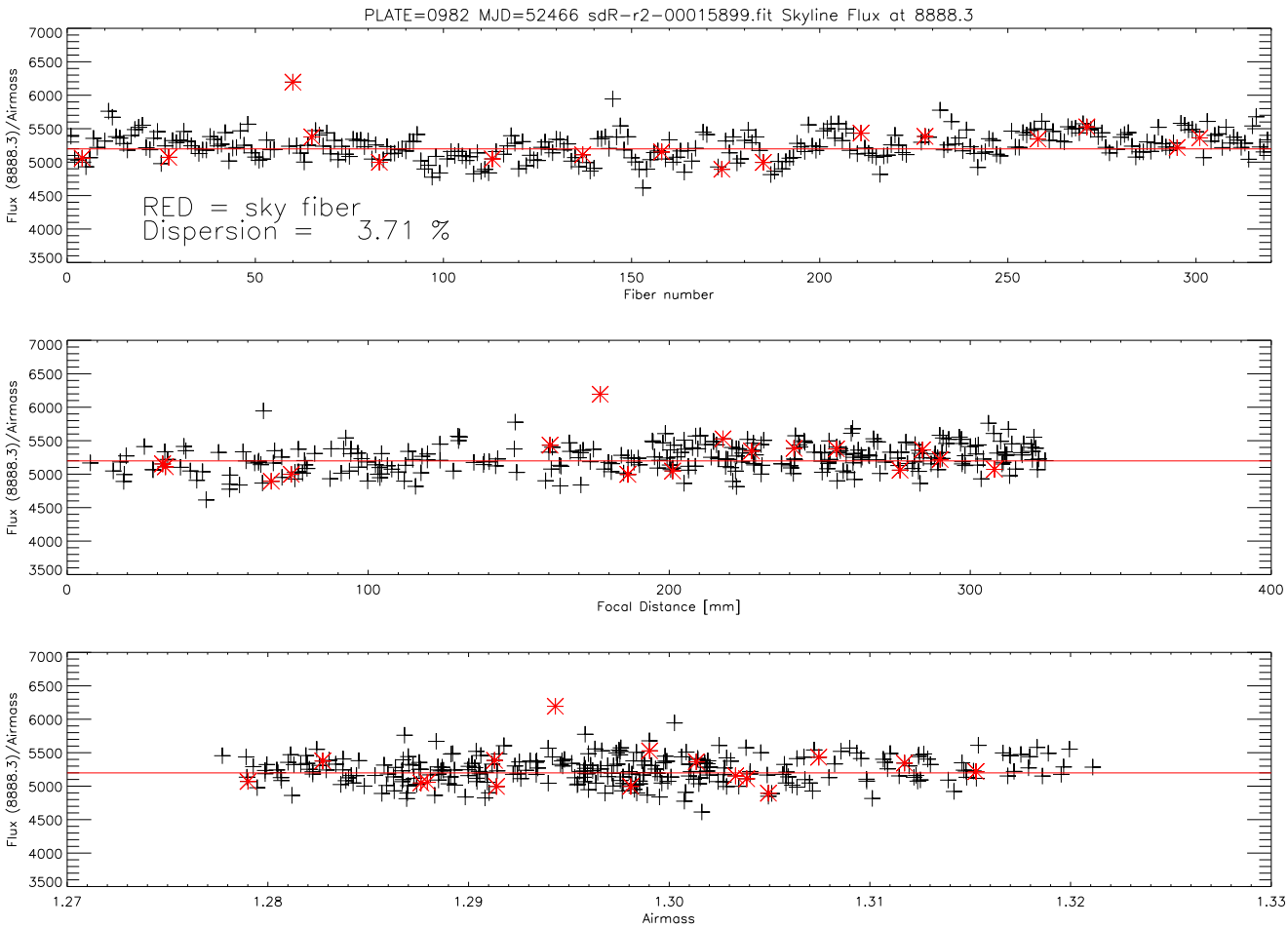

PLATE=0982 MJD=52466 sdR-r2-00015899.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

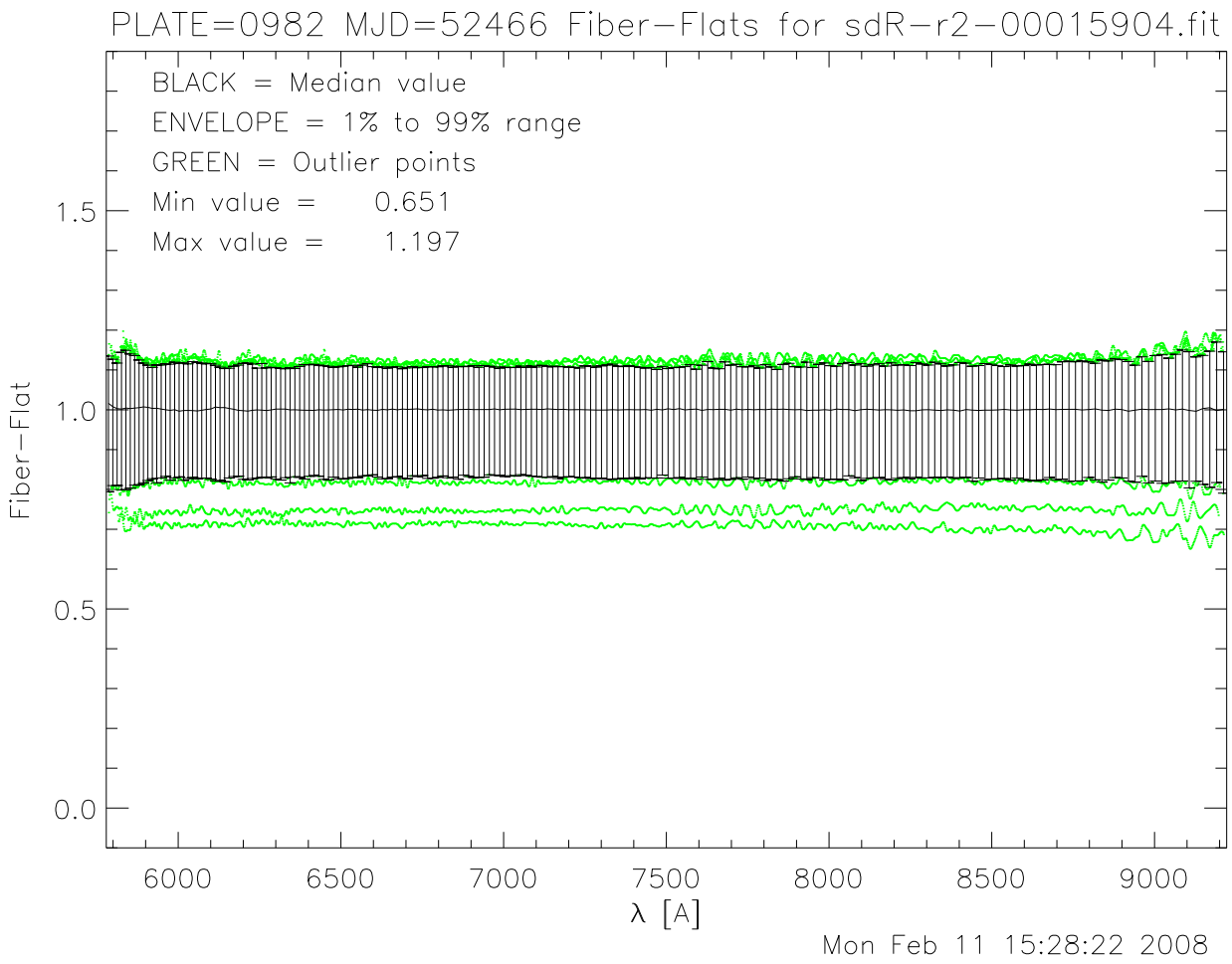

PLATE=0982 MJD=52466 sdR-r2-00015899.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

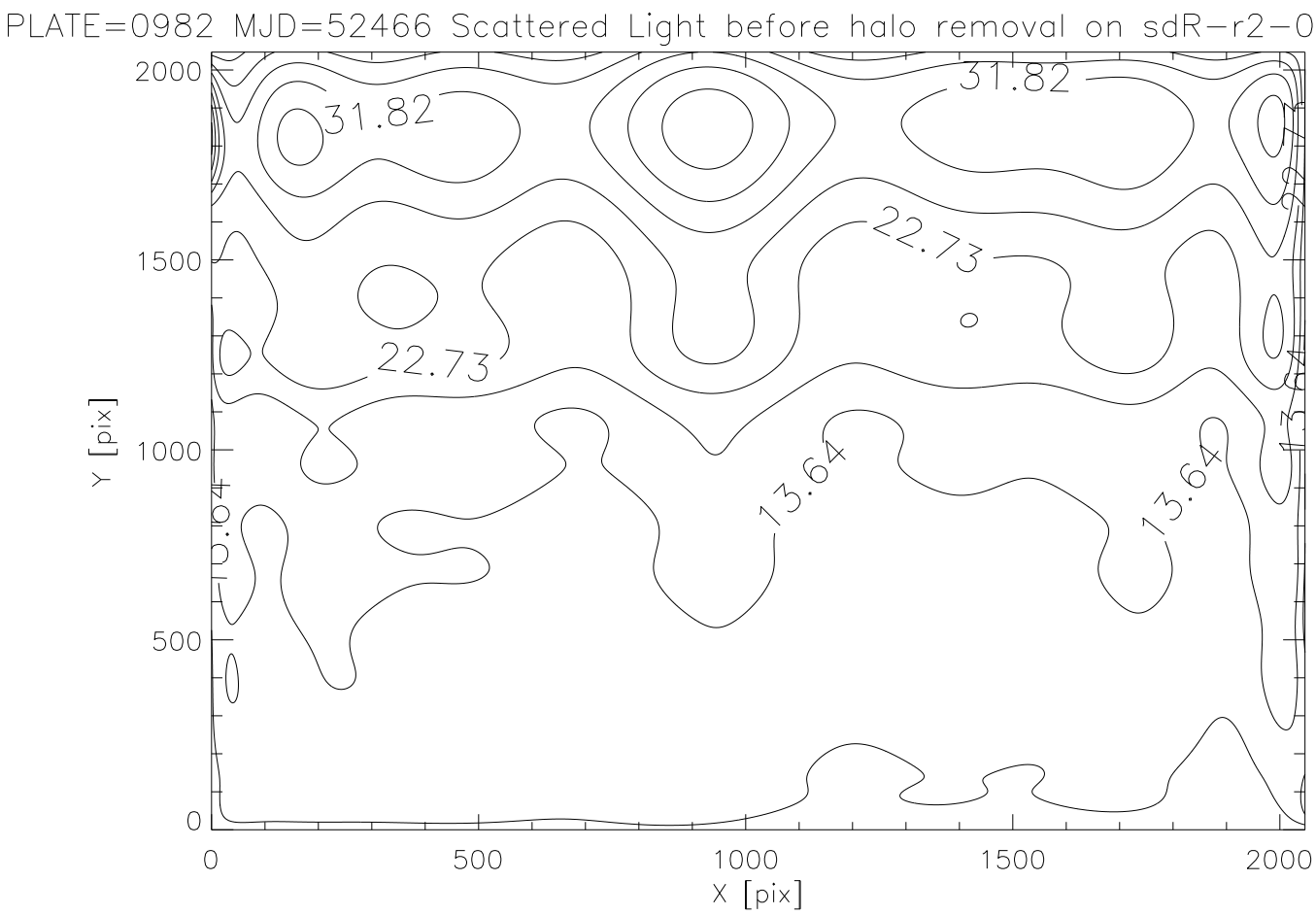

PLATE=0982 MJD=52466 sdR-r2-00015899.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

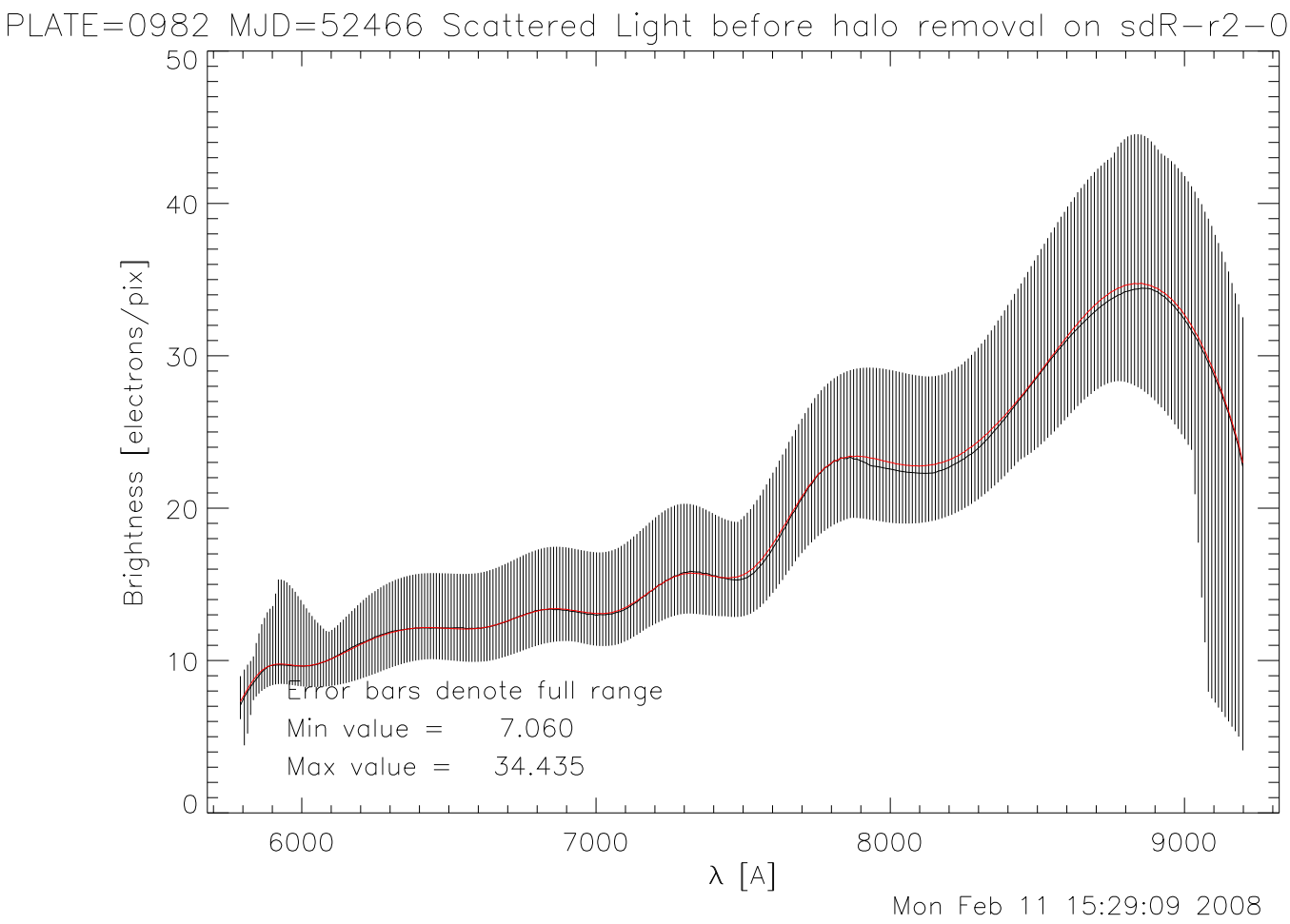

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015899.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

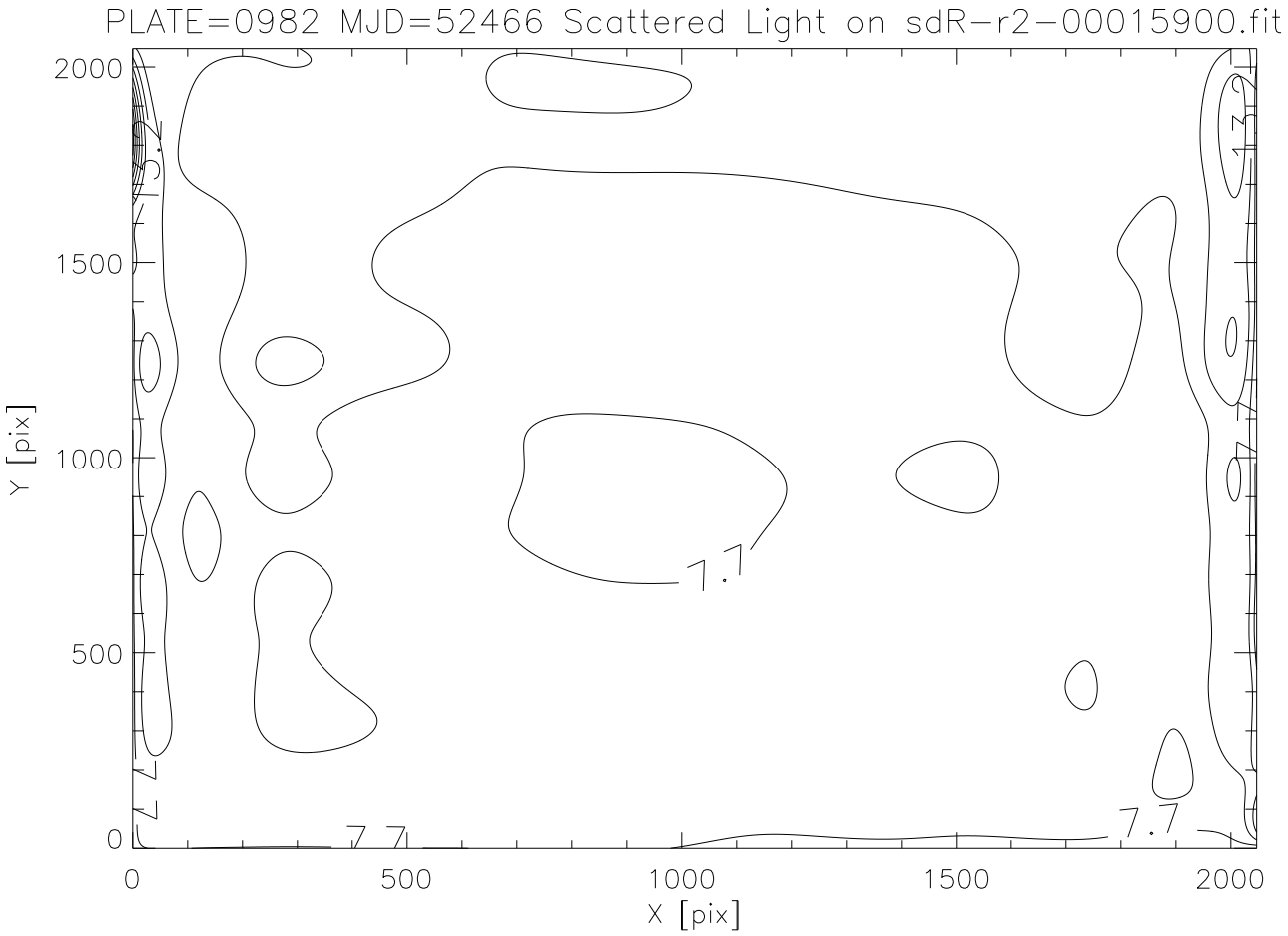

PLATE=0982 MJD=52466 sdR-r2-00015899.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.40 %
Fiber number
Focal Distance [mm]
Airmass

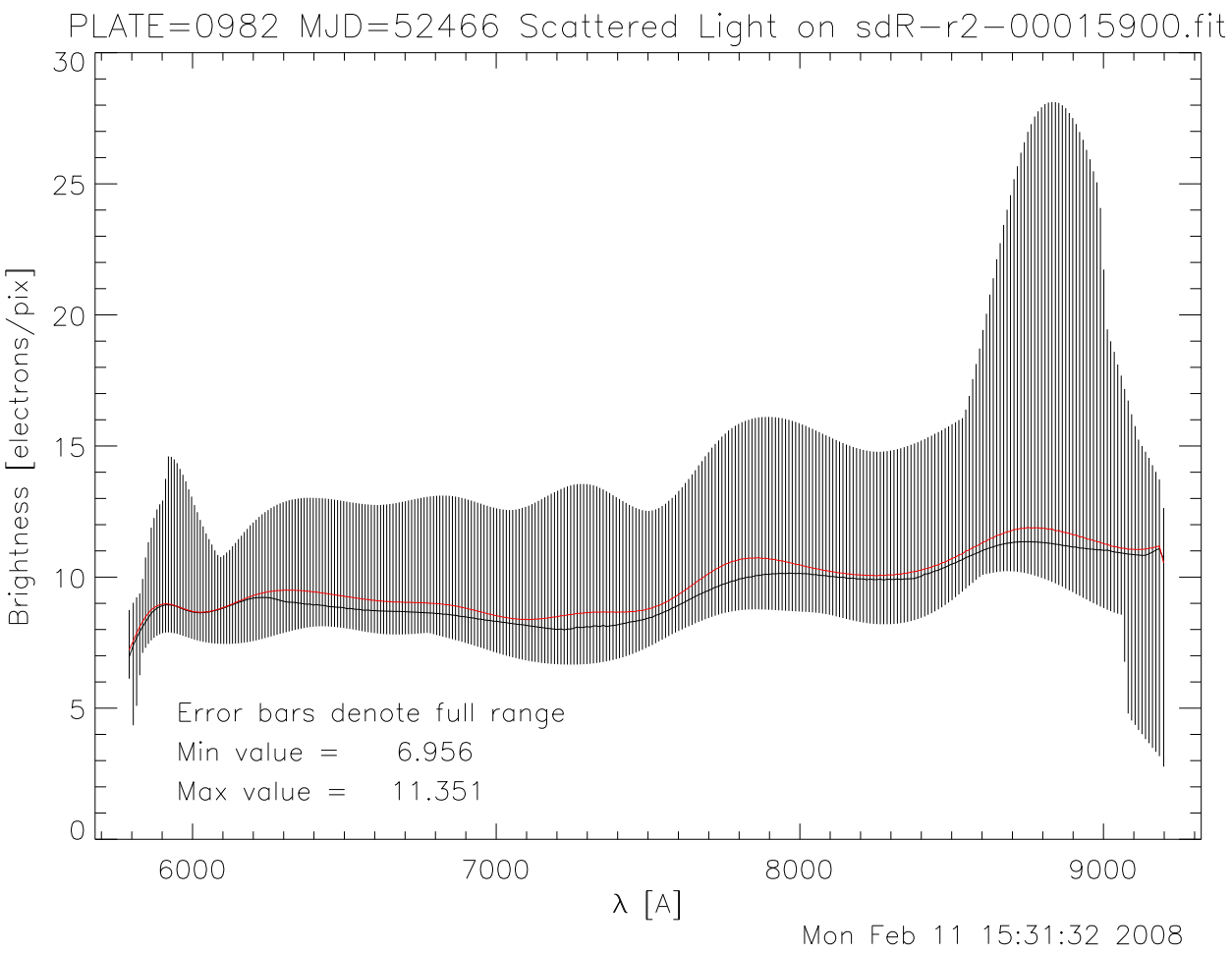

PLATE=0982 MJD=52466 sdR-r2-00015899.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.71 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

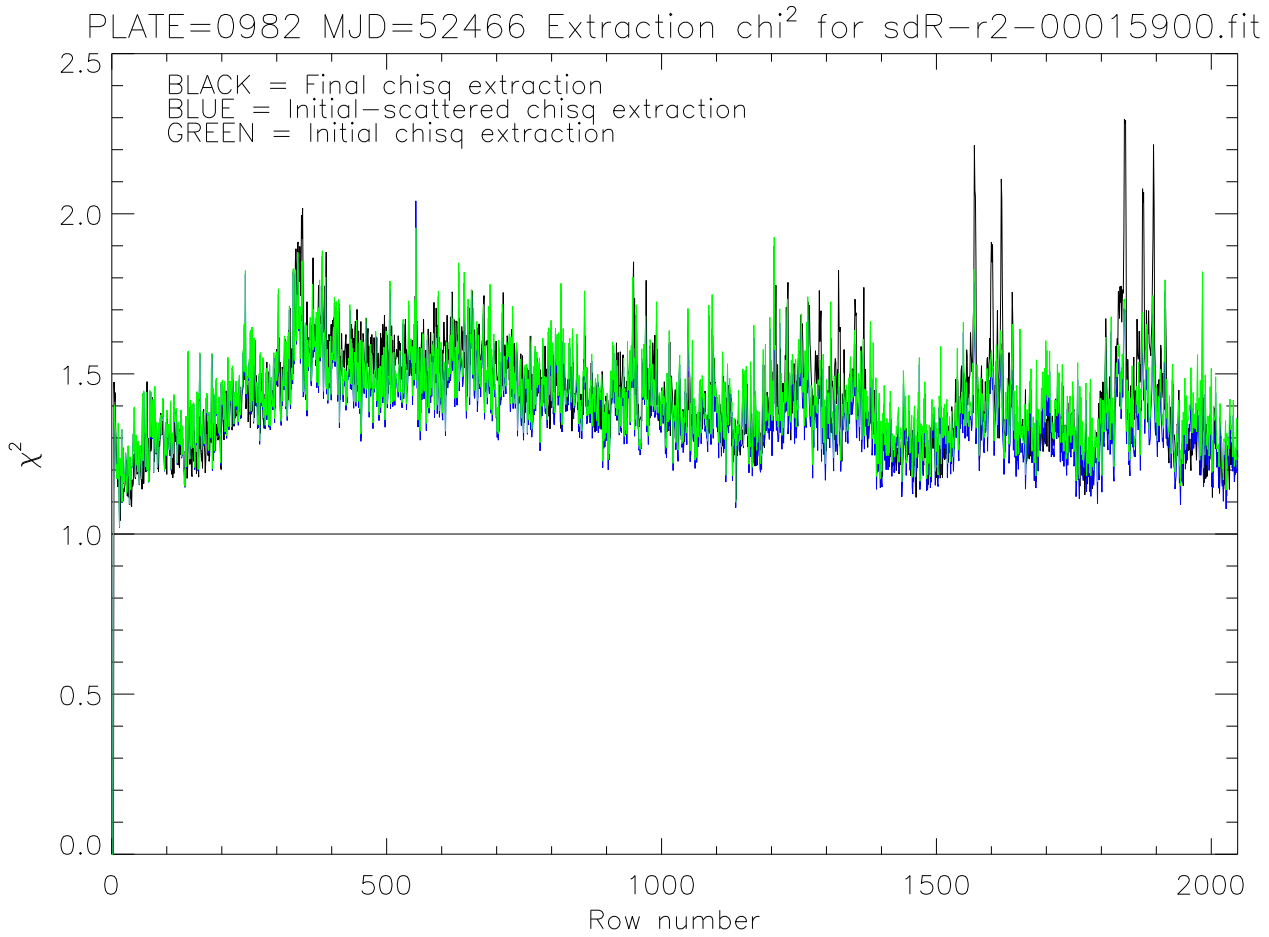

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r2−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.651
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 15:28:22 2008

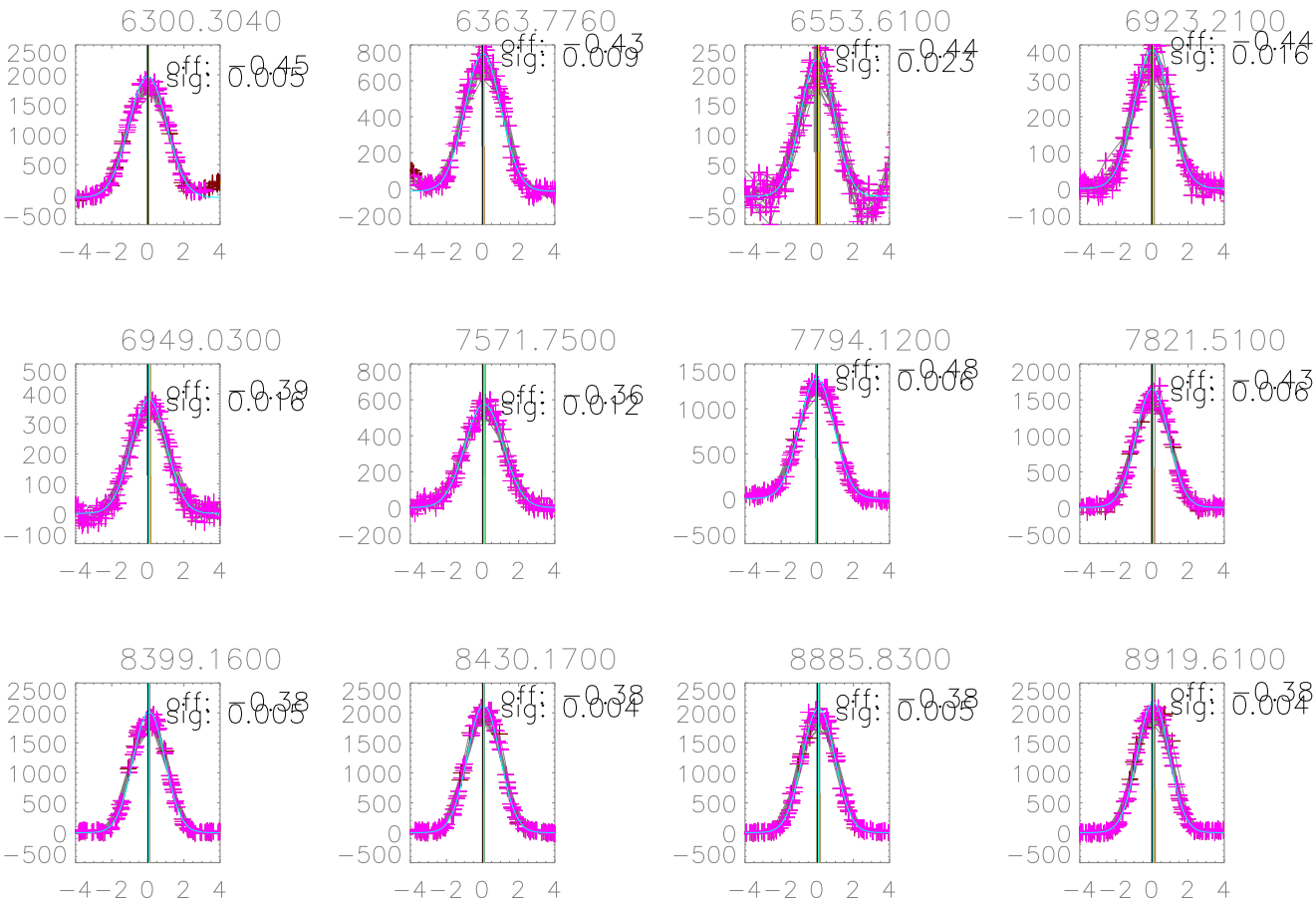

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015900.fi
31.82
31.82
22.73
22.73
13.64
13.64
13.64
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

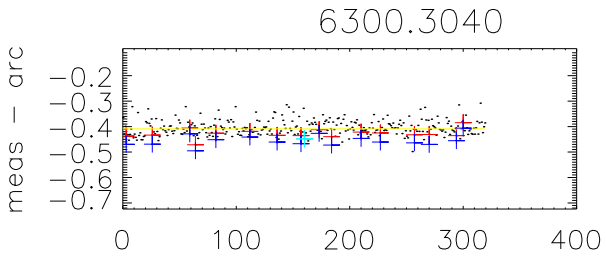

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015900.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.060
Max value = 34.435
Mon Feb 11 15:29:09 2008

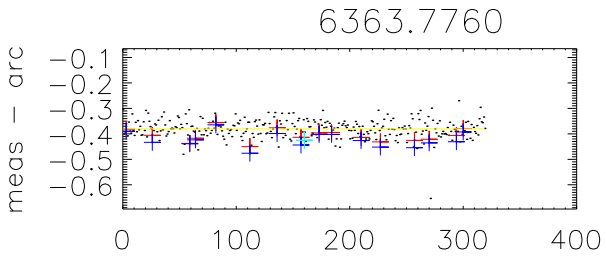

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015900.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
7.7
7.7
7.7
7.7
7.7

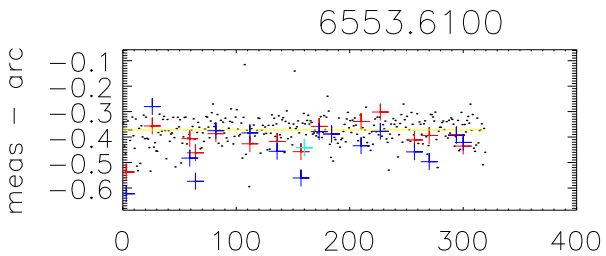

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015900.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.956
Max value = 11.351
Mon Feb 11 15:31:32 2008

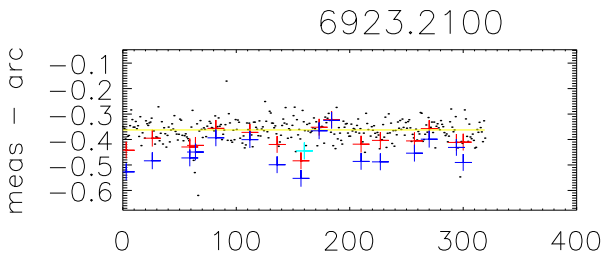

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r2−00015900.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

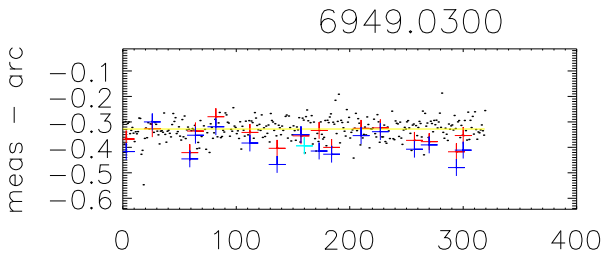

6300.3040
off: −0.45
sig: 0.005
6363.7760
off: −0.43
sig: 0.009
6553.6100
off: −0.44
sig: 0.023
6923.2100
off: −0.44
sig: 0.016
6949.0300
off: −0.39
sig: 0.016
7571.7500
off: −0.36
sig: 0.012
7794.1200
off: −0.48
sig: 0.006
7821.5100
off: −0.43
sig: 0.006
8399.1600
off: −0.38
sig: 0.005
8430.1700
off: −0.38
sig: 0.004
8885.8300
off: −0.38
sig: 0.005
8919.6100
off: −0.38
sig: 0.004

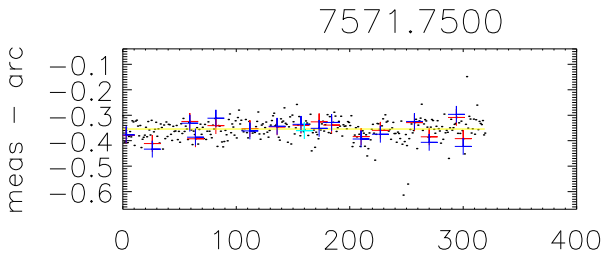

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

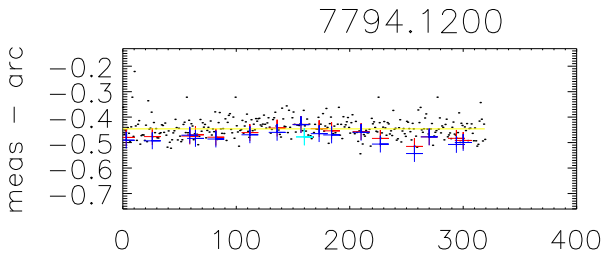

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

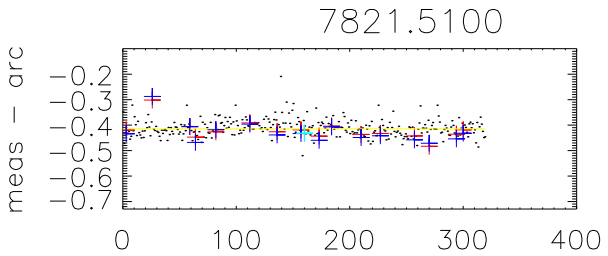

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

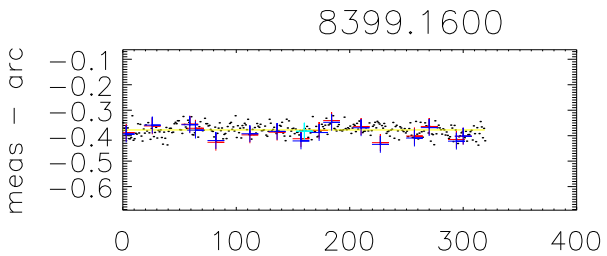

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

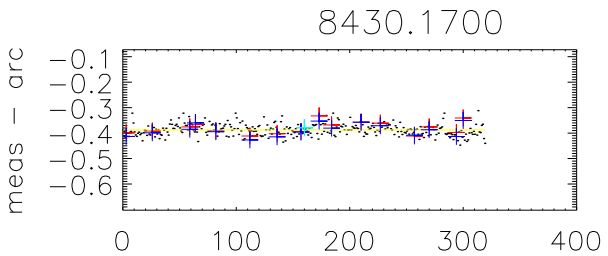

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

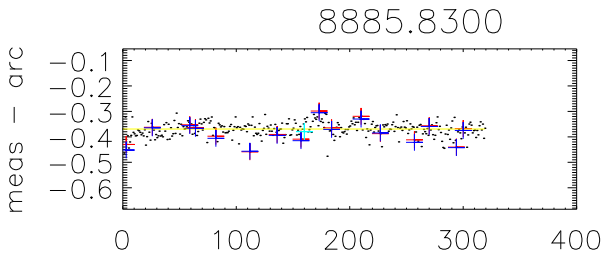

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

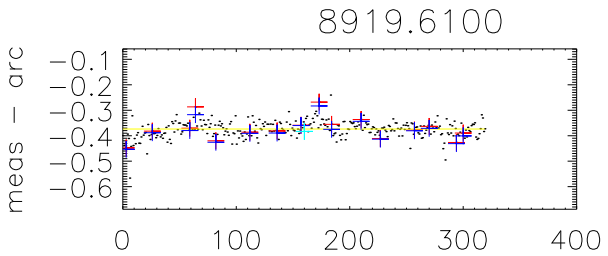

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

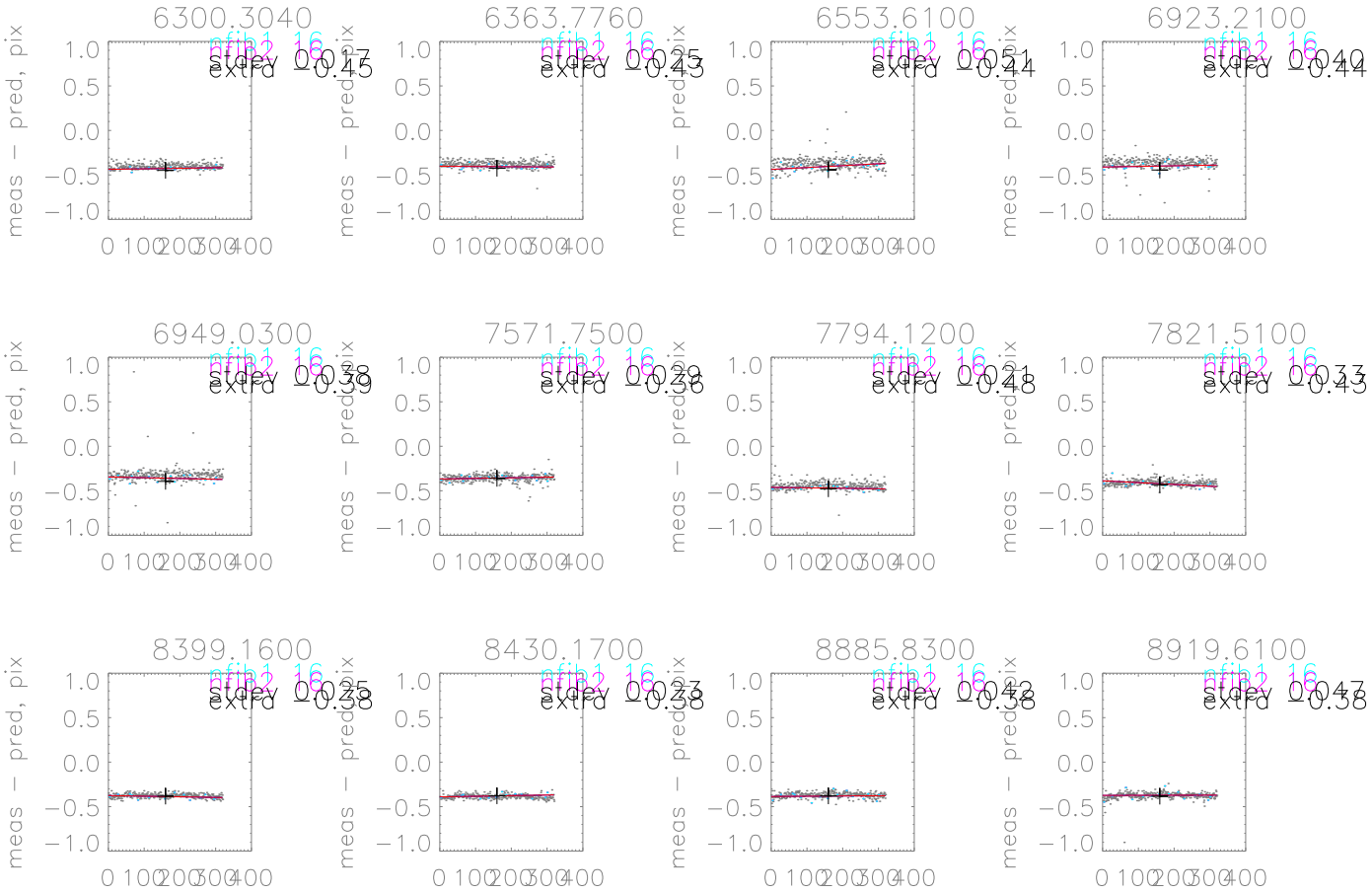

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

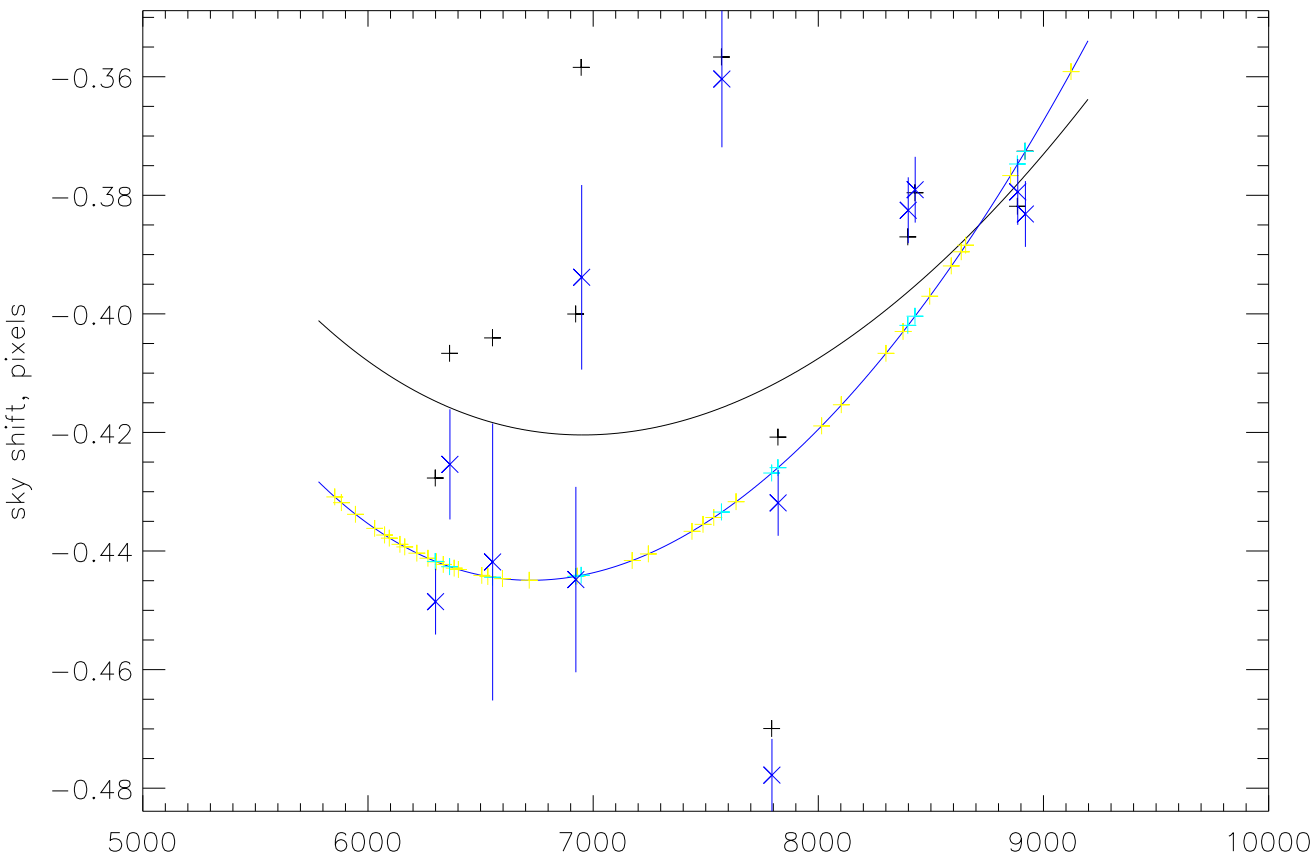

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

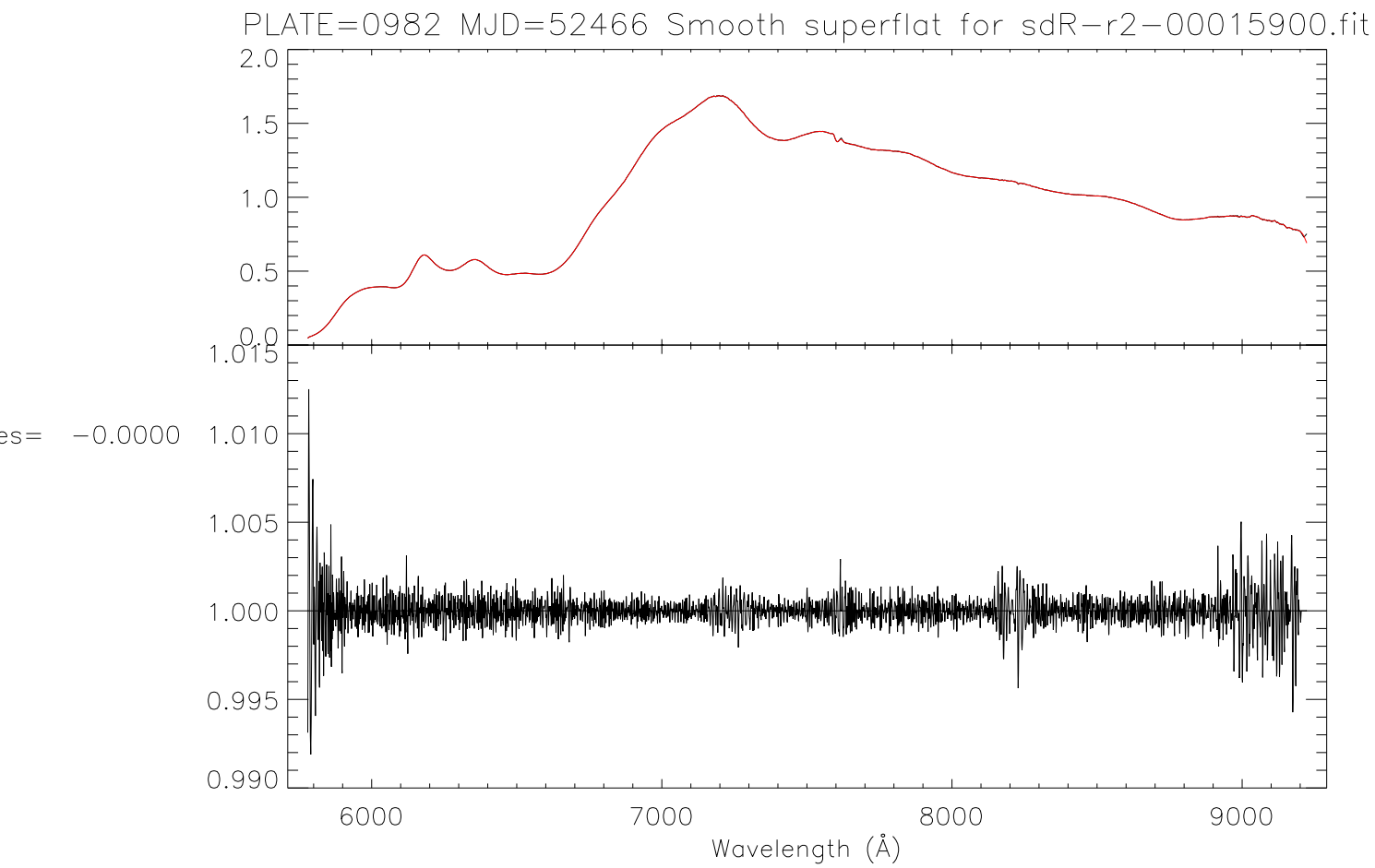

8430.1700
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

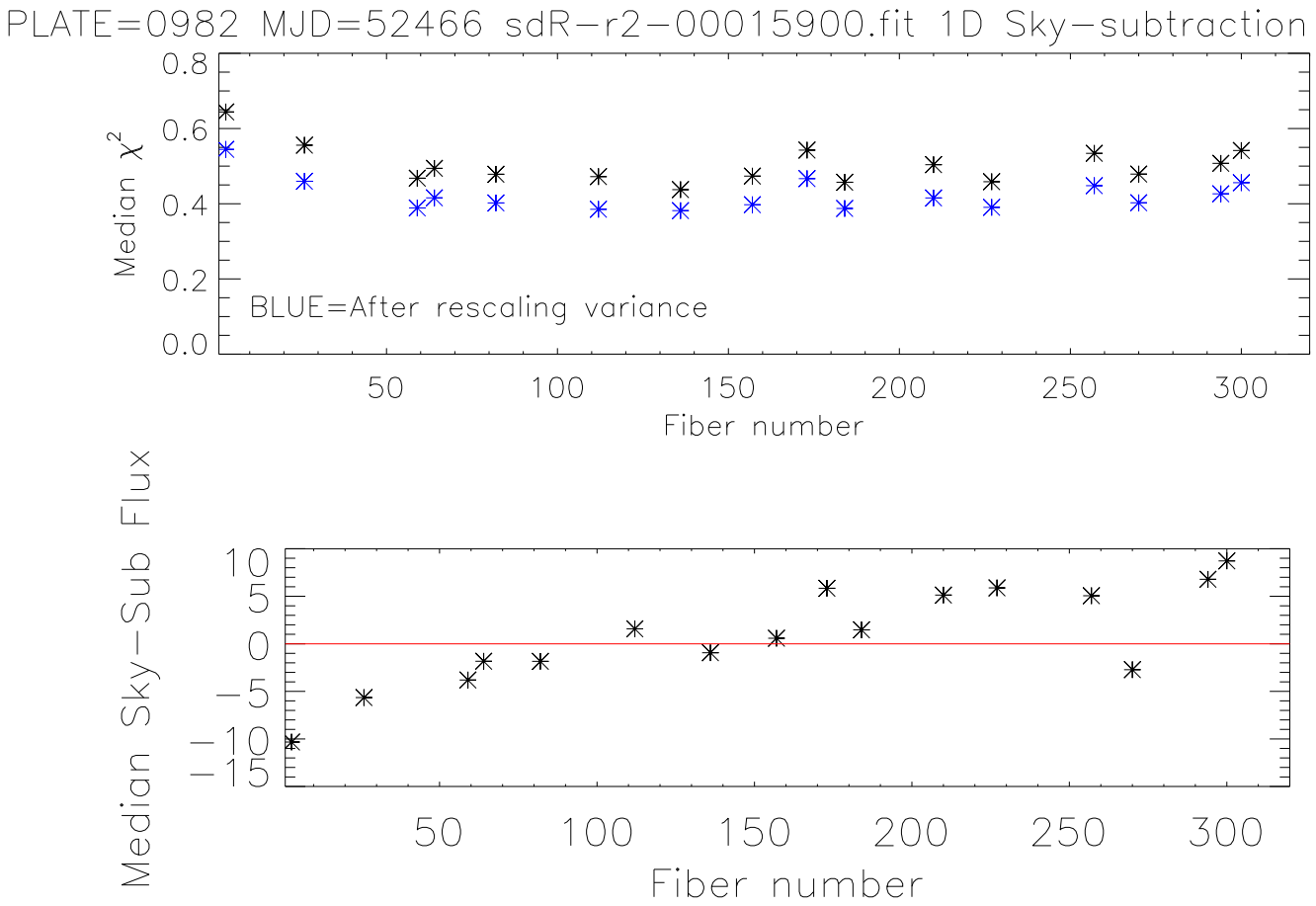

8885.8300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

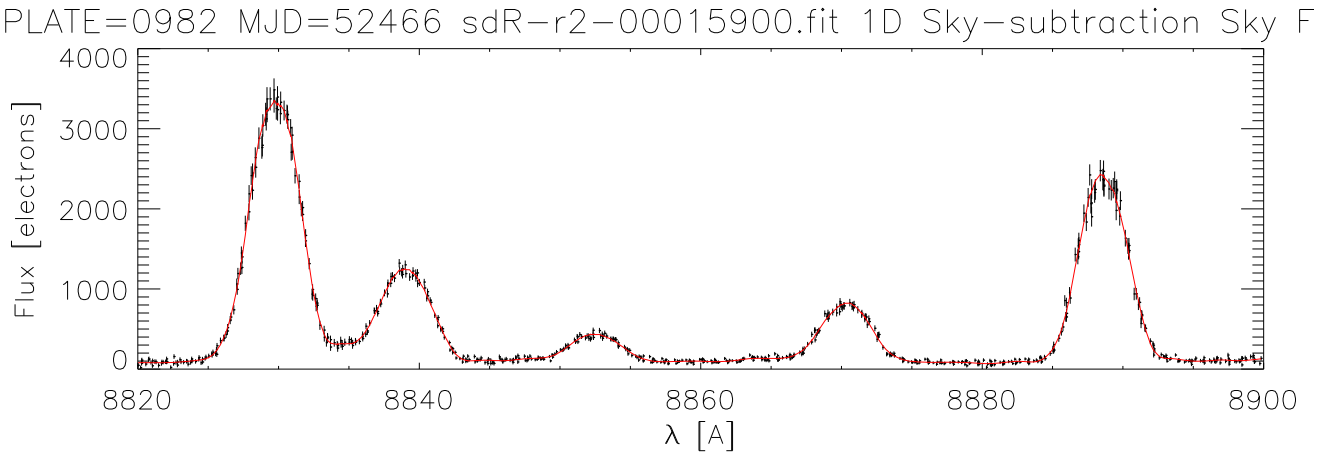

8919.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

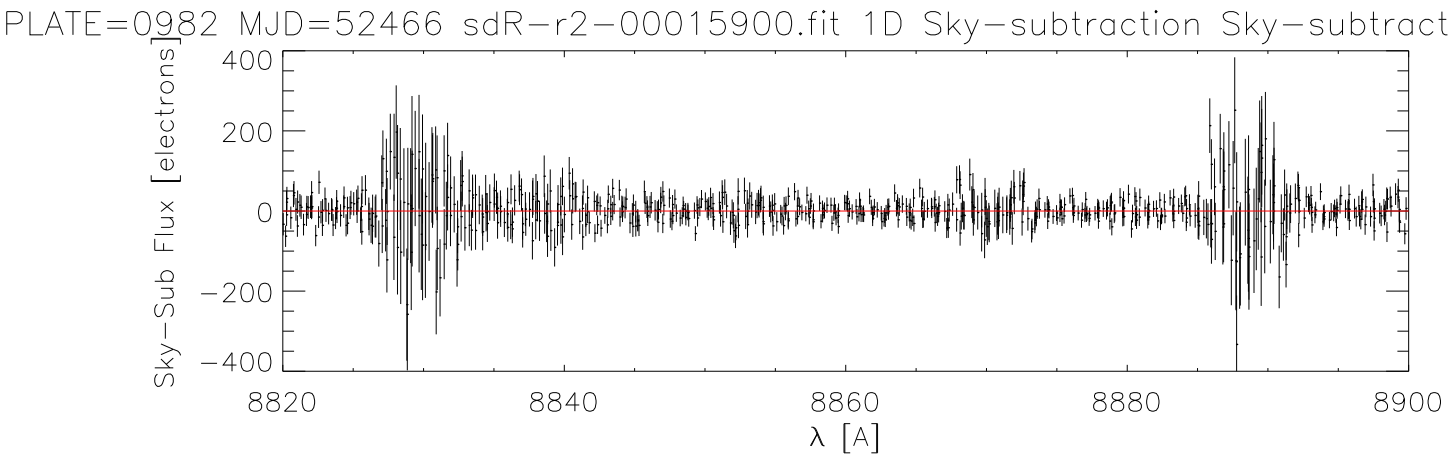

6300.3040
stdev 0.017
extrd −0.45
6363.7760
stdev 0.025
extrd −0.43
6553.6100
stdev 0.051
extrd −0.44
6923.2100
stdev 0.040
extrd −0.44
6949.0300
stdev 0.038
extrd −0.39
7571.7500
stdev 0.029
extrd −0.38
7794.1200
stdev 0.021
extrd −0.48
7821.5100
stdev 0.033
extrd −0.43
8399.1600
stdev 0.025
extrd −0.38
8430.1700
stdev 0.023
extrd −0.38
8885.8300
stdev 0.042
extrd −0.38
8919.6100
stdev 0.047
extrd −0.38
meas − pred, pix
mfhd2 16

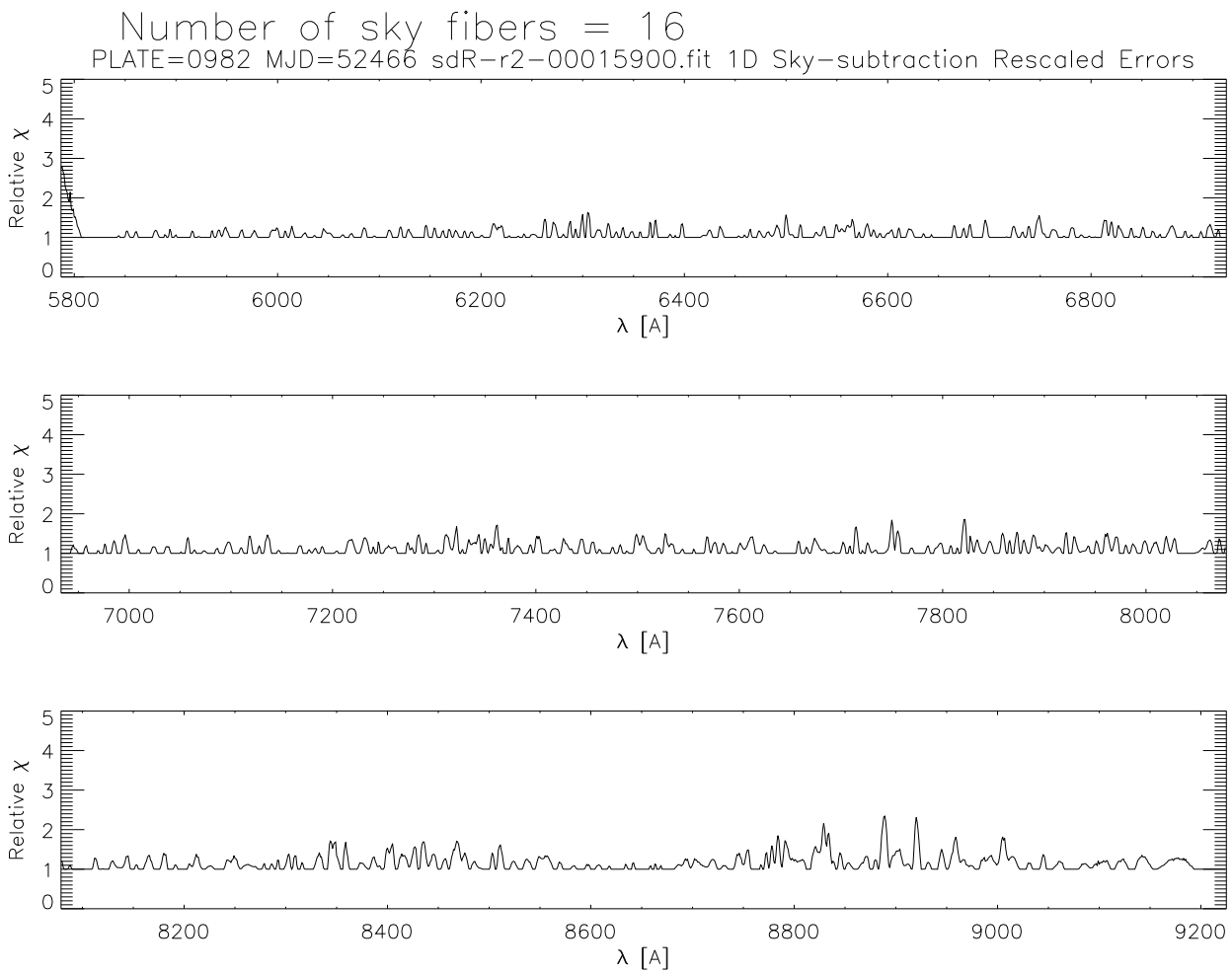

sky shift, pixels
−0.36
−0.38
−0.40
−0.42
−0.44
−0.46
−0.48
5000
6000
7000
8000
9000
10000

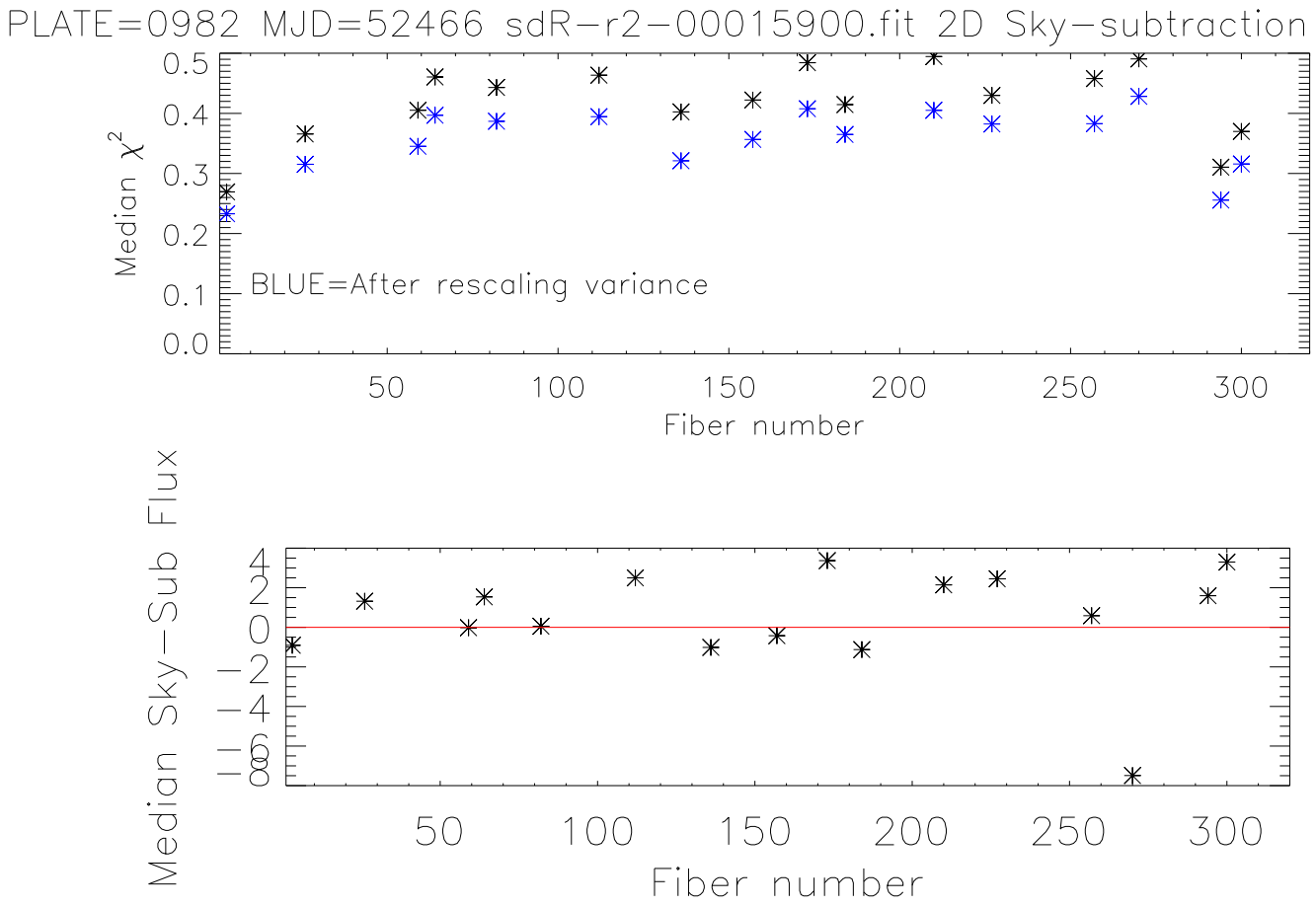

PLATE=0982 MJD=52466 Smooth superflat for sdR-r2-00015900.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

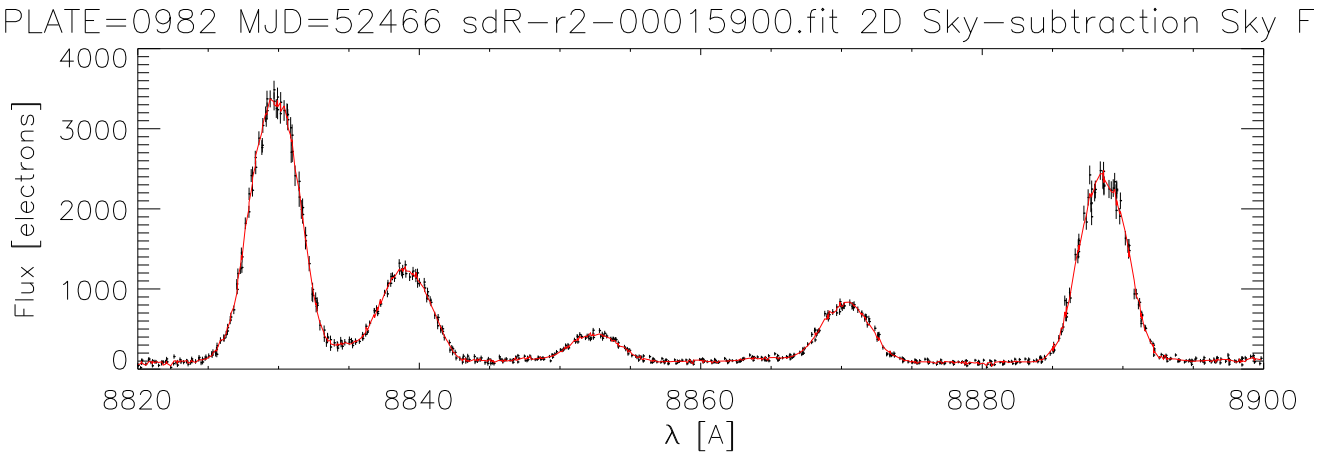

PLATE=0982 MJD=52466 sdR-r2-00015900.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

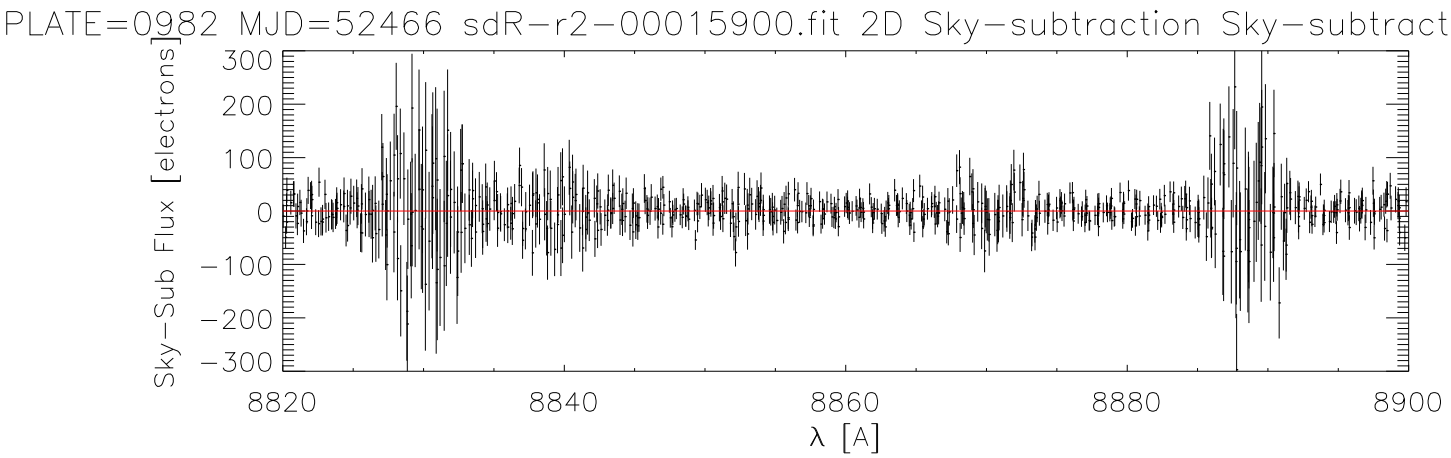

PLATE=0982 MJD=52466 sdR-r2-00015900.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

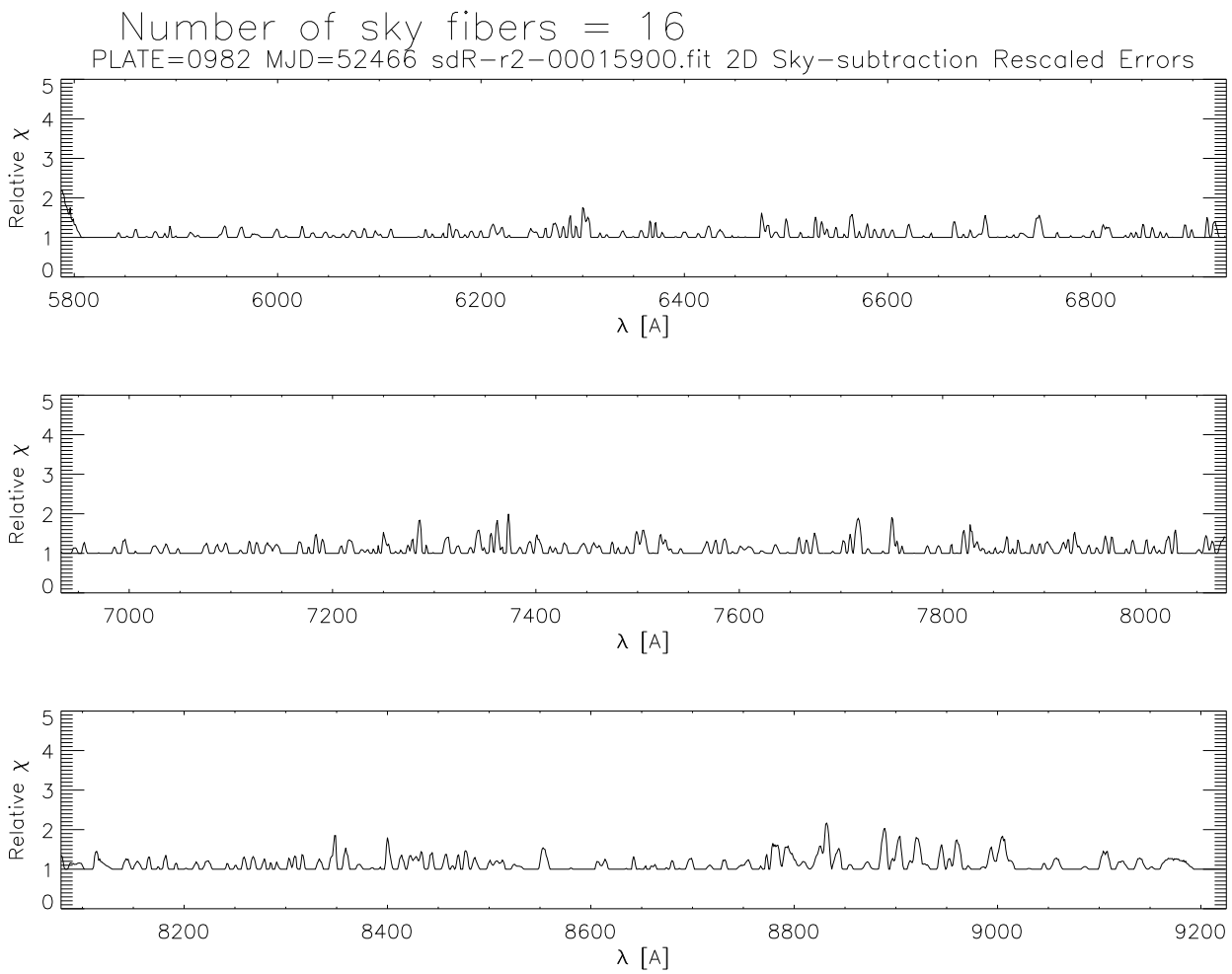

PLATE=0982 MJD=52466 sdR-r2-00015900.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

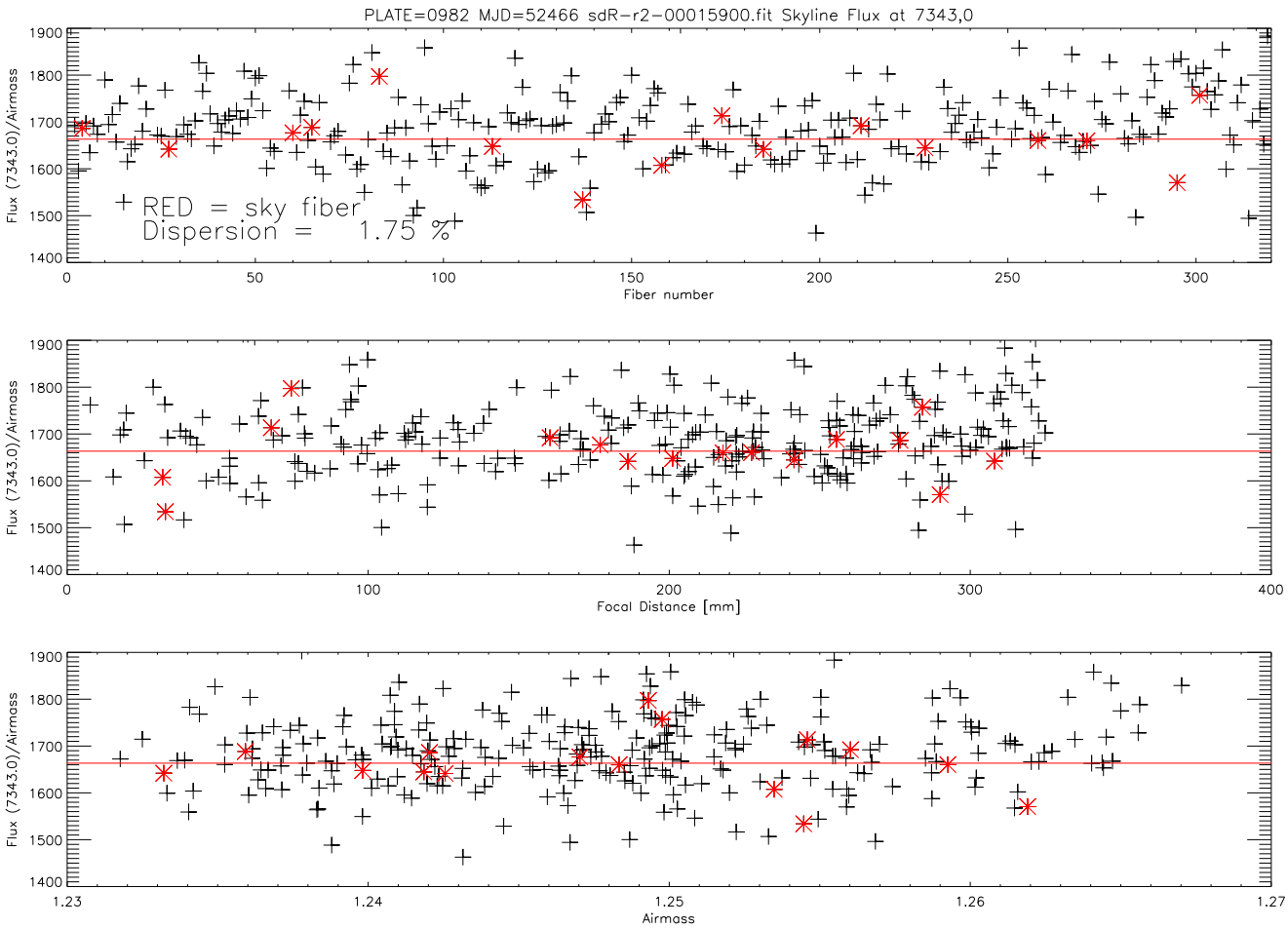

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015900.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

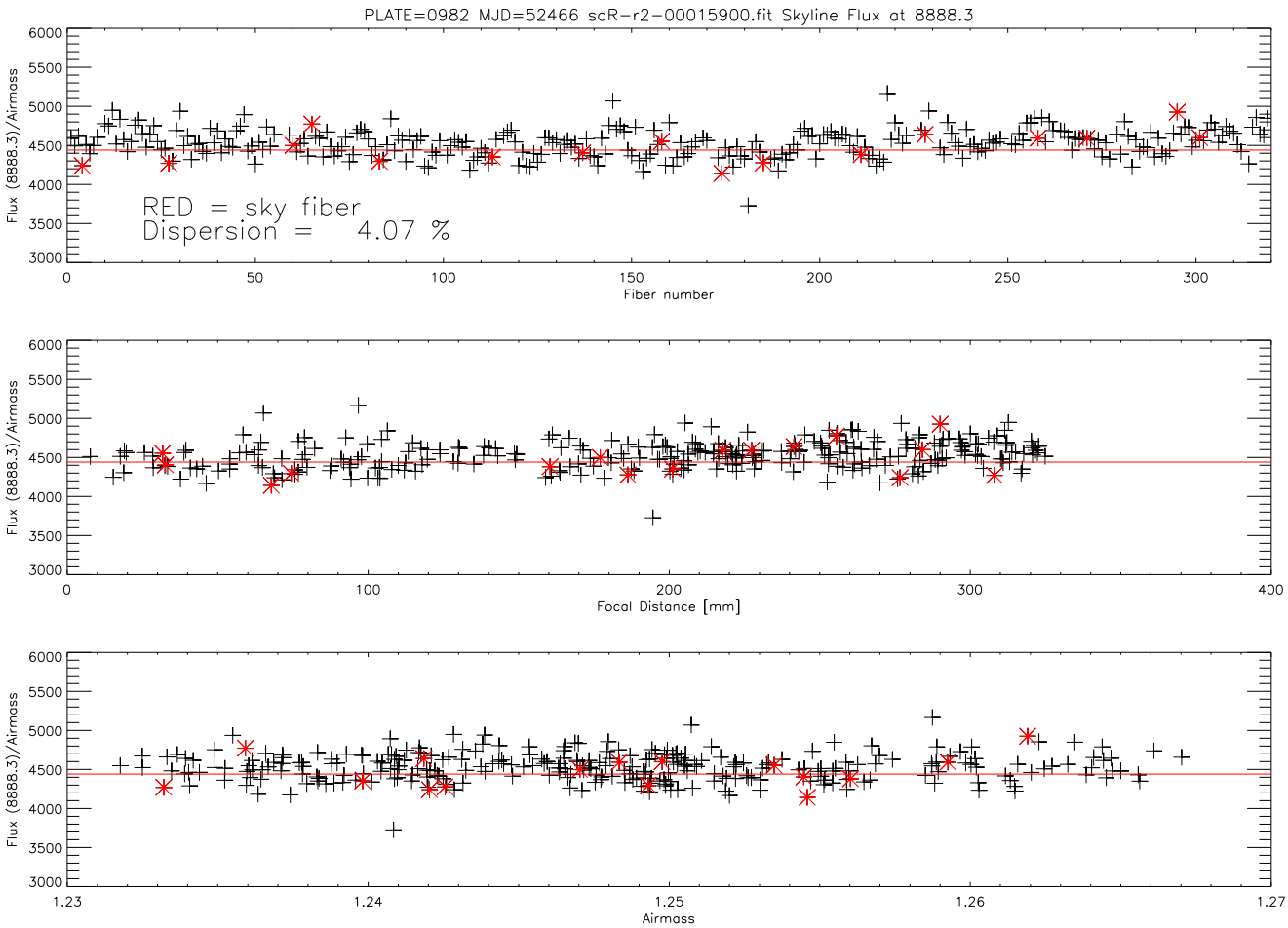

PLATE=0982 MJD=52466 sdR-r2-00015900.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
50
100
150
200
250
300
Fiber number

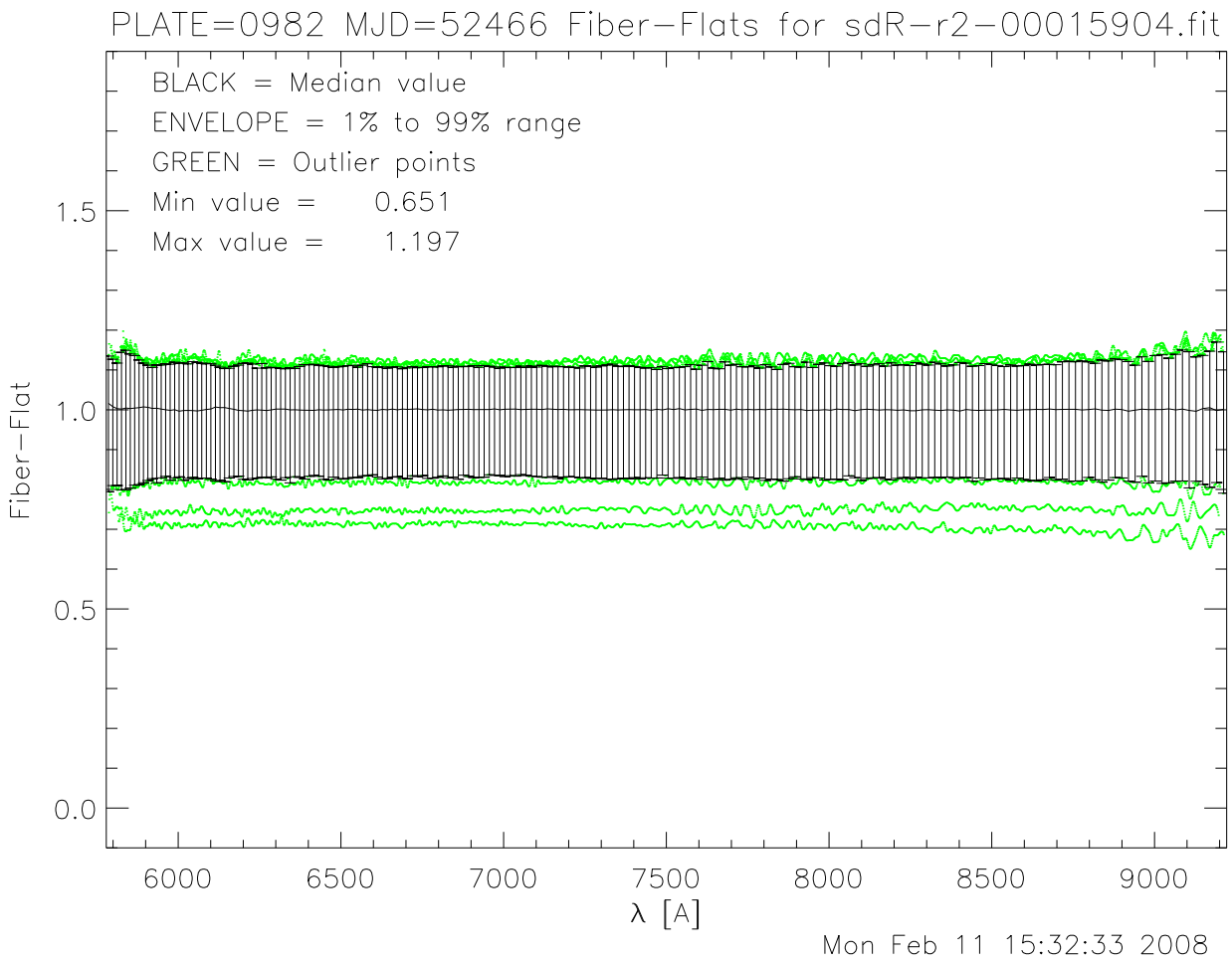

PLATE=0982 MJD=52466 sdR-r2-00015900.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

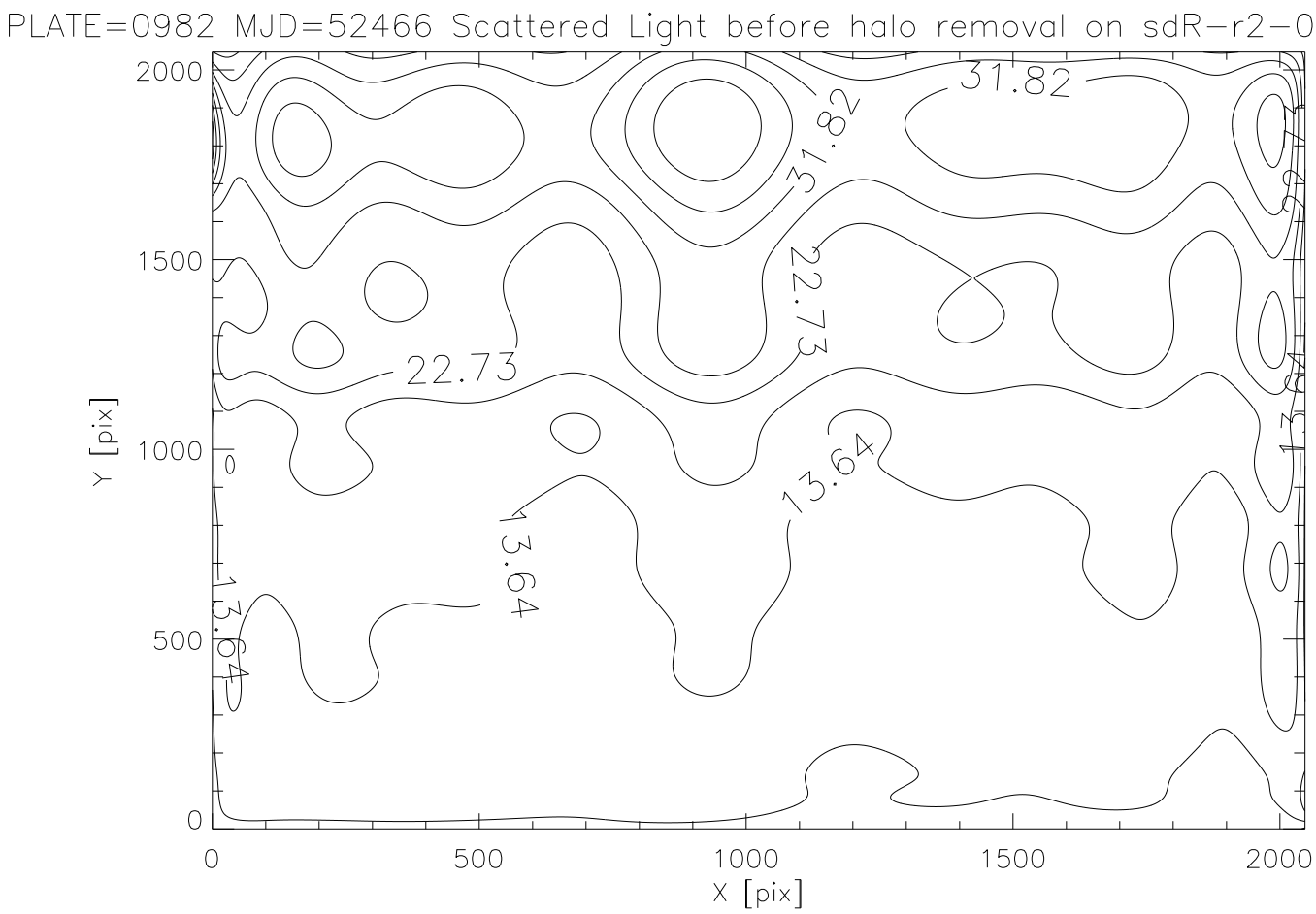

PLATE=0982 MJD=52466 sdR-r2-00015900.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

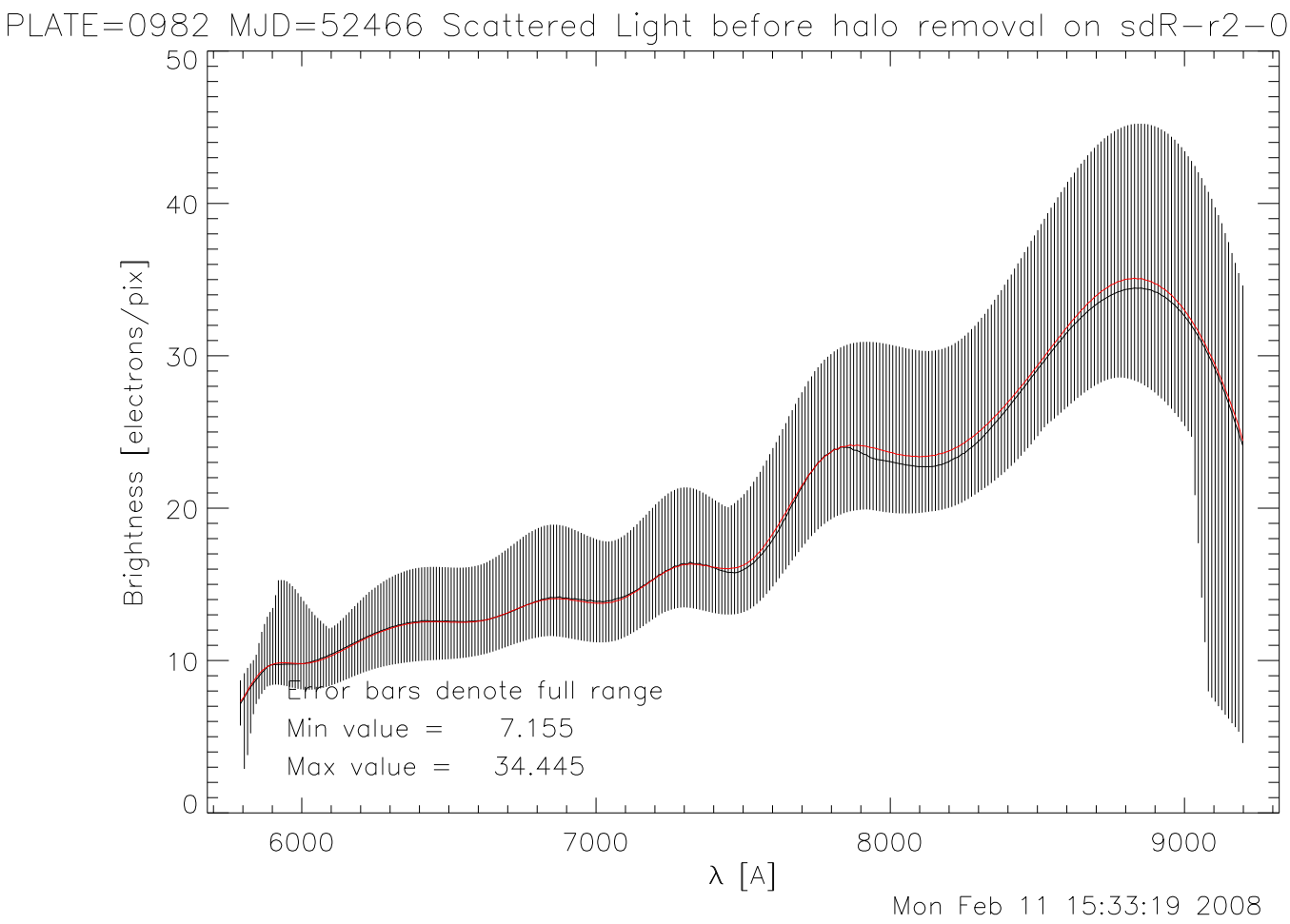

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015900.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

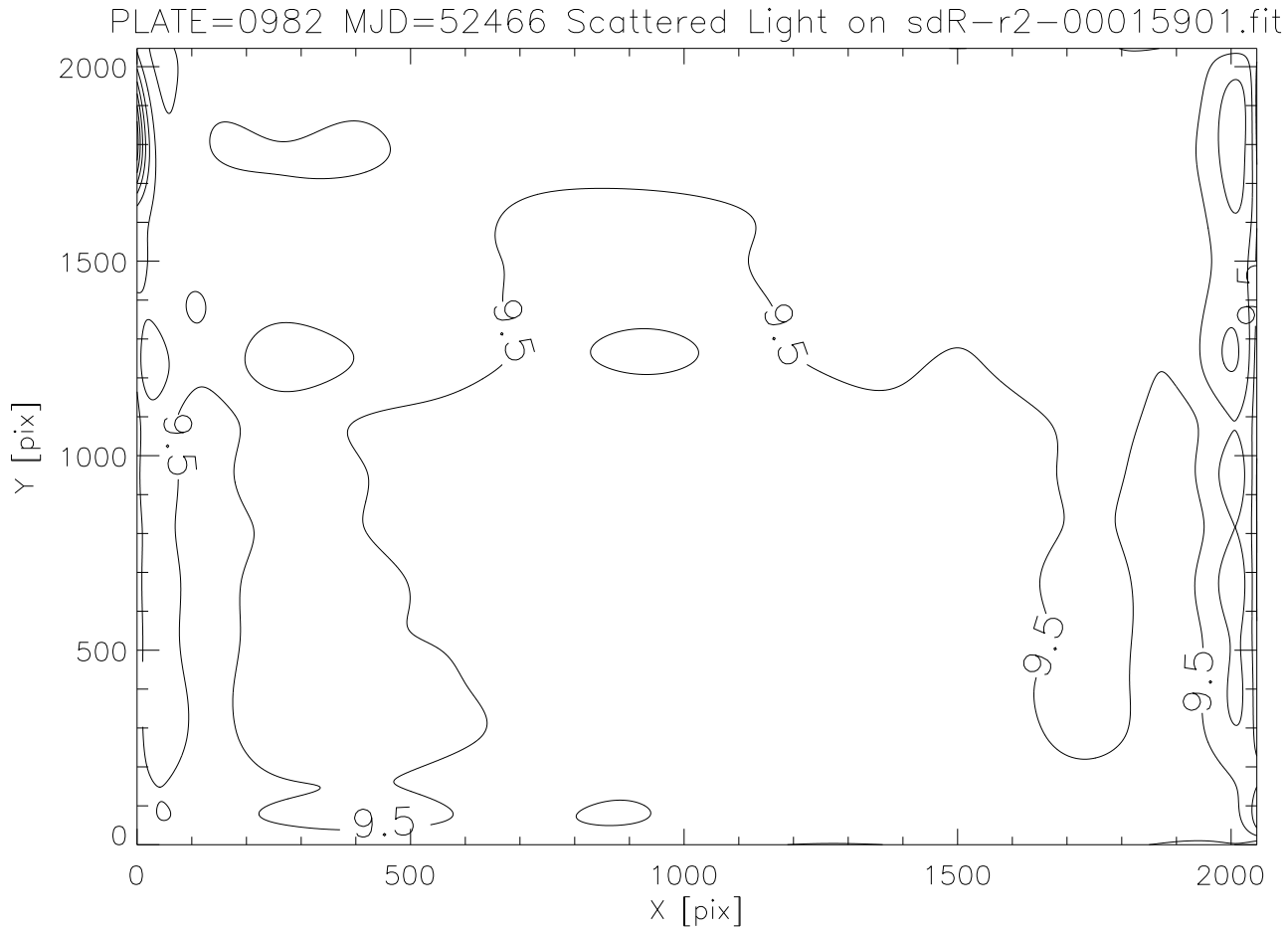

PLATE=0982 MJD=52466 sdR-r2-00015900.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.75 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

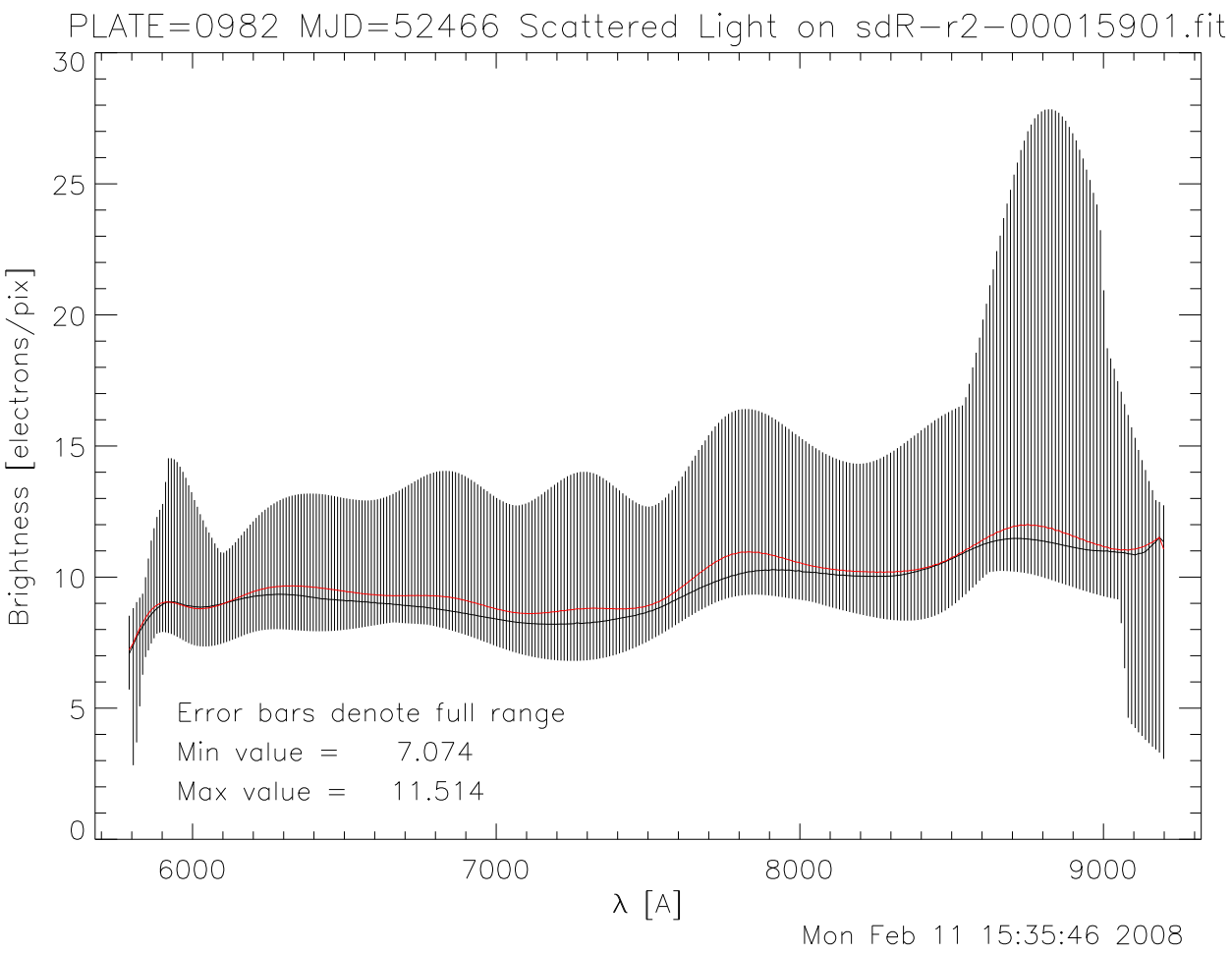

PLATE=0982 MJD=52466 sdR-r2-00015900.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.07 %
Fiber number
Focal Distance [mm]
Airmass

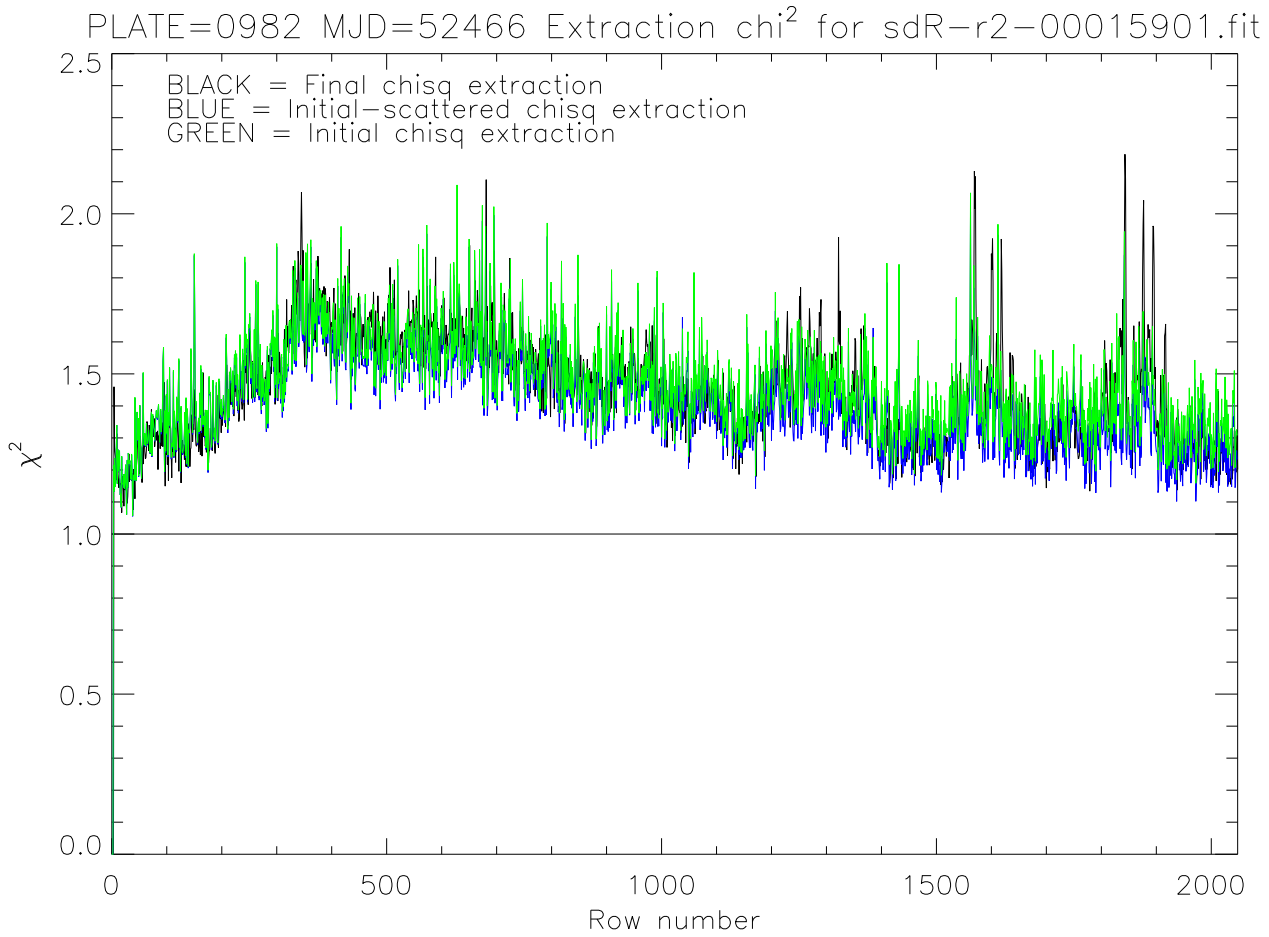

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r2−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.651
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 15:32:33 2008

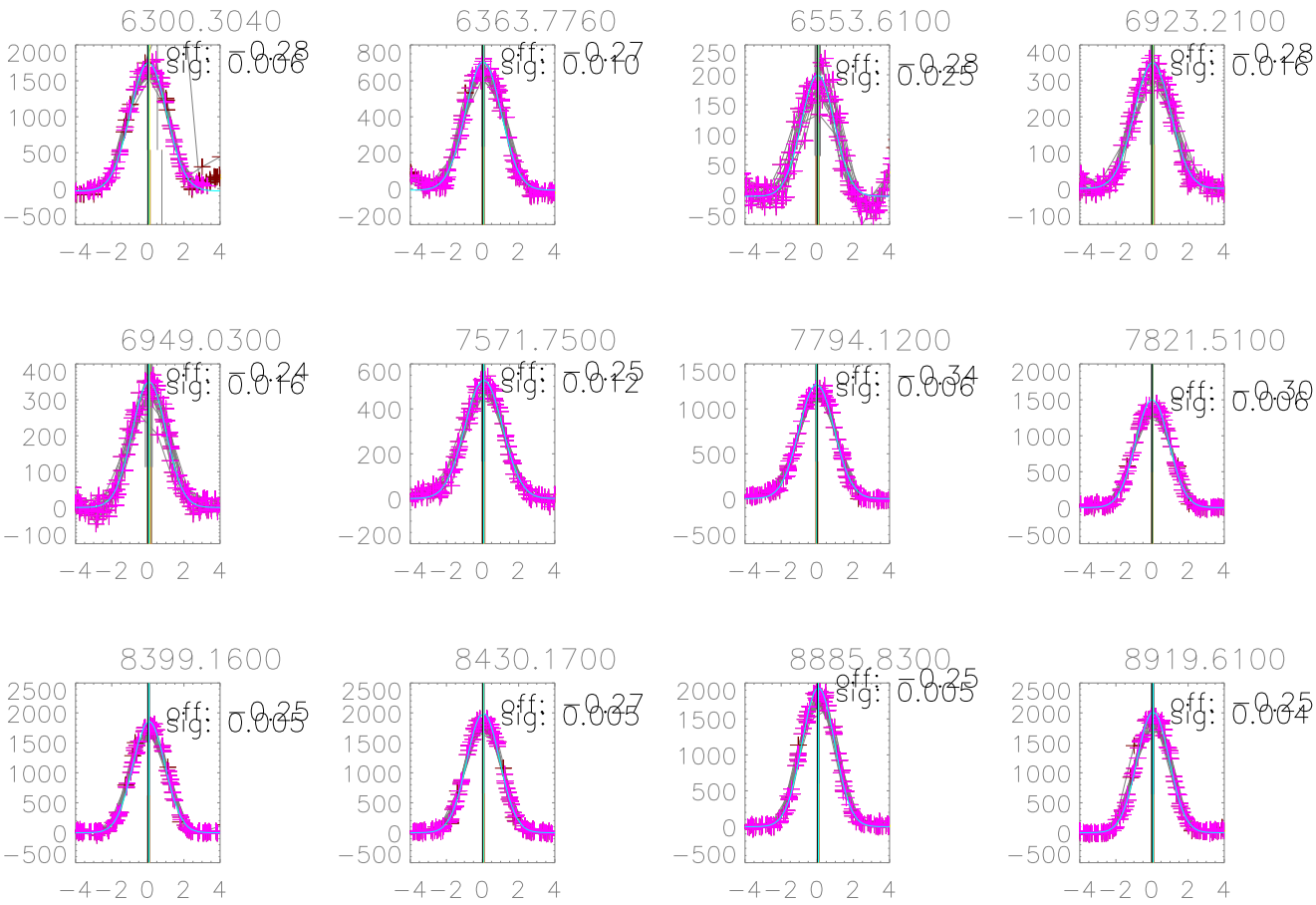

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015901.fi
31.82
31.82
22.73
22.73
22.73
13.64
13.64
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

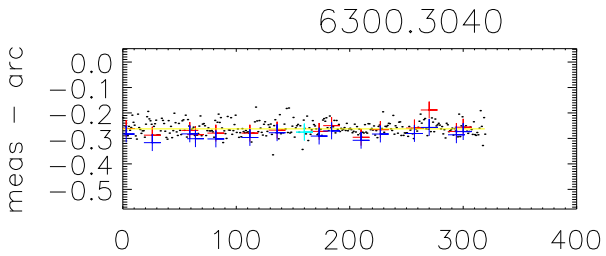

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015901.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.155
Max value = 34.445
Mon Feb 11 15:33:19 2008

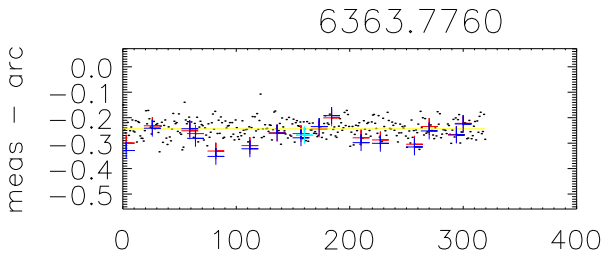

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015901.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
9.5

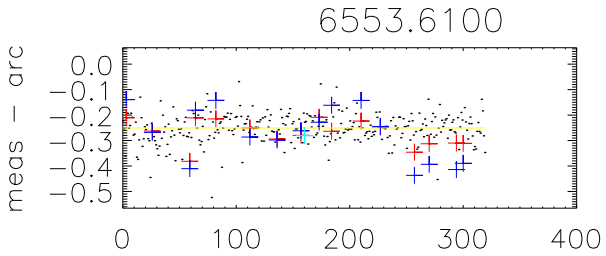

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015901.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.074
Max value = 11.514
Mon Feb 11 15:35:46 2008

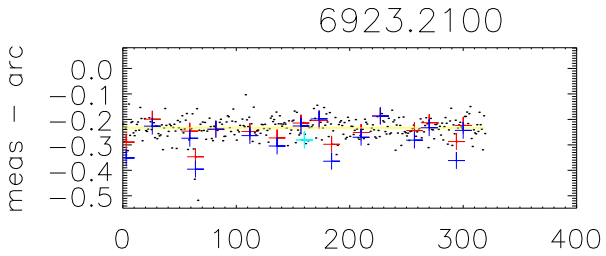

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r2−00015901.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

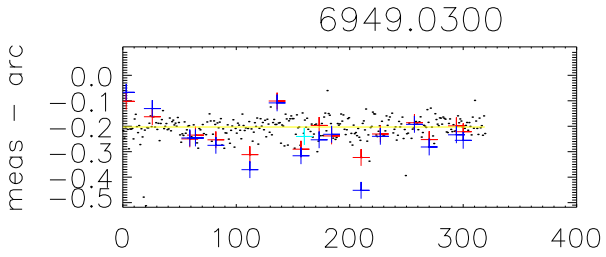

6300.3040
off: −0.28
sig: 0.006
6363.7760
off: −0.27
sig: 0.010
6553.6100
off: −0.28
sig: 0.025
6923.2100
off: −0.28
sig: 0.016
6949.0300
off: −0.24
sig: 0.016
7571.7500
off: −0.25
sig: 0.012
7794.1200
off: −0.34
sig: 0.006
7821.5100
off: −0.30
sig: 0.006
8399.1600
off: −0.25
sig: 0.005
8430.1700
off: −0.27
sig: 0.005
8885.8300
off: −0.25
sig: 0.005
8919.6100
off: −0.25
sig: 0.004

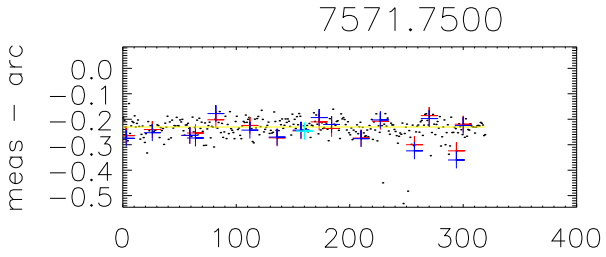

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

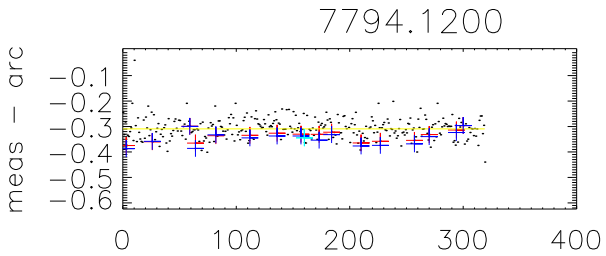

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

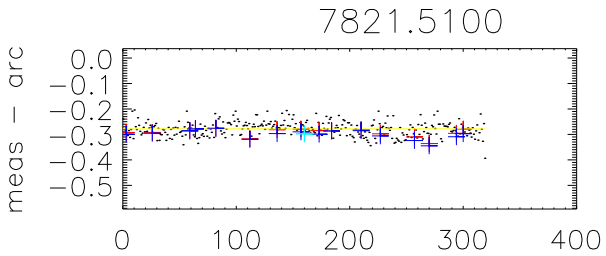

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

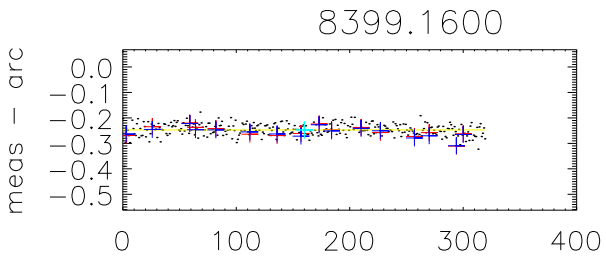

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

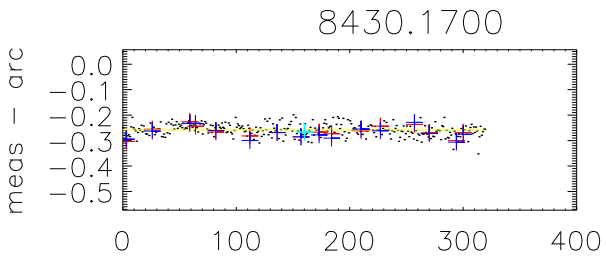

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

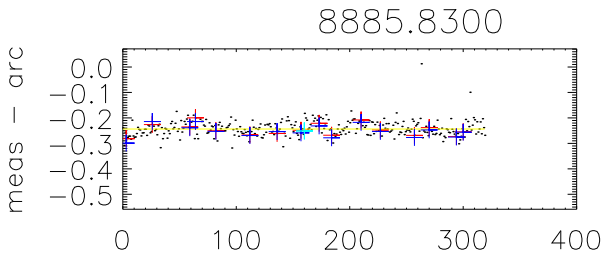

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

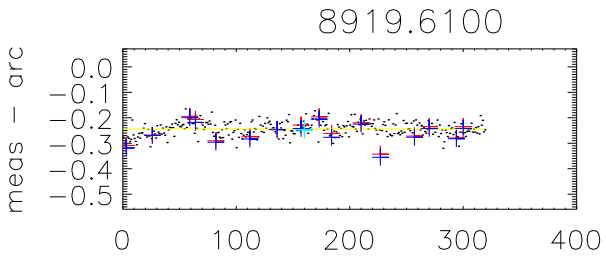

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

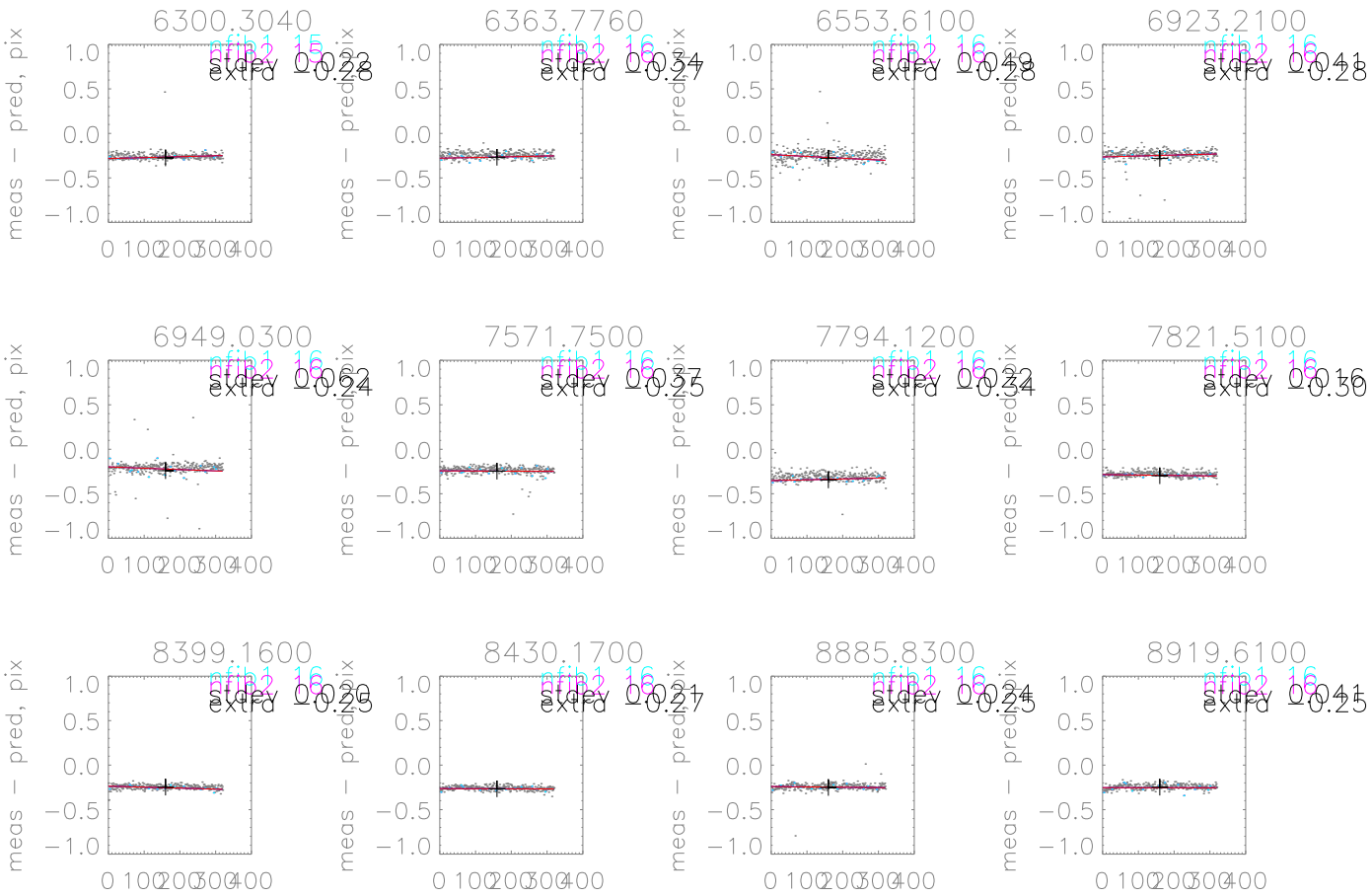

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

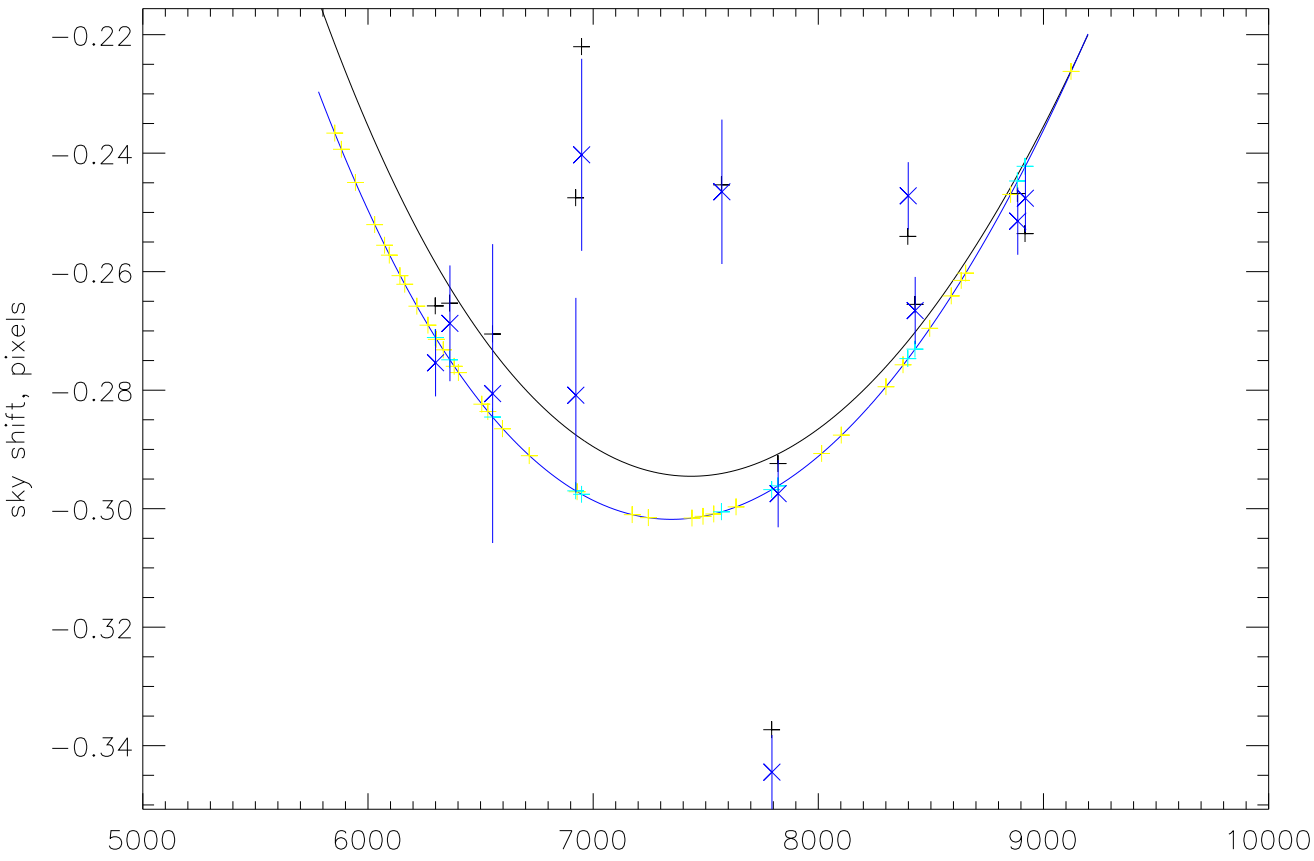

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

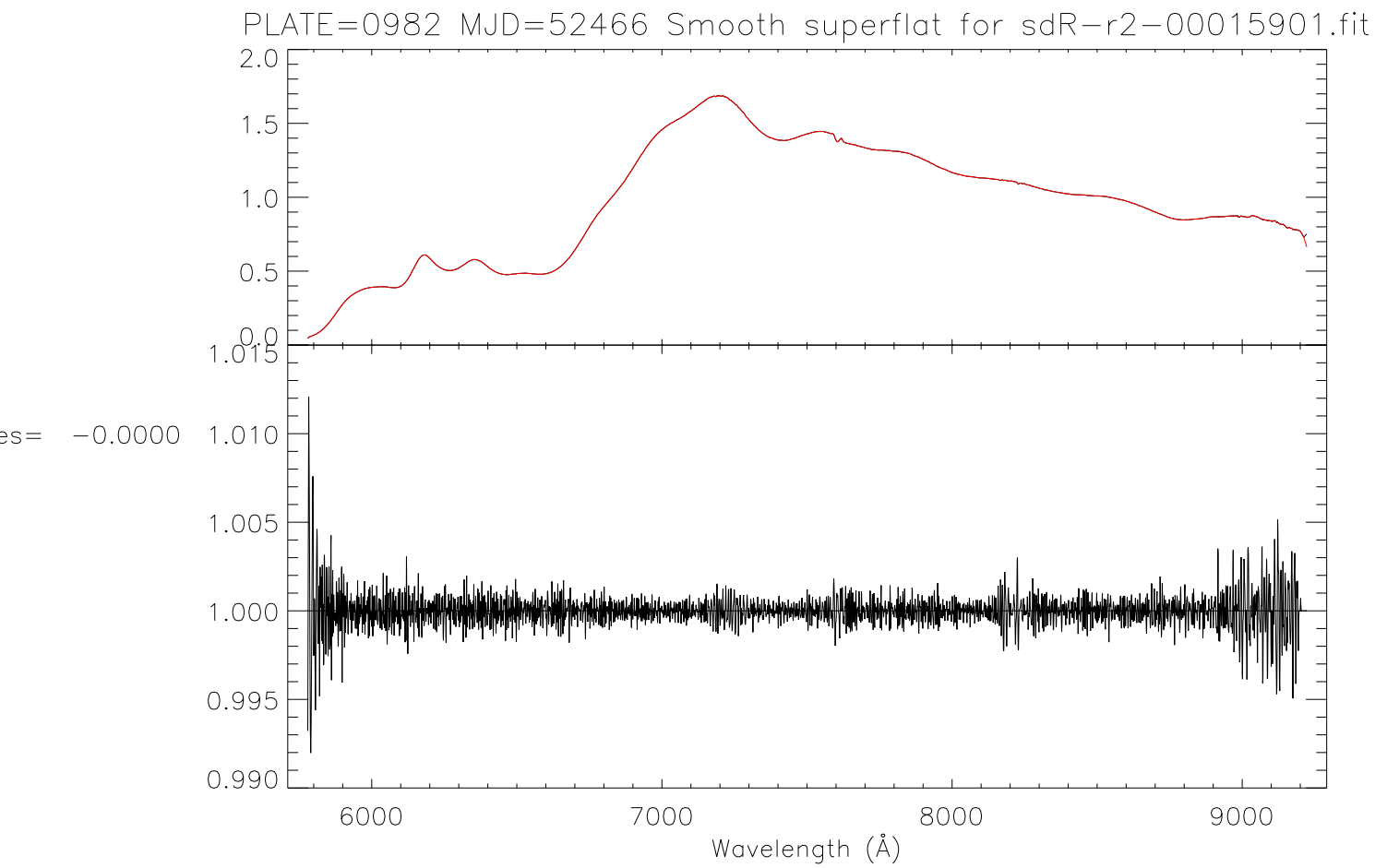

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

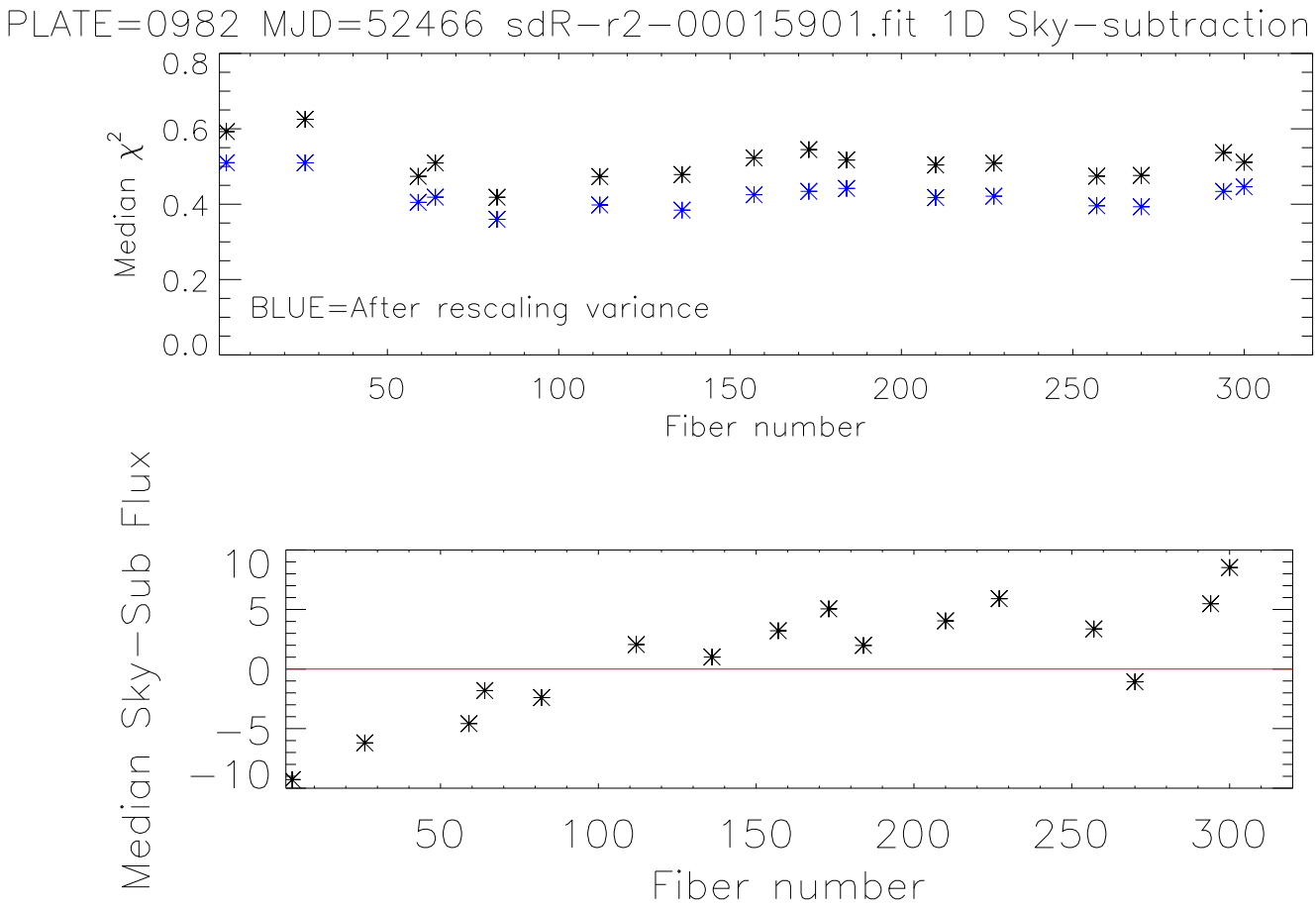

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

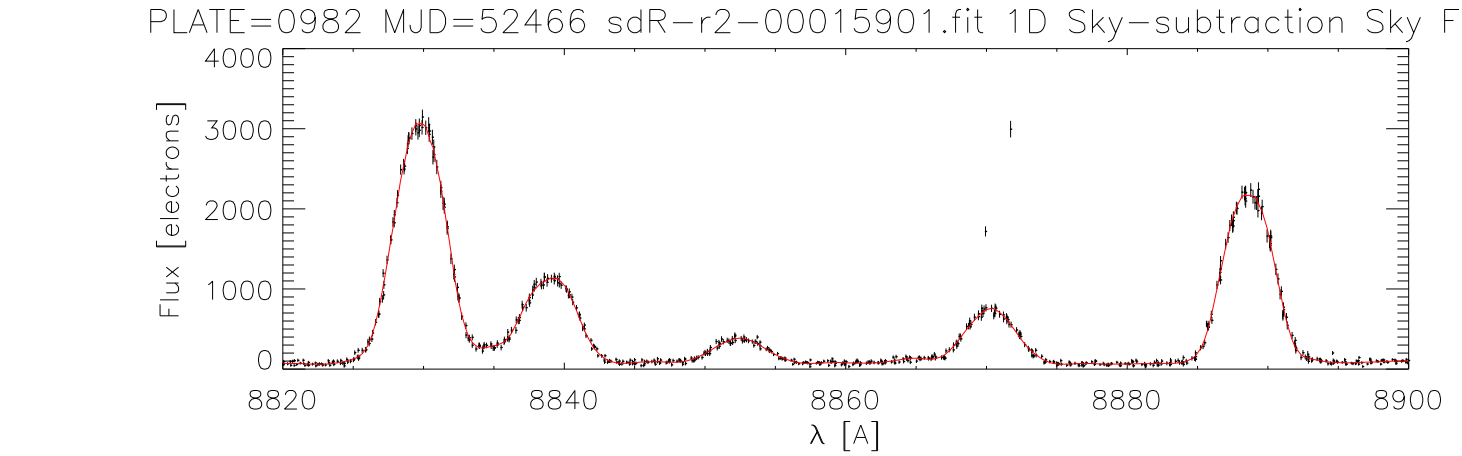

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

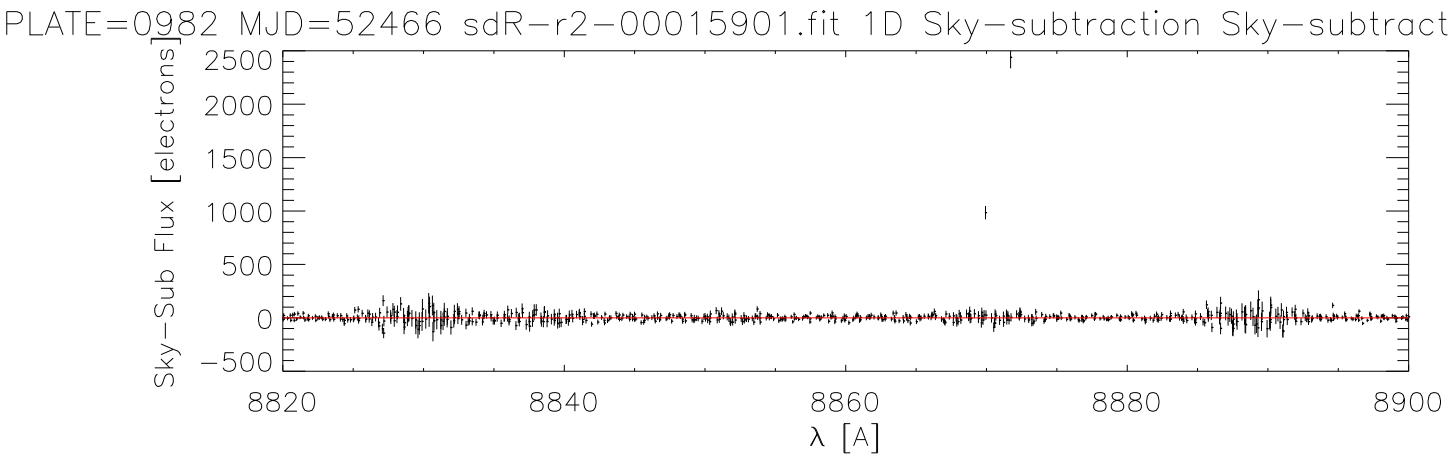

6300.3040
mfhi1 15
mfhi2 16
stdev 0.22
extra 0.28
6363.7760
mfhi1 16
mfhi2 16
stdev 0.24
extra 0.27
6553.6100
mfhi1 16
mfhi2 16
stdev 0.49
extra 0.28
6923.2100
mfhi1 16
mfhi2 16
stdev 0.41
extra 0.28
6949.0300
mfhi1 16
mfhi2 16
stdev 0.62
extra 0.24
7571.7500
mfhi1 16
mfhi2 16
stdev 0.37
extra 0.25
7794.1200
mfhi1 16
mfhi2 16
stdev 0.32
extra 0.34
7821.5100
mfhi1 16
mfhi2 16
stdev 0.16
extra 0.30
8399.1600
mfhi1 16
mfhi2 16
stdev 0.20
extra 0.25
8430.1700
mfhi1 16
mfhi2 16
stdev 0.21
extra 0.27
8885.8300
mfhi1 16
mfhi2 16
stdev 0.24
extra 0.25
8919.6100
mfhi1 16
mfhi2 16
stdev 0.41
extra 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

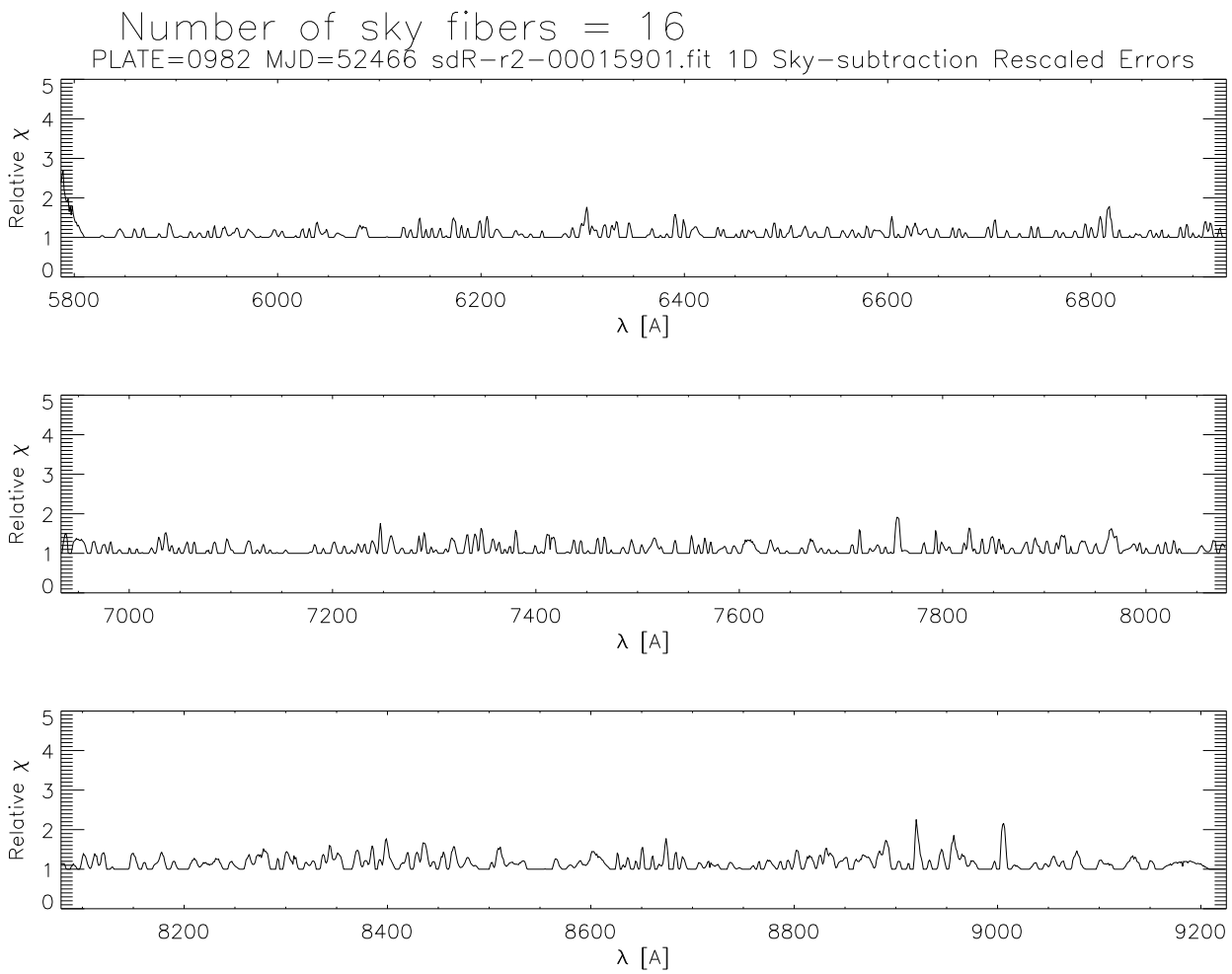

−0.22
−0.24
−0.26
−0.28
−0.30
−0.32
−0.34
sky shift, pixels
5000
6000
7000
8000
9000
10000

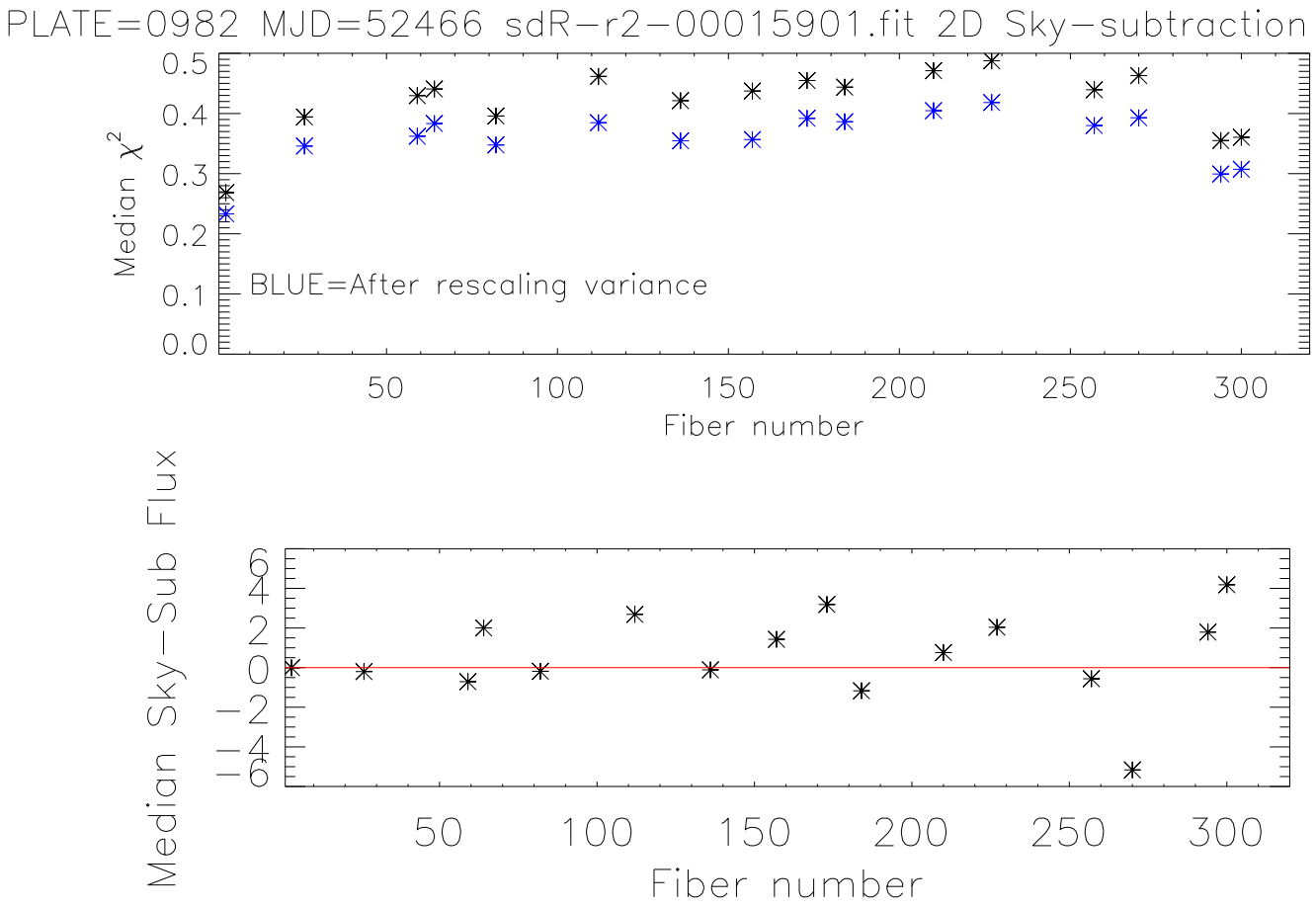

PLATE=0982 MJD=52466 Smooth superflat for sdR-r2-00015901.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

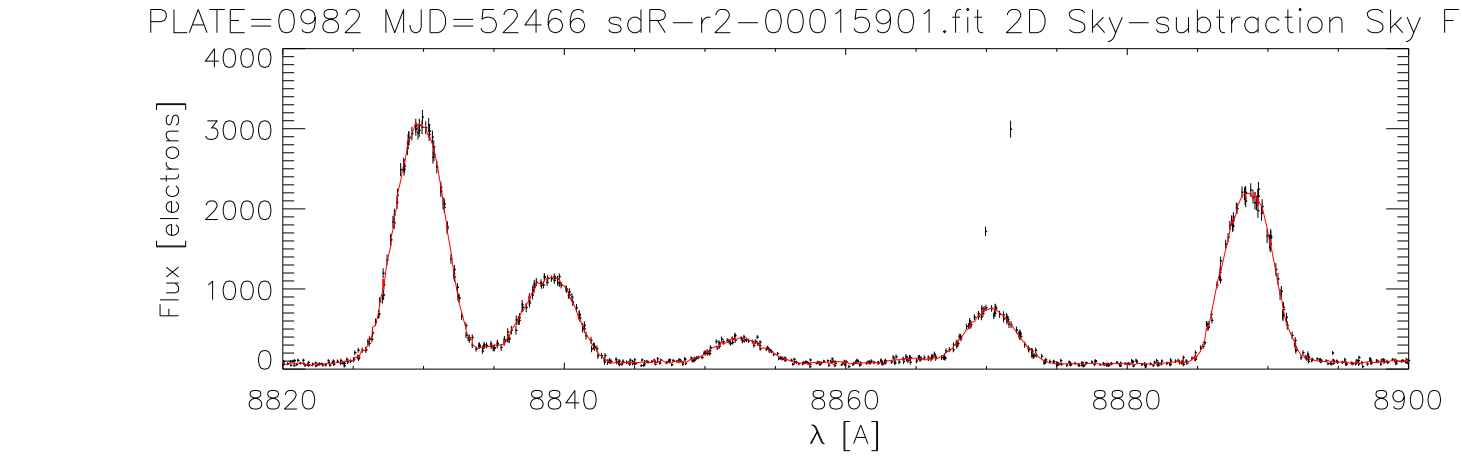

PLATE=0982 MJD=52466 sdR-r2-00015901.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

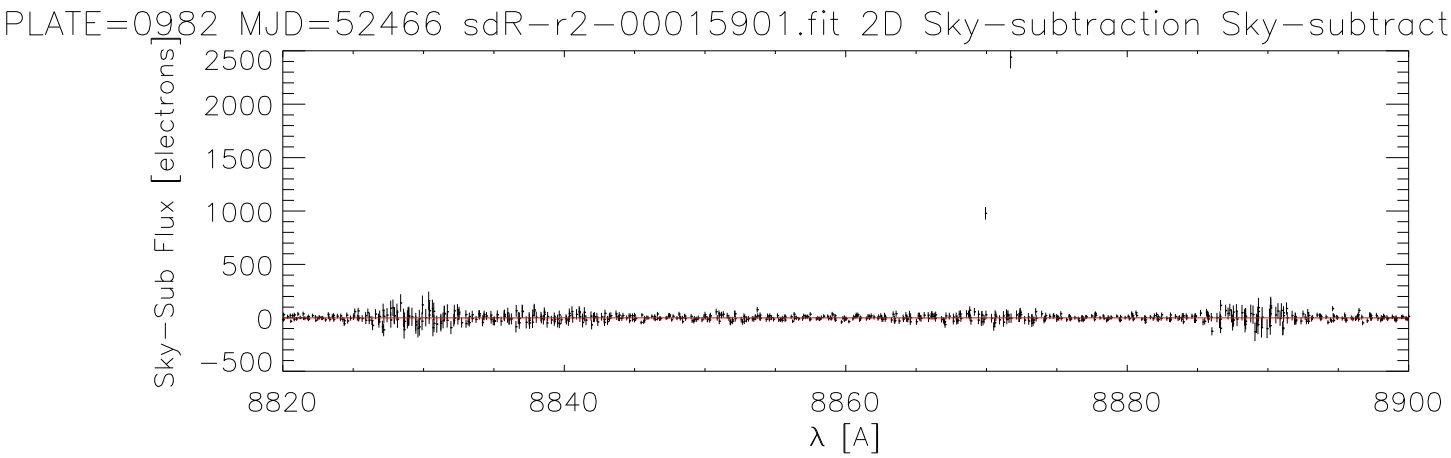

PLATE=0982 MJD=52466 sdR-r2-00015901.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

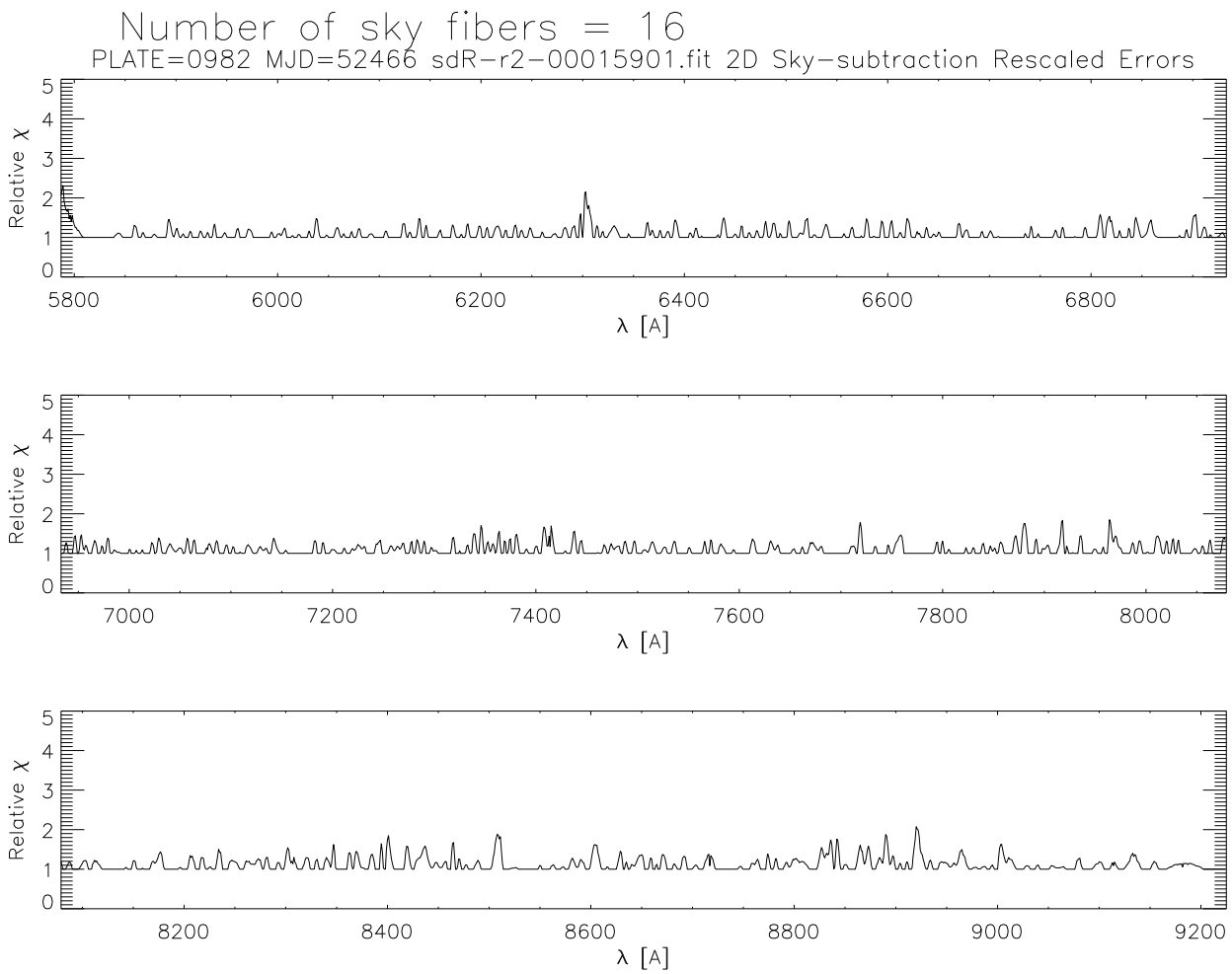

PLATE=0982 MJD=52466 sdR-r2-00015901.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

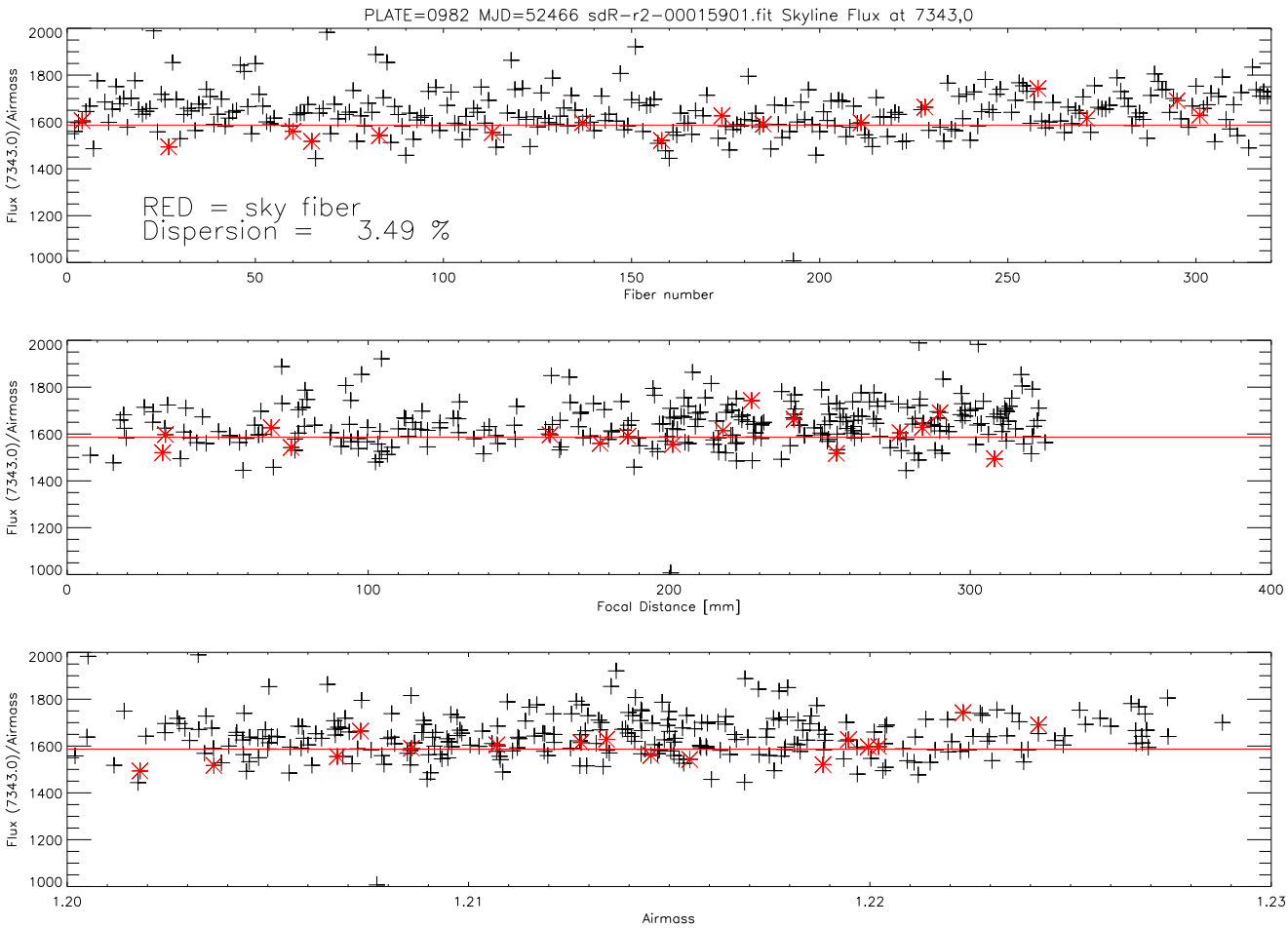

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015901.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

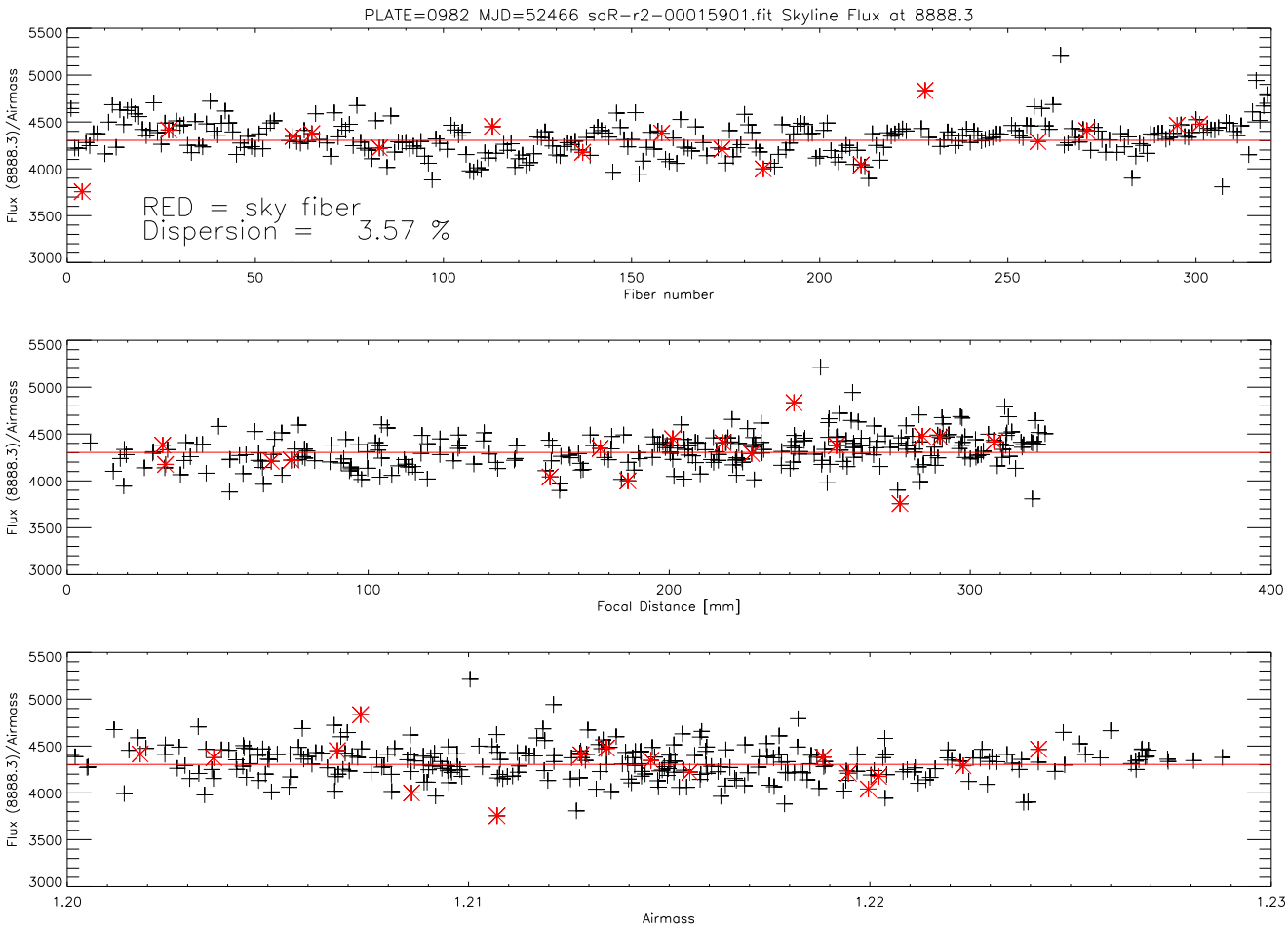

PLATE=0982 MJD=52466 sdR-r2-00015901.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

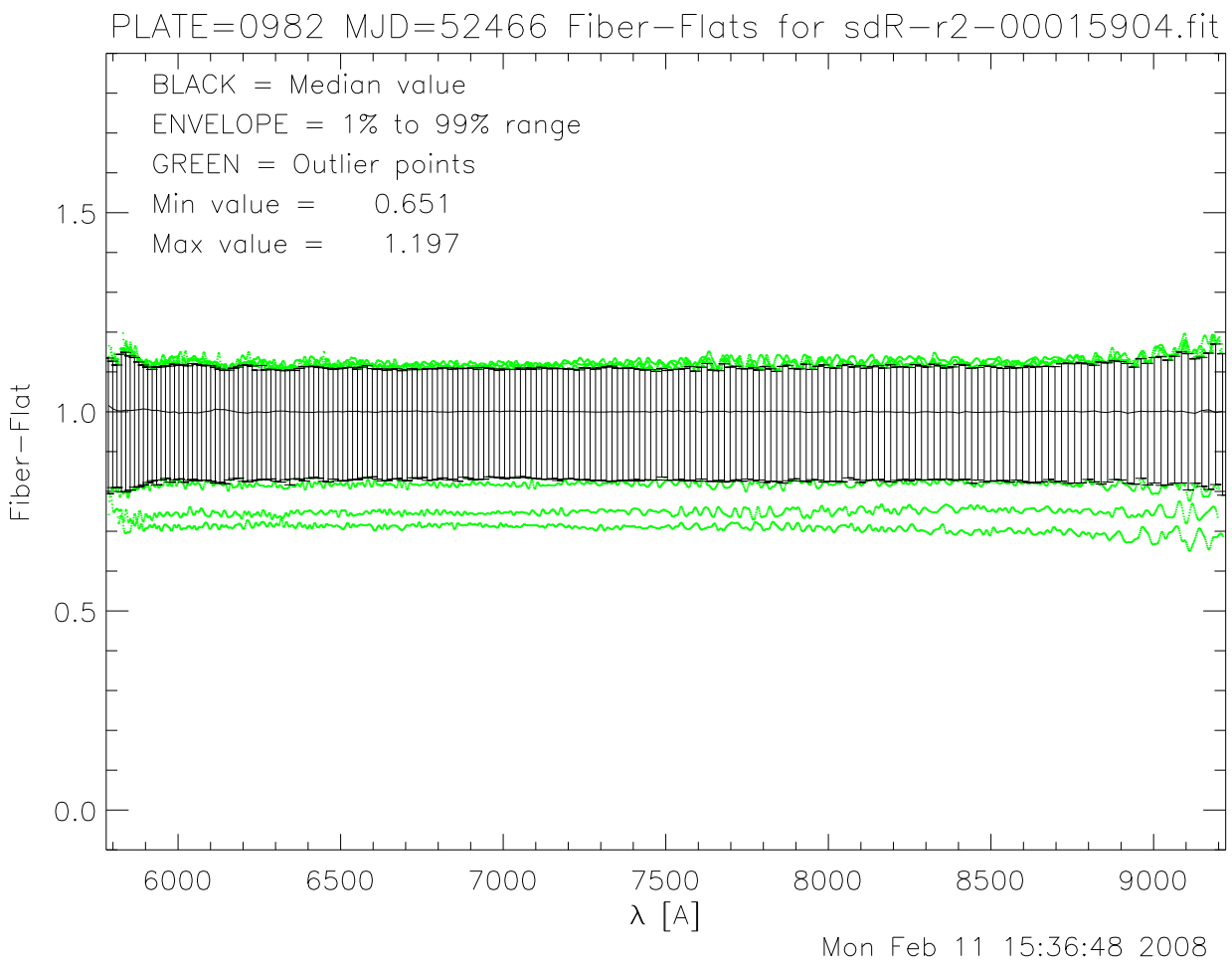

PLATE=0982 MJD=52466 sdR-r2-00015901.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

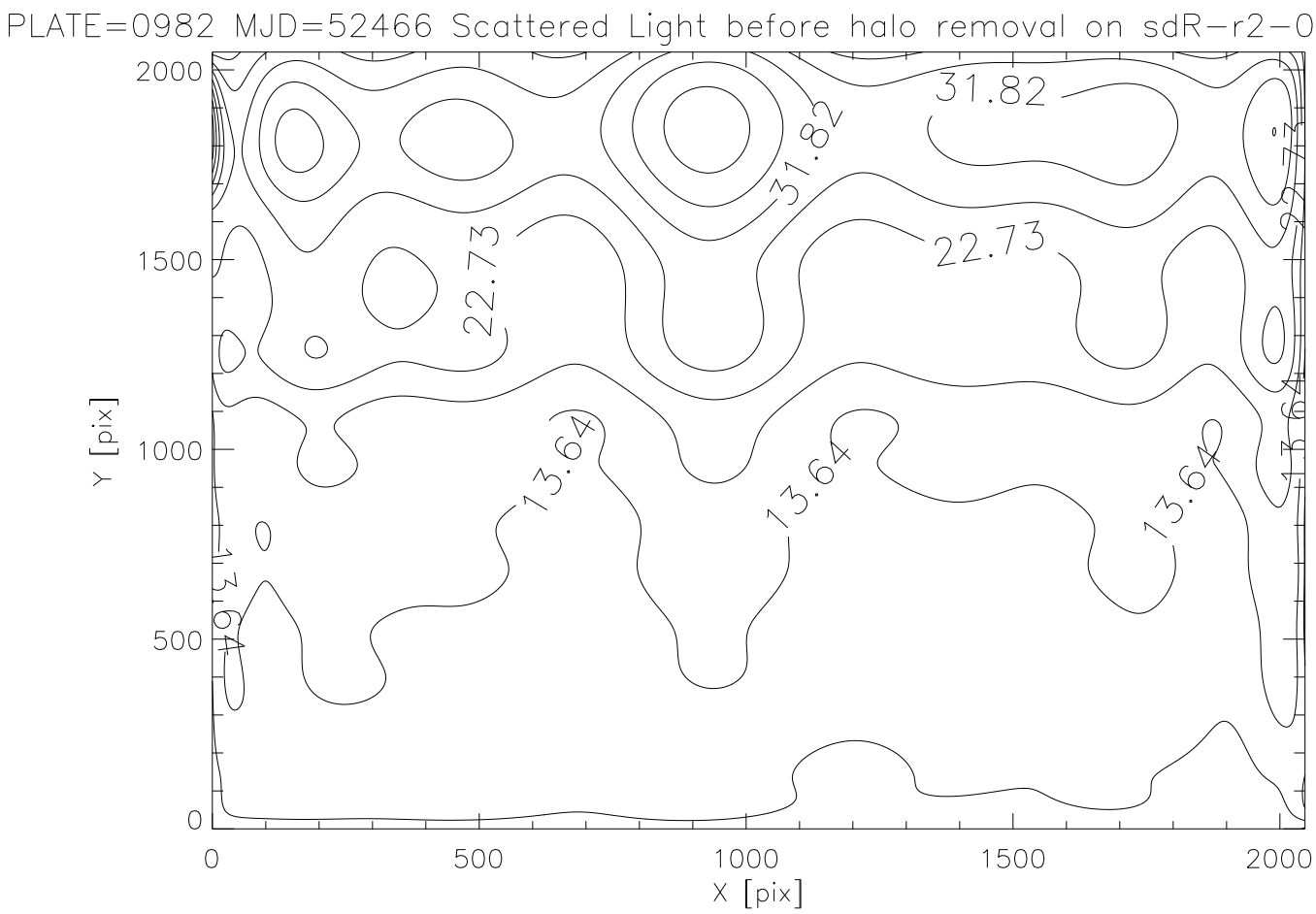

PLATE=0982 MJD=52466 sdR-r2-00015901.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

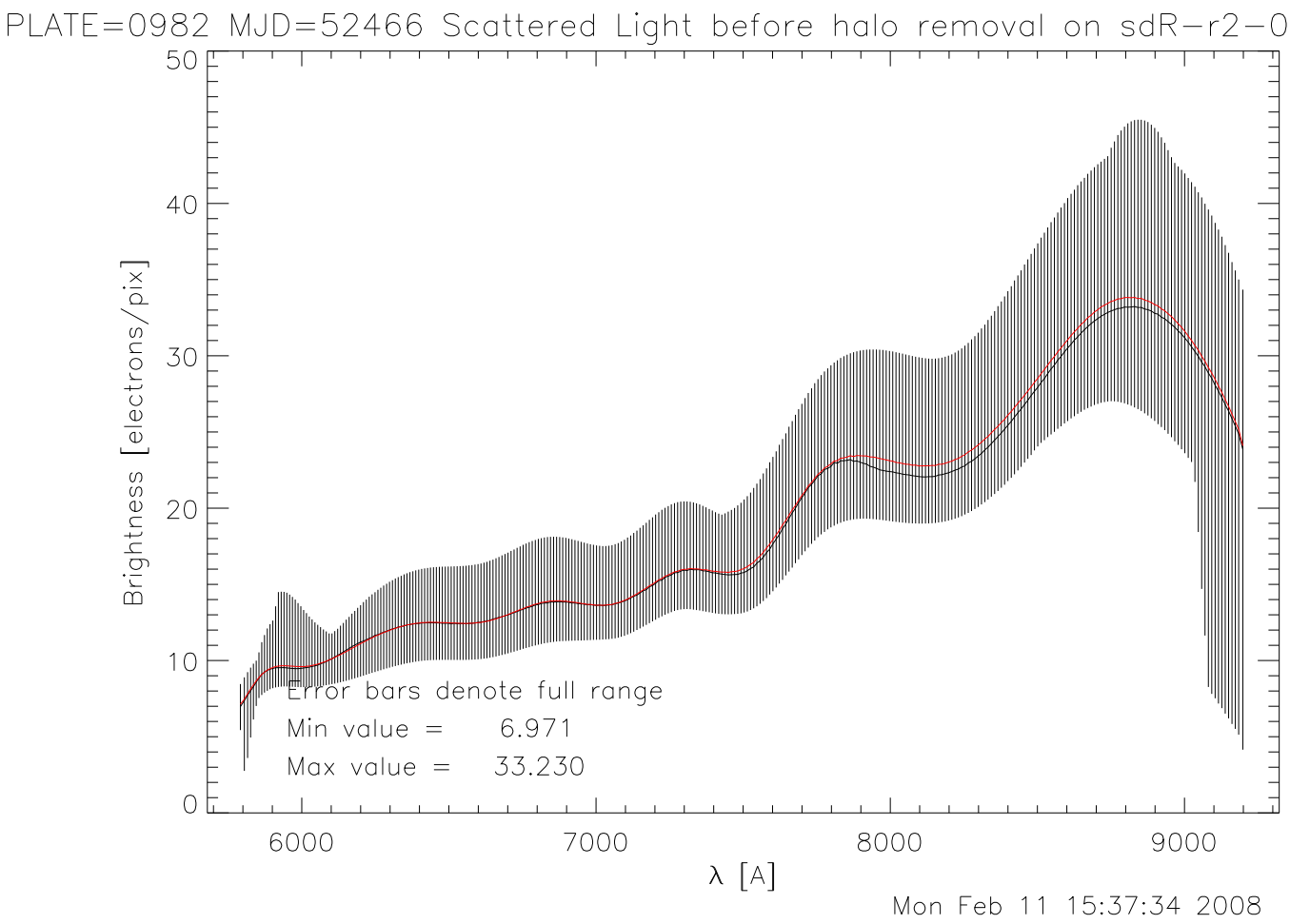

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015901.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

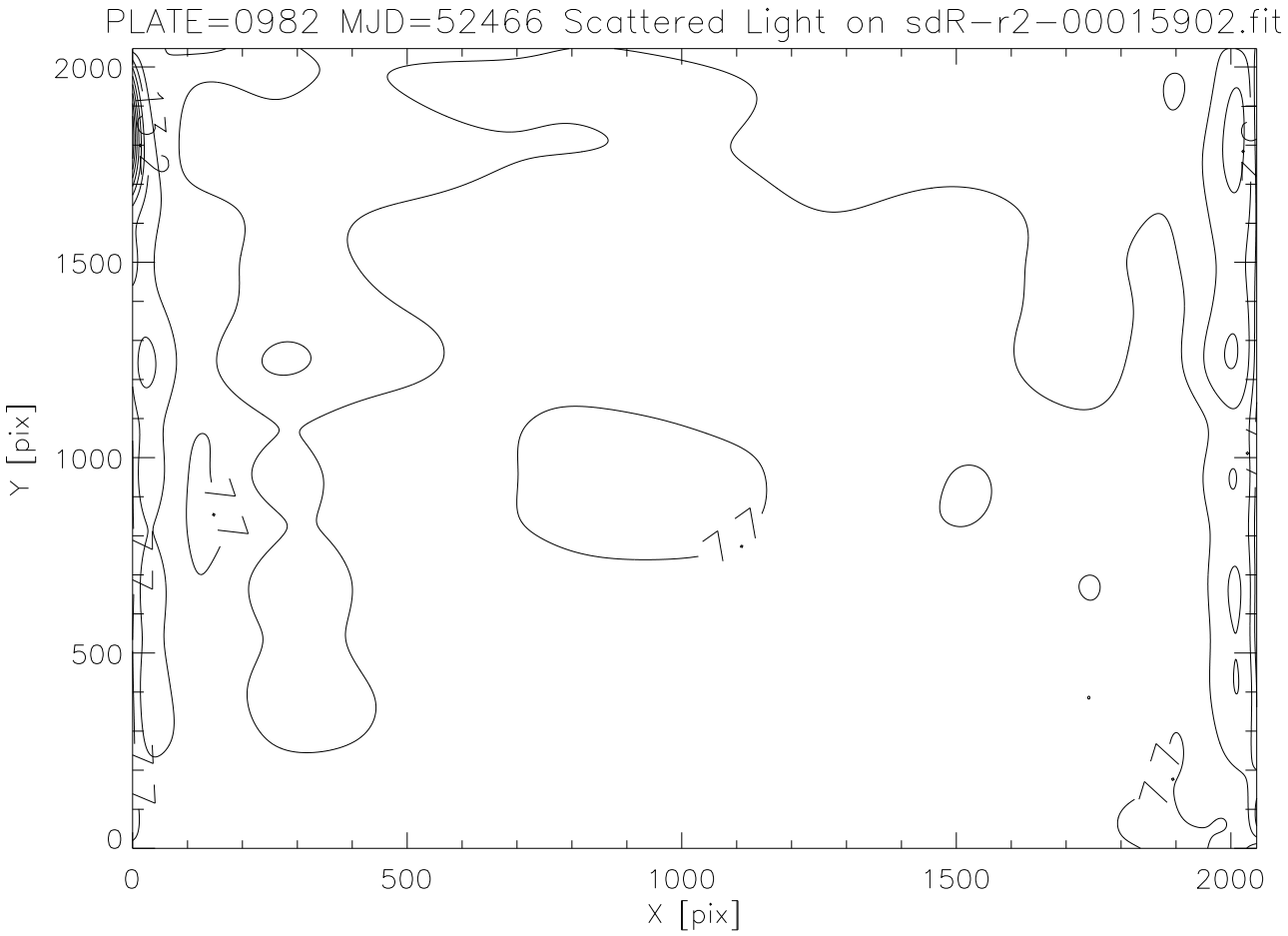

PLATE=0982 MJD=52466 sdR-r2-00015901.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.49 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

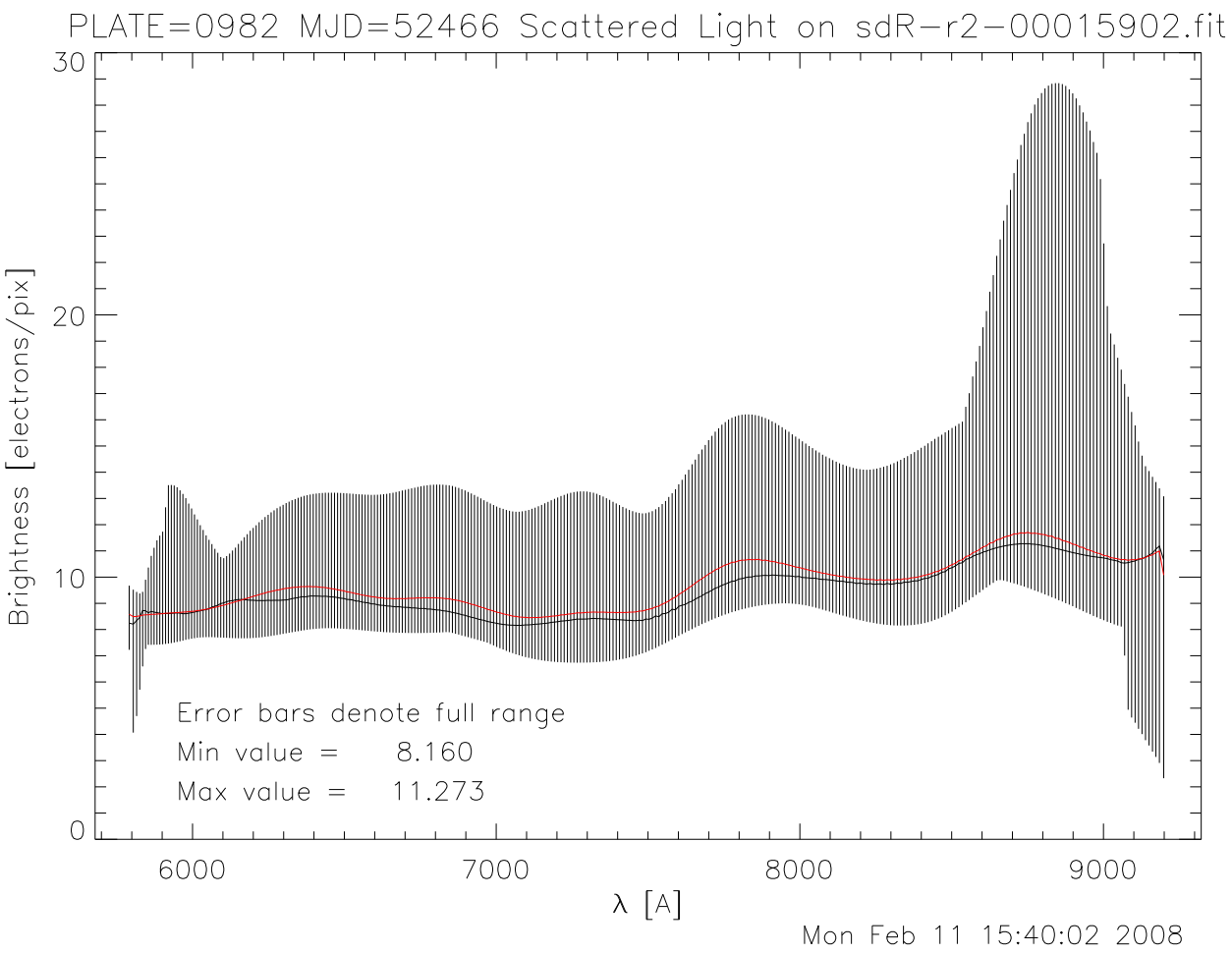

PLATE=0982 MJD=52466 sdR-r2-00015901.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.57 %
Fiber number
Focal Distance [mm]
Airmass

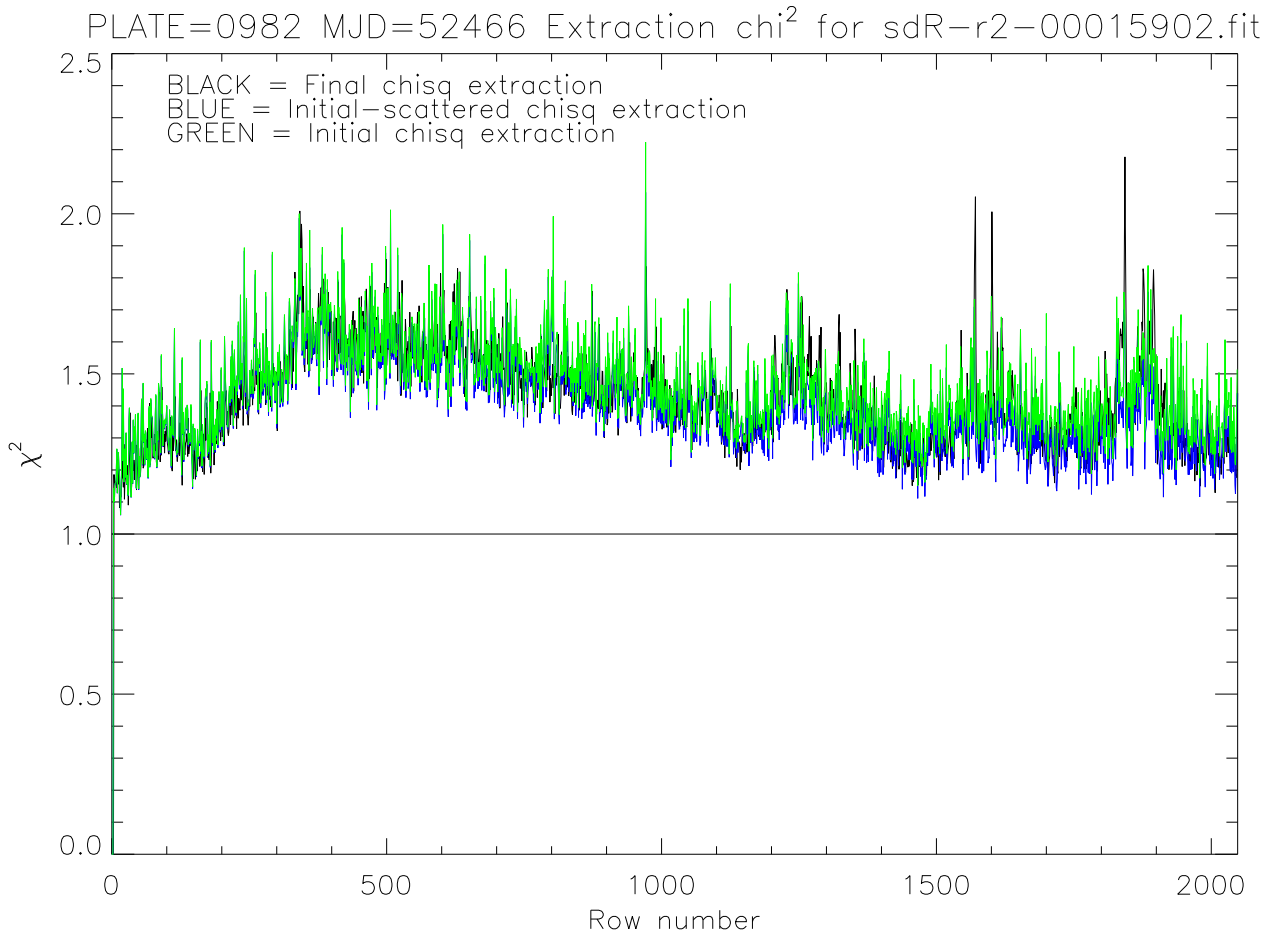

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r2−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.651
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 15:36:48 2008

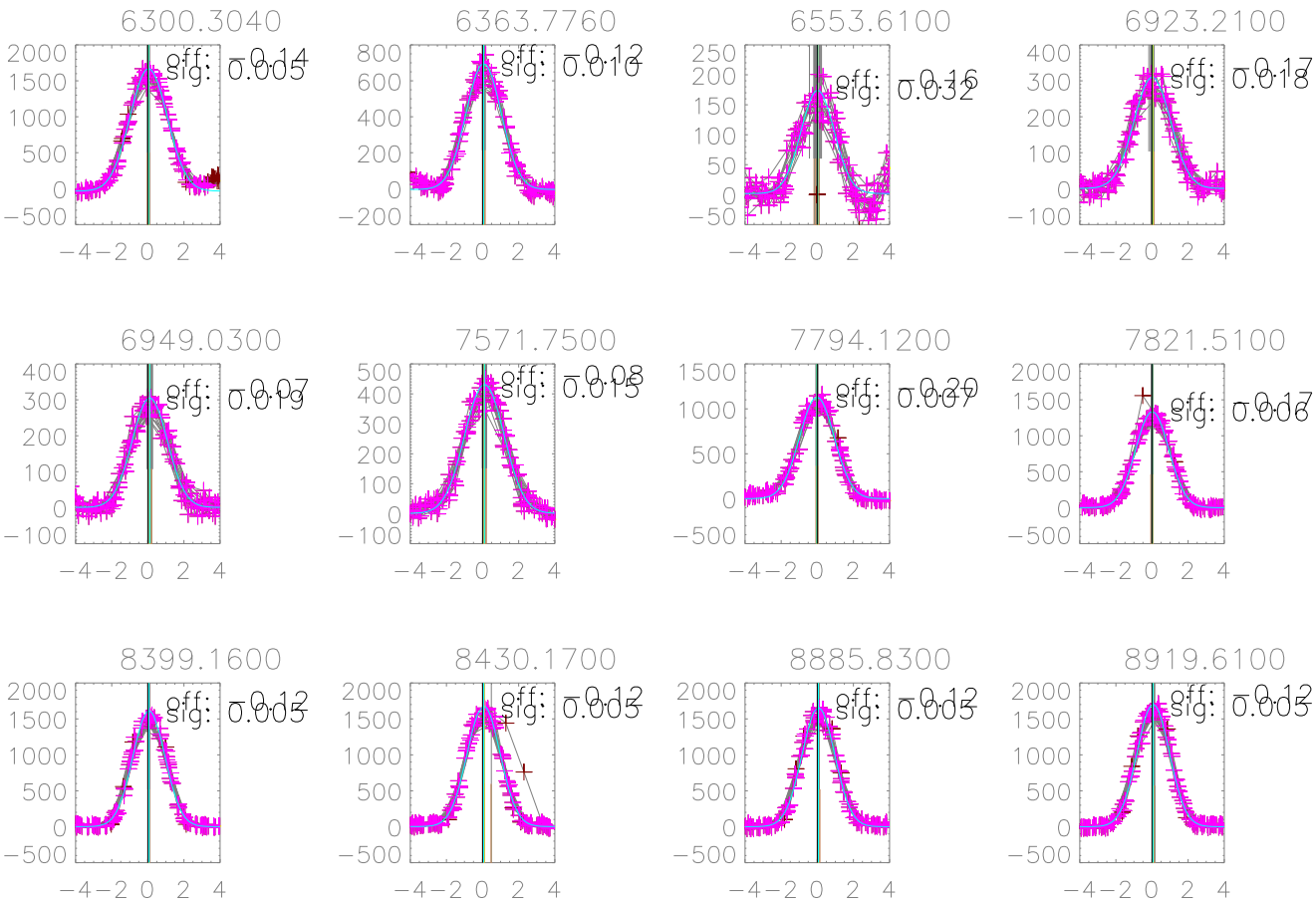

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015902.fi
31.82
22.73
13.64
0
Y [pix]
X [pix]
0
500
1000
1500
2000

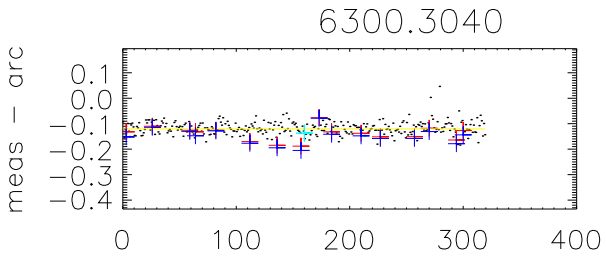

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015902.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.971
Max value = 33.230
Mon Feb 11 15:37:34 2008

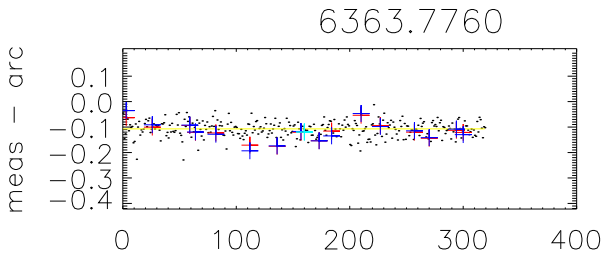

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015902.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.7
7.7
7.7
7.7
7.7
7.7
0
0
0
0
0

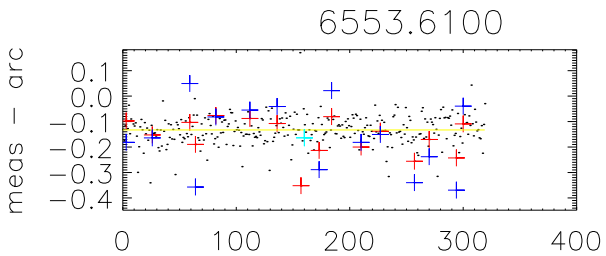

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015902.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.160
Max value = 11.273
Mon Feb 11 15:40:02 2008

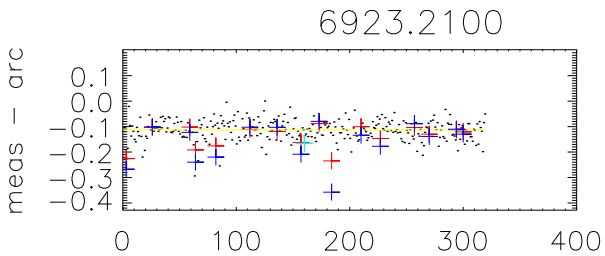

PLATE=0982 MJD=52466 Extraction chi^2 for sdR-r2-00015902.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

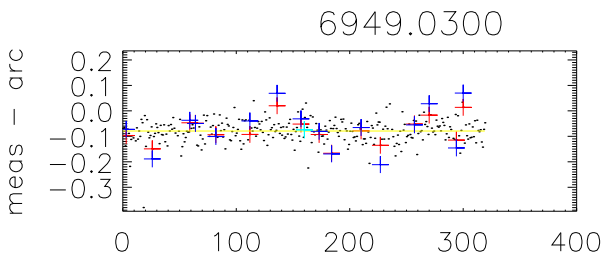

6300.3040
off: −0.14
sig: 0.005
6363.7760
off: −0.12
sig: 0.010
6553.6100
off: −0.16
sig: 0.032
6923.2100
off: −0.17
sig: 0.018
6949.0300
off: −0.07
sig: 0.019
7571.7500
off: −0.08
sig: 0.015
7794.1200
off: −0.29
sig: 0.007
7821.5100
off: −0.17
sig: 0.006
8399.1600
off: −0.12
sig: 0.005
8430.1700
off: −0.12
sig: 0.005
8885.8300
off: −0.12
sig: 0.005
8919.6100
off: −0.12
sig: 0.005

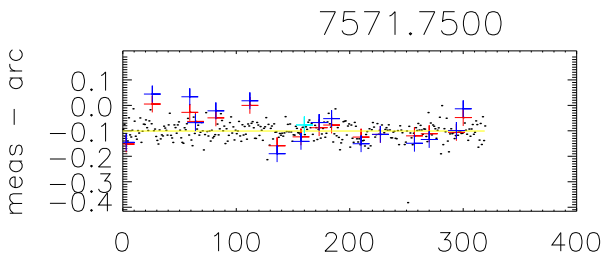

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

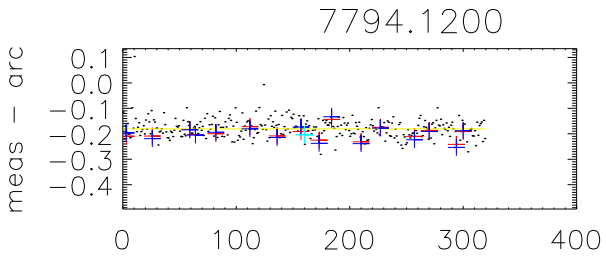

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

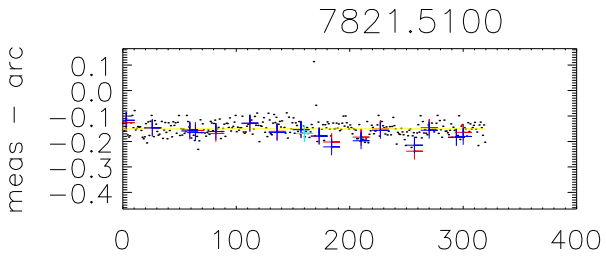

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

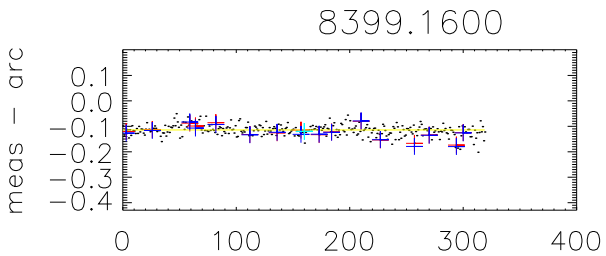

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

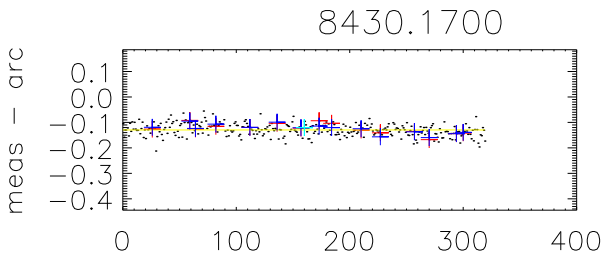

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

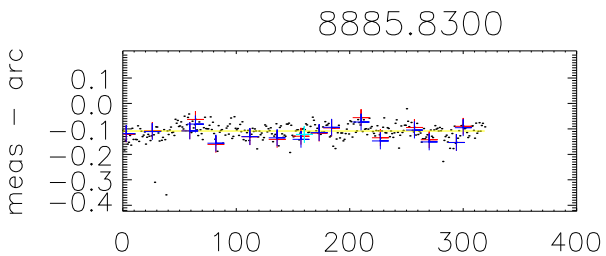

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

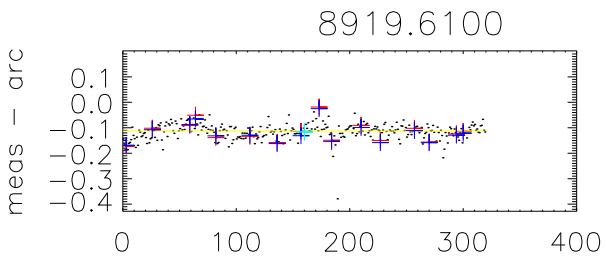

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

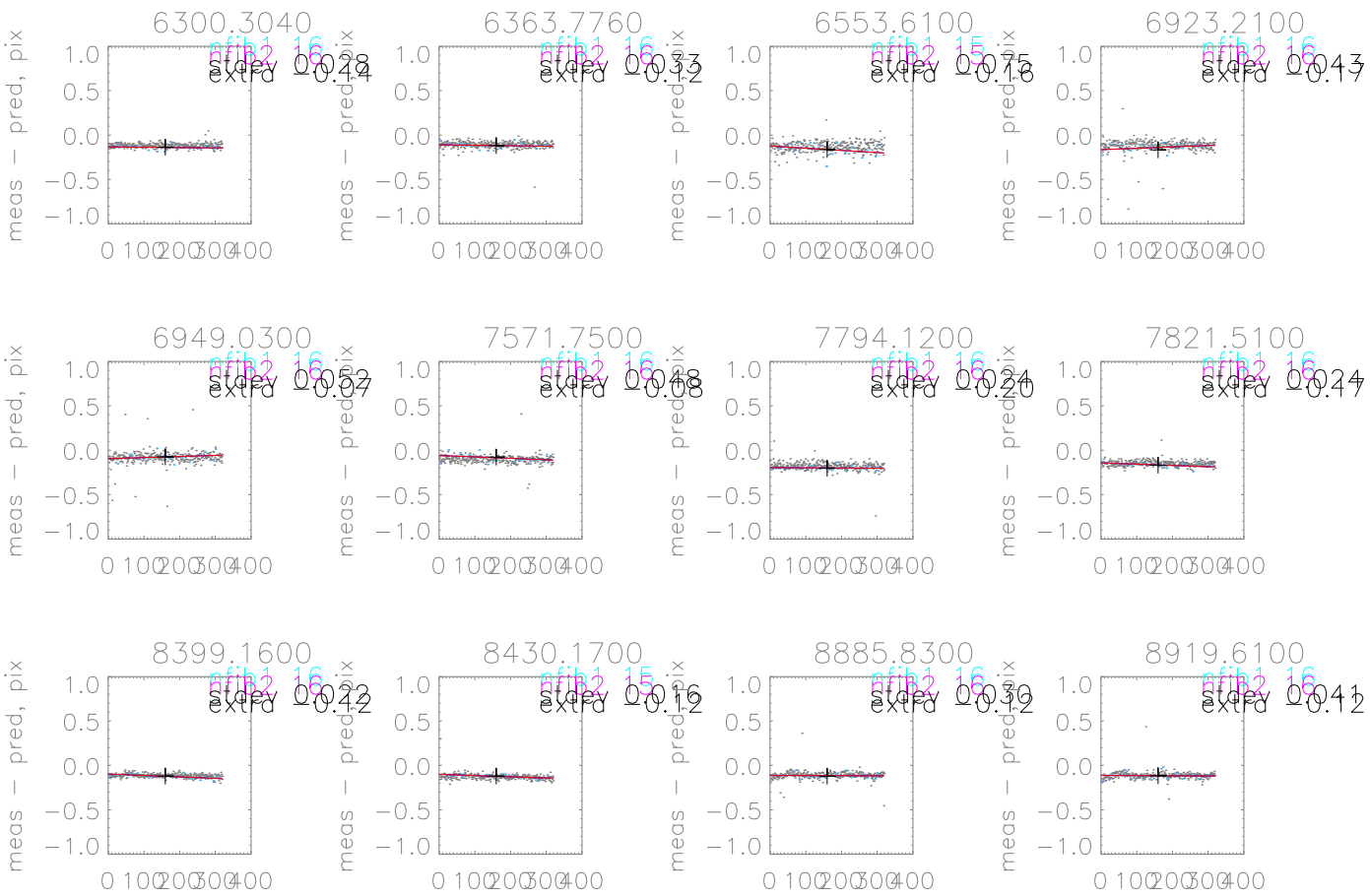

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

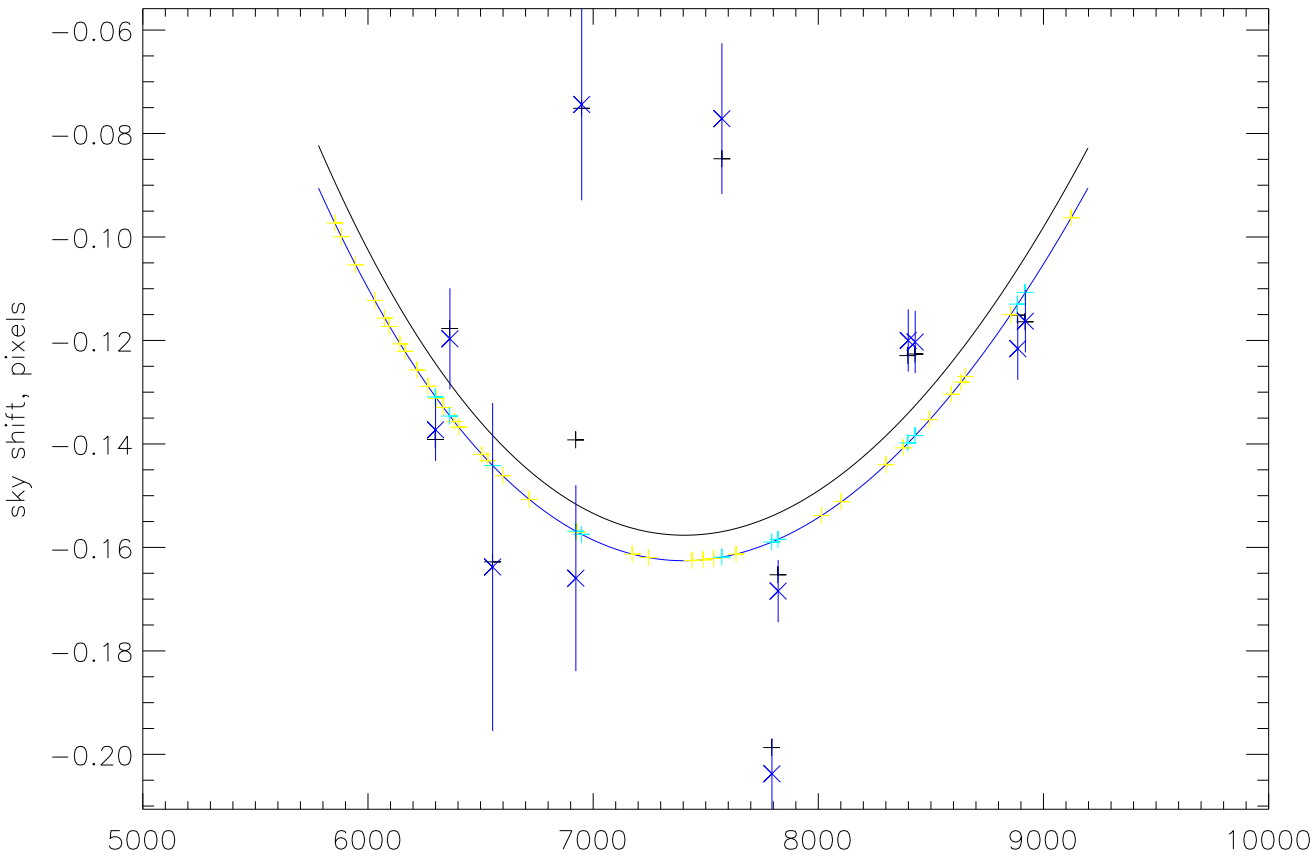

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

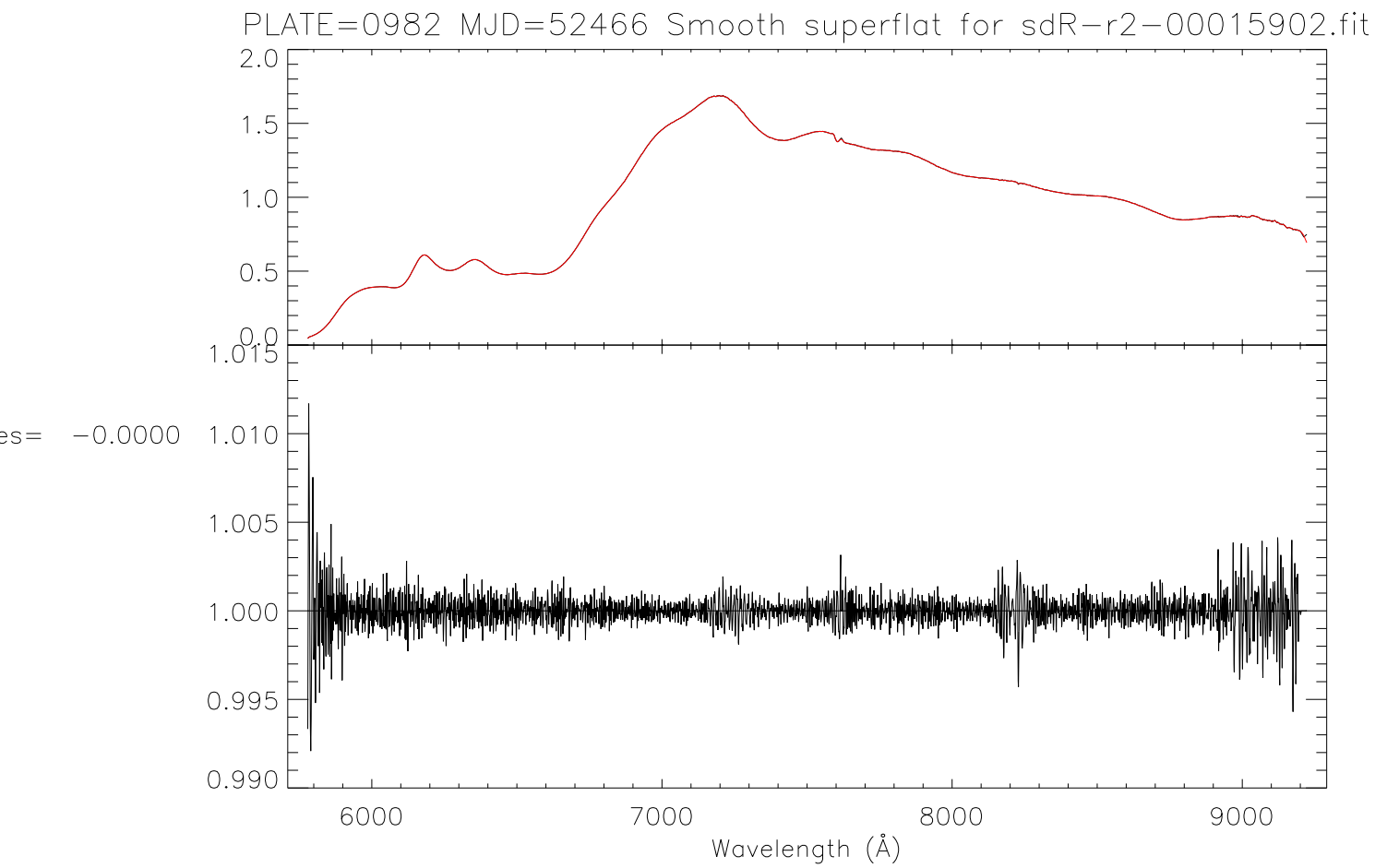

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

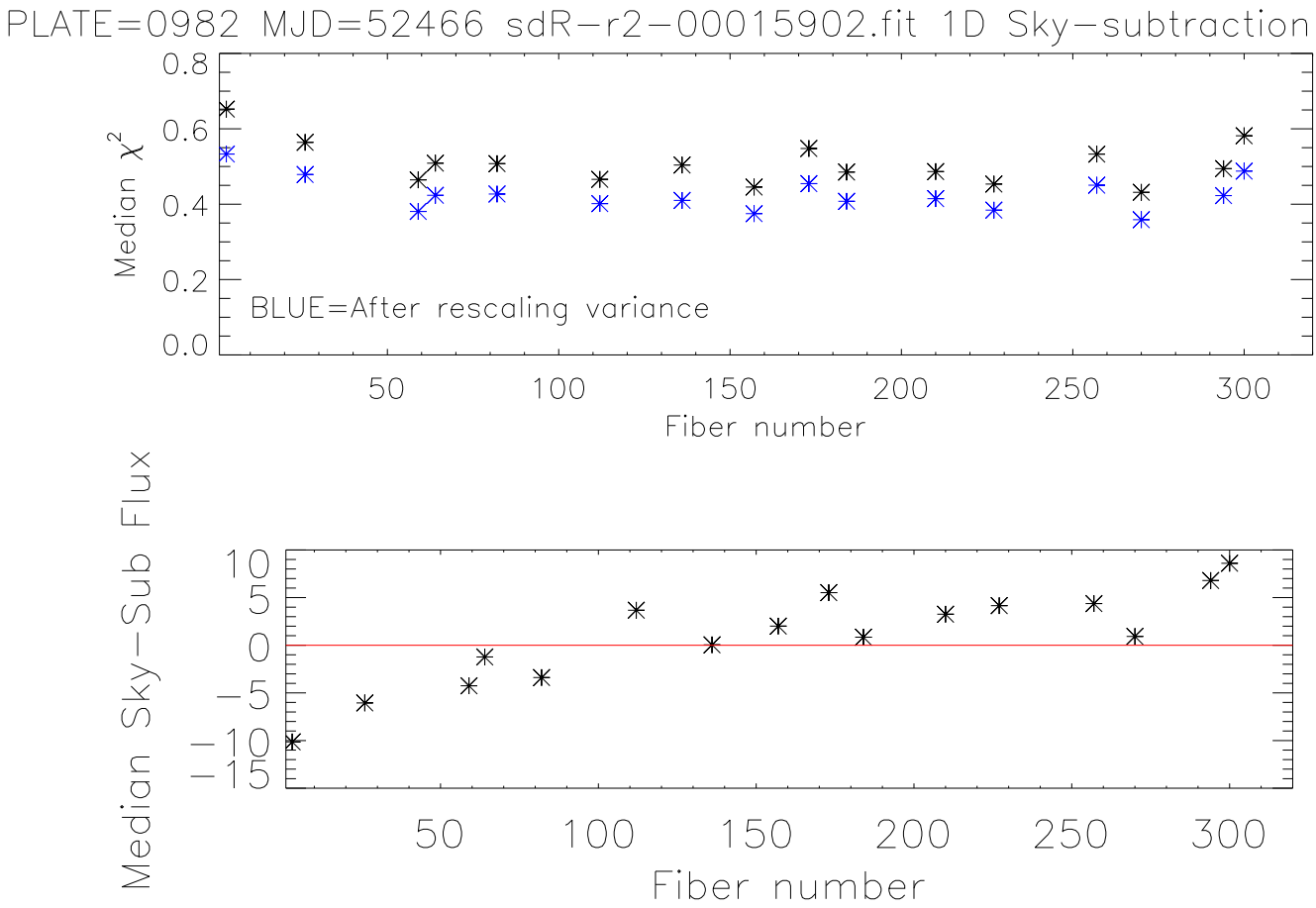

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

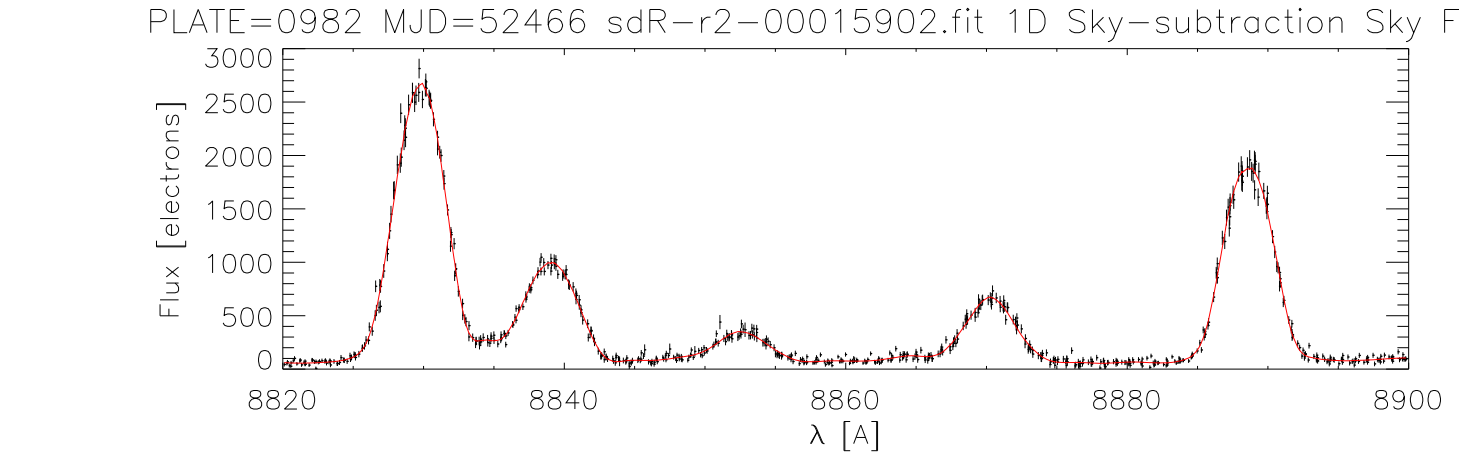

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

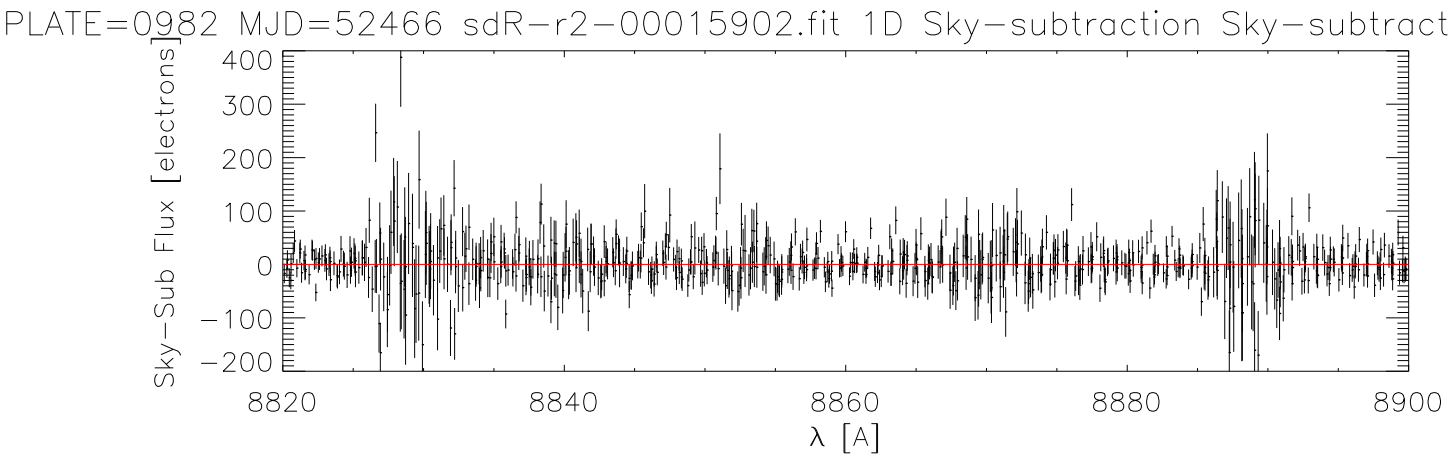

6300.3040
stdev 0.028
extra 0.44
6363.7760
stdev 0.033
extra 0.32
6553.6100
stdev 0.075
extra 0.18
6923.2100
stdev 0.043
extra 0.17
6949.0300
stdev 0.052
extra 0.07
7571.7500
stdev 0.048
extra 0.08
7794.1200
stdev 0.034
extra 0.20
7821.5100
stdev 0.024
extra 0.47
8399.1600
stdev 0.022
extra 0.42
8430.1700
stdev 0.016
extra 0.12
8885.8300
stdev 0.030
extra 0.12
8919.6100
stdev 0.041
extra 0.12
meas − pred, pix

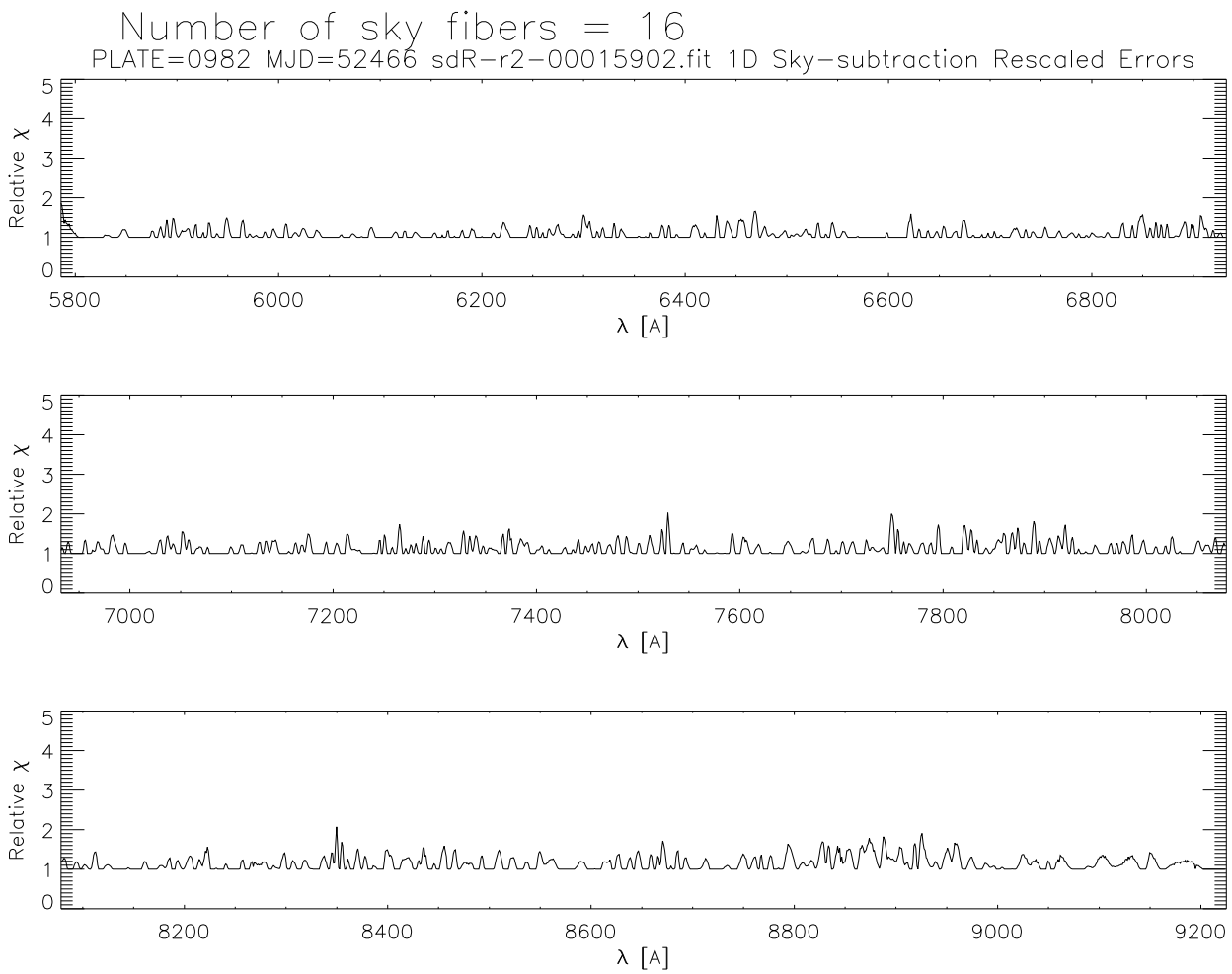

−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

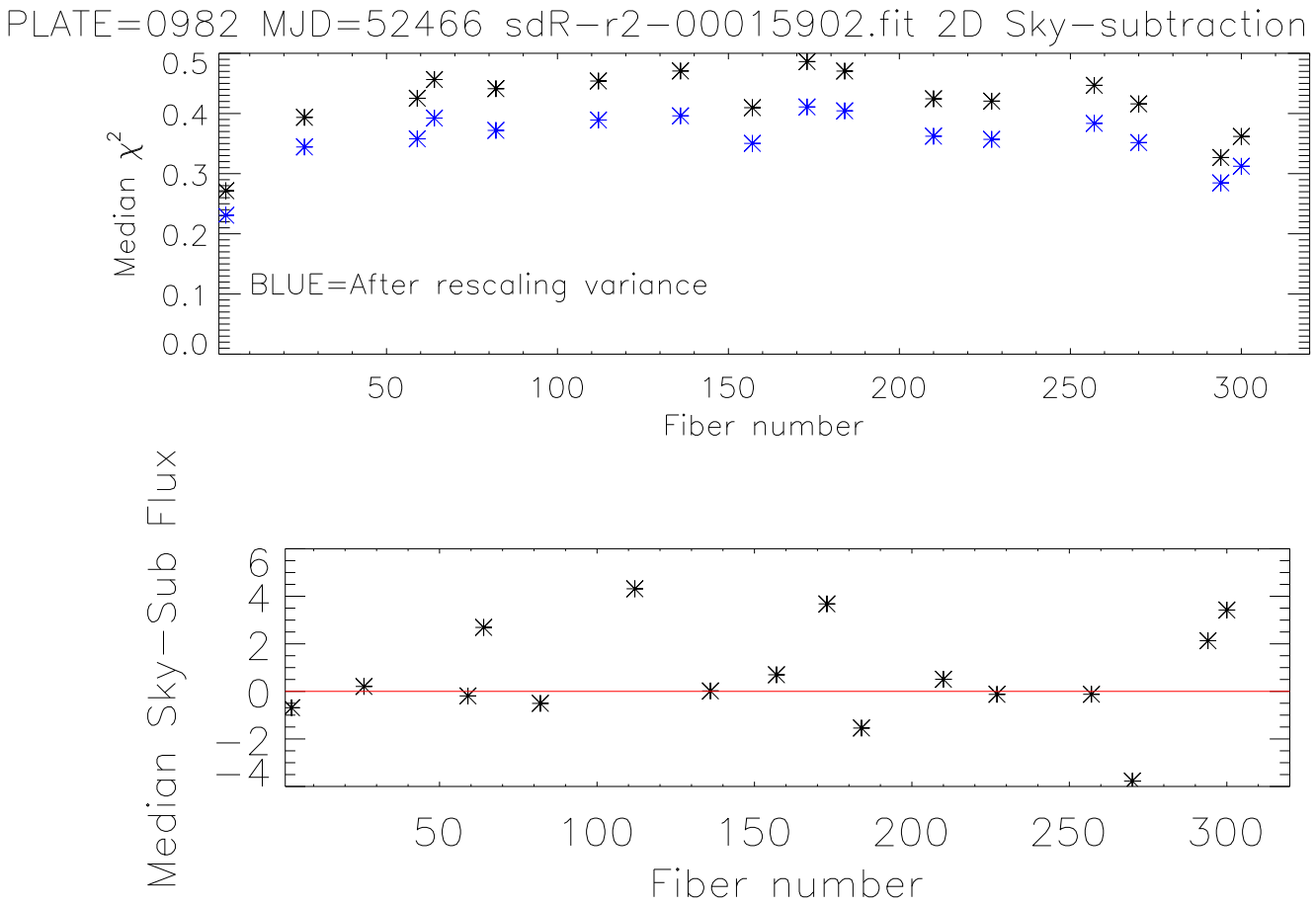

PLATE=0982 MJD=52466 Smooth superflat for sdR-r2-00015902.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

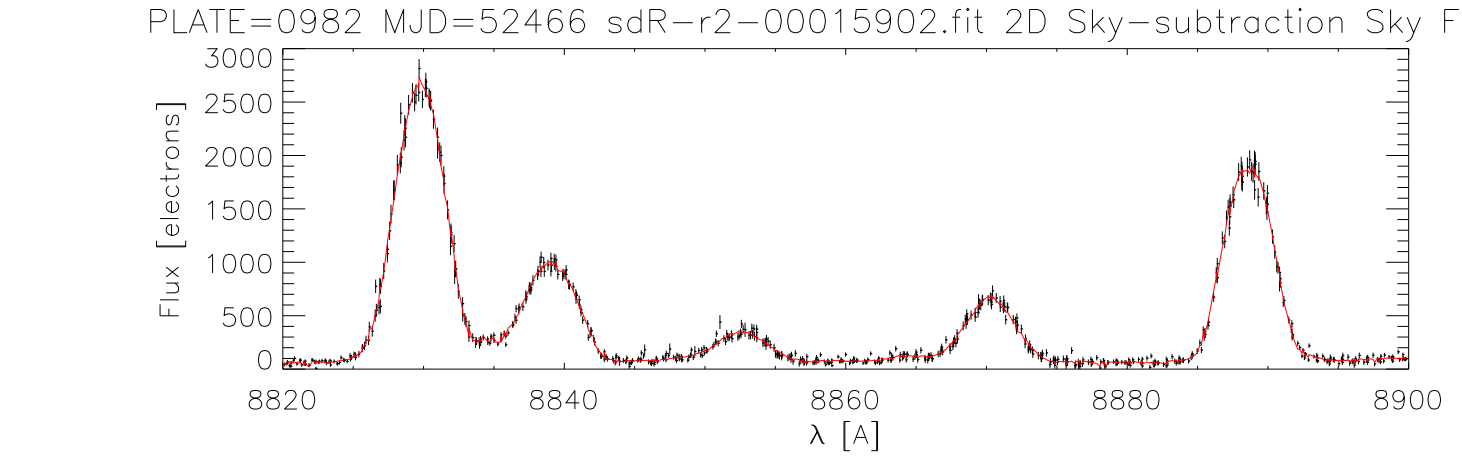

PLATE=0982 MJD=52466 sdR-r2-00015902.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

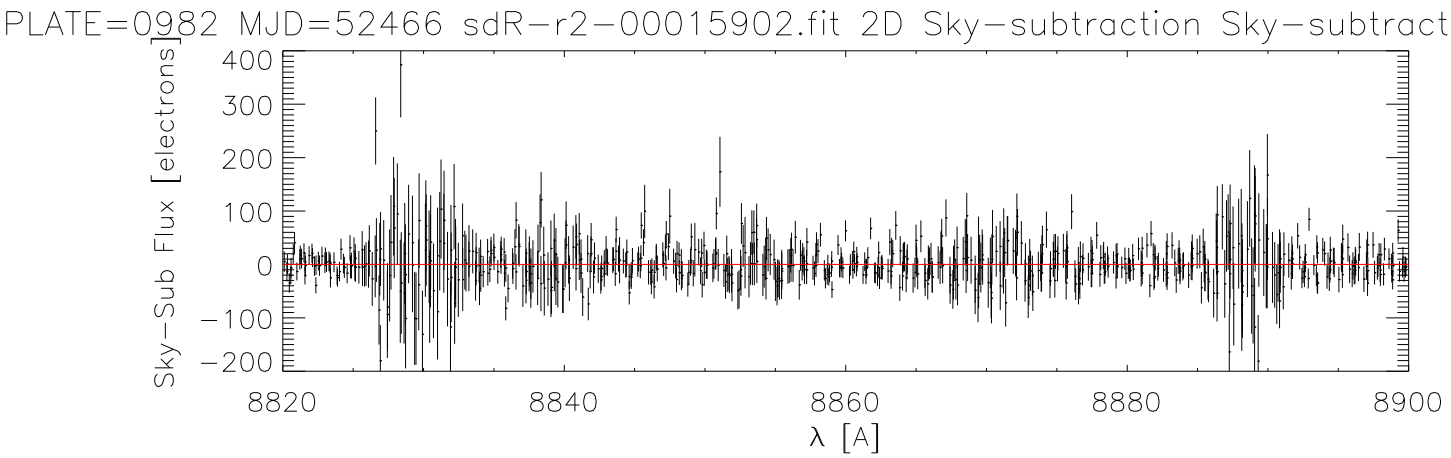

PLATE=0982 MJD=52466 sdR-r2-00015902.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

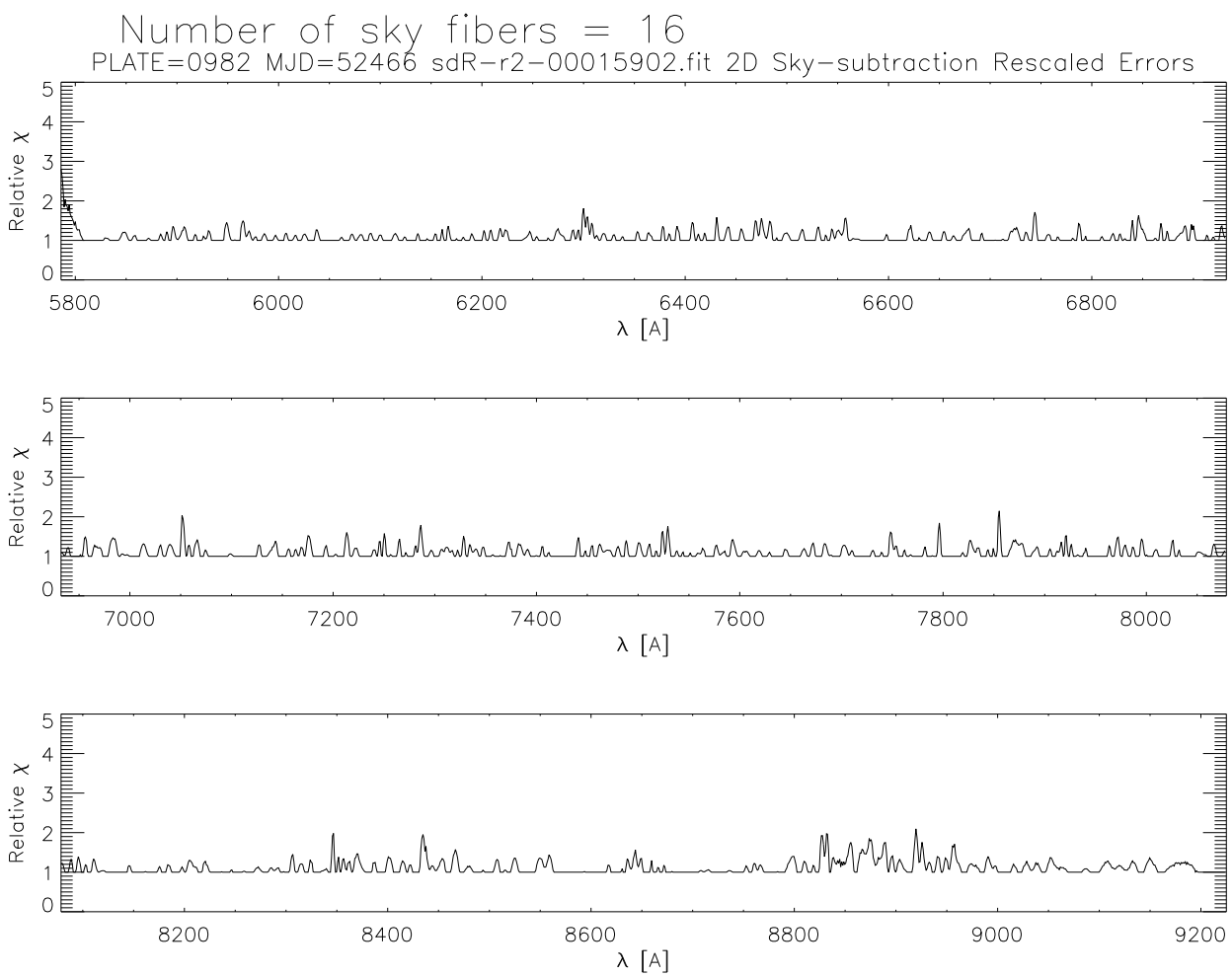

PLATE=0982 MJD=52466 sdR-r2-00015902.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

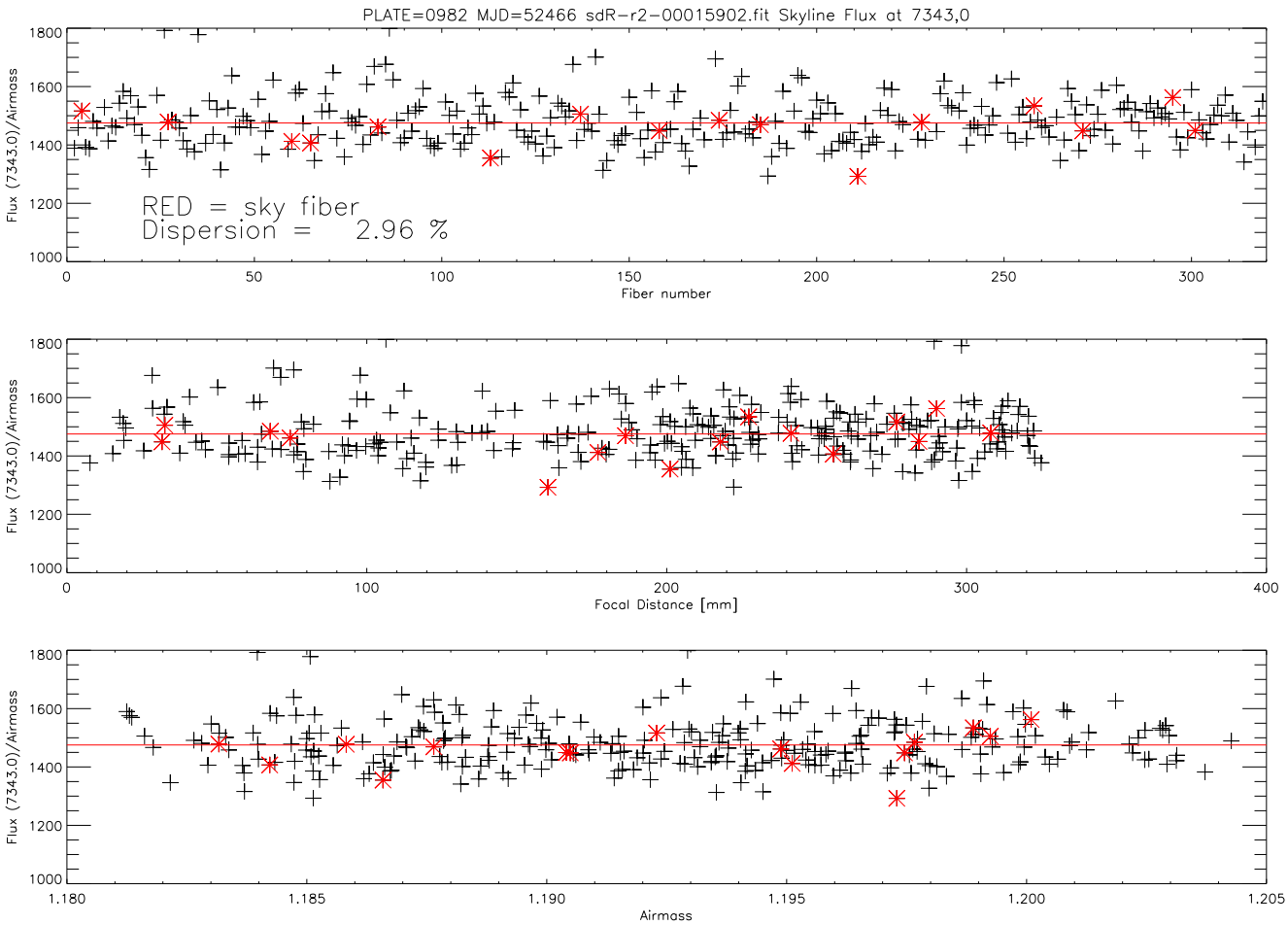

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015902.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

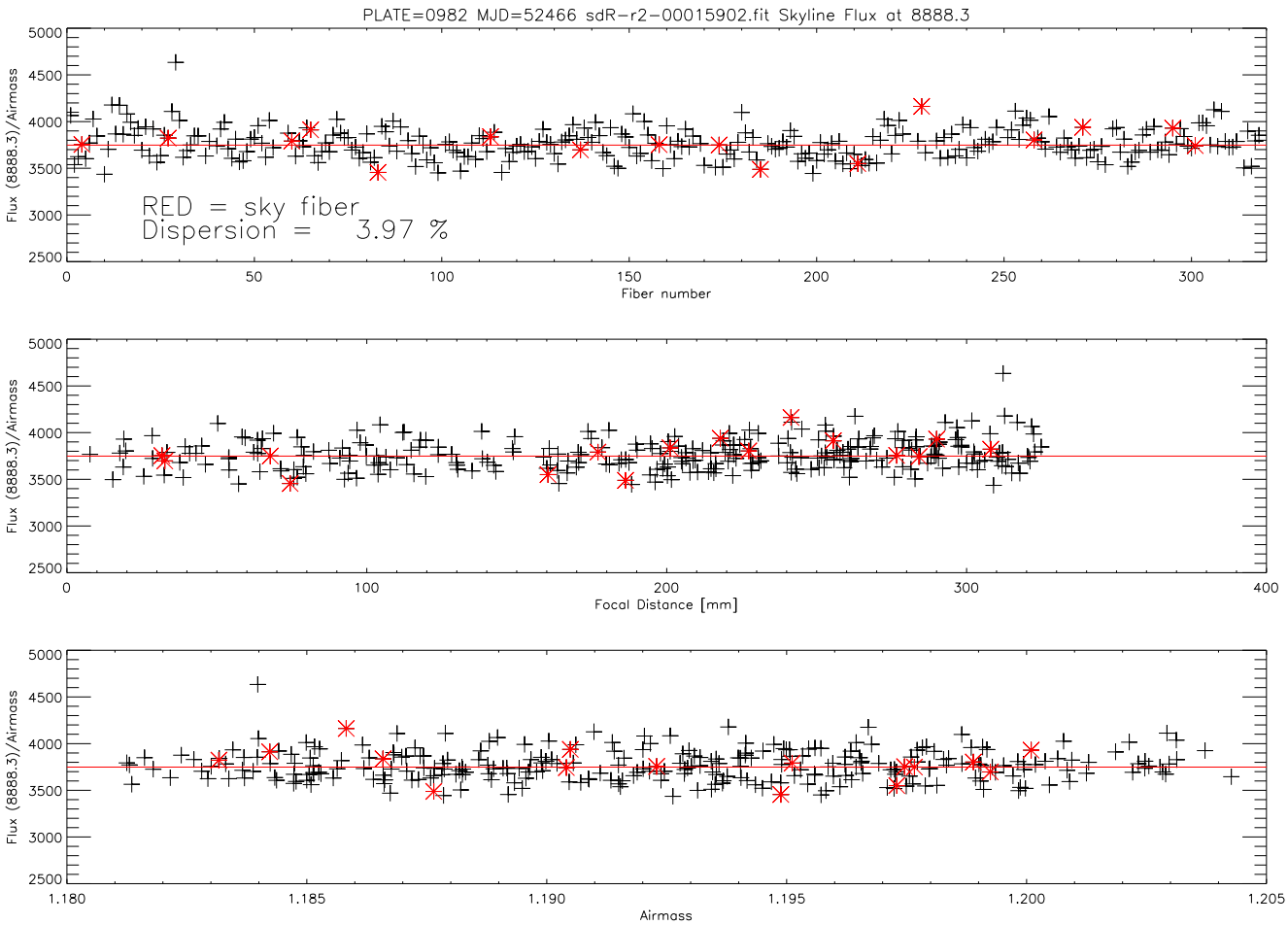

PLATE=0982 MJD=52466 sdR-r2-00015902.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

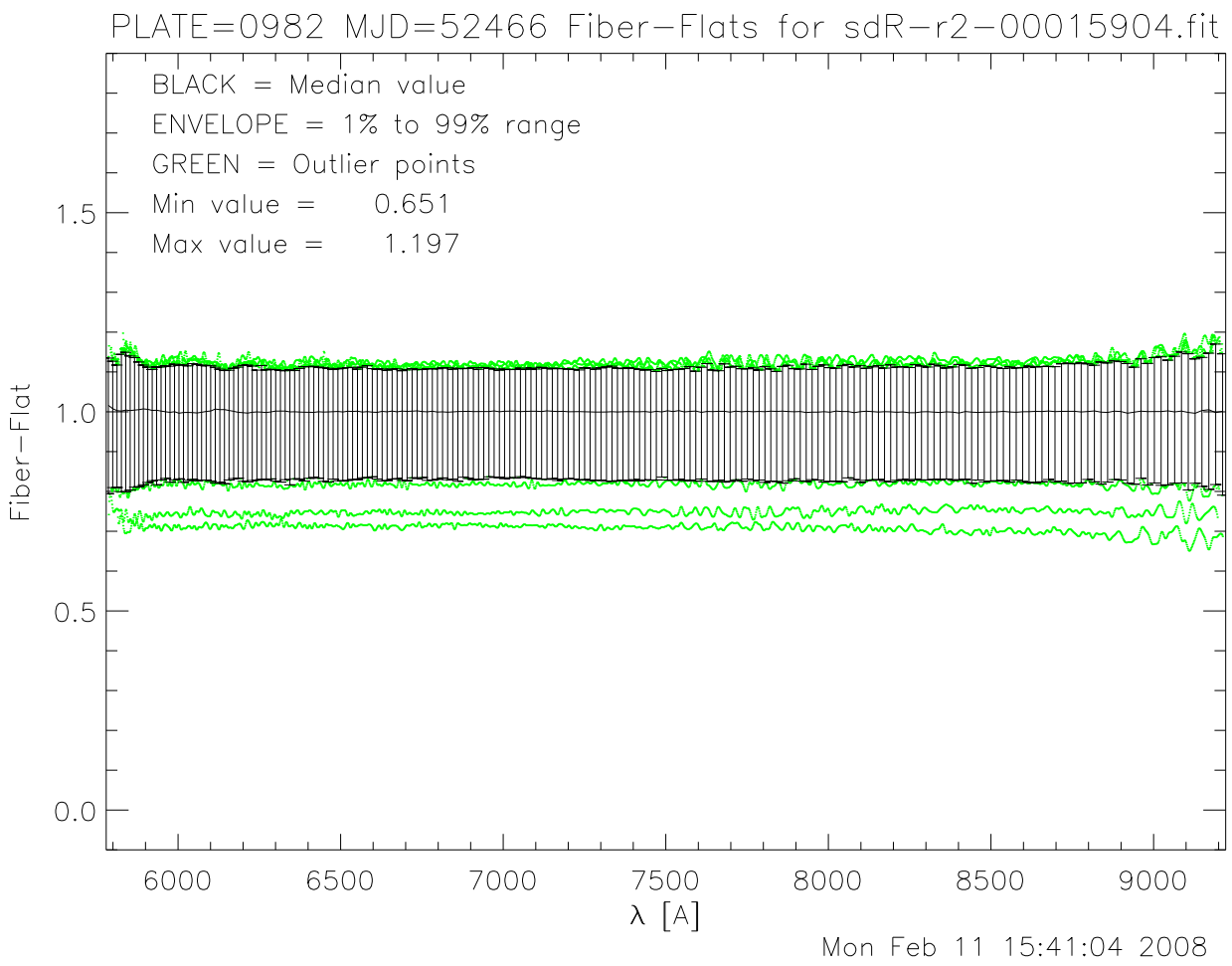

PLATE=0982 MJD=52466 sdR-r2-00015902.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

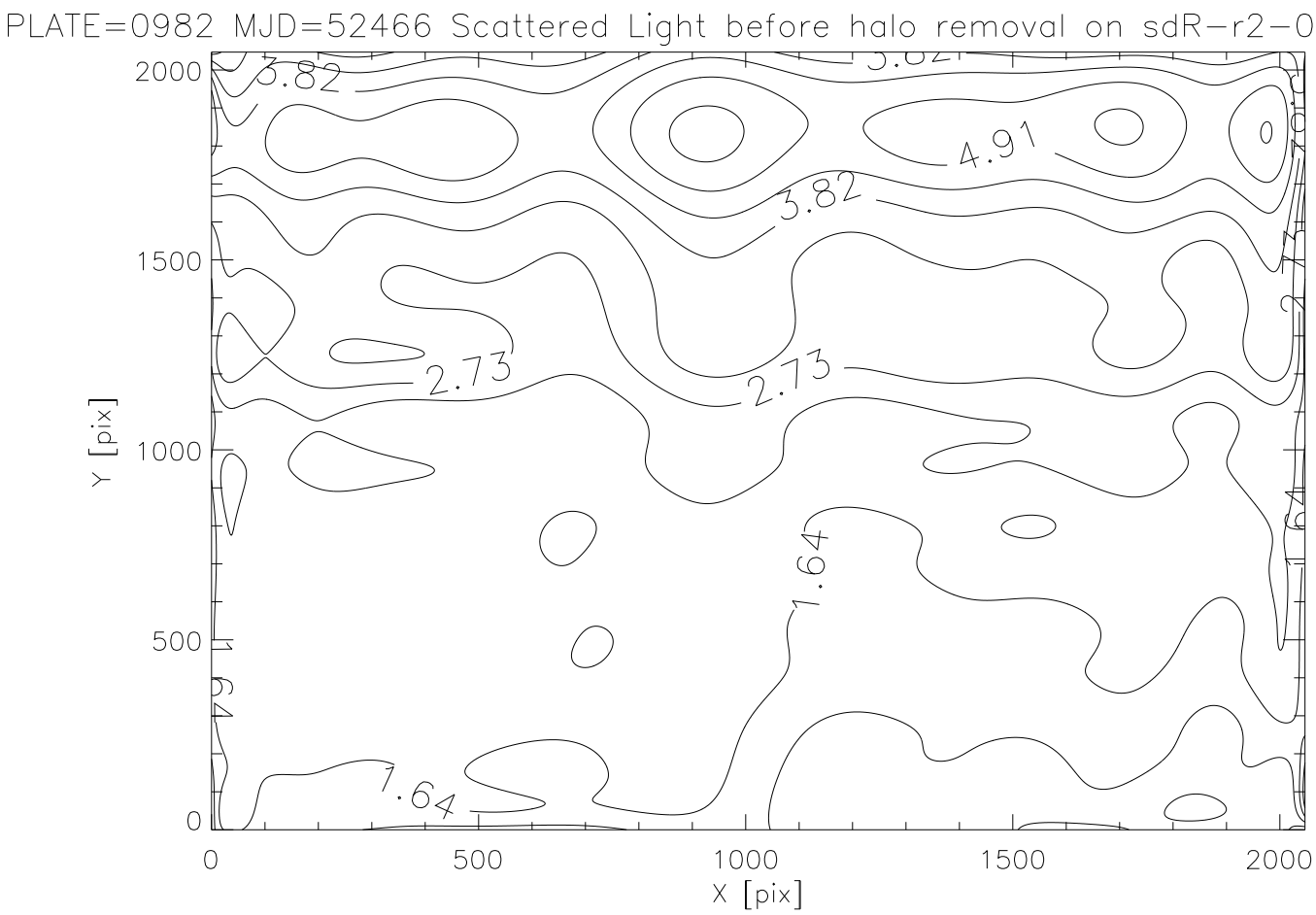

PLATE=0982 MJD=52466 sdR-r2-00015902.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

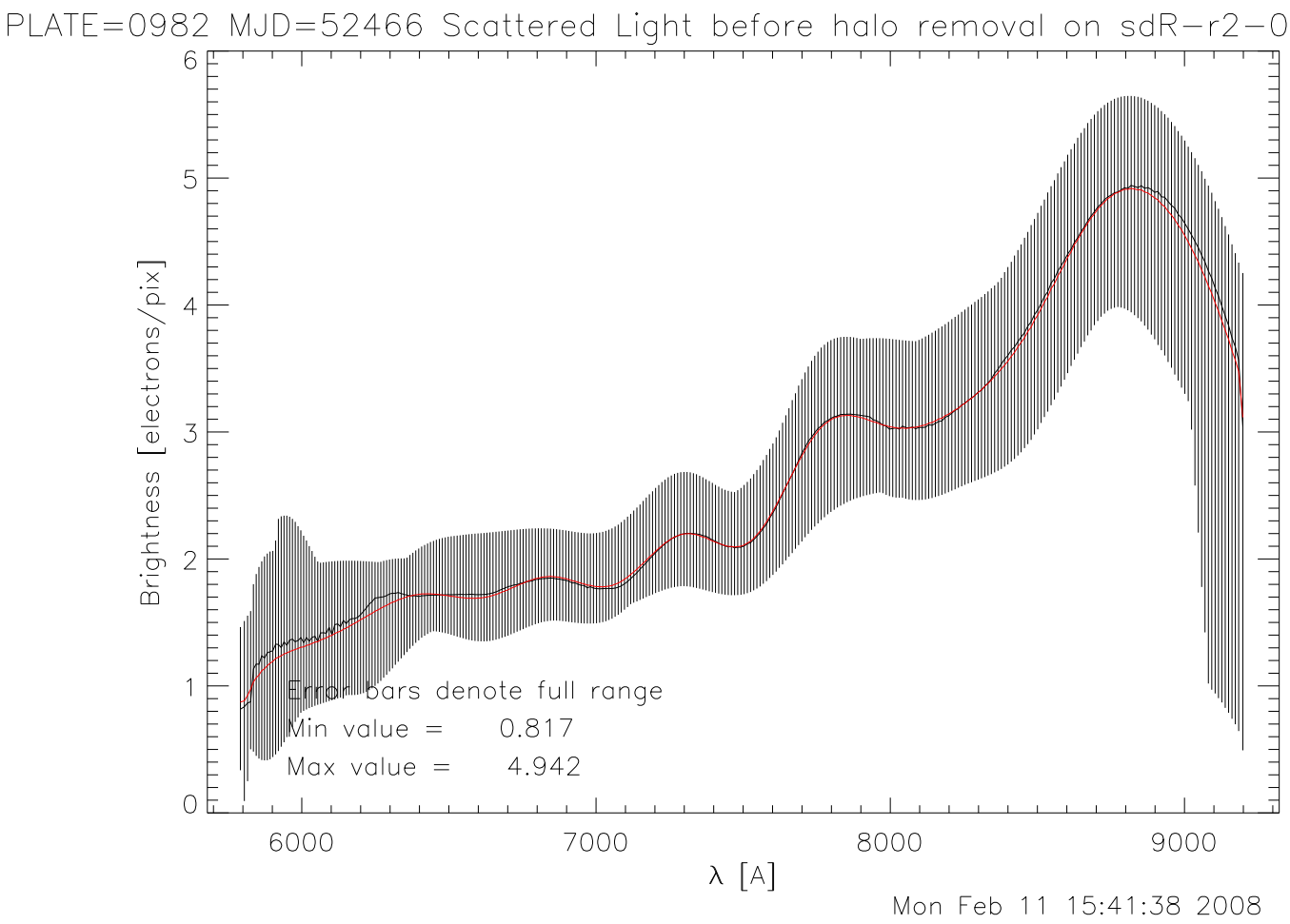

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015902.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

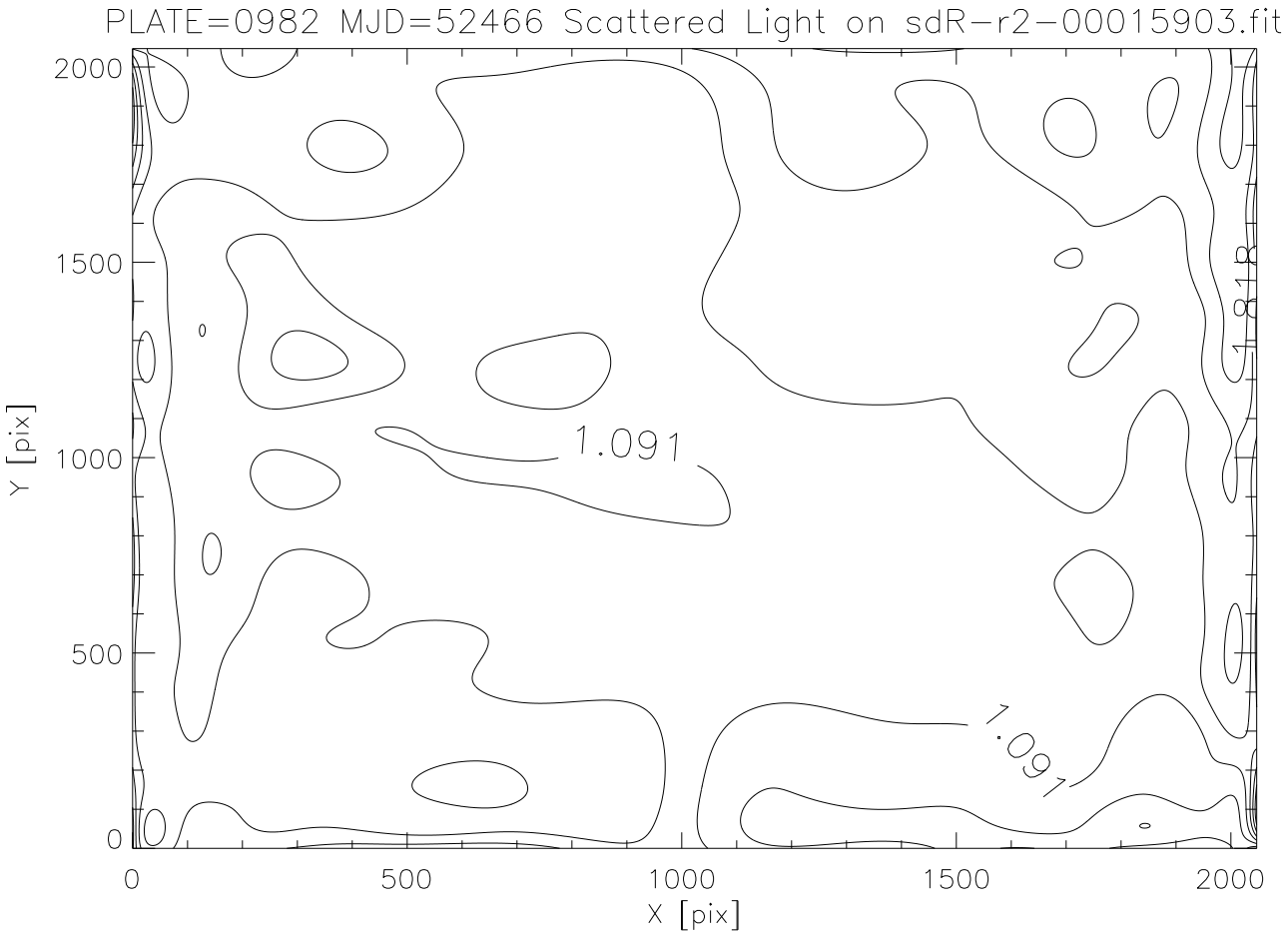

PLATE=0982 MJD=52466 sdR-r2-00015902.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.96 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

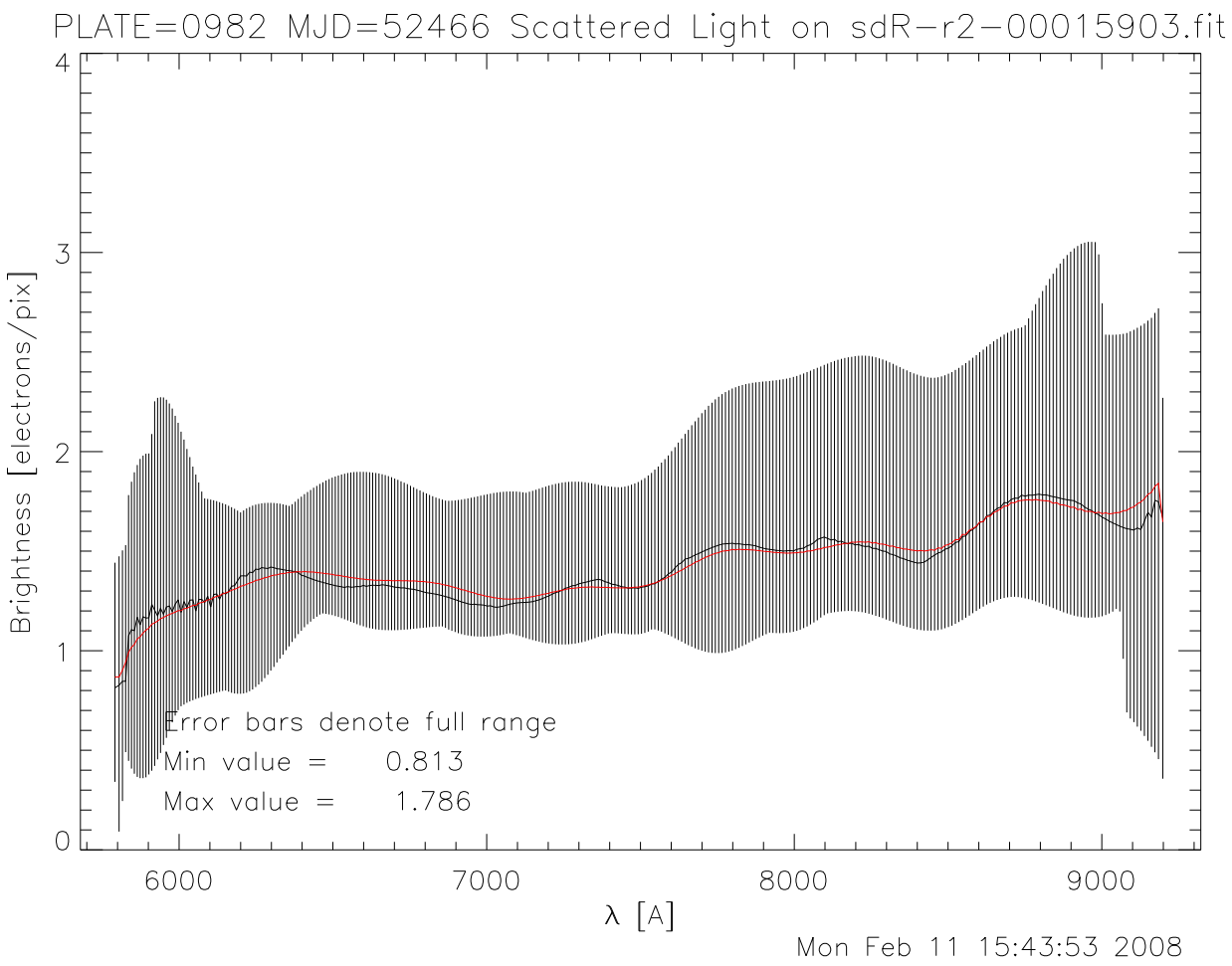

PLATE=0982 MJD=52466 sdR-r2-00015902.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.97 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

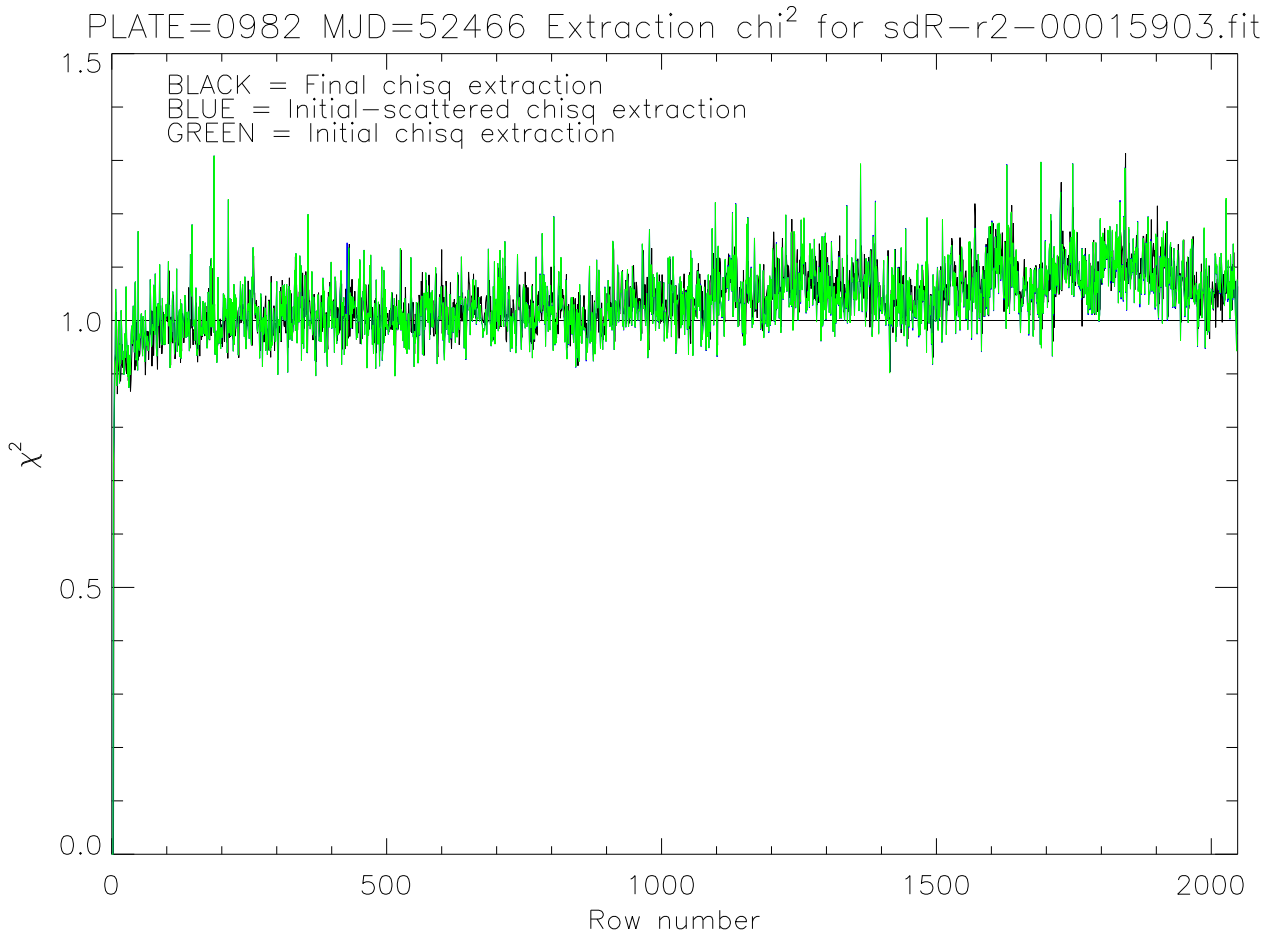

PLATE=0982 MJD=52466 Fiber−Flats for sdR−r2−00015904.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.651
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 15:41:04 2008

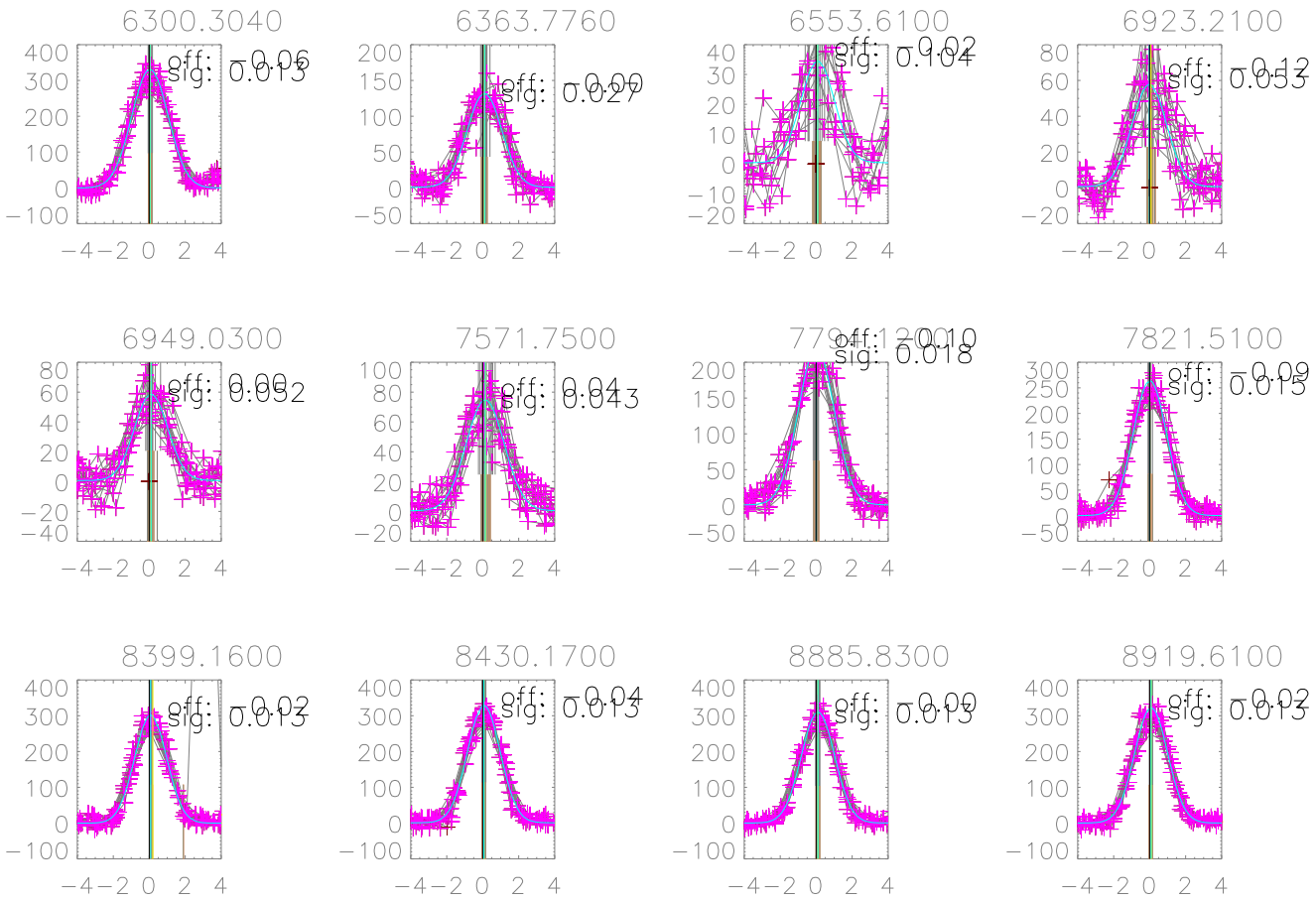

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015903.fi
3.82
4.91
3.82
2.73
2.73
1.64
1.64
1.64
0
Y [pix]
X [pix]
0
500
1000
1500
2000

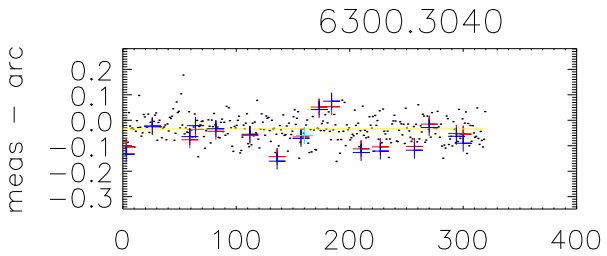

PLATE=0982 MJD=52466 Scattered Light before halo removal on sdR-r2-00015903.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.817
Max value = 4.942
Mon Feb 11 15:41:38 2008

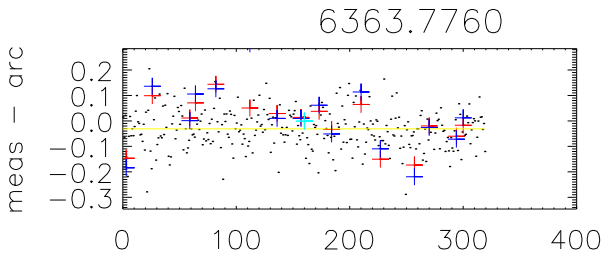

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015903.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
1.091
1.091
1.818
0
0
0

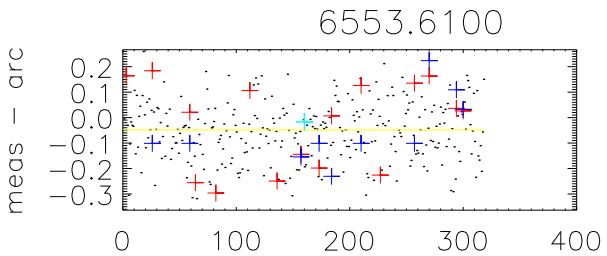

PLATE=0982 MJD=52466 Scattered Light on sdR-r2-00015903.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.813
Max value = 1.786
Mon Feb 11 15:43:53 2008

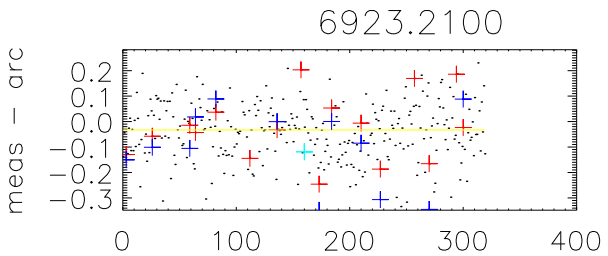

PLATE=0982 MJD=52466 Extraction chi^2 for sdR−r2−00015903.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
1.5
1.0
0.5
0.0
χ^2
0
500
1000
1500
2000
Row number

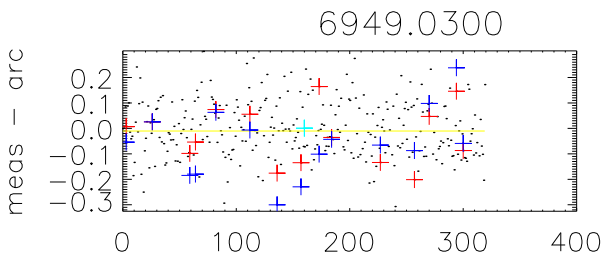

6300.3040
off: −0.06
sig: 0.013
6363.7760
off: −0.09
sig: 0.027
6553.6100
off: −0.02
sig: 0.104
6923.2100
off: −0.12
sig: 0.053
6949.0300
off: 0.00
sig: 0.052
7571.7500
off: 0.04
sig: 0.043
7794.1200
off: −0.10
sig: 0.018
7821.5100
off: −0.09
sig: 0.015
8399.1600
off: −0.02
sig: 0.013
8430.1700
off: −0.04
sig: 0.013
8885.8300
off: −0.09
sig: 0.013
8919.6100
off: −0.02
sig: 0.013

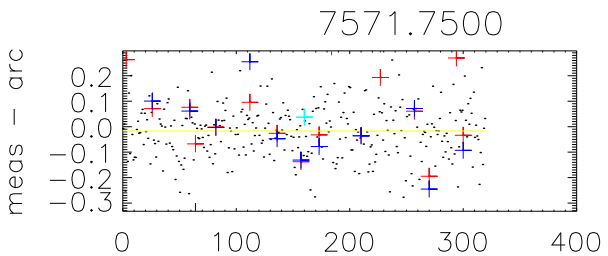

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

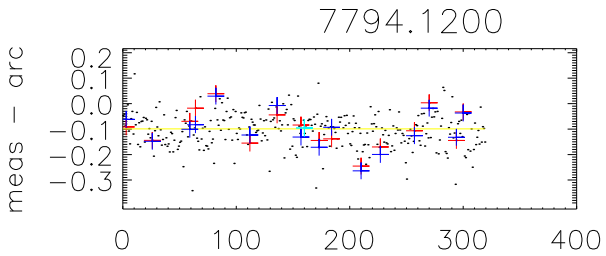

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

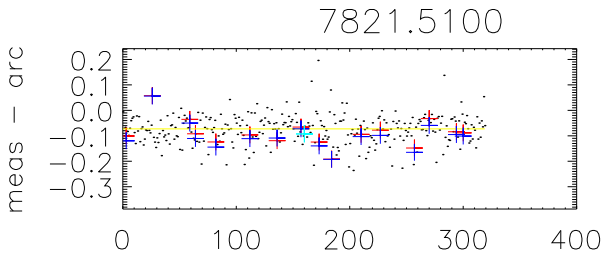

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

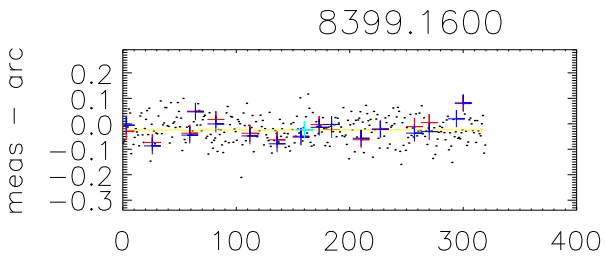

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

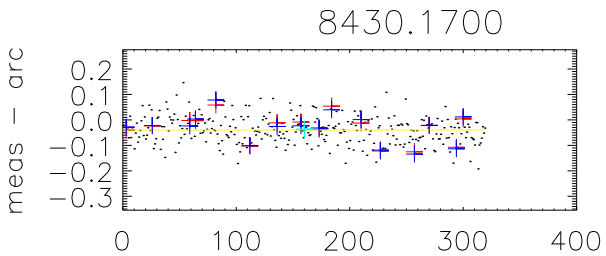

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

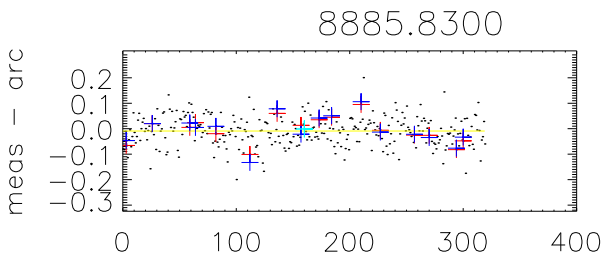

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

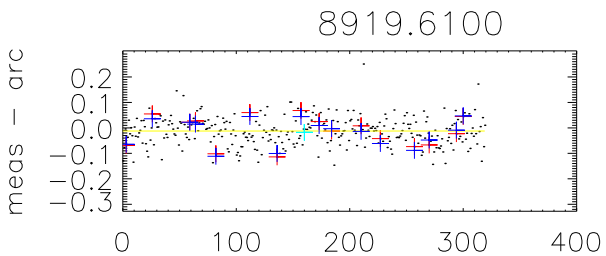

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

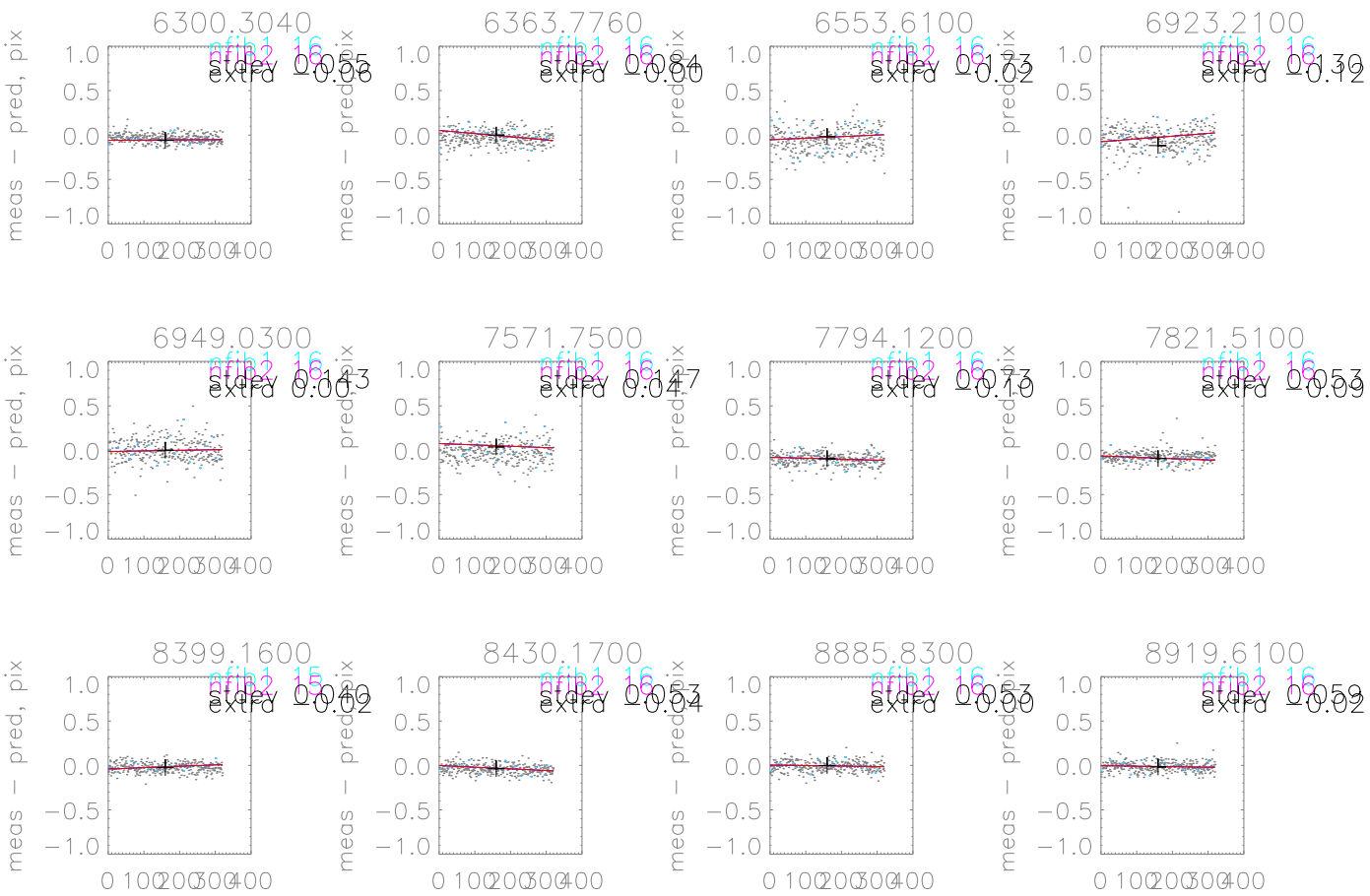

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

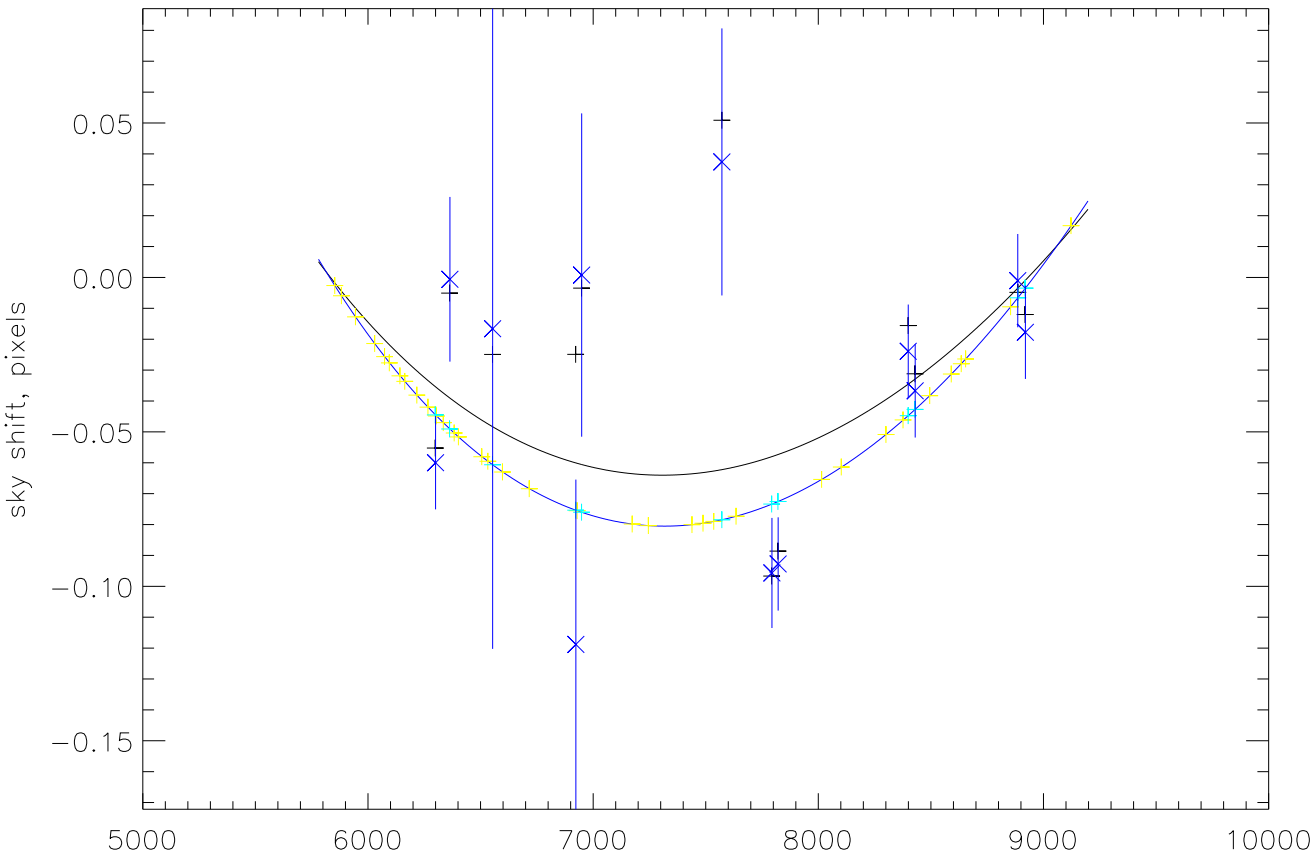

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

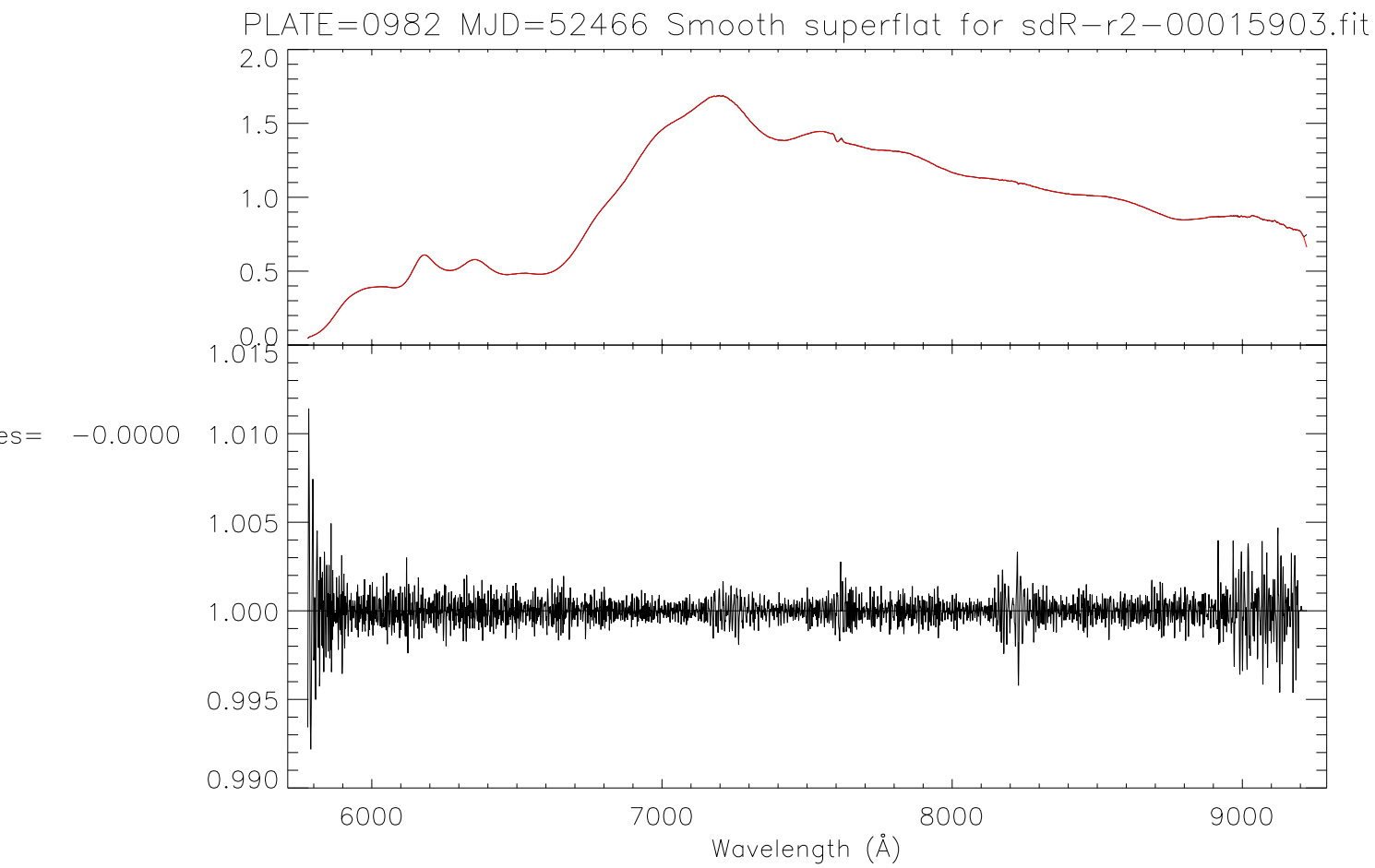

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

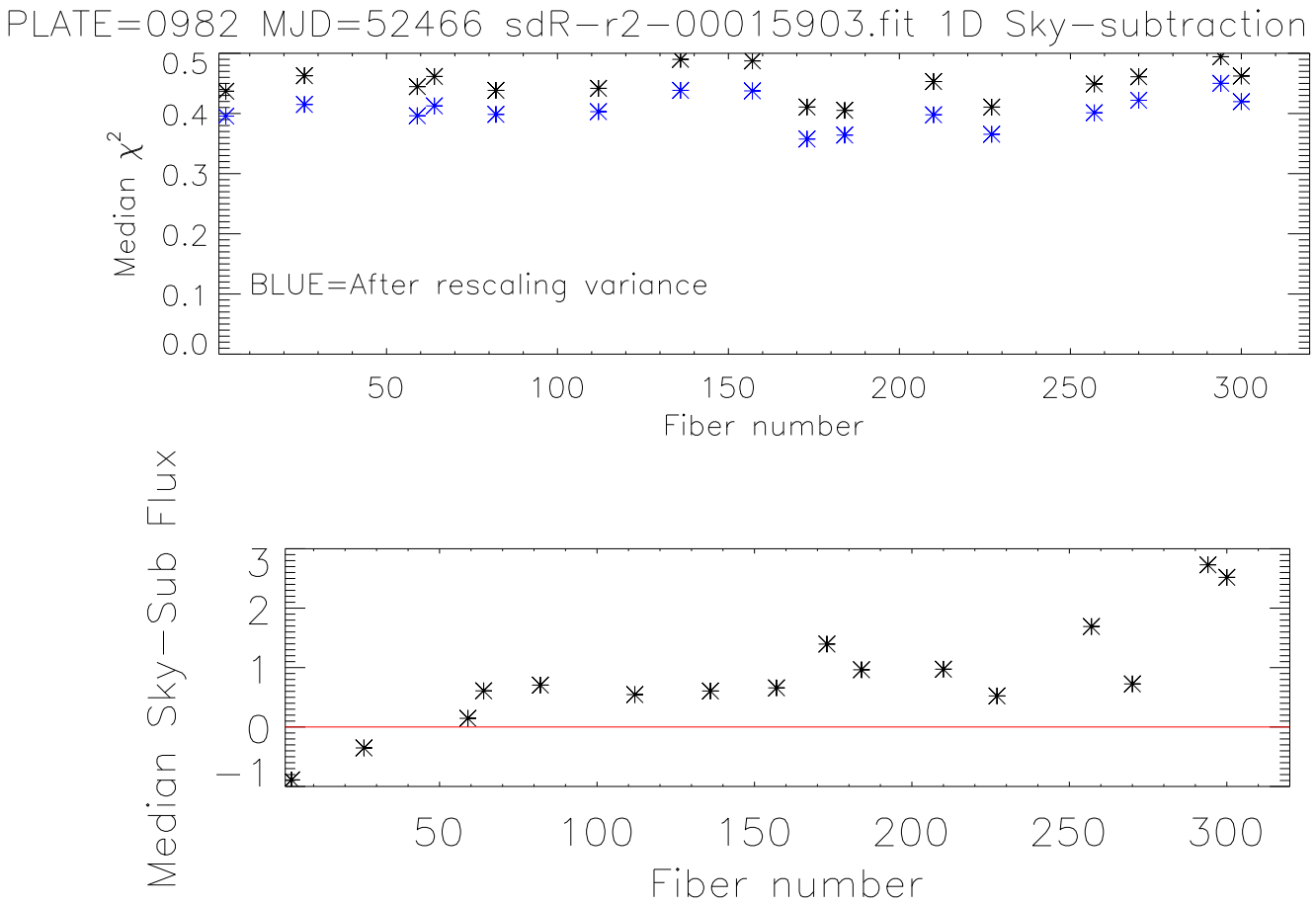

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

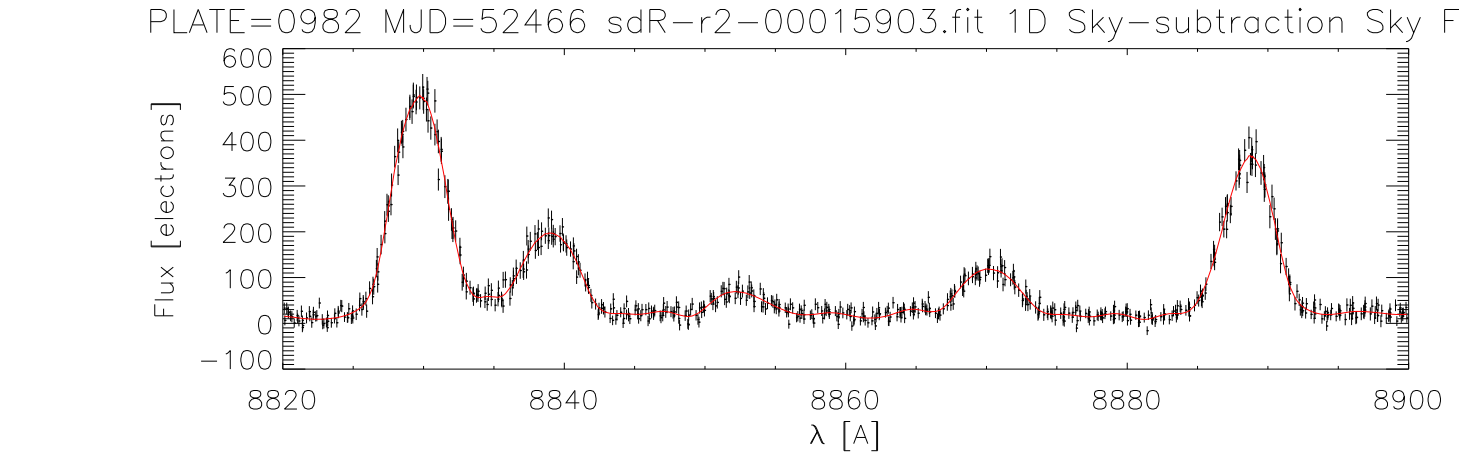

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

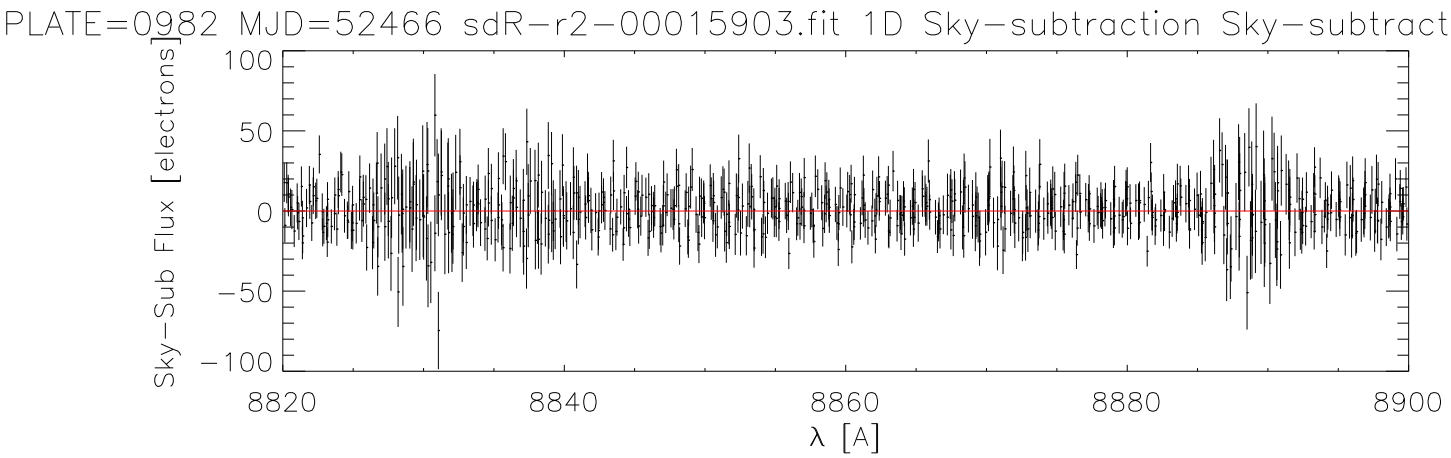

6300.3040
stdev 0.055
extra 0.08
6363.7760
stdev 0.084
extra 0.00
6553.6100
stdev 0.173
extra 0.02
6923.2100
stdev 0.130
extra 0.12
6949.0300
stdev 0.143
extra 0.00
7571.7500
stdev 0.147
extra 0.04
7794.1200
stdev 0.073
extra 0.10
7821.5100
stdev 0.053
extra 0.09
8399.1600
stdev 0.040
extra 0.02
8430.1700
stdev 0.053
extra 0.04
8885.8300
stdev 0.053
extra 0.00
8919.6100
stdev 0.059
extra 0.02
meas − pred, pix

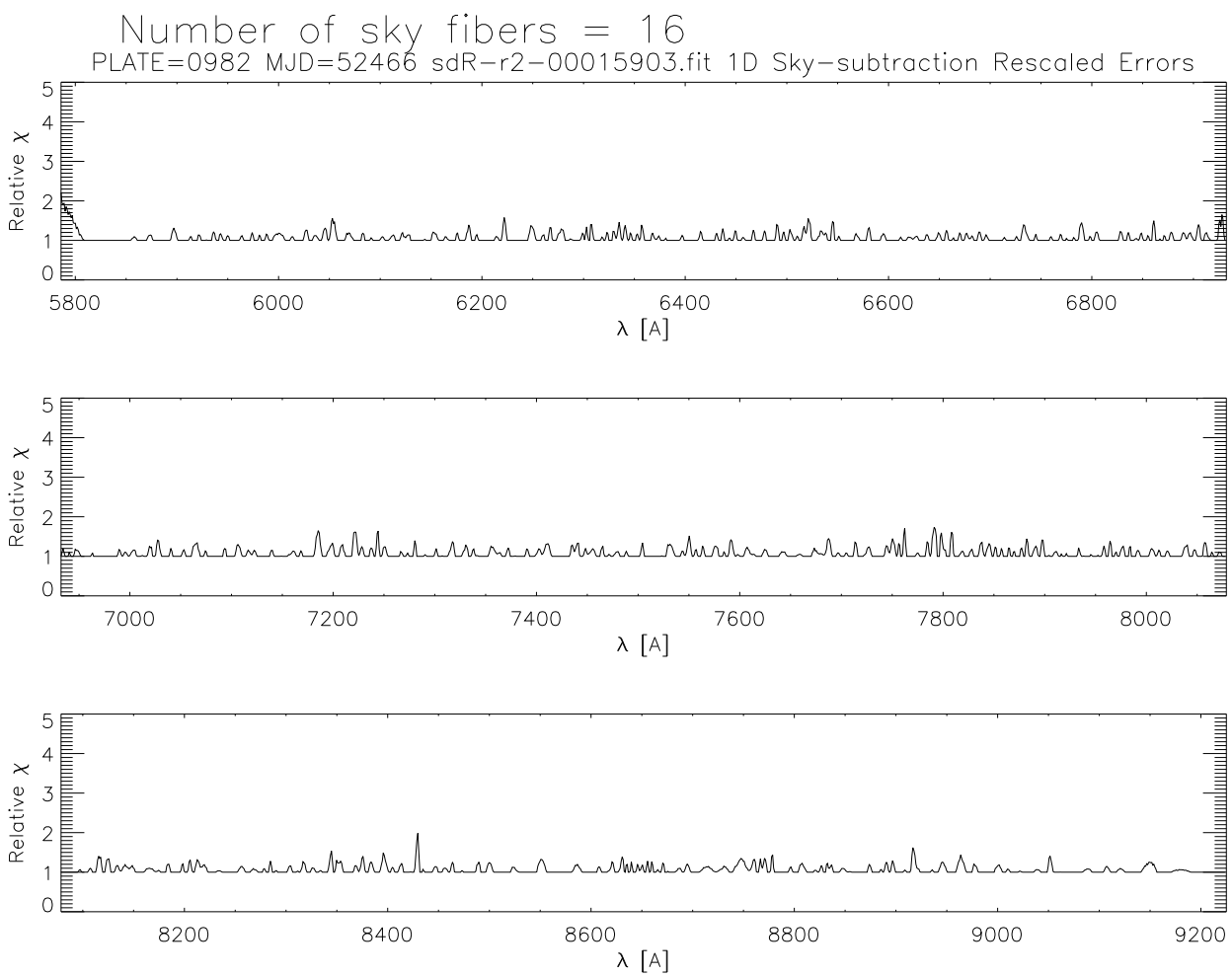

0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

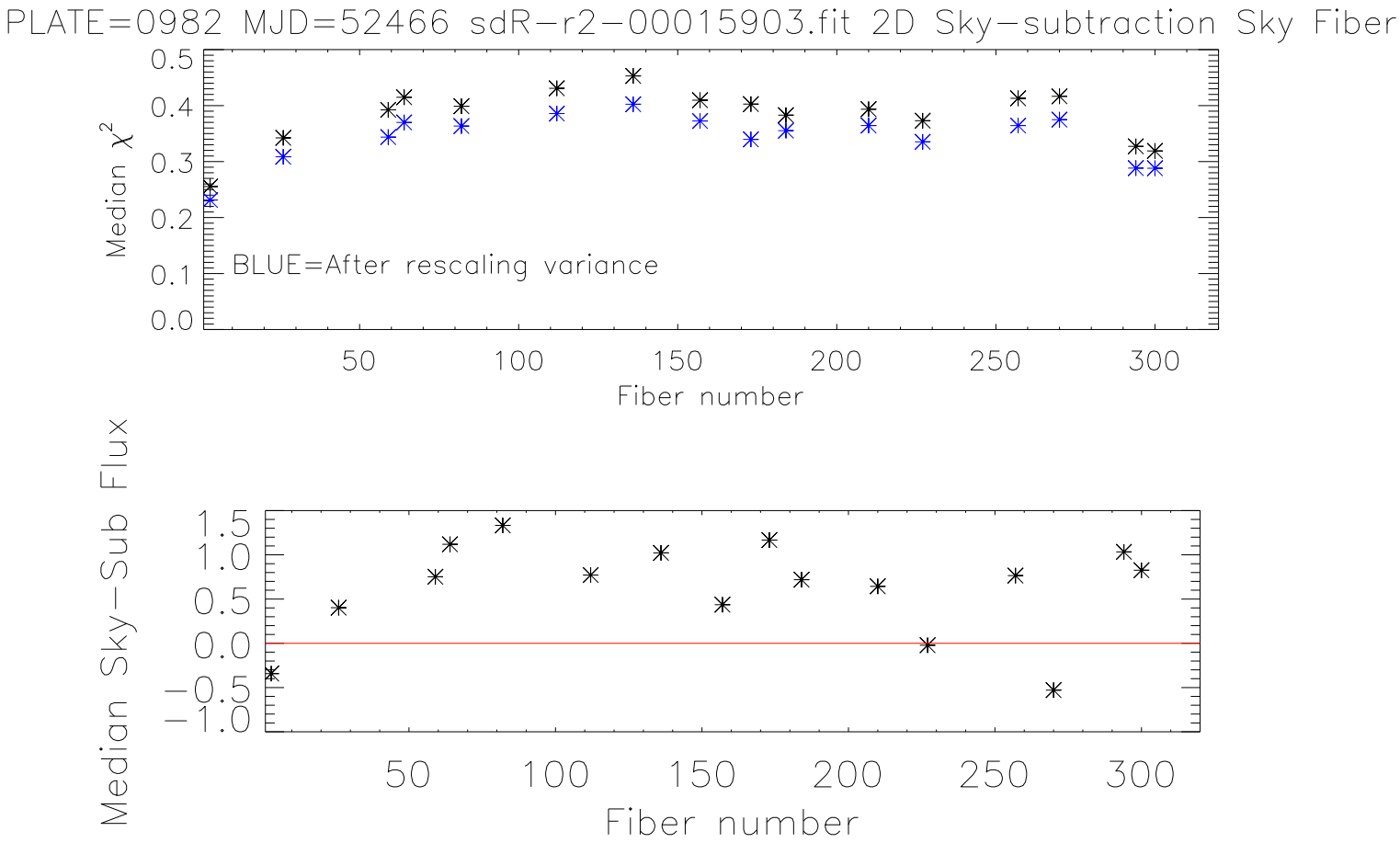

PLATE=0982 MJD=52466 Smooth superflat for sdR-r2-00015903.fit
2.0
1.5
1.0
0.5
0.0
1.015
es= −0.0000
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

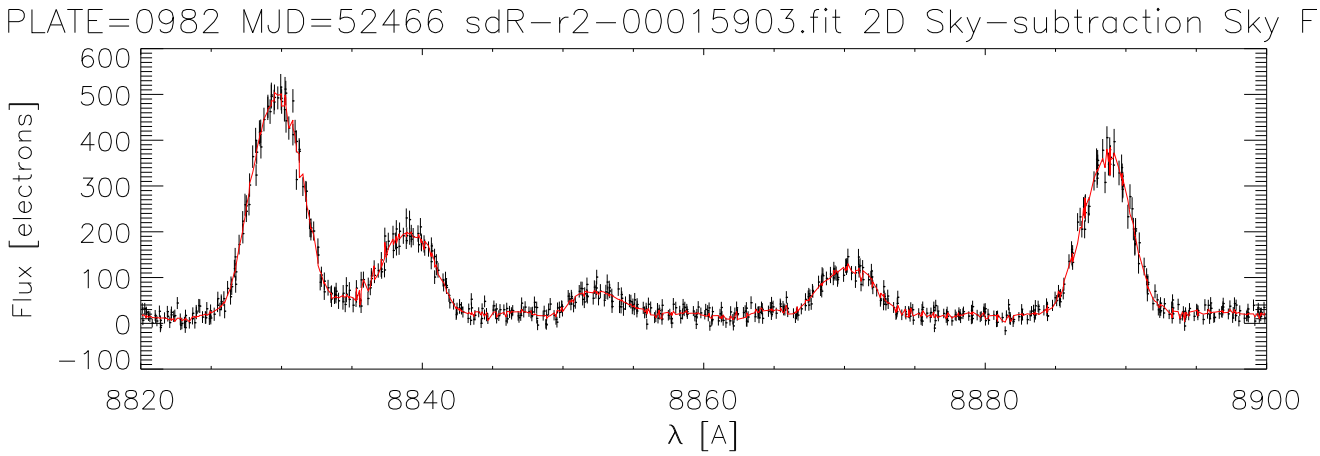

PLATE=0982 MJD=52466 sdR-r2-00015903.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

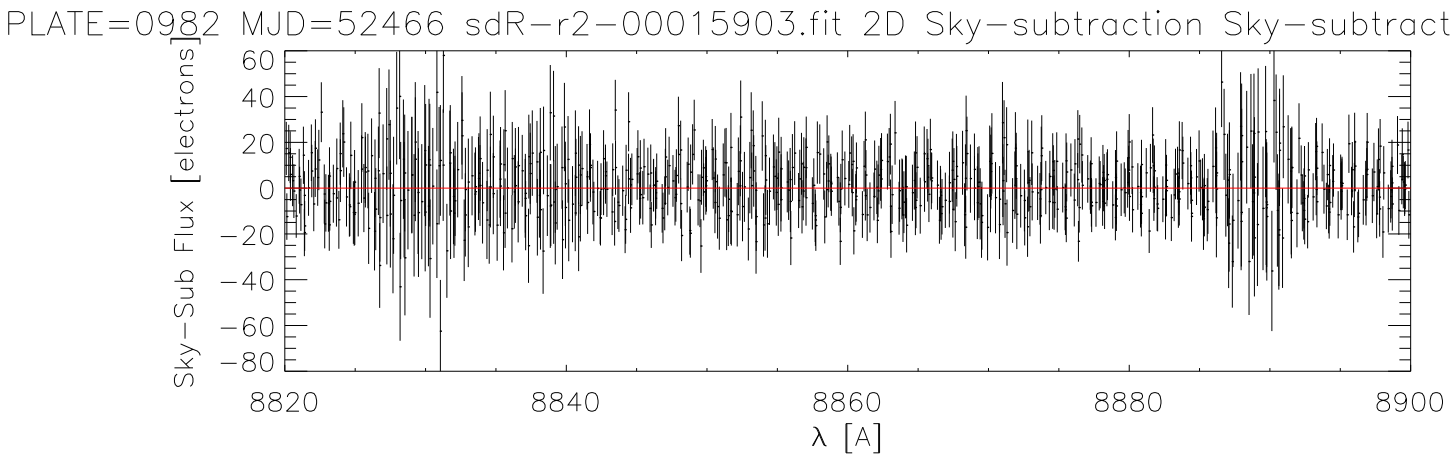

PLATE=0982 MJD=52466 sdR-r2-00015903.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
600
500
400
300
200
100
0
-100
8820
8840
8860
8880
8900
λ [A]

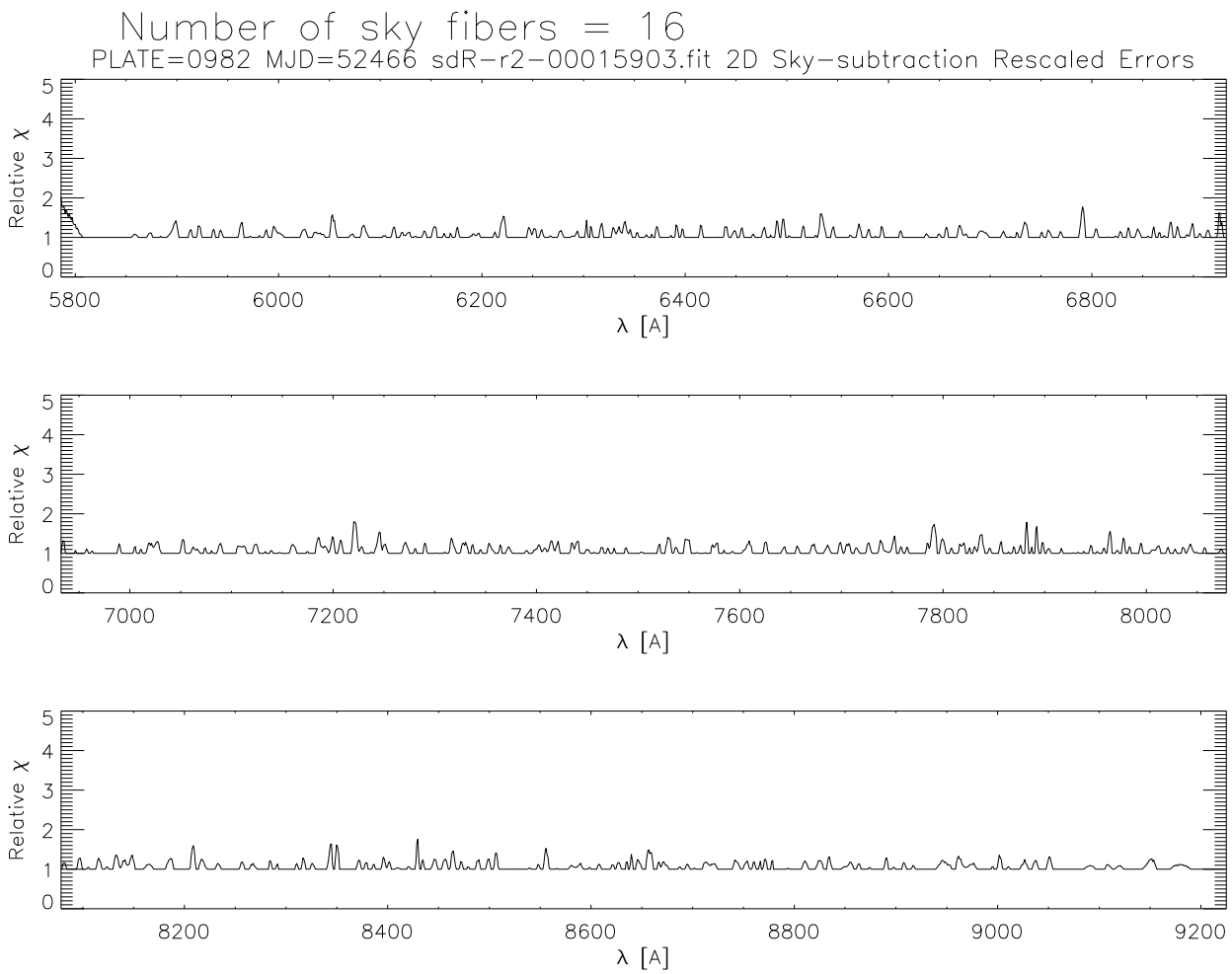

PLATE=0982 MJD=52466 sdR-r2-00015903.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

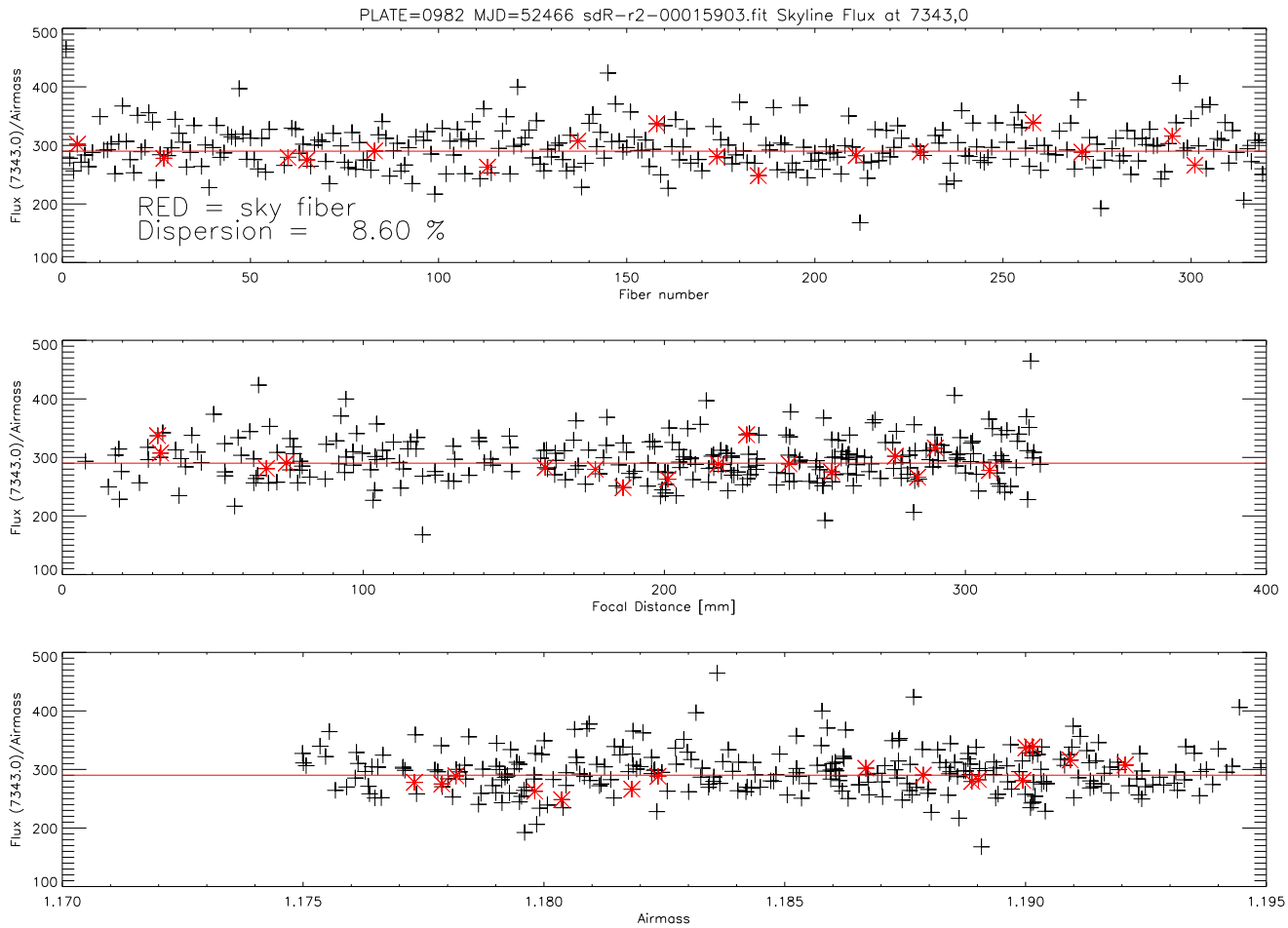

Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015903.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

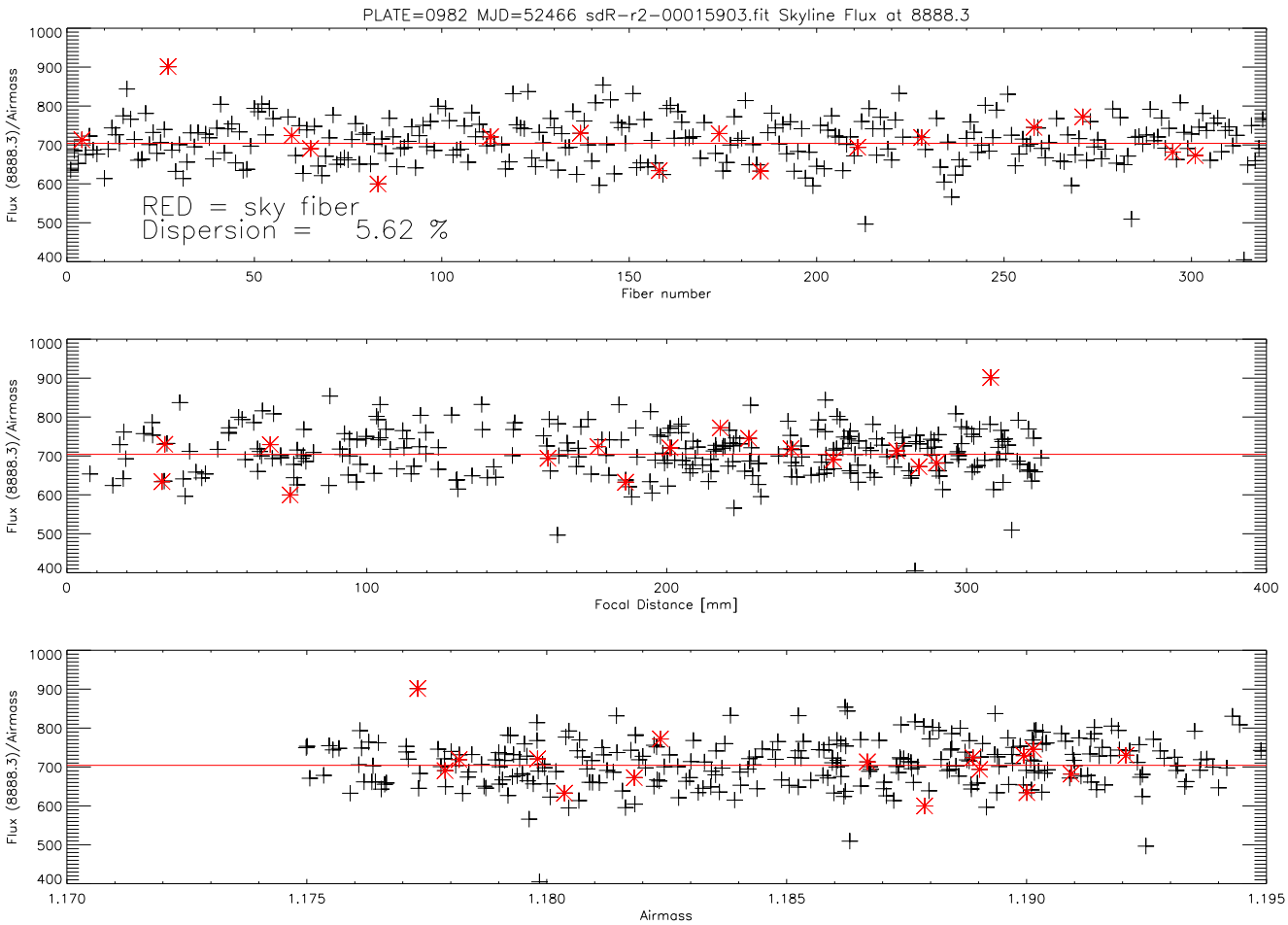

PLATE=0982 MJD=52466 sdR-r2-00015903.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0982 MJD=52466 sdR-r2-00015903.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
600
500
400
300
200
100
0
−100
8820
8840
8860
8880
8900
λ [A]


PLATE=0982 MJD=52466 sdR-r2-00015903.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
60
40
20
0
−20
−40
−60
−80
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=0982 MJD=52466 sdR-r2-00015903.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=0982 MJD=52466 sdR-r2-00015903.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 8.60 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0982 MJD=52466 sdR-r2-00015903.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 5.62 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass