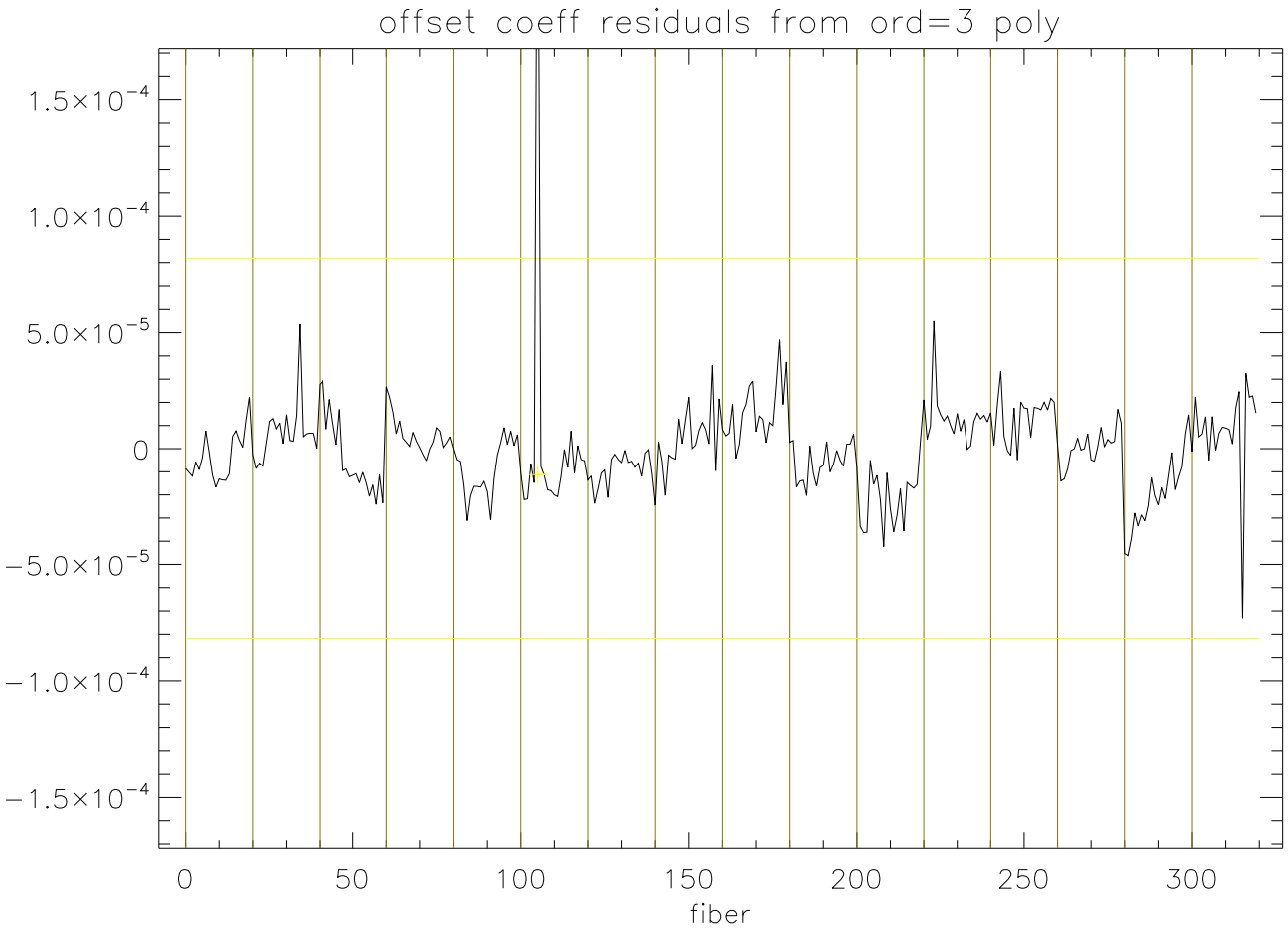
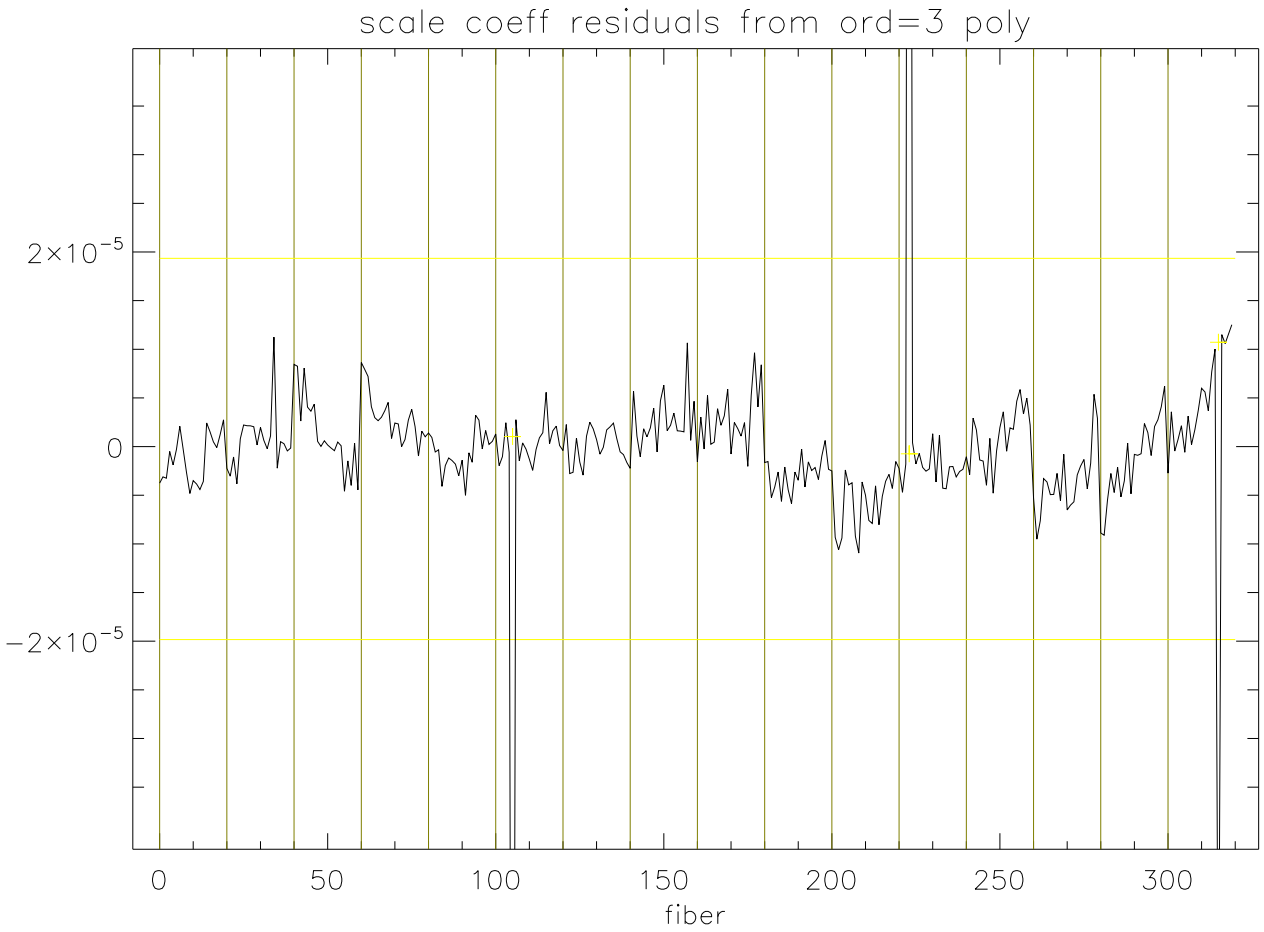
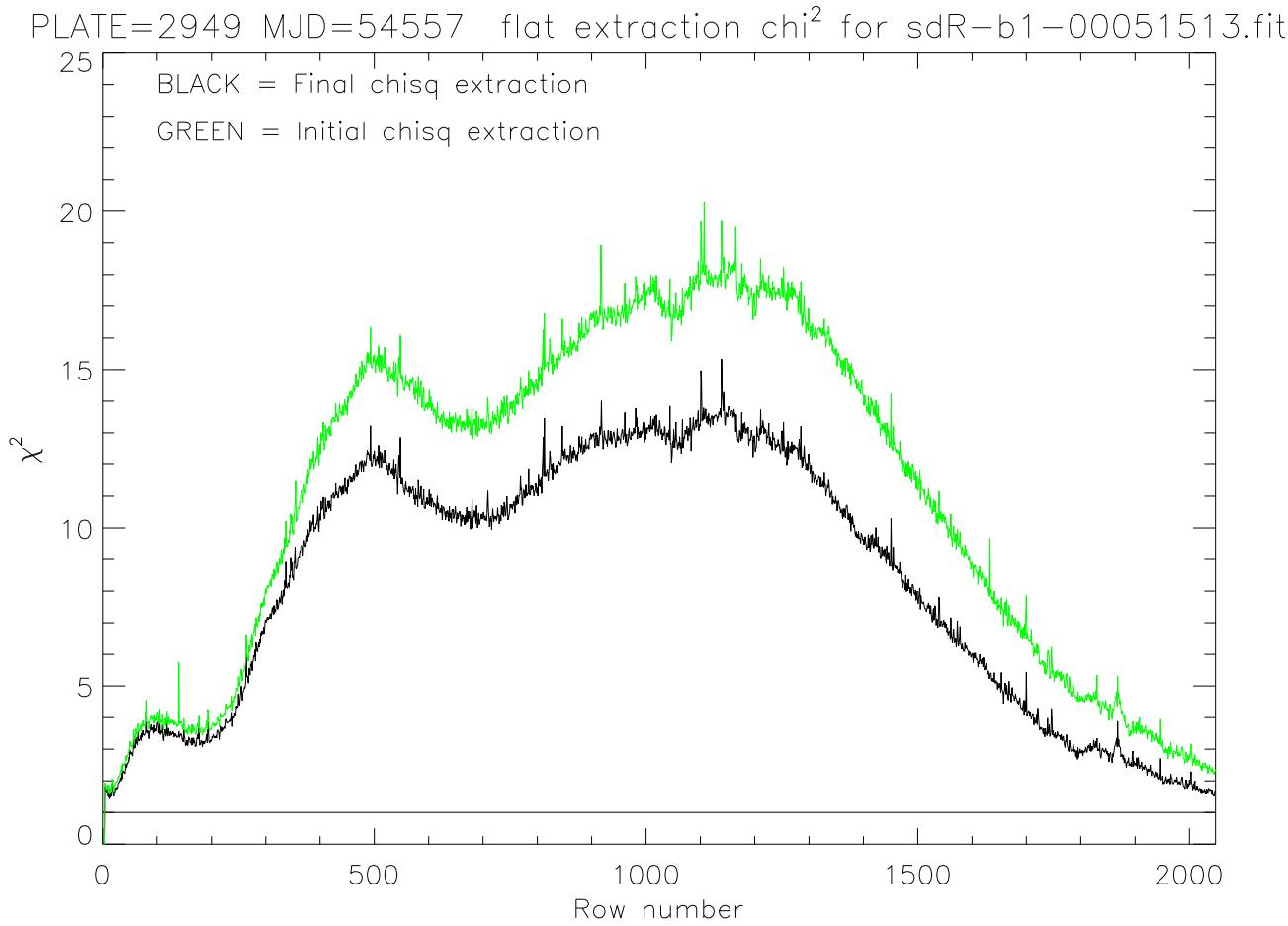
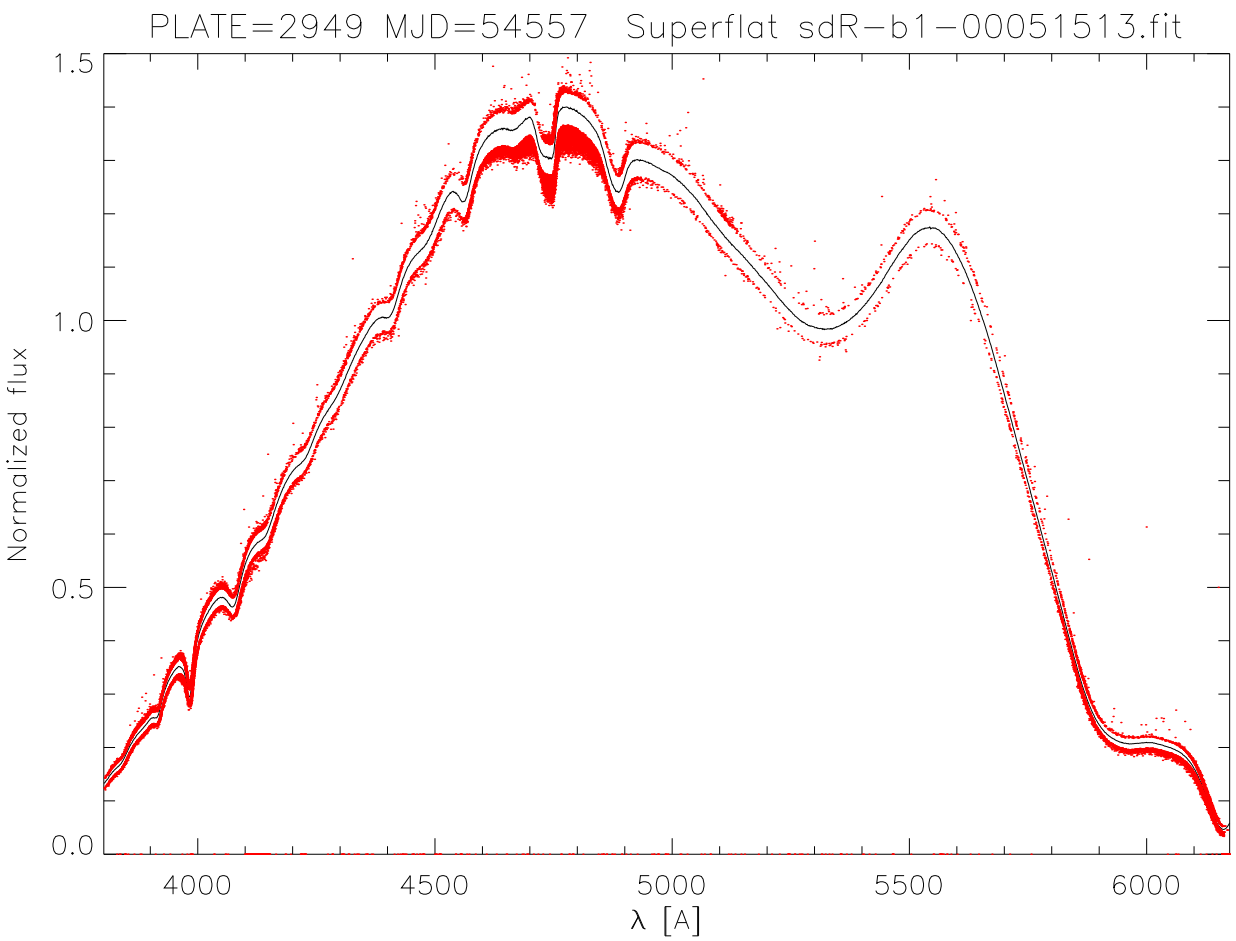
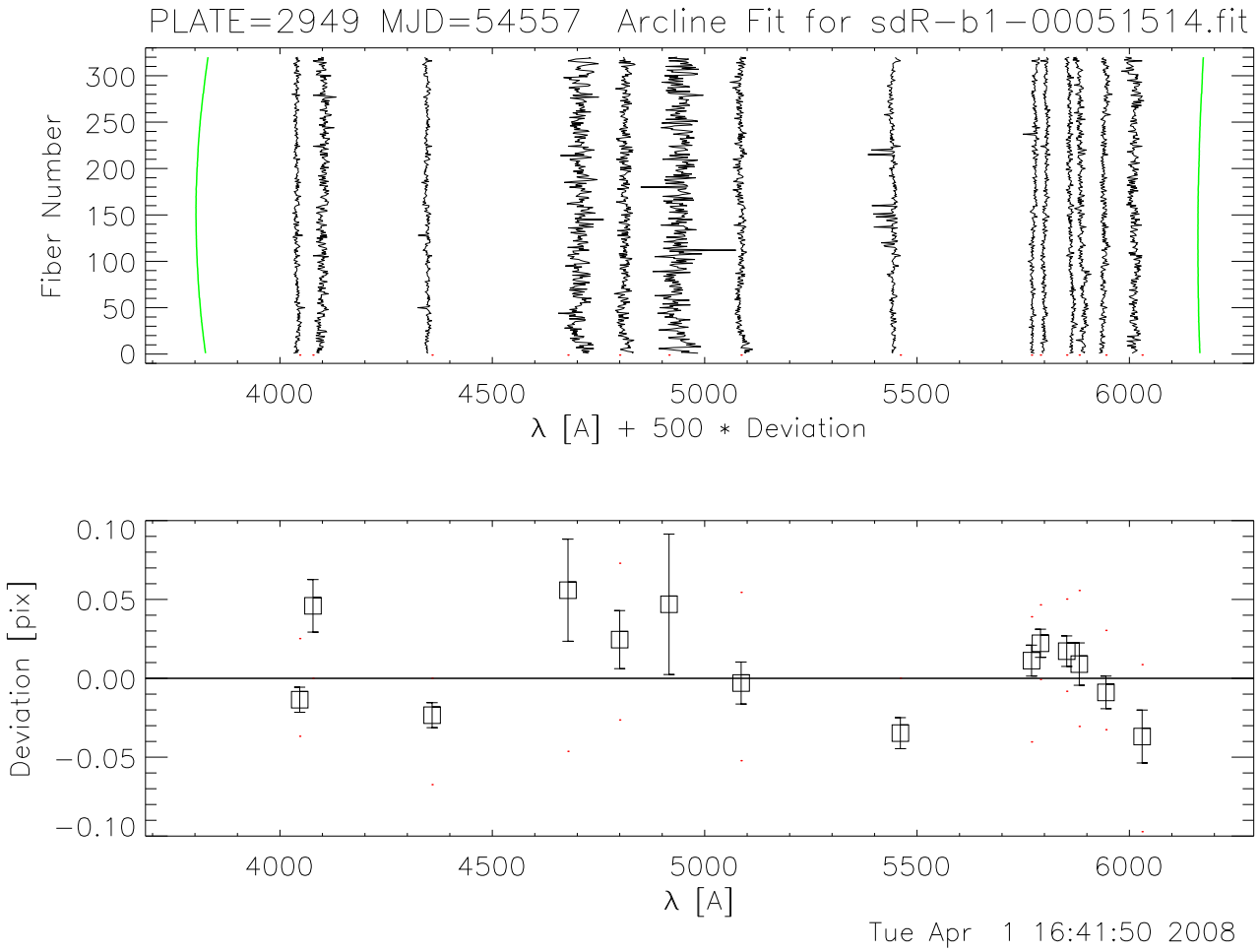
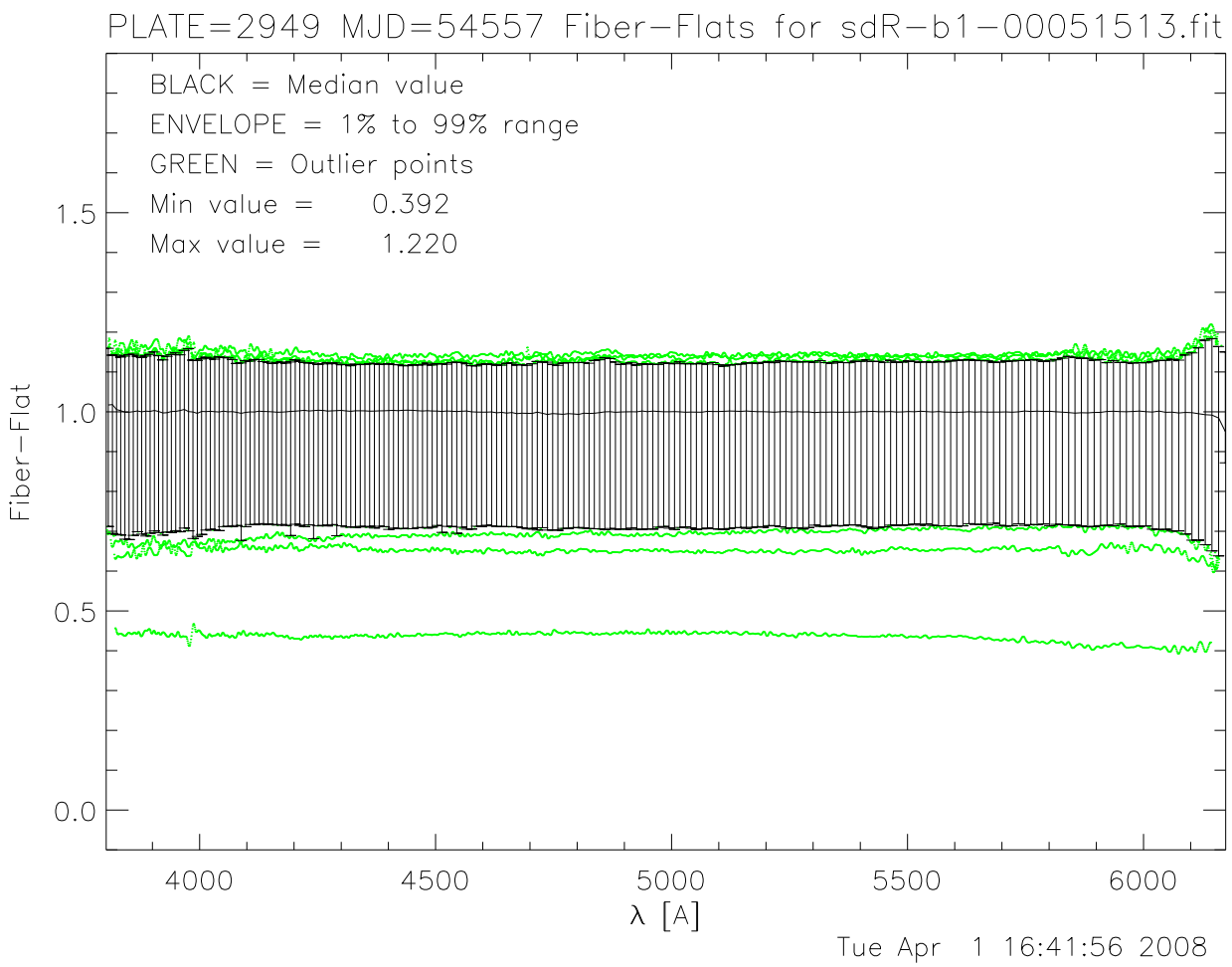

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

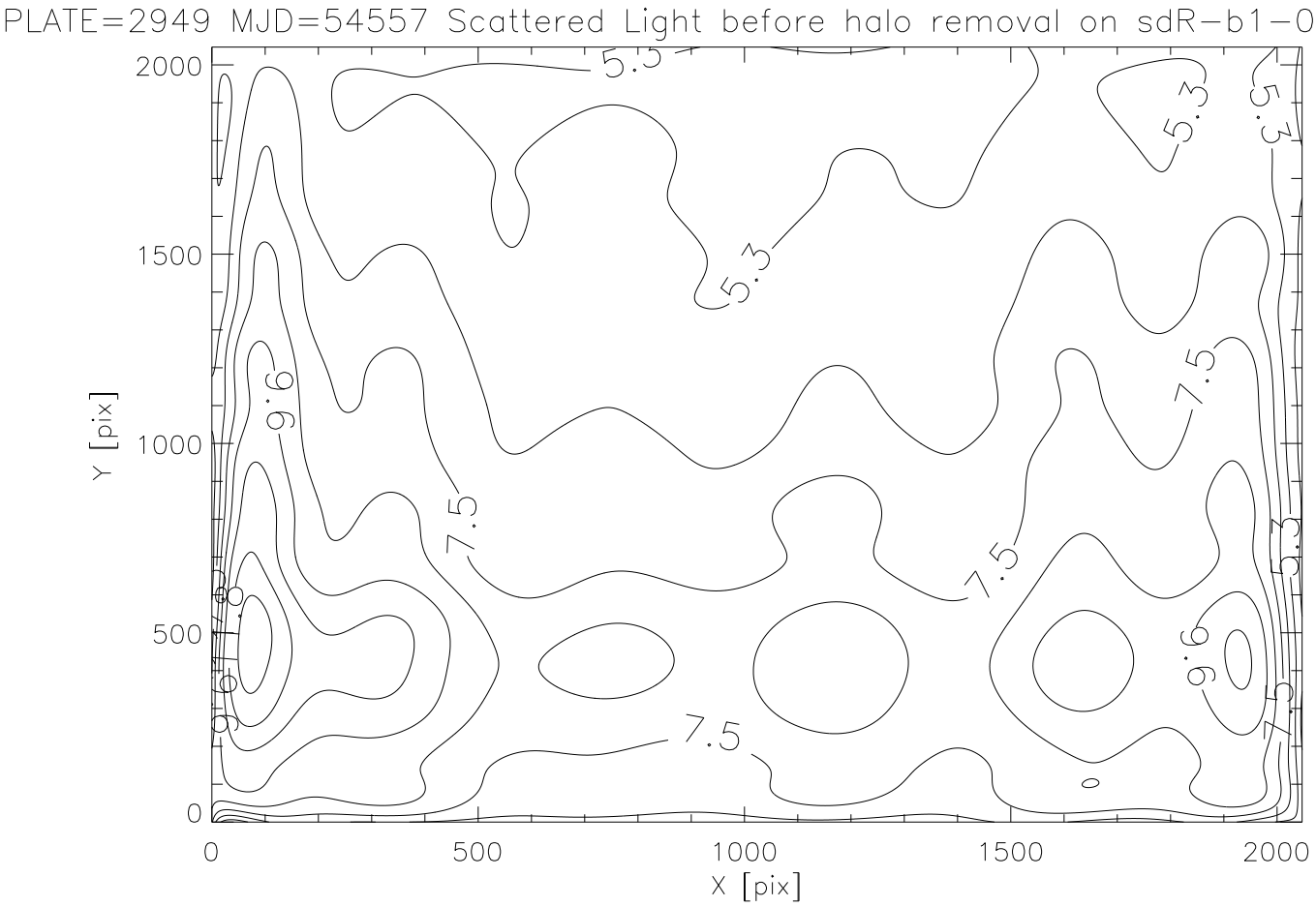

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

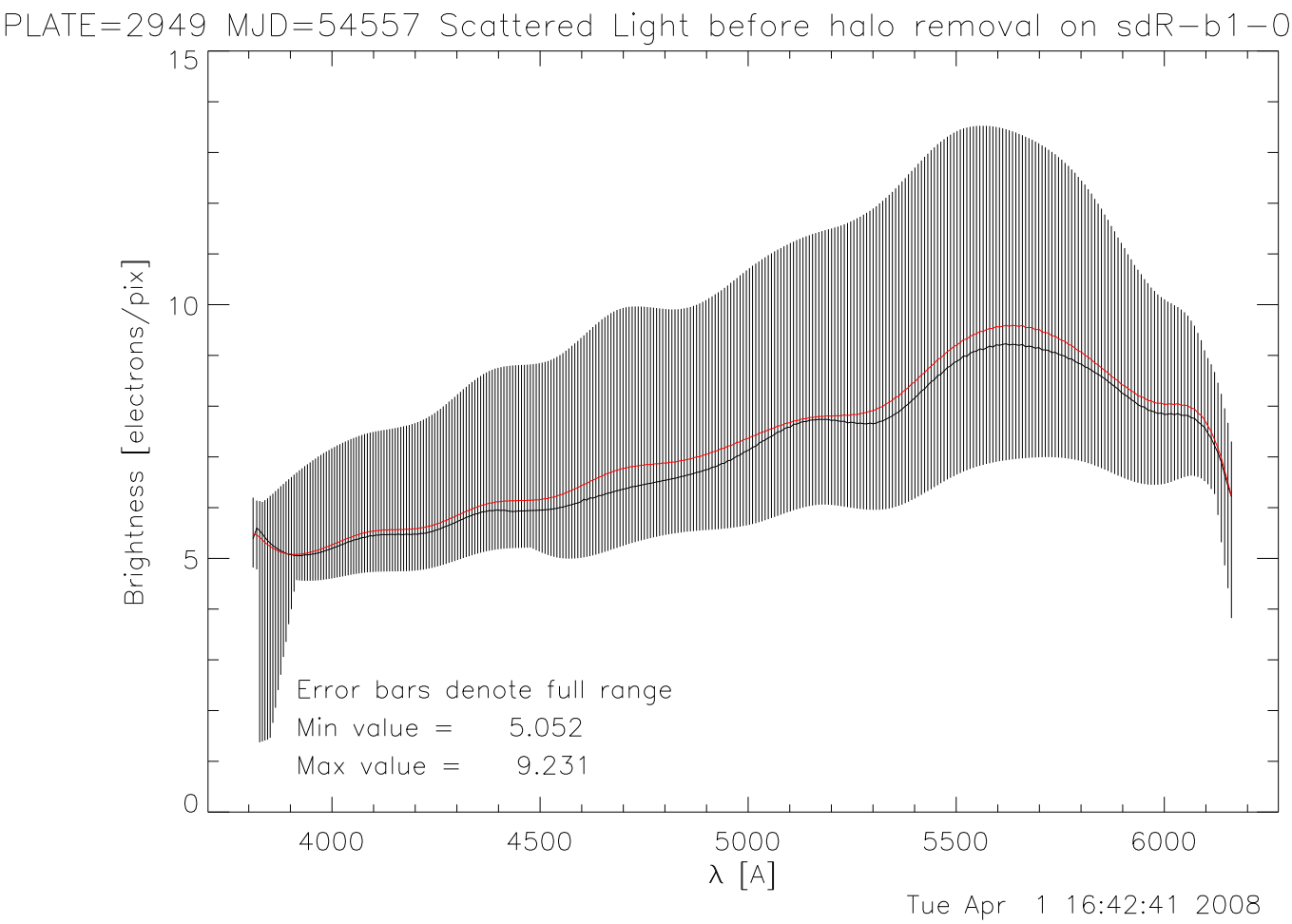

PLATE=2949 MJD=54557 flat extraction chi^2 for sdR−b1−00051513.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

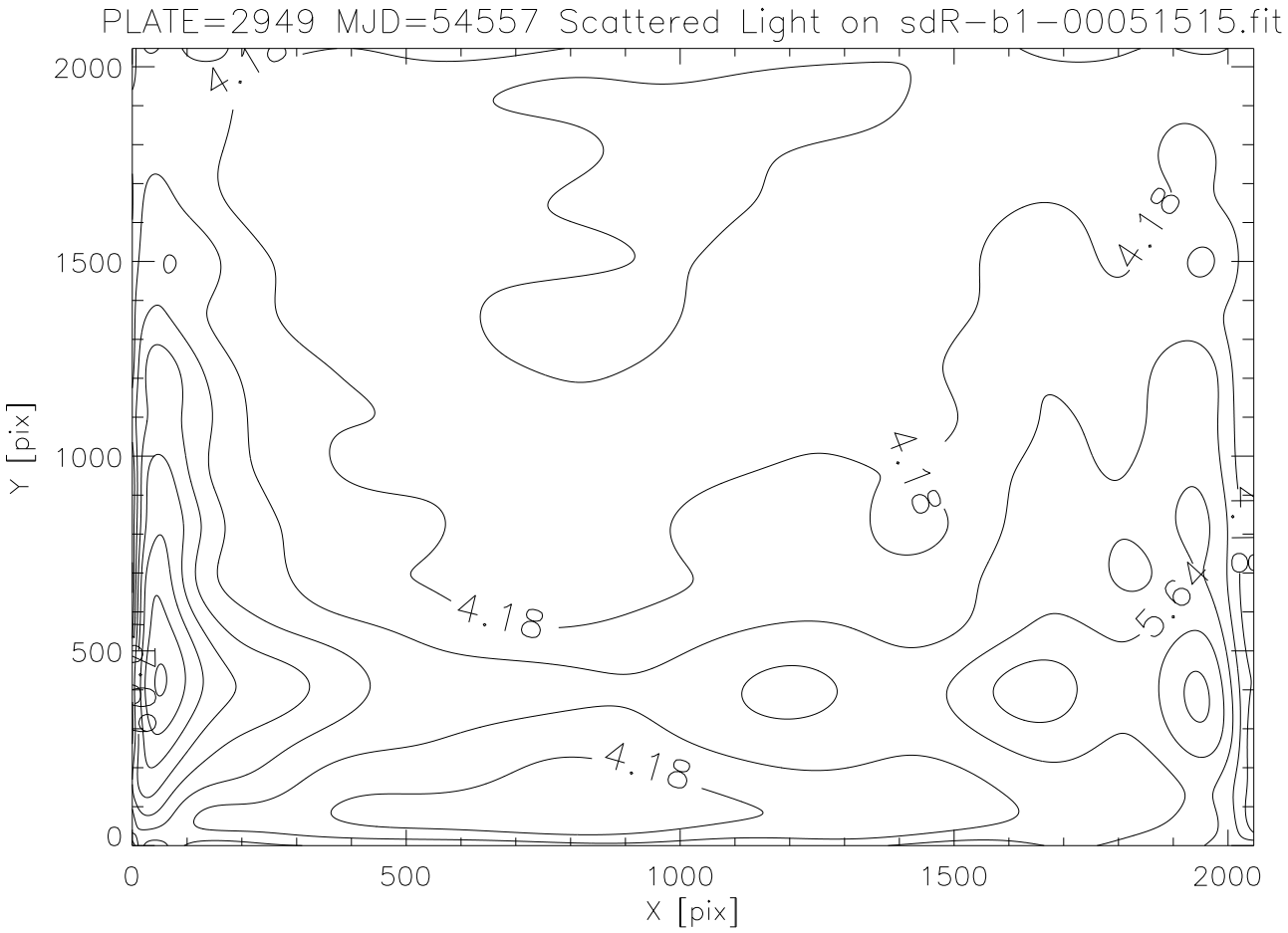

PLATE=2949 MJD=54557 Superflat sdR-b1-00051513.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

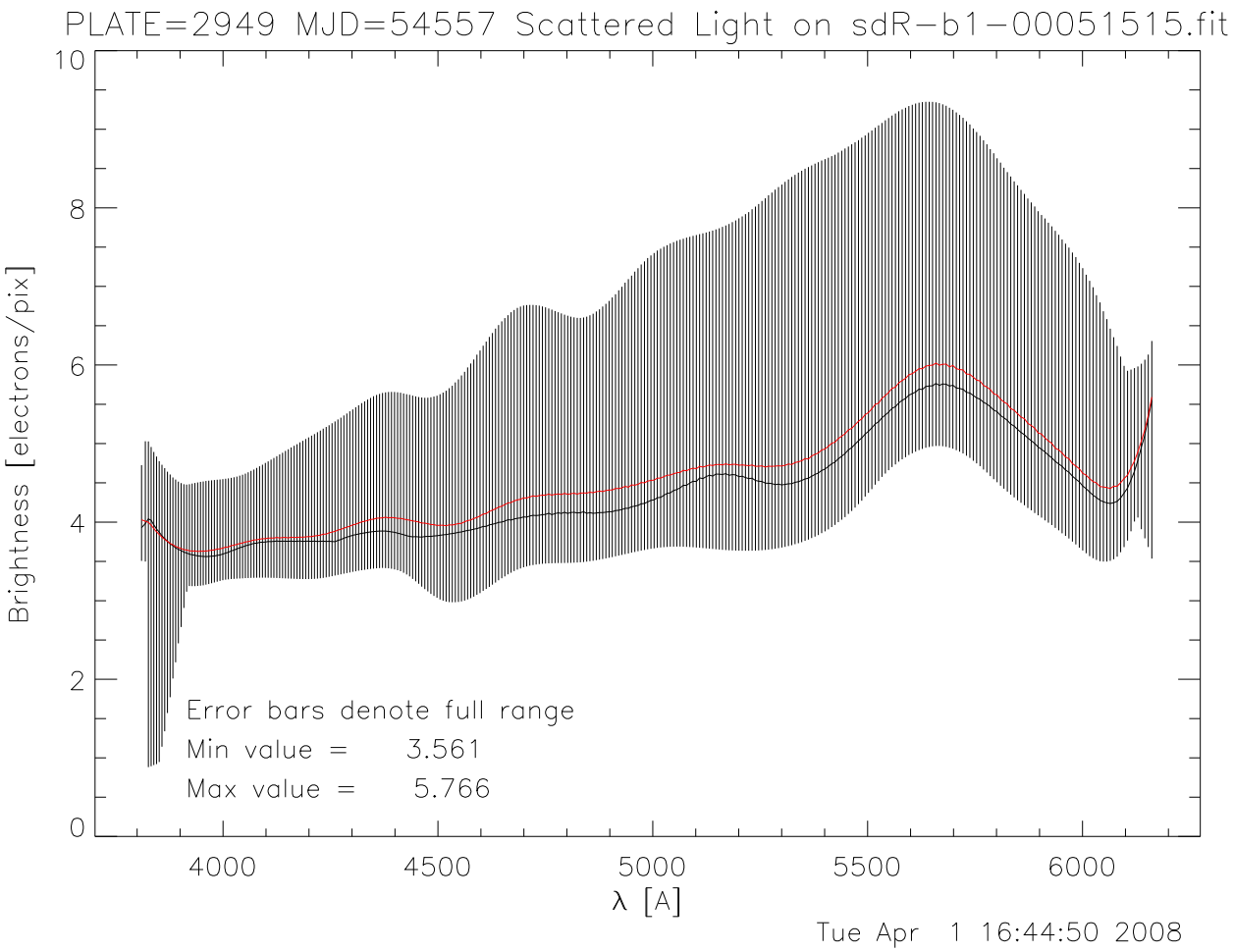

PLATE=2949 MJD=54557 Arcline Fit for sdR-b1-00051514.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 16:41:50 2008

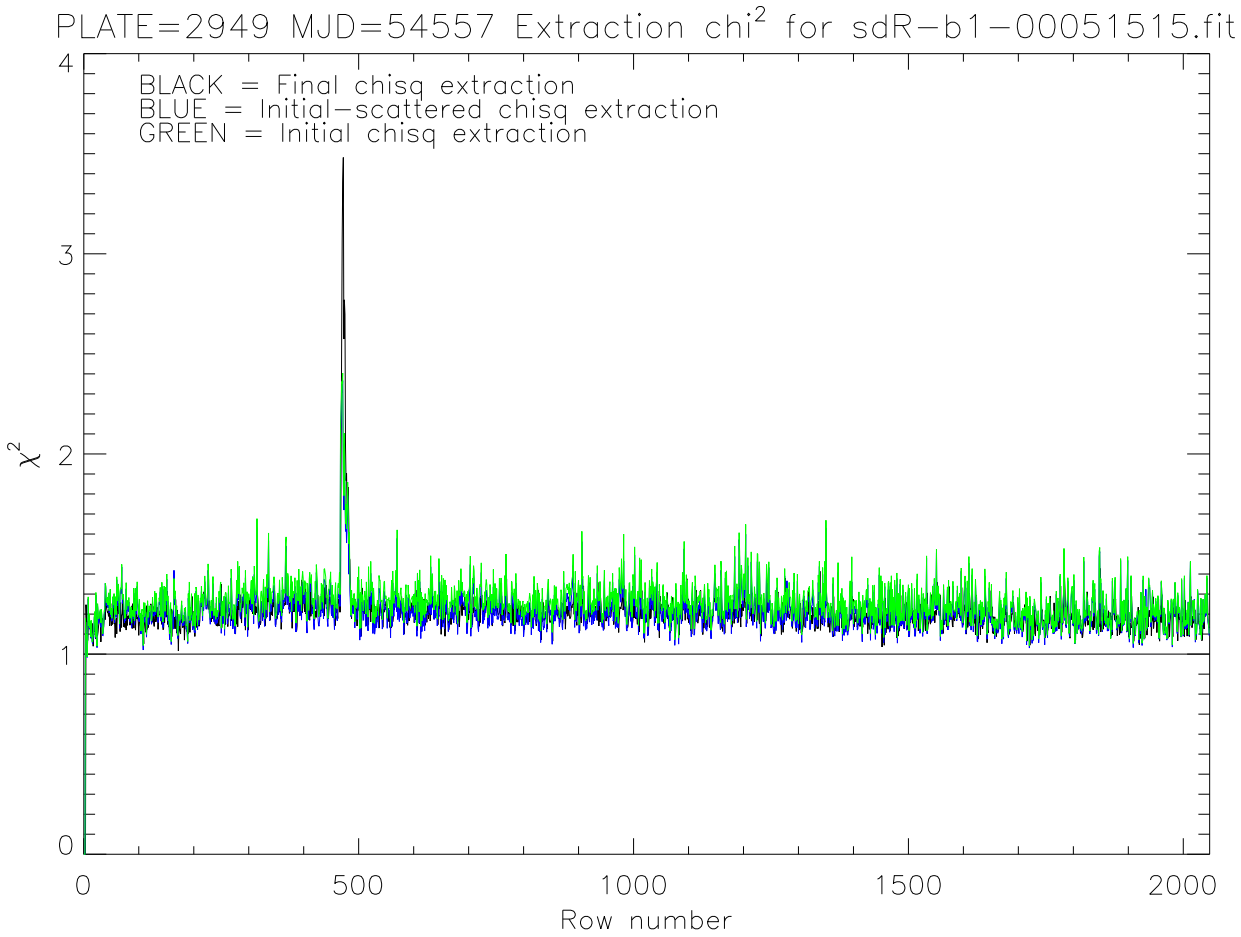

PLATE=2949 MJD=54557 Fiber-Flats for sdR-b1-00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.392
Max value = 1.220
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 16:41:56 2008

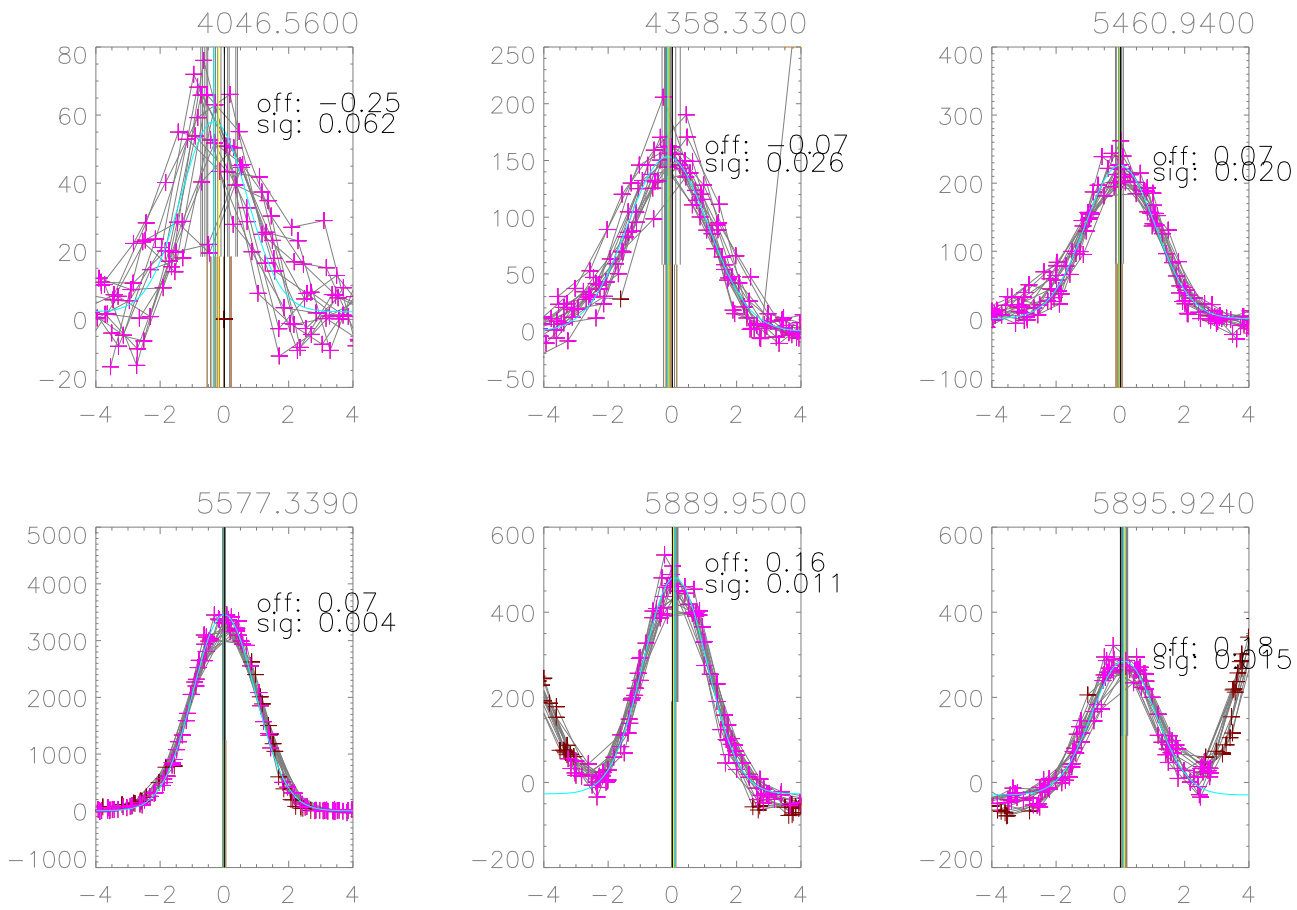

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR−b1−00051515.f
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3
7.5
9.6

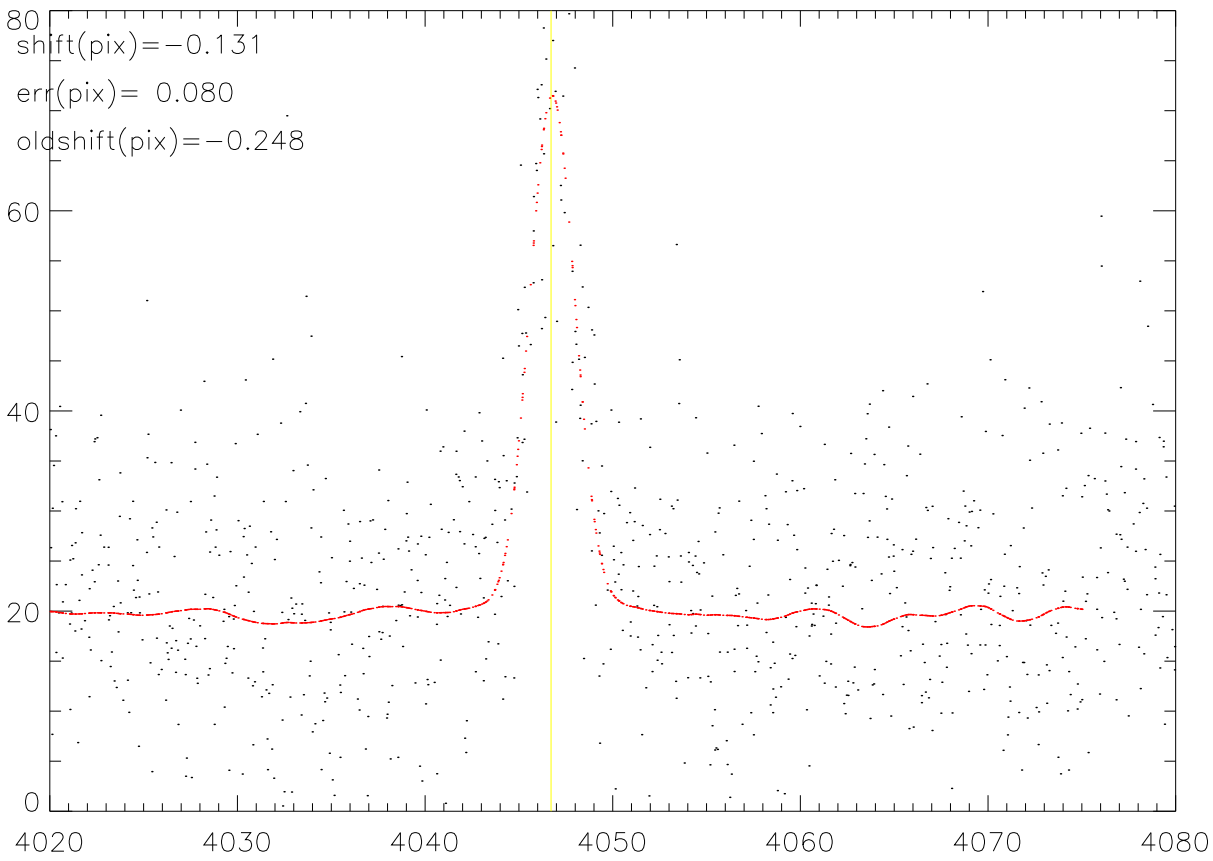

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-b1-00051515.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.052
Max value = 9.231
Tue Apr 1 16:42:41 2008

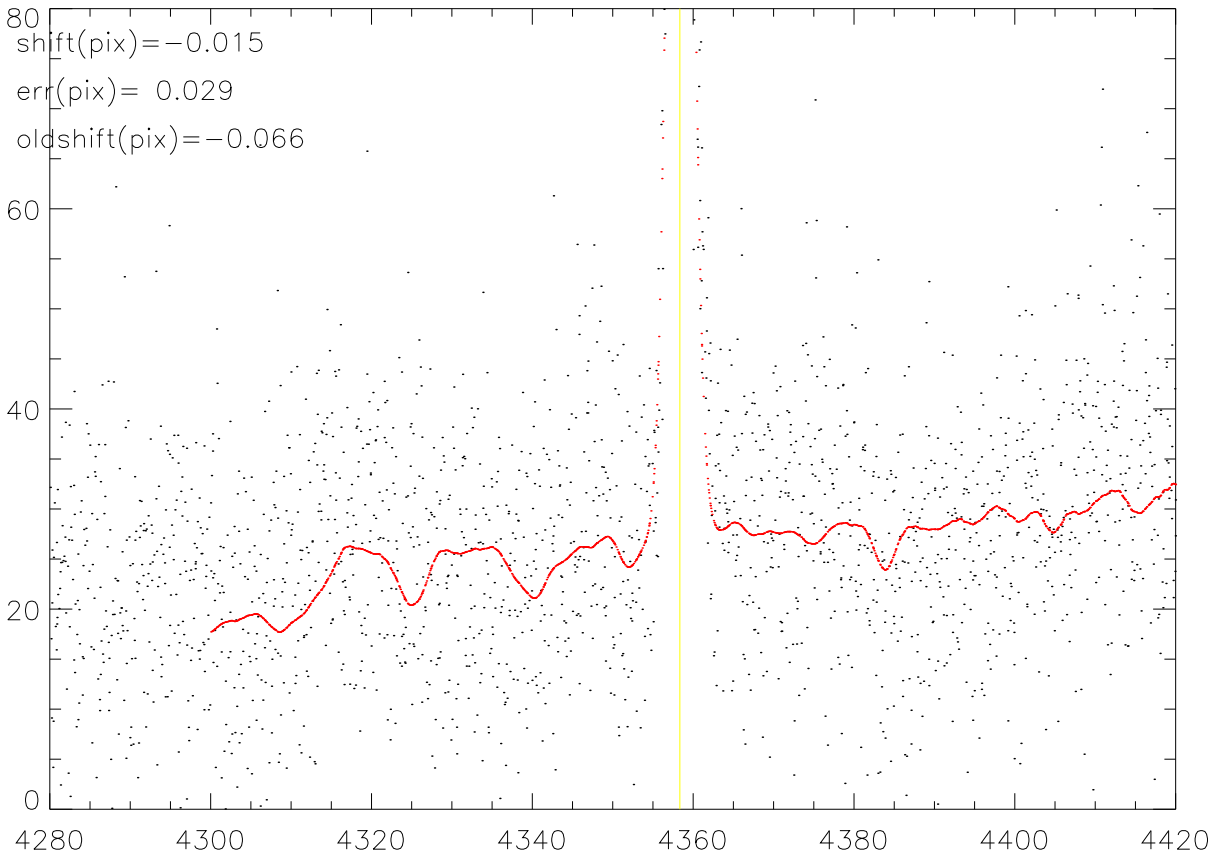

PLATE=2949 MJD=54557 Scattered Light on sdR-b1-00051515.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.18
5.64

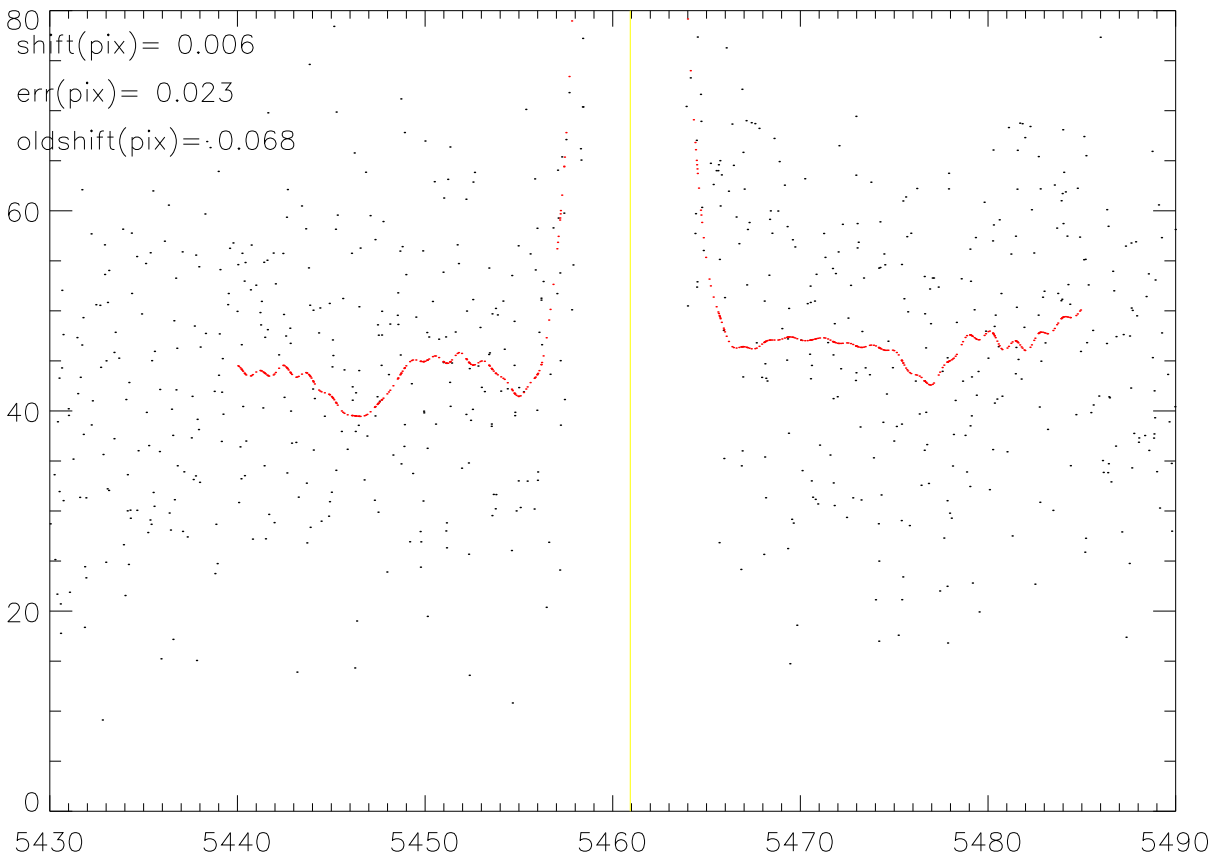

PLATE=2949 MJD=54557 Scattered Light on sdR-b1-00051515.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.561
Max value = 5.766
Tue Apr 1 16:44:50 2008

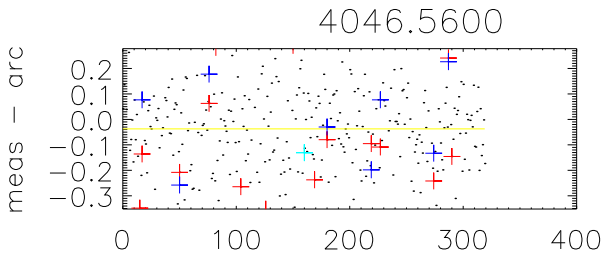

PLATE=2949 MJD=54557 Extraction chi^2 for sdR−b1−00051515.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

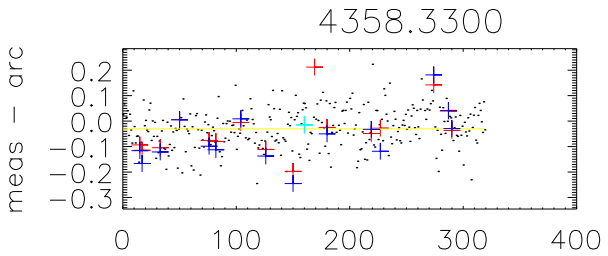

4046.5600
off: −0.25
sig: 0.062
4358.3300
off: −0.07
sig: 0.026
5460.9400
off: 0.07
sig: 0.020
5577.3390
off: 0.07
sig: 0.004
5889.9500
off: 0.16
sig: 0.011
5895.9240
off: 0.18
sig: 0.015

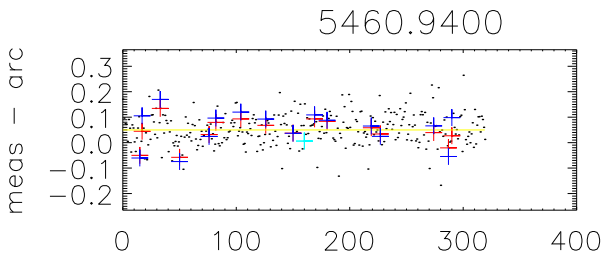

shift(pix)=−0.131
err(pix)= 0.080
oldshift(pix)=−0.248
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

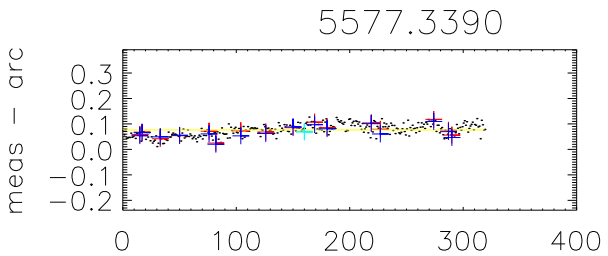

shift(pix)=−0.015
err(pix)= 0.029
oldshift(pix)=−0.066
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

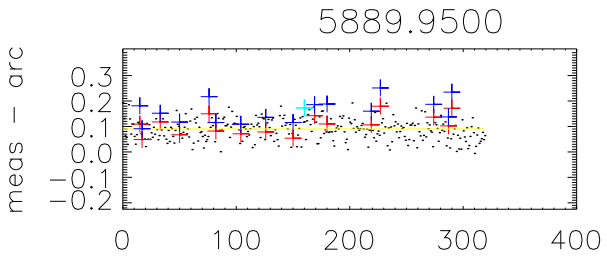

shift(pix)= 0.006
err(pix)= 0.023
oldshift(pix)= 0.068
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

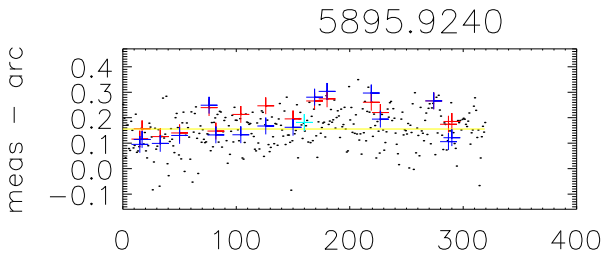

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

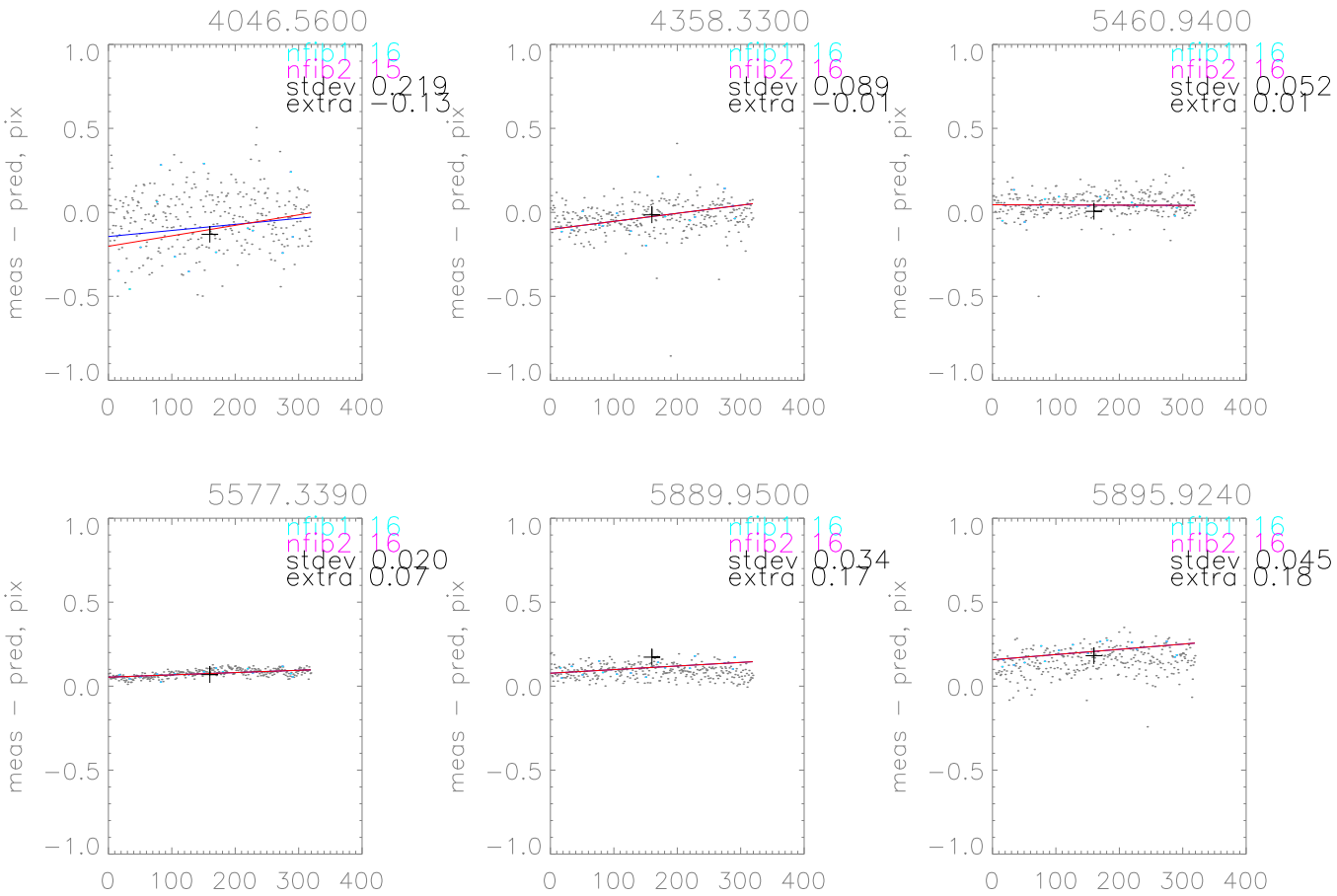

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

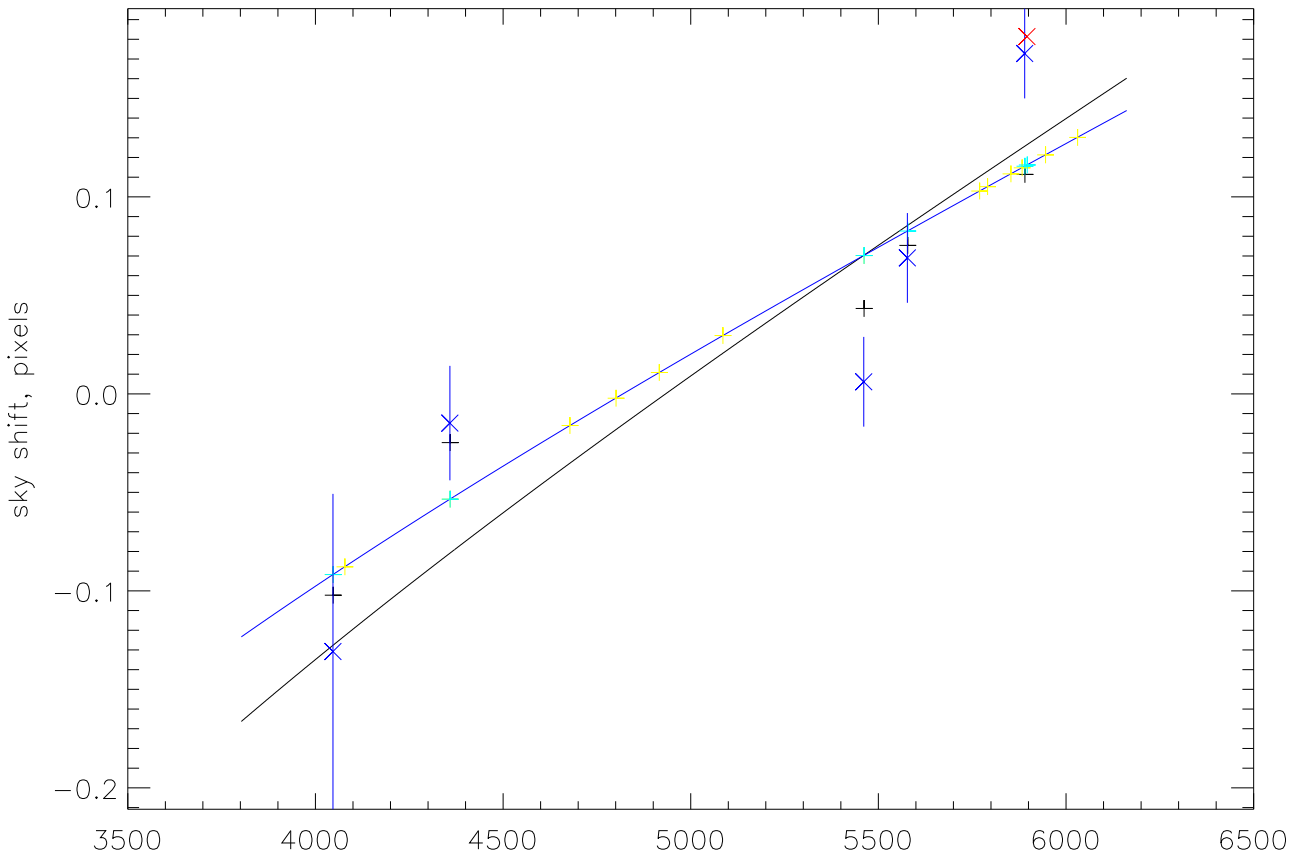

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

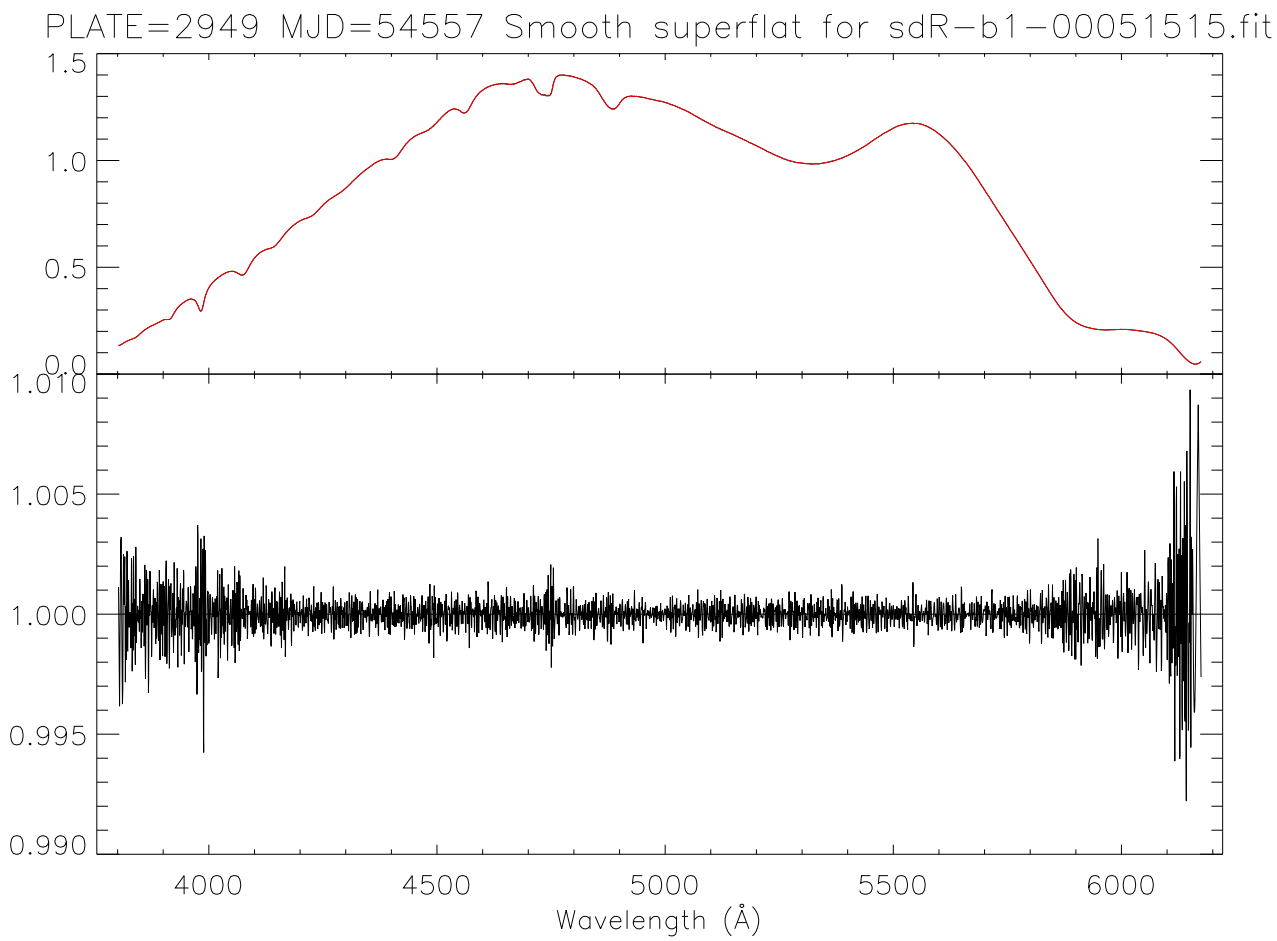

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

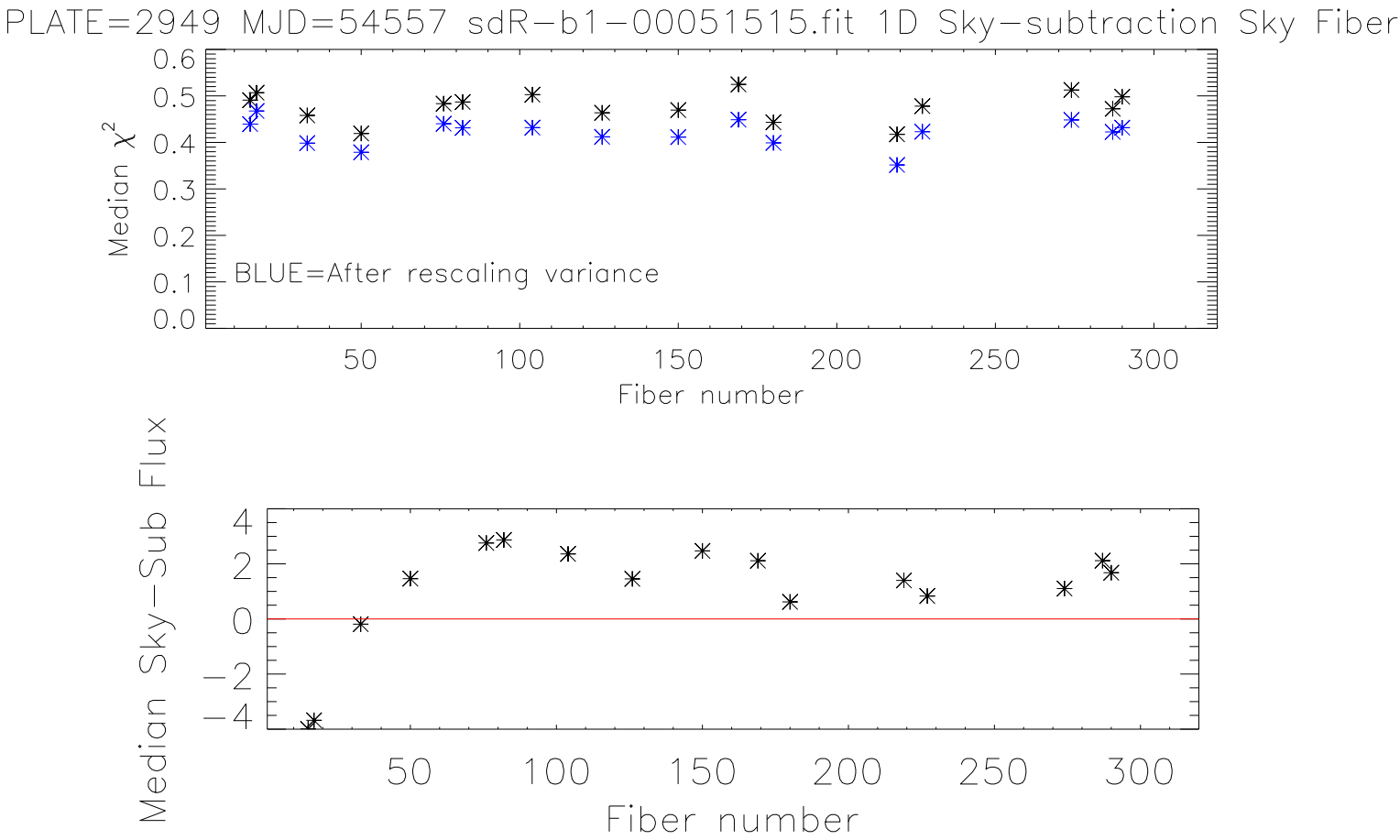

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

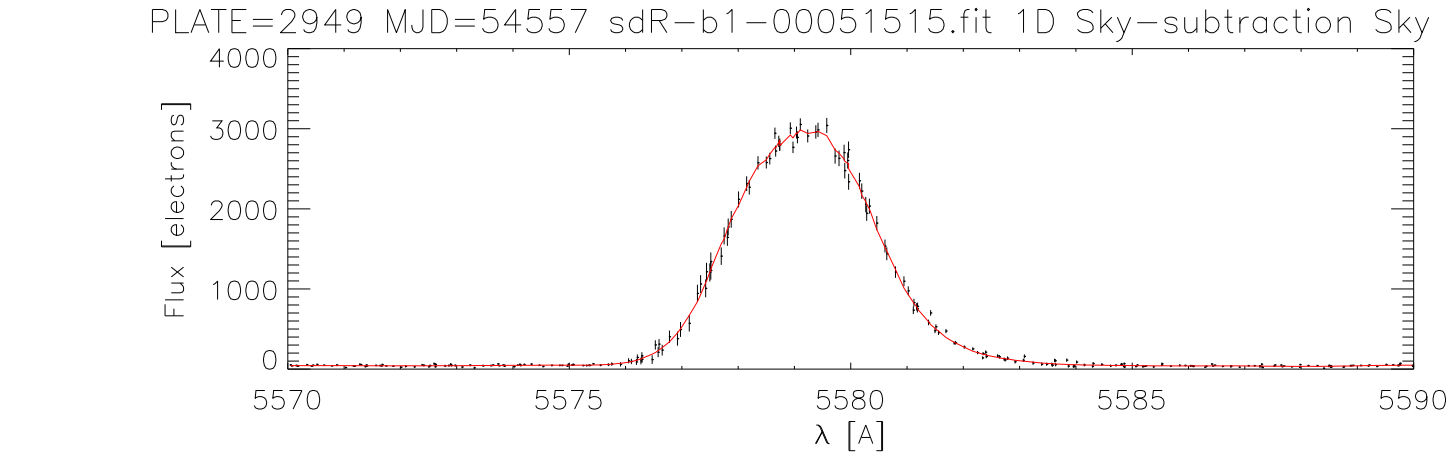

4046.5600
nfib1 16
nfib2 15
stdev 0.219
extra −0.13
4358.3300
nfib1 16
nfib2 16
stdev 0.089
extra −0.01
5460.9400
nfib1 16
nfib2 16
stdev 0.052
extra 0.01
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra 0.07
5889.9500
nfib1 16
nfib2 16
stdev 0.034
extra 0.17
5895.9240
nfib1 16
nfib2 16
stdev 0.045
extra 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

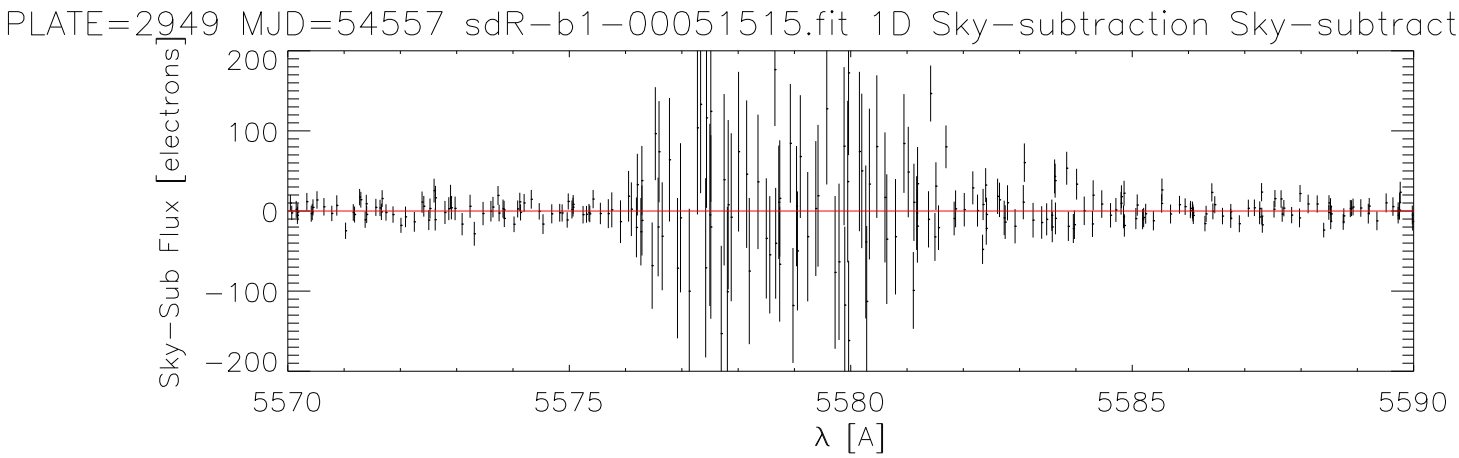

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

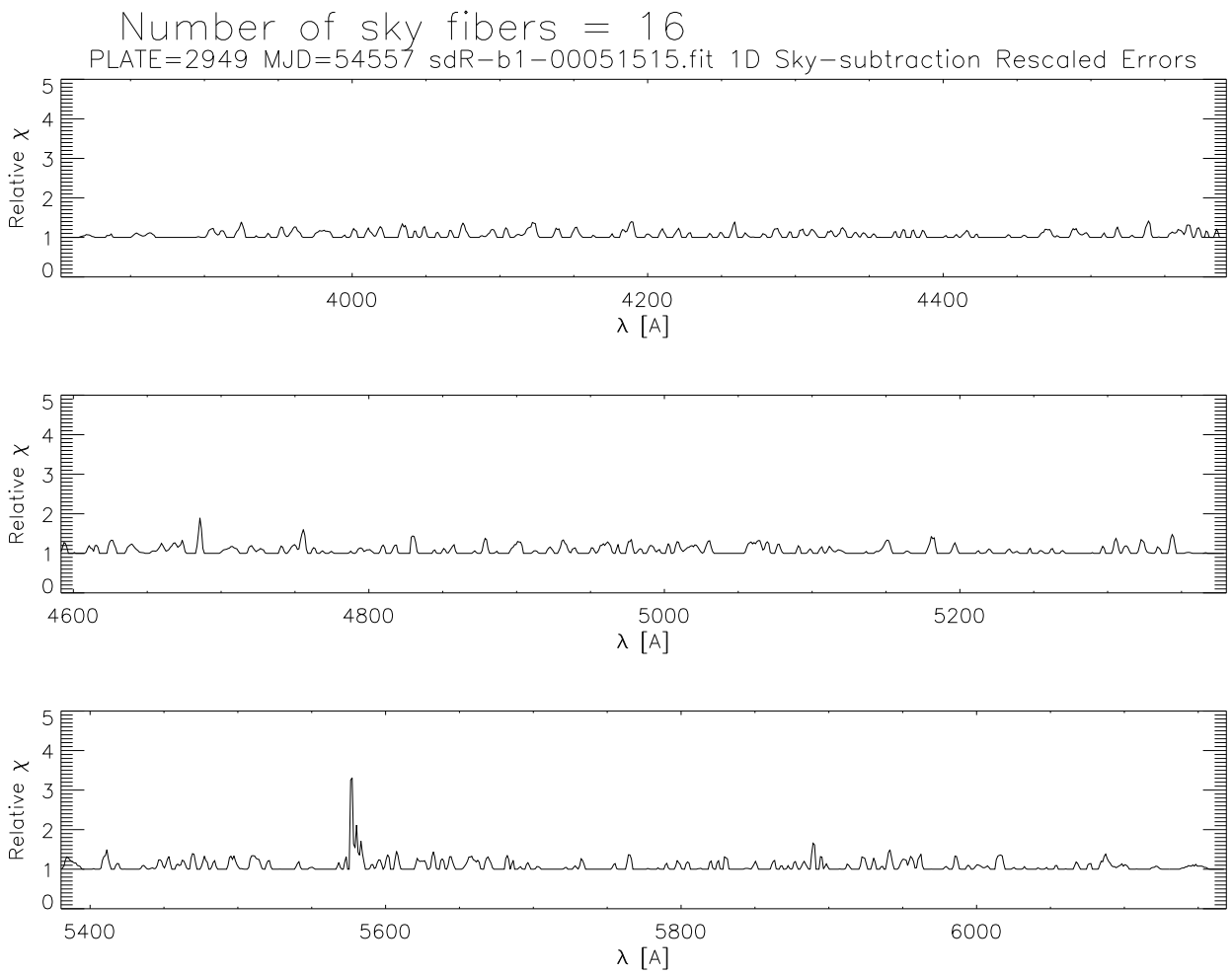
es= −0.0001

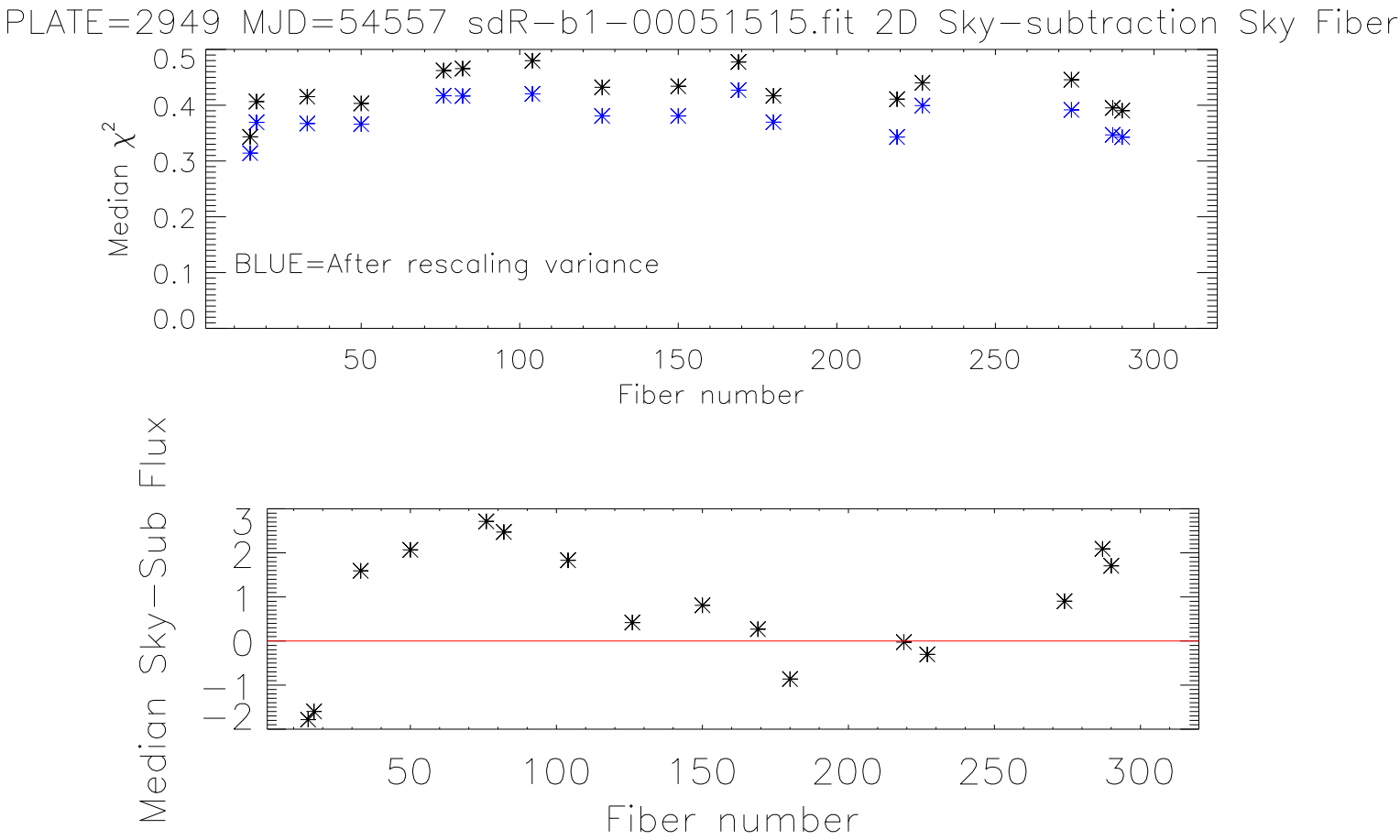

PLATE=2949 MJD=54557 Smooth superflat for sdR−b1−00051515.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

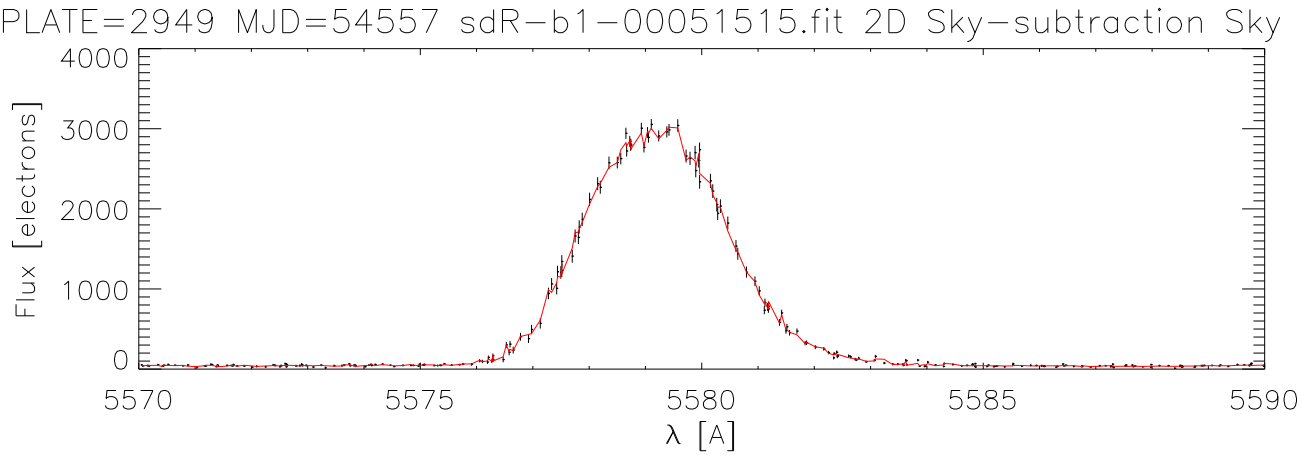

PLATE=2949 MJD=54557 sdR-b1-00051515.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

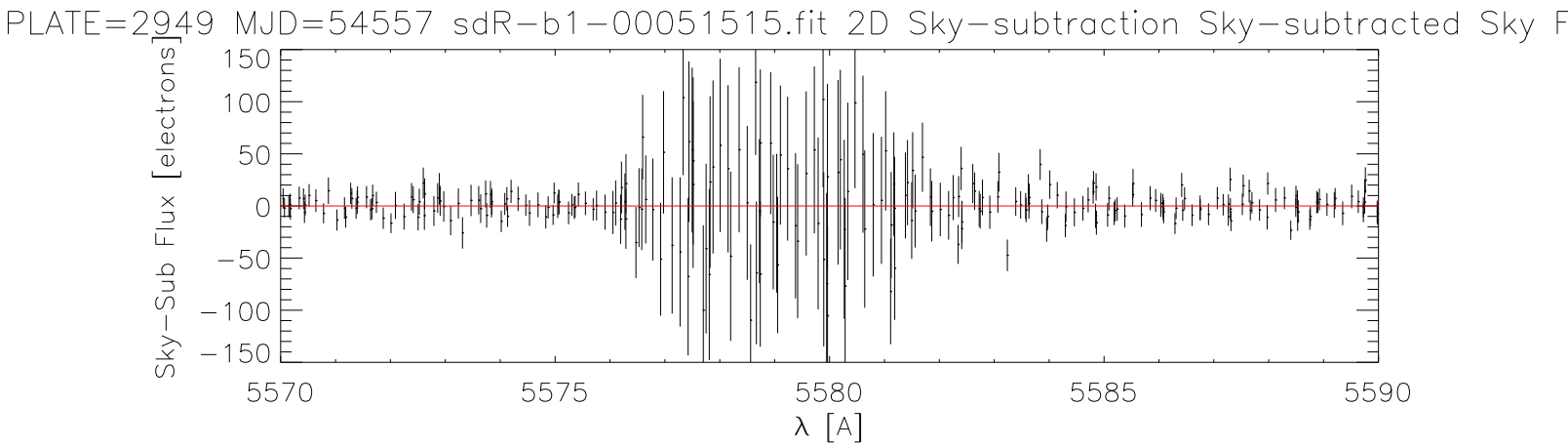

PLATE=2949 MJD=54557 sdR-b1-00051515.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

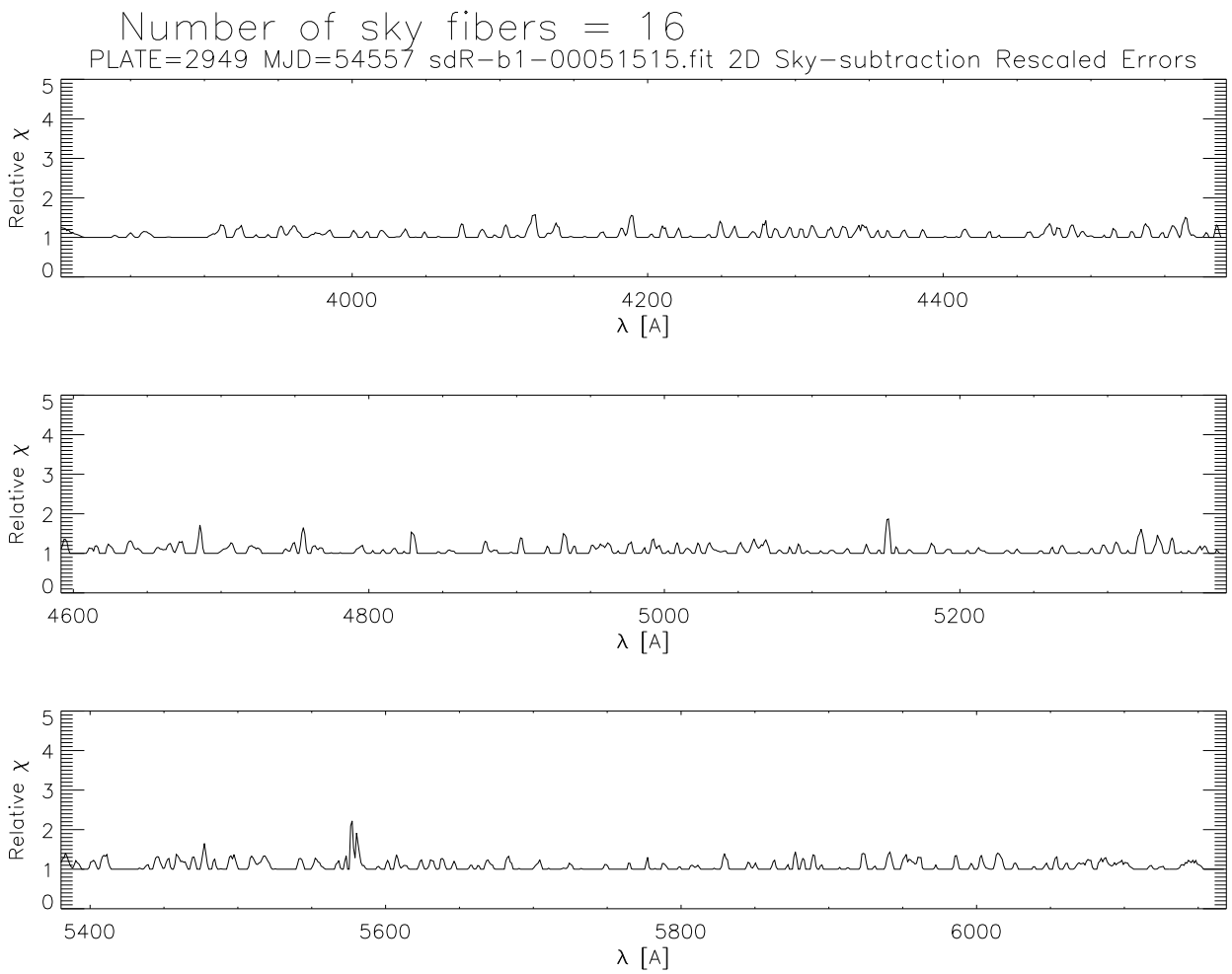

PLATE=2949 MJD=54557 sdR-b1-00051515.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

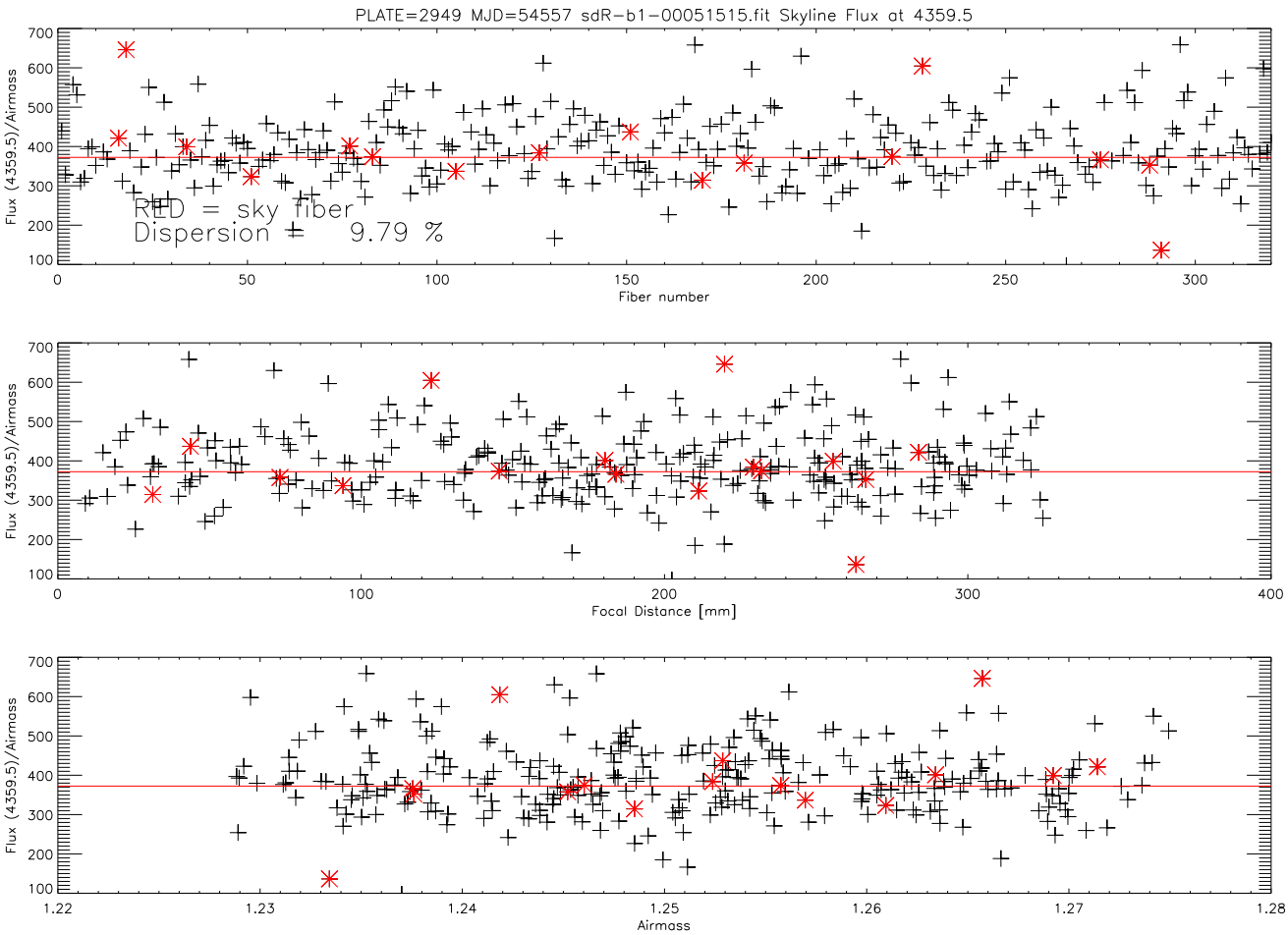

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-b1-00051515.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

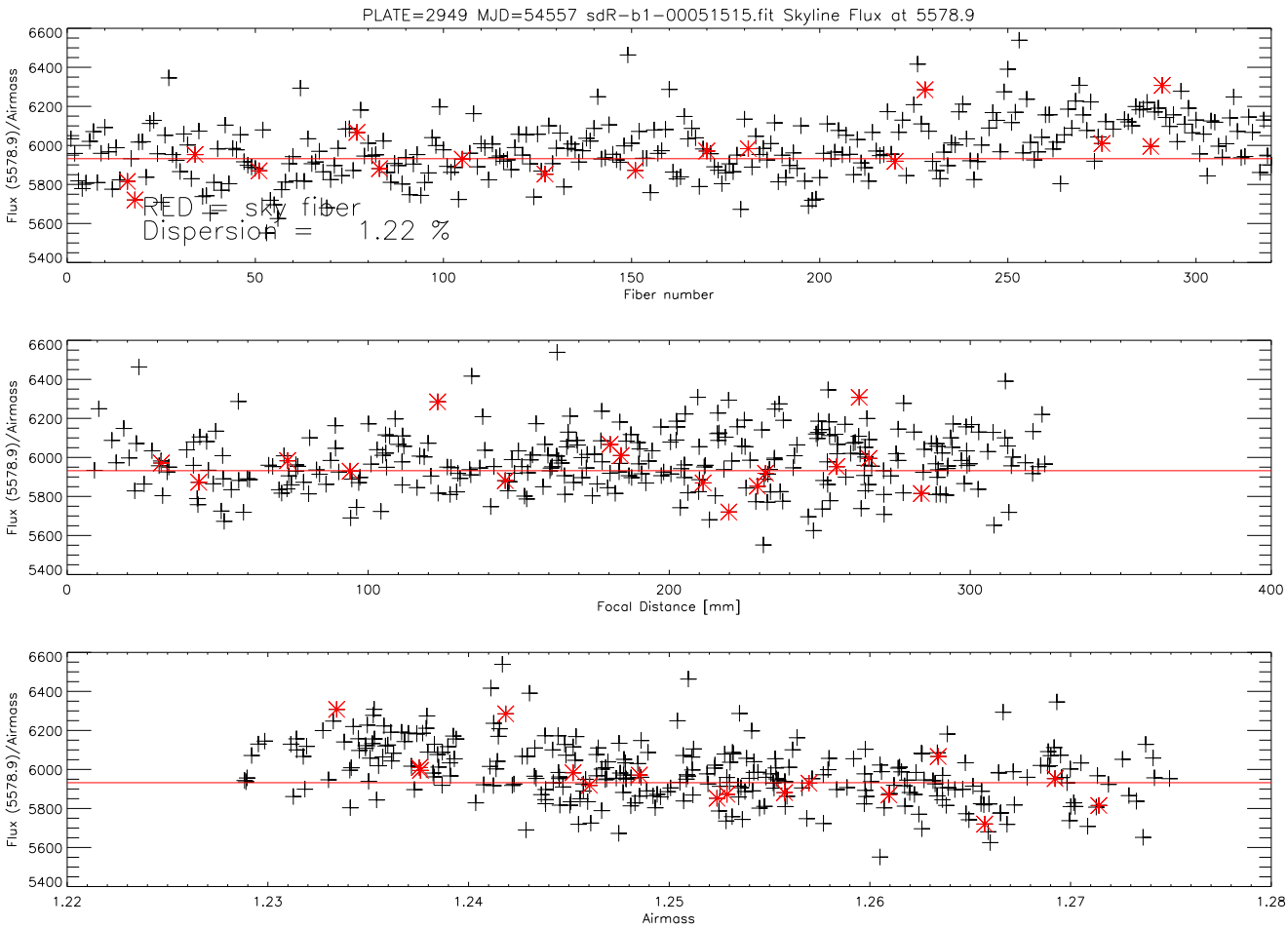

PLATE=2949 MJD=54557 sdR-b1-00051515.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

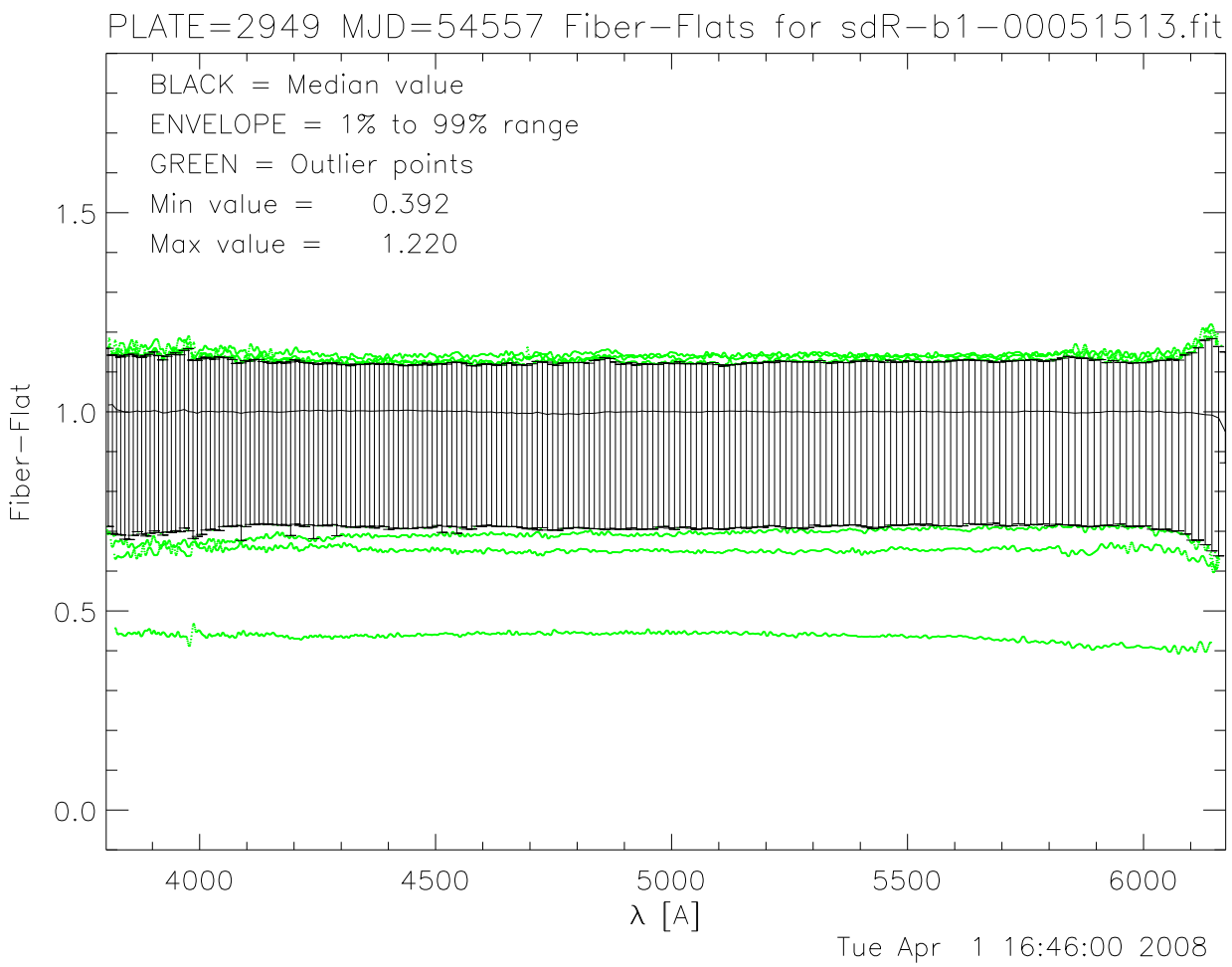

PLATE=2949 MJD=54557 sdR-b1-00051515.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

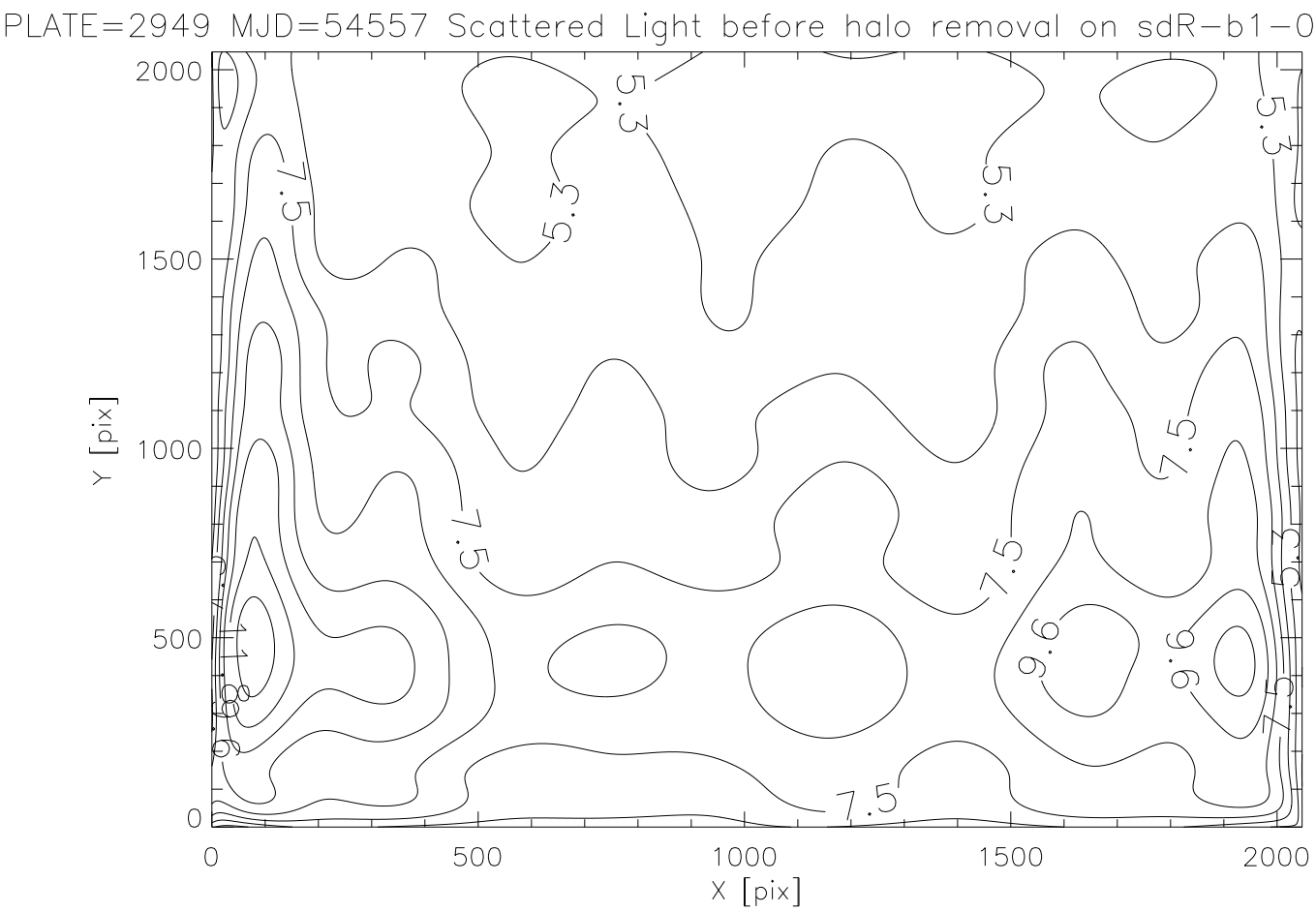

PLATE=2949 MJD=54557 sdR-b1-00051515.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

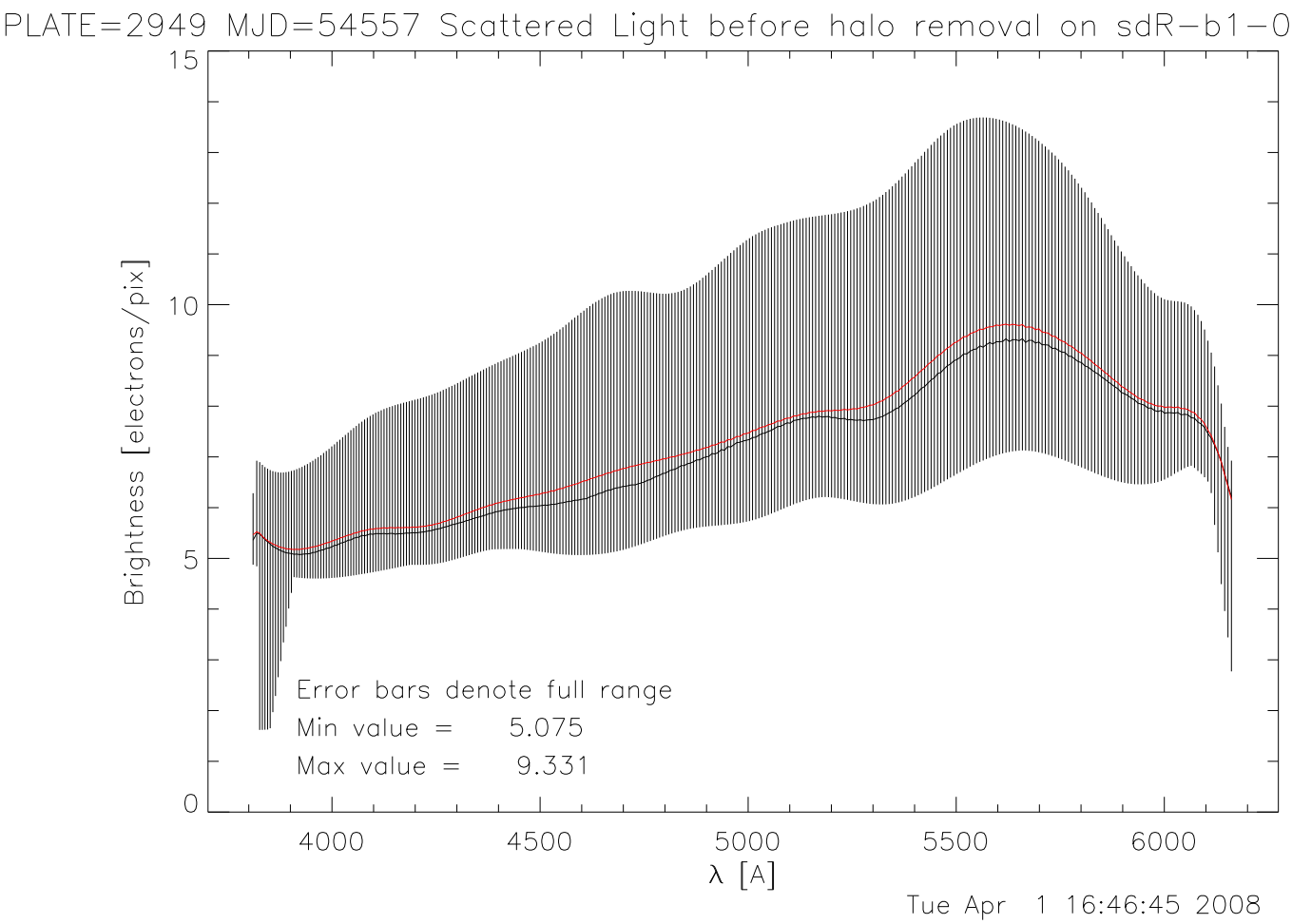

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-b1-00051515.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

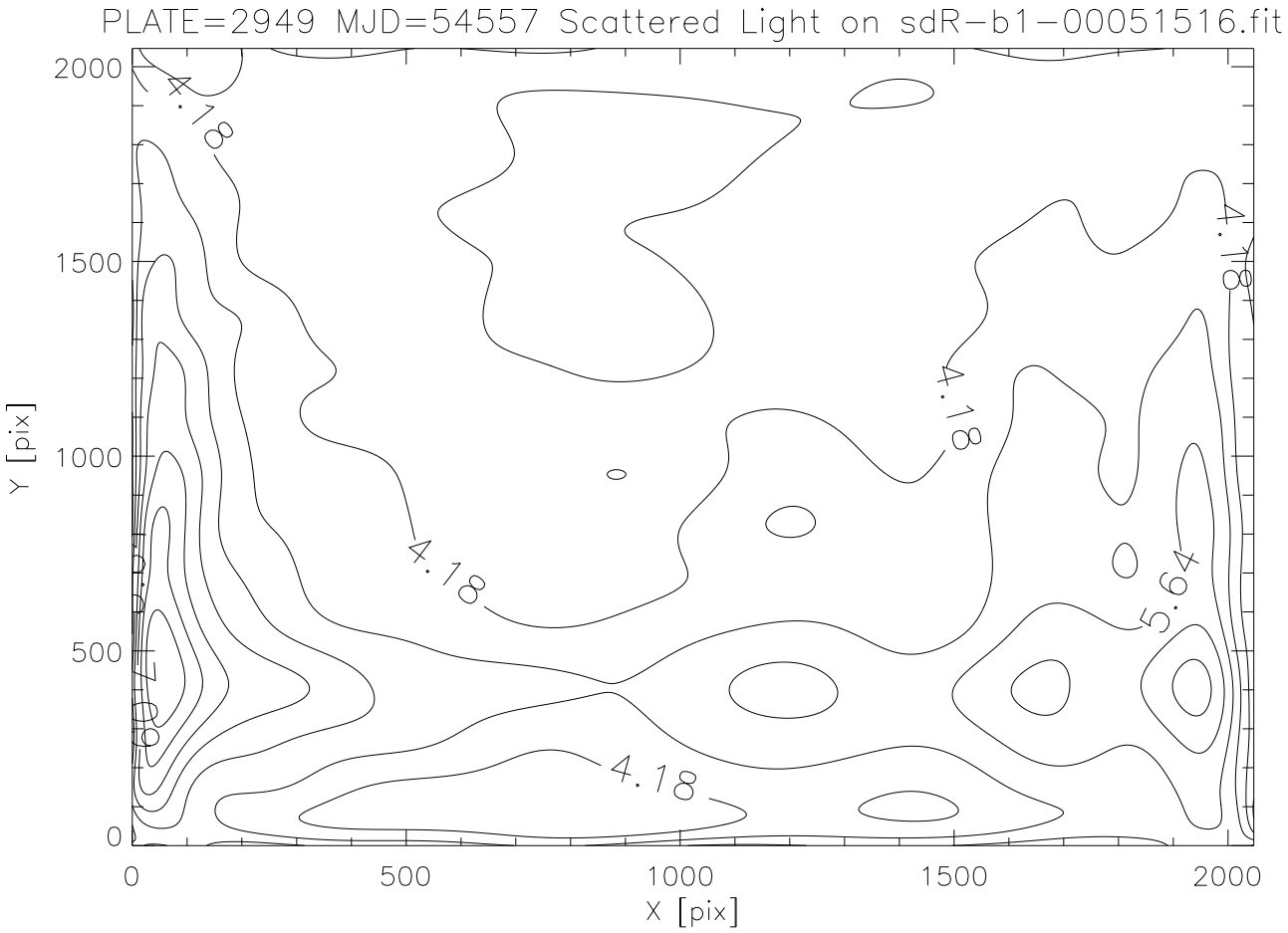

PLATE=2949 MJD=54557 sdR-b1-00051515.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.79 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

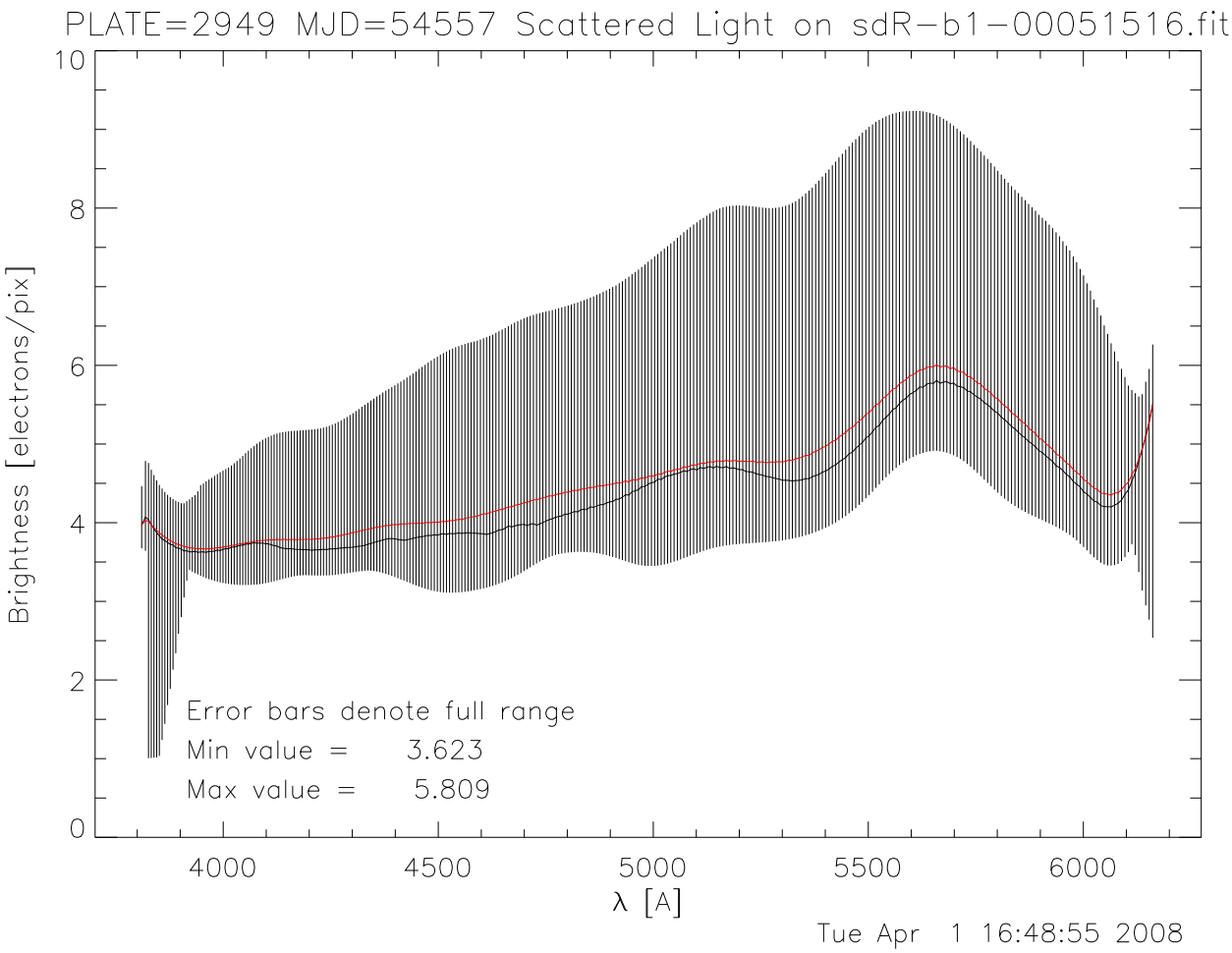

PLATE=2949 MJD=54557 sdR-b1-00051515.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.22 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

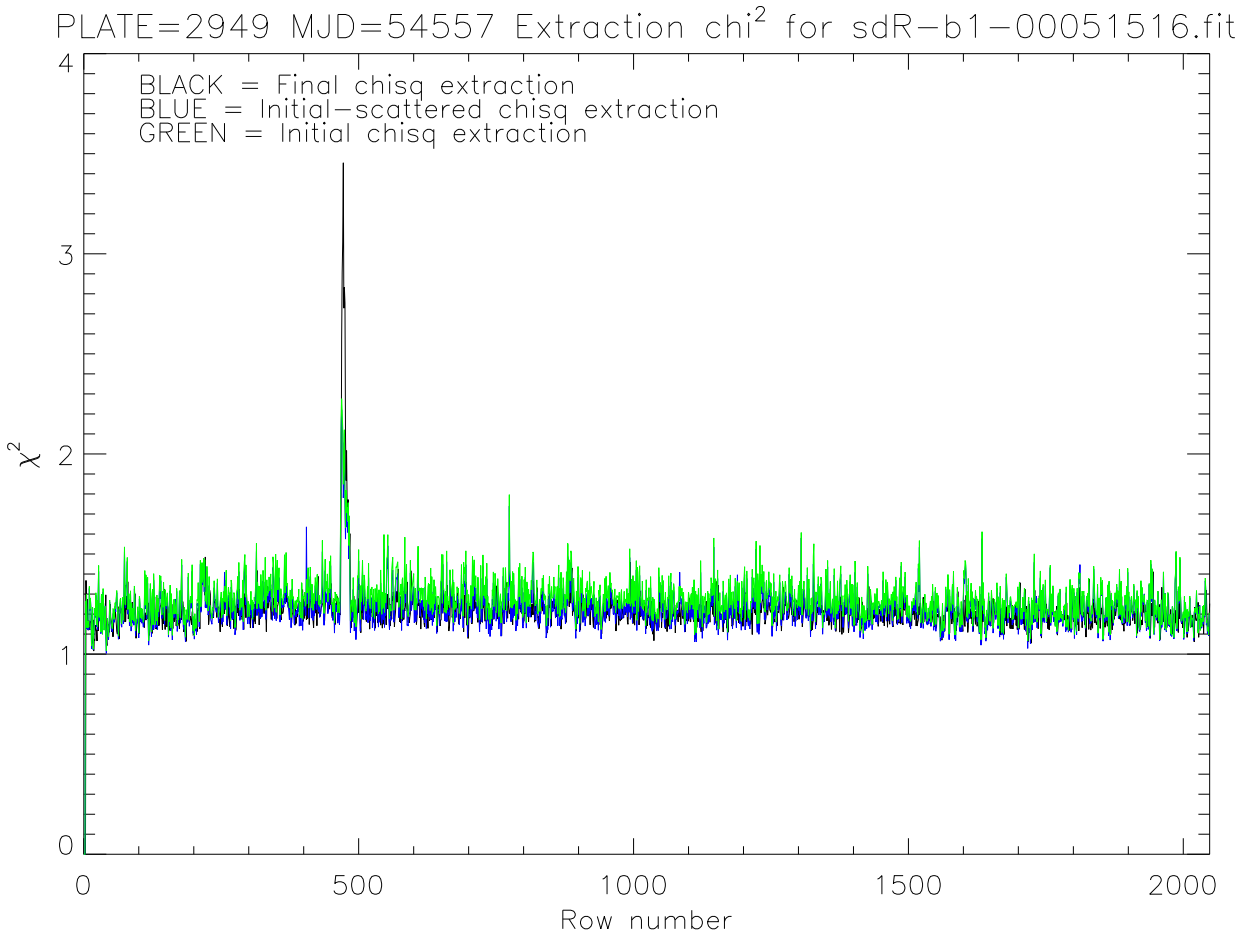

PLATE=2949 MJD=54557 Fiber-Flats for sdR-b1-00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.392
Max value = 1.220
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 16:46:00 2008

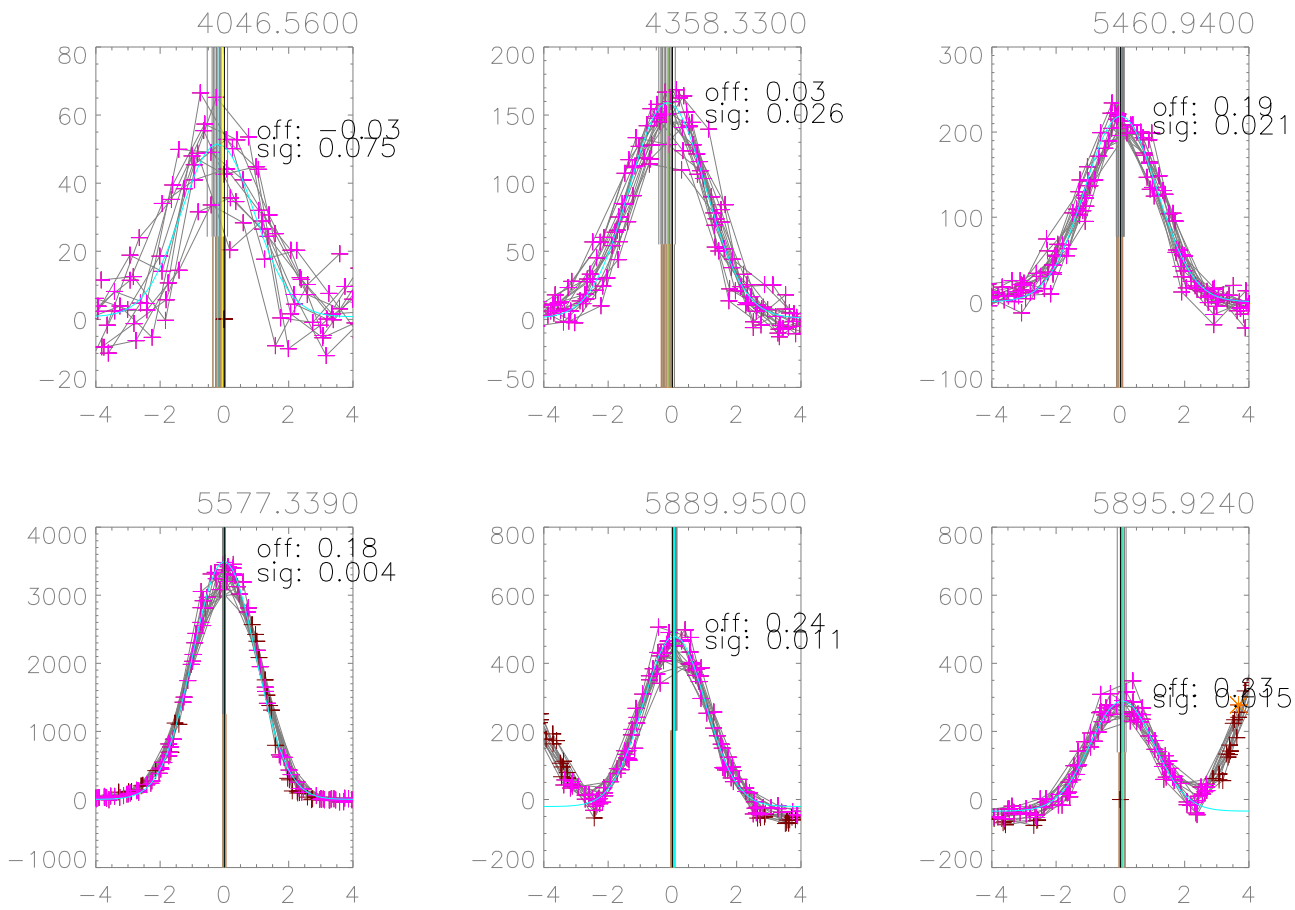

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR−b1−00051516.f
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3
7.5
9.6

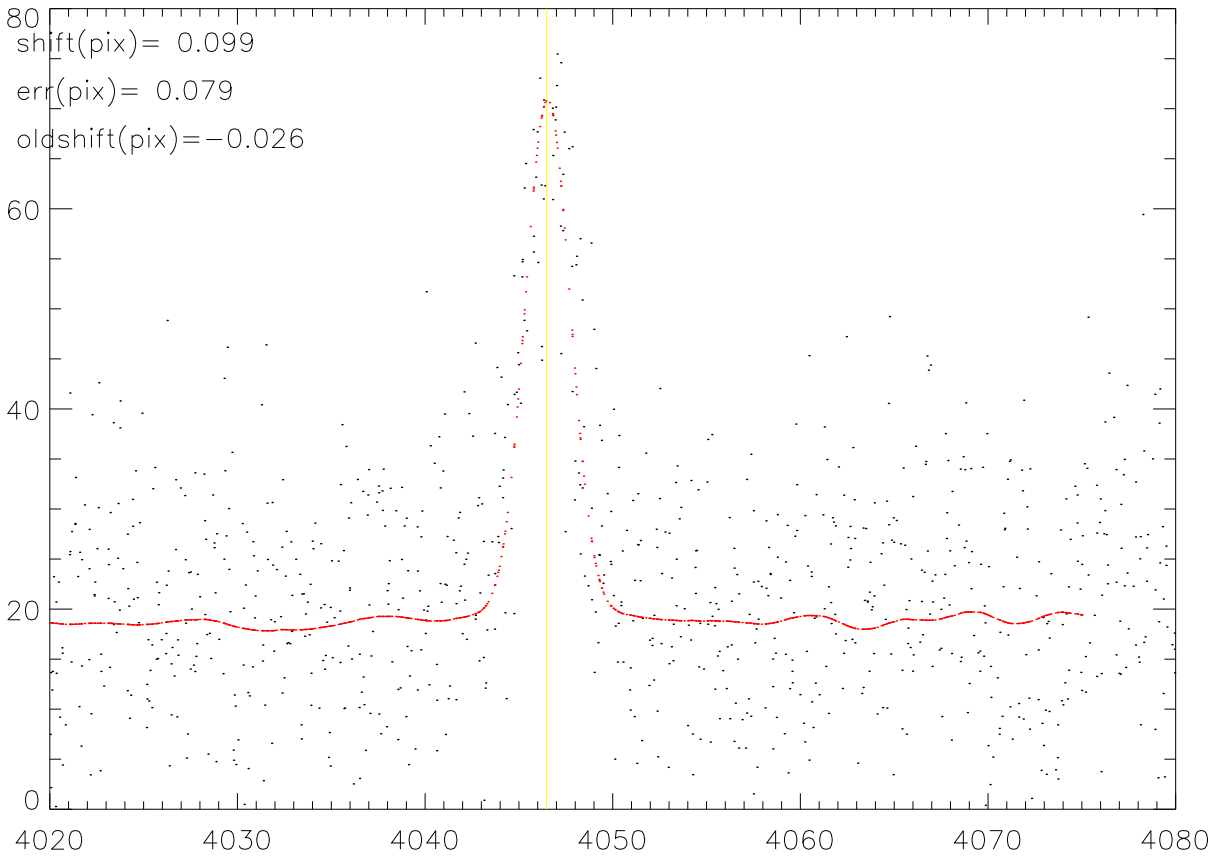

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-b1-00051516.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.075
Max value = 9.331
Tue Apr 1 16:46:45 2008

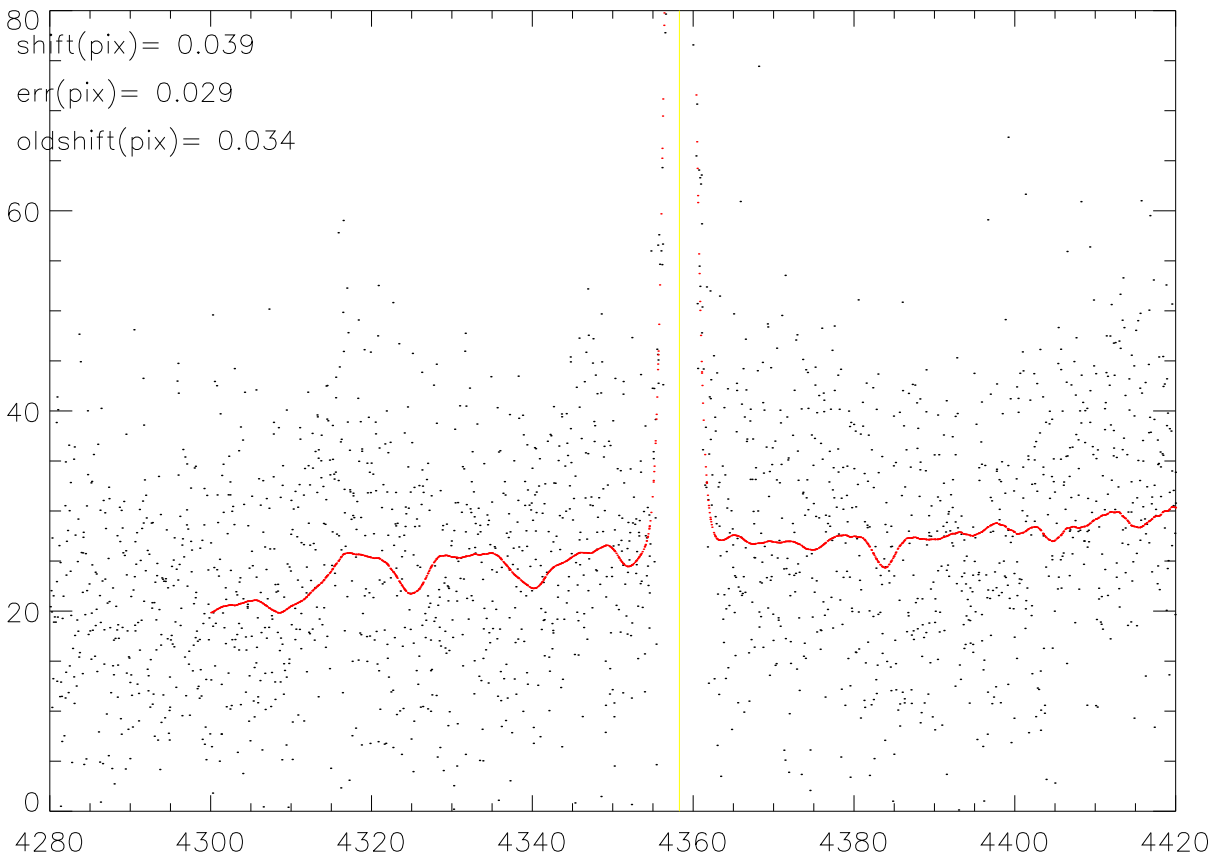

PLATE=2949 MJD=54557 Scattered Light on sdR-b1-00051516.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.18
0
5.64

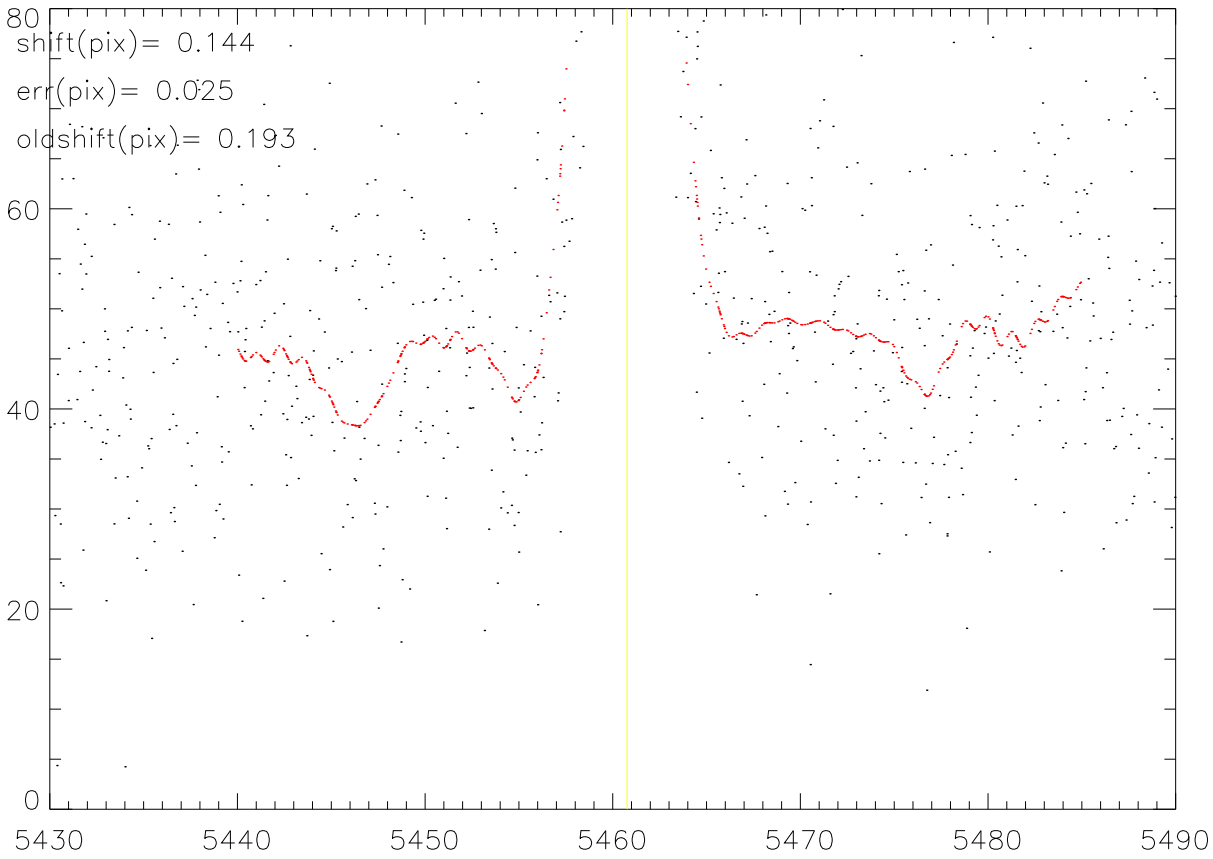

PLATE=2949 MJD=54557 Scattered Light on sdR-b1-00051516.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.623
Max value = 5.809
Tue Apr 1 16:48:55 2008

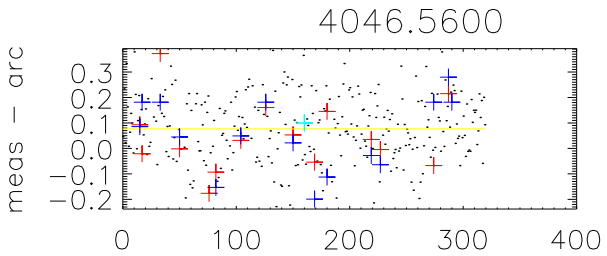

PLATE=2949 MJD=54557 Extraction chi^2 for sdR−b1−00051516.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

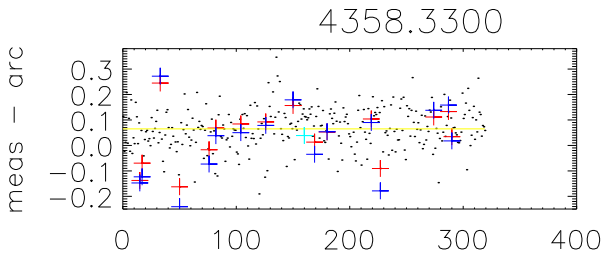

4046.5600
off: −0.03
sig: 0.075
4358.3300
off: 0.03
sig: 0.026
5460.9400
off: 0.19
sig: 0.021
5577.3390
off: 0.18
sig: 0.004
5889.9500
off: 0.24
sig: 0.011
5895.9240
off: 0.23
sig: 0.015

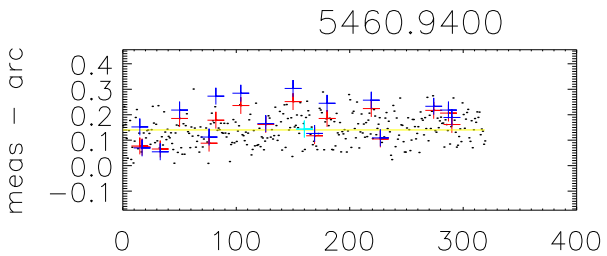

shift(pix)= 0.099
err(pix)= 0.079
oldshift(pix)=−0.026
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

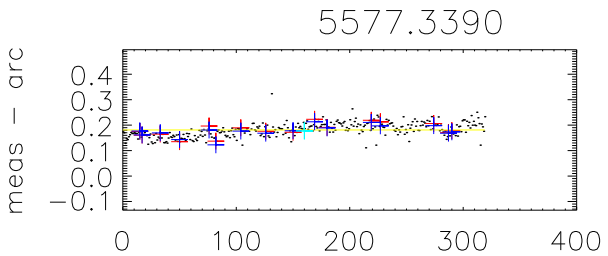

shift(pix)= 0.039
err(pix)= 0.029
oldshift(pix)= 0.034
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

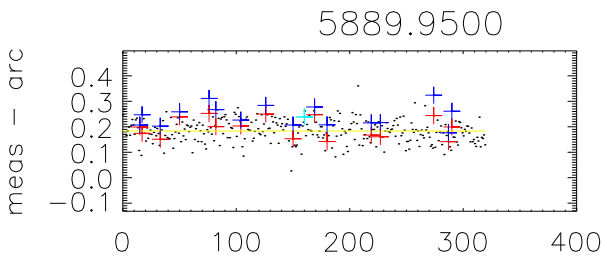

shift(pix)= 0.144
err(pix)= 0.025
oldshift(pix)= 0.193
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

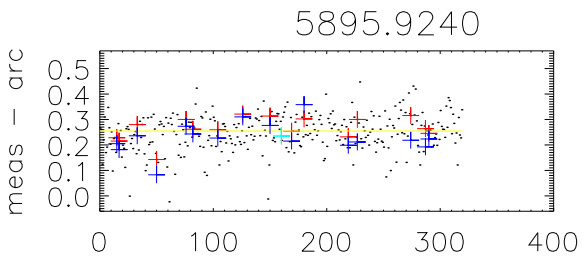

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

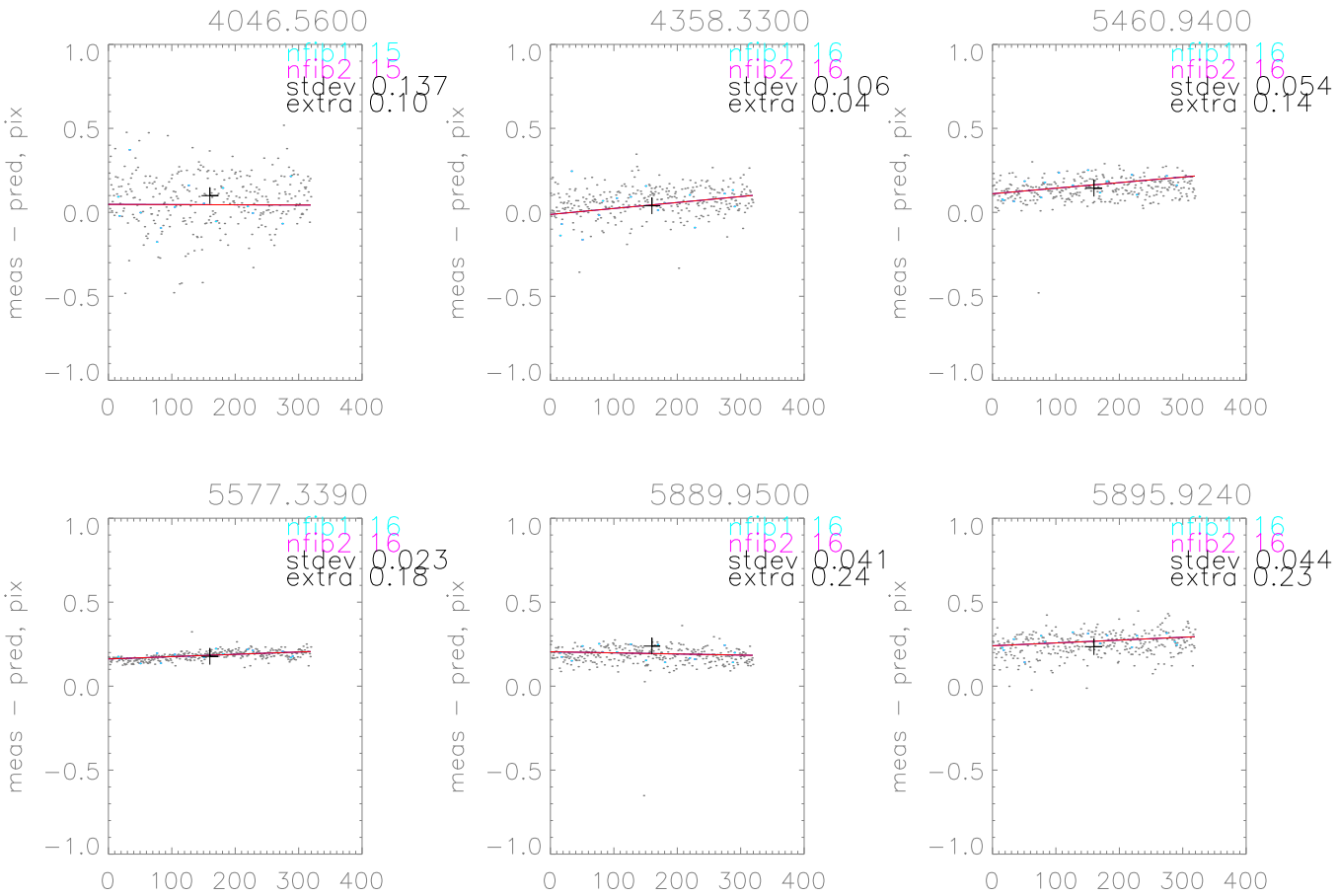

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

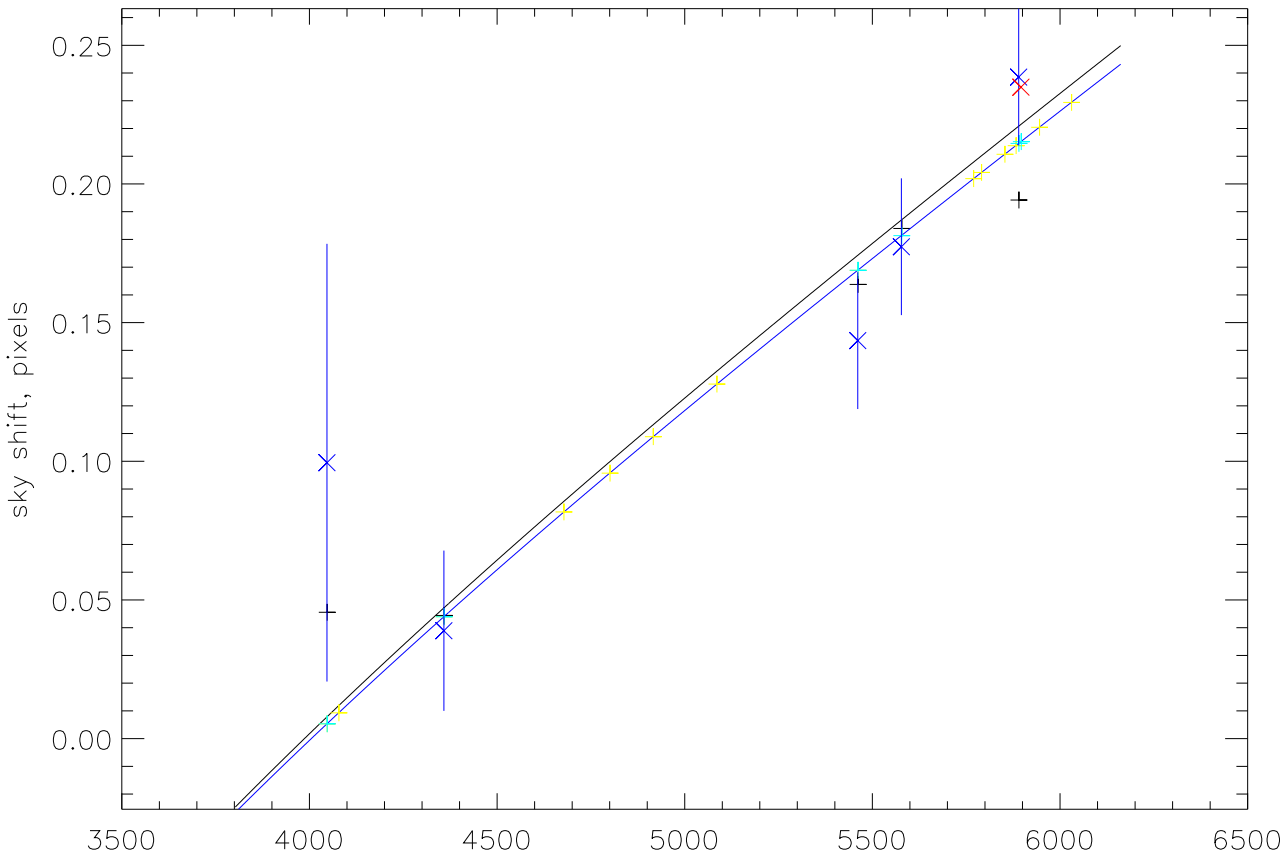

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

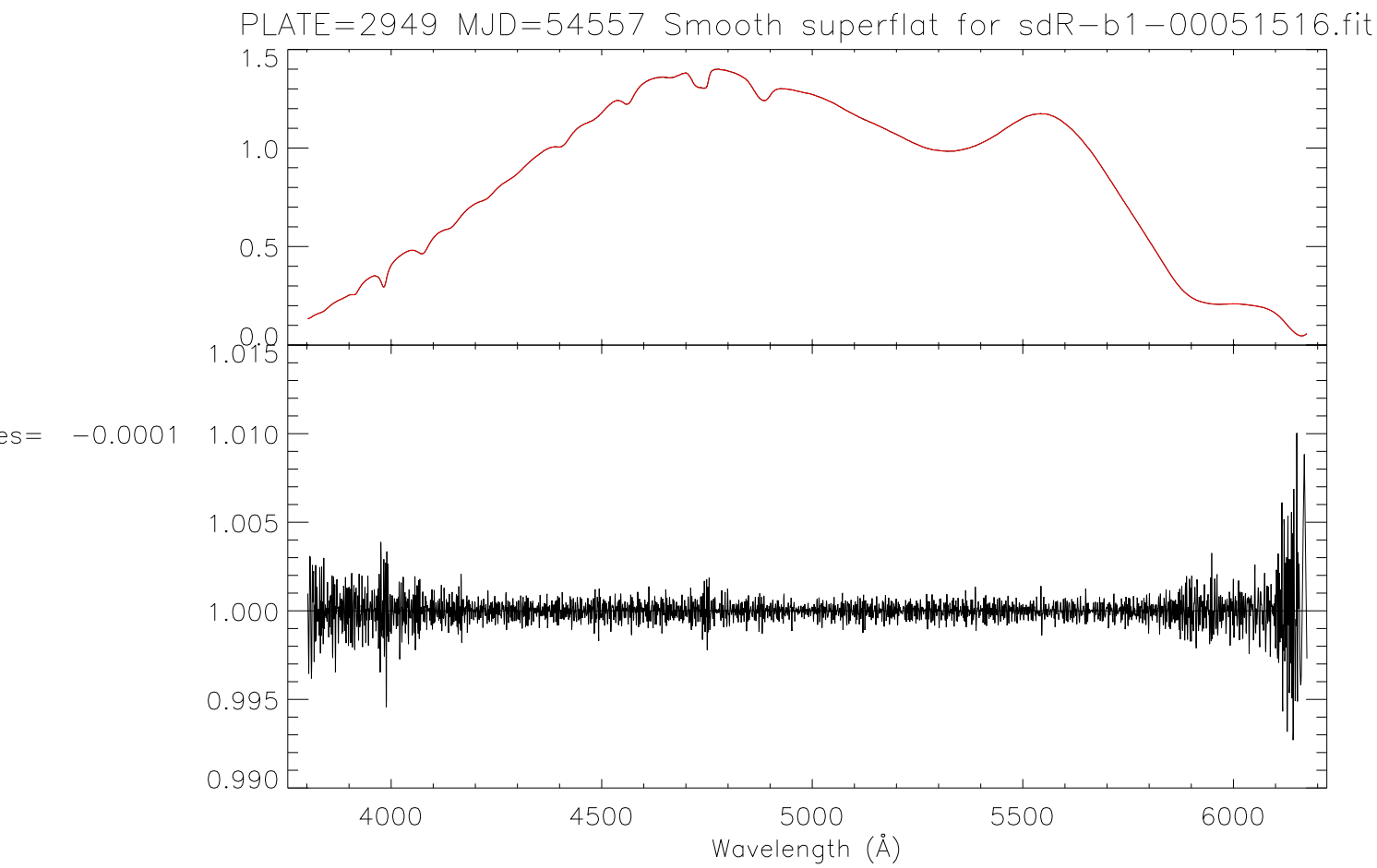

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

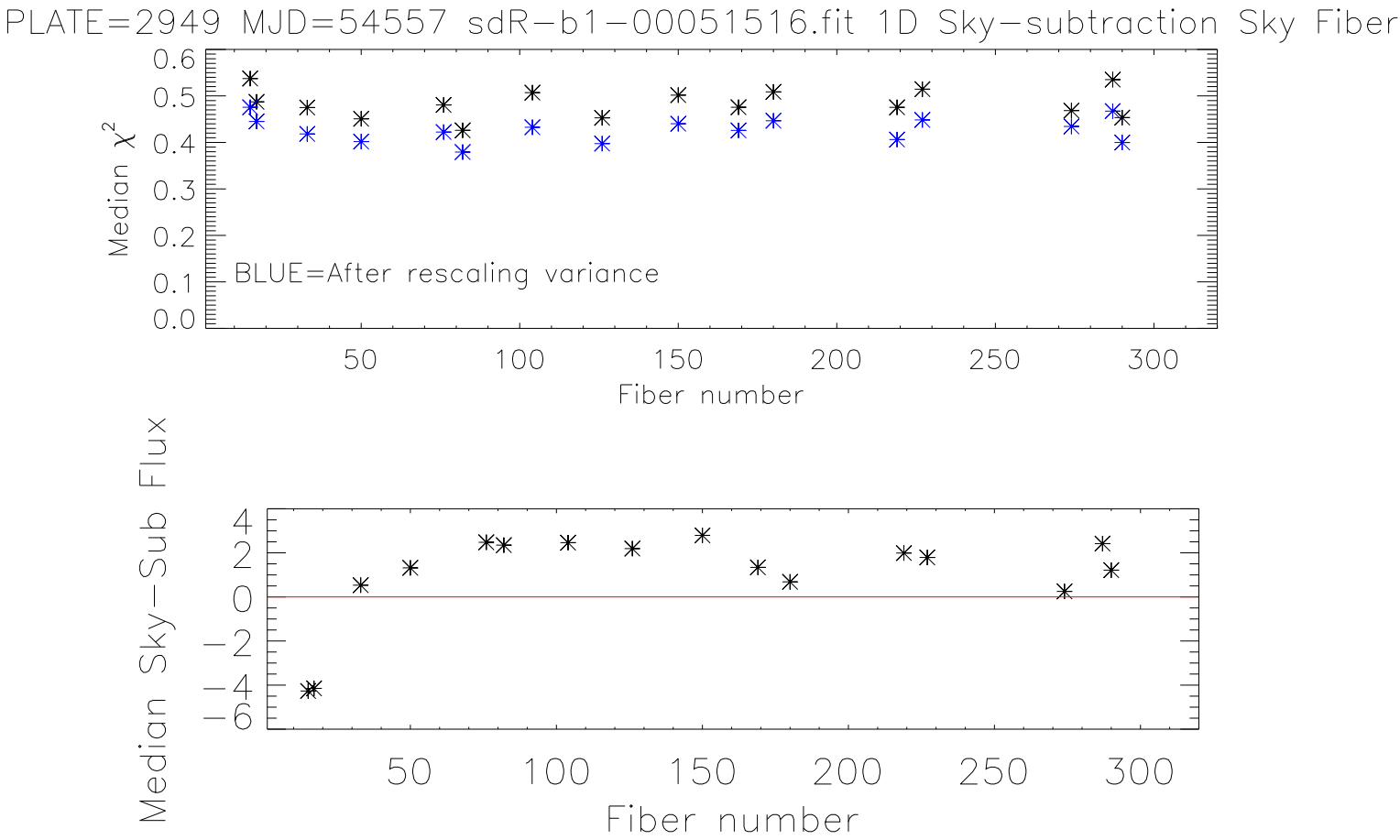

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

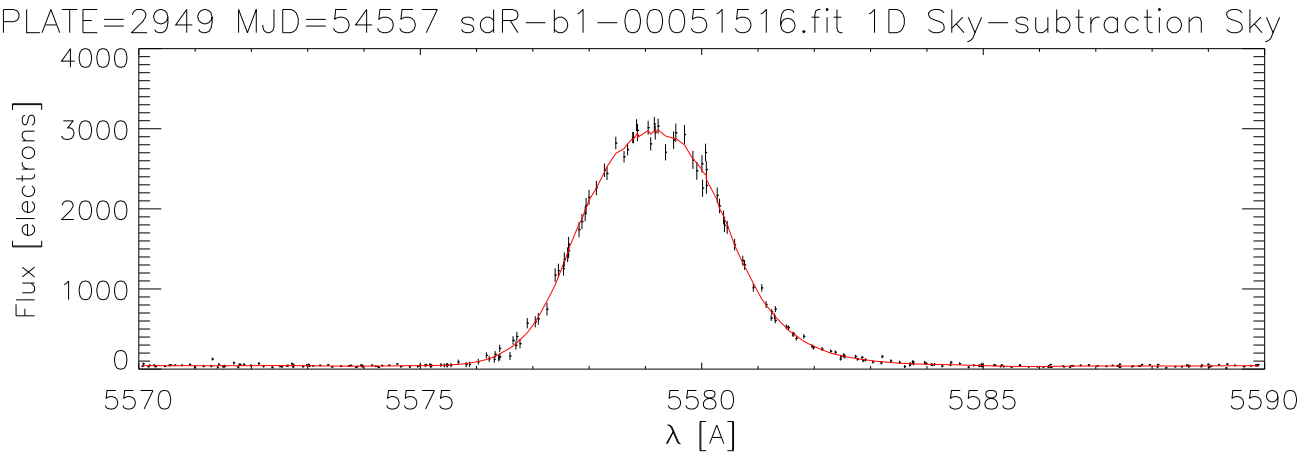

4046.5600
nfib1 15
nfib2 15
stdev 0.137
extra 0.10
4358.3300
nfib1 16
nfib2 16
stdev 0.106
extra 0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.054
extra 0.14
5577.3390
nfib1 16
nfib2 16
stdev 0.023
extra 0.18
5889.9500
nfib1 16
nfib2 16
stdev 0.041
extra 0.24
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

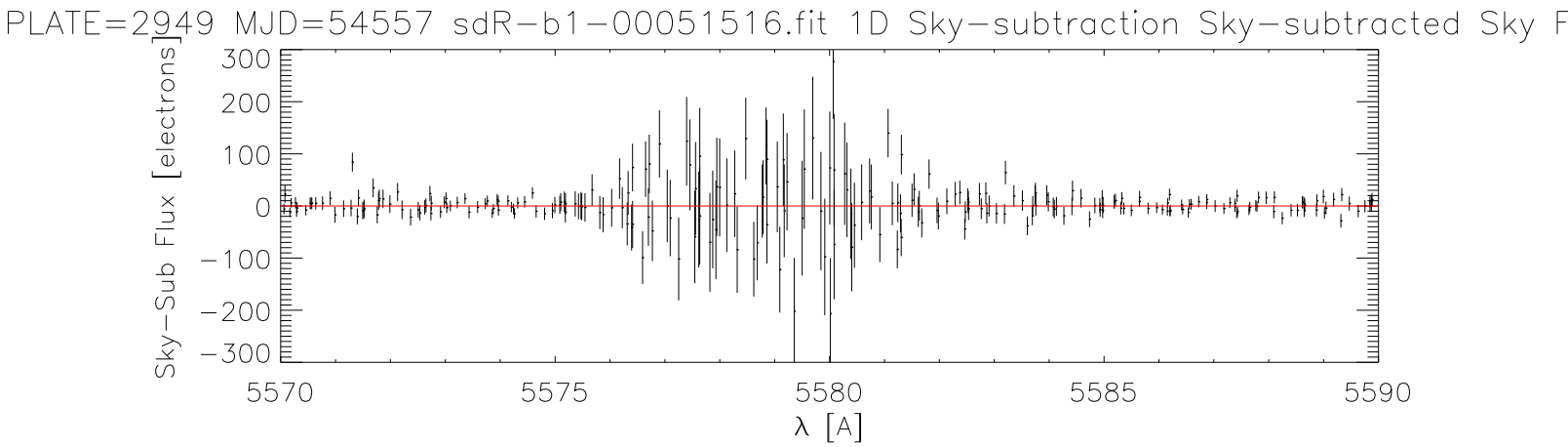

sky shift, pixels
0.25
0.20
0.15
0.10
0.05
0.00
3500
4000
4500
5000
5500
6000
6500

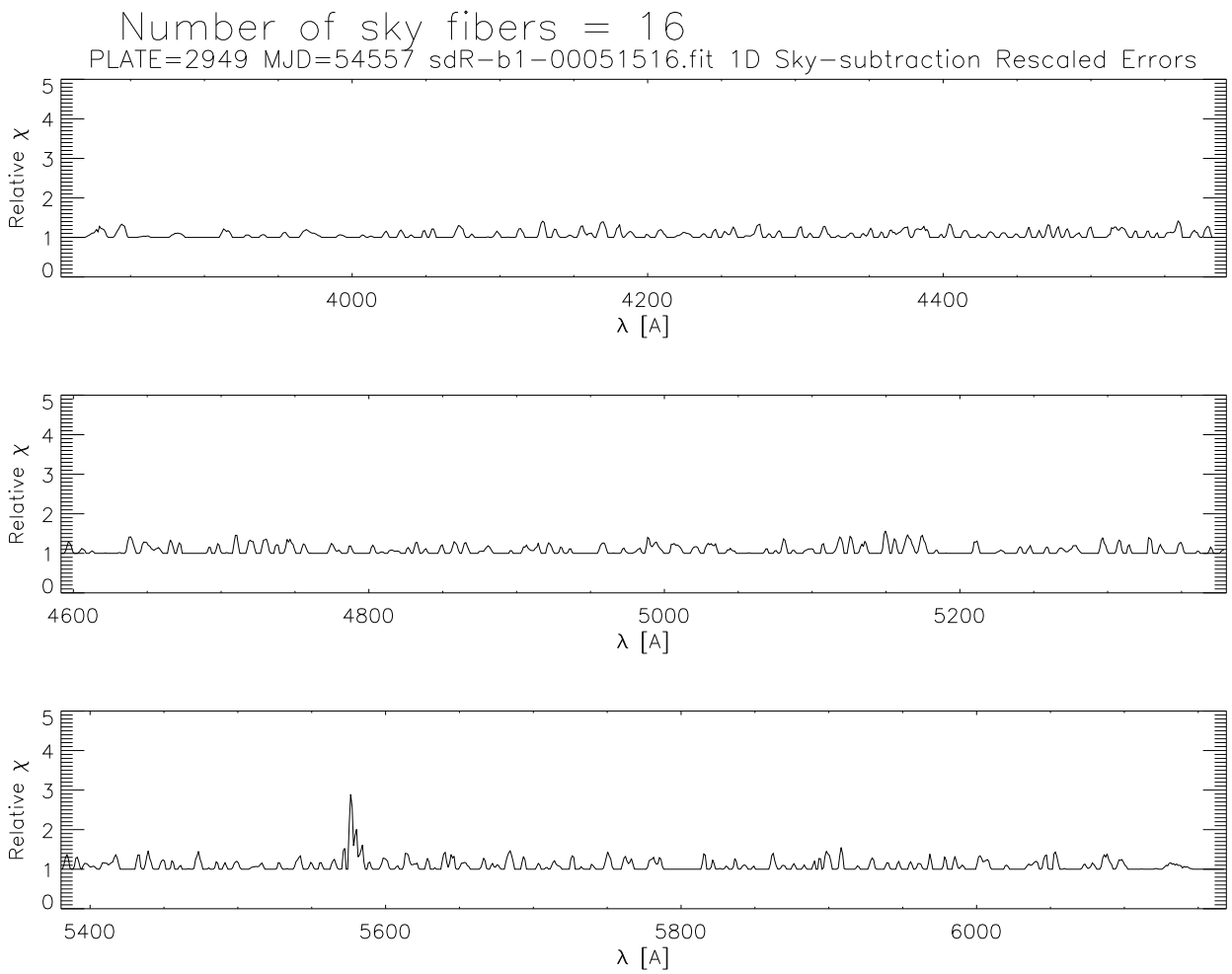

PLATE=2949 MJD=54557 Smooth superflat for sdR-b1-00051516.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

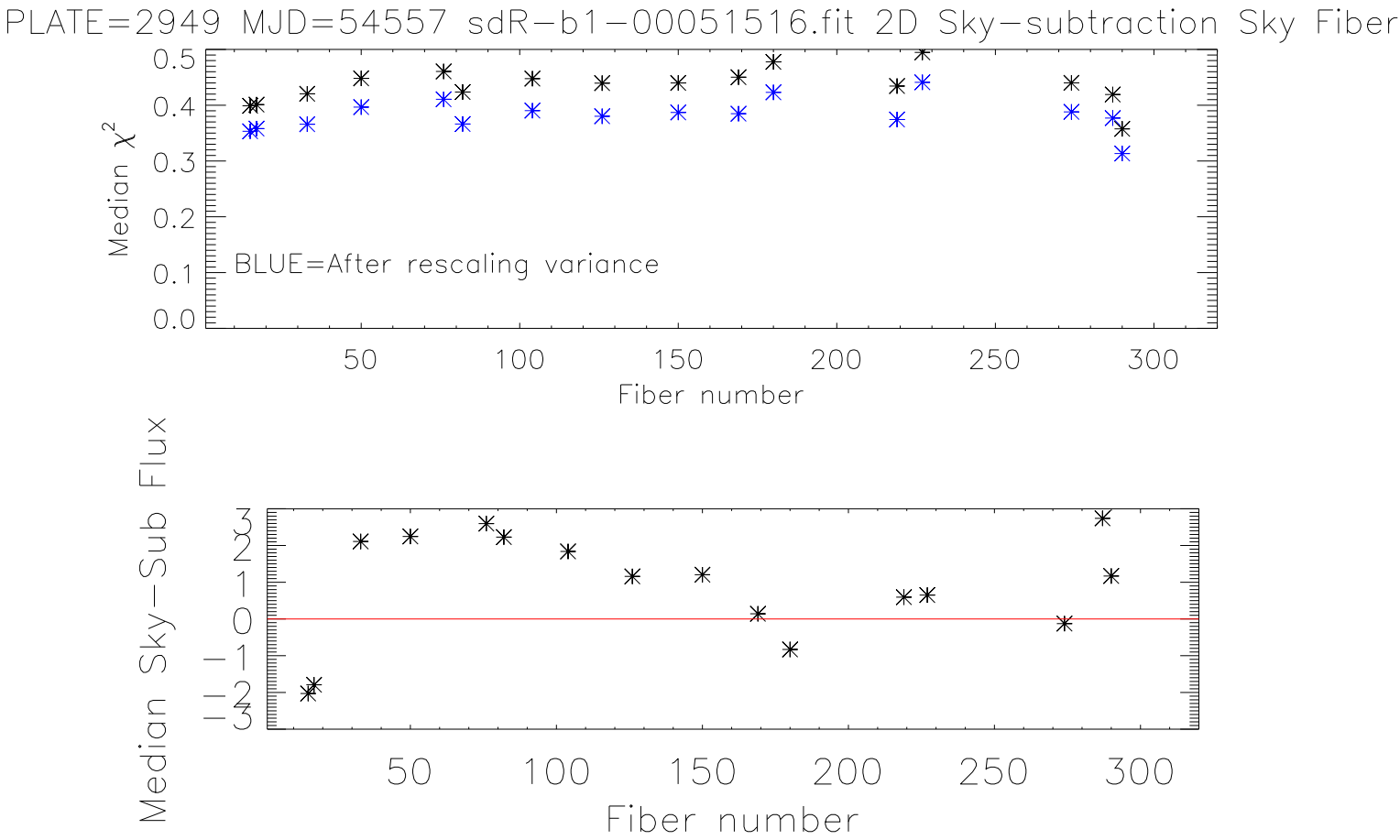
es= −0.0001

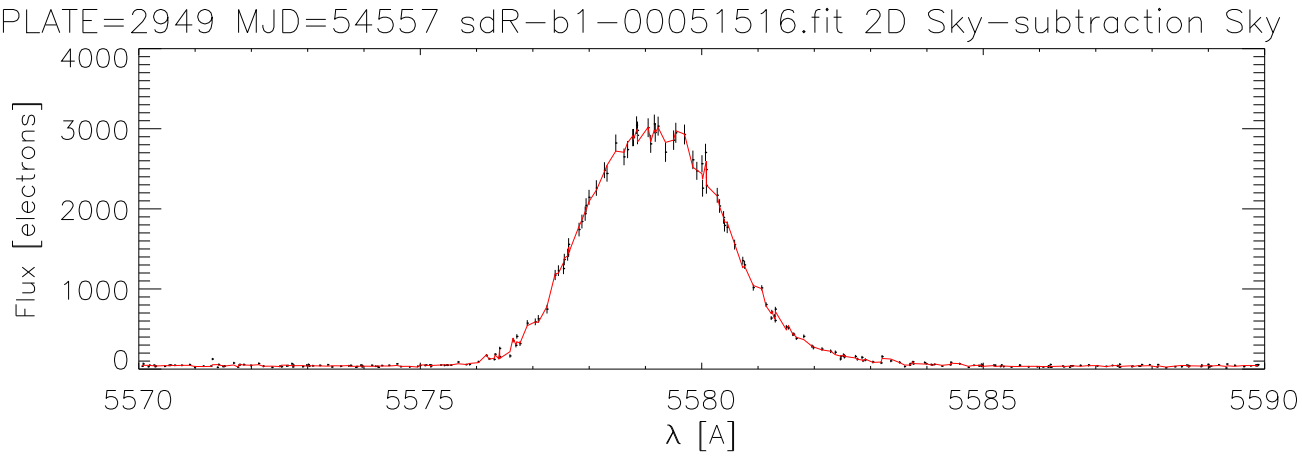

PLATE=2949 MJD=54557 sdR-b1-00051516.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

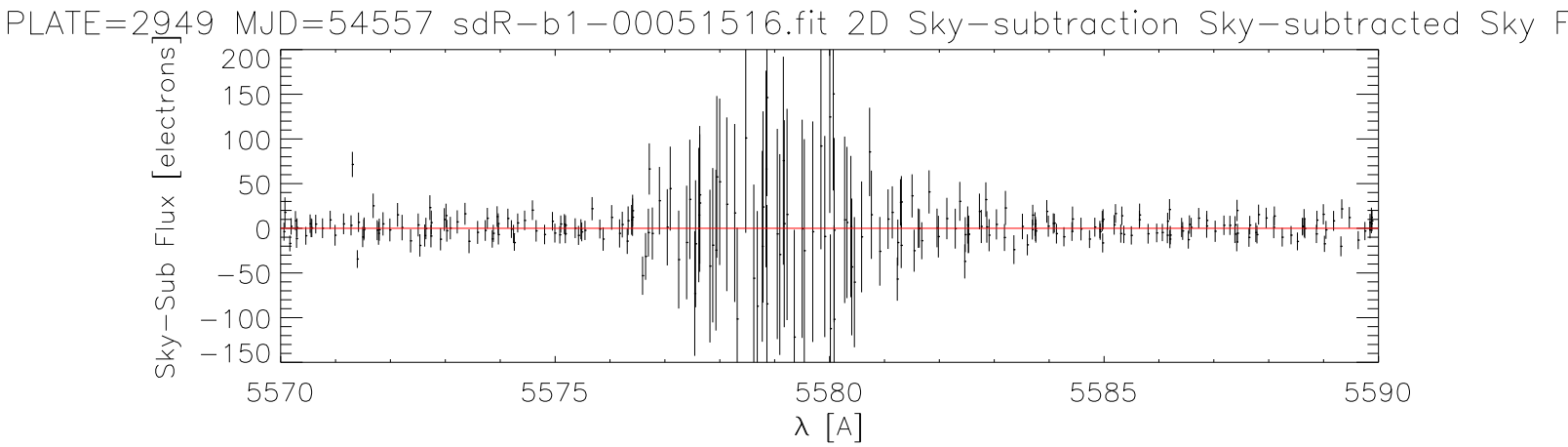

PLATE=2949 MJD=54557 sdR-b1-00051516.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

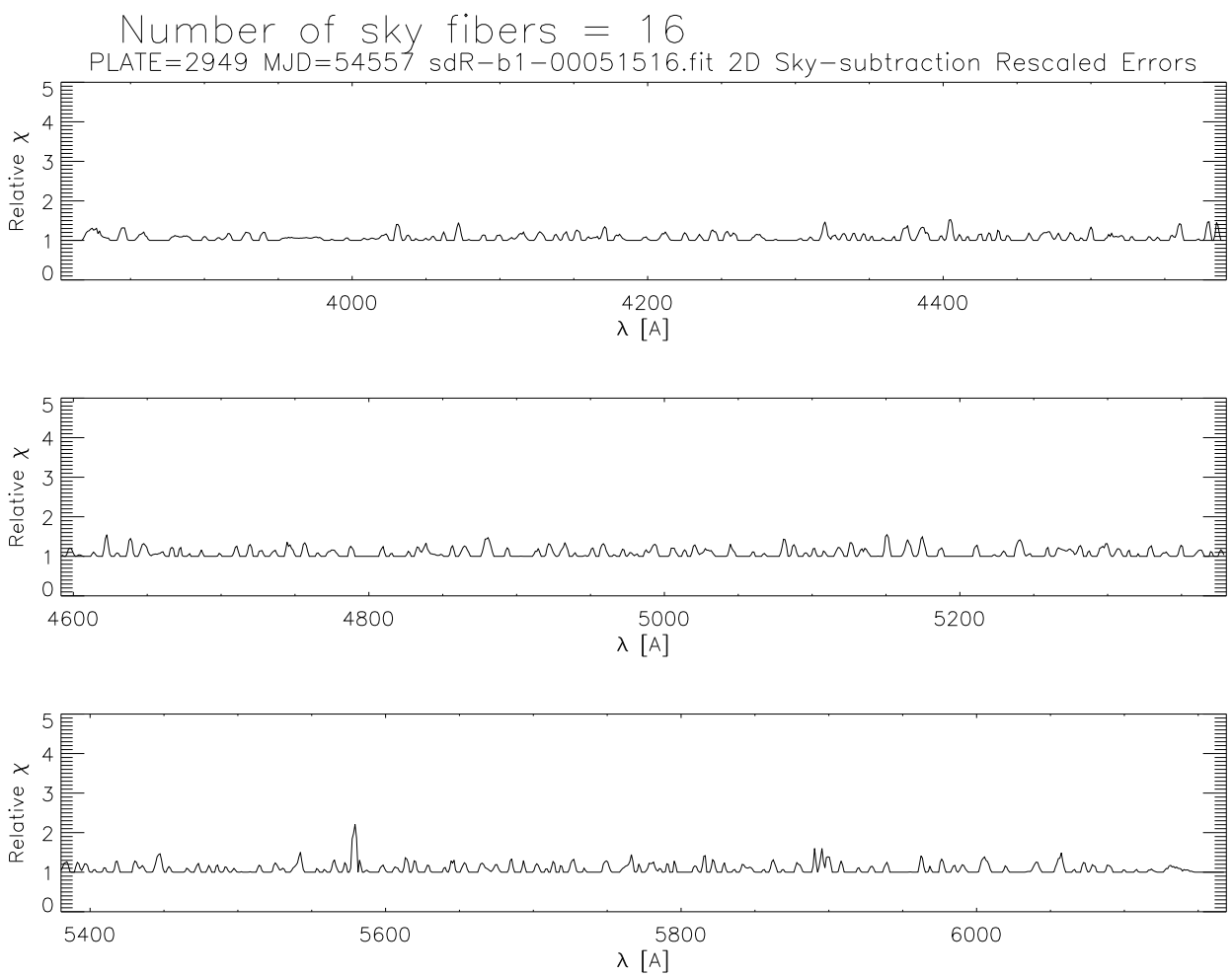

PLATE=2949 MJD=54557 sdR-b1-00051516.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

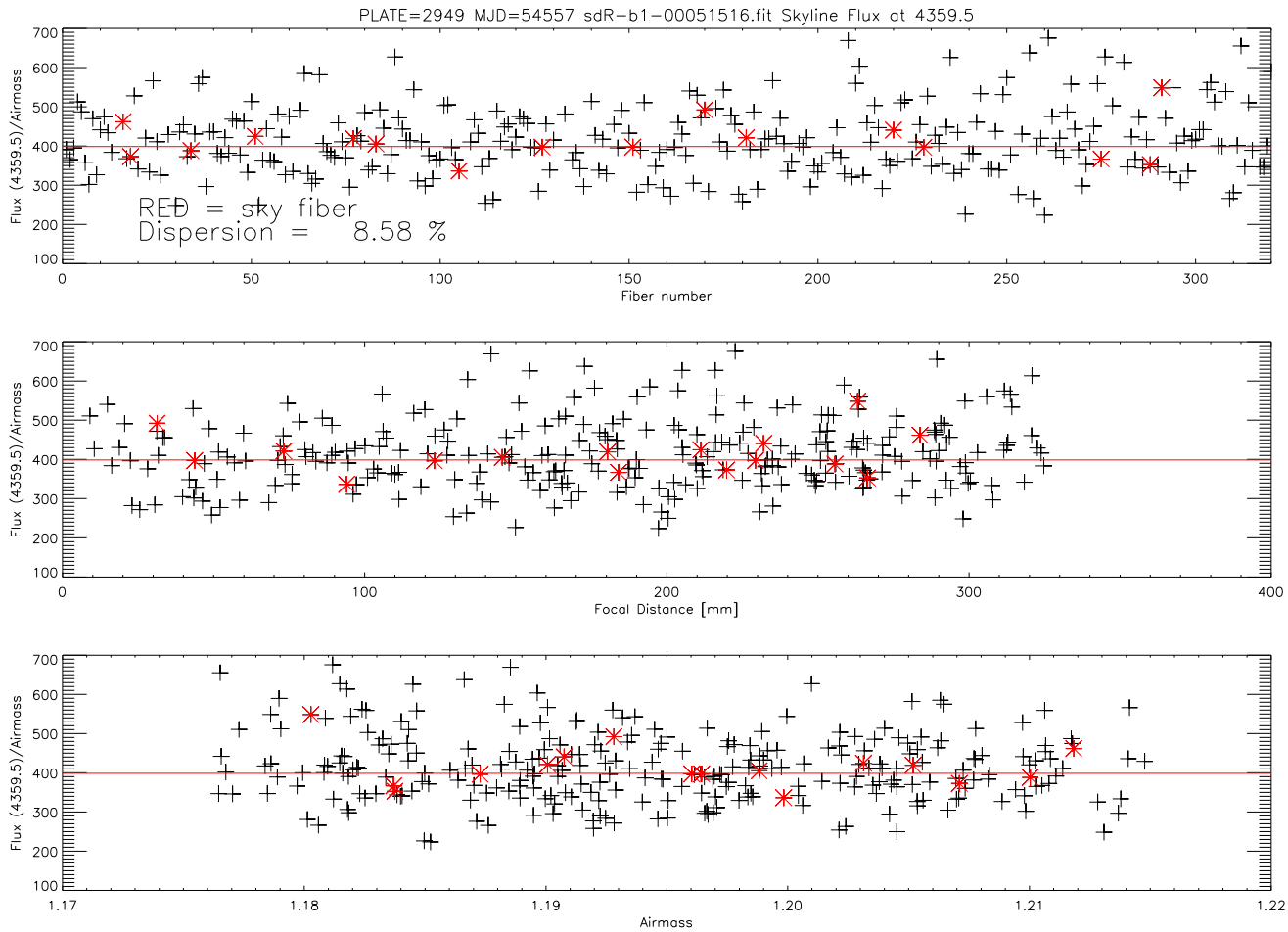

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-b1-00051516.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

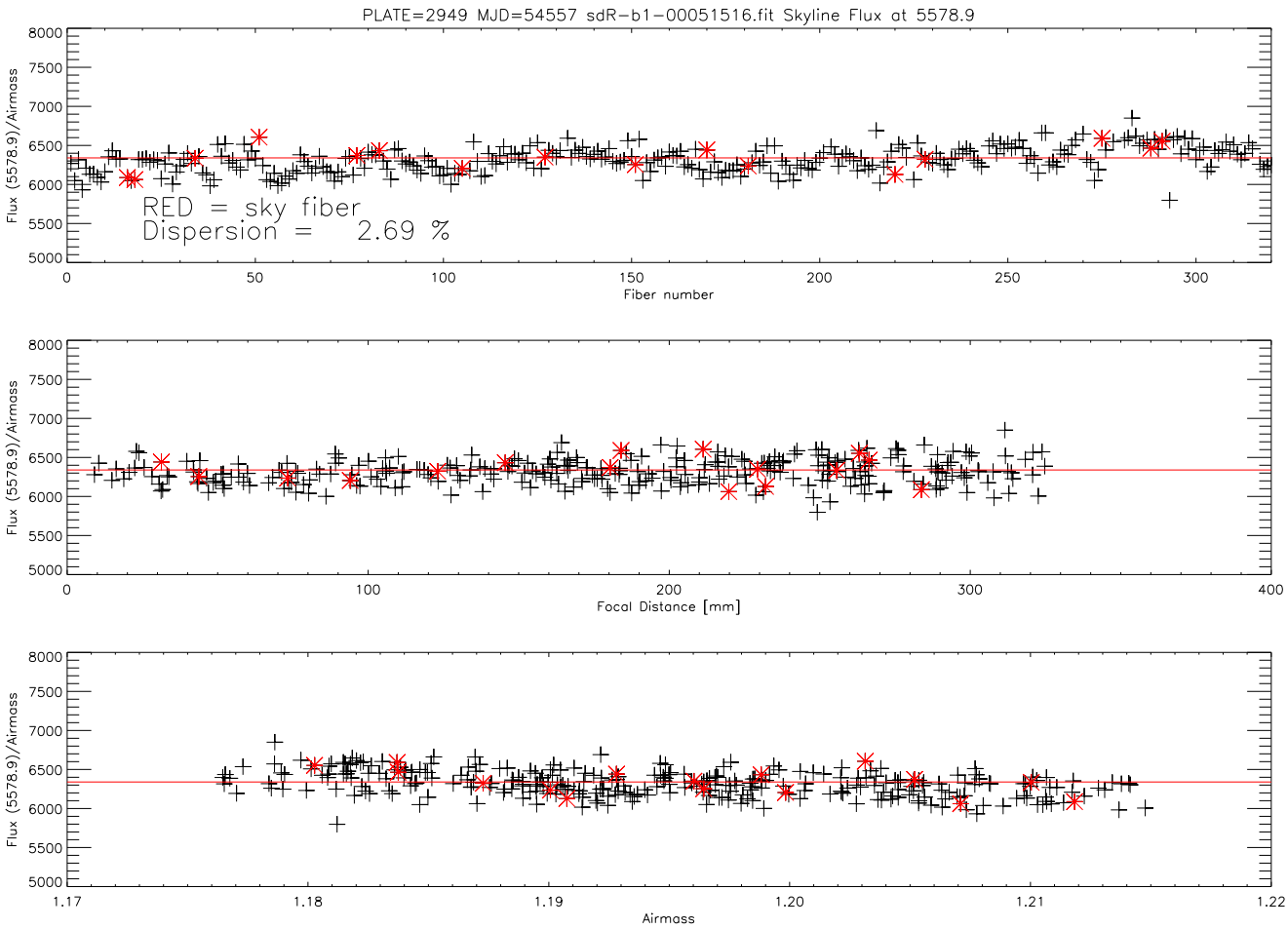

PLATE=2949 MJD=54557 sdR-b1-00051516.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

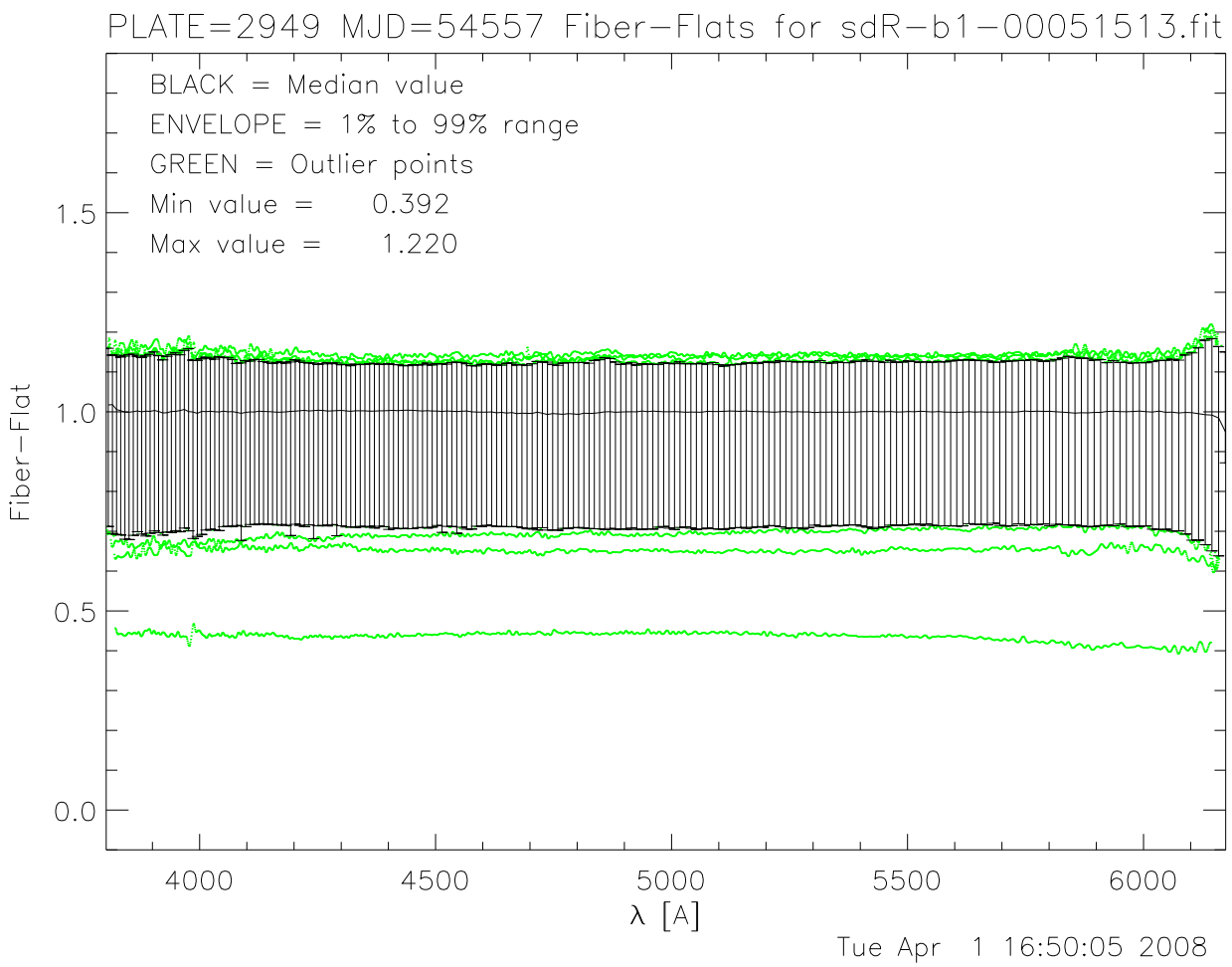

PLATE=2949 MJD=54557 sdR-b1-00051516.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

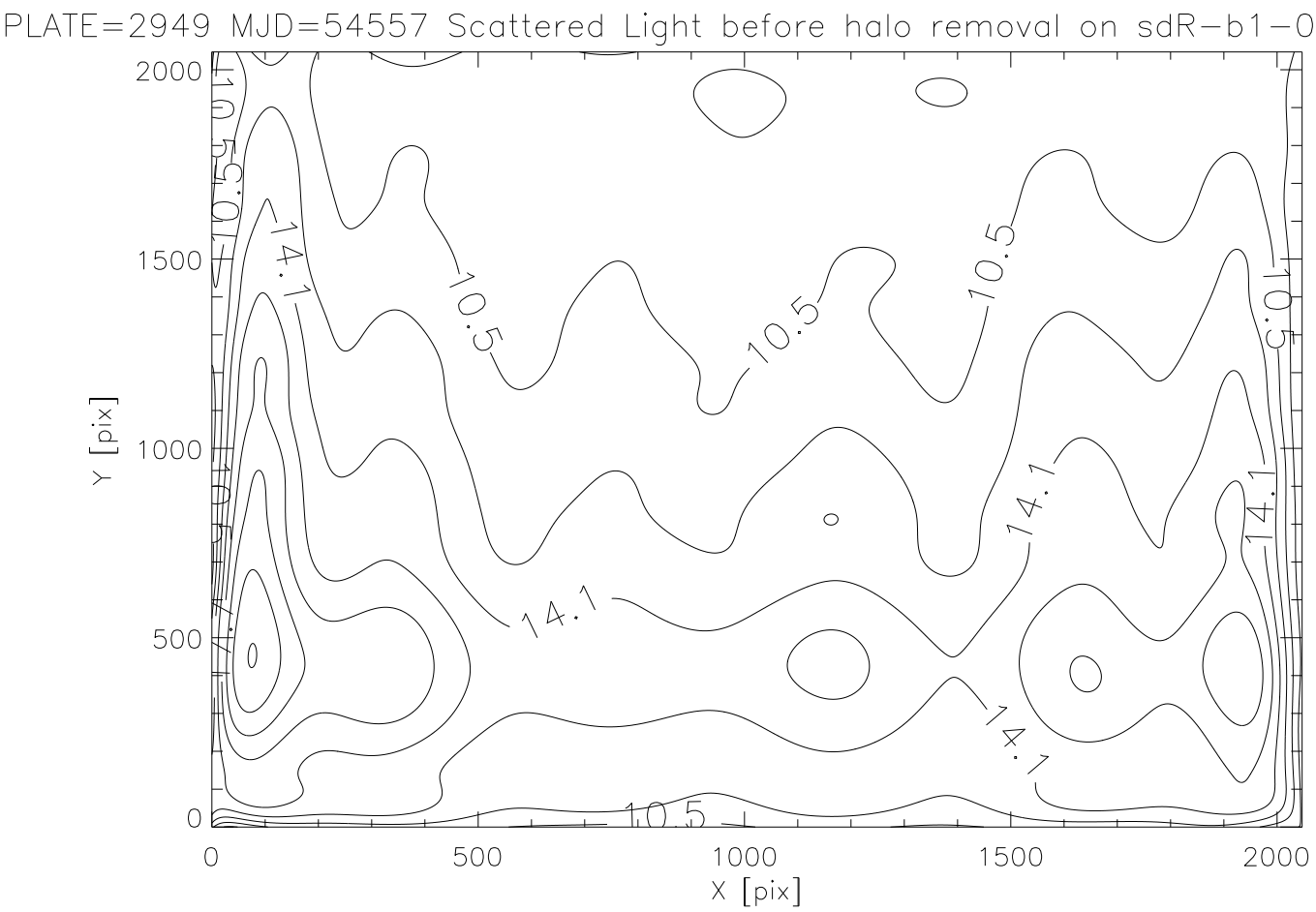

PLATE=2949 MJD=54557 sdR-b1-00051516.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

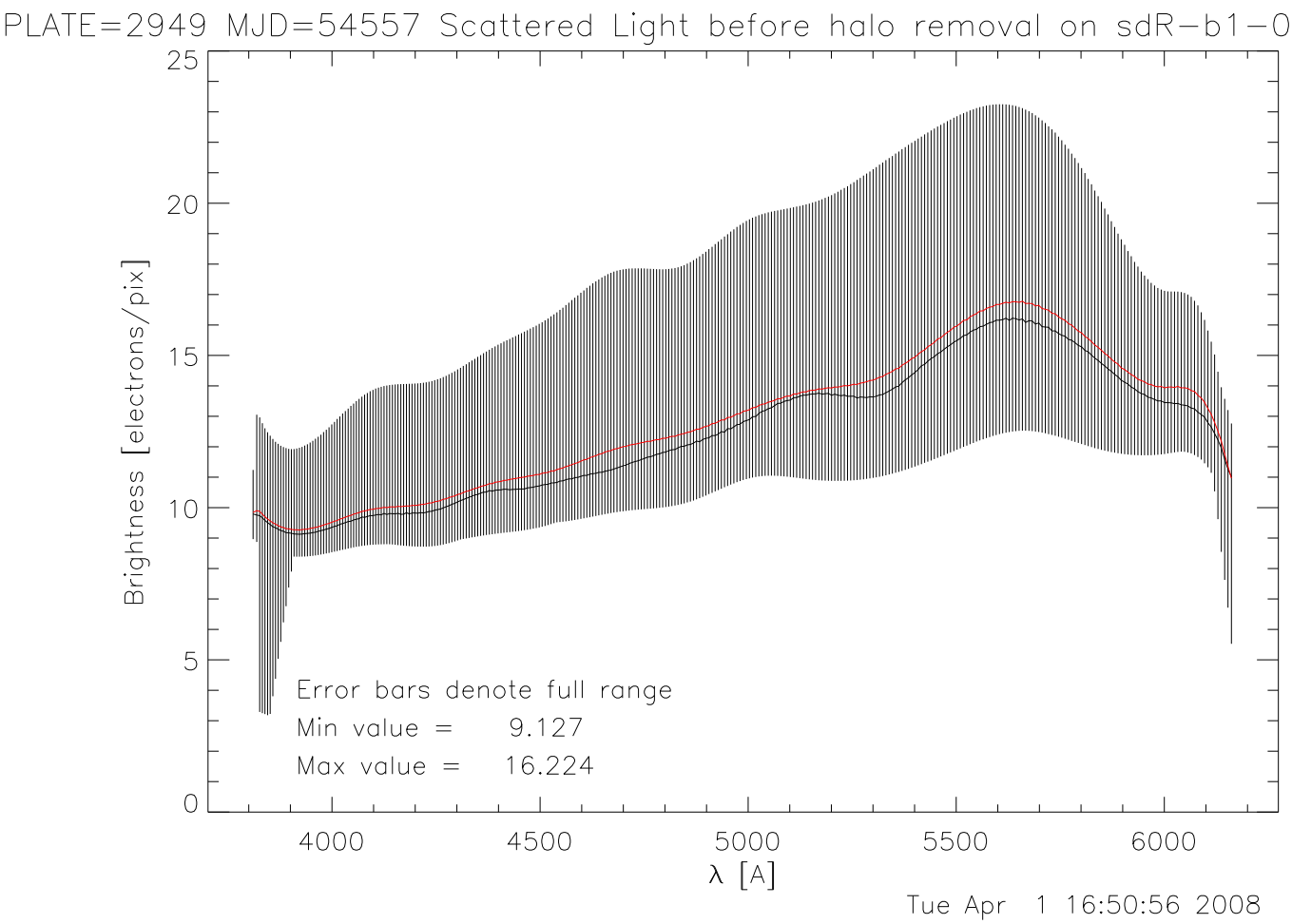

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-b1-00051516.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

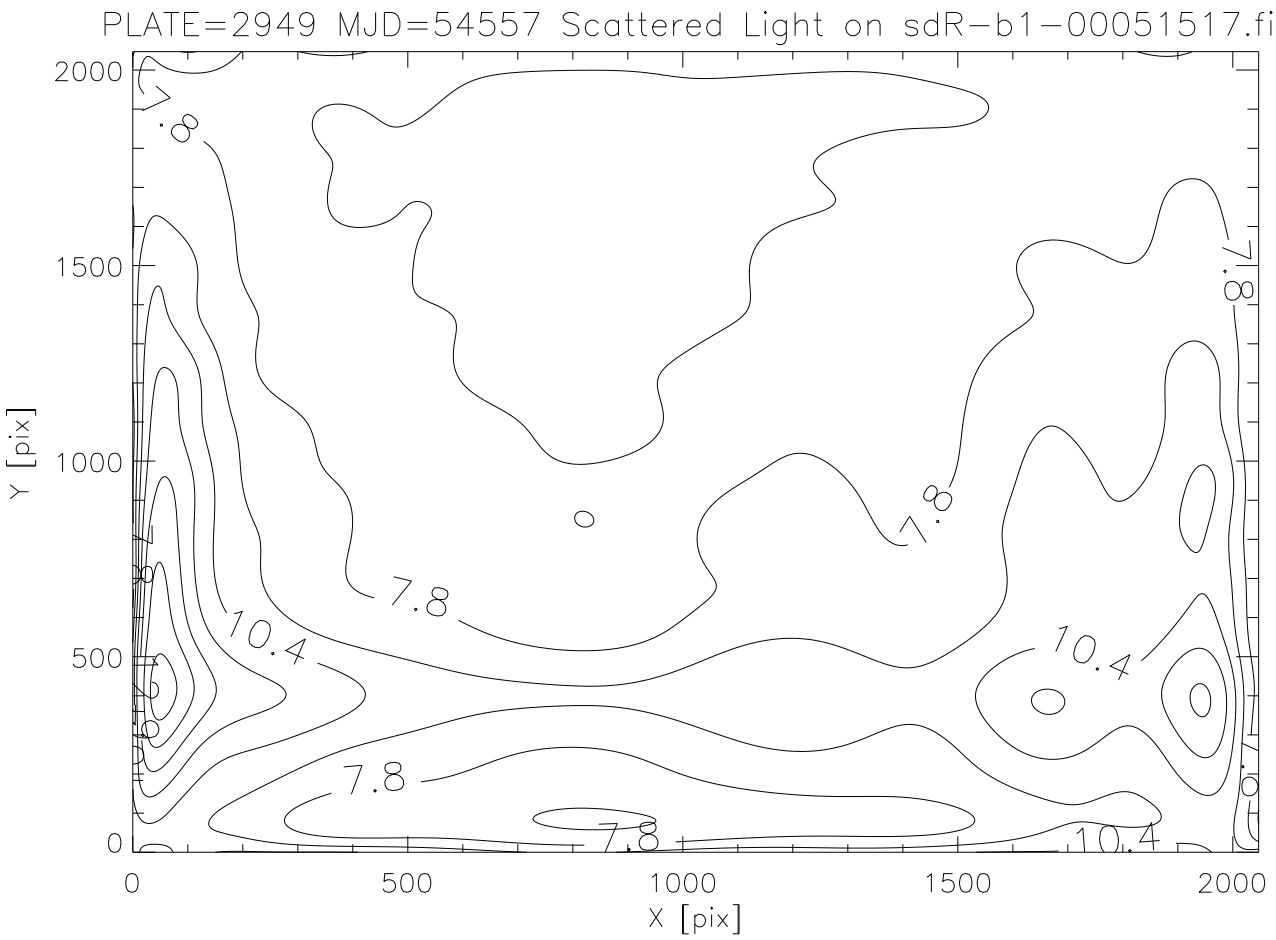

PLATE=2949 MJD=54557 sdR-b1-00051516.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 8.58 %
Fiber number
Focal Distance [mm]
Airmass

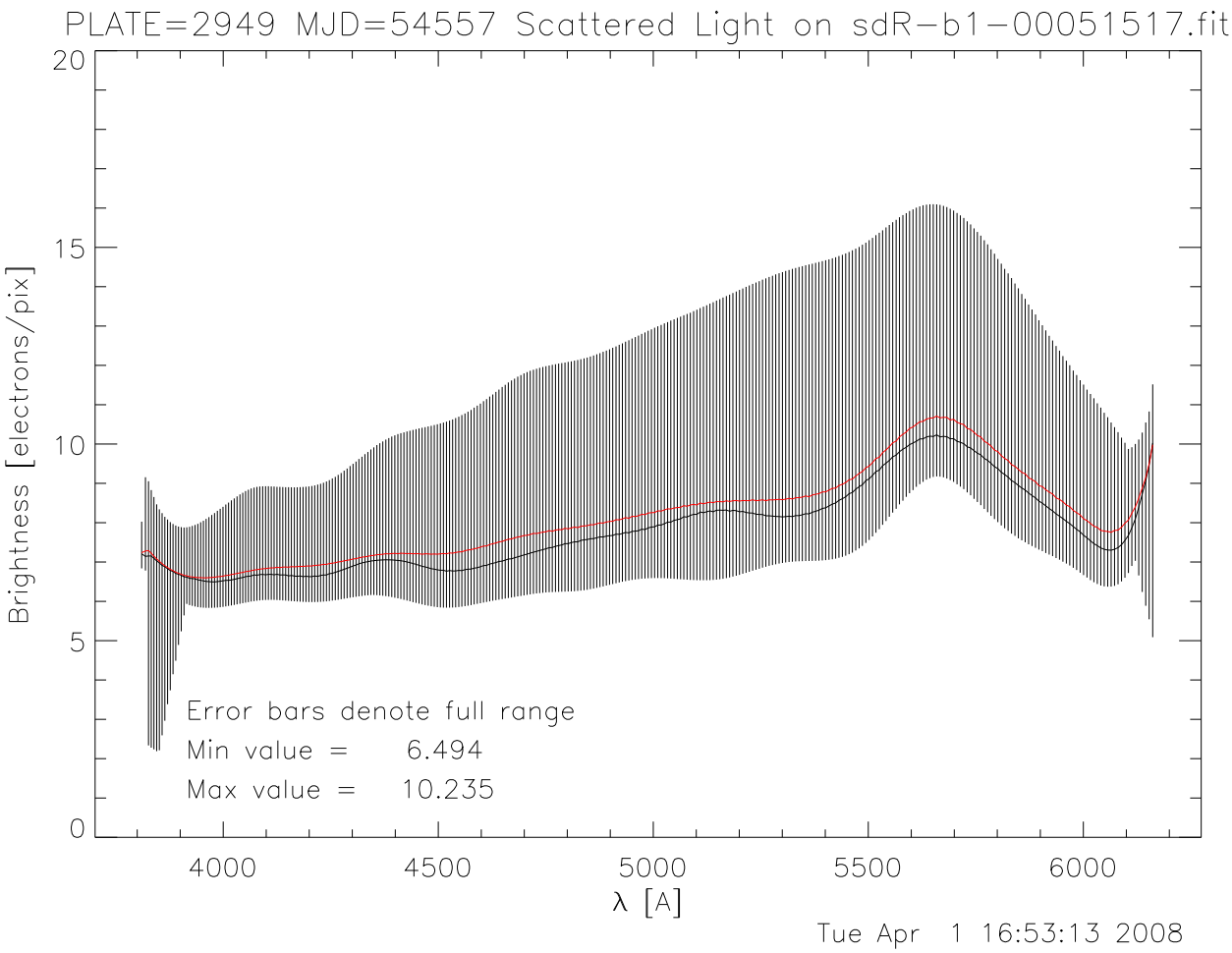

PLATE=2949 MJD=54557 sdR-b1-00051516.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.69 %
Fiber number
Focal Distance [mm]
Airmass

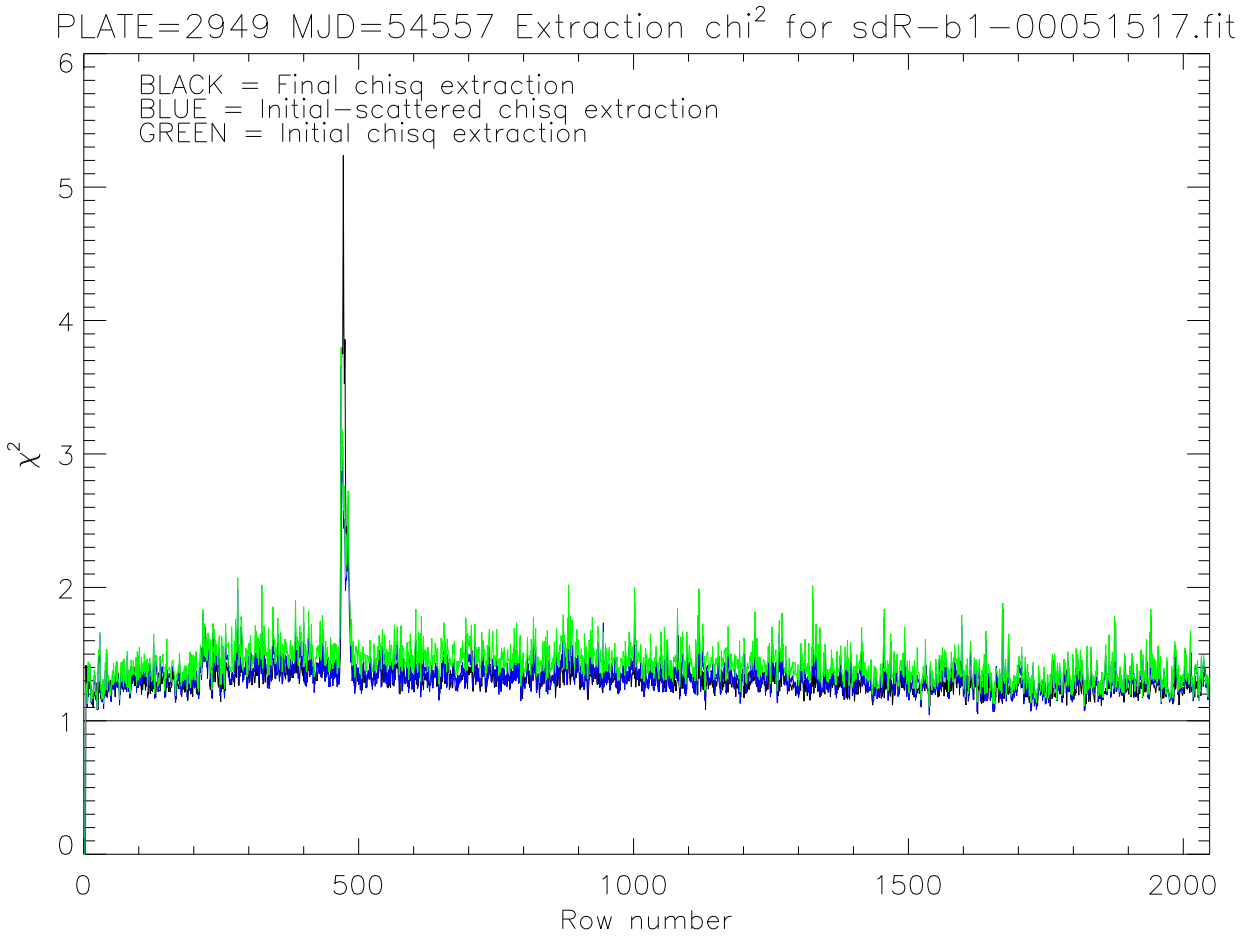

PLATE=2949 MJD=54557 Fiber-Flats for sdR-b1-00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.392
Max value = 1.220
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 16:50:05 2008

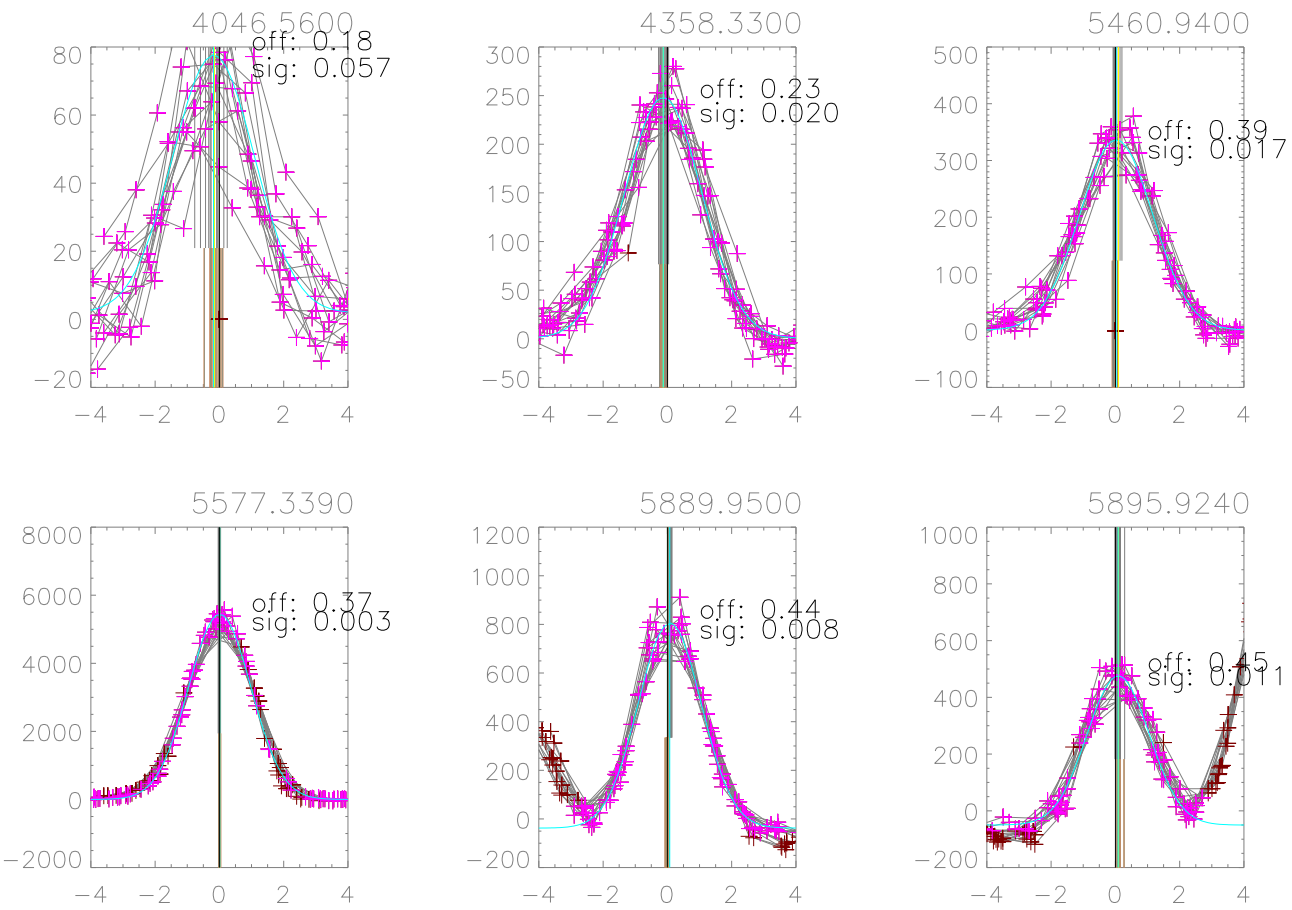

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR−b1−00051517.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.5
14.1
0

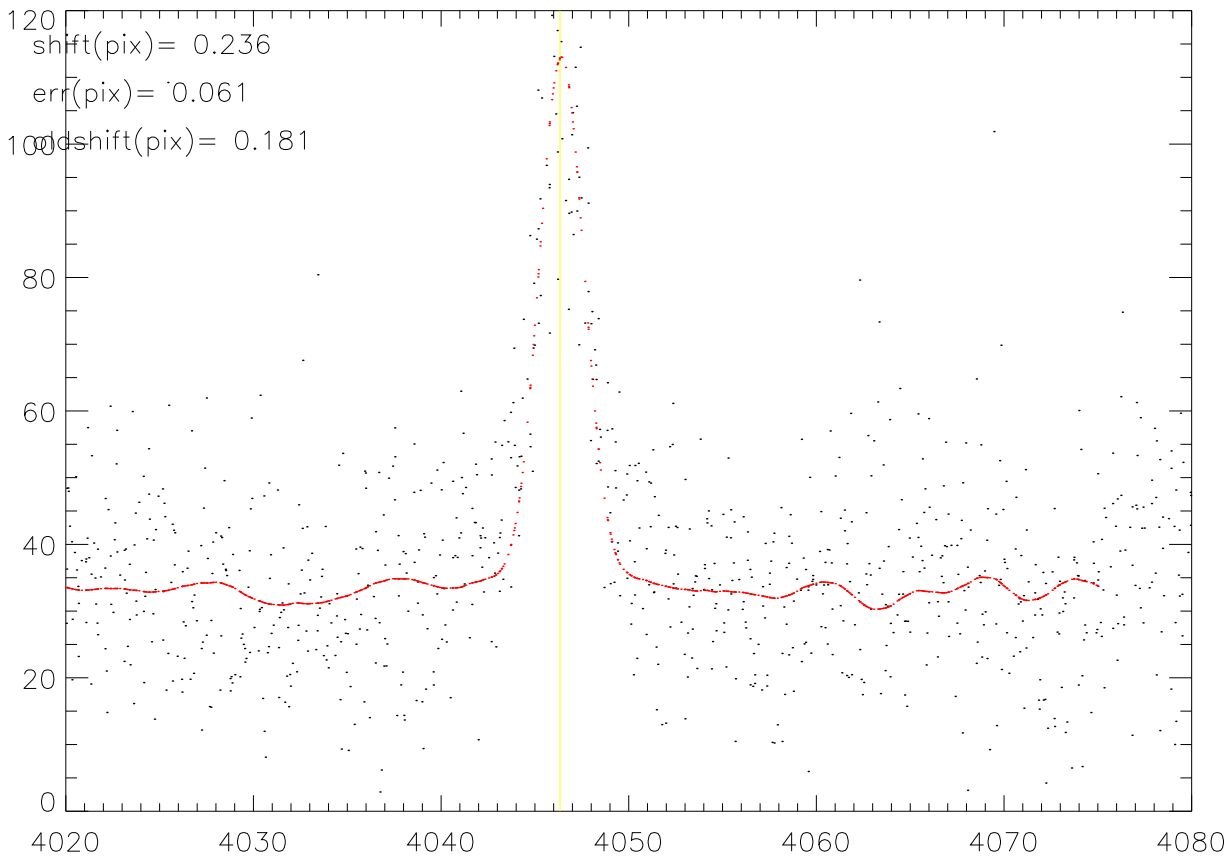

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR−b1−00051517.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.127
Max value = 16.224
Tue Apr 1 16:50:56 2008

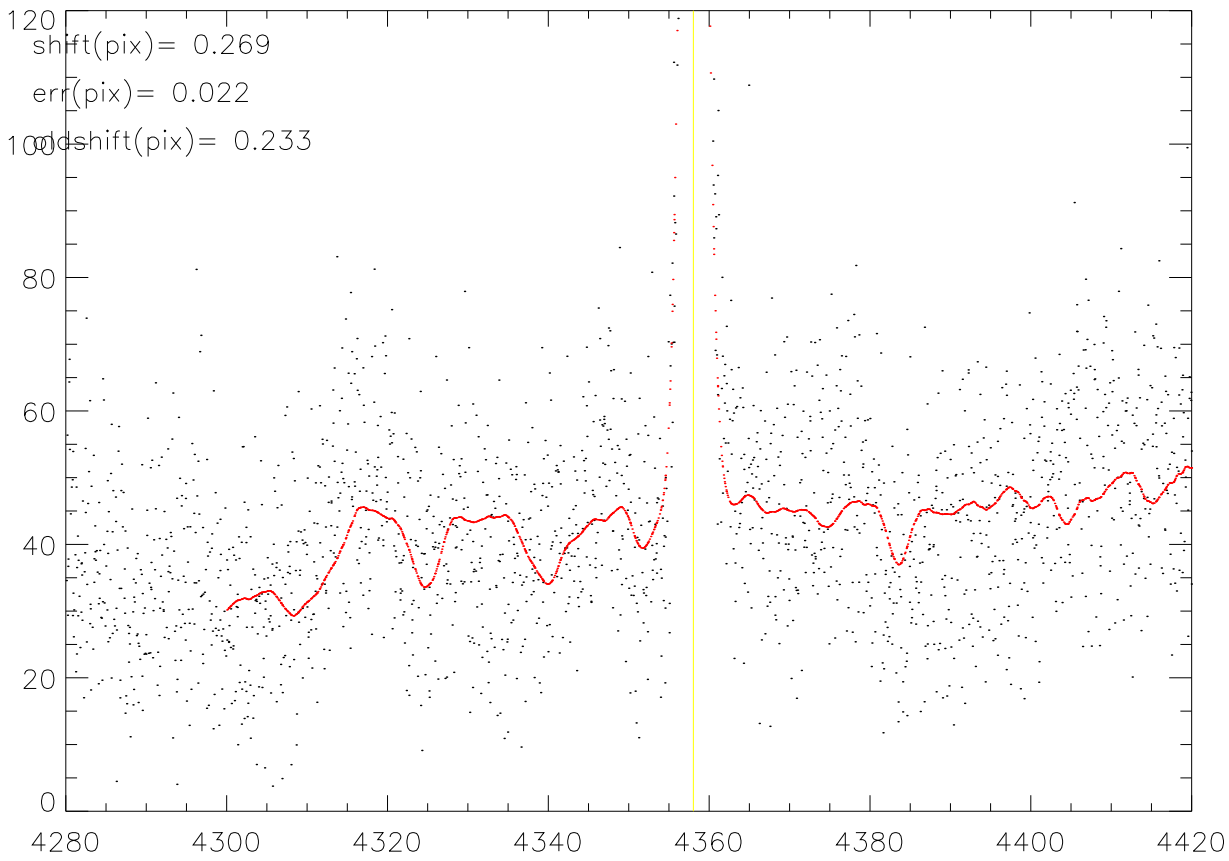

PLATE=2949 MJD=54557 Scattered Light on sdR-b1-00051517.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.8
10.4
0

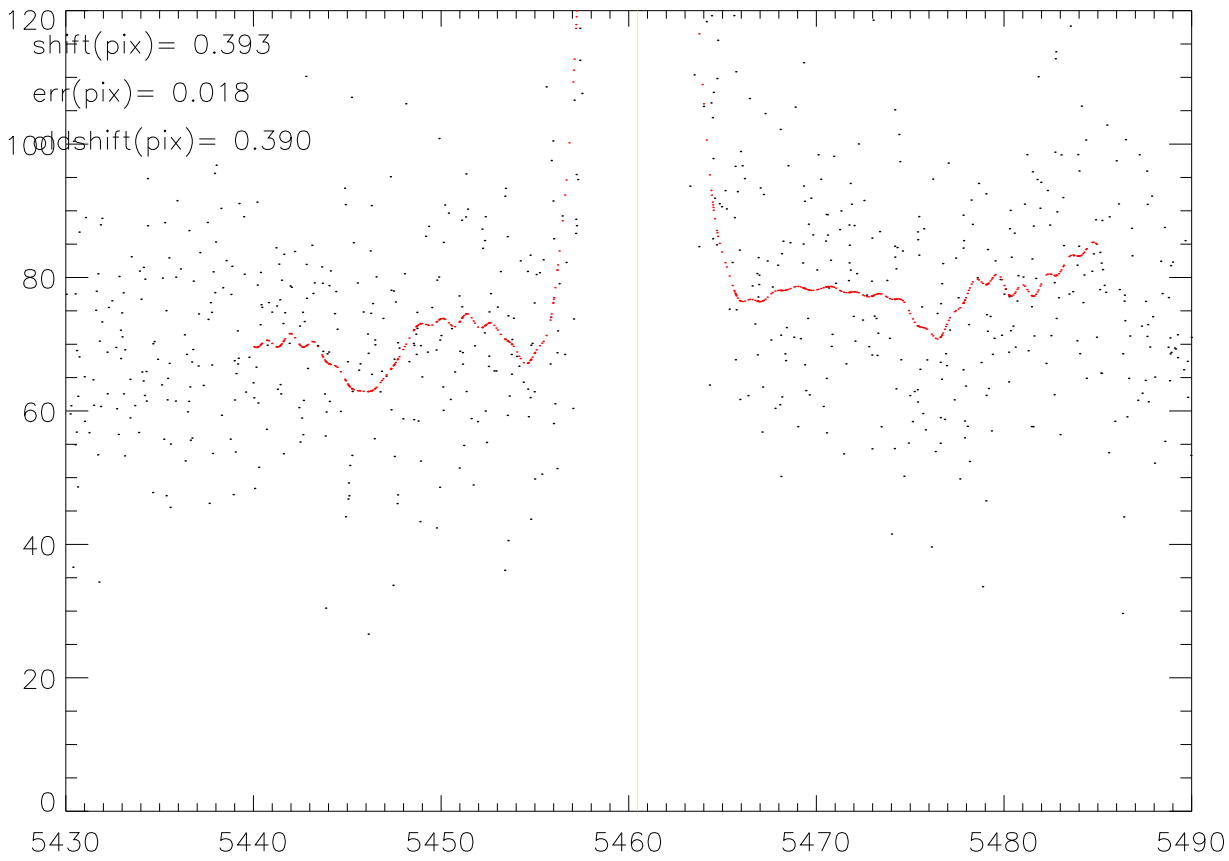

PLATE=2949 MJD=54557 Scattered Light on sdR-b1-00051517.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.494
Max value = 10.235
Tue Apr 1 16:53:13 2008

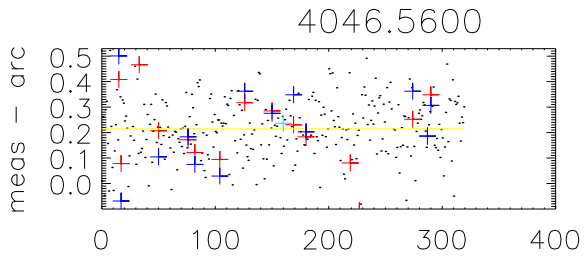

PLATE=2949 MJD=54557 Extraction chi^2 for sdR−b1−00051517.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

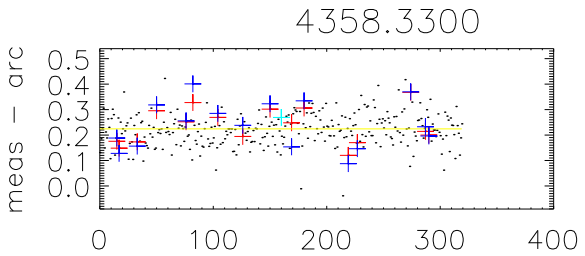

4046.5600
off: 0.18
sig: 0.057
4358.3300
off: 0.23
sig: 0.020
5460.9400
off: 0.39
sig: 0.017
5577.3390
off: 0.37
sig: 0.003
5889.9500
off: 0.44
sig: 0.008
5895.9240
off: 0.45
sig: 0.011

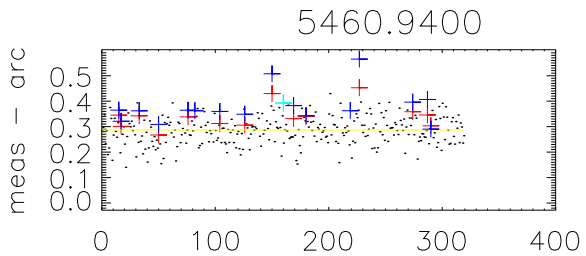

shift(pix)= 0.236
err(pix)= 0.061
oldshift(pix)= 0.181
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

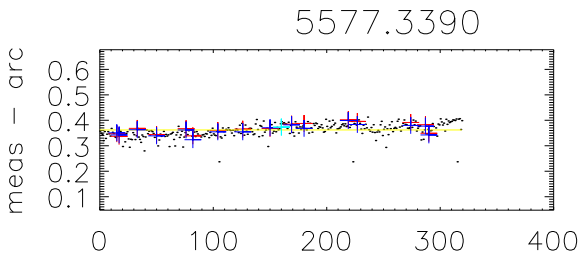

shift(pix)= 0.269
err(pix)= 0.022
oldshift(pix)= 0.233
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

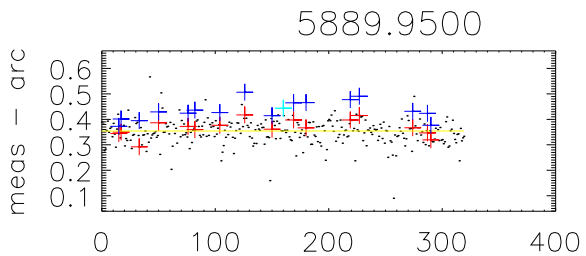

shift(pix)= 0.393
err(pix)= 0.018
oldshift(pix)= 0.390
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

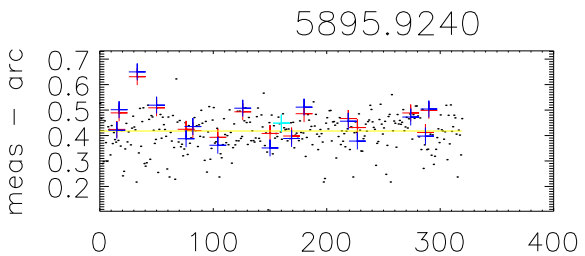

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

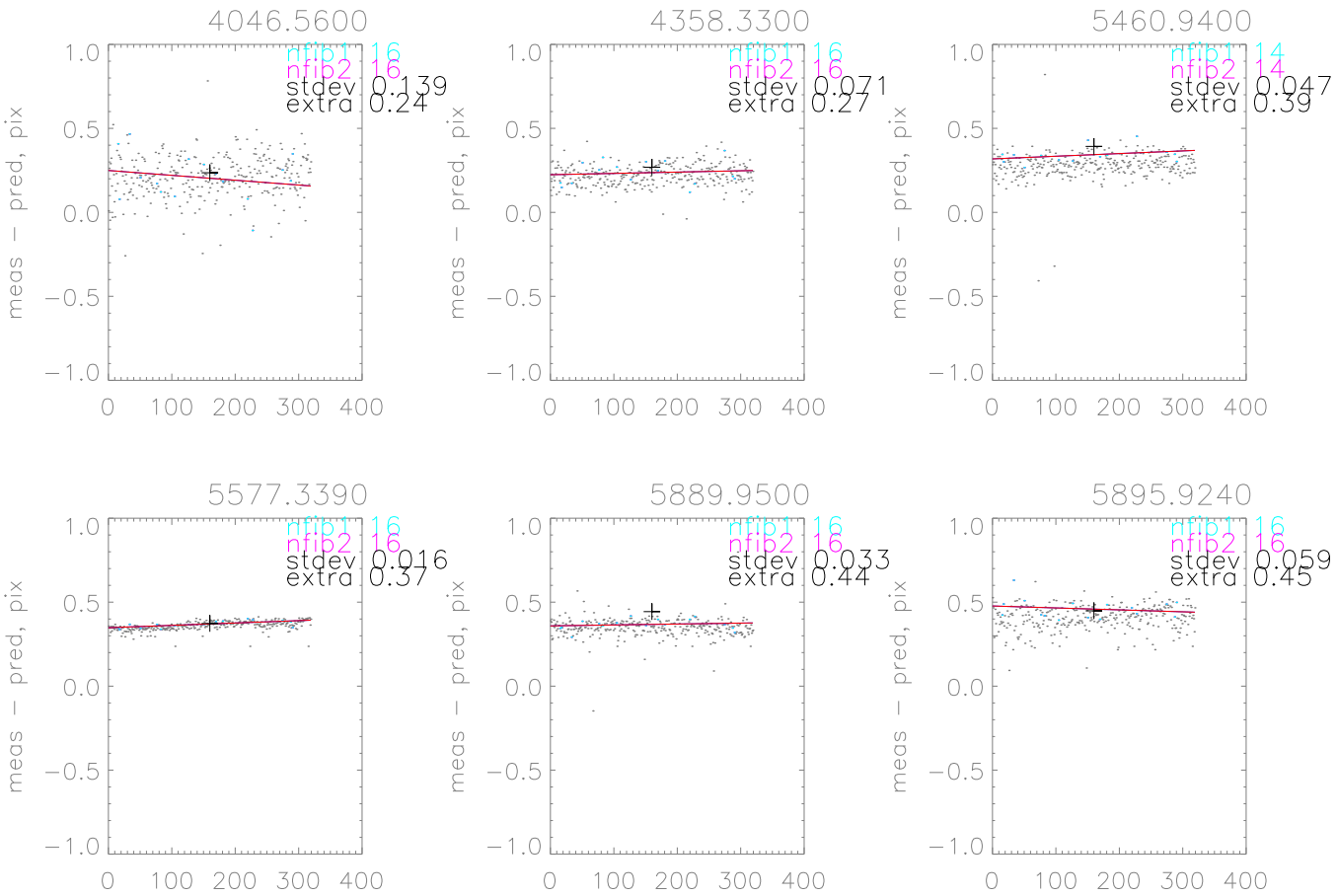

4358.3300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

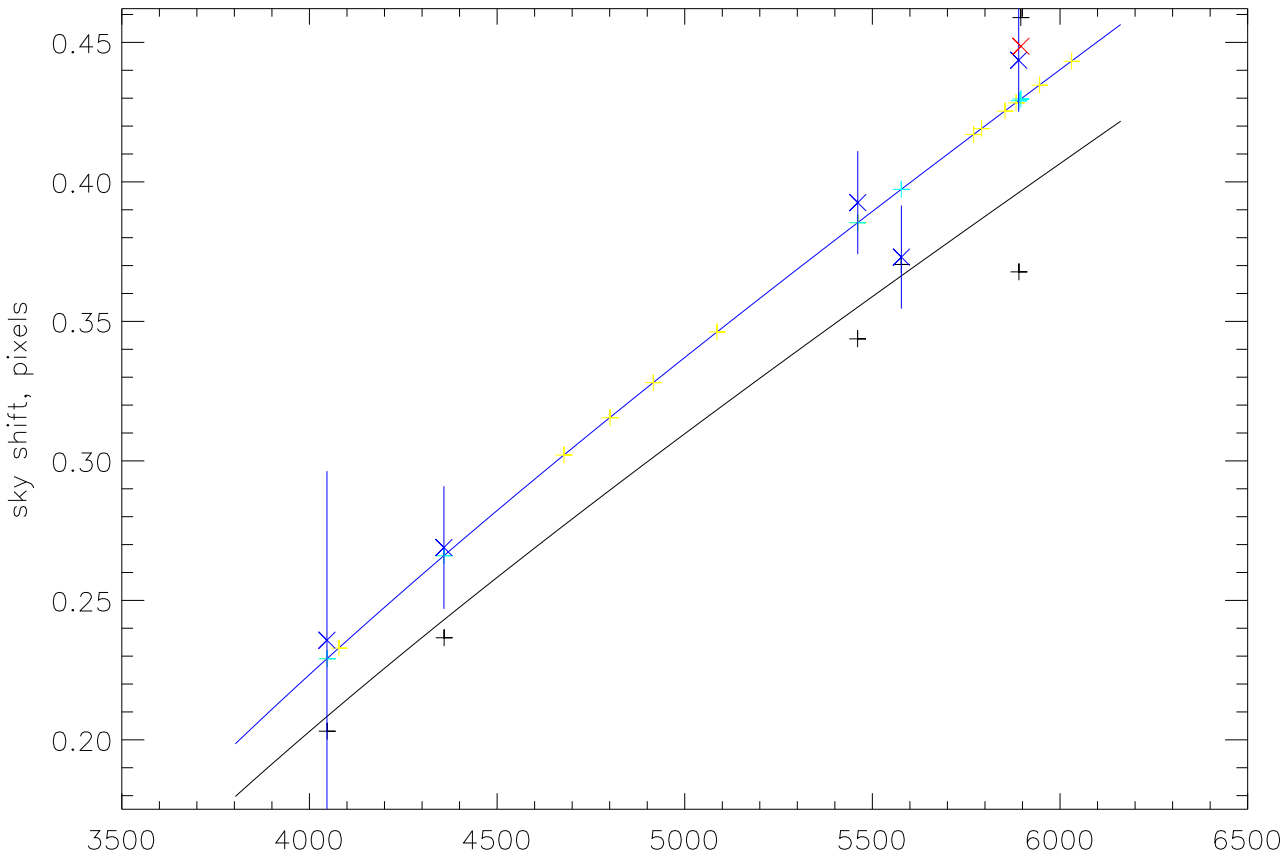

5460.9400
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

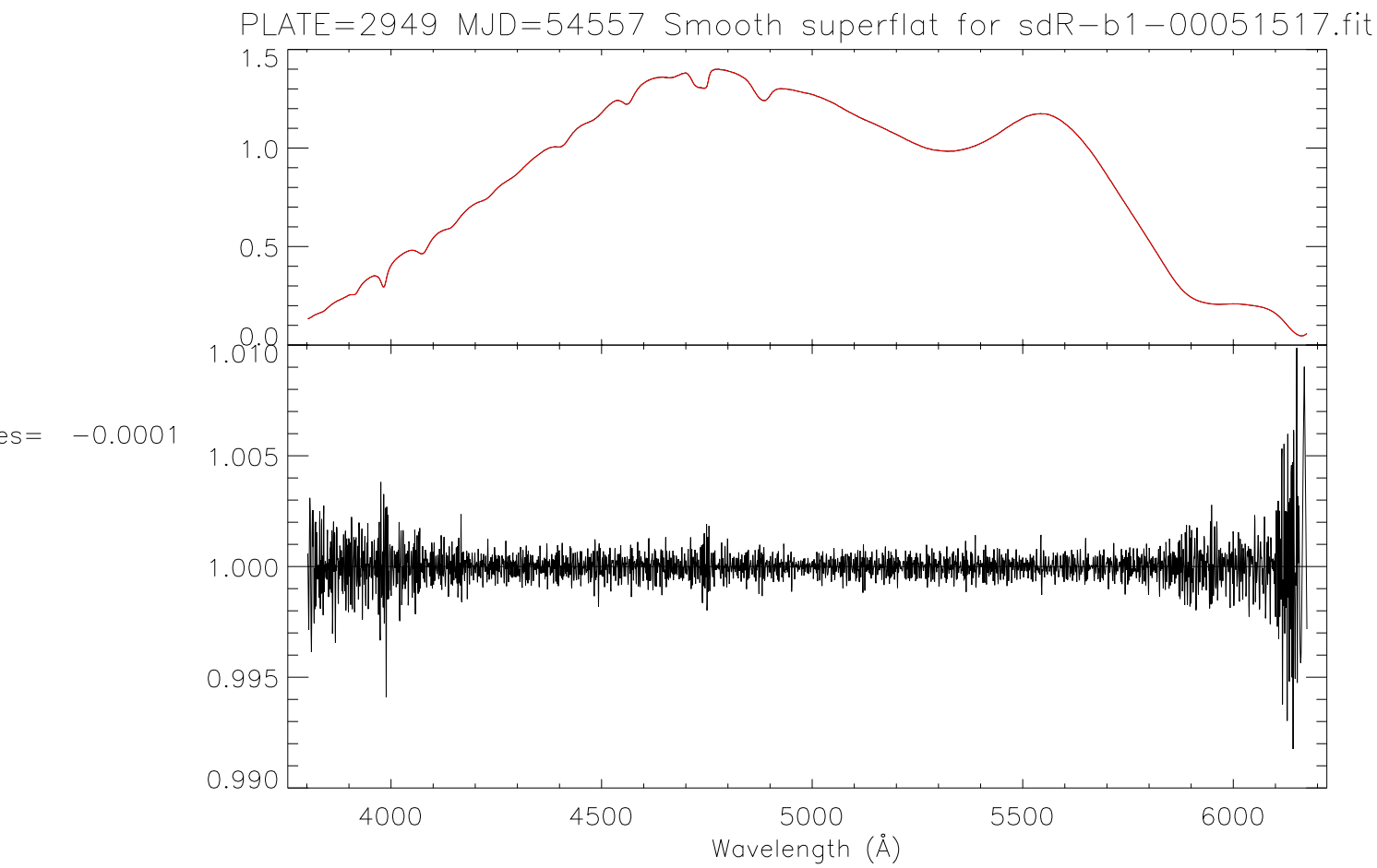

5577.3390
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


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

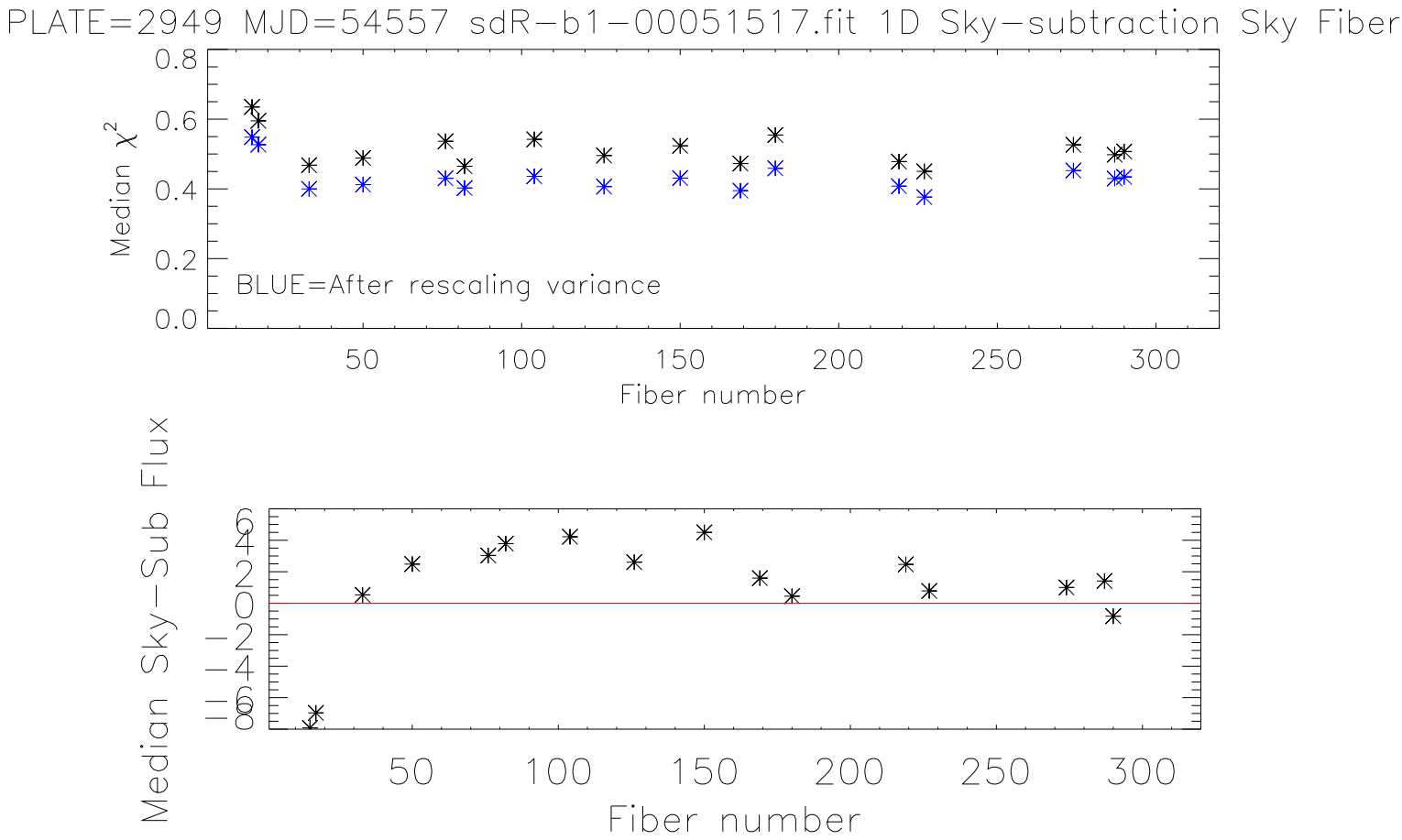

5895.9240
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

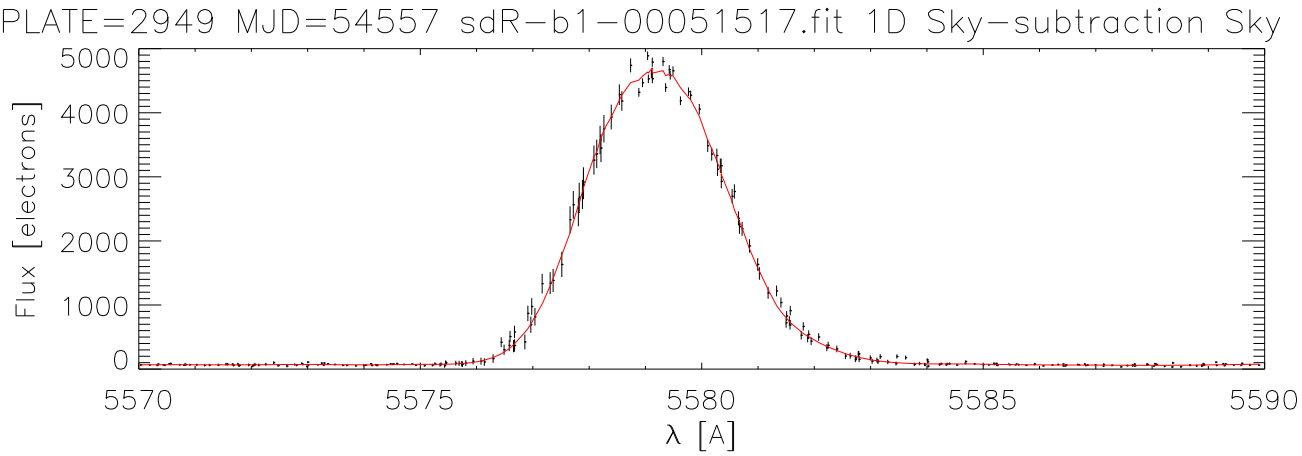

4046.5600
nfib1 16
nfib2 16
stdev 0.139
extra 0.24
4358.3300
nfib1 16
nfib2 16
stdev 0.071
extra 0.27
5460.9400
nfib1 14
nfib2 14
stdev 0.047
extra 0.39
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.37
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra 0.44
5895.9240
nfib1 16
nfib2 16
stdev 0.059
extra 0.45
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

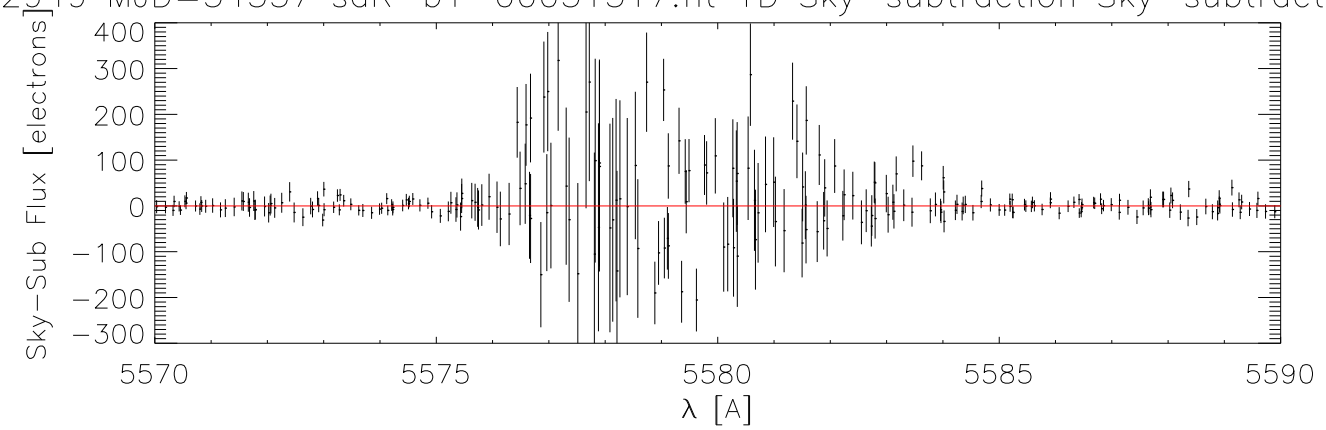

sky shift, pixels
0.45
0.40
0.35
0.30
0.25
0.20
3500
4000
4500
5000
5500
6000
6500

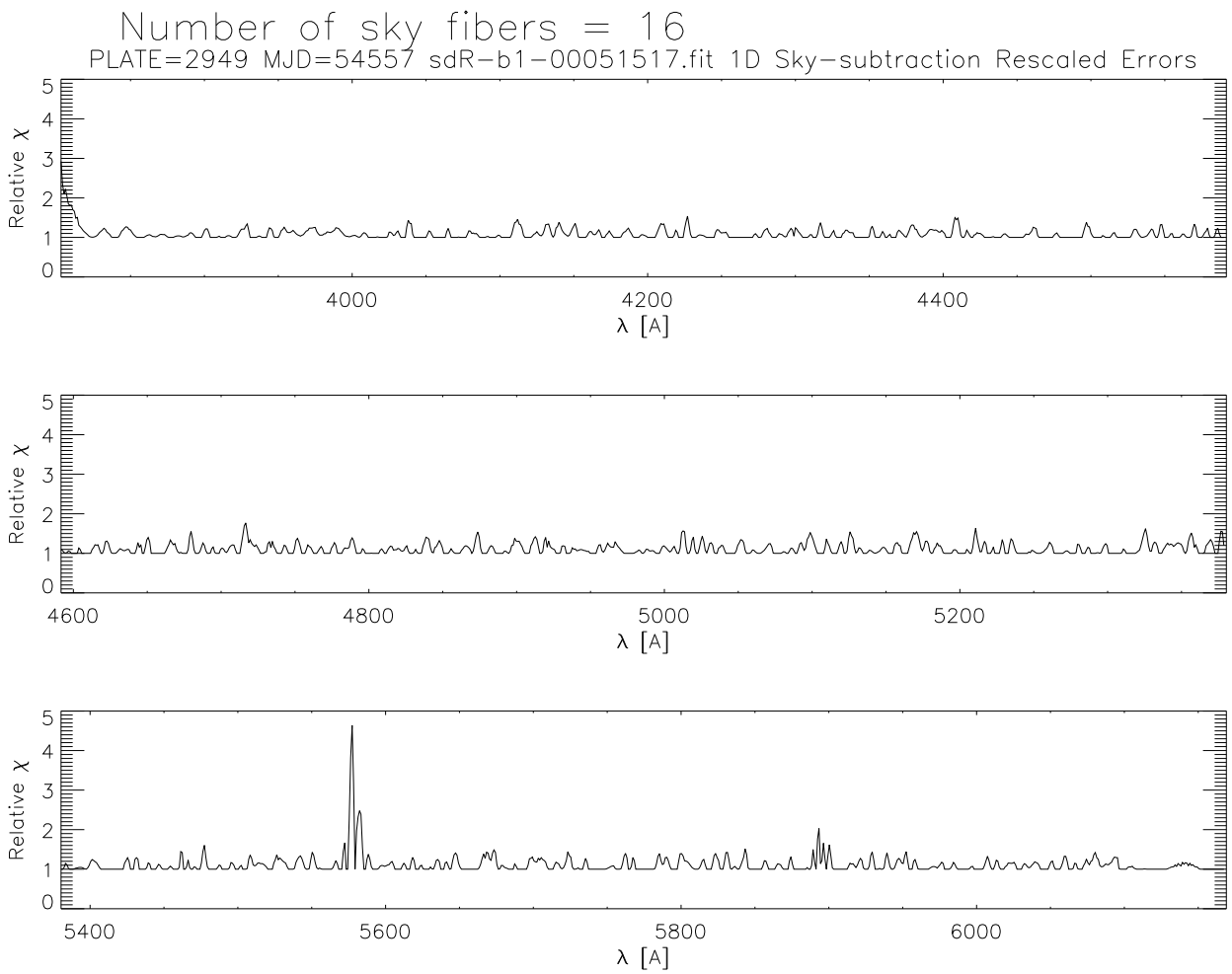

PLATE=2949 MJD=54557 Smooth superflat for sdR-b1-00051517.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

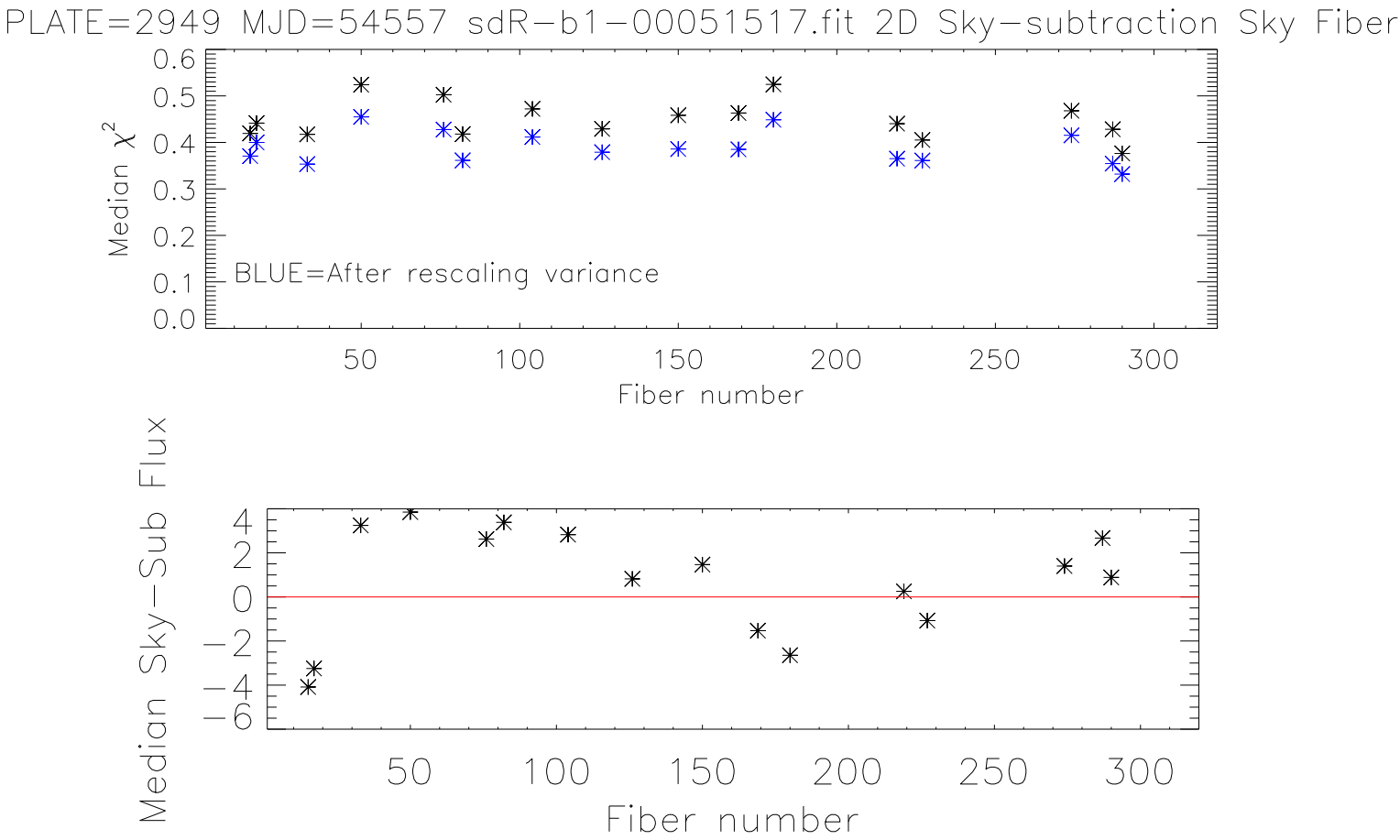
es= −0.0001

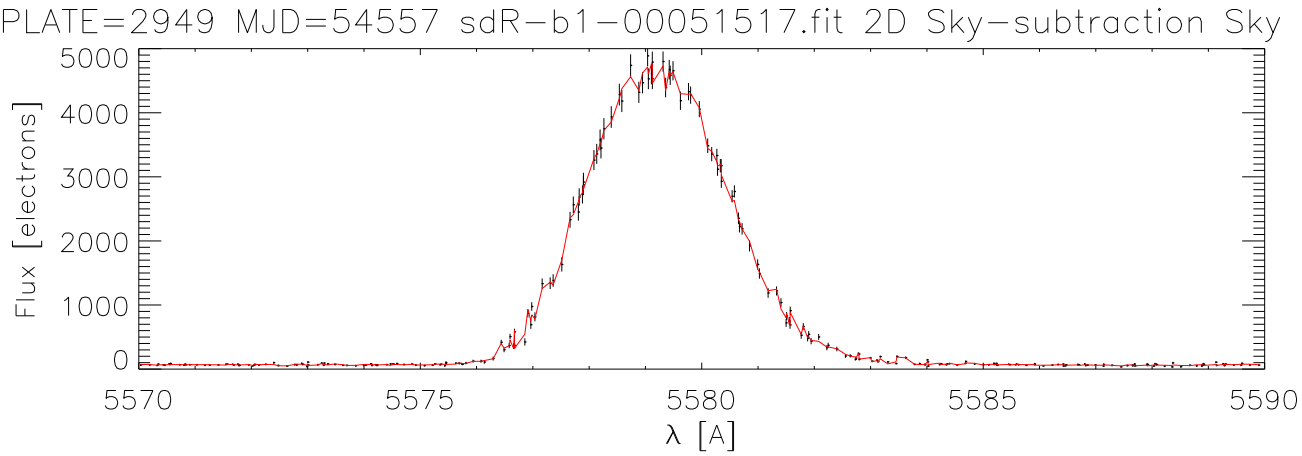

PLATE=2949 MJD=54557 sdR-b1-00051517.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

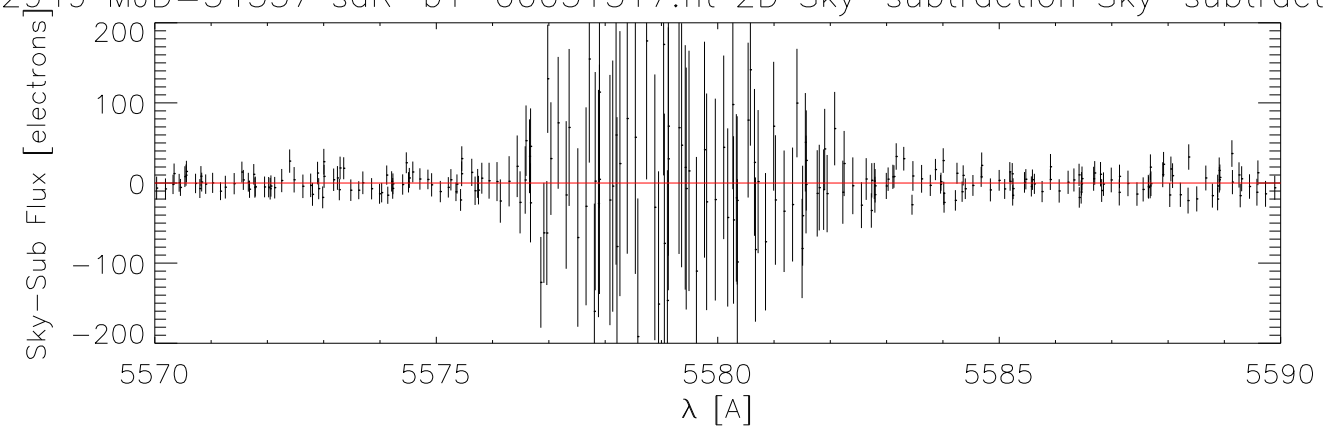

PLATE=2949 MJD=54557 sdR-b1-00051517.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

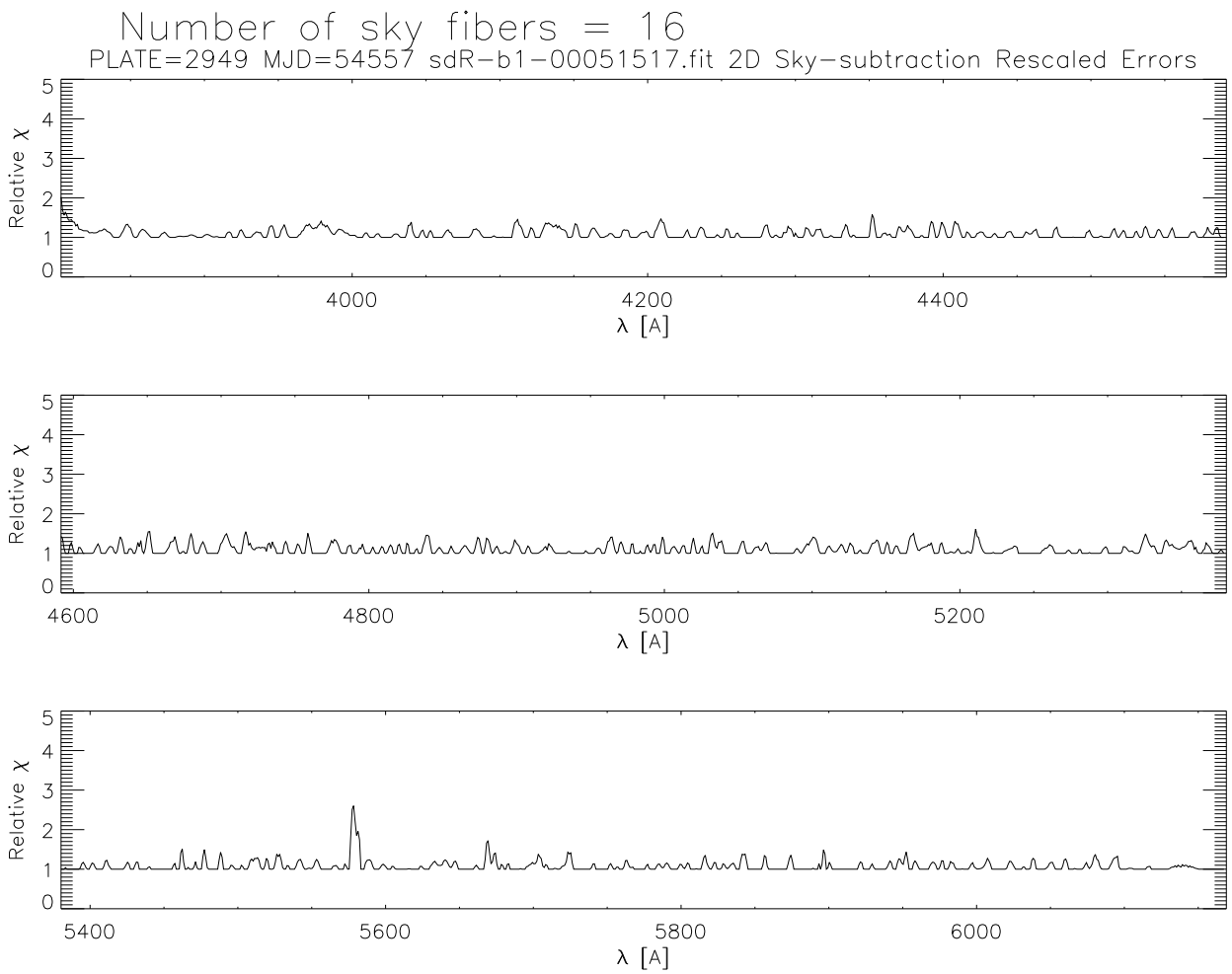

PLATE=2949 MJD=54557 sdR-b1-00051517.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

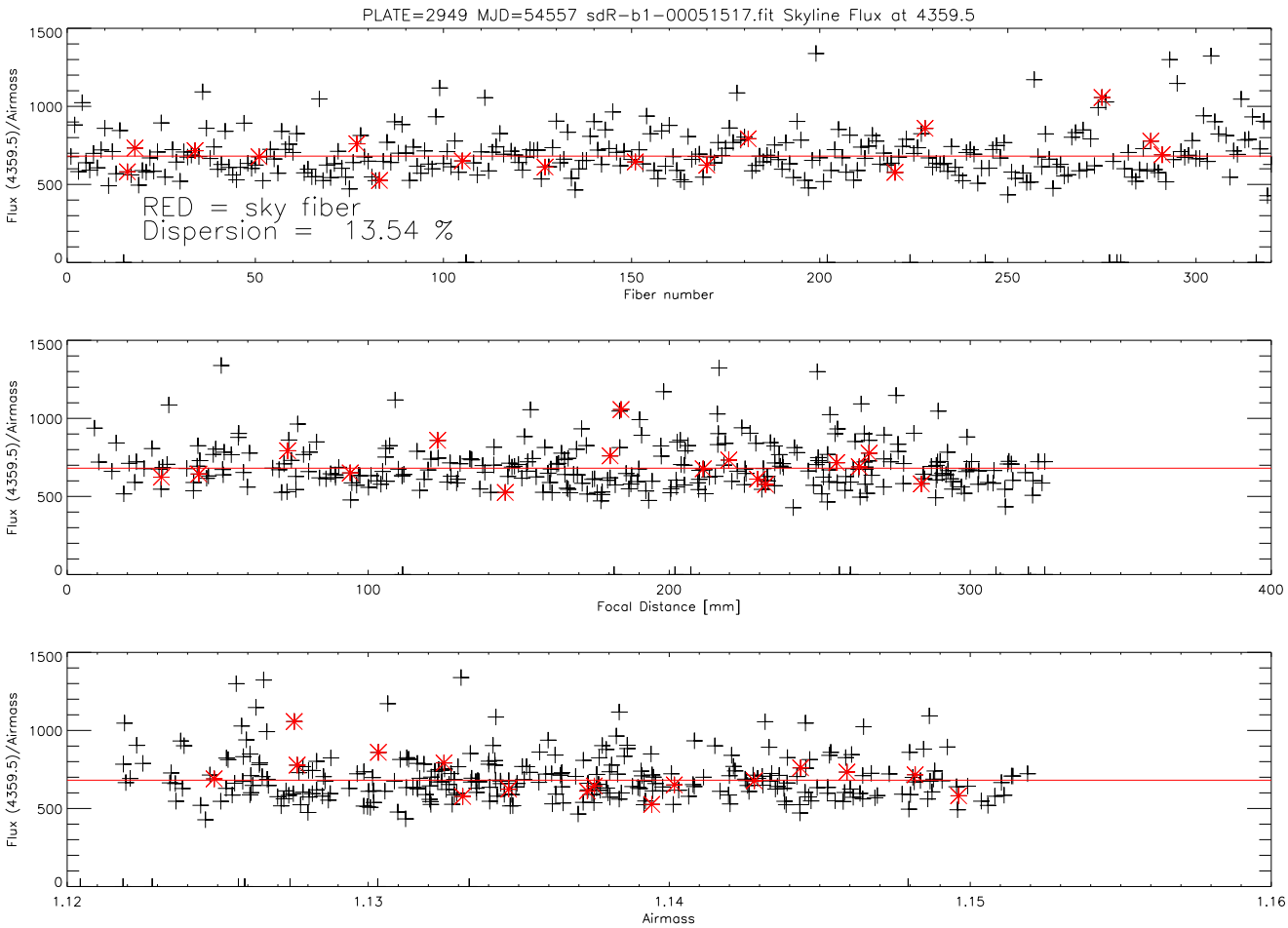

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-b1-00051517.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

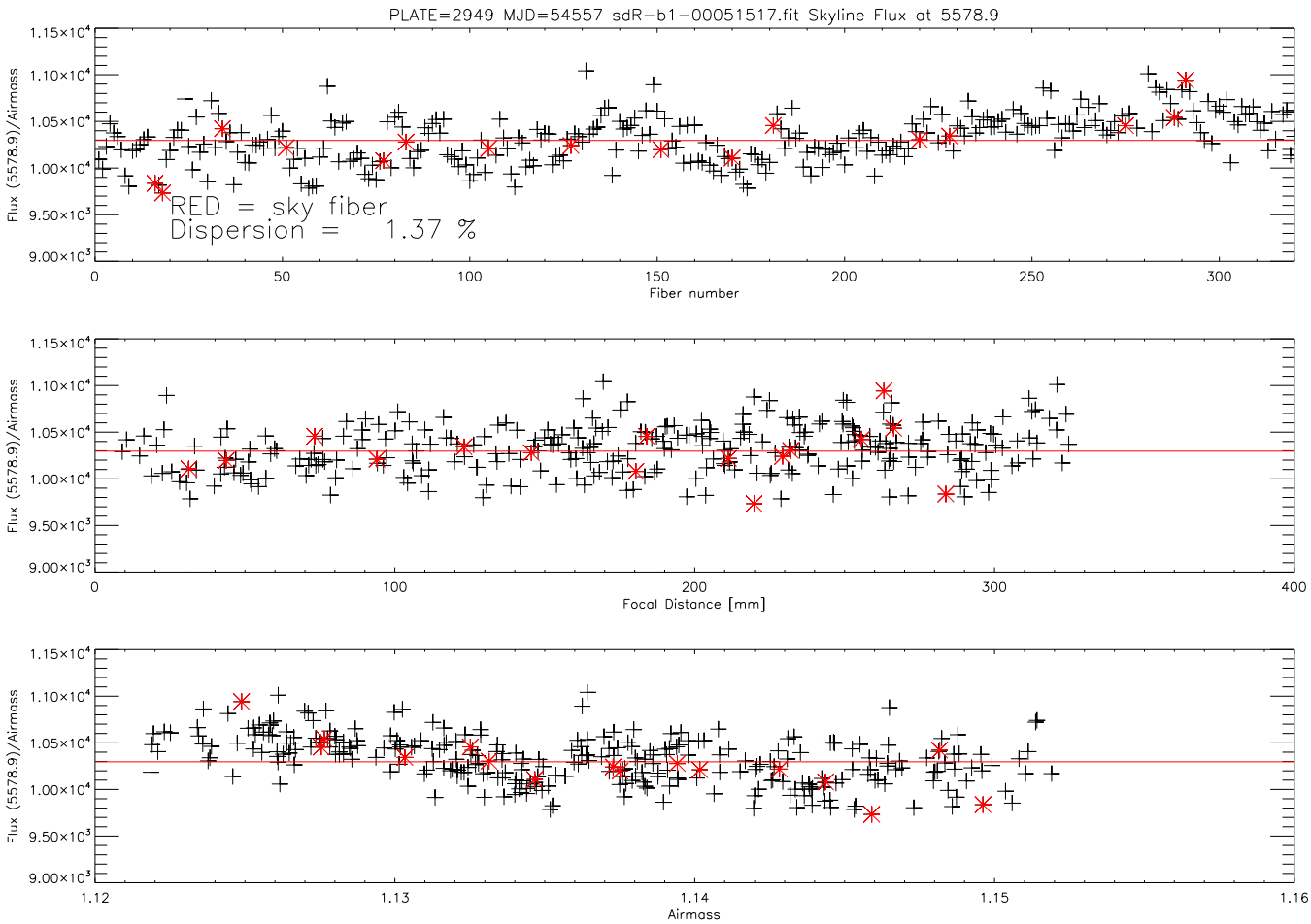

PLATE=2949 MJD=54557 sdR-b1-00051517.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

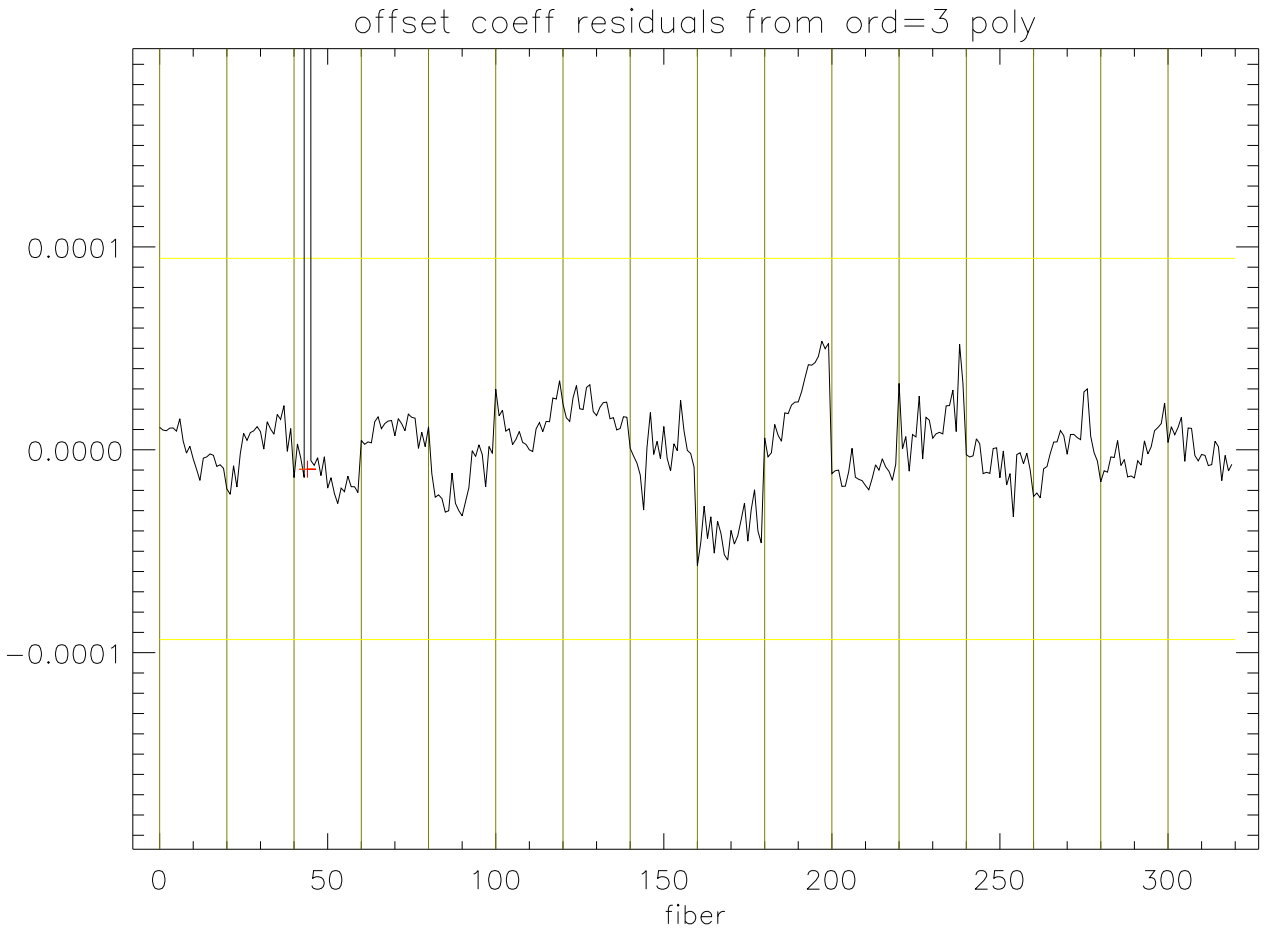

PLATE=2949 MJD=54557 sdR-b1-00051517.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

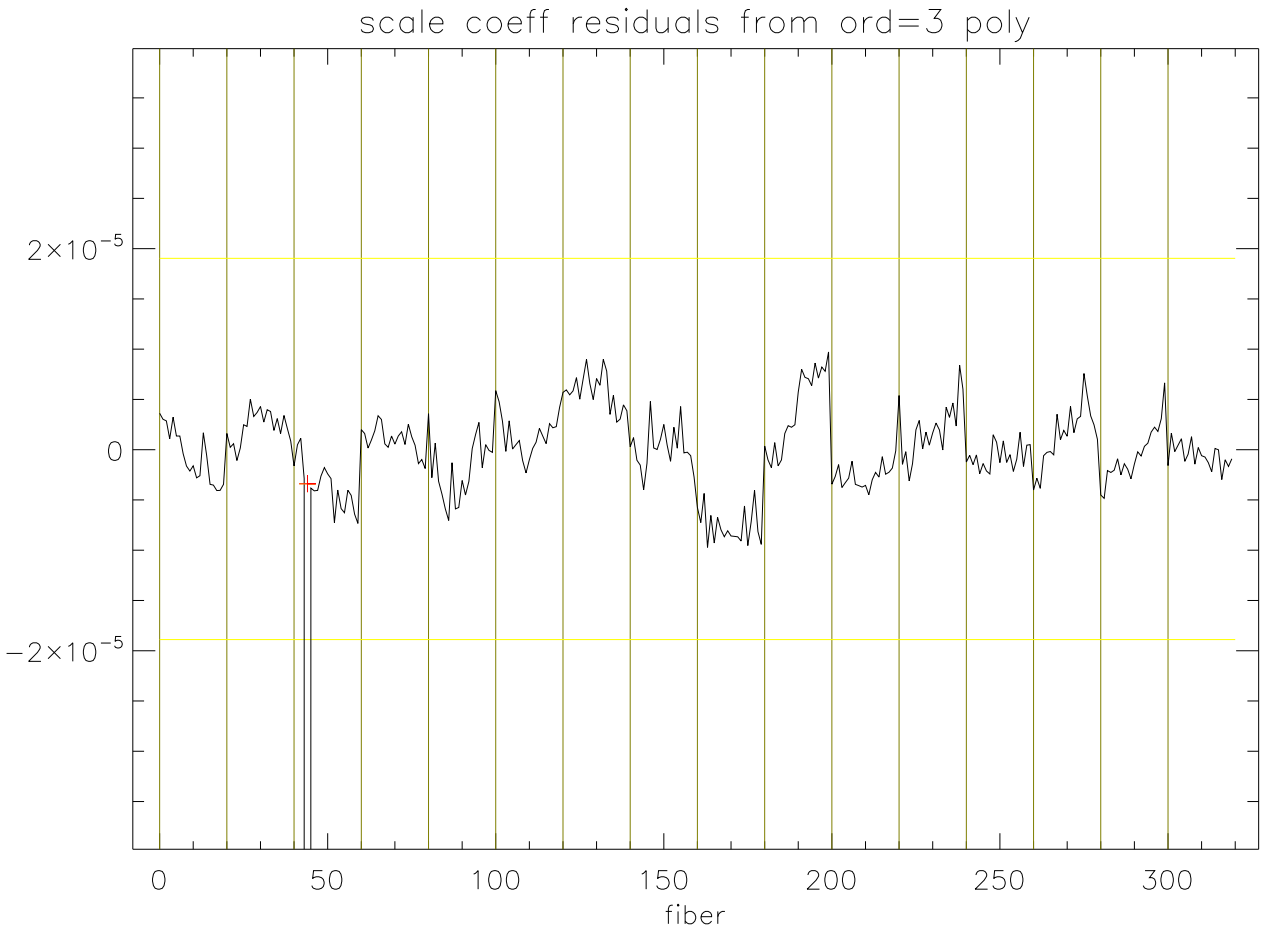

PLATE=2949 MJD=54557 sdR-b1-00051517.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

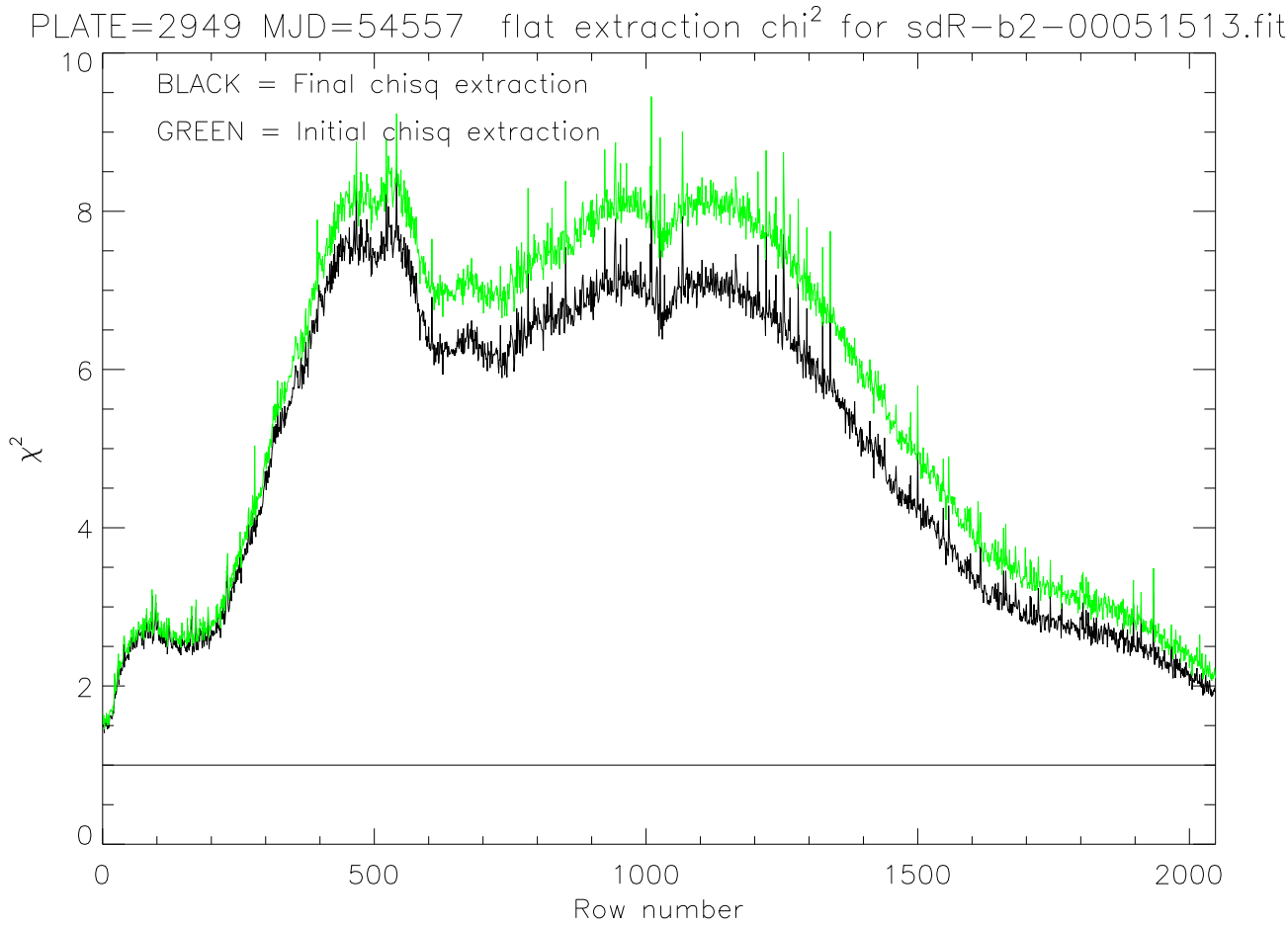

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-b1-00051517.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

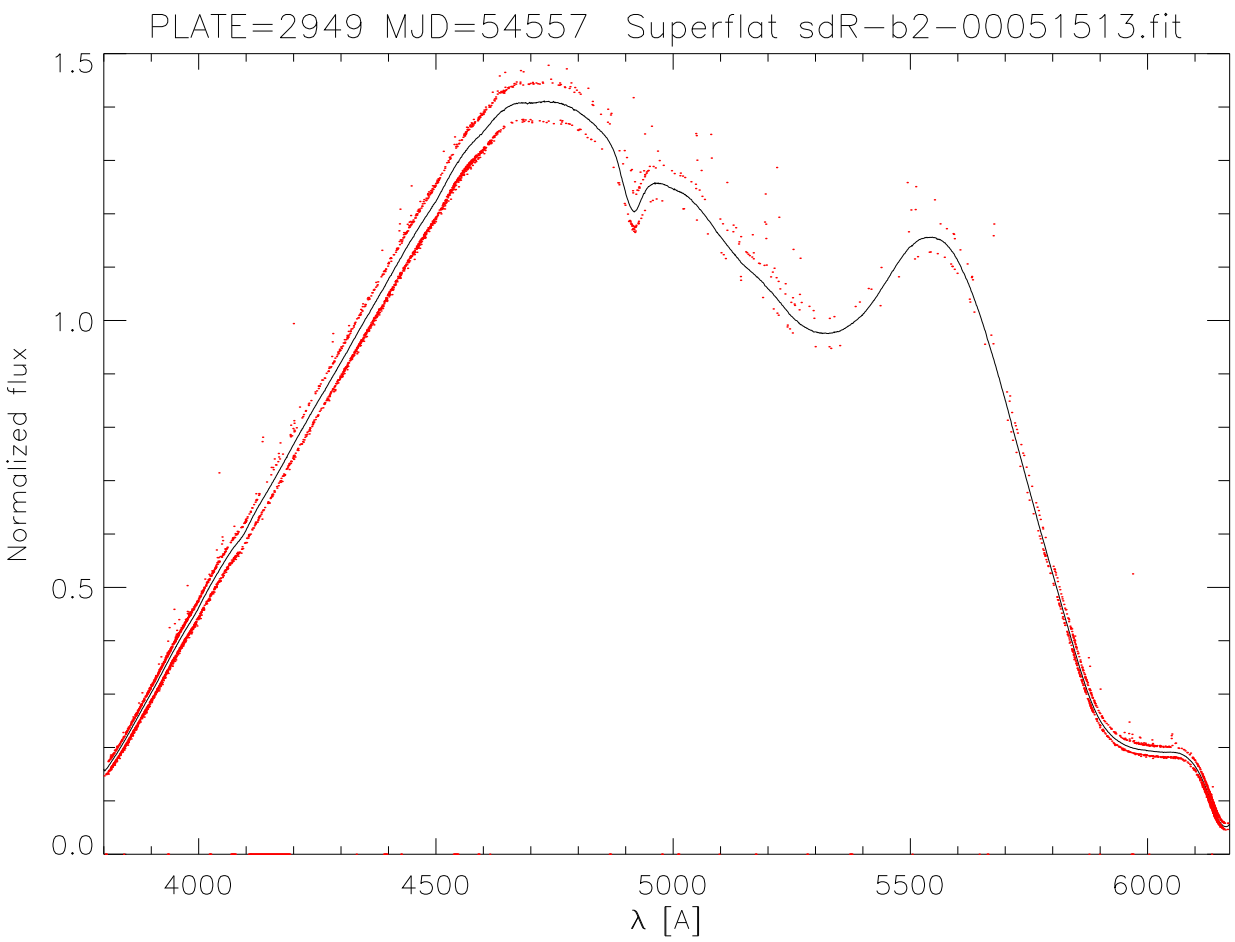

PLATE=2949 MJD=54557 sdR-b1-00051517.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.54 %
Fiber number
Focal Distance [mm]
Airmass

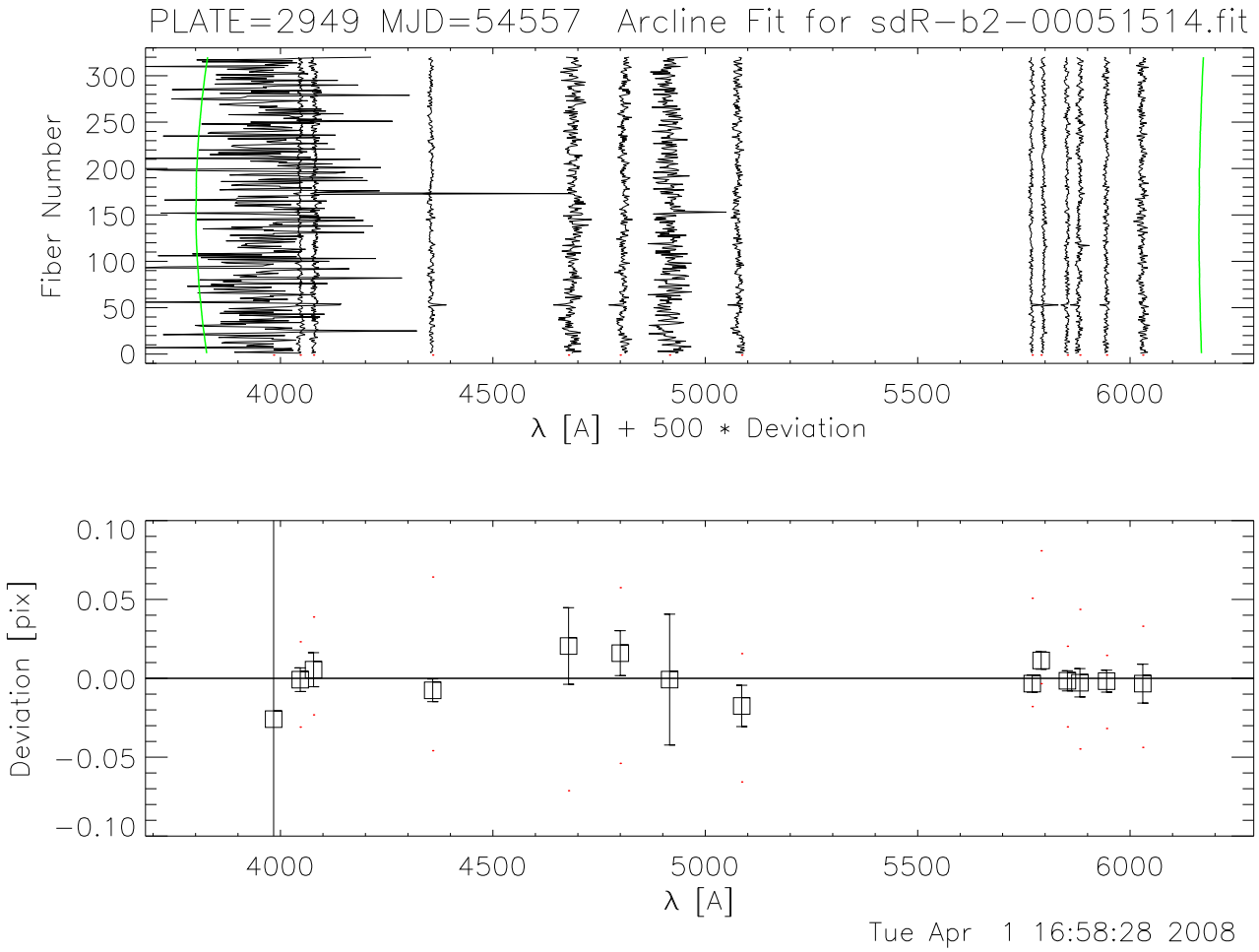

PLATE=2949 MJD=54557 sdR-b1-00051517.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.37 %
Fiber number
Focal Distance [mm]
Airmass

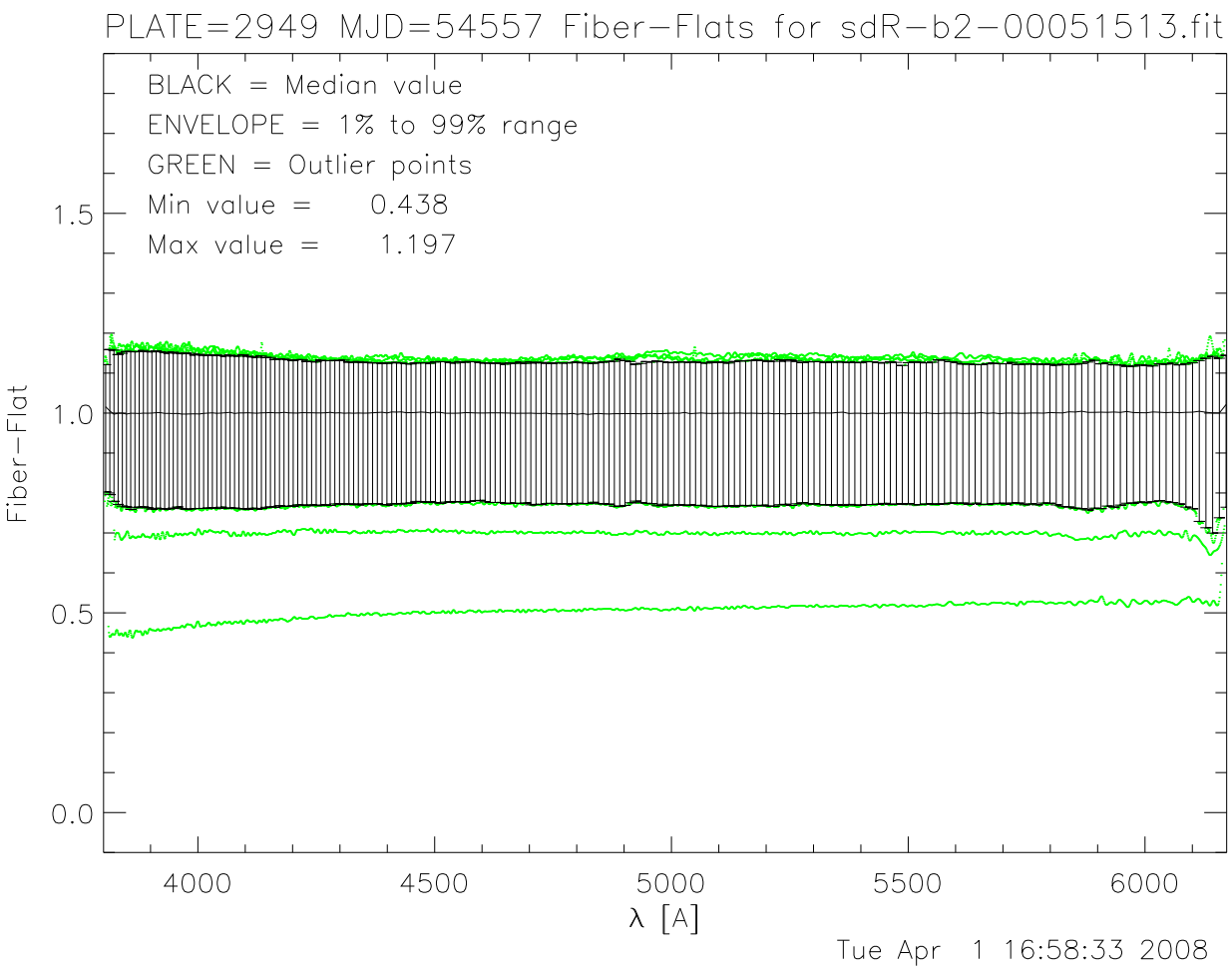

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

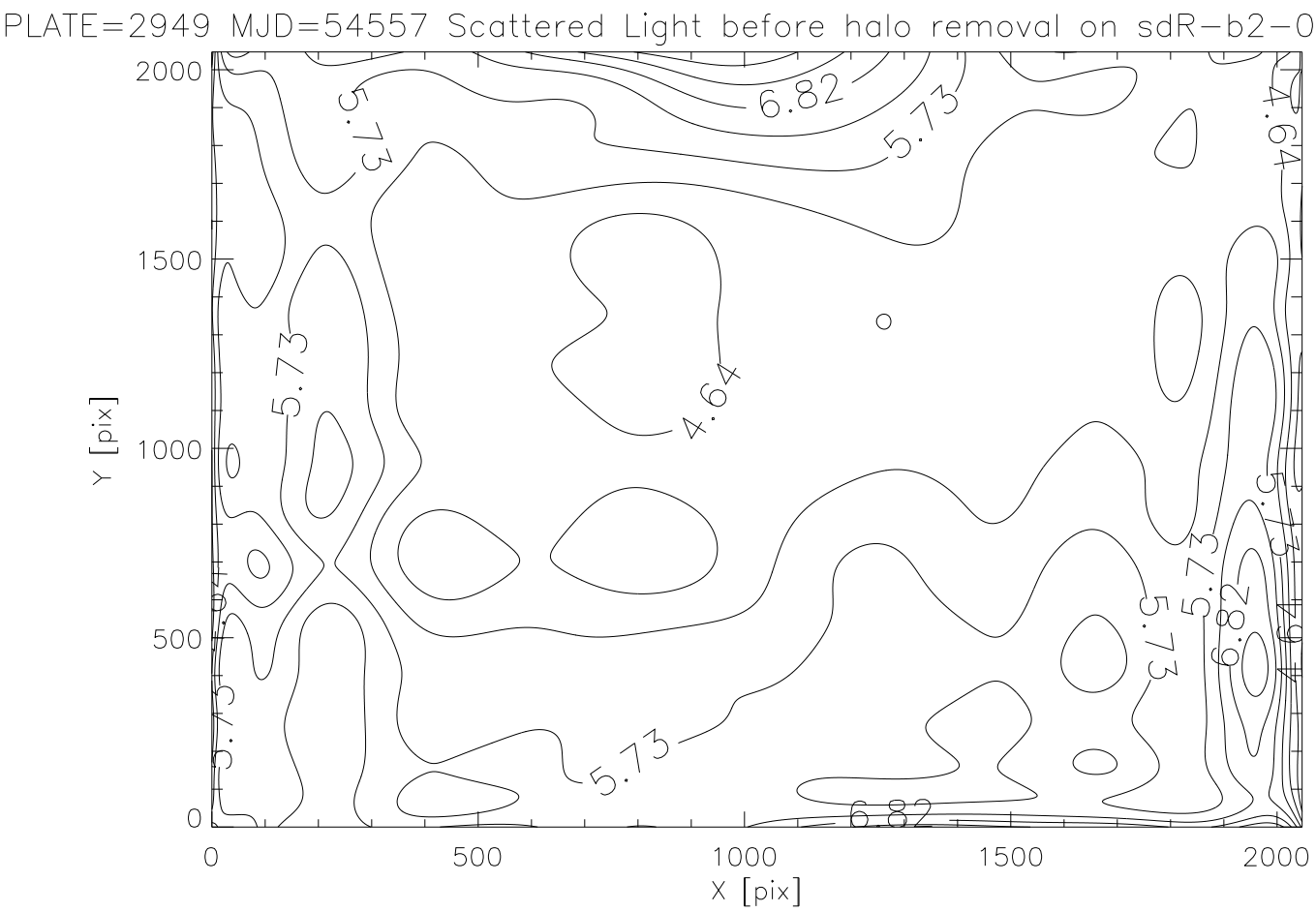

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

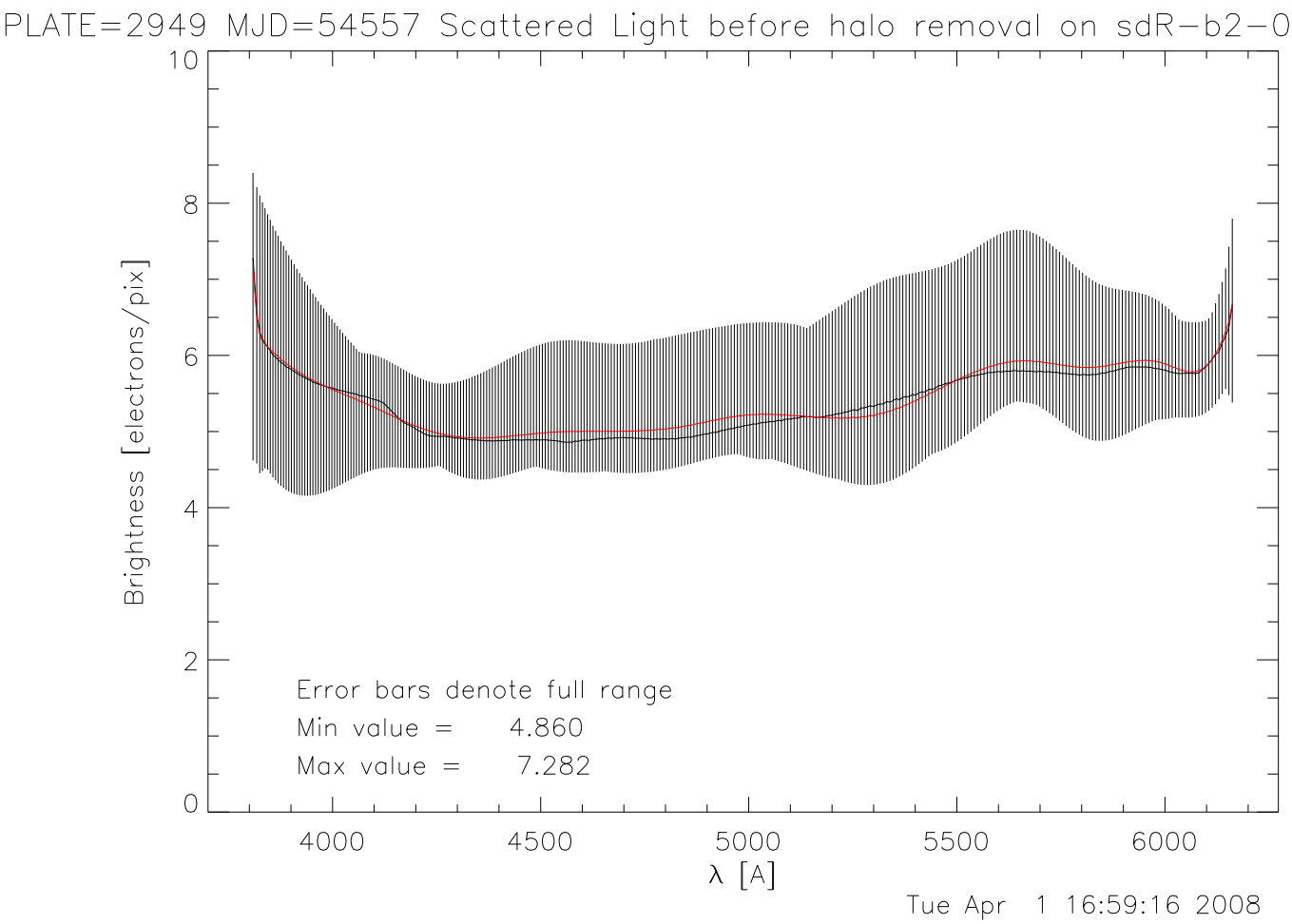

PLATE=2949 MJD=54557 flat extraction chi^2 for sdR−b2−00051513.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

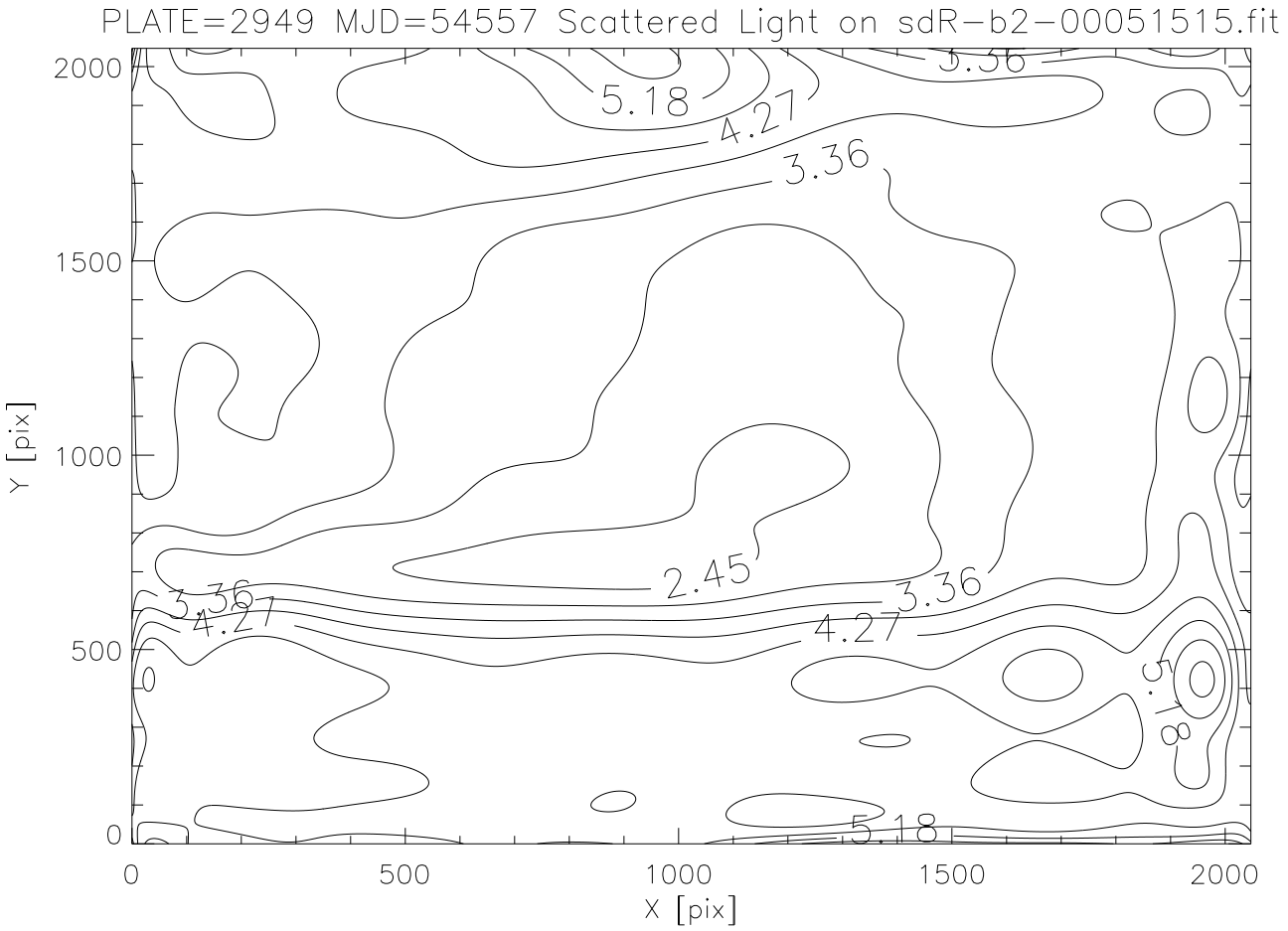

PLATE=2949 MJD=54557 Superflat sdR-b2-00051513.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

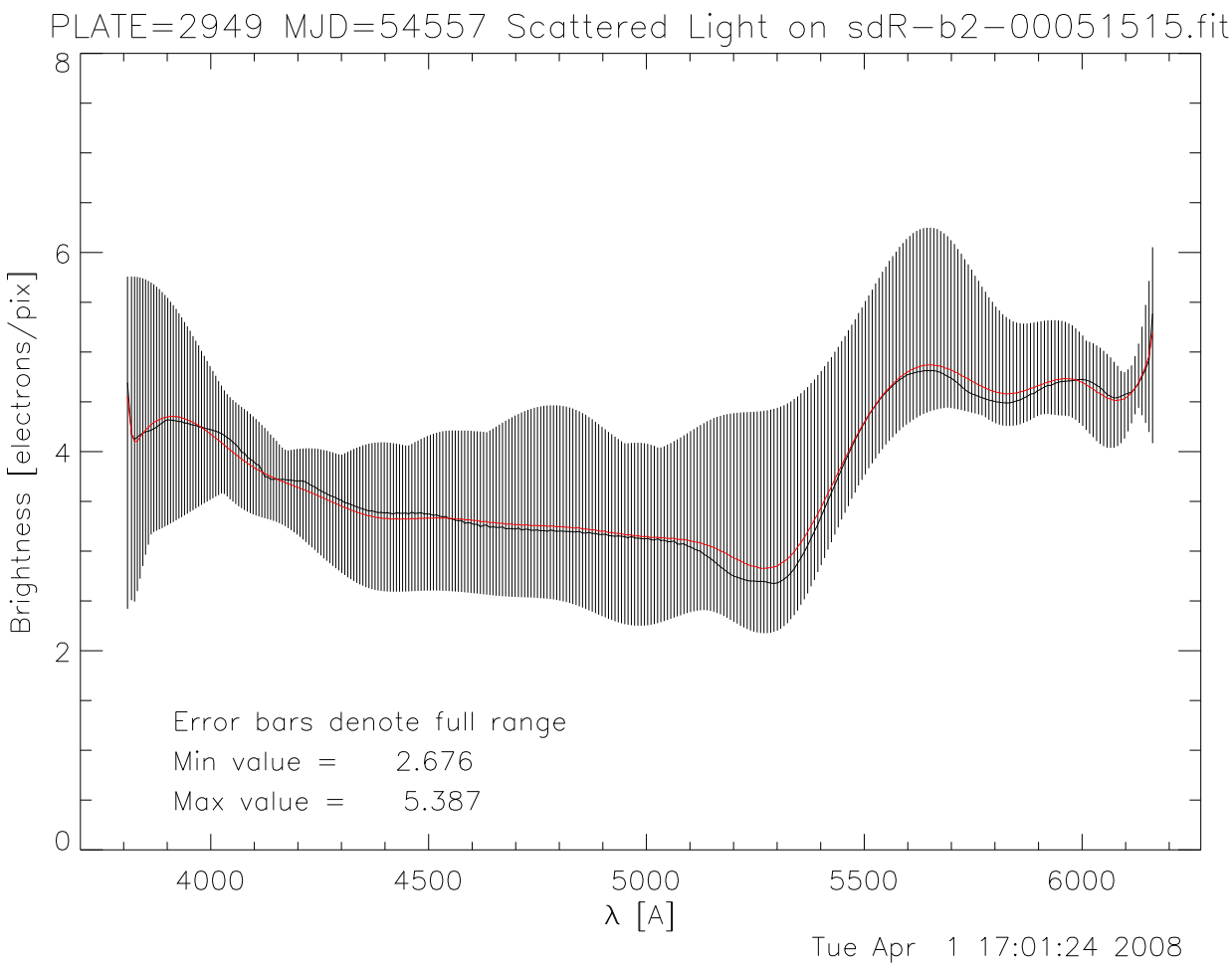

PLATE=2949 MJD=54557 Arcline Fit for sdR-b2-00051514.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 16:58:28 2008

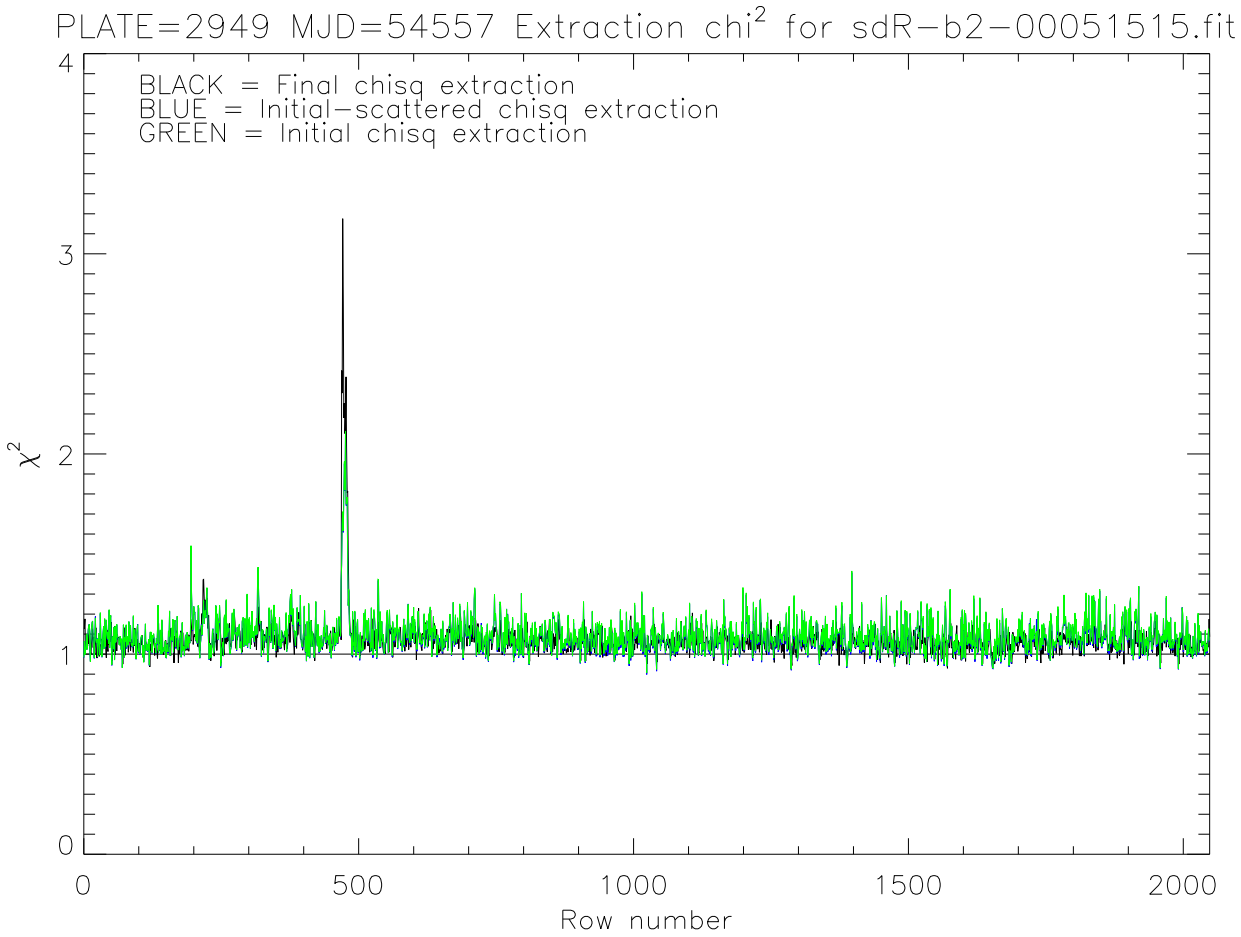

PLATE=2949 MJD=54557 Fiber−Flats for sdR−b2−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.438
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 16:58:33 2008

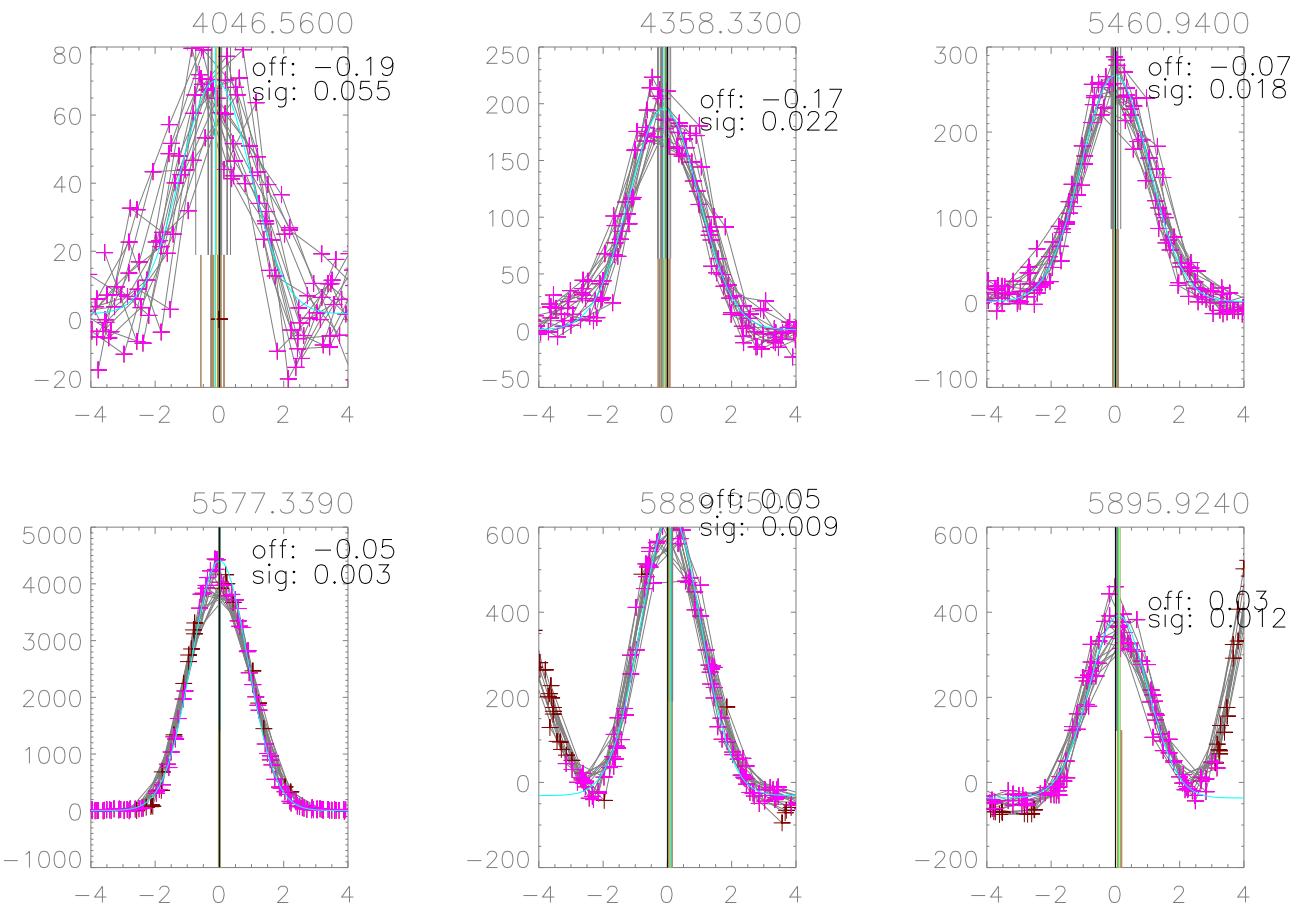

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-b2-00051515.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.82
5.73
4.64

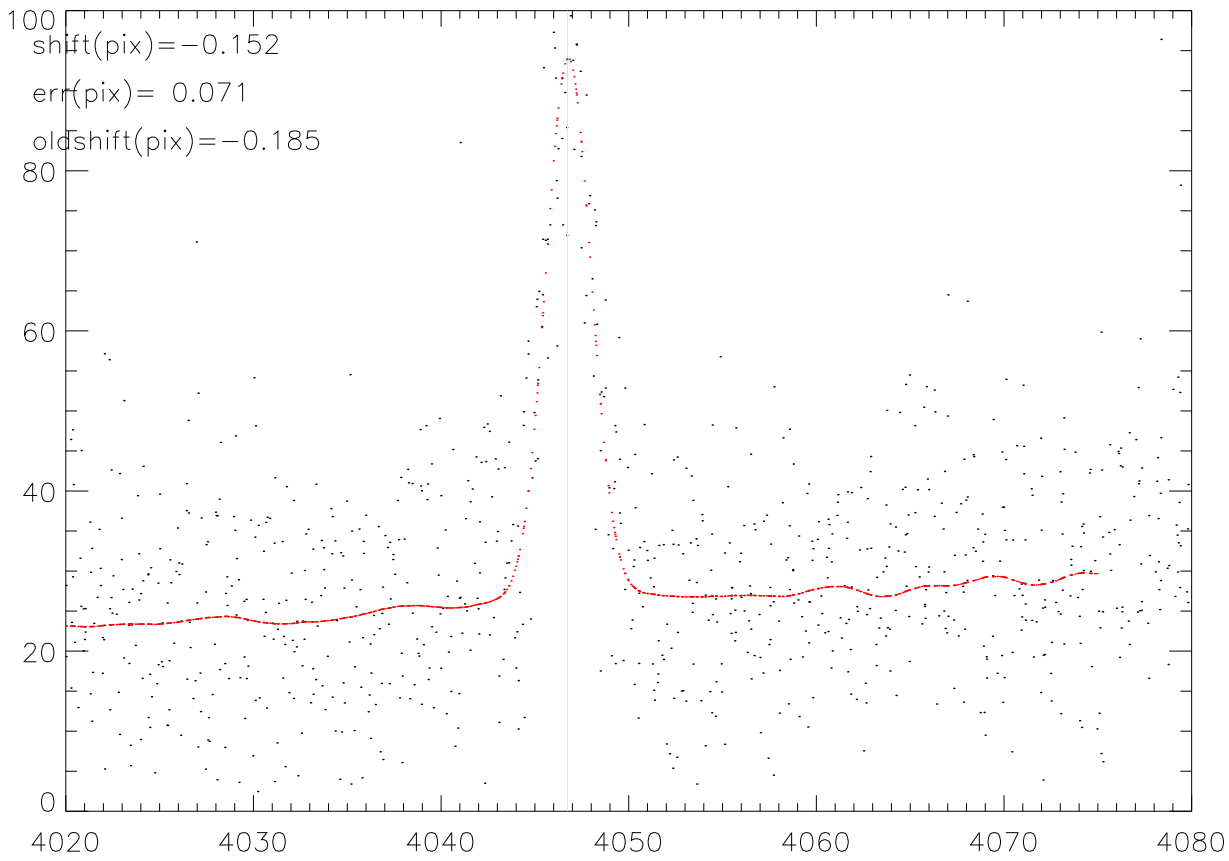

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-b2-00051515.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.860
Max value = 7.282
Tue Apr 1 16:59:16 2008

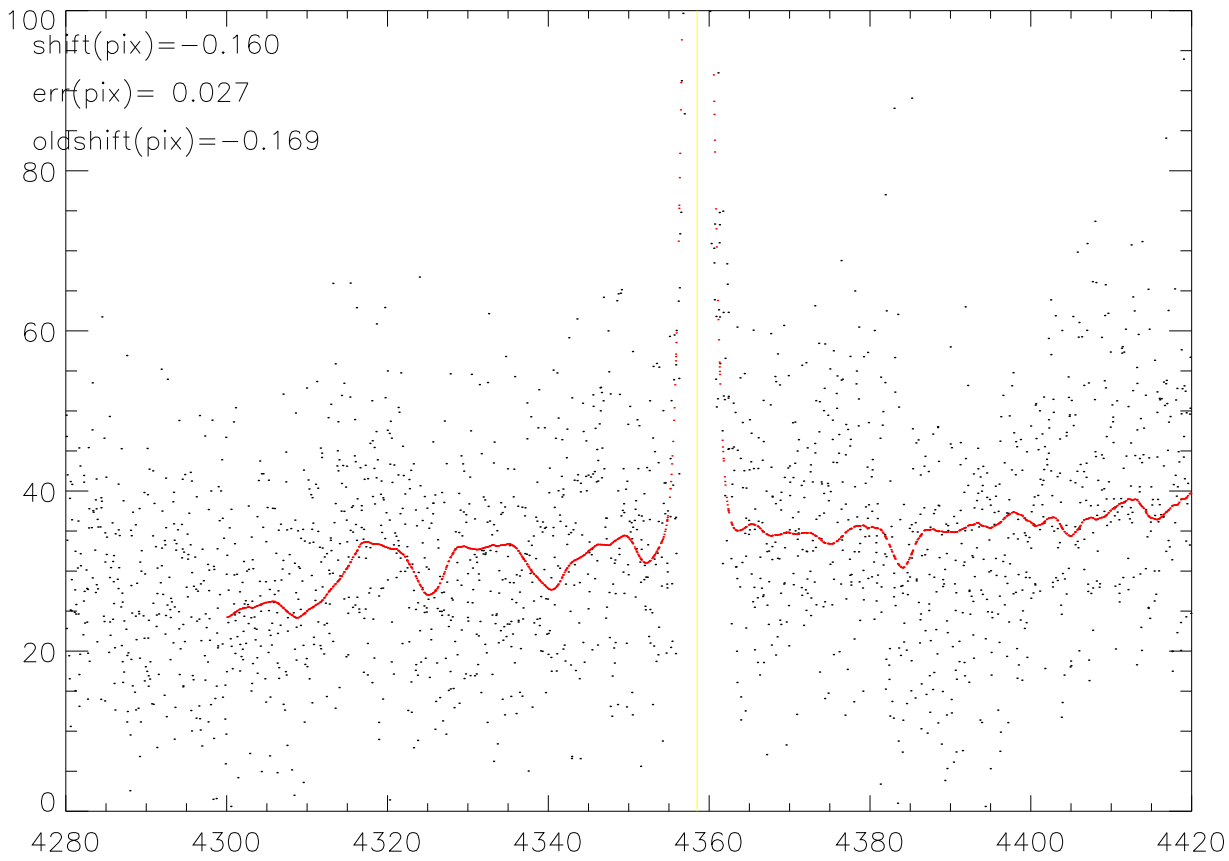

PLATE=2949 MJD=54557 Scattered Light on sdR-b2-00051515.fit
5.18
4.27
3.36
2.45
3.36
4.27
3.36
4.27
5.18
Y [pix]
X [pix]
0
500
1000
1500
2000

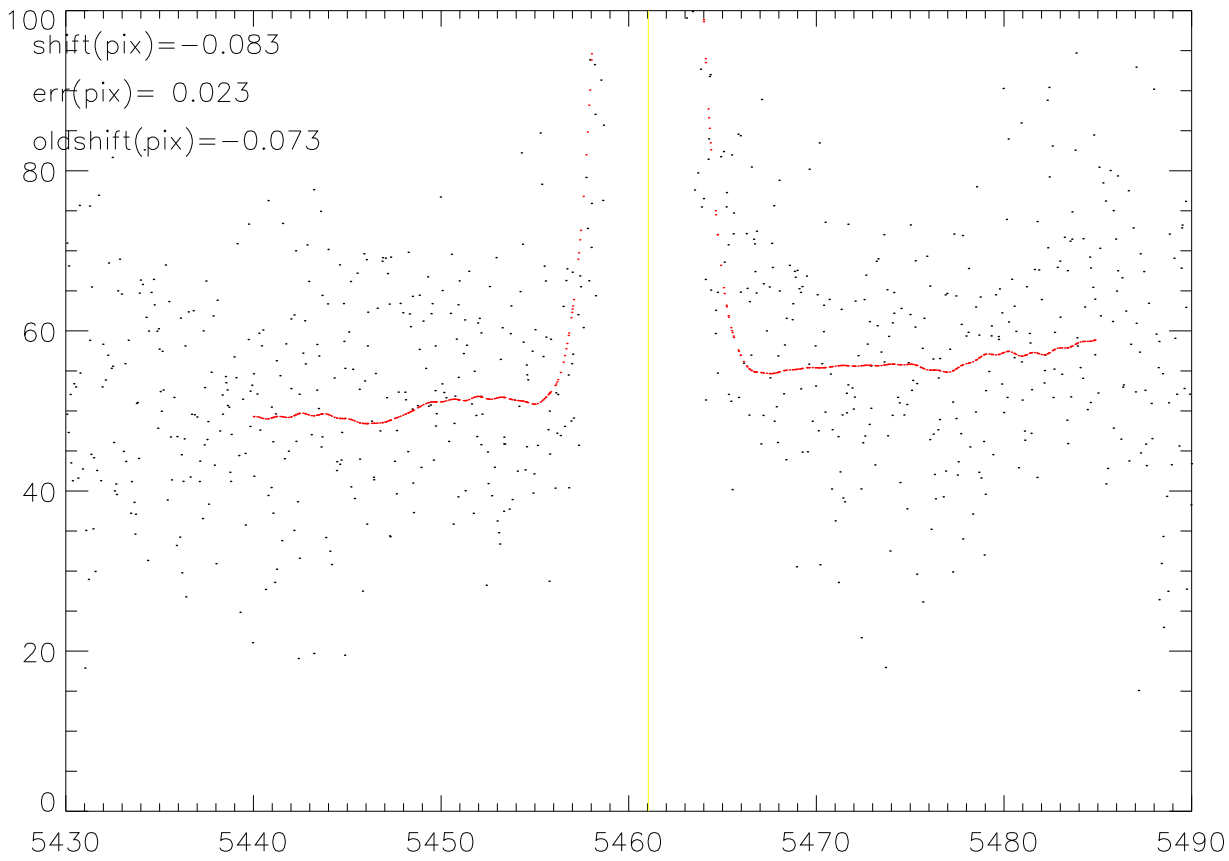

PLATE=2949 MJD=54557 Scattered Light on sdR-b2-00051515.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.676
Max value = 5.387
Tue Apr 1 17:01:24 2008

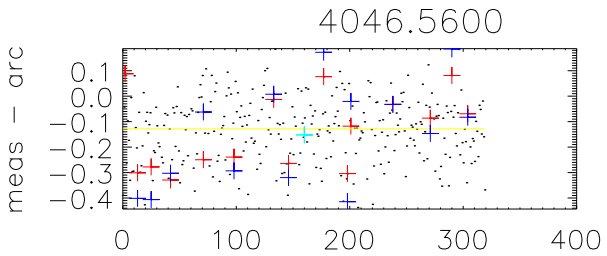

PLATE=2949 MJD=54557 Extraction chi^2 for sdR-b2-00051515.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

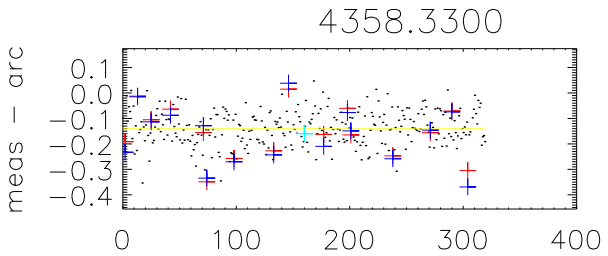

4046.5600
off: −0.19
sig: 0.055
4358.3300
off: −0.17
sig: 0.022
5460.9400
off: −0.07
sig: 0.018
5577.3390
off: −0.05
sig: 0.003
5889.9509
off: 0.05
sig: 0.009
5895.9240
off: 0.03
sig: 0.012

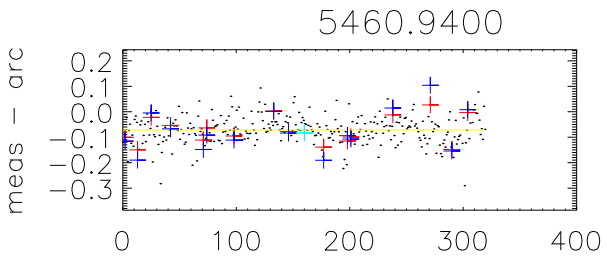

shift(pix)=−0.152
err(pix)= 0.071
oldshift(pix)=−0.185
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

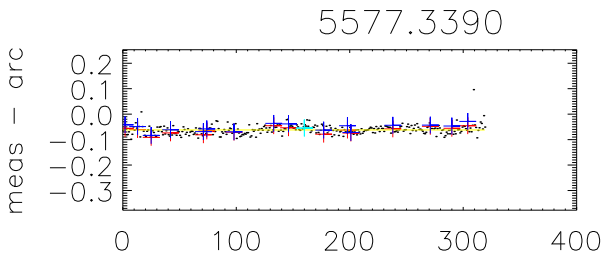

shift(pix)=−0.160
err(pix)= 0.027
oldshift(pix)=−0.169
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

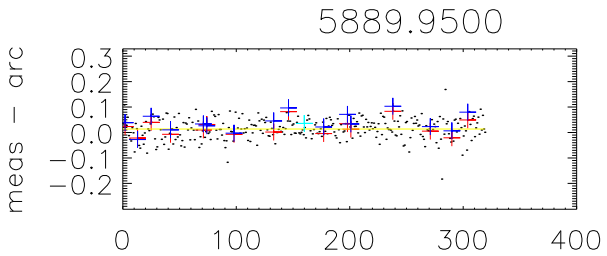

shift(pix)=−0.083
err(pix)= 0.023
oldshift(pix)=−0.073
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

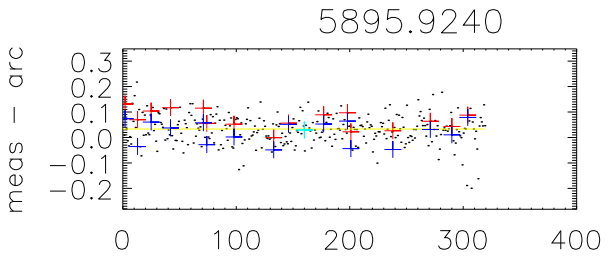

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

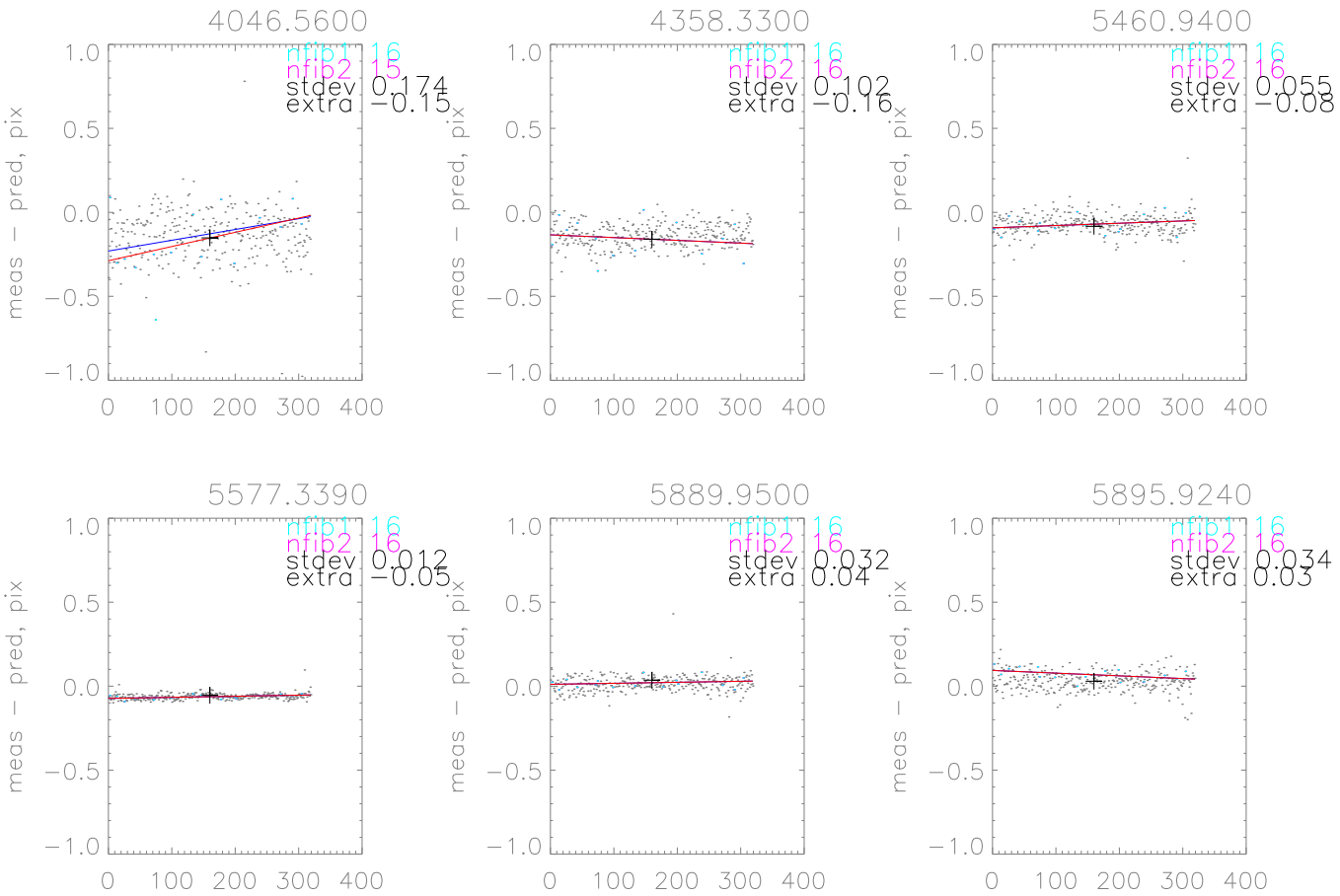

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

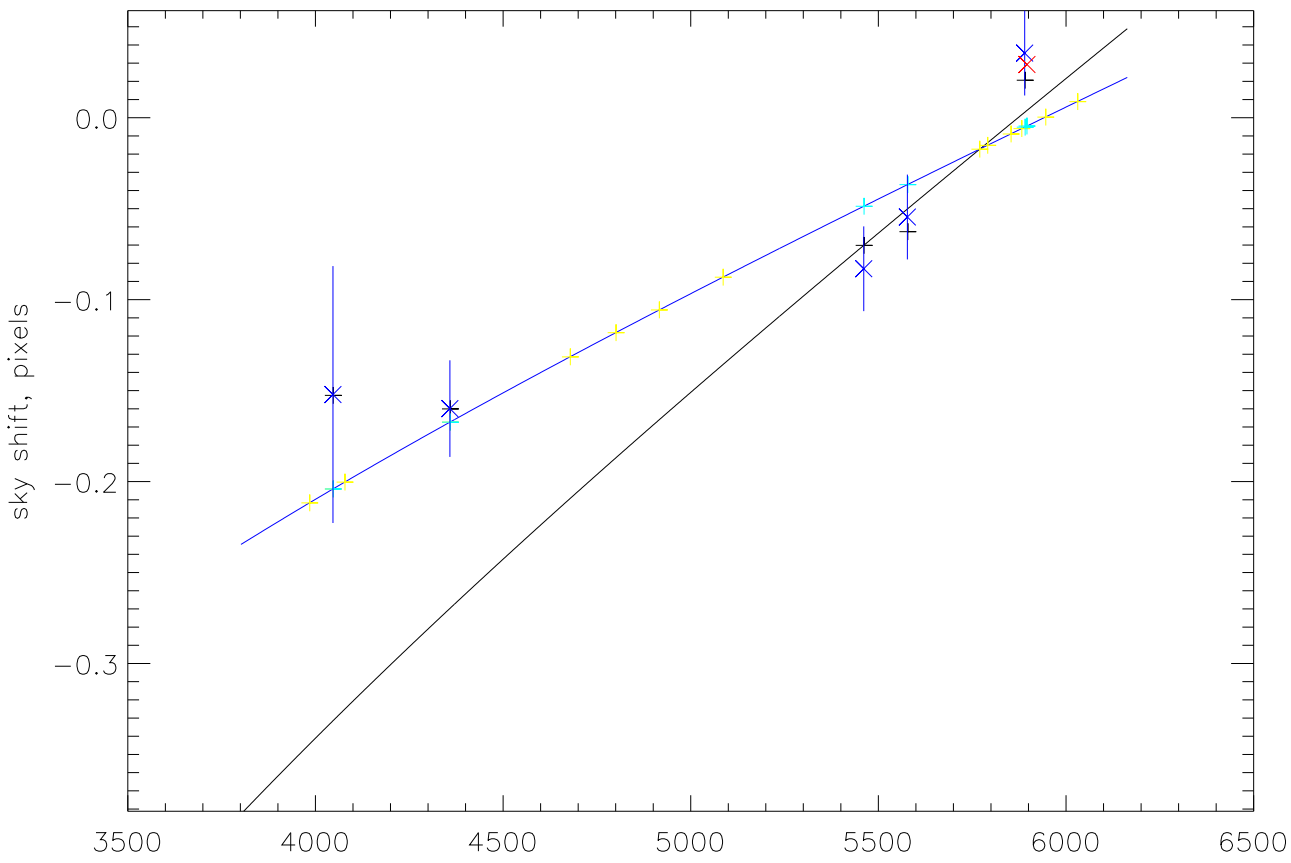

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

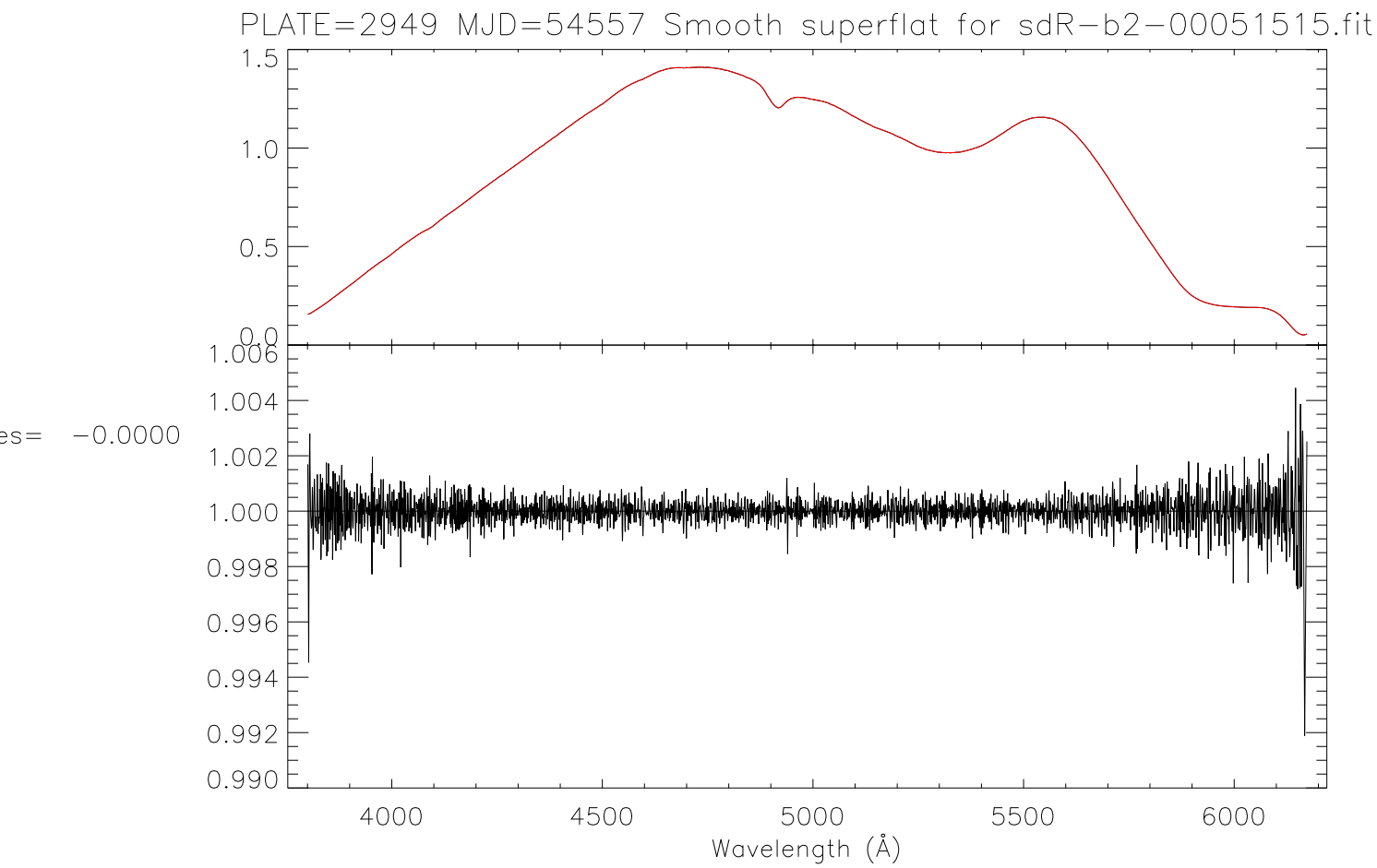

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

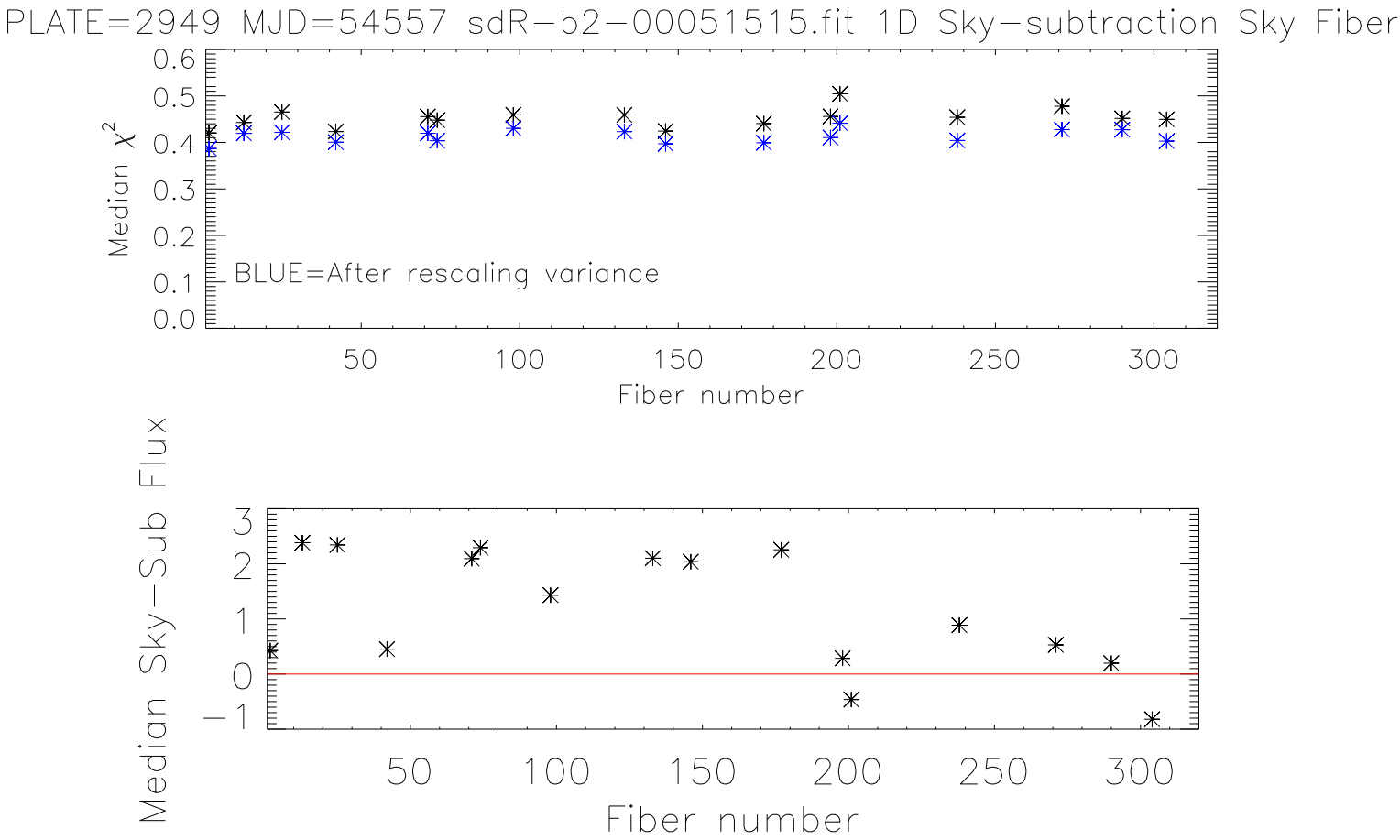

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

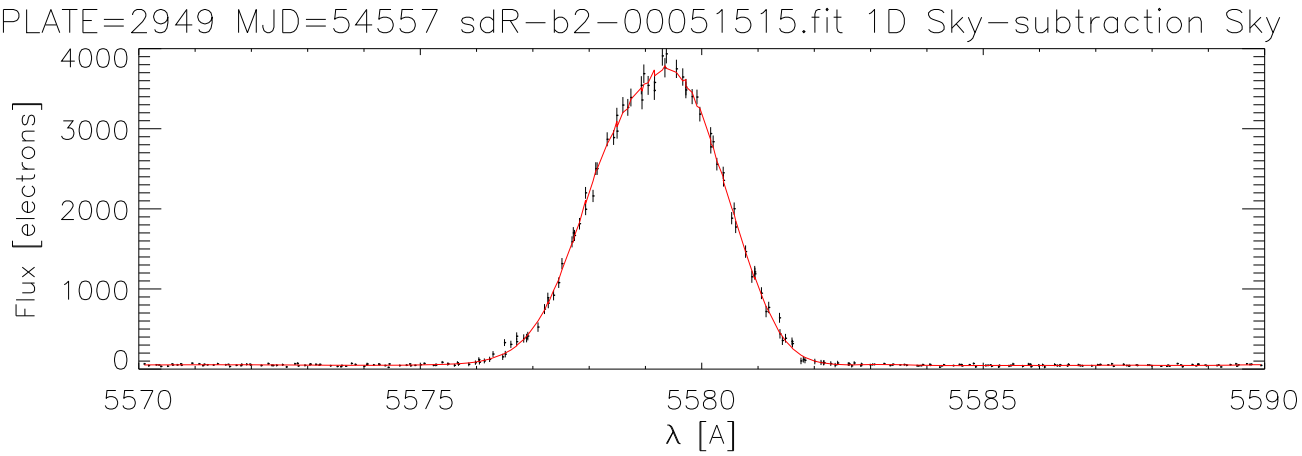

4046.5600
nfib1 16
nfib2 15
stdev 0.174
extra −0.15
4358.3300
nfib1 16
nfib2 16
stdev 0.102
extra −0.16
5460.9400
nfib1 16
nfib2 16
stdev 0.055
extra −0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra −0.05
5889.9500
nfib1 16
nfib2 16
stdev 0.032
extra 0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

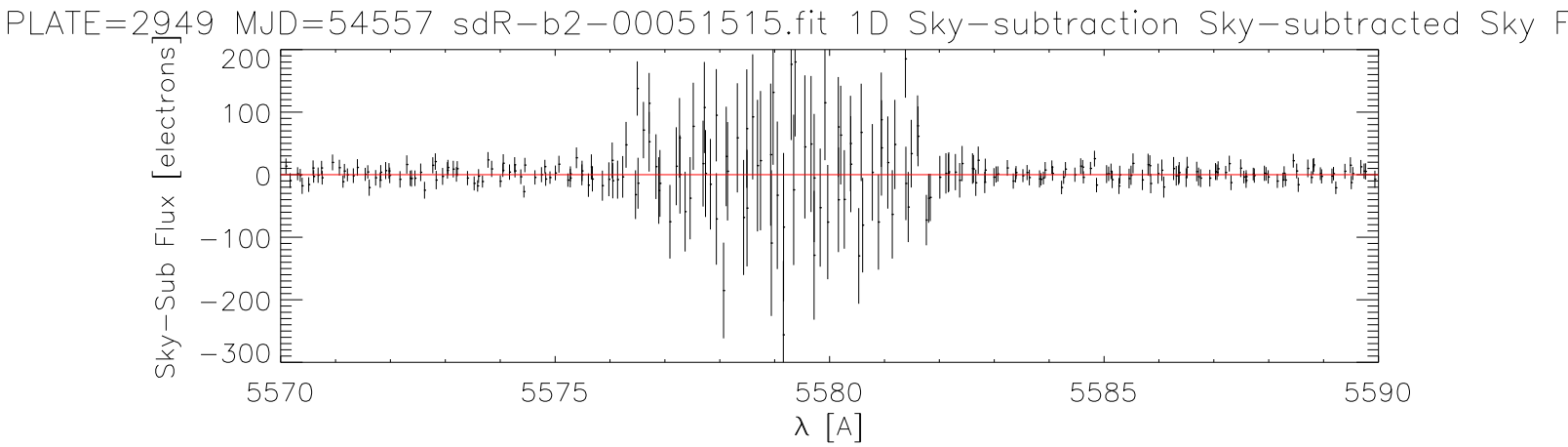

sky shift, pixels
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

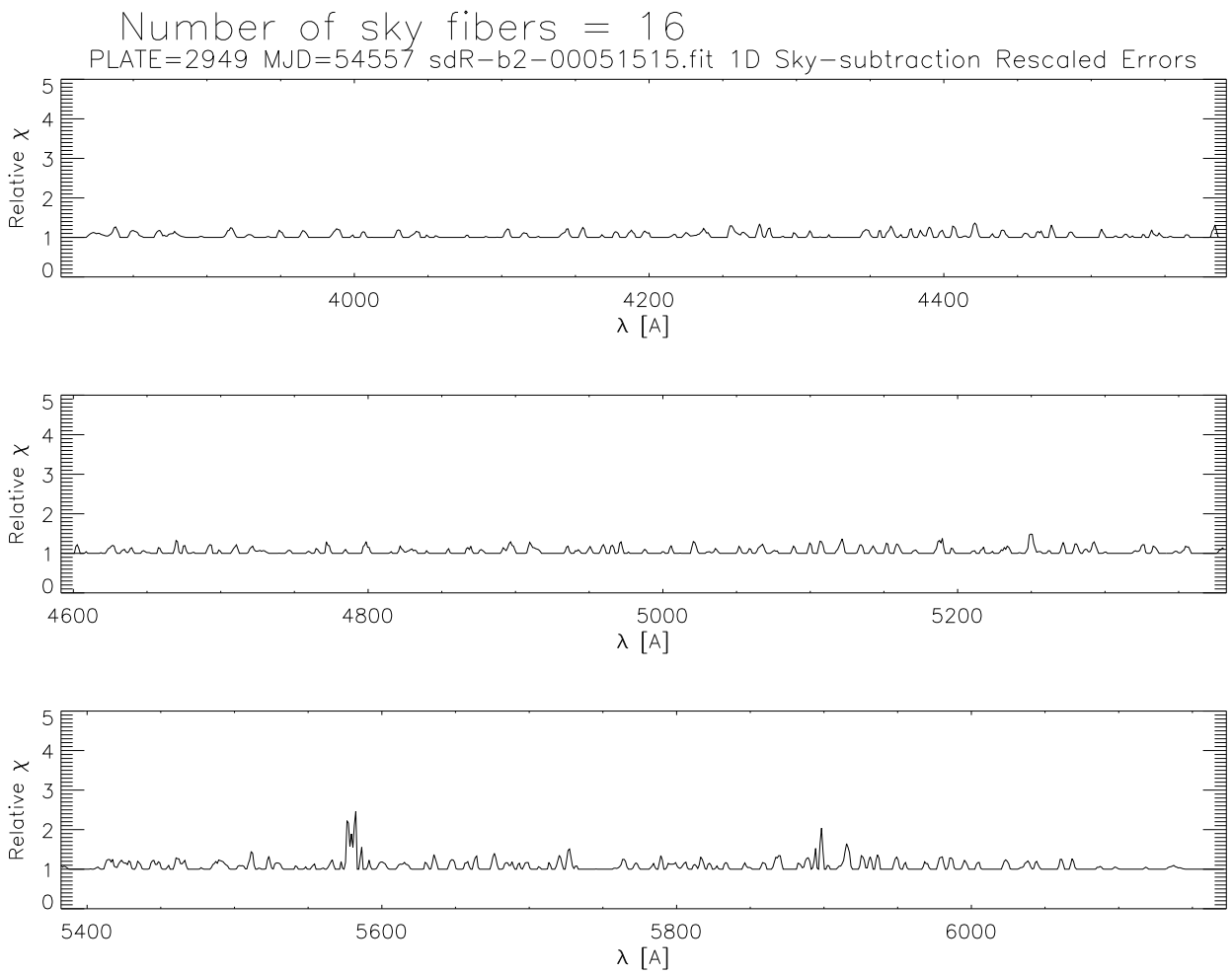

PLATE=2949 MJD=54557 Smooth superflat for sdR-b2-00051515.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

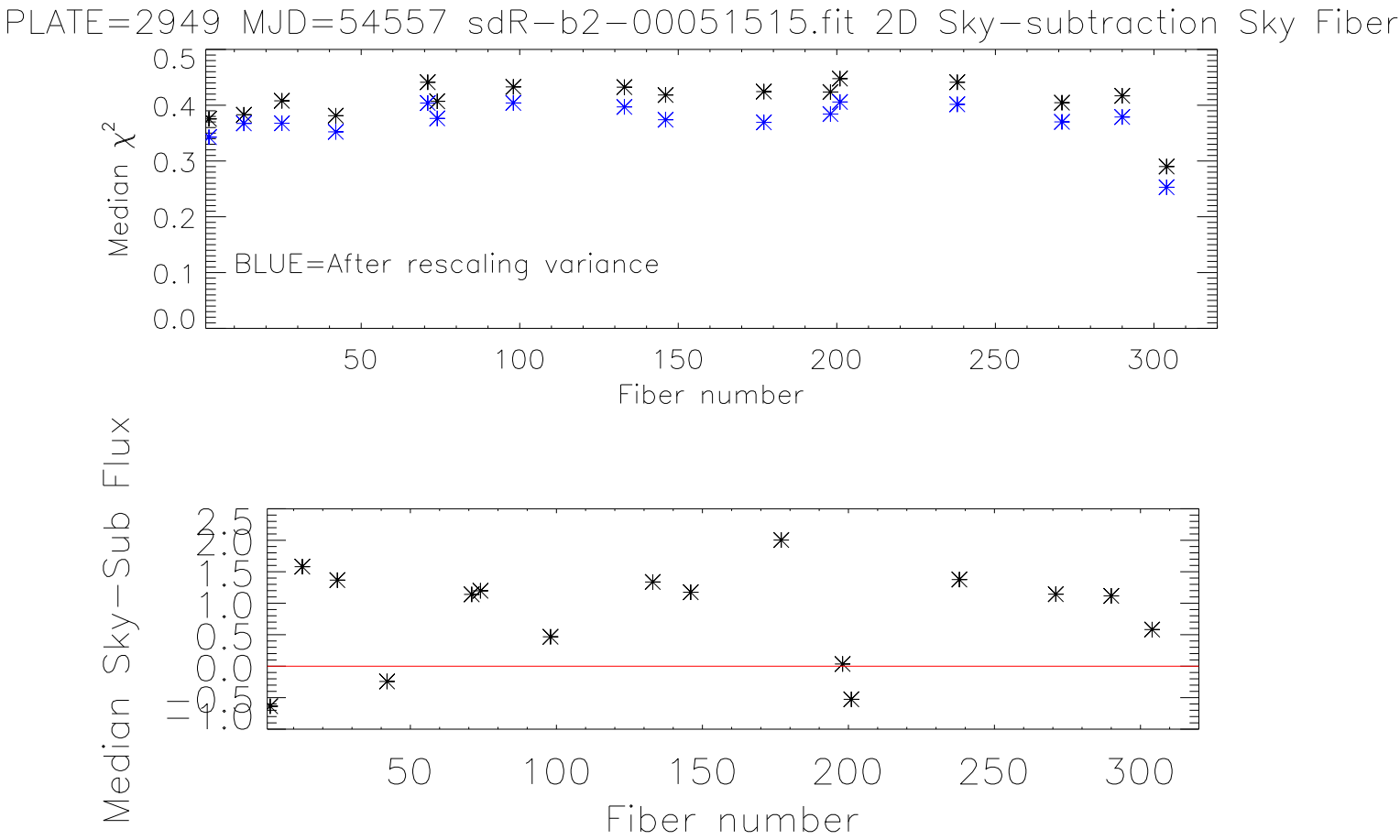
es= −0.0000

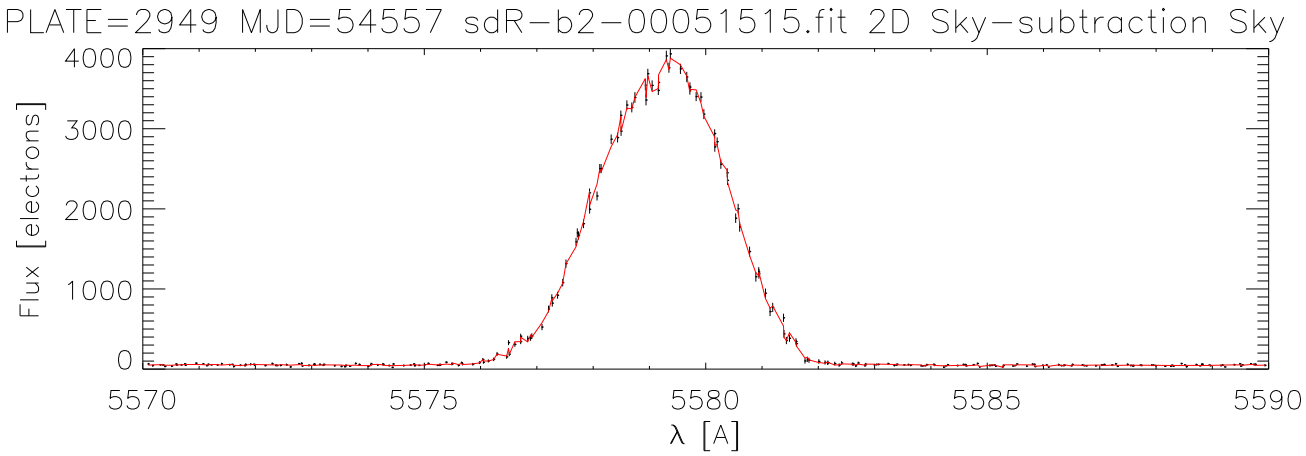

PLATE=2949 MJD=54557 sdR-b2-00051515.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

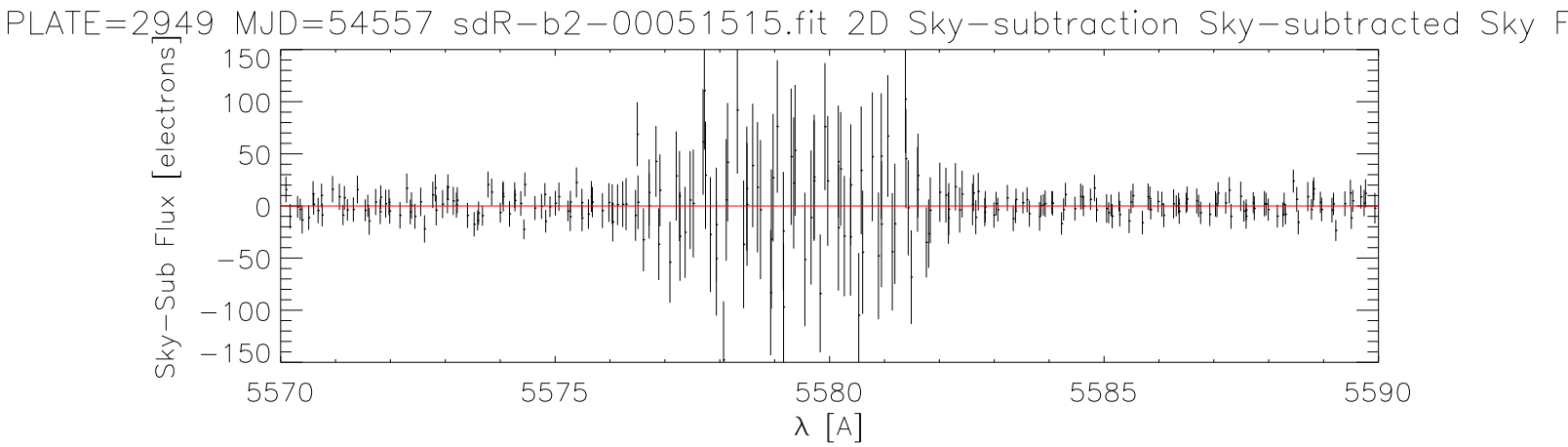

PLATE=2949 MJD=54557 sdR-b2-00051515.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

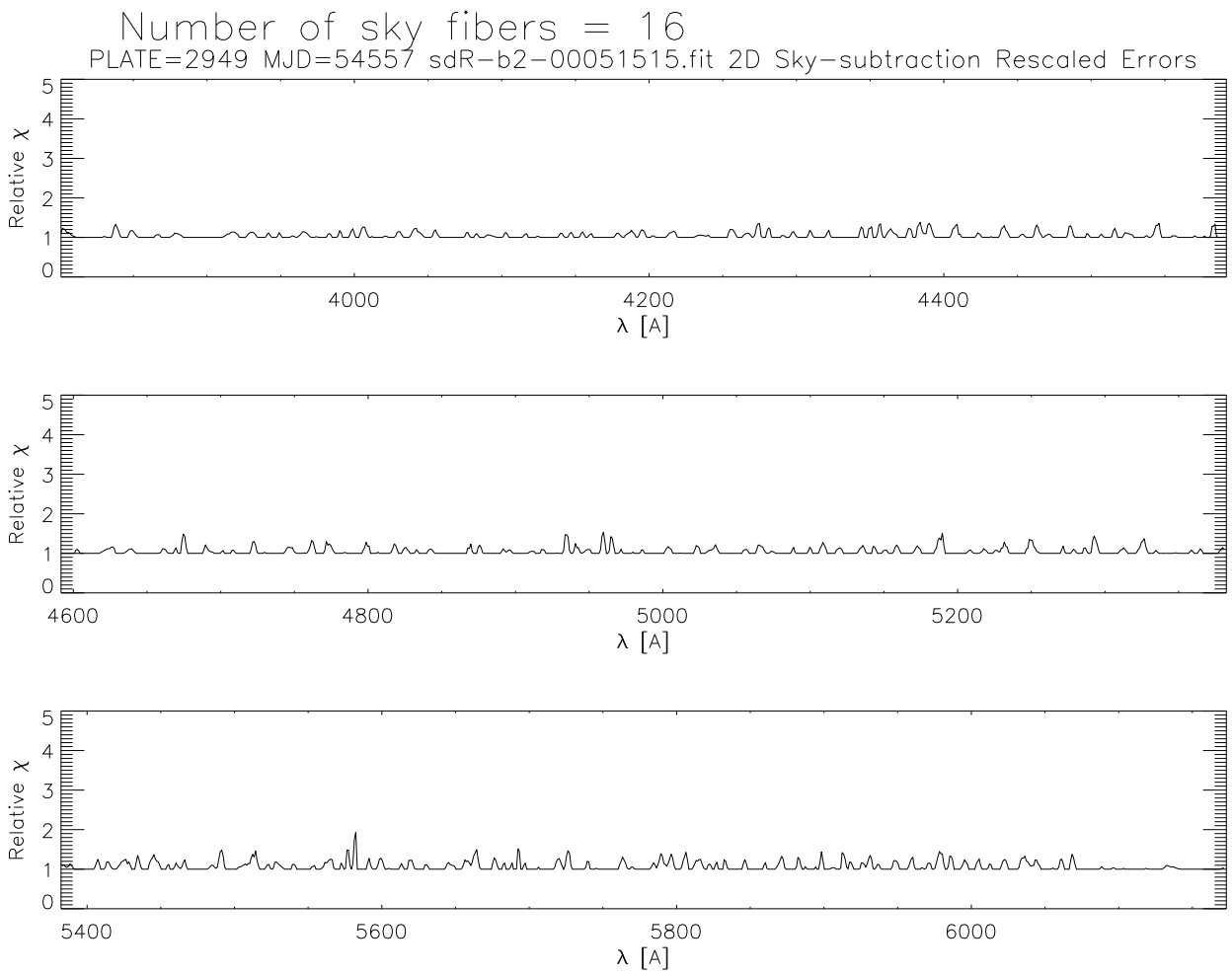

PLATE=2949 MJD=54557 sdR-b2-00051515.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

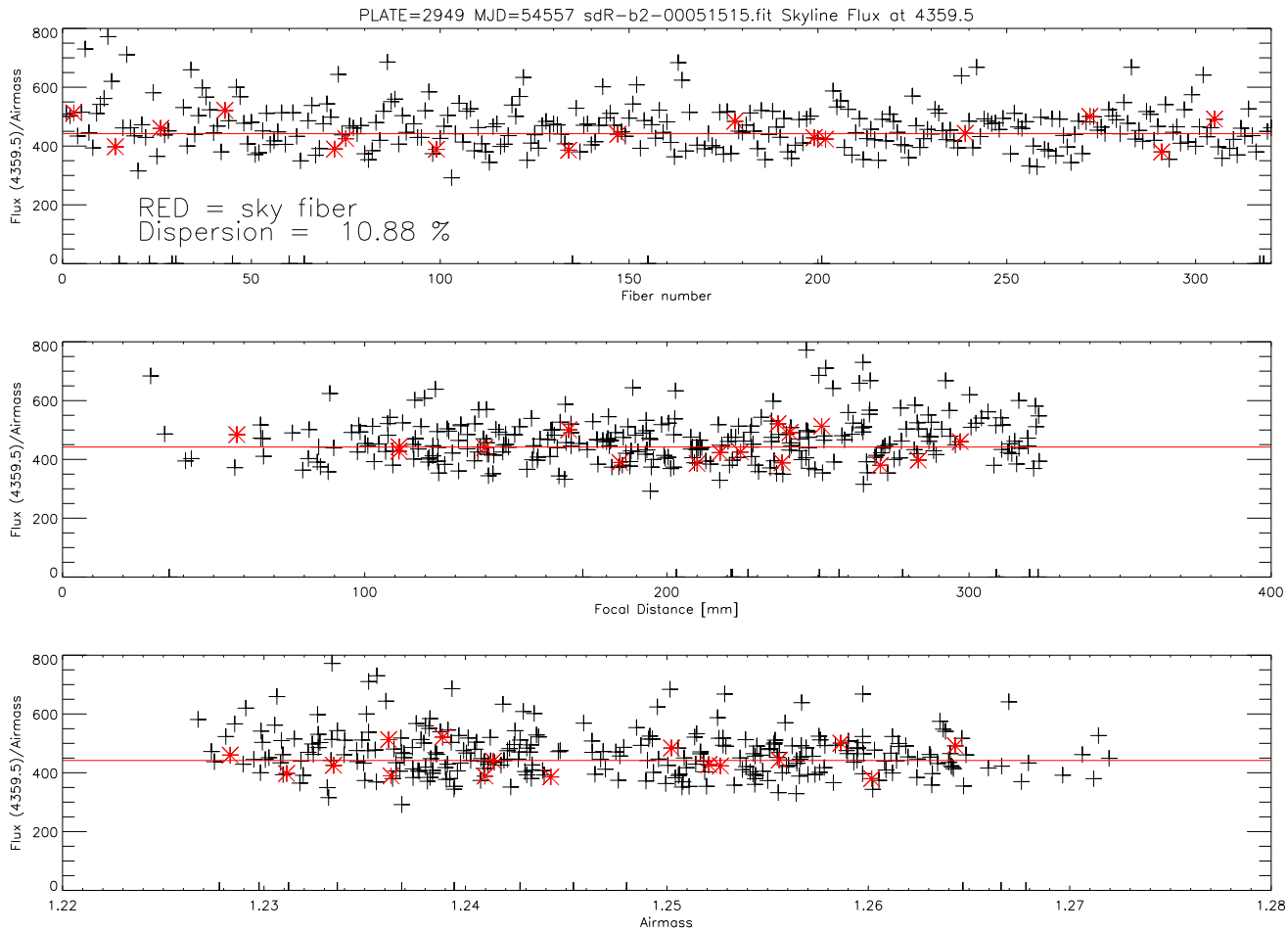

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-b2-00051515.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

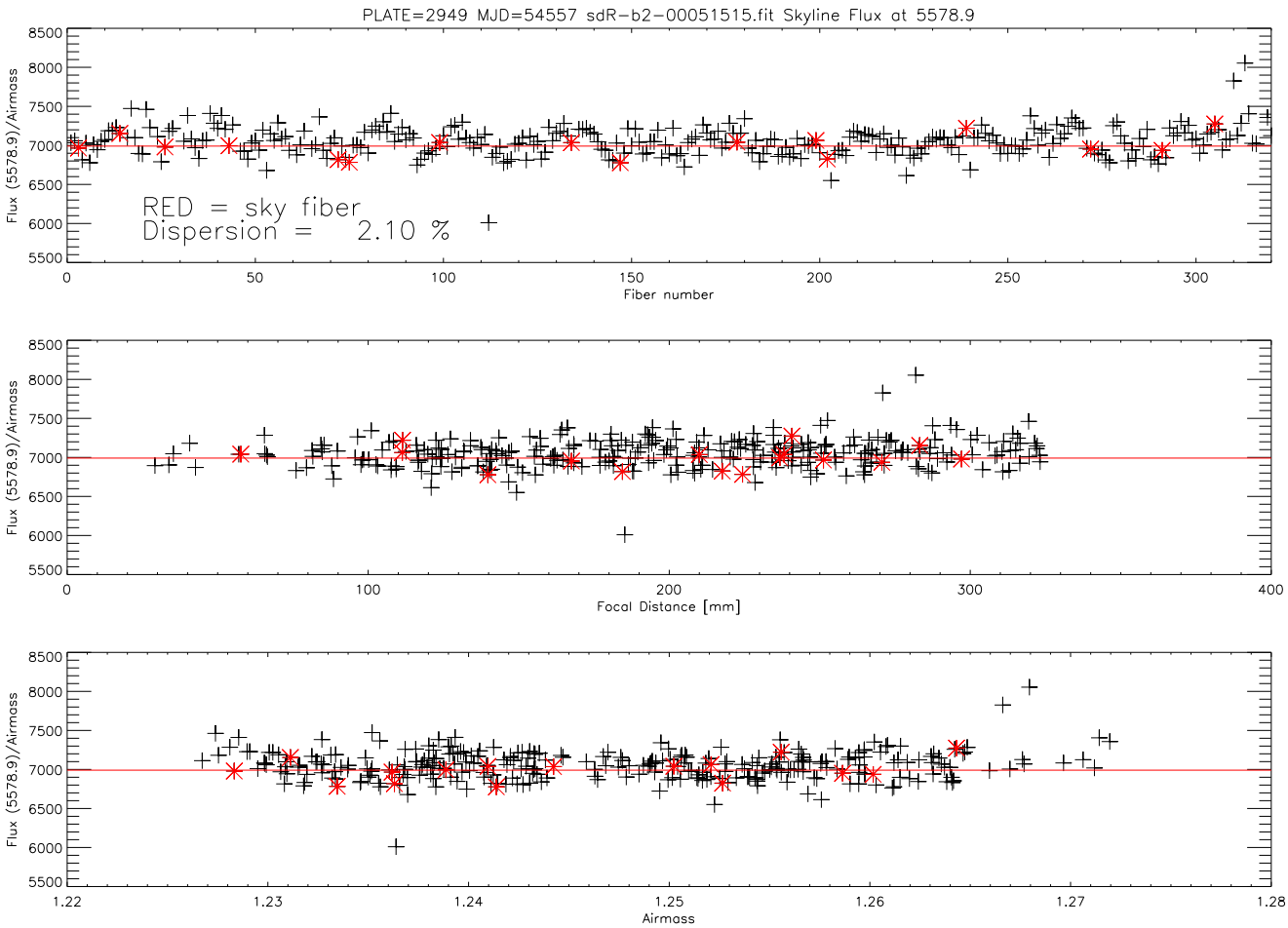

PLATE=2949 MJD=54557 sdR-b2-00051515.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

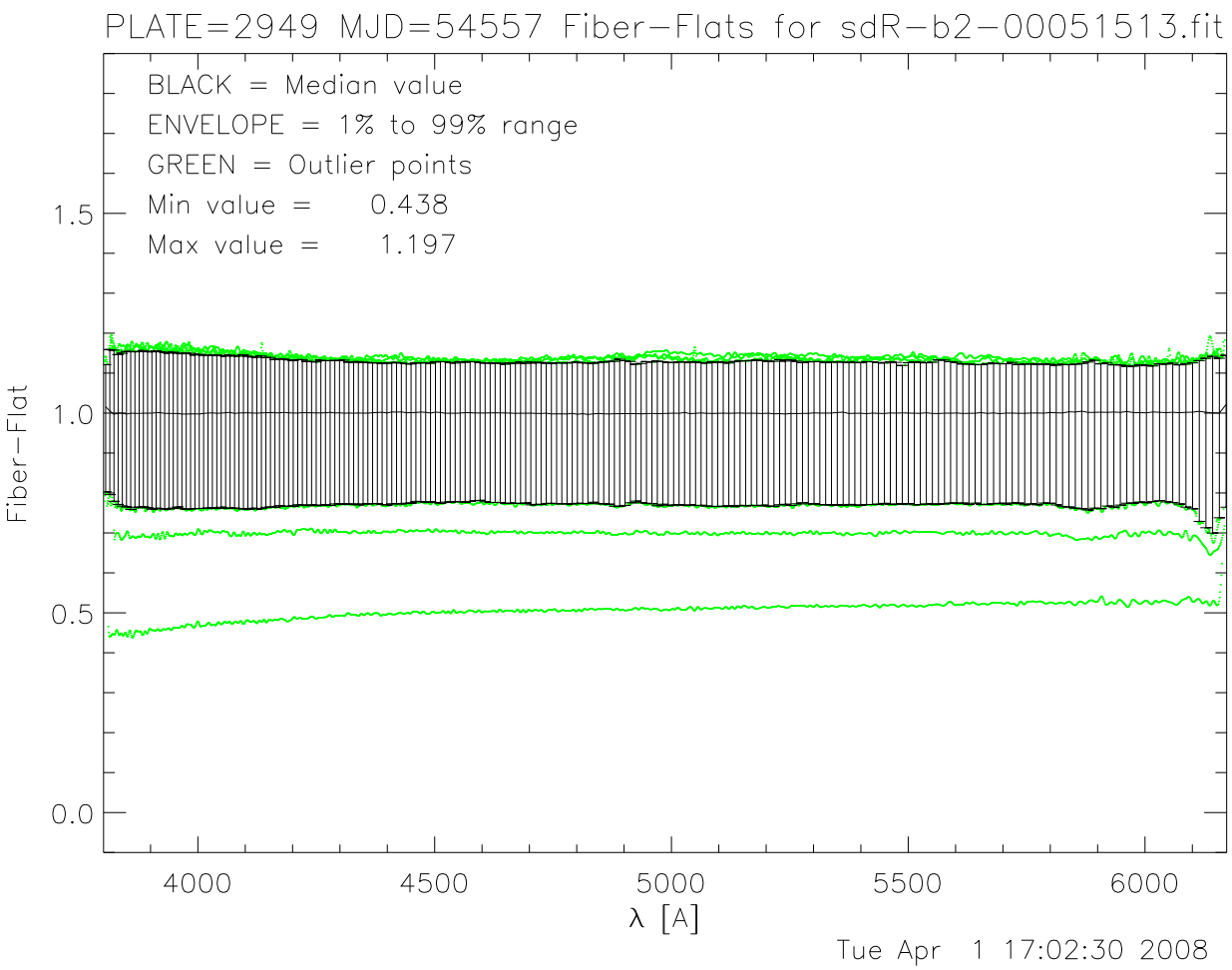

PLATE=2949 MJD=54557 sdR-b2-00051515.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

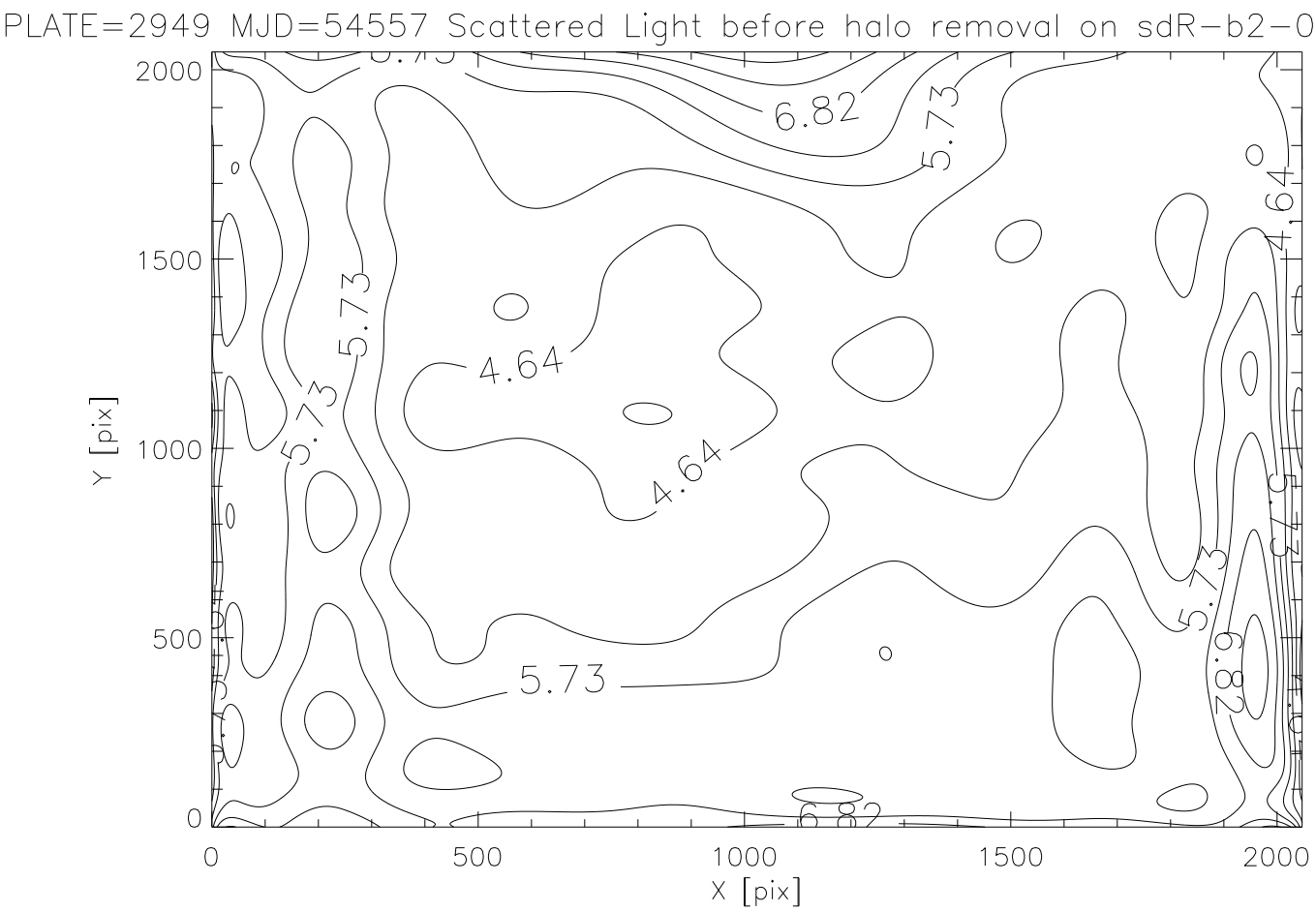

PLATE=2949 MJD=54557 sdR-b2-00051515.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

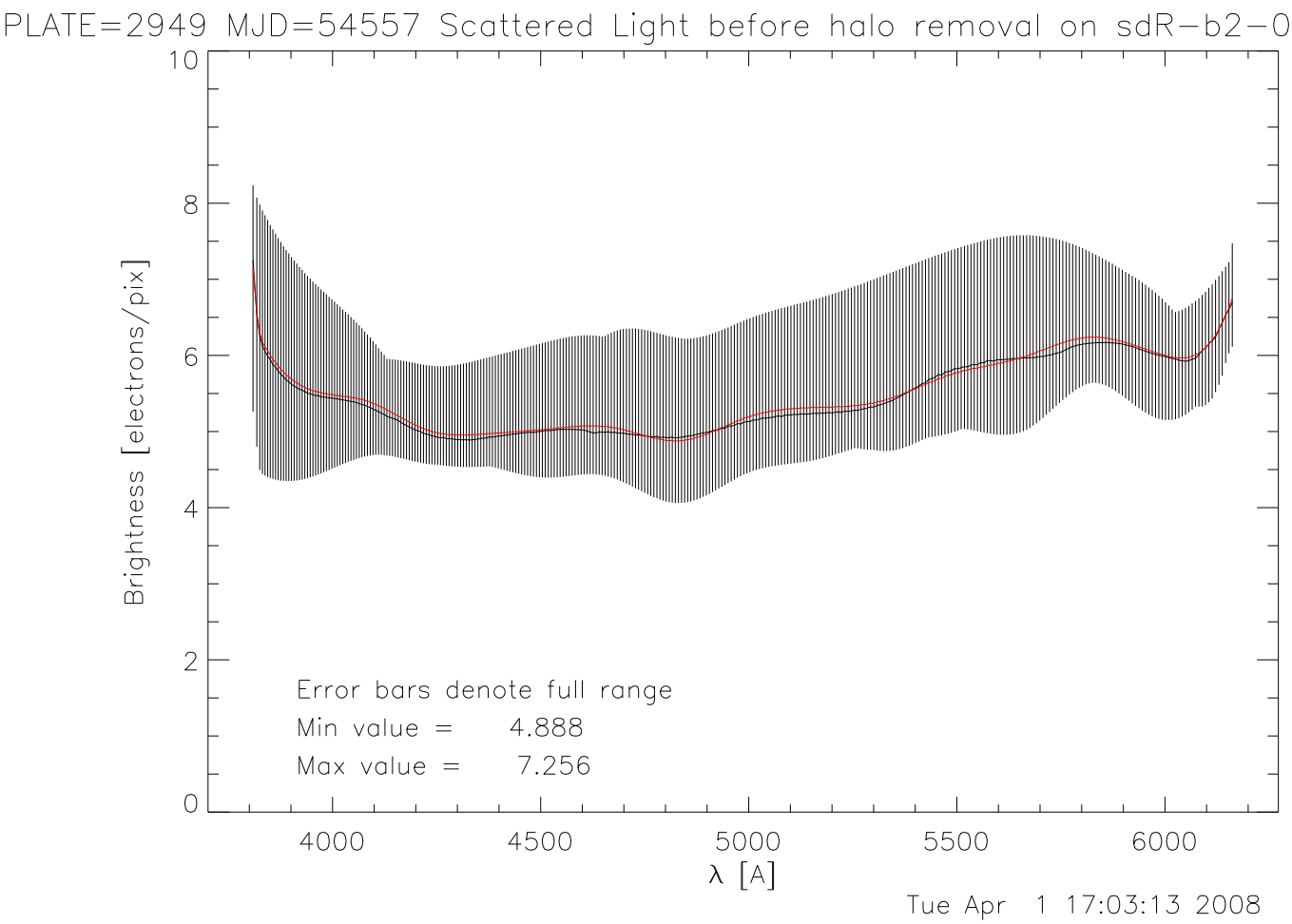

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-b2-00051515.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

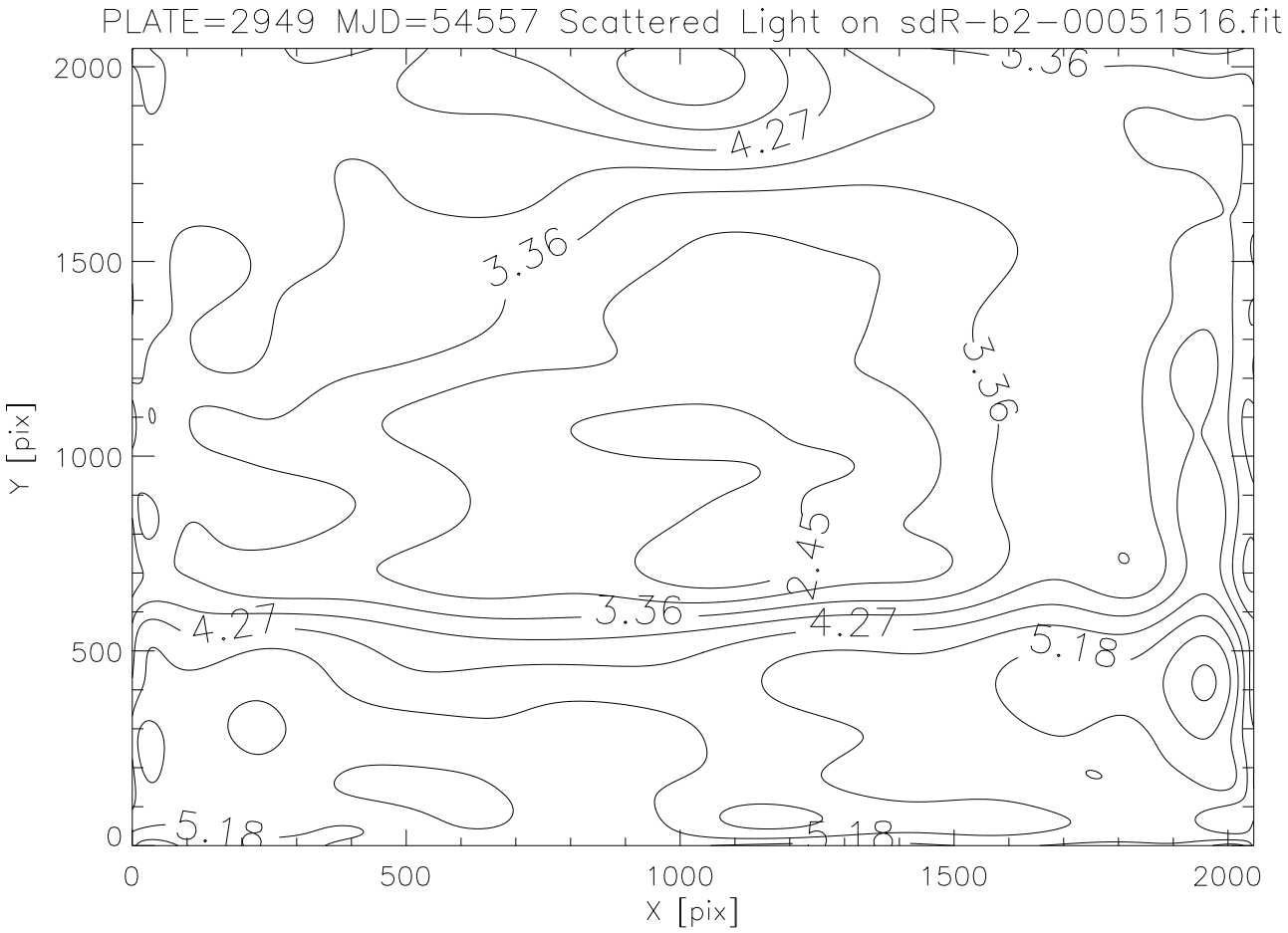

PLATE=2949 MJD=54557 sdR-b2-00051515.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.88 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

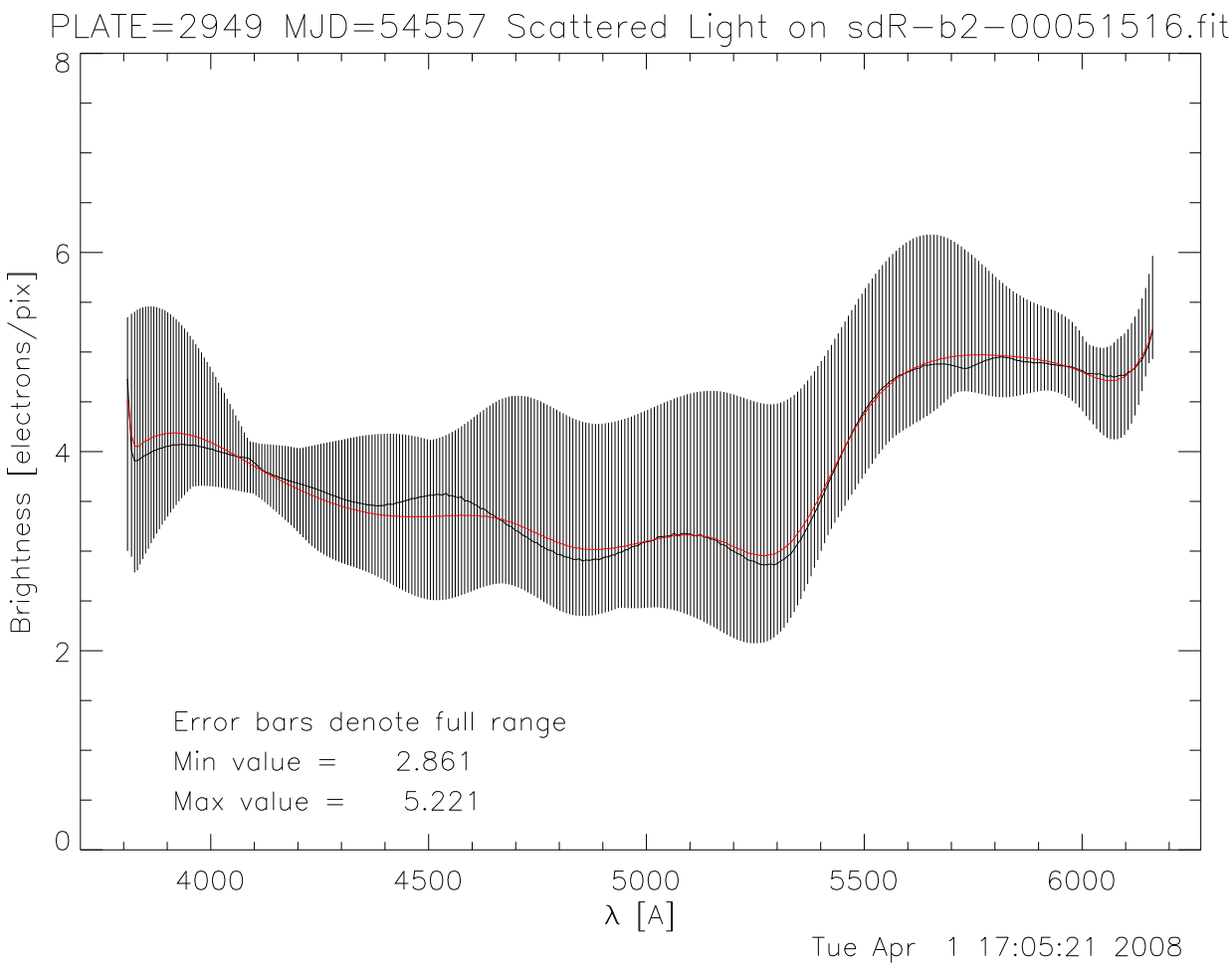

PLATE=2949 MJD=54557 sdR-b2-00051515.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.10 %
Fiber number
Focal Distance [mm]
Airmass

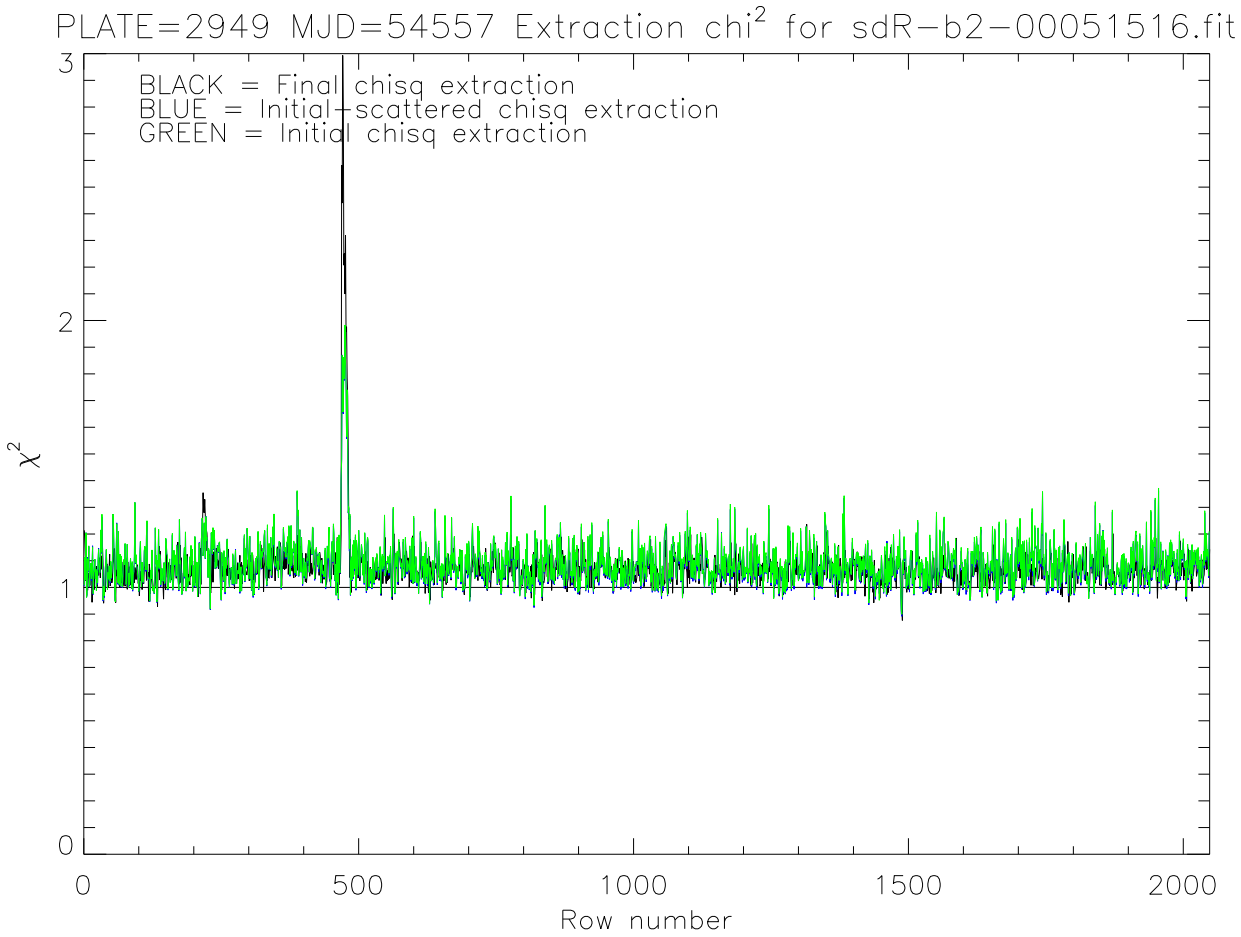

PLATE=2949 MJD=54557 Fiber−Flats for sdR−b2−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.438
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 17:02:30 2008

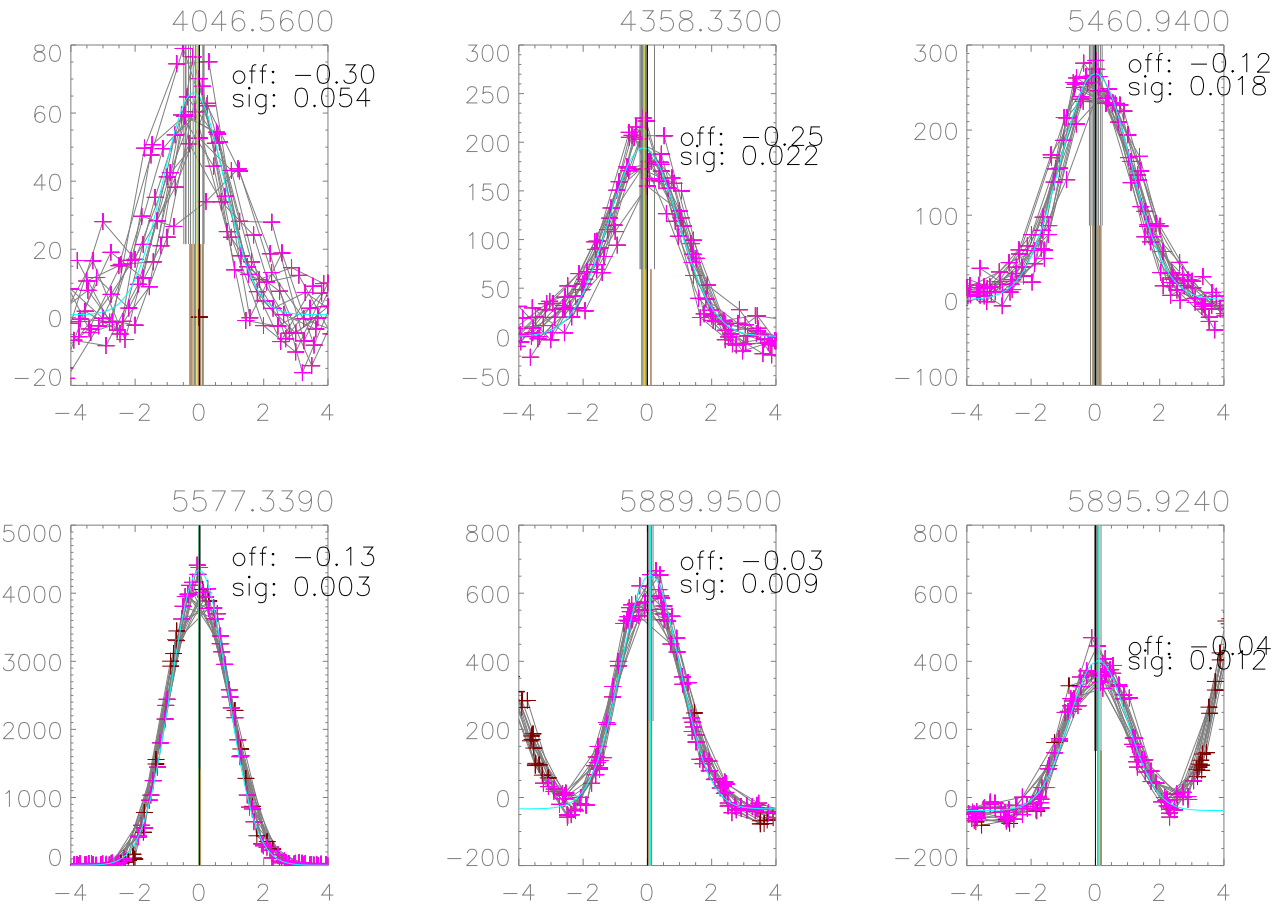

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR−b2−00051516.f
6.82
5.73
4.64
5.73
4.64
4.64
5.73
5.73
5.73
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

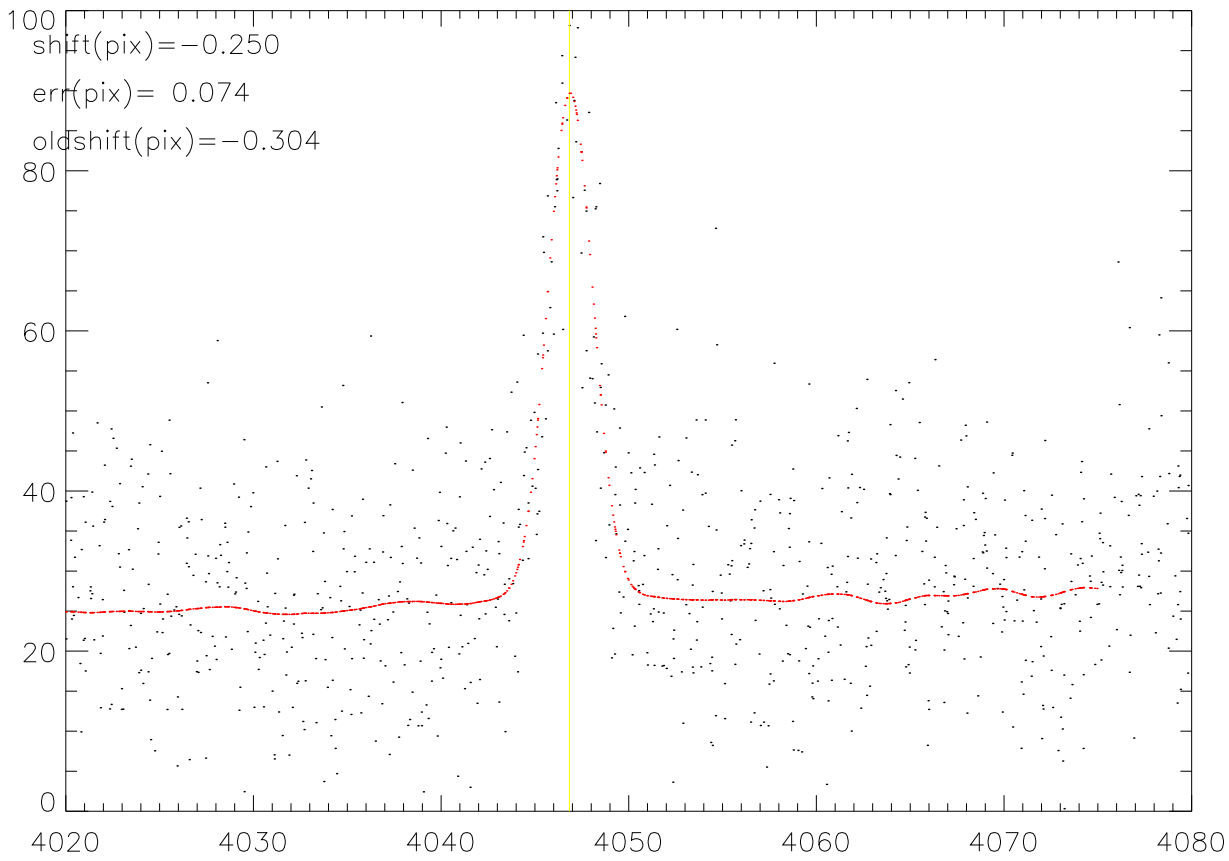

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-b2-00051516.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.888
Max value = 7.256
Tue Apr 1 17:03:13 2008

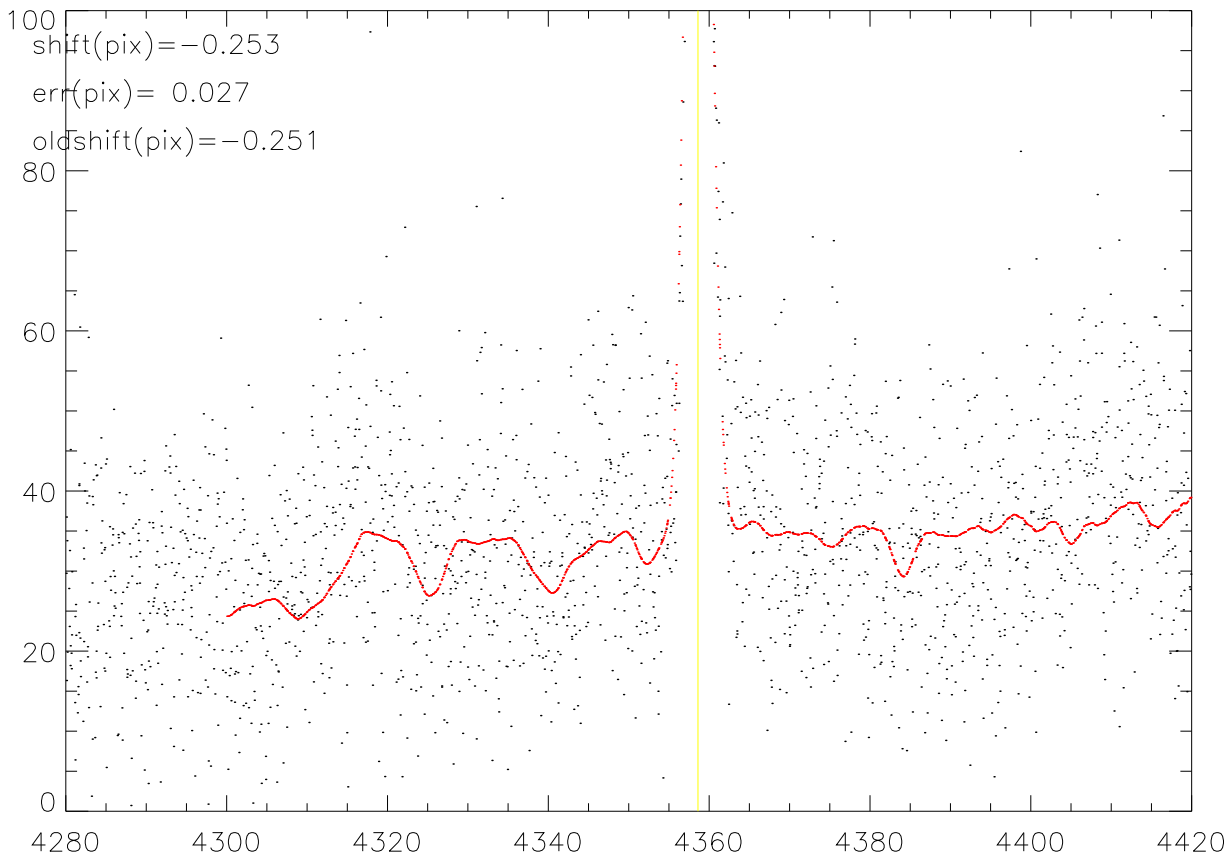

PLATE=2949 MJD=54557 Scattered Light on sdR-b2-00051516.fit
5.36
4.27
3.36
3.36
2.45
3.36
4.27
4.27
5.18
5.18
5.18
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

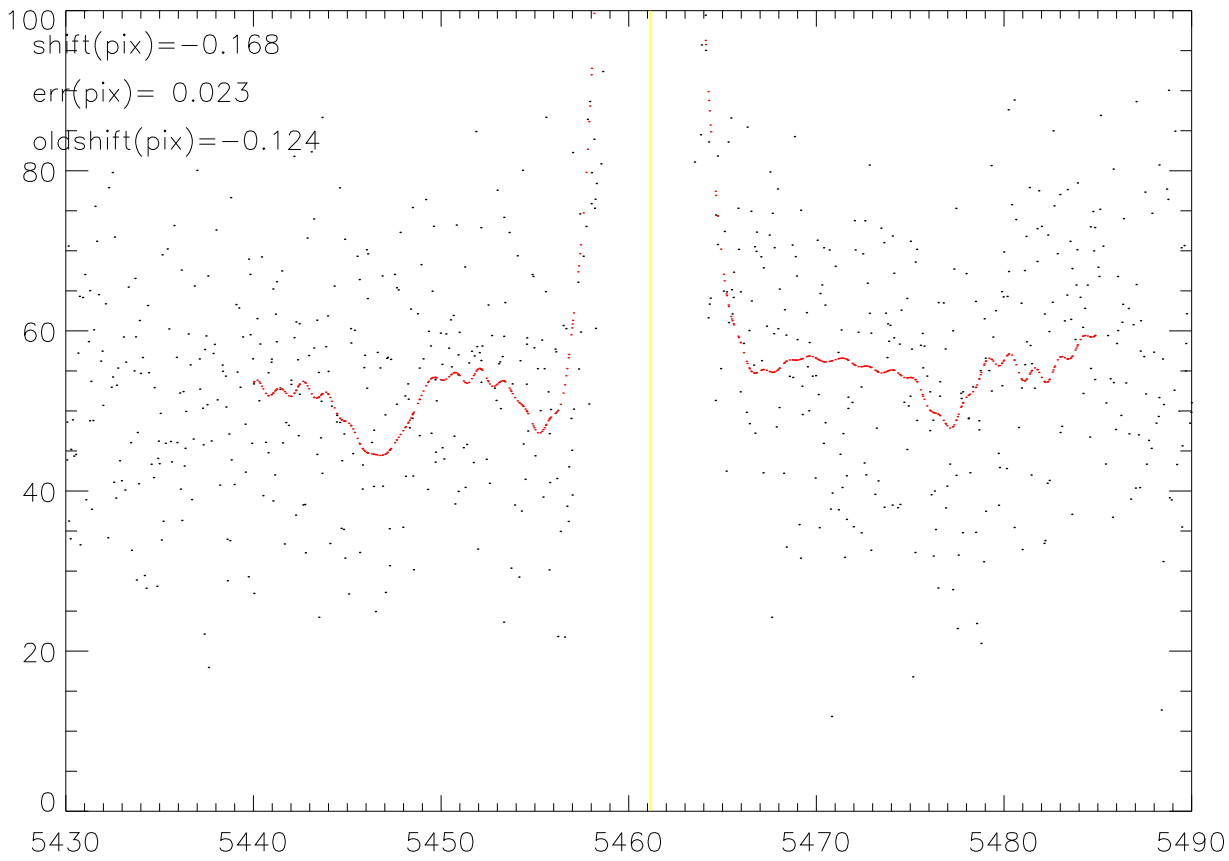

PLATE=2949 MJD=54557 Scattered Light on sdR-b2-00051516.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.861
Max value = 5.221
Tue Apr 1 17:05:21 2008

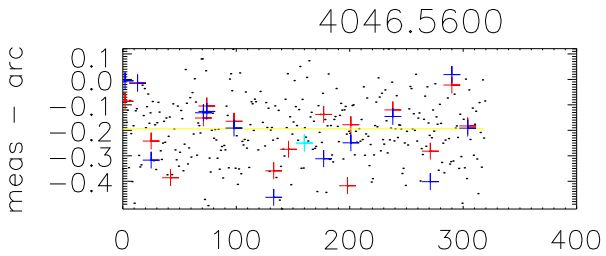

PLATE=2949 MJD=54557 Extraction chi^2 for sdR-b2-00051516.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

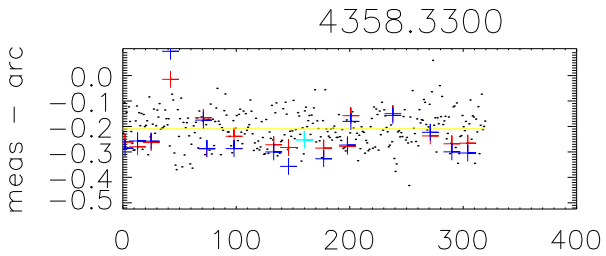

4046.5600
off: −0.30
sig: 0.054
4358.3300
off: −0.25
sig: 0.022
5460.9400
off: −0.12
sig: 0.018
5577.3390
off: −0.13
sig: 0.003
5889.9500
off: −0.03
sig: 0.009
5895.9240
off: −0.04
sig: 0.012

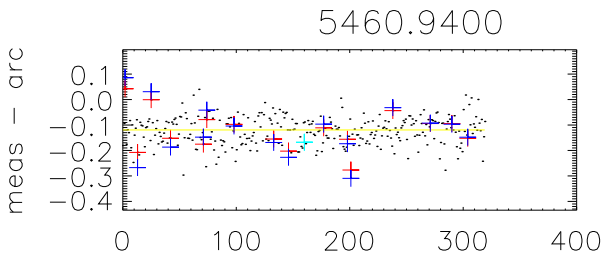

shift(pix)=−0.250
err(pix)= 0.074
oldshift(pix)=−0.304
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

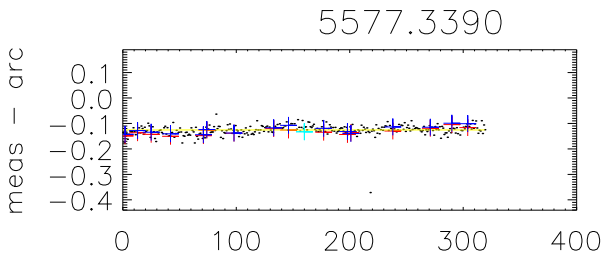

shift(pix)=−0.253
err(pix)= 0.027
oldshift(pix)=−0.251
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

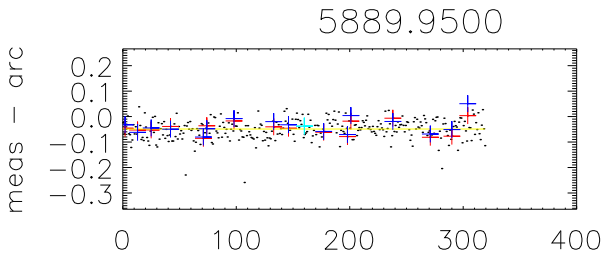

shift(pix)=−0.168
err(pix)= 0.023
oldshift(pix)=−0.124
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

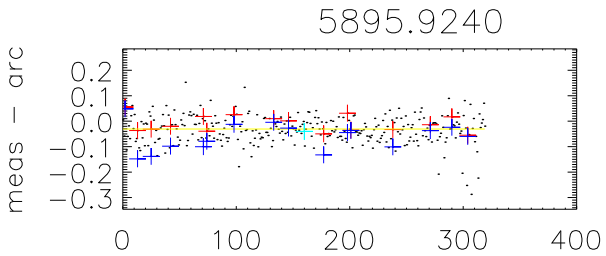

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

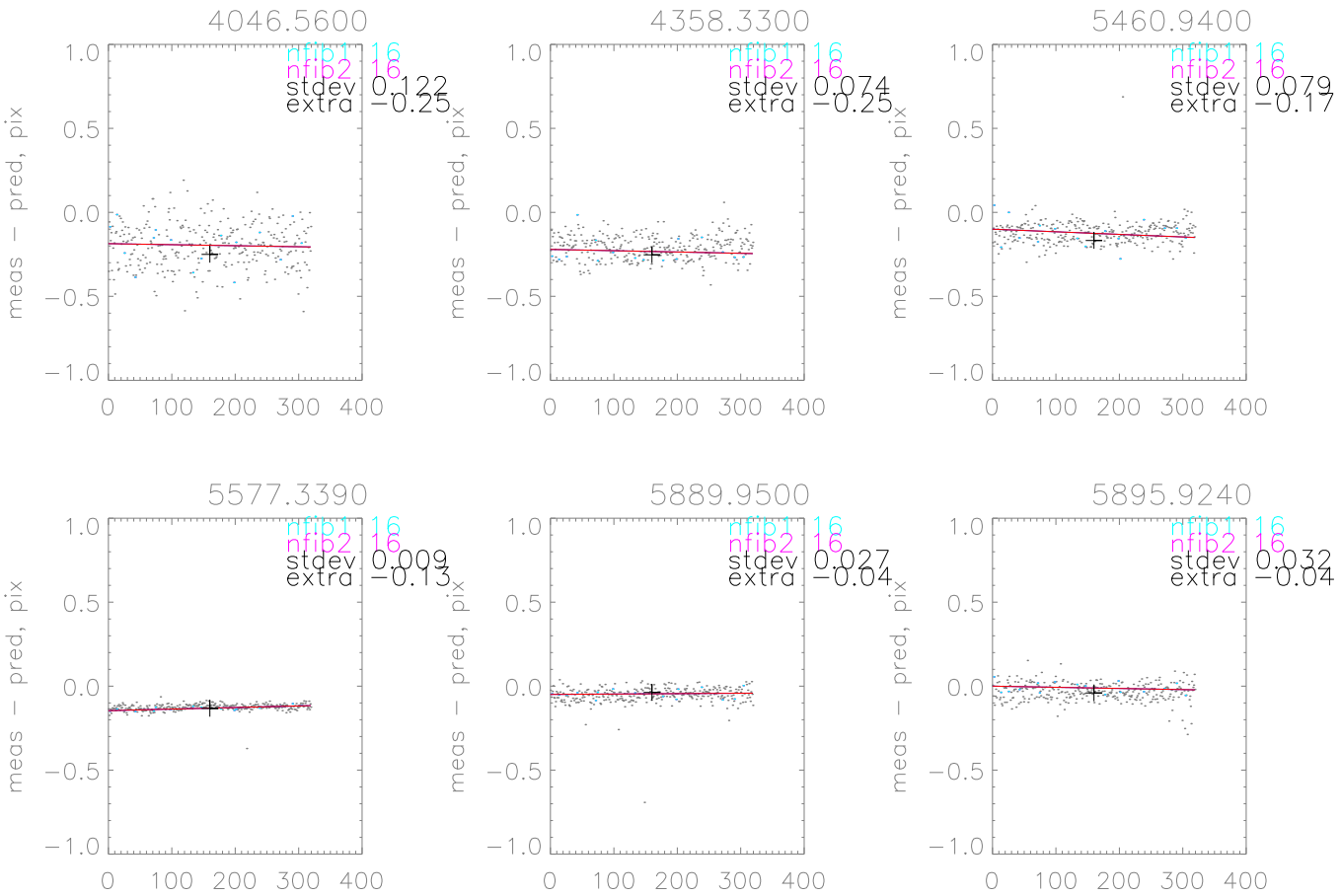

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

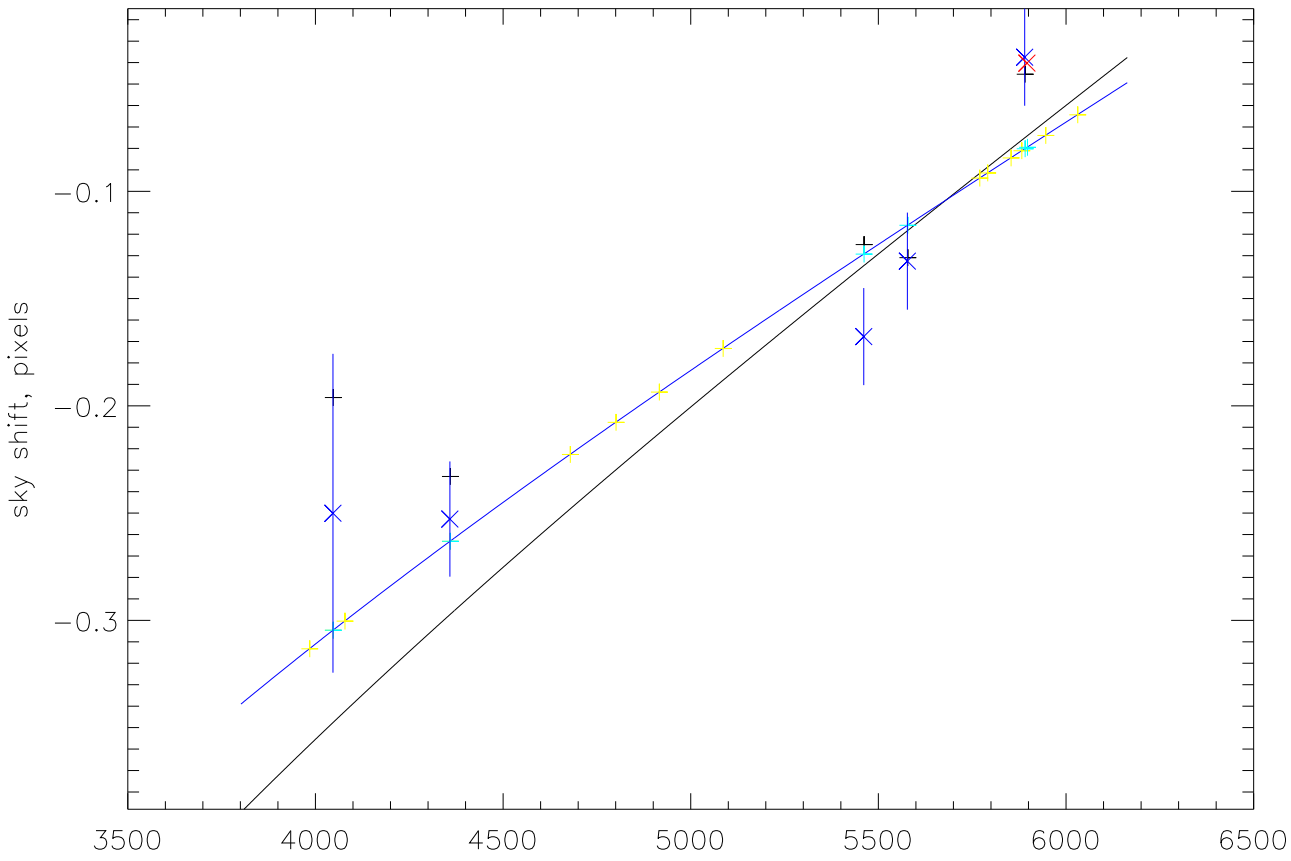

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

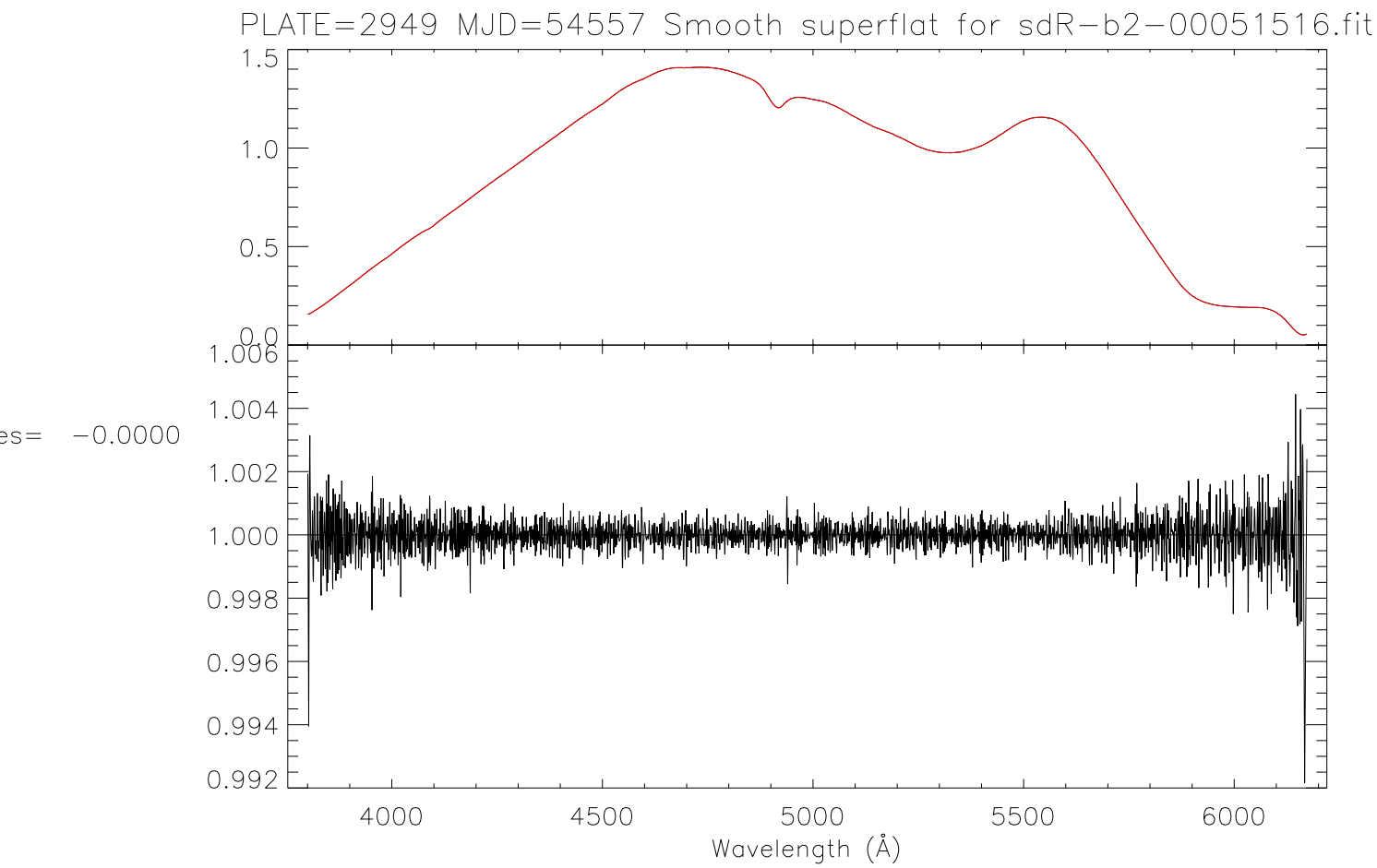

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

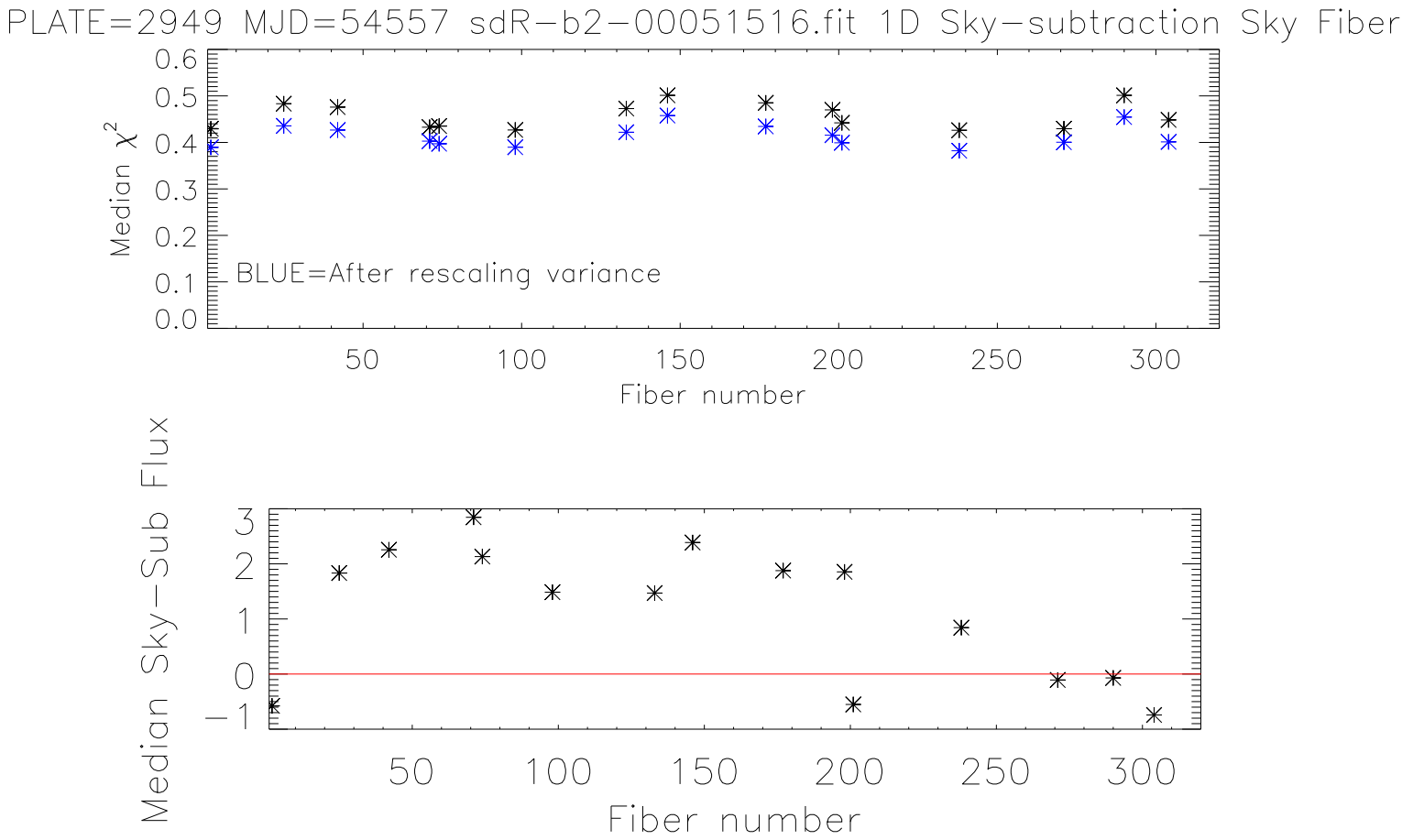

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

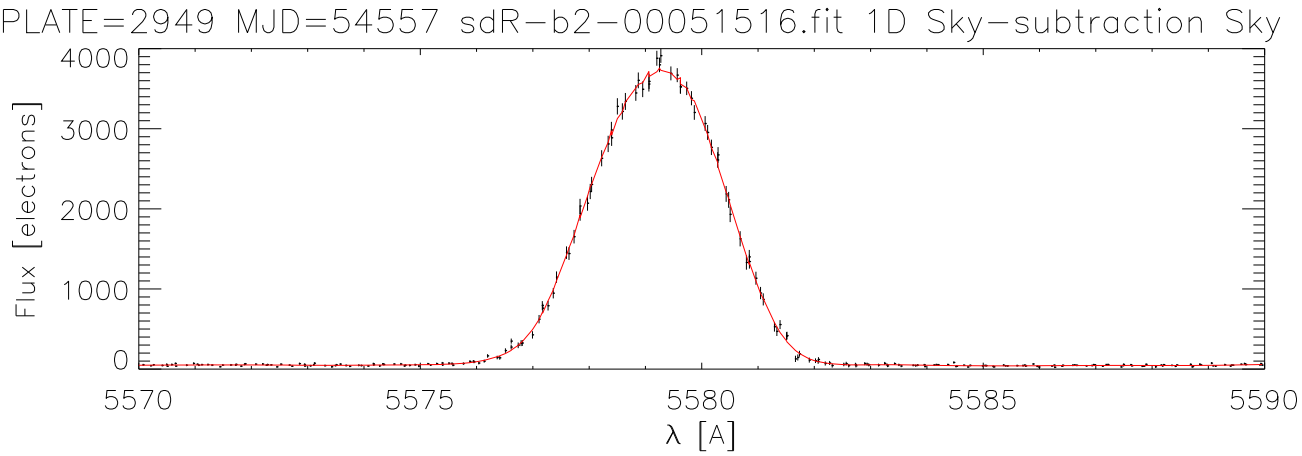

4046.5600
nfib1 16
nfib2 16
stdev 0.122
extra −0.25
4358.3300
nfib1 16
nfib2 16
stdev 0.074
extra −0.25
5460.9400
nfib1 16
nfib2 16
stdev 0.079
extra −0.17
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra −0.13
5889.9500
nfib1 16
nfib2 16
stdev 0.027
extra −0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

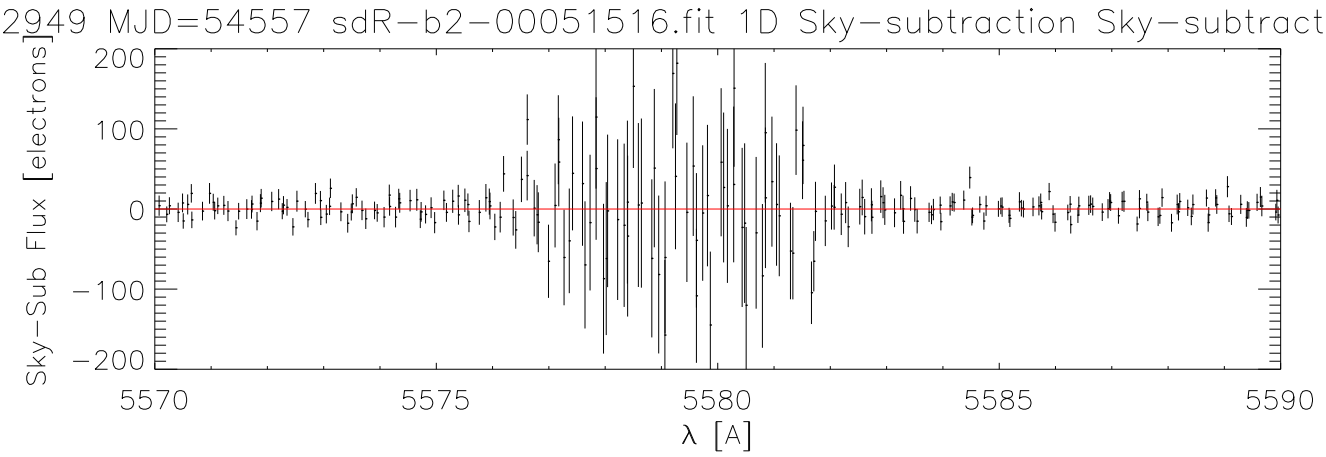

sky shift, pixels
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

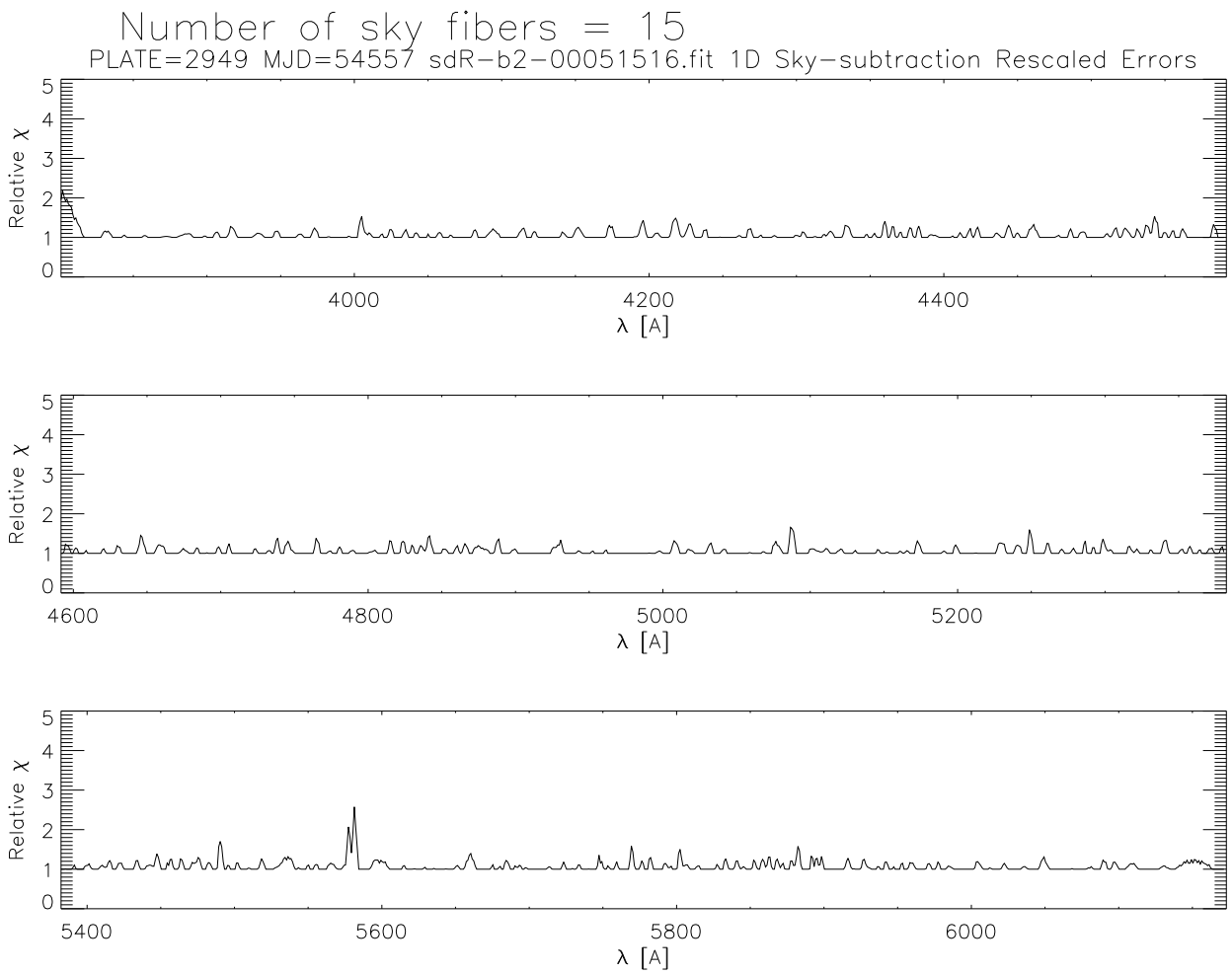

PLATE=2949 MJD=54557 Smooth superflat for sdR-b2-00051516.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

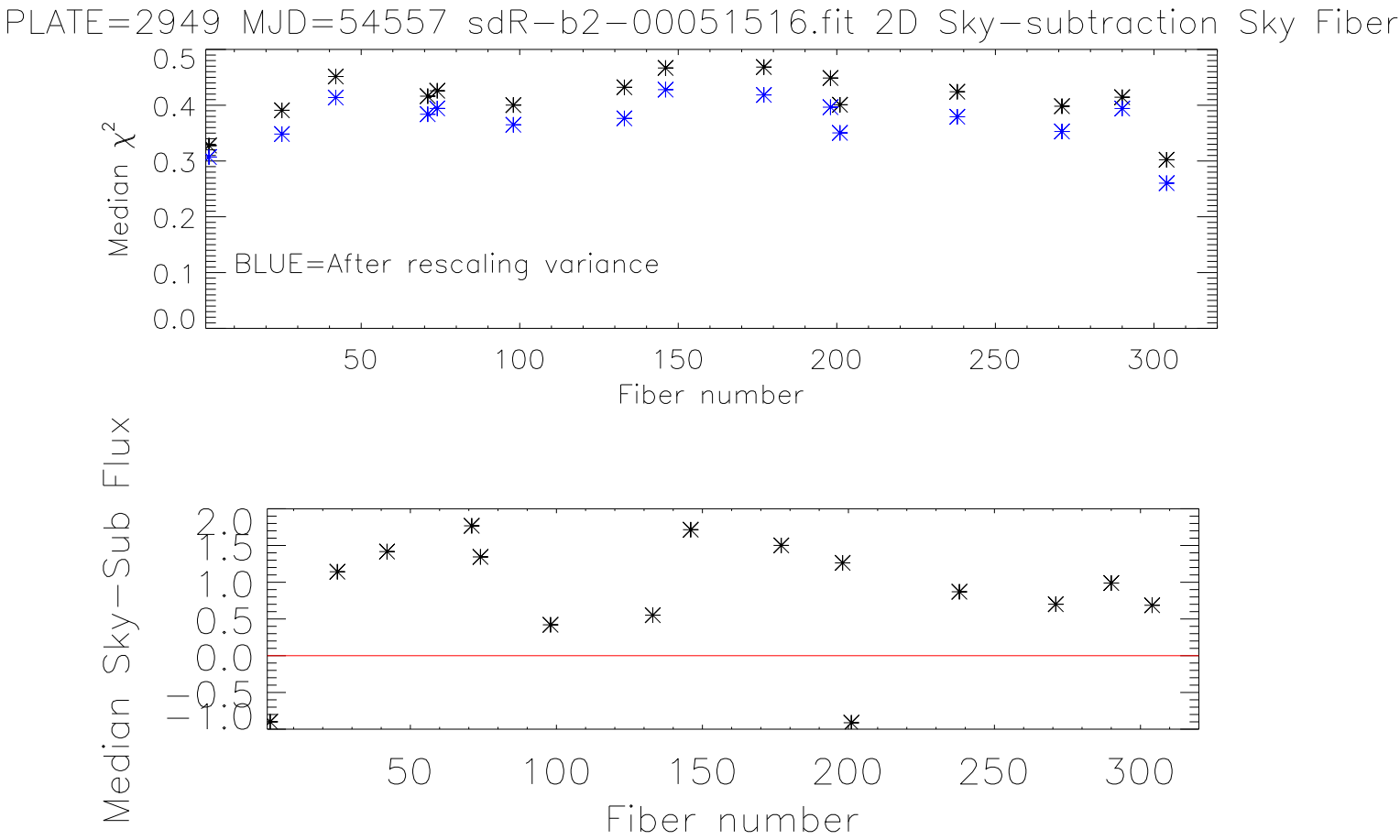
es= −0.0000

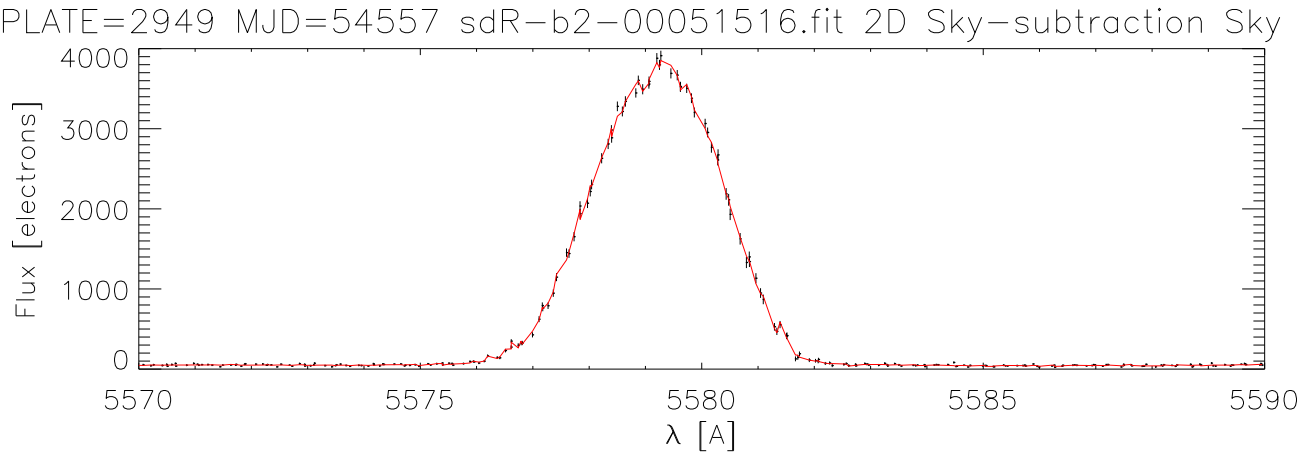

PLATE=2949 MJD=54557 sdR-b2-00051516.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

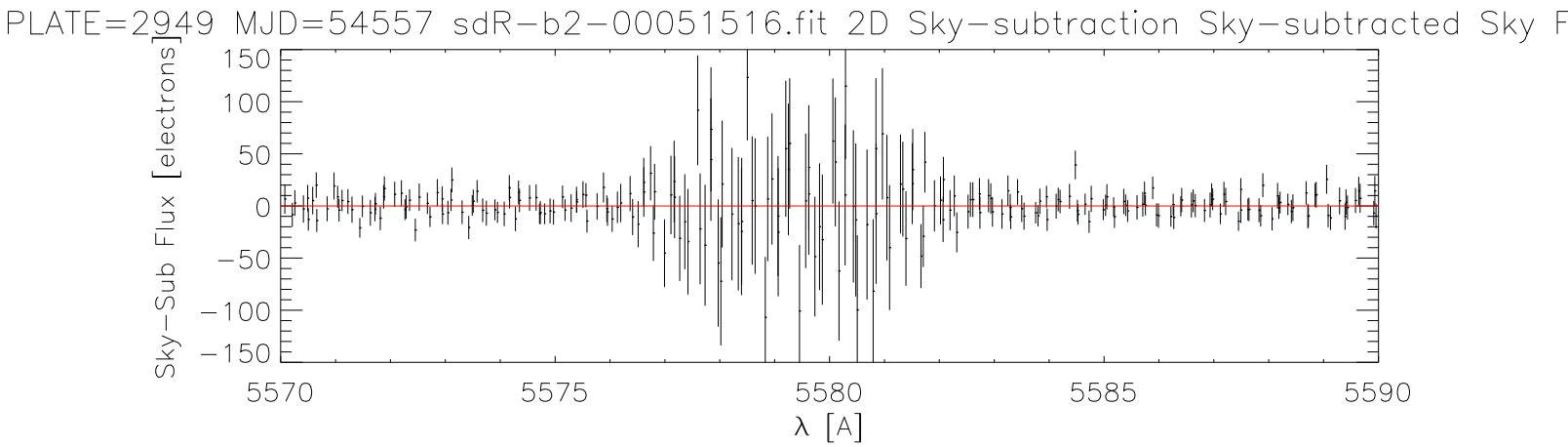

PLATE=2949 MJD=54557 sdR-b2-00051516.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

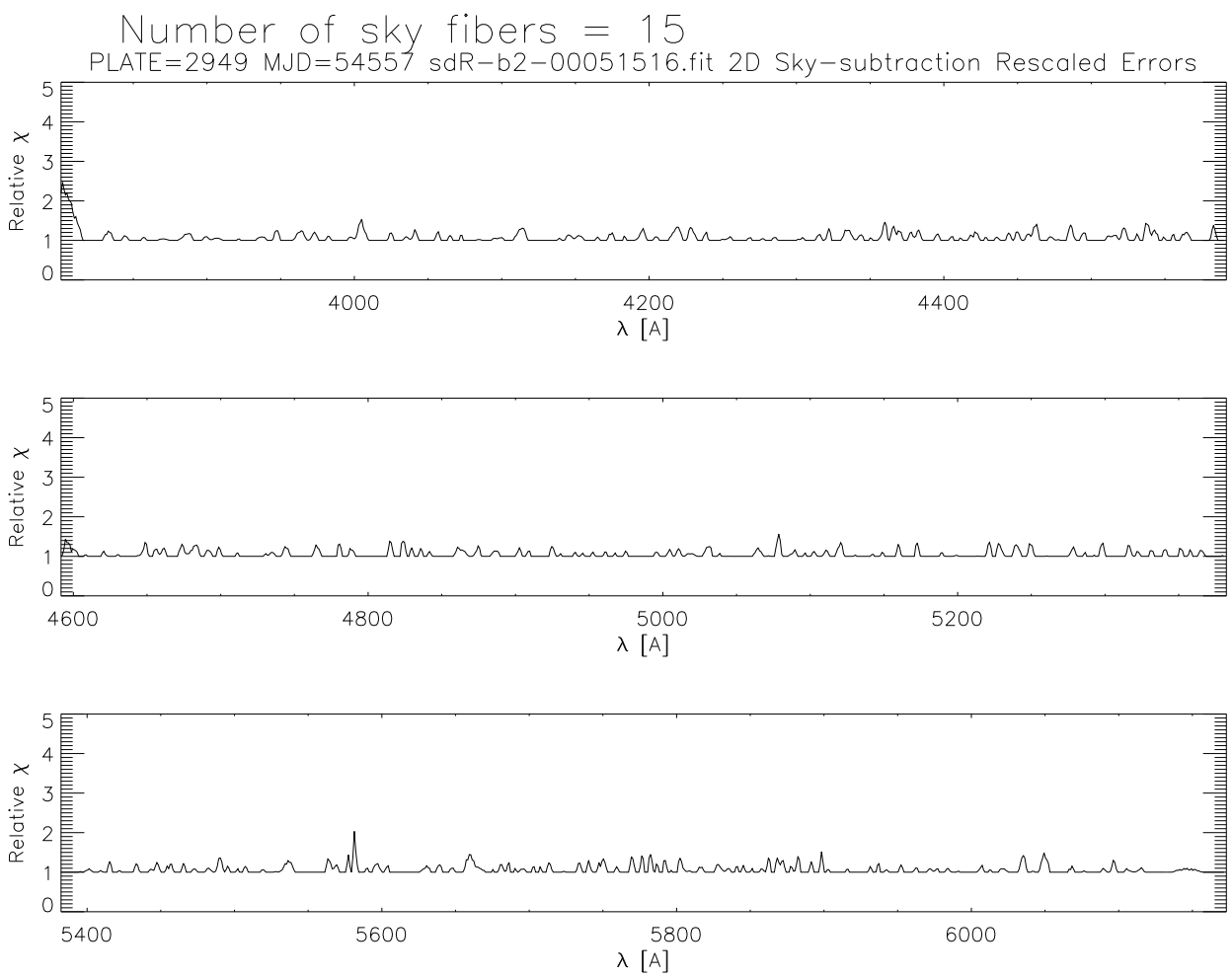

PLATE=2949 MJD=54557 sdR-b2-00051516.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

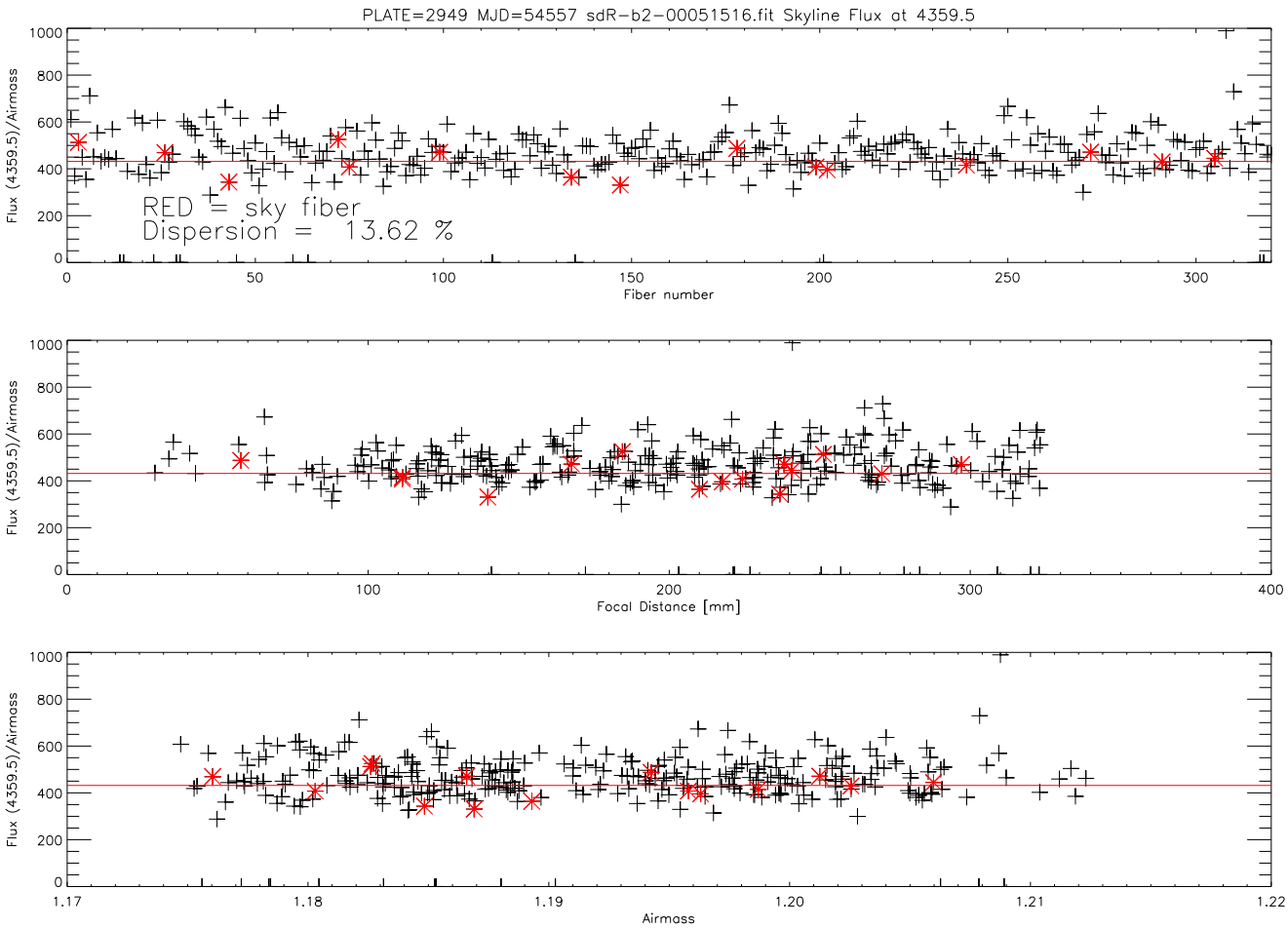

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-b2-00051516.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

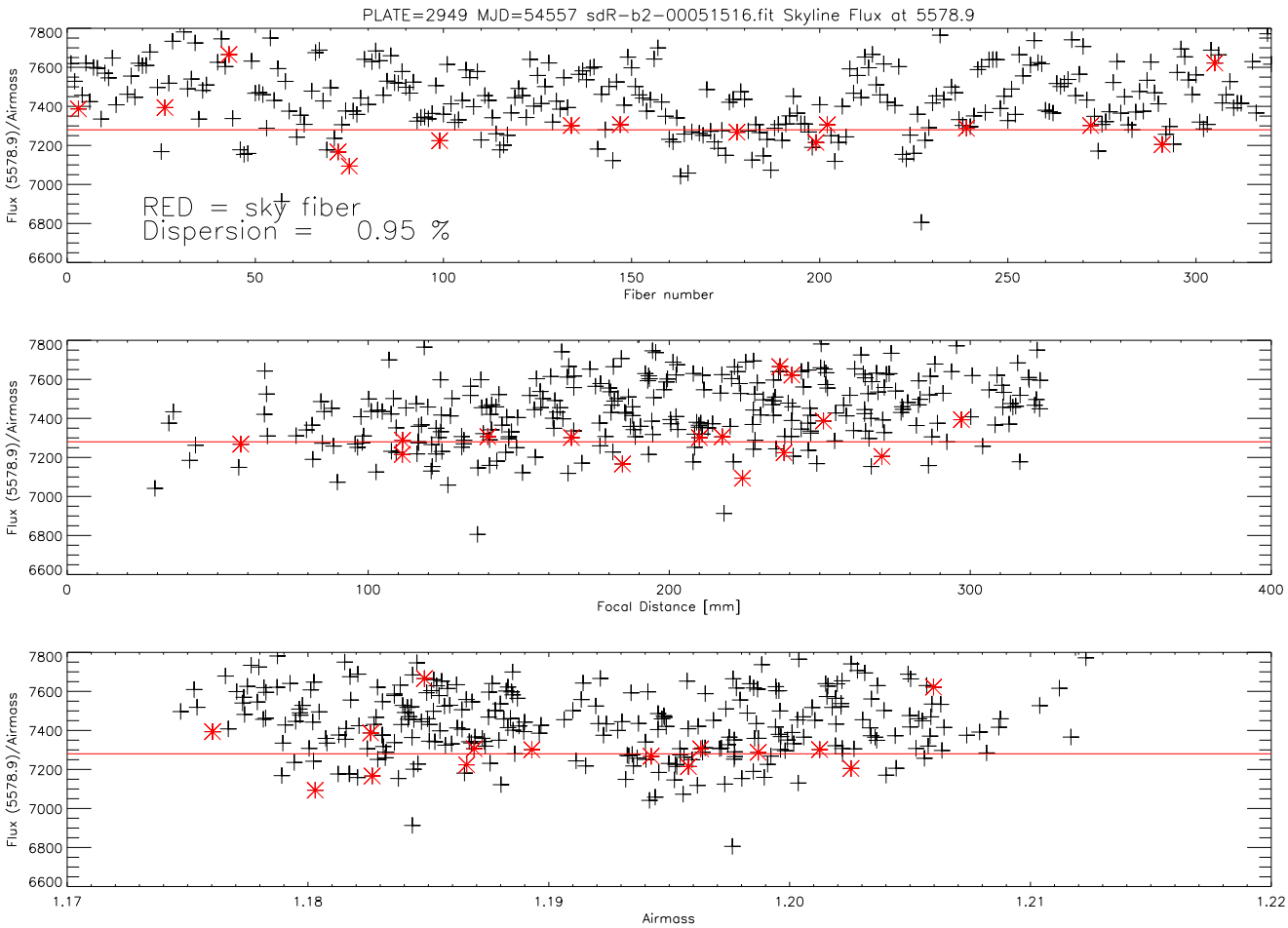

PLATE=2949 MJD=54557 sdR-b2-00051516.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

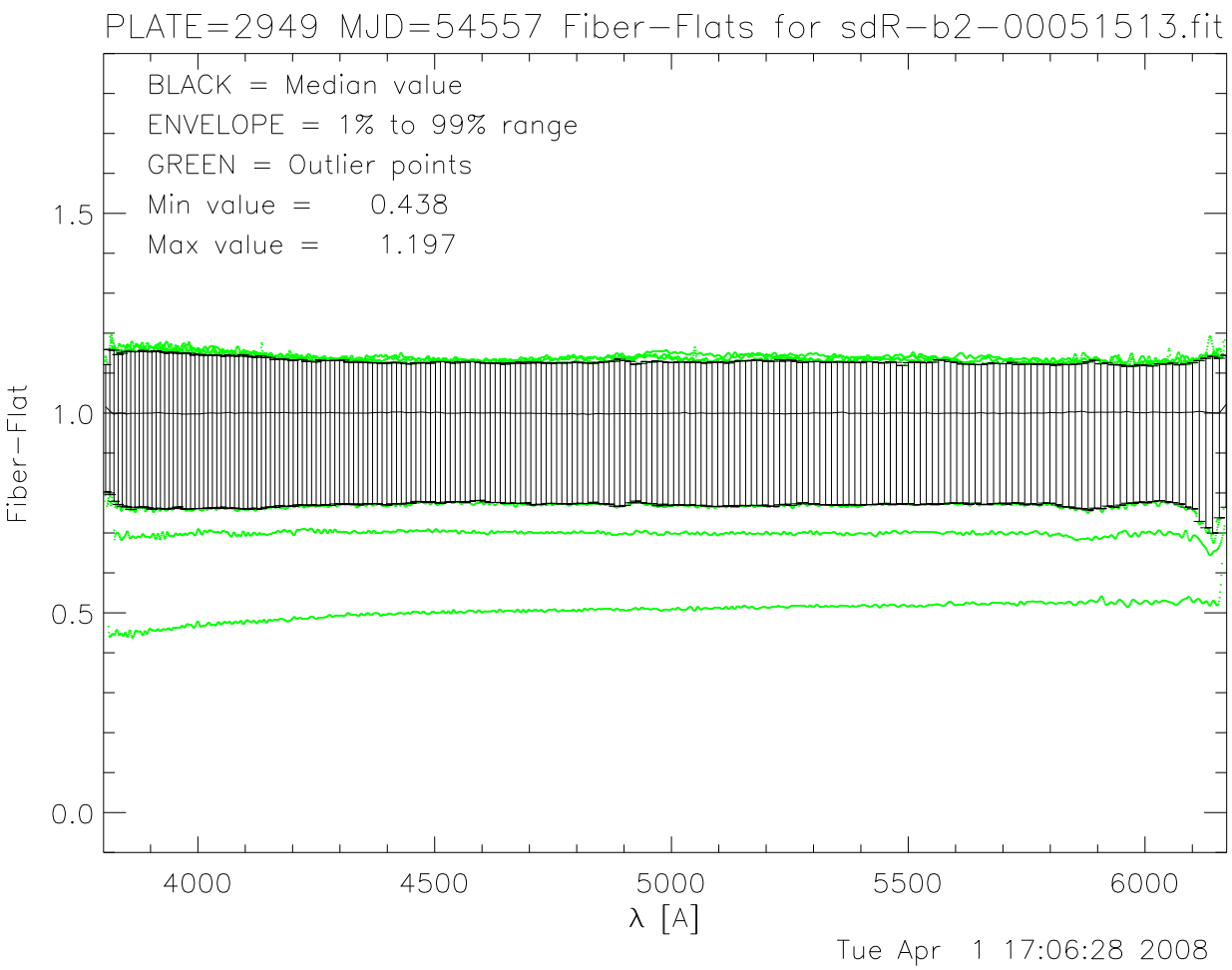

PLATE=2949 MJD=54557 sdR-b2-00051516.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

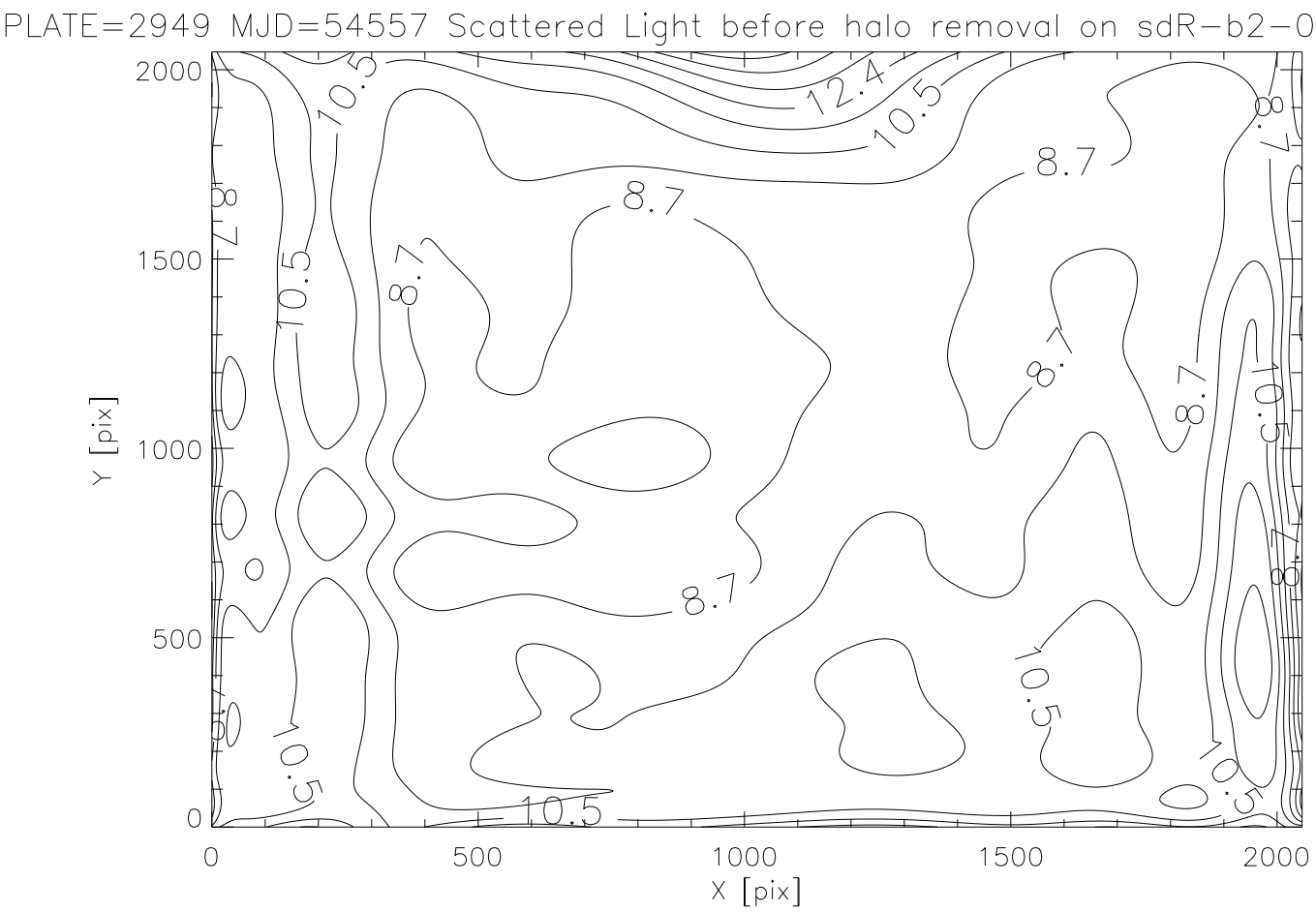

PLATE=2949 MJD=54557 sdR-b2-00051516.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

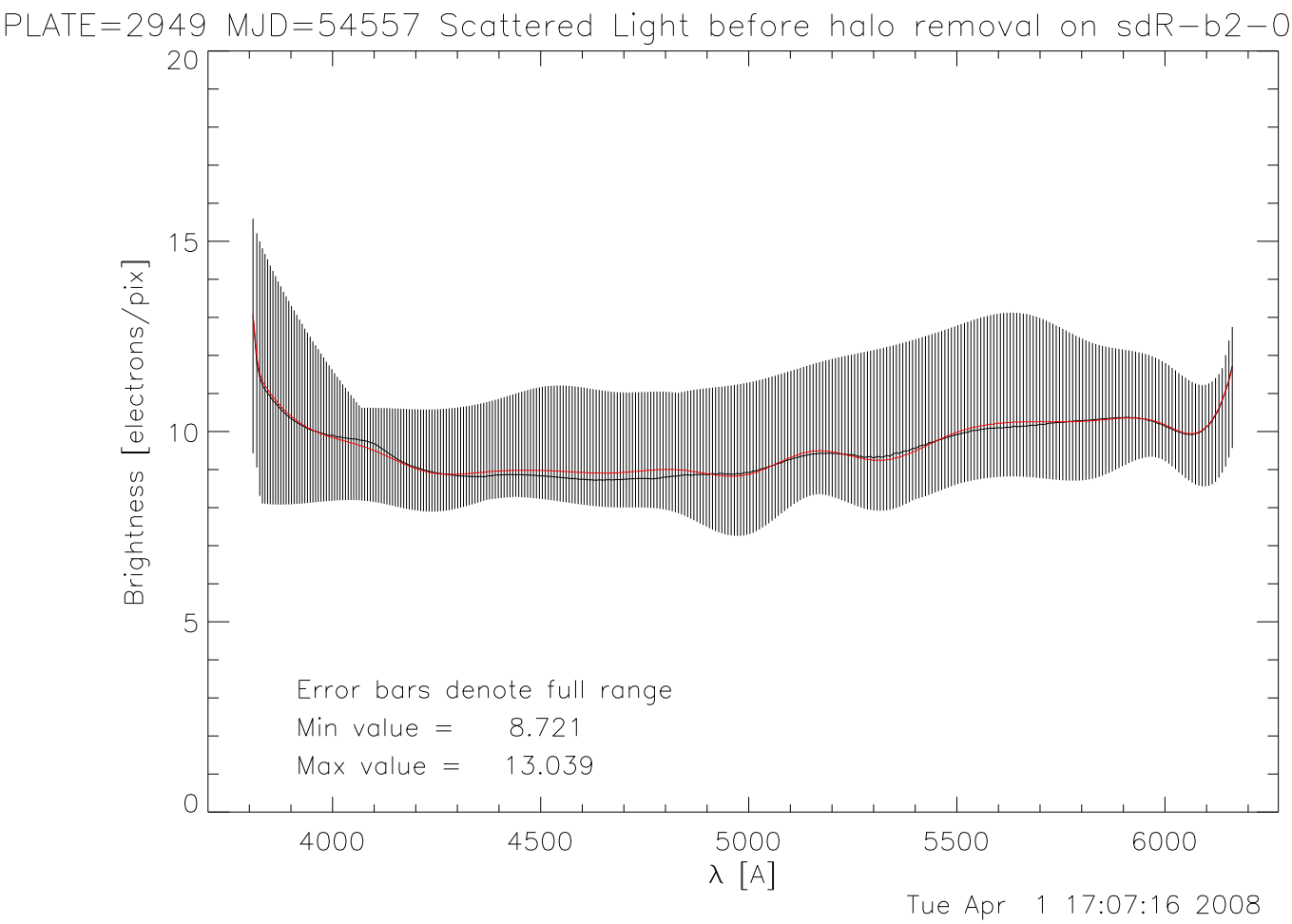

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-b2-00051516.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

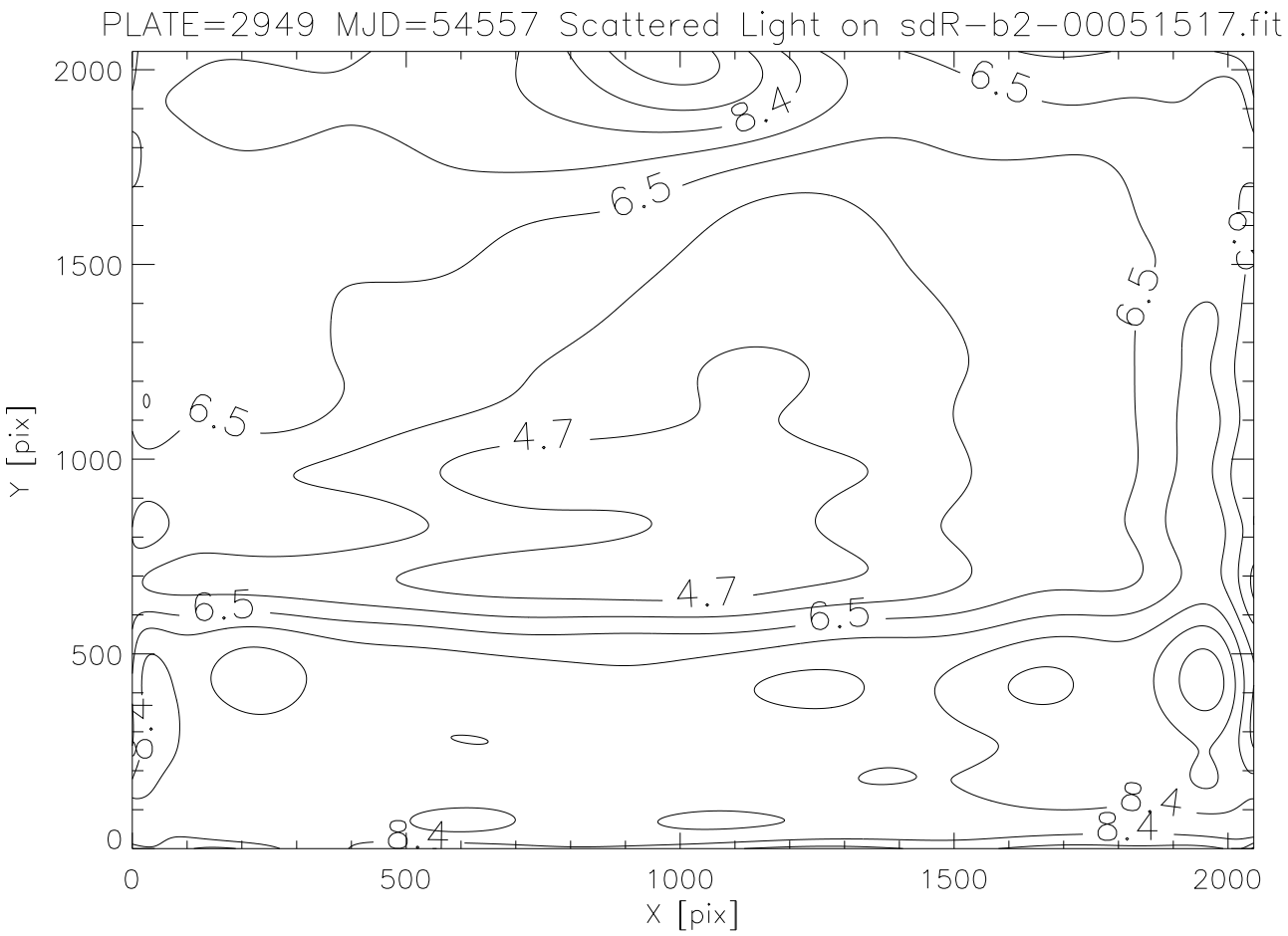

PLATE=2949 MJD=54557 sdR-b2-00051516.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.62 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

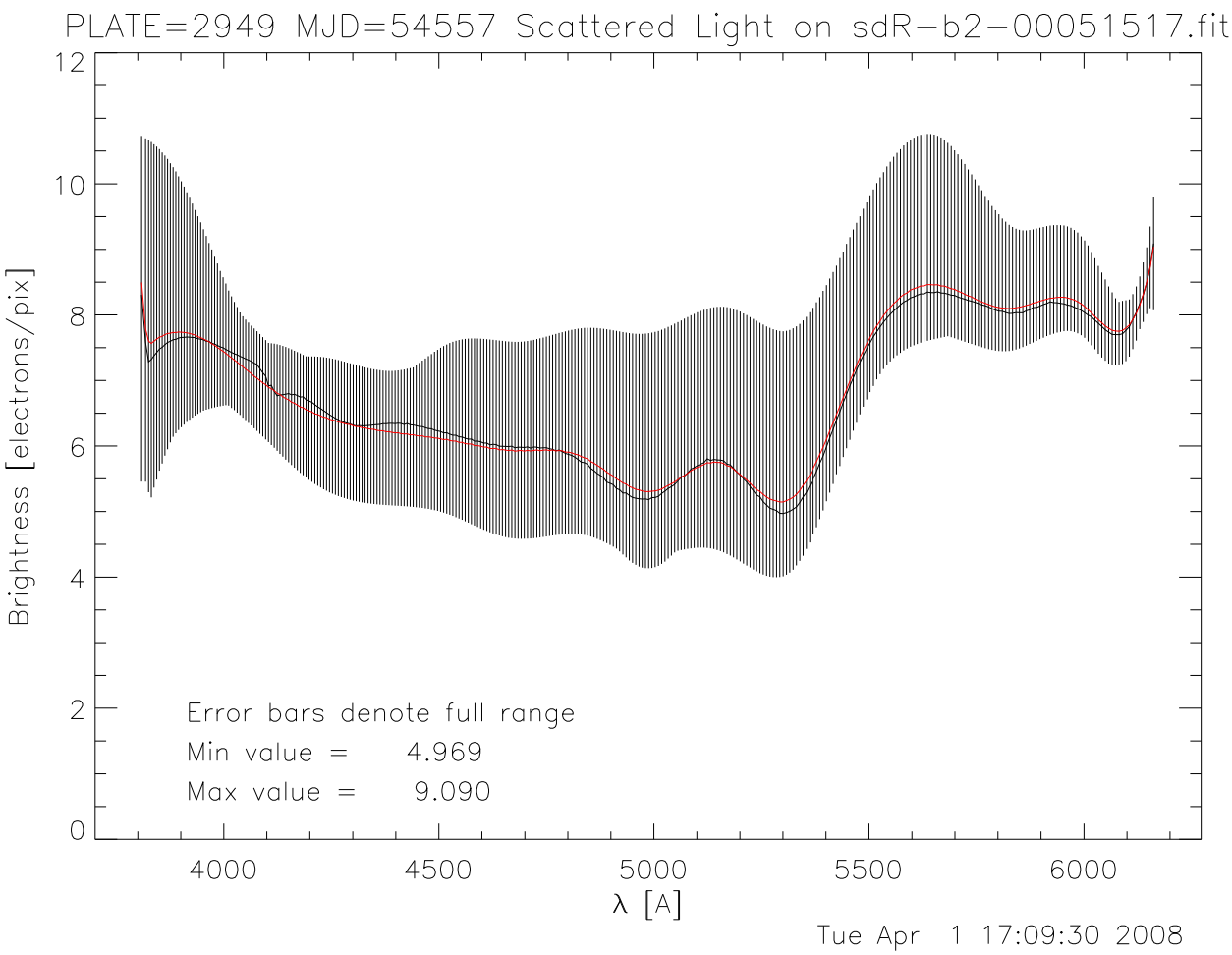

PLATE=2949 MJD=54557 sdR-b2-00051516.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.95 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

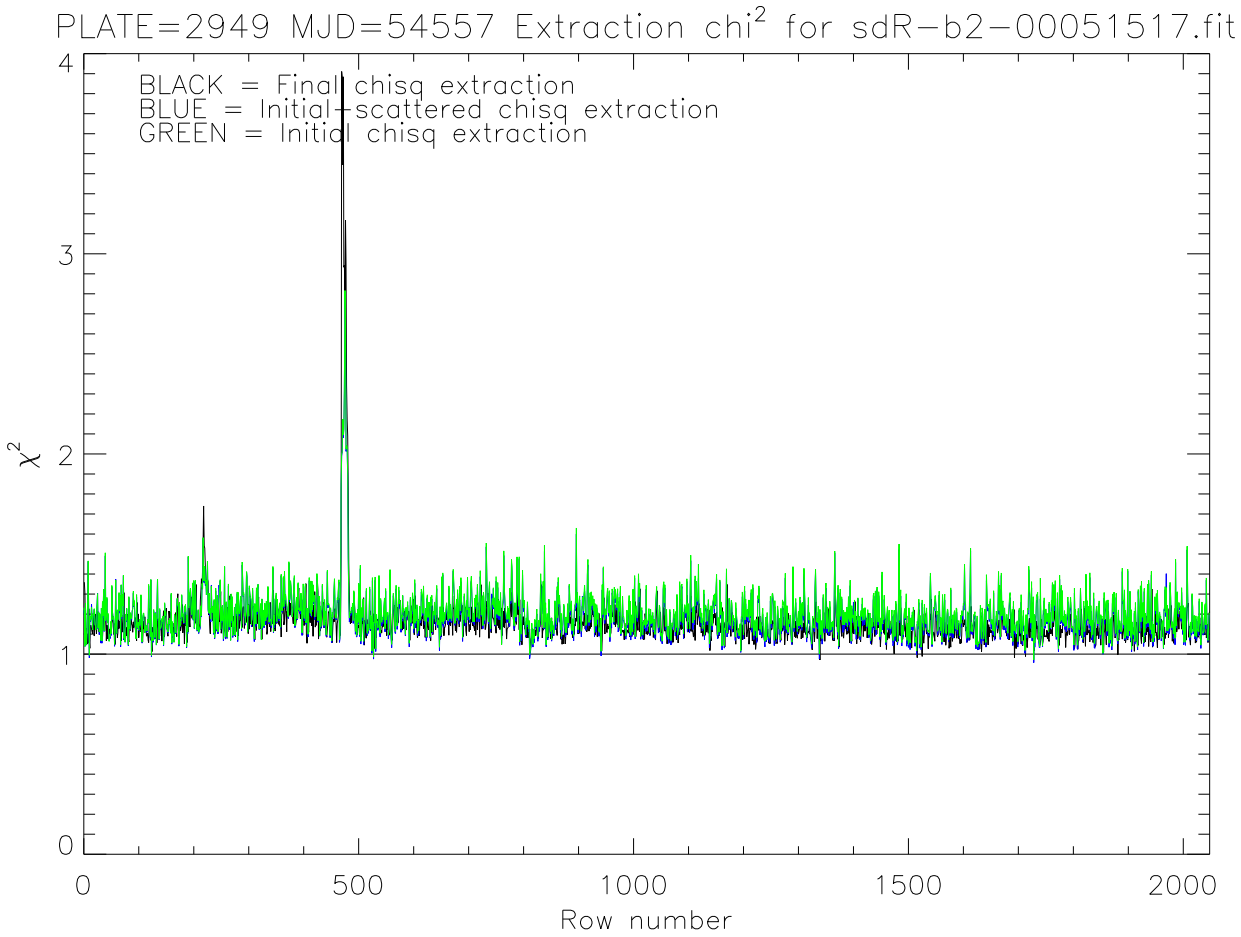

PLATE=2949 MJD=54557 Fiber−Flats for sdR−b2−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.438
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 17:06:28 2008

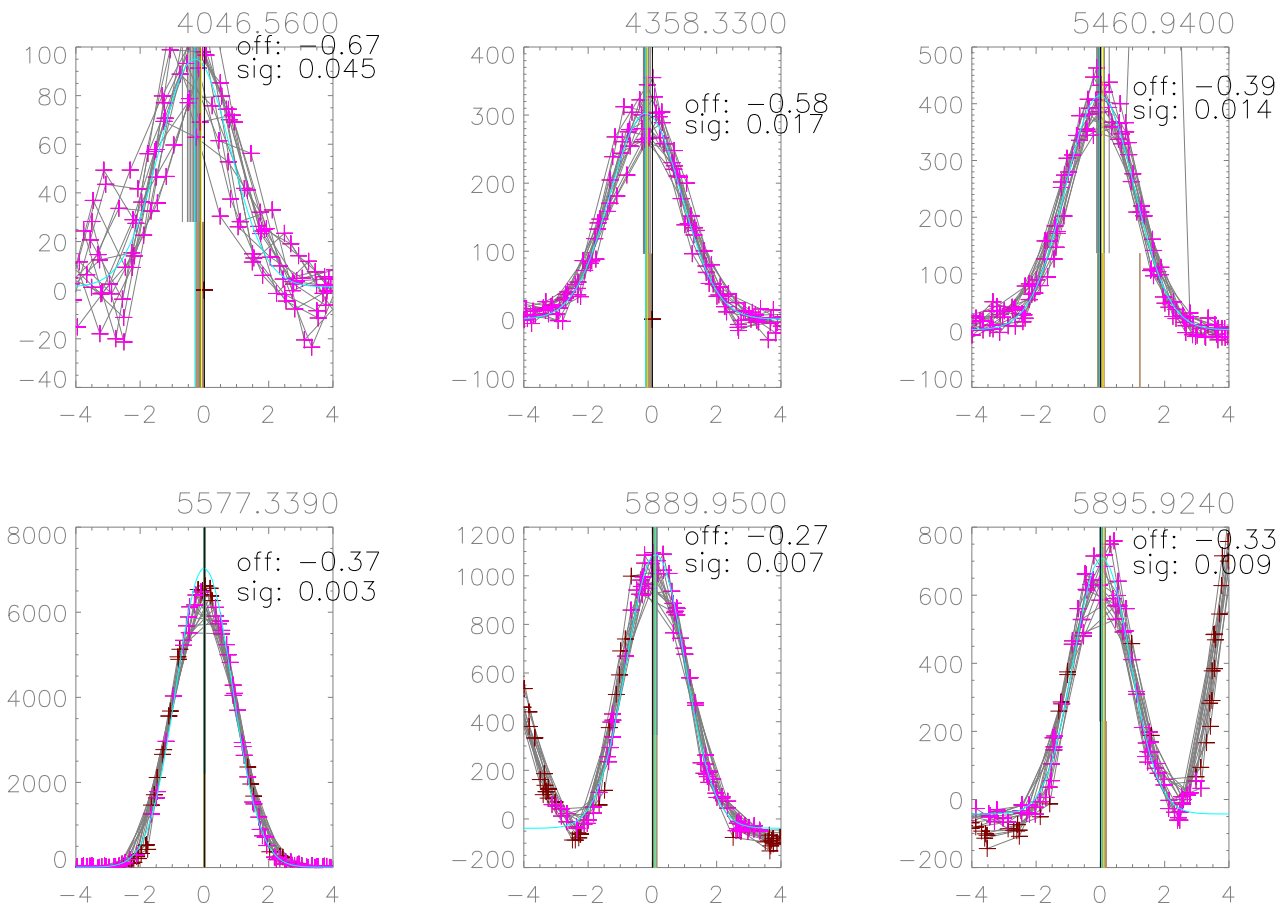

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR−b2−00051517.f
Y [pix]
X [pix]
0
500
1000
1500
2000
8.7
10.5
12.4

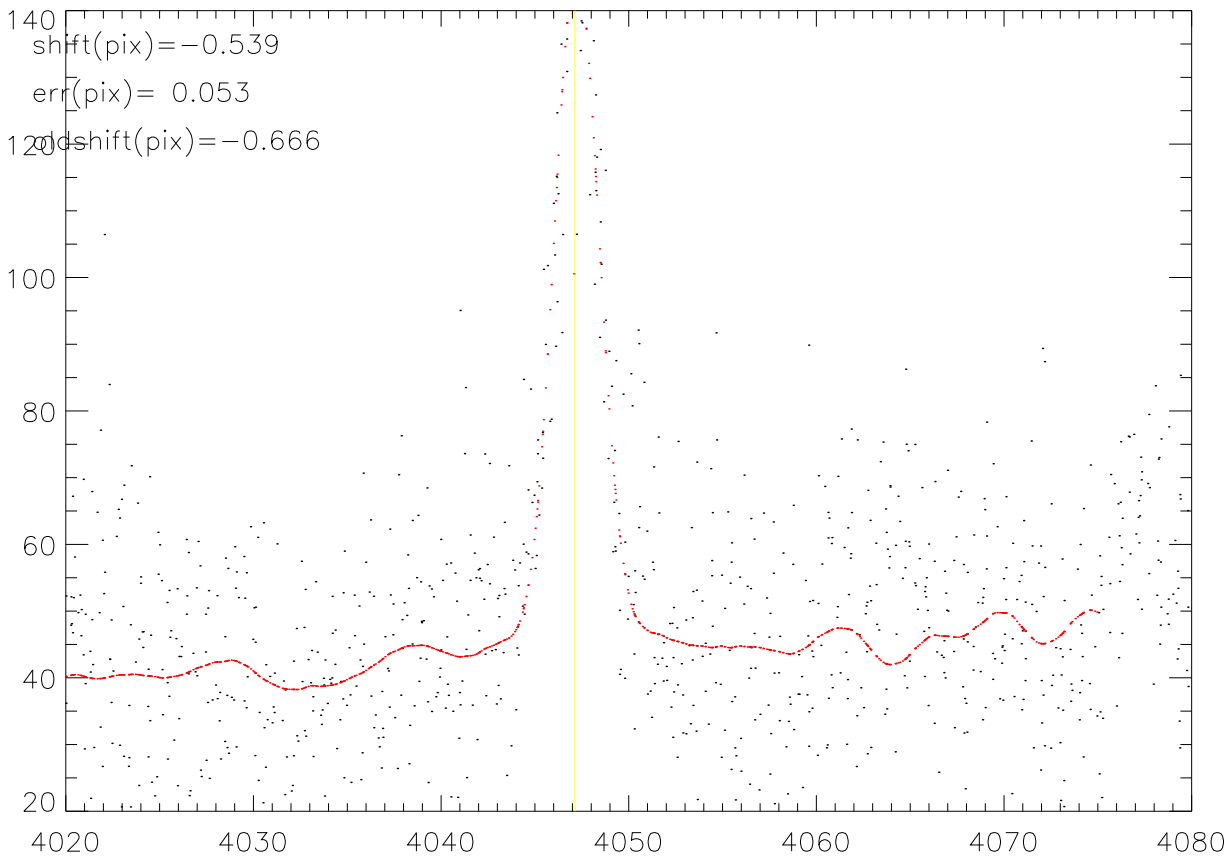

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-b2-00051517.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 8.721
Max value = 13.039
4000
4500
5000
5500
6000
λ [A]
Tue Apr 1 17:07:16 2008

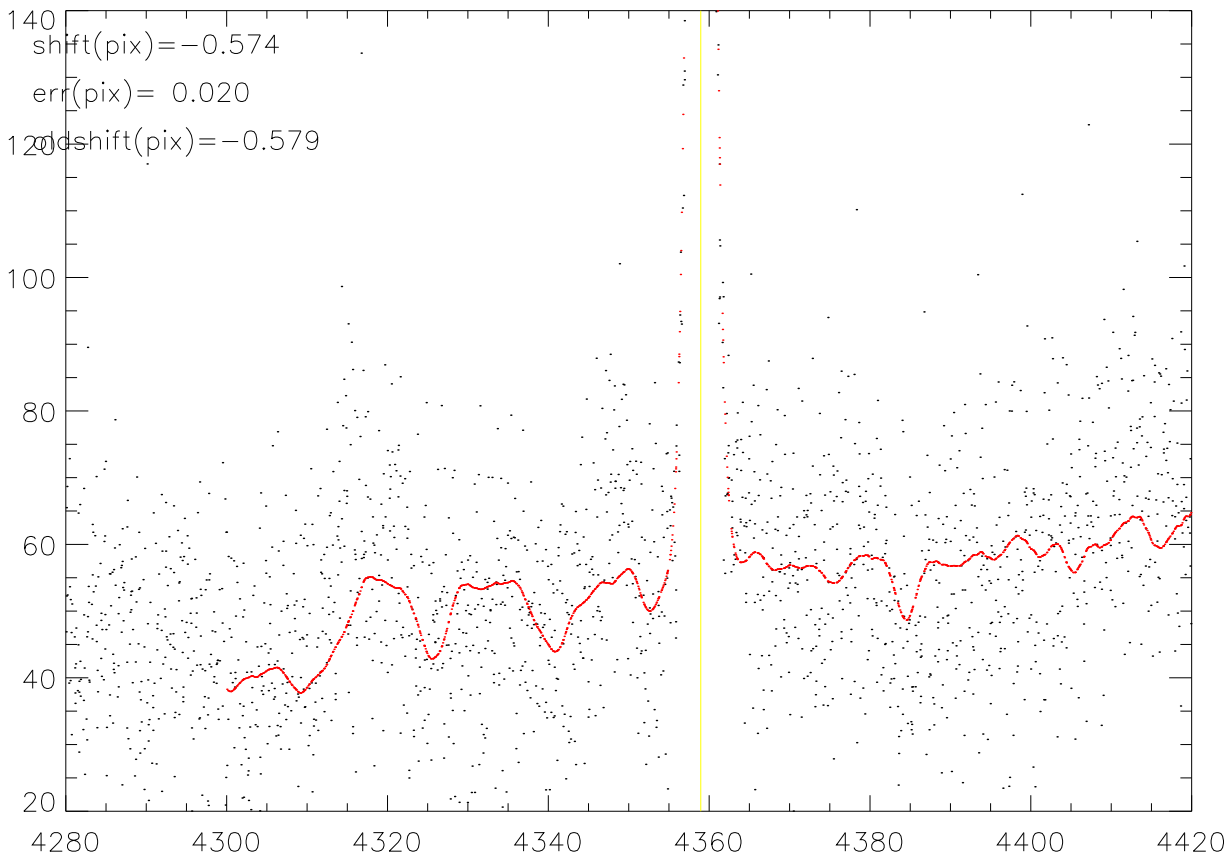

PLATE=2949 MJD=54557 Scattered Light on sdR-b2-00051517.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
6.5
4.7

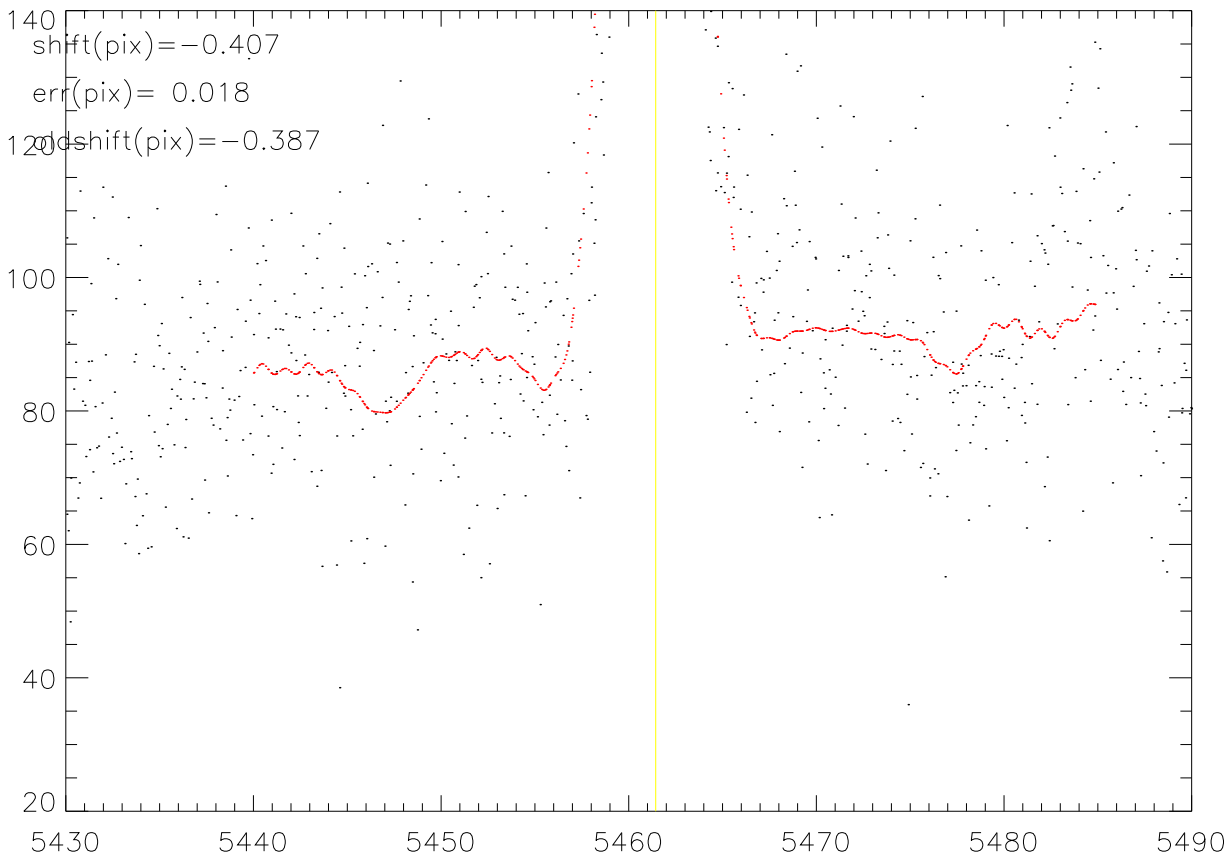

PLATE=2949 MJD=54557 Scattered Light on sdR-b2-00051517.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.969
Max value = 9.090
Tue Apr 1 17:09:30 2008

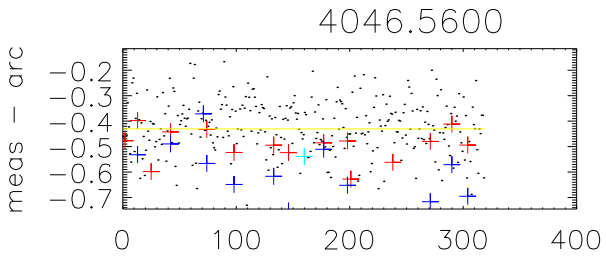

PLATE=2949 MJD=54557 Extraction chi^2 for sdR-b2-00051517.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

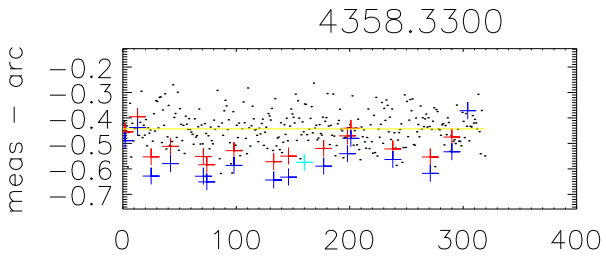

4046.5600
off: −0.67
sig: 0.045
4358.3300
off: −0.58
sig: 0.017
5460.9400
off: −0.39
sig: 0.014
5577.3390
off: −0.37
sig: 0.003
5889.9500
off: −0.27
sig: 0.007
5895.9240
off: −0.33
sig: 0.009

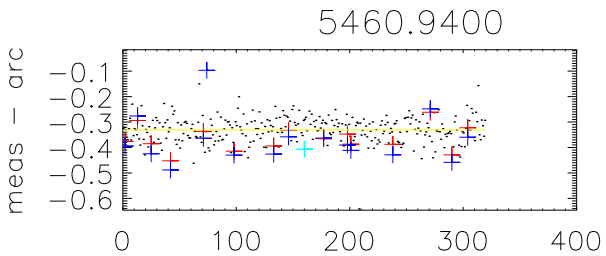

shift(pix)=−0.539
err(pix)= 0.053
oldshift(pix)=−0.666
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

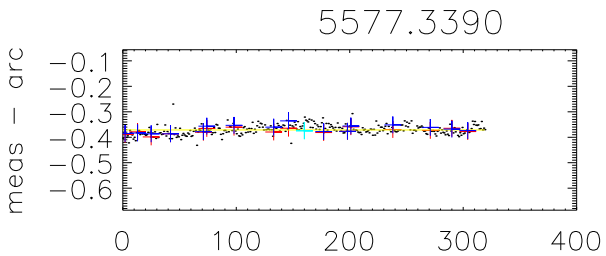

shift(pix)=−0.574
err(pix)= 0.020
oldshift(pix)=−0.579
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

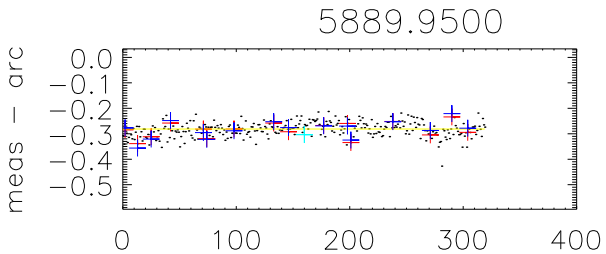

shift(pix)=−0.407
err(pix)= 0.018
oldshift(pix)=−0.387
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

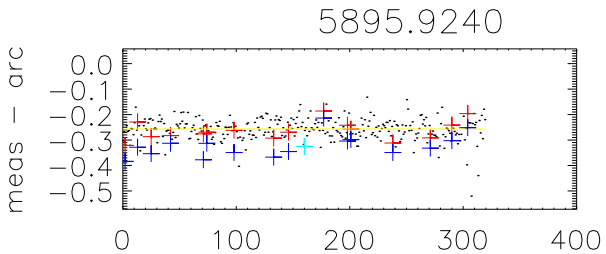

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

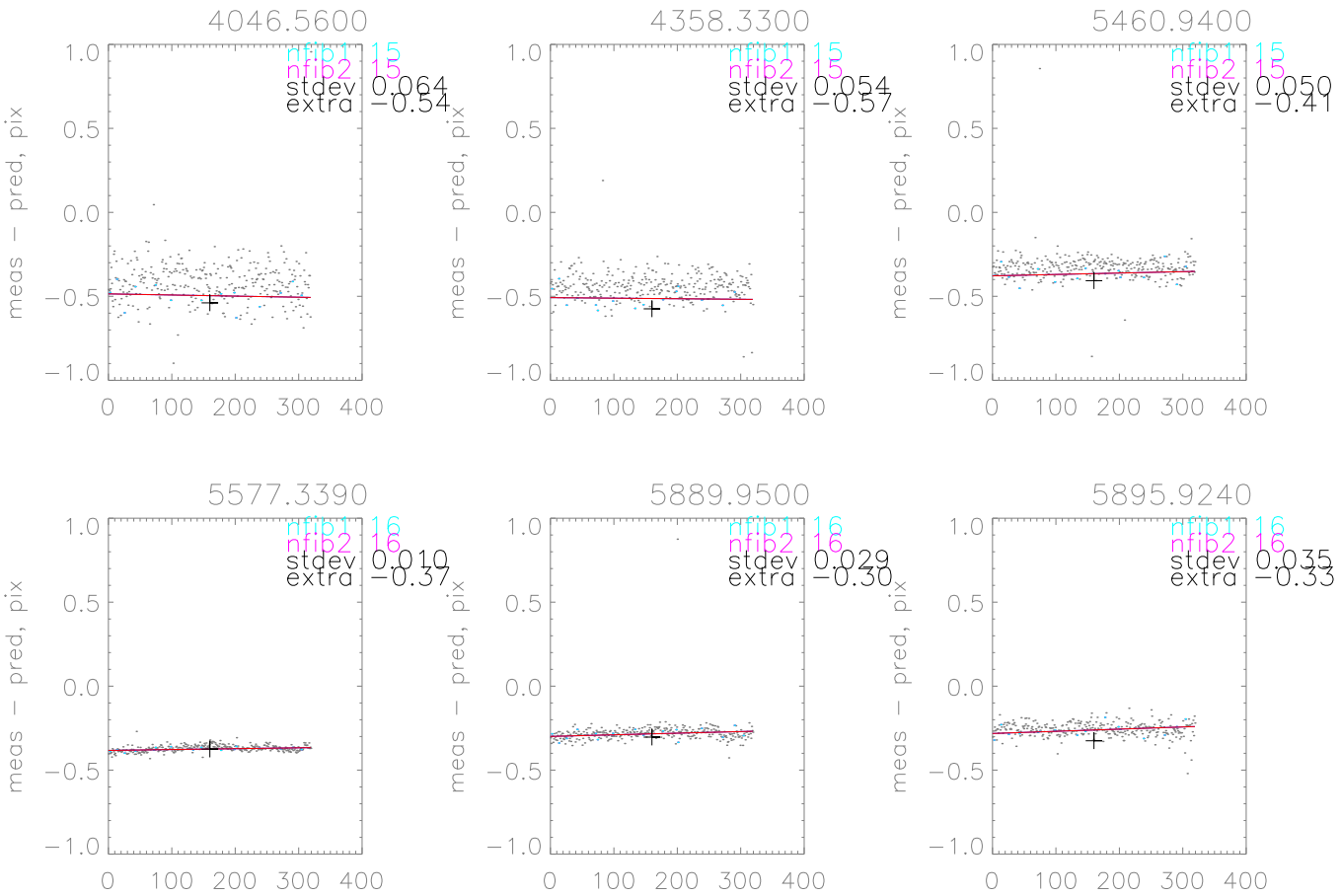

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

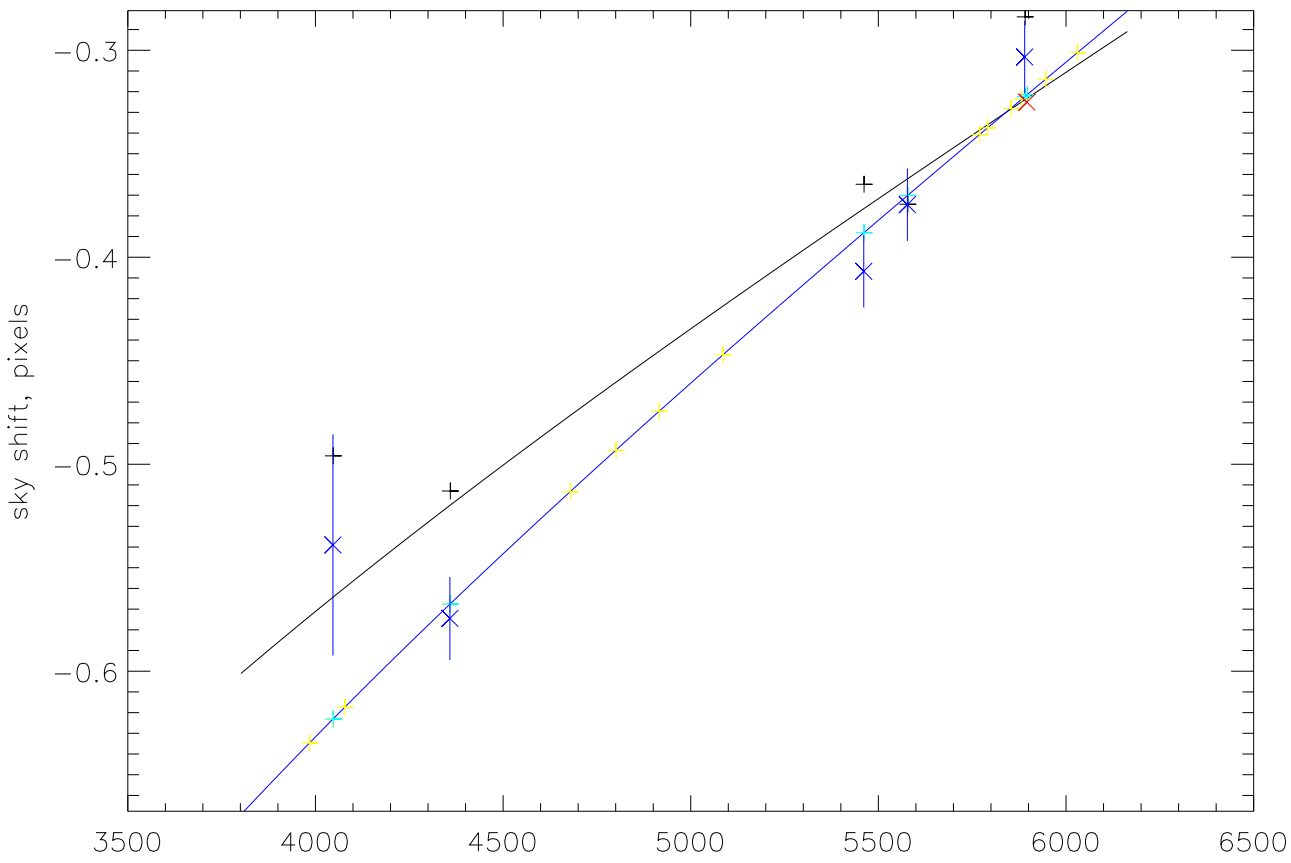

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

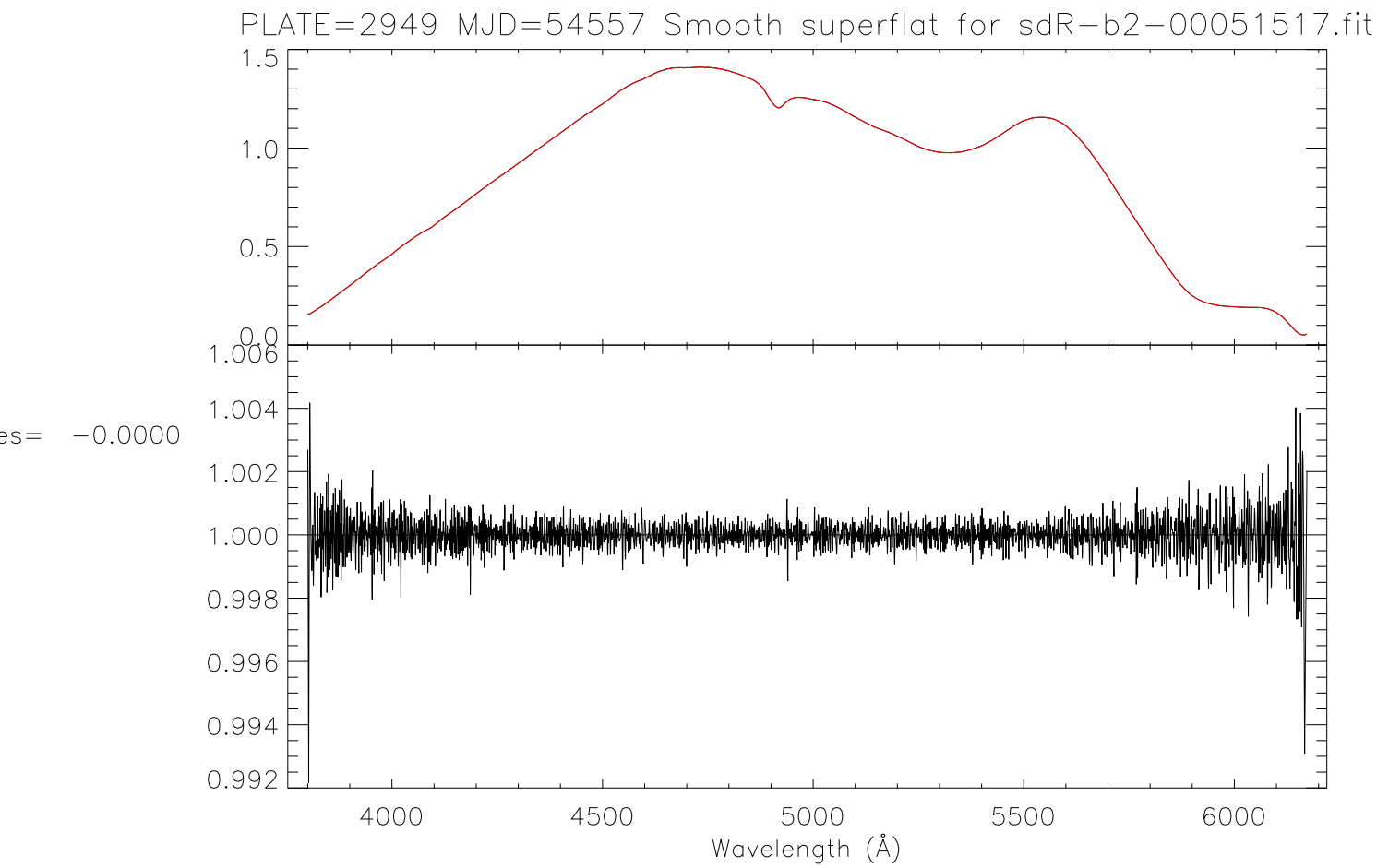

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

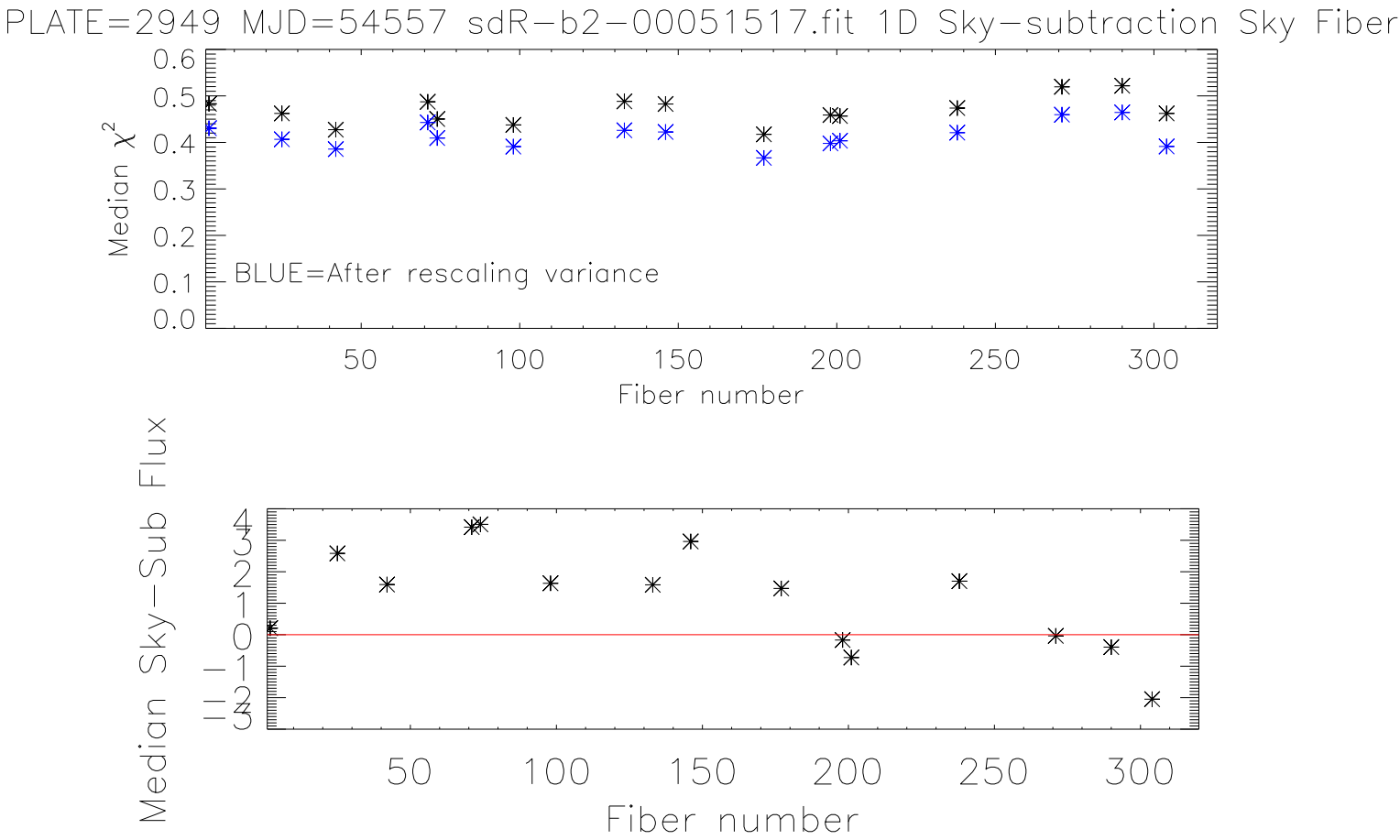

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

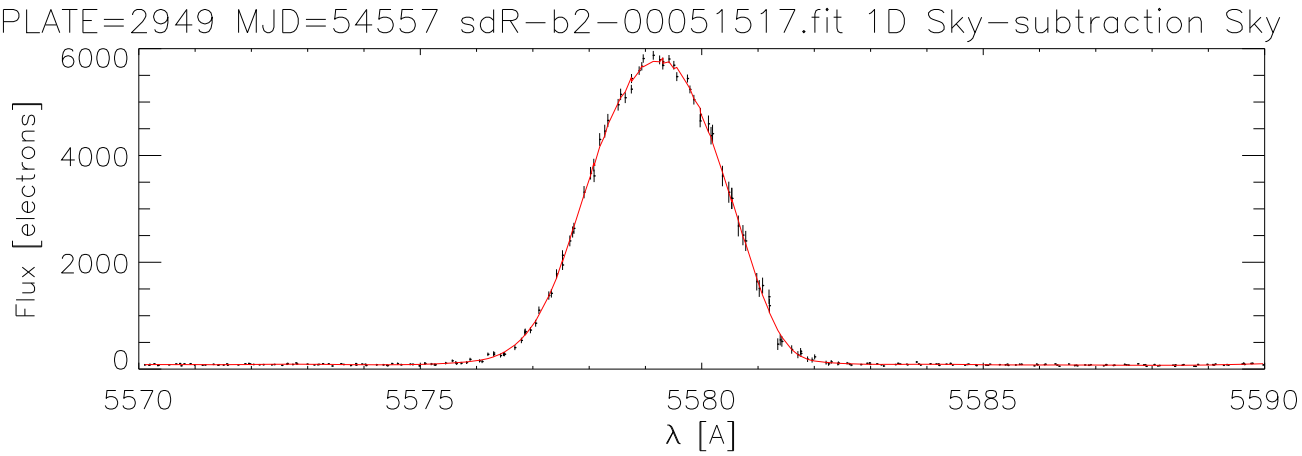

4046.5600
nfib1 15
nfib2 15
stdev 0.064
extra −0.54
4358.3300
nfib1 15
nfib2 15
stdev 0.054
extra −0.57
5460.9400
nfib1 15
nfib2 15
stdev 0.050
extra −0.41
5577.3390
nfib1 16
nfib2 16
stdev 0.010
extra −0.37
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra −0.30
5895.9240
nfib1 16
nfib2 16
stdev 0.035
extra −0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

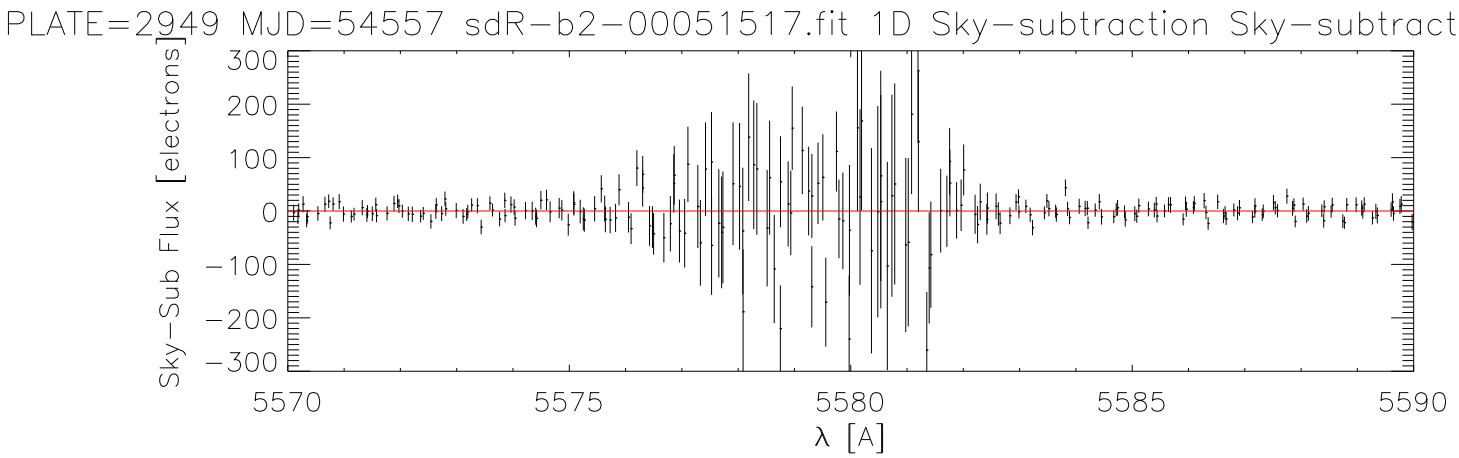

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500

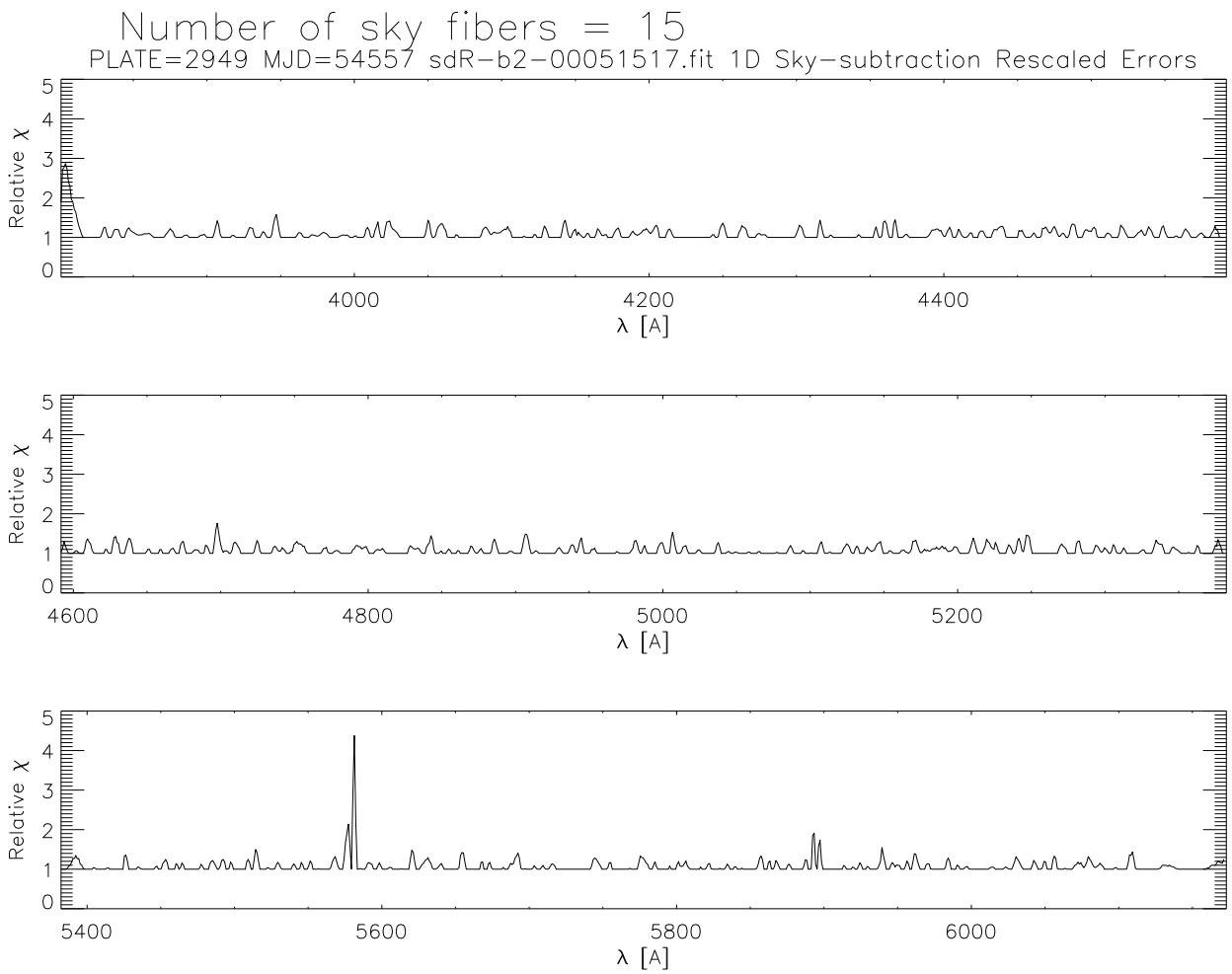

PLATE=2949 MJD=54557 Smooth superflat for sdR-b2-00051517.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

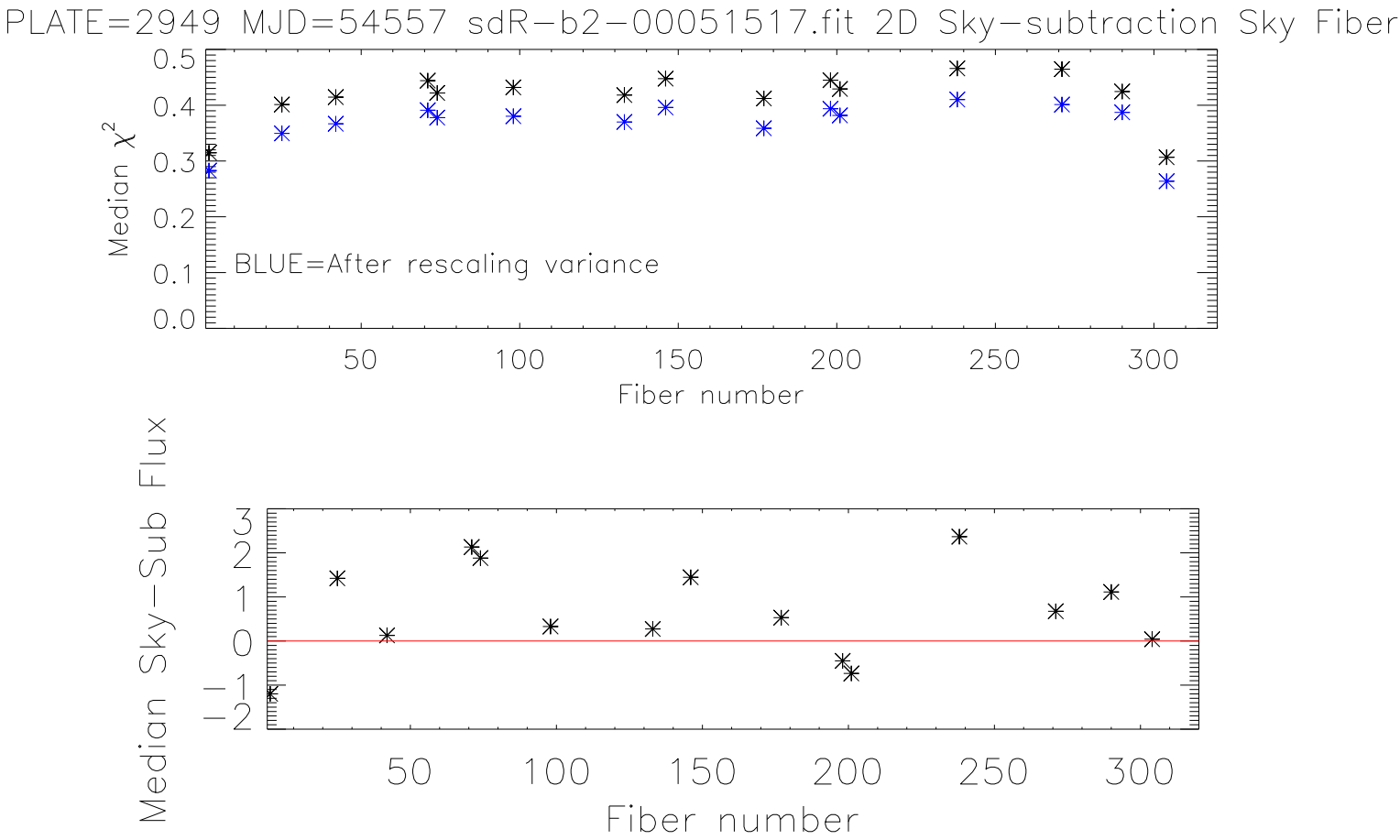
es= −0.0000

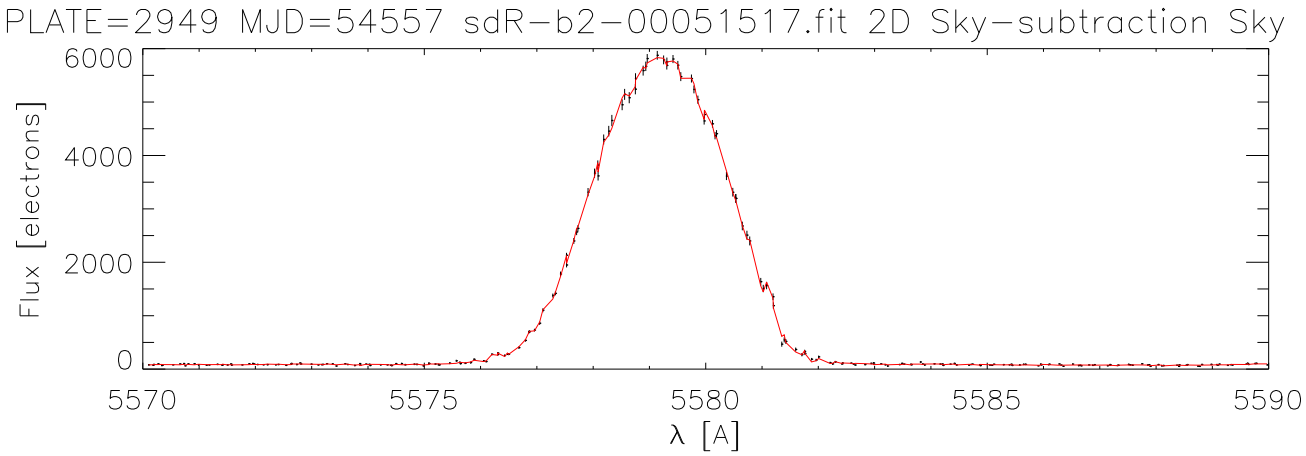

PLATE=2949 MJD=54557 sdR-b2-00051517.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

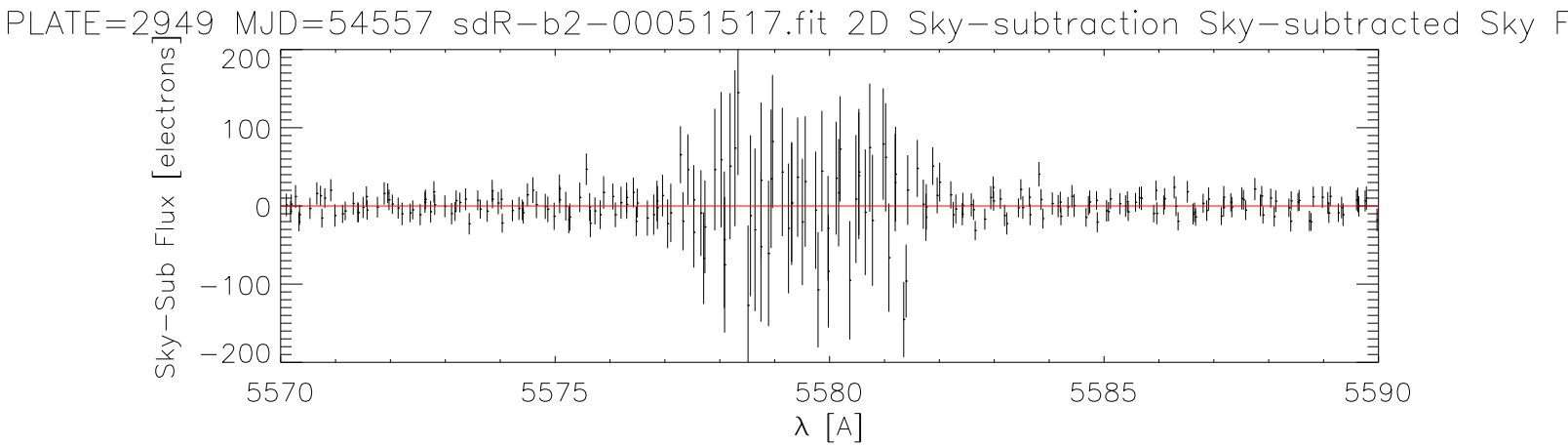

PLATE=2949 MJD=54557 sdR-b2-00051517.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

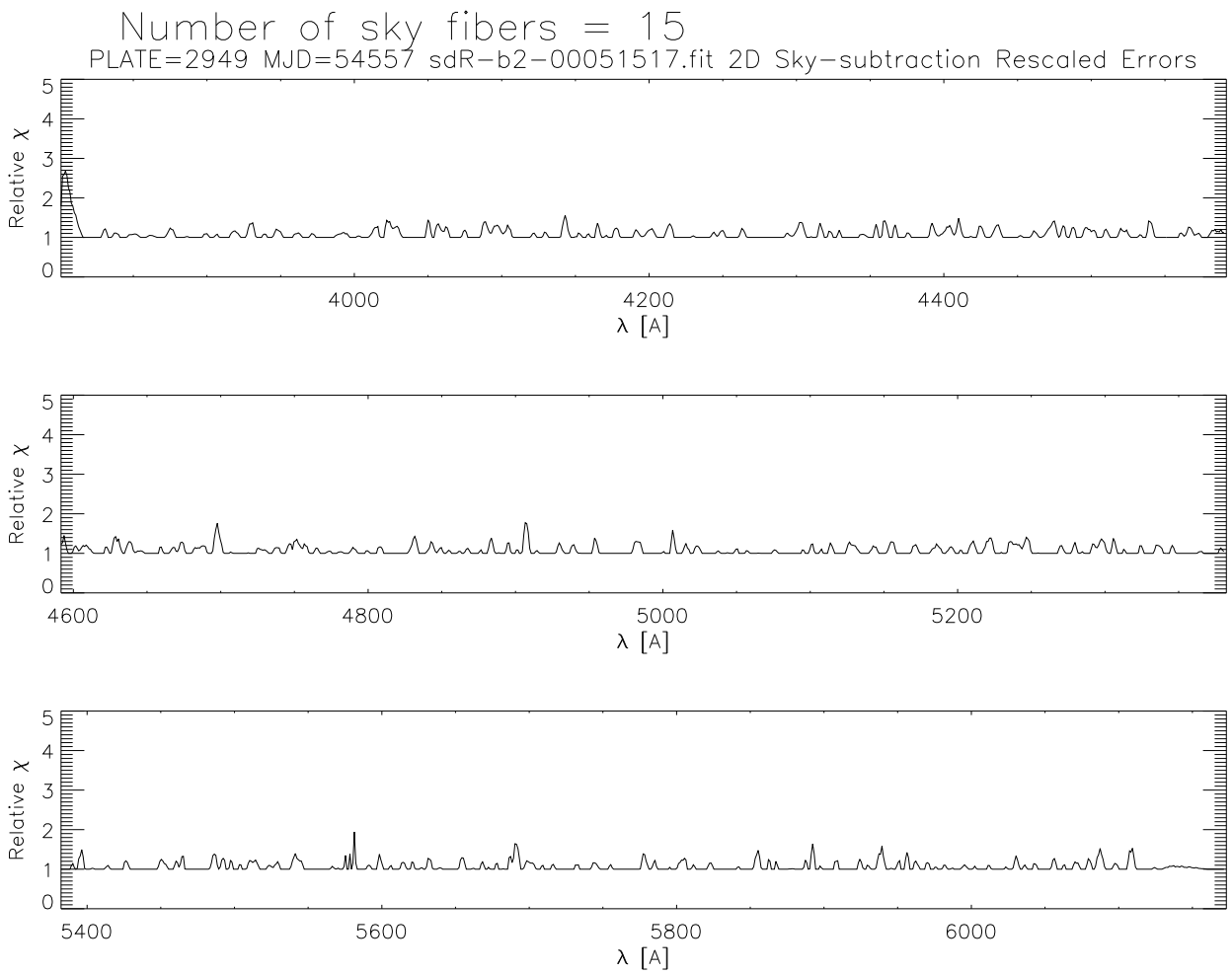

PLATE=2949 MJD=54557 sdR-b2-00051517.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

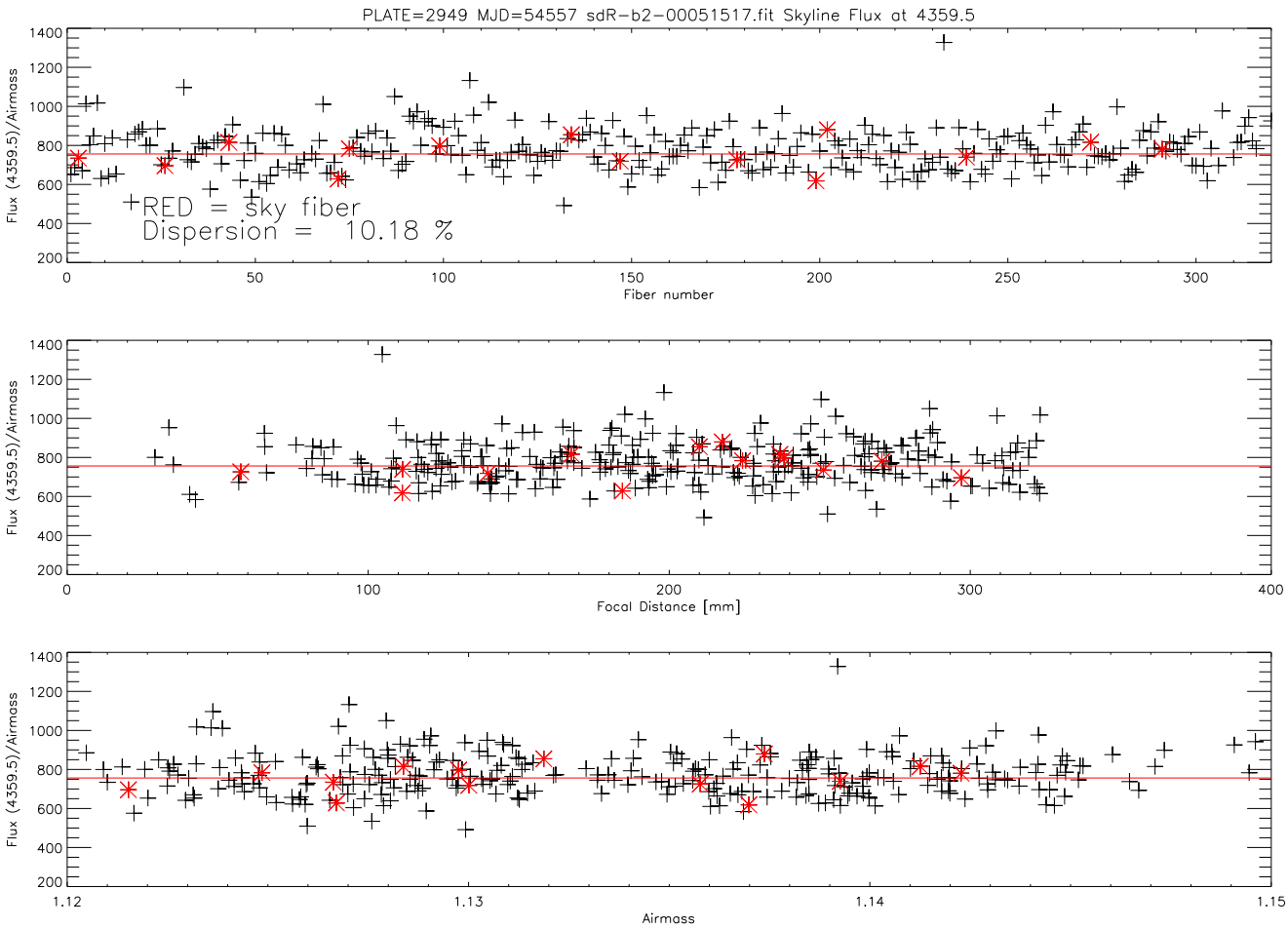

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-b2-00051517.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

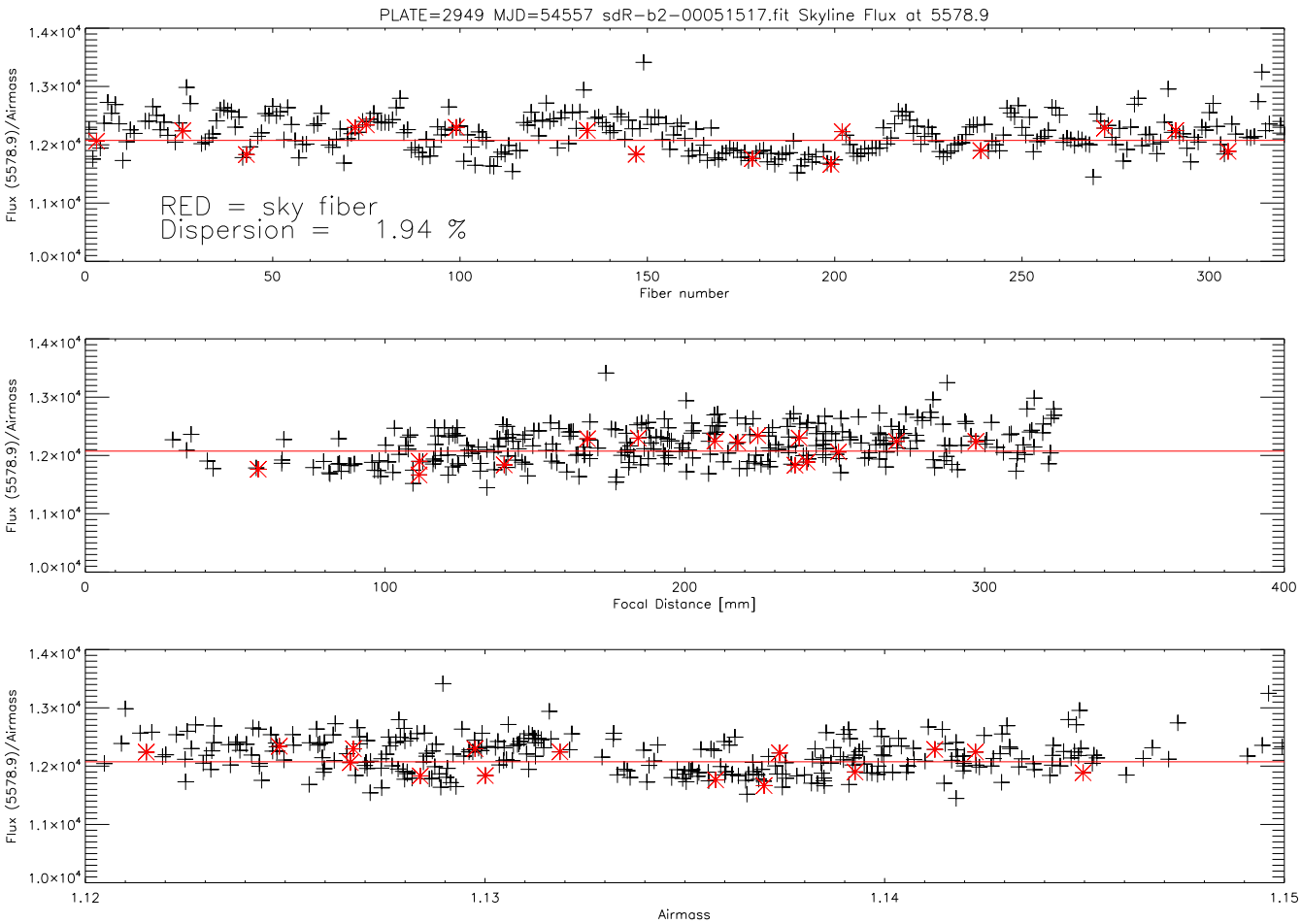

PLATE=2949 MJD=54557 sdR-b2-00051517.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

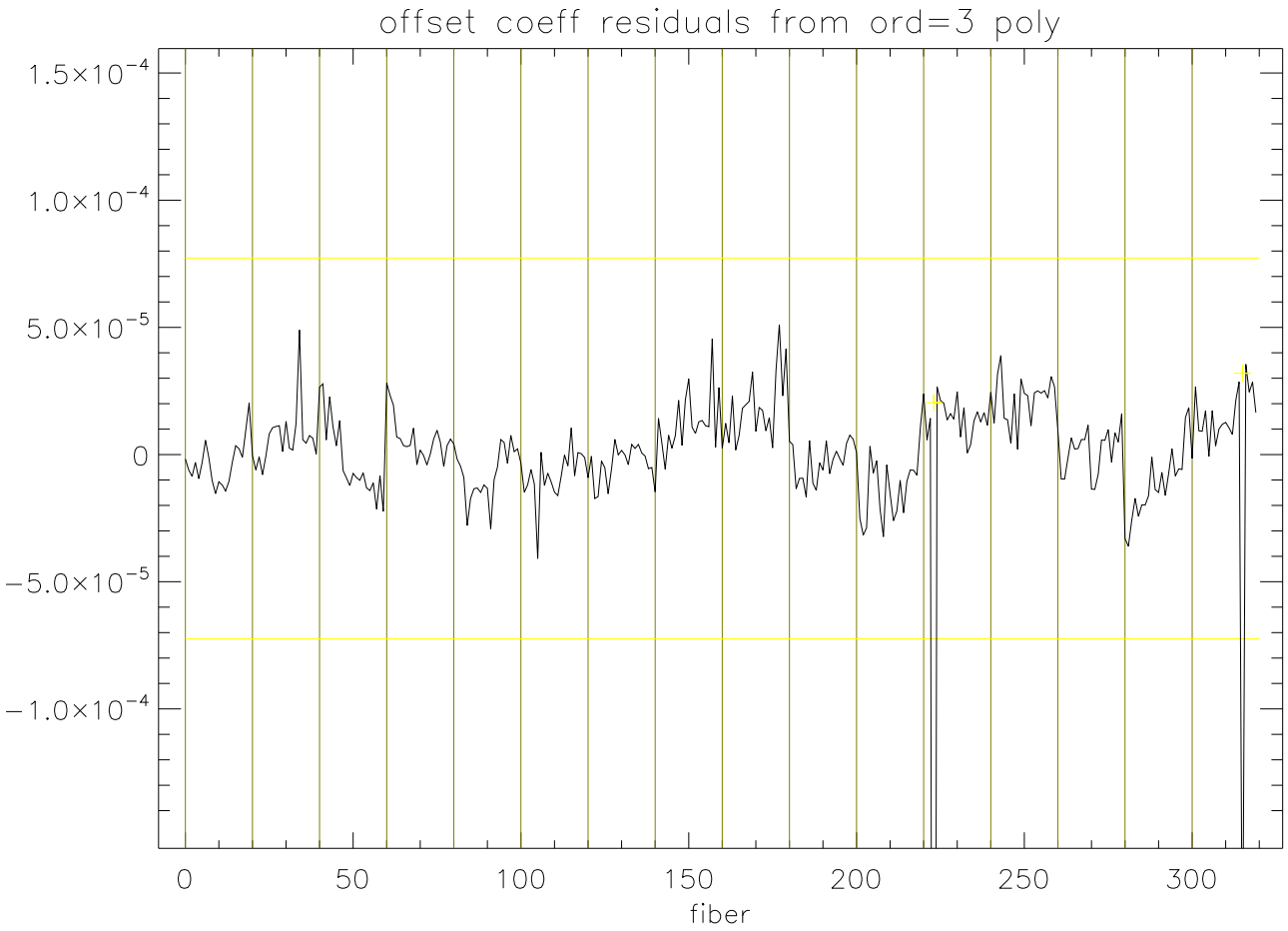

PLATE=2949 MJD=54557 sdR-b2-00051517.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

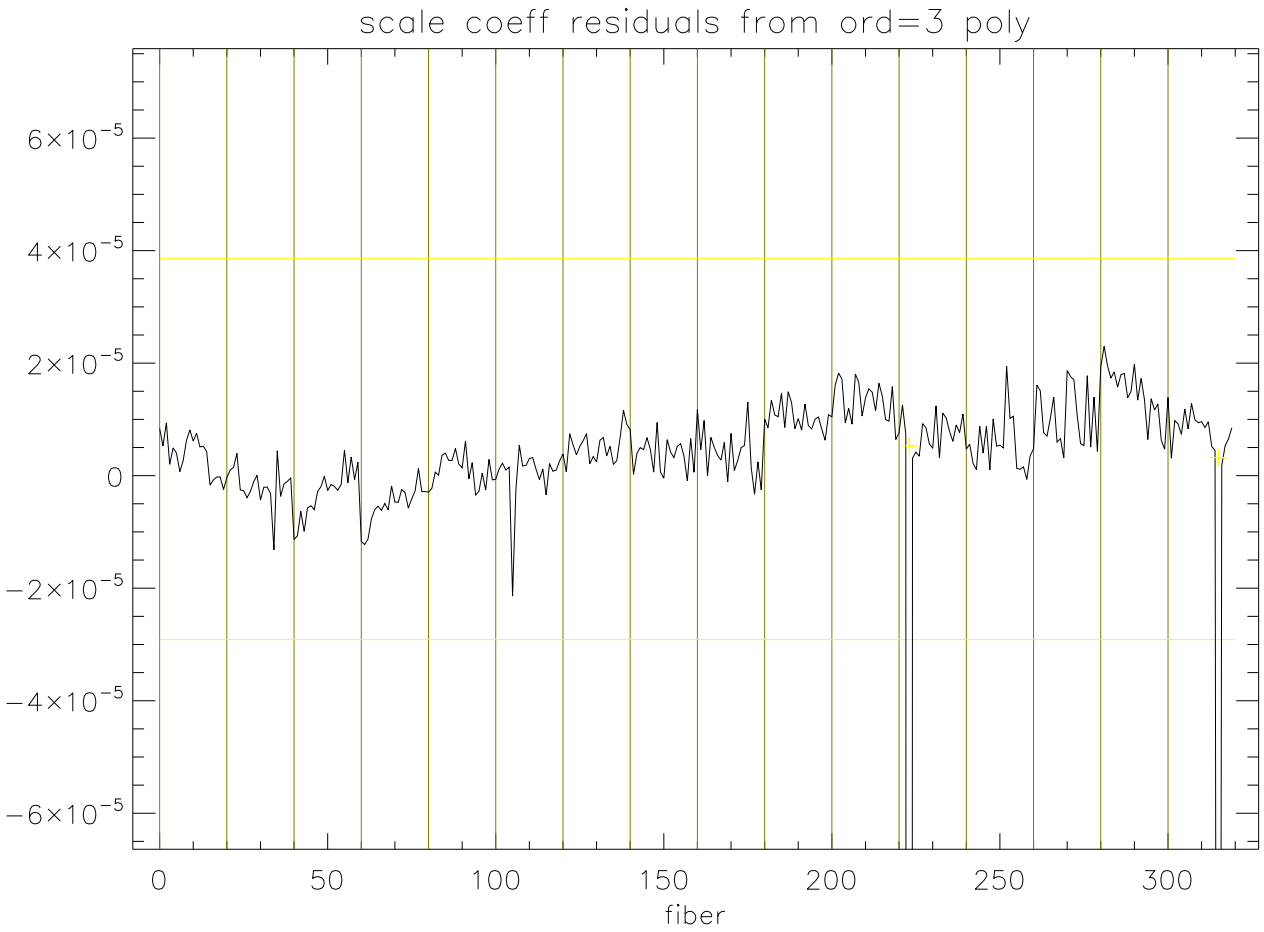

PLATE=2949 MJD=54557 sdR-b2-00051517.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

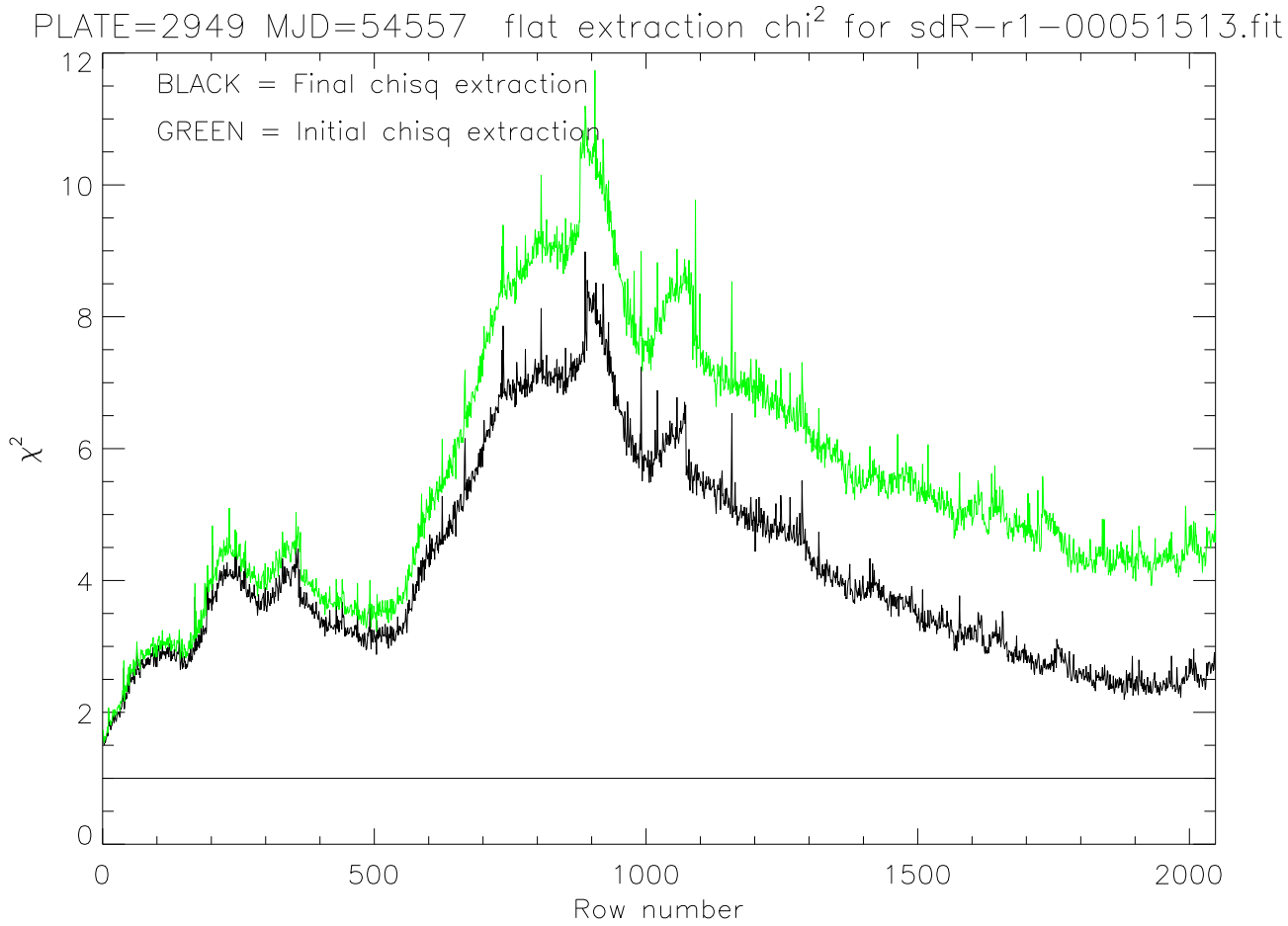

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-b2-00051517.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

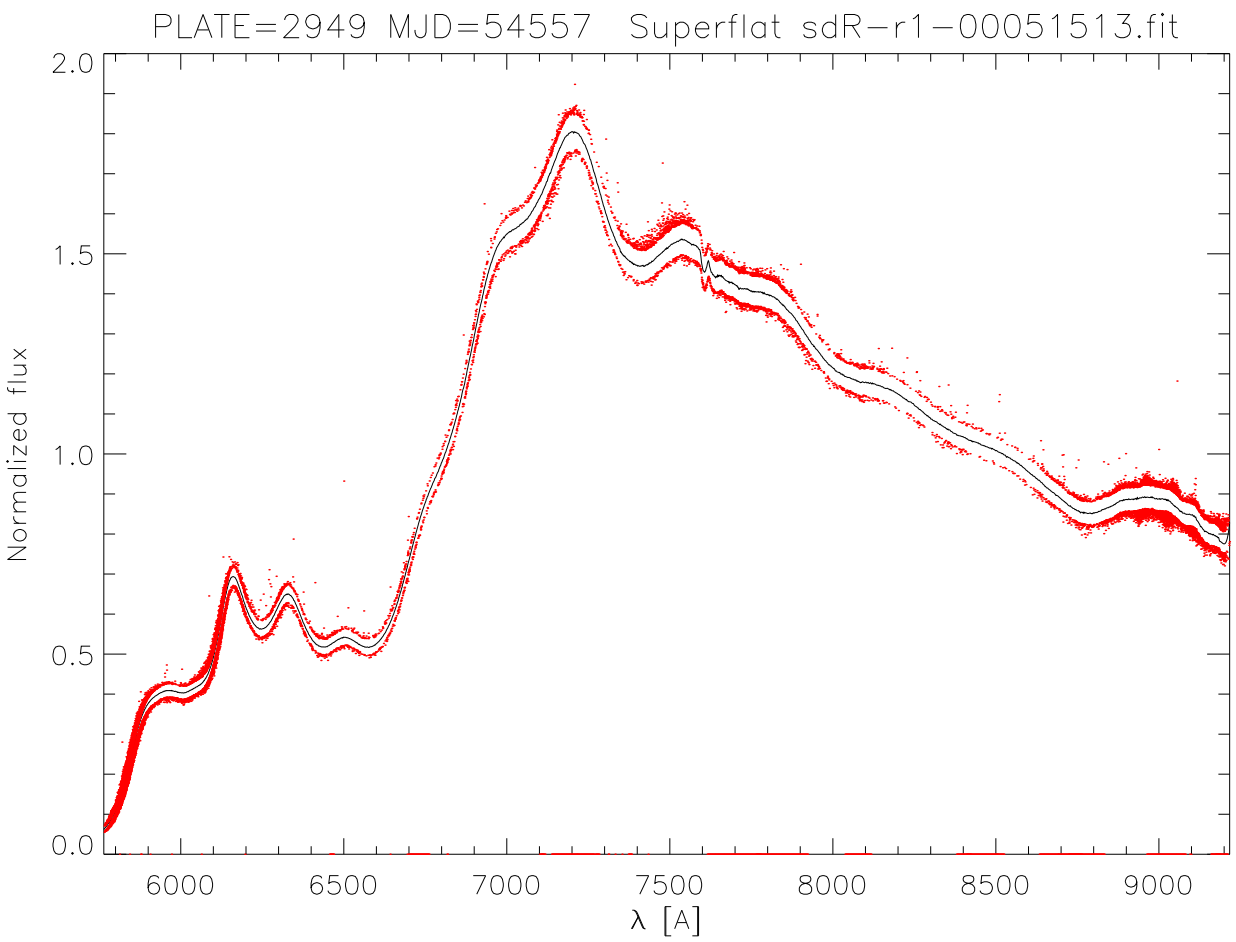

PLATE=2949 MJD=54557 sdR-b2-00051517.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 10.18 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

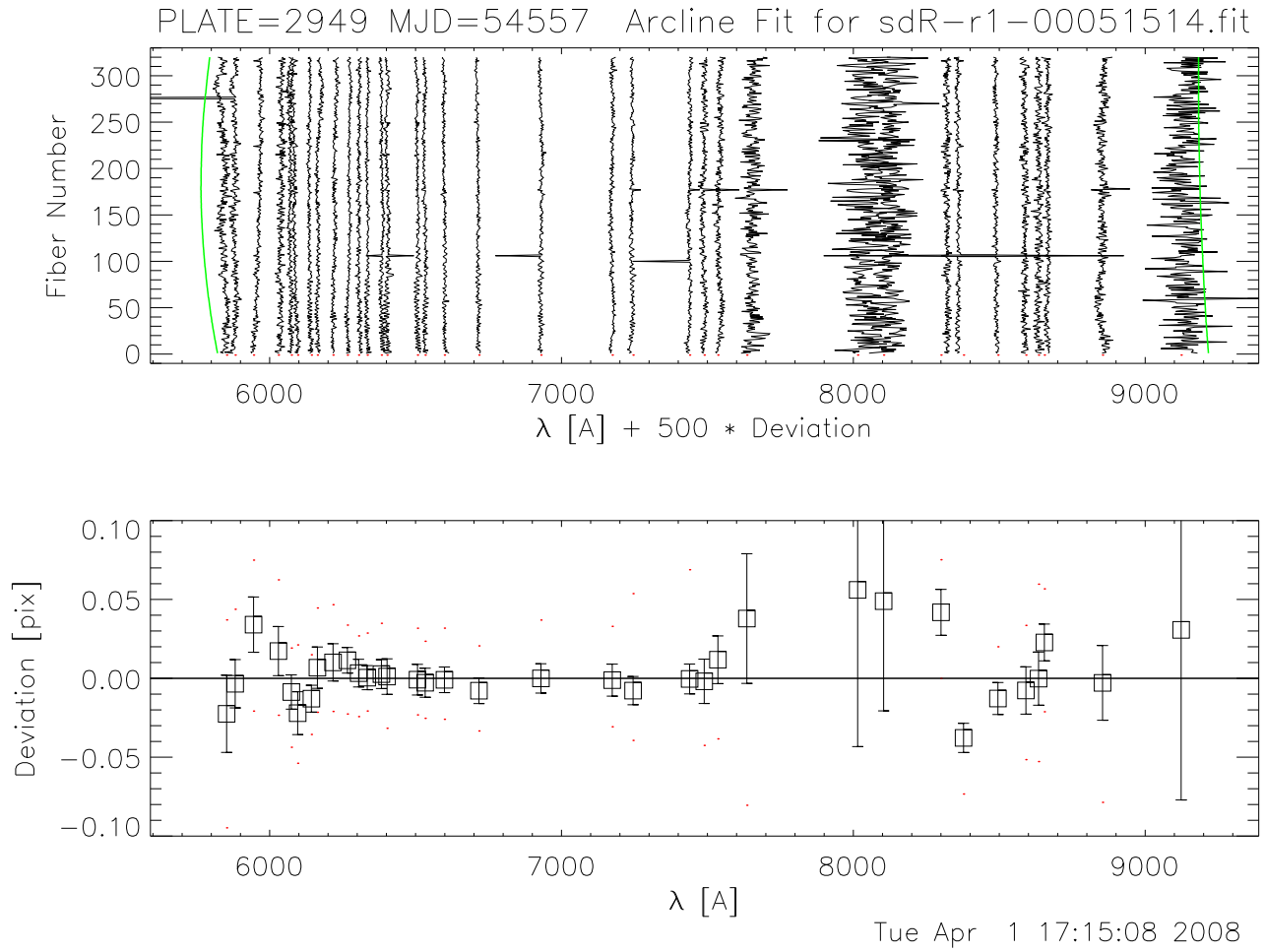

PLATE=2949 MJD=54557 sdR-b2-00051517.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.94 %
Fiber number
Focal Distance [mm]
Airmass

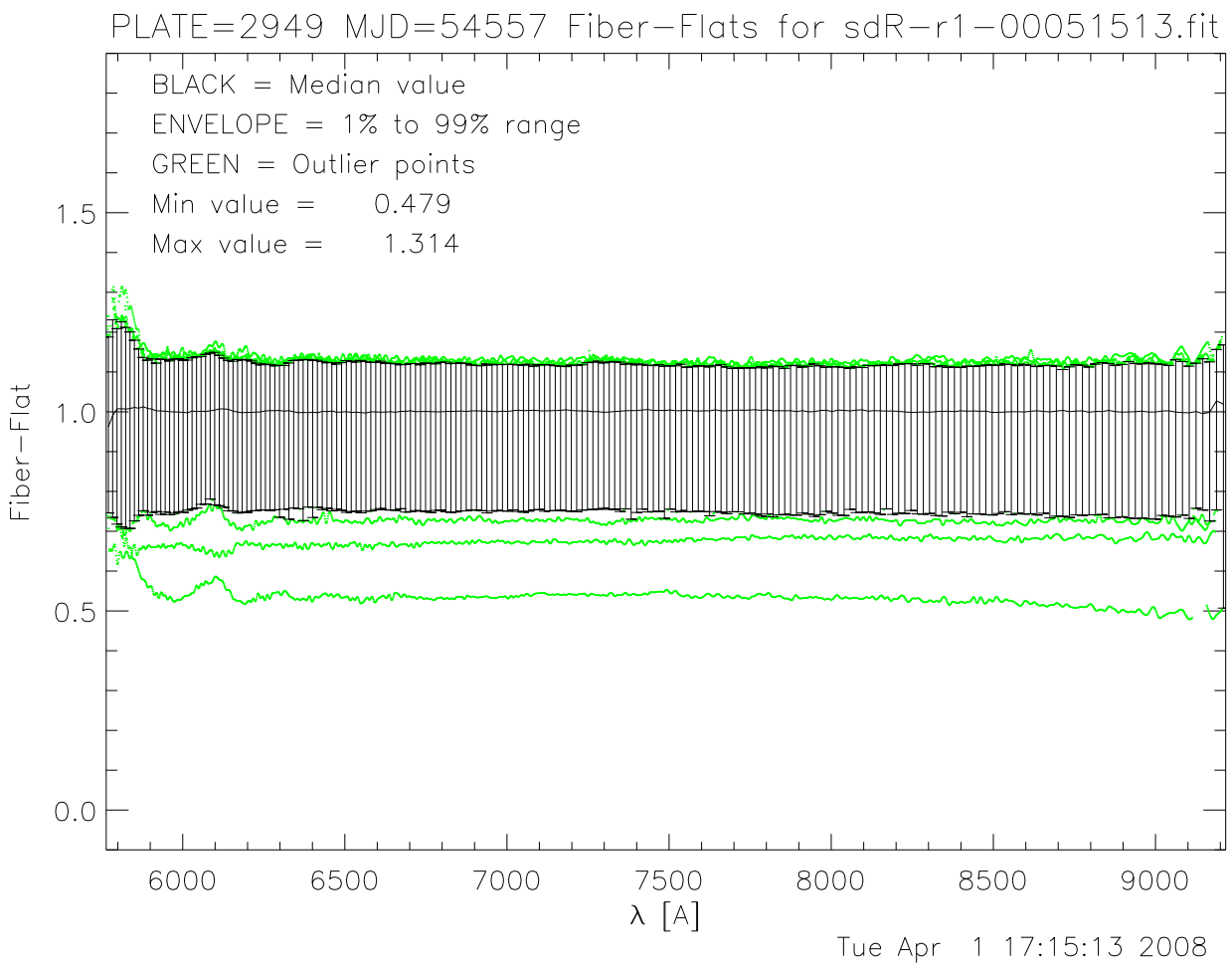

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
0
50
100
150
200
250
300
fiber

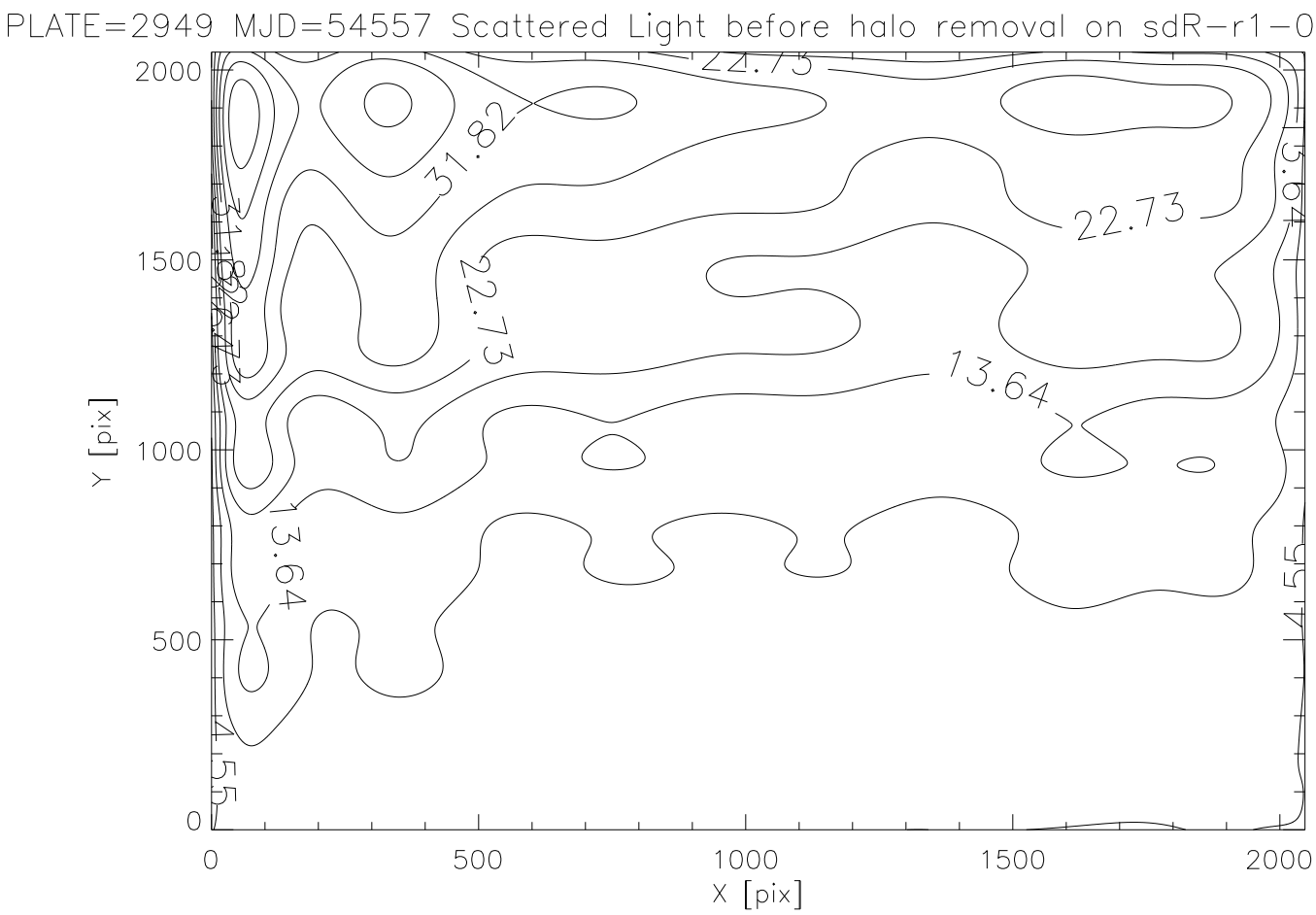

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

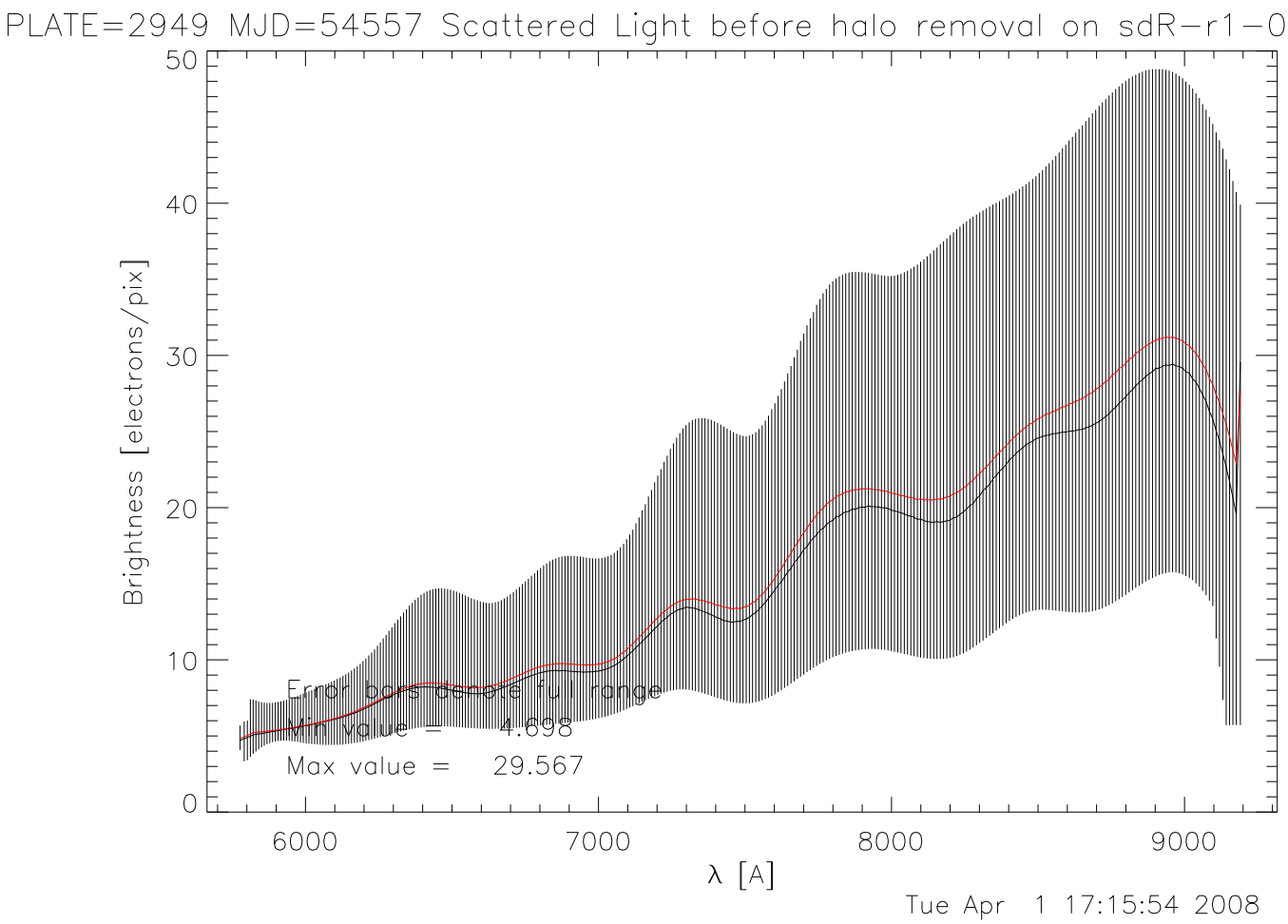

PLATE=2949 MJD=54557 flat extraction chi^2 for sdR−r1−00051513.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

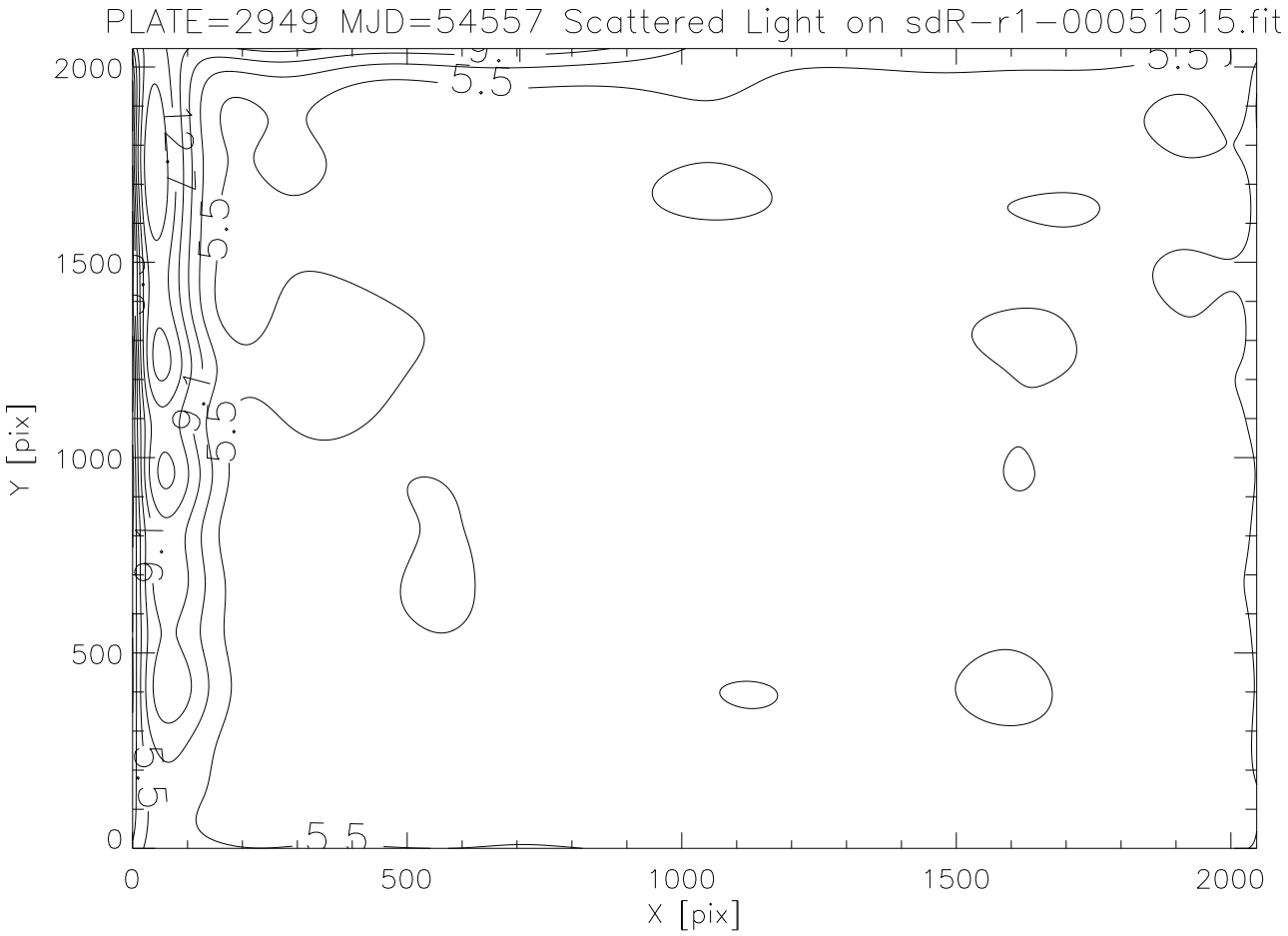

PLATE=2949 MJD=54557 Superflat sdR-r1-00051513.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

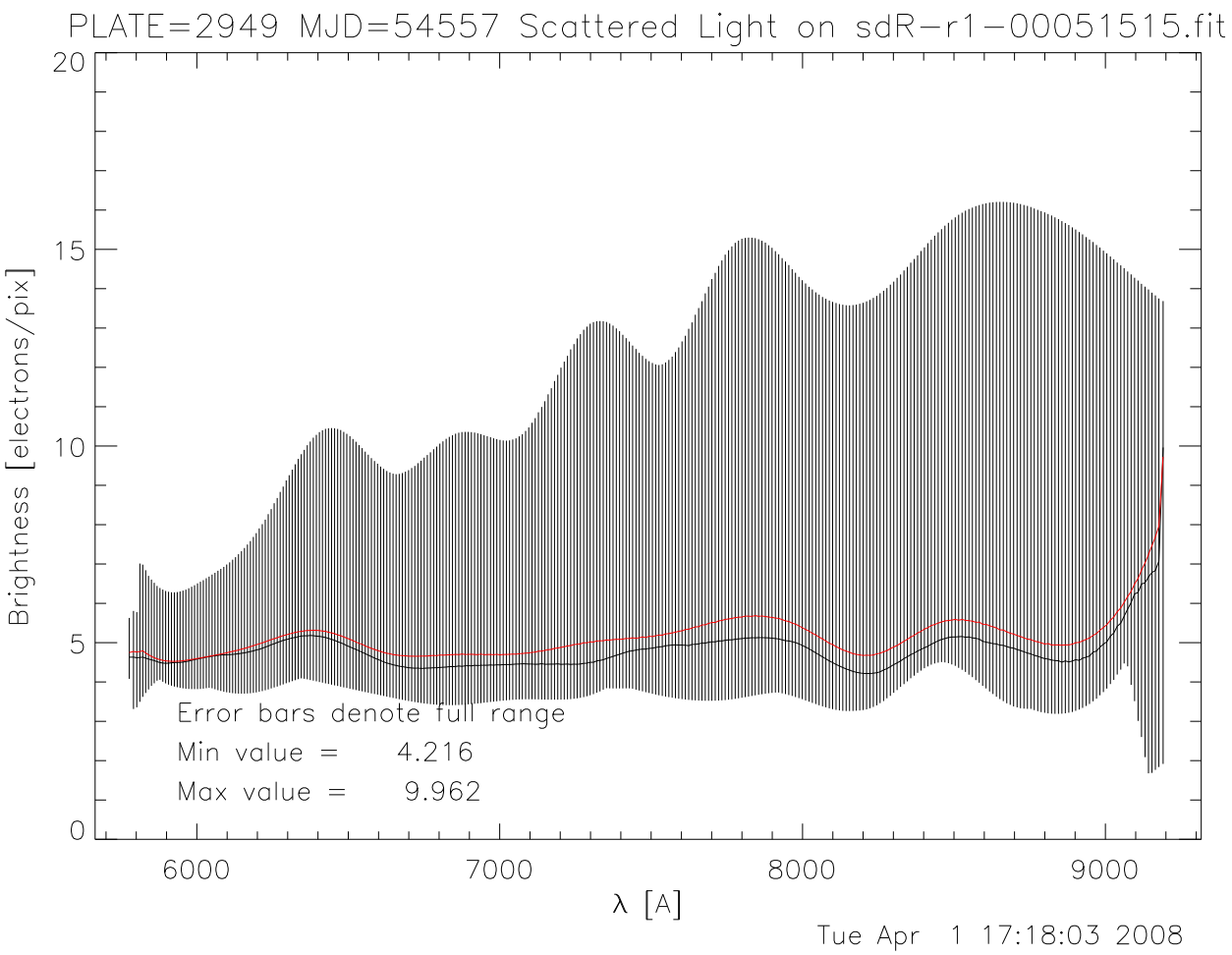

PLATE=2949 MJD=54557 Arcline Fit for sdR-r1-00051514.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Apr 1 17:15:08 2008

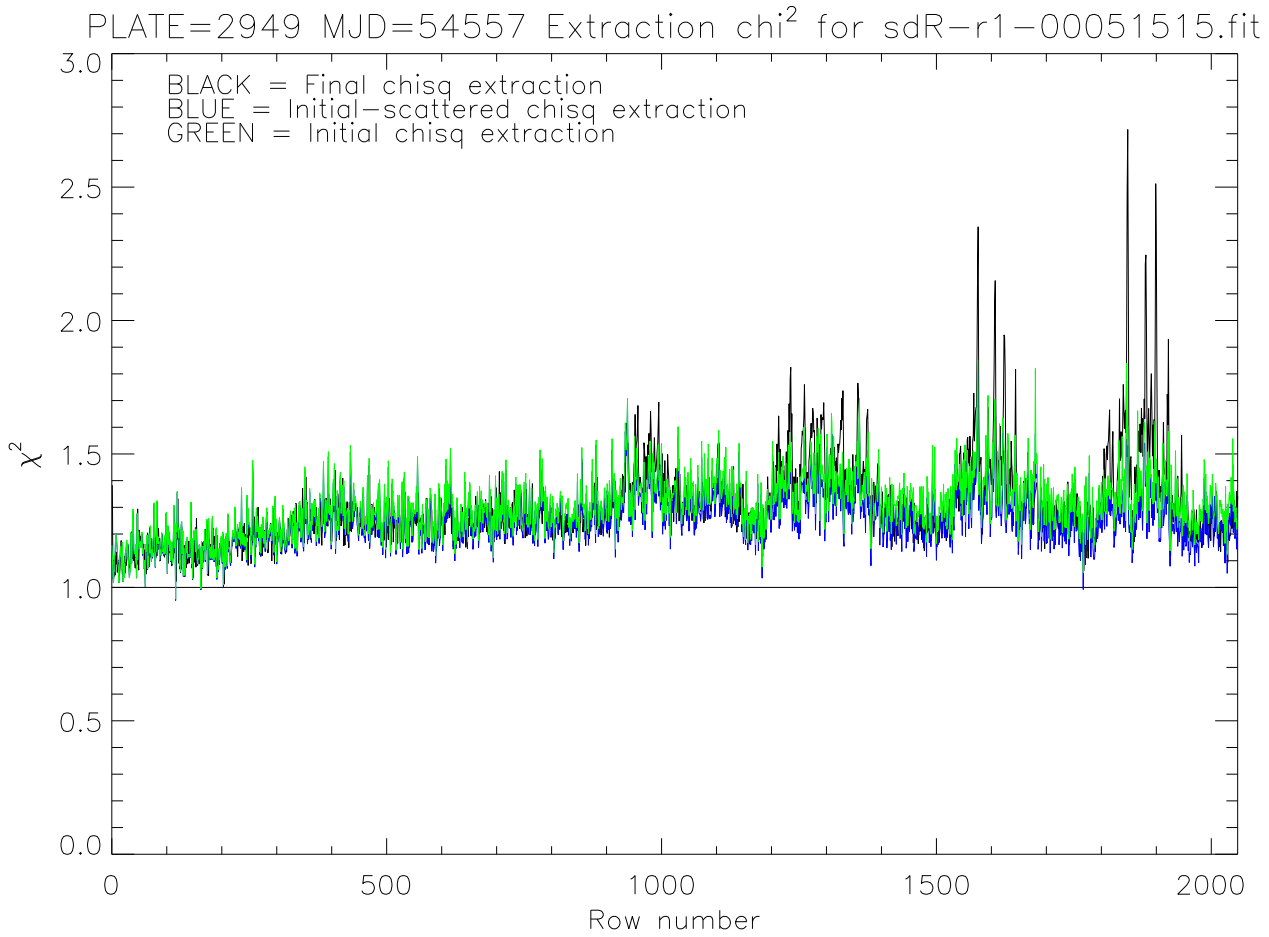

PLATE=2949 MJD=54557 Fiber−Flats for sdR−r1−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.479
Max value = 1.314
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Apr 1 17:15:13 2008

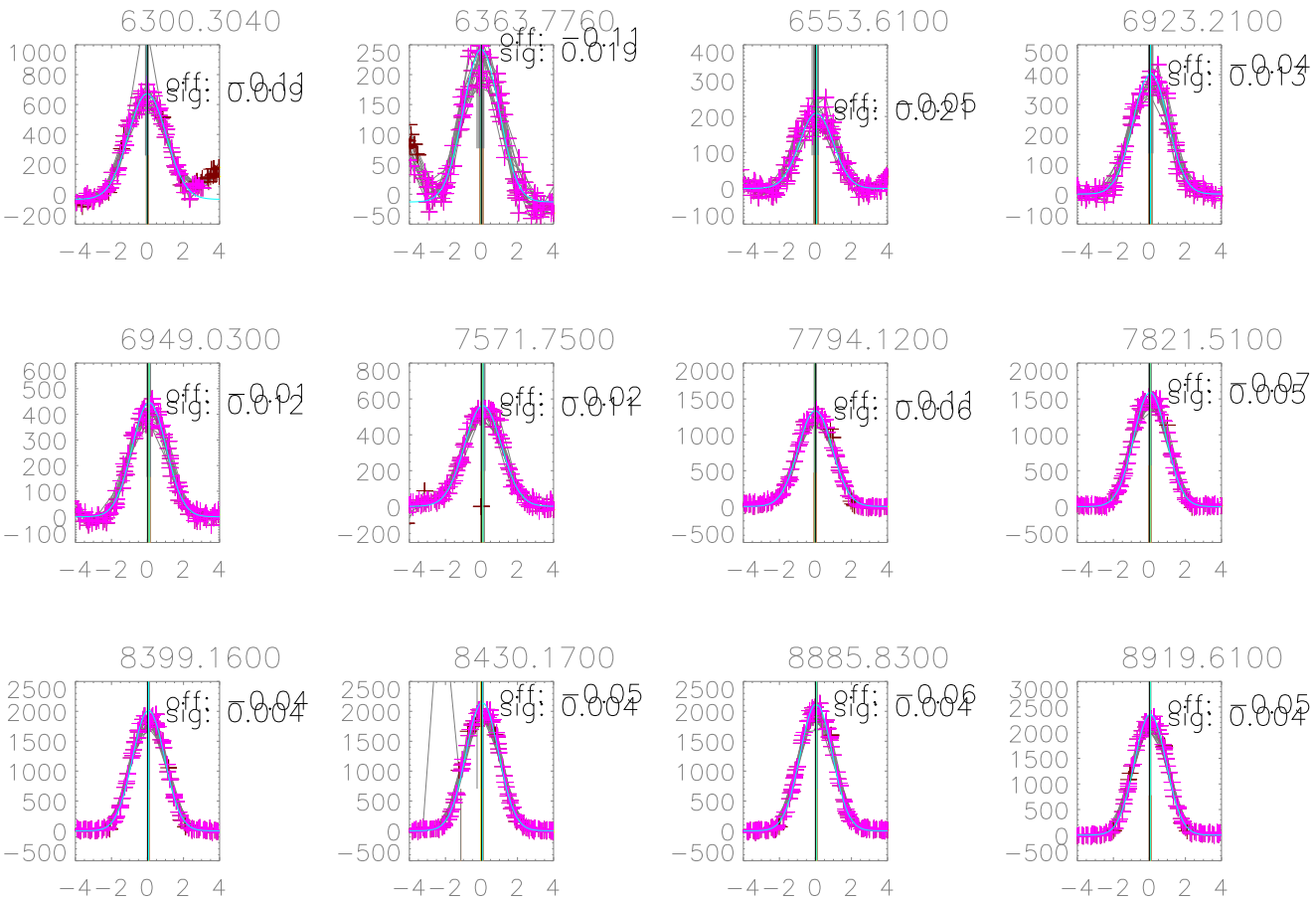

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r1-00051515.fi
24.75
31.82
22.73
13.64
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

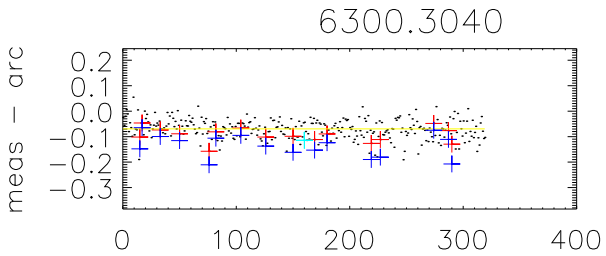

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r1-00051515.fi
Brightness [electrons/pix]
λ [A]
Error bars delete full range
Min value = 4.698
Max value = 29.567
Tue Apr 1 17:15:54 2008

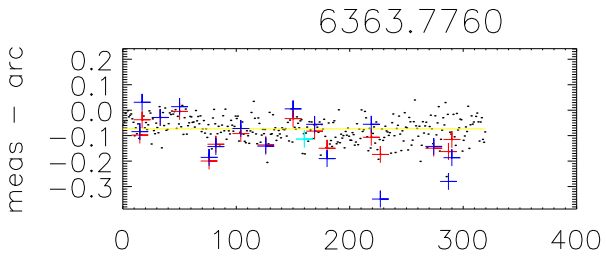

PLATE=2949 MJD=54557 Scattered Light on sdR-r1-00051515.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5

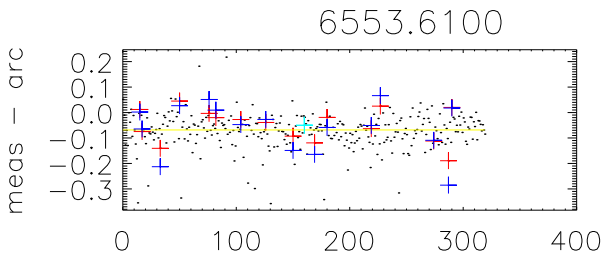

PLATE=2949 MJD=54557 Scattered Light on sdR-r1-00051515.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.216
Max value = 9.962
Tue Apr 1 17:18:03 2008

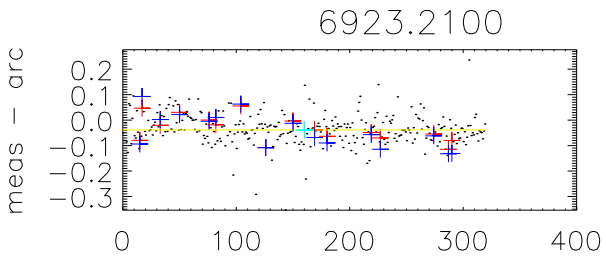

PLATE=2949 MJD=54557 Extraction chi^2 for sdR−r1−00051515.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

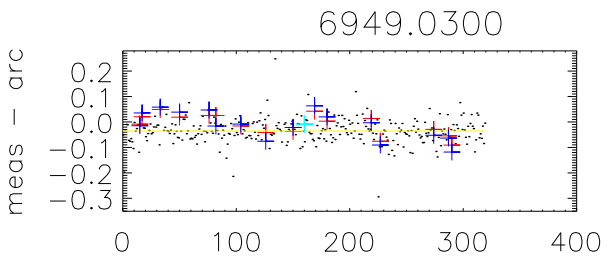

6300.3040
off: −0.11
sig: 0.009
6363.7760
off: −0.11
sig: 0.019
6553.6100
off: −0.05
sig: 0.021
6923.2100
off: −0.04
sig: 0.013
6949.0300
off: −0.01
sig: 0.012
7571.7500
off: −0.02
sig: 0.011
7794.1200
off: −0.11
sig: 0.006
7821.5100
off: −0.07
sig: 0.005
8399.1600
off: −0.04
sig: 0.004
8430.1700
off: −0.05
sig: 0.004
8885.8300
off: −0.06
sig: 0.004
8919.6100
off: −0.05
sig: 0.004

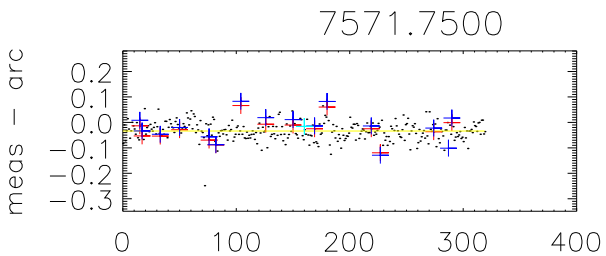

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

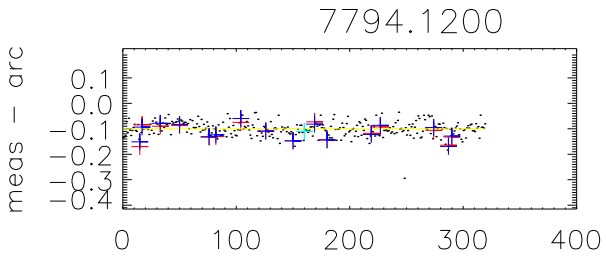

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

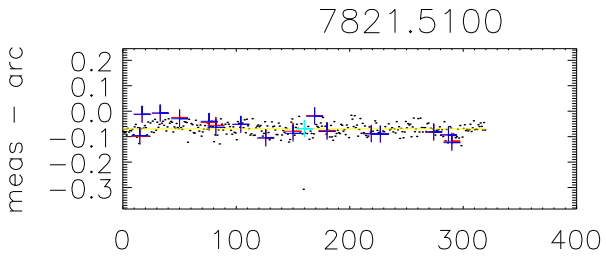

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

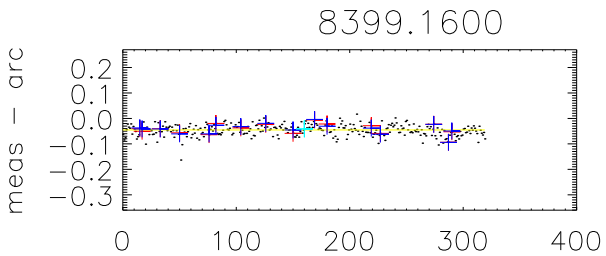

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

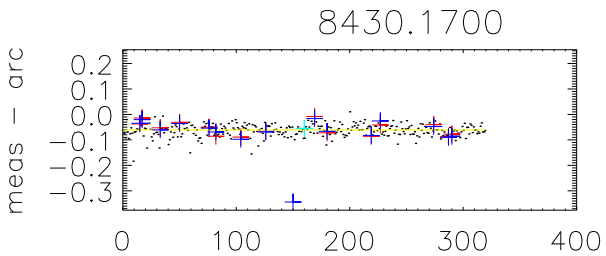

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

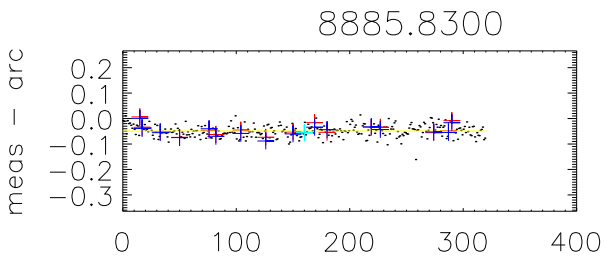

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

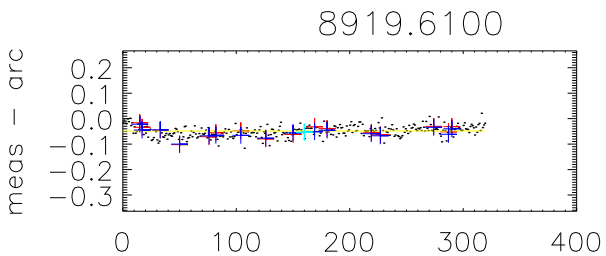

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

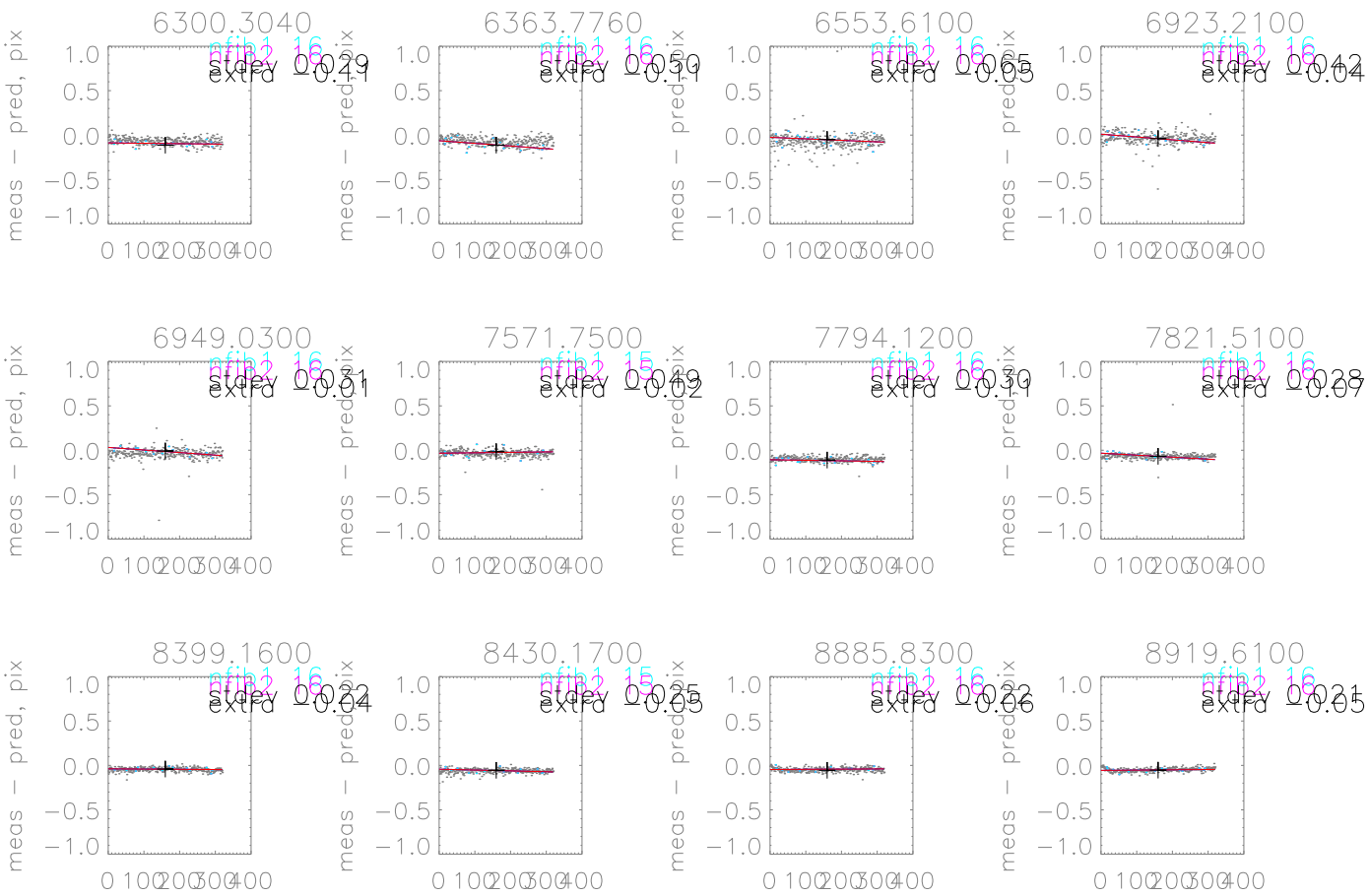

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

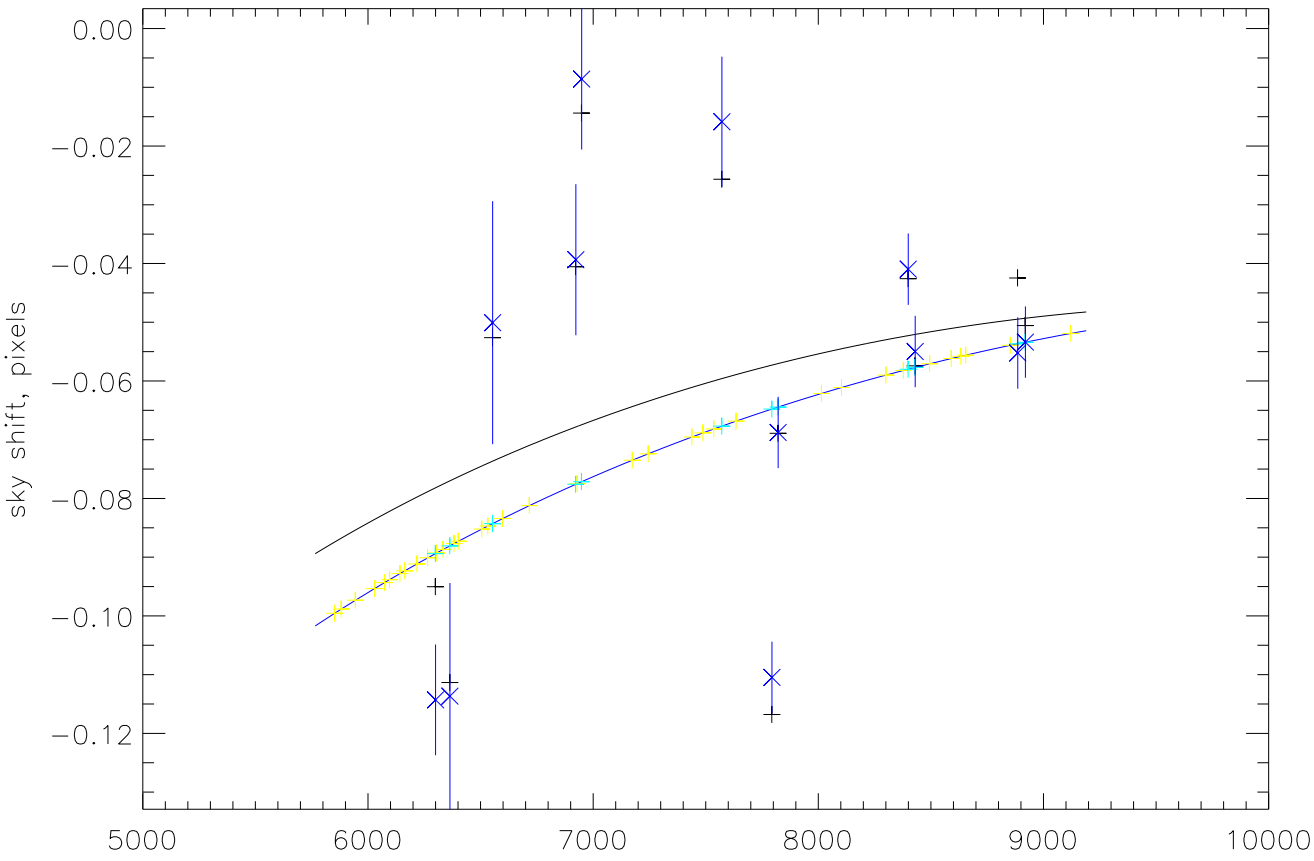

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

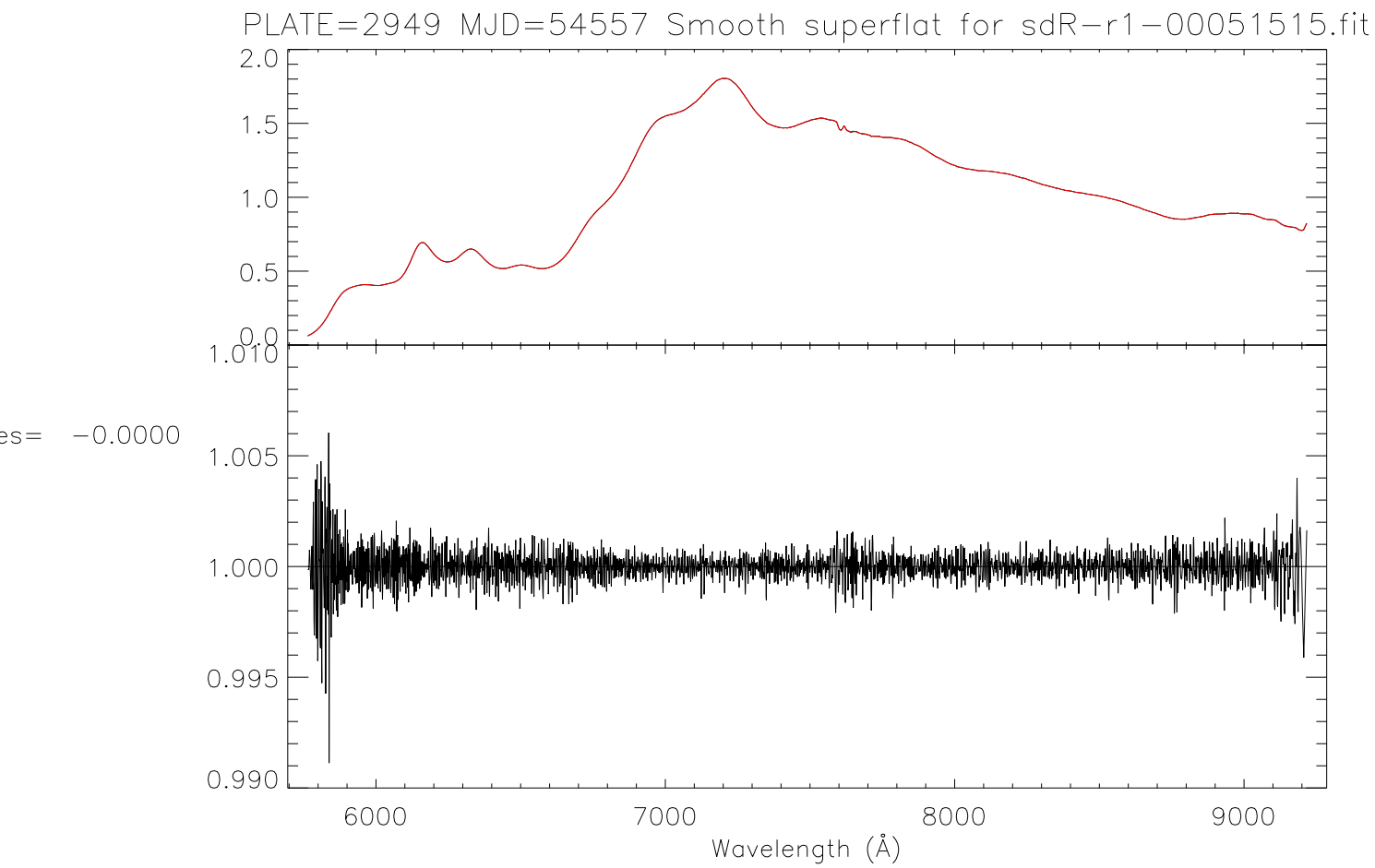

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

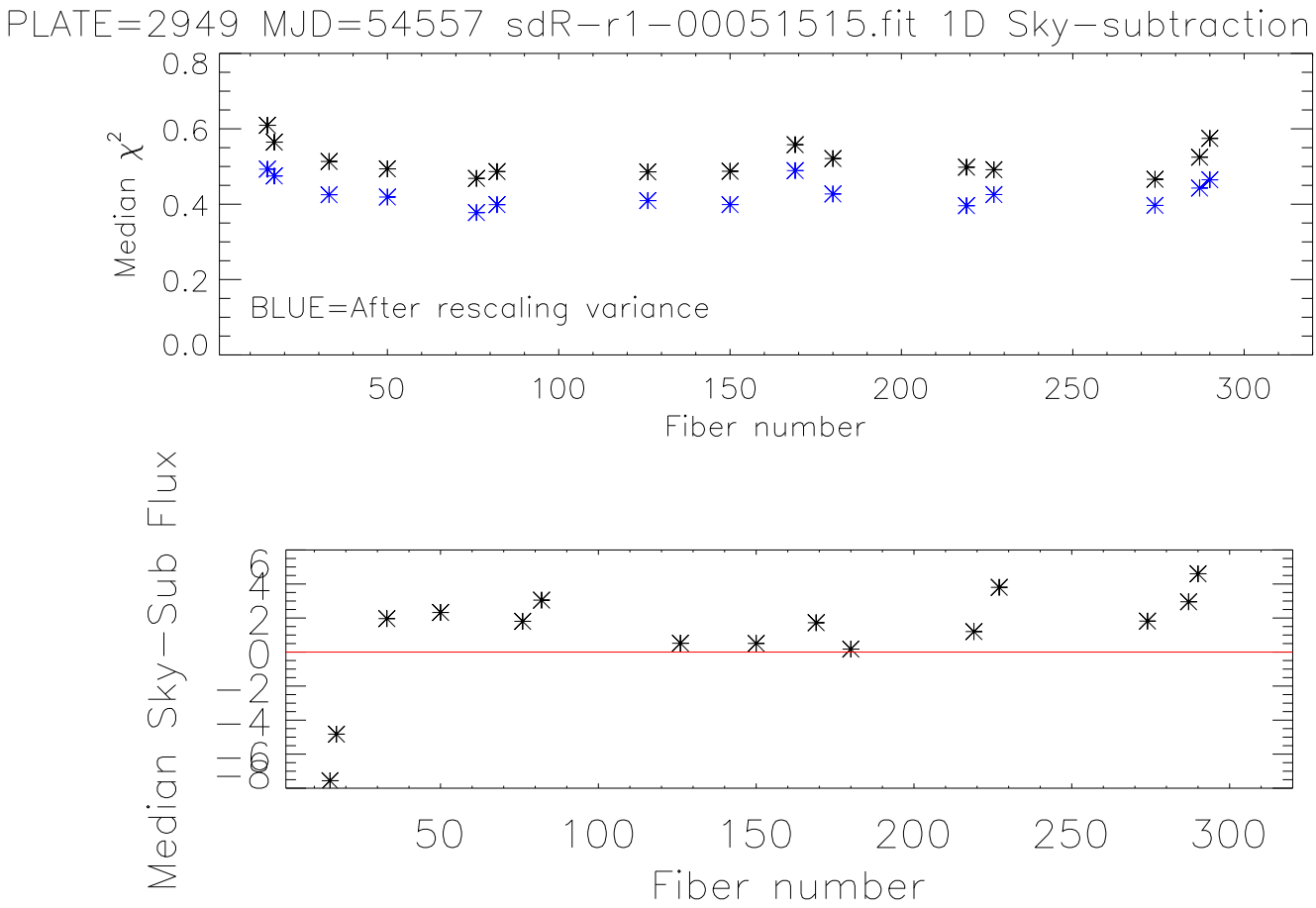

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

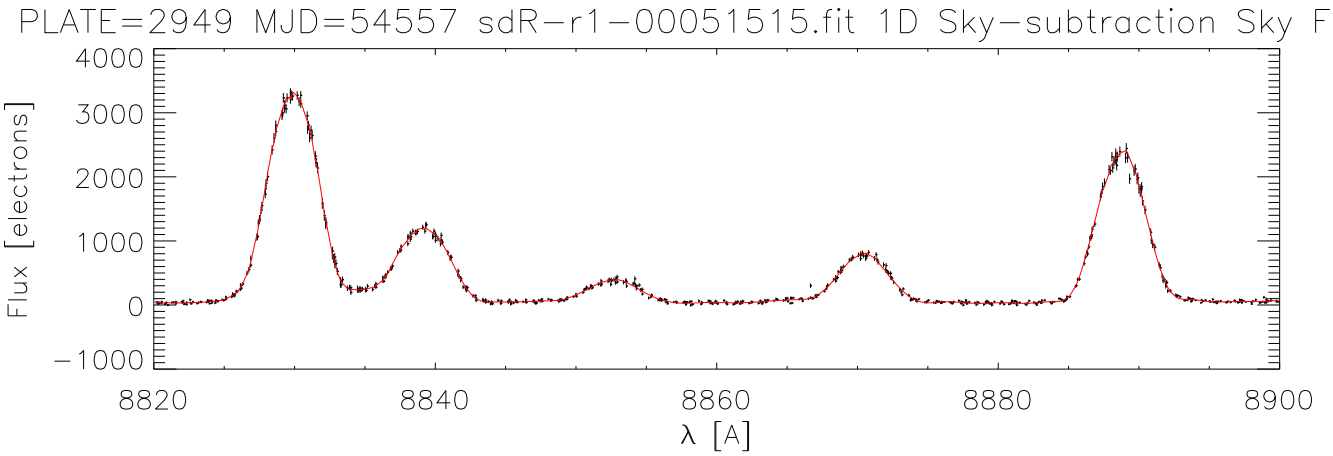

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhd2 16
stdev 0.029
extrd 0.041
stdev 0.050
extrd 0.041
stdev 0.065
extrd 0.065
stdev 0.042
extrd 0.04
stdev 0.031
extrd 0.01
stdev 0.049
extrd 0.02
stdev 0.030
extrd 0.11
stdev 0.028
extrd 0.07
stdev 0.022
extrd 0.04
stdev 0.025
extrd 0.05
stdev 0.022
extrd 0.06
stdev 0.021
extrd 0.05

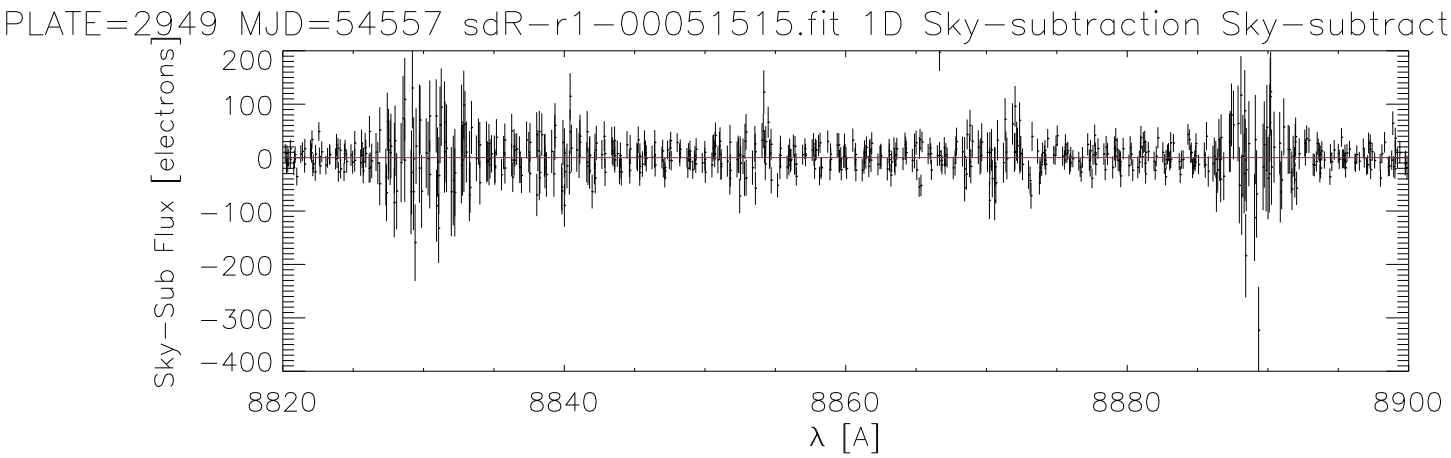

0.00
−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
sky shift, pixels
5000
6000
7000
8000
9000
10000

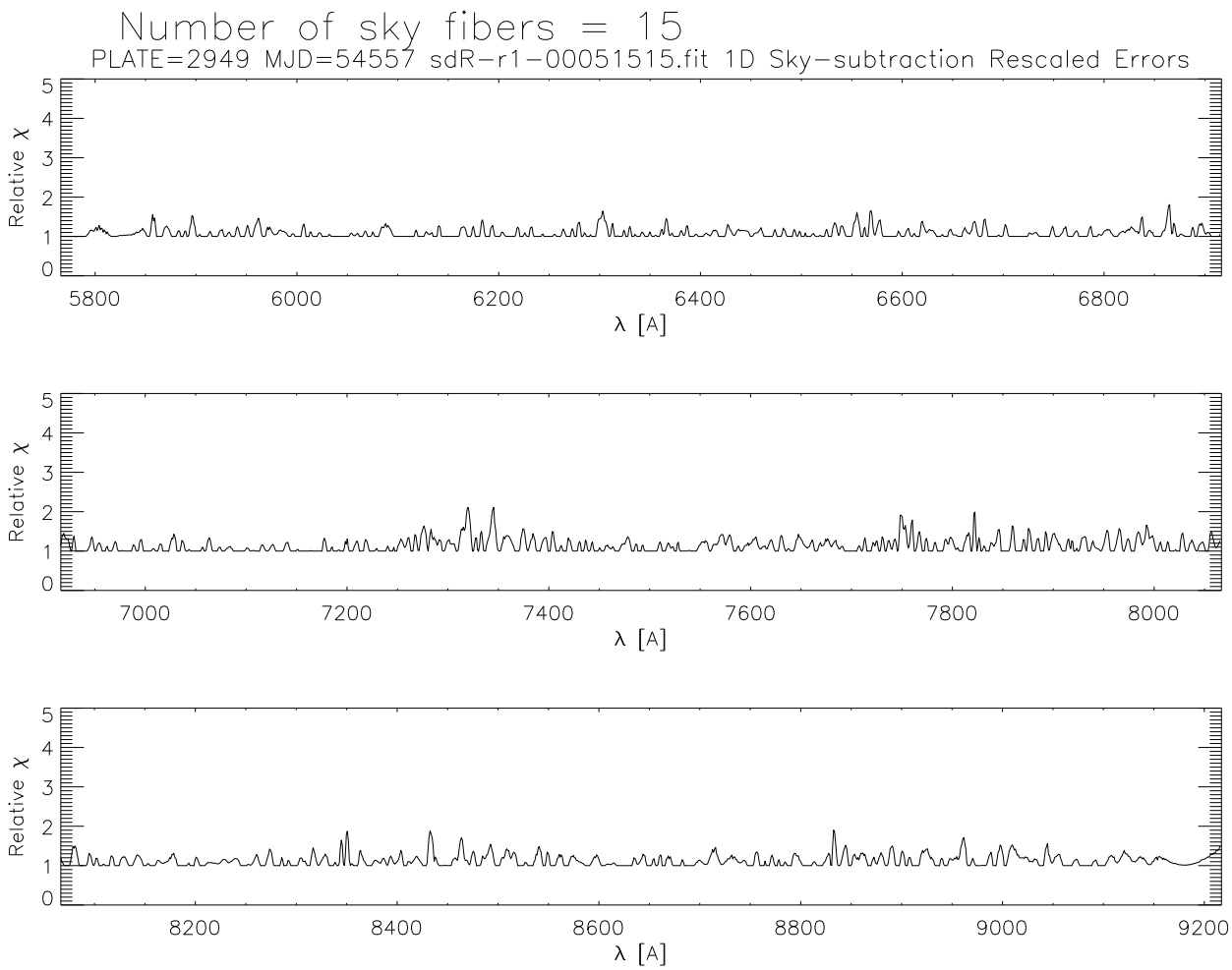

PLATE=2949 MJD=54557 Smooth superflat for sdR-r1-00051515.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

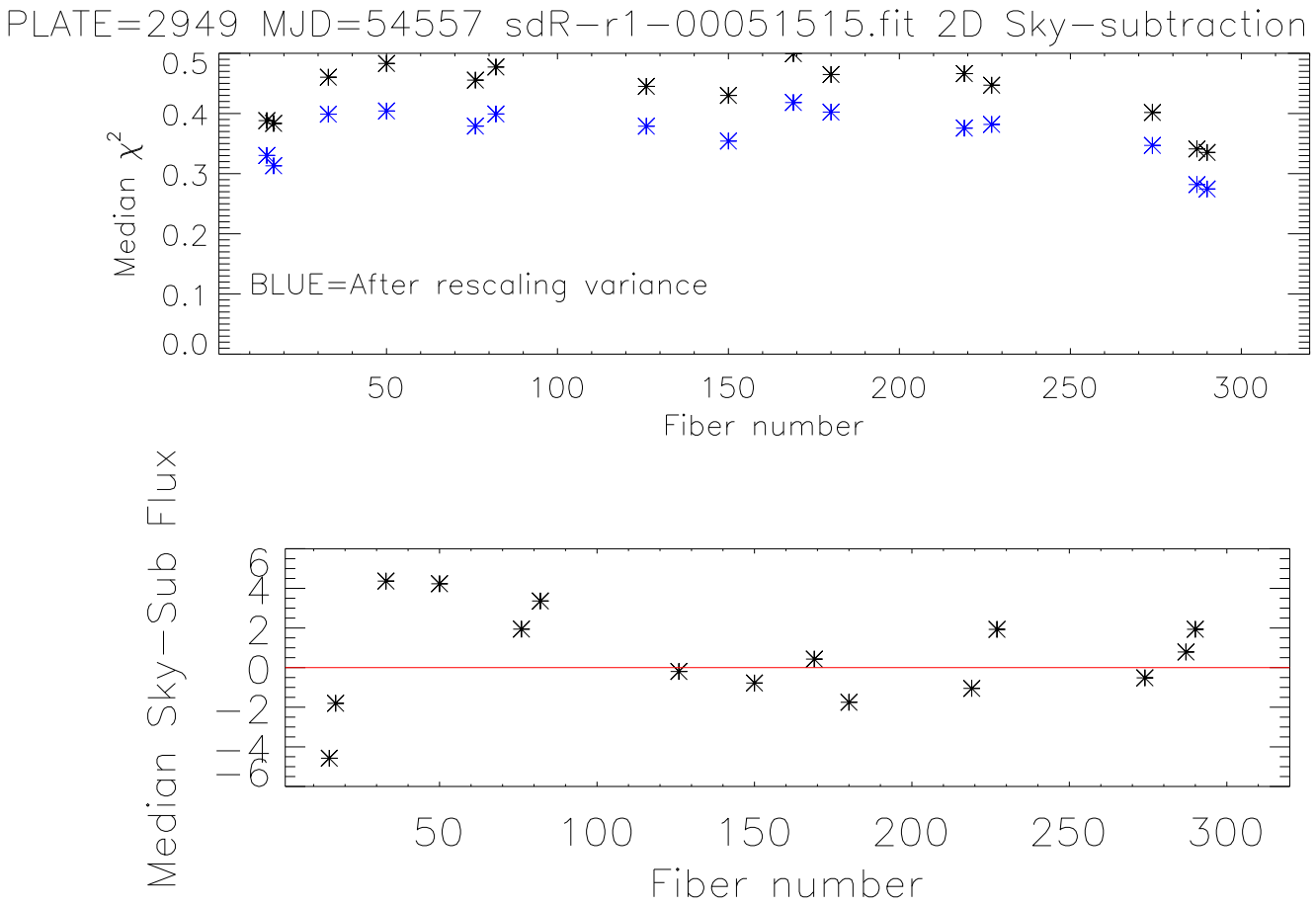

PLATE=2949 MJD=54557 sdR-r1-00051515.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

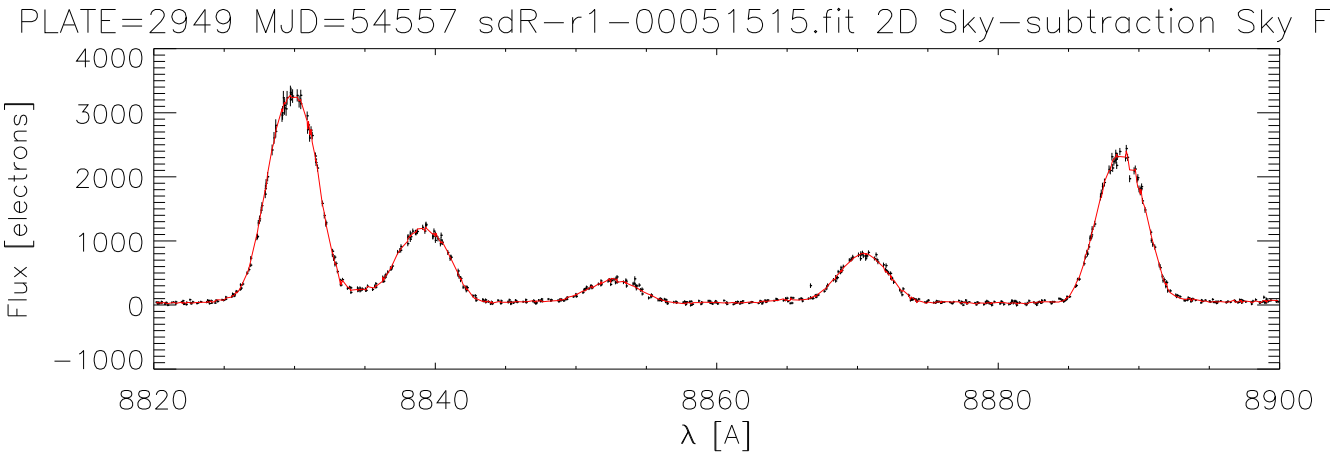
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

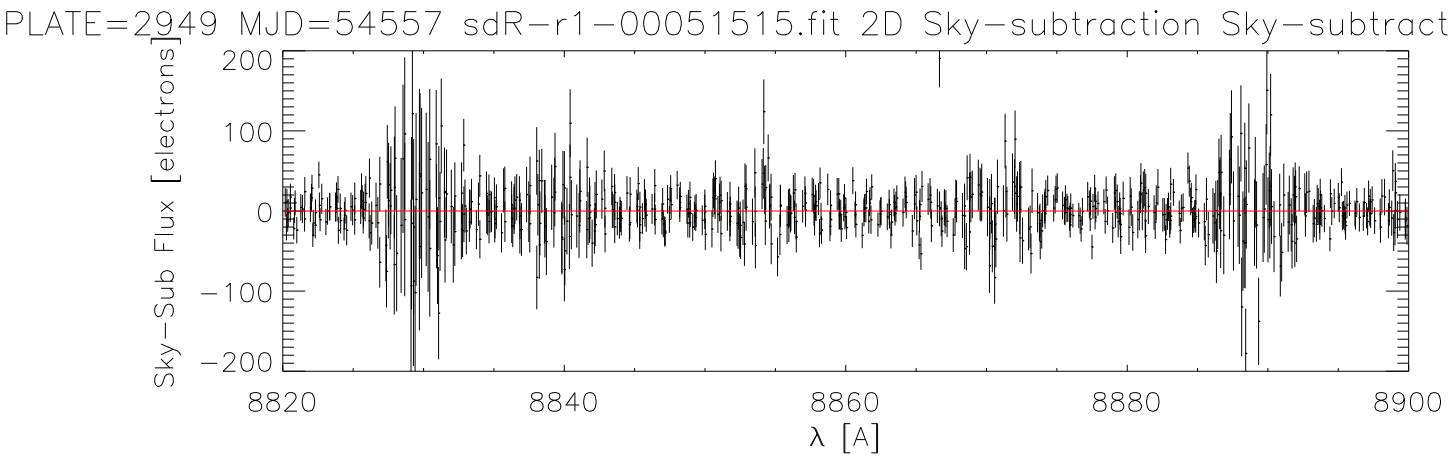

PLATE=2949 MJD=54557 sdR-r1-00051515.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

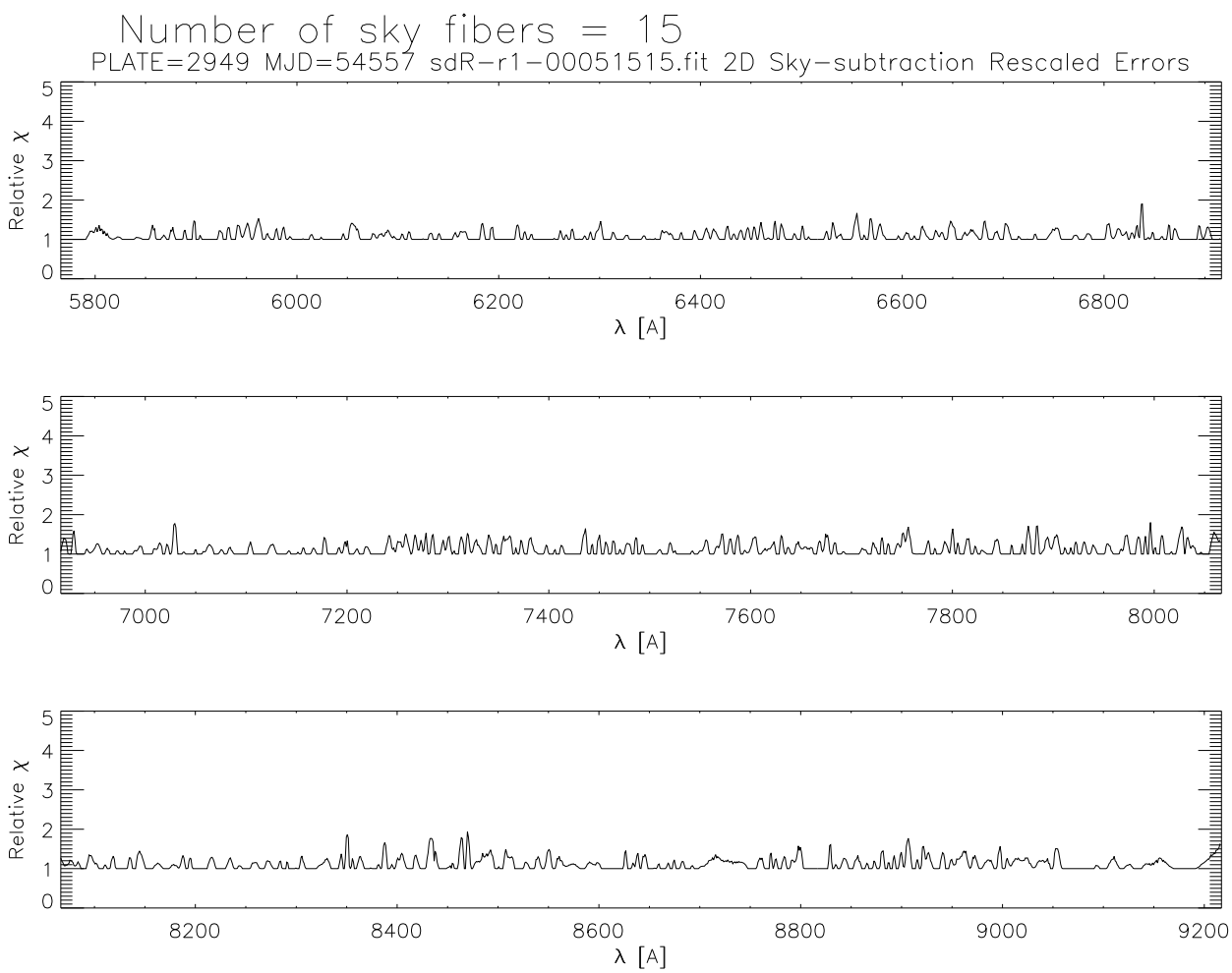

PLATE=2949 MJD=54557 sdR-r1-00051515.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
−300
−400
8820
8840
8860
8880
8900
λ [A]

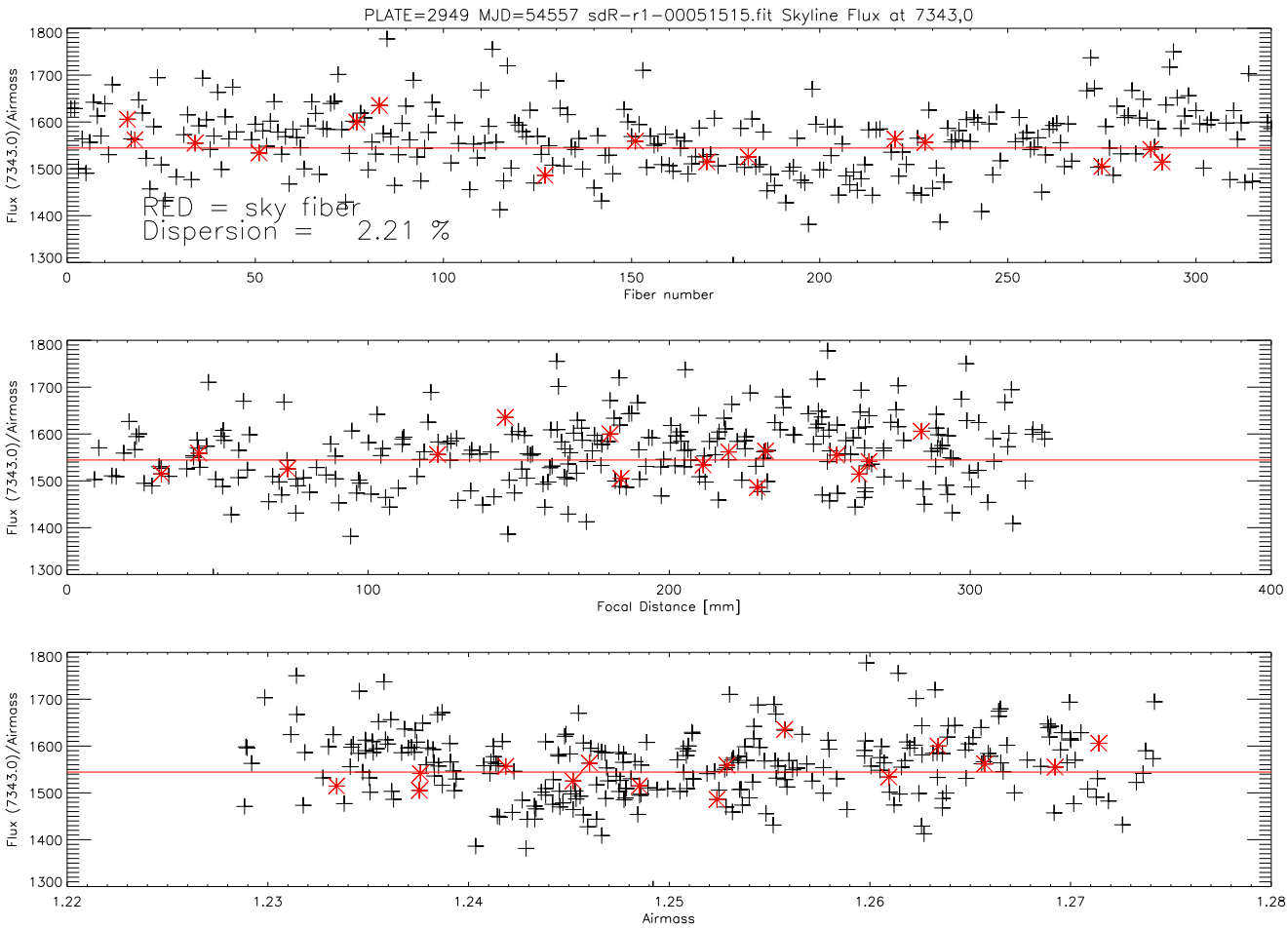

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-r1-00051515.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

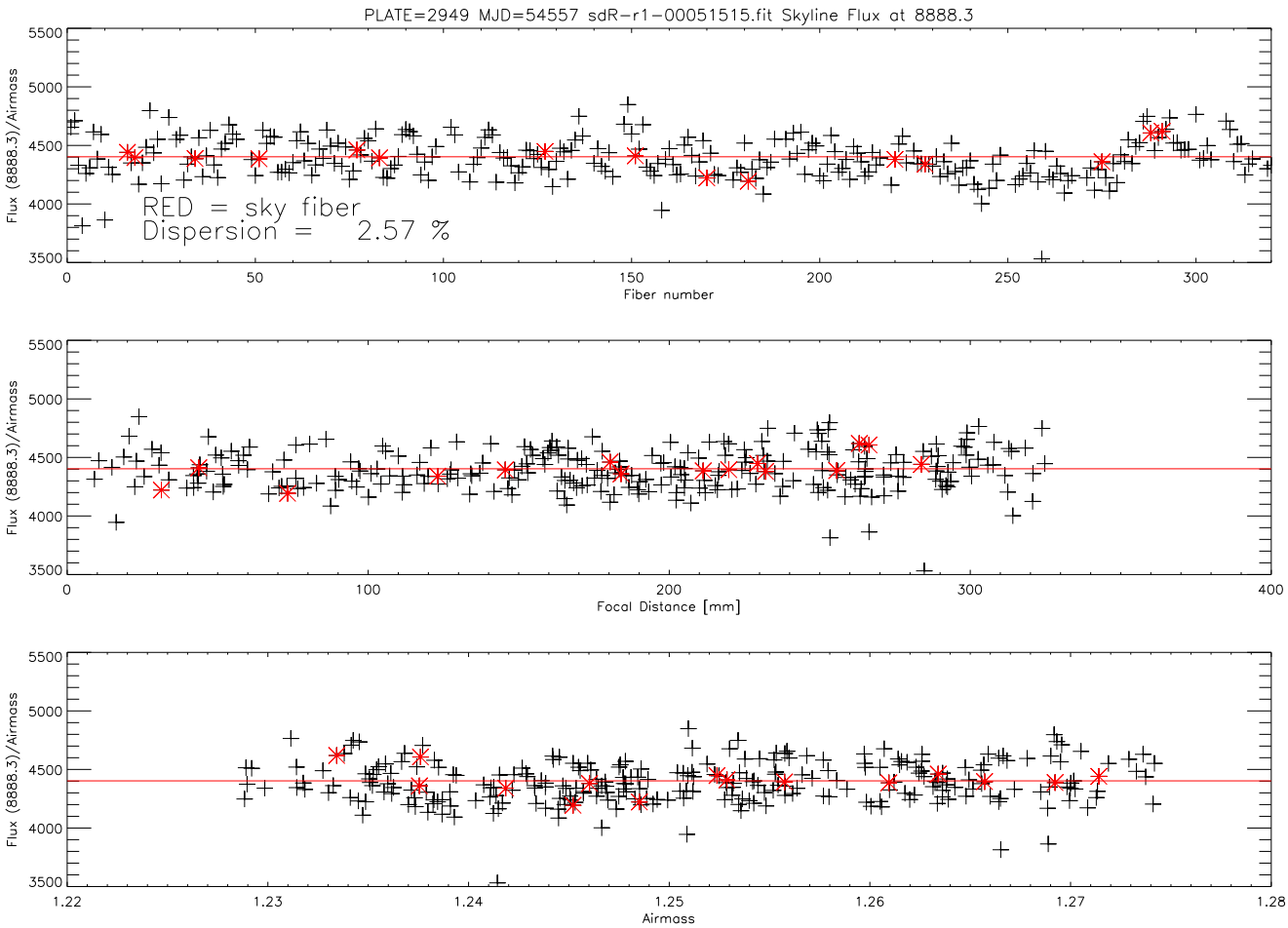

PLATE=2949 MJD=54557 sdR-r1-00051515.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

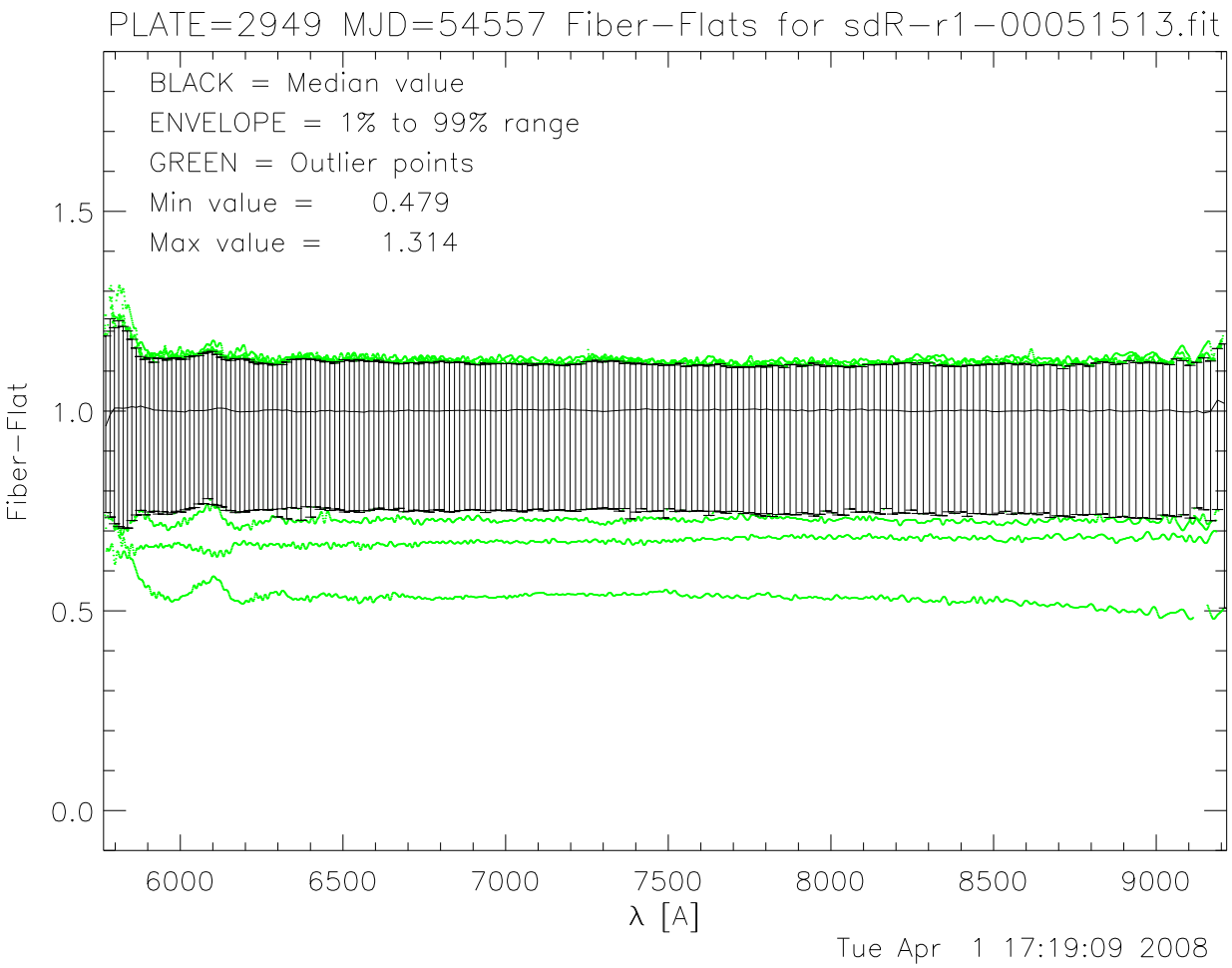

PLATE=2949 MJD=54557 sdR-r1-00051515.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

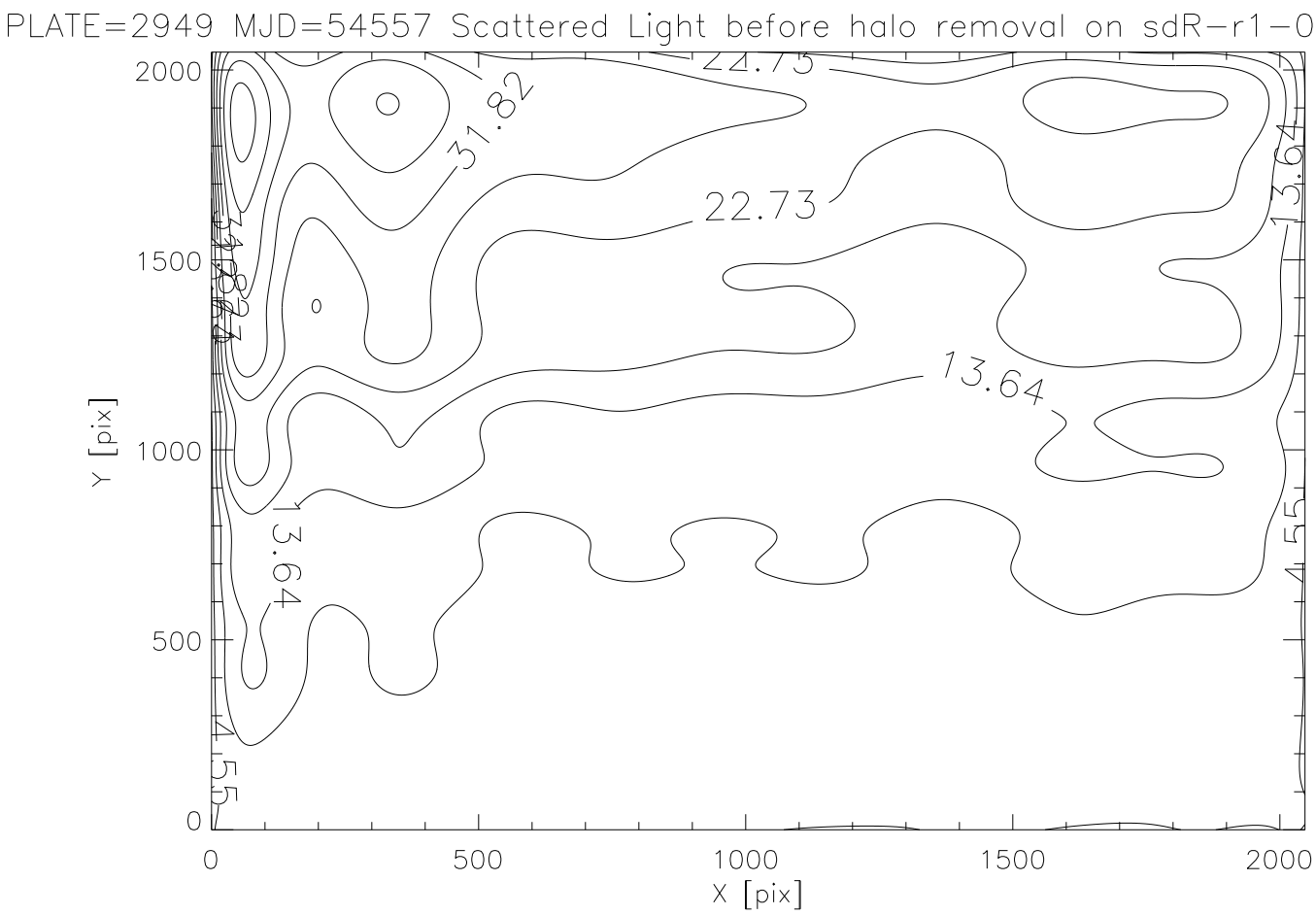

PLATE=2949 MJD=54557 sdR-r1-00051515.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

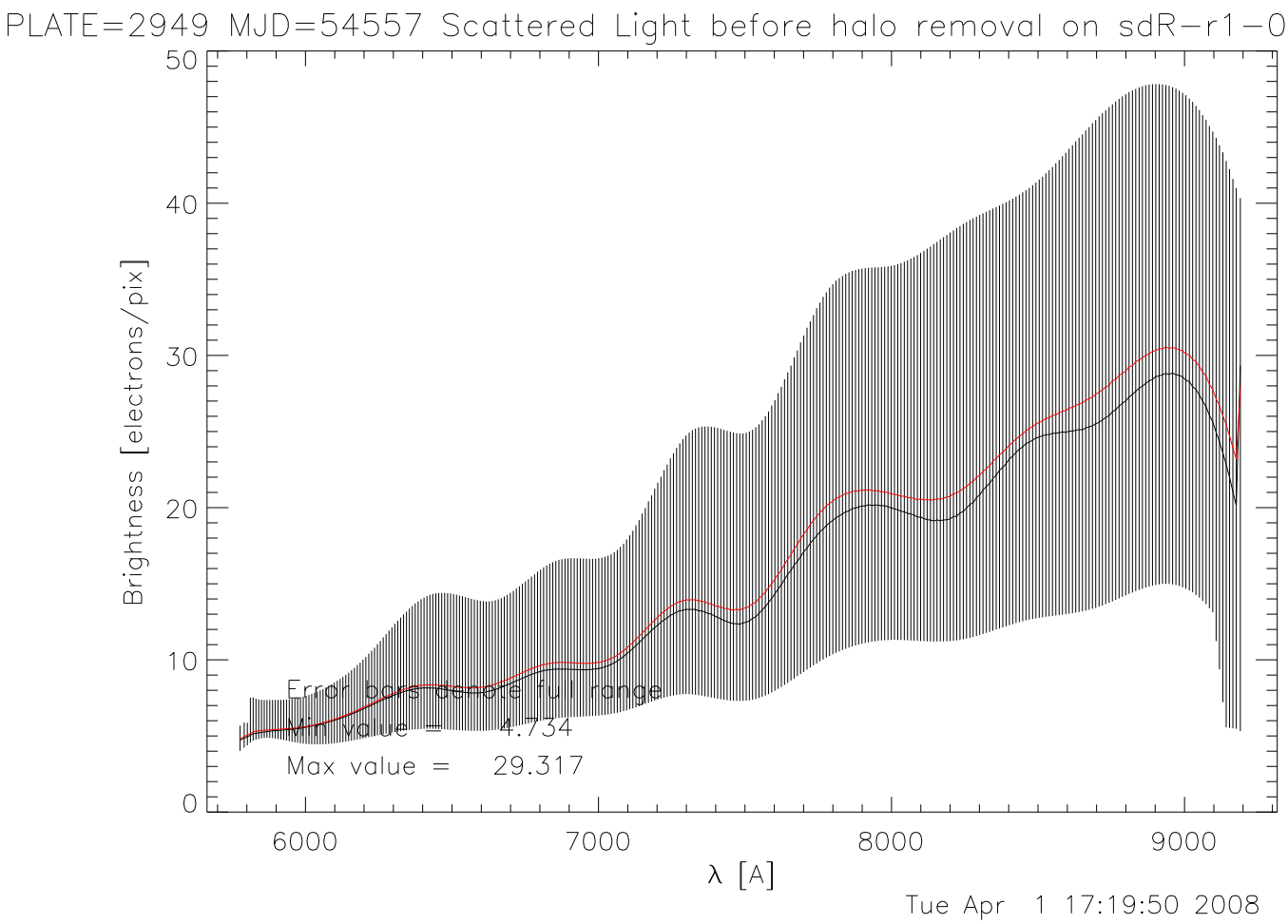

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-r1-00051515.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

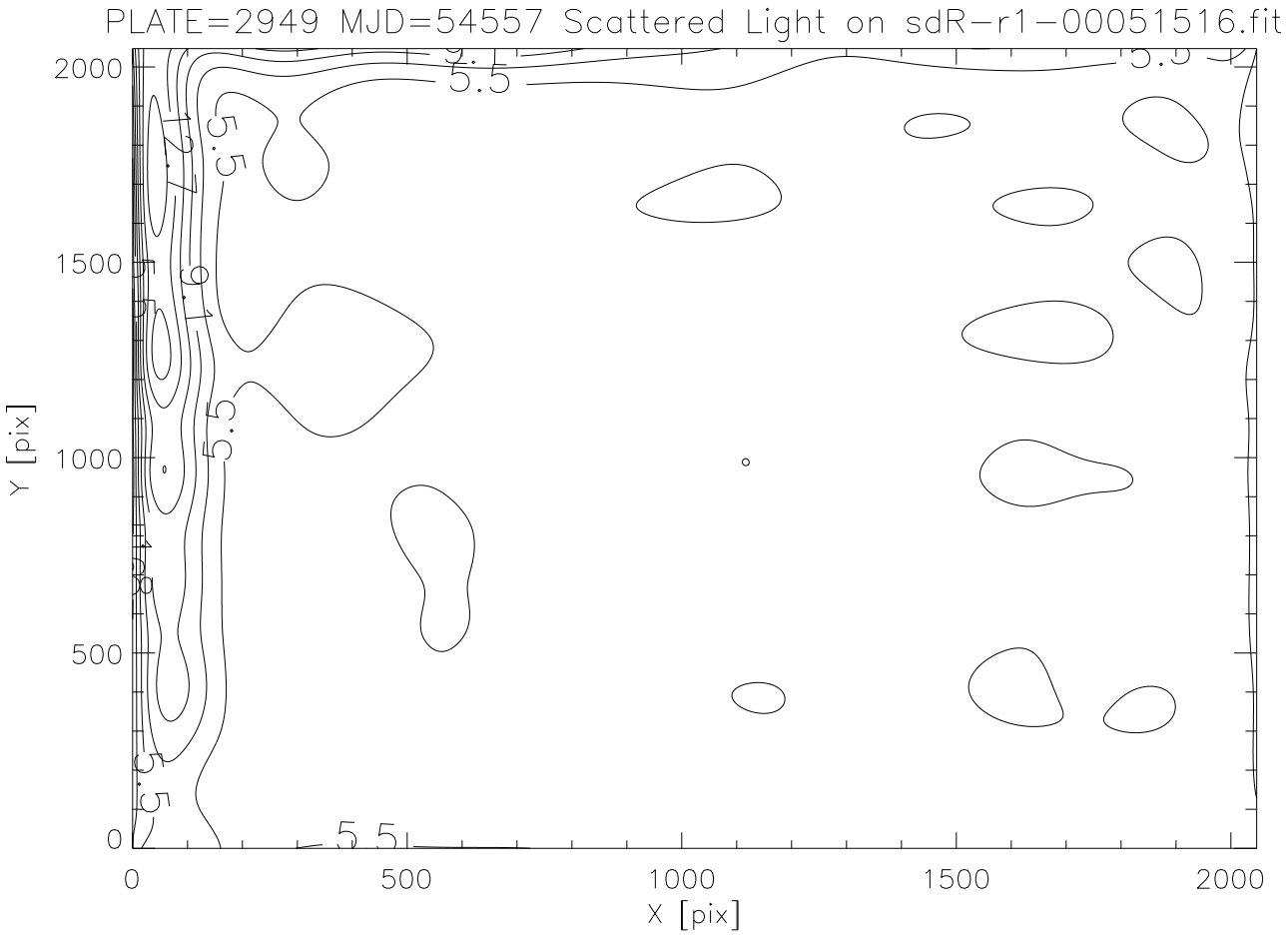

PLATE=2949 MJD=54557 sdR-r1-00051515.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.21 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

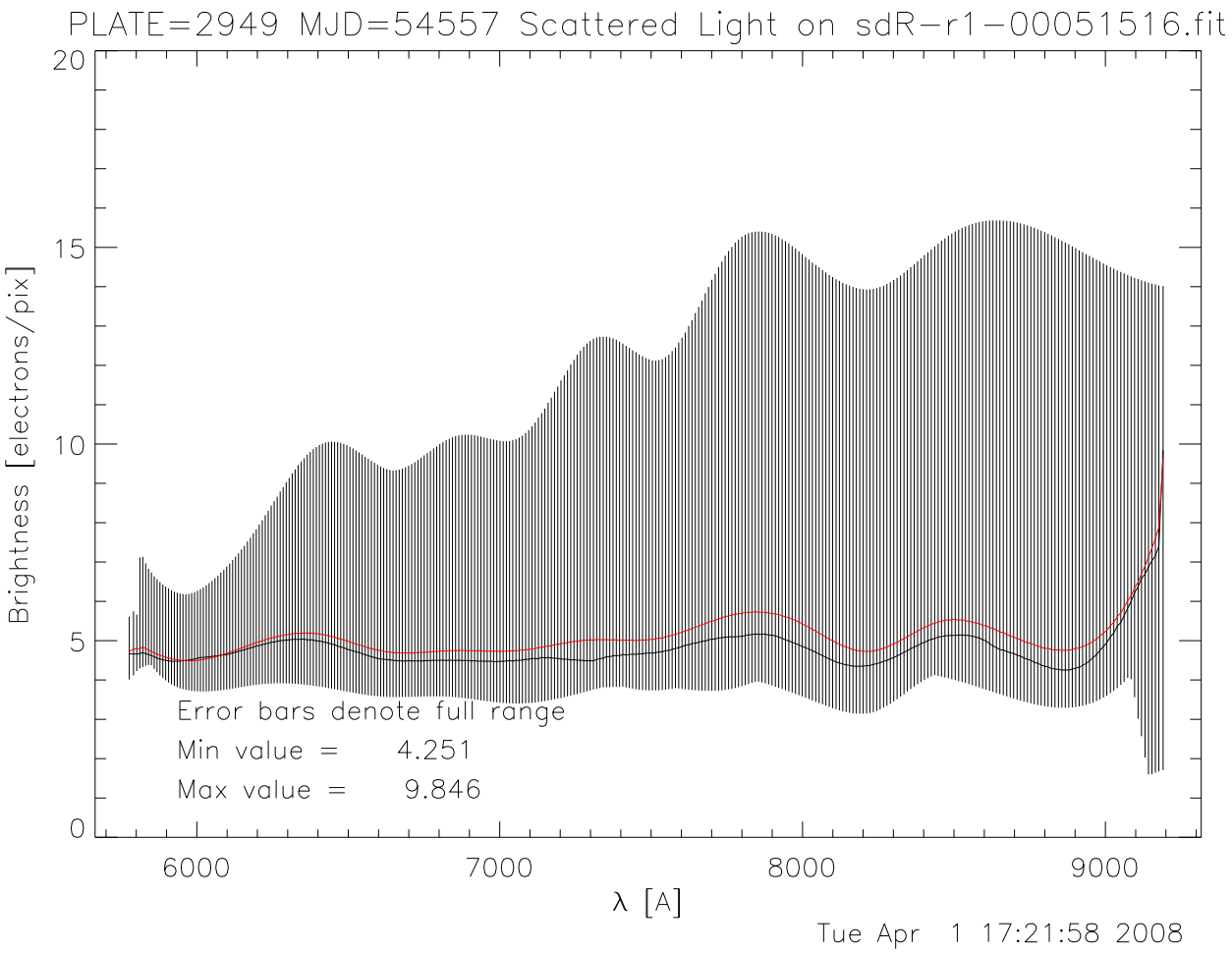

PLATE=2949 MJD=54557 sdR-r1-00051515.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.57 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

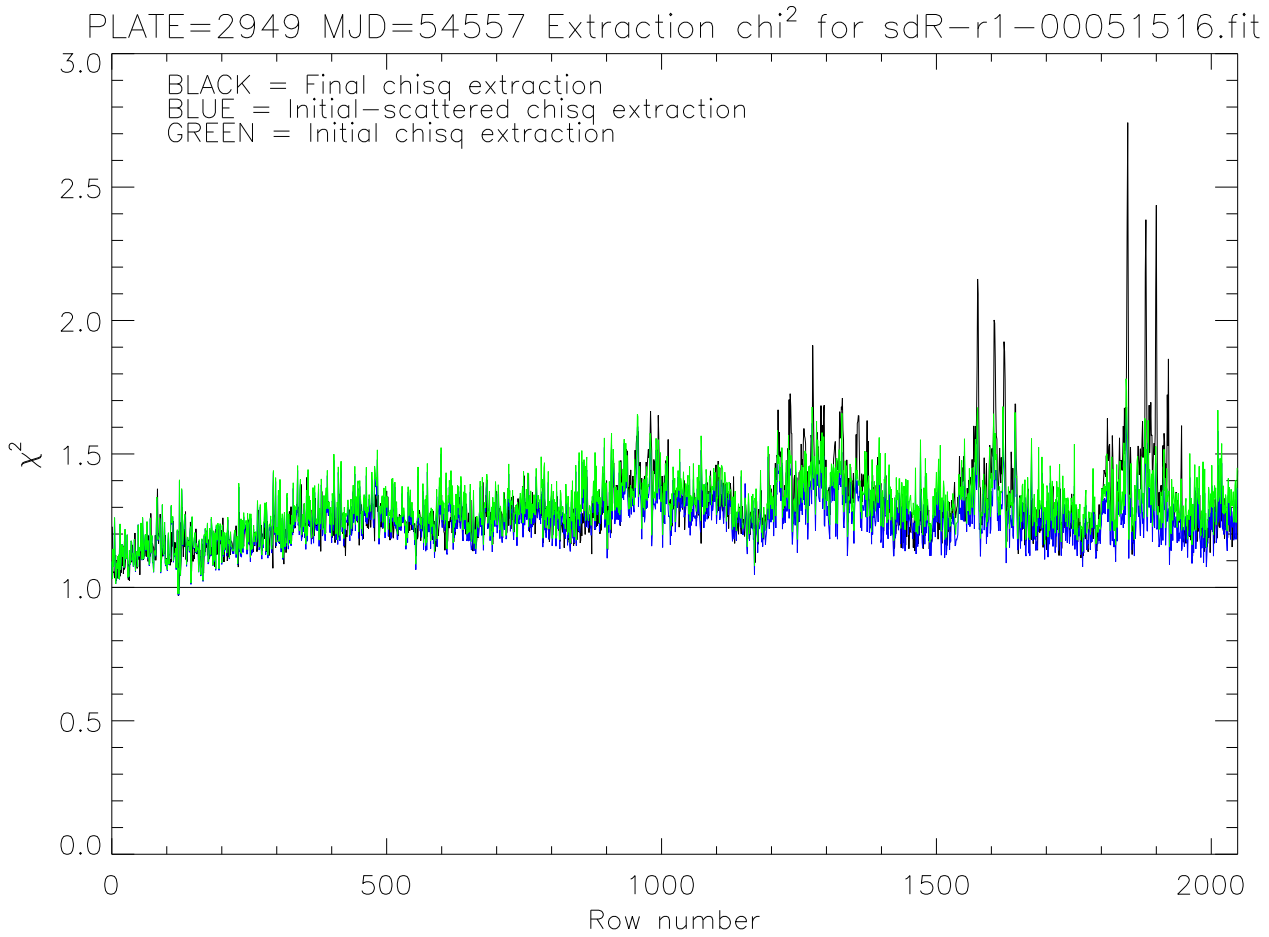

PLATE=2949 MJD=54557 Fiber−Flats for sdR−r1−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.479
Max value = 1.314
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Apr 1 17:19:09 2008

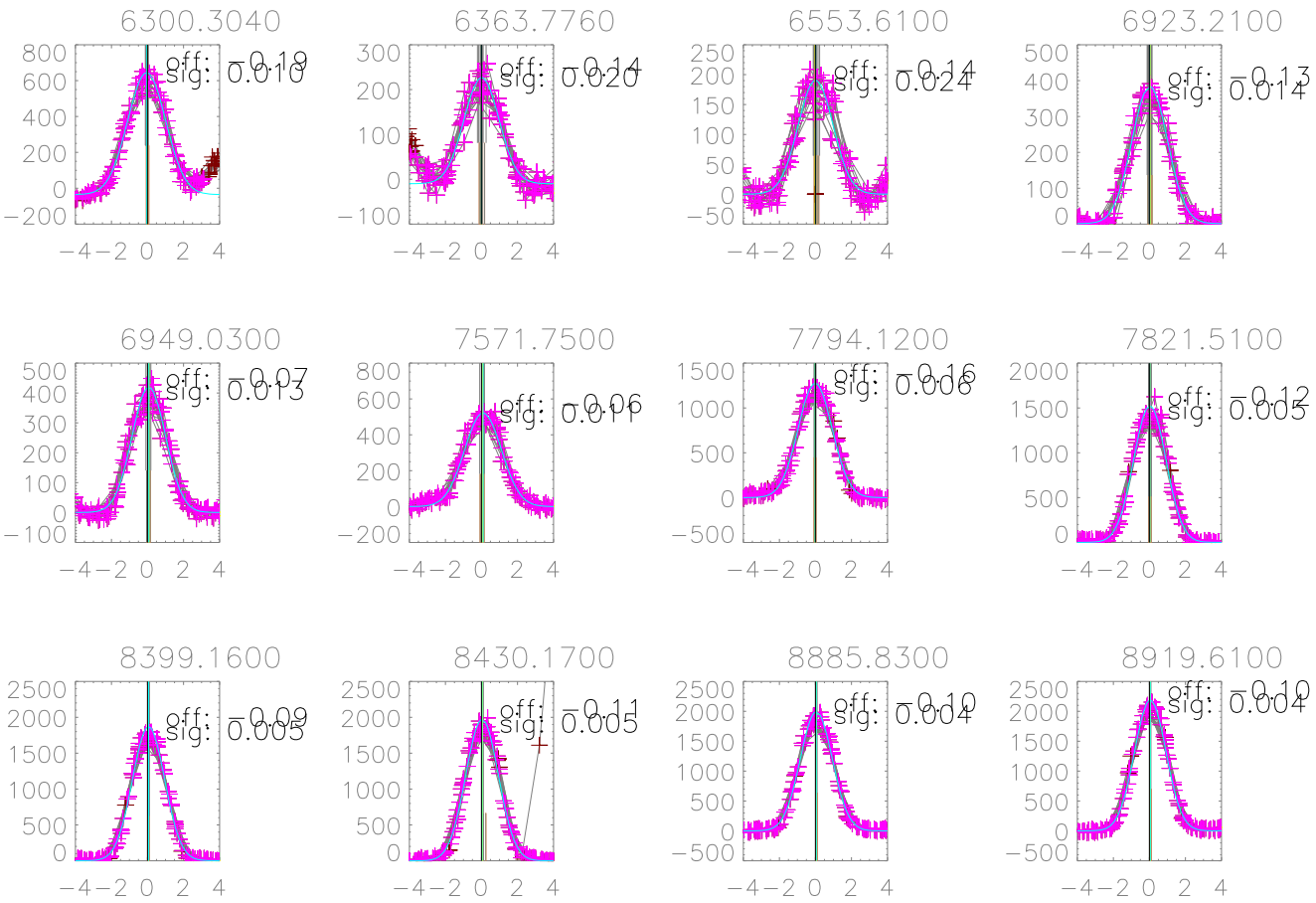

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r1-00051516.fi
24.75
31.82
22.73
13.64
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

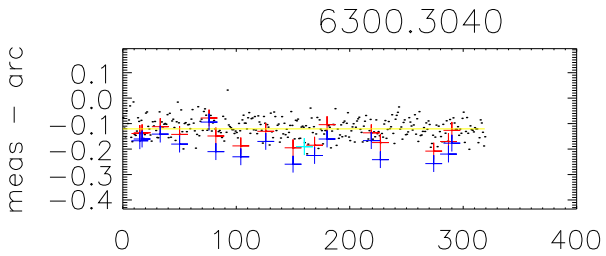

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r1-00051516.fi
Brightness [electrons/pix]
λ [A]
Error bars delete full range
Min value = 4.734
Max value = 29.317
Tue Apr 1 17:19:50 2008

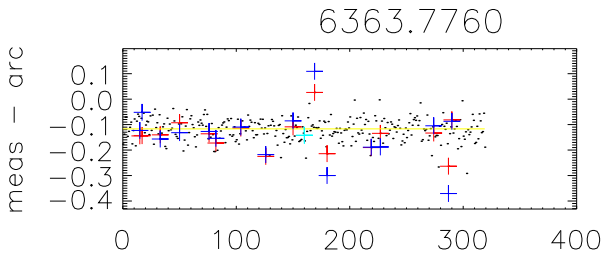

PLATE=2949 MJD=54557 Scattered Light on sdR-r1-00051516.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5

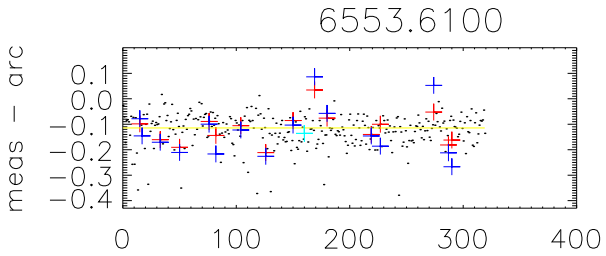

PLATE=2949 MJD=54557 Scattered Light on sdR-r1-00051516.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.251
Max value = 9.846
Tue Apr 1 17:21:58 2008

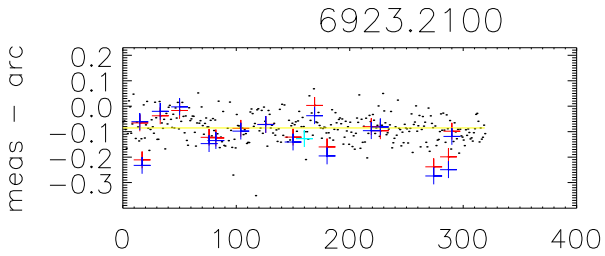

PLATE=2949 MJD=54557 Extraction chi^2 for sdR−r1−00051516.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

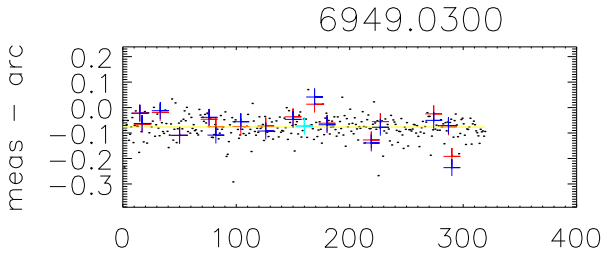

6300.3040
off: 0.18
sig: 0.010
6363.7760
off: 0.14
sig: 0.020
6553.6100
off: 0.14
sig: 0.024
6923.2100
off: 0.13
sig: 0.014
6949.0300
off: 0.07
sig: 0.013
7571.7500
off: 0.06
sig: 0.011
7794.1200
off: 0.16
sig: 0.006
7821.5100
off: 0.12
sig: 0.005
8399.1600
off: 0.09
sig: 0.005
8430.1700
off: 0.11
sig: 0.005
8885.8300
off: 0.10
sig: 0.004
8919.6100
off: 0.10
sig: 0.004

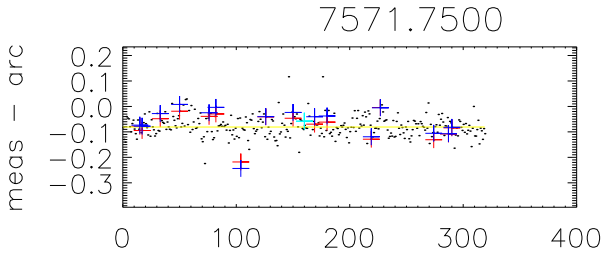

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

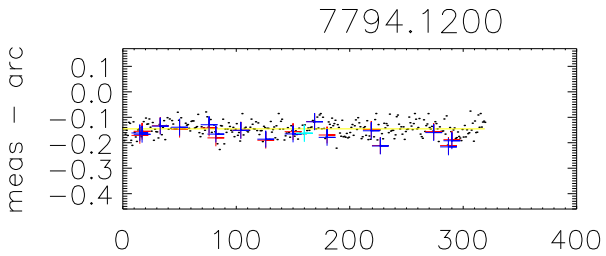

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

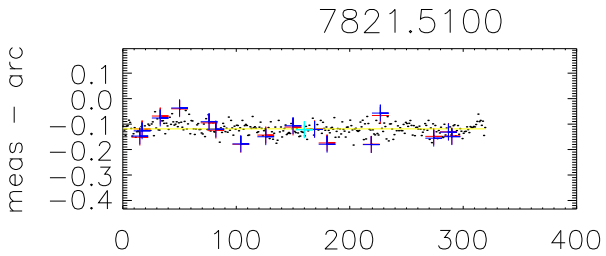

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

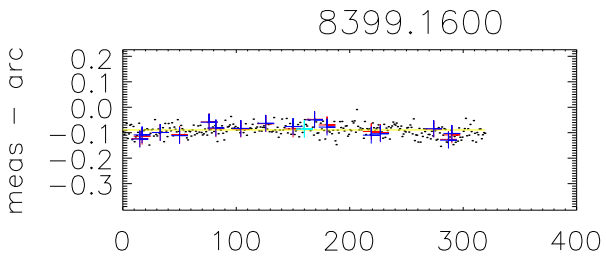

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

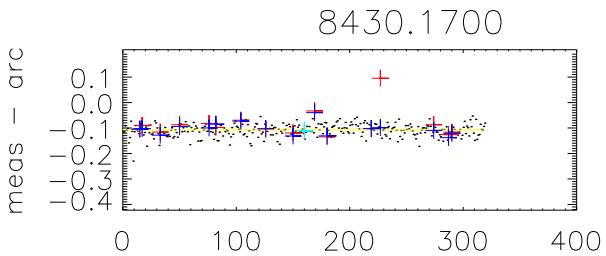

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

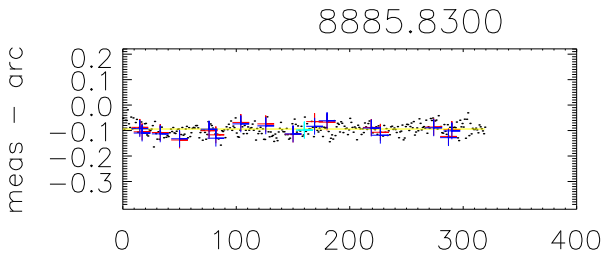

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

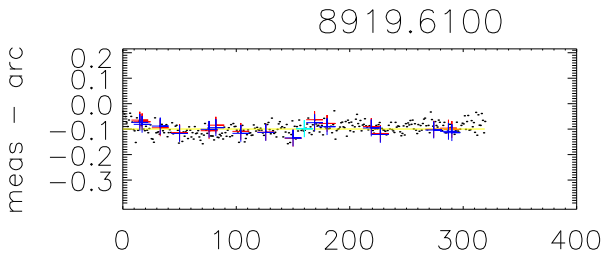

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

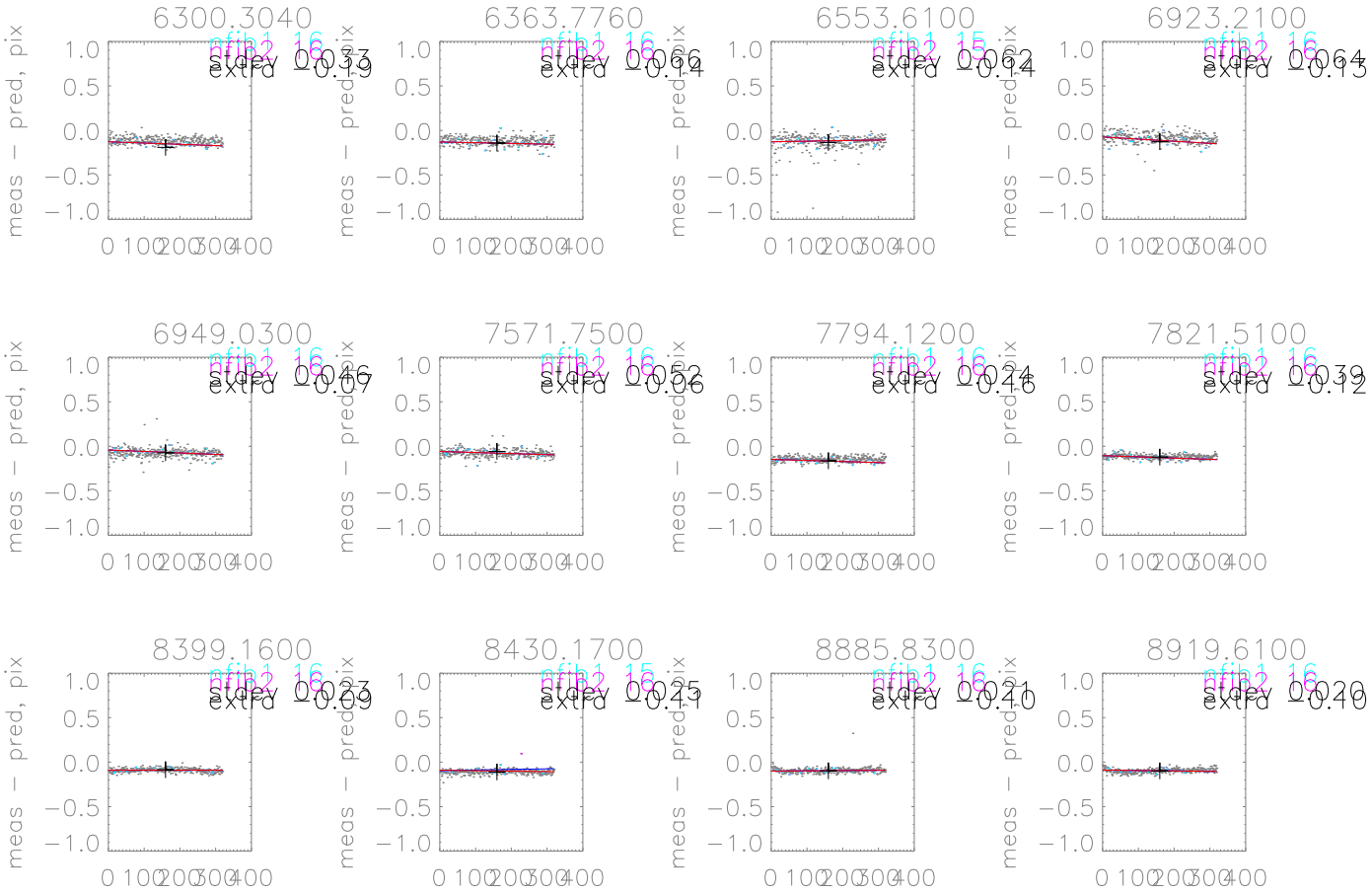

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

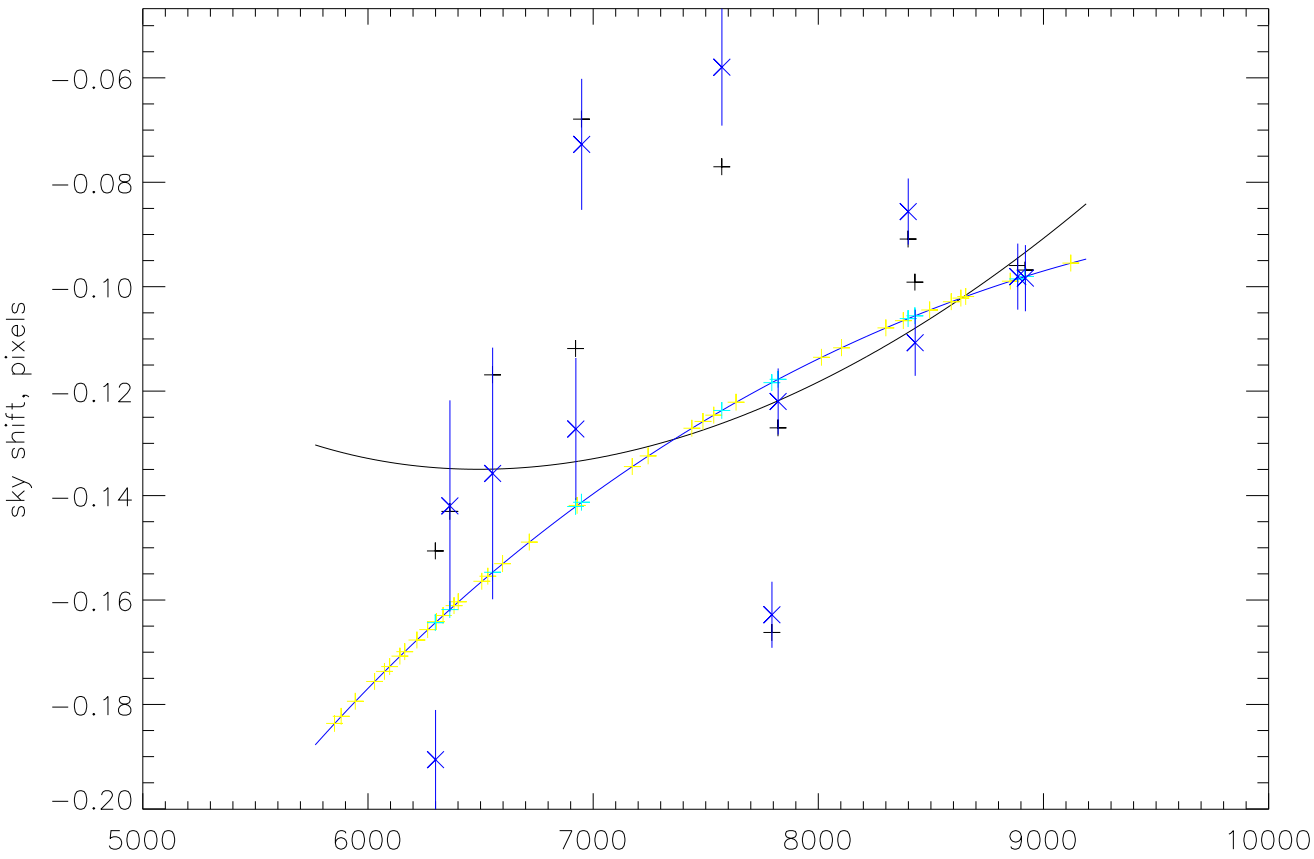

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

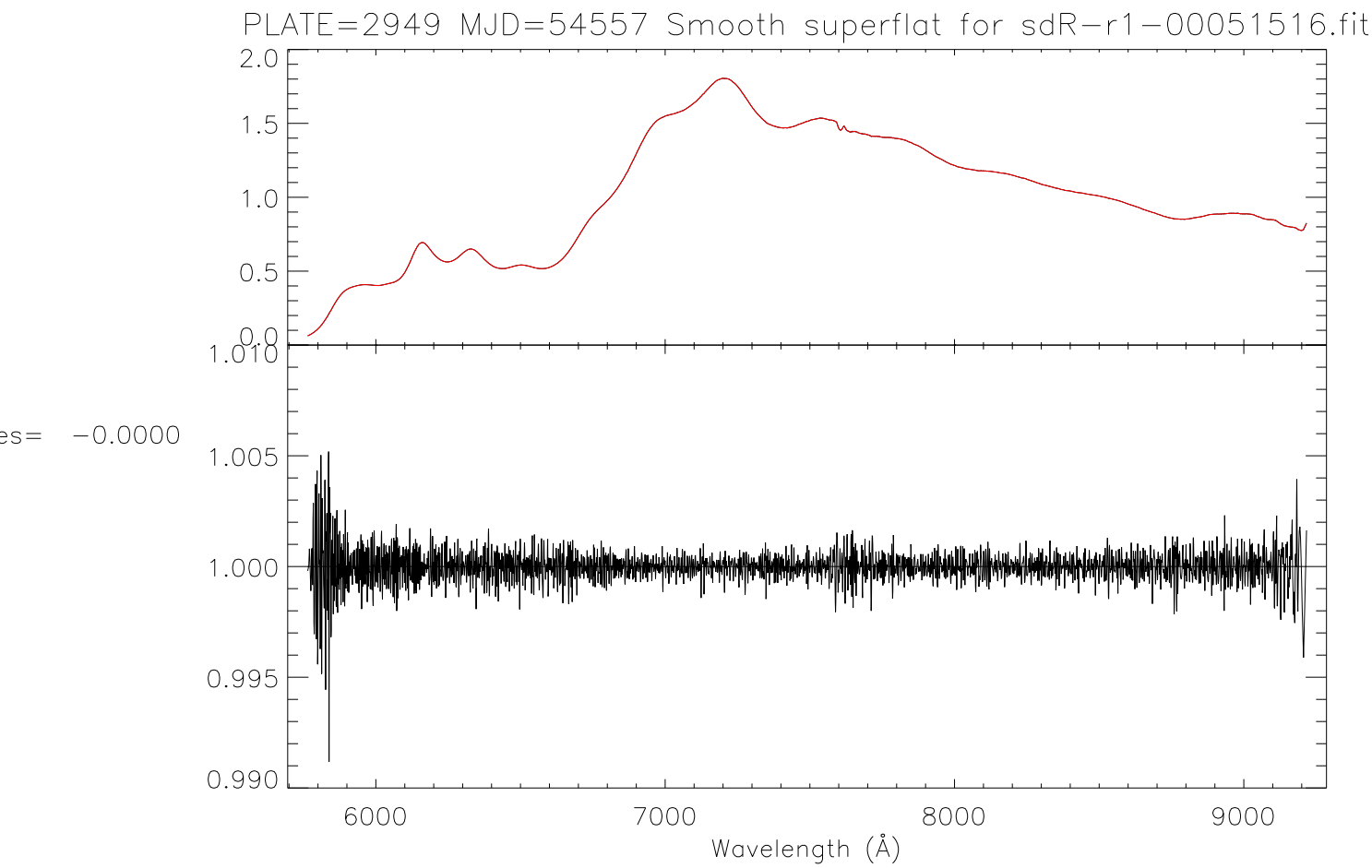

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

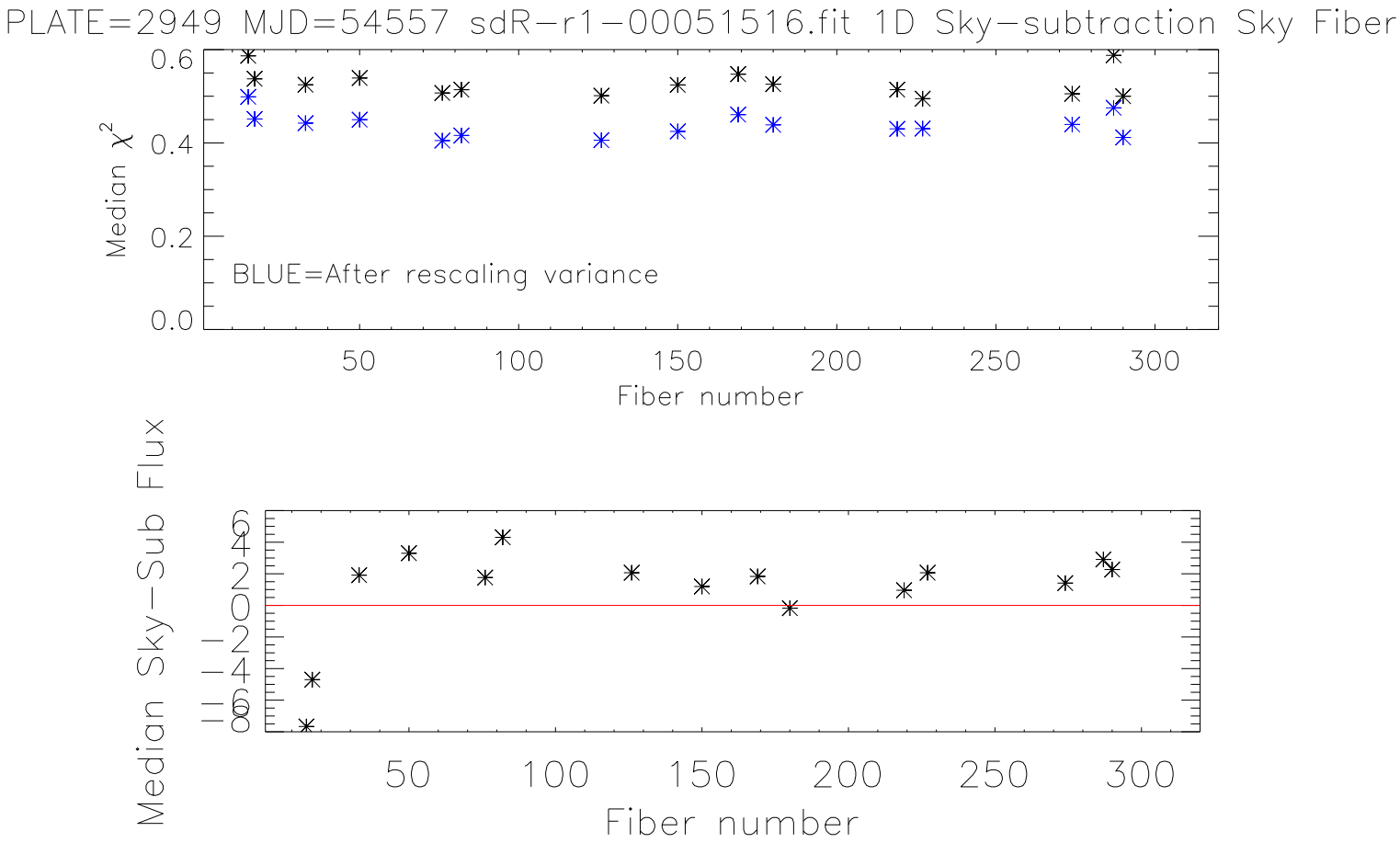

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

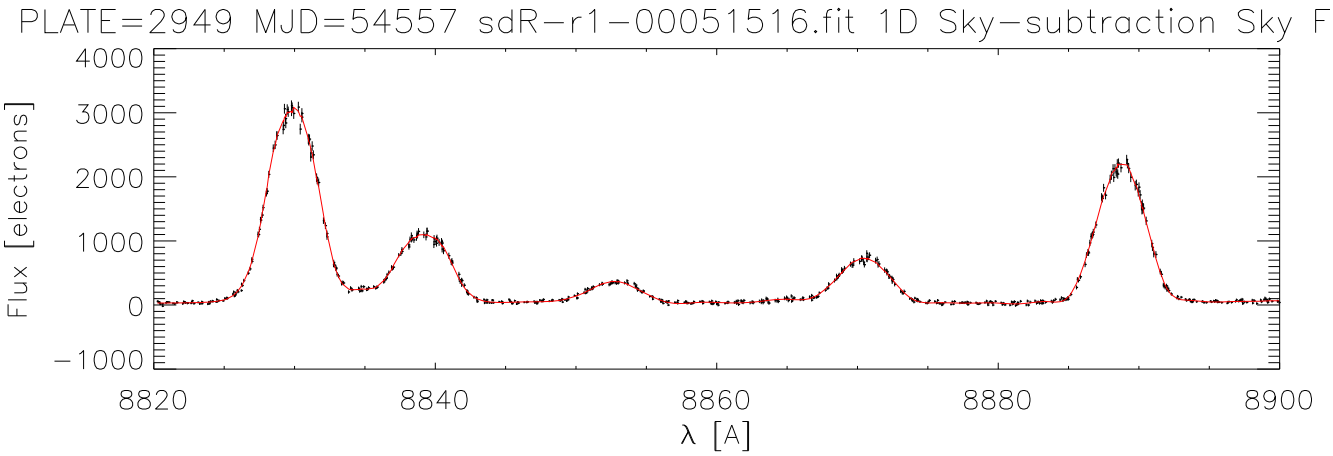

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

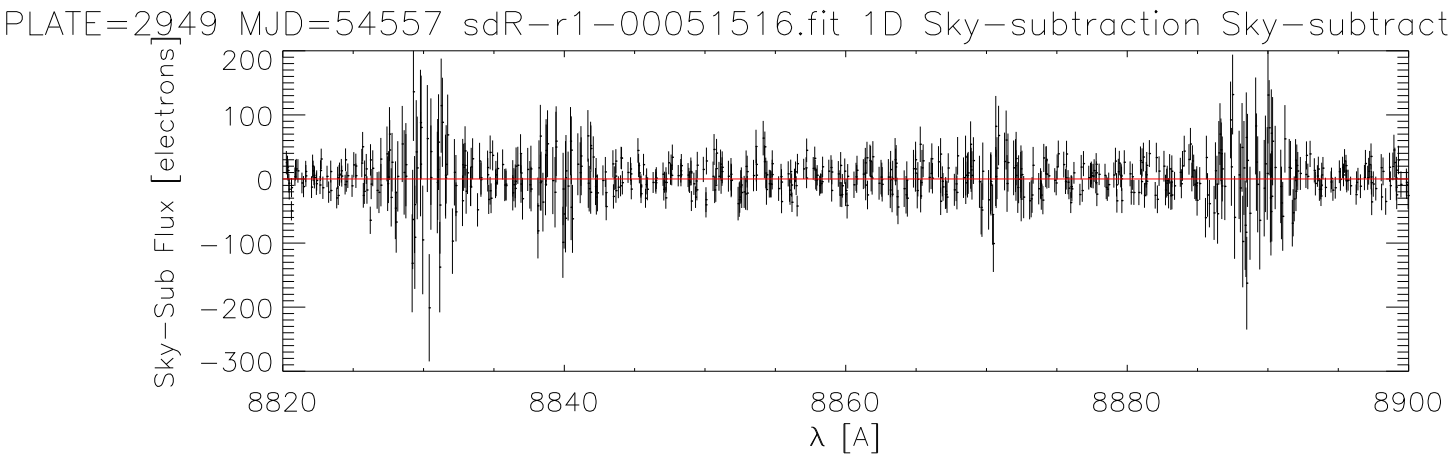

6300.3040
stdev 0.033
extra −0.19
6363.7760
stdev 0.066
extra −0.14
6553.6100
stdev 0.062
extra −0.14
6923.2100
stdev 0.064
extra −0.13
6949.0300
stdev 0.046
extra −0.07
7571.7500
stdev 0.052
extra −0.06
7794.1200
stdev 0.044
extra −0.16
7821.5100
stdev 0.039
extra −0.12
8399.1600
stdev 0.023
extra −0.09
8430.1700
stdev 0.025
extra −0.11
8885.8300
stdev 0.021
extra −0.10
8919.6100
stdev 0.020
extra −0.10
meas − pred, pix
mfib1 16
mfib2 16

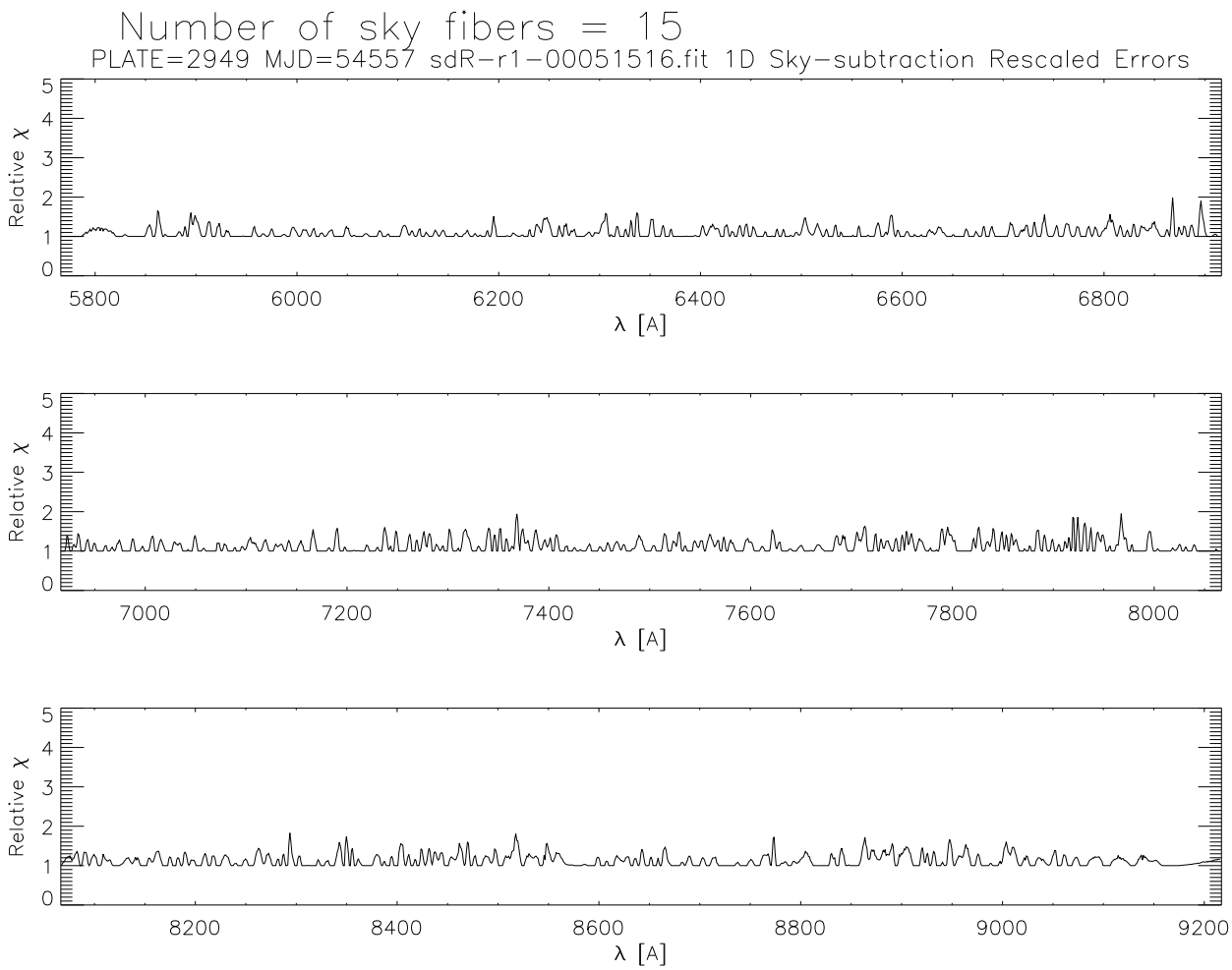

sky shift, pixels
−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
−0.20
5000
6000
7000
8000
9000
10000

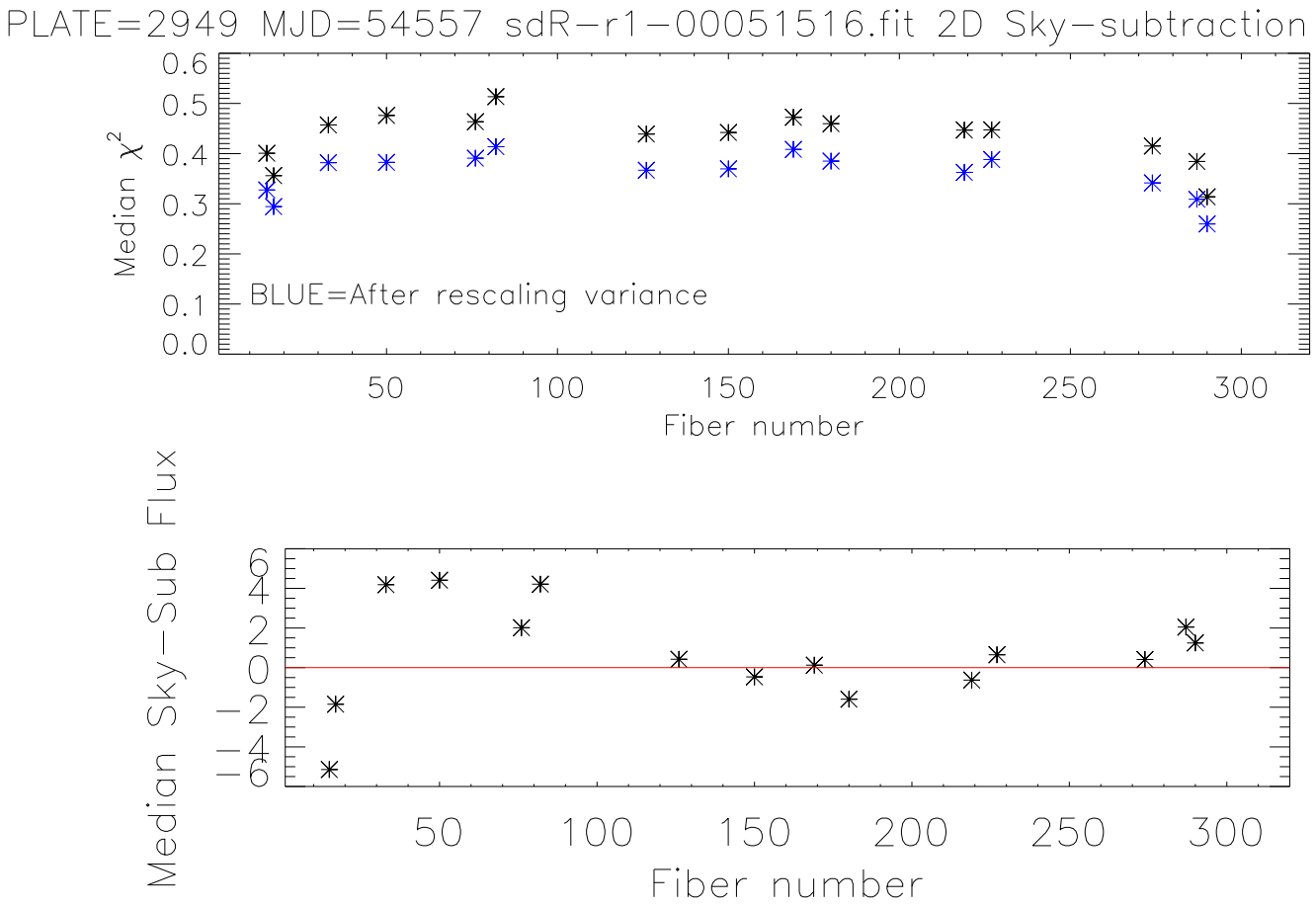

PLATE=2949 MJD=54557 Smooth superflat for sdR-r1-00051516.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

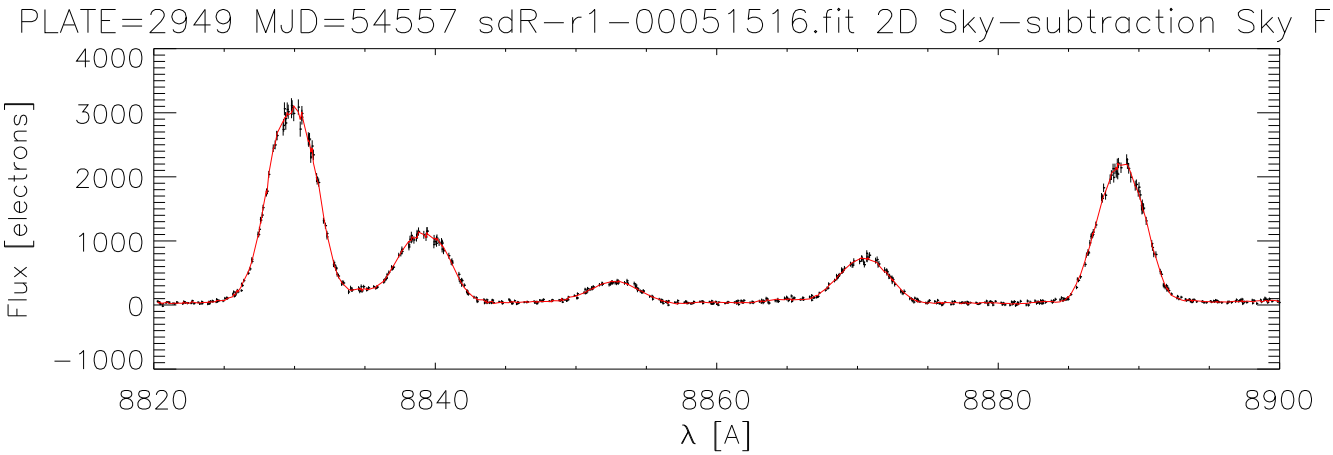

PLATE=2949 MJD=54557 sdR-r1-00051516.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

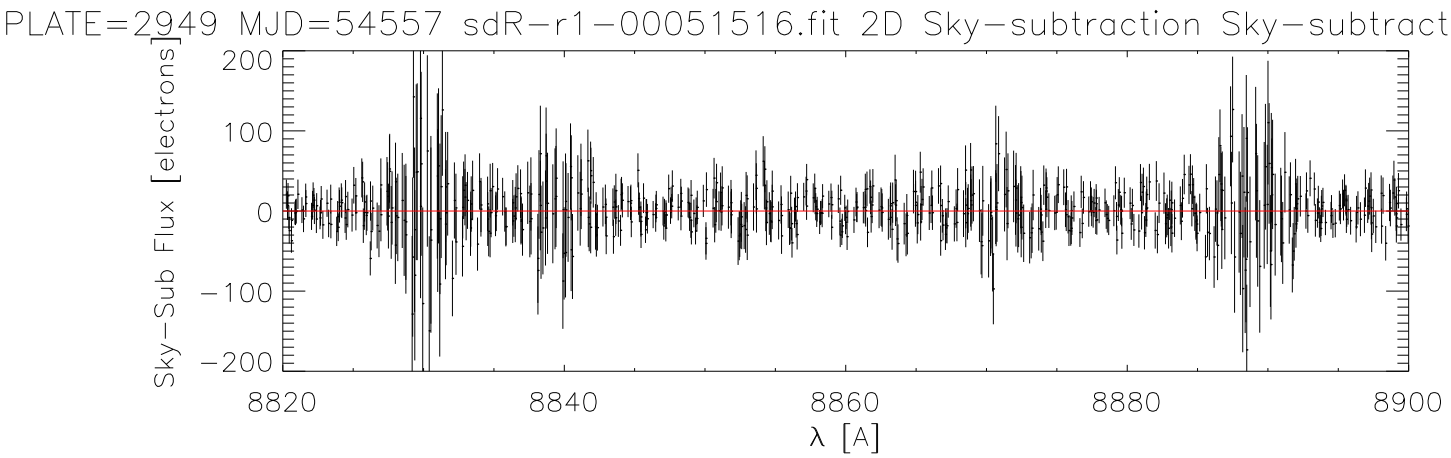

PLATE=2949 MJD=54557 sdR-r1-00051516.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

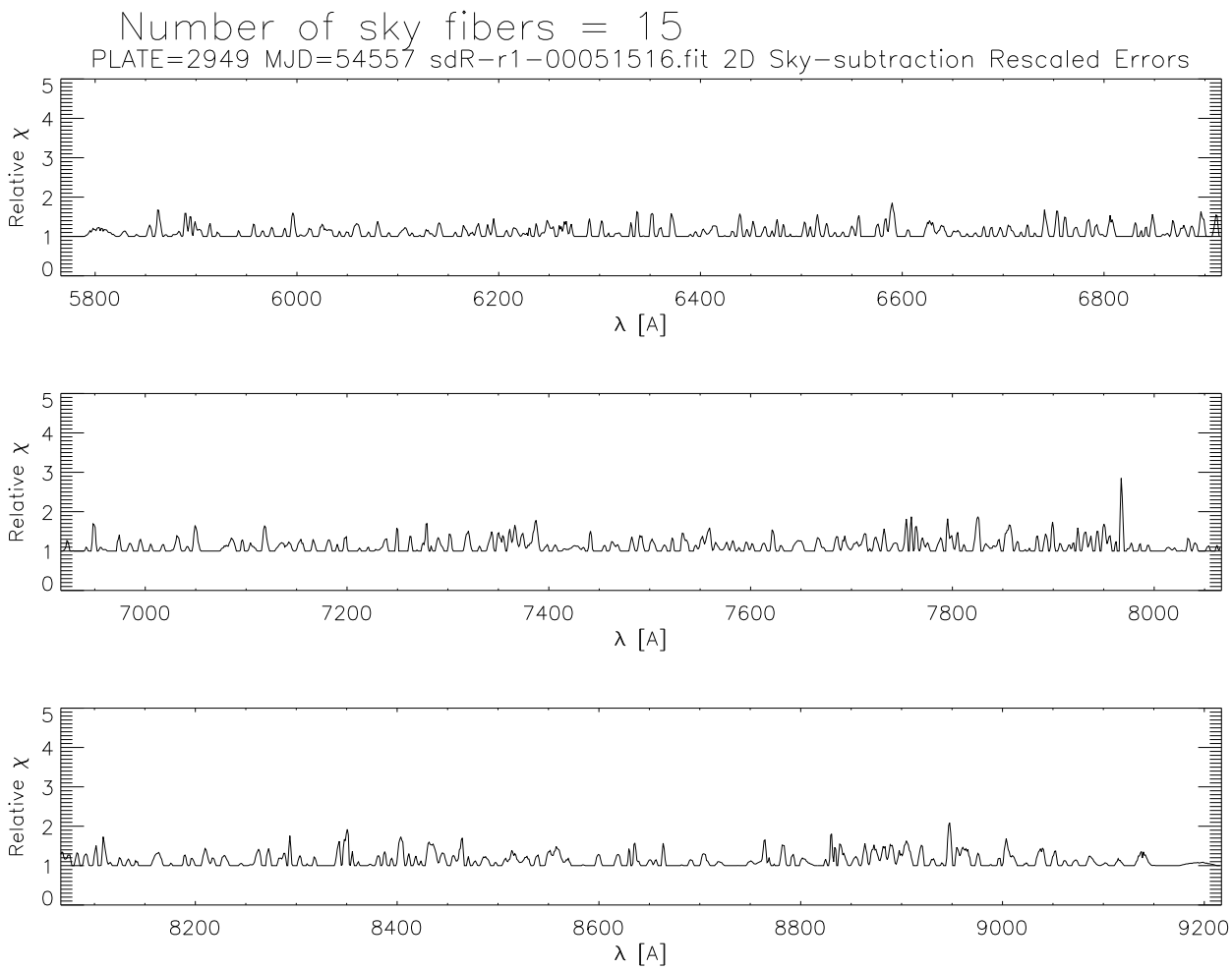

PLATE=2949 MJD=54557 sdR-r1-00051516.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

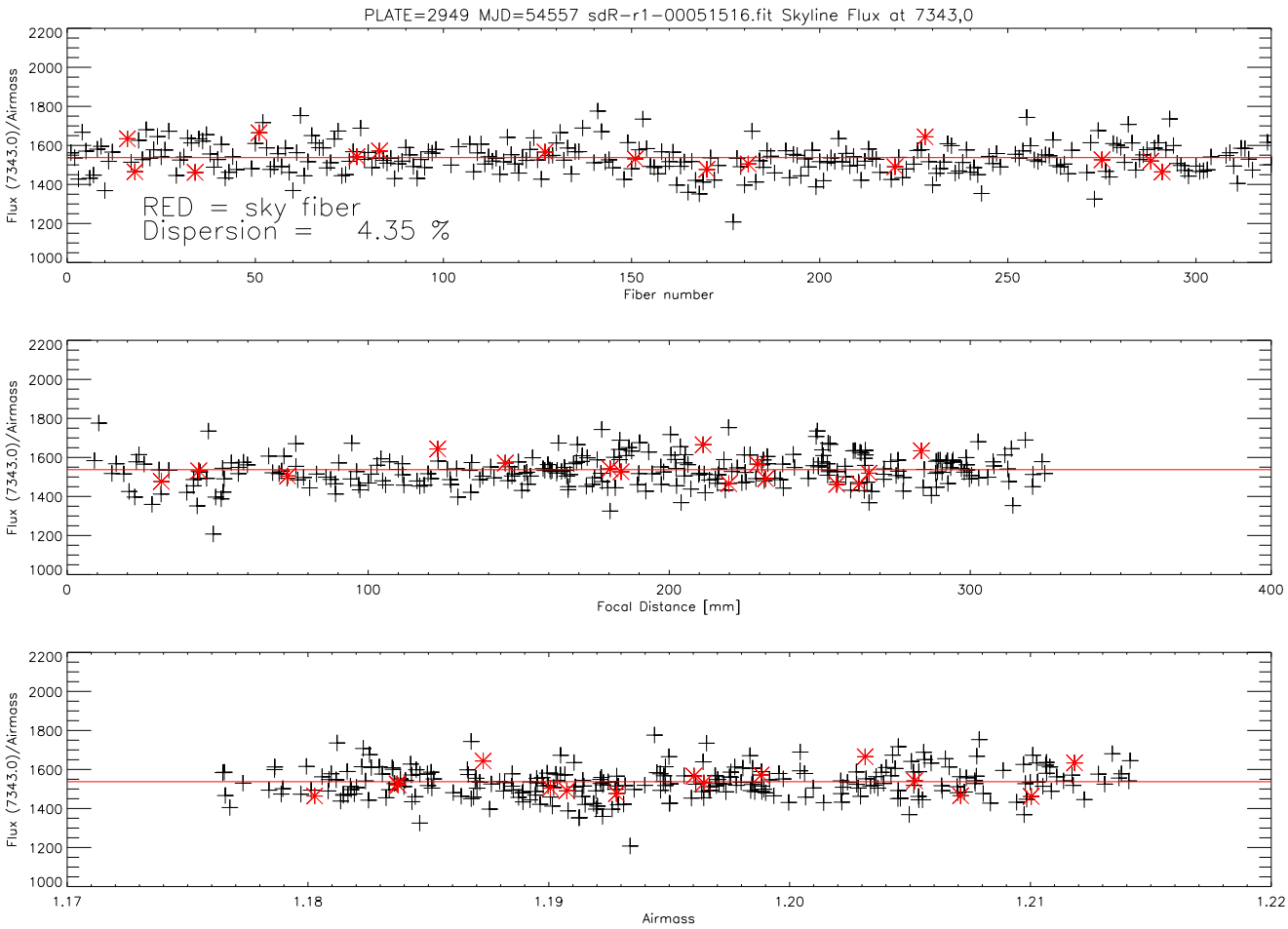

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-r1-00051516.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

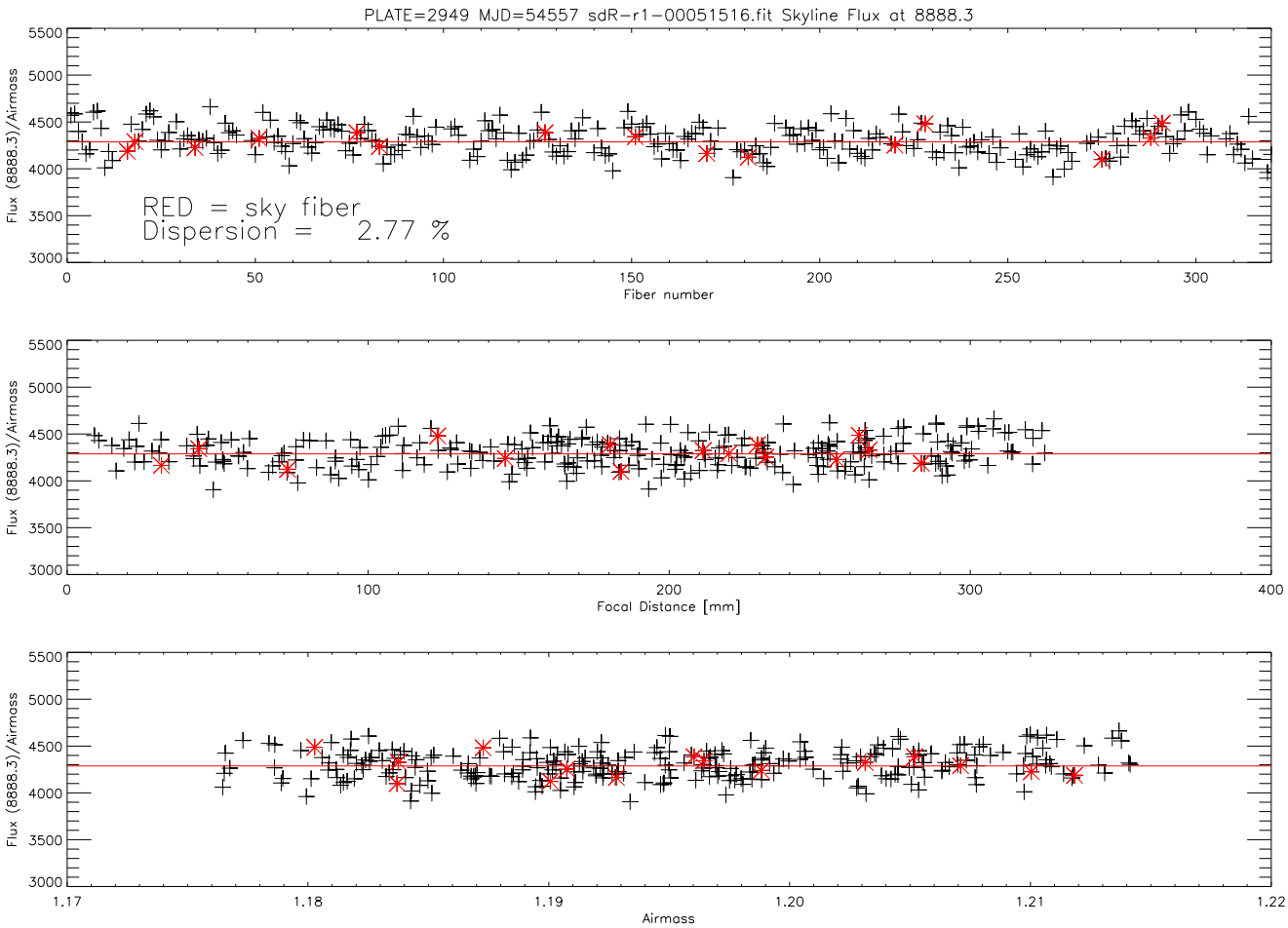

PLATE=2949 MJD=54557 sdR-r1-00051516.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

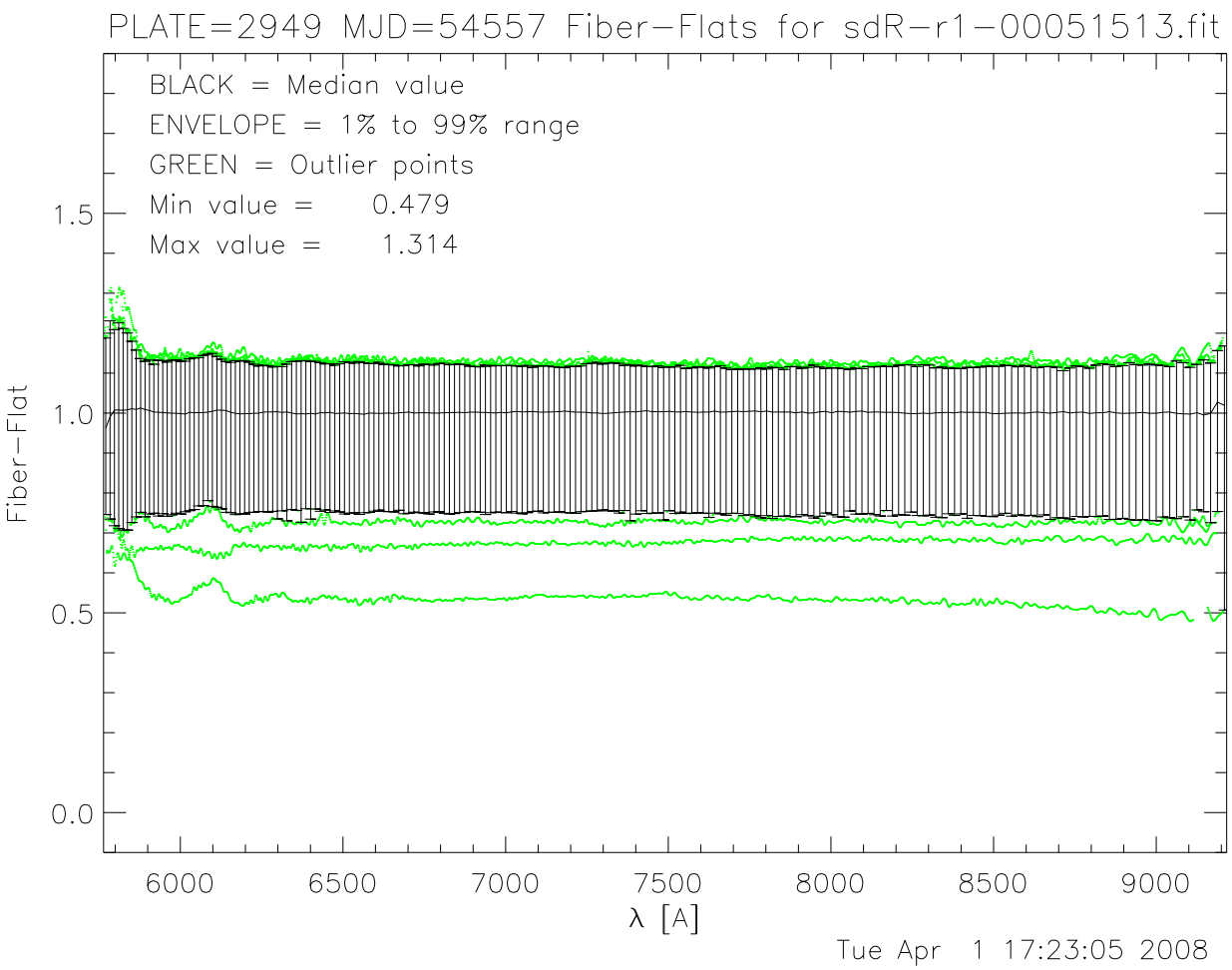

PLATE=2949 MJD=54557 sdR-r1-00051516.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

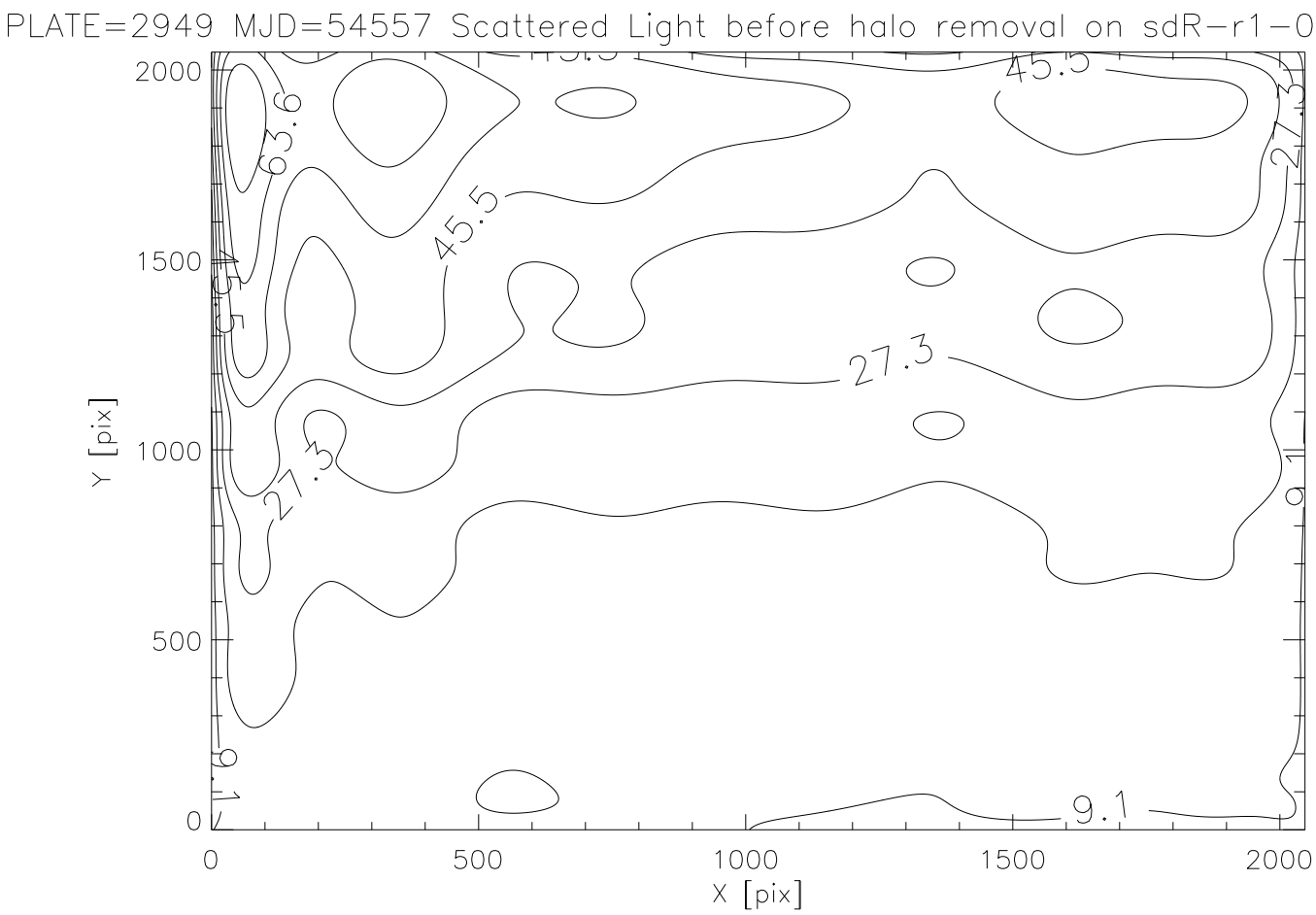

PLATE=2949 MJD=54557 sdR-r1-00051516.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

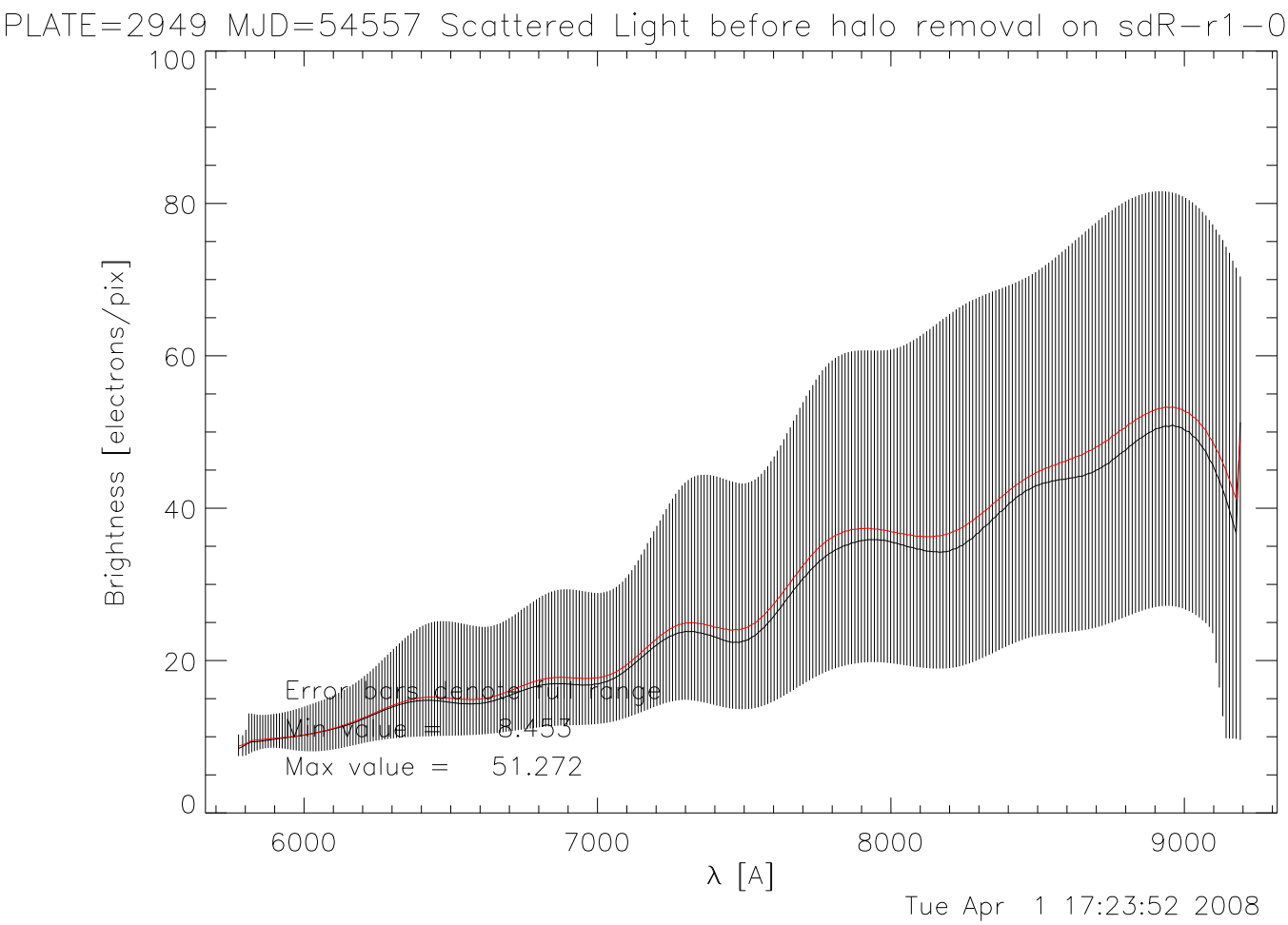

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-r1-00051516.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

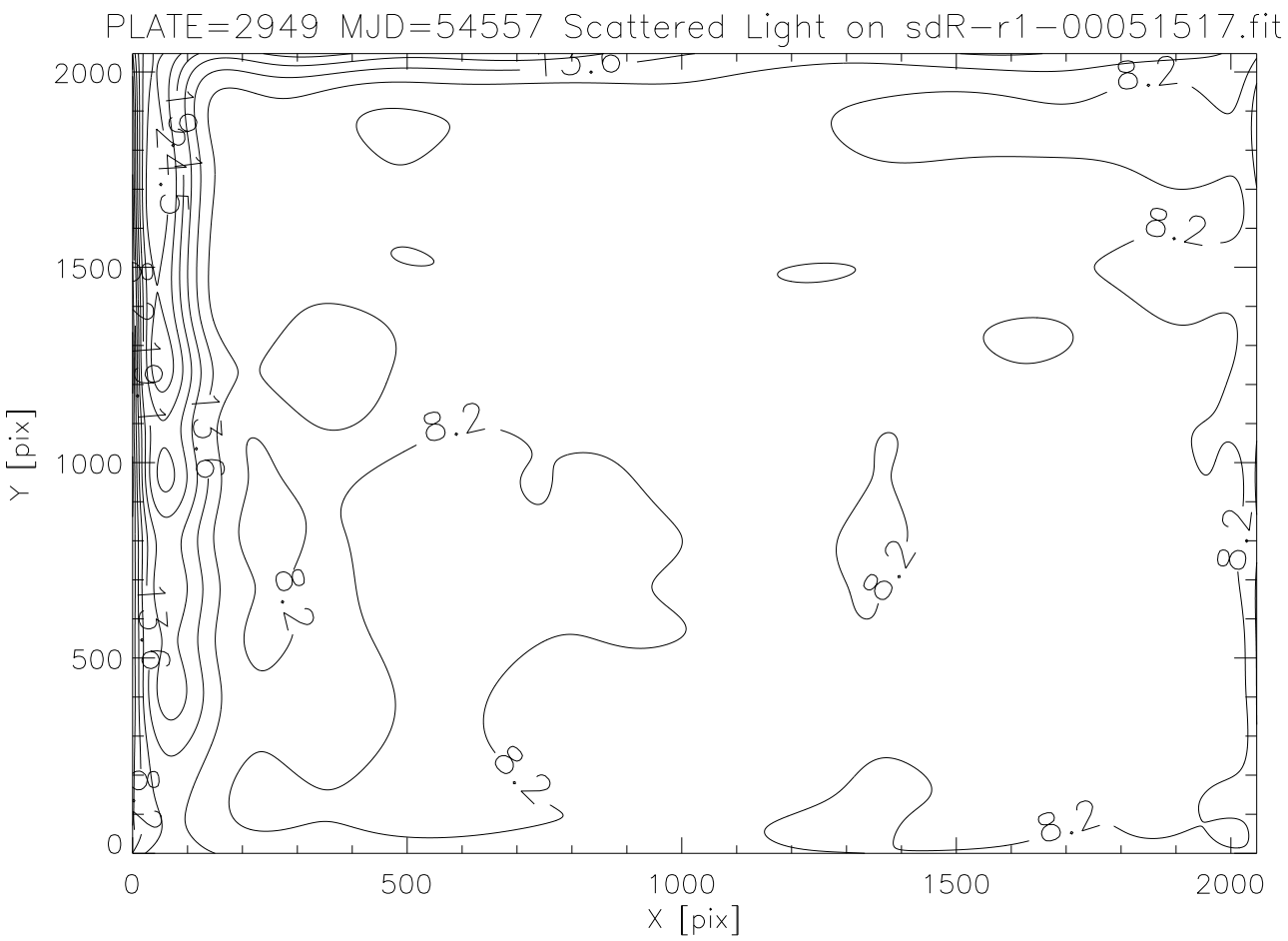

PLATE=2949 MJD=54557 sdR-r1-00051516.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.35 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

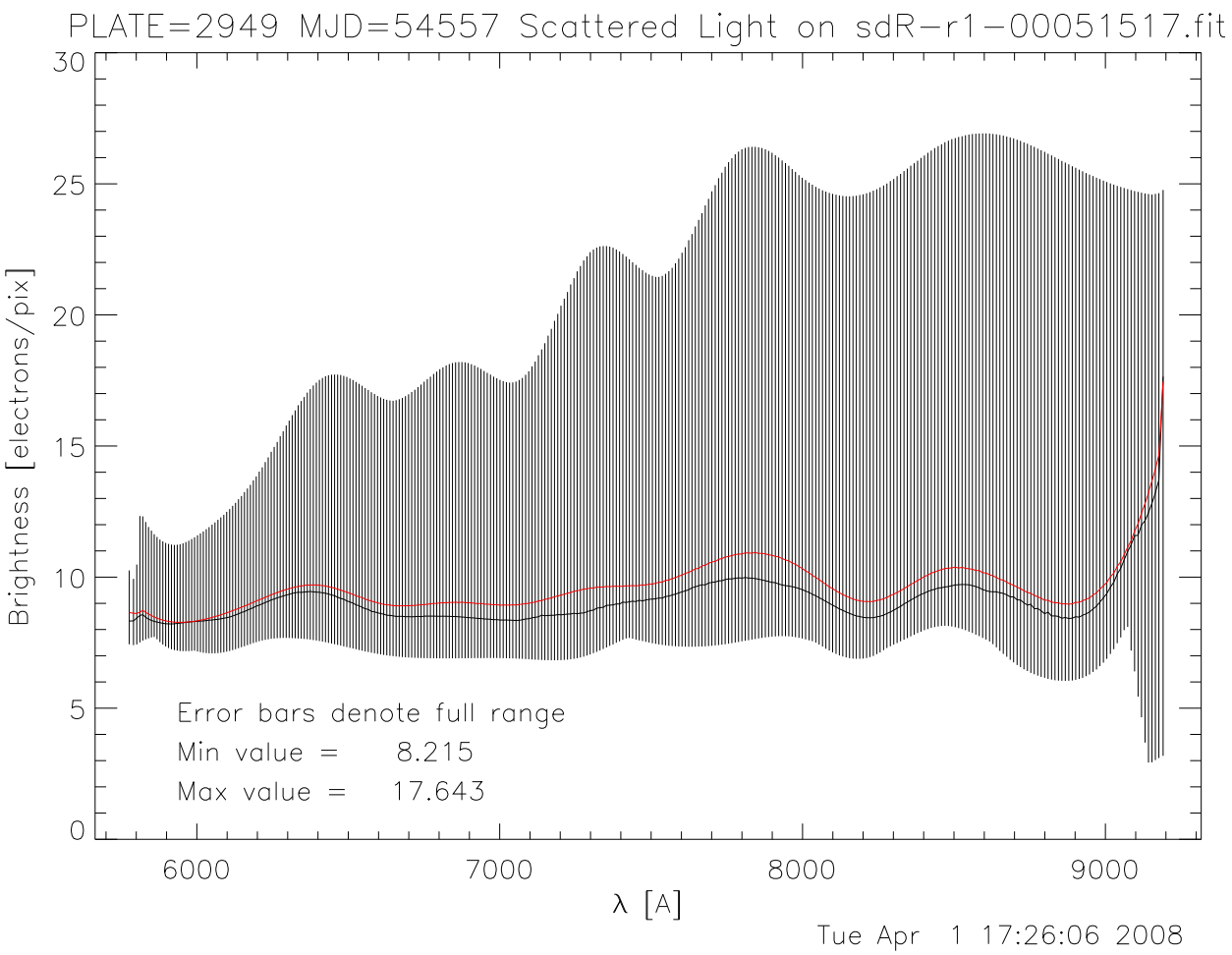

PLATE=2949 MJD=54557 sdR-r1-00051516.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.77 %
Fiber number
Focal Distance [mm]
Airmass

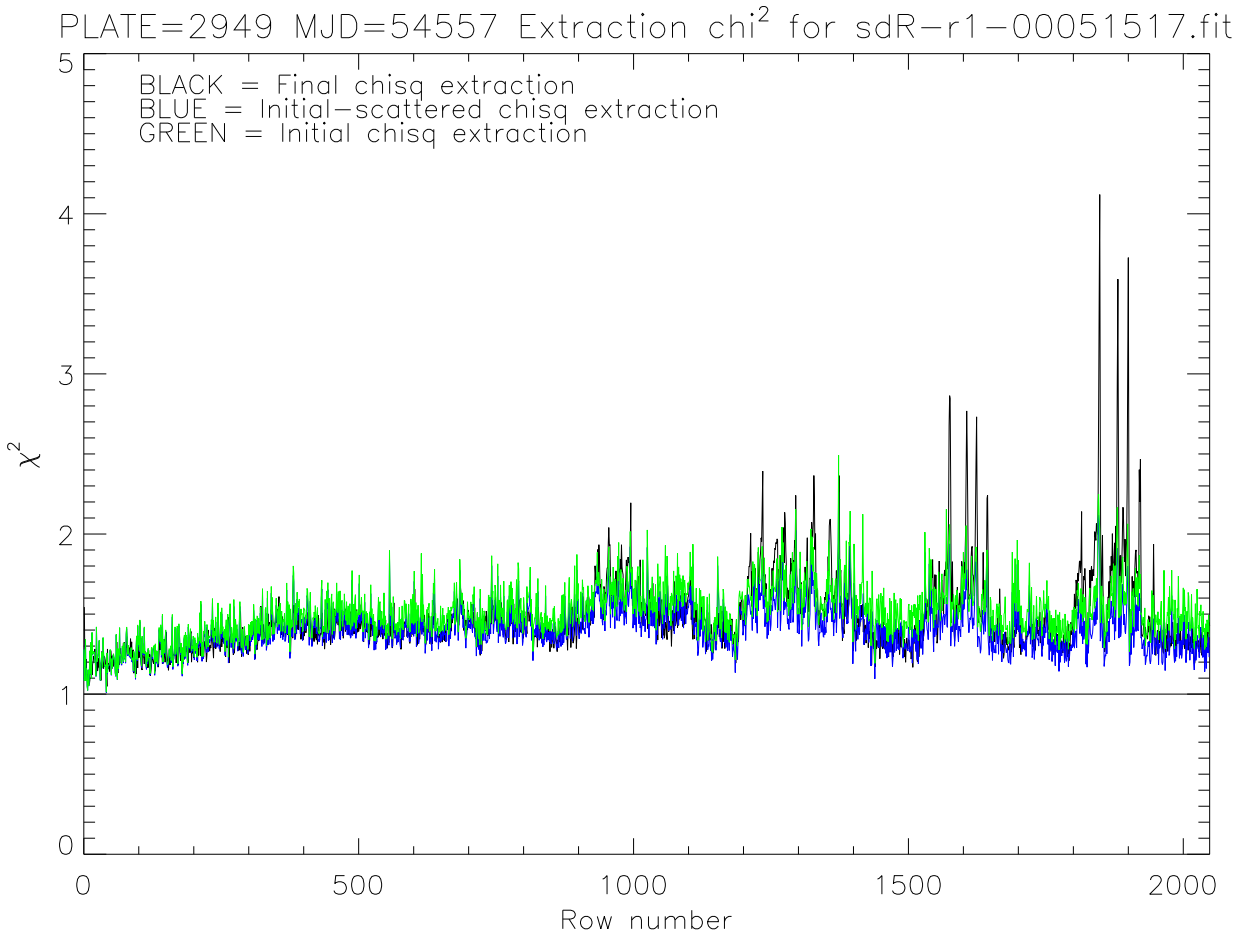

PLATE=2949 MJD=54557 Fiber−Flats for sdR−r1−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.479
Max value = 1.314
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Apr 1 17:23:05 2008

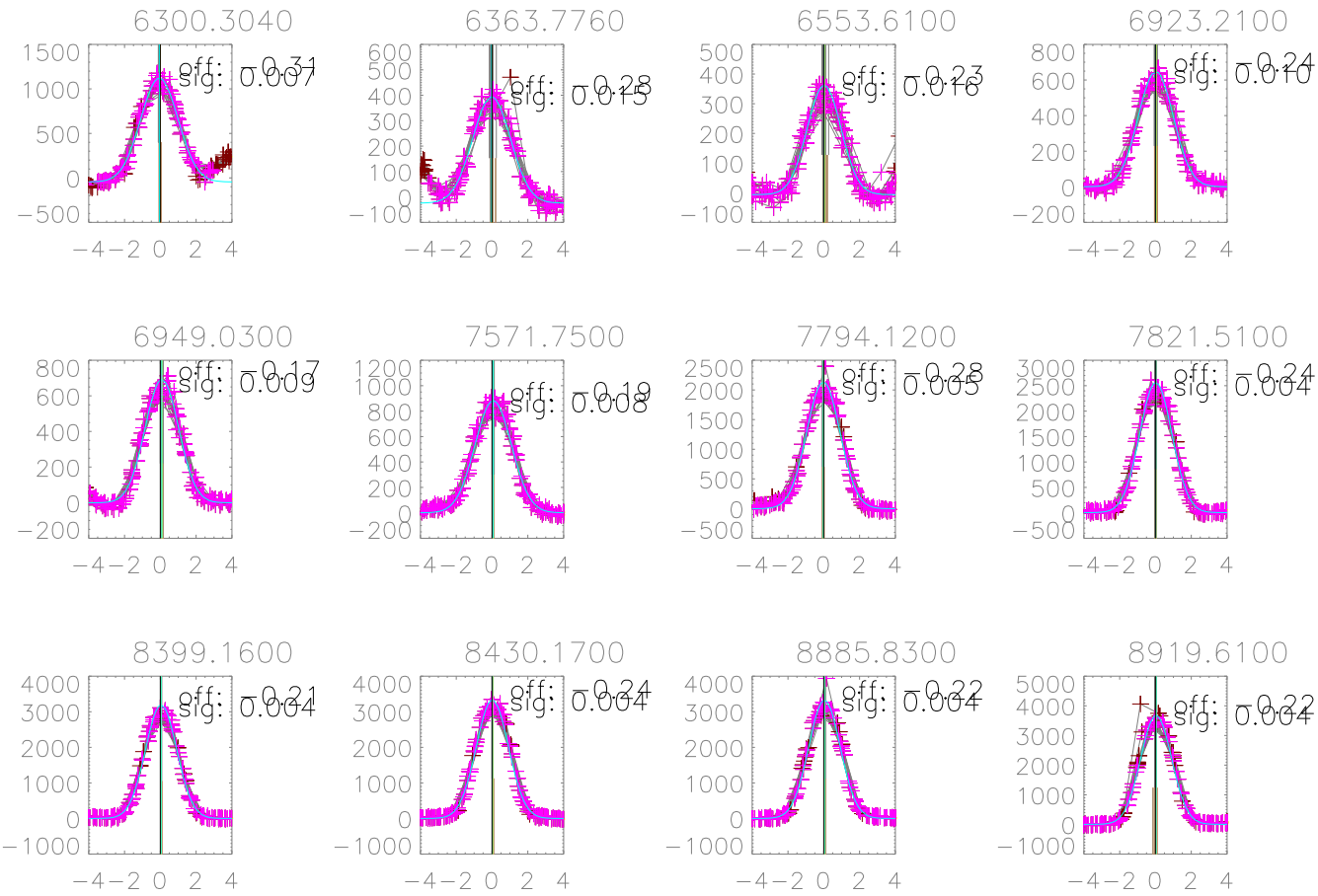

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r1-00051517.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
63.6
45.5
27.3
9.1

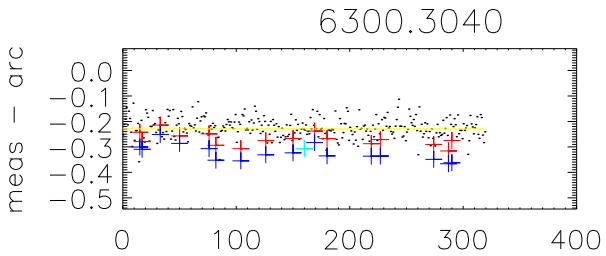

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r1-00051517.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.453
Max value = 51.272
Tue Apr 1 17:23:52 2008

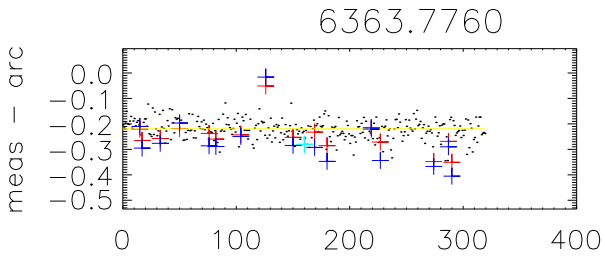

PLATE=2949 MJD=54557 Scattered Light on sdR-r1-00051517.fit
15.6
8.2
19.4.5
13.6
Y [pix]
X [pix]
0
500
1000
1500
2000

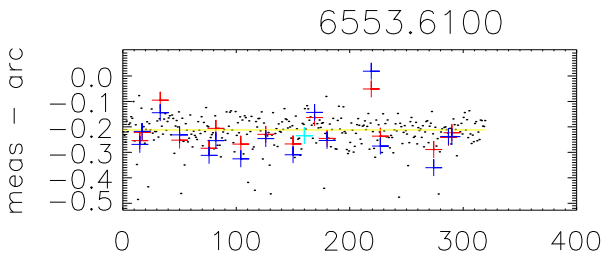

PLATE=2949 MJD=54557 Scattered Light on sdR-r1-00051517.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.215
Max value = 17.643
Tue Apr 1 17:26:06 2008

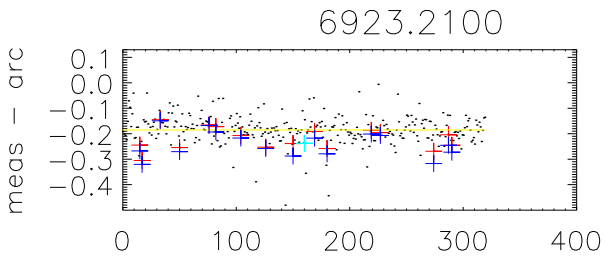

PLATE=2949 MJD=54557 Extraction chi^2 for sdR−r1−00051517.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

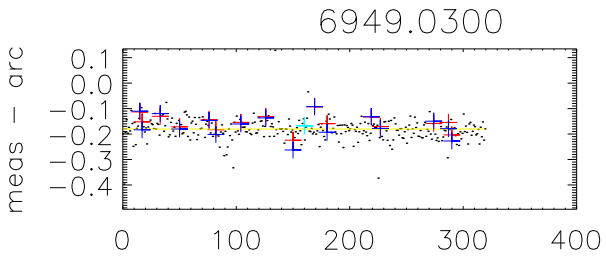

6300.3040
off: -0.31
sig: 0.007
6363.7760
off: -0.28
sig: 0.015
6553.6100
off: -0.23
sig: 0.016
6923.2100
off: -0.24
sig: 0.010
6949.0300
off: -0.17
sig: 0.009
7571.7500
off: -0.19
sig: 0.008
7794.1200
off: -0.28
sig: 0.005
7821.5100
off: -0.24
sig: 0.004
8399.1600
off: -0.21
sig: 0.004
8430.1700
off: -0.24
sig: 0.004
8885.8300
off: -0.22
sig: 0.004
8919.6100
off: -0.22
sig: 0.004

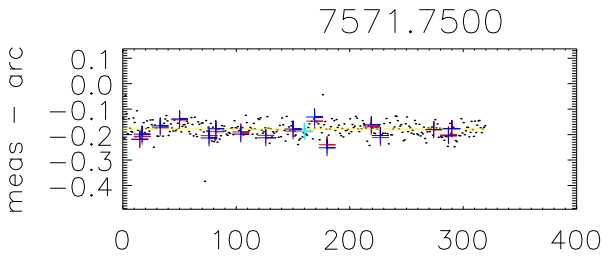

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

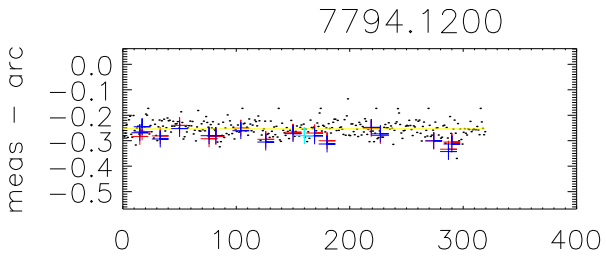

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

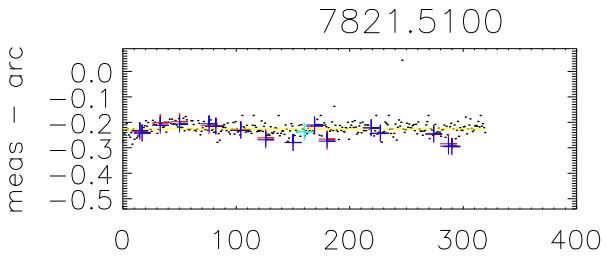

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

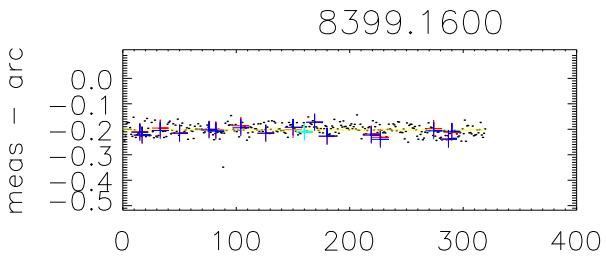

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

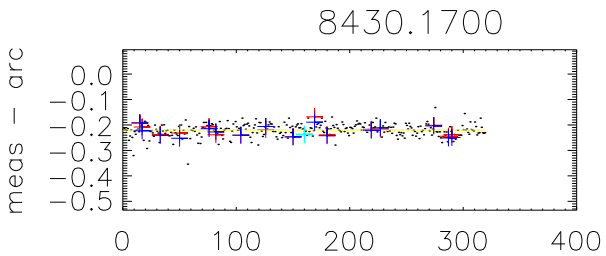

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

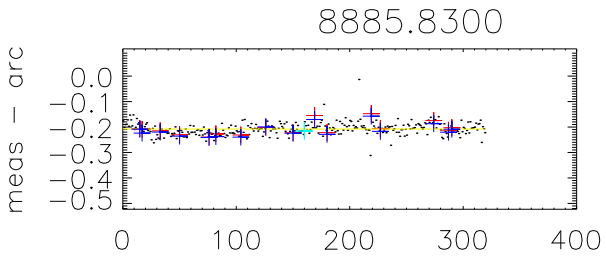

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

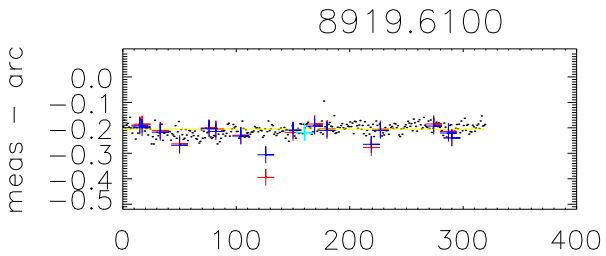

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

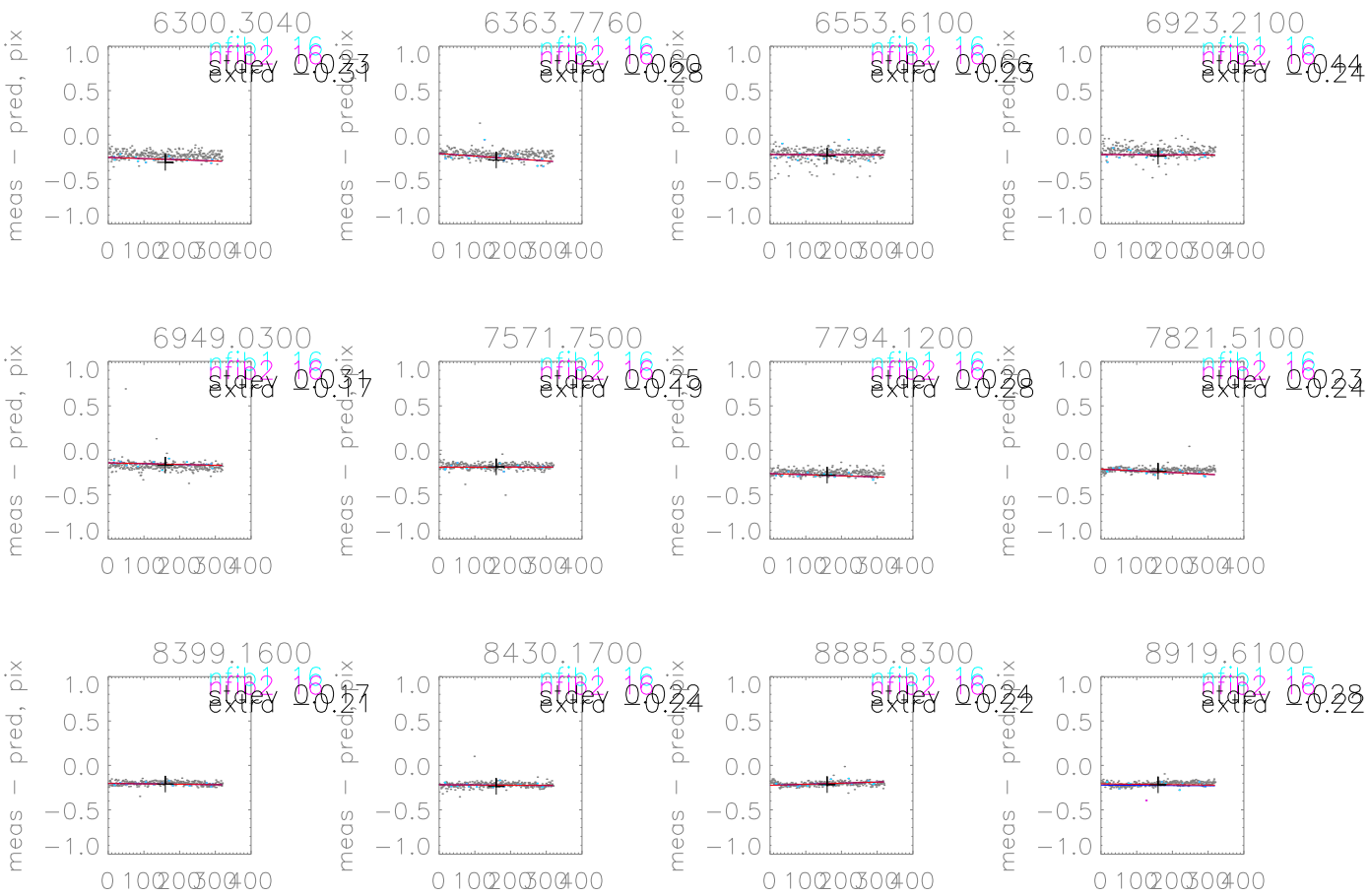

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

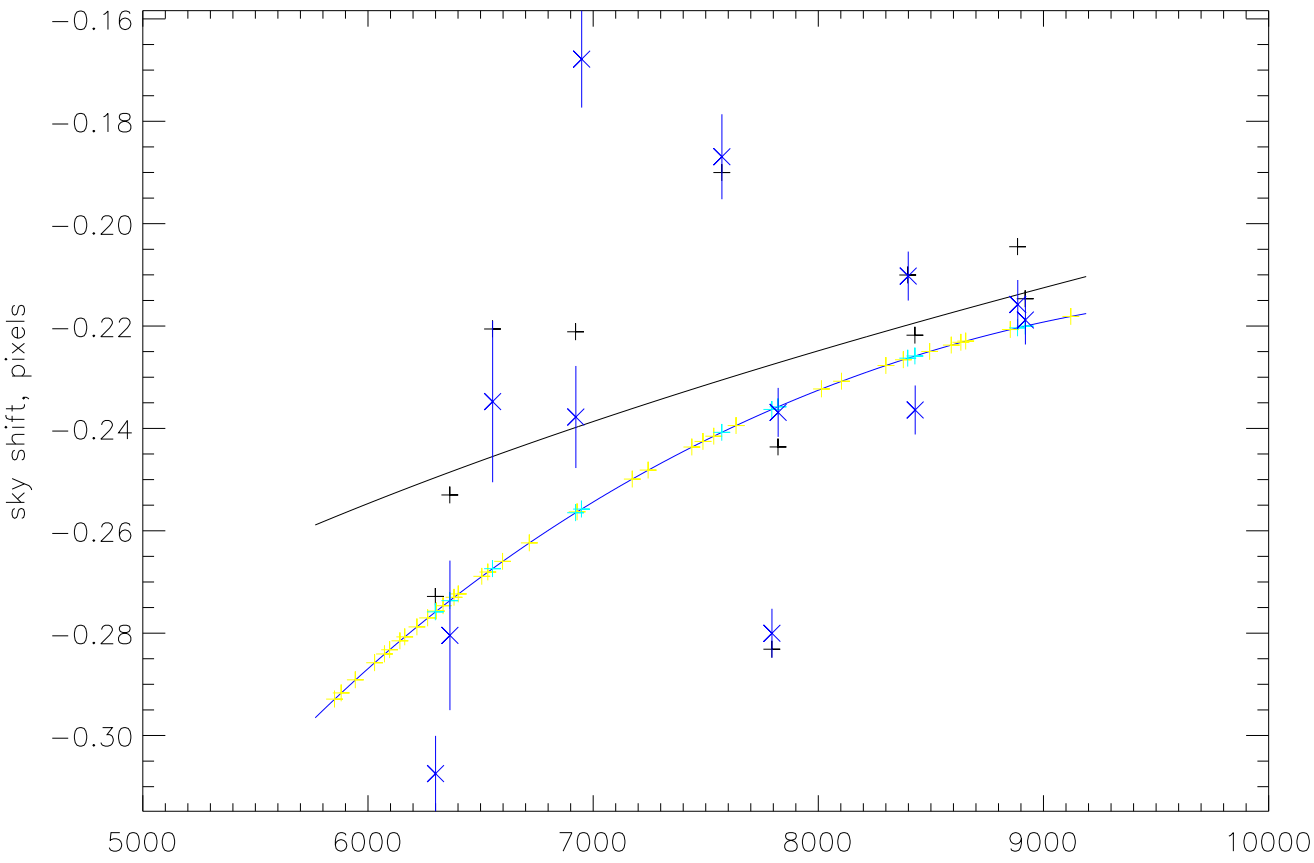

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

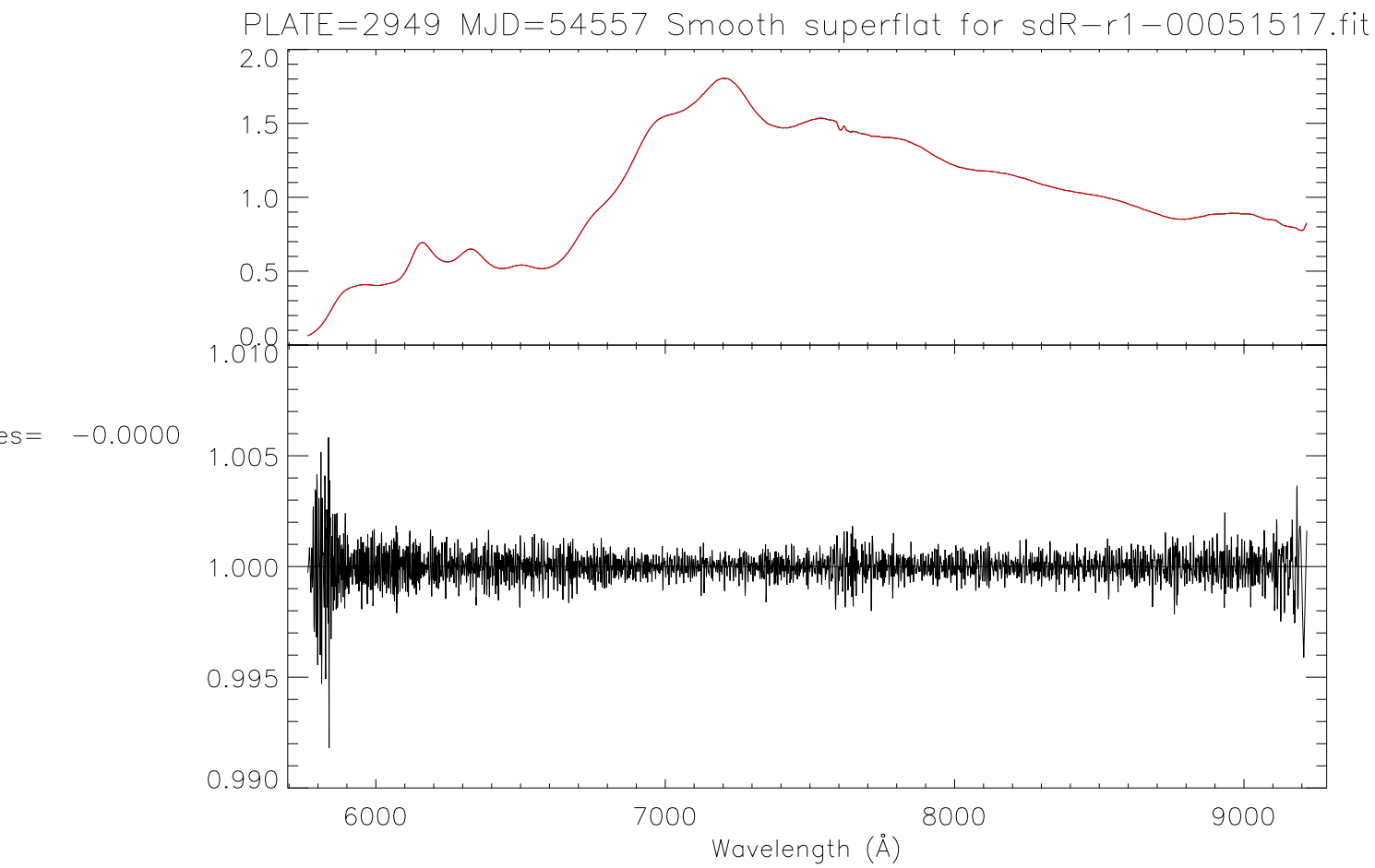

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

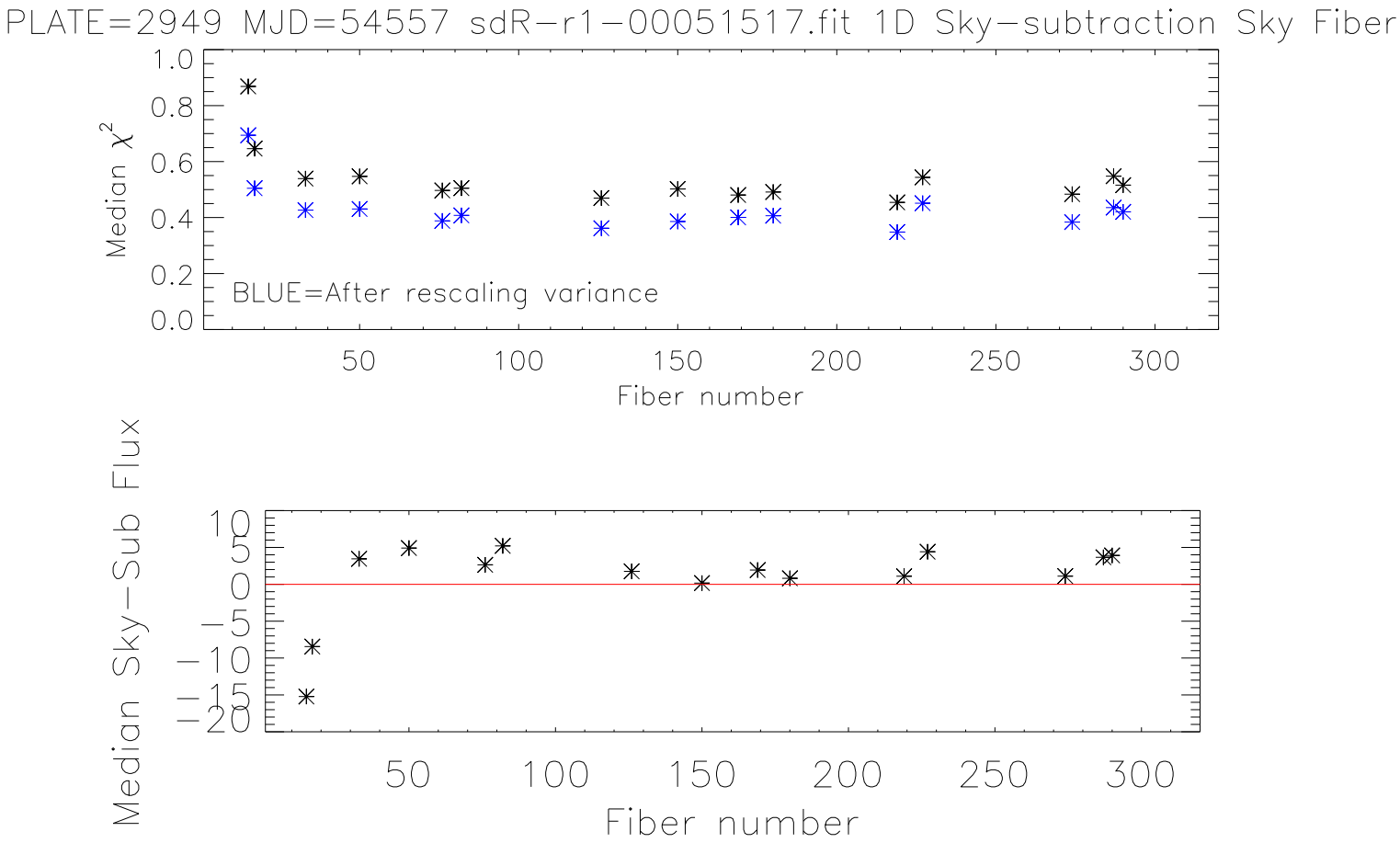

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

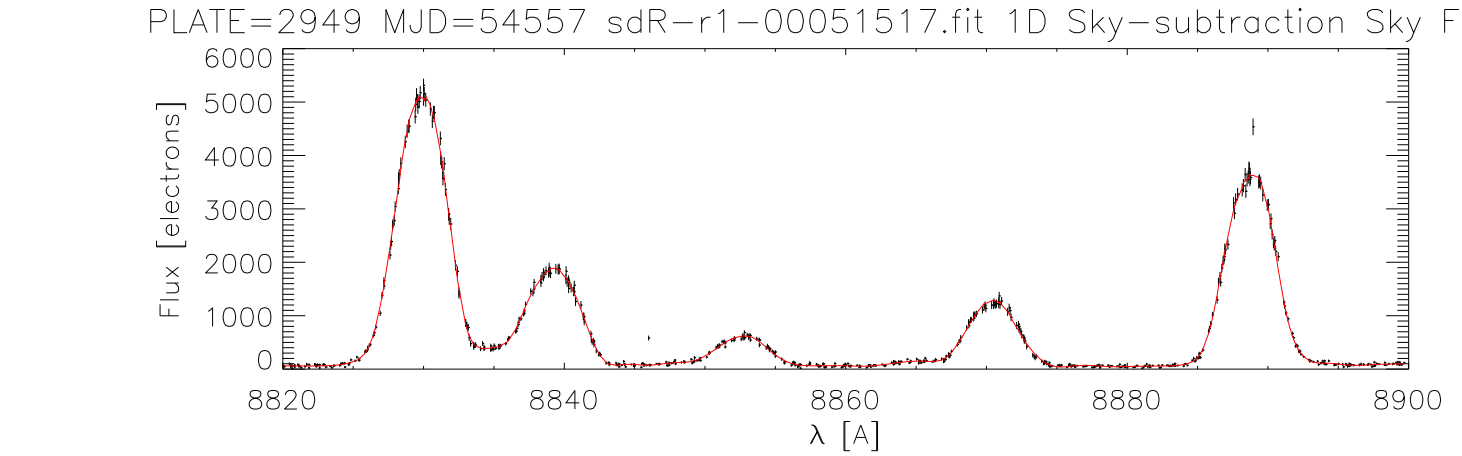

6300.3040
stdev 0.23
extra 0.31
6363.7760
stdev 0.20
extra 0.28
6553.6100
stdev 0.16
extra 0.23
6923.2100
stdev 0.14
extra 0.24
6949.0300
stdev 0.31
extra 0.17
7571.7500
stdev 0.25
extra 0.49
7794.1200
stdev 0.20
extra 0.28
7821.5100
stdev 0.23
extra 0.24
8399.1600
stdev 0.17
extra 0.21
8430.1700
stdev 0.22
extra 0.24
8885.8300
stdev 0.24
extra 0.22
8919.6100
stdev 0.28
extra 0.22
meas − pred, pix

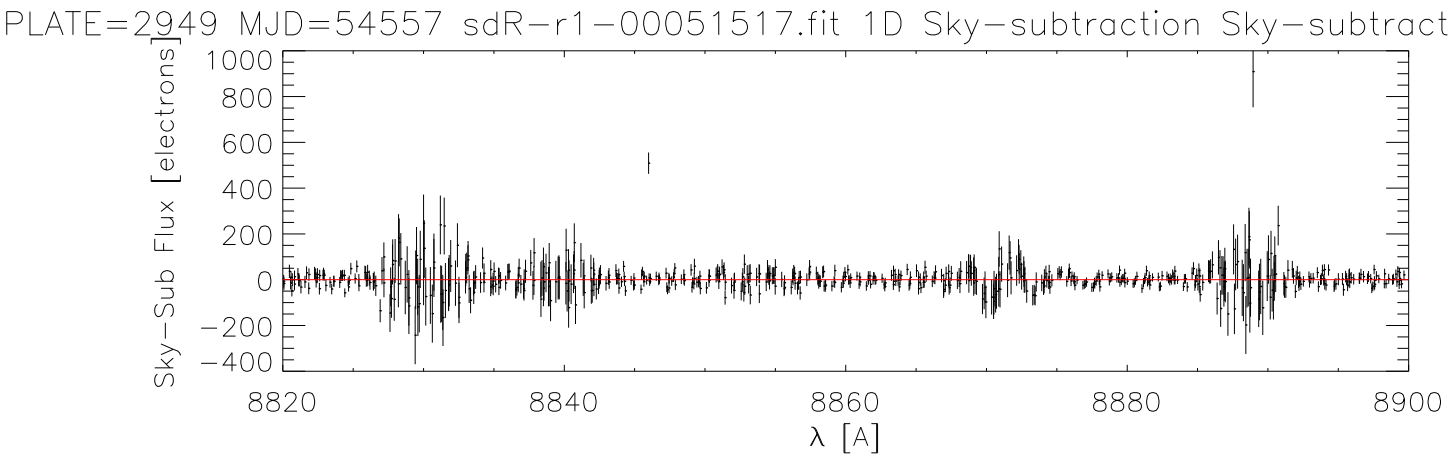

−0.16
−0.18
−0.20
−0.22
−0.24
−0.26
−0.28
−0.30
sky shift, pixels
5000
6000
7000
8000
9000
10000

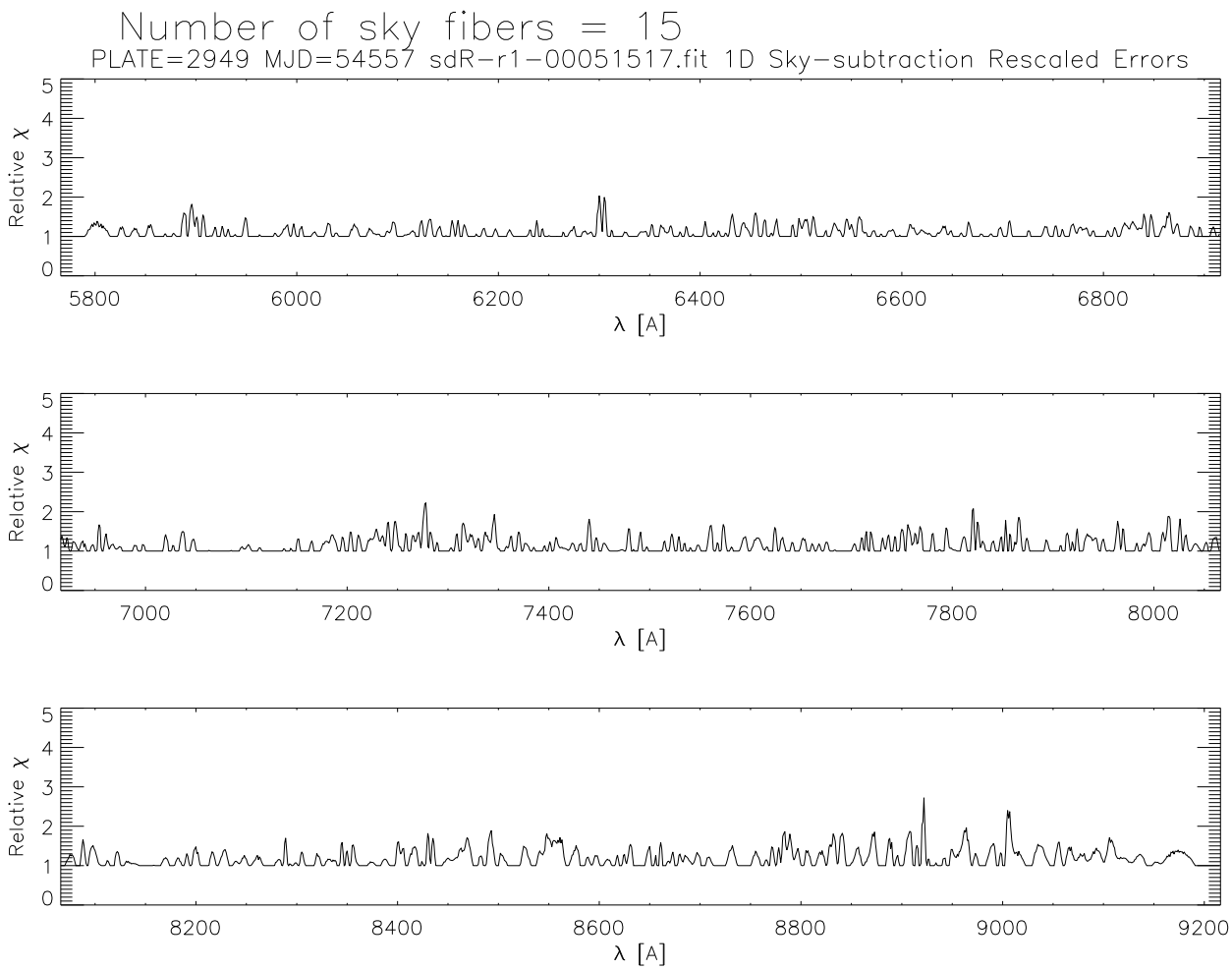

PLATE=2949 MJD=54557 Smooth superflat for sdR-r1-00051517.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

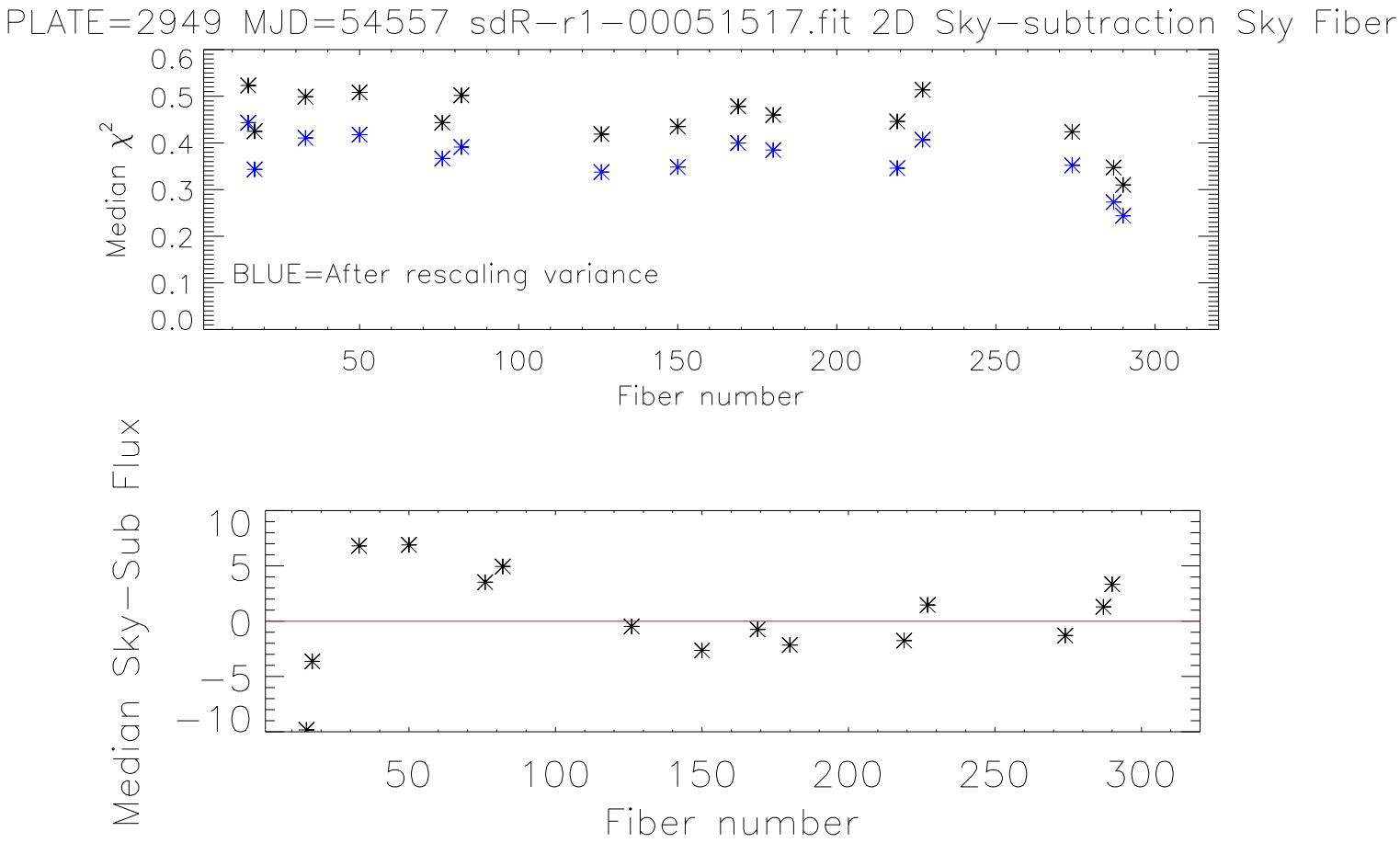
es= −0.0000

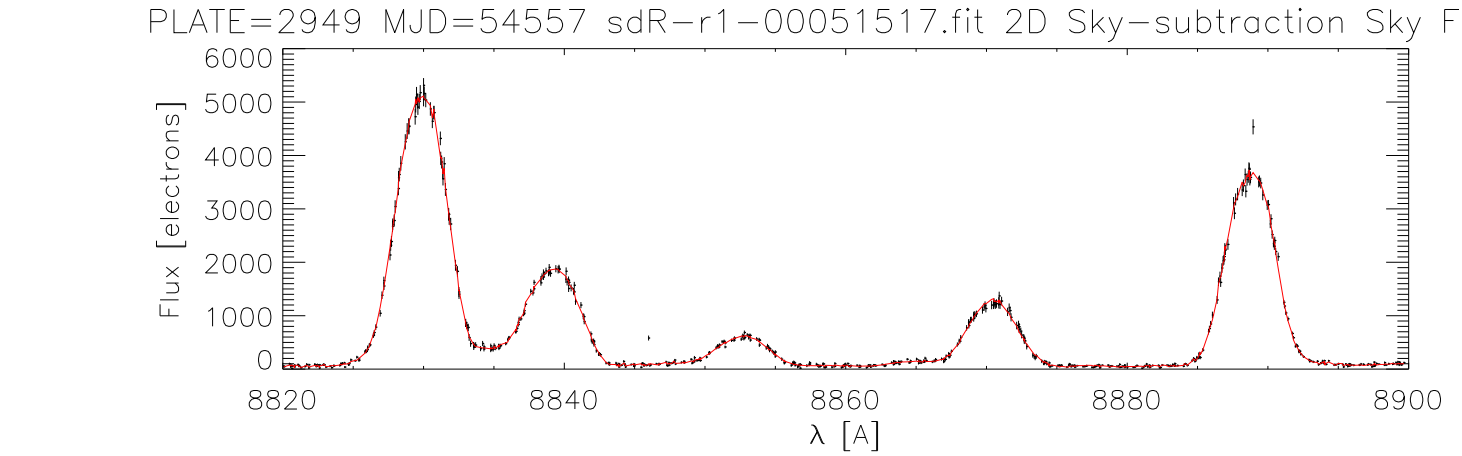

PLATE=2949 MJD=54557 sdR-r1-00051517.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

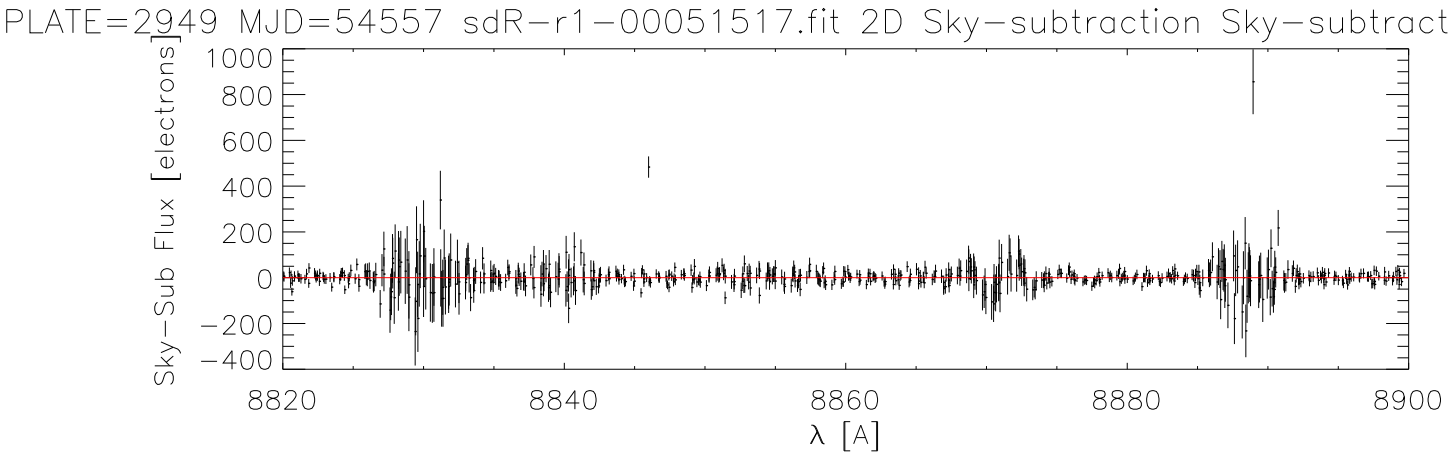

PLATE=2949 MJD=54557 sdR-r1-00051517.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

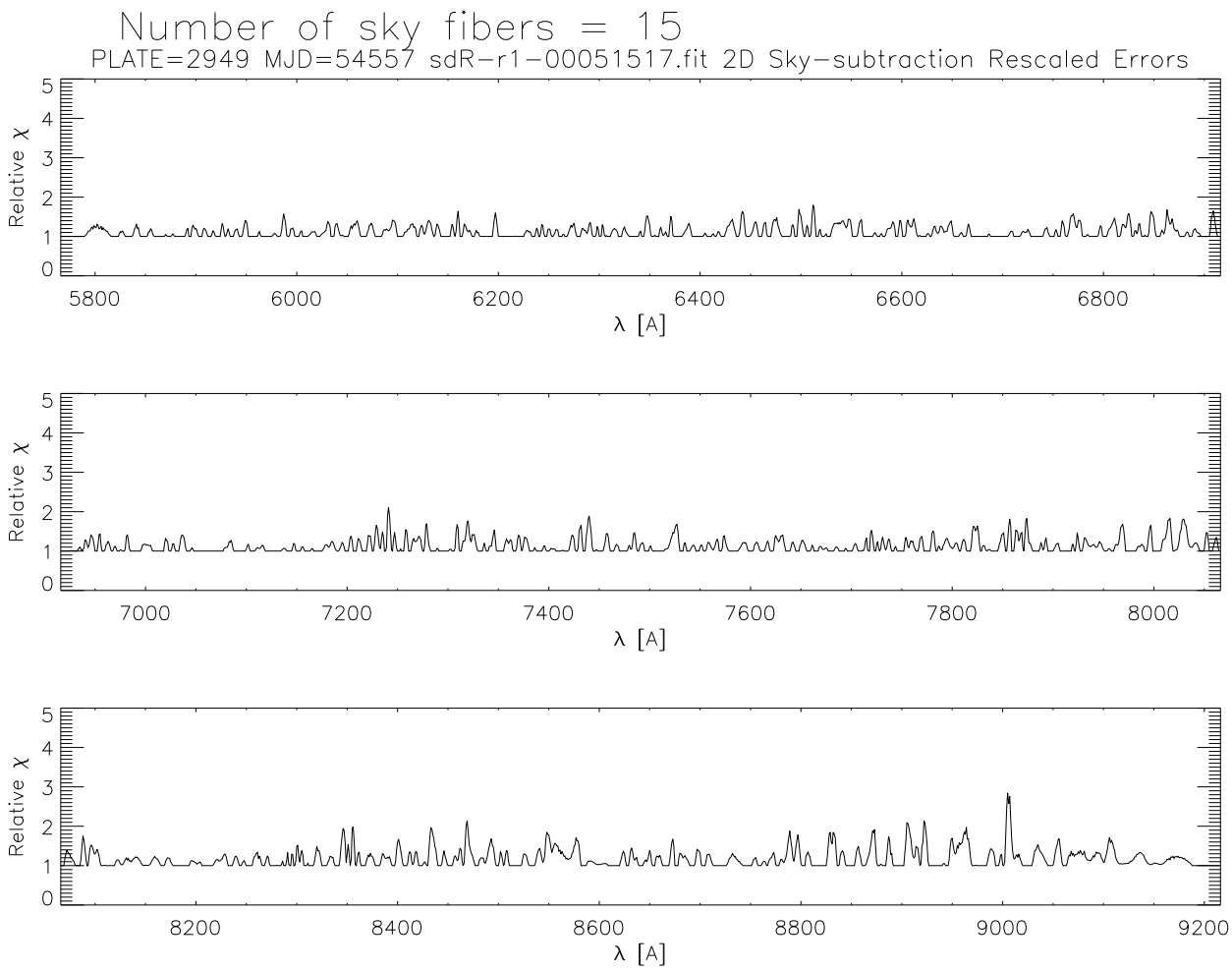

PLATE=2949 MJD=54557 sdR-r1-00051517.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

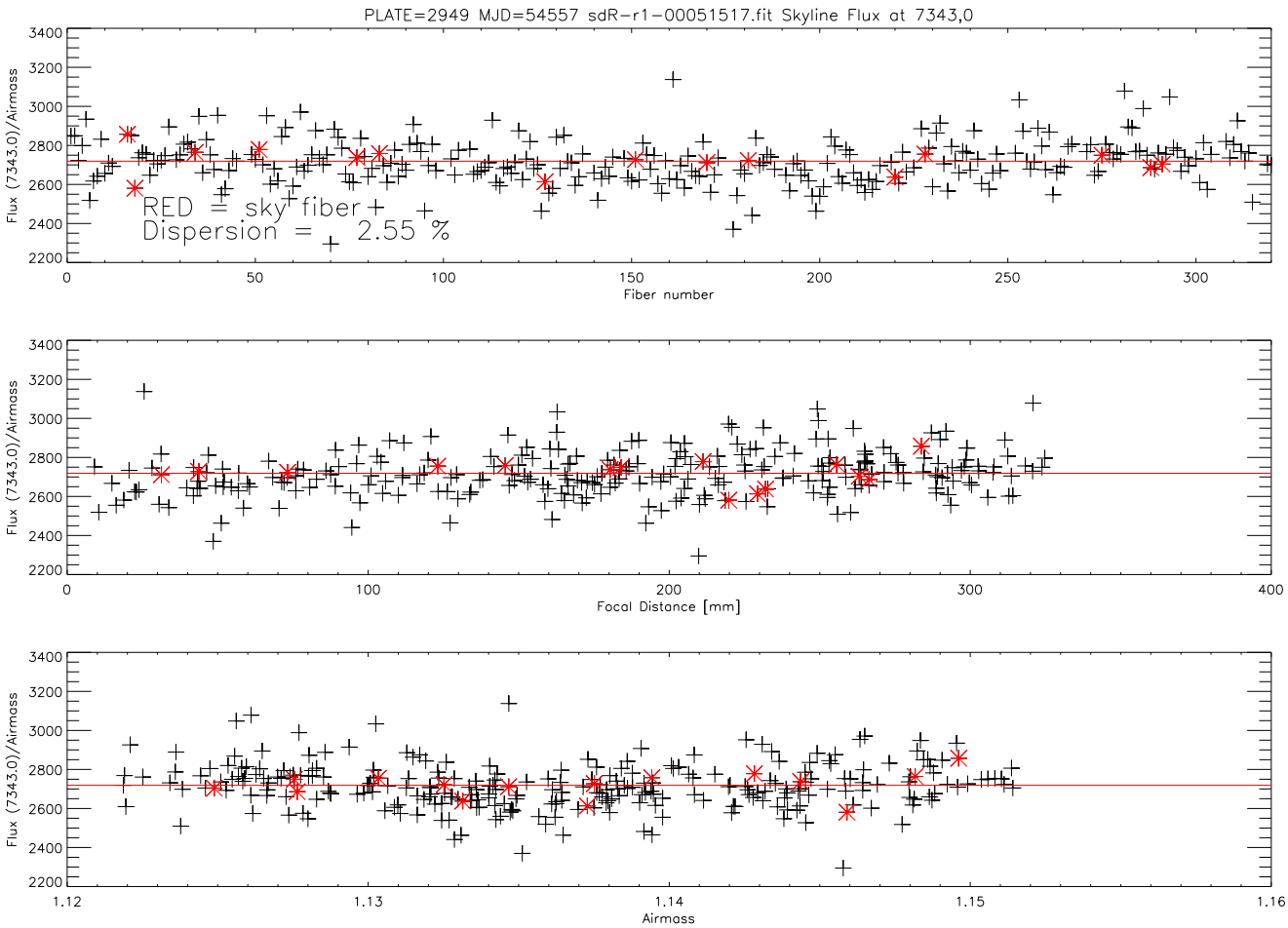

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-r1-00051517.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

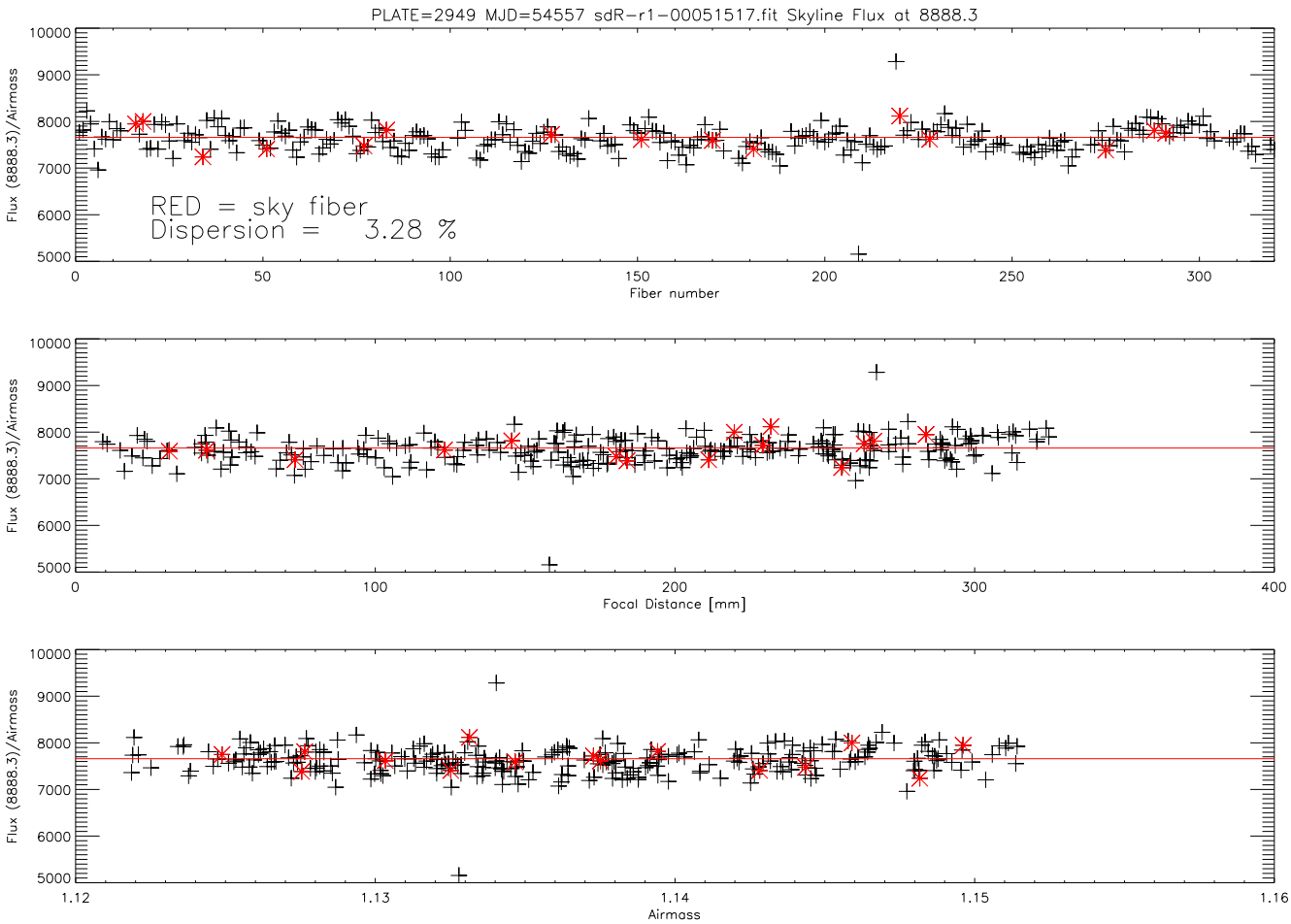

PLATE=2949 MJD=54557 sdR-r1-00051517.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

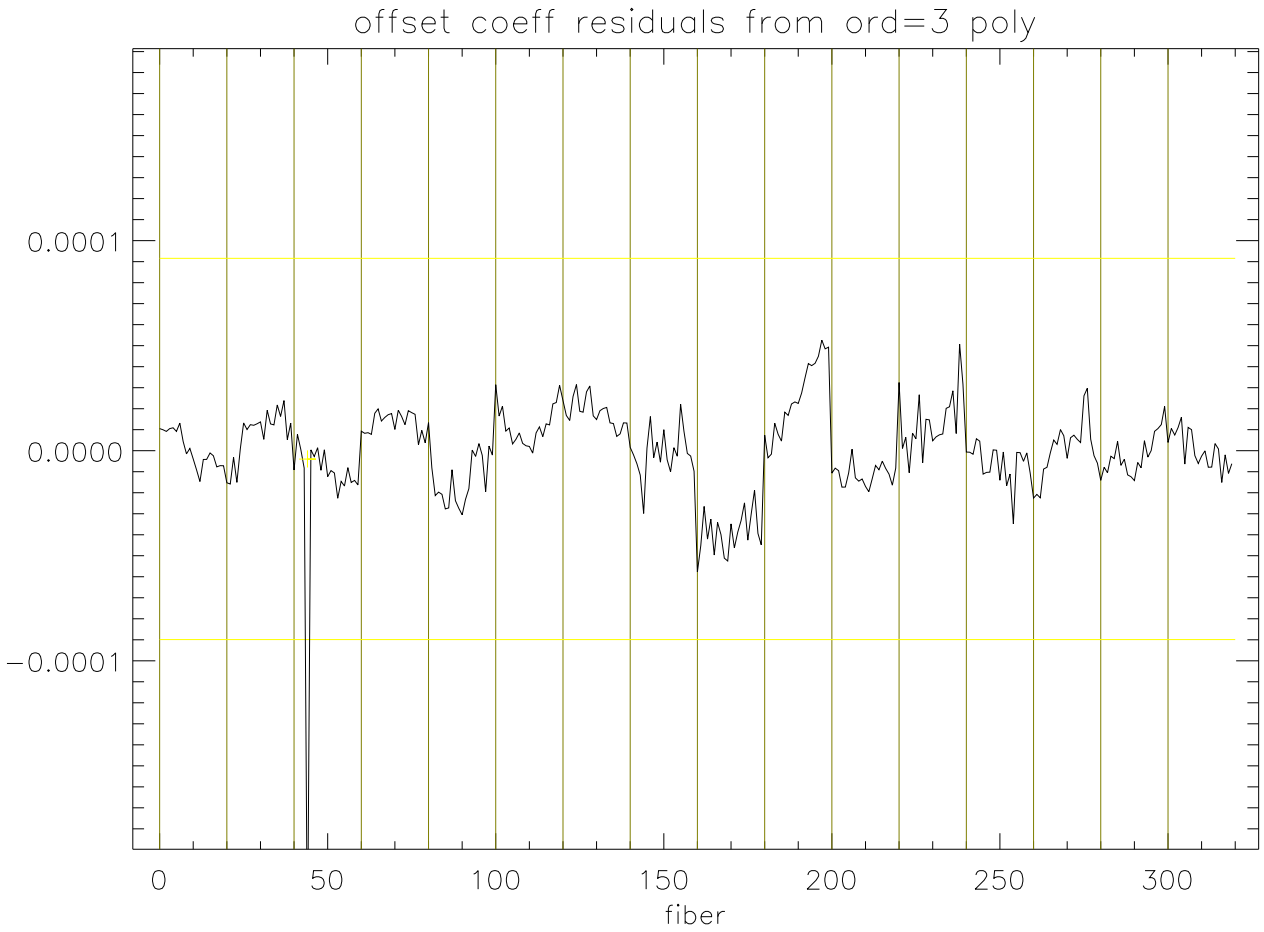

PLATE=2949 MJD=54557 sdR-r1-00051517.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

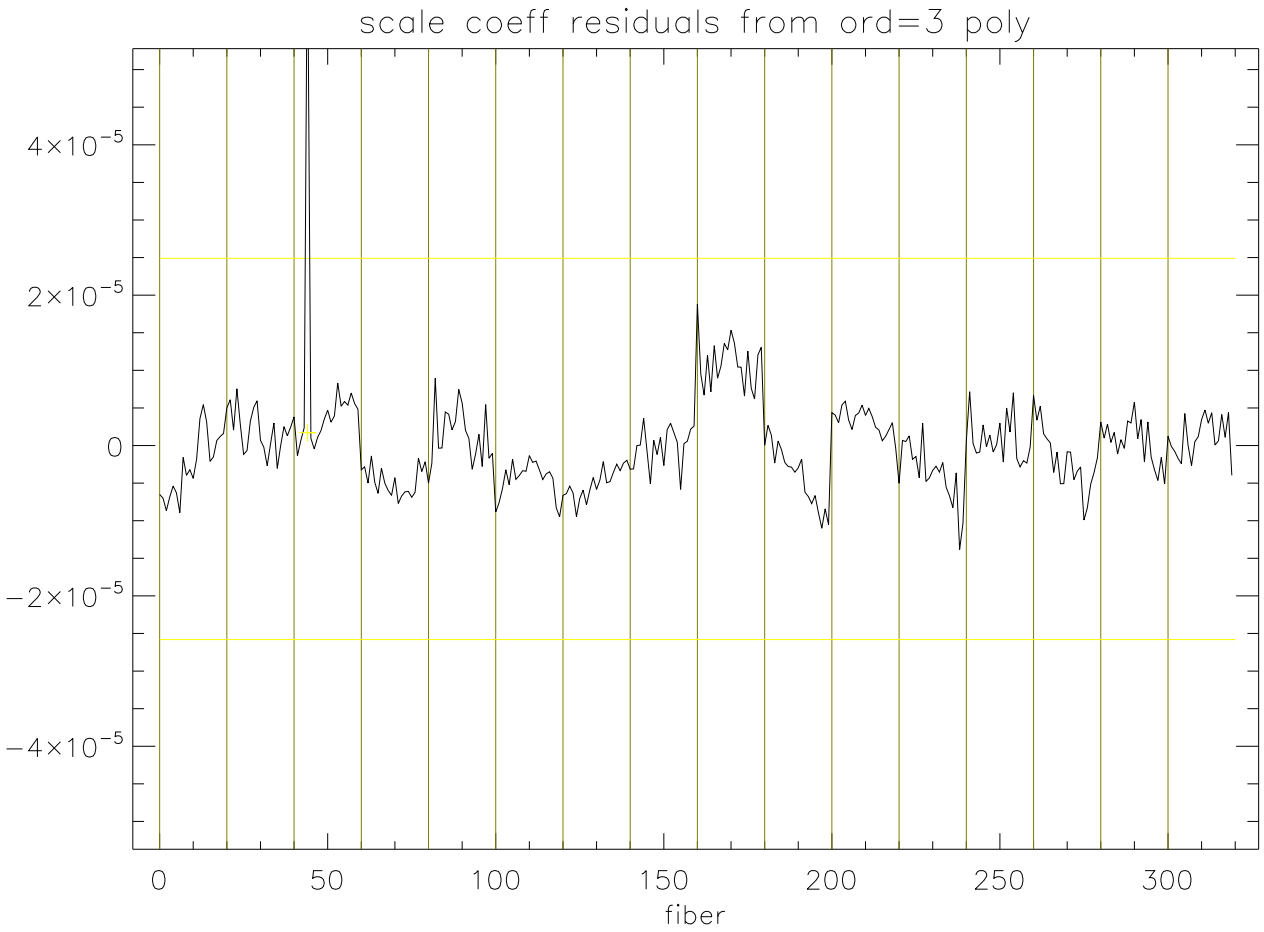

PLATE=2949 MJD=54557 sdR-r1-00051517.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

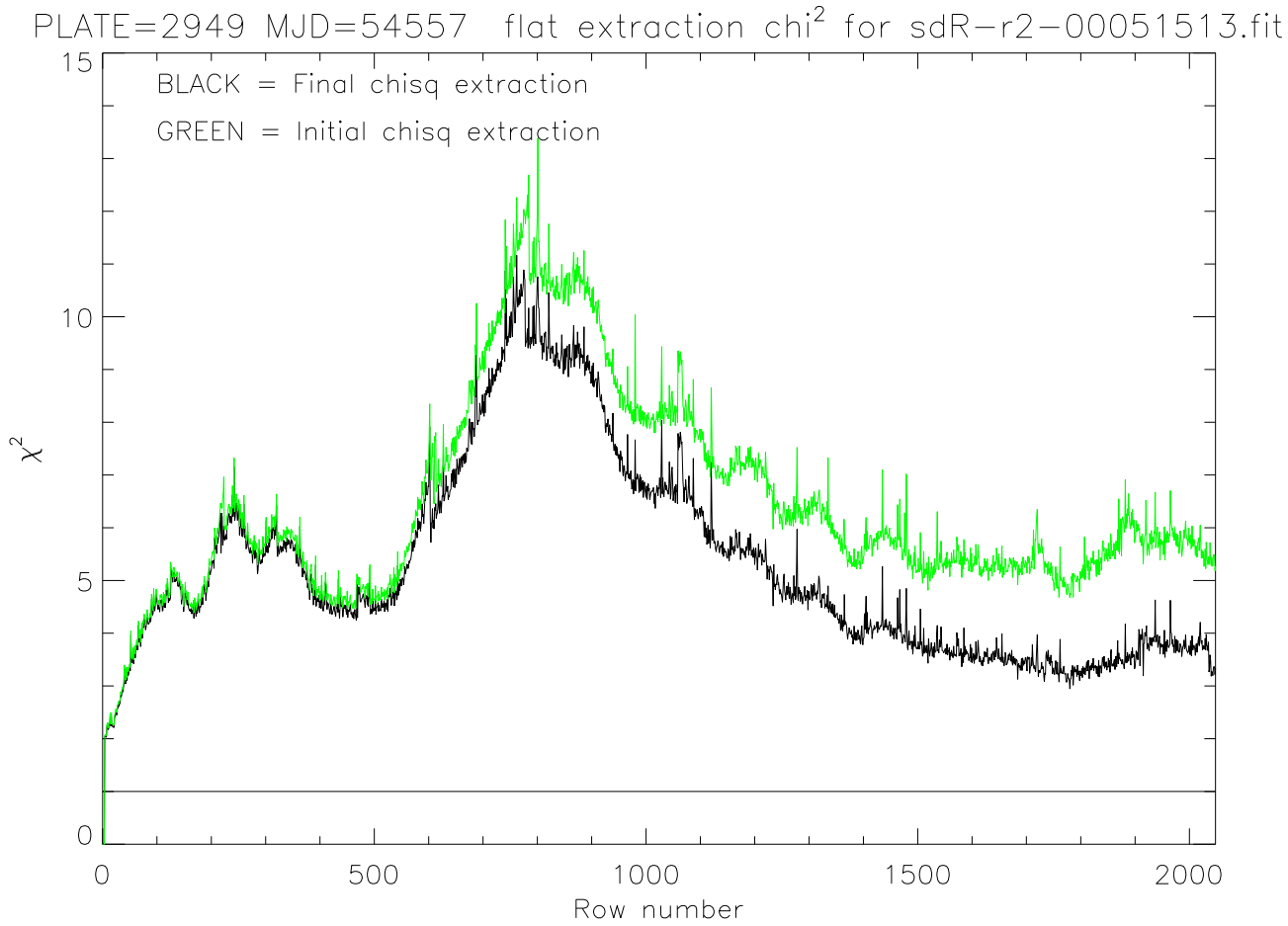

Number of sky fibers = 15
PLATE=2949 MJD=54557 sdR-r1-00051517.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

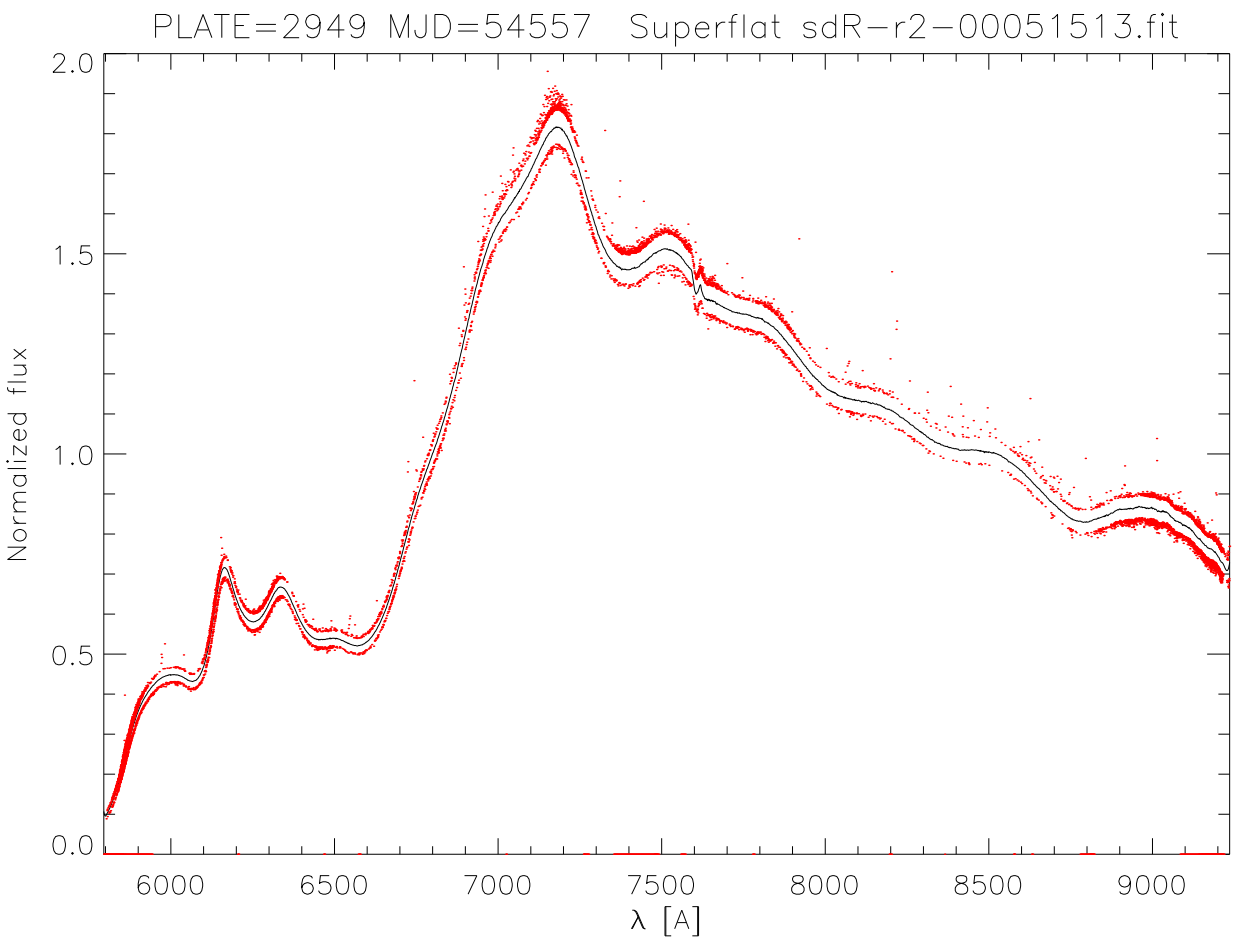

PLATE=2949 MJD=54557 sdR-r1-00051517.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.55 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

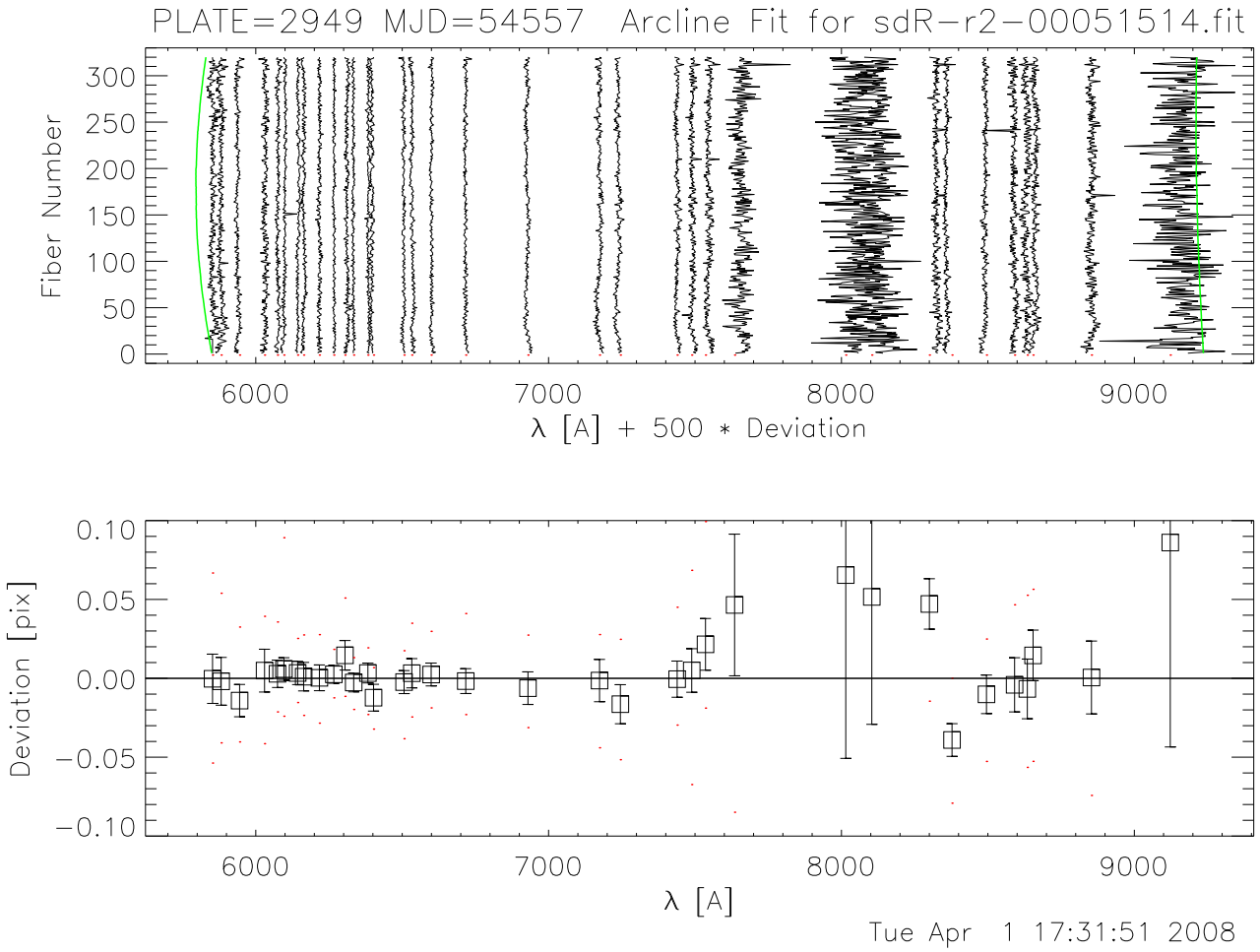

PLATE=2949 MJD=54557 sdR-r1-00051517.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.28 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass


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

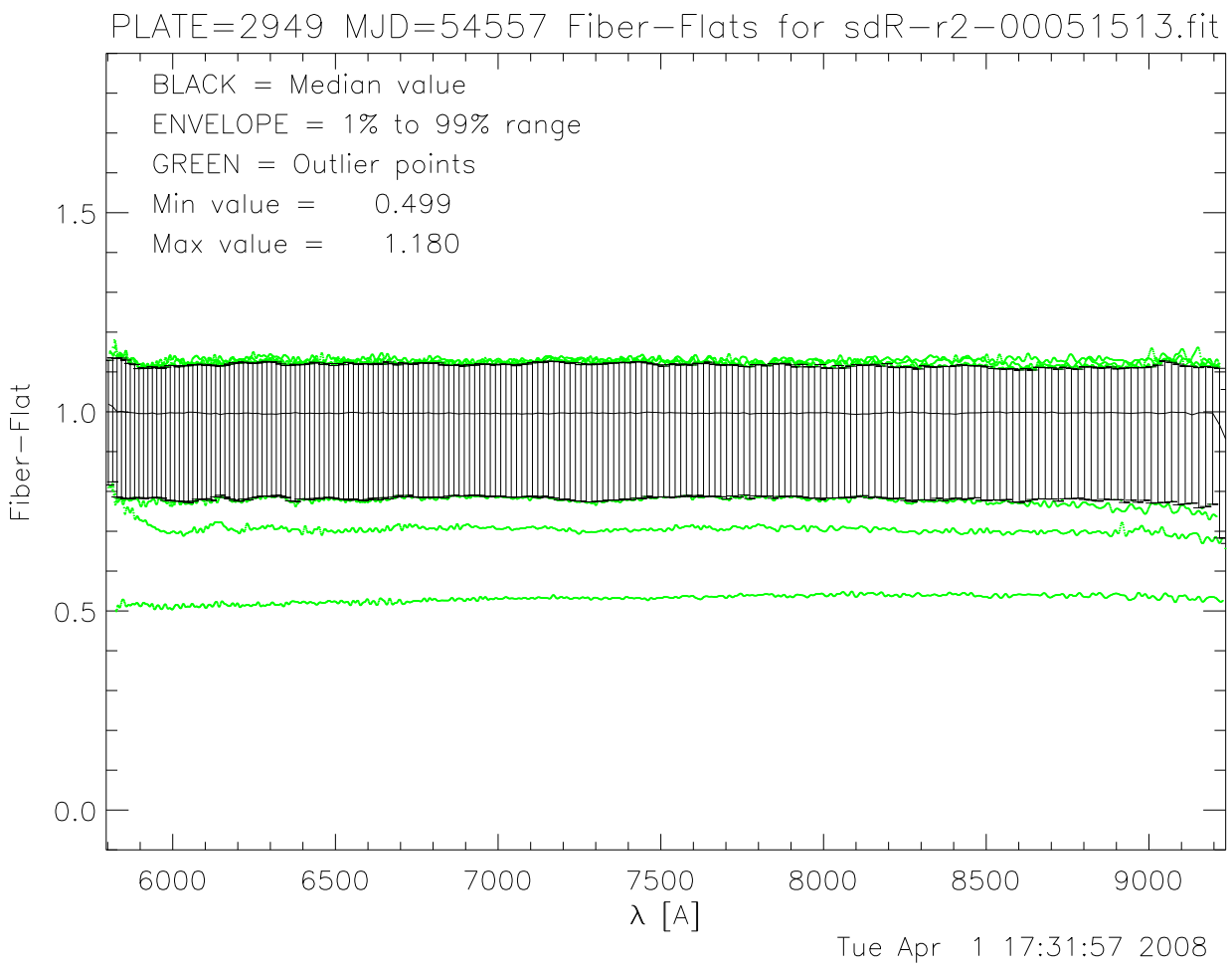

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

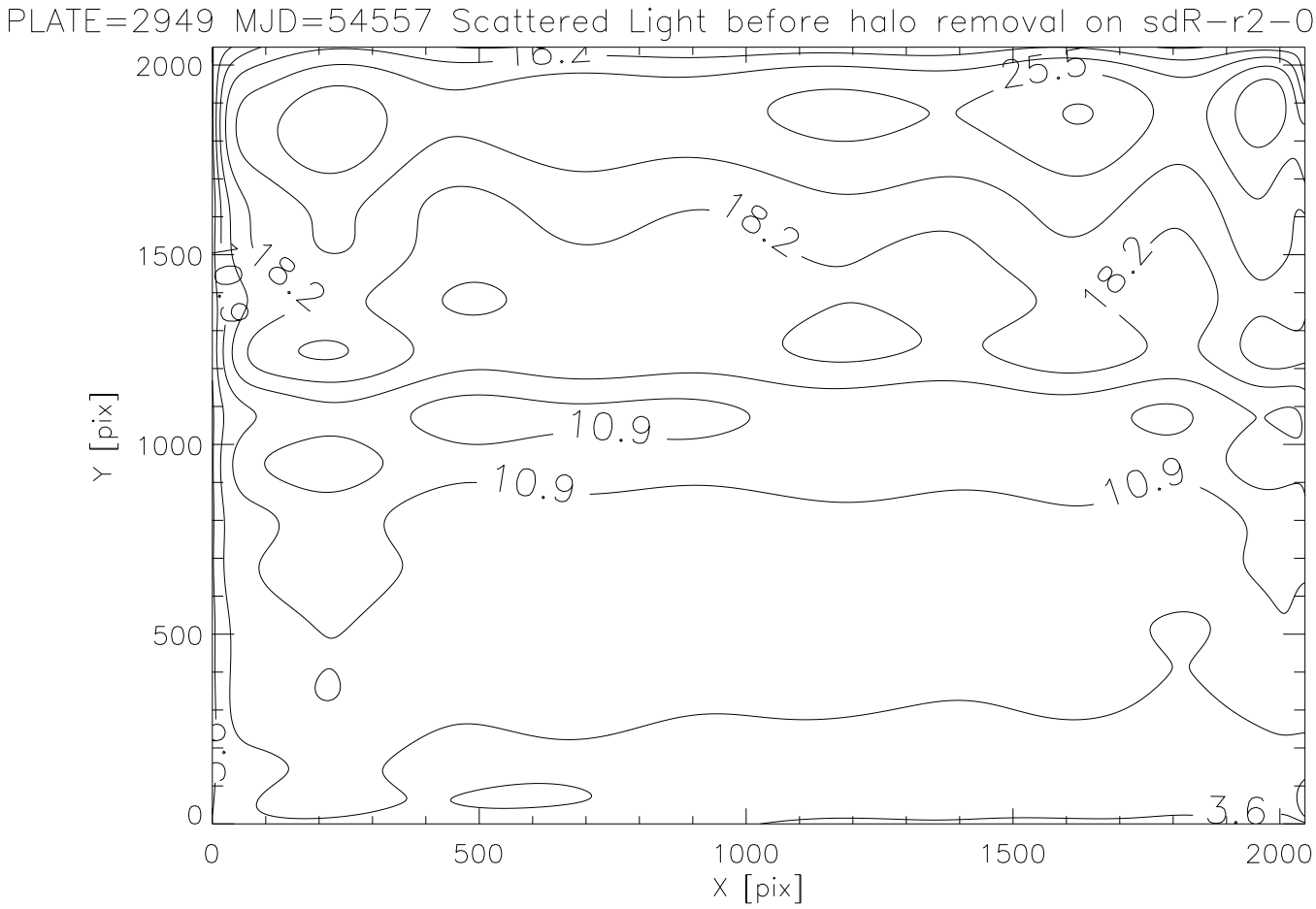

PLATE=2949 MJD=54557 flat extraction chi^2 for sdR−r2−00051513.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

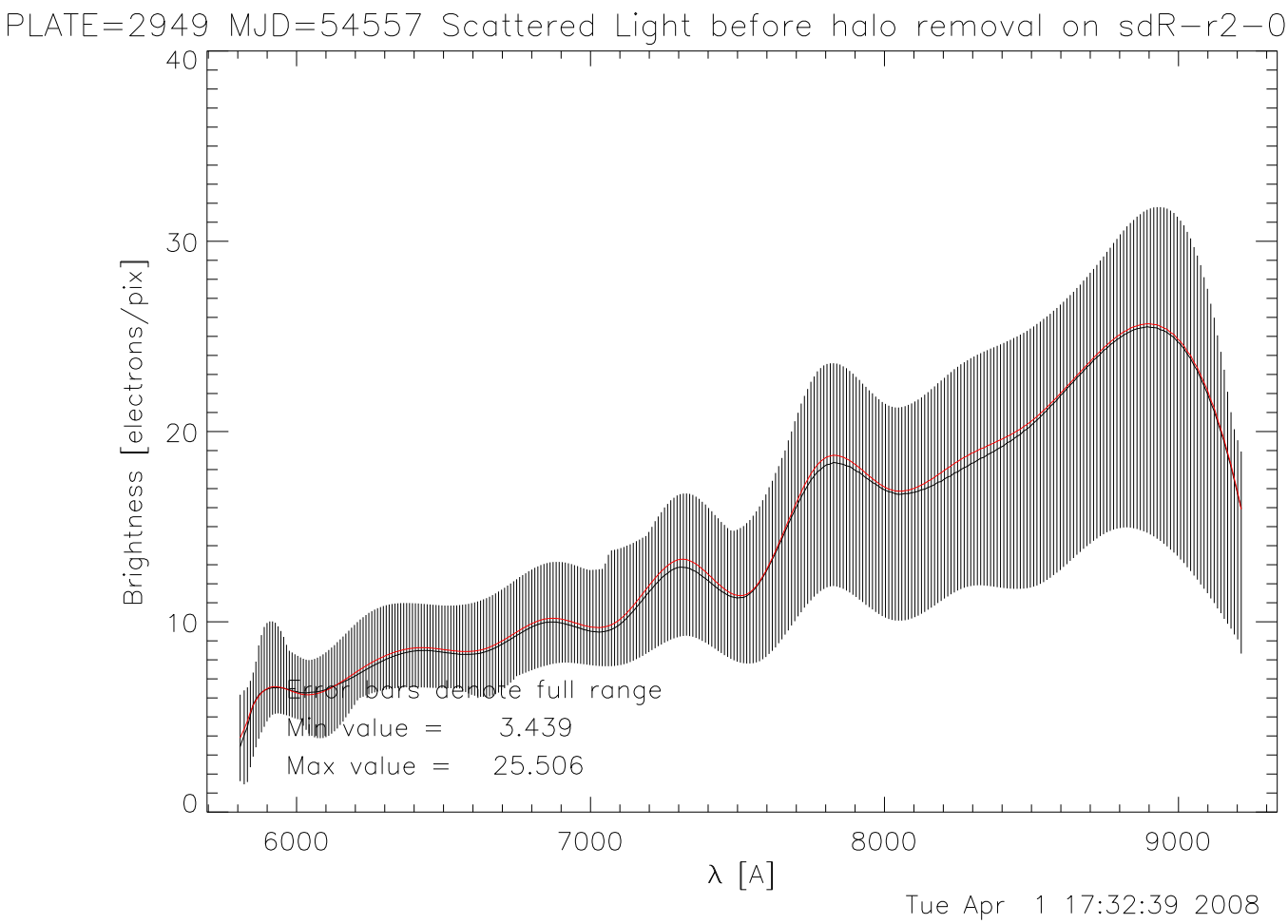

PLATE=2949 MJD=54557 Superflat sdR-r2-00051513.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

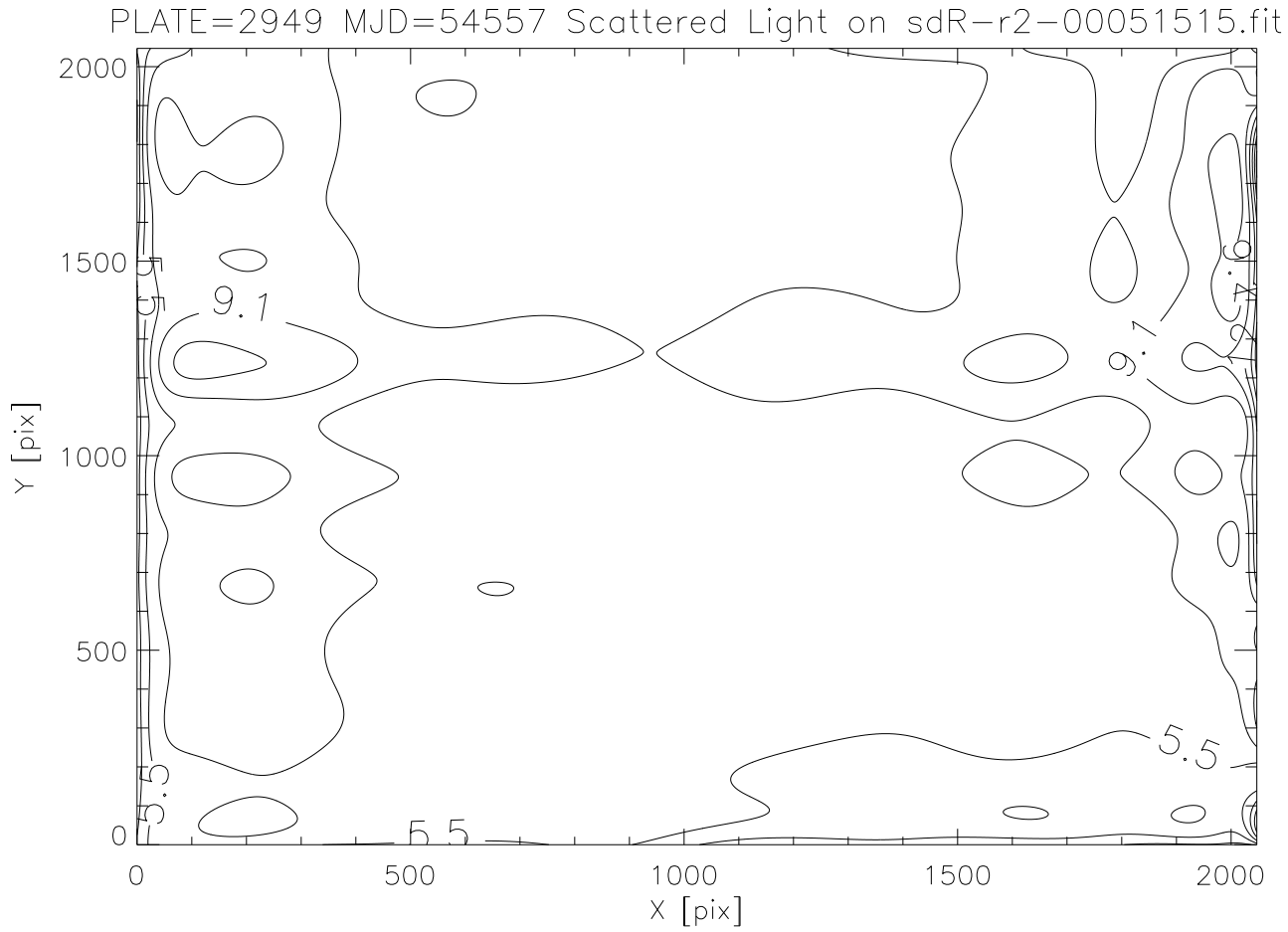

PLATE=2949 MJD=54557 Arcline Fit for sdR-r2-00051514.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation

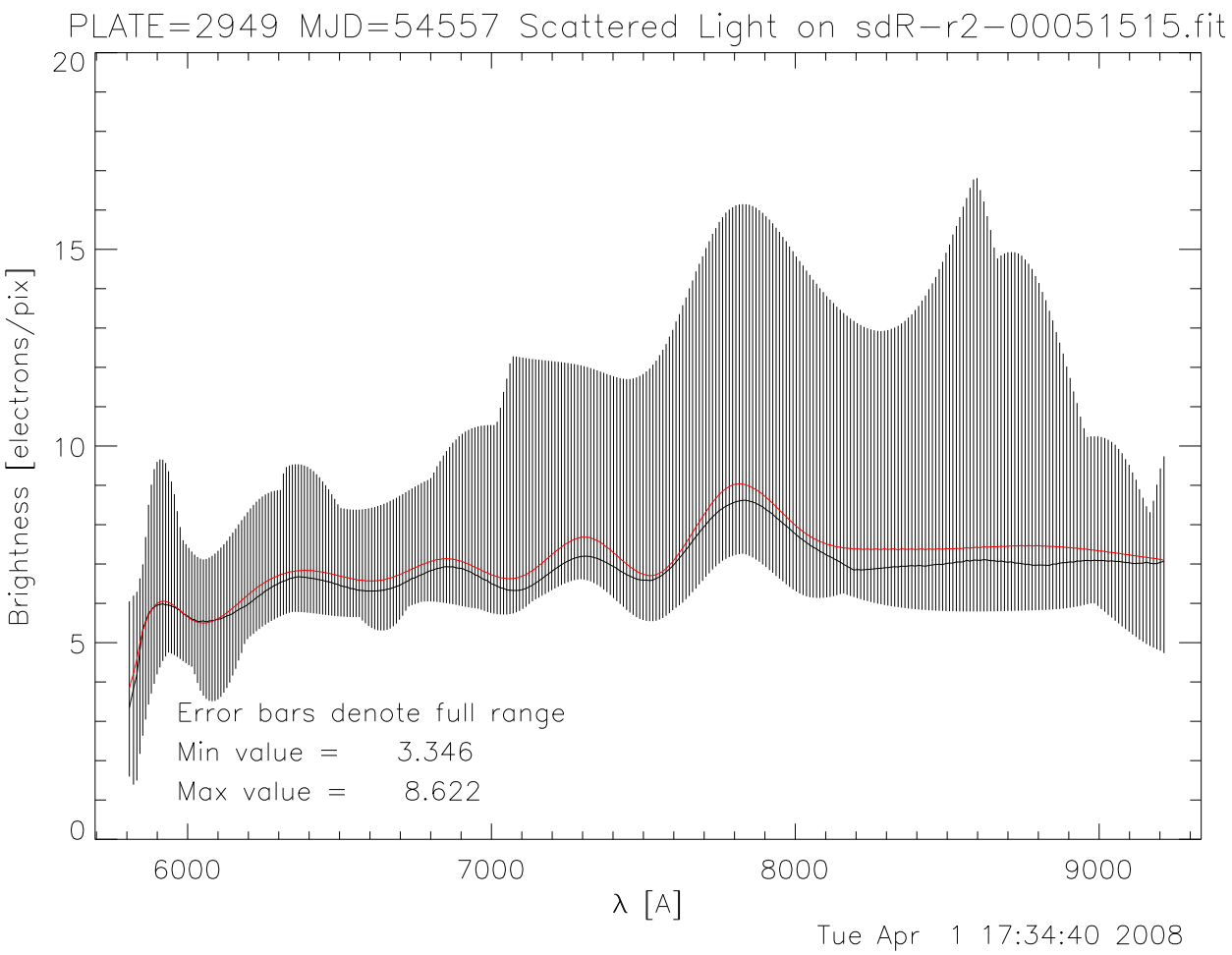
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Apr 1 17:31:51 2008

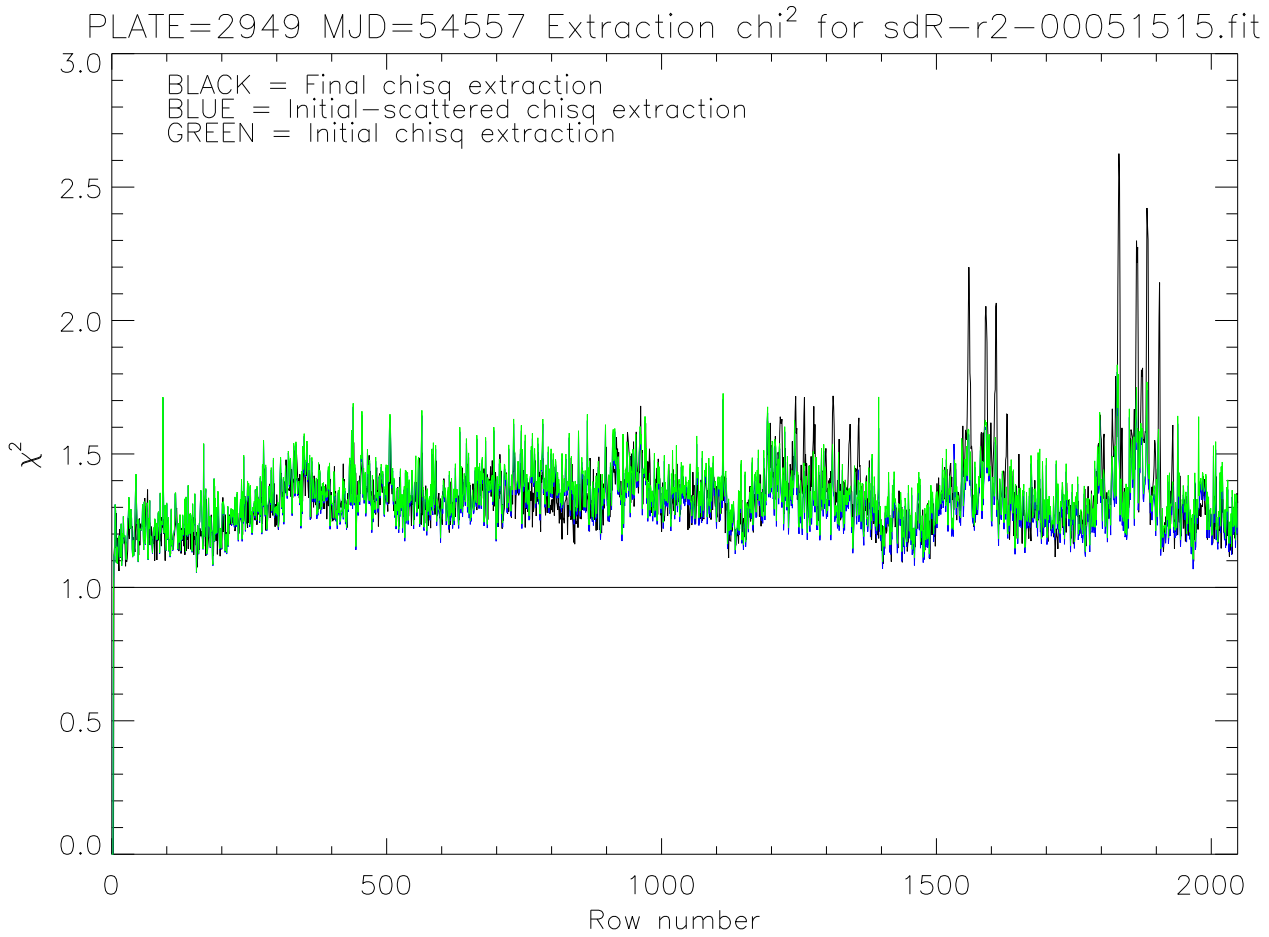

PLATE=2949 MJD=54557 Fiber−Flats for sdR−r2−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.499
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Apr 1 17:31:57 2008

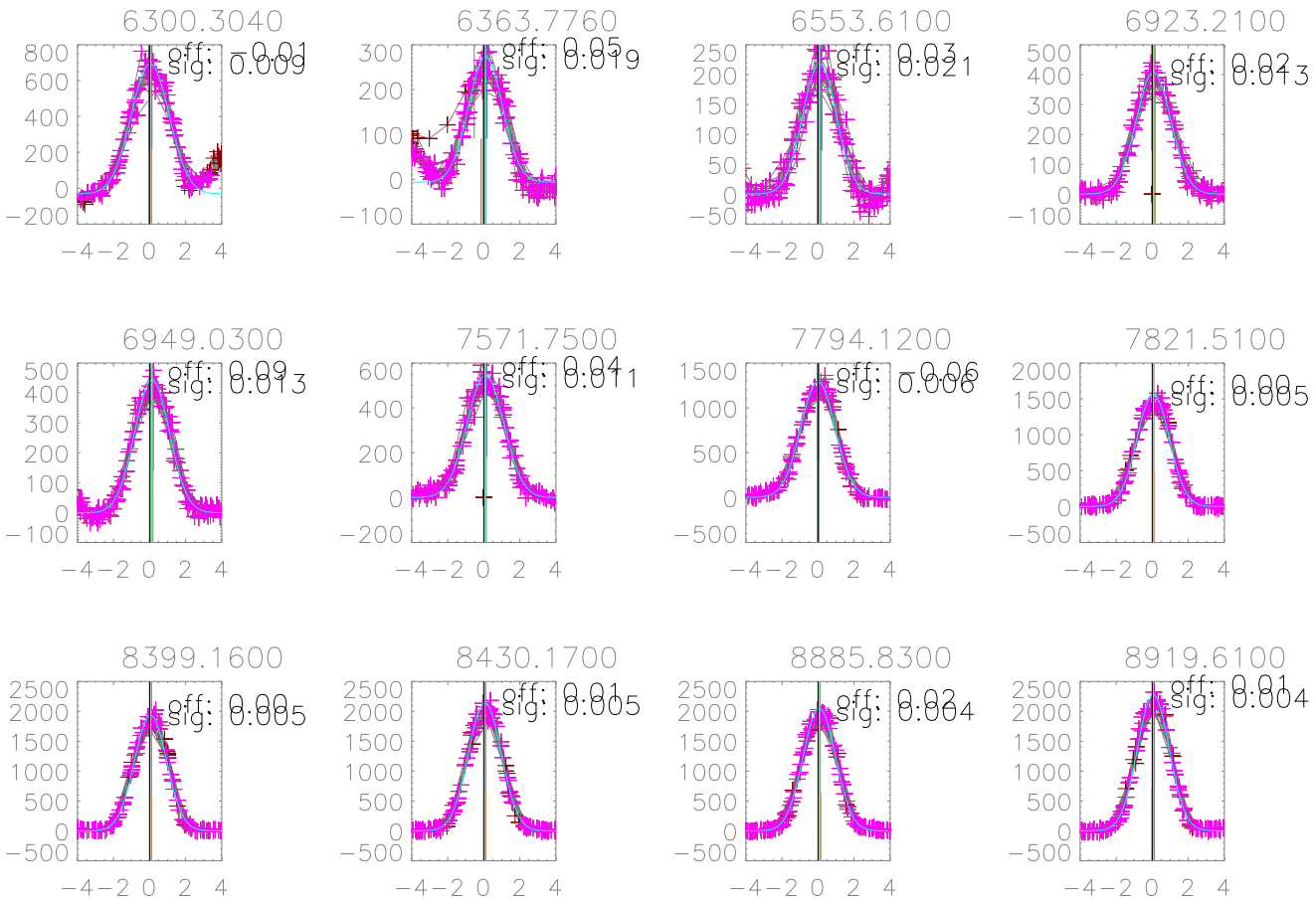

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r2-00051515.fi
16.2
25.5
18.2
18.2
18.2
10.9
10.9
10.9
3.6
Y [pix]
X [pix]
0
500
1000
1500
2000

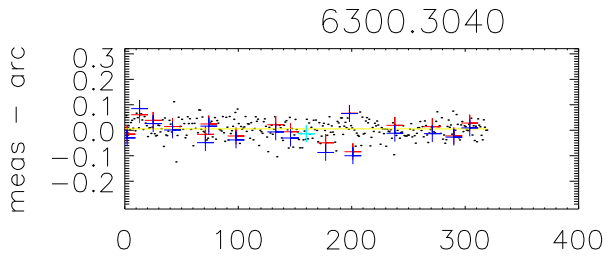

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r2-00051515.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.439
Max value = 25.506
Tue Apr 1 17:32:39 2008

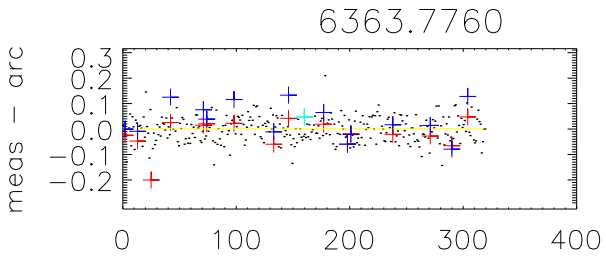

PLATE=2949 MJD=54557 Scattered Light on sdR-r2-00051515.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
9.1
9.1
5.5
5.5
5.5
5.5

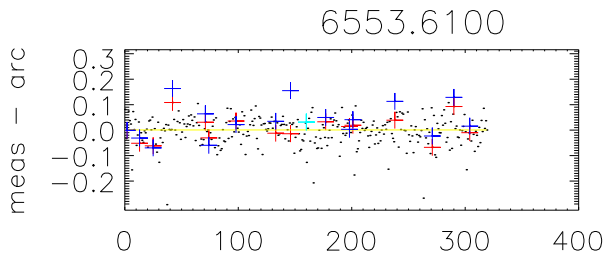

PLATE=2949 MJD=54557 Scattered Light on sdR-r2-00051515.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.346
Max value = 8.622
Tue Apr 1 17:34:40 2008

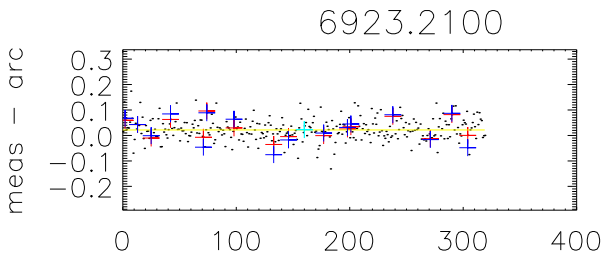

PLATE=2949 MJD=54557 Extraction chi^2 for sdR-r2-00051515.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

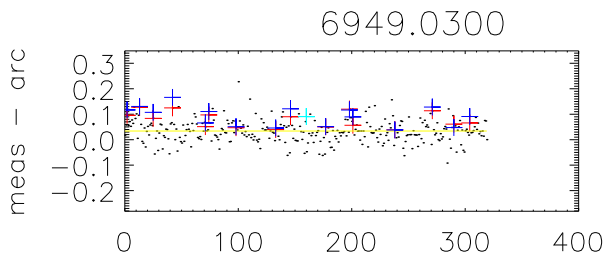

6300.3040
off: -0.01
sig: 0.009
6363.7760
off: 0.05
sig: 0.019
6553.6100
off: 0.03
sig: 0.021
6923.2100
off: 0.02
sig: 0.013
6949.0300
off: 0.09
sig: 0.013
7571.7500
off: 0.04
sig: 0.011
7794.1200
off: -0.06
sig: 0.008
7821.5100
off: 0.00
sig: 0.005
8399.1600
off: 0.00
sig: 0.005
8430.1700
off: 0.01
sig: 0.005
8885.8300
off: 0.02
sig: 0.004
8919.6100
off: 0.01
sig: 0.004

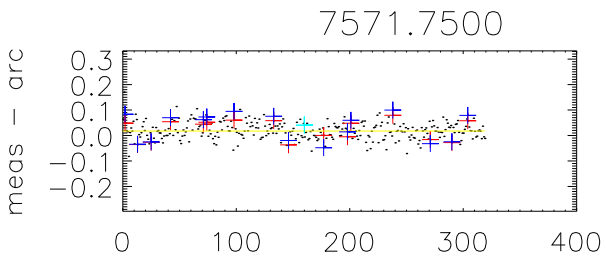

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

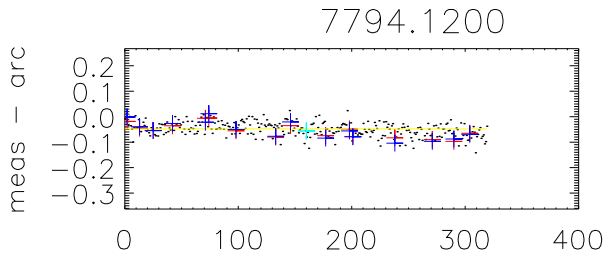

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

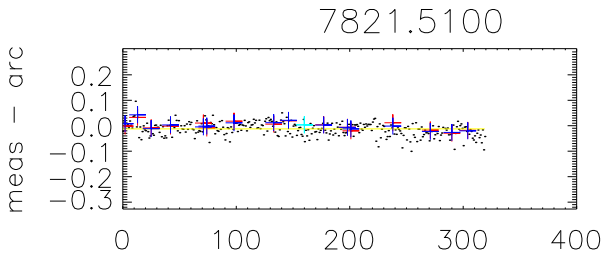

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

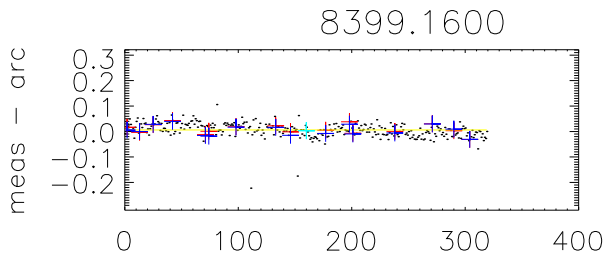

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

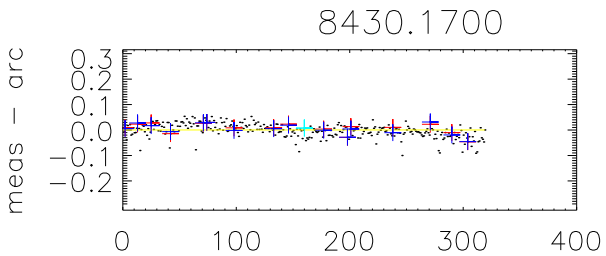

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

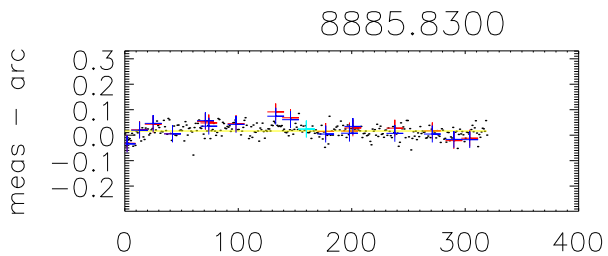

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

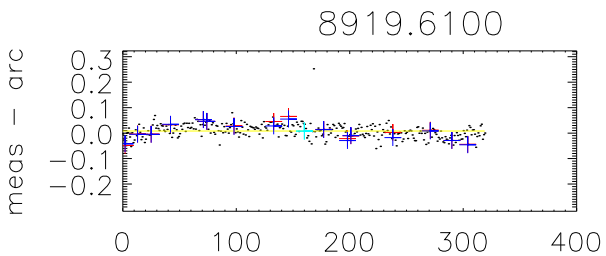

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

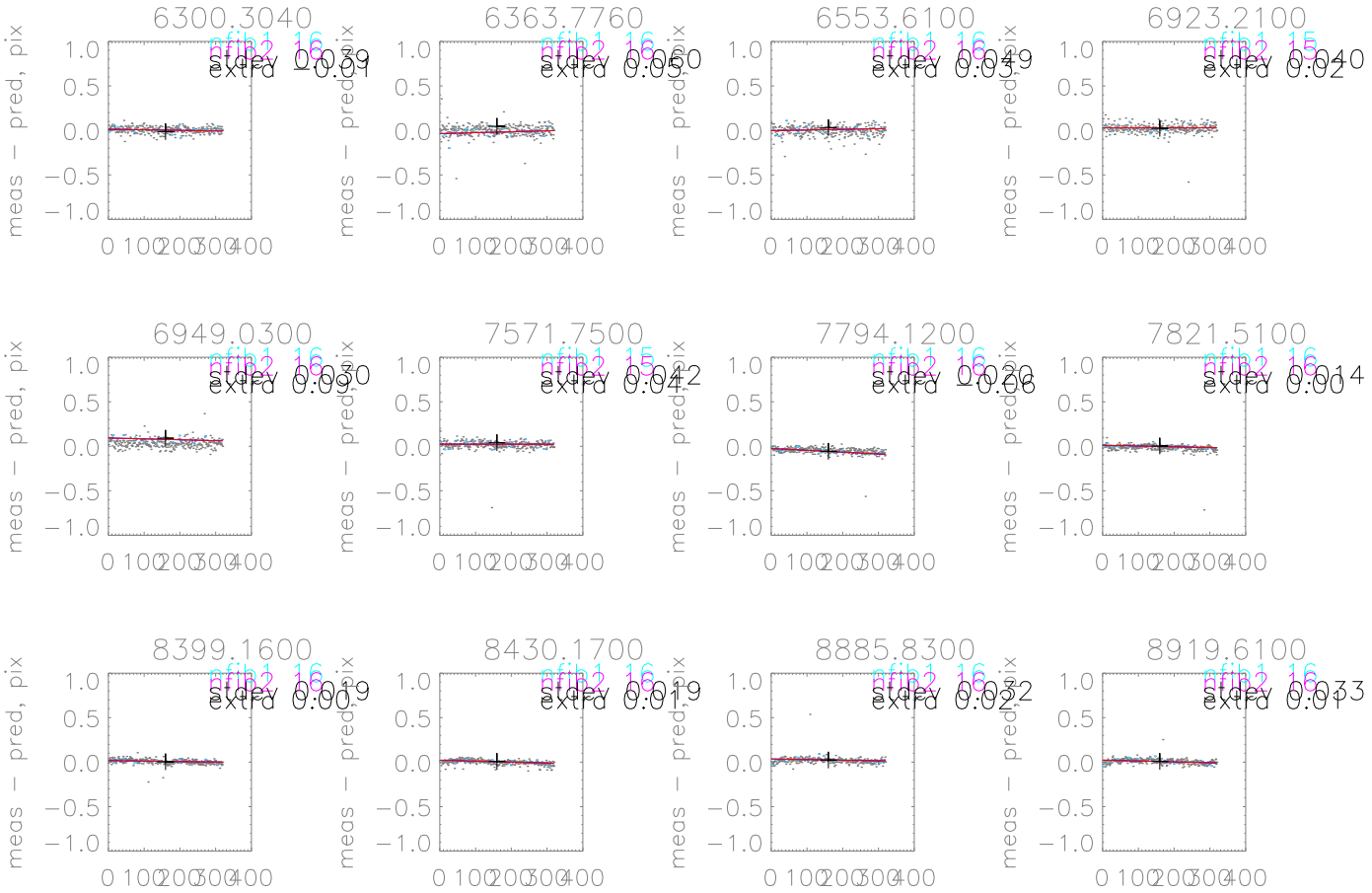

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

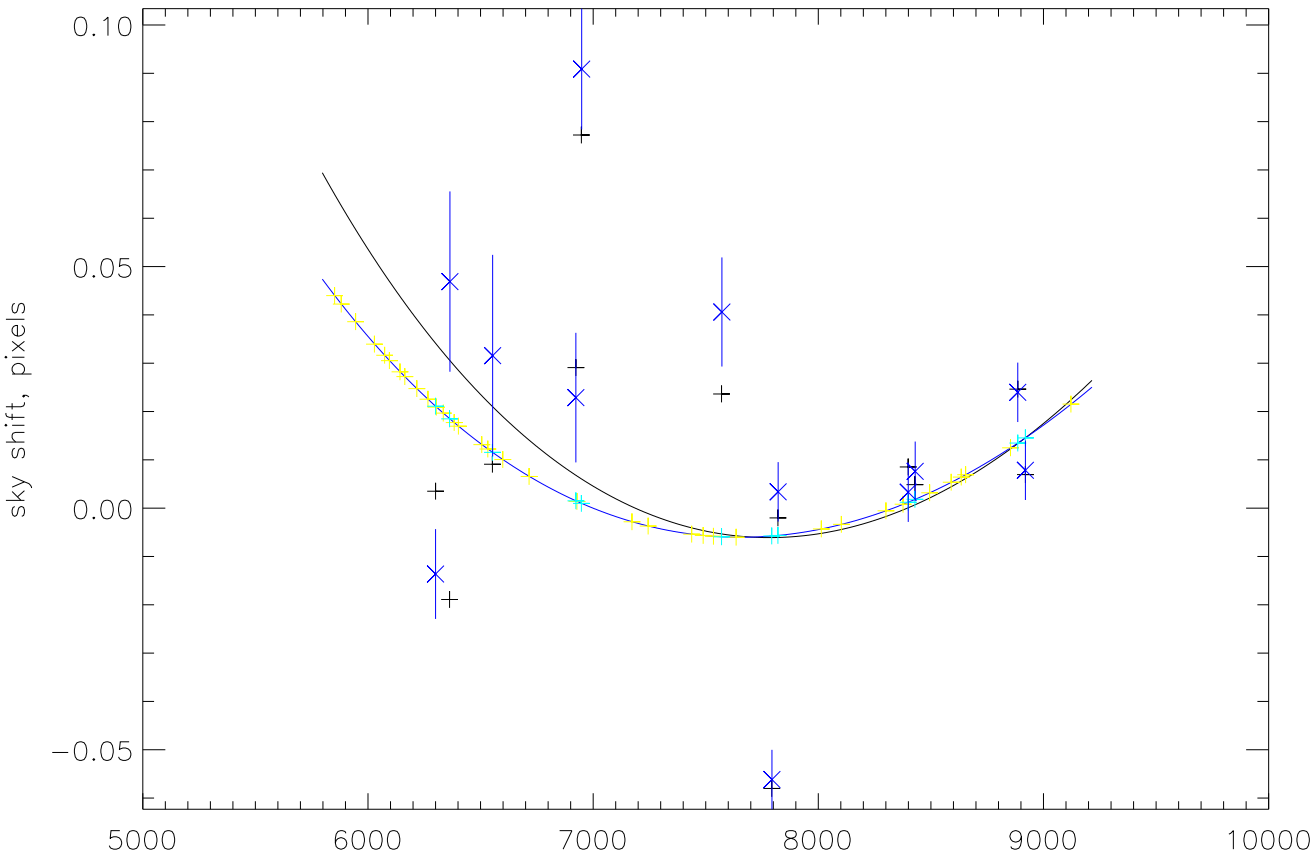

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

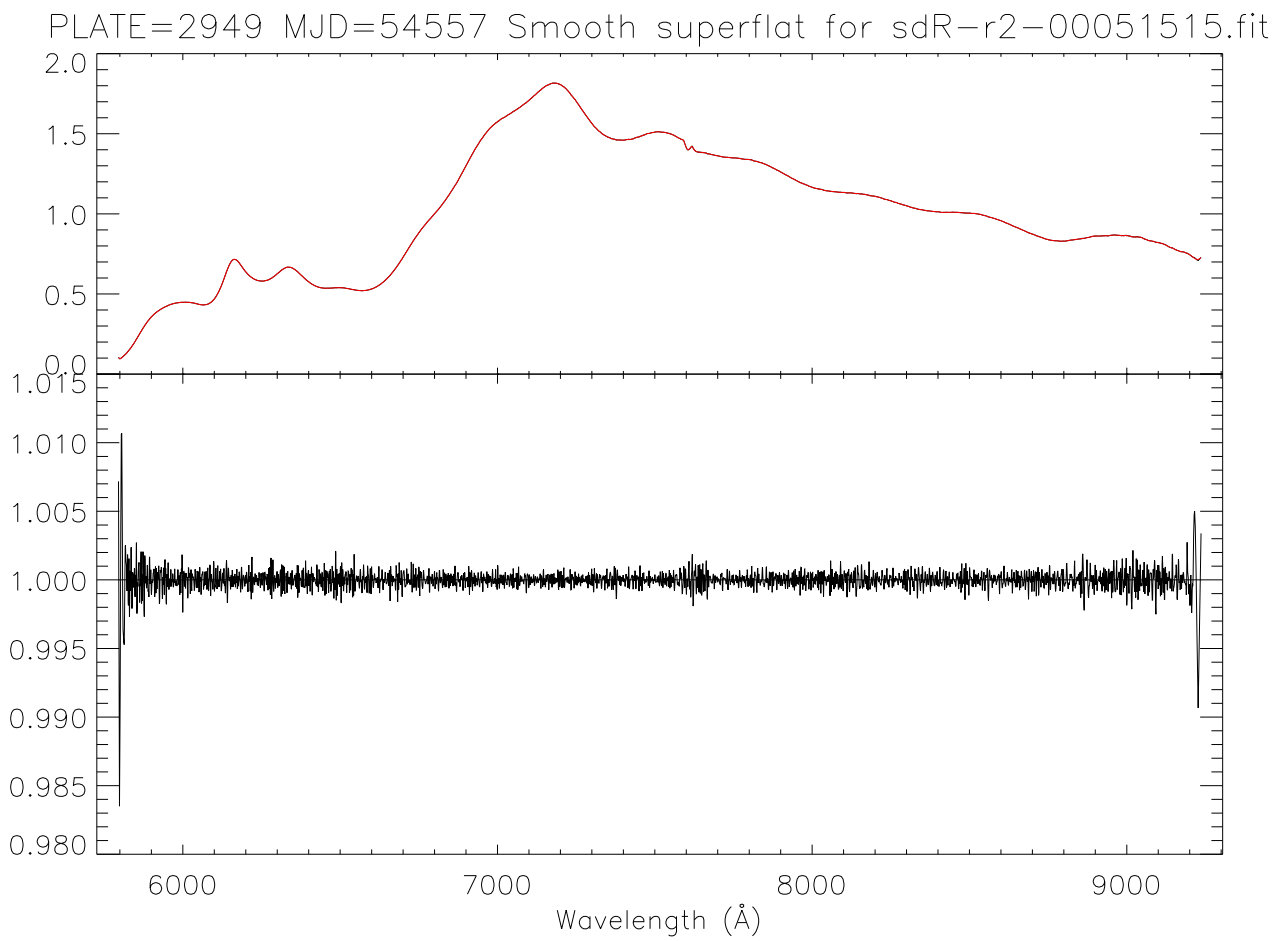

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

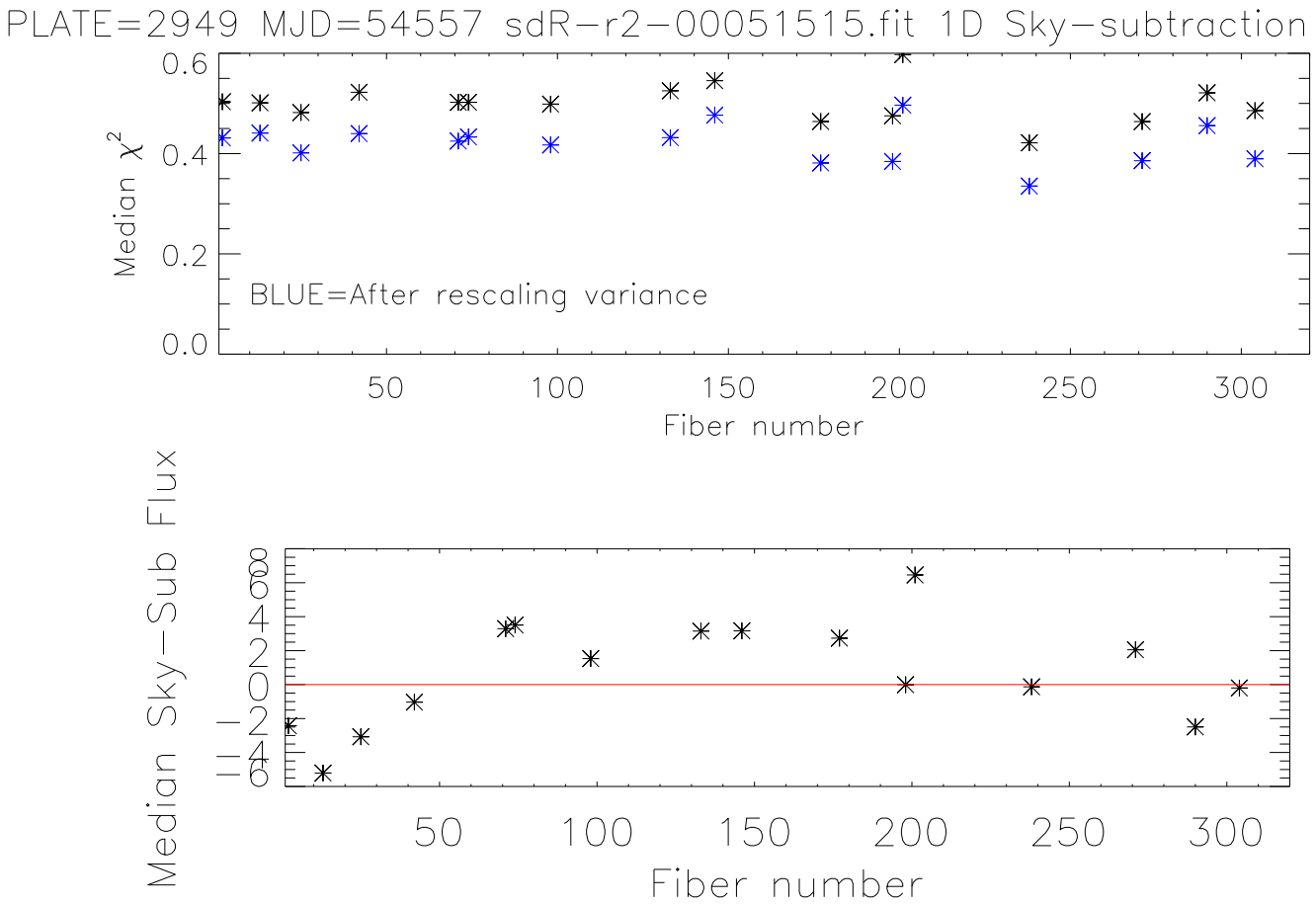

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6300.3040
stdev 0.039
extra −0.01
6363.7760
stdev 0.050
extra 0.05
6553.6100
stdev 0.049
extra 0.03
6923.2100
stdev 0.040
extra 0.02
6949.0300
stdev 0.030
extra 0.09
7571.7500
stdev 0.042
extra 0.04
7794.1200
stdev 0.030
extra −0.06
7821.5100
stdev 0.014
extra 0.00
8399.1600
stdev 0.019
extra 0.00
8430.1700
stdev 0.019
extra 0.01
8885.8300
stdev 0.032
extra 0.02
8919.6100
stdev 0.033
extra 0.01
meas − pred, pix
mfib1 16
mfib2 16
mfib1 15
mfib2 15

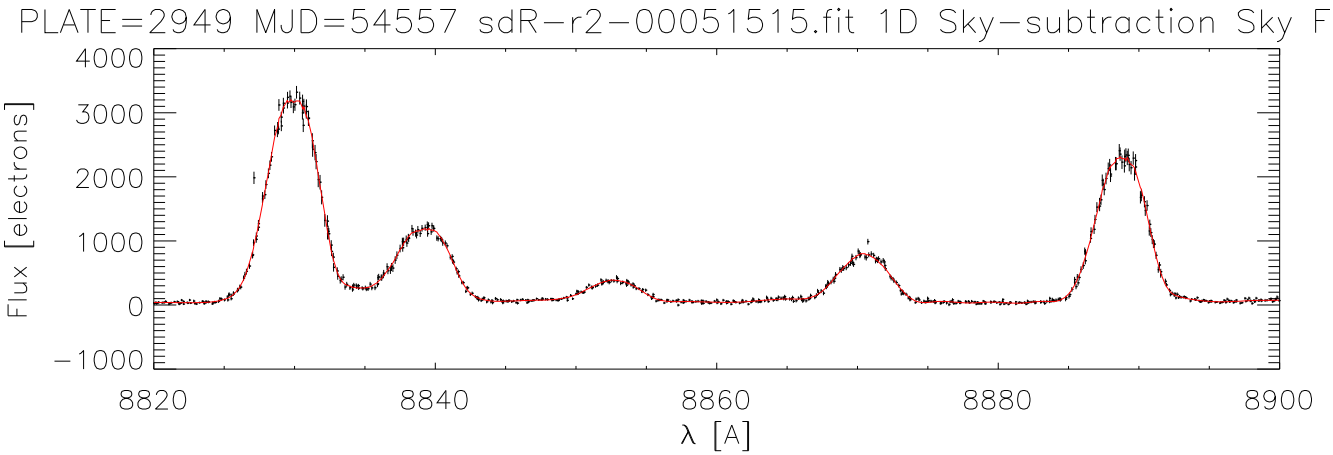

0.10
0.05
0.00
−0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

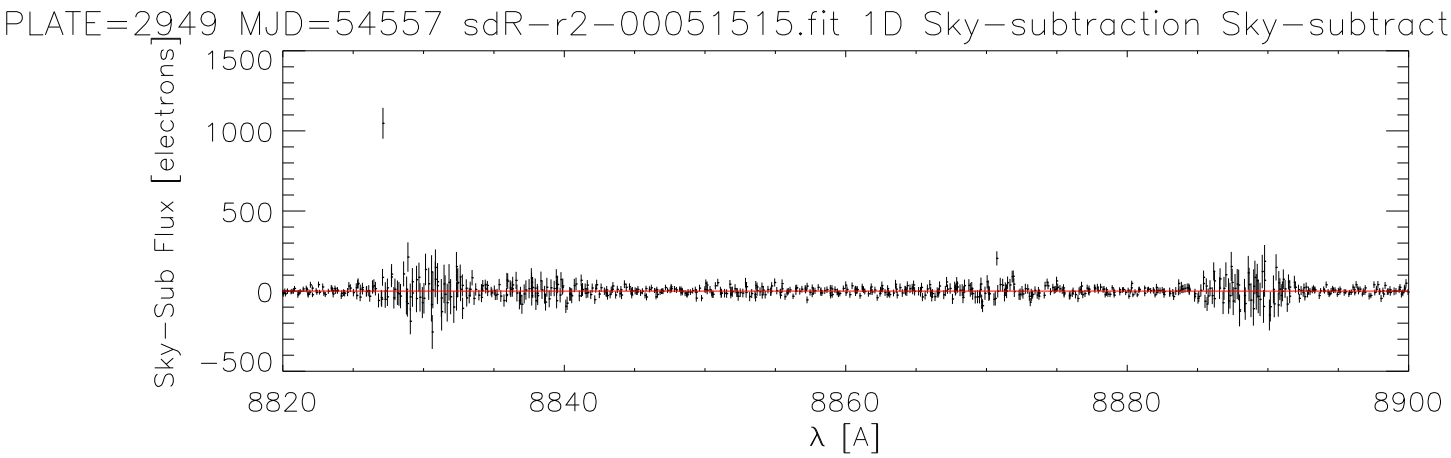
es= −0.0000

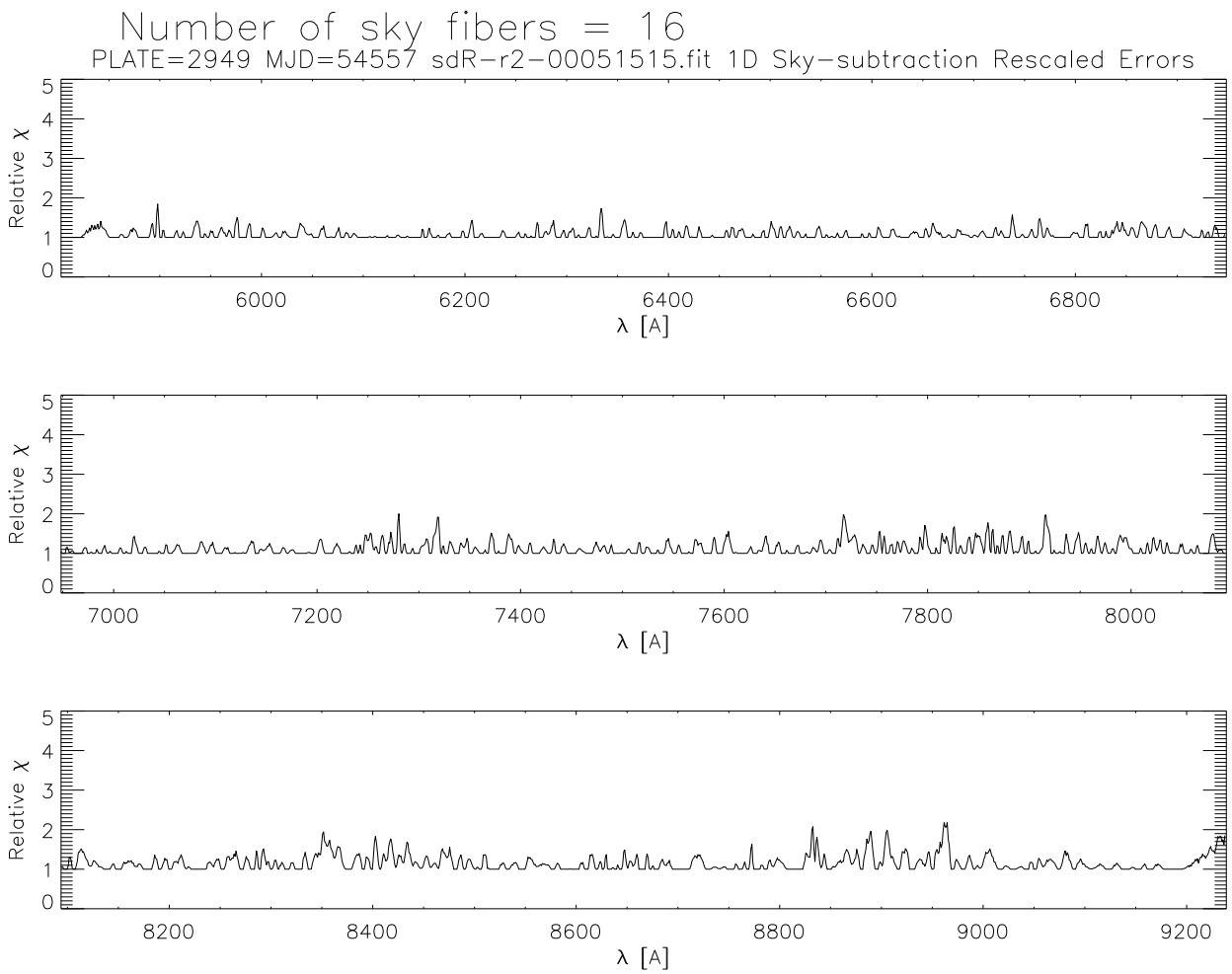

PLATE=2949 MJD=54557 Smooth superflat for sdR−r2−00051515.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
0.980
6000
7000
8000
9000
Wavelength (Å)

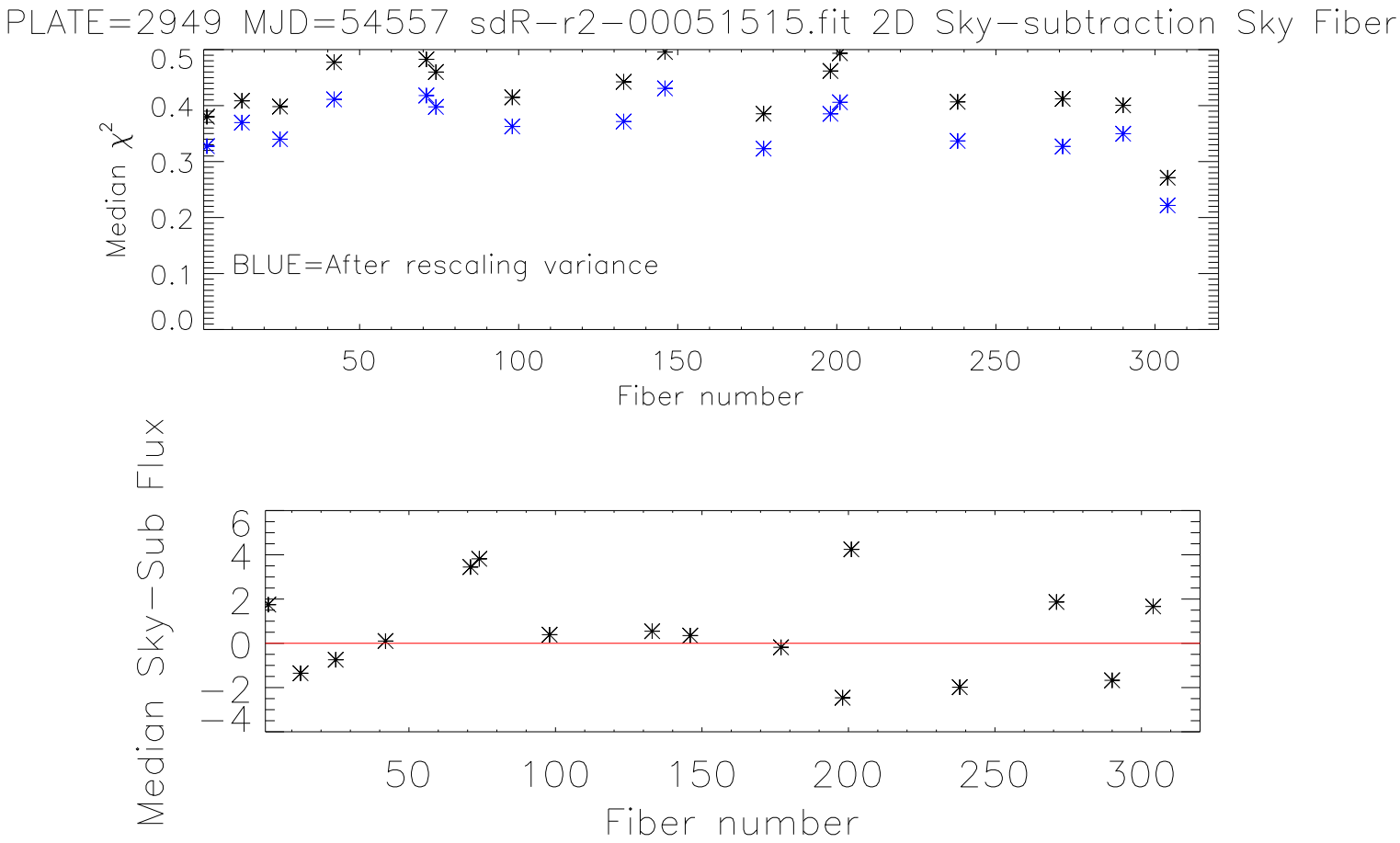

PLATE=2949 MJD=54557 sdR-r2-00051515.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

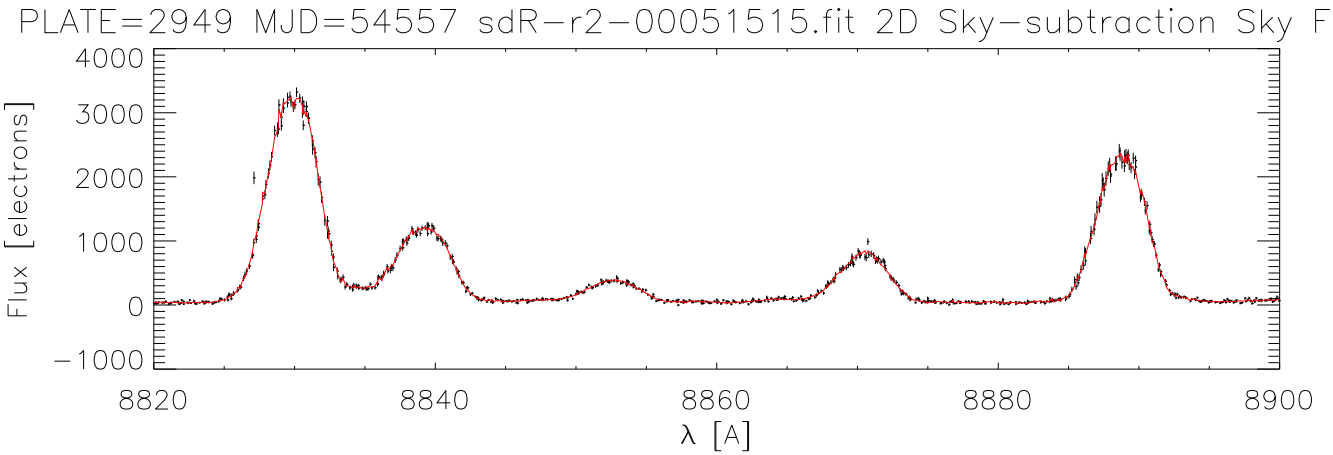
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

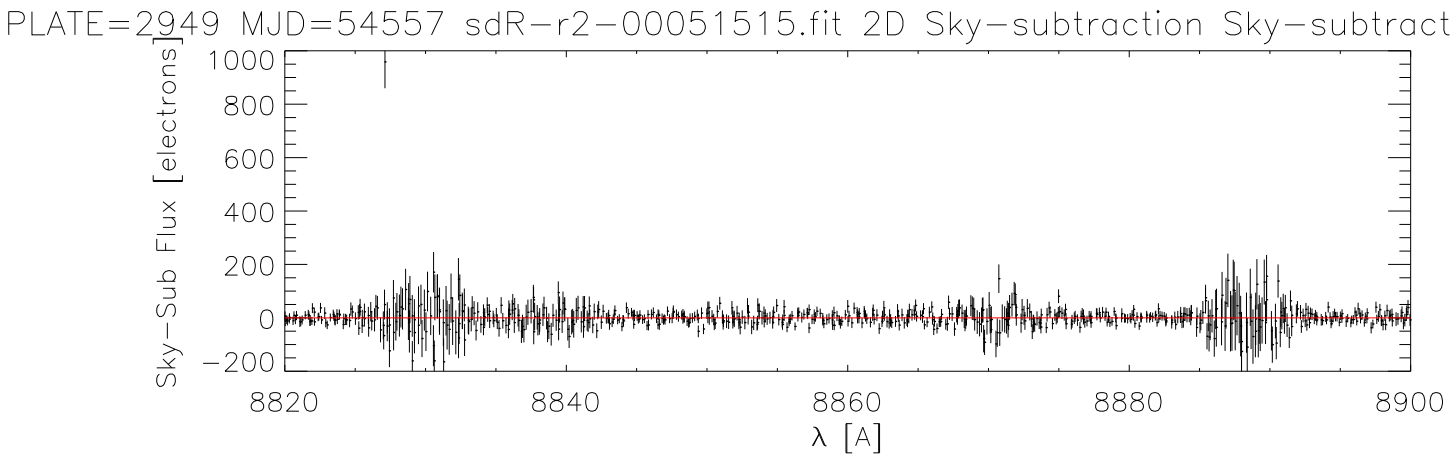

PLATE=2949 MJD=54557 sdR-r2-00051515.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

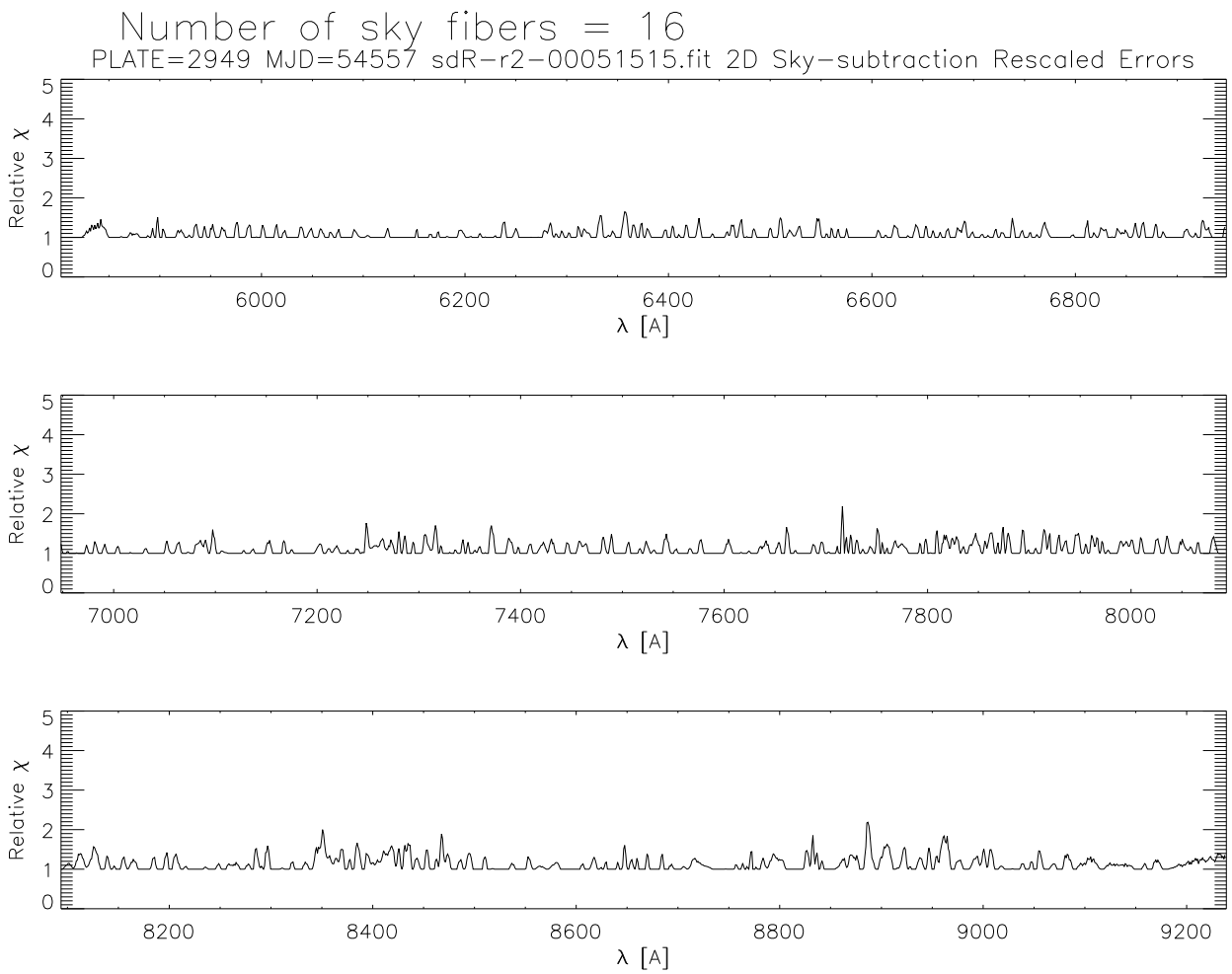

PLATE=2949 MJD=54557 sdR-r2-00051515.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

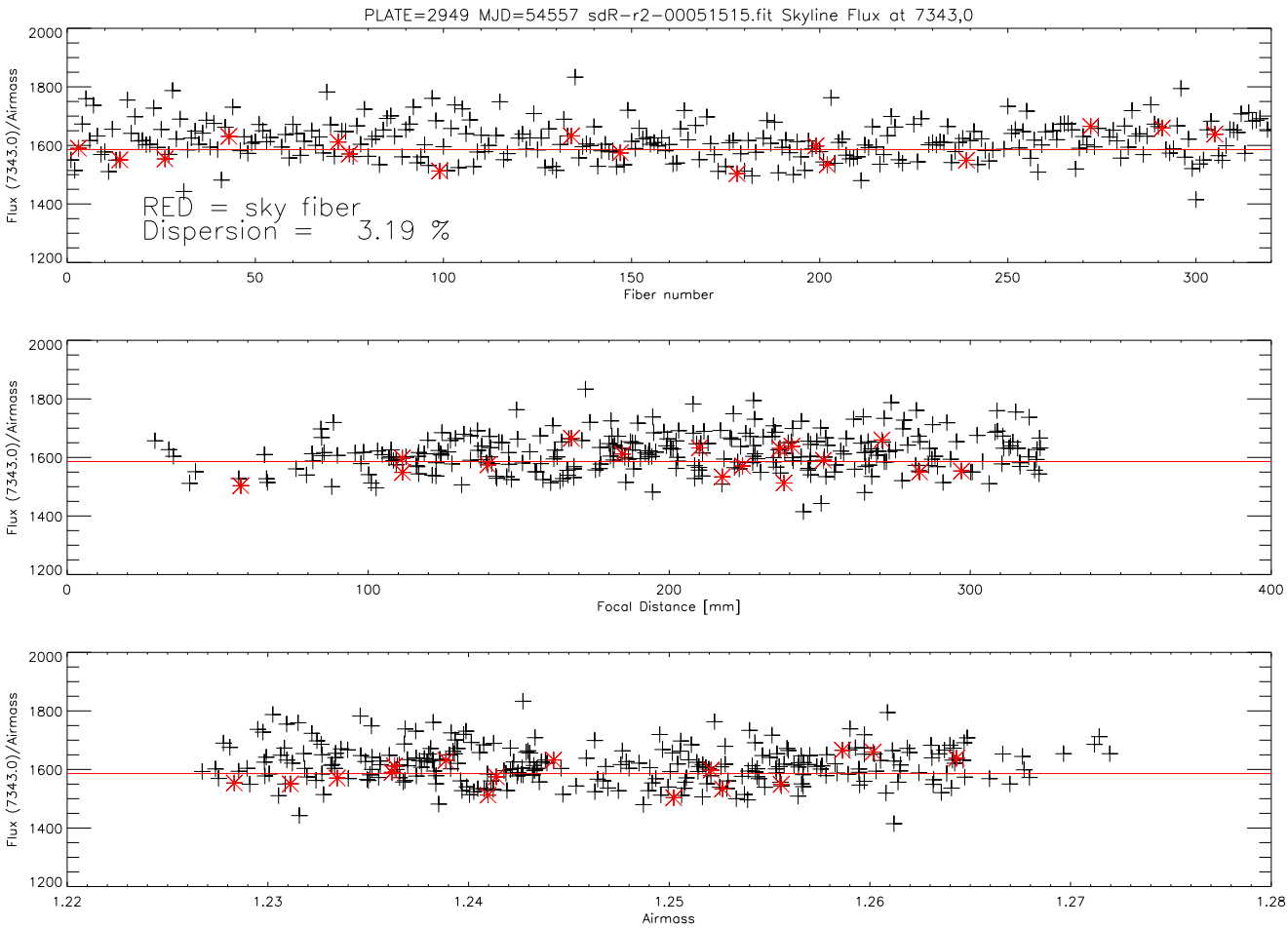

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-r2-00051515.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

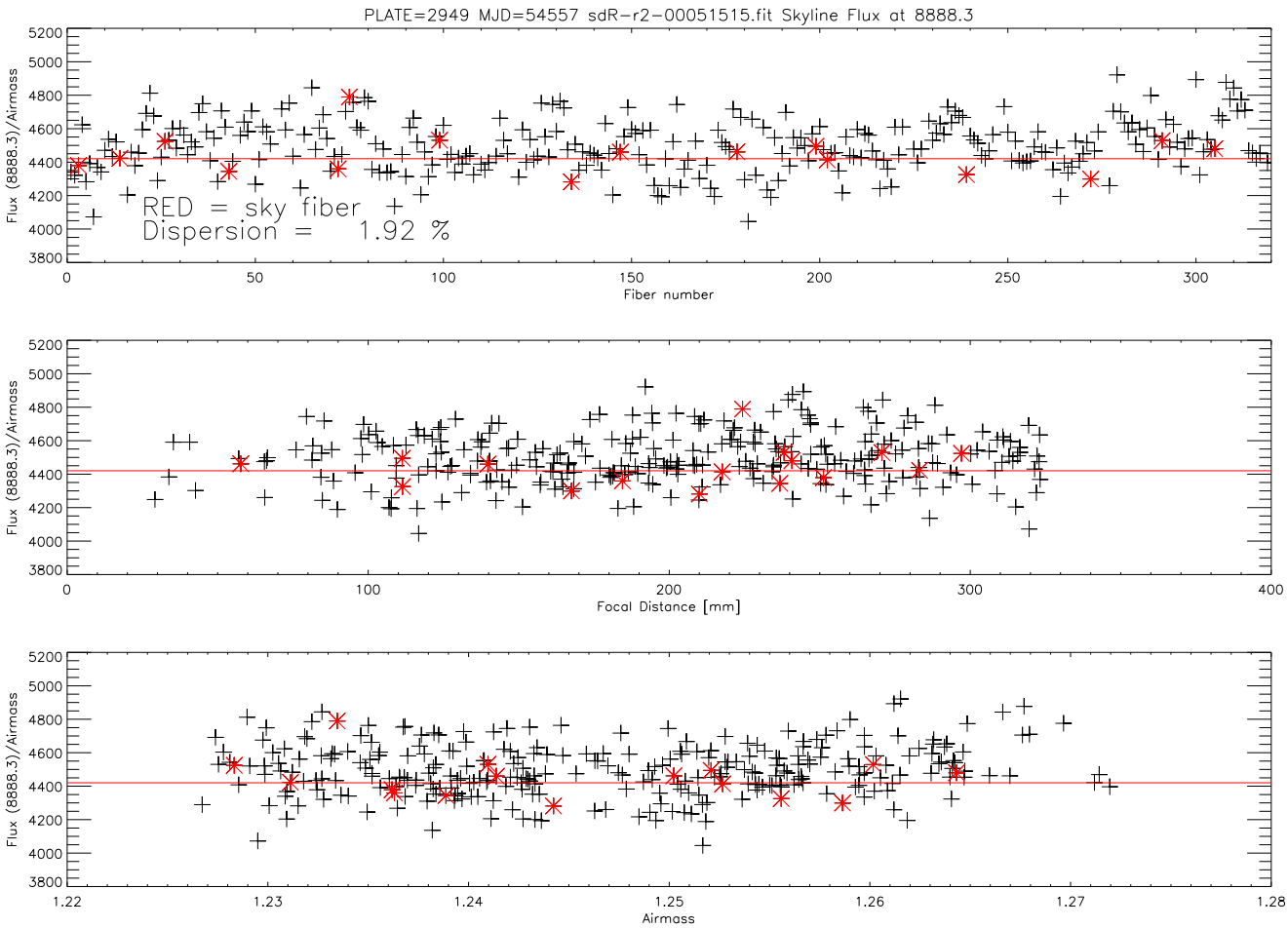

PLATE=2949 MJD=54557 sdR-r2-00051515.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

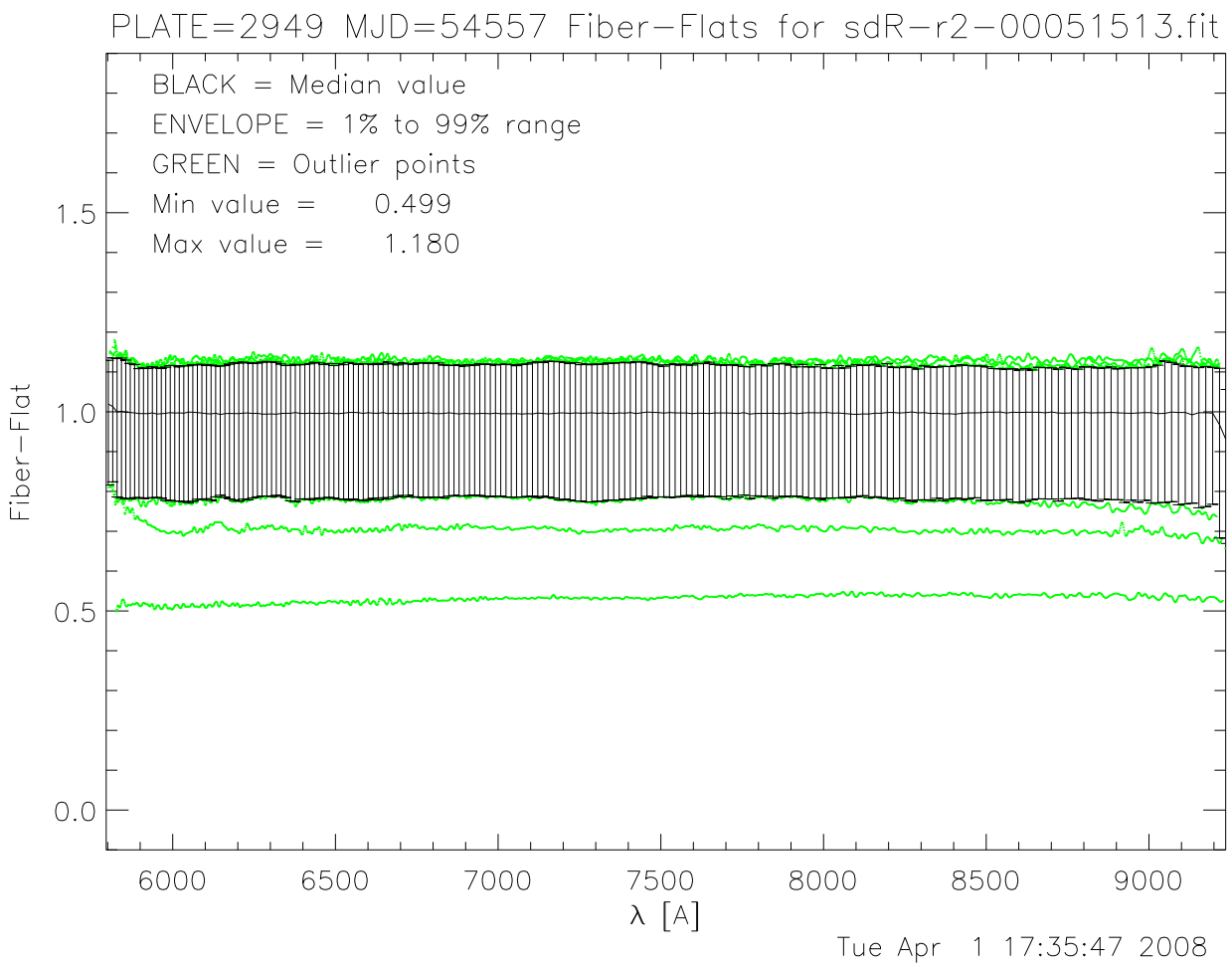

PLATE=2949 MJD=54557 sdR-r2-00051515.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

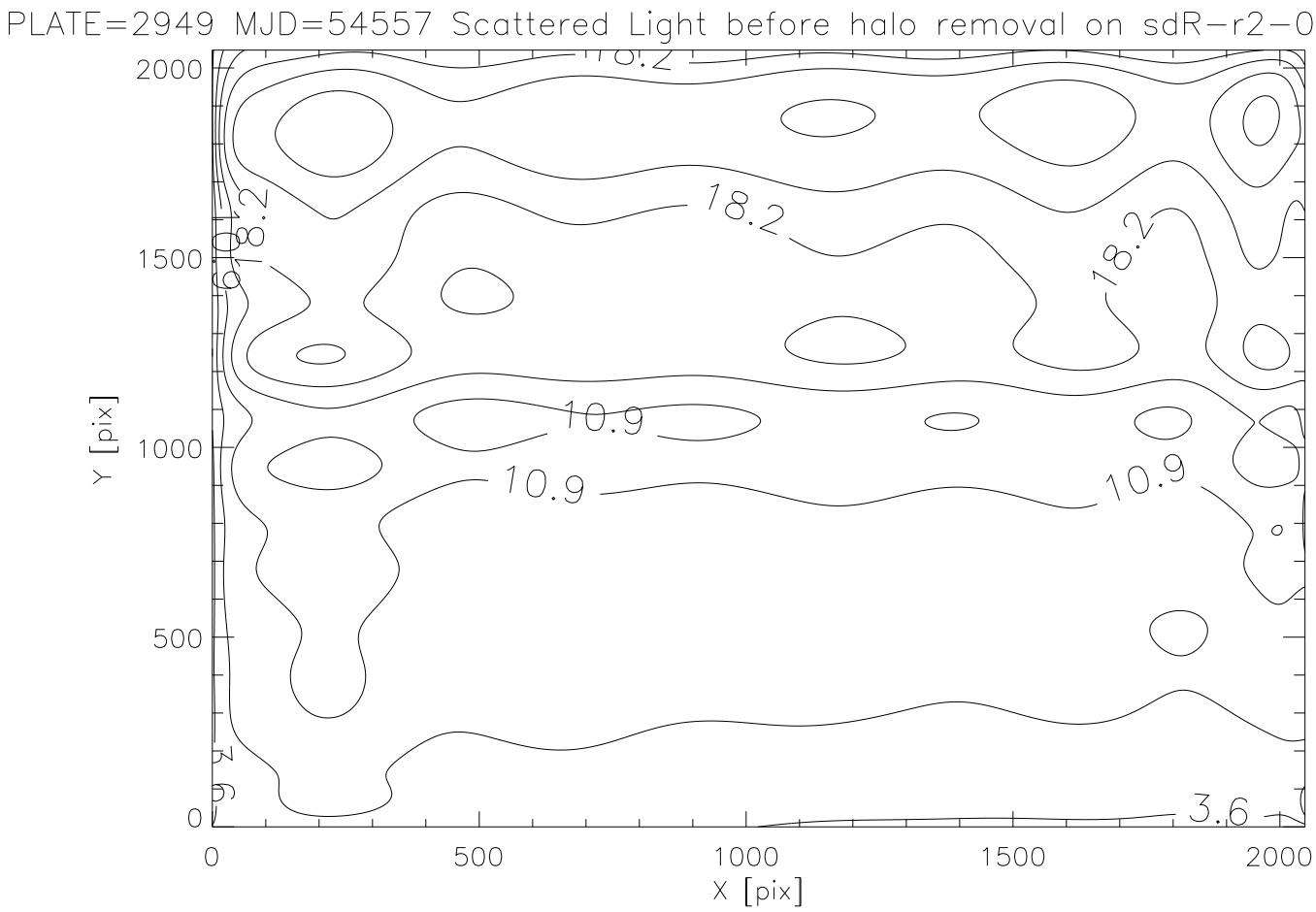

PLATE=2949 MJD=54557 sdR-r2-00051515.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

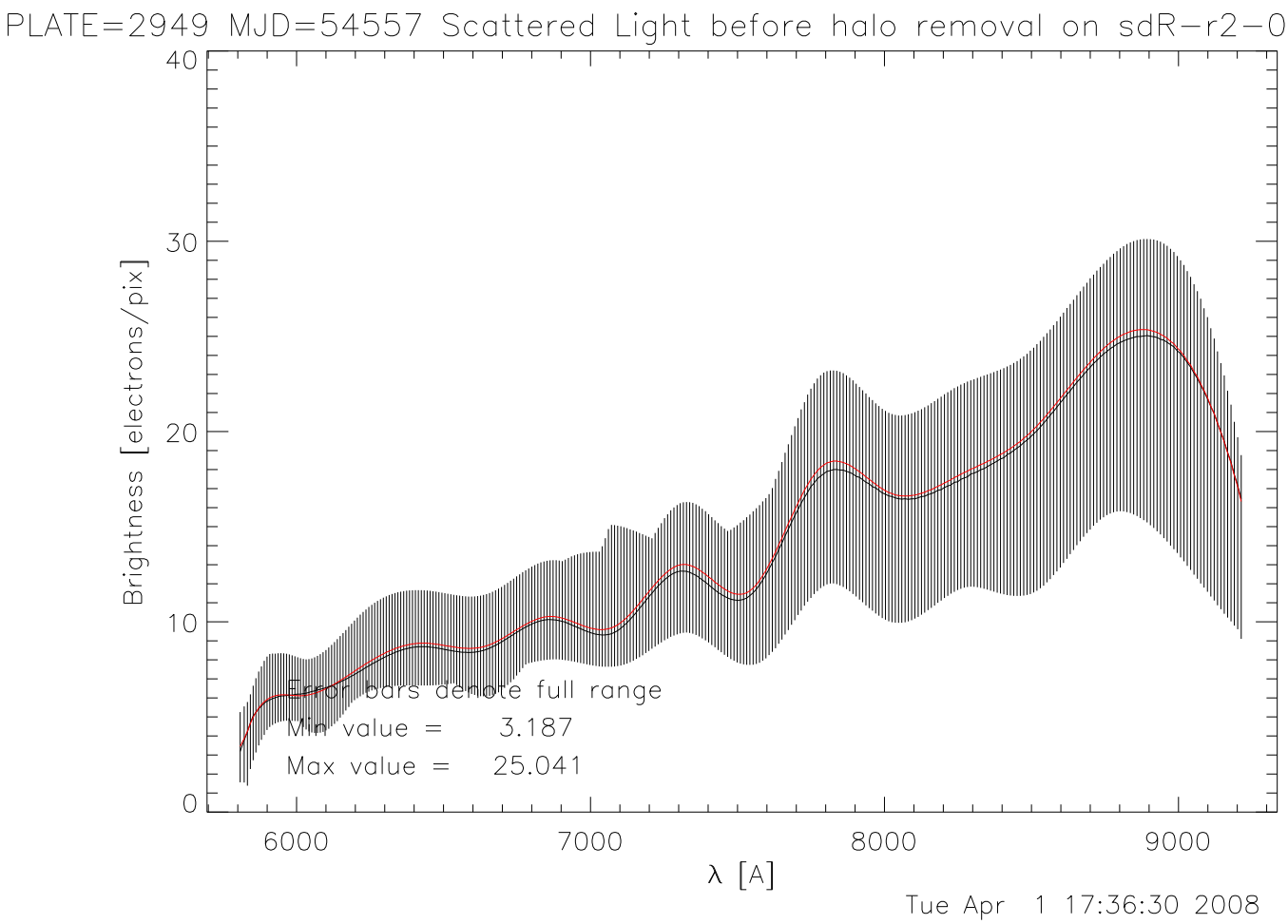

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-r2-00051515.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

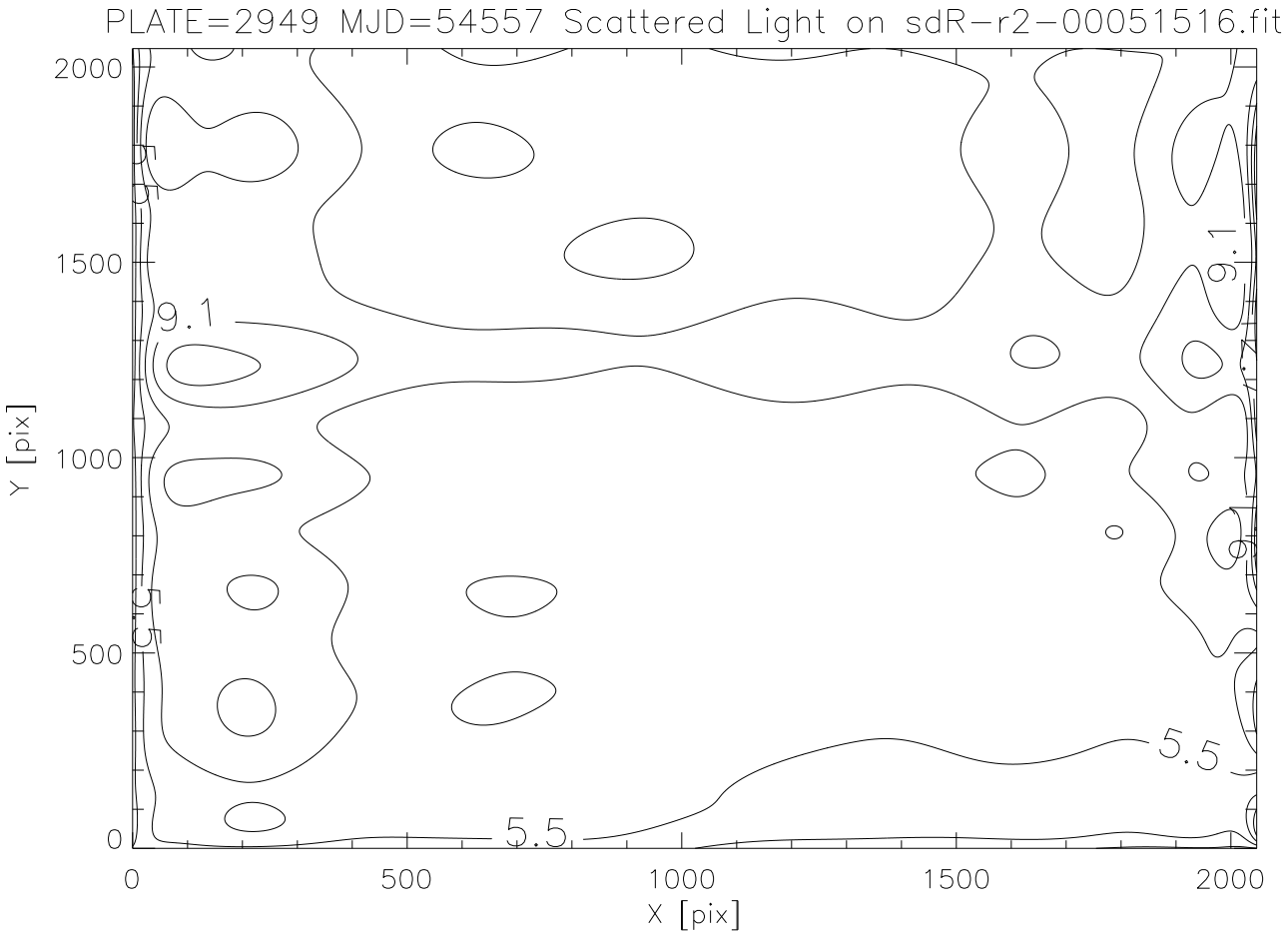

PLATE=2949 MJD=54557 sdR-r2-00051515.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.19 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

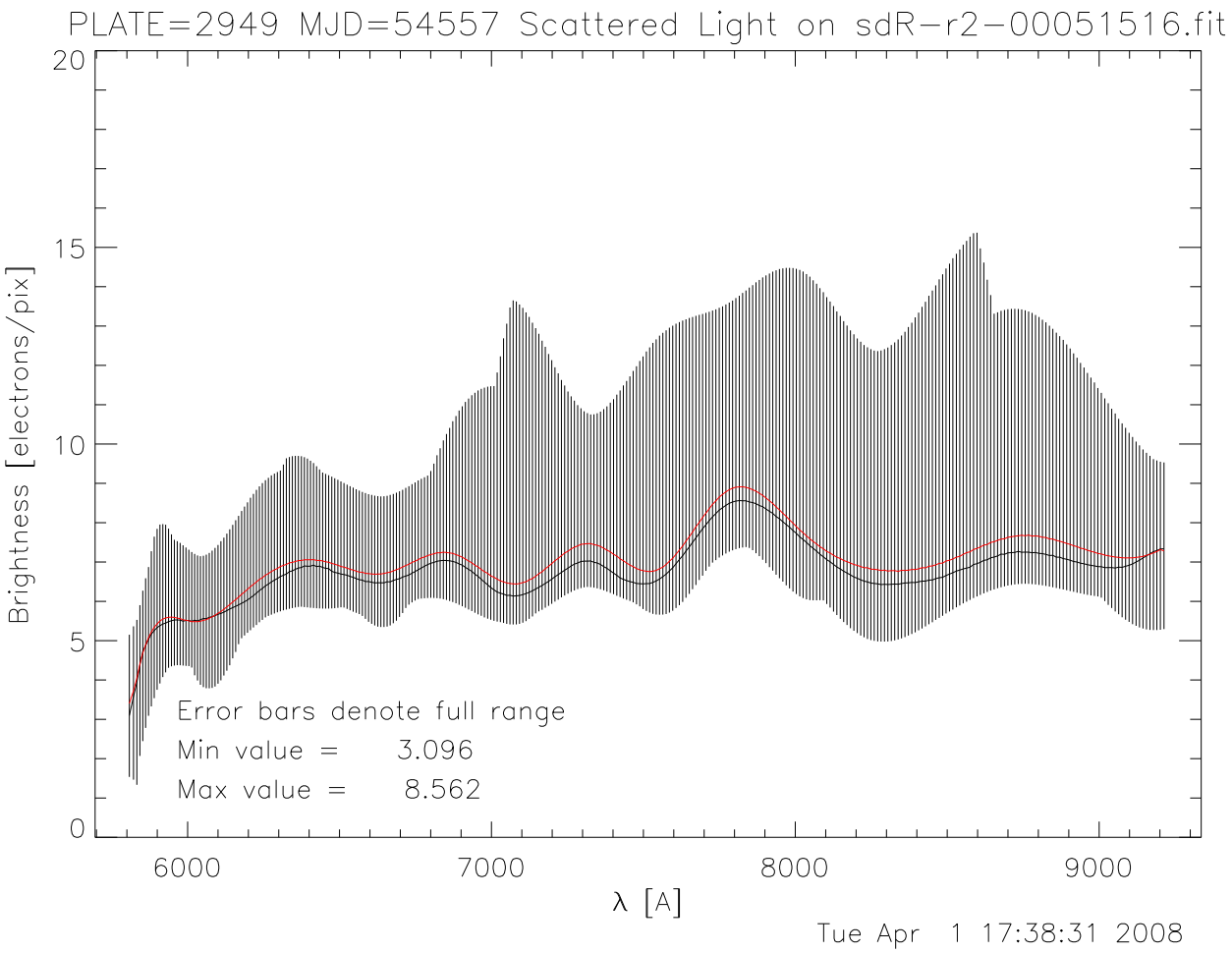

PLATE=2949 MJD=54557 sdR-r2-00051515.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.92 %
Fiber number
Focal Distance [mm]
Airmass

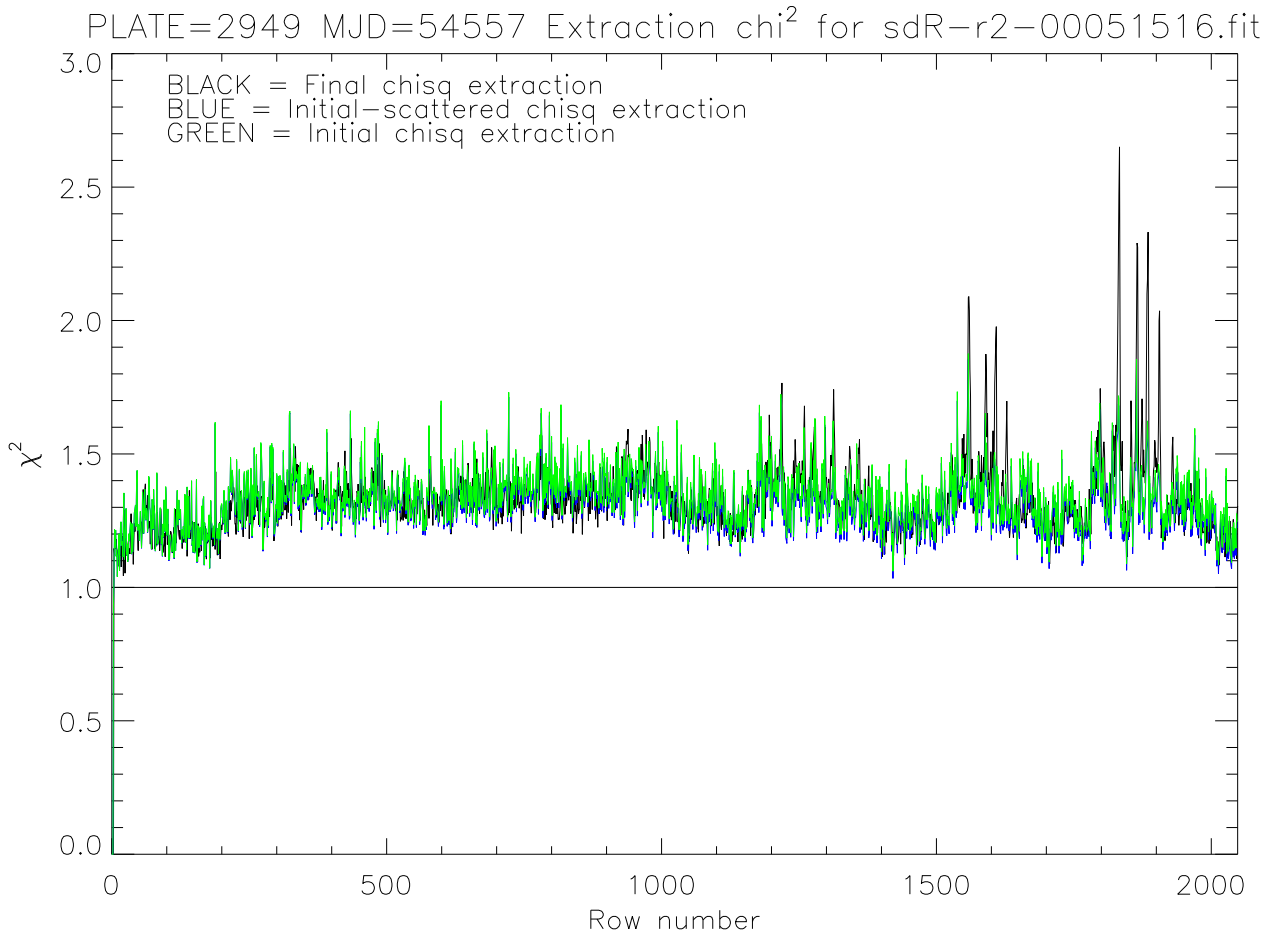

PLATE=2949 MJD=54557 Fiber−Flats for sdR−r2−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.499
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Apr 1 17:35:47 2008

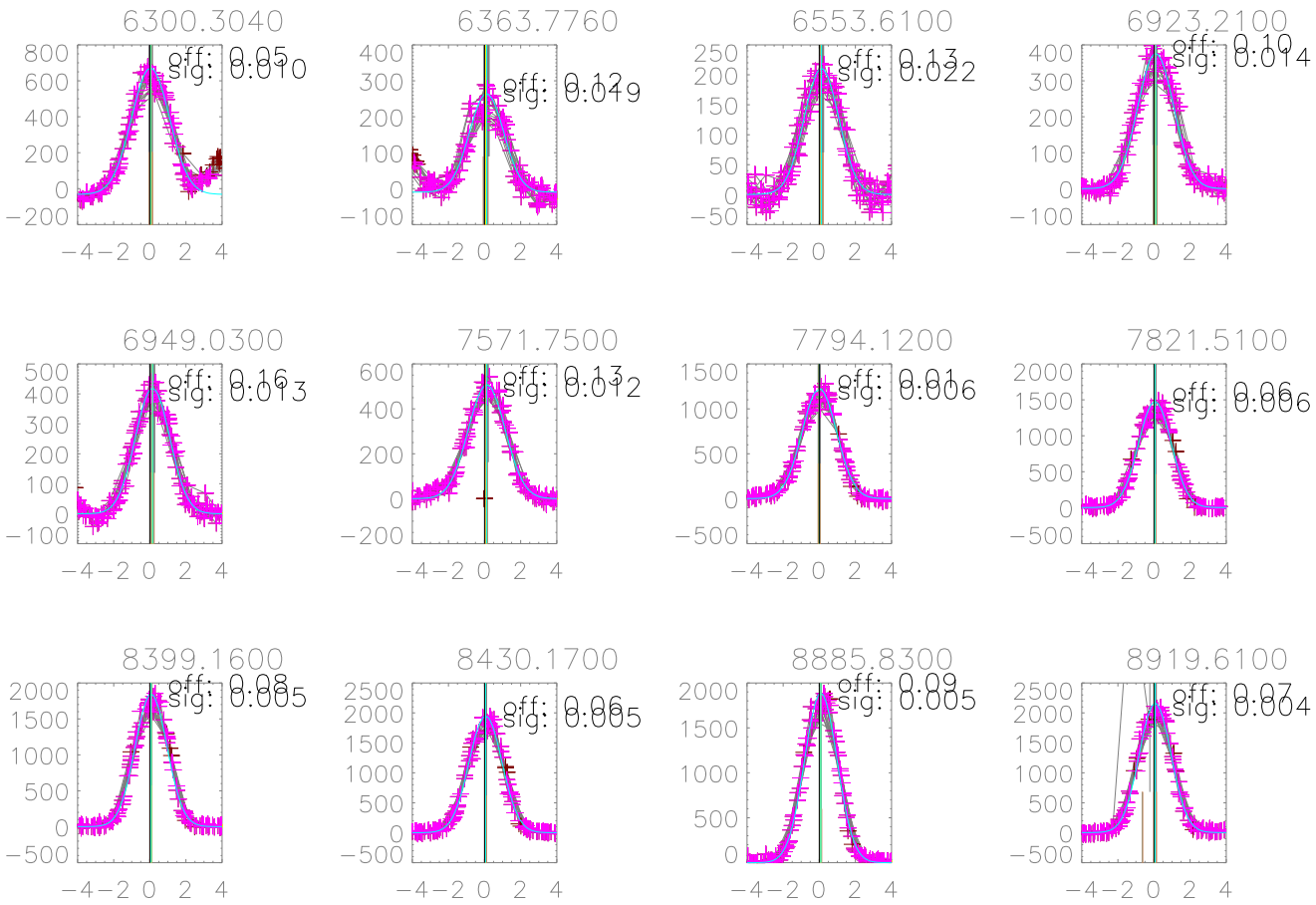

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r2-00051516.fi
18.2
18.2
18.2
18.2
10.9
10.9
10.9
3.6
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

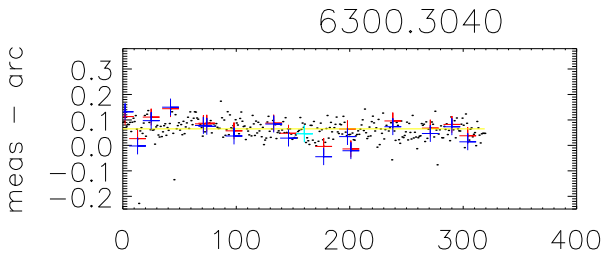

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r2-00051516.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.187
Max value = 25.041
Tue Apr 1 17:36:30 2008

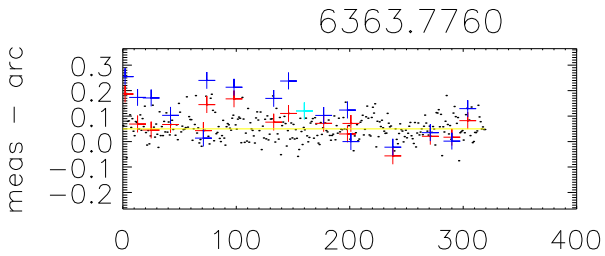

PLATE=2949 MJD=54557 Scattered Light on sdR-r2-00051516.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
5.5

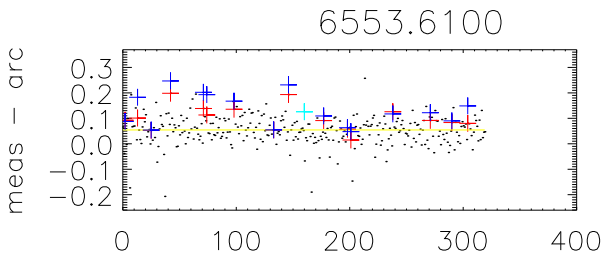

PLATE=2949 MJD=54557 Scattered Light on sdR-r2-00051516.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.096
Max value = 8.562
Tue Apr 1 17:38:31 2008

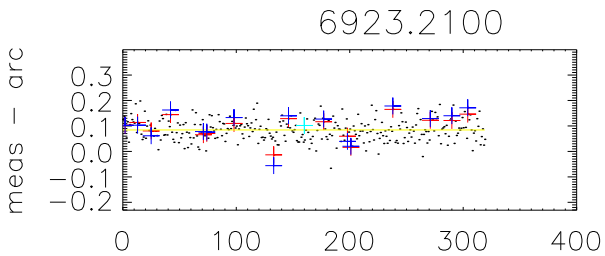

PLATE=2949 MJD=54557 Extraction chi^2 for sdR−r2−00051516.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

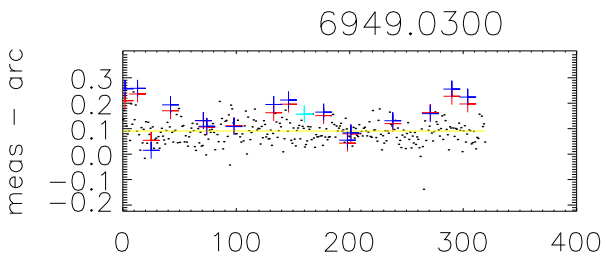

6300.3040
off: 0.05
sig: 0.010
6363.7760
off: 0.12
sig: 0.049
6553.6100
off: 0.13
sig: 0.022
6923.2100
off: 0.10
sig: 0.014
6949.0300
off: 0.16
sig: 0.013
7571.7500
off: 0.13
sig: 0.012
7794.1200
off: 0.01
sig: 0.006
7821.5100
off: 0.06
sig: 0.006
8399.1600
off: 0.08
sig: 0.005
8430.1700
off: 0.06
sig: 0.005
8885.8300
off: 0.09
sig: 0.005
8919.6100
off: 0.07
sig: 0.004

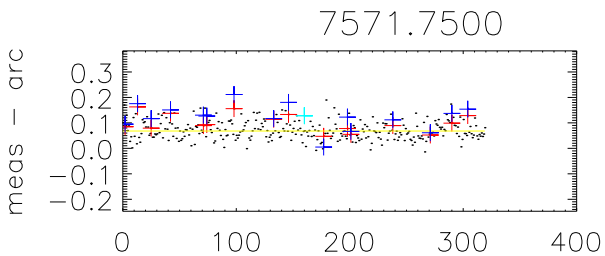

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

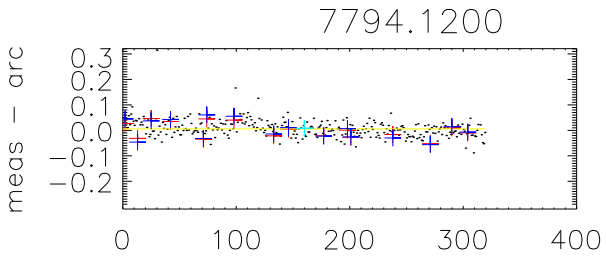

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

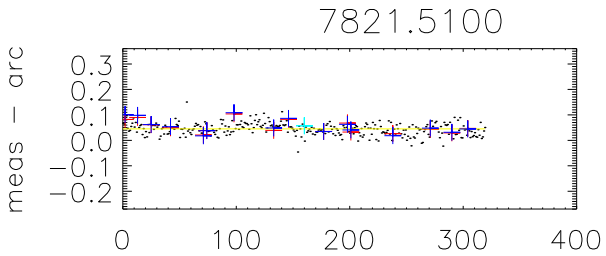

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

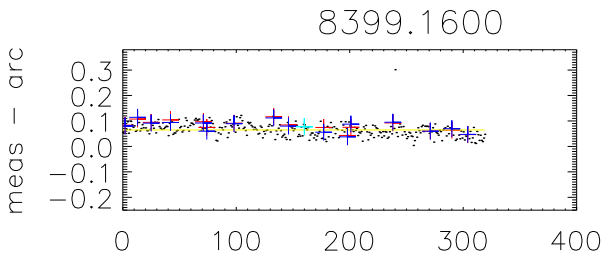

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

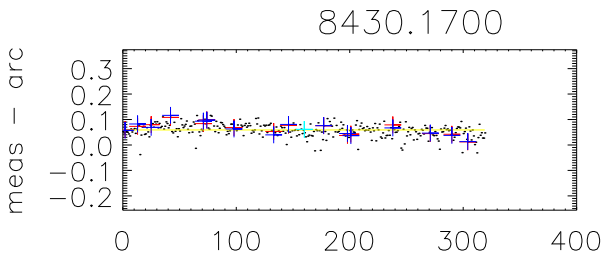

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

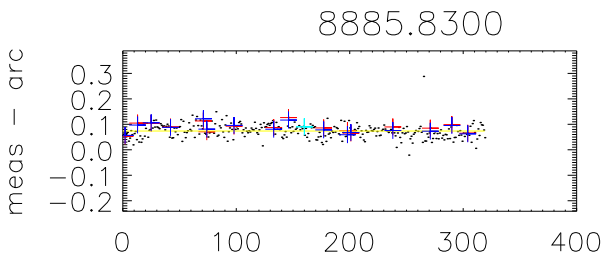

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

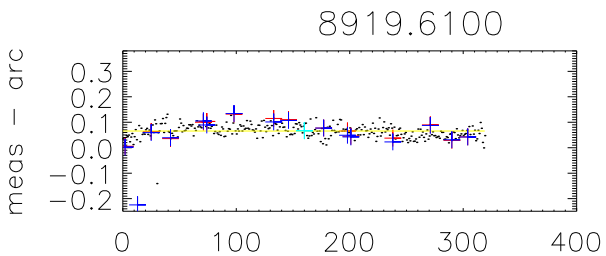

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

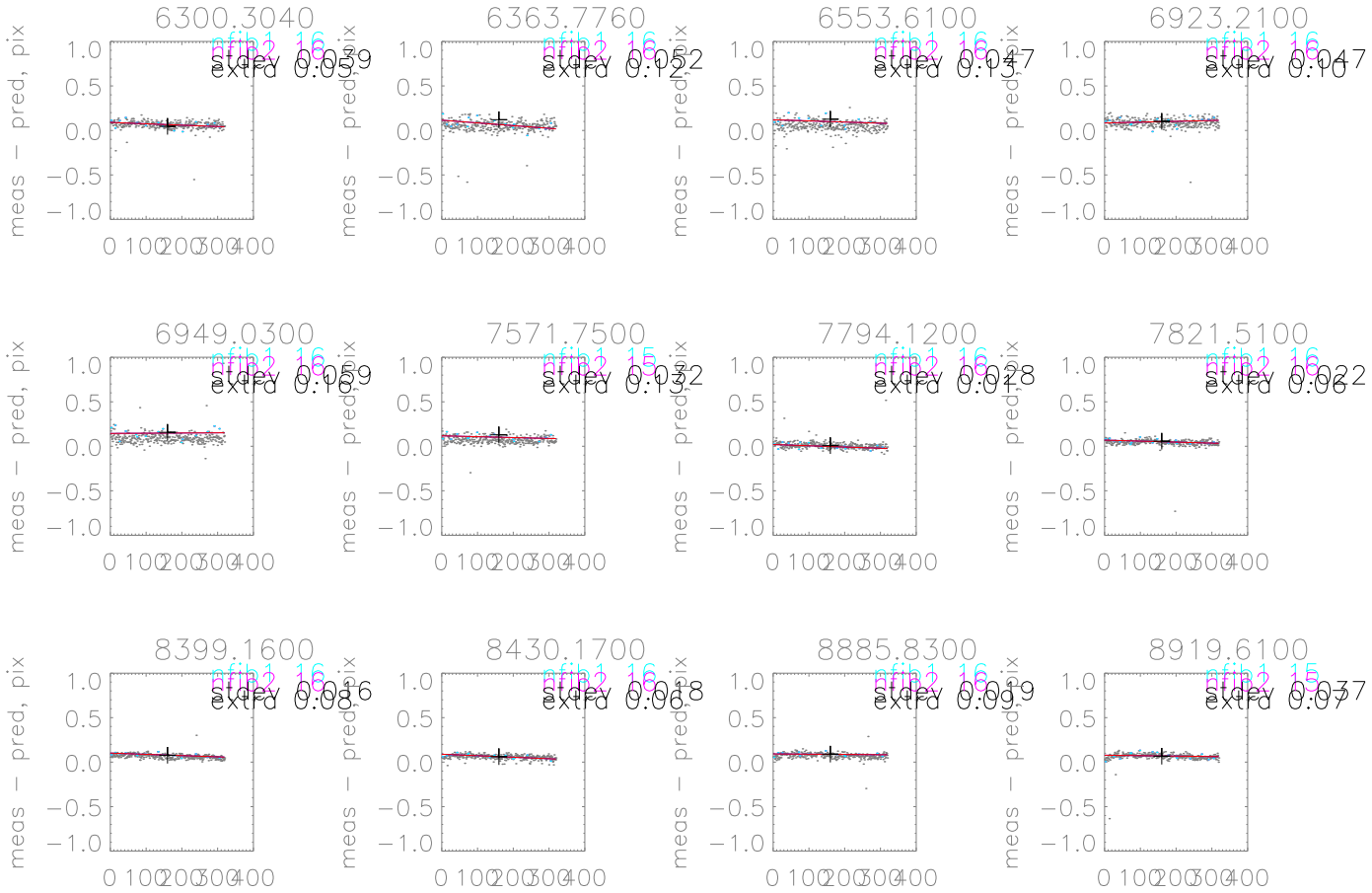

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

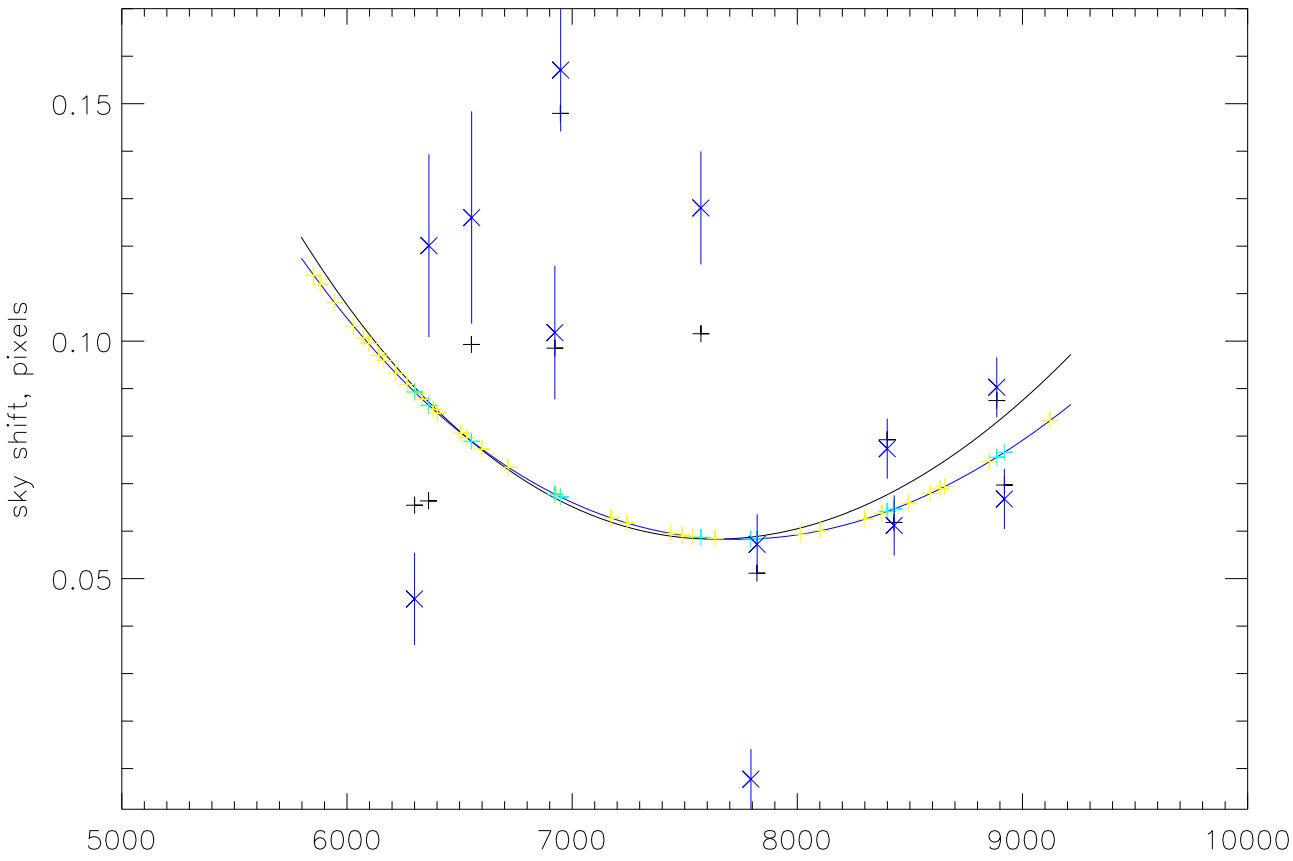

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

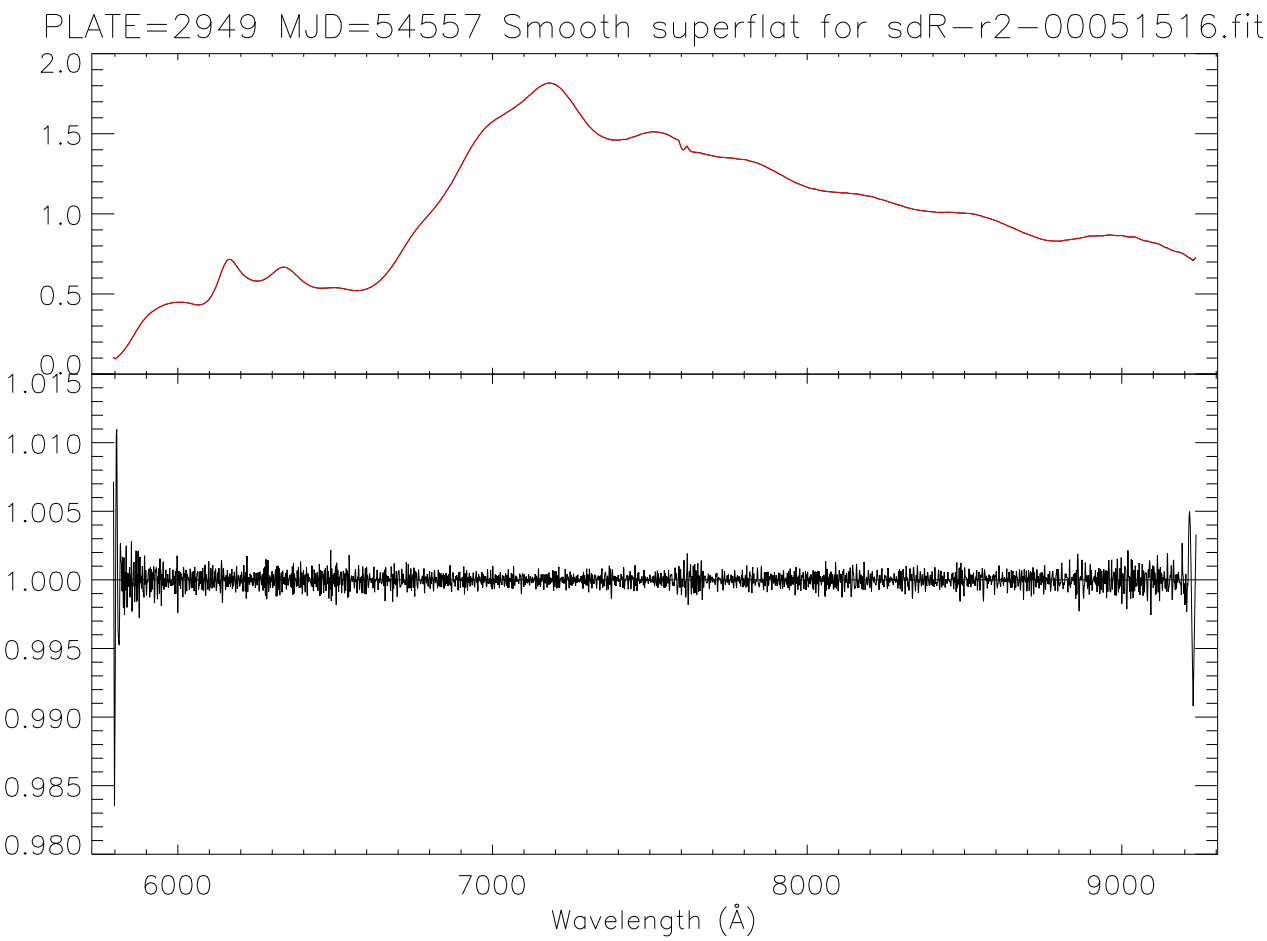

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

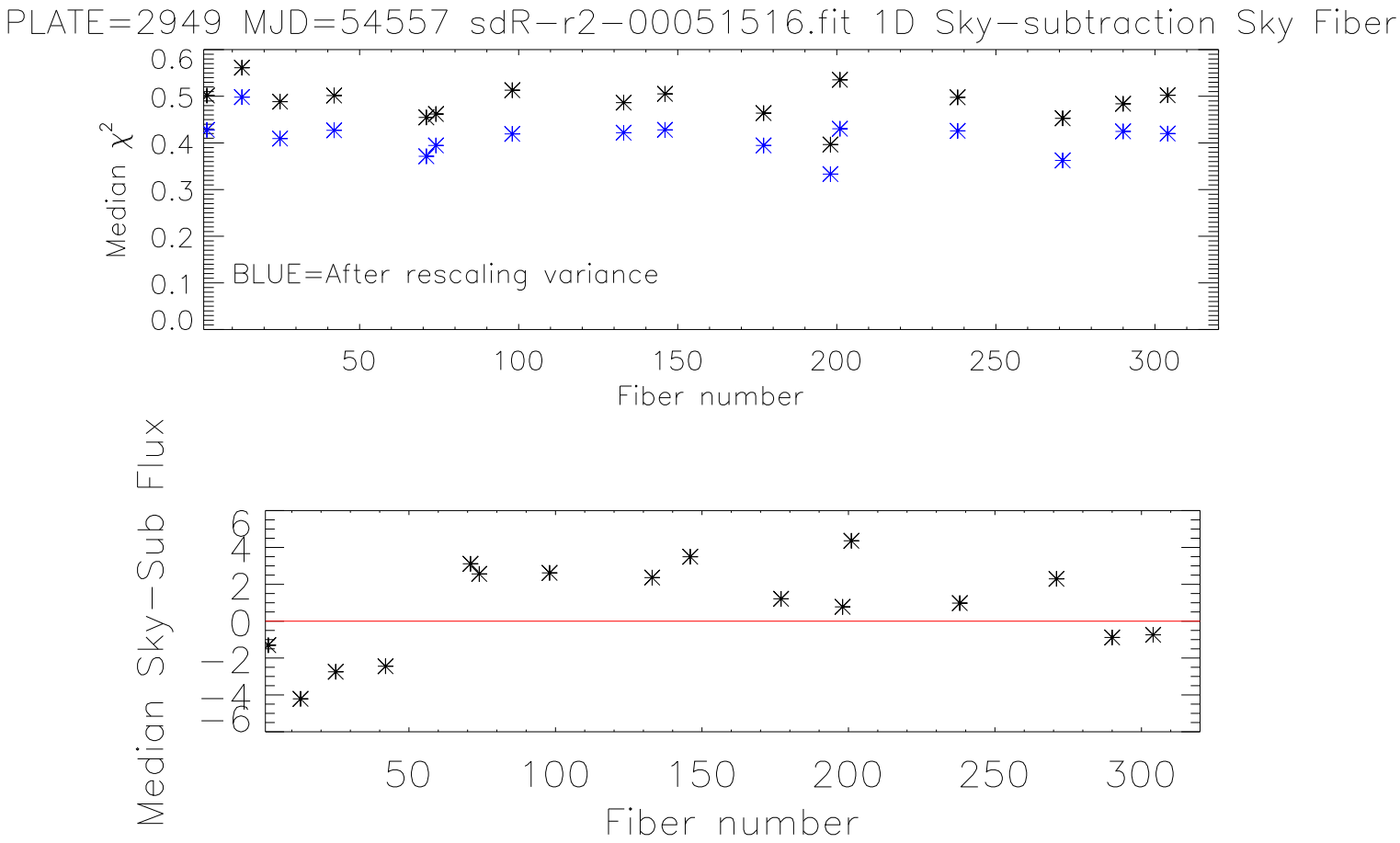

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

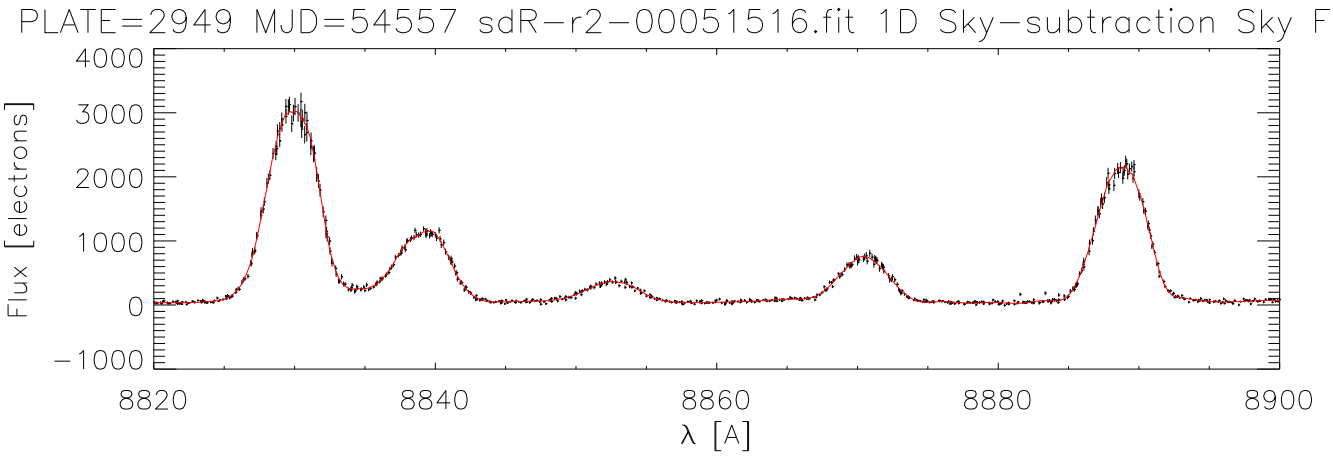

6300.3040
stdev 0.059
extra 0.059
6363.7760
stdev 0.052
extra 0.122
6553.6100
stdev 0.047
extra 0.134
6923.2100
stdev 0.047
extra 0.10
6949.0300
stdev 0.059
extra 0.169
7571.7500
stdev 0.032
extra 0.132
7794.1200
stdev 0.028
extra 0.028
7821.5100
stdev 0.022
extra 0.06
8399.1600
stdev 0.046
extra 0.08
8430.1700
stdev 0.048
extra 0.068
8885.8300
stdev 0.049
extra 0.099
8919.6100
stdev 0.037
extra 0.07
meas − pred, pix
meas − pred, pix

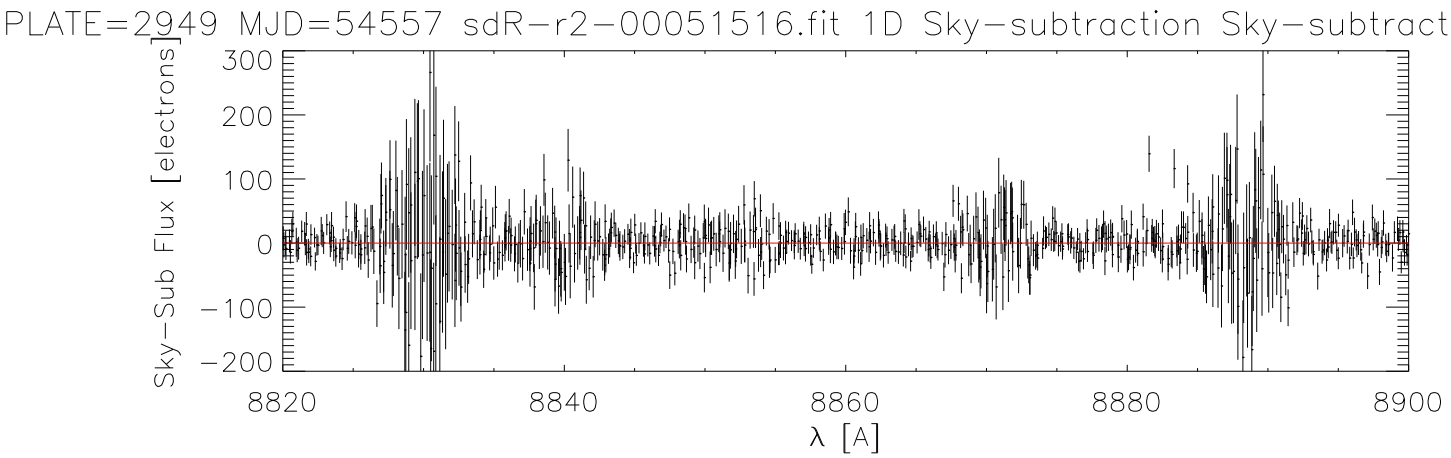

sky shift, pixels
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

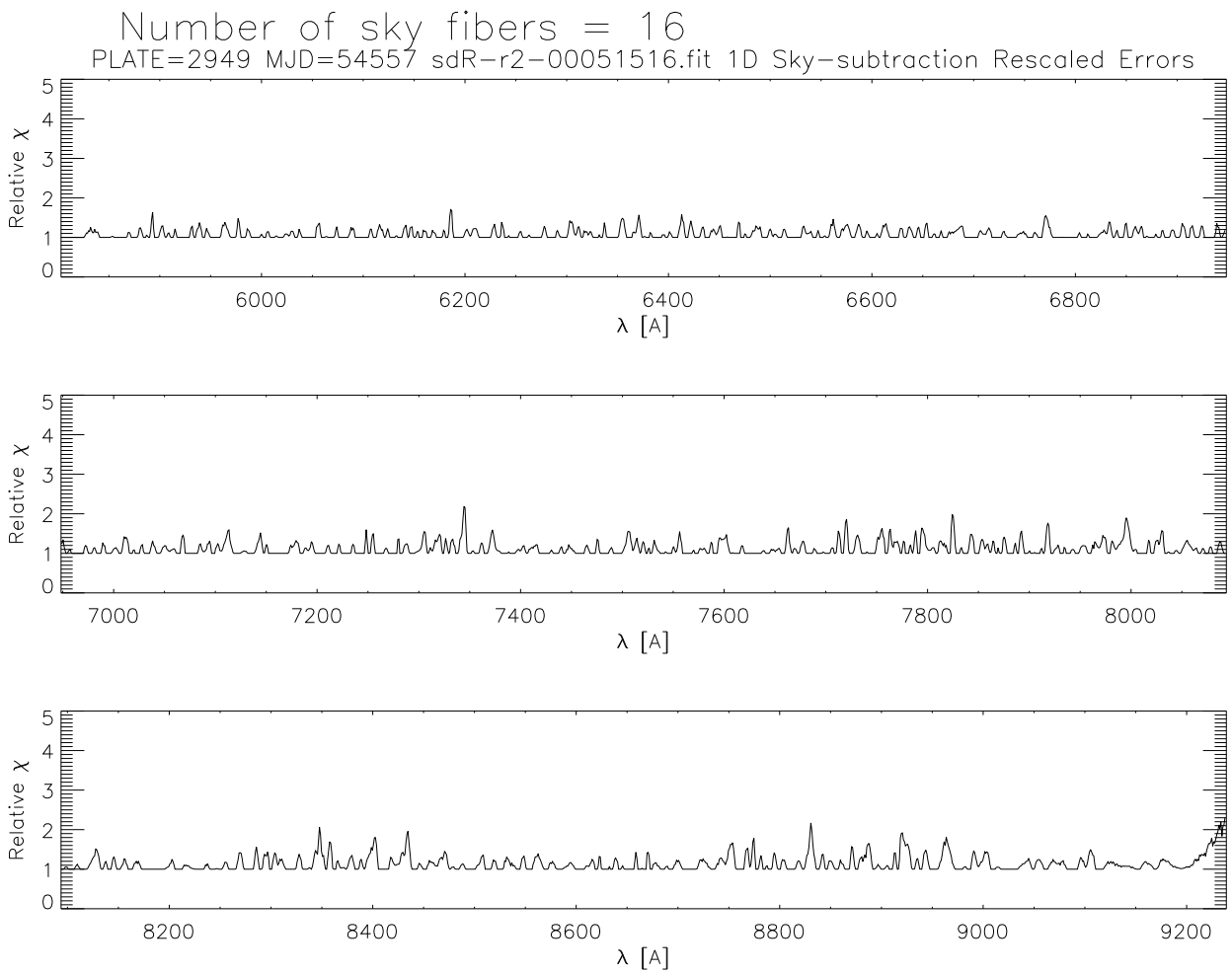
es= −0.0000

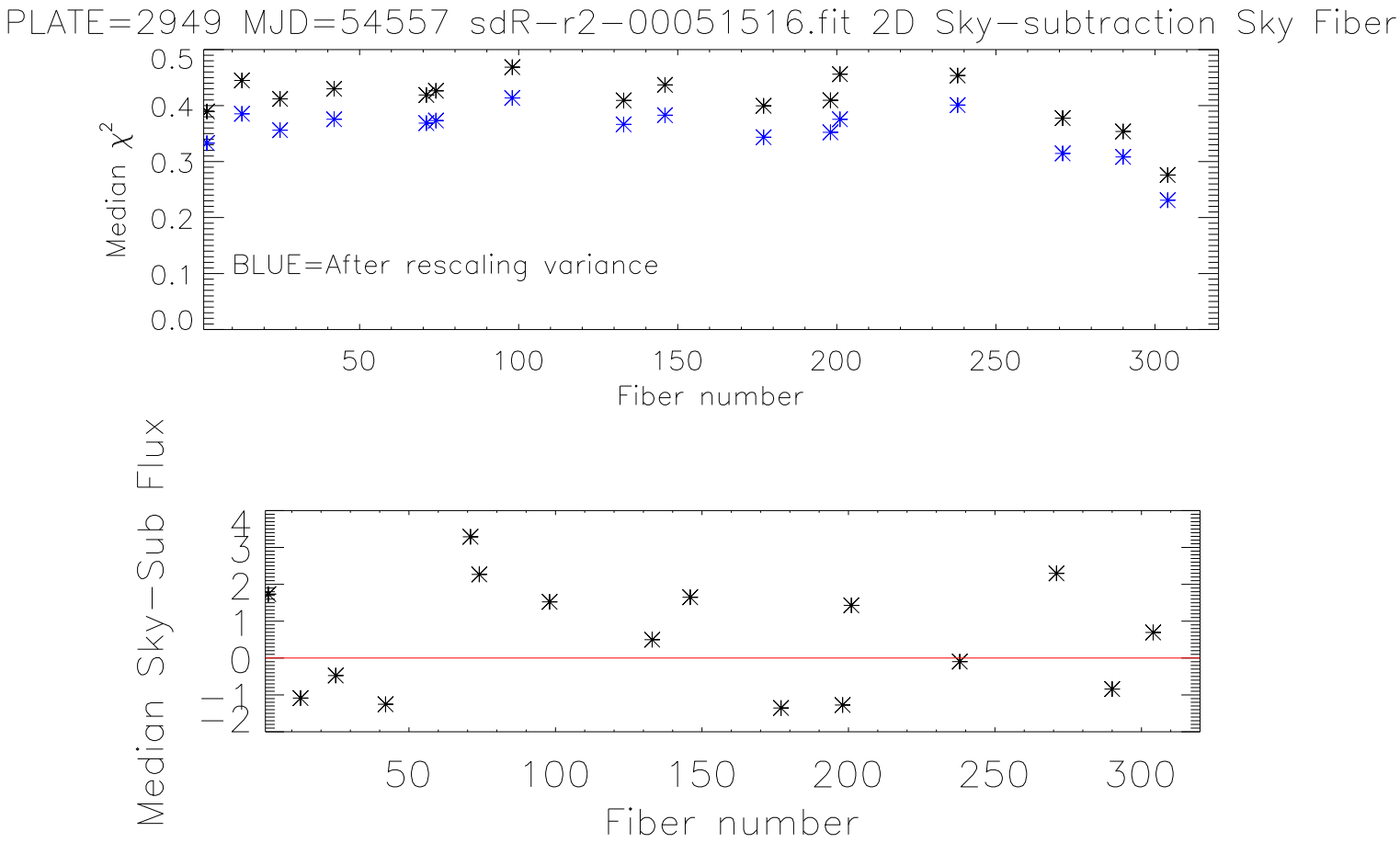

PLATE=2949 MJD=54557 Smooth superflat for sdR−r2−00051516.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
0.980
6000
7000
8000
9000
Wavelength (Å)

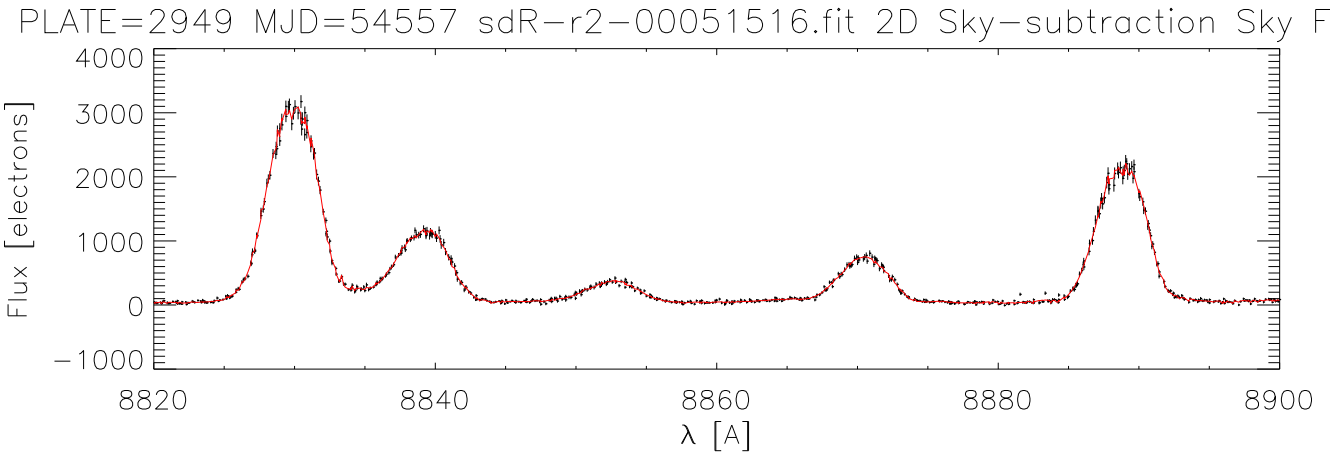

PLATE=2949 MJD=54557 sdR-r2-00051516.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

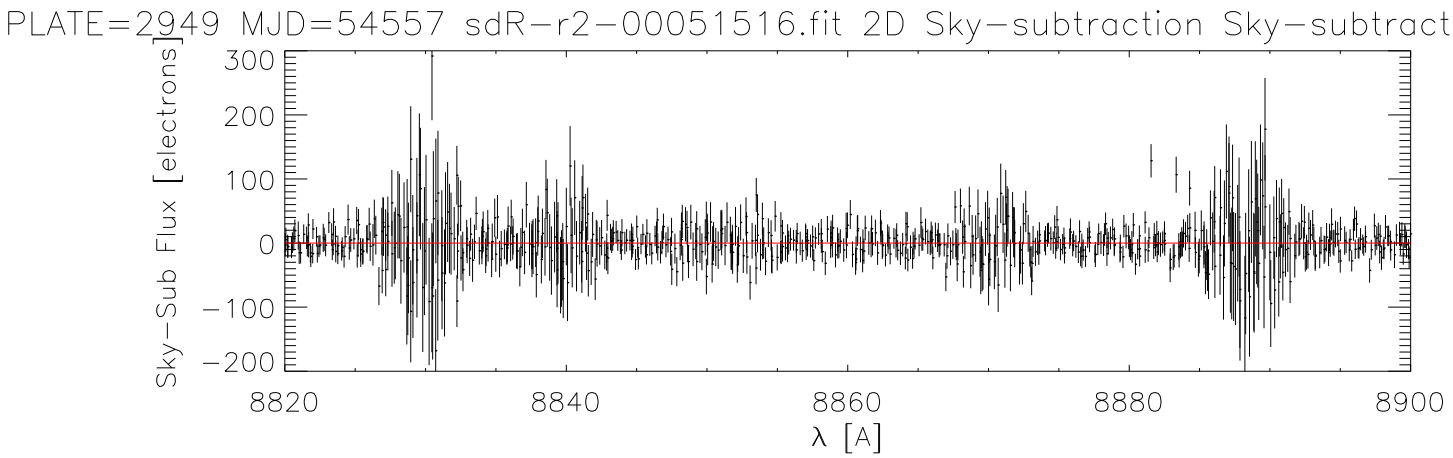

PLATE=2949 MJD=54557 sdR-r2-00051516.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

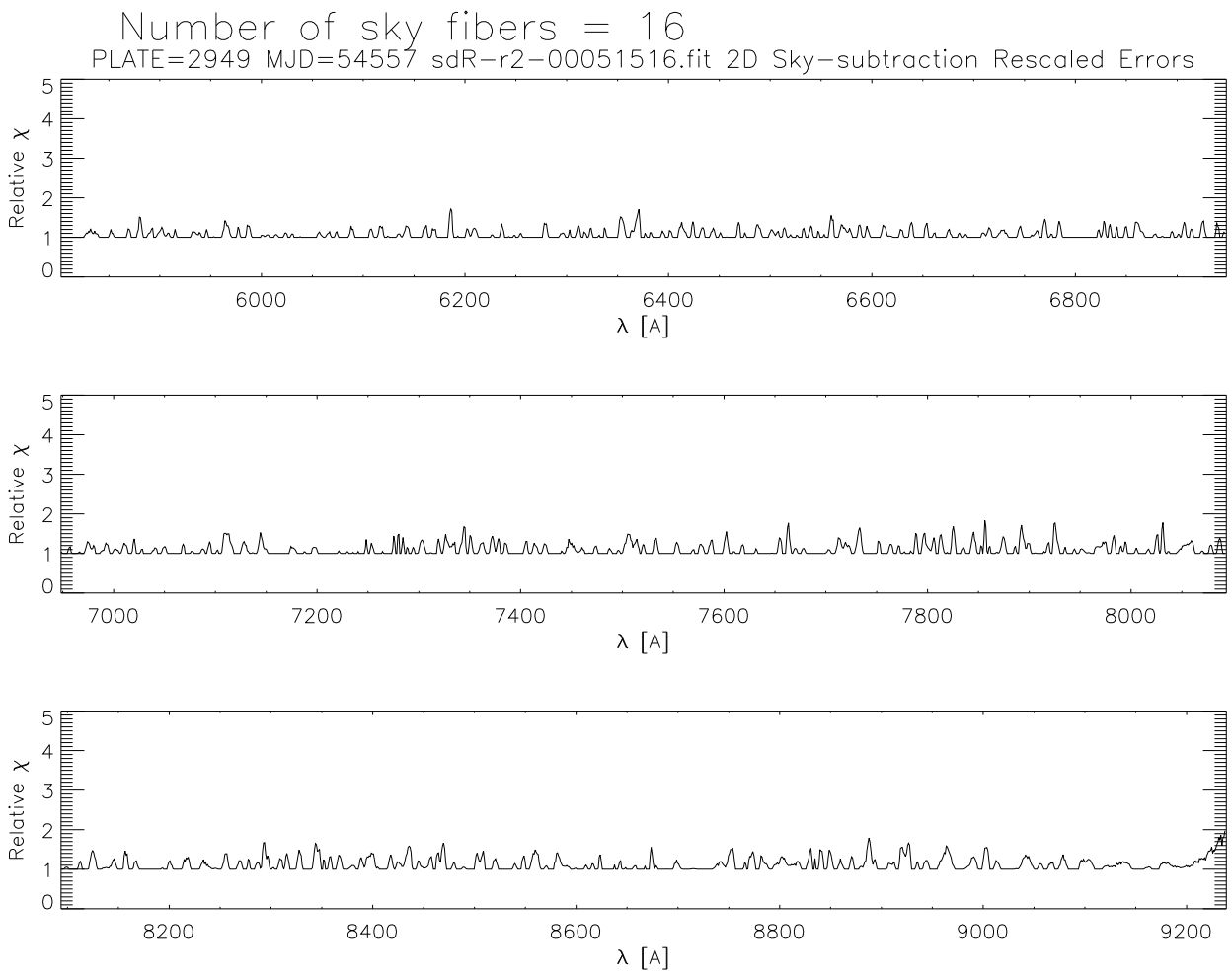

PLATE=2949 MJD=54557 sdR-r2-00051516.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

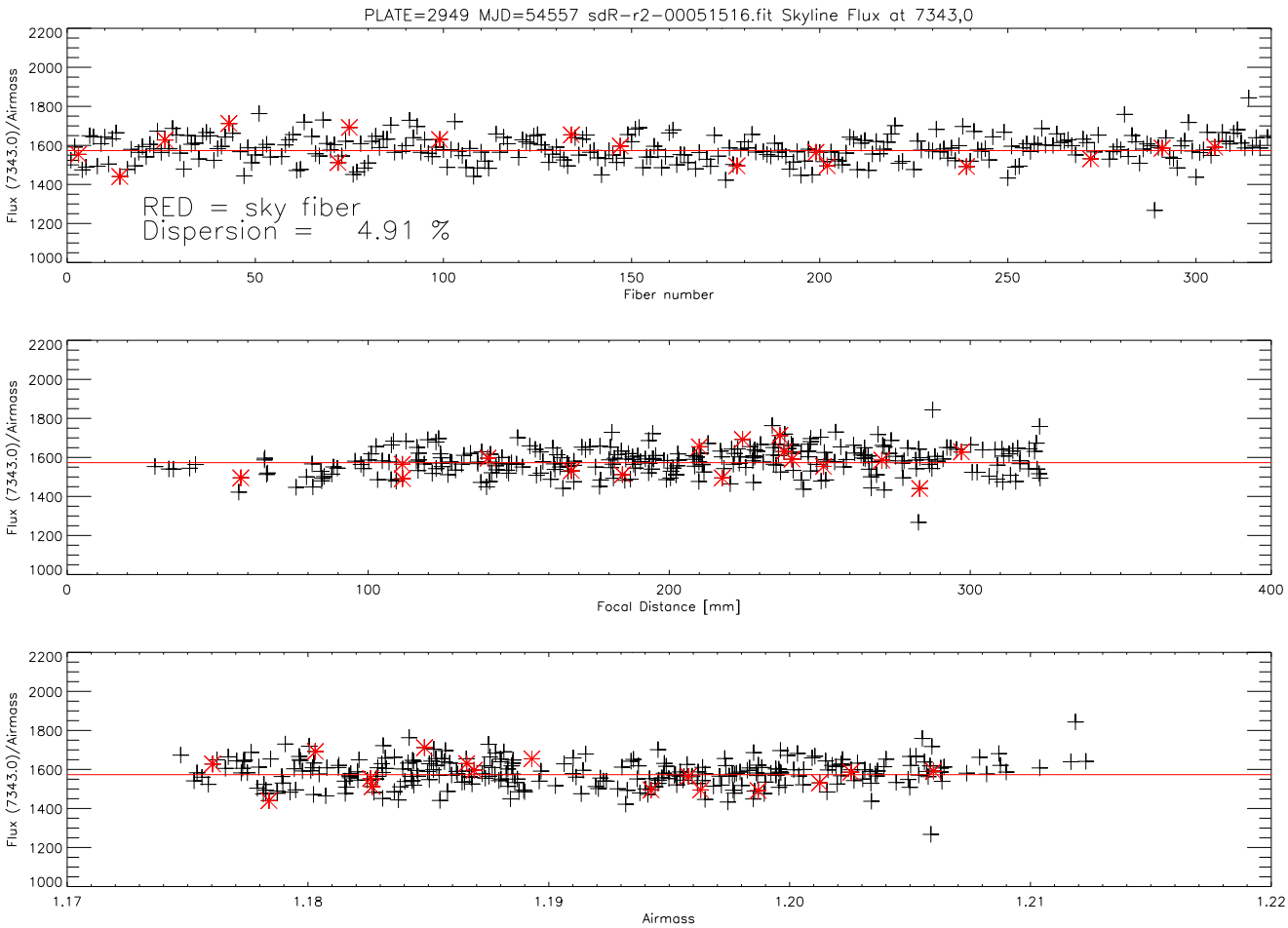

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-r2-00051516.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

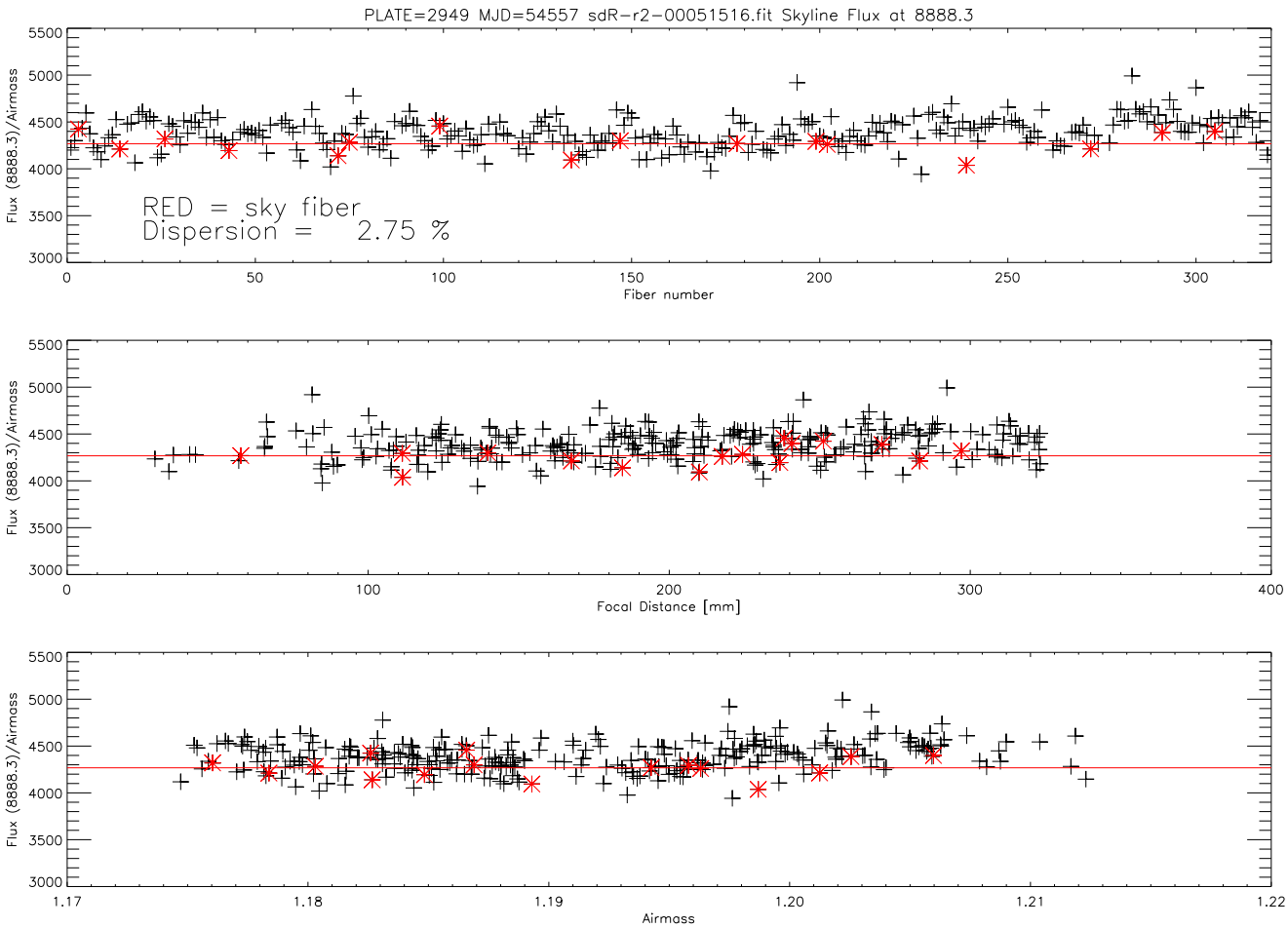

PLATE=2949 MJD=54557 sdR-r2-00051516.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

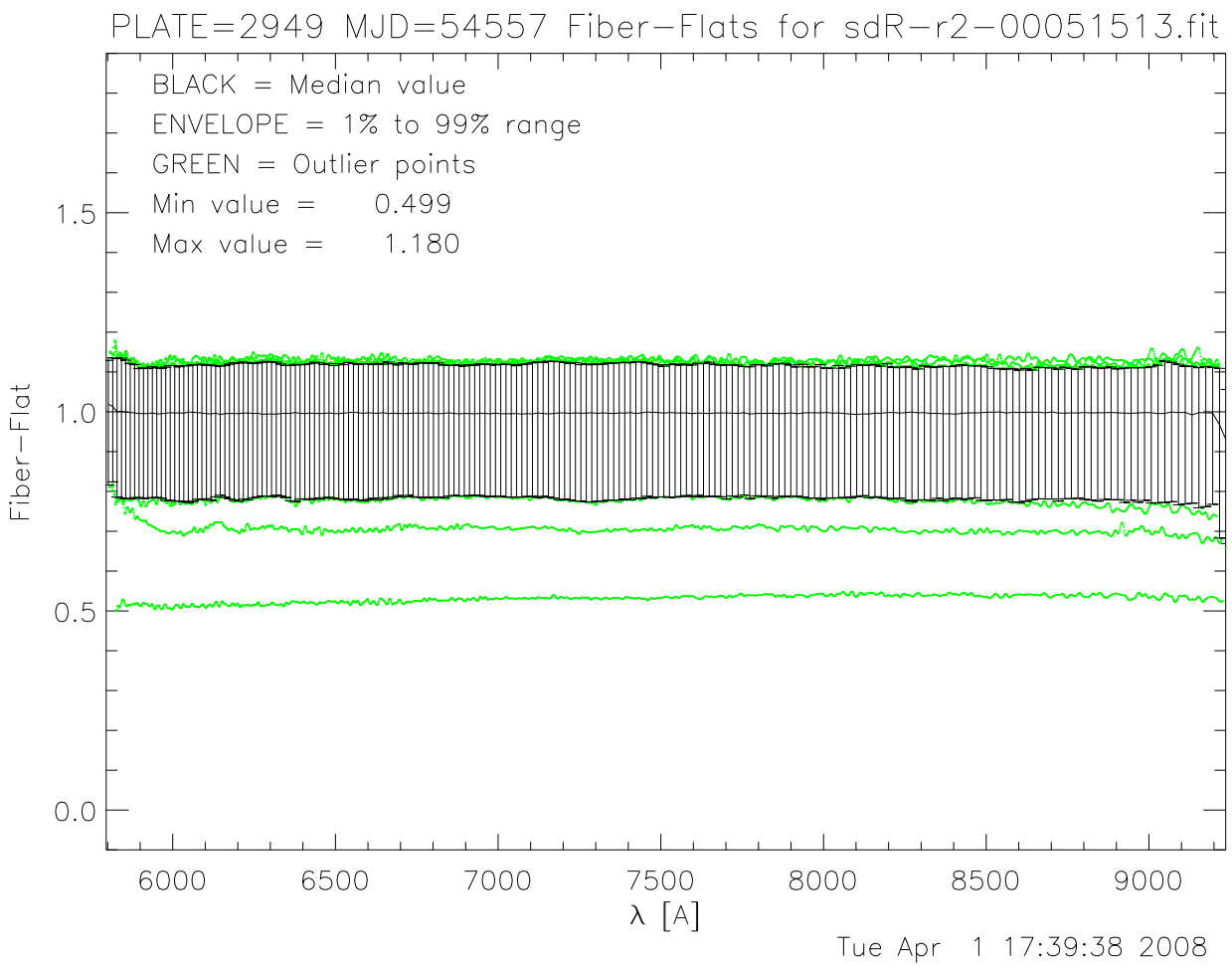

PLATE=2949 MJD=54557 sdR-r2-00051516.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

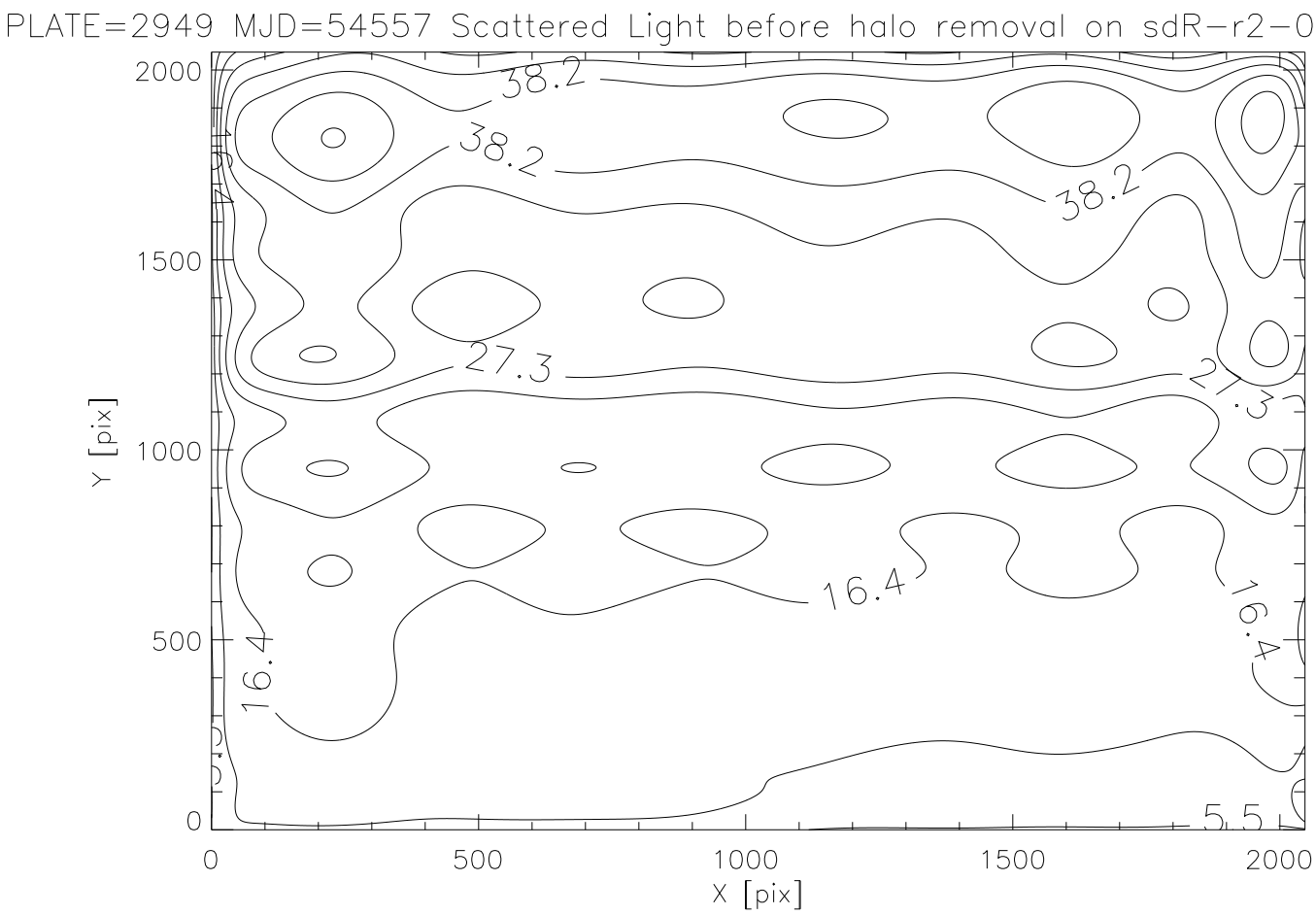

PLATE=2949 MJD=54557 sdR-r2-00051516.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

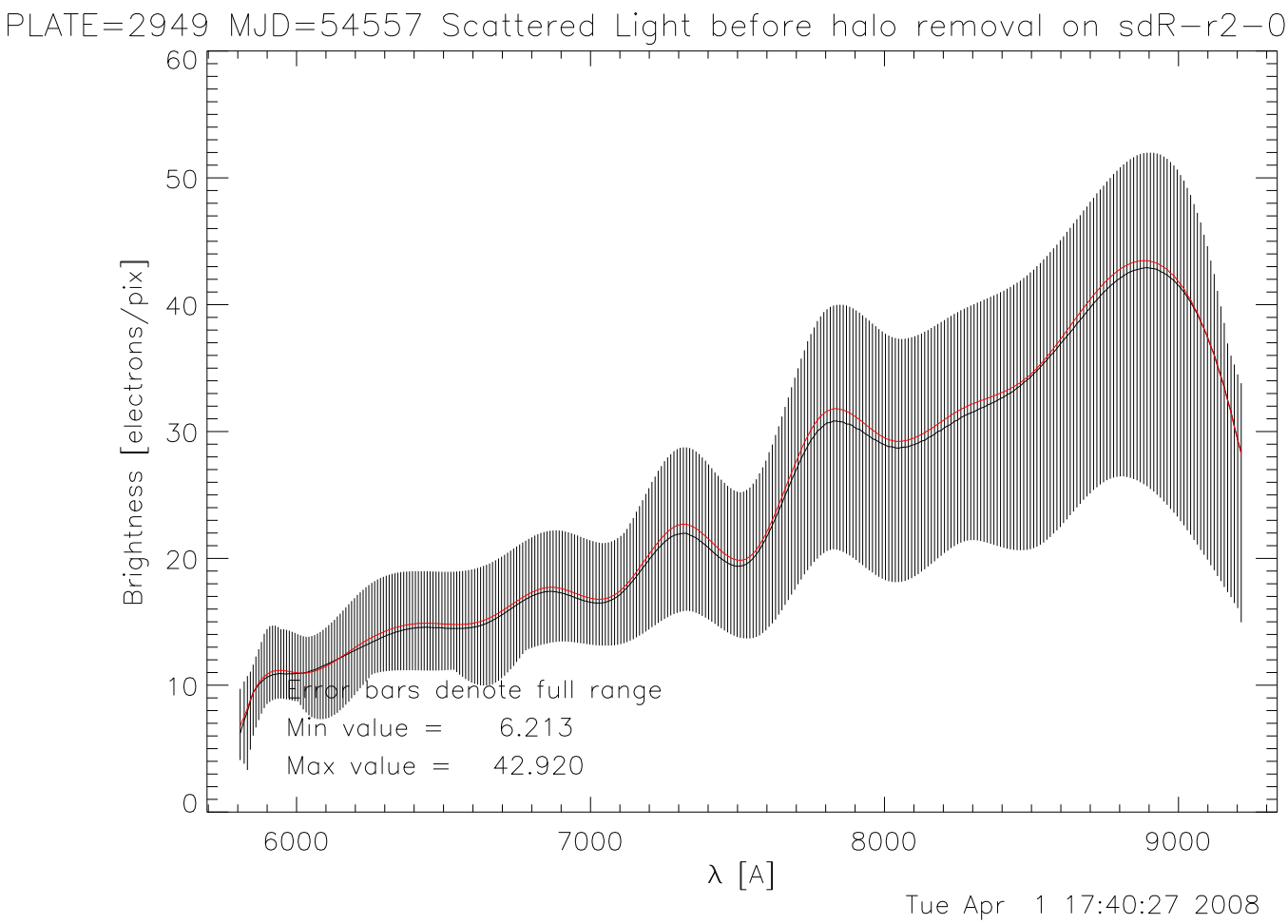

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-r2-00051516.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

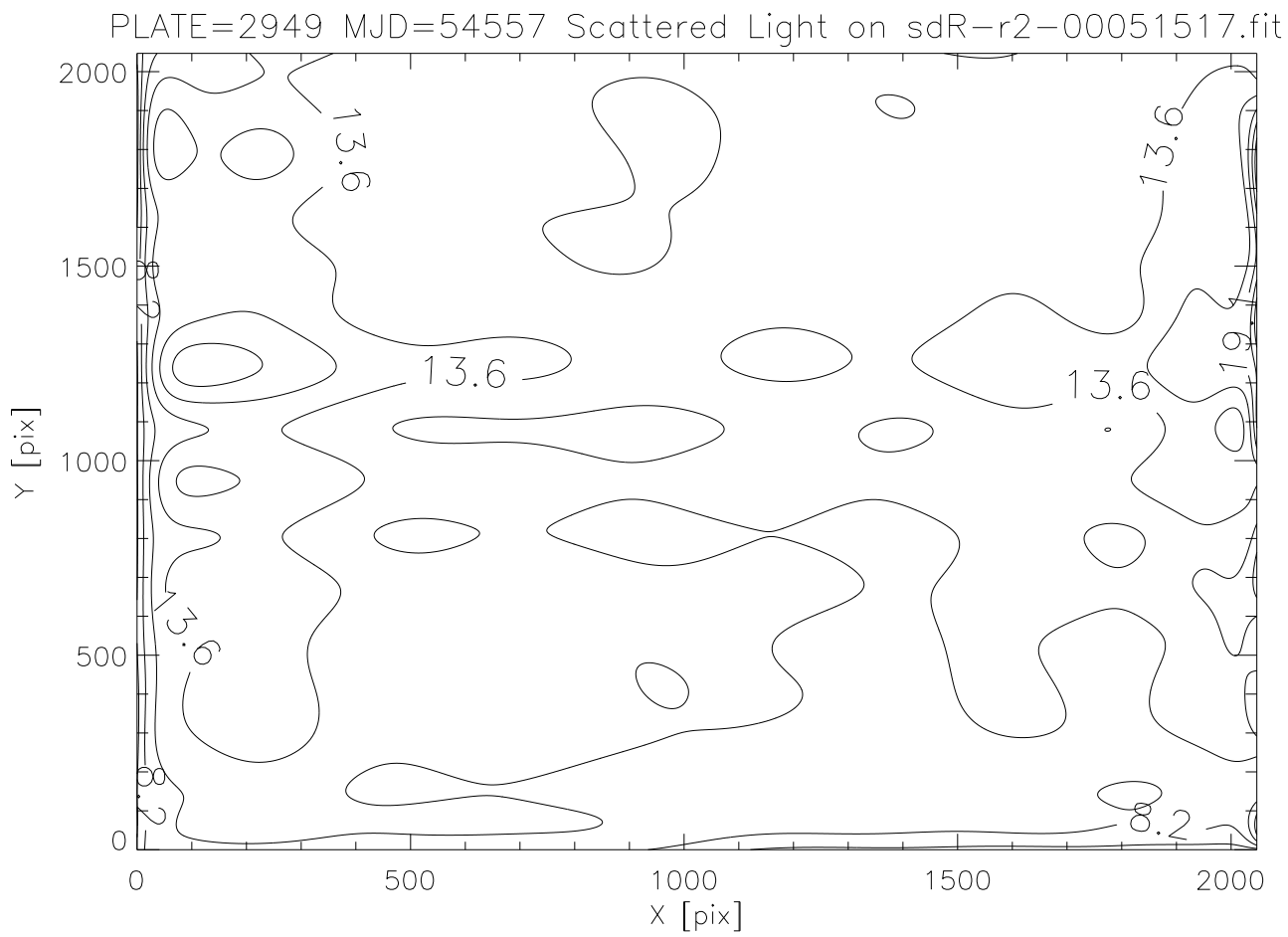

PLATE=2949 MJD=54557 sdR-r2-00051516.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.91 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

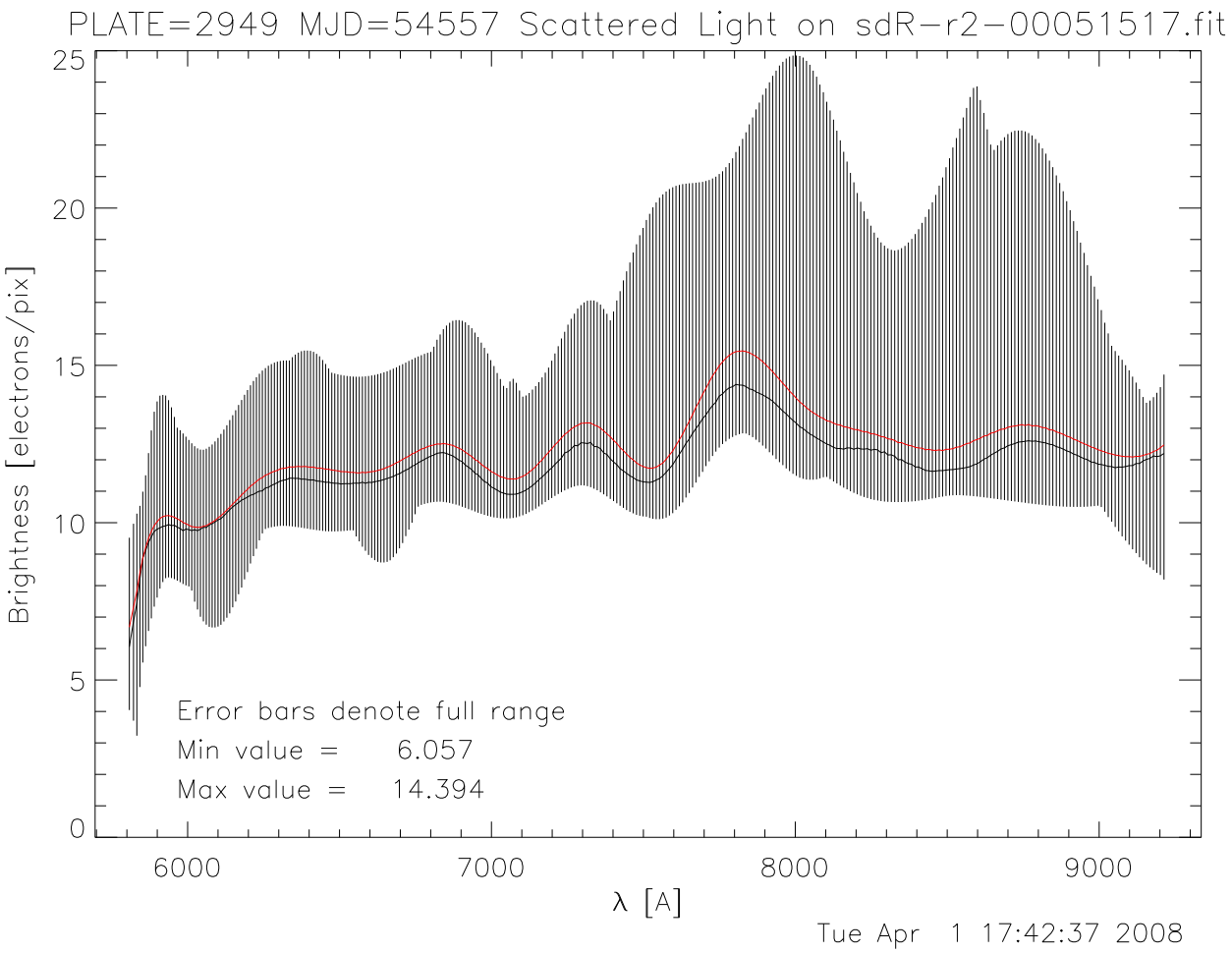

PLATE=2949 MJD=54557 sdR-r2-00051516.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.75 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

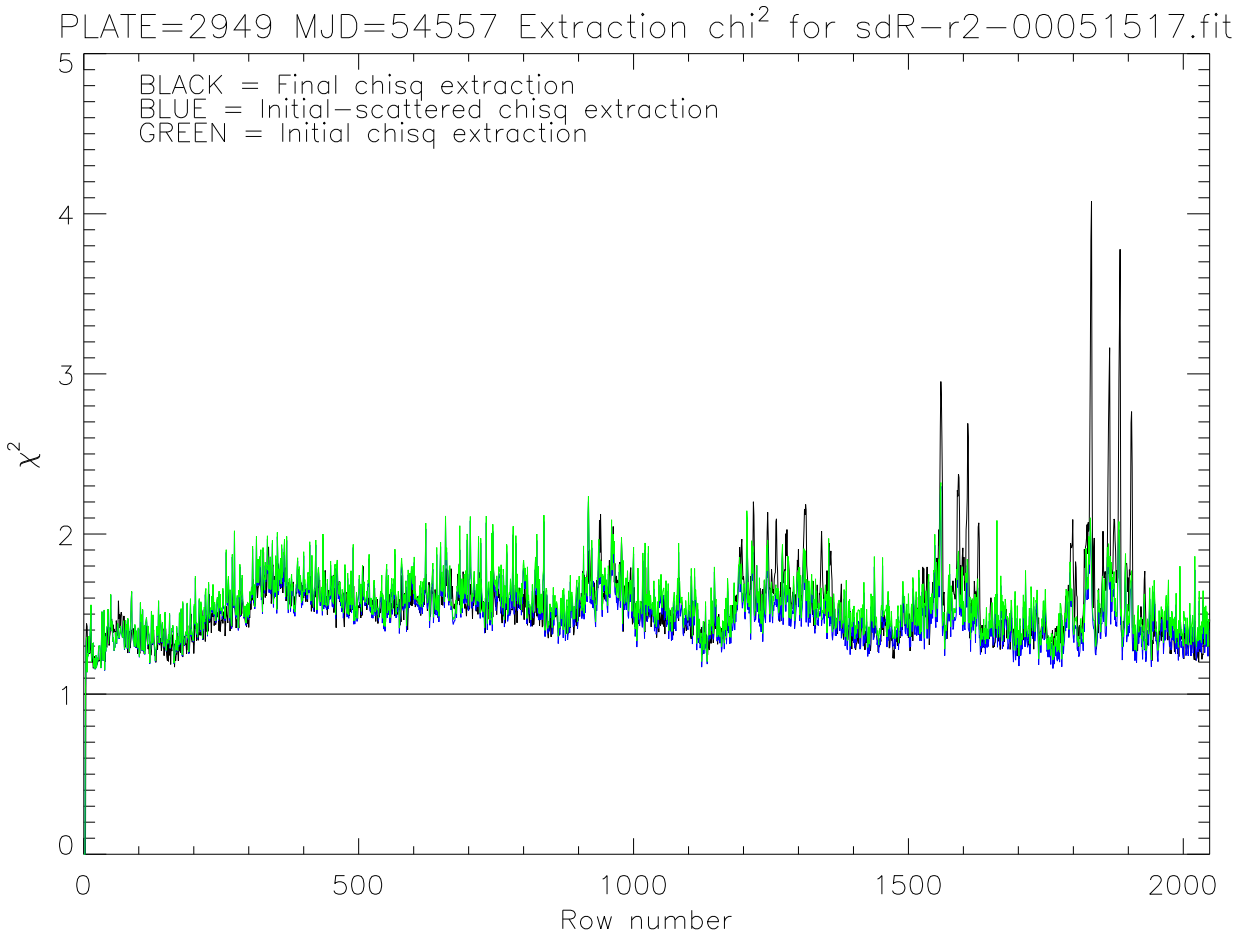

PLATE=2949 MJD=54557 Fiber−Flats for sdR−r2−00051513.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.499
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Apr 1 17:39:38 2008

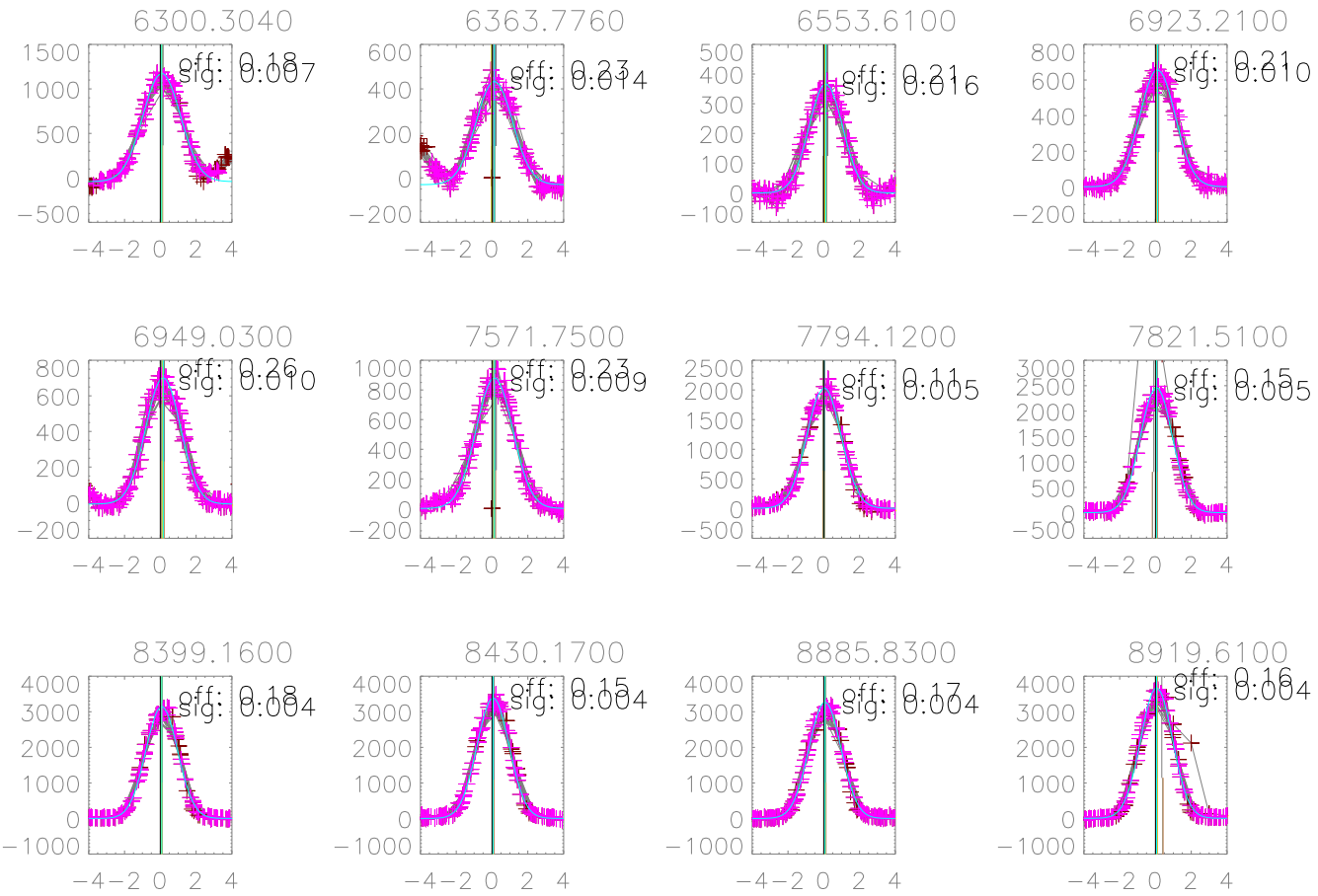

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r2-00051517.fi
38.2
38.2
38.2
27.3
27.3
16.4
16.4
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

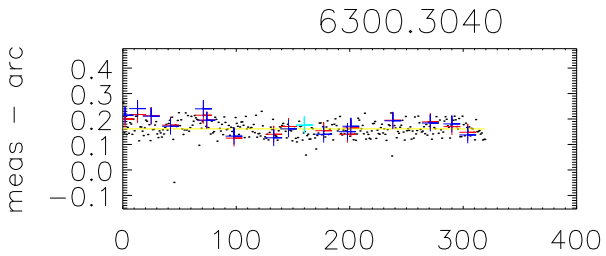

PLATE=2949 MJD=54557 Scattered Light before halo removal on sdR-r2-00051517.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.213
Max value = 42.920
Tue Apr 1 17:40:27 2008

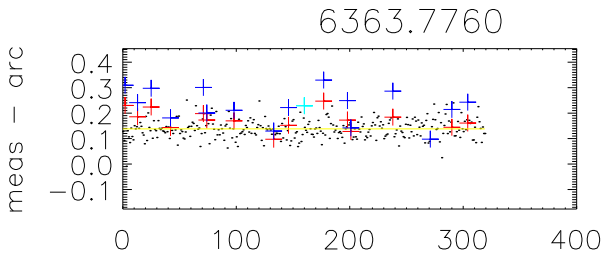

PLATE=2949 MJD=54557 Scattered Light on sdR-r2-00051517.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
13.6
13.6
13.6
8.2
8.2

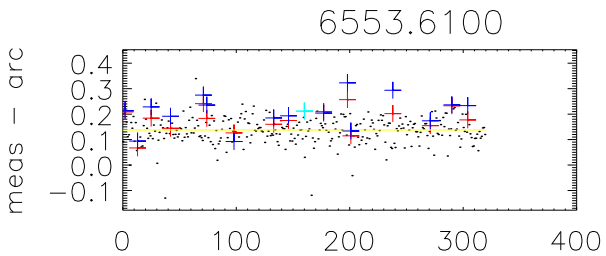

PLATE=2949 MJD=54557 Scattered Light on sdR-r2-00051517.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.057
Max value = 14.394
Tue Apr 1 17:42:37 2008

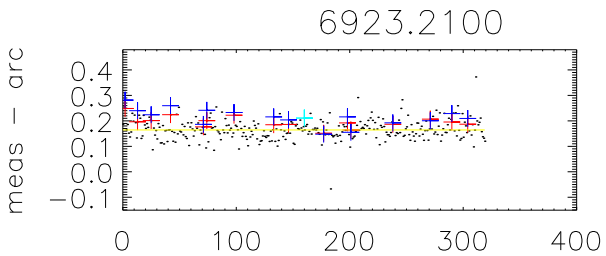

PLATE=2949 MJD=54557 Extraction chi^2 for sdR−r2−00051517.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

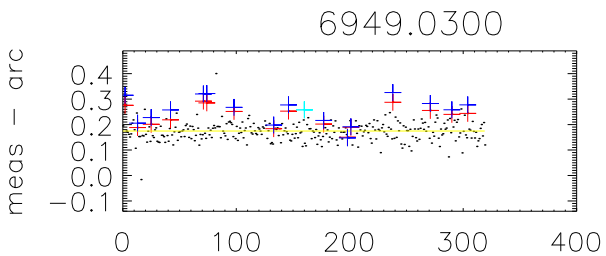

6300.3040
off: 0.18
sig: 0.007
6363.7760
off: 0.23
sig: 0.014
6553.6100
off: 0.21
sig: 0.016
6923.2100
off: 0.21
sig: 0.010
6949.0300
off: 0.26
sig: 0.010
7571.7500
off: 0.23
sig: 0.009
7794.1200
off: 0.11
sig: 0.005
7821.5100
off: 0.15
sig: 0.005
8399.1600
off: 0.18
sig: 0.004
8430.1700
off: 0.15
sig: 0.004
8885.8300
off: 0.17
sig: 0.004
8919.6100
off: 0.16
sig: 0.004

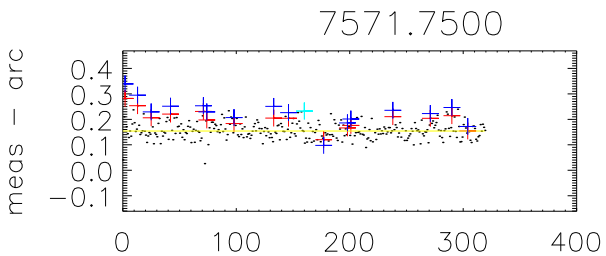

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

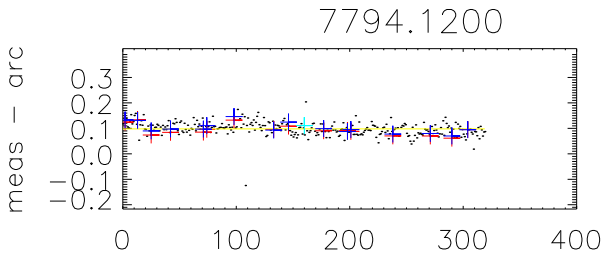

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

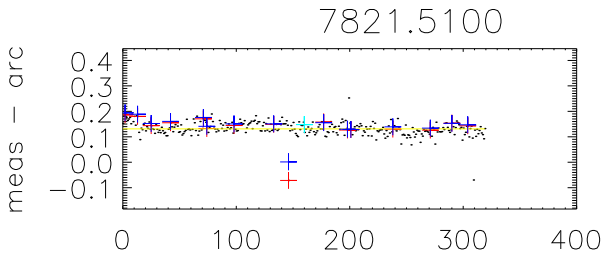

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

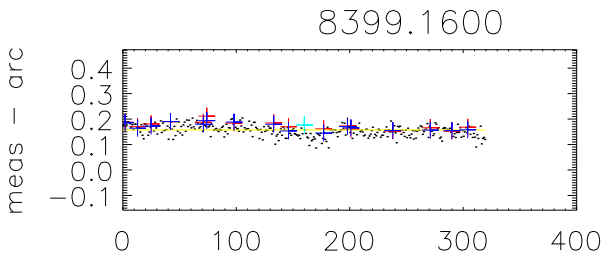

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

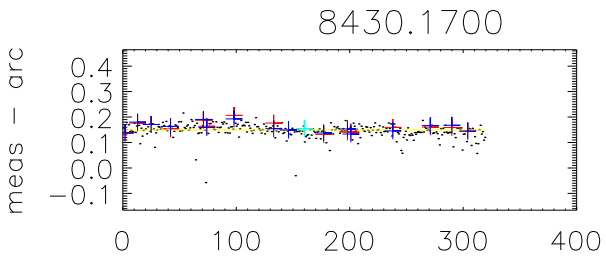

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

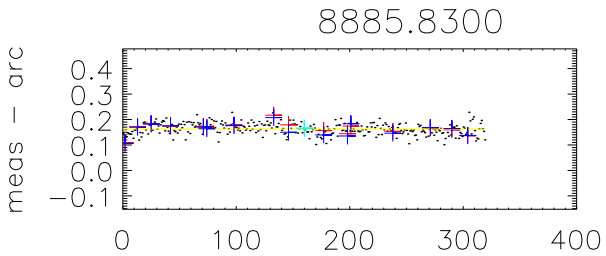

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

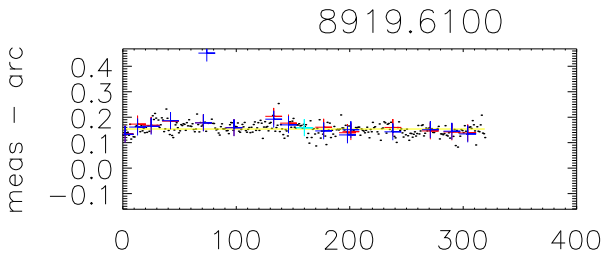

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

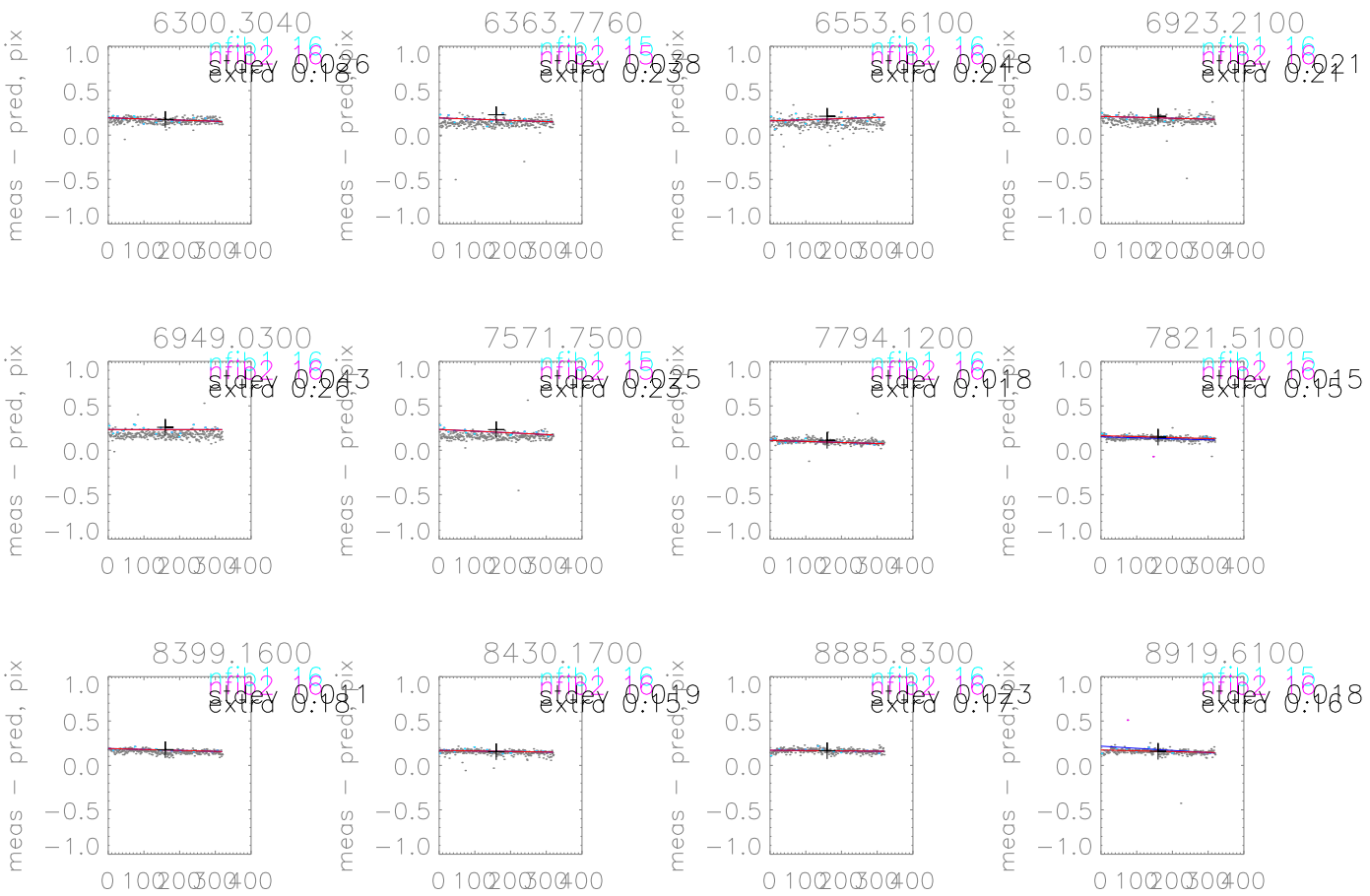

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

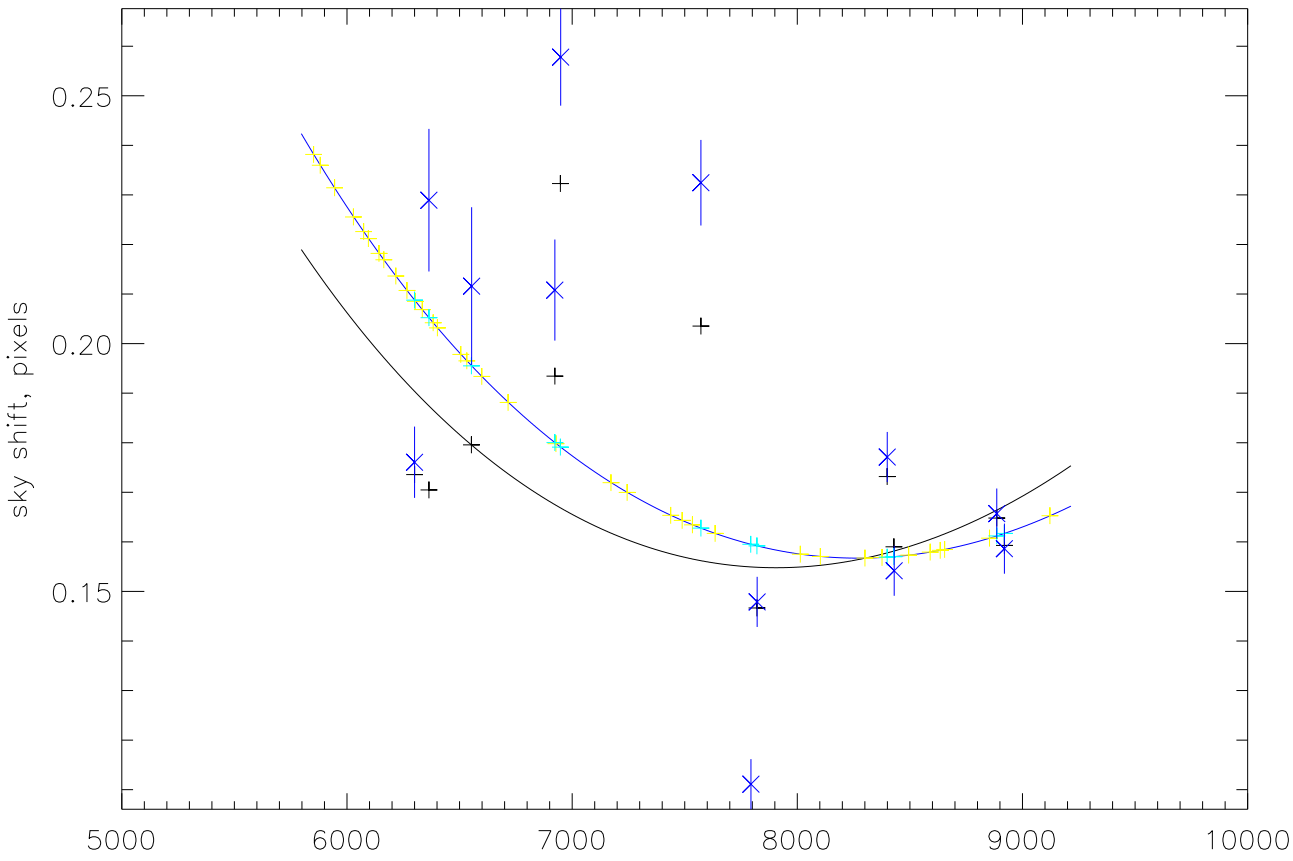

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

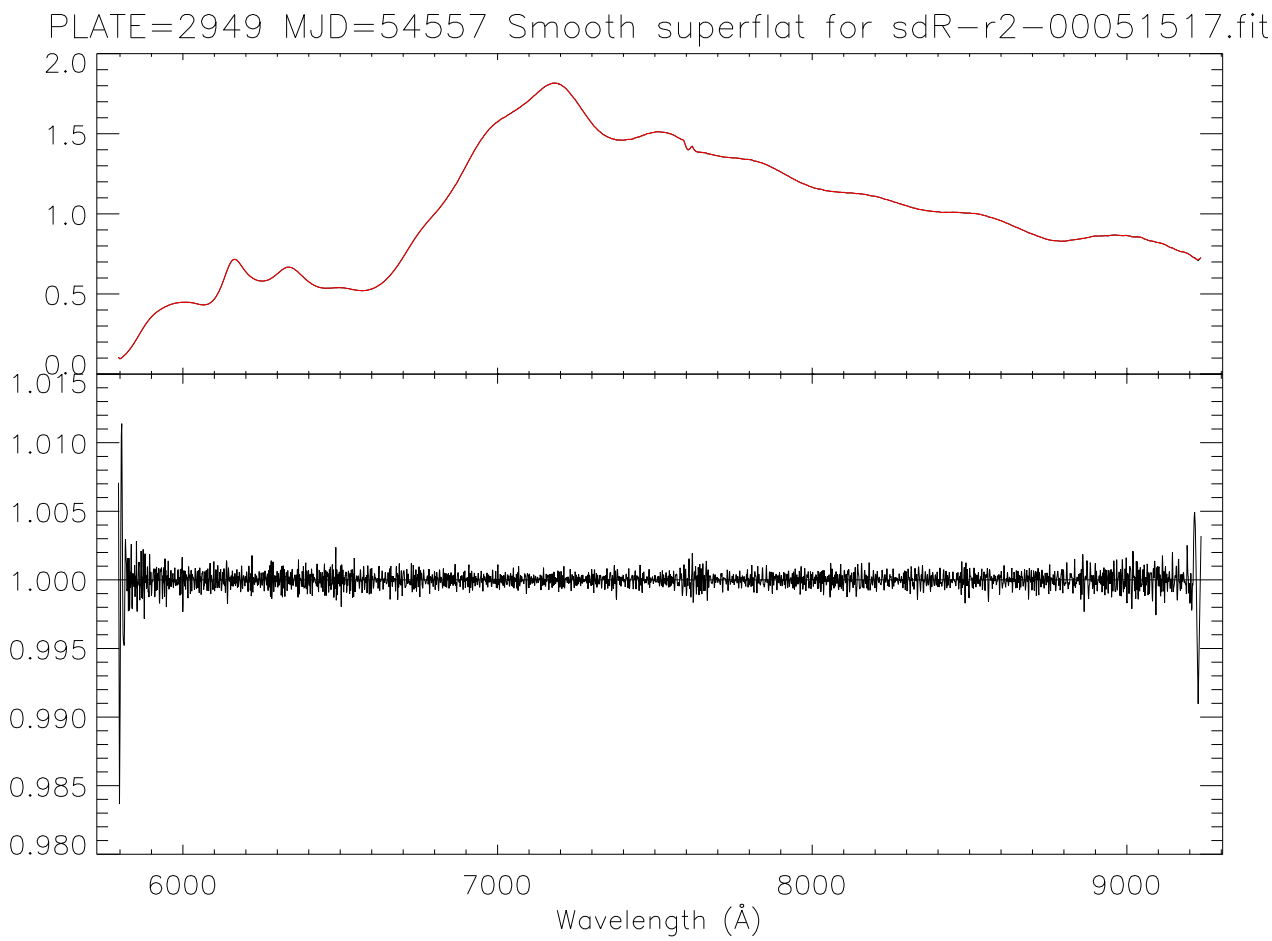

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

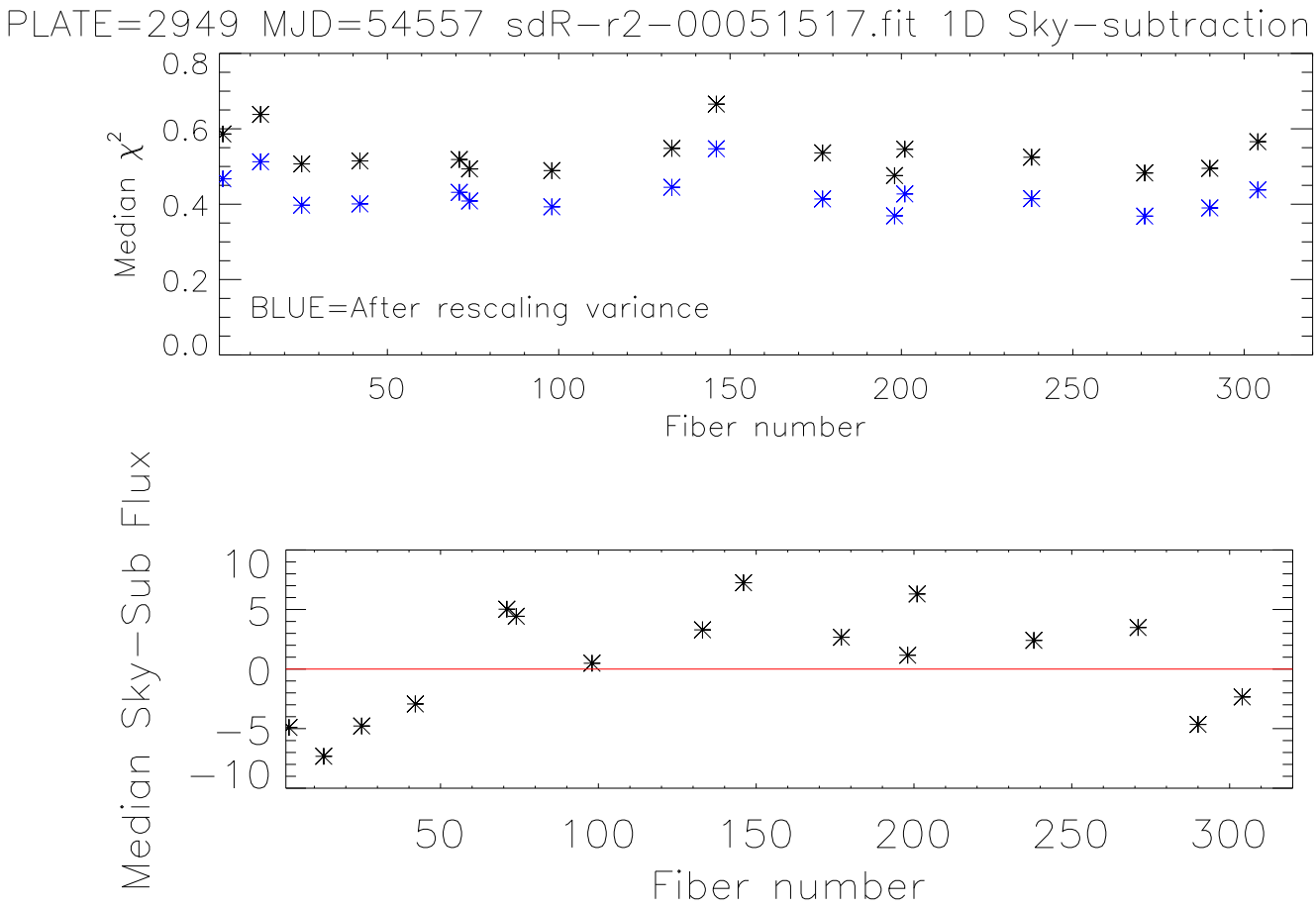

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

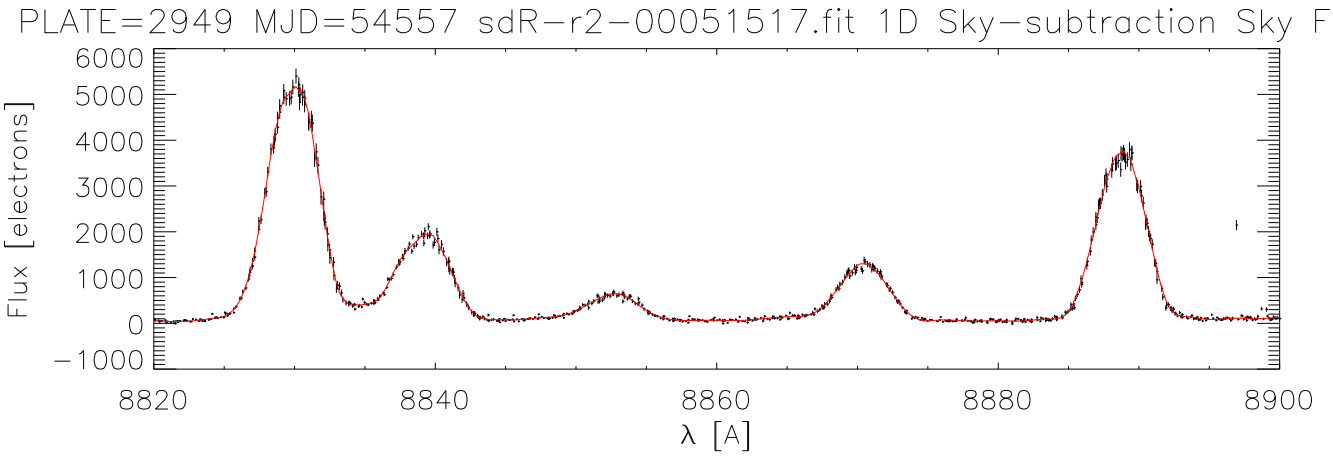

6300.3040
stdev 0.026
extra 0.18
6363.7760
stdev 0.038
extra 0.238
6553.6100
stdev 0.018
extra 0.218
6923.2100
stdev 0.021
extra 0.21
6949.0300
stdev 0.043
extra 0.26
7571.7500
stdev 0.025
extra 0.23
7794.1200
stdev 0.018
extra 0.118
7821.5100
stdev 0.015
extra 0.15
8399.1600
stdev 0.041
extra 0.181
8430.1700
stdev 0.019
extra 0.159
8885.8300
stdev 0.023
extra 0.17
8919.6100
stdev 0.018
extra 0.16
meas − pred, pix
mfhd2 16
mfhd1 15

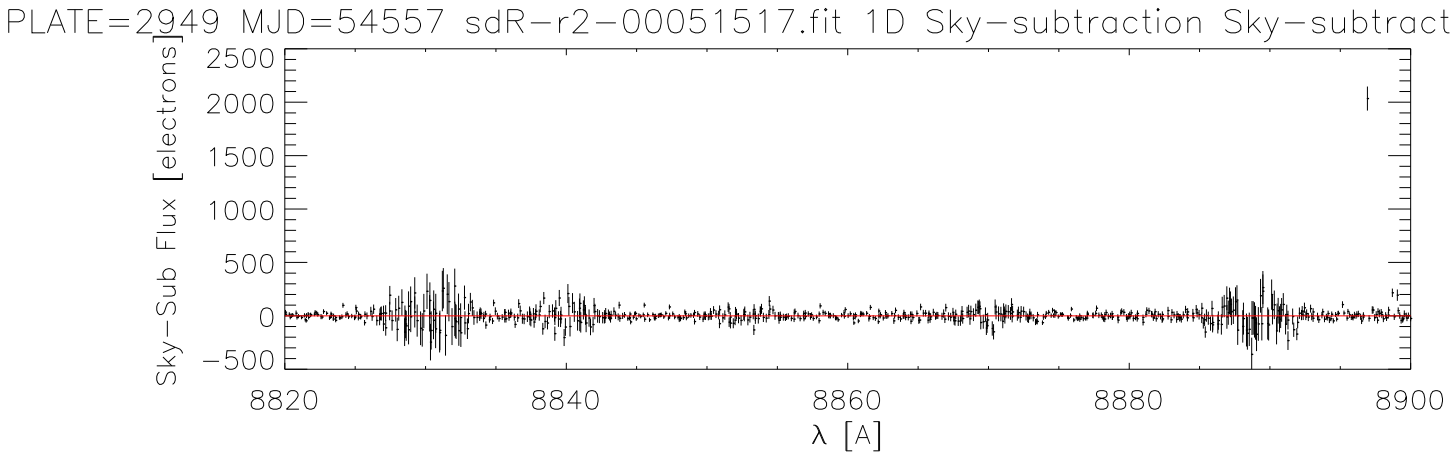

sky shift, pixels
0.25
0.20
0.15
5000
6000
7000
8000
9000
10000

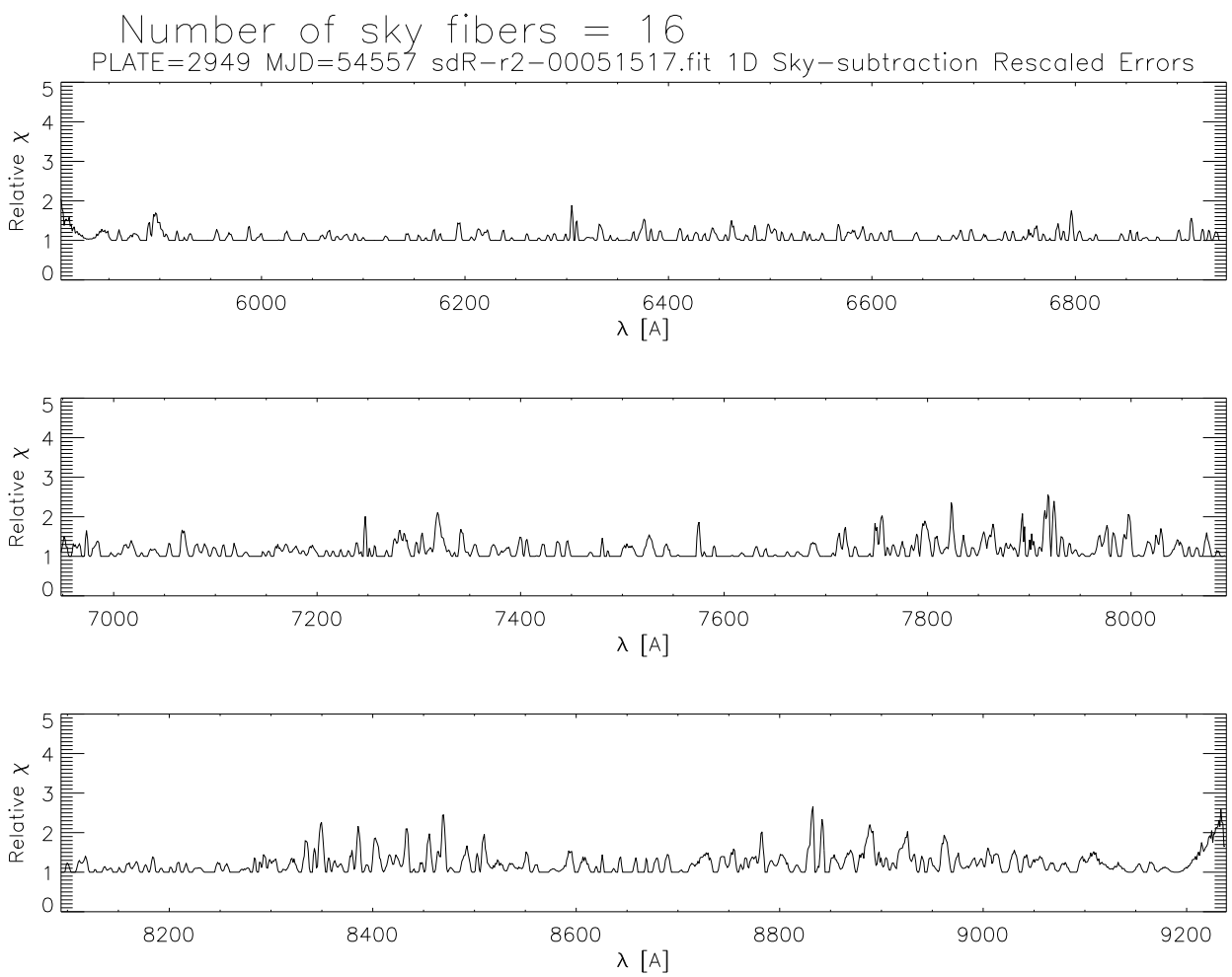
es= −0.0000

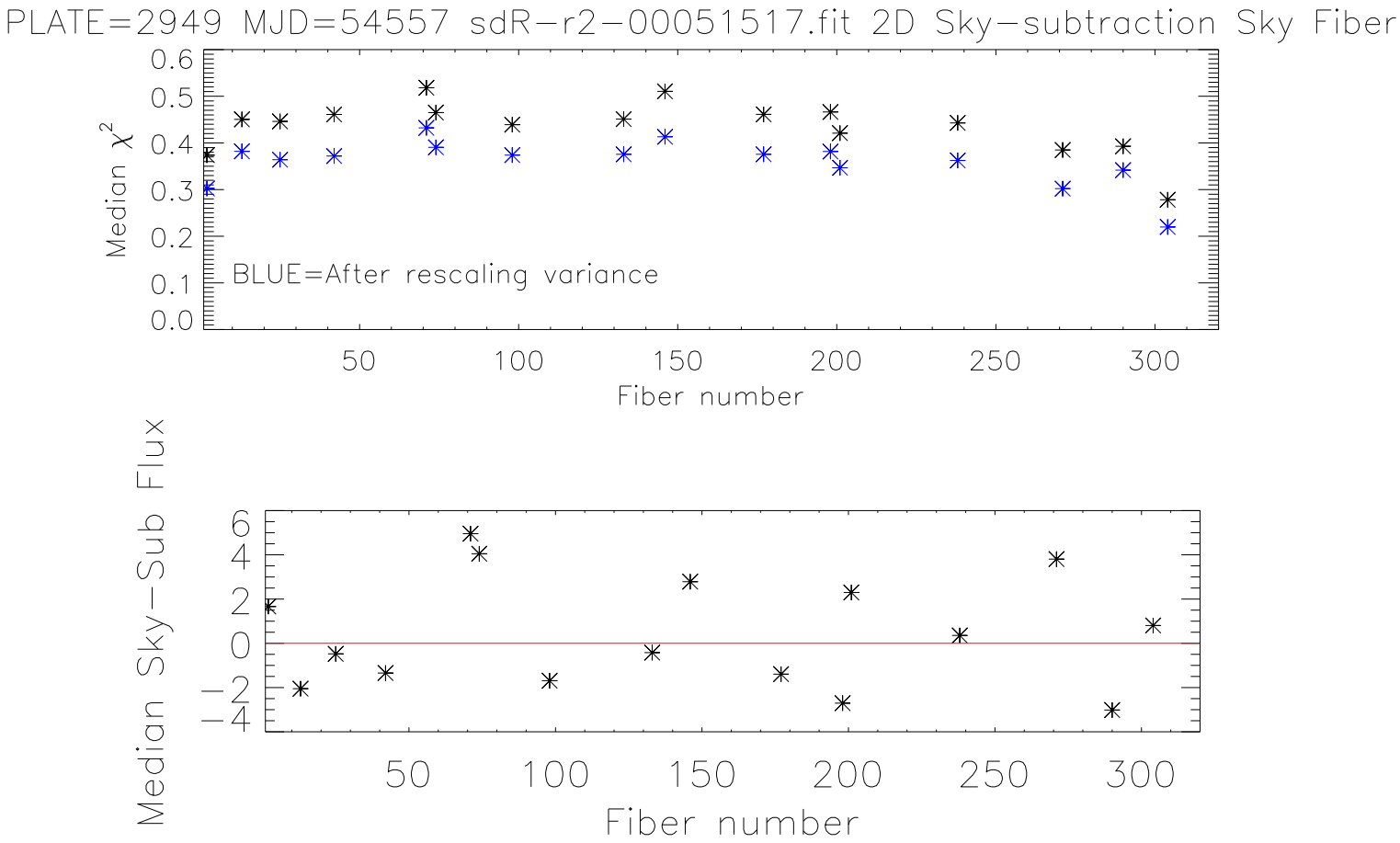

PLATE=2949 MJD=54557 Smooth superflat for sdR−r2−00051517.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
0.980
6000
7000
8000
9000
Wavelength (Å)

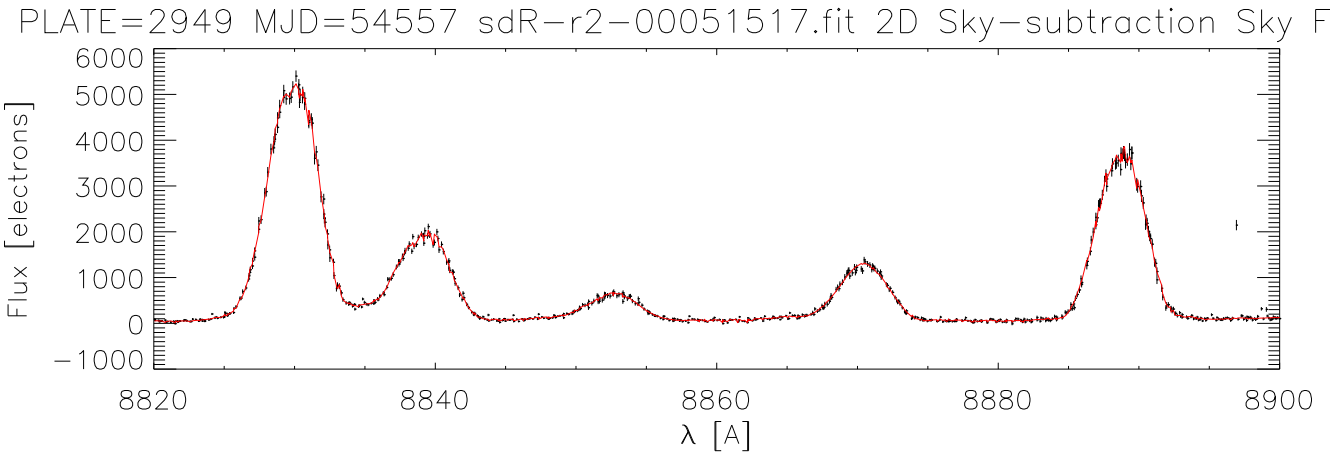

PLATE=2949 MJD=54557 sdR-r2-00051517.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

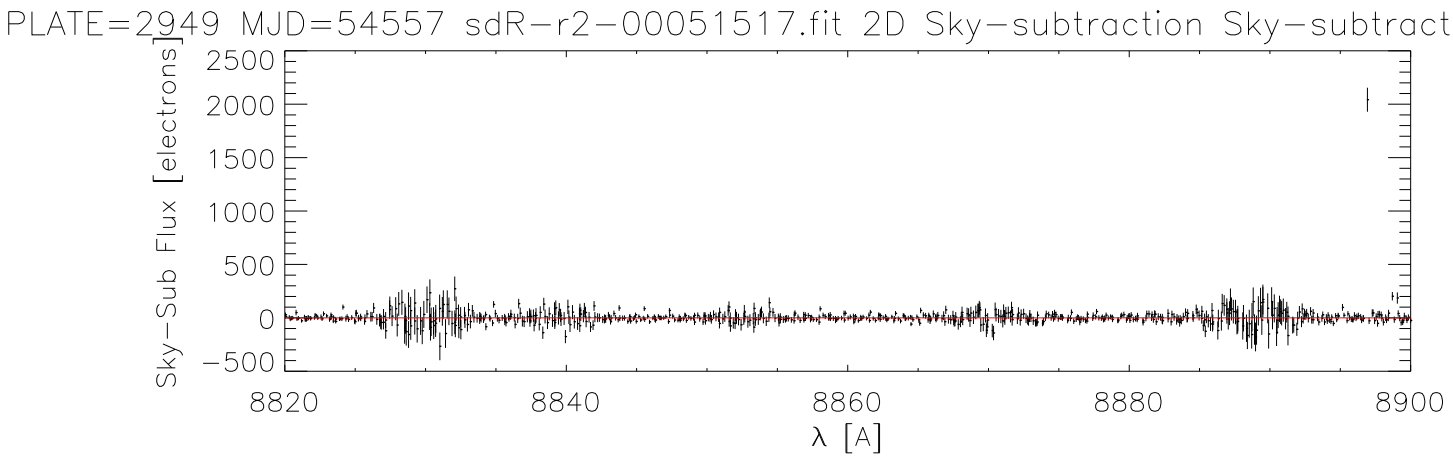

PLATE=2949 MJD=54557 sdR-r2-00051517.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

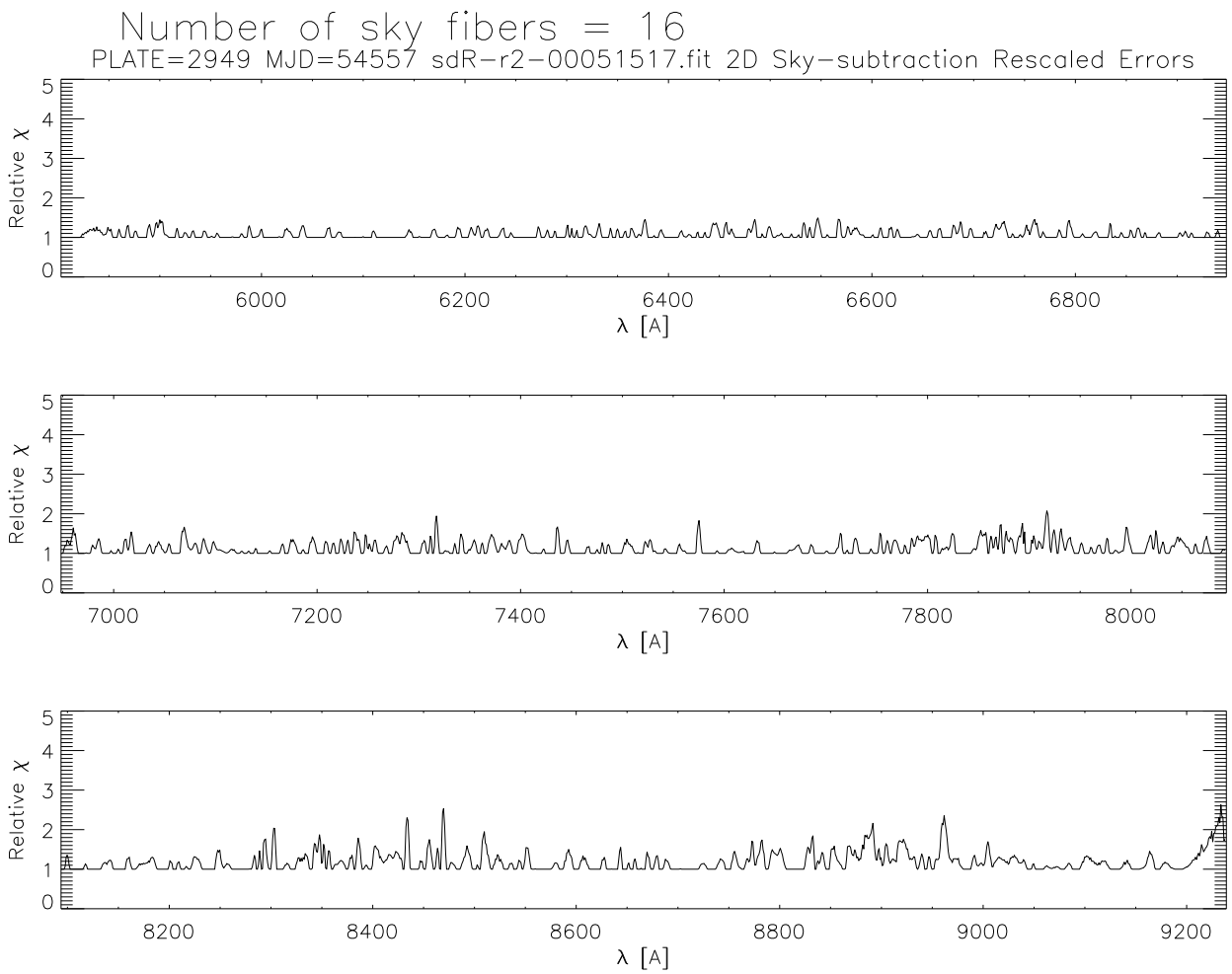

PLATE=2949 MJD=54557 sdR-r2-00051517.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

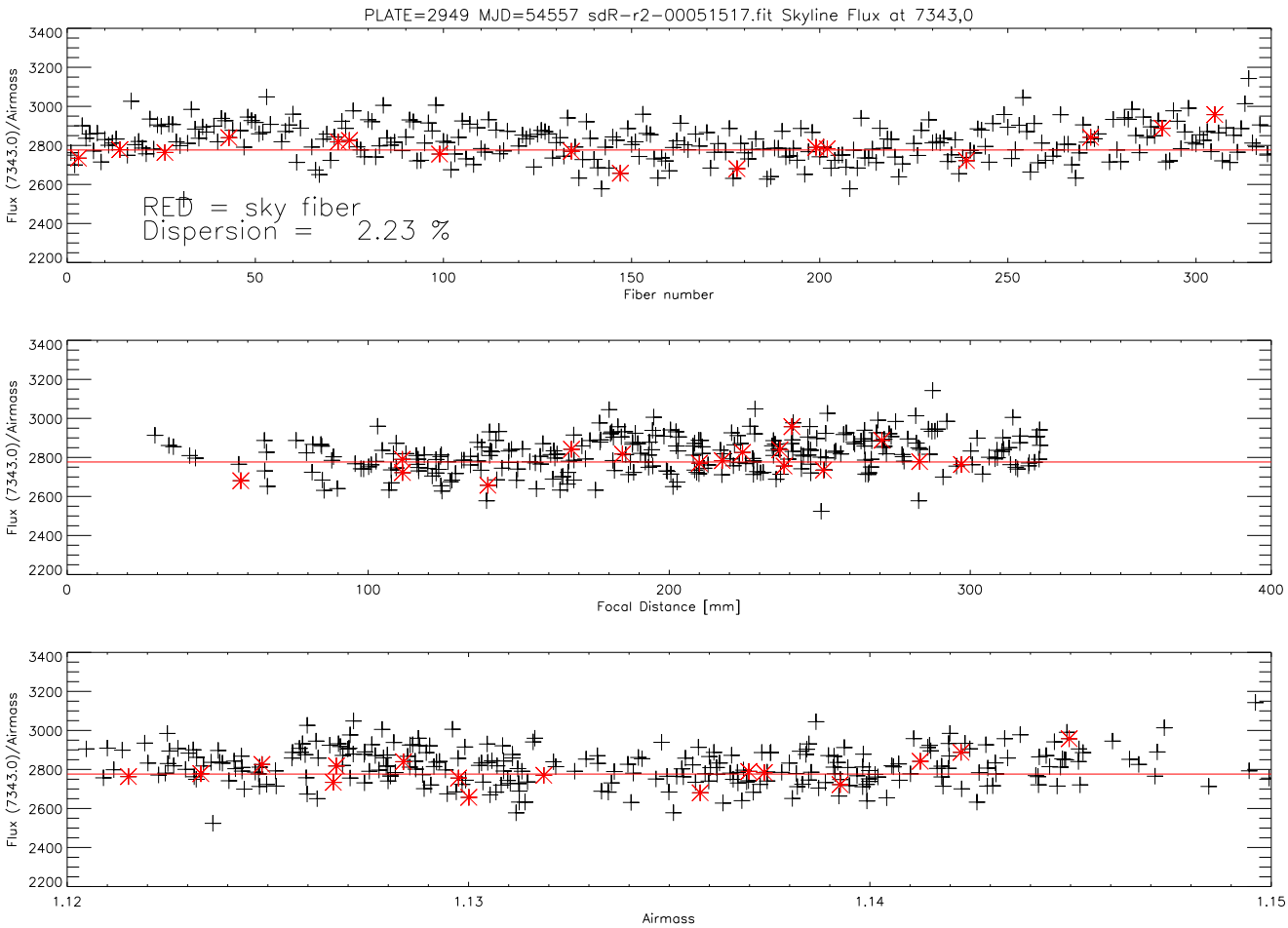

Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-r2-00051517.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

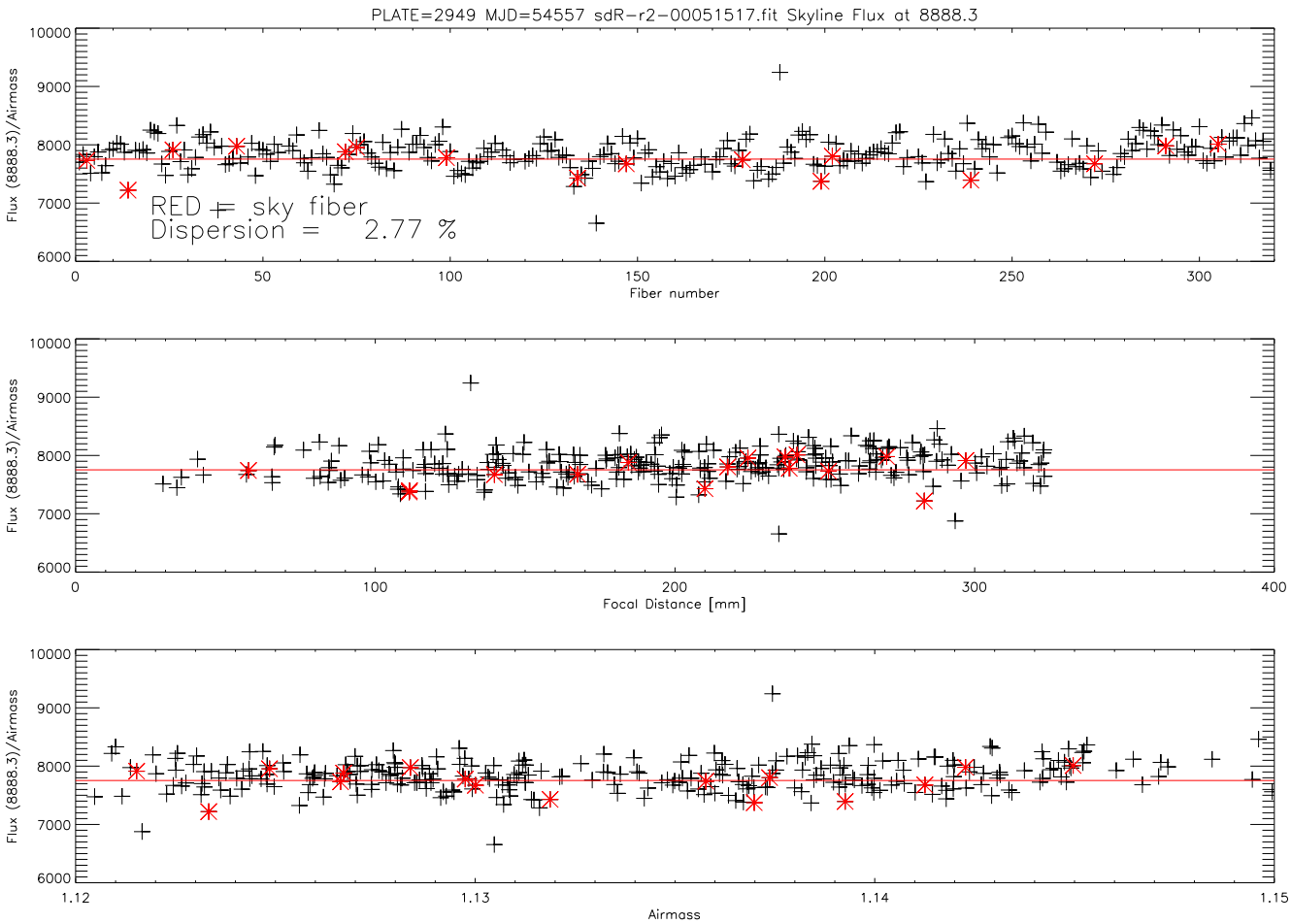

PLATE=2949 MJD=54557 sdR-r2-00051517.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=2949 MJD=54557 sdR-r2-00051517.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]


PLATE=2949 MJD=54557 sdR-r2-00051517.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=2949 MJD=54557 sdR-r2-00051517.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=2949 MJD=54557 sdR-r2-00051517.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.23 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2949 MJD=54557 sdR-r2-00051517.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.77 %
Fiber number
Focal Distance [mm]
Airmass