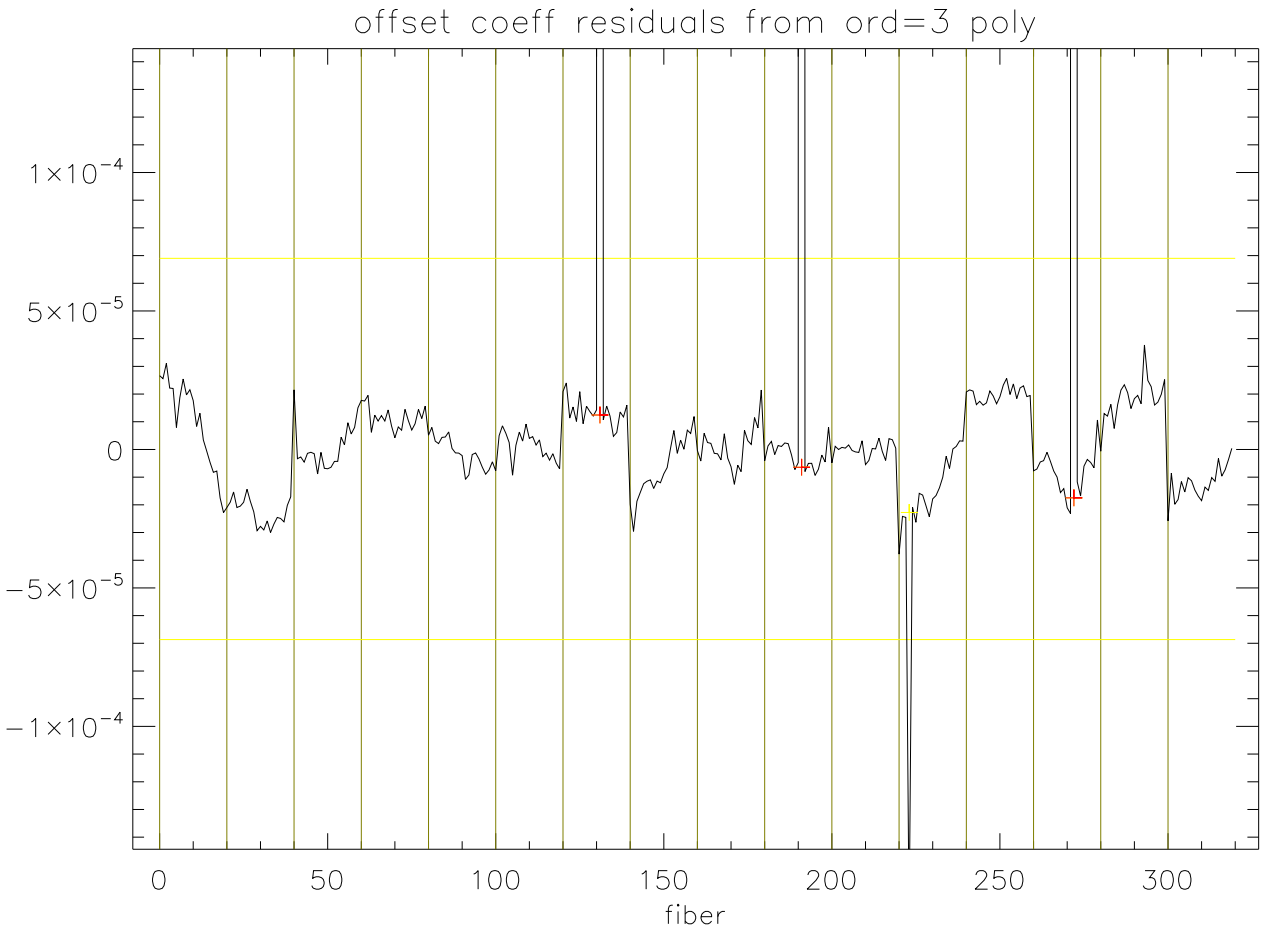
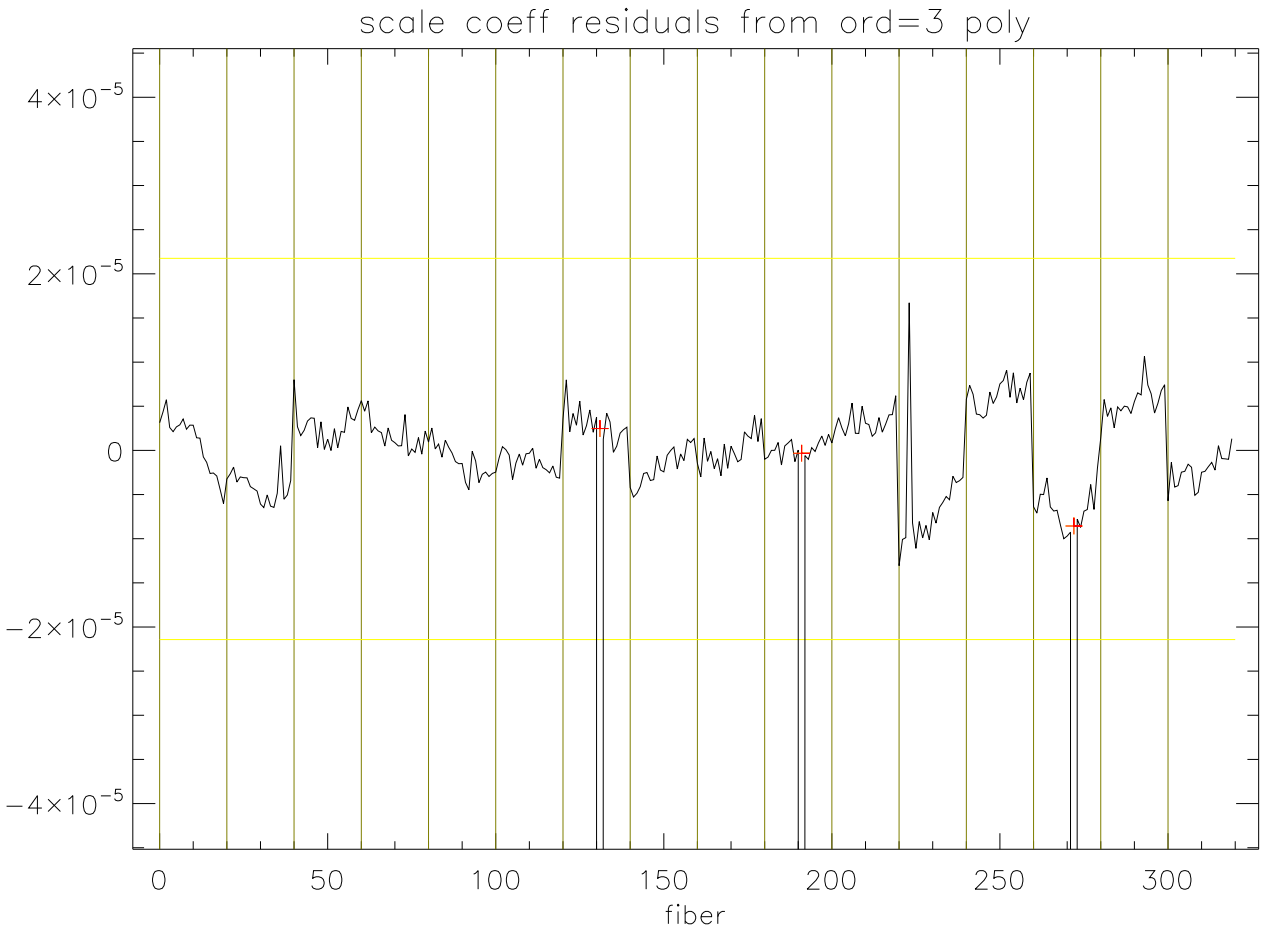
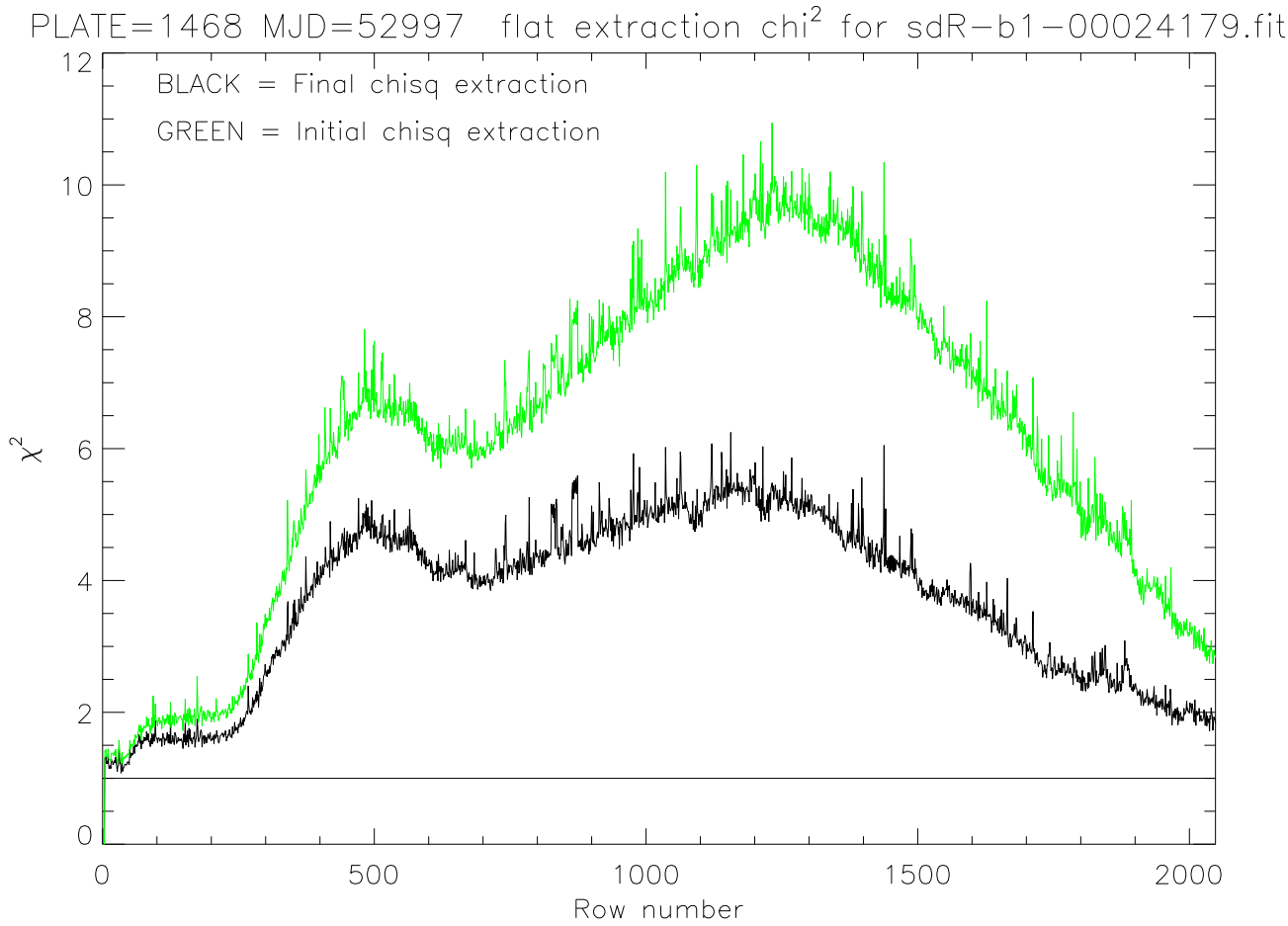
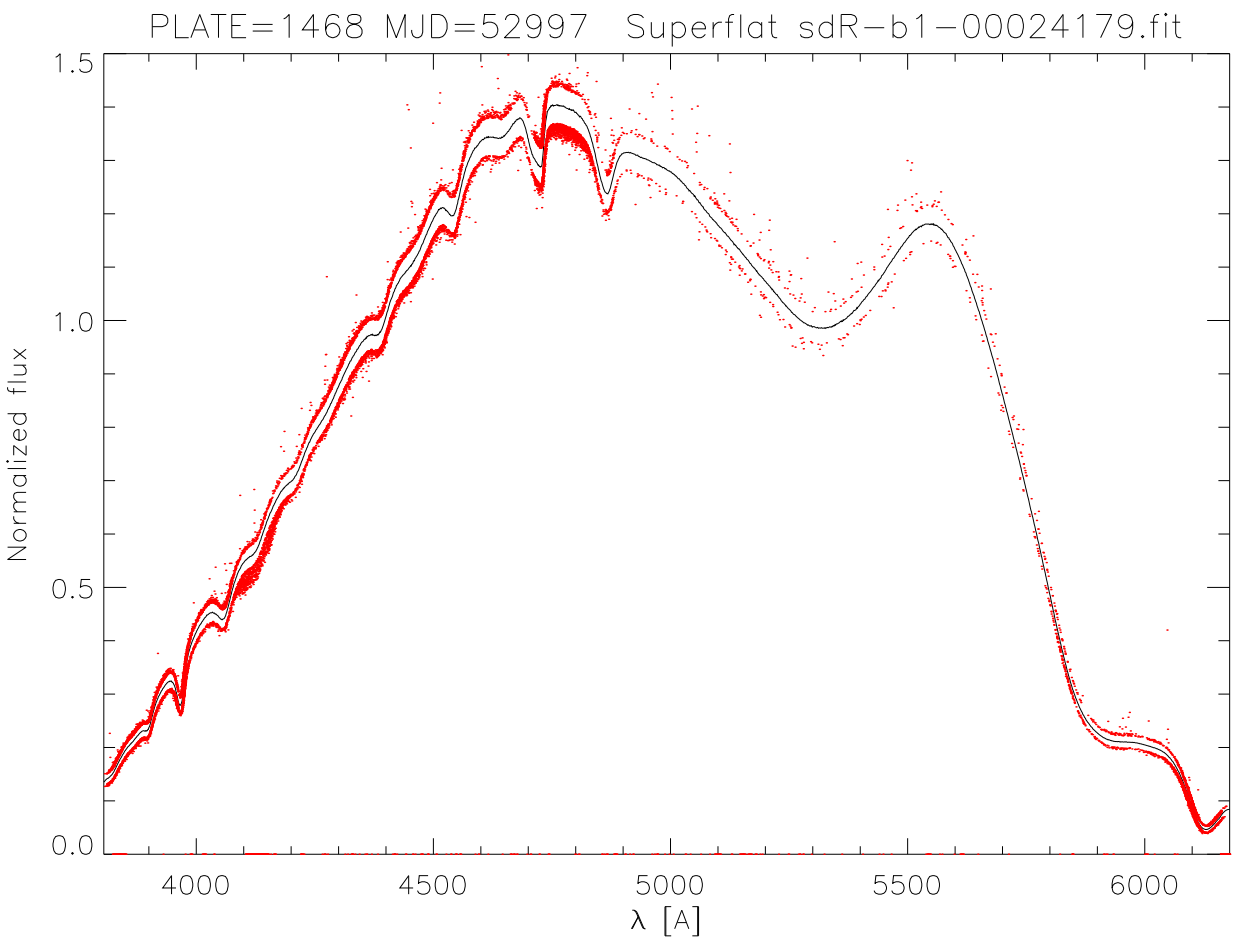
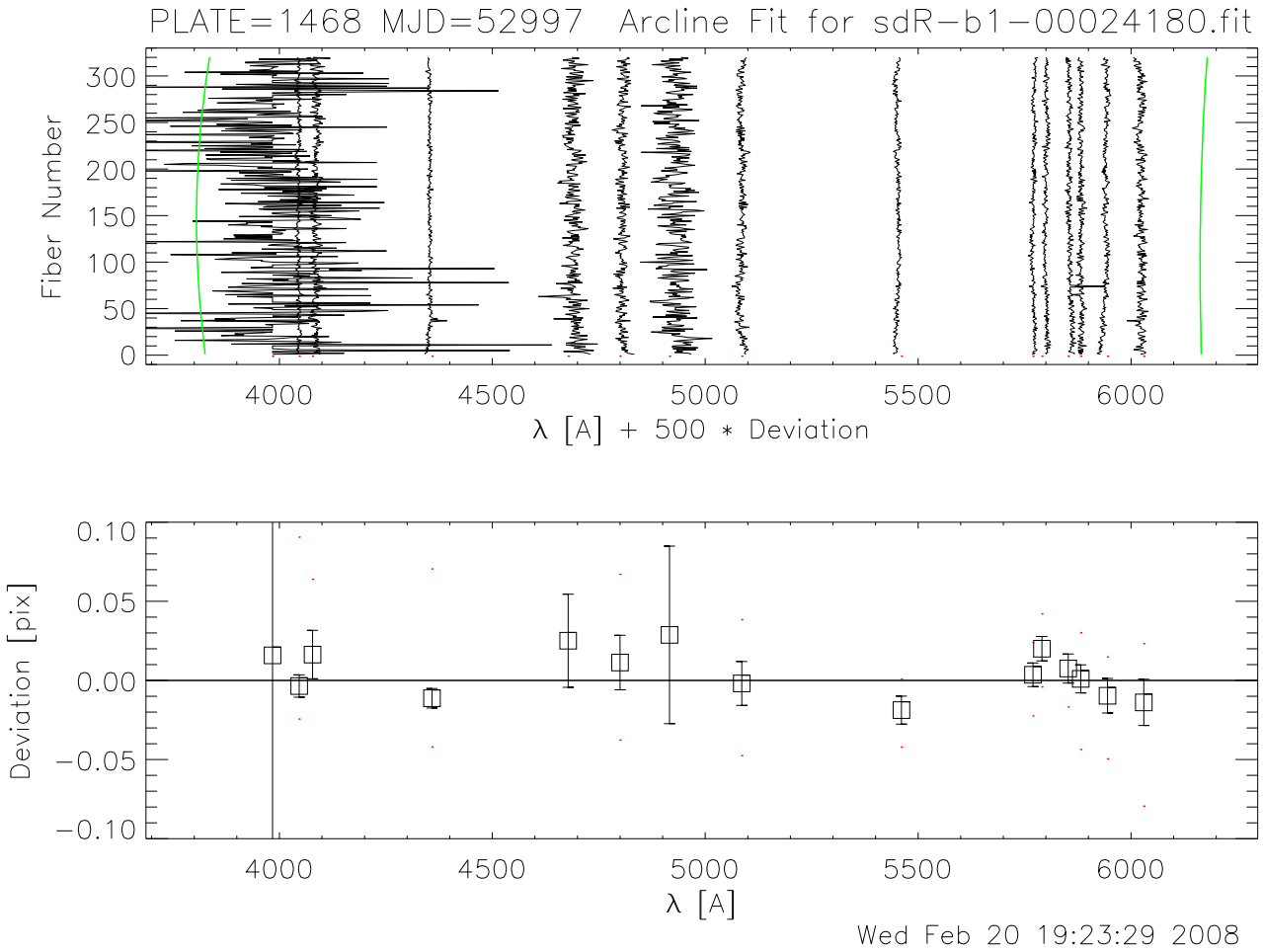
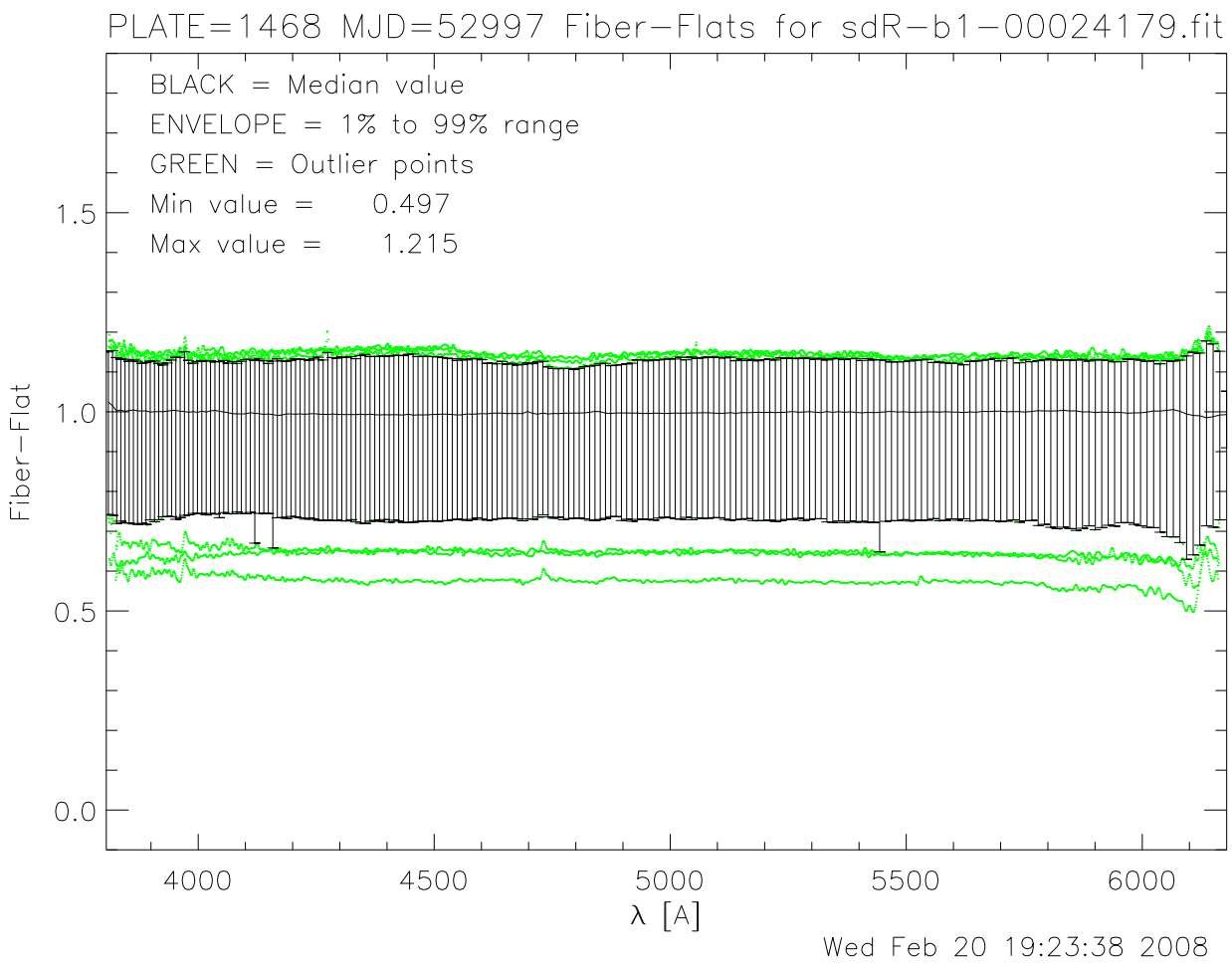

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

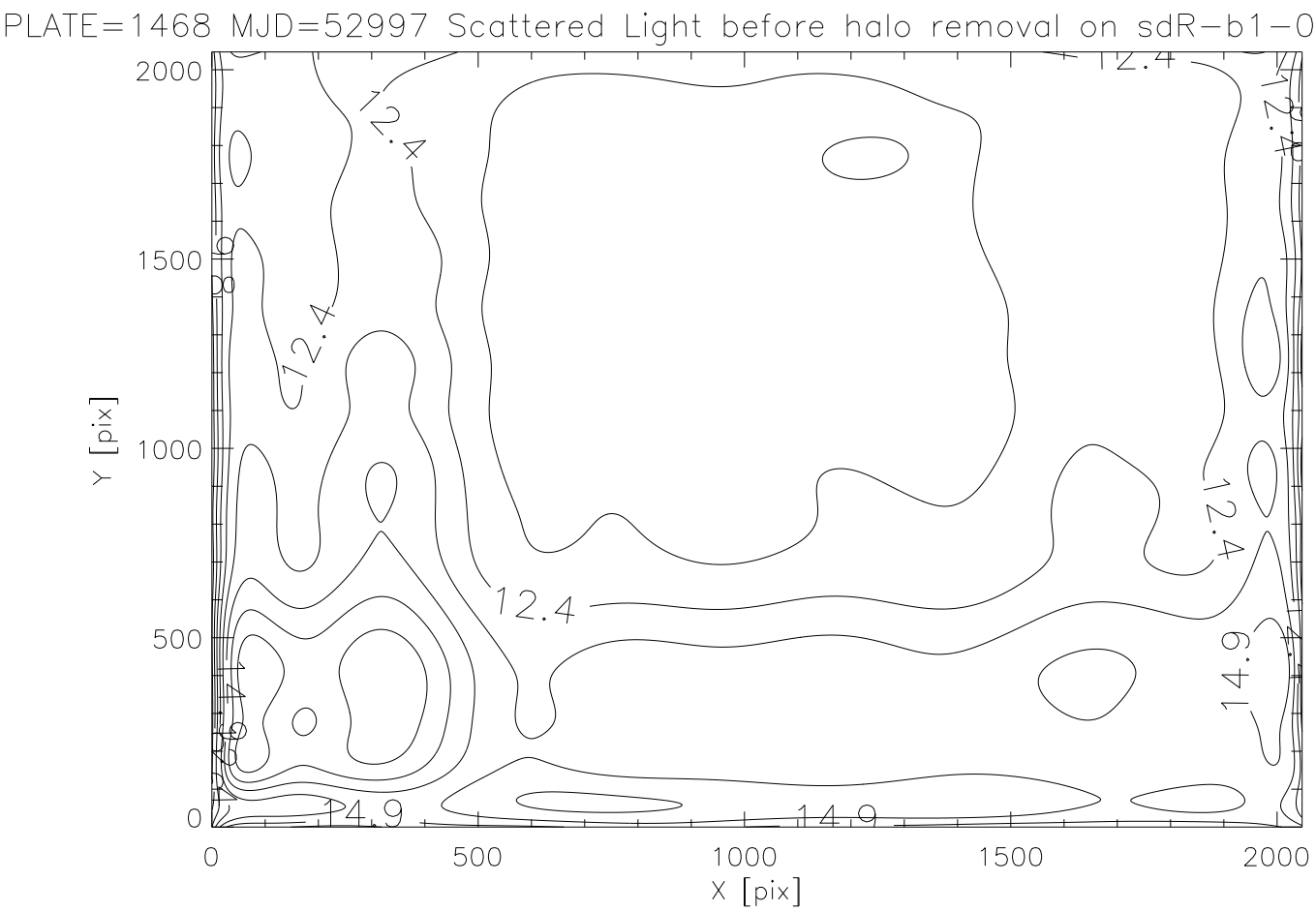

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

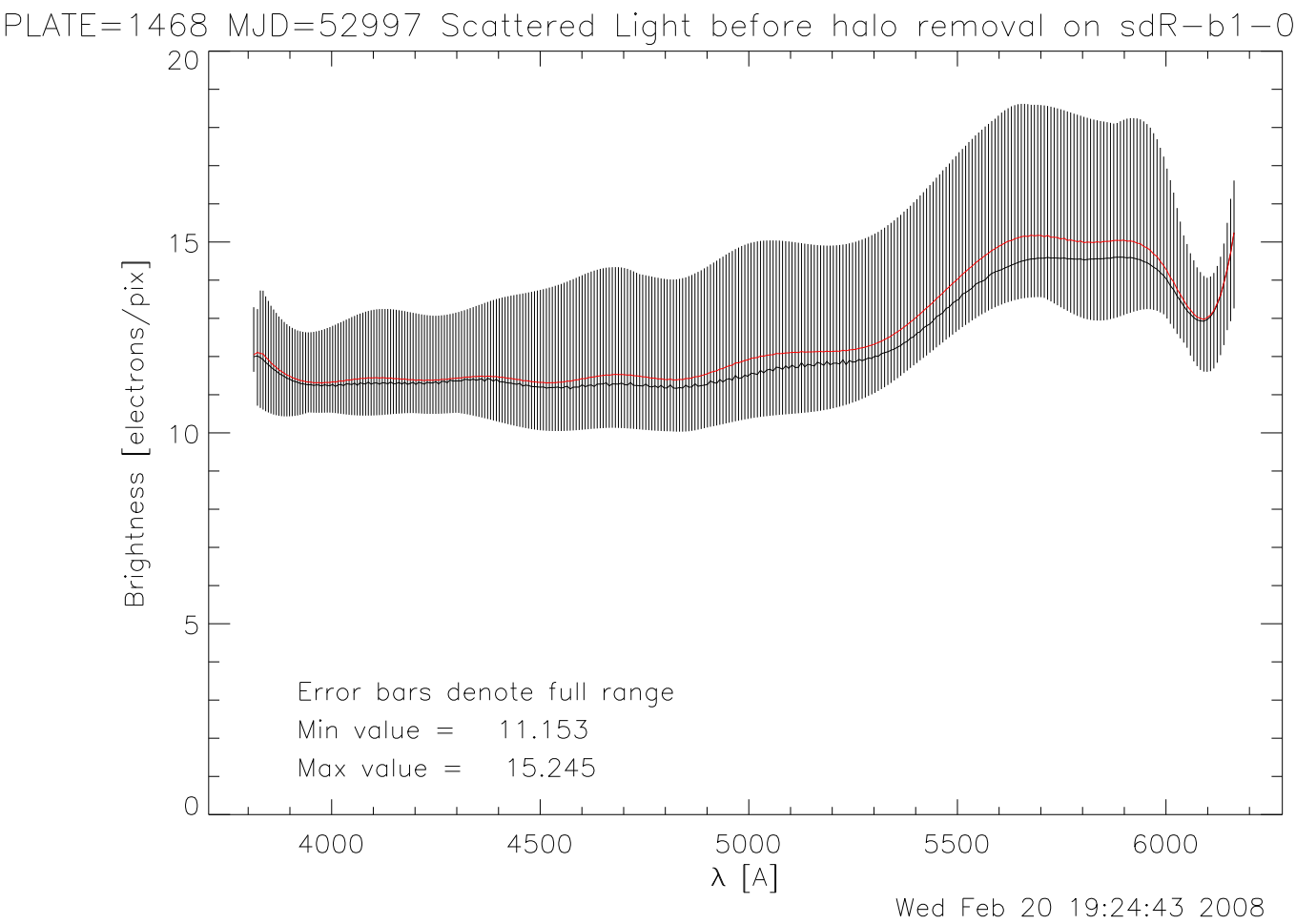

PLATE=1468 MJD=52997 flat extraction chi^2 for sdR-b1-00024179.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

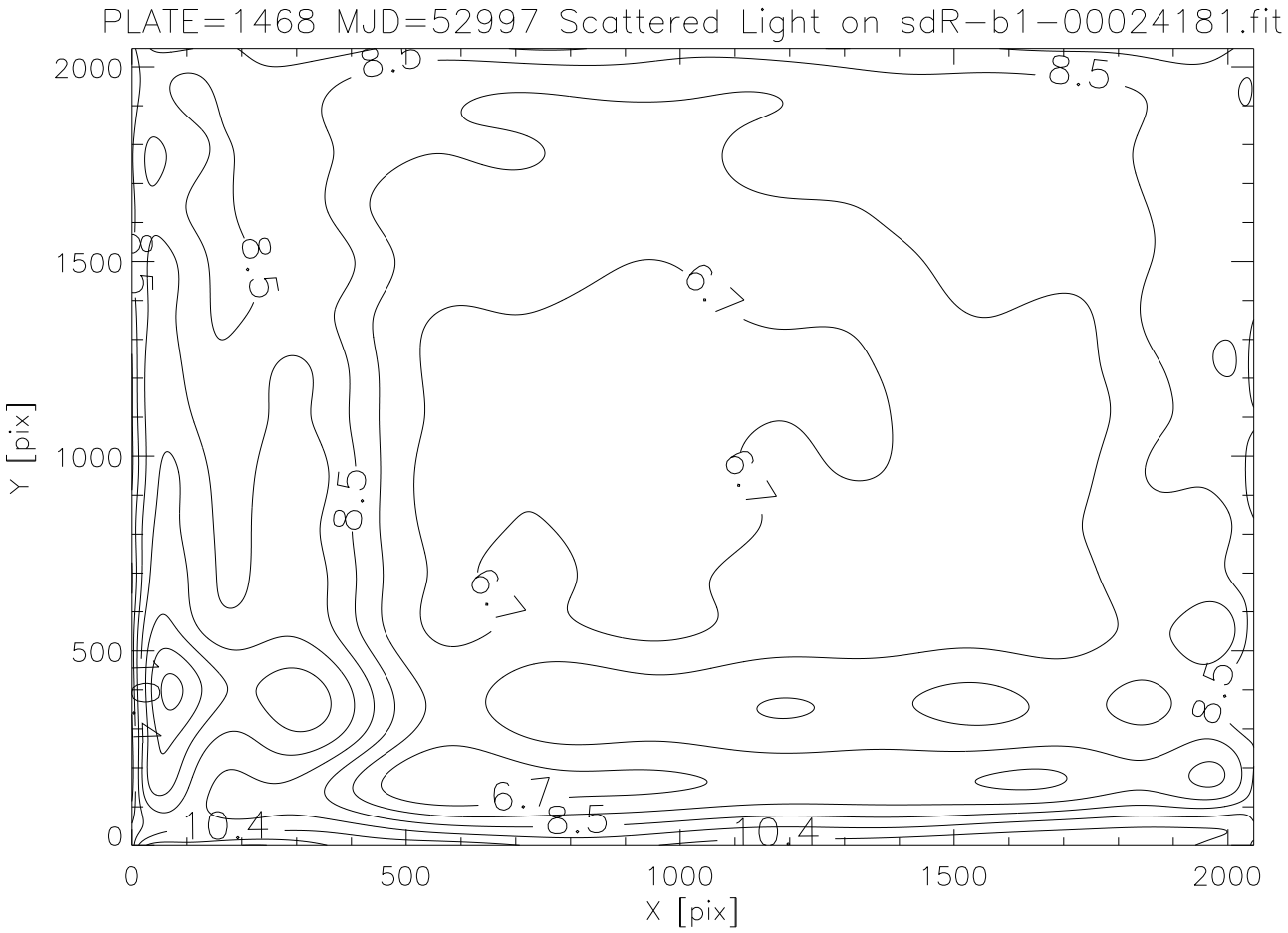

PLATE=1468 MJD=52997 Superflat sdR-b1-00024179.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

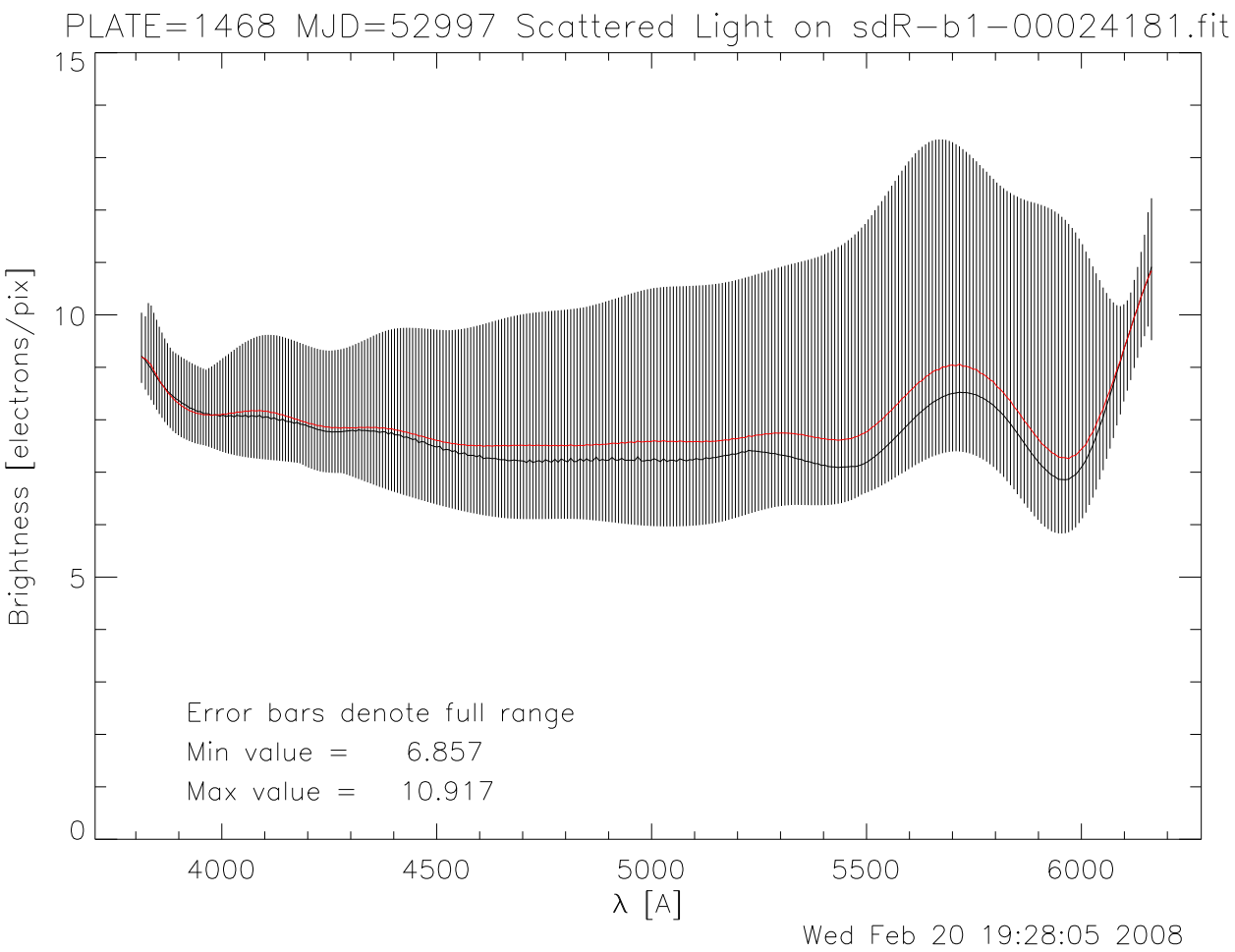

PLATE=1468 MJD=52997 Arcline Fit for sdR-b1-00024180.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:23:29 2008

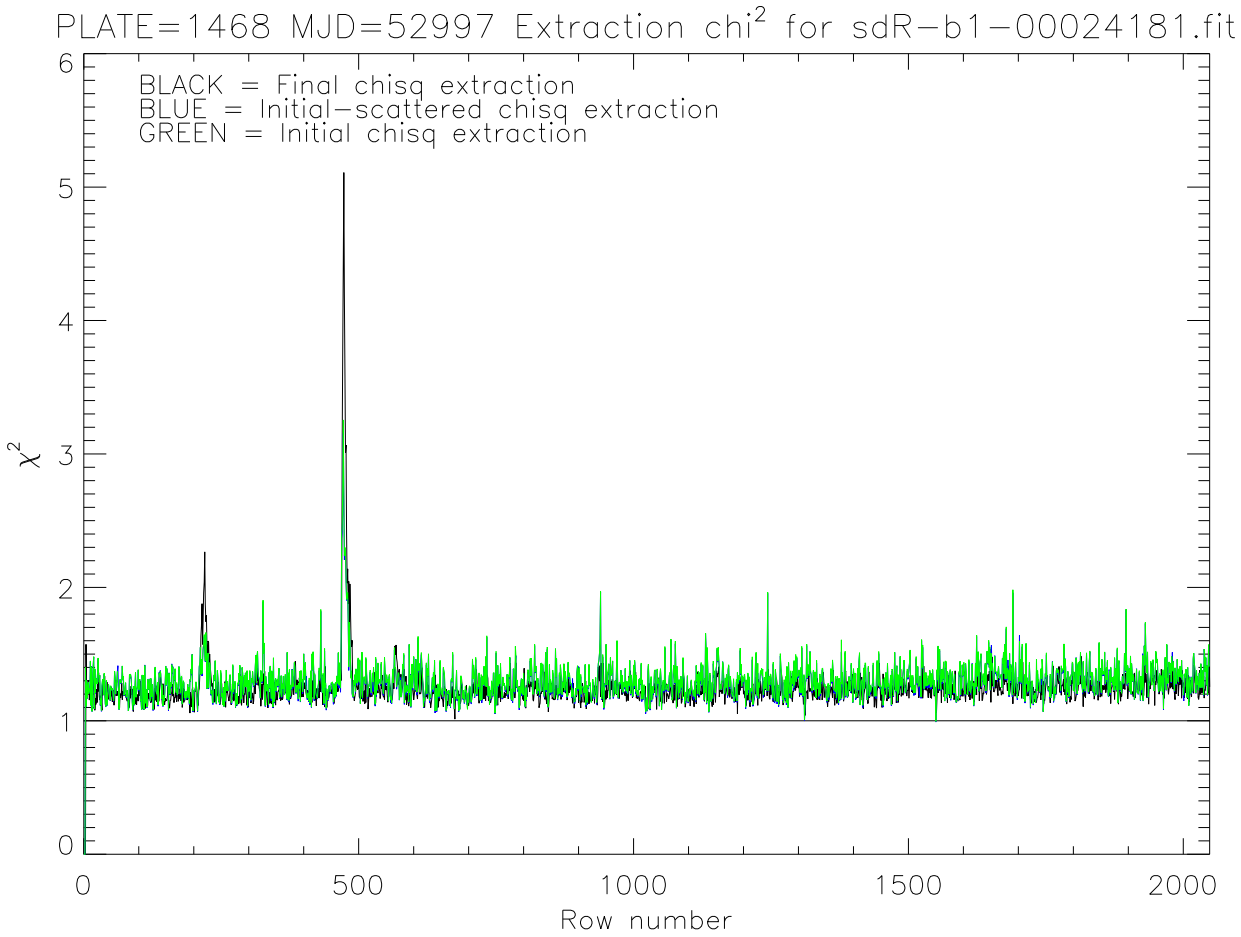

PLATE=1468 MJD=52997 Fiber-Flats for sdR-b1-00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.497
Max value = 1.215
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:23:38 2008

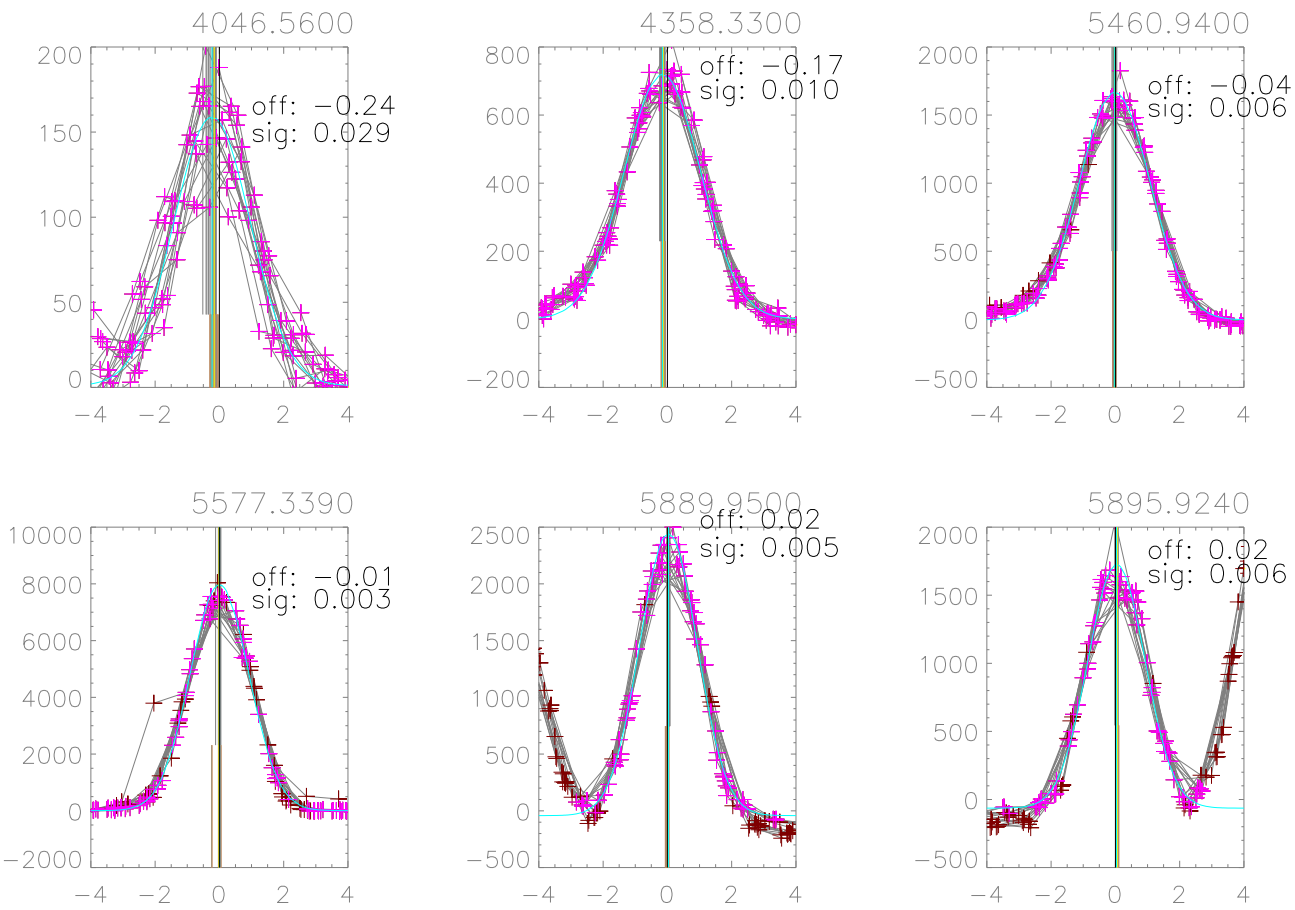

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b1-00024181.f
12.4
14.9
Y [pix]
X [pix]
0
500
1000
1500
2000

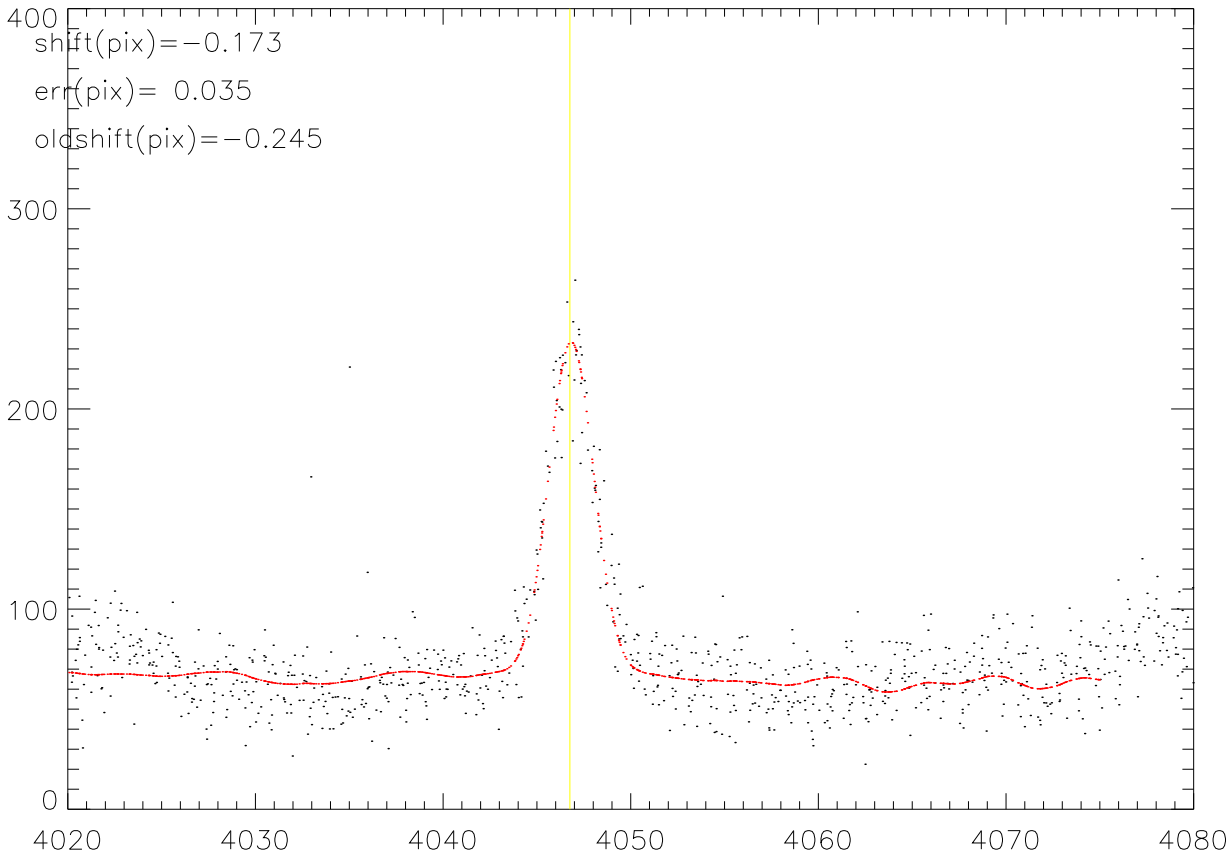

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b1-00024181.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.153
Max value = 15.245
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:24:43 2008

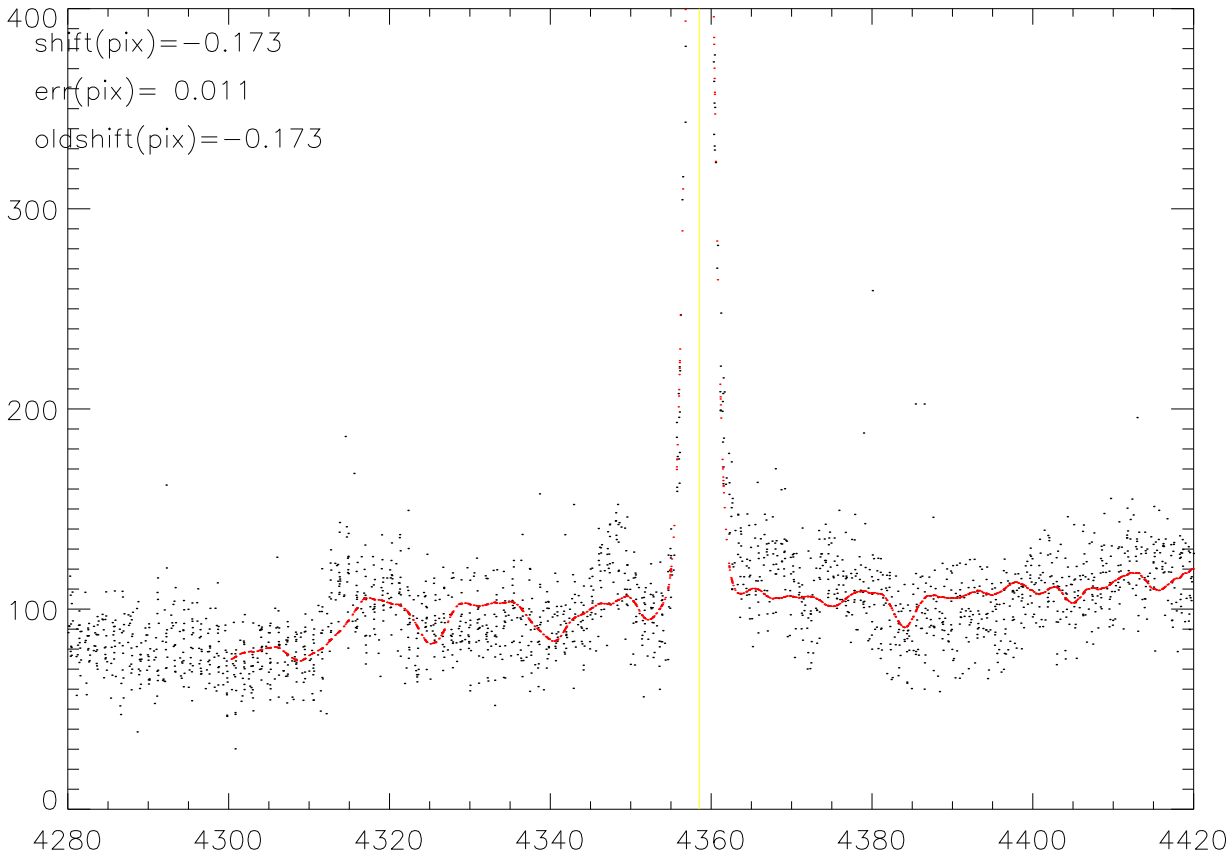

PLATE=1468 MJD=52997 Scattered Light on sdR-b1-00024181.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.5
6.7
10.4

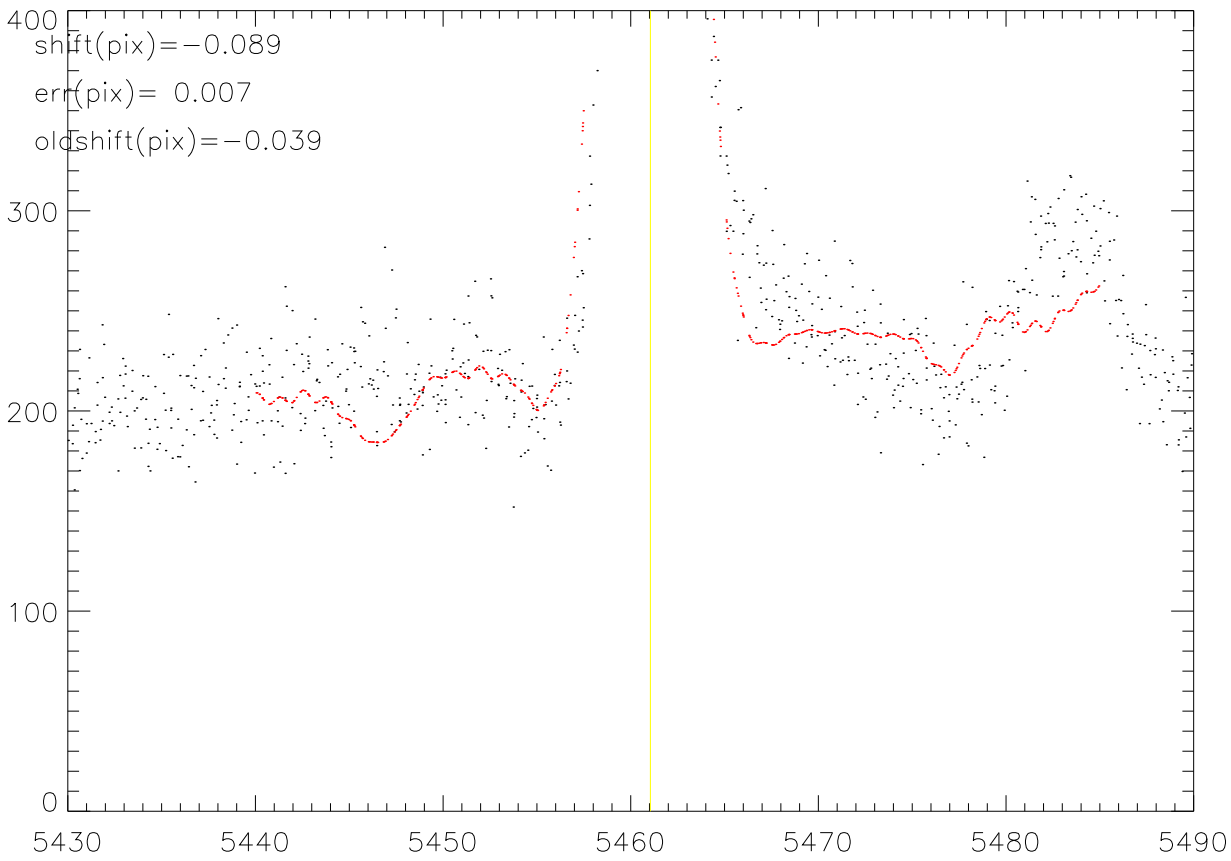

PLATE=1468 MJD=52997 Scattered Light on sdR-b1-00024181.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.857
Max value = 10.917
Wed Feb 20 19:28:05 2008

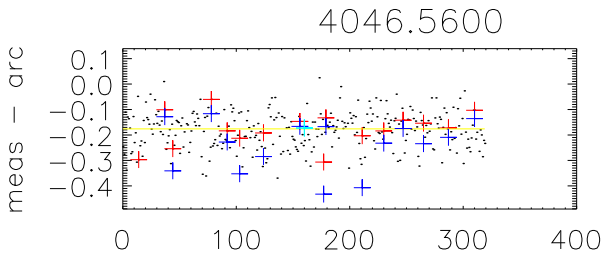

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-b1-00024181.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

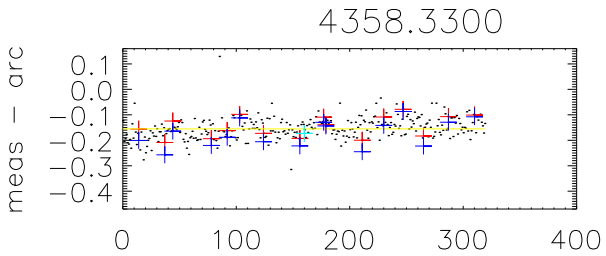

4046.5600
off: −0.24
sig: 0.029
4358.3300
off: −0.17
sig: 0.010
5460.9400
off: −0.04
sig: 0.006
5577.3390
off: −0.01
sig: 0.003
5889.9500
off: 0.02
sig: 0.005
5895.9240
off: 0.02
sig: 0.006

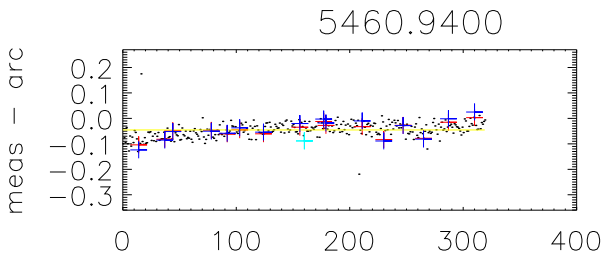

shift(pix)=−0.173
err(pix)= 0.035
oldshift(pix)=−0.245
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

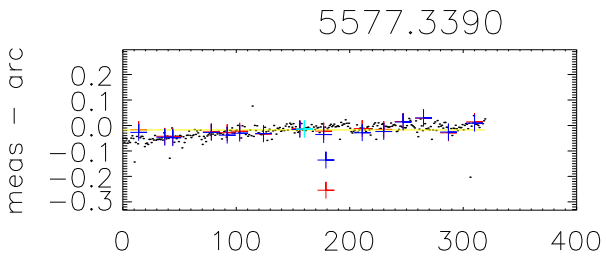

shift(pix)=−0.173
err(pix)= 0.011
oldshift(pix)=−0.173
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

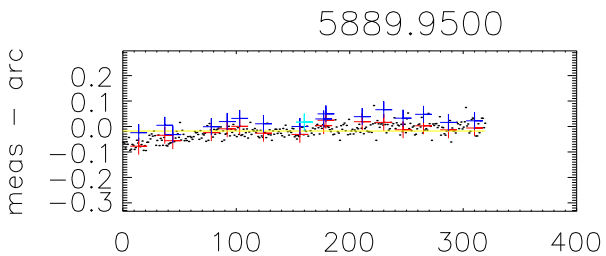

shift(pix)=−0.089
err(pix)= 0.007
oldshift(pix)=−0.039
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

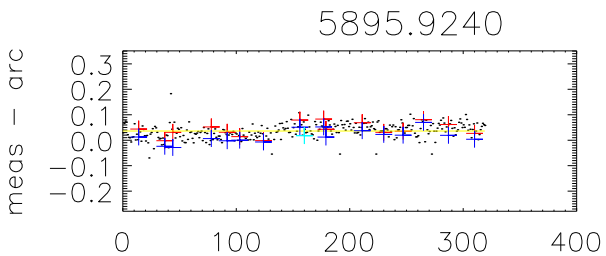

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

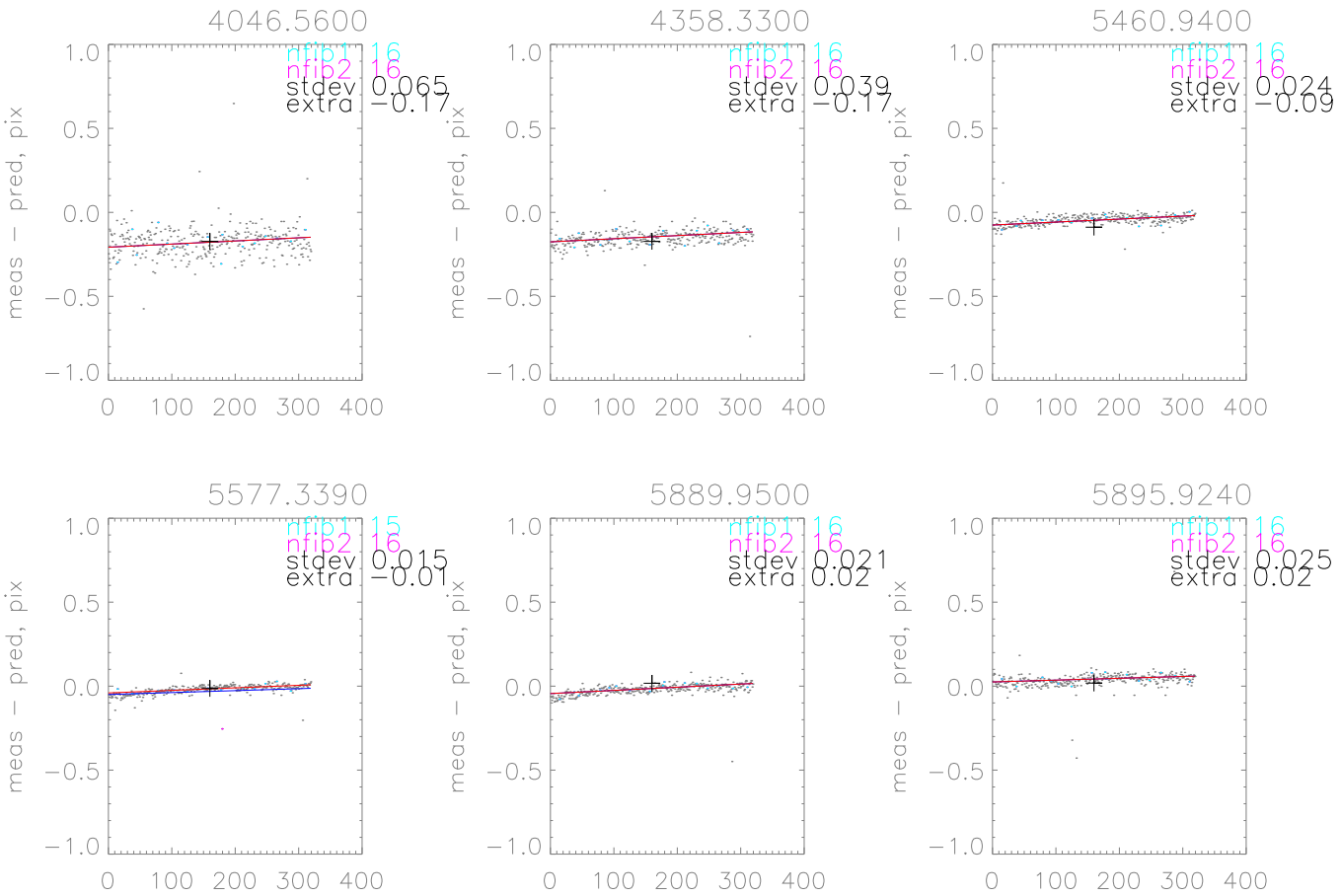

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

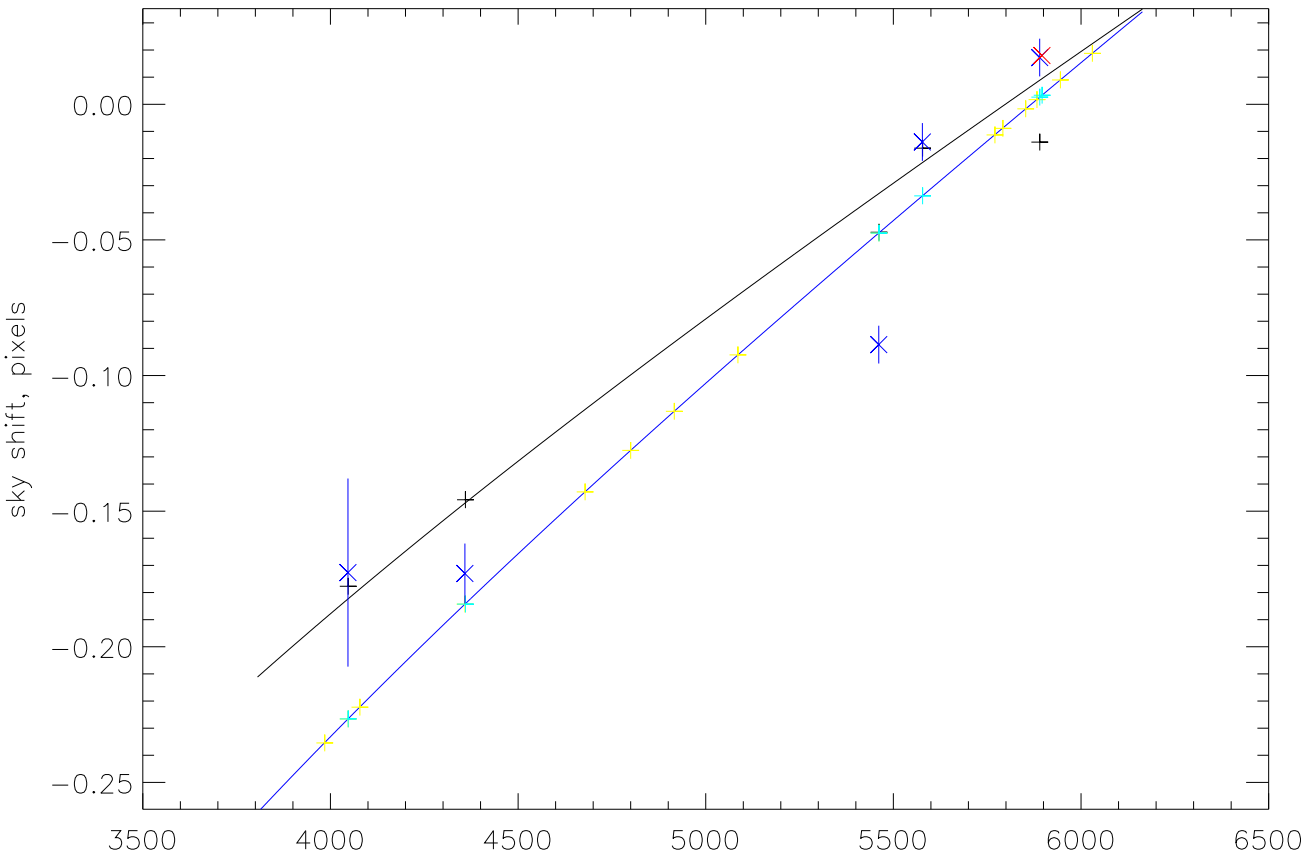

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

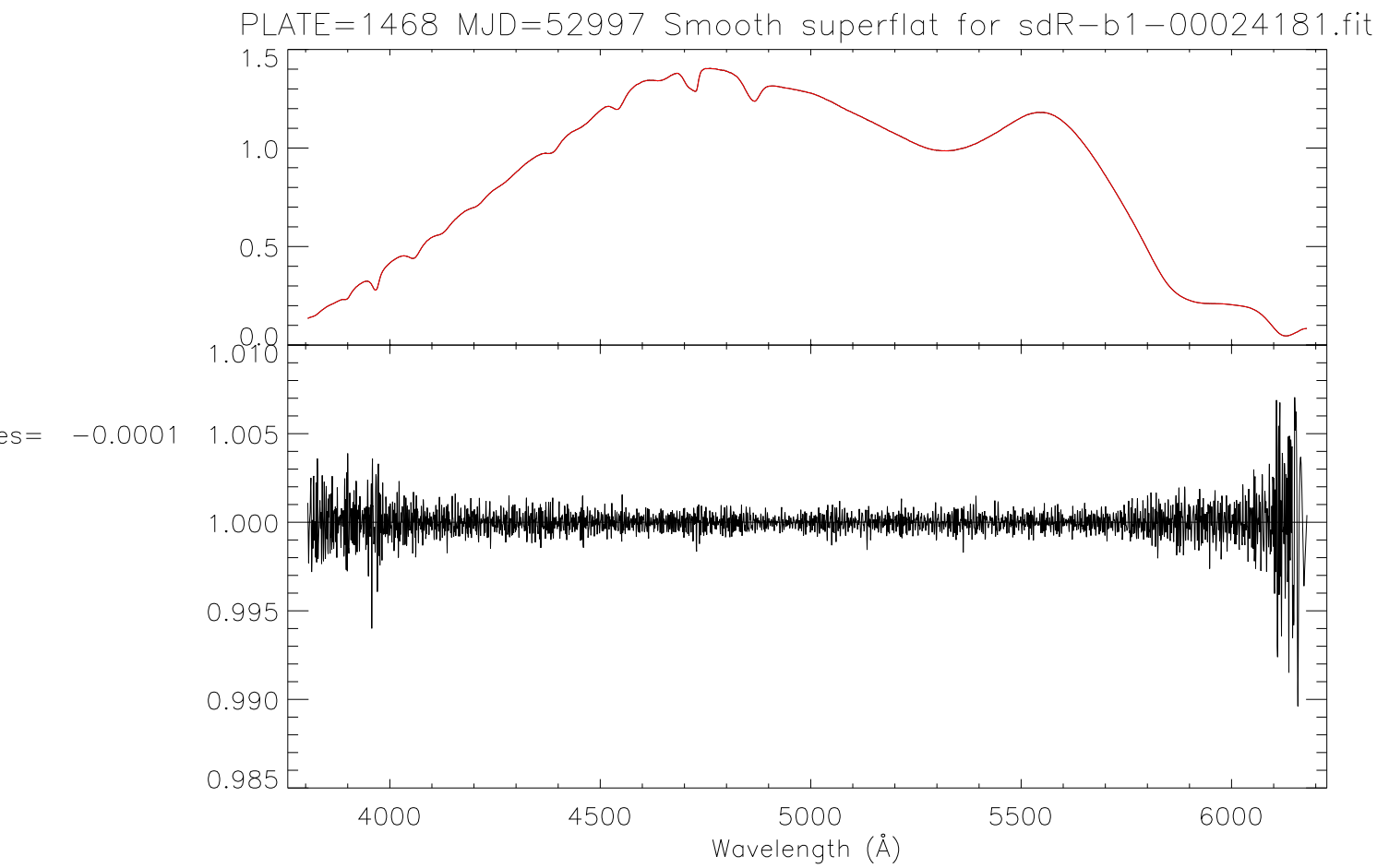

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

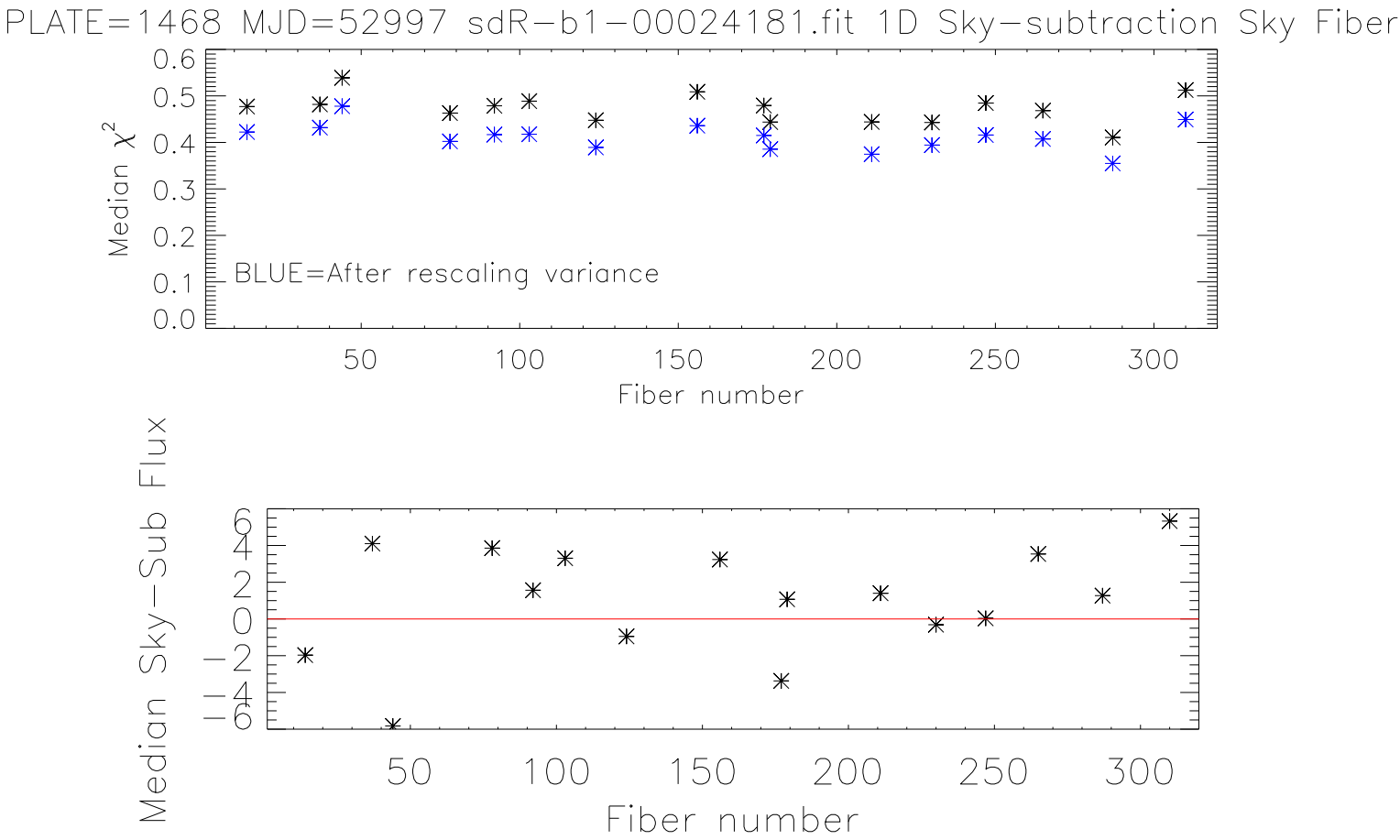

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

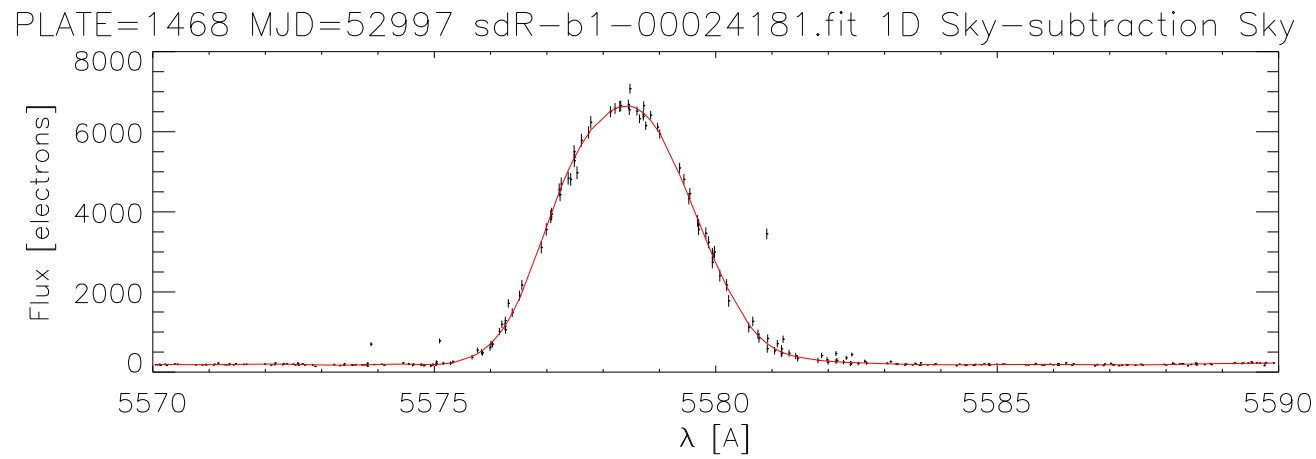

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

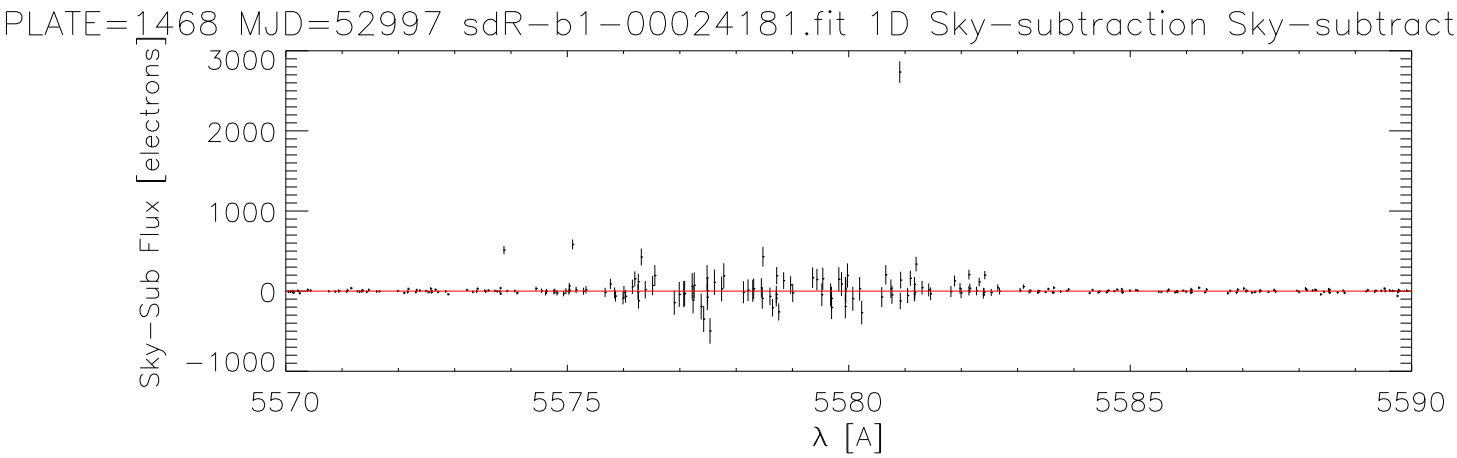

4046.5600
nfib1 16
nfib2 16
stdev 0.065
extra −0.17
4358.3300
nfib1 16
nfib2 16
stdev 0.039
extra −0.17
5460.9400
nfib1 16
nfib2 16
stdev 0.024
extra −0.09
5577.3390
nfib1 15
nfib2 16
stdev 0.015
extra −0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra 0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.025
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

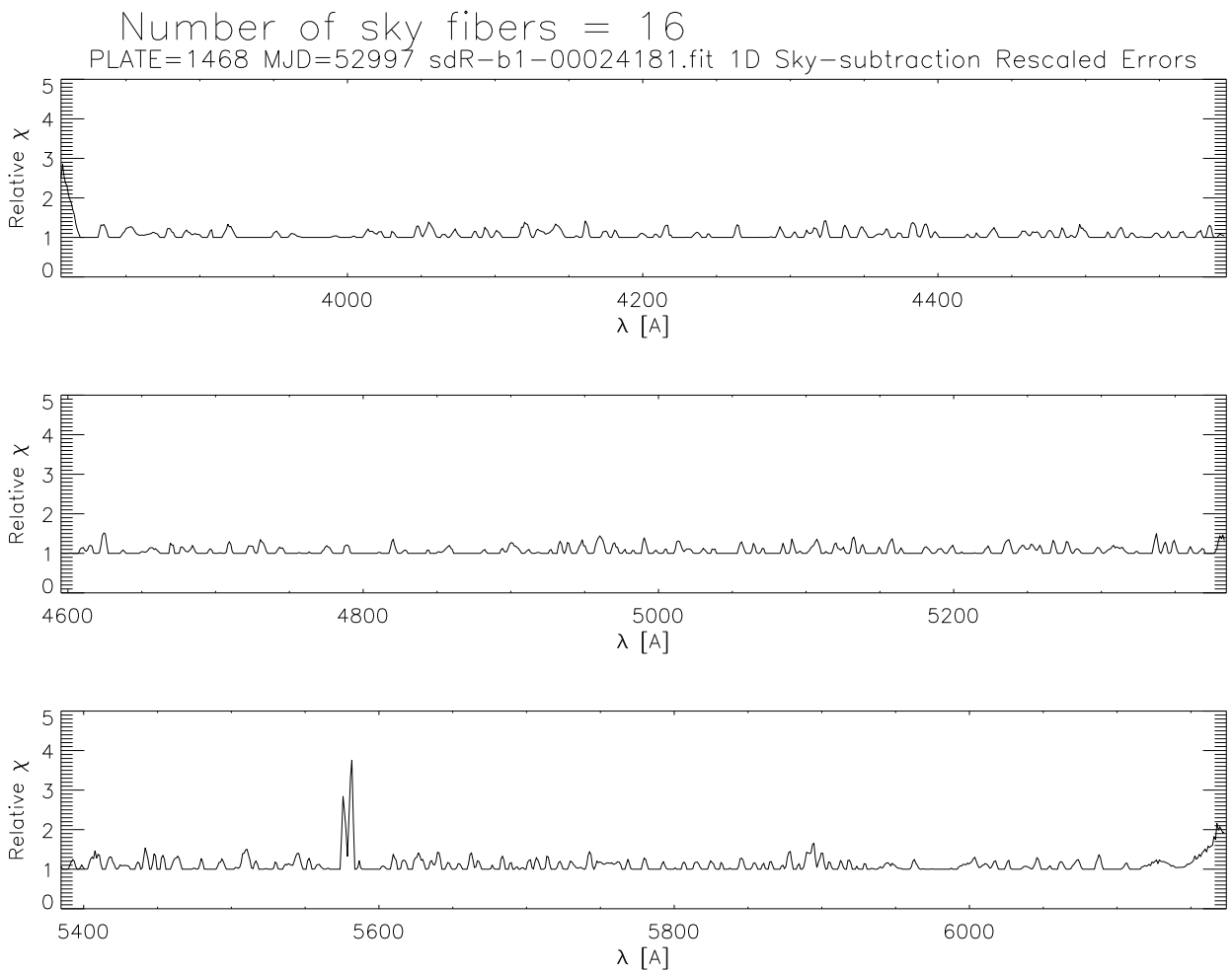

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

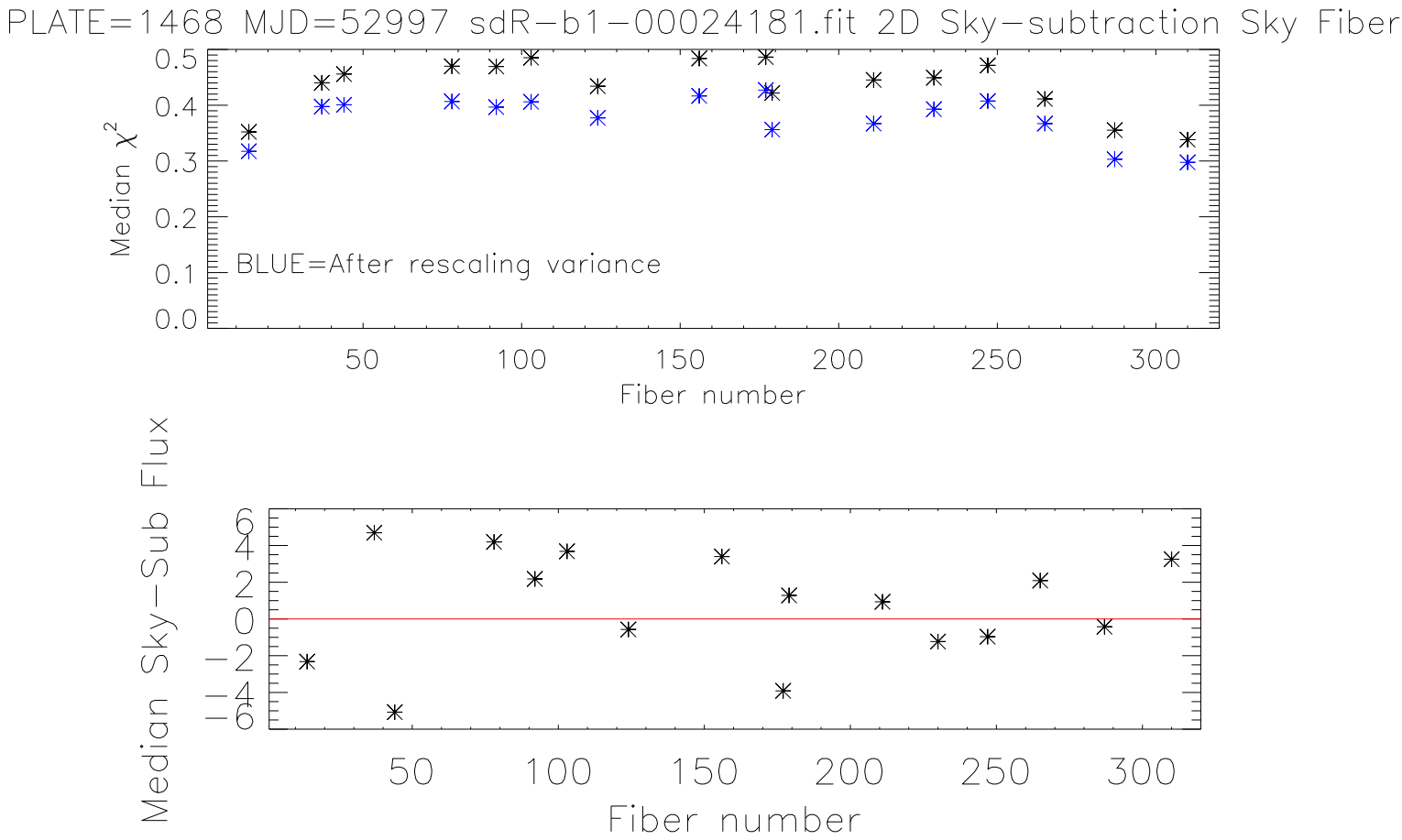

PLATE=1468 MJD=52997 Smooth superflat for sdR-b1-00024181.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

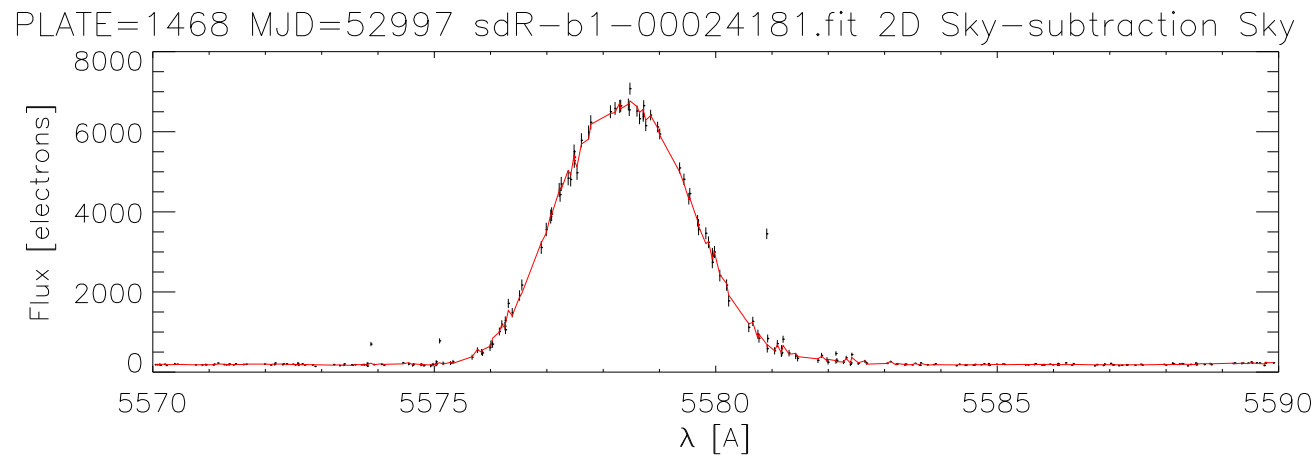

PLATE=1468 MJD=52997 sdR-b1-00024181.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

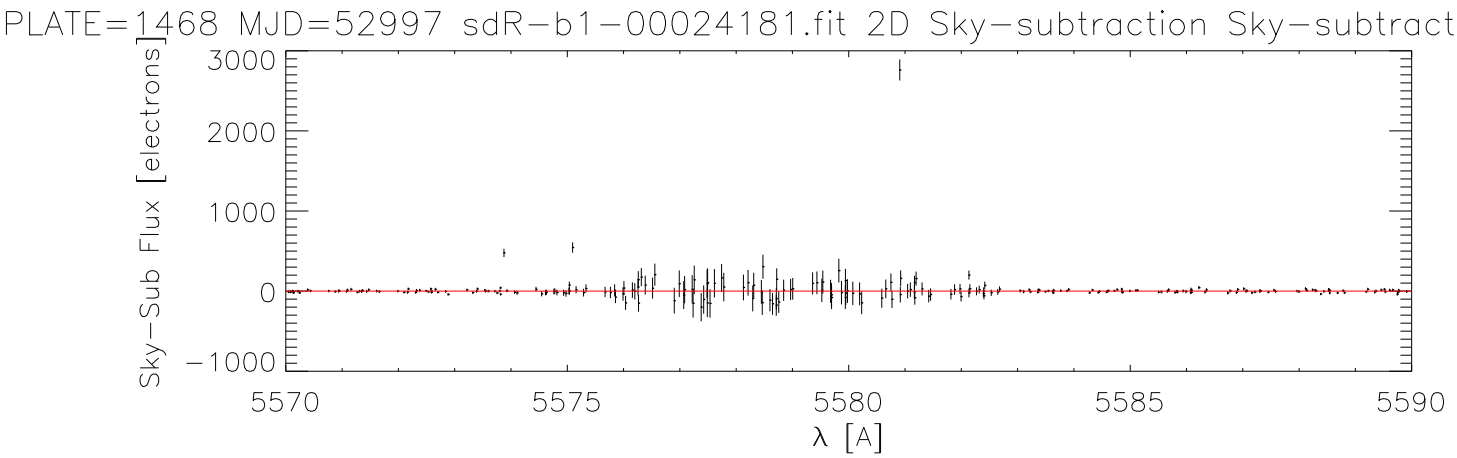

PLATE=1468 MJD=52997 sdR-b1-00024181.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

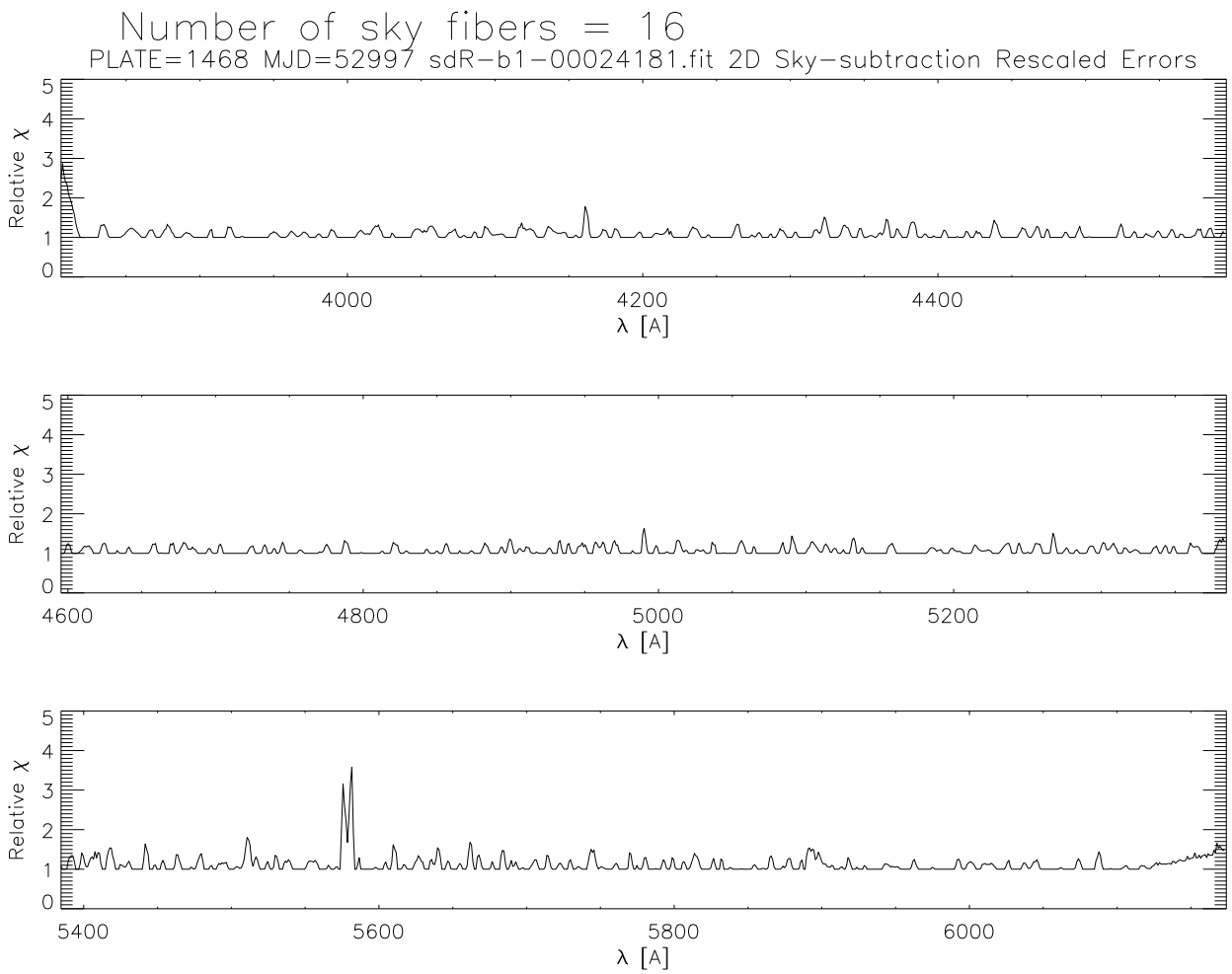

PLATE=1468 MJD=52997 sdR-b1-00024181.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

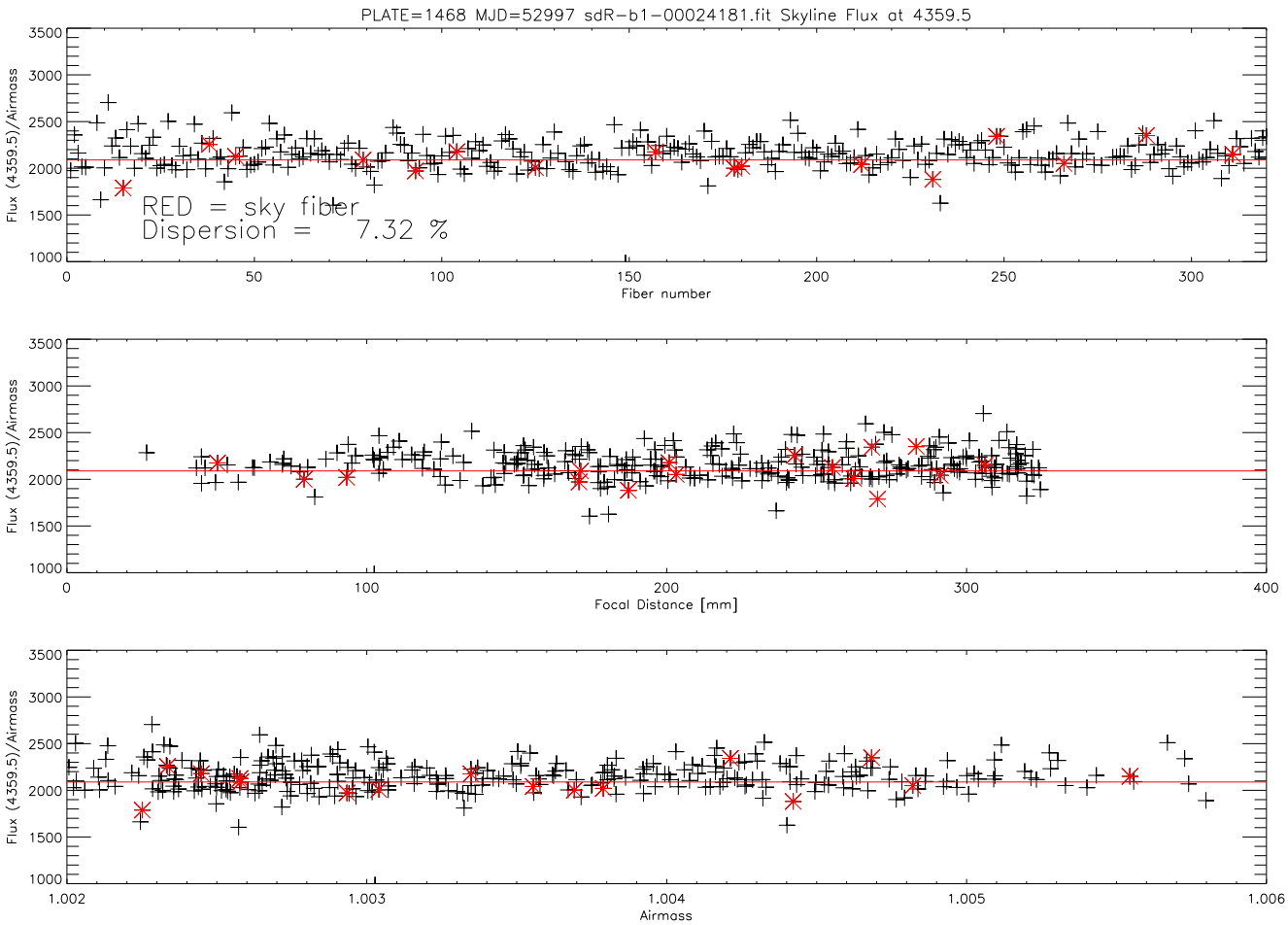

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b1-00024181.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

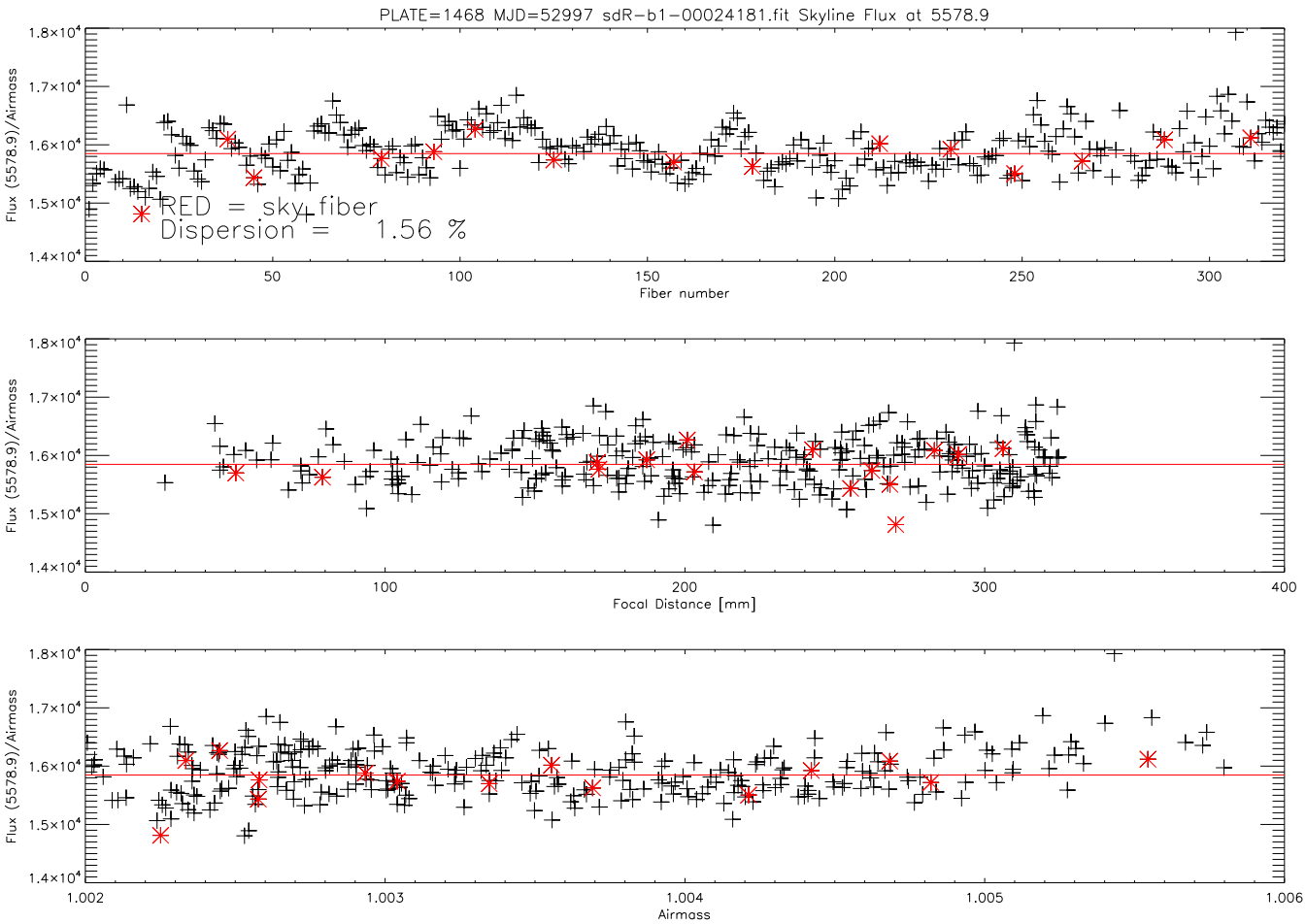

PLATE=1468 MJD=52997 sdR-b1-00024181.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

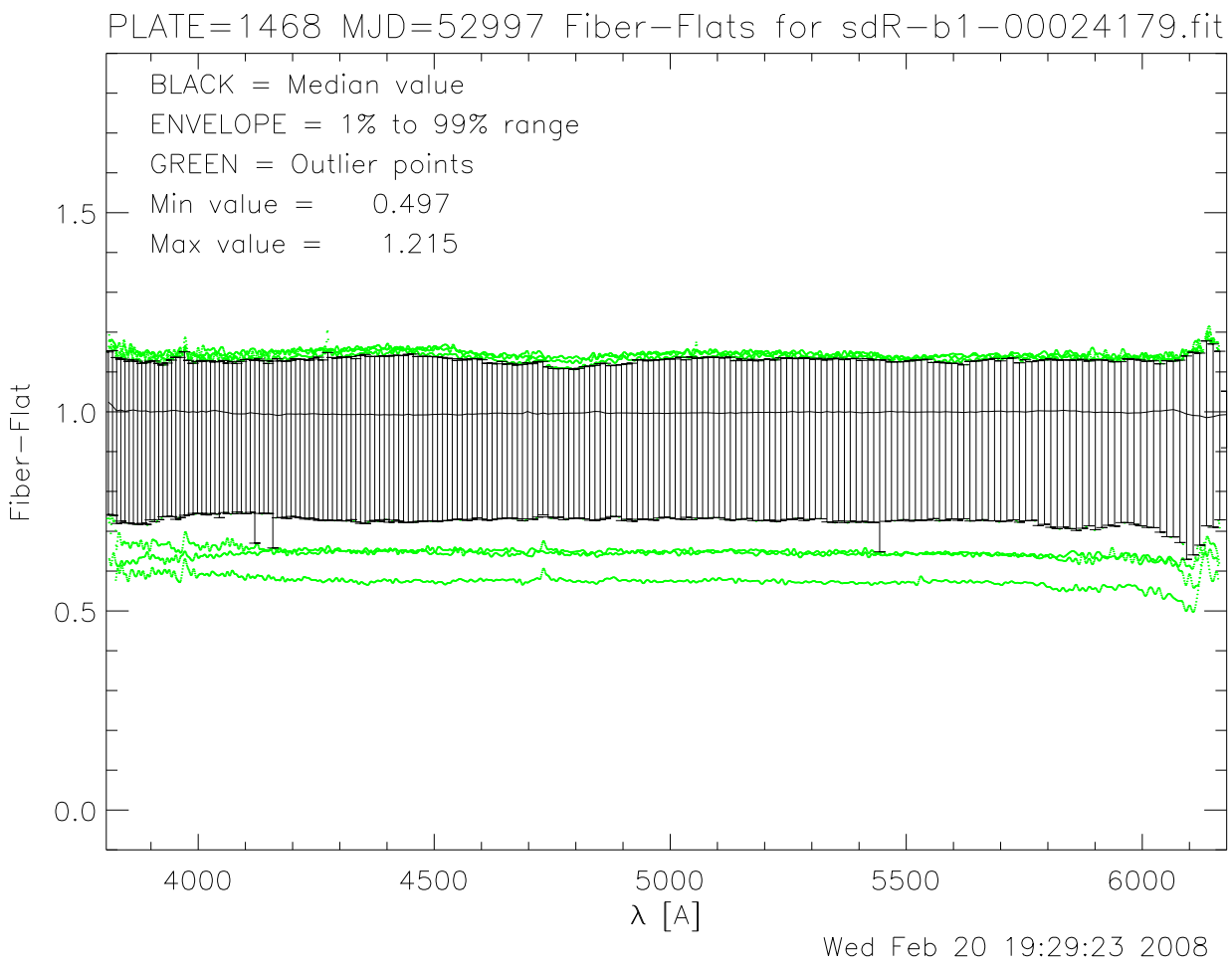

PLATE=1468 MJD=52997 sdR-b1-00024181.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

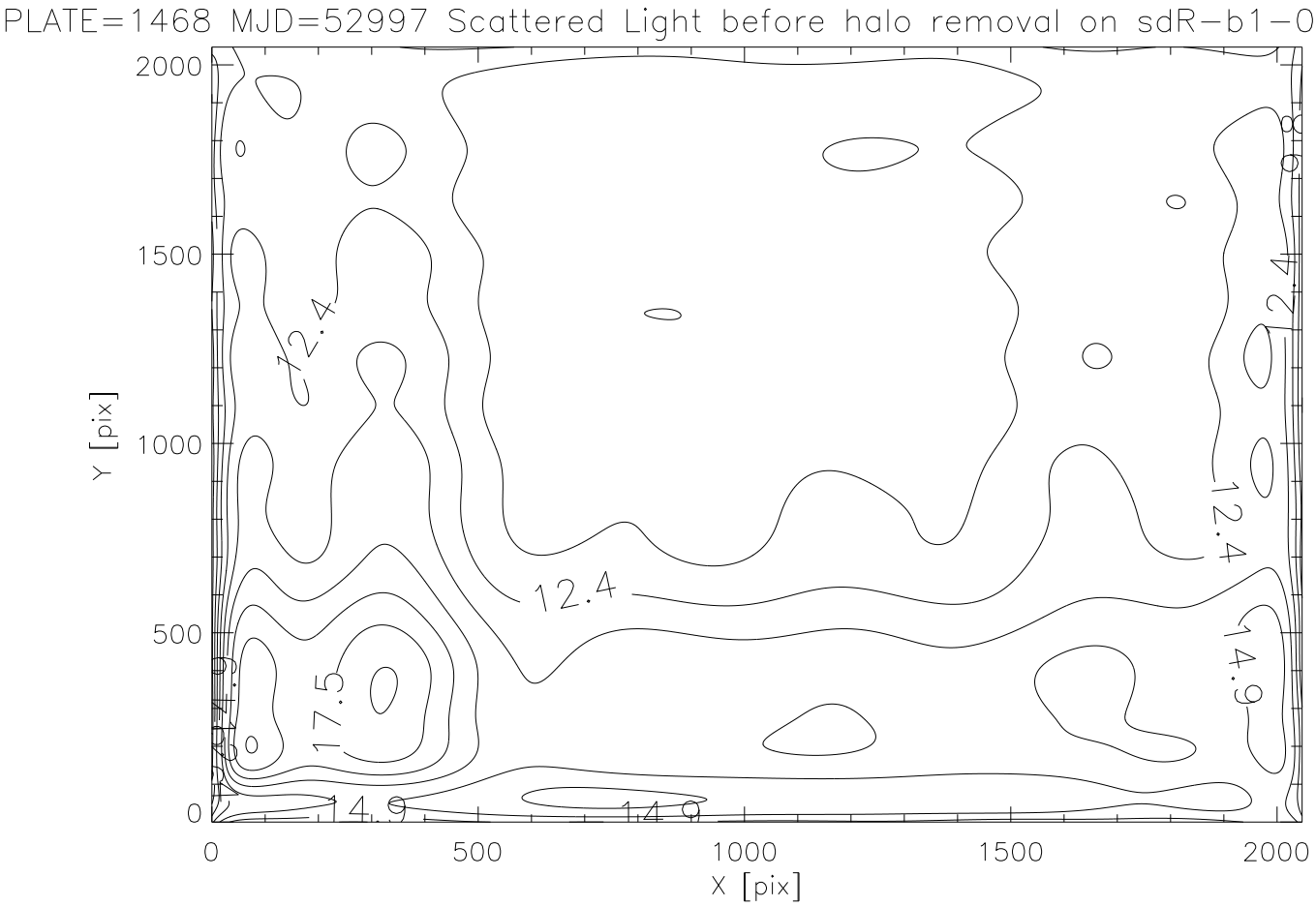

PLATE=1468 MJD=52997 sdR-b1-00024181.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

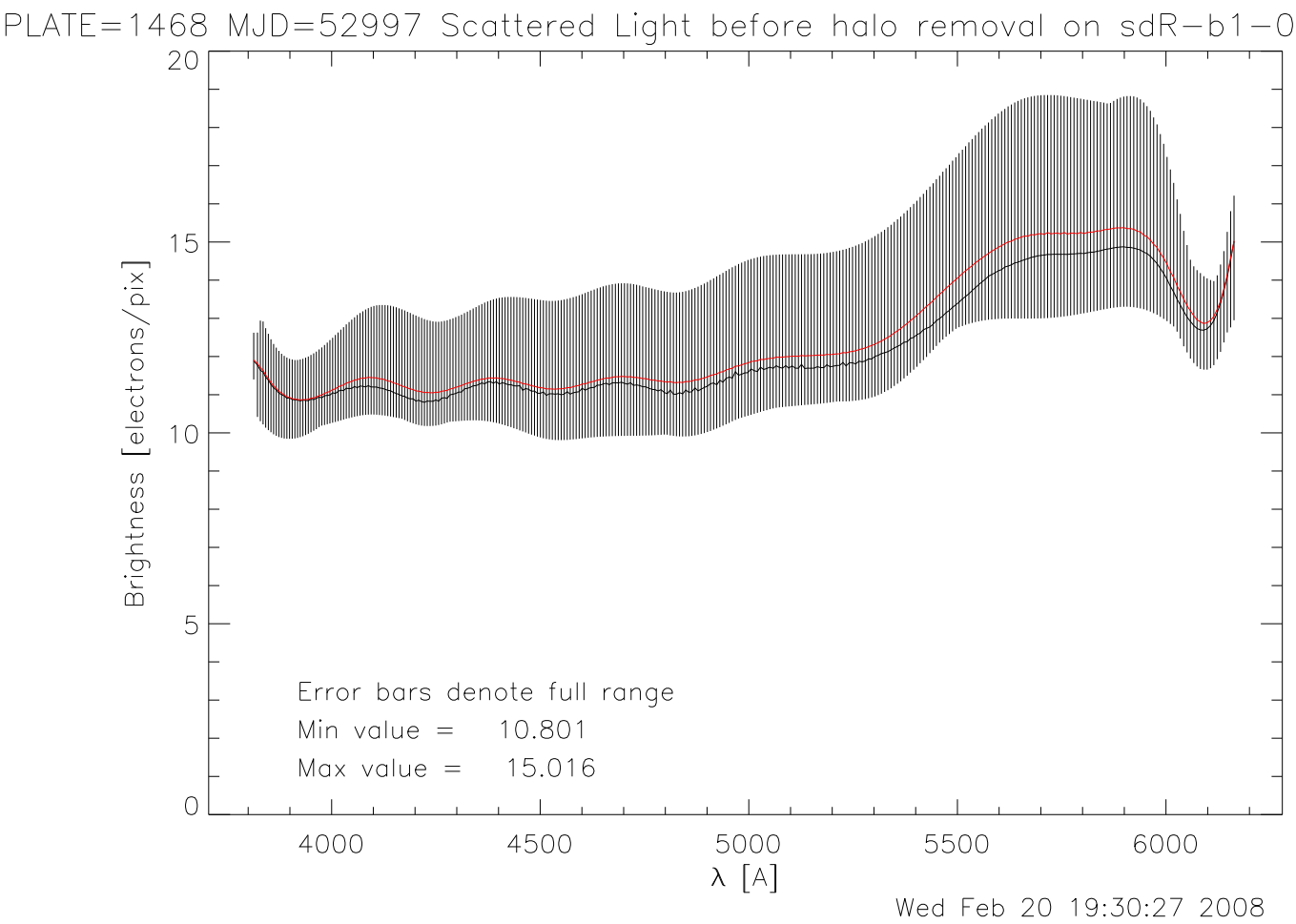

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b1-00024181.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

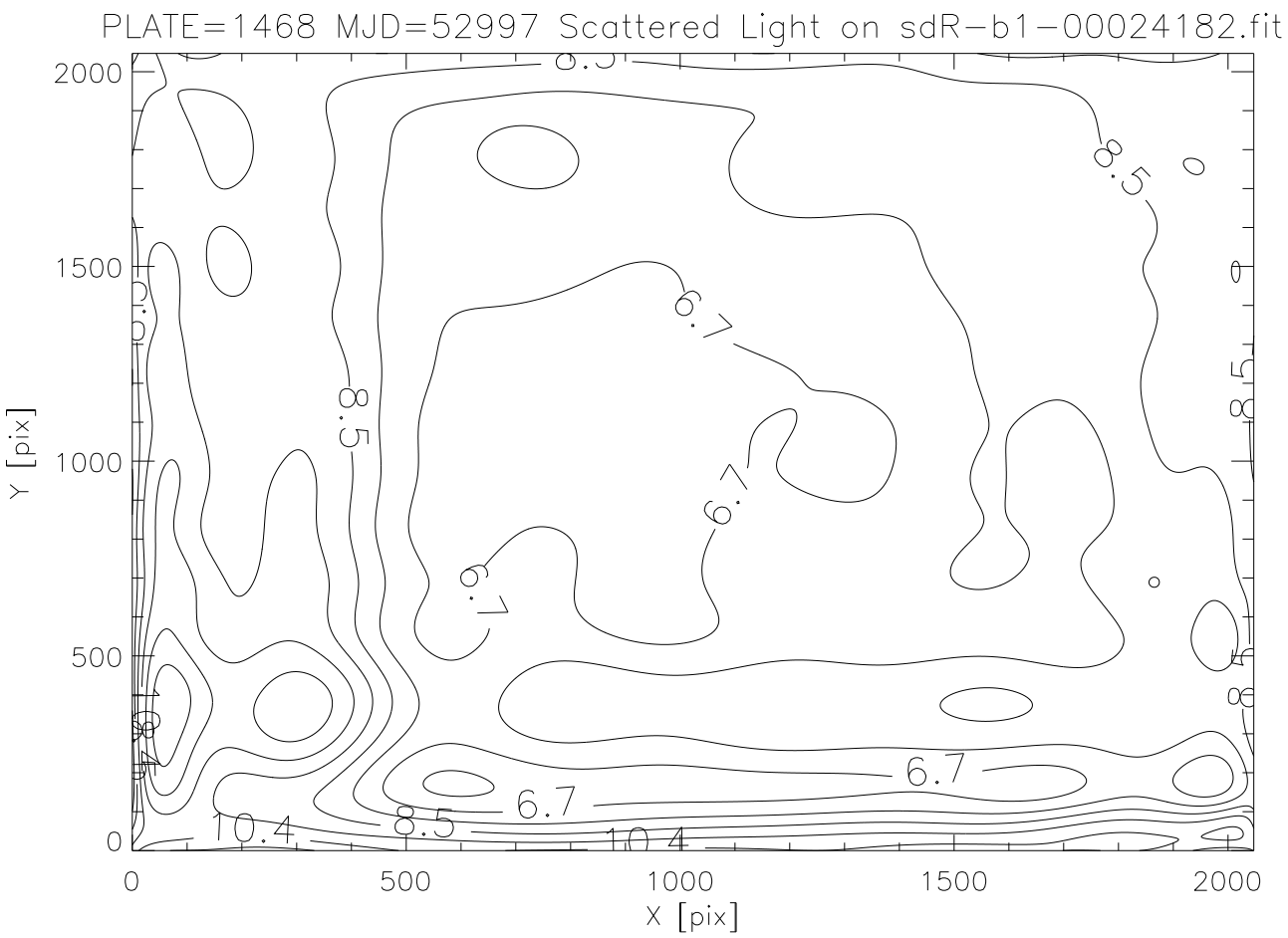

PLATE=1468 MJD=52997 sdR-b1-00024181.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.32 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

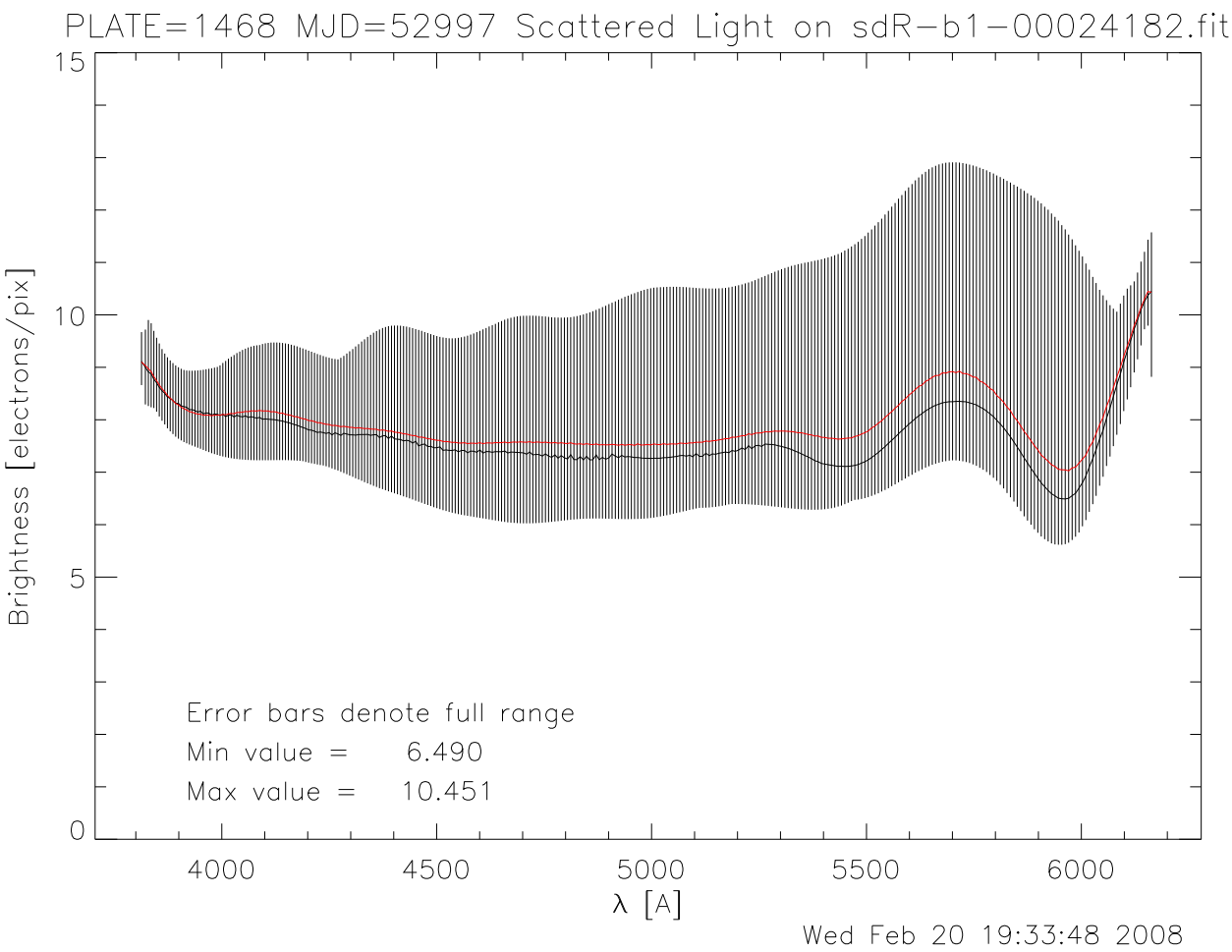

PLATE=1468 MJD=52997 sdR-b1-00024181.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
RED = sky fiber
Dispersion = 1.56 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.002
1.003
1.004
1.005
1.006
Airmass

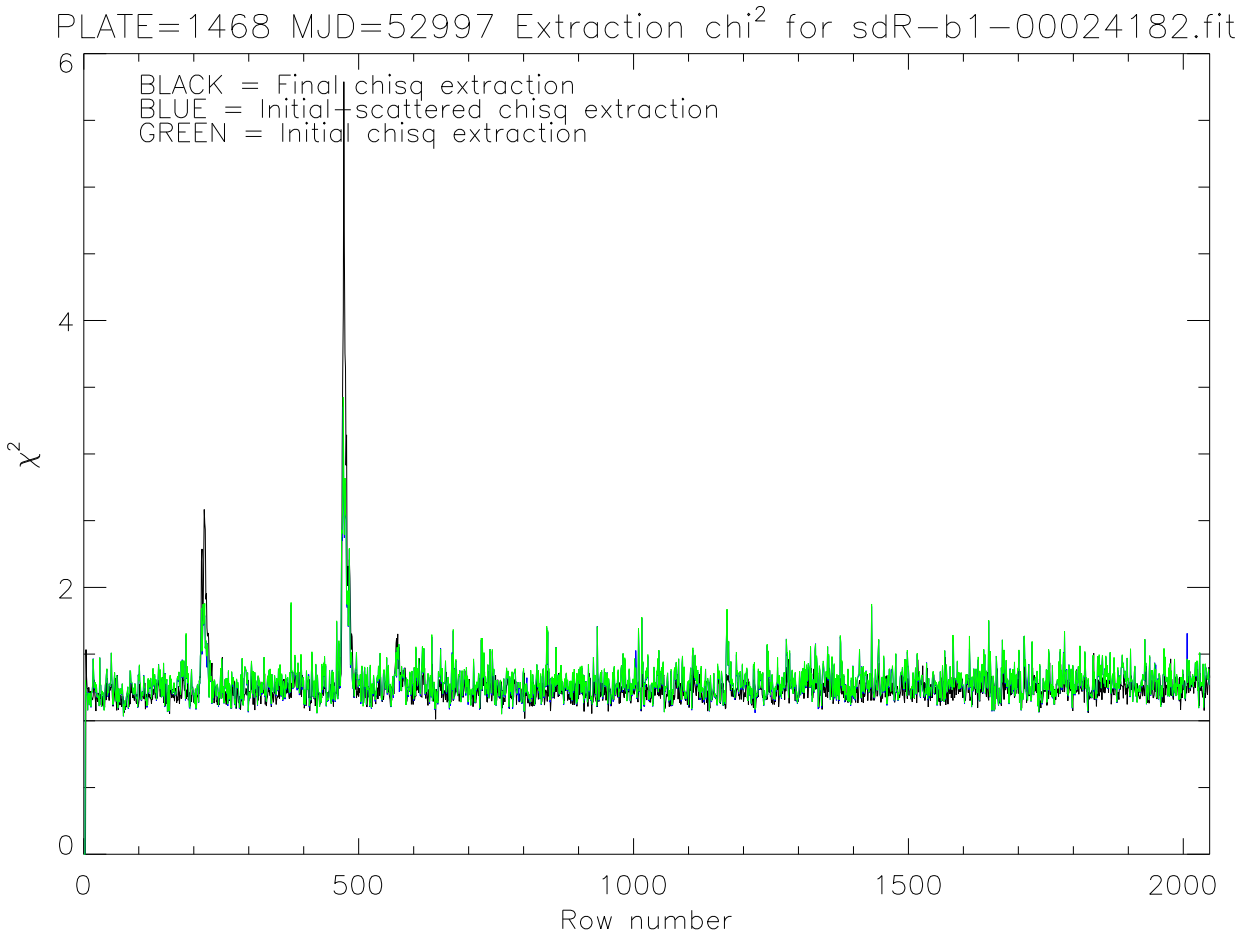

PLATE=1468 MJD=52997 Fiber-Flats for sdR-b1-00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.497
Max value = 1.215
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:29:23 2008

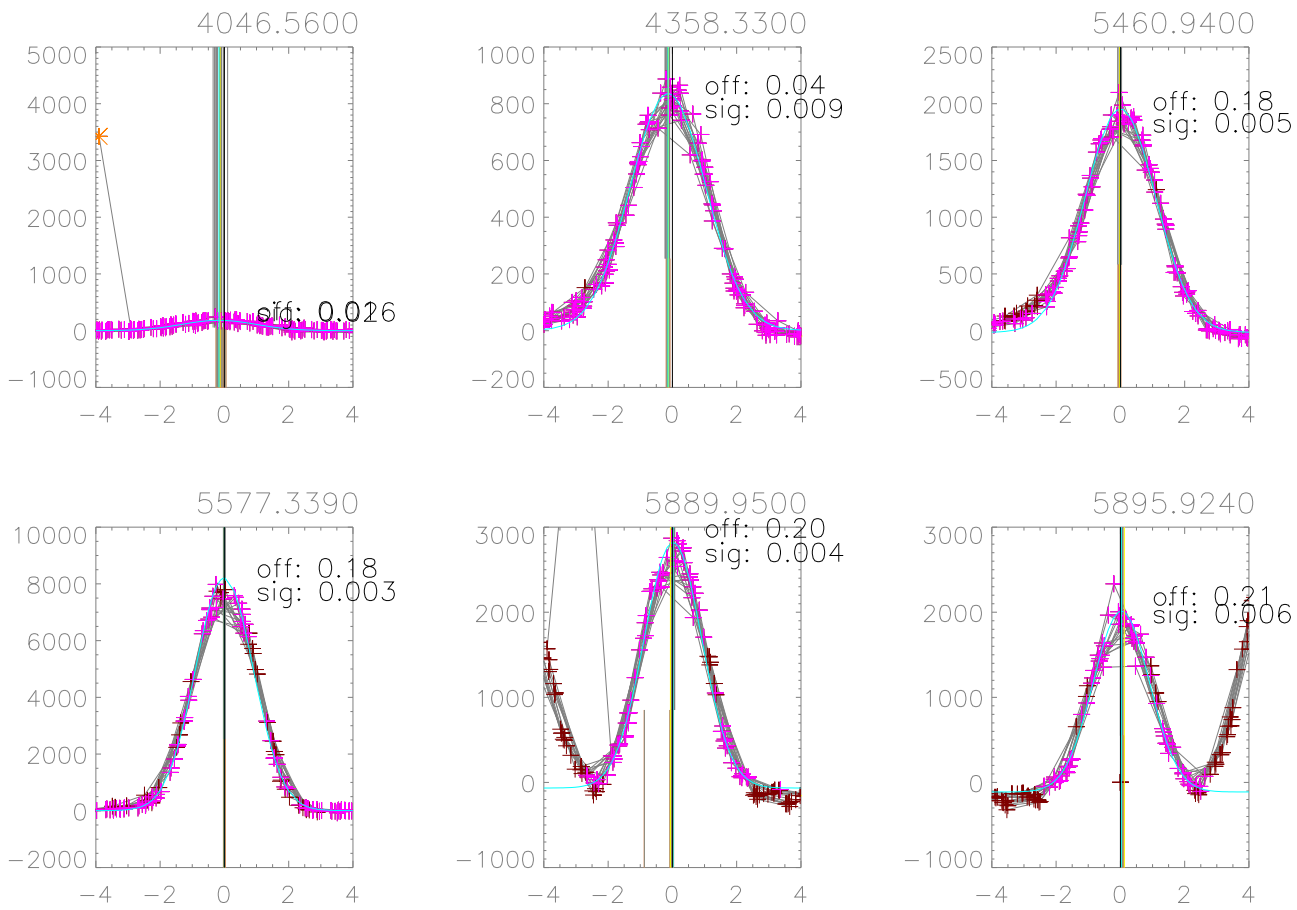

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b1-00024182.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.4
14.9
17.5

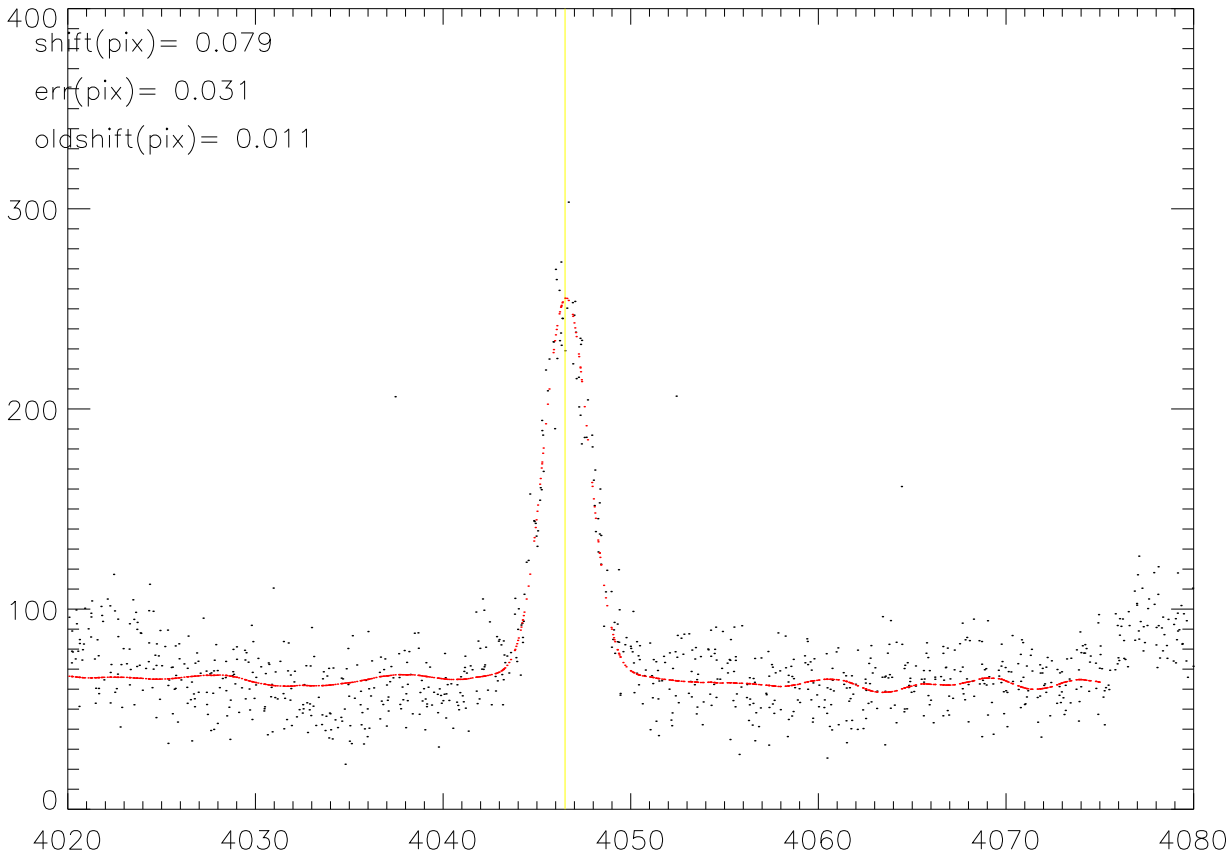

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b1-00024182.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 10.801
Max value = 15.016
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:30:27 2008

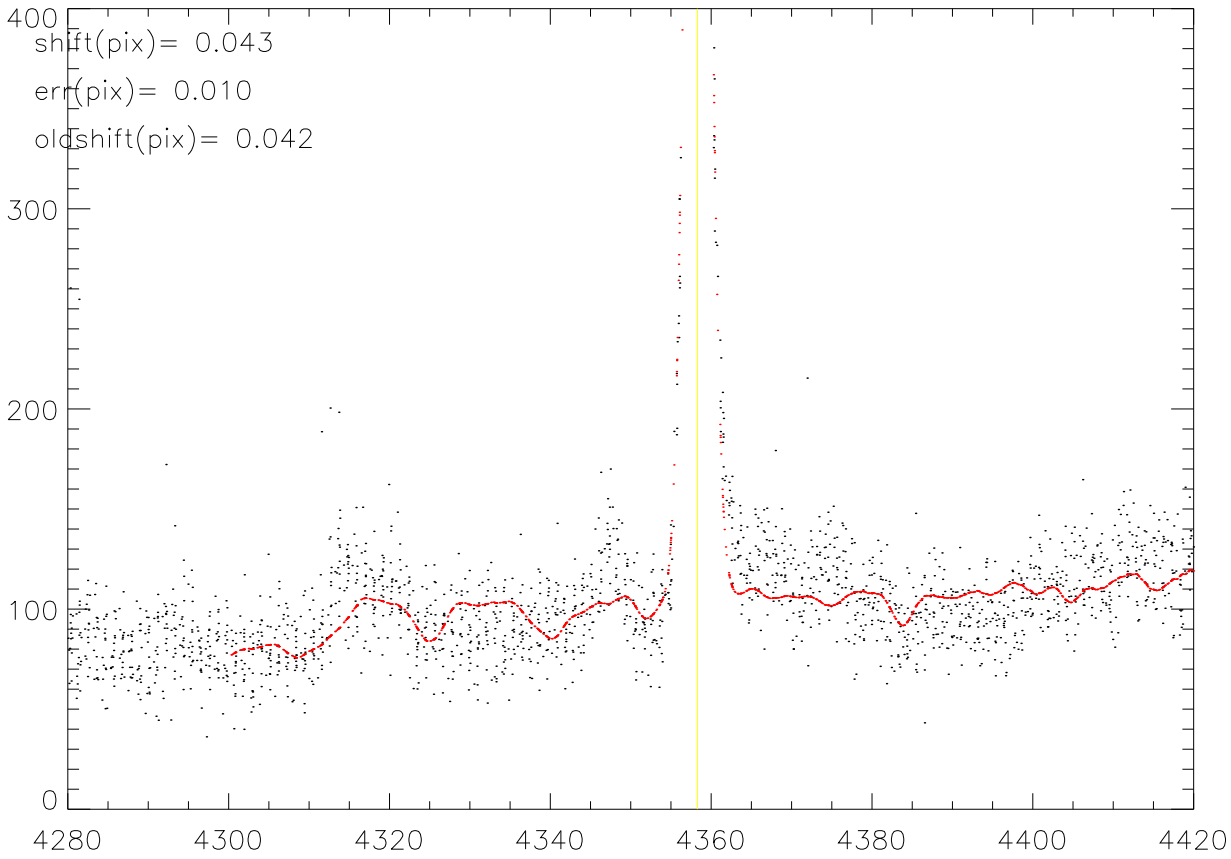

PLATE=1468 MJD=52997 Scattered Light on sdR-b1-00024182.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.7
8.5
10.4

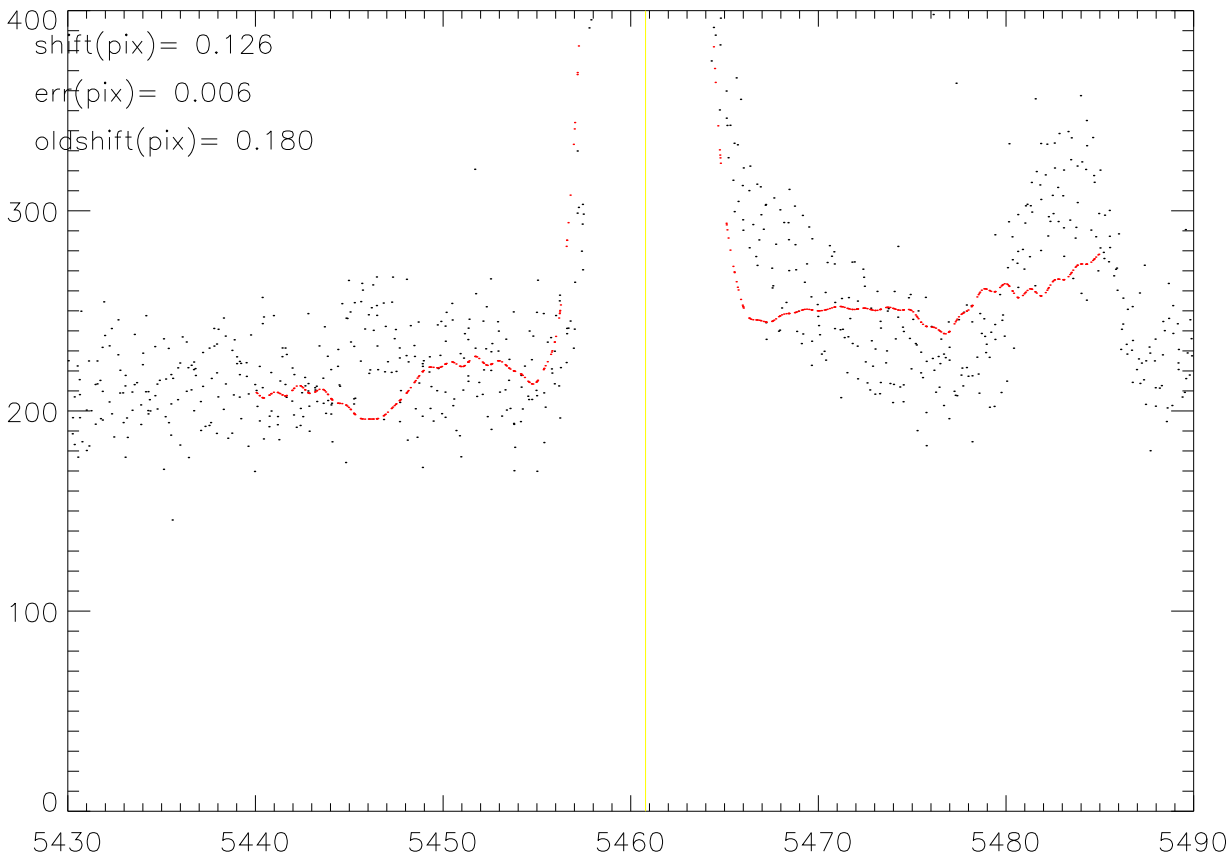

PLATE=1468 MJD=52997 Scattered Light on sdR-b1-00024182.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.490
Max value = 10.451
Wed Feb 20 19:33:48 2008

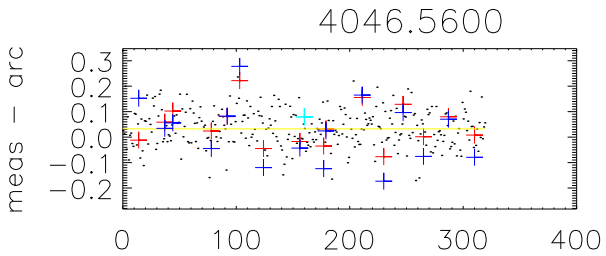

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-b1-00024182.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

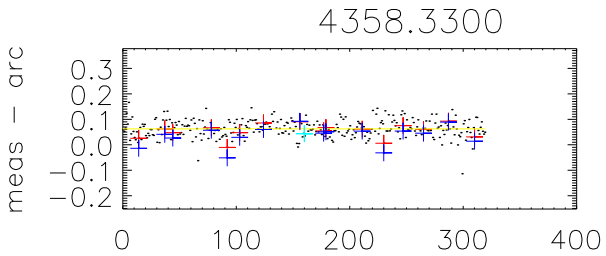

4046.5600
off: 0.016
4358.3300
off: 0.04
sig: 0.009
5460.9400
off: 0.18
sig: 0.005
5577.3390
off: 0.18
sig: 0.003
5889.9500
off: 0.20
sig: 0.004
5895.9240
off: 0.21
sig: 0.006

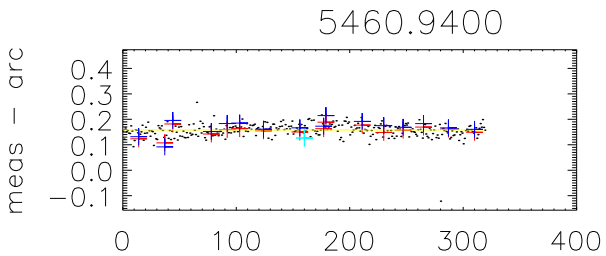

shift(pix)= 0.079
err(pix)= 0.031
oldshift(pix)= 0.011
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

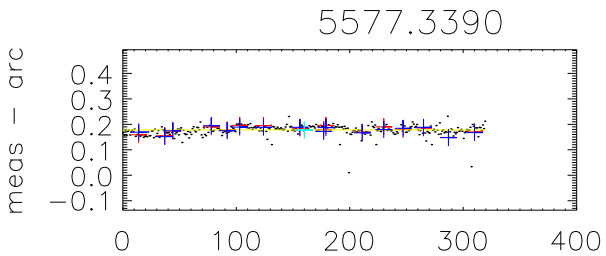

shift(pix)= 0.043
err(pix)= 0.010
oldshift(pix)= 0.042
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

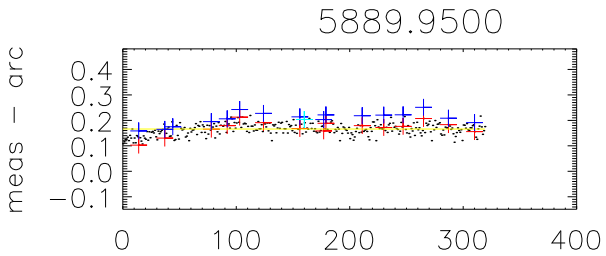

shift(pix)= 0.126
err(pix)= 0.006
oldshift(pix)= 0.180
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

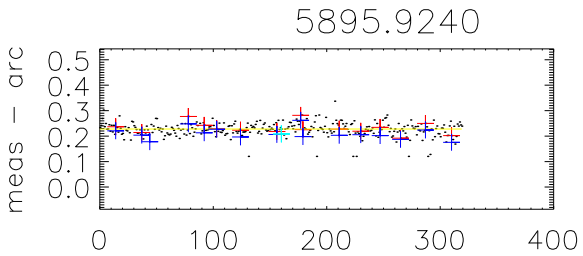

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

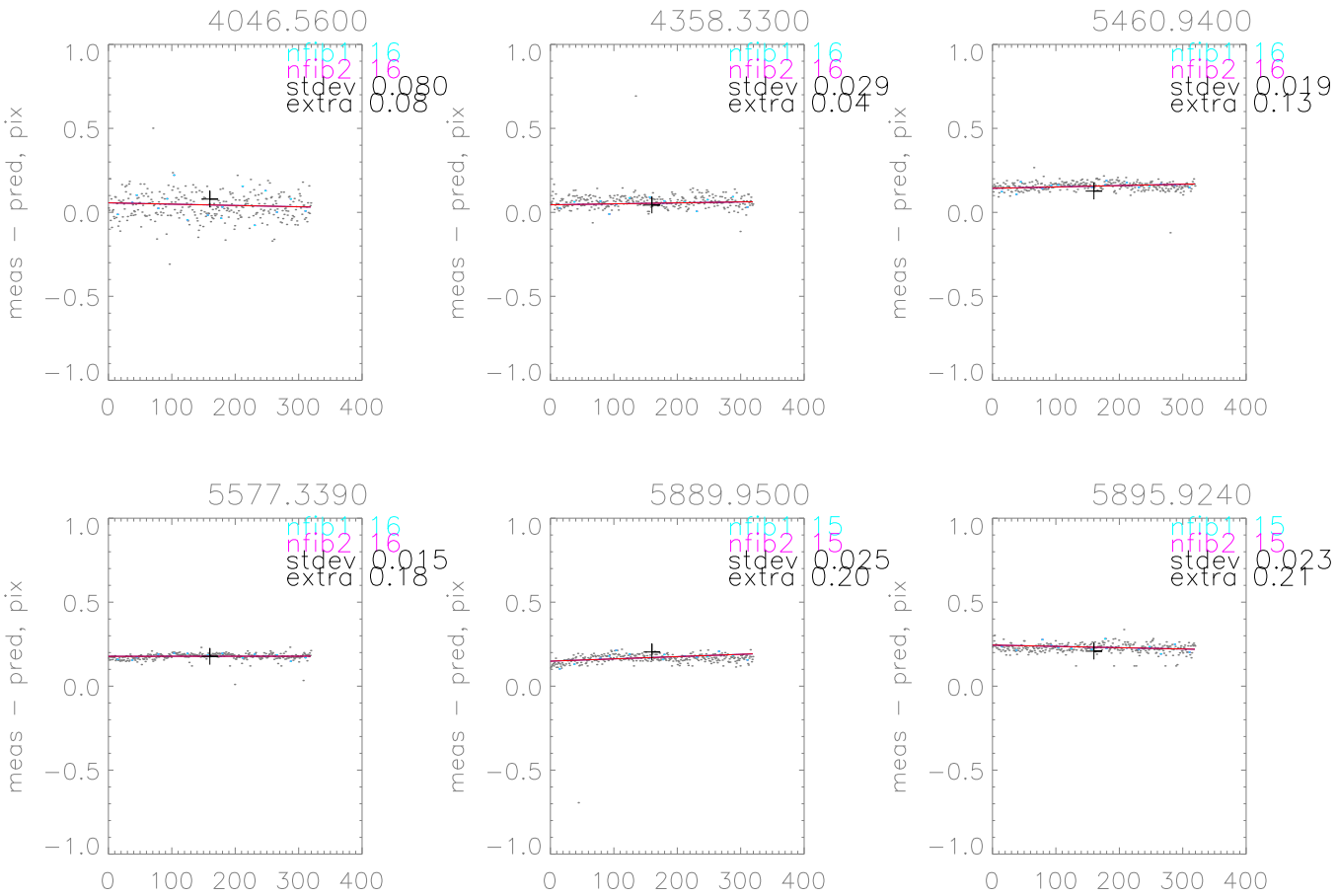

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

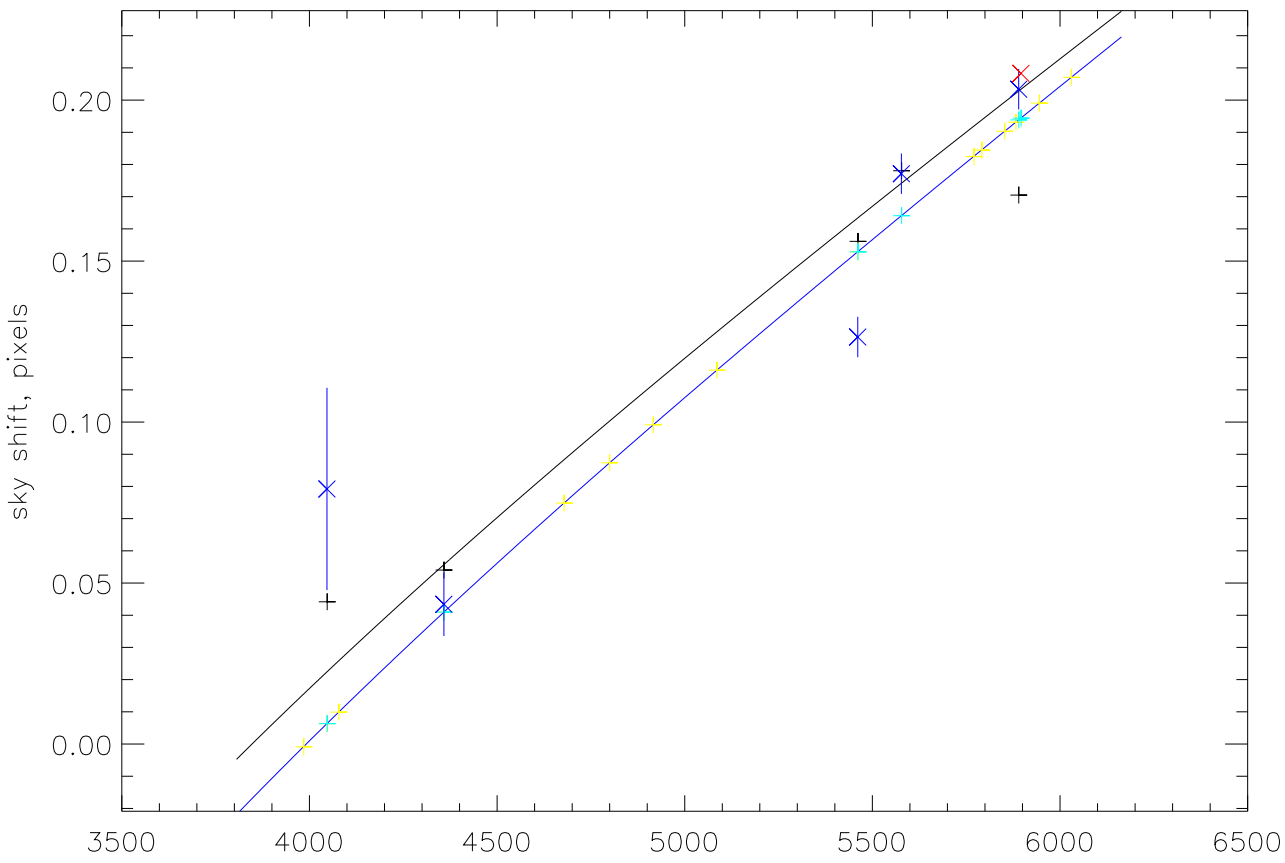

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

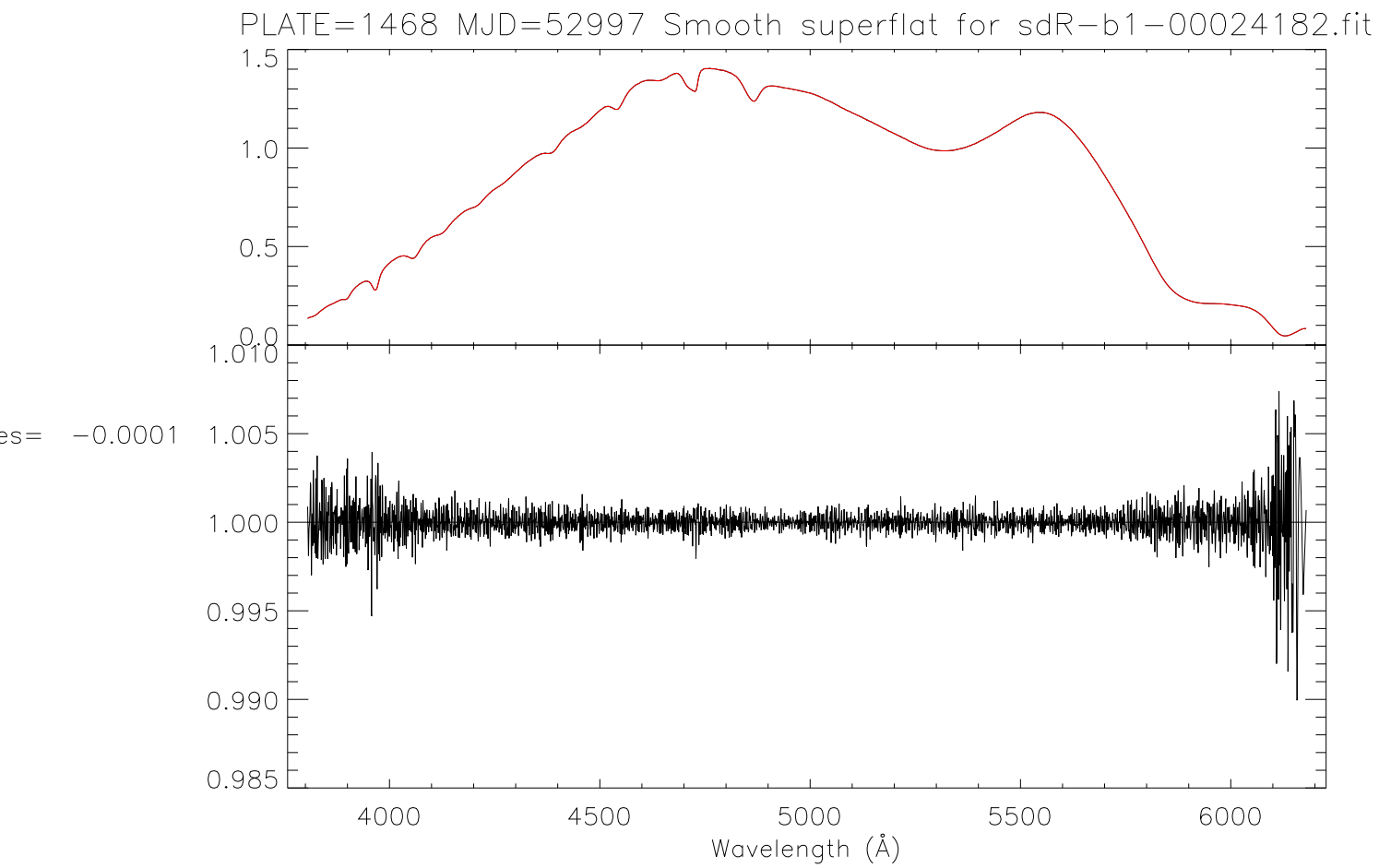

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

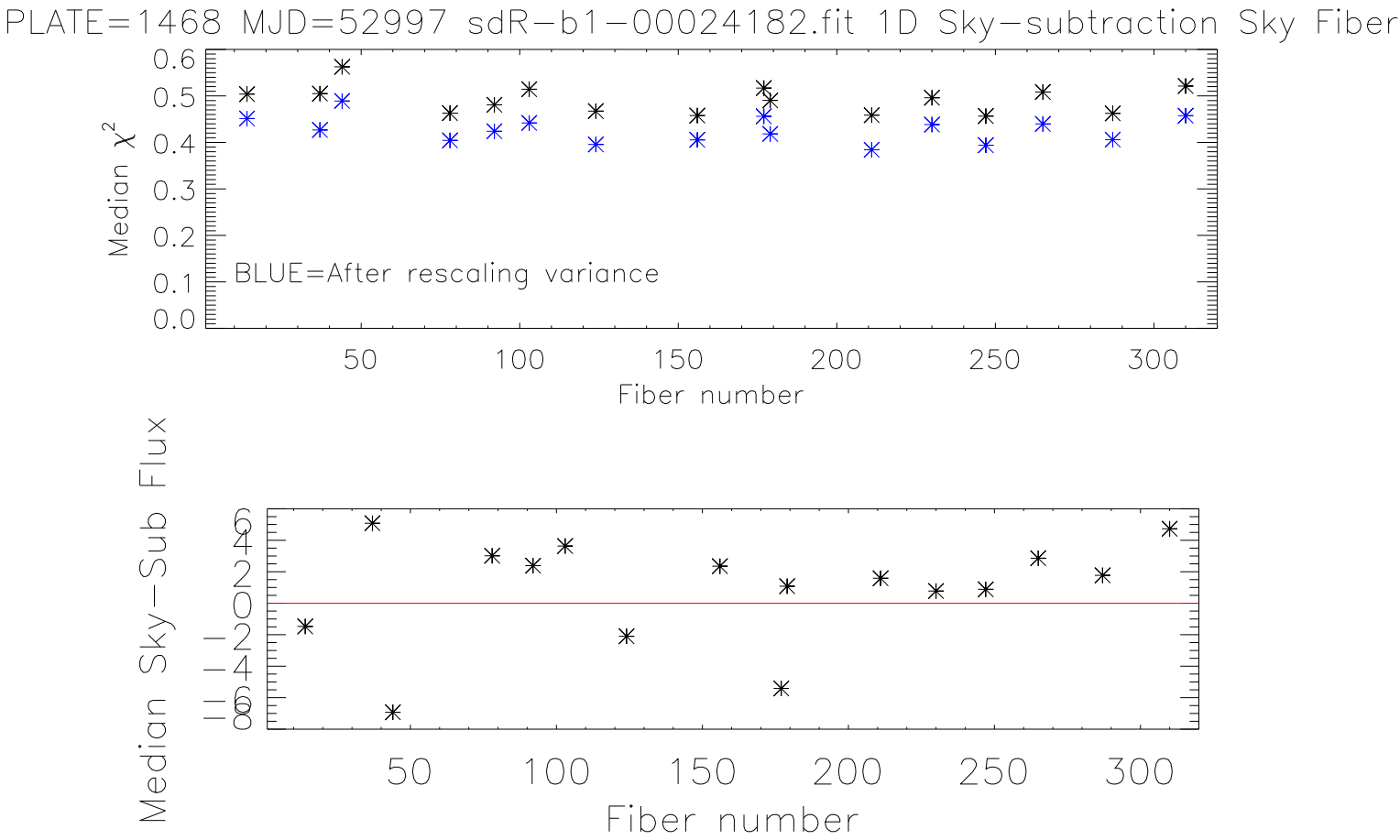

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

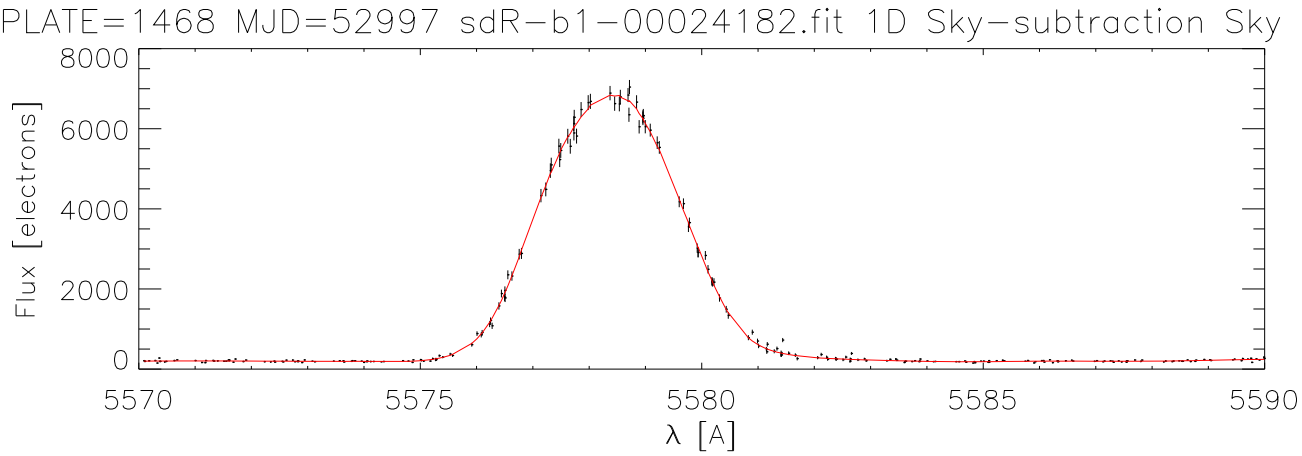

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

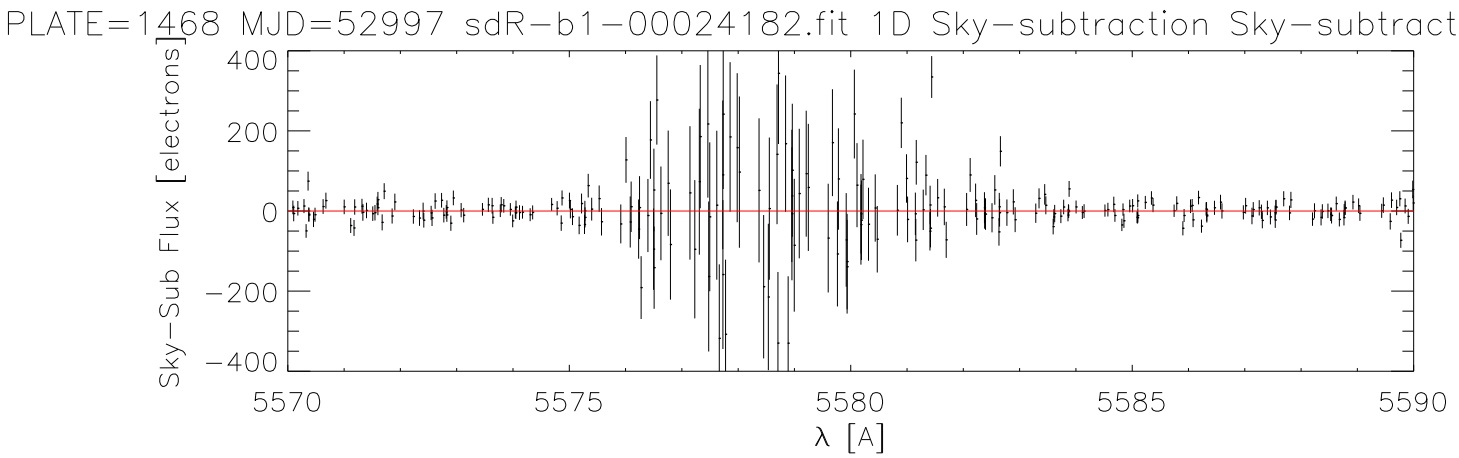

4046.5600
nfib1 16
nfib2 16
stdev 0.080
extra 0.08
4358.3300
nfib1 16
nfib2 16
stdev 0.029
extra 0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.019
extra 0.13
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.18
5889.9500
nfib1 15
nfib2 15
stdev 0.025
extra 0.20
5895.9240
nfib1 15
nfib2 15
stdev 0.023
extra 0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

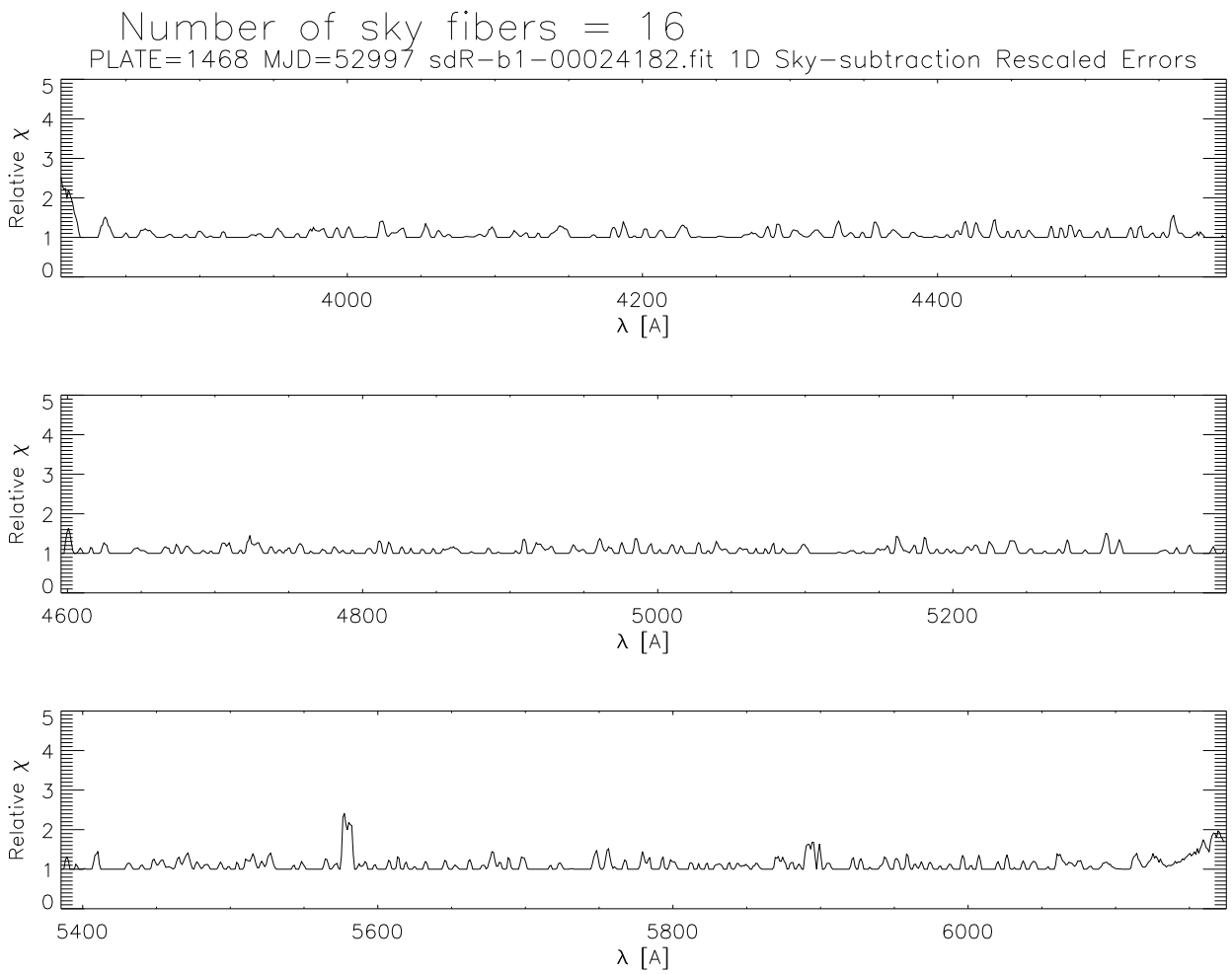

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
3500
4000
4500
5000
5500
6000
6500

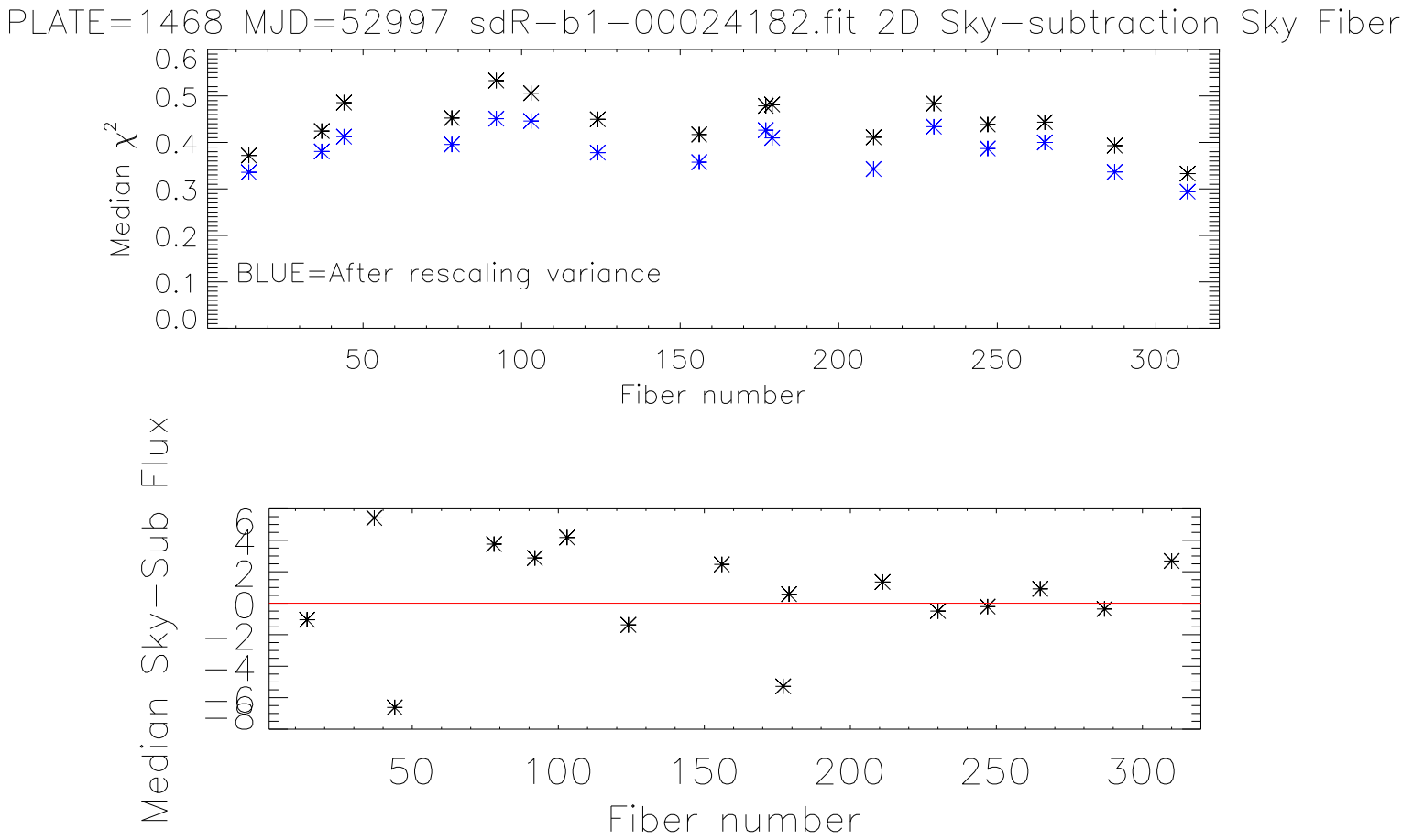

PLATE=1468 MJD=52997 Smooth superflat for sdR-b1-00024182.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

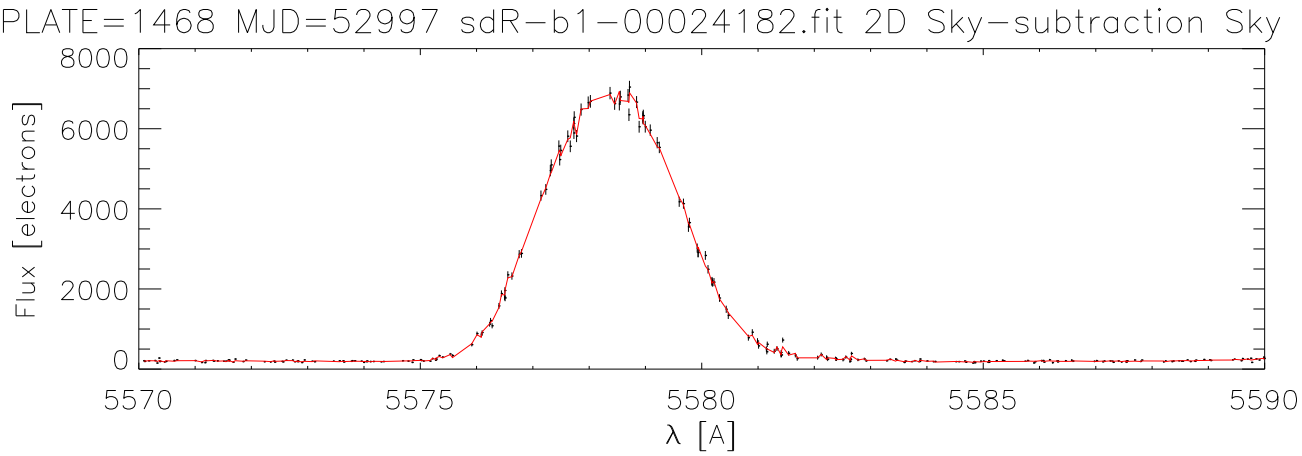

PLATE=1468 MJD=52997 sdR-b1-00024182.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

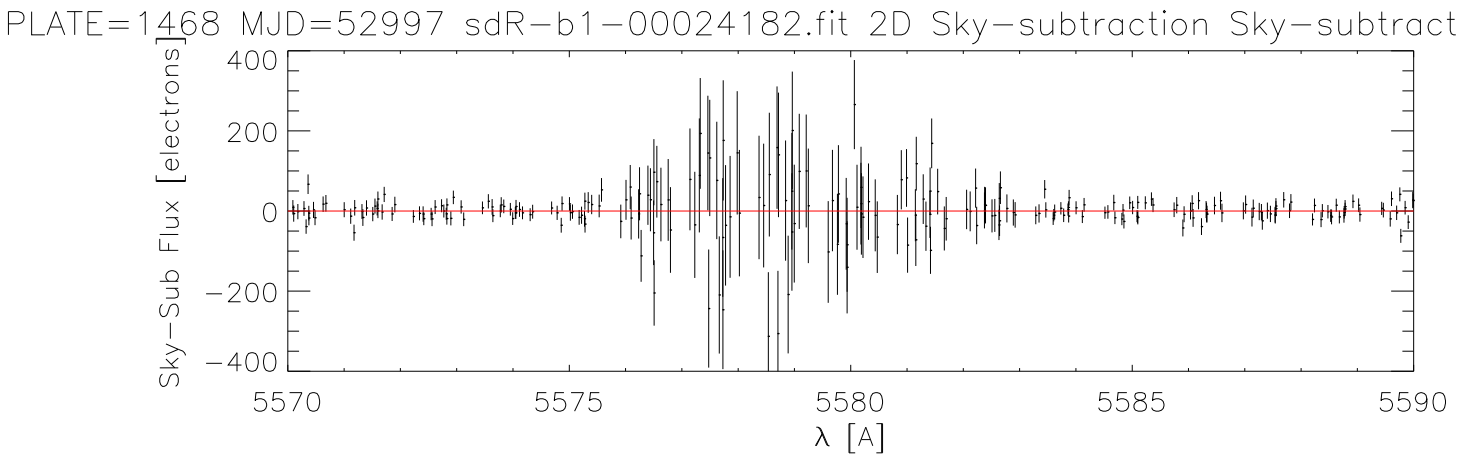

PLATE=1468 MJD=52997 sdR-b1-00024182.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

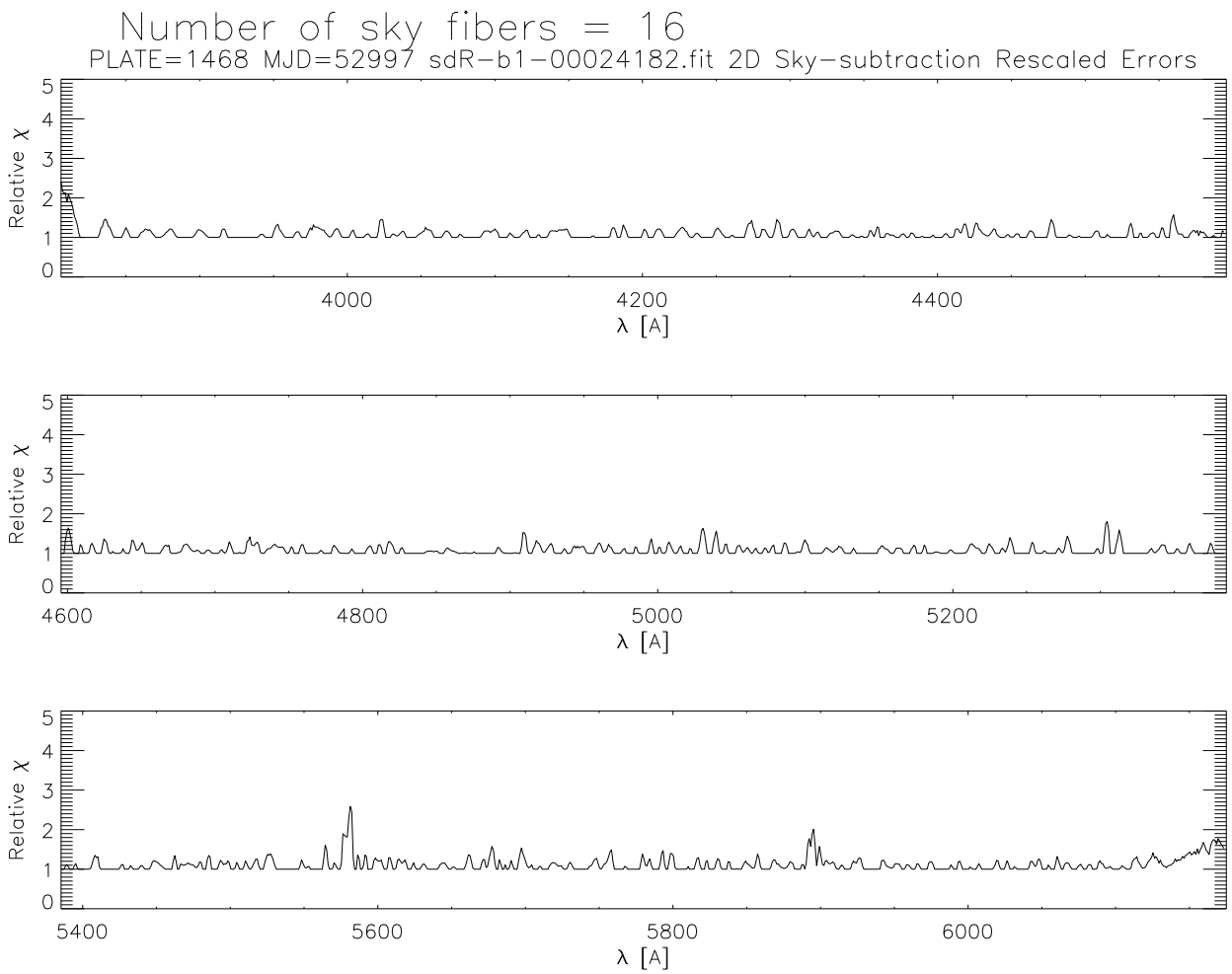

PLATE=1468 MJD=52997 sdR-b1-00024182.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

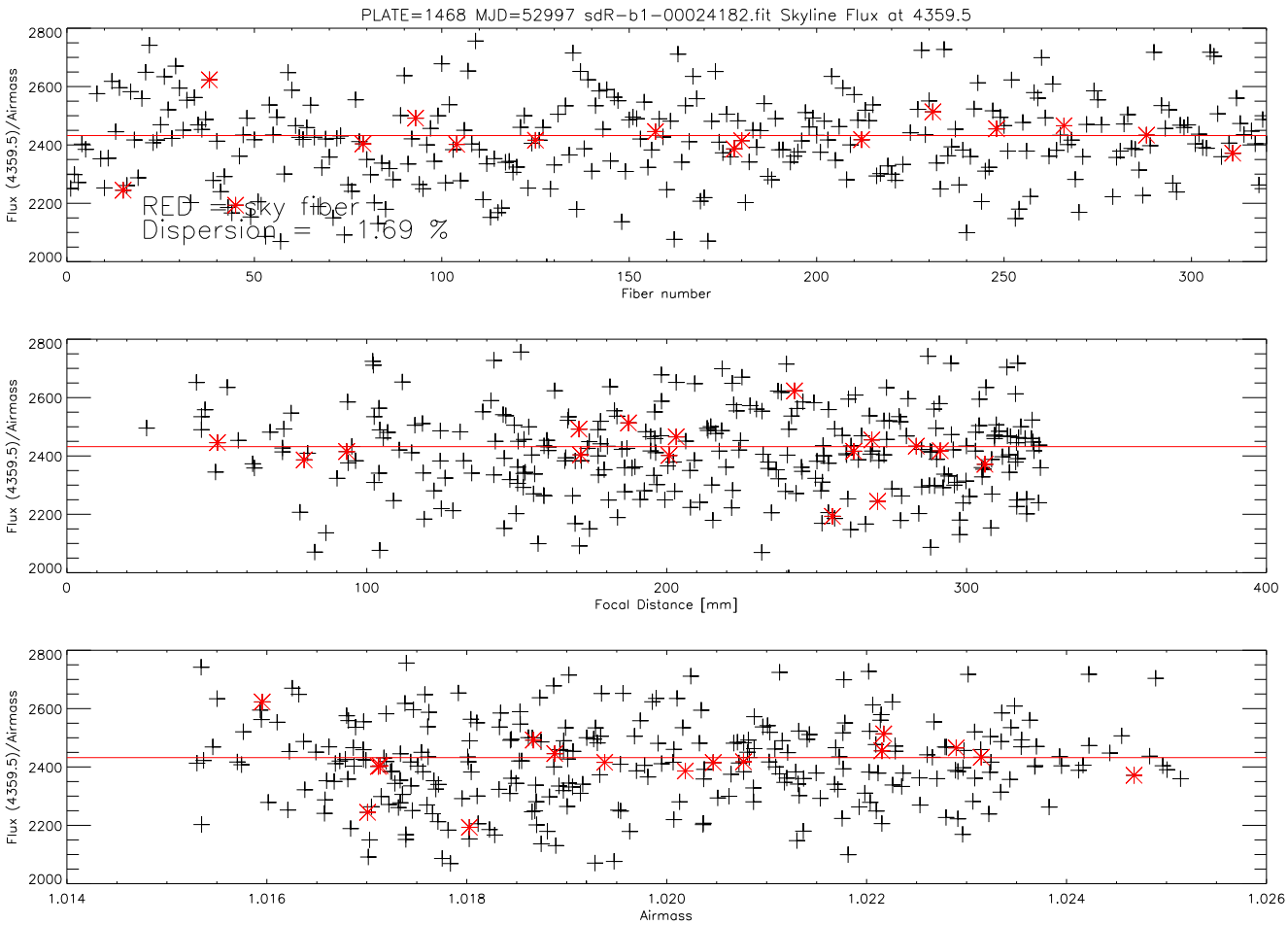

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b1-00024182.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

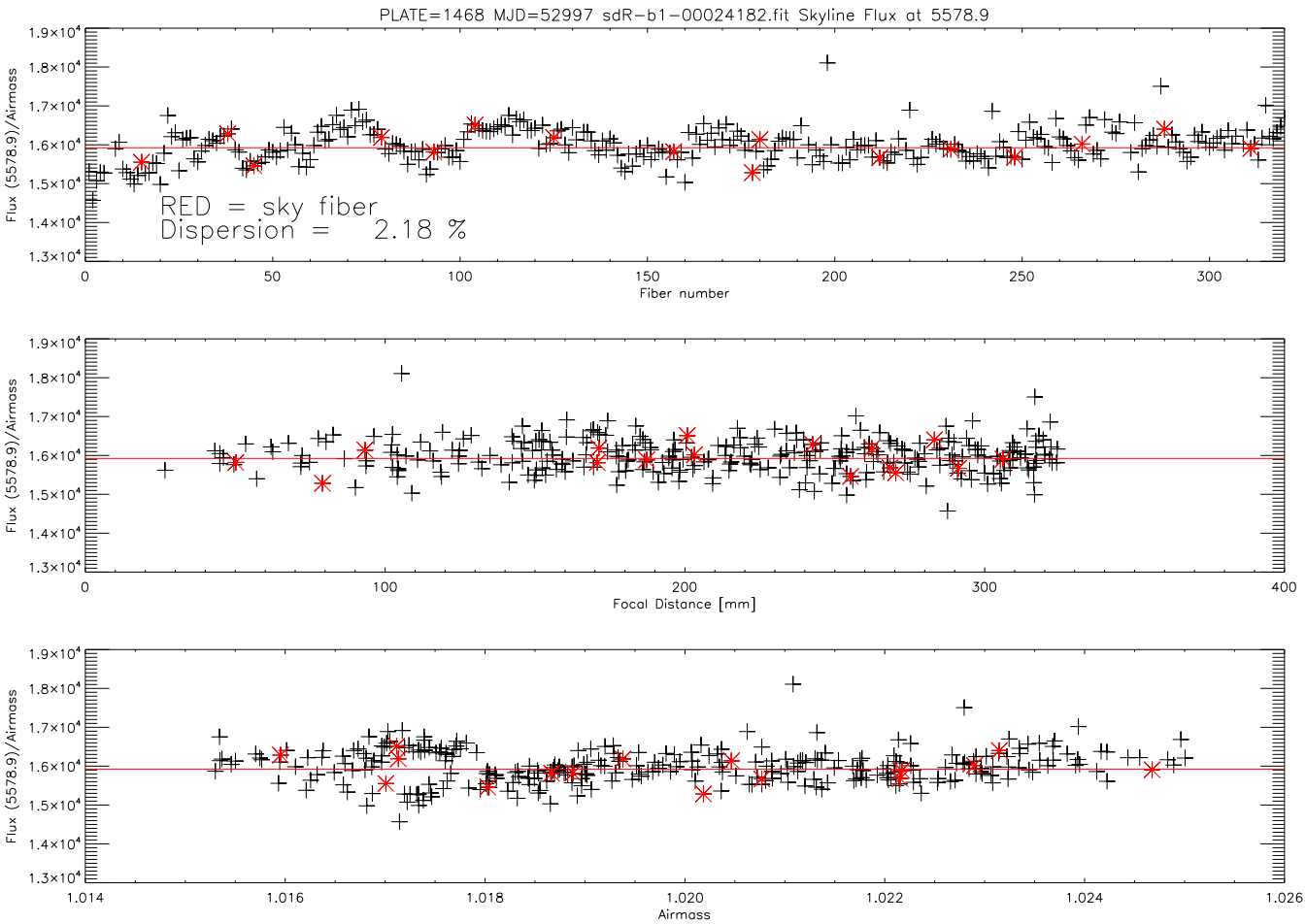

PLATE=1468 MJD=52997 sdR-b1-00024182.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

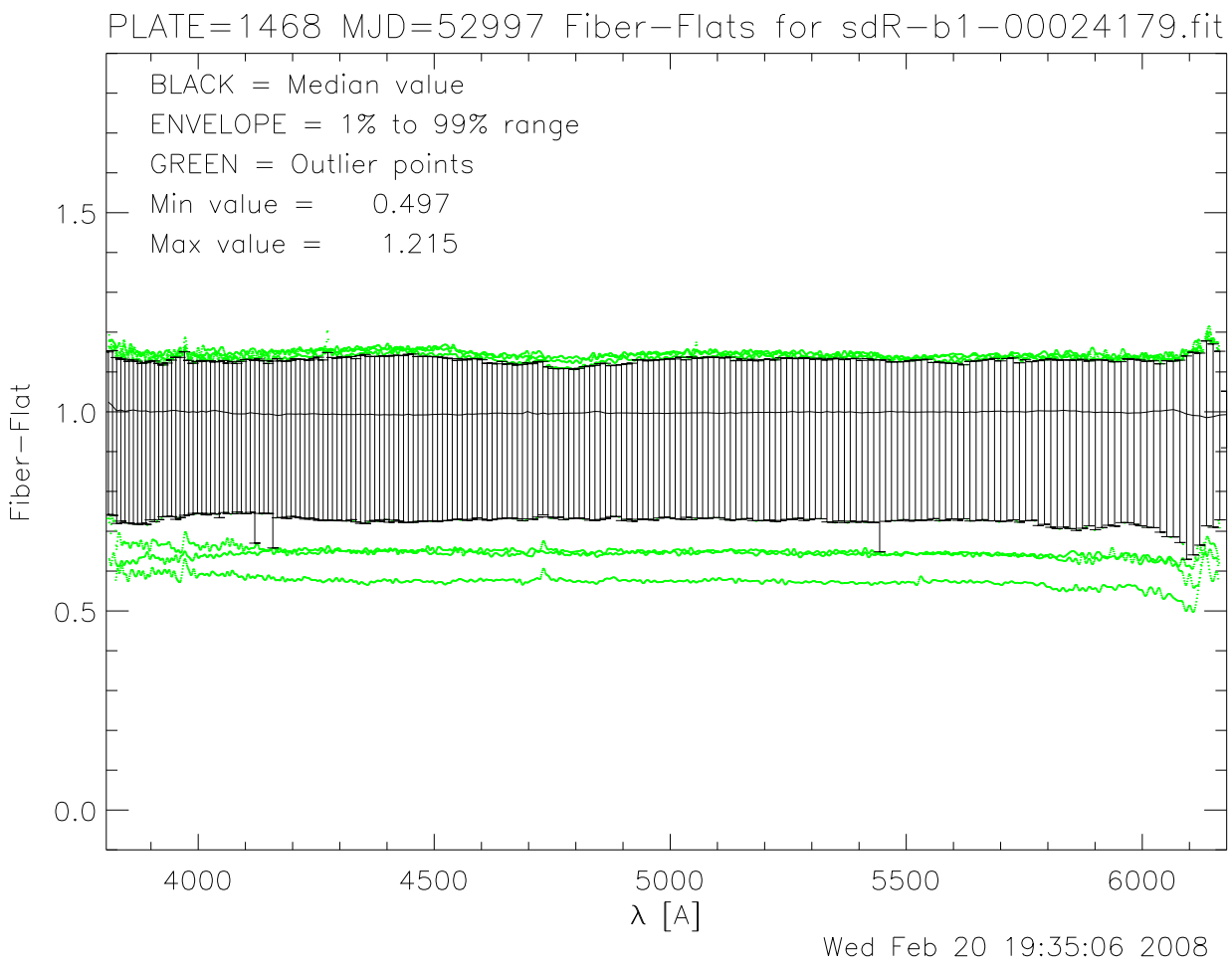

PLATE=1468 MJD=52997 sdR-b1-00024182.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

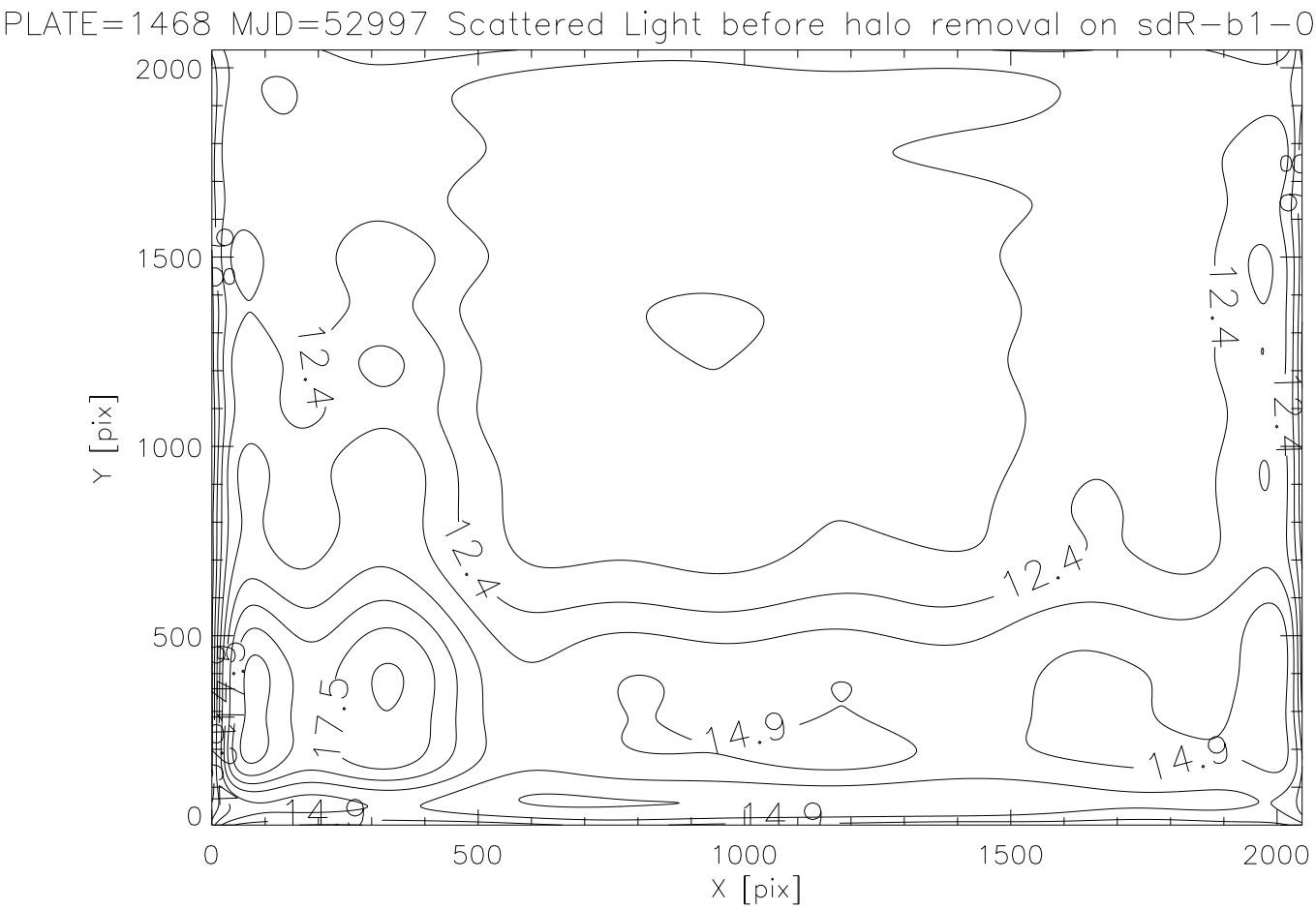

PLATE=1468 MJD=52997 sdR-b1-00024182.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

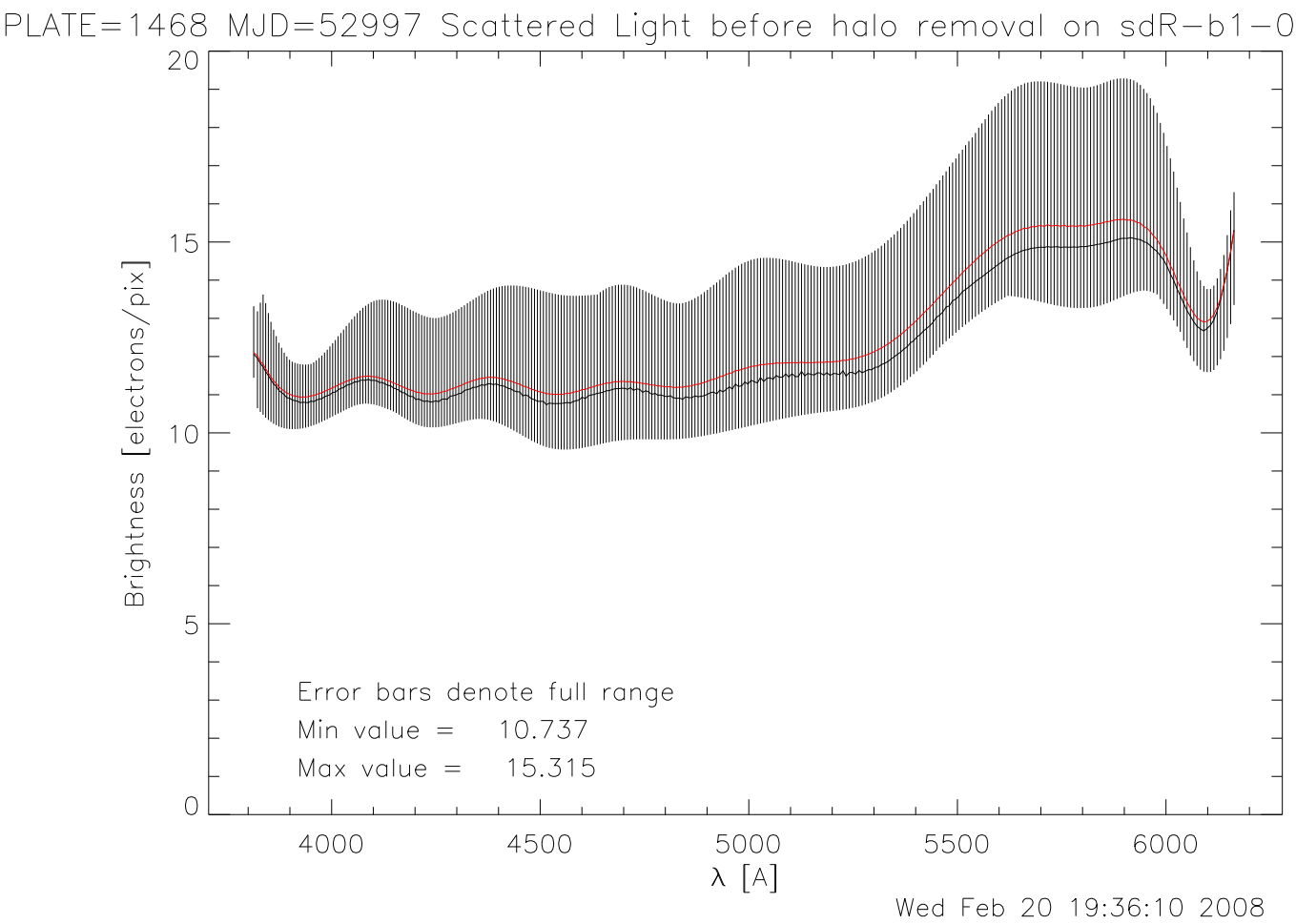

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b1-00024182.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

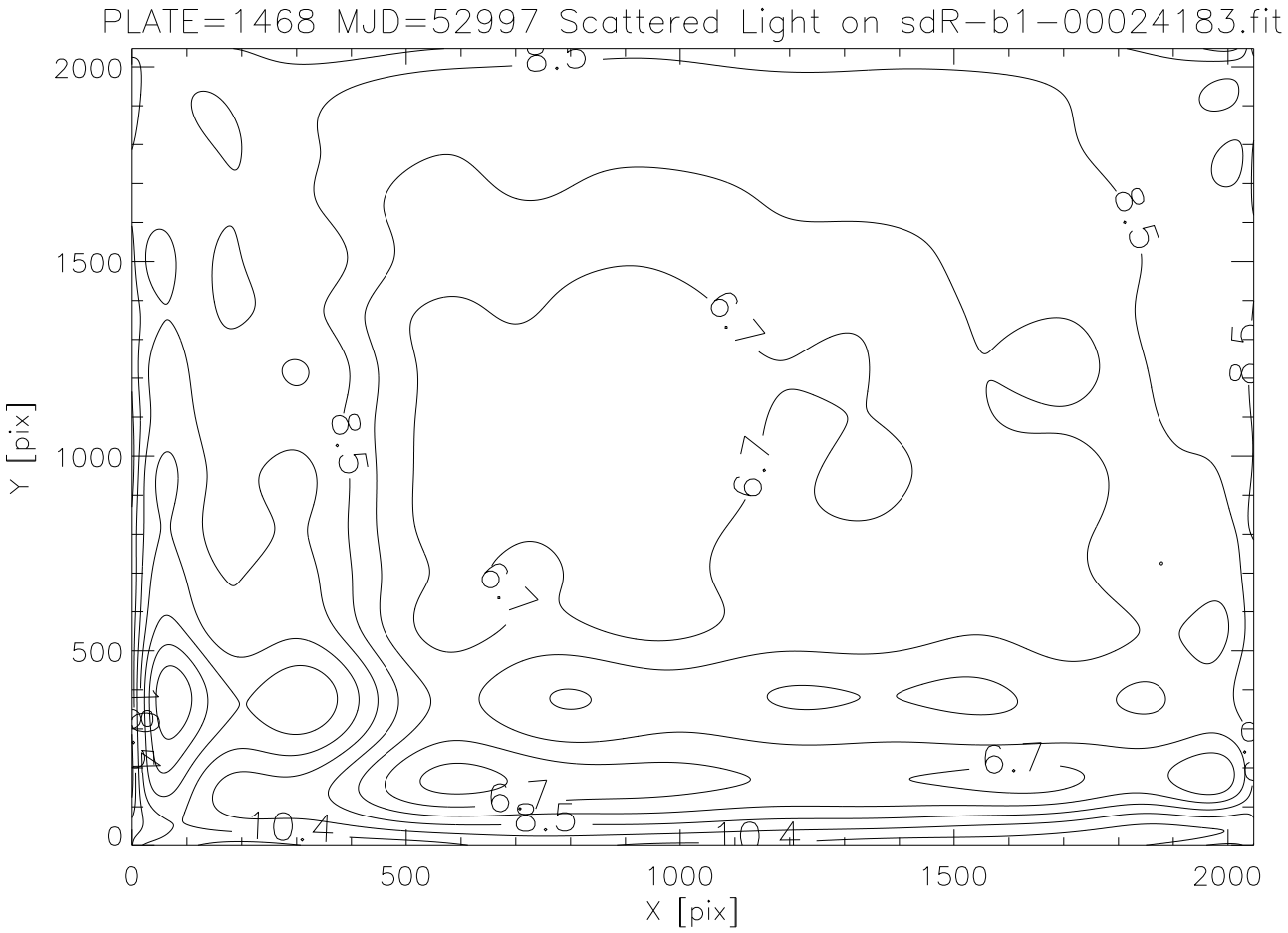

PLATE=1468 MJD=52997 sdR-b1-00024182.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = +1.69 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

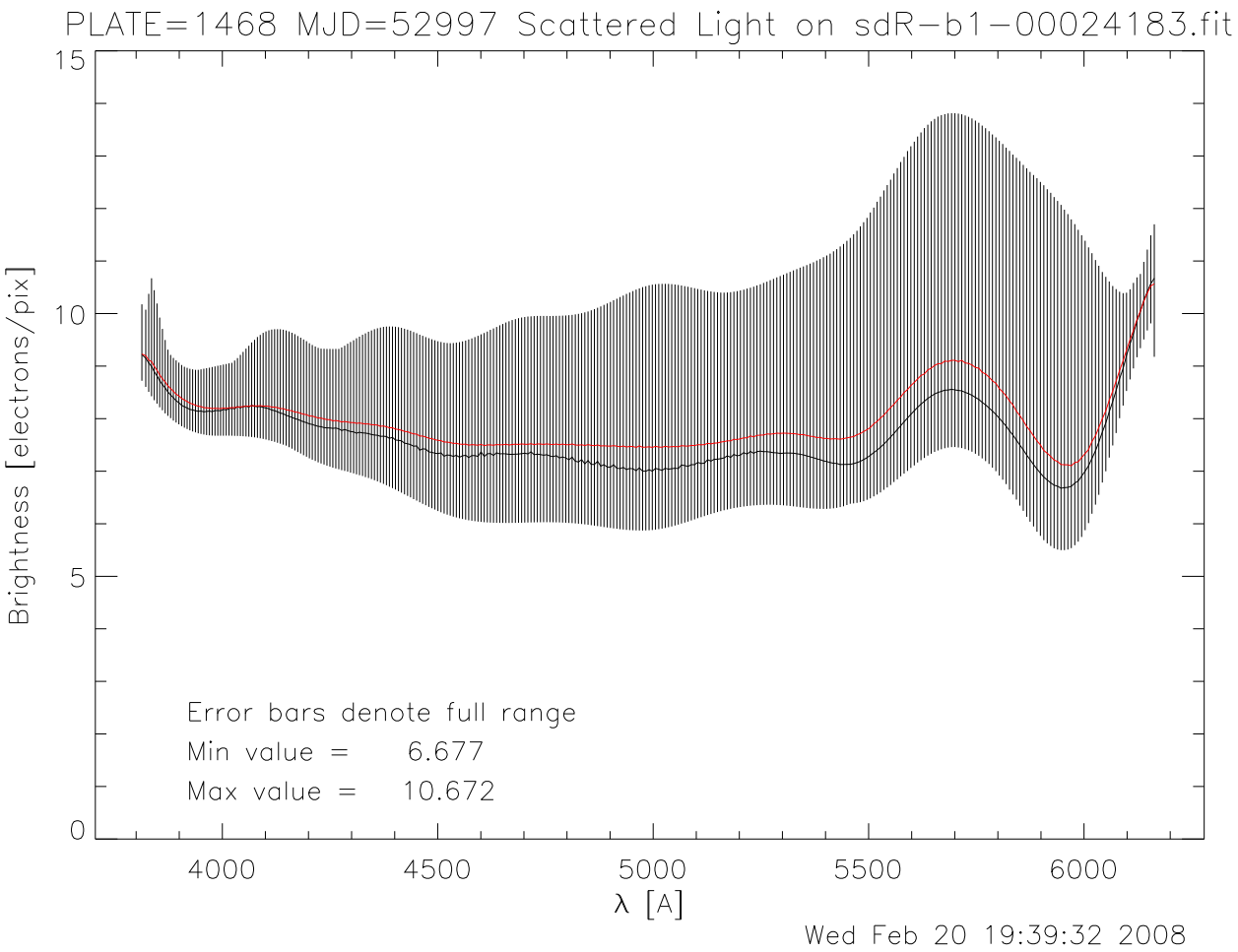

PLATE=1468 MJD=52997 sdR-b1-00024182.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.18 %
Fiber number
Focal Distance [mm]
Airmass

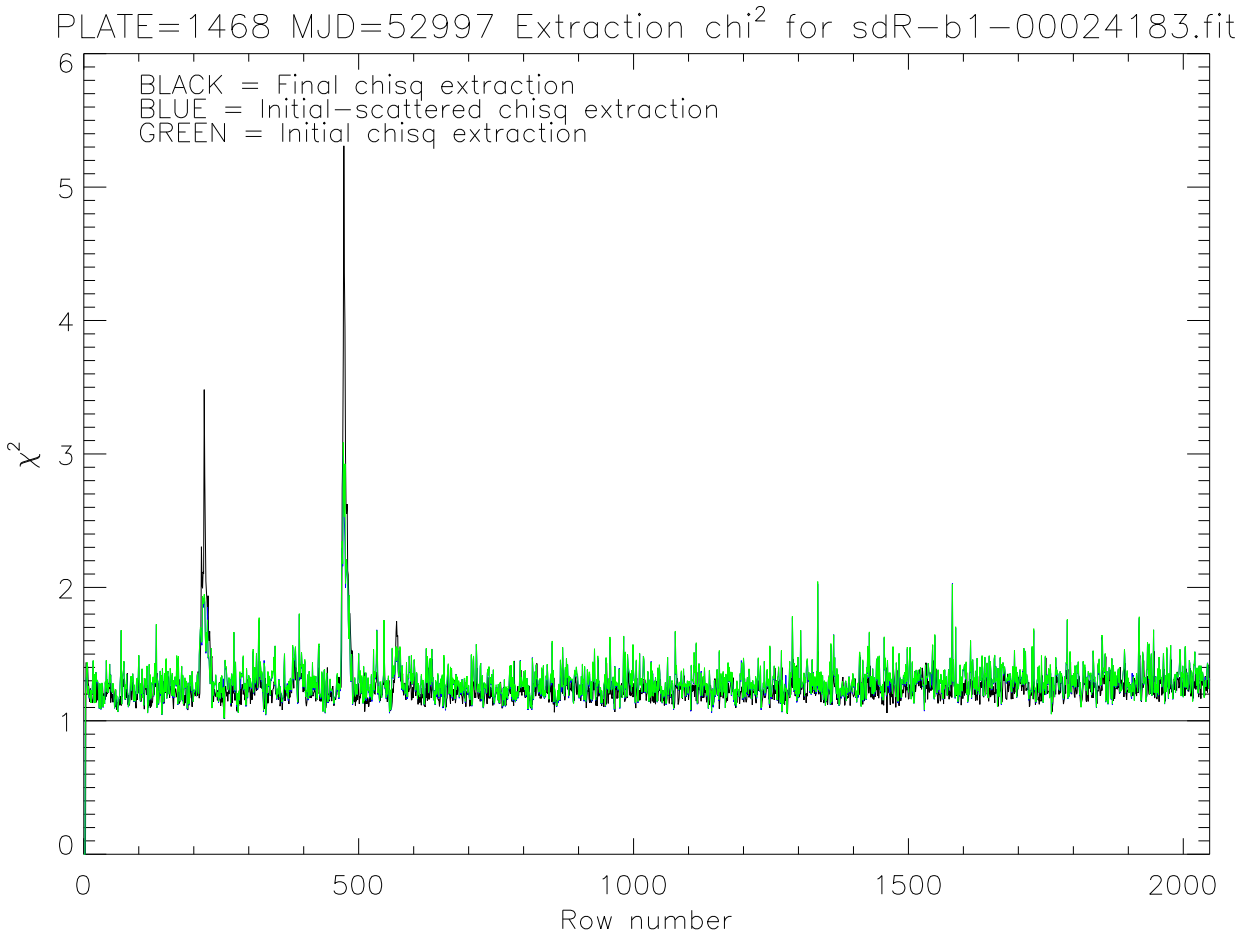

PLATE=1468 MJD=52997 Fiber-Flats for sdR-b1-00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.497
Max value = 1.215
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:35:06 2008

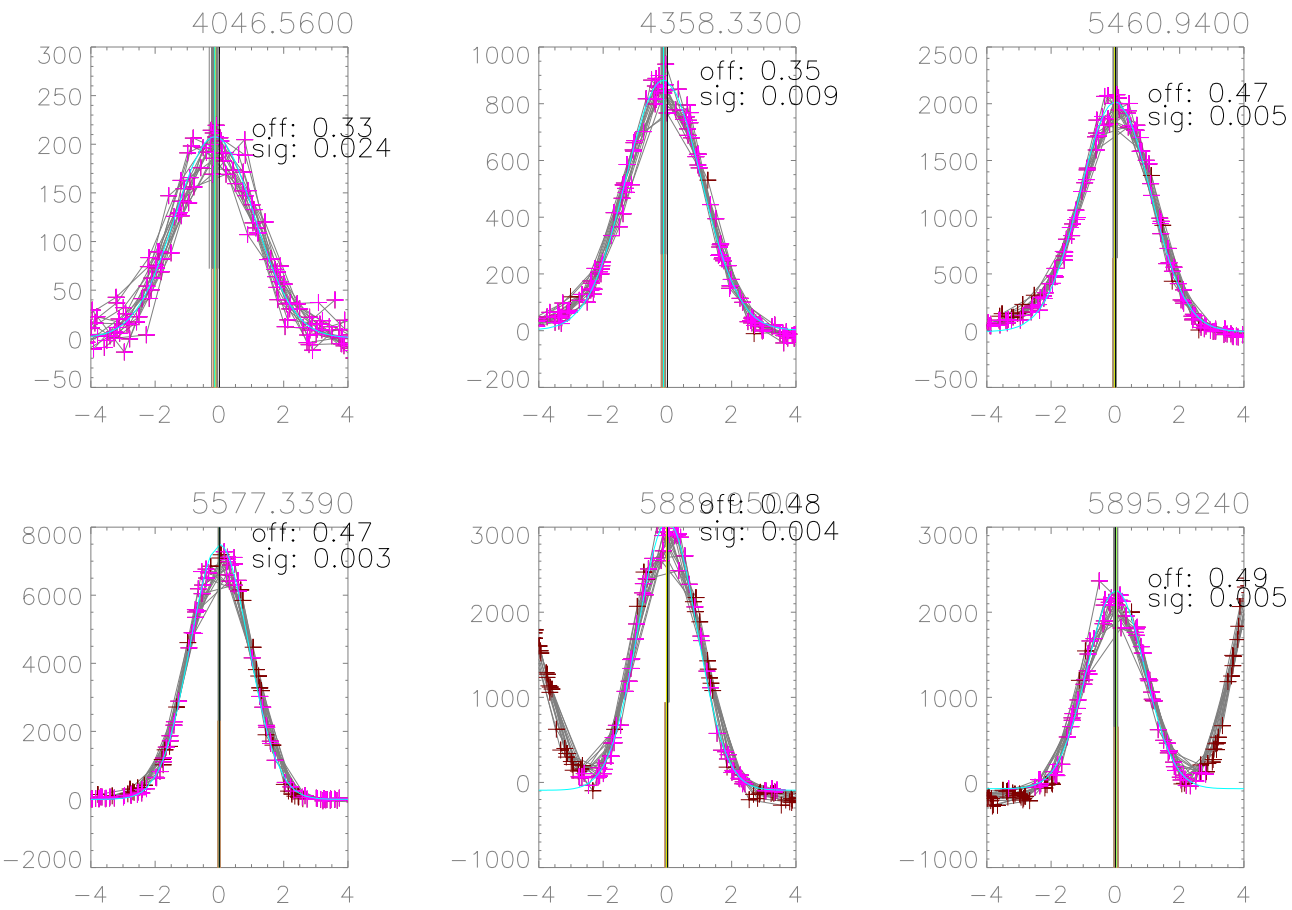

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR−b1−00024183.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.4
12.4
12.4
12.4
12.4
17.5
14.9
14.9
14.9
14.9

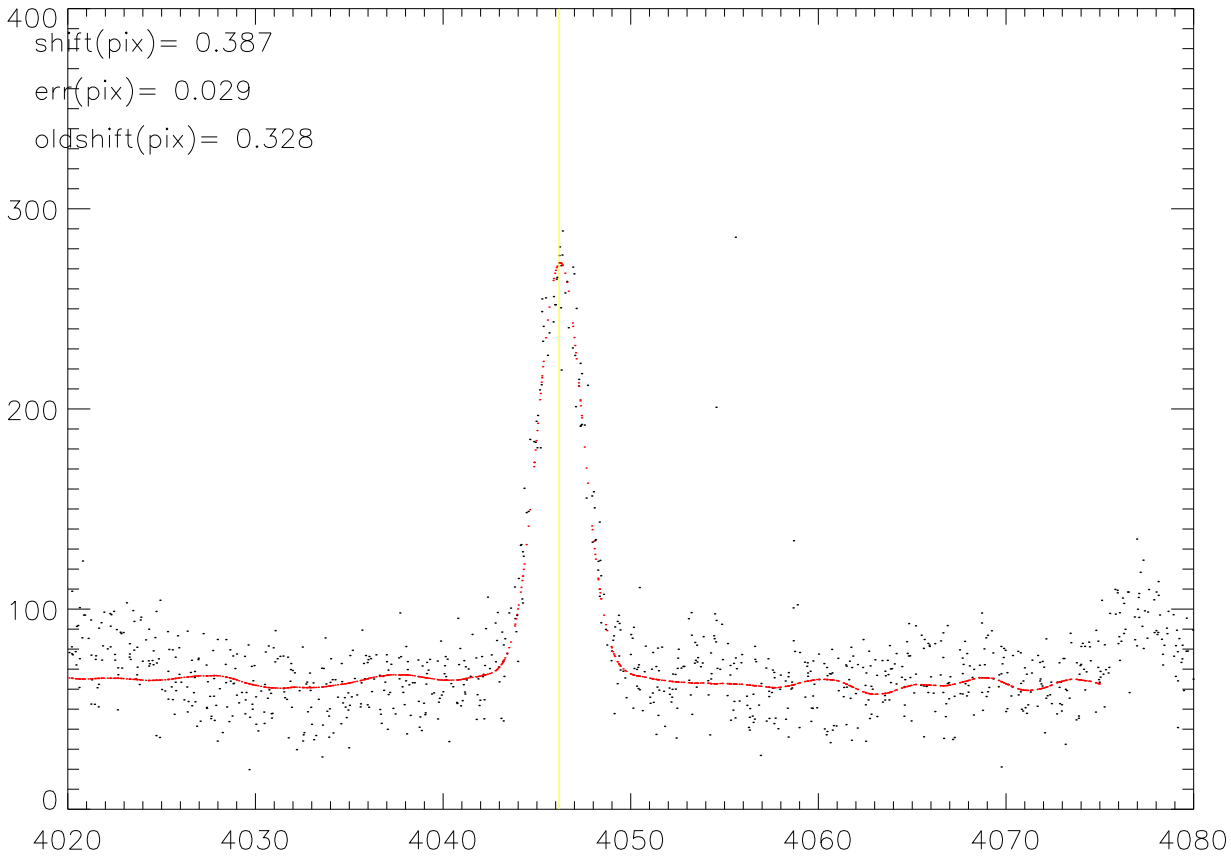

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b1-00024183.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 10.737
Max value = 15.315
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:36:10 2008

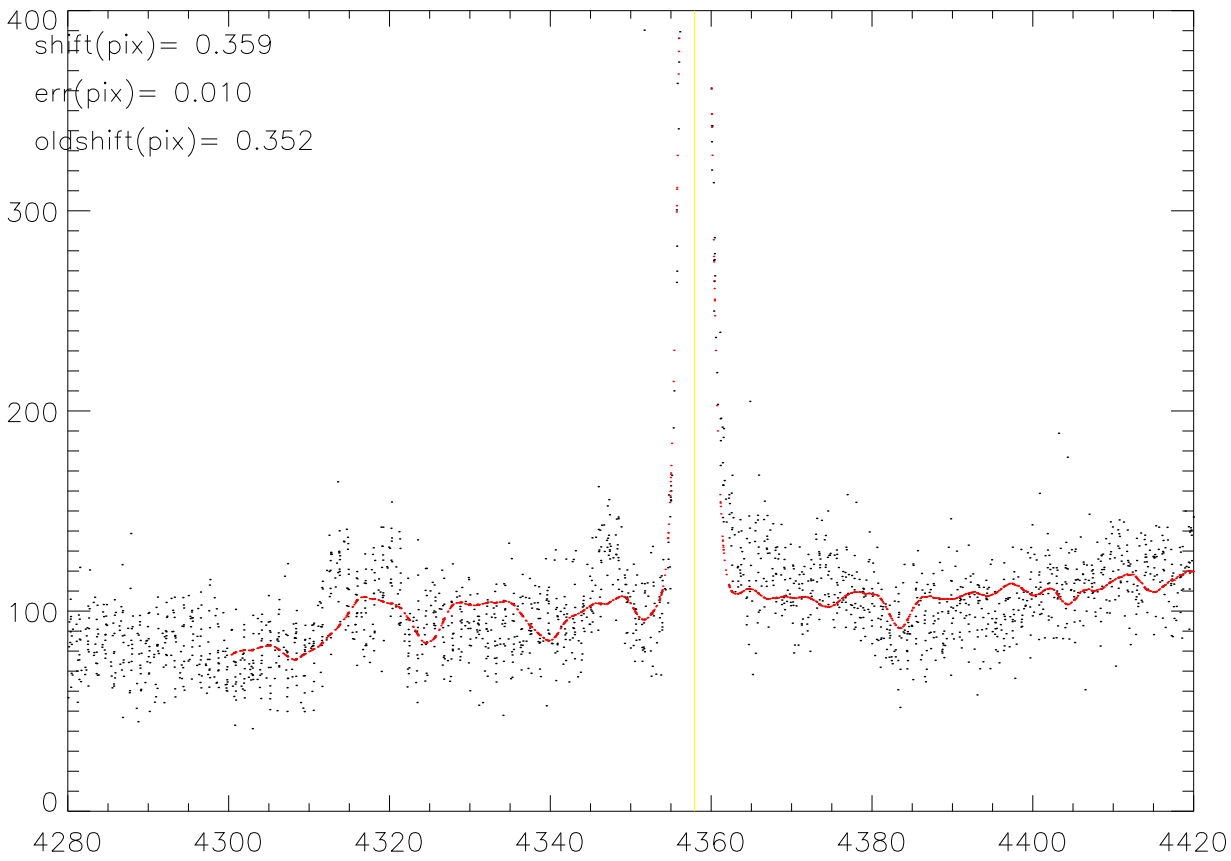

PLATE=1468 MJD=52997 Scattered Light on sdR-b1-00024183.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.5
6.7
10.4

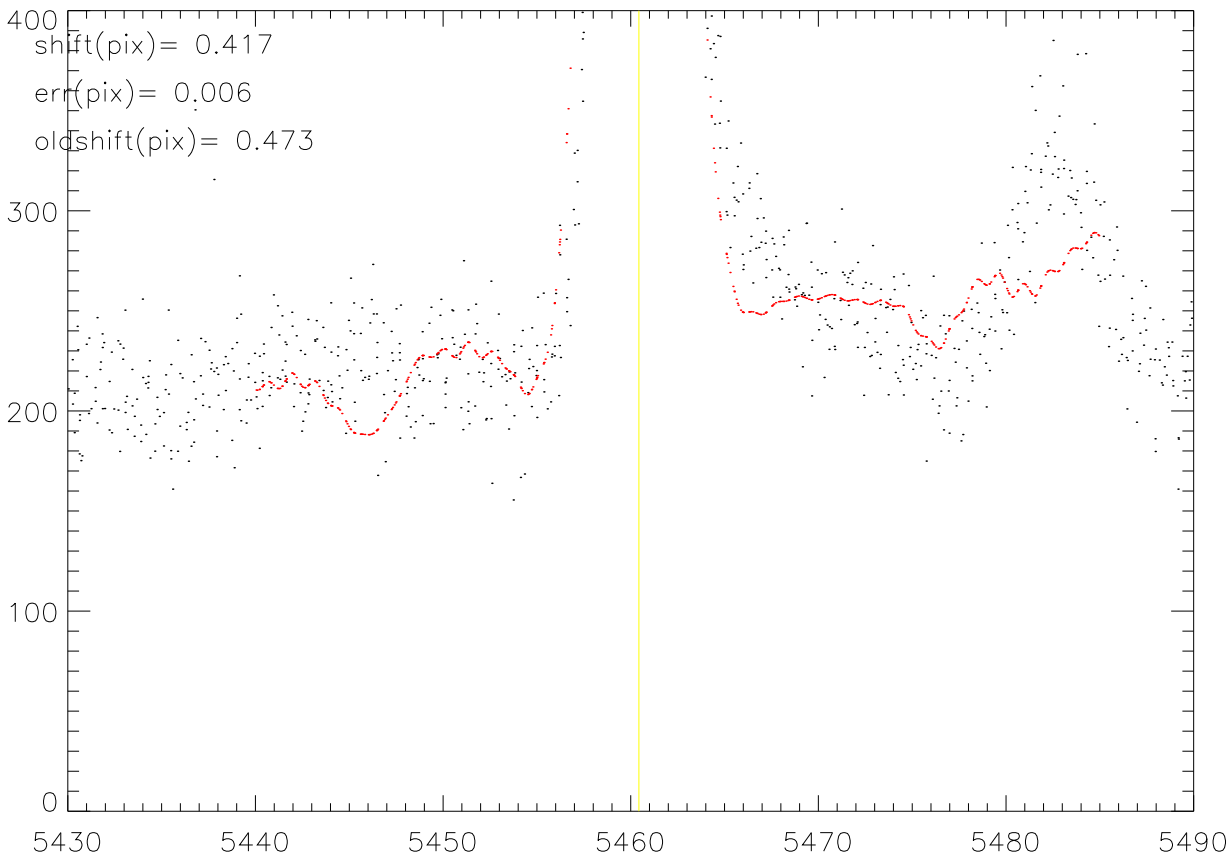

PLATE=1468 MJD=52997 Scattered Light on sdR-b1-00024183.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.677
Max value = 10.672
Wed Feb 20 19:39:32 2008

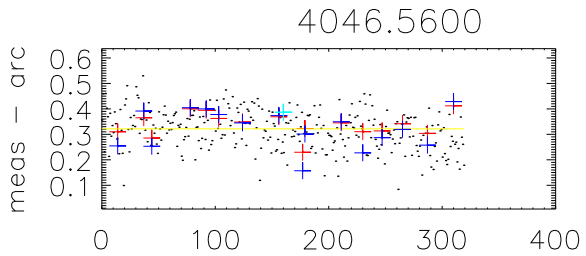

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-b1-00024183.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

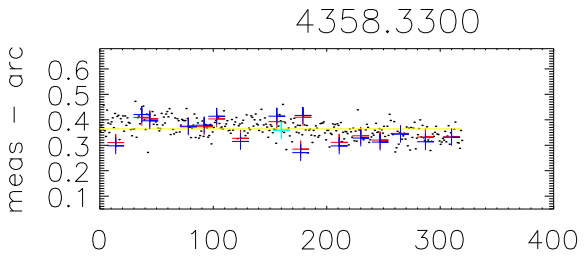

4046.5600
off: 0.33
sig: 0.024
4358.3300
off: 0.35
sig: 0.009
5460.9400
off: 0.47
sig: 0.005
5577.3390
off: 0.47
sig: 0.003
5880.9500
off: 0.48
sig: 0.004
5895.9240
off: 0.49
sig: 0.005

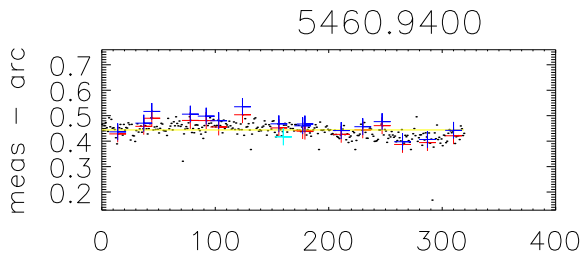

shift(pix)= 0.387
err(pix)= 0.029
oldshift(pix)= 0.328
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

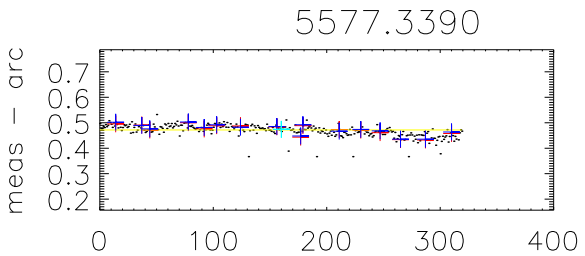

shift(pix)= 0.359
err(pix)= 0.010
oldshift(pix)= 0.352
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

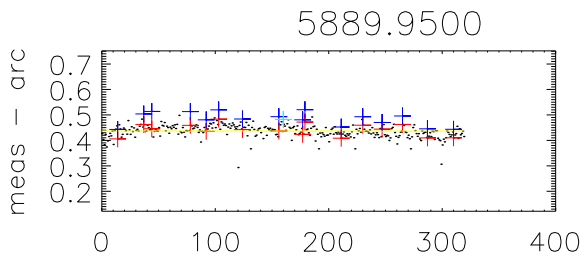

shift(pix)= 0.417
err(pix)= 0.006
oldshift(pix)= 0.473
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

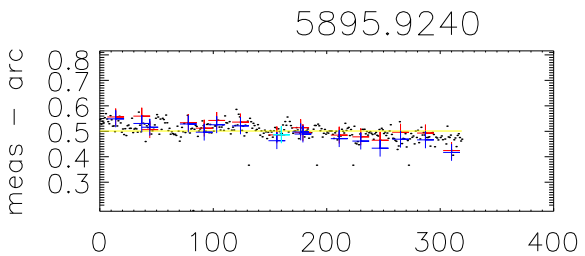

4046.5600
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

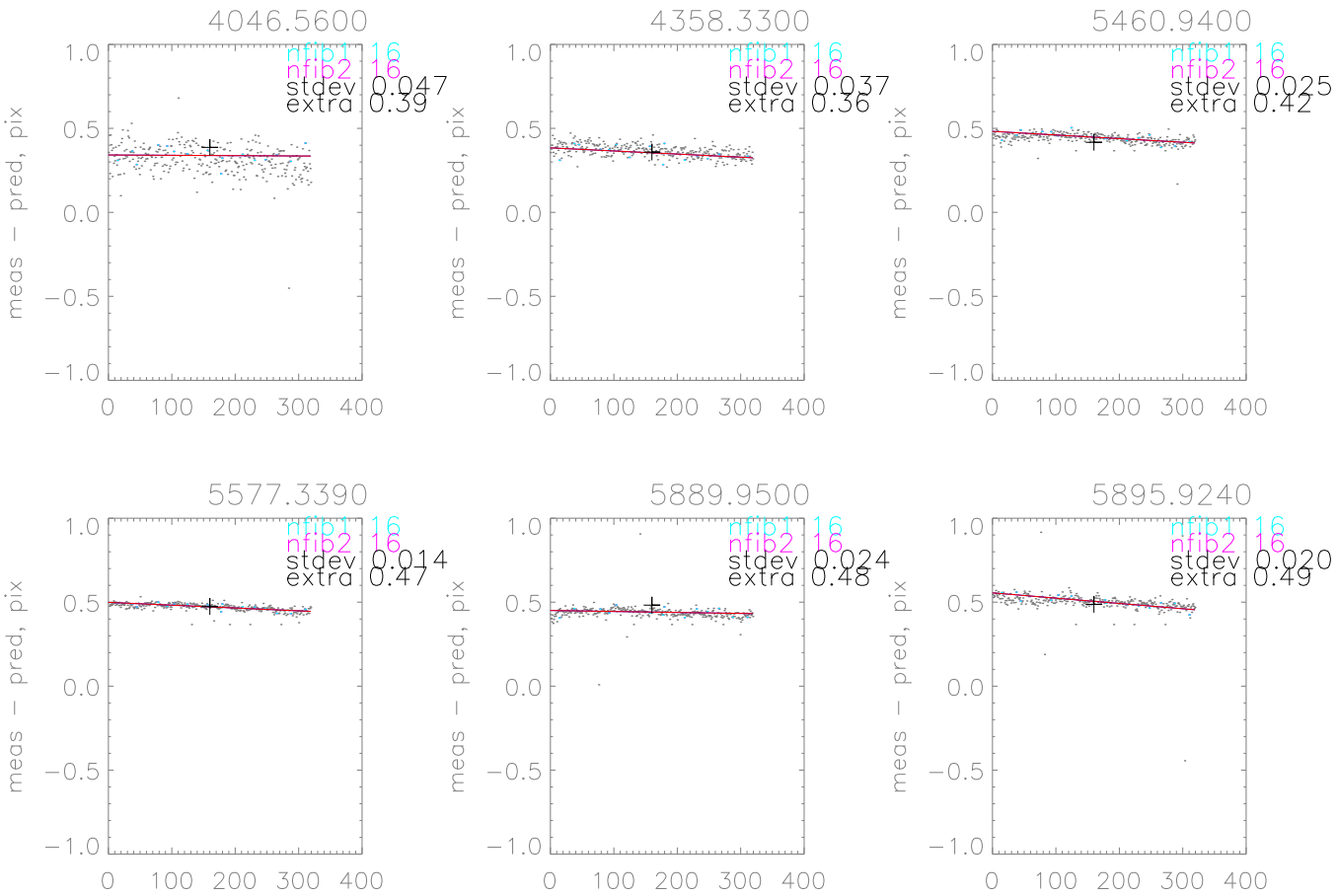

4358.3300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

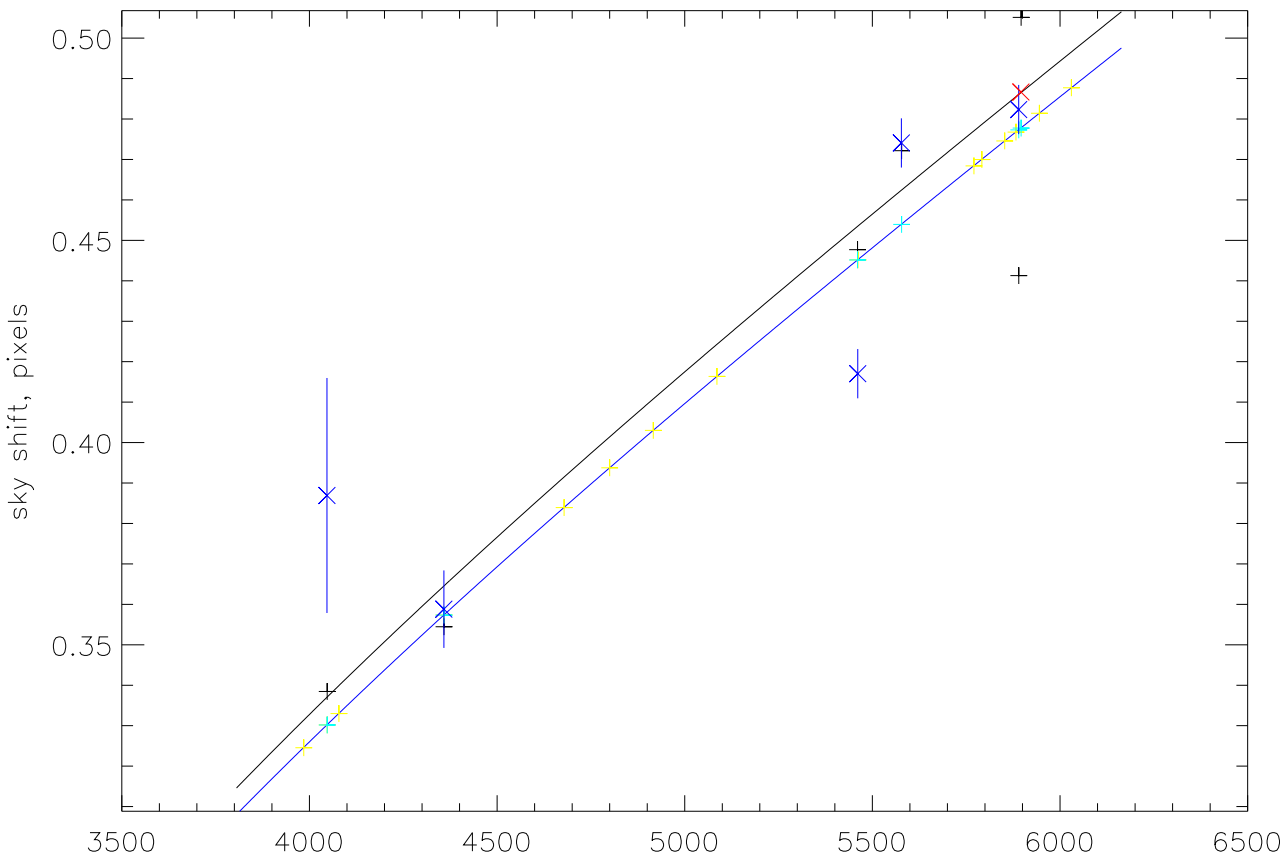

5460.9400
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

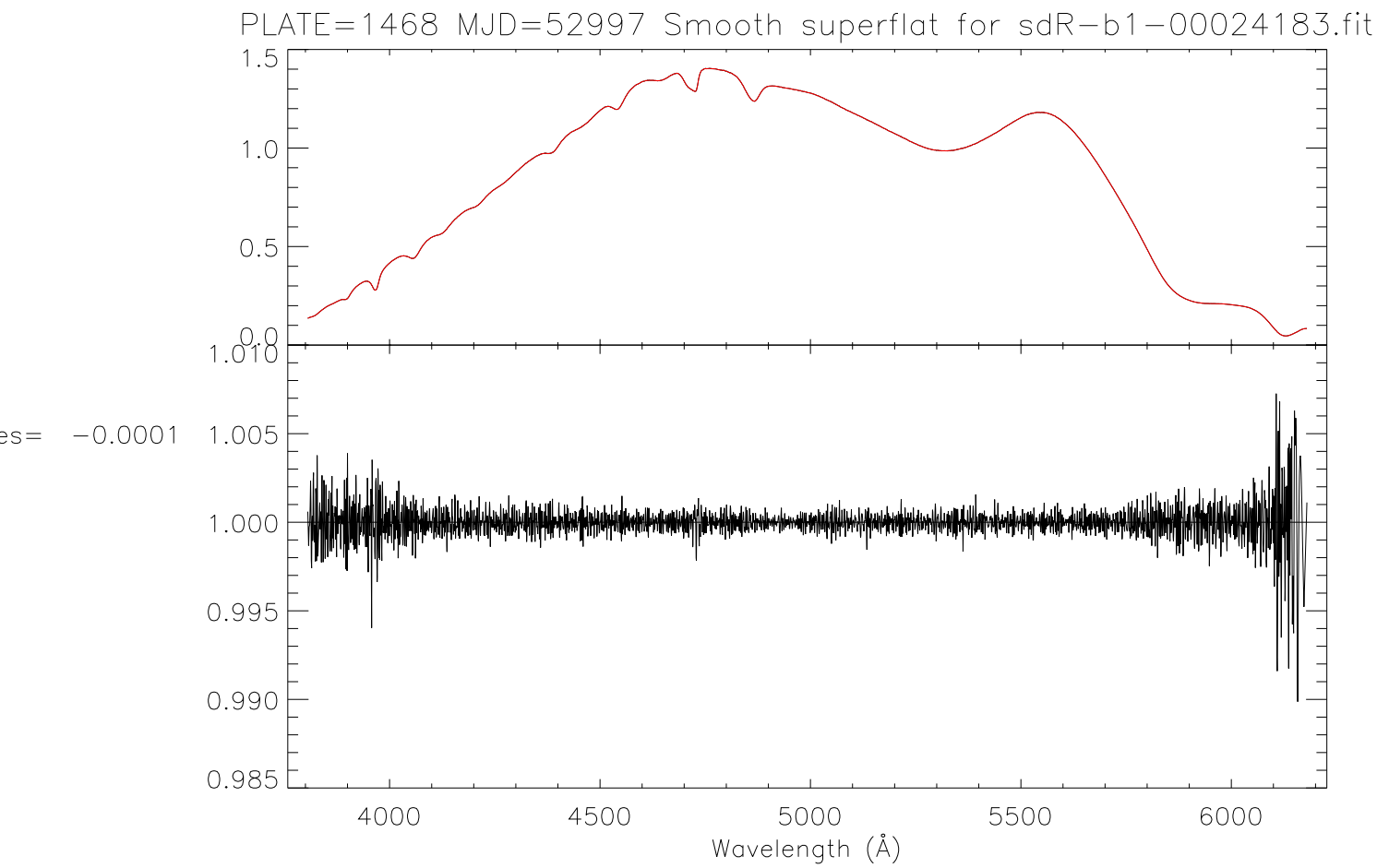

5577.3390
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

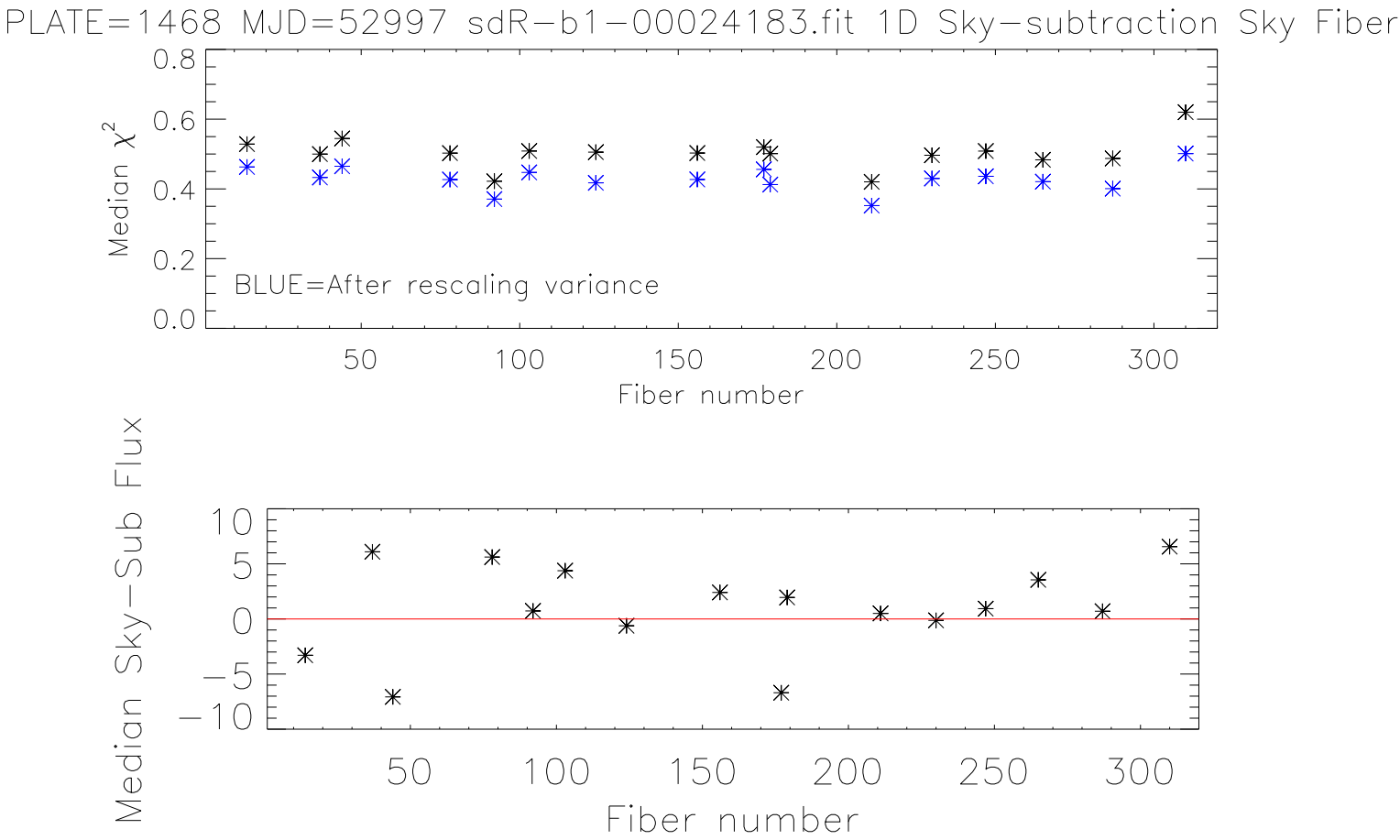

5889.9500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

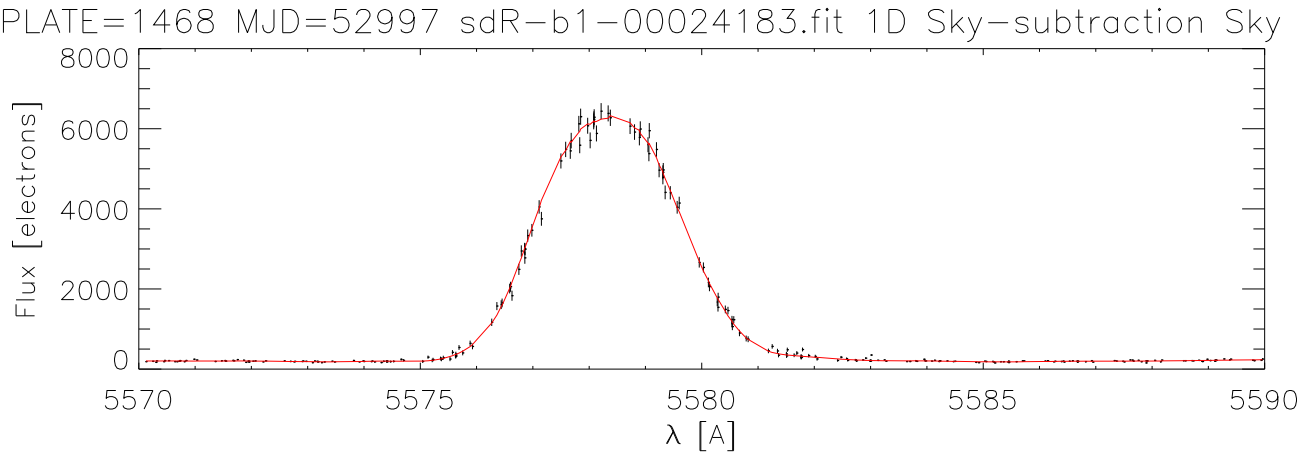

5895.9240
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

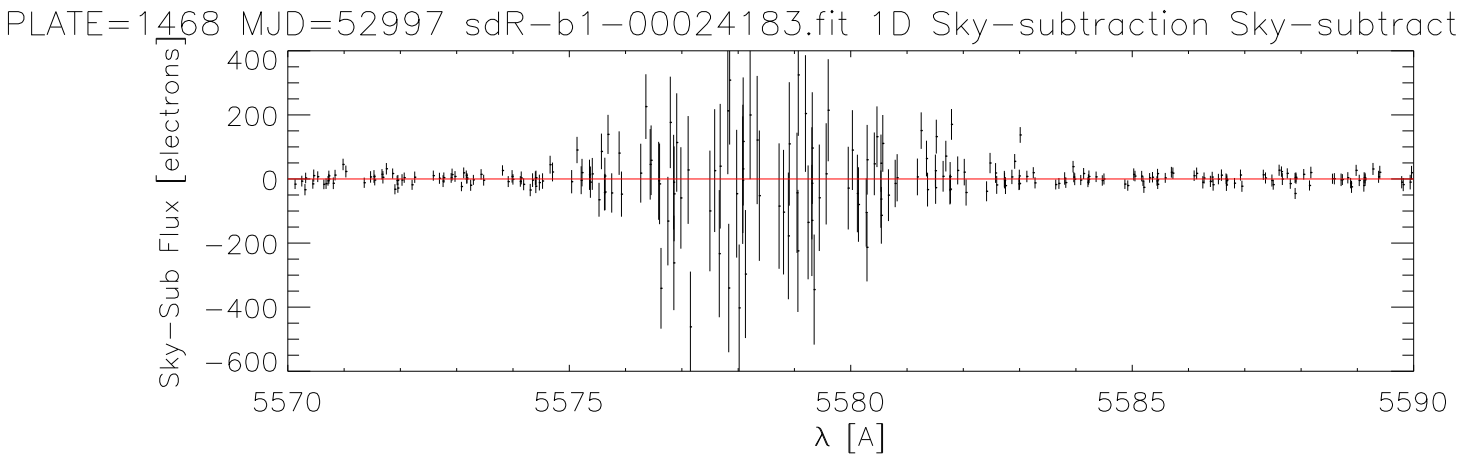

4046.5600
nfib1 16
nfib2 16
stdev 0.047
extra 0.39
4358.3300
nfib1 16
nfib2 16
stdev 0.037
extra 0.36
5460.9400
nfib1 16
nfib2 16
stdev 0.025
extra 0.42
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.47
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra 0.48
5895.9240
nfib1 16
nfib2 16
stdev 0.020
extra 0.49
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

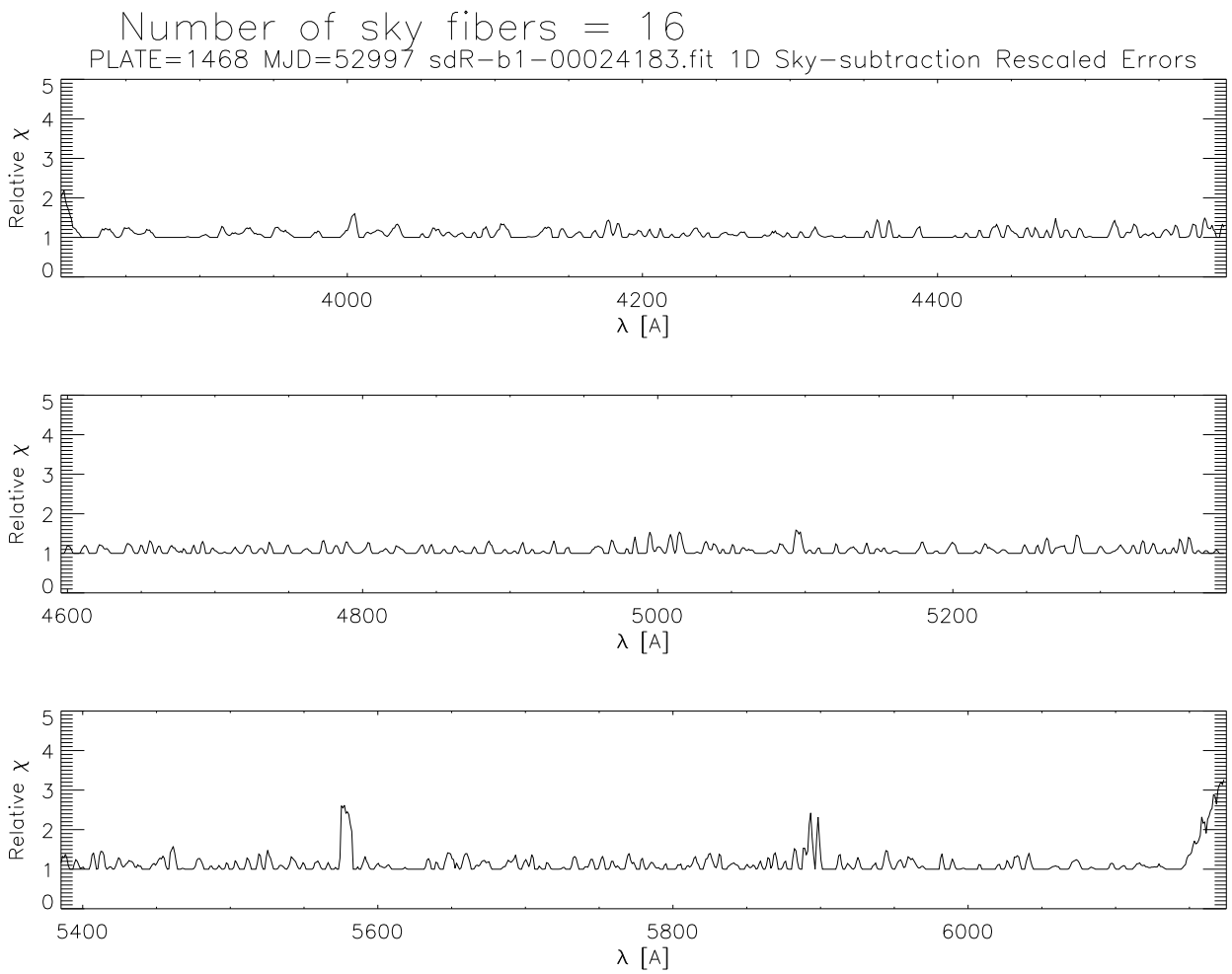

0.50
0.45
0.40
0.35
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

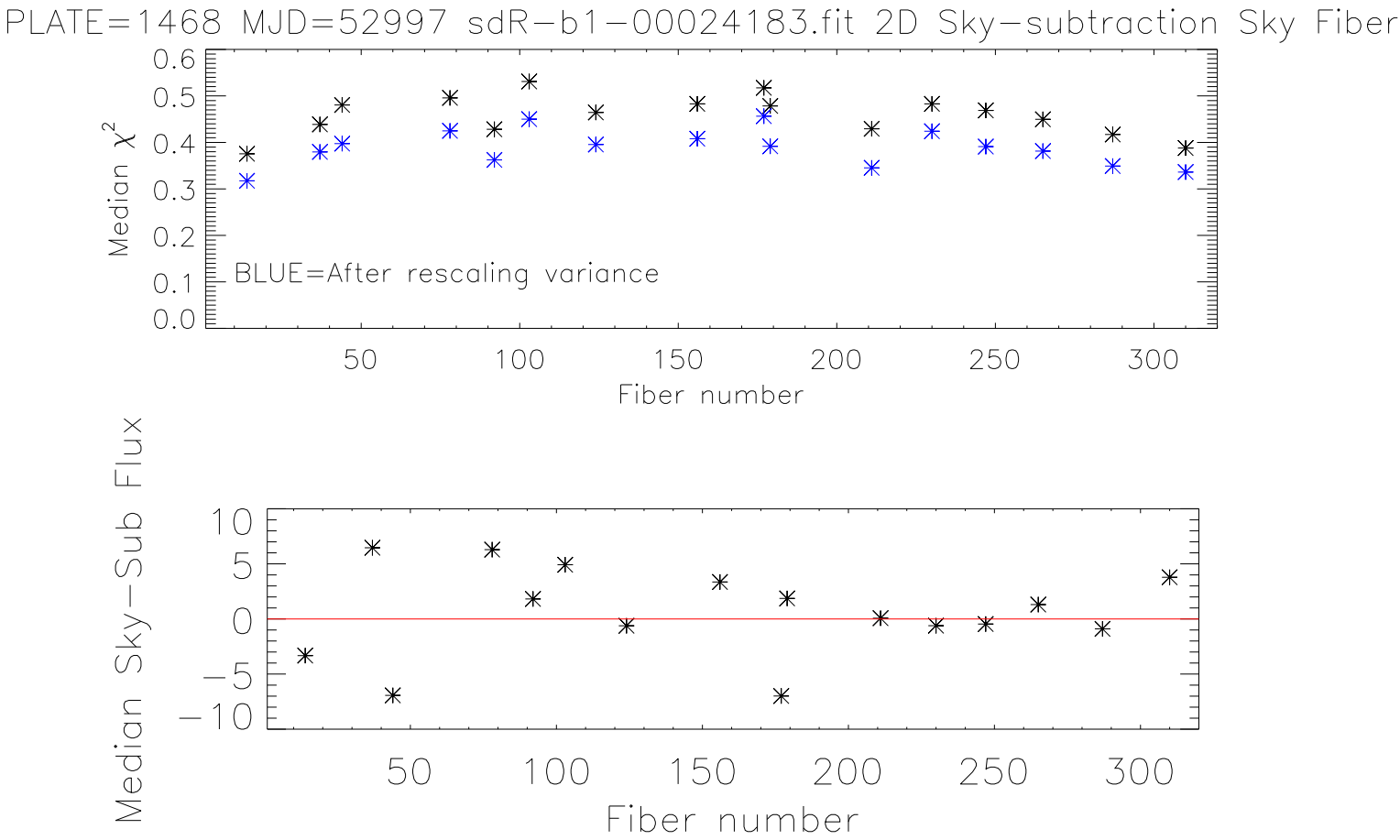

PLATE=1468 MJD=52997 Smooth superflat for sdR-b1-00024183.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

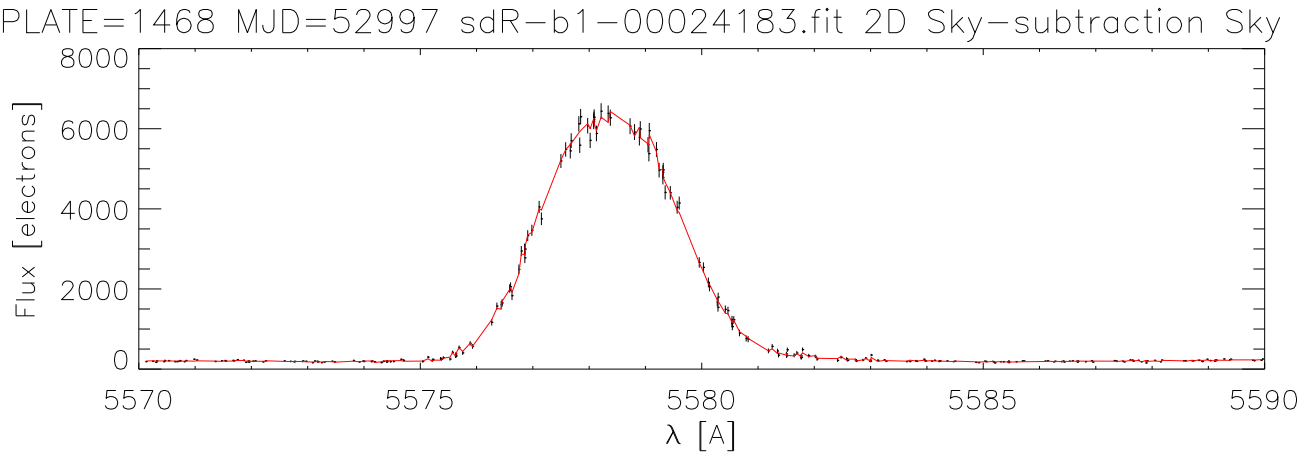

PLATE=1468 MJD=52997 sdR-b1-00024183.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

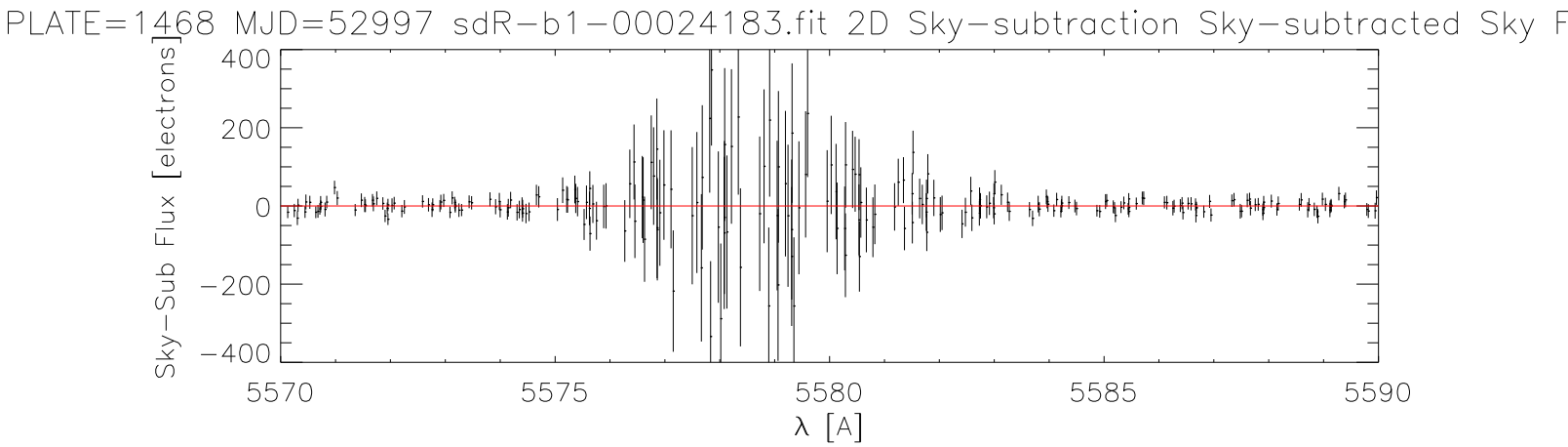

PLATE=1468 MJD=52997 sdR-b1-00024183.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

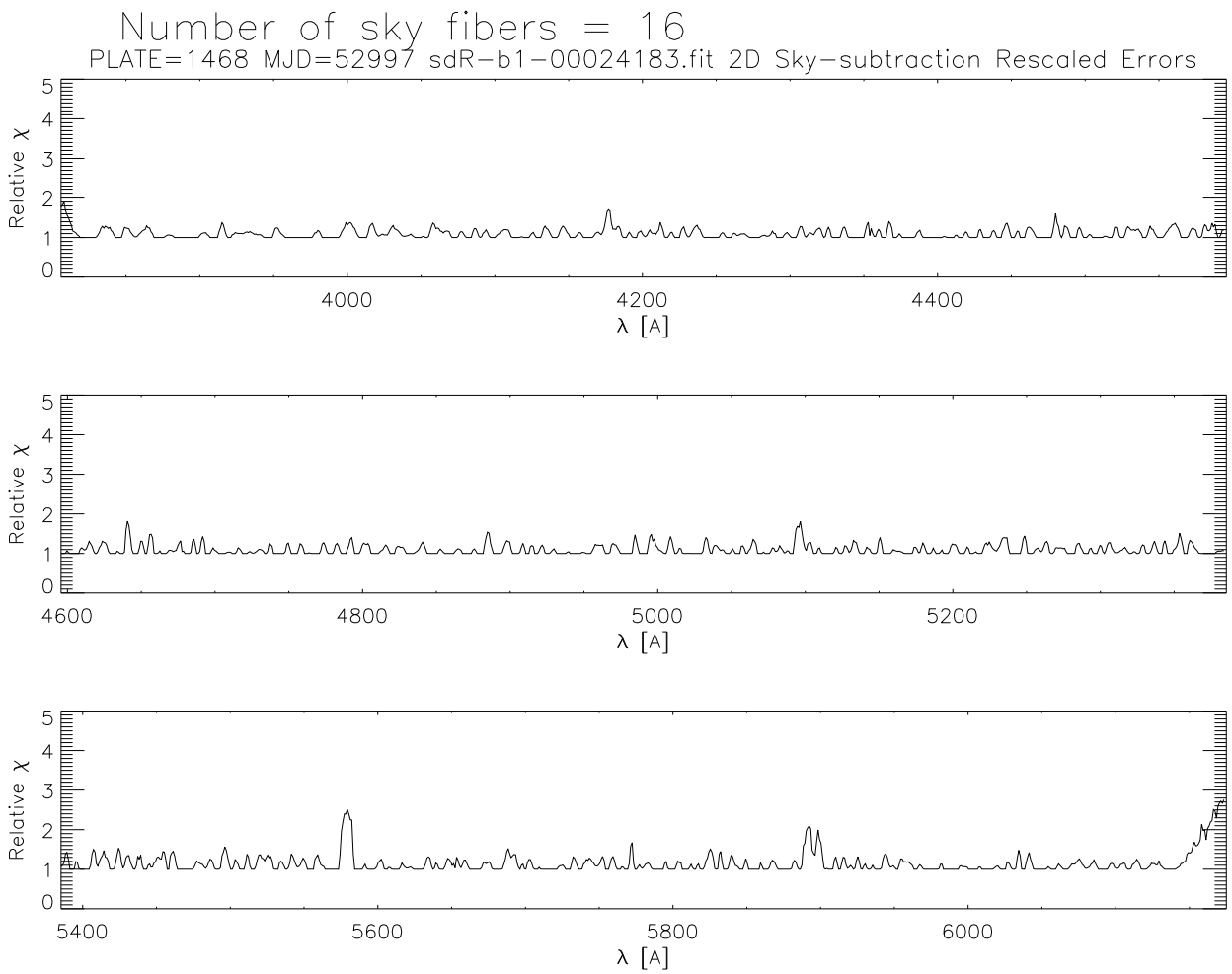

PLATE=1468 MJD=52997 sdR-b1-00024183.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

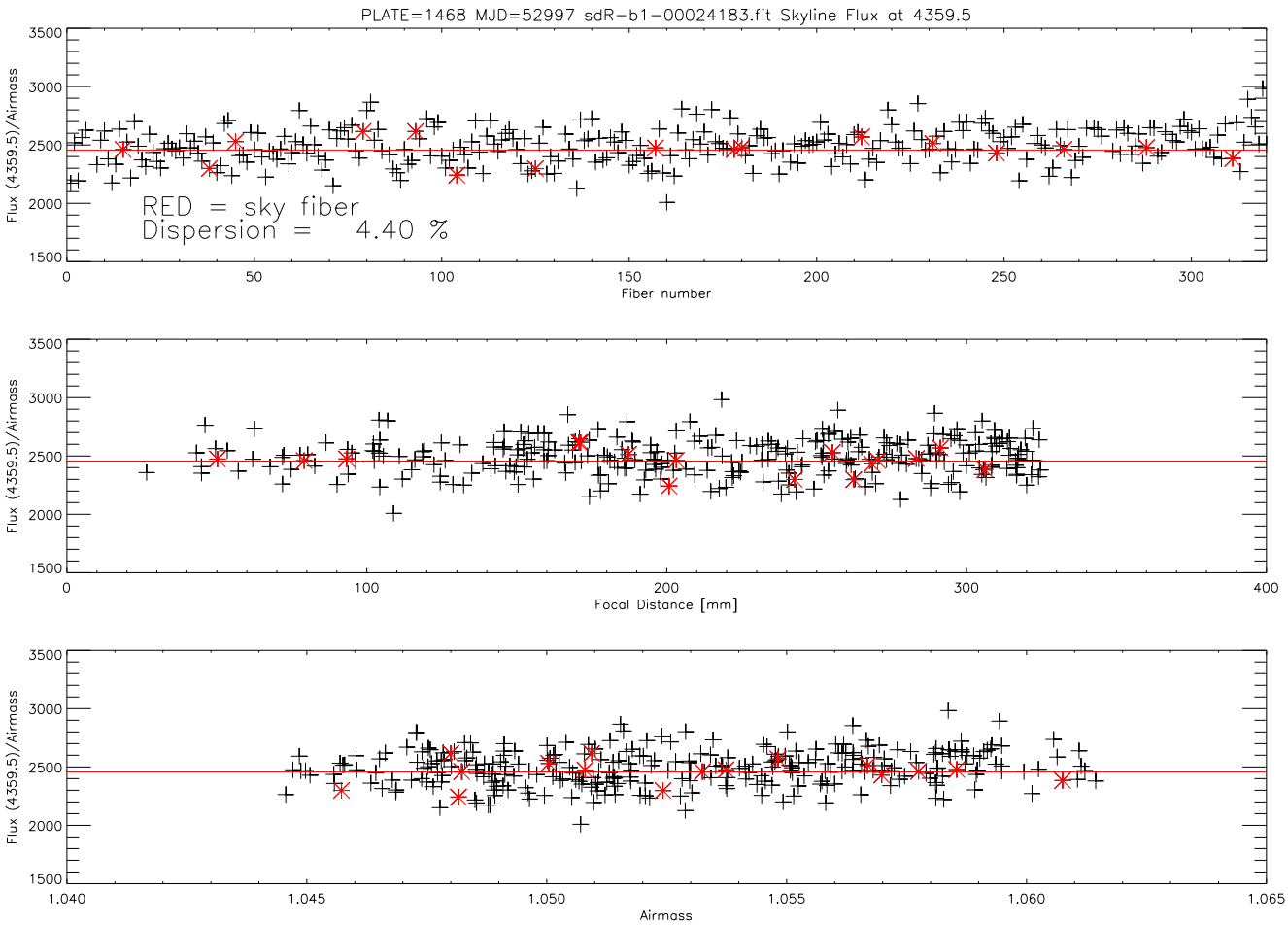

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b1-00024183.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

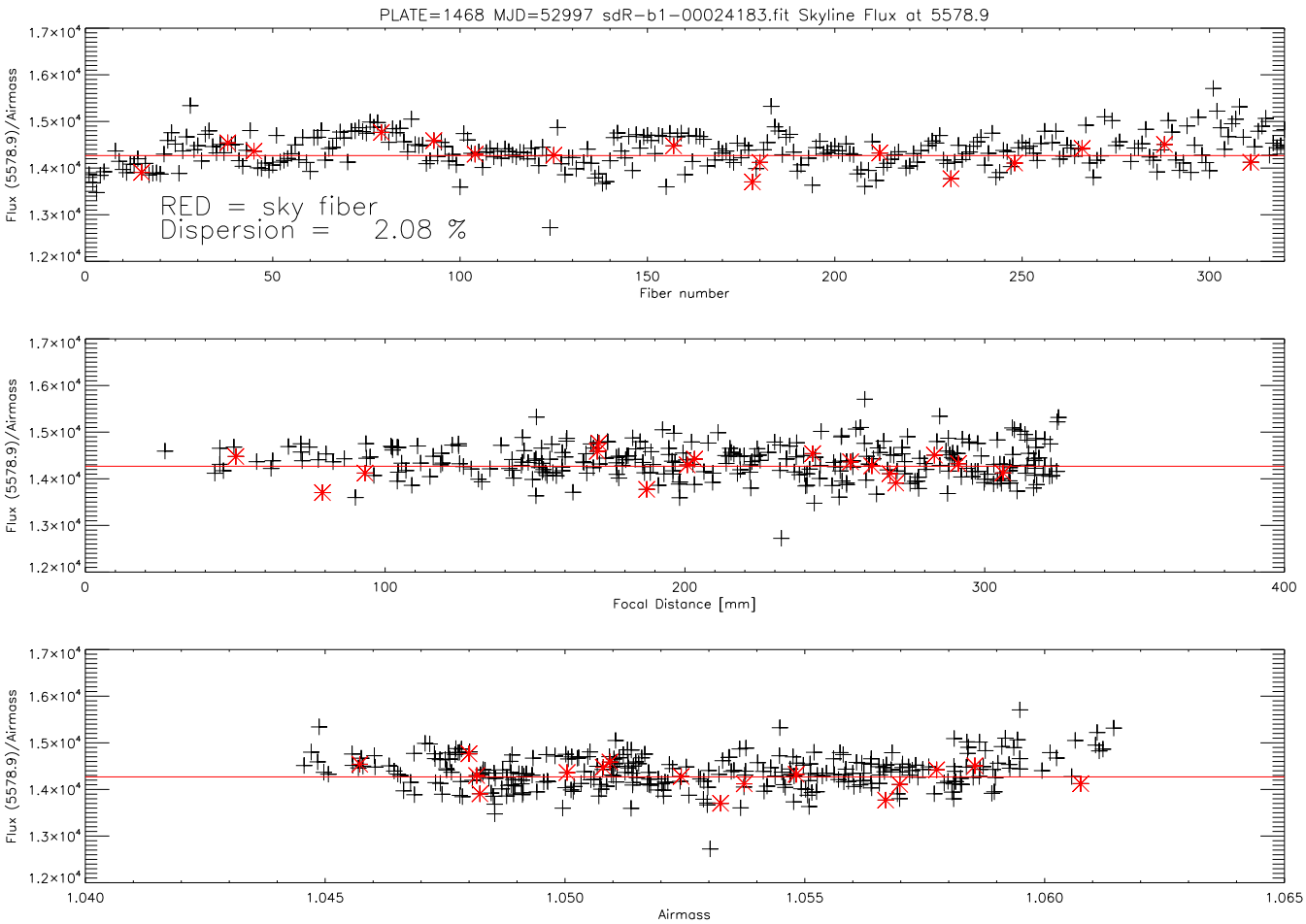

PLATE=1468 MJD=52997 sdR-b1-00024183.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

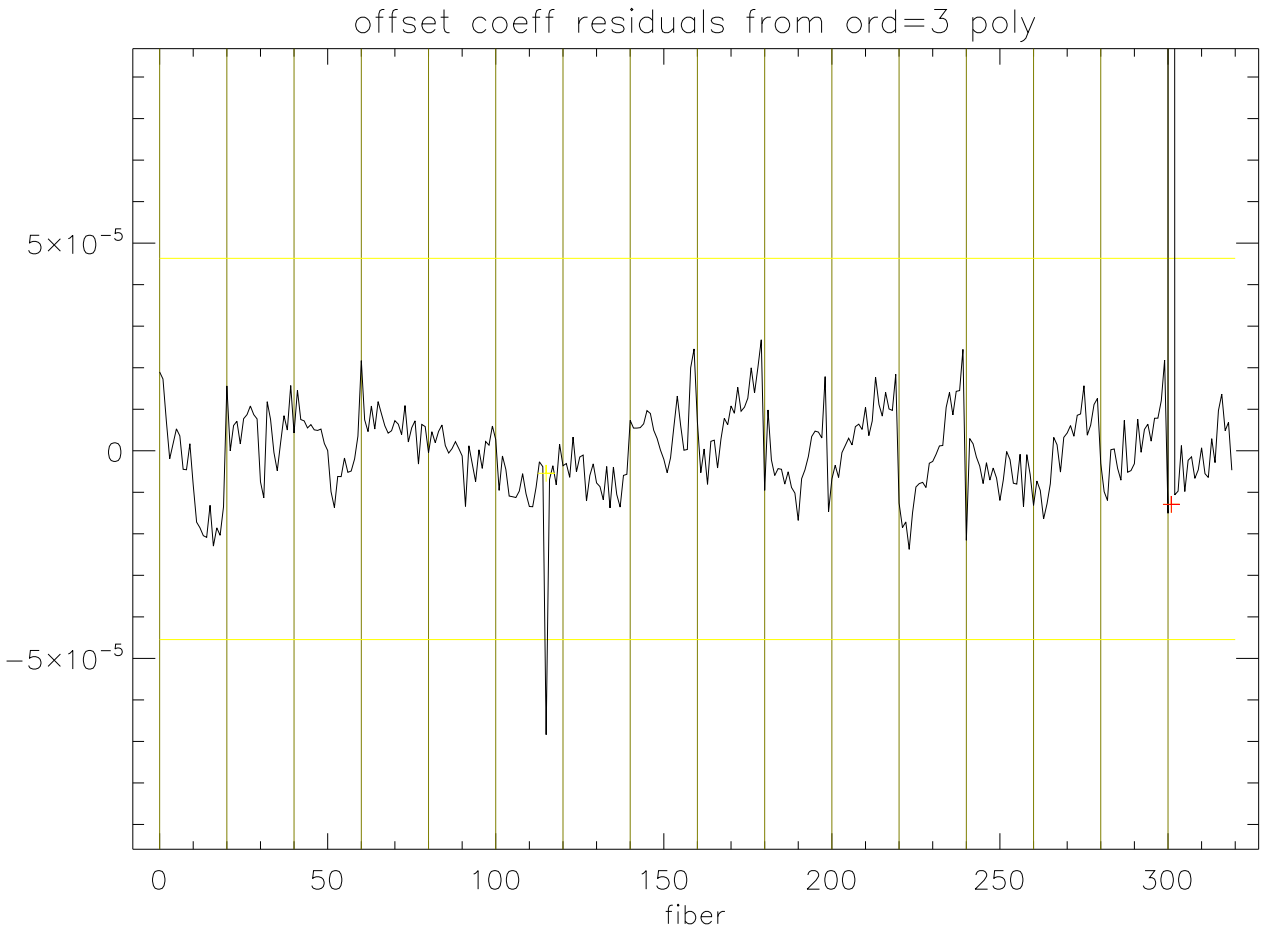

PLATE=1468 MJD=52997 sdR-b1-00024183.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

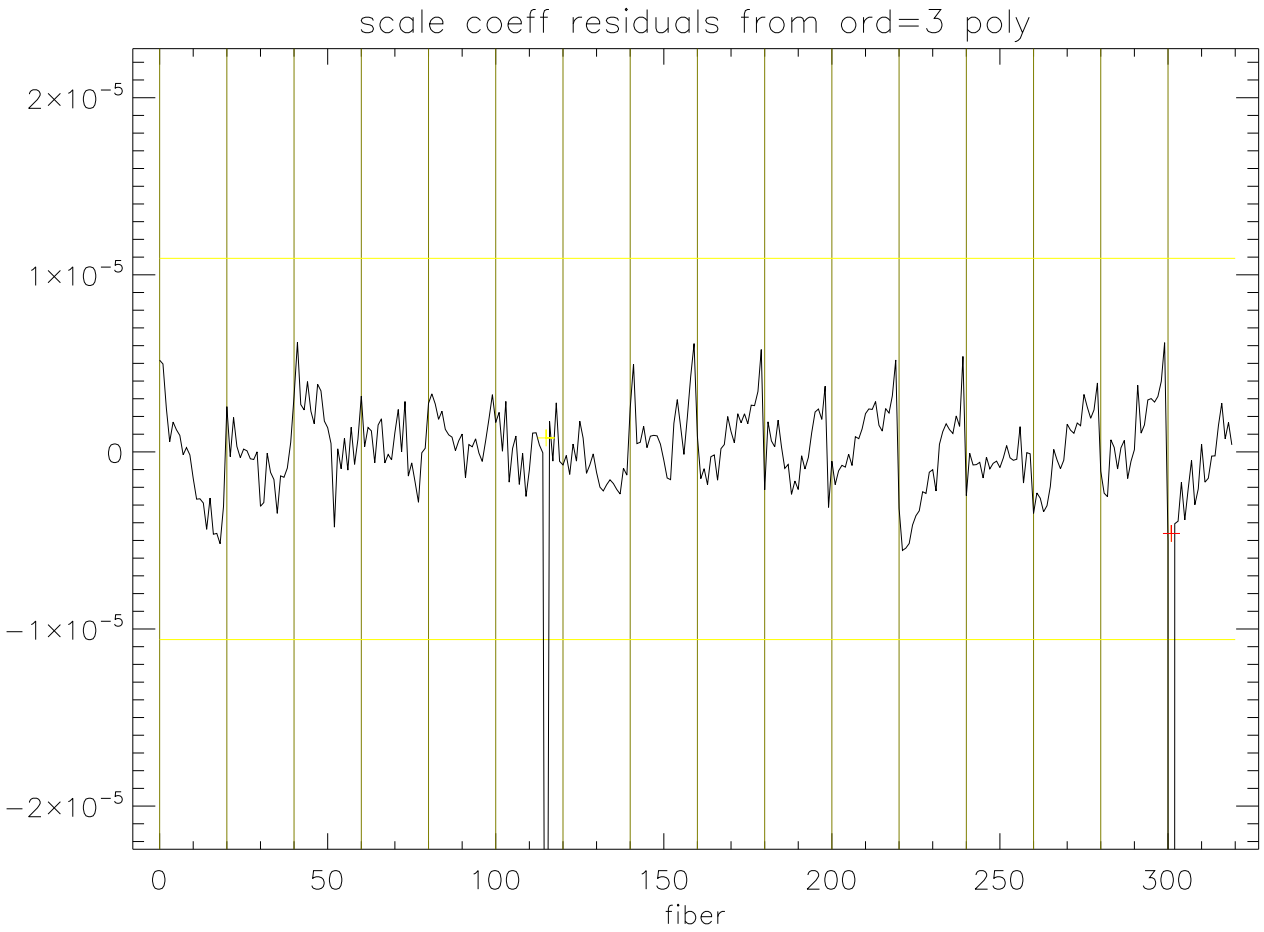

PLATE=1468 MJD=52997 sdR-b1-00024183.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

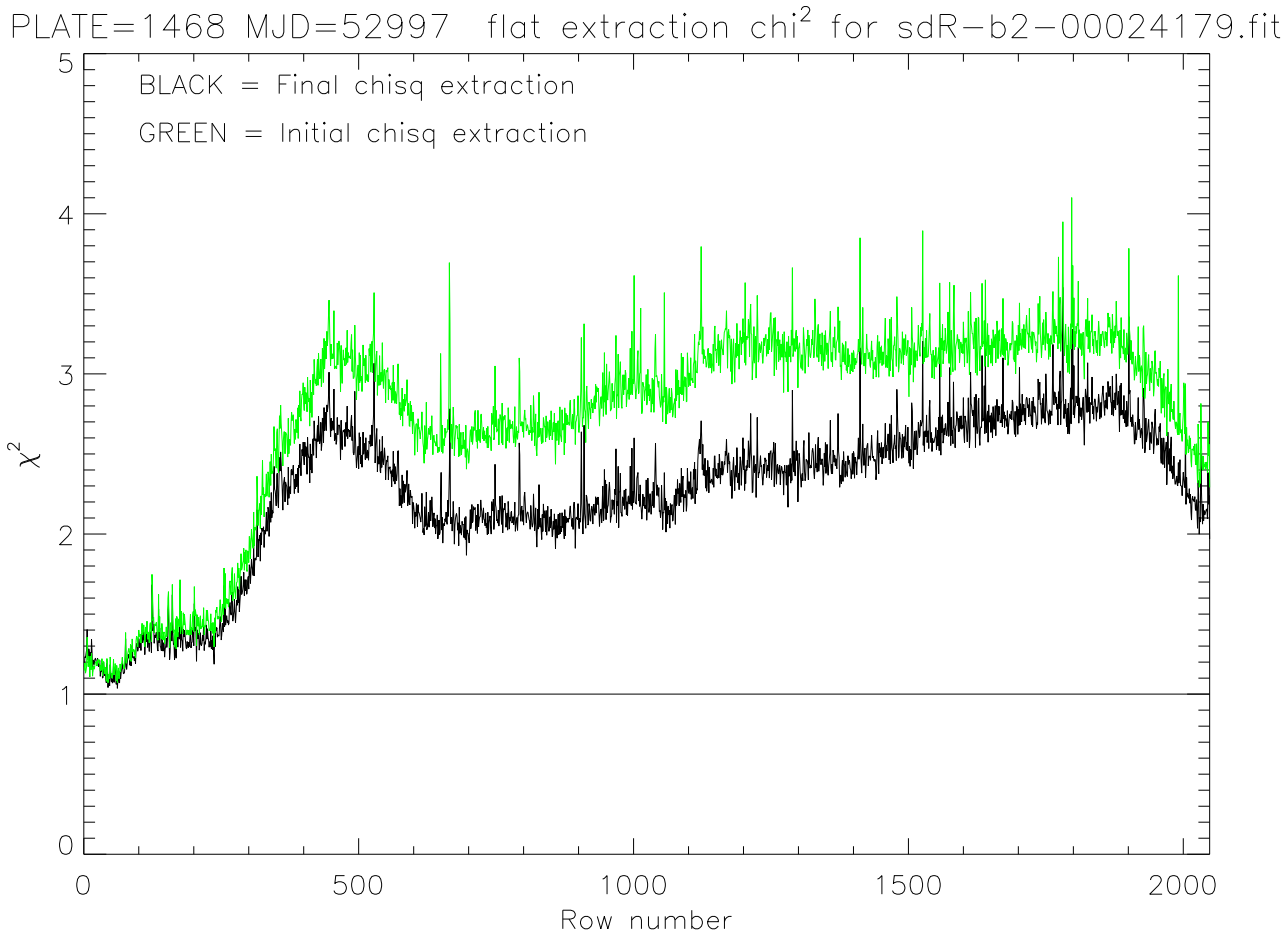

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b1-00024183.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

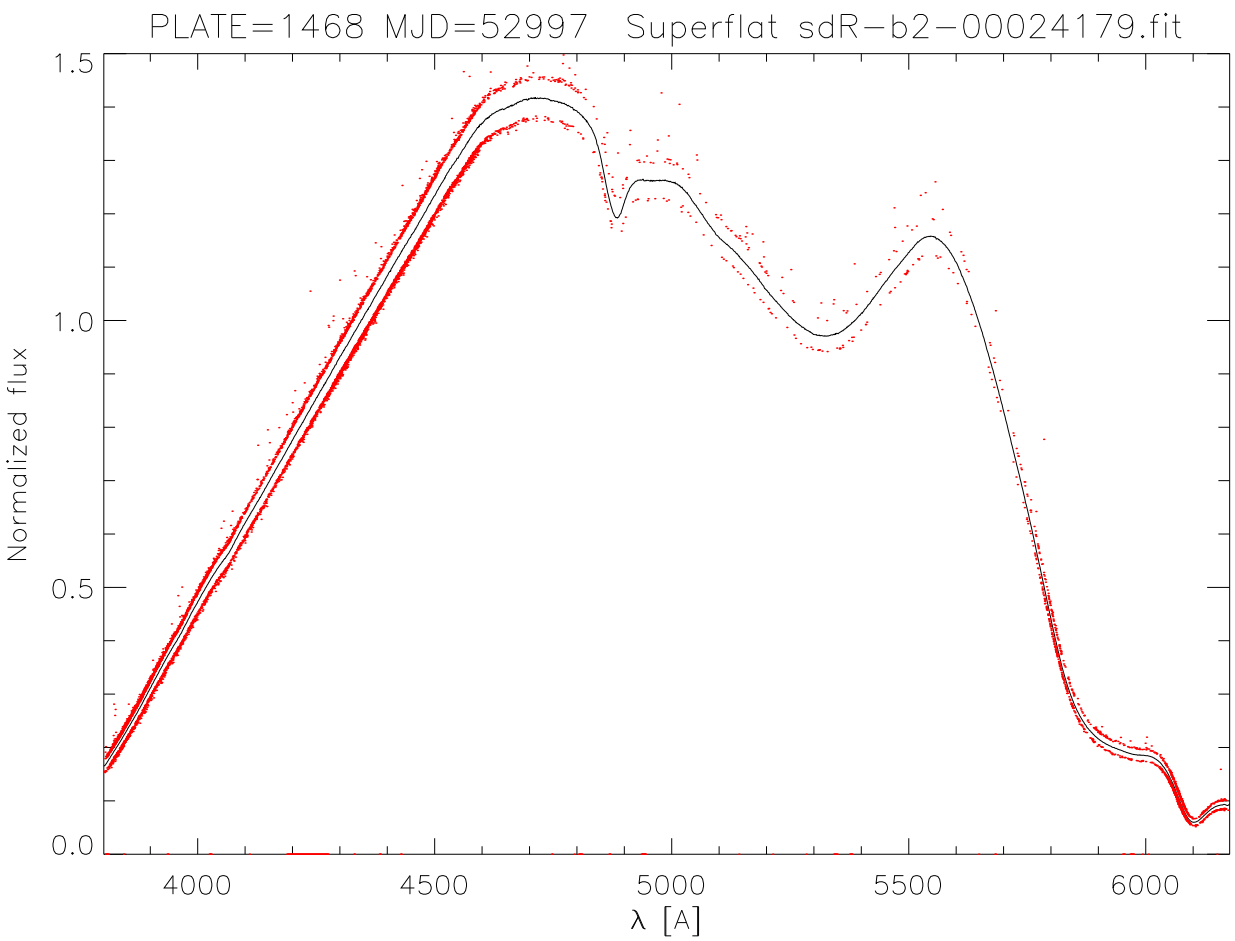

PLATE=1468 MJD=52997 sdR-b1-00024183.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 4.40 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

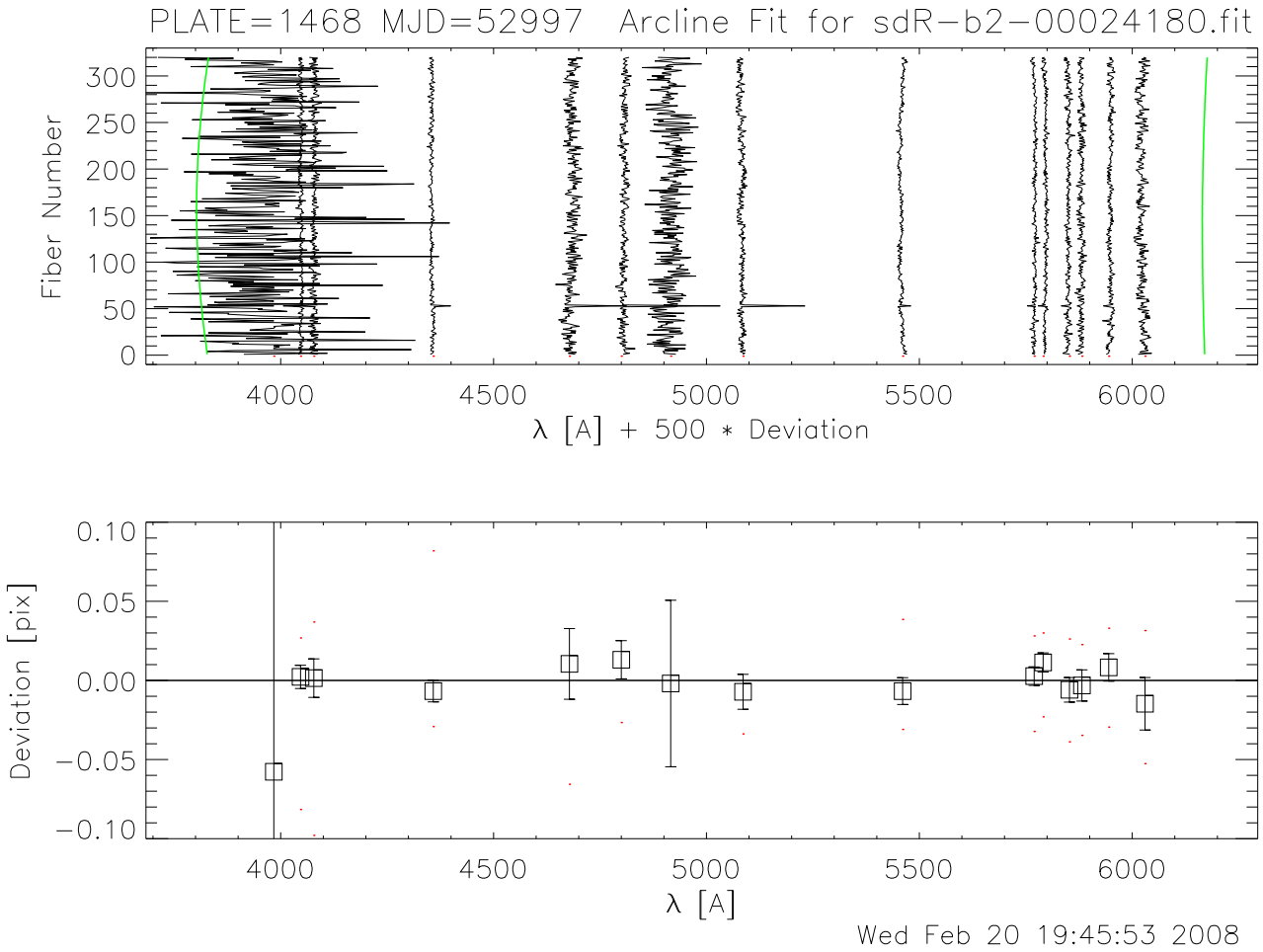

PLATE=1468 MJD=52997 sdR-b1-00024183.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.08 %
Fiber number
Focal Distance [mm]
Airmass

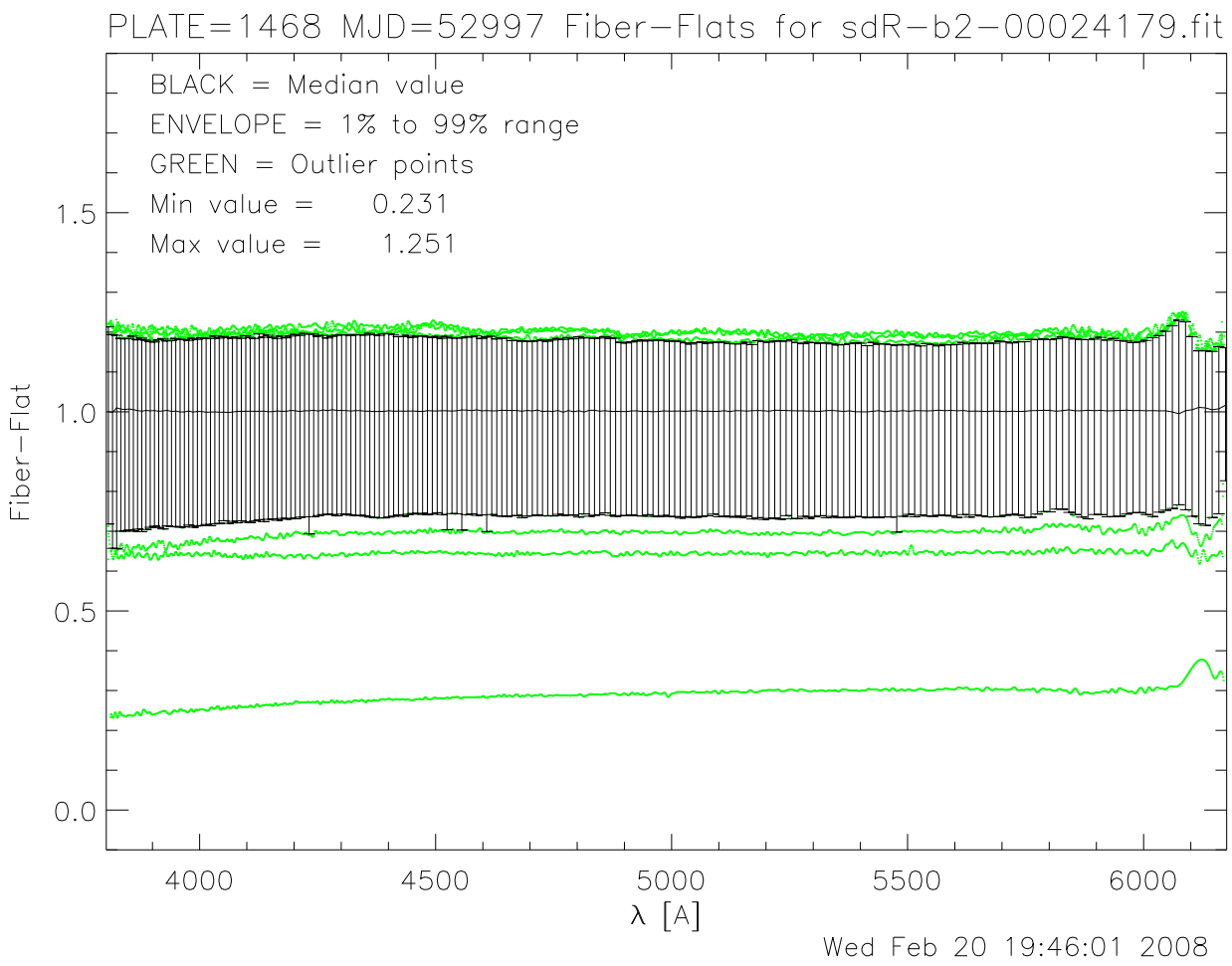

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

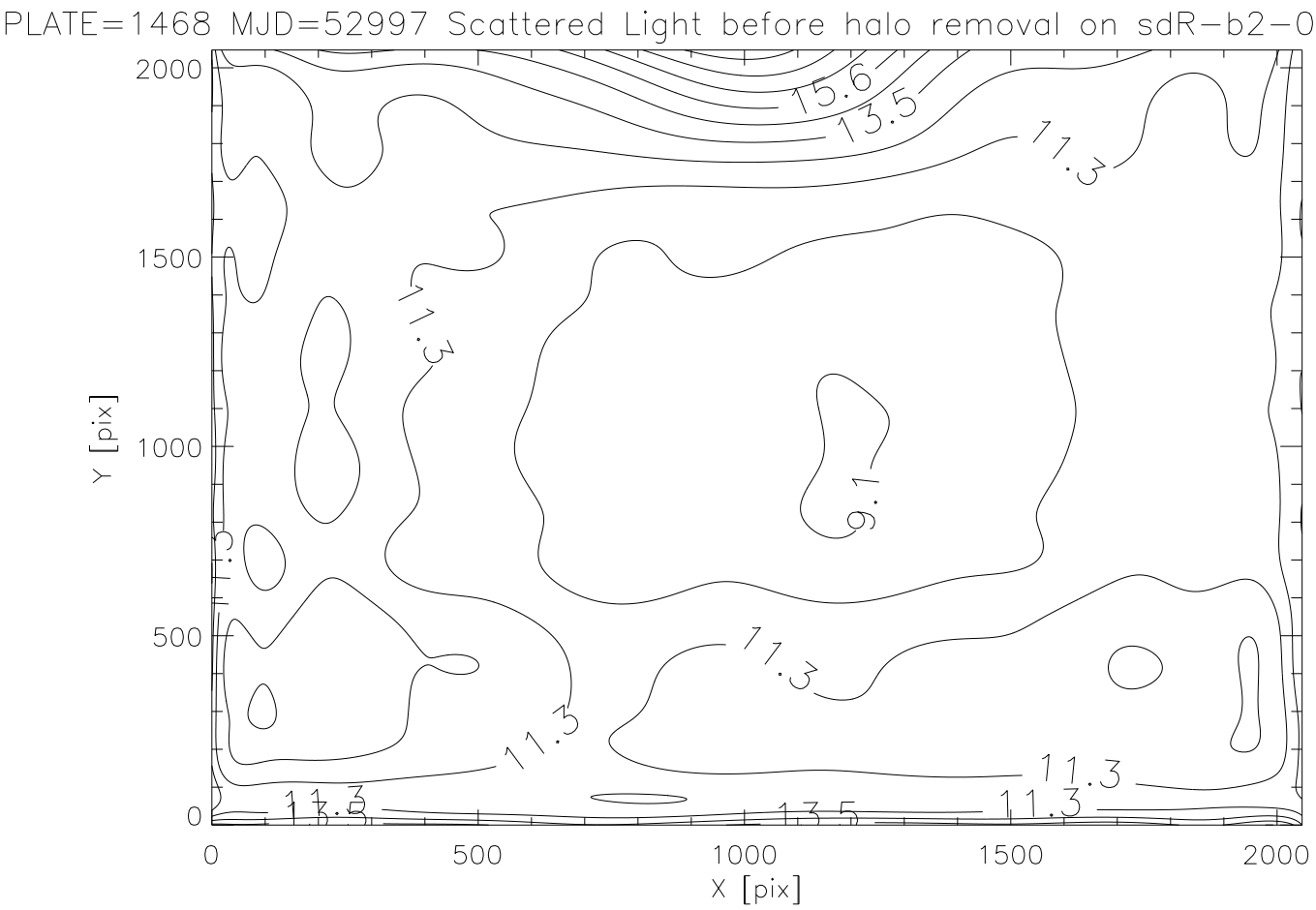

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

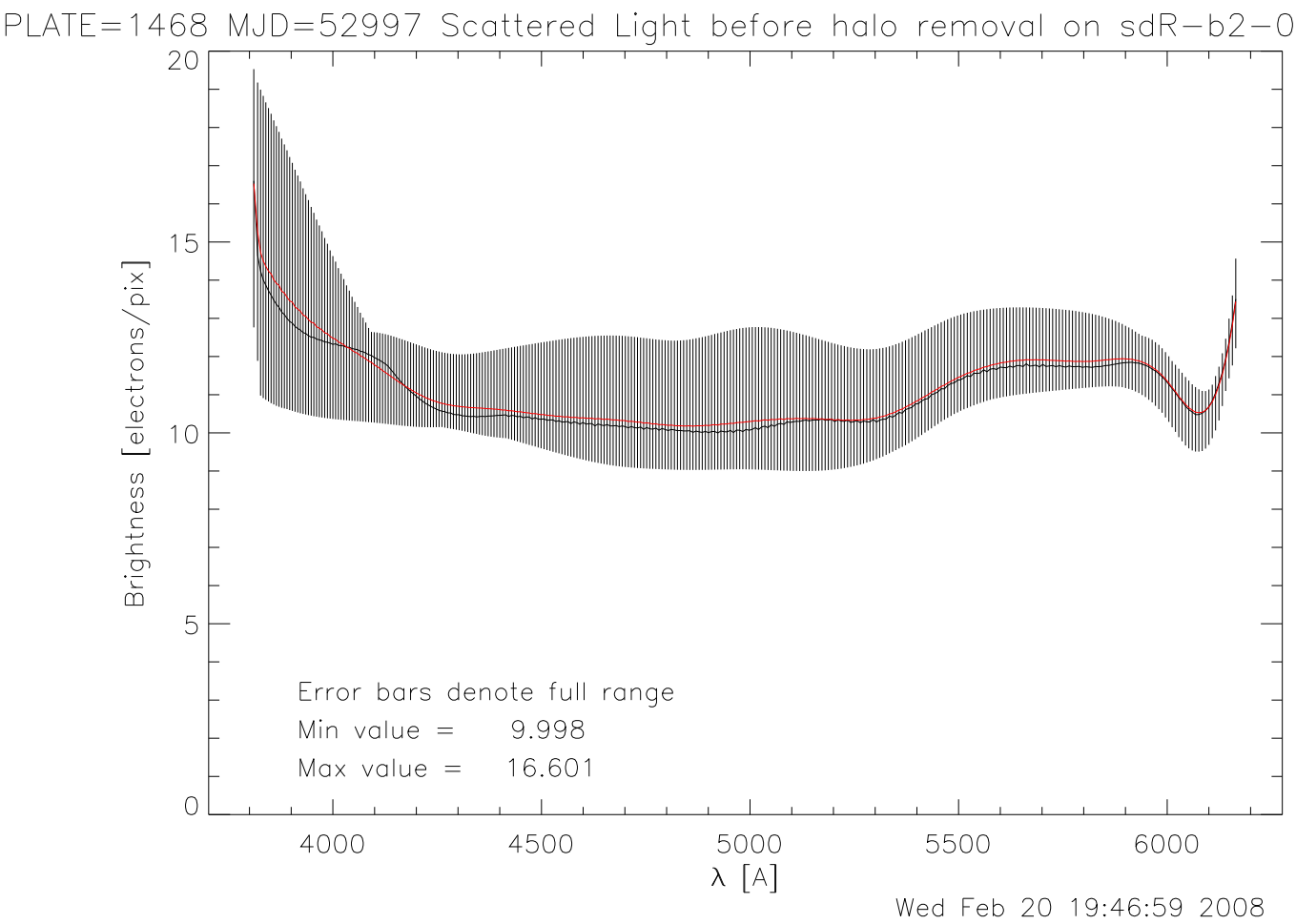

PLATE=1468 MJD=52997 flat extraction chi^2 for sdR−b2−00024179.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
0
500
1000
1500
2000

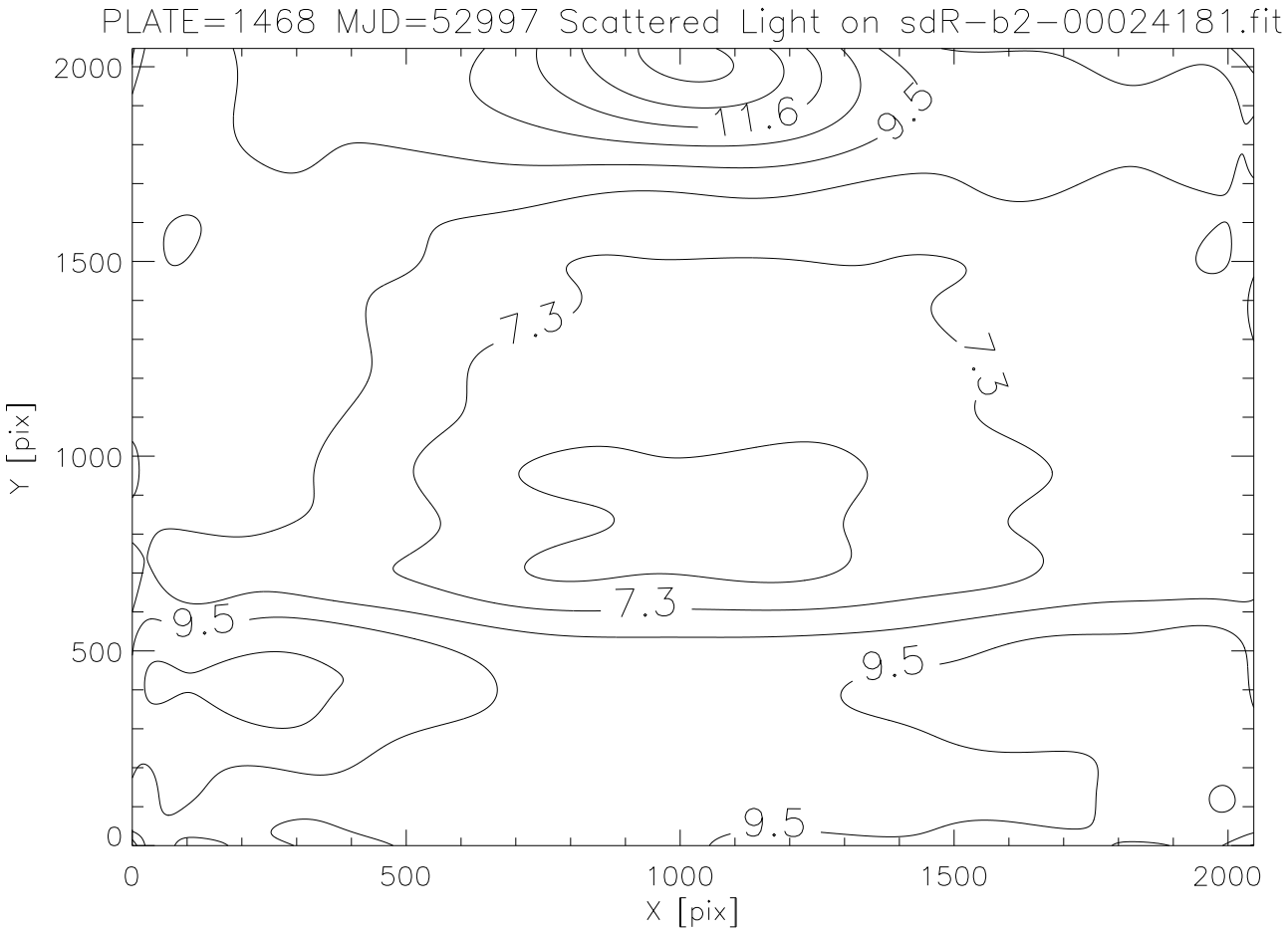

PLATE=1468 MJD=52997 Superflat sdR-b2-00024179.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

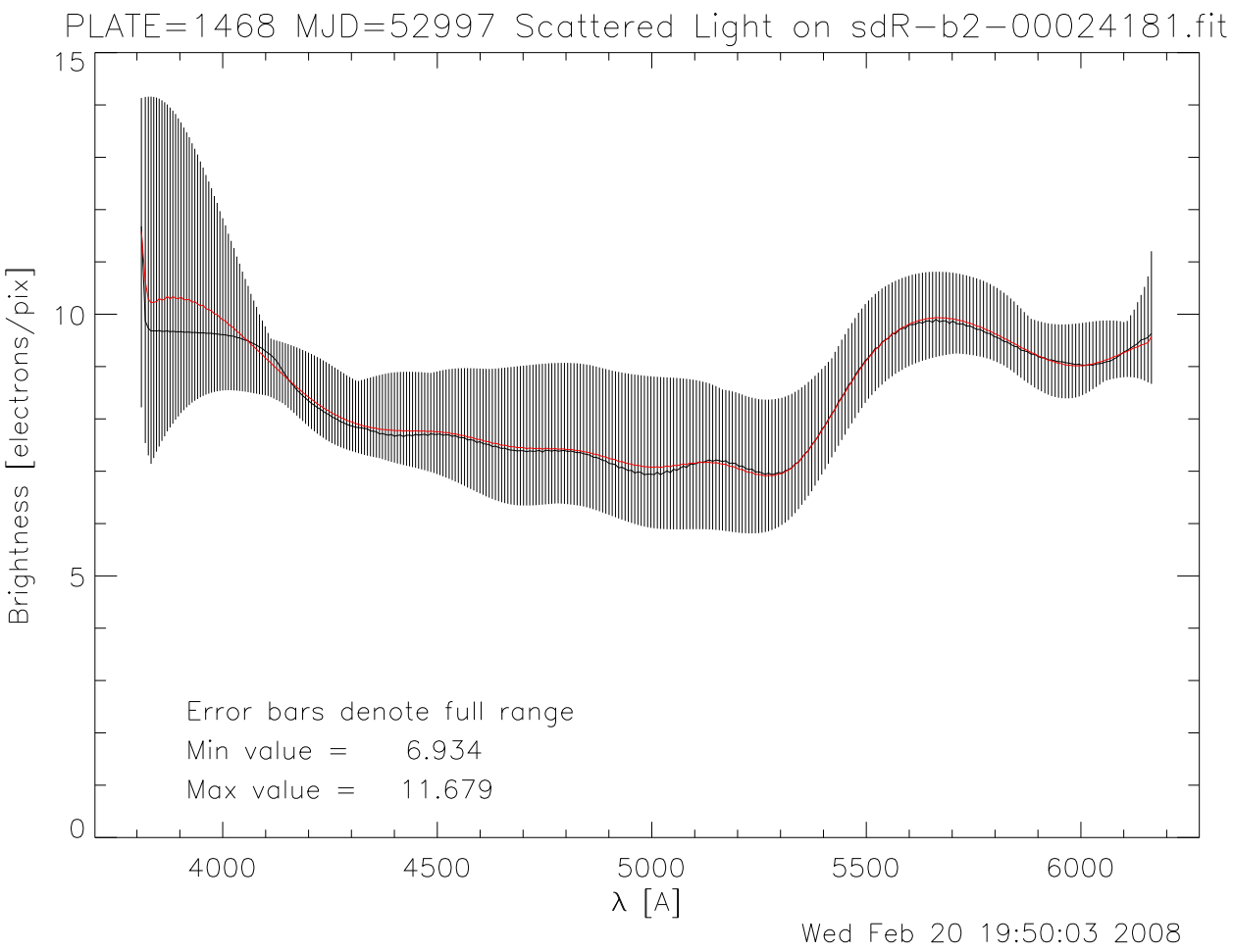

PLATE=1468 MJD=52997 Arcline Fit for sdR-b2-00024180.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:45:53 2008

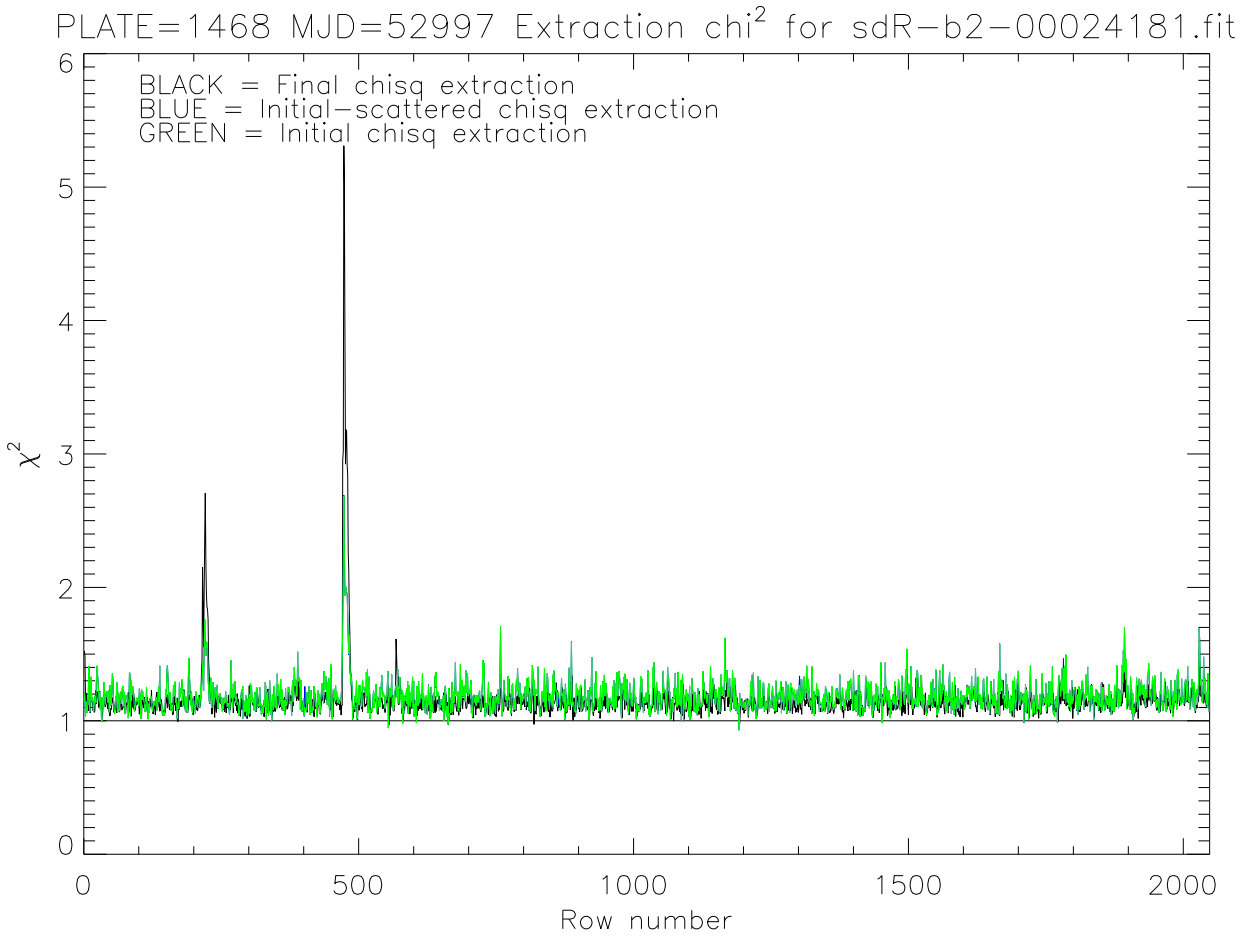

PLATE=1468 MJD=52997 Fiber-Flats for sdR-b2-00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.231
Max value = 1.251
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:46:01 2008

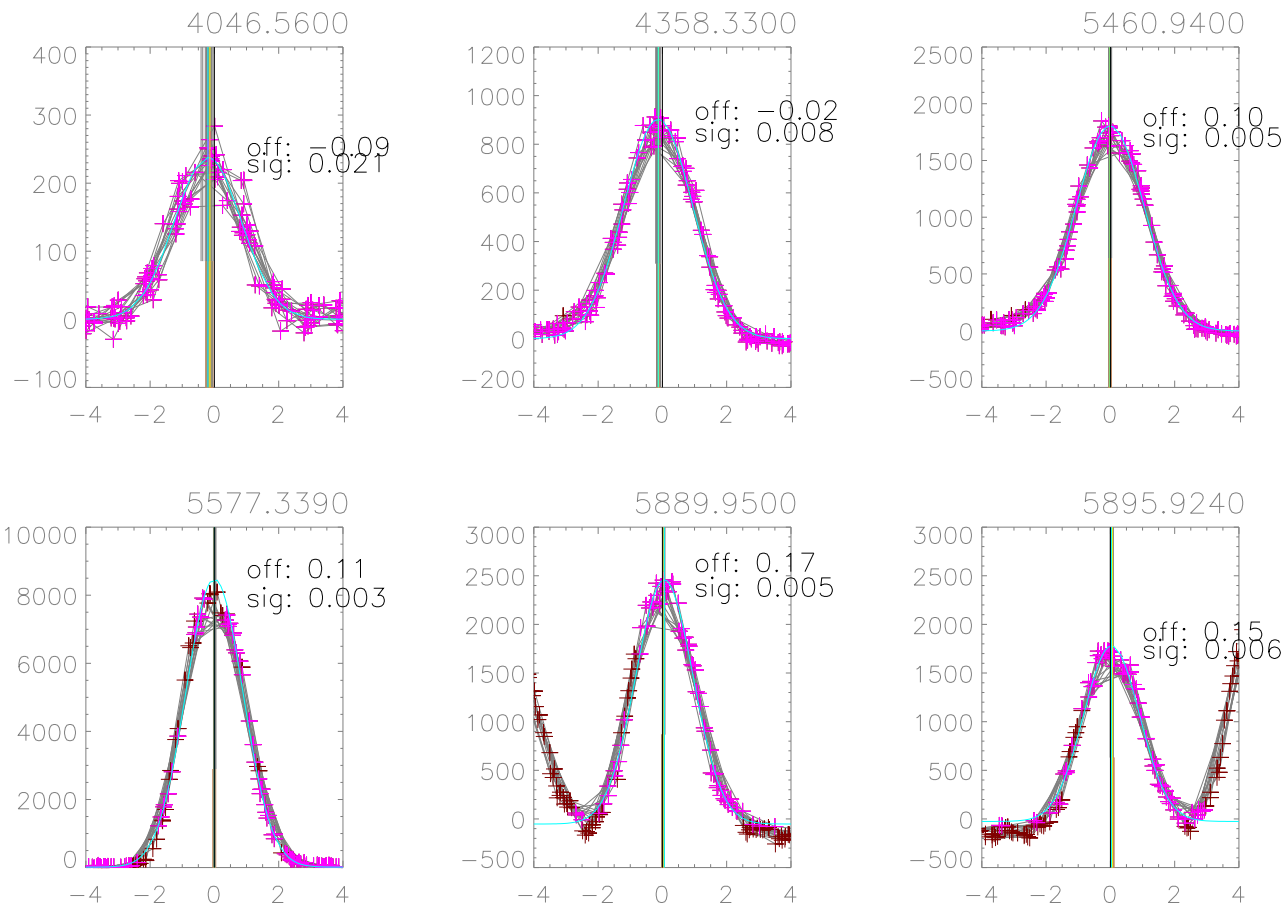

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR−b2−00024181.f
15.6
13.5
11.3
11.3
9.1
11.3
11.3
11.3
11.3
11.3
13.5
11.3
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

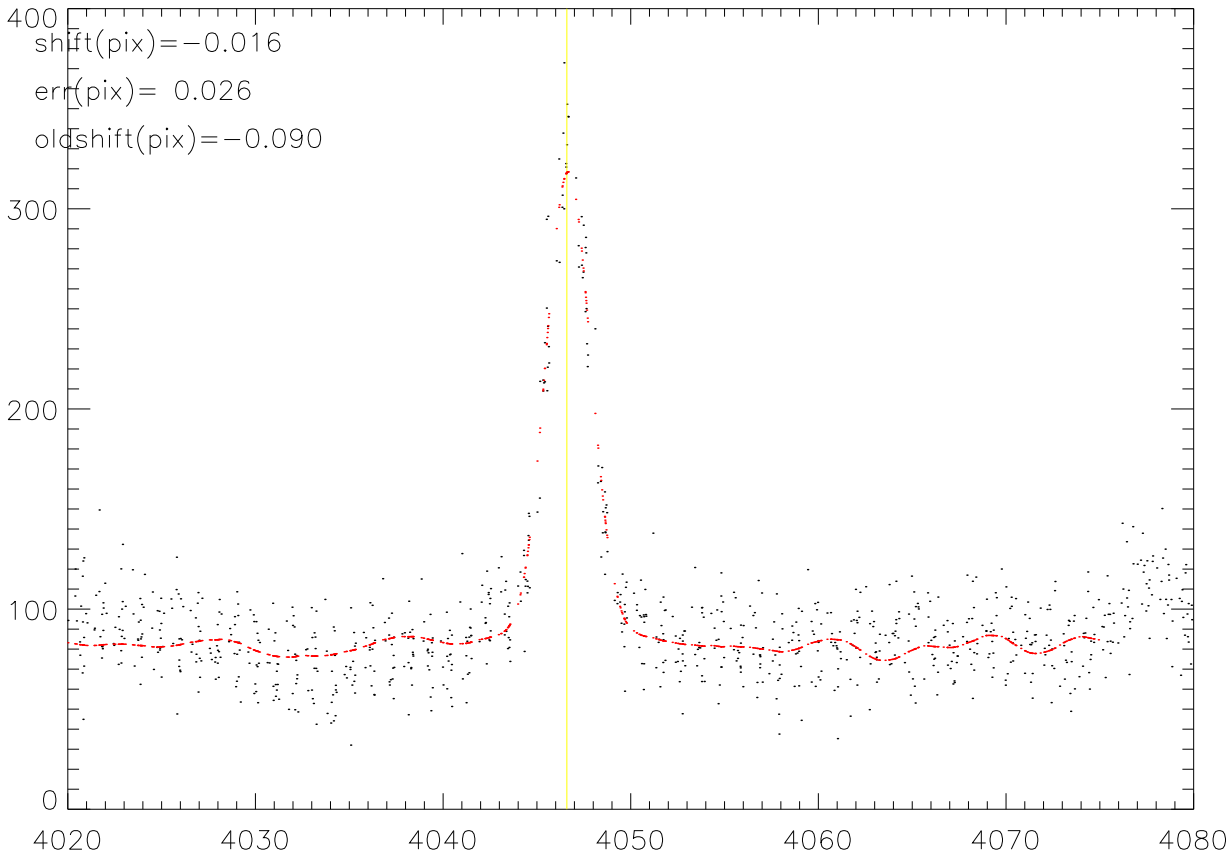

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b2-00024181.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.998
Max value = 16.601
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:46:59 2008

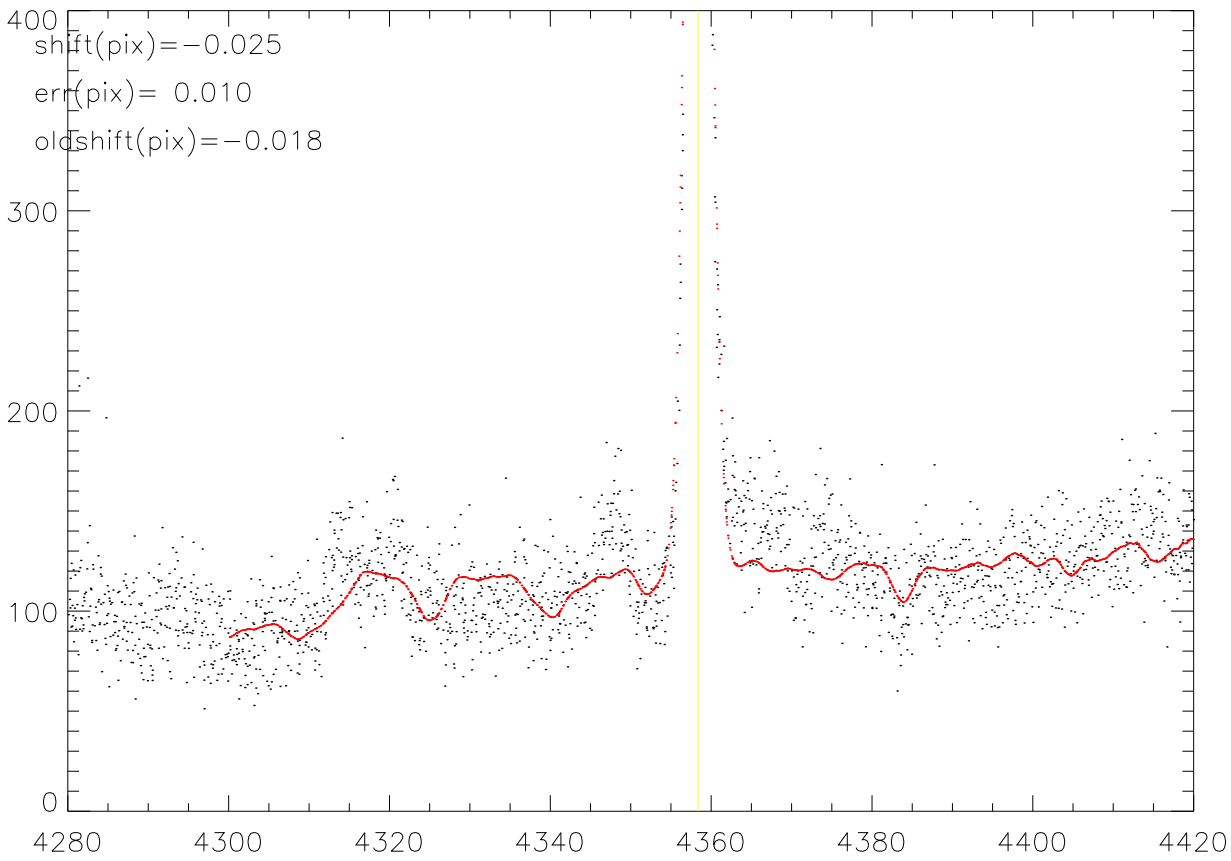

PLATE=1468 MJD=52997 Scattered Light on sdR-b2-00024181.fit
11.6
9.5
0
7.3
7.3
9.5
7.3
9.5
0
9.5
0
500
1000
1500
2000
Y [pix]
X [pix]

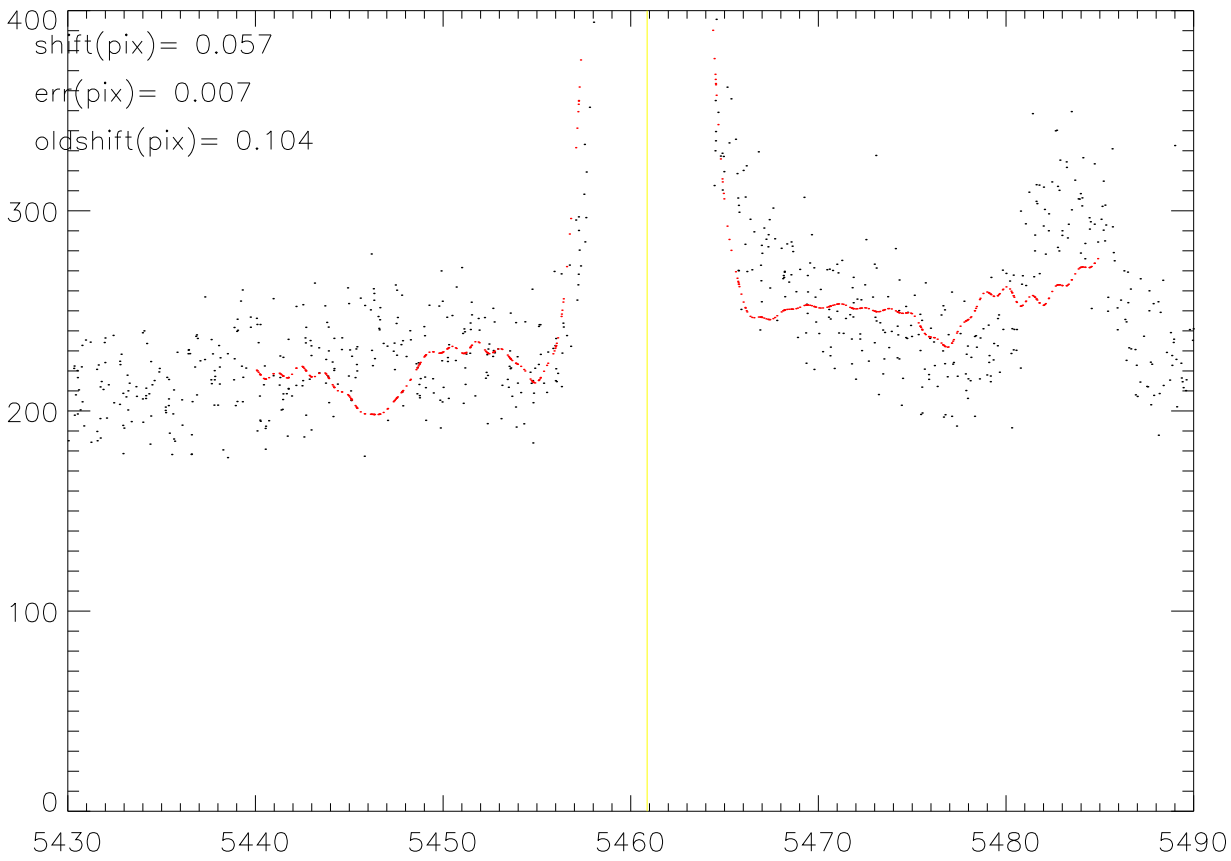

PLATE=1468 MJD=52997 Scattered Light on sdR-b2-00024181.fit
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 6.934
Max value = 11.679
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:50:03 2008

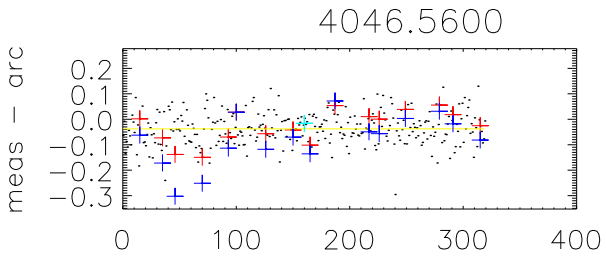

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-b2-00024181.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

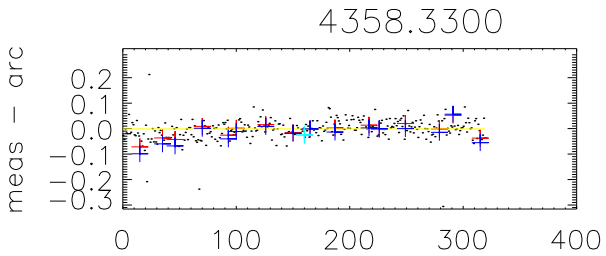

4046.5600
off: −0.09
sig: 0.021
4358.3300
off: −0.02
sig: 0.008
5460.9400
off: 0.10
sig: 0.005
5577.3390
off: 0.11
sig: 0.003
5889.9500
off: 0.17
sig: 0.005
5895.9240
off: 0.15
sig: 0.006

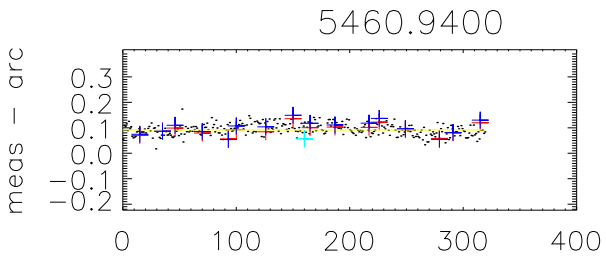

shift(pix)=−0.016
err(pix)= 0.026
oldshift(pix)=−0.090
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

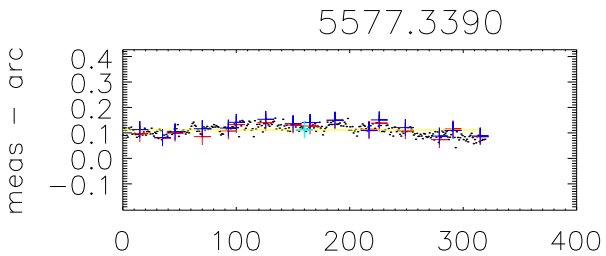

shift(pix)=−0.025
err(pix)= 0.010
oldshift(pix)=−0.018
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

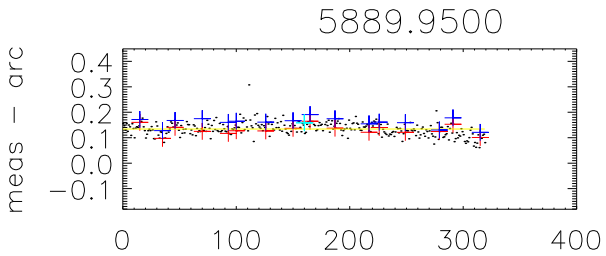

shift(pix)= 0.057
err(pix)= 0.007
oldshift(pix)= 0.104
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

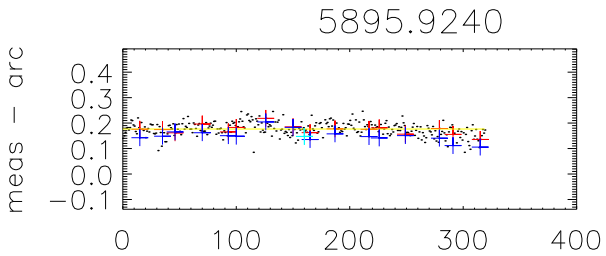

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

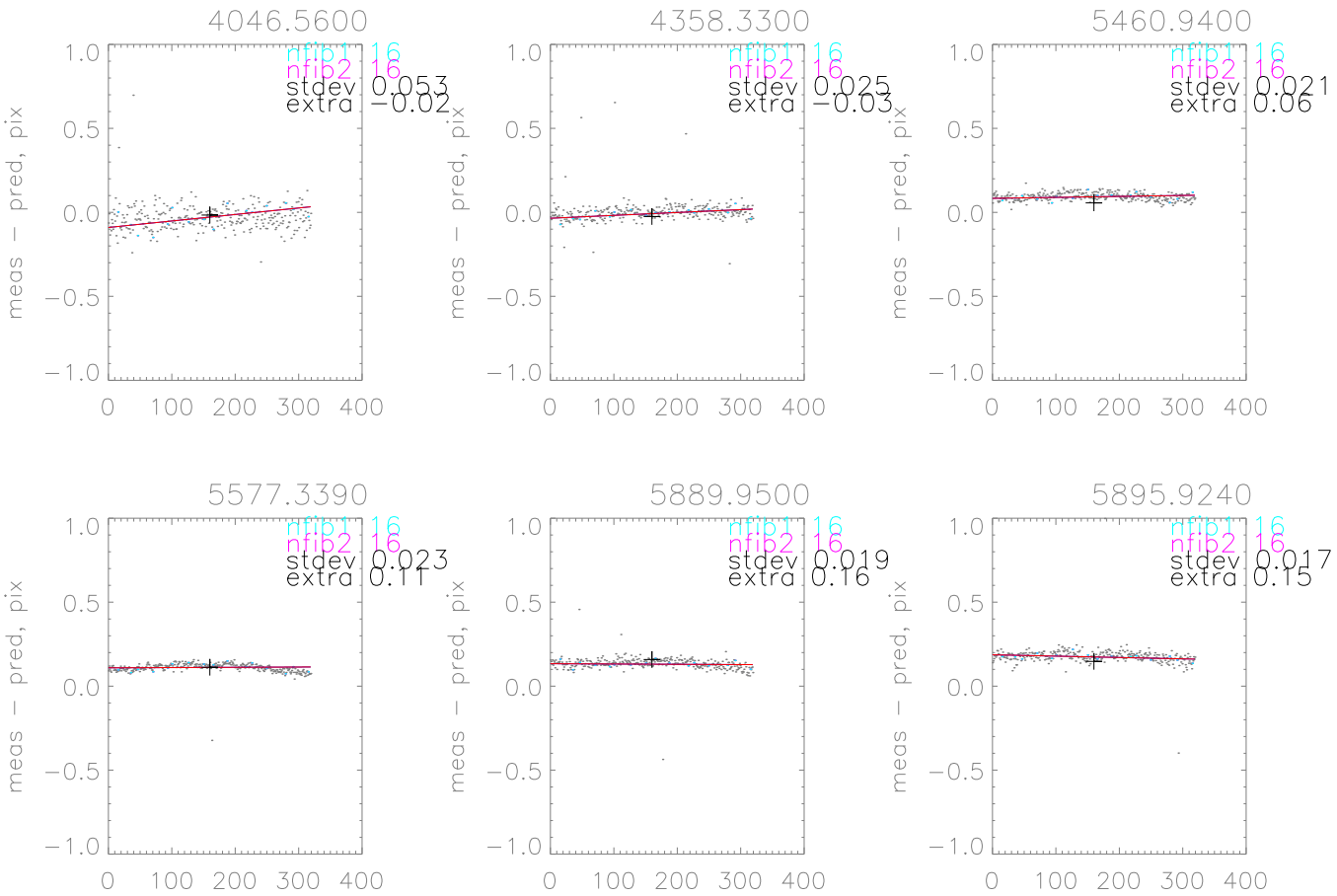

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

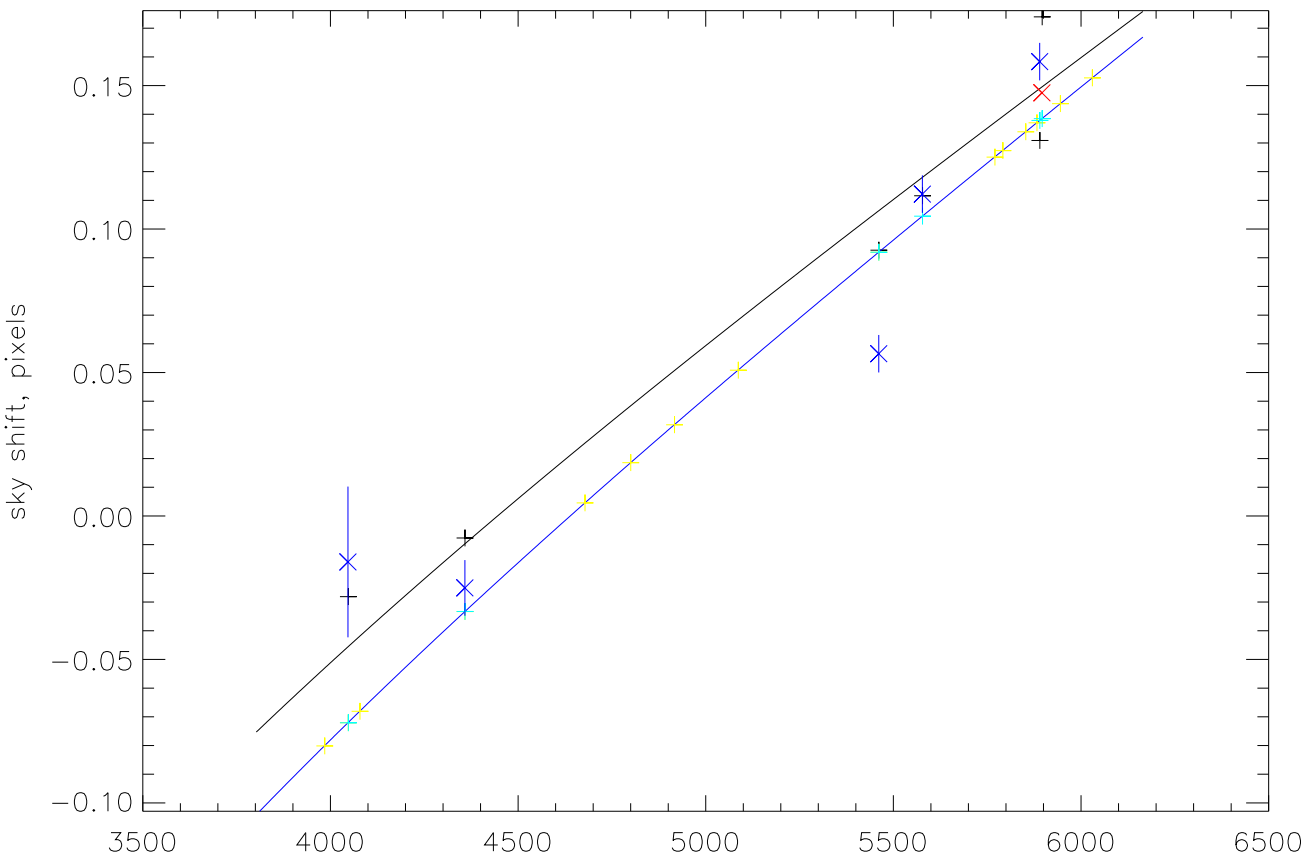

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

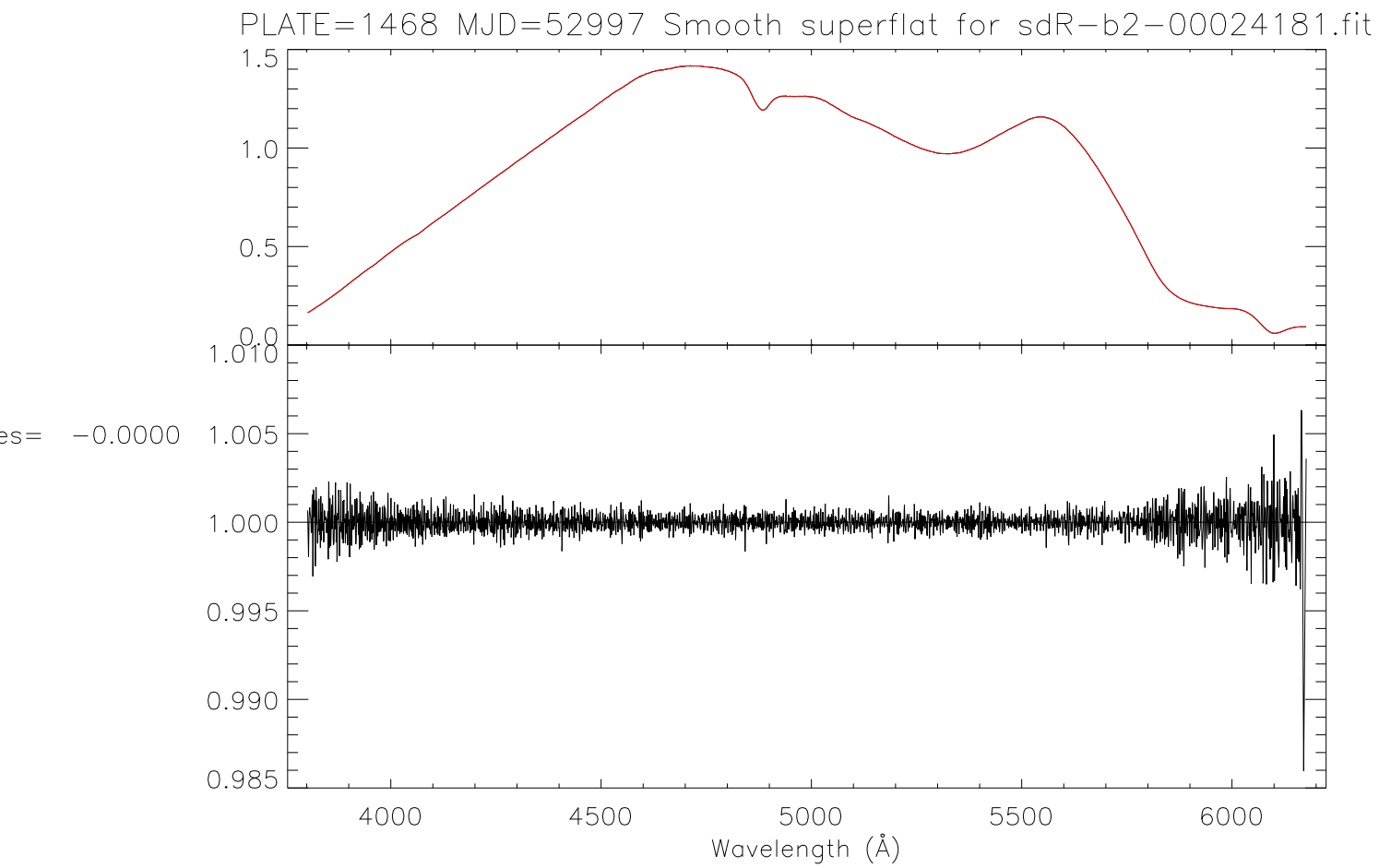

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

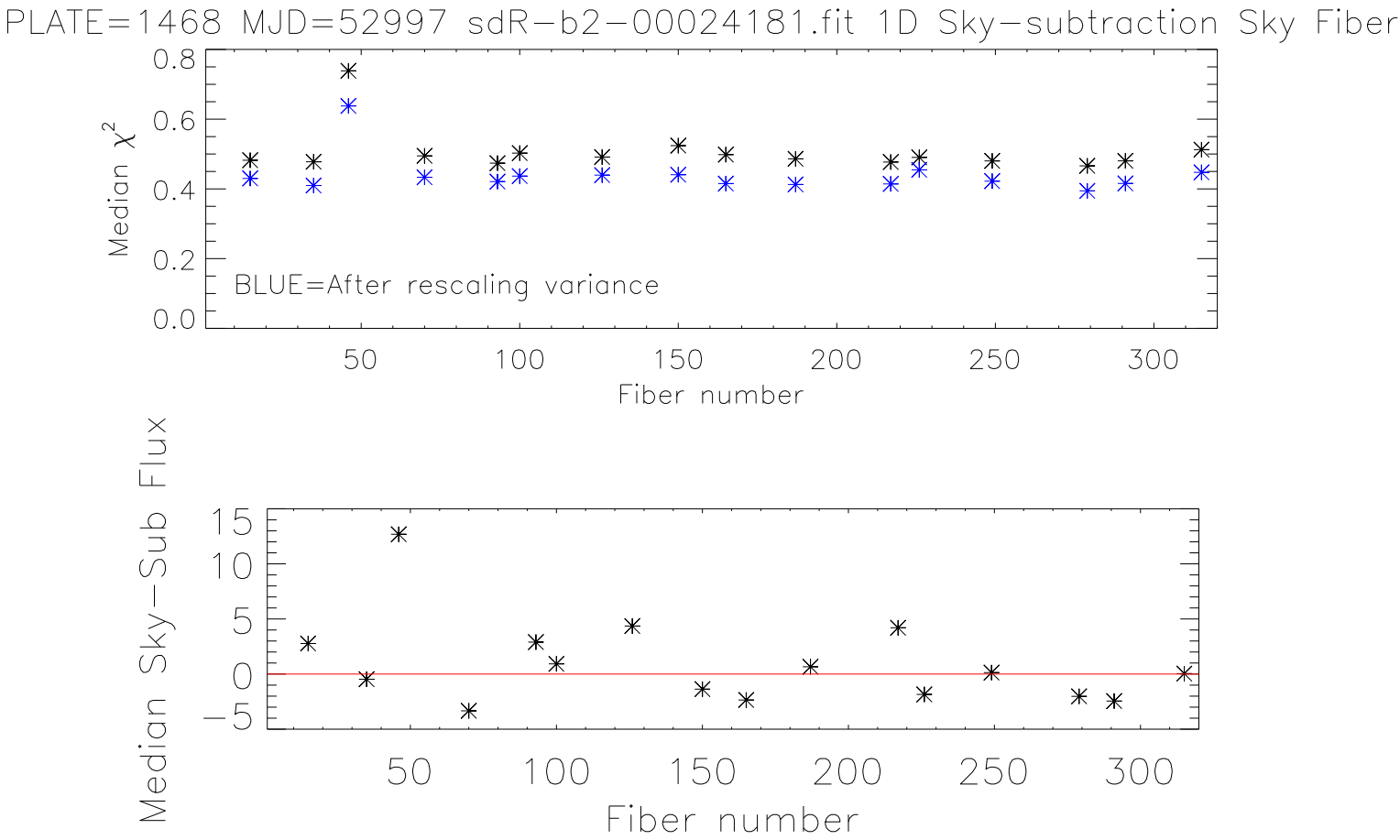

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

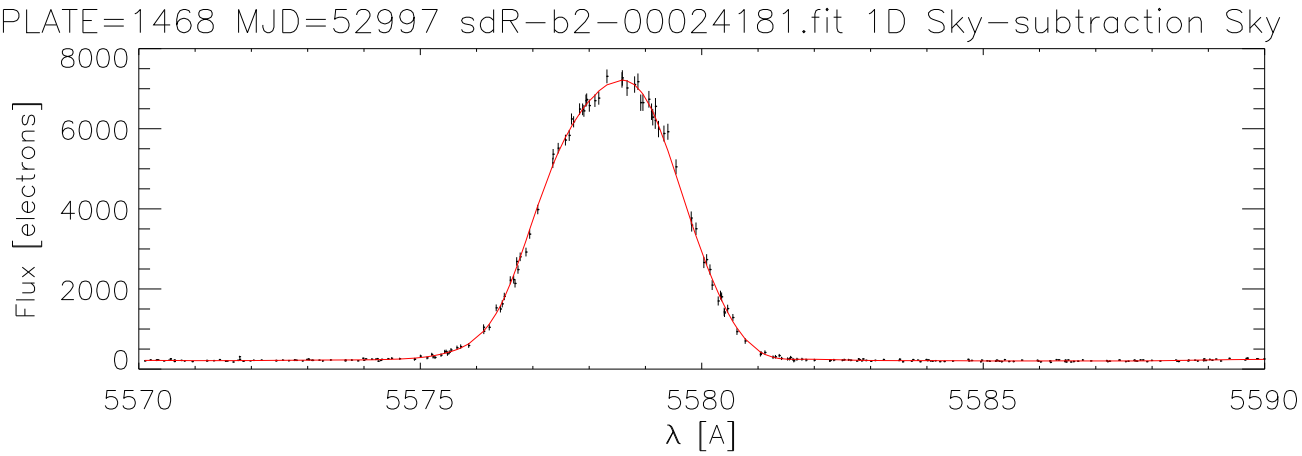

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

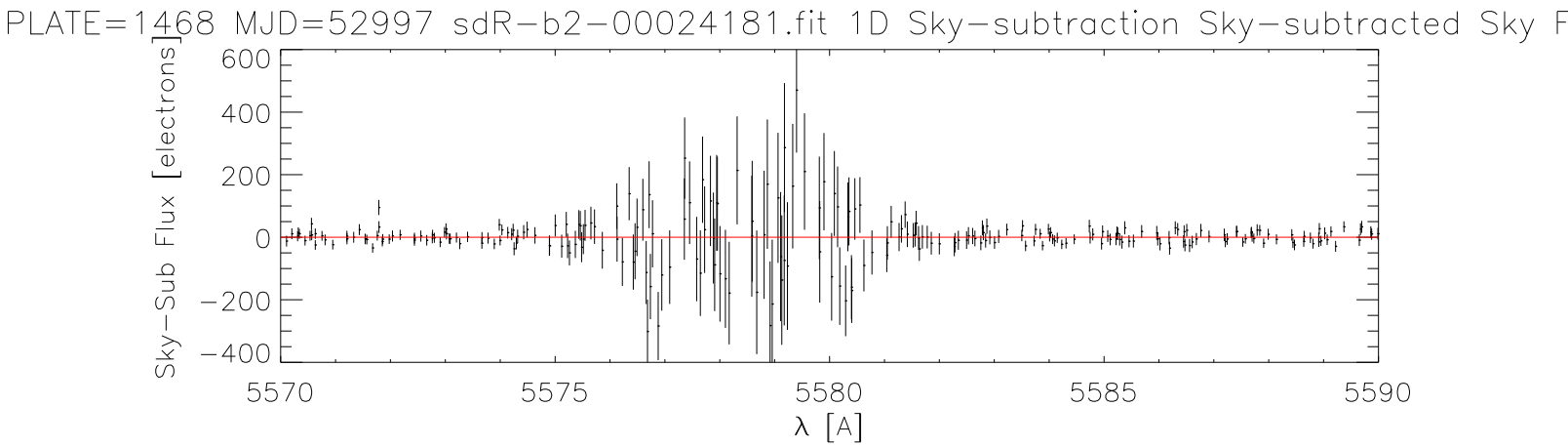

4046.5600
nfib1 16
nfib2 16
stdev 0.053
extra −0.02
4358.3300
nfib1 16
nfib2 16
stdev 0.025
extra −0.03
5460.9400
nfib1 16
nfib2 16
stdev 0.021
extra 0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.023
extra 0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.019
extra 0.16
5895.9240
nfib1 16
nfib2 16
stdev 0.017
extra 0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

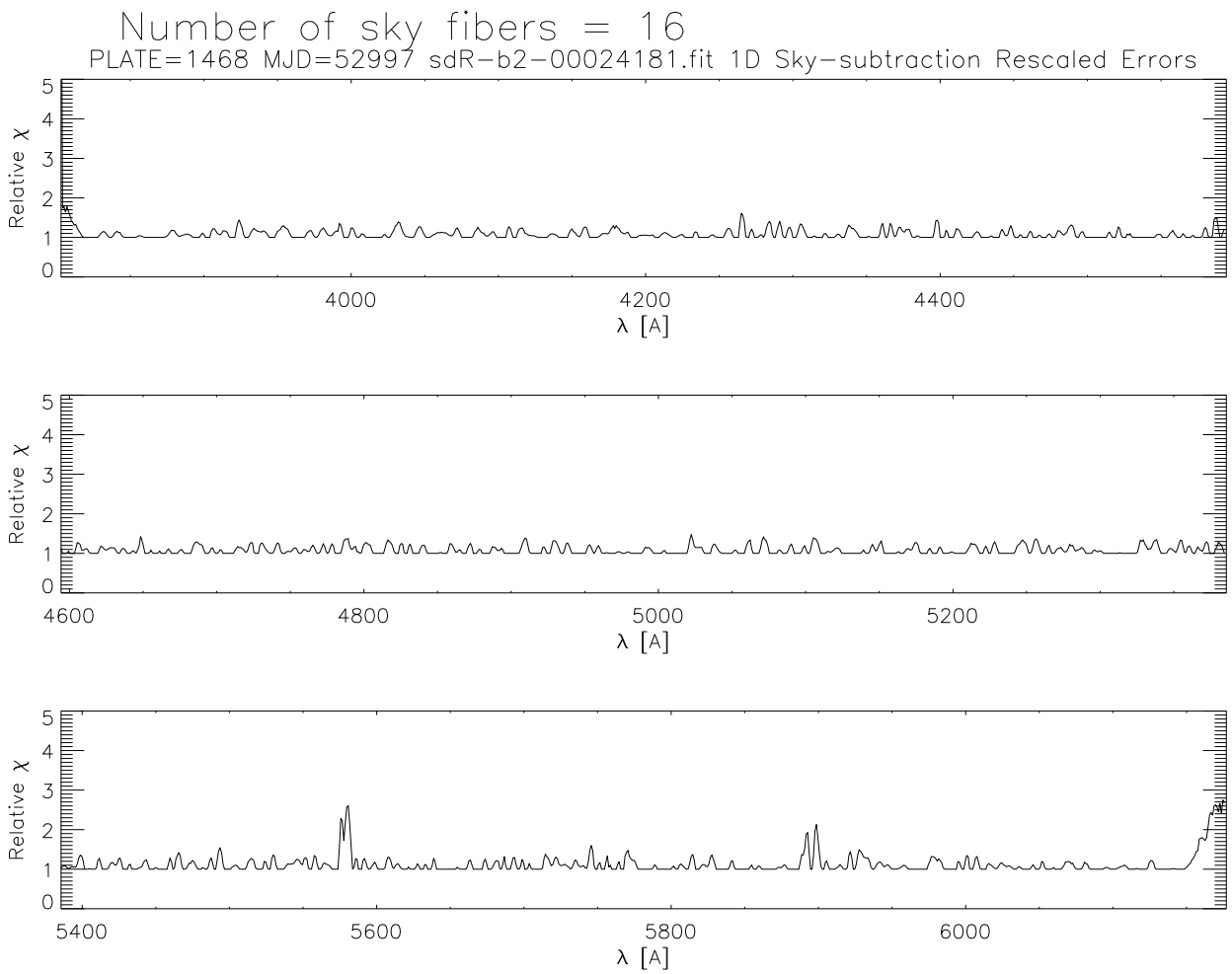

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

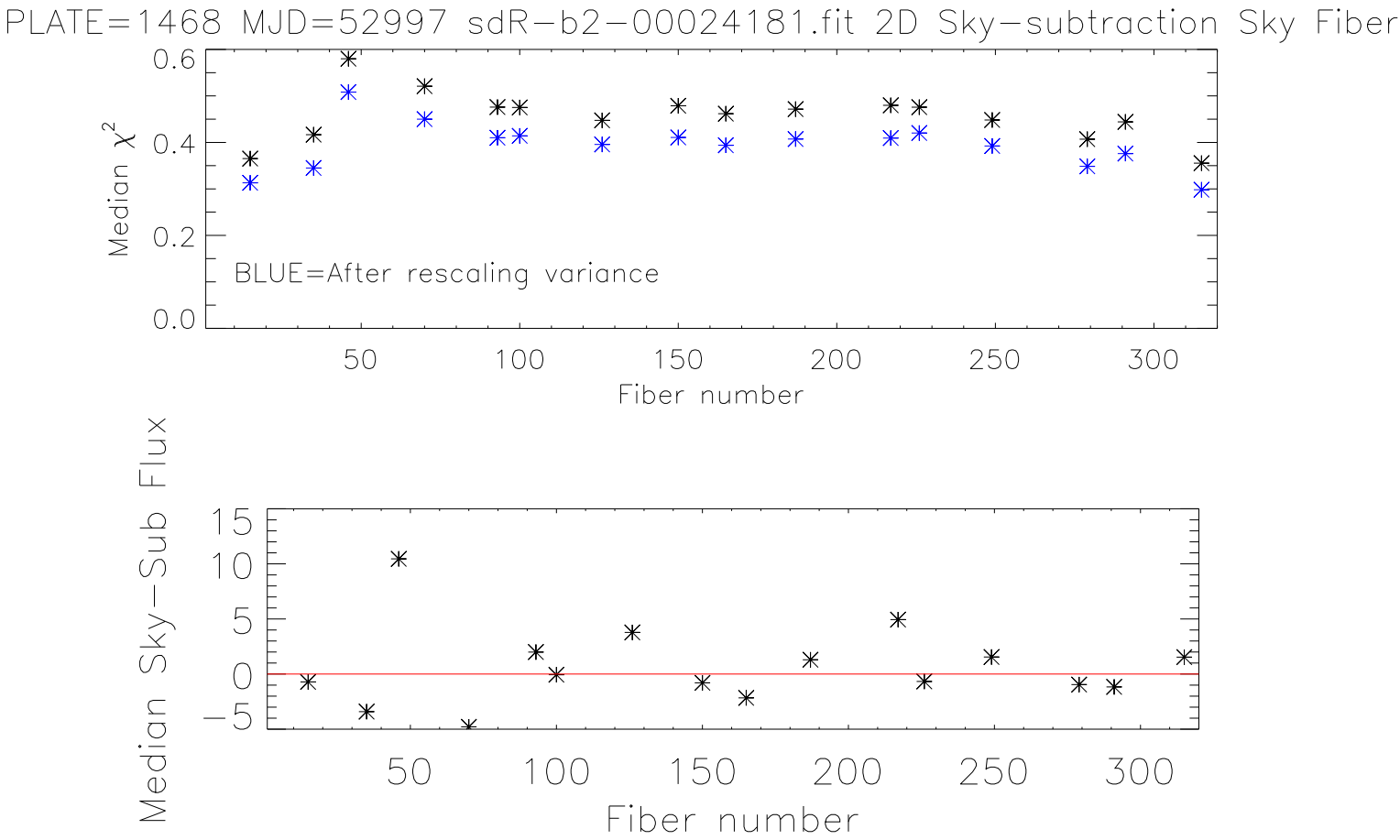

PLATE=1468 MJD=52997 Smooth superflat for sdR-b2-00024181.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

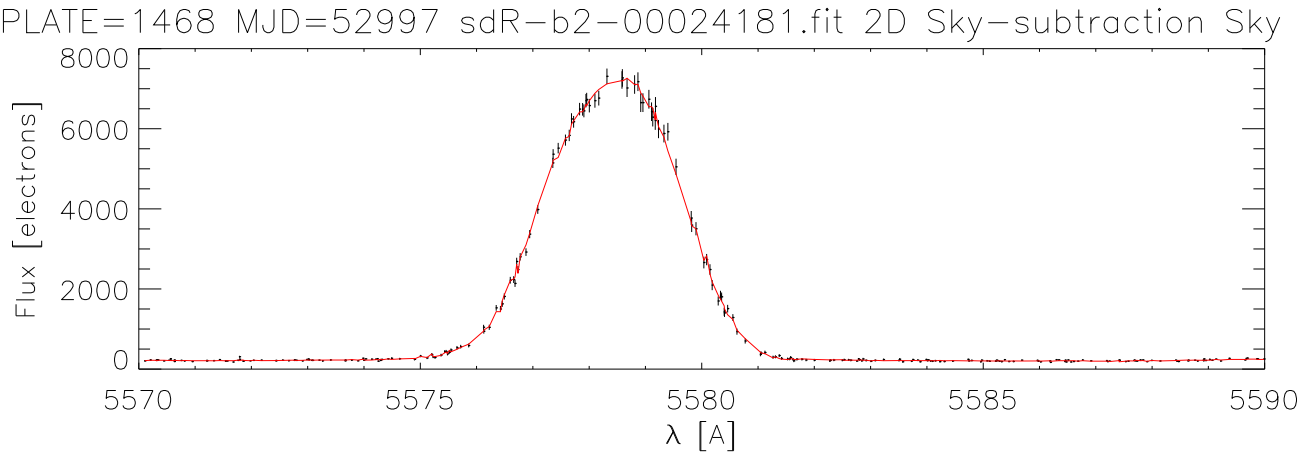

PLATE=1468 MJD=52997 sdR-b2-00024181.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

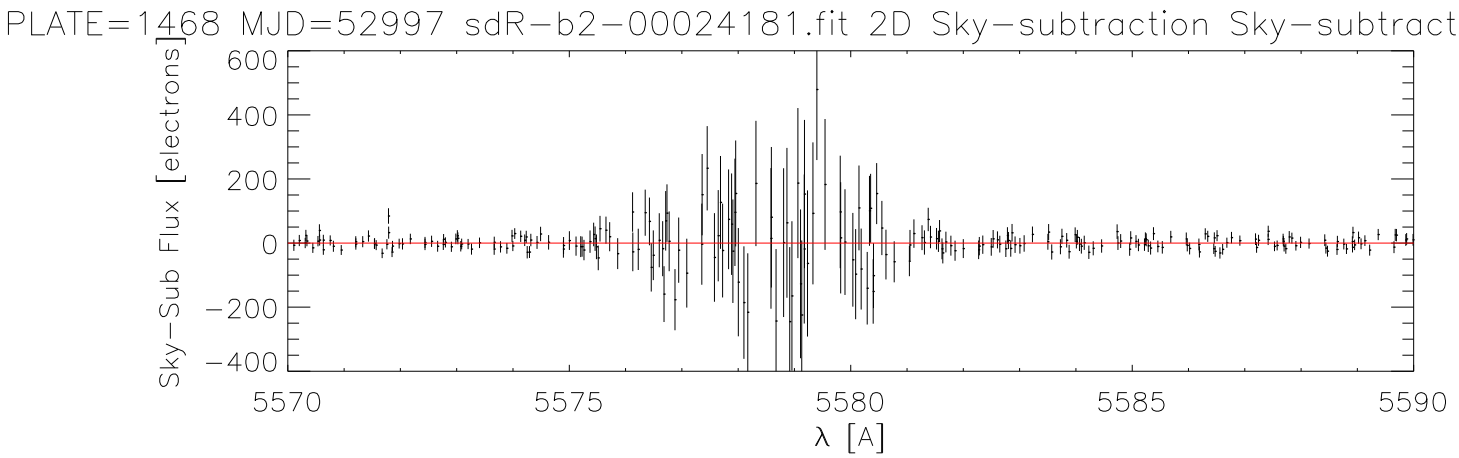

PLATE=1468 MJD=52997 sdR-b2-00024181.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

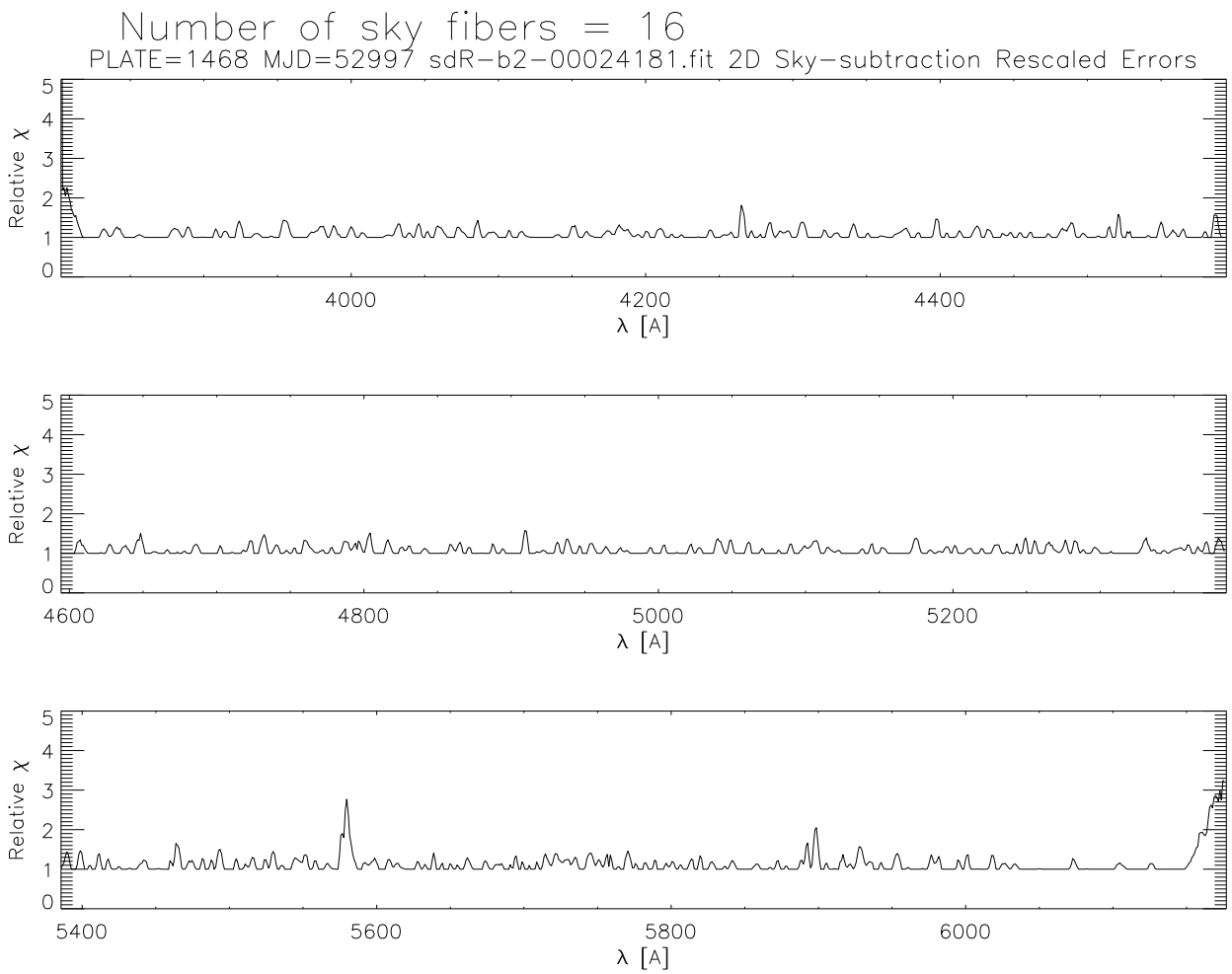

PLATE=1468 MJD=52997 sdR-b2-00024181.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

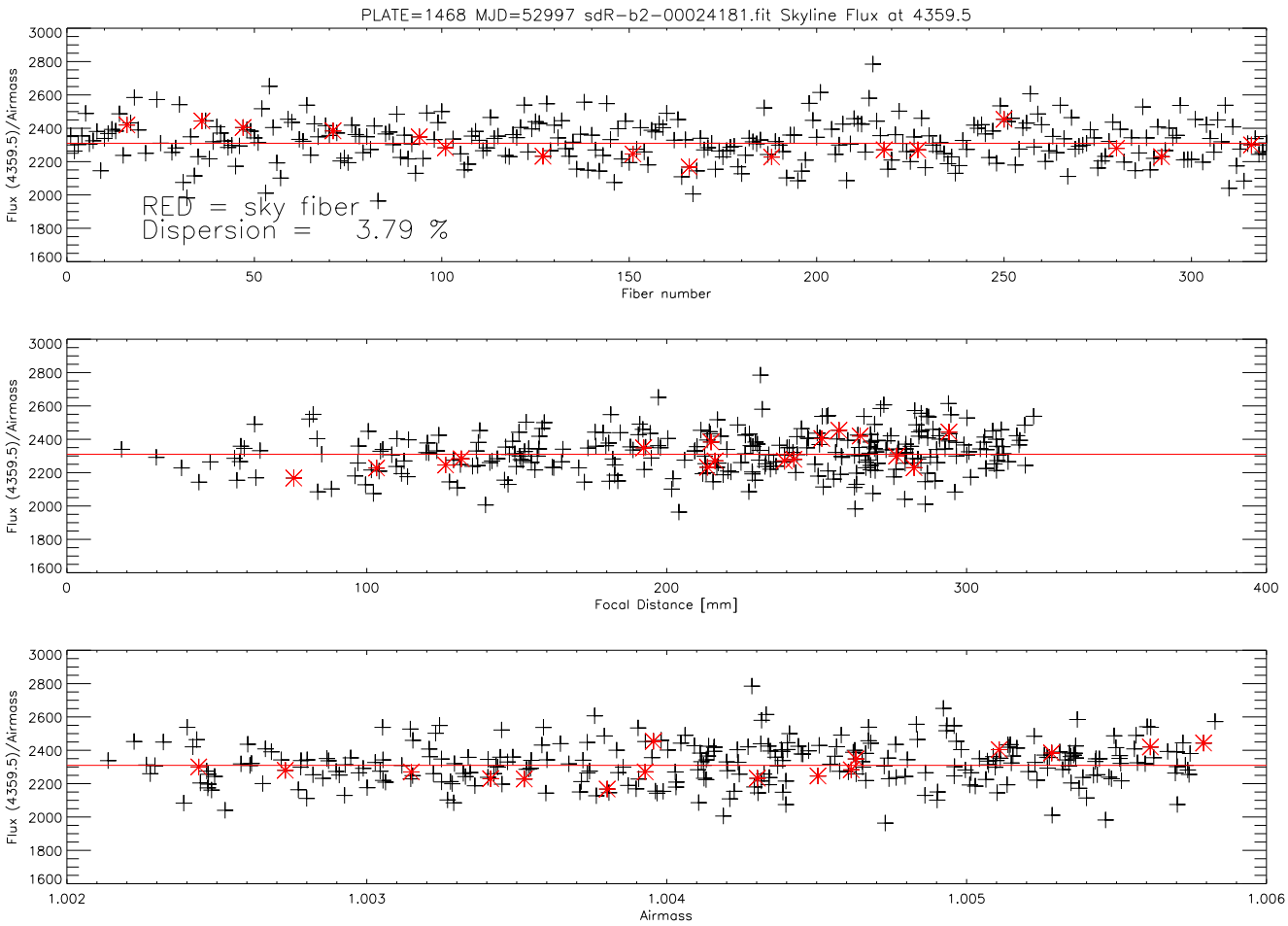

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b2-00024181.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

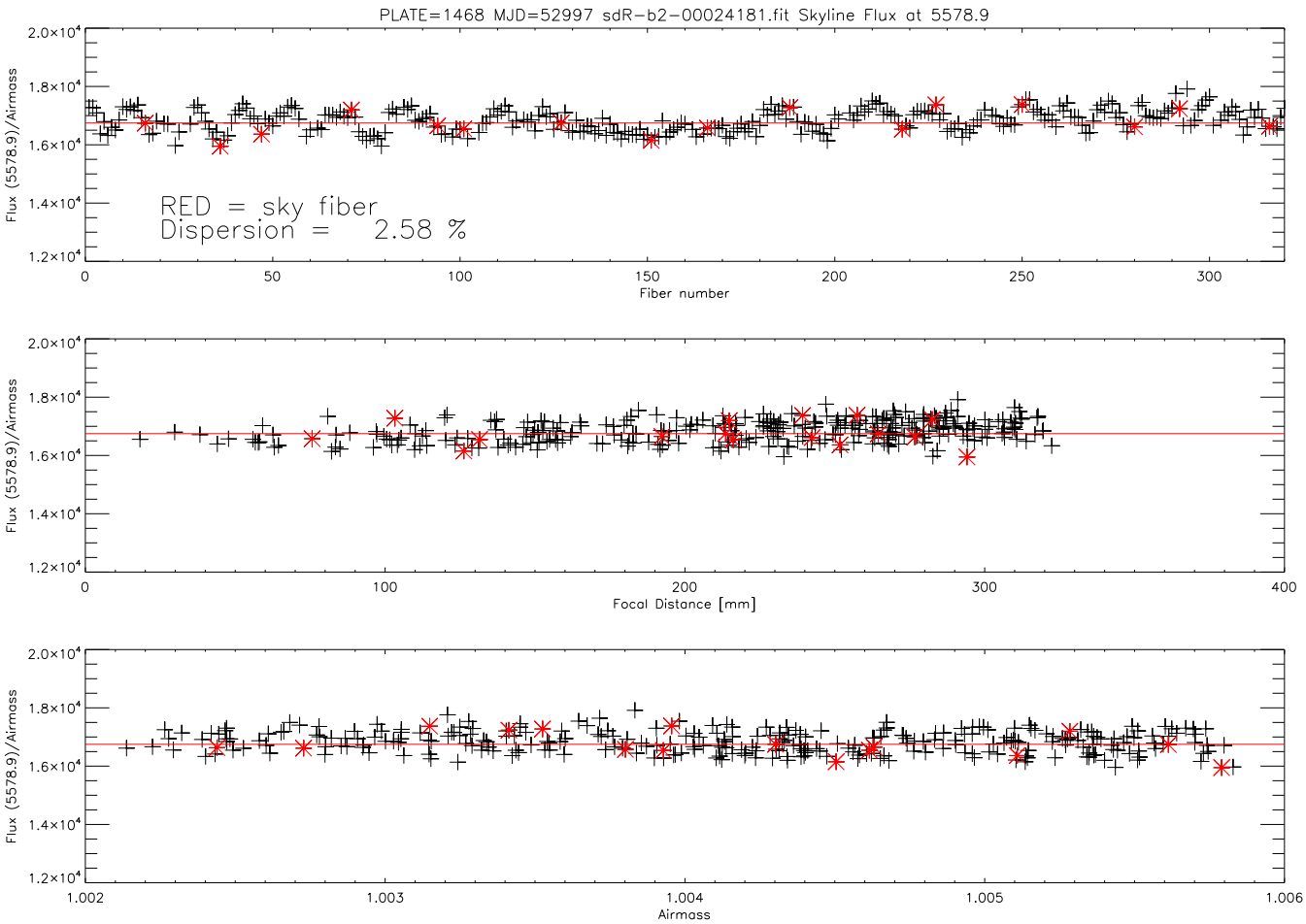

PLATE=1468 MJD=52997 sdR-b2-00024181.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

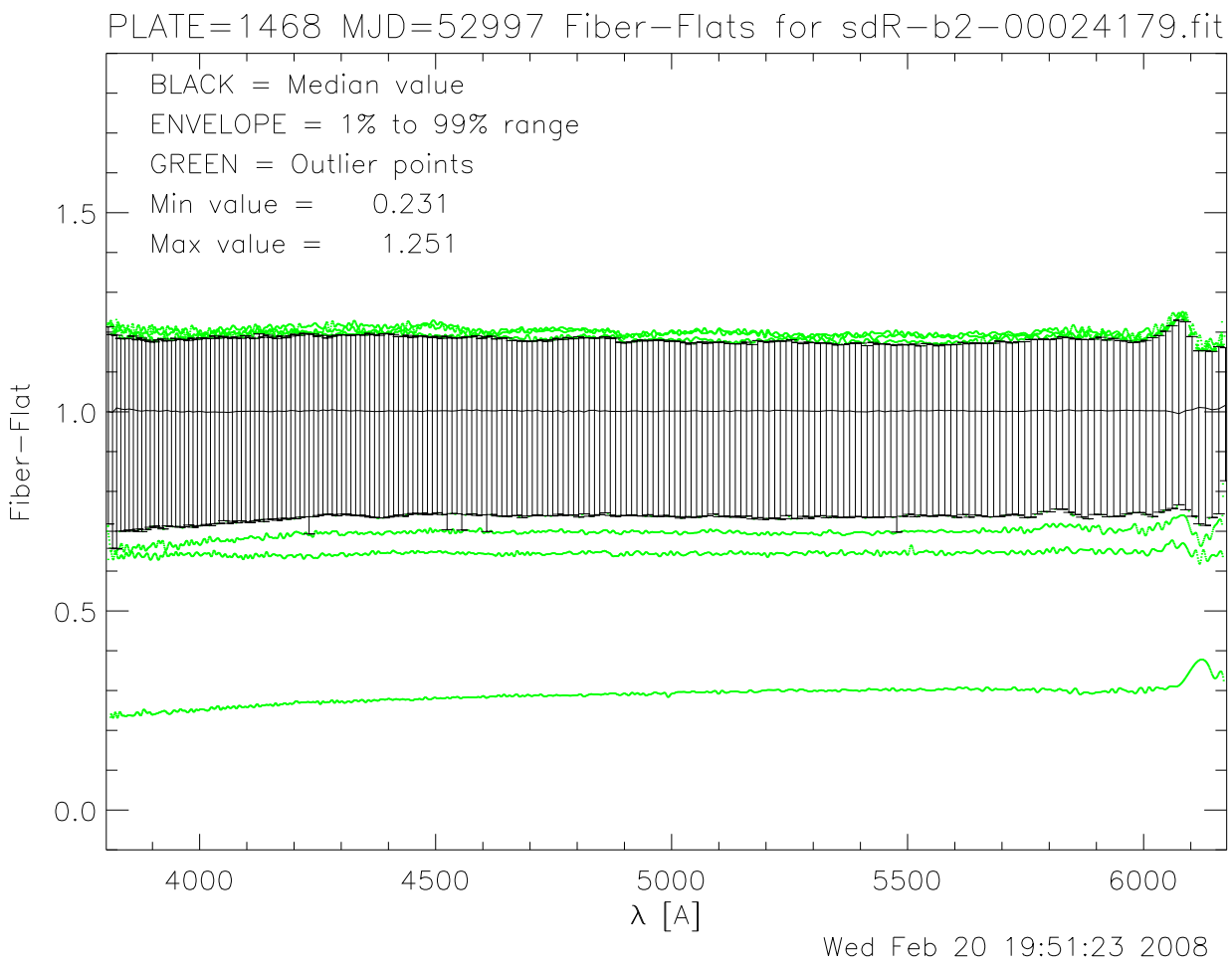

PLATE=1468 MJD=52997 sdR-b2-00024181.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

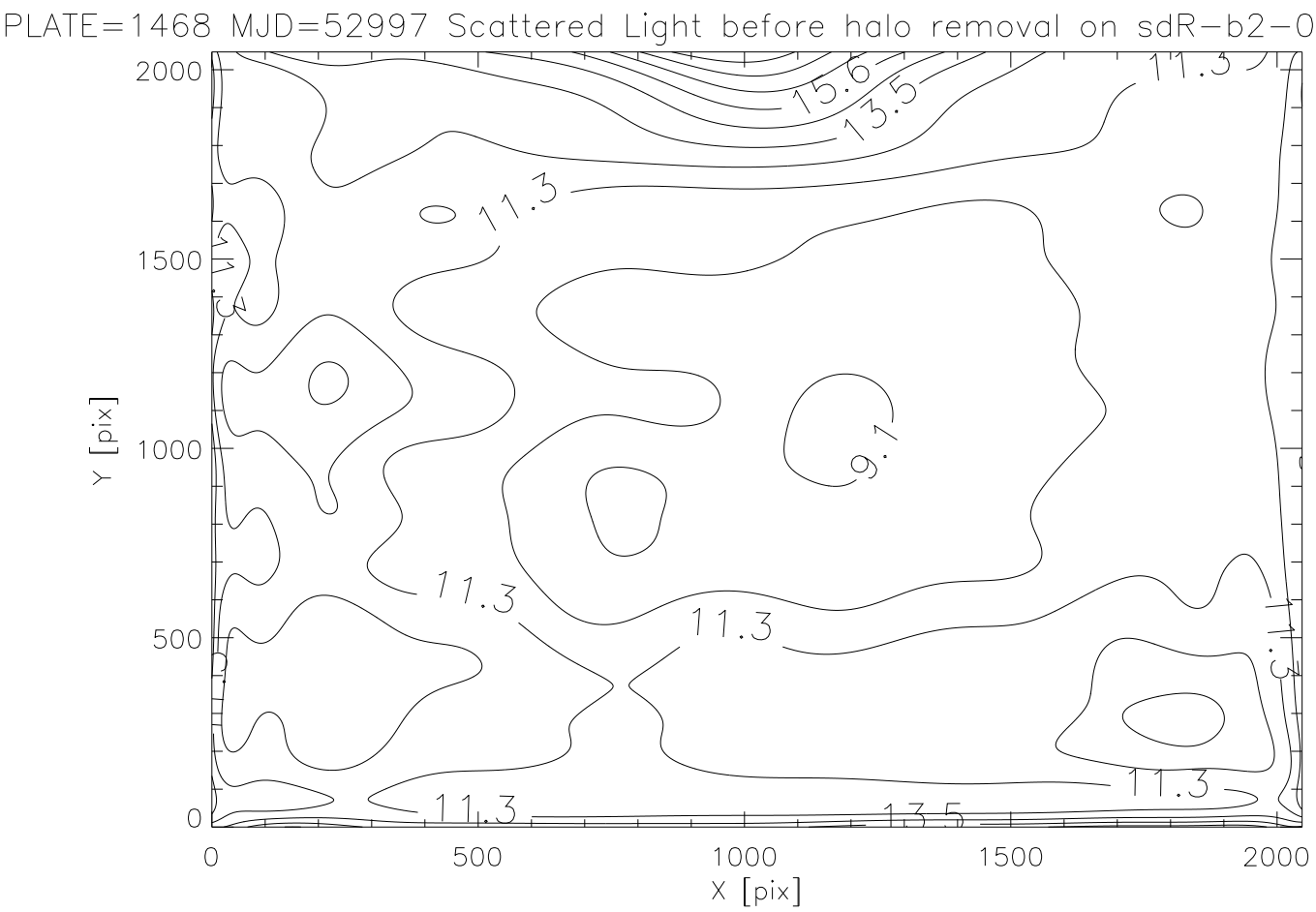

PLATE=1468 MJD=52997 sdR-b2-00024181.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

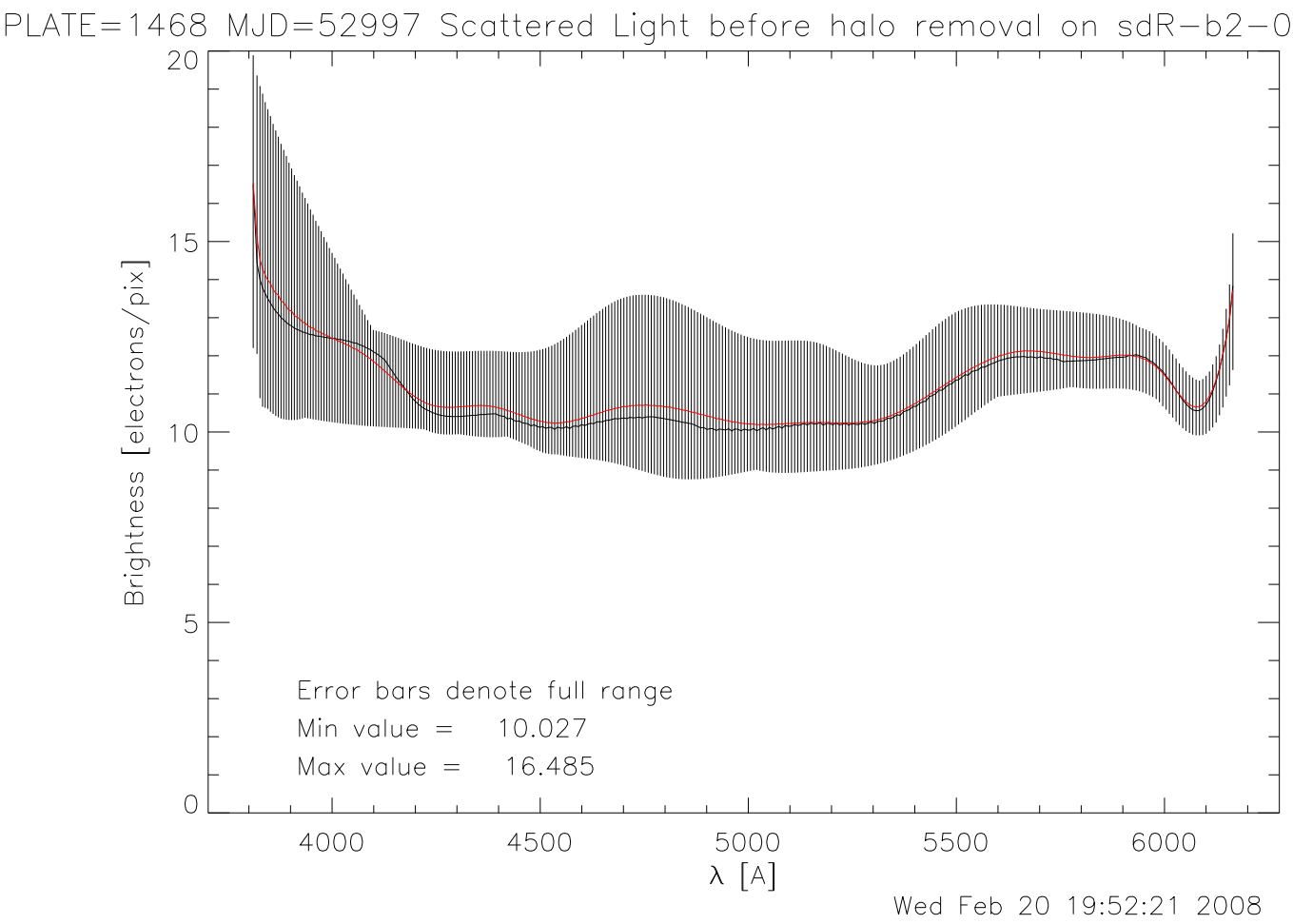

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b2-00024181.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

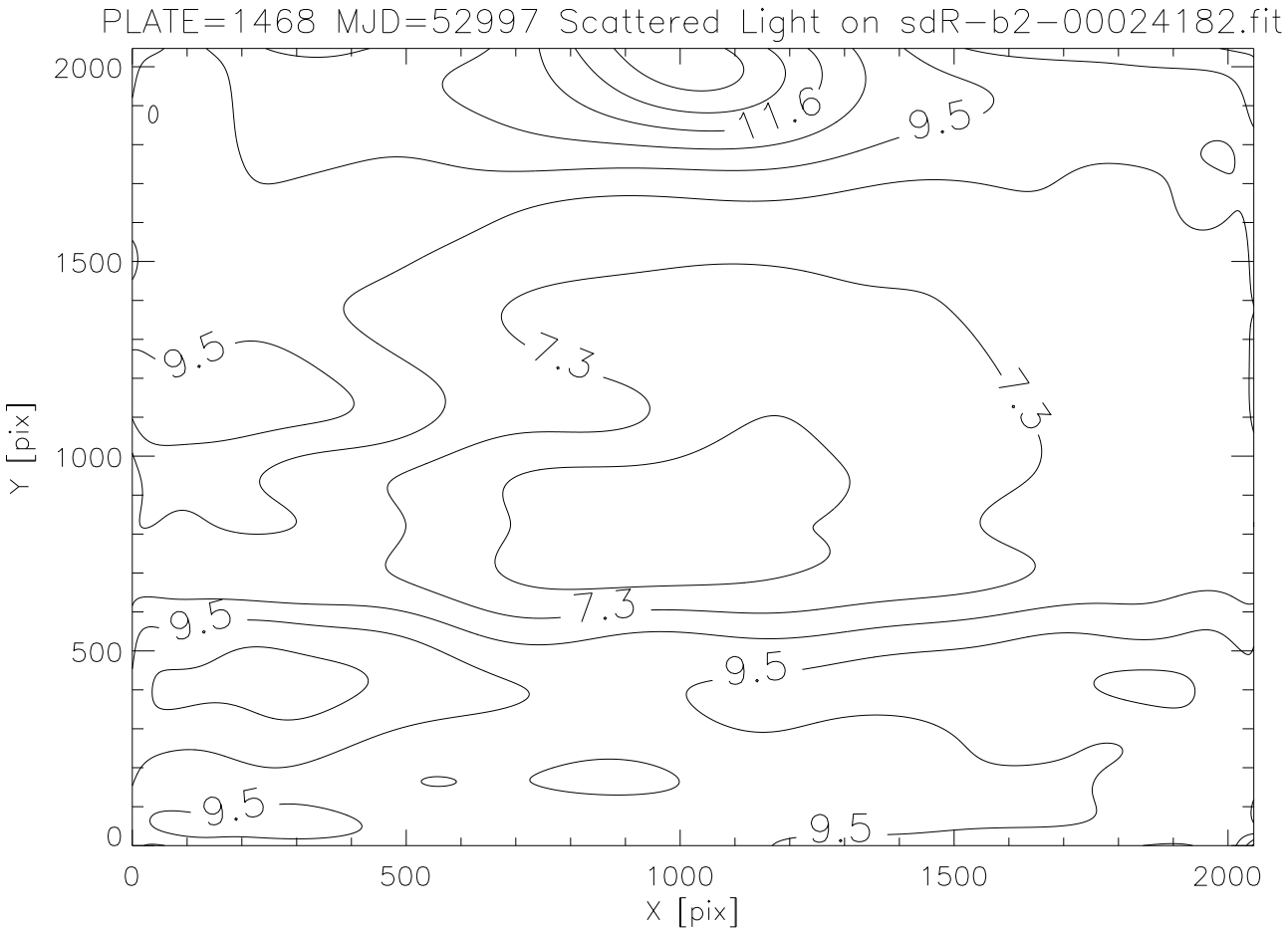

PLATE=1468 MJD=52997 sdR-b2-00024181.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 3.79 %
Fiber number
Focal Distance [mm]
Airmass

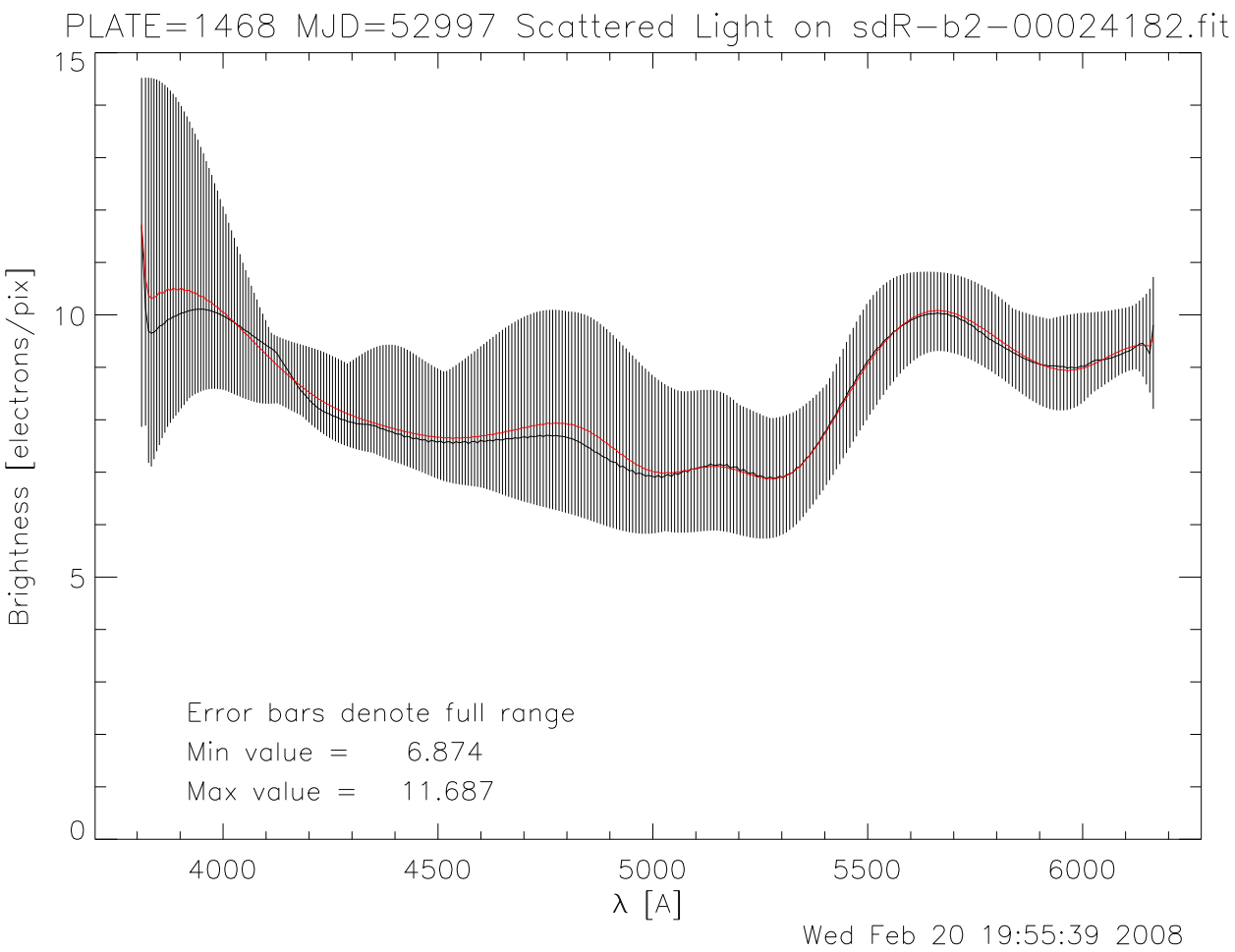

PLATE=1468 MJD=52997 sdR-b2-00024181.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.58 %
Fiber number
Focal Distance [mm]
Airmass

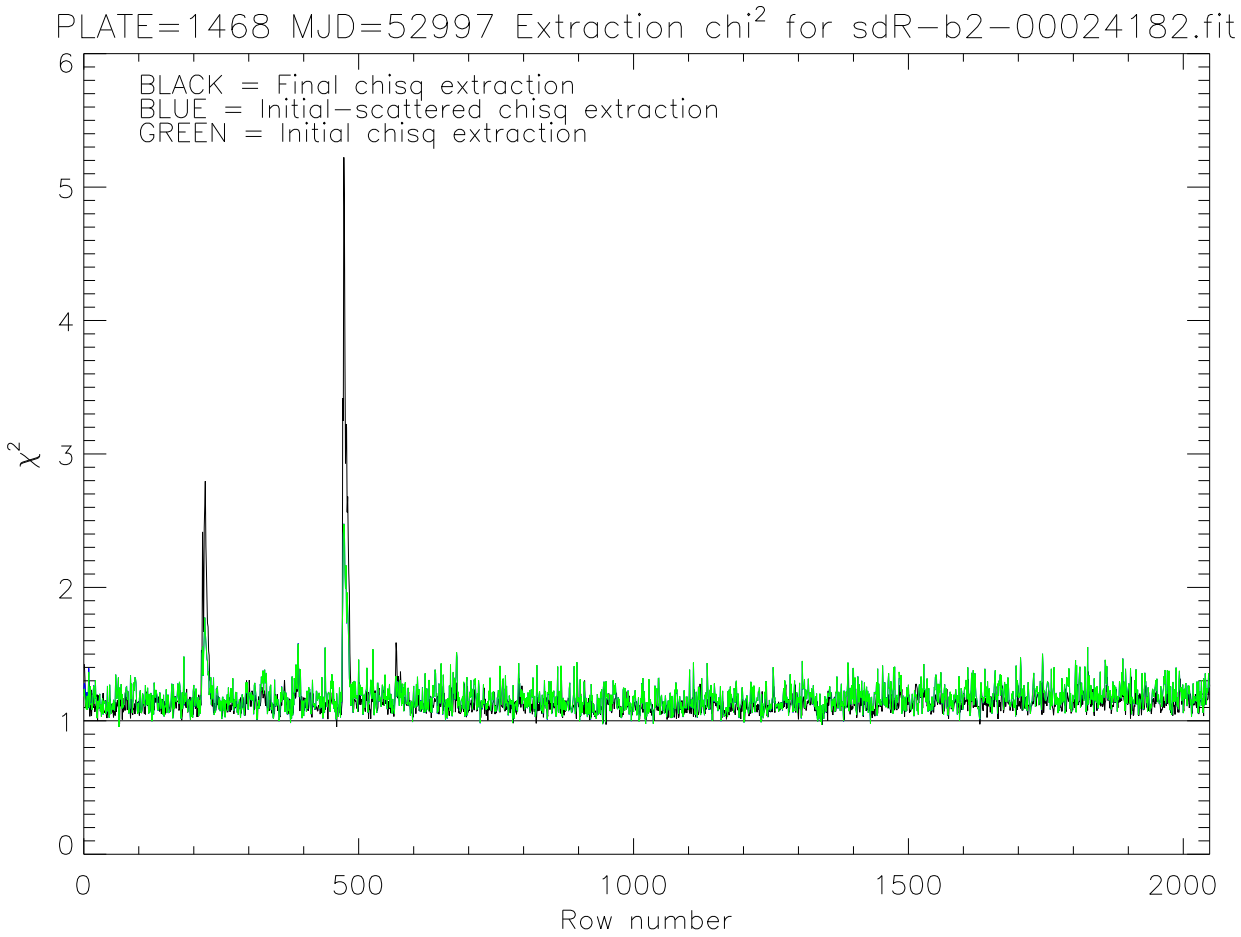

PLATE=1468 MJD=52997 Fiber-Flats for sdR-b2-00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.231
Max value = 1.251
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:51:23 2008

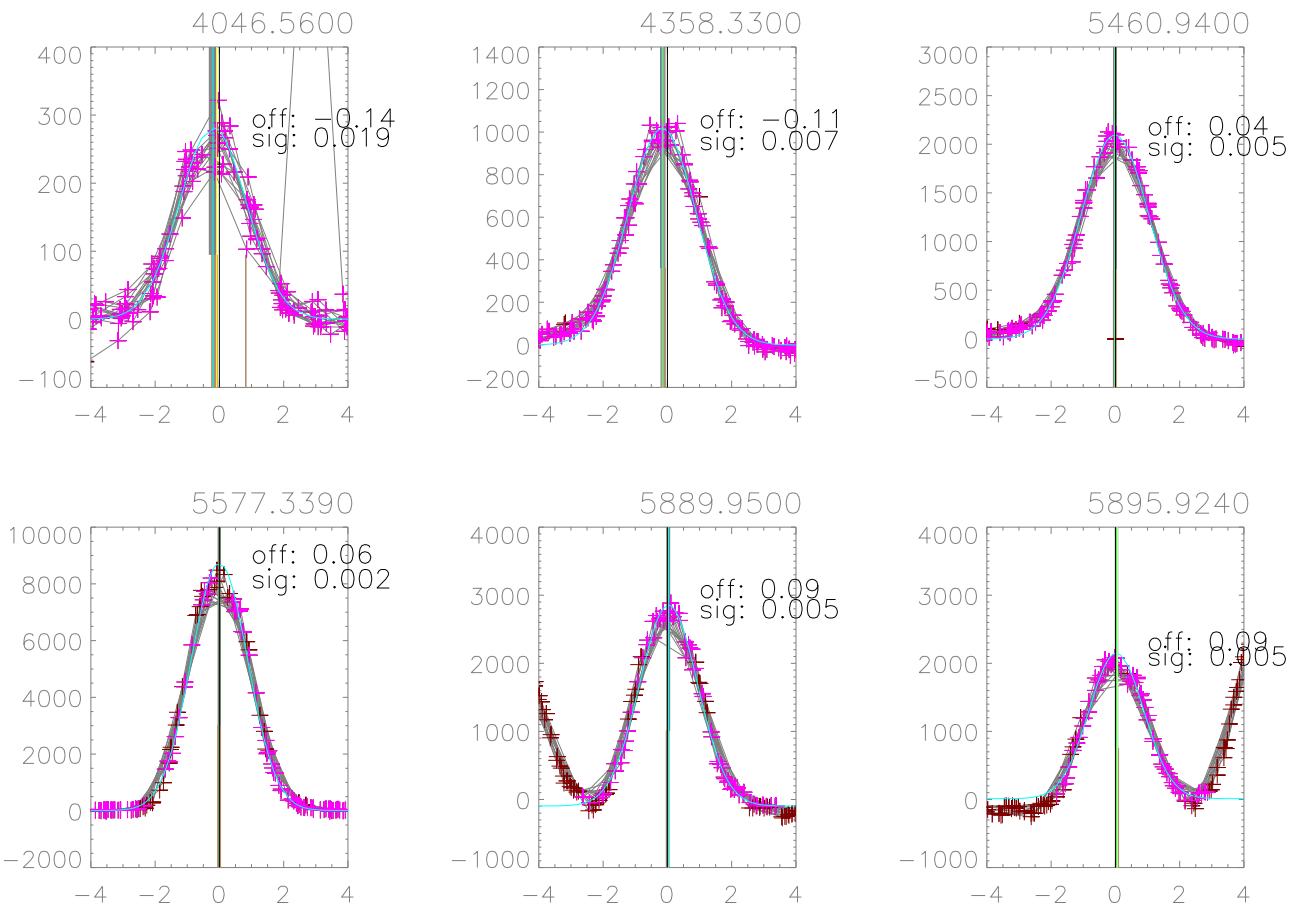

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR−b2−00024182.f
15.6
13.5
11.3
11.3
9.1
11.3
11.3
11.3
11.3
13.5
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

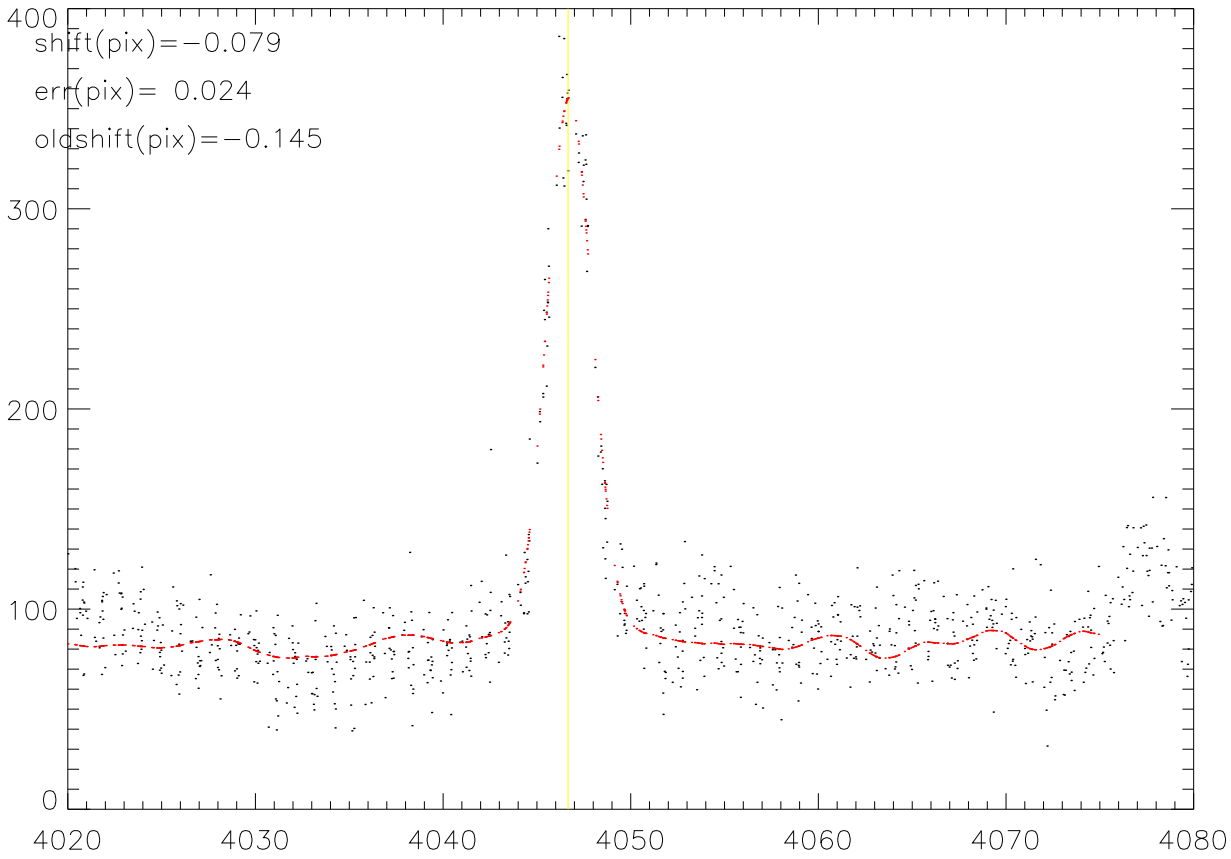

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b2-00024182.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 10.027
Max value = 16.485
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:52:21 2008

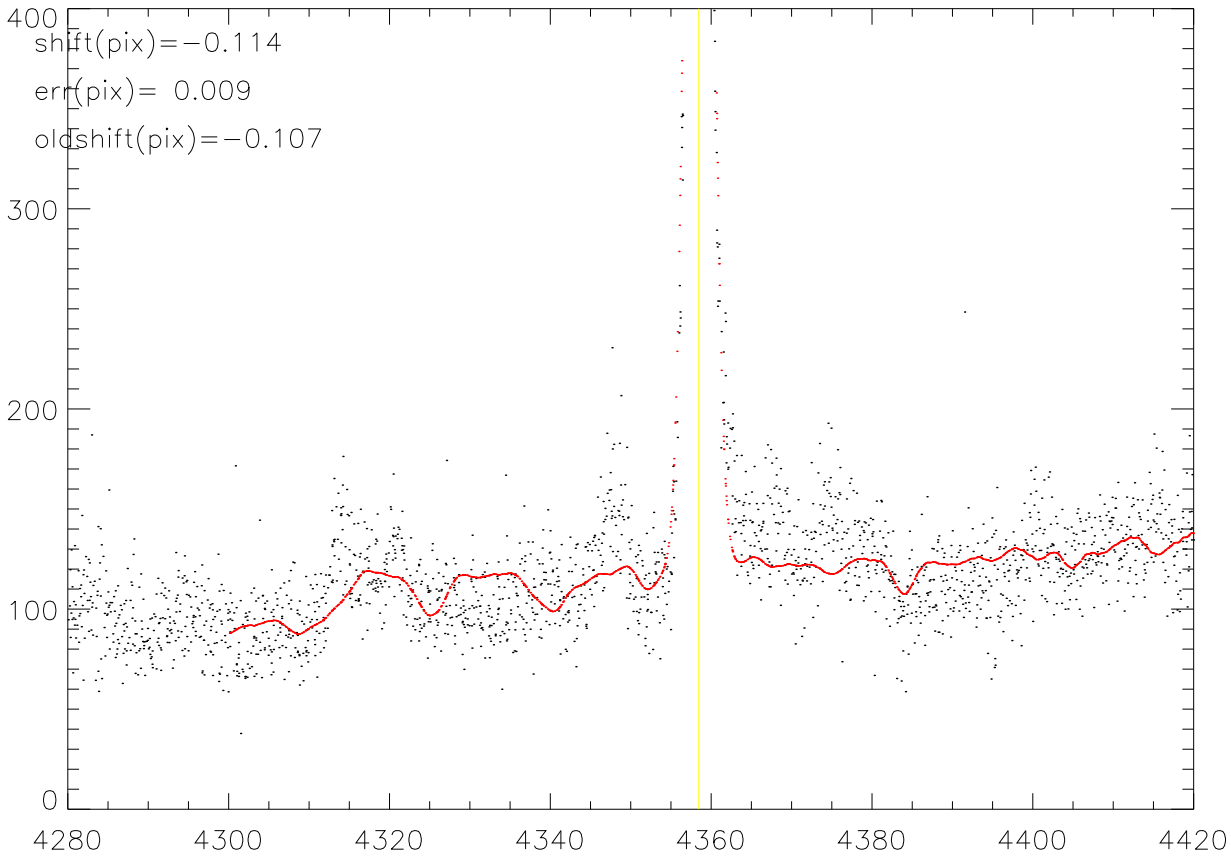

PLATE=1468 MJD=52997 Scattered Light on sdR-b2-00024182.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.6
9.5
7.3
0

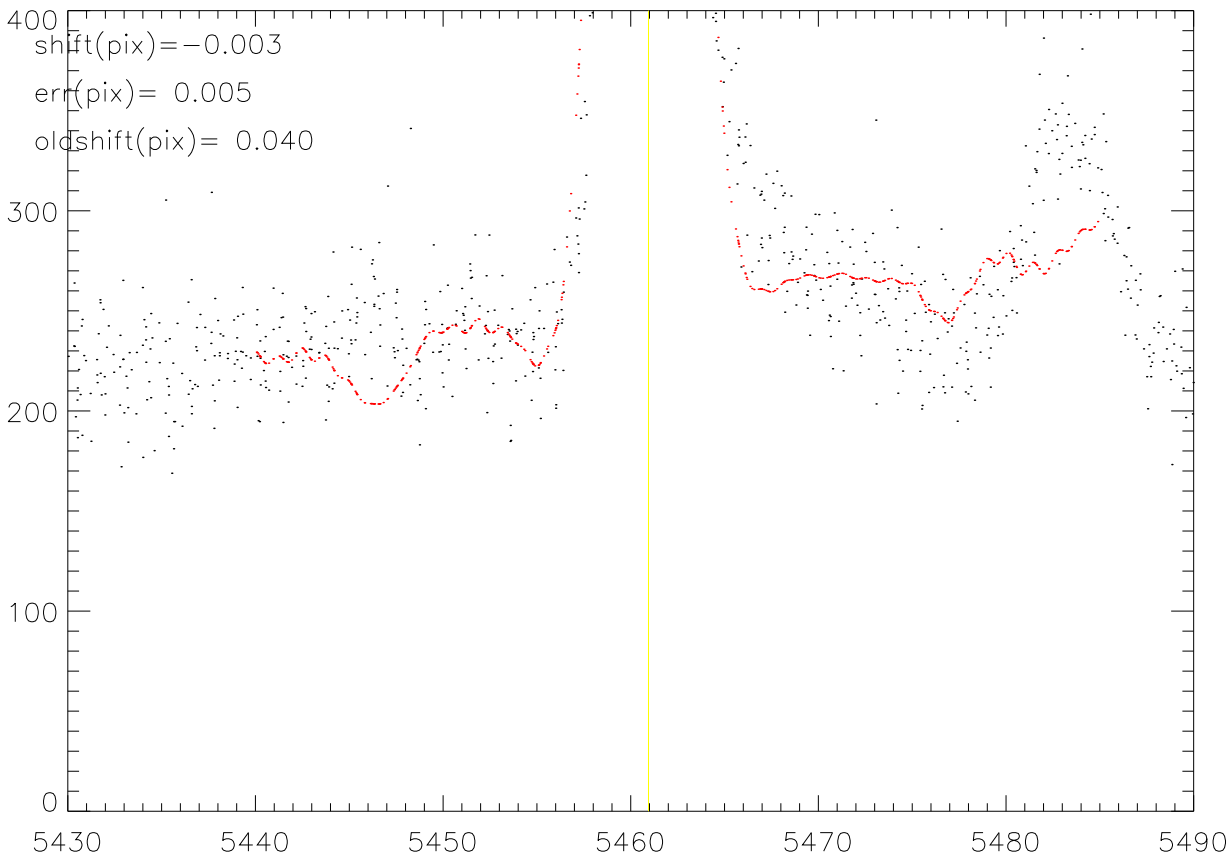

PLATE=1468 MJD=52997 Scattered Light on sdR-b2-00024182.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.874
Max value = 11.687
Wed Feb 20 19:55:39 2008

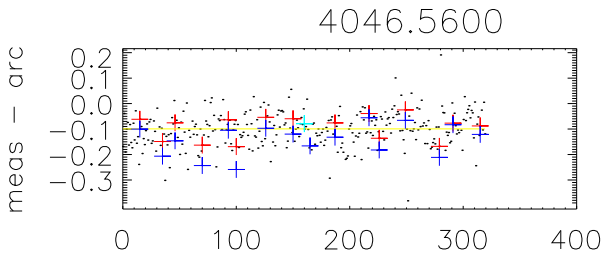

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-b2-00024182.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

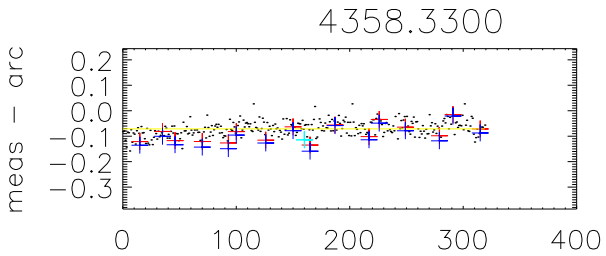

4046.5600
off: −0.14
sig: 0.019
4358.3300
off: −0.11
sig: 0.007
5460.9400
off: 0.04
sig: 0.005
5577.3390
off: 0.06
sig: 0.002
5889.9500
off: 0.09
sig: 0.005
5895.9240
off: 0.09
sig: 0.005

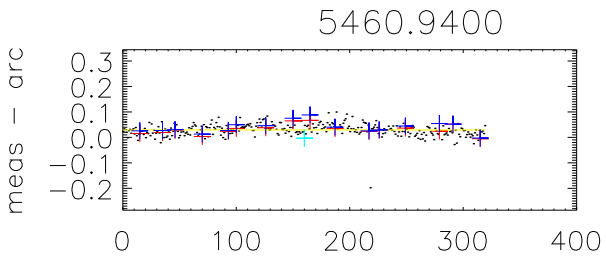

shift(pix)=−0.079
err(pix)= 0.024
oldshift(pix)=−0.145
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

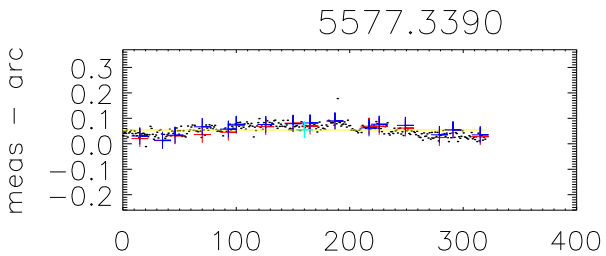

shift(pix)=−0.114
err(pix)= 0.009
oldshift(pix)=−0.107
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

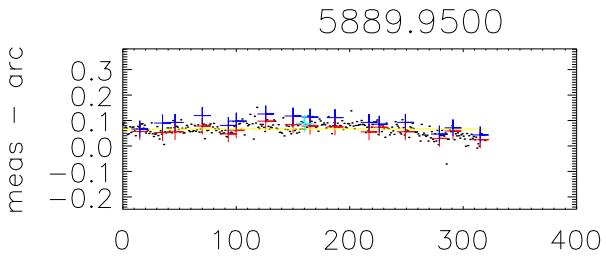

shift(pix)=−0.003
err(pix)= 0.005
oldshift(pix)= 0.040
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

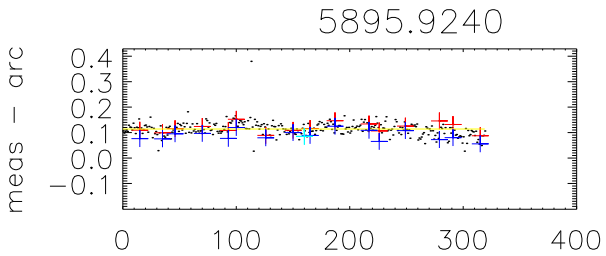

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

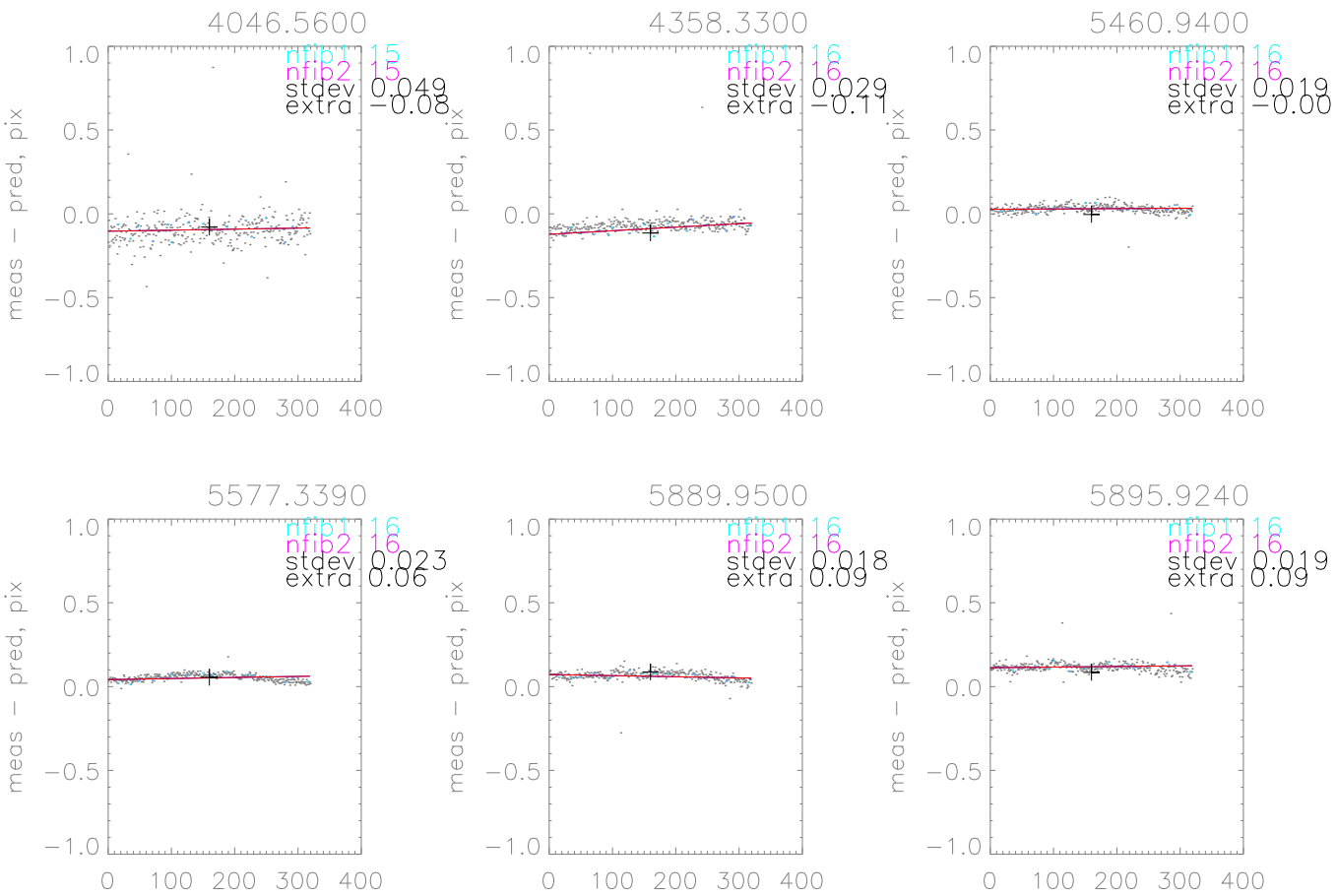

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

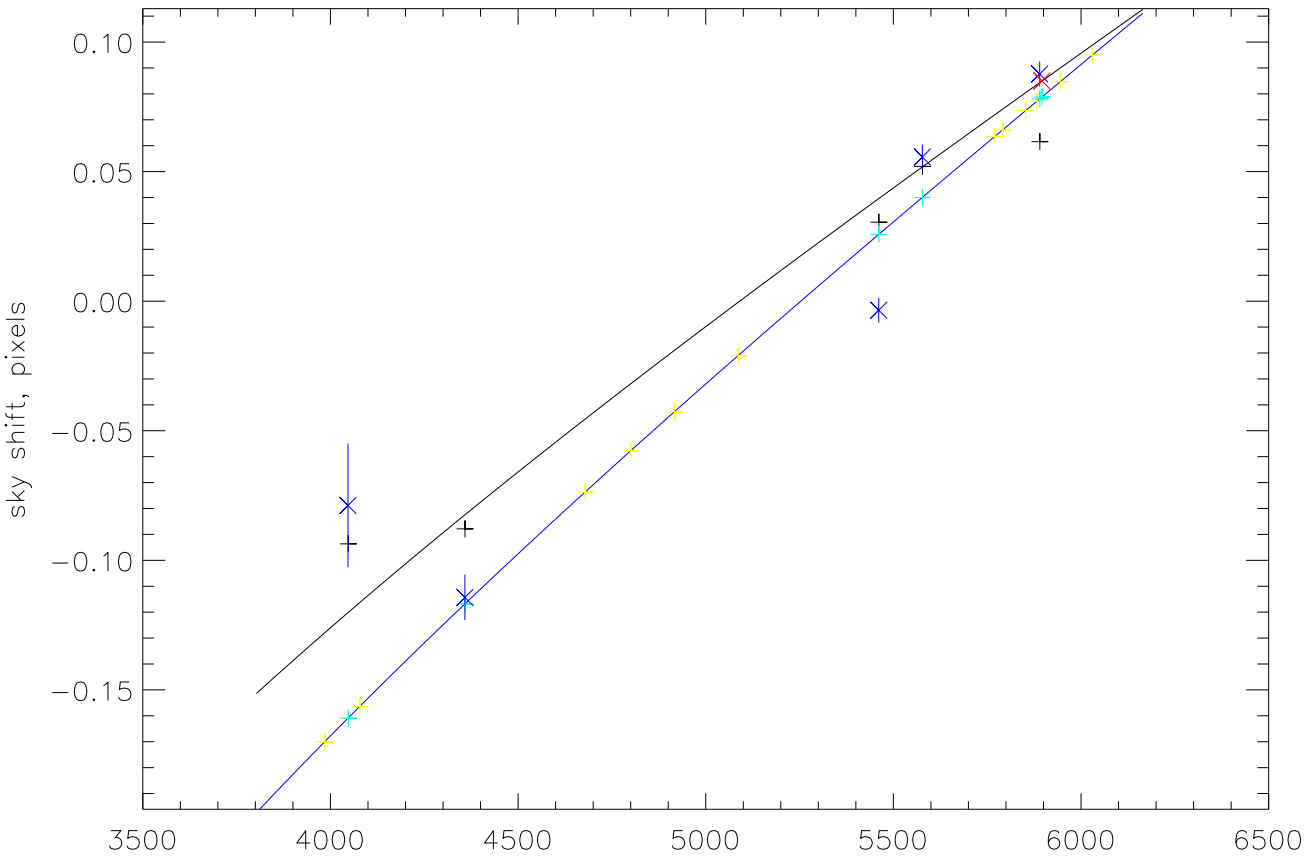

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

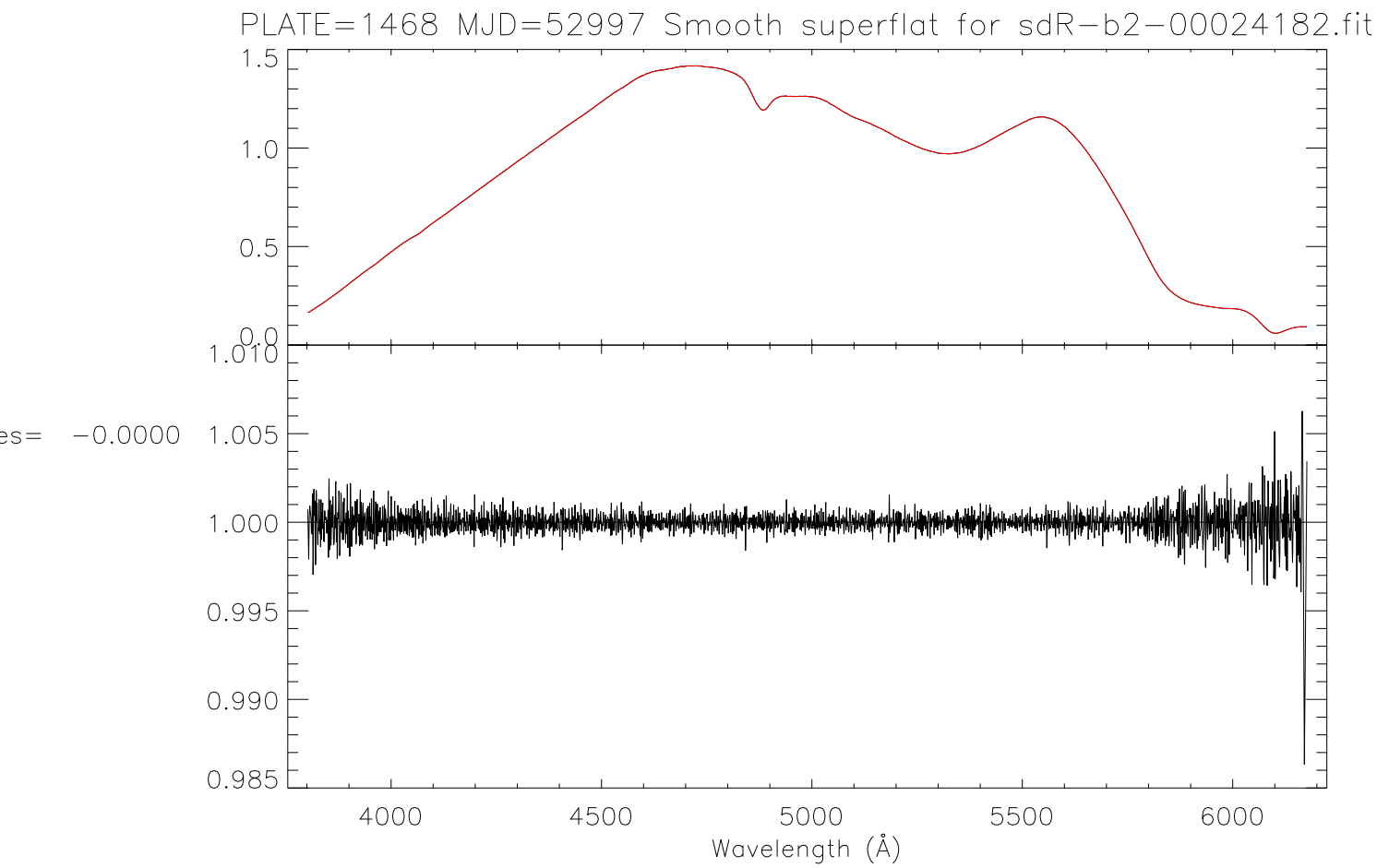

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

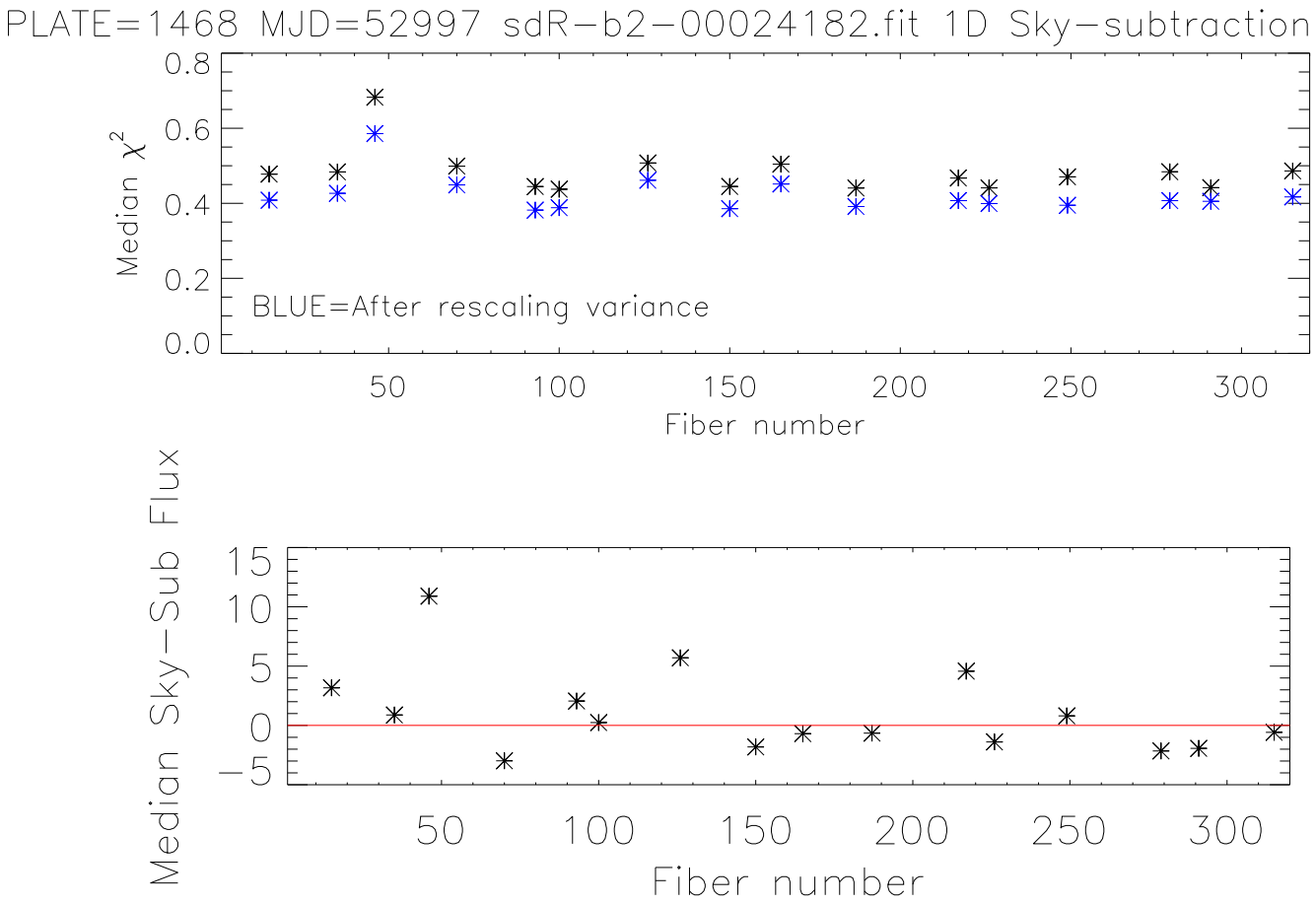

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

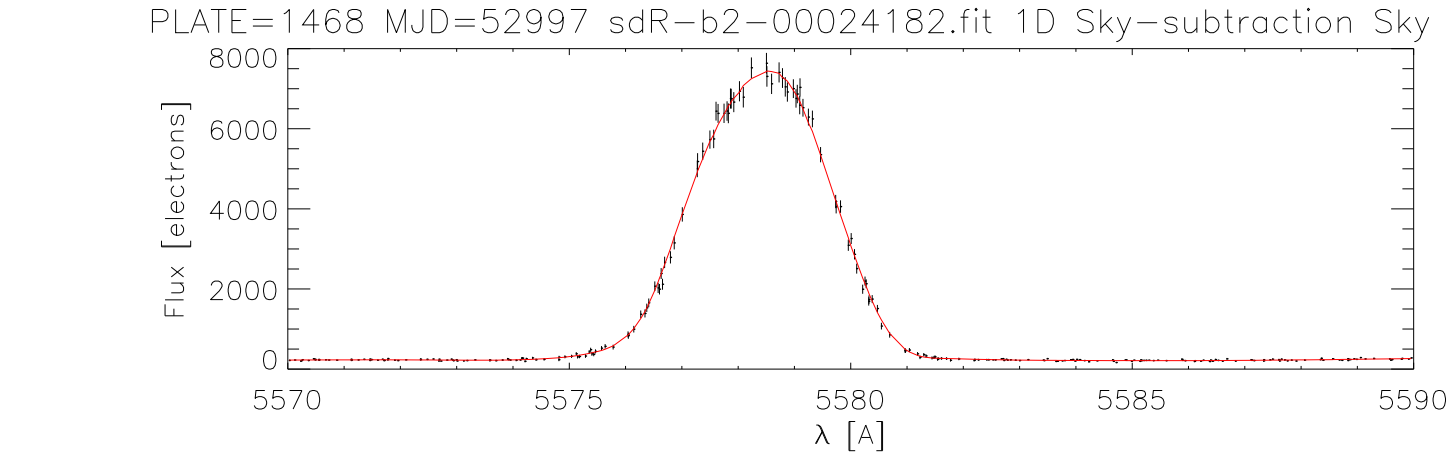

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

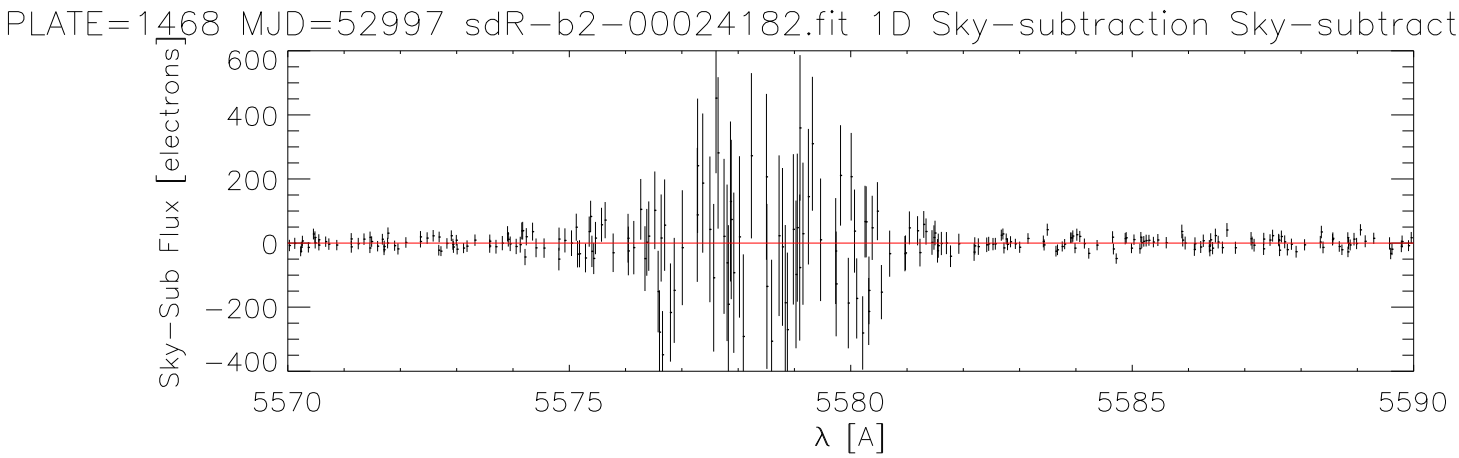

4046.5600
nfib1 15
nfib2 15
stdev 0.049
extra −0.08
4358.3300
nfib1 16
nfib2 16
stdev 0.029
extra −0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.019
extra −0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.023
extra 0.06
5889.9500
nfib1 16
nfib2 16
stdev 0.018
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.019
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

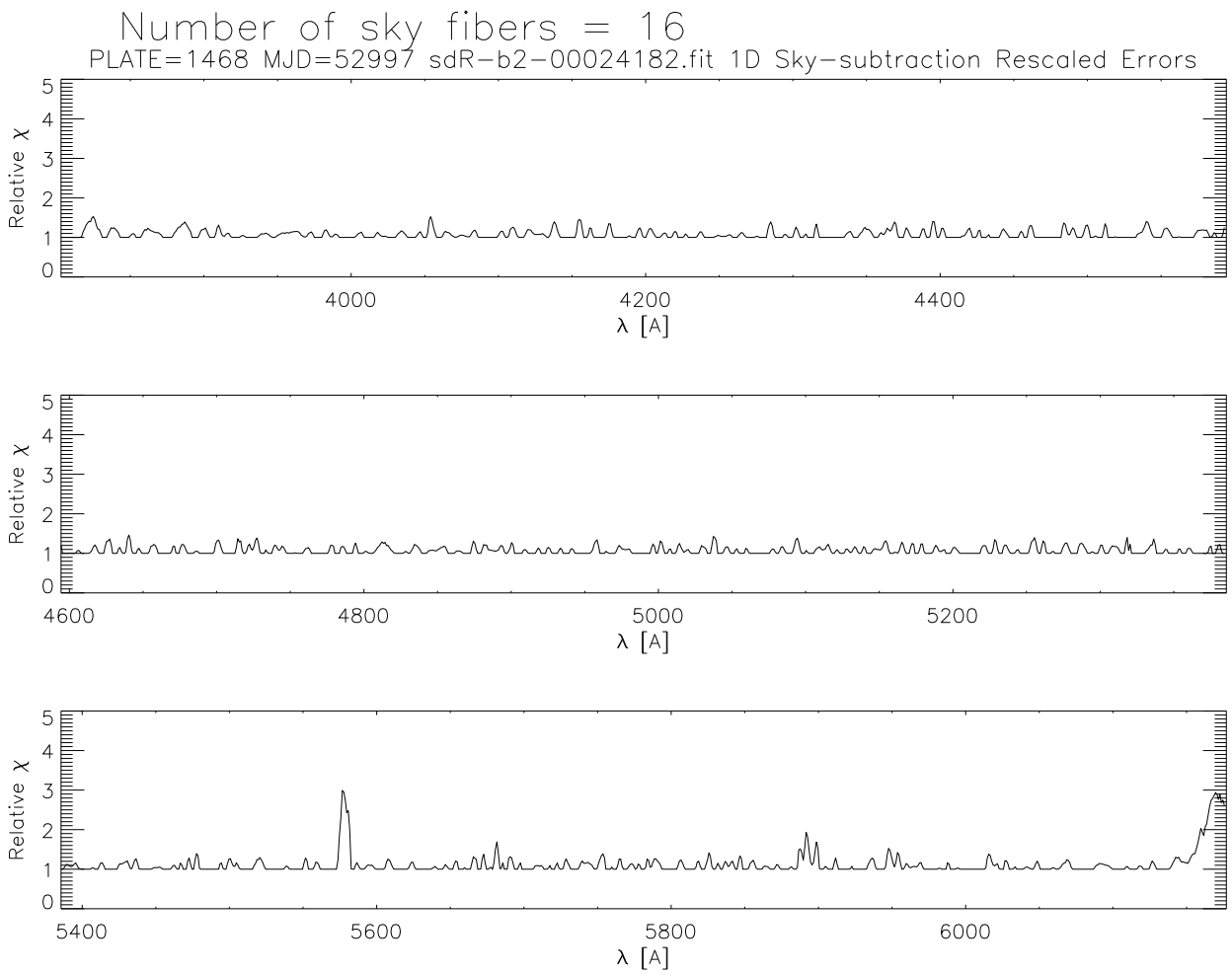

0.10
0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

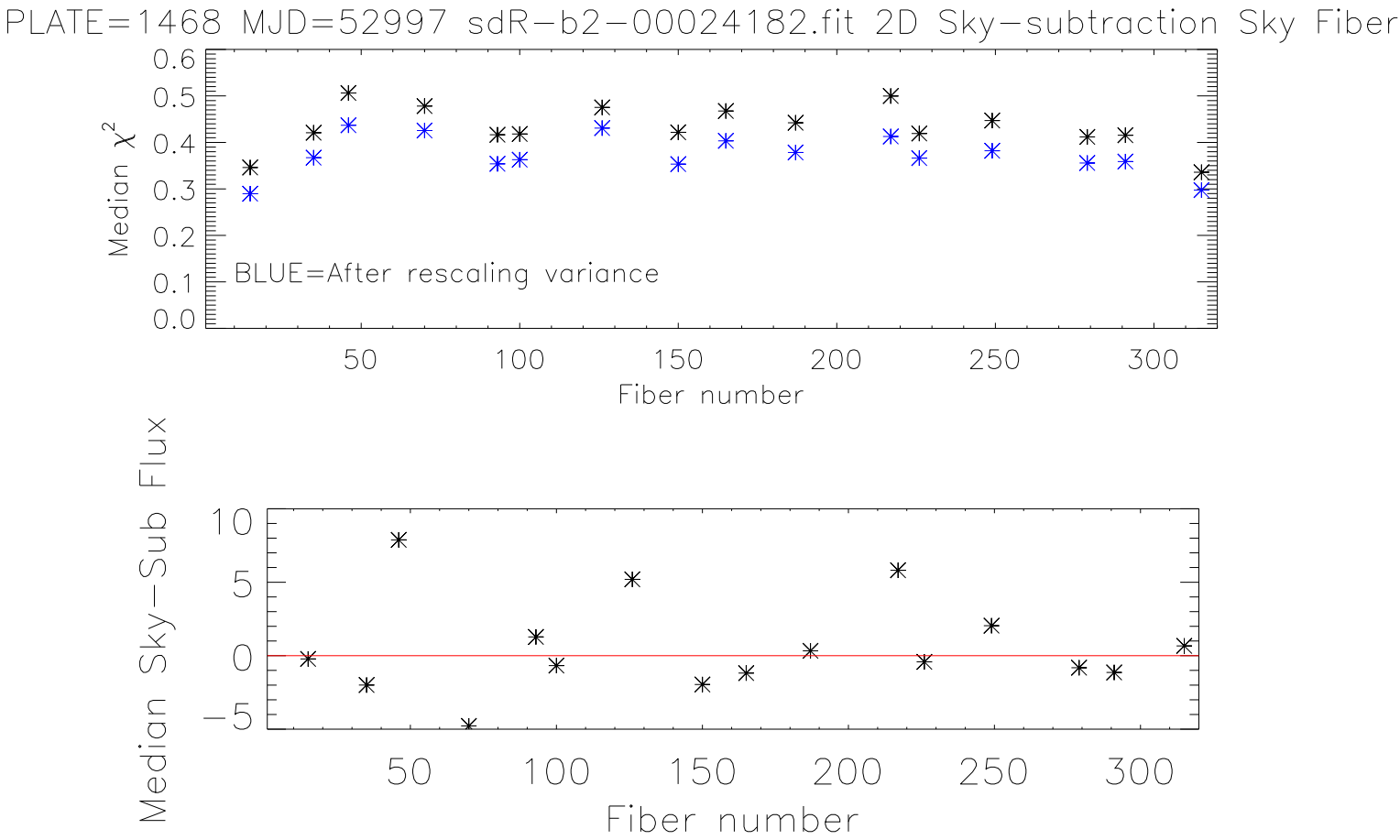

PLATE=1468 MJD=52997 Smooth superflat for sdR-b2-00024182.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

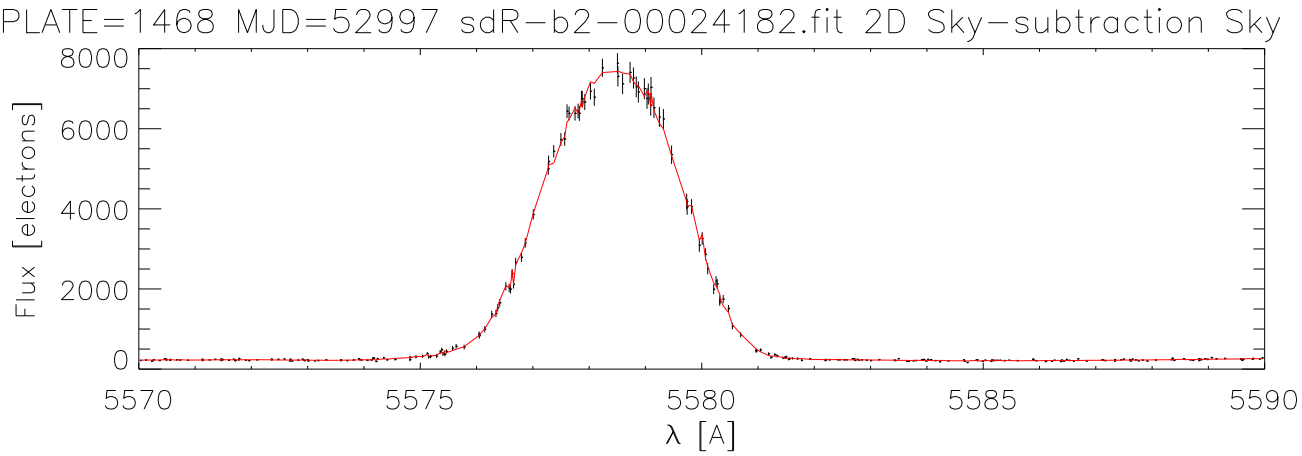

PLATE=1468 MJD=52997 sdR-b2-00024182.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

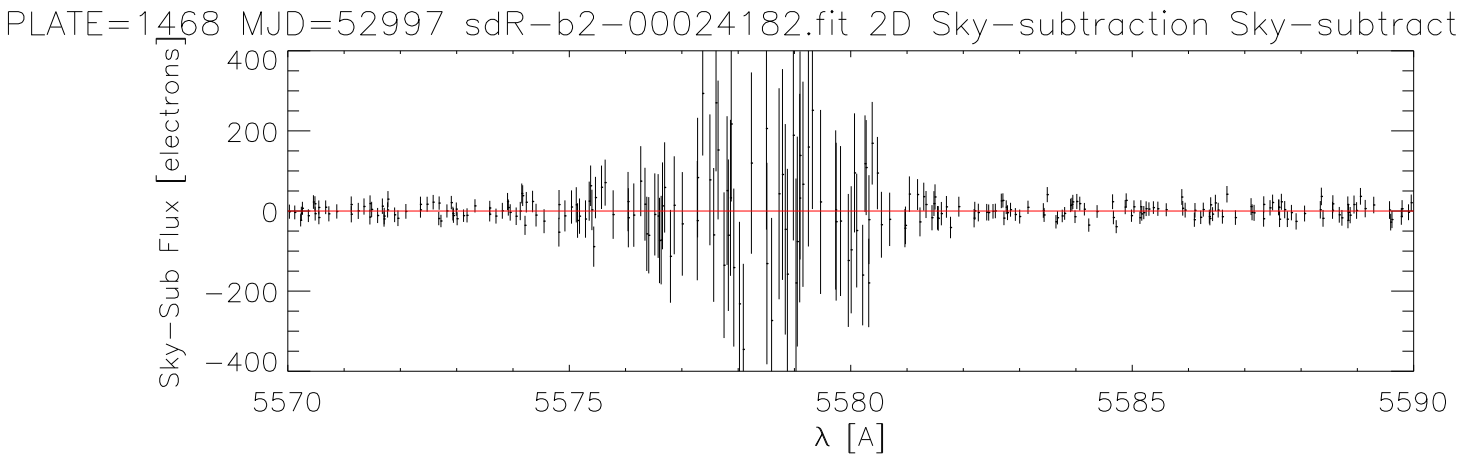

PLATE=1468 MJD=52997 sdR-b2-00024182.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

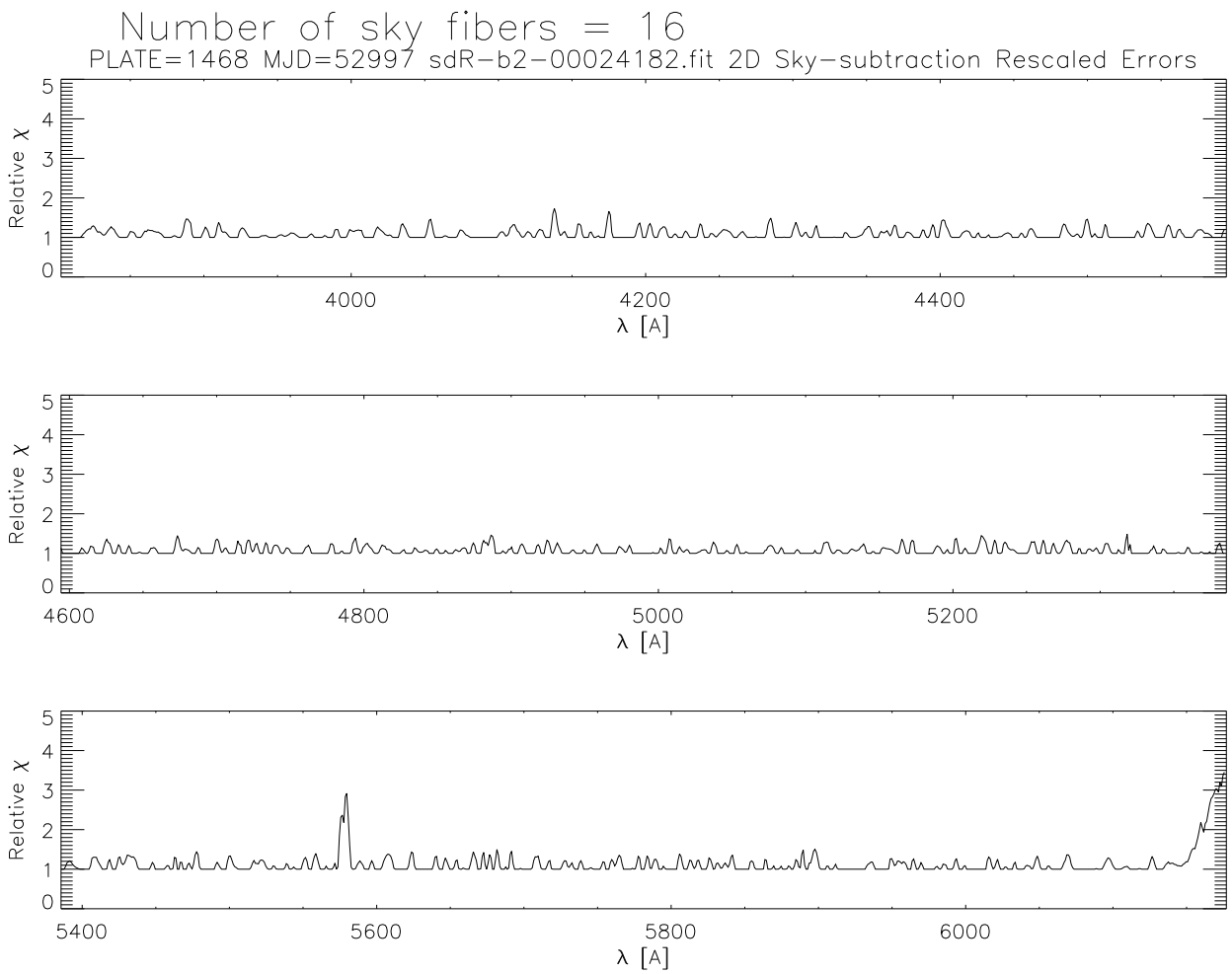

PLATE=1468 MJD=52997 sdR-b2-00024182.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

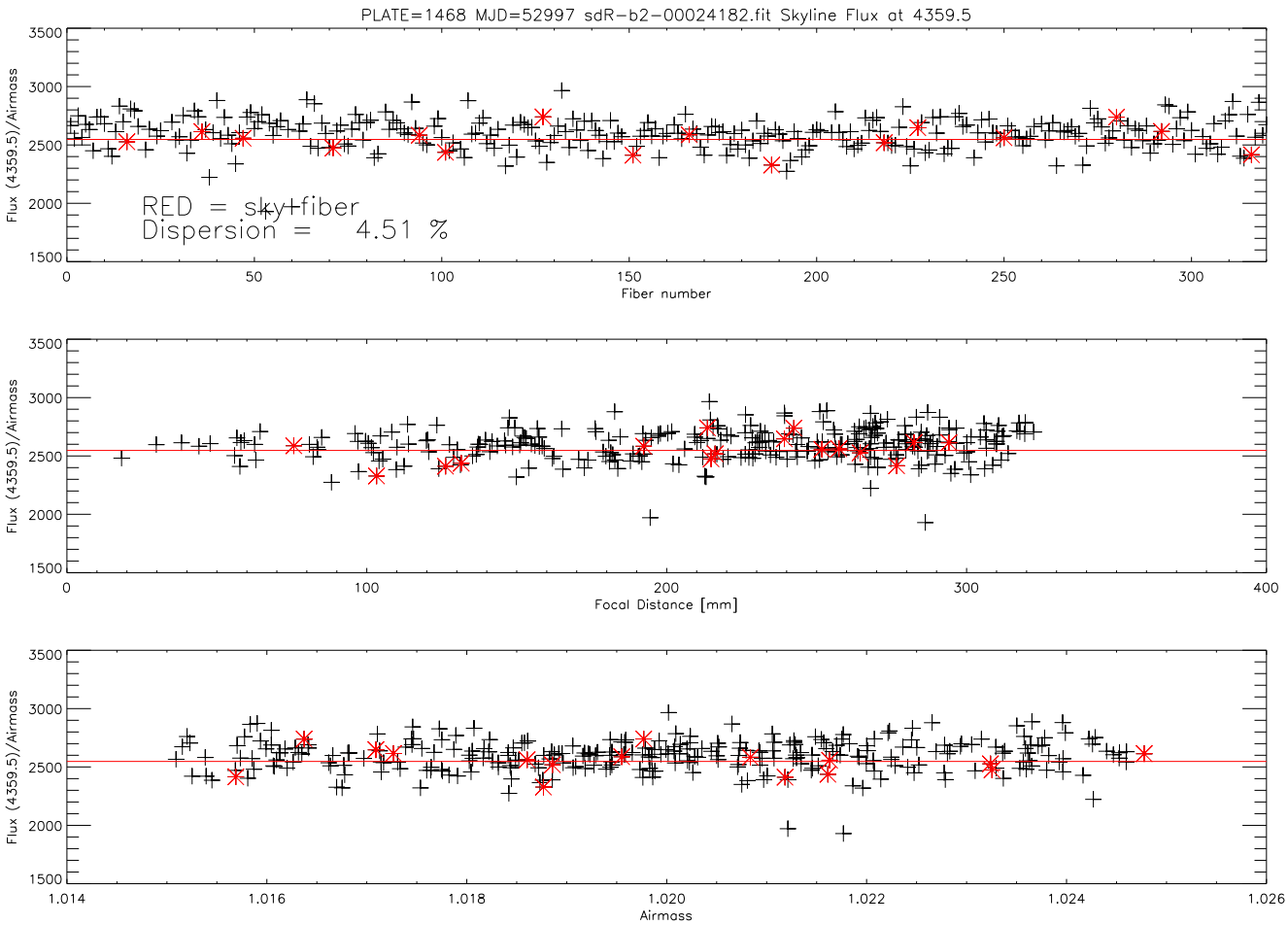

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b2-00024182.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

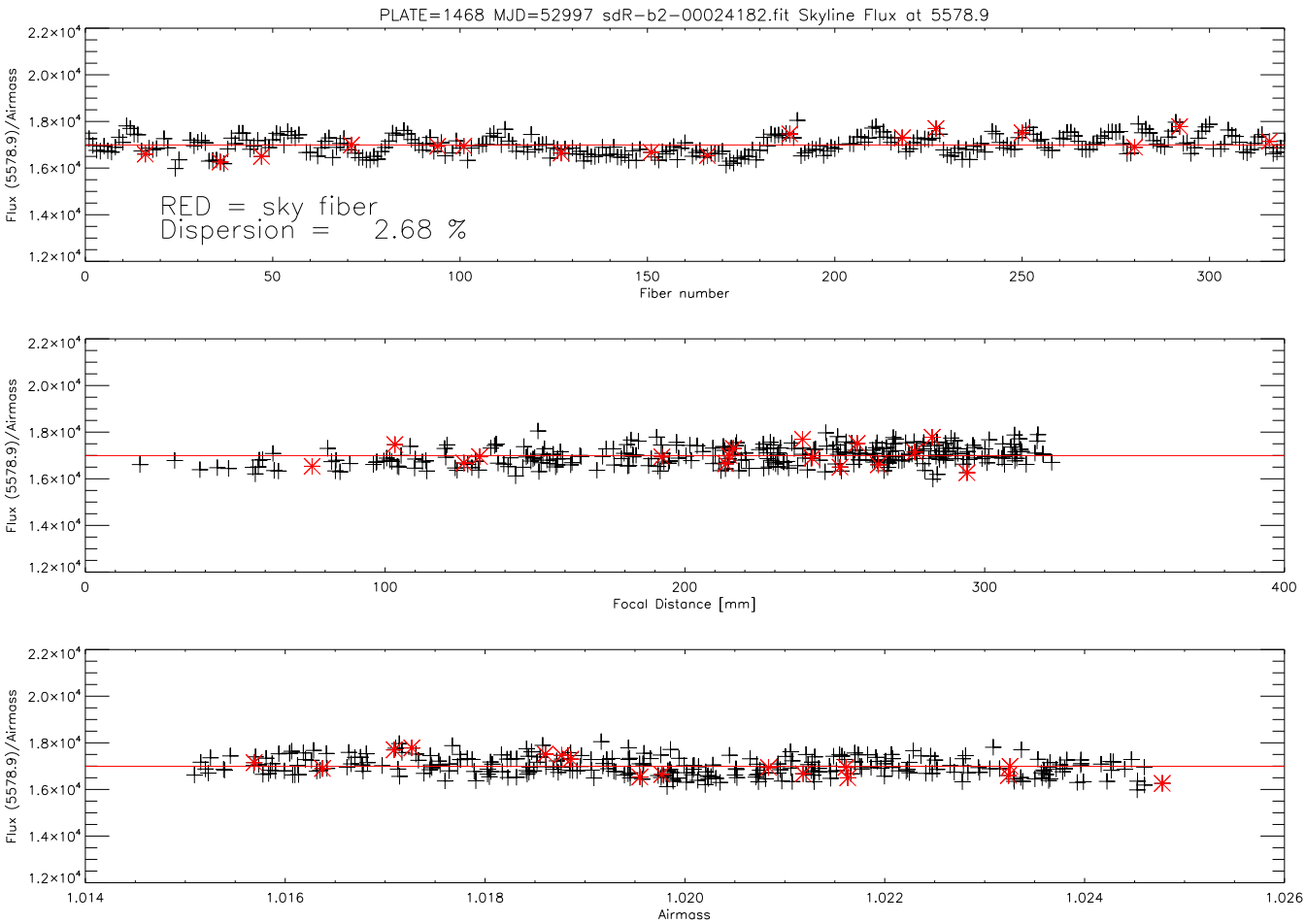

PLATE=1468 MJD=52997 sdR-b2-00024182.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

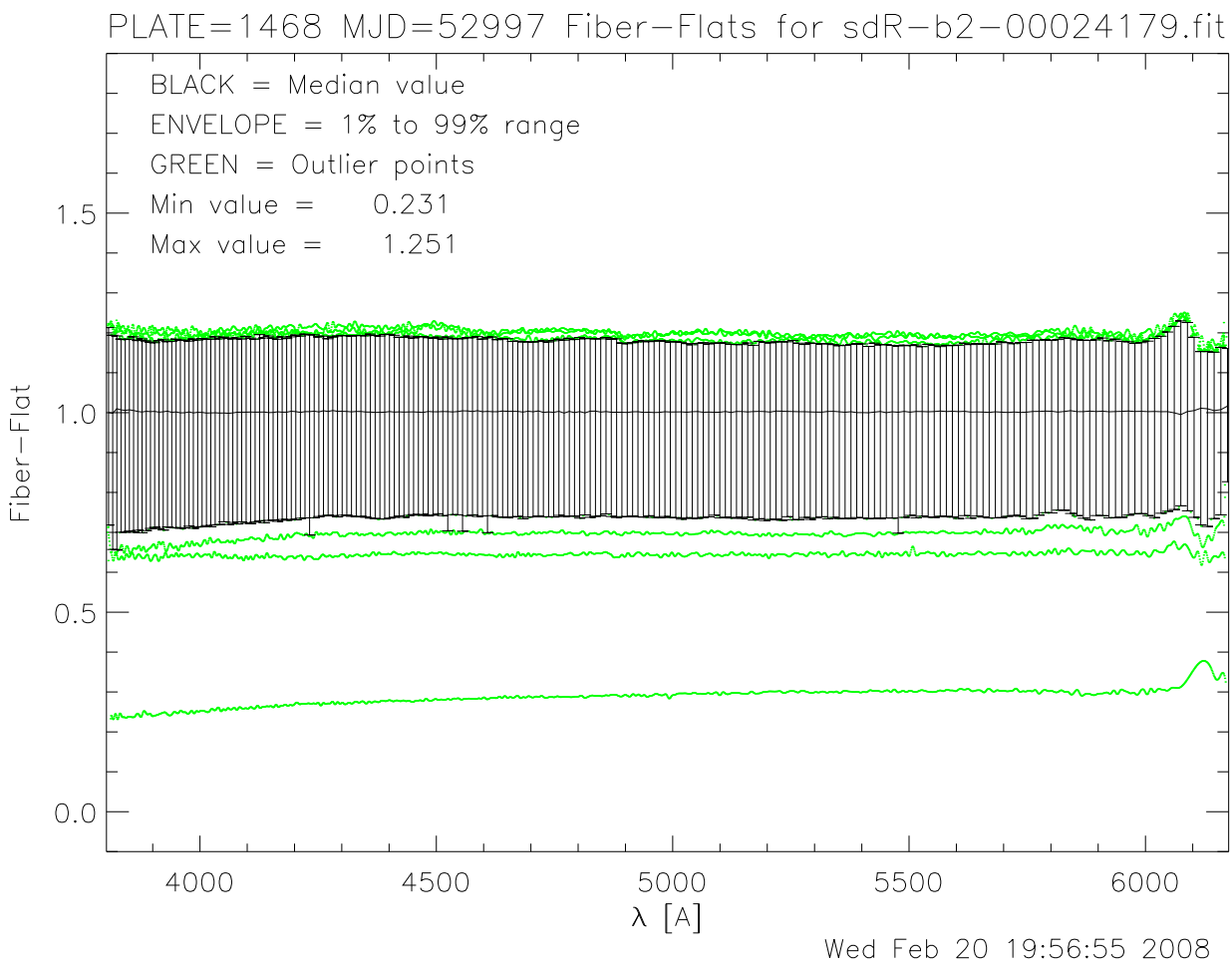

PLATE=1468 MJD=52997 sdR-b2-00024182.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

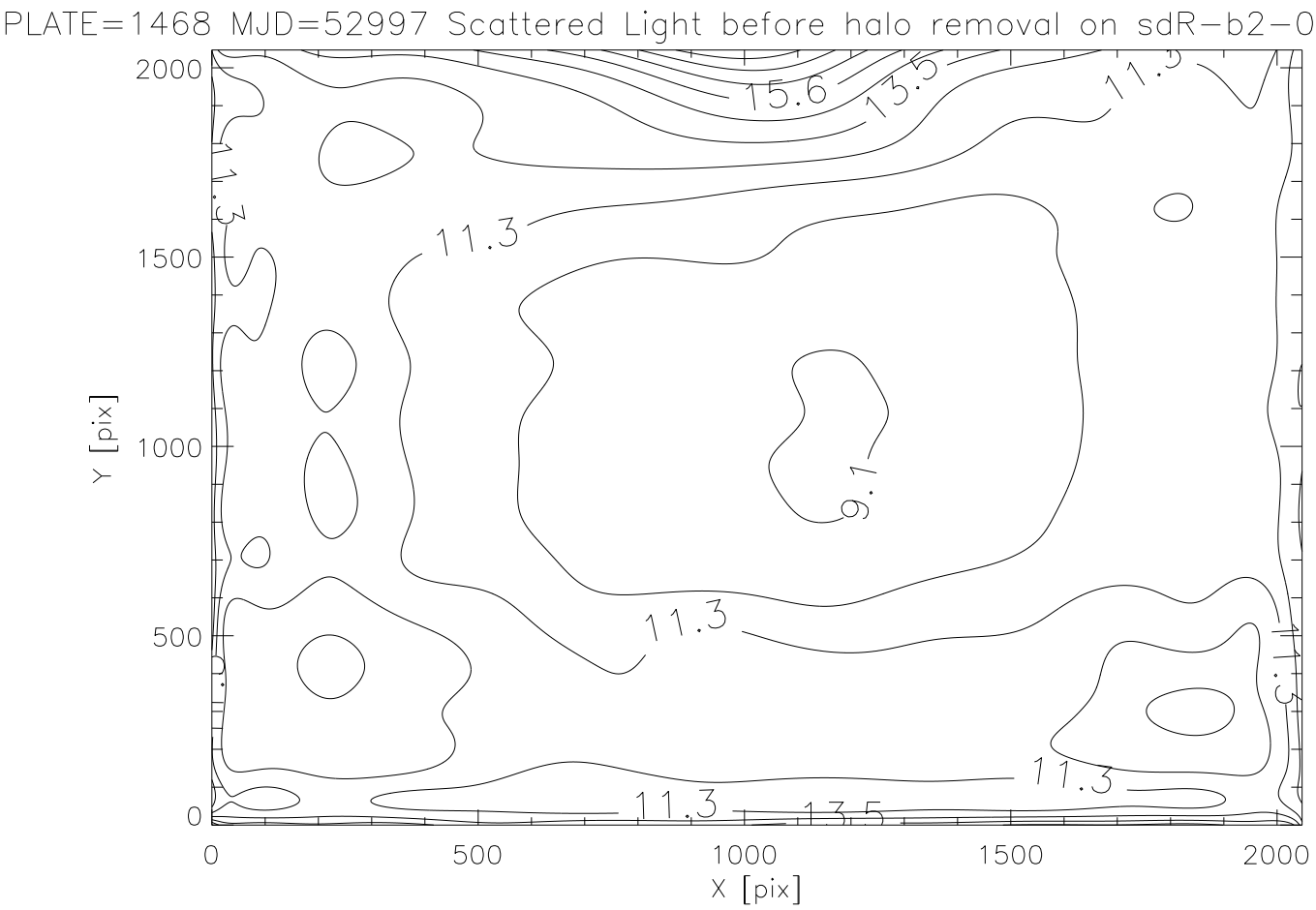

PLATE=1468 MJD=52997 sdR-b2-00024182.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

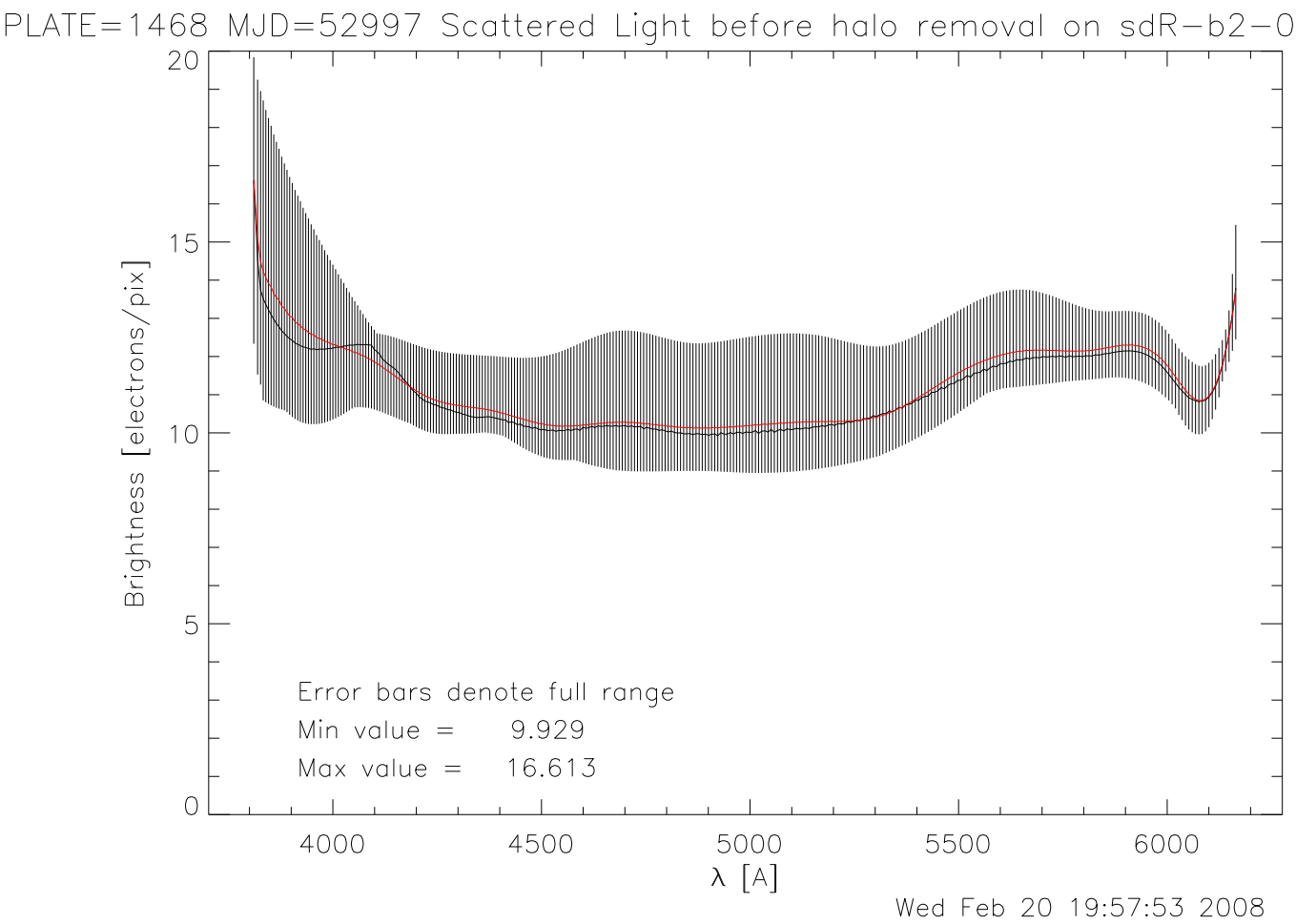

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b2-00024182.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

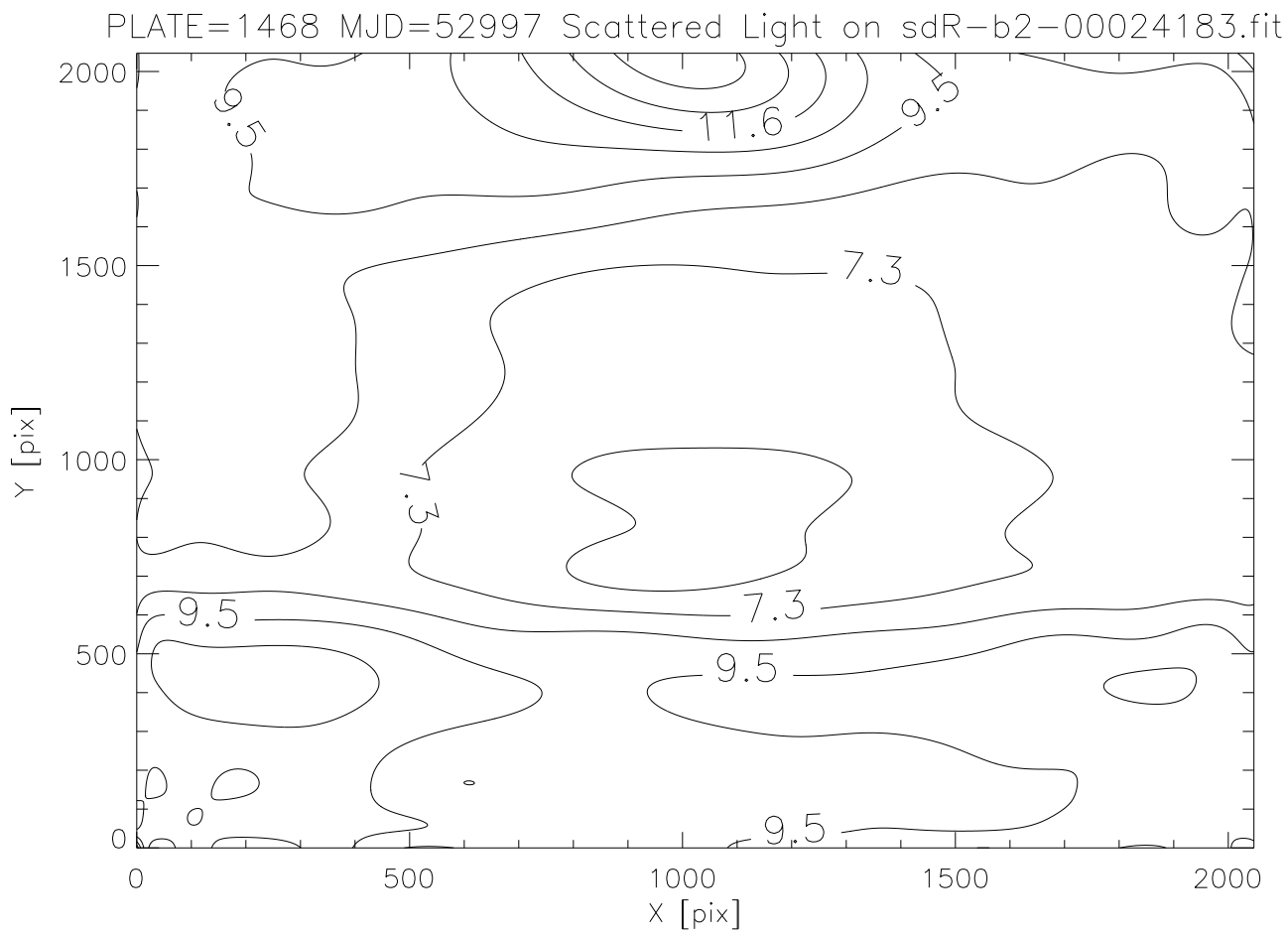

PLATE=1468 MJD=52997 sdR-b2-00024182.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky+fiber
Dispersion = 4.51 %
Fiber number
Focal Distance [mm]
Airmass

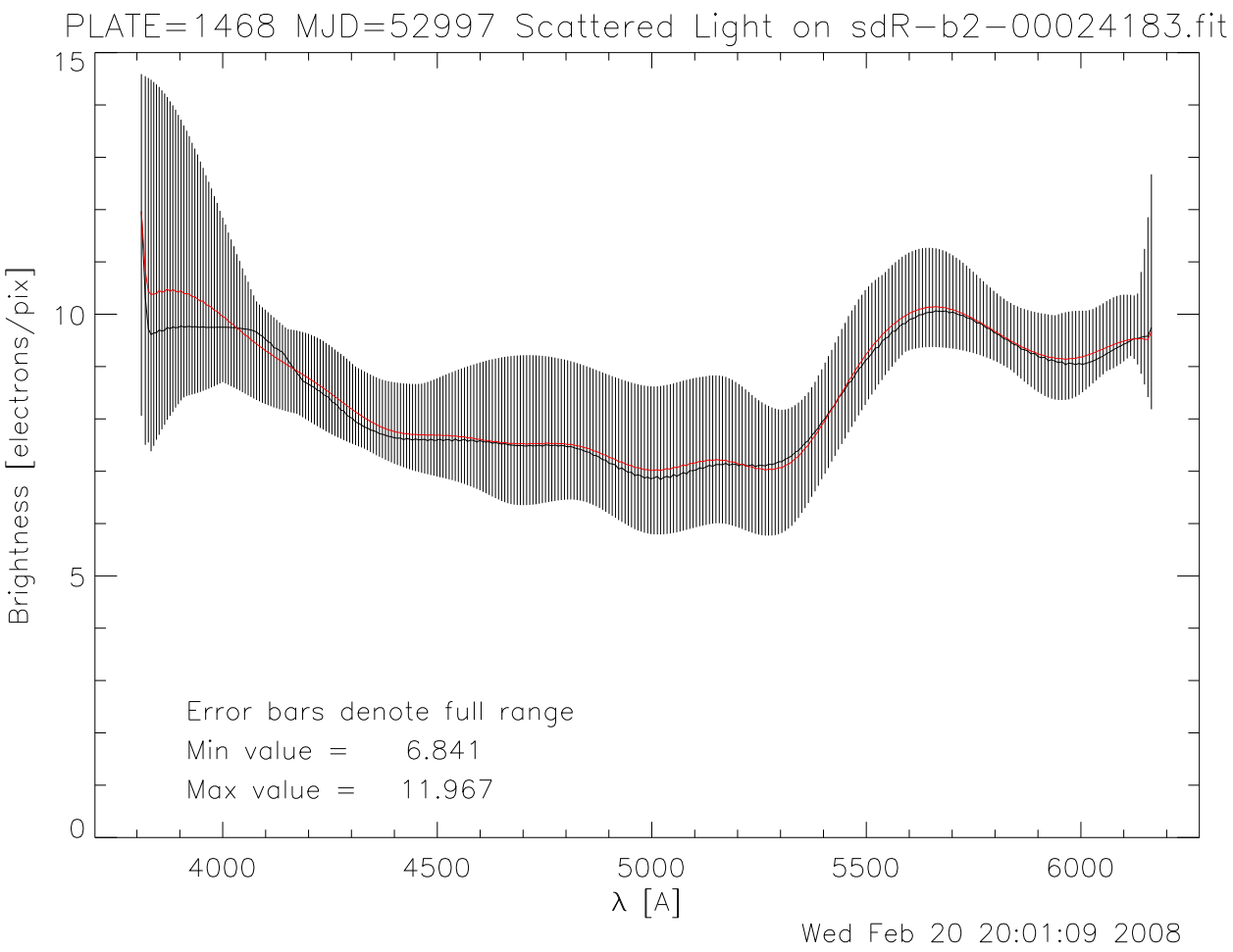

PLATE=1468 MJD=52997 sdR-b2-00024182.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.68 %
Fiber number
Focal Distance [mm]
Airmass

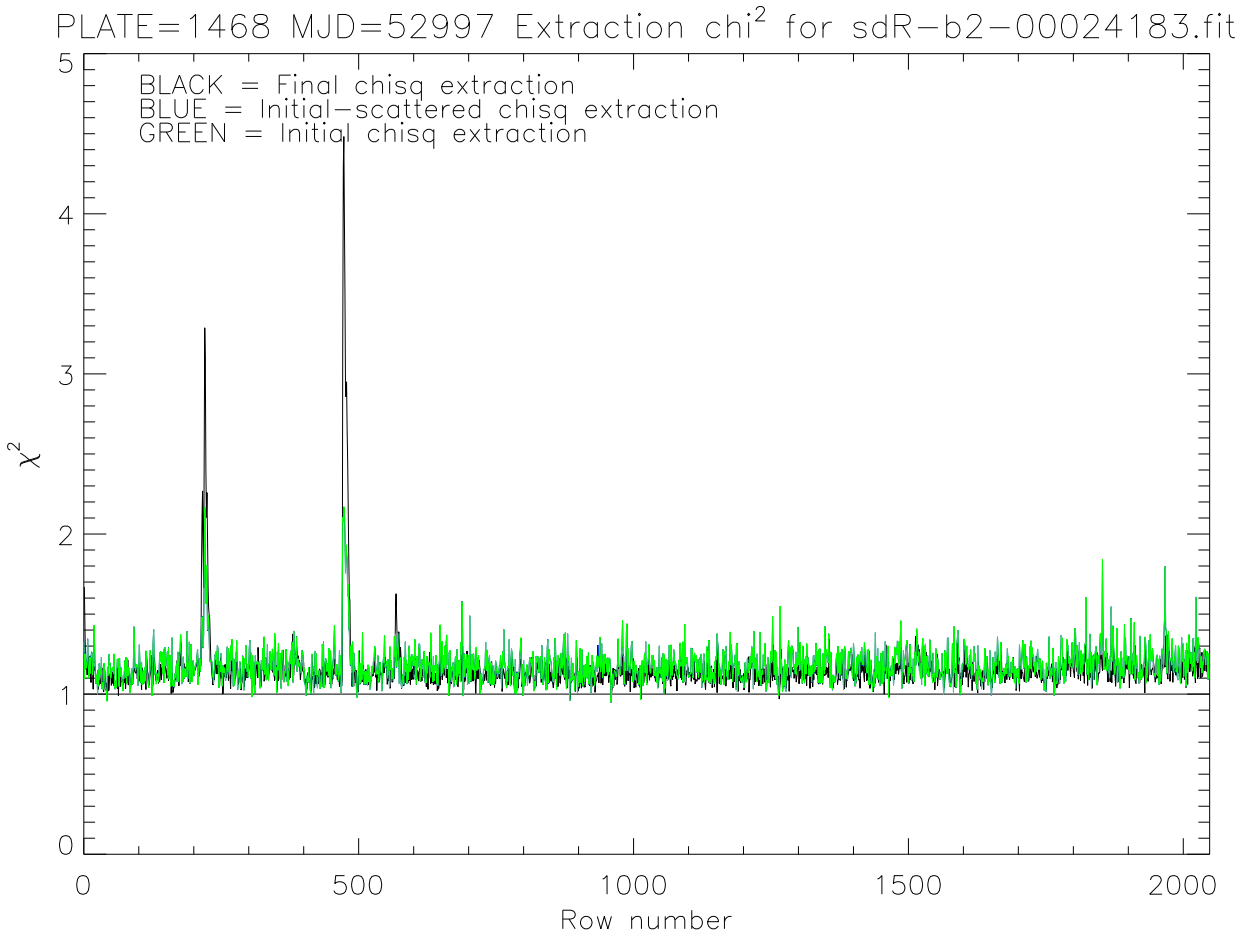

PLATE=1468 MJD=52997 Fiber-Flats for sdR-b2-00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.231
Max value = 1.251
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:56:55 2008

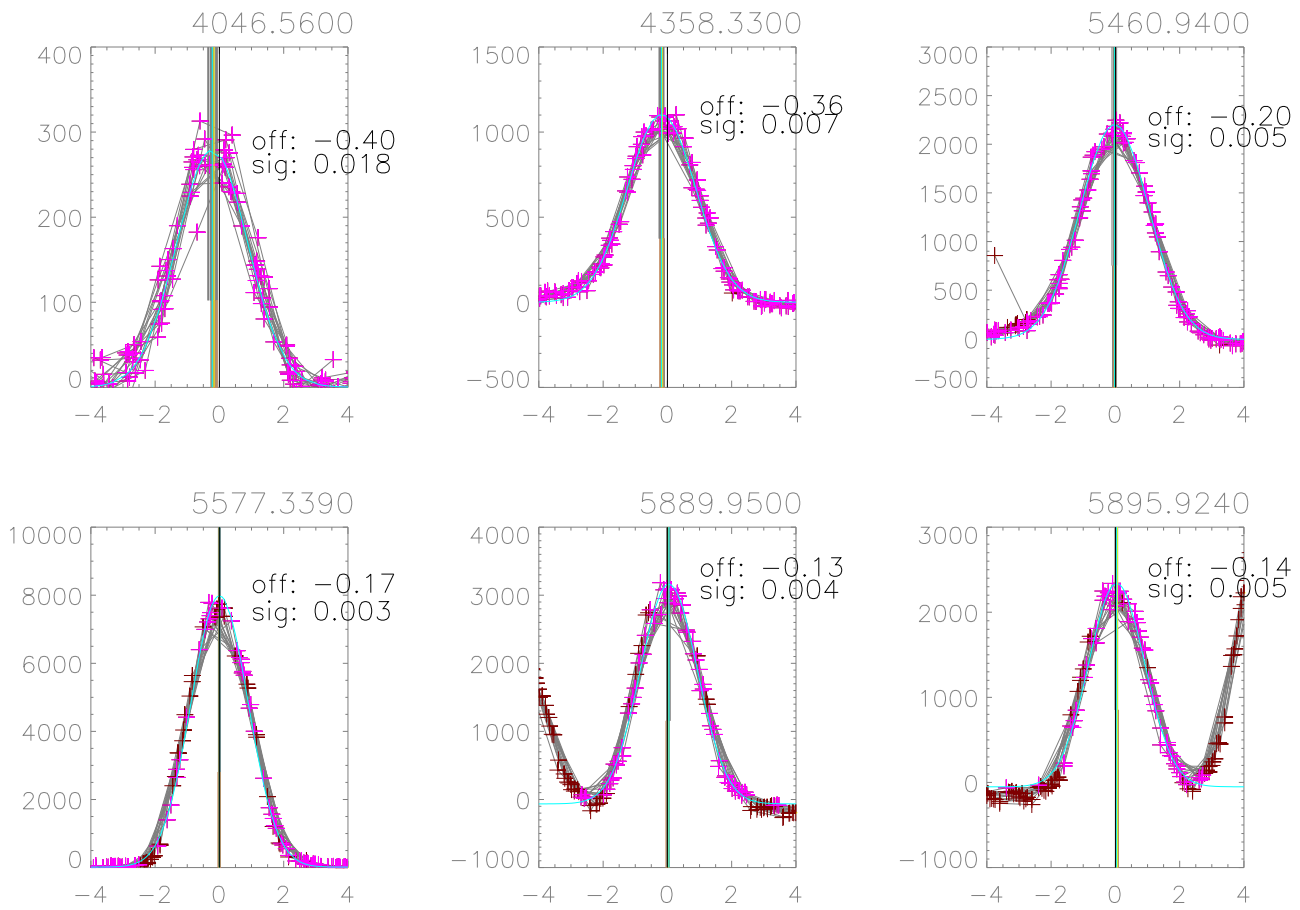

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b2-00024183.f
15.6
13.5
11.3
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

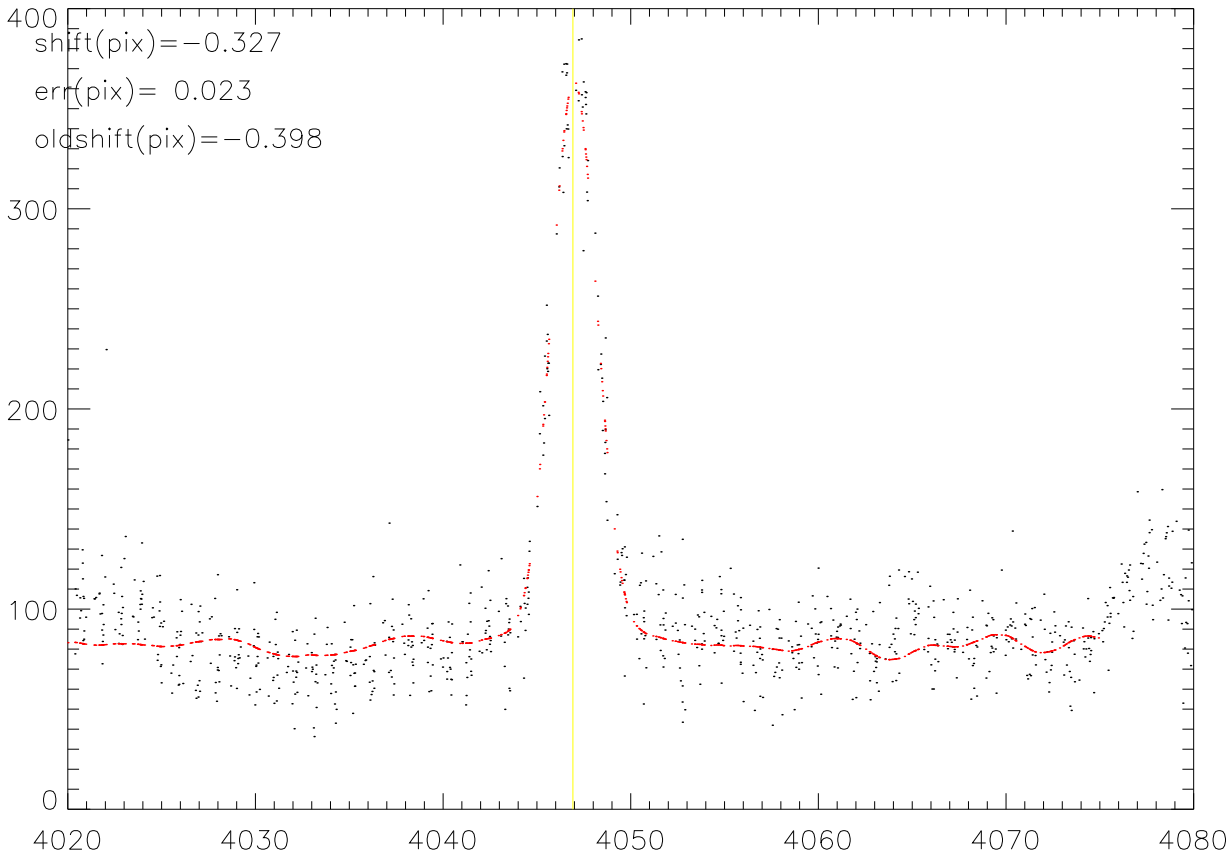

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-b2-00024183.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.929
Max value = 16.613
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 19:57:53 2008

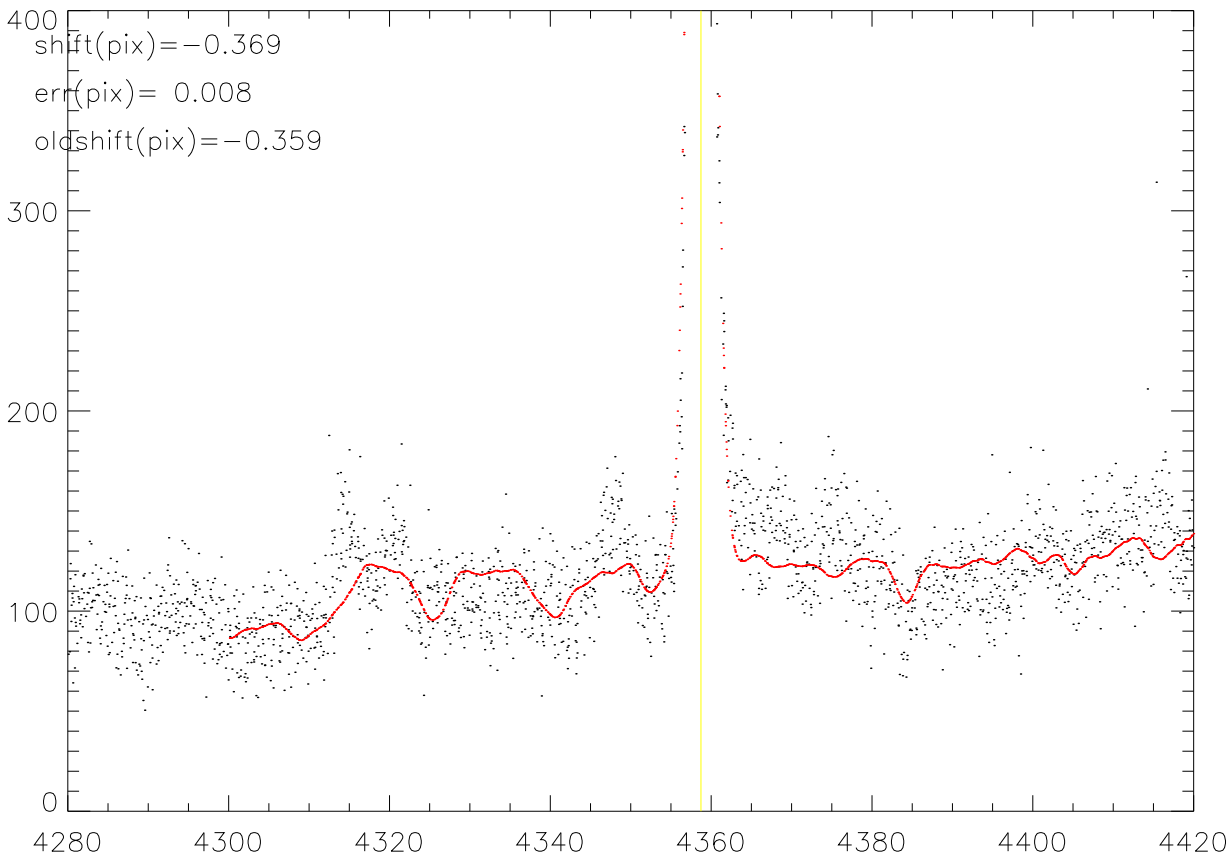

PLATE=1468 MJD=52997 Scattered Light on sdR-b2-00024183.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.5
11.6
9.5
7.3
7.3
9.5
7.3
9.5
9.5

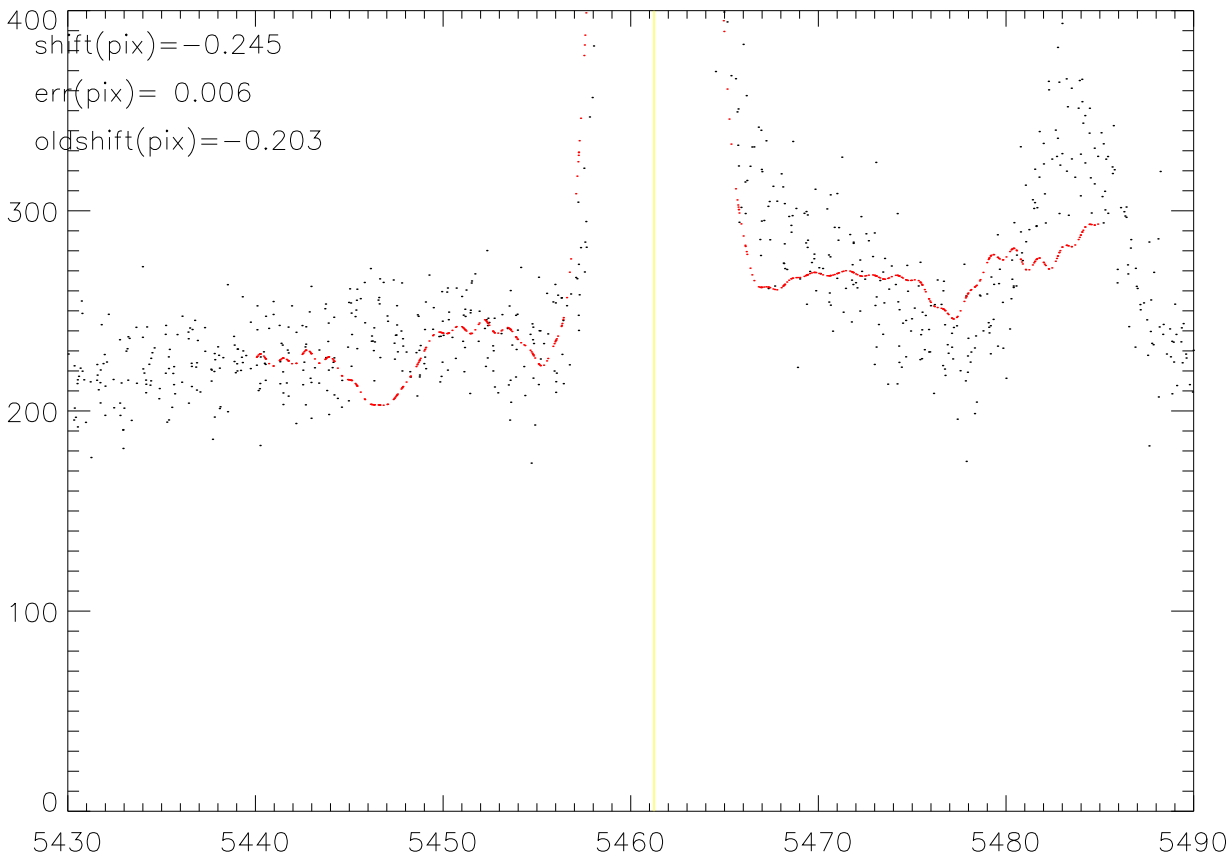

PLATE=1468 MJD=52997 Scattered Light on sdR-b2-00024183.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.841
Max value = 11.967
Wed Feb 20 20:01:09 2008

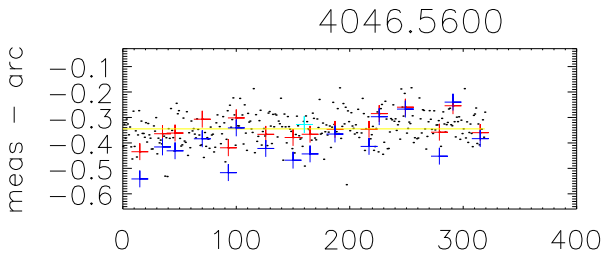

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-b2-00024183.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

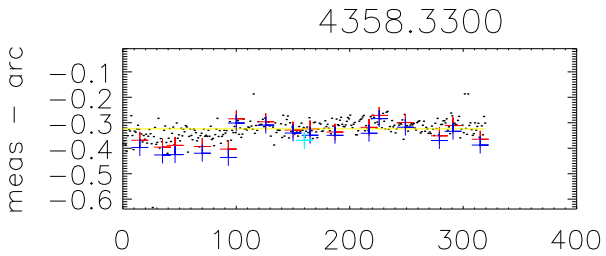

4046.5600
off: −0.40
sig: 0.018
4358.3300
off: −0.36
sig: 0.007
5460.9400
off: −0.20
sig: 0.005
5577.3390
off: −0.17
sig: 0.003
5889.9500
off: −0.13
sig: 0.004
5895.9240
off: −0.14
sig: 0.005

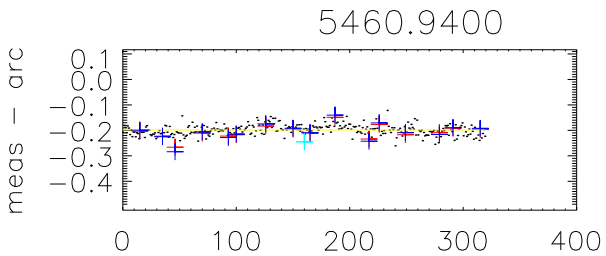

shift(pix)=−0.327
err(pix)= 0.023
oldshift(pix)=−0.398
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

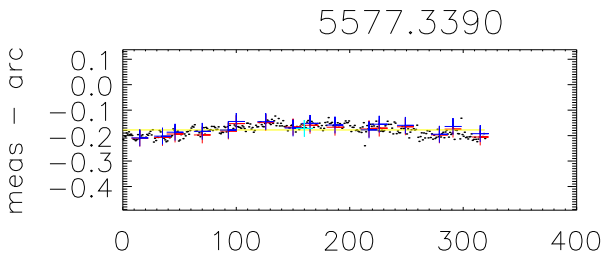

shift(pix)=−0.369
err(pix)= 0.008
oldshift(pix)=−0.359
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

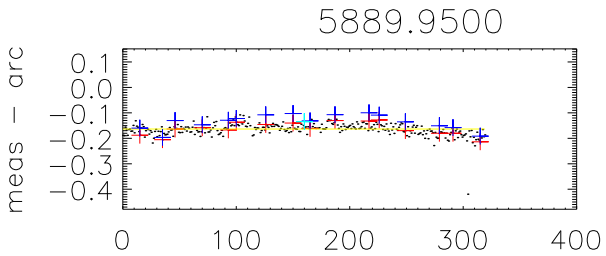

shift(pix)=−0.245
err(pix)= 0.006
oldshift(pix)=−0.203
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

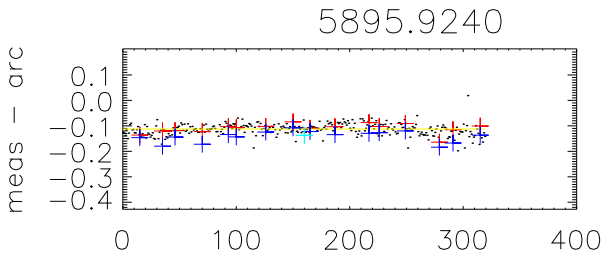

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

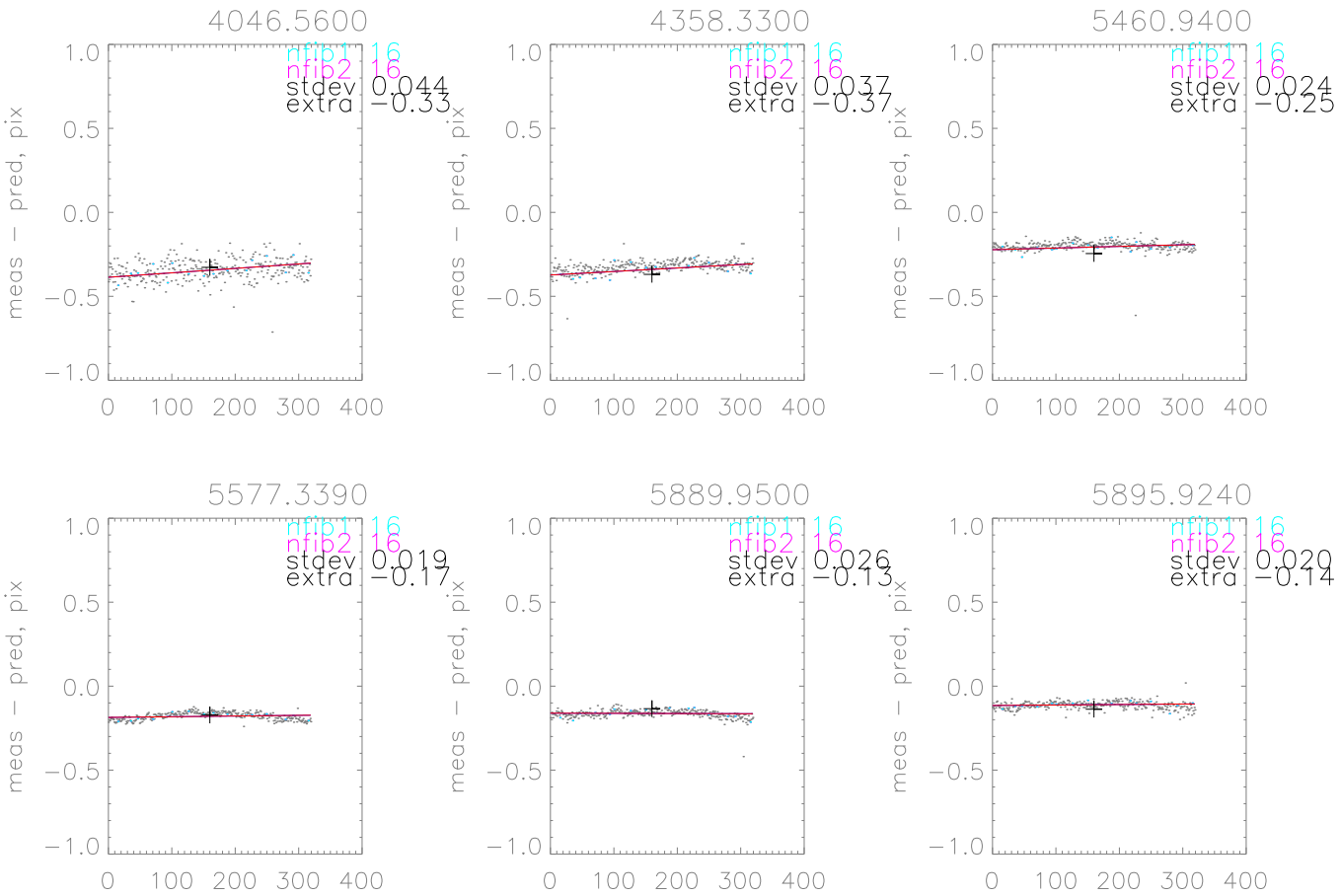

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

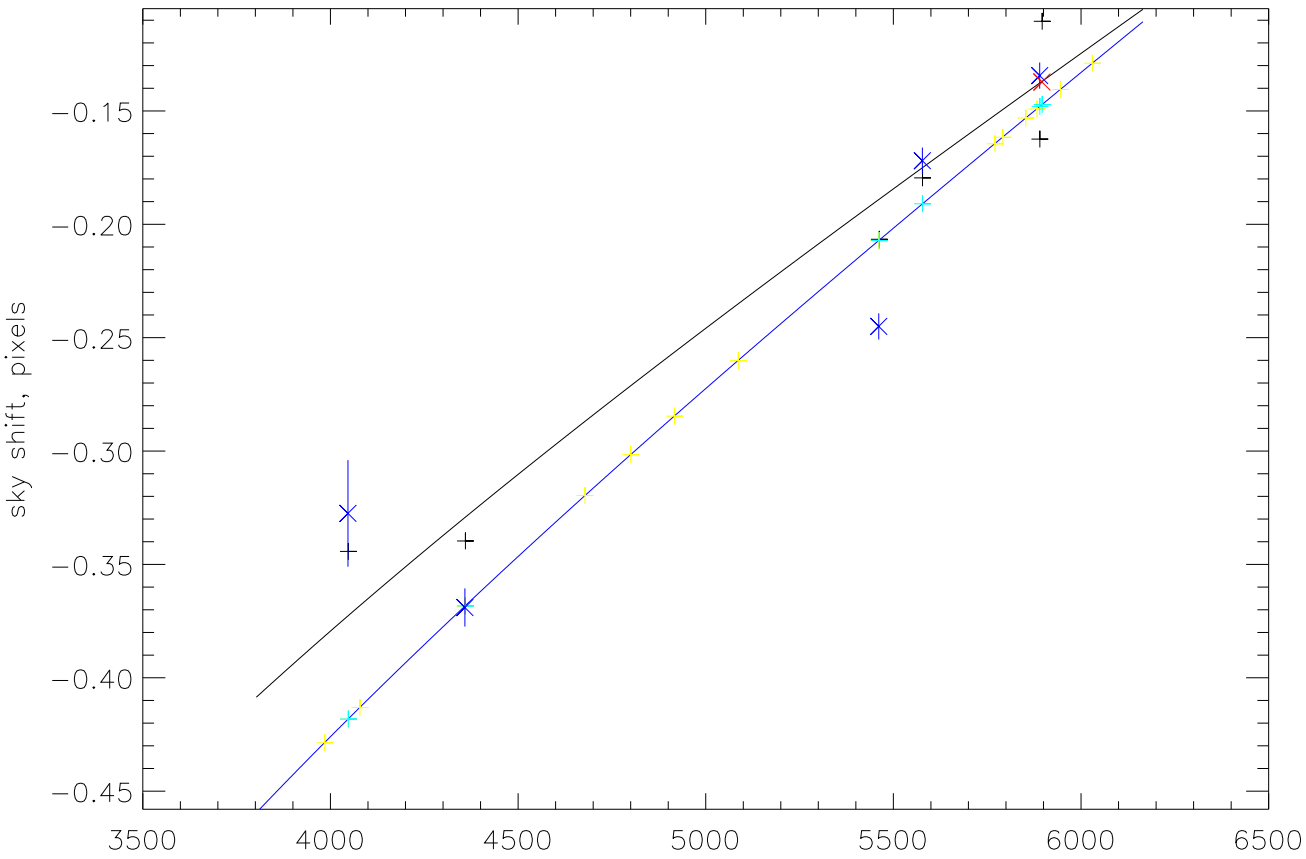

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

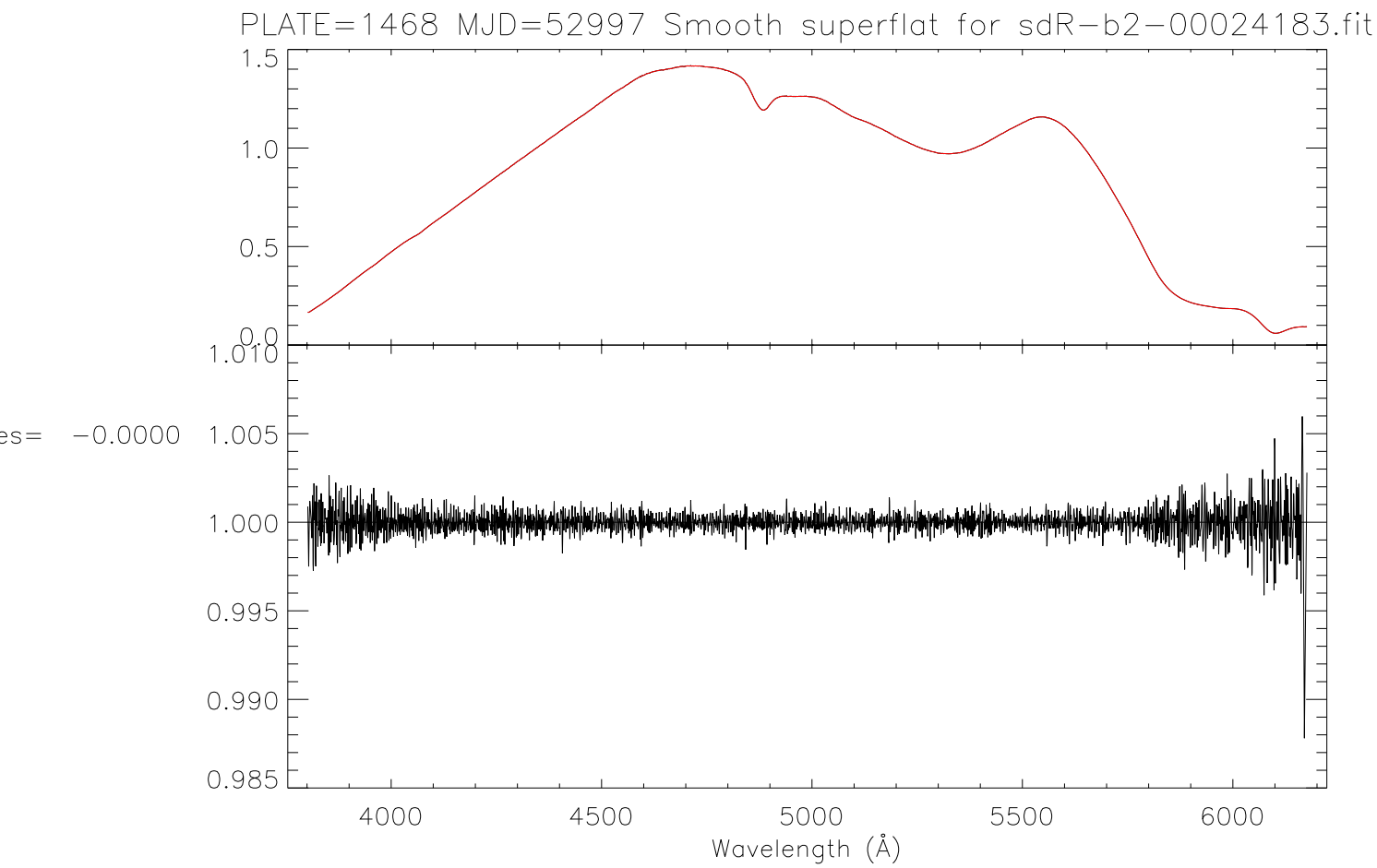

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

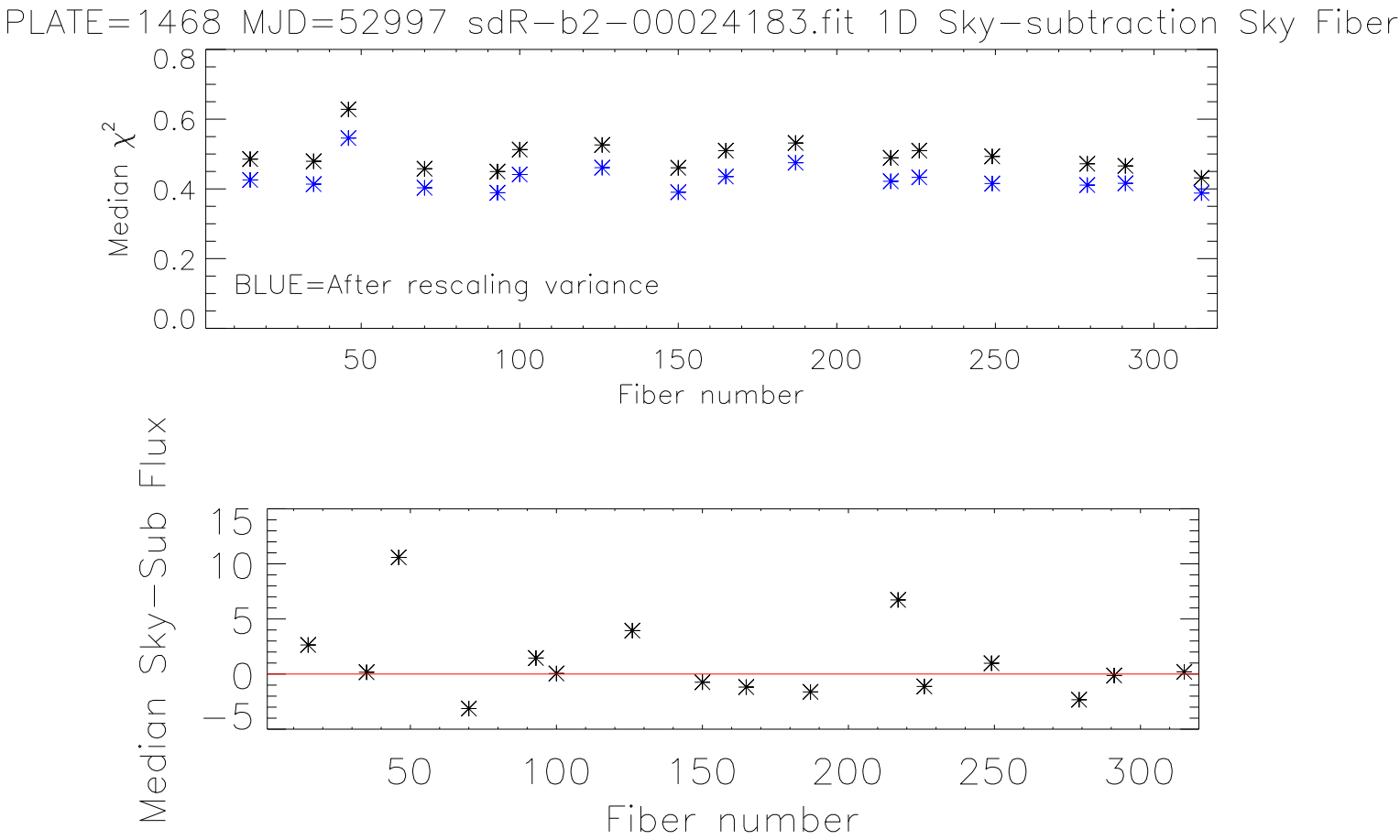

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

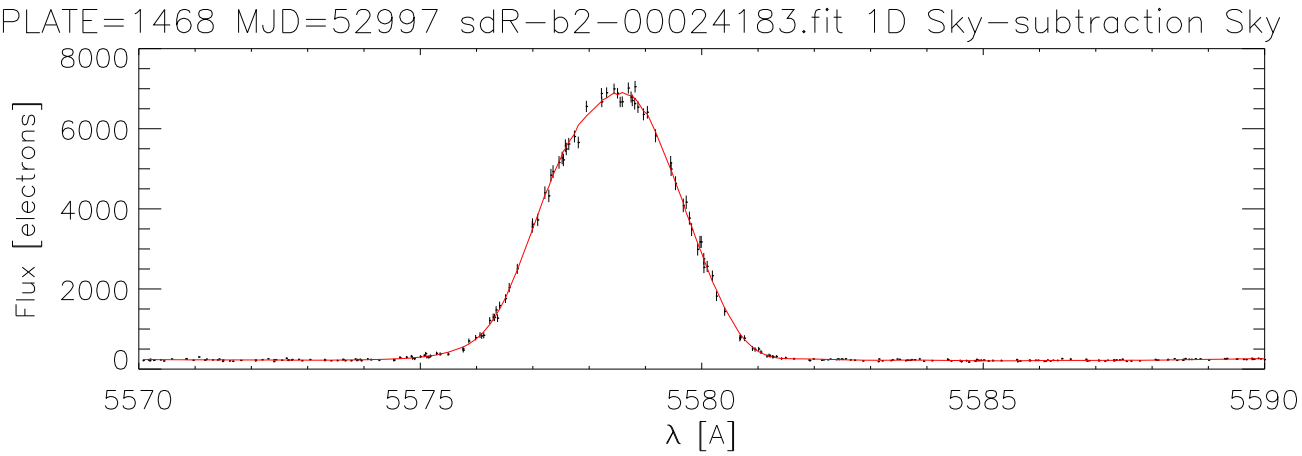

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

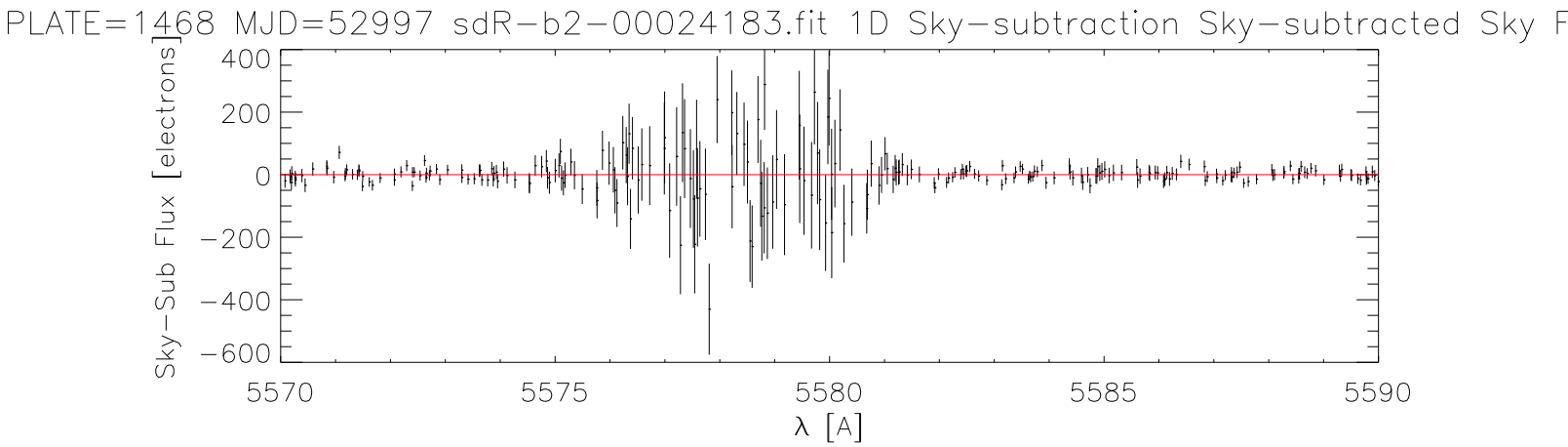

4046.5600
nfib1 16
nfib2 16
stdev 0.044
extra −0.33
4358.3300
nfib1 16
nfib2 16
stdev 0.037
extra −0.37
5460.9400
nfib1 16
nfib2 16
stdev 0.024
extra −0.25
5577.3390
nfib1 16
nfib2 16
stdev 0.019
extra −0.17
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra −0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.020
extra −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

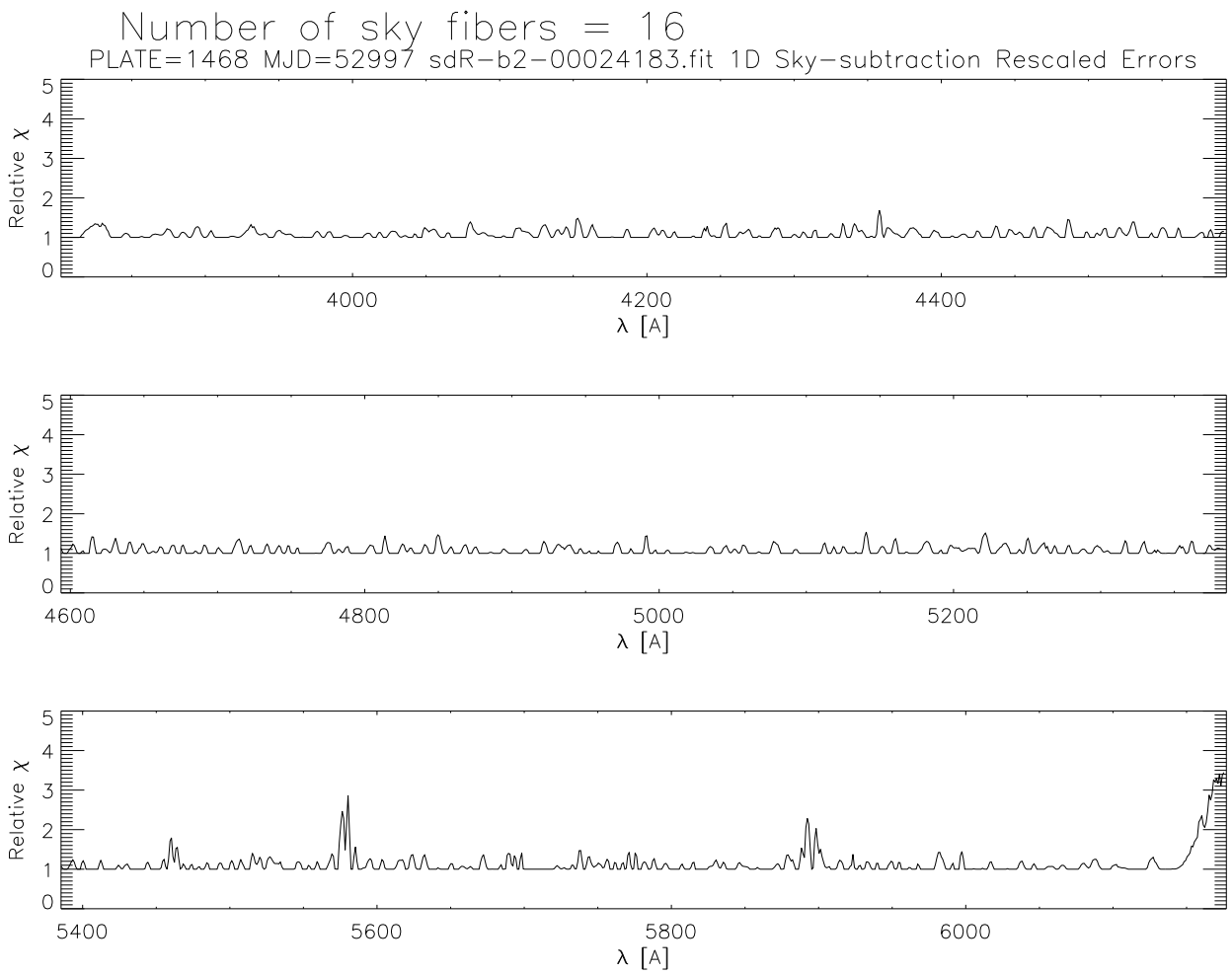

sky shift, pixels
−0.15
−0.20
−0.25
−0.30
−0.35
−0.40
−0.45
3500
4000
4500
5000
5500
6000
6500

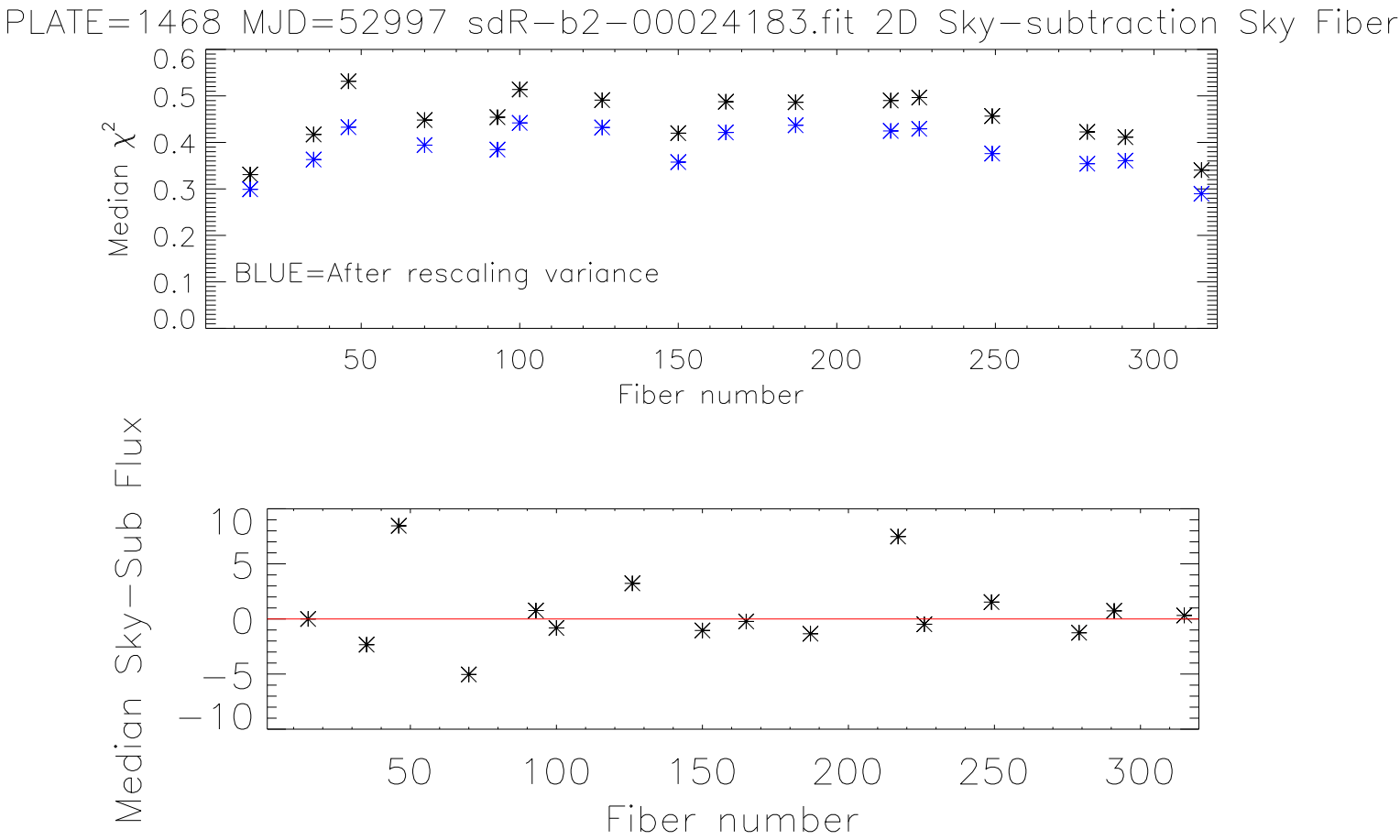

PLATE=1468 MJD=52997 Smooth superflat for sdR-b2-00024183.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

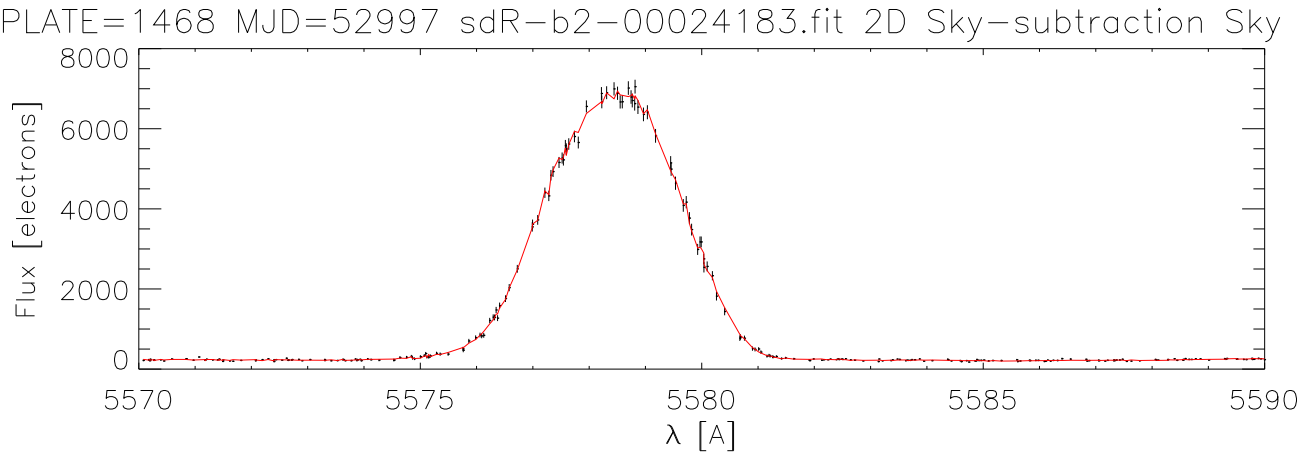

PLATE=1468 MJD=52997 sdR-b2-00024183.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

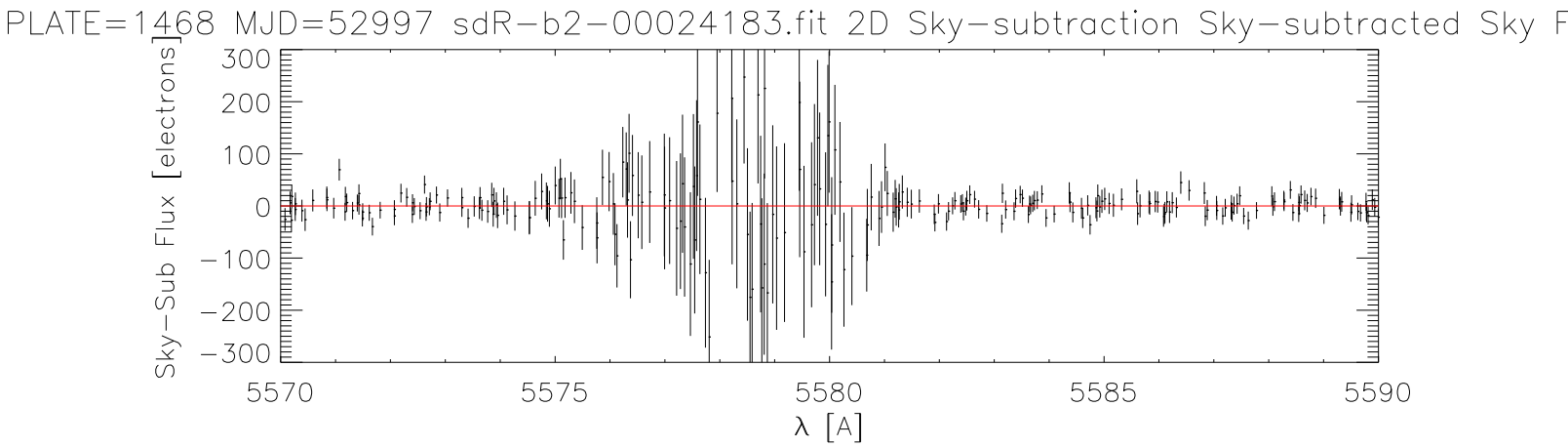

PLATE=1468 MJD=52997 sdR-b2-00024183.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

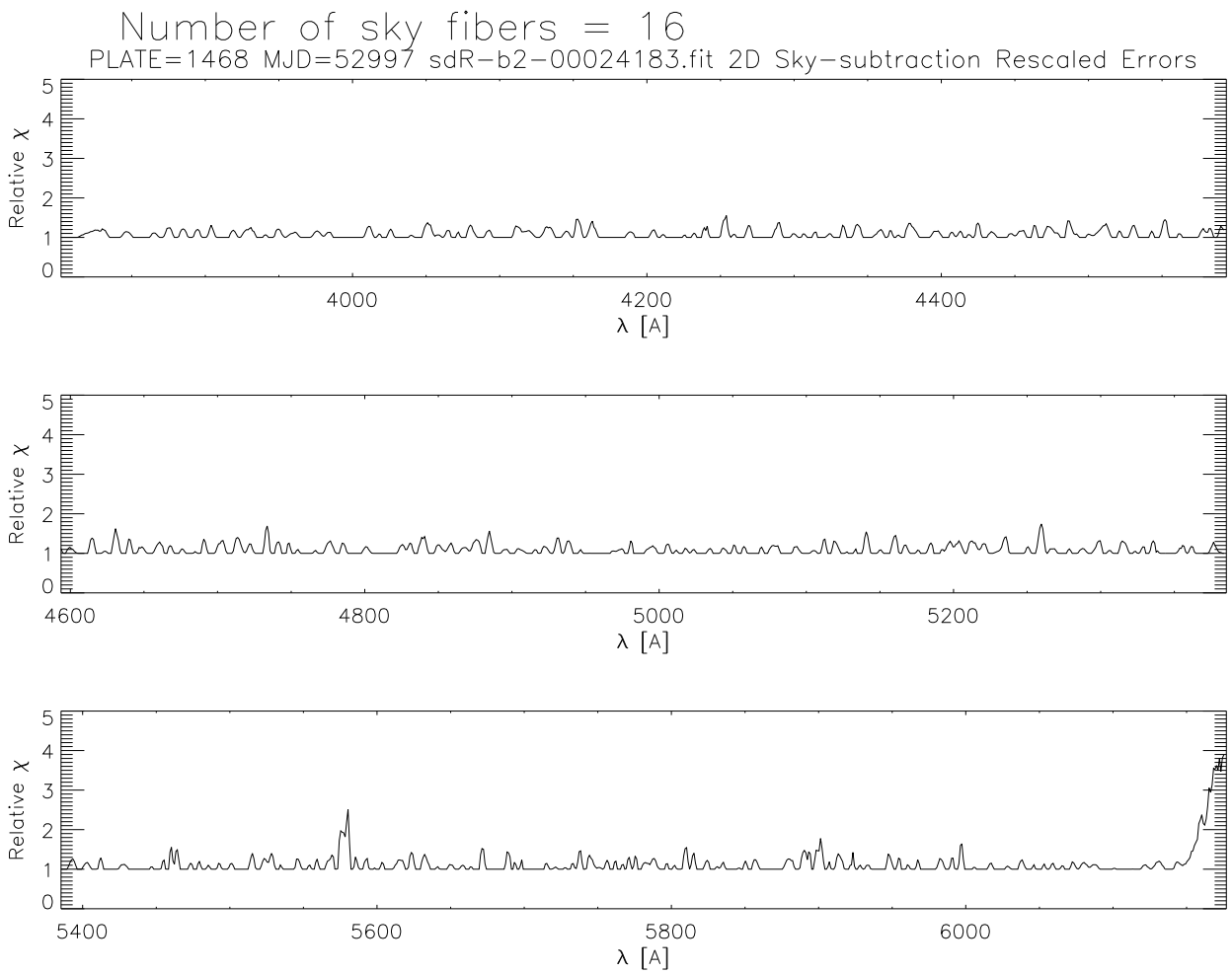

PLATE=1468 MJD=52997 sdR-b2-00024183.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

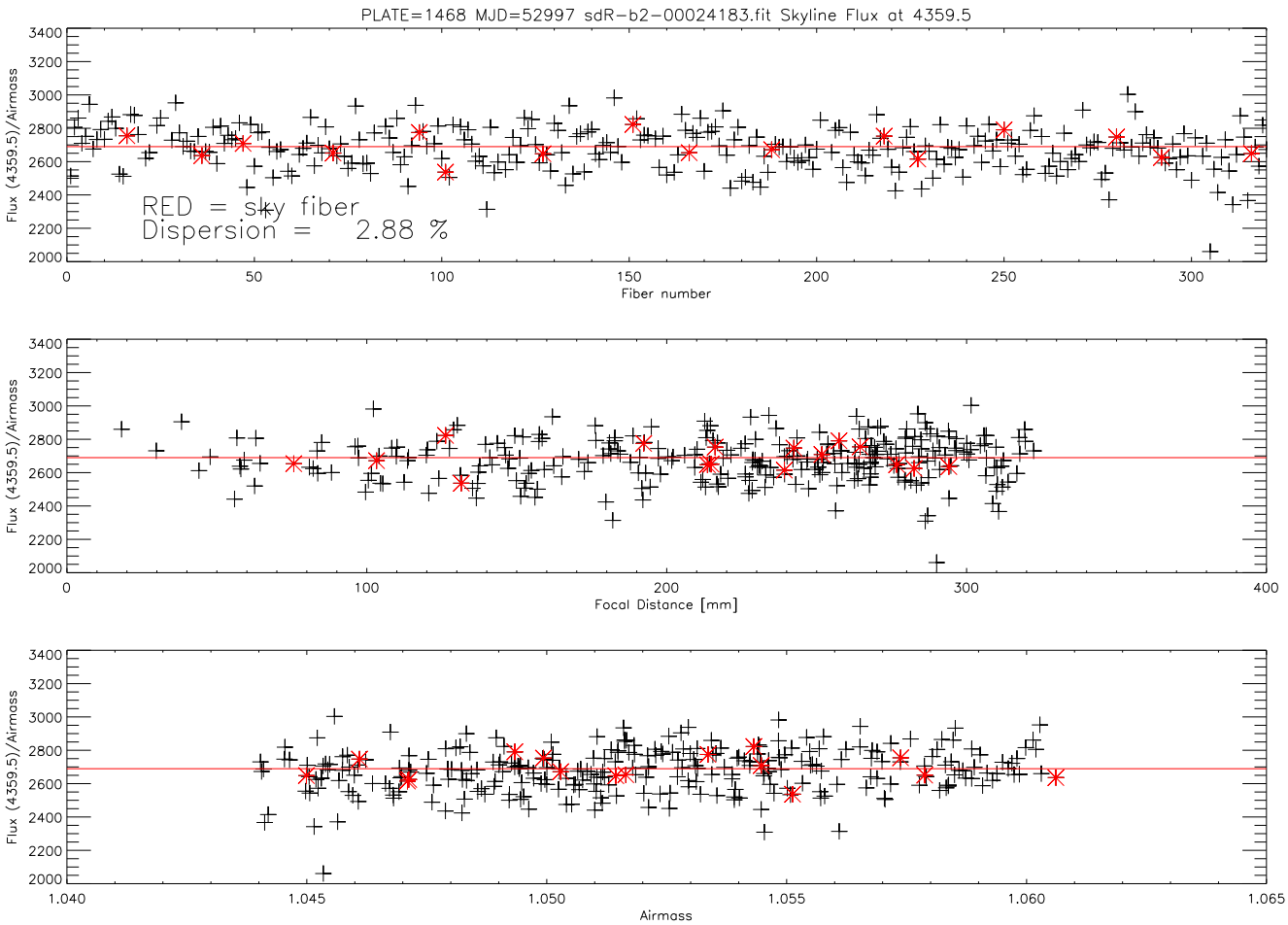

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b2-00024183.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

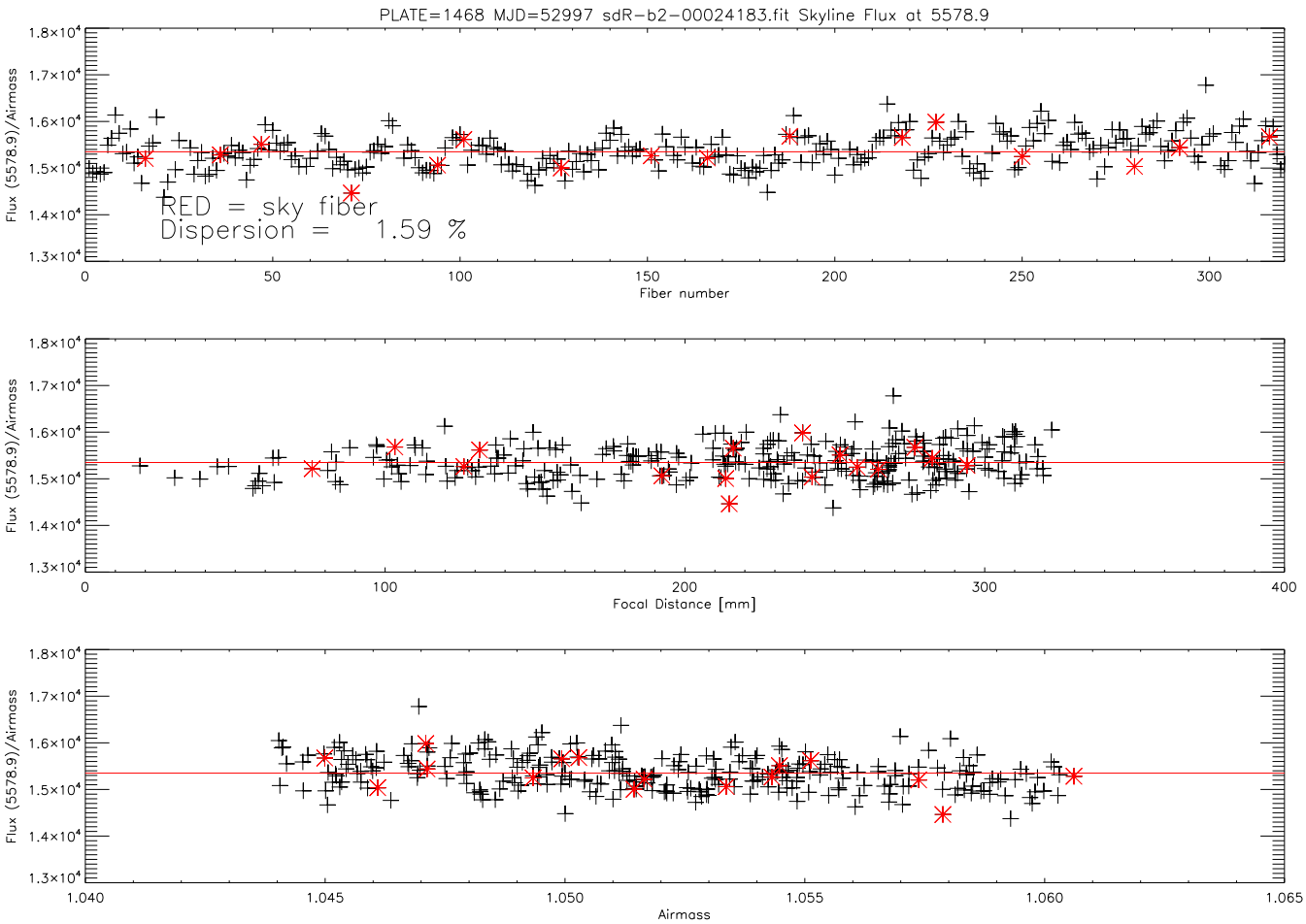

PLATE=1468 MJD=52997 sdR-b2-00024183.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

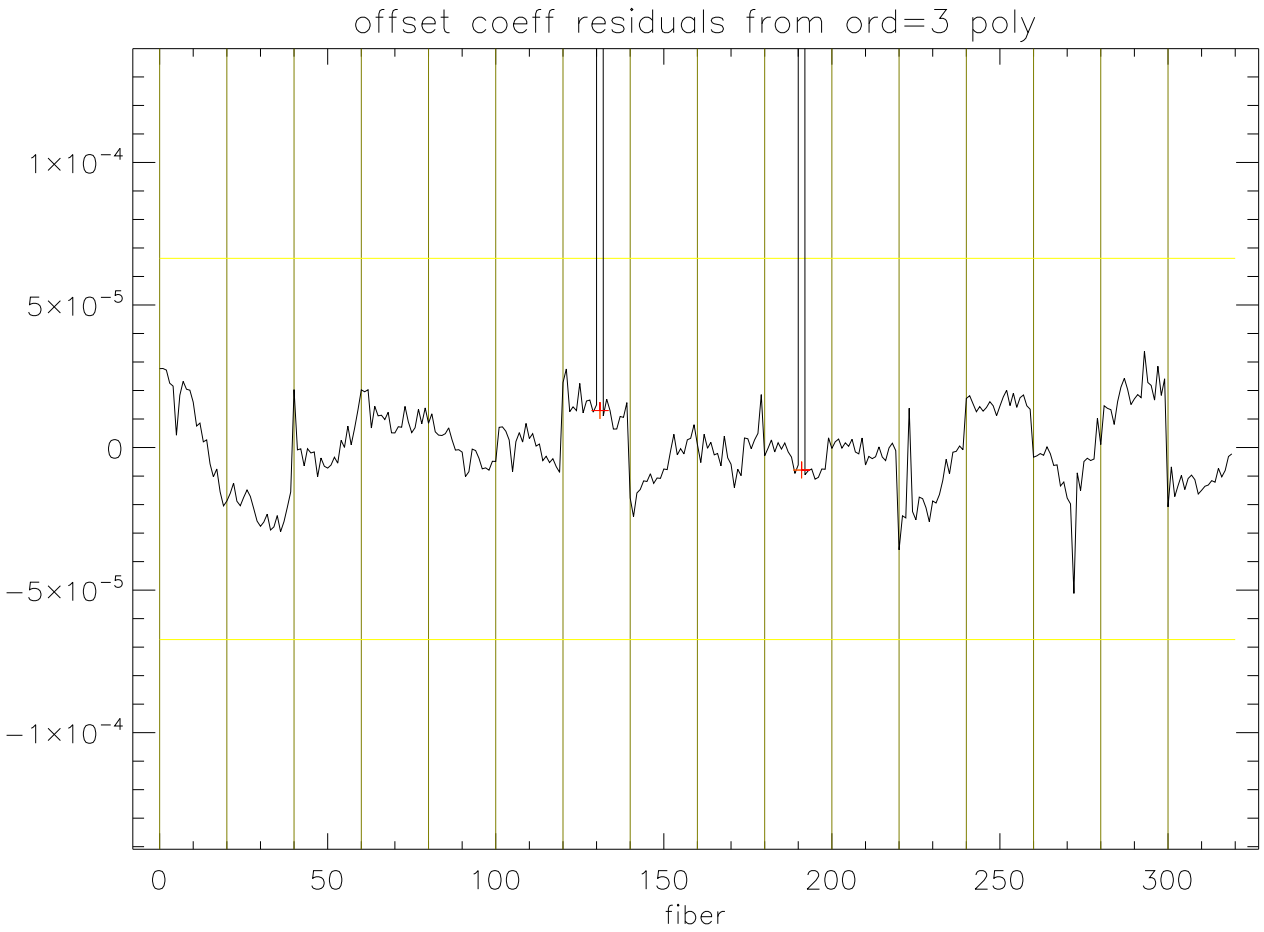

PLATE=1468 MJD=52997 sdR-b2-00024183.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

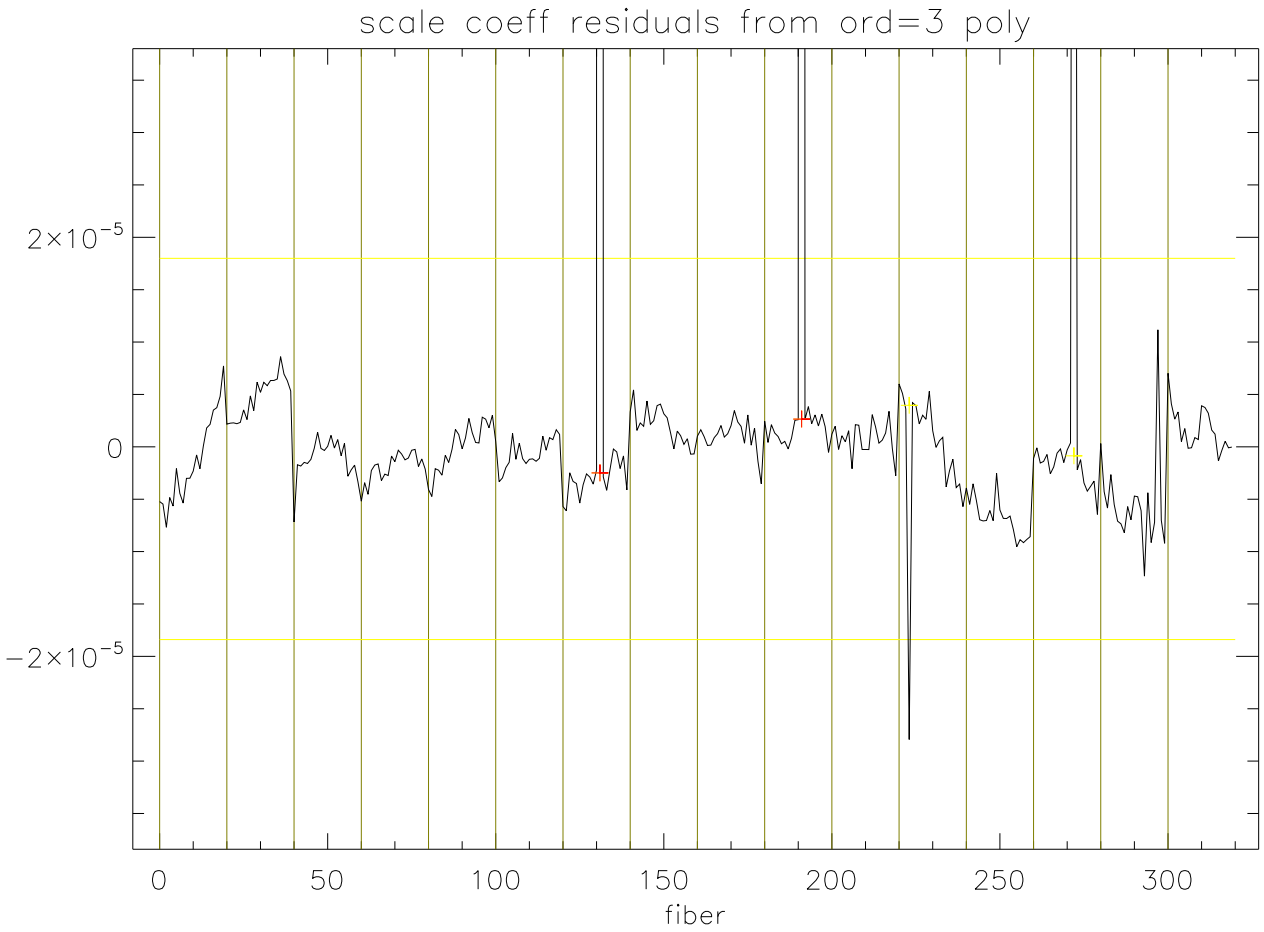

PLATE=1468 MJD=52997 sdR-b2-00024183.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

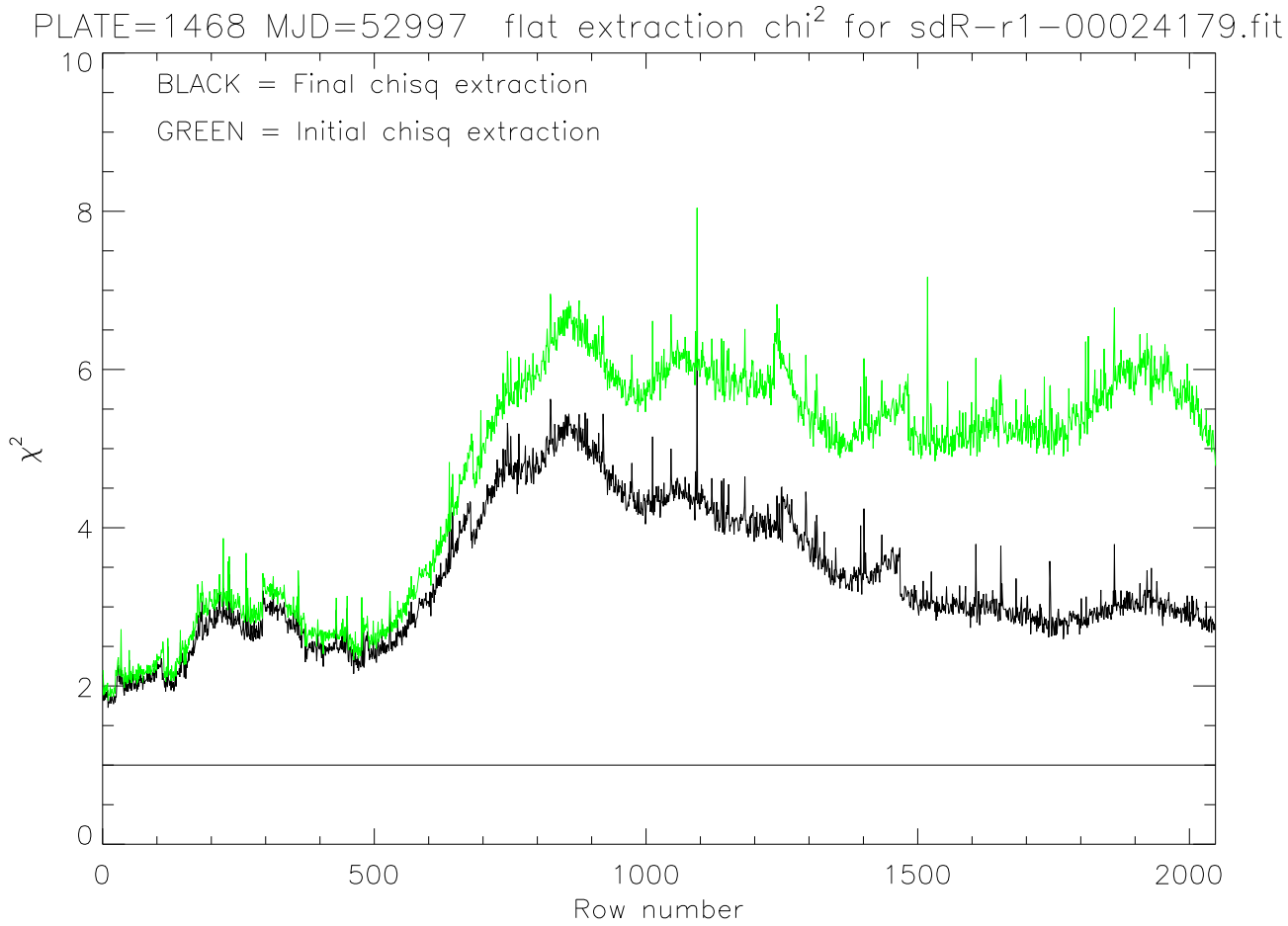

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-b2-00024183.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

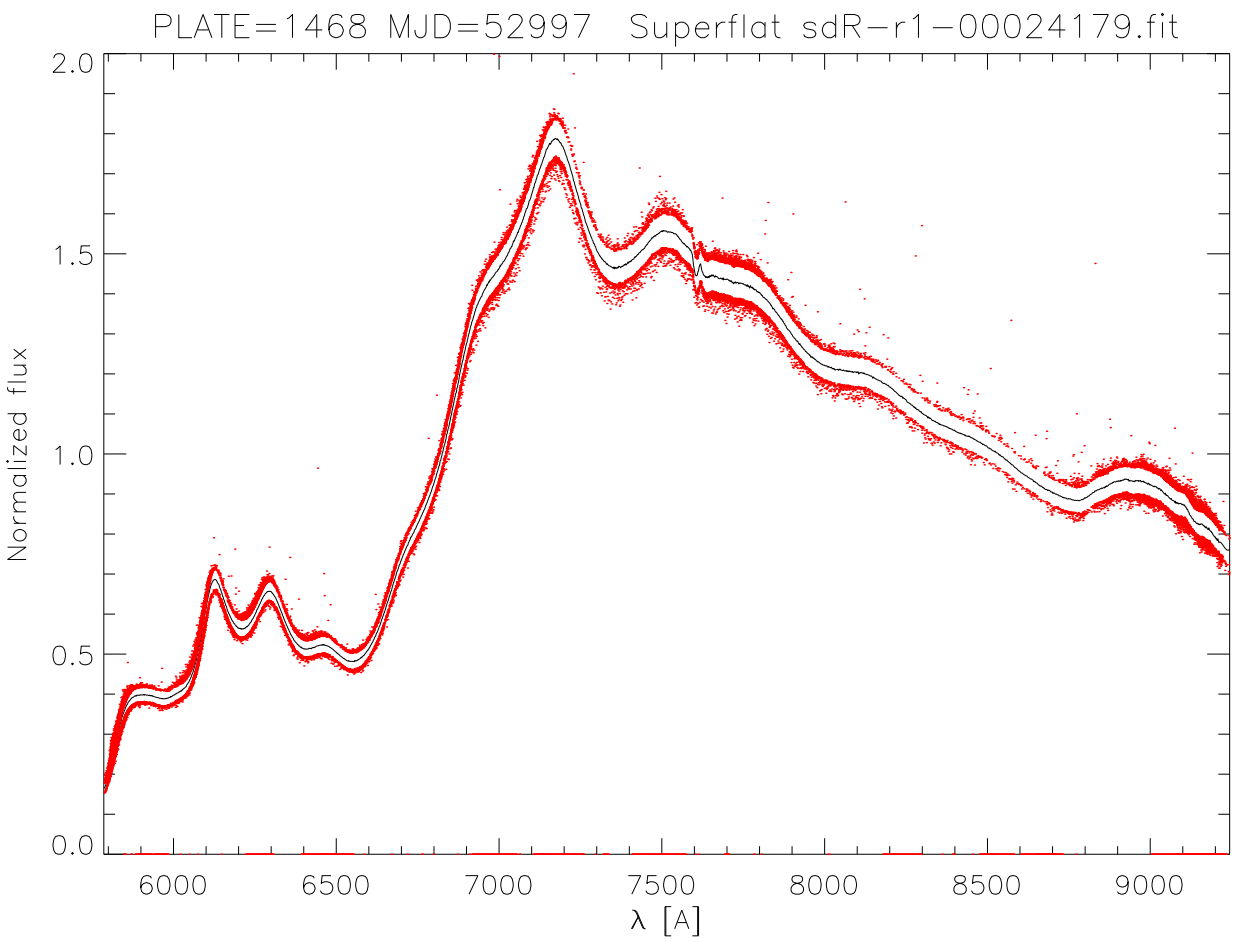

PLATE=1468 MJD=52997 sdR-b2-00024183.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.88 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

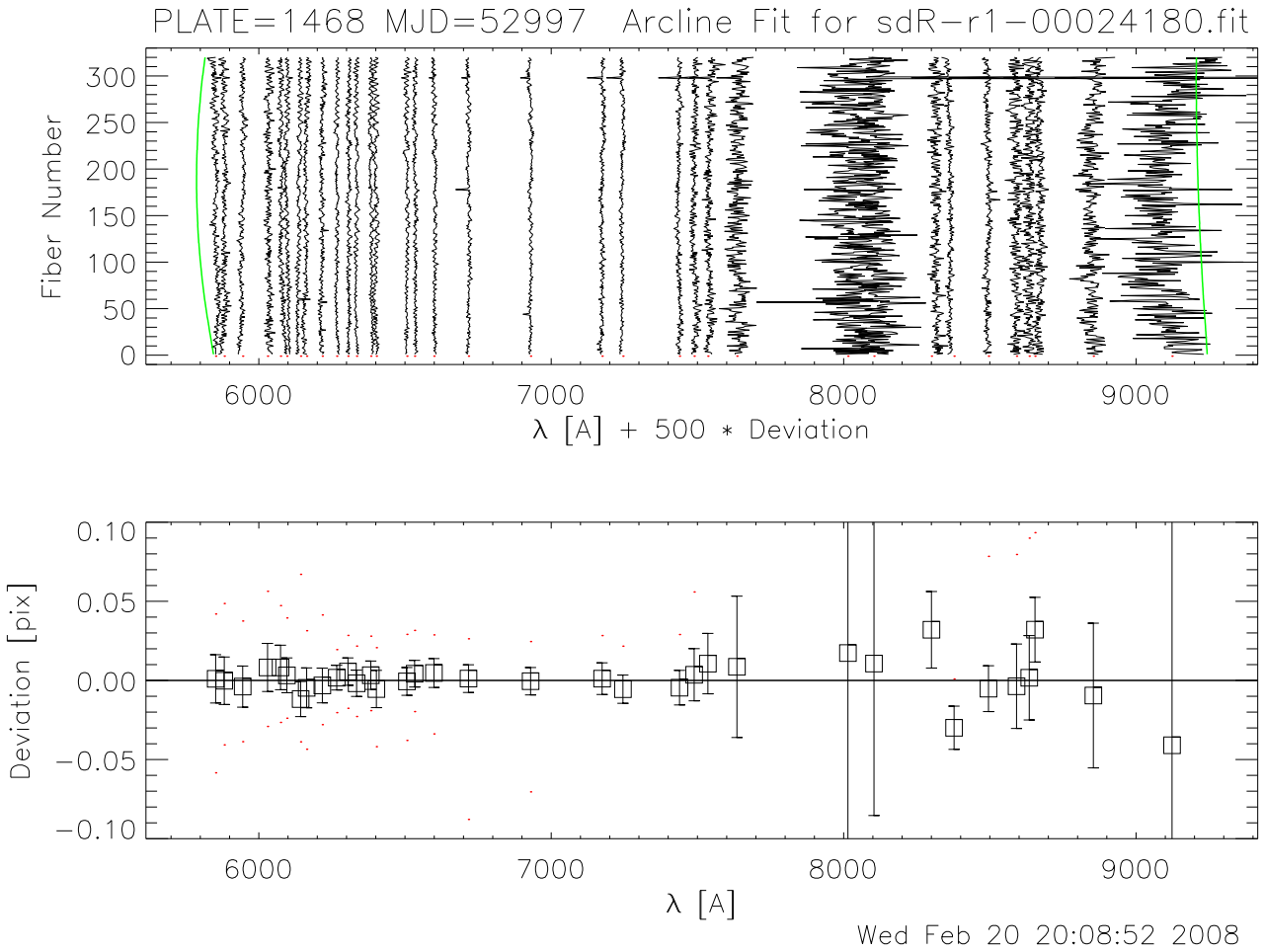

PLATE=1468 MJD=52997 sdR-b2-00024183.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
RED = sky fiber
Dispersion = 1.59 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.040
1.045
1.050
1.055
1.060
1.065
Airmass

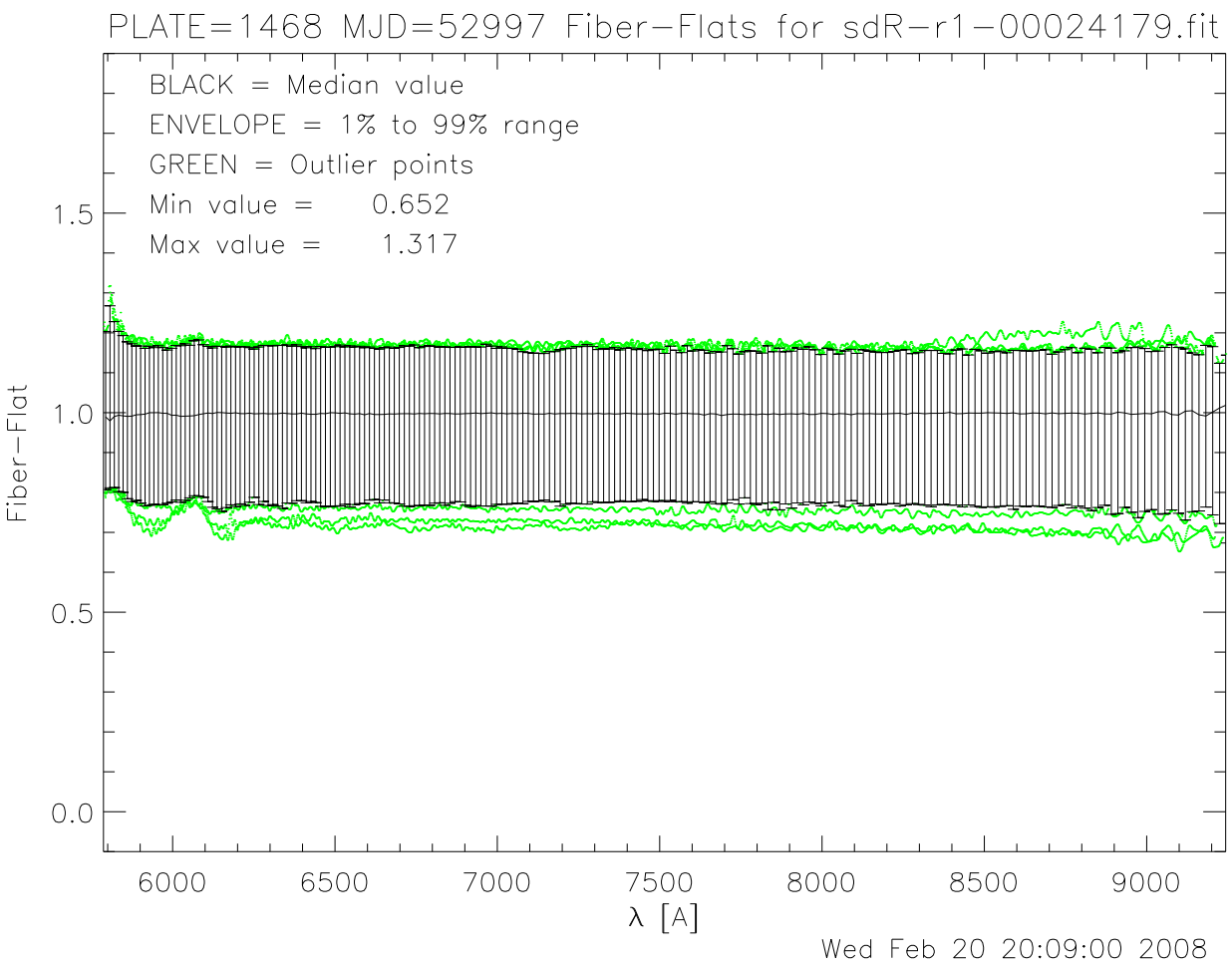

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

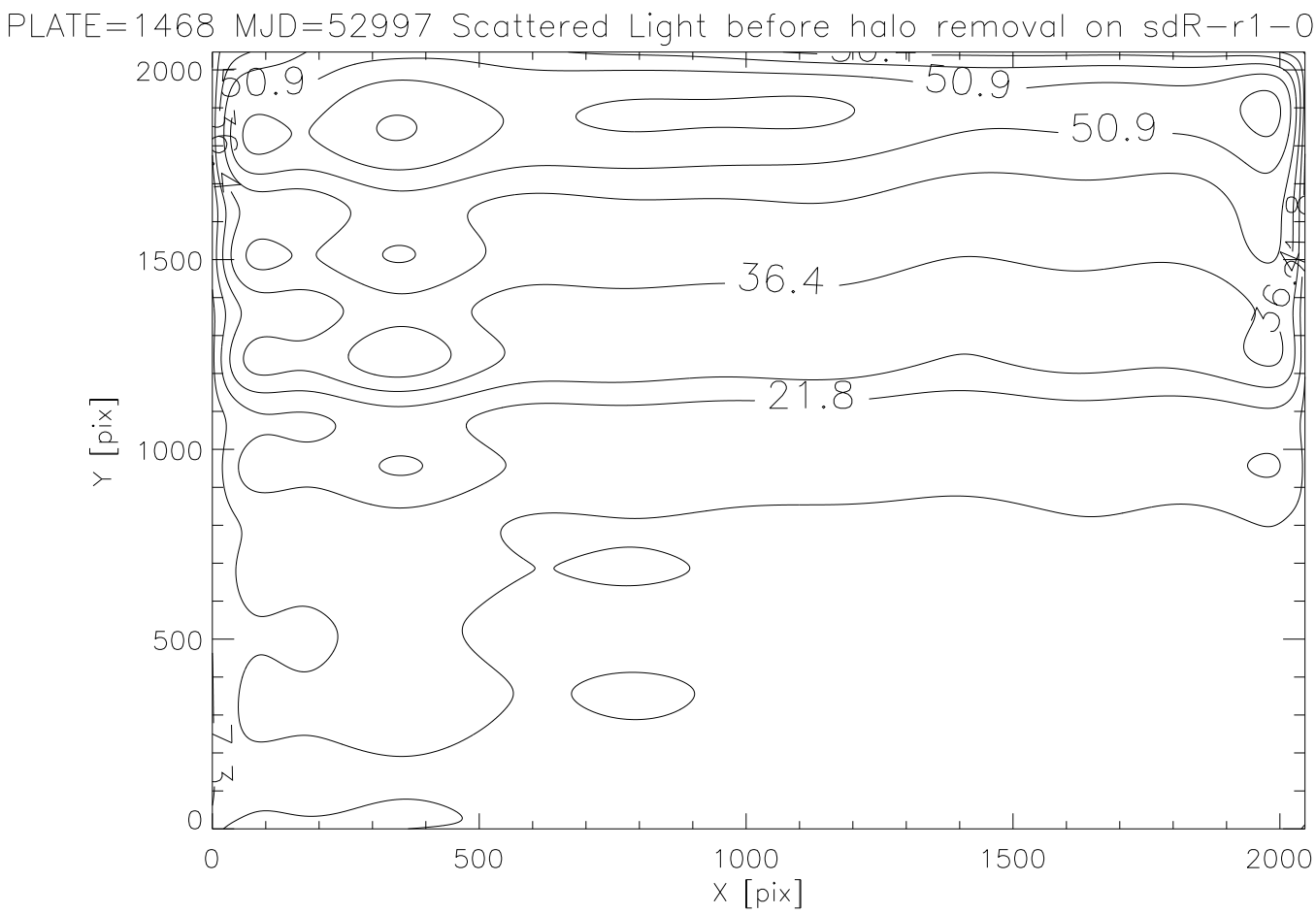

scale coeff residuals from ord=3 poly
2×10^-5
0
−2×10^-5
0
50
100
150
200
250
300
fiber

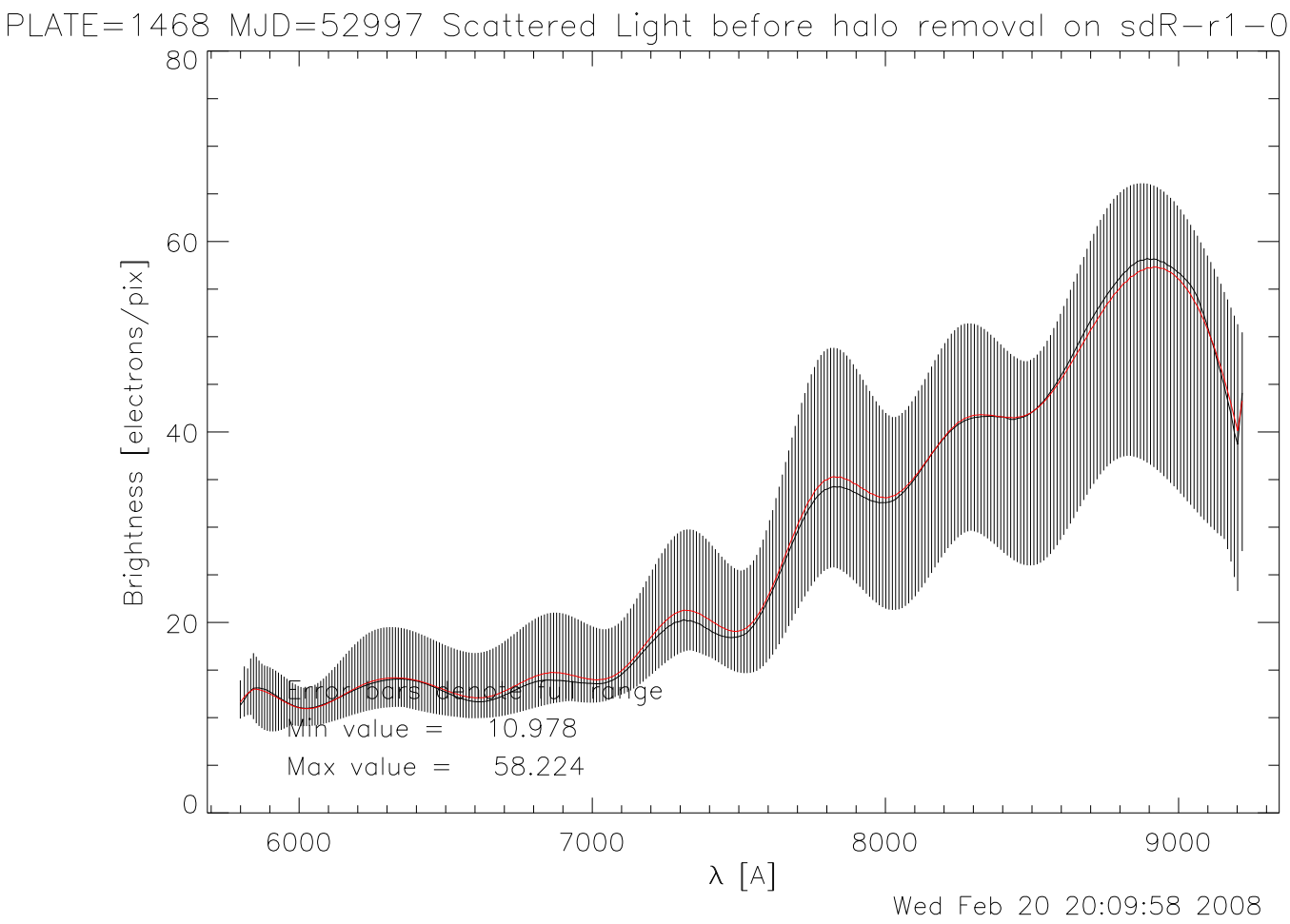

PLATE=1468 MJD=52997 flat extraction chi^2 for sdR−r1−00024179.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

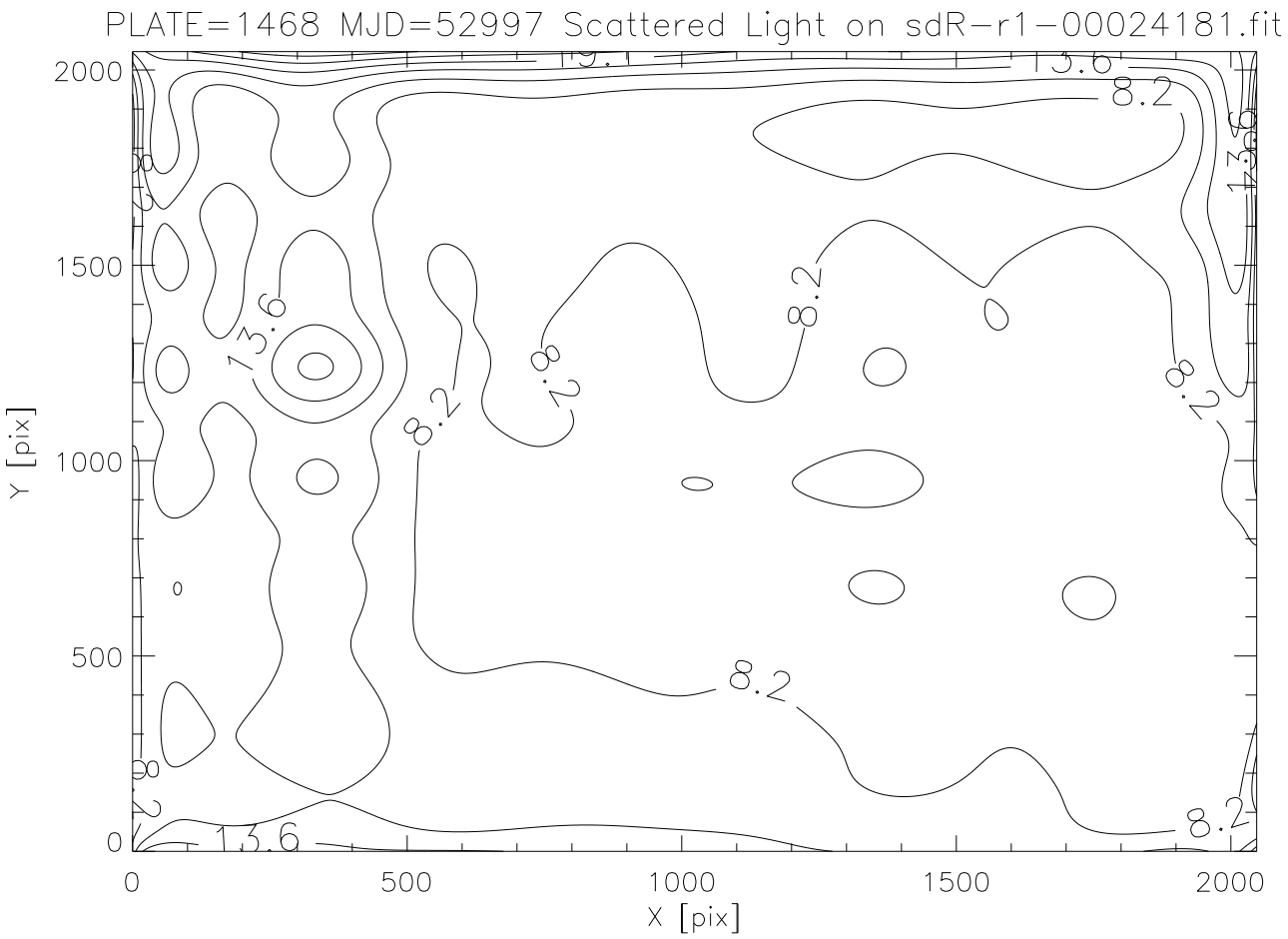

PLATE=1468 MJD=52997 Superflat sdR-r1-00024179.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

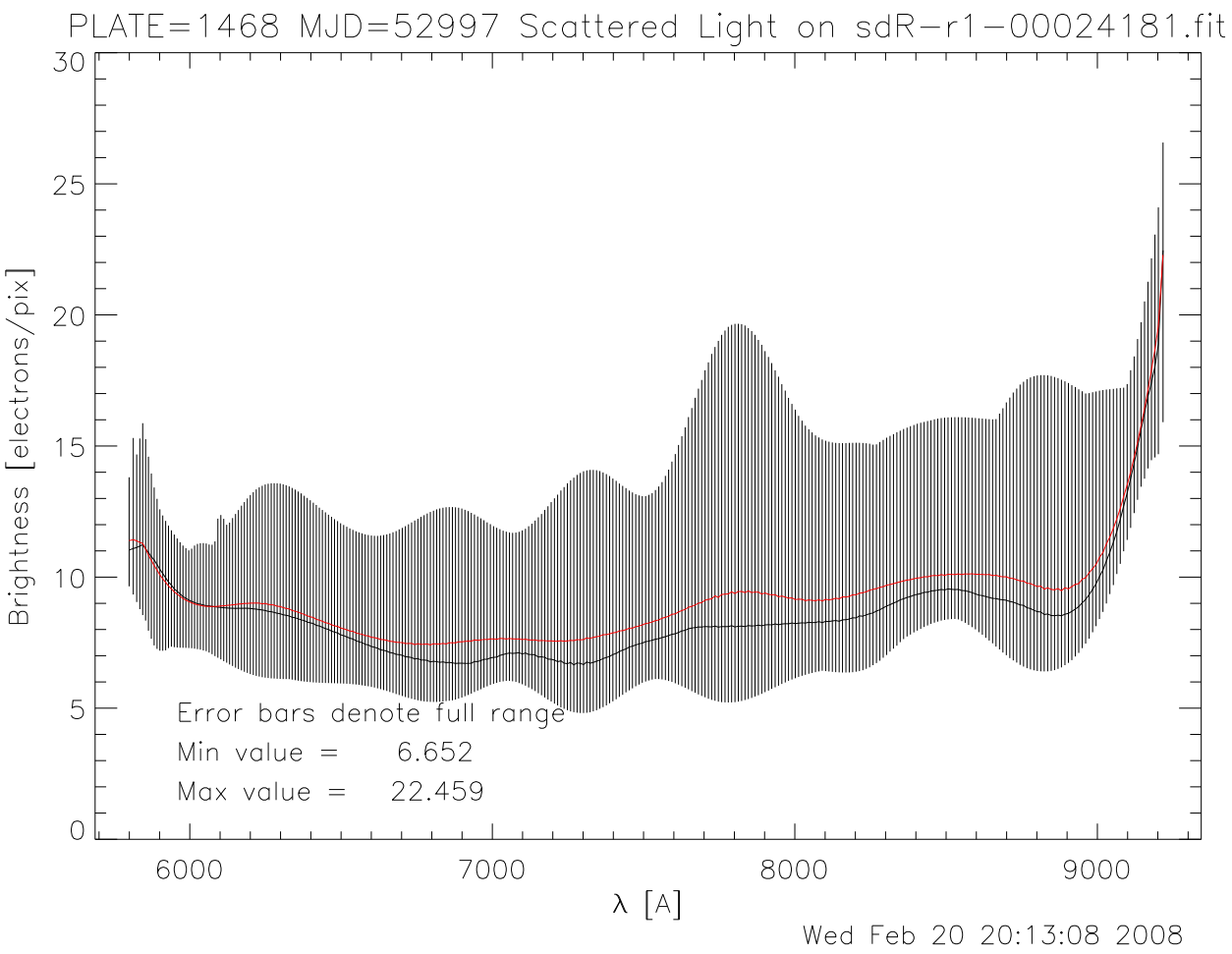

PLATE=1468 MJD=52997 Arcline Fit for sdR-r1-00024180.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Feb 20 20:08:52 2008

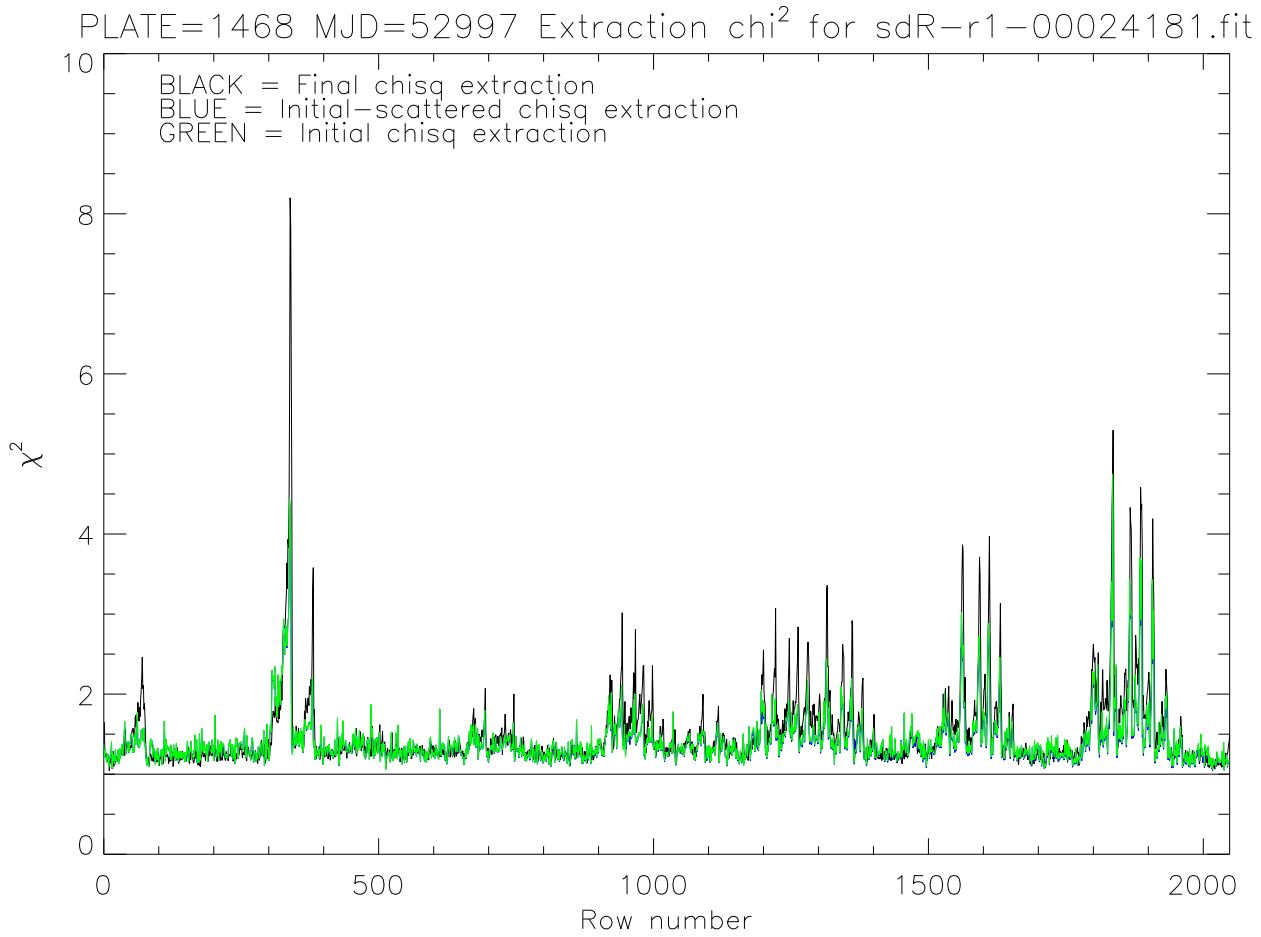

PLATE=1468 MJD=52997 Fiber−Flats for sdR−r1−00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.652
Max value = 1.317
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 20:09:00 2008

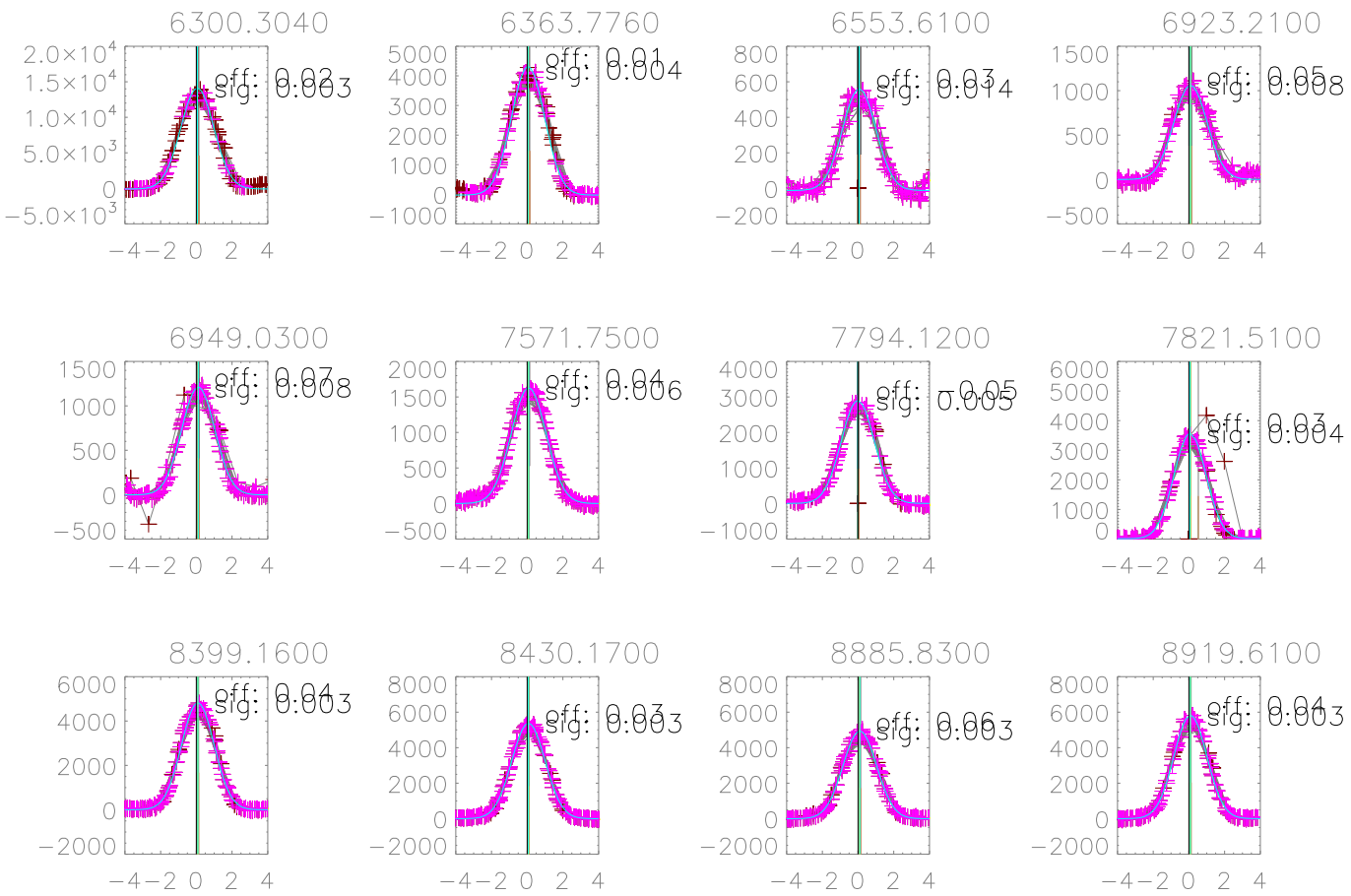

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r1-00024181.fi
50.9
50.9
50.9
36.4
36.4
21.8
0
Y [pix]
X [pix]
0
500
1000
1500
2000

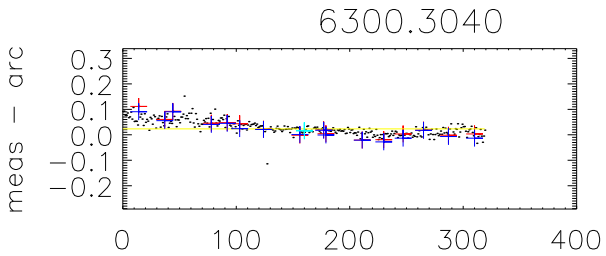

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r1-00024181.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.978
Max value = 58.224
Wed Feb 20 20:09:58 2008

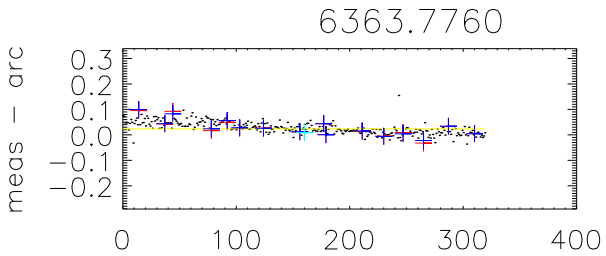

PLATE=1468 MJD=52997 Scattered Light on sdR-r1-00024181.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
13.6

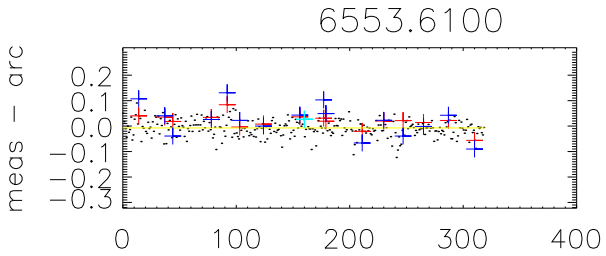

PLATE=1468 MJD=52997 Scattered Light on sdR-r1-00024181.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.652
Max value = 22.459
Wed Feb 20 20:13:08 2008

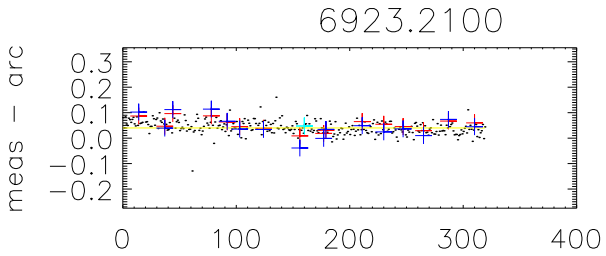

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-r1-00024181.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

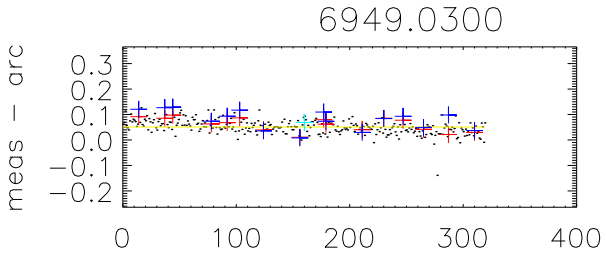

6300.3040
off: 0.02
sig: 0.003
6363.7760
off: 0.01
sig: 0.004
6553.6100
off: 0.03
sig: 0.014
6923.2100
off: 0.05
sig: 0.008
6949.0300
off: 0.07
sig: 0.008
7571.7500
off: 0.04
sig: 0.006
7794.1200
off: 0.05
sig: 0.005
7821.5100
off: 0.03
sig: 0.004
8399.1600
off: 0.04
sig: 0.003
8430.1700
off: 0.03
sig: 0.003
8885.8300
off: 0.06
sig: 0.003
8919.6100
off: 0.04
sig: 0.003

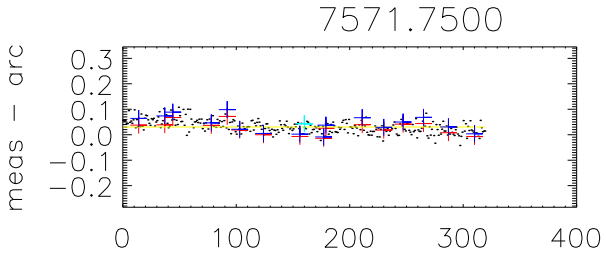

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

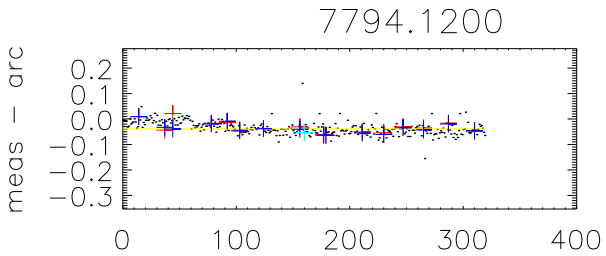

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

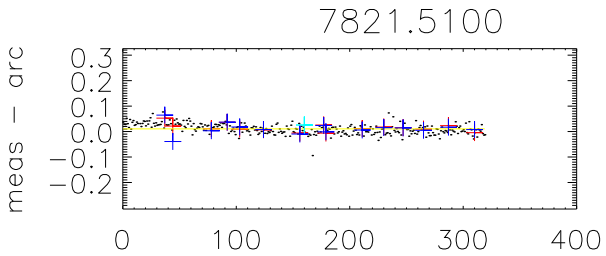

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

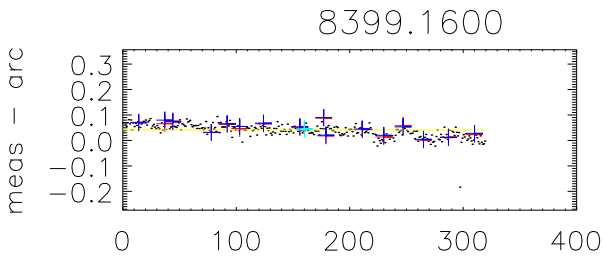

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

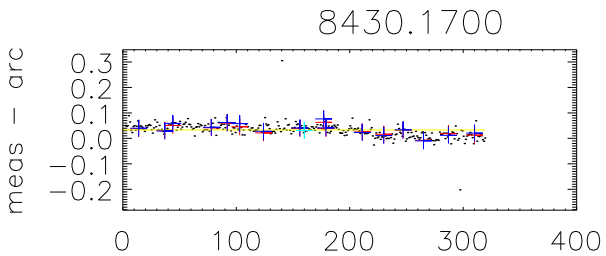

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

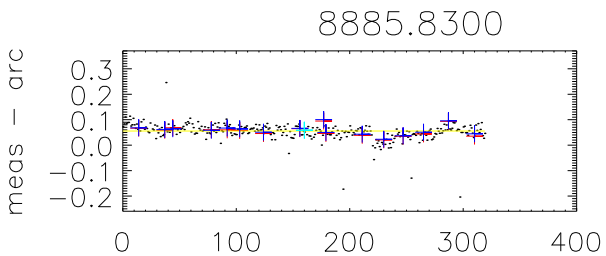

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

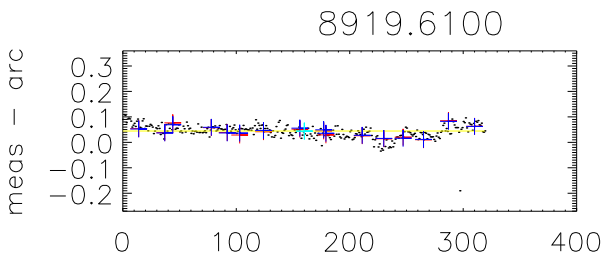

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

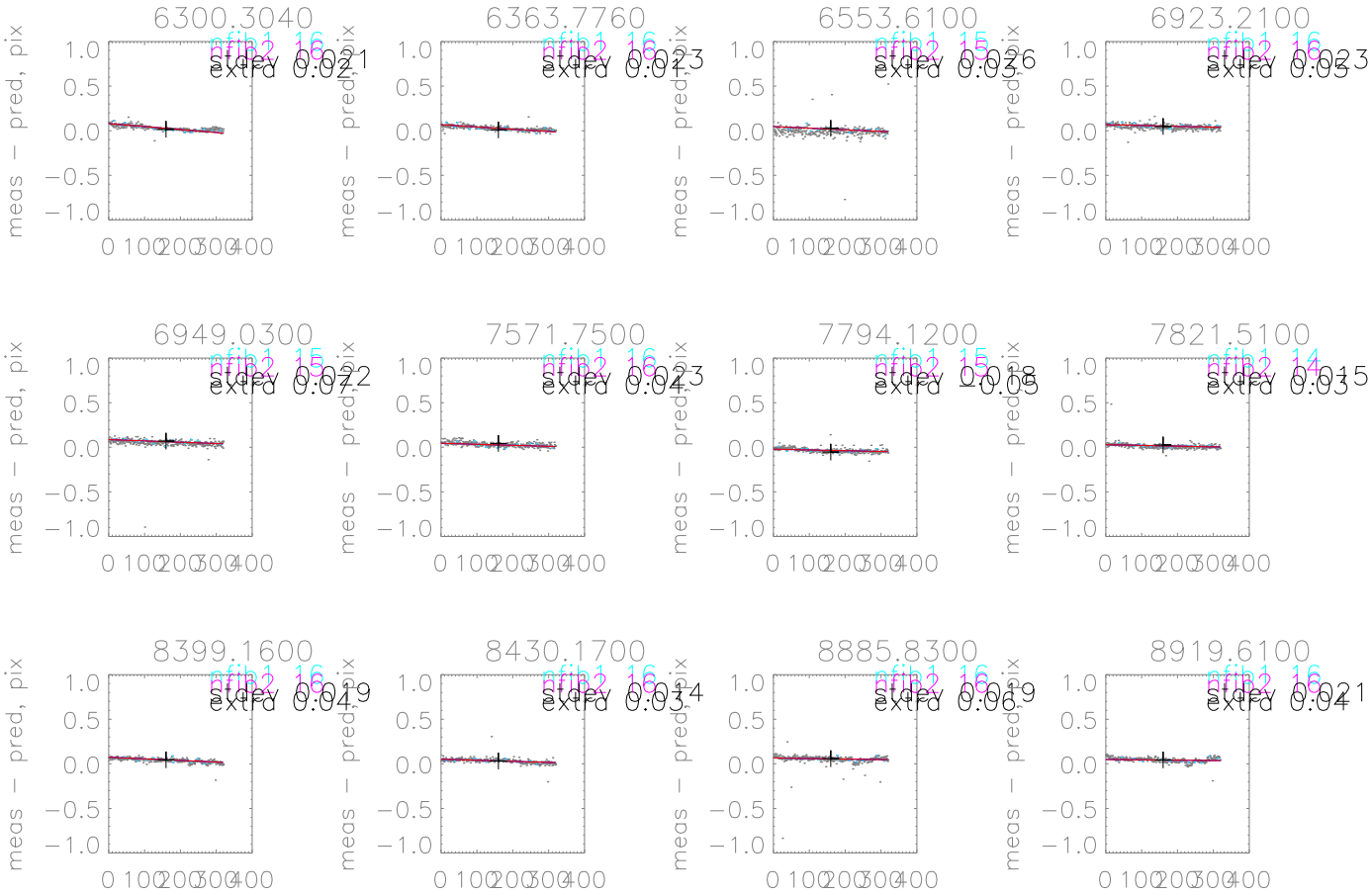

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

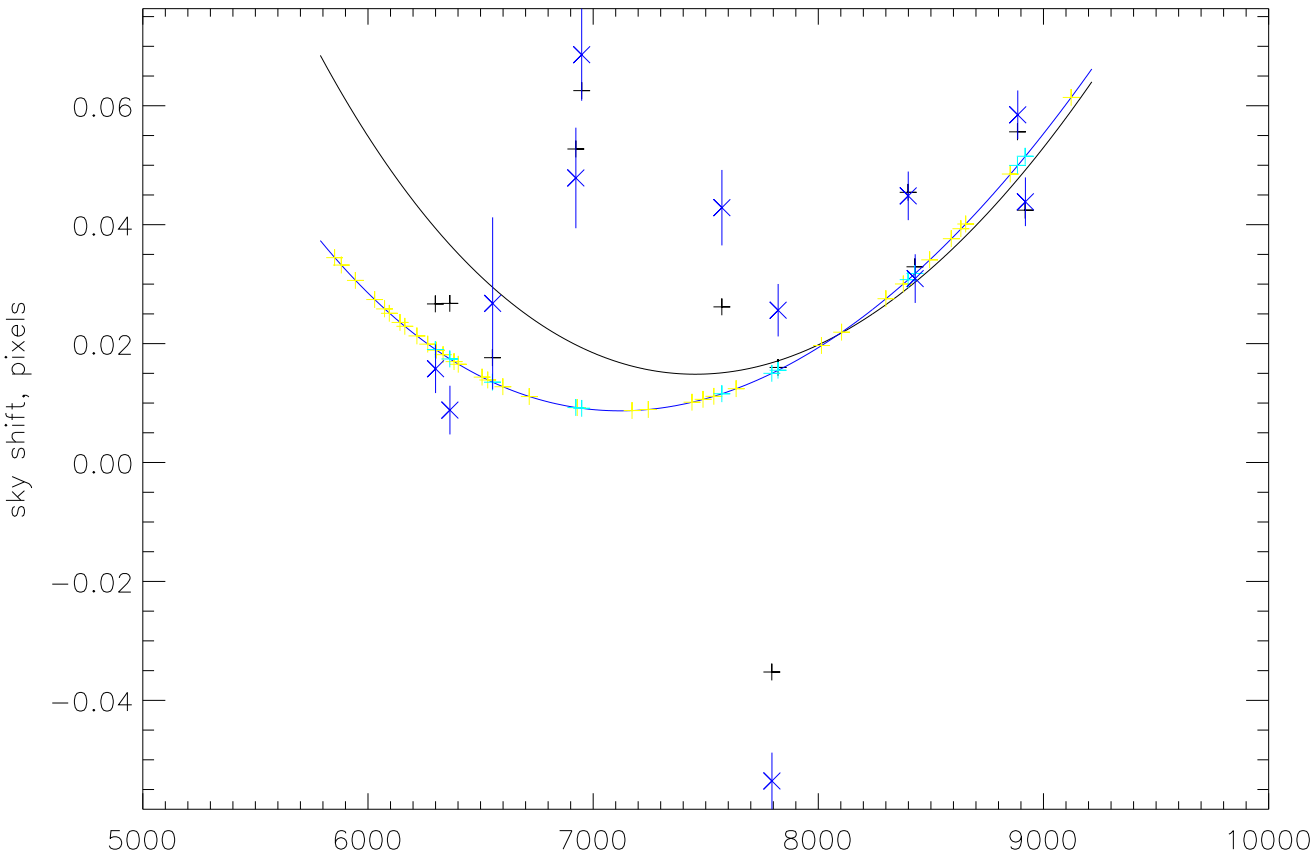

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

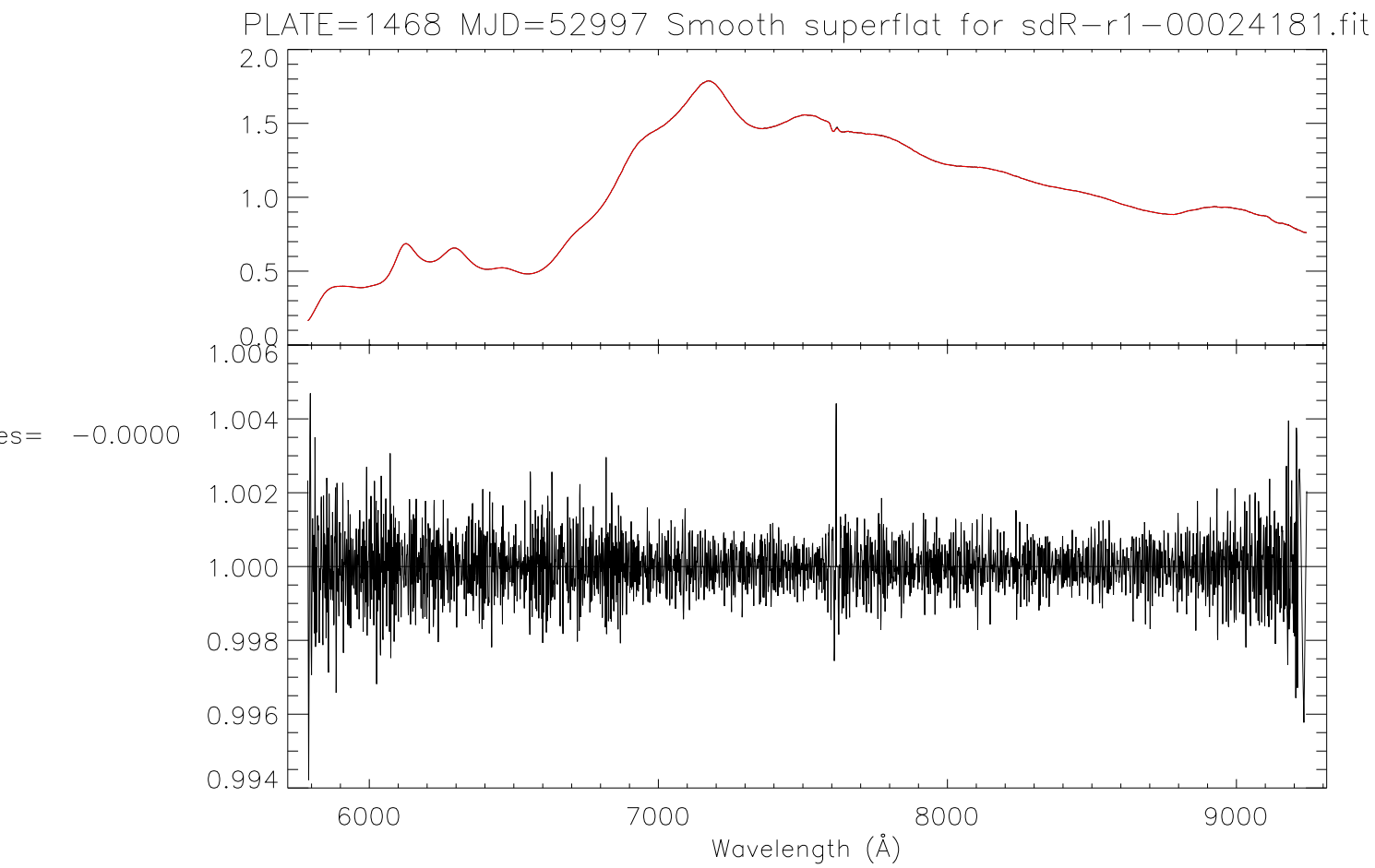

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

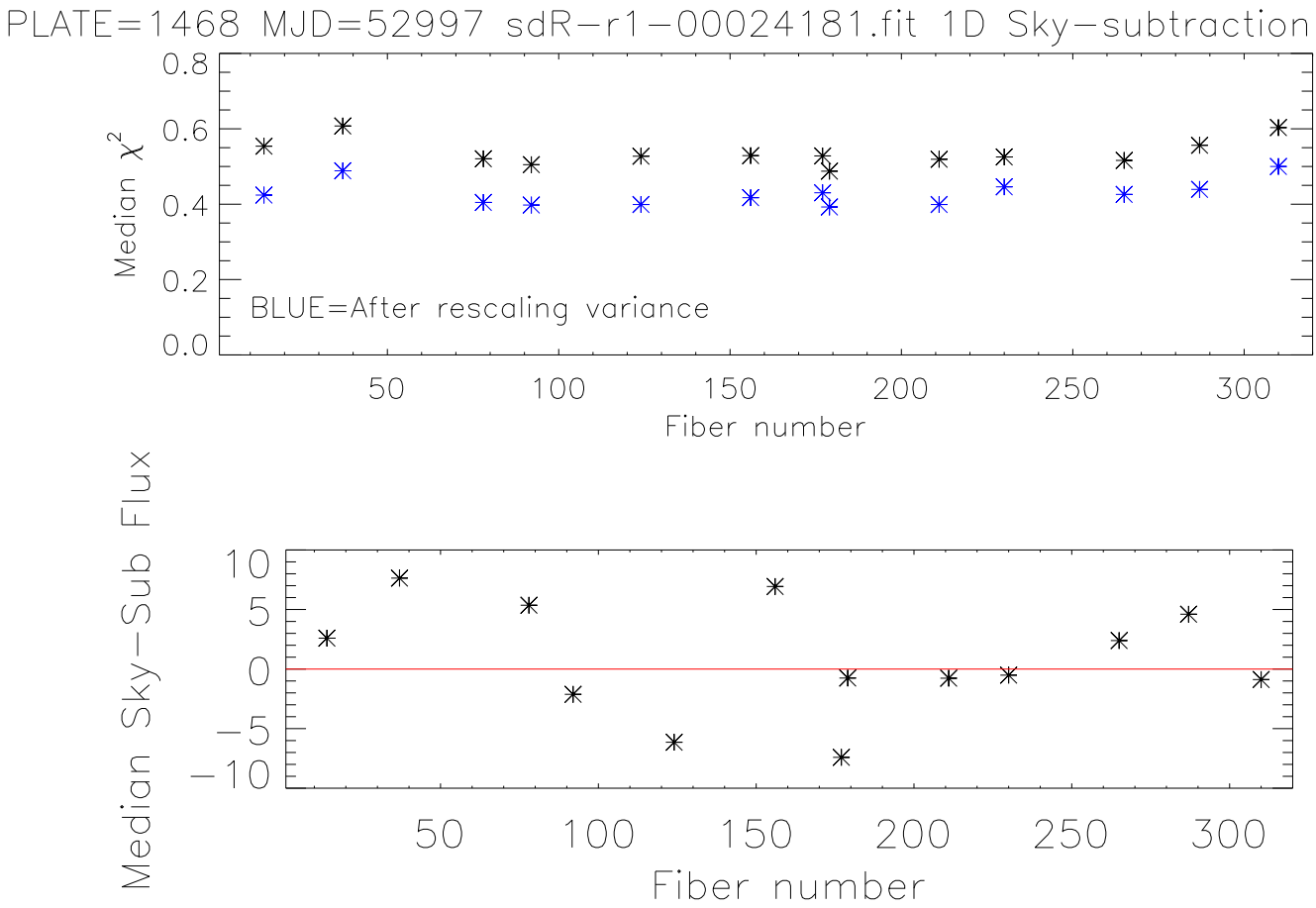

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

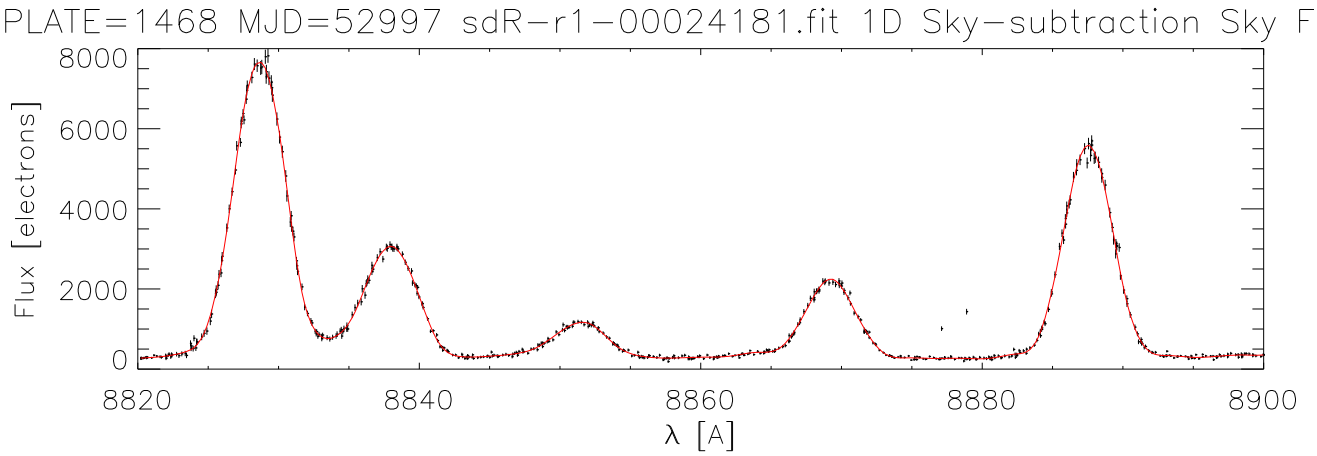

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

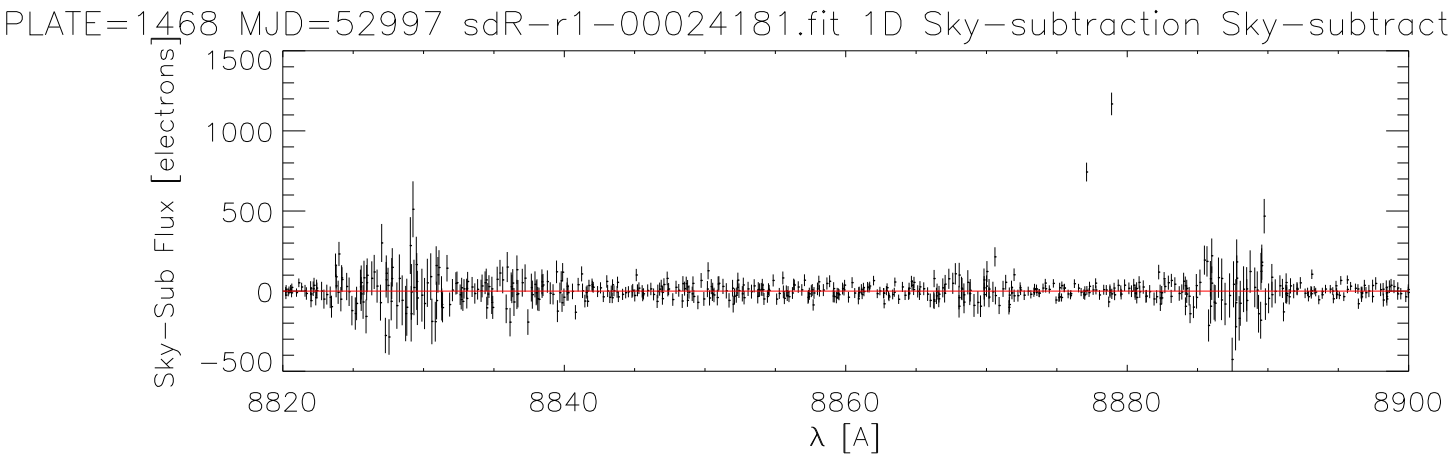

6300.3040
mfib1 16
mfib2 16
stdev 0.021
extra 0.021
6363.7760
mfib1 16
mfib2 16
stdev 0.023
extra 0.013
6553.6100
mfib1 15
mfib2 16
stdev 0.026
extra 0.036
6923.2100
mfib1 16
mfib2 16
stdev 0.023
extra 0.05
6949.0300
mfib1 15
mfib2 16
stdev 0.022
extra 0.072
7571.7500
mfib1 16
mfib2 16
stdev 0.023
extra 0.04
7794.1200
mfib1 15
mfib2 16
stdev 0.018
extra −0.05
7821.5100
mfib1 14
mfib2 16
stdev 0.015
extra 0.03
8399.1600
mfib1 16
mfib2 16
stdev 0.019
extra 0.049
8430.1700
mfib1 16
mfib2 16
stdev 0.014
extra 0.033
8885.8300
mfib1 16
mfib2 16
stdev 0.019
extra 0.069
8919.6100
mfib1 16
mfib2 16
stdev 0.021
extra 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

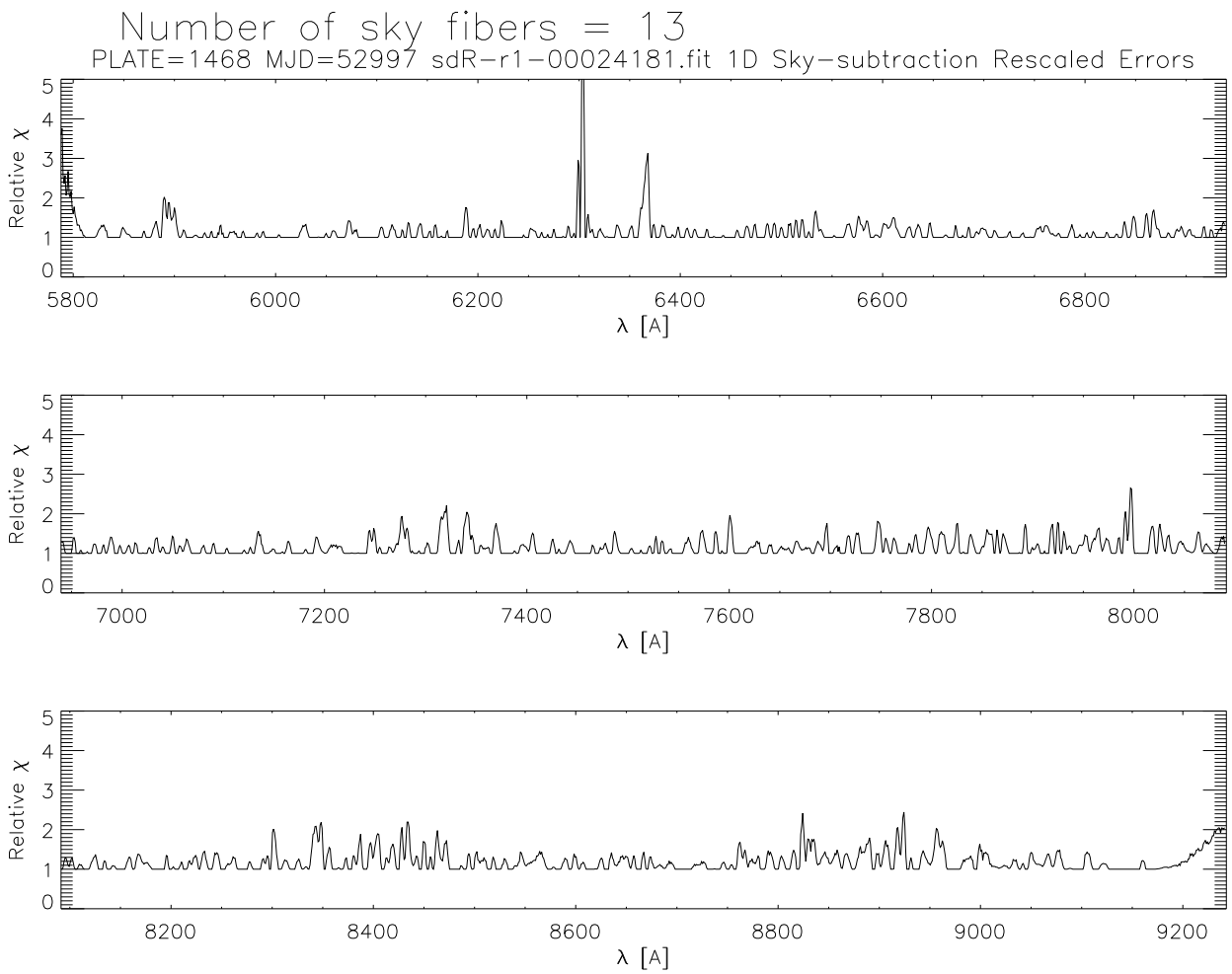

sky shift, pixels
0.06
0.04
0.02
0.00
−0.02
−0.04
5000
6000
7000
8000
9000
10000

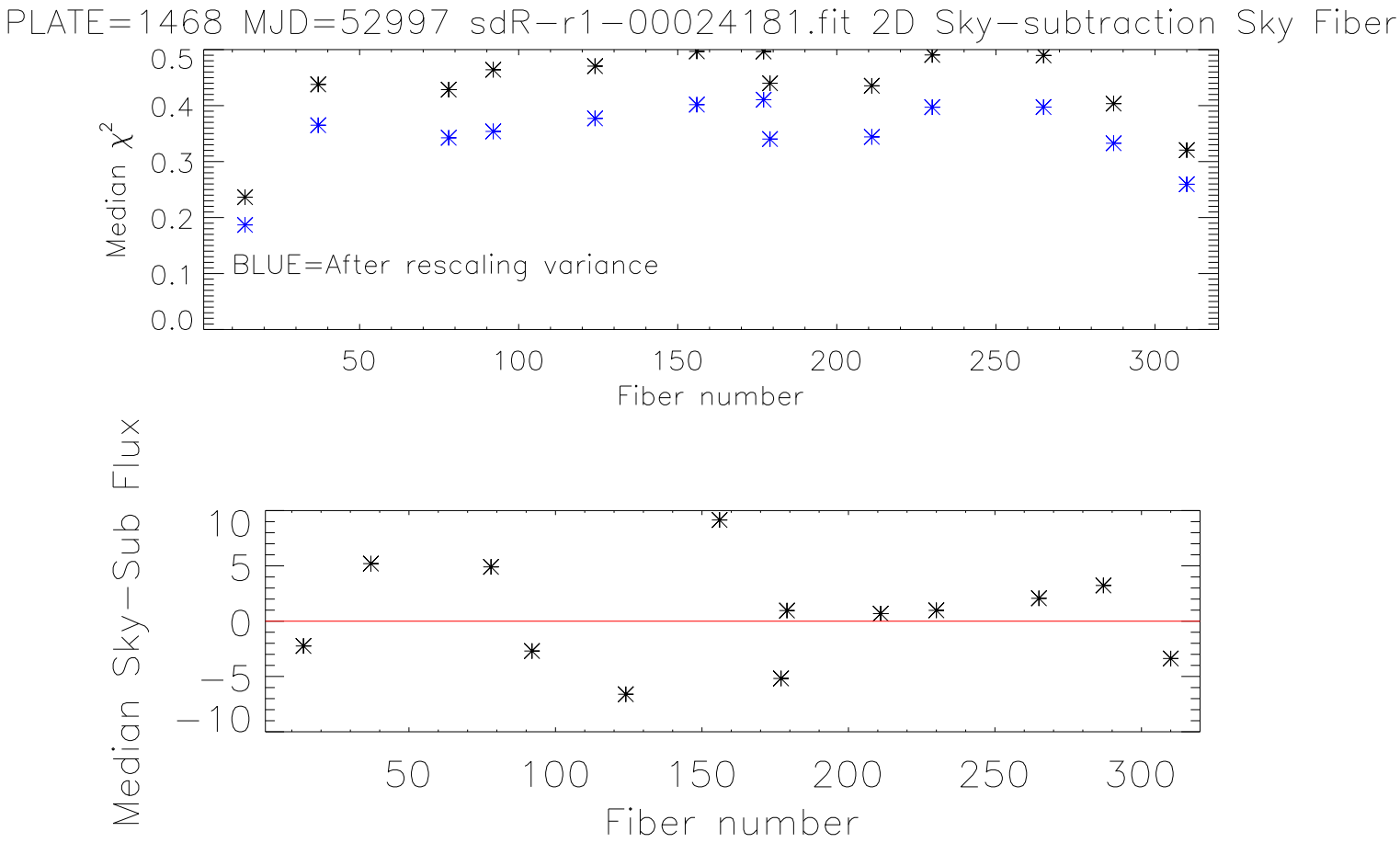

PLATE=1468 MJD=52997 Smooth superflat for sdR-r1-00024181.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

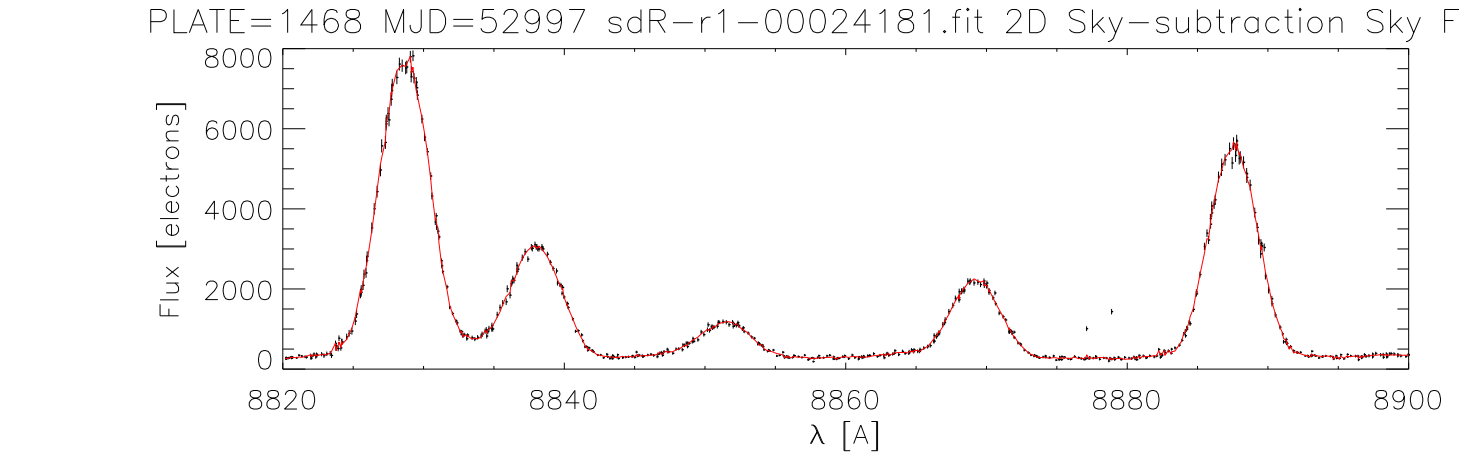

PLATE=1468 MJD=52997 sdR-r1-00024181.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

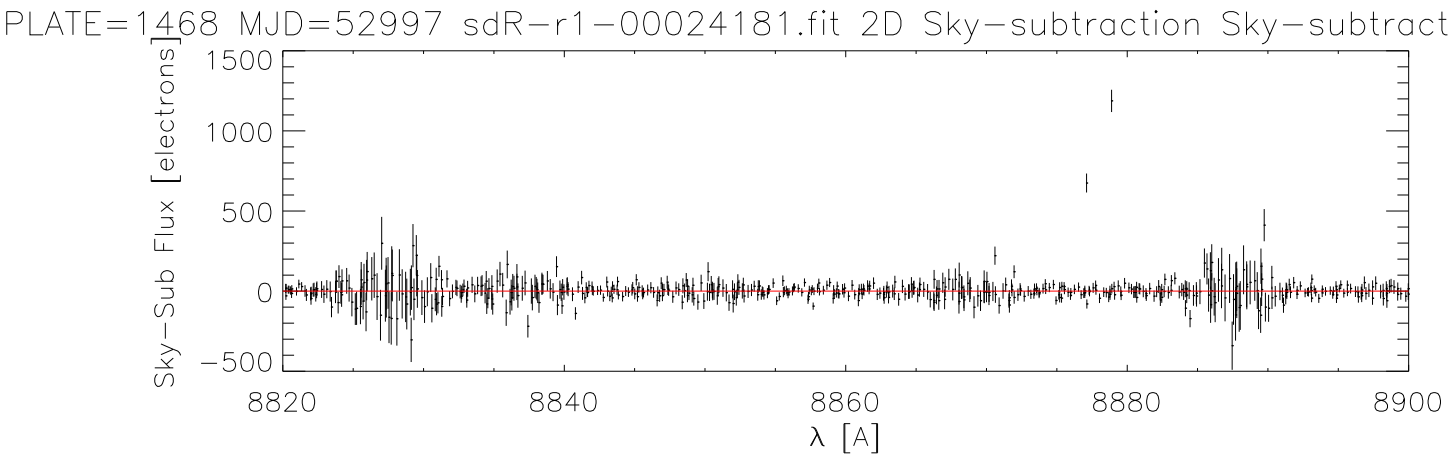

PLATE=1468 MJD=52997 sdR-r1-00024181.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

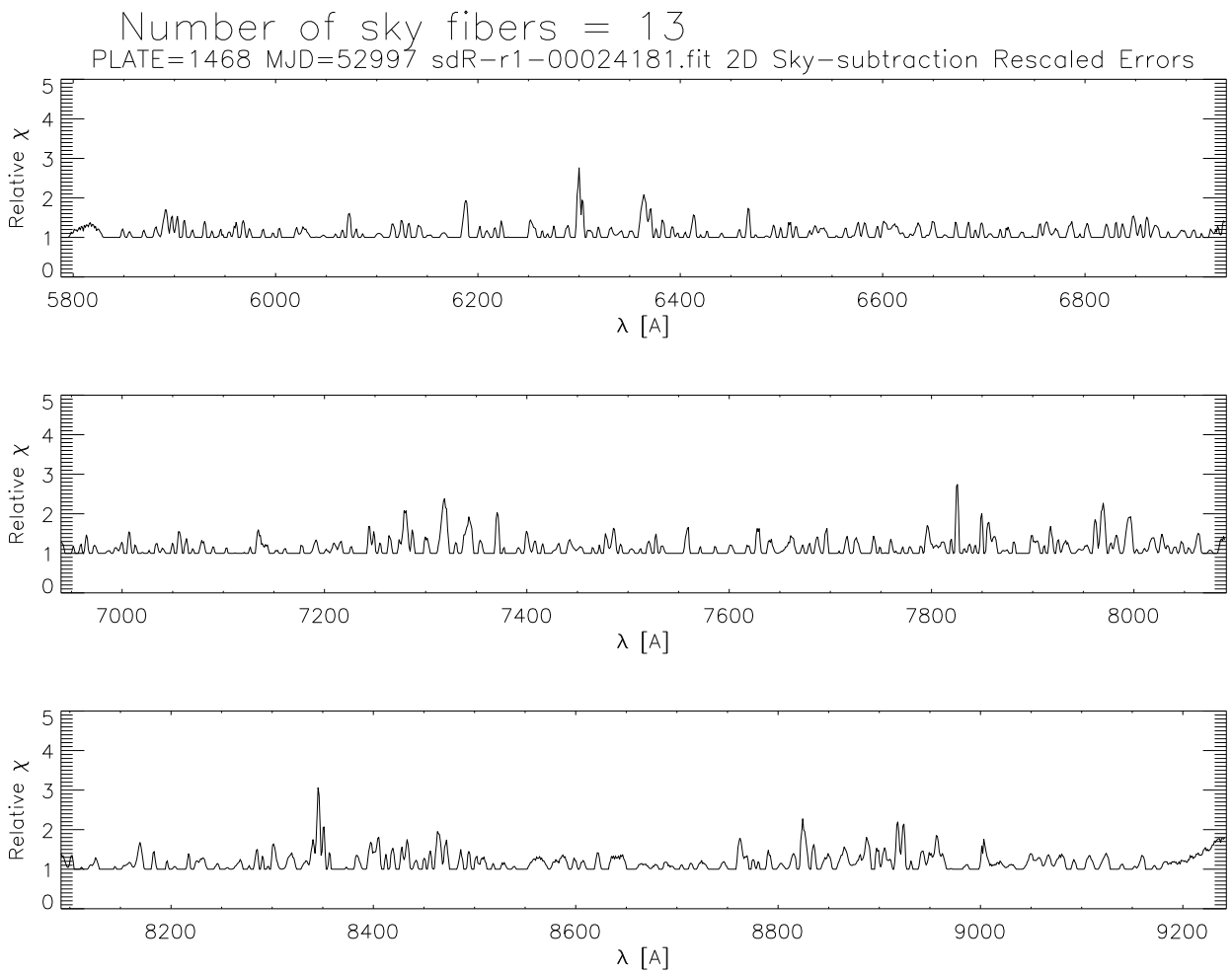

PLATE=1468 MJD=52997 sdR-r1-00024181.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

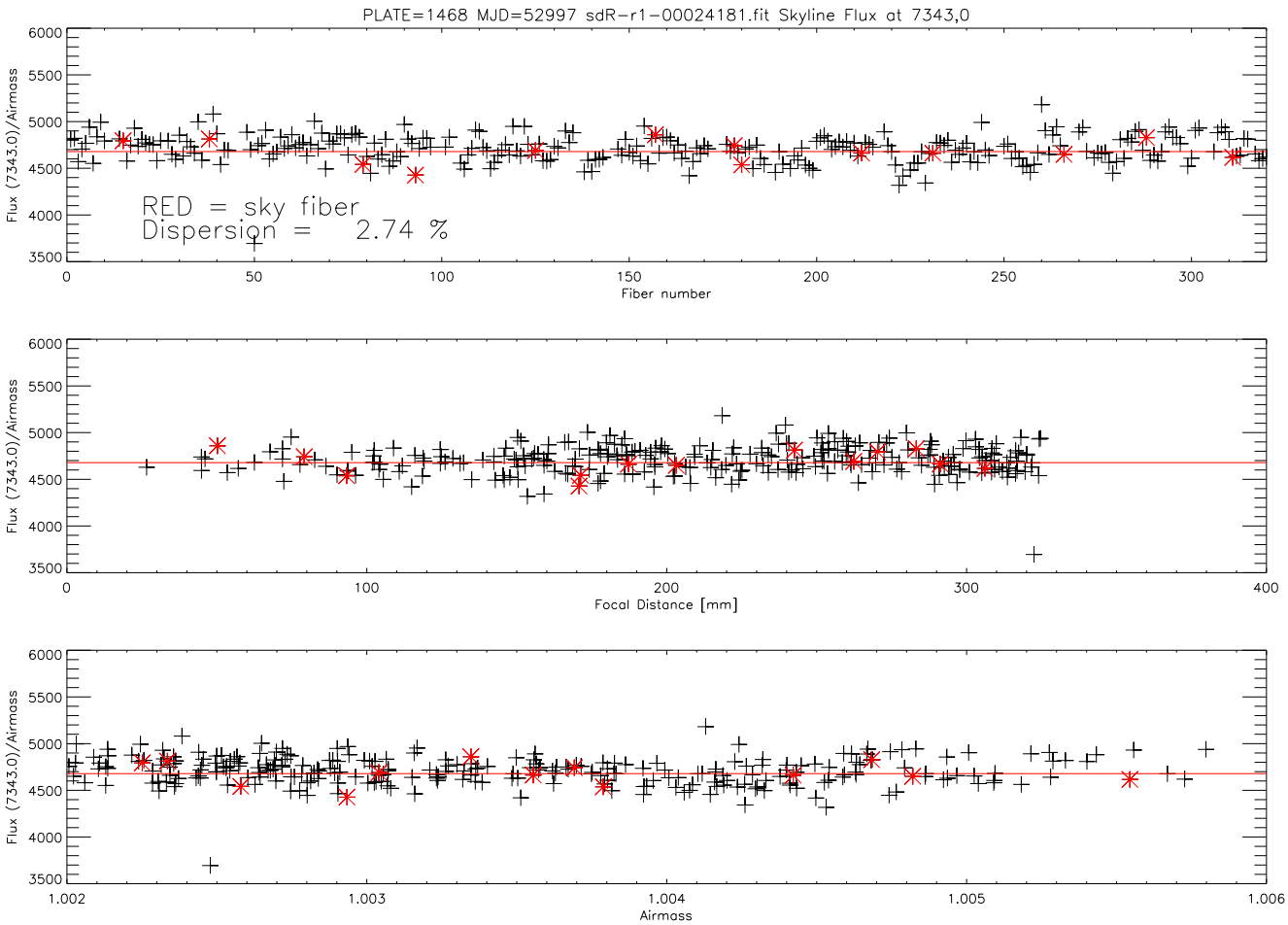

Number of sky fibers = 13
PLATE=1468 MJD=52997 sdR-r1-00024181.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

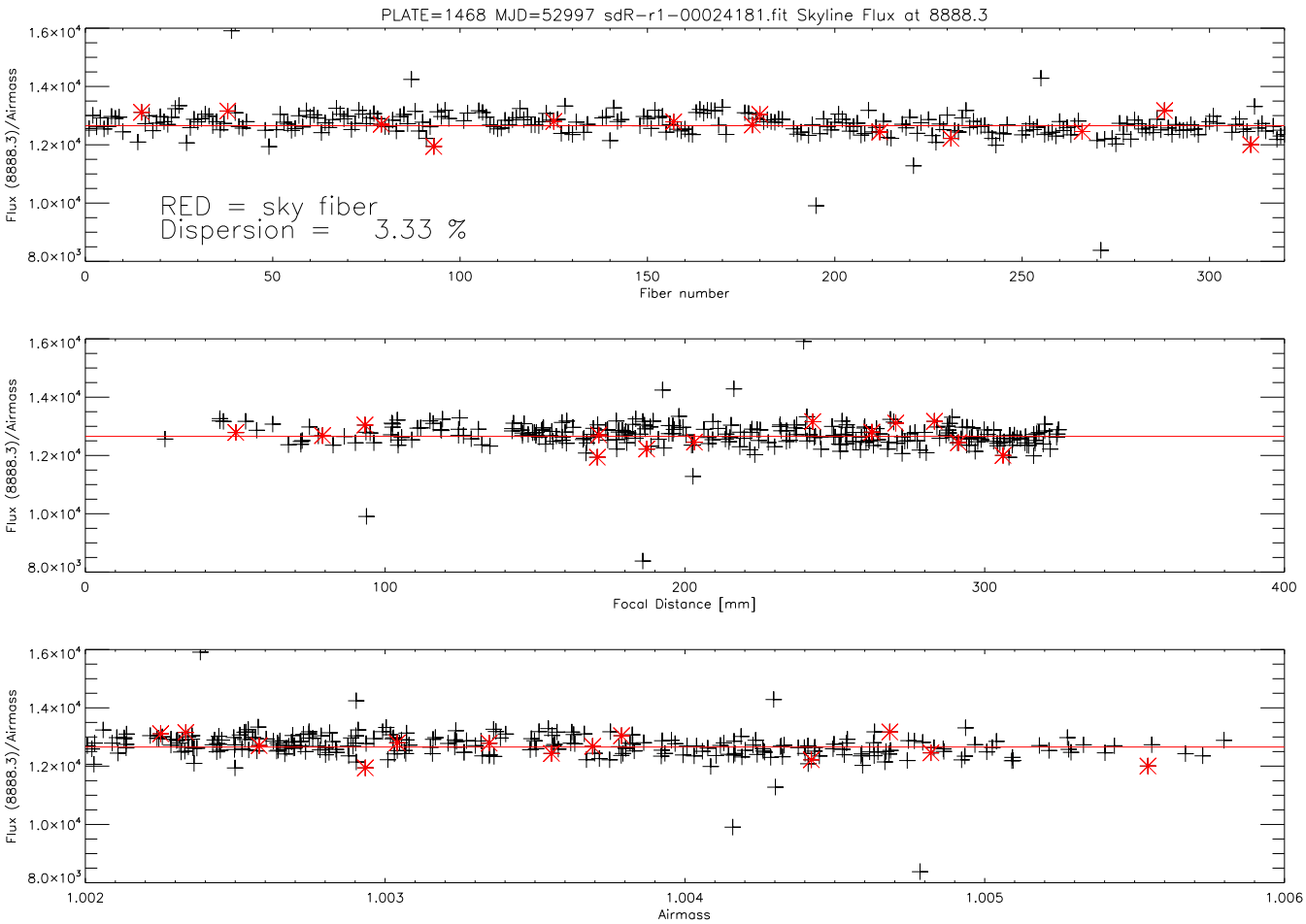

PLATE=1468 MJD=52997 sdR-r1-00024181.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

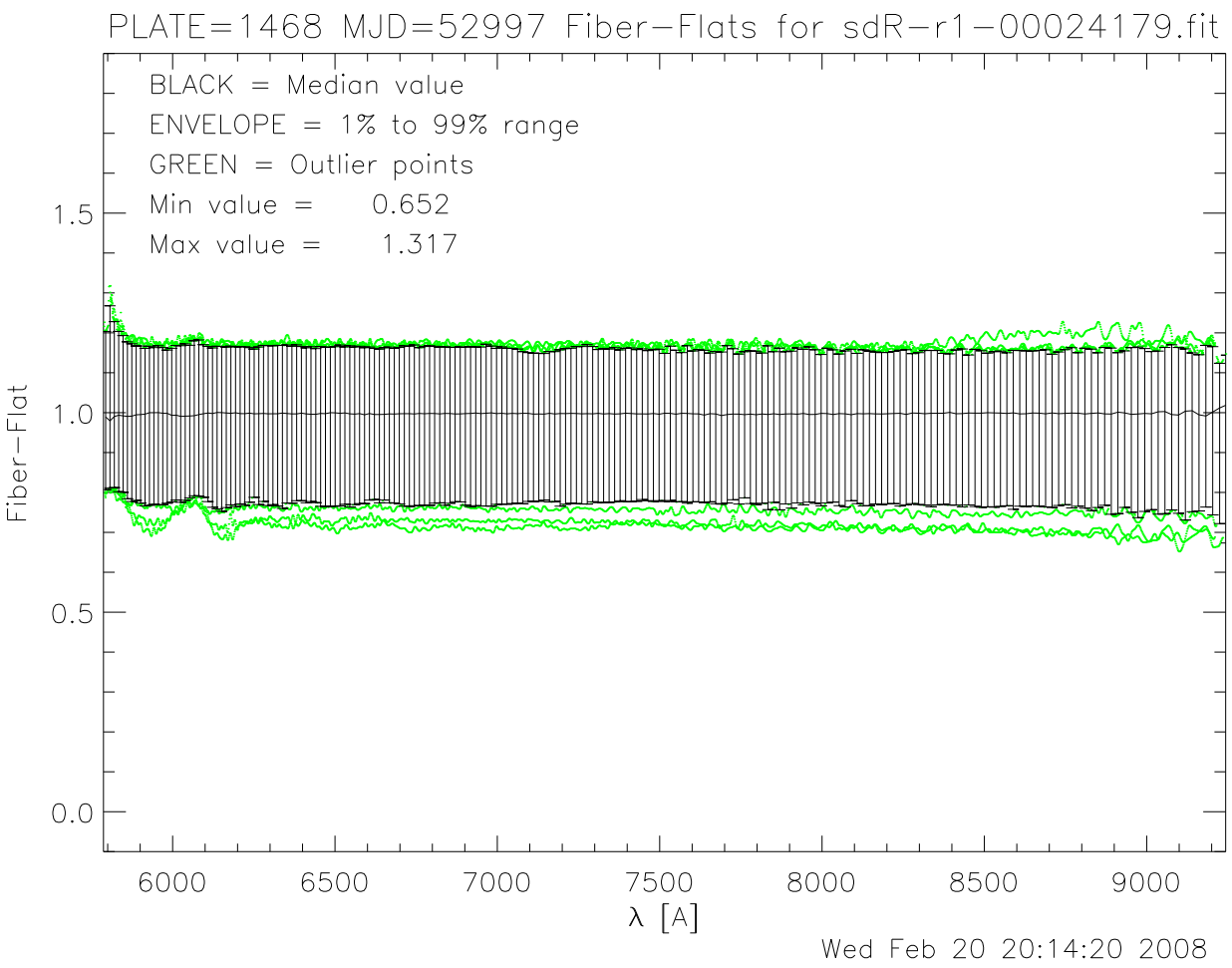

PLATE=1468 MJD=52997 sdR-r1-00024181.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

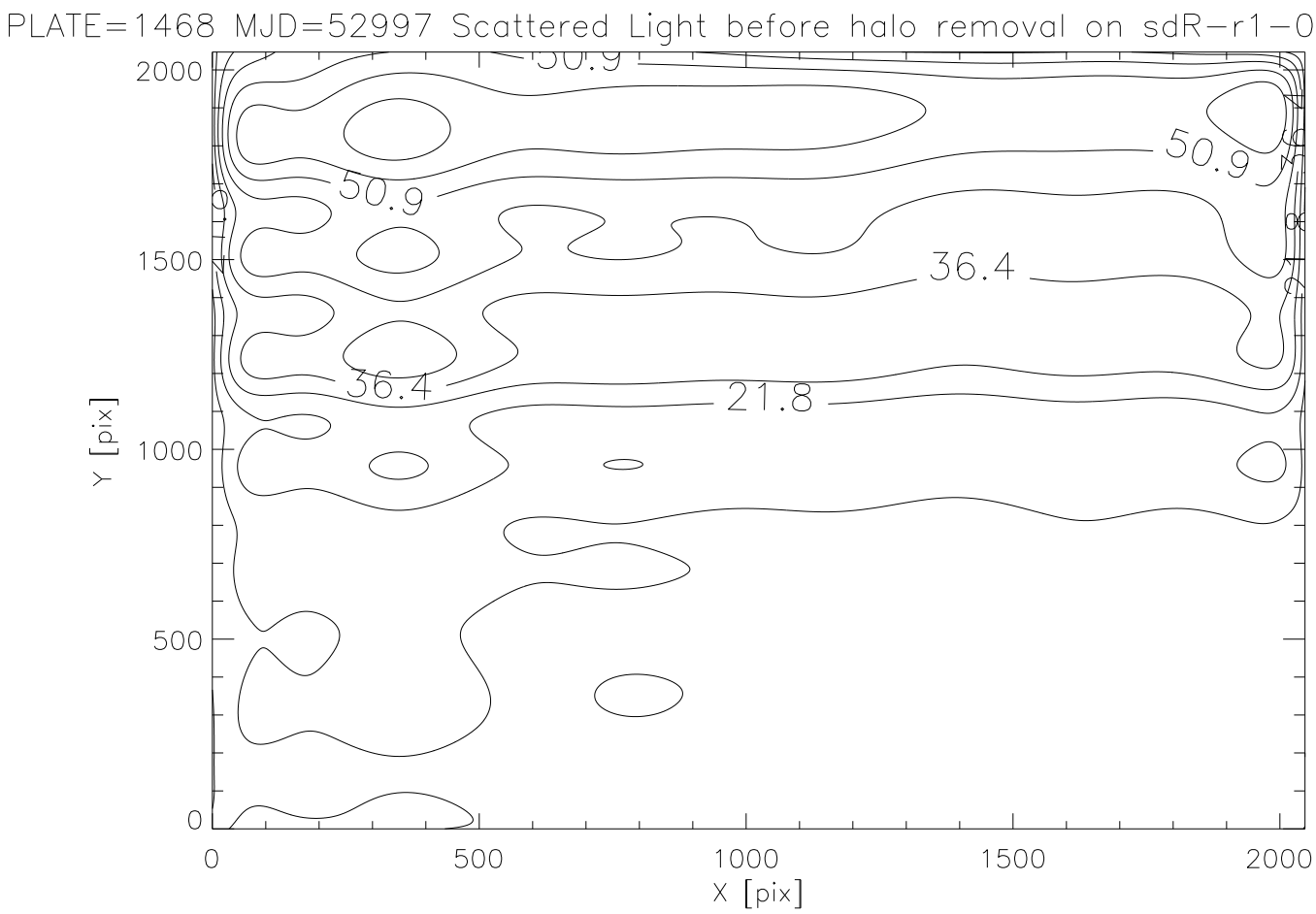

PLATE=1468 MJD=52997 sdR-r1-00024181.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

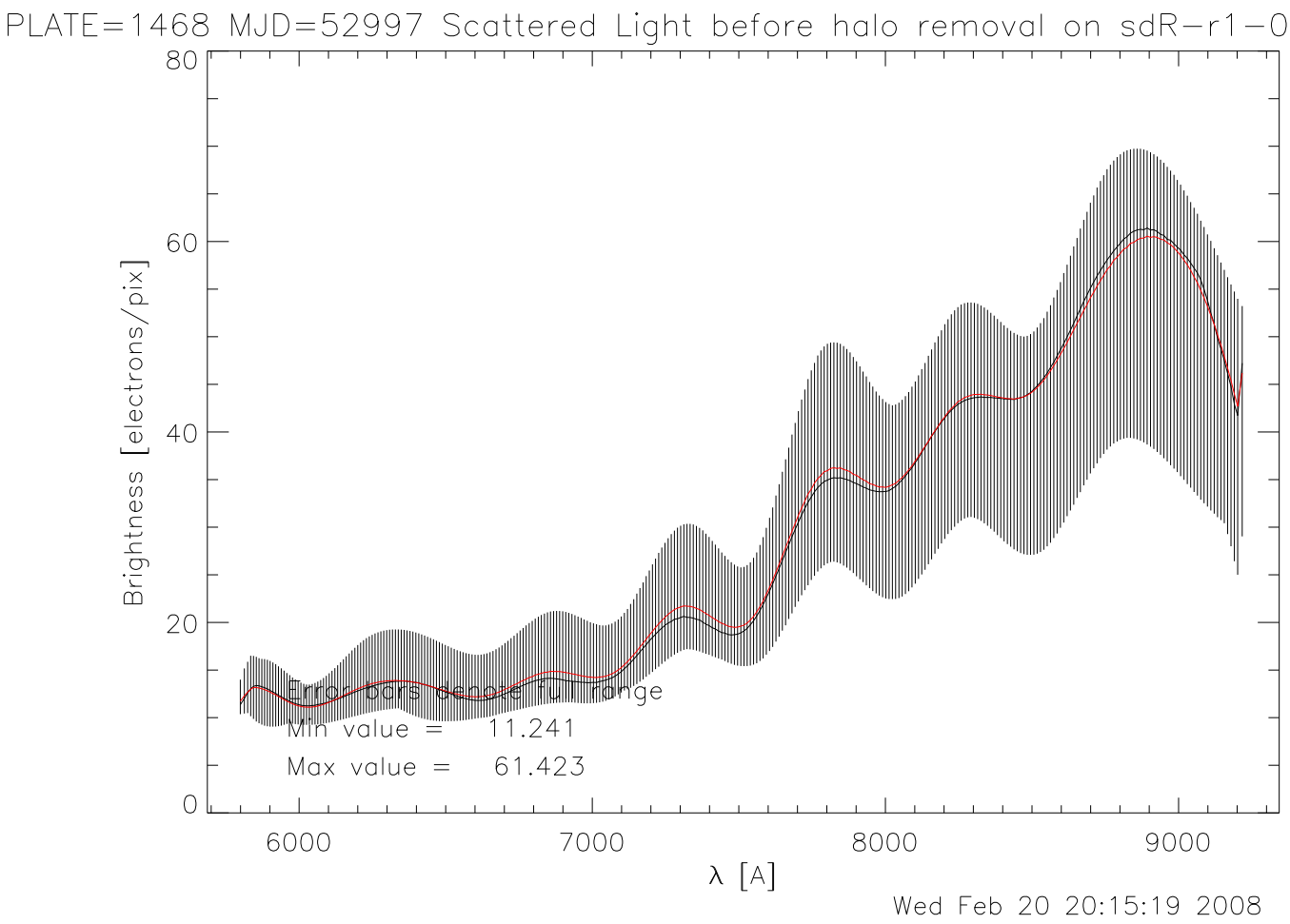

Number of sky fibers = 13
PLATE=1468 MJD=52997 sdR-r1-00024181.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

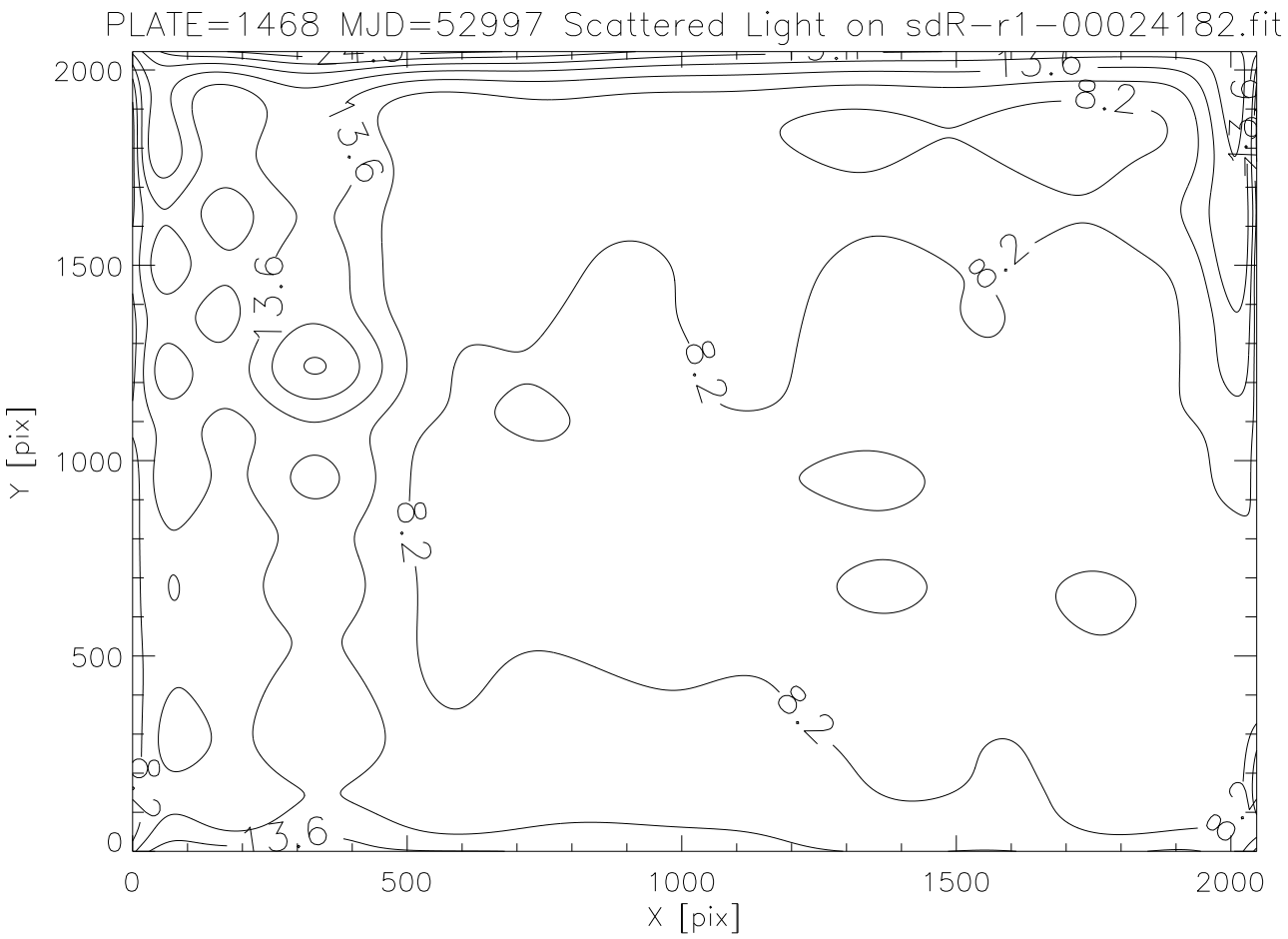

PLATE=1468 MJD=52997 sdR-r1-00024181.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.74 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

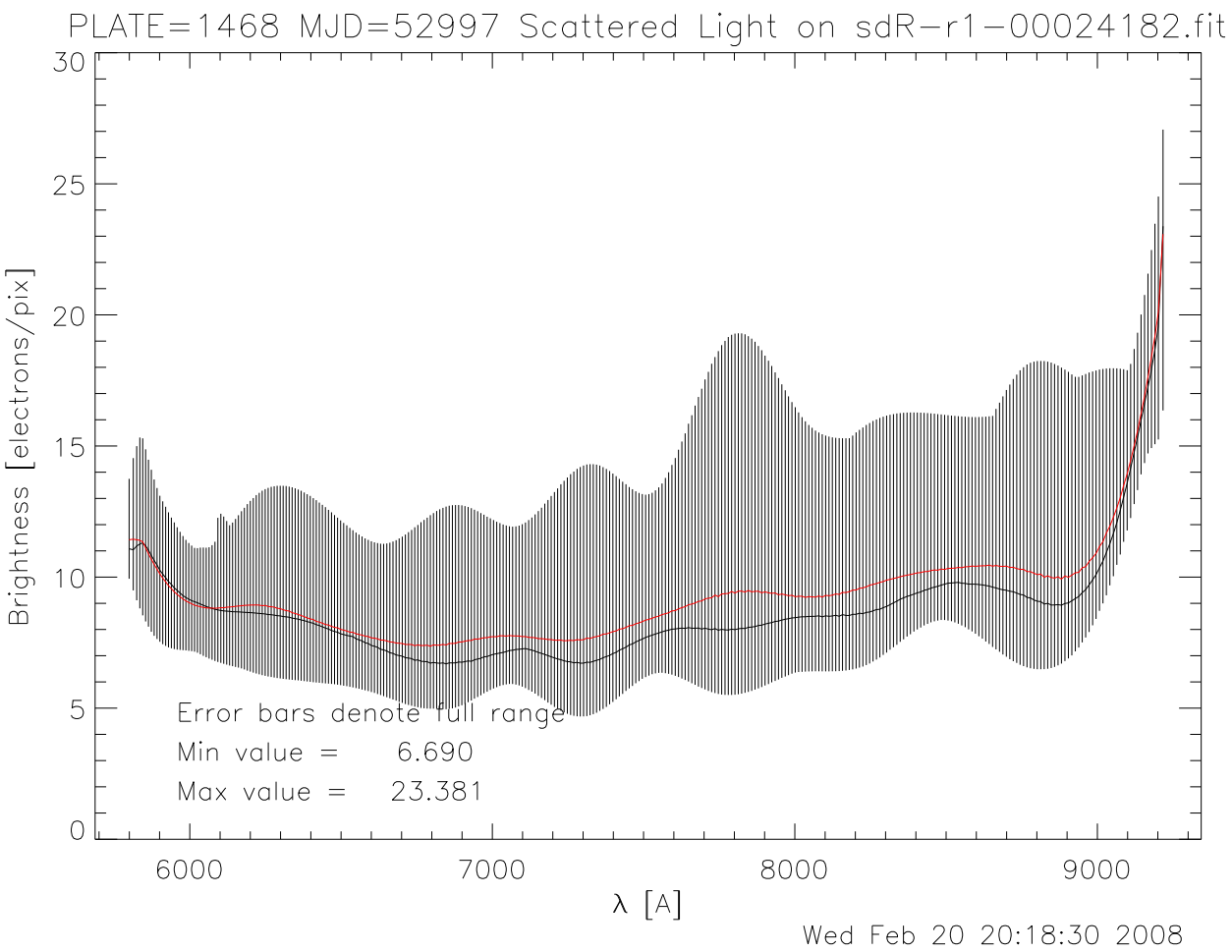

PLATE=1468 MJD=52997 sdR-r1-00024181.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.33 %
Fiber number
Focal Distance [mm]
Airmass

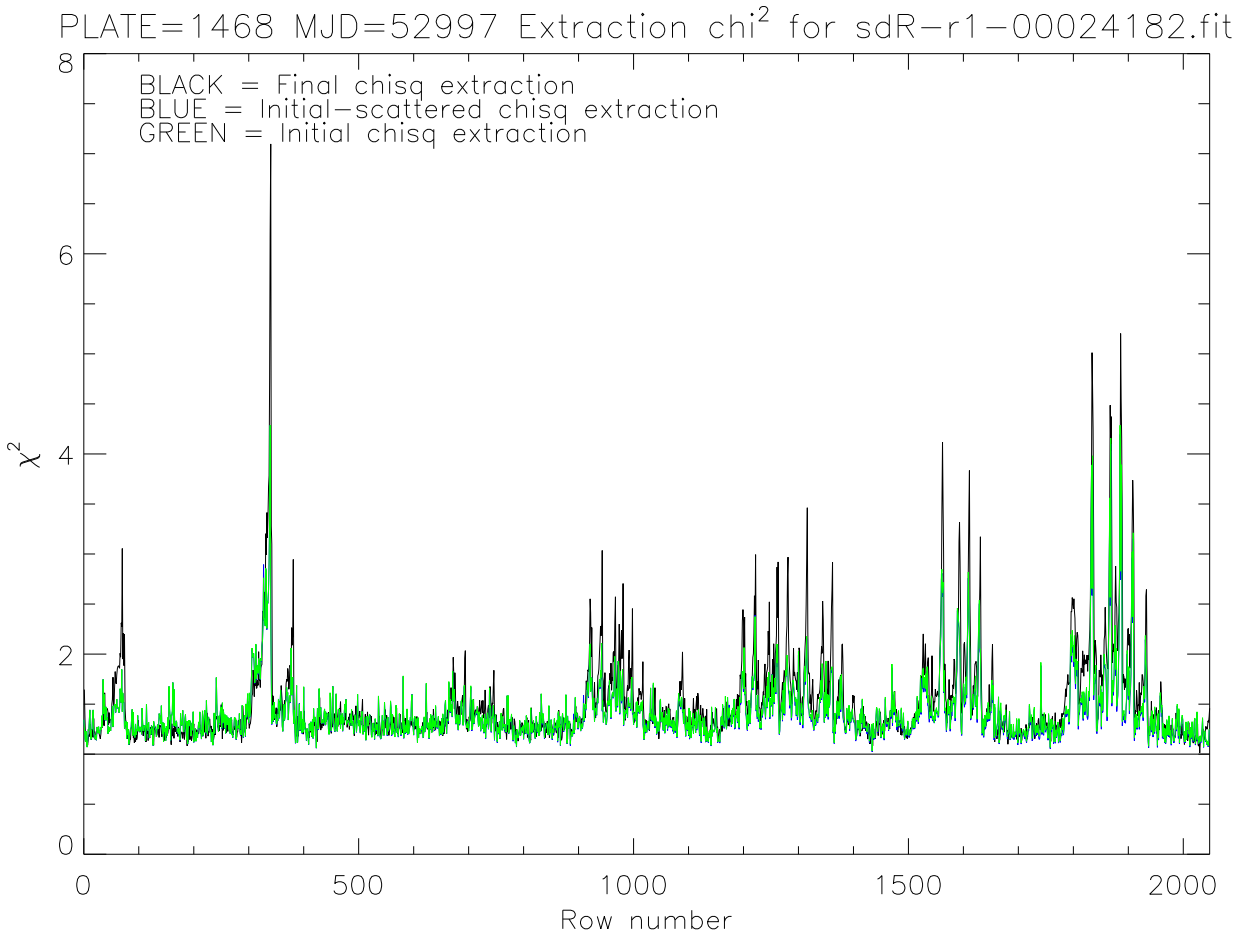

PLATE=1468 MJD=52997 Fiber−Flats for sdR−r1−00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.652
Max value = 1.317
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 20:14:20 2008

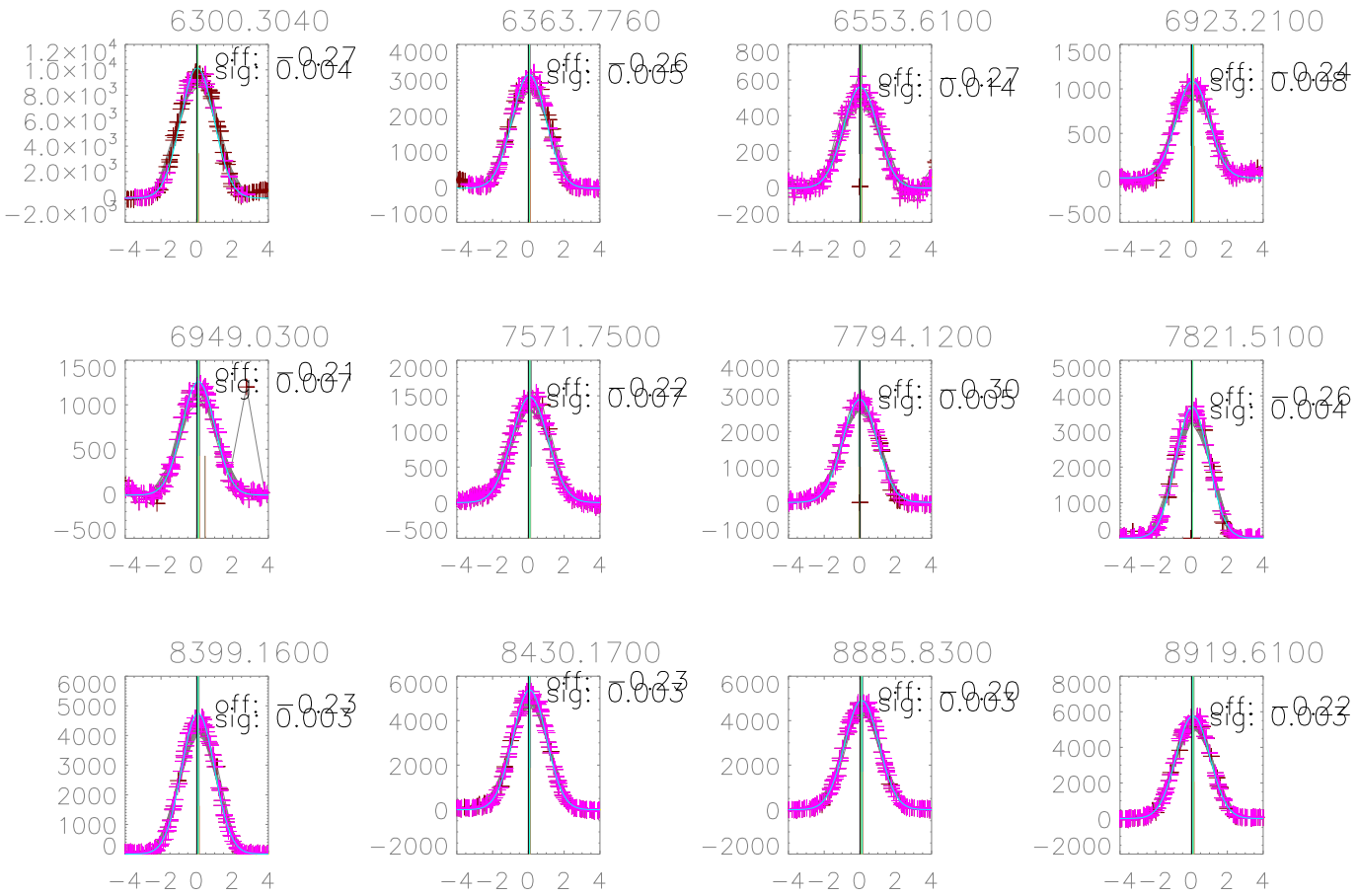

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r1-00024182.fi
50.9
50.9
50.9
36.4
36.4
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

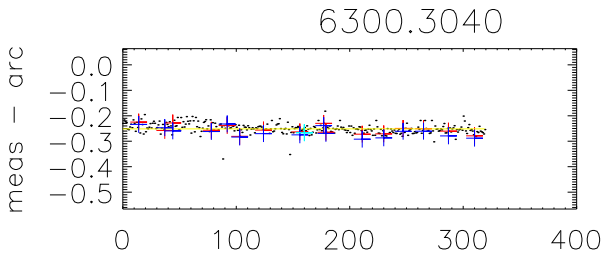

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r1-00024182.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.241
Max value = 61.423
Wed Feb 20 20:15:19 2008

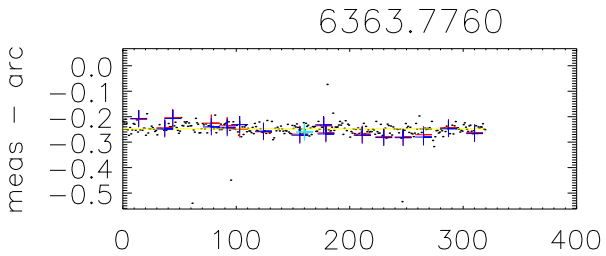

PLATE=1468 MJD=52997 Scattered Light on sdR-r1-00024182.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
8.2

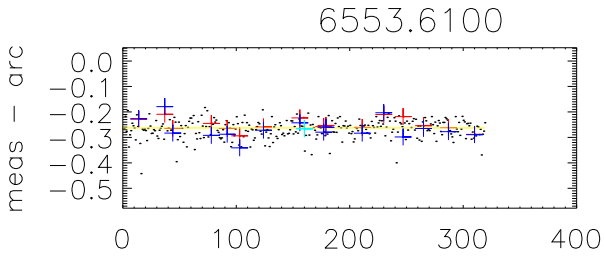

PLATE=1468 MJD=52997 Scattered Light on sdR-r1-00024182.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.690
Max value = 23.381
Wed Feb 20 20:18:30 2008

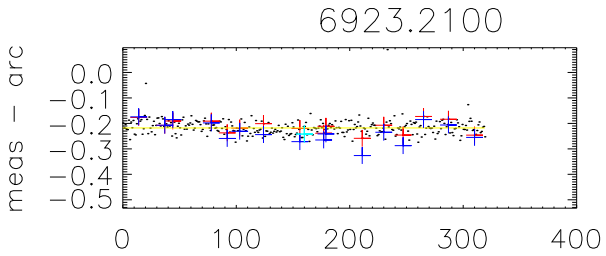

PLATE=1468 MJD=52997 Extraction chi^2 for sdR−r1−00024182.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

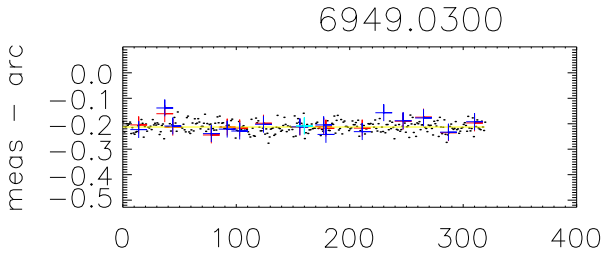

6300.3040
off: −0.27
sig: 0.004
6363.7760
off: −0.26
sig: 0.005
6553.6100
off: −0.27
sig: 0.014
6923.2100
off: −0.24
sig: 0.008
6949.0300
off: −0.21
sig: 0.007
7571.7500
off: −0.22
sig: 0.007
7794.1200
off: −0.30
sig: 0.005
7821.5100
off: −0.26
sig: 0.004
8399.1600
off: −0.23
sig: 0.003
8430.1700
off: −0.23
sig: 0.003
8885.8300
off: −0.29
sig: 0.003
8919.6100
off: −0.22
sig: 0.003

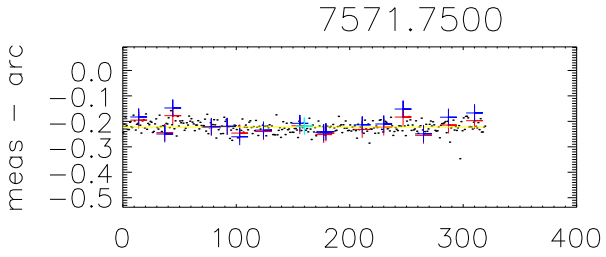

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

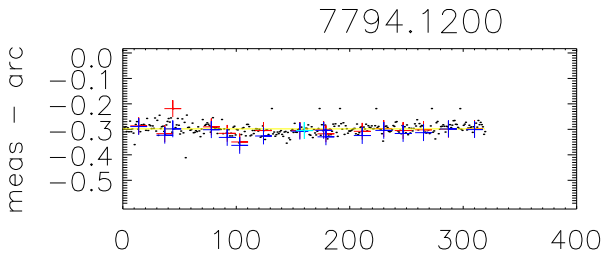

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

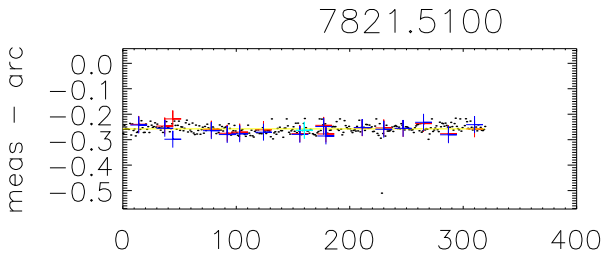

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

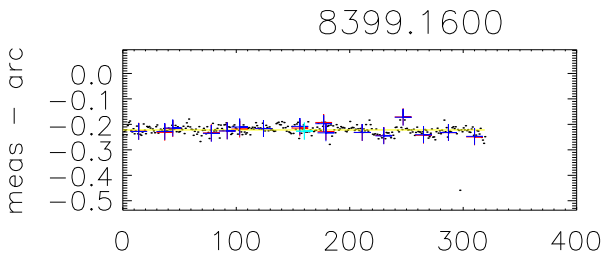

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

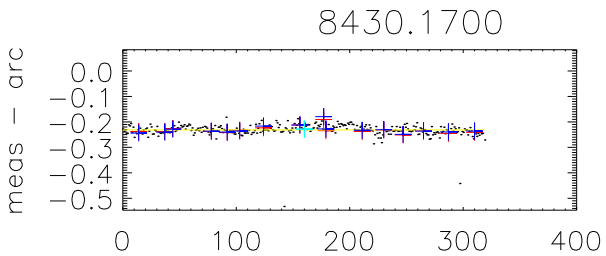

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

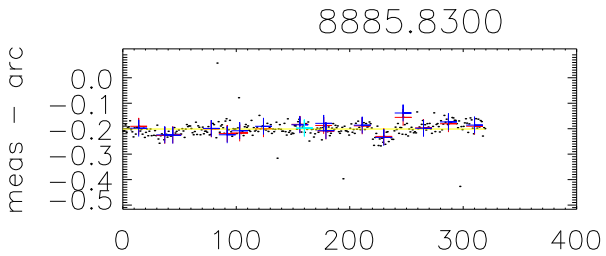

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

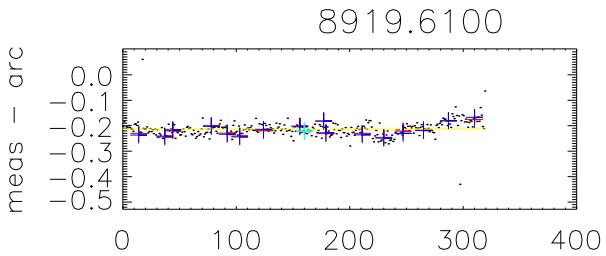

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

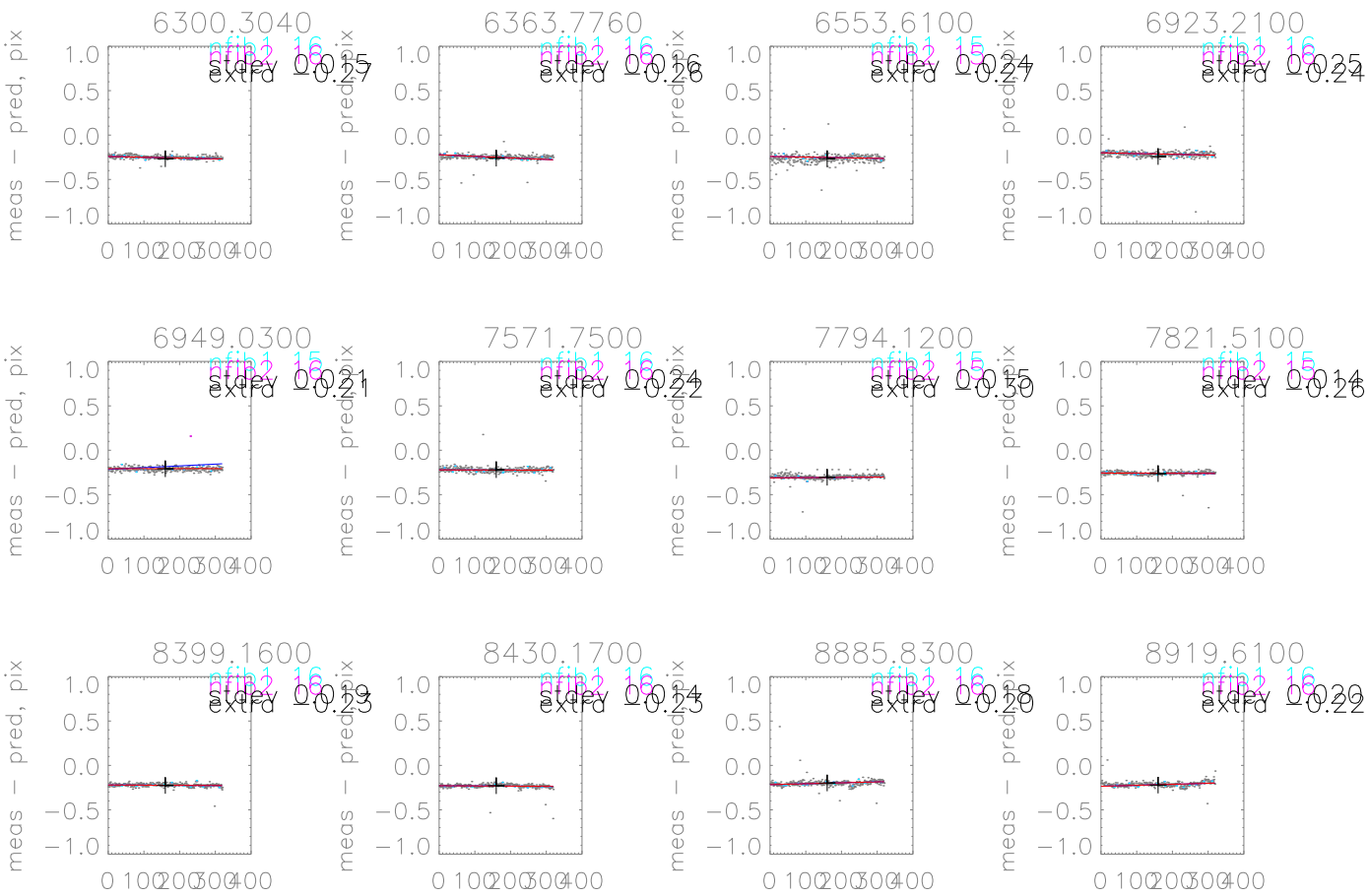

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

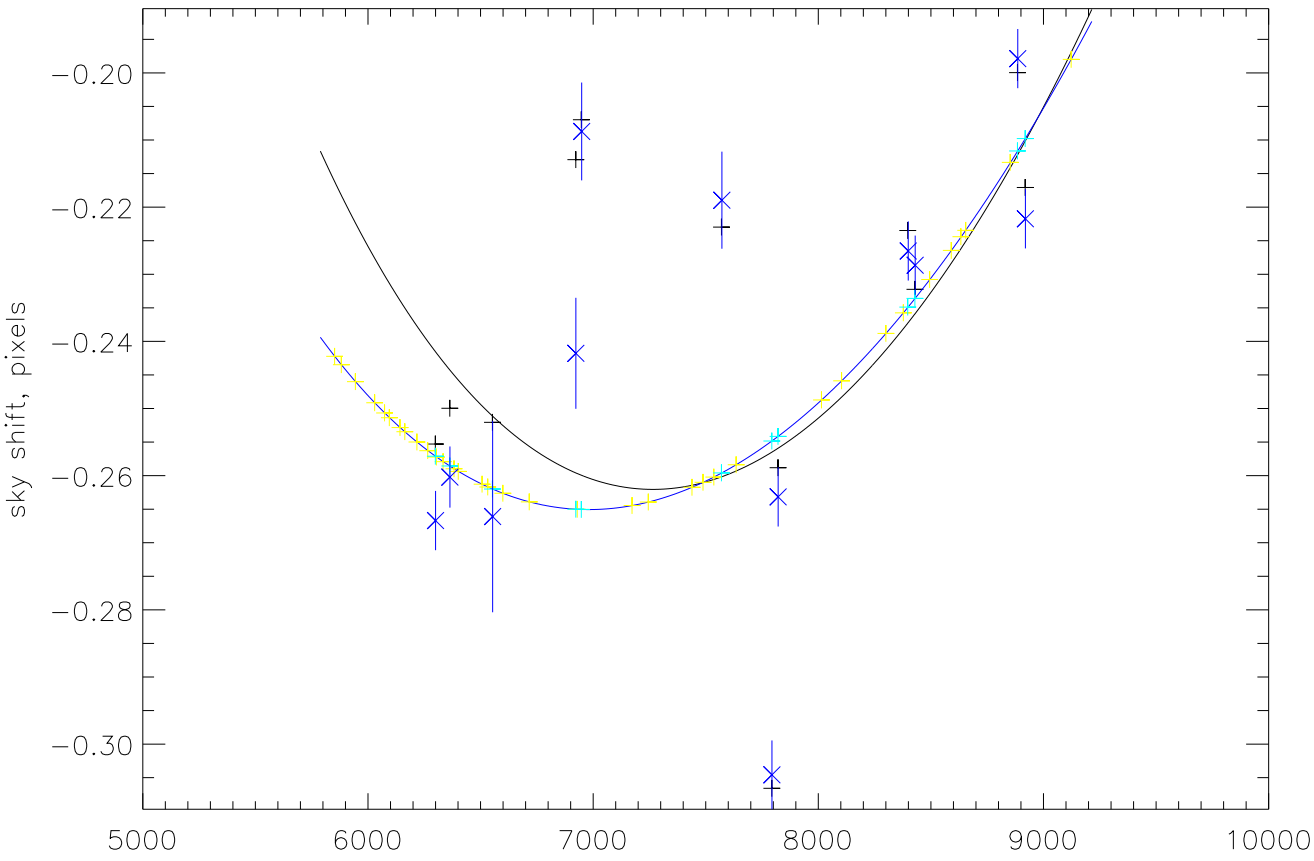

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

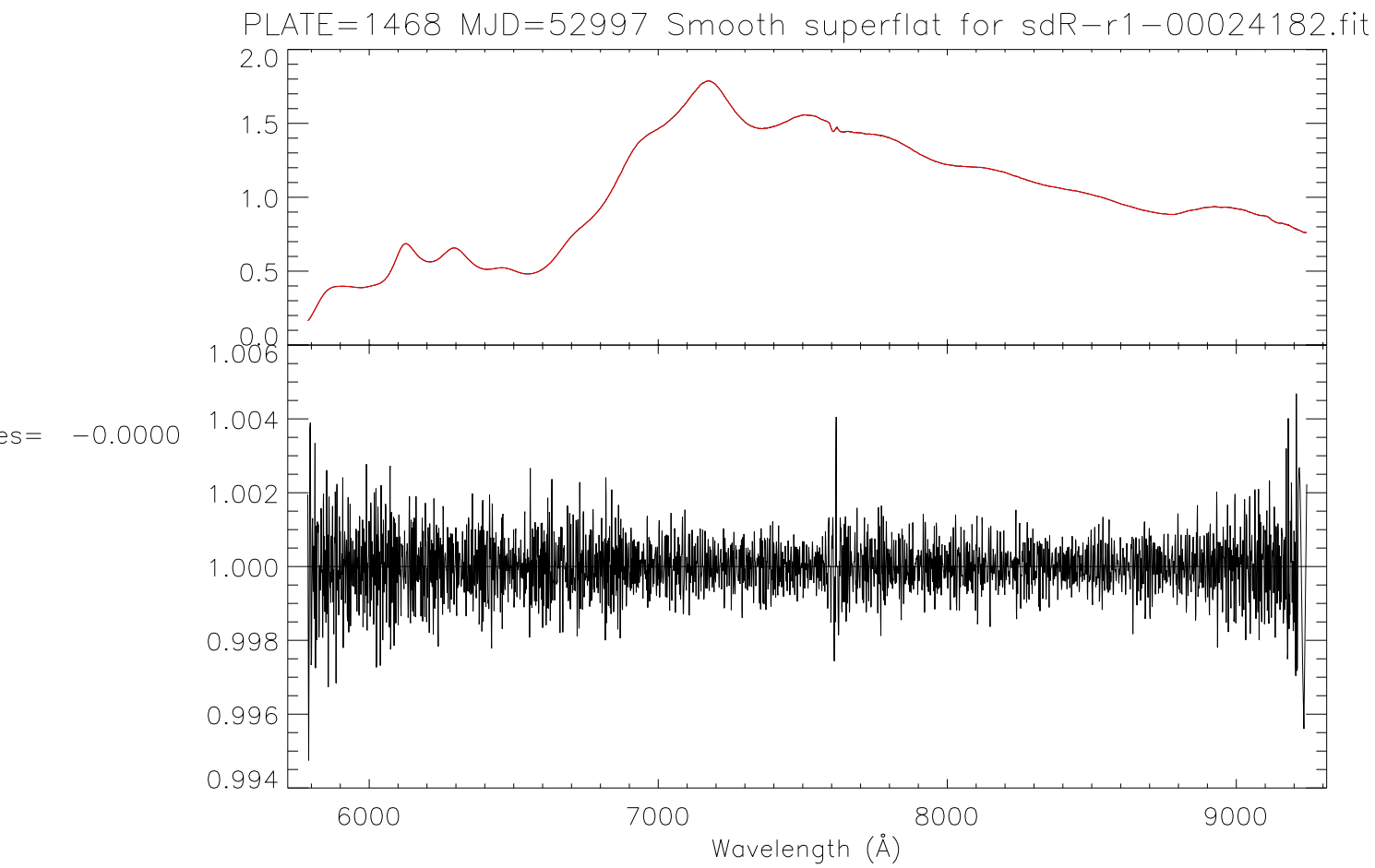

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

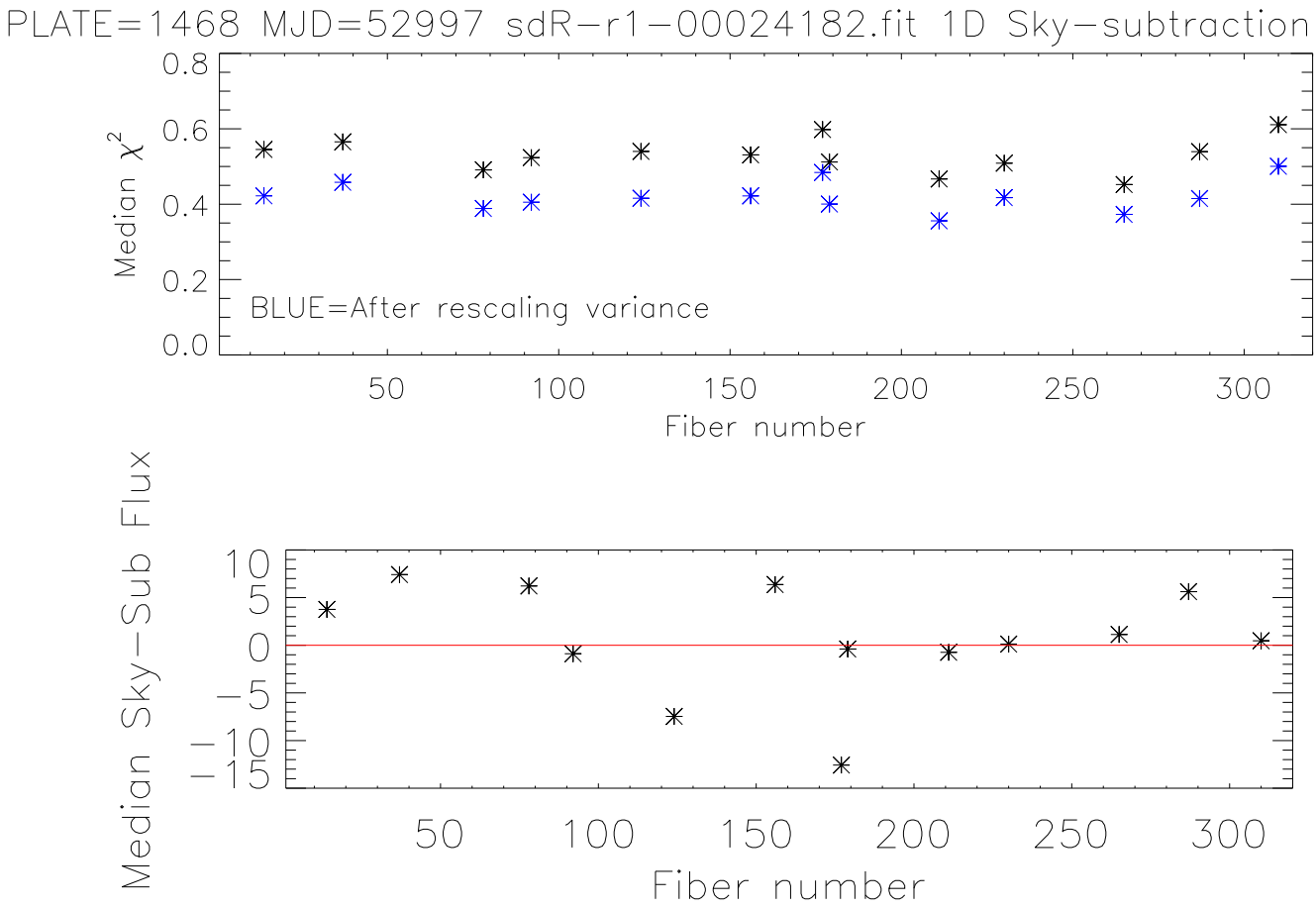

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

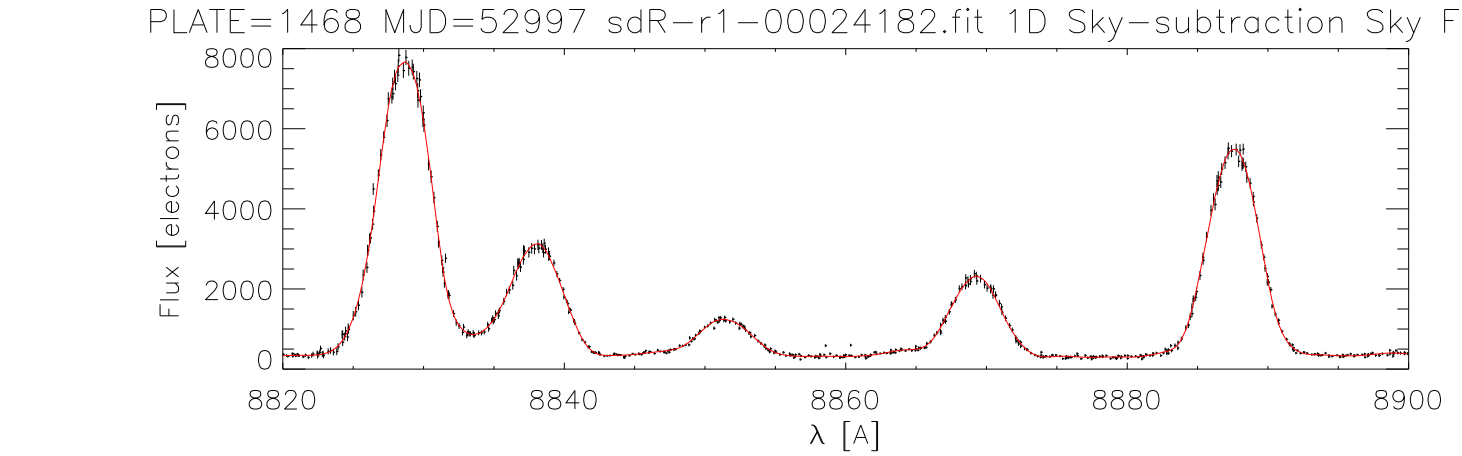

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

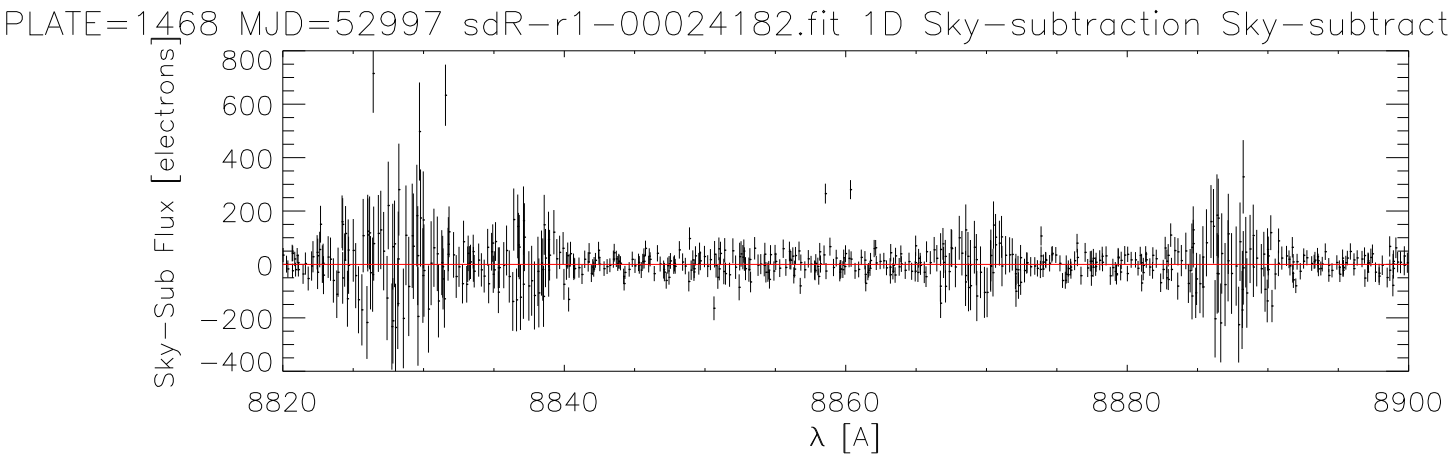

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 16
mfib2 15
stdev 0.25
extra 0.27
stdev 0.26
extra 0.26
stdev 0.24
extra 0.27
stdev 0.25
extra 0.24
stdev 0.21
extra 0.21
stdev 0.24
extra 0.22
stdev 0.45
extra 0.30
stdev 0.14
extra 0.26
stdev 0.19
extra 0.23
stdev 0.24
extra 0.23
stdev 0.18
extra 0.20
stdev 0.20
extra 0.22
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

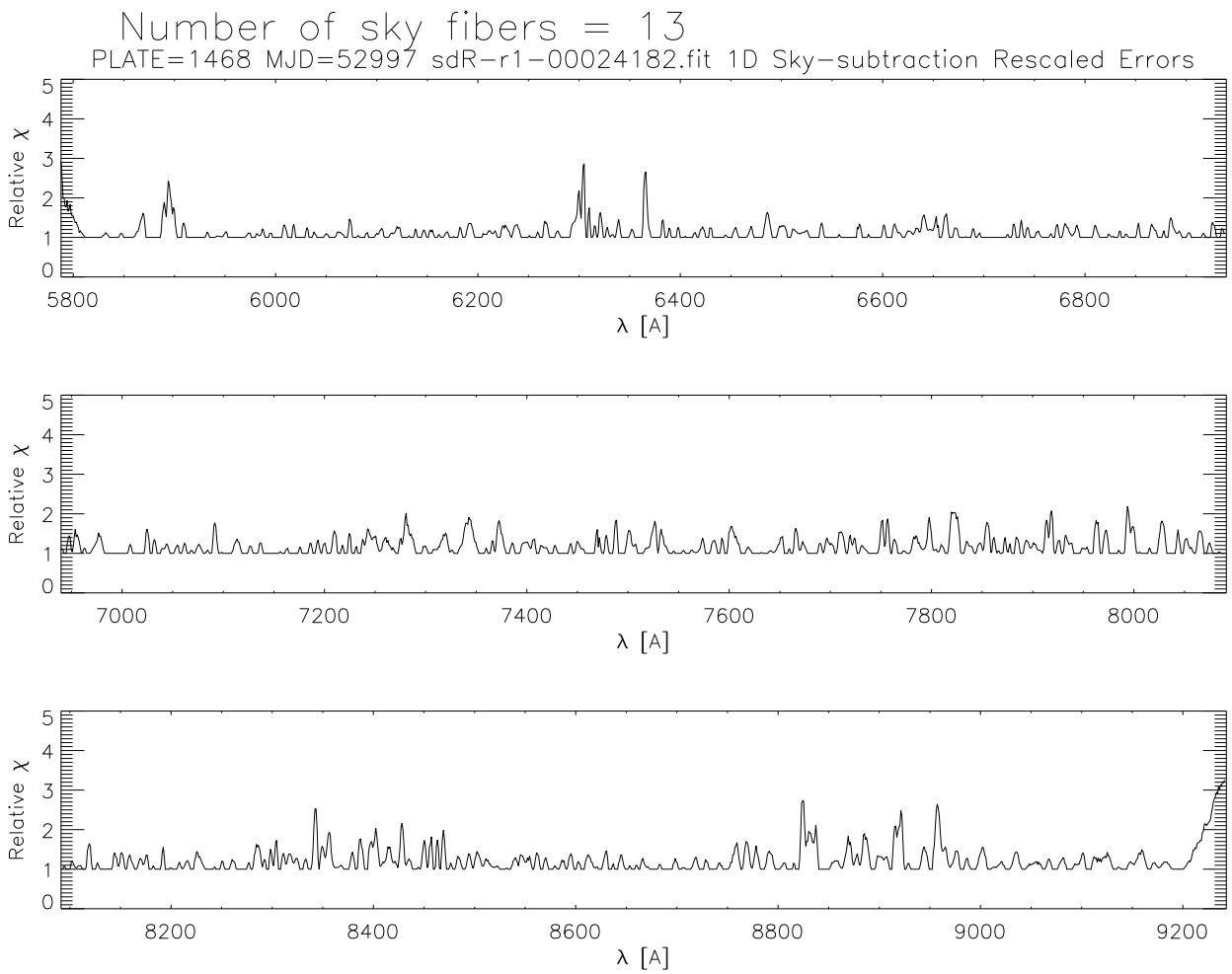

−0.20
−0.22
−0.24
−0.26
−0.28
−0.30
sky shift, pixels
5000
6000
7000
8000
9000
10000

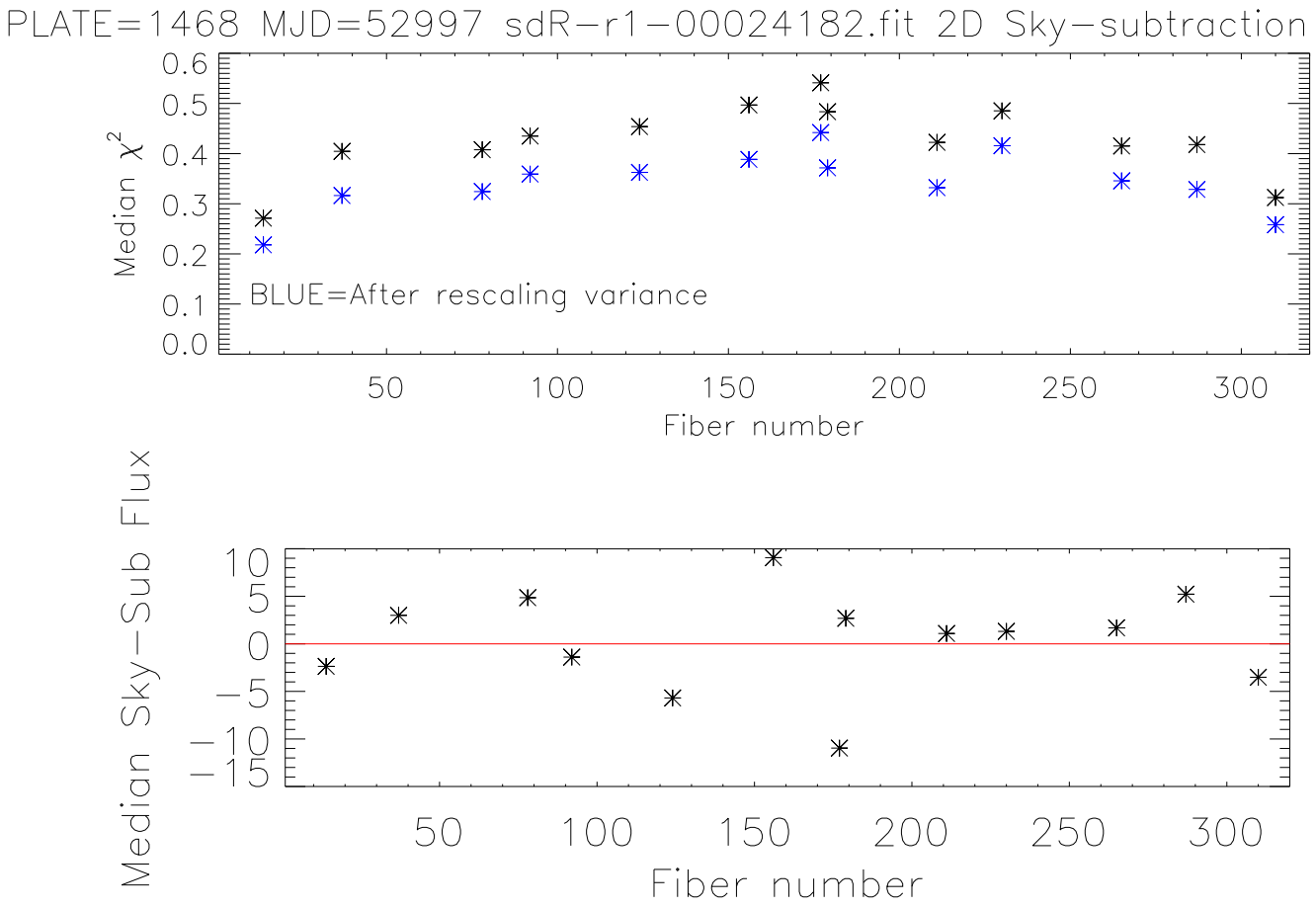

PLATE=1468 MJD=52997 Smooth superflat for sdR-r1-00024182.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

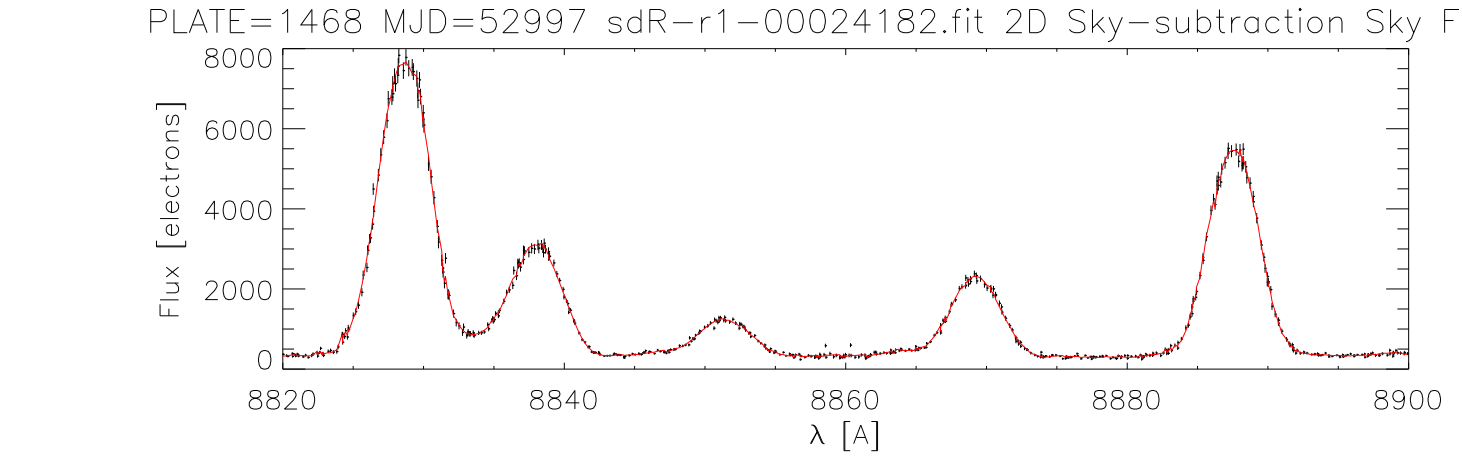

PLATE=1468 MJD=52997 sdR-r1-00024182.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

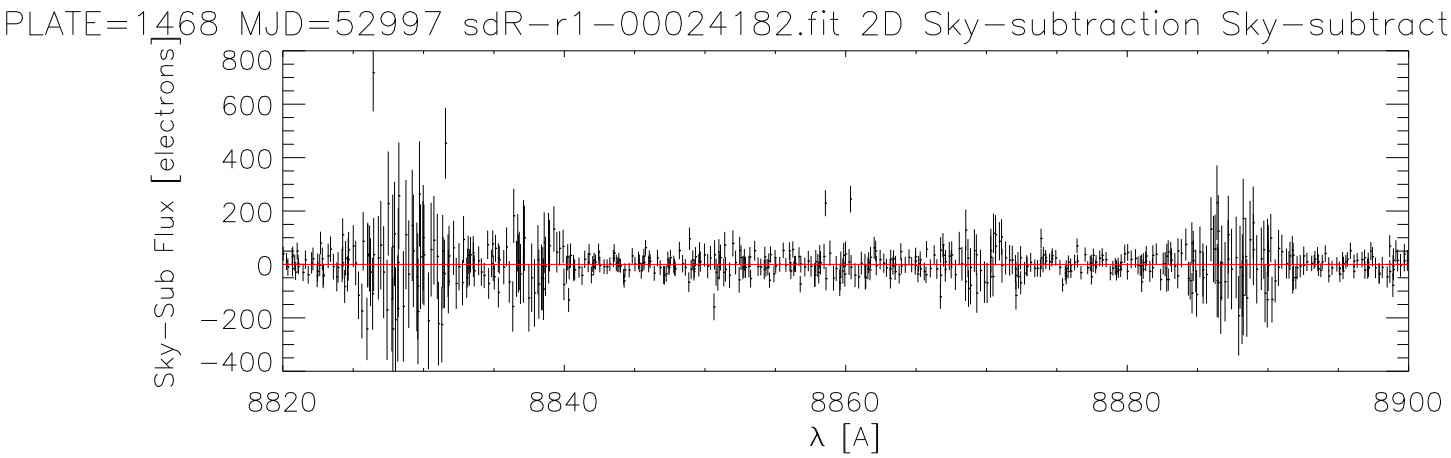

PLATE=1468 MJD=52997 sdR-r1-00024182.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

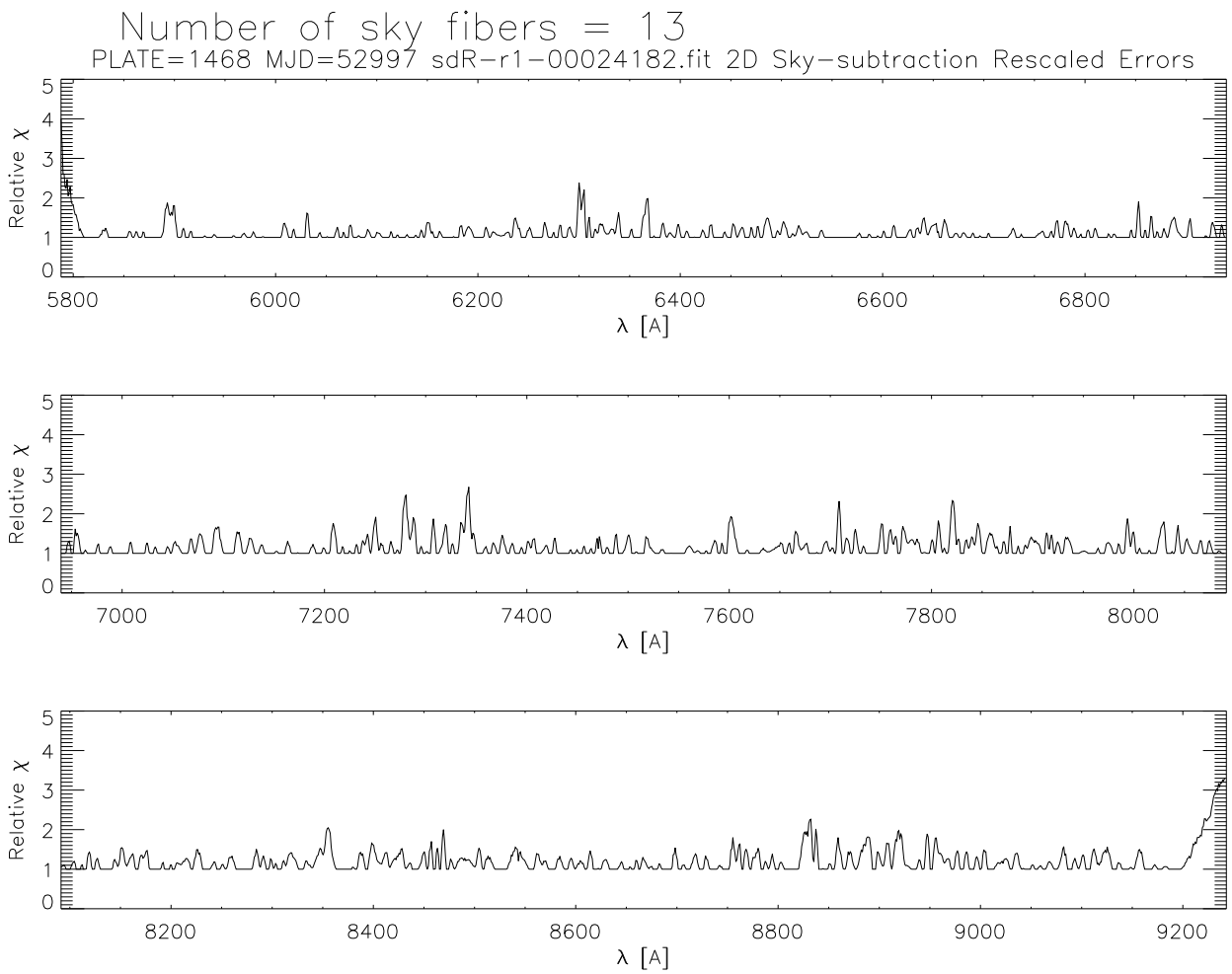

PLATE=1468 MJD=52997 sdR-r1-00024182.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

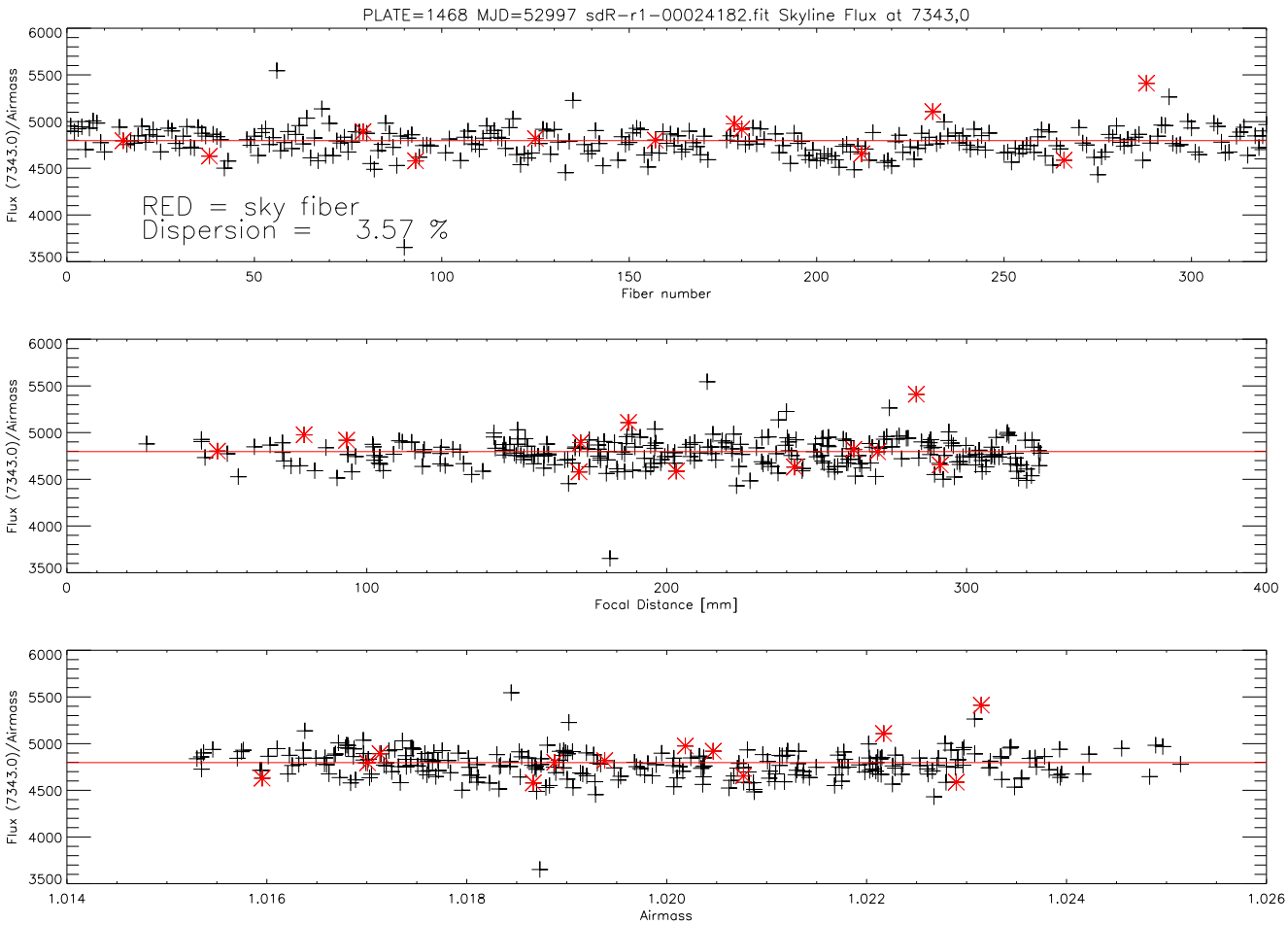

Number of sky fibers = 13
PLATE=1468 MJD=52997 sdR-r1-00024182.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

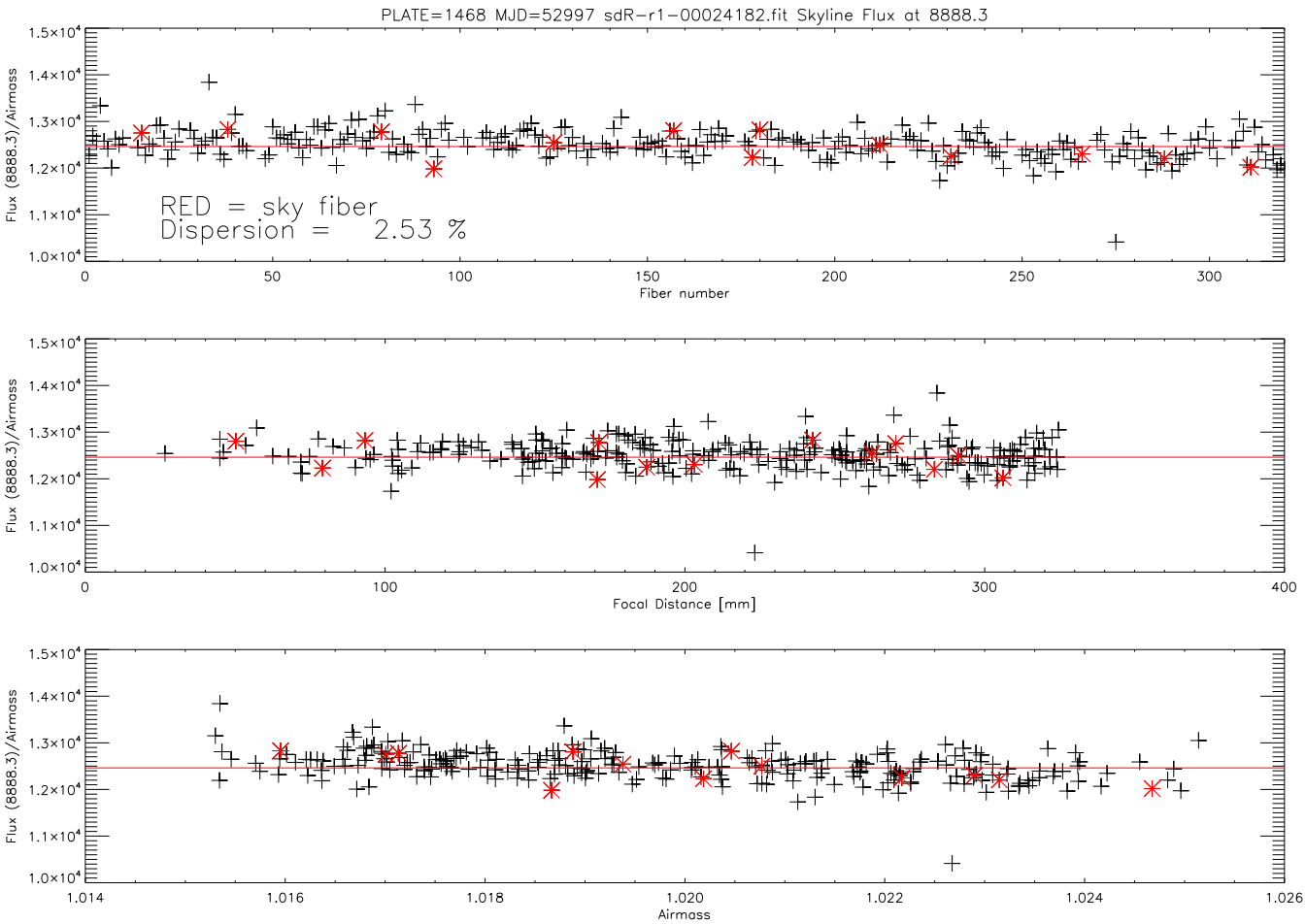

PLATE=1468 MJD=52997 sdR-r1-00024182.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

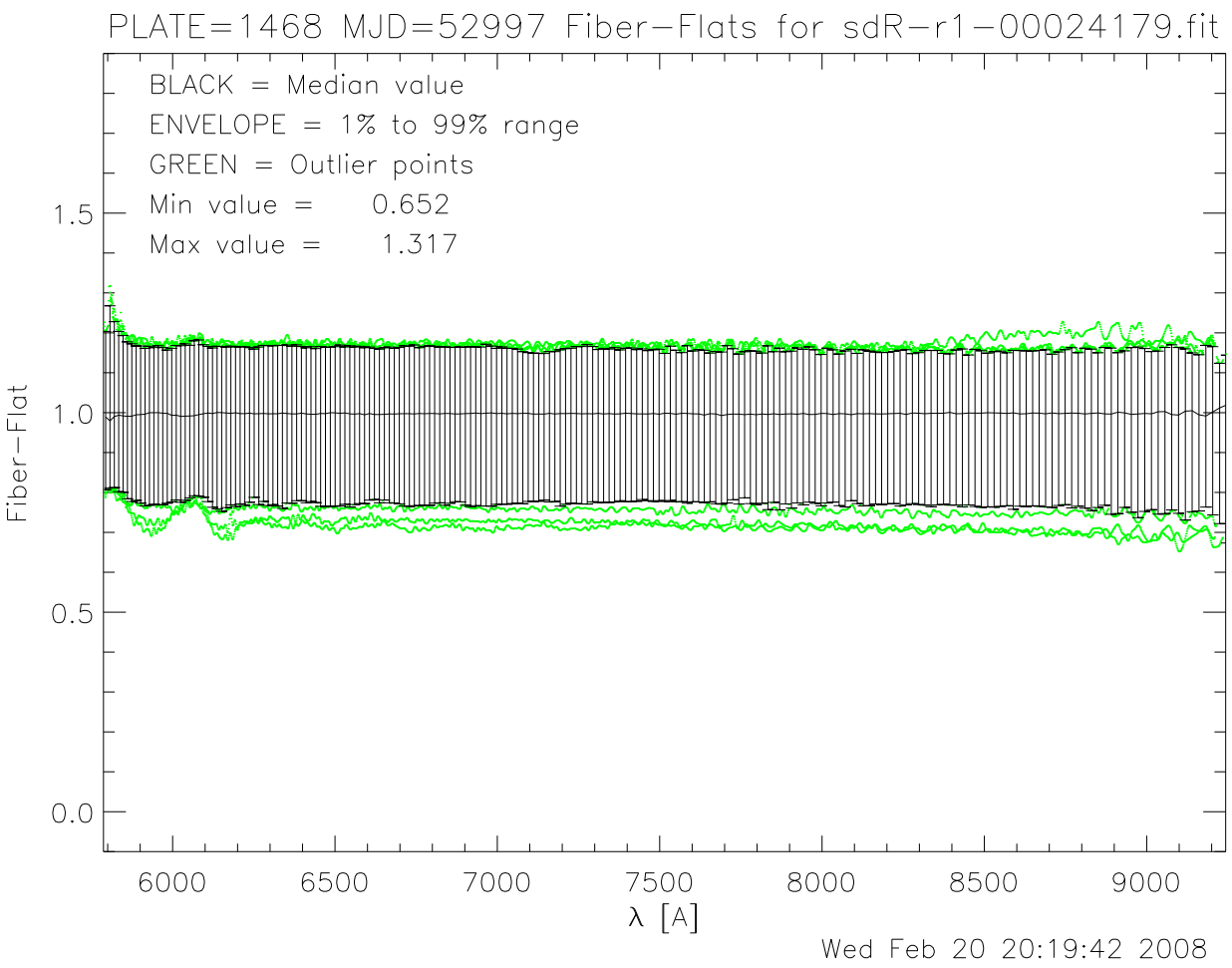

PLATE=1468 MJD=52997 sdR-r1-00024182.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

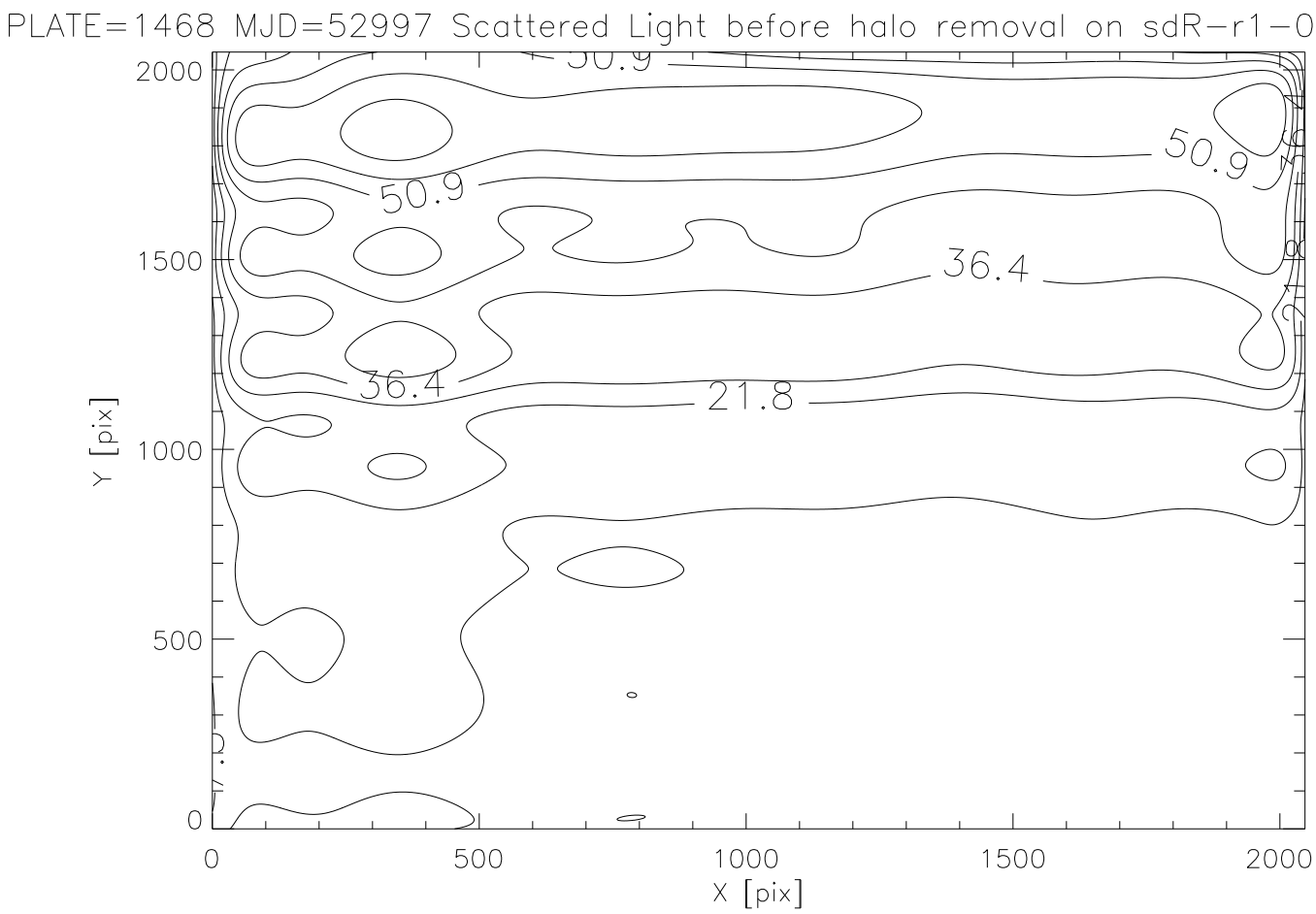

PLATE=1468 MJD=52997 sdR-r1-00024182.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

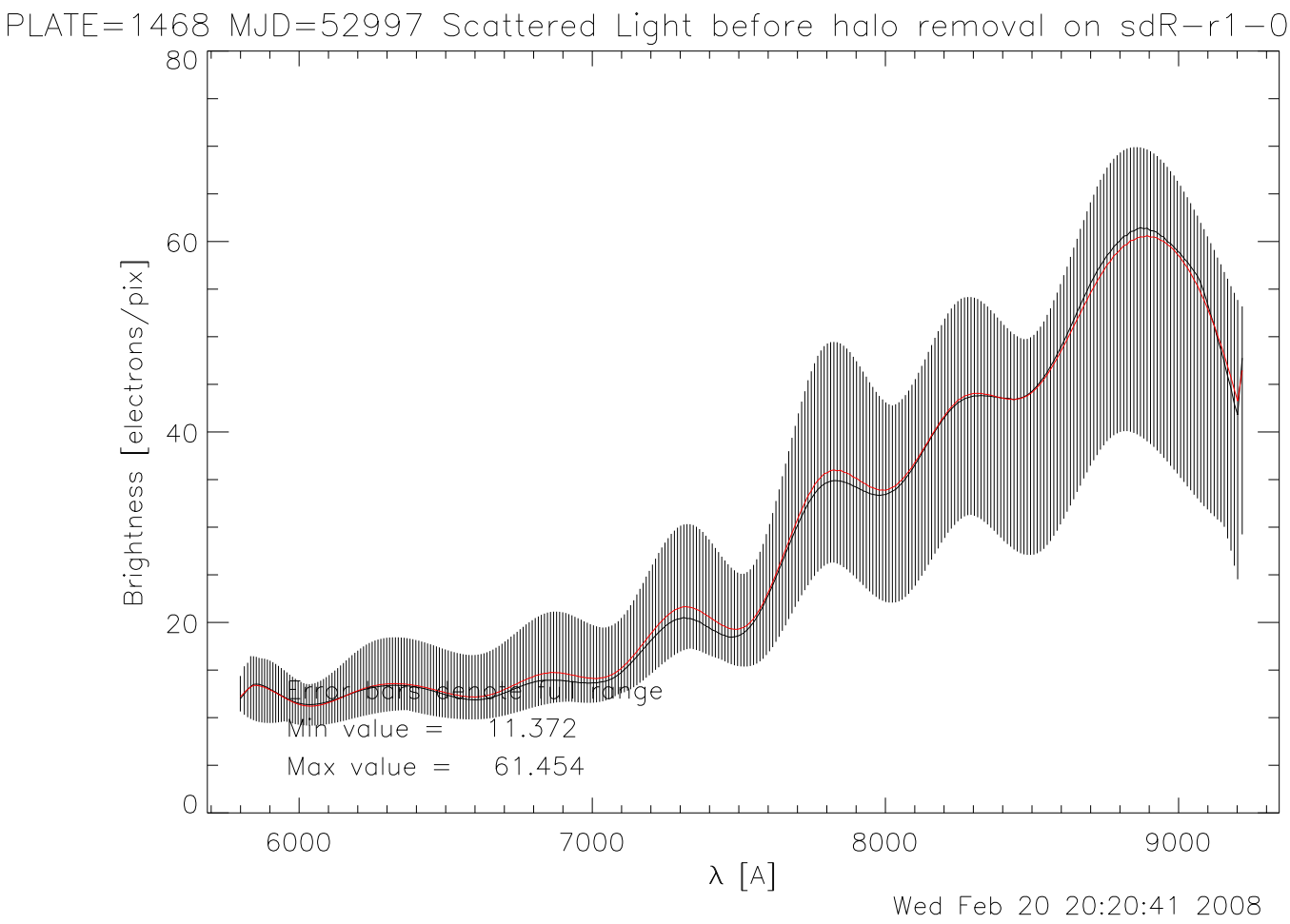

Number of sky fibers = 13
PLATE=1468 MJD=52997 sdR-r1-00024182.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

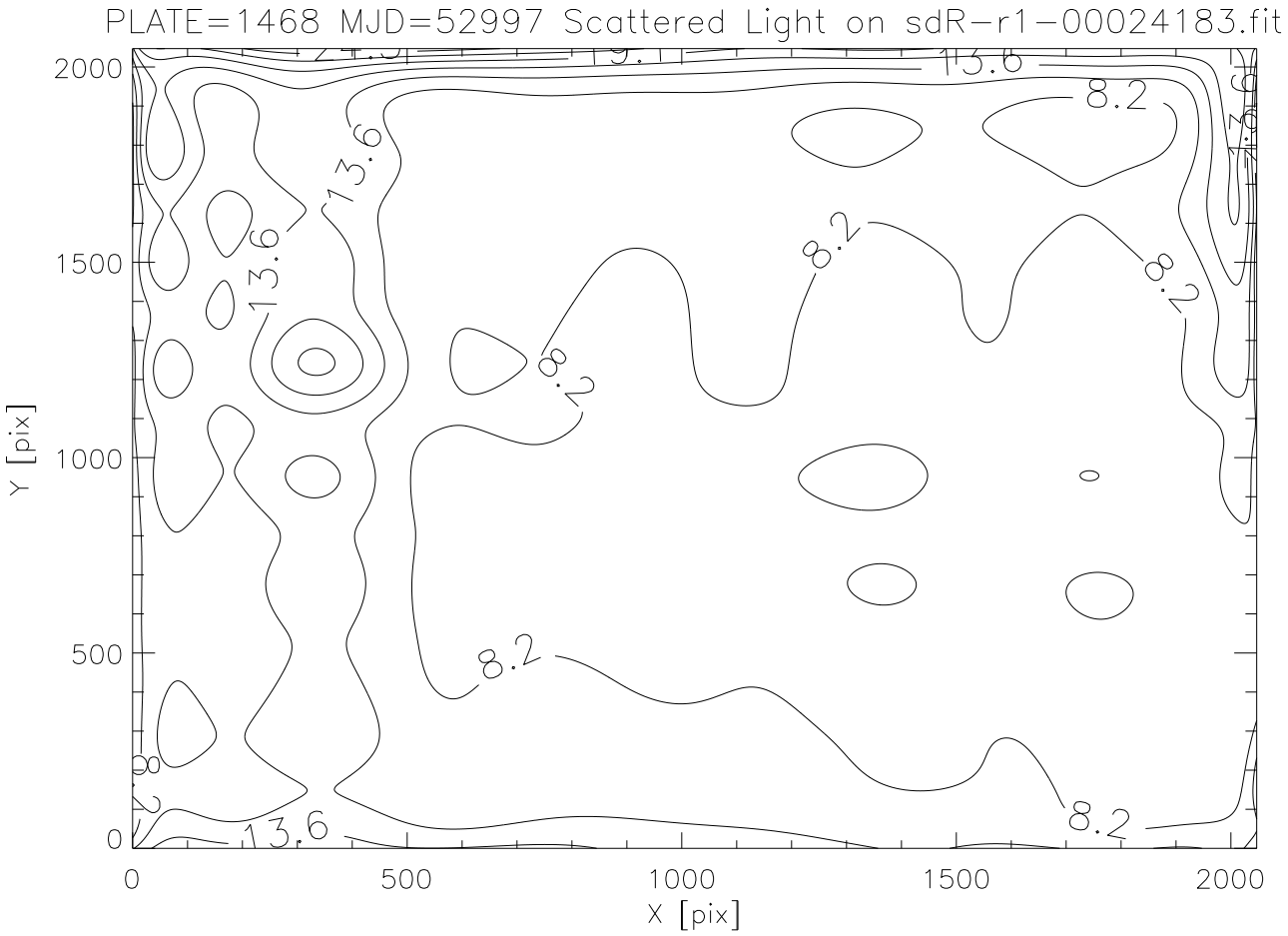

PLATE=1468 MJD=52997 sdR-r1-00024182.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.57 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

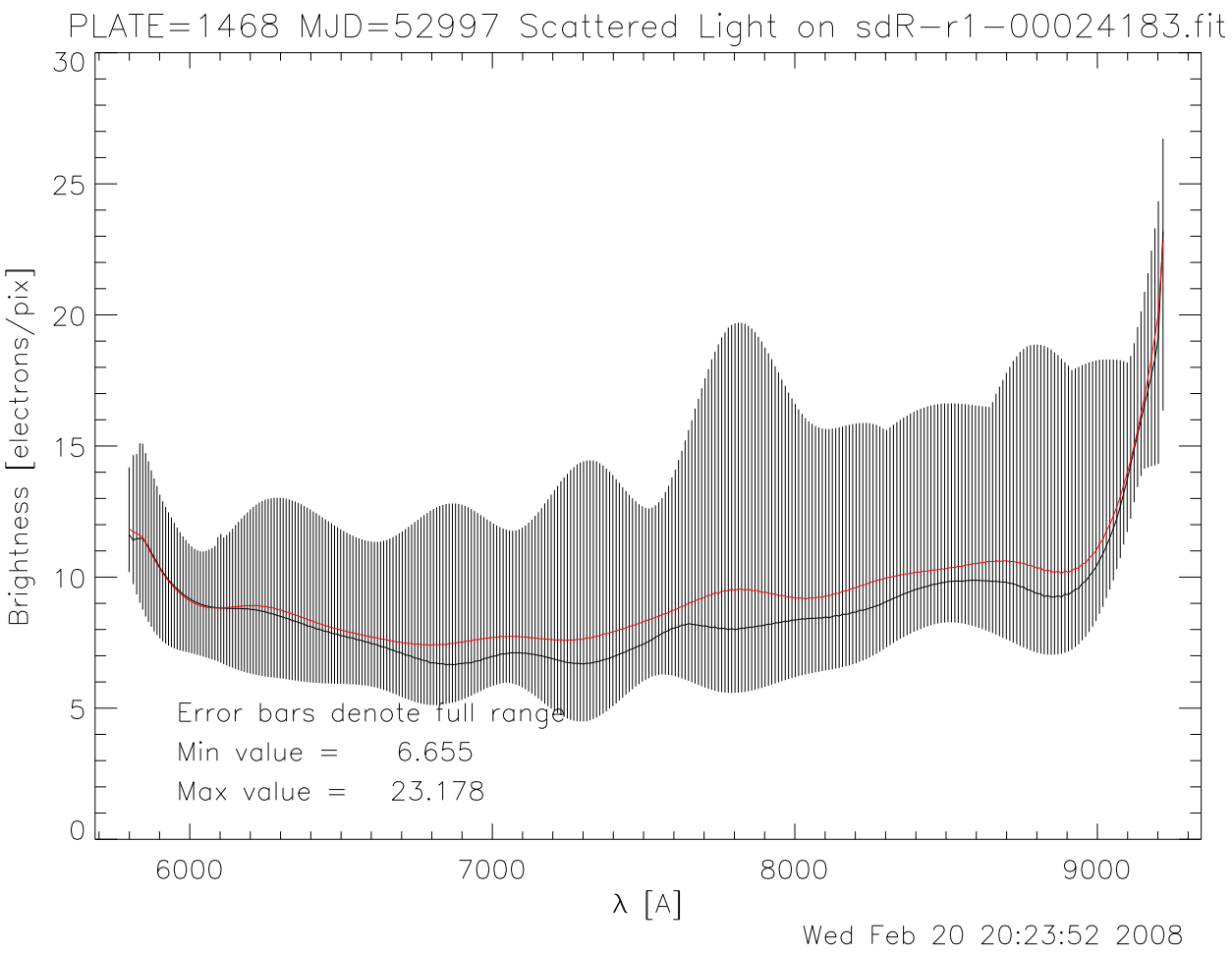

PLATE=1468 MJD=52997 sdR-r1-00024182.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.53 %
Fiber number
Focal Distance [mm]
Airmass

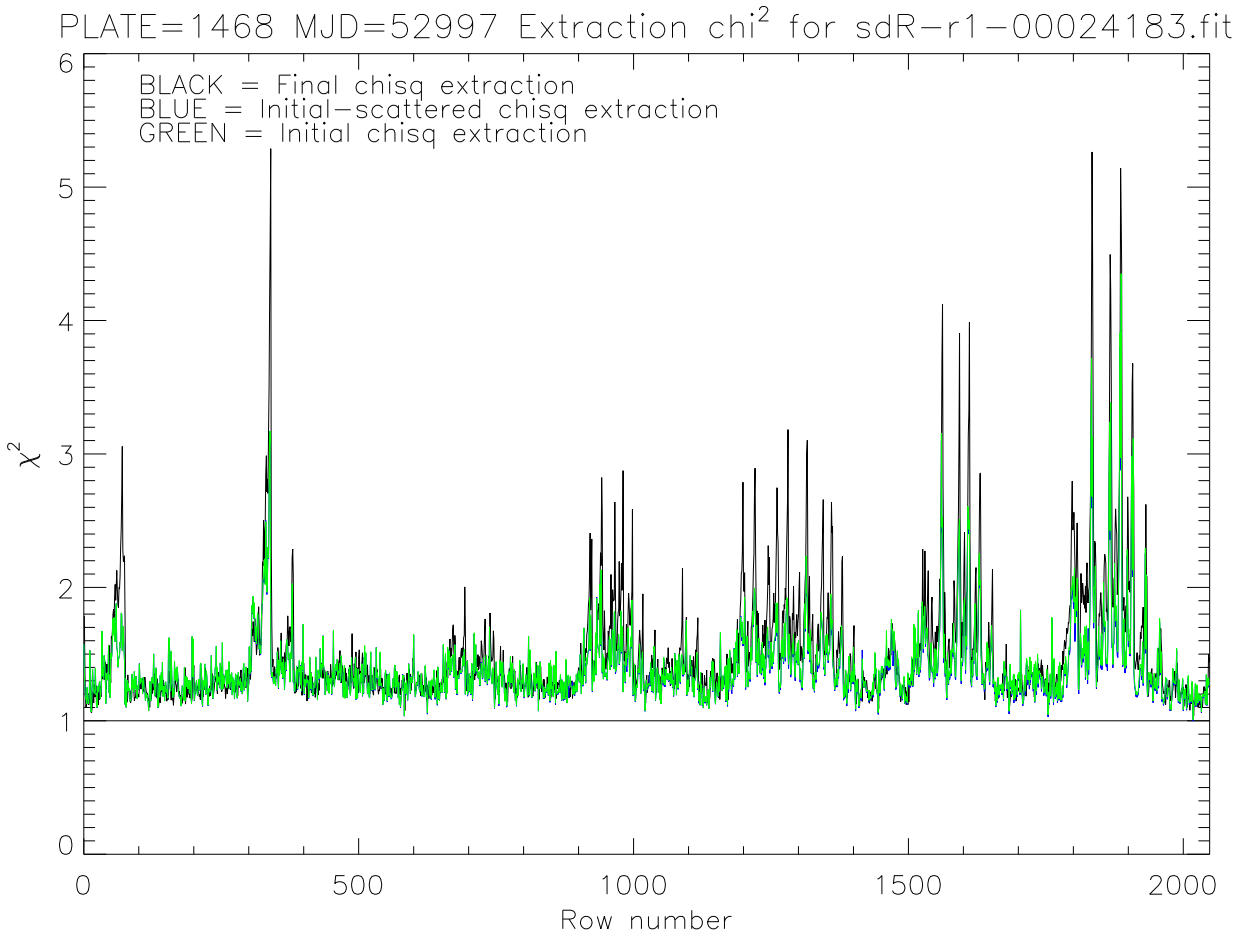

PLATE=1468 MJD=52997 Fiber−Flats for sdR−r1−00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.652
Max value = 1.317
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 20:19:42 2008

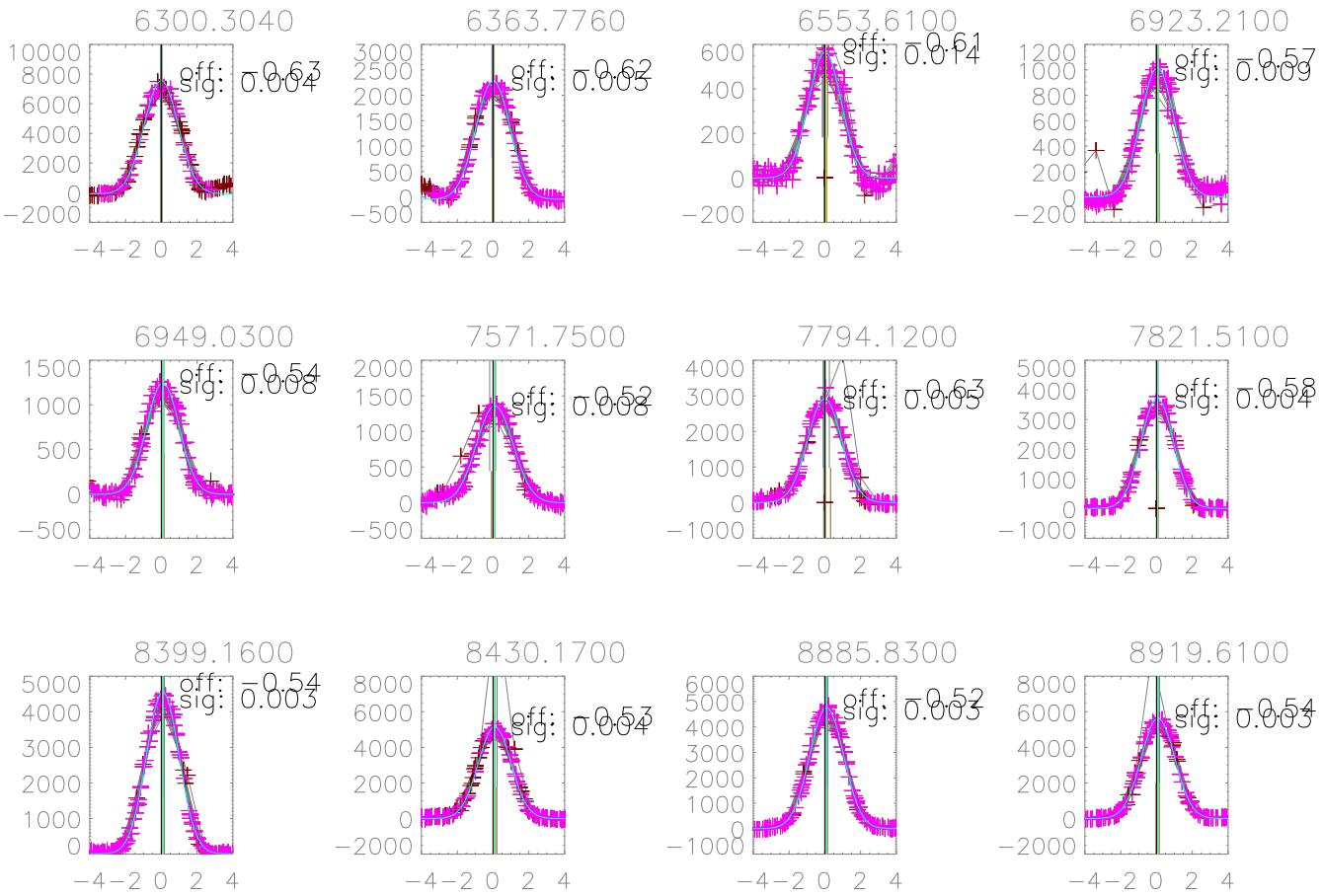

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r1-00024183.fi
50.9
50.9
50.9
36.4
36.4
21.8
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

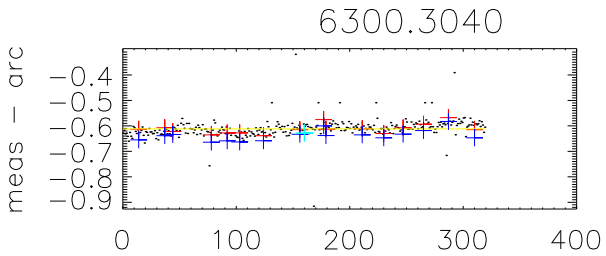

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r1-00024183.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.372
Max value = 61.454
Wed Feb 20 20:20:41 2008

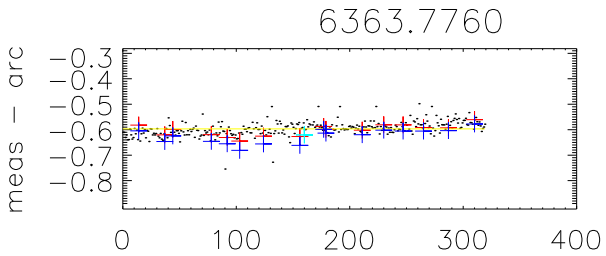

PLATE=1468 MJD=52997 Scattered Light on sdR-r1-00024183.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
8.2

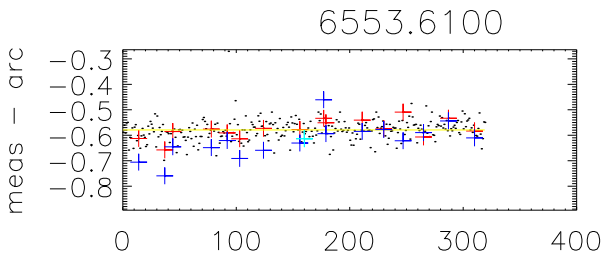

PLATE=1468 MJD=52997 Scattered Light on sdR-r1-00024183.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.655
Max value = 23.178
Wed Feb 20 20:23:52 2008

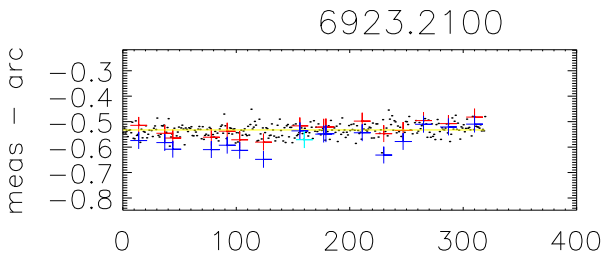

PLATE=1468 MJD=52997 Extraction chi^2 for sdR−r1−00024183.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

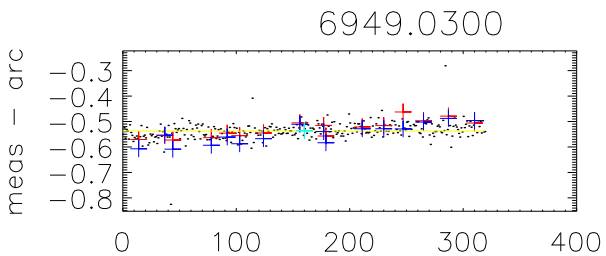

6300.3040
off: −0.63
sig: 0.004
6363.7760
off: −0.62
sig: 0.005
6553.6100
off: −0.61
sig: 0.014
6923.2100
off: −0.57
sig: 0.009
6949.0300
off: −0.54
sig: 0.008
7571.7500
off: −0.52
sig: 0.008
7794.1200
off: −0.63
sig: 0.005
7821.5100
off: −0.58
sig: 0.004
8399.1600
off: −0.54
sig: 0.003
8430.1700
off: −0.53
sig: 0.004
8885.8300
off: −0.52
sig: 0.003
8919.6100
off: −0.54
sig: 0.003

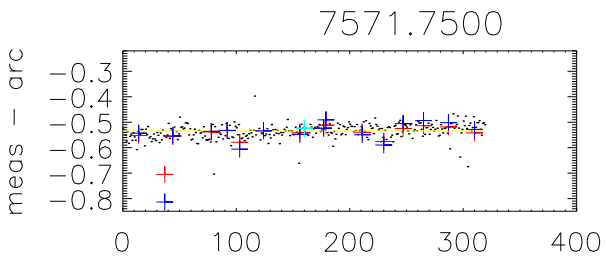

6300.3040
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

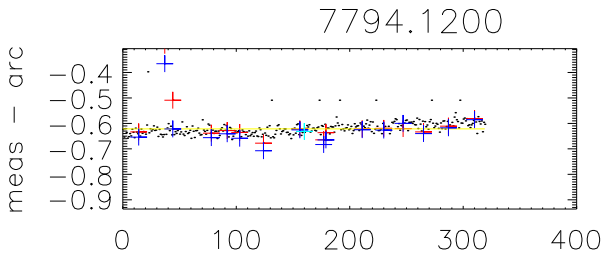

6363.7760
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

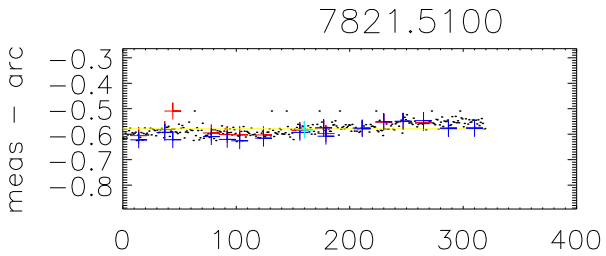

6553.6100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

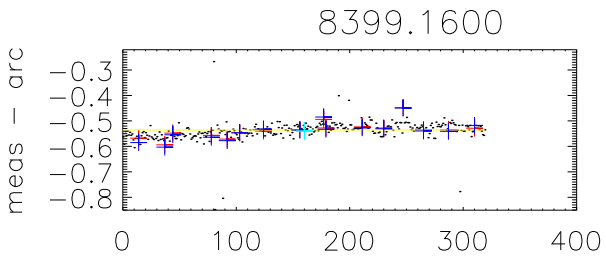

6923.2100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

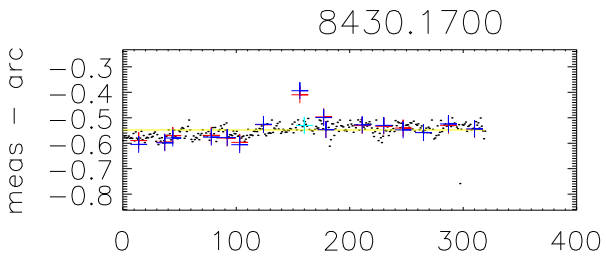

6949.0300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

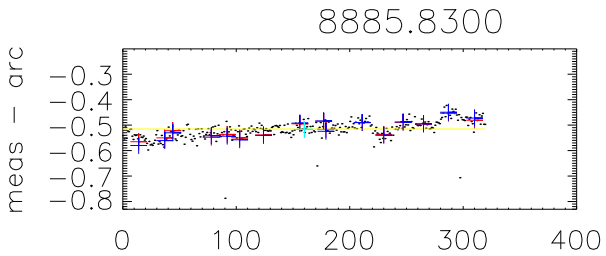

7571.7500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

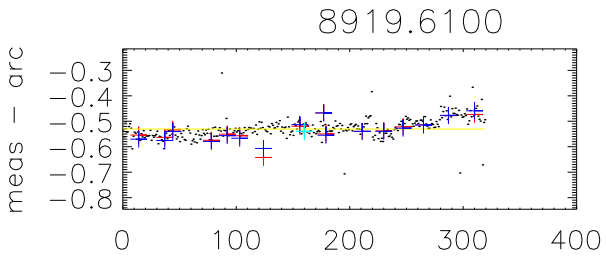

7794.1200
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

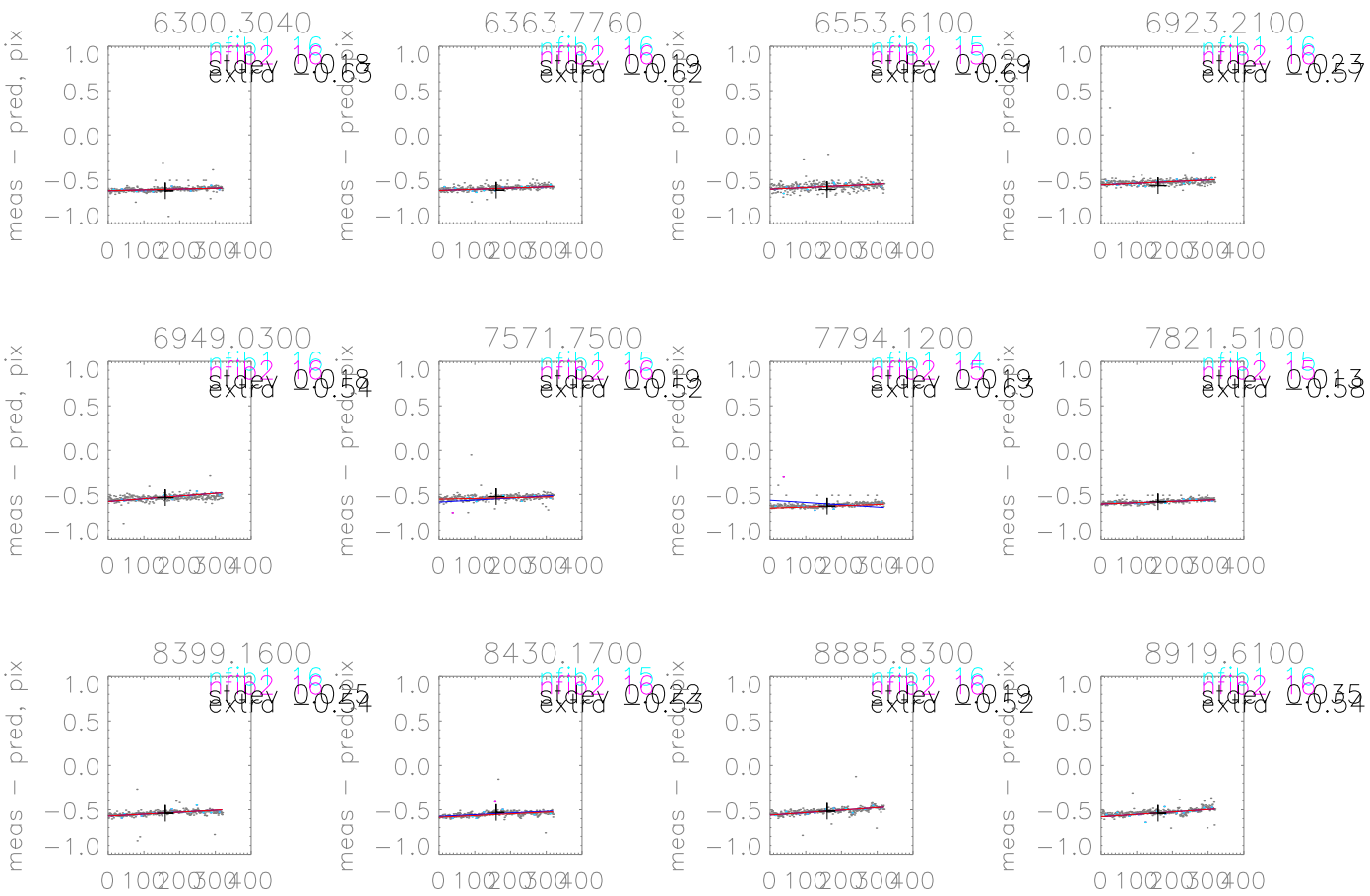

7821.5100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

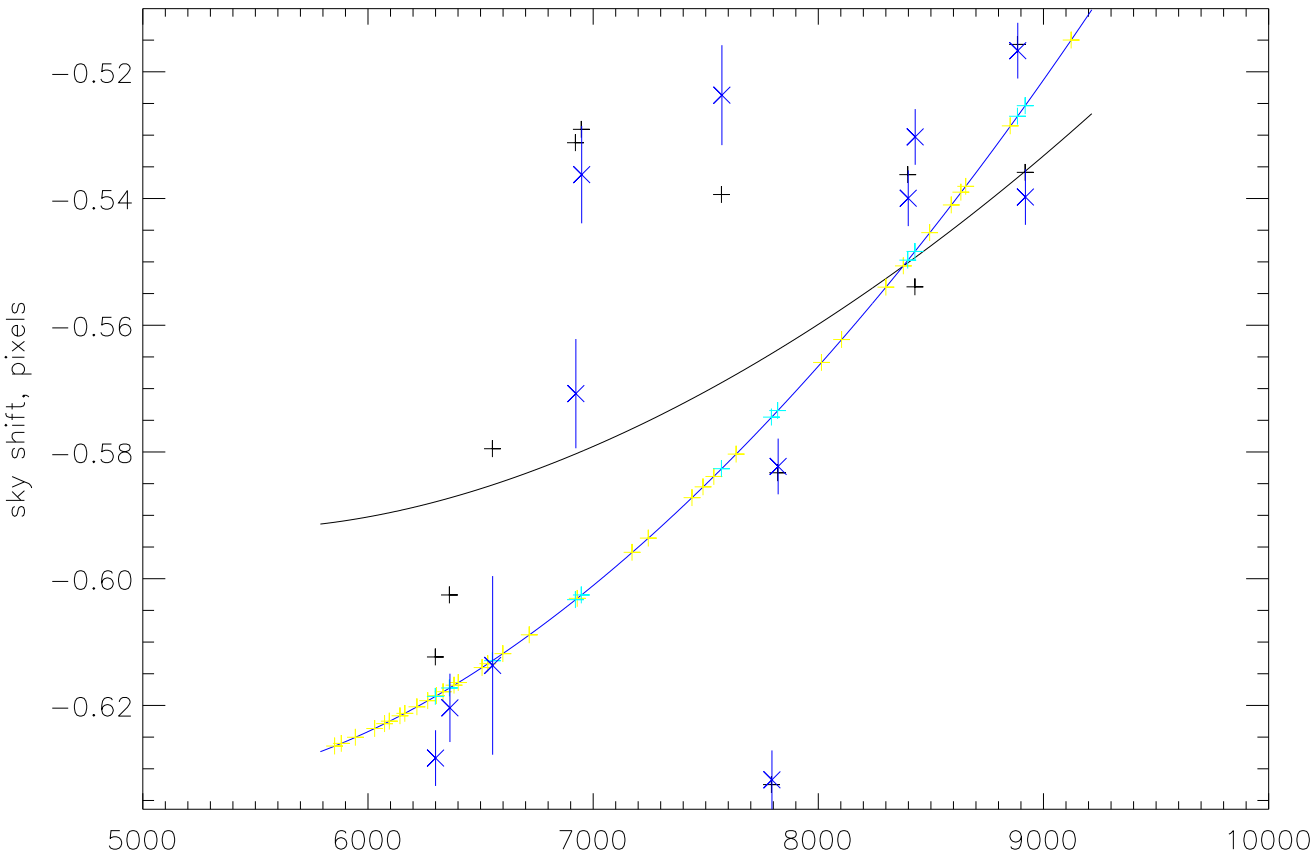

8399.1600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

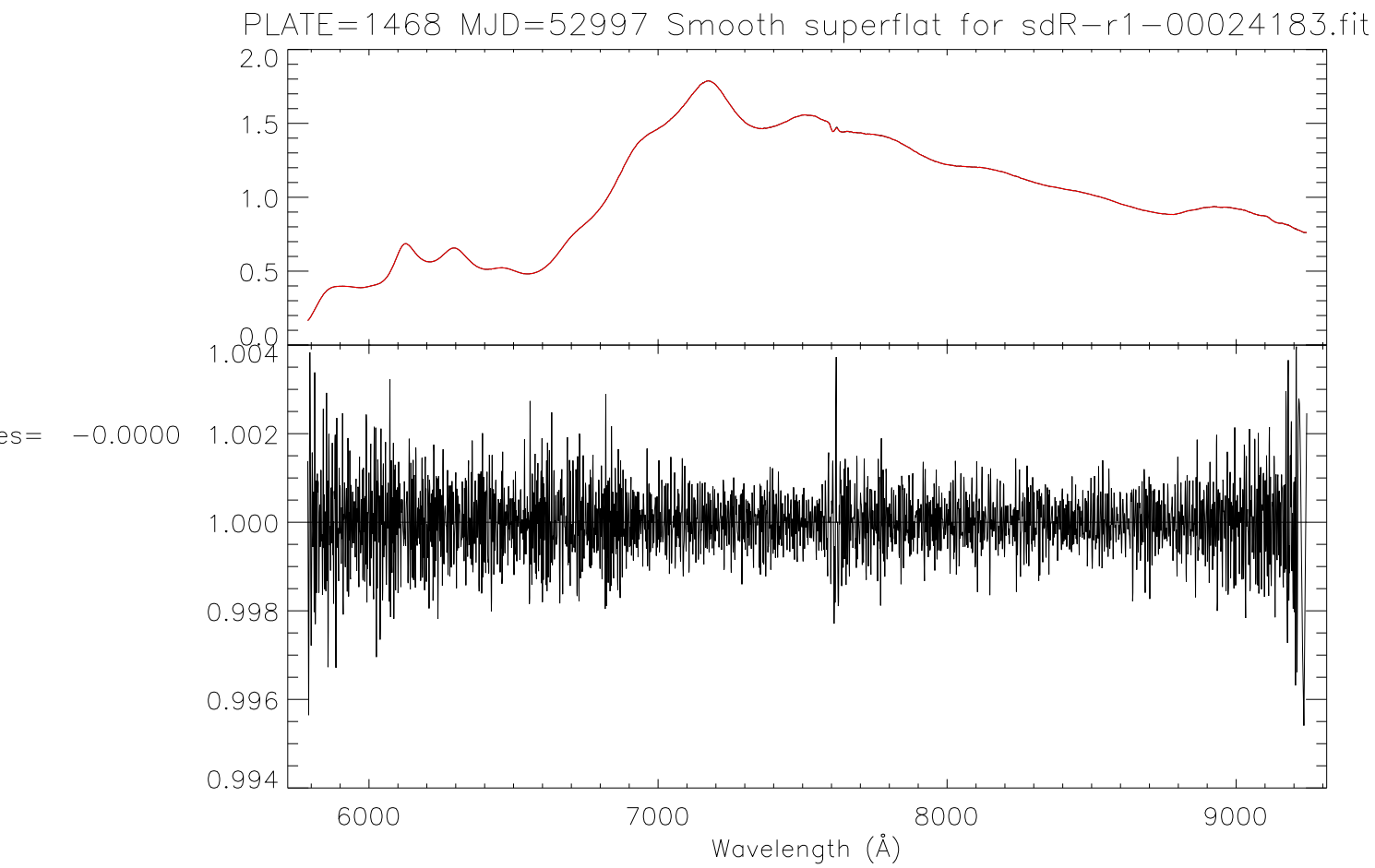

8430.1700
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

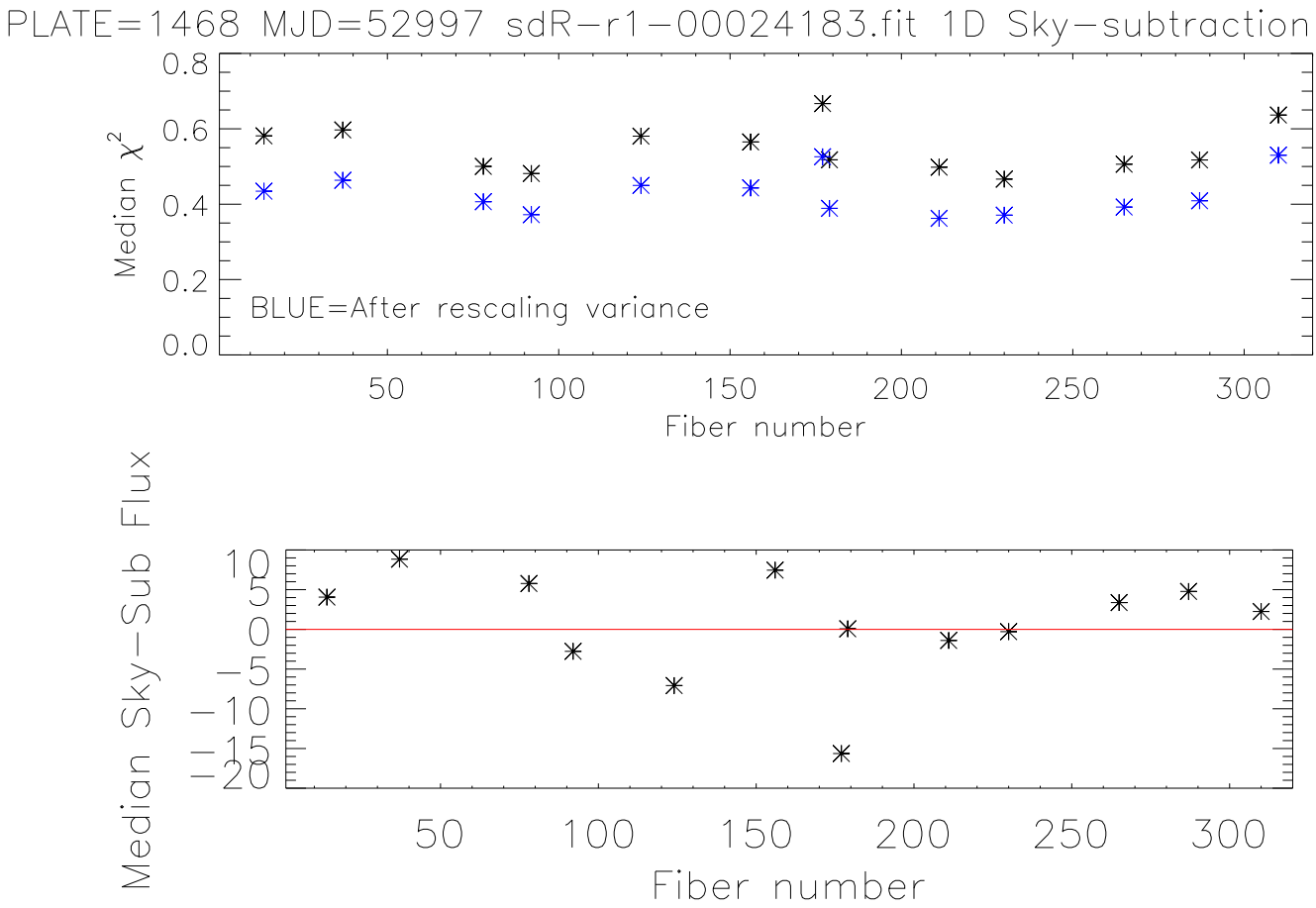

8885.8300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

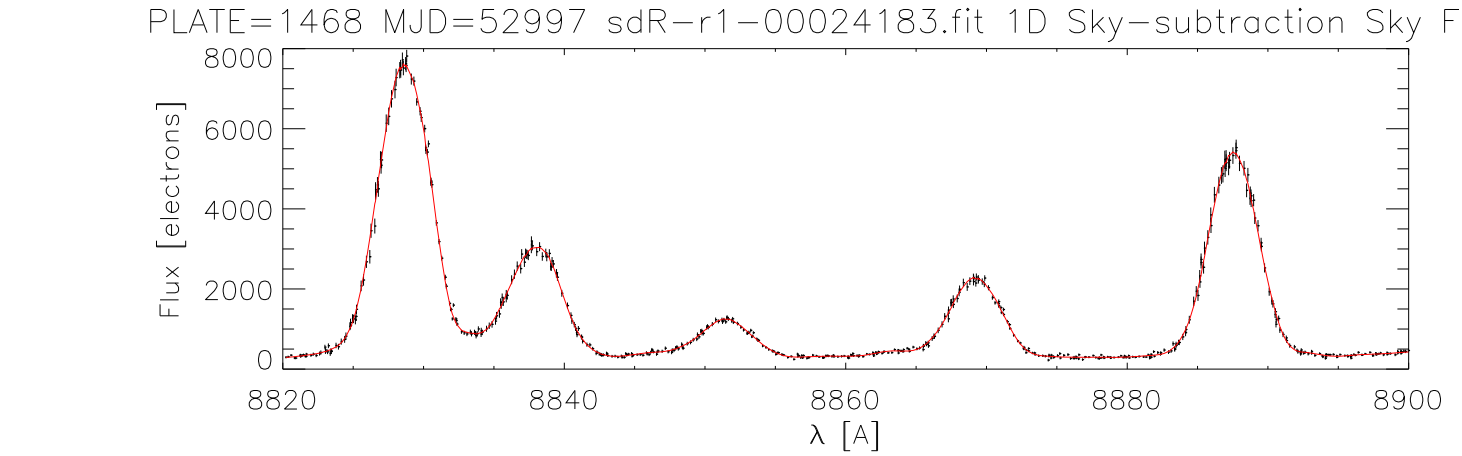

8919.6100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

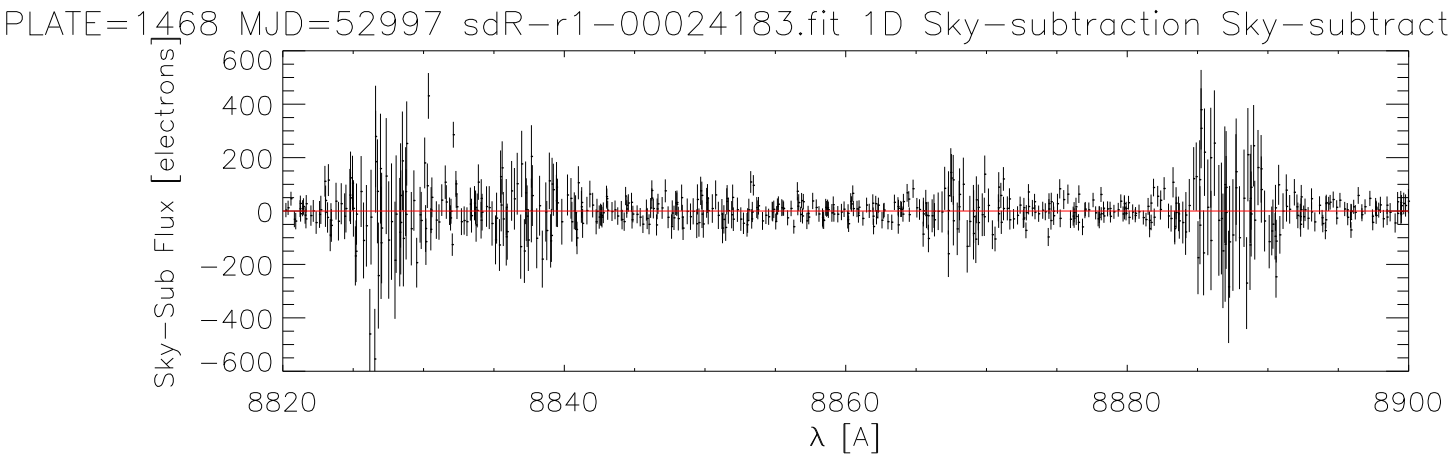

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhd1 16
mfhd2 16
stdev 0.018
extrd 0.63
stdev 0.019
extrd 0.62
mfhd2 15
stdev 0.029
extrd 0.61
stdev 0.023
extrd 0.57
stdev 0.018
extrd 0.54
stdev 0.019
extrd 0.52
mfhd2 14
stdev 0.019
extrd 0.63
stdev 0.013
extrd 0.58
stdev 0.025
extrd 0.54
stdev 0.022
extrd 0.53
stdev 0.019
extrd 0.52
stdev 0.035
extrd 0.54
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

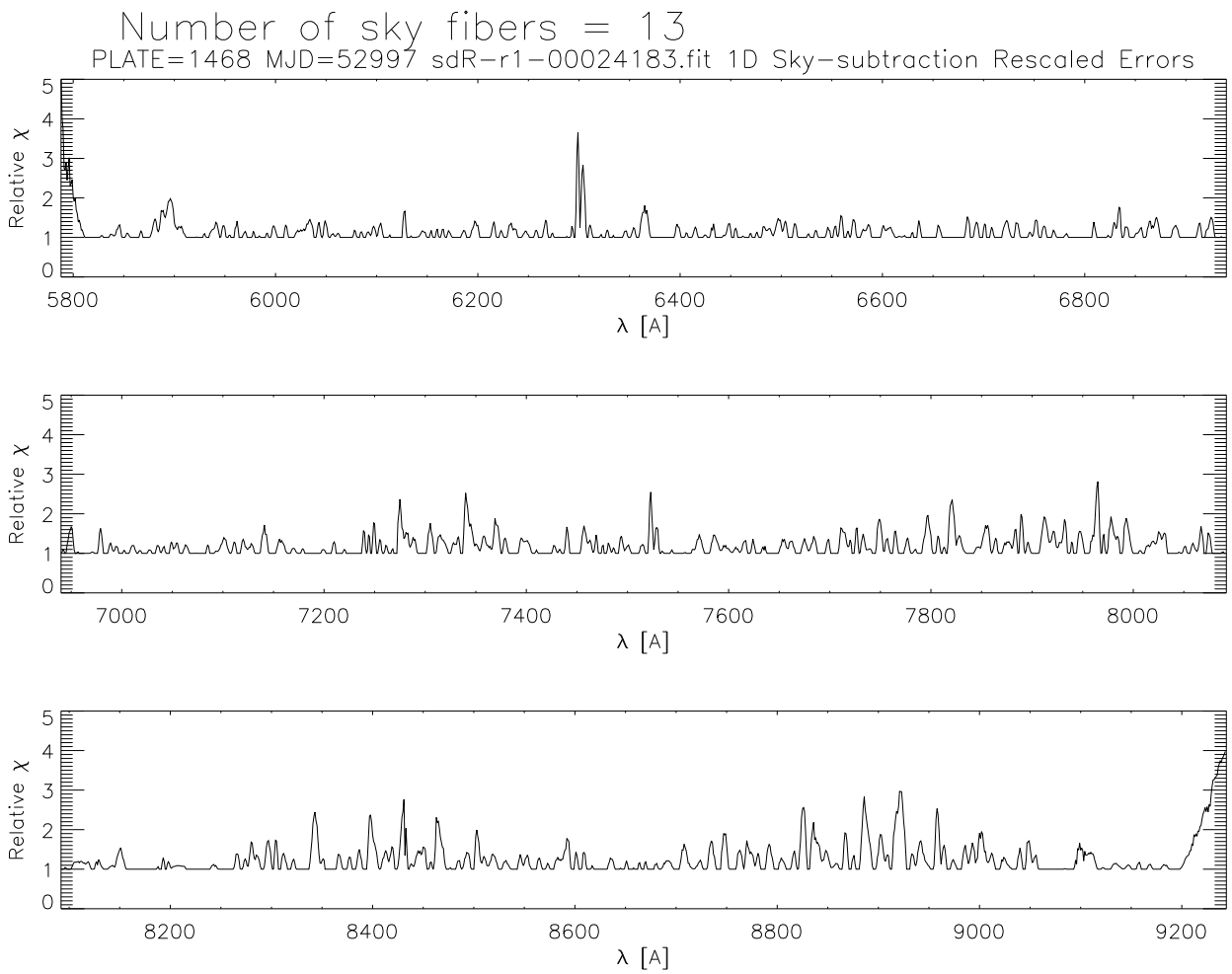

sky shift, pixels
−0.52
−0.54
−0.56
−0.58
−0.60
−0.62
5000
6000
7000
8000
9000
10000

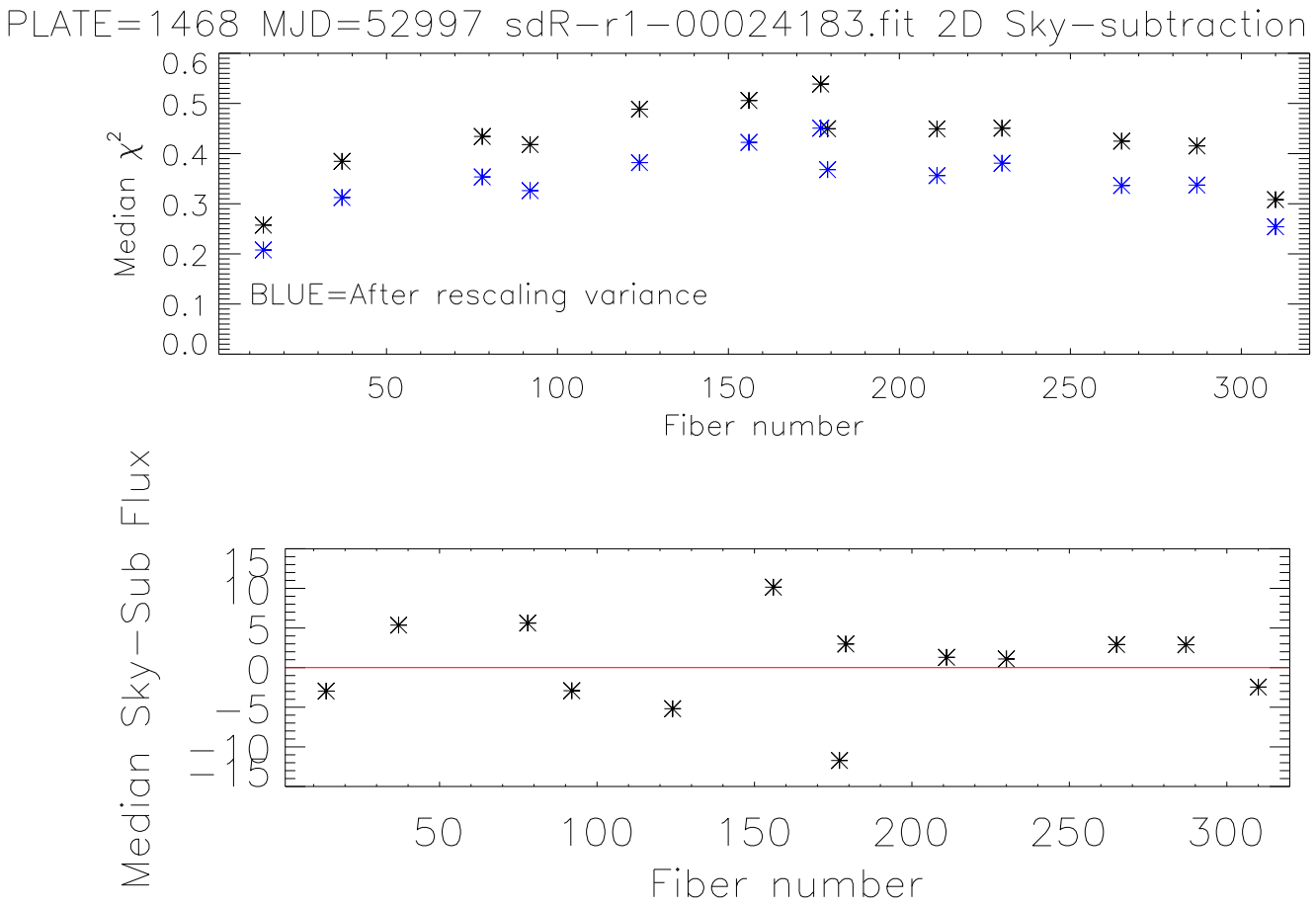

PLATE=1468 MJD=52997 Smooth superflat for sdR-r1-00024183.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

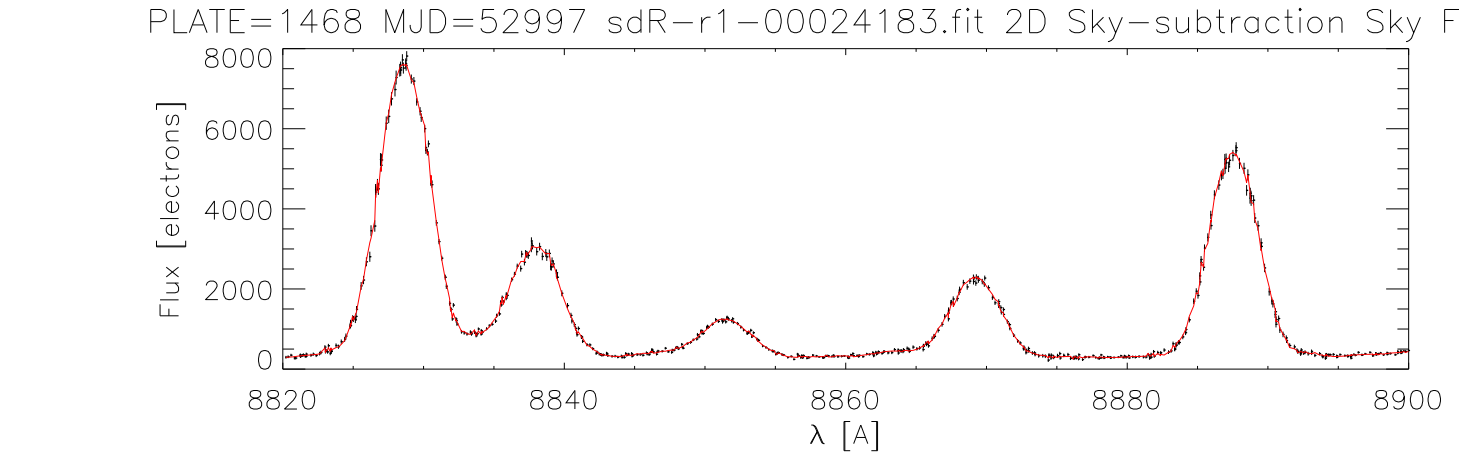

PLATE=1468 MJD=52997 sdR-r1-00024183.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

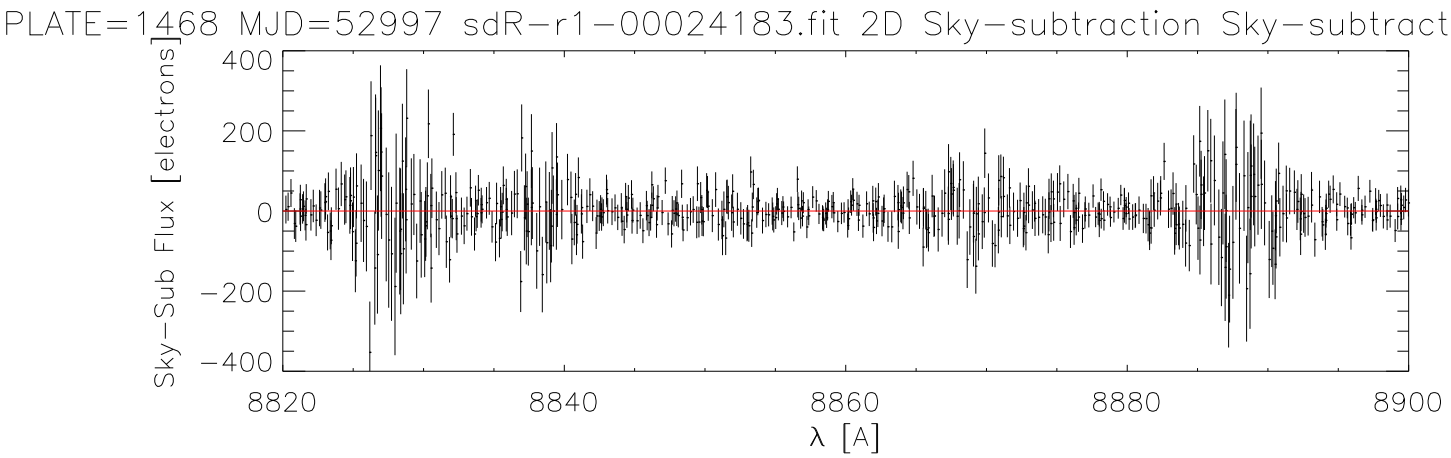

PLATE=1468 MJD=52997 sdR-r1-00024183.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

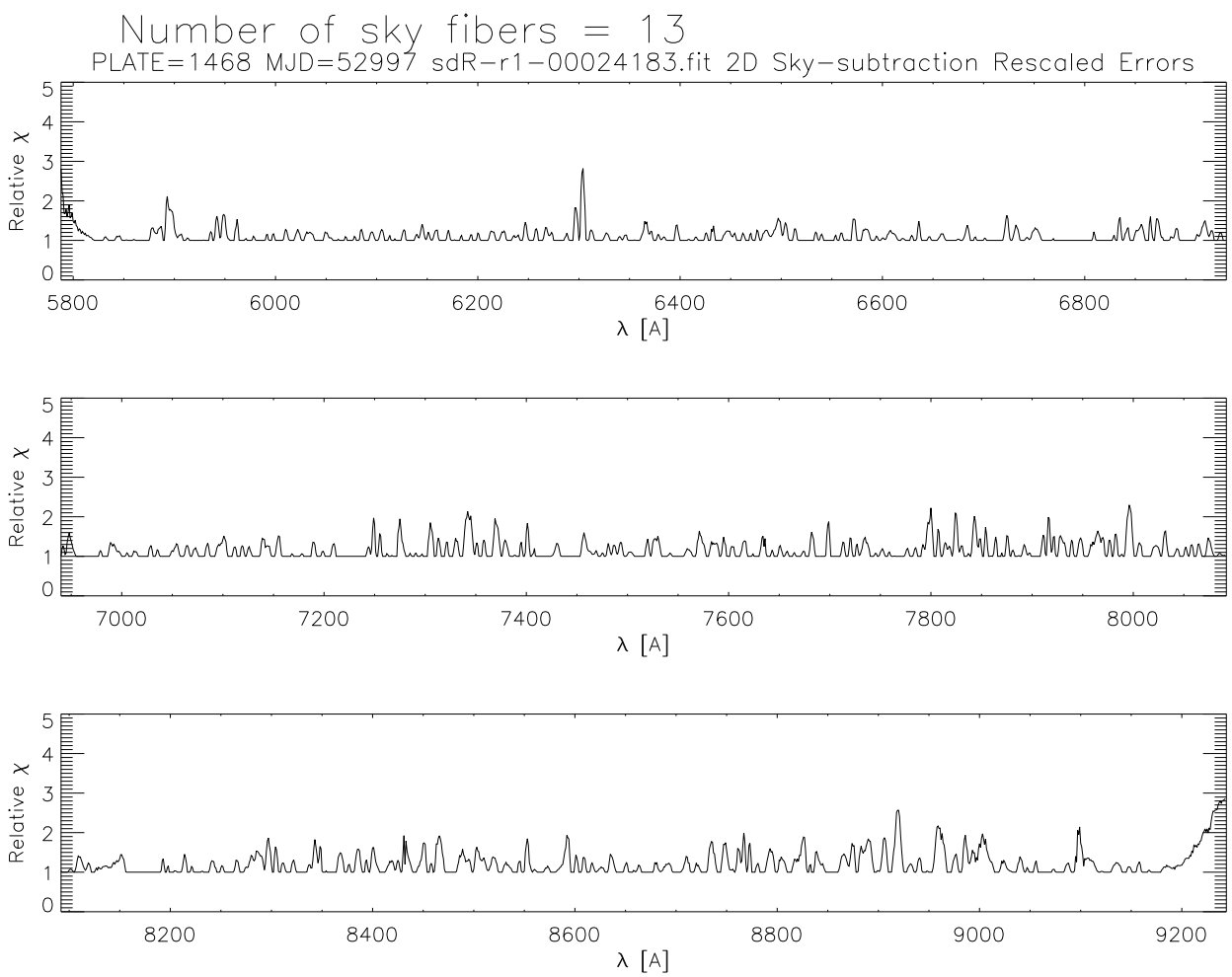

PLATE=1468 MJD=52997 sdR-r1-00024183.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

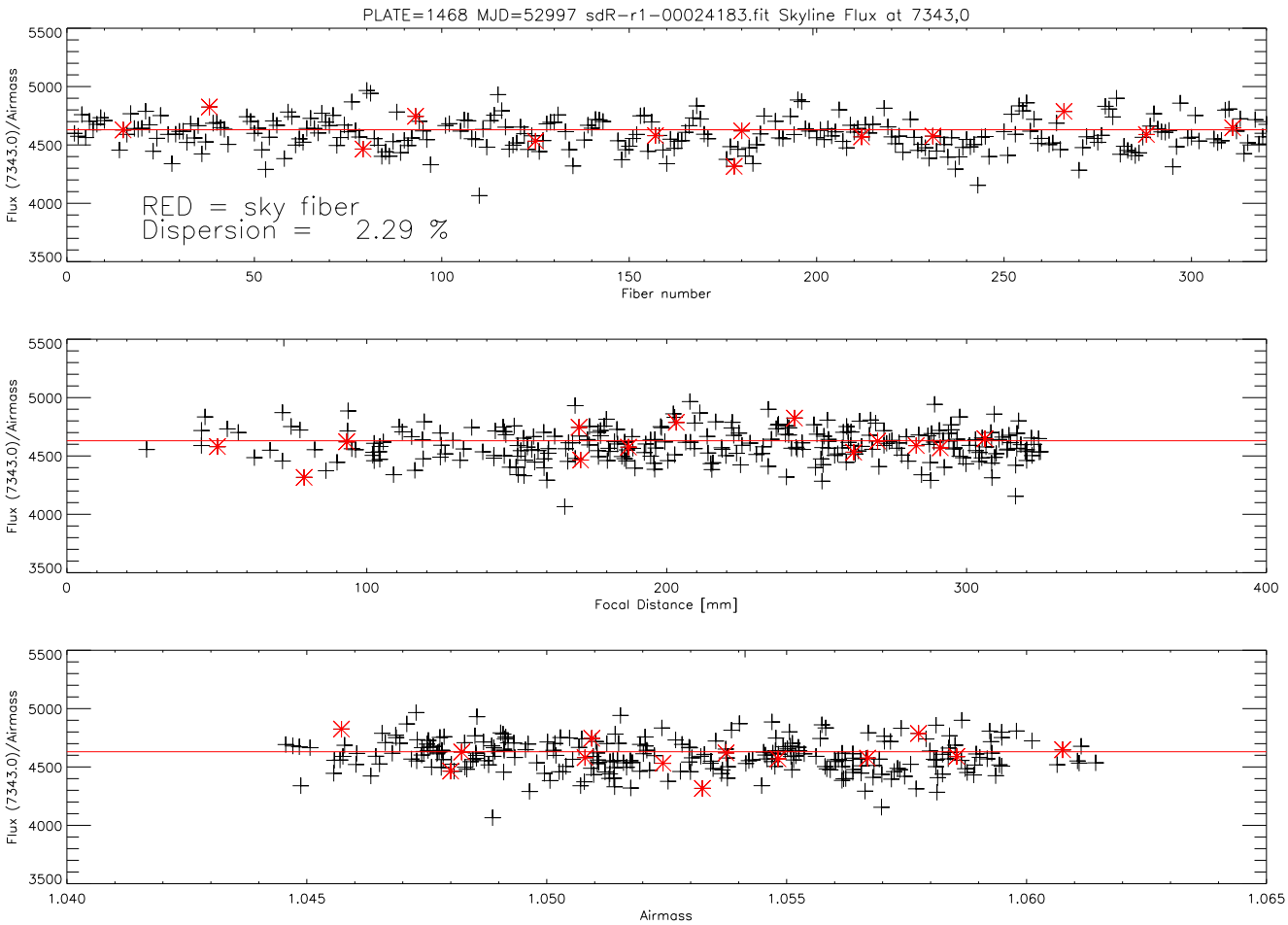

Number of sky fibers = 13
PLATE=1468 MJD=52997 sdR-r1-00024183.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

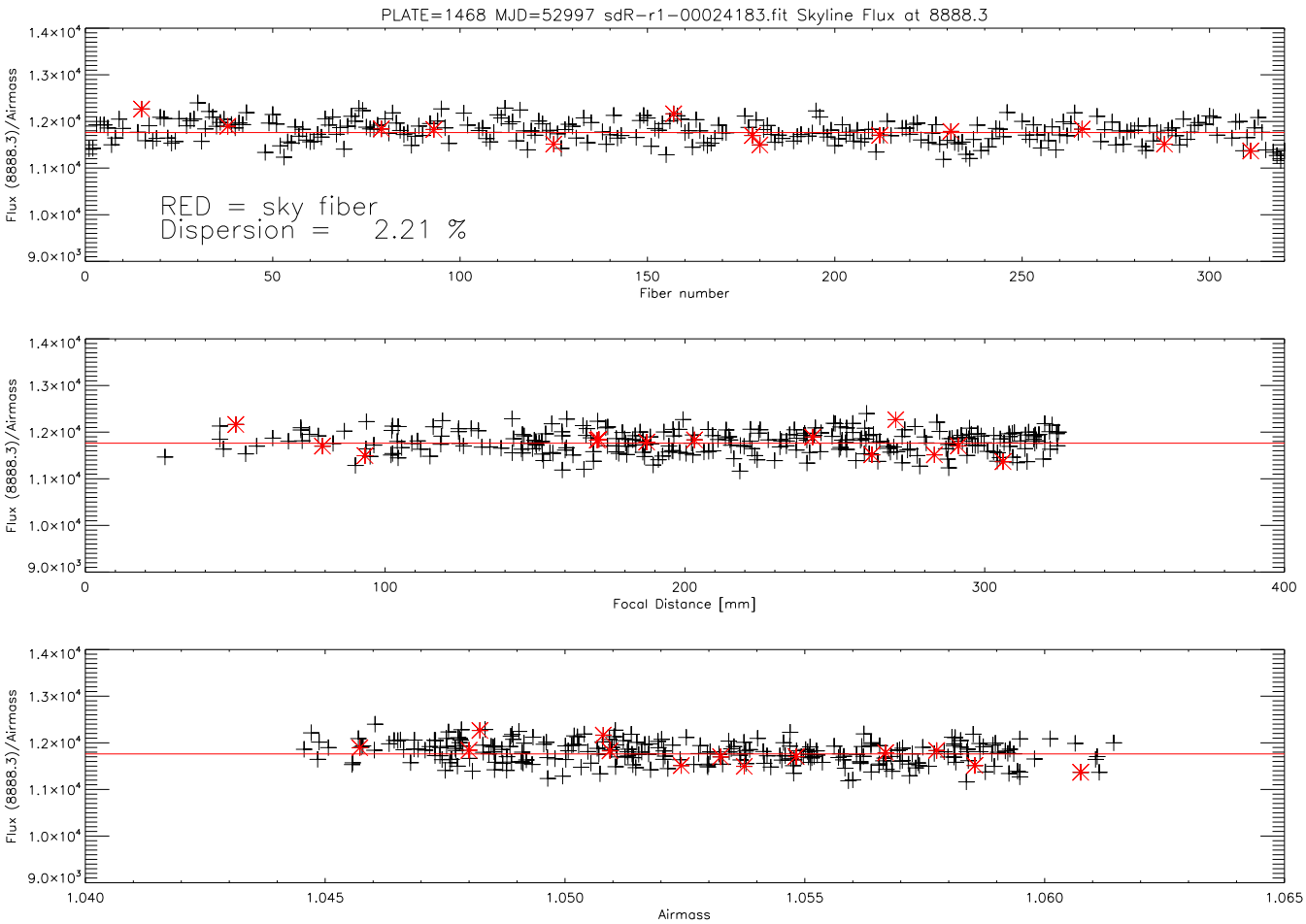

PLATE=1468 MJD=52997 sdR-r1-00024183.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

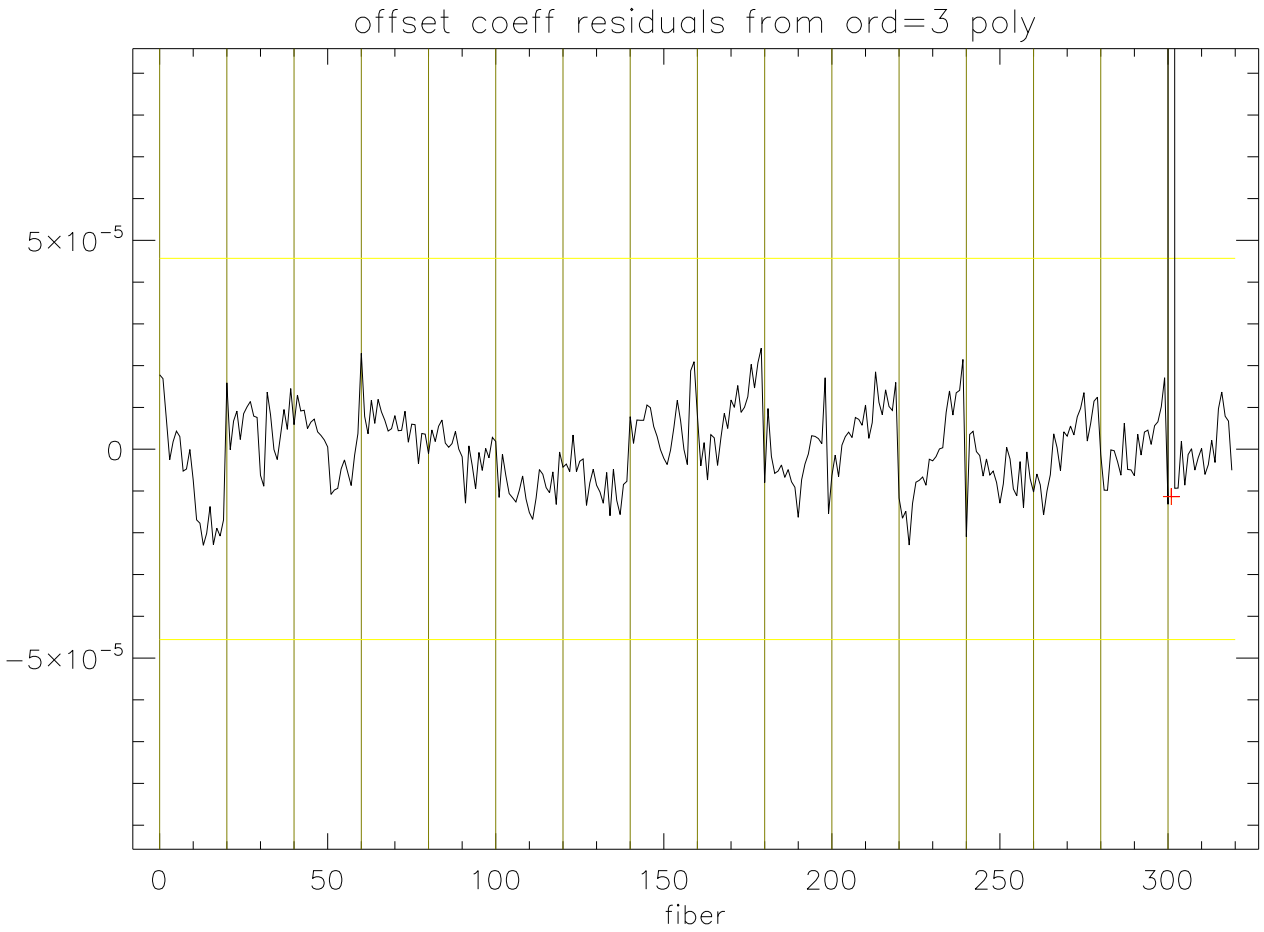

PLATE=1468 MJD=52997 sdR-r1-00024183.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

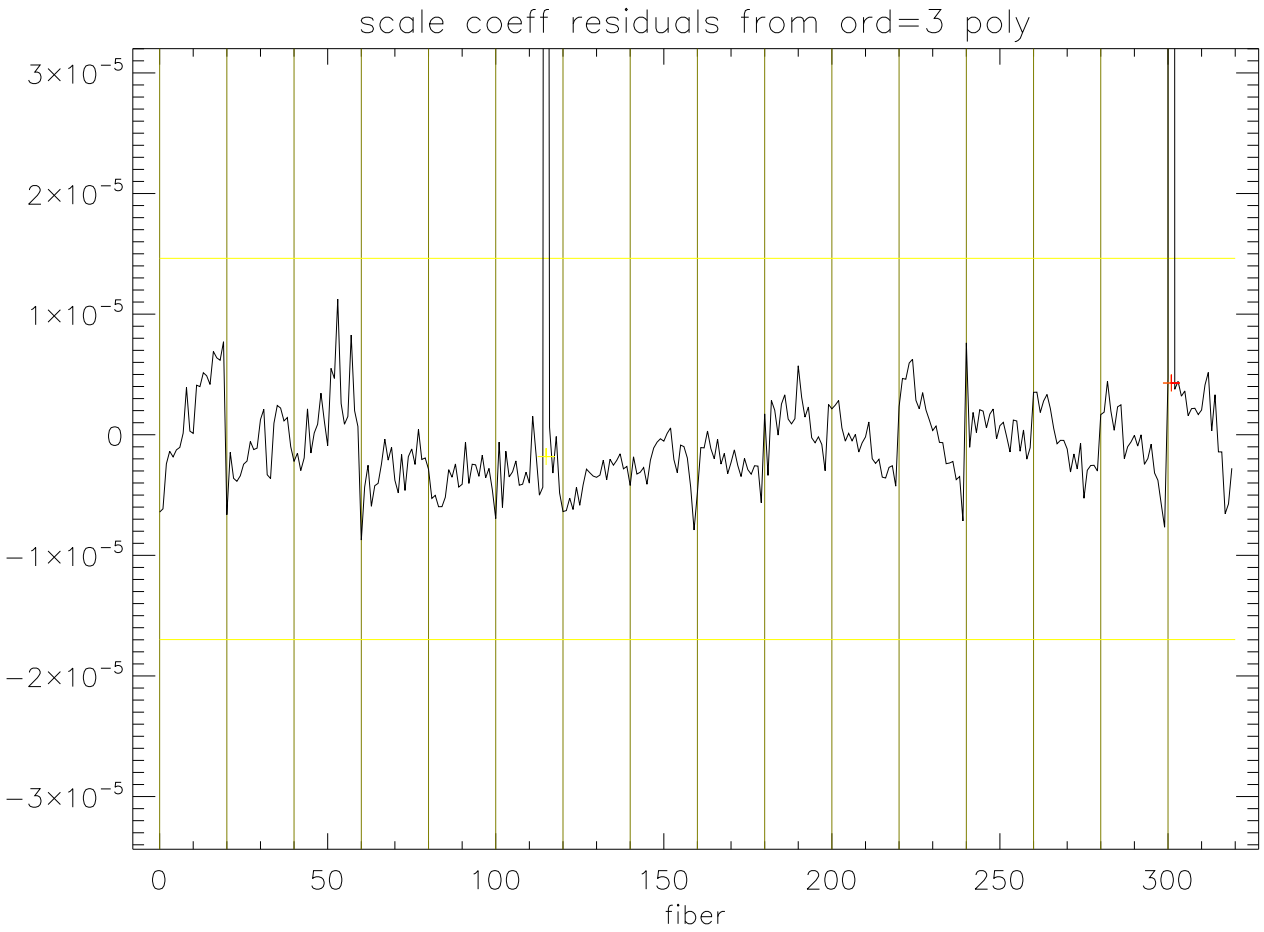

PLATE=1468 MJD=52997 sdR-r1-00024183.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

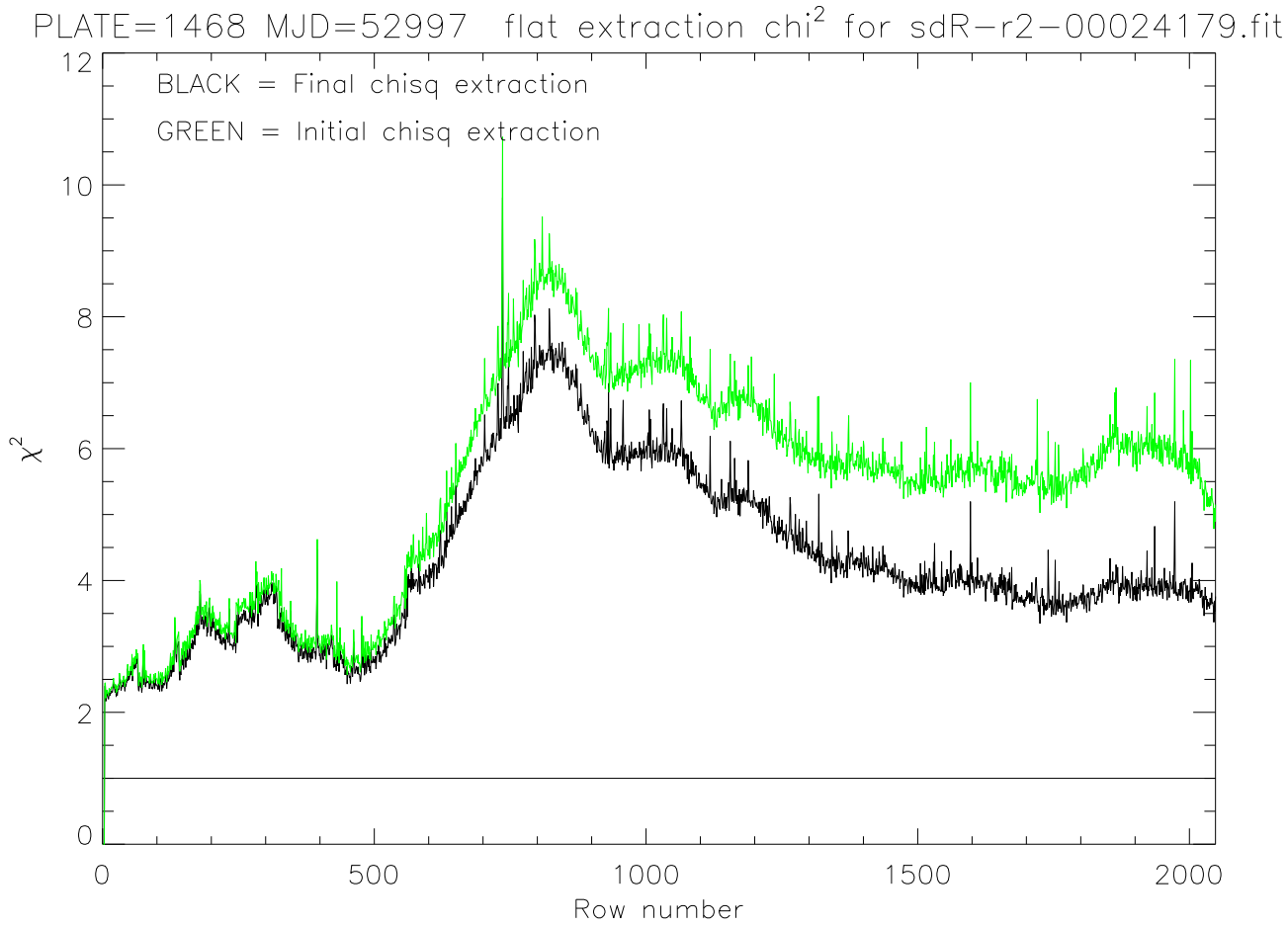

Number of sky fibers = 13
PLATE=1468 MJD=52997 sdR-r1-00024183.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

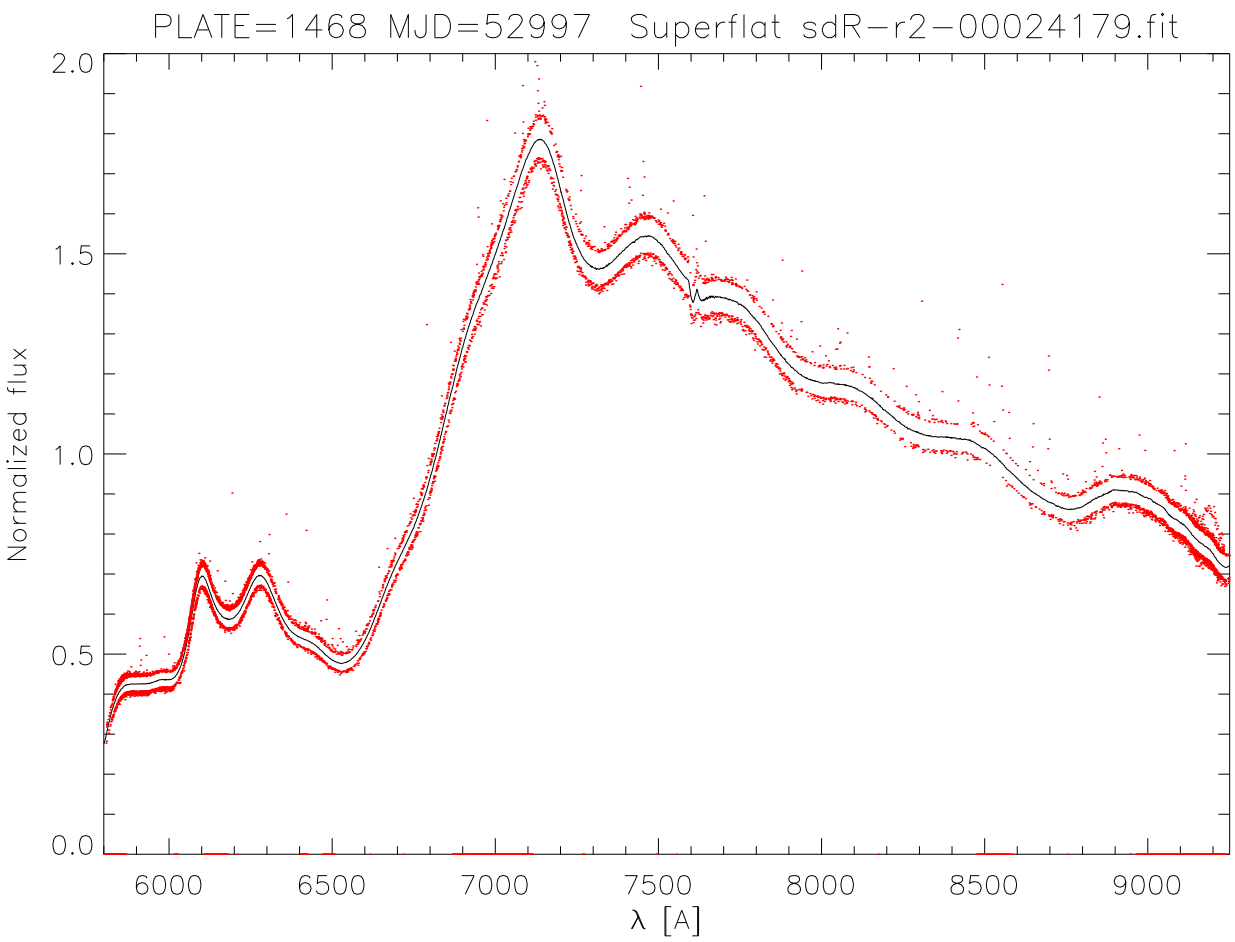

PLATE=1468 MJD=52997 sdR-r1-00024183.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.29 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

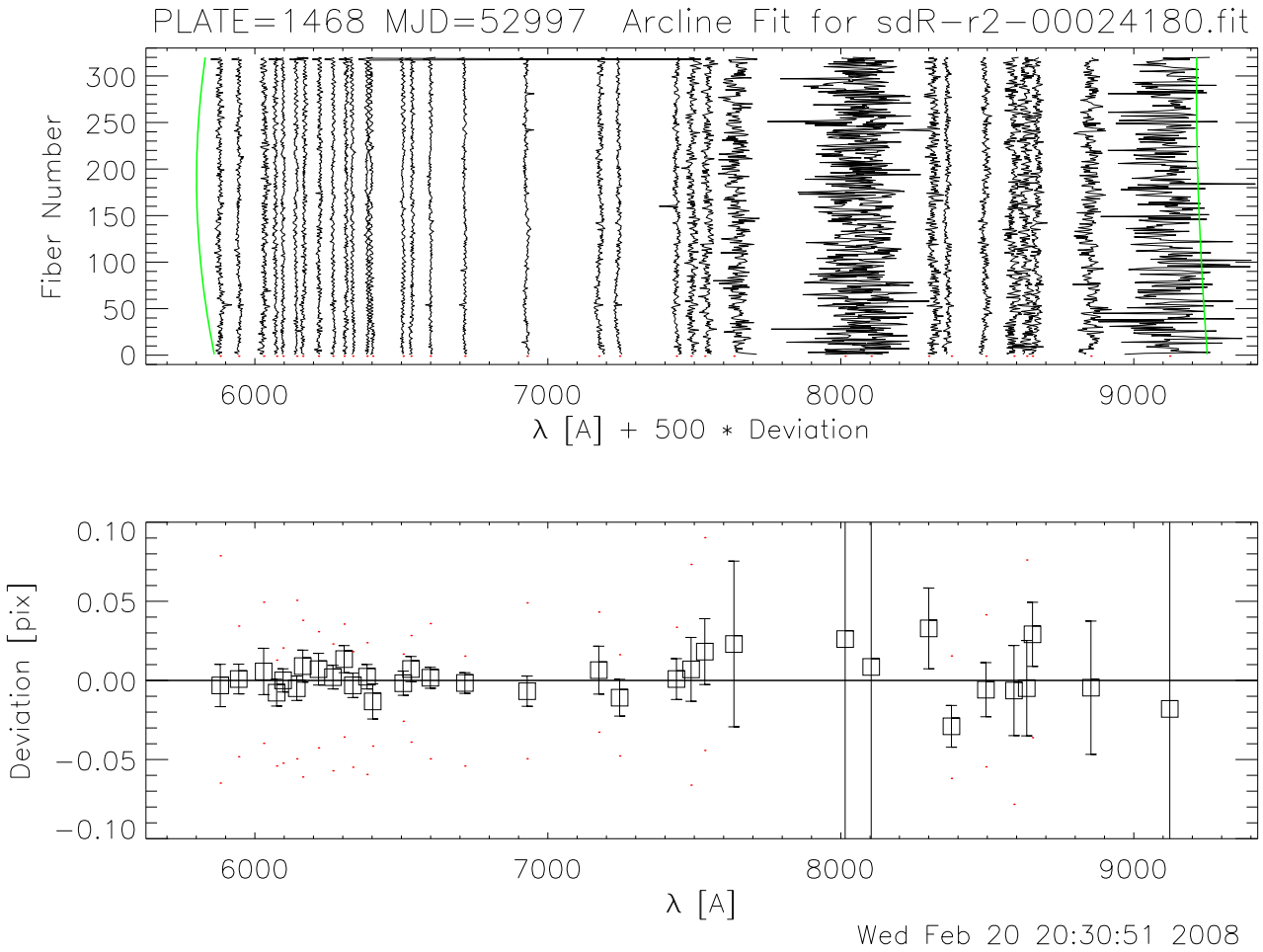

PLATE=1468 MJD=52997 sdR-r1-00024183.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Focal Distance [mm]
Airmass

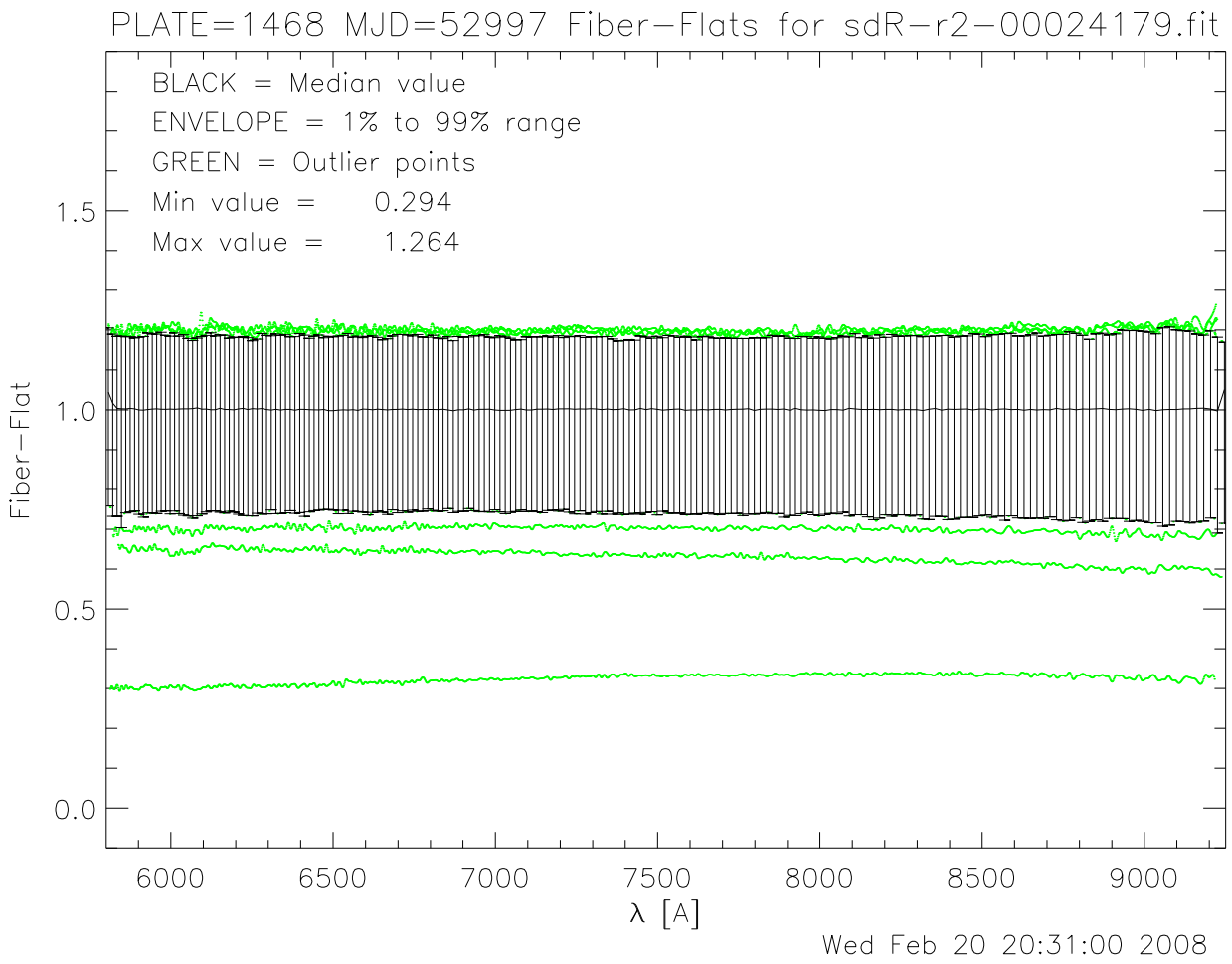

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

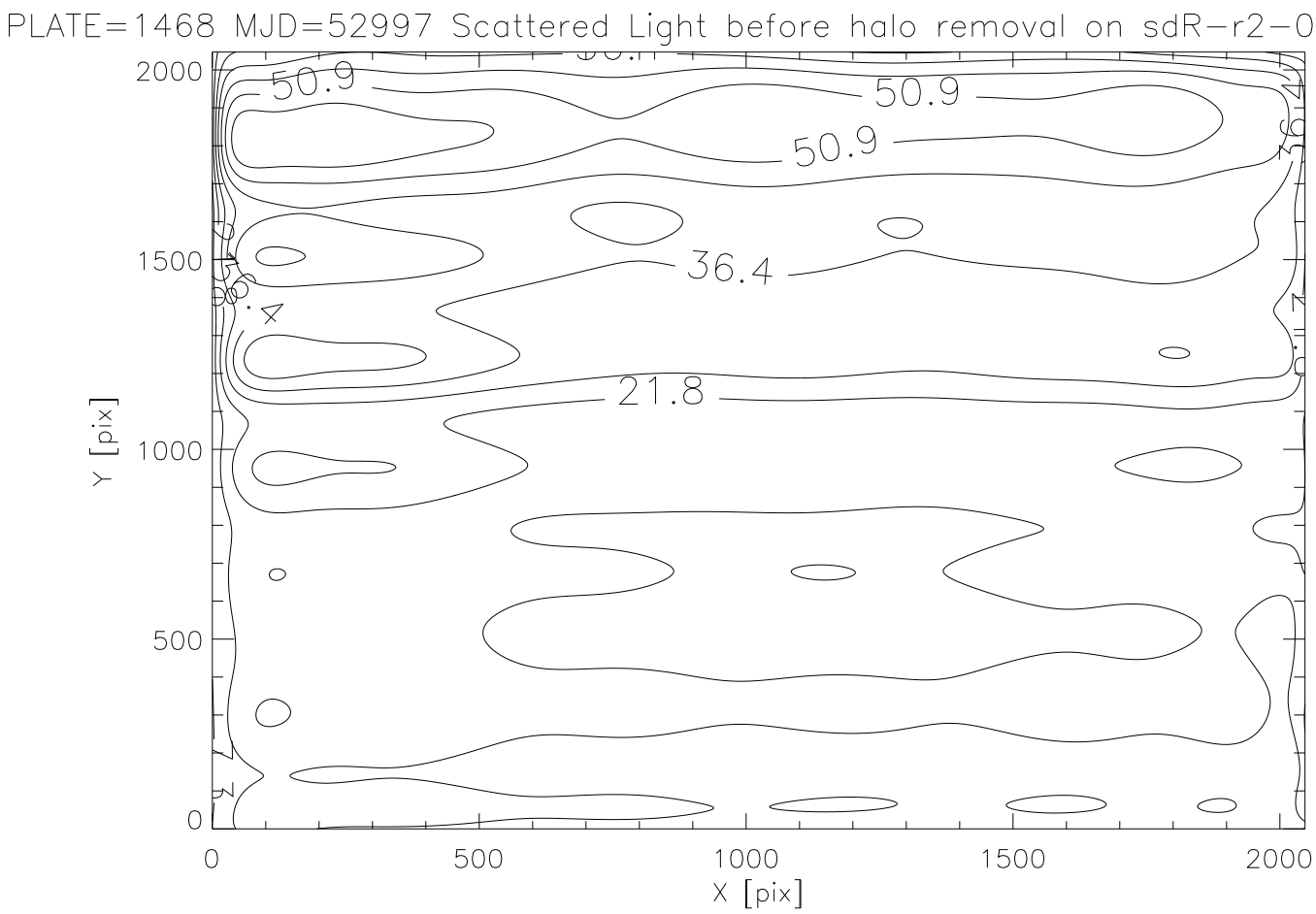

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

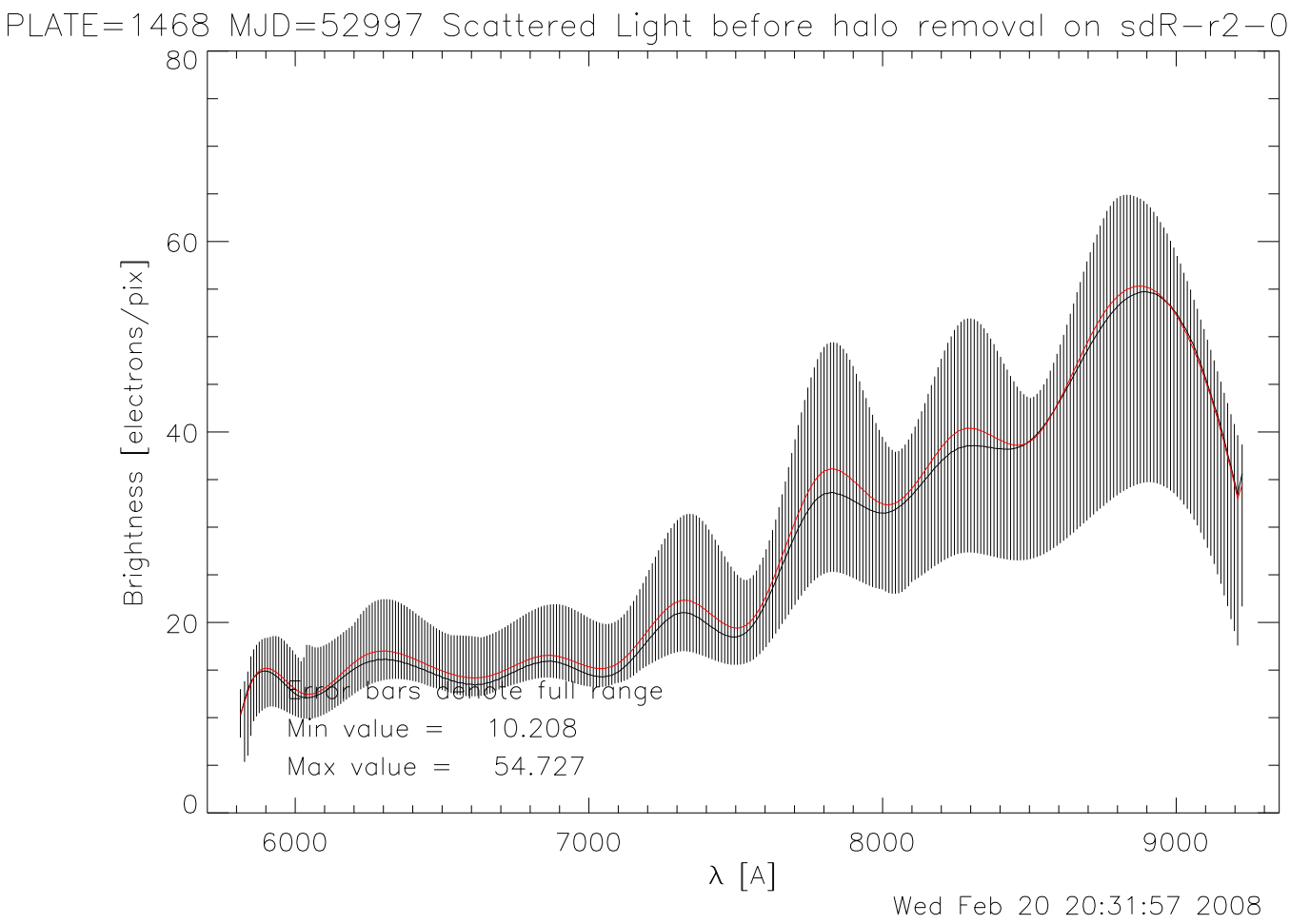

PLATE=1468 MJD=52997 flat extraction chi^2 for sdR−r2−00024179.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

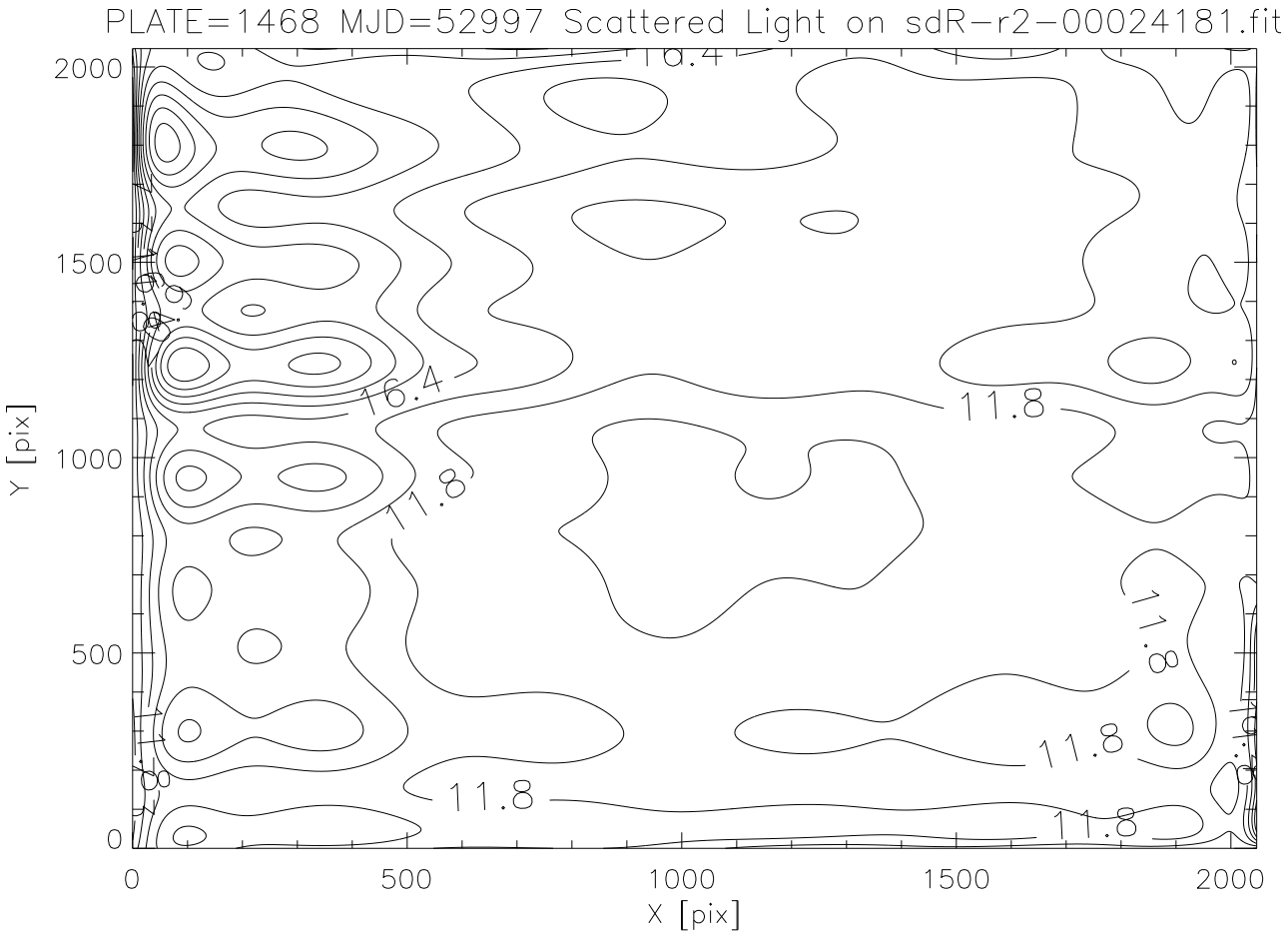

PLATE=1468 MJD=52997 Superflat sdR-r2-00024179.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

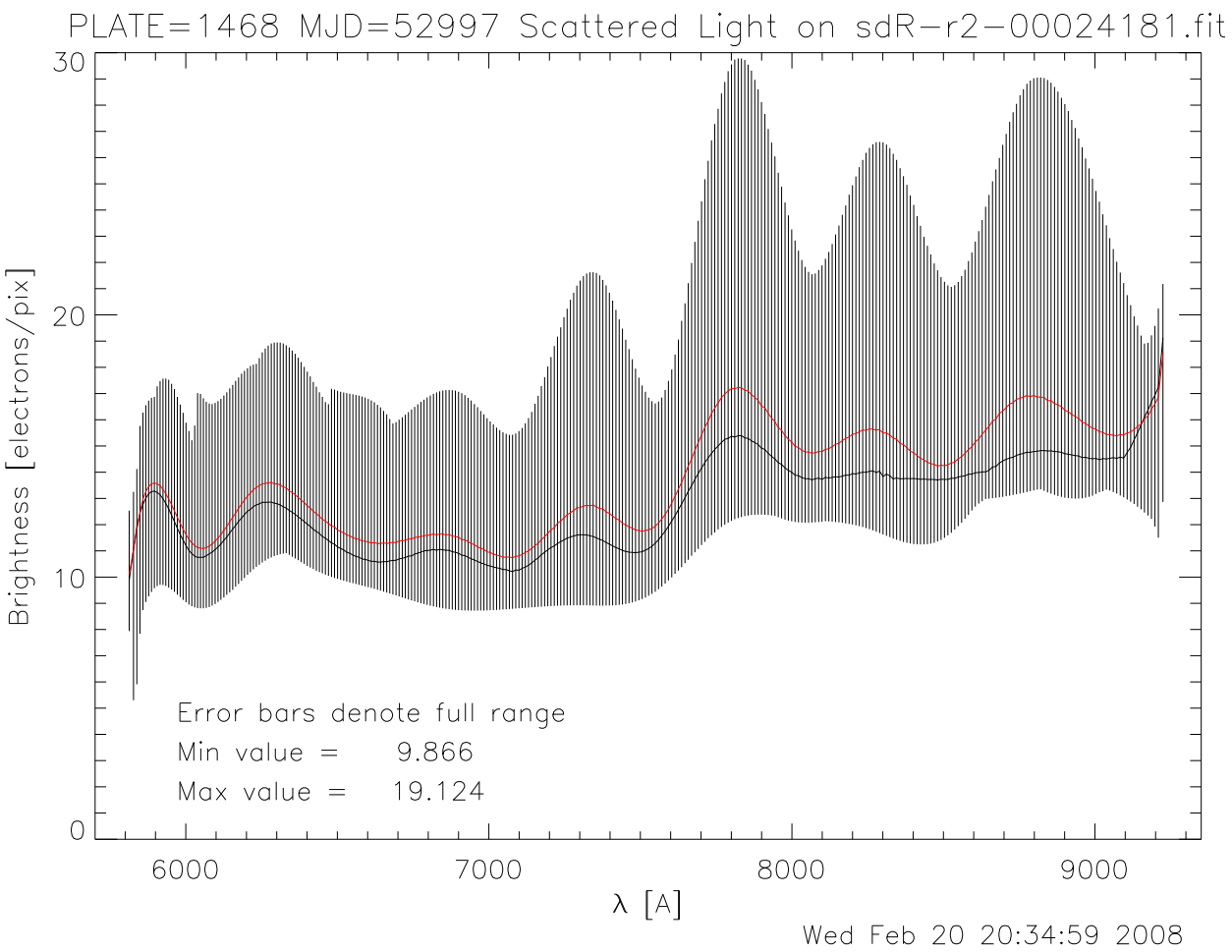

PLATE=1468 MJD=52997 Arcline Fit for sdR-r2-00024180.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Feb 20 20:30:51 2008

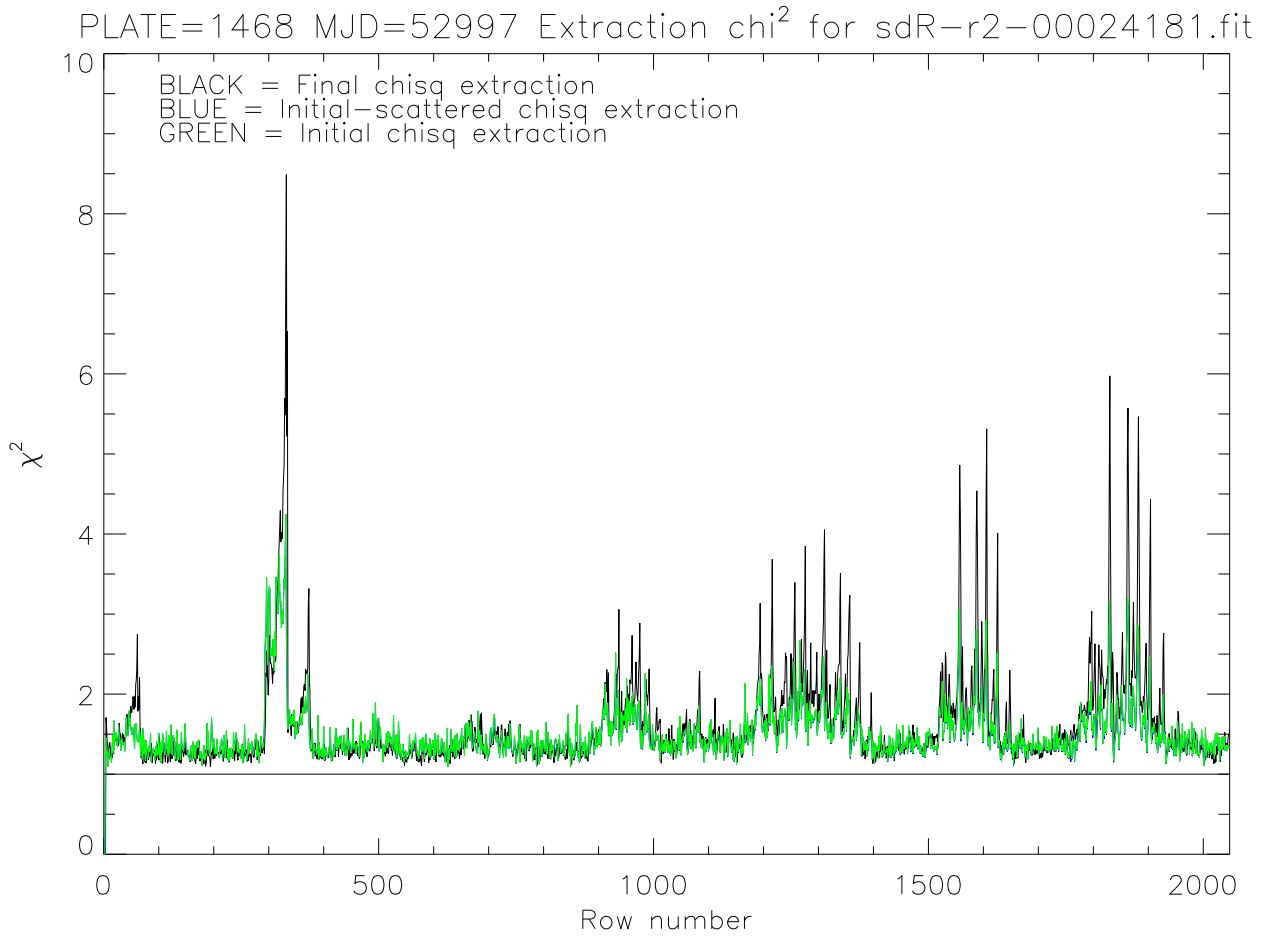

PLATE=1468 MJD=52997 Fiber−Flats for sdR−r2−00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.294
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 20:31:00 2008

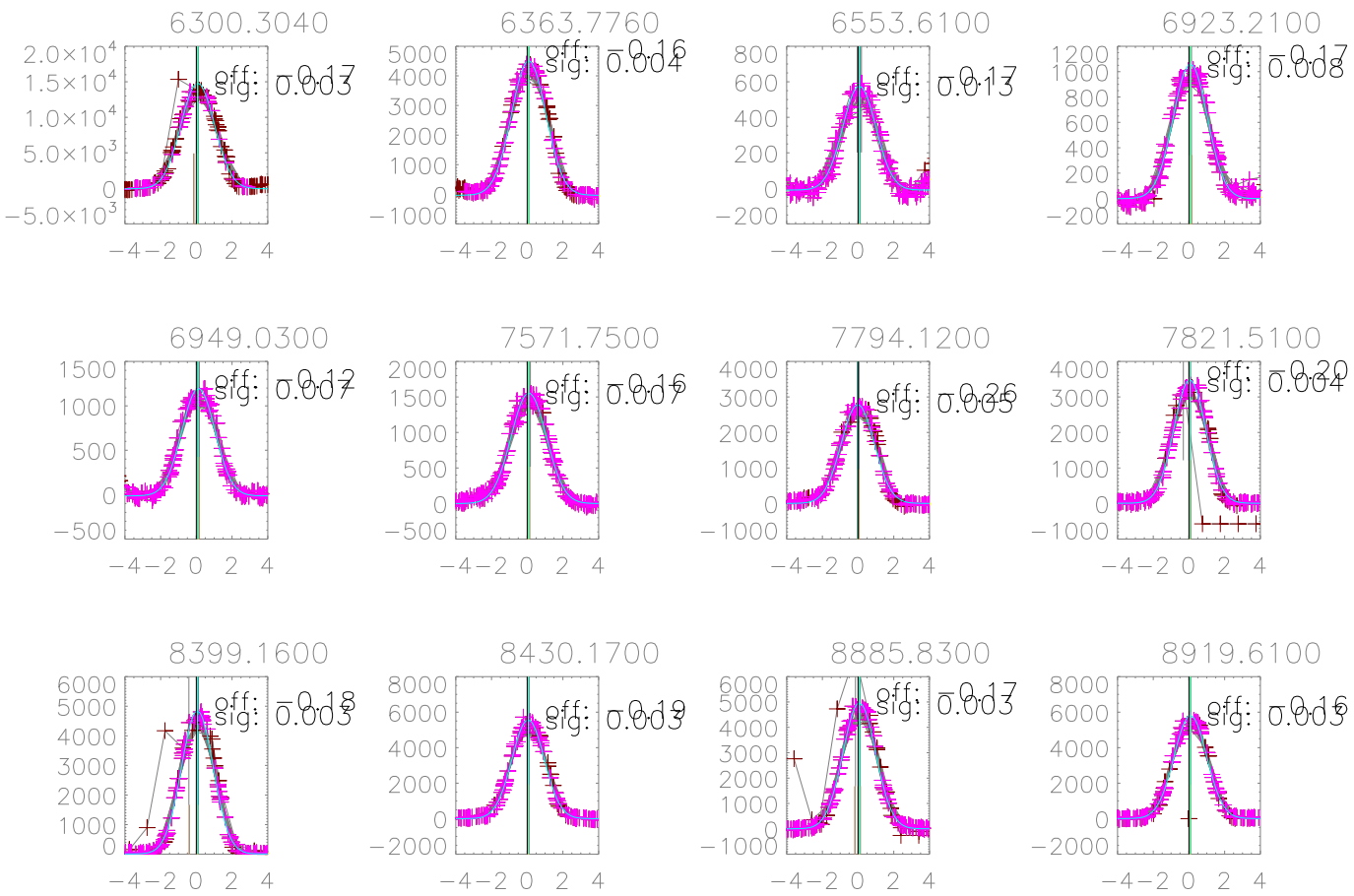

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r2-00024181.fi
50.9
50.9
50.9
36.4
36.4
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

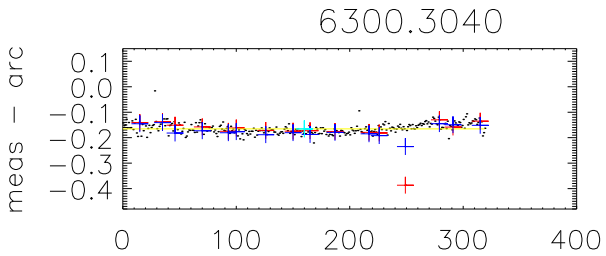

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r2-00024181.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.208
Max value = 54.727
Wed Feb 20 20:31:57 2008

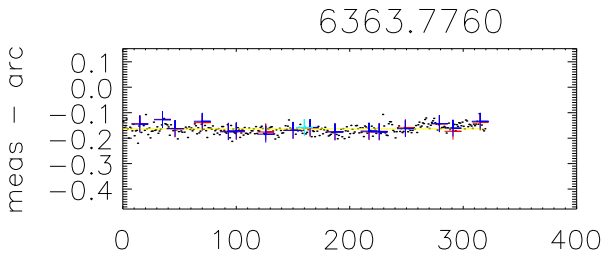

PLATE=1468 MJD=52997 Scattered Light on sdR-r2-00024181.fit
16.4
11.8
Y [pix]
X [pix]
0
500
1000
1500
2000

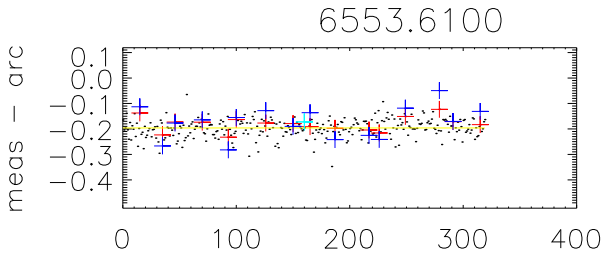

PLATE=1468 MJD=52997 Scattered Light on sdR-r2-00024181.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.866
Max value = 19.124
Wed Feb 20 20:34:59 2008

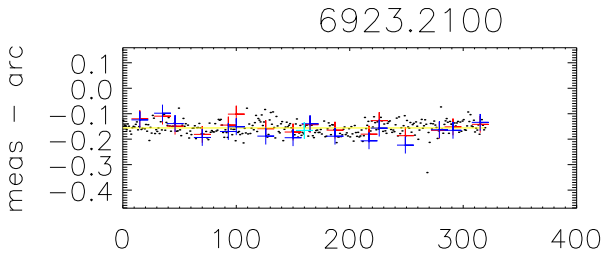

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-r2-00024181.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

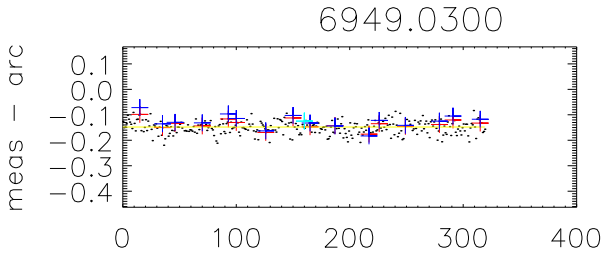

6300.3040
off: −0.17
sig: 0.003
6363.7760
off: −0.16
sig: 0.004
6553.6100
off: −0.17
sig: 0.013
6923.2100
off: −0.17
sig: 0.008
6949.0300
off: −0.12
sig: 0.007
7571.7500
off: −0.16
sig: 0.007
7794.1200
off: −0.26
sig: 0.005
7821.5100
off: −0.20
sig: 0.004
8399.1600
off: −0.18
sig: 0.003
8430.1700
off: −0.19
sig: 0.003
8885.8300
off: −0.17
sig: 0.003
8919.6100
off: −0.16
sig: 0.003

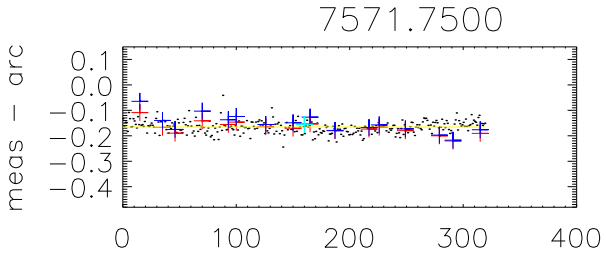

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

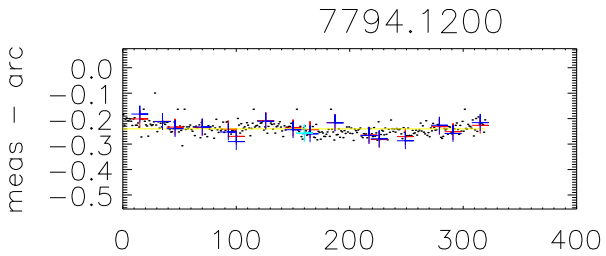

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

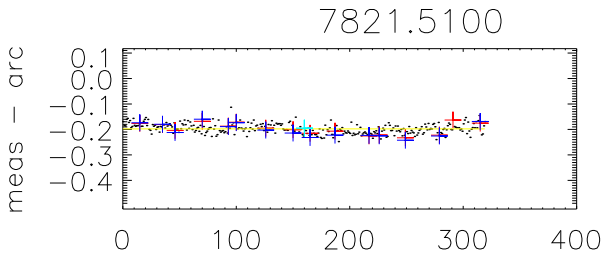

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

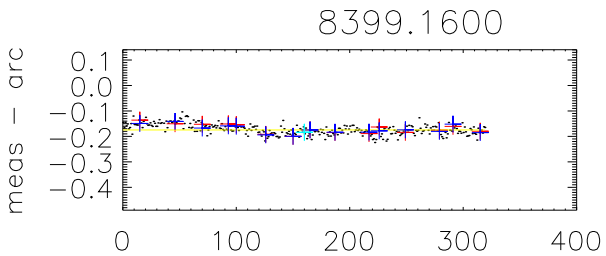

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

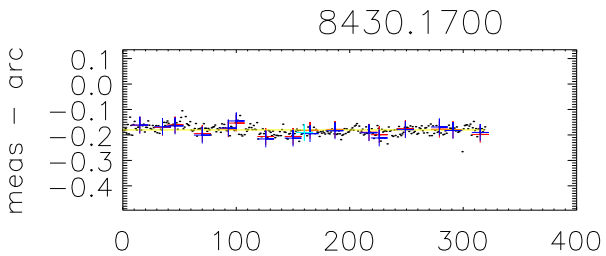

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

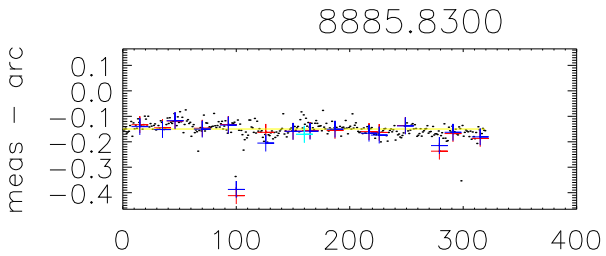

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

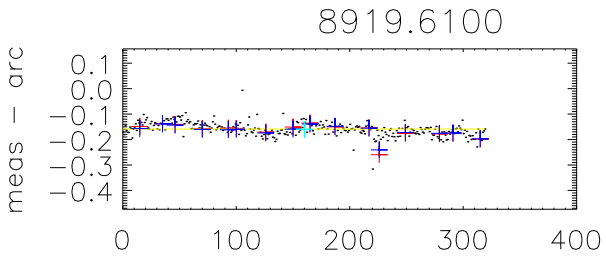

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

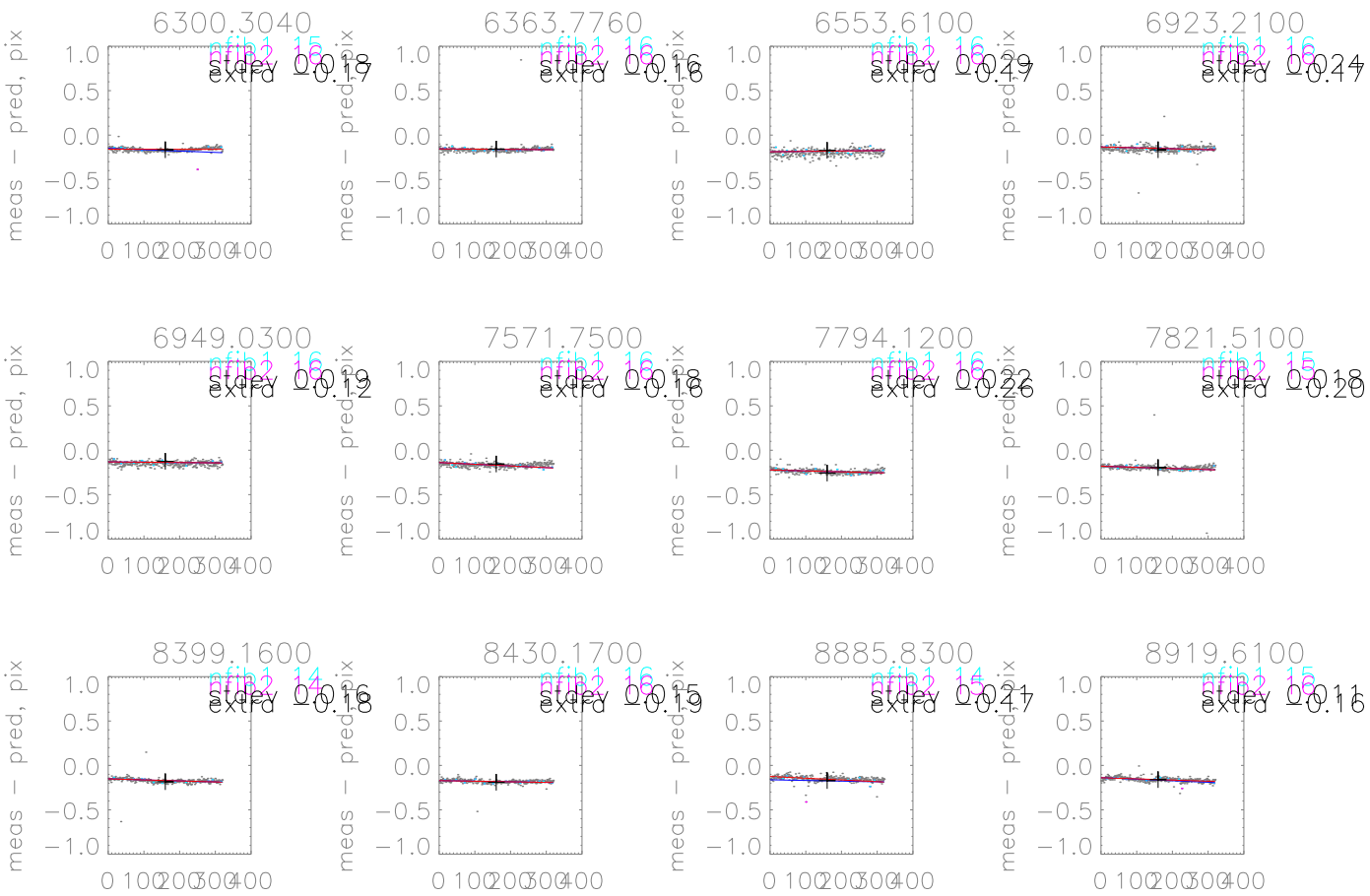

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

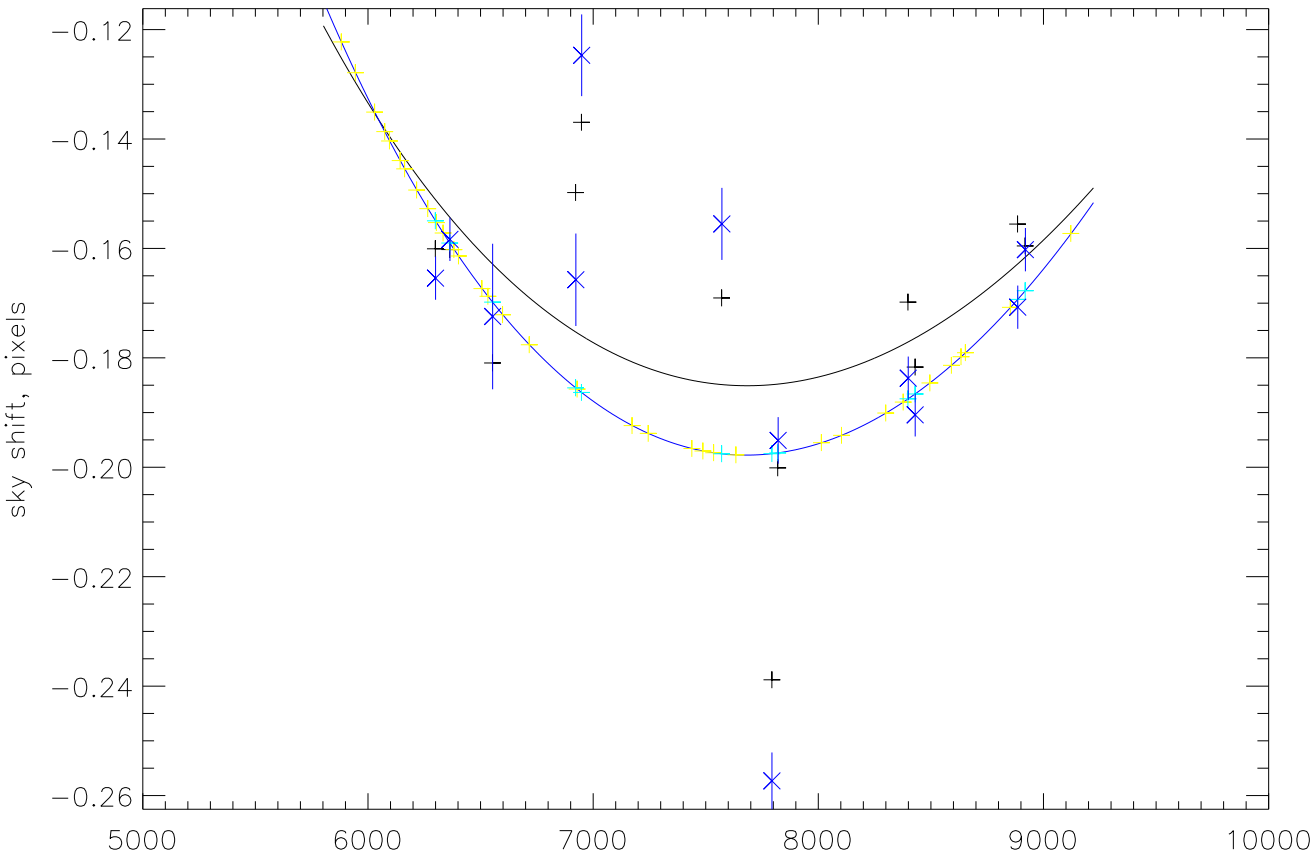

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

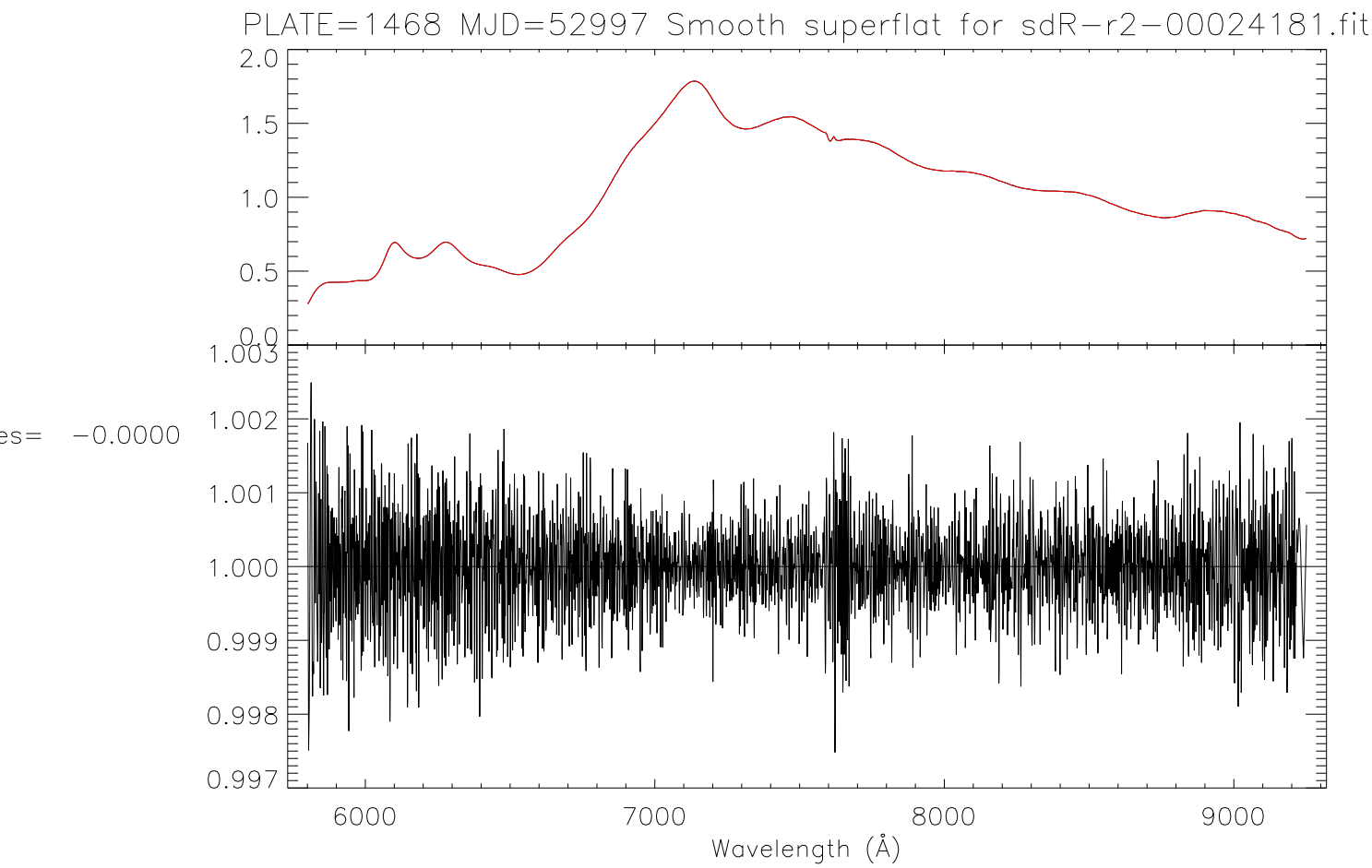

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

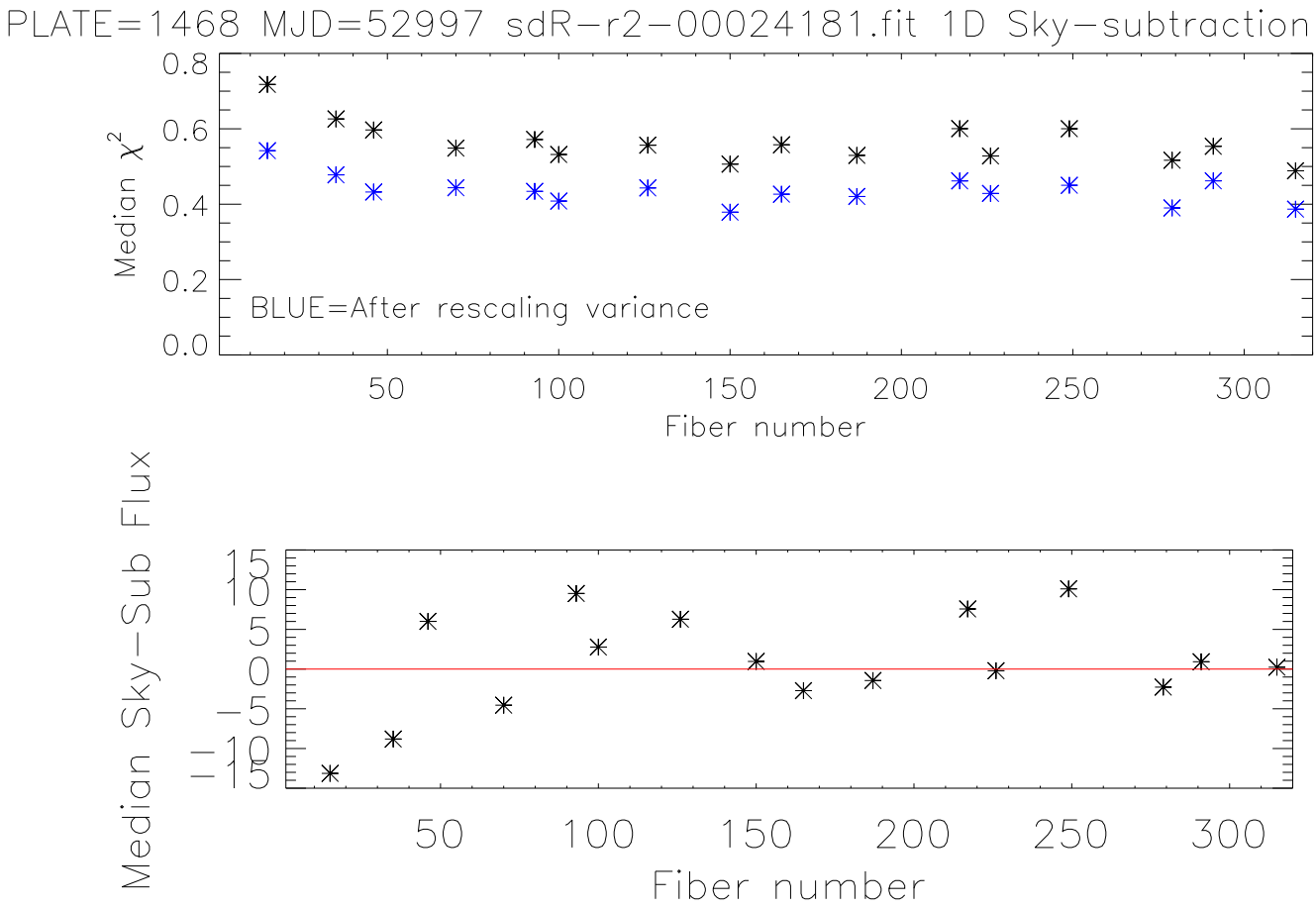

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

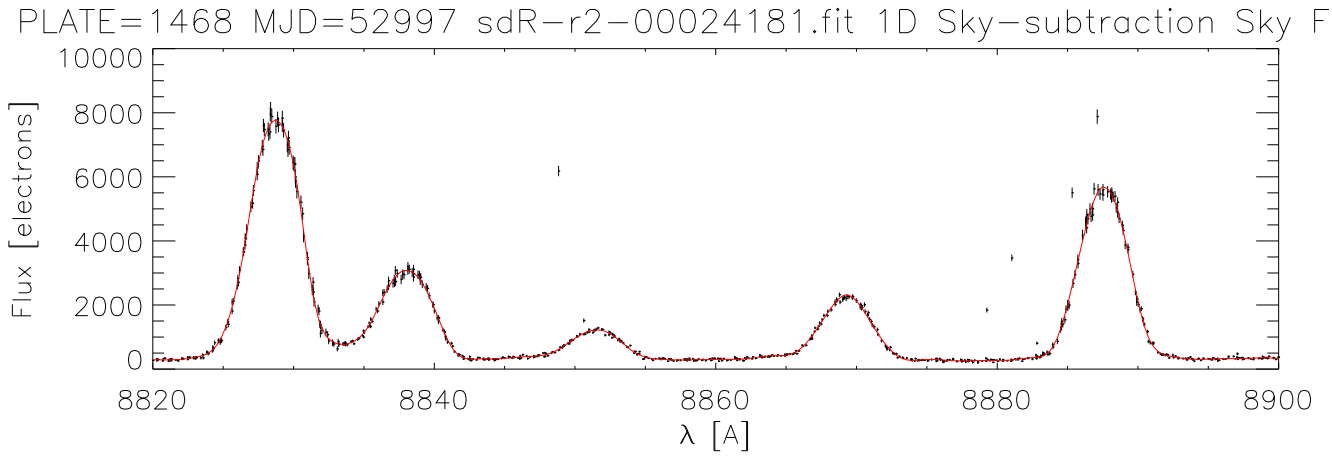

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

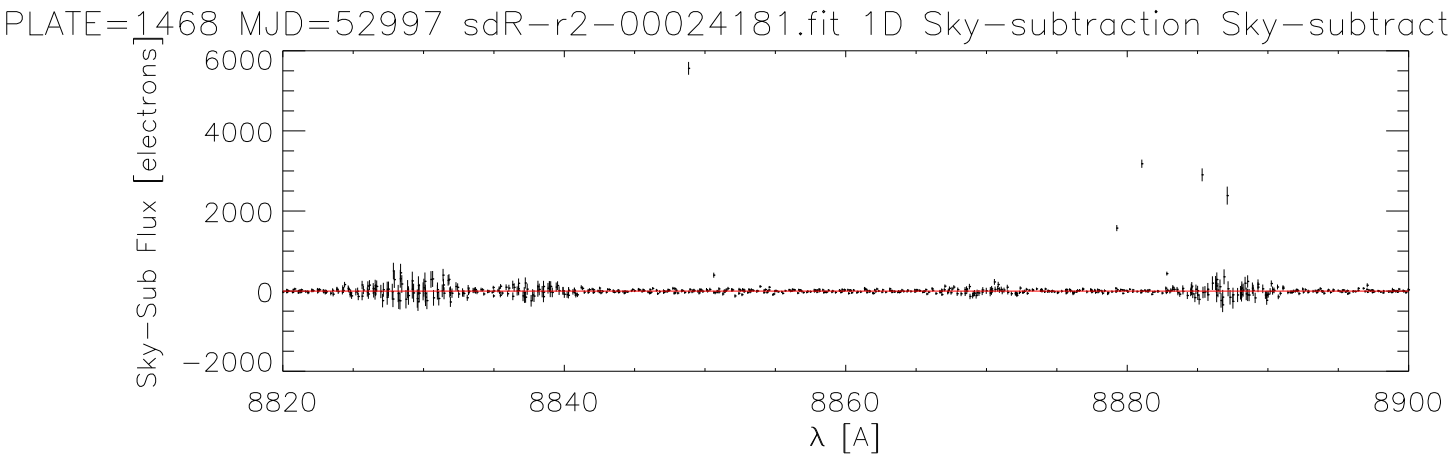

6300.3040
stdev 0.018
extra 0.17
6363.7760
stdev 0.016
extra 0.16
6553.6100
stdev 0.029
extra 0.47
6923.2100
stdev 0.024
extra 0.47
6949.0300
stdev 0.019
extra 0.12
7571.7500
stdev 0.018
extra 0.16
7794.1200
stdev 0.022
extra 0.26
7821.5100
stdev 0.018
extra 0.20
8399.1600
stdev 0.016
extra 0.18
8430.1700
stdev 0.015
extra 0.19
8885.8300
stdev 0.021
extra 0.47
8919.6100
stdev 0.011
extra 0.16
meas − pred, pix

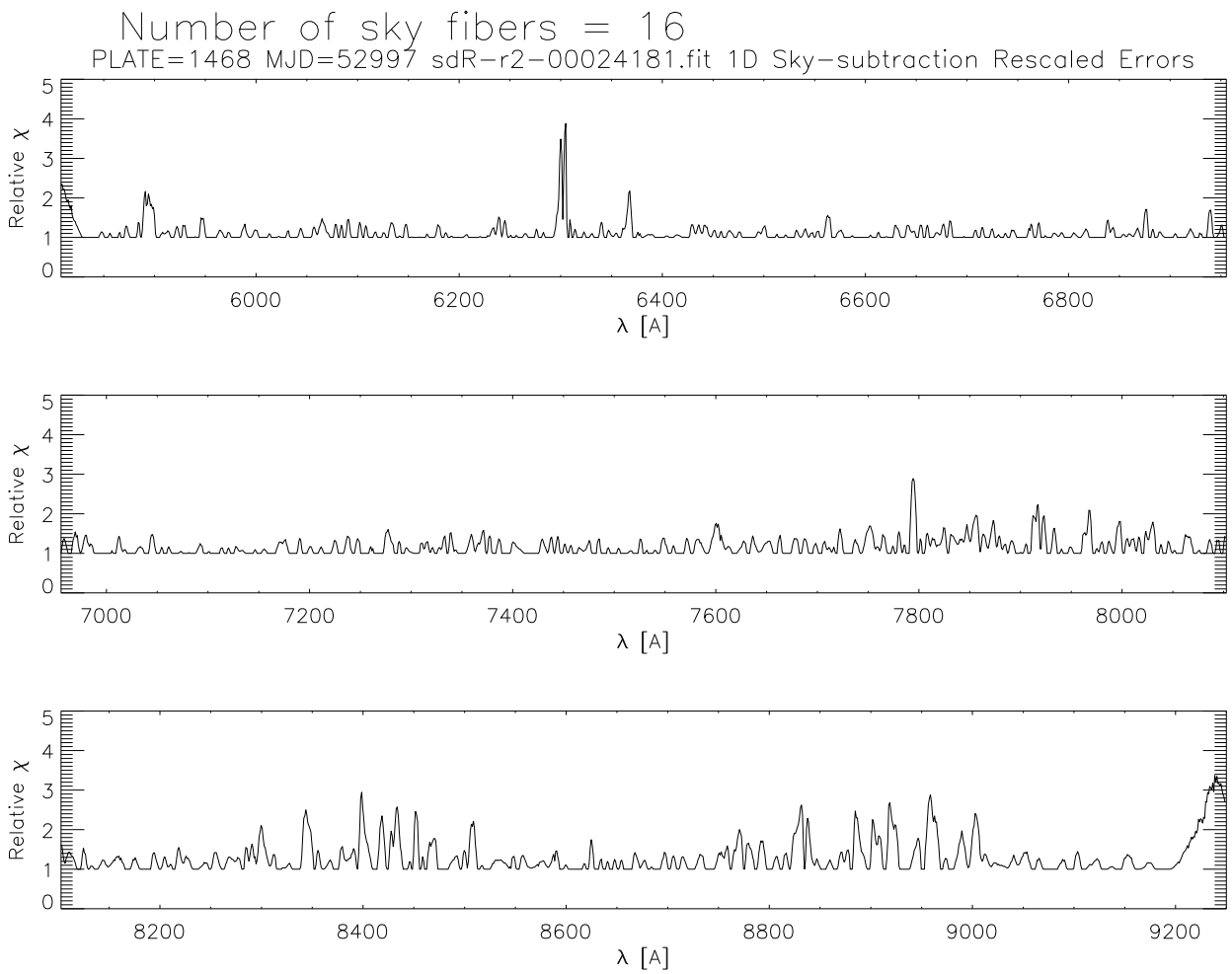

−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
−0.24
−0.26
sky shift, pixels
5000
6000
7000
8000
9000
10000

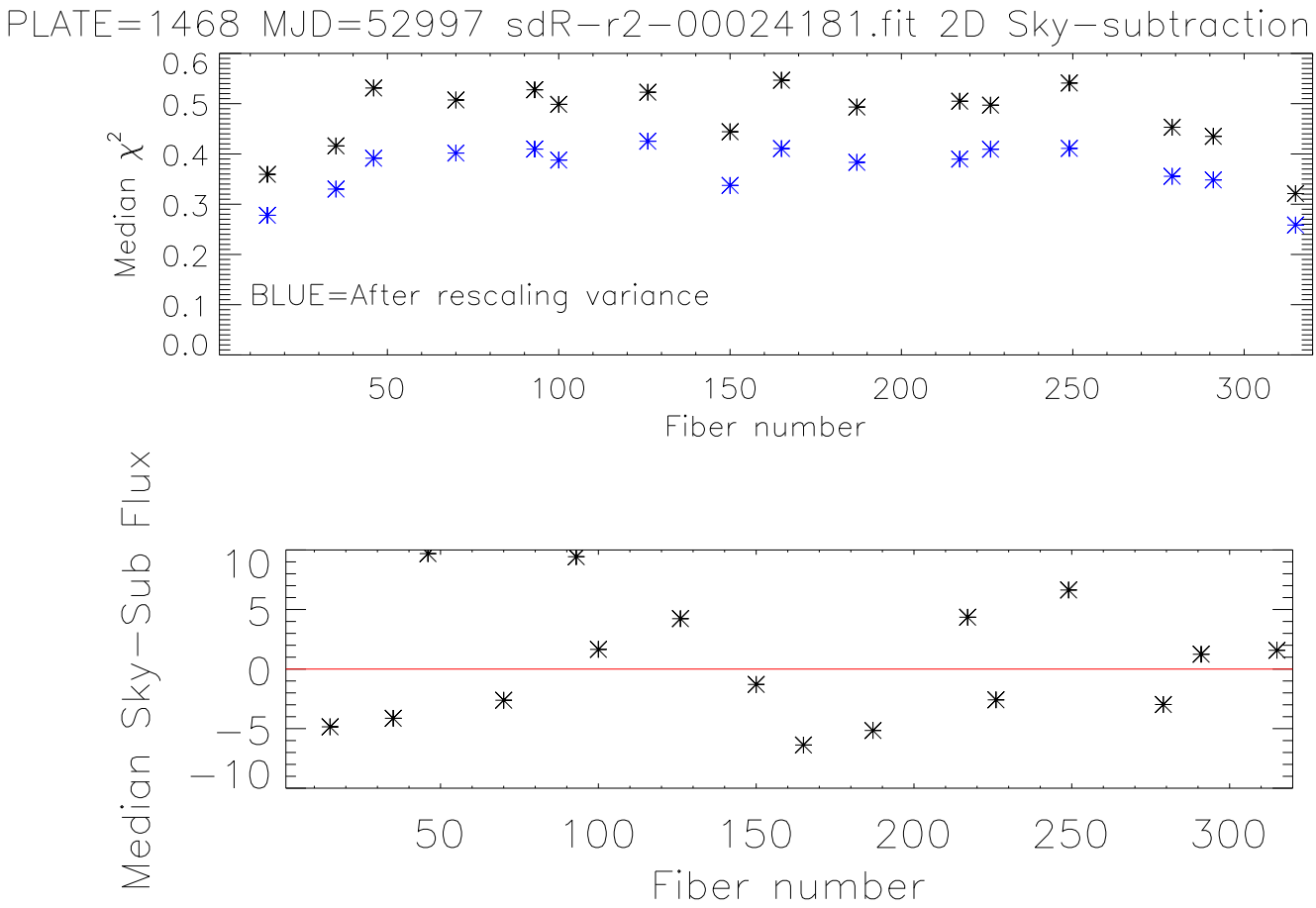

PLATE=1468 MJD=52997 Smooth superflat for sdR-r2-00024181.fit
2.0
1.5
1.0
0.5
0.0
1.003
1.002
1.001
1.000
0.999
0.998
0.997
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

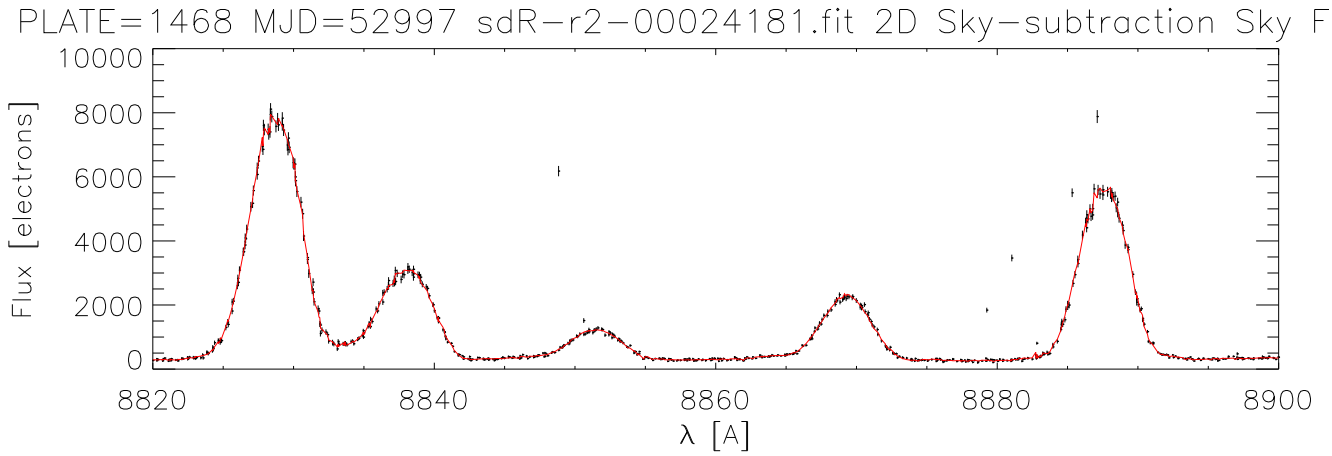

PLATE=1468 MJD=52997 sdR-r2-00024181.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

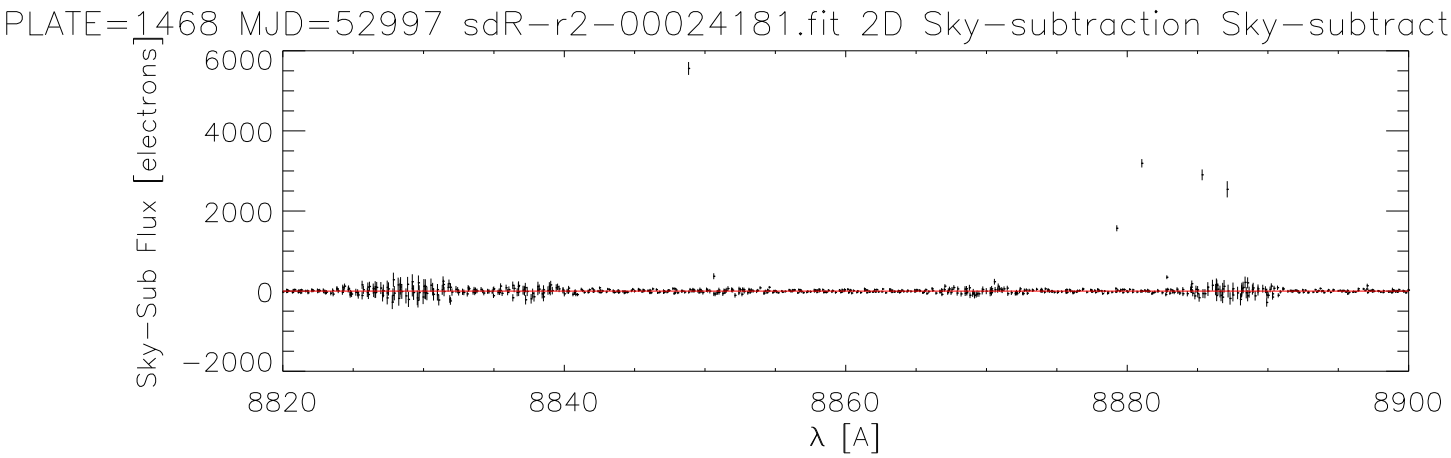

PLATE=1468 MJD=52997 sdR-r2-00024181.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

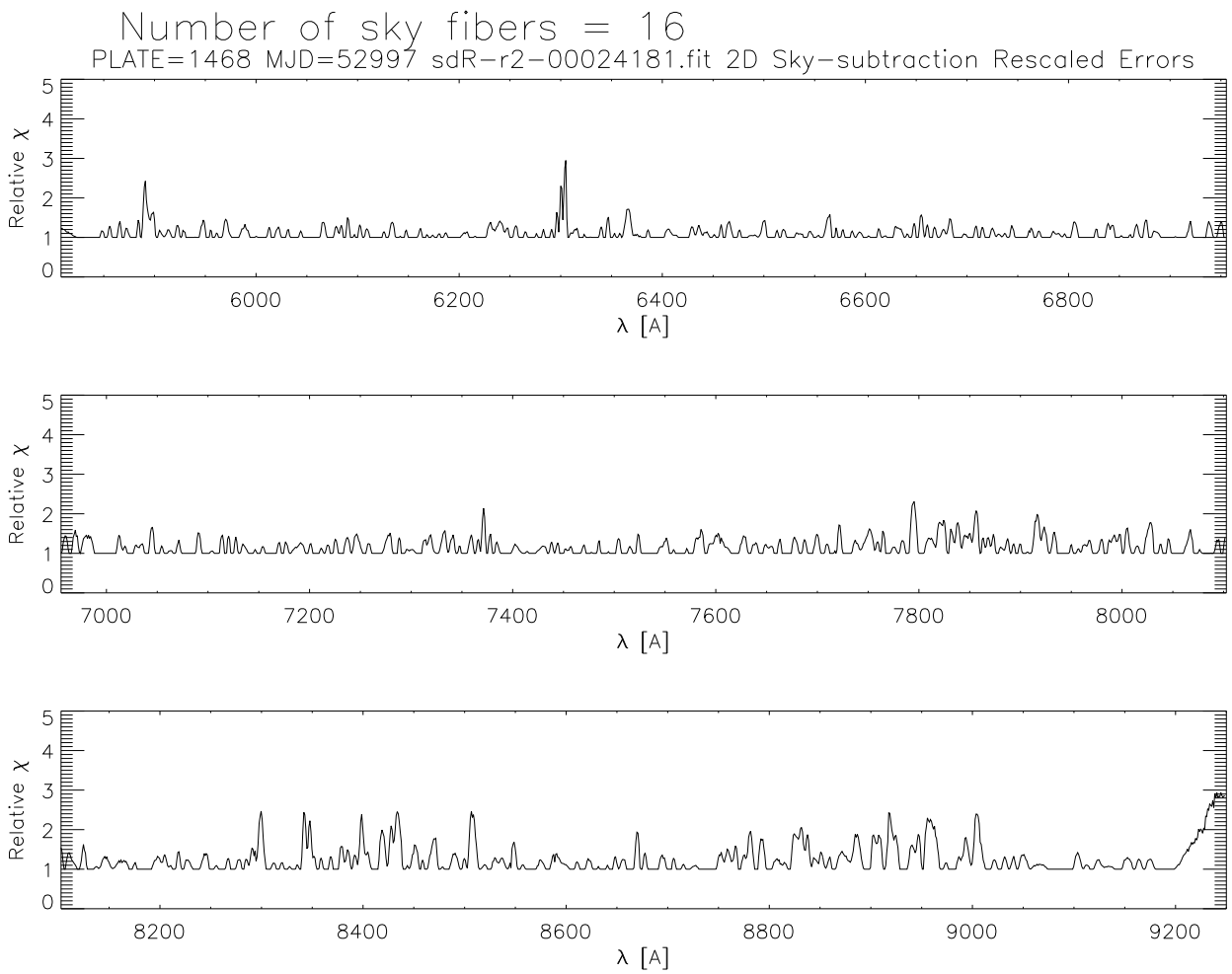

PLATE=1468 MJD=52997 sdR-r2-00024181.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

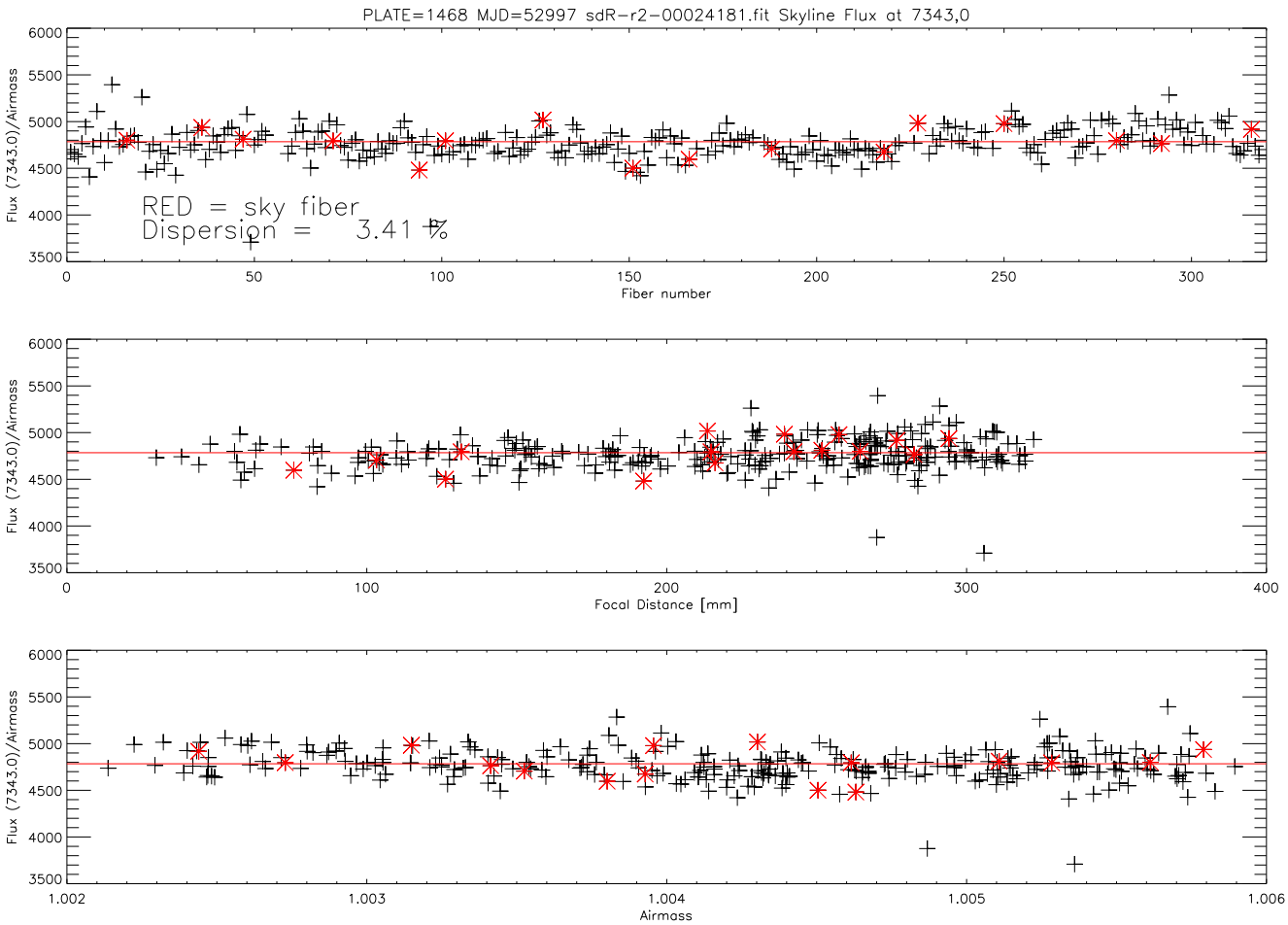

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-r2-00024181.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

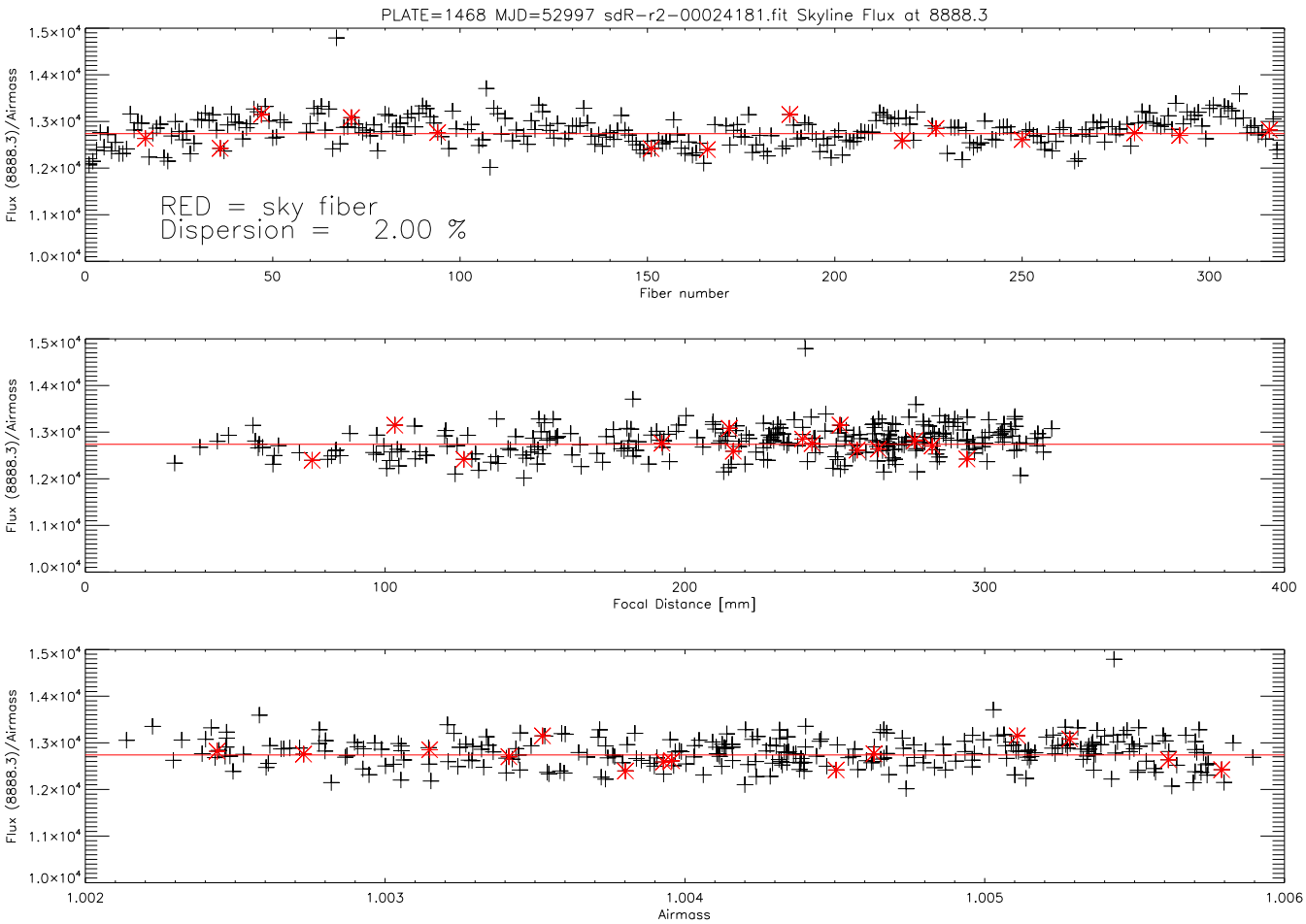

PLATE=1468 MJD=52997 sdR-r2-00024181.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

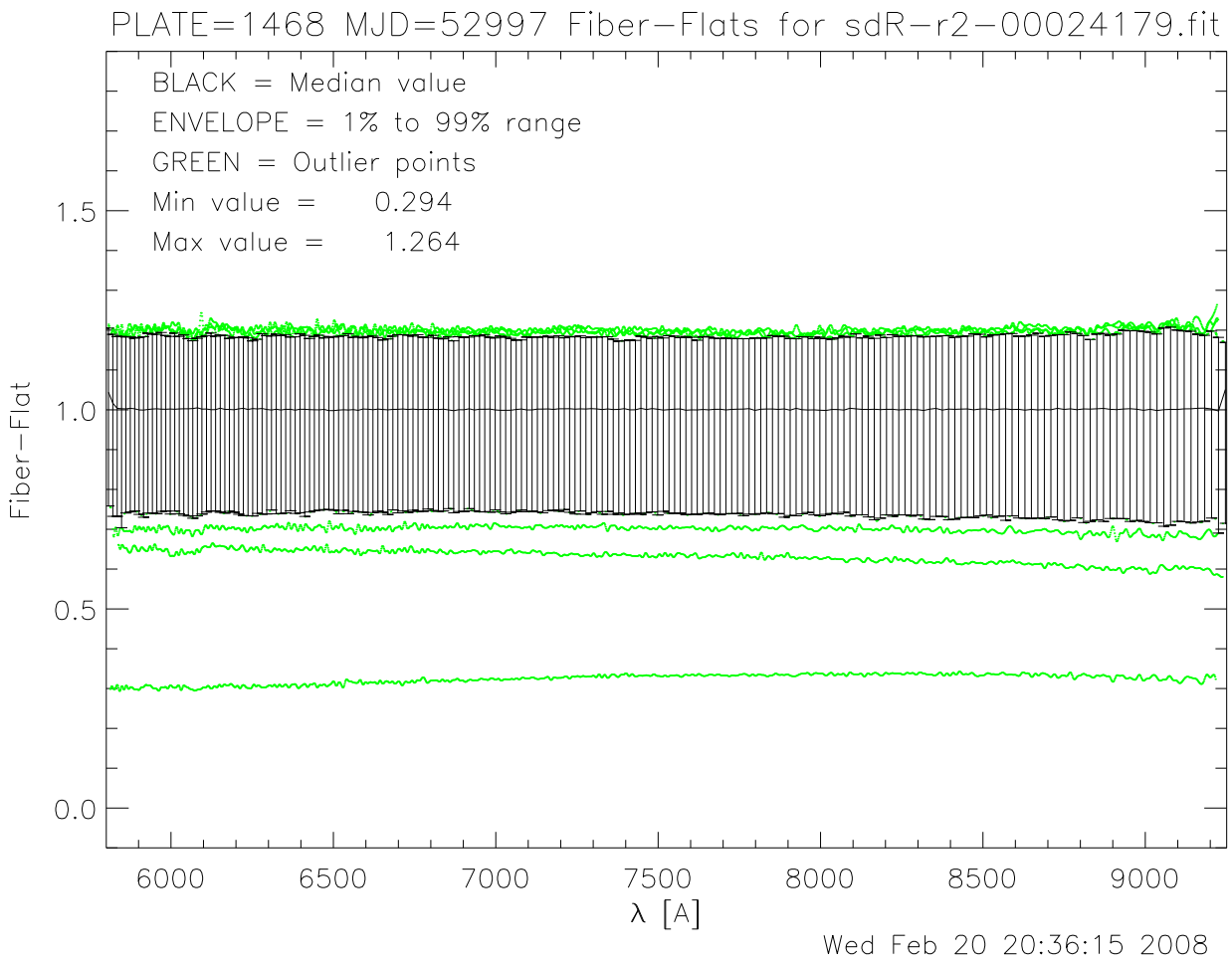

PLATE=1468 MJD=52997 sdR-r2-00024181.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

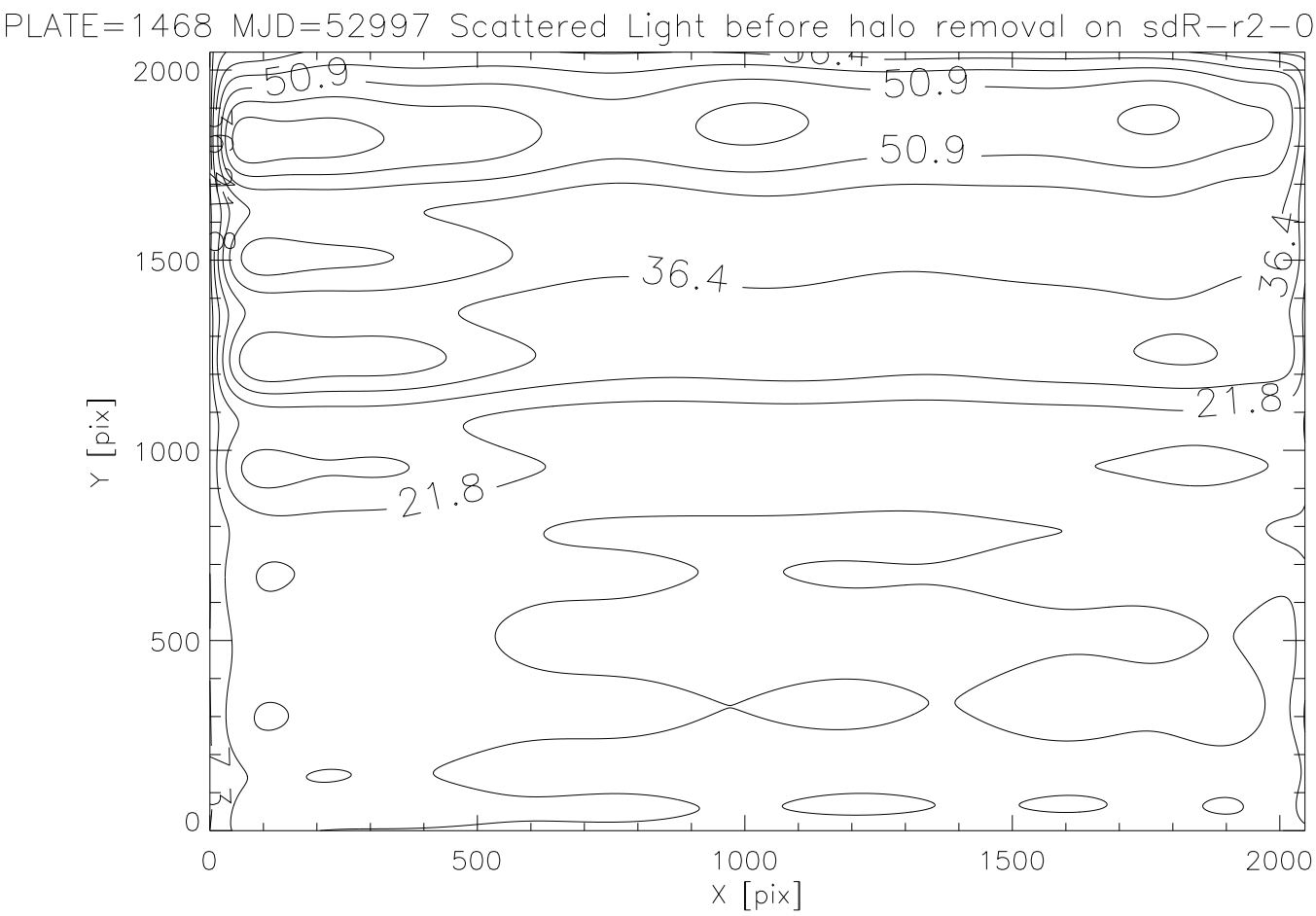

PLATE=1468 MJD=52997 sdR-r2-00024181.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

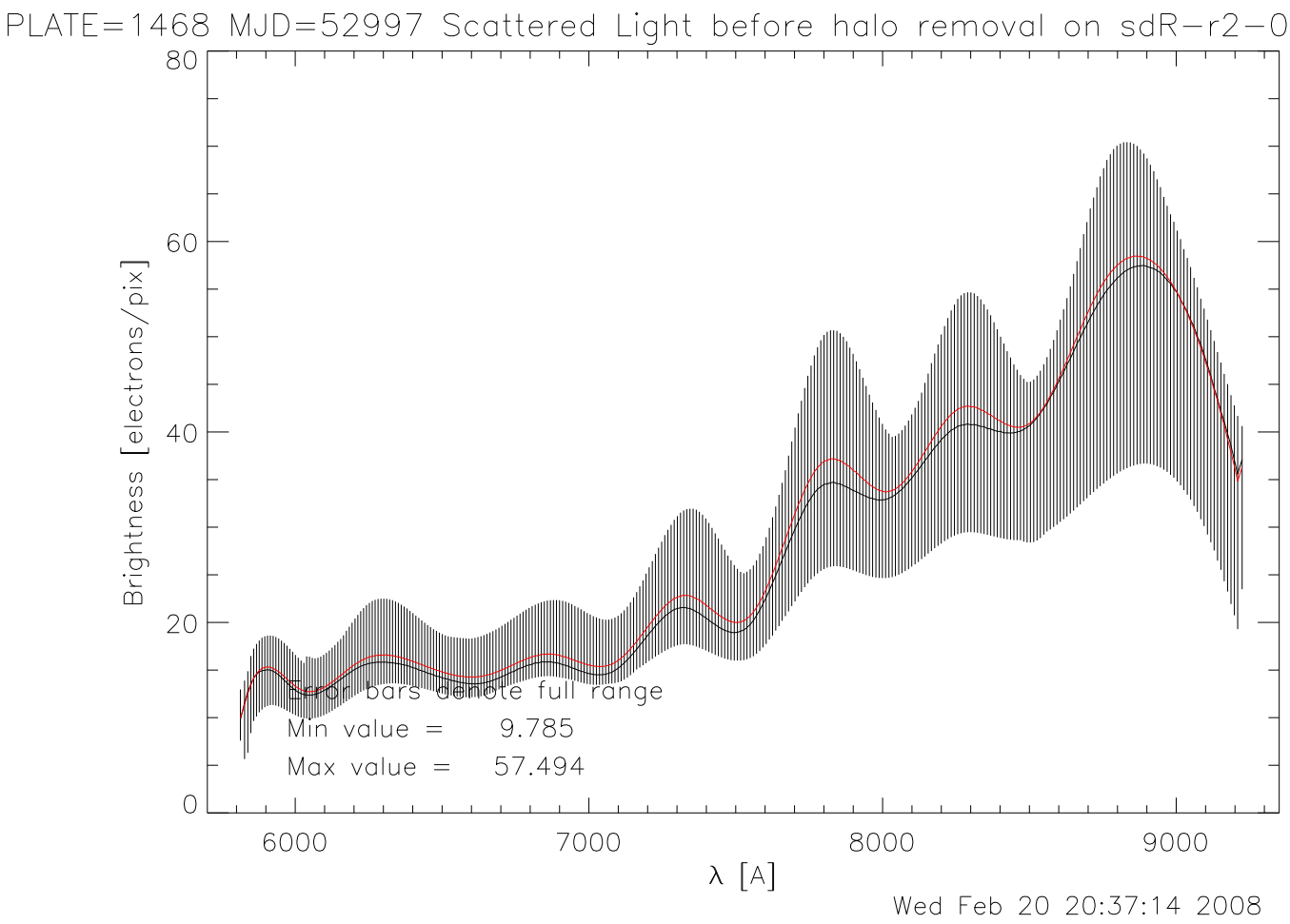

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-r2-00024181.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

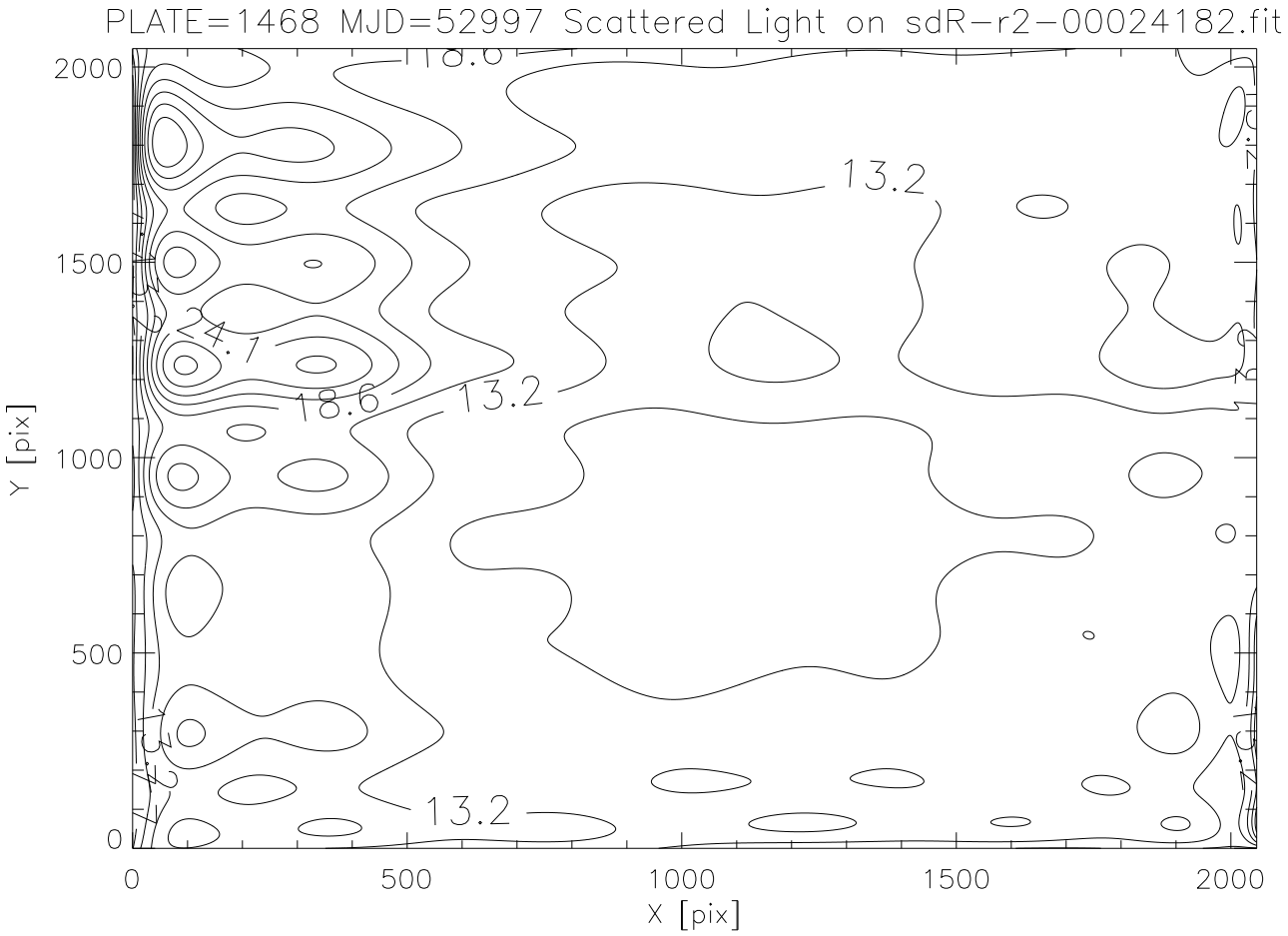

PLATE=1468 MJD=52997 sdR-r2-00024181.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.41 %
Fiber number
Focal Distance [mm]
Airmass

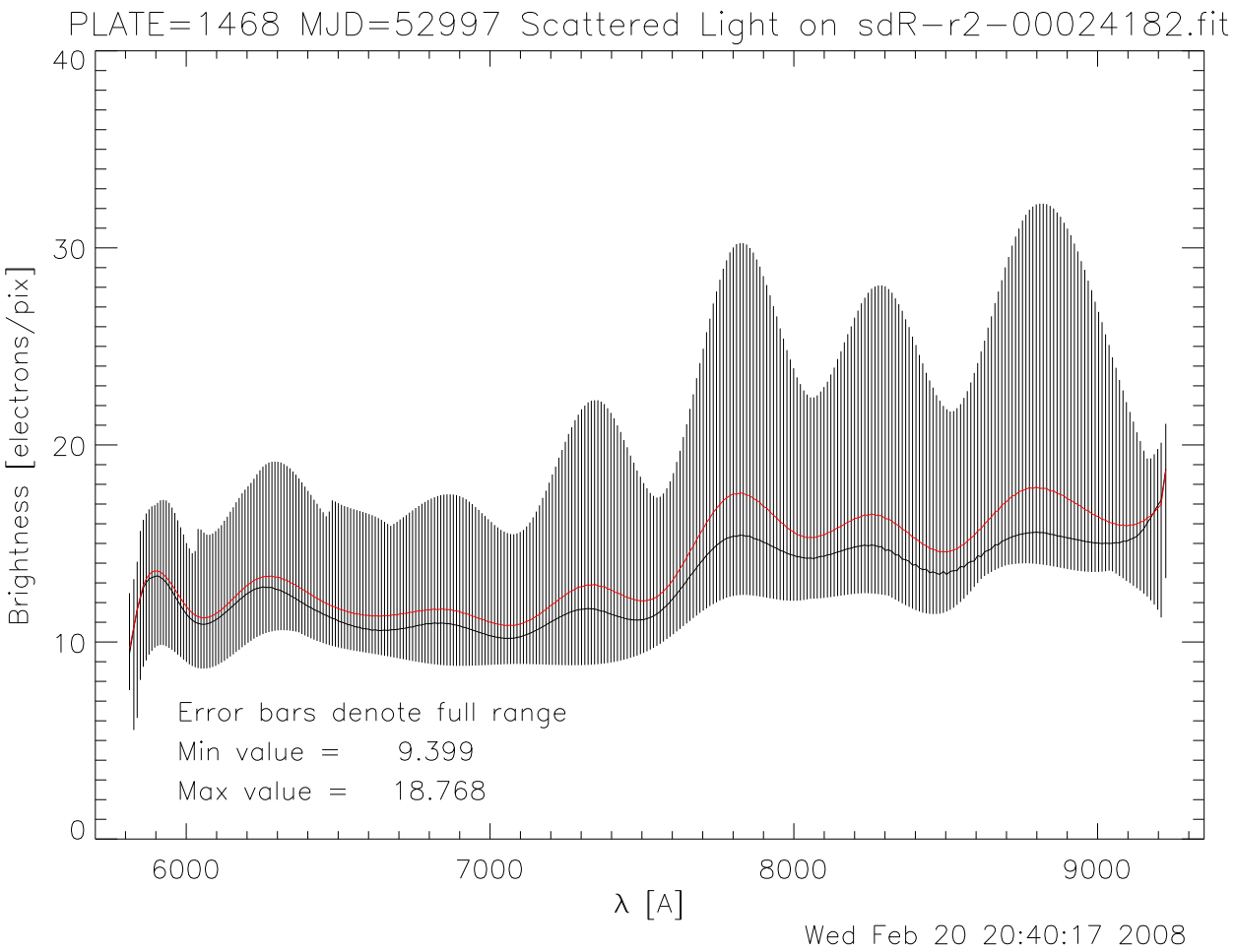

PLATE=1468 MJD=52997 sdR-r2-00024181.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.00 %
Fiber number
Focal Distance [mm]
Airmass

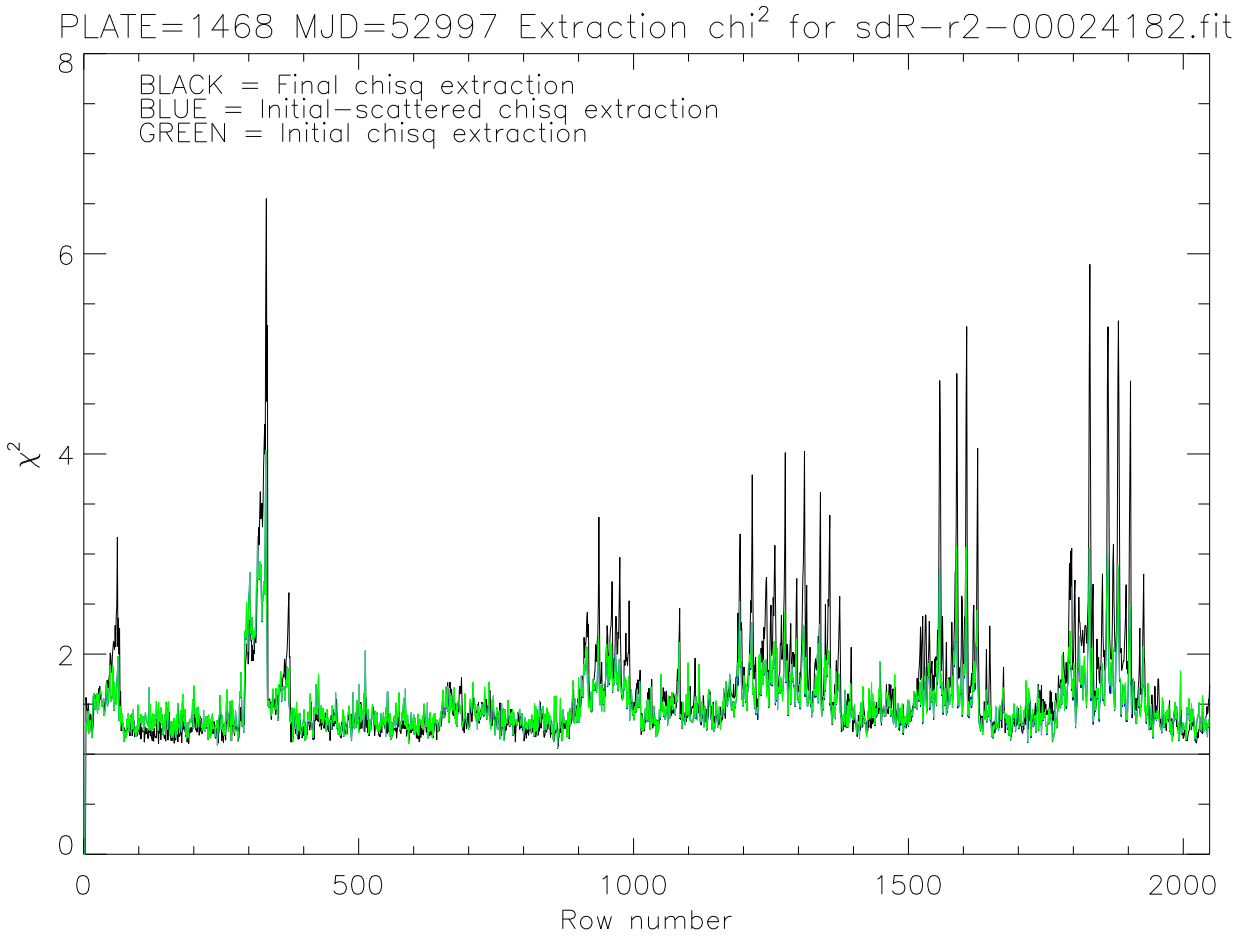

PLATE=1468 MJD=52997 Fiber−Flats for sdR−r2−00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.294
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 20:36:15 2008

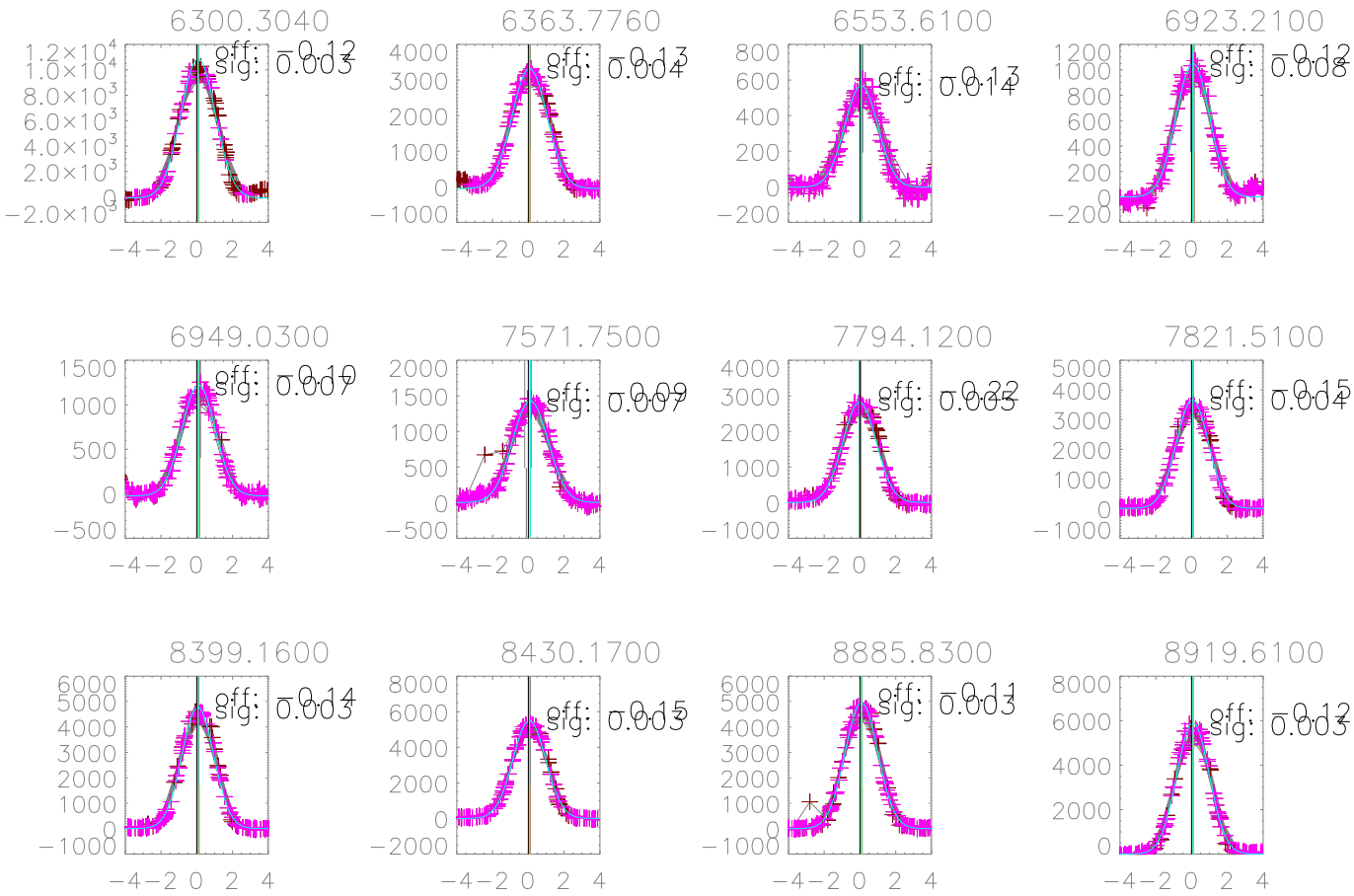

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR−r2−00024182.fi
50.9
50.9
50.9
36.4
36.4
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

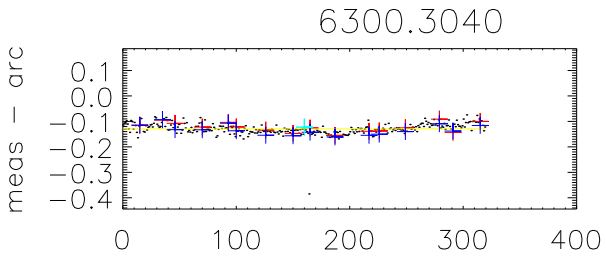

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r2-00024182.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.785
Max value = 57.494
Wed Feb 20 20:37:14 2008

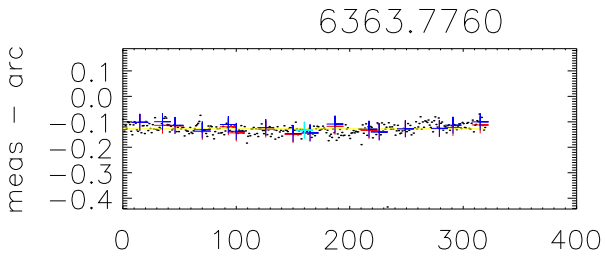

PLATE=1468 MJD=52997 Scattered Light on sdR-r2-00024182.fit
18.6
13.2
24.1
18.6
13.2
13.2
Y [pix]
X [pix]
0
500
1000
1500
2000

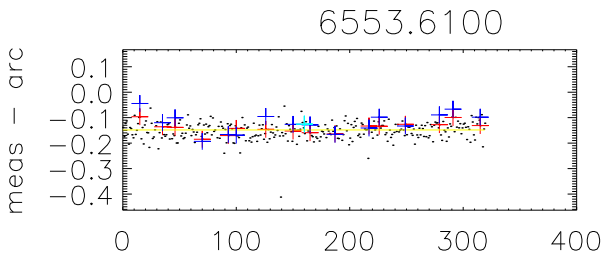

PLATE=1468 MJD=52997 Scattered Light on sdR-r2-00024182.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.399
Max value = 18.768
Wed Feb 20 20:40:17 2008

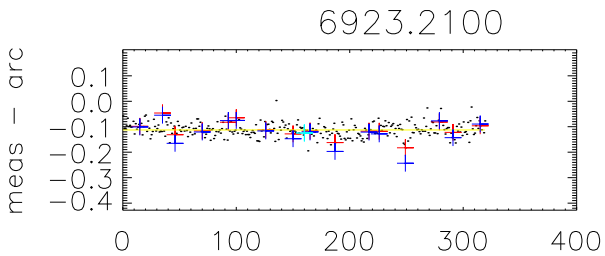

PLATE=1468 MJD=52997 Extraction chi^2 for sdR−r2−00024182.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

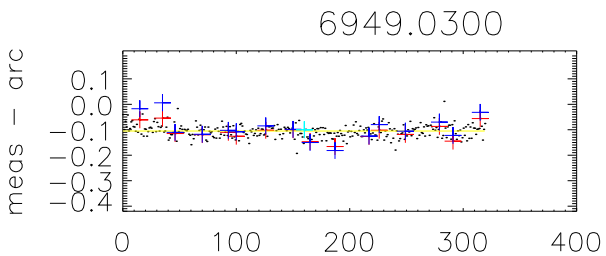

6300.3040
off: −0.12
sig: 0.003
6363.7760
off: −0.13
sig: 0.004
6553.6100
off: −0.13
sig: 0.014
6923.2100
off: −0.12
sig: 0.008
6949.0300
off: −0.10
sig: 0.007
7571.7500
off: −0.09
sig: 0.007
7794.1200
off: −0.22
sig: 0.003
7821.5100
off: −0.15
sig: 0.004
8399.1600
off: −0.14
sig: 0.003
8430.1700
off: −0.15
sig: 0.003
8885.8300
off: −0.11
sig: 0.003
8919.6100
off: −0.12
sig: 0.003

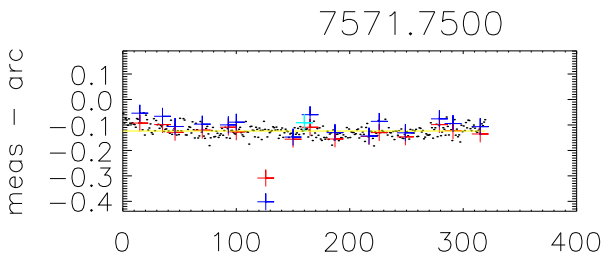

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

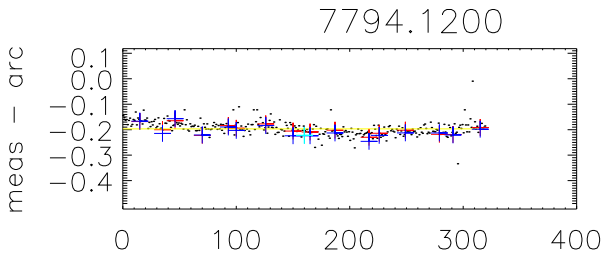

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

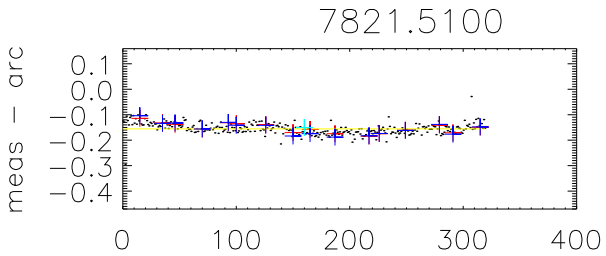

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

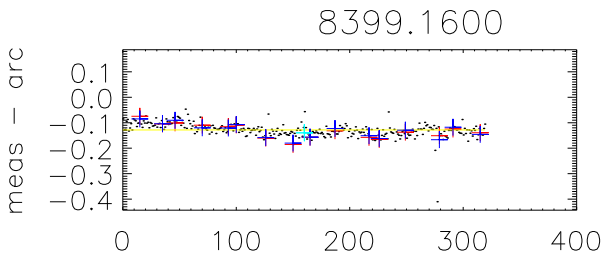

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

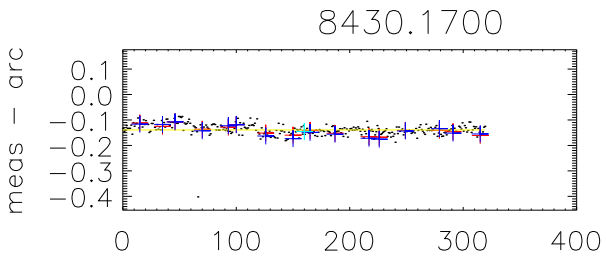

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

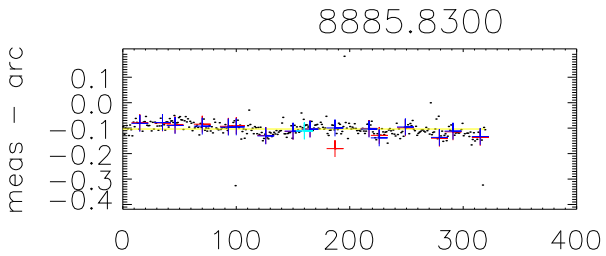

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

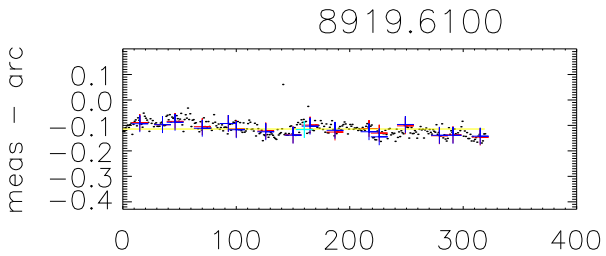

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

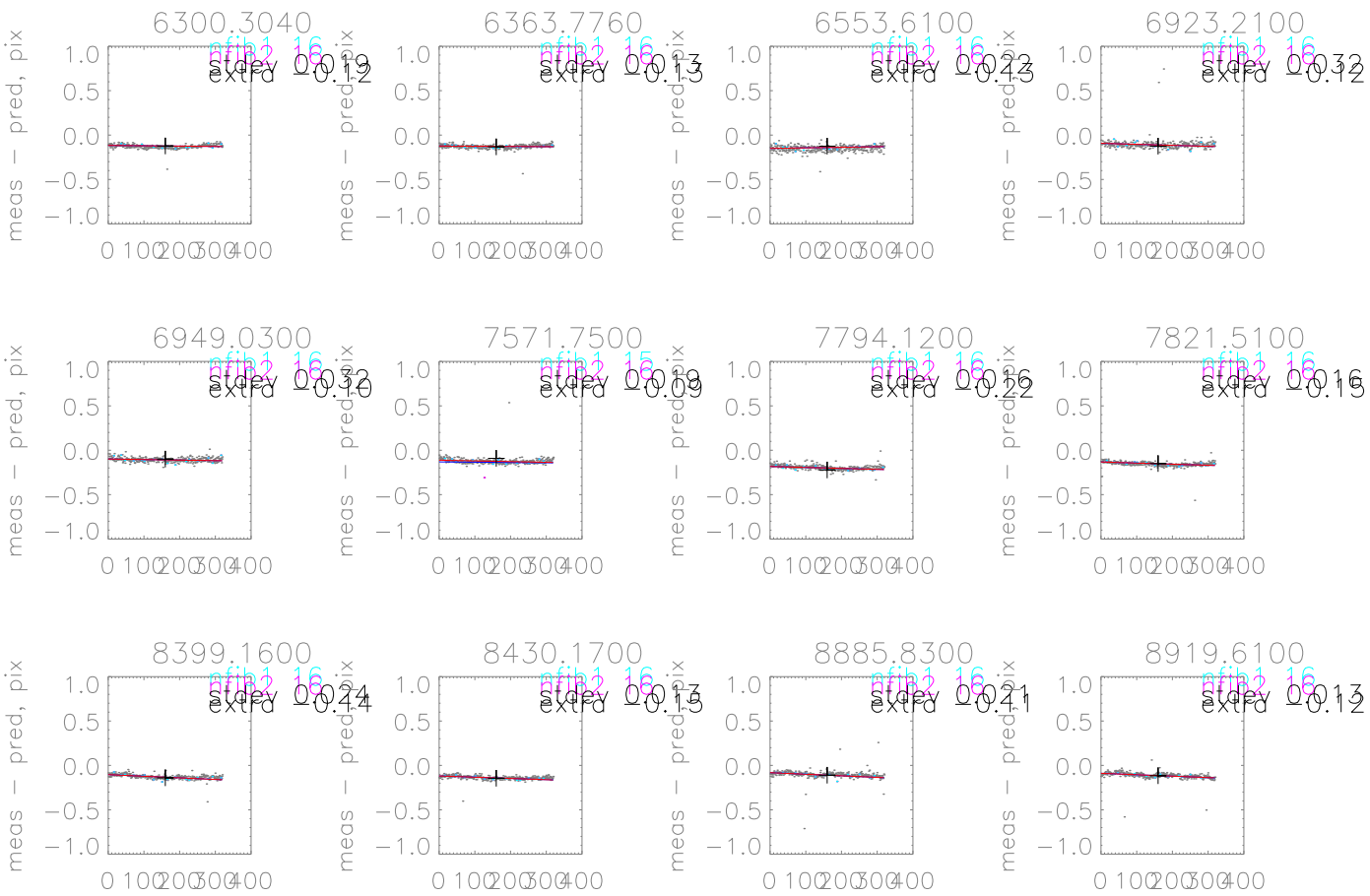

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

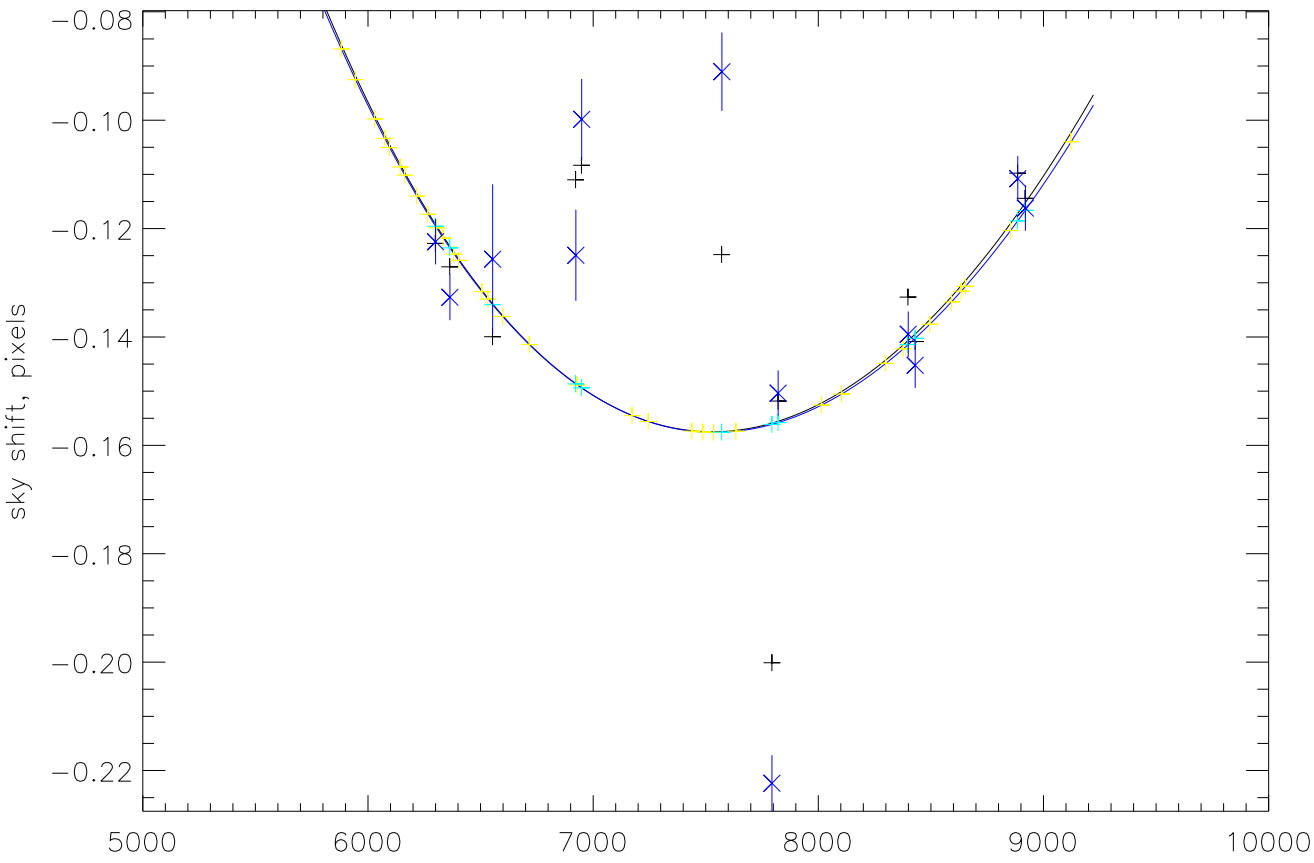

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

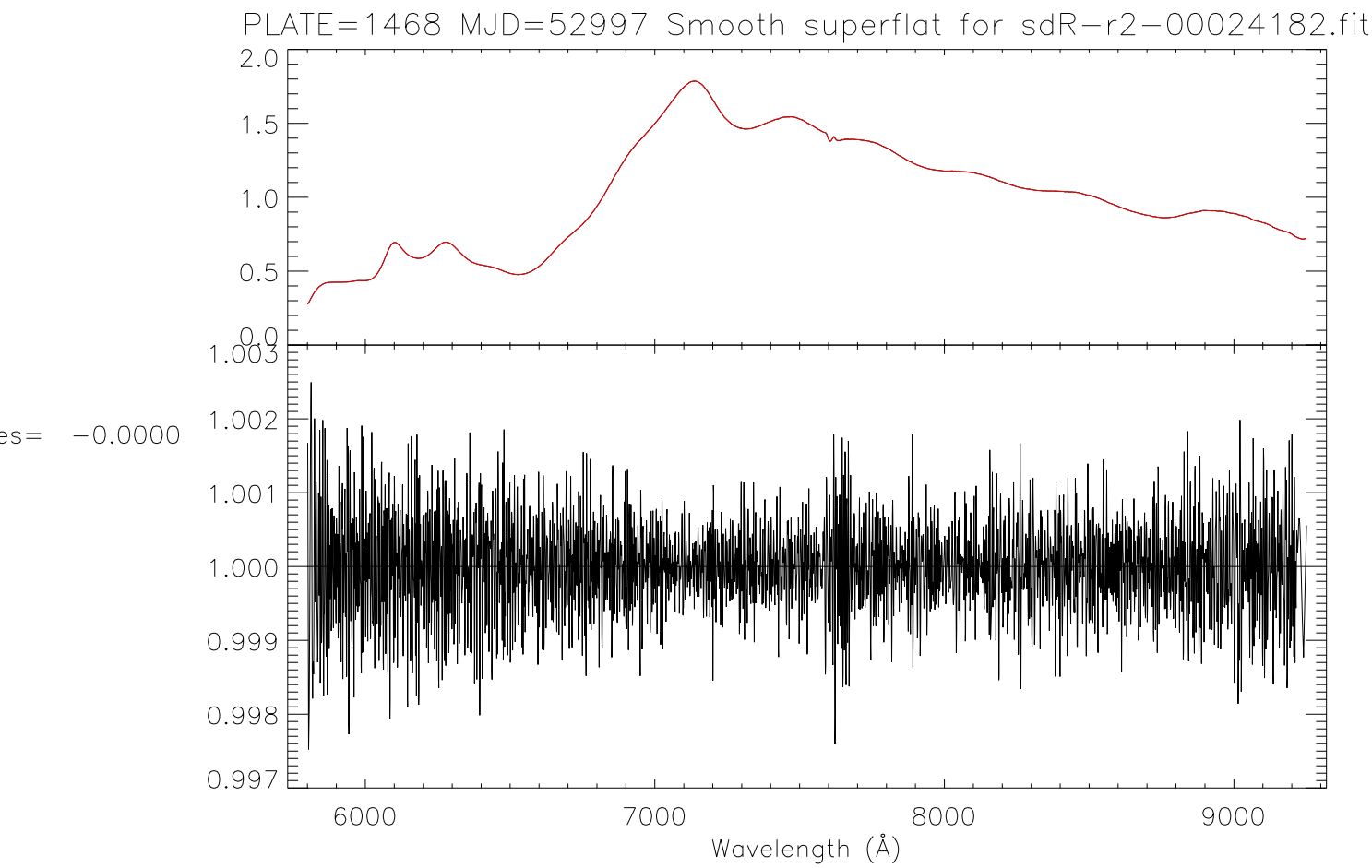

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

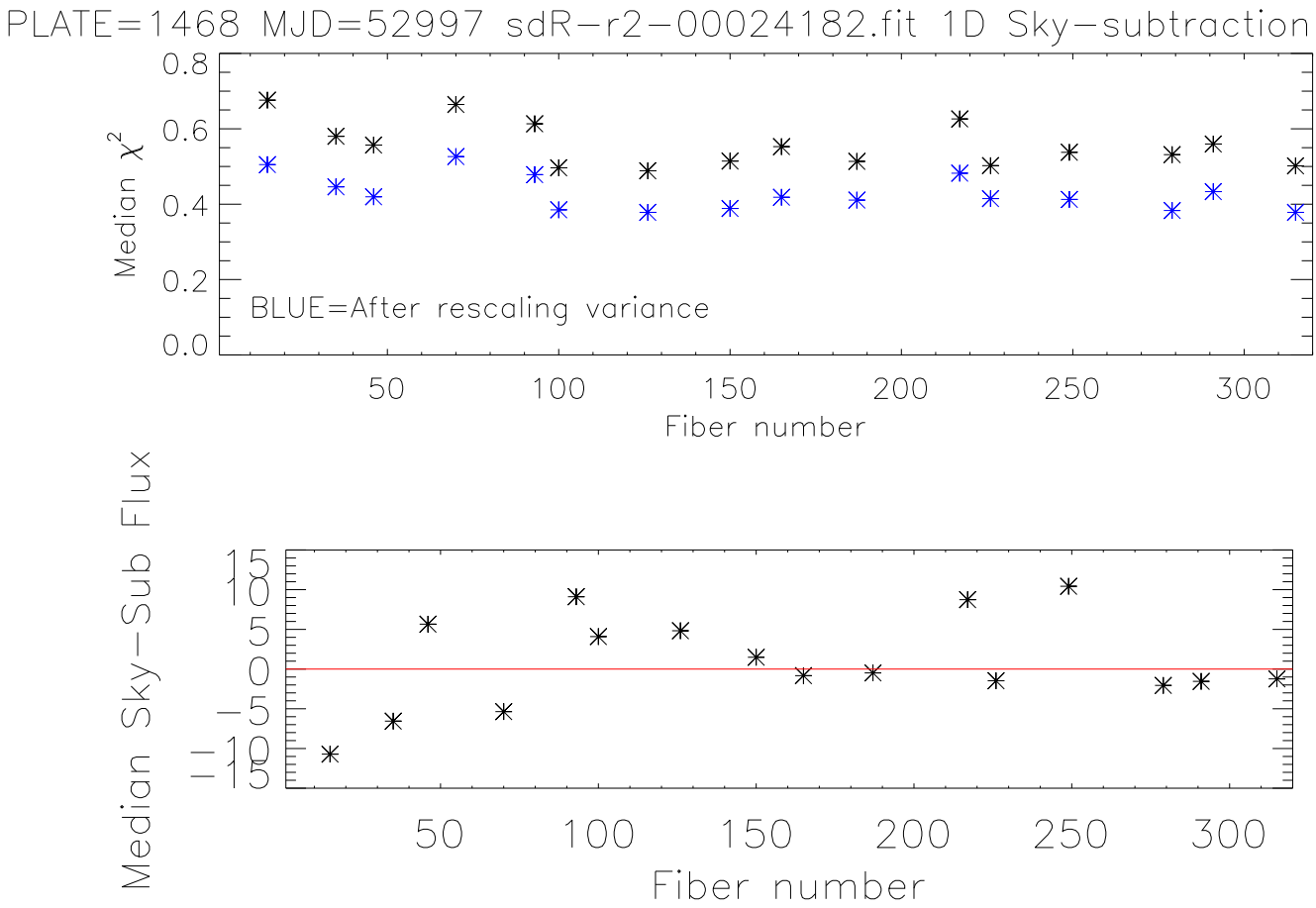

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

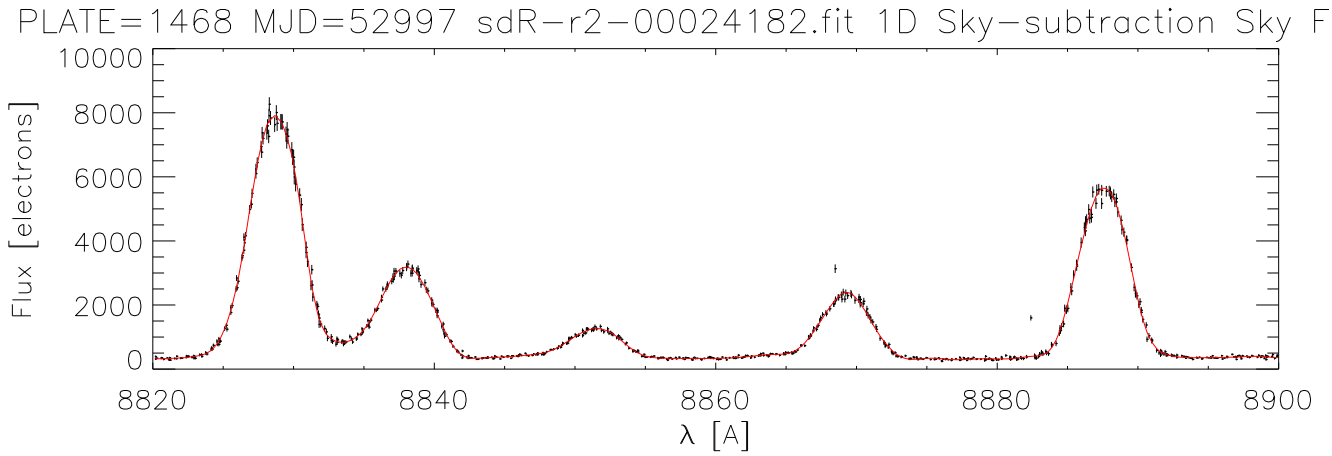

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

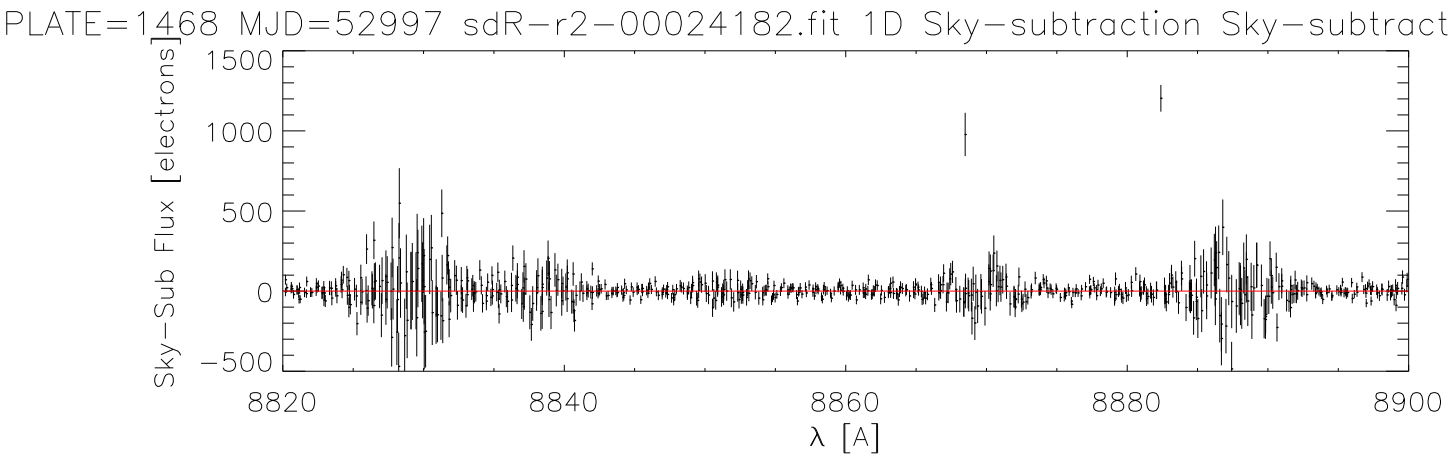

6300.3040
stdev 0.019
extra 0.12
6363.7760
stdev 0.013
extra 0.13
6553.6100
stdev 0.022
extra 0.43
6923.2100
stdev 0.032
extra 0.12
6949.0300
stdev 0.032
extra 0.10
7571.7500
stdev 0.009
extra 0.09
7794.1200
stdev 0.046
extra 0.22
7821.5100
stdev 0.016
extra 0.15
8399.1600
stdev 0.024
extra 0.44
8430.1700
stdev 0.013
extra 0.15
8885.8300
stdev 0.021
extra 0.41
8919.6100
stdev 0.013
extra 0.12
meas − pred, pix

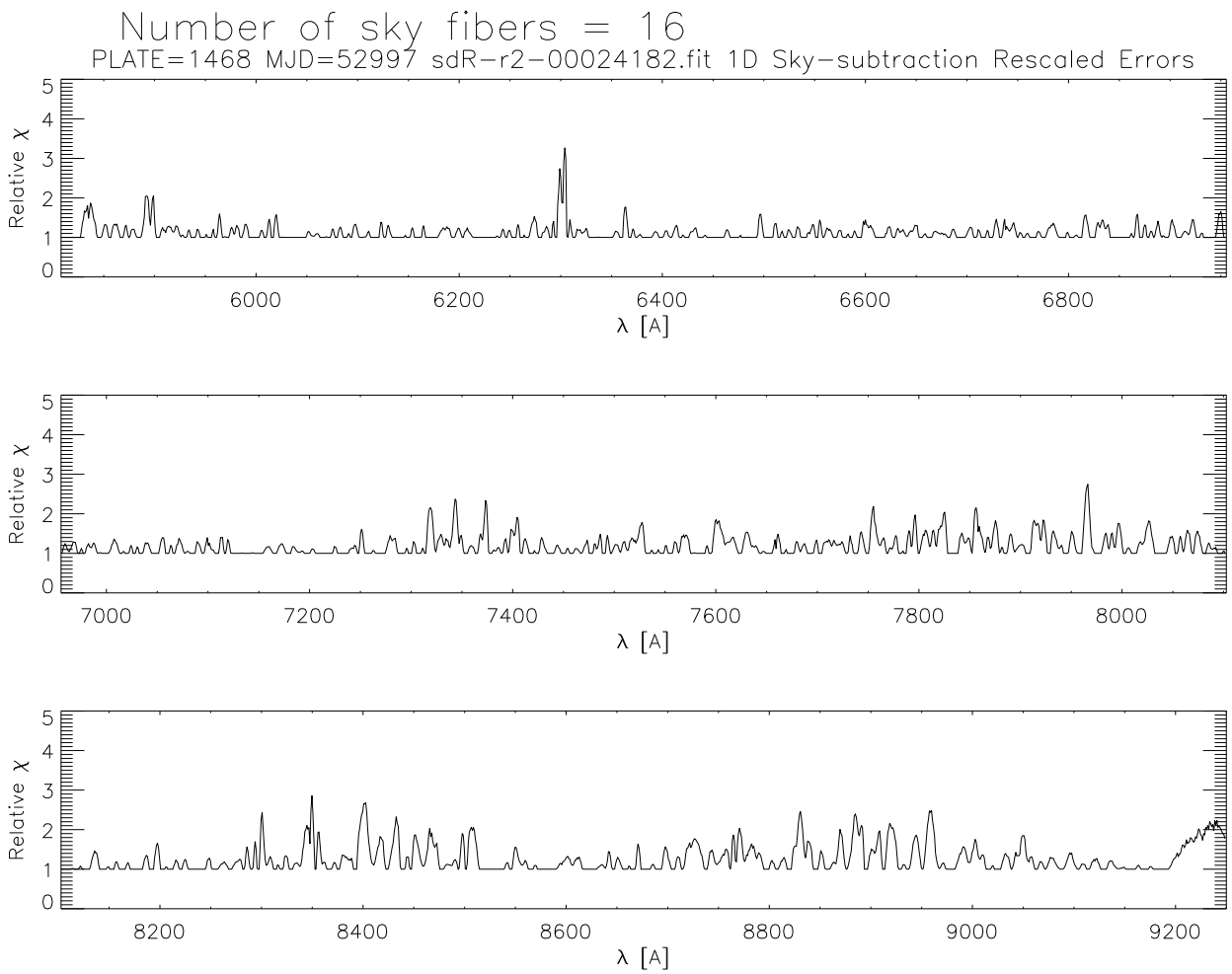

−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
sky shift, pixels
5000
6000
7000
8000
9000
10000

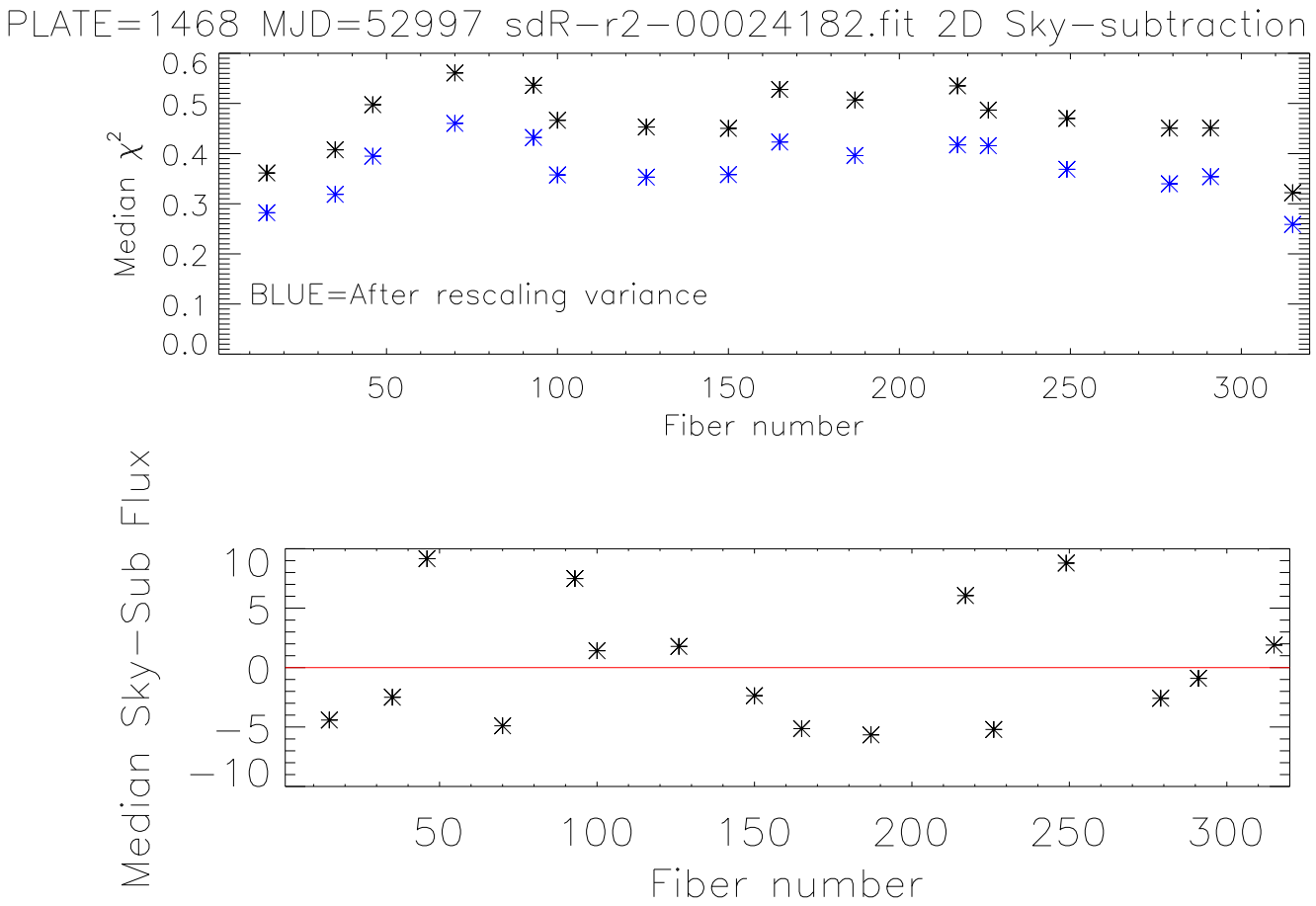

PLATE=1468 MJD=52997 Smooth superflat for sdR-r2-00024182.fit
2.0
1.5
1.0
0.5
0.0
1.003
1.002
1.001
1.000
0.999
0.998
0.997
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

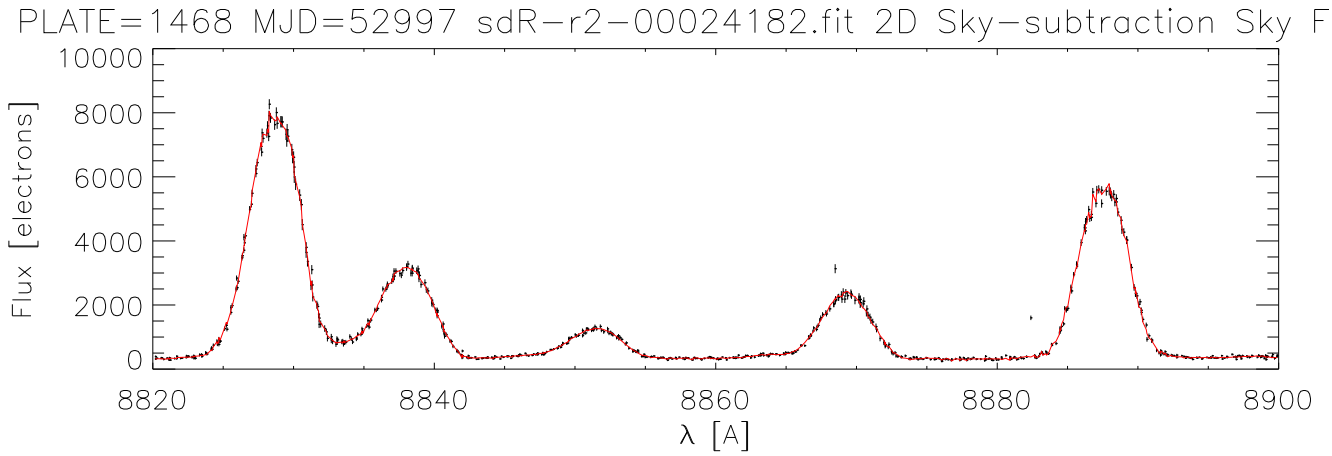

PLATE=1468 MJD=52997 sdR-r2-00024182.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

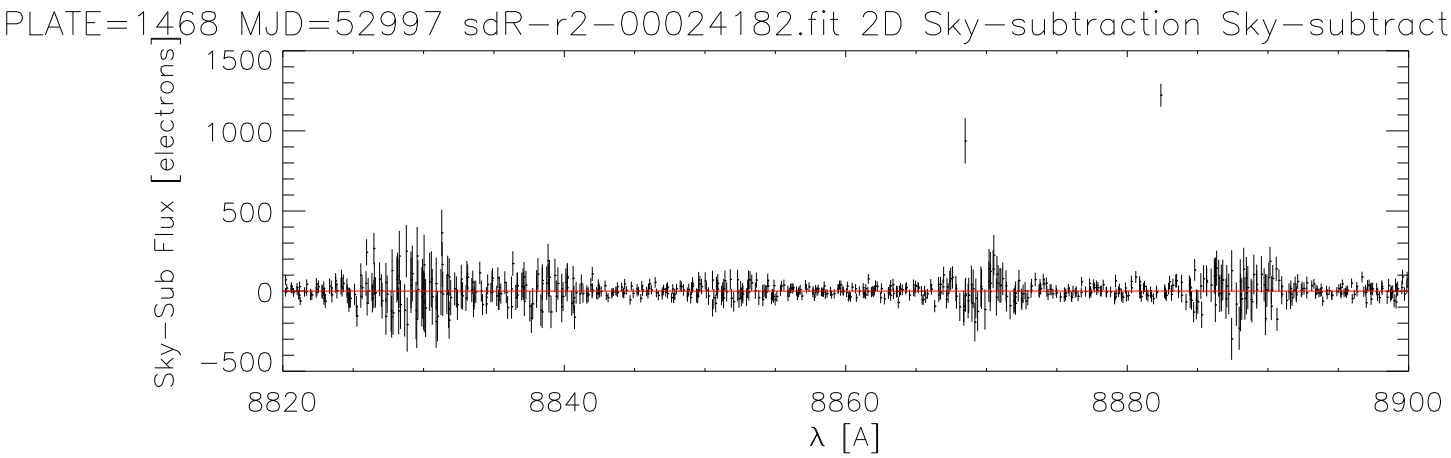

PLATE=1468 MJD=52997 sdR-r2-00024182.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

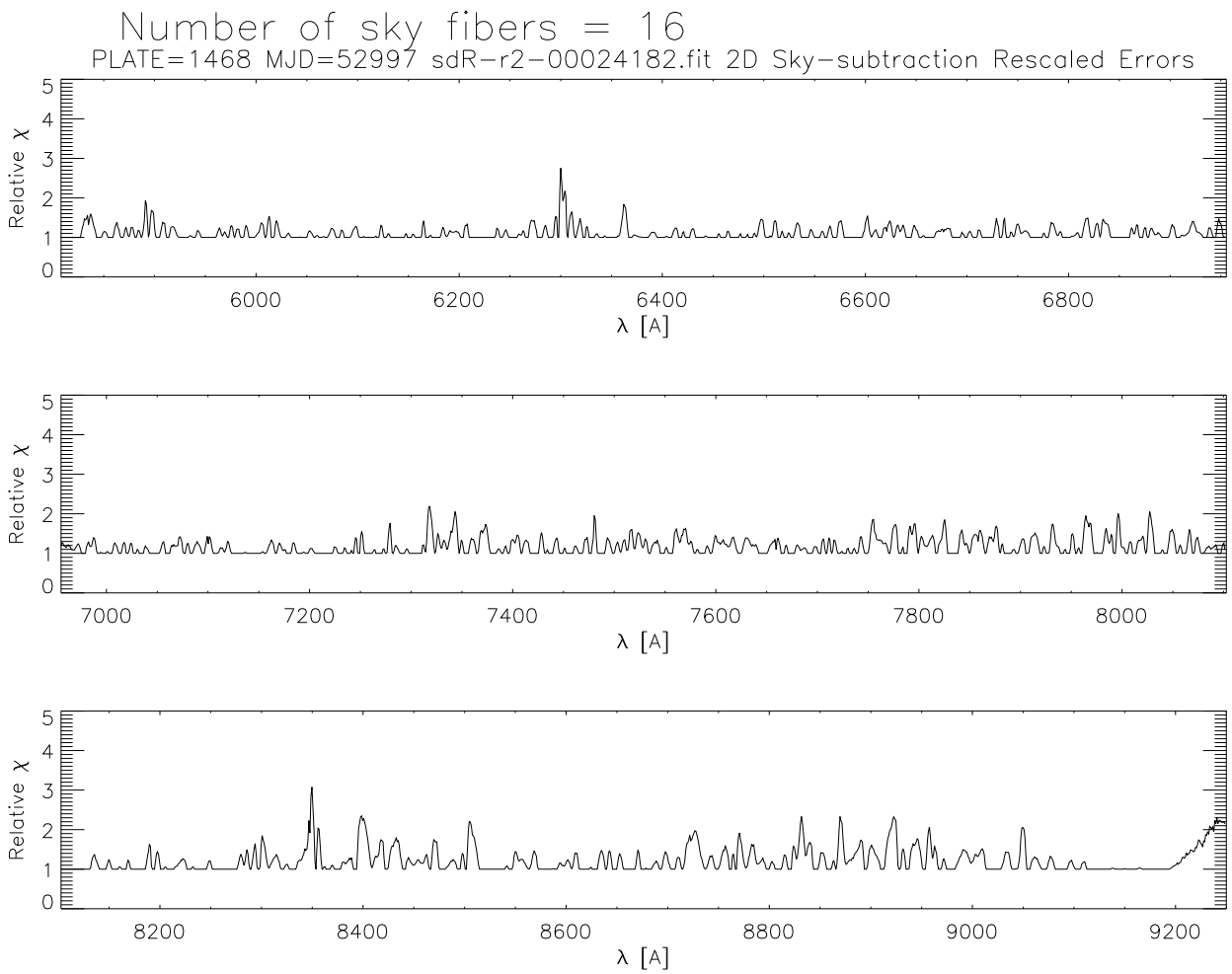

PLATE=1468 MJD=52997 sdR-r2-00024182.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

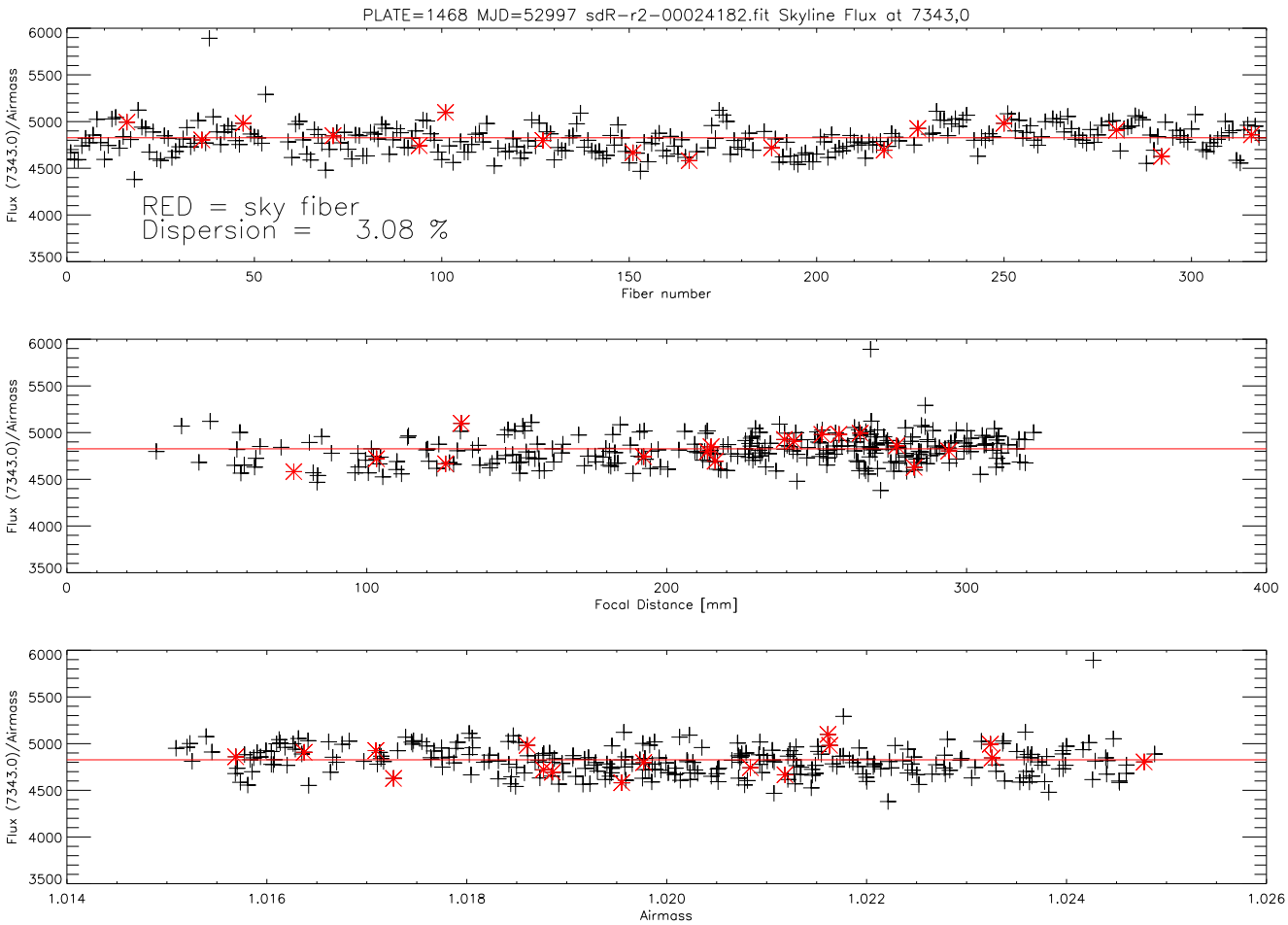

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-r2-00024182.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

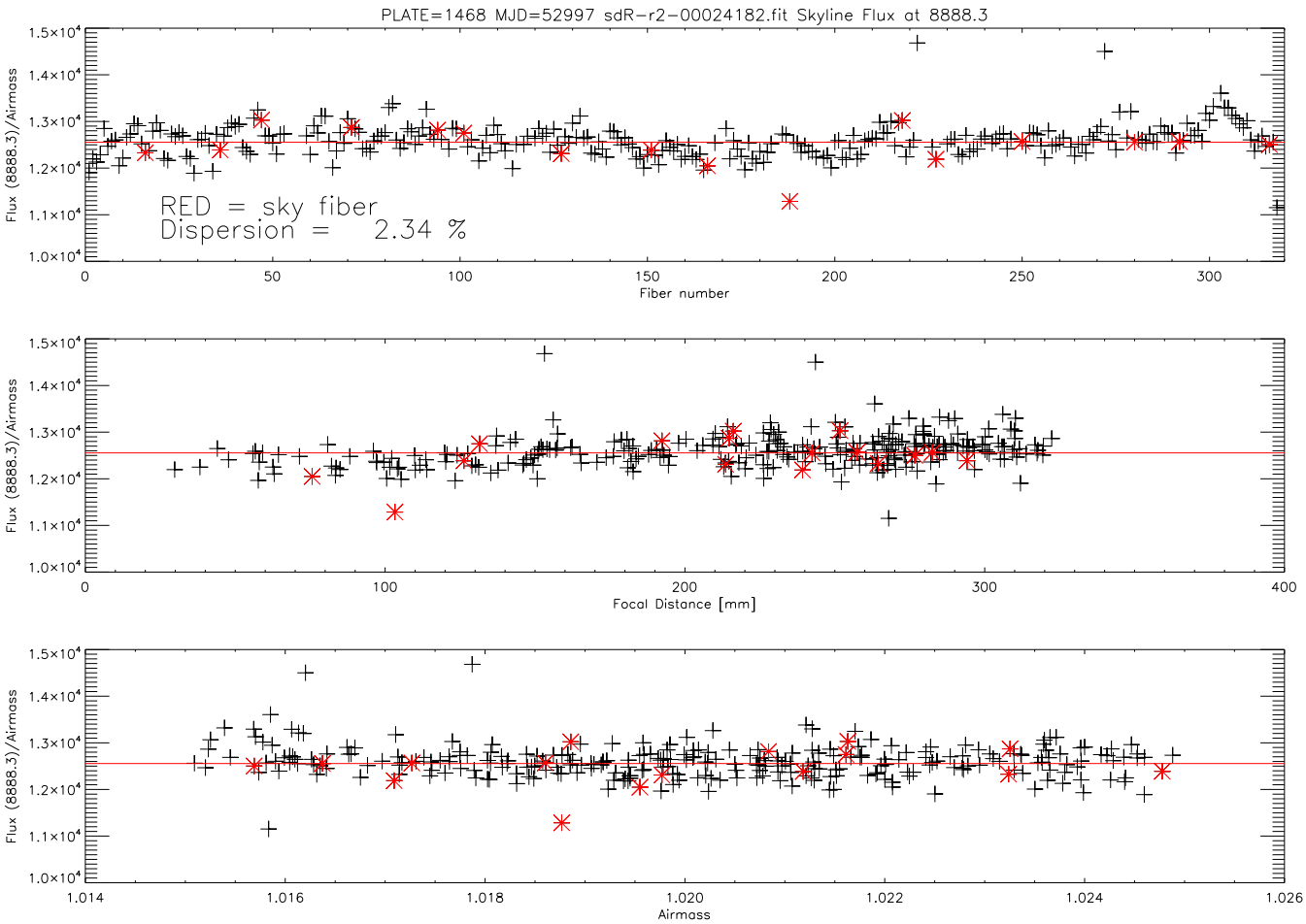

PLATE=1468 MJD=52997 sdR-r2-00024182.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

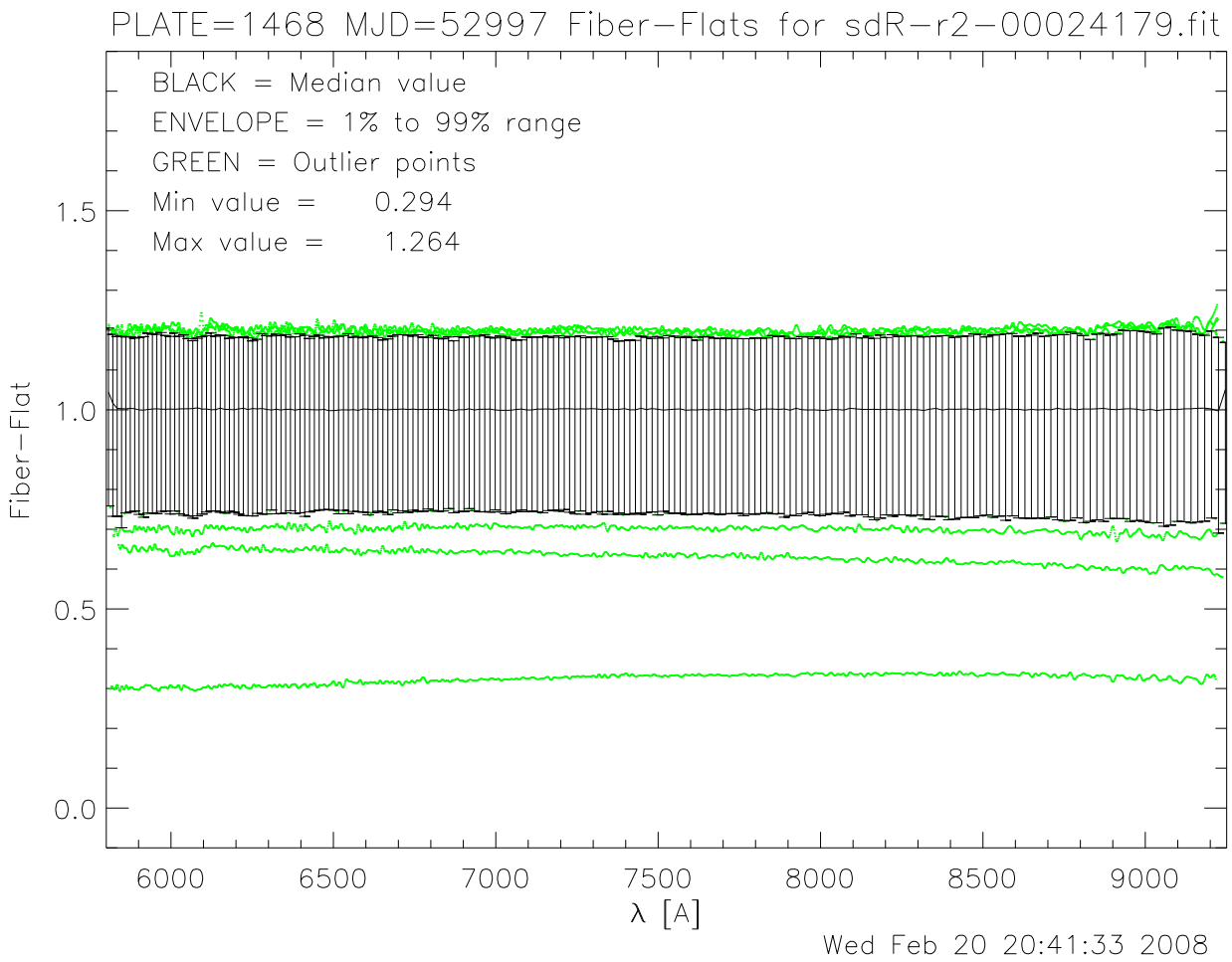

PLATE=1468 MJD=52997 sdR-r2-00024182.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

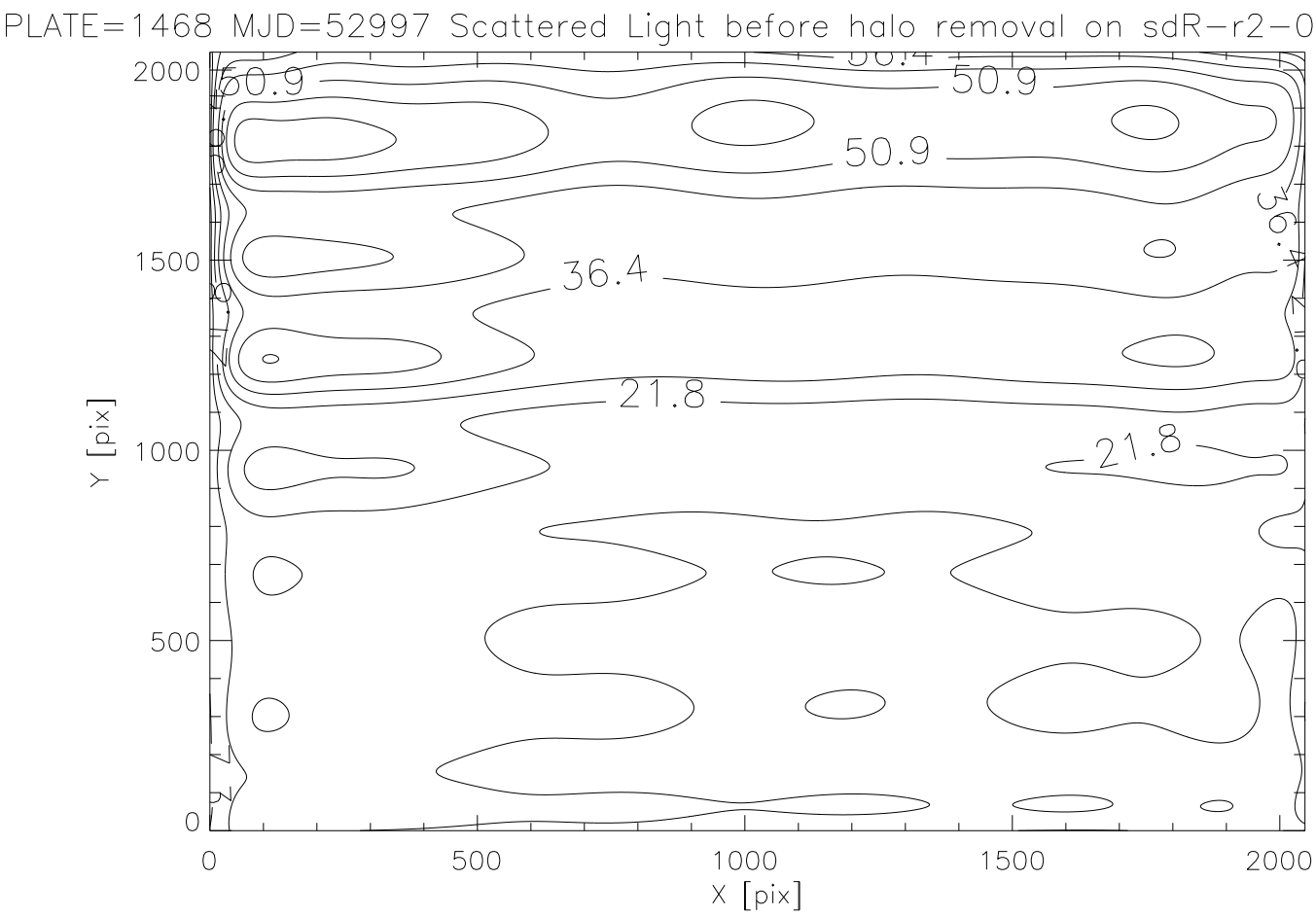

PLATE=1468 MJD=52997 sdR-r2-00024182.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

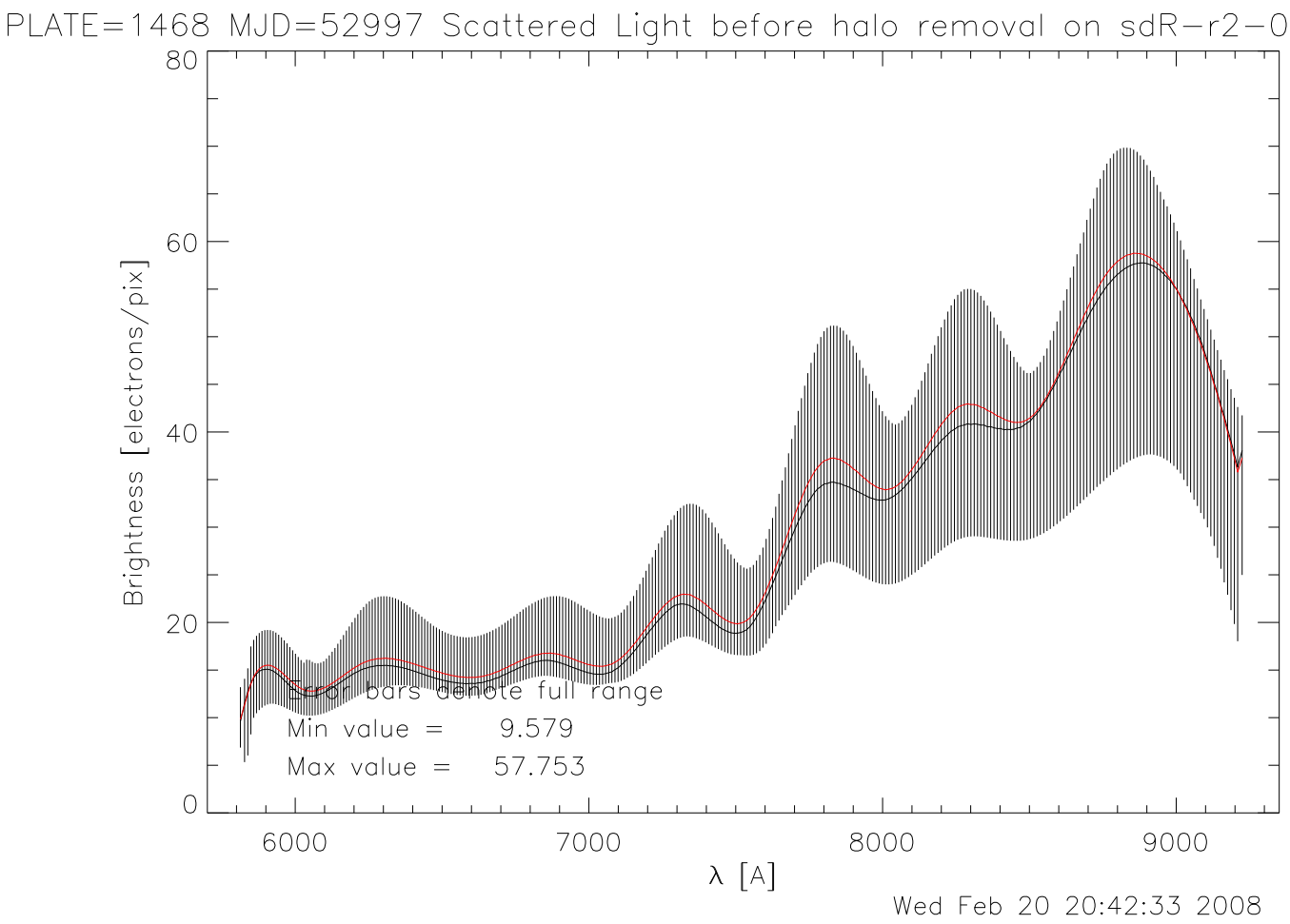

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-r2-00024182.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

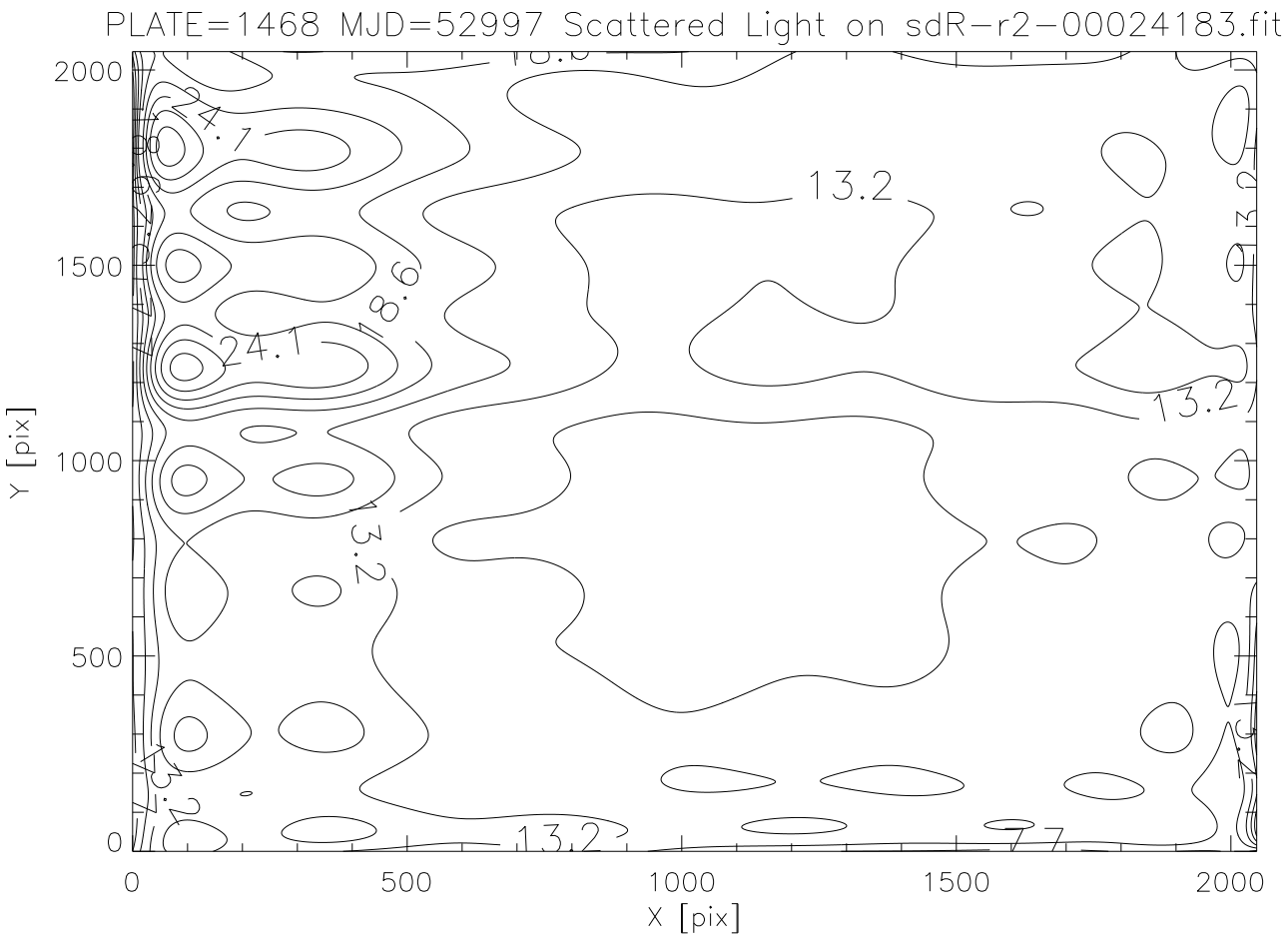

PLATE=1468 MJD=52997 sdR-r2-00024182.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.08 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

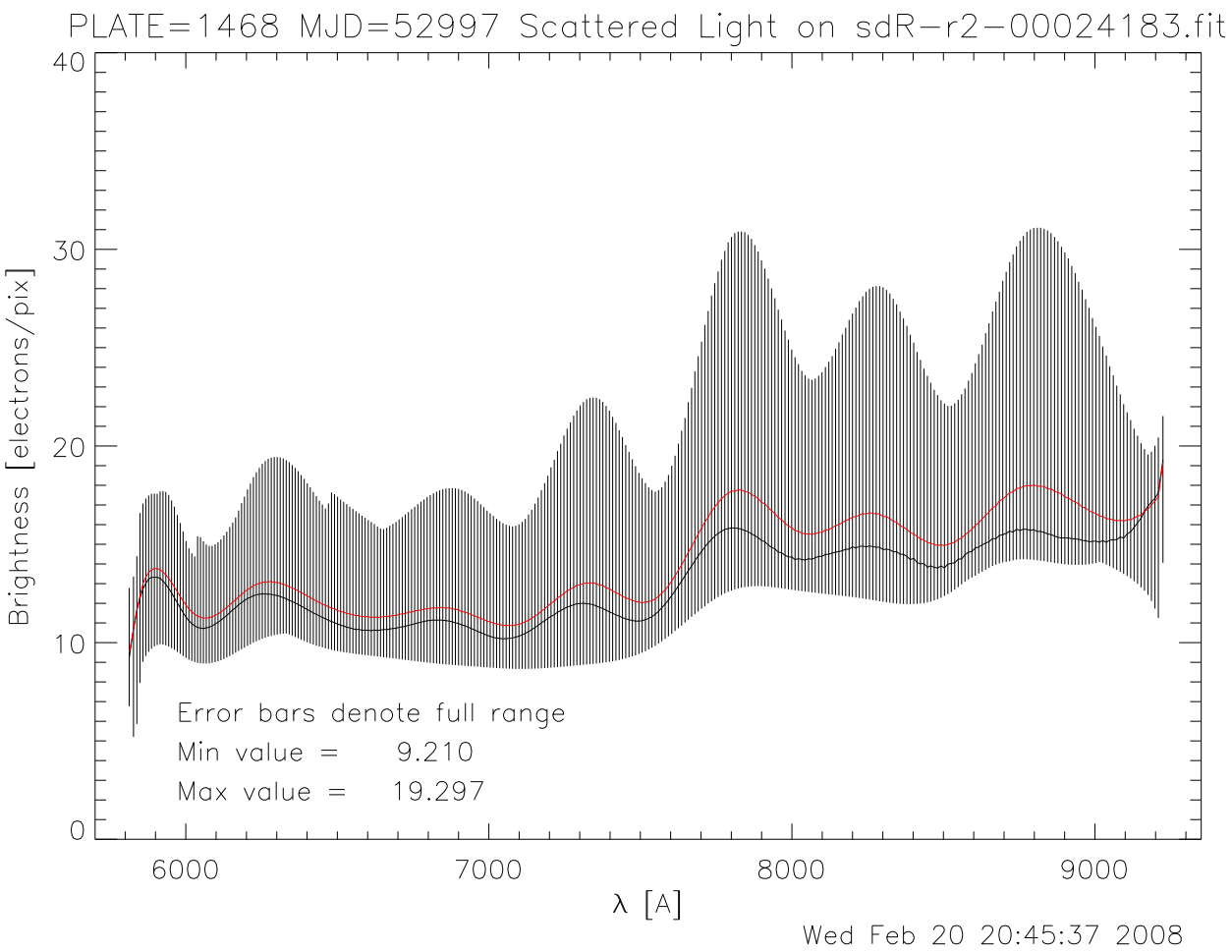

PLATE=1468 MJD=52997 sdR-r2-00024182.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.34 %
Fiber number
Focal Distance [mm]
Airmass

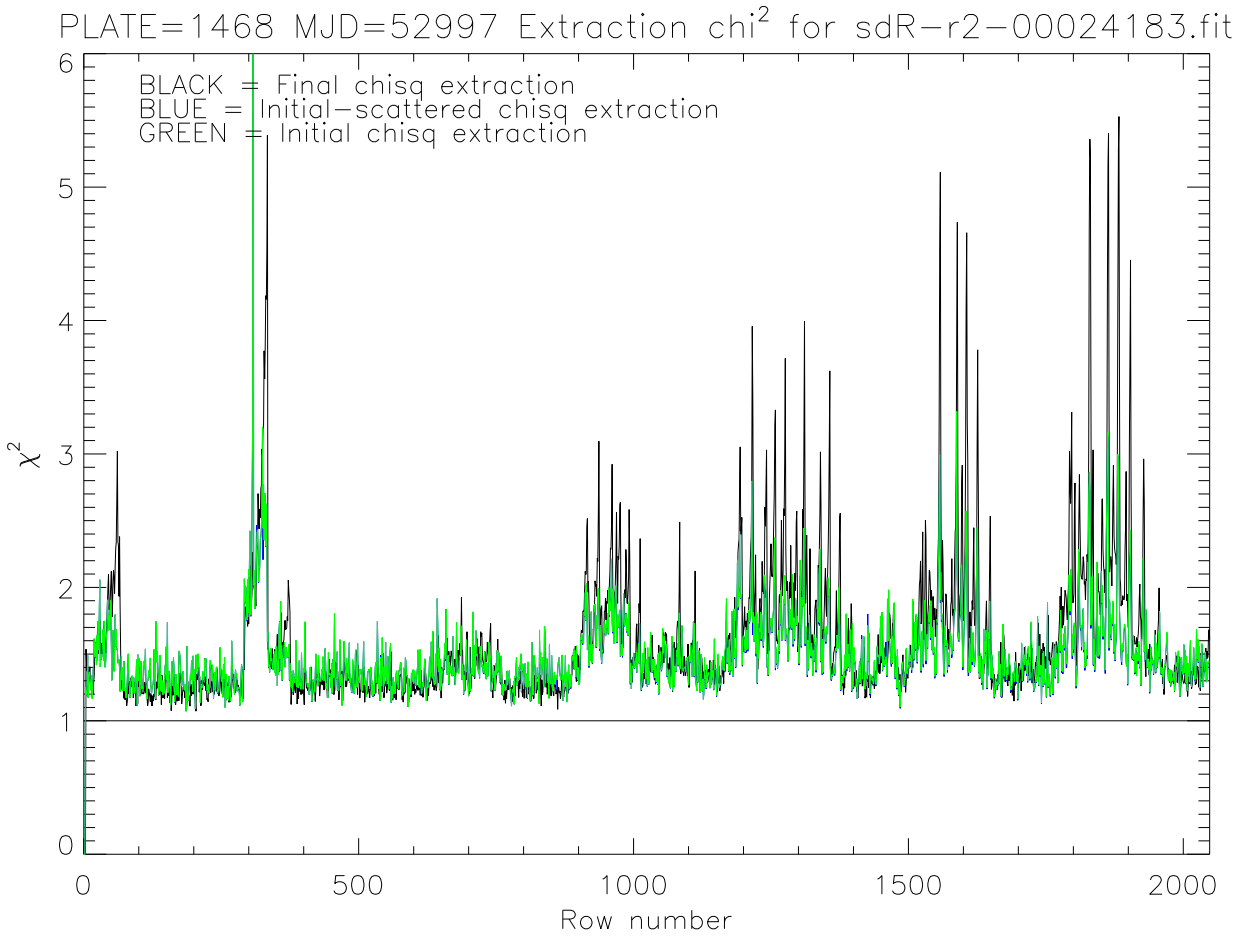

PLATE=1468 MJD=52997 Fiber−Flats for sdR−r2−00024179.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.294
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 20:41:33 2008

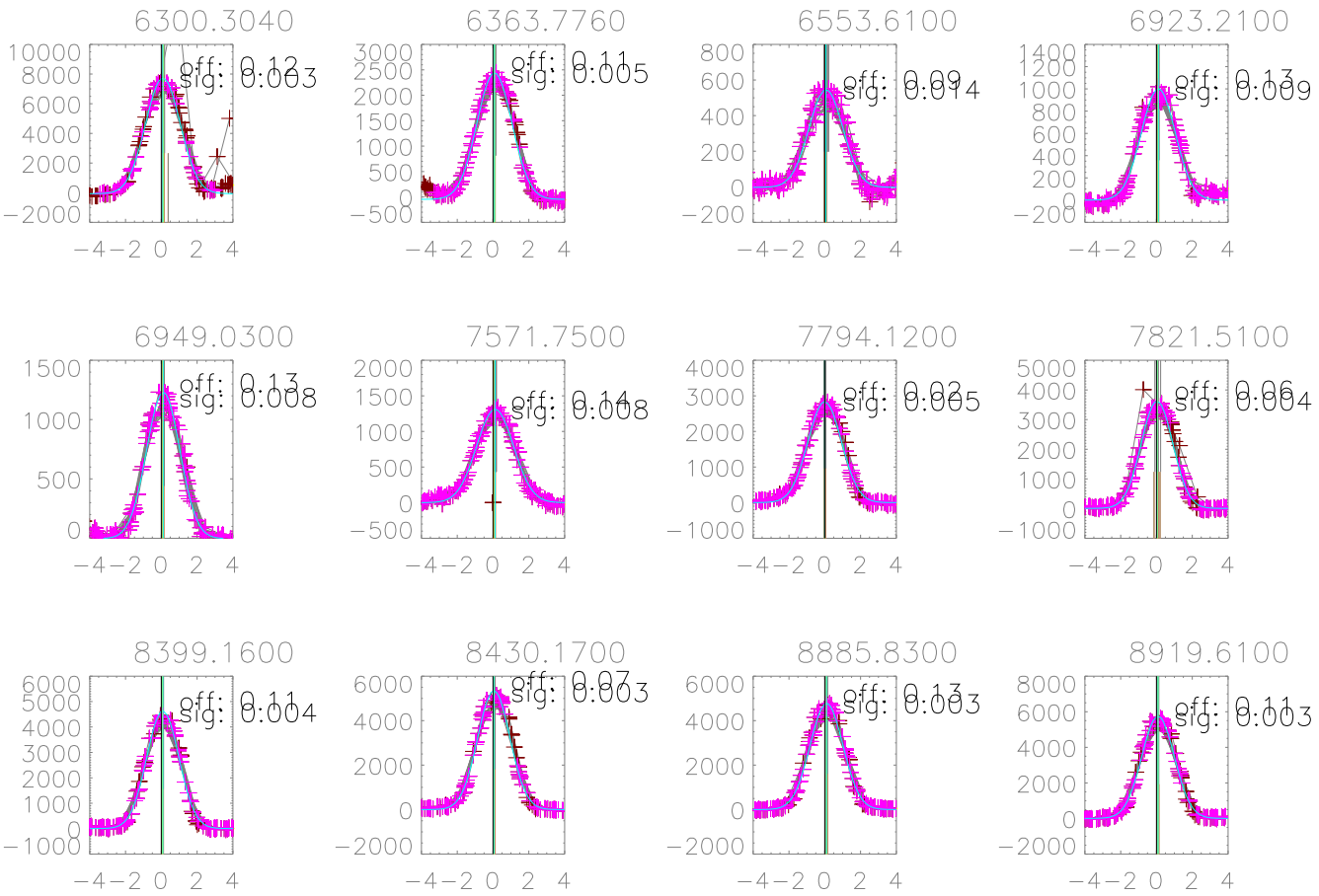

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r2-00024183.fi
60.9
50.9
50.9
36.4
36.4
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

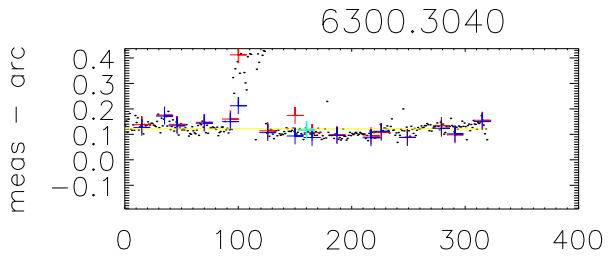

PLATE=1468 MJD=52997 Scattered Light before halo removal on sdR-r2-00024183.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.579
Max value = 57.753
Wed Feb 20 20:42:33 2008

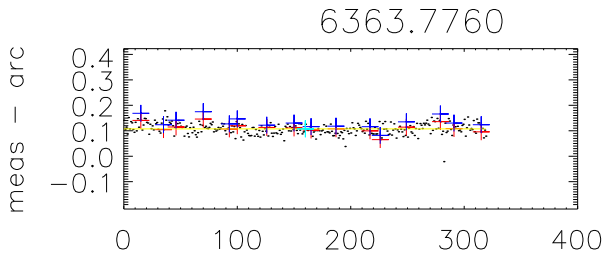

PLATE=1468 MJD=52997 Scattered Light on sdR-r2-00024183.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
24.1
13.2
9.8
24.1
13.2
13.2
13.2
13.2

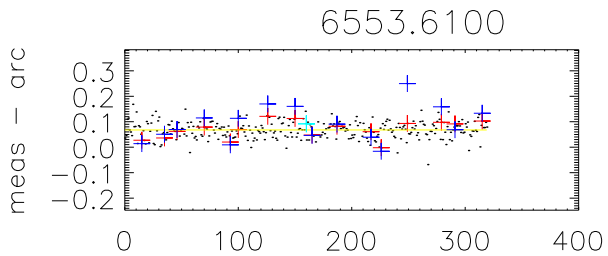

PLATE=1468 MJD=52997 Scattered Light on sdR-r2-00024183.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.210
Max value = 19.297
Wed Feb 20 20:45:37 2008

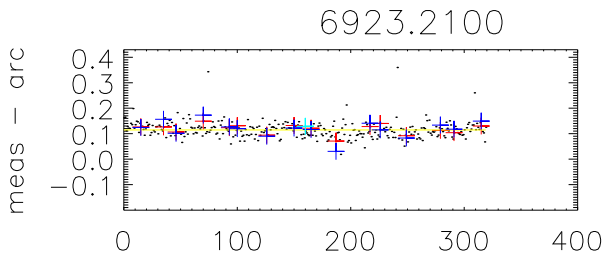

PLATE=1468 MJD=52997 Extraction chi^2 for sdR-r2-00024183.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

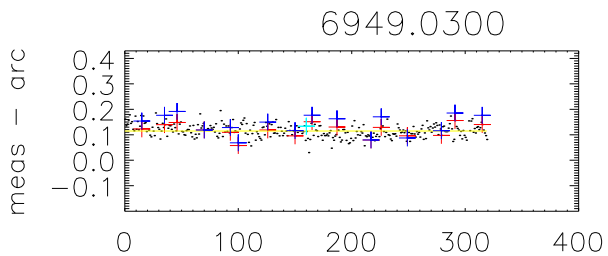

6300.3040
off: 0.12
sig: 0.003
6363.7760
off: 0.11
sig: 0.005
6553.6100
off: 0.09
sig: 0.014
6923.2100
off: 0.13
sig: 0.009
6949.0300
off: 0.13
sig: 0.008
7571.7500
off: 0.14
sig: 0.008
7794.1200
off: 0.02
sig: 0.005
7821.5100
off: 0.06
sig: 0.004
8399.1600
off: 0.11
sig: 0.004
8430.1700
off: 0.07
sig: 0.003
8885.8300
off: 0.13
sig: 0.003
8919.6100
off: 0.11
sig: 0.003

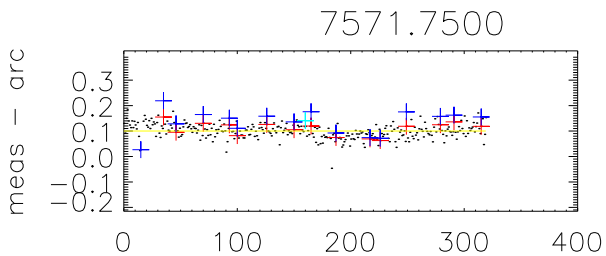

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

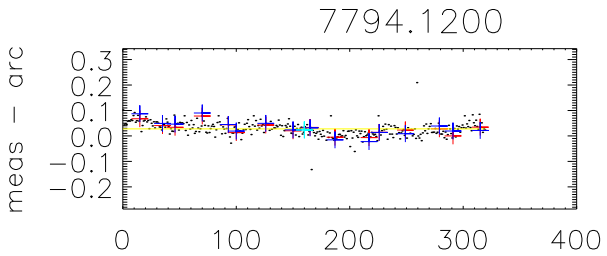

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

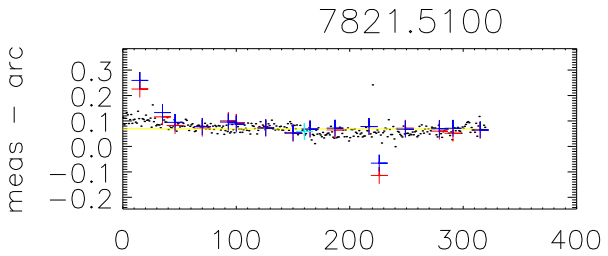

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

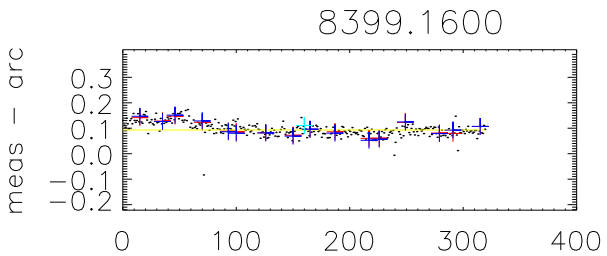

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

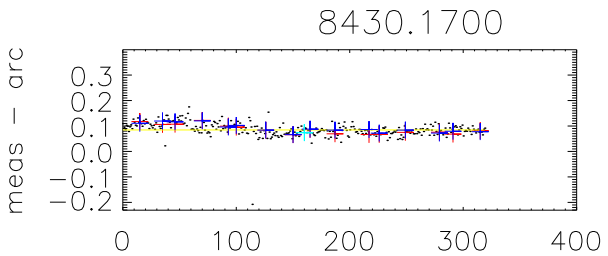

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

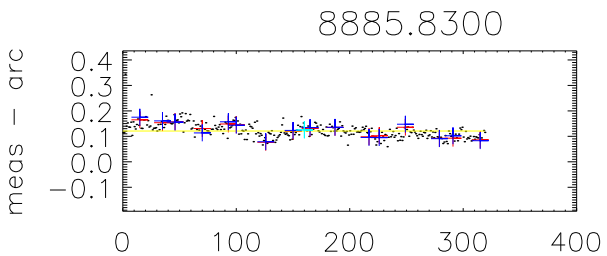

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

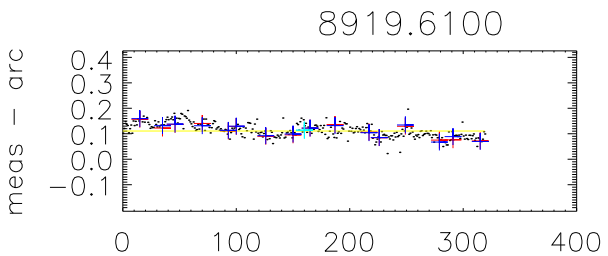

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

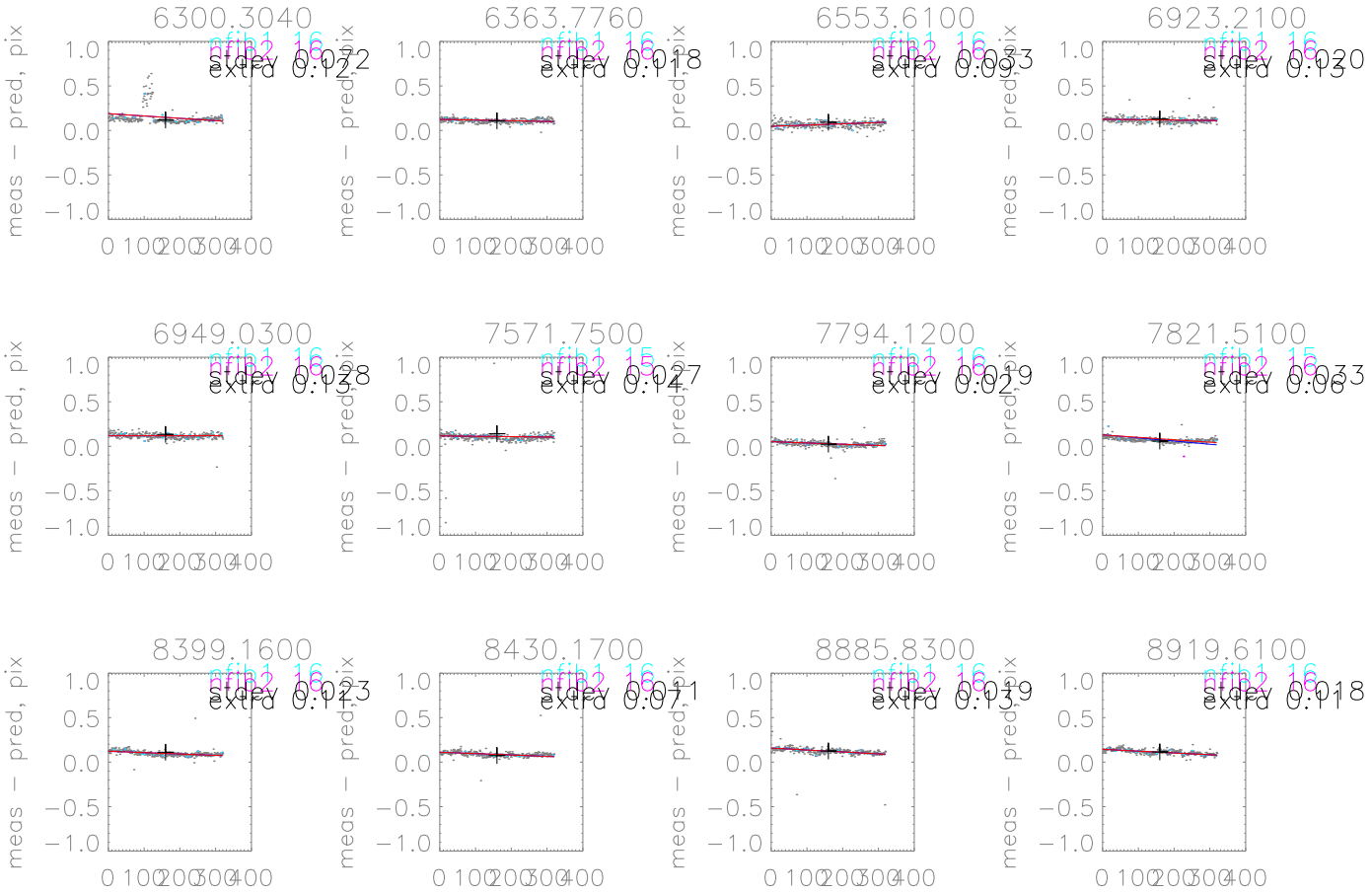

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

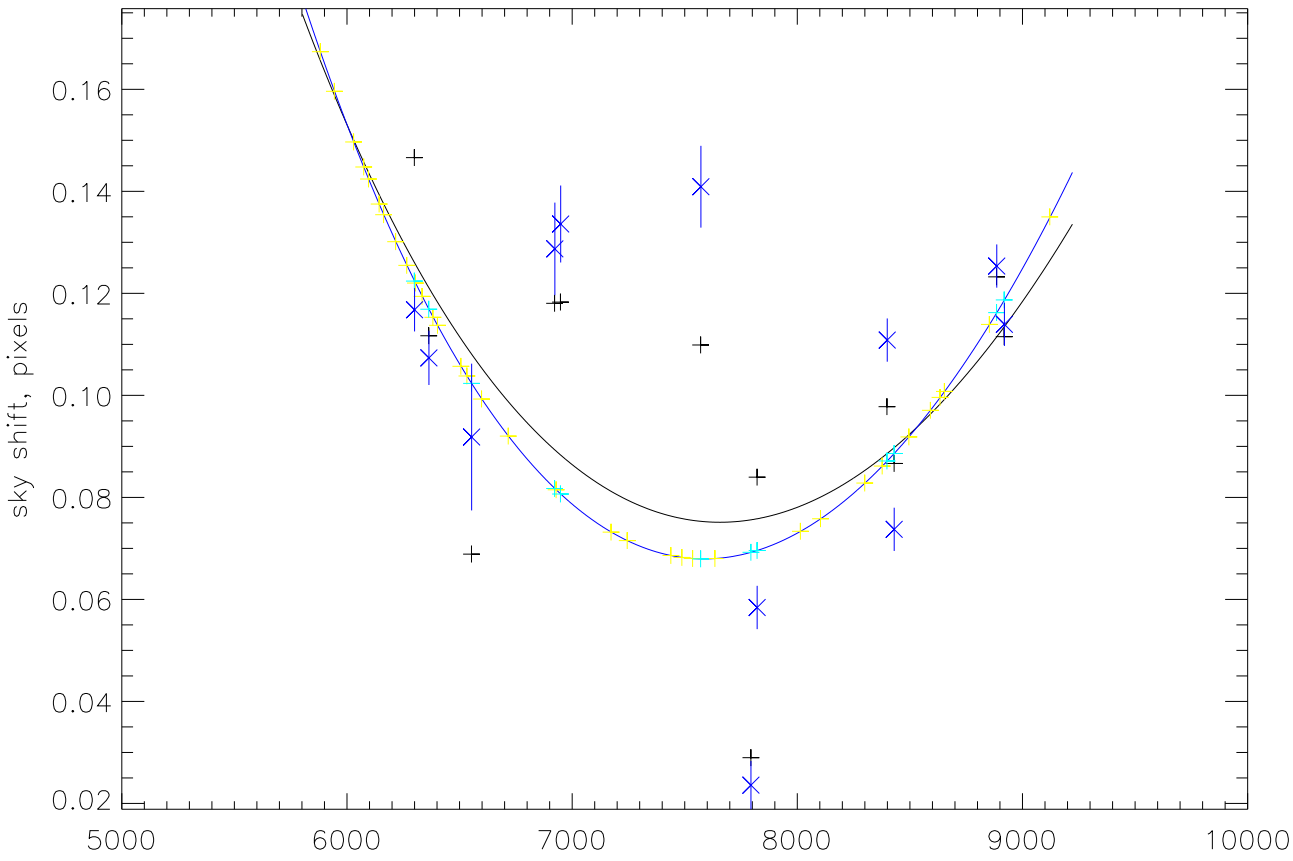

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

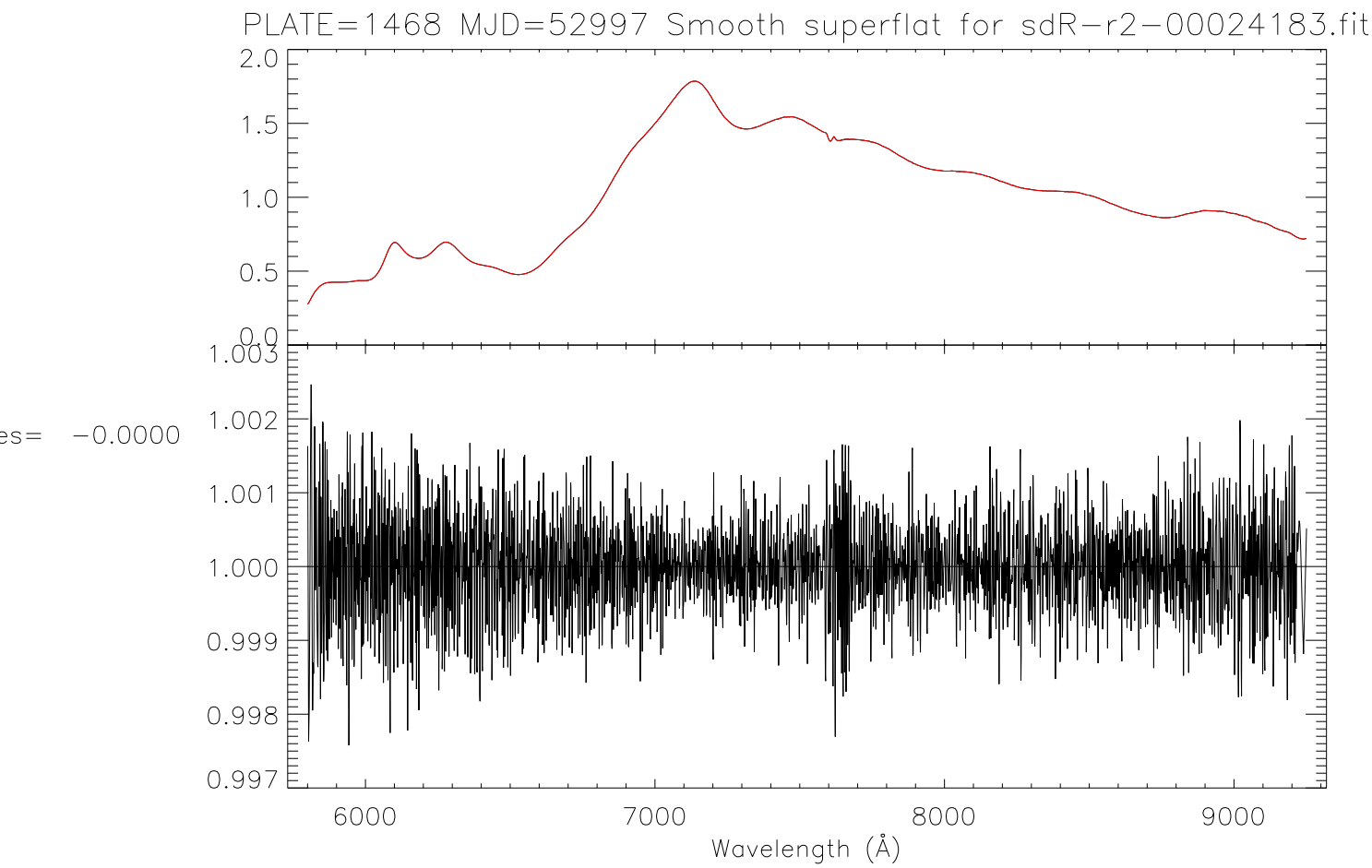

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

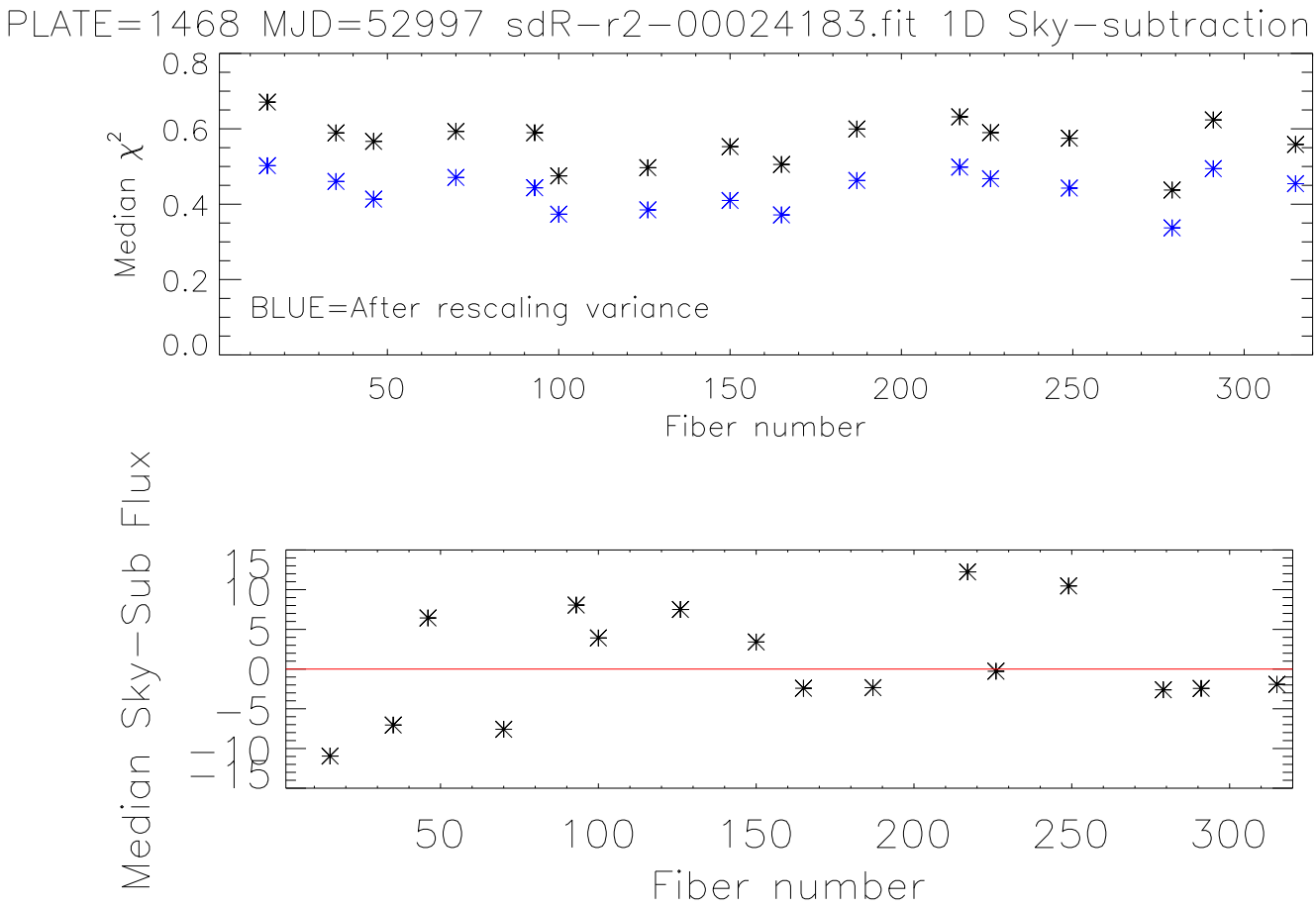

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

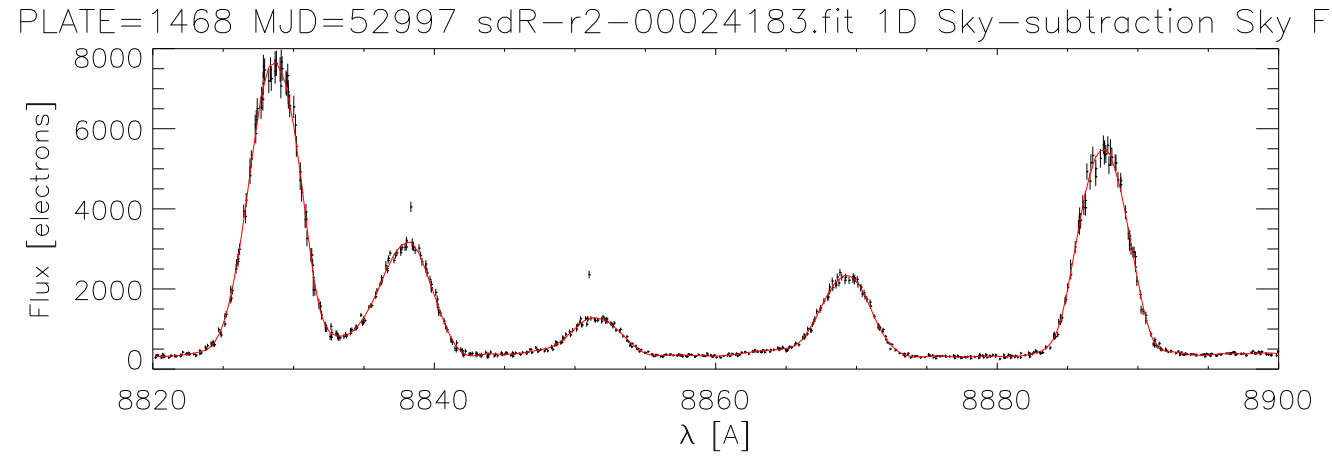

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

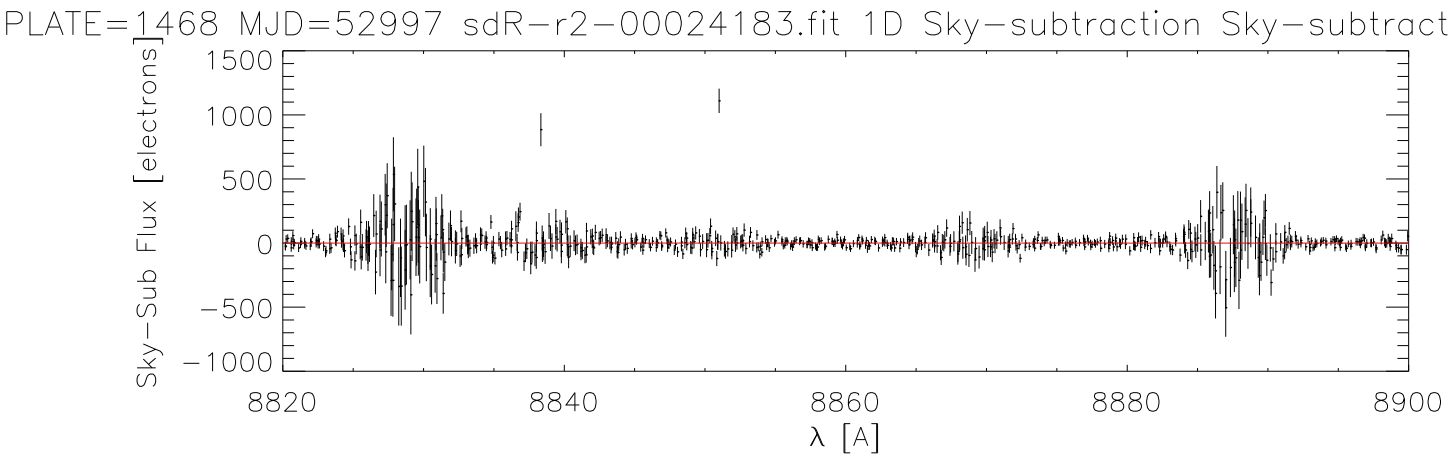

6300.3040
mfib1 16
mfib2 16
stdev 0.022
extra 0.12
6363.7760
mfib1 16
mfib2 16
stdev 0.018
extra 0.11
6553.6100
mfib1 16
mfib2 16
stdev 0.033
extra 0.09
6923.2100
mfib1 16
mfib2 16
stdev 0.020
extra 0.13
6949.0300
mfib1 16
mfib2 16
stdev 0.028
extra 0.13
7571.7500
mfib1 15
mfib2 16
stdev 0.027
extra 0.14
7794.1200
mfib1 16
mfib2 16
stdev 0.029
extra 0.02
7821.5100
mfib1 15
mfib2 16
stdev 0.033
extra 0.06
8399.1600
mfib1 16
mfib2 16
stdev 0.023
extra 0.11
8430.1700
mfib1 16
mfib2 16
stdev 0.071
extra 0.07
8885.8300
mfib1 16
mfib2 16
stdev 0.039
extra 0.13
8919.6100
mfib1 16
mfib2 16
stdev 0.018
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

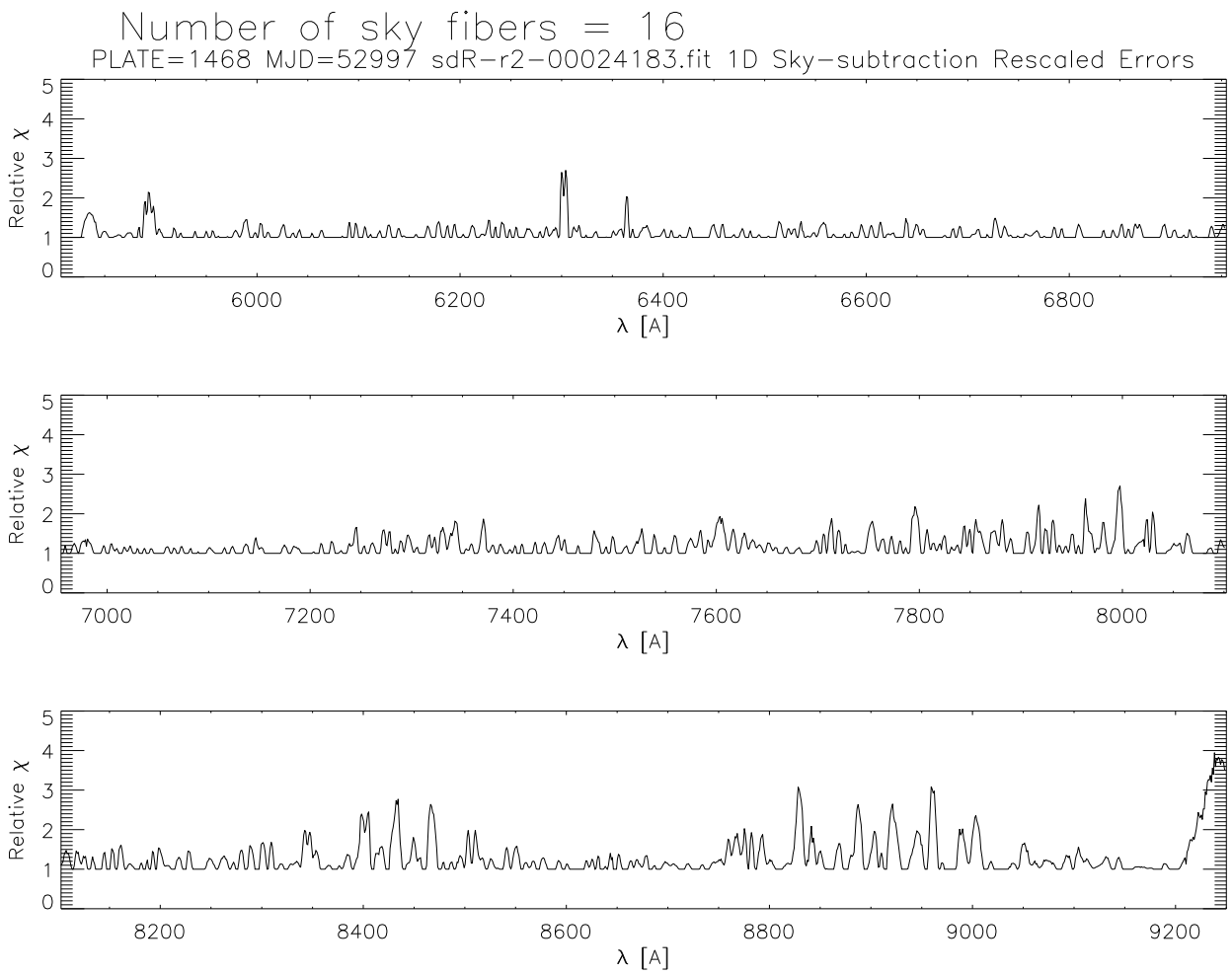

sky shift, pixels
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
5000
6000
7000
8000
9000
10000

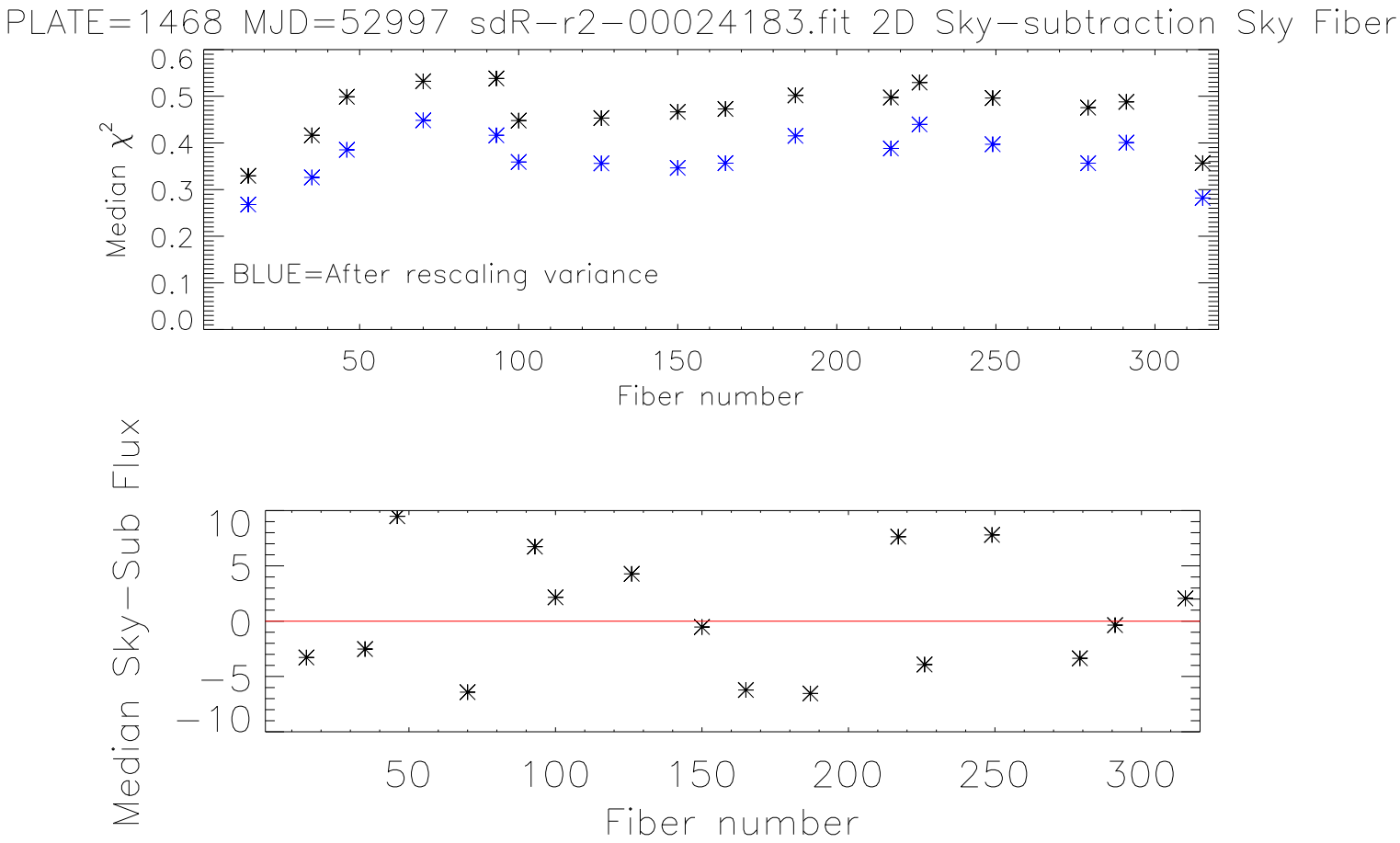

PLATE=1468 MJD=52997 Smooth superflat for sdR-r2-00024183.fit
2.0
1.5
1.0
0.5
0.0
1.003
1.002
1.001
1.000
0.999
0.998
0.997
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

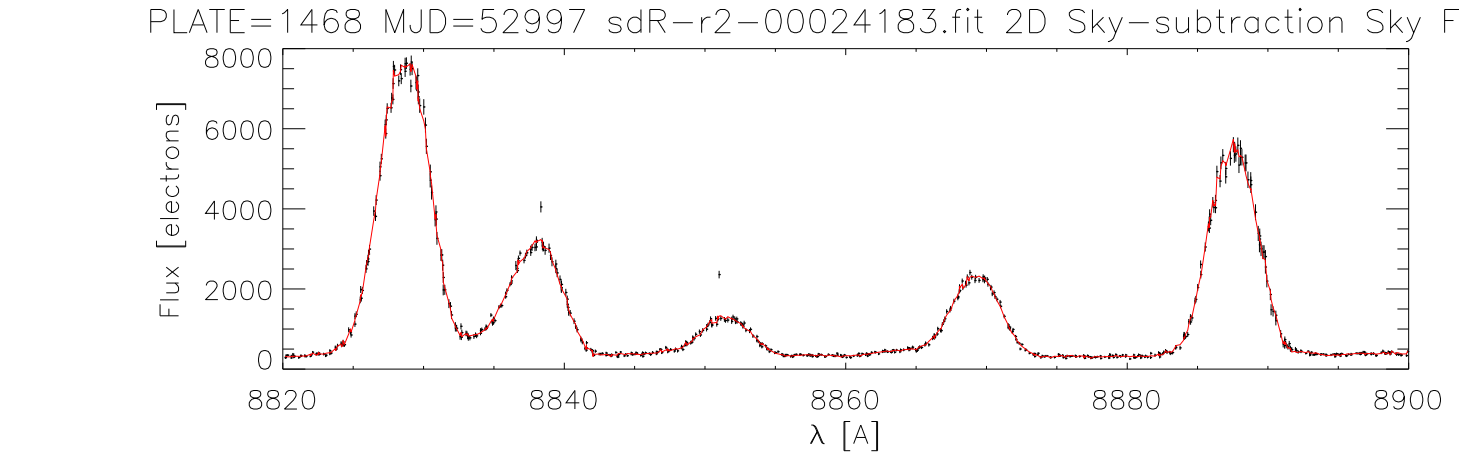

PLATE=1468 MJD=52997 sdR-r2-00024183.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

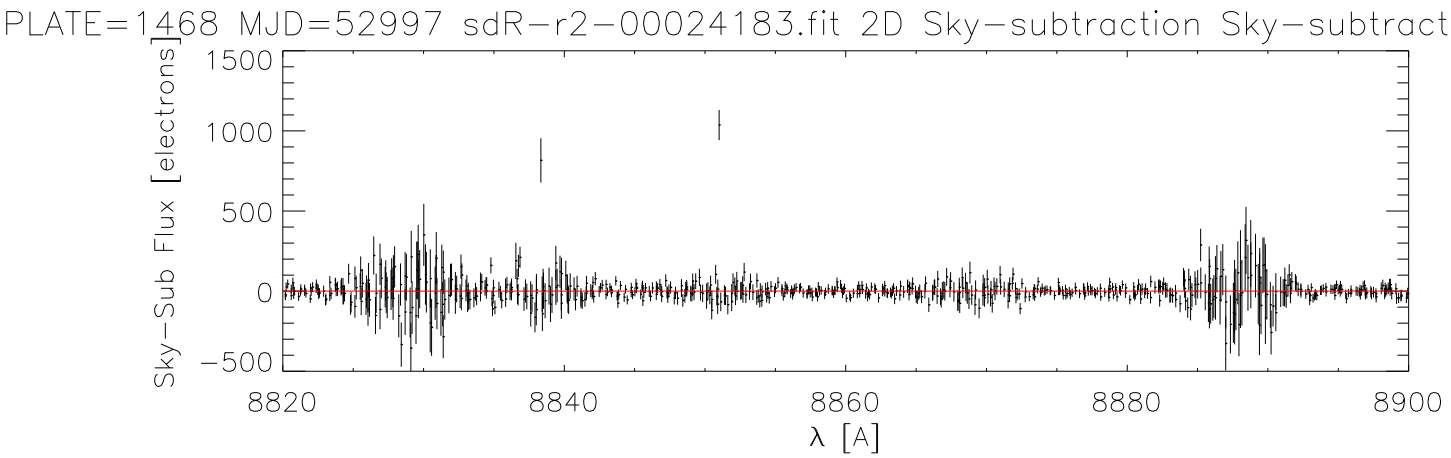

PLATE=1468 MJD=52997 sdR-r2-00024183.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

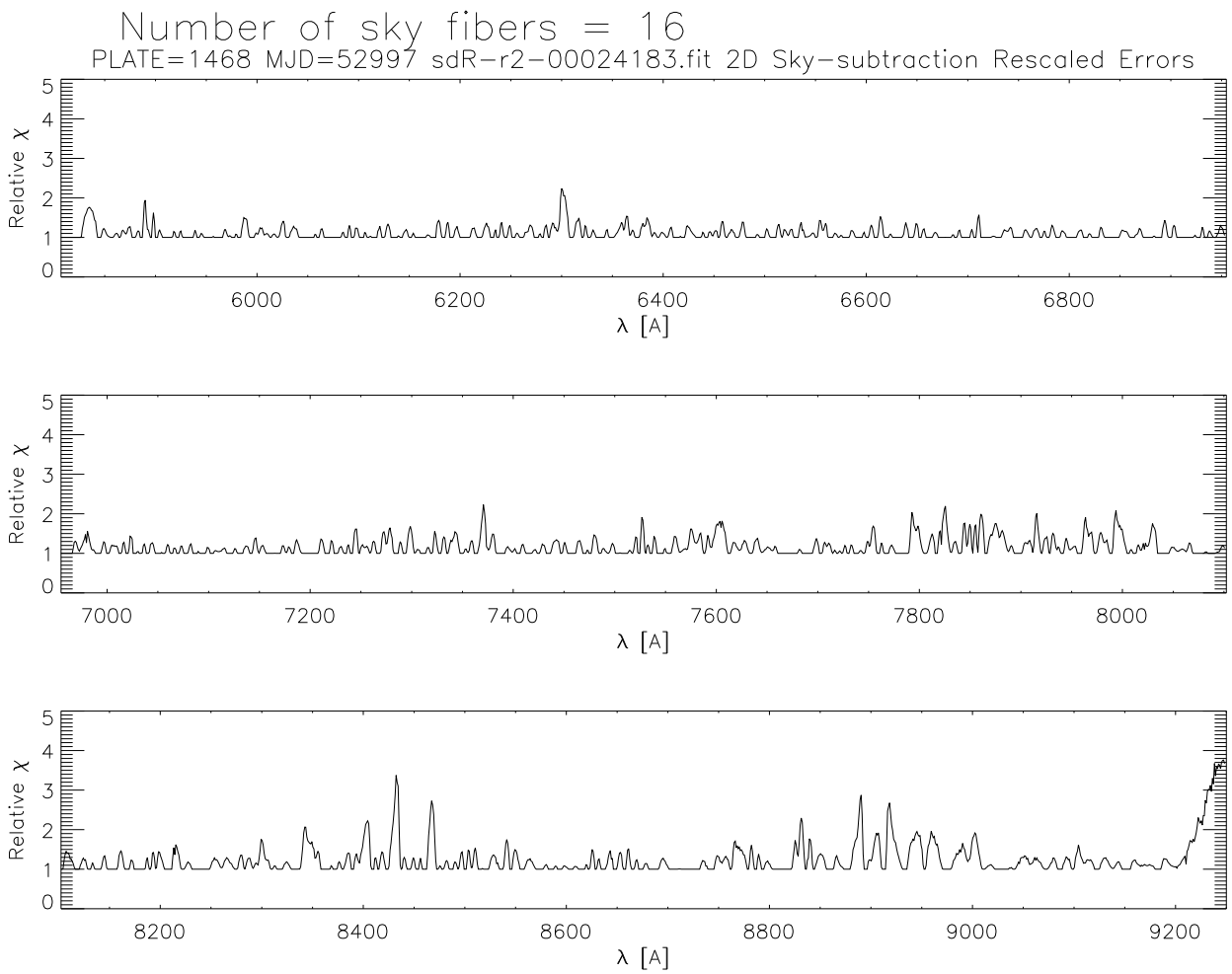

PLATE=1468 MJD=52997 sdR-r2-00024183.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

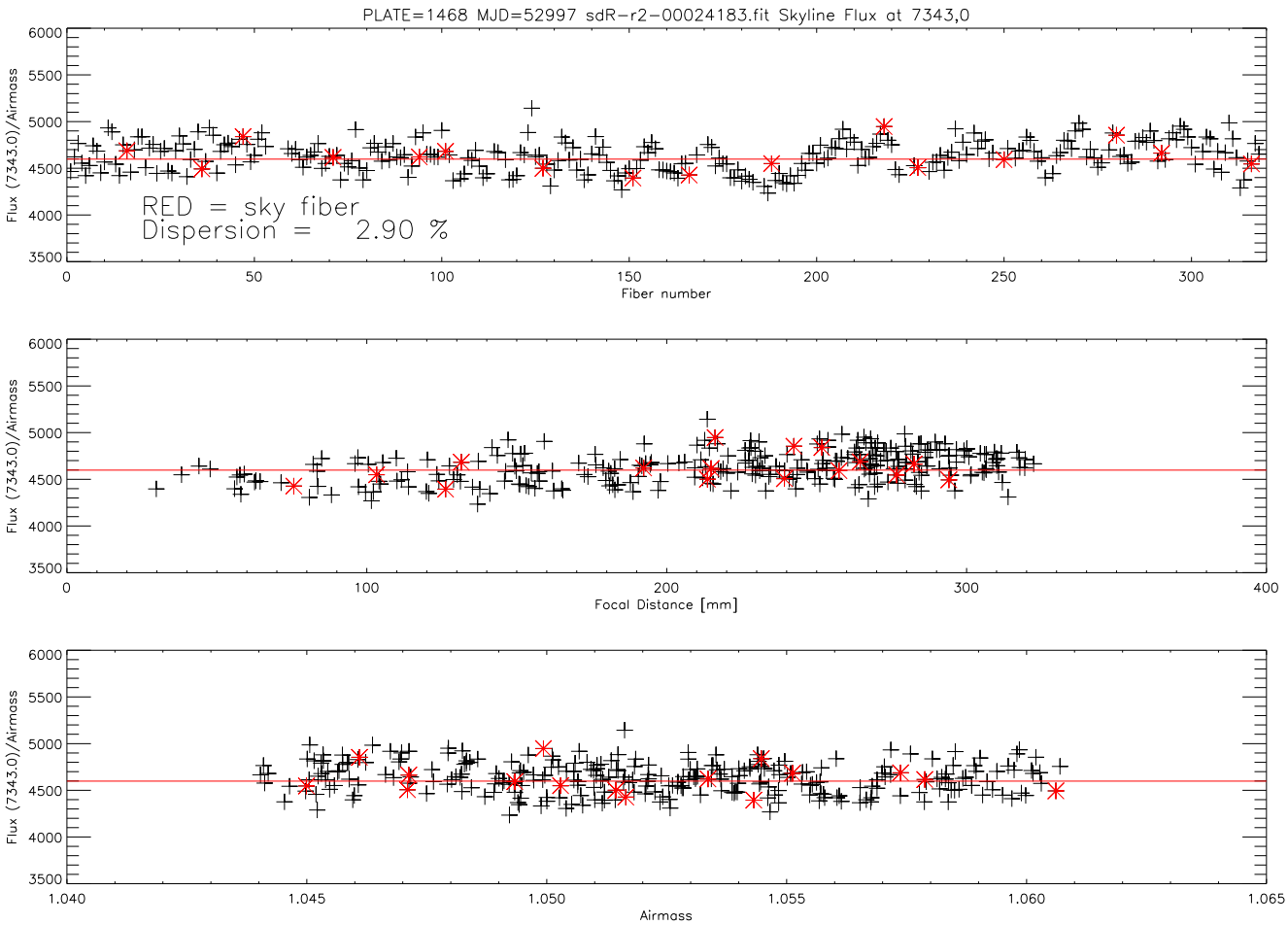

Number of sky fibers = 16
PLATE=1468 MJD=52997 sdR-r2-00024183.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

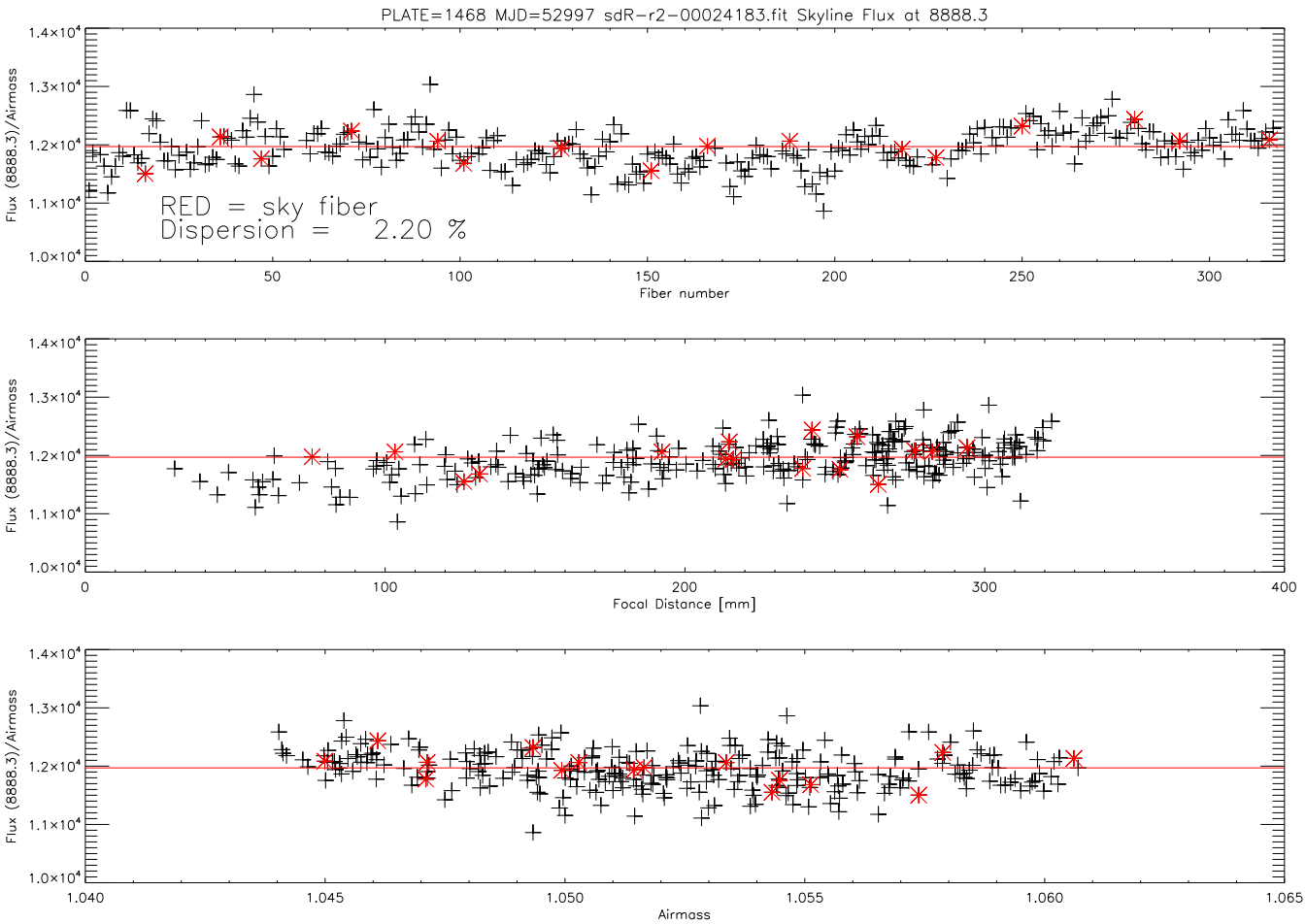

PLATE=1468 MJD=52997 sdR-r2-00024183.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=1468 MJD=52997 sdR-r2-00024183.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1468 MJD=52997 sdR-r2-00024183.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=1468 MJD=52997 sdR-r2-00024183.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=1468 MJD=52997 sdR-r2-00024183.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.90 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1468 MJD=52997 sdR-r2-00024183.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.20 %
Fiber number
Focal Distance [mm]
Airmass