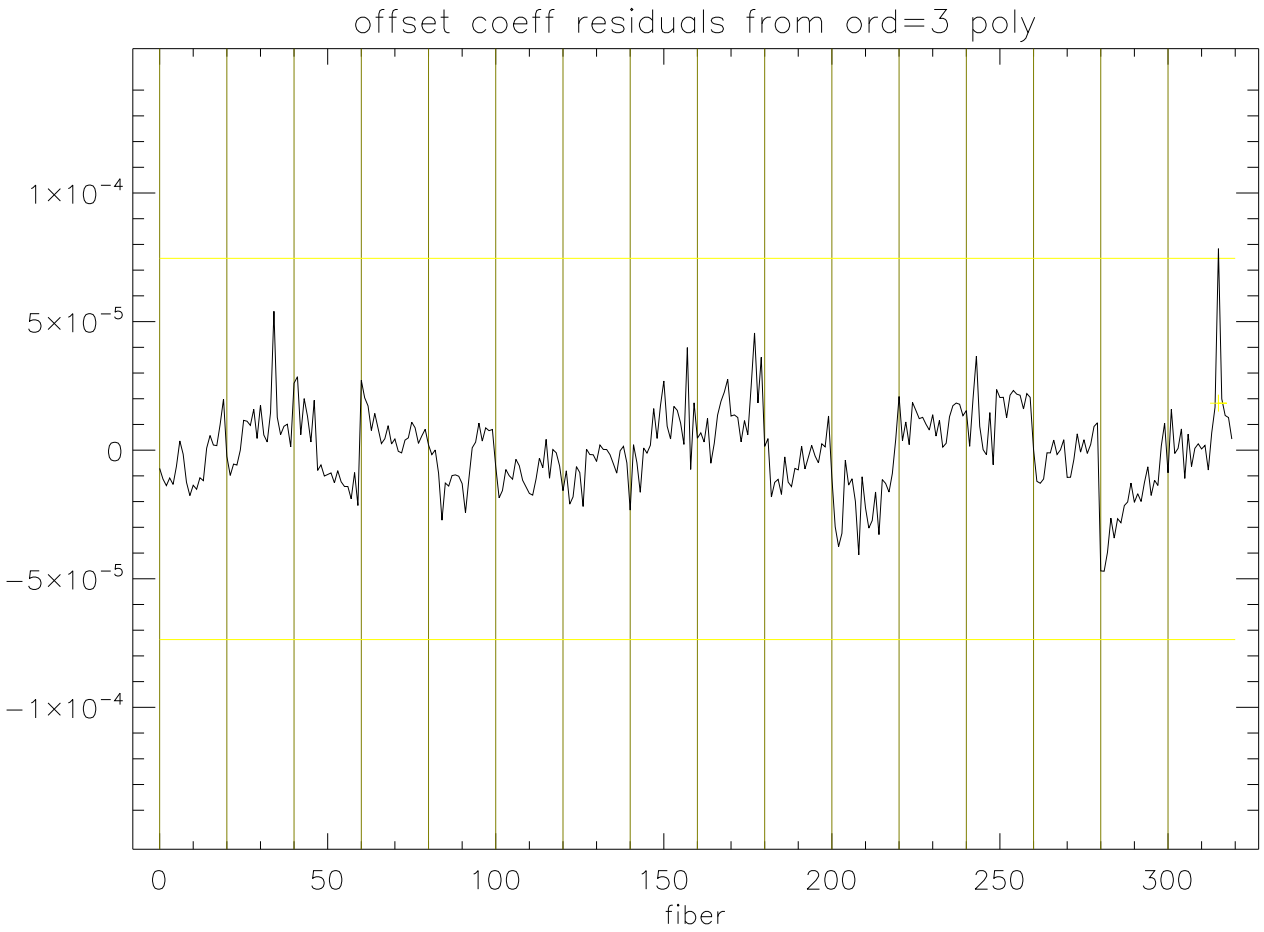
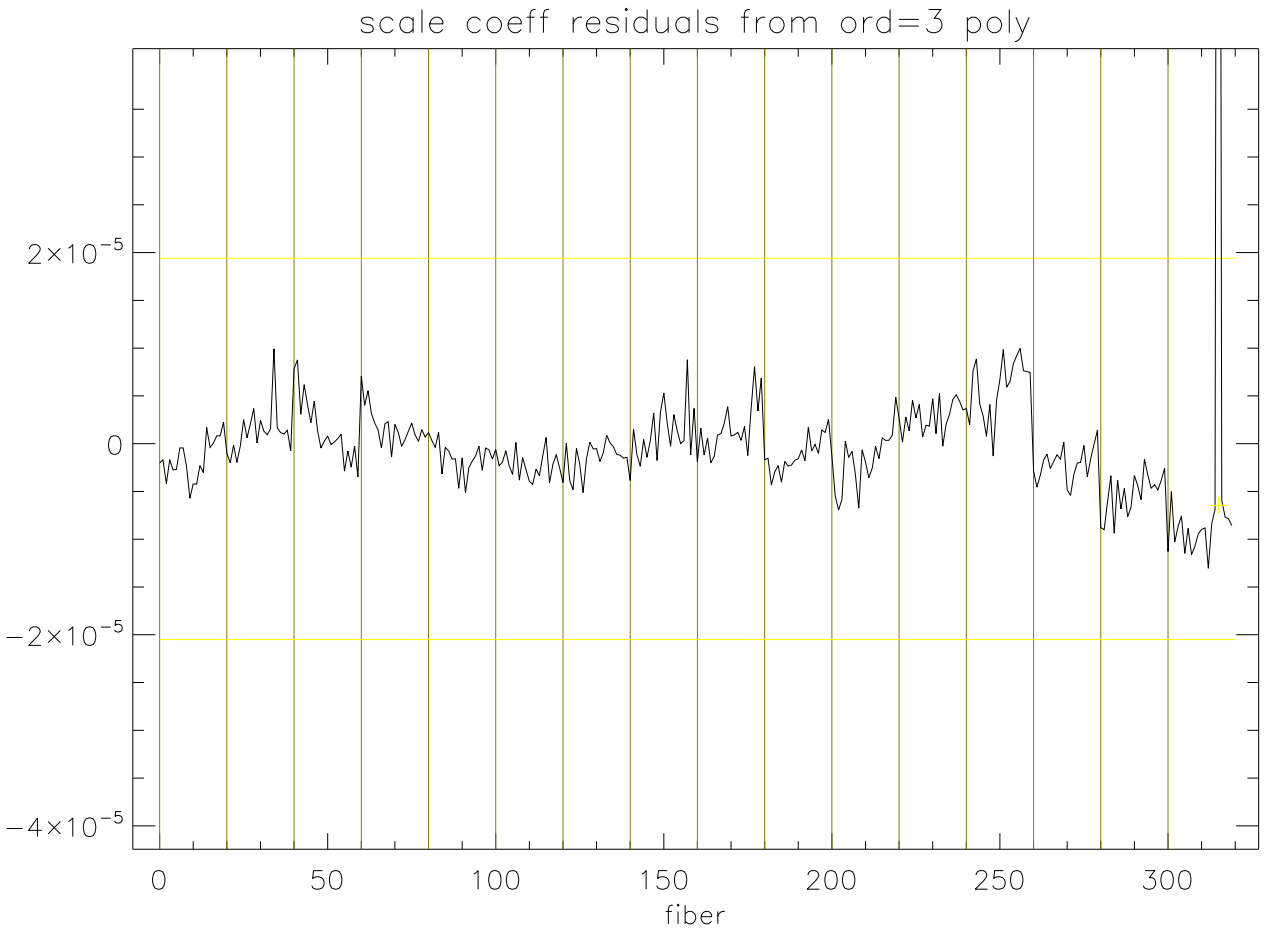
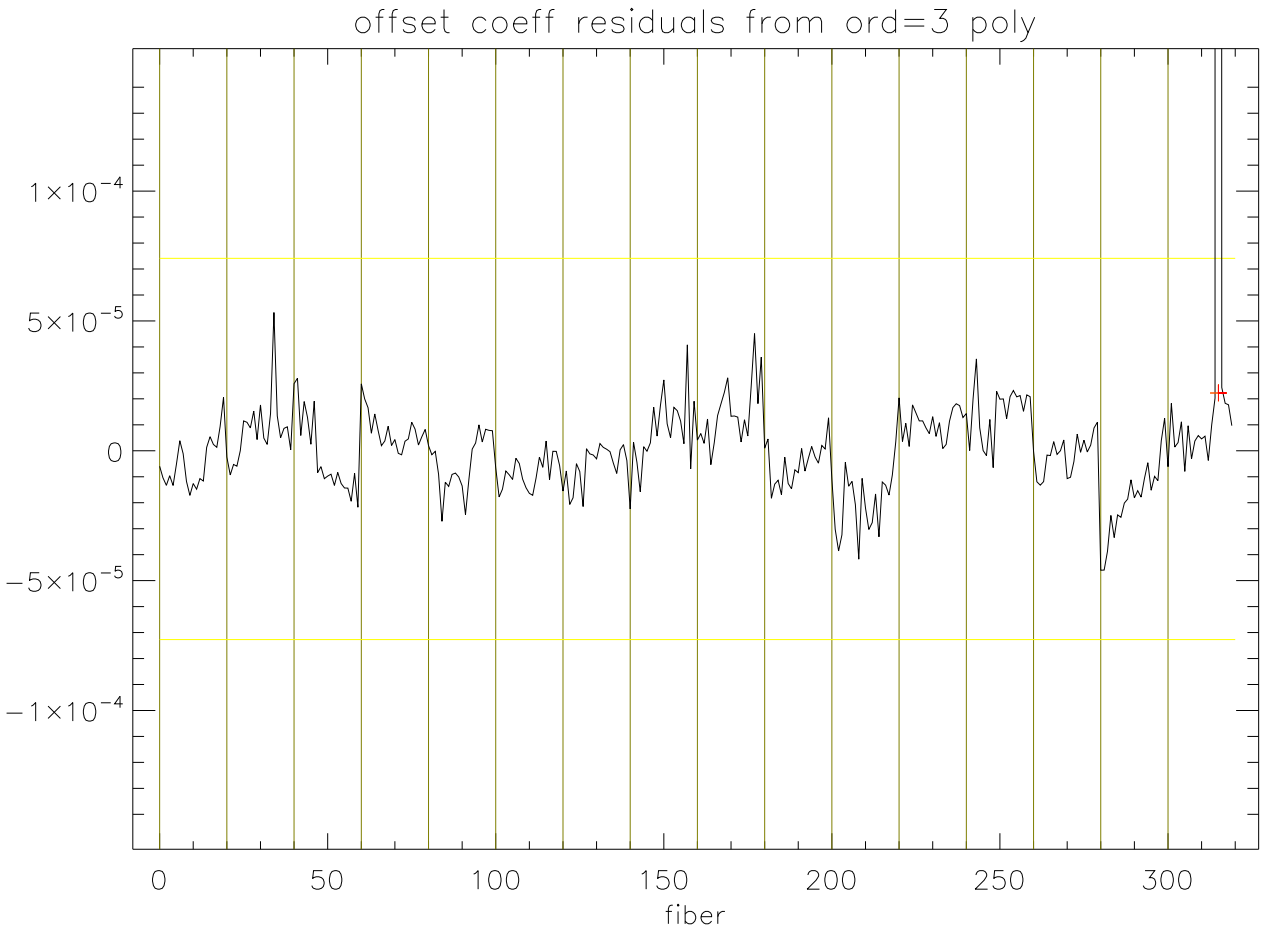
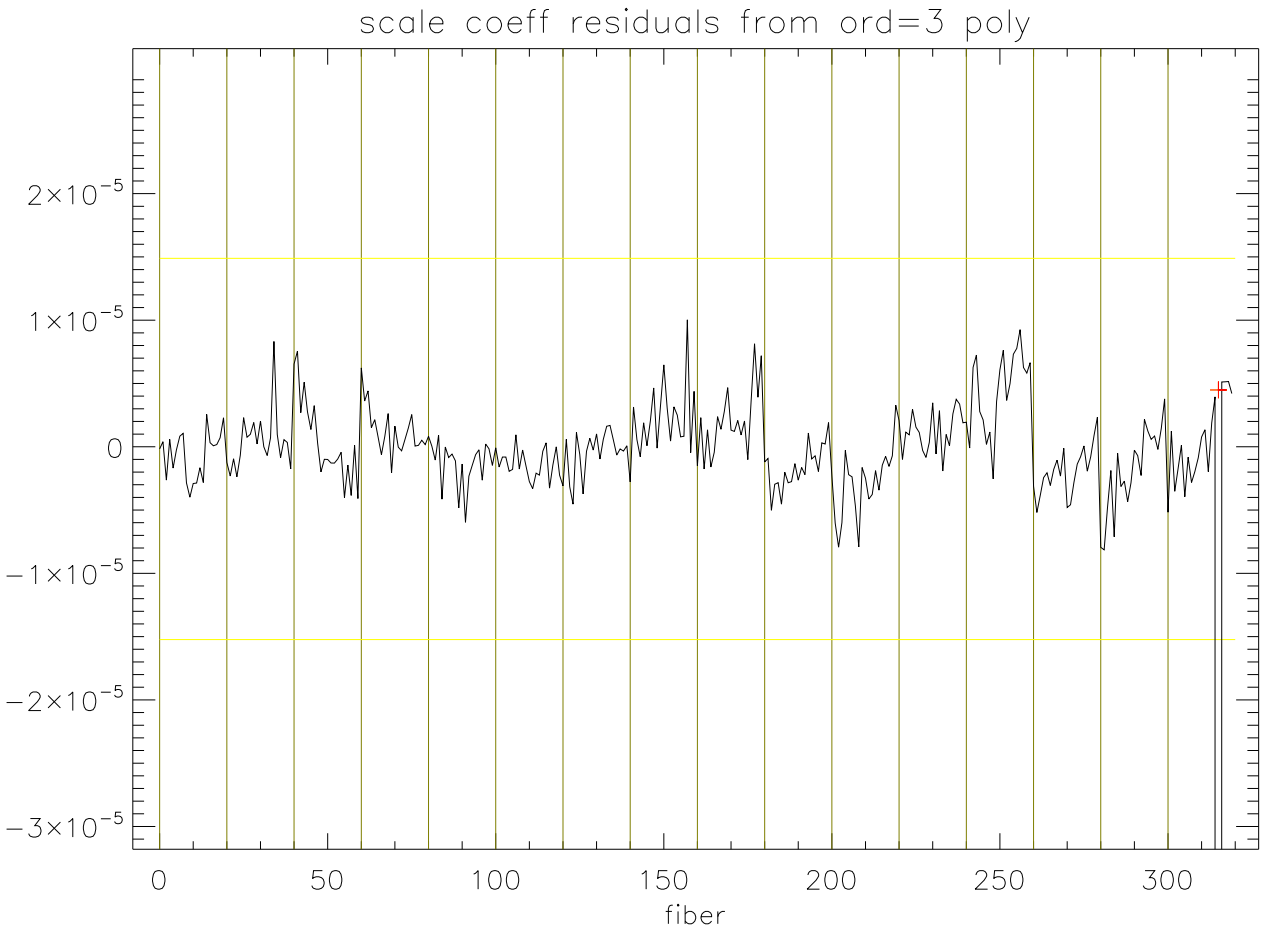
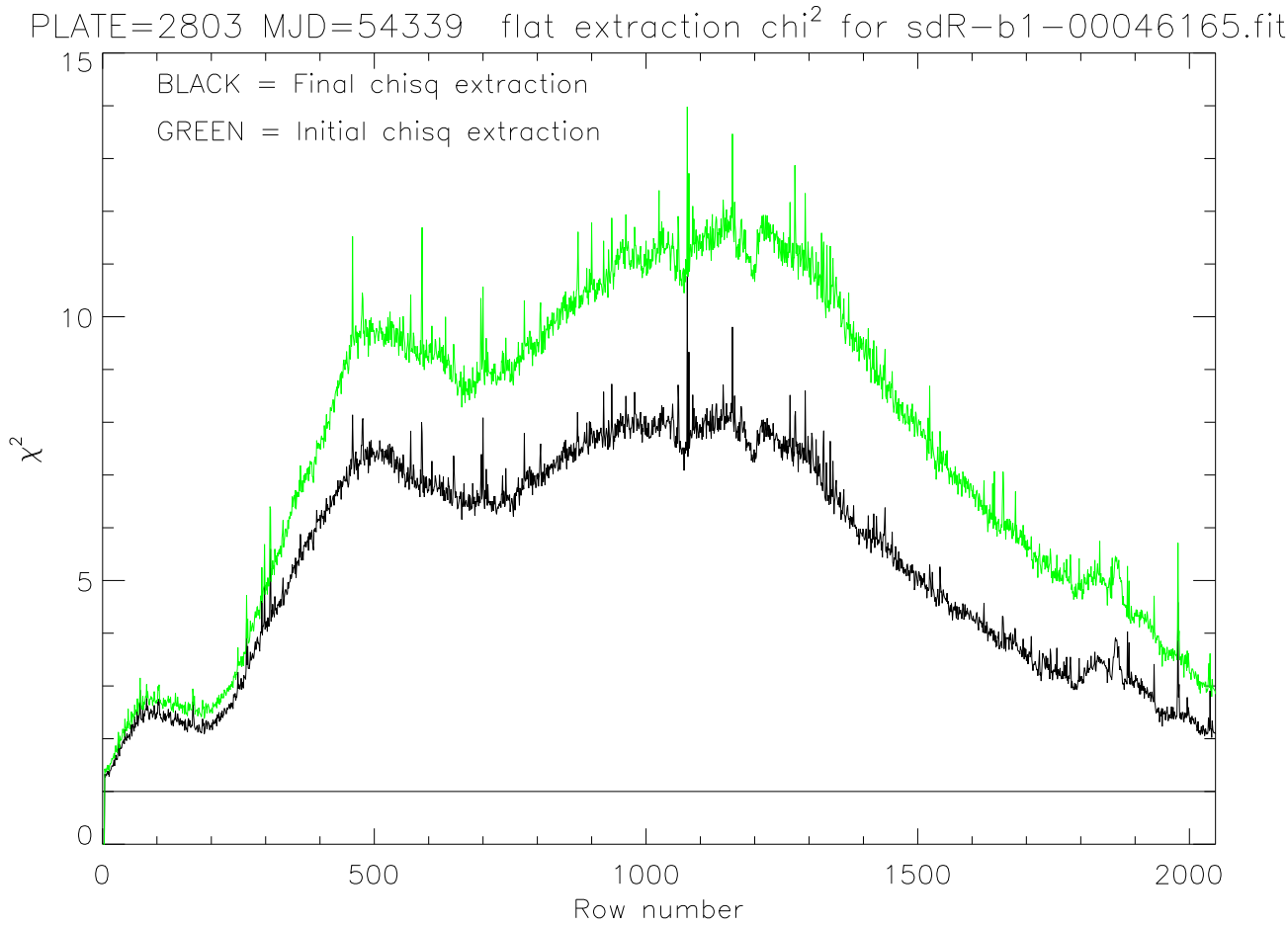
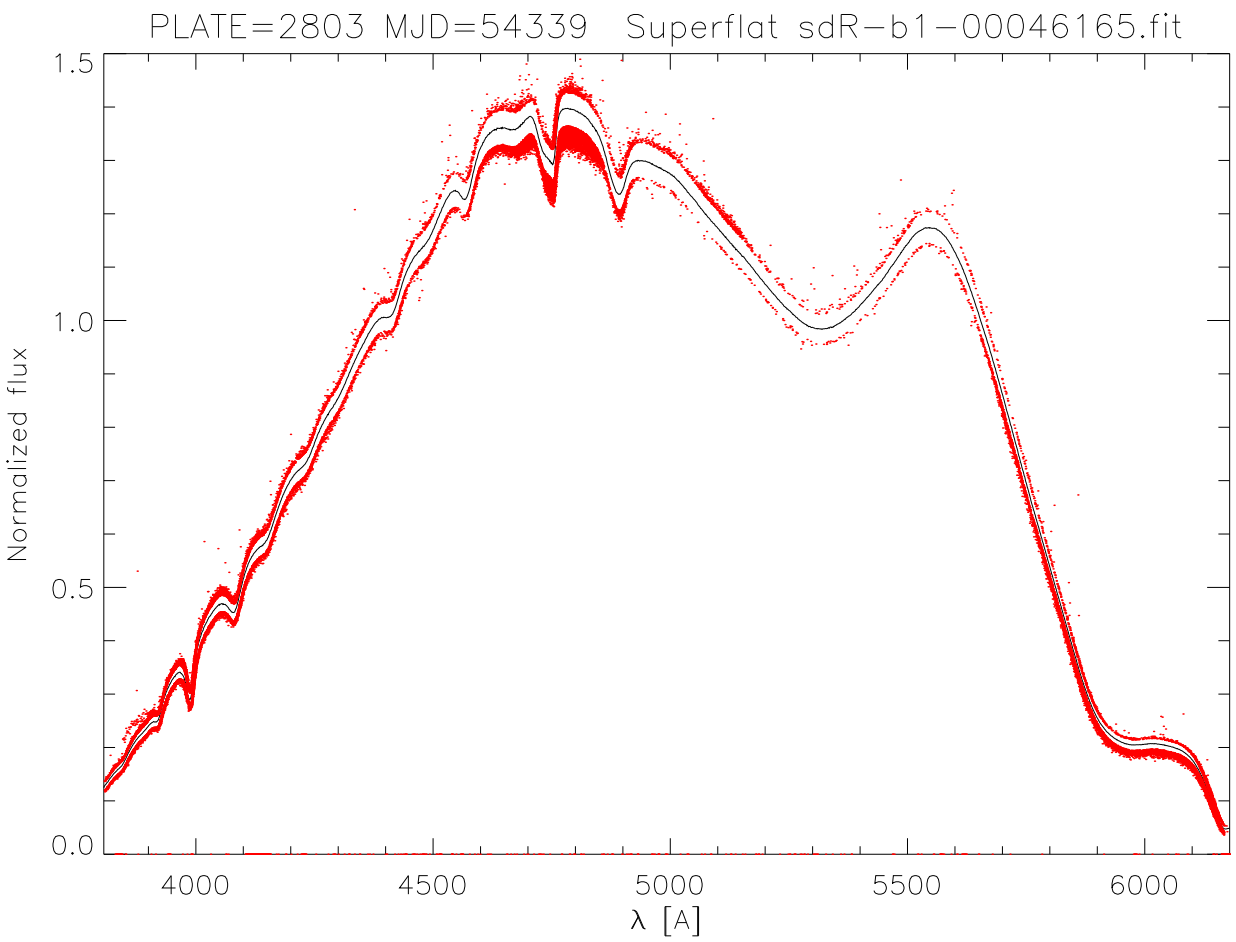

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

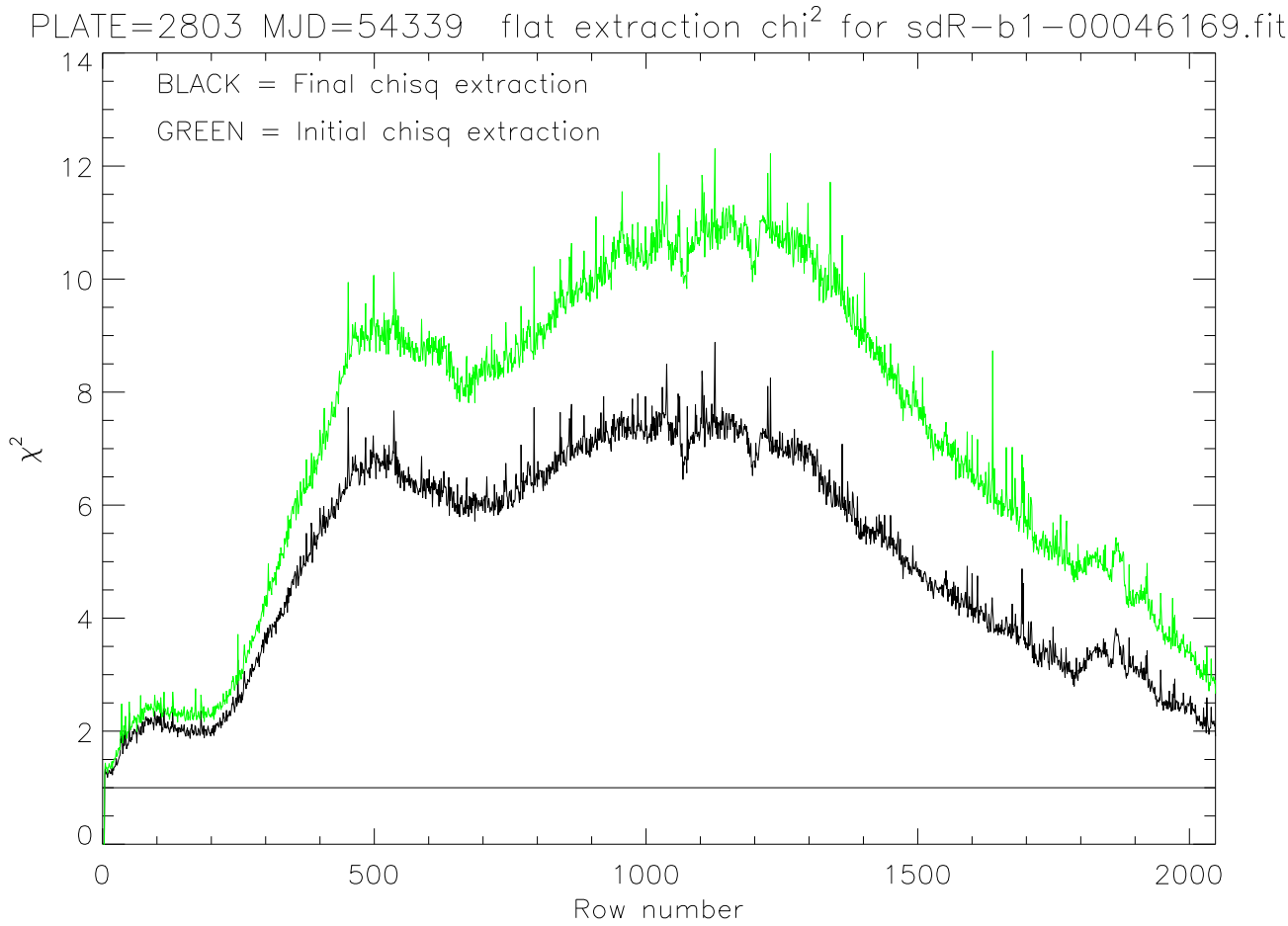

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

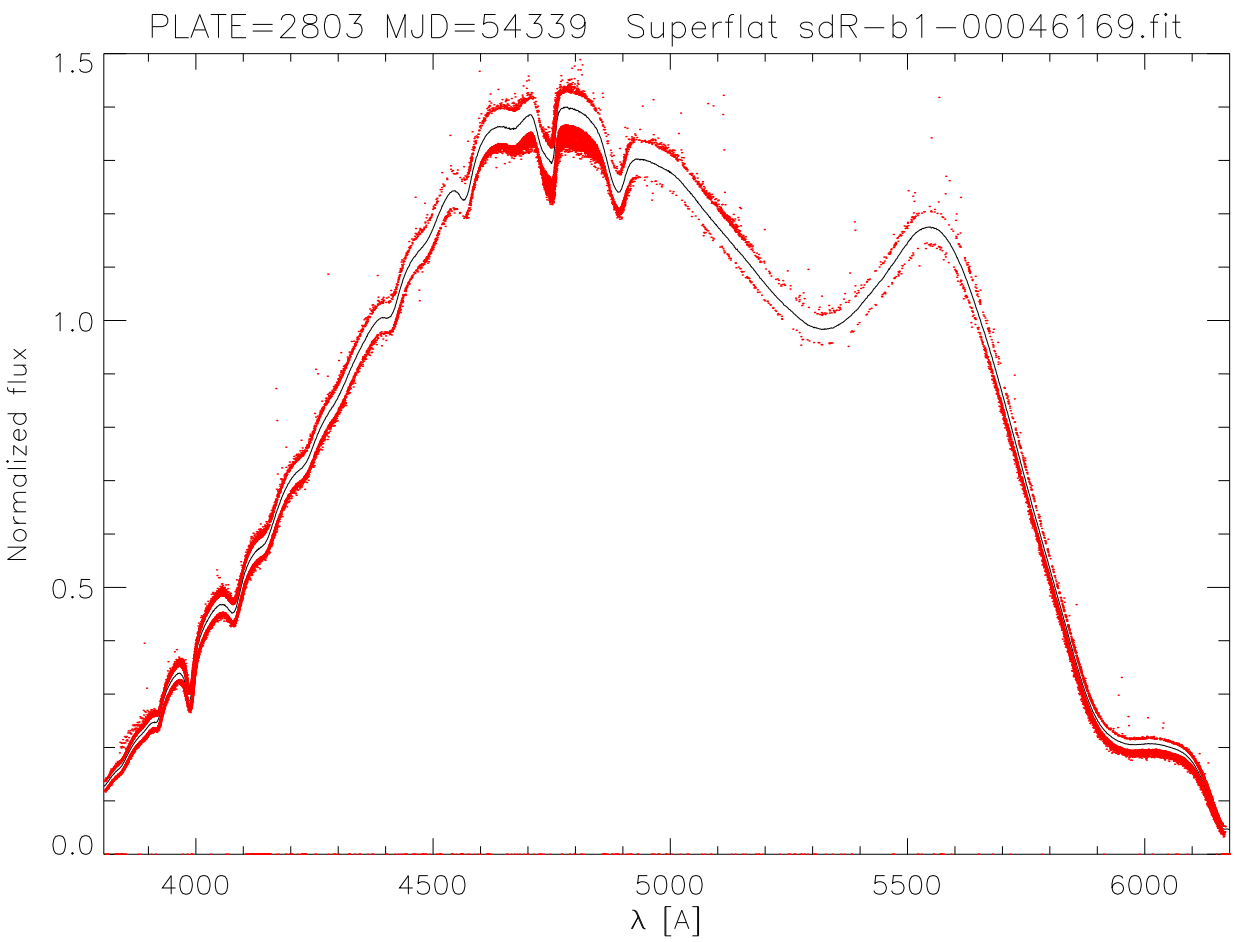

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

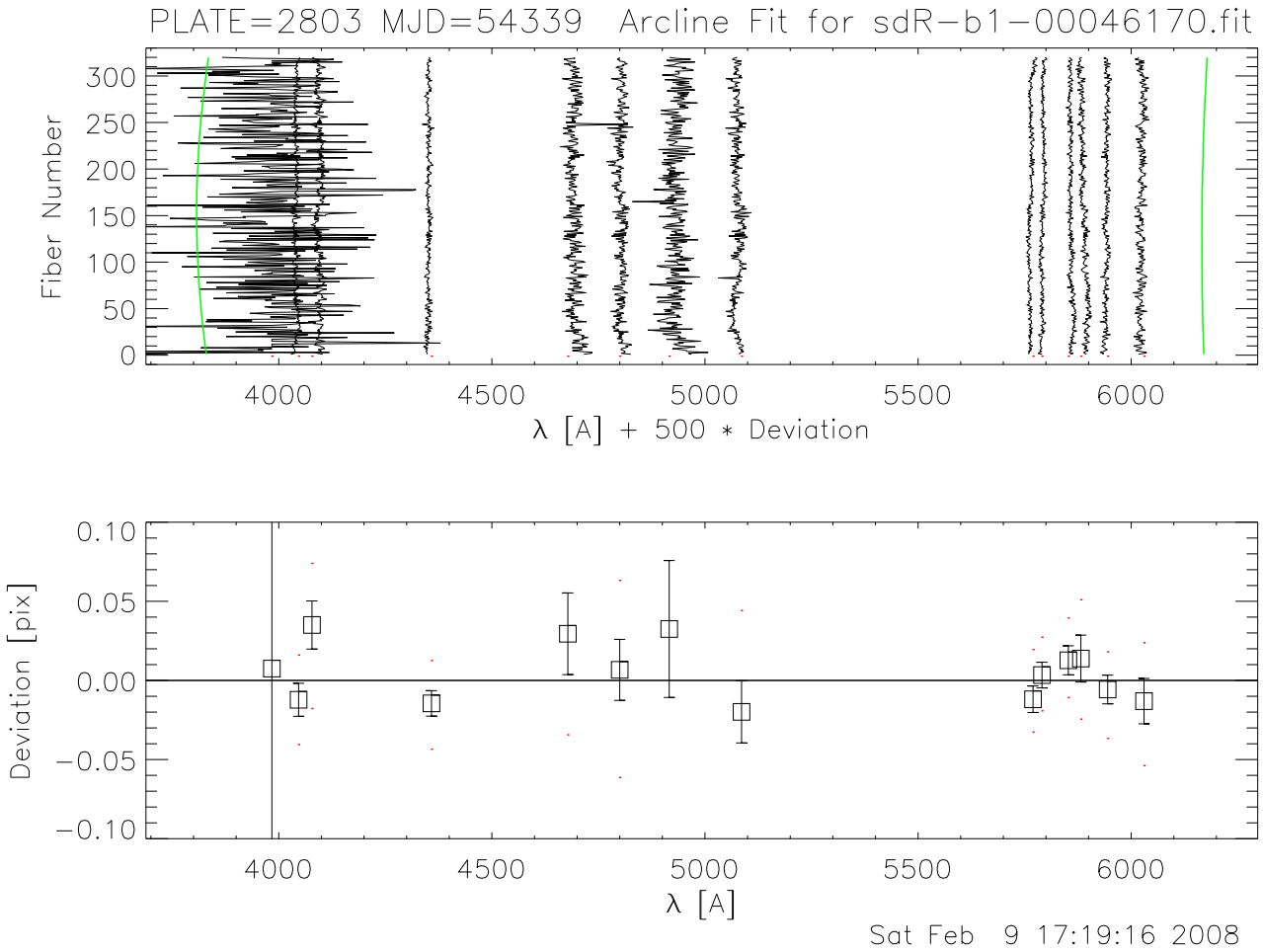

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

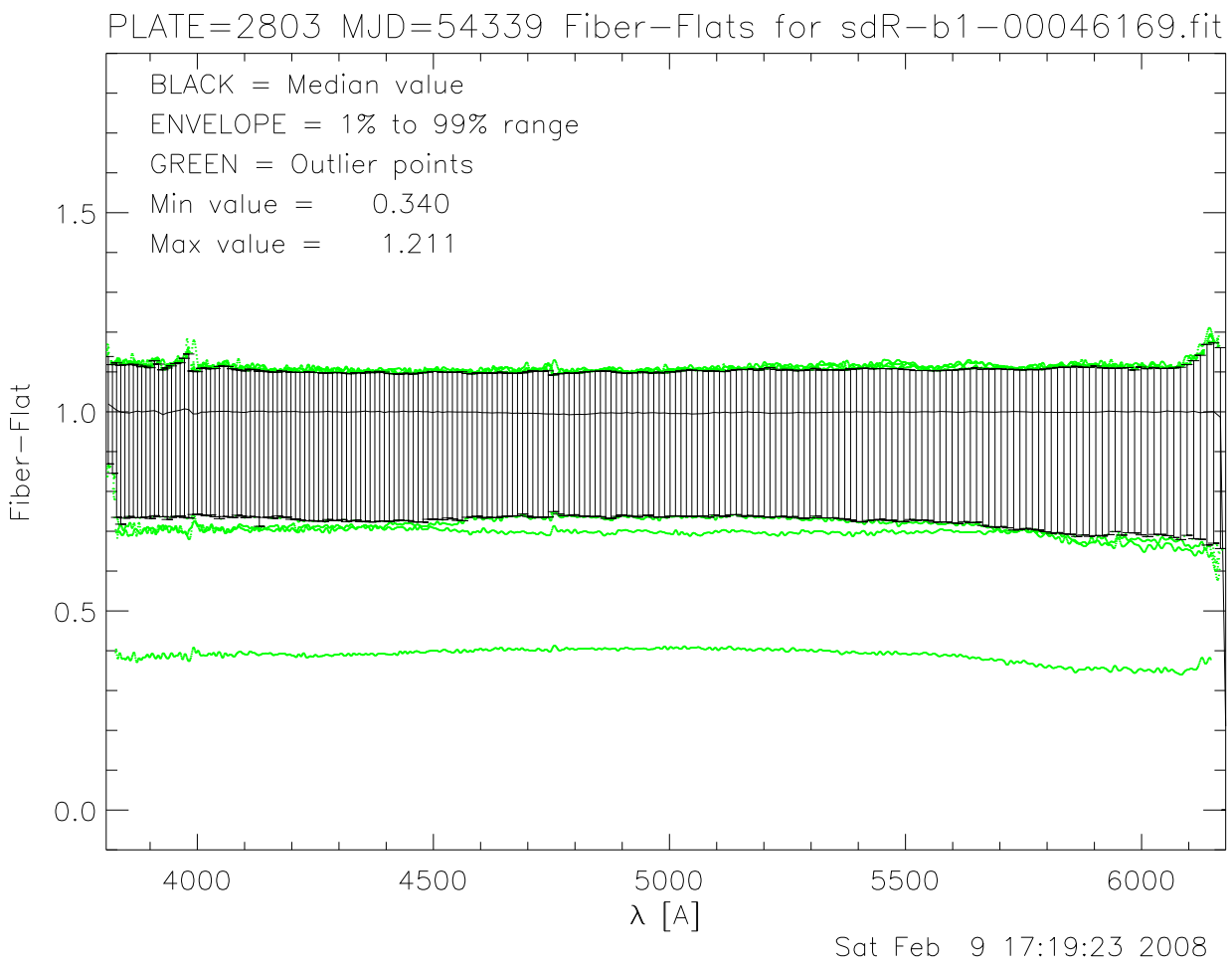

PLATE=2803 MJD=54339 flat extraction chi^2 for sdR−b1−00046165.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

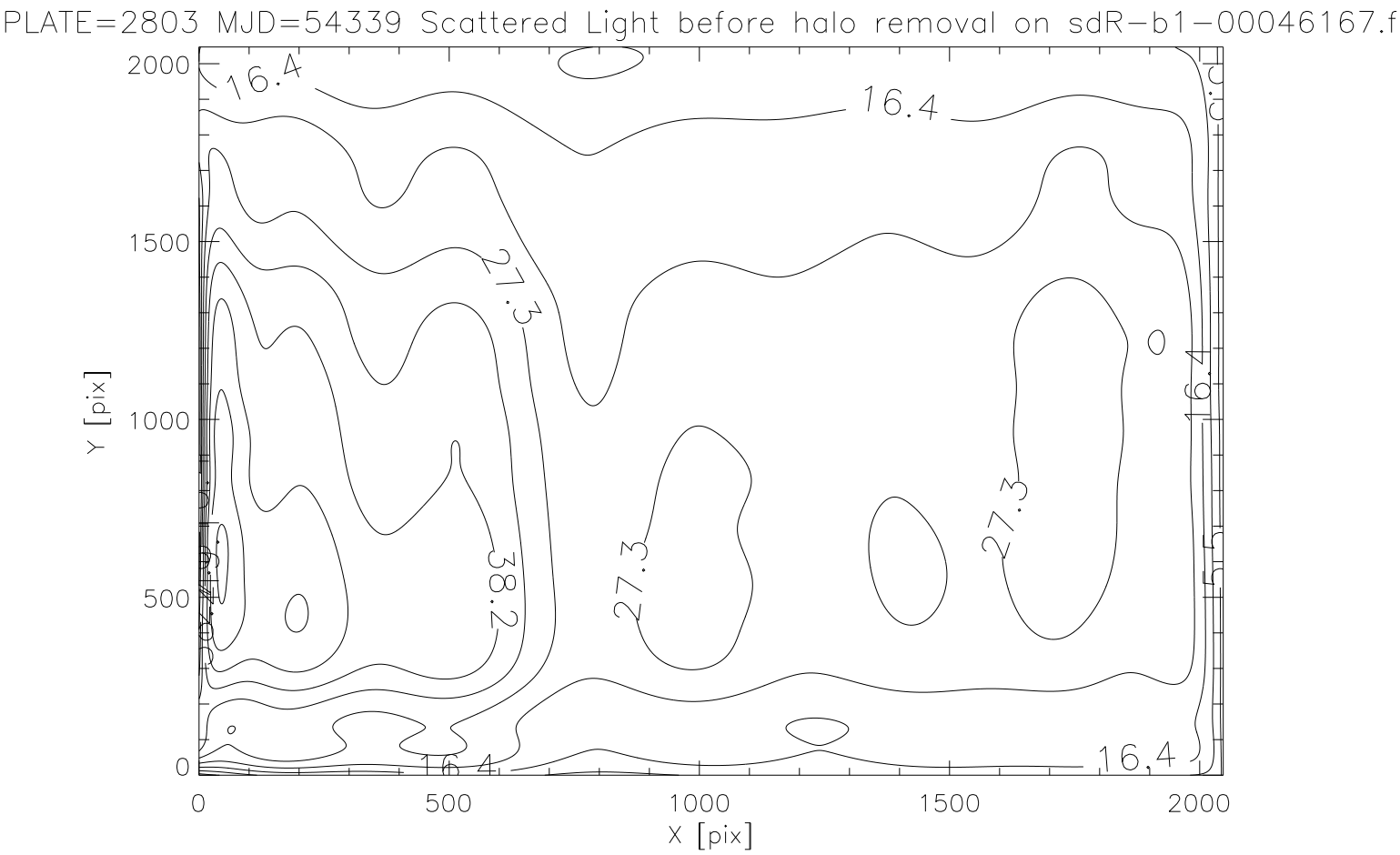

PLATE=2803 MJD=54339 Superflat sdR-b1-00046165.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

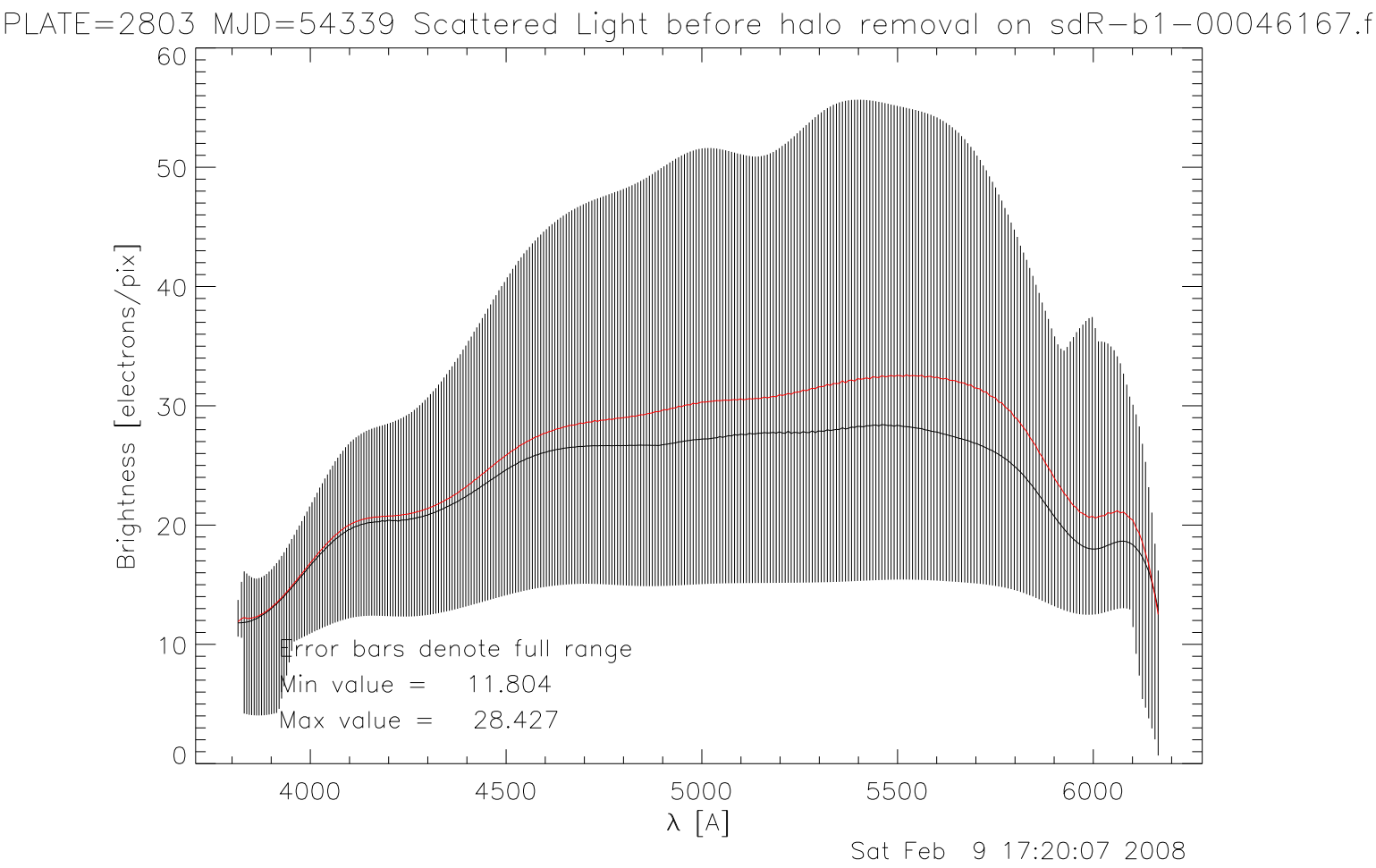

PLATE=2803 MJD=54339 flat extraction chi^2 for sdR−b1−00046169.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

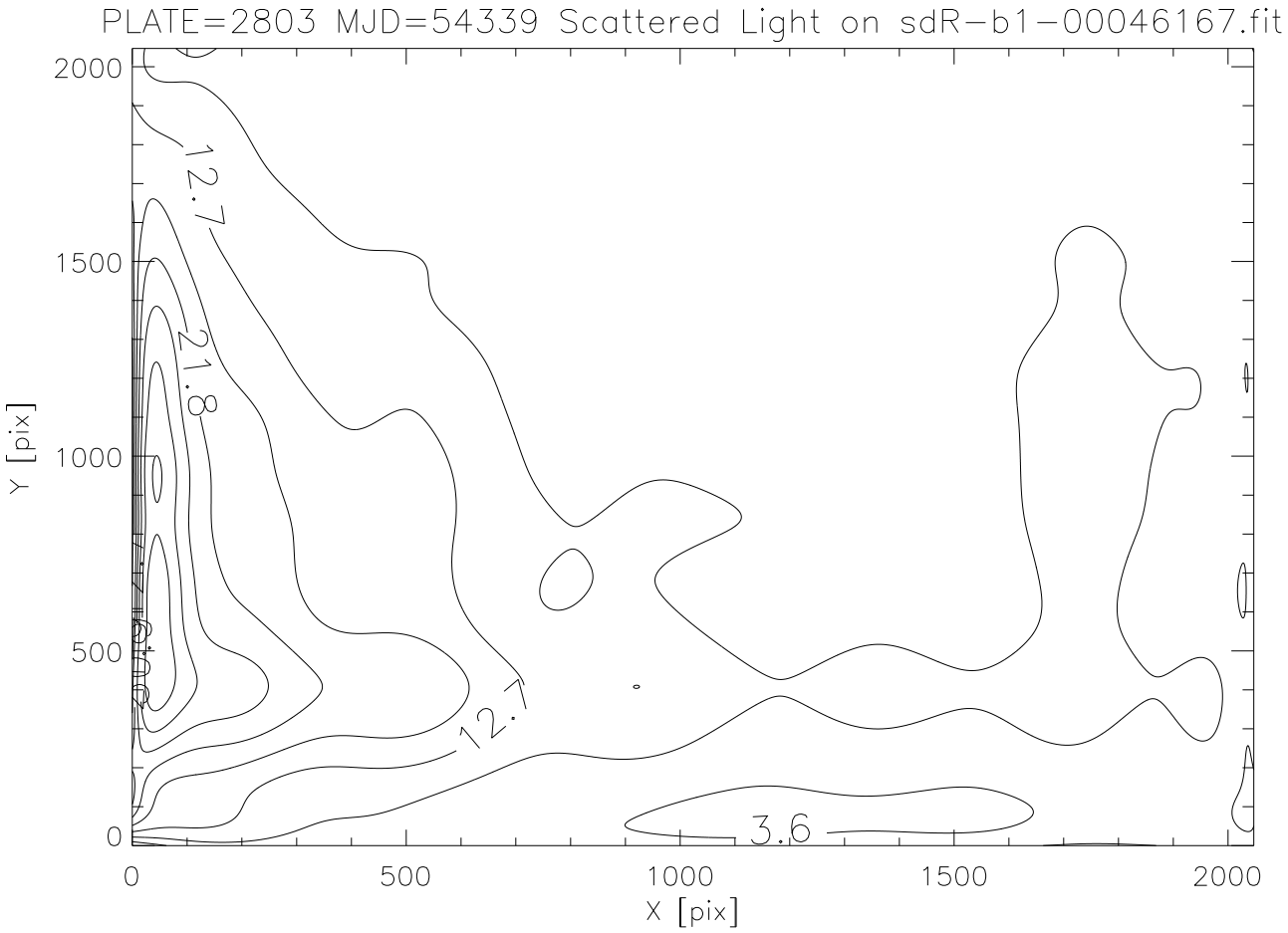

PLATE=2803 MJD=54339 Superflat sdR-b1-00046169.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

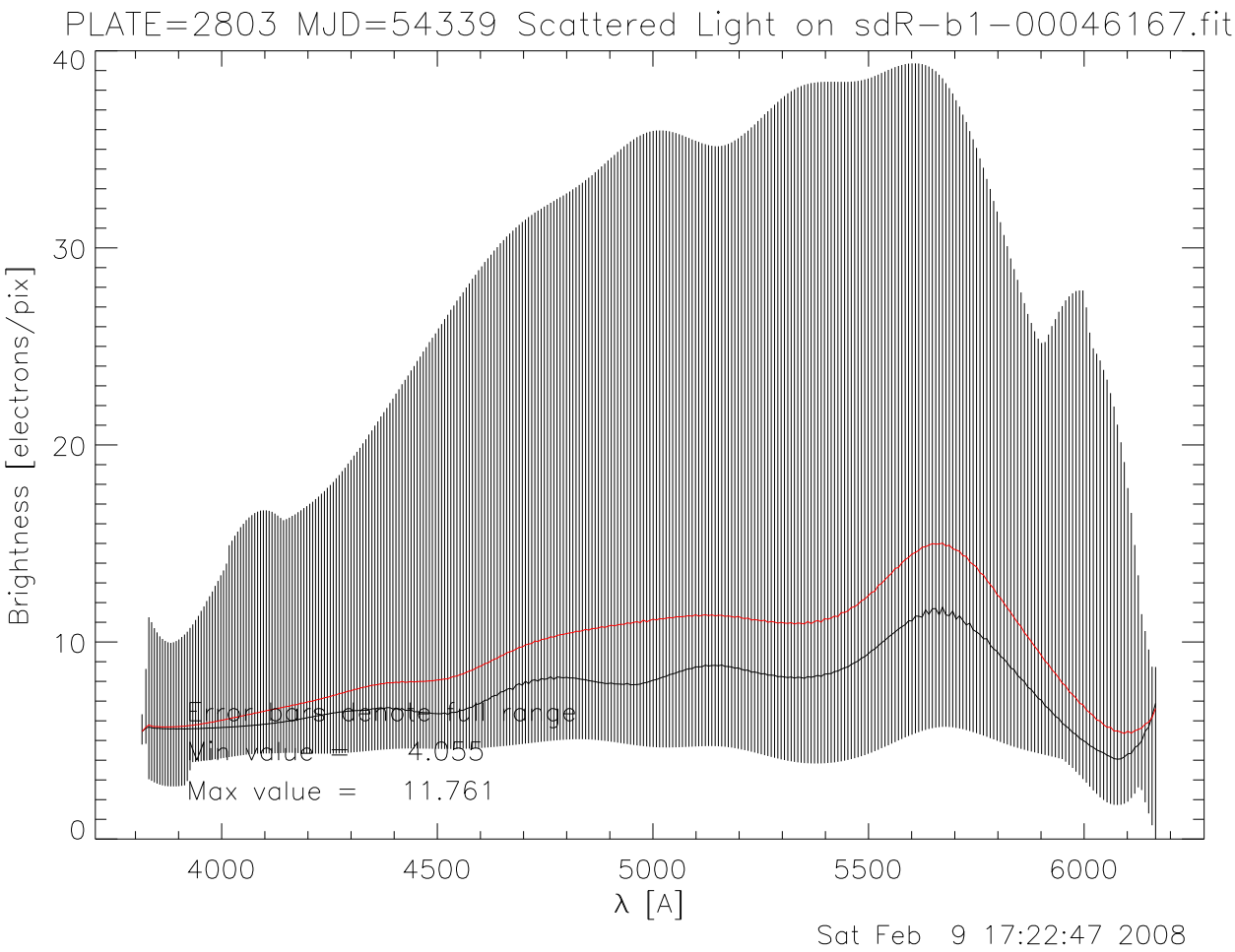

PLATE=2803 MJD=54339 Arcline Fit for sdR-b1-00046170.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 17:19:16 2008

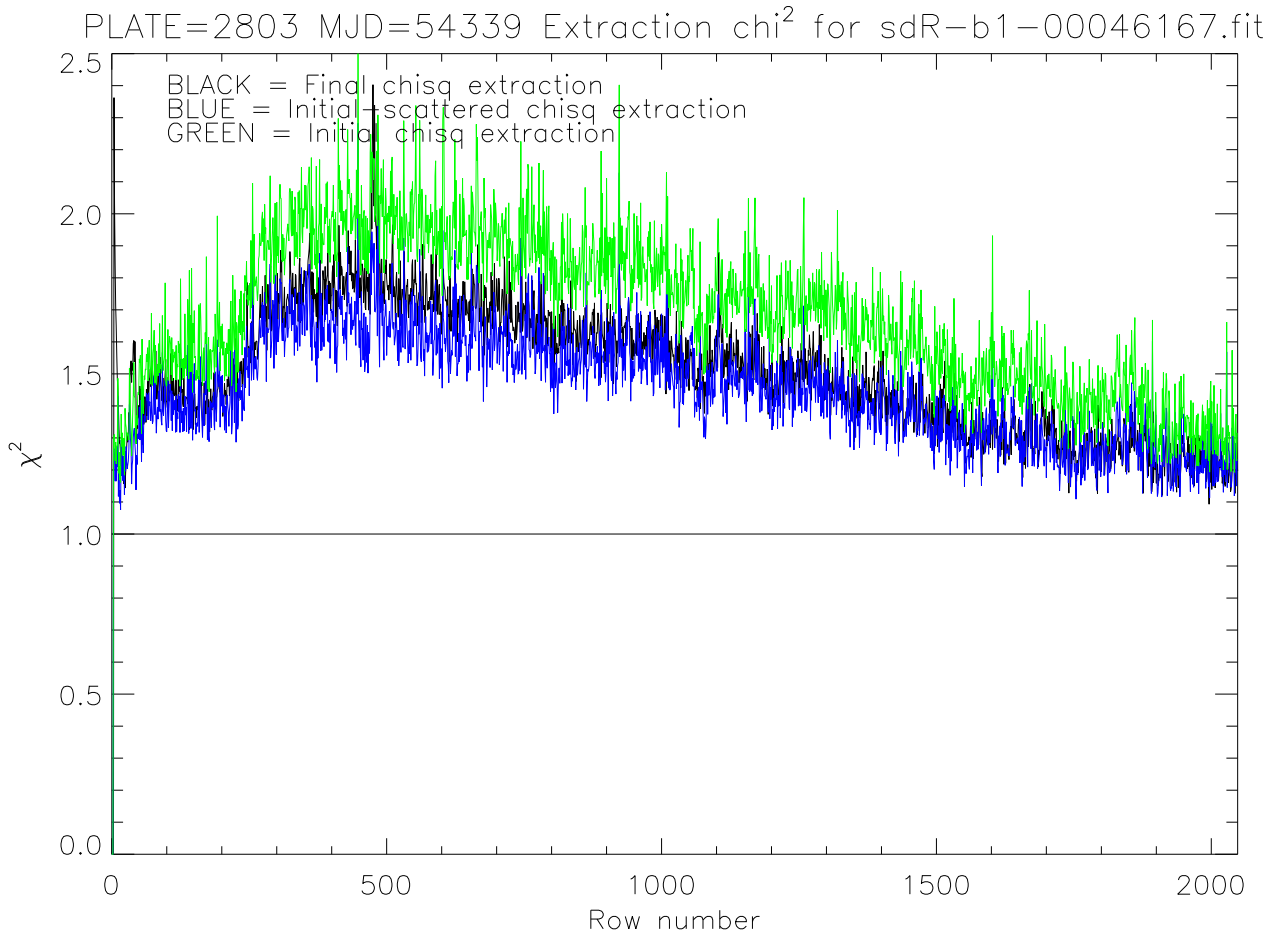

PLATE=2803 MJD=54339 Fiber-Flats for sdR-b1-00046169.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.340
Max value = 1.211
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 17:19:23 2008

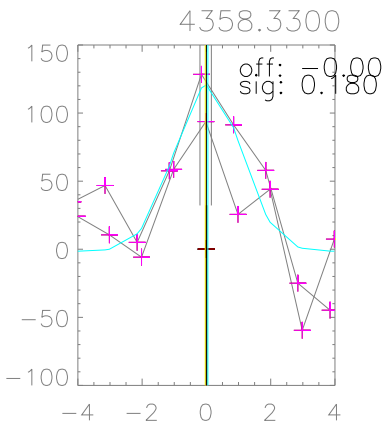

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-b1-00046167.f
16.4
16.4
27.3
0
16.4
27.3
38.2
27.3
0
16.4
16.4
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

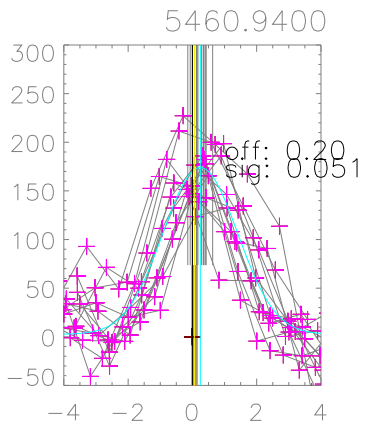

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR−b1−00046167.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.804
Max value = 28.427
Sat Feb 9 17:20:07 2008

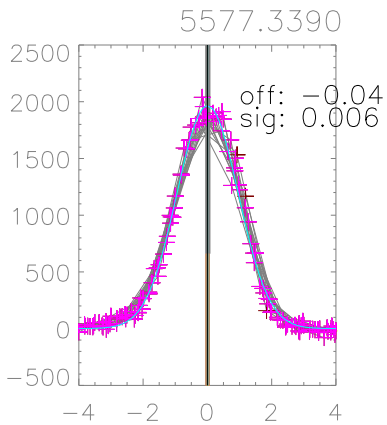

PLATE=2803 MJD=54339 Scattered Light on sdR-b1-00046167.fit
2000
1500
1000
500
0
Y [pix]
12.7
21.8
12.7
3.6
0
500
1000
1500
2000
X [pix]

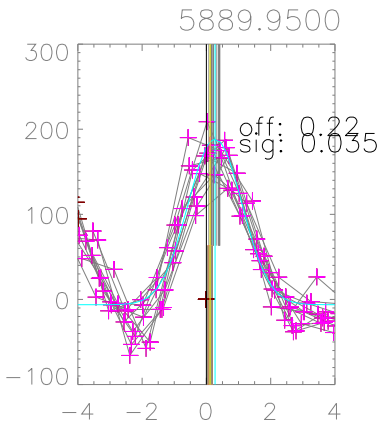

PLATE=2803 MJD=54339 Scattered Light on sdR-b1-00046167.fit
Brightness [electrons/pix]
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.055
Max value = 11.761
Sat Feb 9 17:22:47 2008

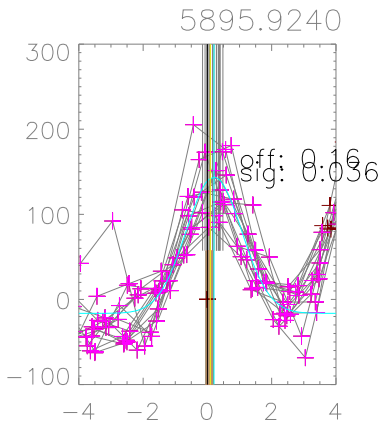

PLATE=2803 MJD=54339 Extraction chi^2 for sdR−b1−00046167.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

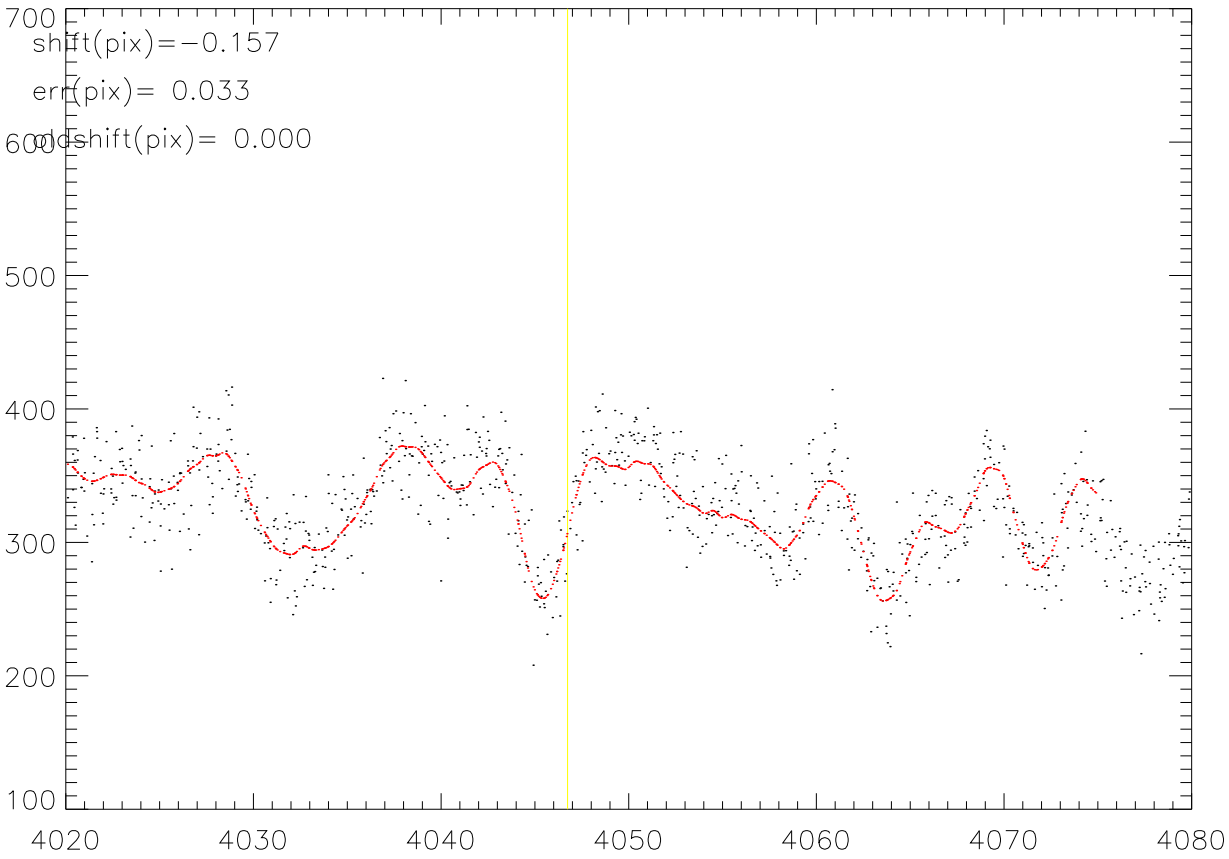

4358.3300
off: −0.00
sig: 0.180

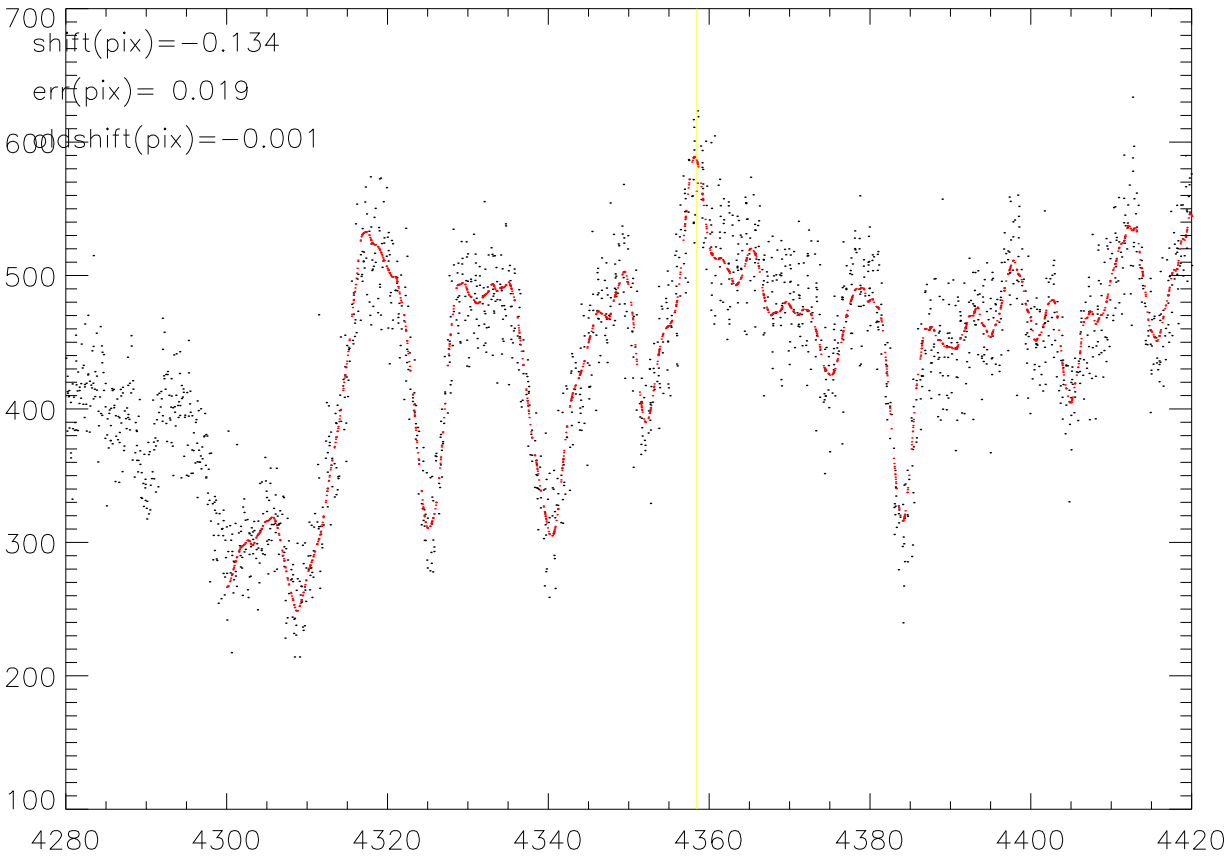

5460.9400
off: 0.20
sig: 0.051

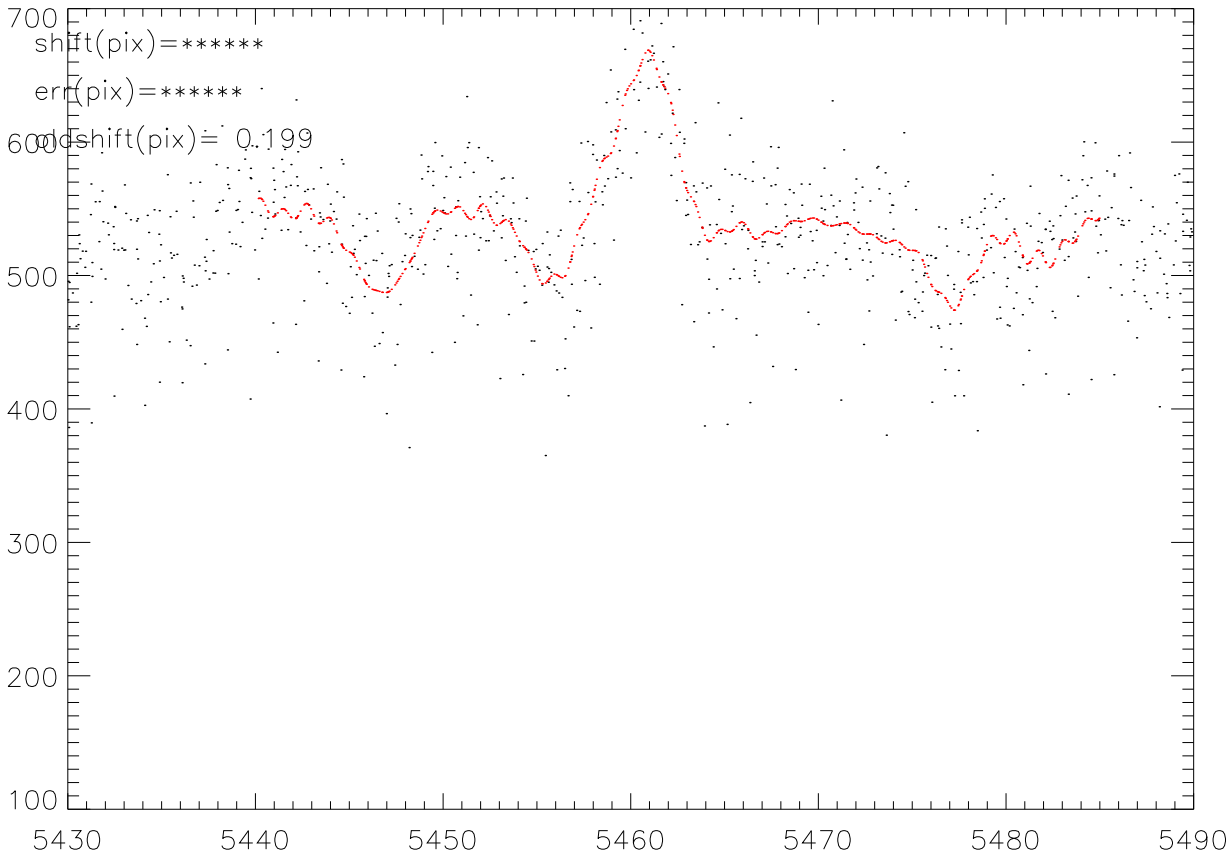

5577.3390
off: −0.04
sig: 0.006

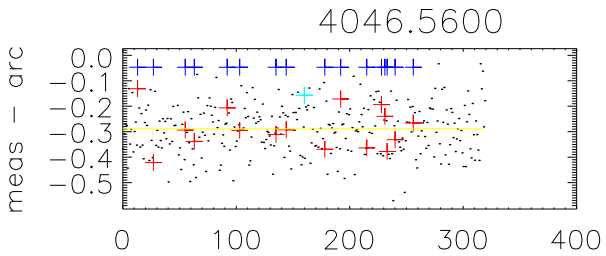

5889.9500
off: 0.22
sig: 0.035

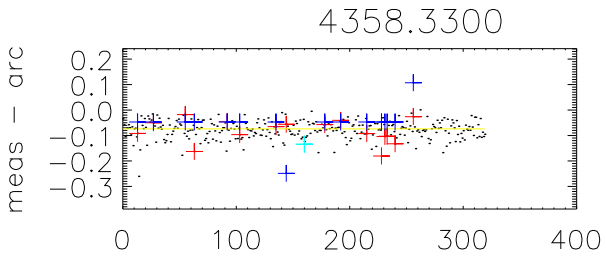

5895.9240
off: 0.16
sig: 0.036

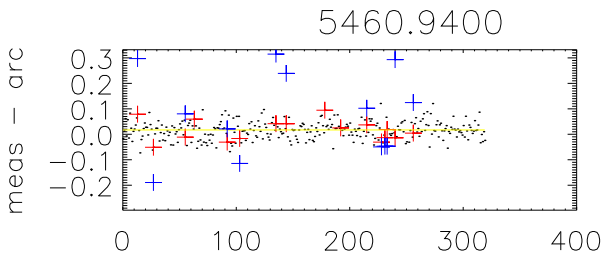

shift(pix)=−0.157
err(pix)= 0.033
oldshift(pix)= 0.000
700
600
500
400
300
200
100
4020
4030
4040
4050
4060
4070
4080

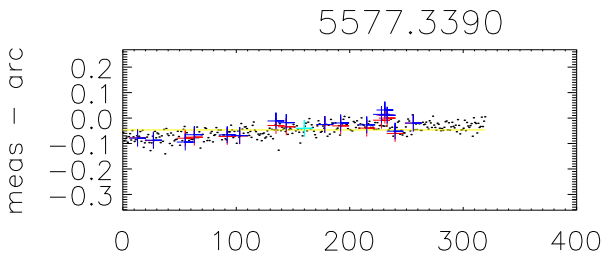

shift(pix)=−0.134
err(pix)= 0.019
oldshift(pix)=−0.001
700
600
500
400
300
200
100
4280
4300
4320
4340
4360
4380
4400
4420

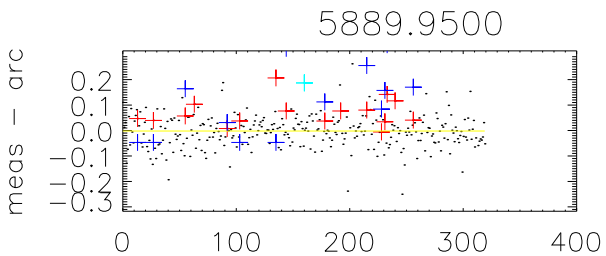

shift(pix)=******
err(pix)=******
oldshift(pix)= 0.199
700
600
500
400
300
200
100
5430
5440
5450
5460
5470
5480
5490

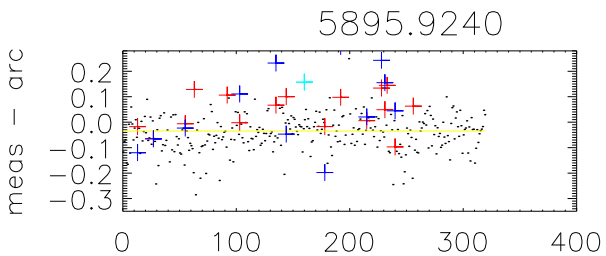

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

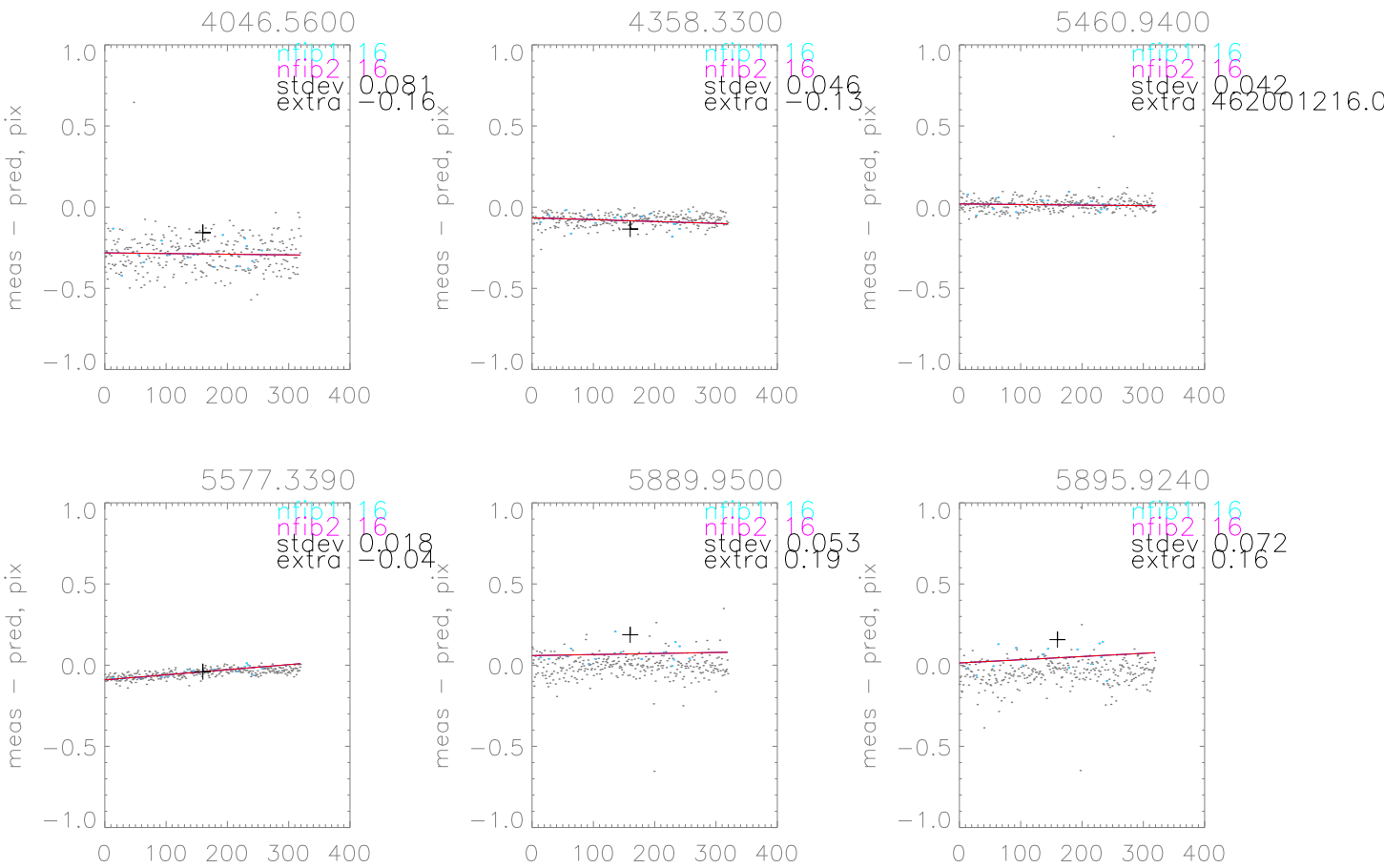

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

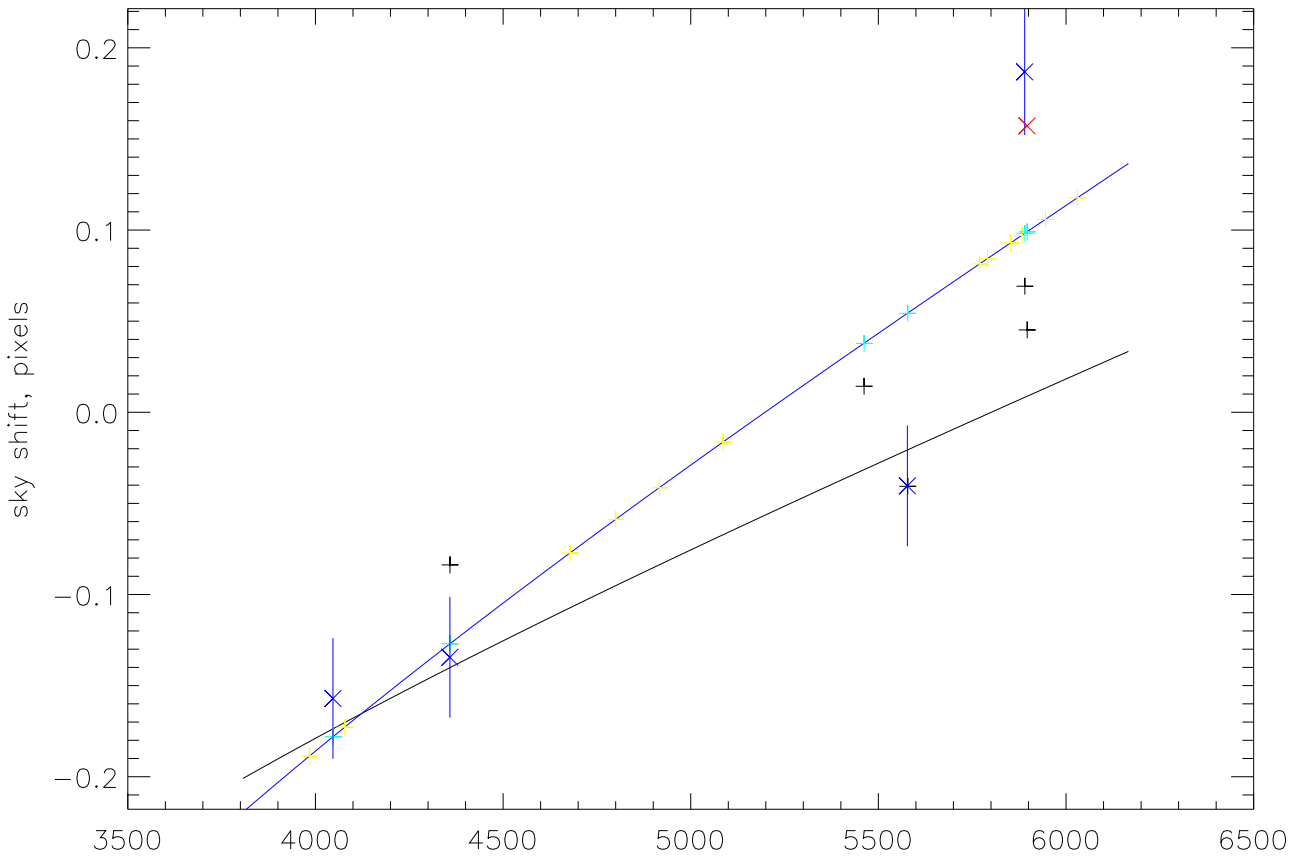

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

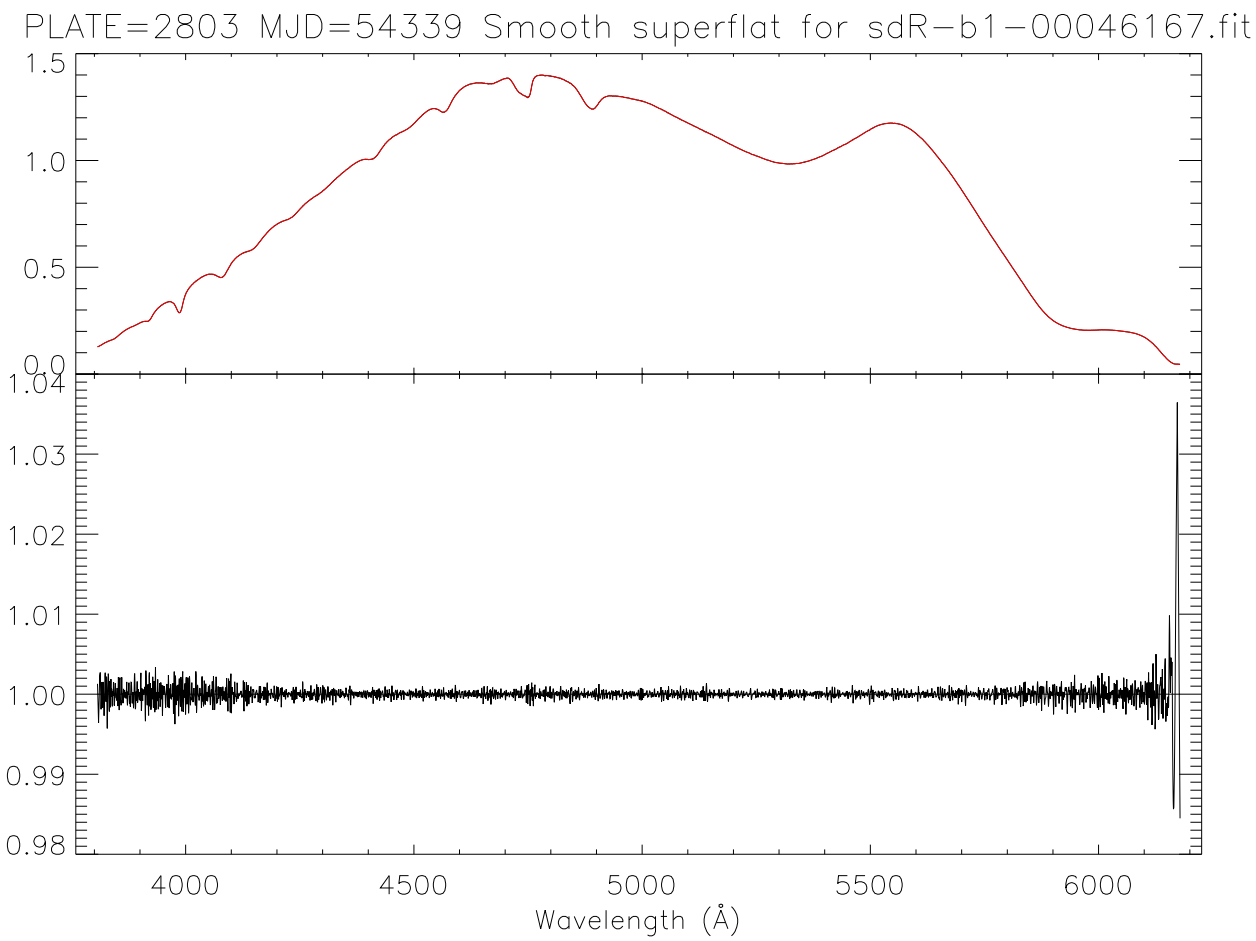

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

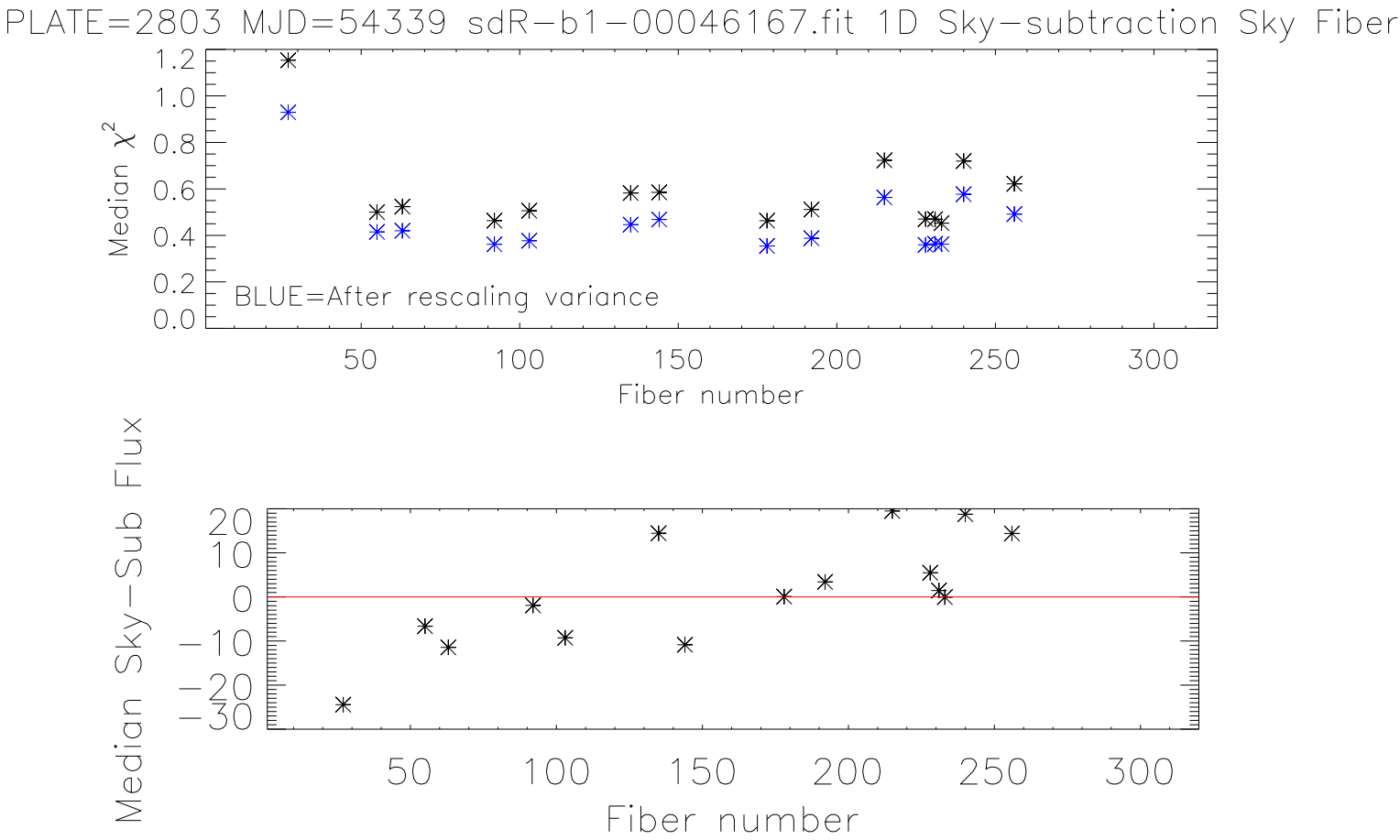

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

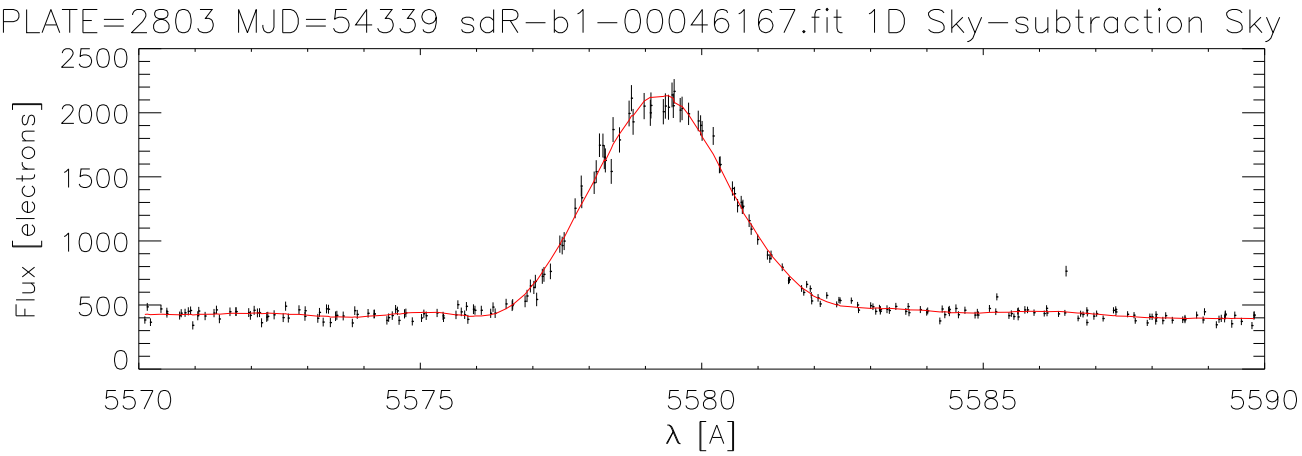

4046.5600
nfib1 16
nfib2 16
stdev 0.081
extra −0.16
4358.3300
nfib1 16
nfib2 16
stdev 0.046
extra −0.13
5460.9400
nfib1 16
nfib2 16
stdev 0.042
extra 462001216.0
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.053
extra 0.19
5895.9240
nfib1 16
nfib2 16
stdev 0.072
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

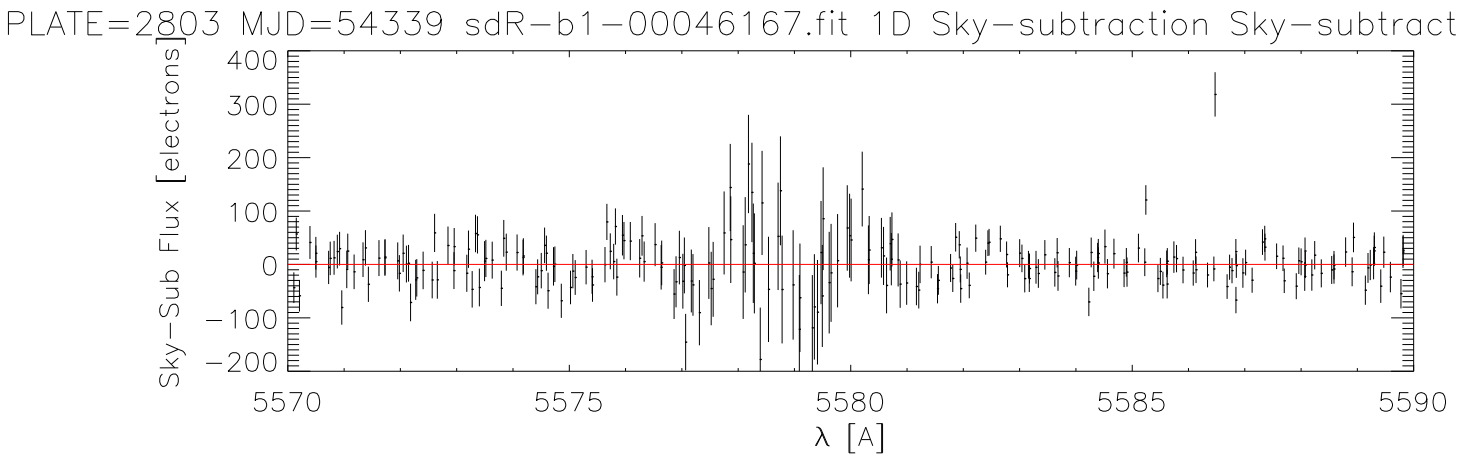

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

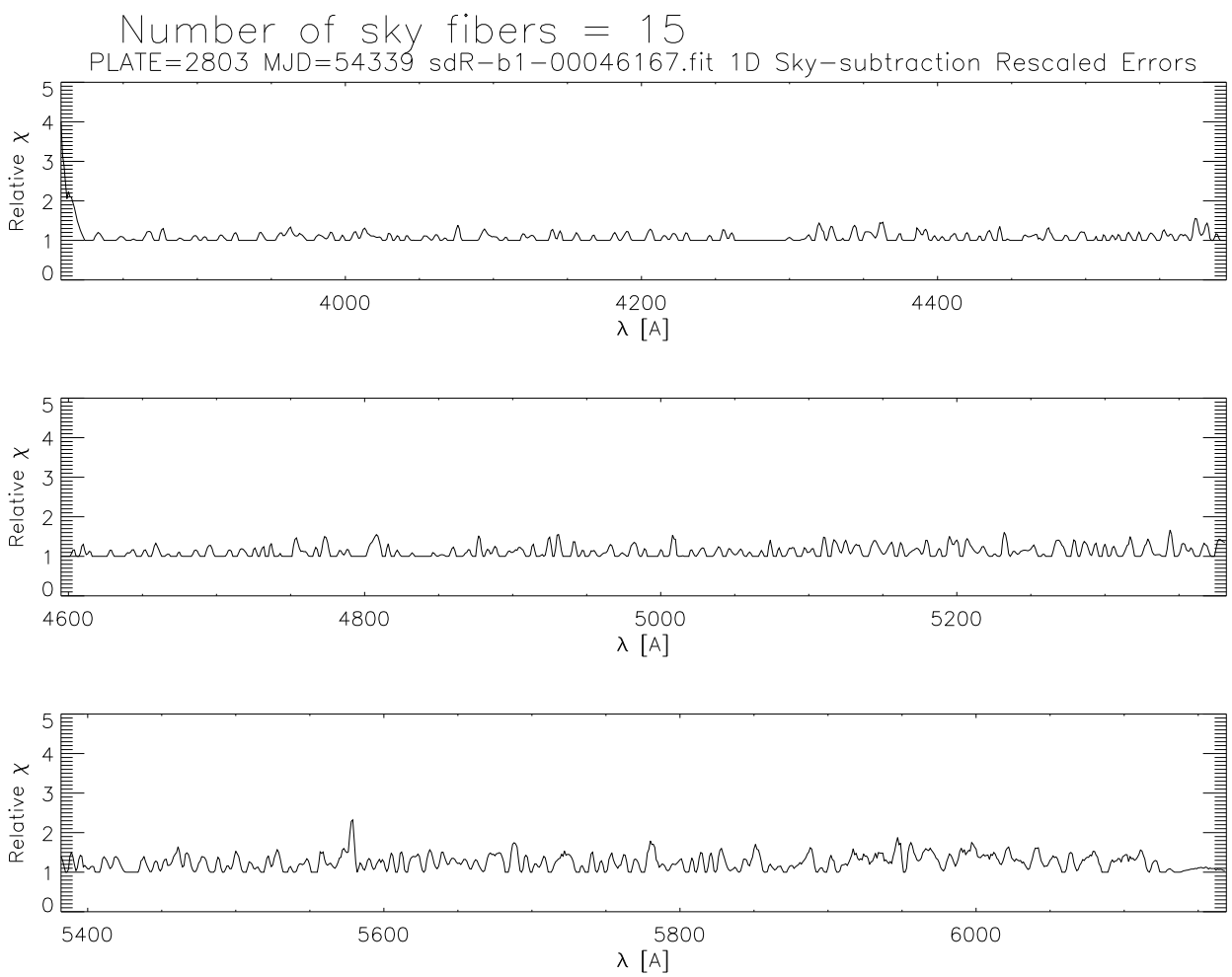
es= −0.0001

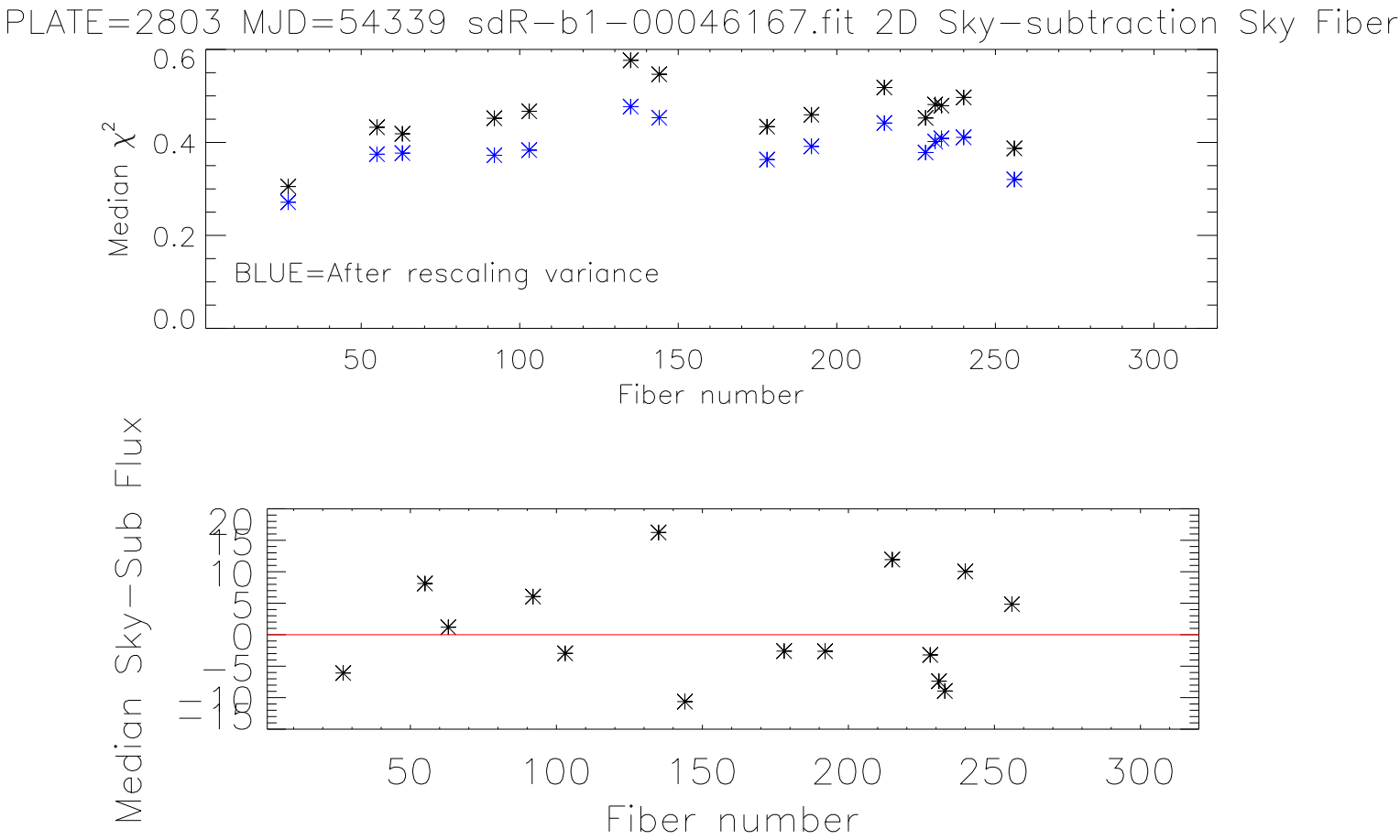

PLATE=2803 MJD=54339 Smooth superflat for sdR−b1−00046167.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

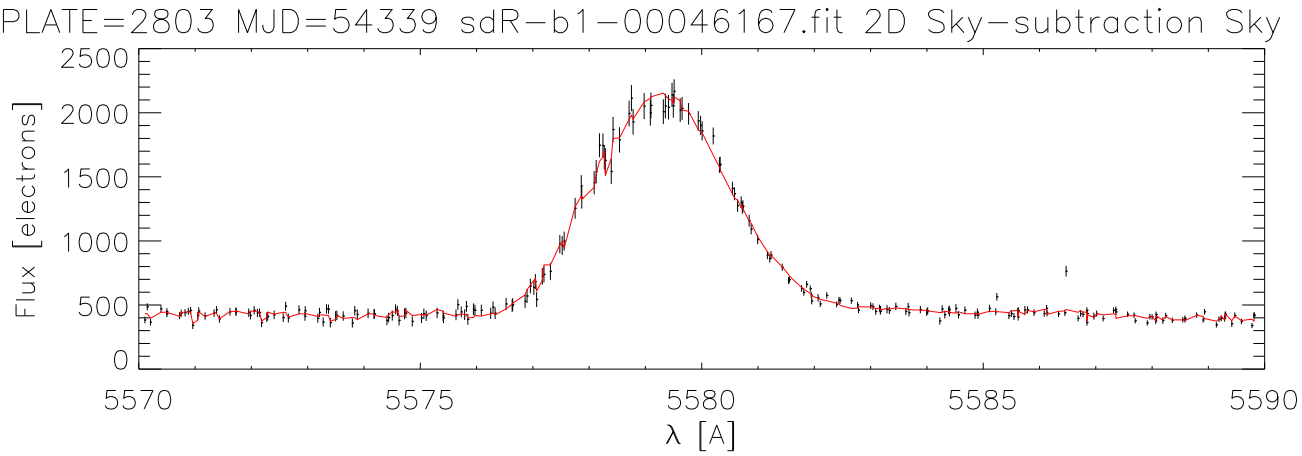

PLATE=2803 MJD=54339 sdR-b1-00046167.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

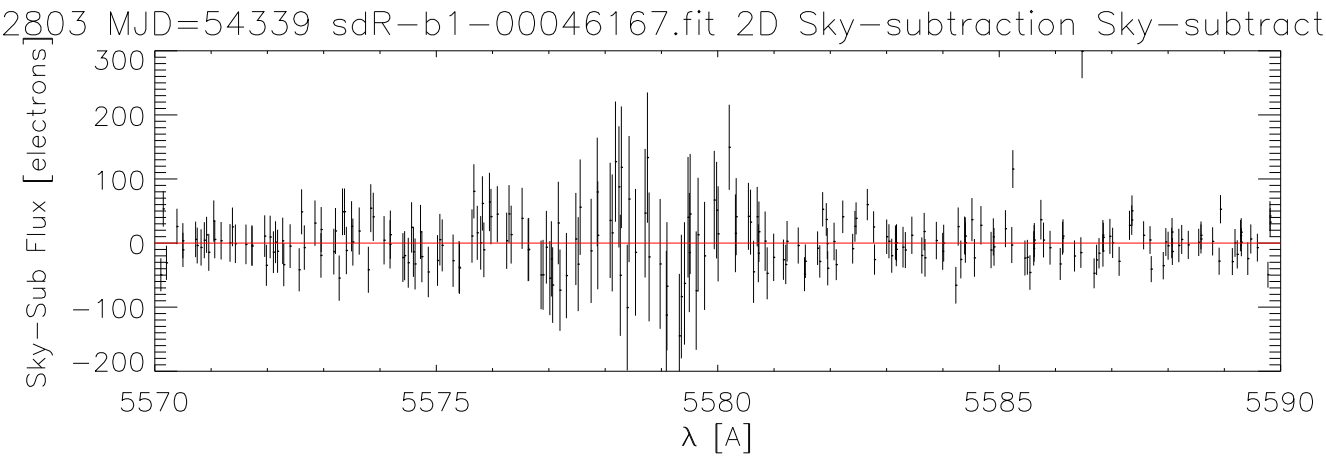

PLATE=2803 MJD=54339 sdR-b1-00046167.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

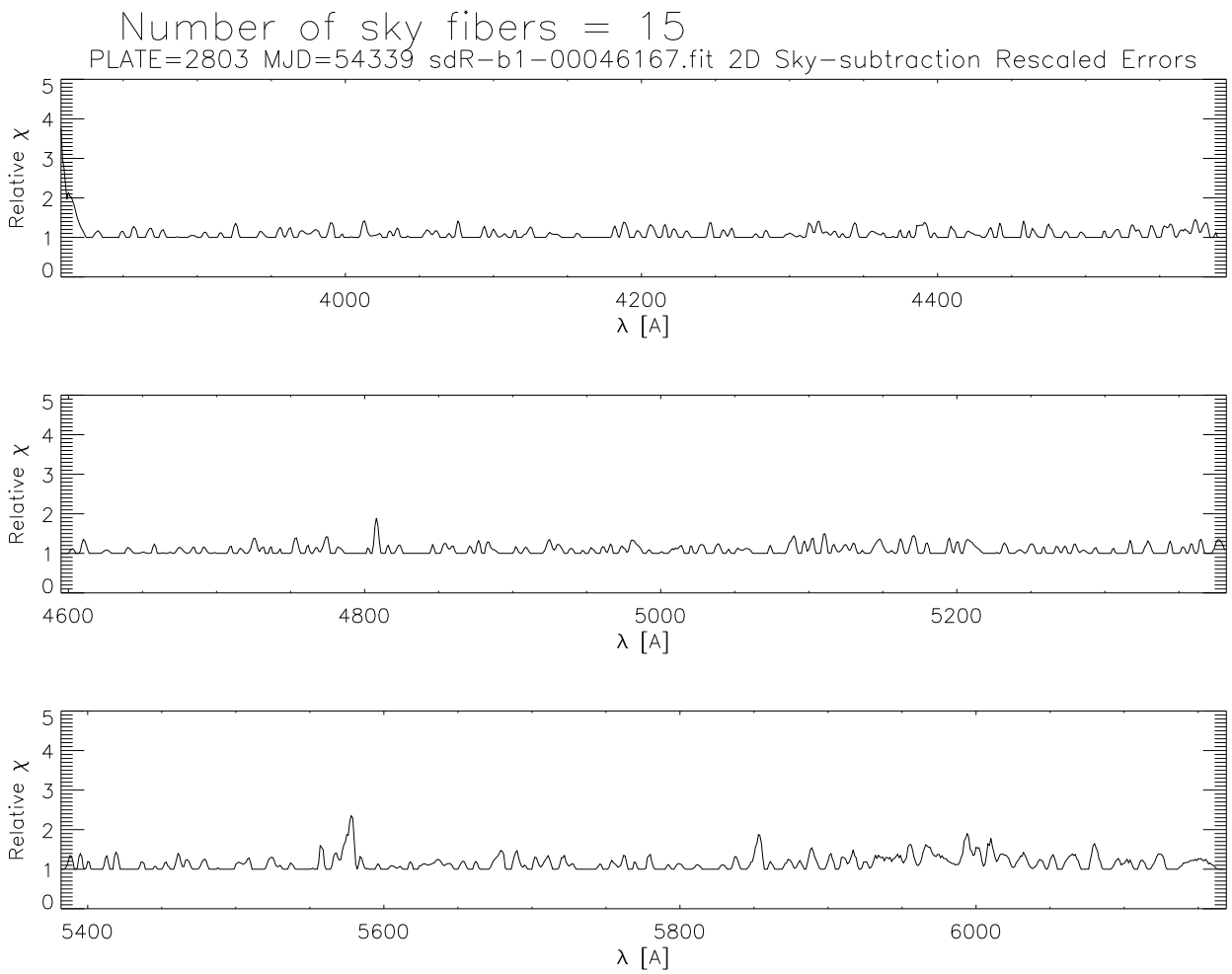

PLATE=2803 MJD=54339 sdR-b1-00046167.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

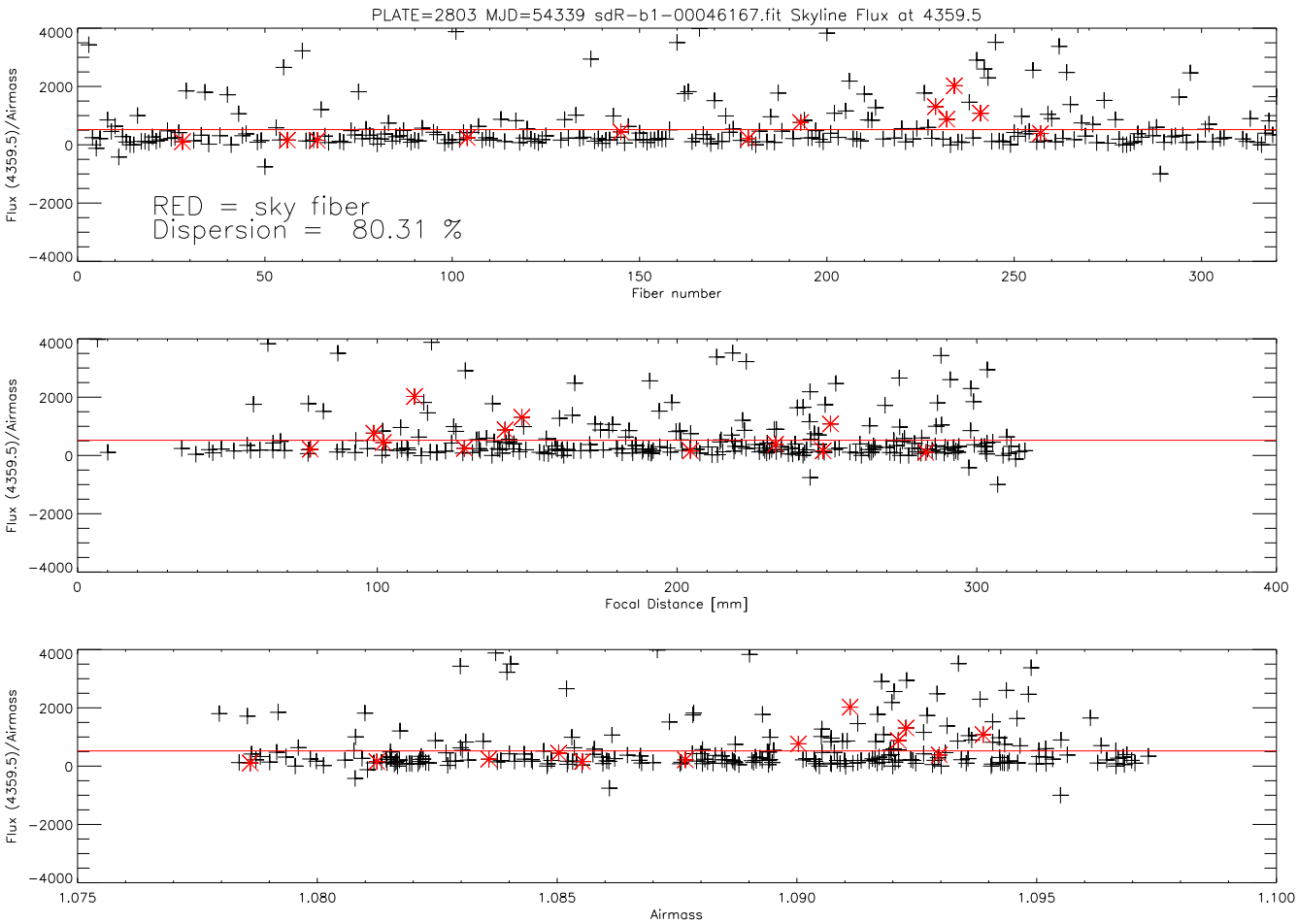

Number of sky fibers = 15
PLATE=2803 MJD=54339 sdR-b1-00046167.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

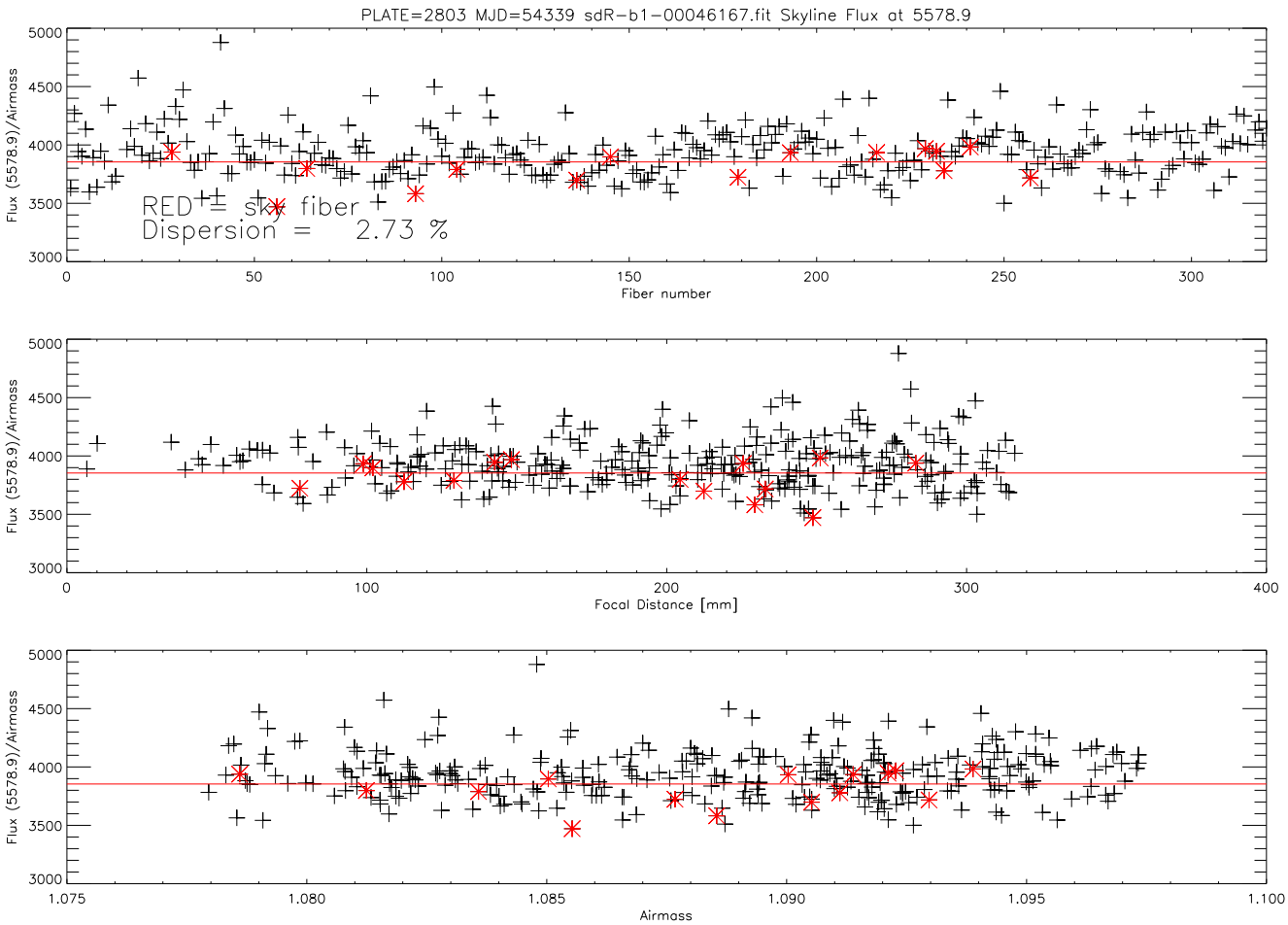

PLATE=2803 MJD=54339 sdR-b1-00046167.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

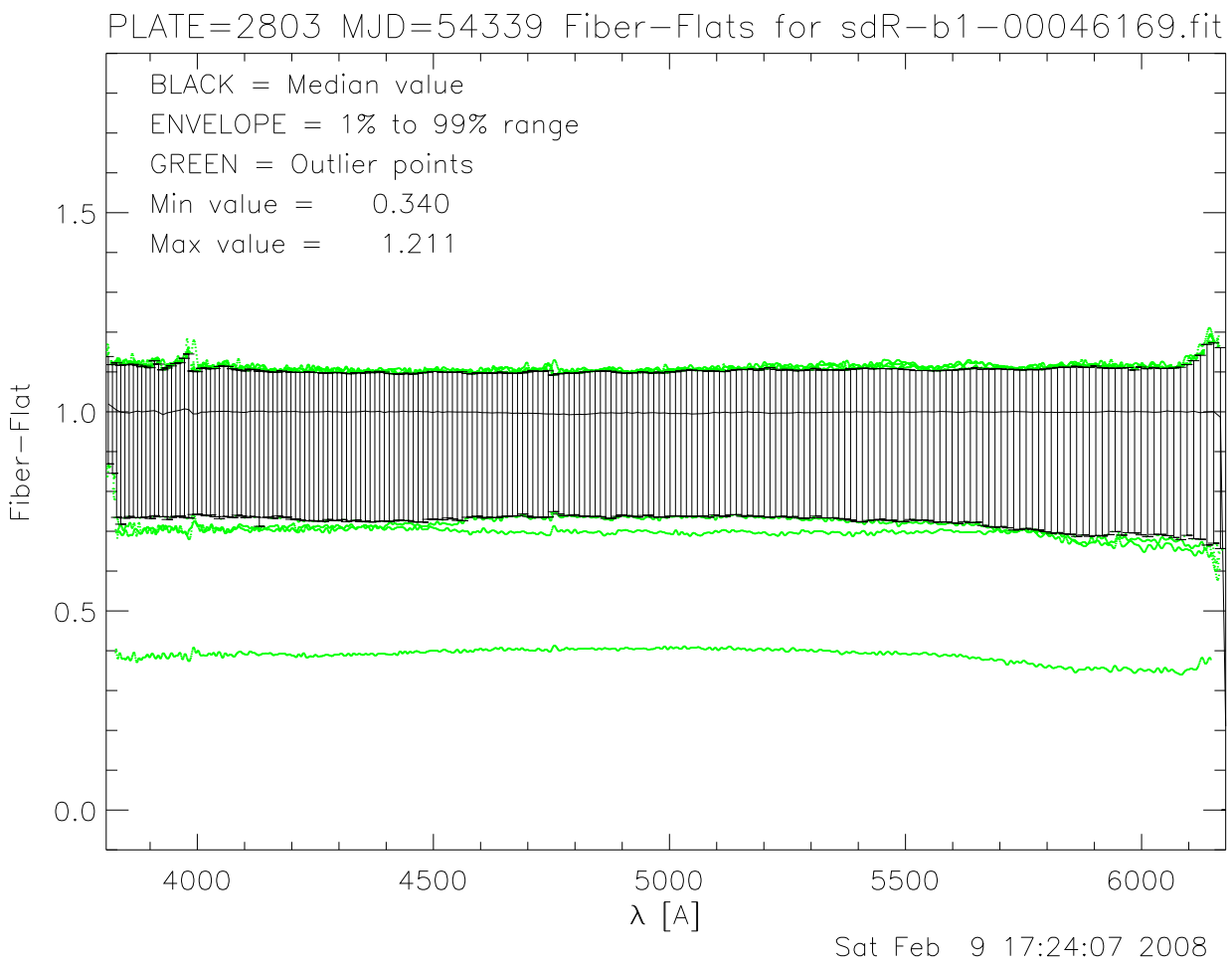

PLATE=2803 MJD=54339 sdR-b1-00046167.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

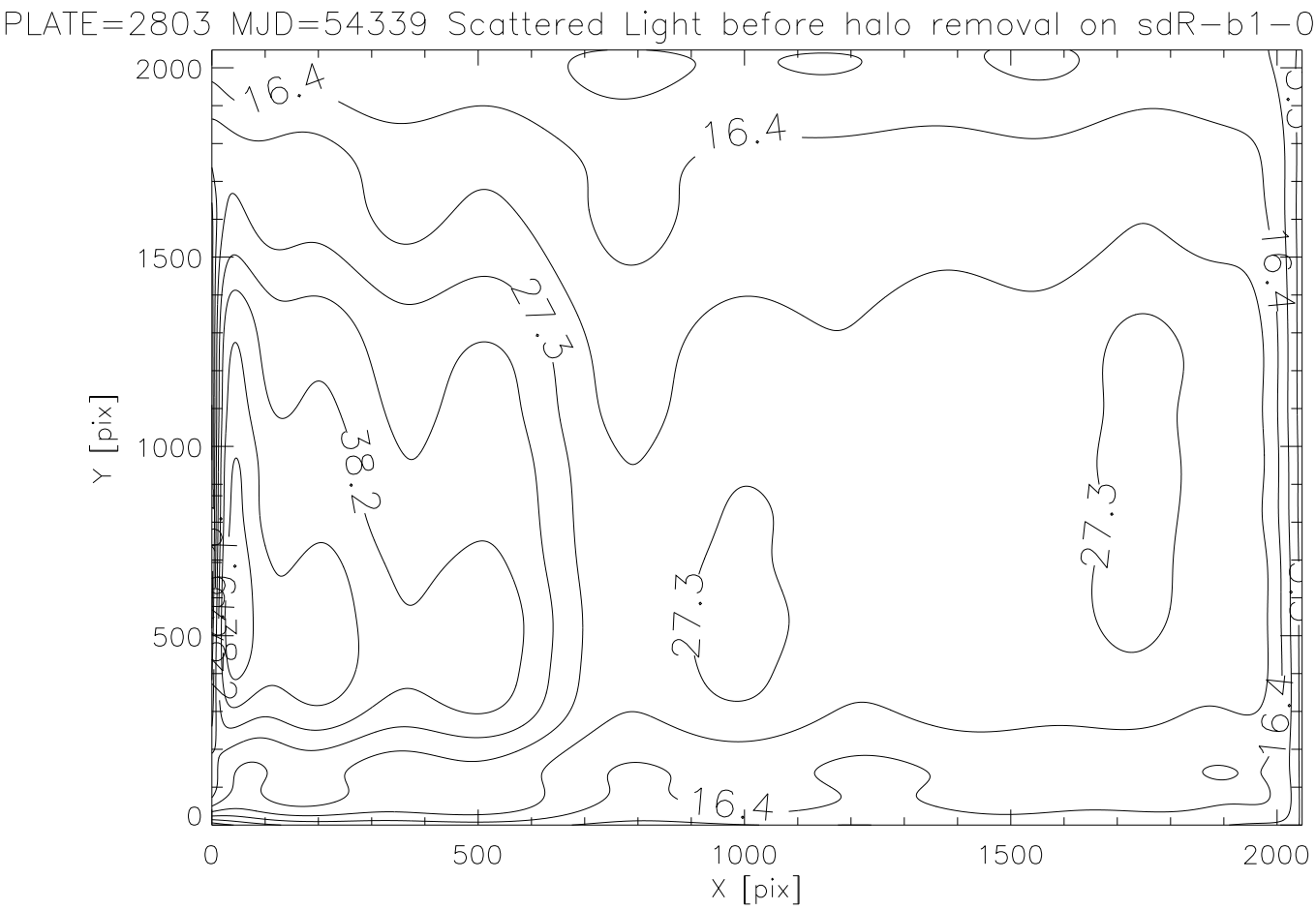

PLATE=2803 MJD=54339 sdR-b1-00046167.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

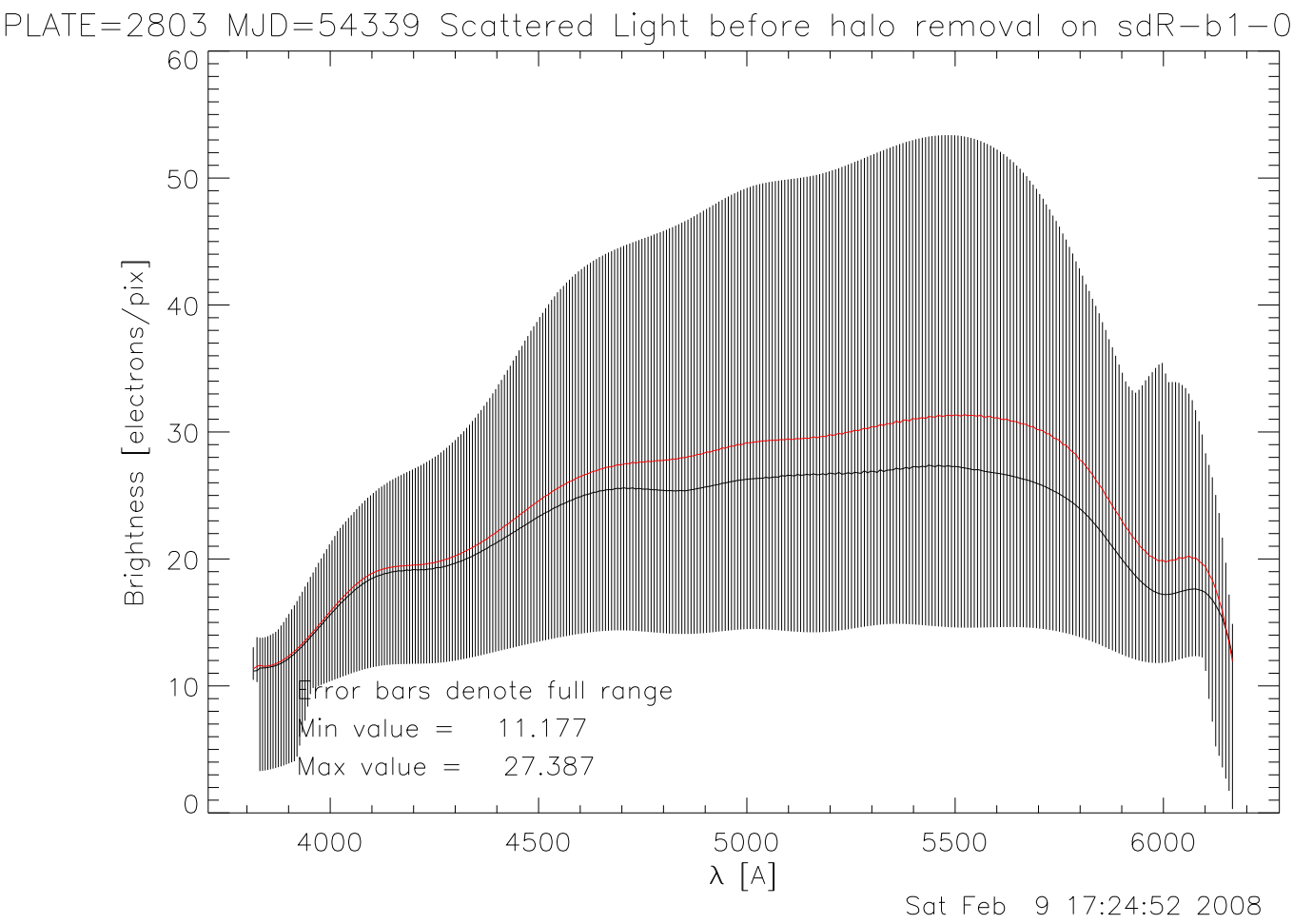

Number of sky fibers = 15
PLATE=2803 MJD=54339 sdR-b1-00046167.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

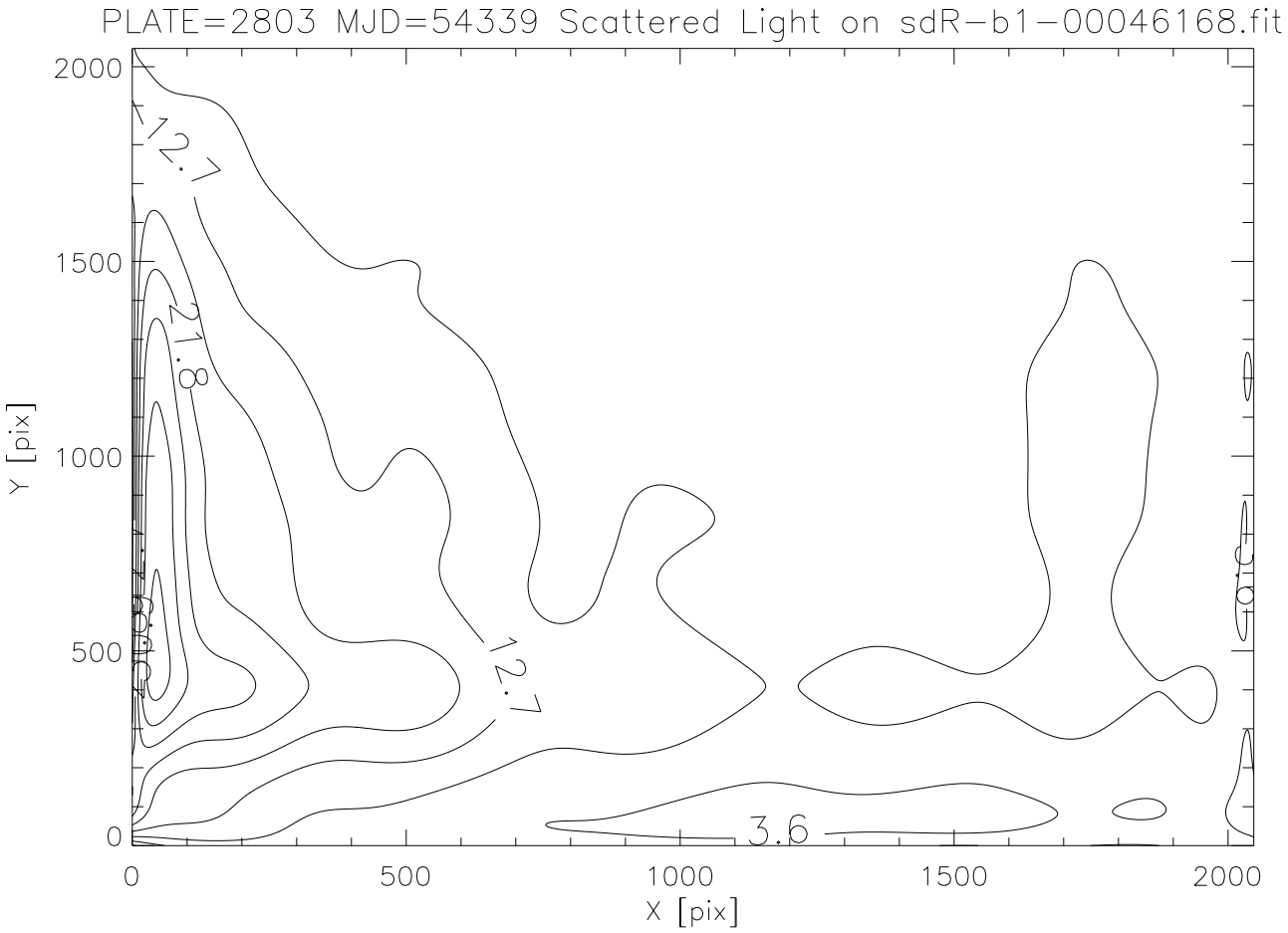

PLATE=2803 MJD=54339 sdR-b1-00046167.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 80.31 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

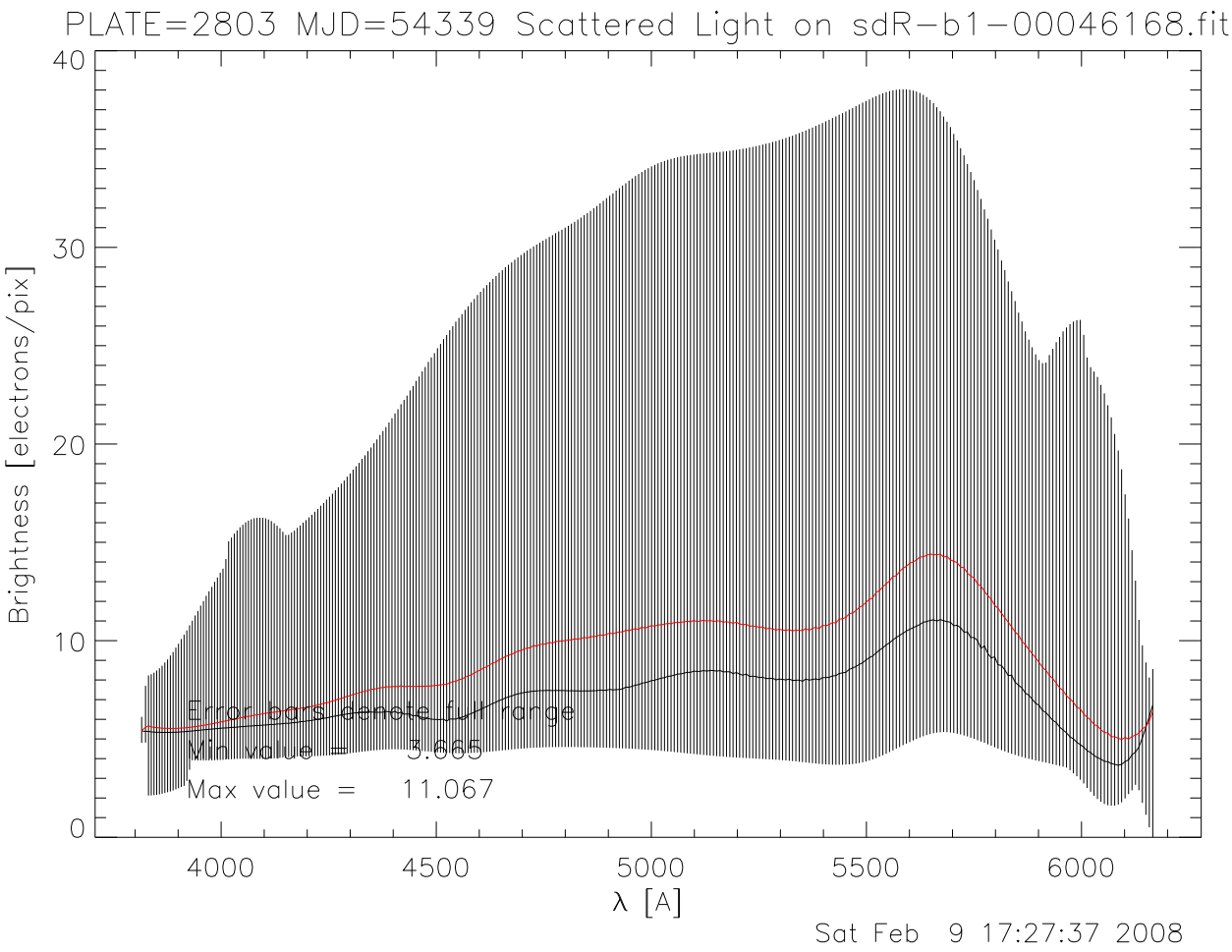

PLATE=2803 MJD=54339 sdR-b1-00046167.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.73 %
Fiber number
Focal Distance [mm]
Airmass

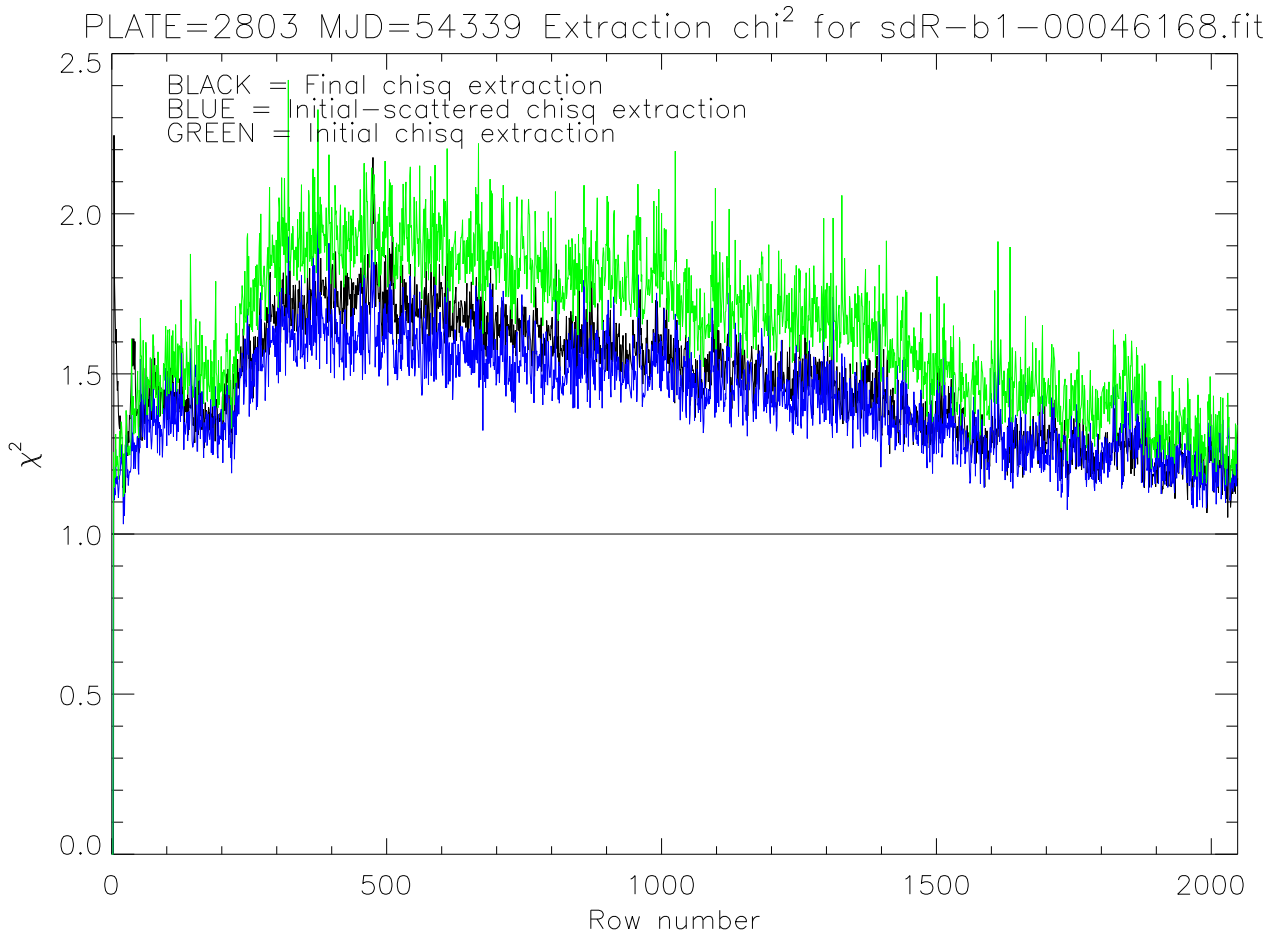

PLATE=2803 MJD=54339 Fiber−Flats for sdR−b1−00046169.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.340
Max value = 1.211
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 17:24:07 2008

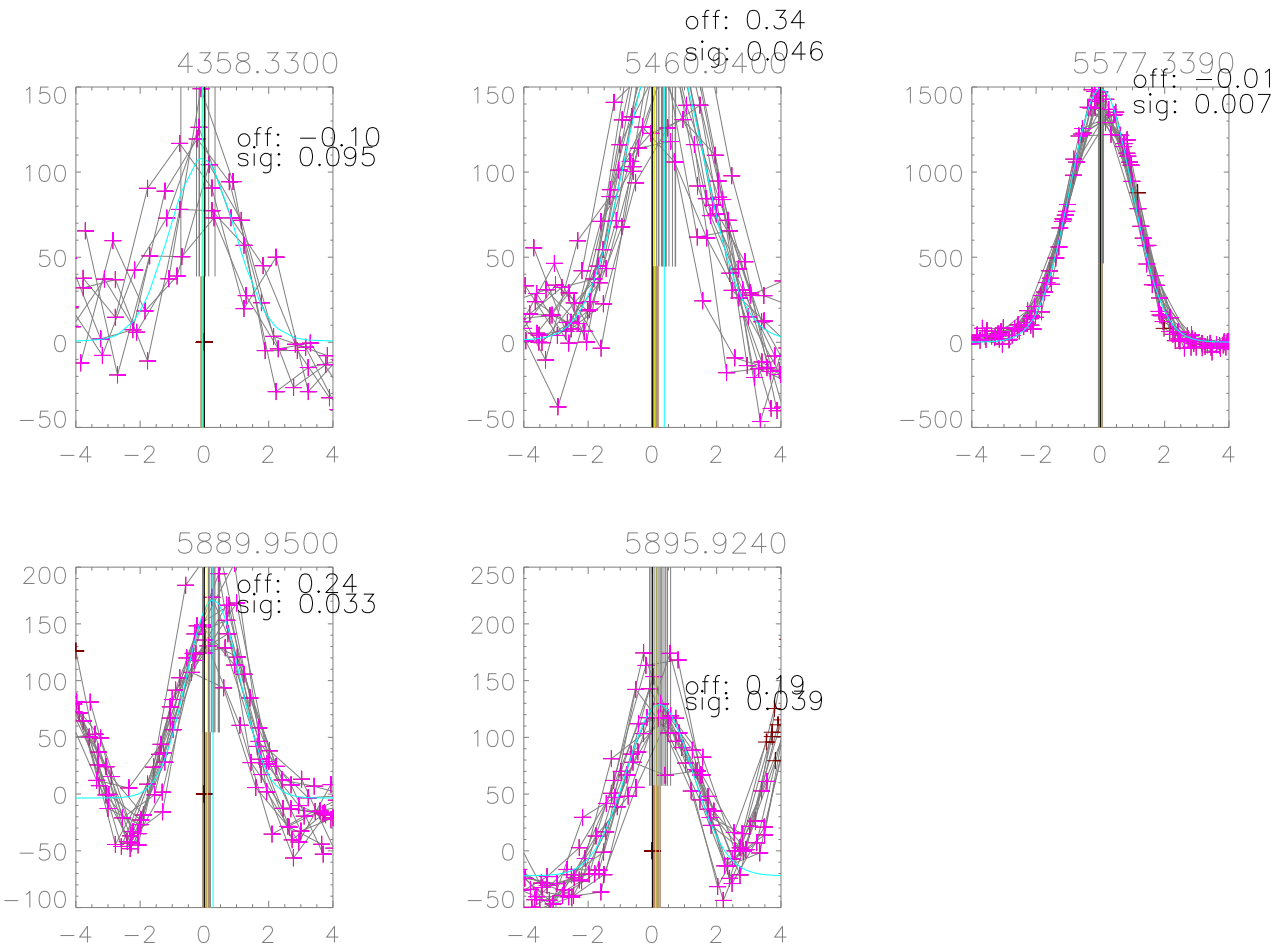

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR−b1−00046168.f
16.4
16.4
16.4
27.3
38.2
27.3
27.3
16.4
16.4
0
Y [pix]
X [pix]
0
500
1000
1500
2000

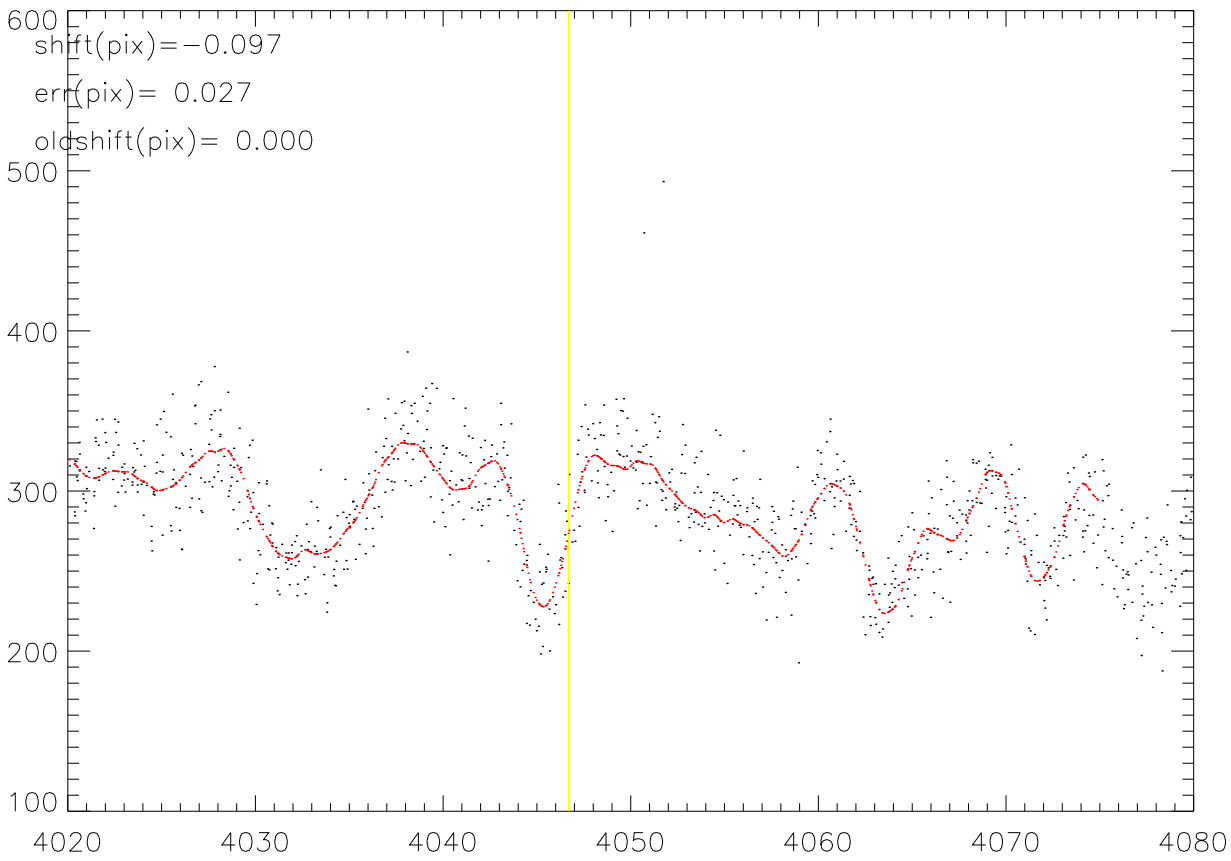

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR−b1−00046168.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.177
Max value = 27.387
Sat Feb 9 17:24:52 2008

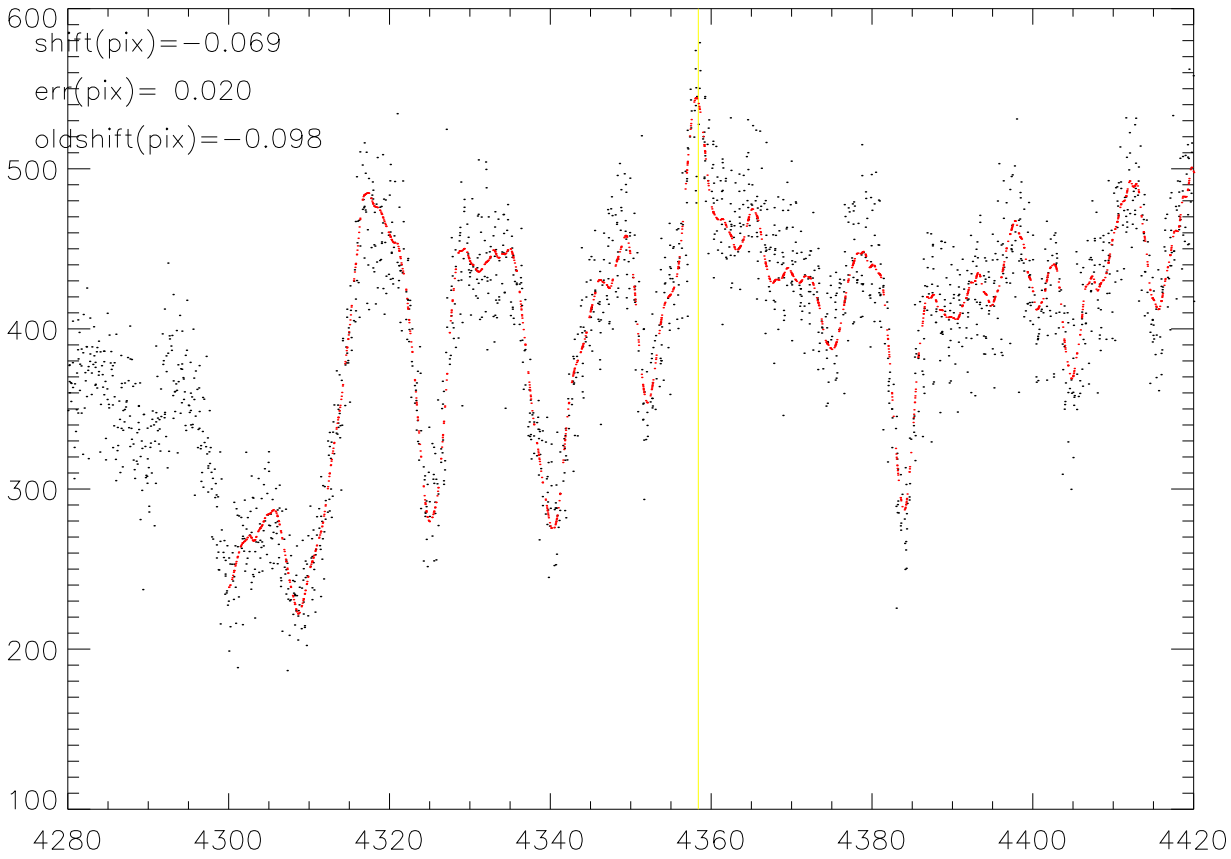

PLATE=2803 MJD=54339 Scattered Light on sdR-b1-00046168.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.7
21.8
30.9
12.7
3.6

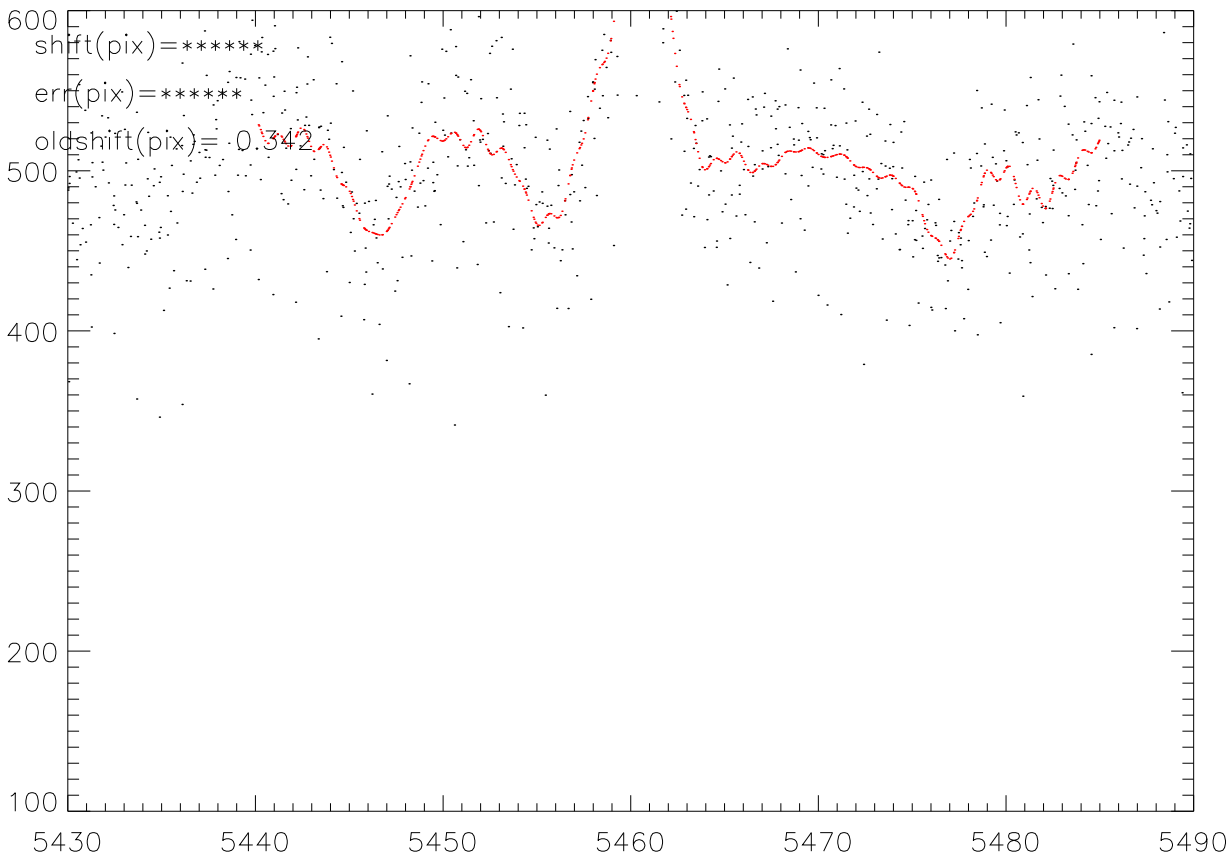

PLATE=2803 MJD=54339 Scattered Light on sdR-b1-00046168.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.665
Max value = 11.067
Sat Feb 9 17:27:37 2008

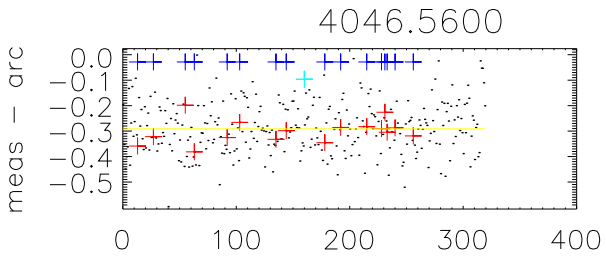

PLATE=2803 MJD=54339 Extraction chi^2 for sdR-b1-00046168.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

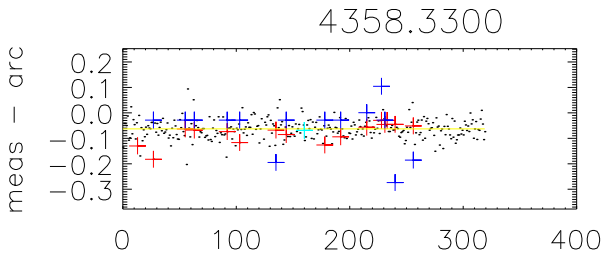

4358.3300
off: −0.10
sig: 0.095
5460.9400
off: 0.34
sig: 0.046
5577.3390
off: −0.01
sig: 0.007
5889.9500
off: 0.24
sig: 0.033
5895.9240
off: 0.19
sig: 0.039

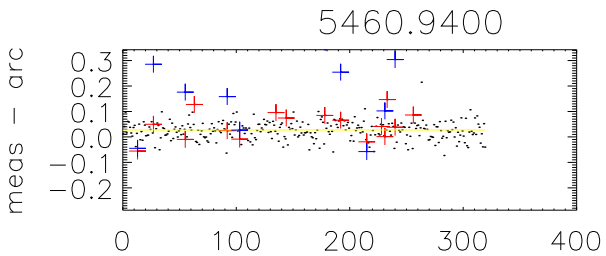

shift(pix)=−0.097
err(pix)= 0.027
oldshift(pix)= 0.000
600
500
400
300
200
100
4020
4030
4040
4050
4060
4070
4080

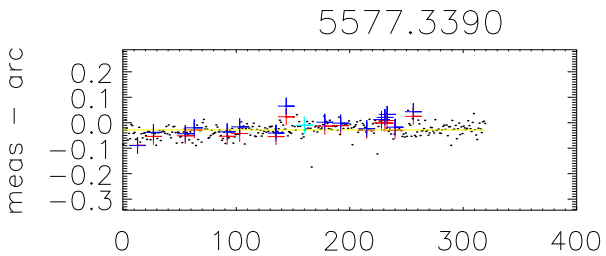

shift(pix)=−0.069
err(pix)= 0.020
oldshift(pix)=−0.098
600
500
400
300
200
100
4280
4300
4320
4340
4360
4380
4400
4420

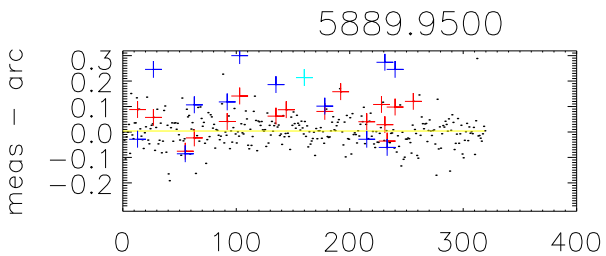

shift(pix)=******
err(pix)=******
oldshift(pix)= 0.342
600
500
400
300
200
100
5430
5440
5450
5460
5470
5480
5490

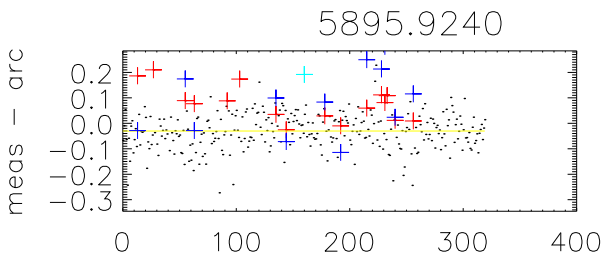

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

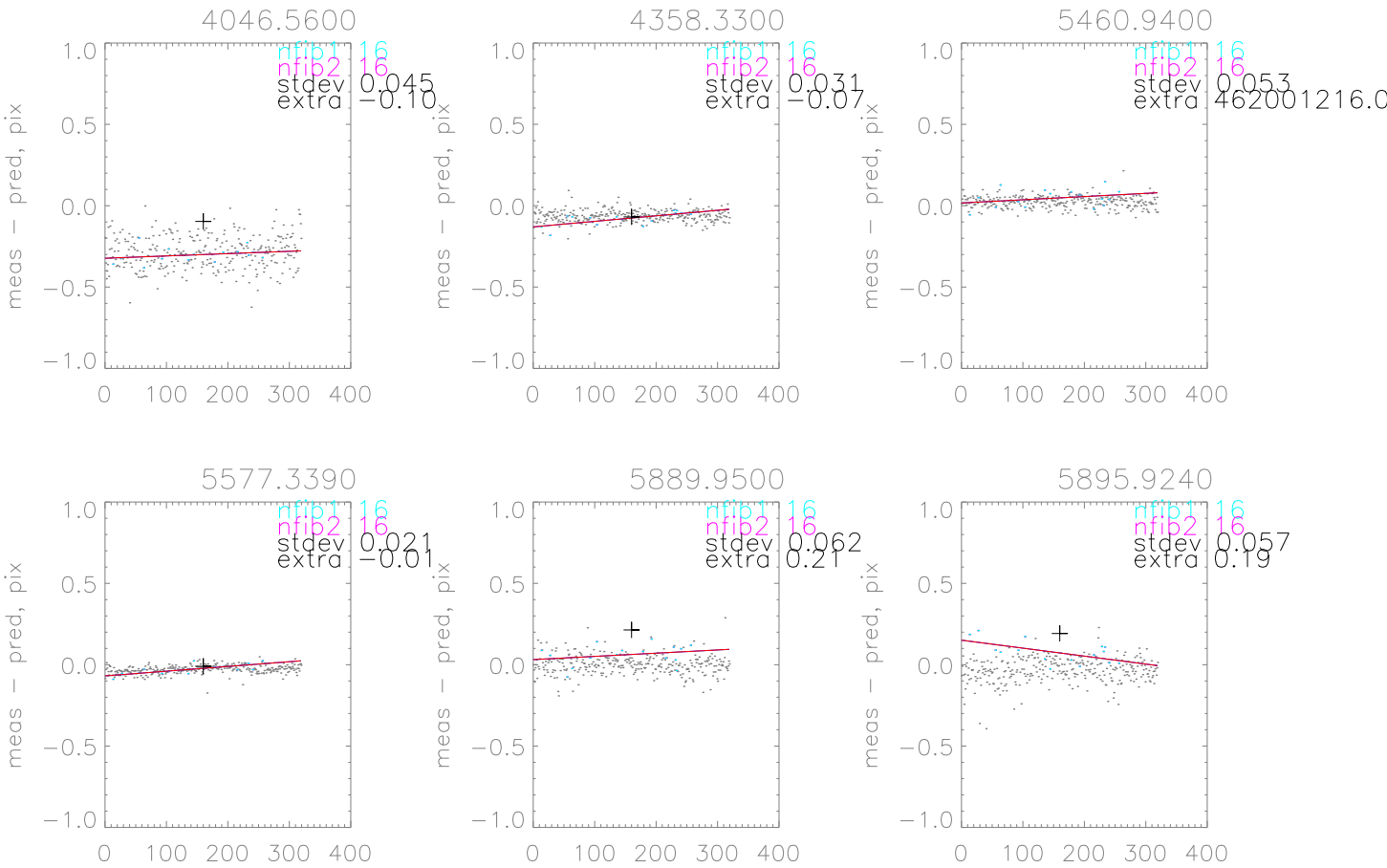

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

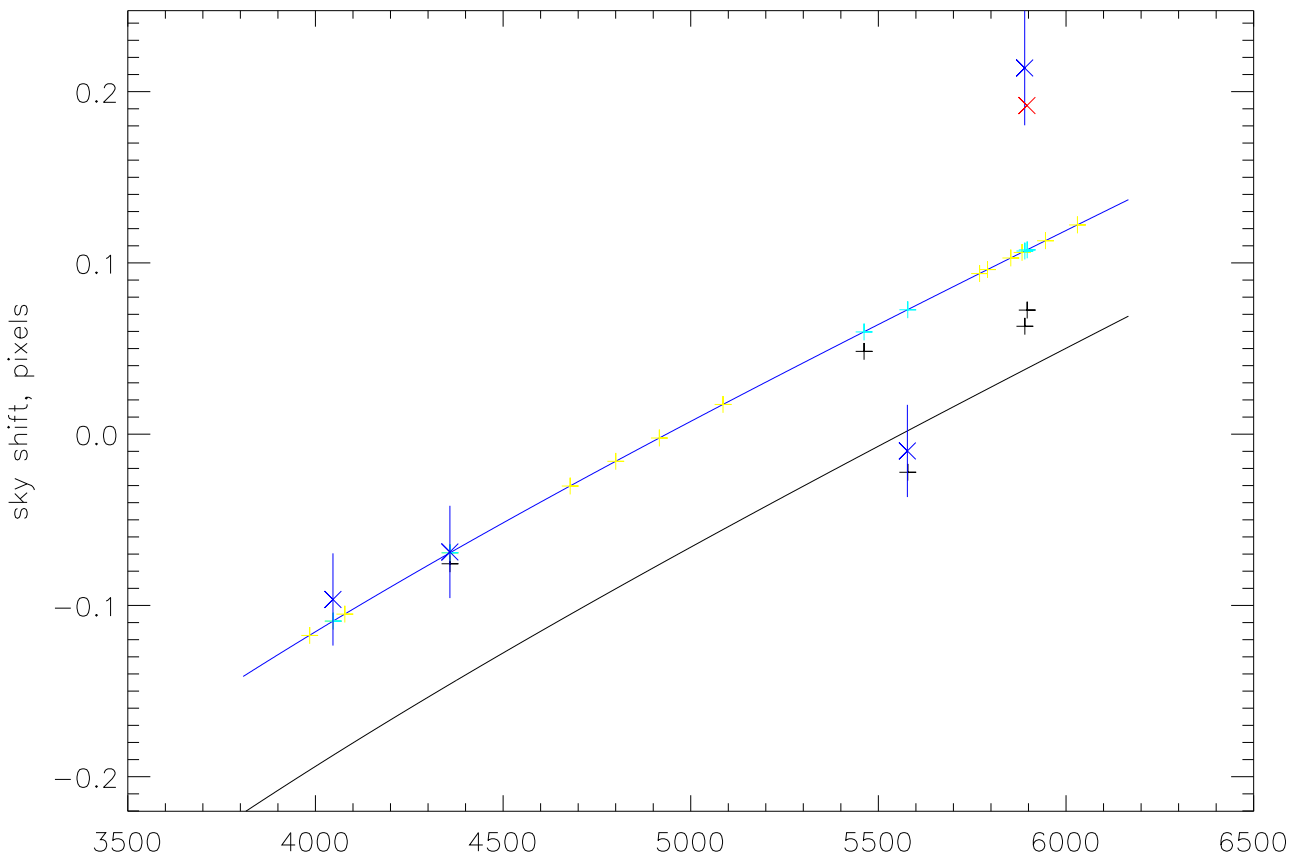

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

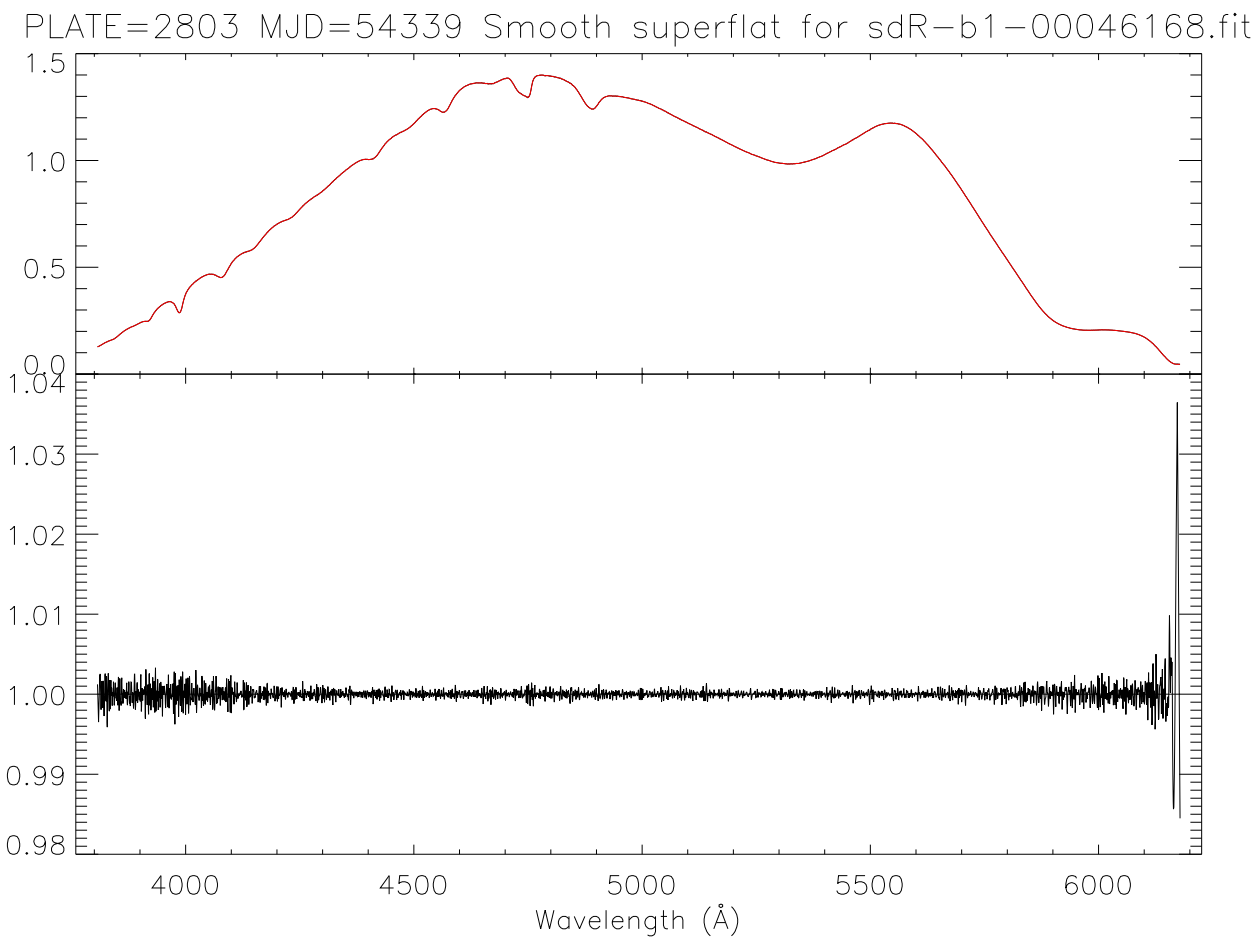

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

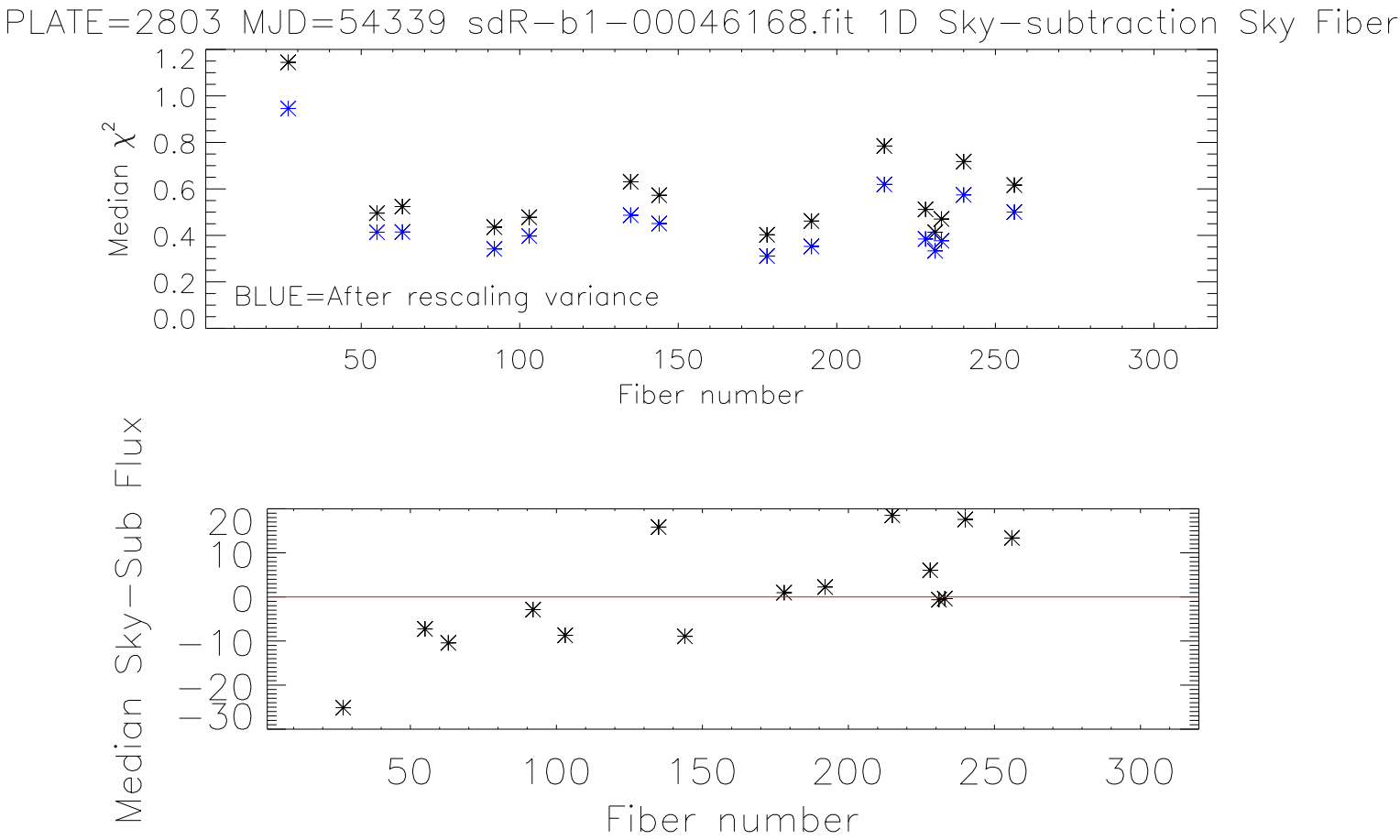

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

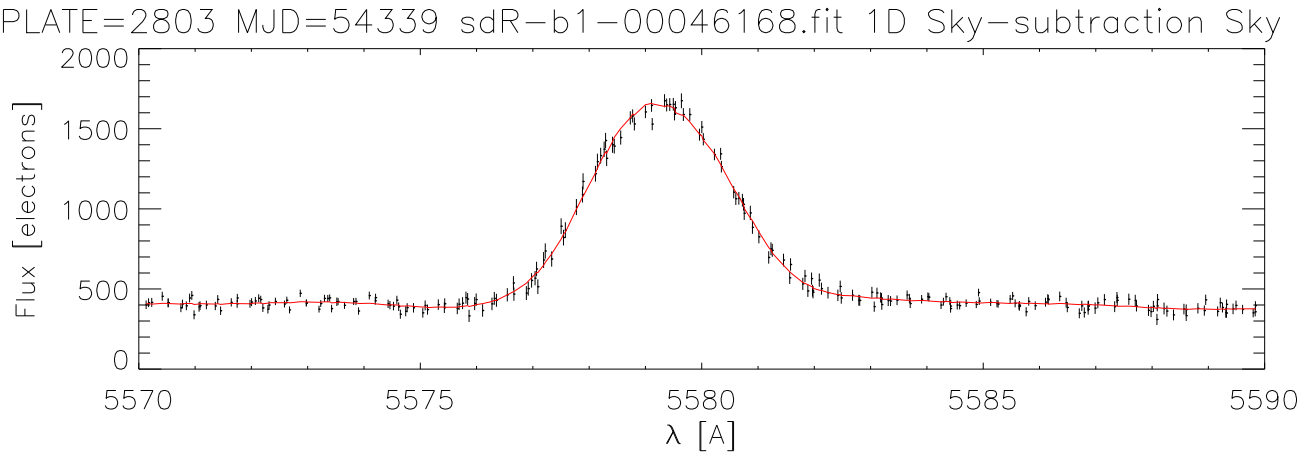

4046.5600
nfib1 16
nfib2 16
stdev 0.045
extra −0.10
4358.3300
nfib1 16
nfib2 16
stdev 0.031
extra −0.07
5460.9400
nfib1 16
nfib2 16
stdev 0.053
extra 462001216.0
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra −0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.062
extra 0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.057
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

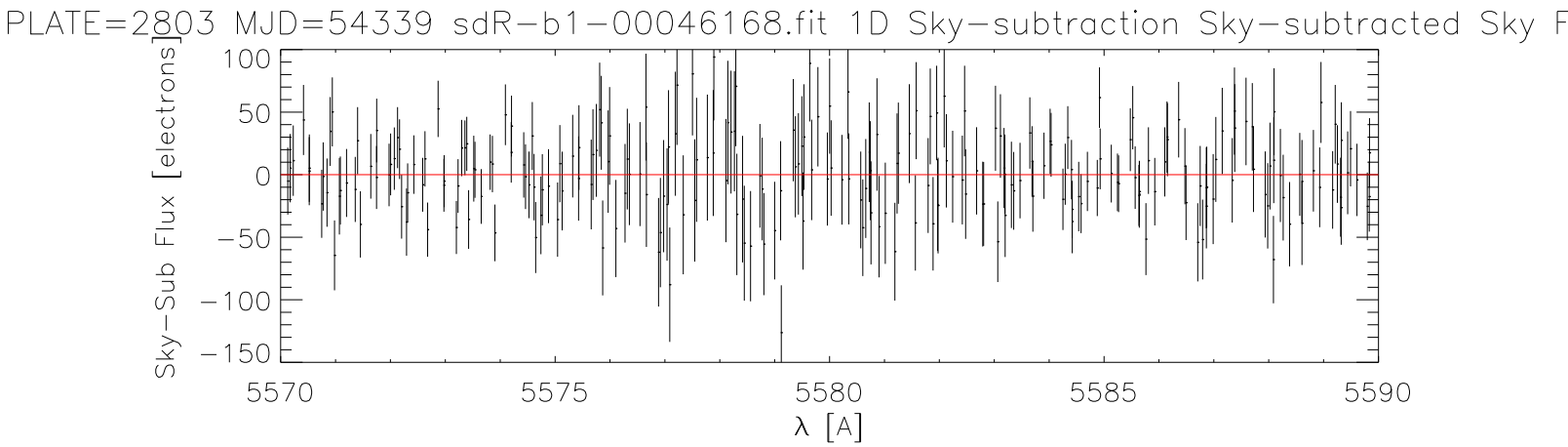

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

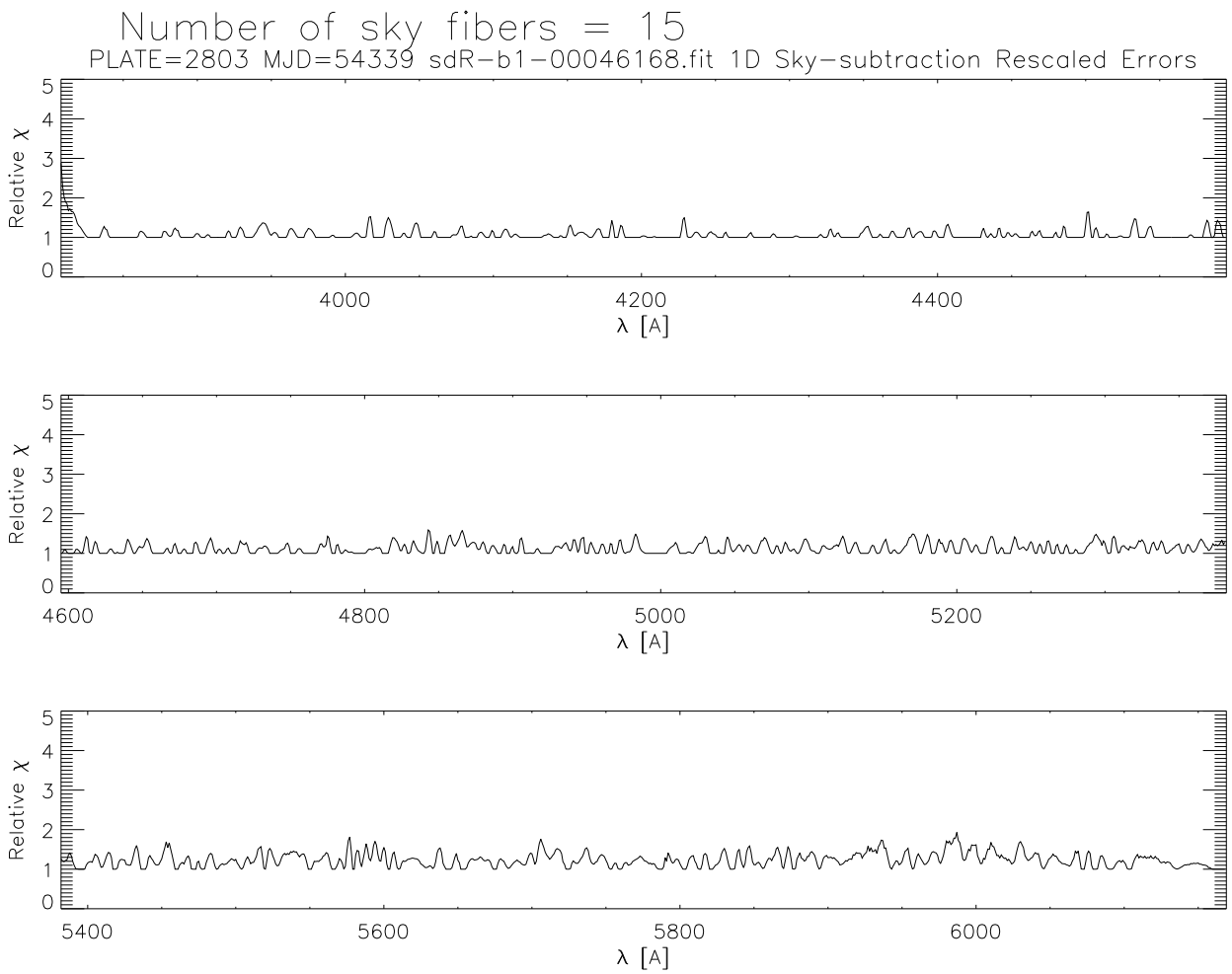
es= −0.0001

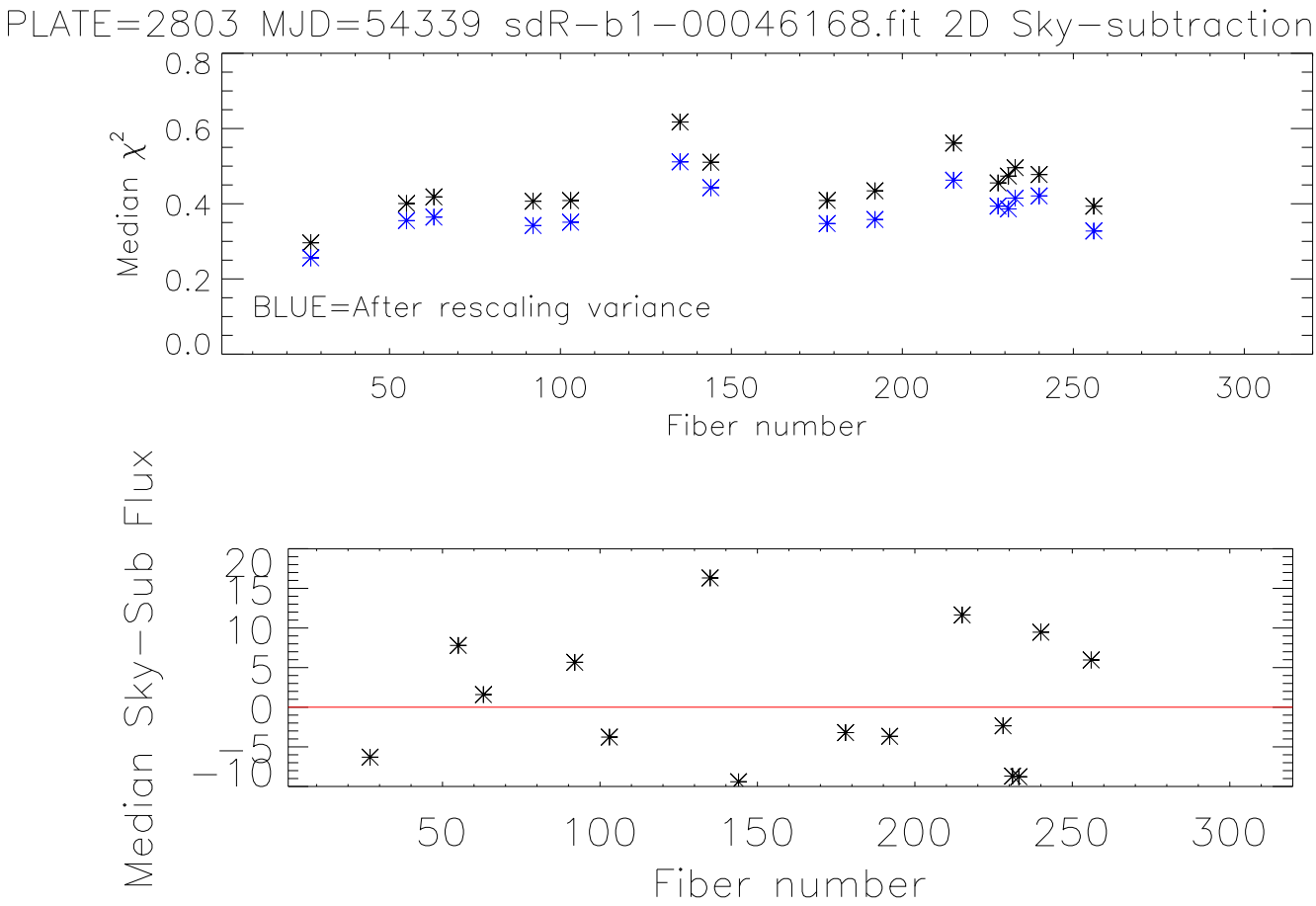

PLATE=2803 MJD=54339 Smooth superflat for sdR−b1−00046168.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

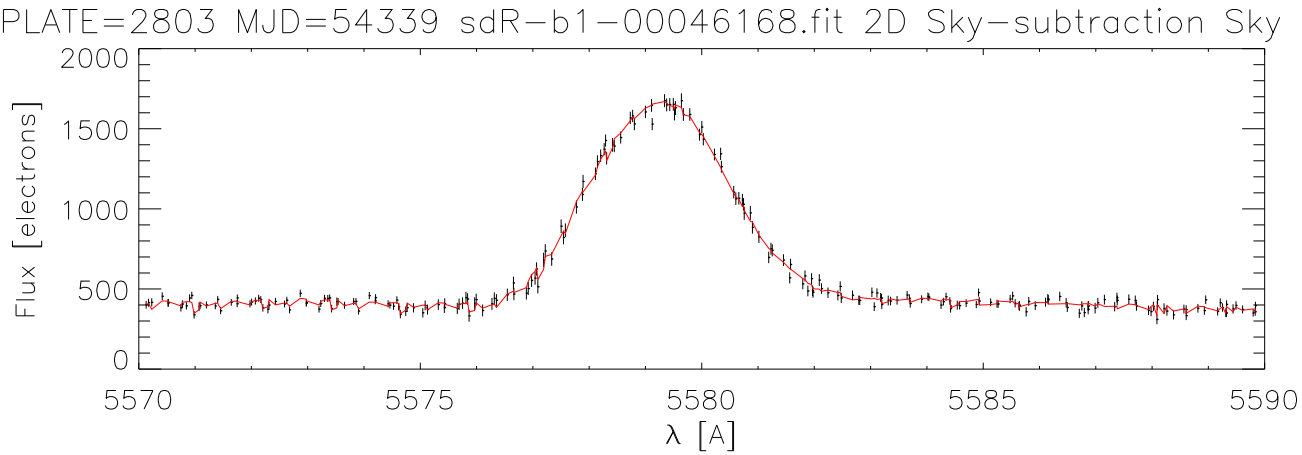

PLATE=2803 MJD=54339 sdR-b1-00046168.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

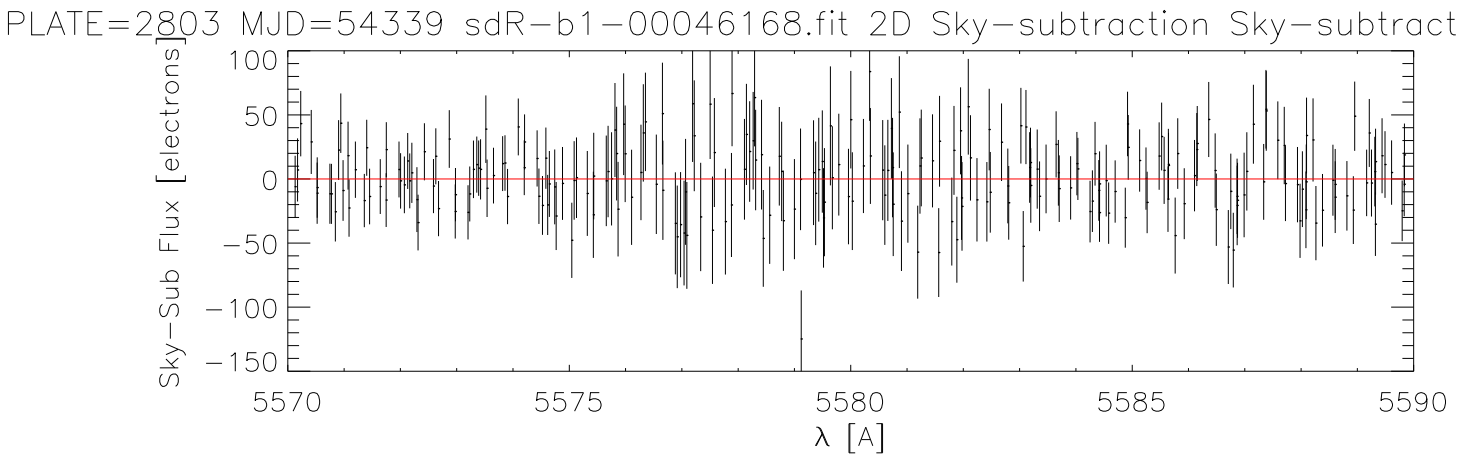

PLATE=2803 MJD=54339 sdR-b1-00046168.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

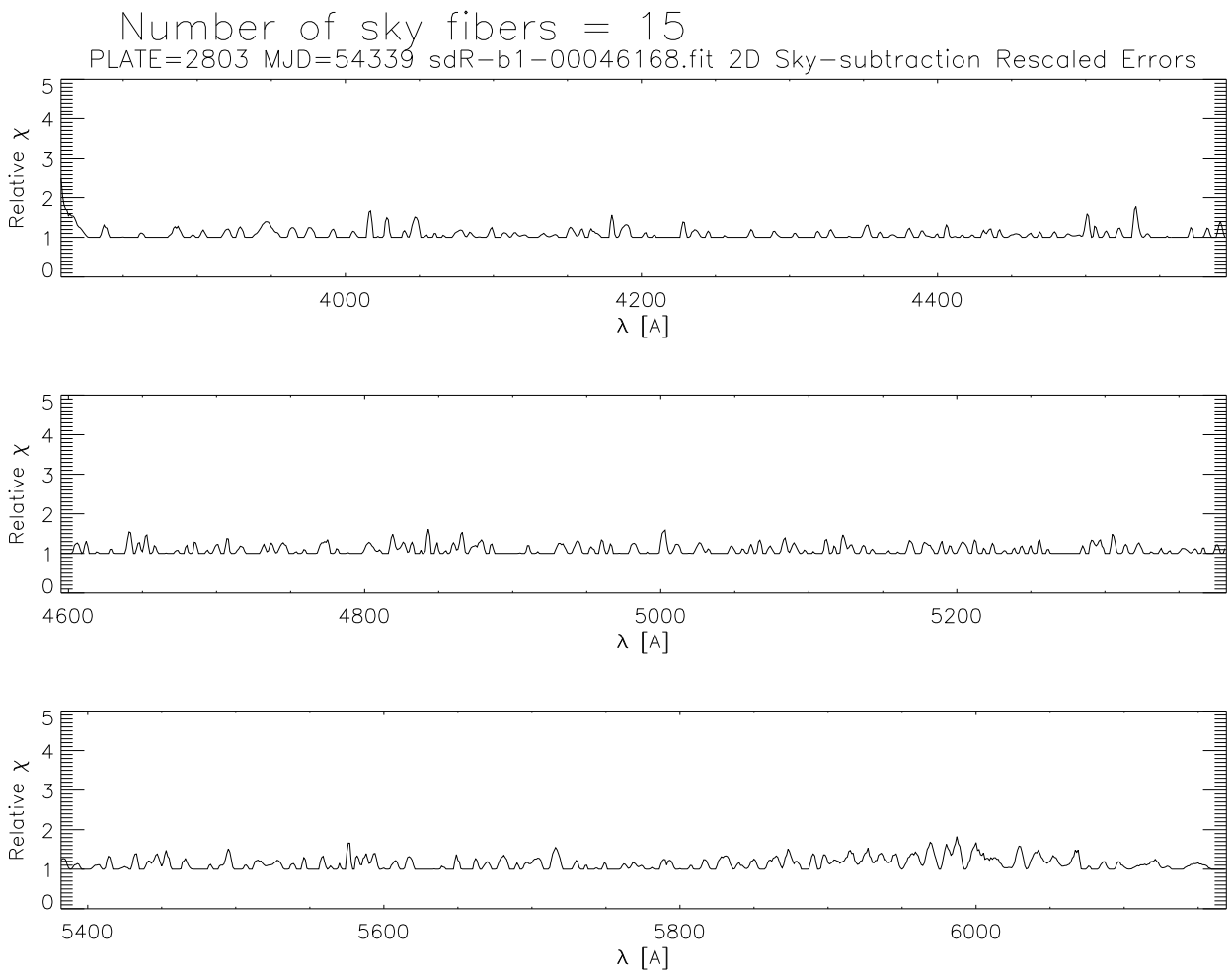

PLATE=2803 MJD=54339 sdR-b1-00046168.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

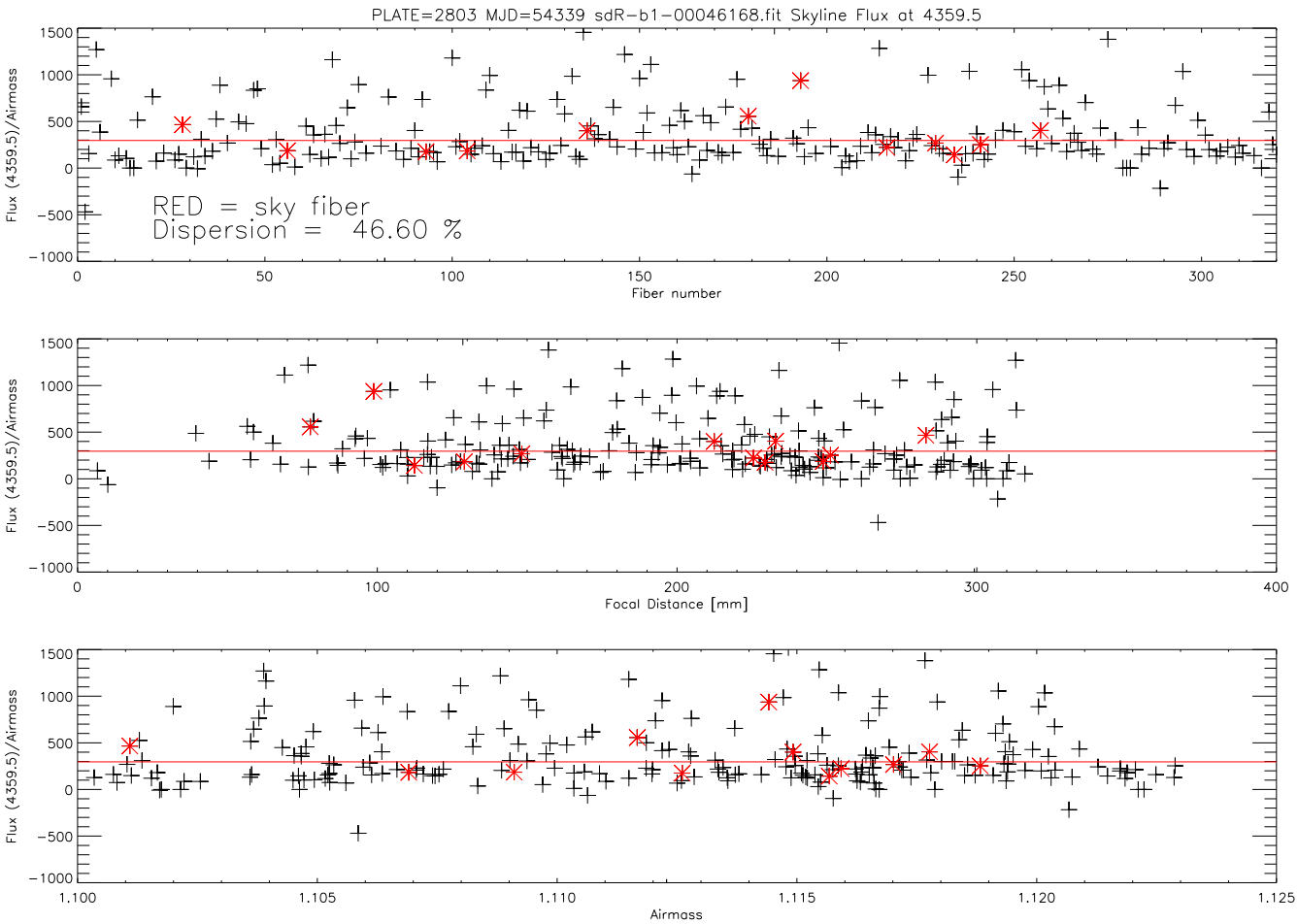

Number of sky fibers = 15
PLATE=2803 MJD=54339 sdR-b1-00046168.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

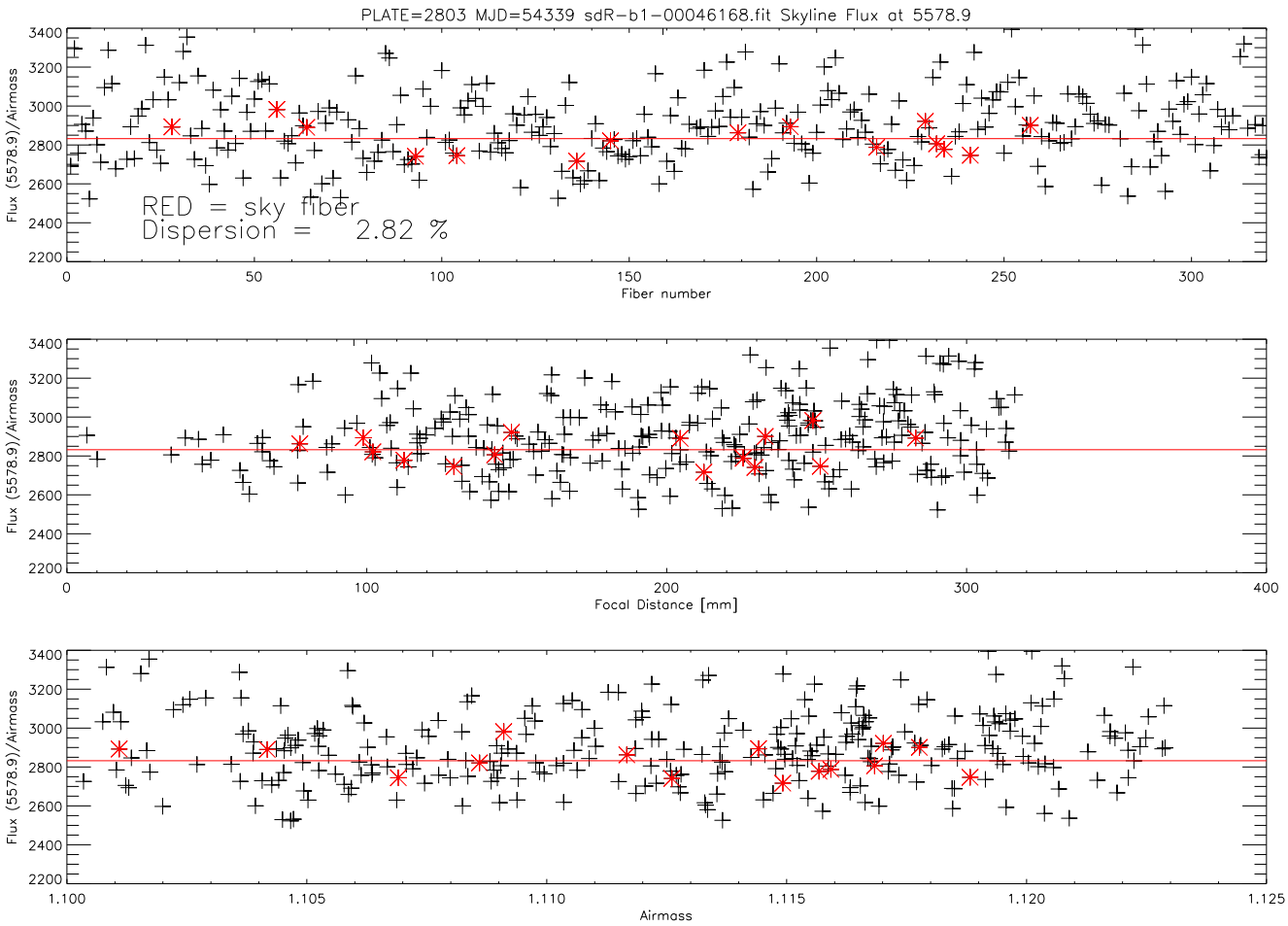

PLATE=2803 MJD=54339 sdR-b1-00046168.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
15
20
50
100
150
200
250
300
Fiber number

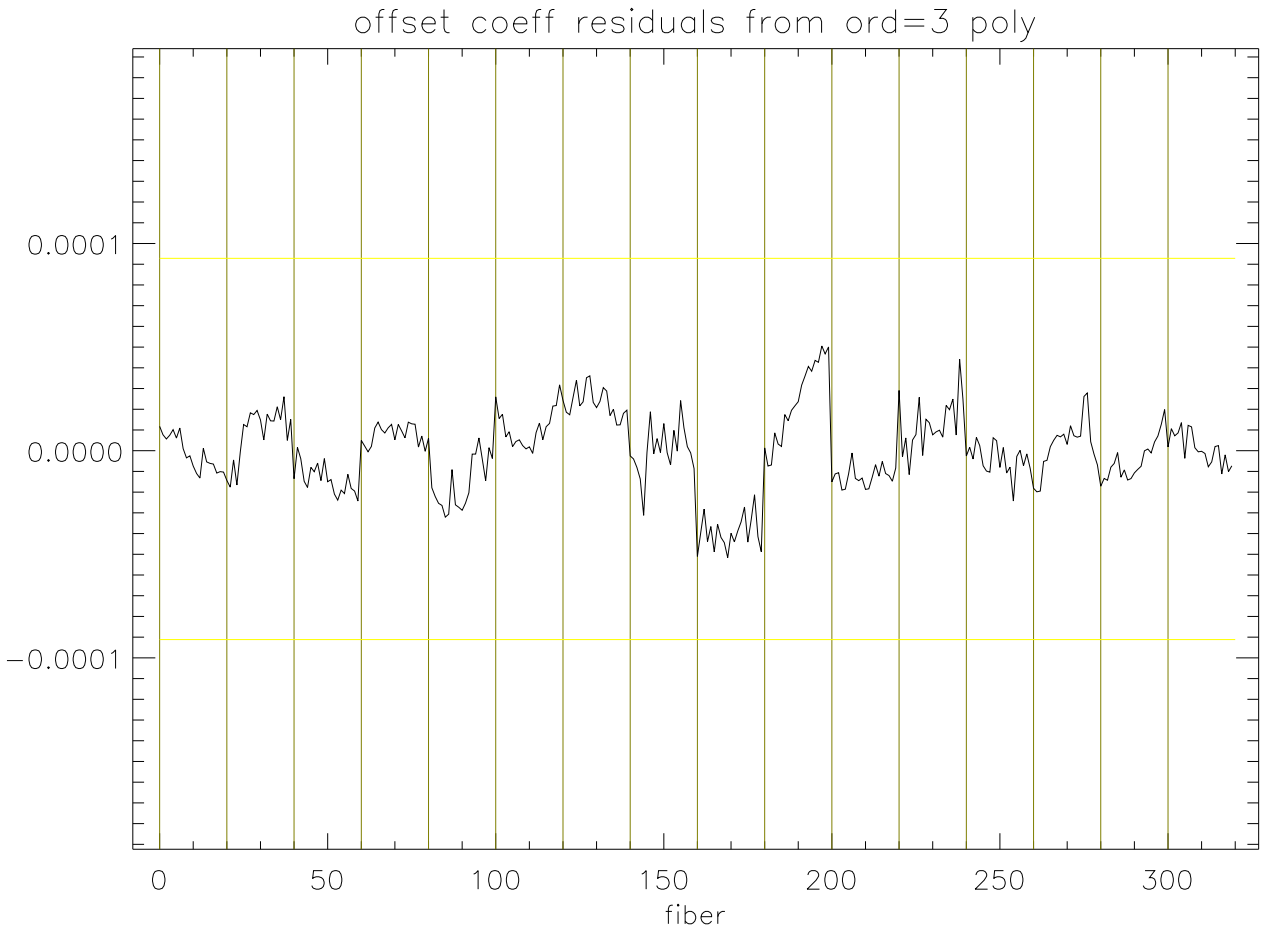

PLATE=2803 MJD=54339 sdR-b1-00046168.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

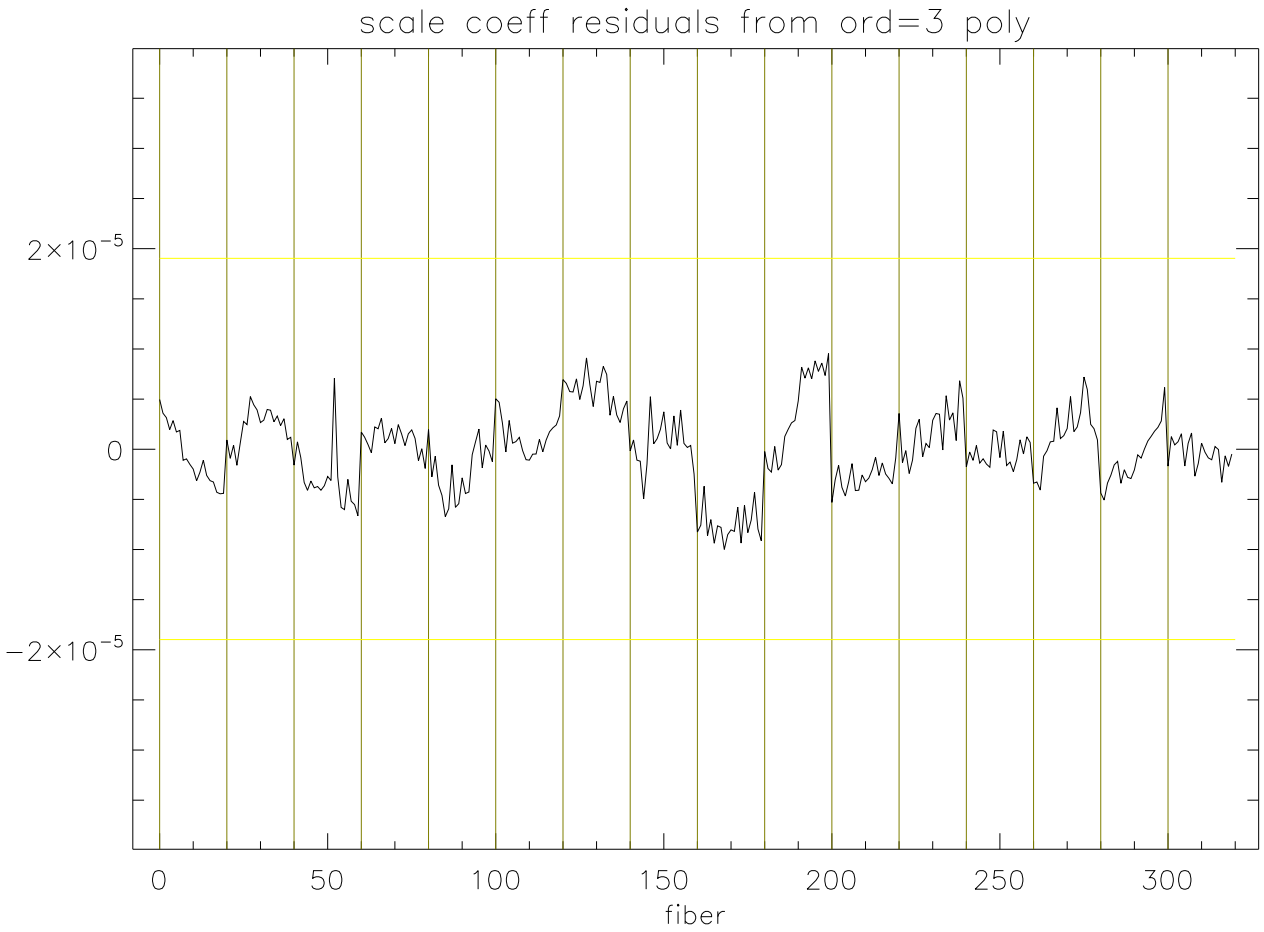

PLATE=2803 MJD=54339 sdR-b1-00046168.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

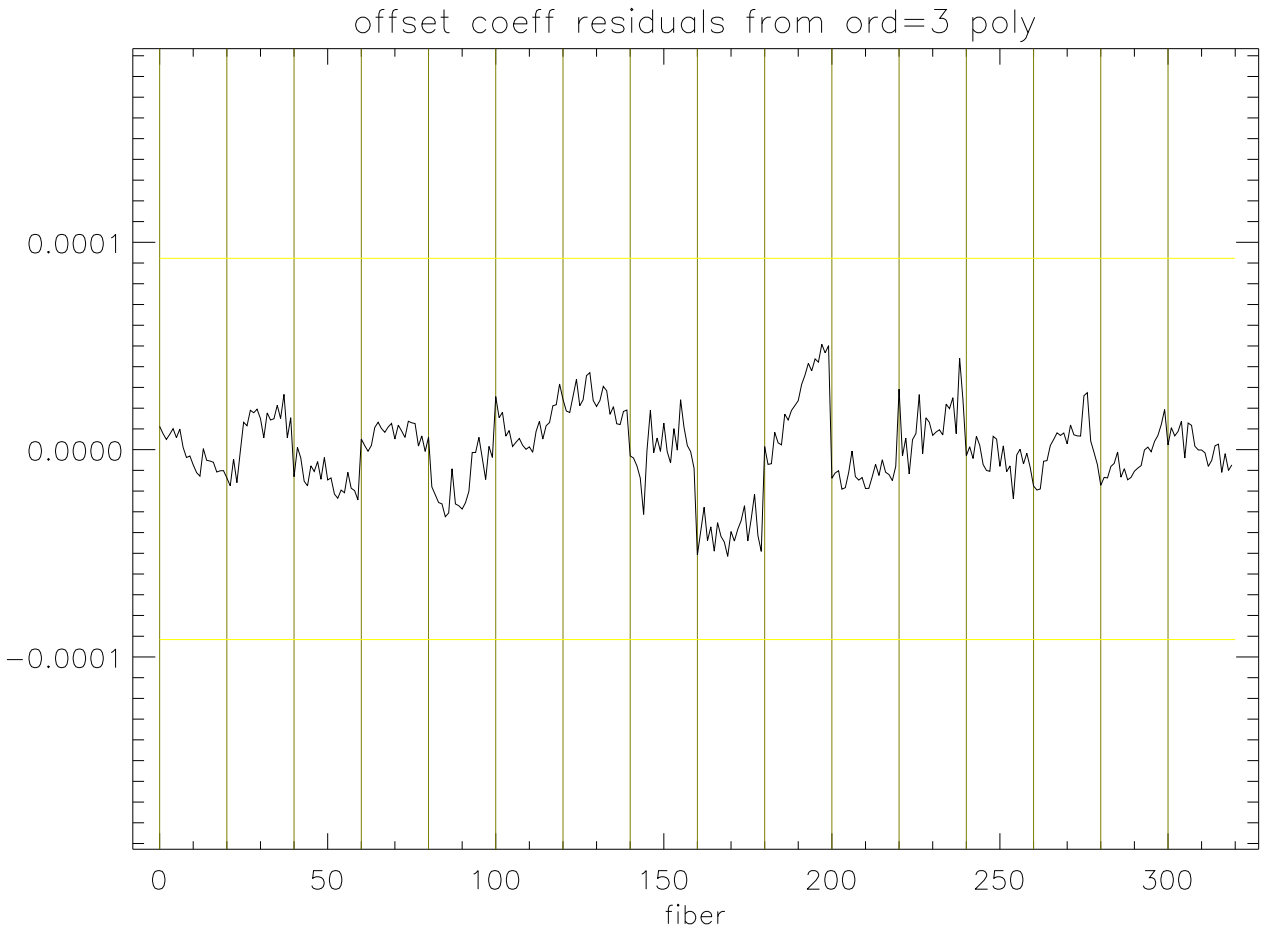

Number of sky fibers = 15
PLATE=2803 MJD=54339 sdR-b1-00046168.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

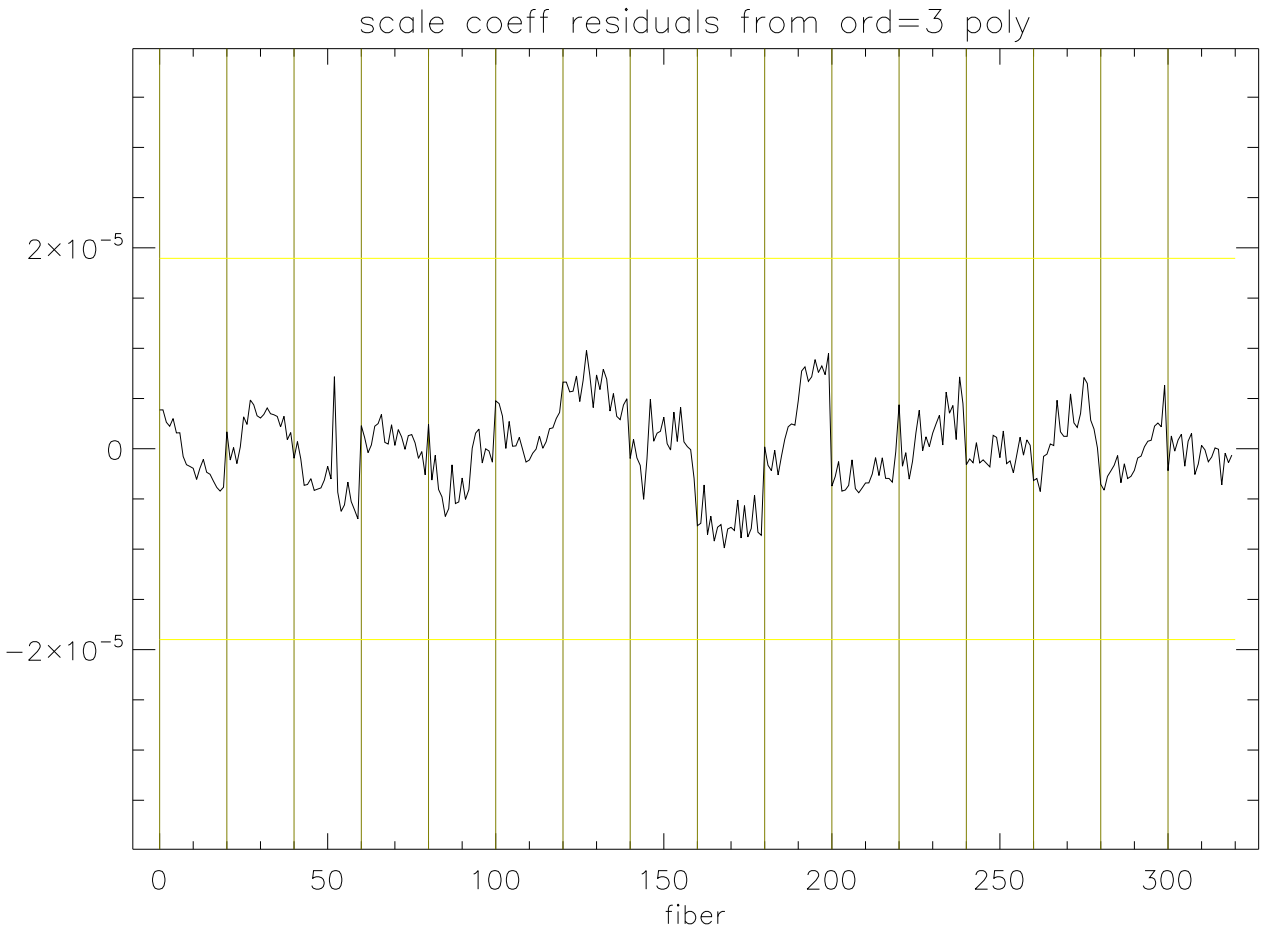

PLATE=2803 MJD=54339 sdR-b1-00046168.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 46.60 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

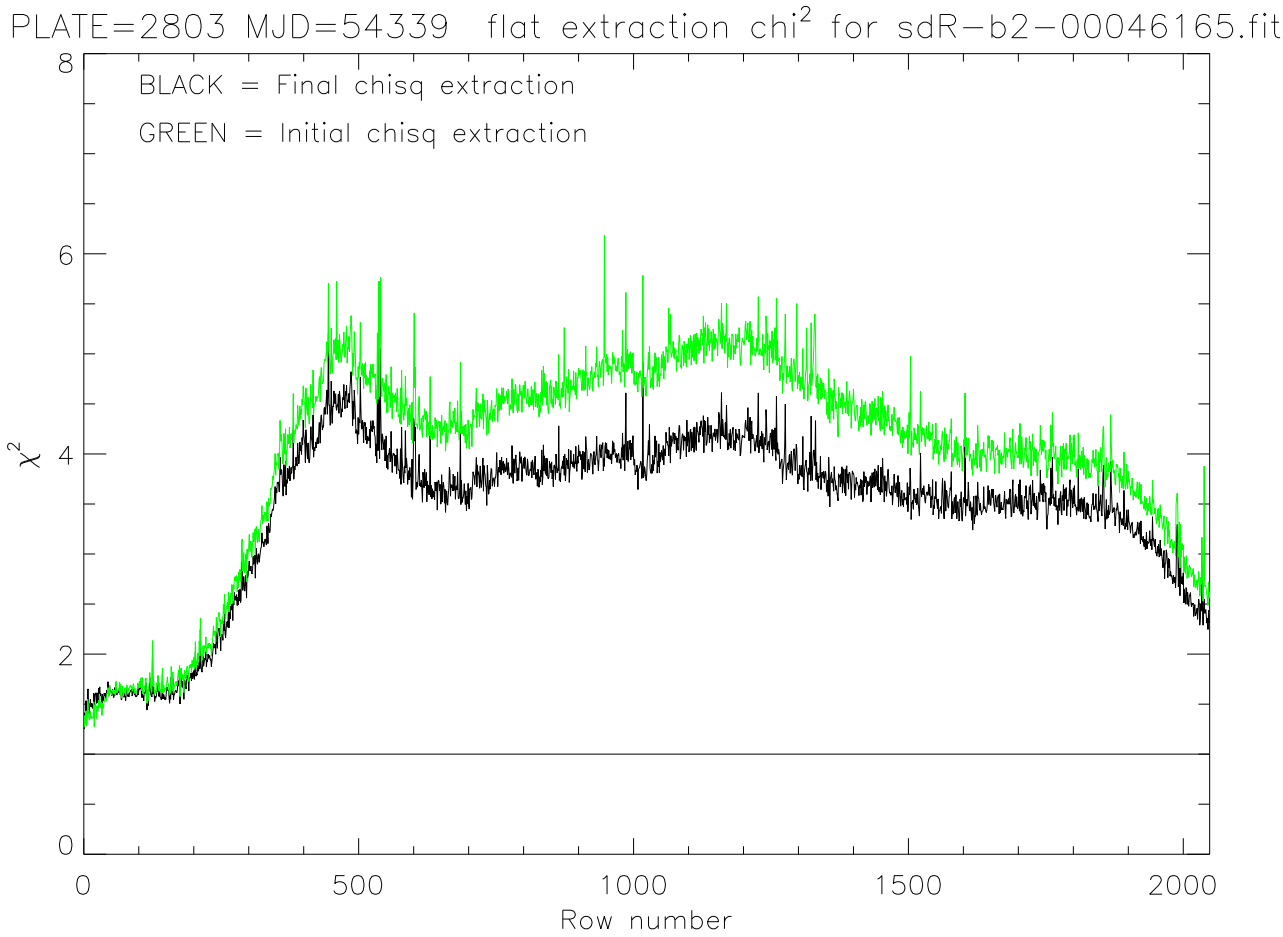

PLATE=2803 MJD=54339 sdR-b1-00046168.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.82 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

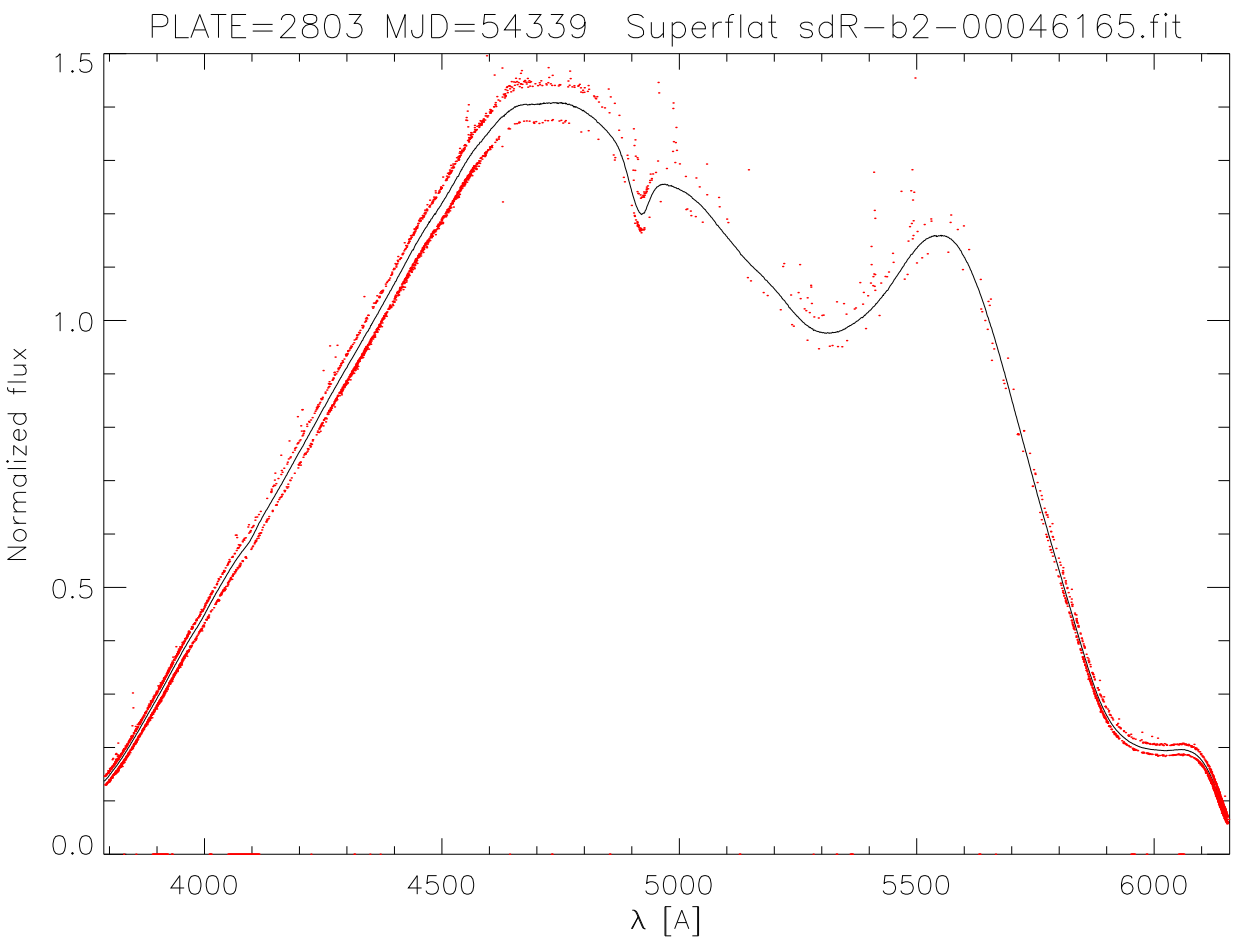

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

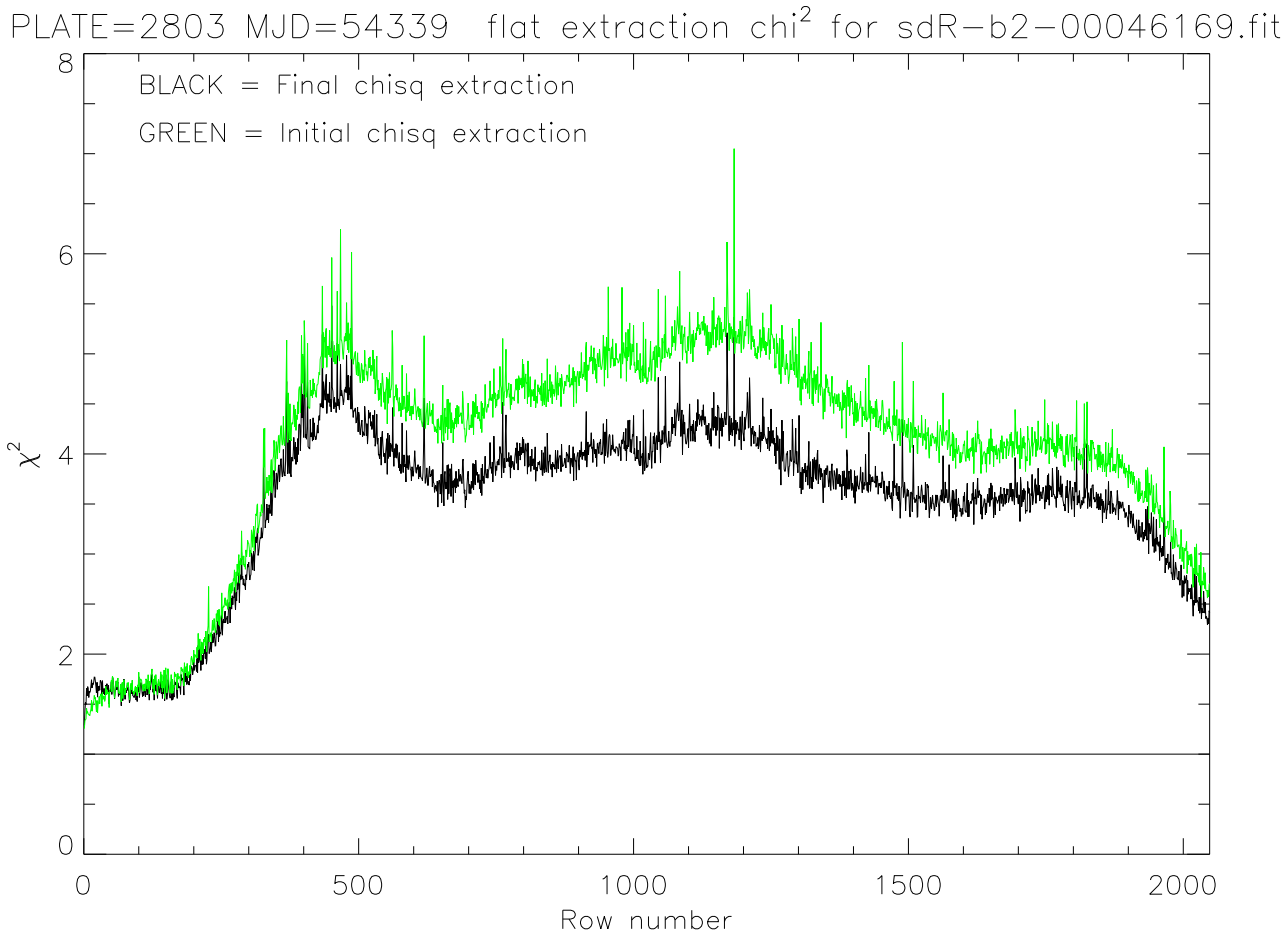

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

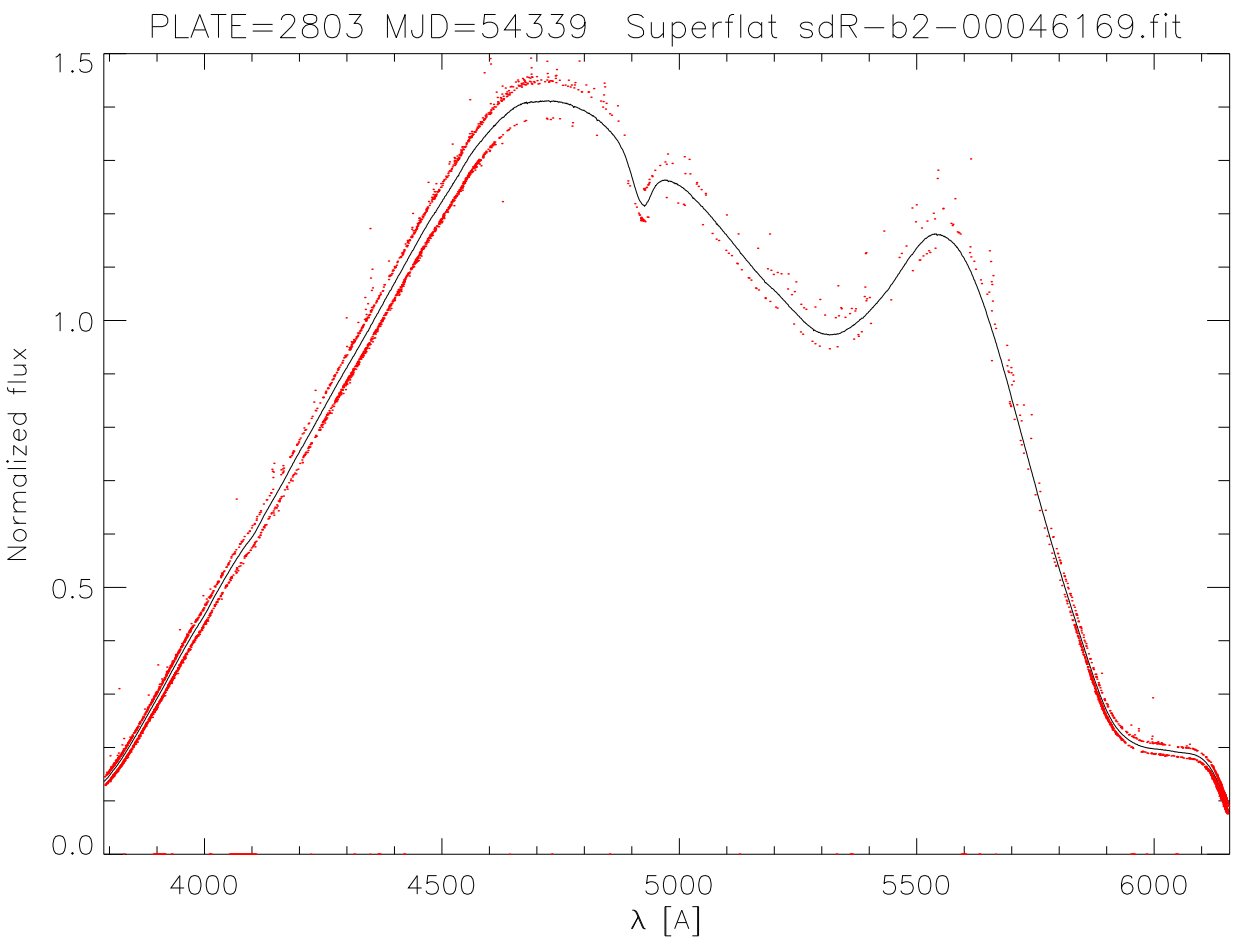

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

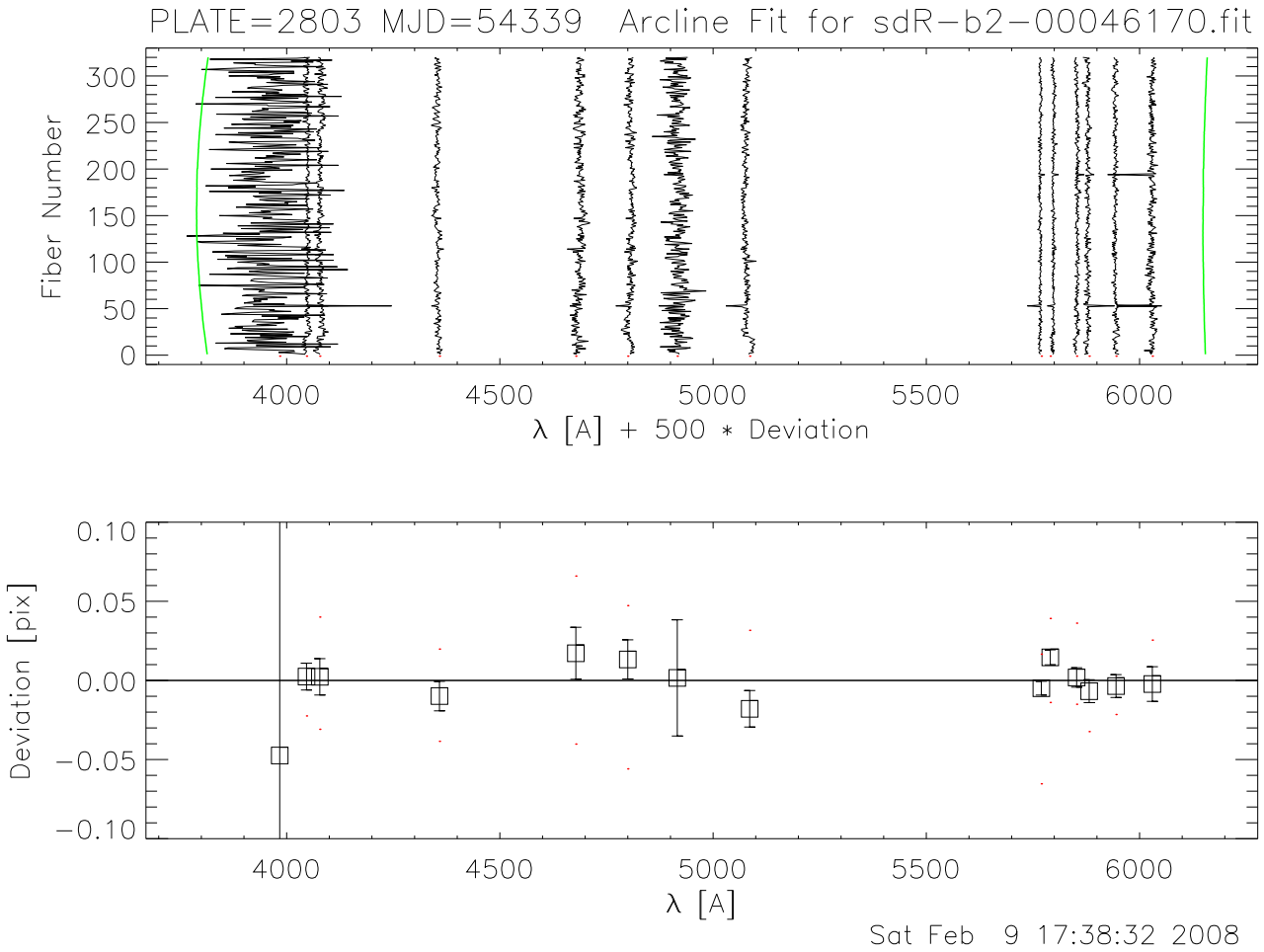

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

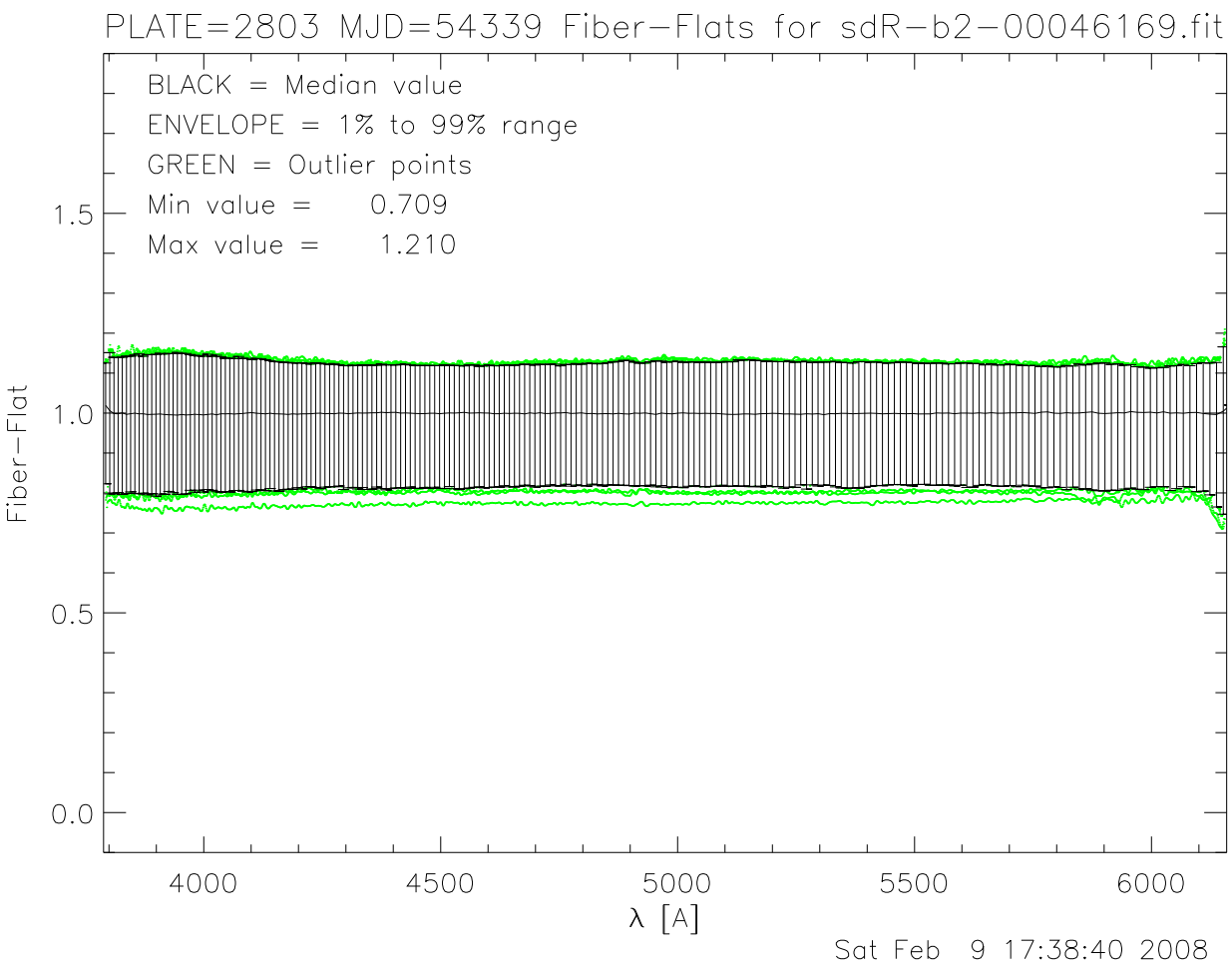

PLATE=2803 MJD=54339 flat extraction chi^2 for sdR−b2−00046165.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

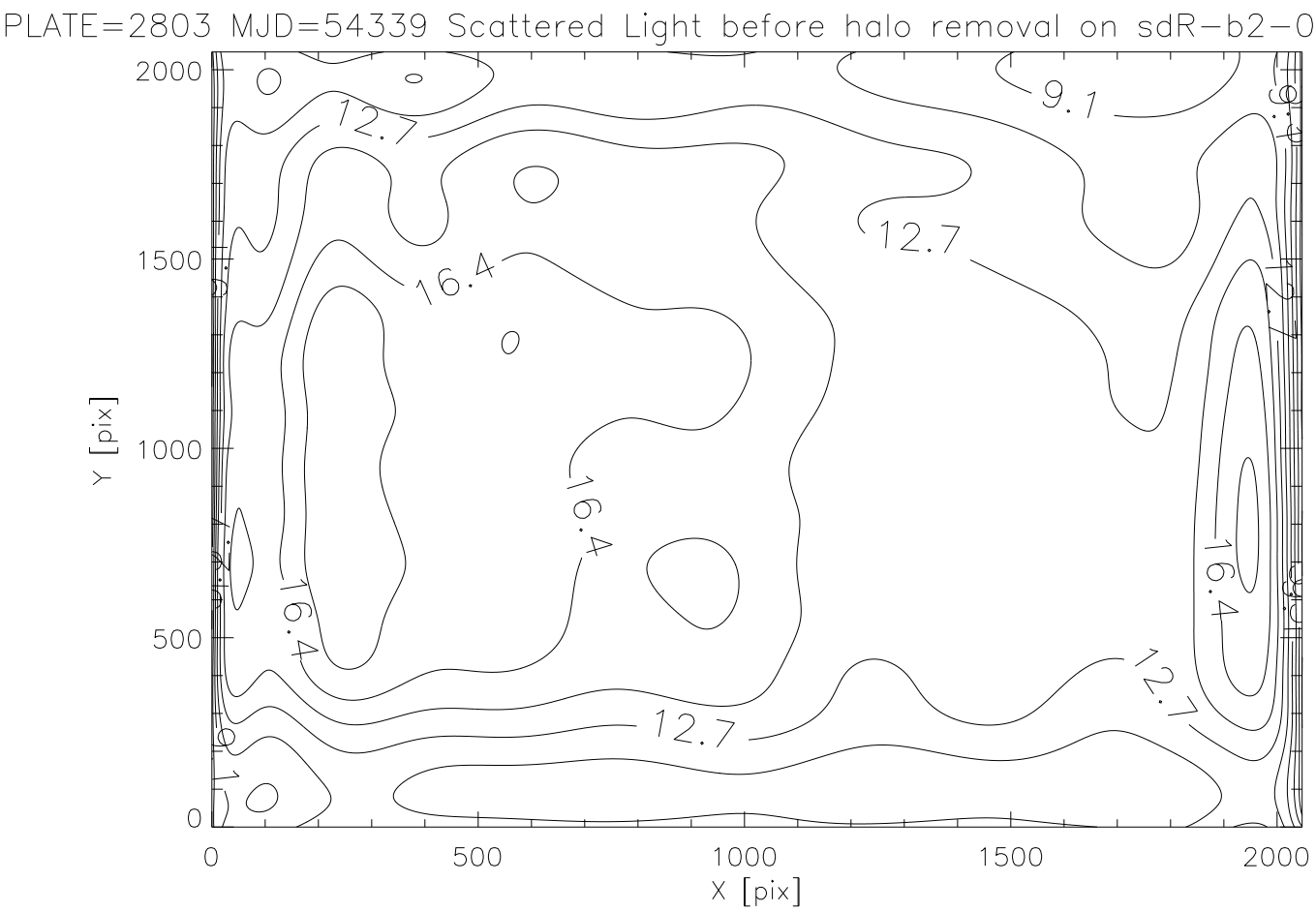

PLATE=2803 MJD=54339 Superflat sdR-b2-00046165.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

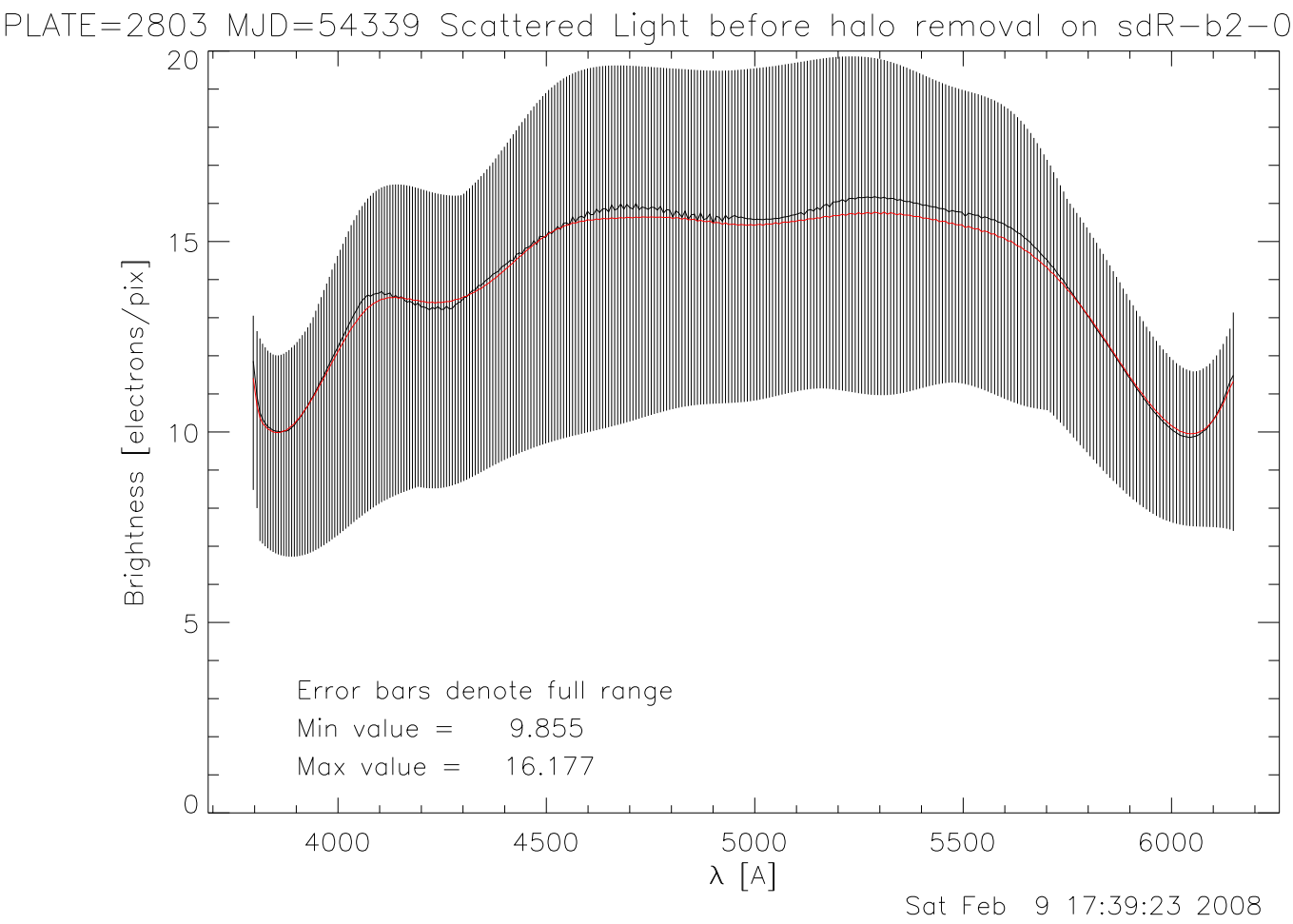

PLATE=2803 MJD=54339 flat extraction chi^2 for sdR−b2−00046169.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

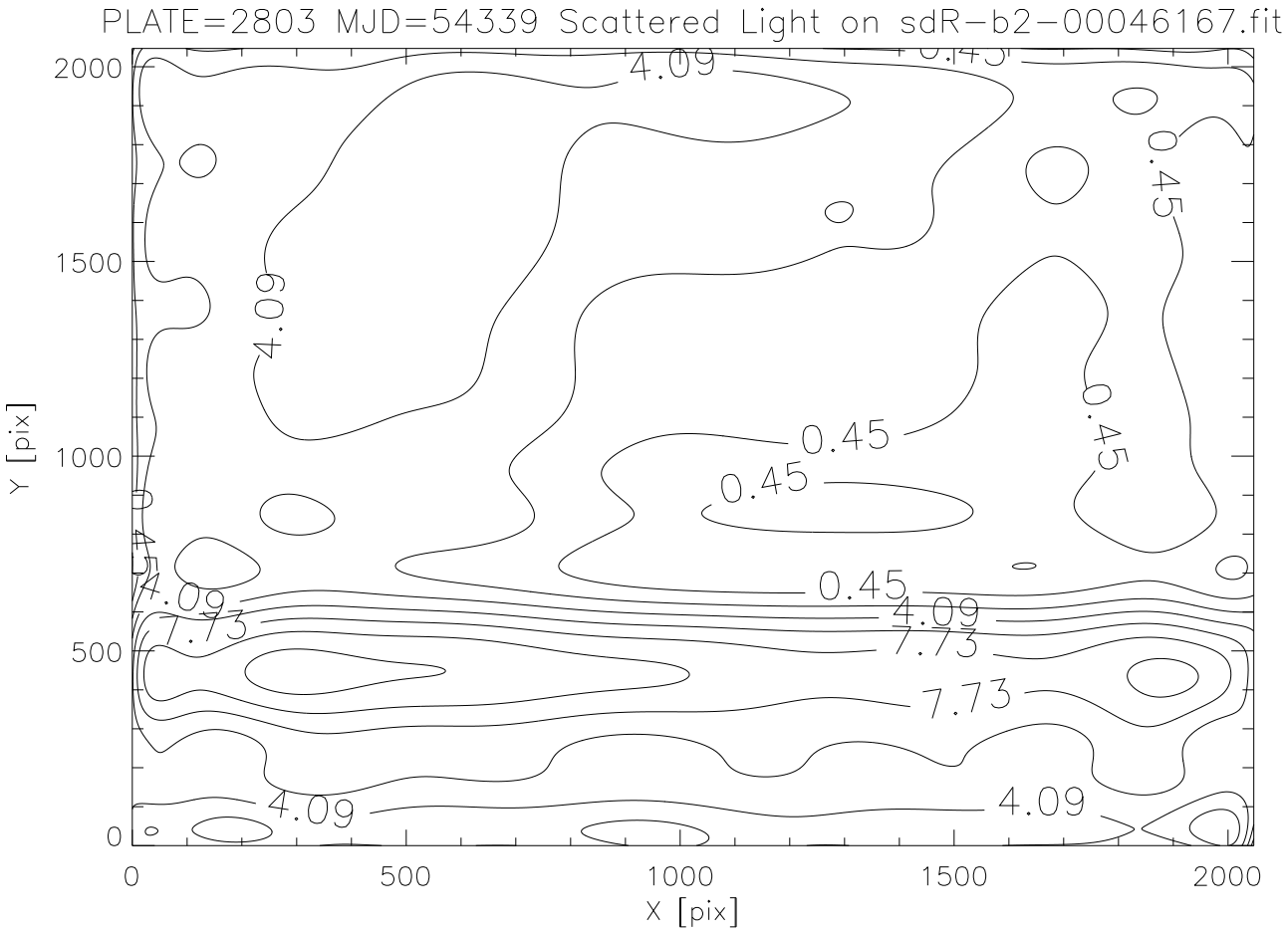

PLATE=2803 MJD=54339 Superflat sdR-b2-00046169.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

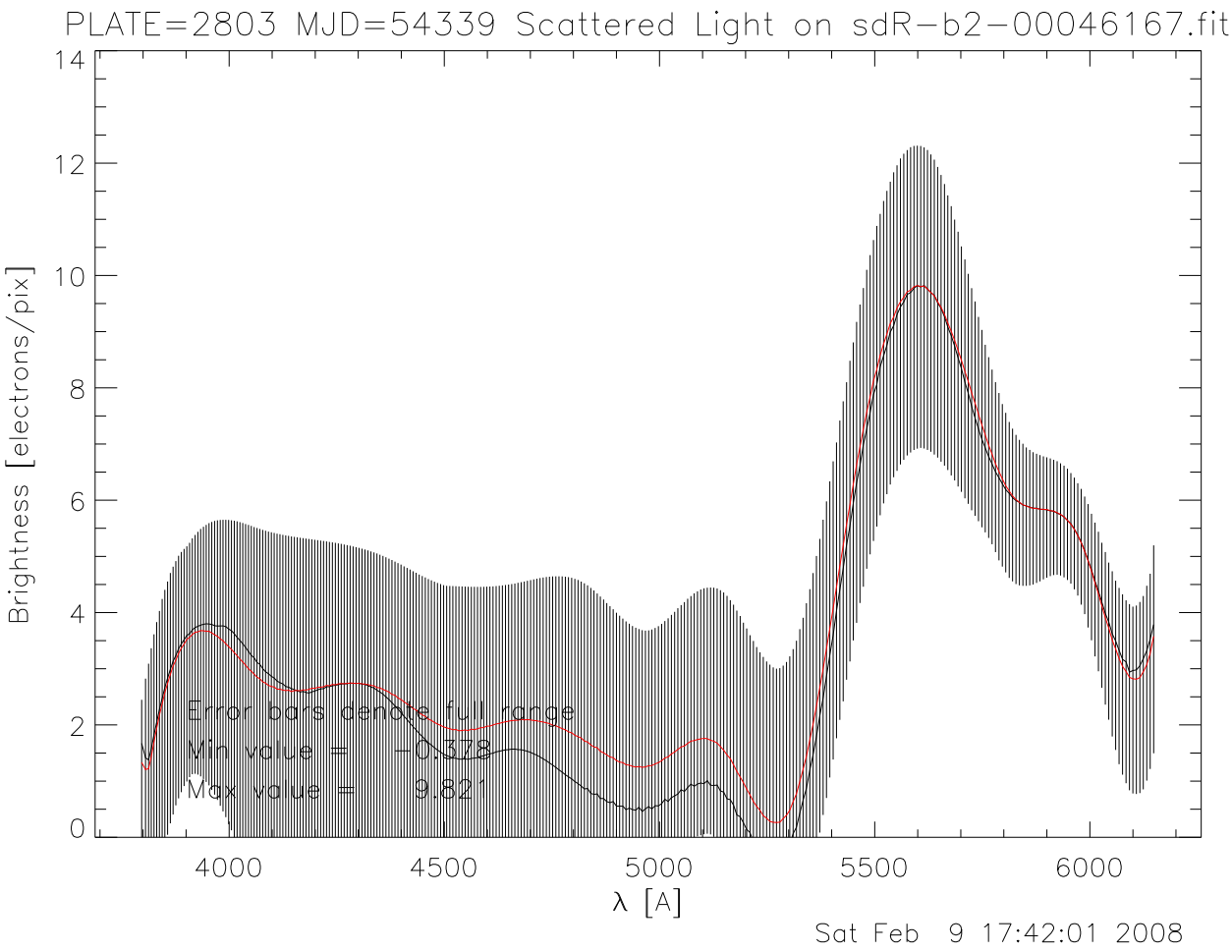

PLATE=2803 MJD=54339 Arcline Fit for sdR-b2-00046170.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 17:38:32 2008

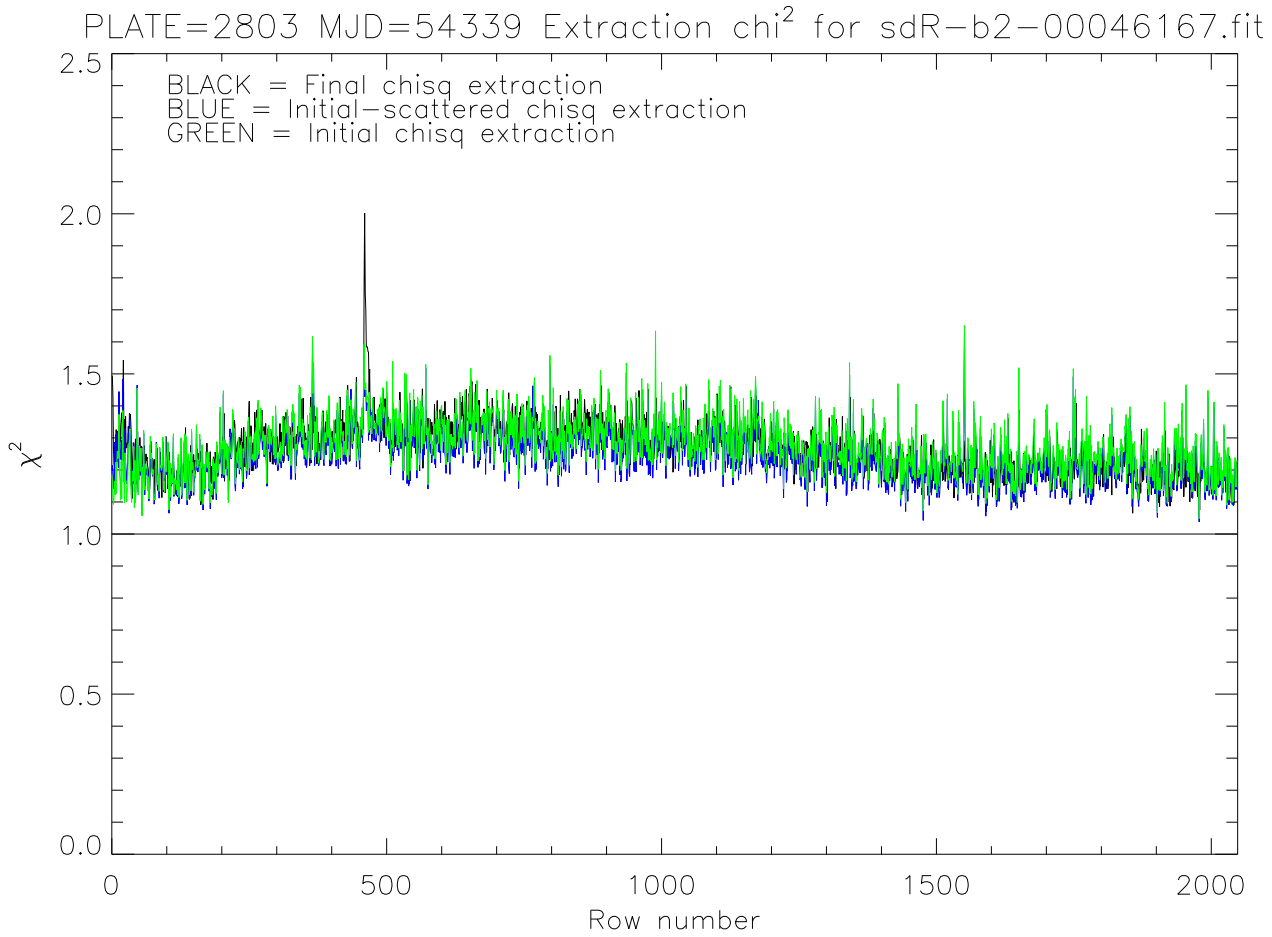

PLATE=2803 MJD=54339 Fiber-Flats for sdR-b2-00046169.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.709
Max value = 1.210
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 17:38:40 2008

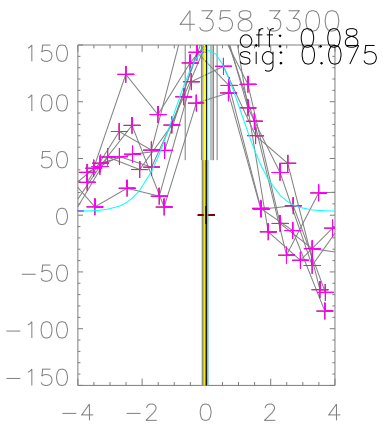

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-b2-00046167.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0
12.7
9.1
16.4
12.7
16.4
0
16.4
16.4
12.7
12.7
9.1
0

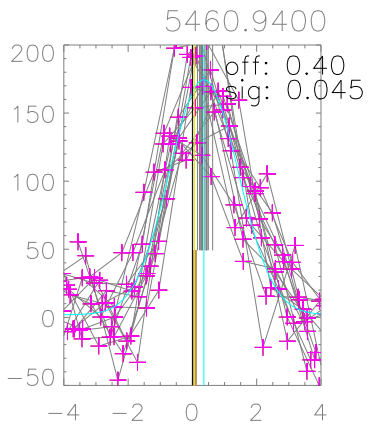

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-b2-00046167.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.855
Max value = 16.177
Sat Feb 9 17:39:23 2008

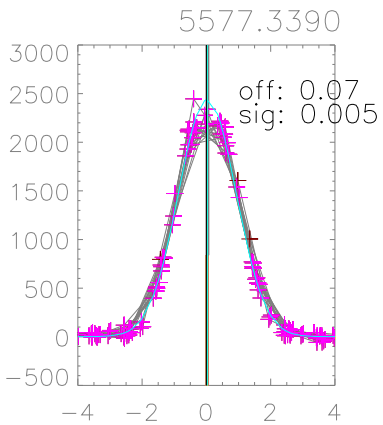

PLATE=2803 MJD=54339 Scattered Light on sdR-b2-00046167.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.09
0.45
7.73

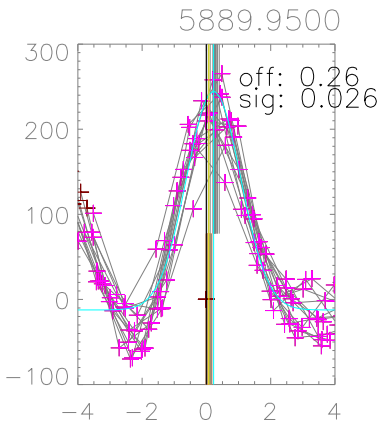

PLATE=2803 MJD=54339 Scattered Light on sdR-b2-00046167.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = -0.378
Max value = 9.82
Sat Feb 9 17:42:01 2008

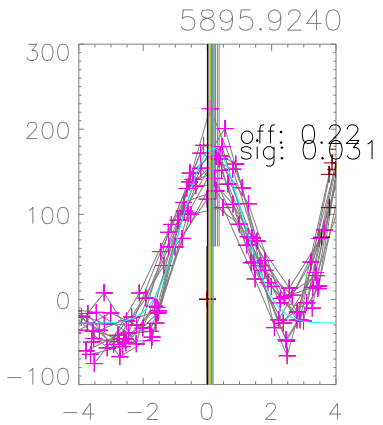

PLATE=2803 MJD=54339 Extraction chi^2 for sdR-b2-00046167.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

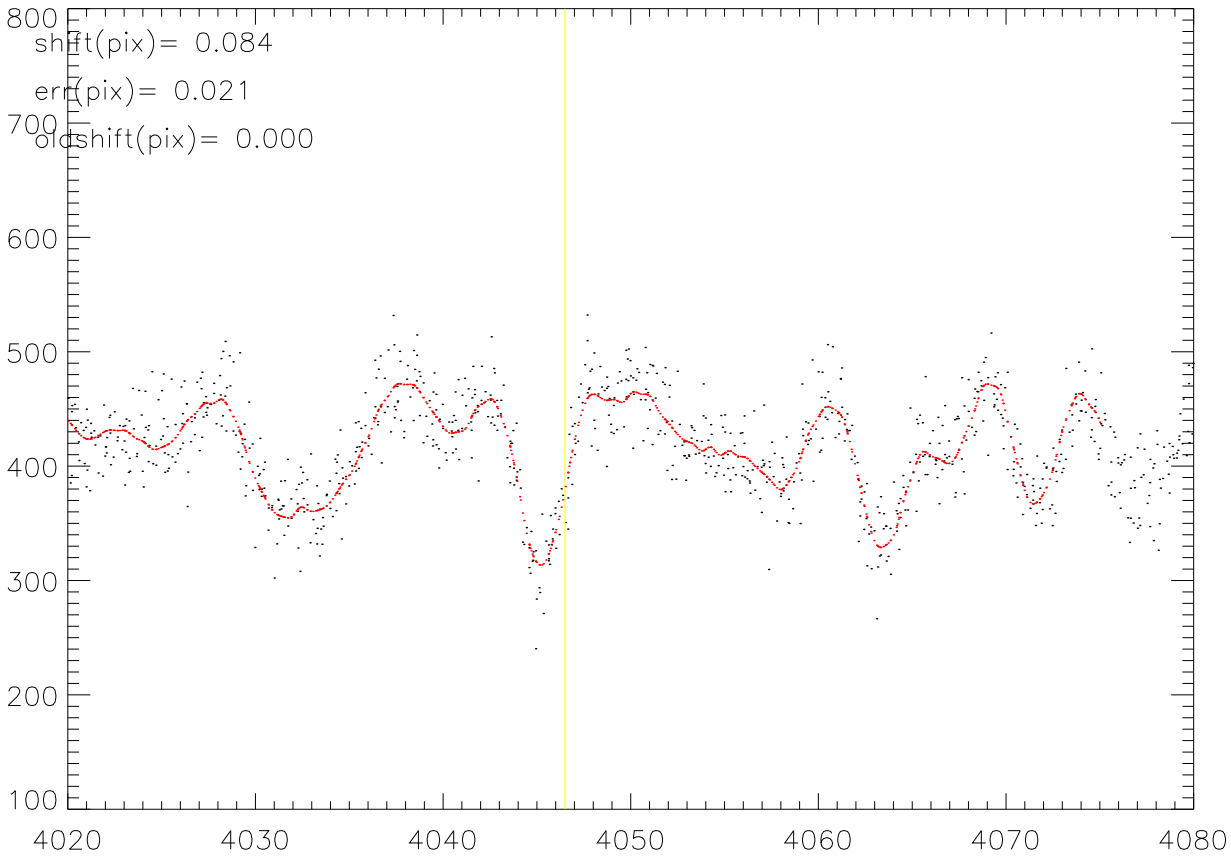

4358.3300
off: 0.08
sig: 0.075

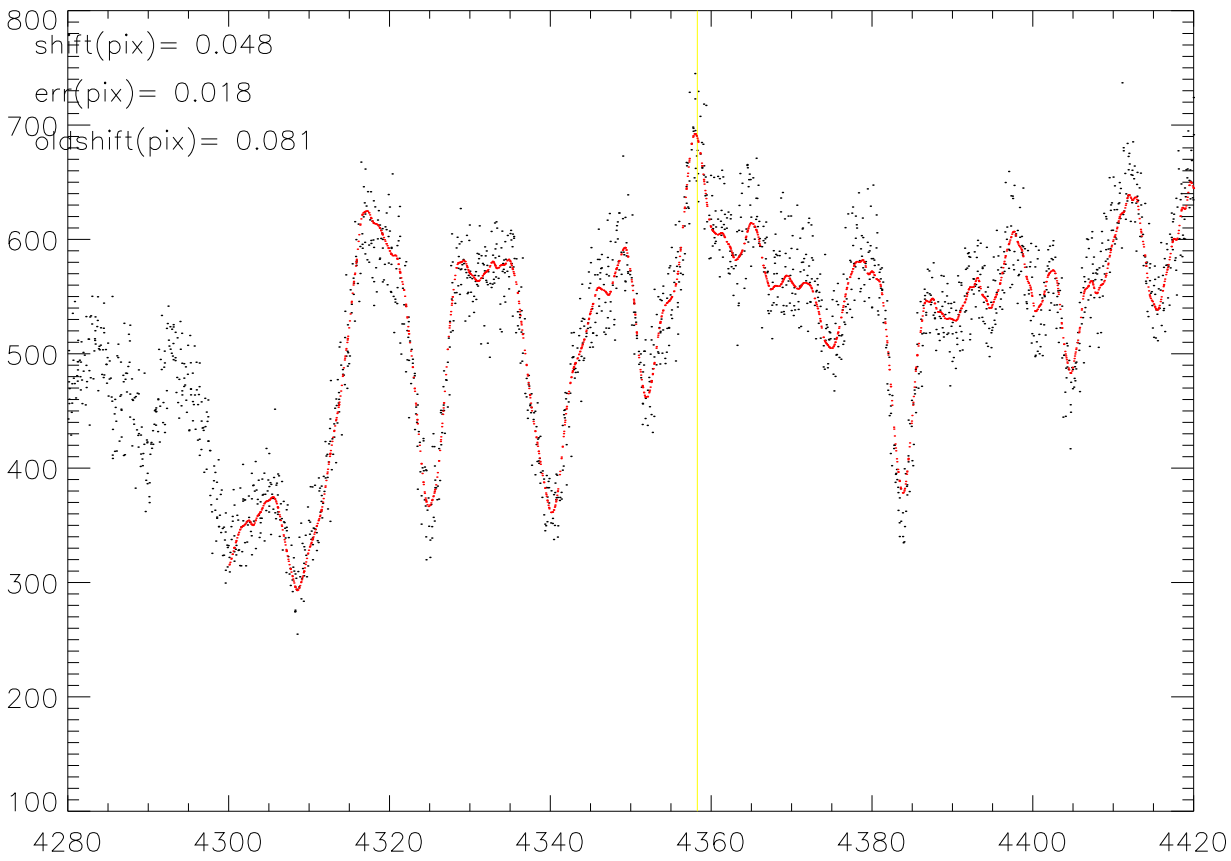

5460.9400
off: 0.40
sig: 0.045

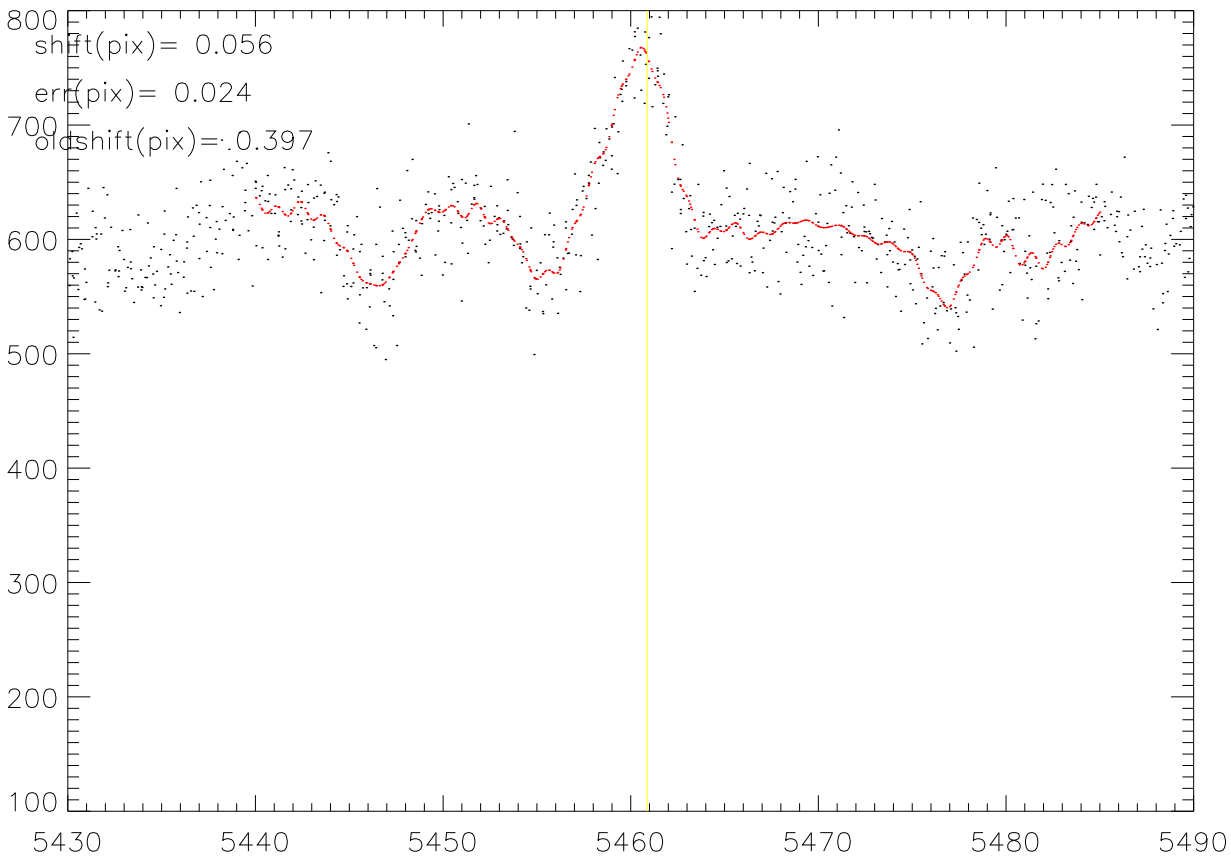

5577.3390
off: 0.07
sig: 0.005

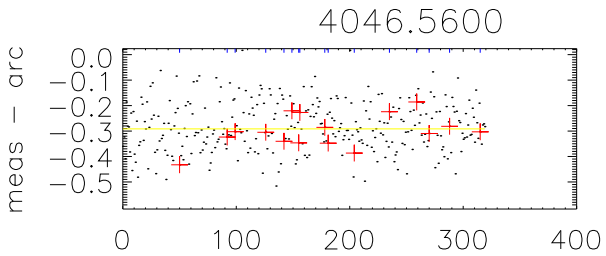

5889.9500
off: 0.26
sig: 0.026

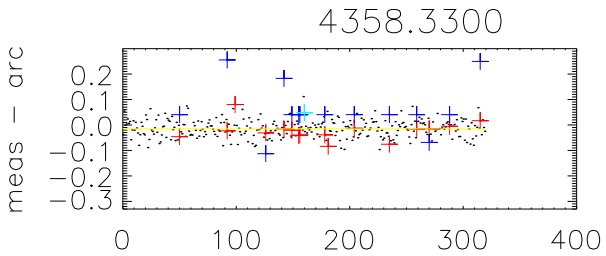

5895.9240
off: 0.22
sig: 0.031

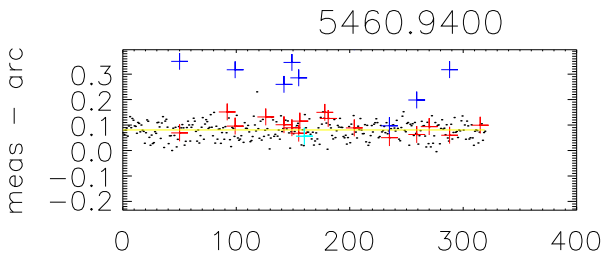

shift(pix)= 0.084
err(pix)= 0.021
oldshift(pix)= 0.000
800
700
600
500
400
300
200
100
4020
4030
4040
4050
4060
4070
4080

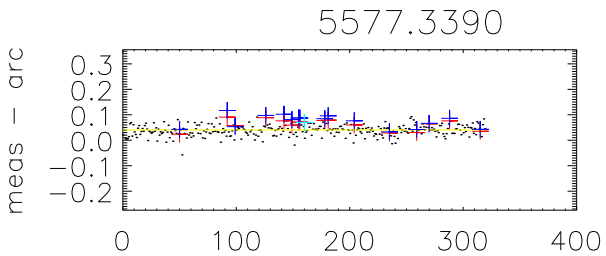

shift(pix)= 0.048
err(pix)= 0.018
oldshift(pix)= 0.081
800
700
600
500
400
300
200
100
4280
4300
4320
4340
4360
4380
4400
4420

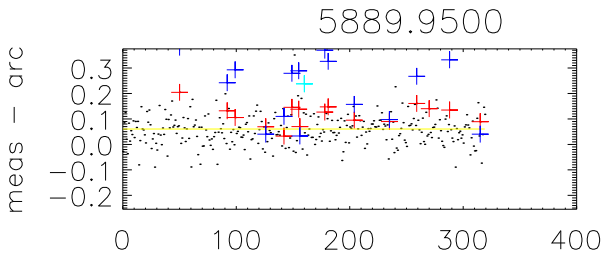

shift(pix)= 0.056
err(pix)= 0.024
oldshift(pix)= 0.397
800
700
600
500
400
300
200
100
5430
5440
5450
5460
5470
5480
5490

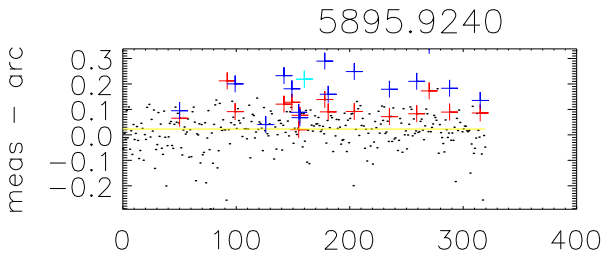

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

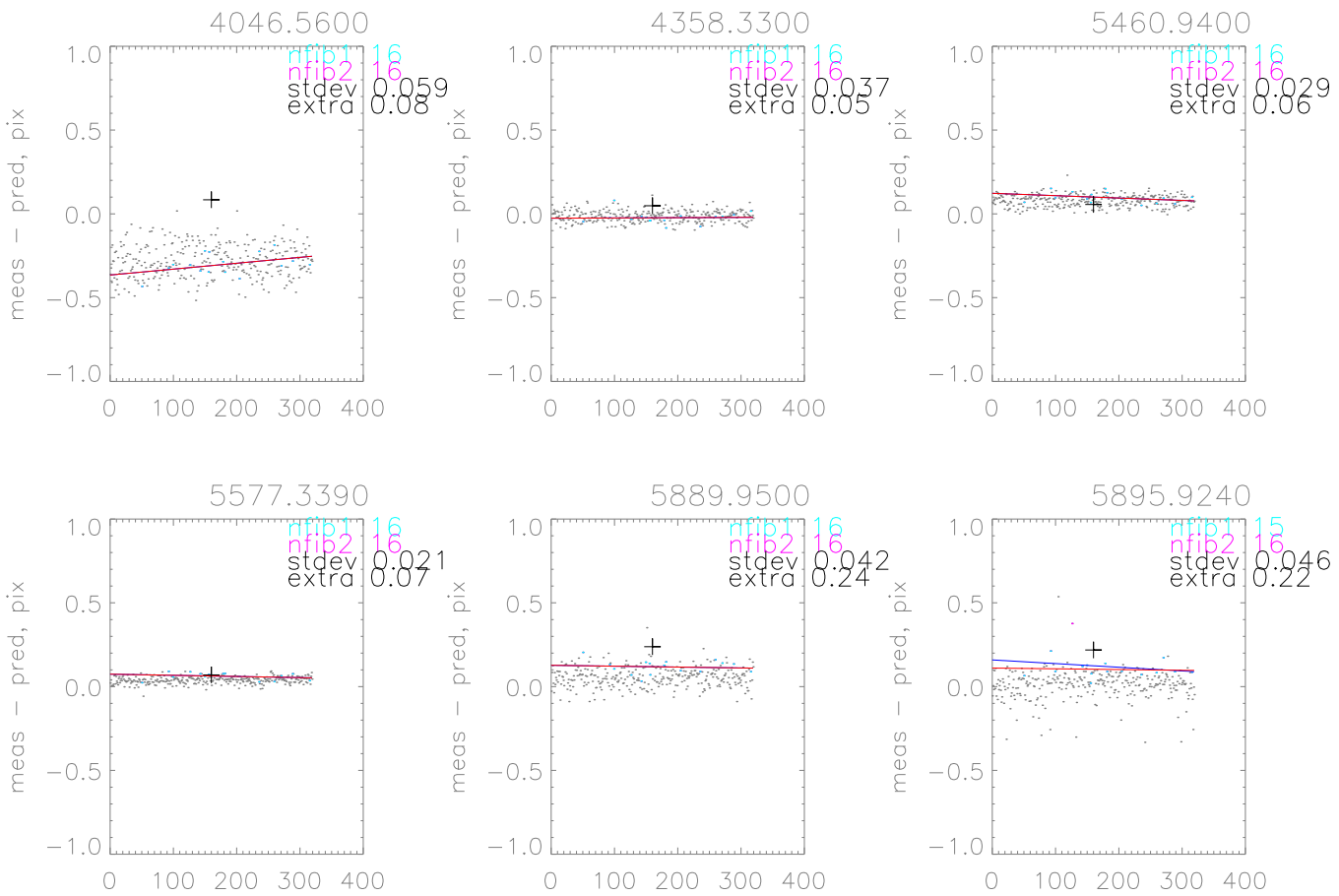

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

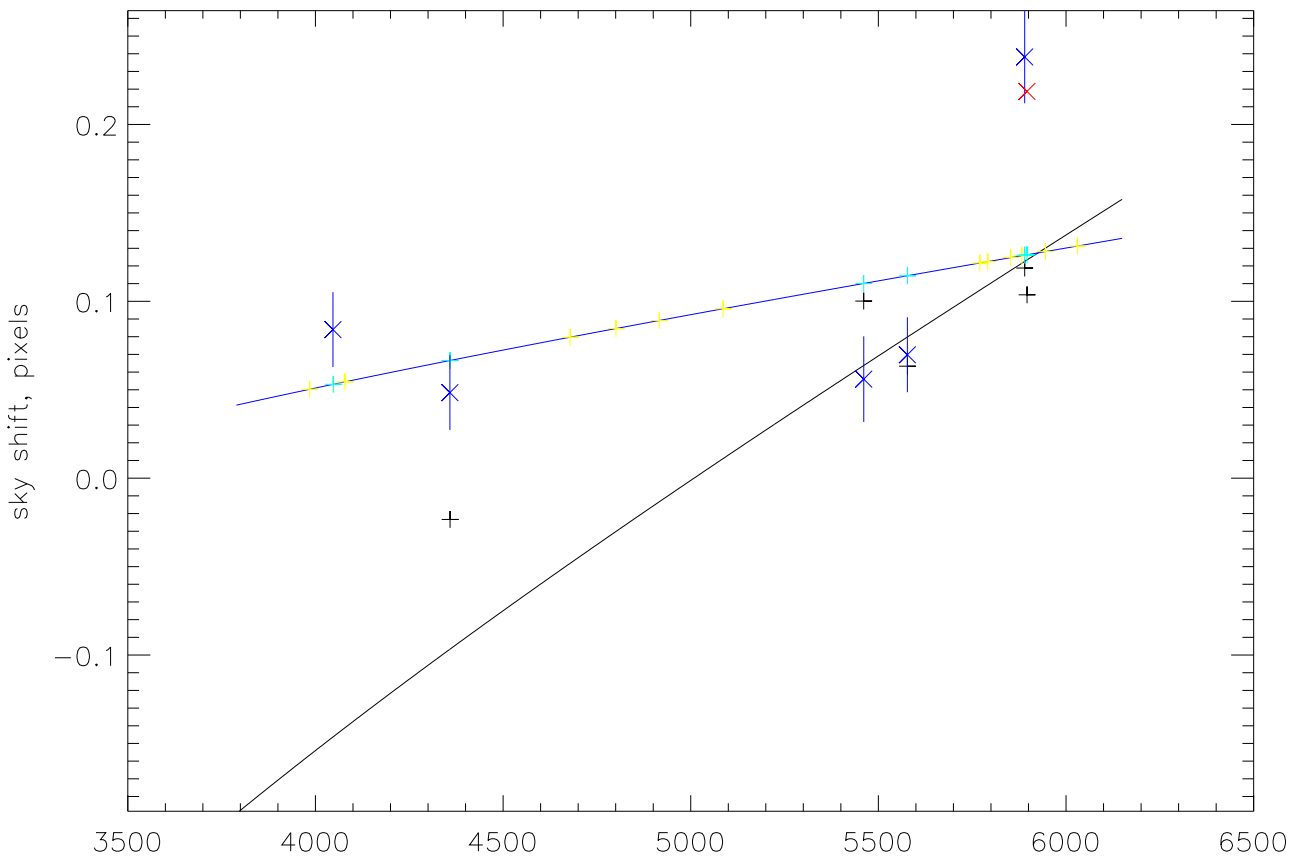

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

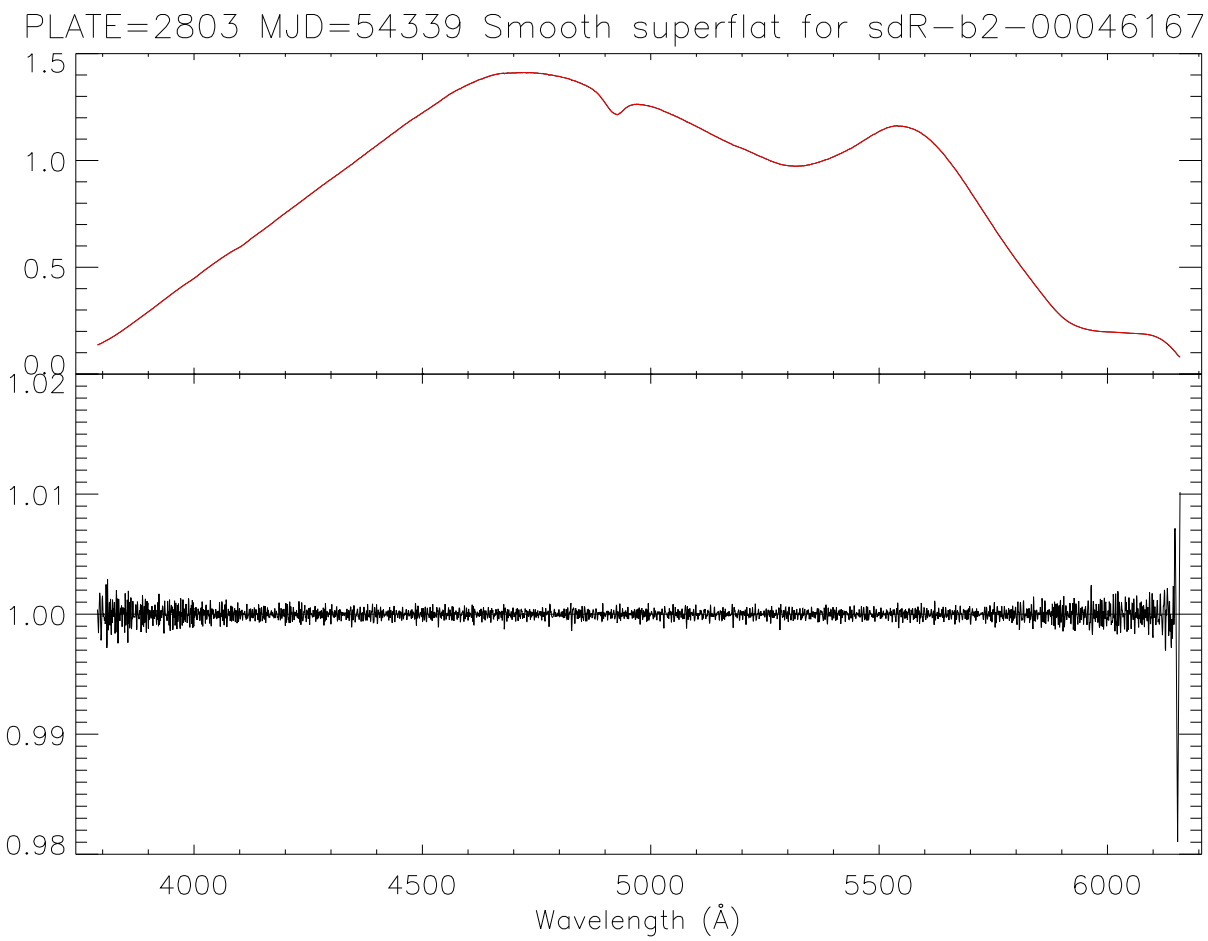

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

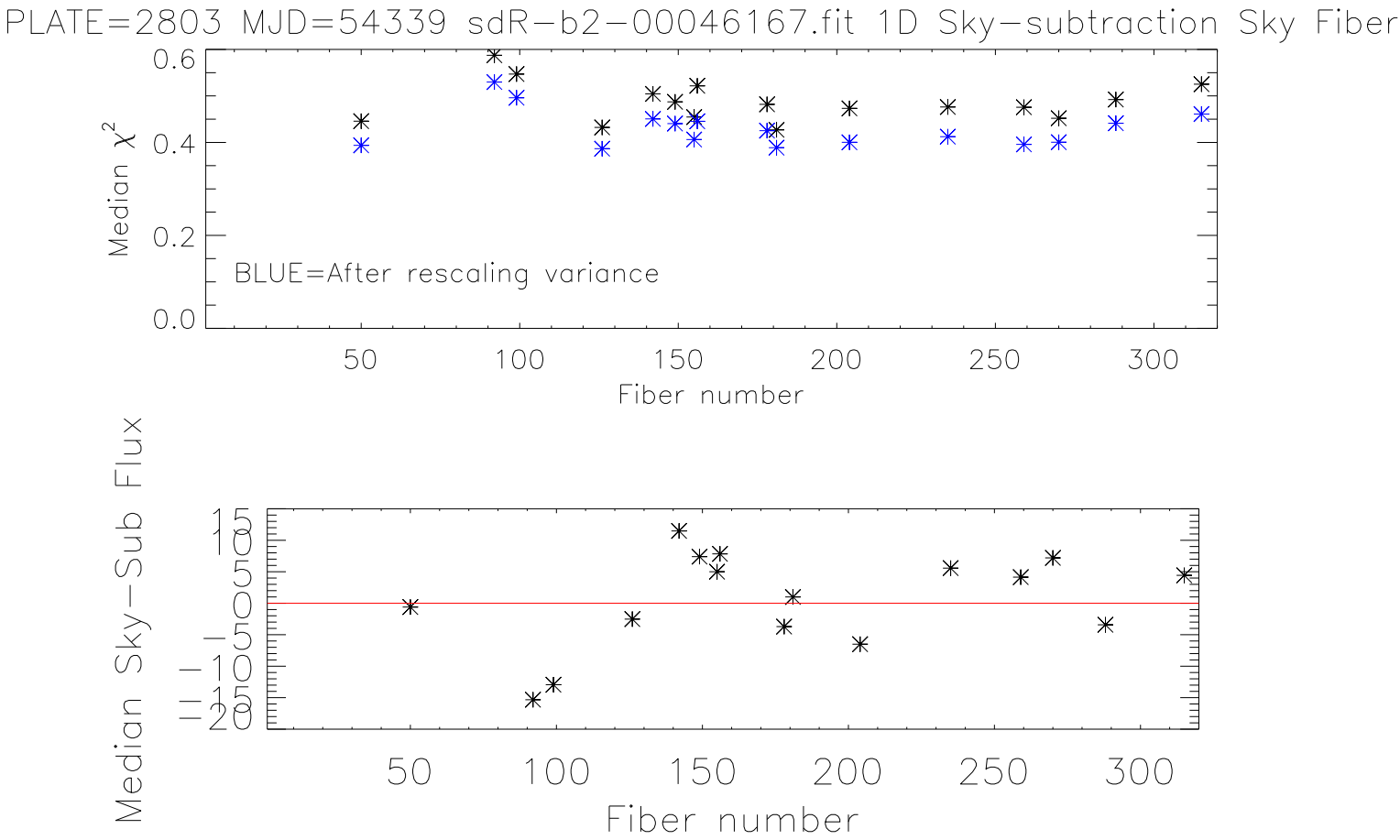

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

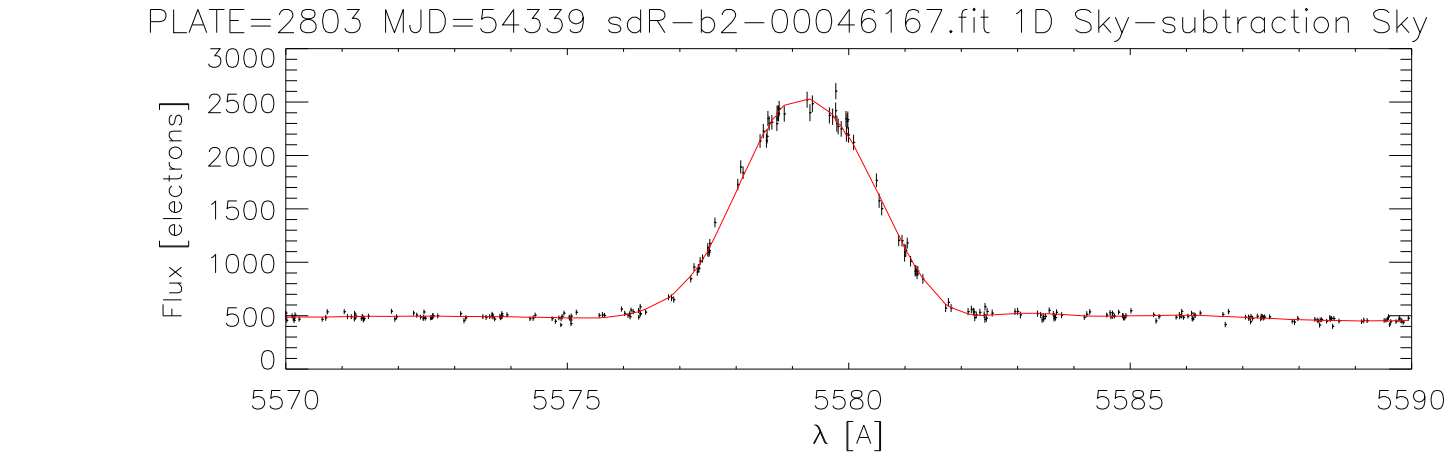

4046.5600
nfib1 16
nfib2 16
stdev 0.059
extra 0.08
4358.3300
nfib1 16
nfib2 16
stdev 0.037
extra 0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.029
extra 0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.07
5889.9500
nfib1 16
nfib2 16
stdev 0.042
extra 0.24
5895.9240
nfib1 15
nfib2 16
stdev 0.046
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

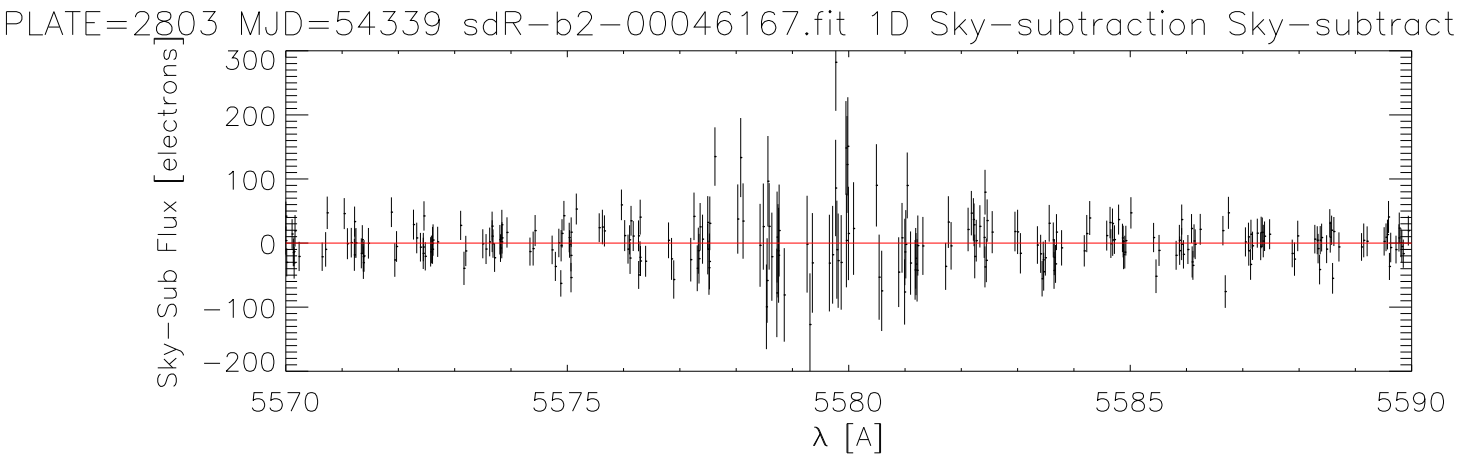

sky shift, pixels
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

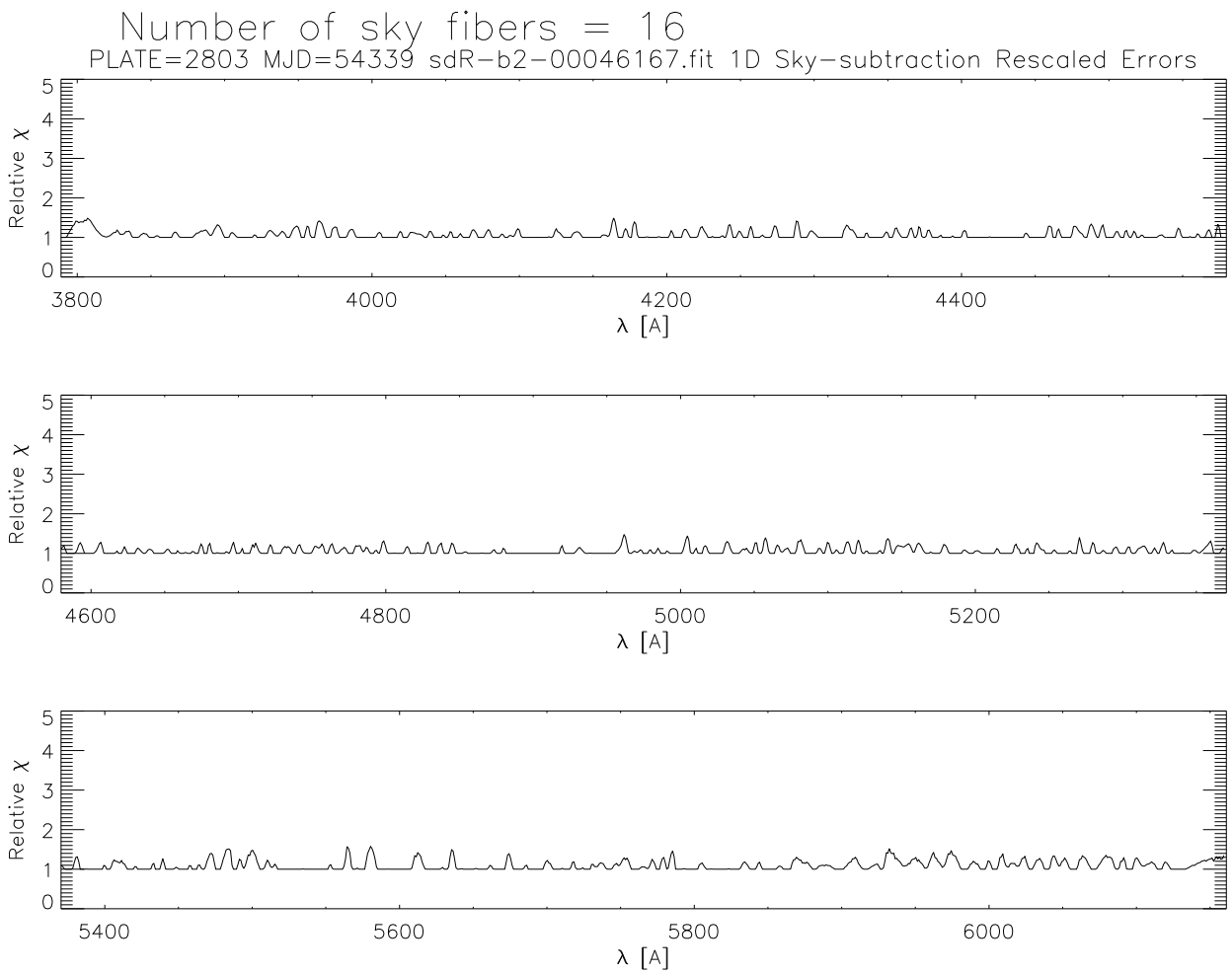
es= −0.0000

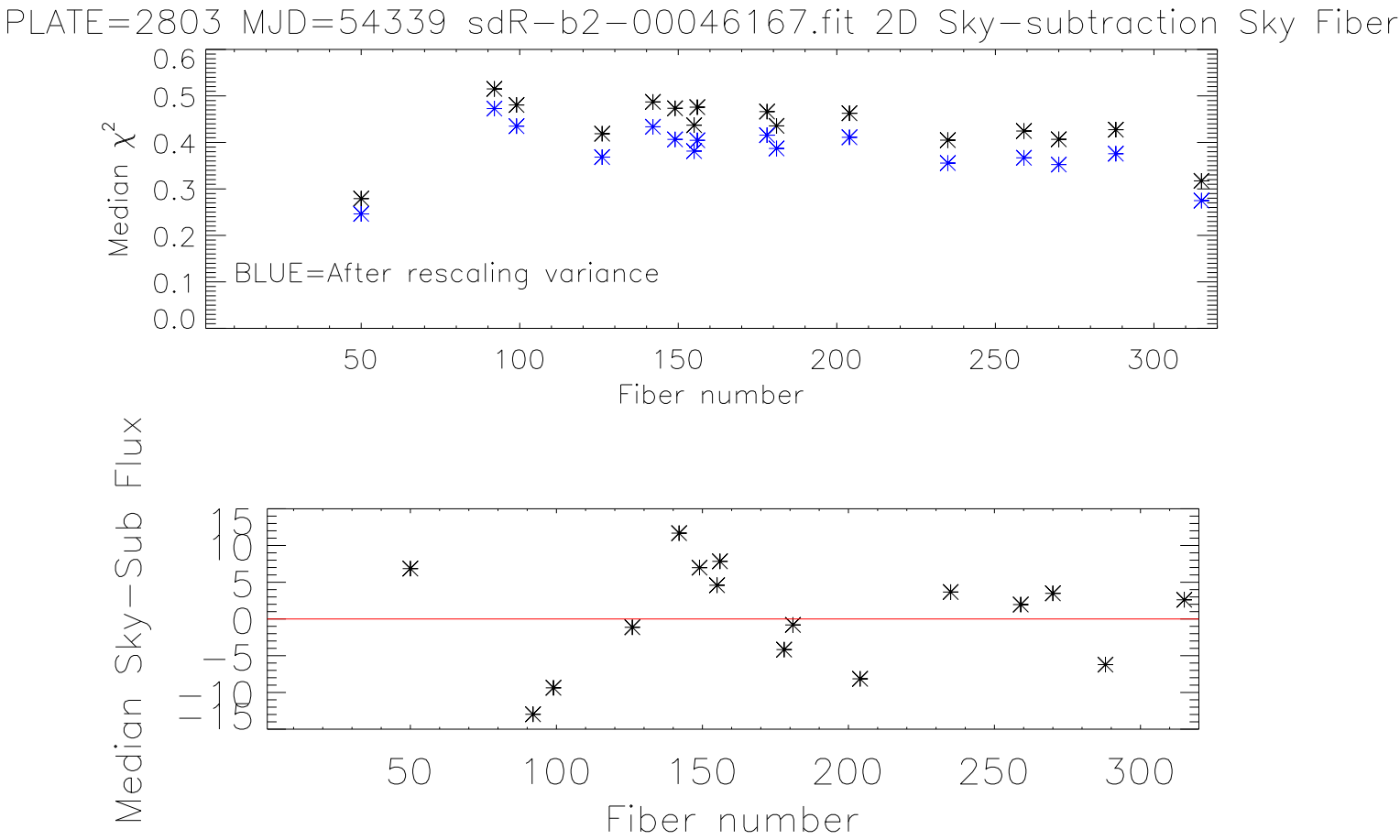

PLATE=2803 MJD=54339 Smooth superflat for sdR−b2−00046167.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

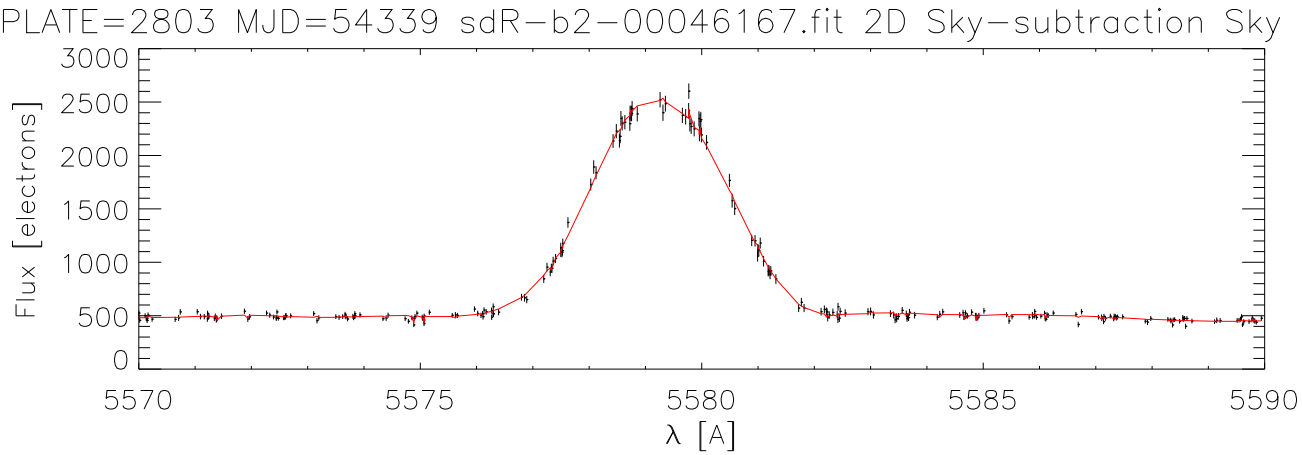

PLATE=2803 MJD=54339 sdR-b2-00046167.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
Fiber number

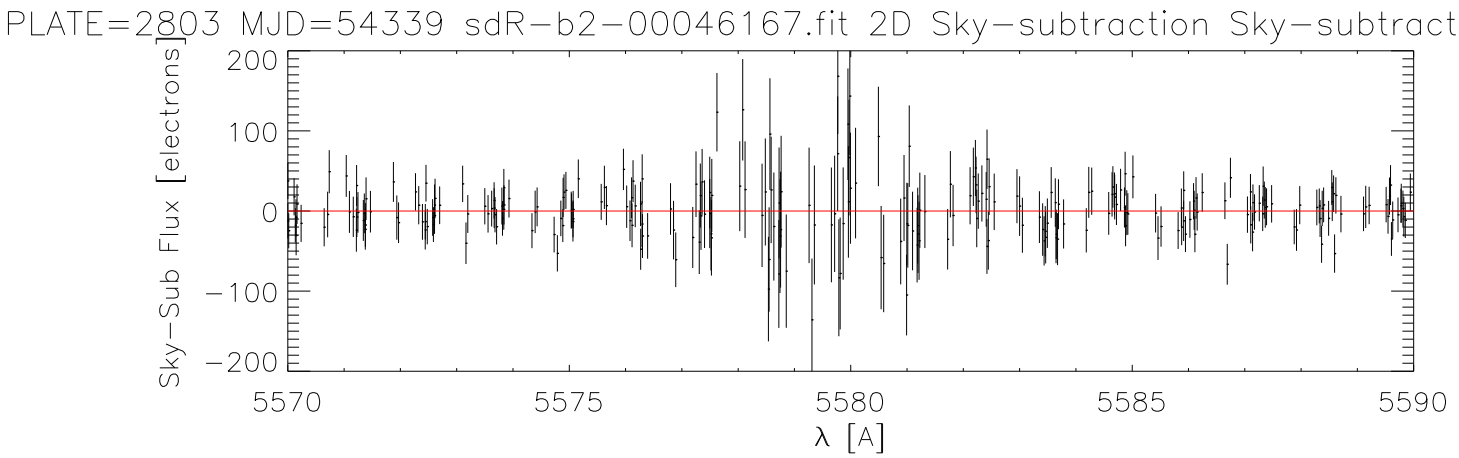

PLATE=2803 MJD=54339 sdR-b2-00046167.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

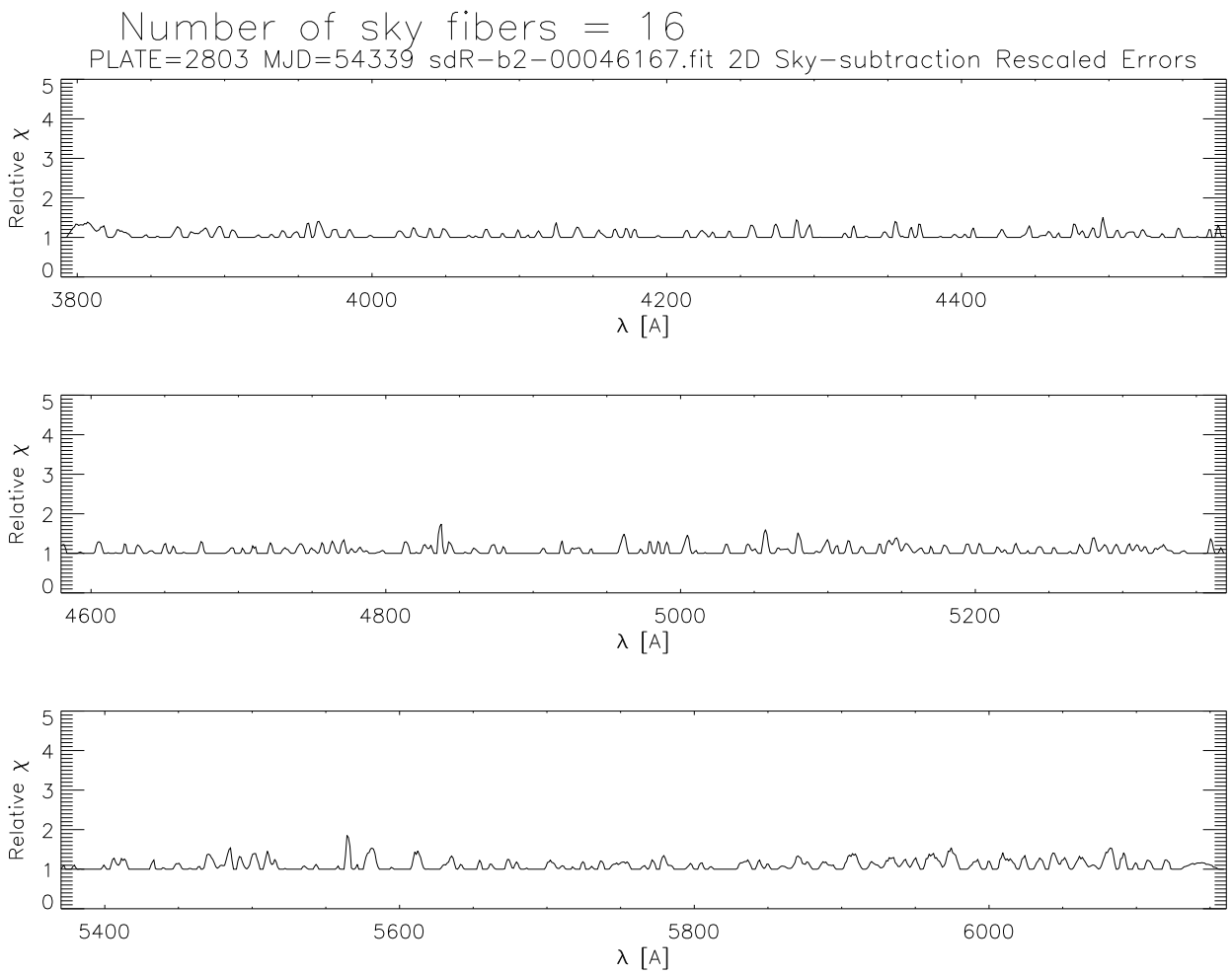

PLATE=2803 MJD=54339 sdR-b2-00046167.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

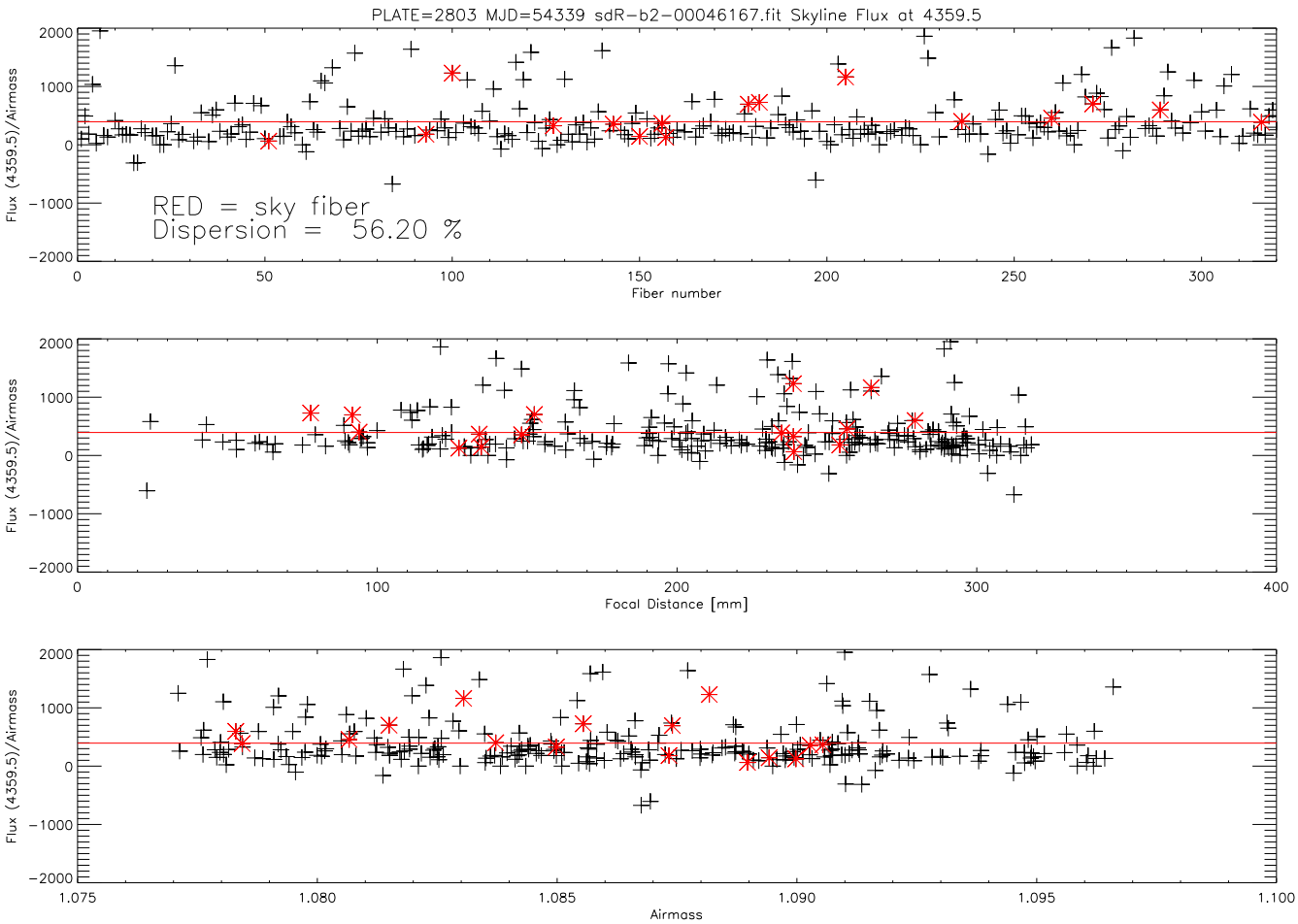

Number of sky fibers = 16
PLATE=2803 MJD=54339 sdR-b2-00046167.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

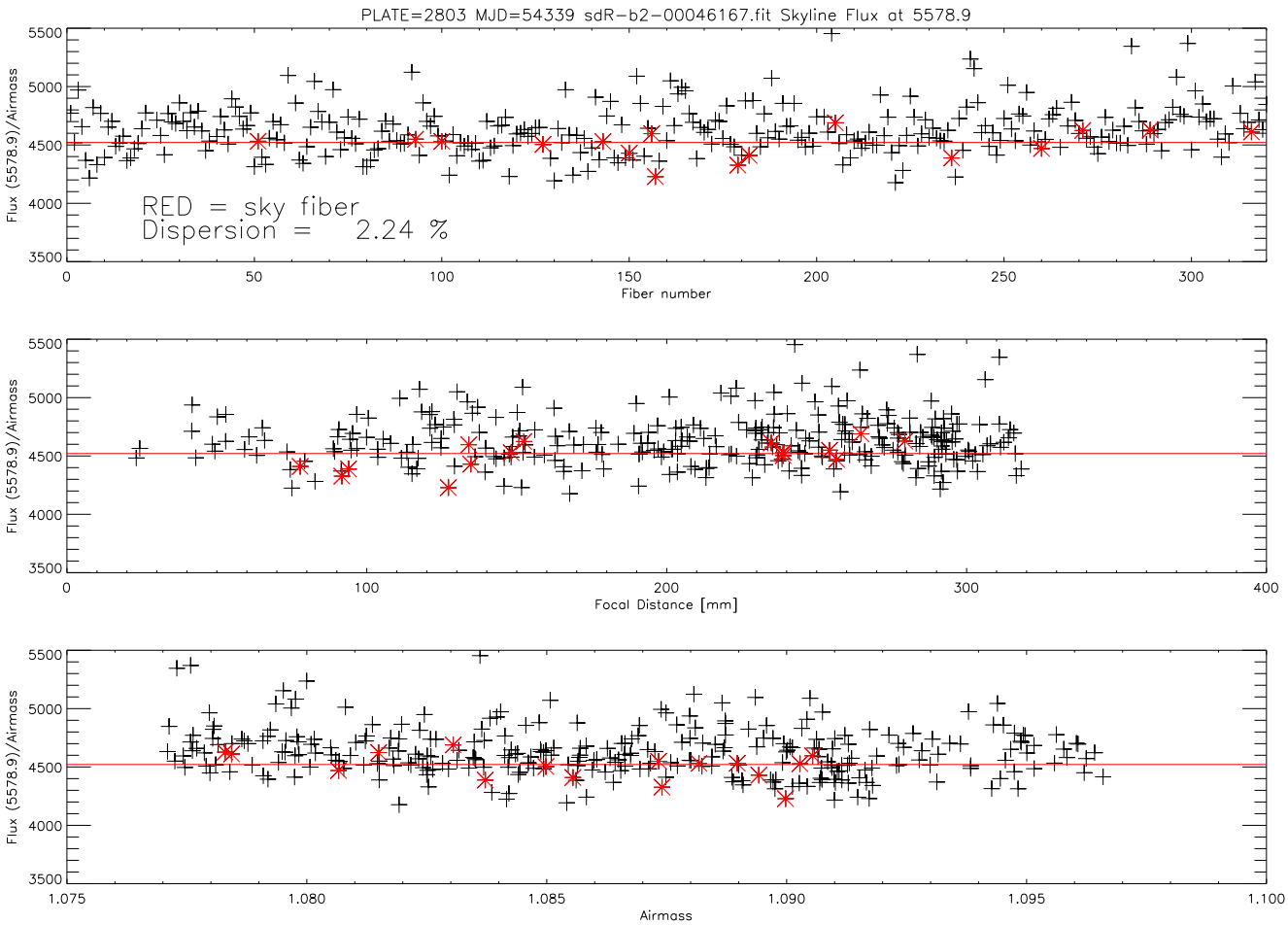

PLATE=2803 MJD=54339 sdR-b2-00046167.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

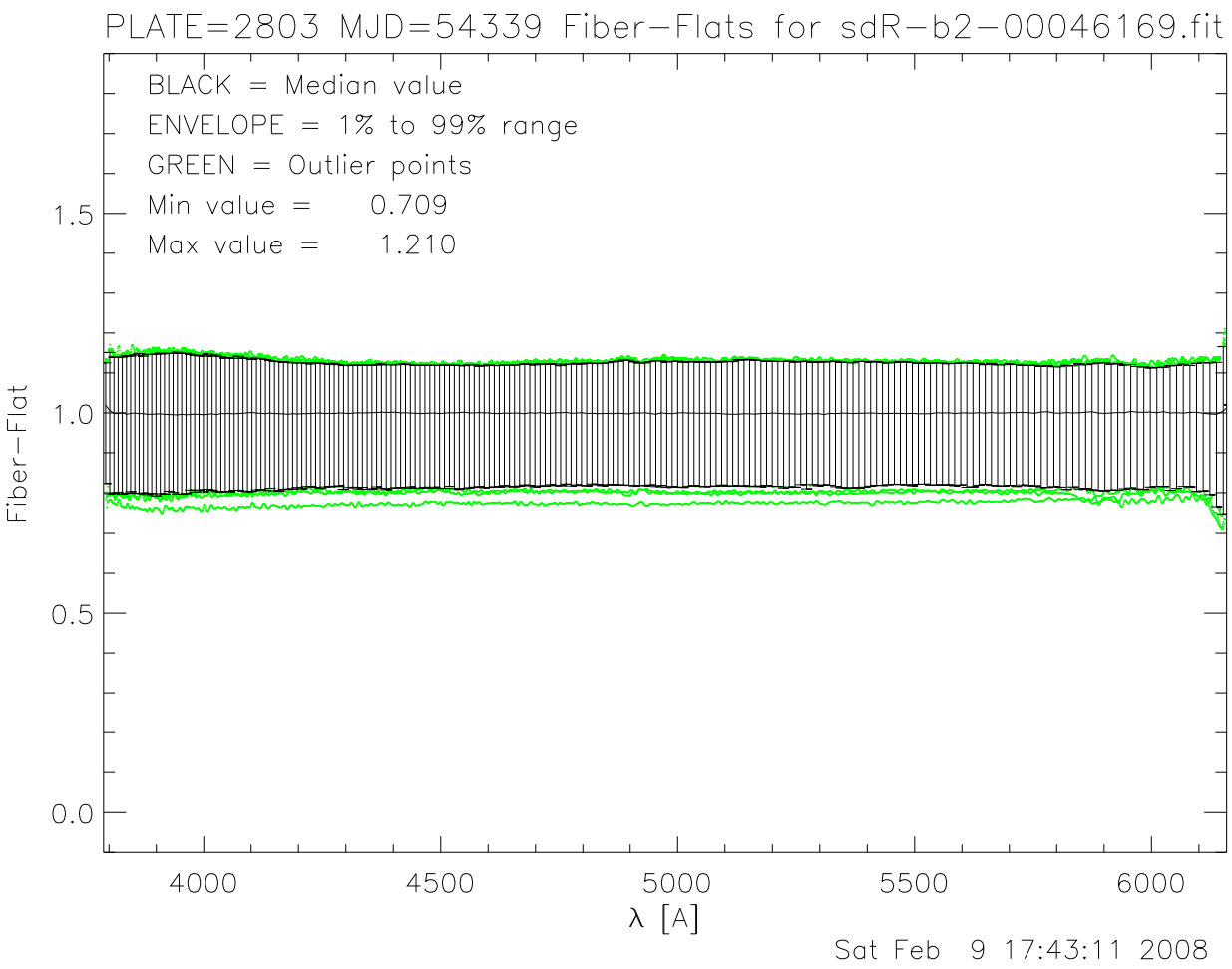

PLATE=2803 MJD=54339 sdR-b2-00046167.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

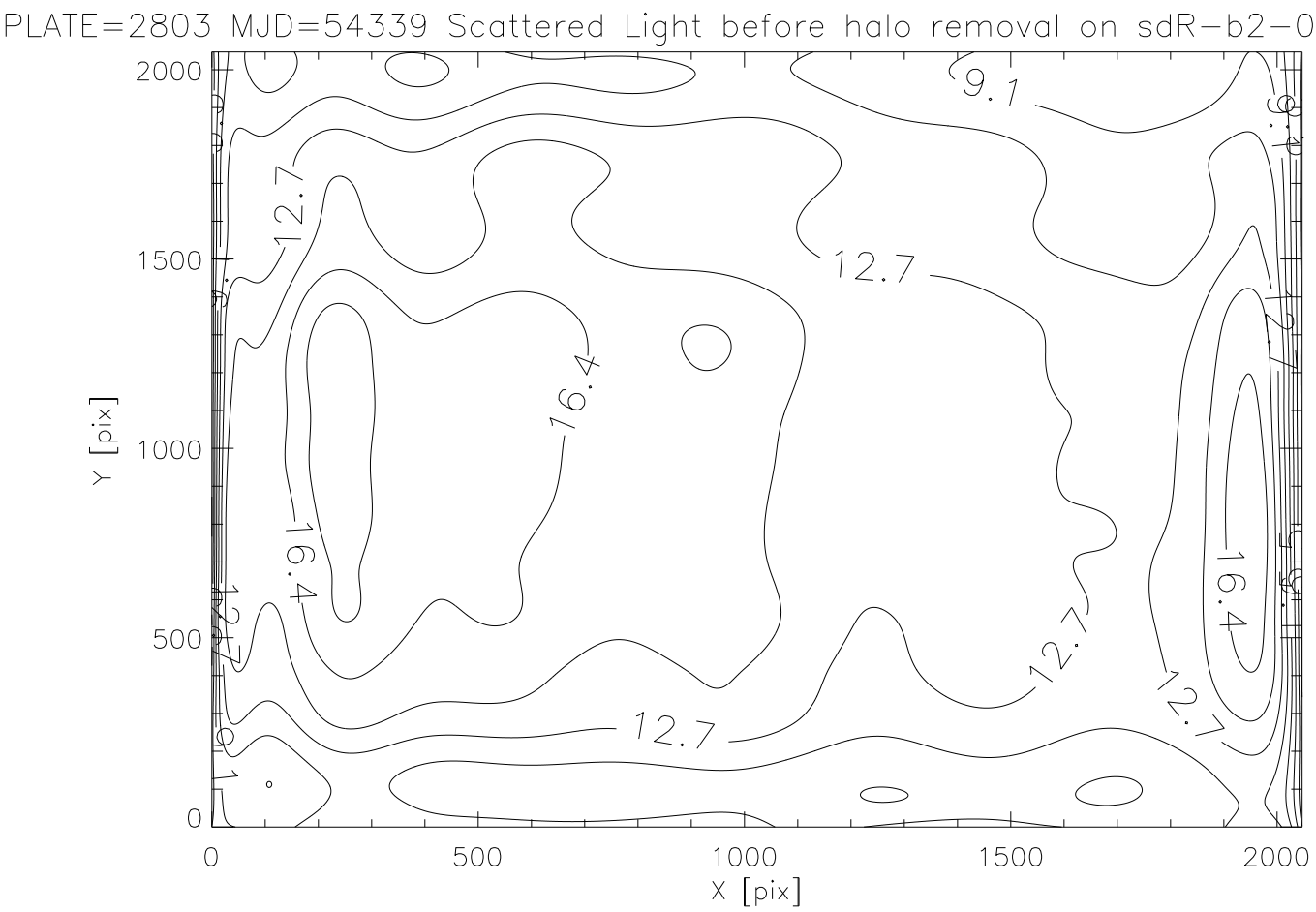

PLATE=2803 MJD=54339 sdR-b2-00046167.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

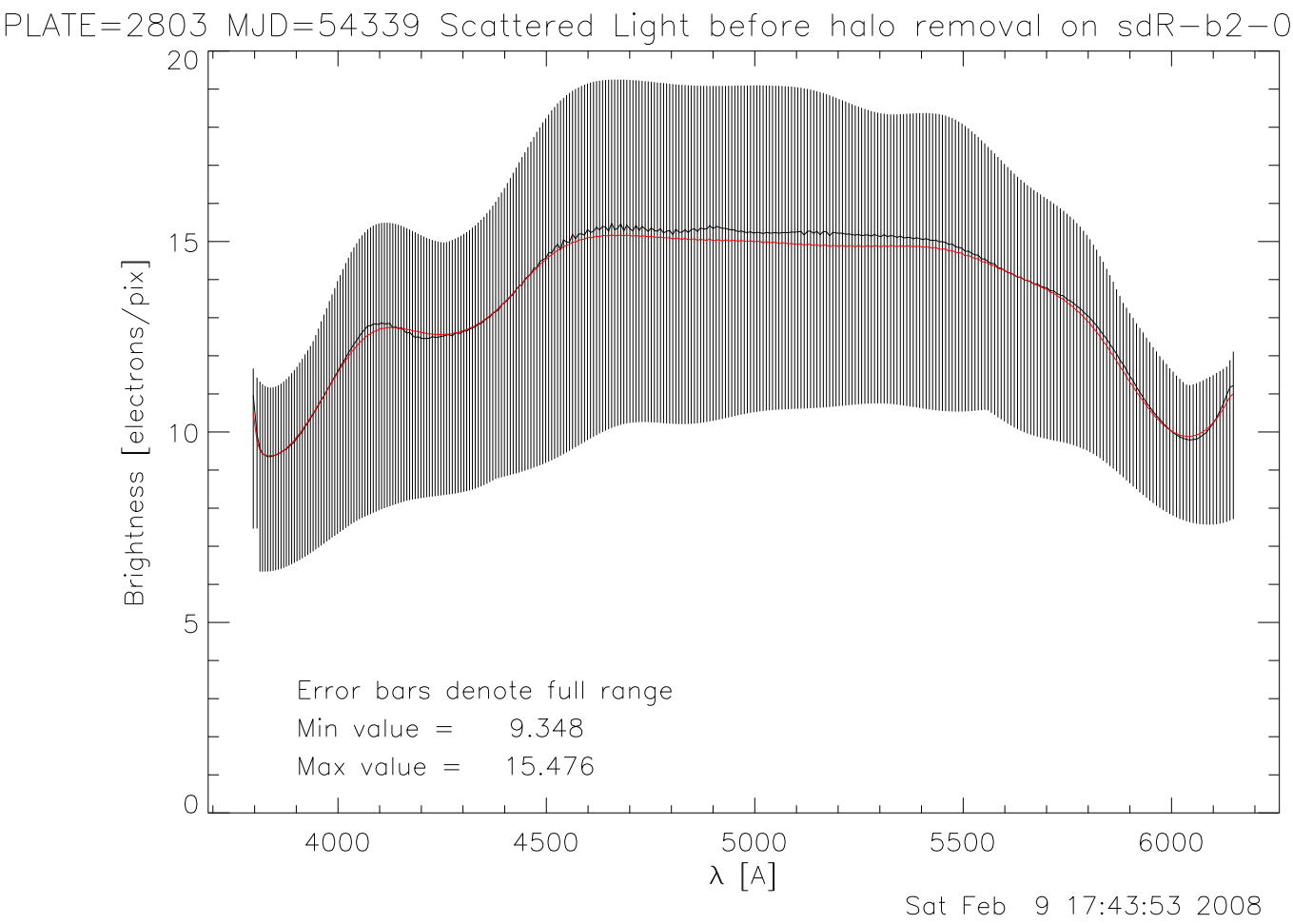

Number of sky fibers = 16
PLATE=2803 MJD=54339 sdR-b2-00046167.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

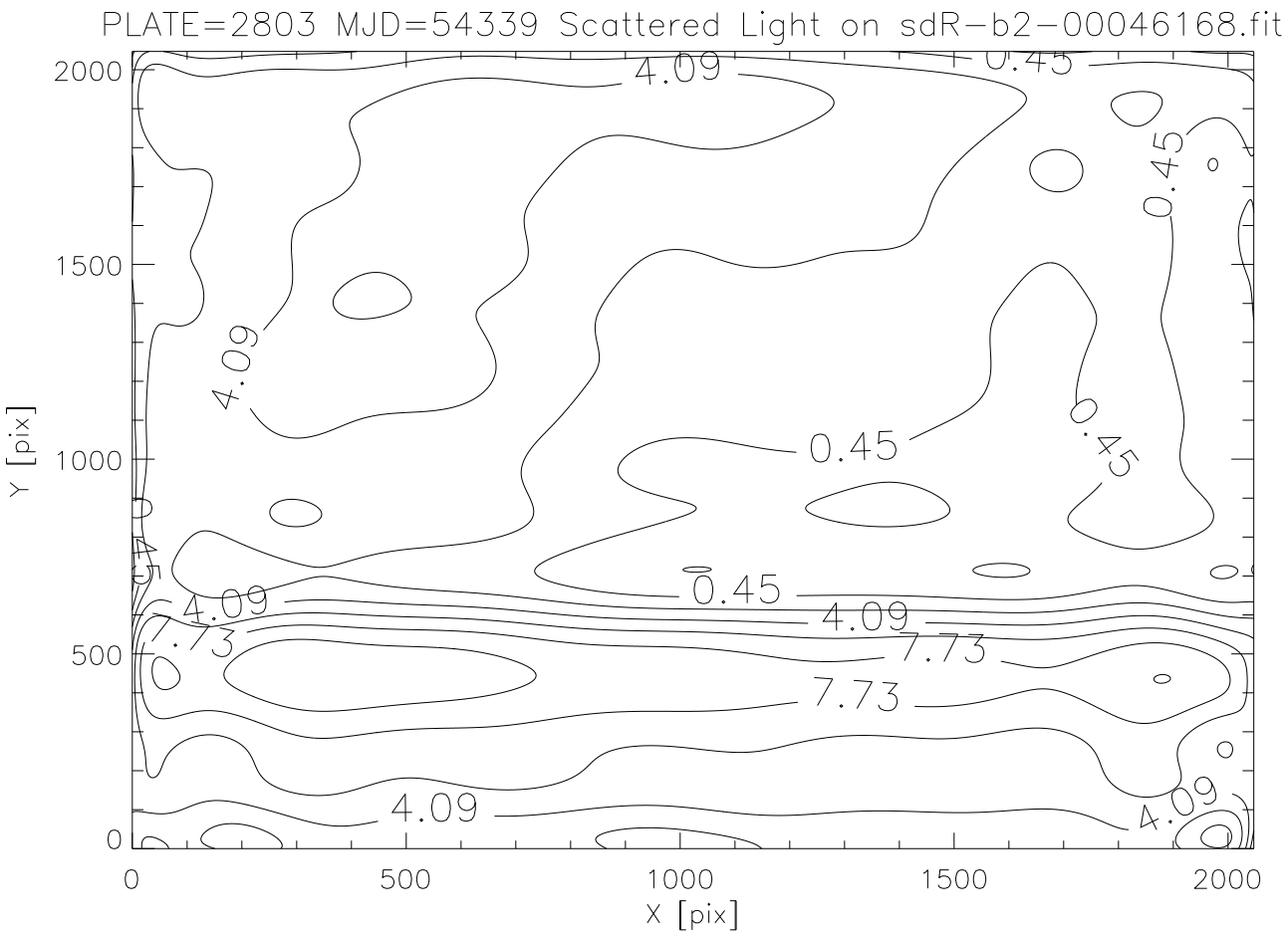

PLATE=2803 MJD=54339 sdR-b2-00046167.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 56.20 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

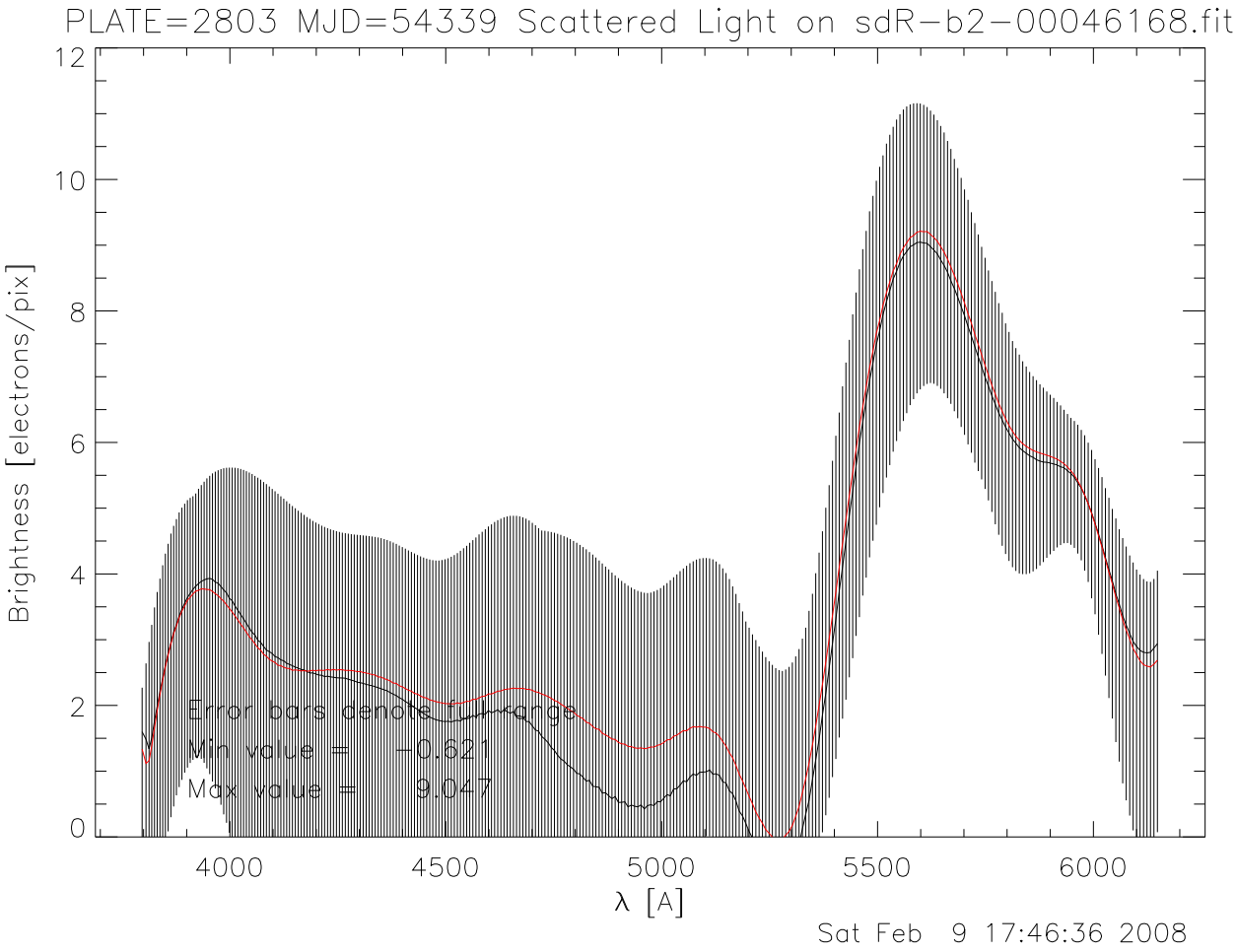

PLATE=2803 MJD=54339 sdR-b2-00046167.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.24 %
Fiber number
Focal Distance [mm]
Airmass

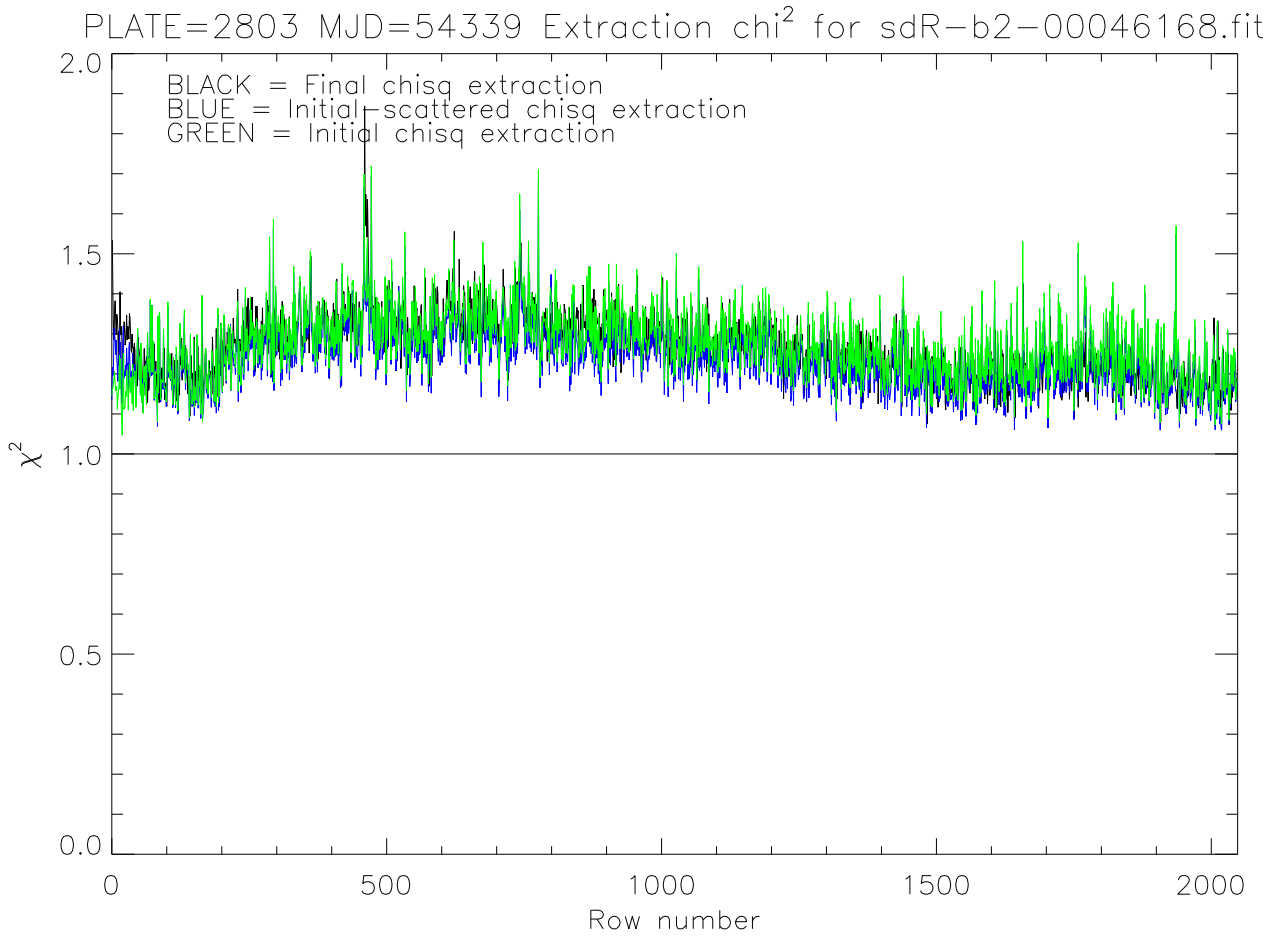

PLATE=2803 MJD=54339 Fiber−Flats for sdR−b2−00046169.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.709
Max value = 1.210
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 17:43:11 2008

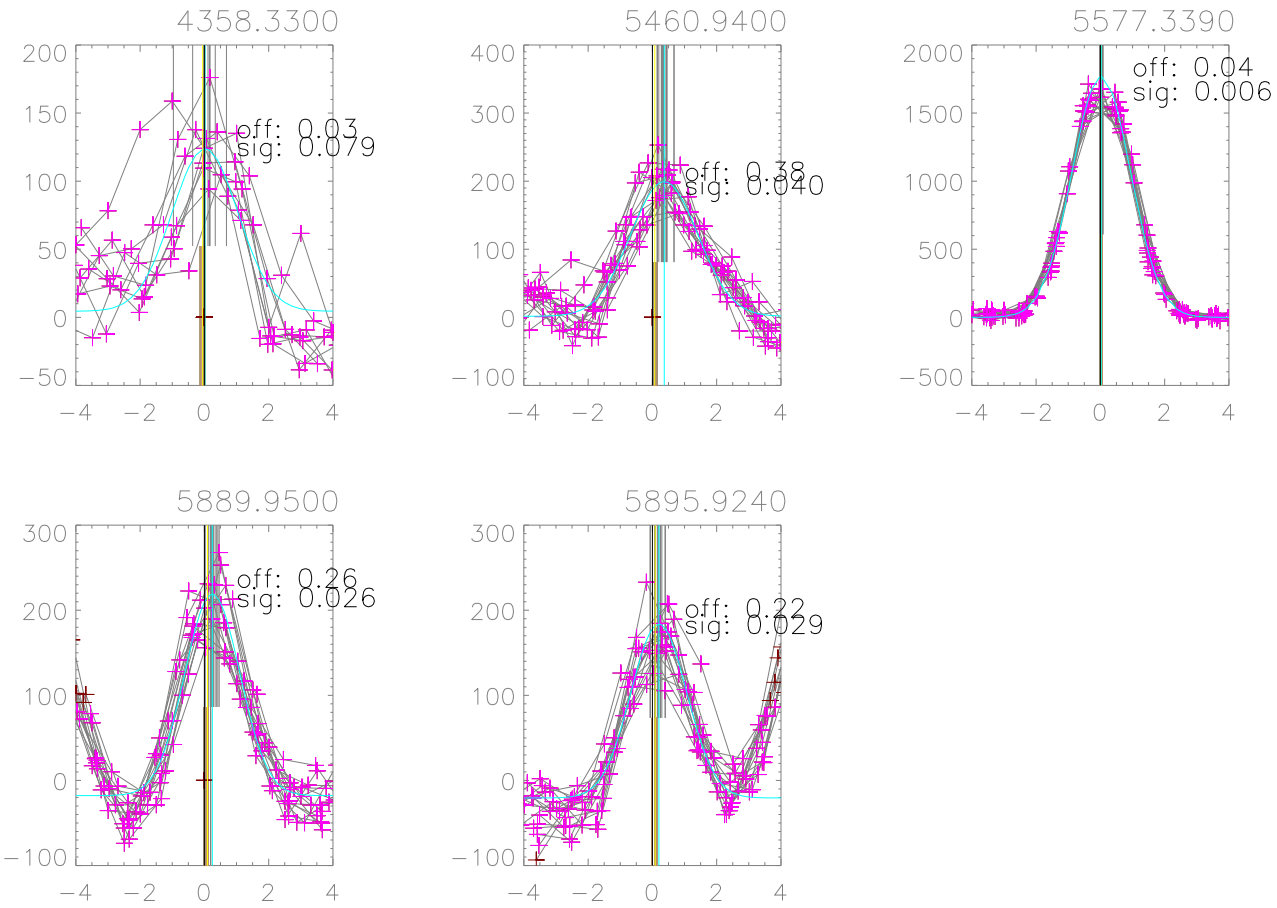

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-b2-00046168.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
12.7
16.4

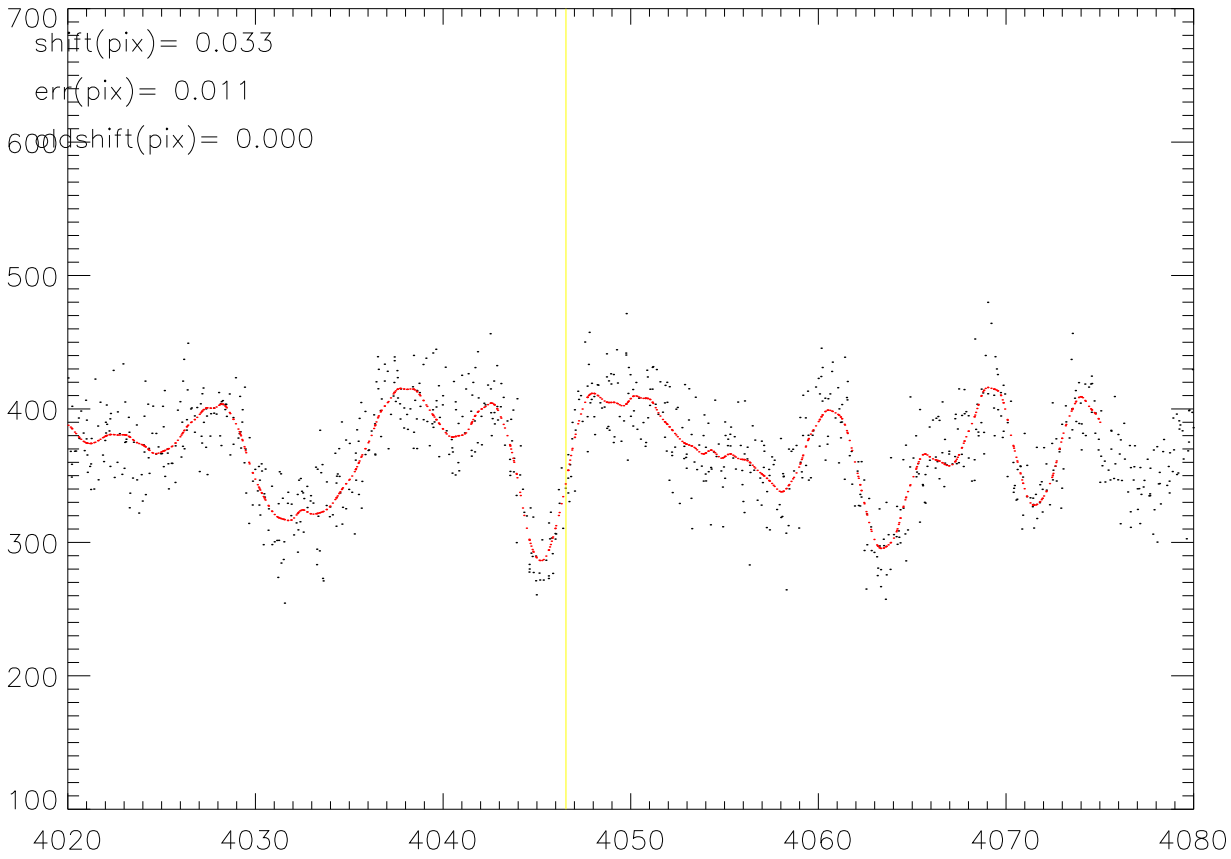

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-b2-00046168.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.348
Max value = 15.476
Sat Feb 9 17:43:53 2008

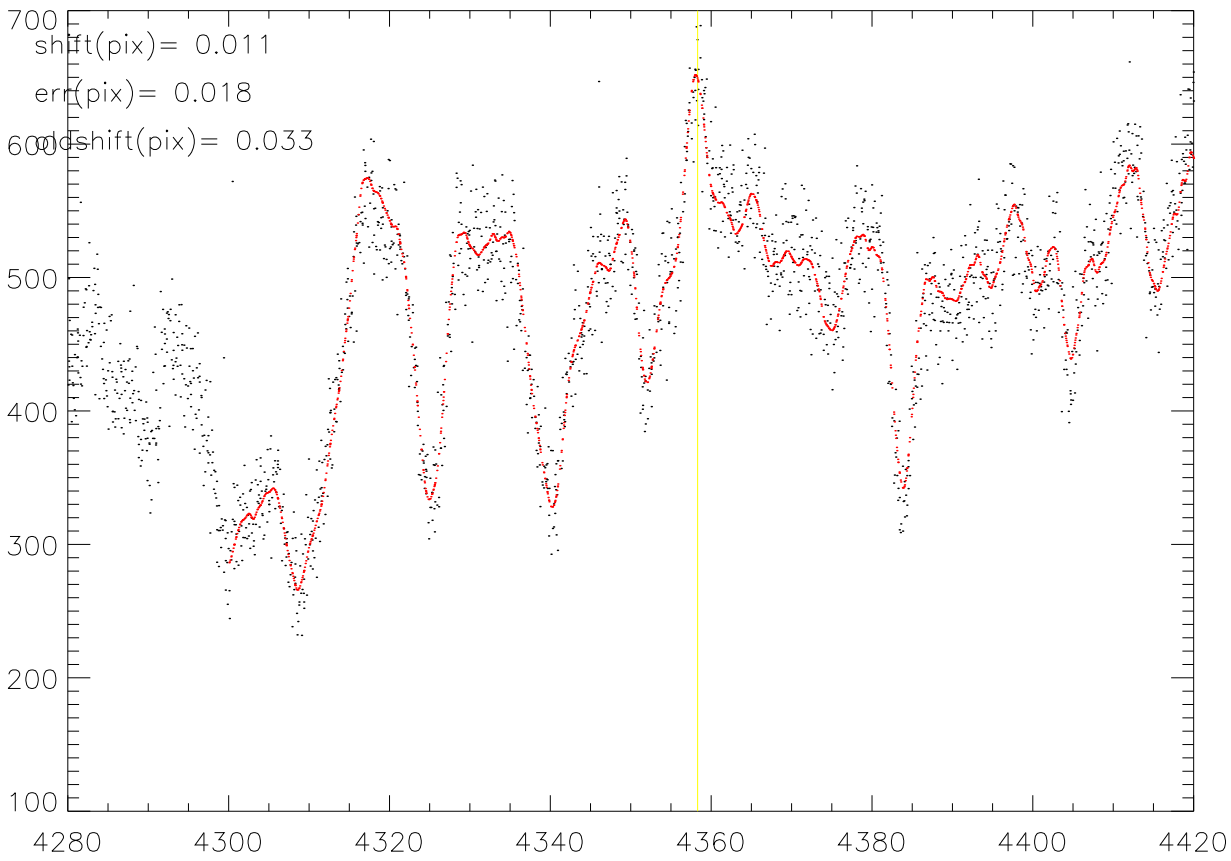

PLATE=2803 MJD=54339 Scattered Light on sdR-b2-00046168.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.09
0.45
7.73

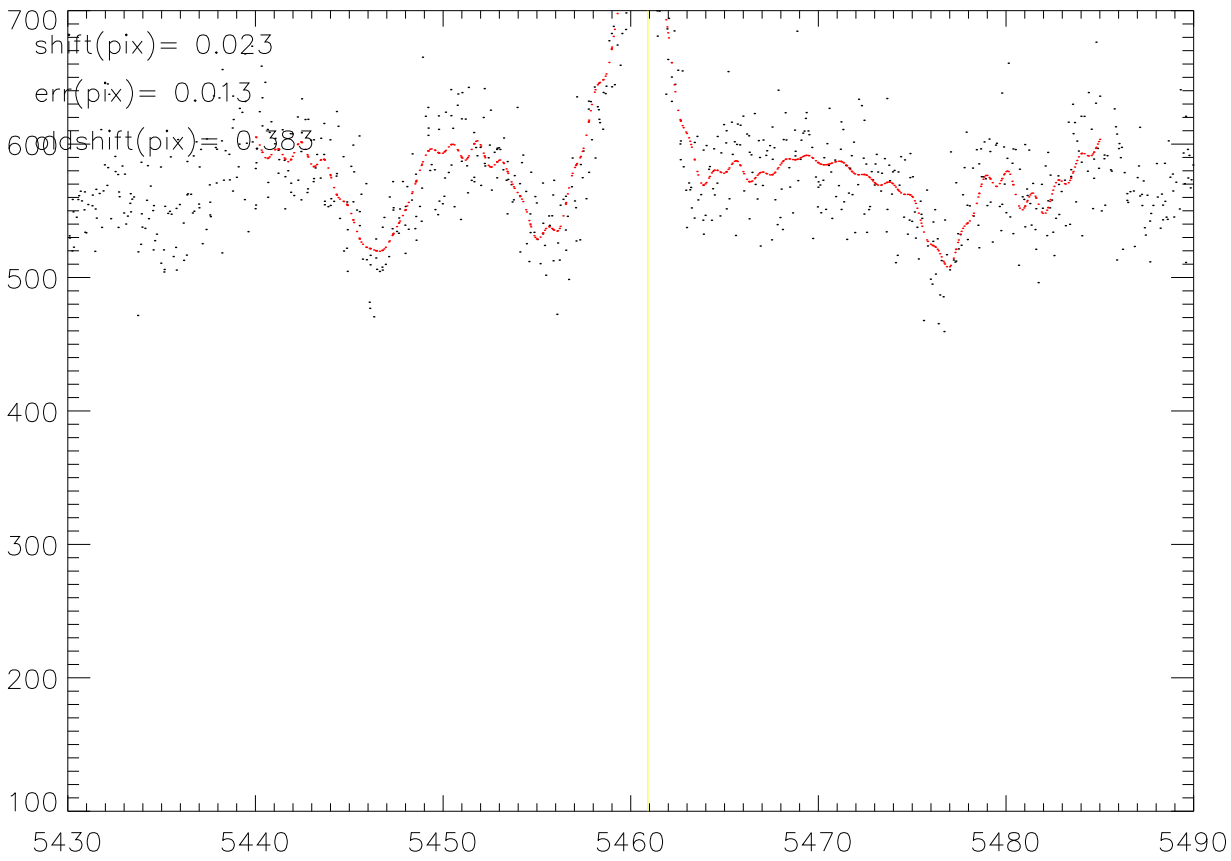

PLATE=2803 MJD=54339 Scattered Light on sdR-b2-00046168.fit
Brightness [electrons/pix]
λ [A]
Error bars denote 1-σ range
Min value = -0.621
Max value = 9.047
Sat Feb 9 17:46:36 2008

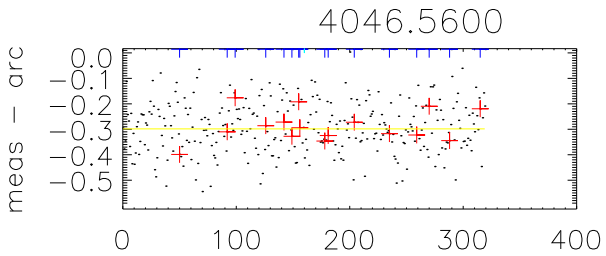

PLATE=2803 MJD=54339 Extraction chi^2 for sdR-b2-00046168.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

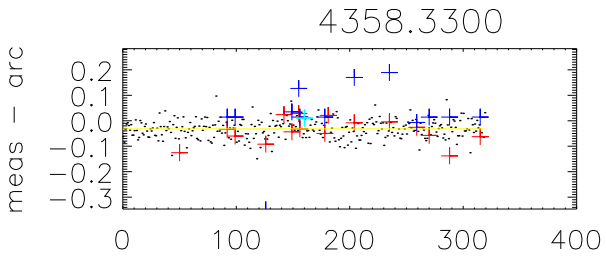

4358.3300
off: 0.03
sig: 0.079
5460.9400
off: 0.38
sig: 0.040
5577.3390
off: 0.04
sig: 0.006
5889.9500
off: 0.26
sig: 0.026
5895.9240
off: 0.22
sig: 0.029

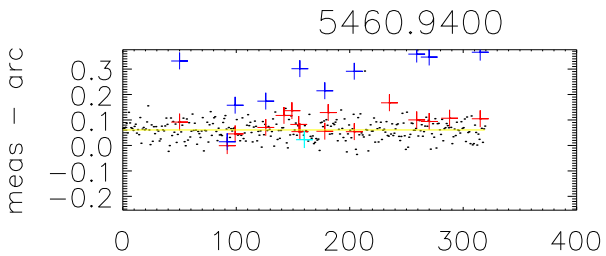

shift(pix)= 0.033
err(pix)= 0.011
oldshift(pix)= 0.000
700
600
500
400
300
200
100
4020
4030
4040
4050
4060
4070
4080

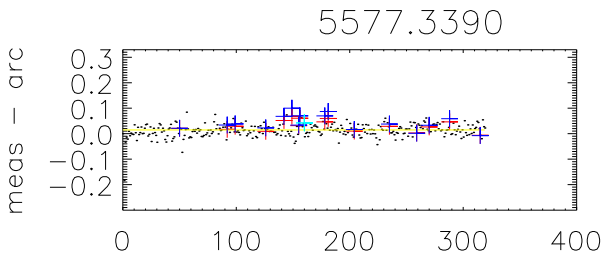

shift(pix)= 0.011
err(pix)= 0.018
oldshift(pix)= 0.033
700
600
500
400
300
200
100
4280
4300
4320
4340
4360
4380
4400
4420

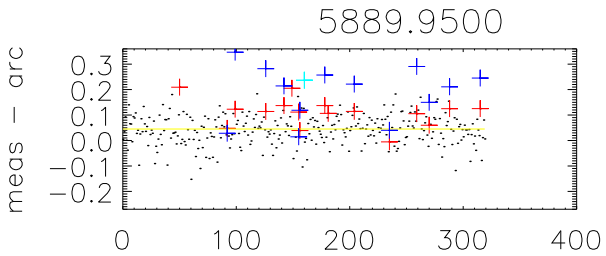

shift(pix)= 0.023
err(pix)= 0.013
oldshift(pix)= 0.383
700
600
500
400
300
200
100
5430
5440
5450
5460
5470
5480
5490

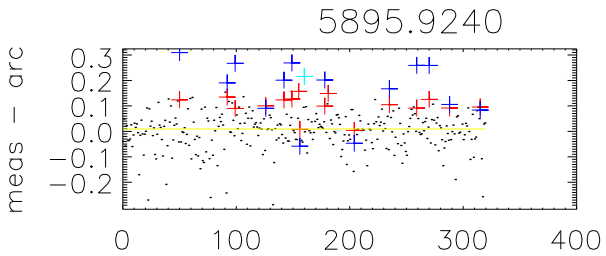

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

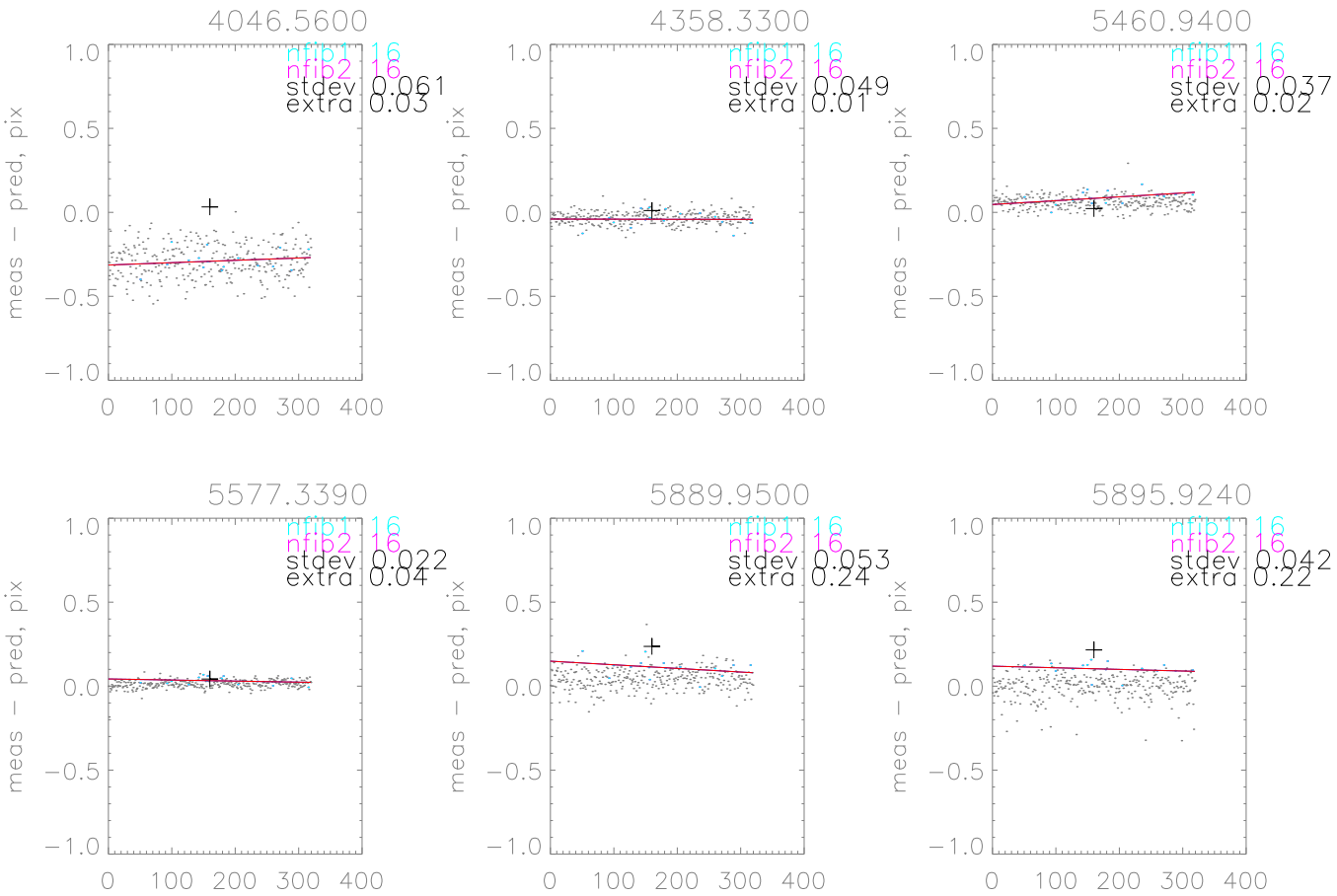

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

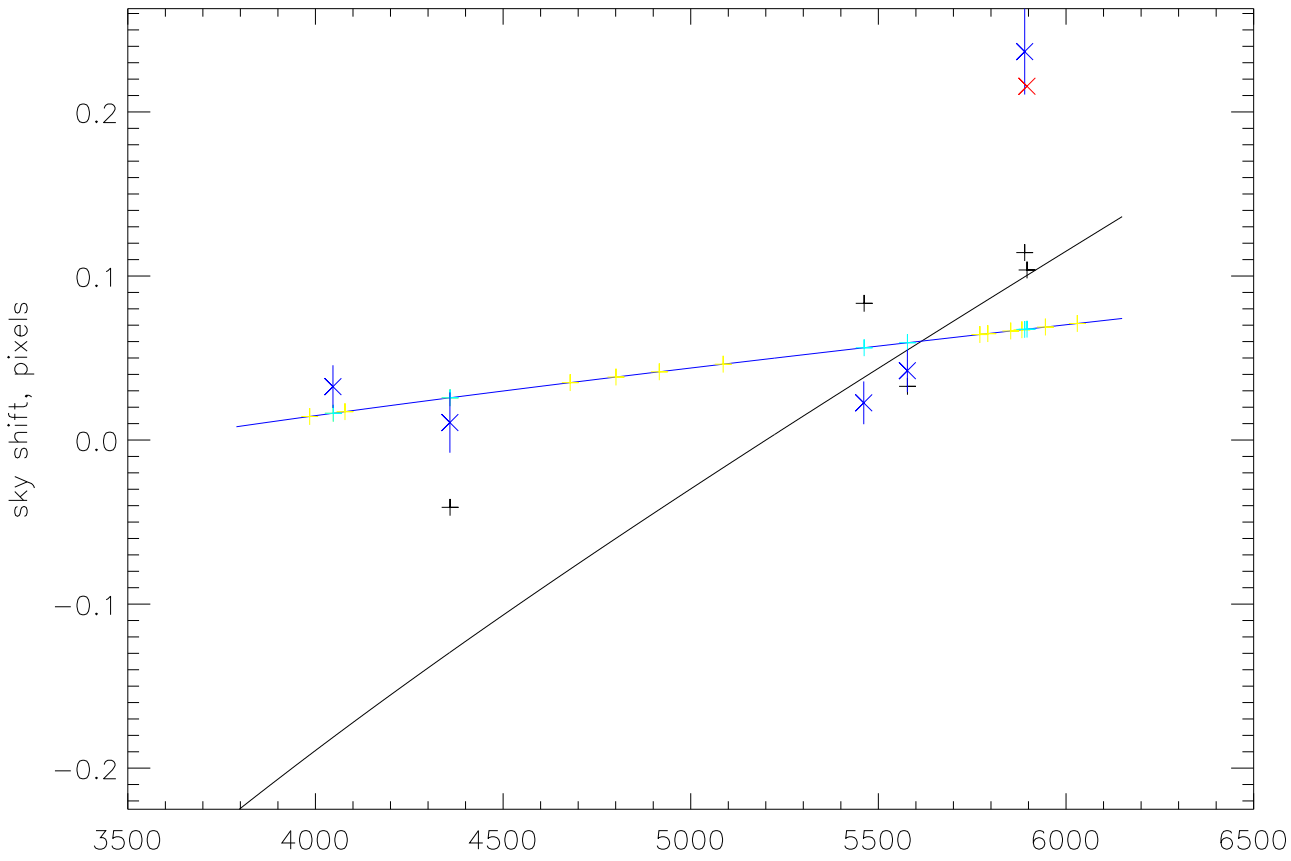

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

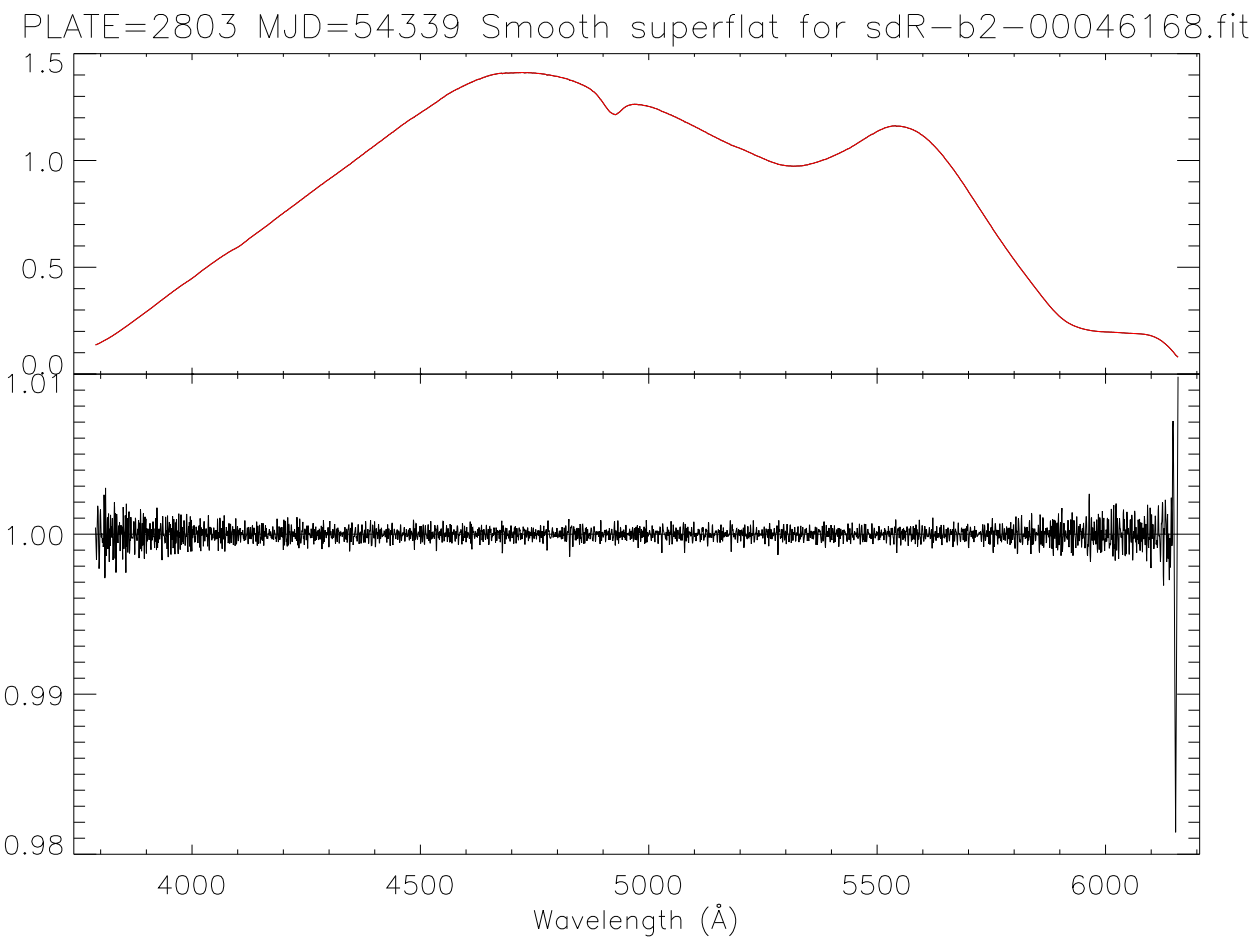

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

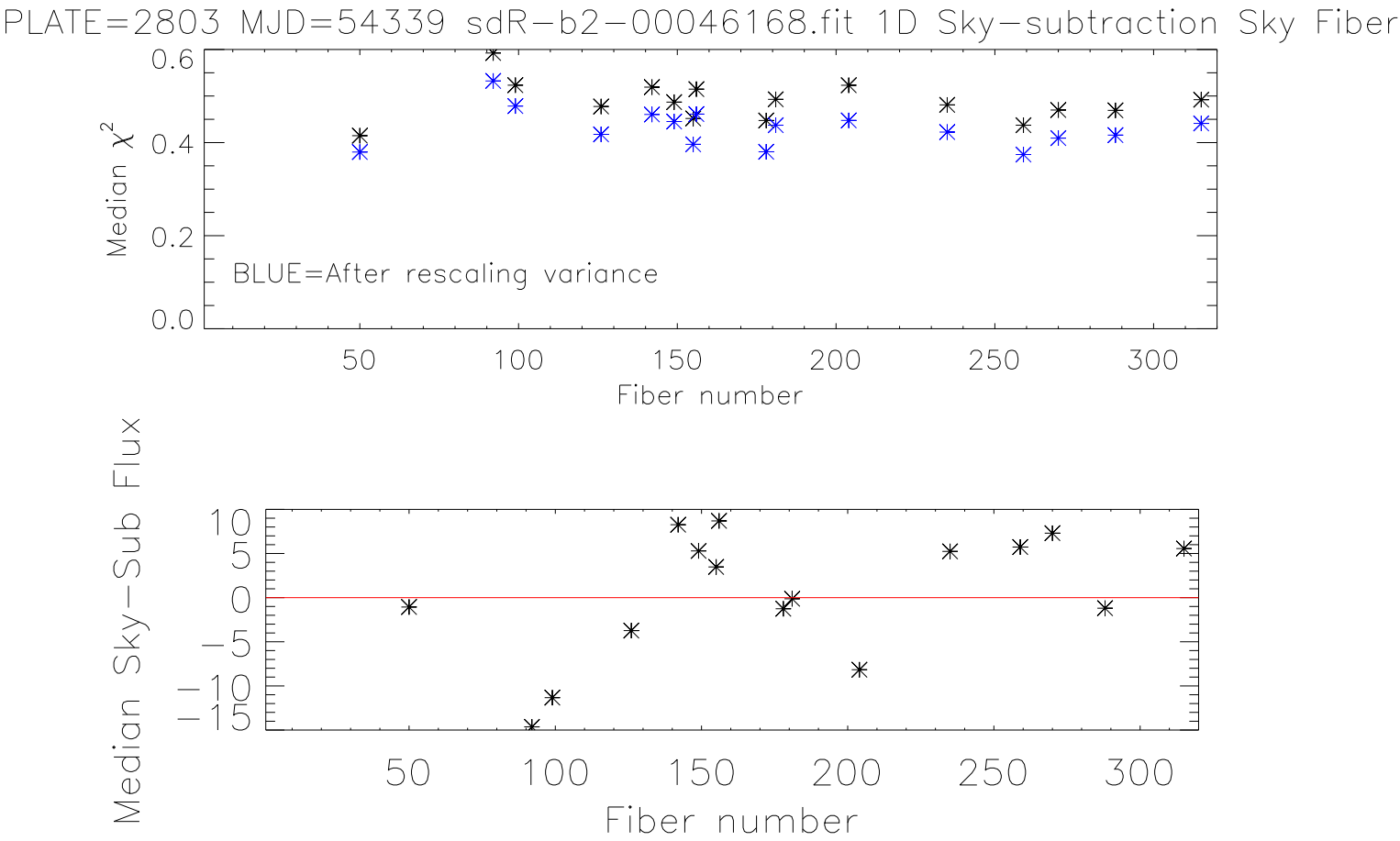

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

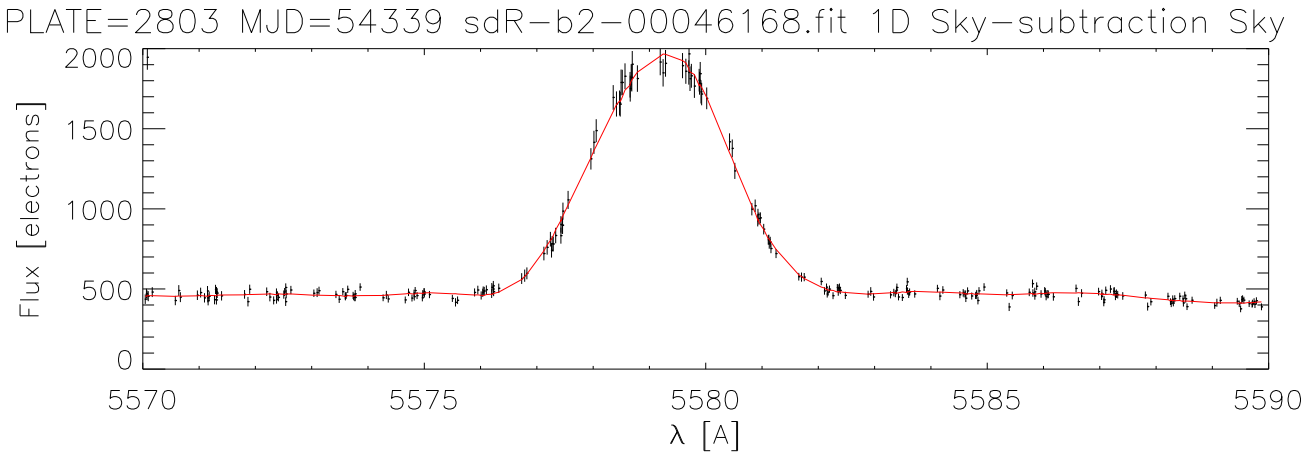

4046.5600
nfib1 16
nfib2 16
stdev 0.061
extra 0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.049
extra 0.01
5460.9400
nfib1 16
nfib2 16
stdev 0.037
extra 0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra 0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.053
extra 0.24
5895.9240
nfib1 16
nfib2 16
stdev 0.042
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

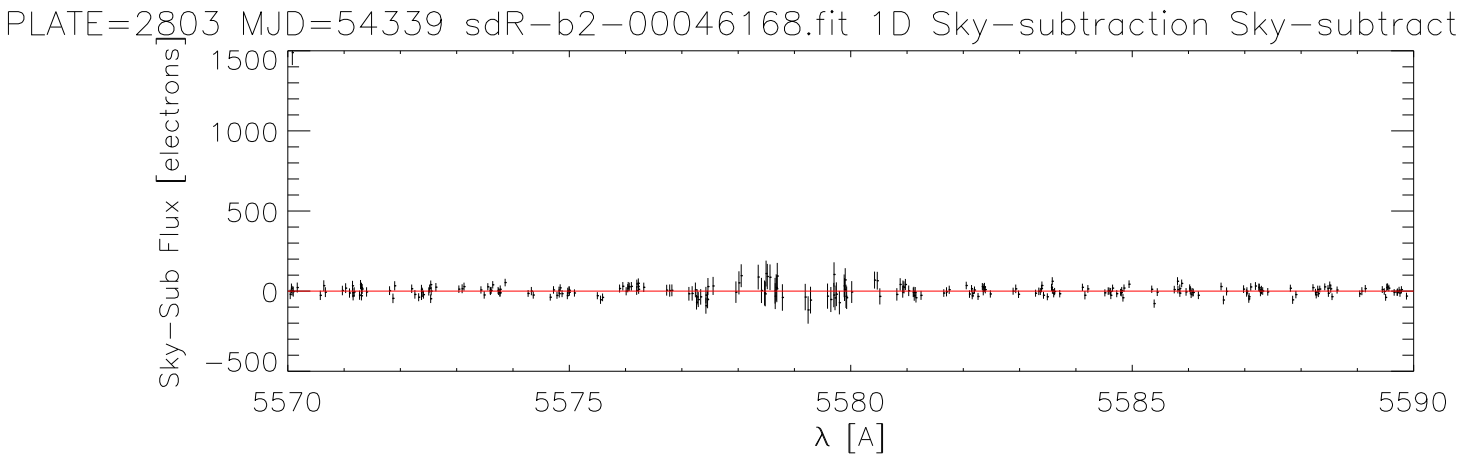

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

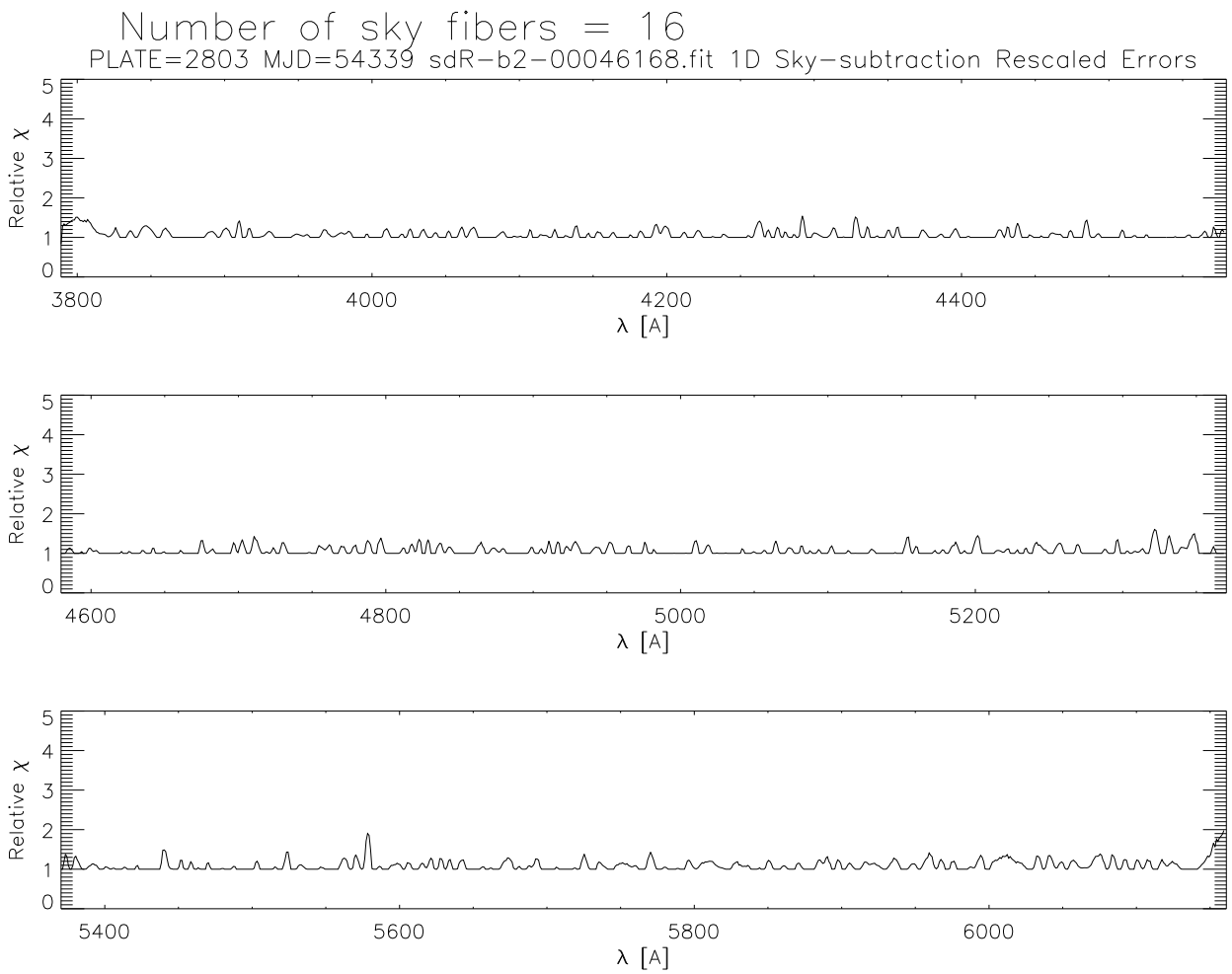
es= −0.0000

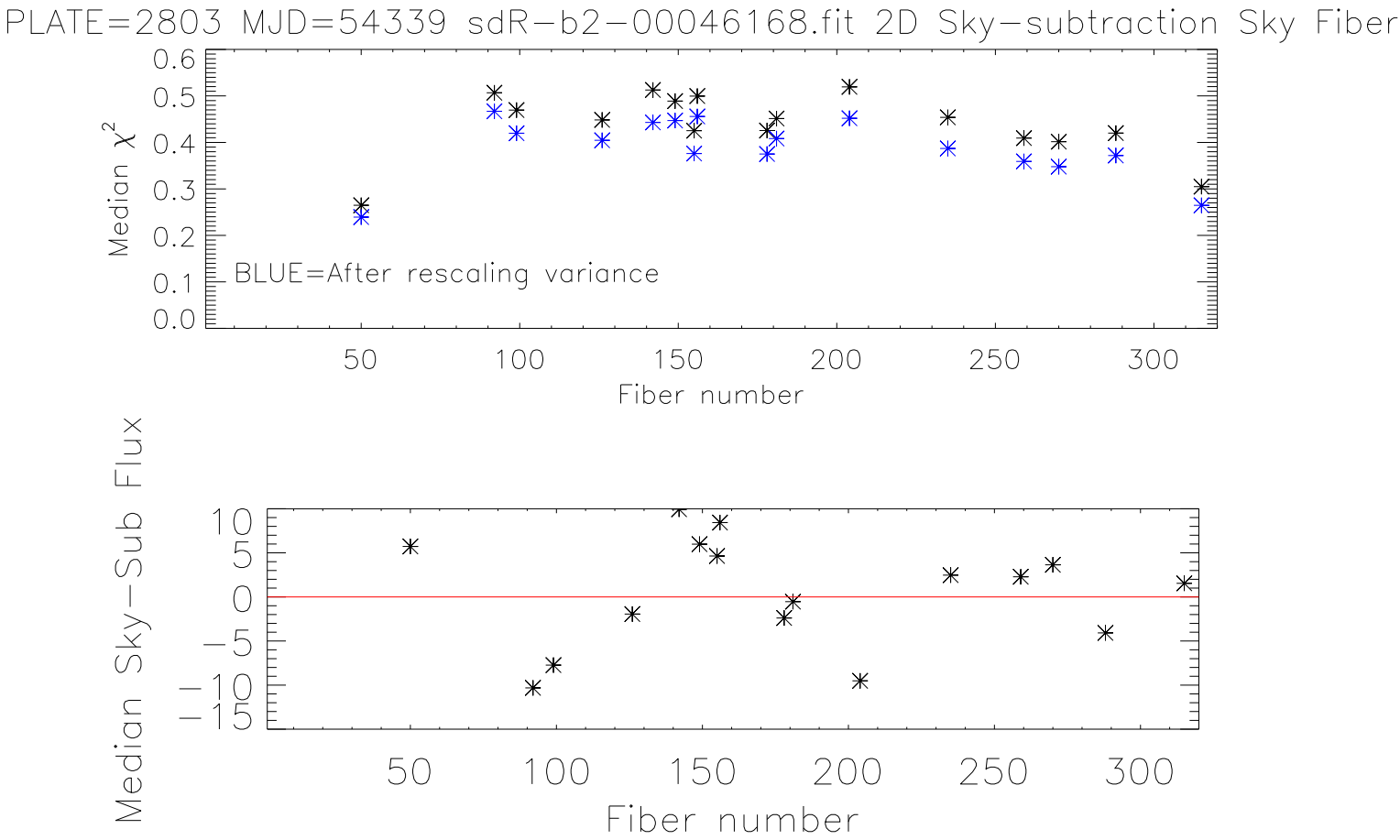

PLATE=2803 MJD=54339 Smooth superflat for sdR−b2−00046168.fit
1.5
1.0
0.5
0.0
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

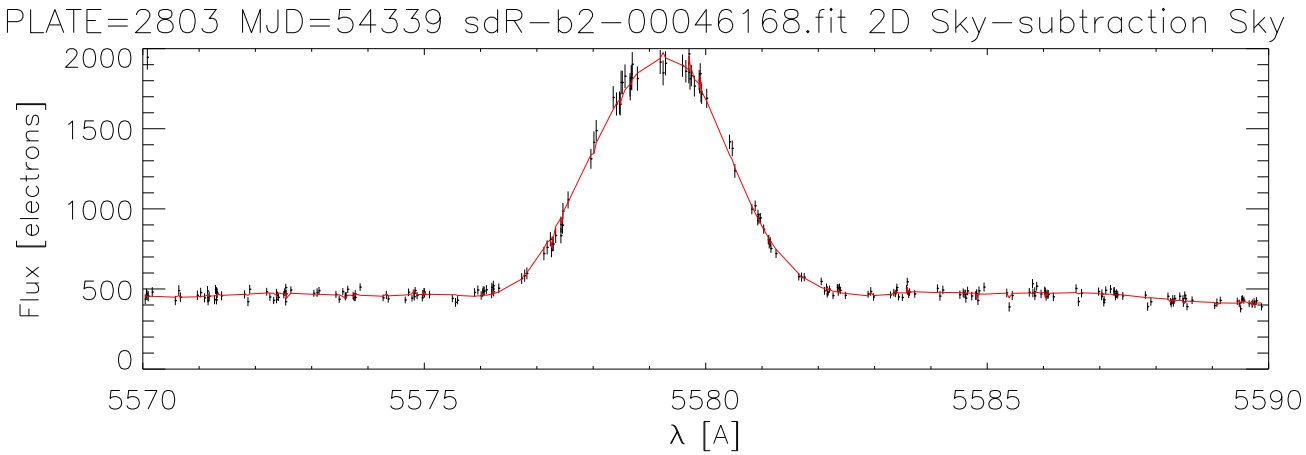

PLATE=2803 MJD=54339 sdR-b2-00046168.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

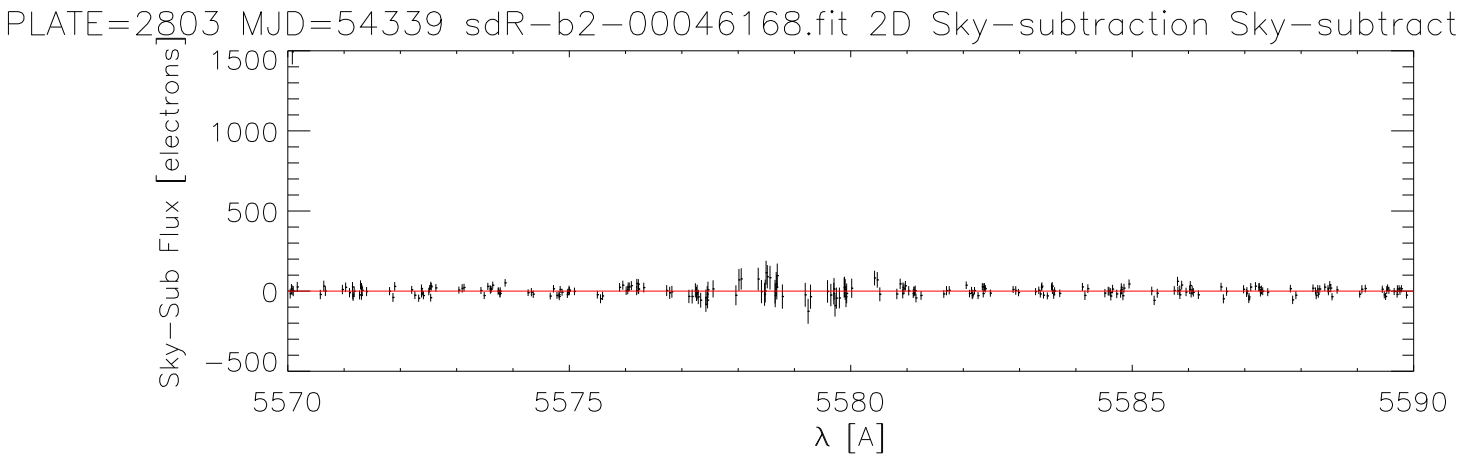

PLATE=2803 MJD=54339 sdR-b2-00046168.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

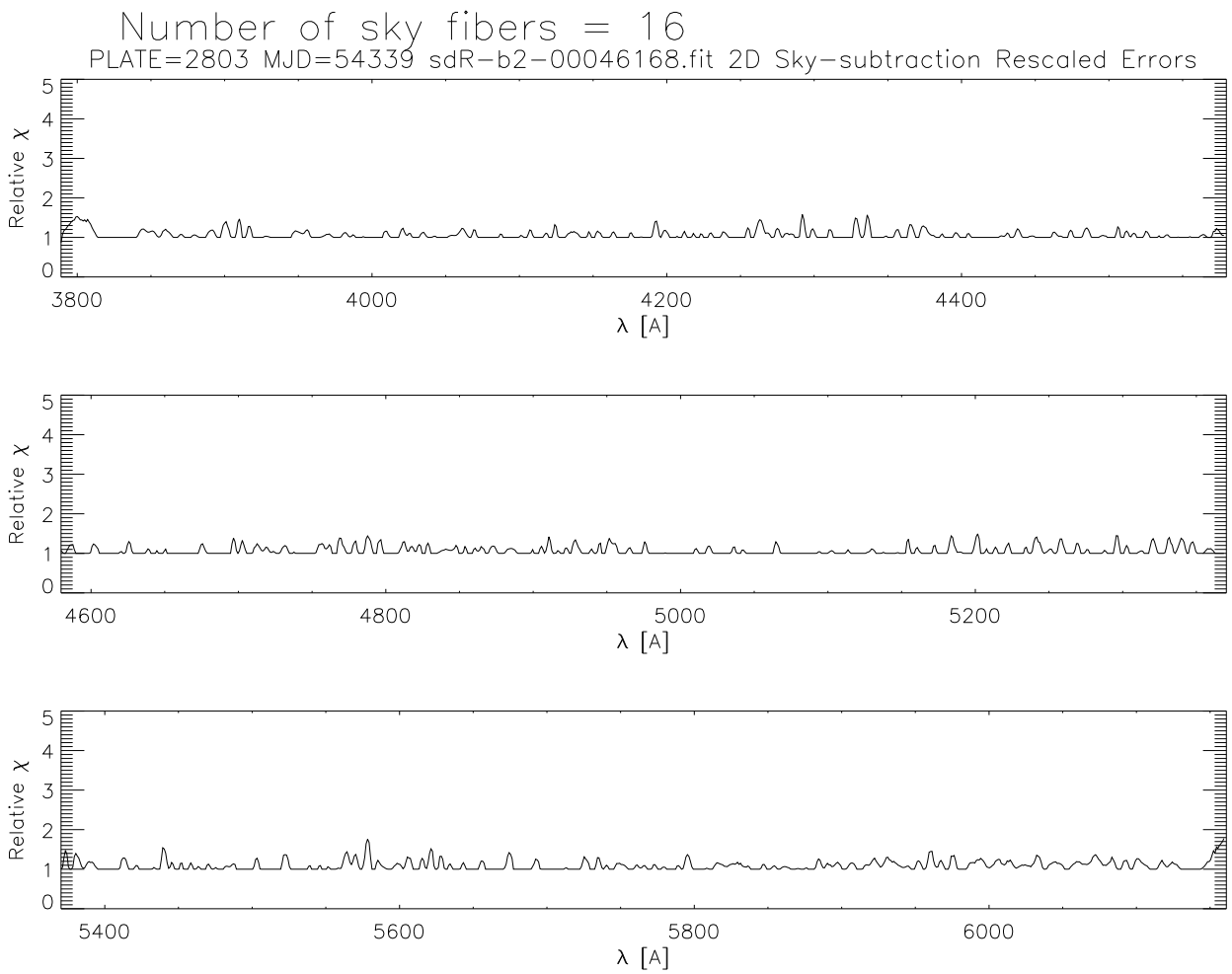

PLATE=2803 MJD=54339 sdR-b2-00046168.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

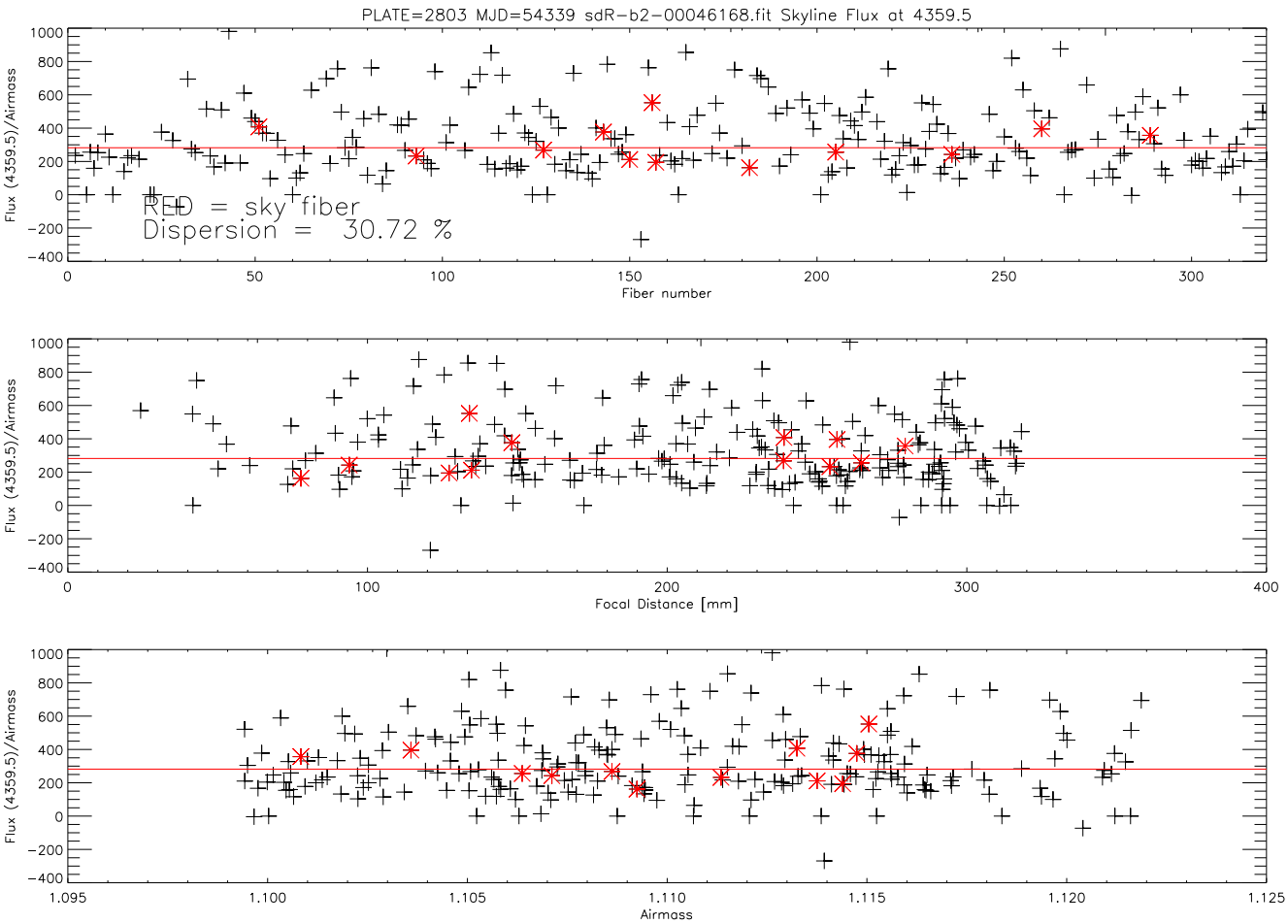

Number of sky fibers = 16
PLATE=2803 MJD=54339 sdR-b2-00046168.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

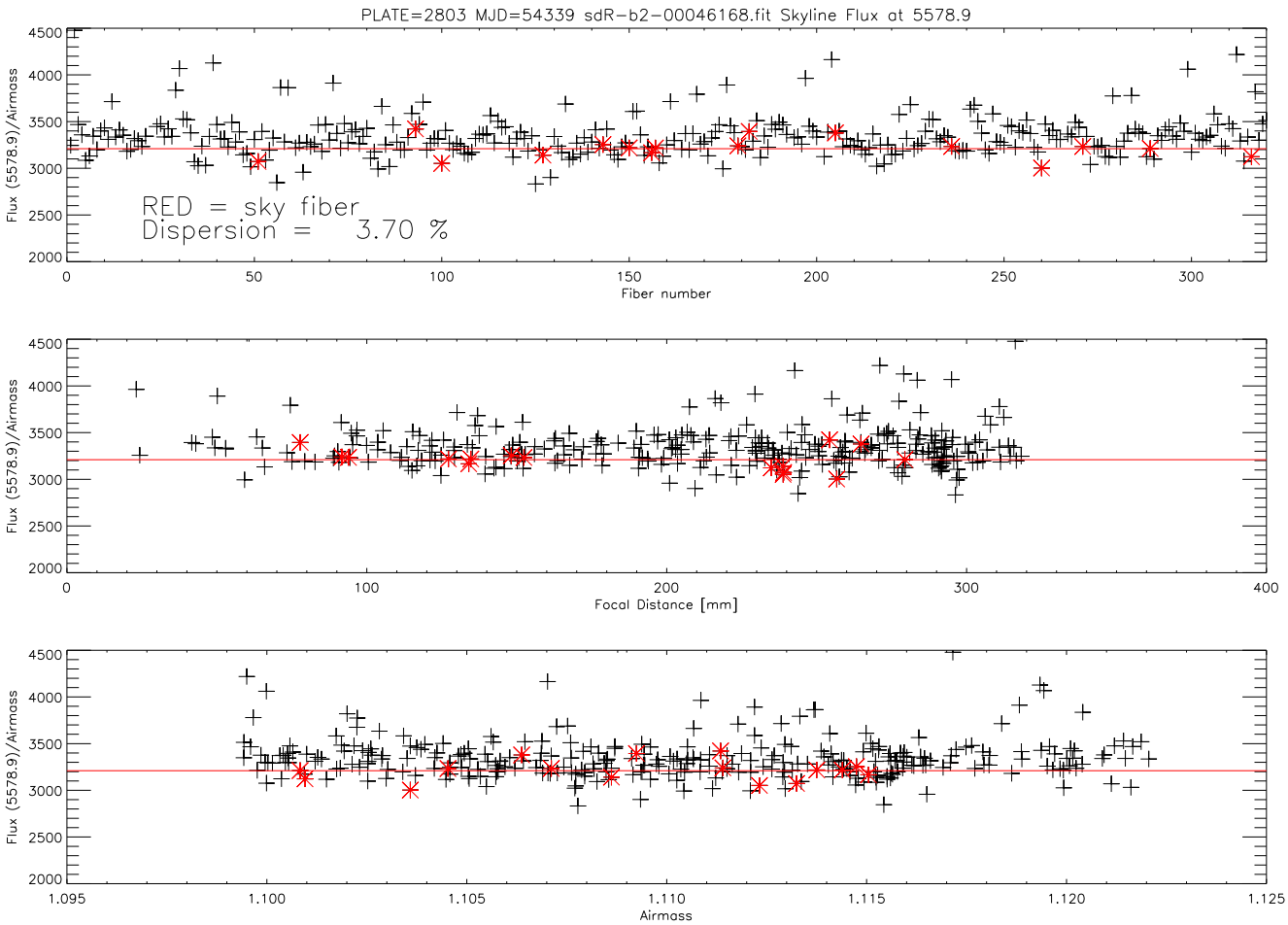

PLATE=2803 MJD=54339 sdR-b2-00046168.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

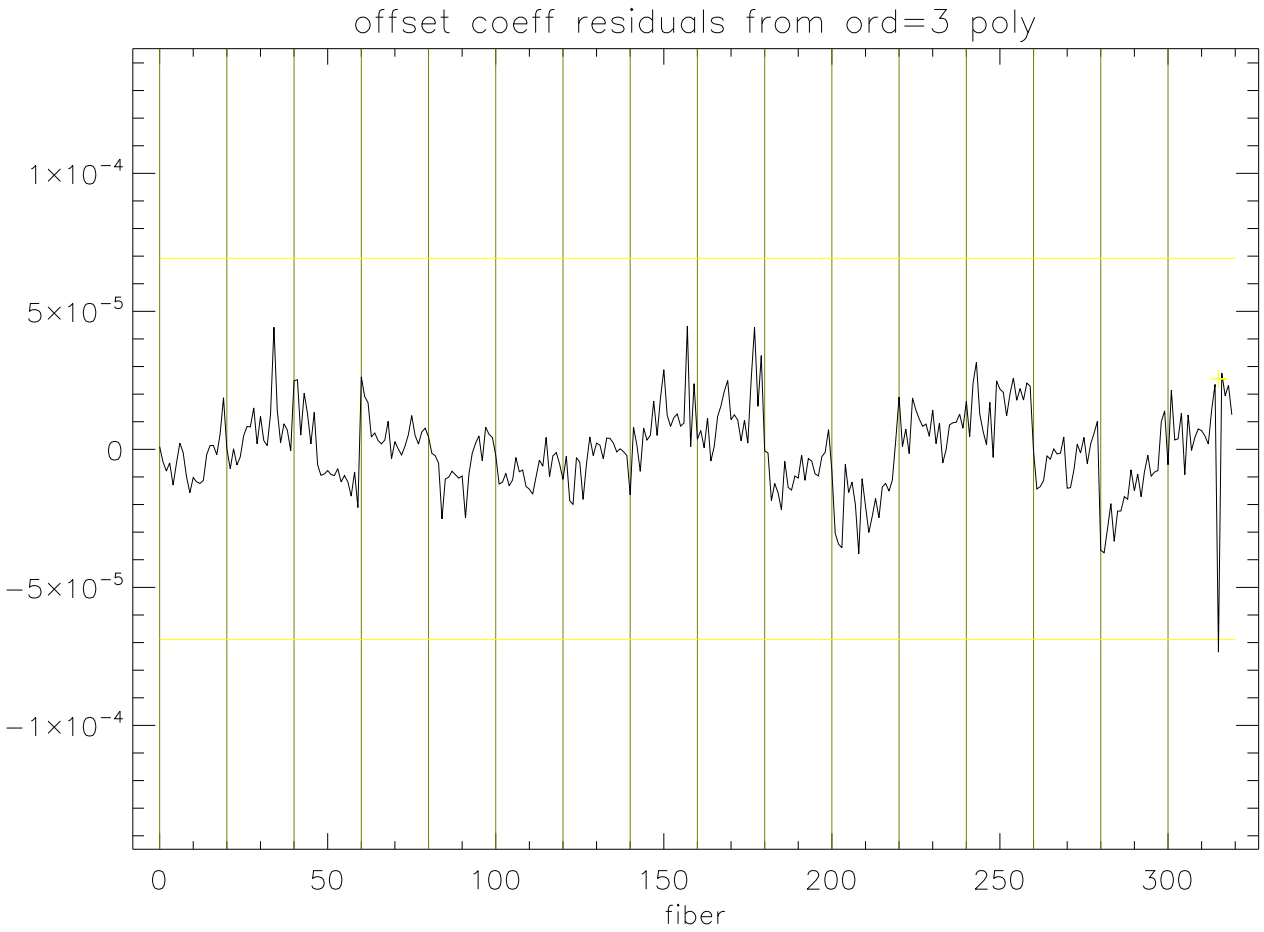

PLATE=2803 MJD=54339 sdR-b2-00046168.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

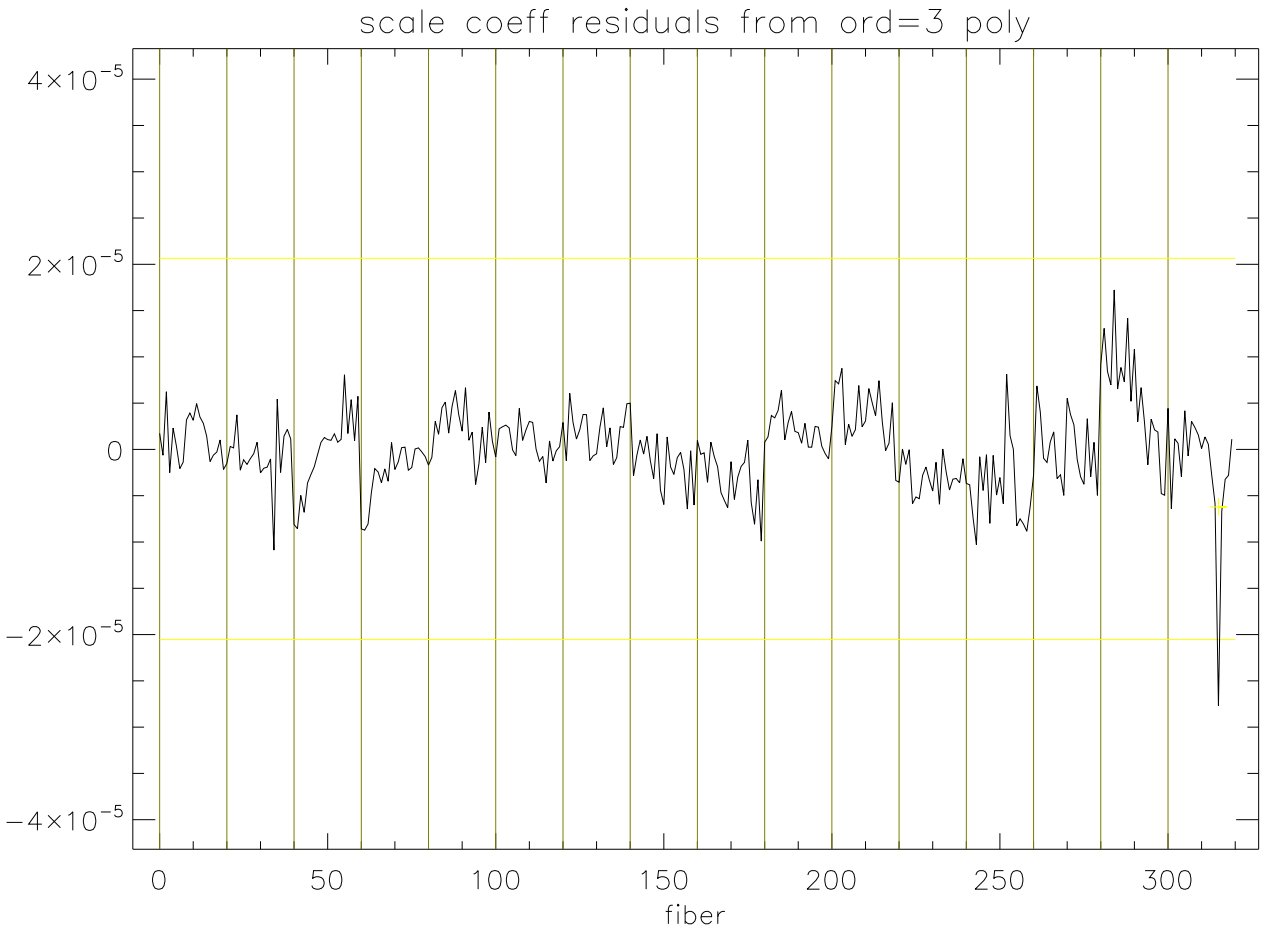

PLATE=2803 MJD=54339 sdR-b2-00046168.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

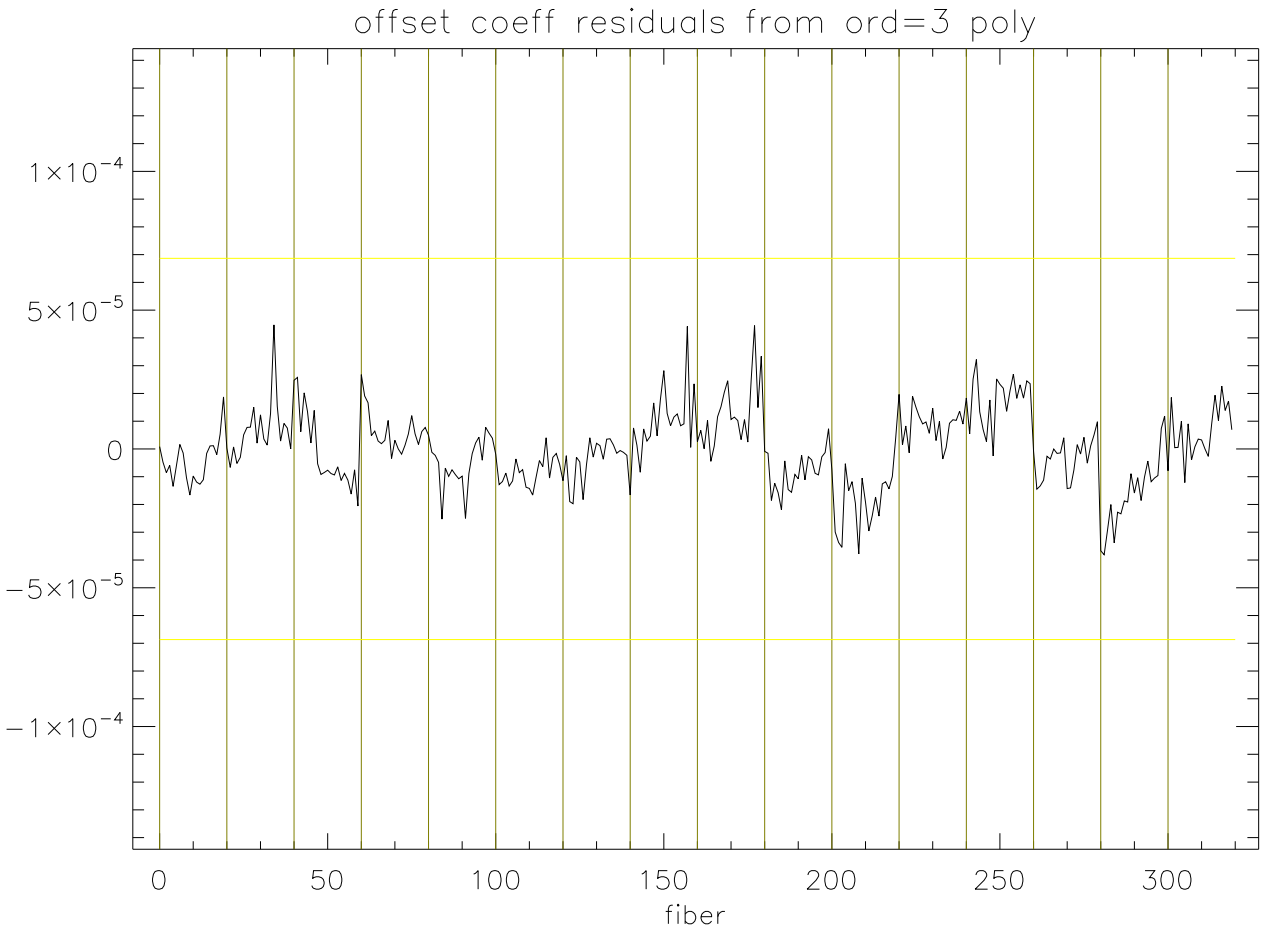

Number of sky fibers = 16
PLATE=2803 MJD=54339 sdR-b2-00046168.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

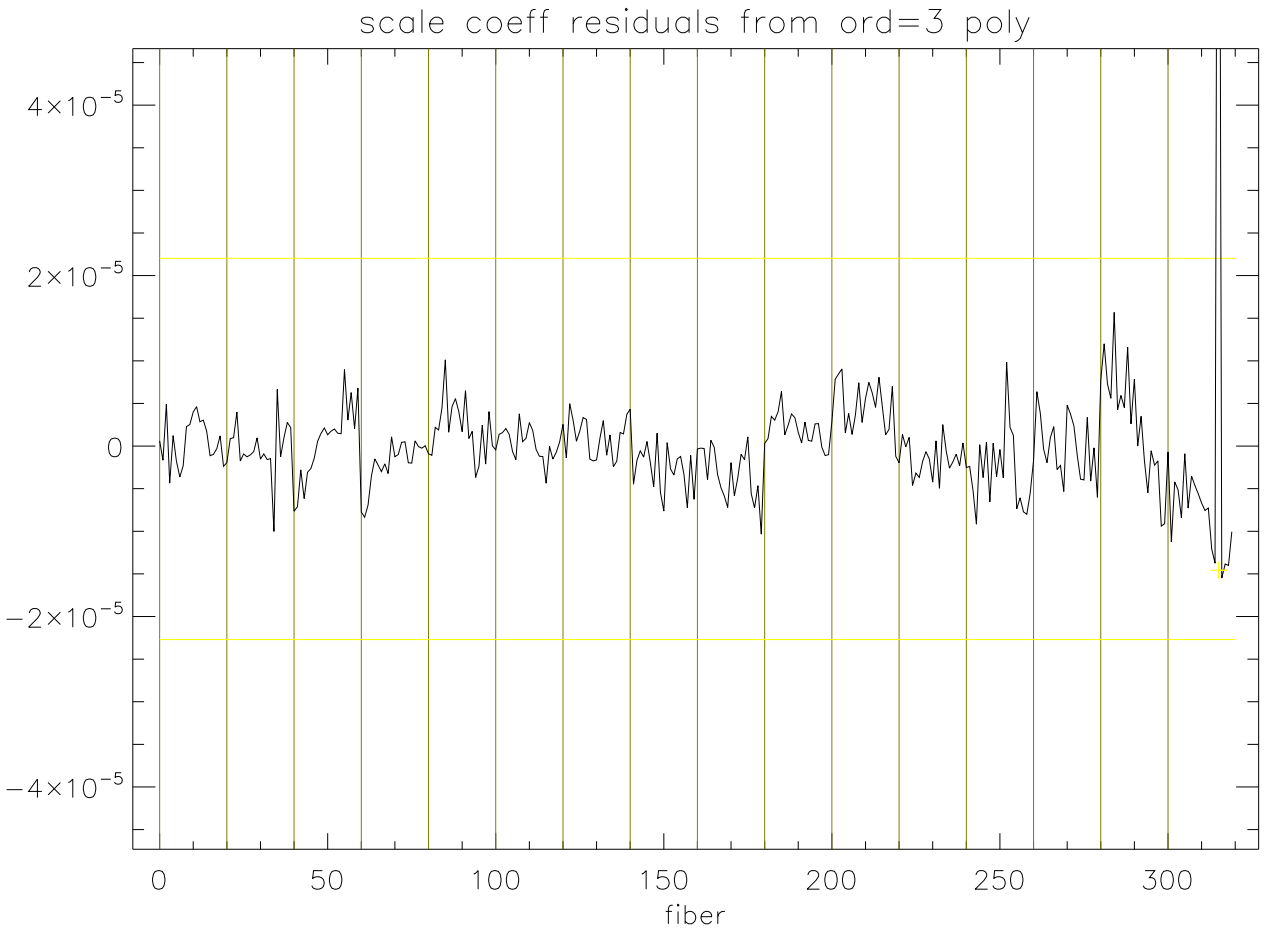

PLATE=2803 MJD=54339 sdR-b2-00046168.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 30.72 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

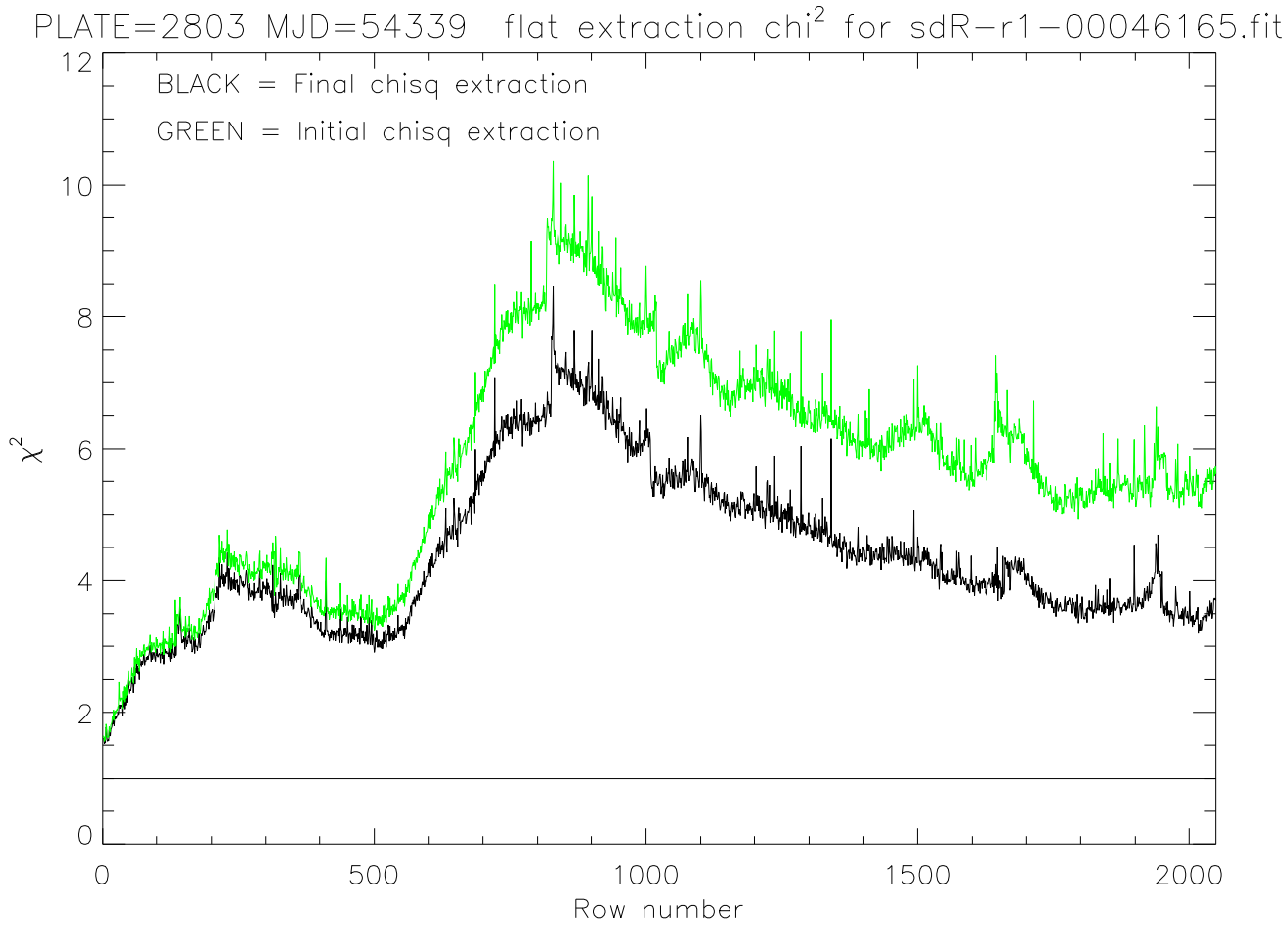

PLATE=2803 MJD=54339 sdR-b2-00046168.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 3.70 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

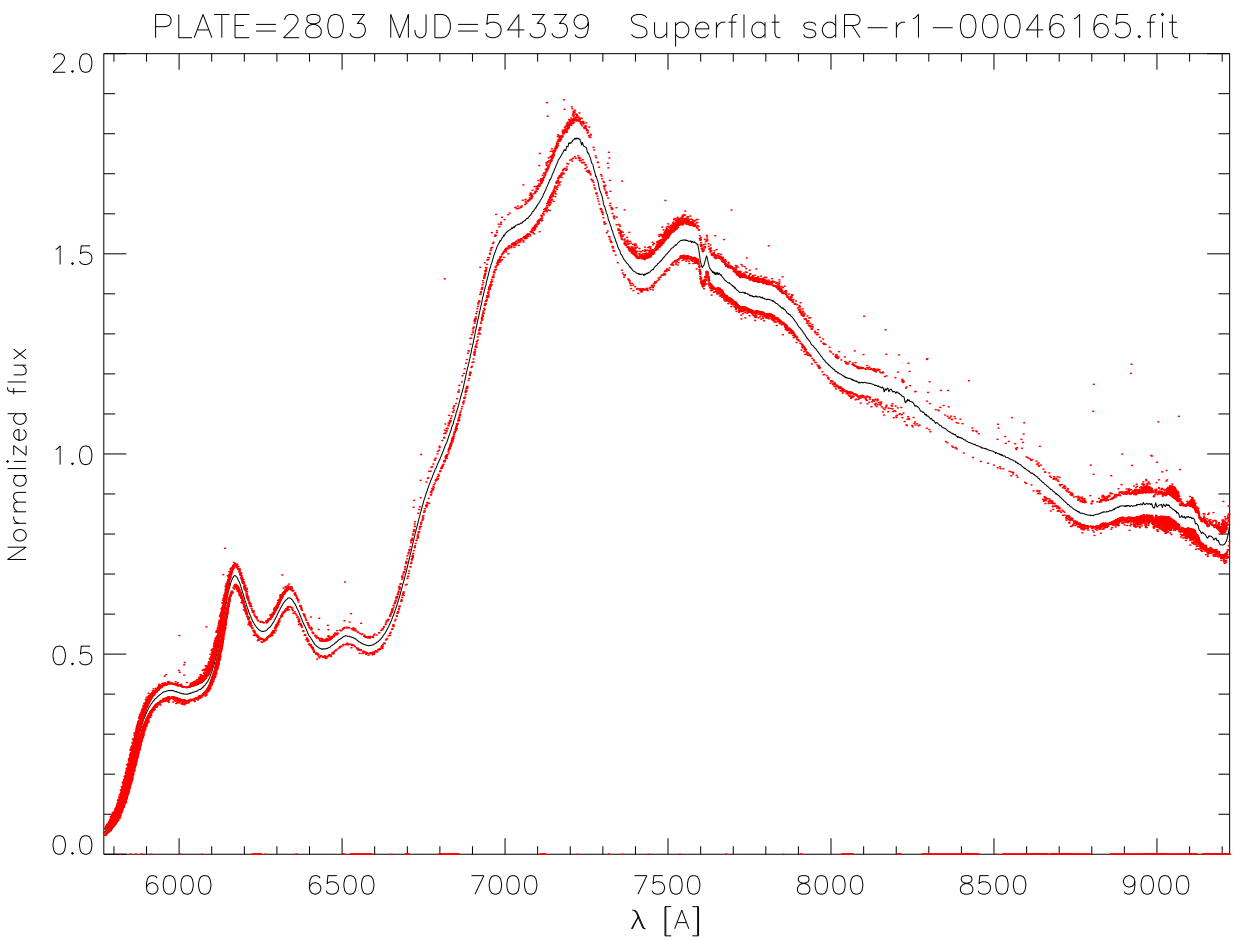

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

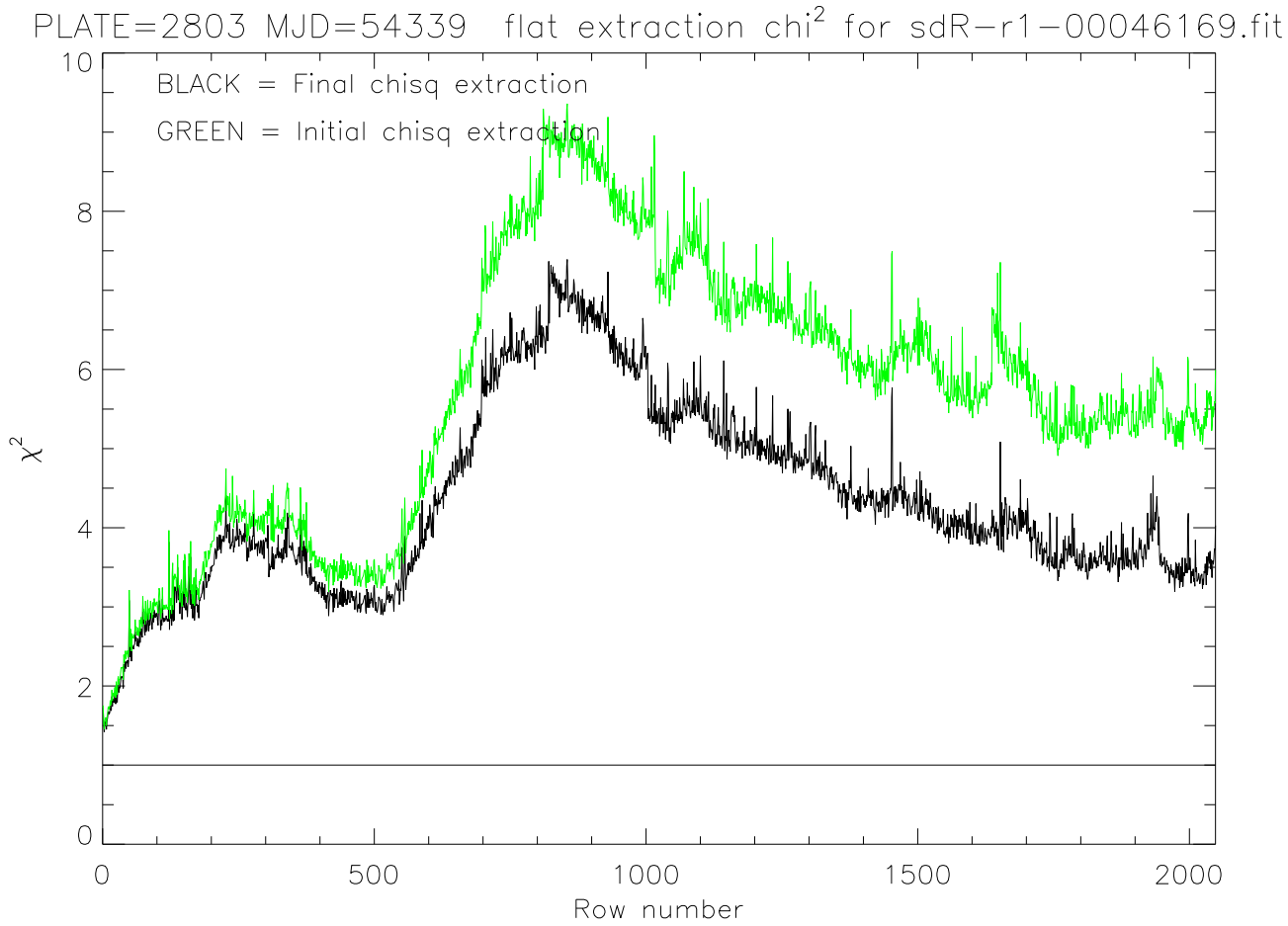

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

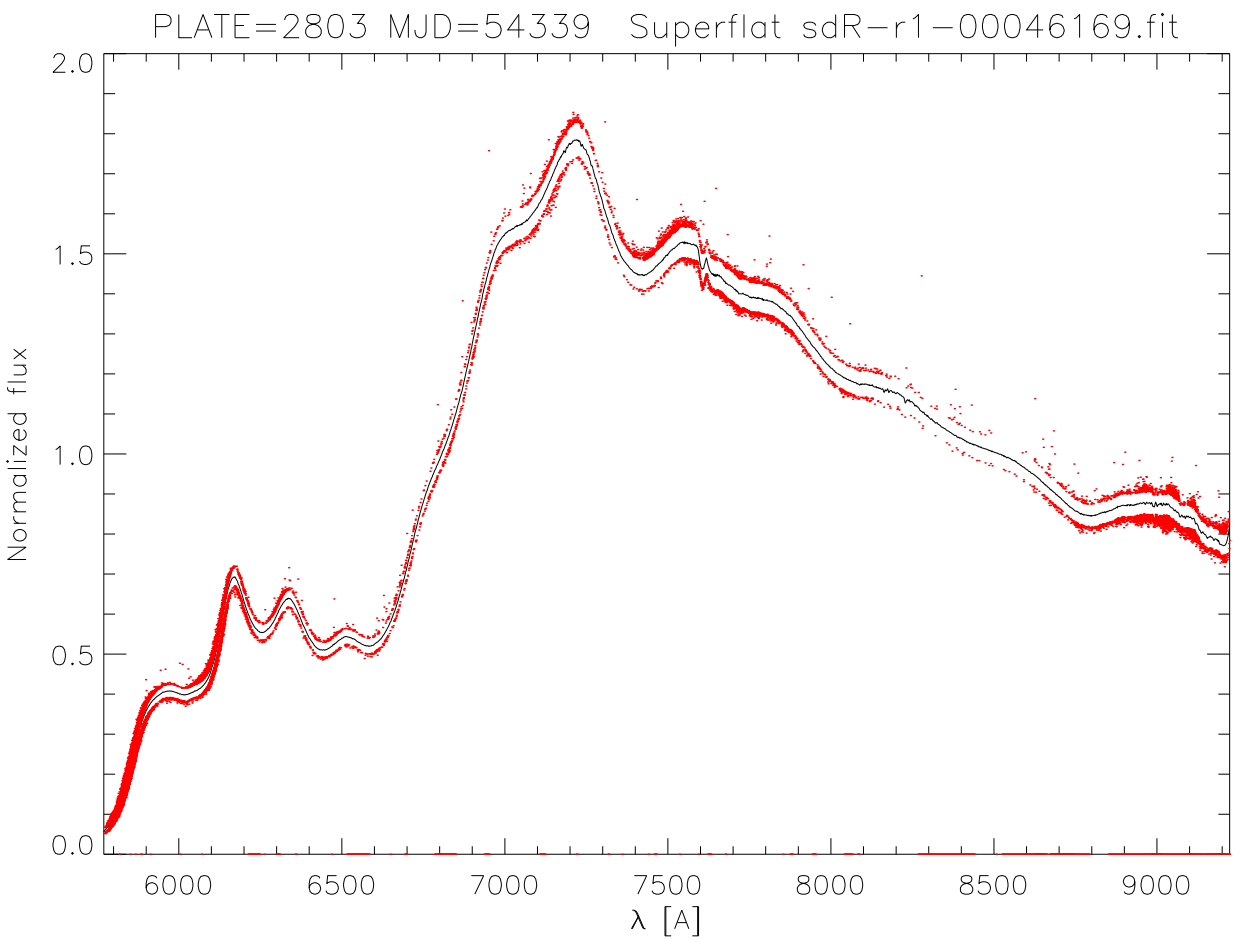

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

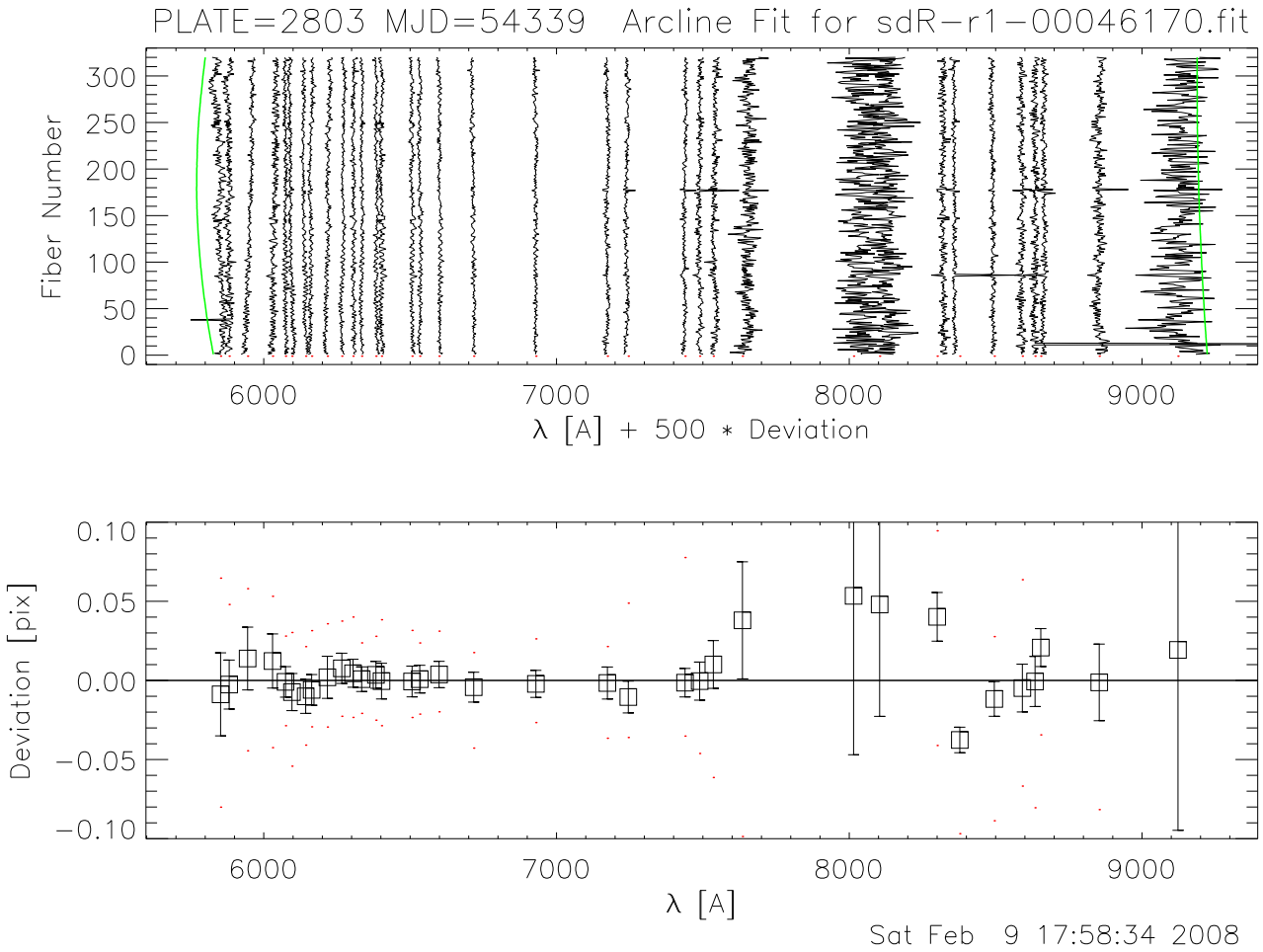

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

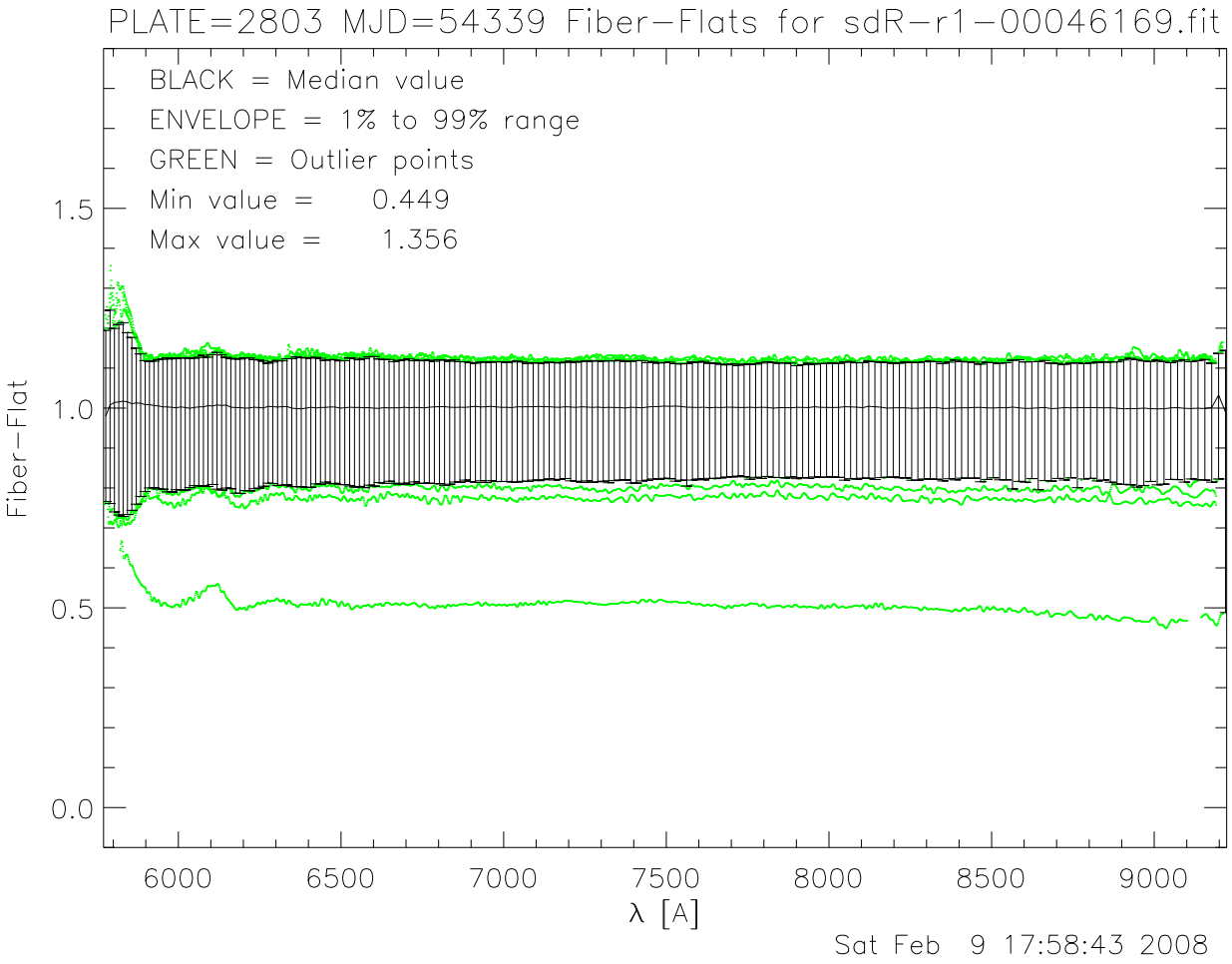

PLATE=2803 MJD=54339 flat extraction chi^2 for sdR−r1−00046165.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

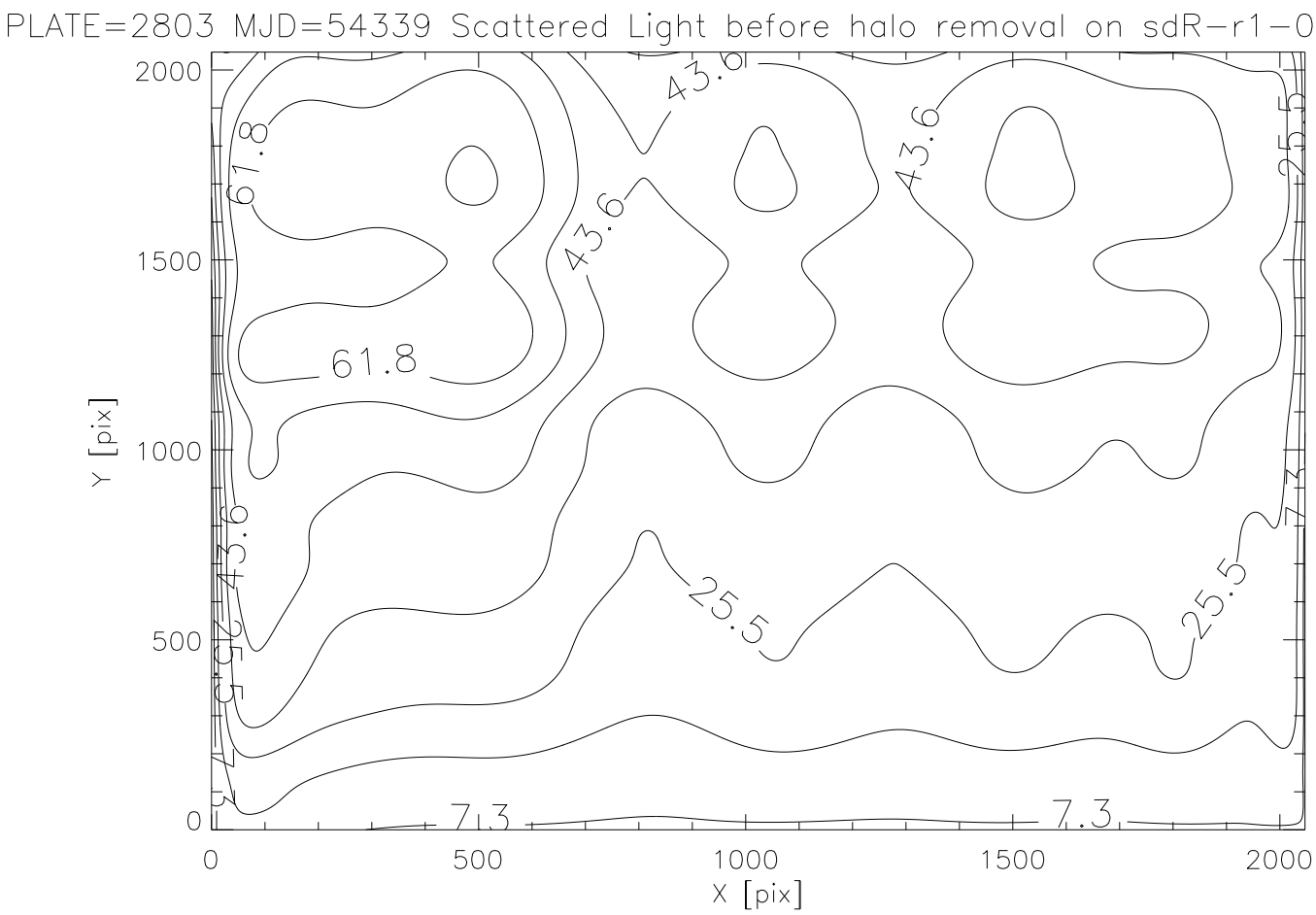

PLATE=2803 MJD=54339 Superflat sdR-r1-00046165.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

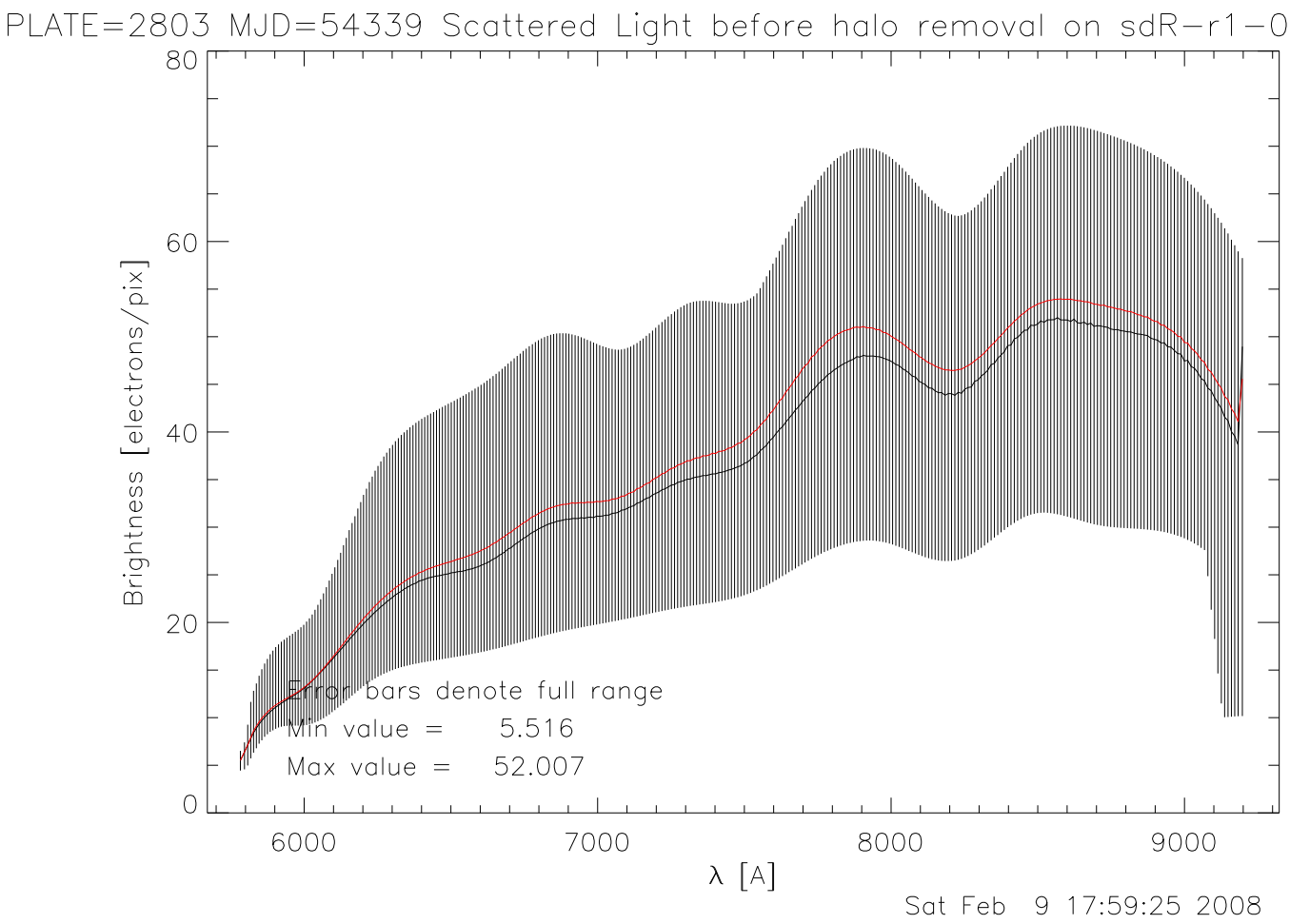

PLATE=2803 MJD=54339 flat extraction chi^2 for sdR−r1−00046169.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

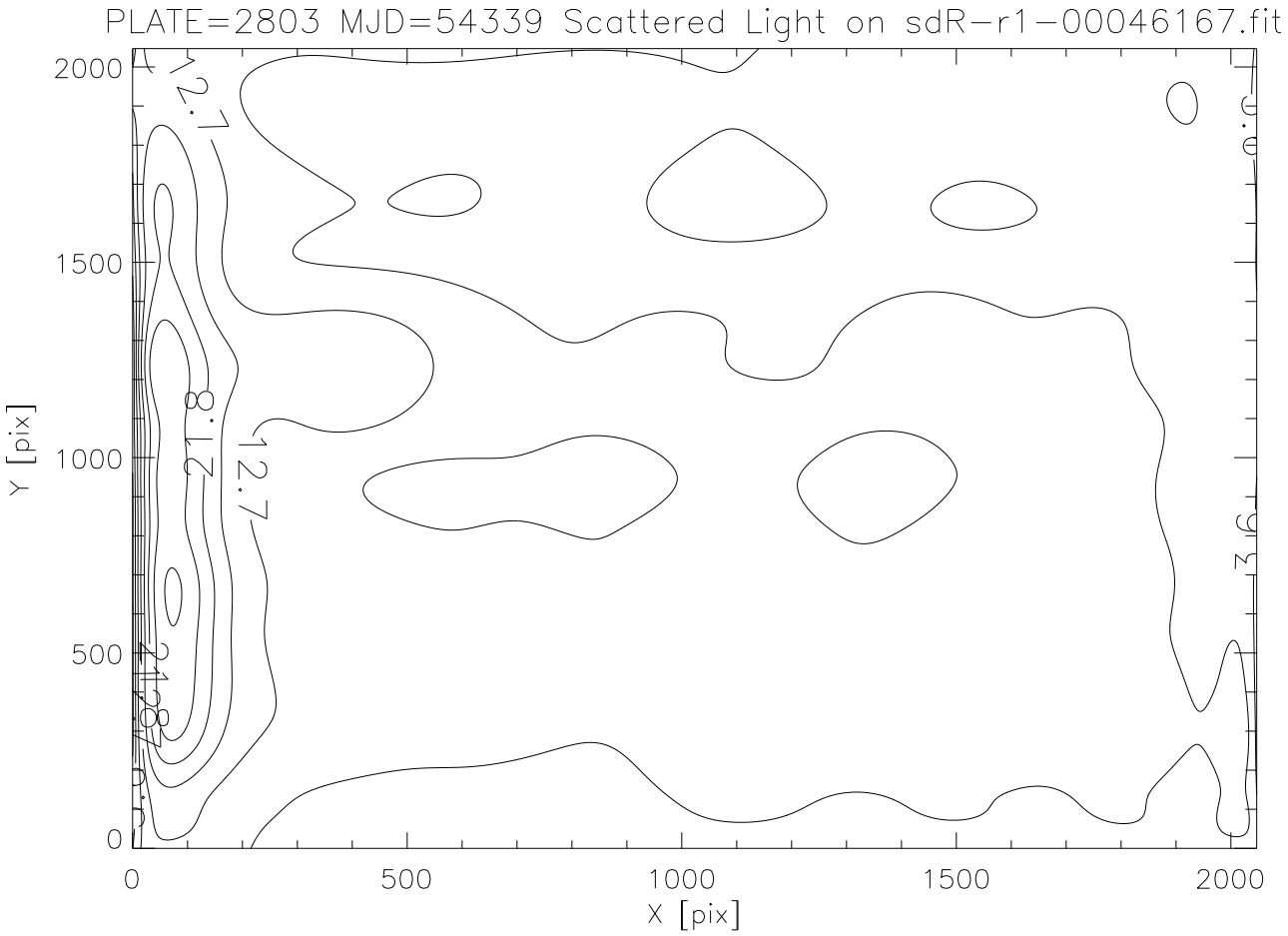

PLATE=2803 MJD=54339 Superflat sdR-r1-00046169.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

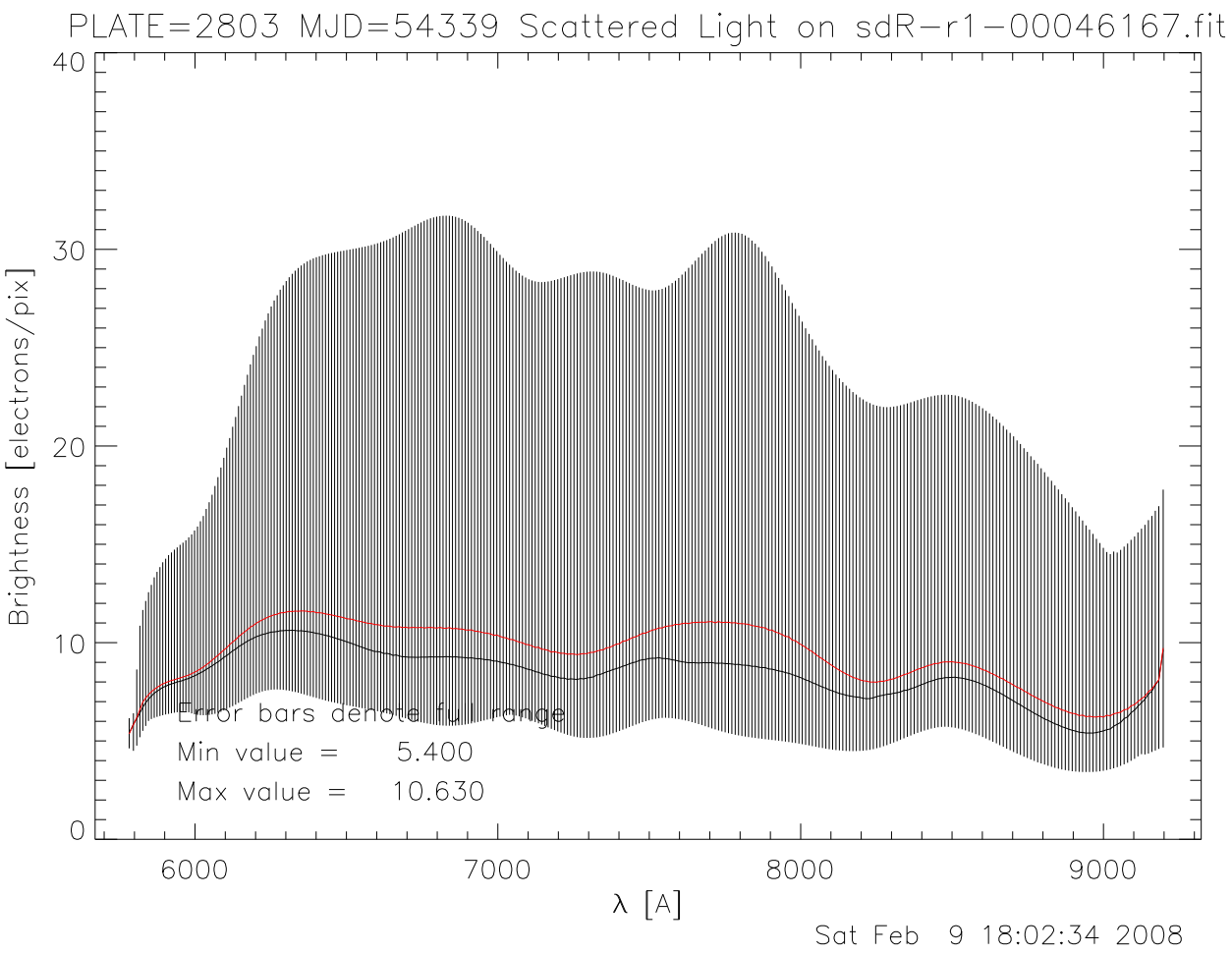

PLATE=2803 MJD=54339 Arcline Fit for sdR-r1-00046170.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
0.10
0.05
0.00
−0.05
−0.10
Deviation [pix]
6000
7000
8000
9000
λ [A]
Sat Feb 9 17:58:34 2008

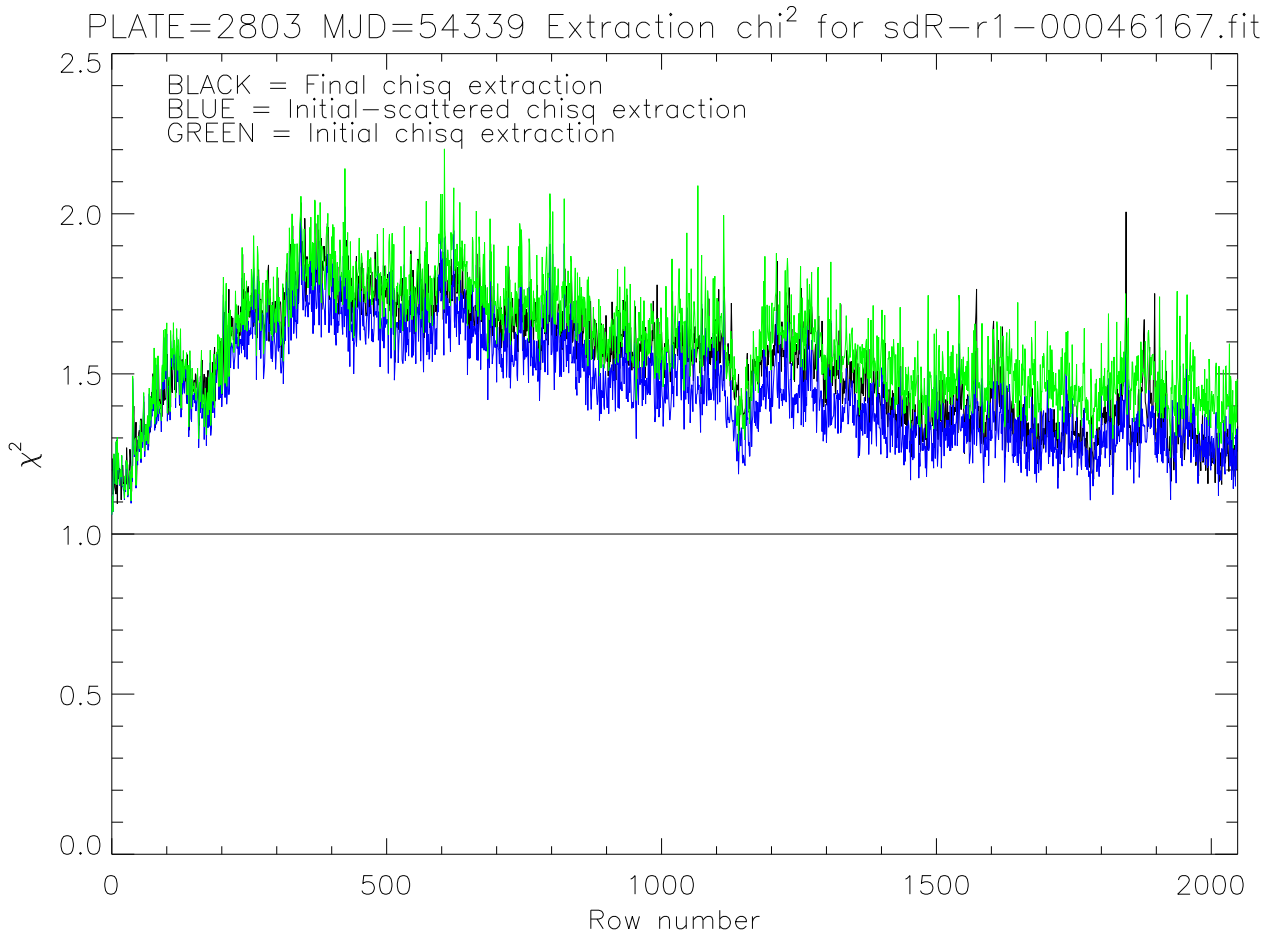

PLATE=2803 MJD=54339 Fiber-Flats for sdR-r1-00046169.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.449
Max value = 1.356
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 9 17:58:43 2008

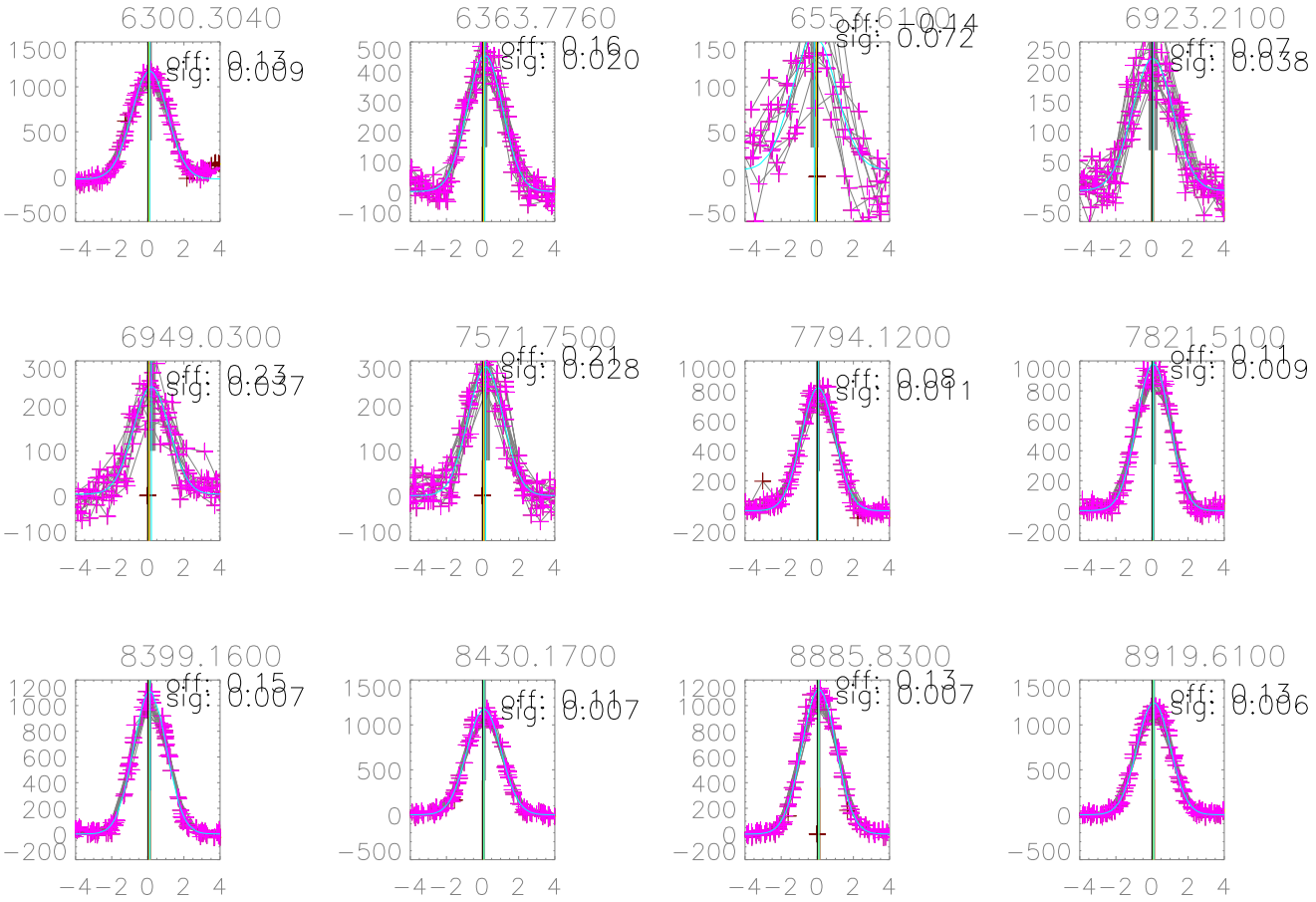

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-r1-00046167.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
61.8
43.6
25.5
7.3

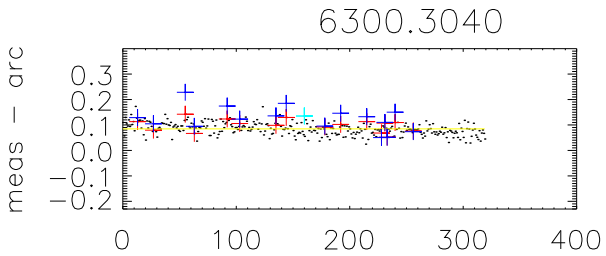

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-r1-00046167.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.516
Max value = 52.007
Sat Feb 9 17:59:25 2008

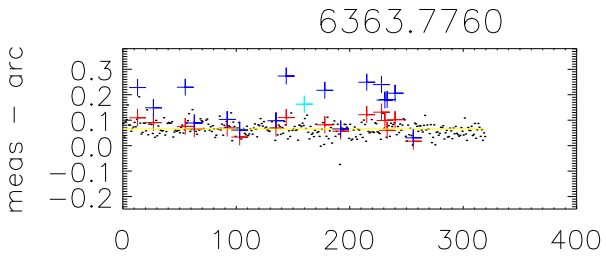

PLATE=2803 MJD=54339 Scattered Light on sdR-r1-00046167.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.7
8.12
12.7
4.48
0.0
0.0
3.91

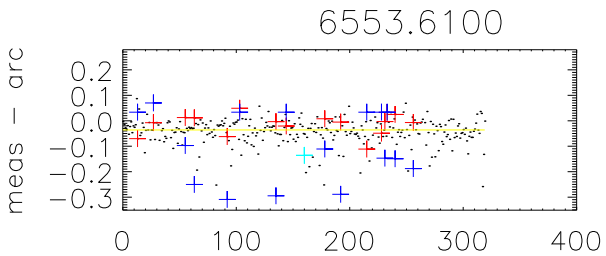

PLATE=2803 MJD=54339 Scattered Light on sdR-r1-00046167.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.400
Max value = 10.630
Sat Feb 9 18:02:34 2008

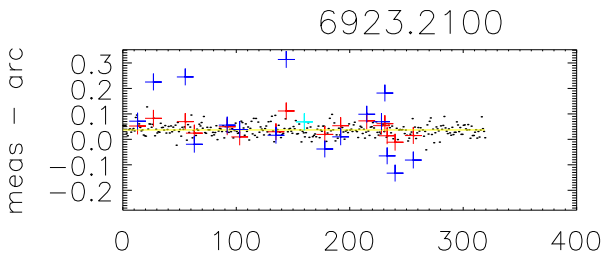

PLATE=2803 MJD=54339 Extraction chi^2 for sdR−r1−00046167.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

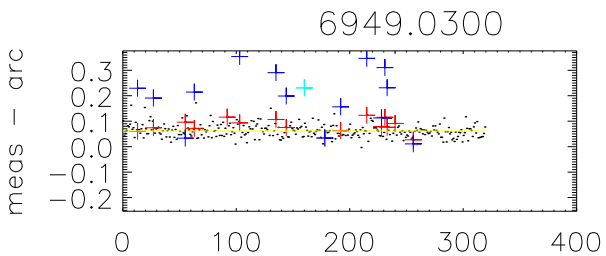

6300.3040
off: 0.13
sig: 0.009
6363.7760
off: 0.16
sig: 0.020
6557.6100
off: 0.14
sig: 0.072
6923.2100
off: 0.07
sig: 0.038
6949.0300
off: 0.23
sig: 0.037
7571.7500
off: 0.21
sig: 0.028
7794.1200
off: 0.08
sig: 0.011
7821.5100
off: 0.11
sig: 0.009
8399.1600
off: 0.15
sig: 0.007
8430.1700
off: 0.11
sig: 0.007
8885.8300
off: 0.13
sig: 0.007
8919.6100
off: 0.13
sig: 0.006

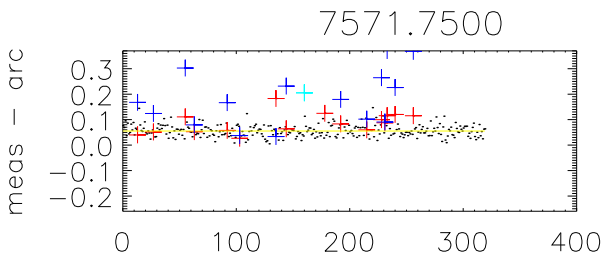

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

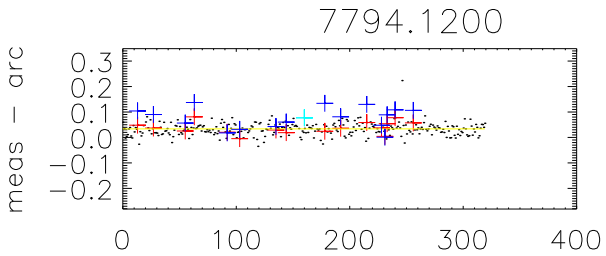

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

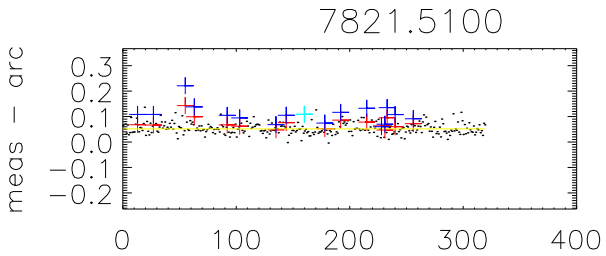

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

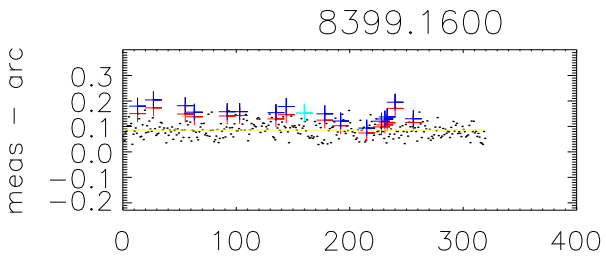

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

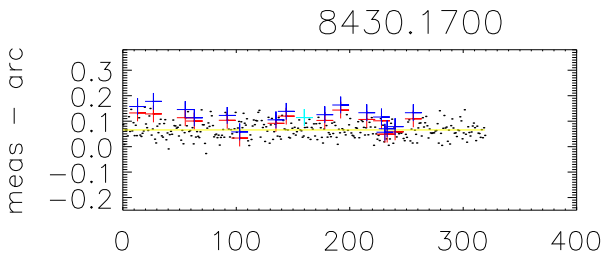

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

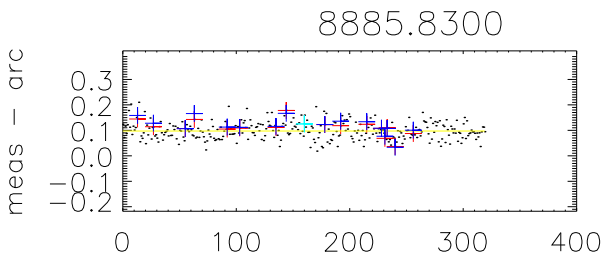

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

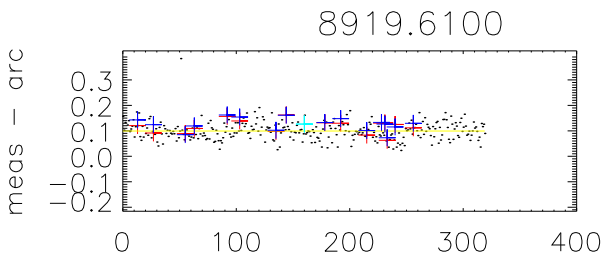

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

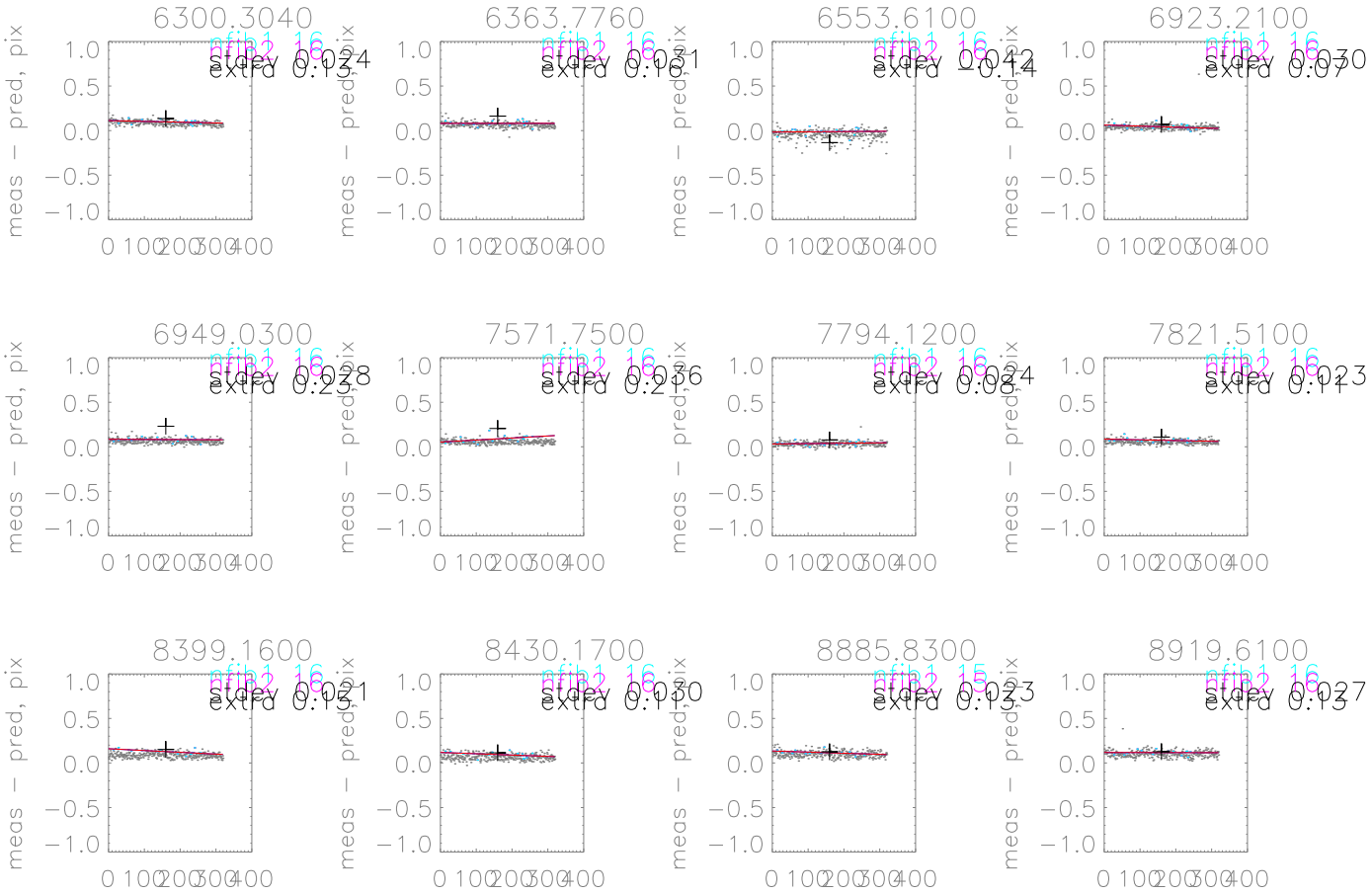

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

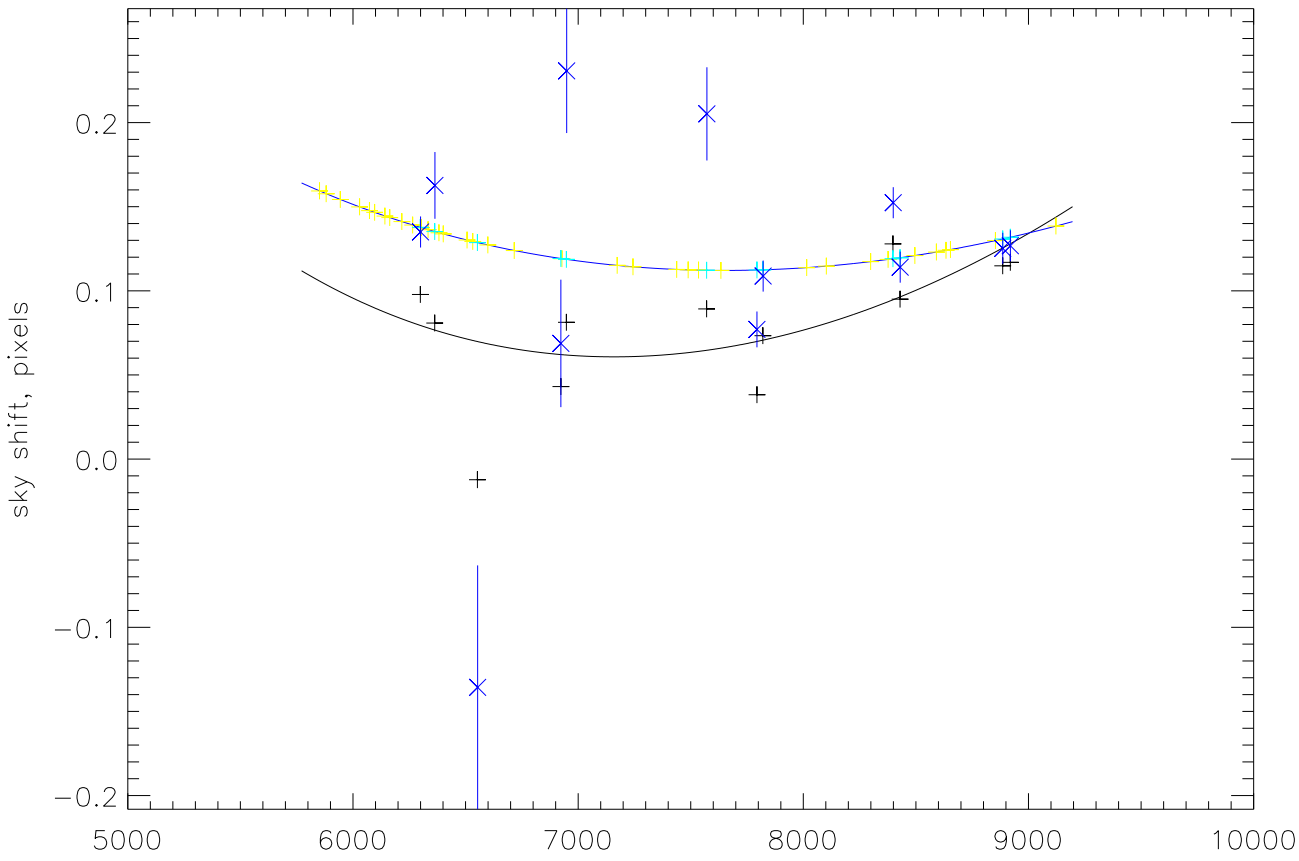

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

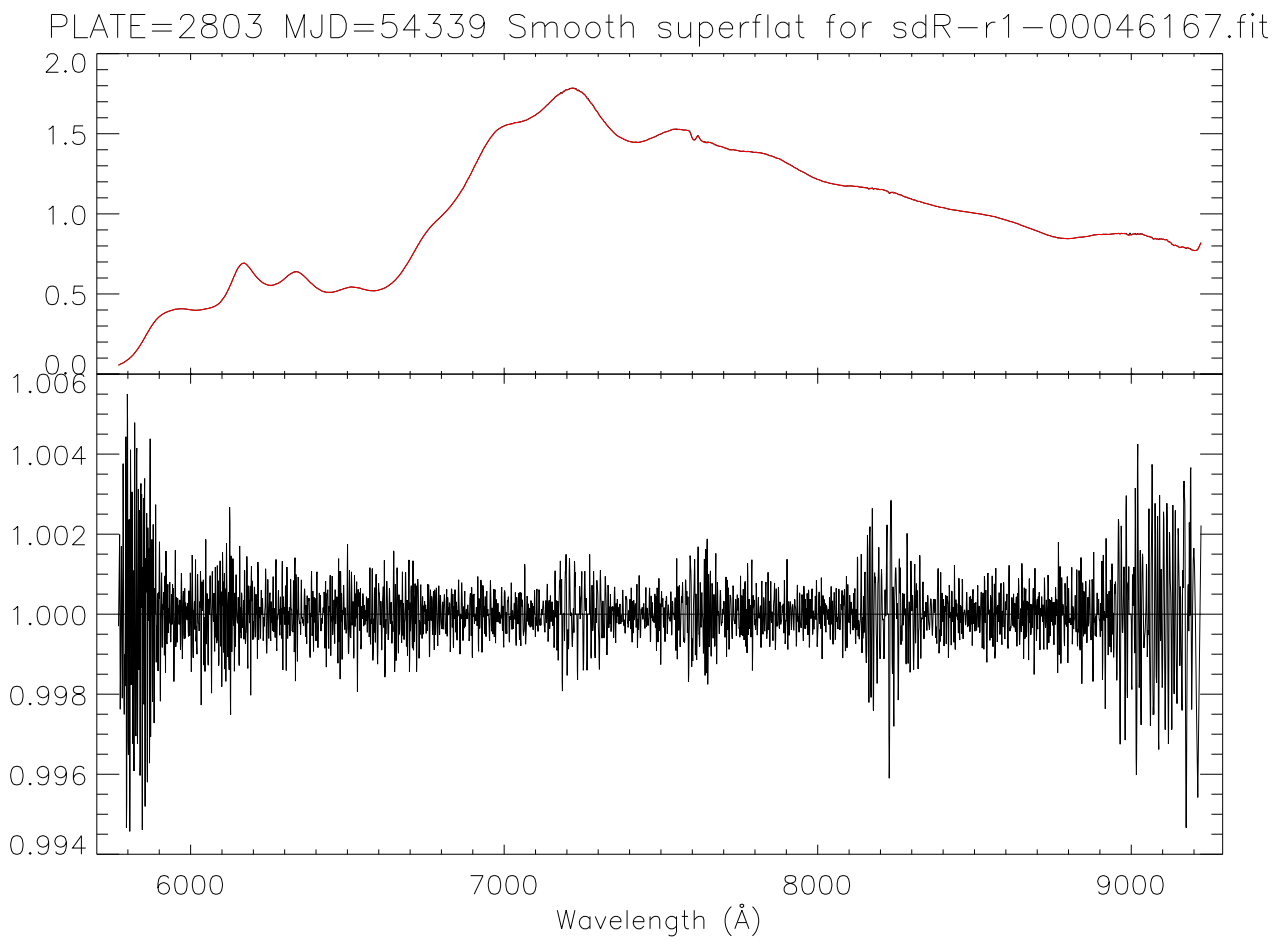

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

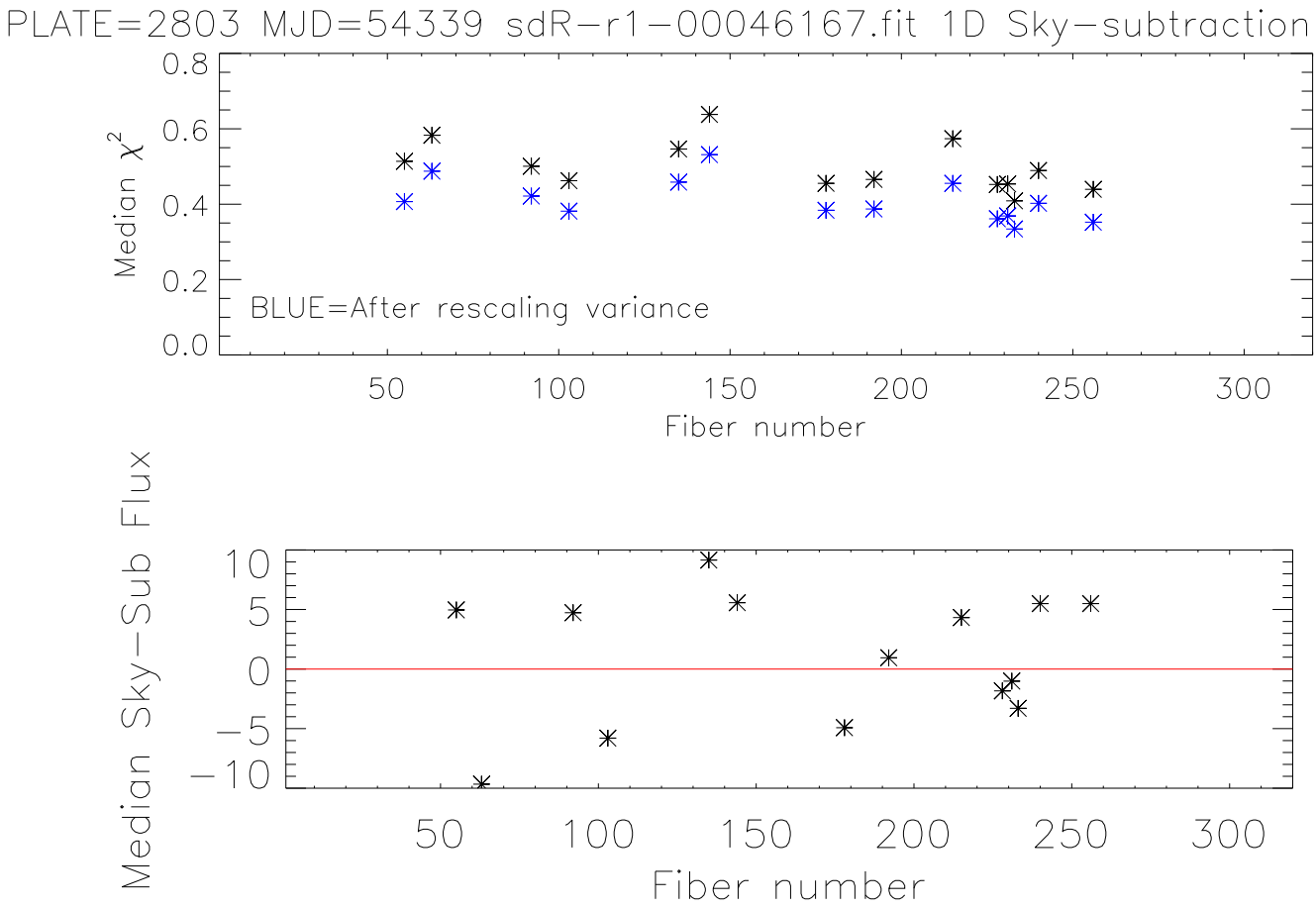

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

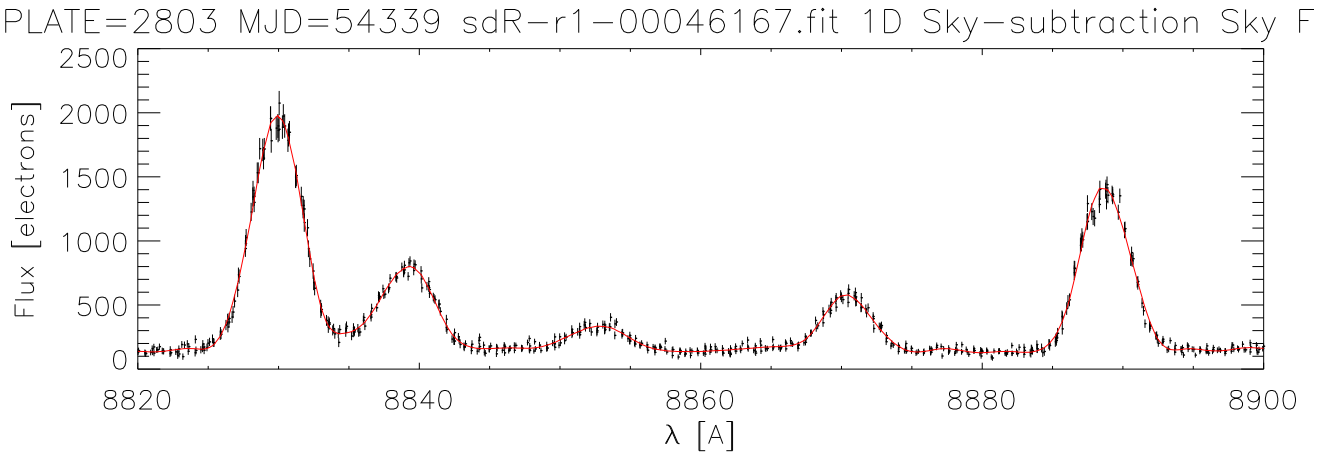

6300.3040
mfhs1 16
mfhs2 16
stdev 0.024
extra 0.13
6363.7760
mfhs1 16
mfhs2 16
stdev 0.031
extra 0.16
6553.6100
mfhs1 16
mfhs2 16
stdev 0.042
extra −0.14
6923.2100
mfhs1 16
mfhs2 16
stdev 0.030
extra 0.07
6949.0300
mfhs1 16
mfhs2 16
stdev 0.028
extra 0.23
7571.7500
mfhs1 16
mfhs2 16
stdev 0.036
extra 0.216
7794.1200
mfhs1 16
mfhs2 16
stdev 0.024
extra 0.08
7821.5100
mfhs1 16
mfhs2 16
stdev 0.023
extra 0.11
8399.1600
mfhs1 16
mfhs2 16
stdev 0.021
extra 0.13
8430.1700
mfhs1 16
mfhs2 16
stdev 0.030
extra 0.110
8885.8300
mfhs1 15
mfhs2 16
stdev 0.023
extra 0.13
8919.6100
mfhs1 16
mfhs2 16
stdev 0.027
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

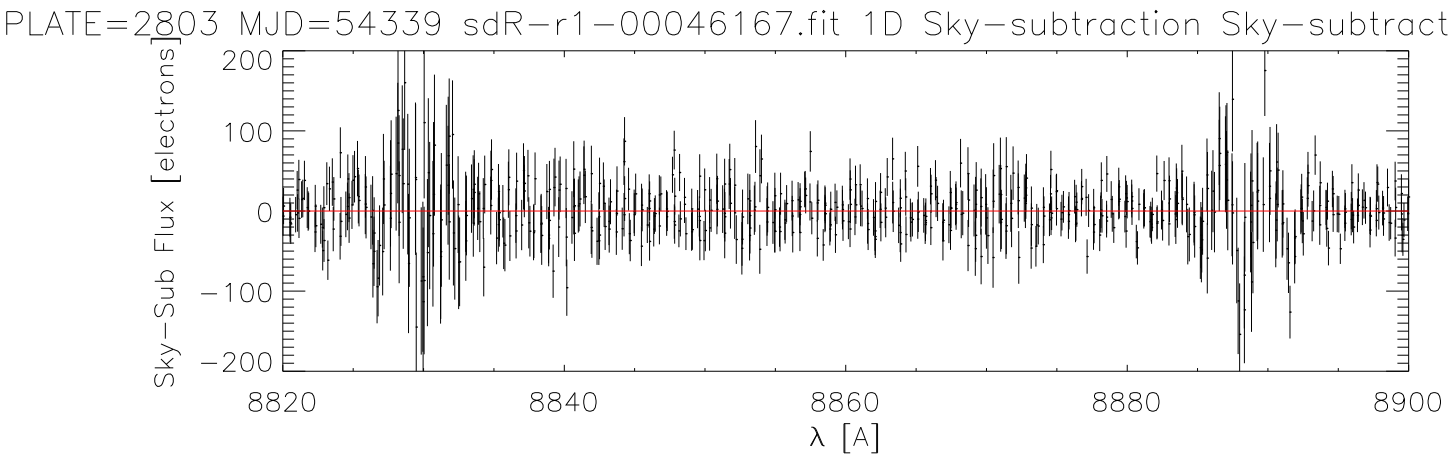

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
5000
6000
7000
8000
9000
10000

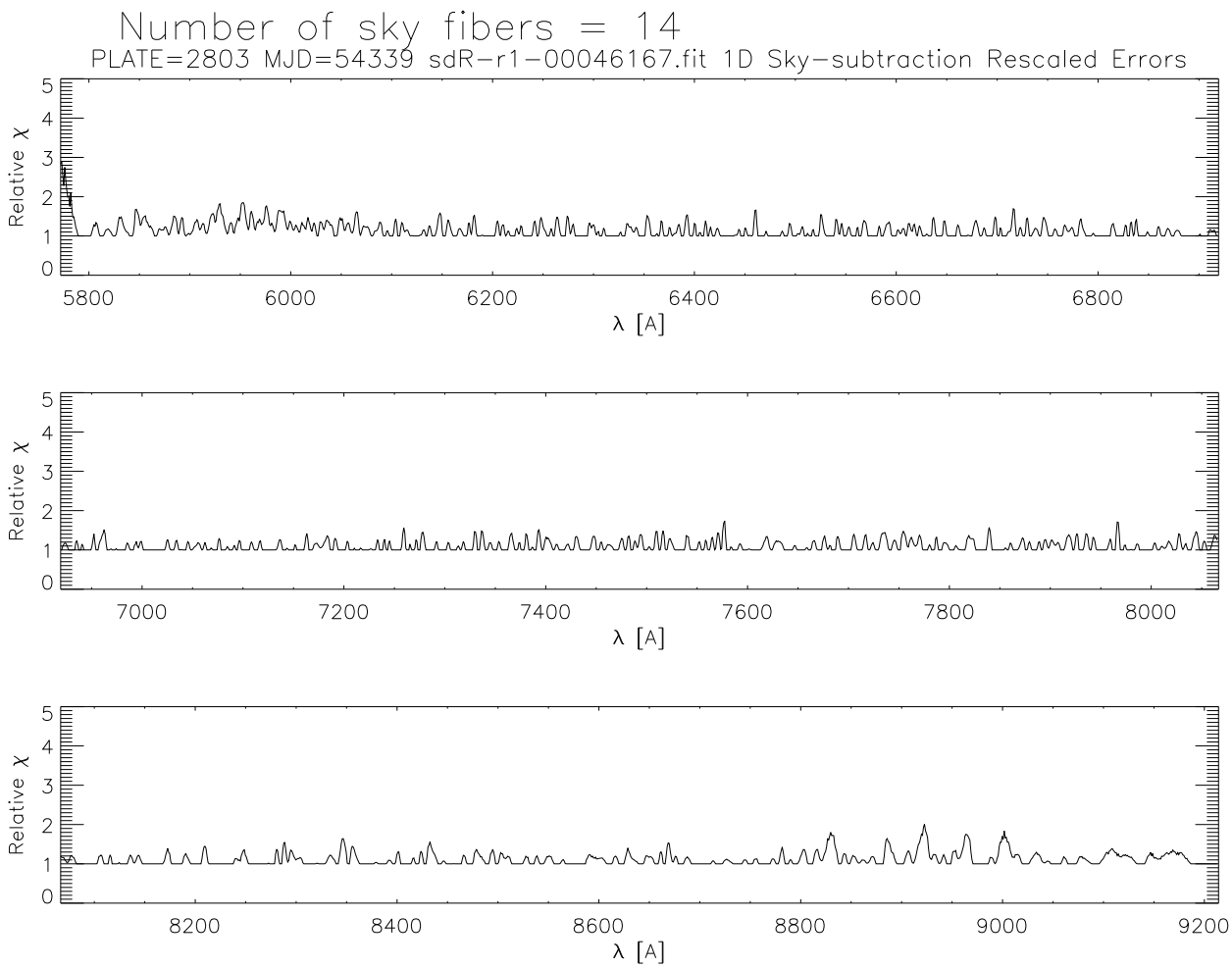
es= 0.0000

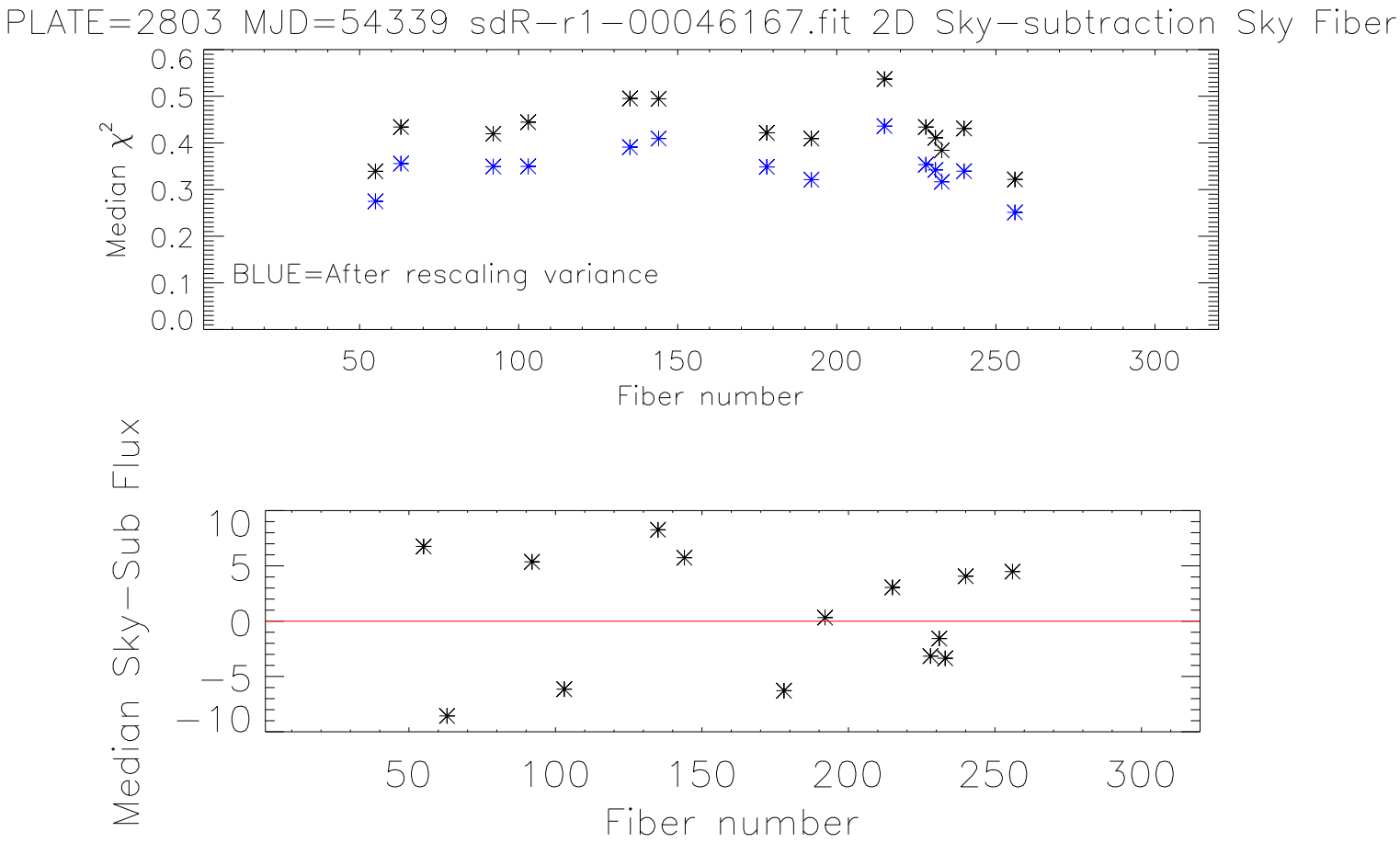

PLATE=2803 MJD=54339 Smooth superflat for sdR-r1-00046167.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

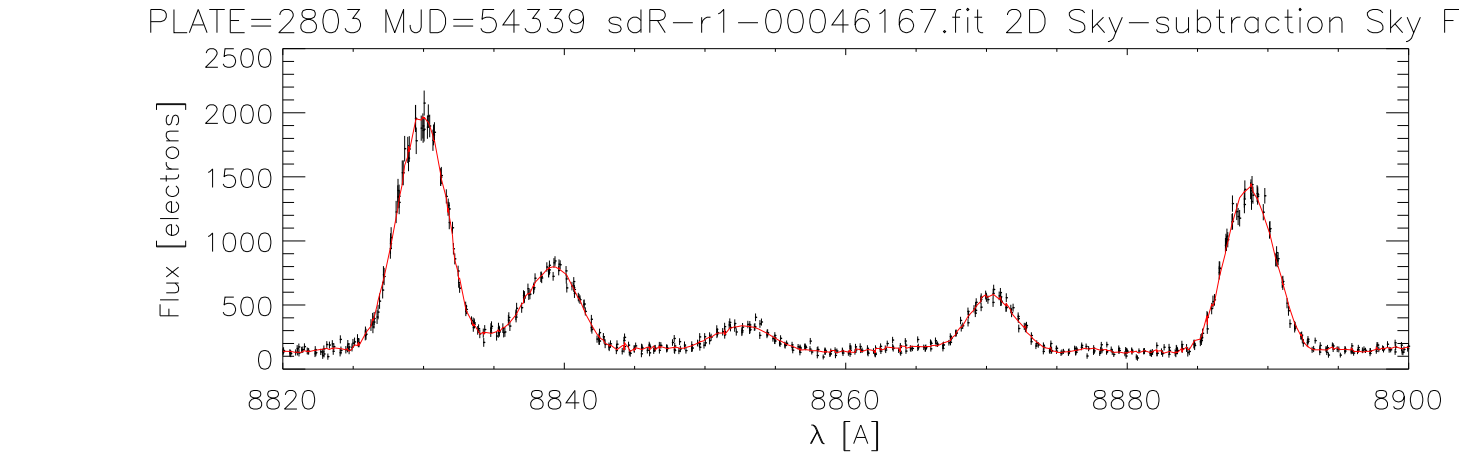

PLATE=2803 MJD=54339 sdR-r1-00046167.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

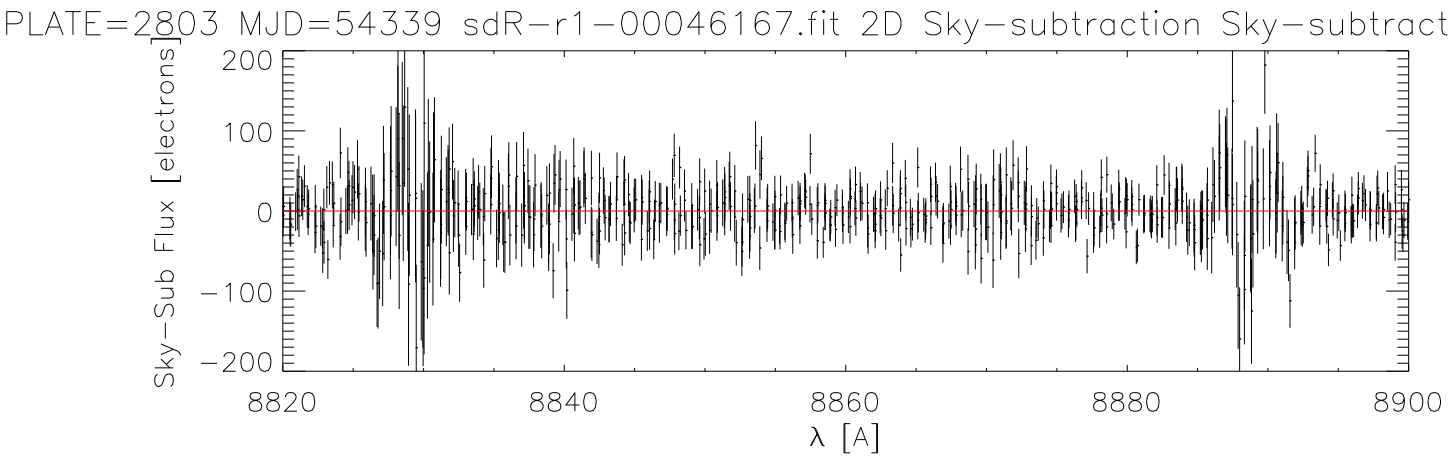

PLATE=2803 MJD=54339 sdR-r1-00046167.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

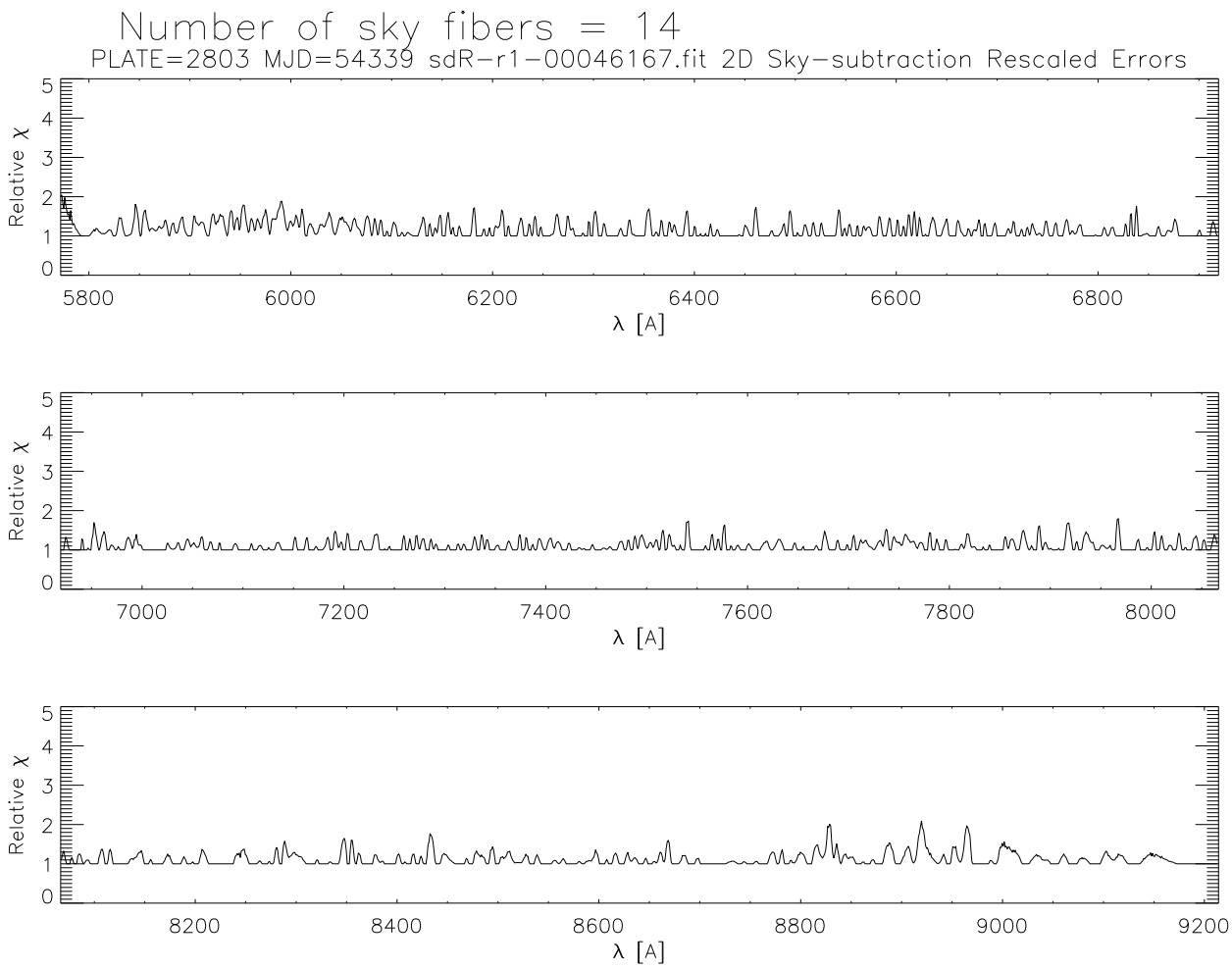

PLATE=2803 MJD=54339 sdR-r1-00046167.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

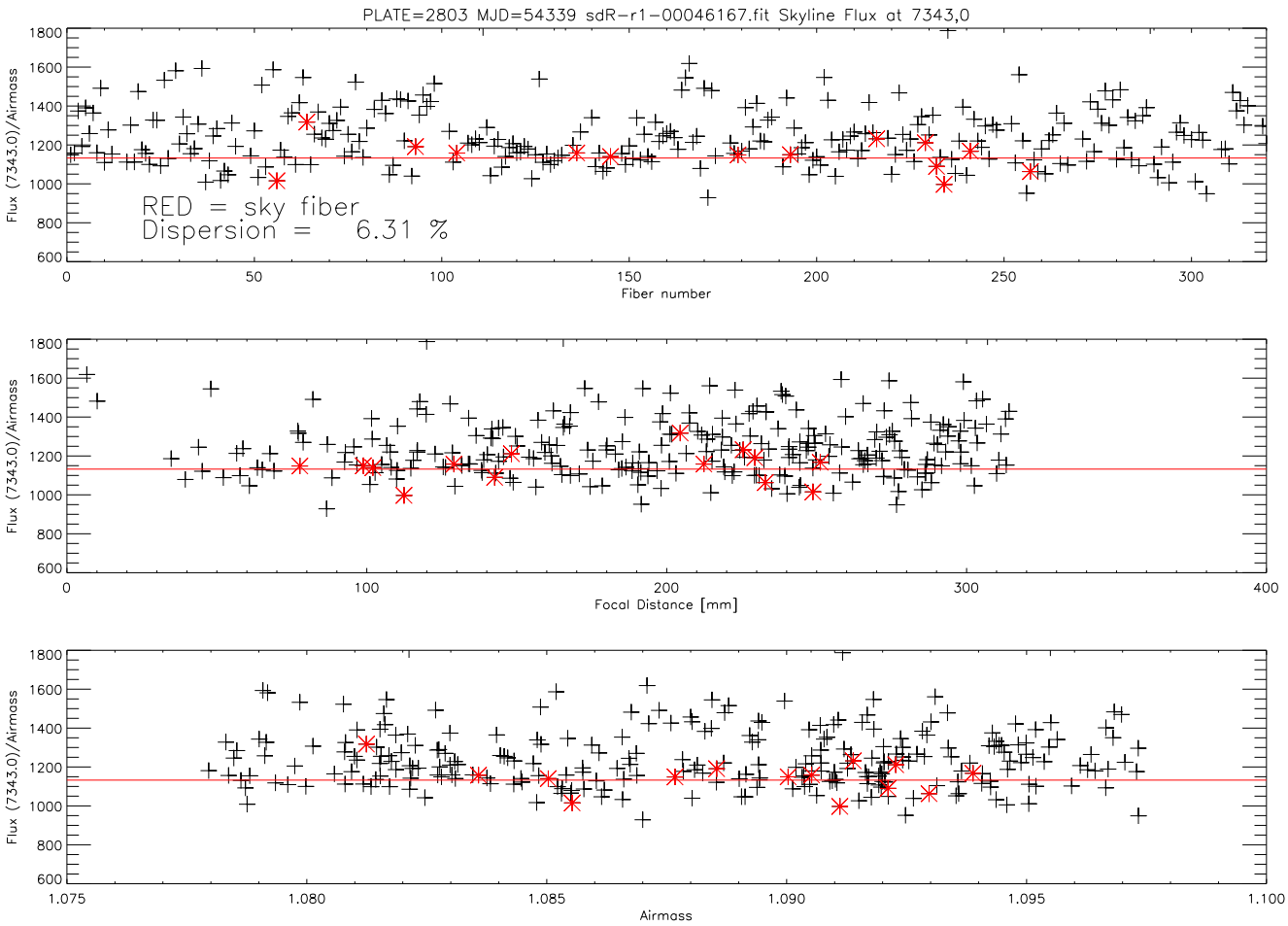

Number of sky fibers = 14
PLATE=2803 MJD=54339 sdR-r1-00046167.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

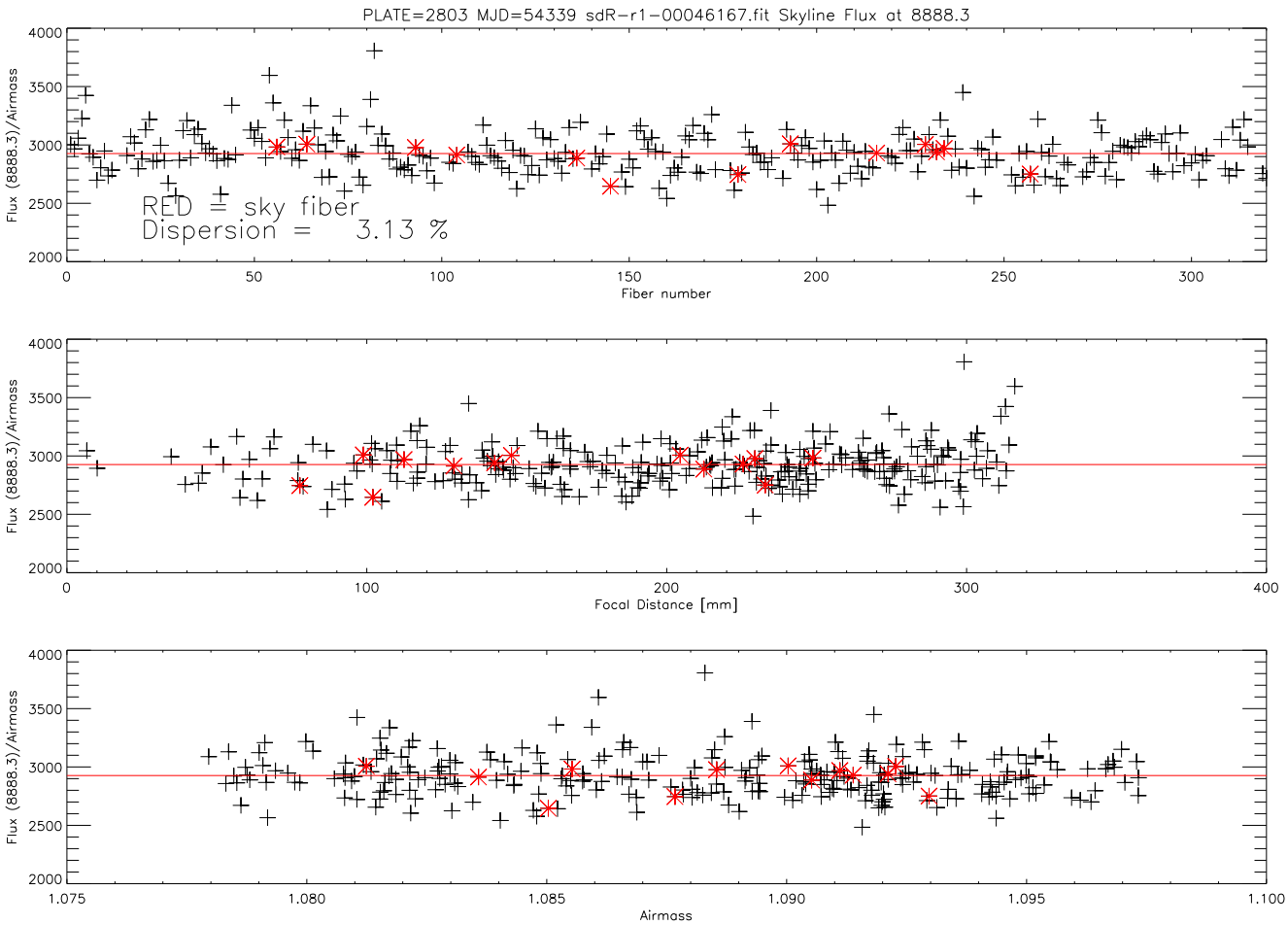

PLATE=2803 MJD=54339 sdR-r1-00046167.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

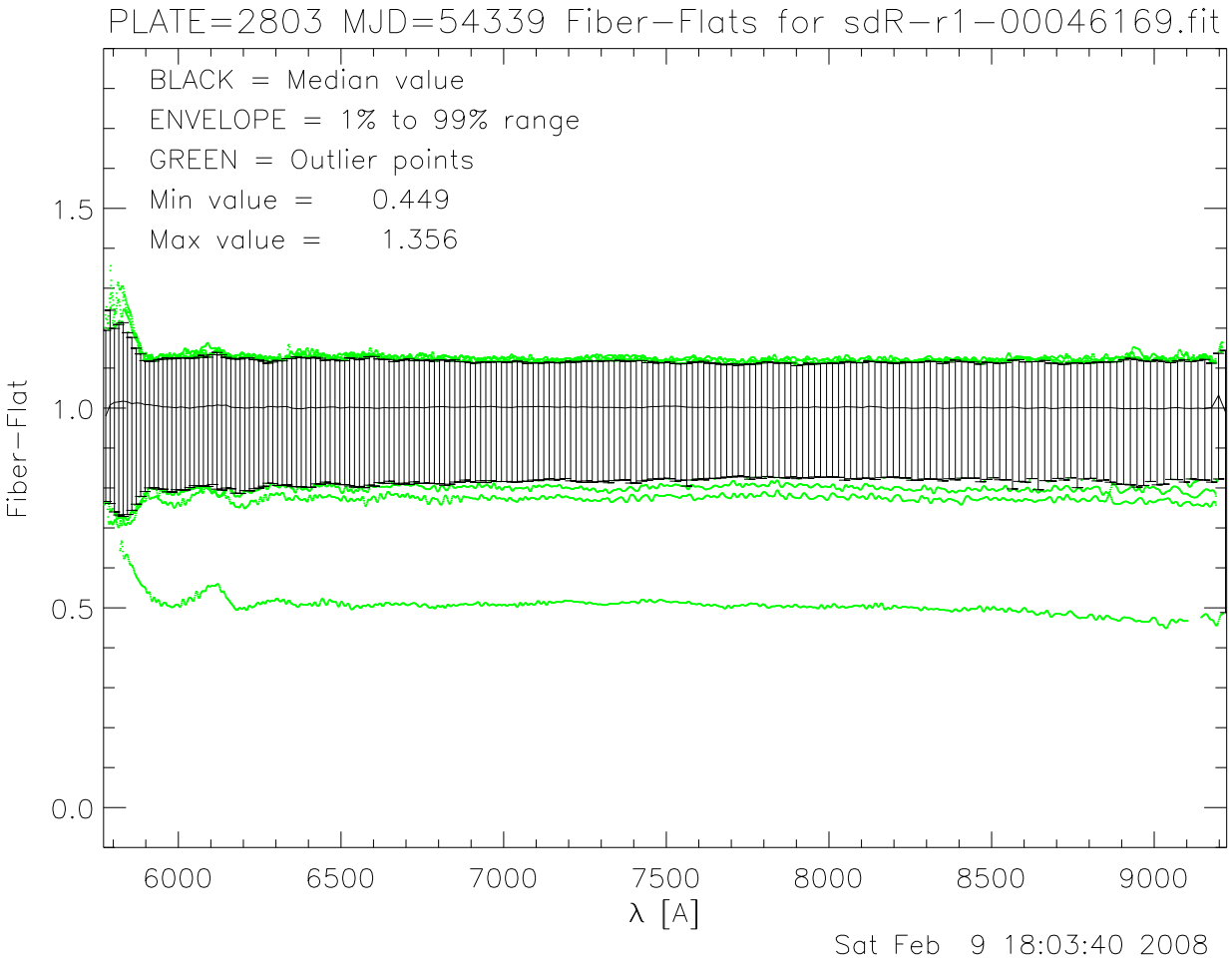

PLATE=2803 MJD=54339 sdR-r1-00046167.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

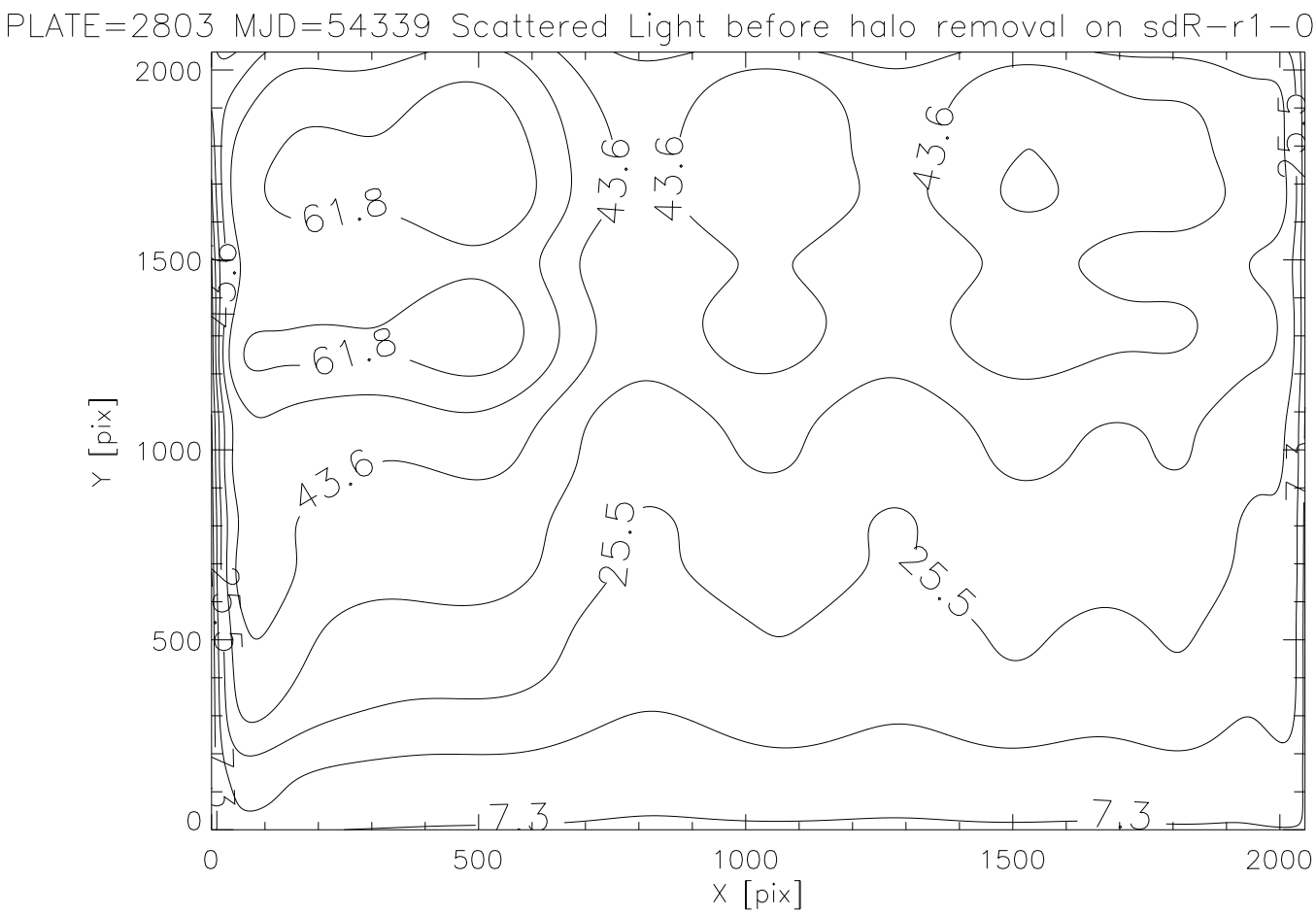

PLATE=2803 MJD=54339 sdR-r1-00046167.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

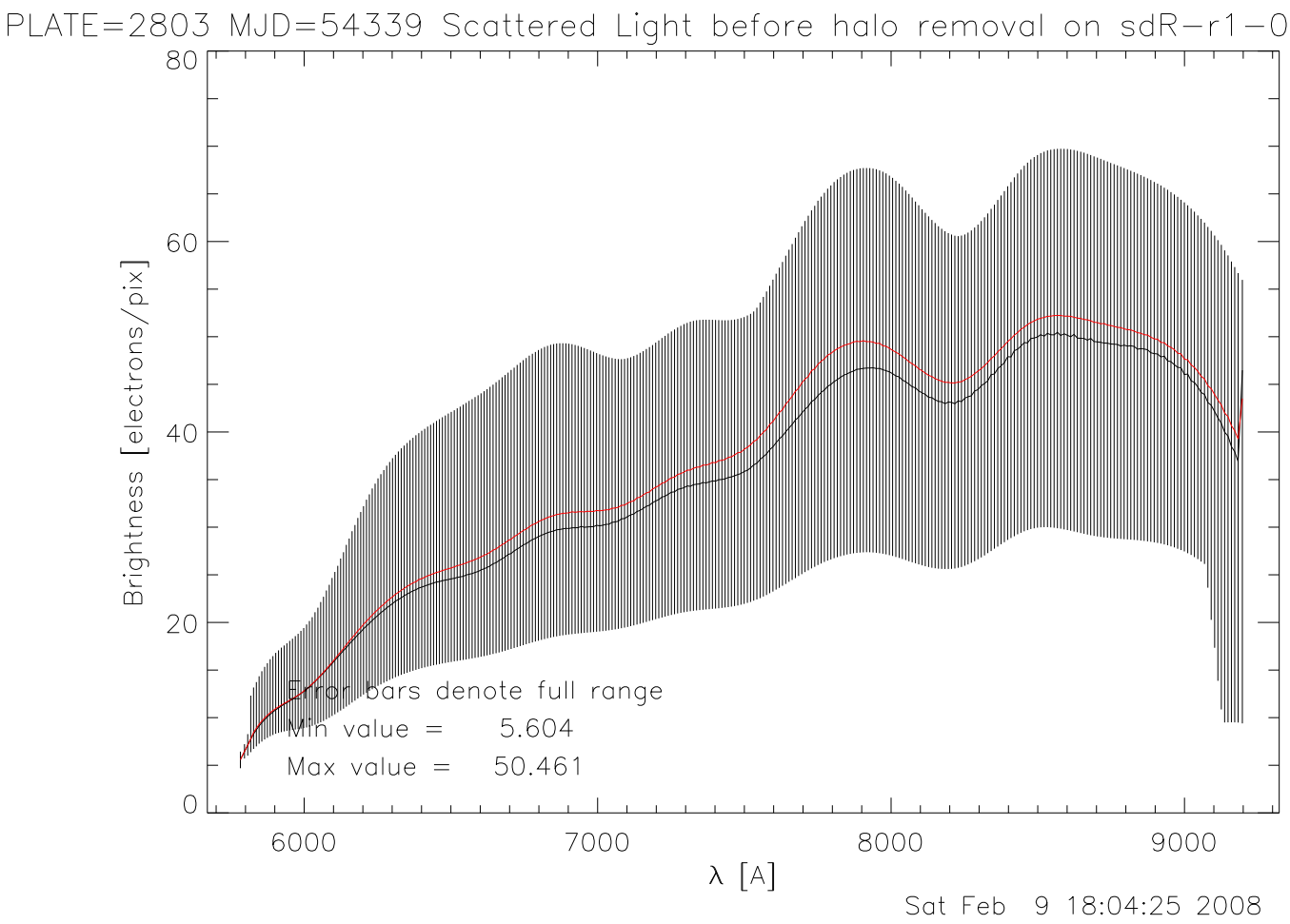

Number of sky fibers = 14
PLATE=2803 MJD=54339 sdR-r1-00046167.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

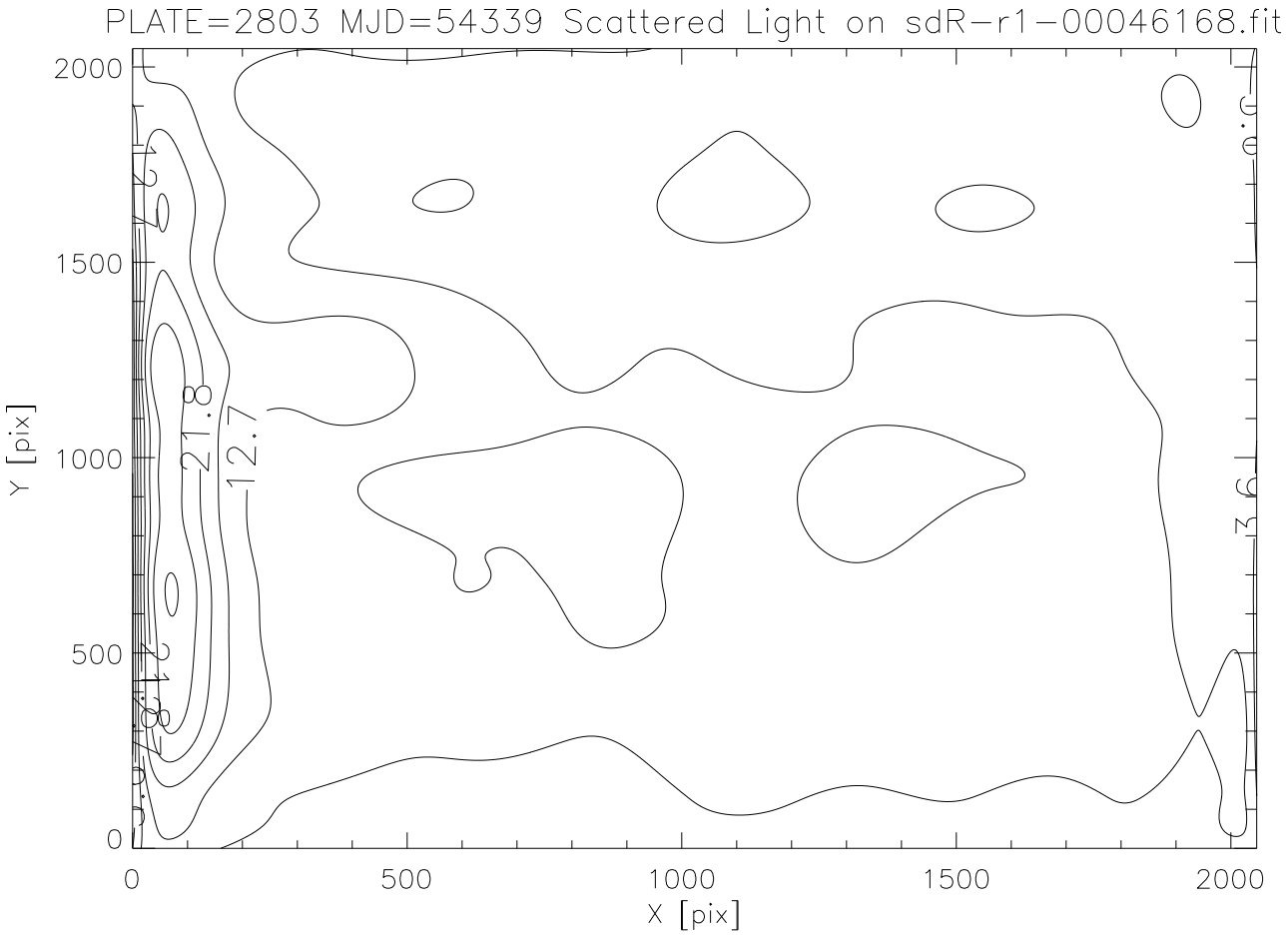

PLATE=2803 MJD=54339 sdR-r1-00046167.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 6.31 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

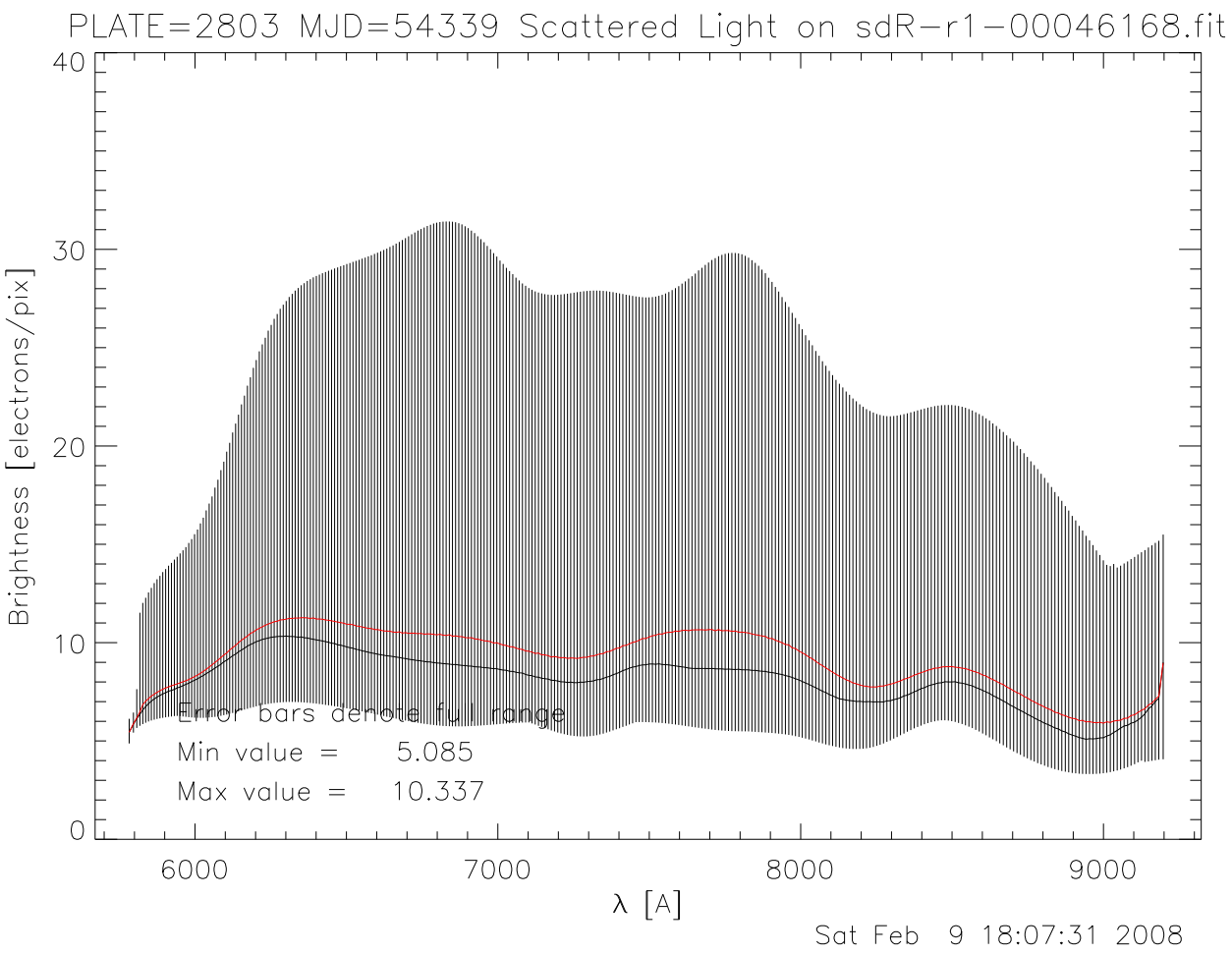

PLATE=2803 MJD=54339 sdR-r1-00046167.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.13 %
Fiber number
Focal Distance [mm]
Airmass

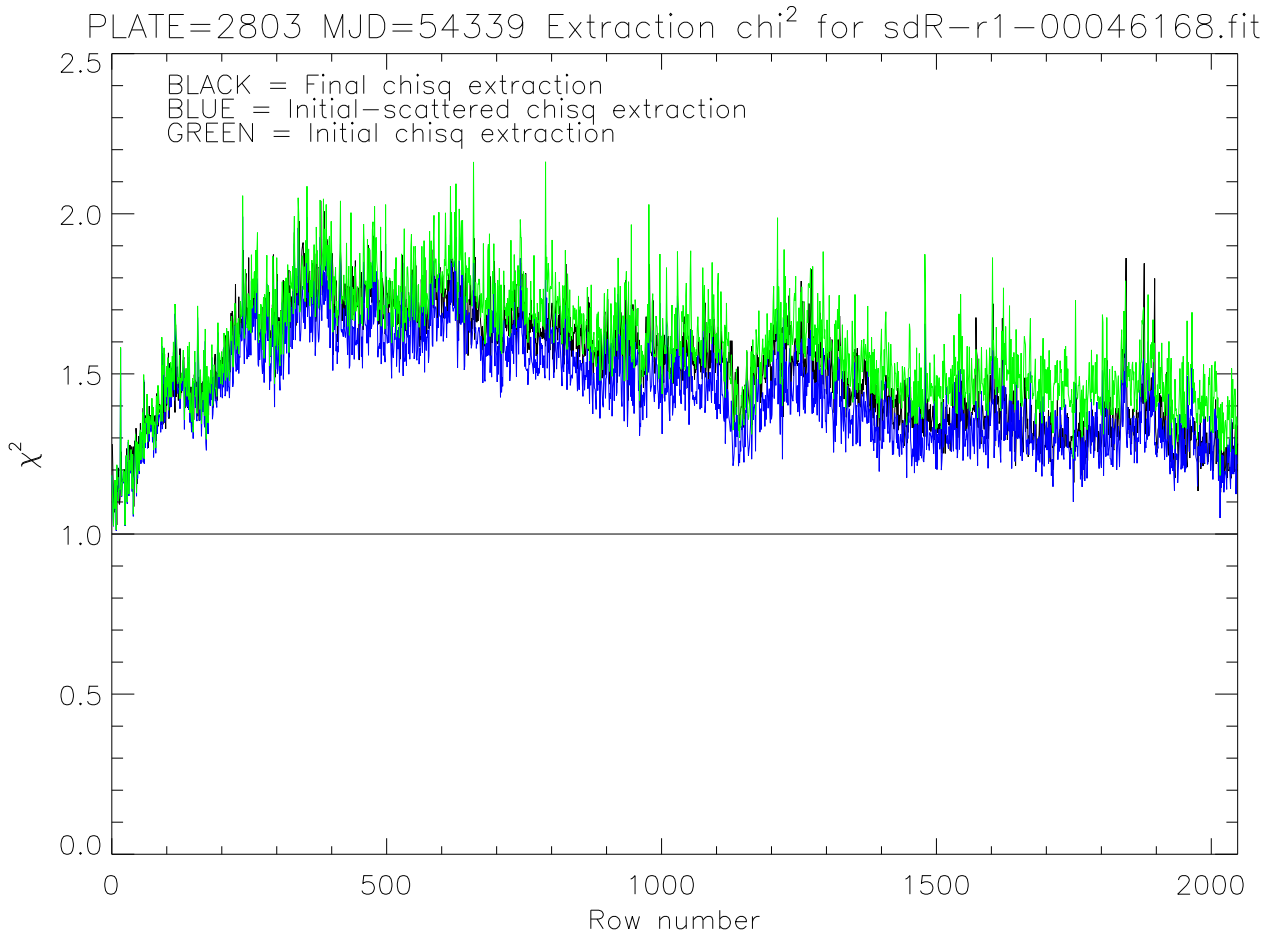

PLATE=2803 MJD=54339 Fiber-Flats for sdR-r1-00046169.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.449
Max value = 1.356
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 9 18:03:40 2008

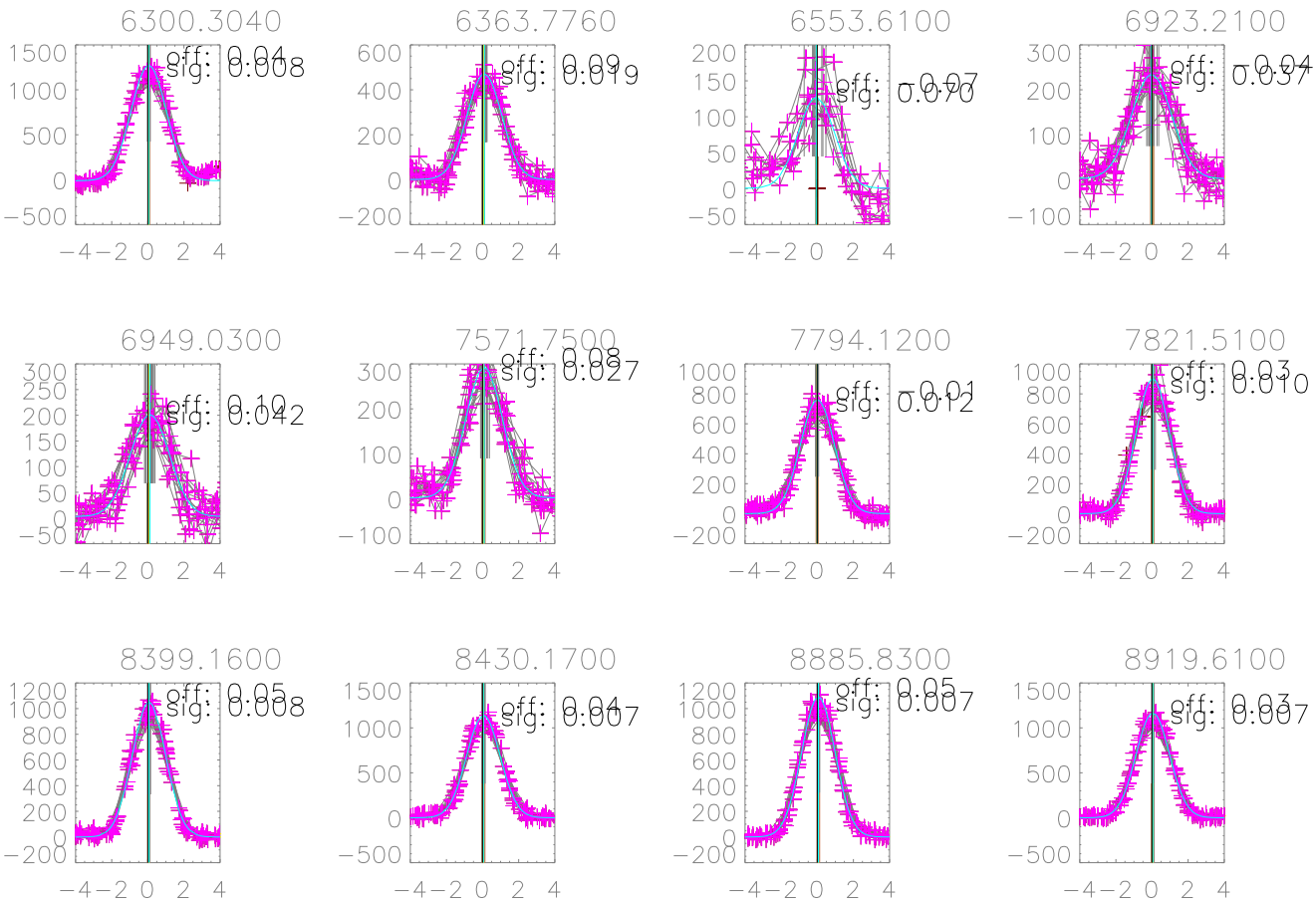

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-r1-00046168.fi
61.8
61.8
43.6
43.6
43.6
43.6
43.6
25.5
25.5
25.5
7.3
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

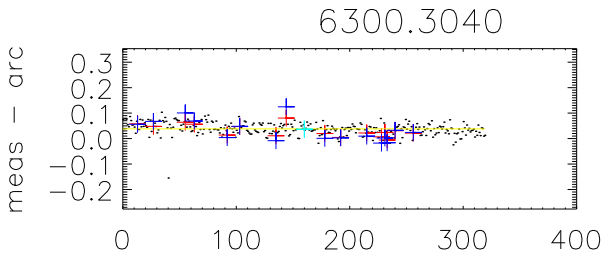

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-r1-00046168.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.604
Max value = 50.461
Sat Feb 9 18:04:25 2008

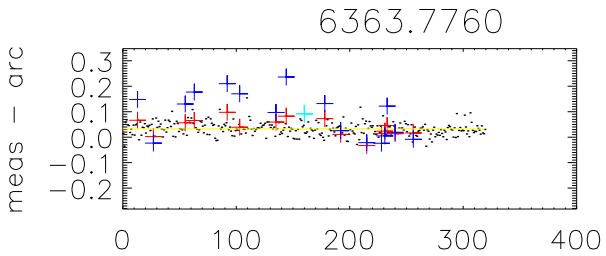

PLATE=2803 MJD=54339 Scattered Light on sdR-r1-00046168.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
21.8
12.7
3.6
19.2

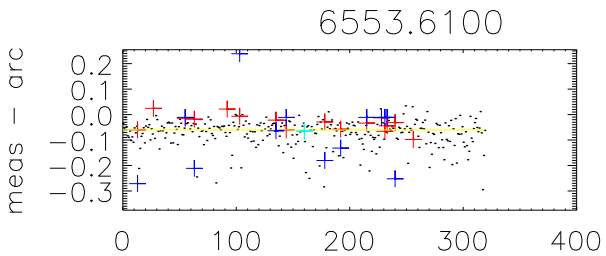

PLATE=2803 MJD=54339 Scattered Light on sdR-r1-00046168.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.085
Max value = 10.337
Sat Feb 9 18:07:31 2008

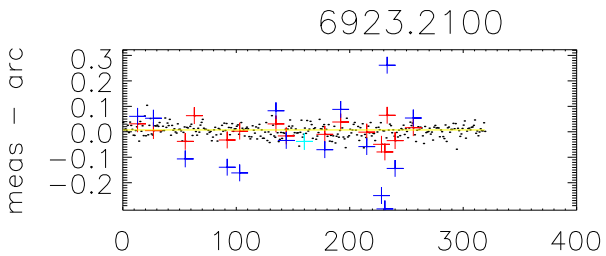

PLATE=2803 MJD=54339 Extraction chi^2 for sdR-r1-00046168.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

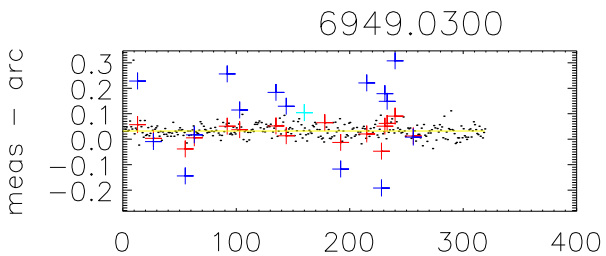

6300.3040
off: 0.04
sig: 0.008
6363.7760
off: 0.09
sig: 0.019
6553.6100
off: -0.07
sig: 0.070
6923.2100
off: -0.04
sig: 0.037
6949.0300
off: 0.10
sig: 0.042
7571.7500
off: 0.08
sig: 0.027
7794.1200
off: -0.01
sig: 0.012
7821.5100
off: 0.03
sig: 0.010
8399.1600
off: 0.05
sig: 0.008
8430.1700
off: 0.04
sig: 0.007
8885.8300
off: 0.05
sig: 0.007
8919.6100
off: 0.03
sig: 0.007

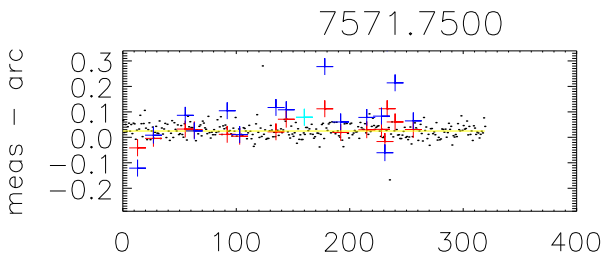

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

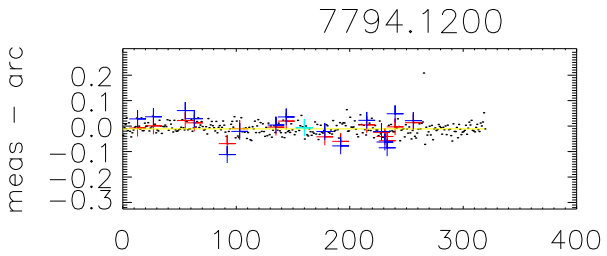

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

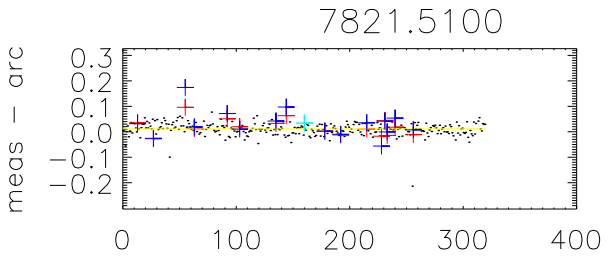

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

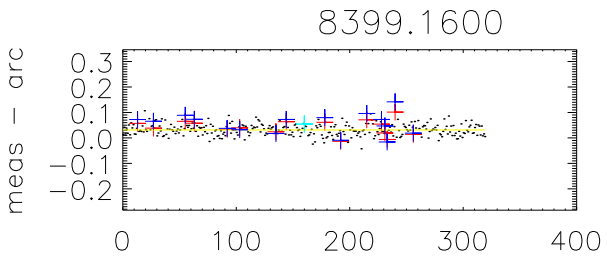

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

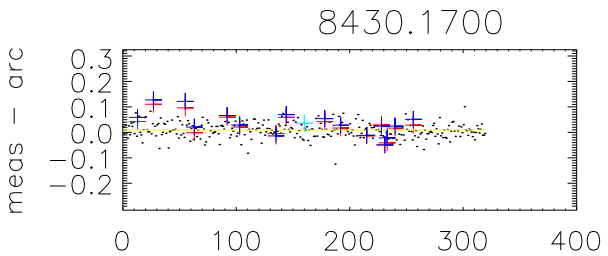

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

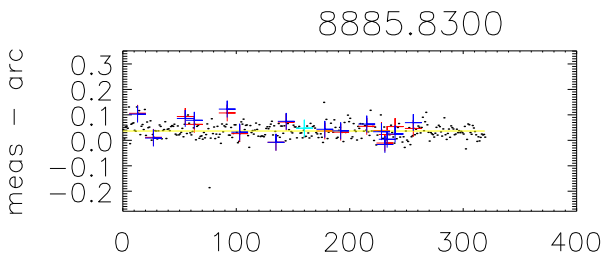

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

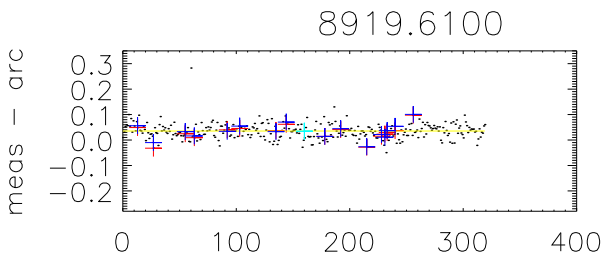

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

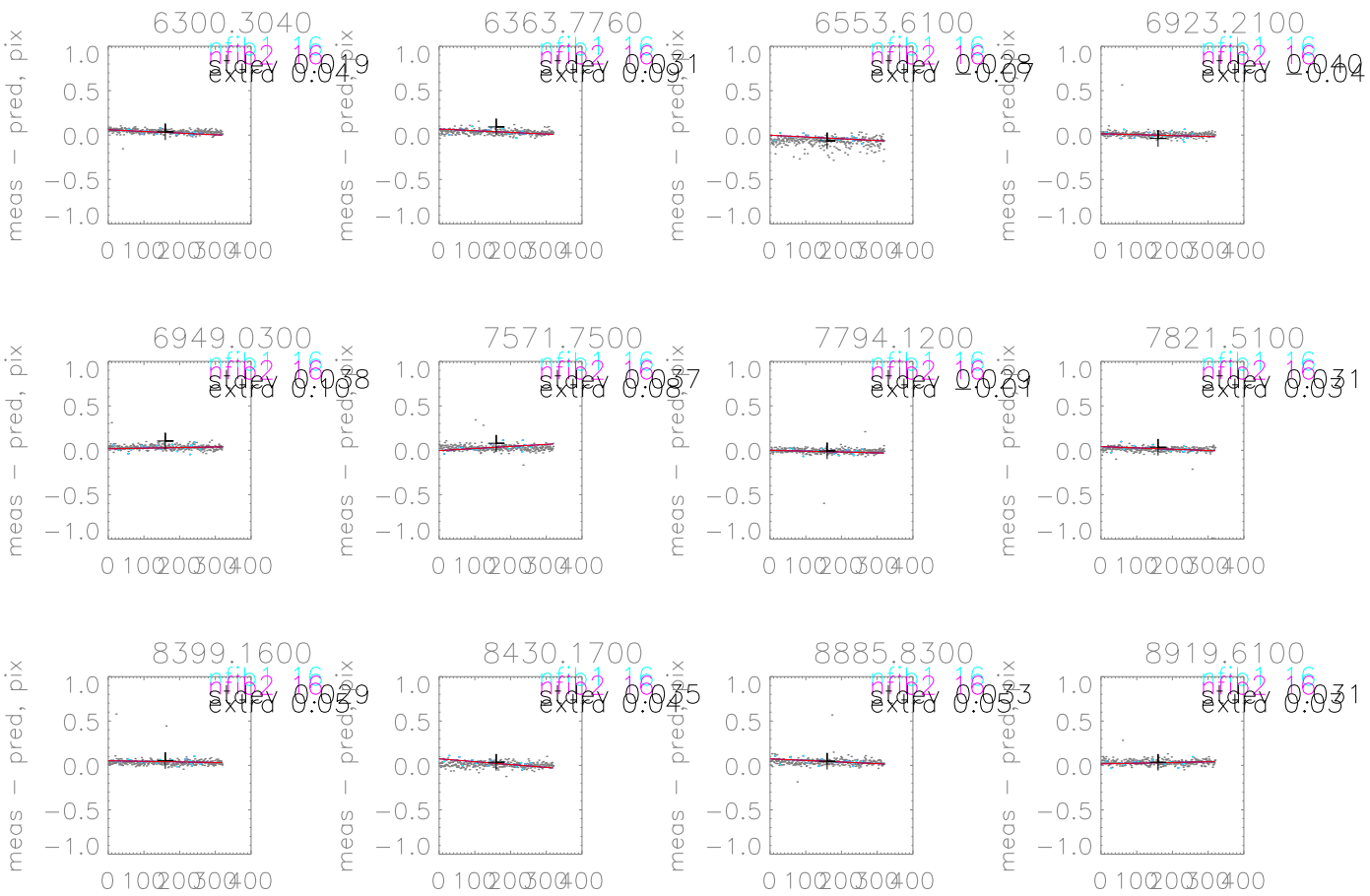

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

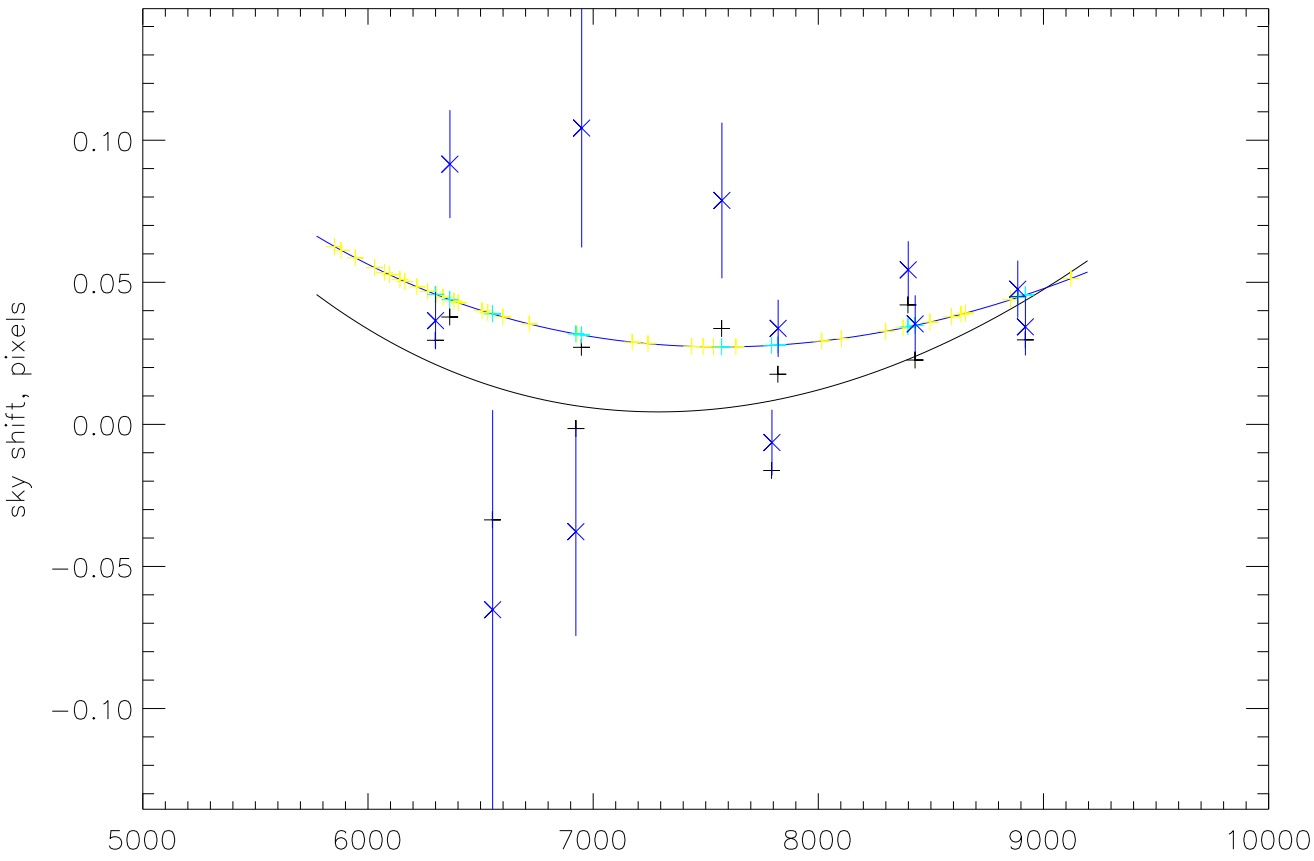

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

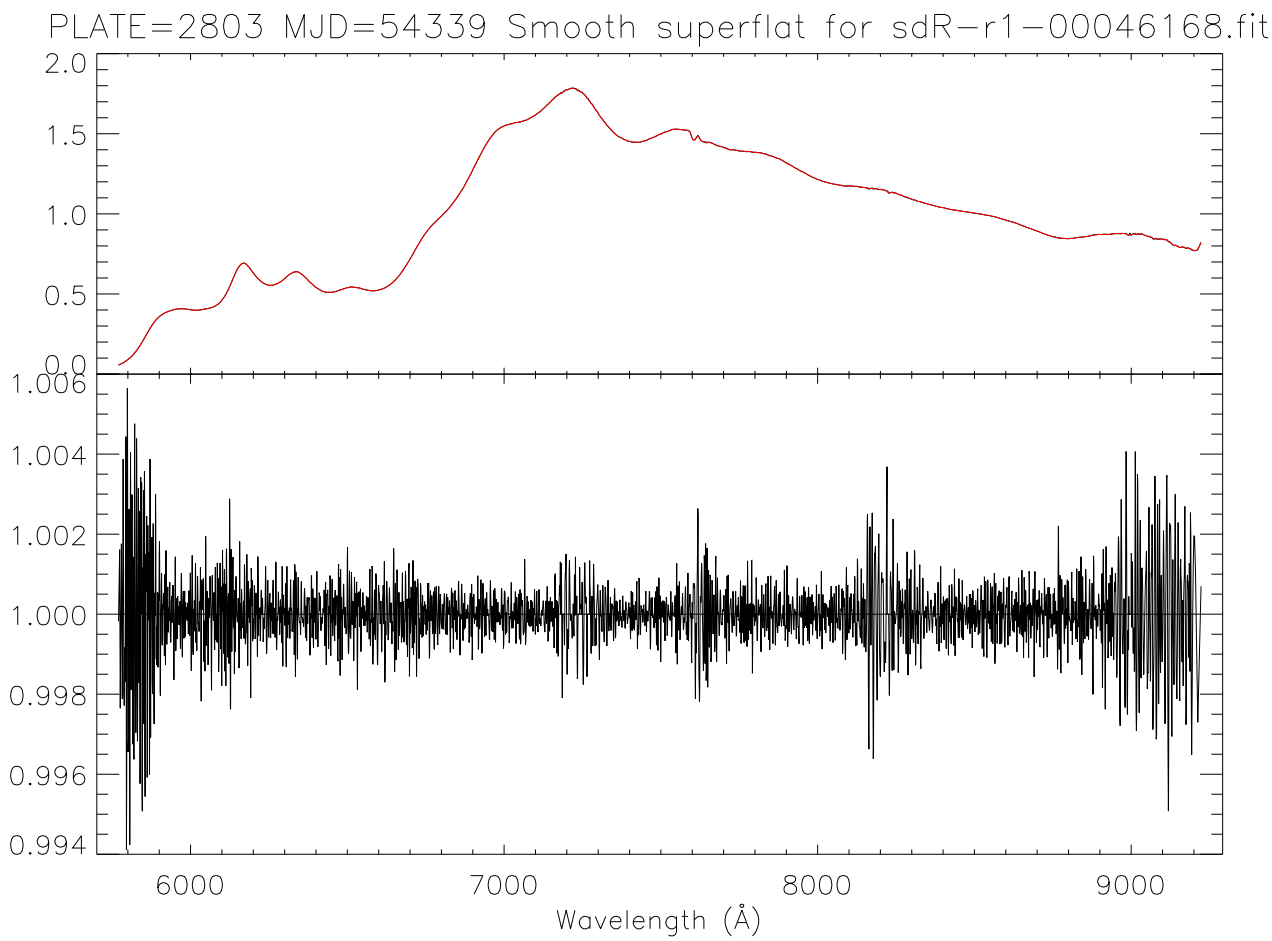

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

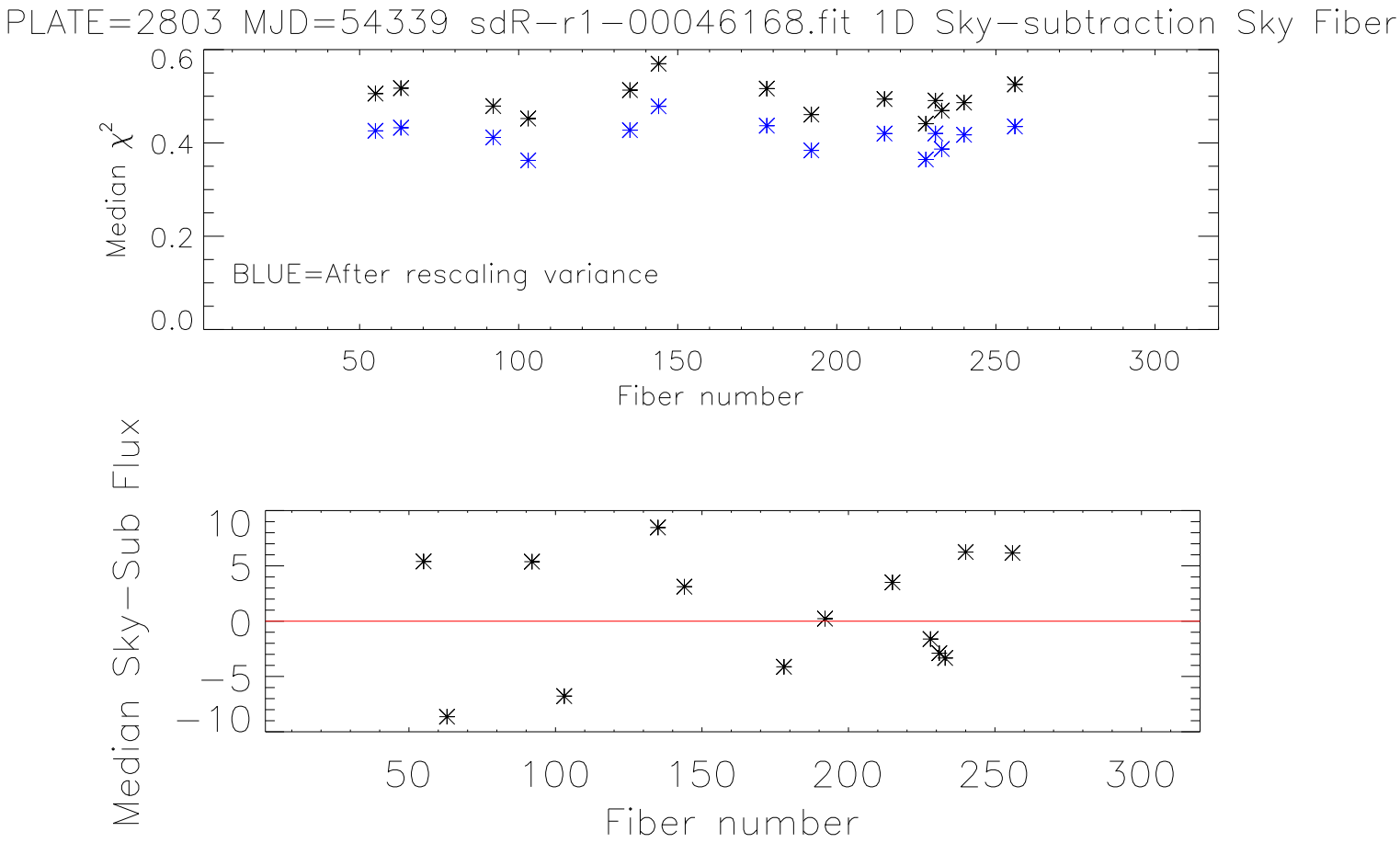

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

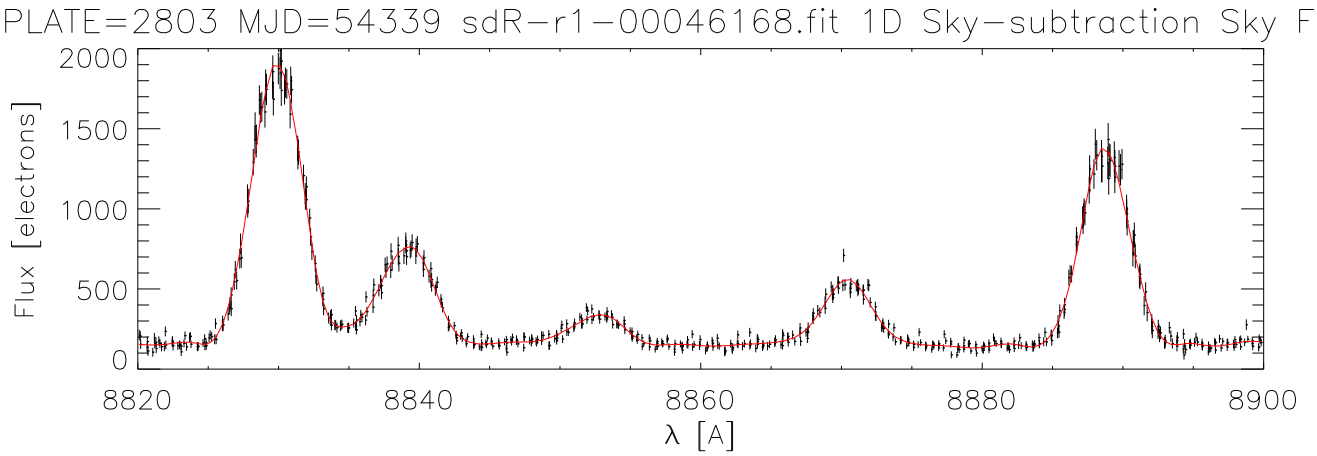

6300.3040
stdev 0.049
extra 0.019
6363.7760
stdev 0.091
extra 0.031
6553.6100
stdev 0.067
extra −0.028
6923.2100
stdev 0.040
extra −0.004
6949.0300
stdev 0.108
extra 0.038
7571.7500
stdev 0.087
extra 0.037
7794.1200
stdev 0.041
extra −0.029
7821.5100
stdev 0.031
extra 0.031
8399.1600
stdev 0.053
extra 0.029
8430.1700
stdev 0.045
extra 0.035
8885.8300
stdev 0.055
extra 0.033
8919.6100
stdev 0.031
extra 0.031
meas − pred, pix
mfhd2 16

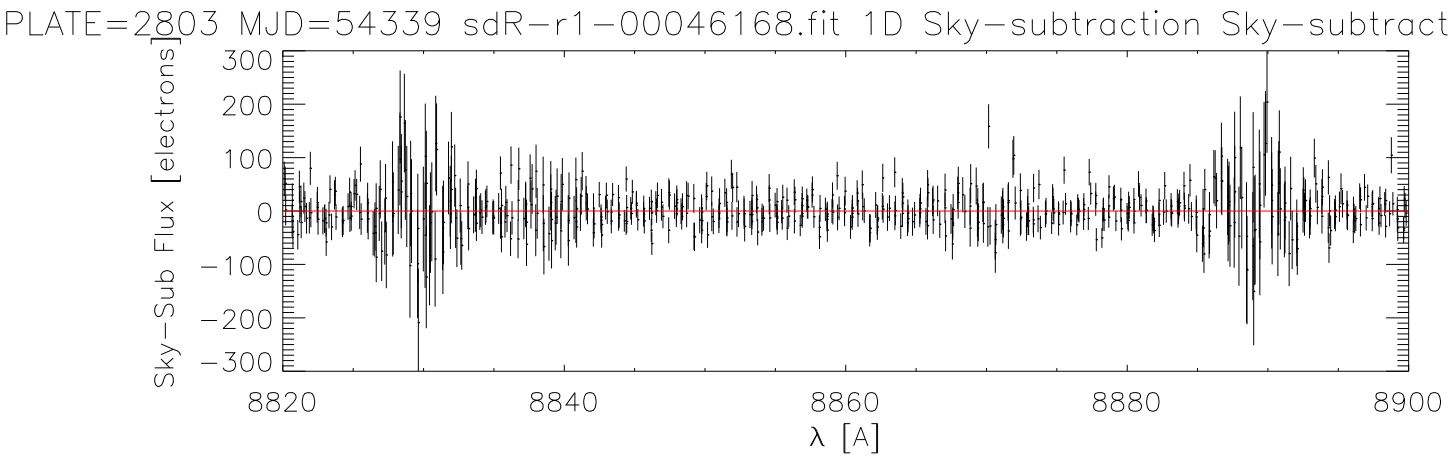

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000

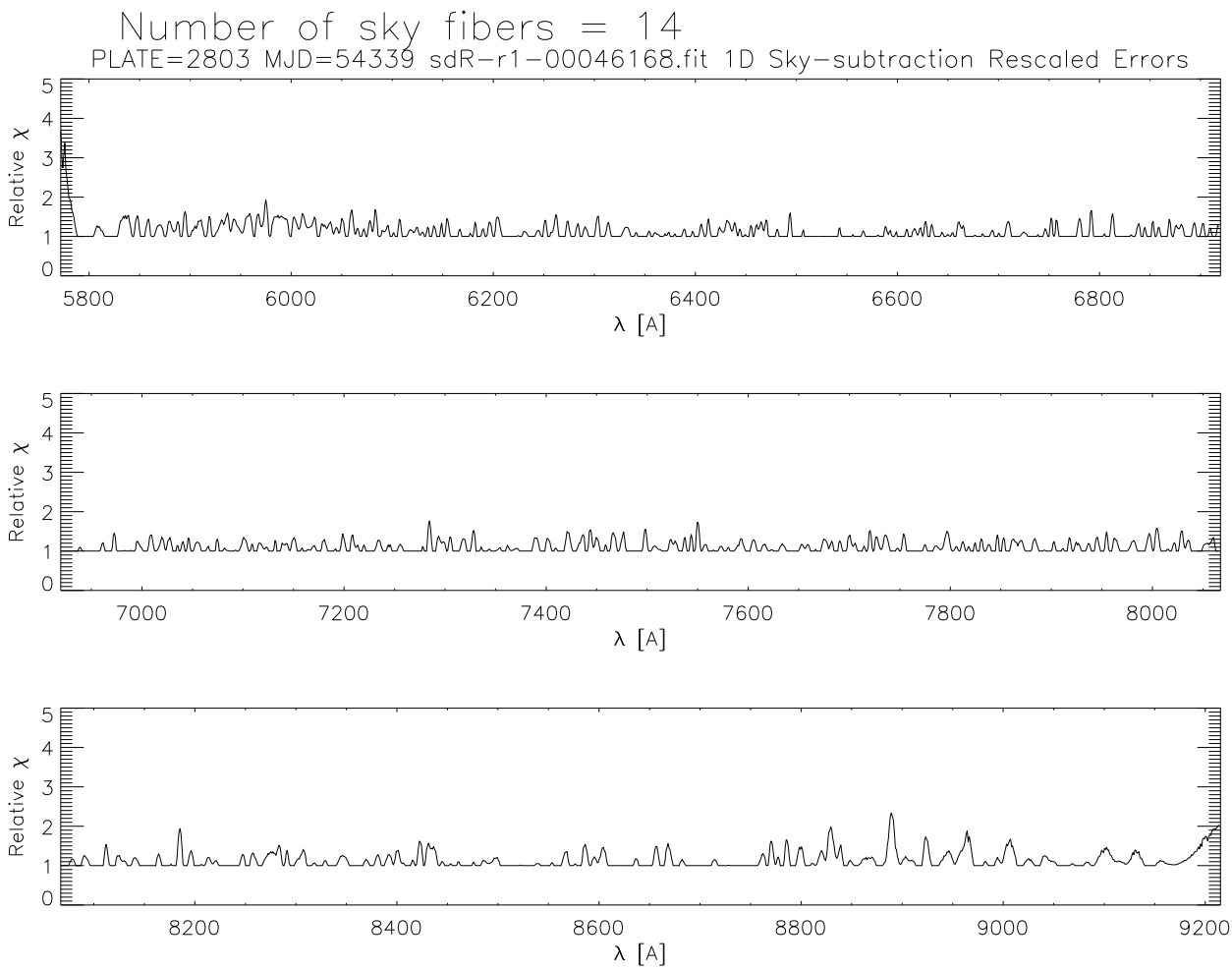
es= 0.0000

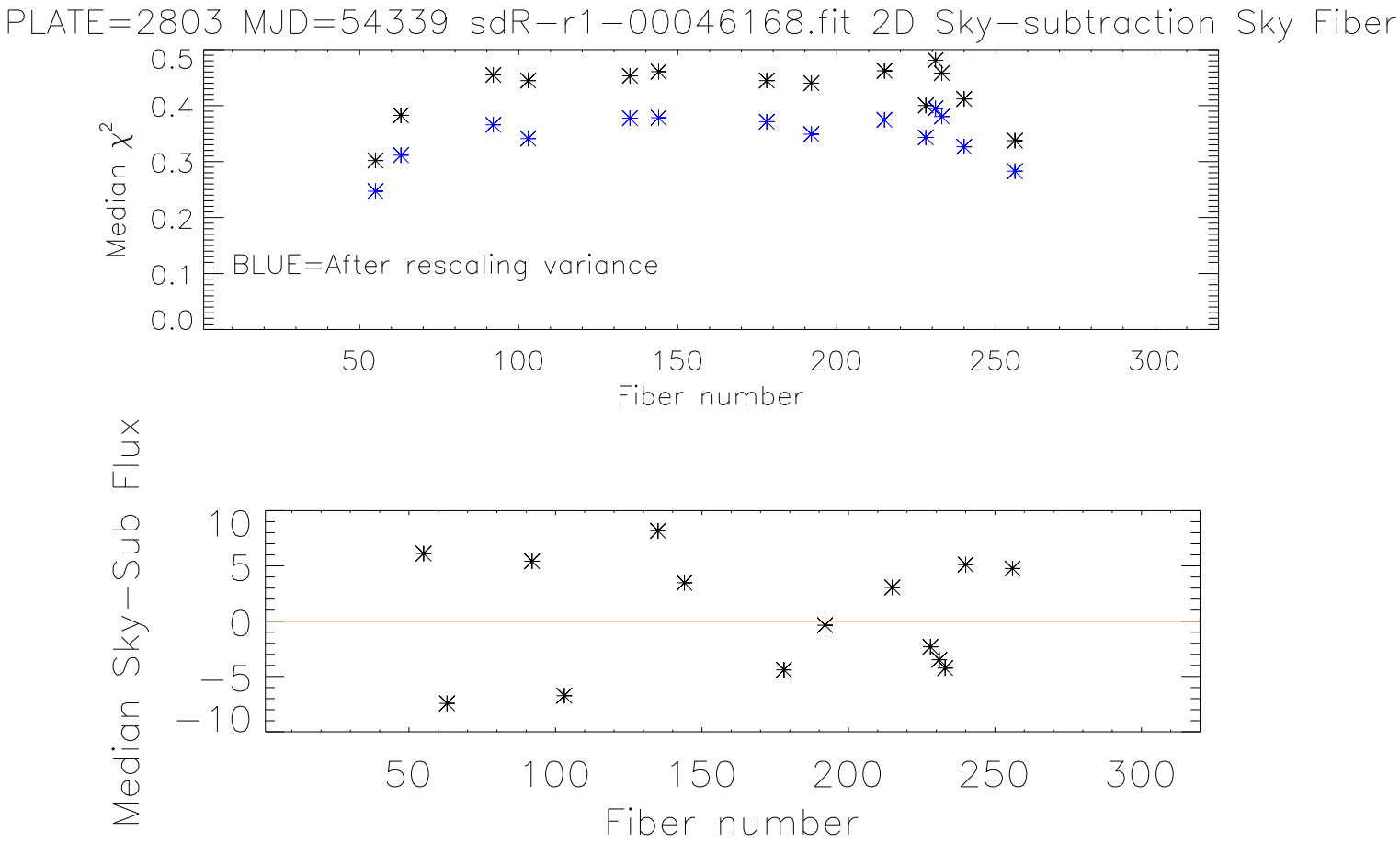

PLATE=2803 MJD=54339 Smooth superflat for sdR-r1-00046168.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

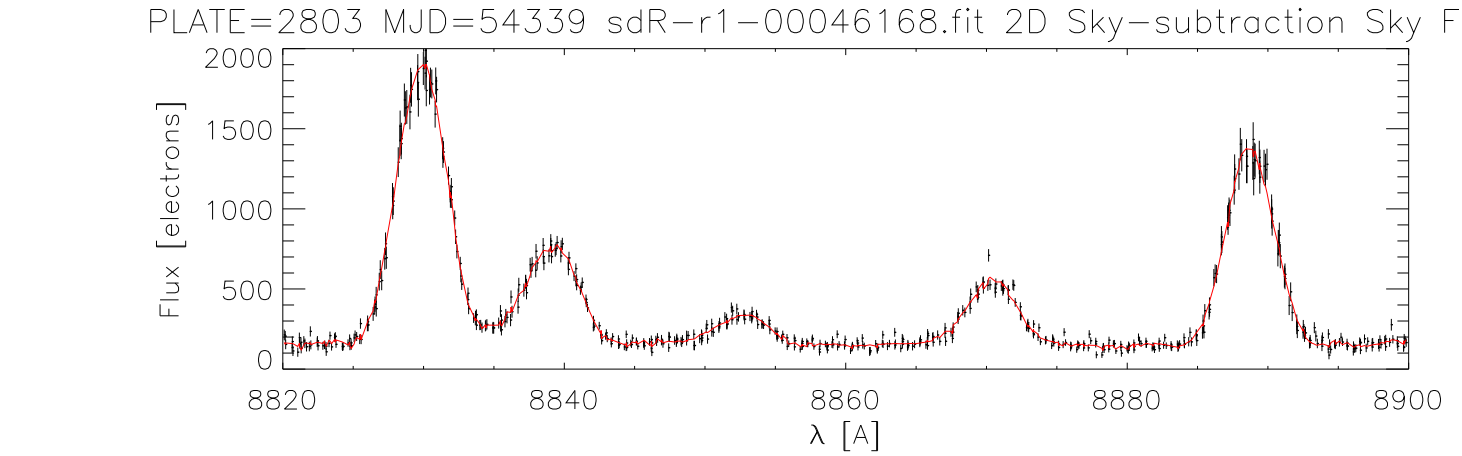

PLATE=2803 MJD=54339 sdR-r1-00046168.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

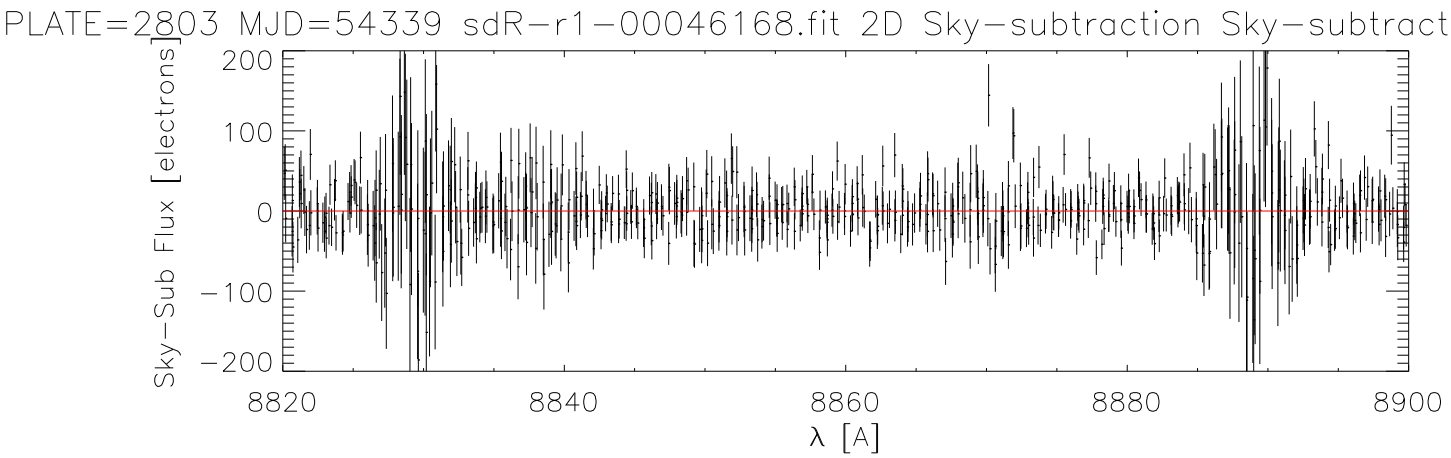

PLATE=2803 MJD=54339 sdR-r1-00046168.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

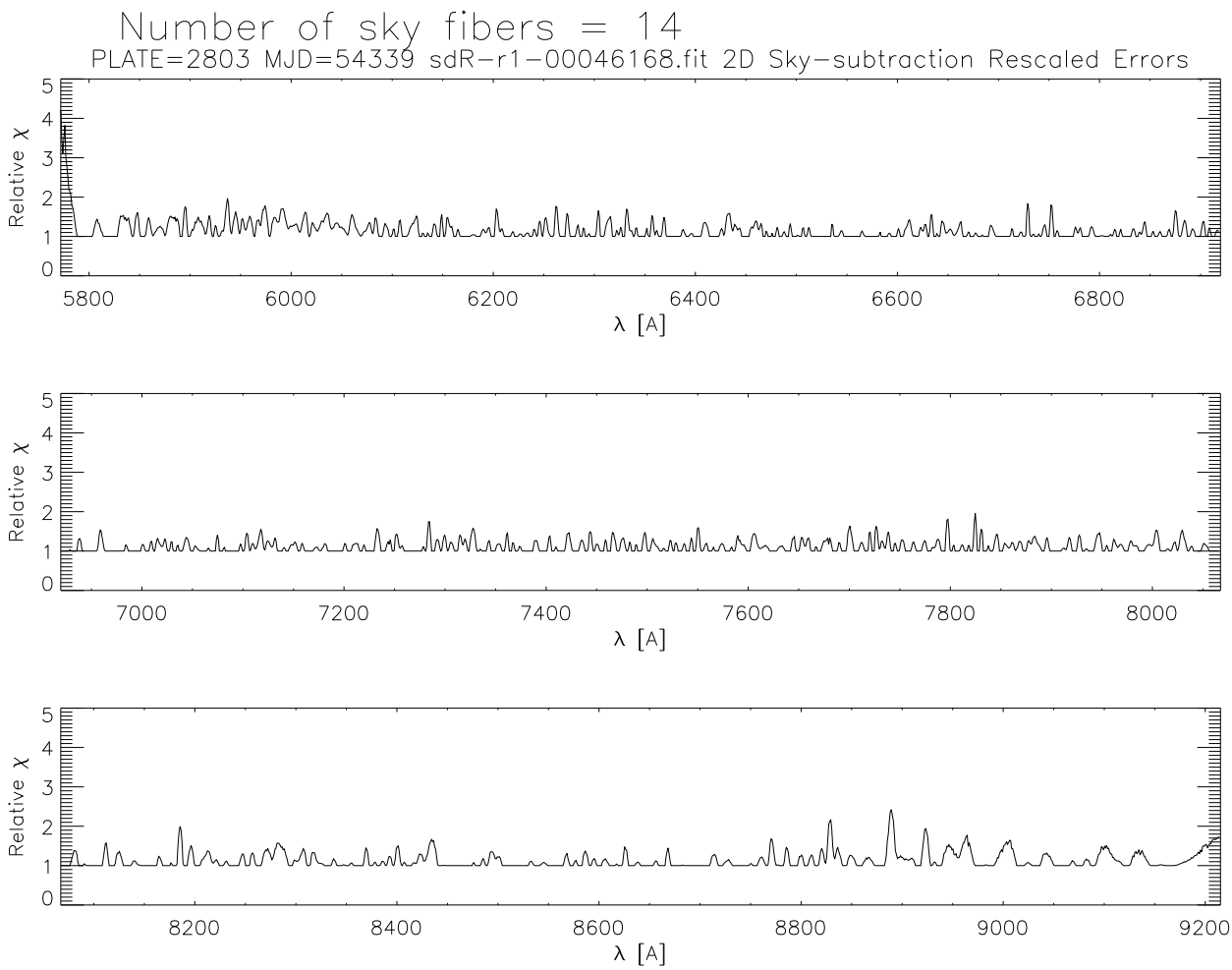

PLATE=2803 MJD=54339 sdR-r1-00046168.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

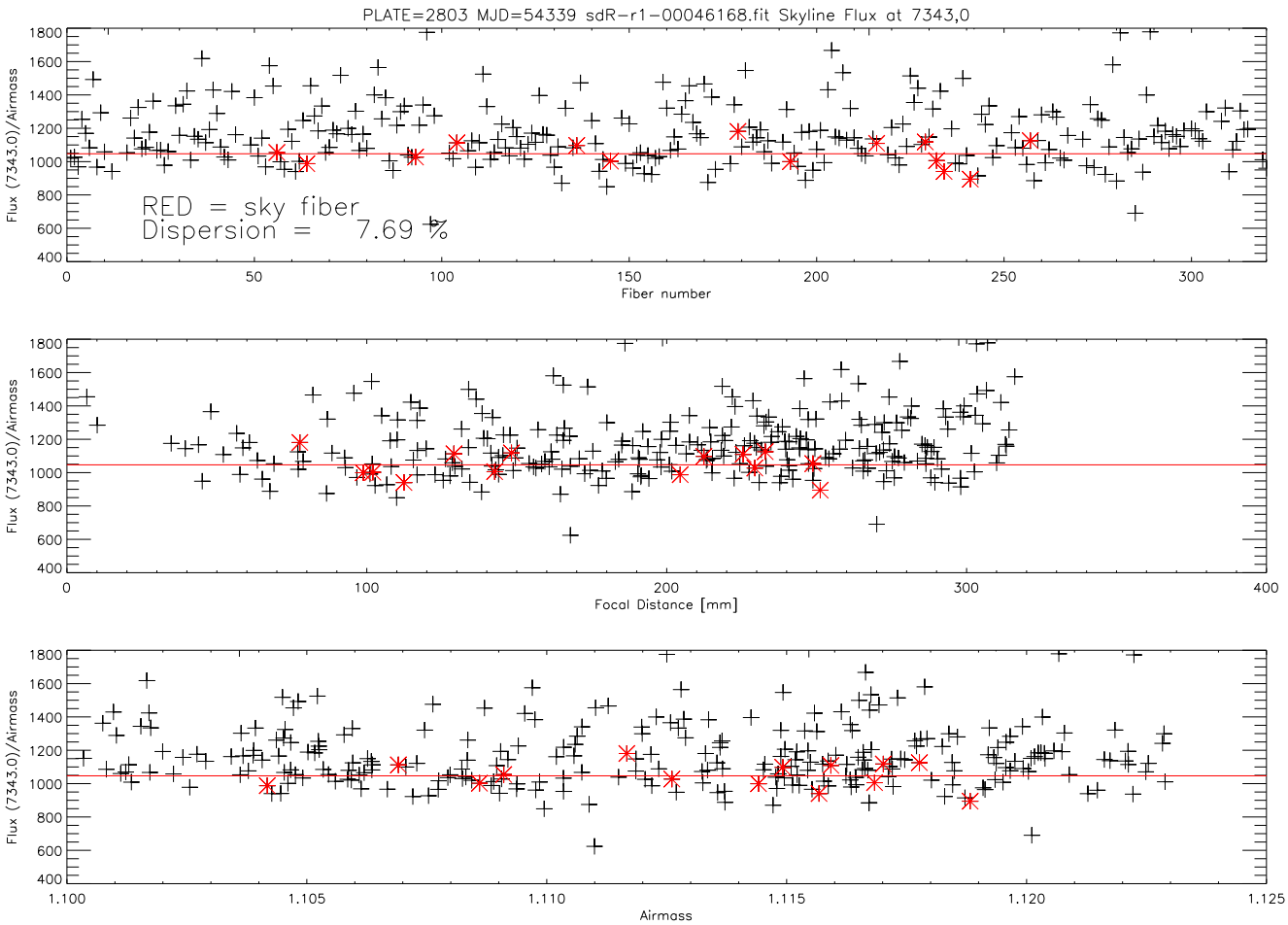

Number of sky fibers = 14
PLATE=2803 MJD=54339 sdR-r1-00046168.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

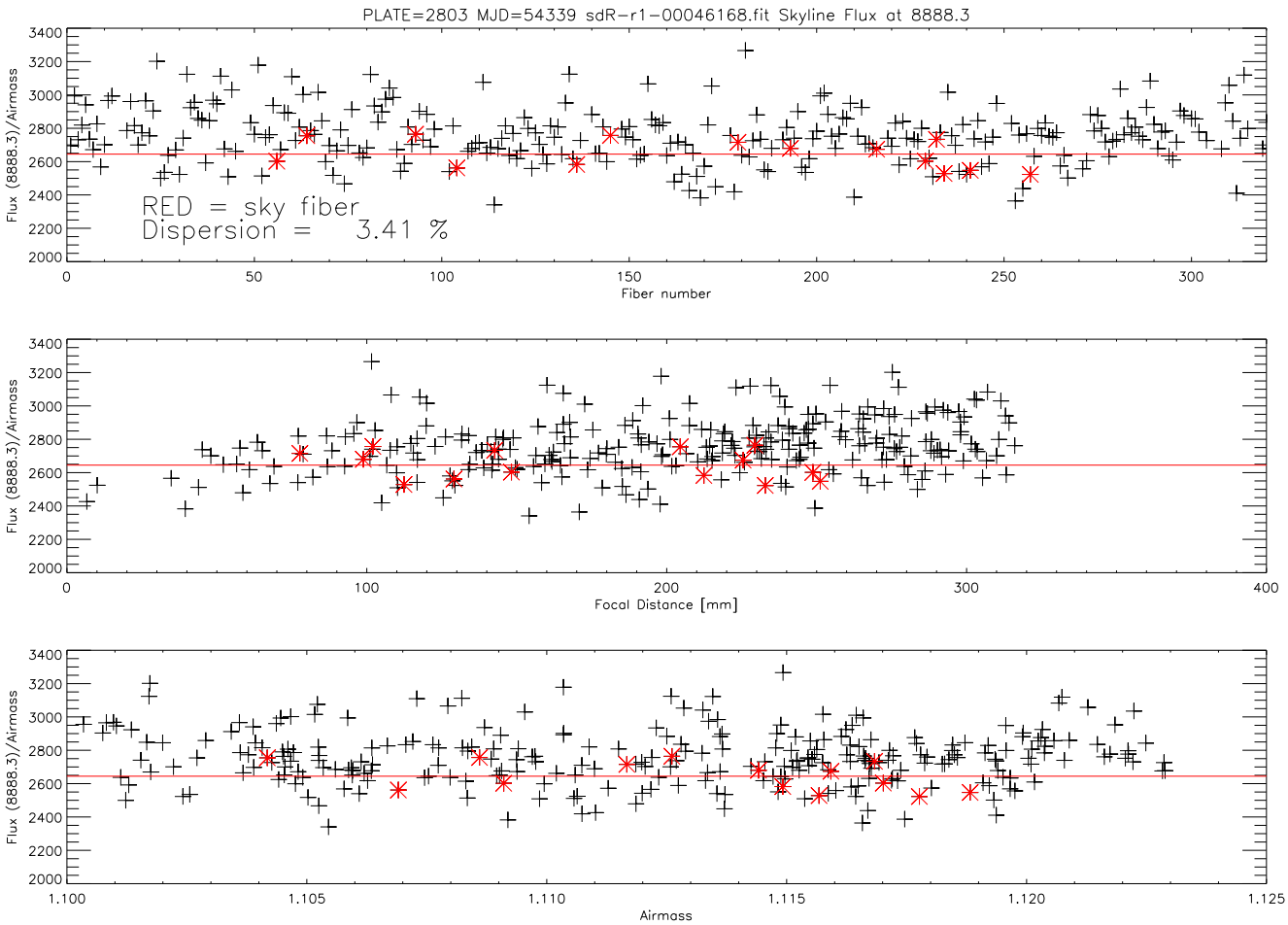

PLATE=2803 MJD=54339 sdR-r1-00046168.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

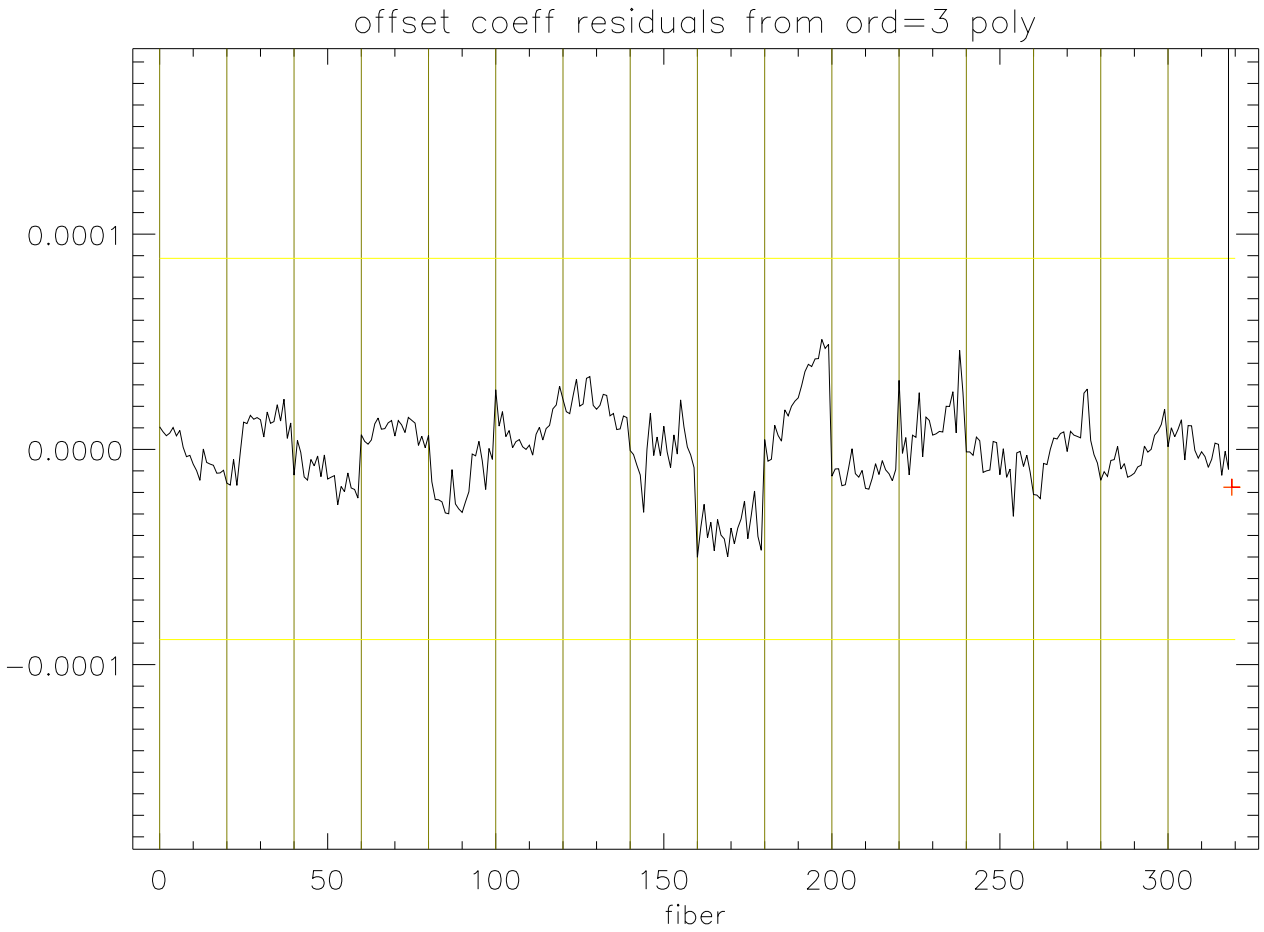

PLATE=2803 MJD=54339 sdR-r1-00046168.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

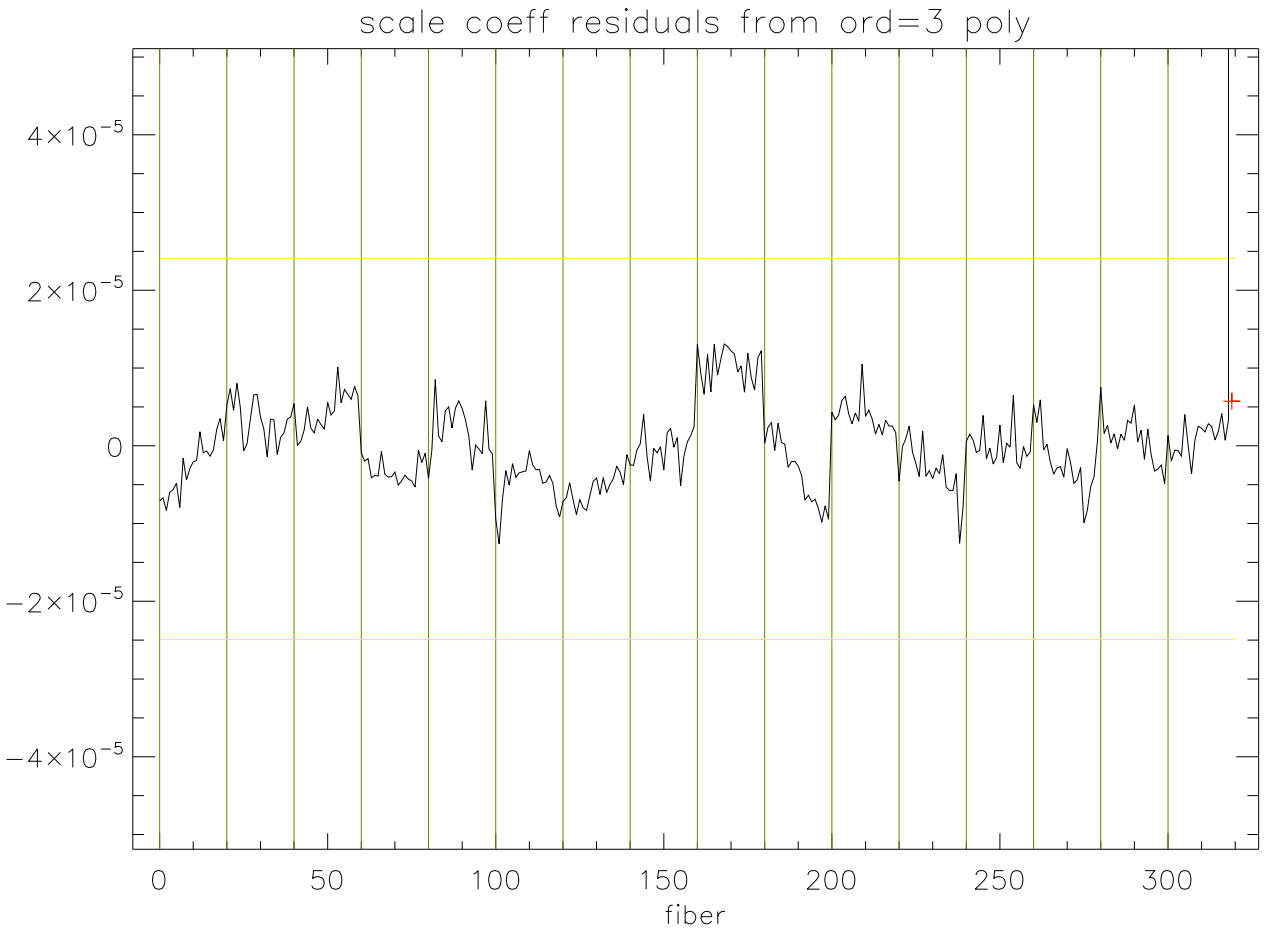

PLATE=2803 MJD=54339 sdR-r1-00046168.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

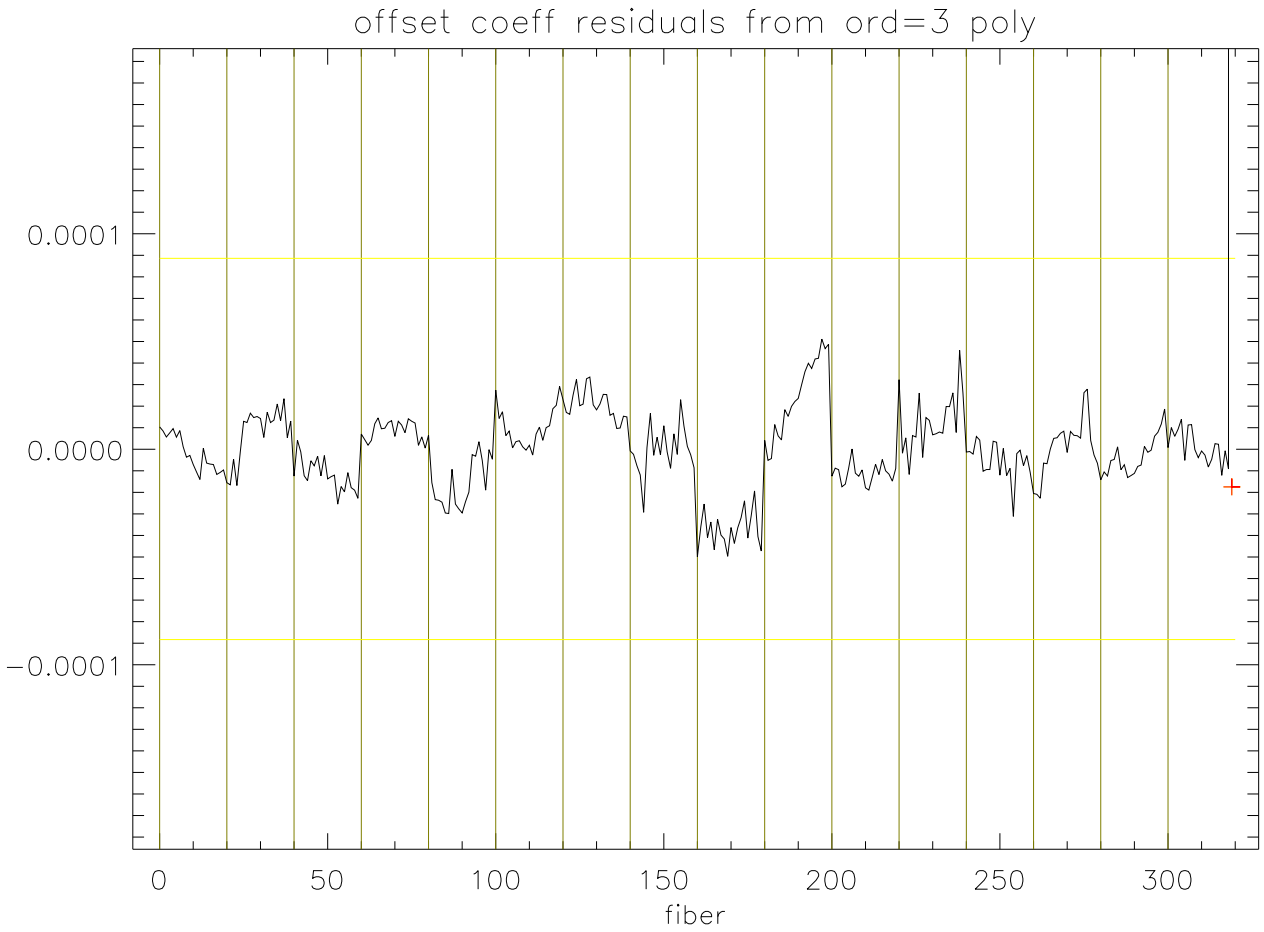

Number of sky fibers = 14
PLATE=2803 MJD=54339 sdR-r1-00046168.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

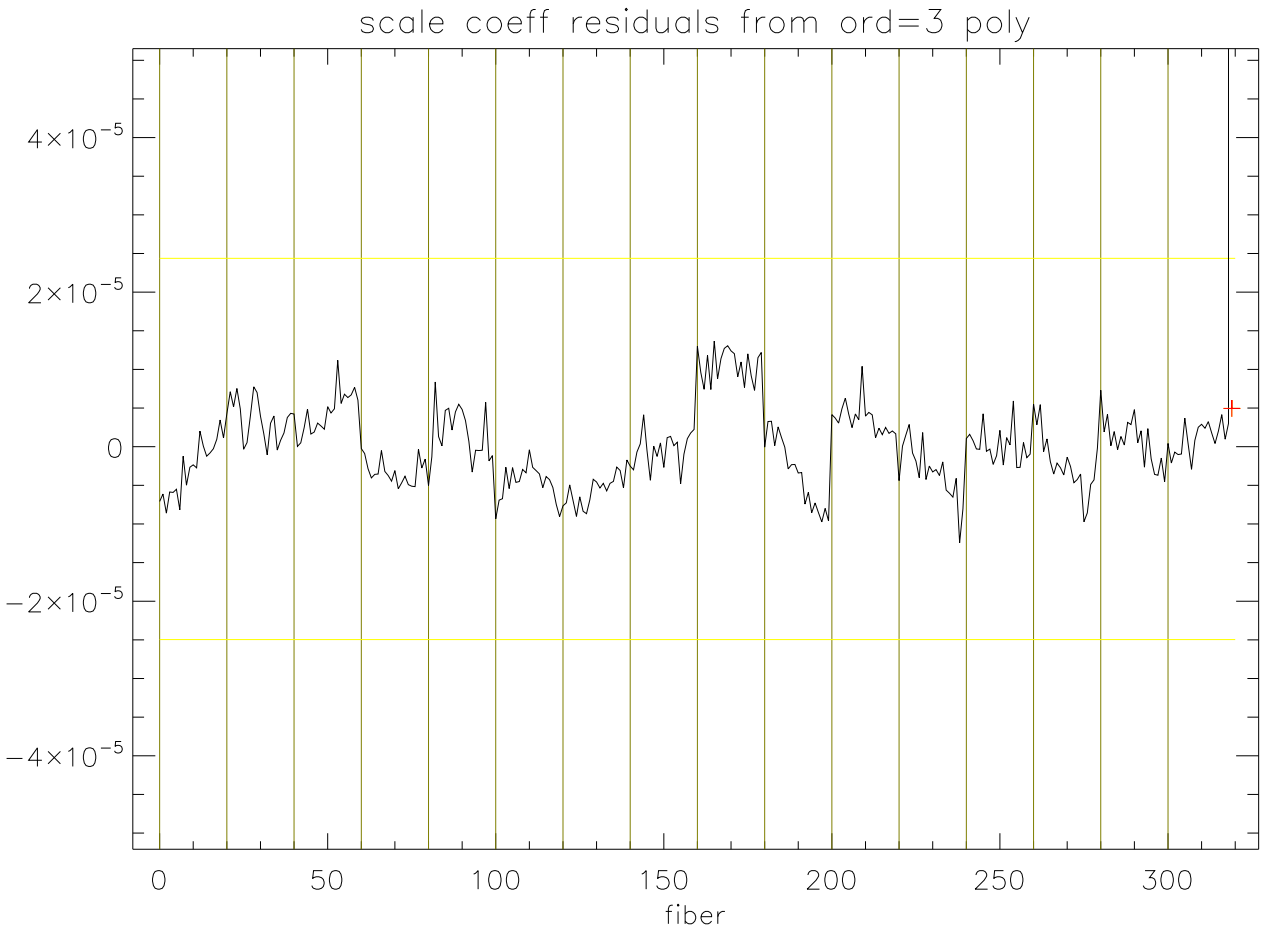

PLATE=2803 MJD=54339 sdR-r1-00046168.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 7.69 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

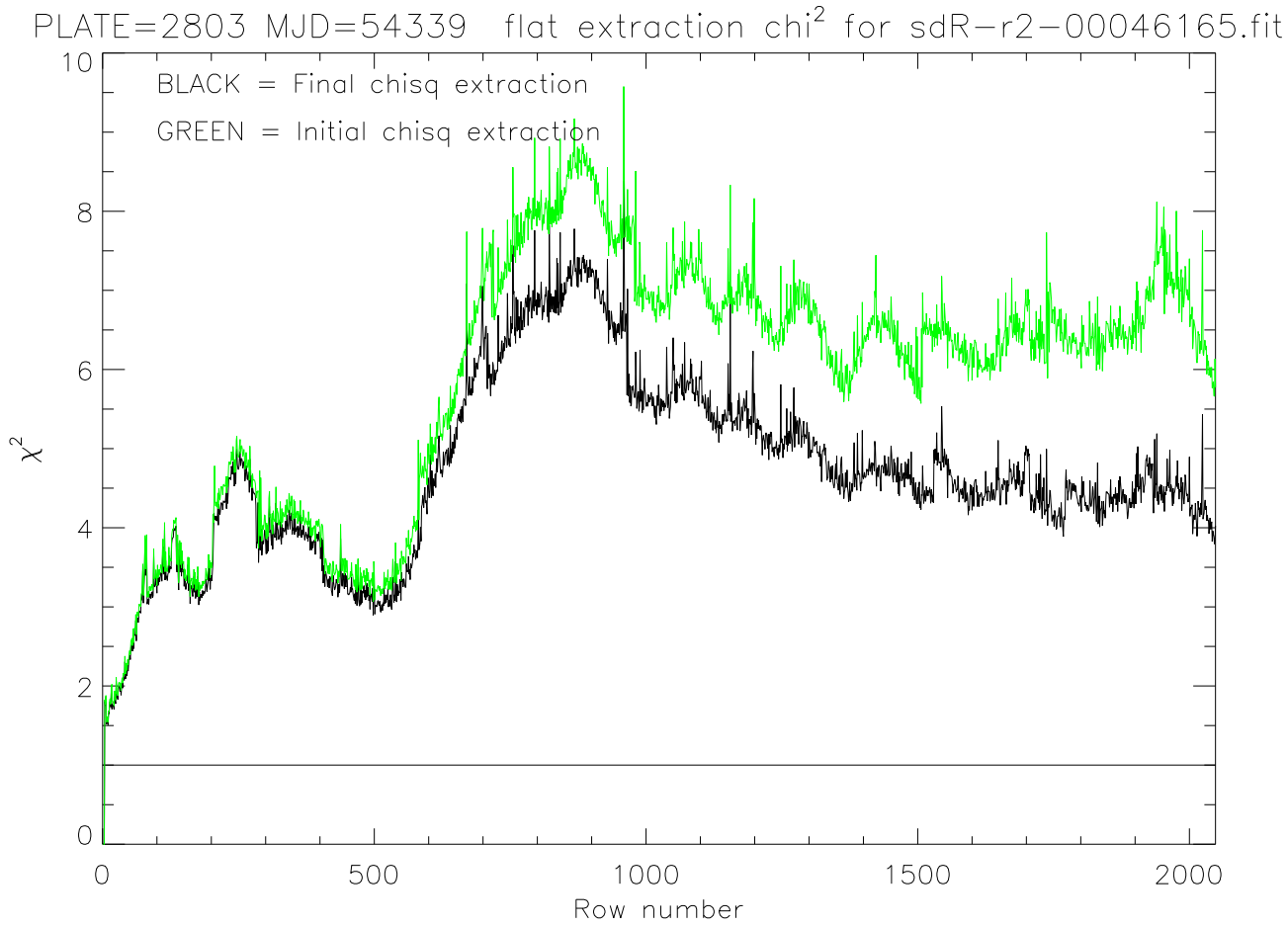

PLATE=2803 MJD=54339 sdR-r1-00046168.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.41 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

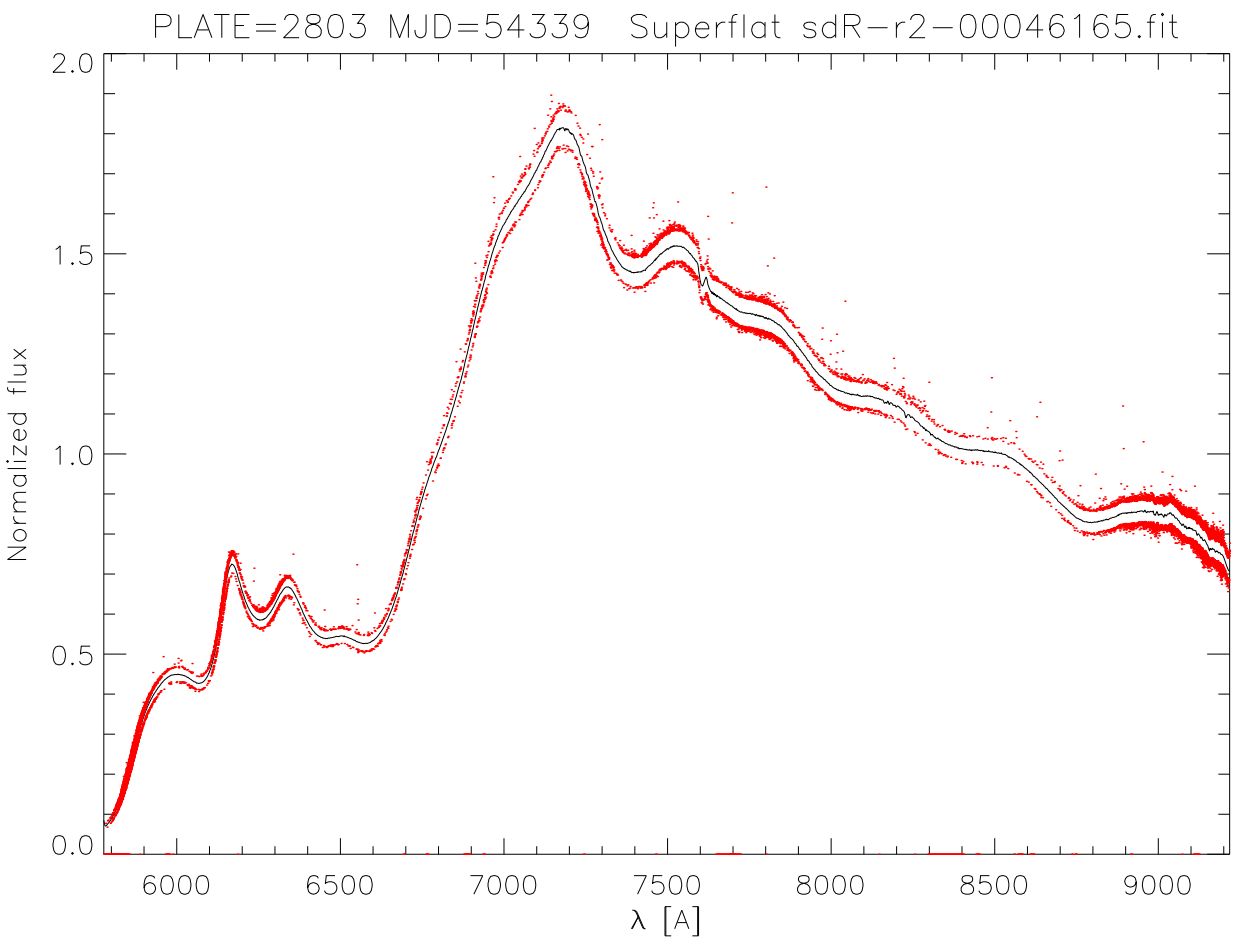

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

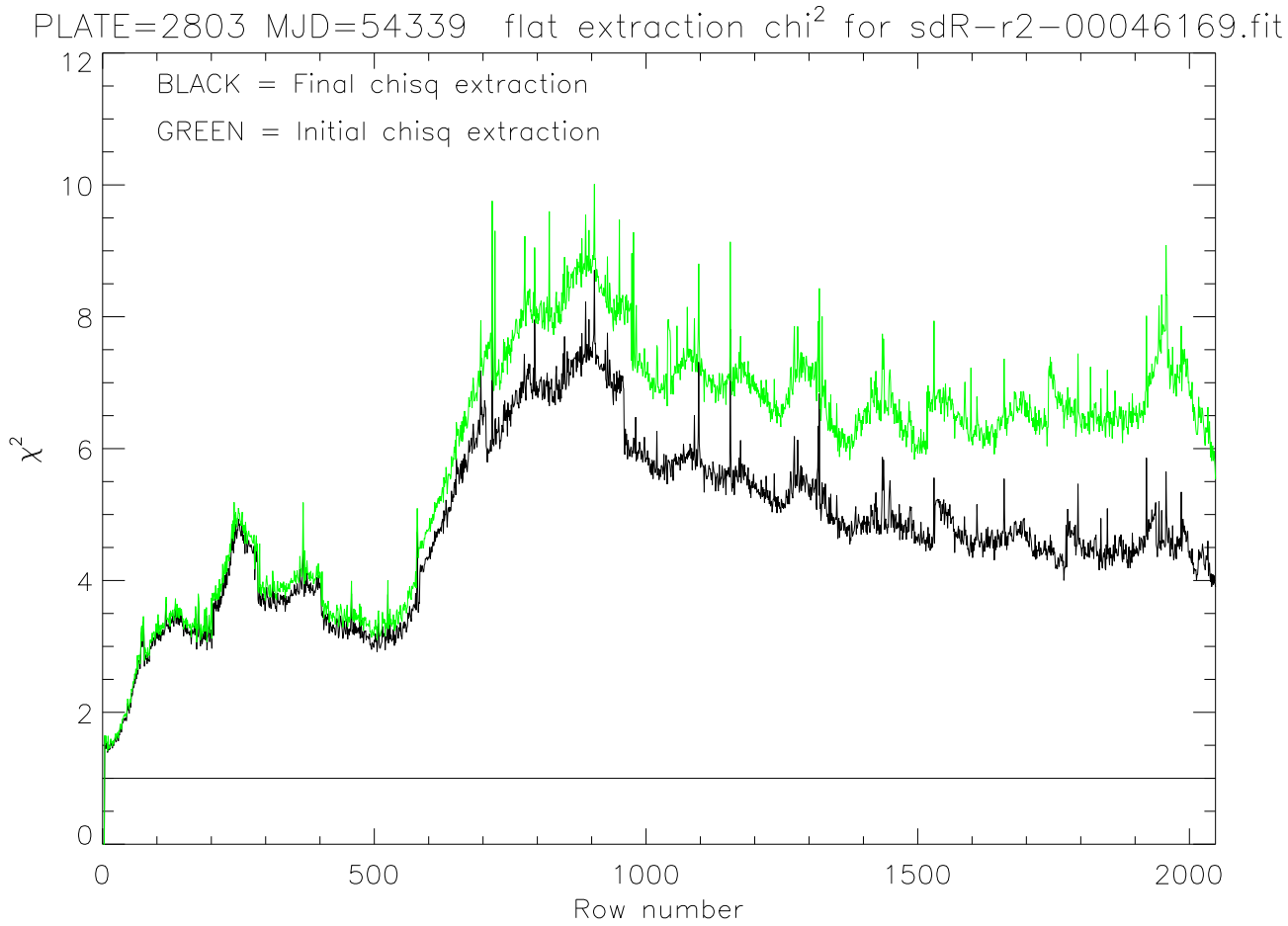

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

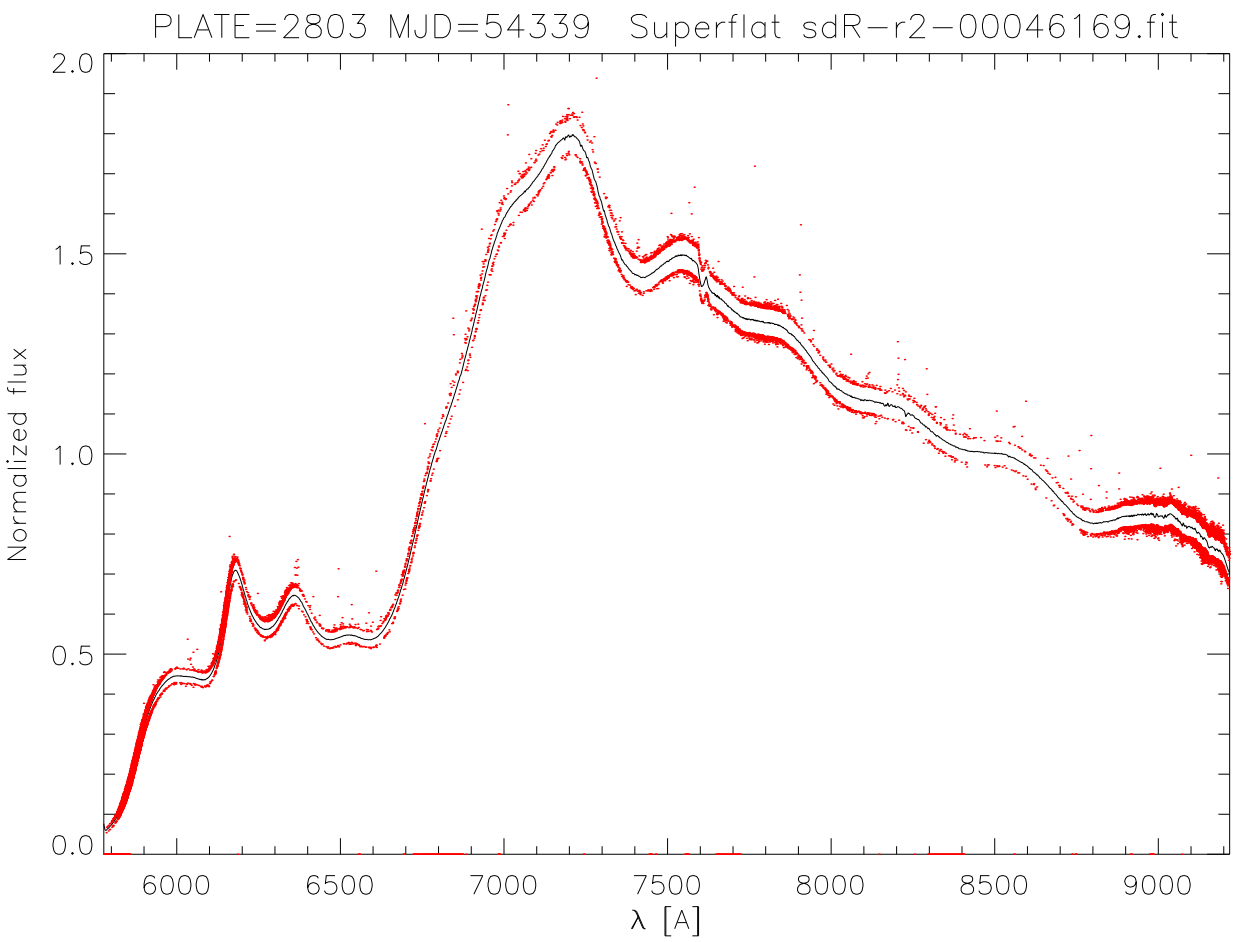

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

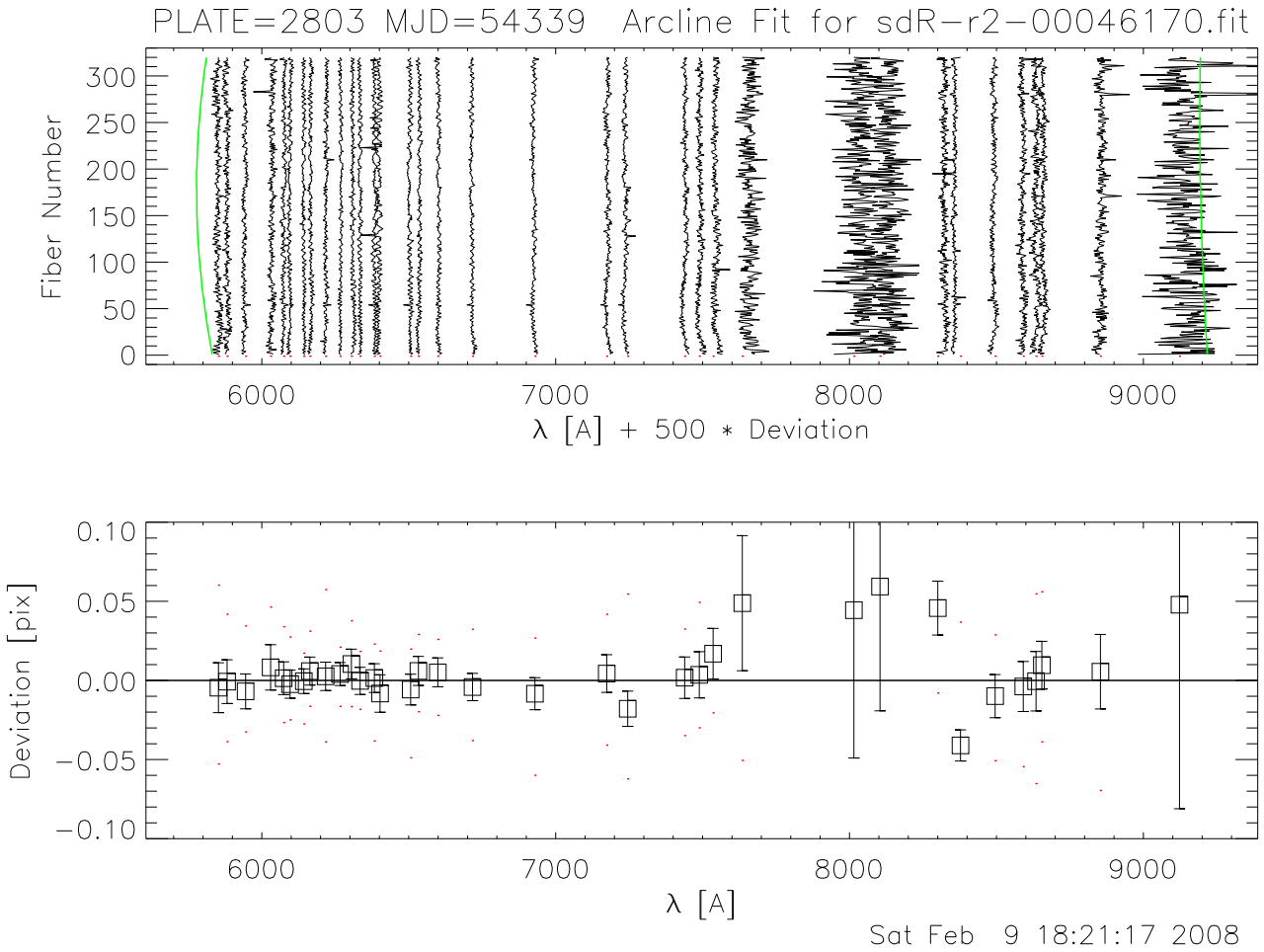

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

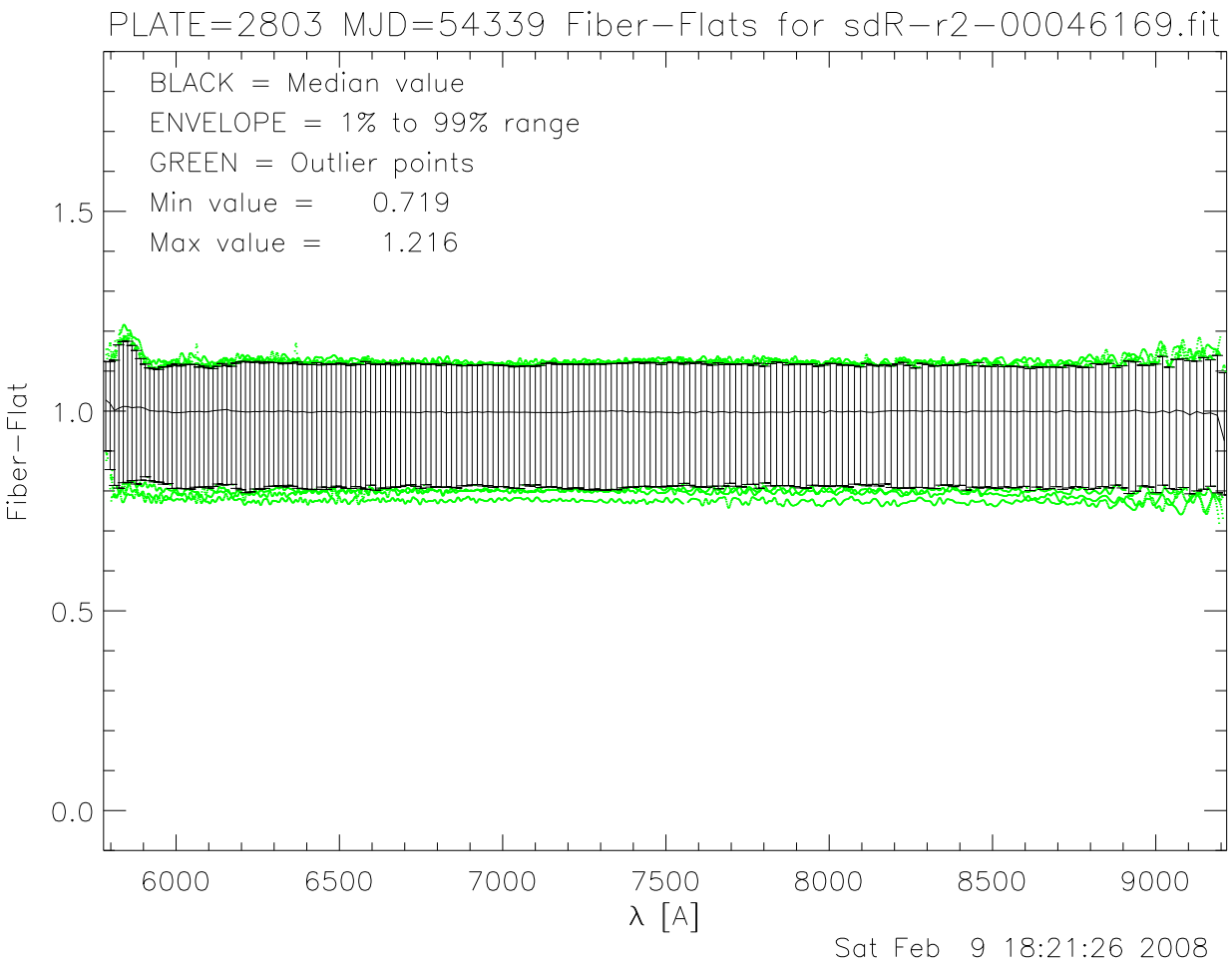

PLATE=2803 MJD=54339 flat extraction chi^2 for sdR−r2−00046165.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

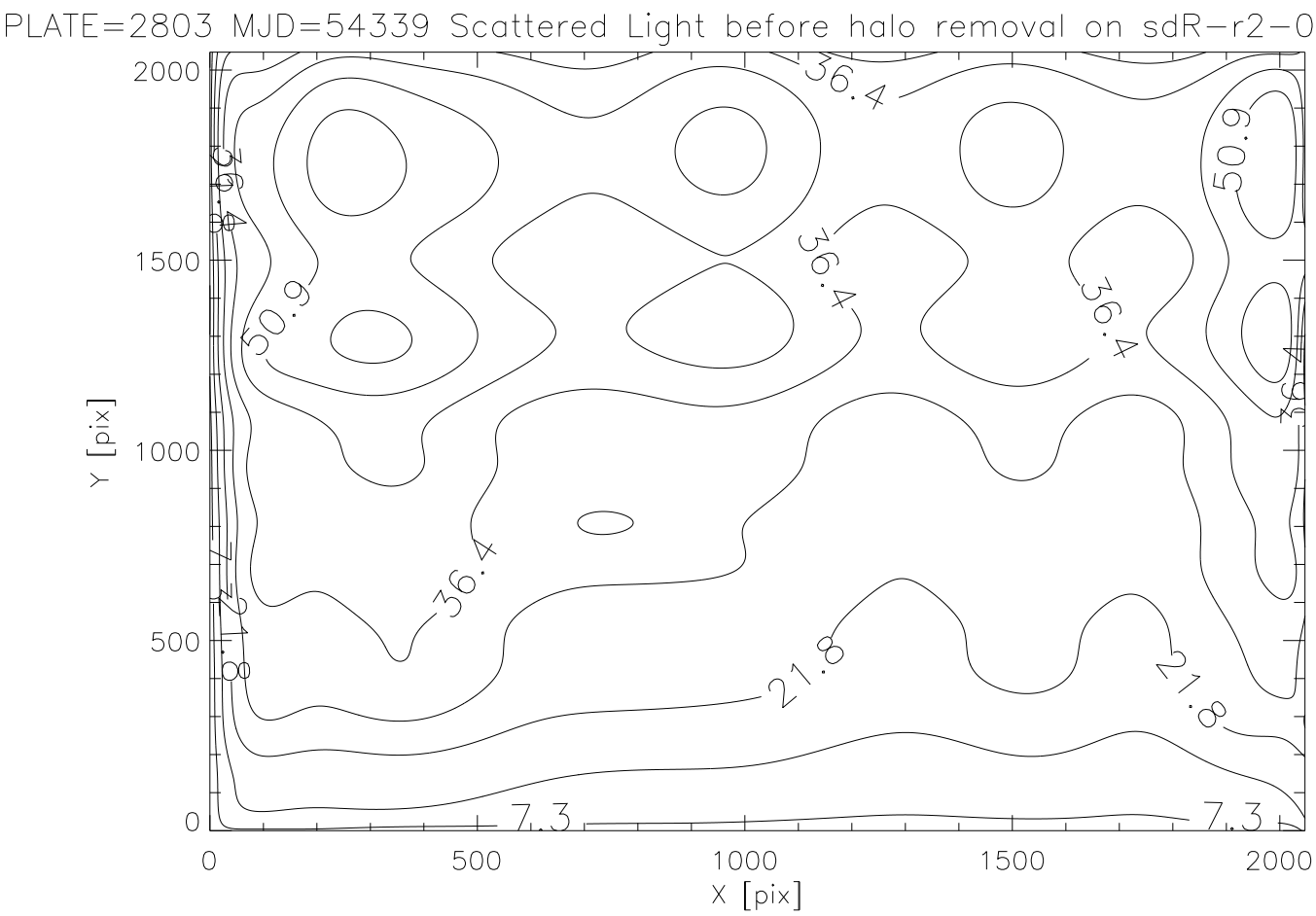

PLATE=2803 MJD=54339 Superflat sdR-r2-00046165.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

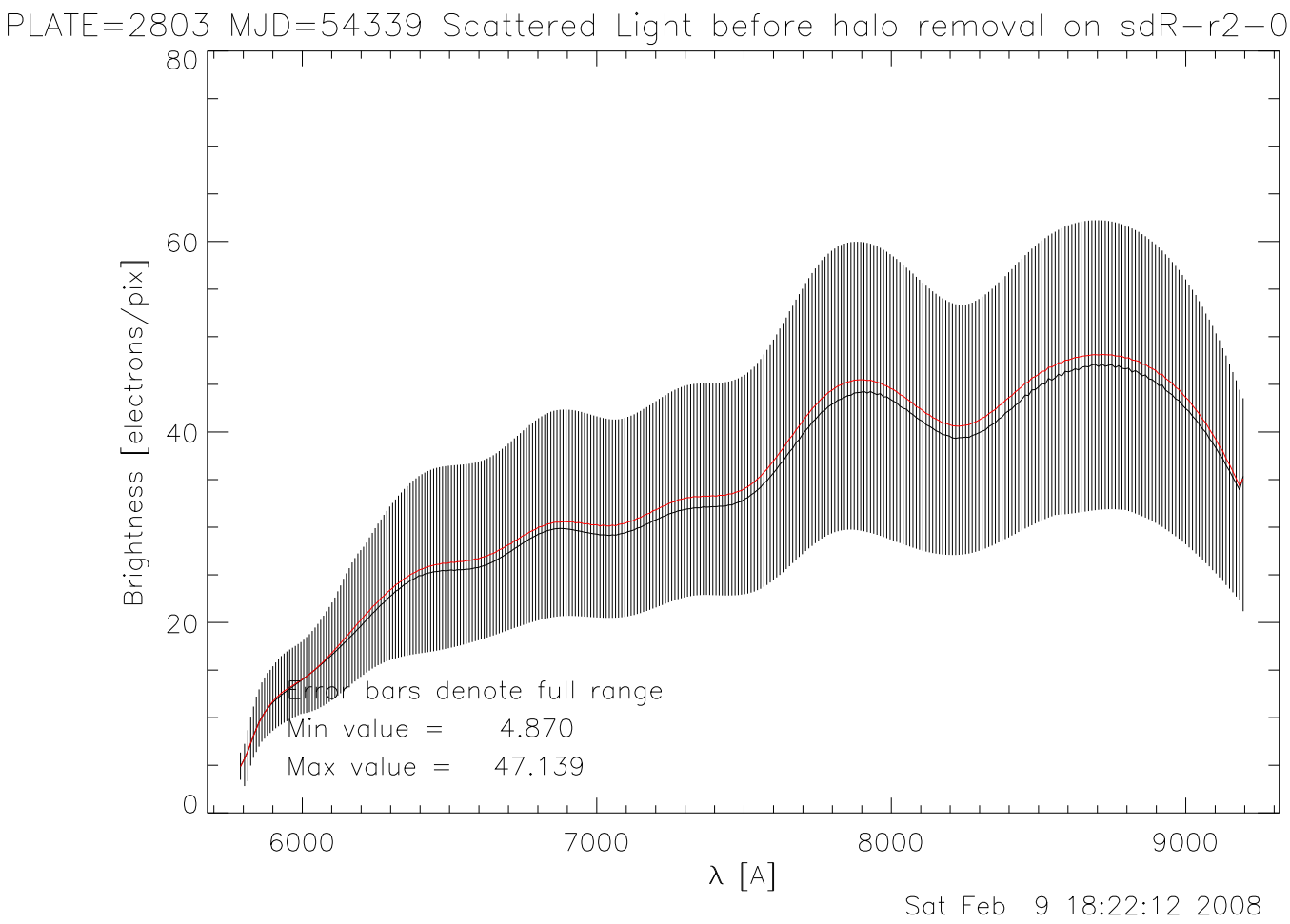

PLATE=2803 MJD=54339 flat extraction chi^2 for sdR−r2−00046169.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

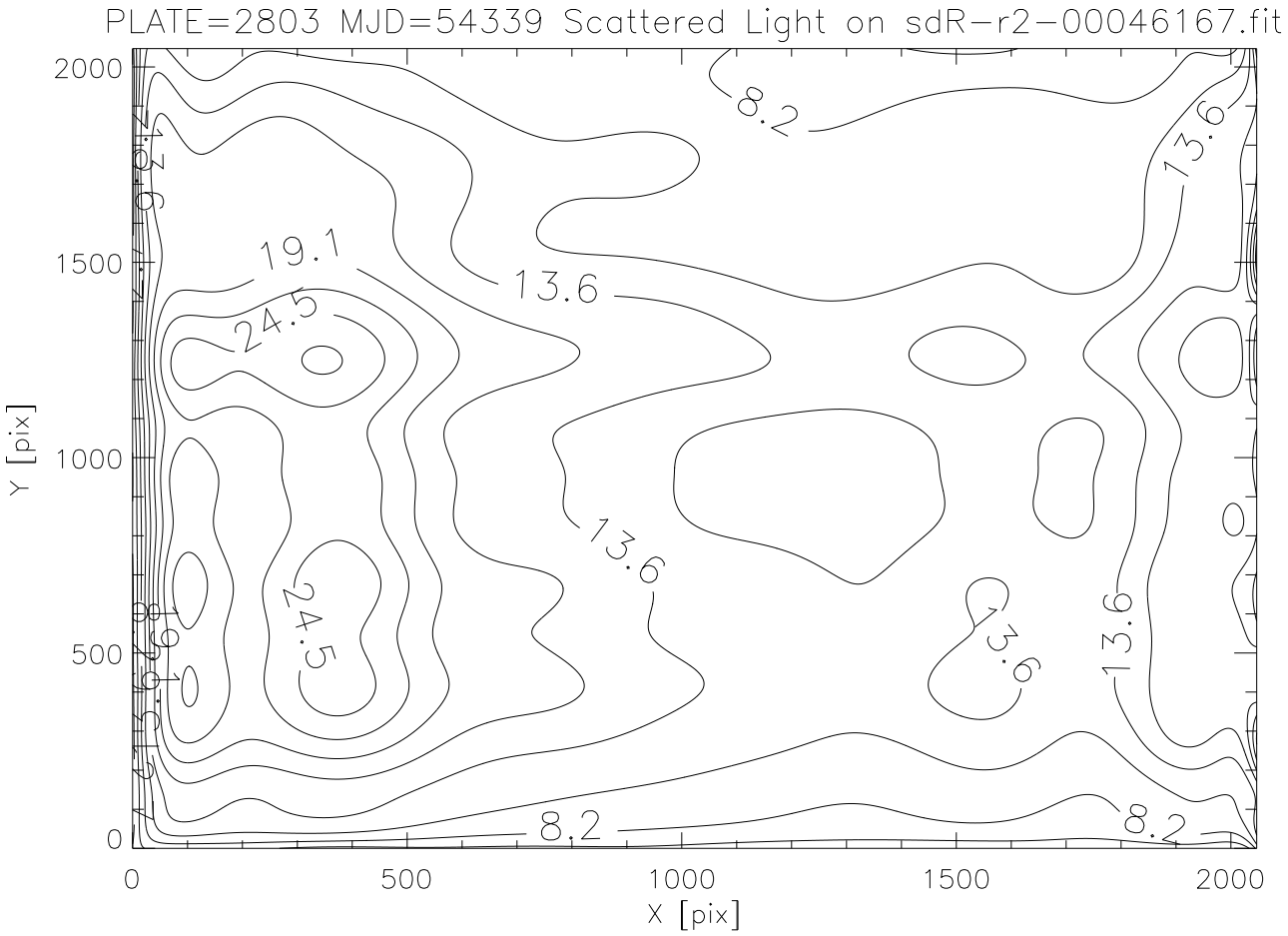

PLATE=2803 MJD=54339 Superflat sdR-r2-00046169.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

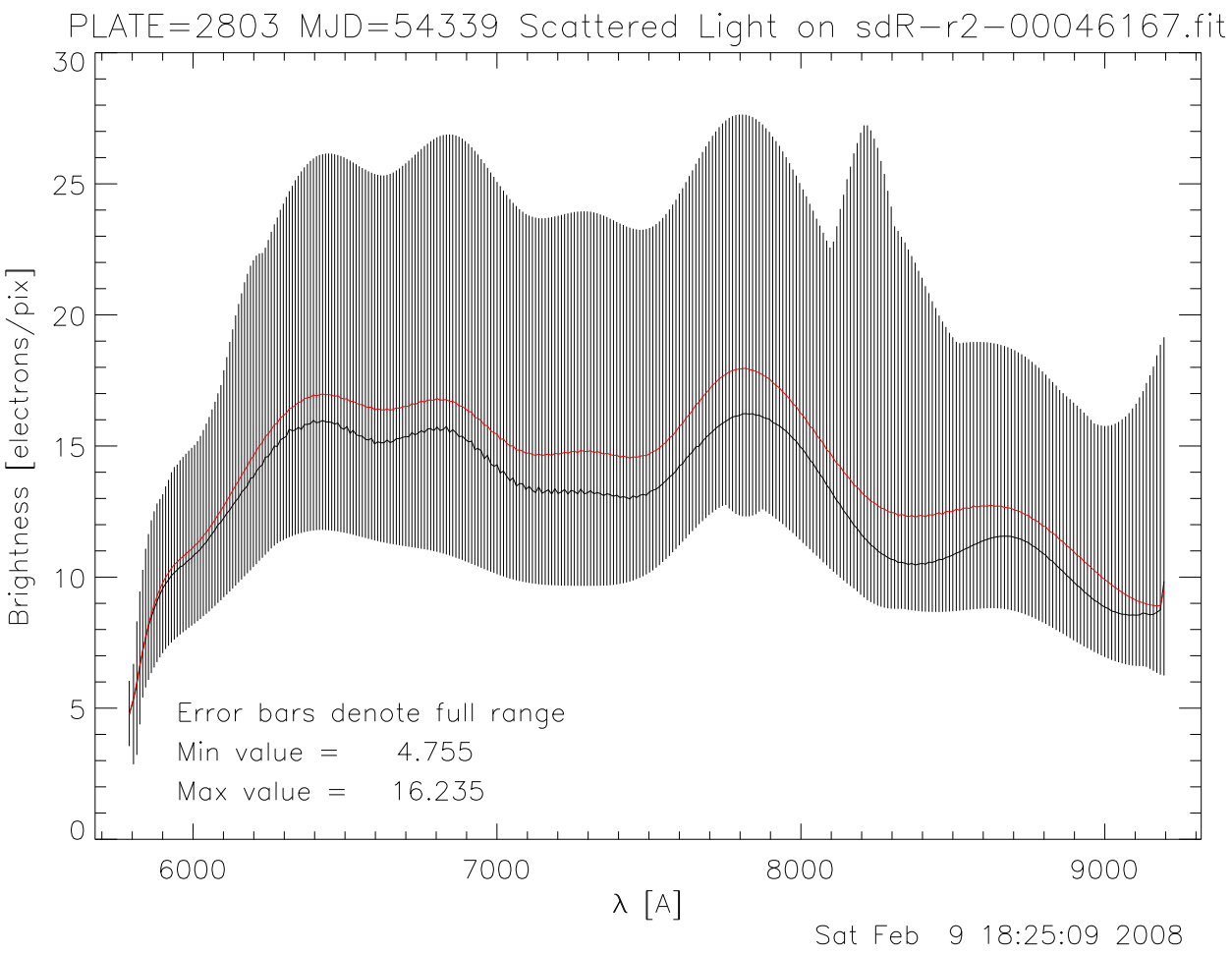

PLATE=2803 MJD=54339 Arcline Fit for sdR-r2-00046170.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 9 18:21:17 2008

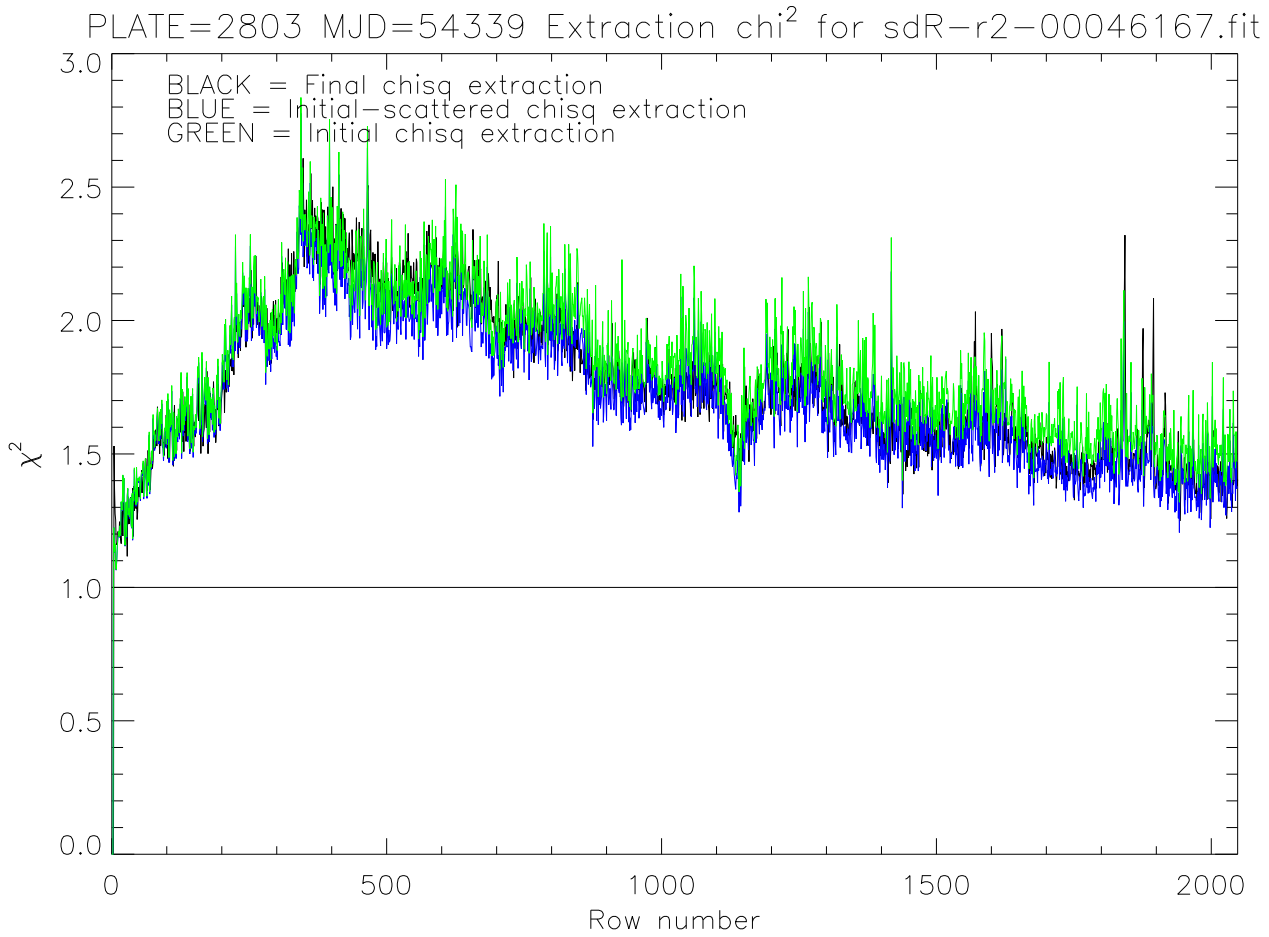

PLATE=2803 MJD=54339 Fiber-Flats for sdR-r2-00046169.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.719
Max value = 1.216
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 9 18:21:26 2008

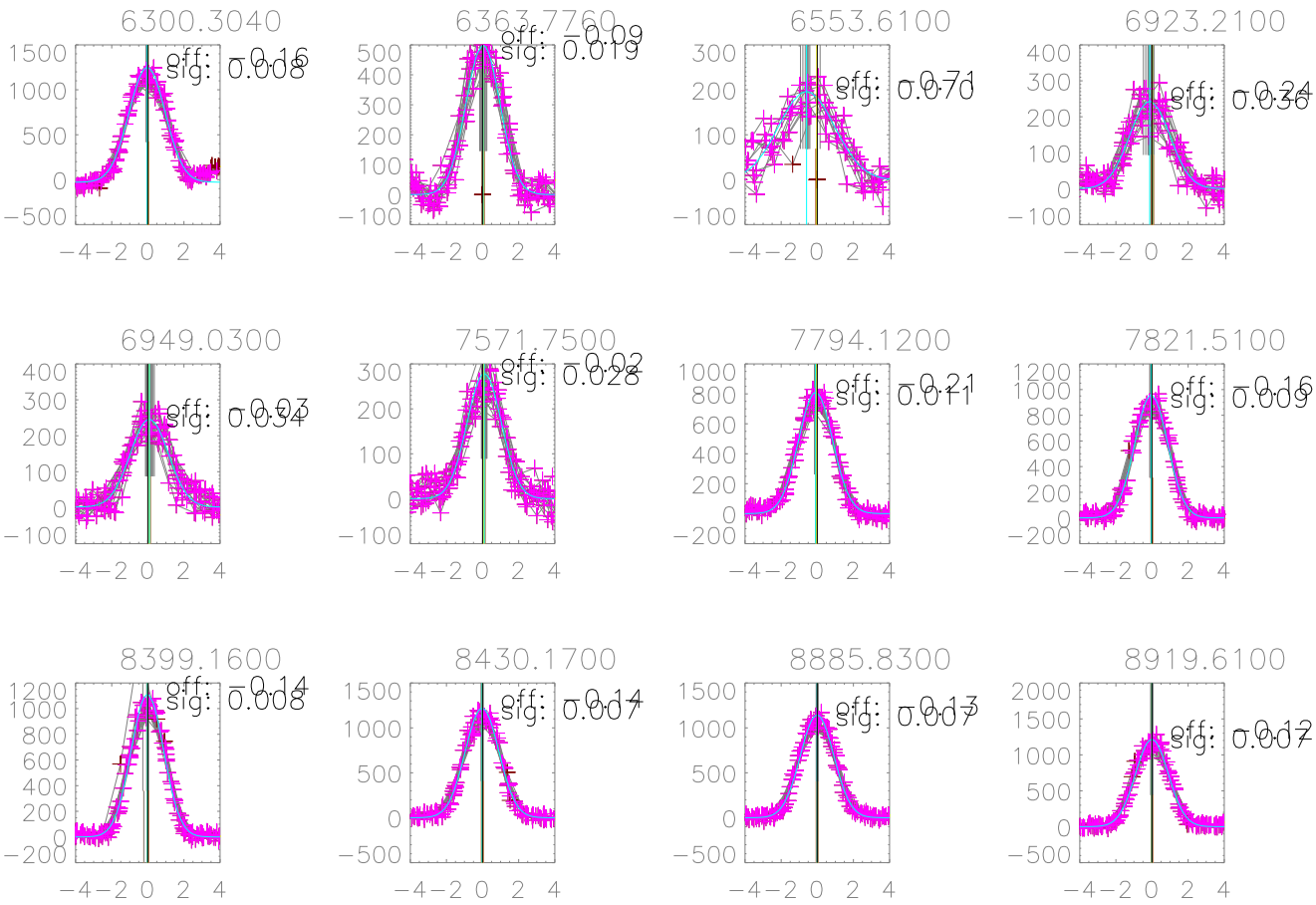

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-r2-00046167.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
36.4
50.9
21.8
7.3

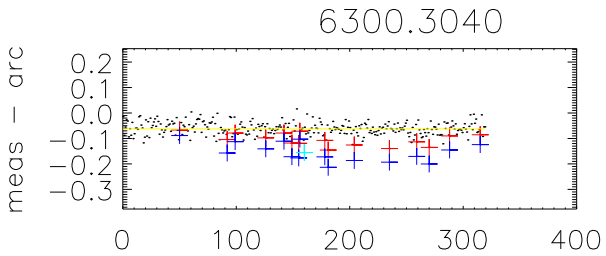

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-r2-00046167.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.870
Max value = 47.139
Sat Feb 9 18:22:12 2008

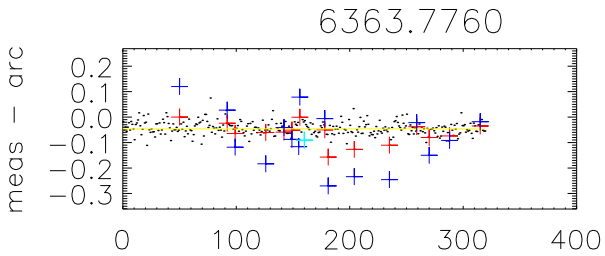

PLATE=2803 MJD=54339 Scattered Light on sdR-r2-00046167.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
13.6
19.1
24.5

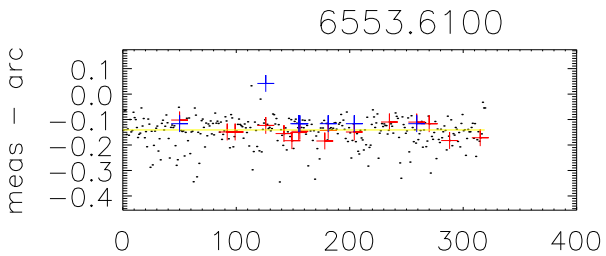

PLATE=2803 MJD=54339 Scattered Light on sdR-r2-00046167.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.755
Max value = 16.235
Sat Feb 9 18:25:09 2008

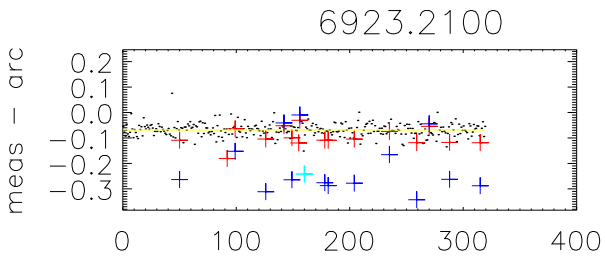

PLATE=2803 MJD=54339 Extraction chi^2 for sdR−r2−00046167.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

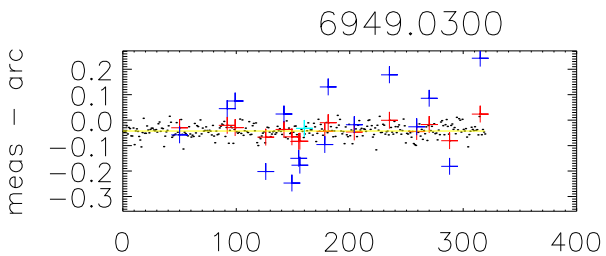

6300.3040
off: −0.16
sig: 0.008
6363.7760
off: −0.09
sig: 0.019
6553.6100
off: −0.71
sig: 0.070
6923.2100
off: −0.24
sig: 0.036
6949.0300
off: −0.03
sig: 0.034
7571.7500
off: −0.02
sig: 0.028
7794.1200
off: −0.21
sig: 0.011
7821.5100
off: −0.16
sig: 0.009
8399.1600
off: −0.14
sig: 0.008
8430.1700
off: −0.14
sig: 0.007
8885.8300
off: −0.13
sig: 0.007
8919.6100
off: −0.12
sig: 0.007

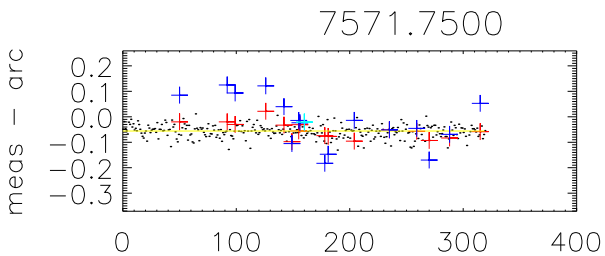

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

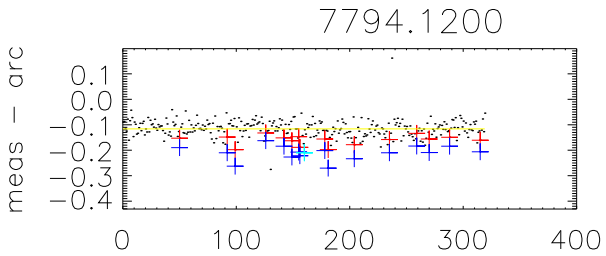

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

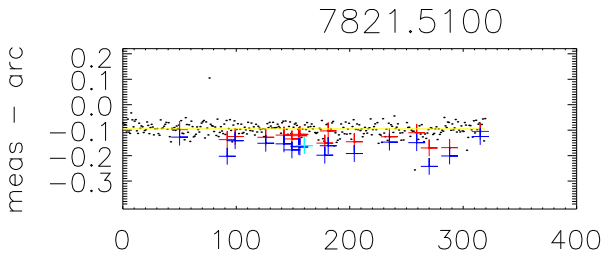

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

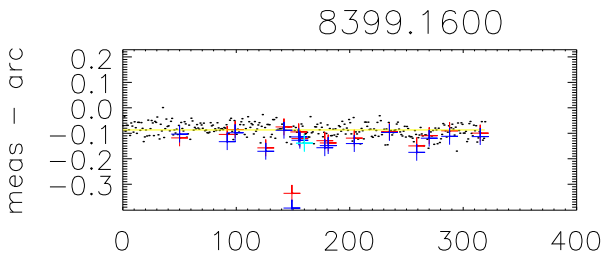

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

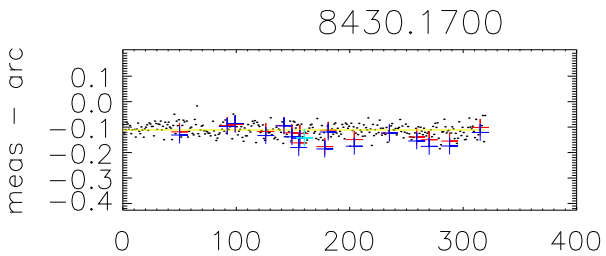

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

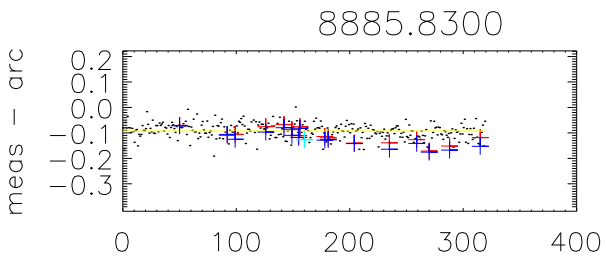

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

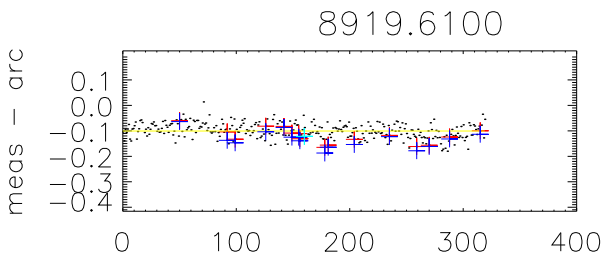

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

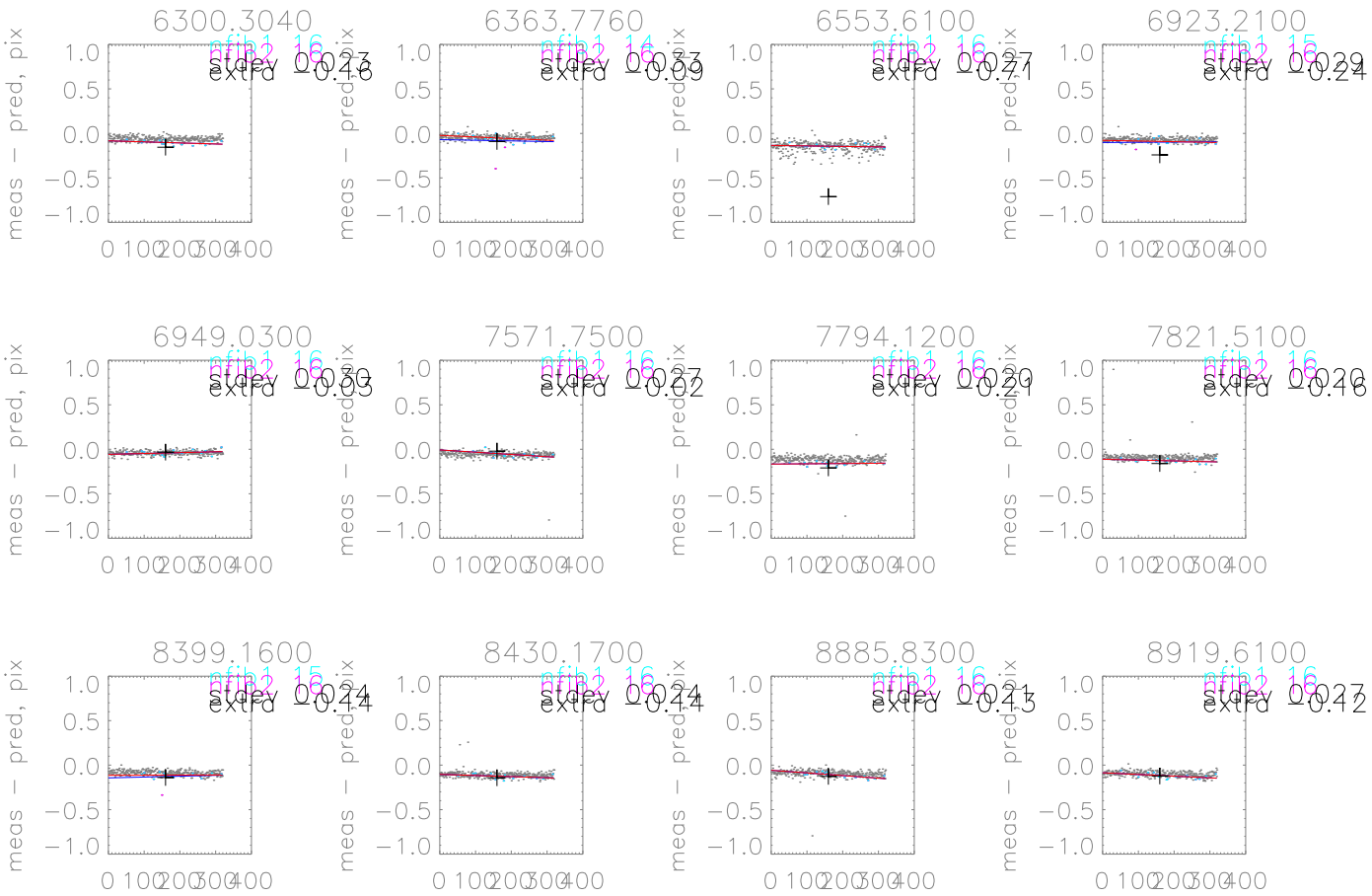

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

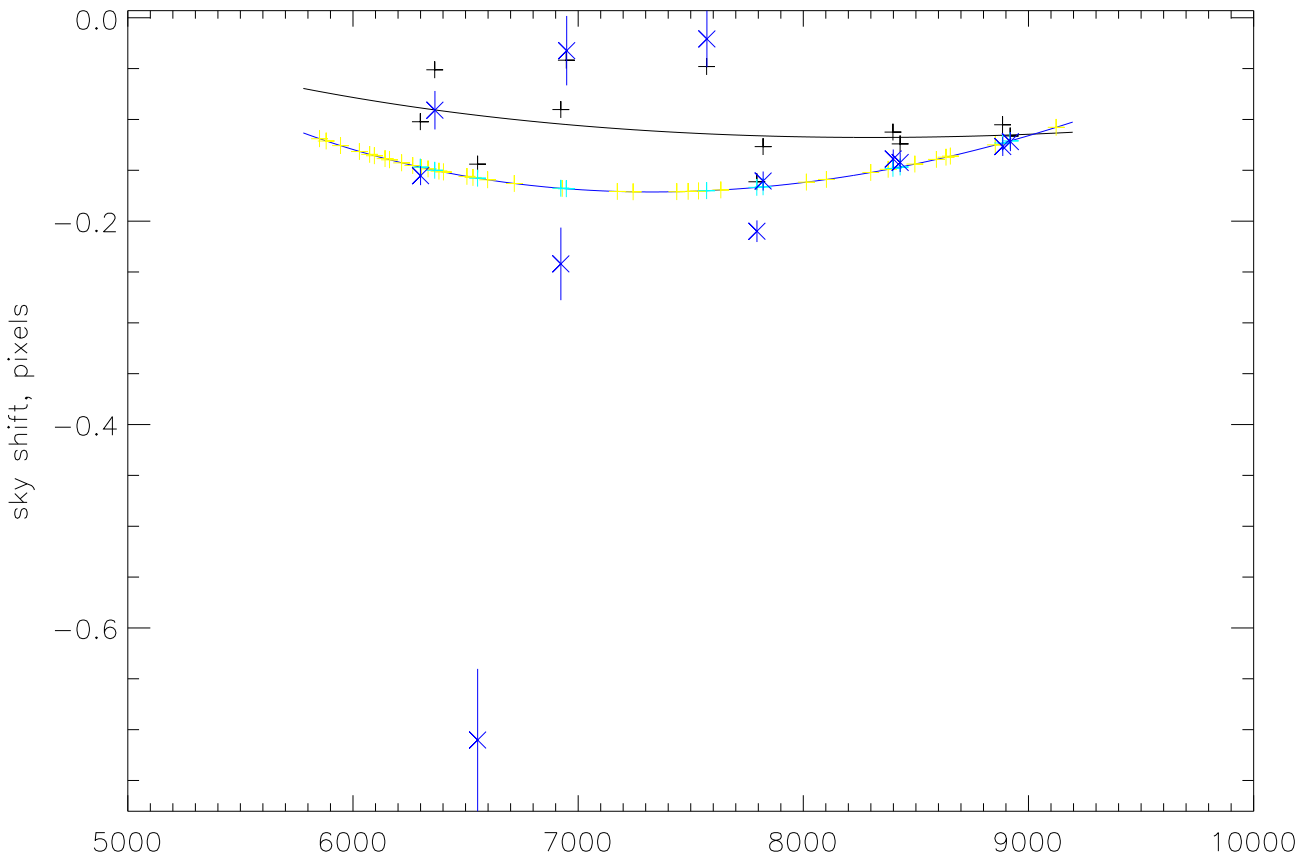

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

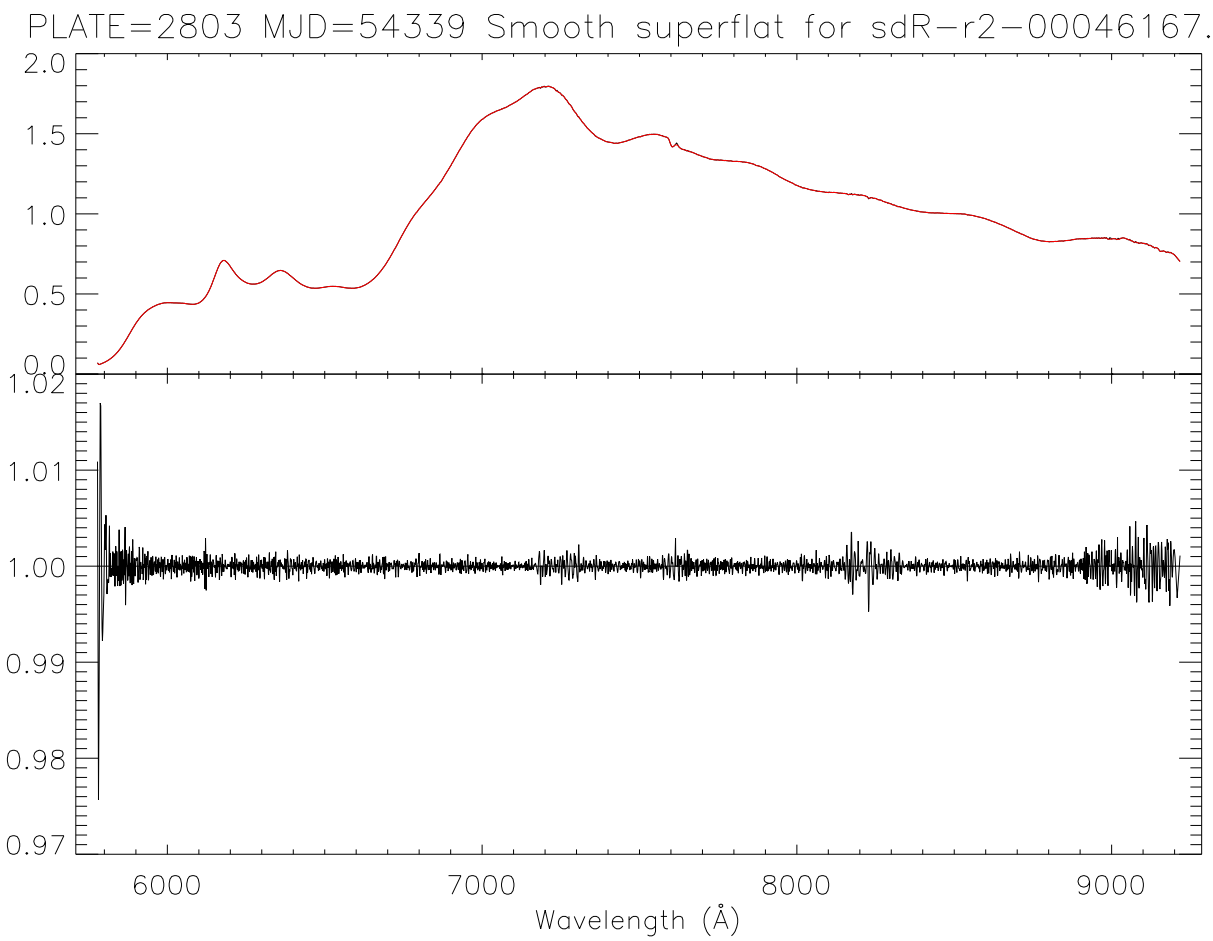

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

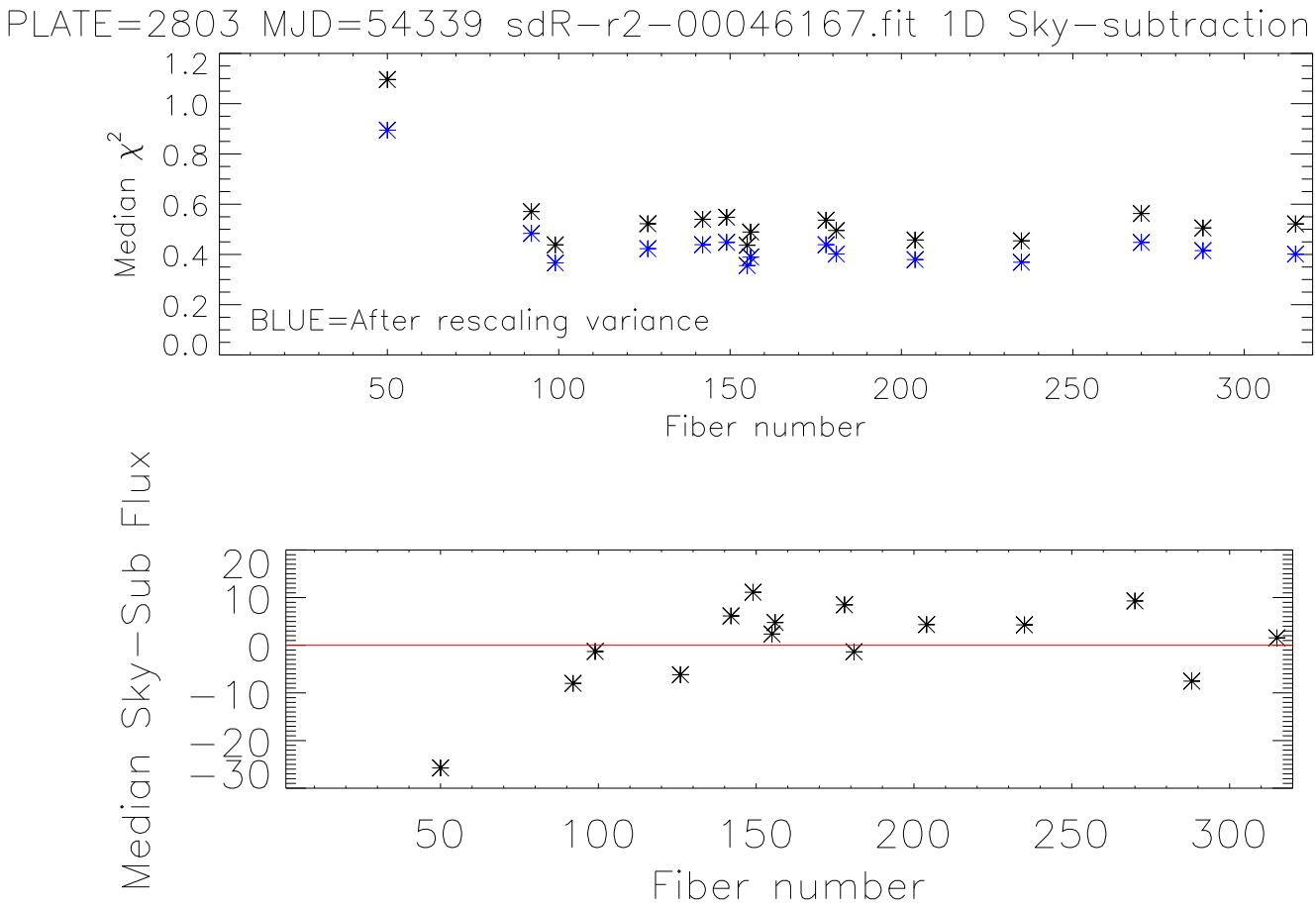

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

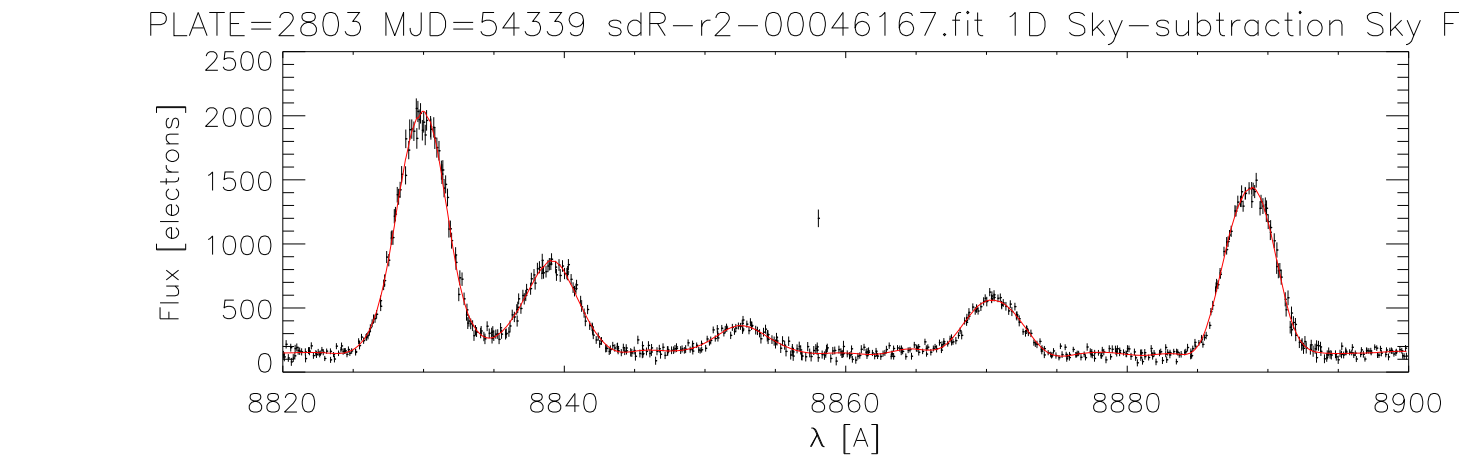

6300.3040
mfib1 16
mfib2 16
stdev 0.023
extrd 0.46
6363.7760
mfib1 14
mfib2 16
stdev 0.033
extrd 0.09
6553.6100
mfib1 16
mfib2 16
stdev 0.027
extrd 0.71
6923.2100
mfib1 15
mfib2 16
stdev 0.029
extrd 0.24
6949.0300
mfib1 16
mfib2 16
stdev 0.030
extrd 0.03
7571.7500
mfib1 16
mfib2 16
stdev 0.027
extrd 0.02
7794.1200
mfib1 16
mfib2 16
stdev 0.020
extrd 0.21
7821.5100
mfib1 16
mfib2 16
stdev 0.020
extrd 0.46
8399.1600
mfib1 15
mfib2 16
stdev 0.024
extrd 0.44
8430.1700
mfib1 16
mfib2 16
stdev 0.024
extrd 0.44
8885.8300
mfib1 16
mfib2 16
stdev 0.021
extrd 0.43
8919.6100
mfib1 16
mfib2 16
stdev 0.027
extrd 0.42
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

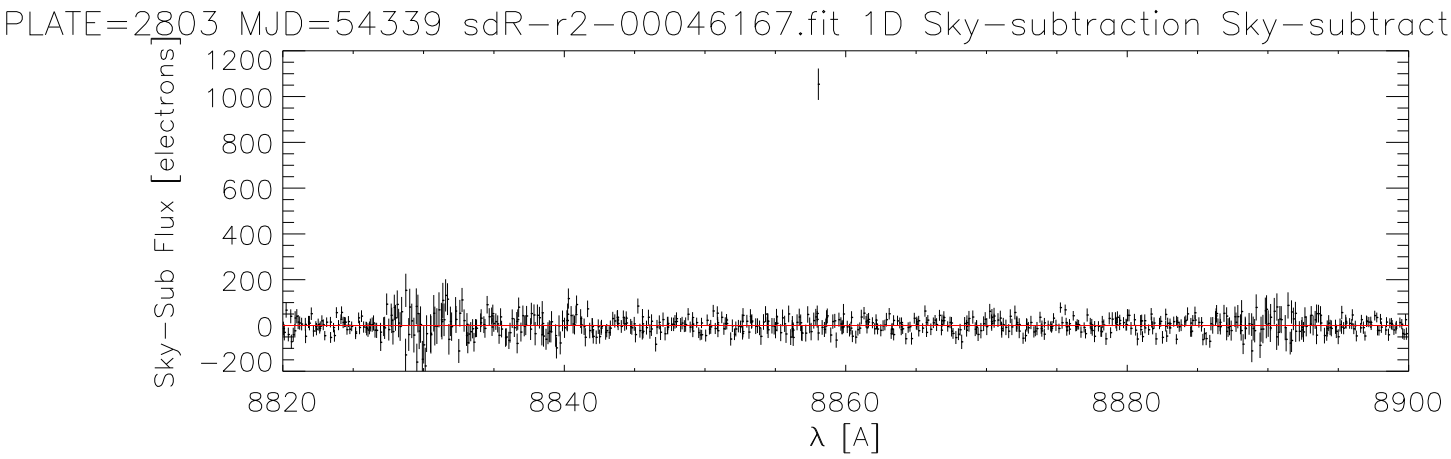

0.0
−0.2
−0.4
−0.6
sky shift, pixels
5000
6000
7000
8000
9000
10000

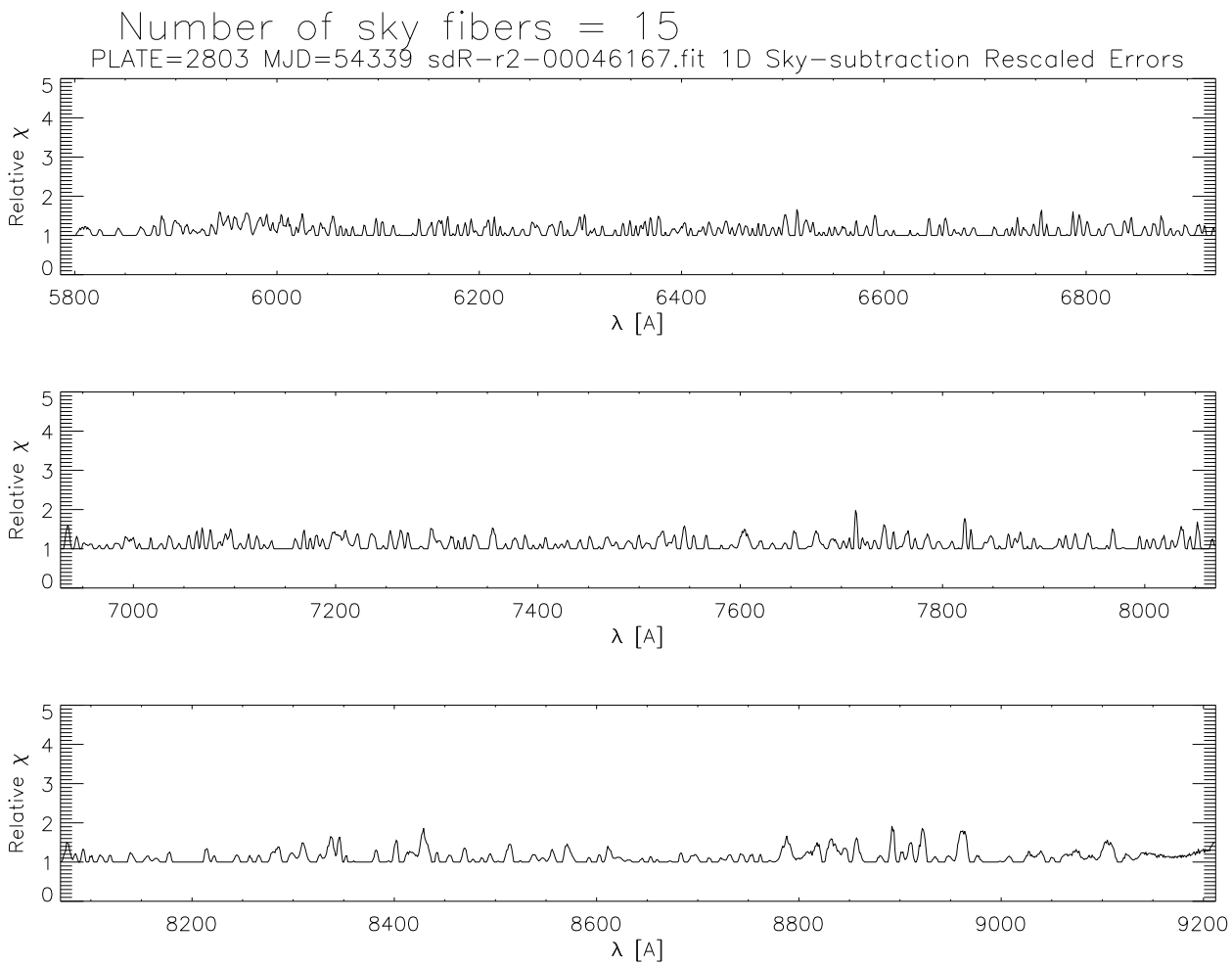
es= 0.0000

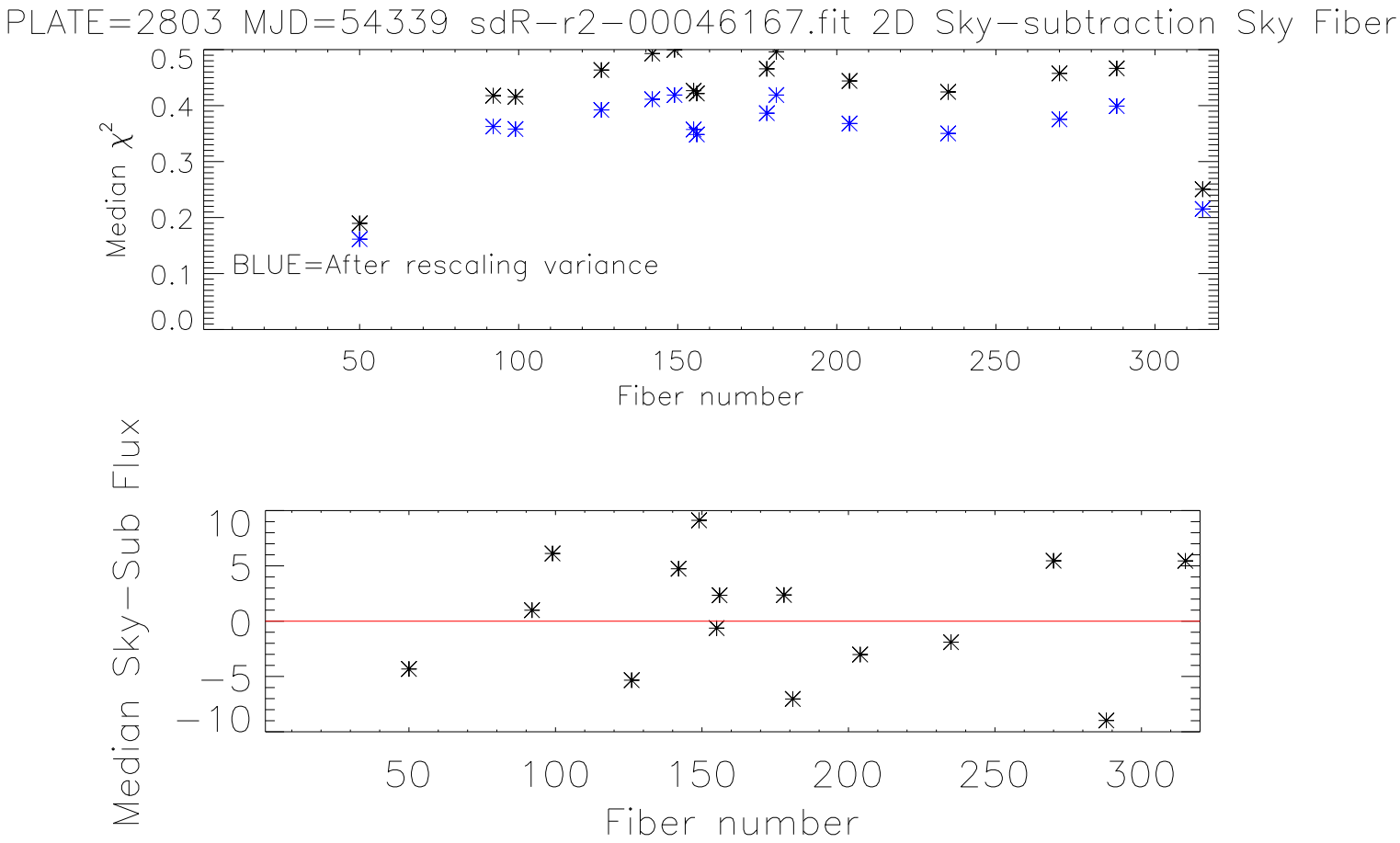

PLATE=2803 MJD=54339 Smooth superflat for sdR-r2-00046167.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

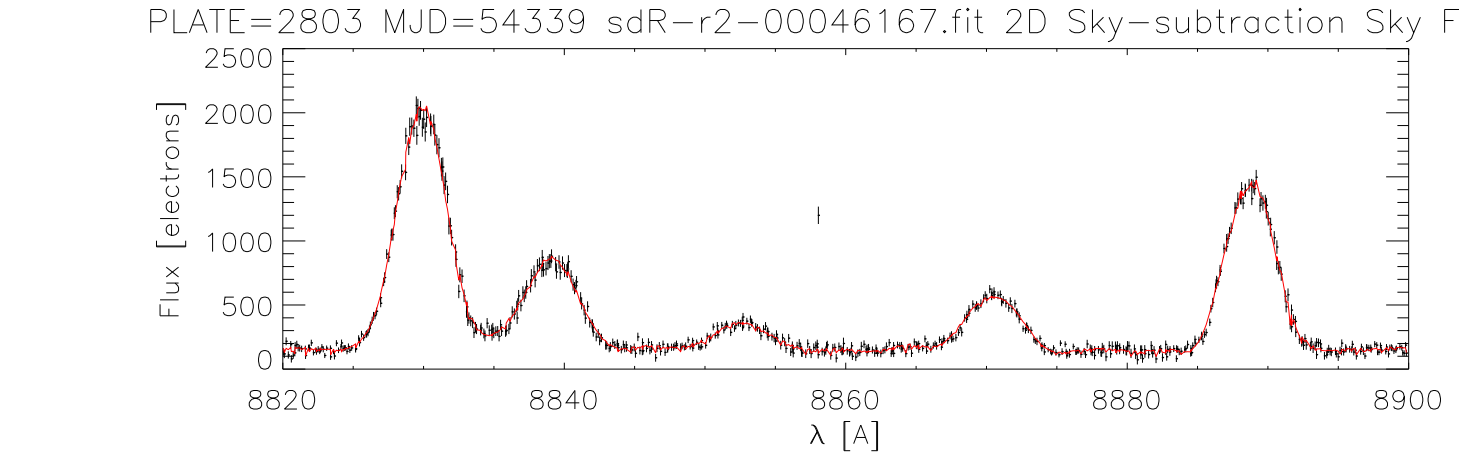

PLATE=2803 MJD=54339 sdR-r2-00046167.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

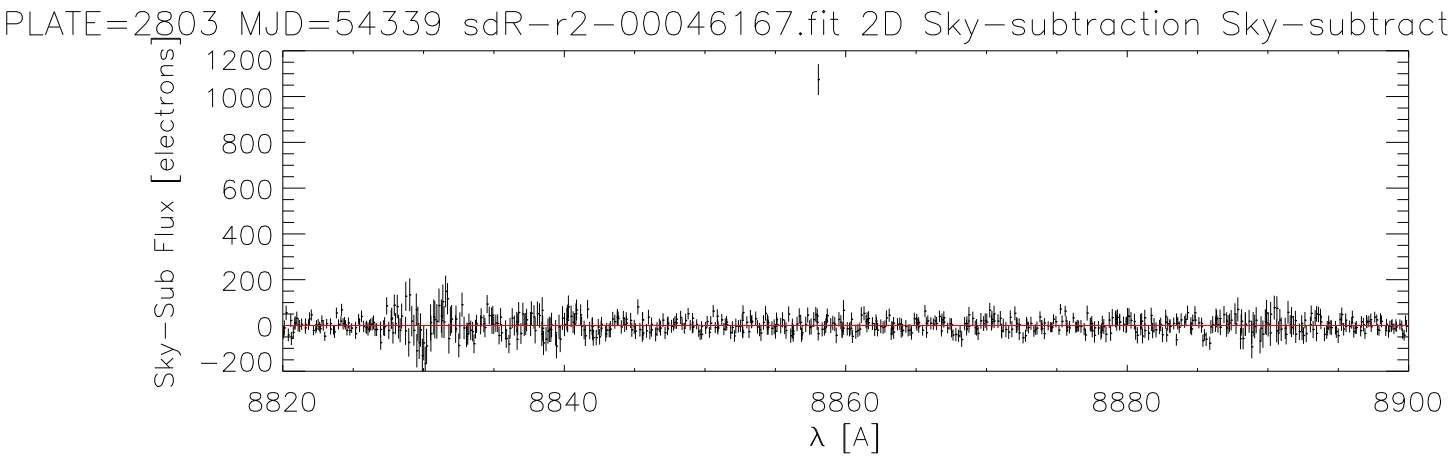

PLATE=2803 MJD=54339 sdR-r2-00046167.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

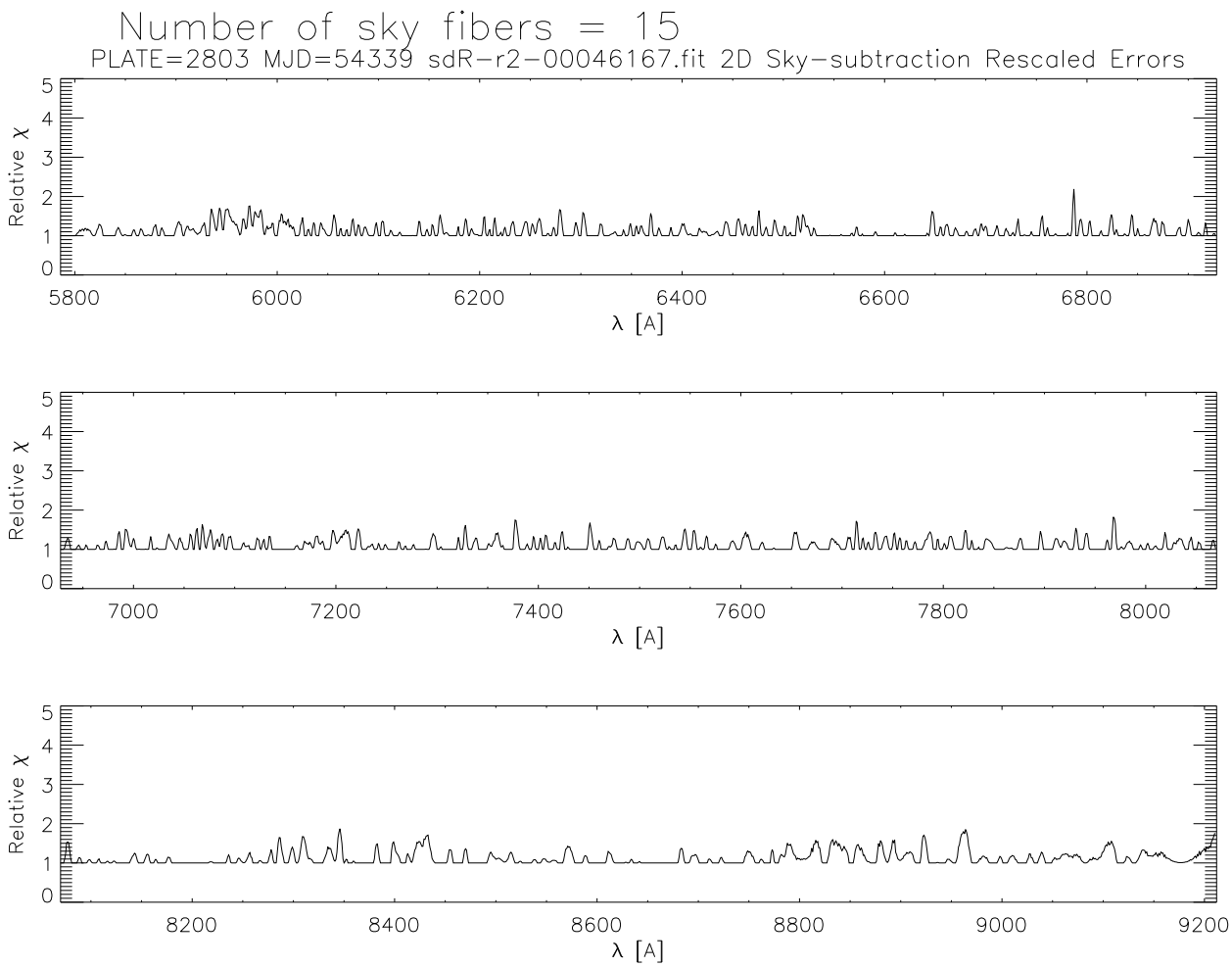

PLATE=2803 MJD=54339 sdR-r2-00046167.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

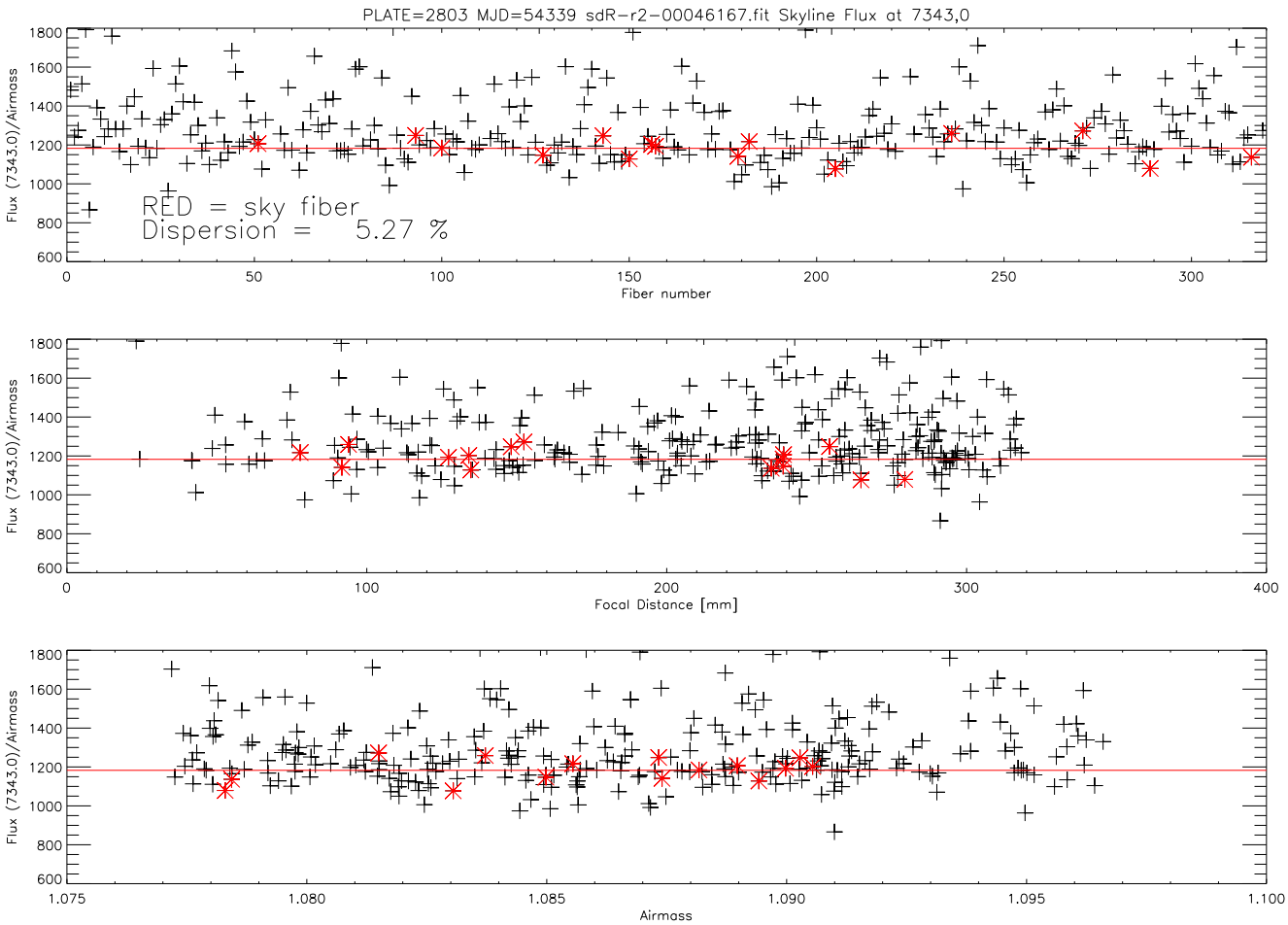

Number of sky fibers = 15
PLATE=2803 MJD=54339 sdR-r2-00046167.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

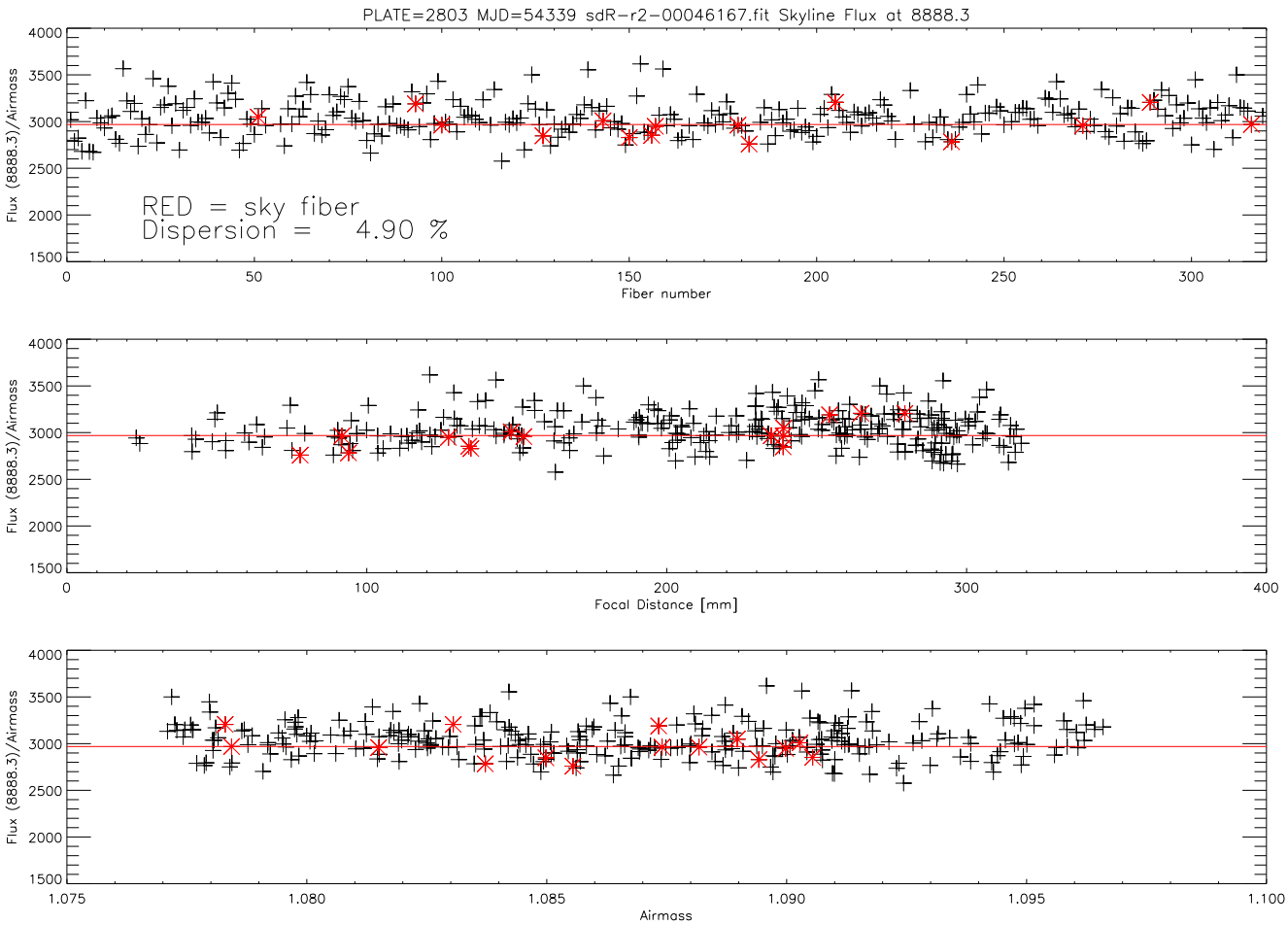

PLATE=2803 MJD=54339 sdR-r2-00046167.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

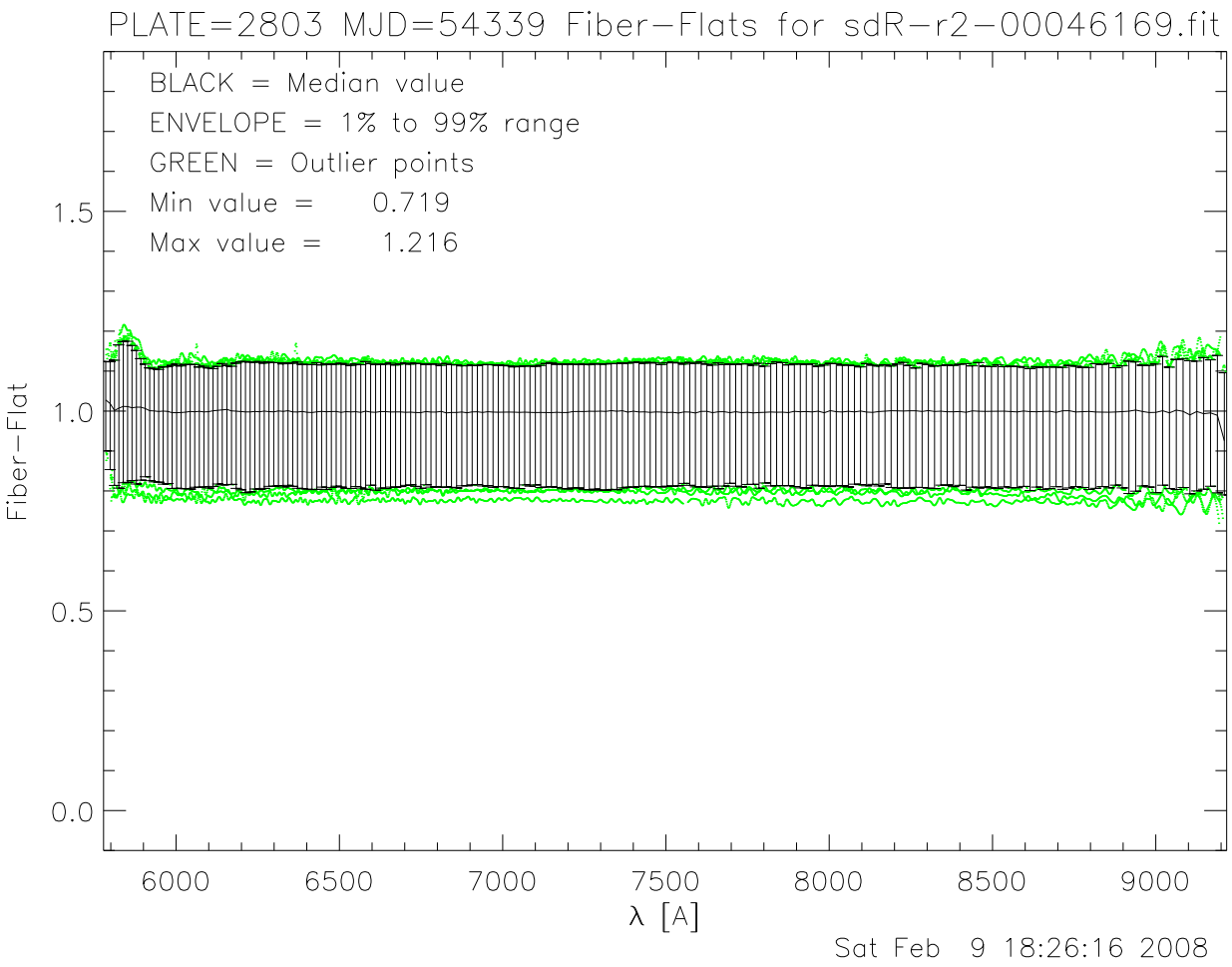

PLATE=2803 MJD=54339 sdR-r2-00046167.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

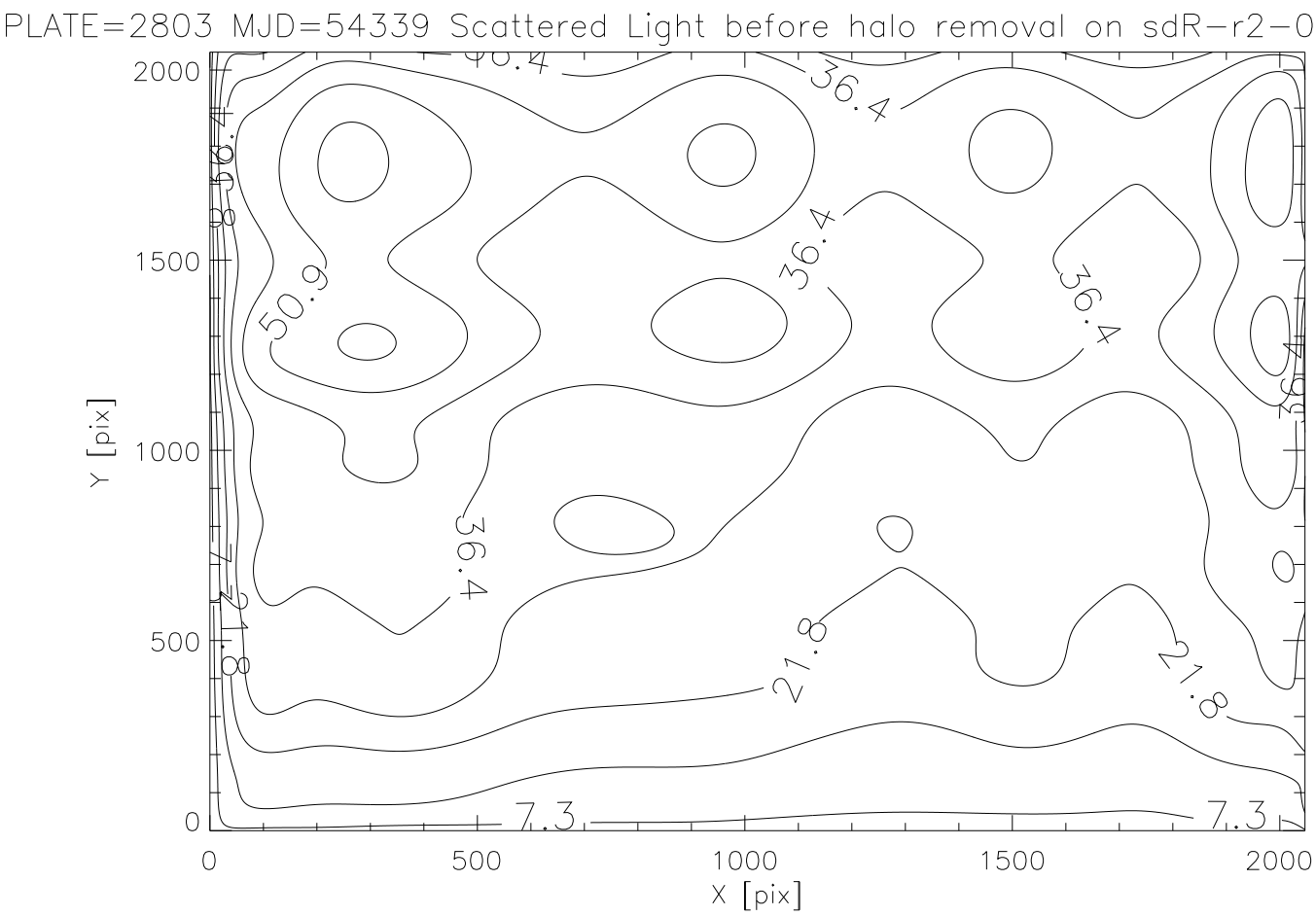

PLATE=2803 MJD=54339 sdR-r2-00046167.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

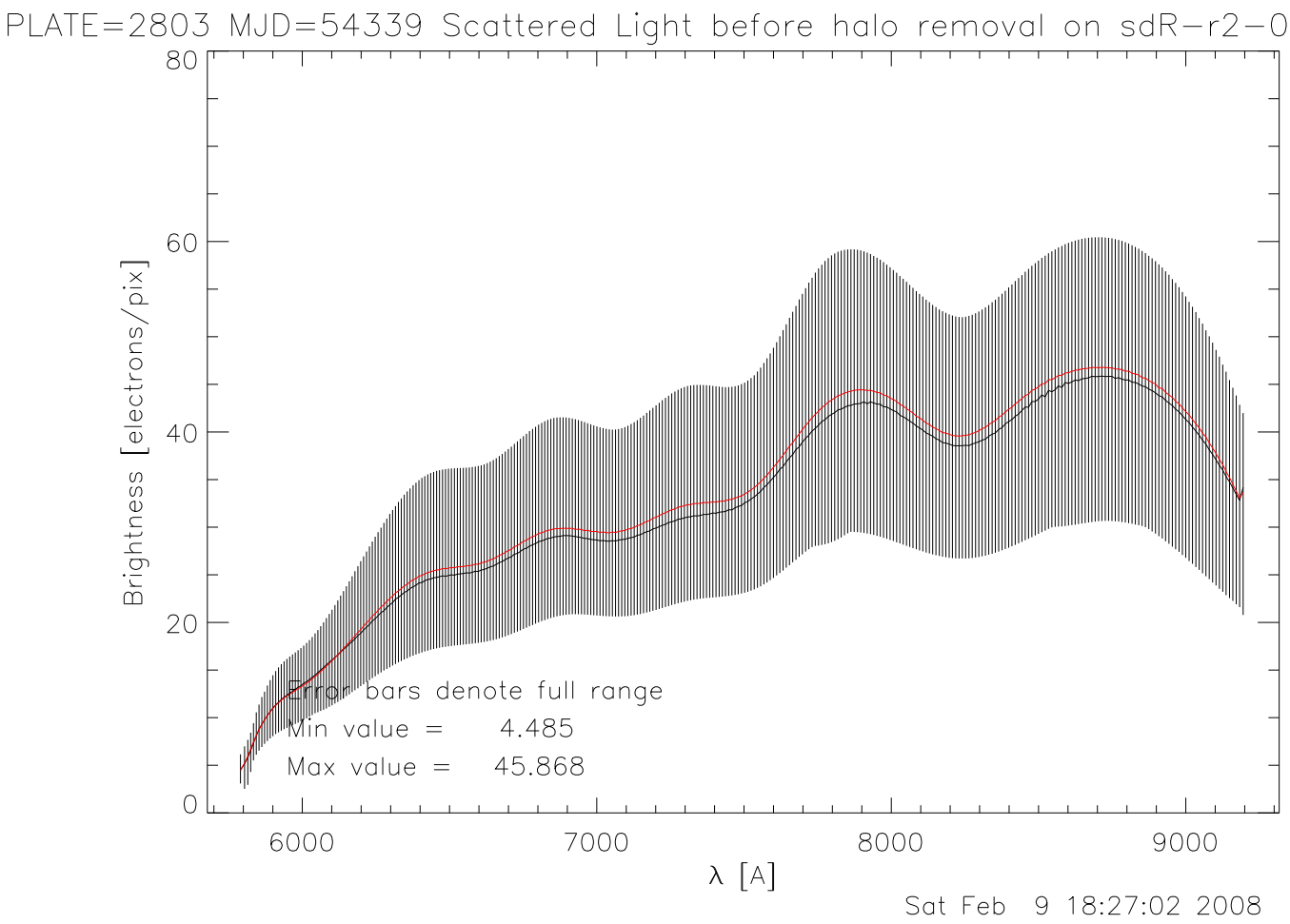

Number of sky fibers = 15
PLATE=2803 MJD=54339 sdR-r2-00046167.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

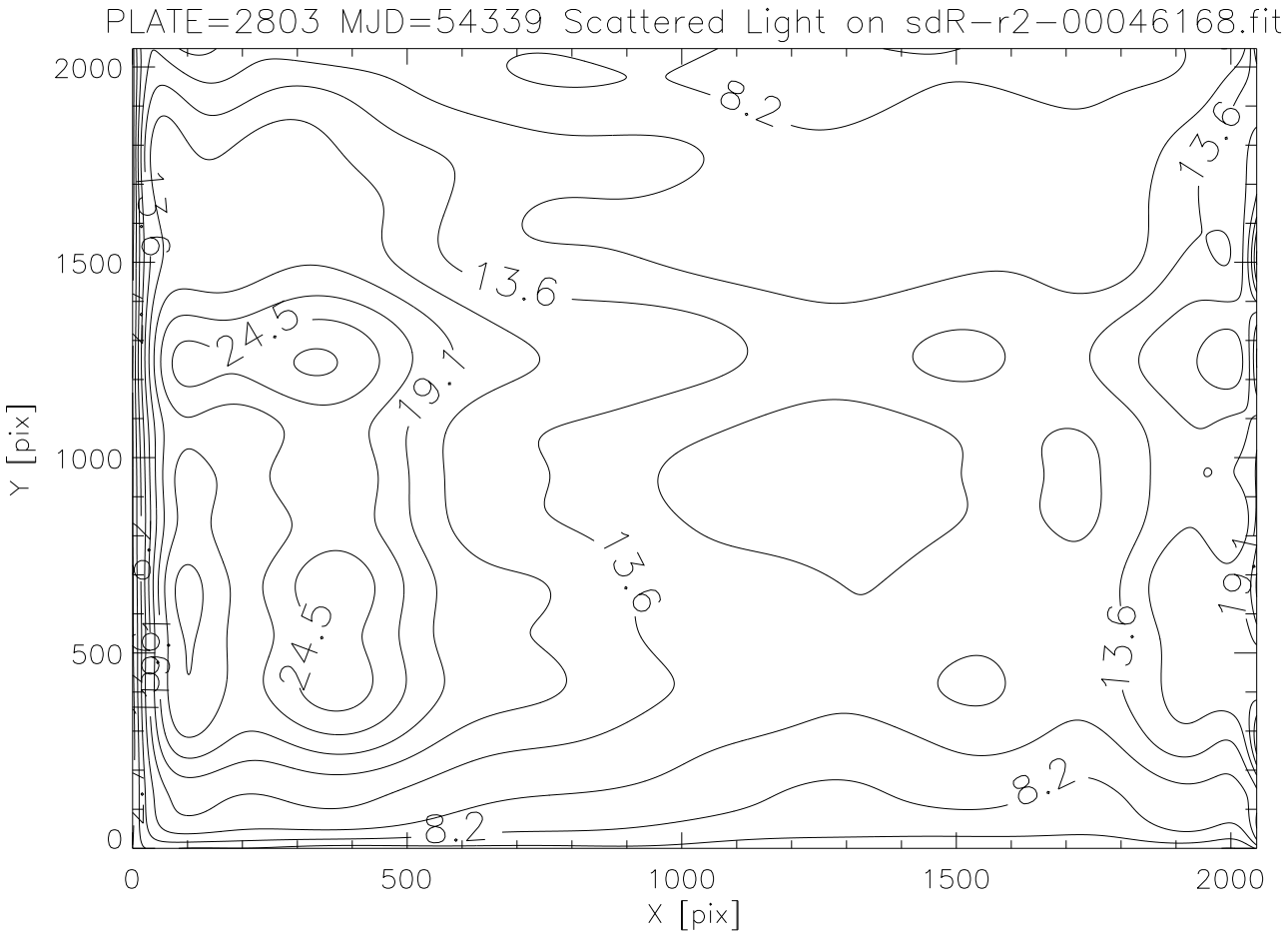

PLATE=2803 MJD=54339 sdR-r2-00046167.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.27 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

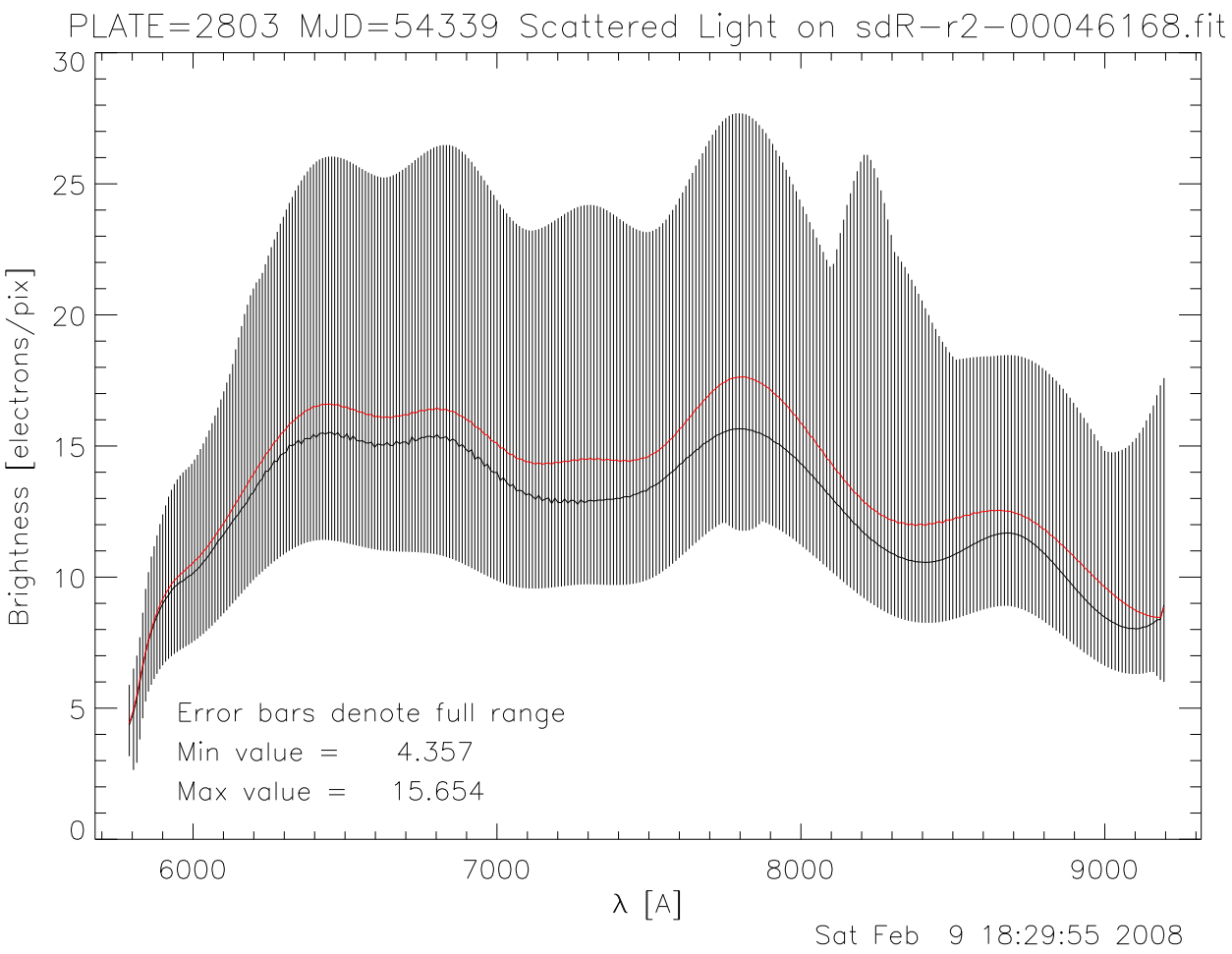

PLATE=2803 MJD=54339 sdR-r2-00046167.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.90 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

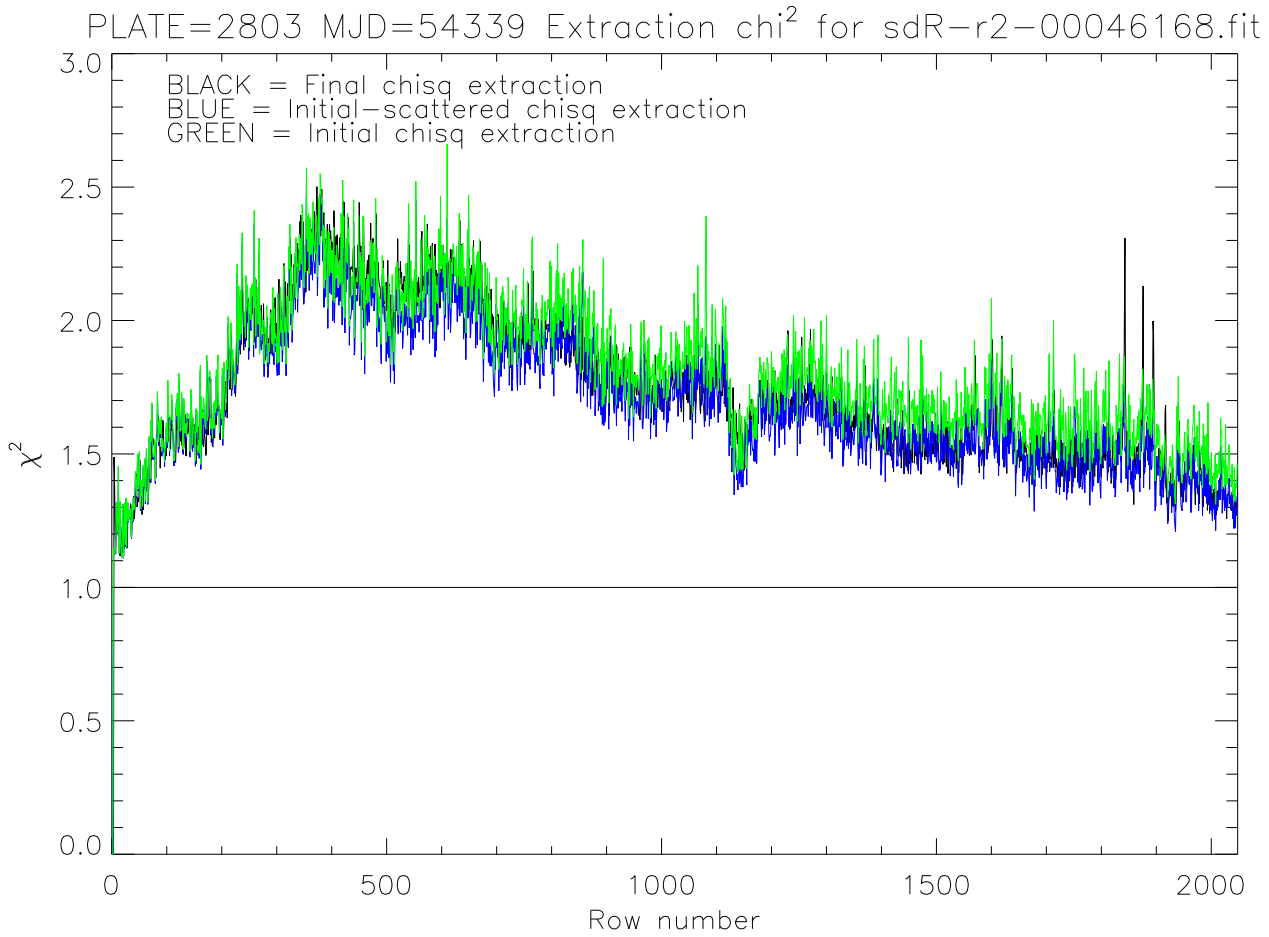

PLATE=2803 MJD=54339 Fiber-Flats for sdR-r2-00046169.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.719
Max value = 1.216
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 9 18:26:16 2008

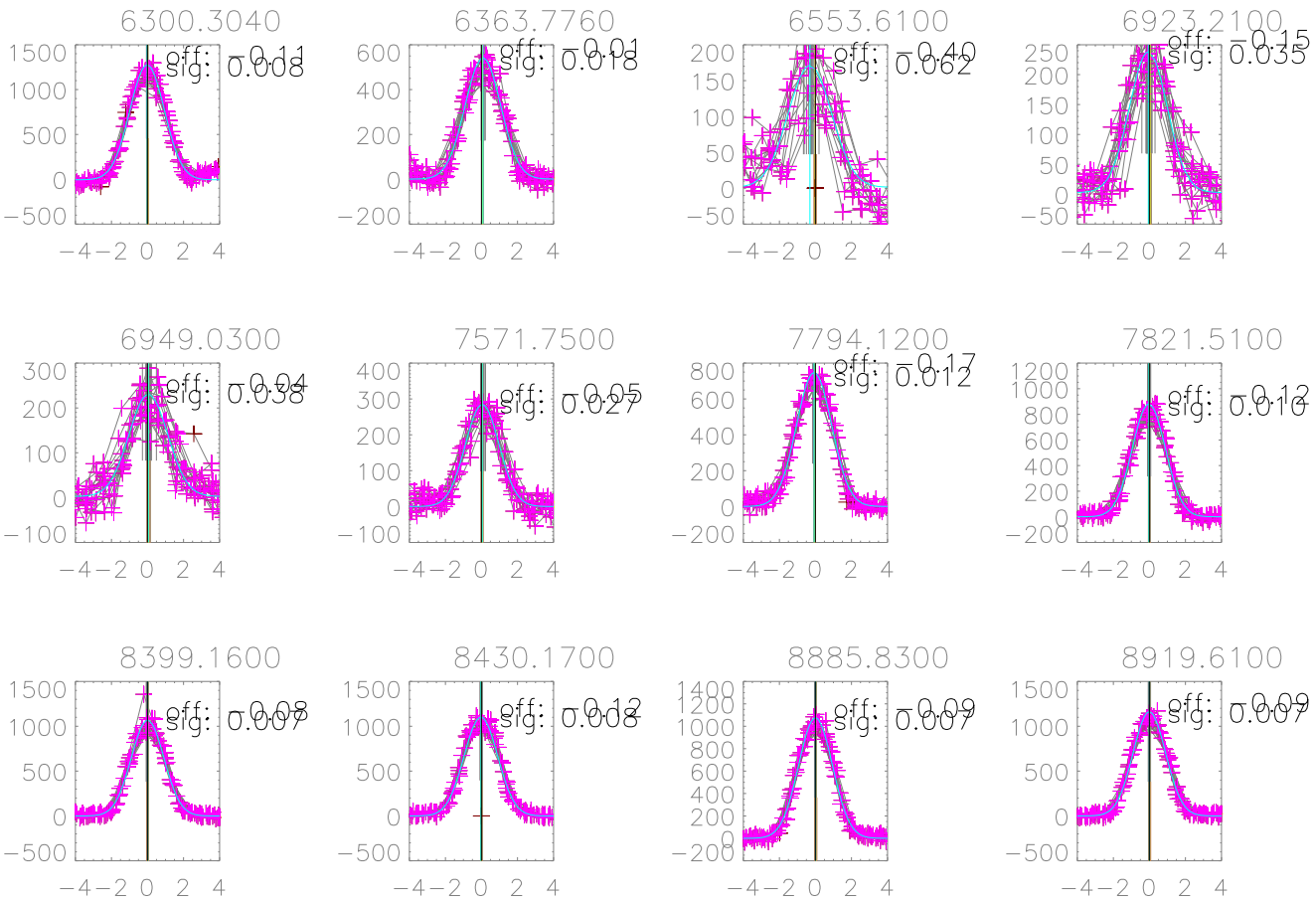

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-r2-00046168.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
36.4
50.9
21.8
7.3

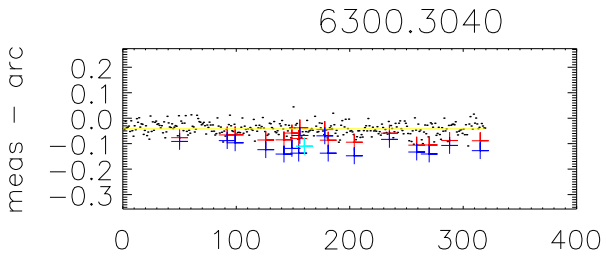

PLATE=2803 MJD=54339 Scattered Light before halo removal on sdR-r2-00046168.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.485
Max value = 45.868
Sat Feb 9 18:27:02 2008

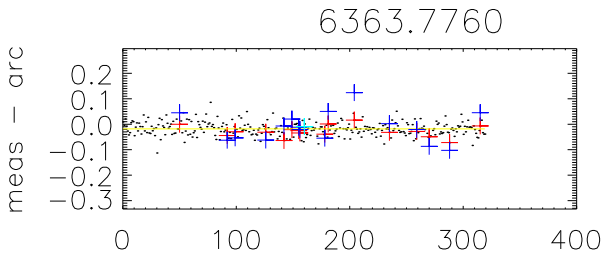

PLATE=2803 MJD=54339 Scattered Light on sdR-r2-00046168.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
13.6
19.1
24.5

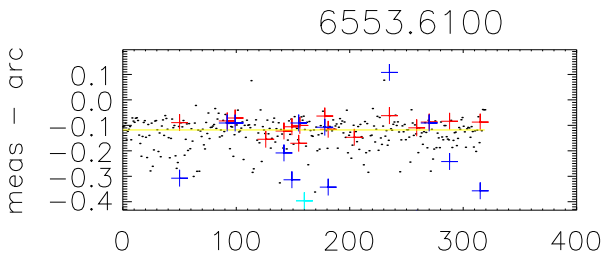

PLATE=2803 MJD=54339 Scattered Light on sdR-r2-00046168.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.357
Max value = 15.654
Sat Feb 9 18:29:55 2008

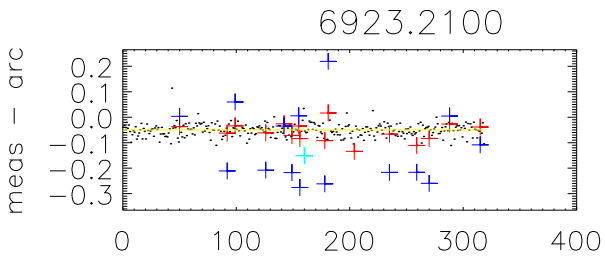

PLATE=2803 MJD=54339 Extraction chi^2 for sdR−r2−00046168.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

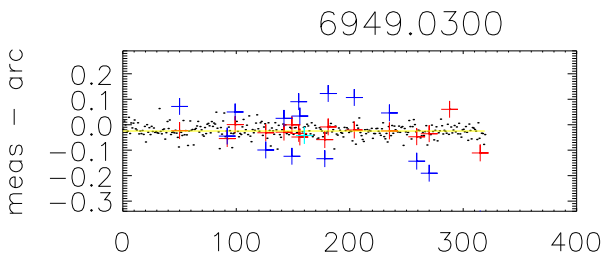

6300.3040
off: −0.11
sig: 0.008
6363.7760
off: −0.01
sig: 0.018
6553.6100
off: −0.40
sig: 0.062
6923.2100
off: −0.15
sig: 0.035
6949.0300
off: −0.04
sig: 0.038
7571.7500
off: −0.05
sig: 0.027
7794.1200
off: −0.17
sig: 0.012
7821.5100
off: −0.12
sig: 0.010
8399.1600
off: −0.08
sig: 0.007
8430.1700
off: −0.12
sig: 0.008
8885.8300
off: −0.09
sig: 0.007
8919.6100
off: −0.09
sig: 0.007

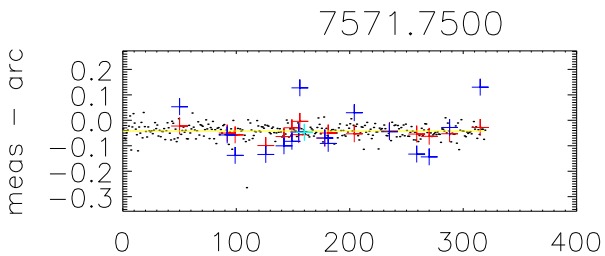

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

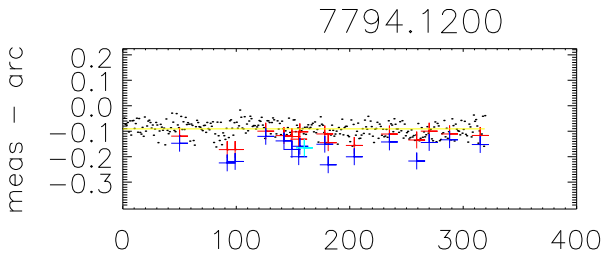

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

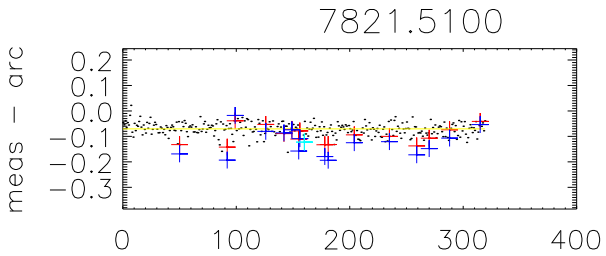

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

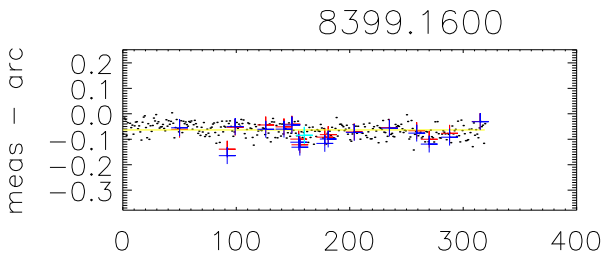

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

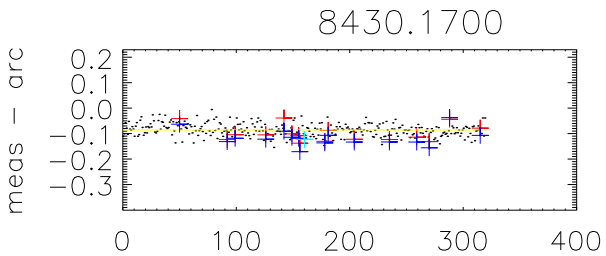

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

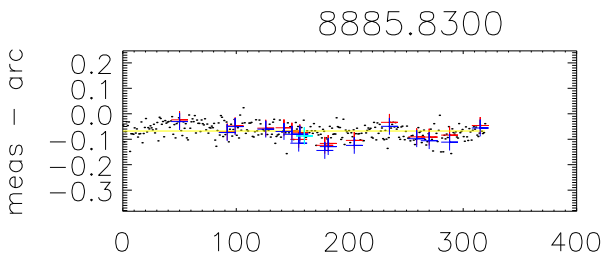

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

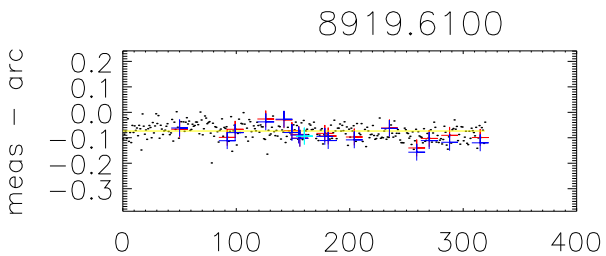

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

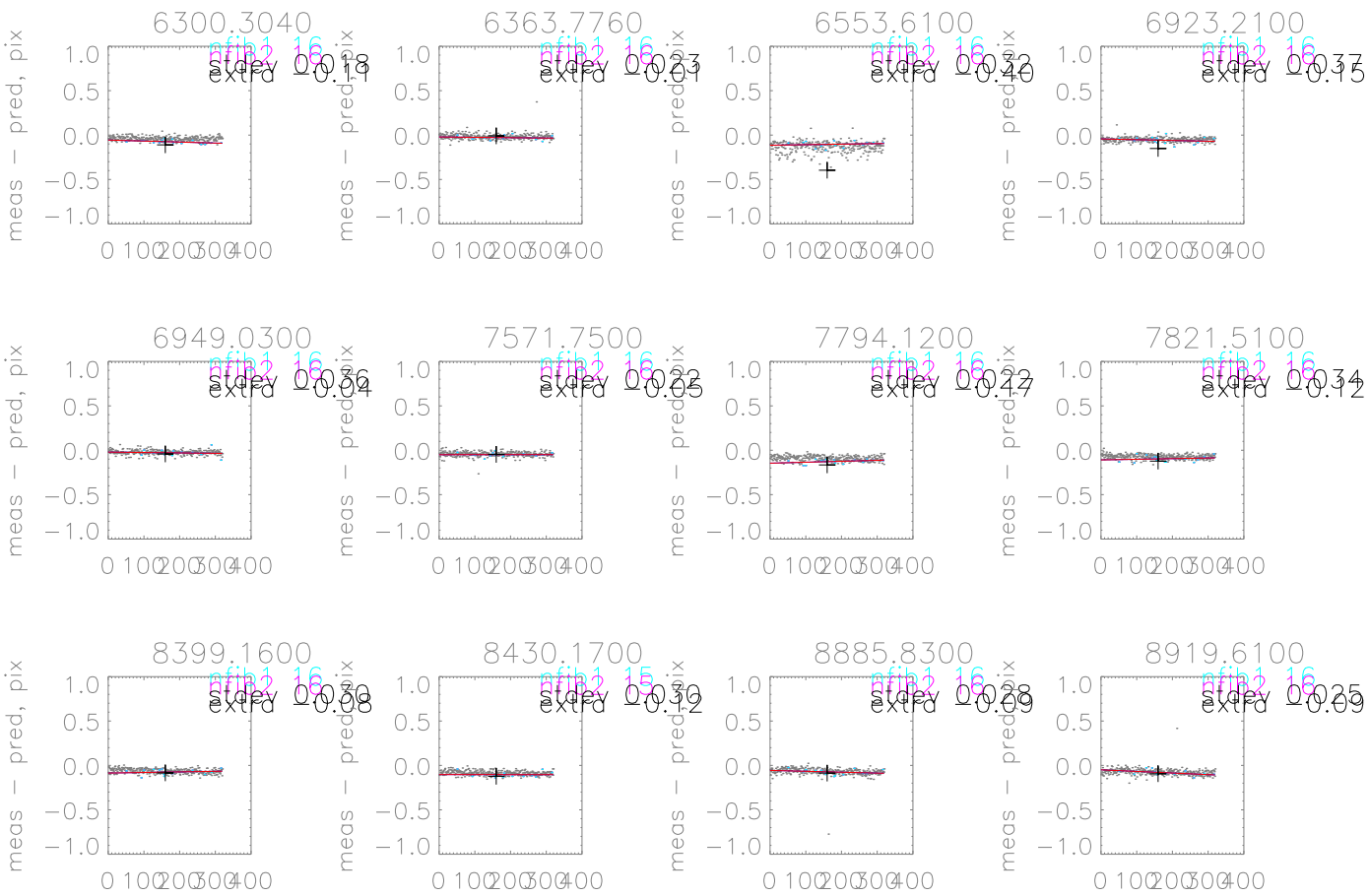

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

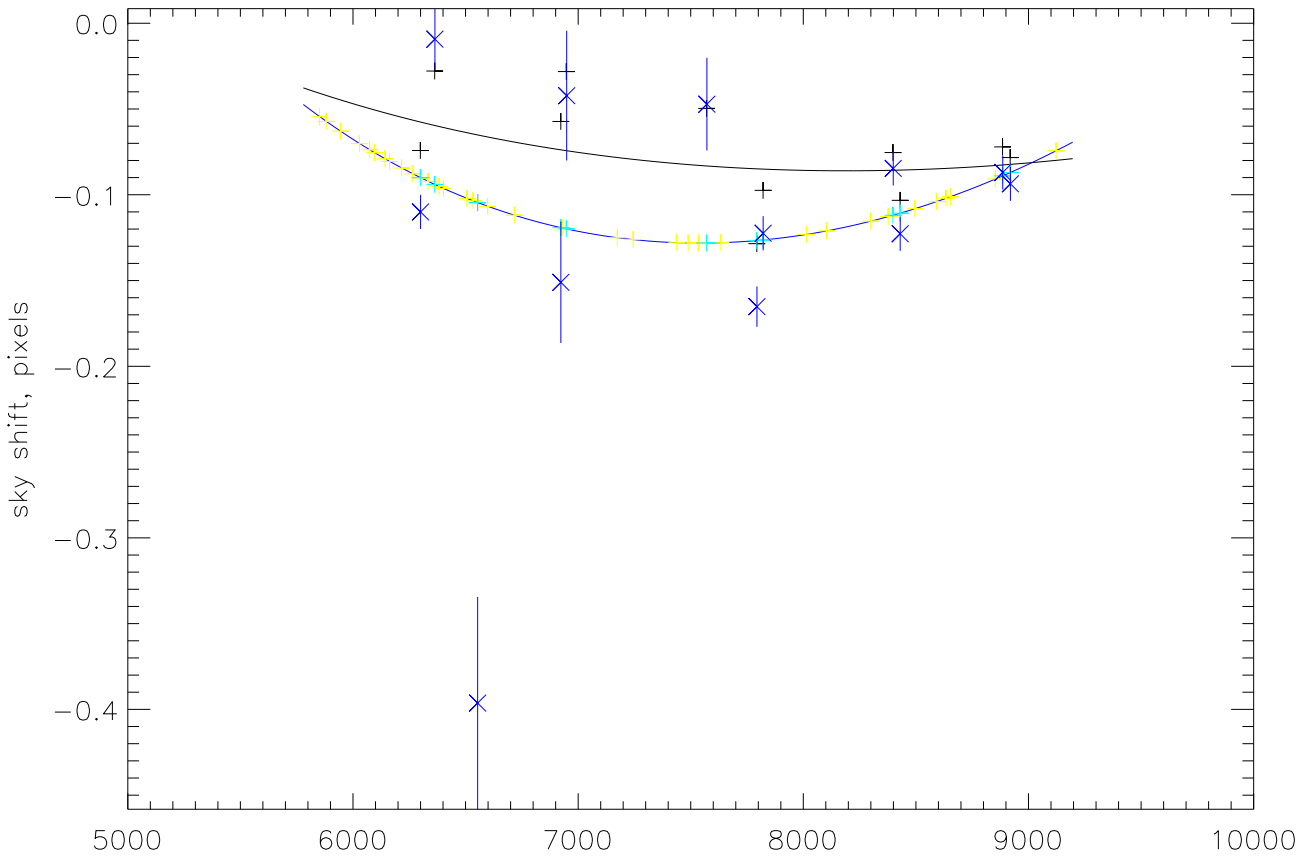

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

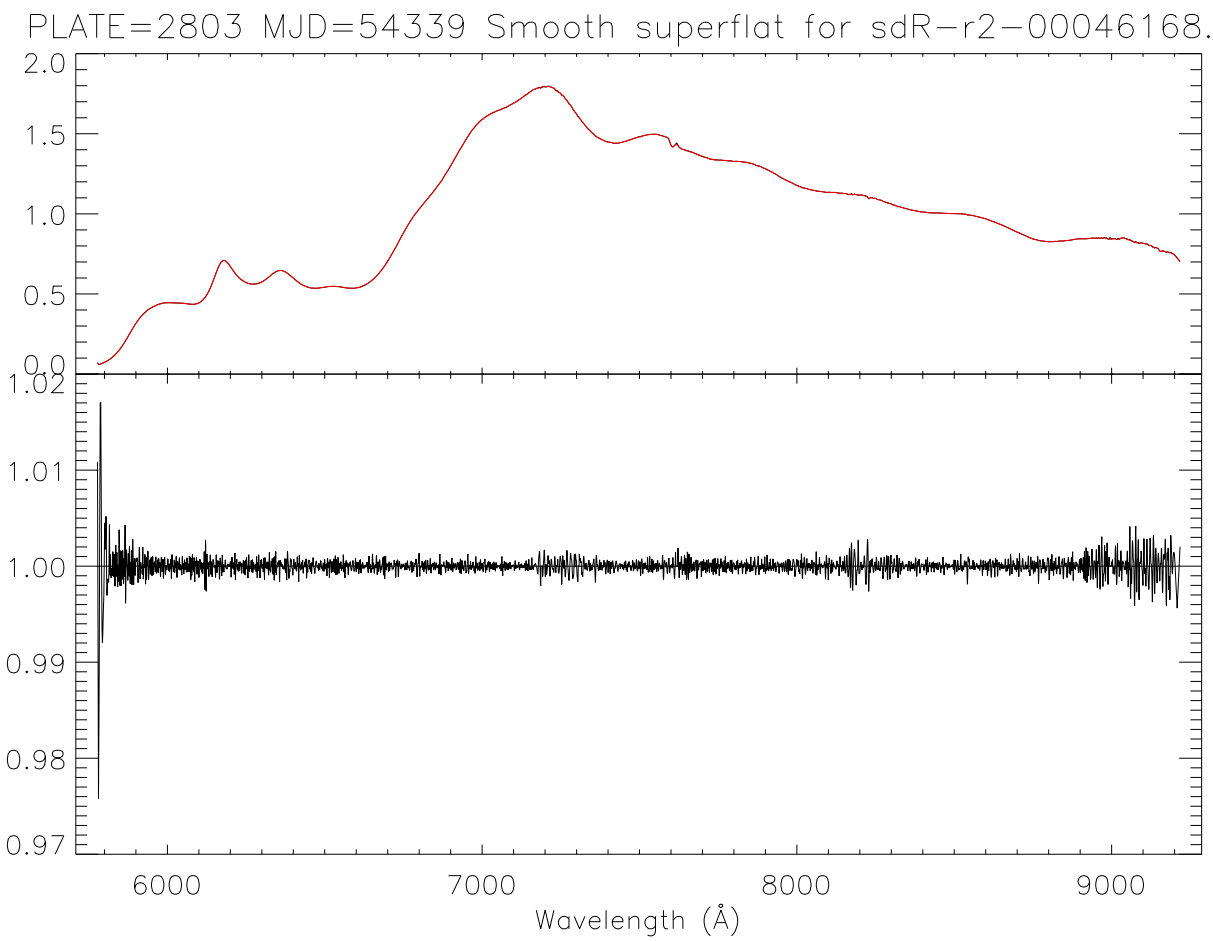

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

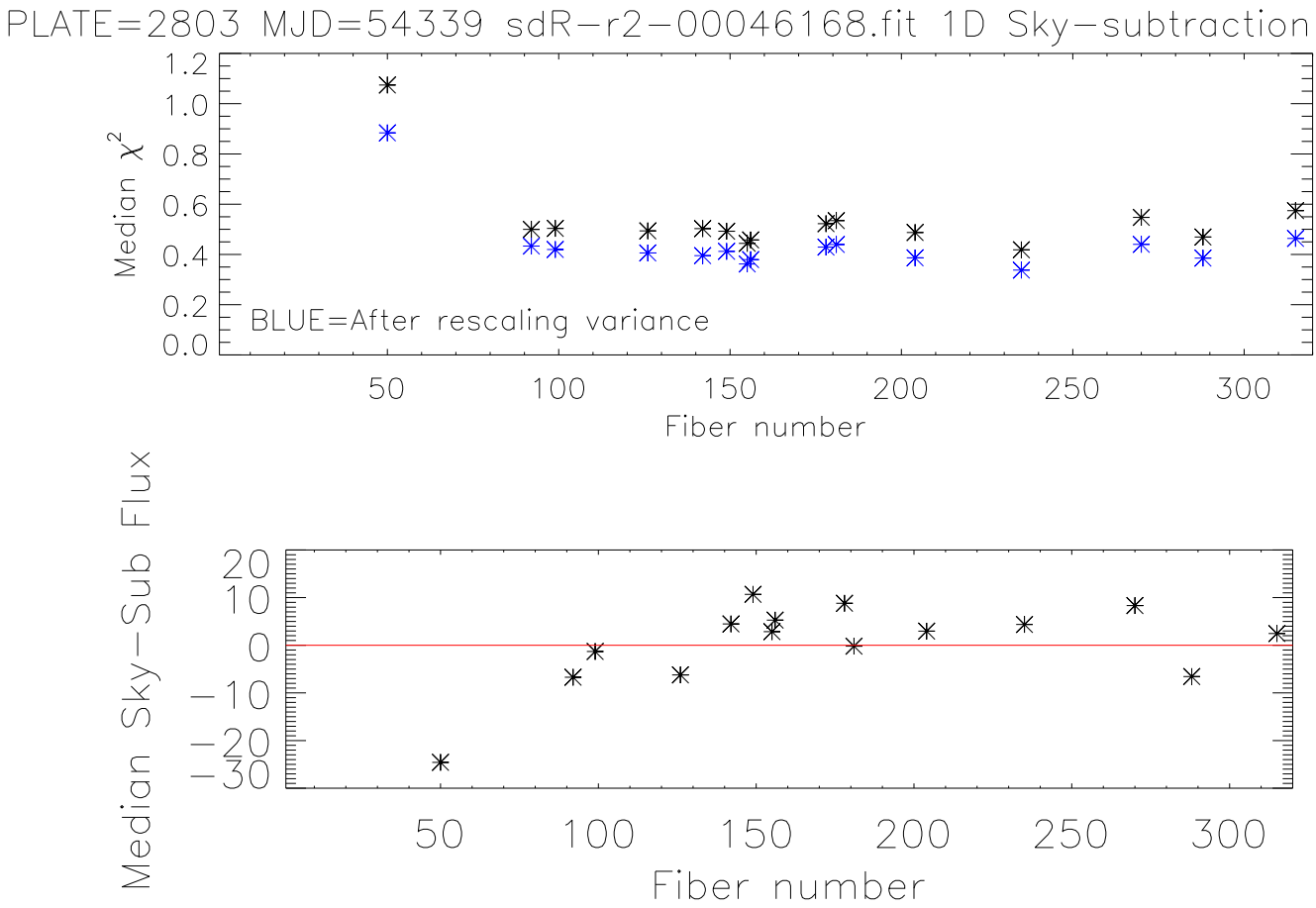

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

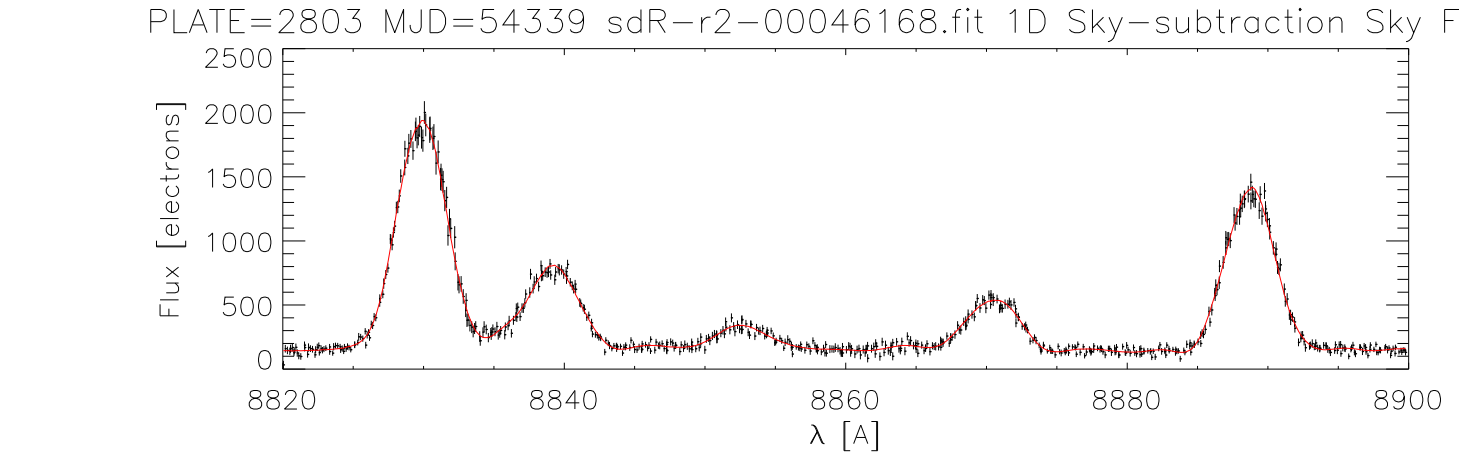

6300.3040
stdev 0.018
extra 0.011
6363.7760
stdev 0.023
extra 0.001
6553.6100
stdev 0.032
extra 0.040
6923.2100
stdev 0.037
extra 0.015
6949.0300
stdev 0.036
extra 0.004
7571.7500
stdev 0.022
extra 0.005
7794.1200
stdev 0.022
extra 0.047
7821.5100
stdev 0.034
extra 0.012
8399.1600
stdev 0.030
extra 0.008
8430.1700
stdev 0.030
extra 0.012
8885.8300
stdev 0.028
extra 0.009
8919.6100
stdev 0.025
extra 0.009
meas − pred, pix
mfib1 16
mfib2 16

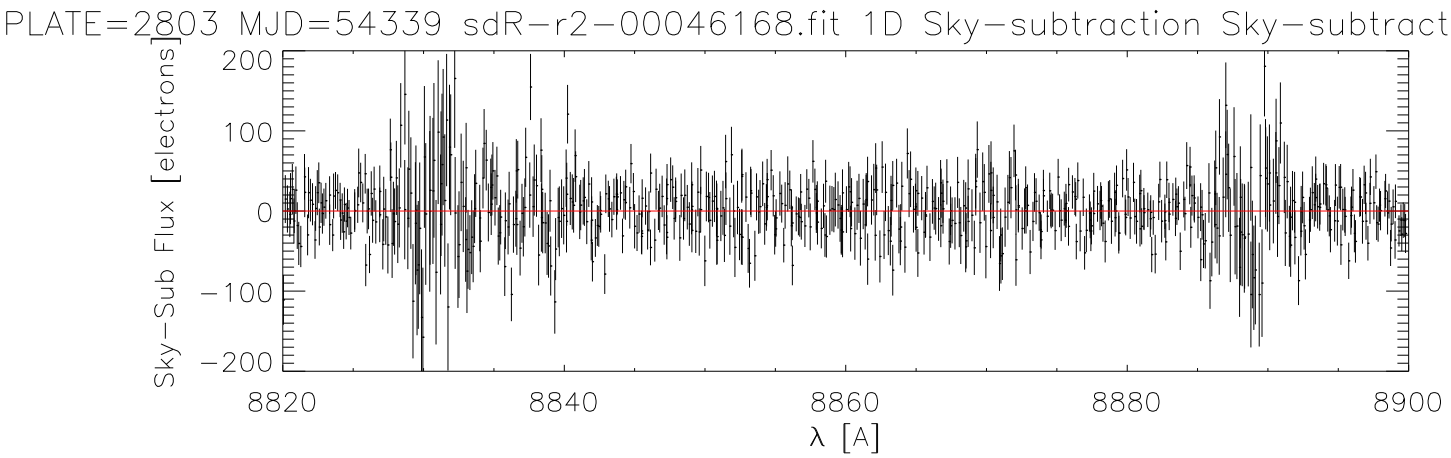

0.0
−0.1
−0.2
−0.3
−0.4
sky shift, pixels
5000
6000
7000
8000
9000
10000

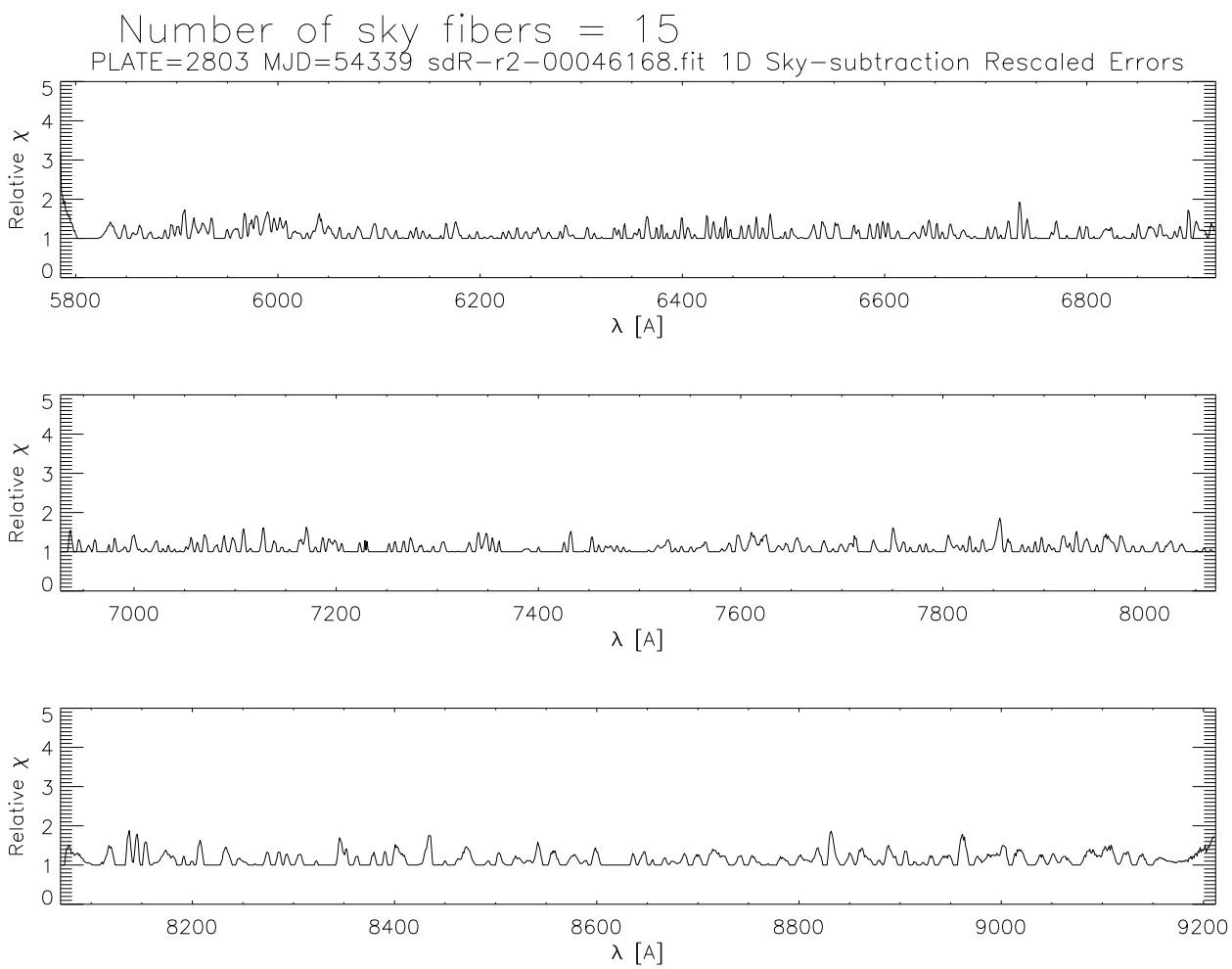
es= 0.0000

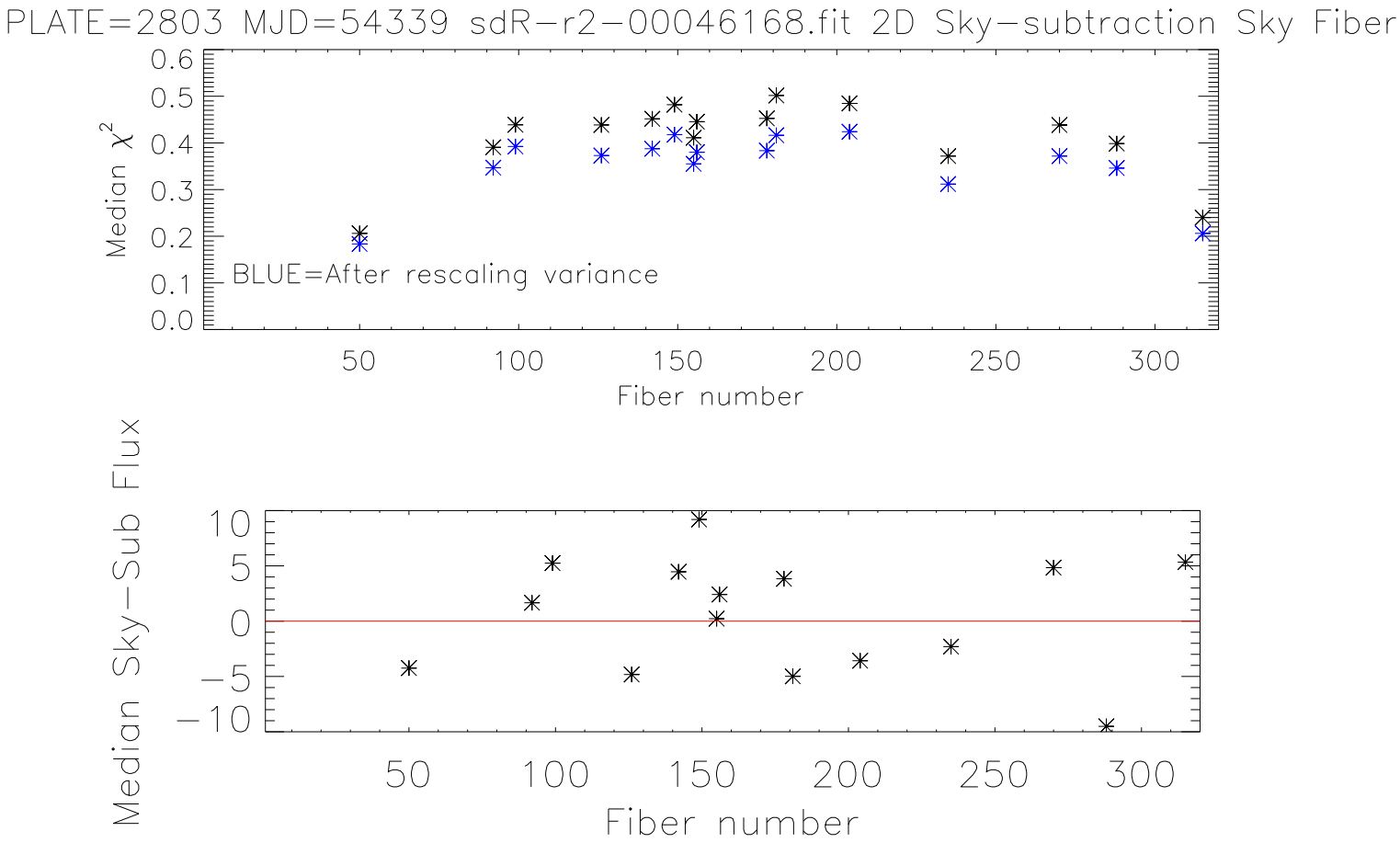

PLATE=2803 MJD=54339 Smooth superflat for sdR-r2-00046168.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

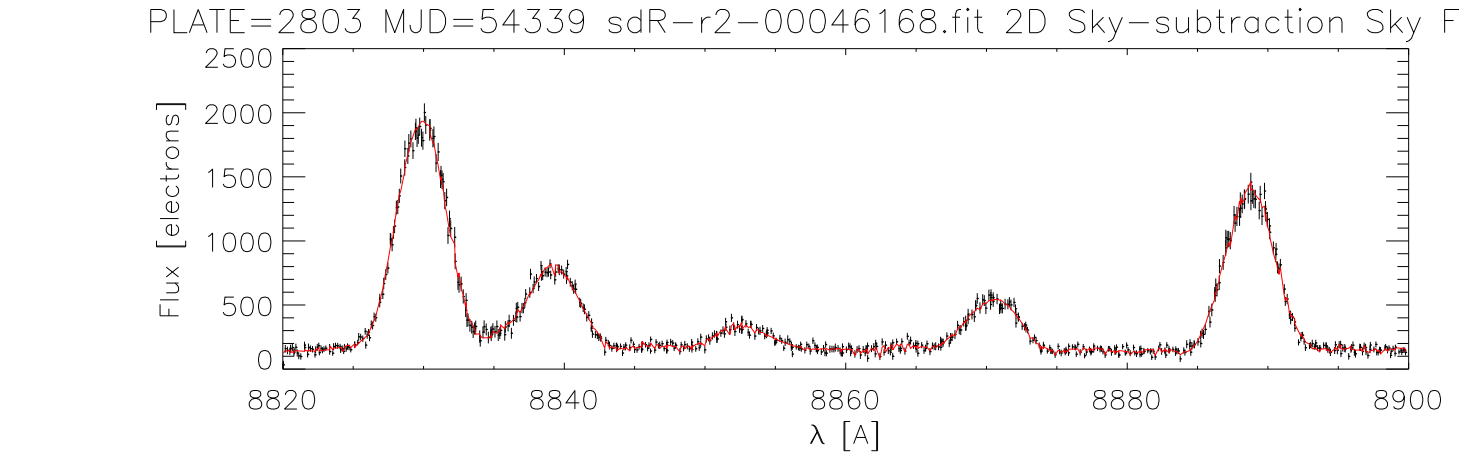

PLATE=2803 MJD=54339 sdR-r2-00046168.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

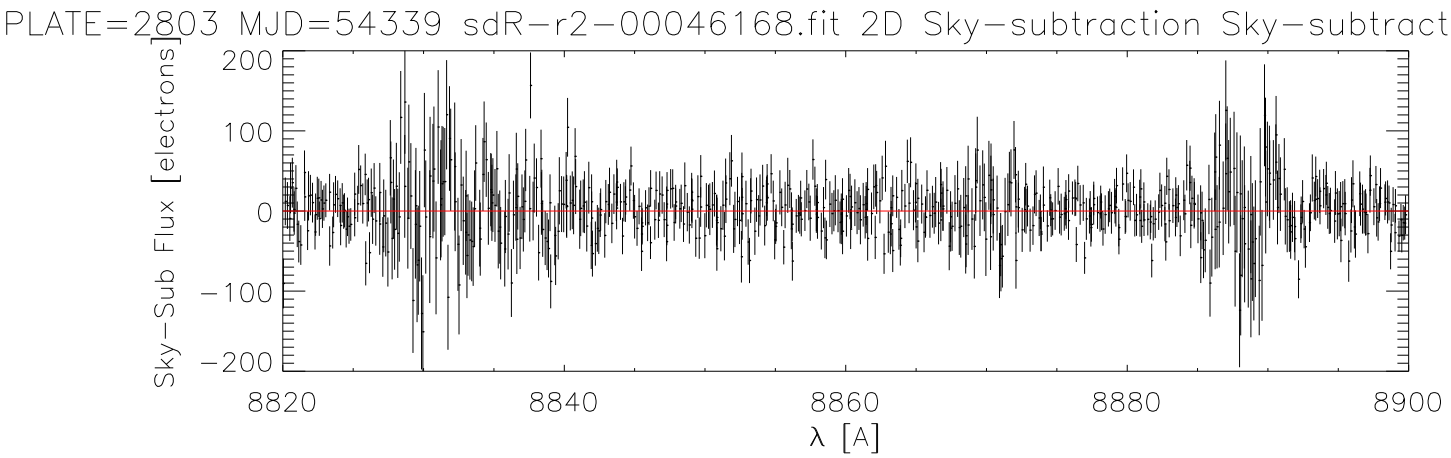

PLATE=2803 MJD=54339 sdR-r2-00046168.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

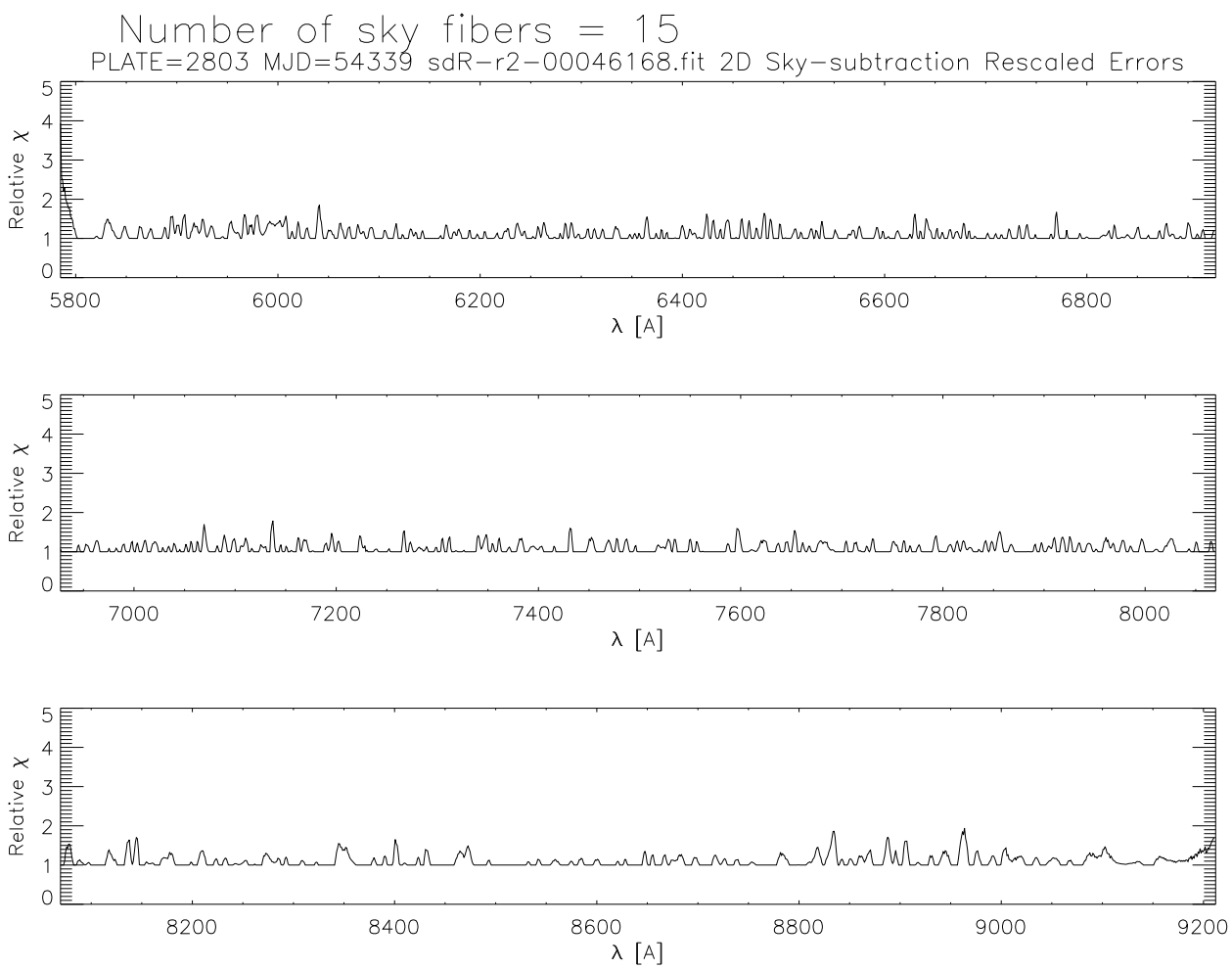

PLATE=2803 MJD=54339 sdR-r2-00046168.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

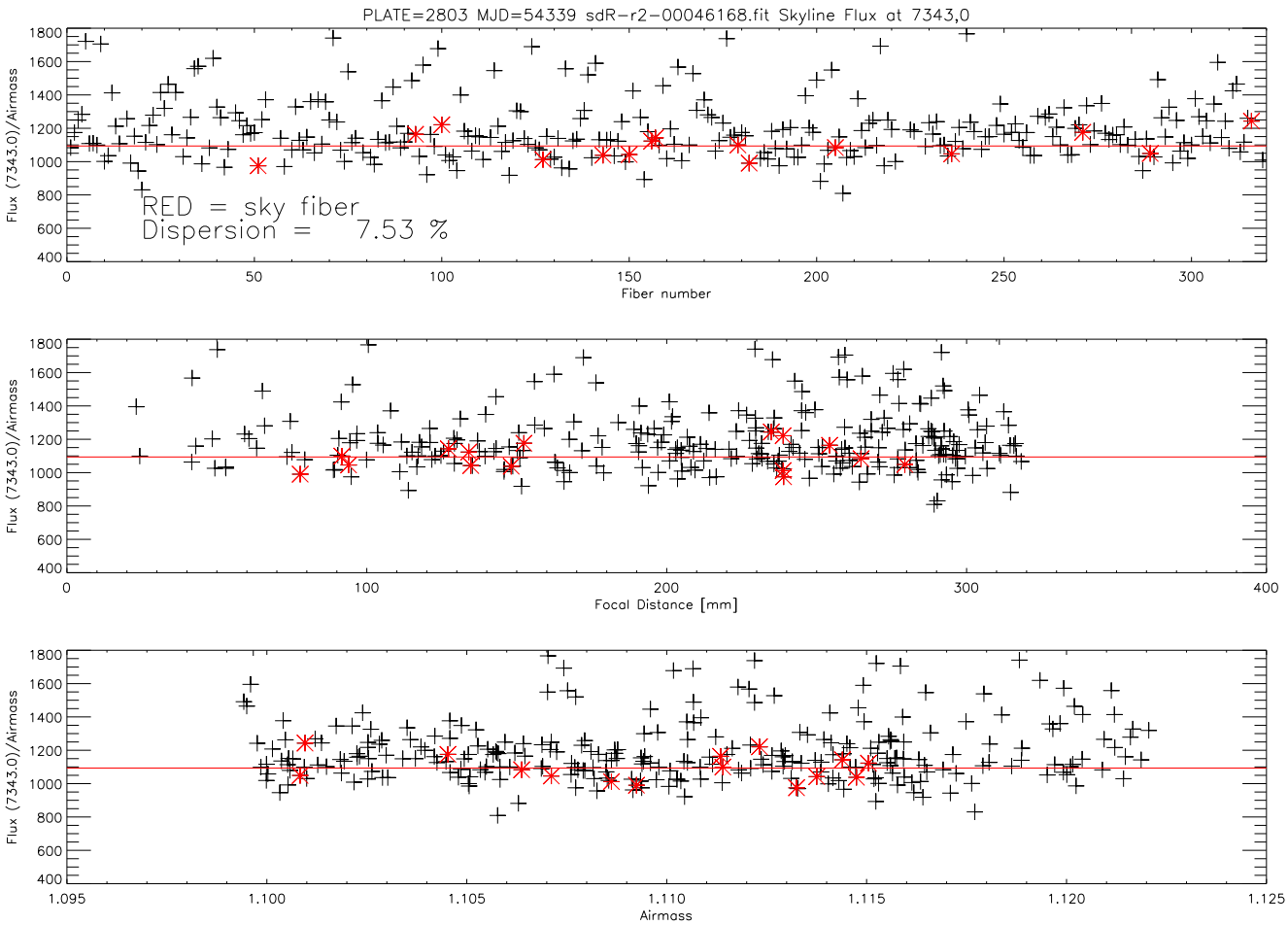

Number of sky fibers = 15
PLATE=2803 MJD=54339 sdR-r2-00046168.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

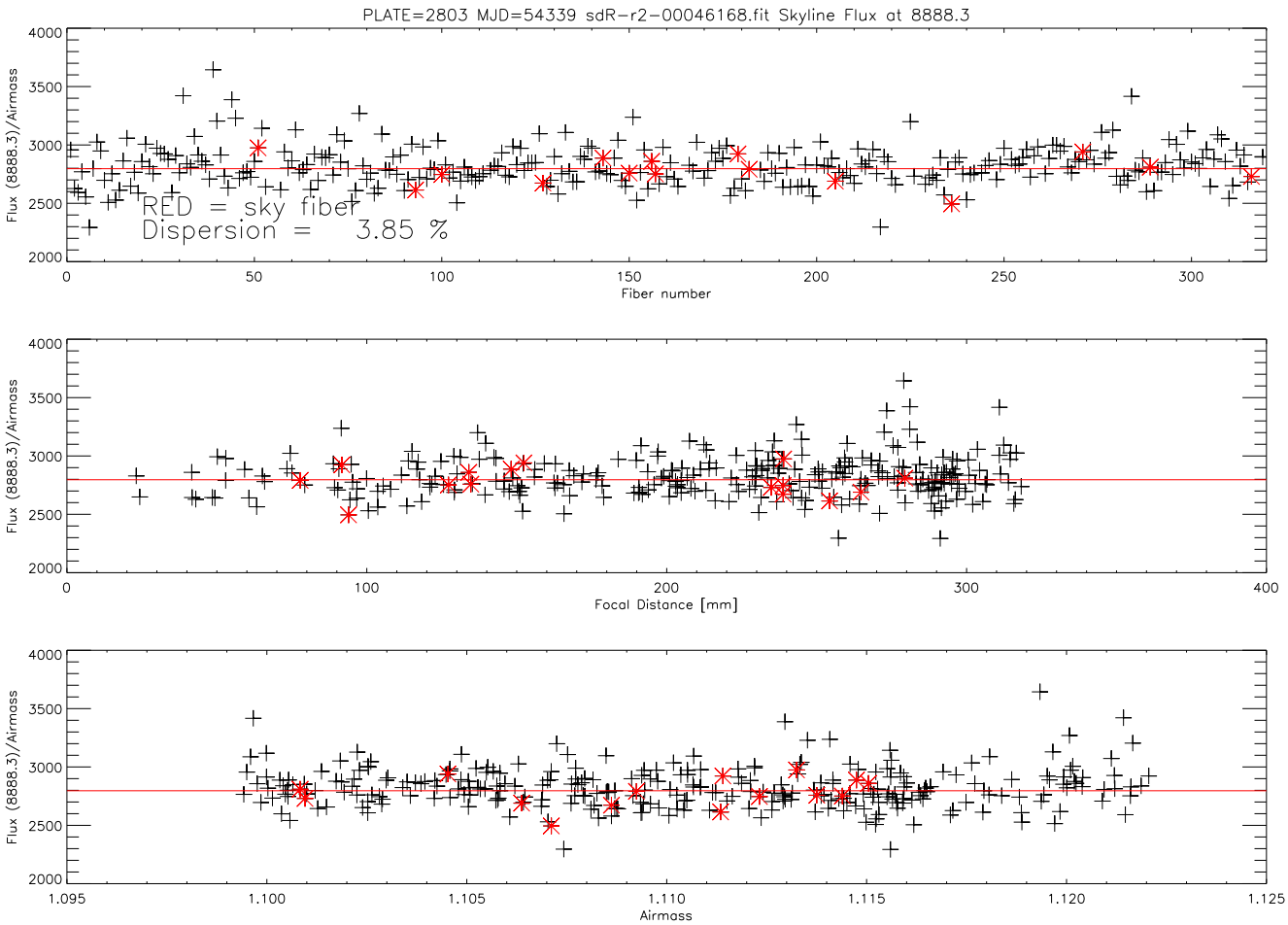

PLATE=2803 MJD=54339 sdR-r2-00046168.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=2803 MJD=54339 sdR-r2-00046168.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2803 MJD=54339 sdR-r2-00046168.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=2803 MJD=54339 sdR-r2-00046168.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=2803 MJD=54339 sdR-r2-00046168.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 7.53 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2803 MJD=54339 sdR-r2-00046168.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.85 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass