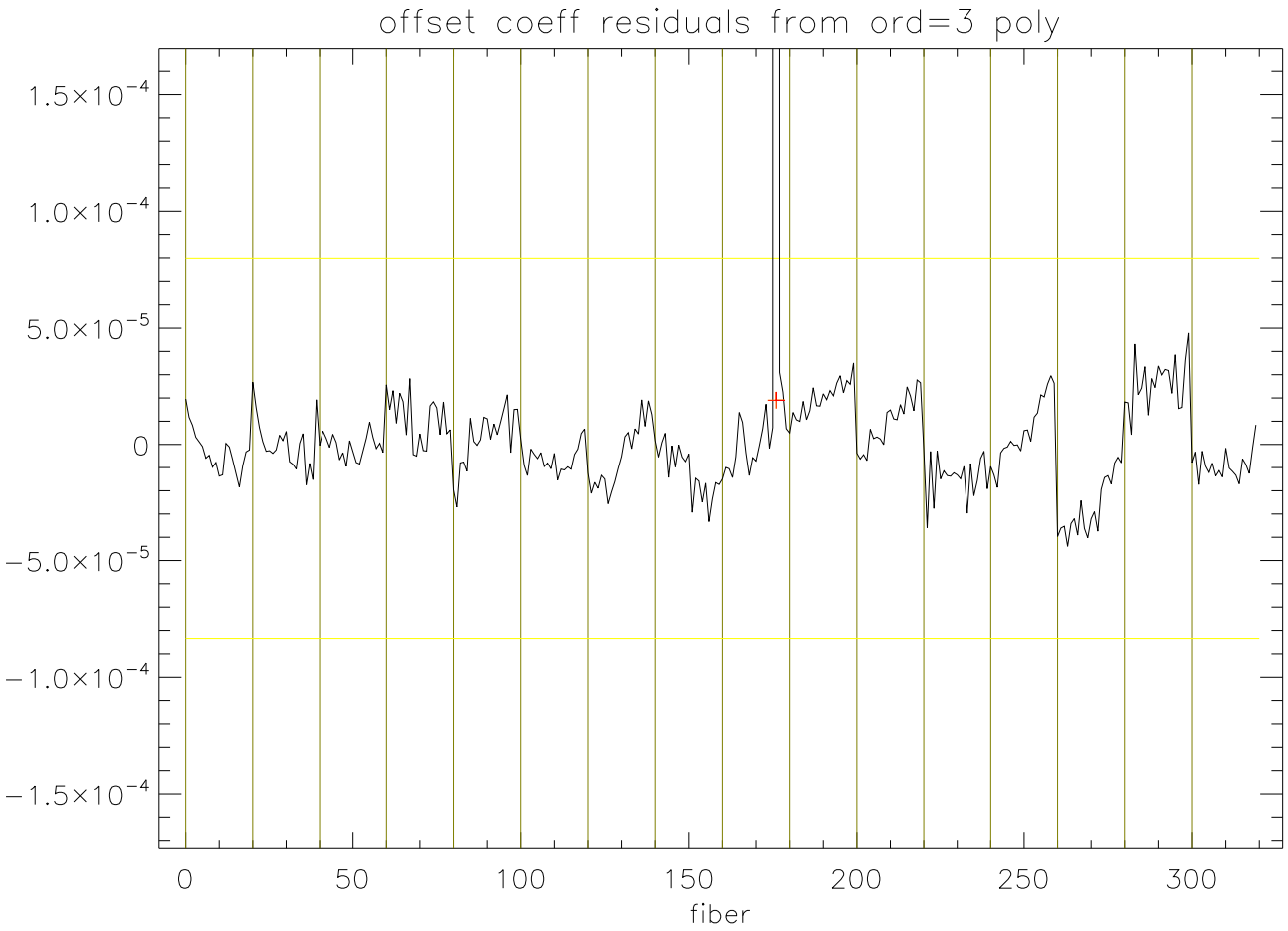
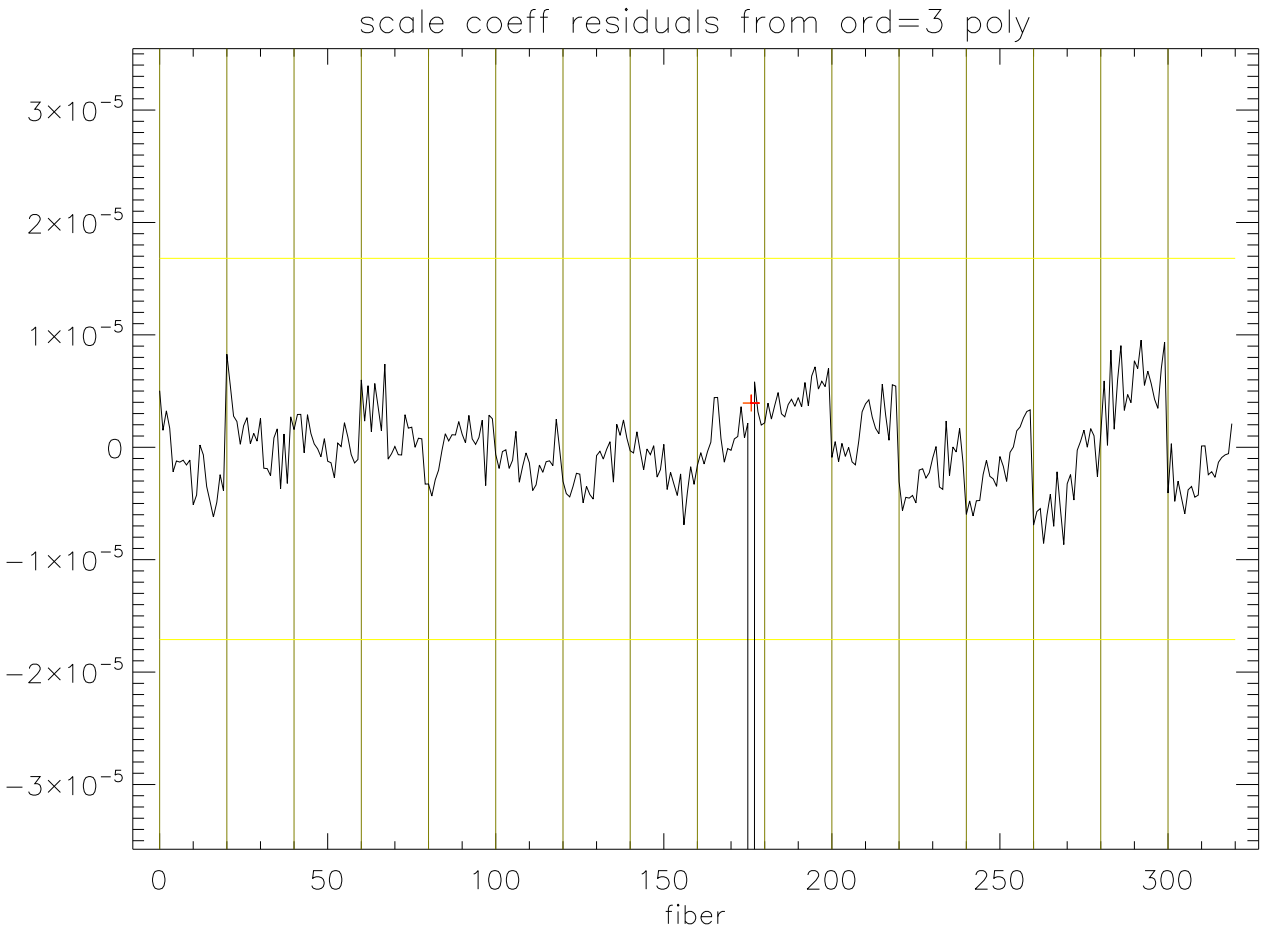
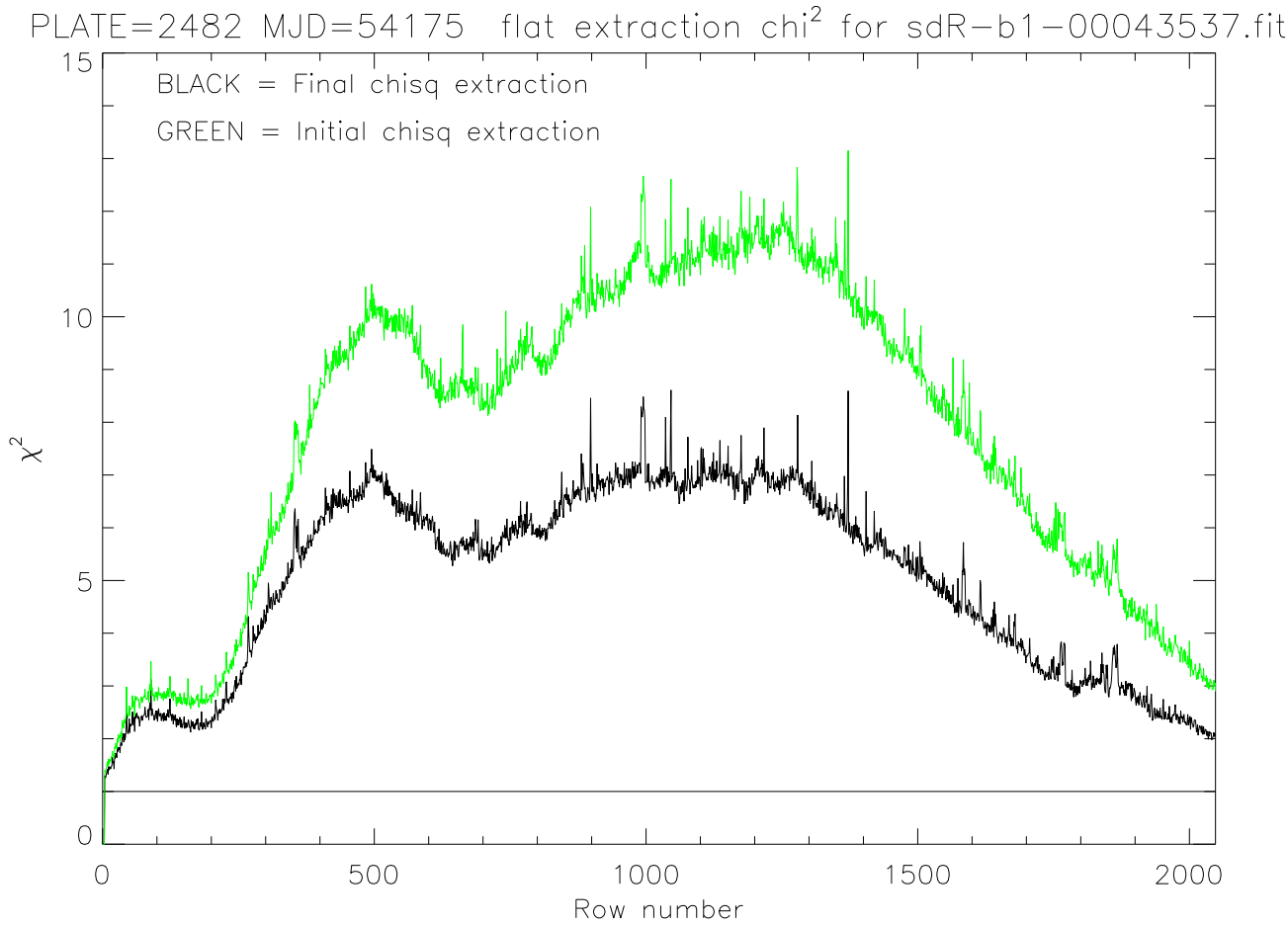
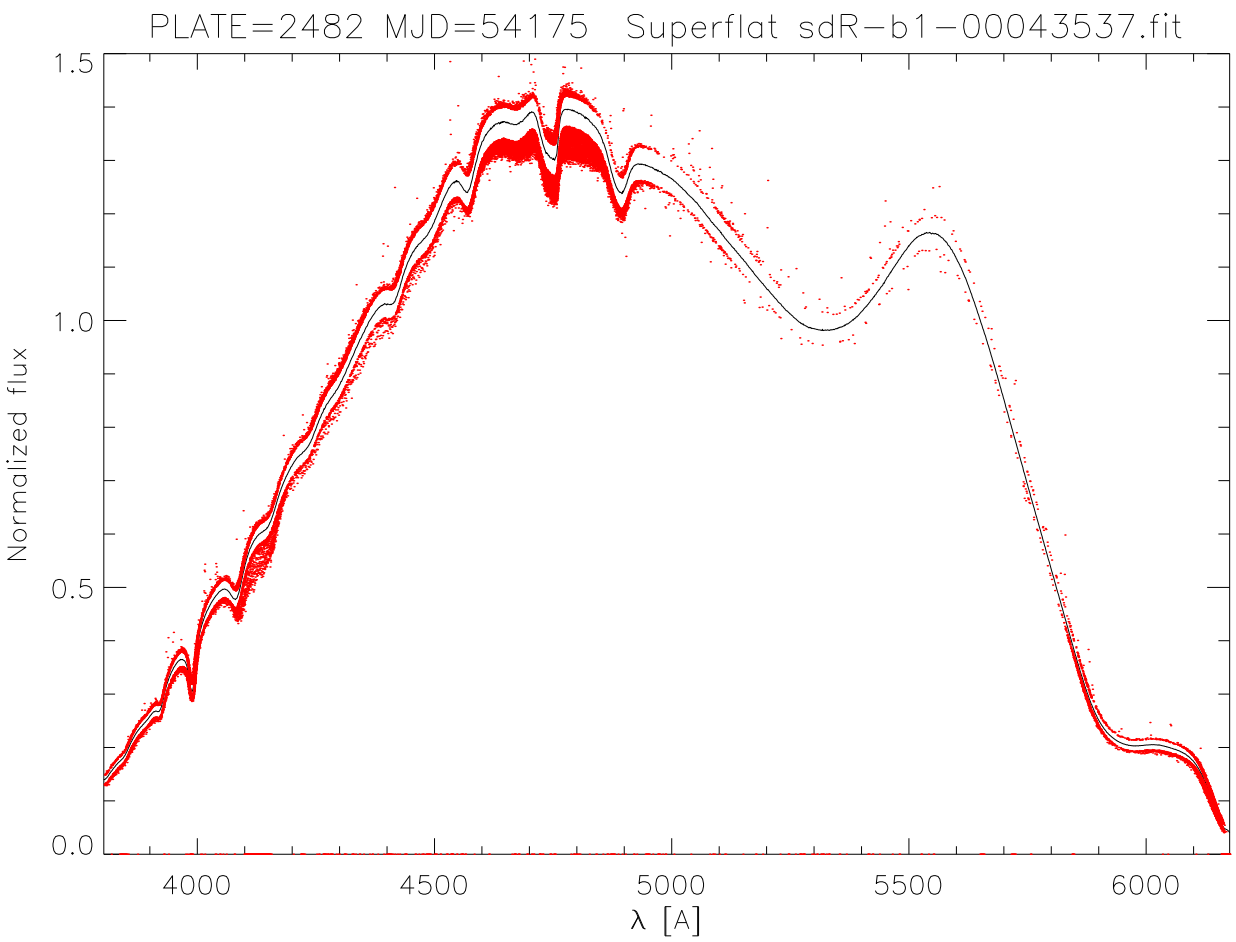
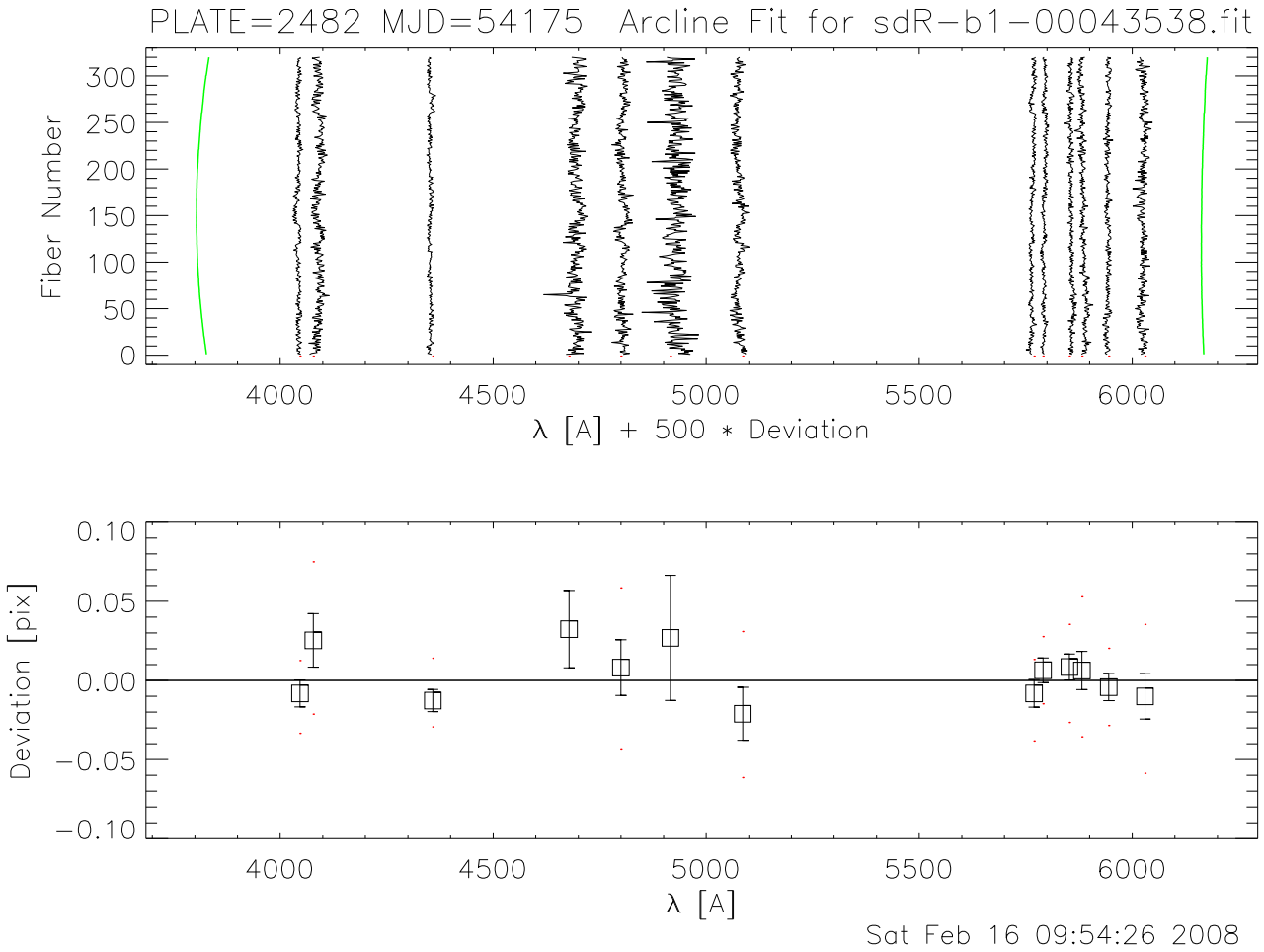
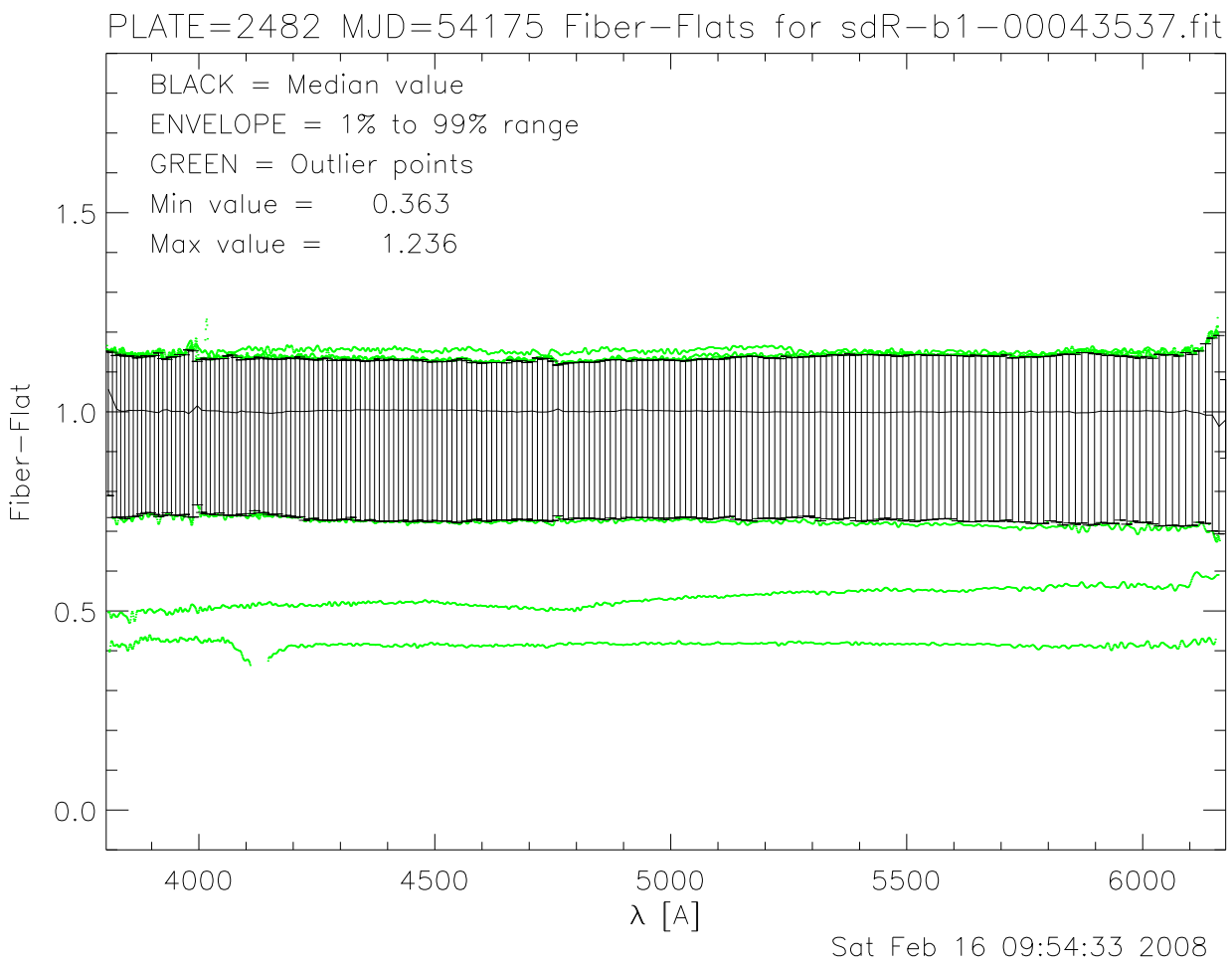

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

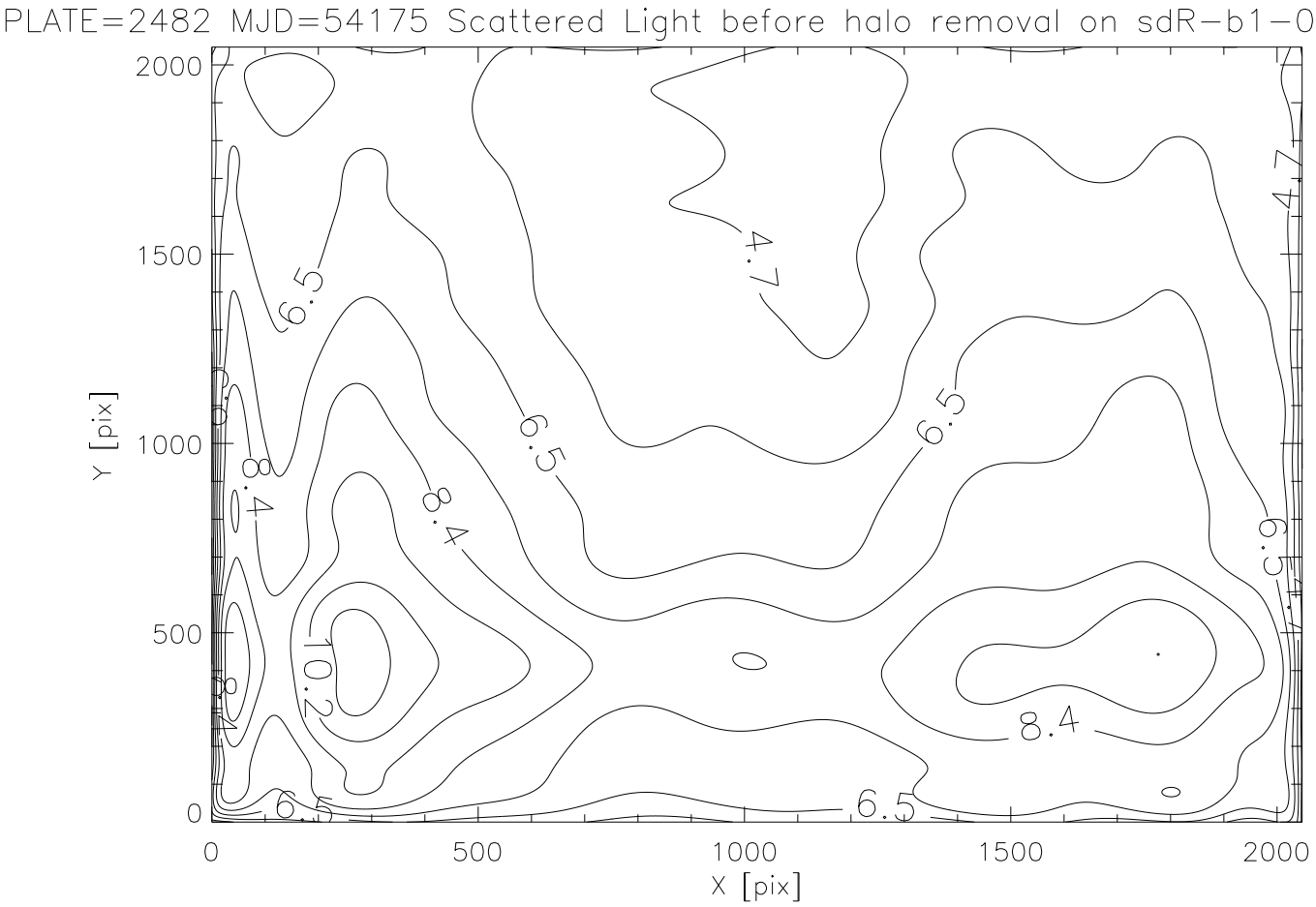

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

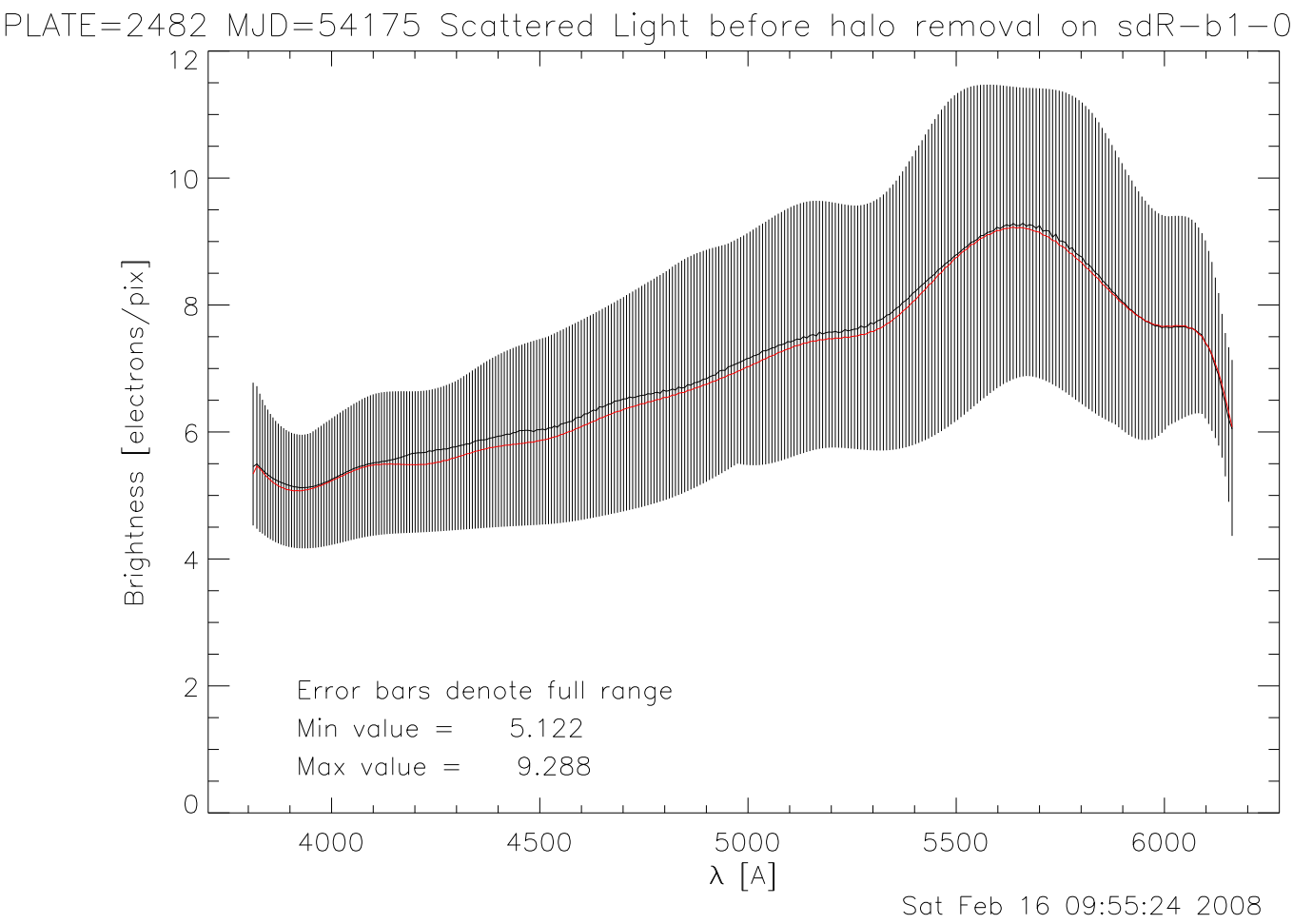

PLATE=2482 MJD=54175 flat extraction chi^2 for sdR-b1-00043537.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

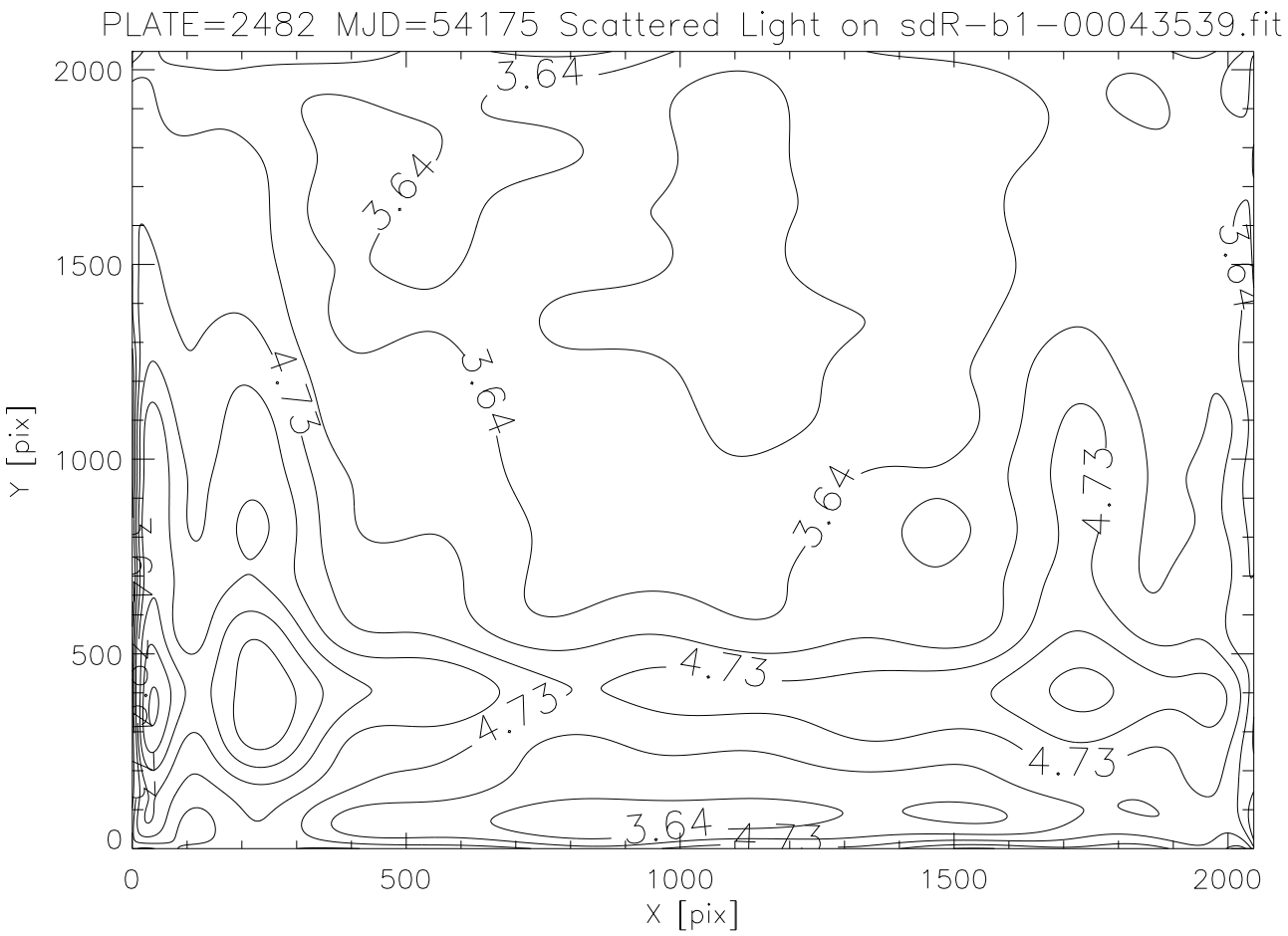

PLATE=2482 MJD=54175 Superflat sdR-b1-00043537.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

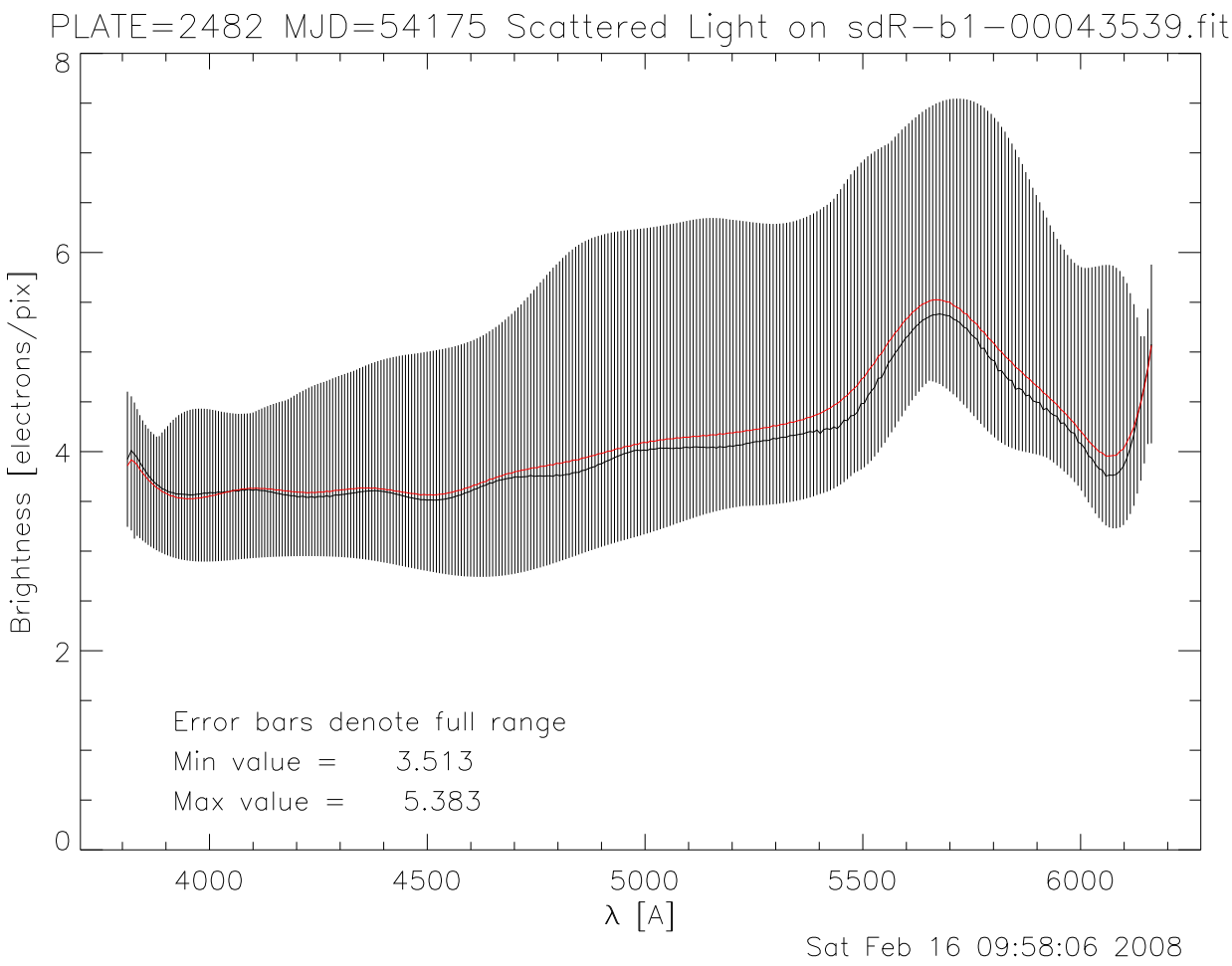

PLATE=2482 MJD=54175 Arcline Fit for sdR-b1-00043538.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 09:54:26 2008

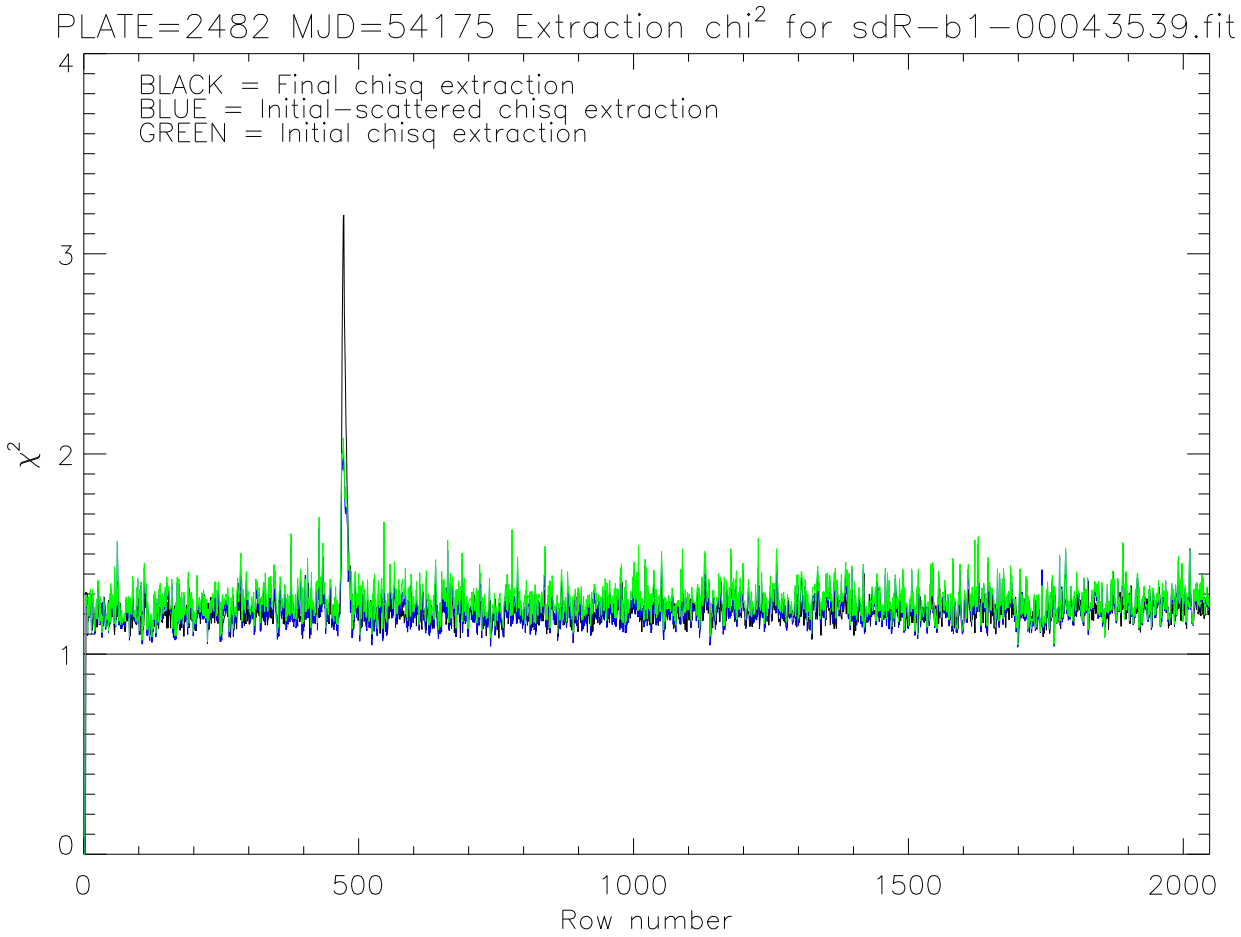

PLATE=2482 MJD=54175 Fiber−Flats for sdR−b1−00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.363
Max value = 1.236
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 09:54:33 2008

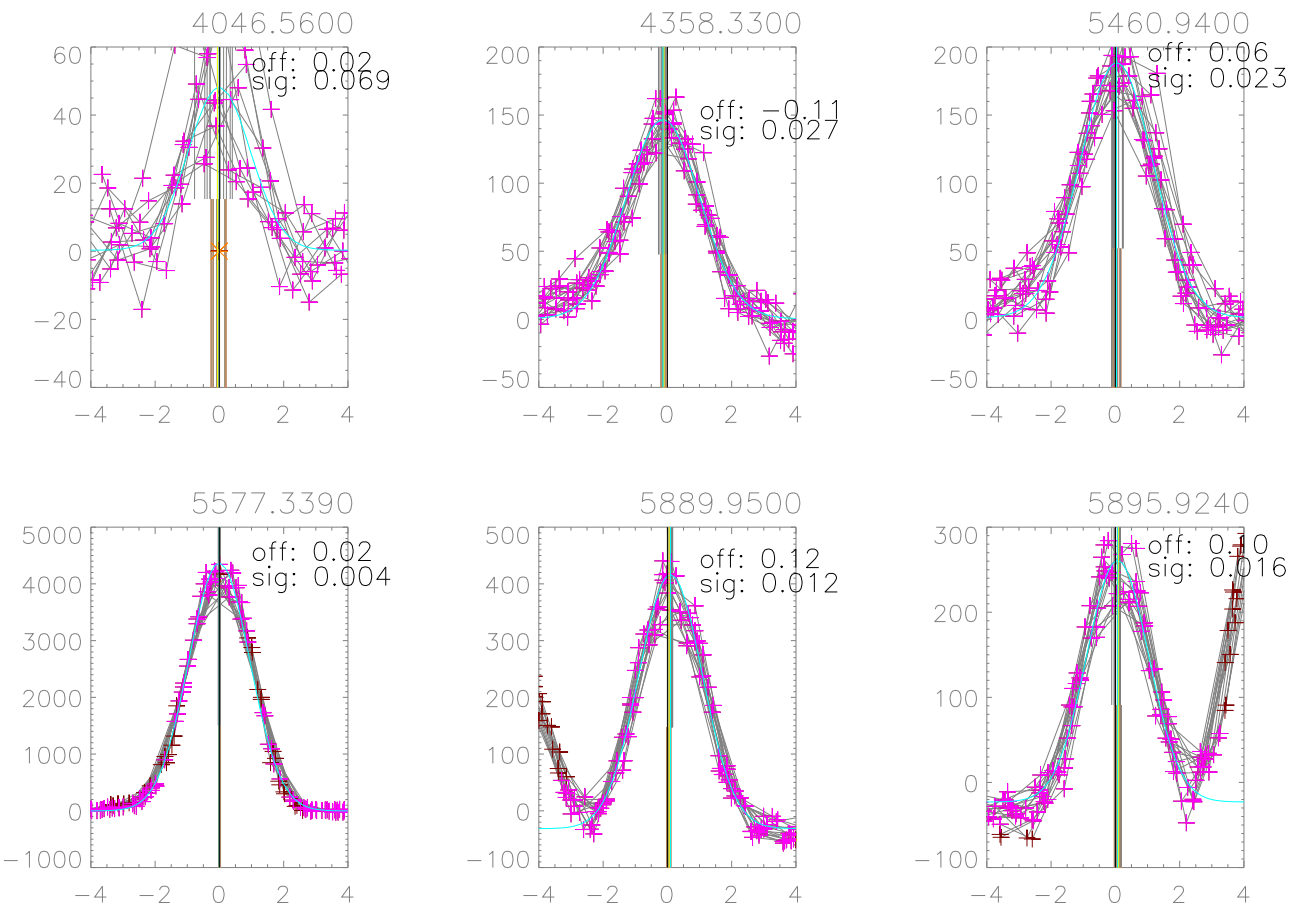

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR−b1−00043539.f
Y [pix]
X [pix]
0
500
1000
1500
2000
4.7
6.5
8.4
10.2
0

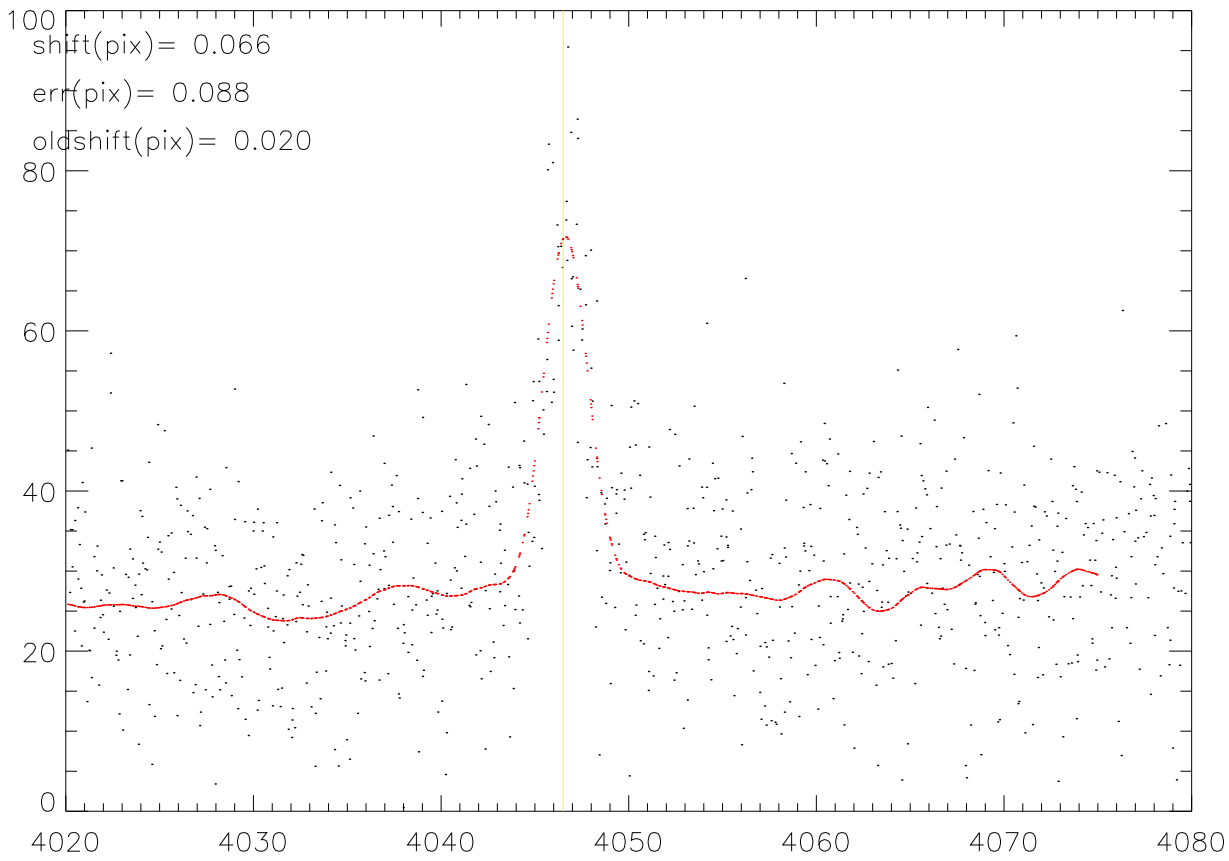

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-b1-00043539.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.122
Max value = 9.288
Sat Feb 16 09:55:24 2008

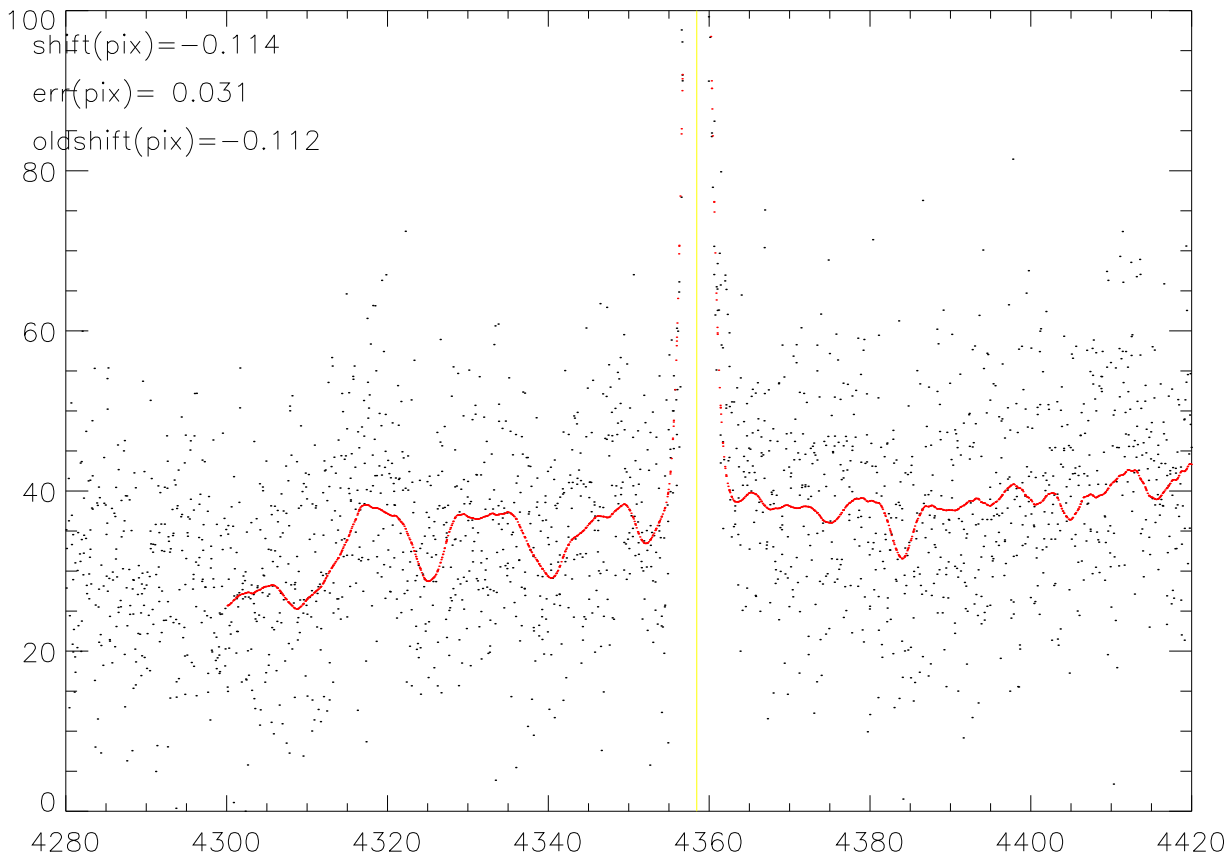

PLATE=2482 MJD=54175 Scattered Light on sdR-b1-00043539.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.64
4.73

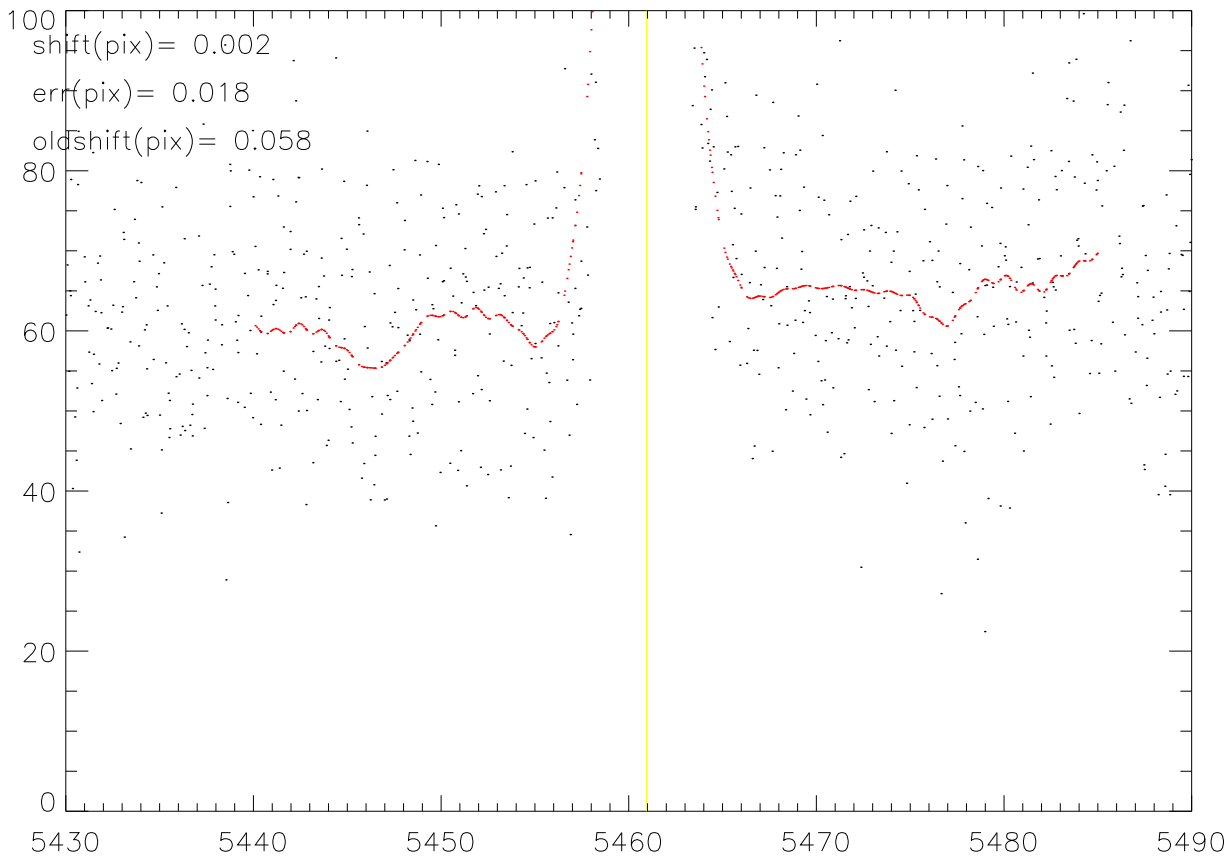

PLATE=2482 MJD=54175 Scattered Light on sdR-b1-00043539.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.513
Max value = 5.383
Sat Feb 16 09:58:06 2008

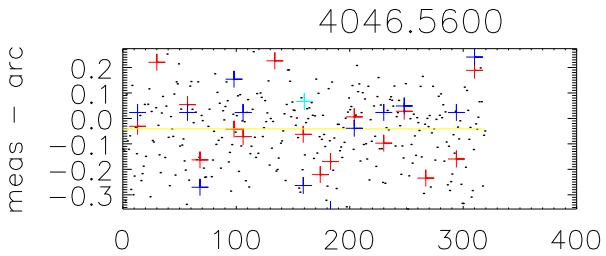

PLATE=2482 MJD=54175 Extraction chi^2 for sdR-b1-00043539.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

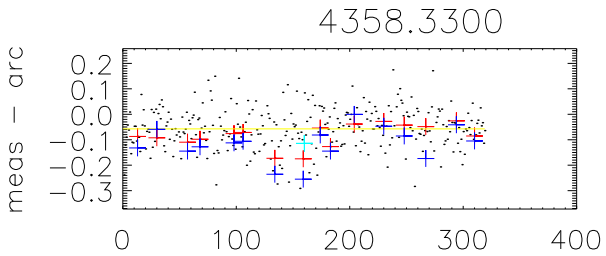

4046.5600
off: 0.02
sig: 0.069
4358.3300
off: −0.11
sig: 0.027
5460.9400
off: 0.06
sig: 0.023
5577.3390
off: 0.02
sig: 0.004
5889.9500
off: 0.12
sig: 0.012
5895.9240
off: 0.10
sig: 0.016

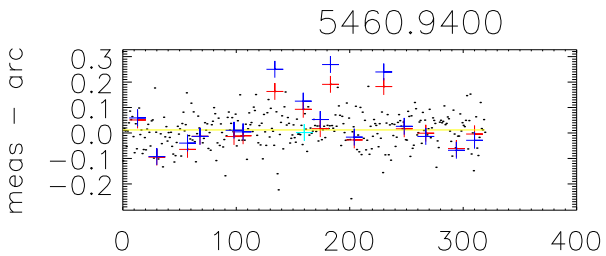

shift(pix)= 0.066
err(pix)= 0.088
oldshift(pix)= 0.020
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

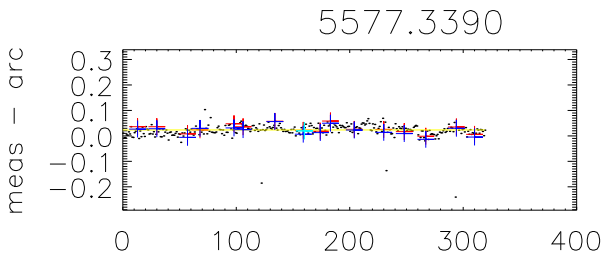

shift(pix)=−0.114
err(pix)= 0.031
oldshift(pix)=−0.112
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

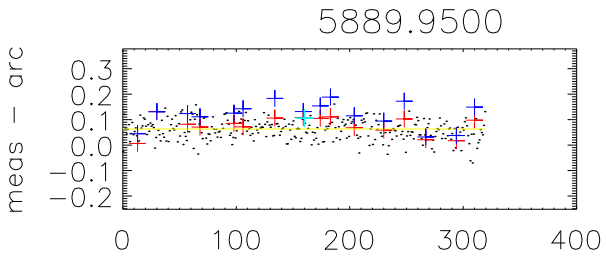

shift(pix)= 0.002
err(pix)= 0.018
oldshift(pix)= 0.058
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

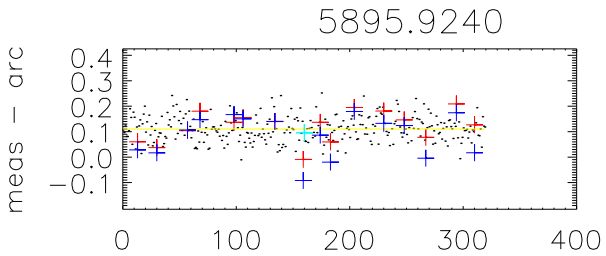

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

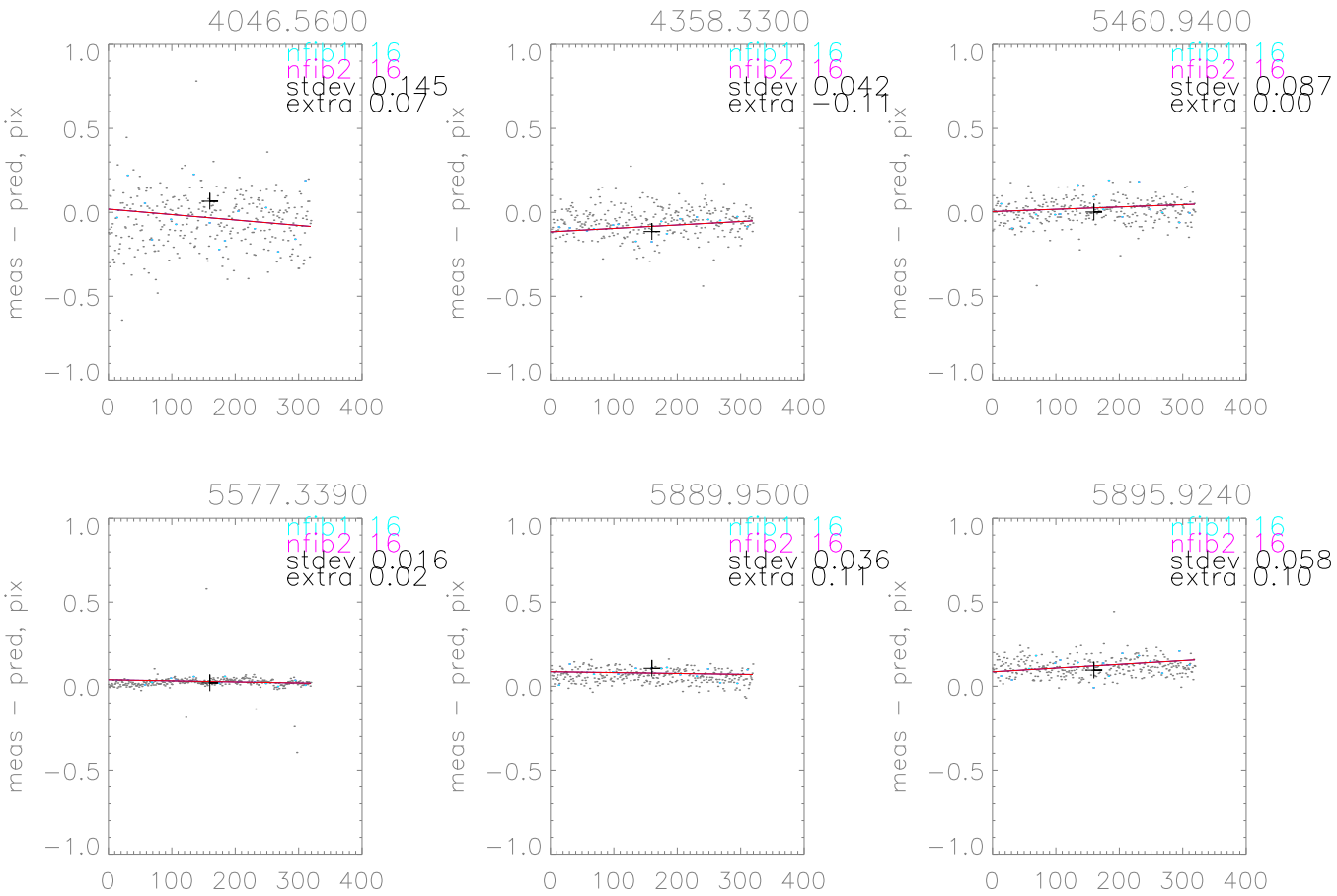

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

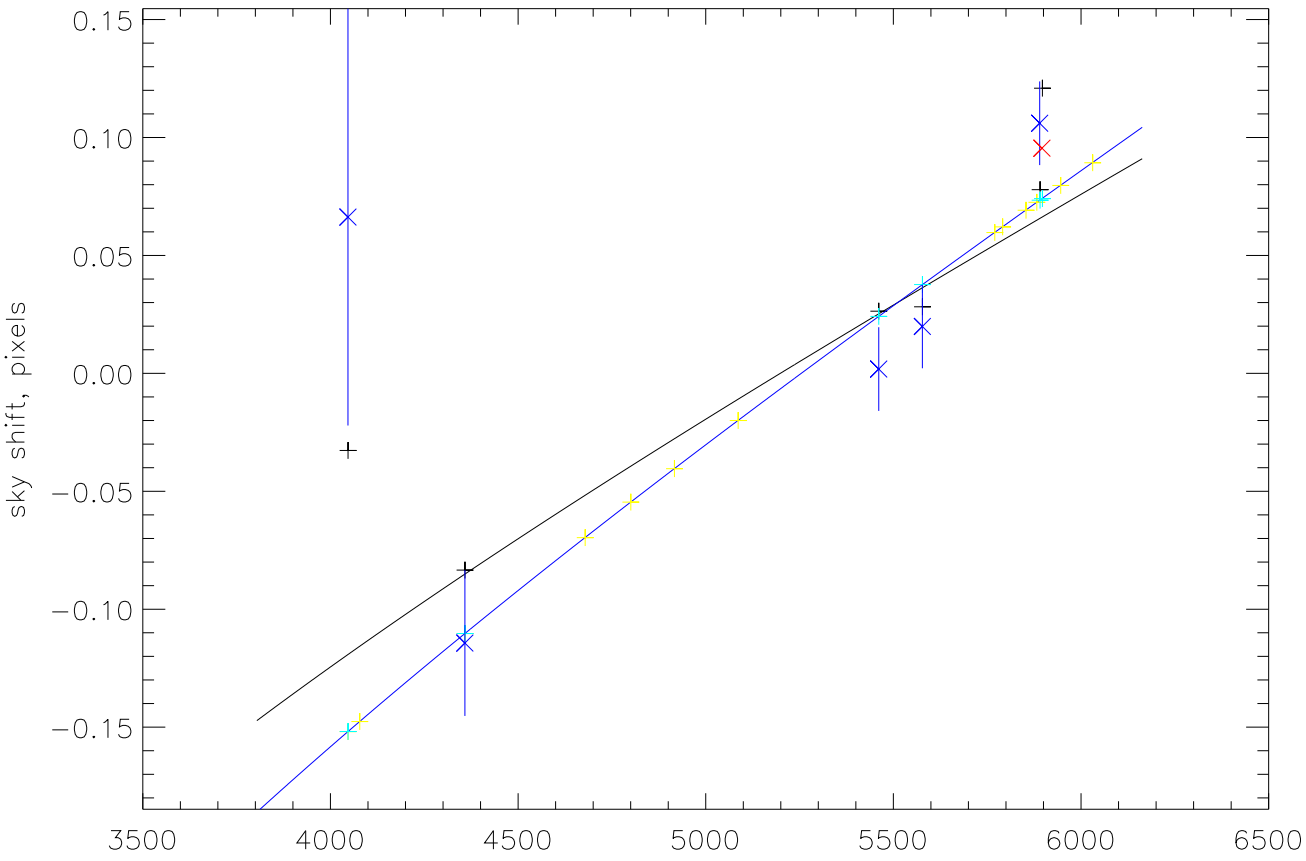

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

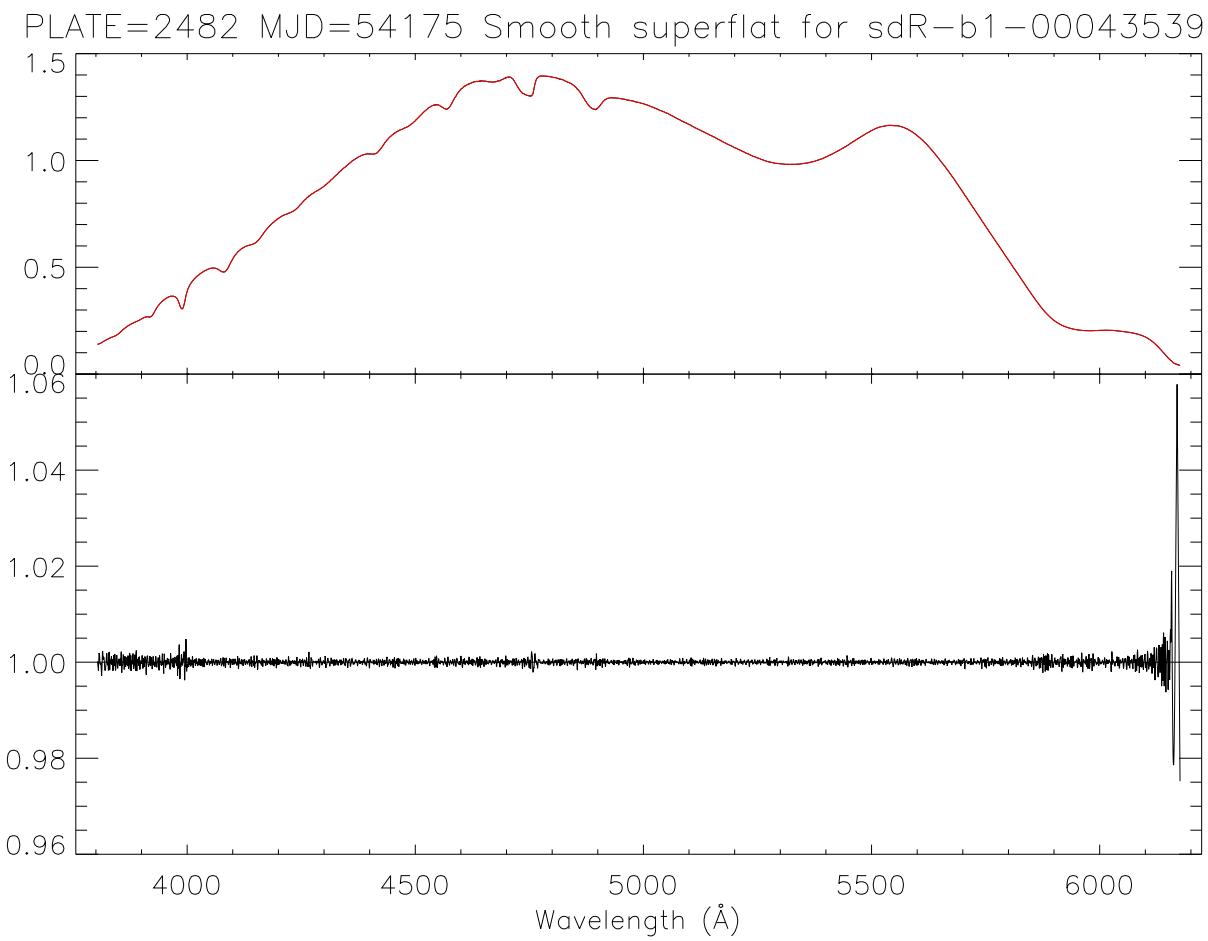

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

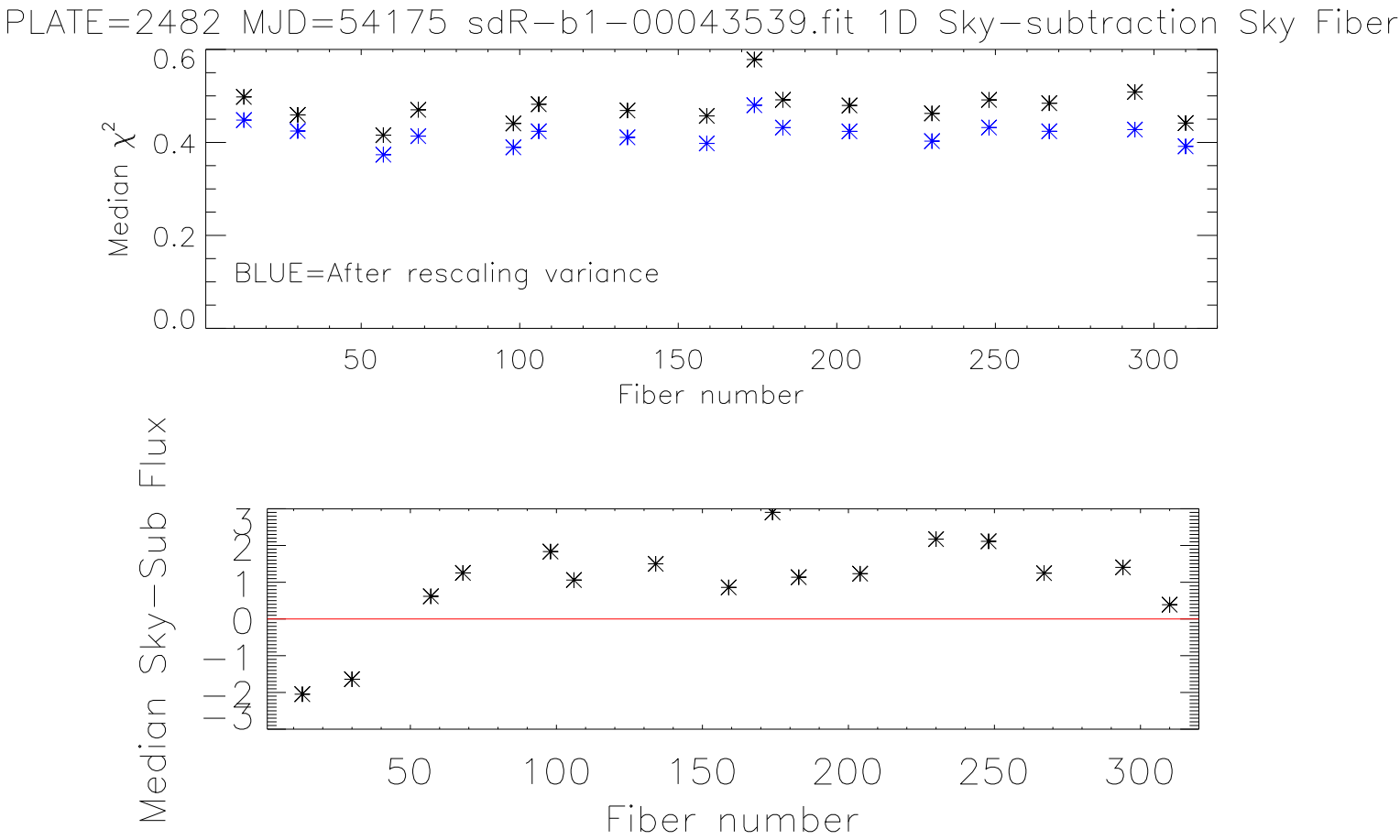

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

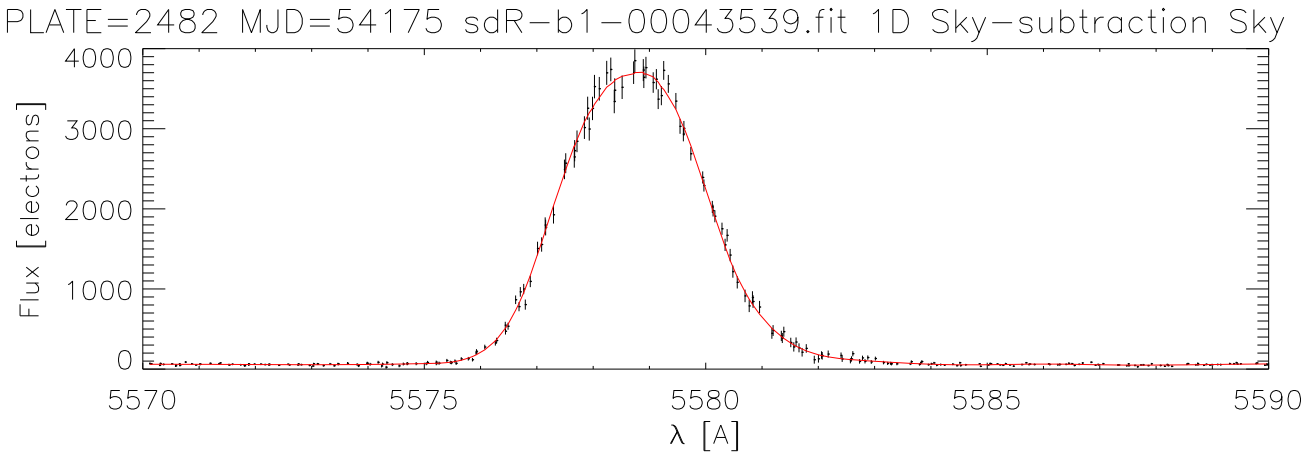

4046.5600
nfib1 16
nfib2 16
stdev 0.145
extra 0.07
4358.3300
nfib1 16
nfib2 16
stdev 0.042
extra −0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.087
extra 0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.036
extra 0.11
5895.9240
nfib1 16
nfib2 16
stdev 0.058
extra 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

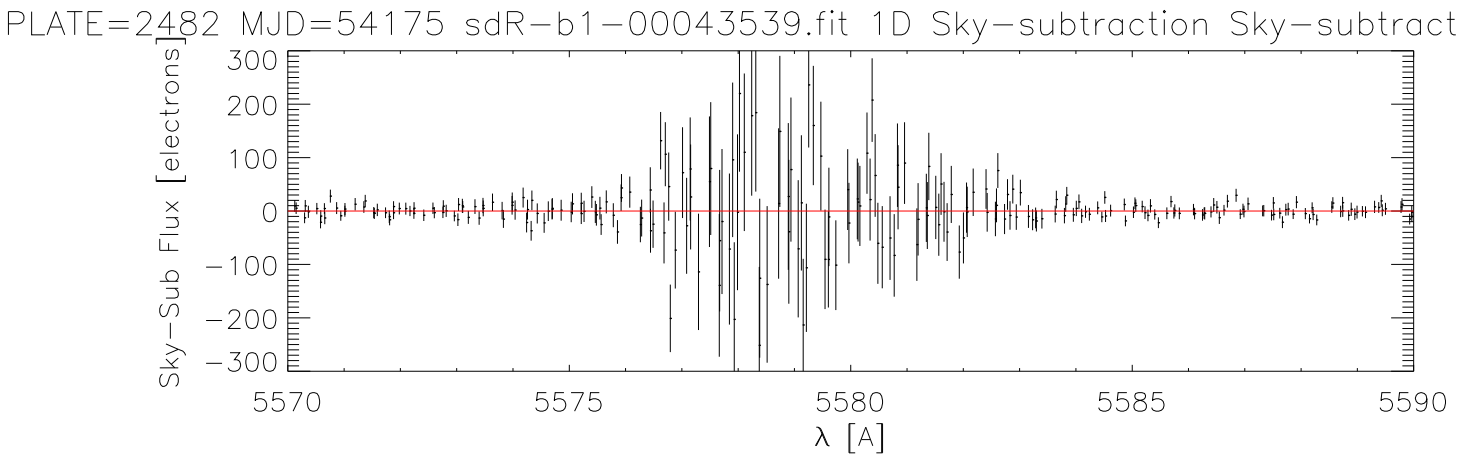

0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

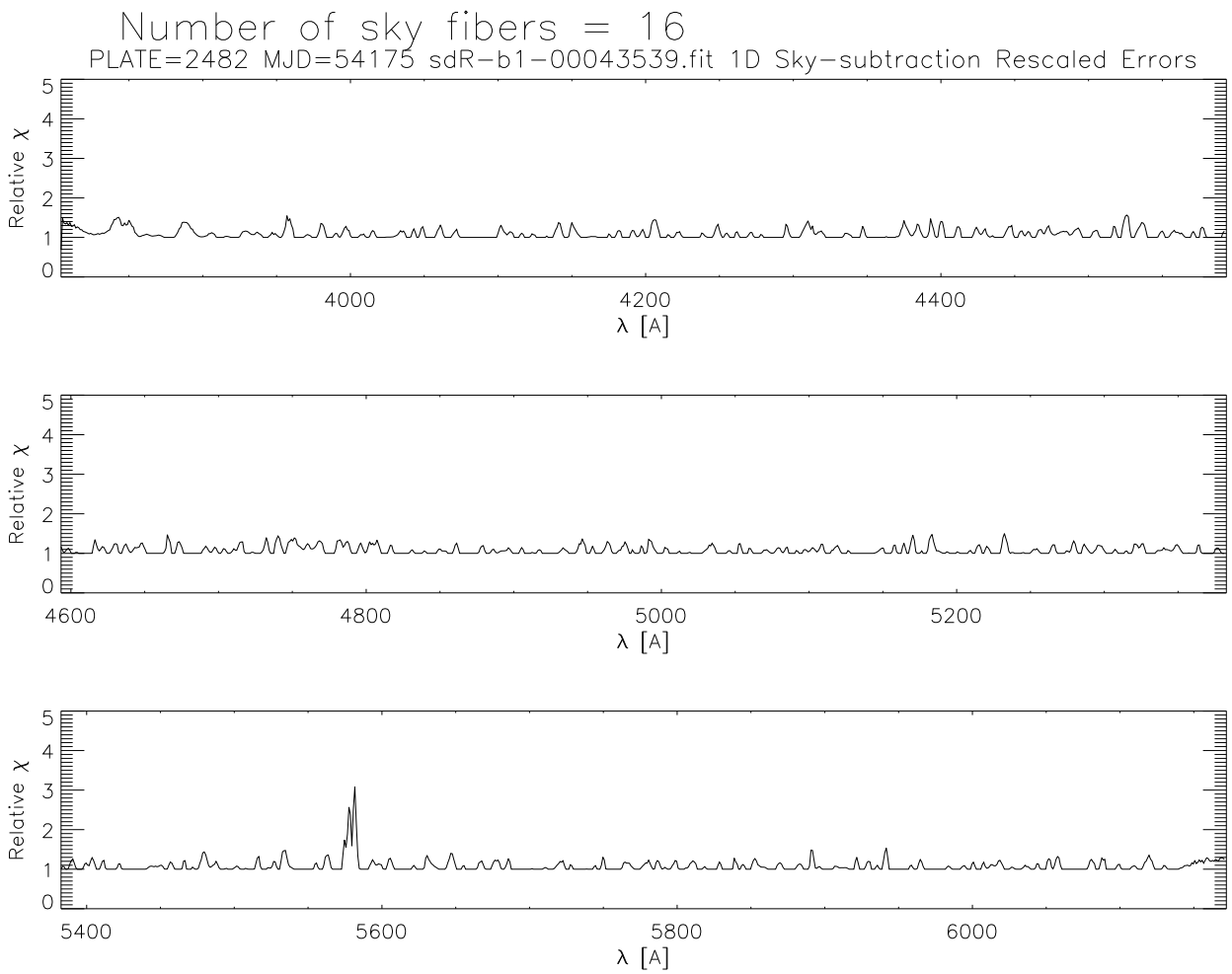
es= −0.0001

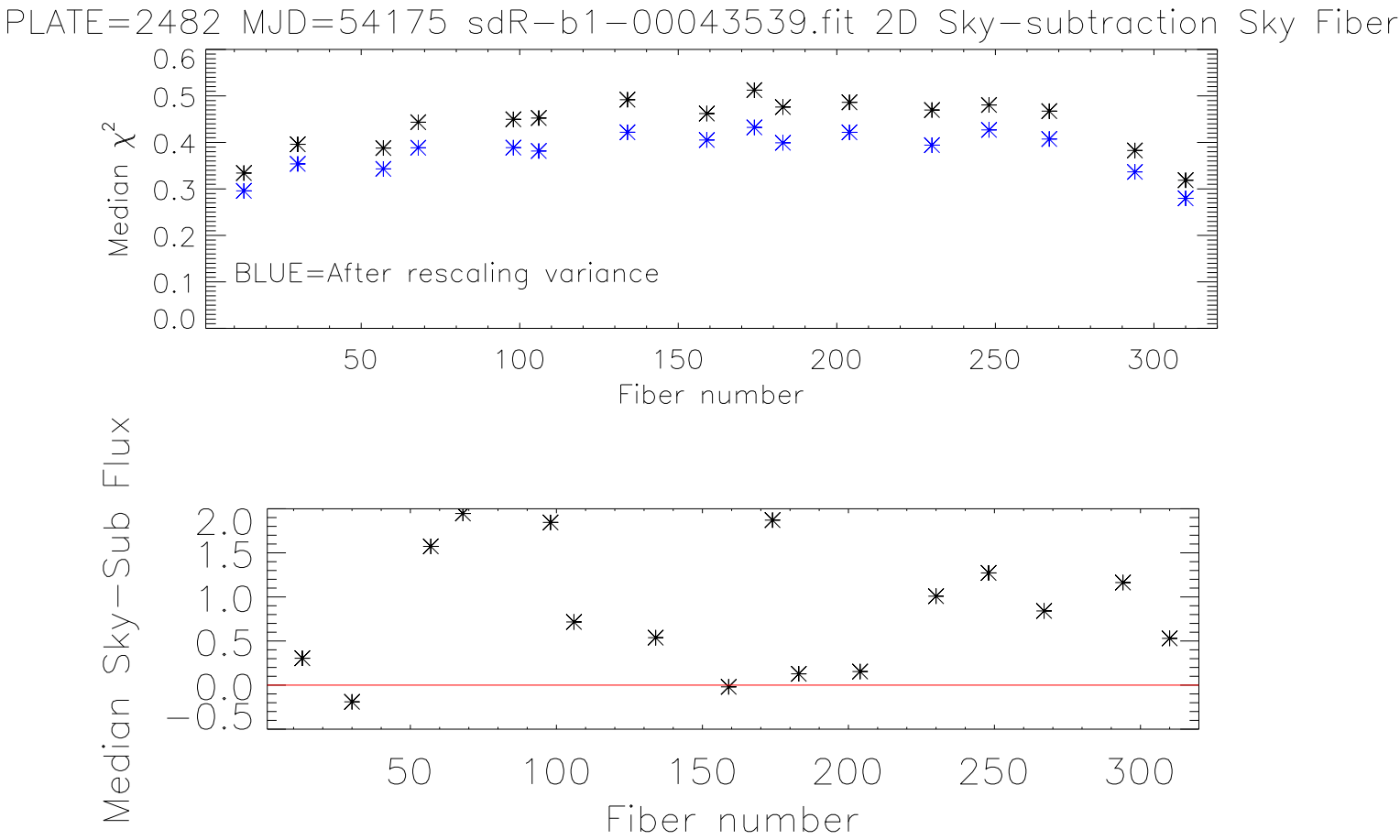

PLATE=2482 MJD=54175 Smooth superflat for sdR−b1−00043539.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

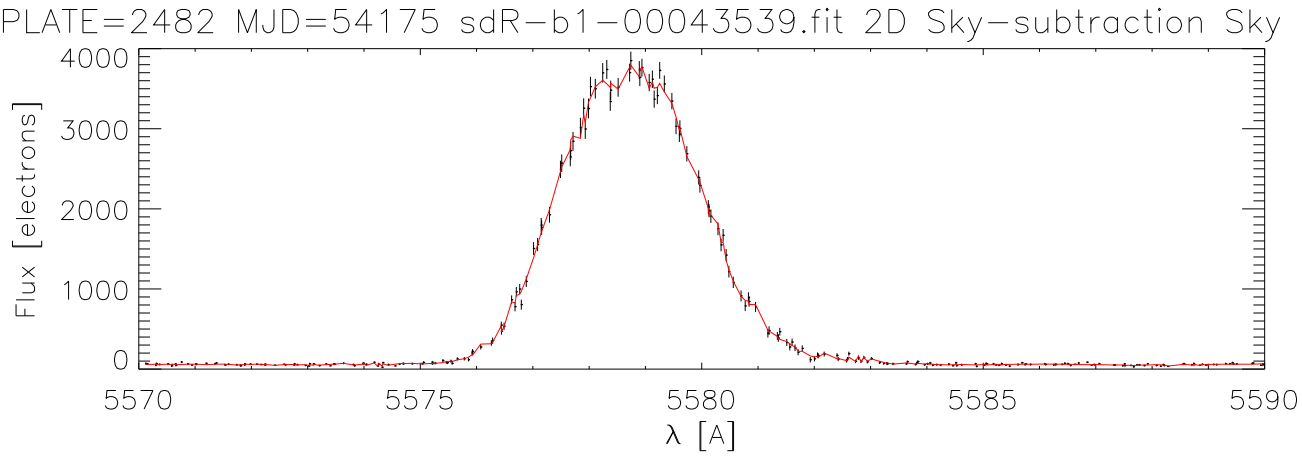

PLATE=2482 MJD=54175 sdR-b1-00043539.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

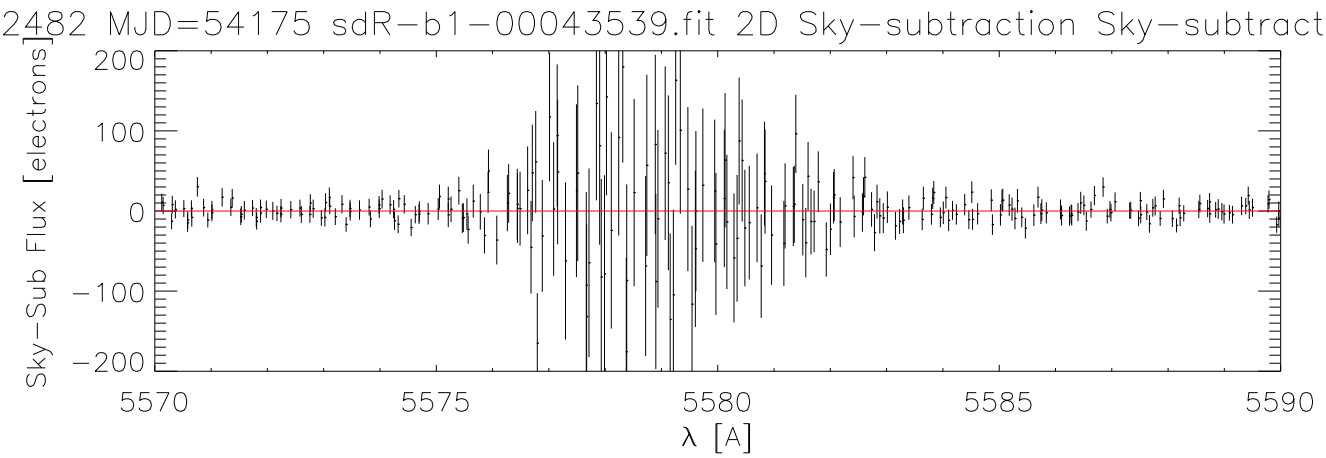

PLATE=2482 MJD=54175 sdR-b1-00043539.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

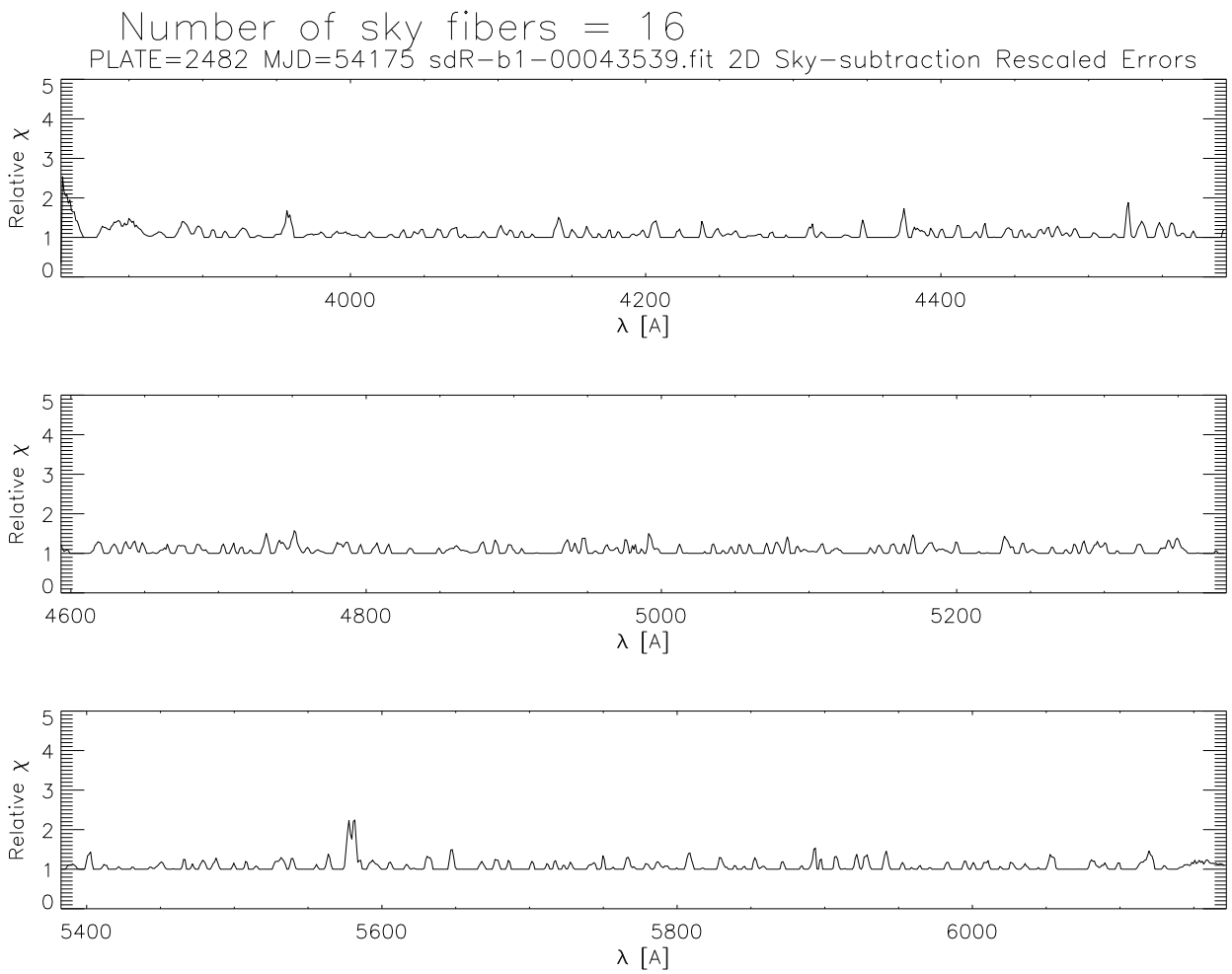

PLATE=2482 MJD=54175 sdR-b1-00043539.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

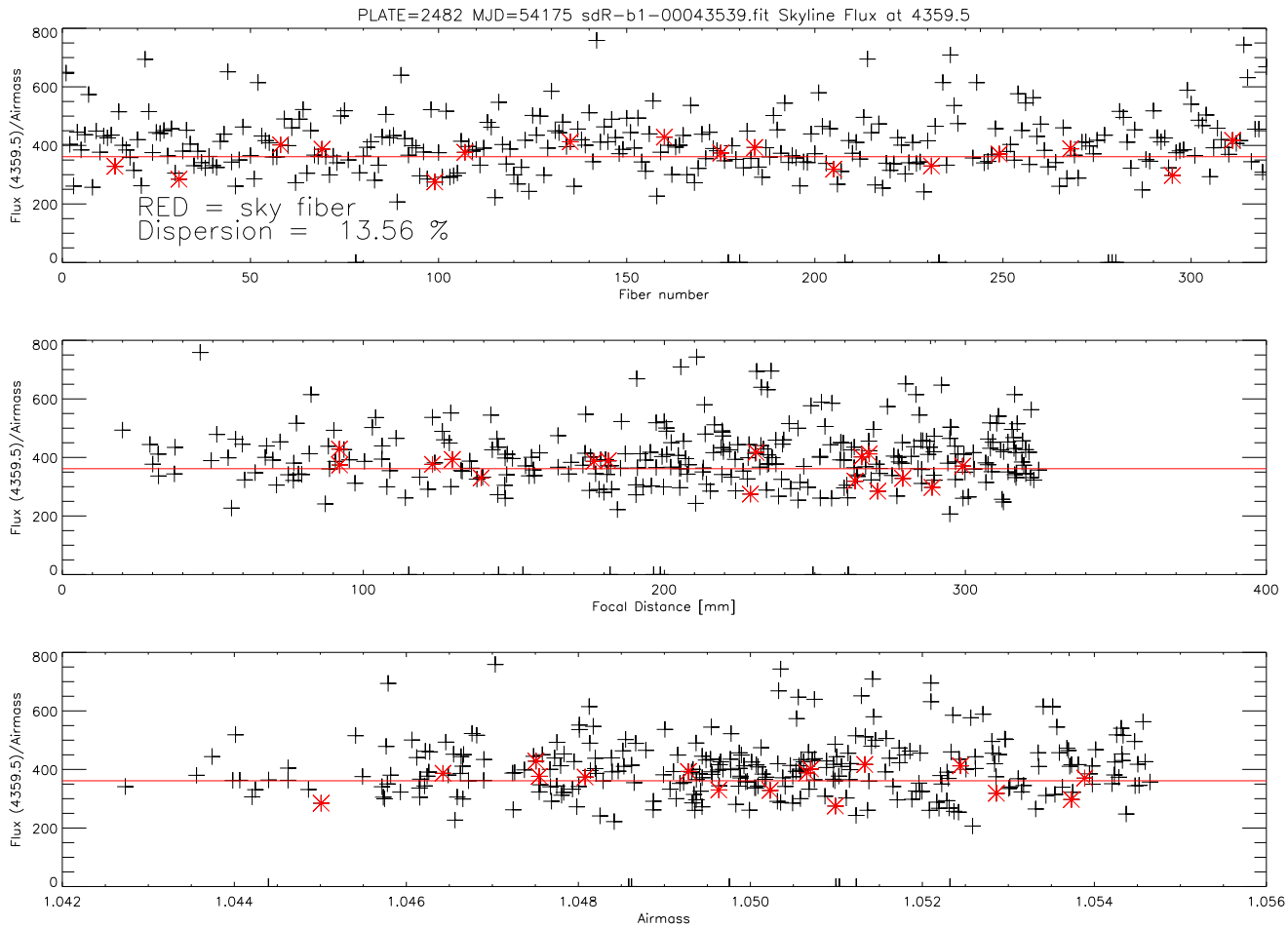

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-b1-00043539.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

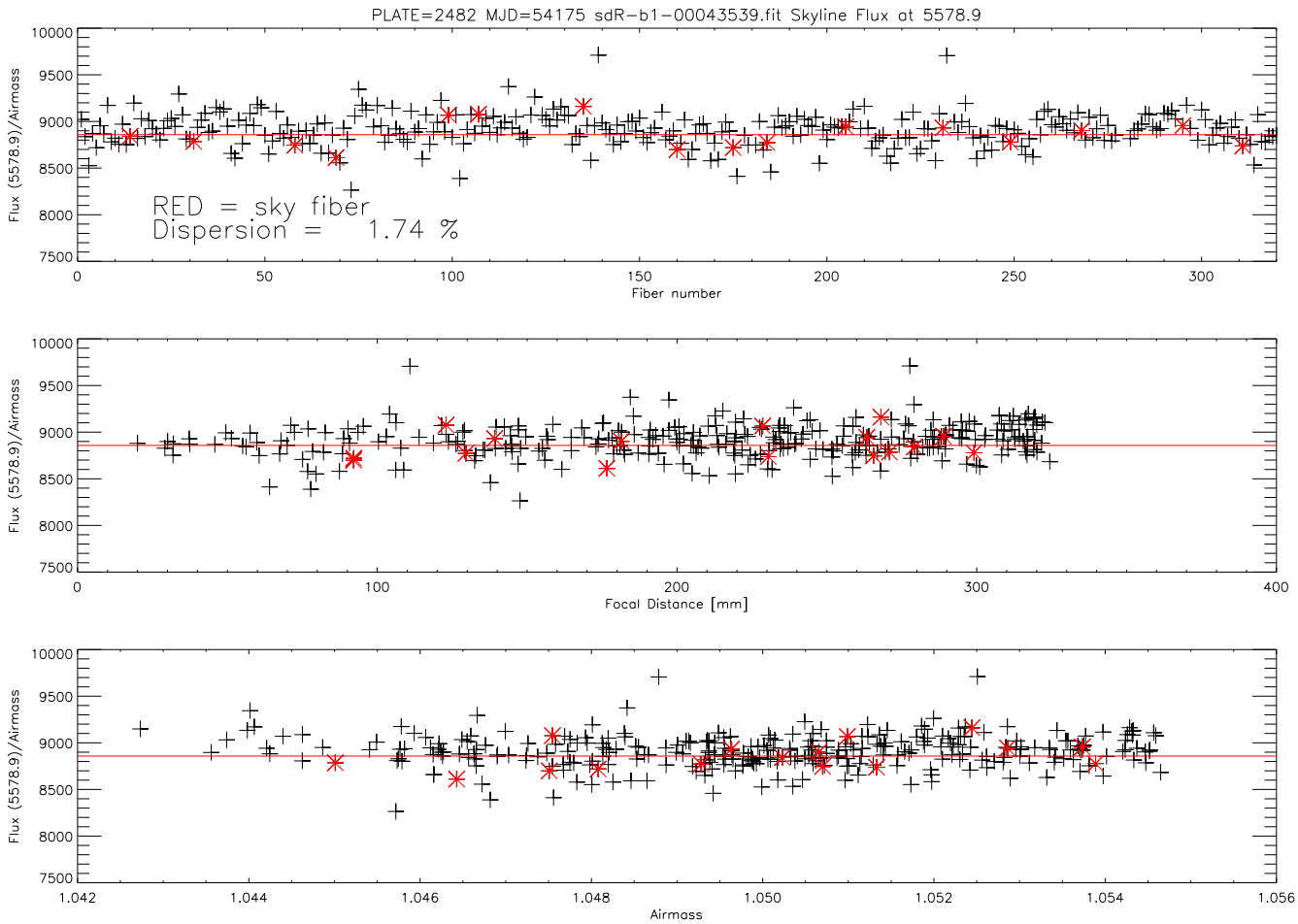

PLATE=2482 MJD=54175 sdR-b1-00043539.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

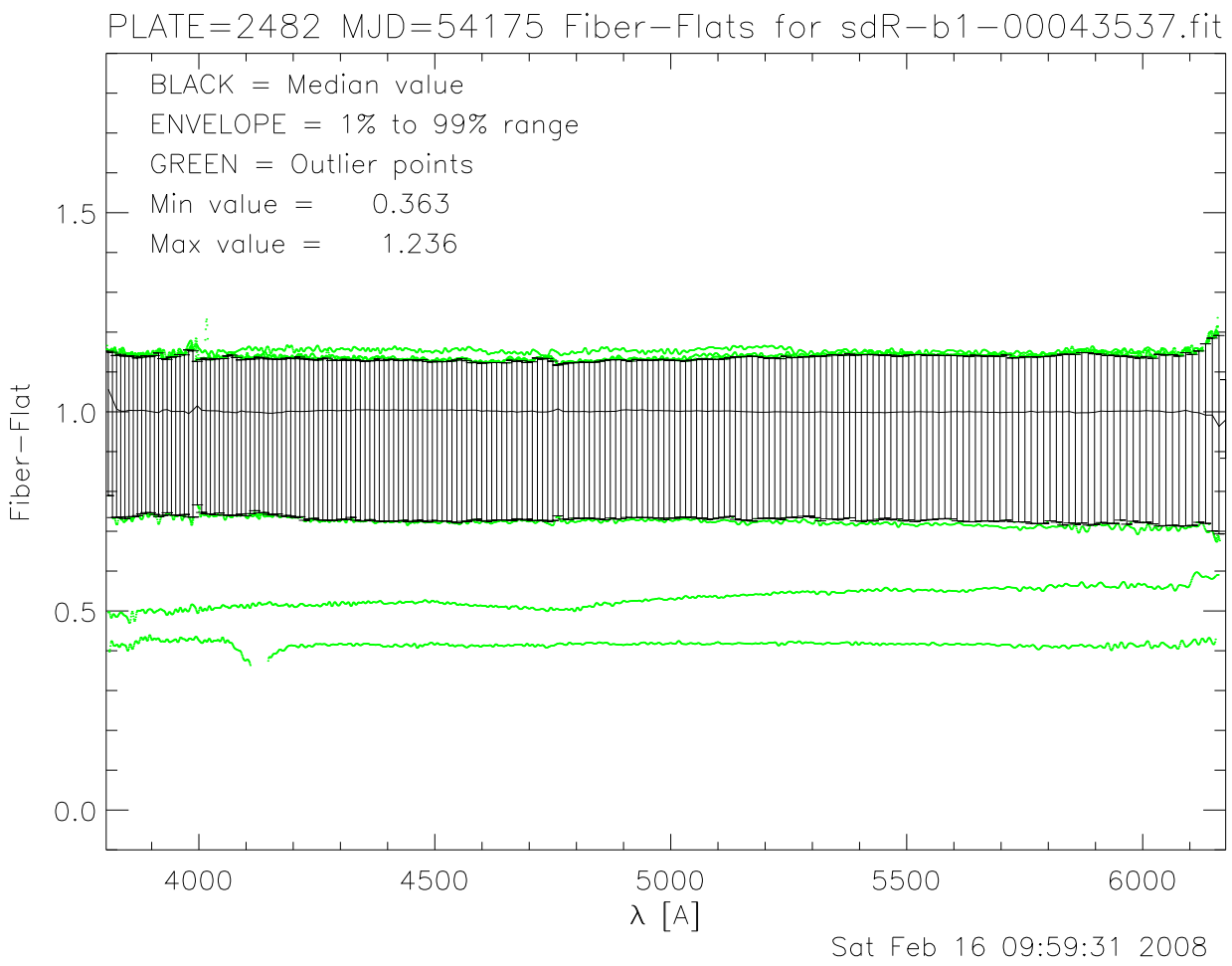

PLATE=2482 MJD=54175 sdR-b1-00043539.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

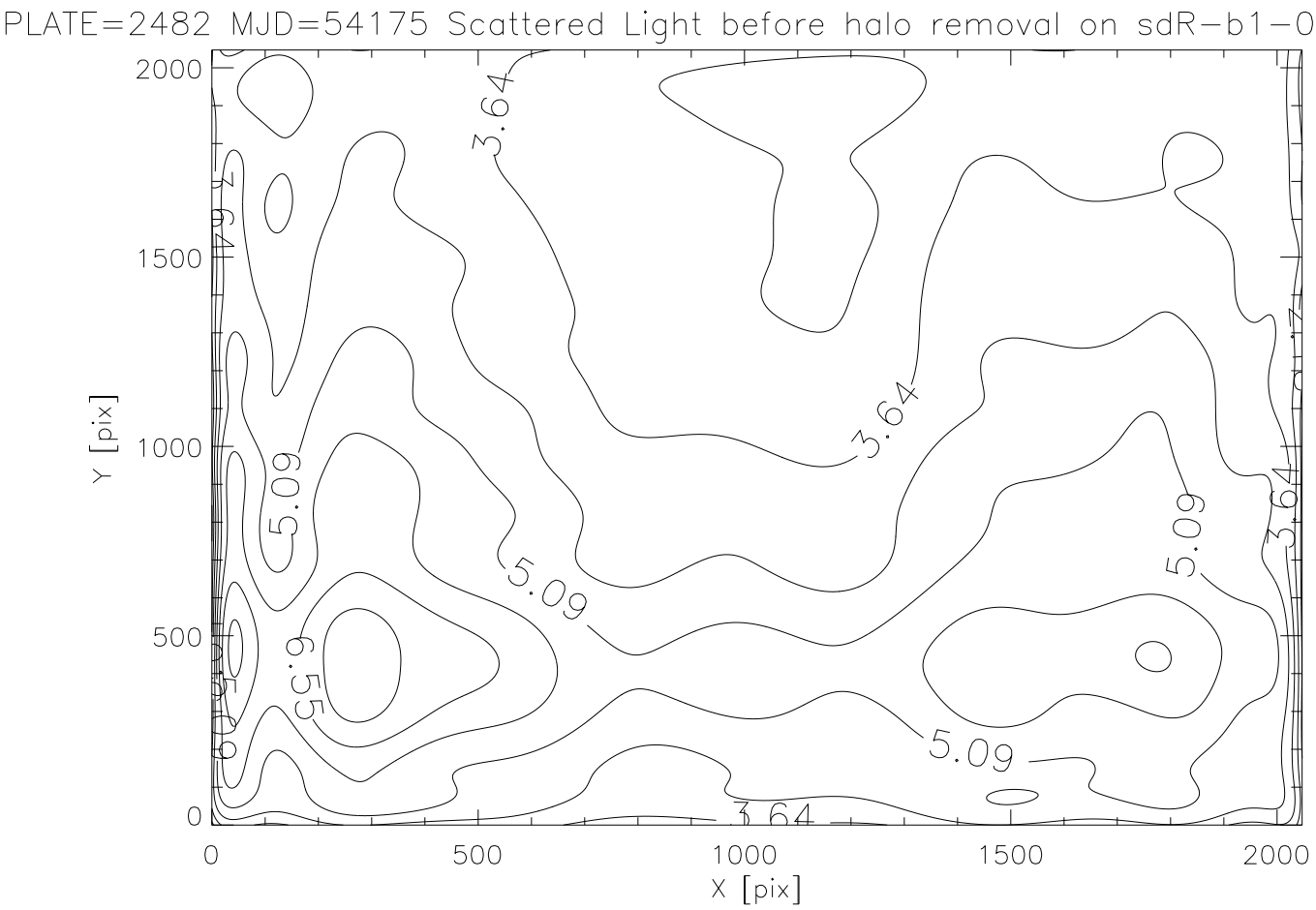

PLATE=2482 MJD=54175 sdR-b1-00043539.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

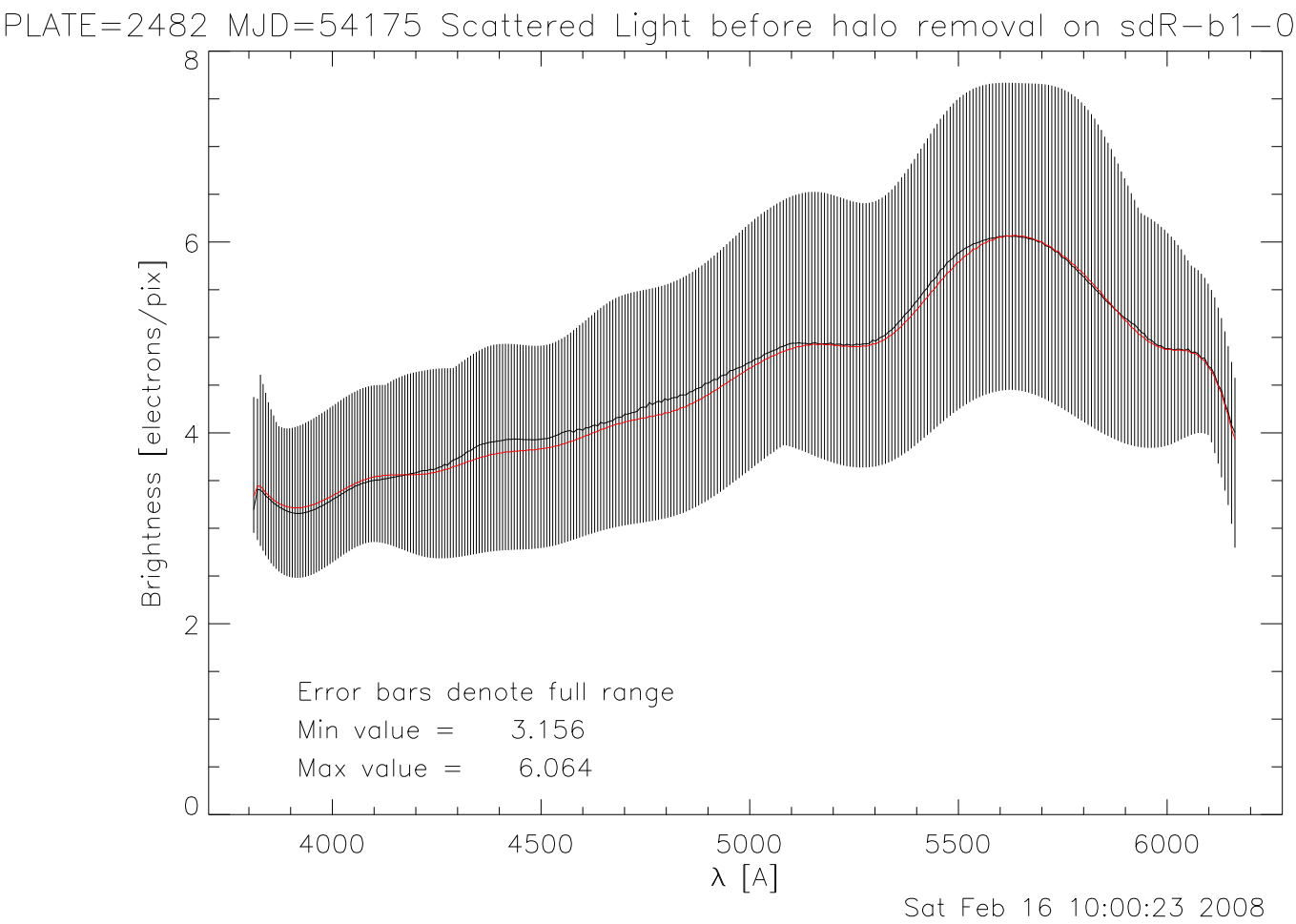

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-b1-00043539.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

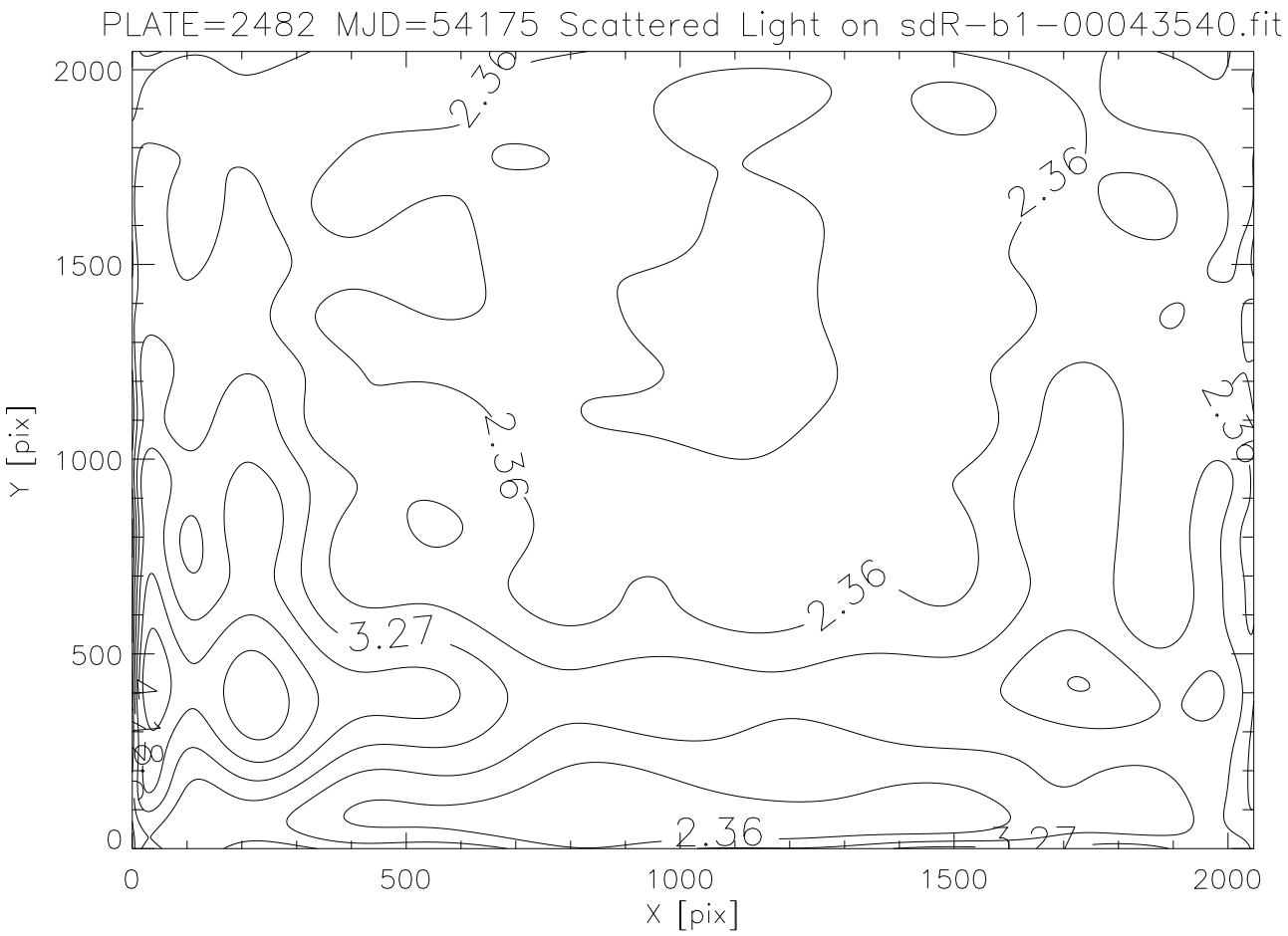

PLATE=2482 MJD=54175 sdR-b1-00043539.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.56 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

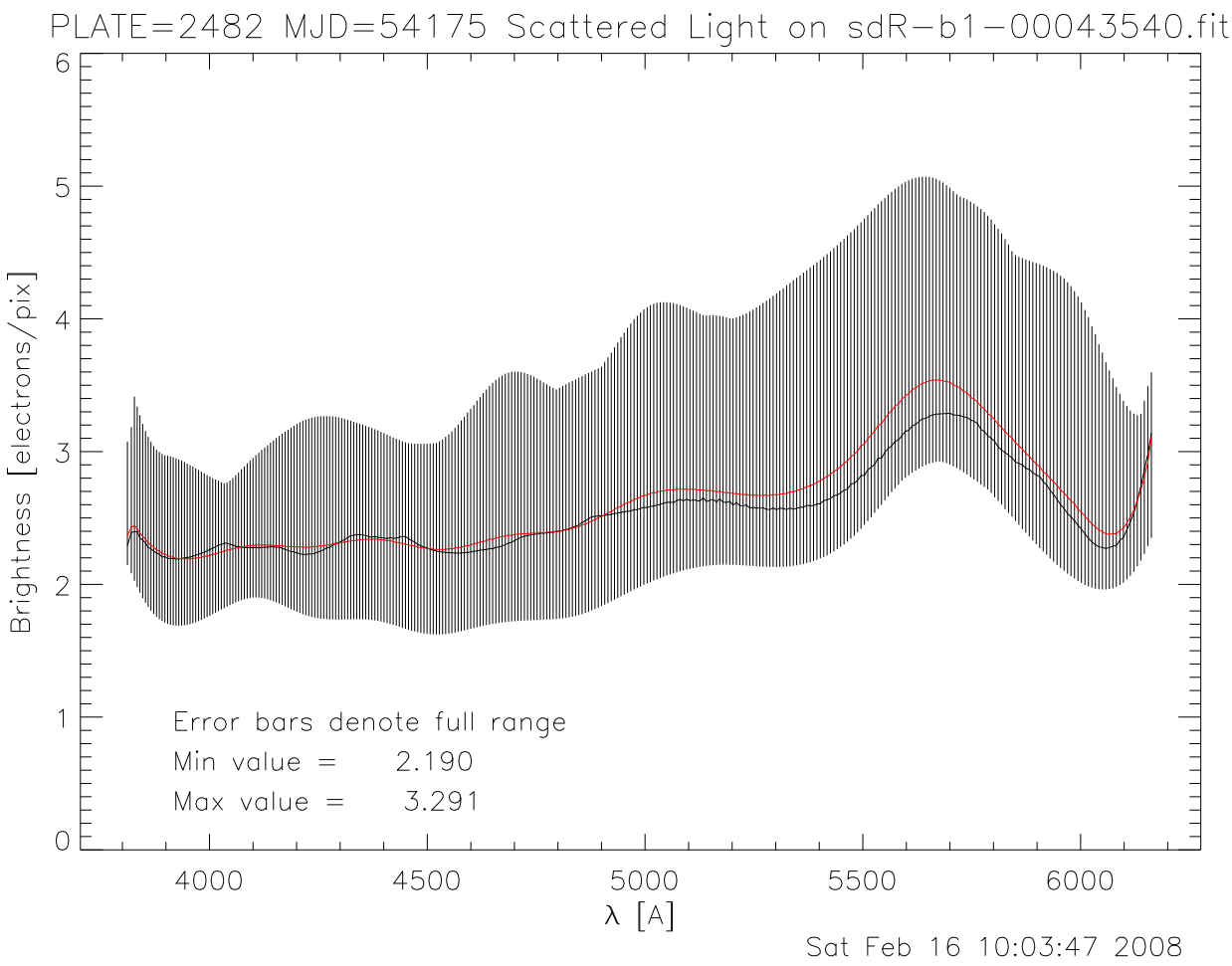

PLATE=2482 MJD=54175 sdR-b1-00043539.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.74 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

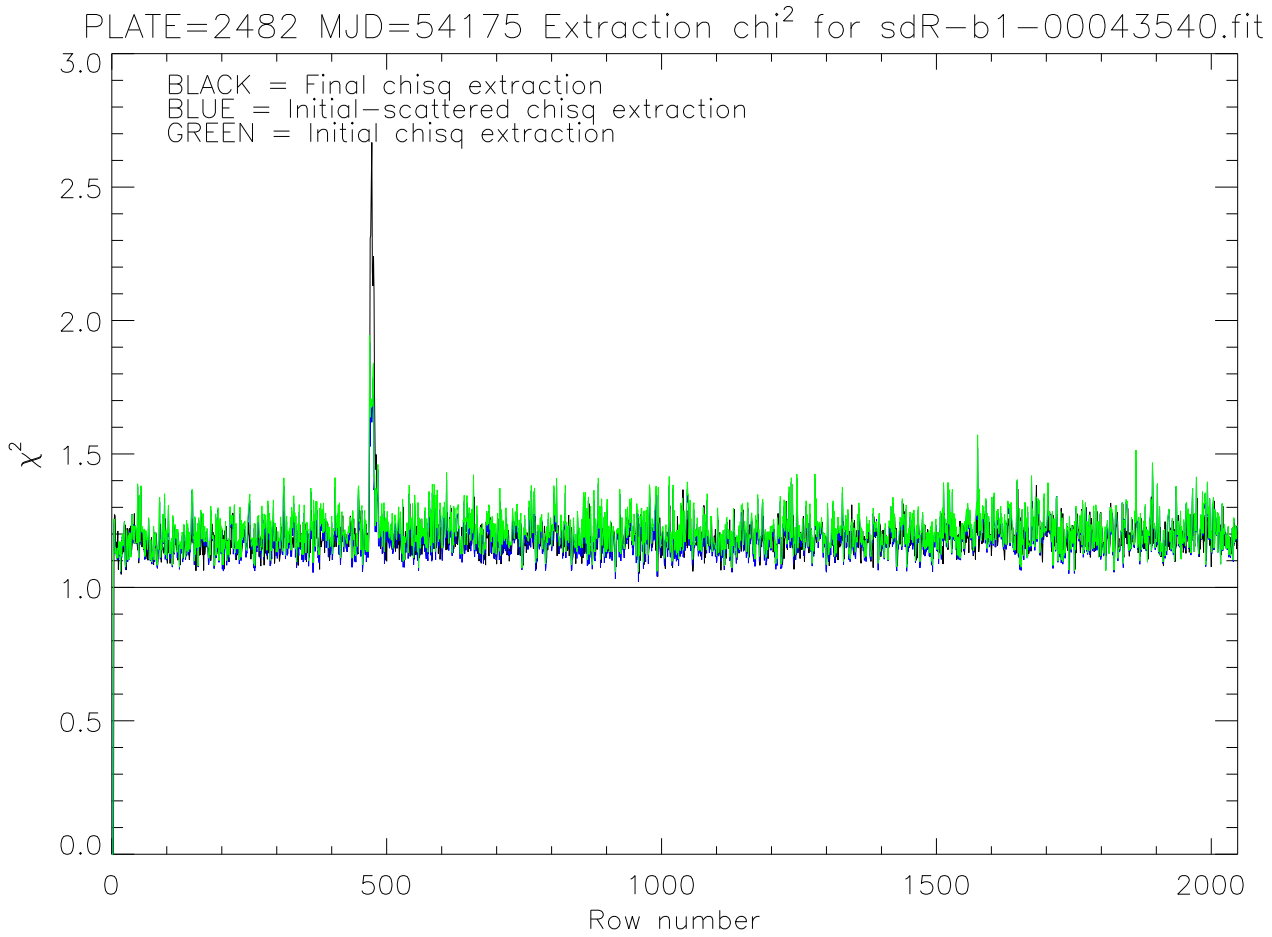

PLATE=2482 MJD=54175 Fiber-Flats for sdR-b1-00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.363
Max value = 1.236
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 09:59:31 2008

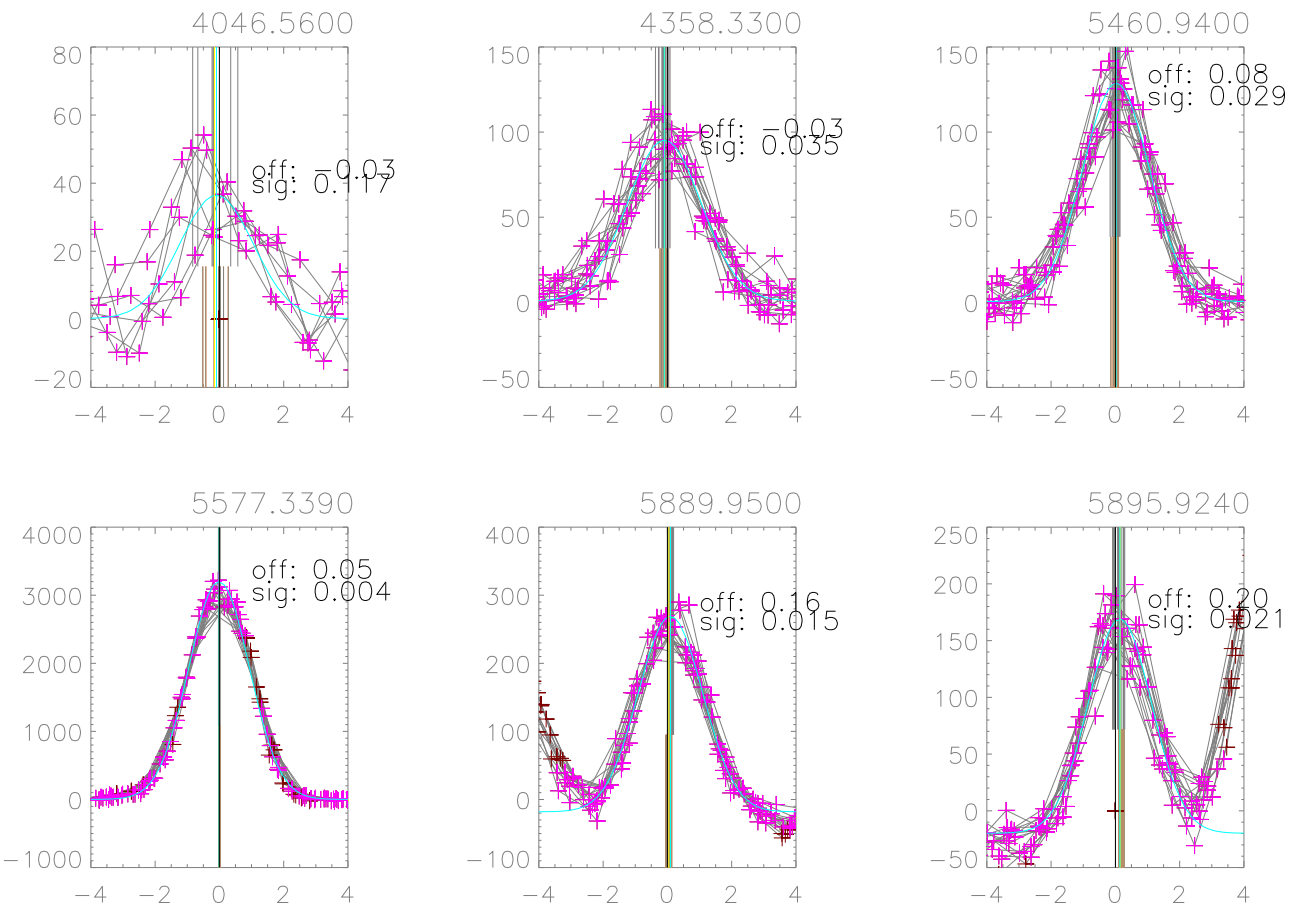

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR−b1−00043540.f
3.64
5.09
6.55
7.47
6.01
Y [pix]
X [pix]
0
500
1000
1500
2000

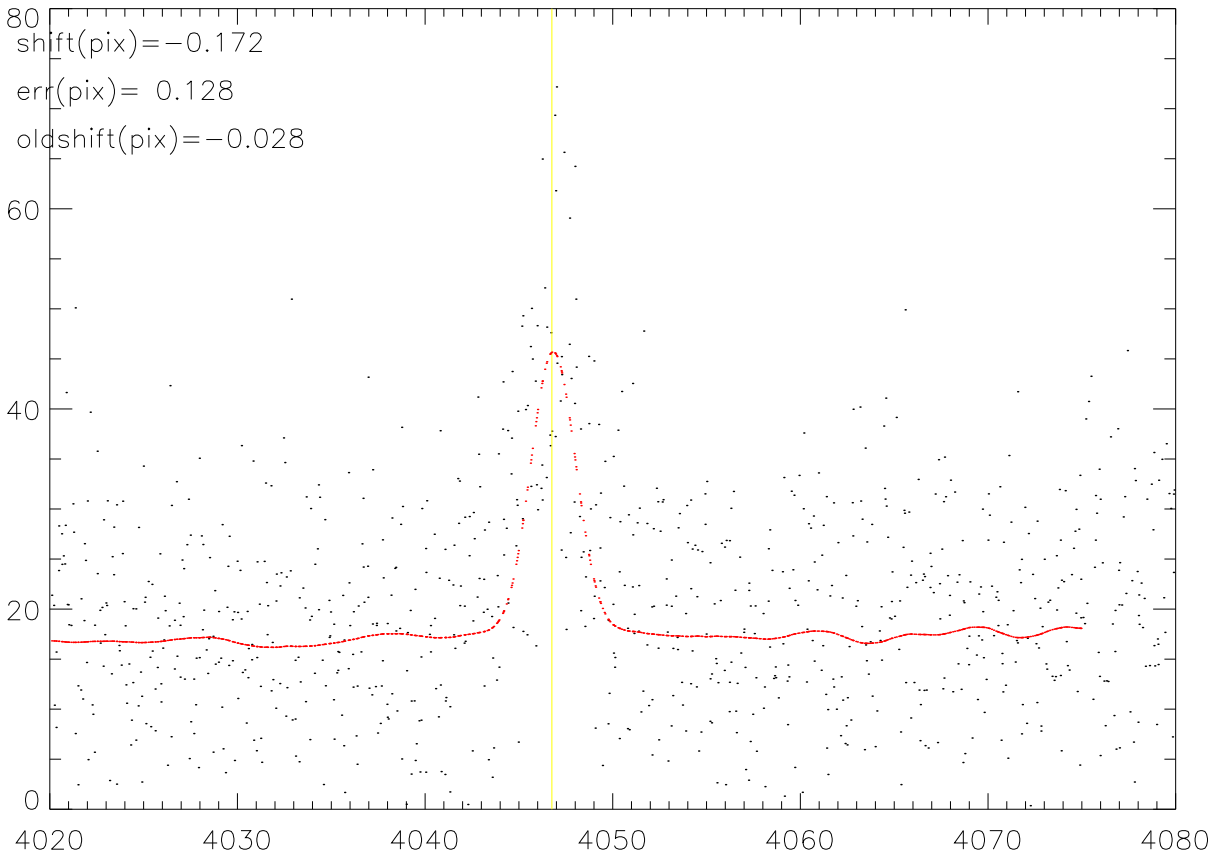

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-b1-00043540.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.156
Max value = 6.064
Sat Feb 16 10:00:23 2008

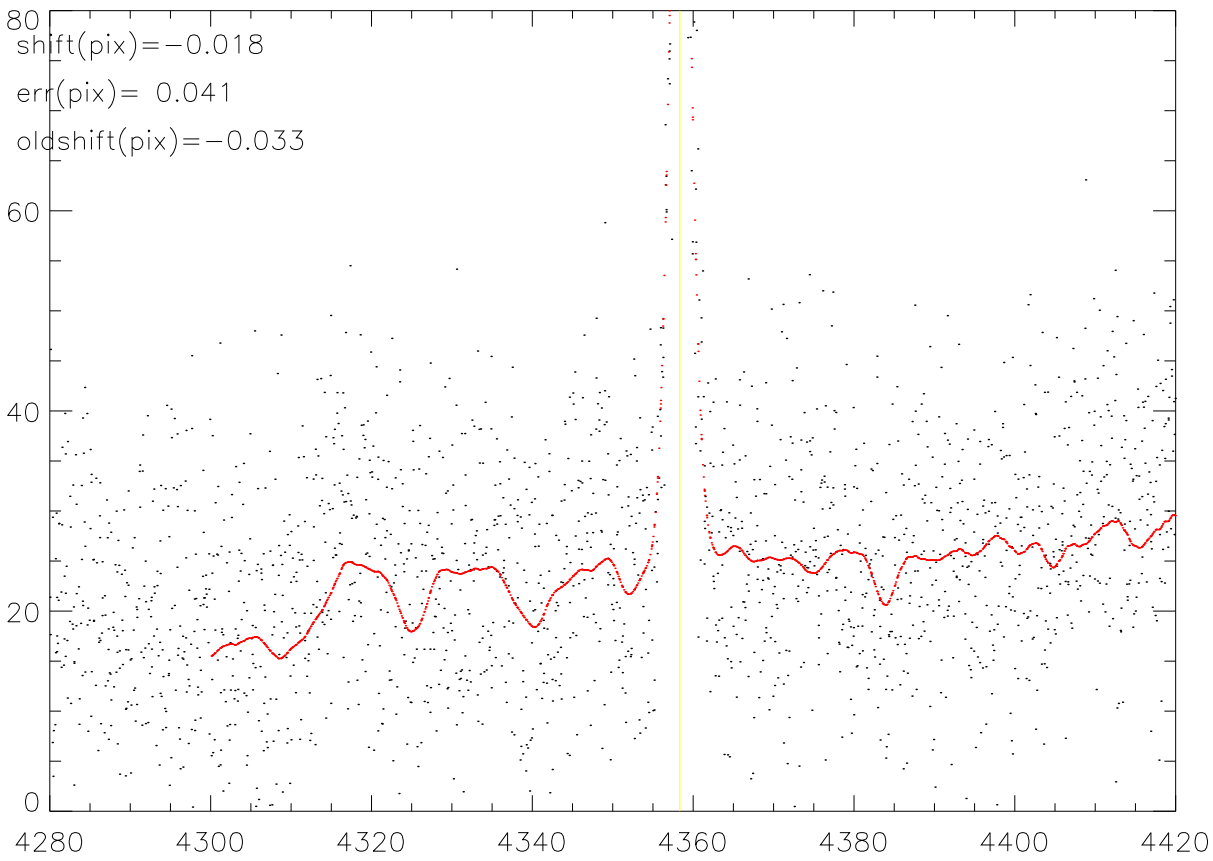

PLATE=2482 MJD=54175 Scattered Light on sdR-b1-00043540.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.36
2.36
2.36
2.36
3.27
2.36
3.27

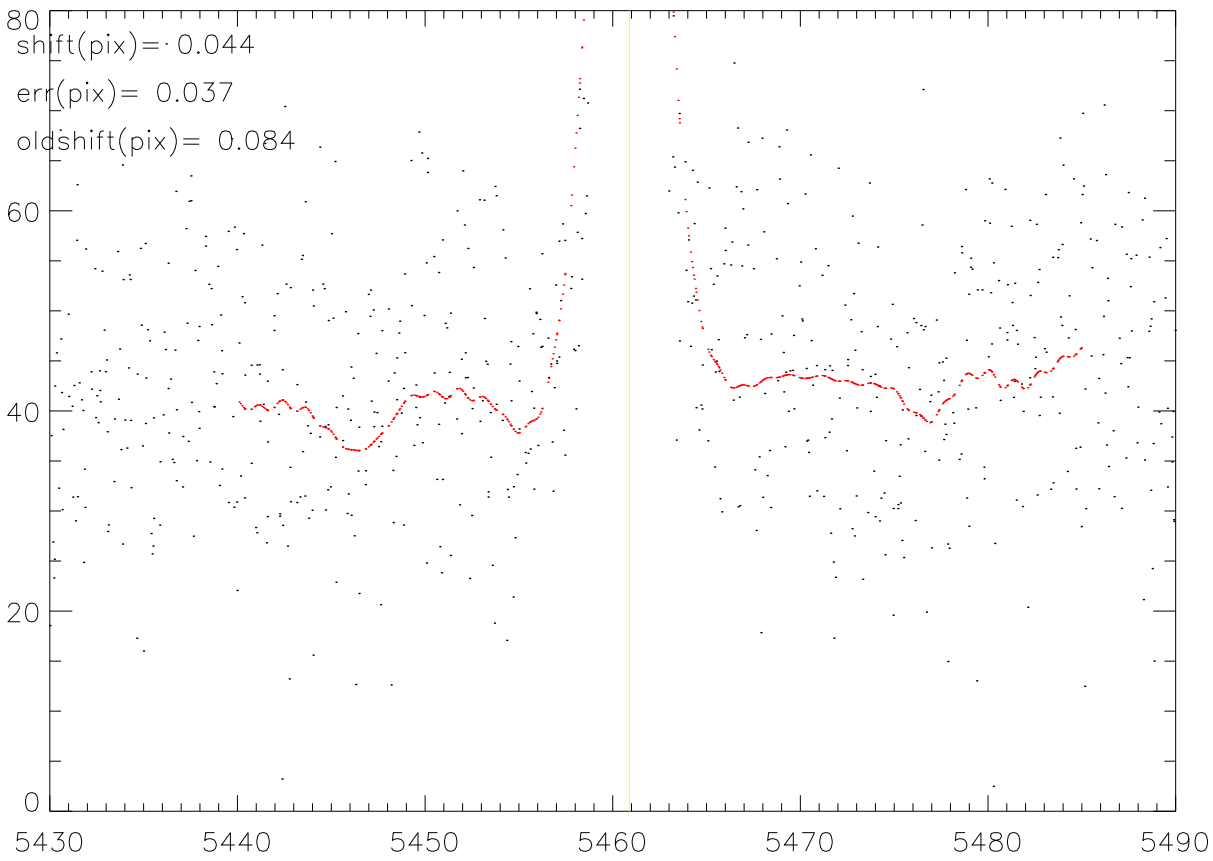

PLATE=2482 MJD=54175 Scattered Light on sdR-b1-00043540.fit
Brightness [electrons/pix]
0
1
2
3
4
5
6
Error bars denote full range
Min value = 2.190
Max value = 3.291
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 10:03:47 2008

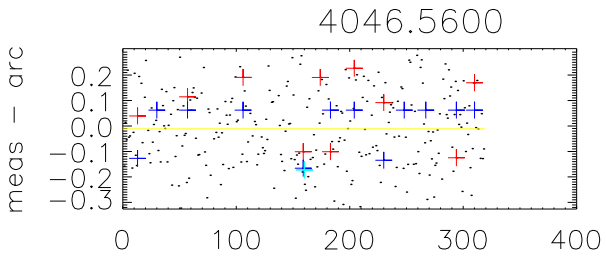

PLATE=2482 MJD=54175 Extraction chi^2 for sdR-b1-00043540.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

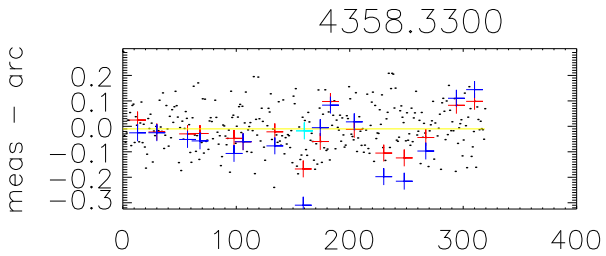

4046.5600
off: −0.03
sig: 0.117
4358.3300
off: −0.03
sig: 0.035
5460.9400
off: 0.08
sig: 0.029
5577.3390
off: 0.05
sig: 0.004
5889.9500
off: 0.16
sig: 0.015
5895.9240
off: 0.20
sig: 0.021

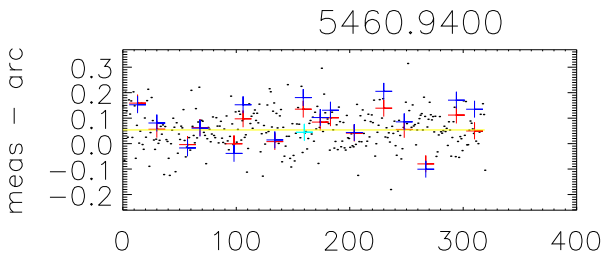

shift(pix)=−0.172
err(pix)= 0.128
oldshift(pix)=−0.028
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

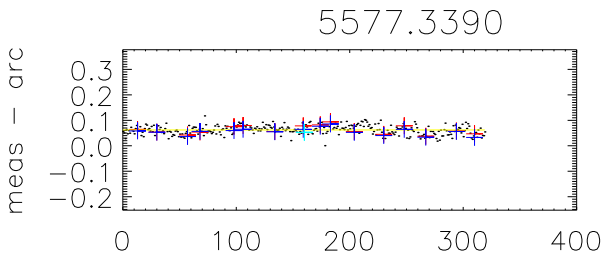

shift(pix)=−0.018
err(pix)= 0.041
oldshift(pix)=−0.033
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

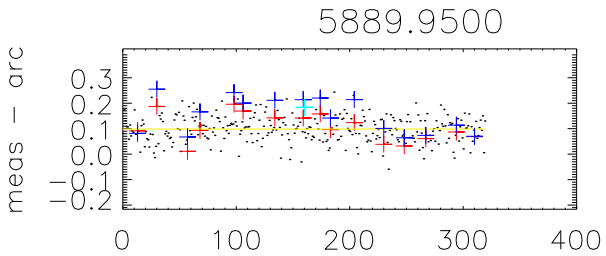

shift(pix)= 0.044
err(pix)= 0.037
oldshift(pix)= 0.084
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

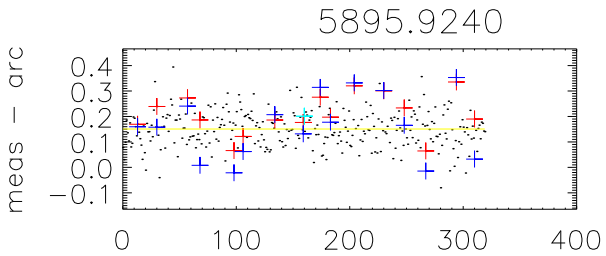

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

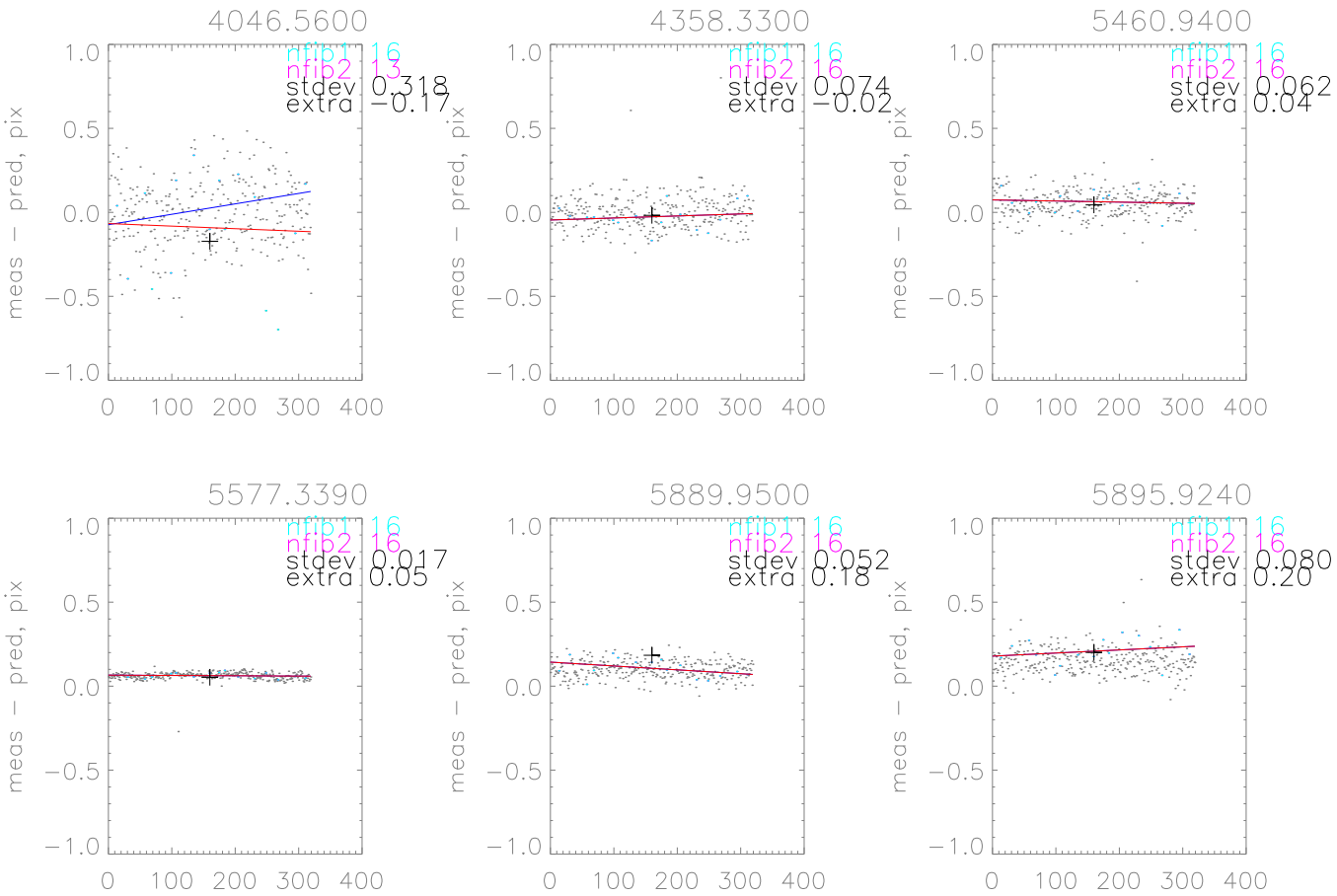

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

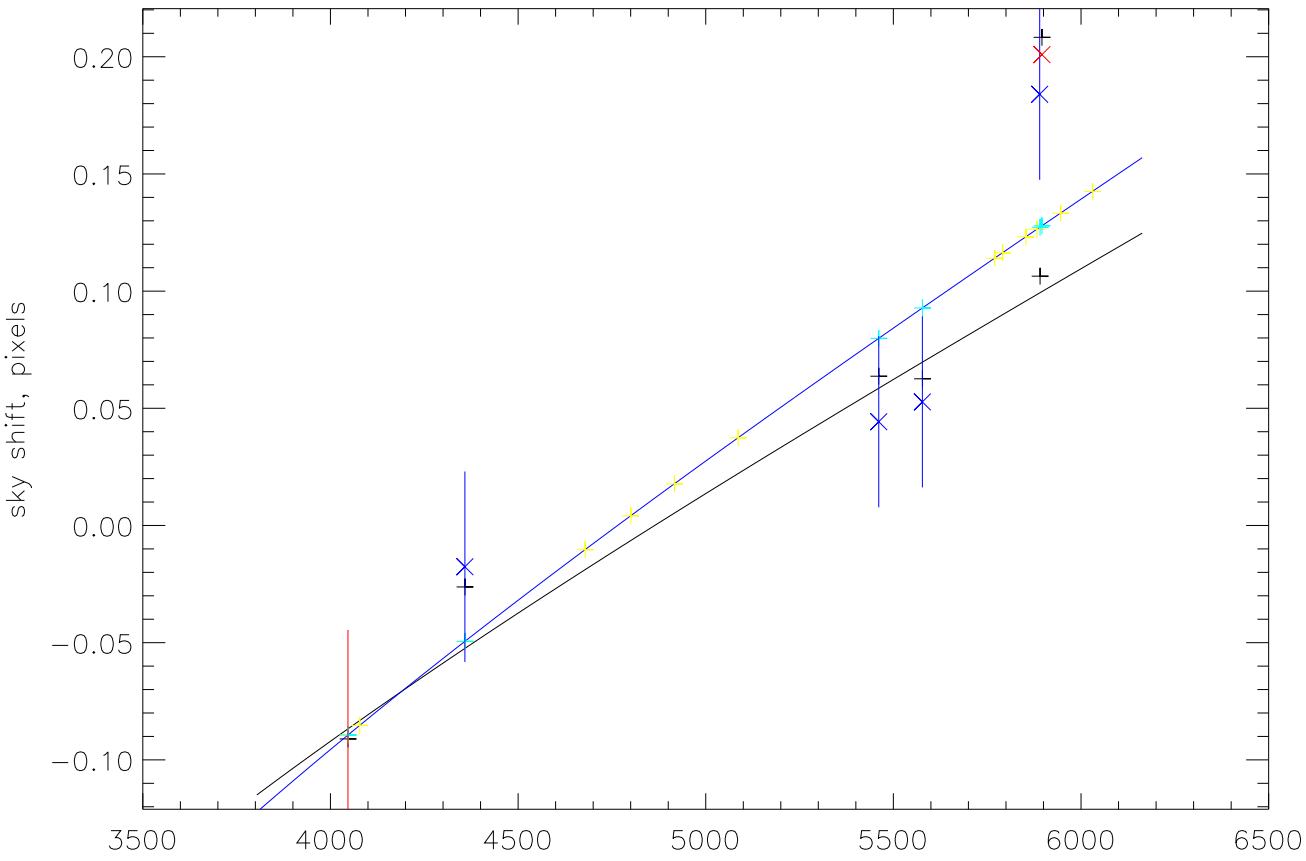

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

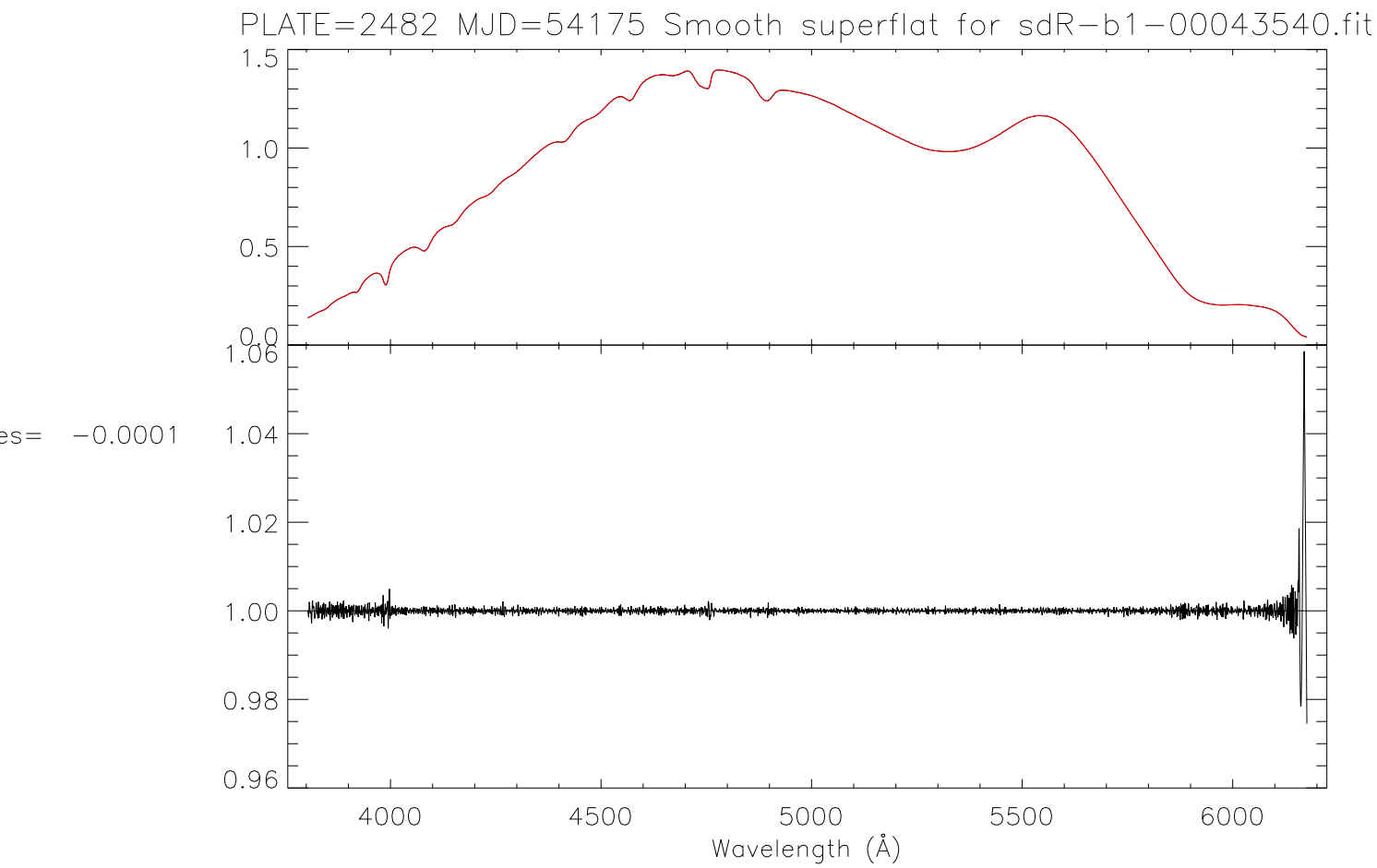

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

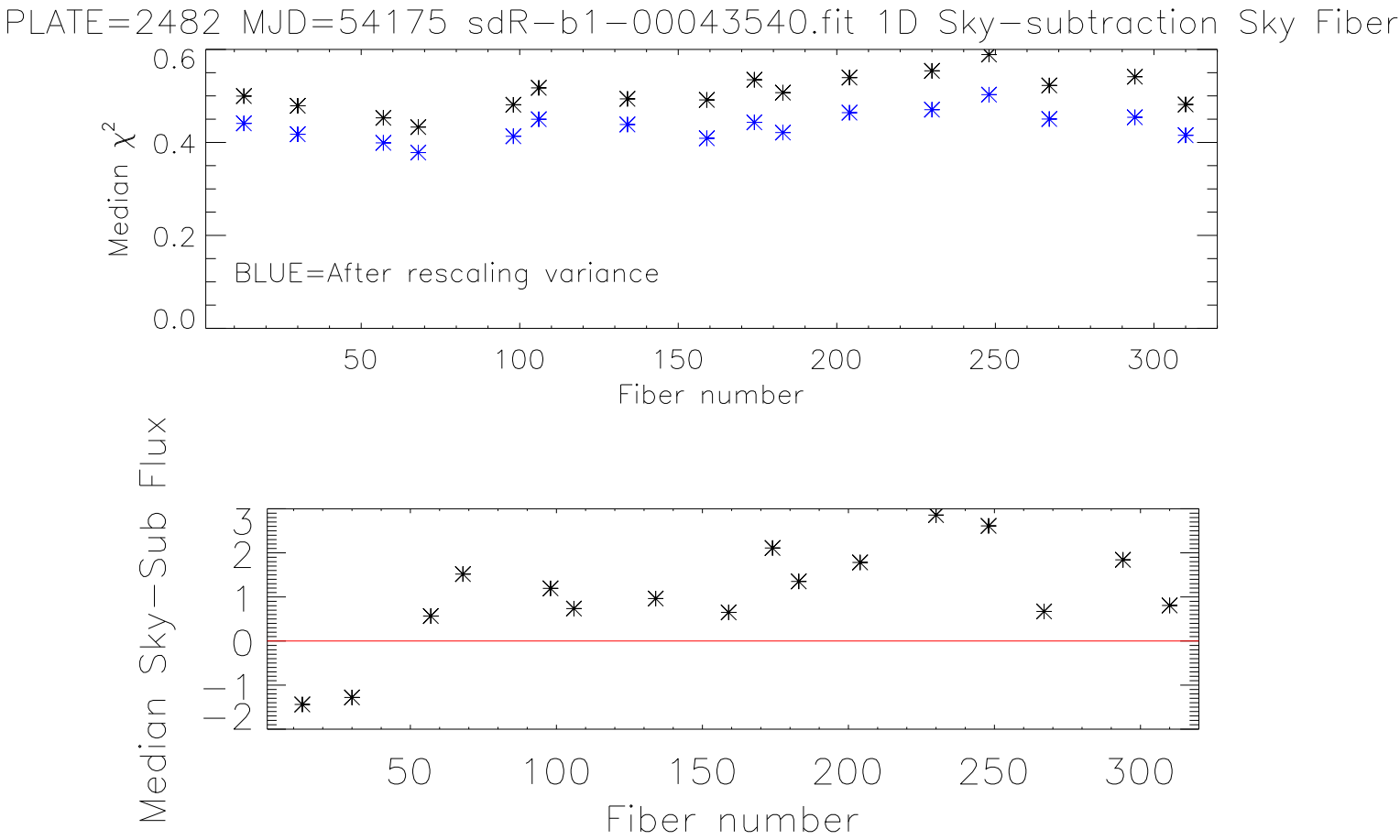

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

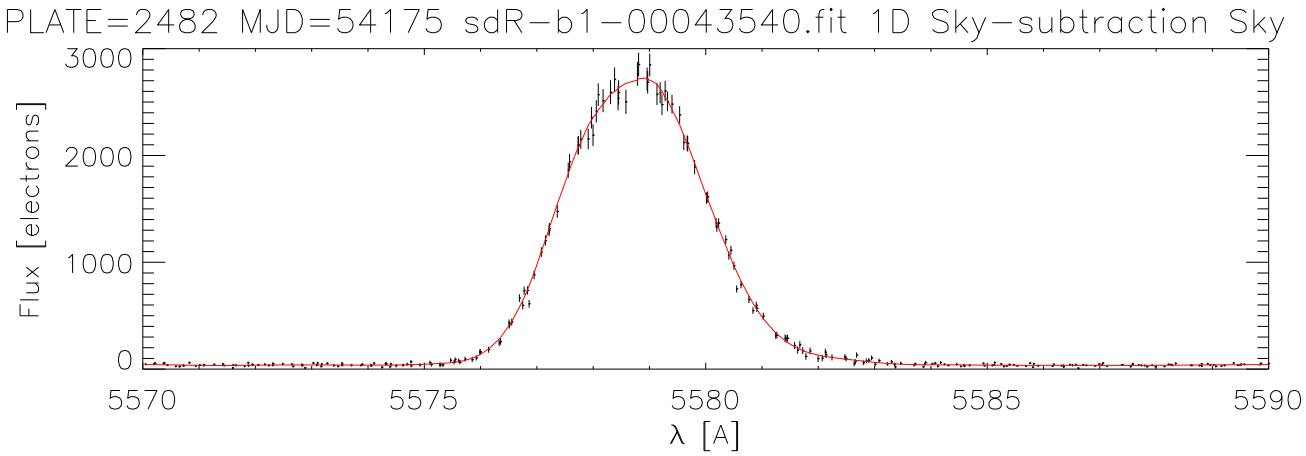

4046.5600
nfib1 16
nfib2 13
stdev 0.318
extra −0.17
4358.3300
nfib1 16
nfib2 16
stdev 0.074
extra −0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.062
extra 0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.05
5889.9500
nfib1 16
nfib2 16
stdev 0.052
extra 0.18
5895.9240
nfib1 16
nfib2 16
stdev 0.080
extra 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

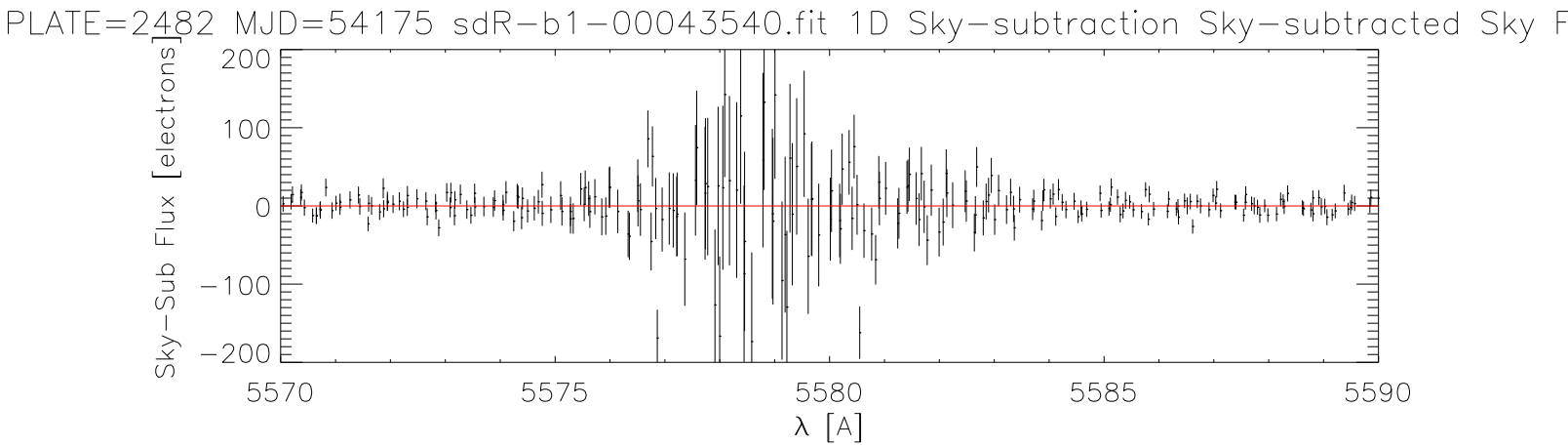

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

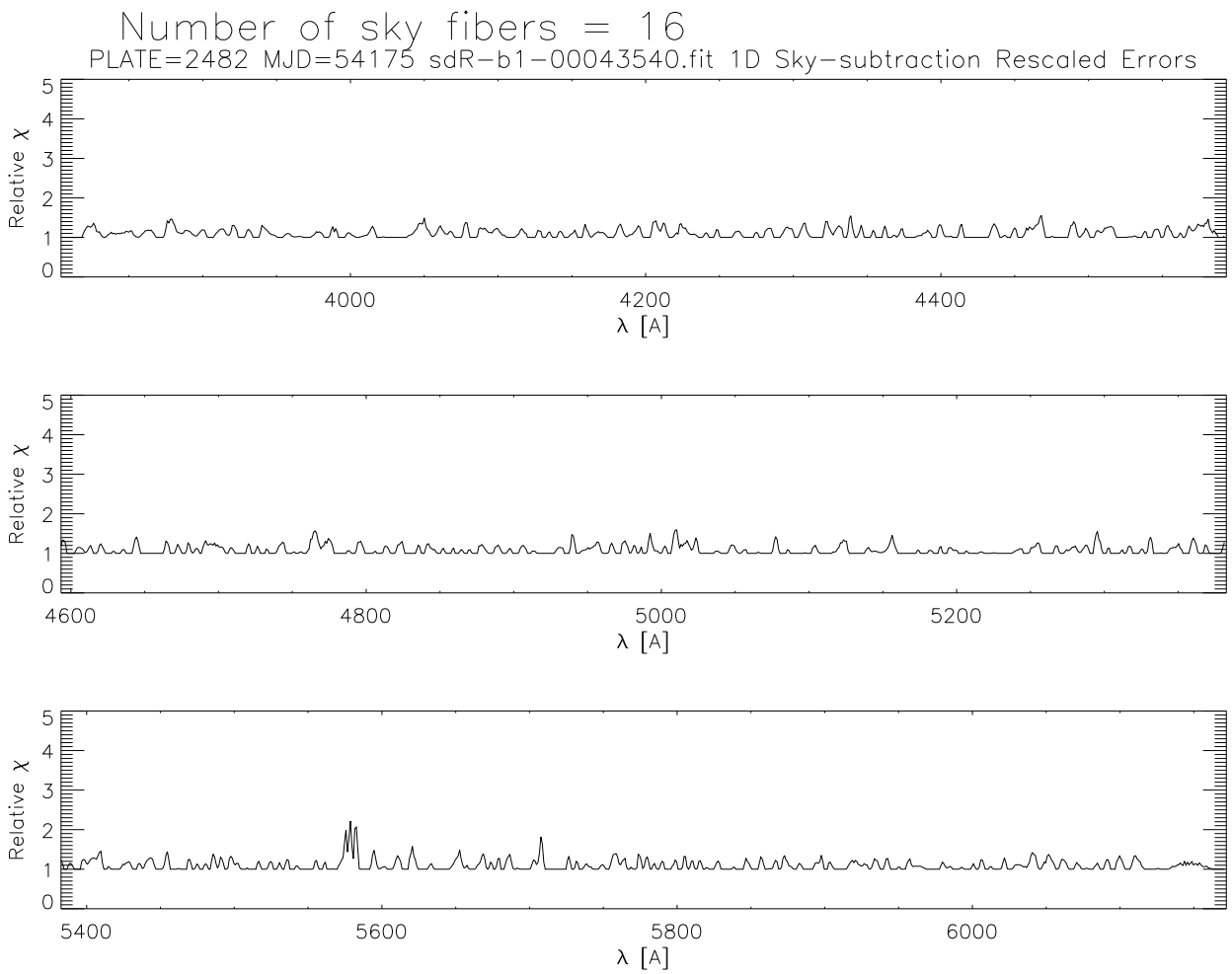

PLATE=2482 MJD=54175 Smooth superflat for sdR-b1-00043540.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

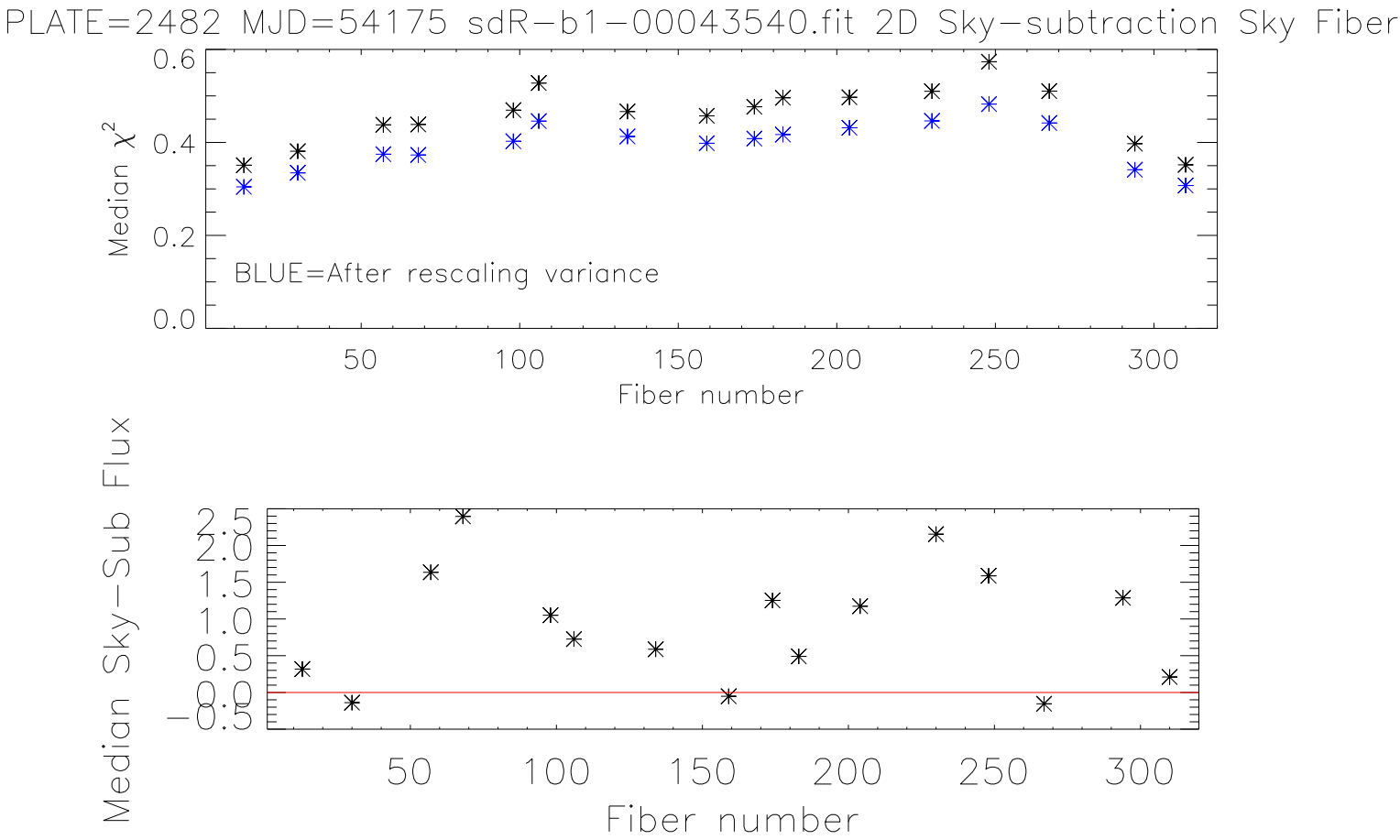
es= −0.0001

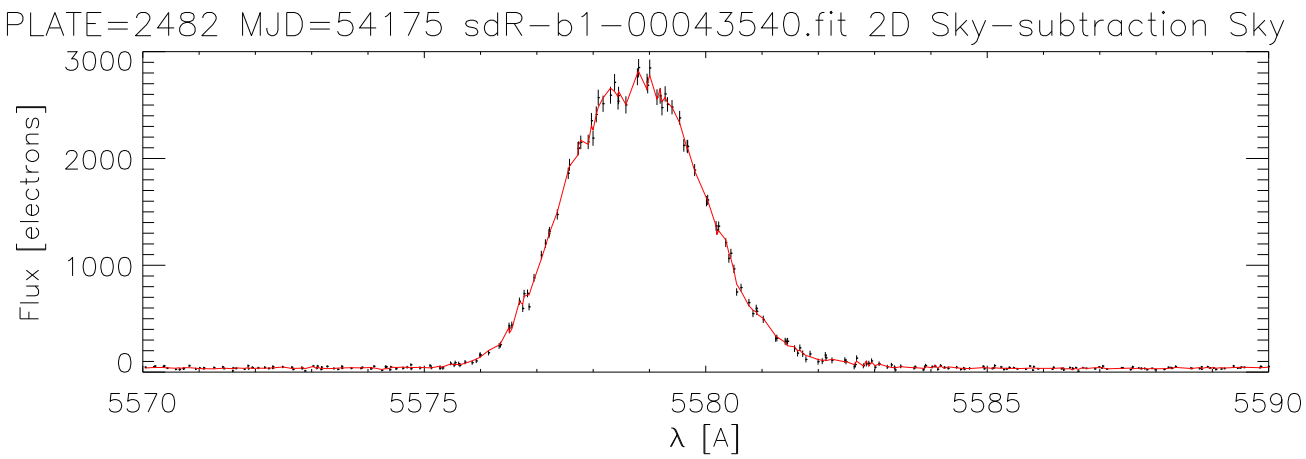

PLATE=2482 MJD=54175 sdR-b1-00043540.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

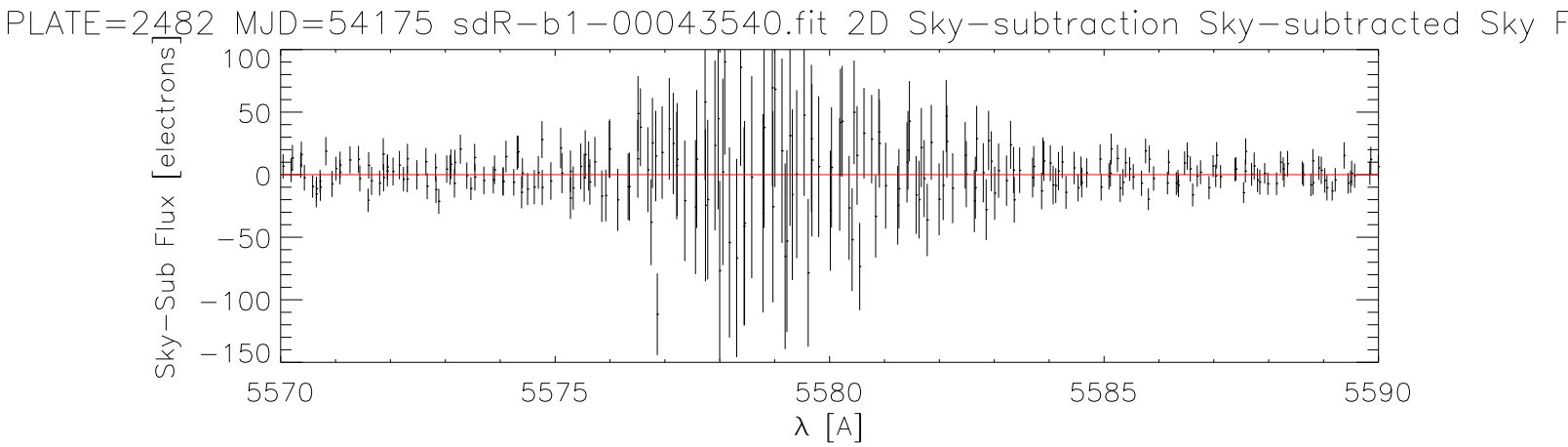

PLATE=2482 MJD=54175 sdR-b1-00043540.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

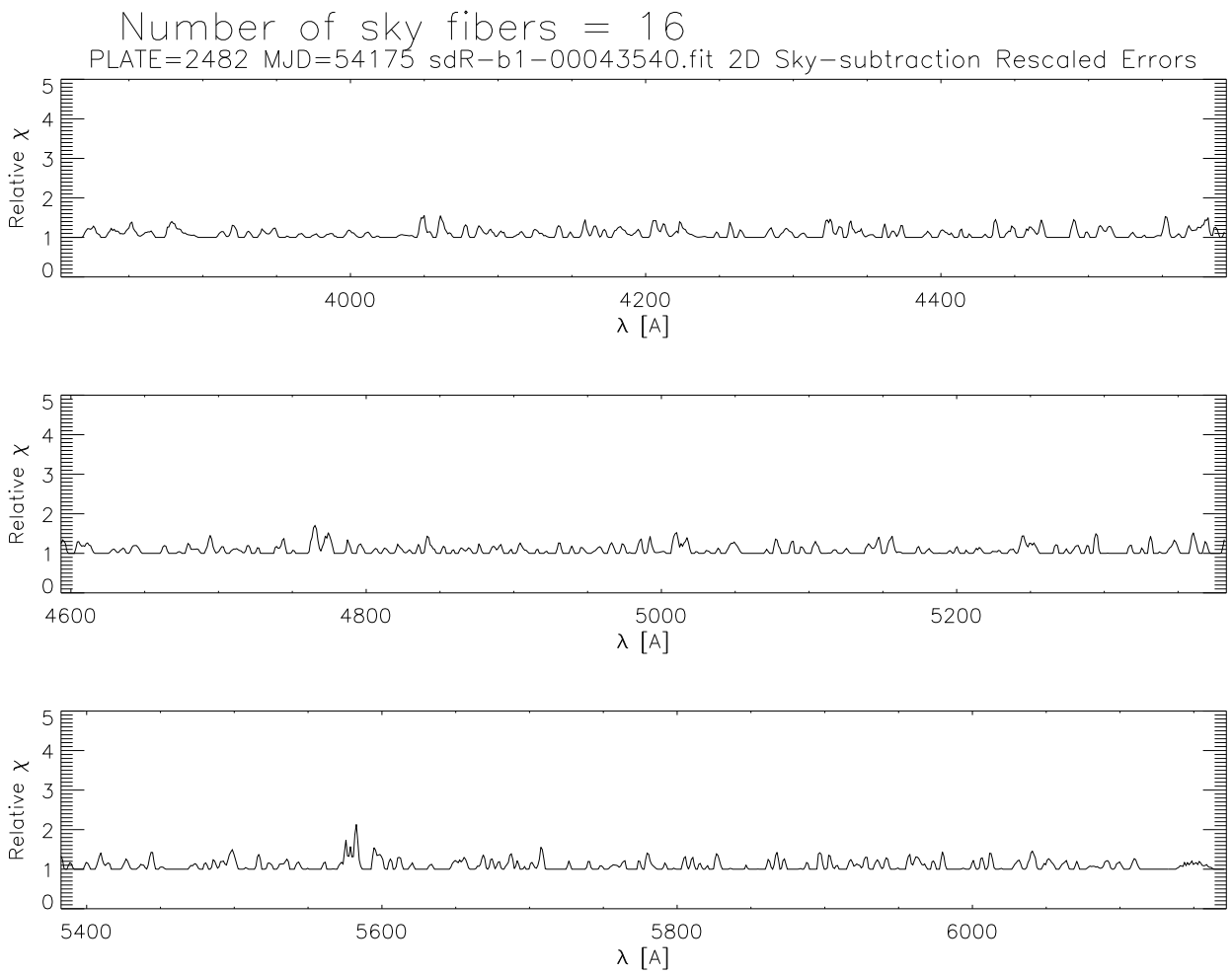

PLATE=2482 MJD=54175 sdR-b1-00043540.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

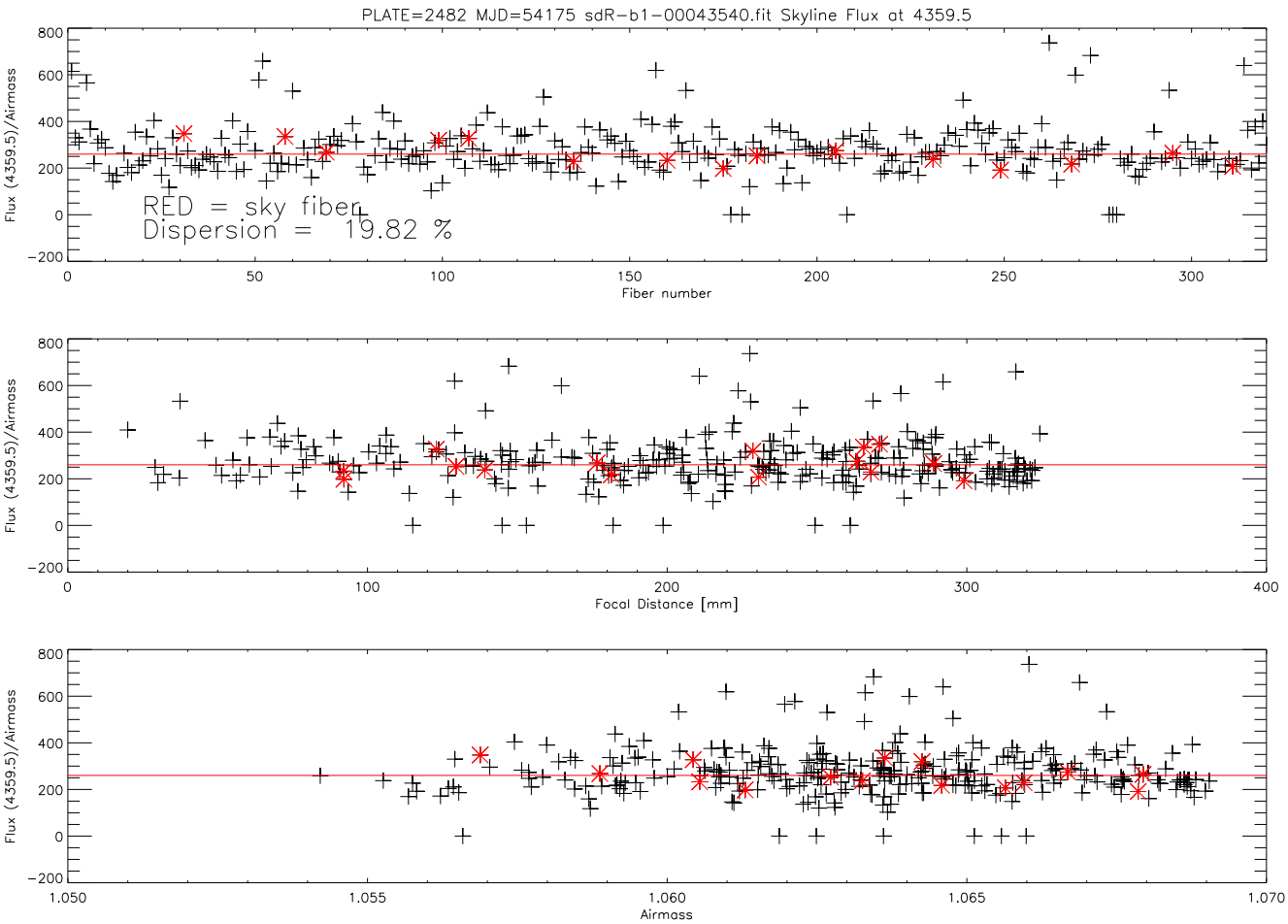

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-b1-00043540.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

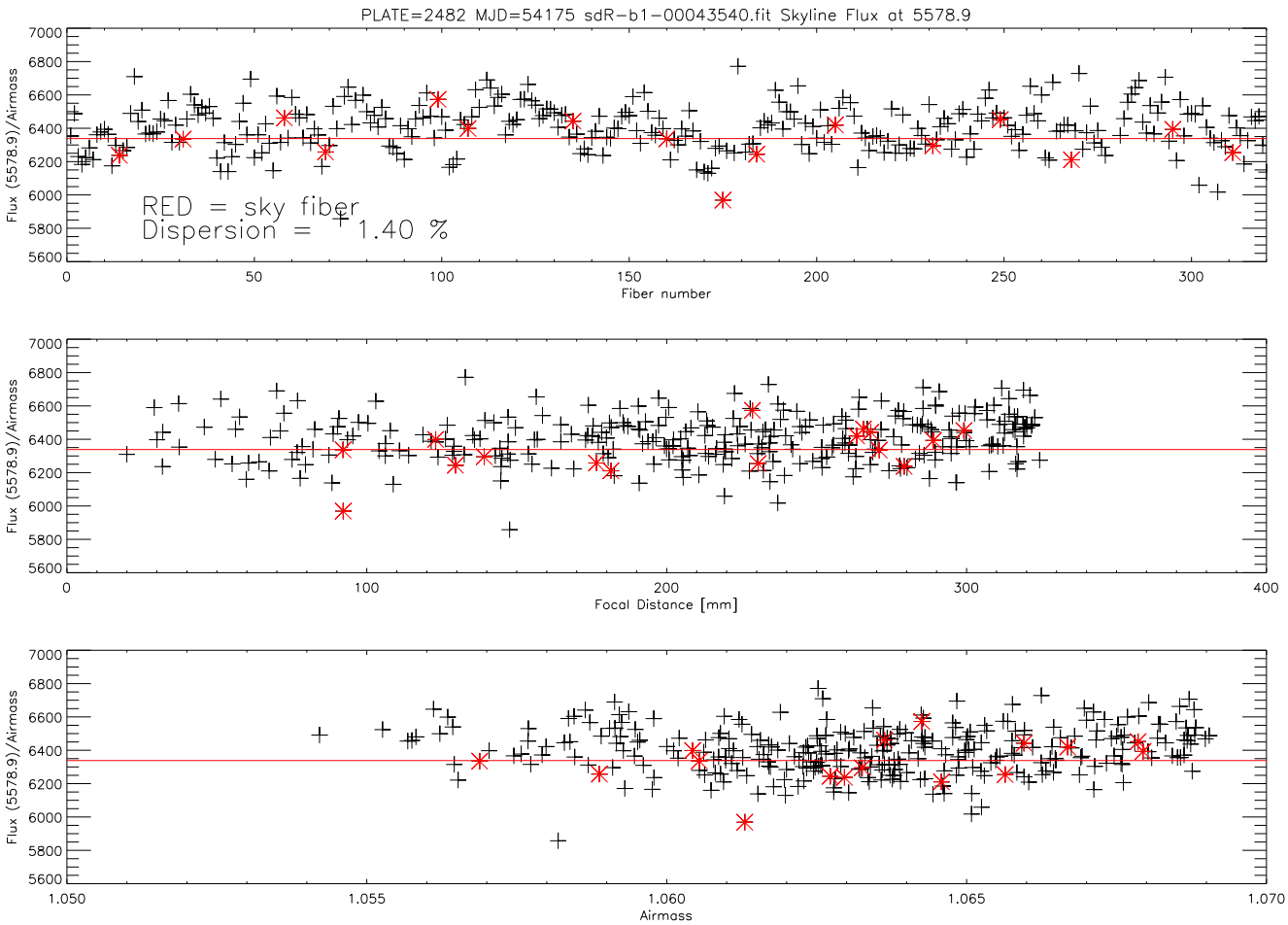

PLATE=2482 MJD=54175 sdR-b1-00043540.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
50
100
150
200
250
300
Fiber number

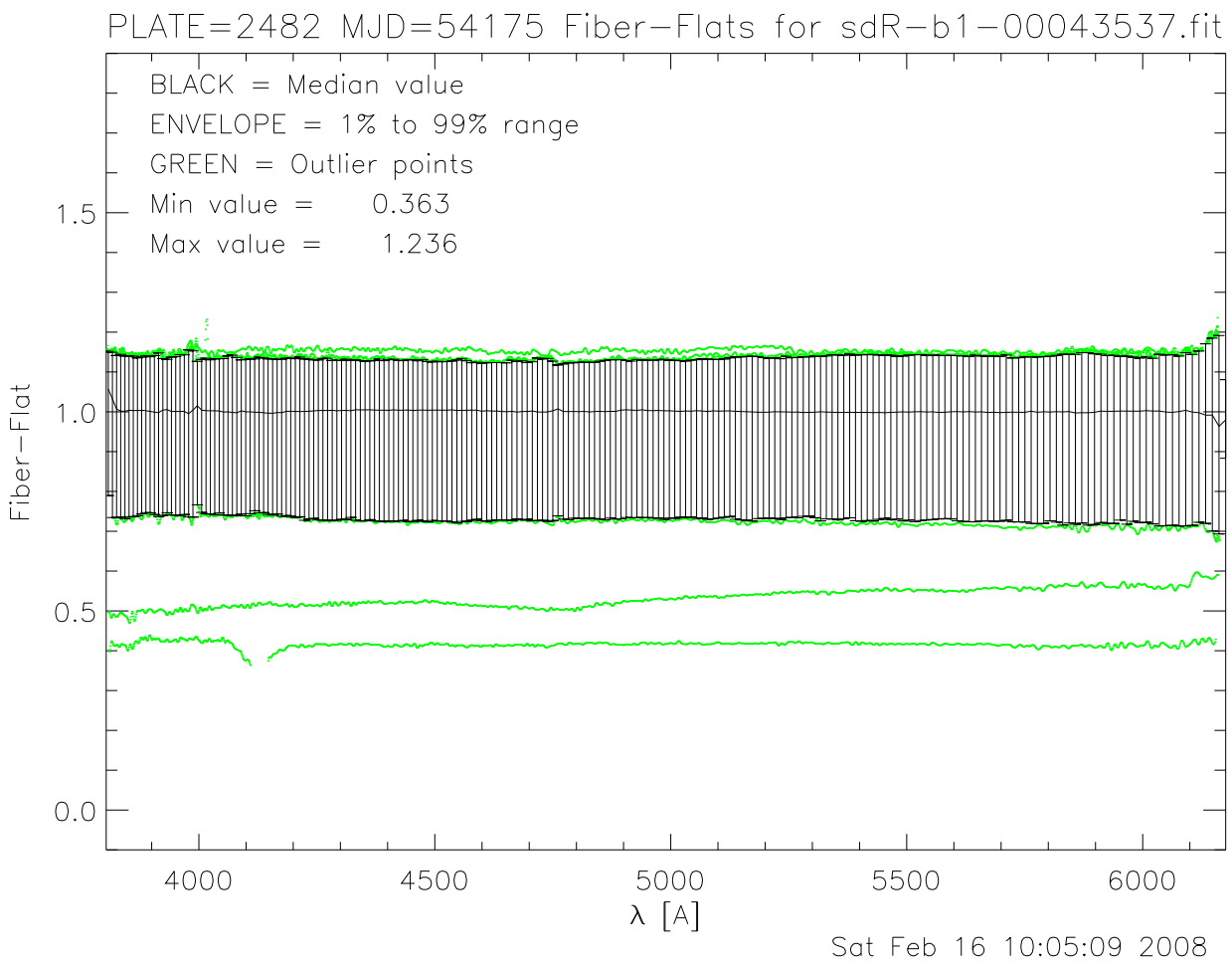

PLATE=2482 MJD=54175 sdR-b1-00043540.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

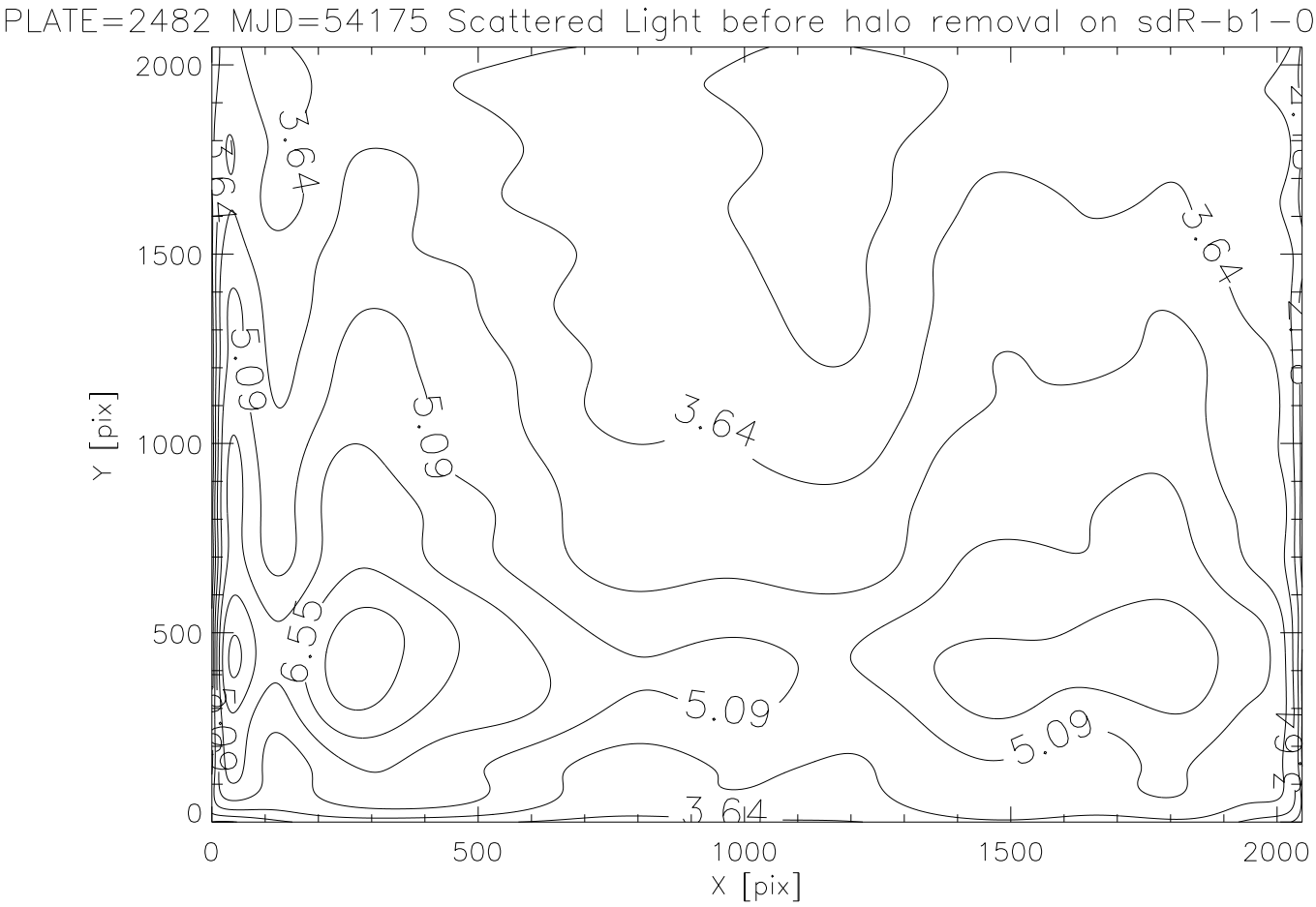

PLATE=2482 MJD=54175 sdR-b1-00043540.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

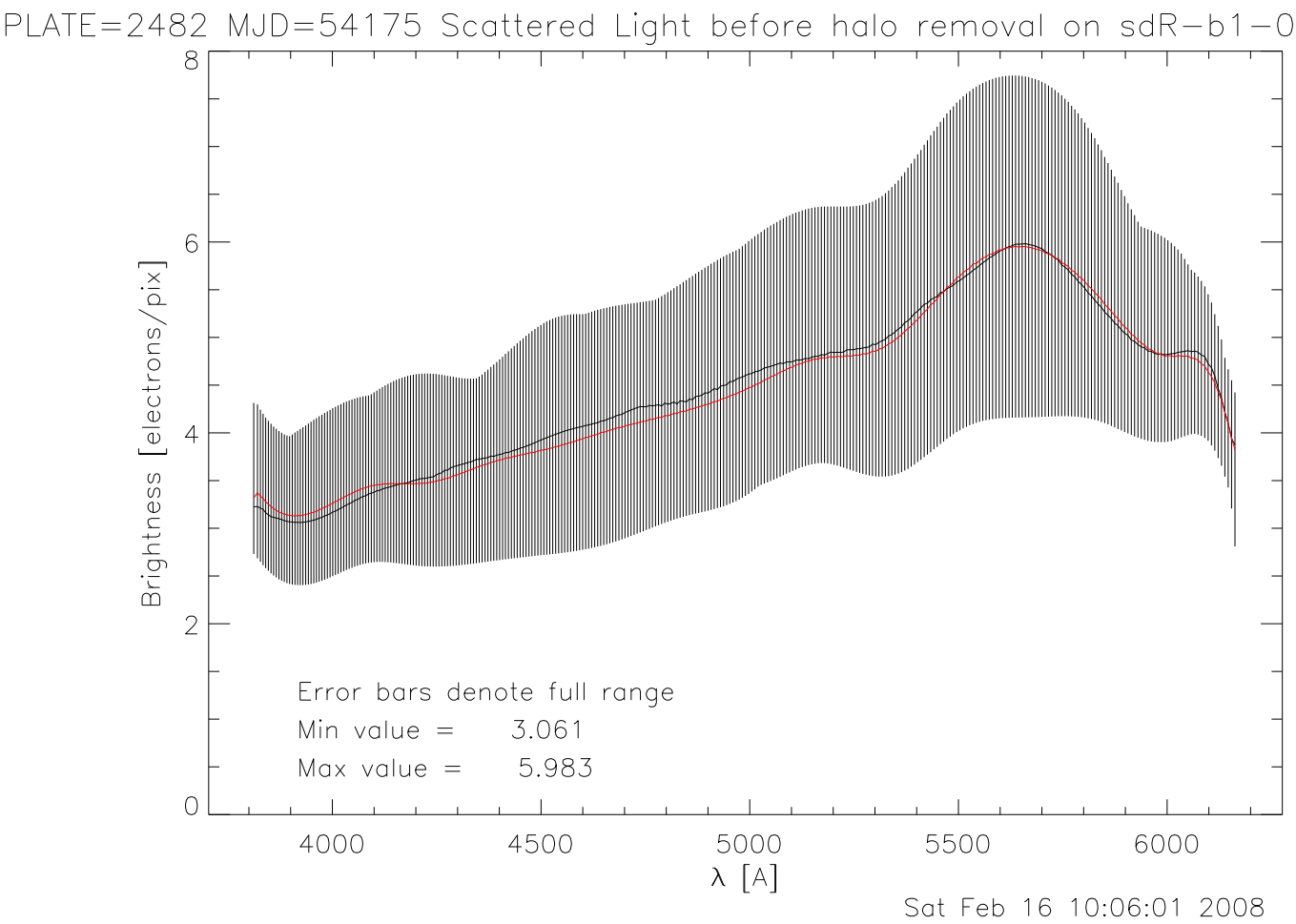

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-b1-00043540.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

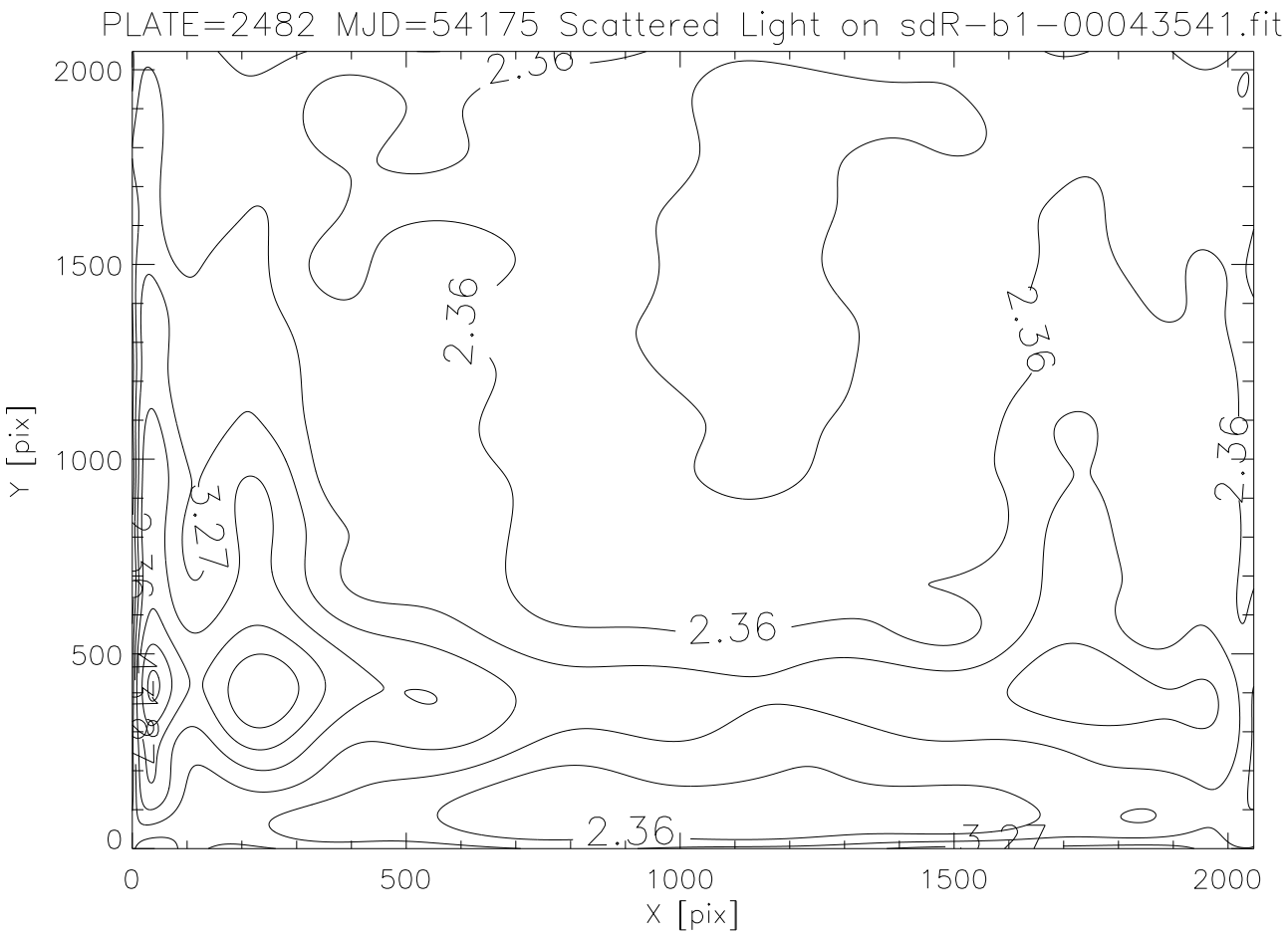

PLATE=2482 MJD=54175 sdR-b1-00043540.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 19.82 %
Fiber number
Focal Distance [mm]
Airmass

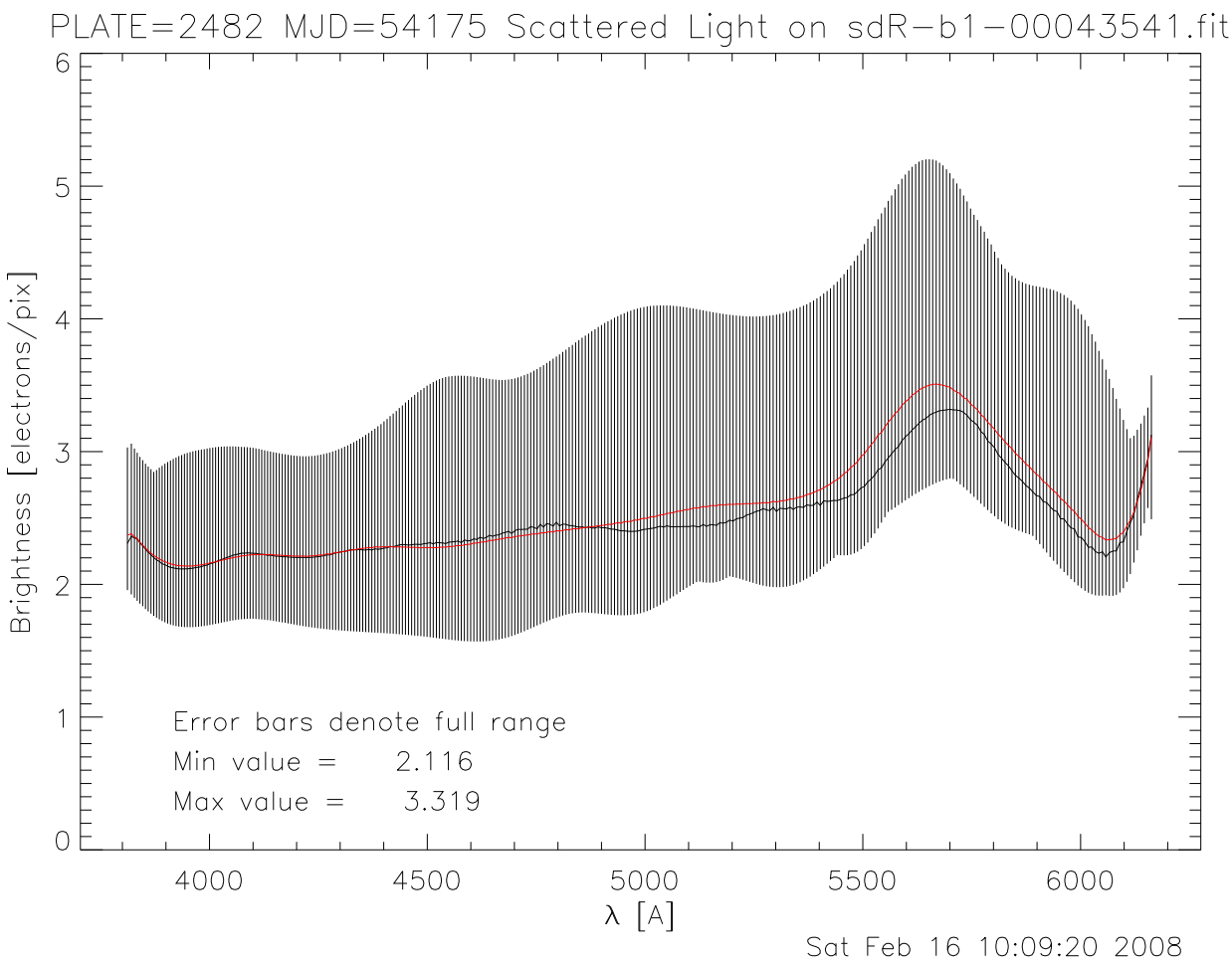

PLATE=2482 MJD=54175 sdR-b1-00043540.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.40 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

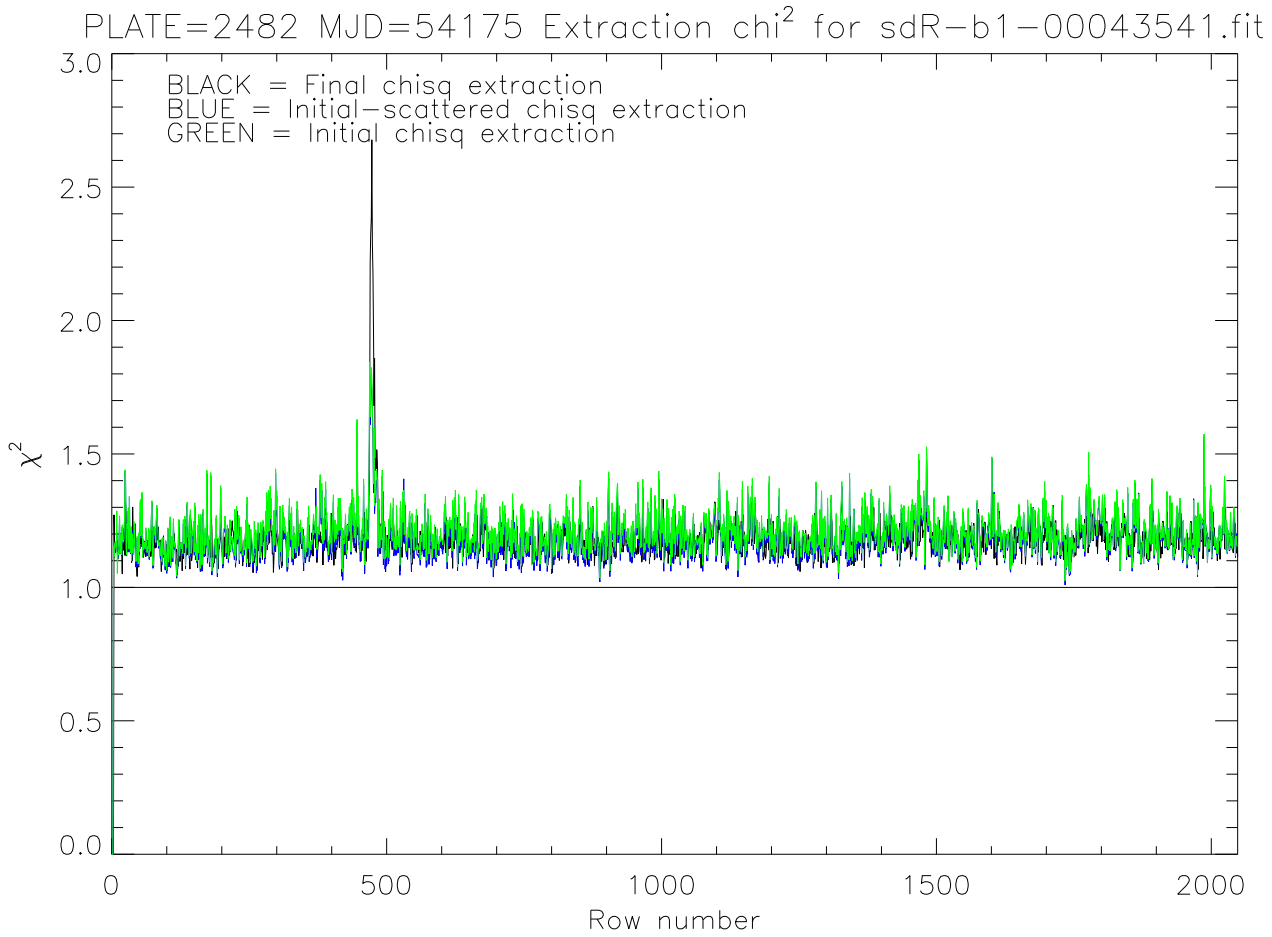

PLATE=2482 MJD=54175 Fiber−Flats for sdR−b1−00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.363
Max value = 1.236
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 10:05:09 2008

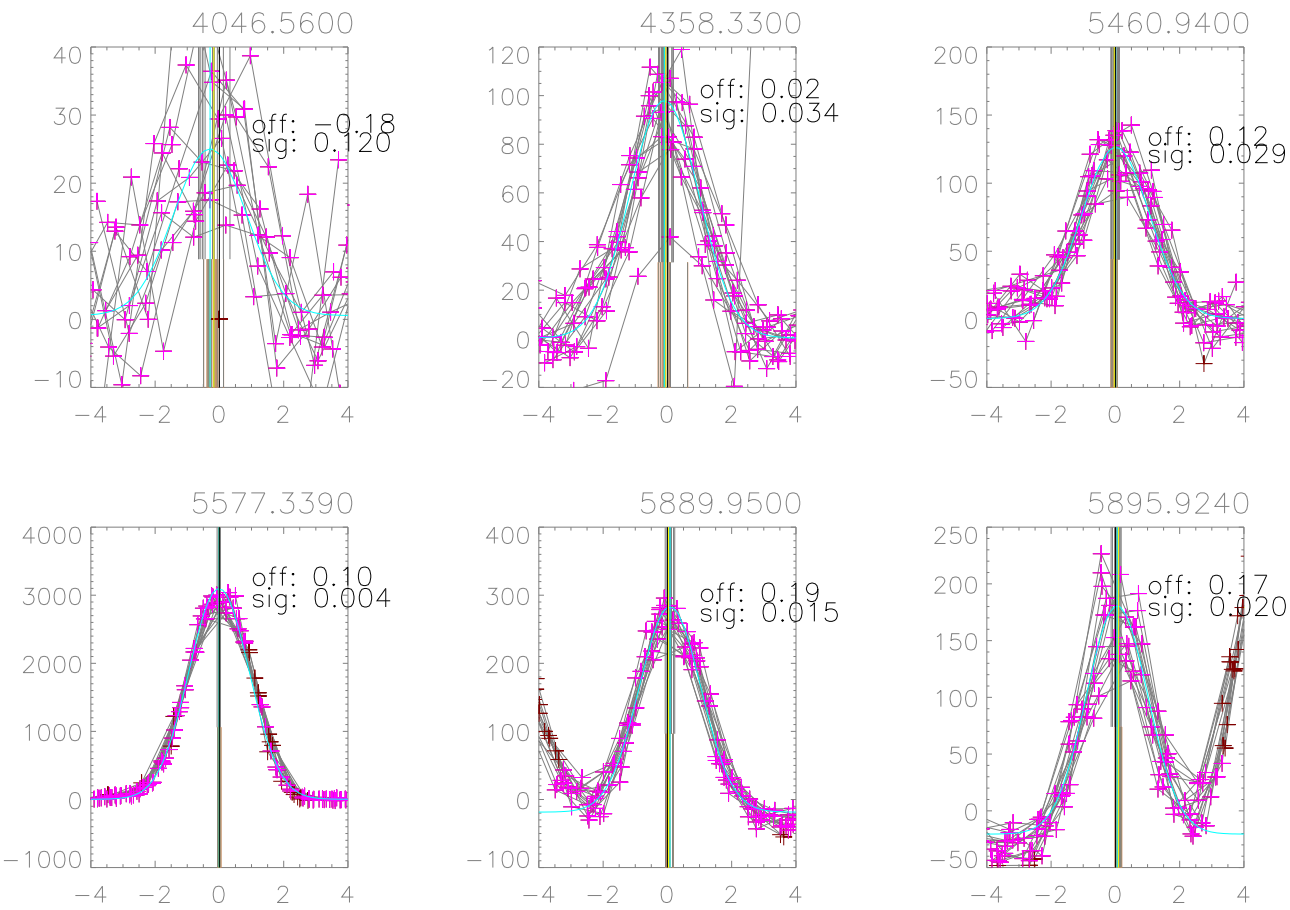

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-b1-00043541.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
3.64
5.09
6.55
3.64
5.09
3.64
5.09
5.09
3.64
3.64

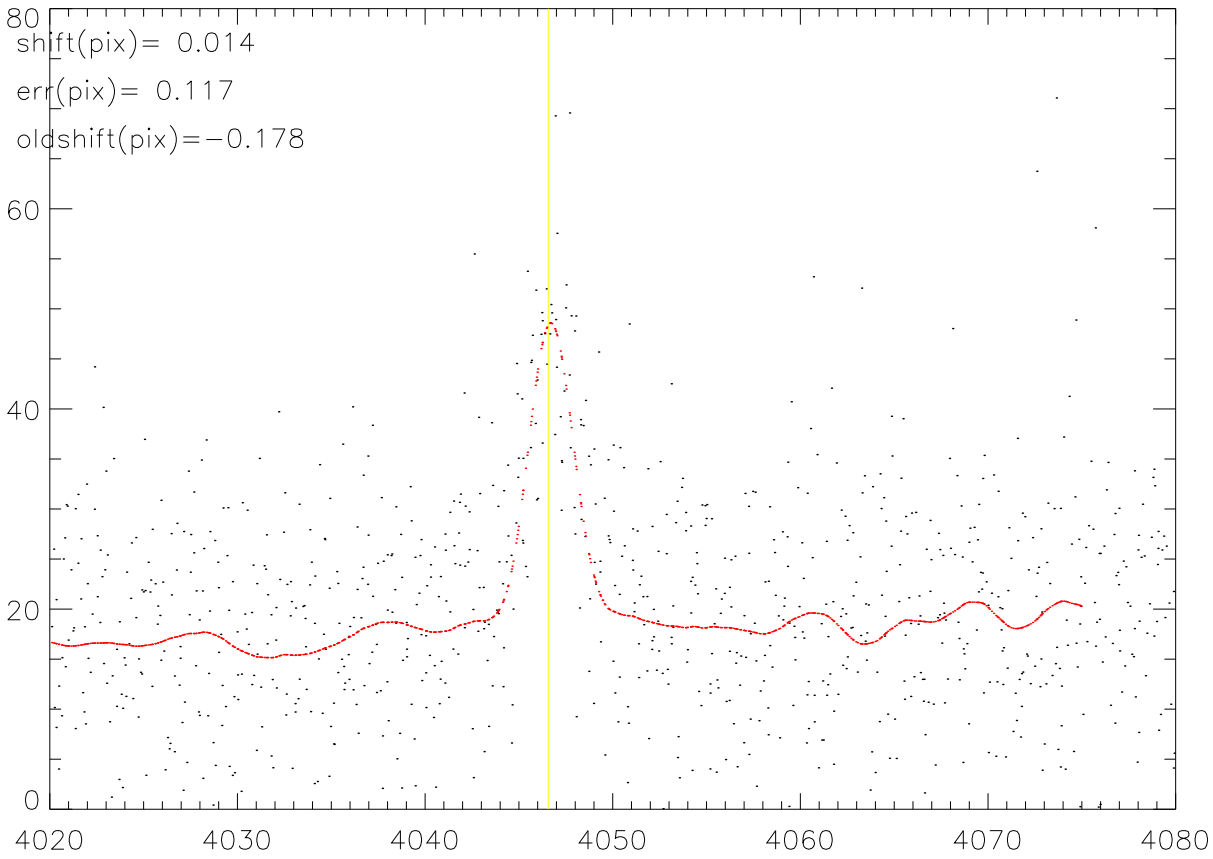

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-b1-00043541.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.061
Max value = 5.983
Sat Feb 16 10:06:01 2008

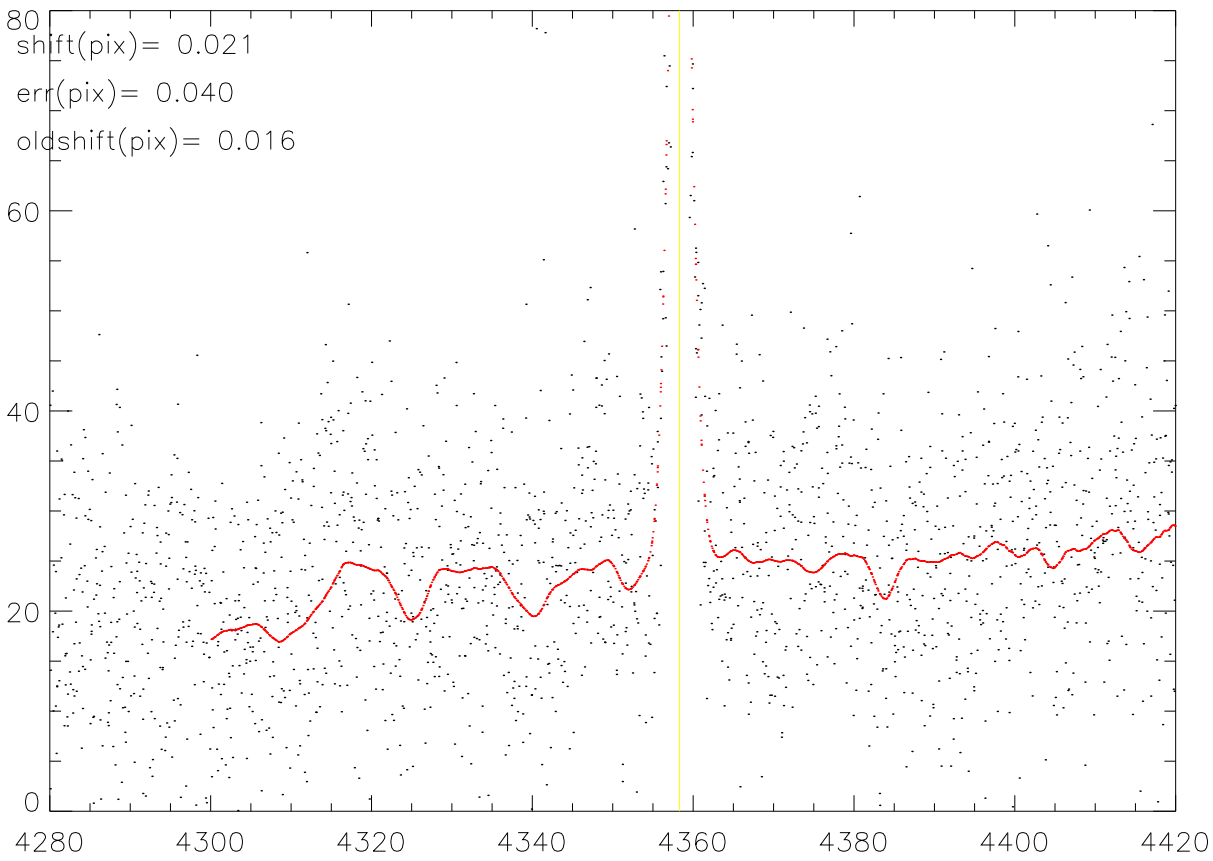

PLATE=2482 MJD=54175 Scattered Light on sdR-b1-00043541.fit
2.36
2.36
2.36
2.36
3.27
2.36
2.36
0
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

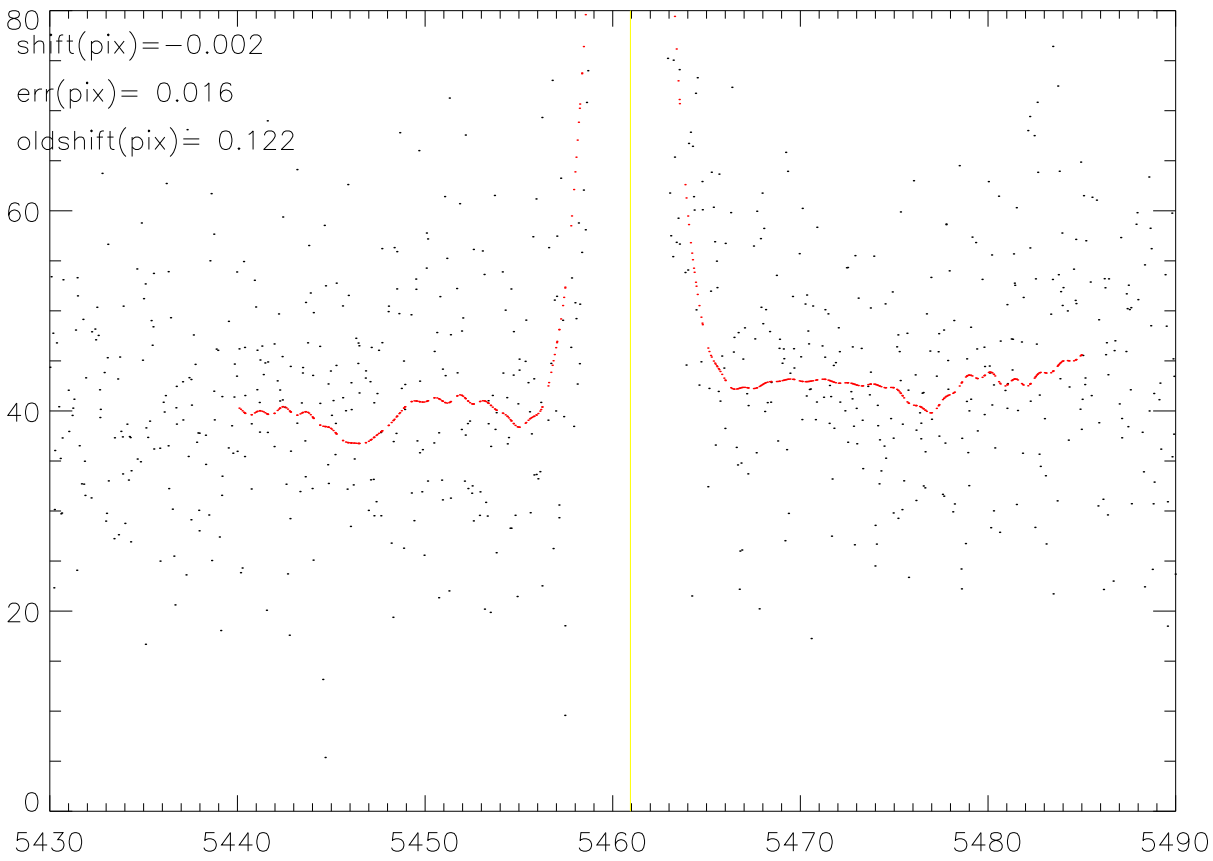

PLATE=2482 MJD=54175 Scattered Light on sdR-b1-00043541.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.116
Max value = 3.319
Sat Feb 16 10:09:20 2008

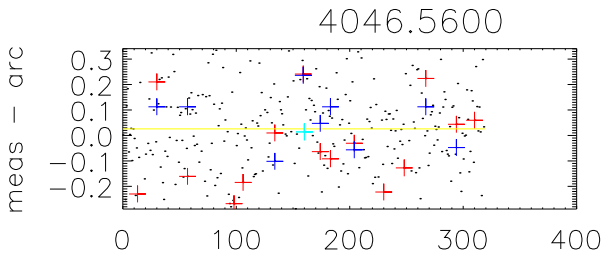

PLATE=2482 MJD=54175 Extraction chi^2 for sdR-b1-00043541.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

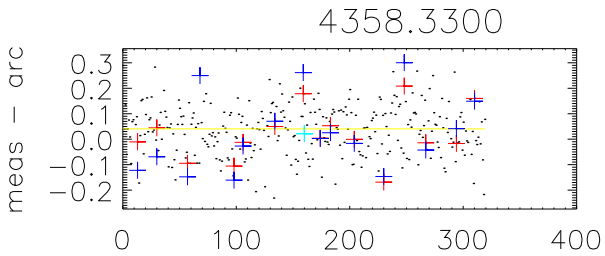

4046.5600
off: −0.18
sig: 0.120
4358.3300
off: 0.02
sig: 0.034
5460.9400
off: 0.12
sig: 0.029
5577.3390
off: 0.10
sig: 0.004
5889.9500
off: 0.19
sig: 0.015
5895.9240
off: 0.17
sig: 0.020

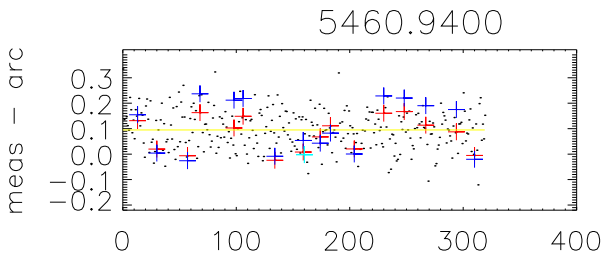

shift(pix)= 0.014
err(pix)= 0.117
oldshift(pix)=-0.178
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

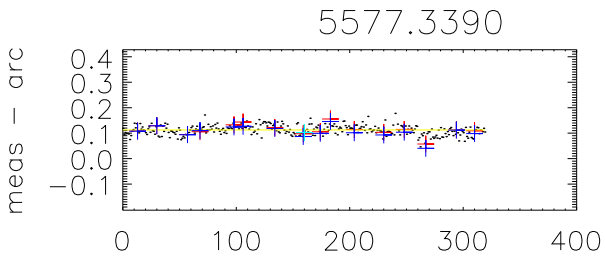

shift(pix)= 0.021
err(pix)= 0.040
oldshift(pix)= 0.016
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

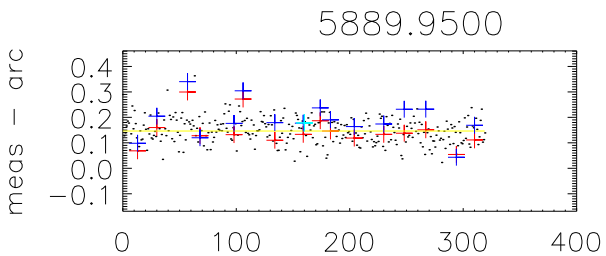

shift(pix)=−0.002
err(pix)= 0.016
oldshift(pix)= 0.122
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

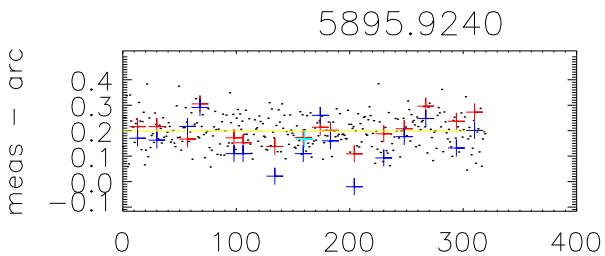

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

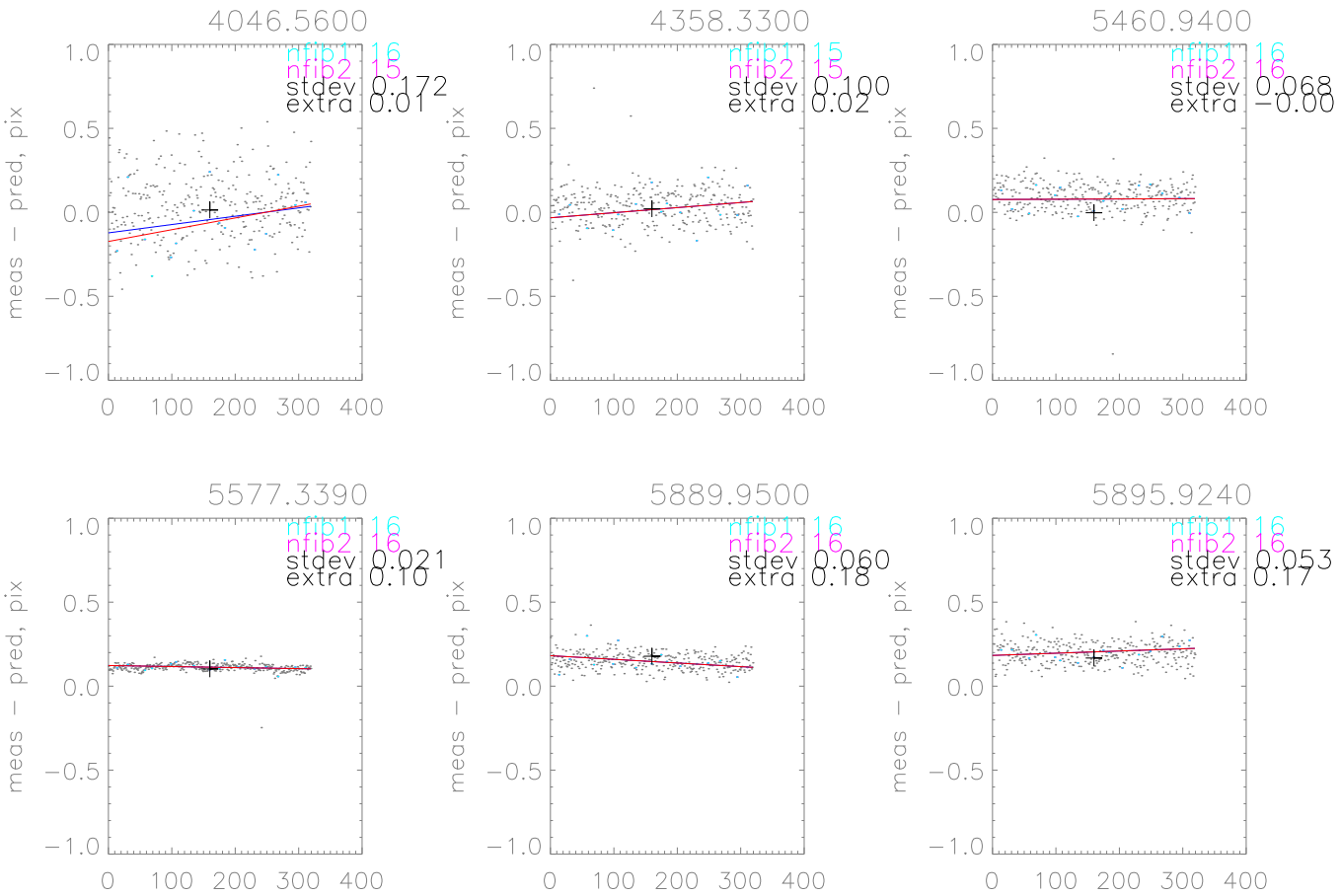

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

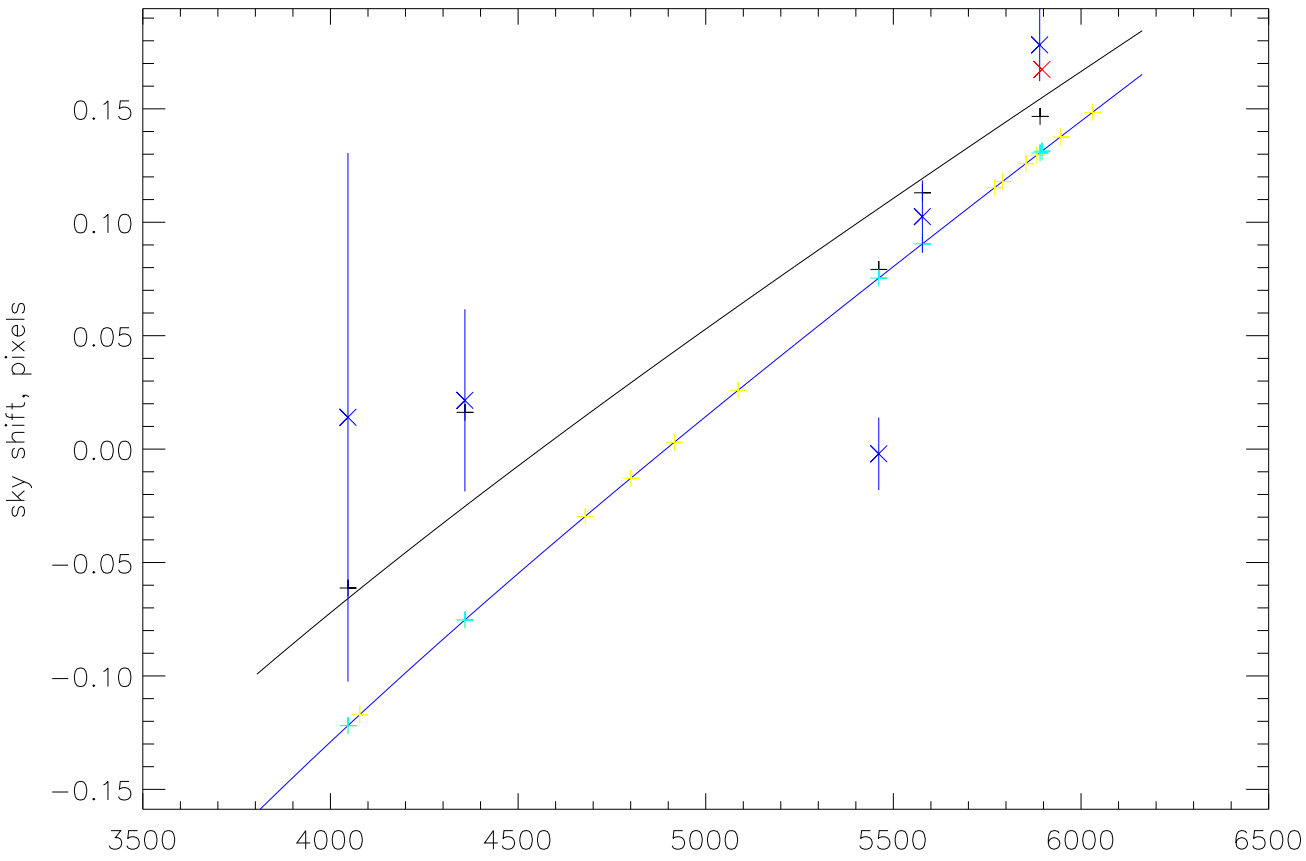

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

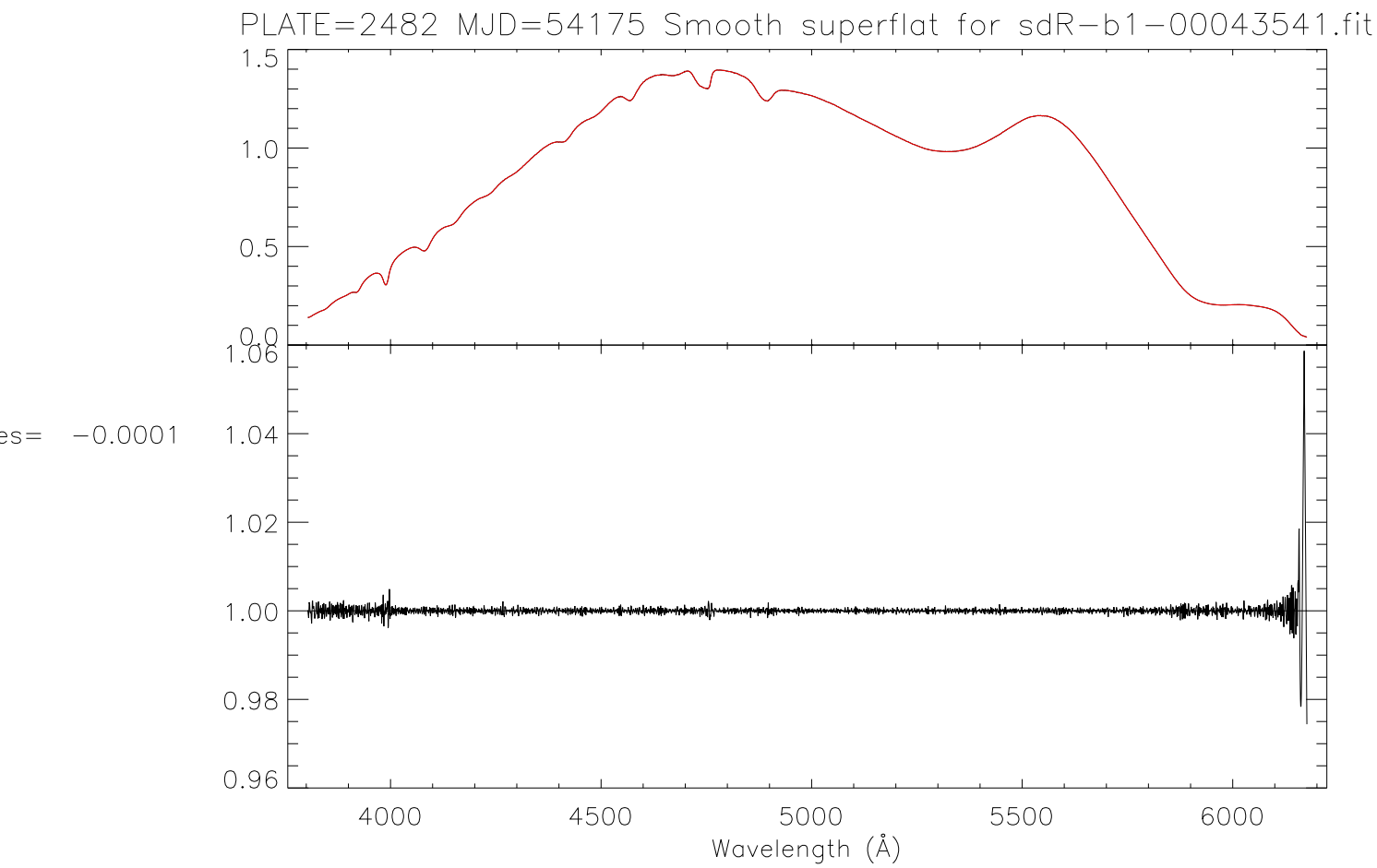

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

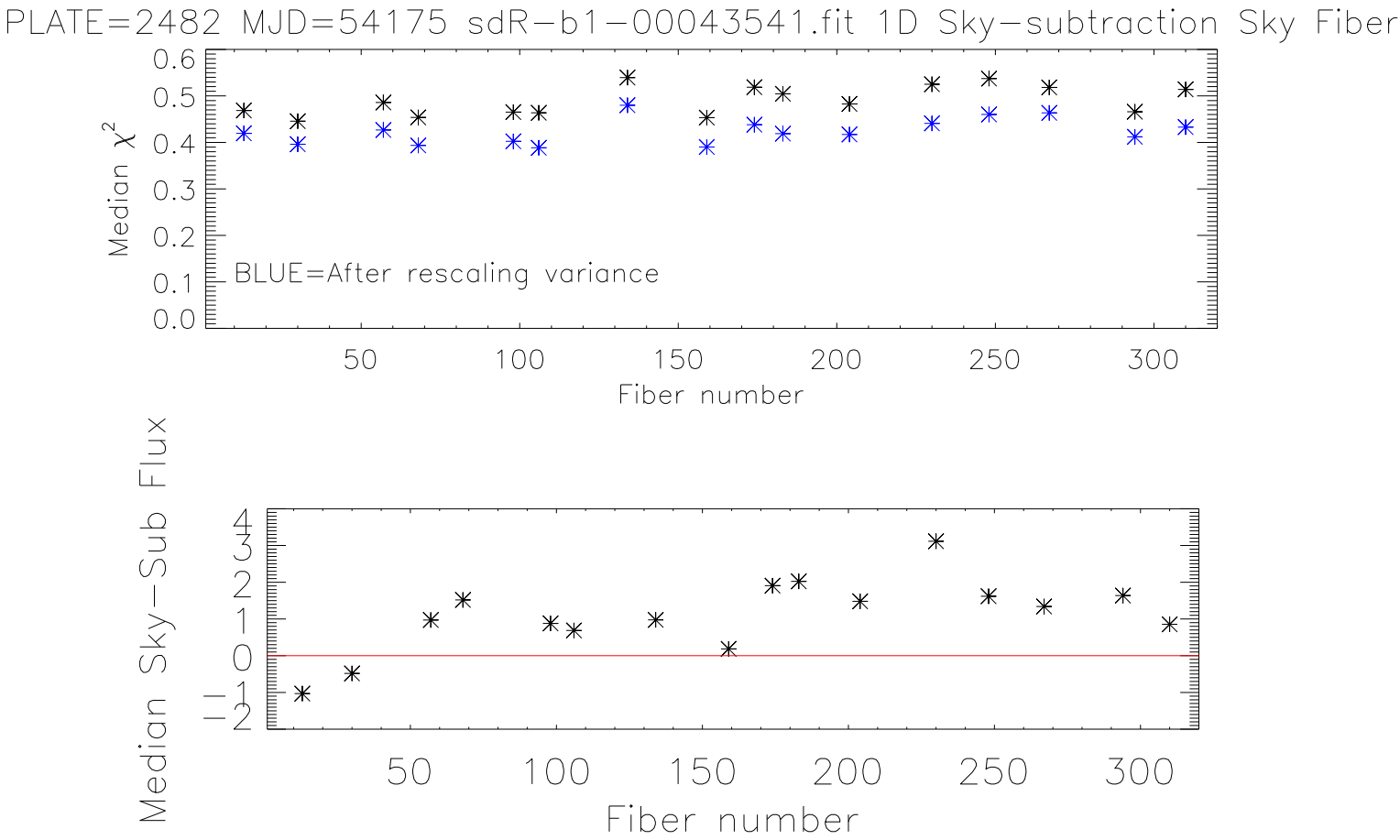

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

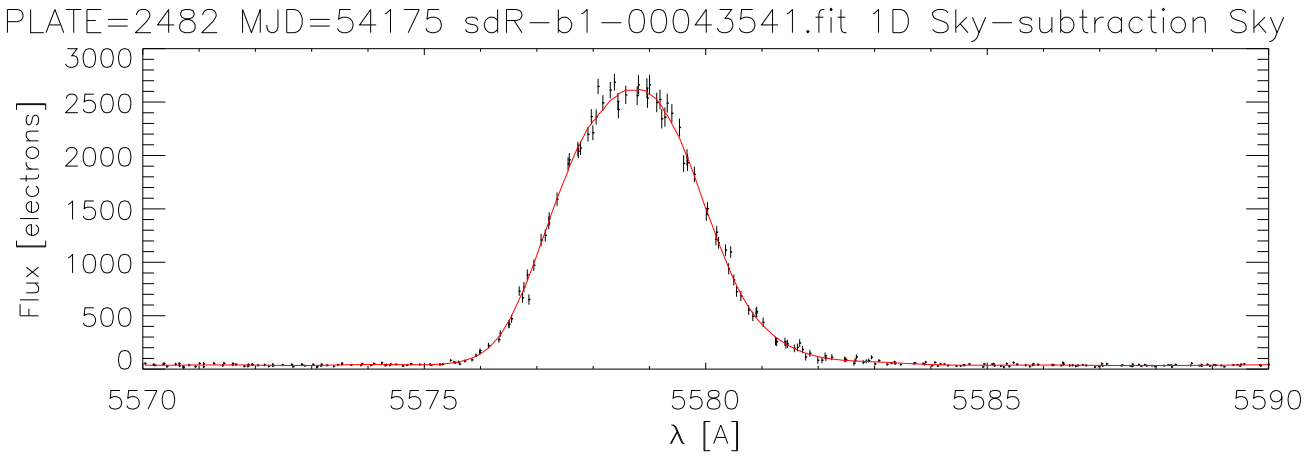

4046.5600
nfib1 16
nfib2 15
stdev 0.172
extra 0.01
4358.3300
nfib1 15
nfib2 15
stdev 0.100
extra 0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.068
extra −0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.060
extra 0.18
5895.9240
nfib1 16
nfib2 16
stdev 0.053
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

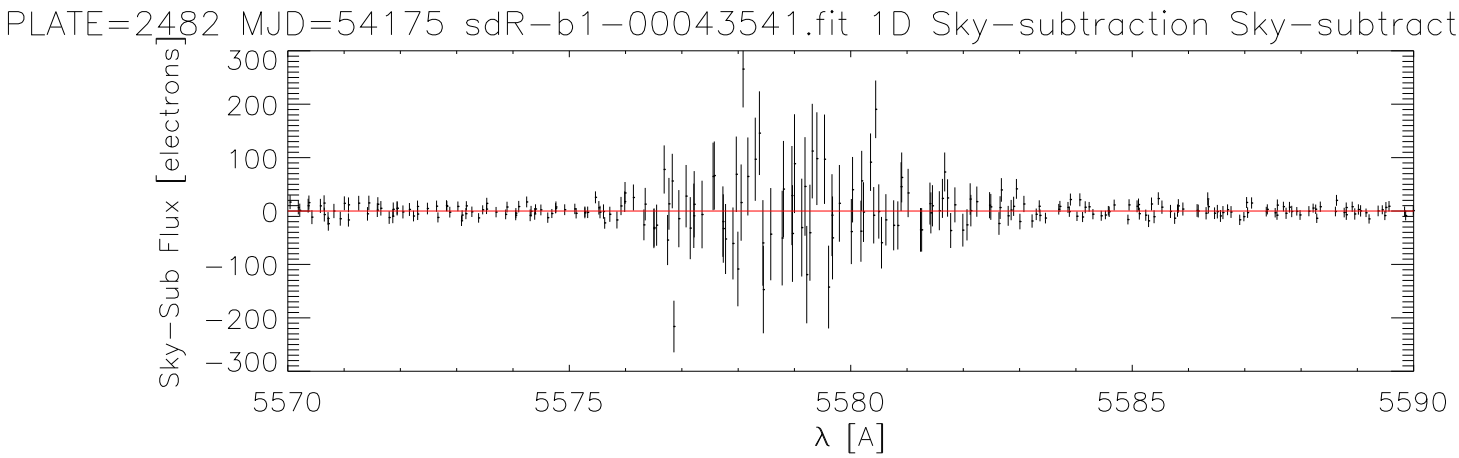

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

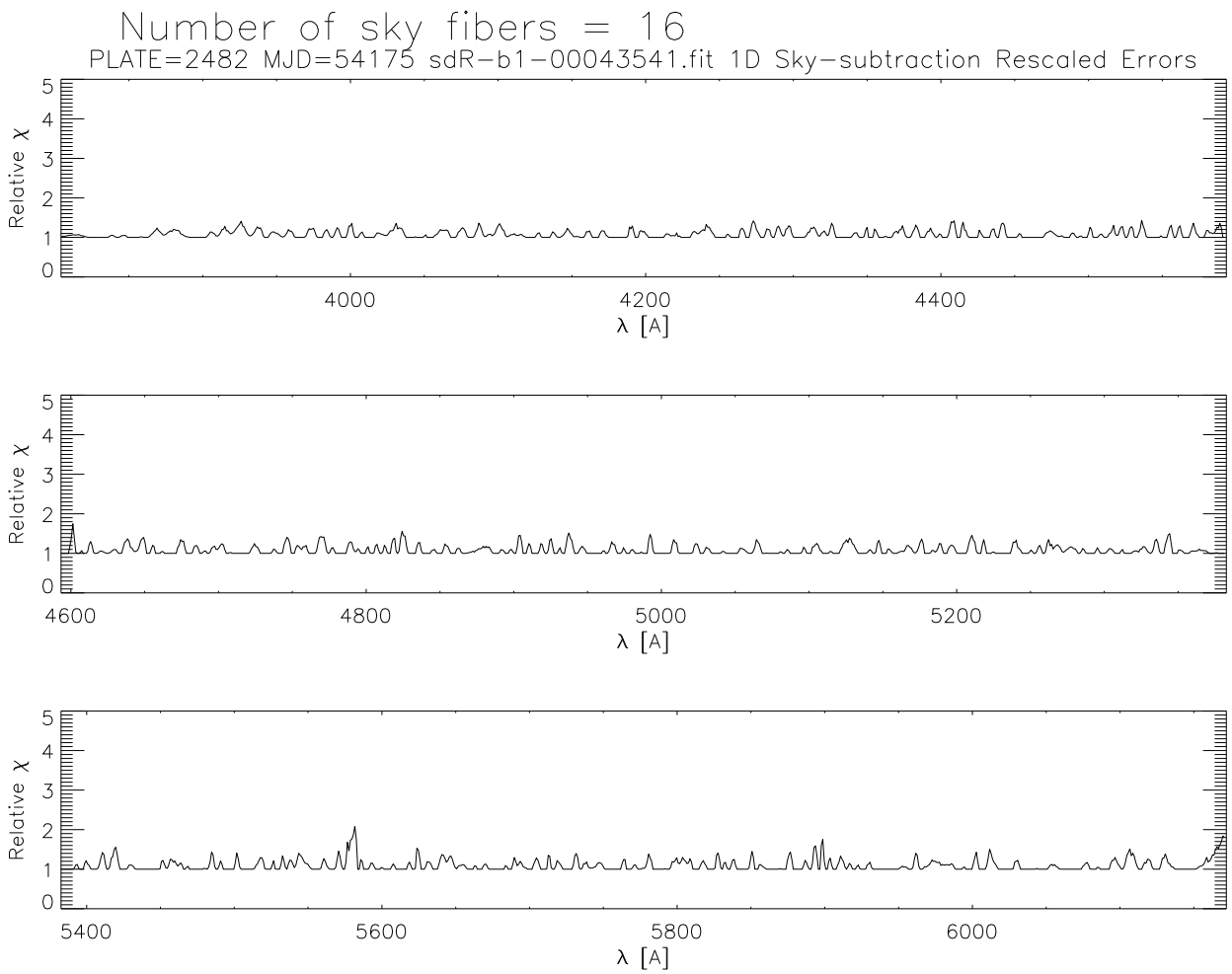

PLATE=2482 MJD=54175 Smooth superflat for sdR-b1-00043541.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

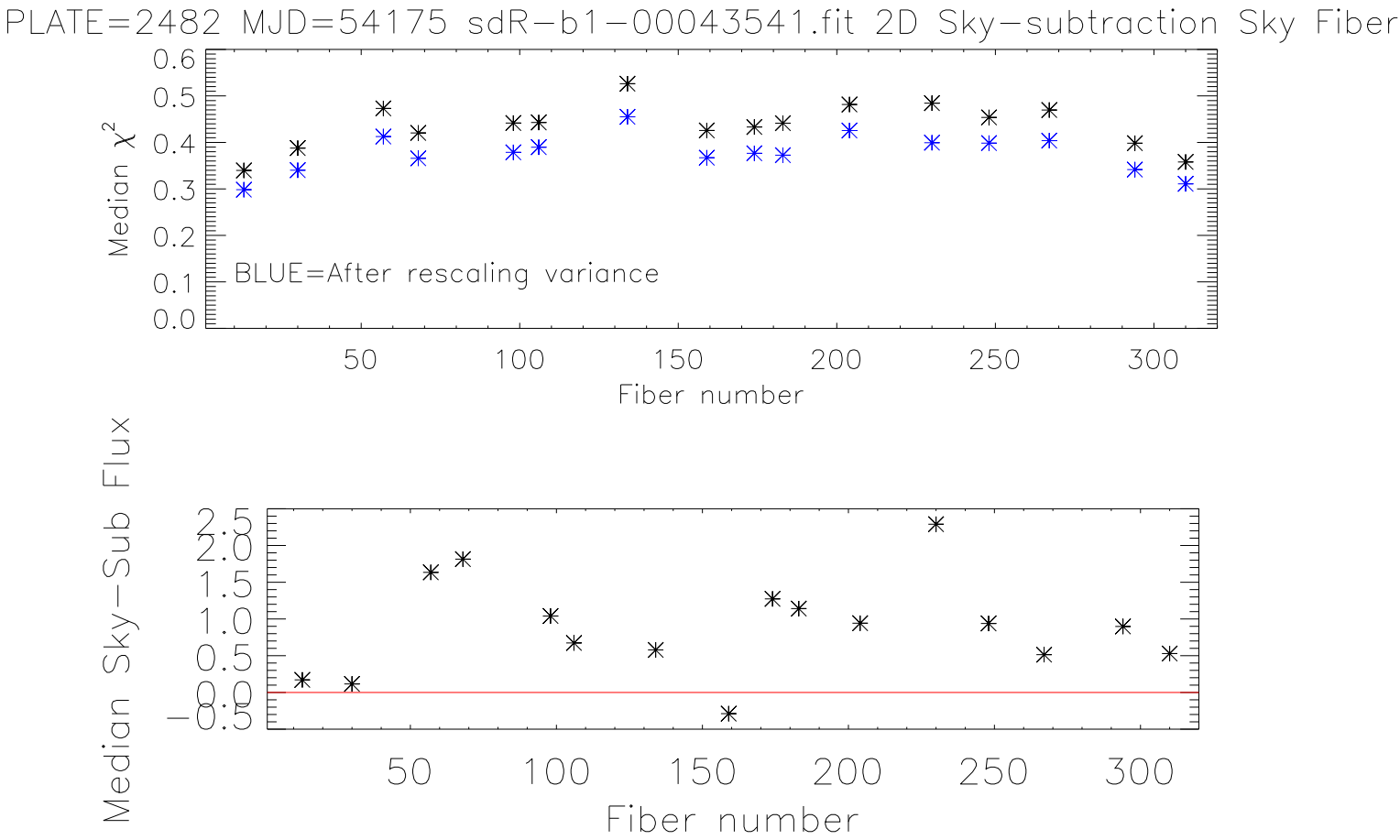
es= −0.0001

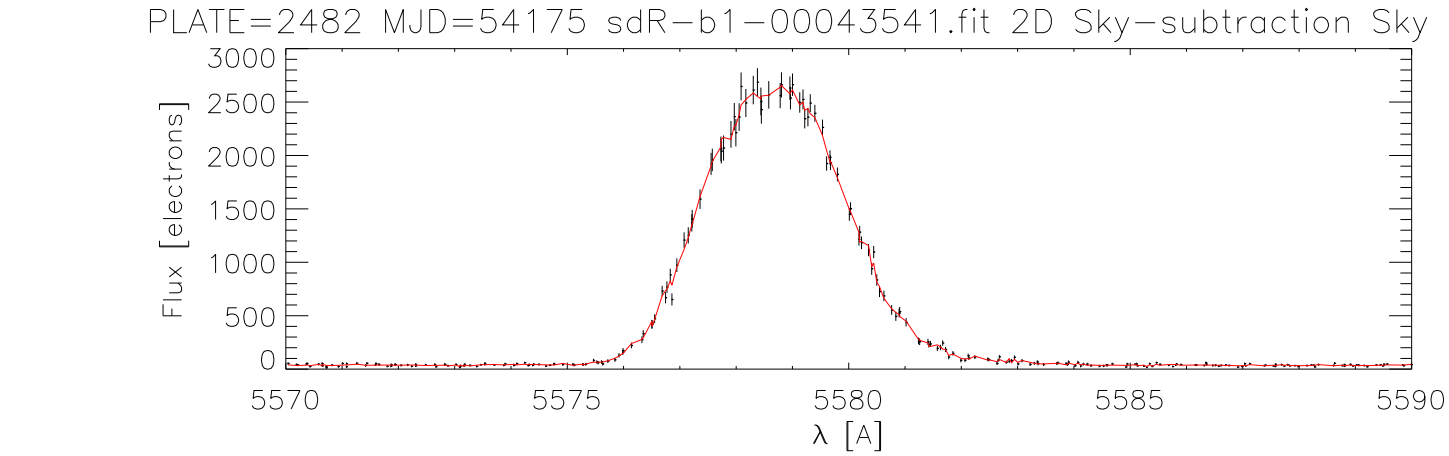

PLATE=2482 MJD=54175 sdR-b1-00043541.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

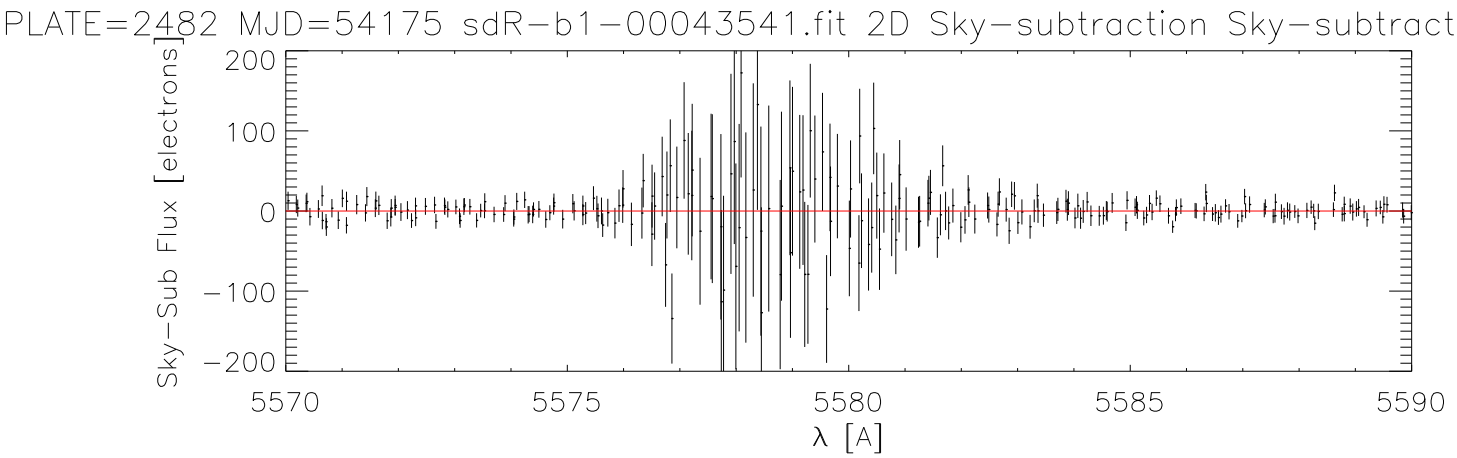

PLATE=2482 MJD=54175 sdR-b1-00043541.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

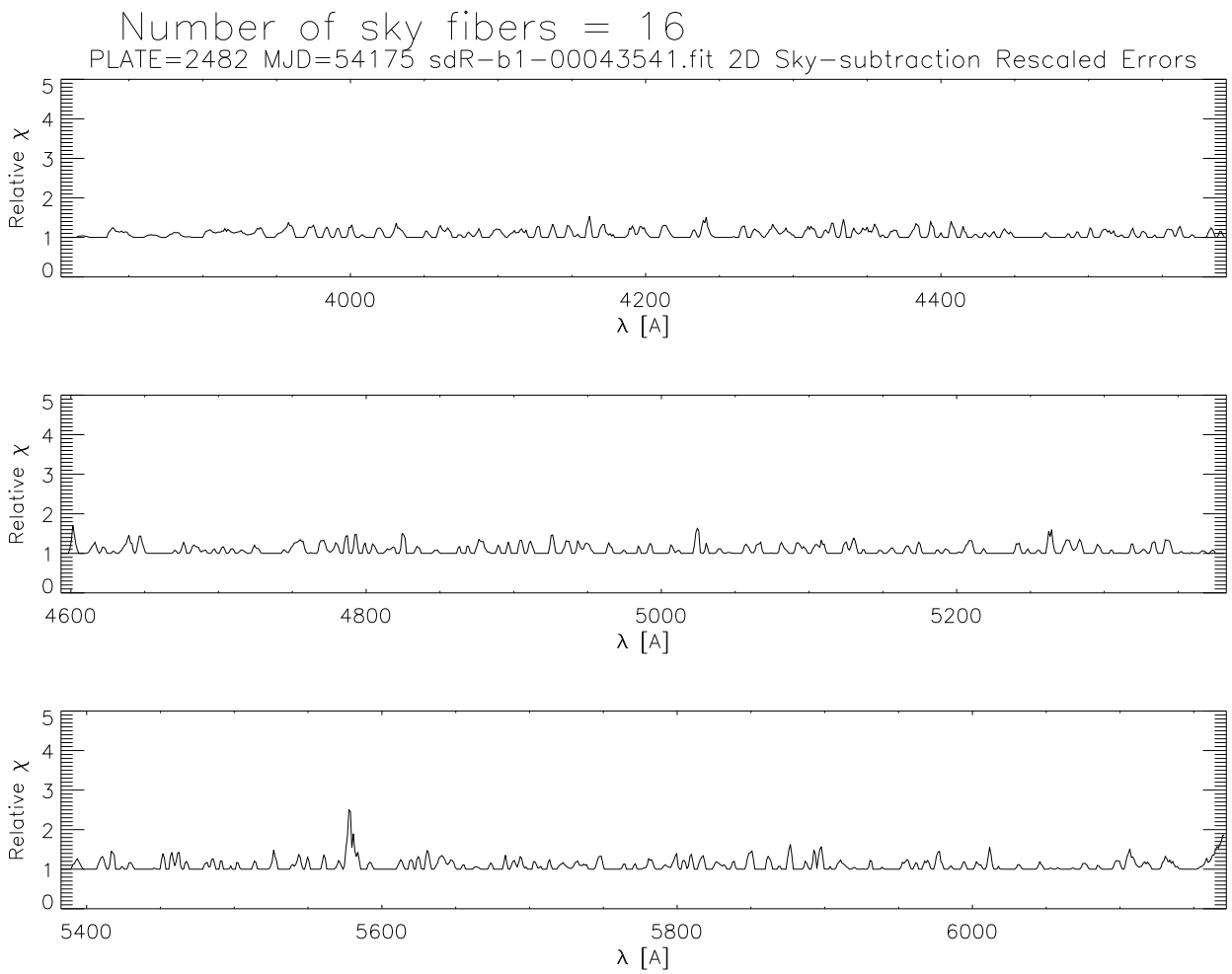

PLATE=2482 MJD=54175 sdR-b1-00043541.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

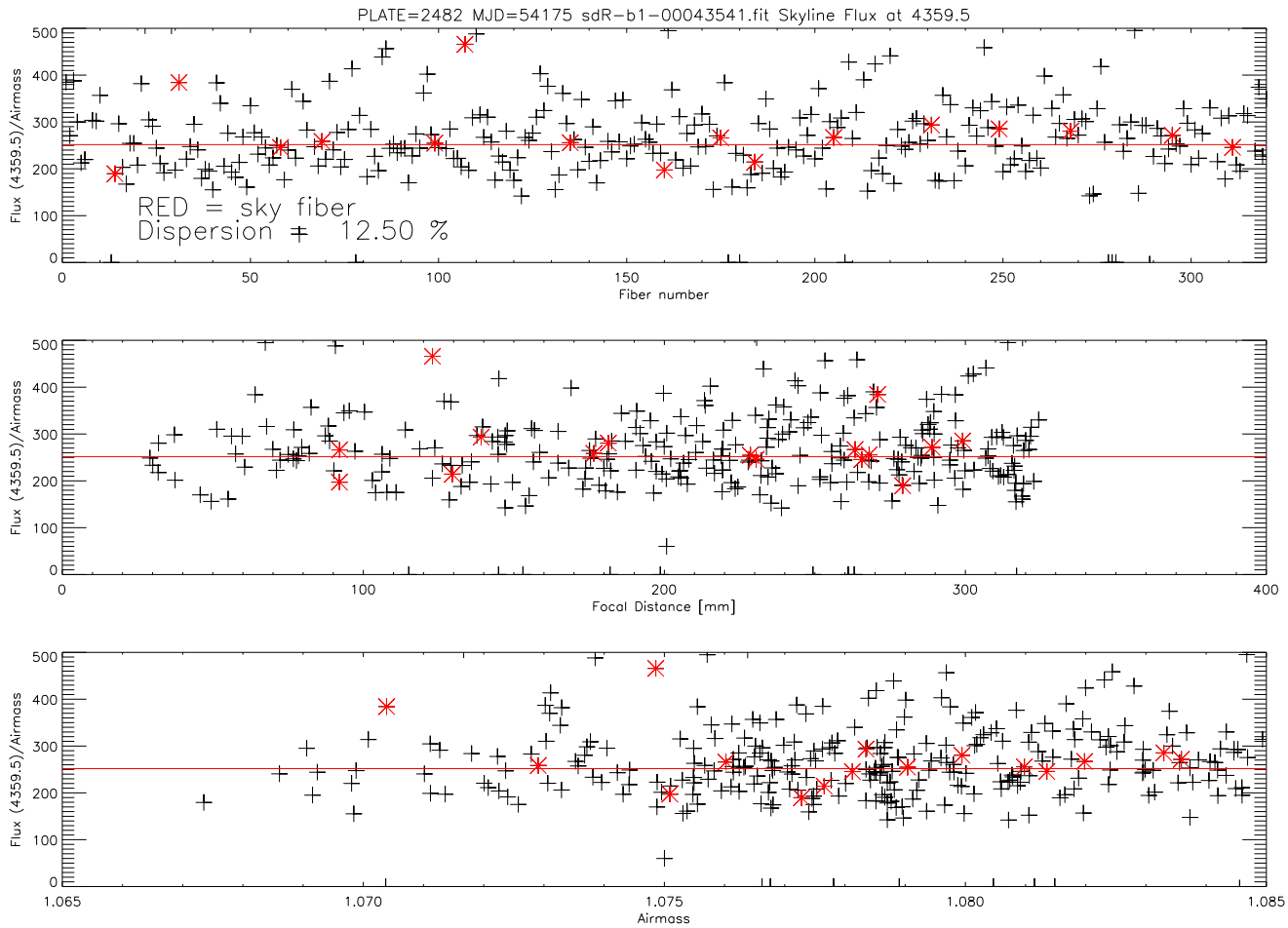

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-b1-00043541.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

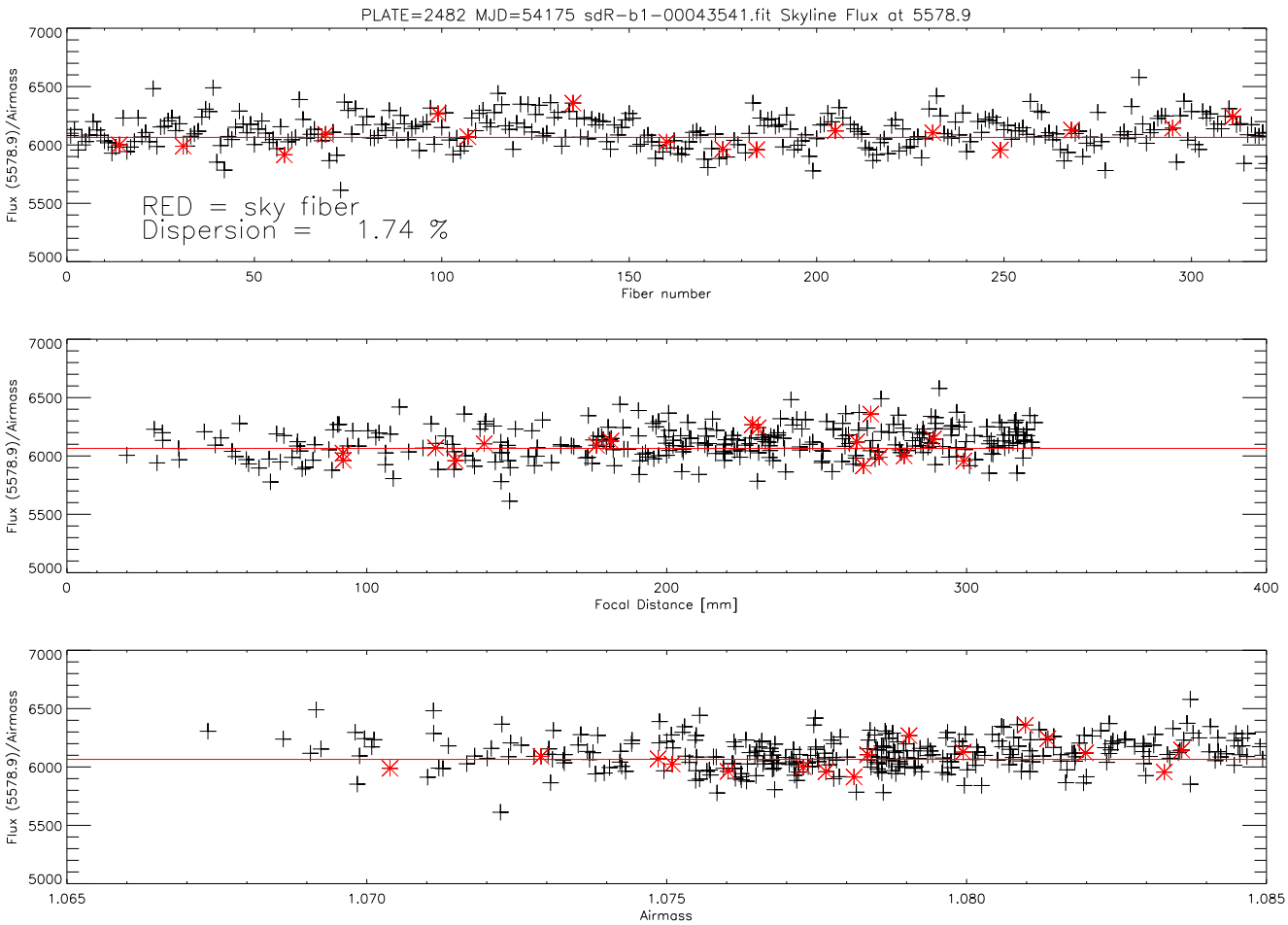

PLATE=2482 MJD=54175 sdR-b1-00043541.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

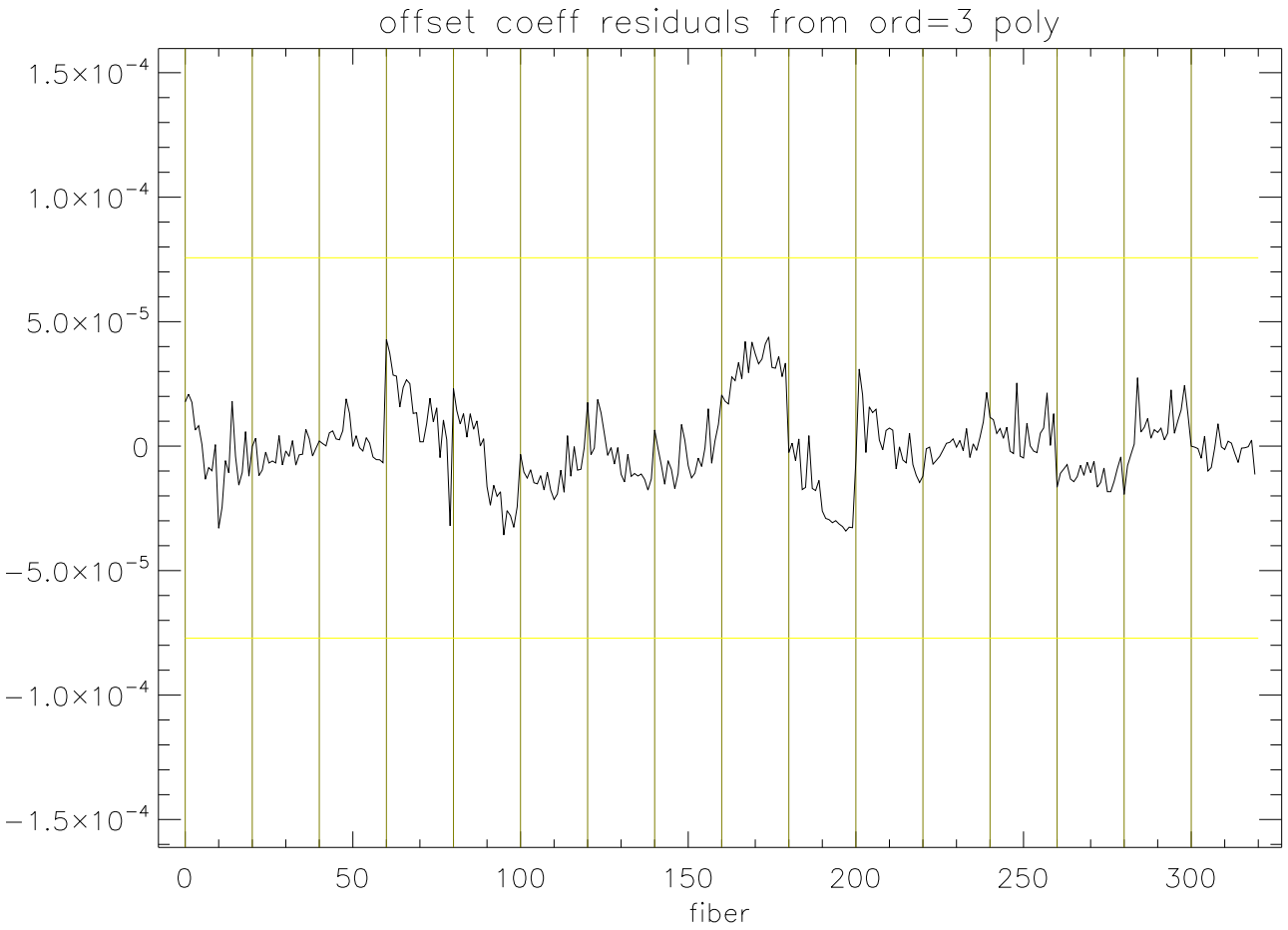

PLATE=2482 MJD=54175 sdR-b1-00043541.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

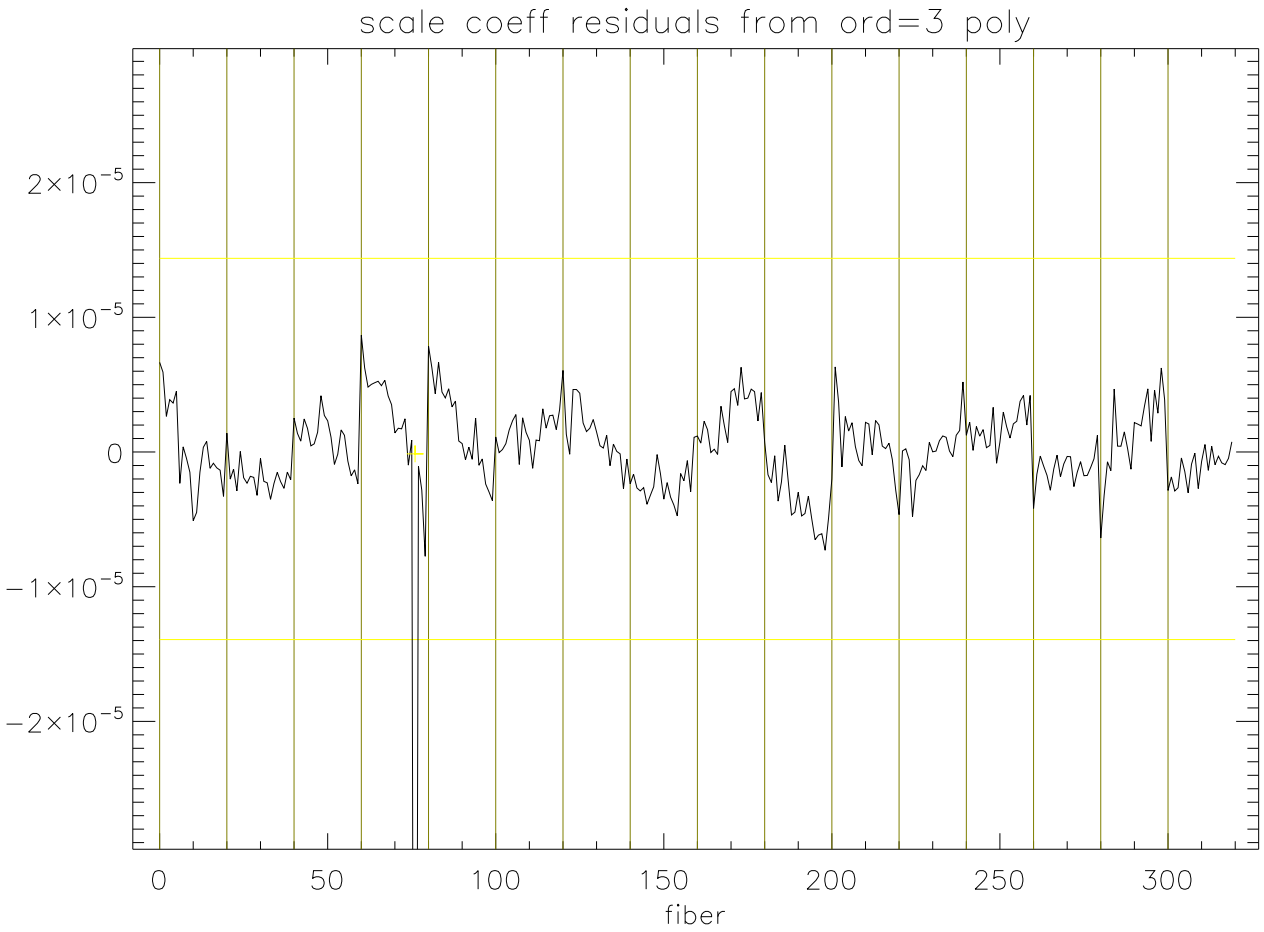

PLATE=2482 MJD=54175 sdR-b1-00043541.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

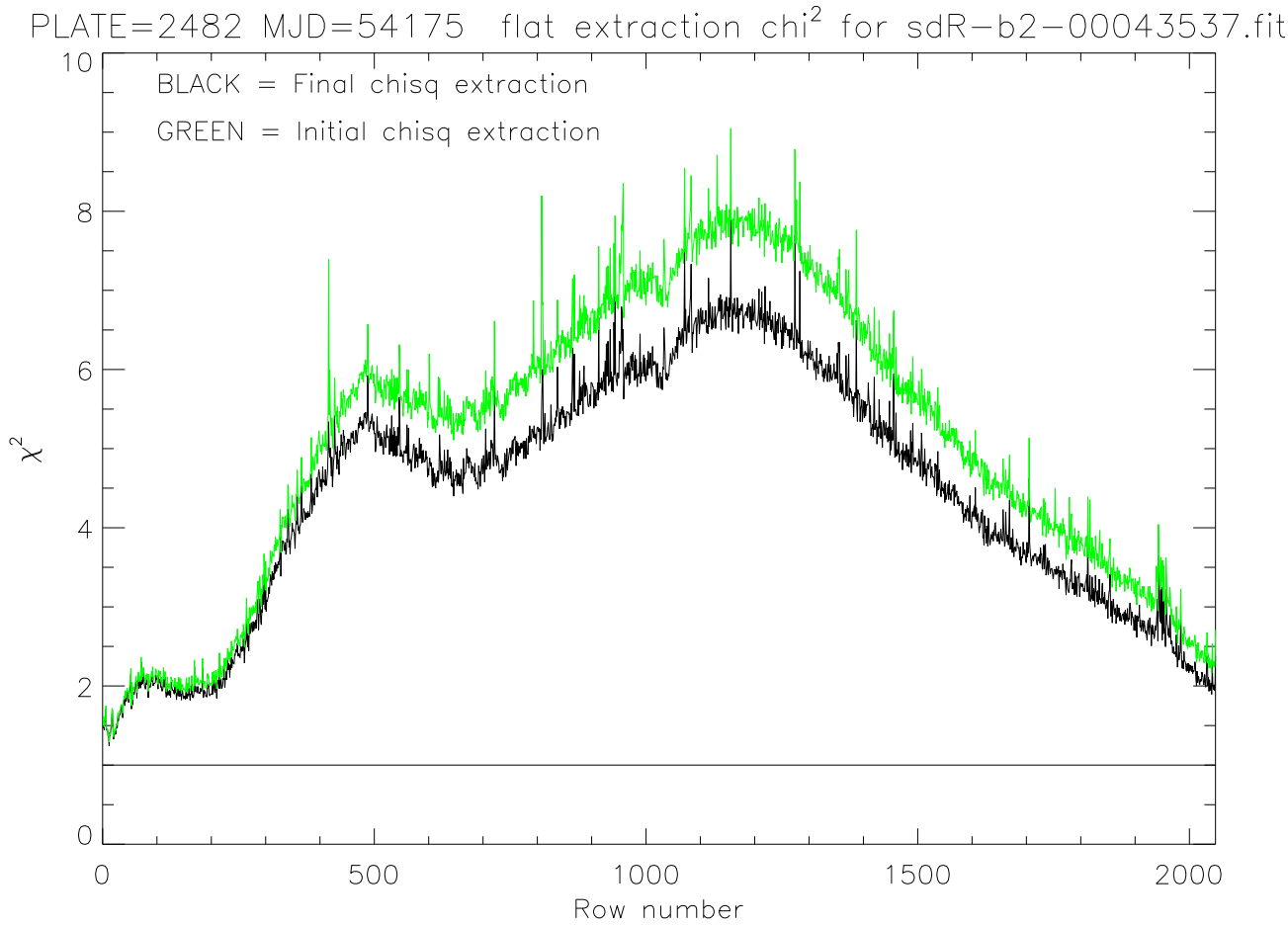

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-b1-00043541.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

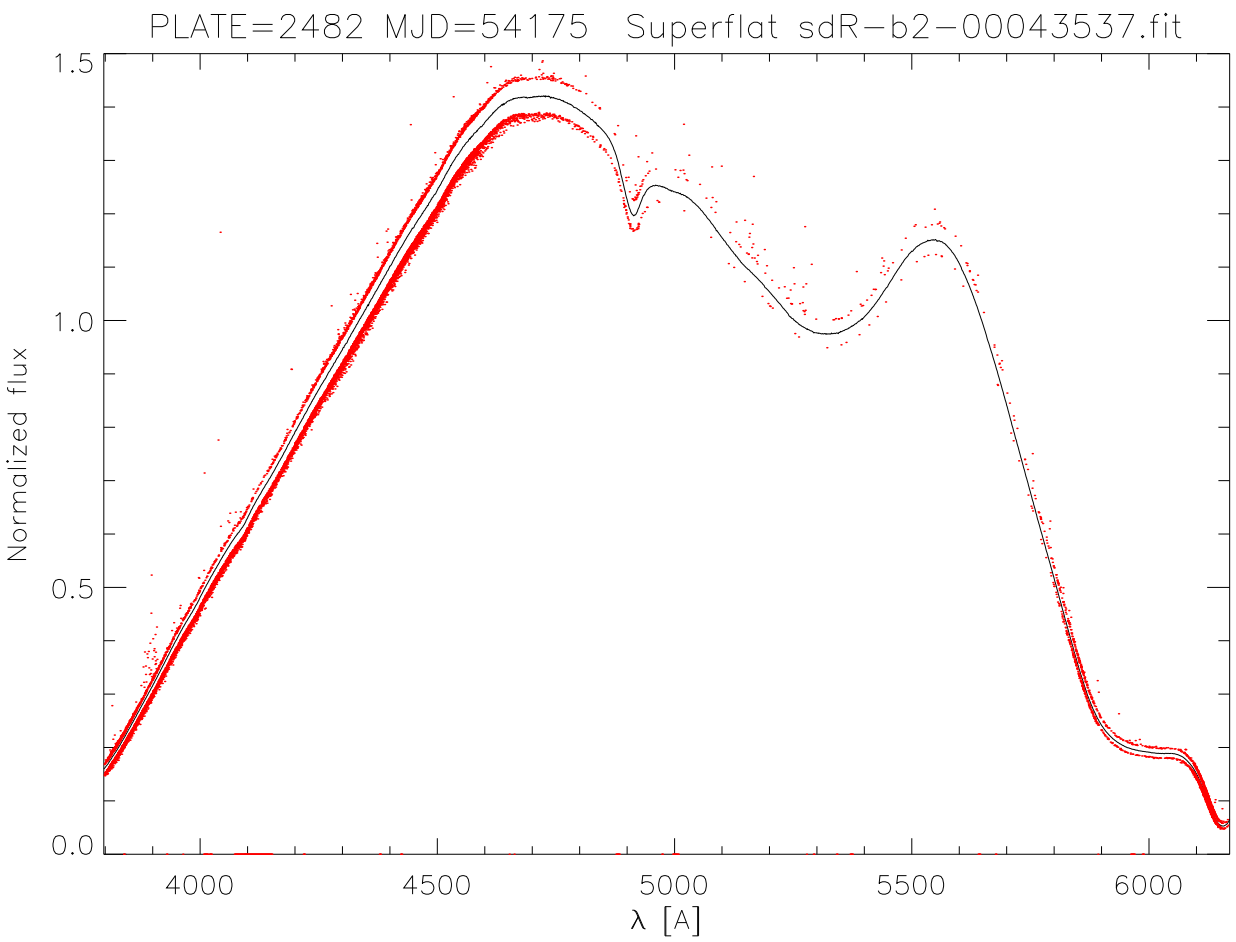

PLATE=2482 MJD=54175 sdR-b1-00043541.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.50 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

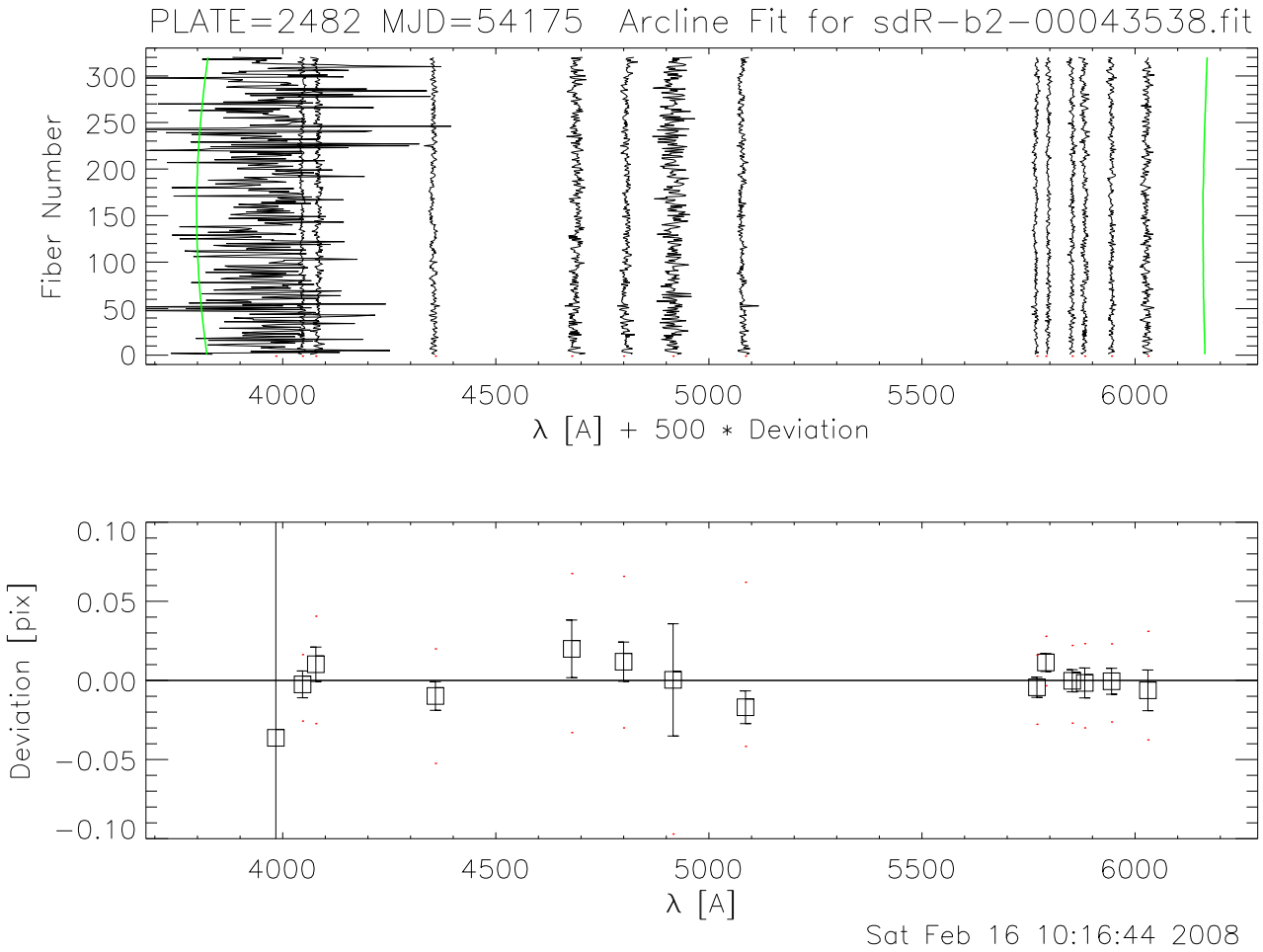

PLATE=2482 MJD=54175 sdR-b1-00043541.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.74 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

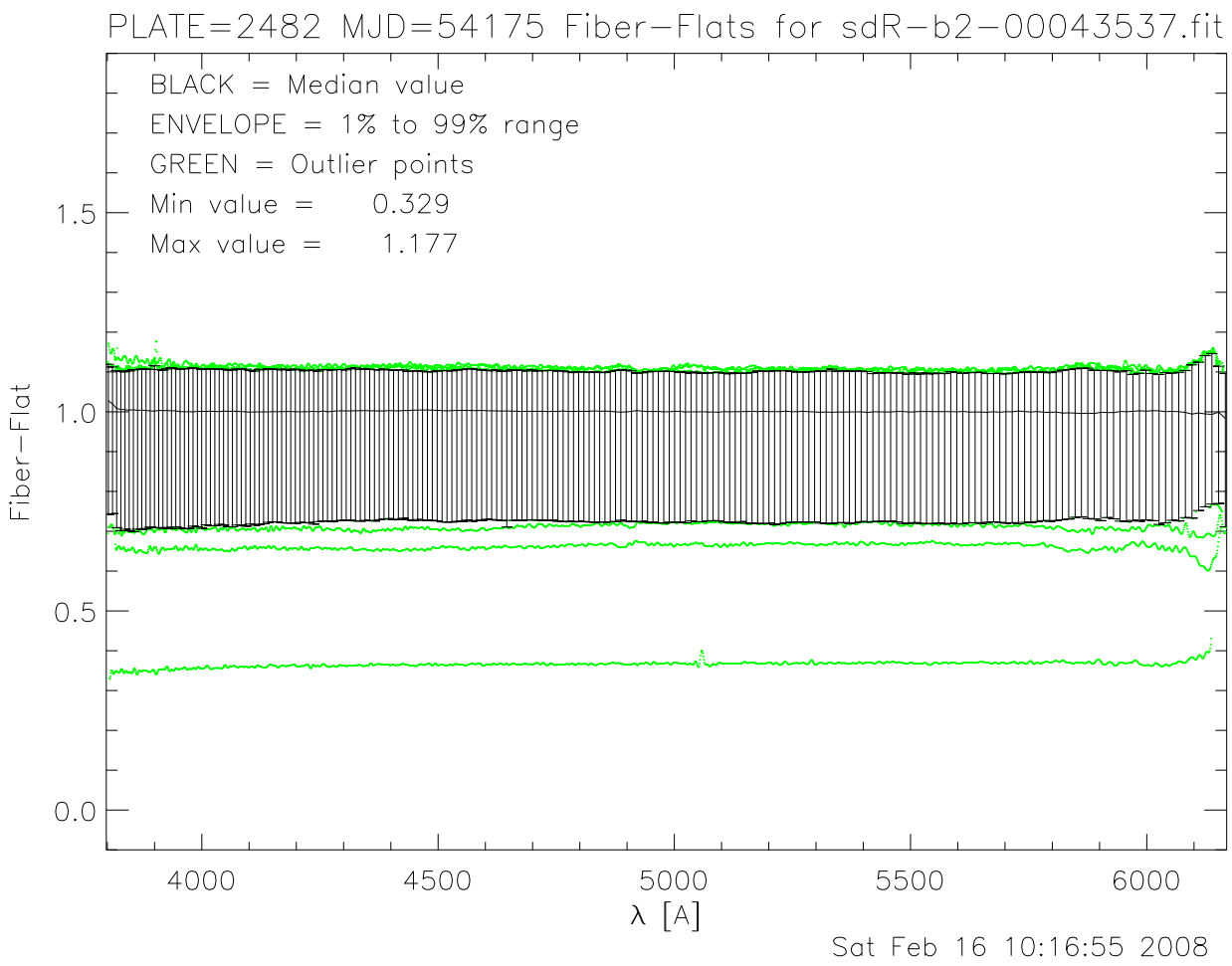

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

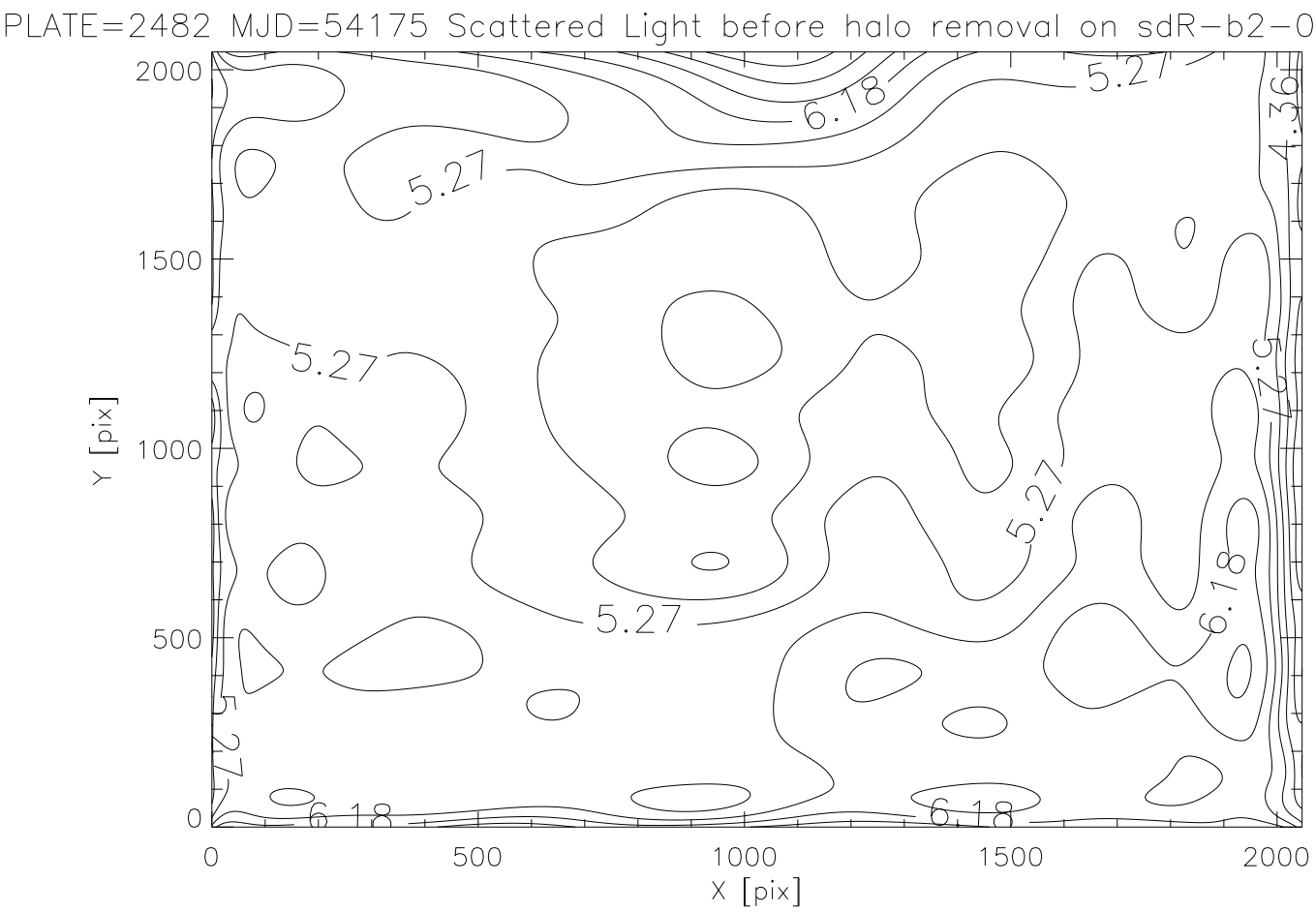

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

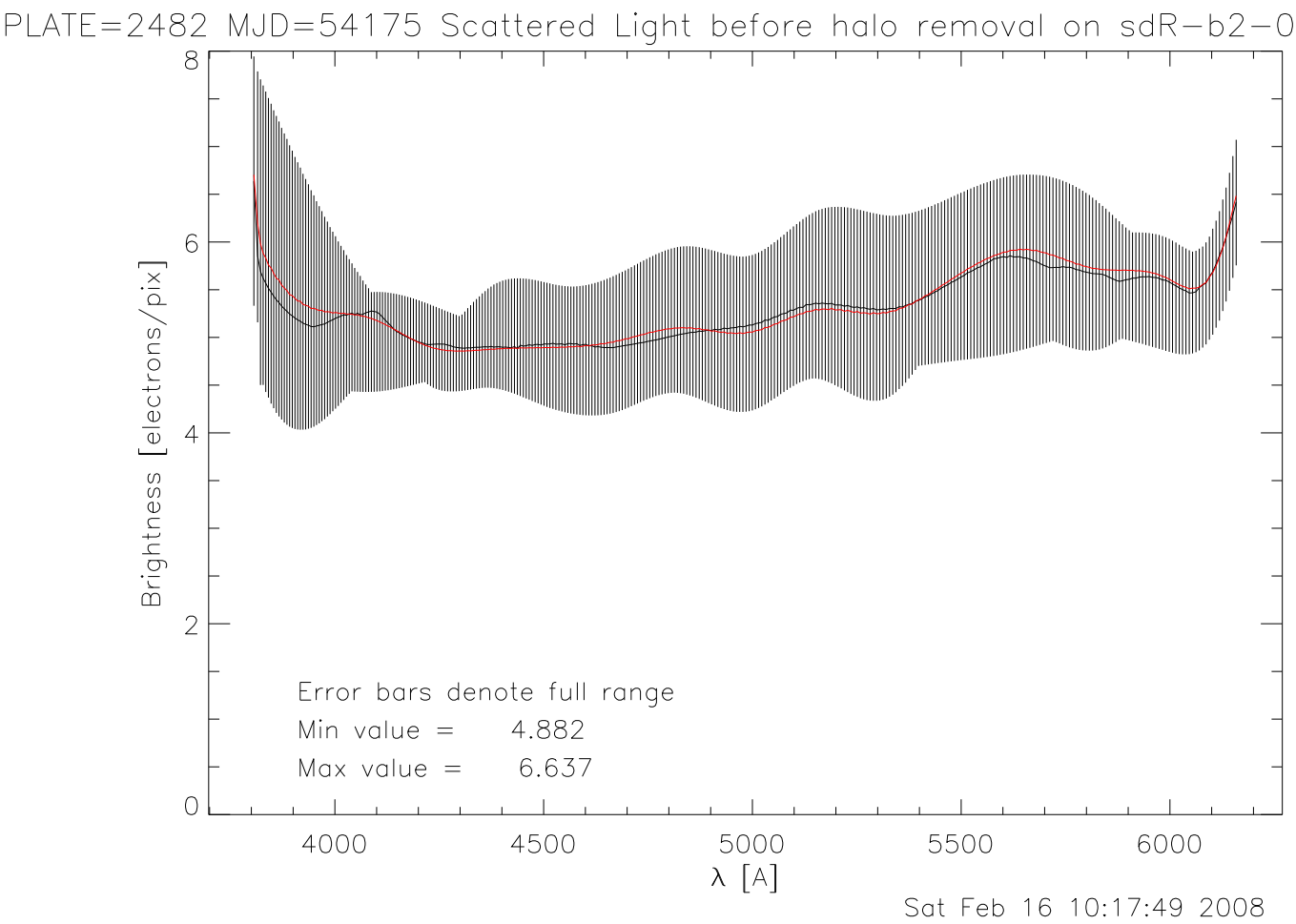

PLATE=2482 MJD=54175 flat extraction chi^2 for sdR−b2−00043537.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

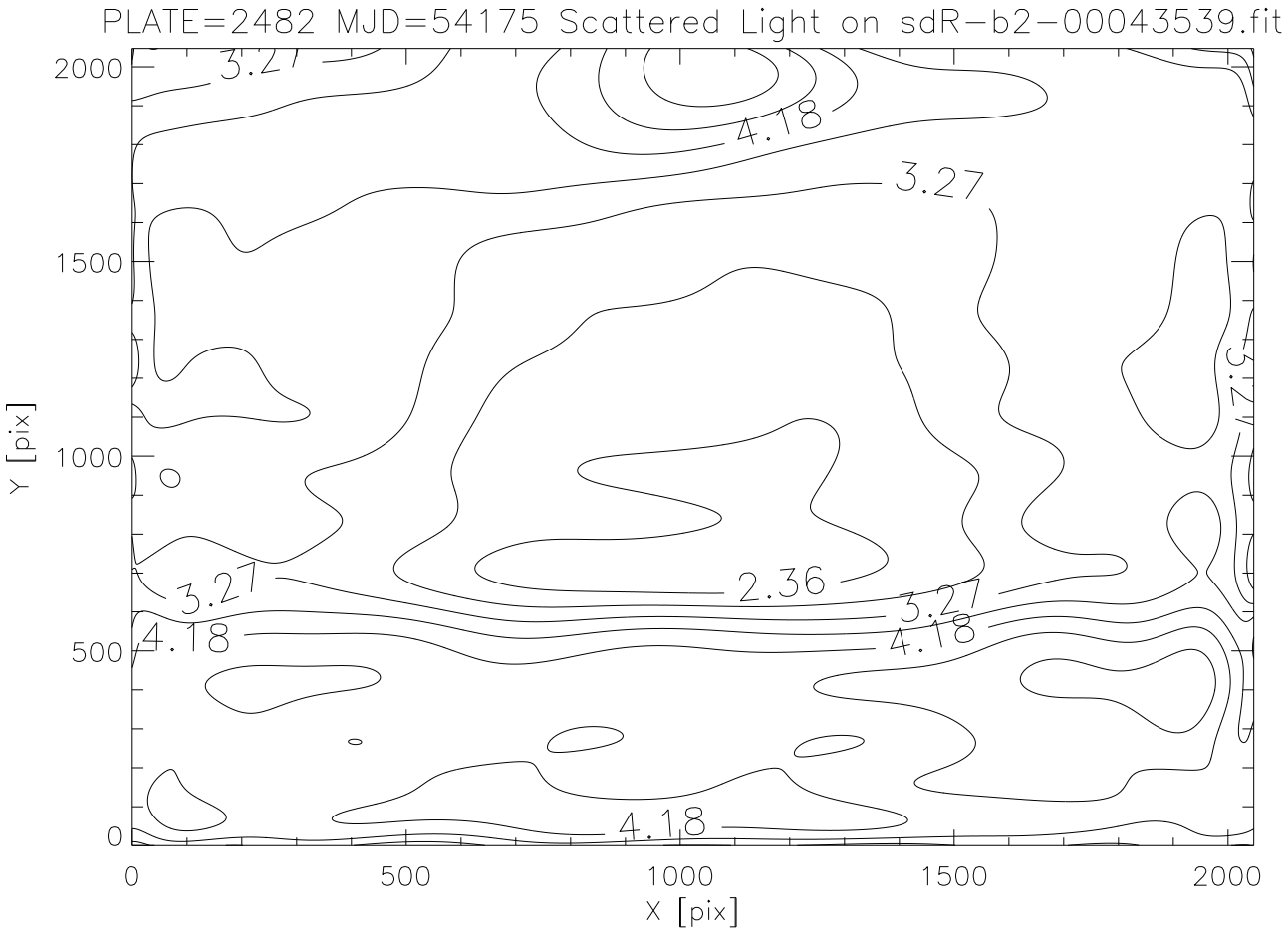

PLATE=2482 MJD=54175 Superflat sdR-b2-00043537.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

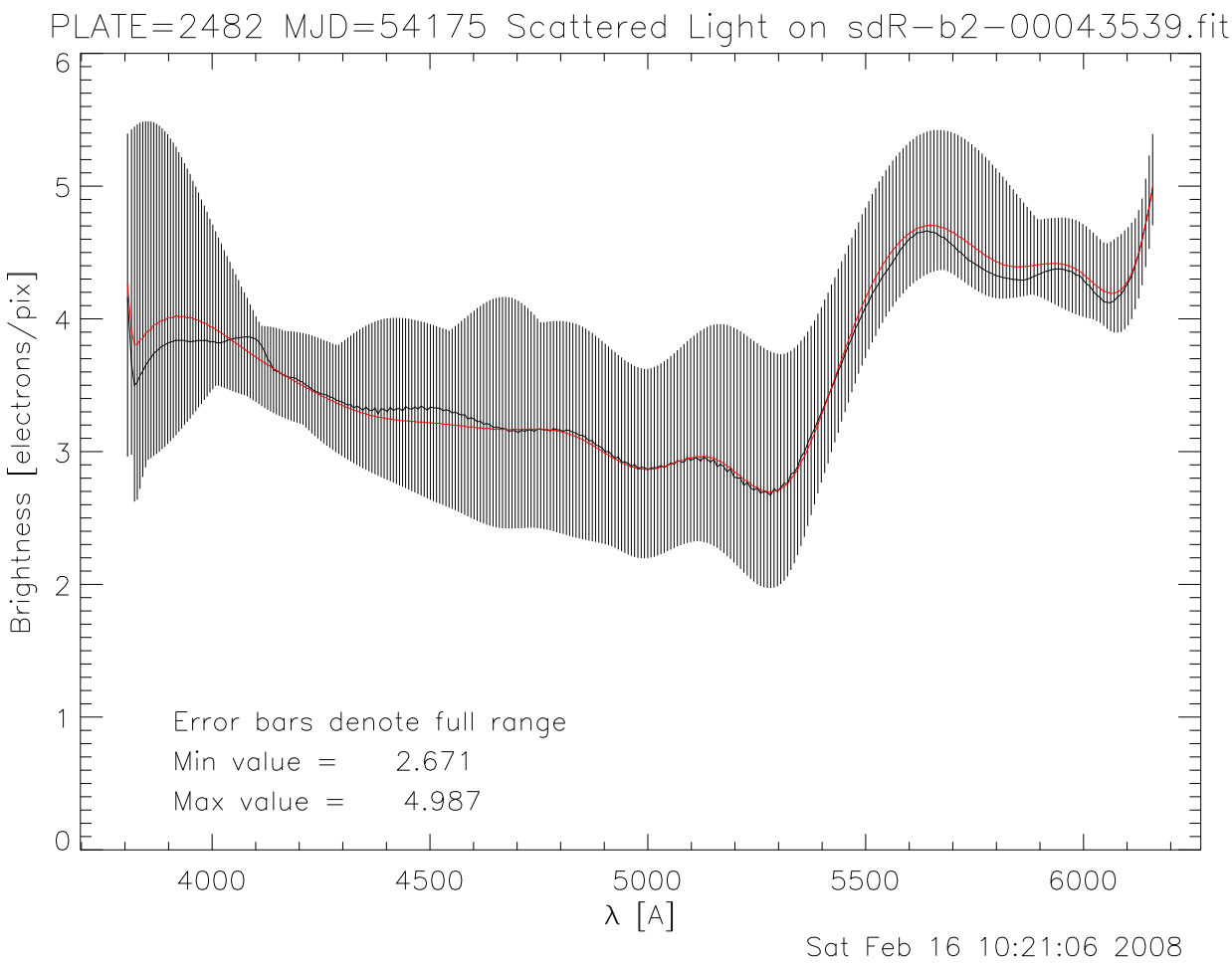

PLATE=2482 MJD=54175 Arcline Fit for sdR-b2-00043538.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 10:16:44 2008

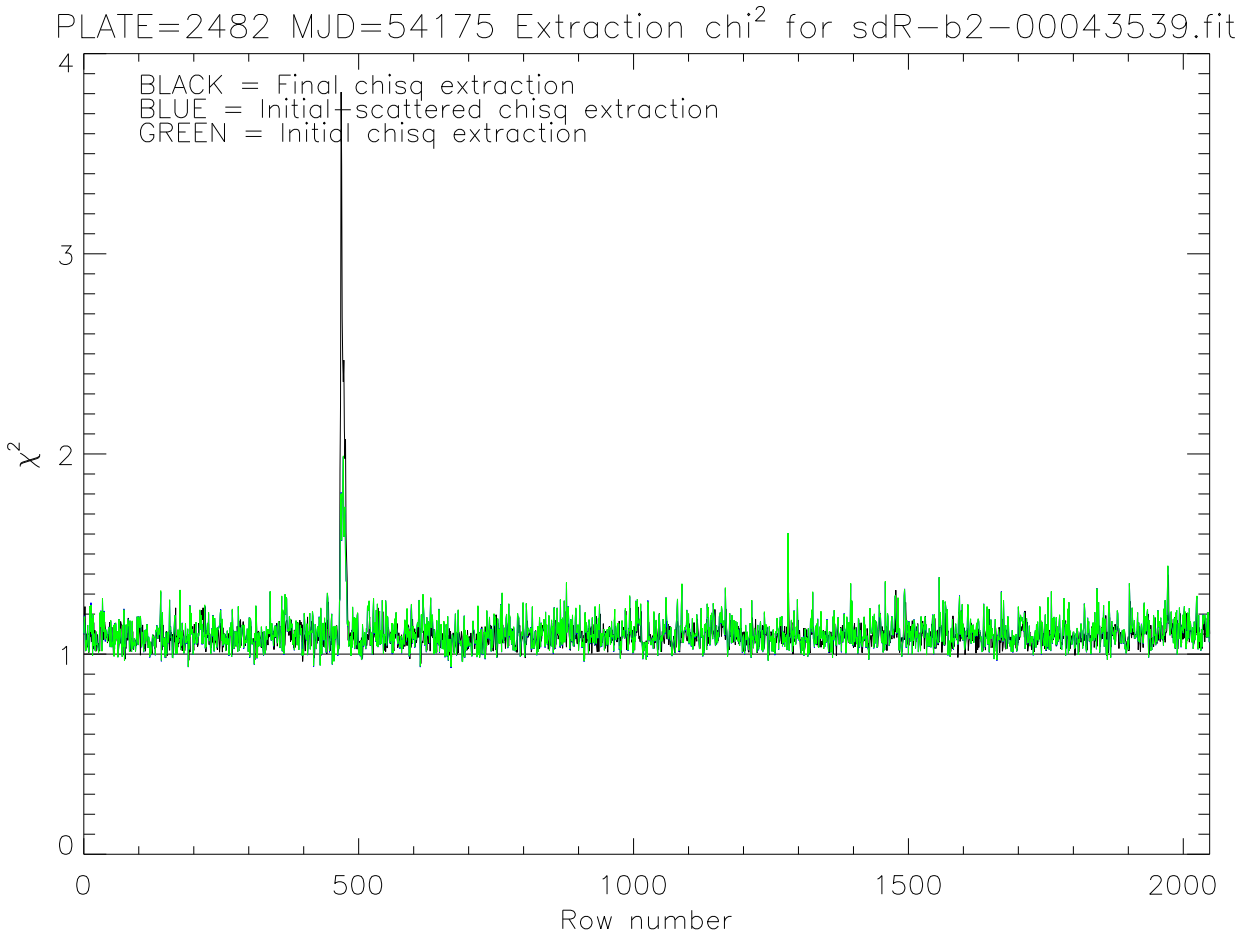

PLATE=2482 MJD=54175 Fiber-Flats for sdR-b2-00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.329
Max value = 1.177
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 10:16:55 2008

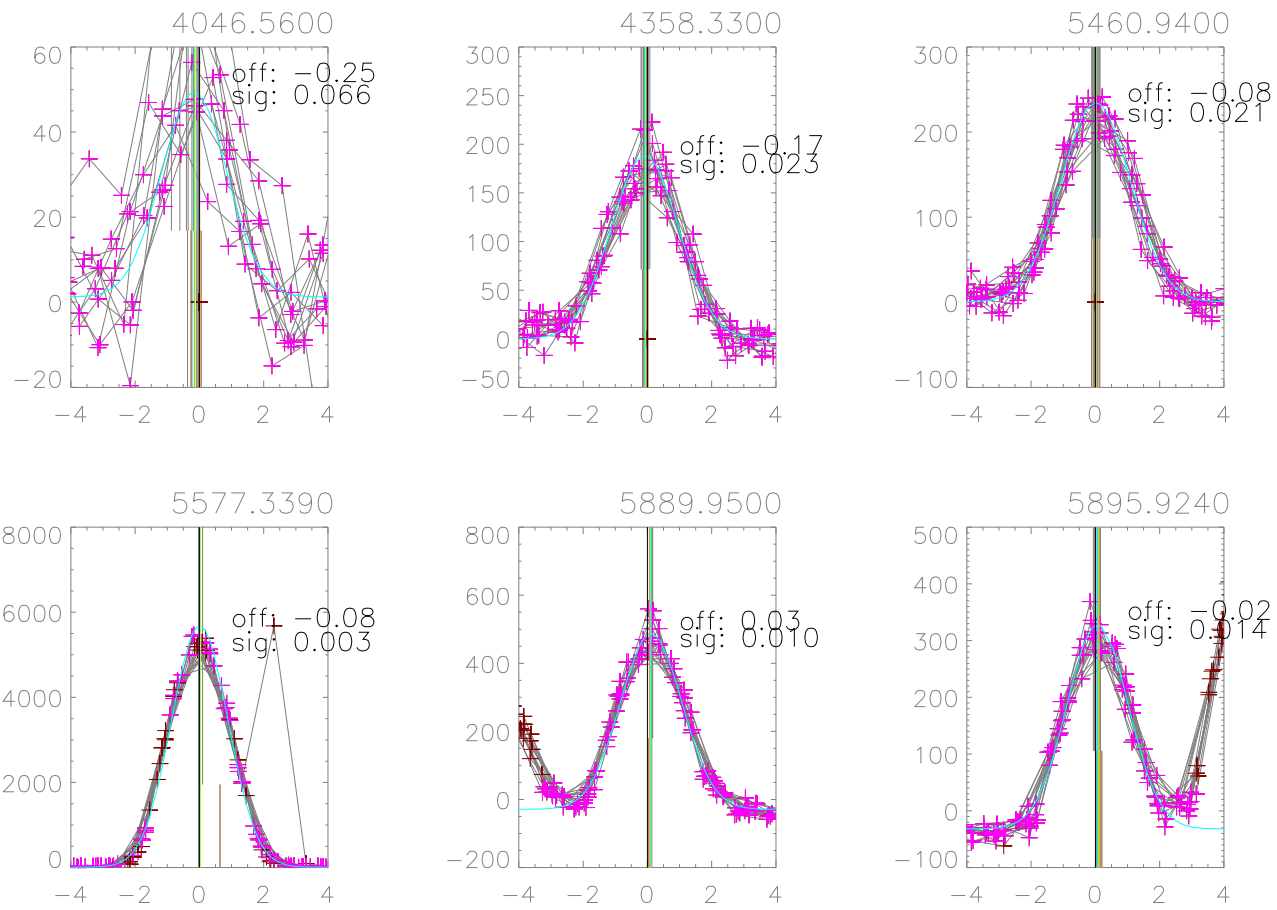

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR−b2−00043539.f
Y [pix]
X [pix]
0
500
1000
1500
2000
5.27
6.18
4.36
0

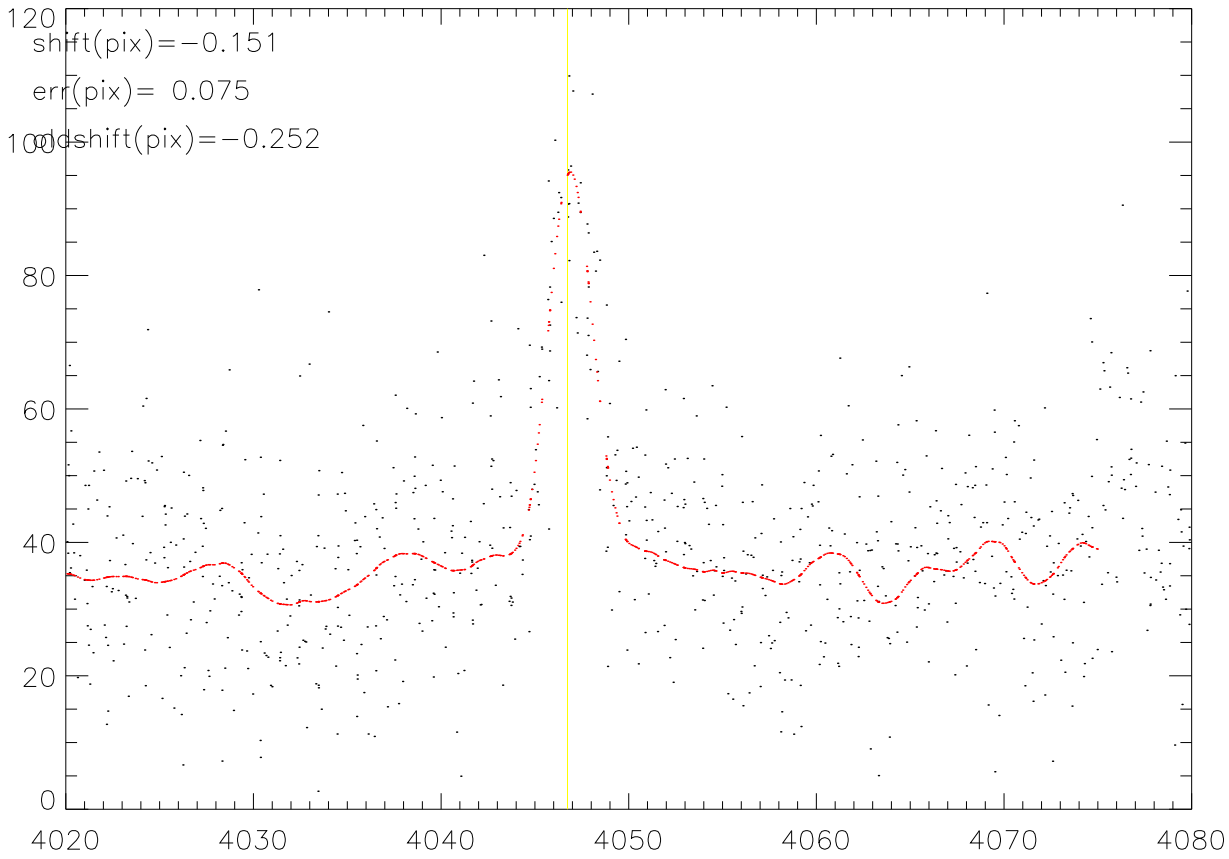

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-b2-00043539.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.882
Max value = 6.637
Sat Feb 16 10:17:49 2008

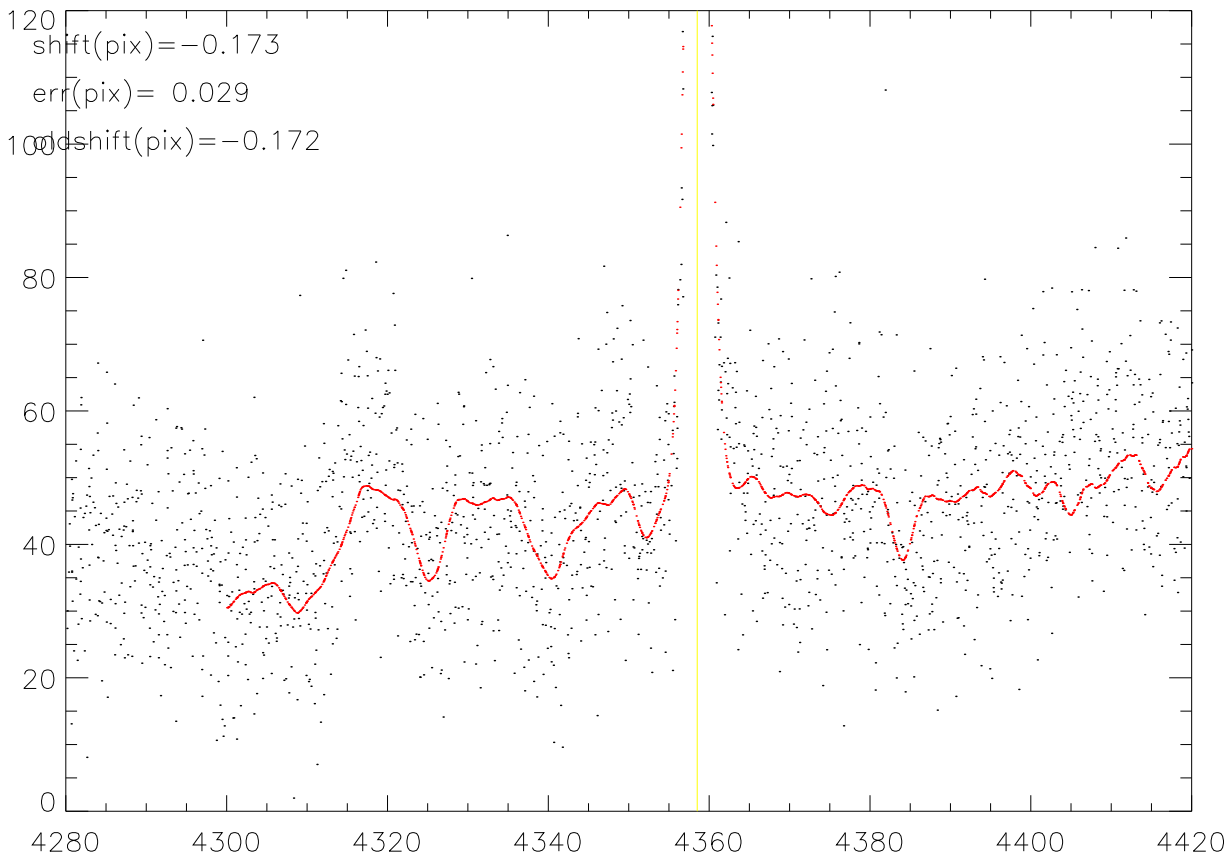

PLATE=2482 MJD=54175 Scattered Light on sdR-b2-00043539.fit
3.27
4.18
3.27
3.27
0
3.27
2.36
3.27
4.18
4.18
4.18
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

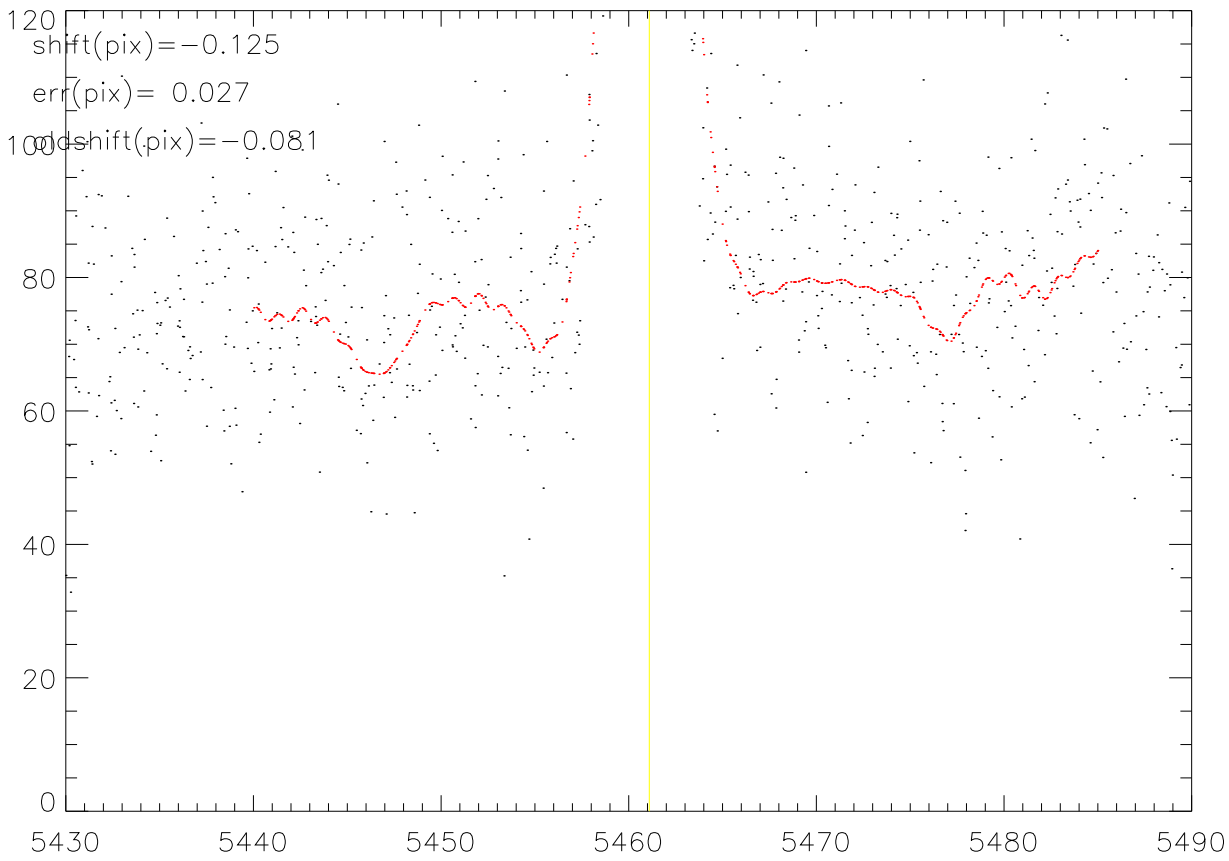

PLATE=2482 MJD=54175 Scattered Light on sdR-b2-00043539.fit
Brightness [electrons/pix]
0
1
2
3
4
5
6
Error bars denote full range
Min value = 2.671
Max value = 4.987
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 10:21:06 2008

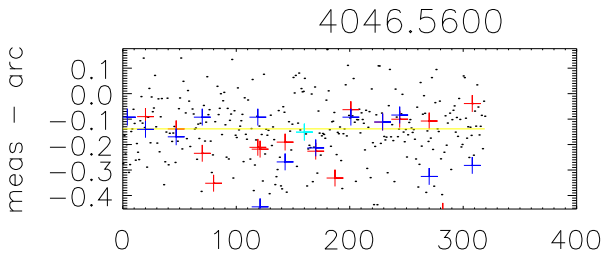

PLATE=2482 MJD=54175 Extraction chi^2 for sdR-b2-00043539.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

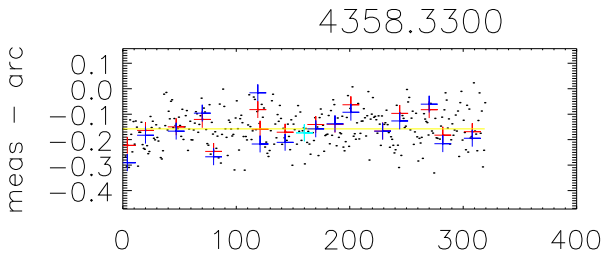

4046.5600
off: −0.25
sig: 0.066
4358.3300
off: −0.17
sig: 0.023
5460.9400
off: −0.08
sig: 0.021
5577.3390
off: −0.08
sig: 0.003
5889.9500
off: 0.03
sig: 0.010
5895.9240
off: −0.02
sig: 0.014

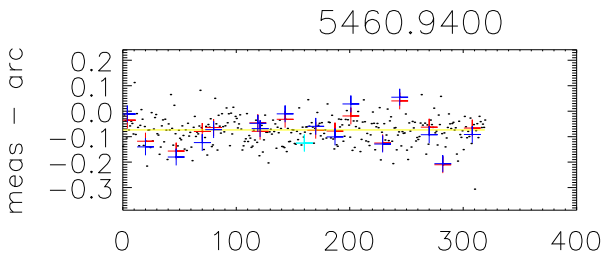

shift(pix)=−0.151
err(pix)= 0.075
oldshift(pix)=−0.252
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

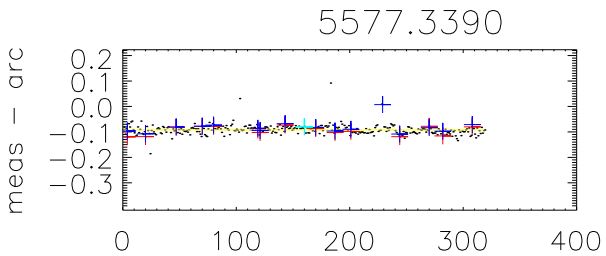

shift(pix)=−0.173
err(pix)= 0.029
oldshift(pix)=−0.172
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

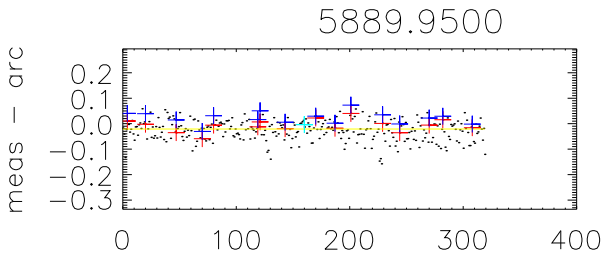

shift(pix)=−0.125
err(pix)= 0.027
oldshift(pix)=−0.081
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

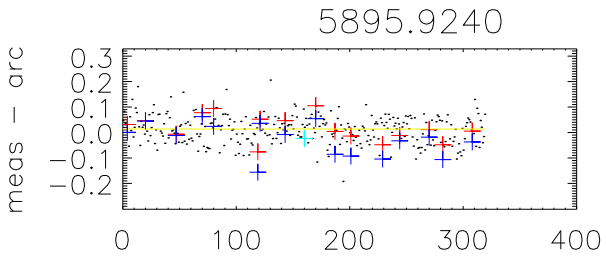

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

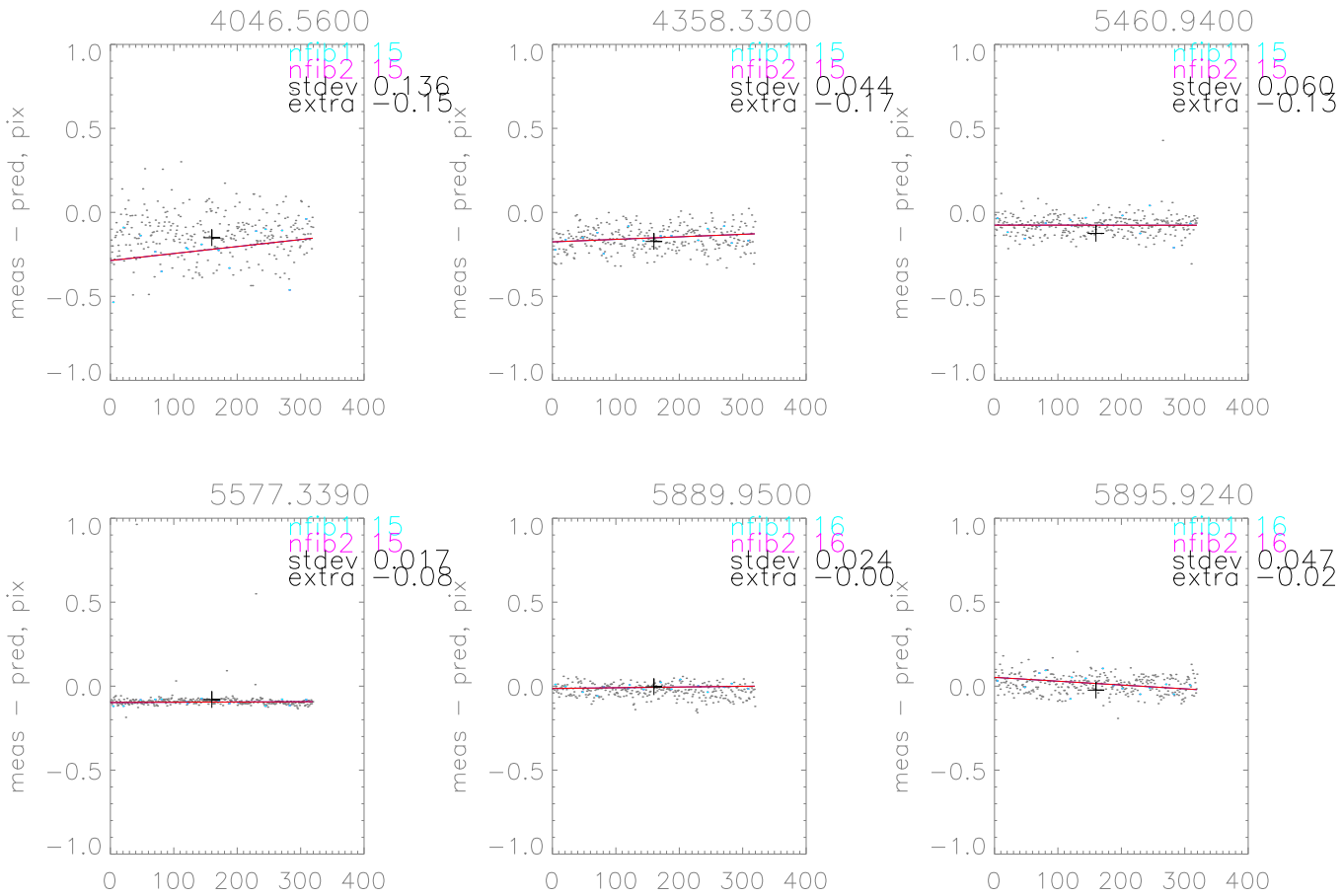

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

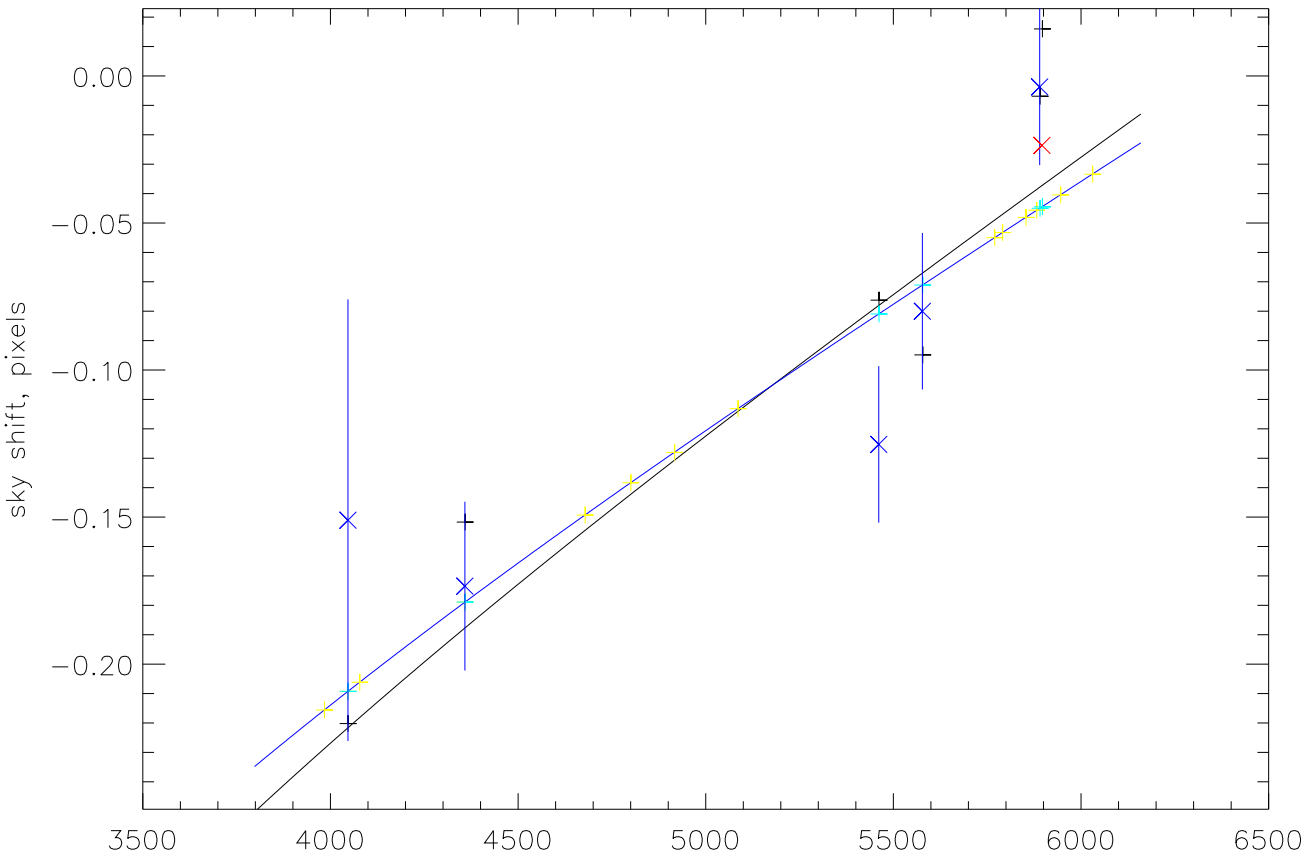

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

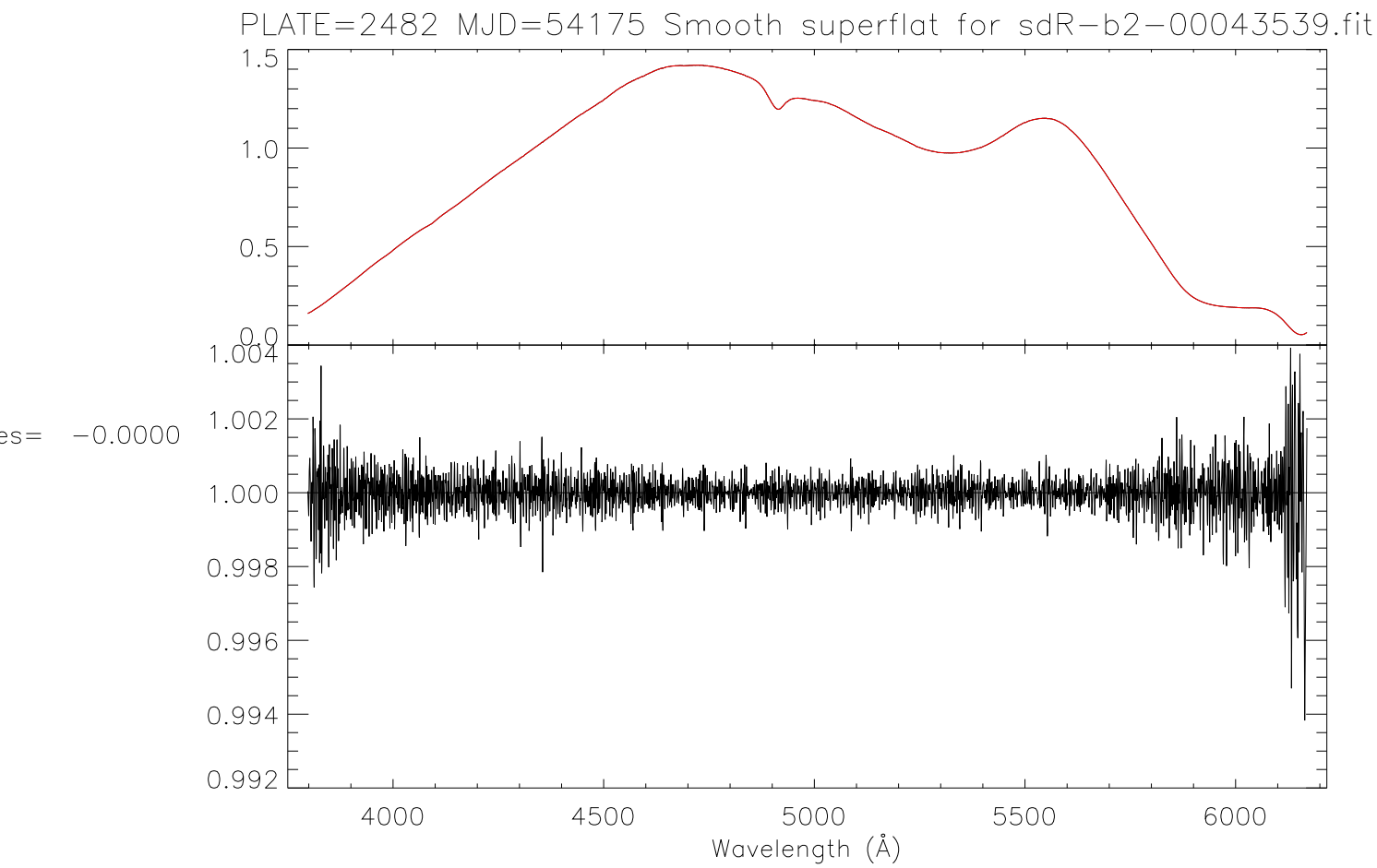

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

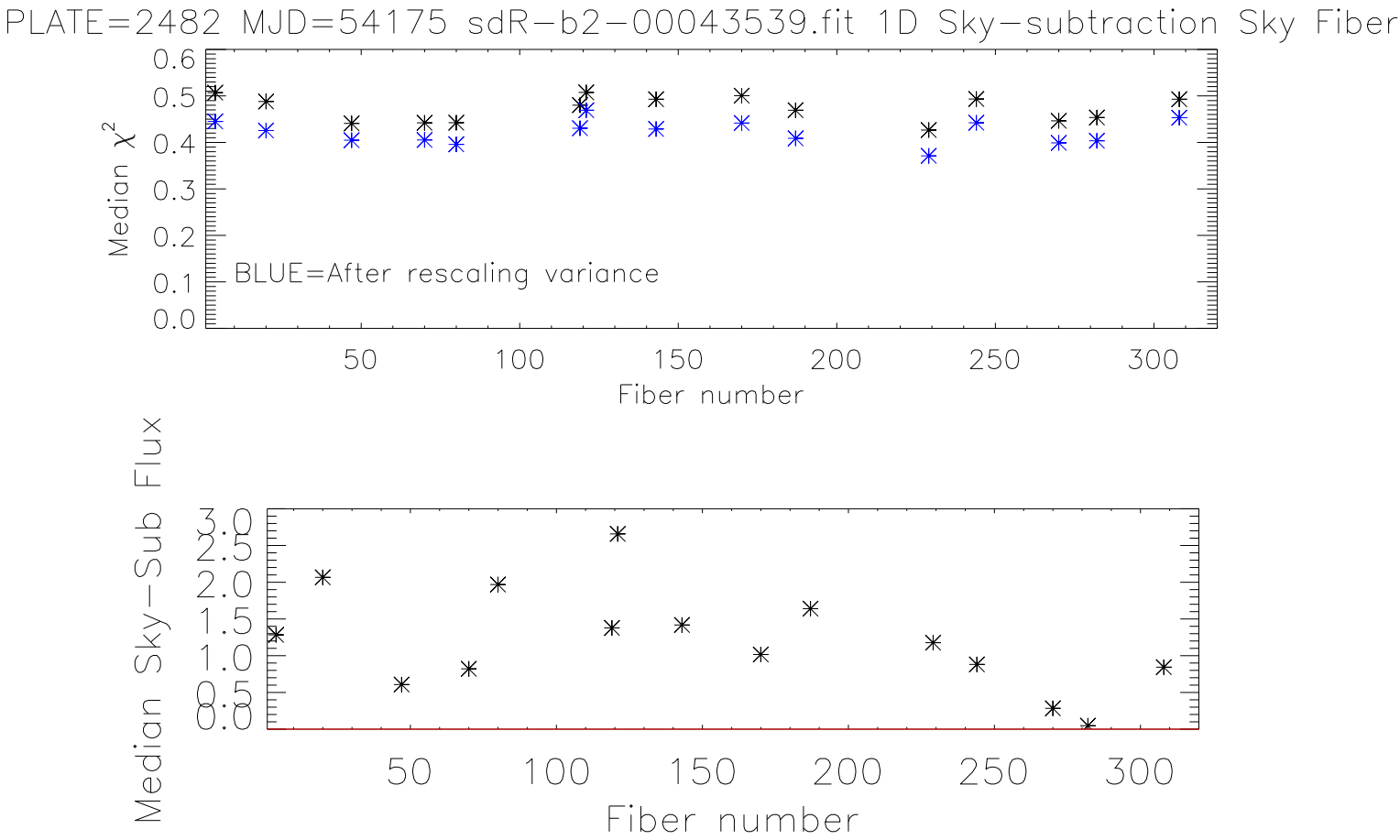

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

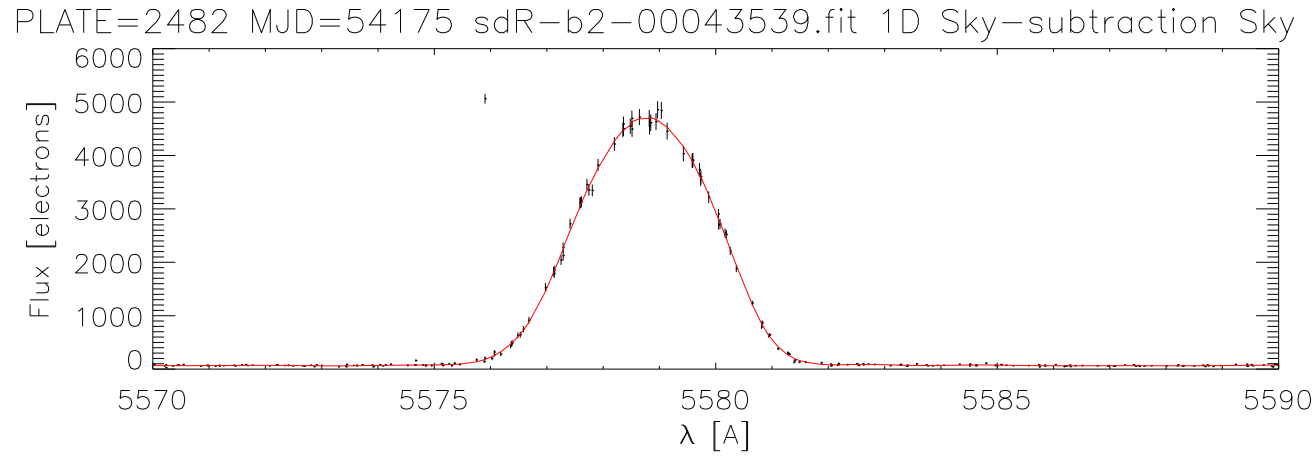

4046.5600
nfib1 15
nfib2 15
stdev 0.136
extra −0.15
4358.3300
nfib1 15
nfib2 15
stdev 0.044
extra −0.17
5460.9400
nfib1 15
nfib2 15
stdev 0.060
extra −0.13
5577.3390
nfib1 15
nfib2 15
stdev 0.017
extra −0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra −0.00
5895.9240
nfib1 16
nfib2 16
stdev 0.047
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

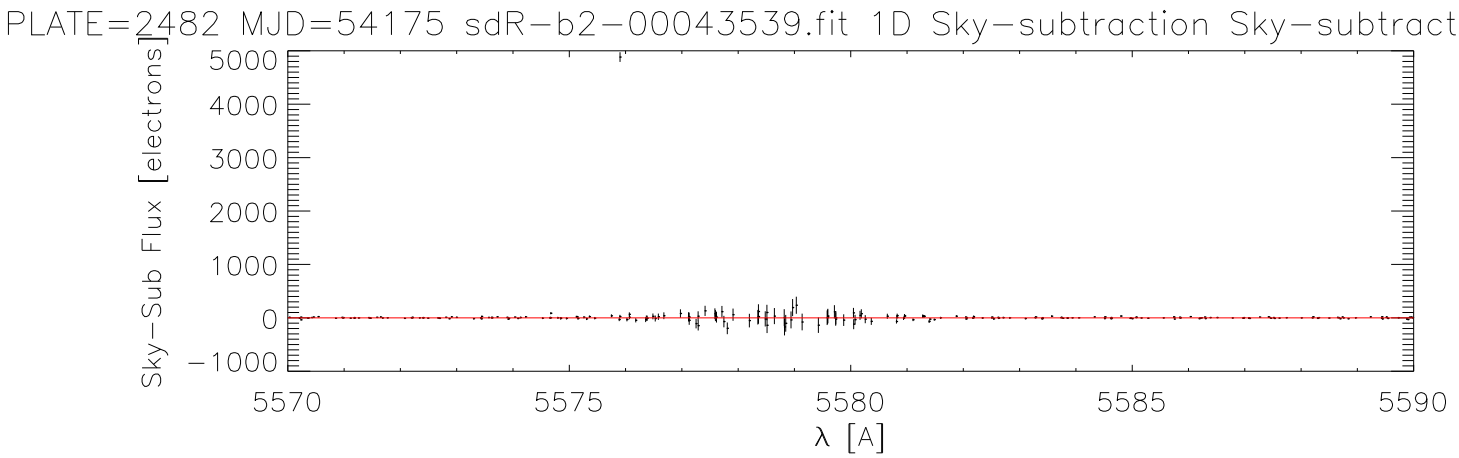

0.00
−0.05
−0.10
−0.15
−0.20
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

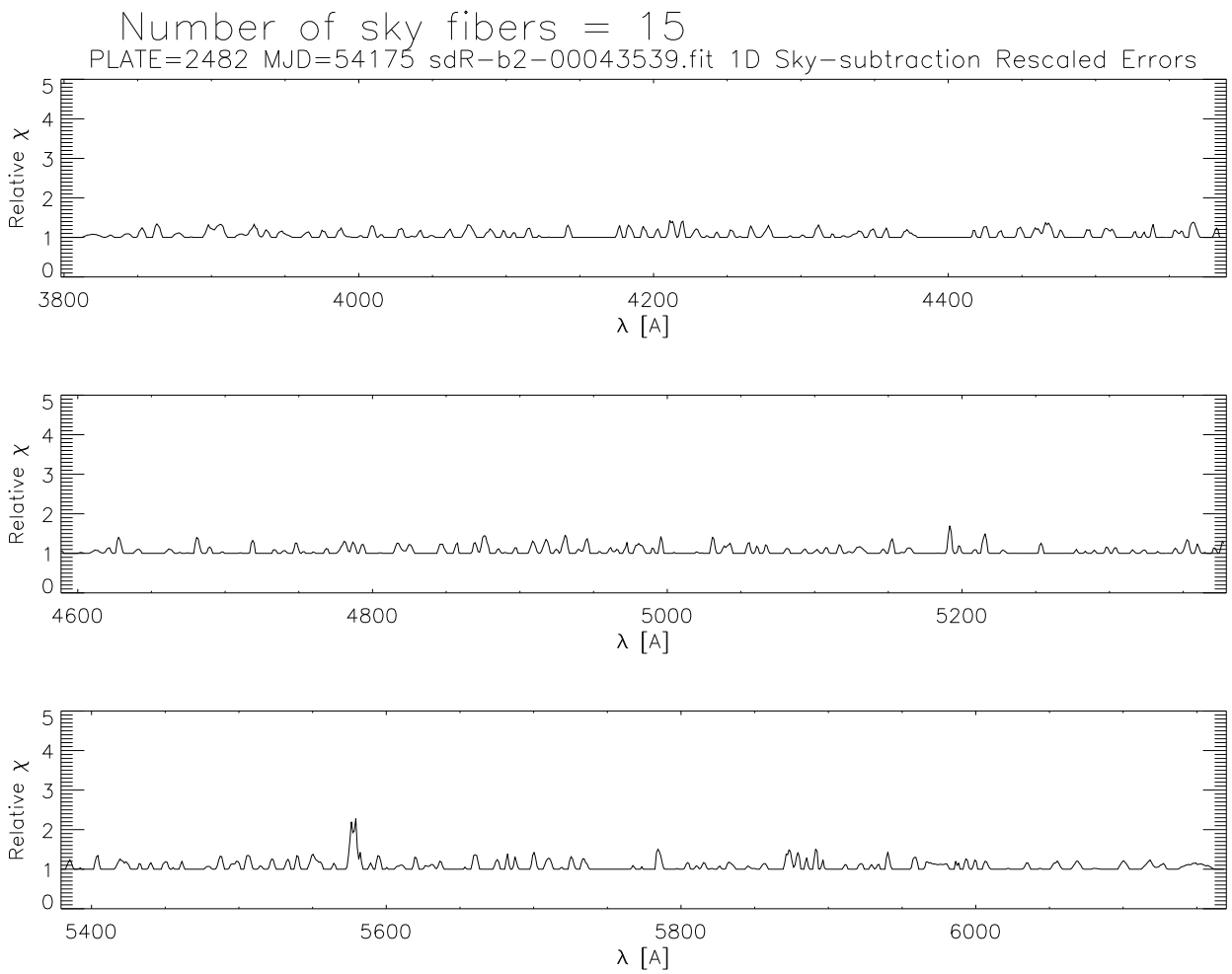

PLATE=2482 MJD=54175 Smooth superflat for sdR-b2-00043539.fit
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

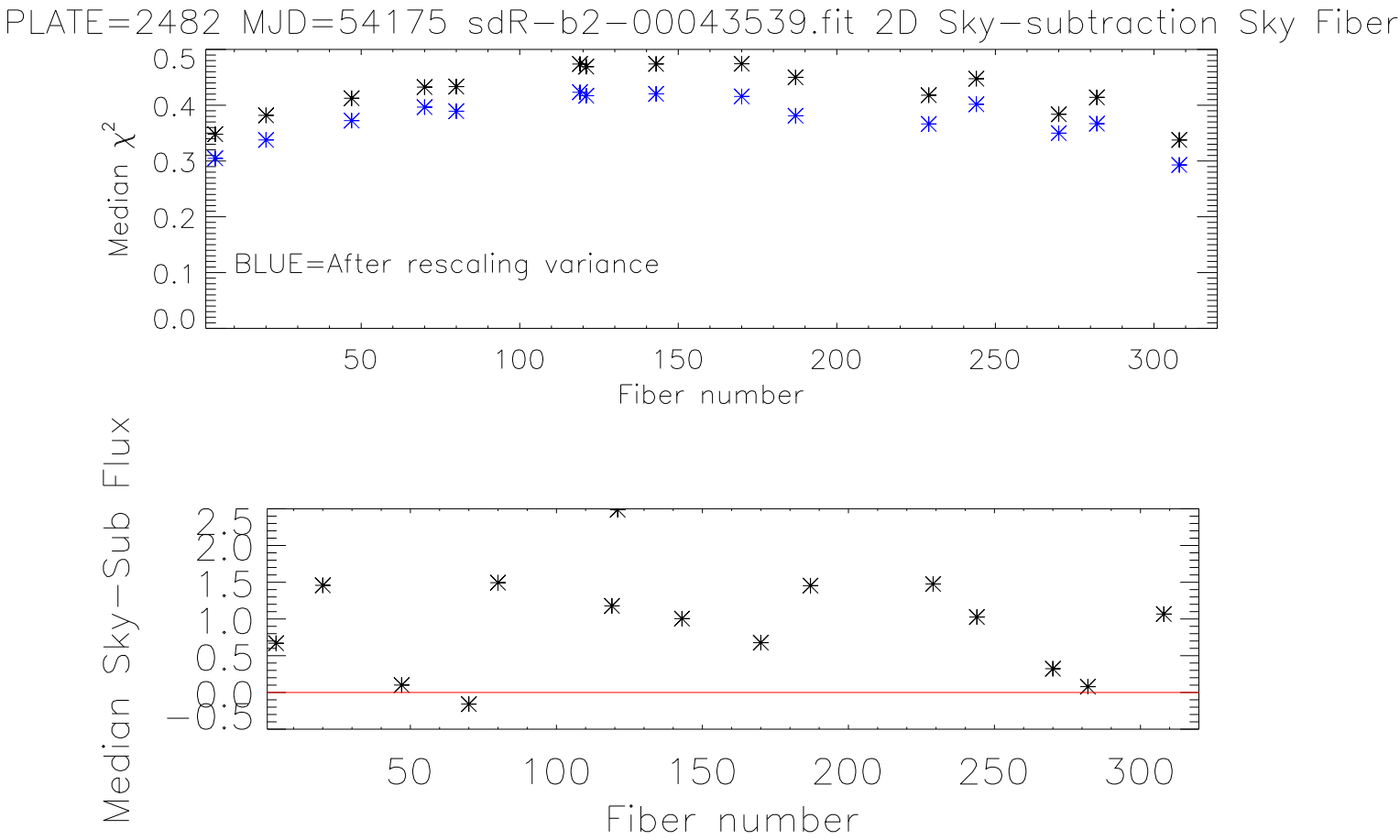
es= −0.0000

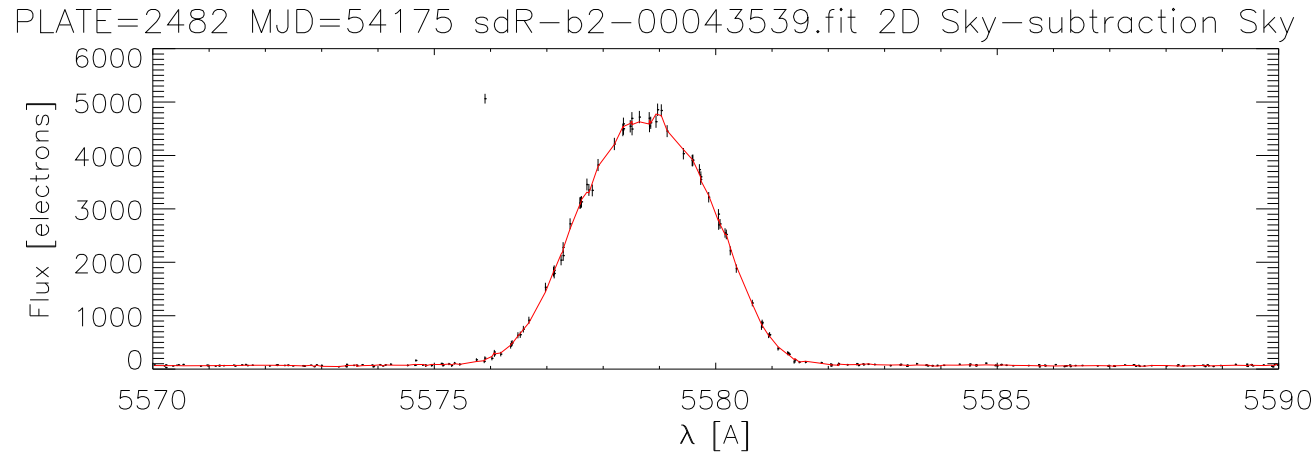

PLATE=2482 MJD=54175 sdR-b2-00043539.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

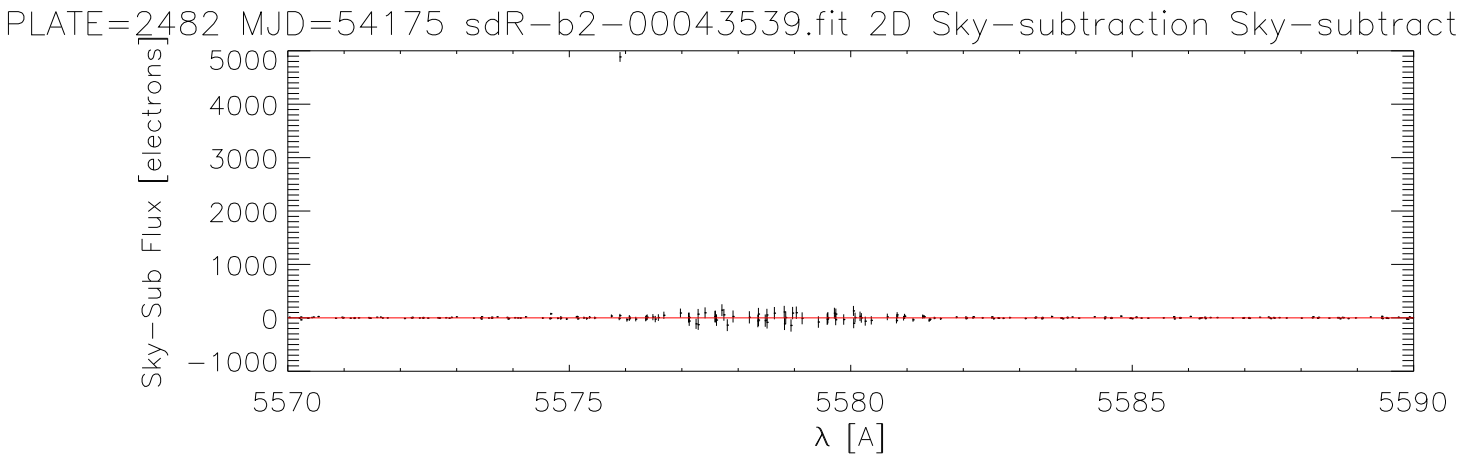

PLATE=2482 MJD=54175 sdR-b2-00043539.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

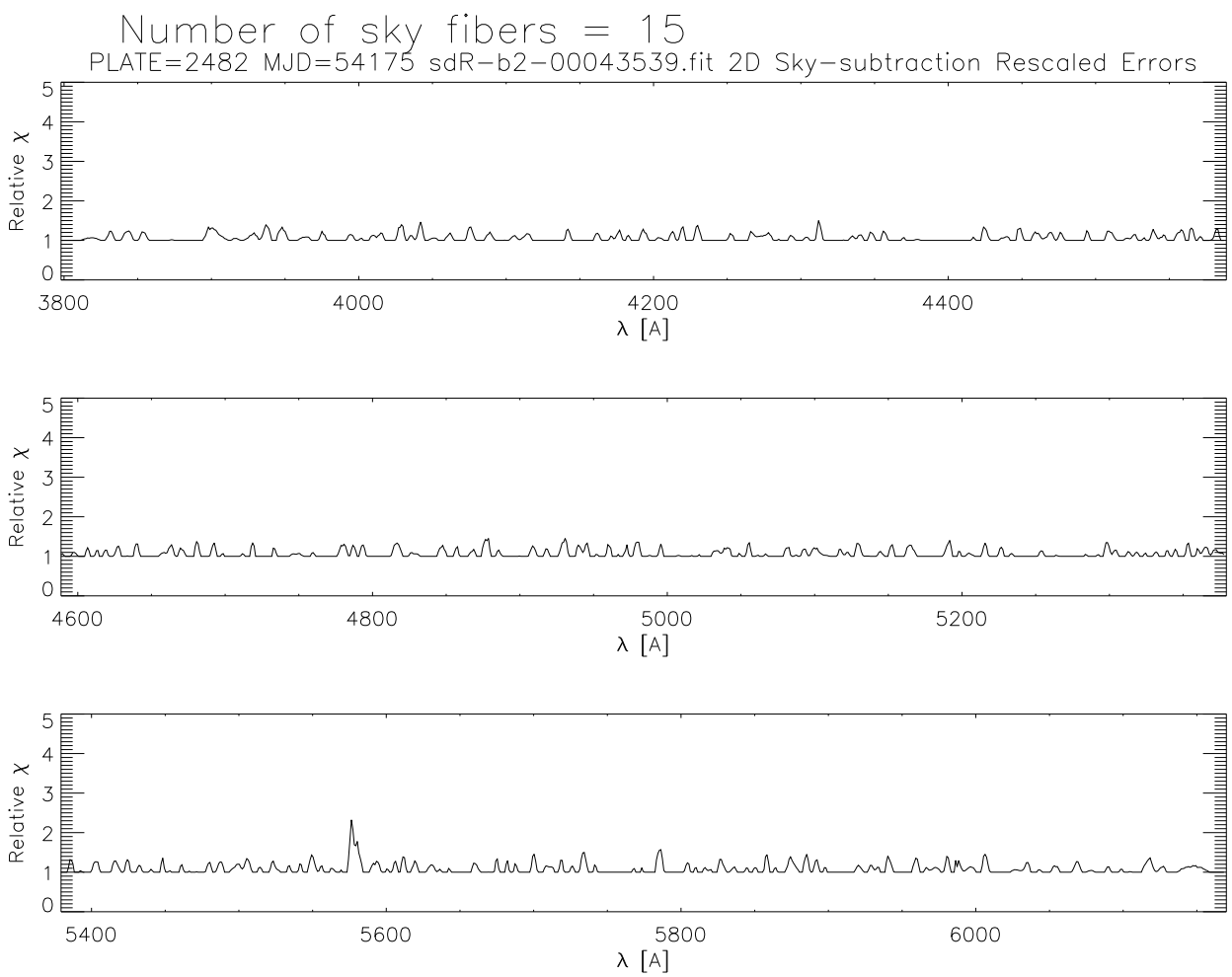

PLATE=2482 MJD=54175 sdR-b2-00043539.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

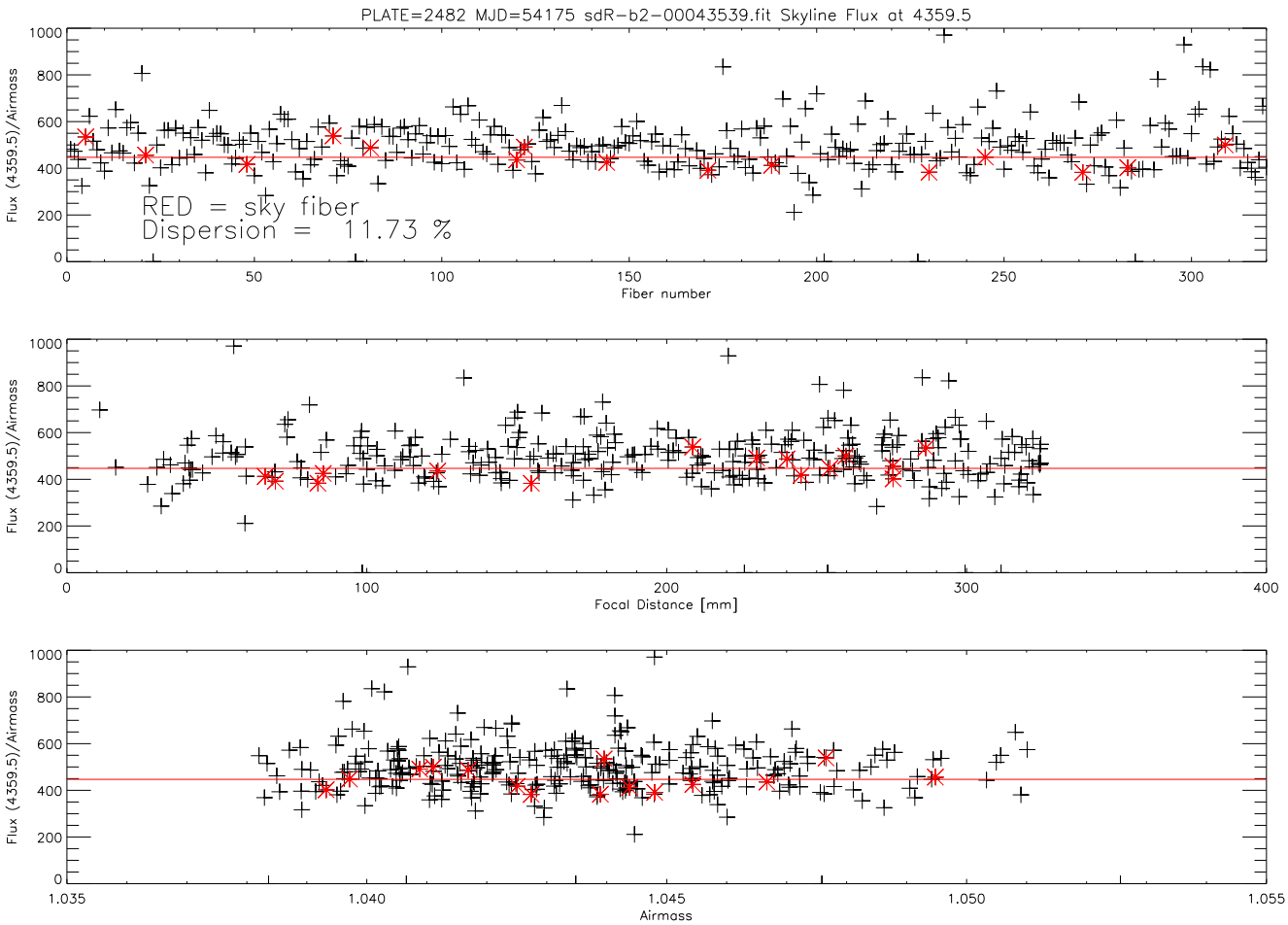

Number of sky fibers = 15
PLATE=2482 MJD=54175 sdR-b2-00043539.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

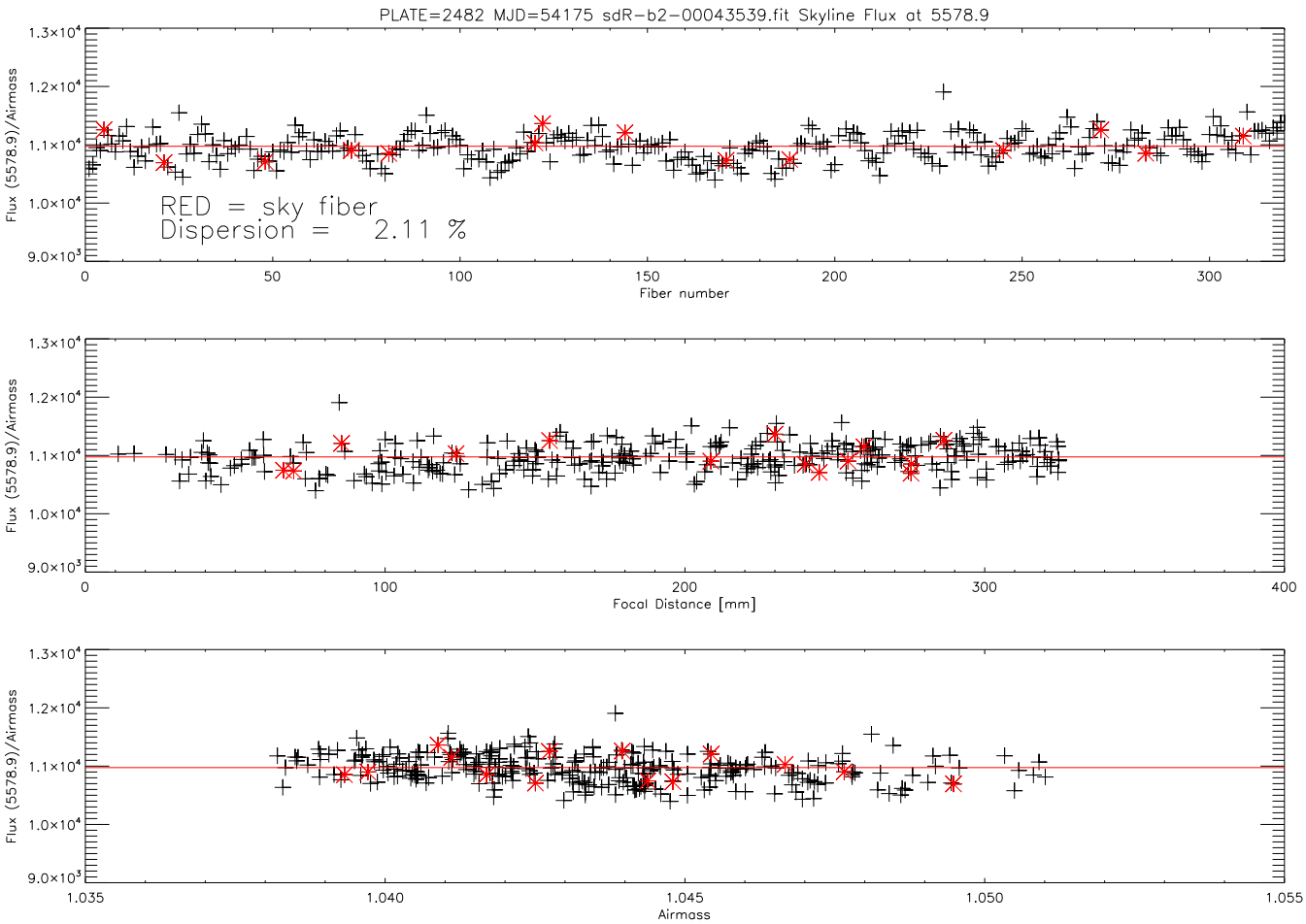

PLATE=2482 MJD=54175 sdR-b2-00043539.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

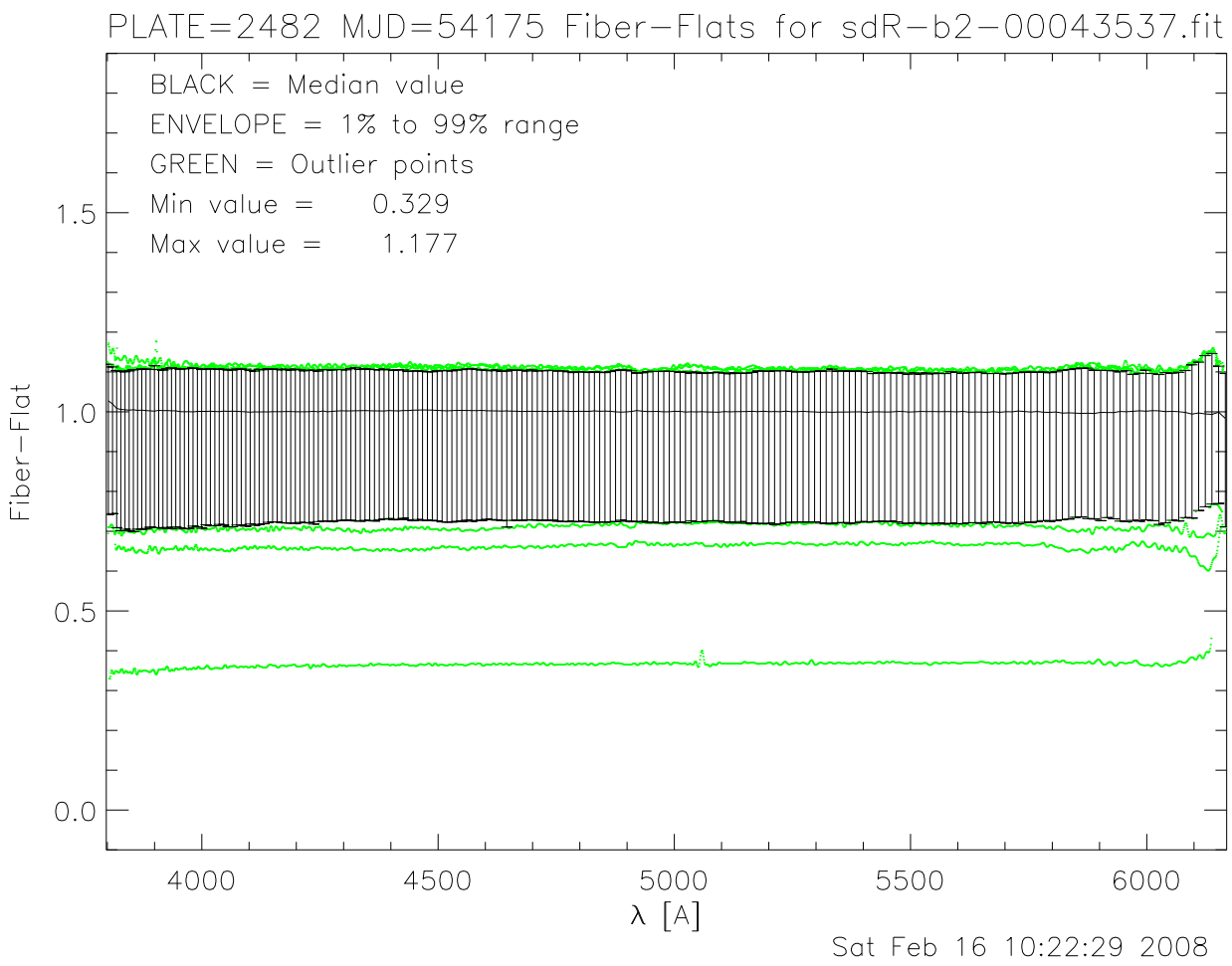

PLATE=2482 MJD=54175 sdR-b2-00043539.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

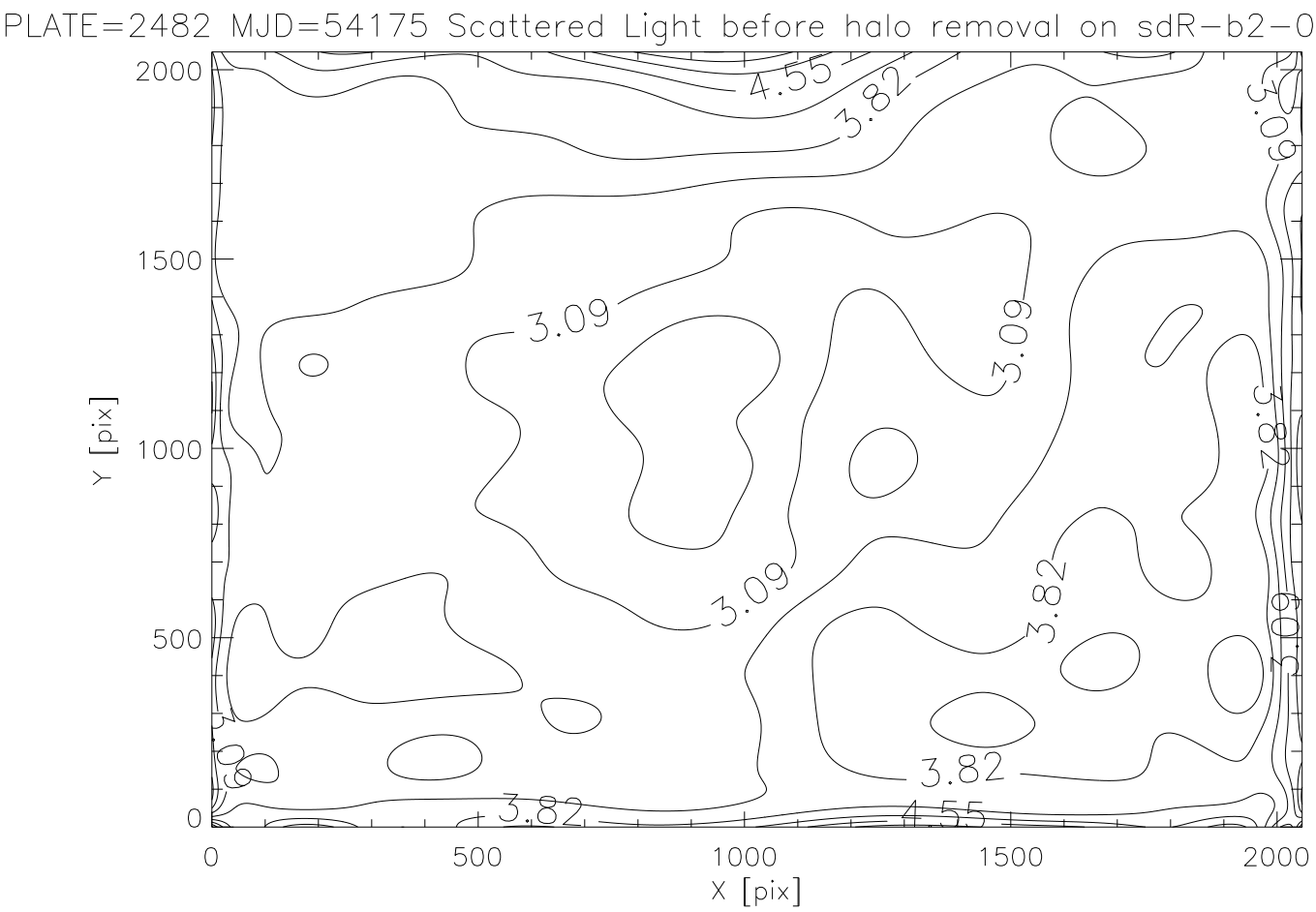

PLATE=2482 MJD=54175 sdR-b2-00043539.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

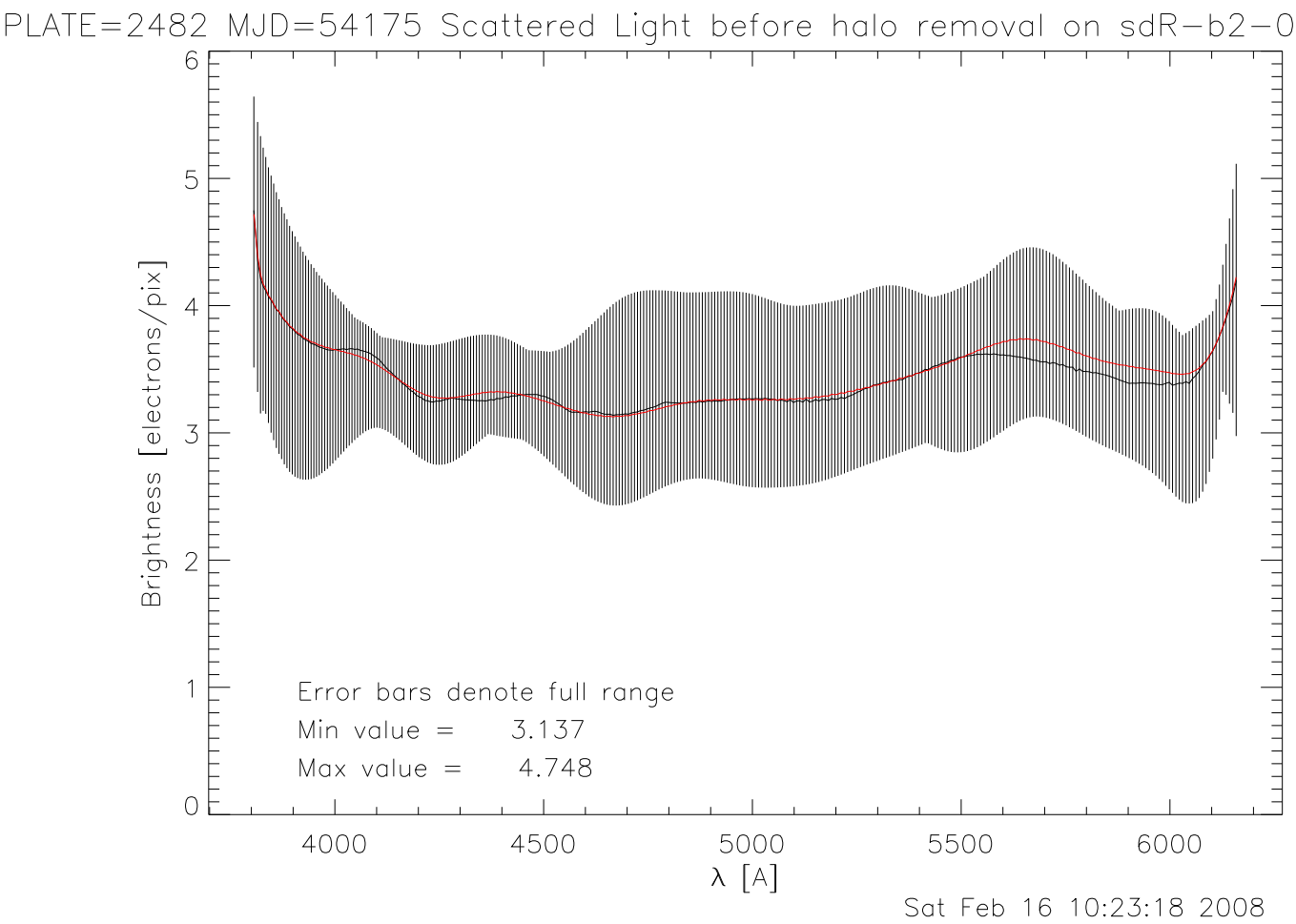

Number of sky fibers = 15
PLATE=2482 MJD=54175 sdR-b2-00043539.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

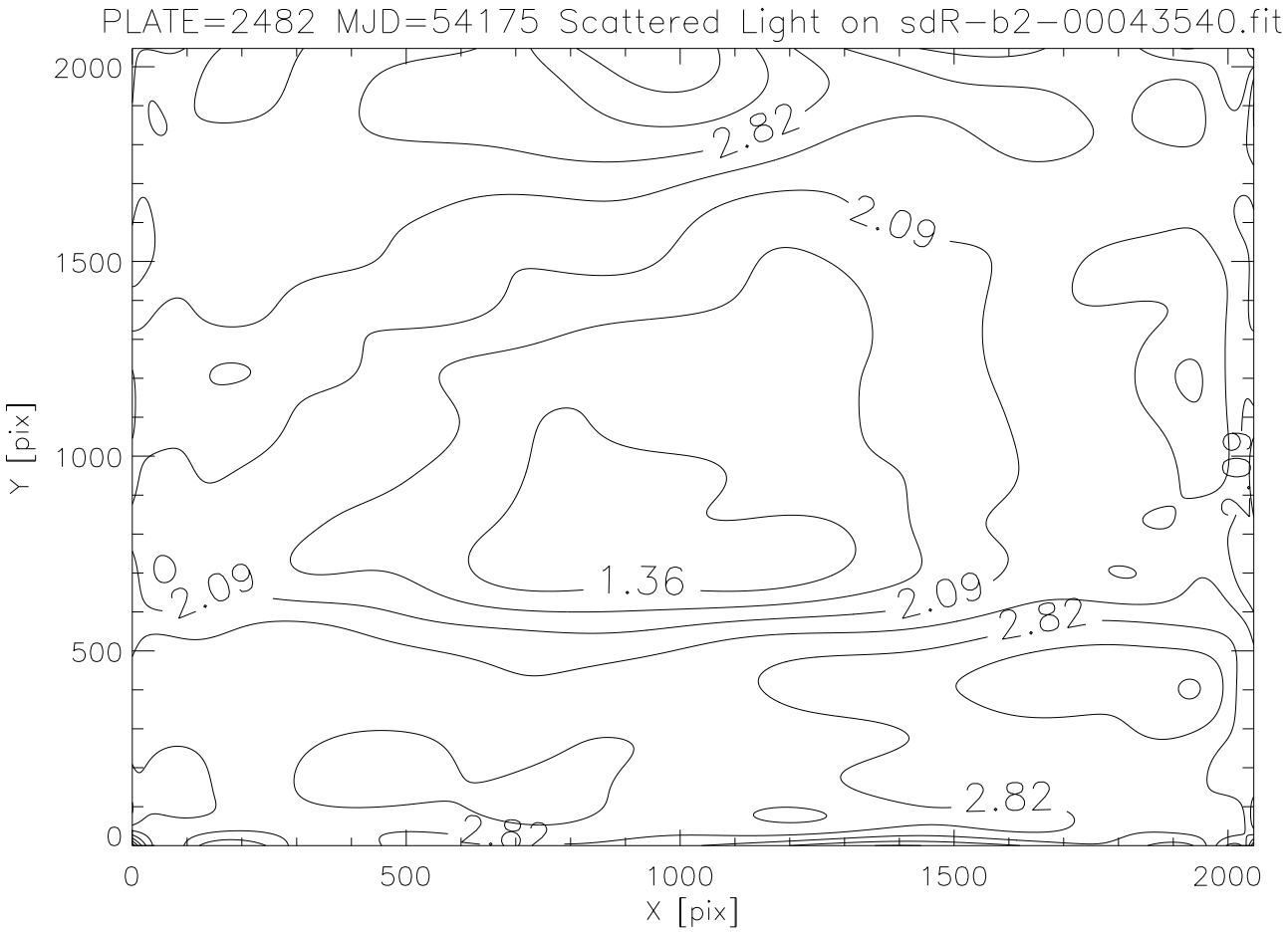

PLATE=2482 MJD=54175 sdR-b2-00043539.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.73 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

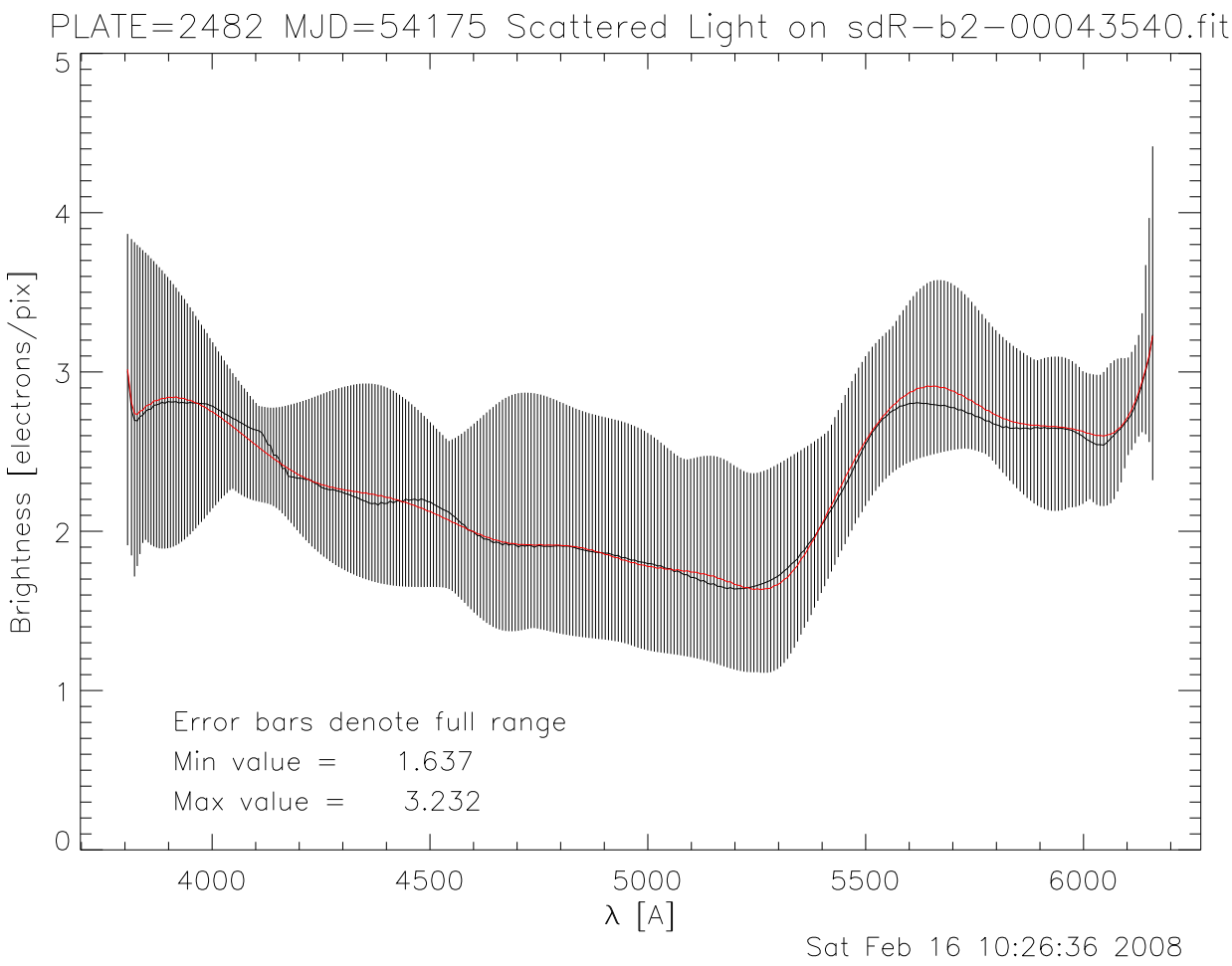

PLATE=2482 MJD=54175 sdR-b2-00043539.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.11 %
Fiber number
Focal Distance [mm]
Airmass

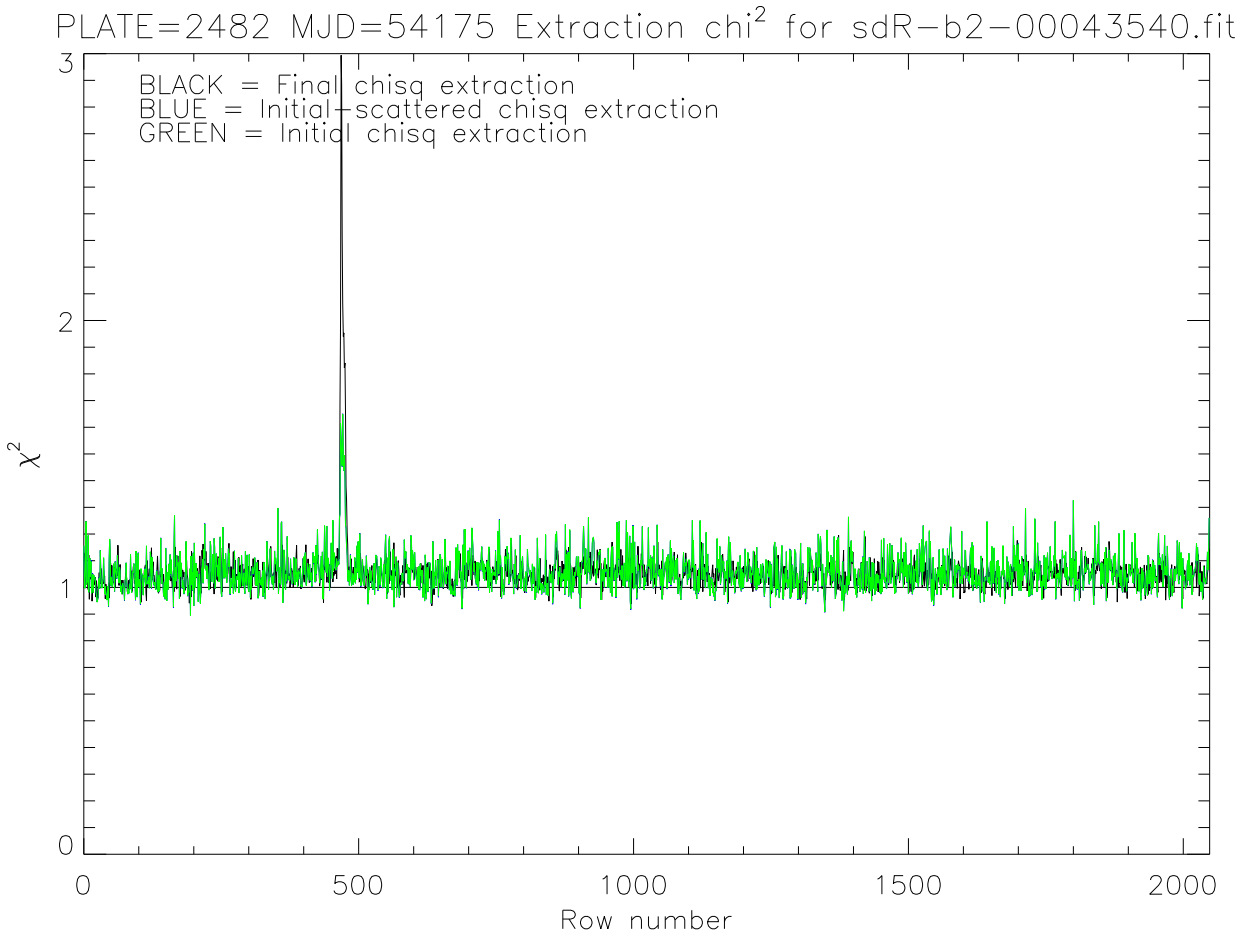

PLATE=2482 MJD=54175 Fiber-Flats for sdR-b2-00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.329
Max value = 1.177
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 10:22:29 2008

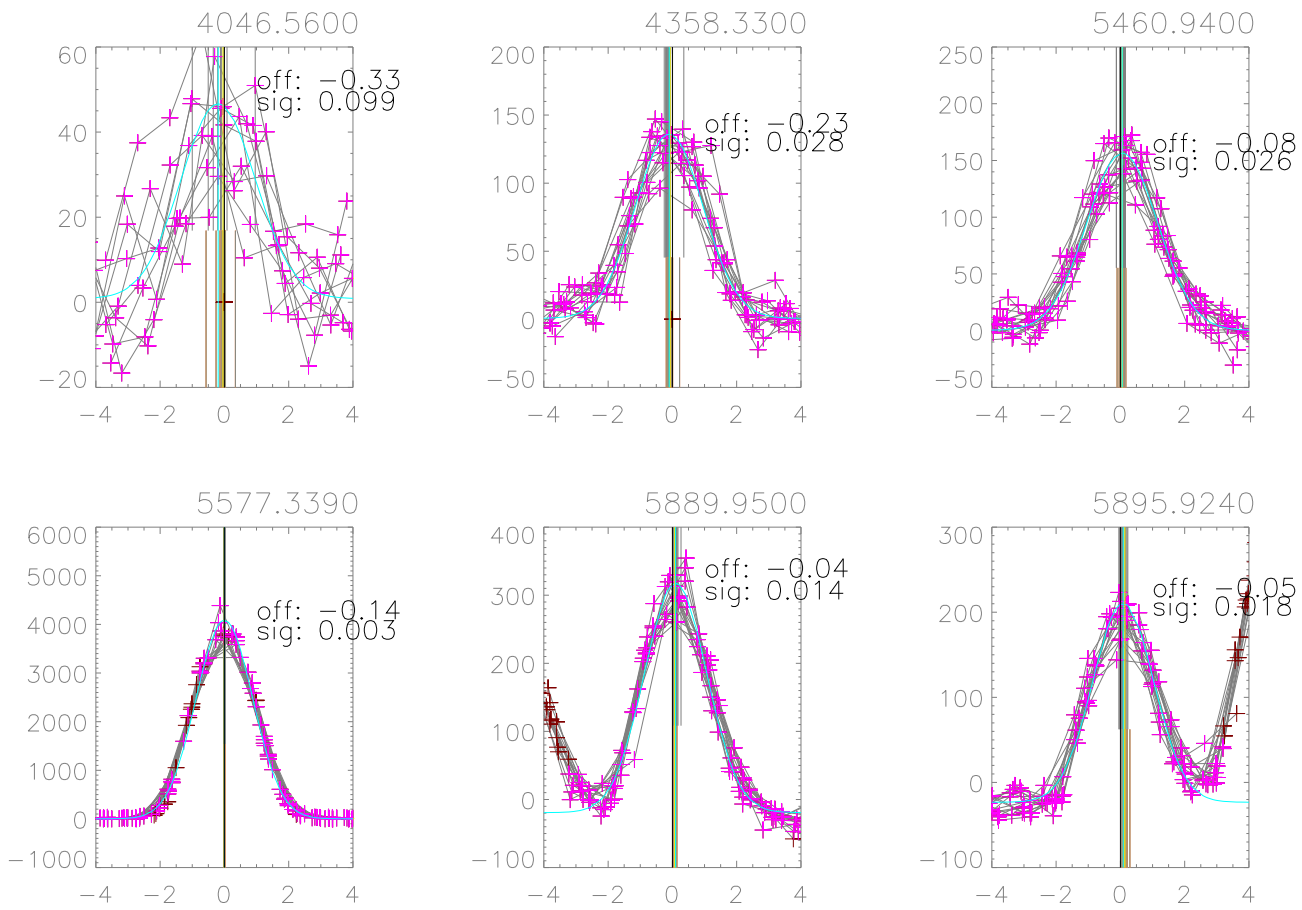

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR−b2−00043540.f
4.55
3.82
3.09
3.09
3.09
3.09
3.82
3.82
3.82
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

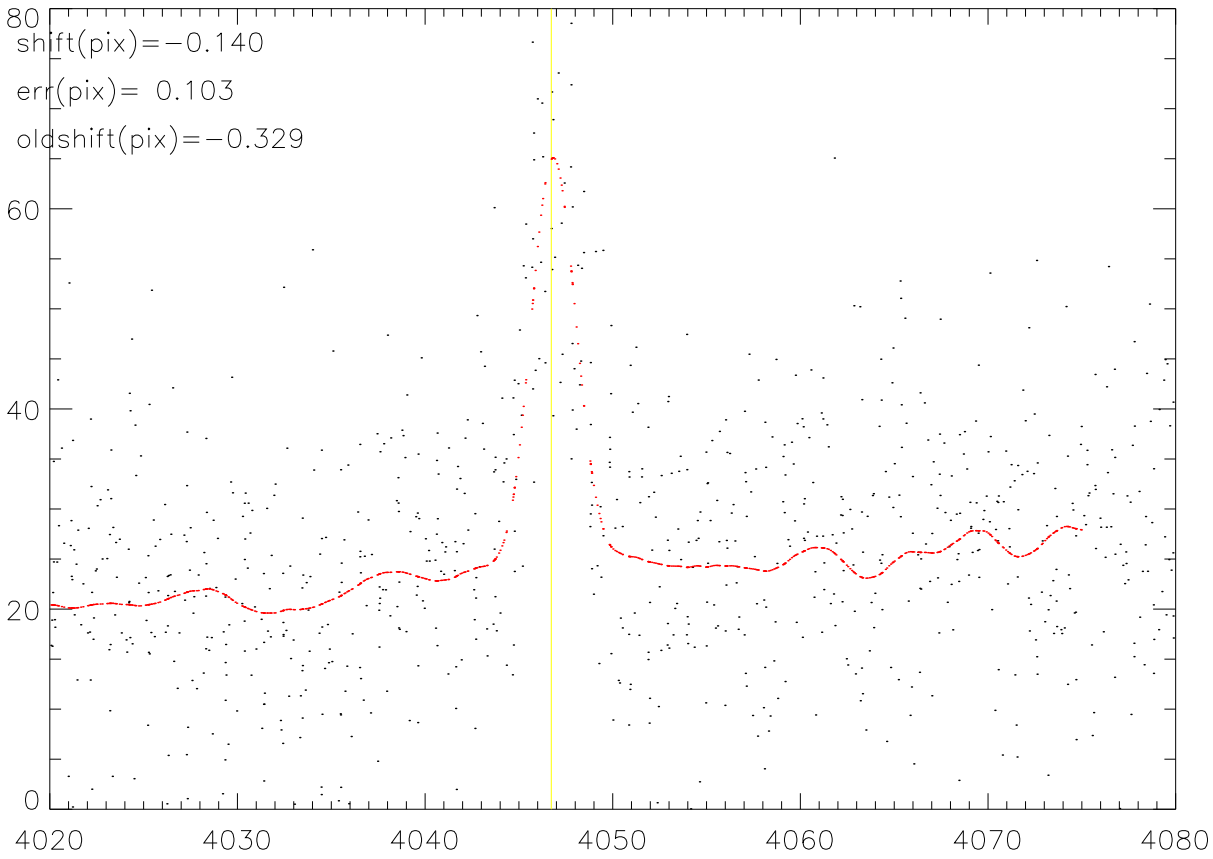

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-b2-00043540.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.137
Max value = 4.748
Sat Feb 16 10:23:18 2008

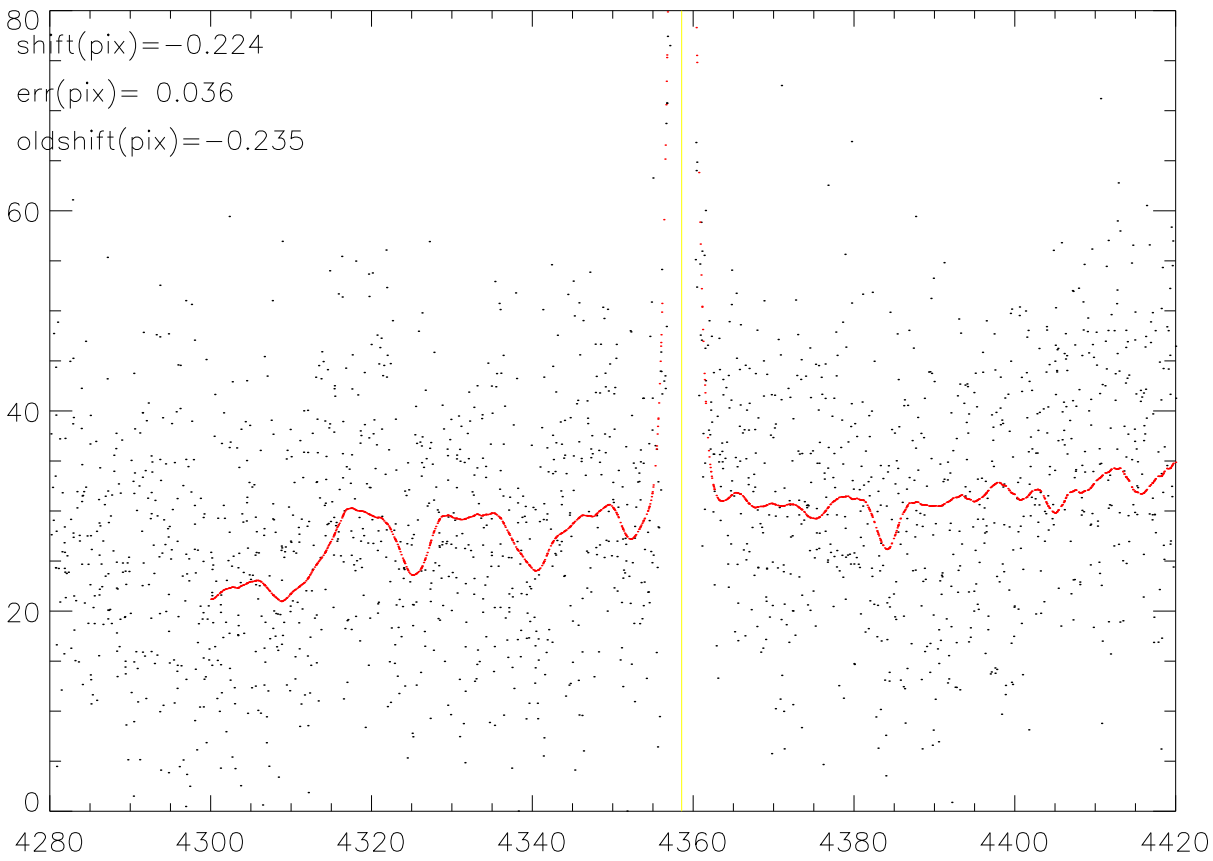

PLATE=2482 MJD=54175 Scattered Light on sdR-b2-00043540.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0
2.82
2.09
1.36
2.09
2.82
0
2.09
2.09
0
2.82
2.82

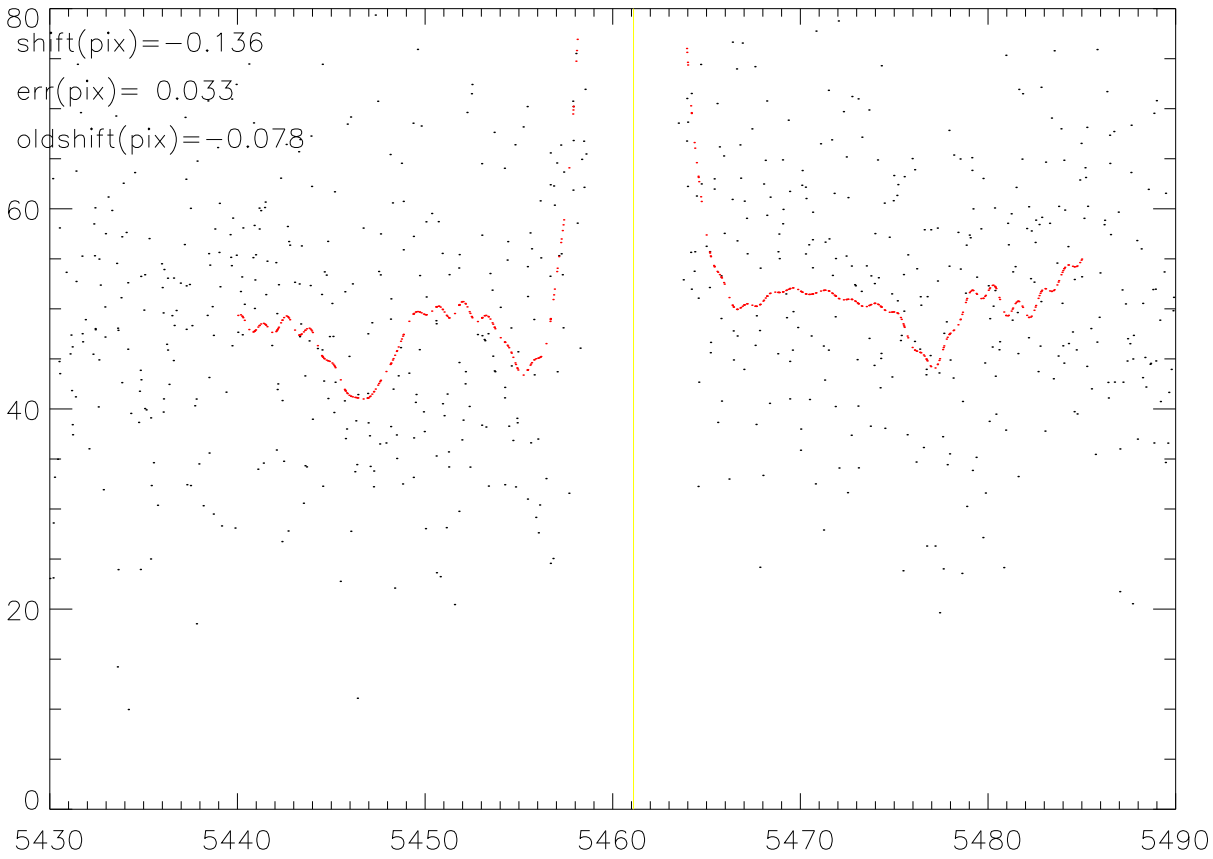

PLATE=2482 MJD=54175 Scattered Light on sdR-b2-00043540.fit
Brightness [electrons/pix]
0
1
2
3
4
5
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 1.637
Max value = 3.232
Sat Feb 16 10:26:36 2008

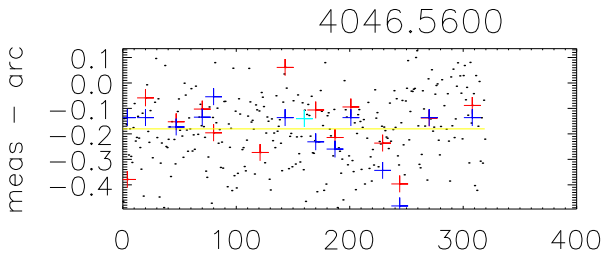

PLATE=2482 MJD=54175 Extraction chi^2 for sdR-b2-00043540.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

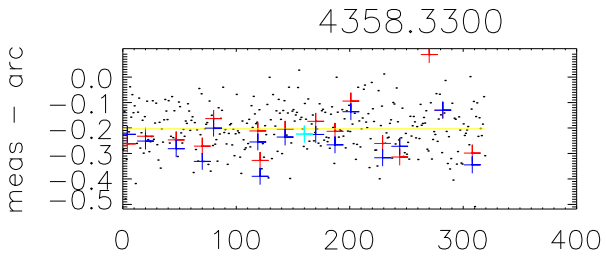

4046.5600
off: −0.33
sig: 0.099
4358.3300
off: −0.23
sig: 0.028
5460.9400
off: −0.08
sig: 0.026
5577.3390
off: −0.14
sig: 0.003
5889.9500
off: −0.04
sig: 0.014
5895.9240
off: −0.05
sig: 0.018

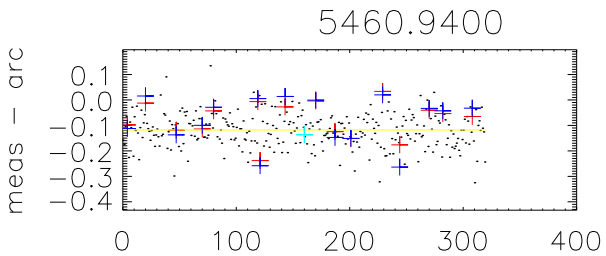

shift(pix)=−0.140
err(pix)= 0.103
oldshift(pix)=−0.329
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

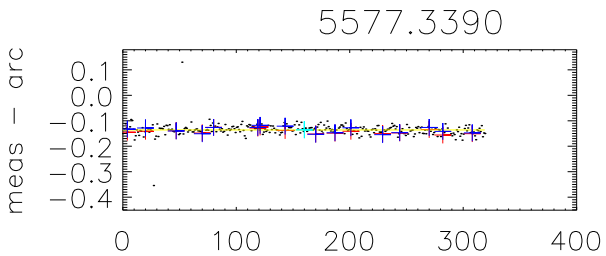

shift(pix)=−0.224
err(pix)= 0.036
oldshift(pix)=−0.235
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

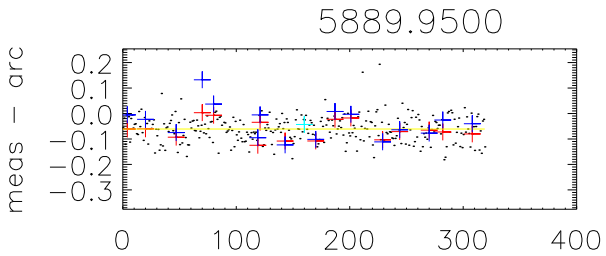

shift(pix)=−0.136
err(pix)= 0.033
oldshift(pix)=−0.078
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

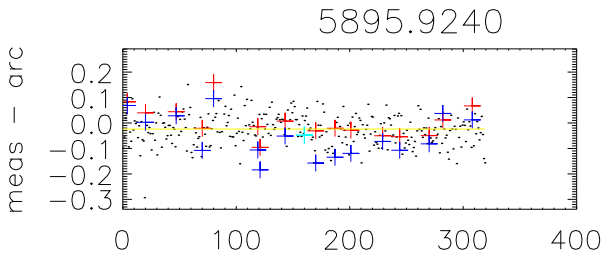

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

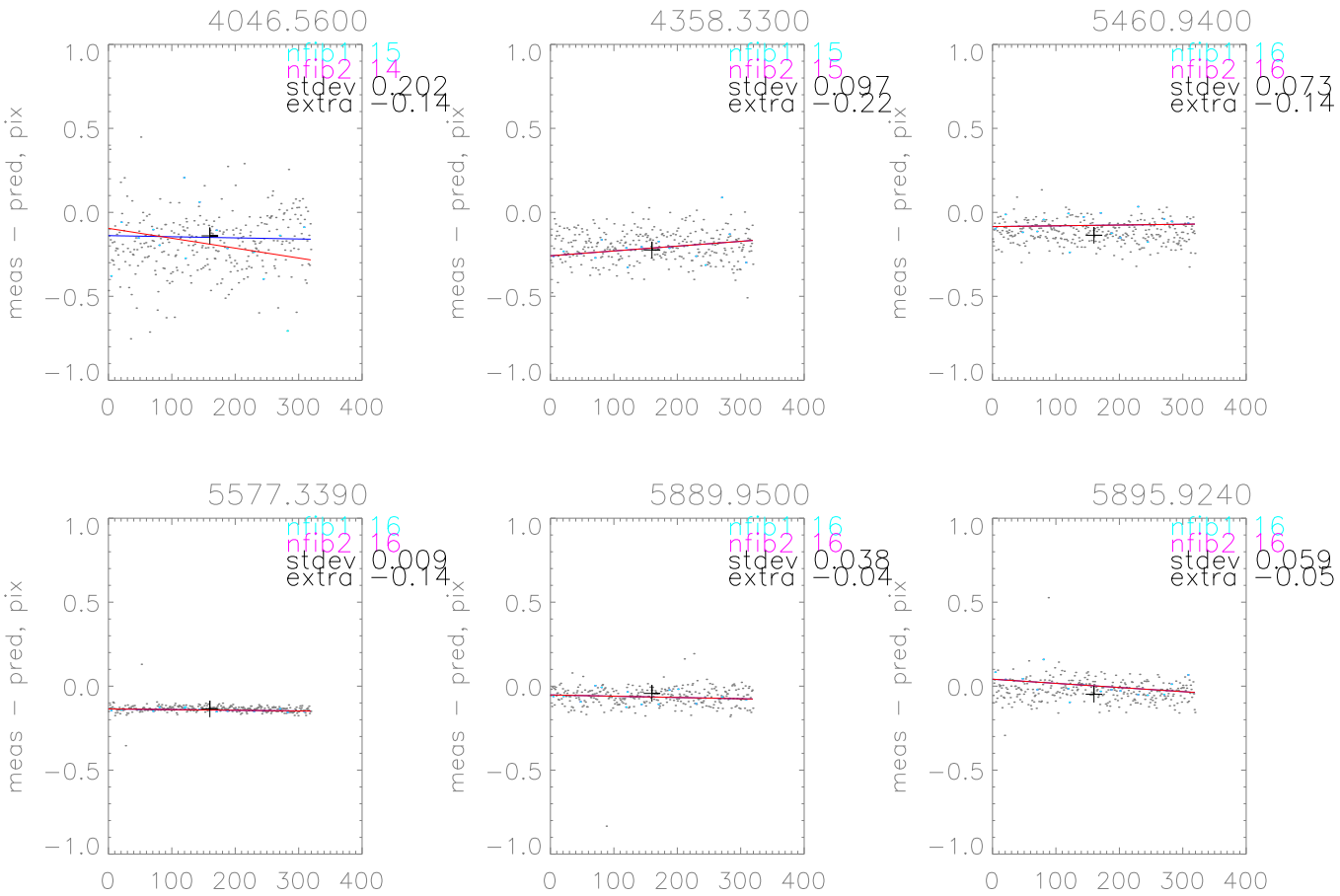

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

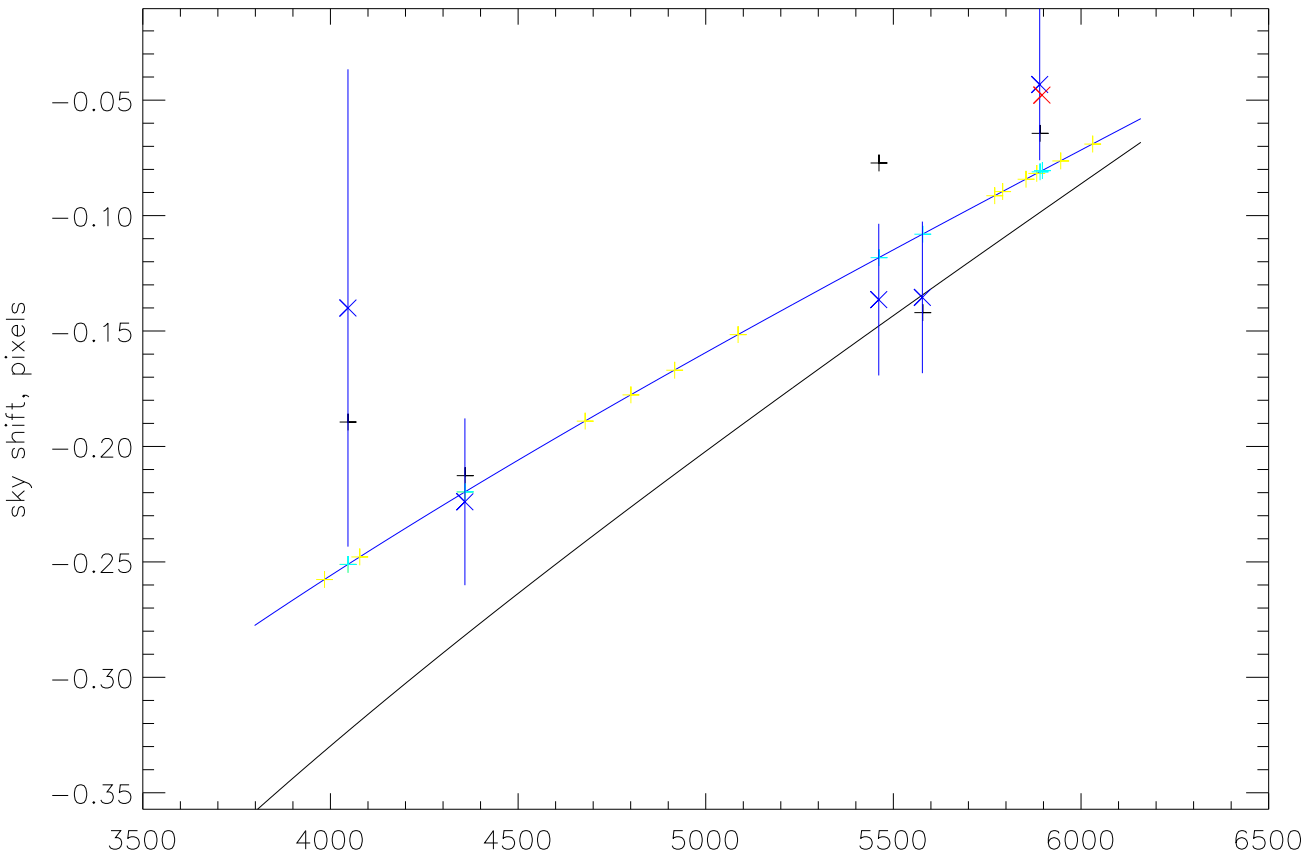

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

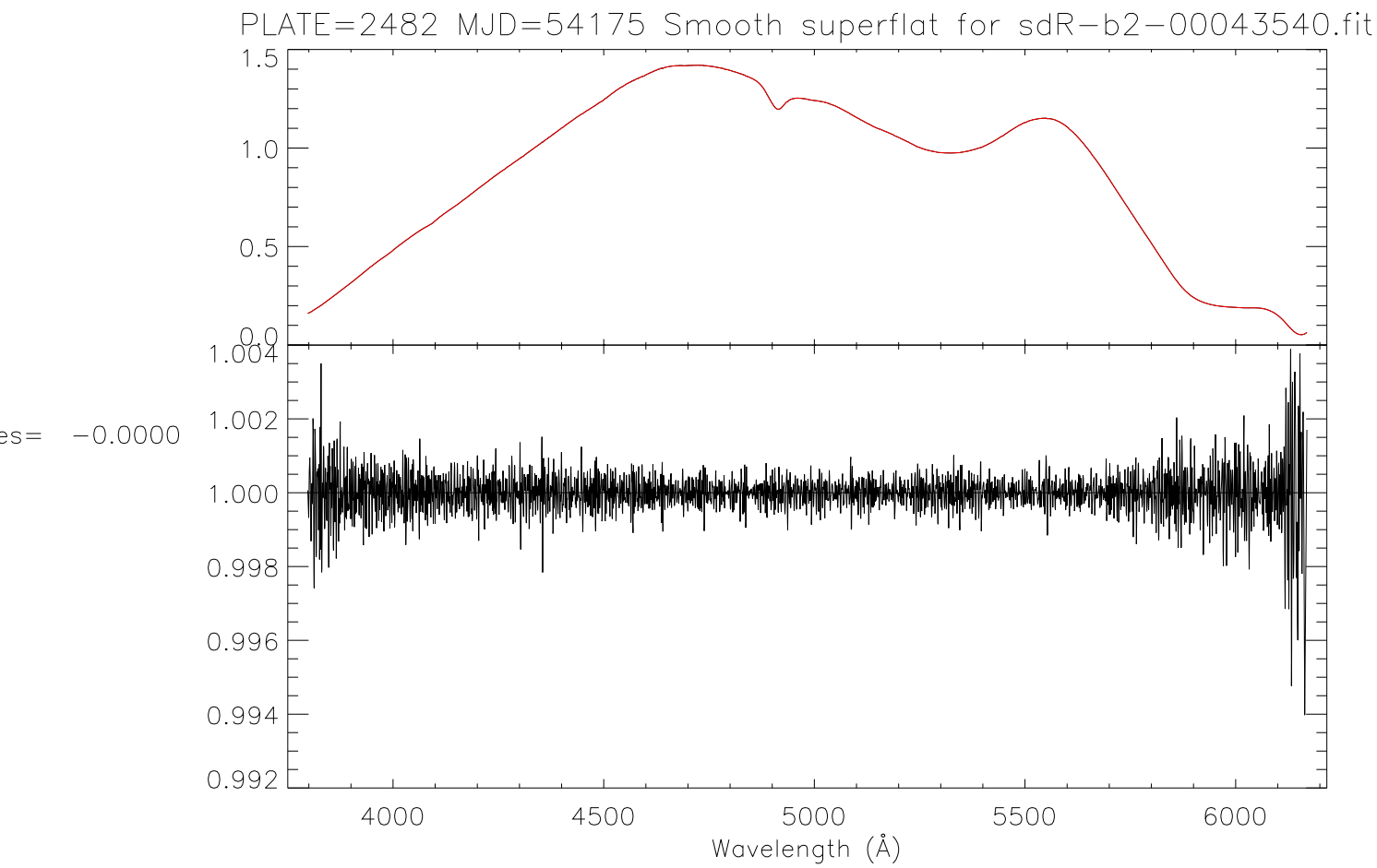

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

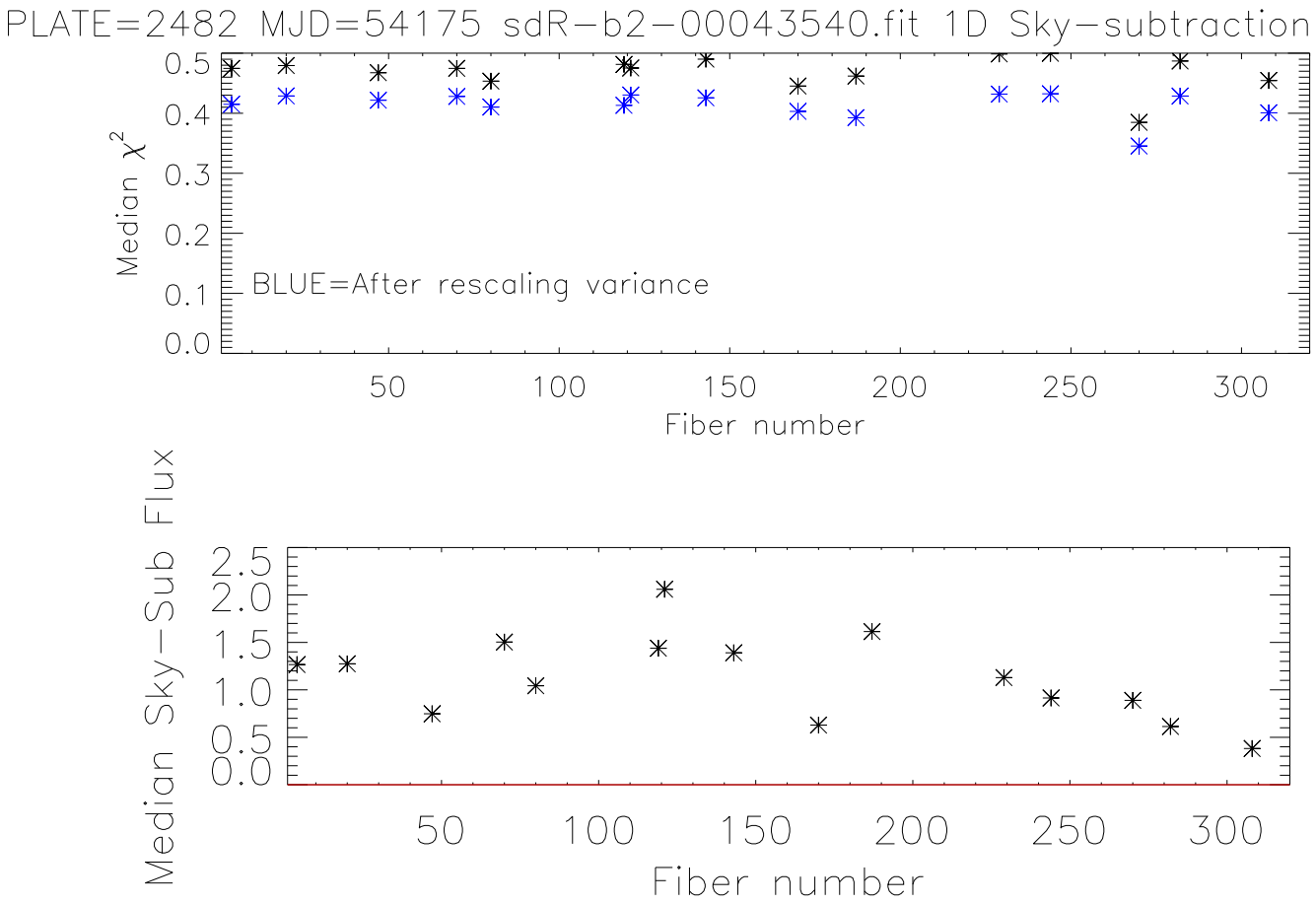

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

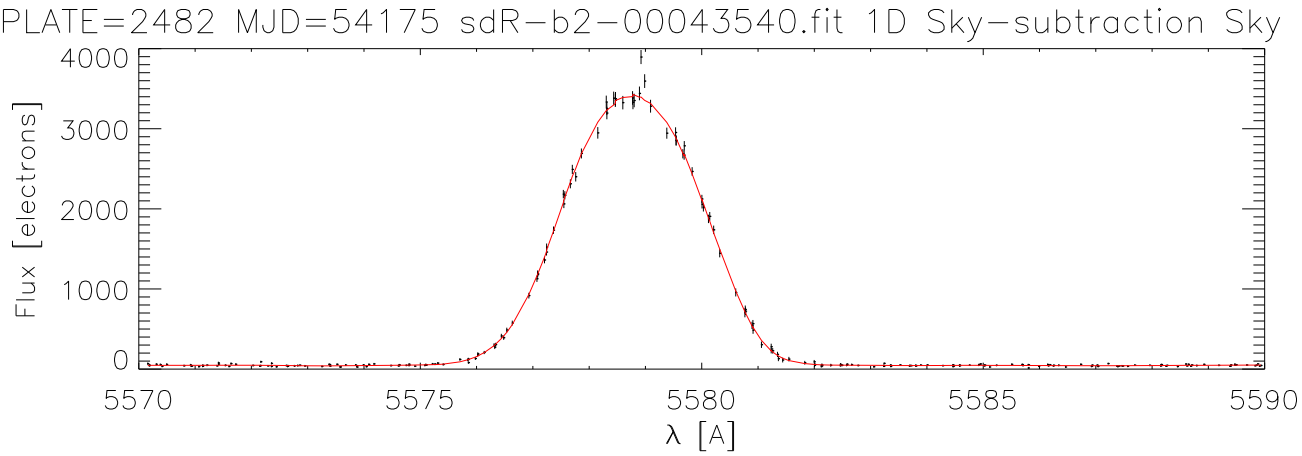

4046.5600
nfib1 15
nfib2 14
stdev 0.202
extra −0.14
4358.3300
nfib1 15
nfib2 15
stdev 0.097
extra −0.22
5460.9400
nfib1 16
nfib2 16
stdev 0.073
extra −0.14
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra −0.14
5889.9500
nfib1 16
nfib2 16
stdev 0.038
extra −0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.059
extra −0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

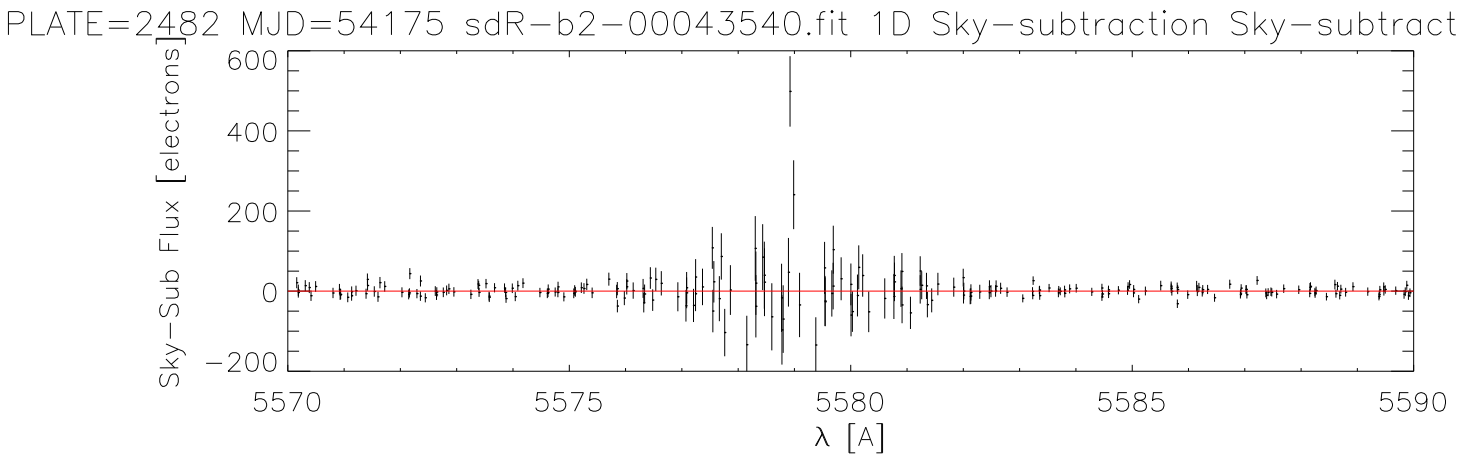

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
3500
4000
4500
5000
5500
6000
6500

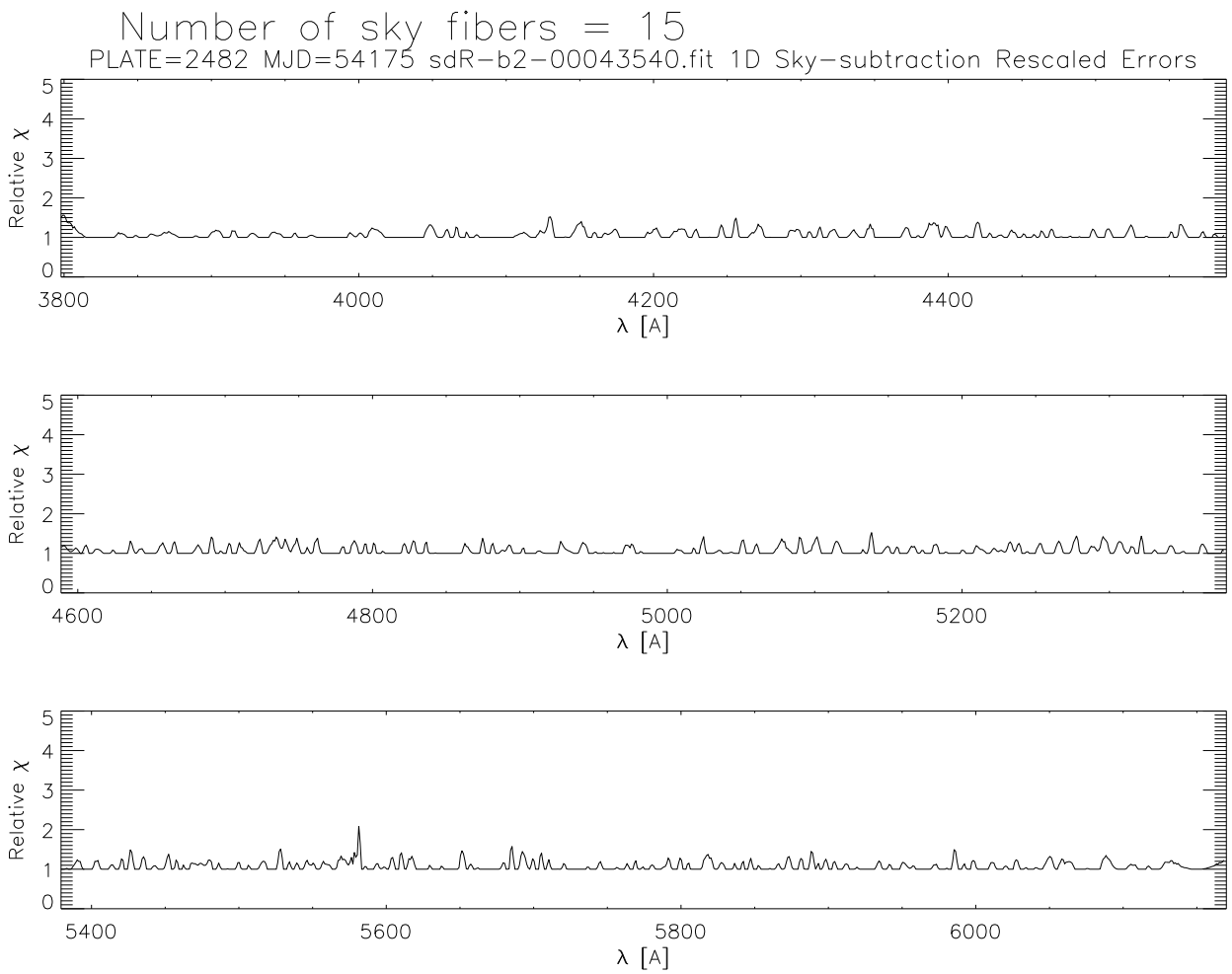

PLATE=2482 MJD=54175 Smooth superflat for sdR-b2-00043540.fit
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

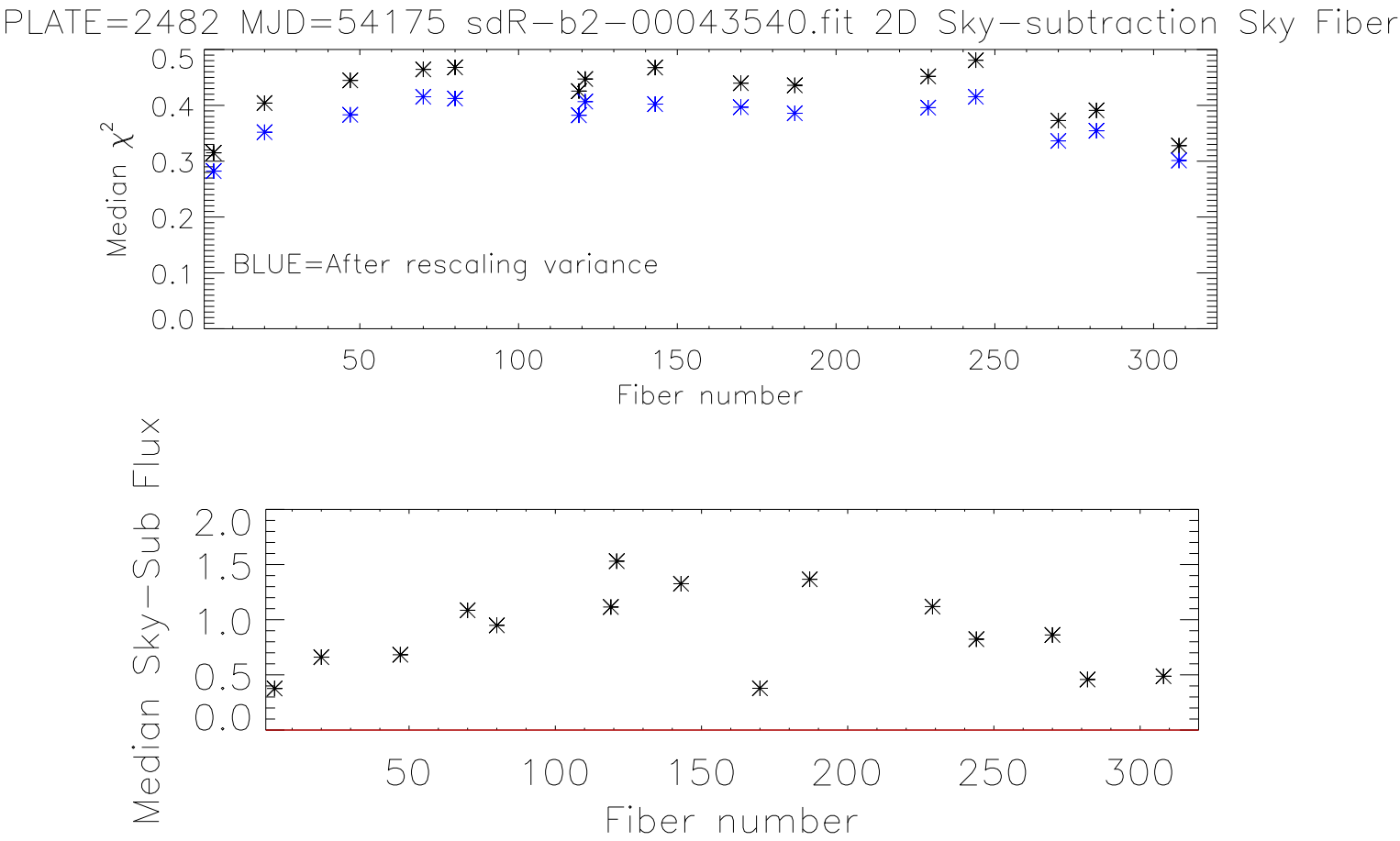
es= −0.0000

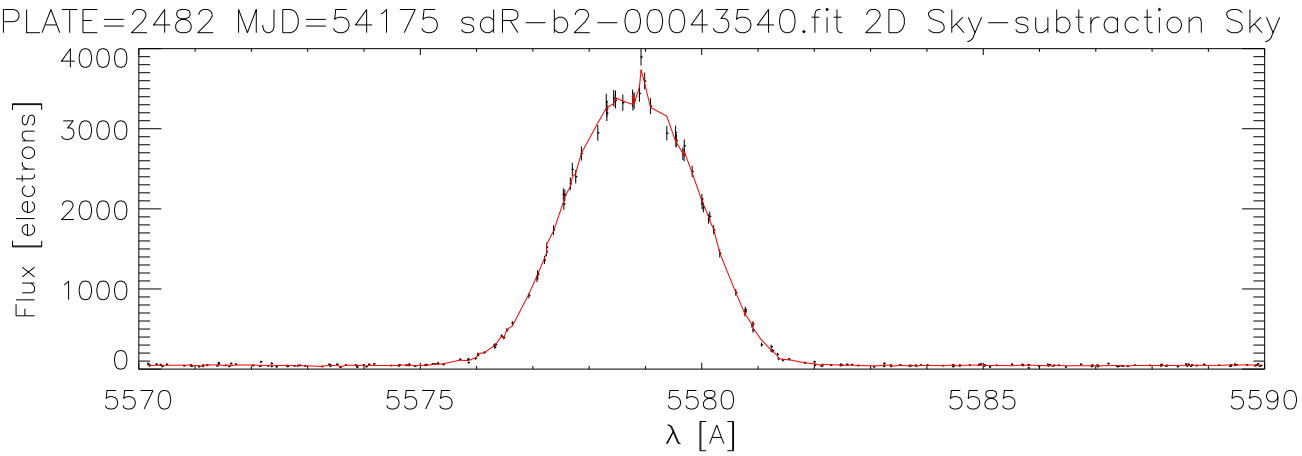

PLATE=2482 MJD=54175 sdR-b2-00043540.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

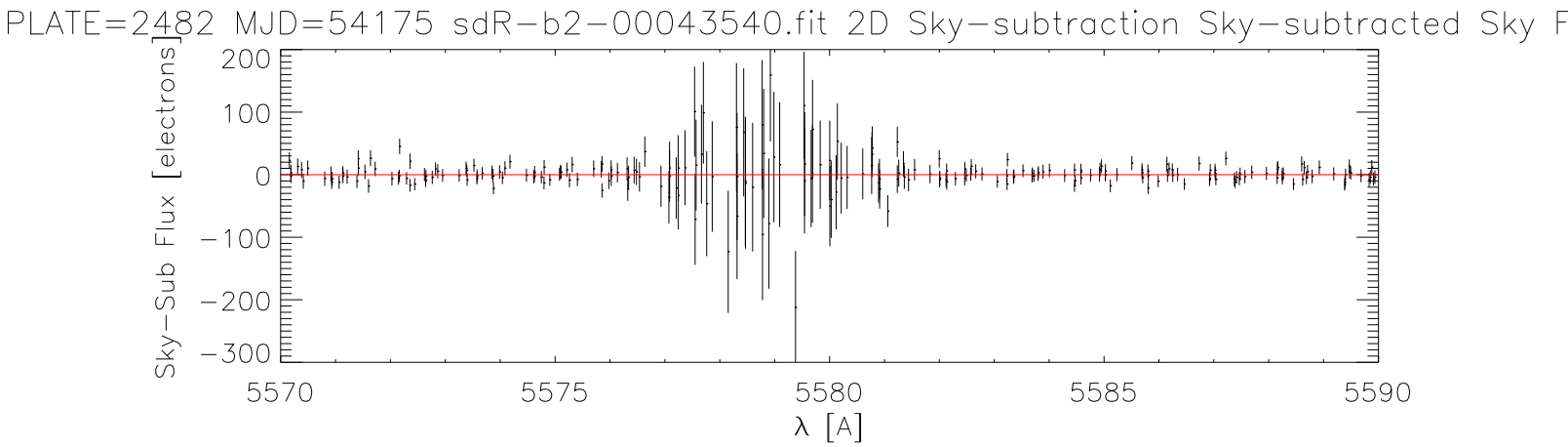

PLATE=2482 MJD=54175 sdR-b2-00043540.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

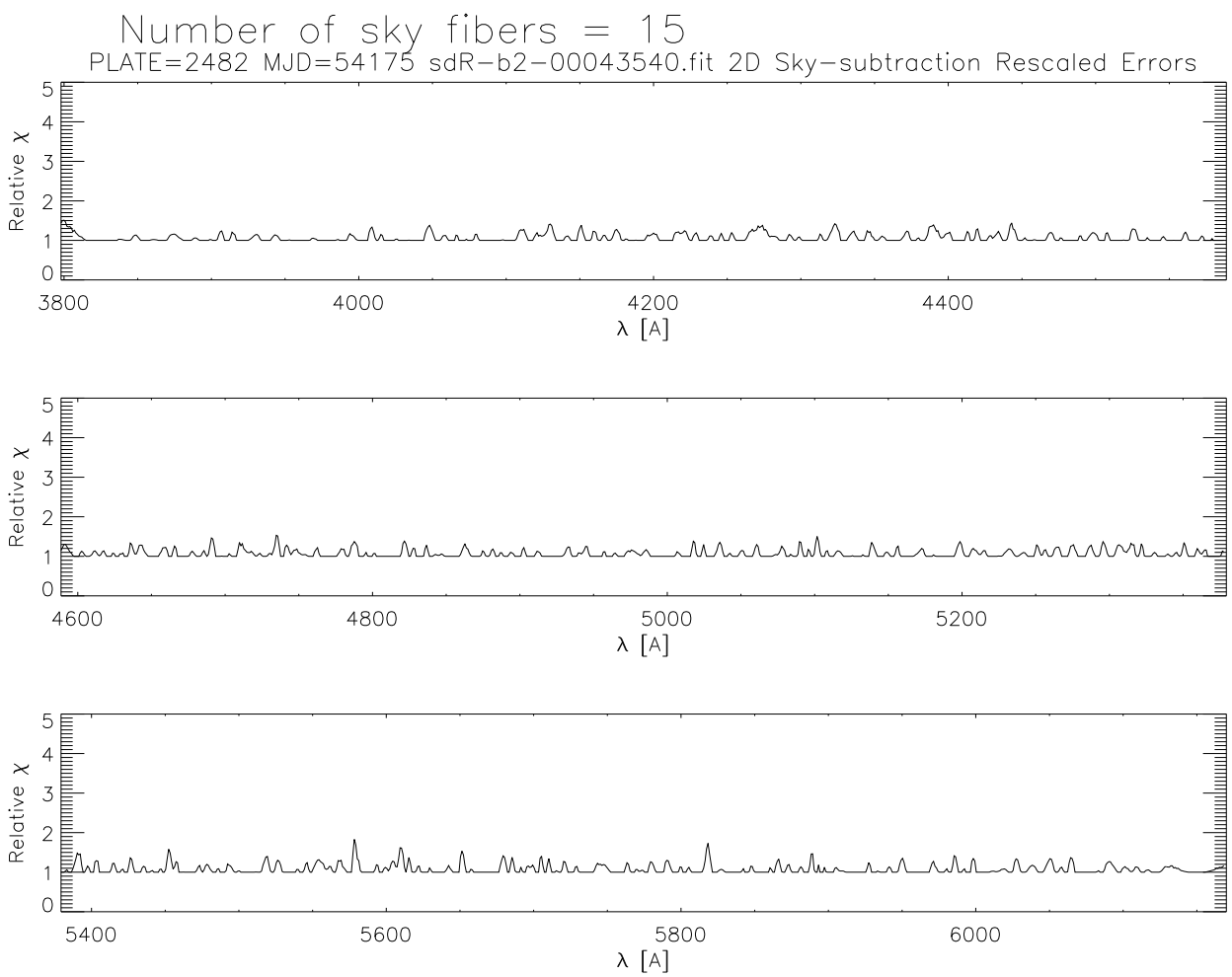

PLATE=2482 MJD=54175 sdR-b2-00043540.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

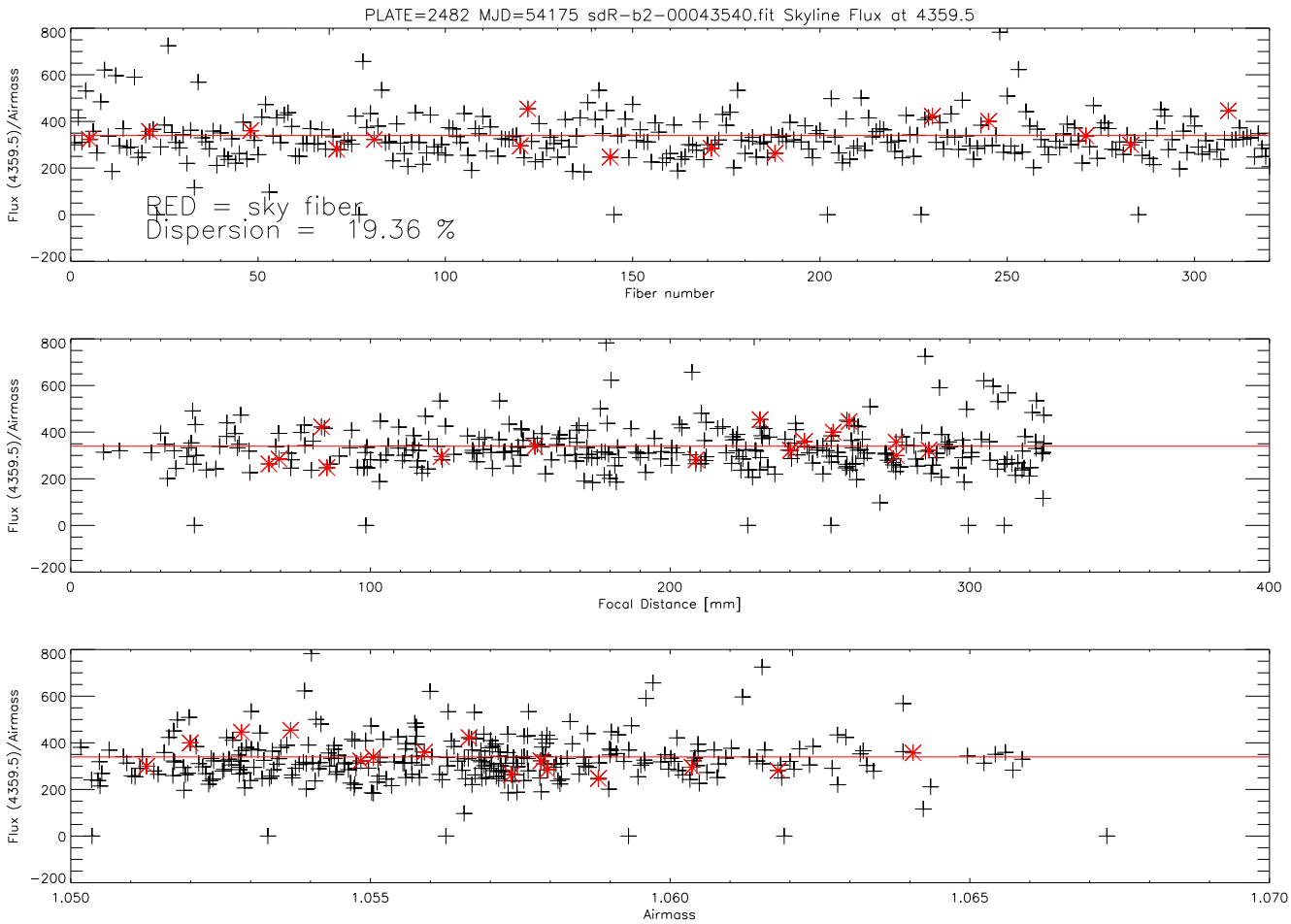

Number of sky fibers = 15
PLATE=2482 MJD=54175 sdR-b2-00043540.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

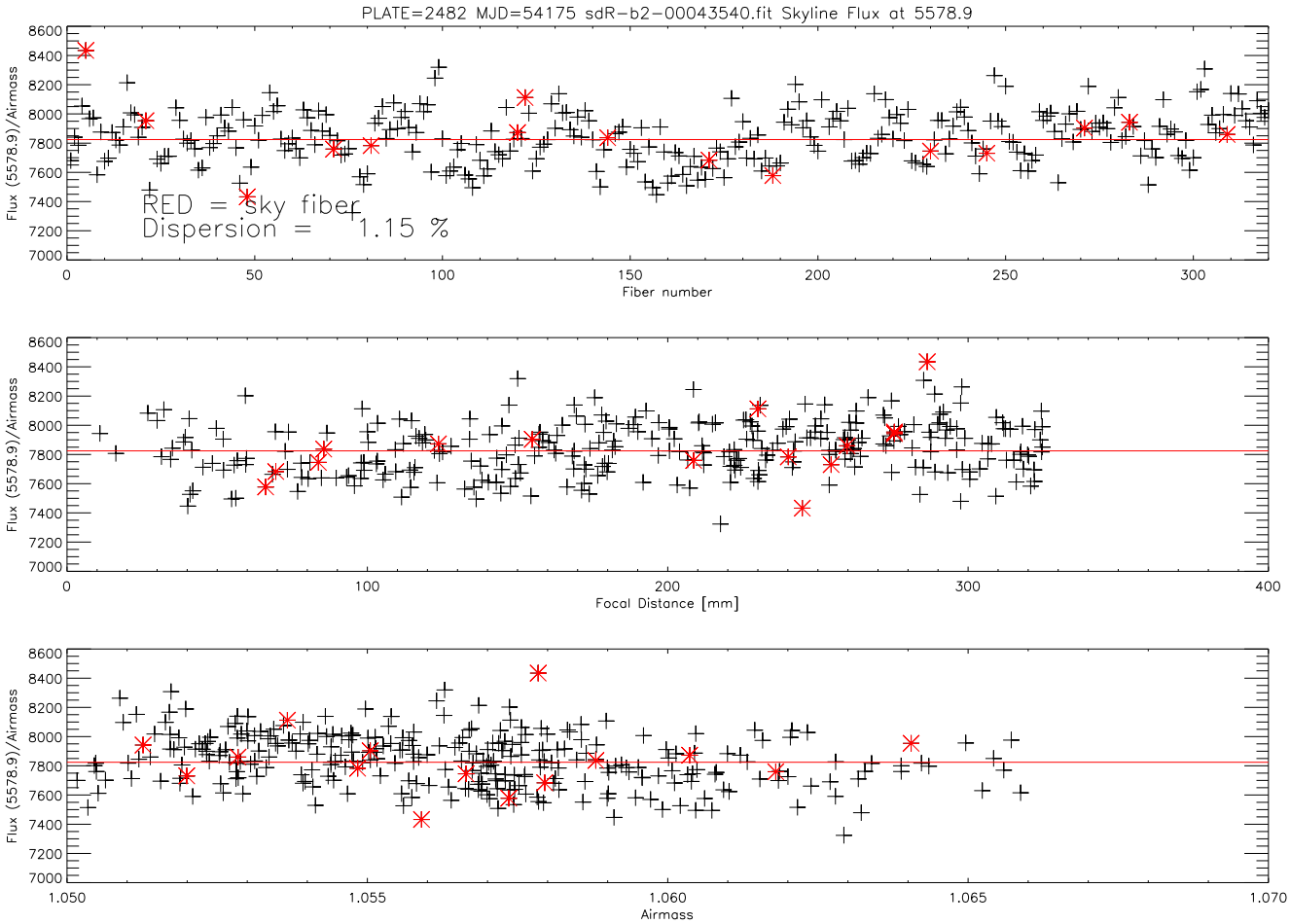

PLATE=2482 MJD=54175 sdR-b2-00043540.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

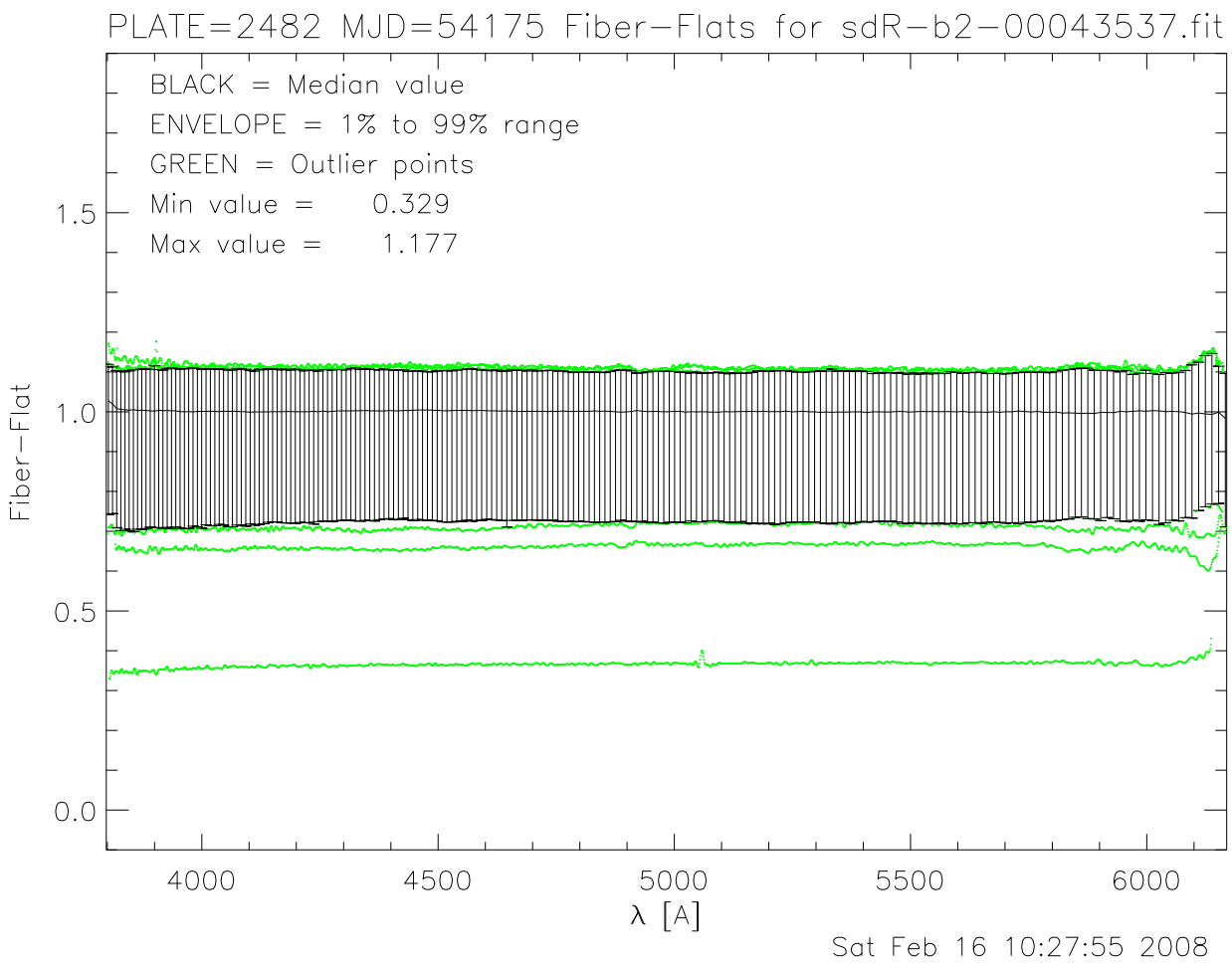

PLATE=2482 MJD=54175 sdR-b2-00043540.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

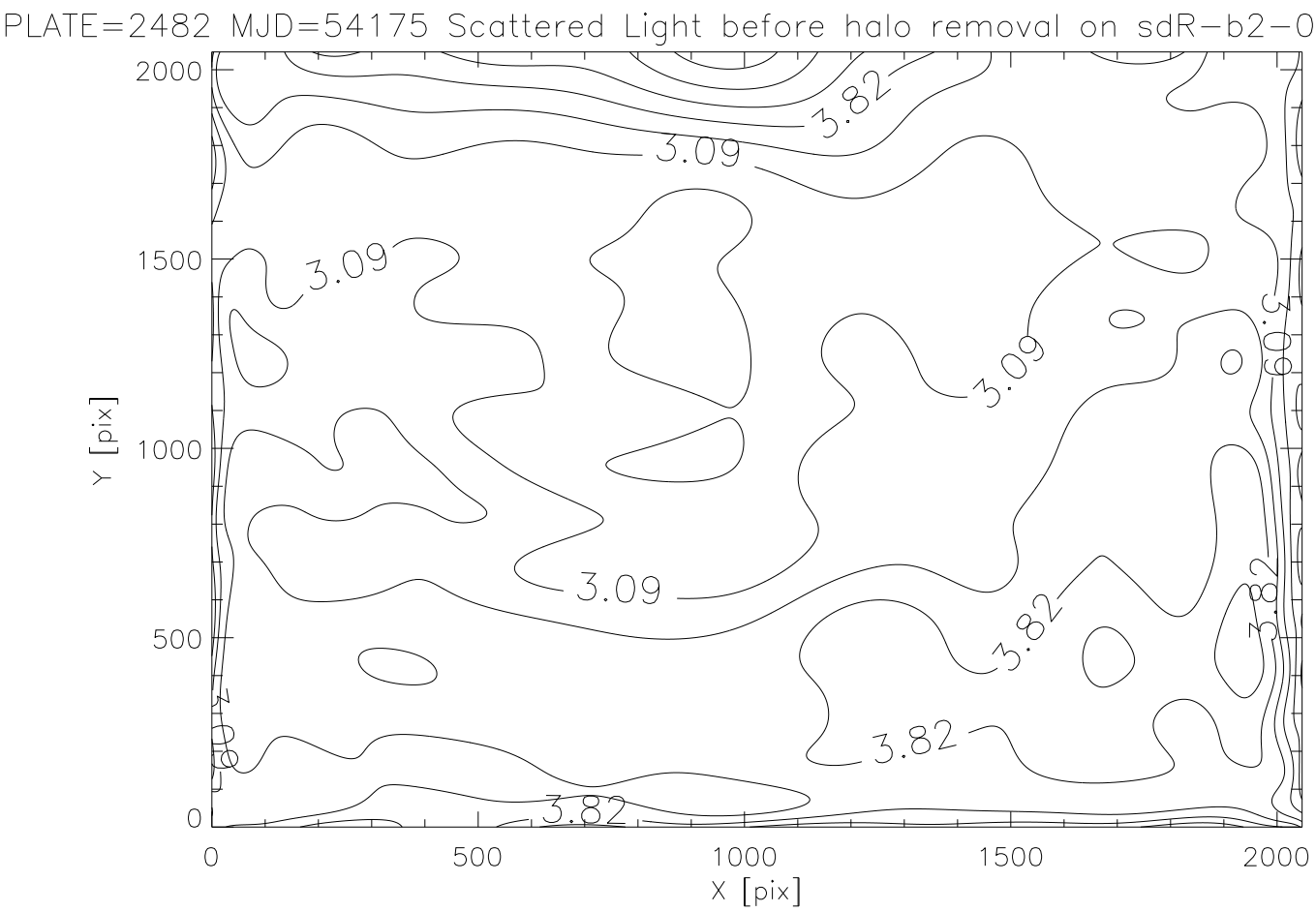

PLATE=2482 MJD=54175 sdR-b2-00043540.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

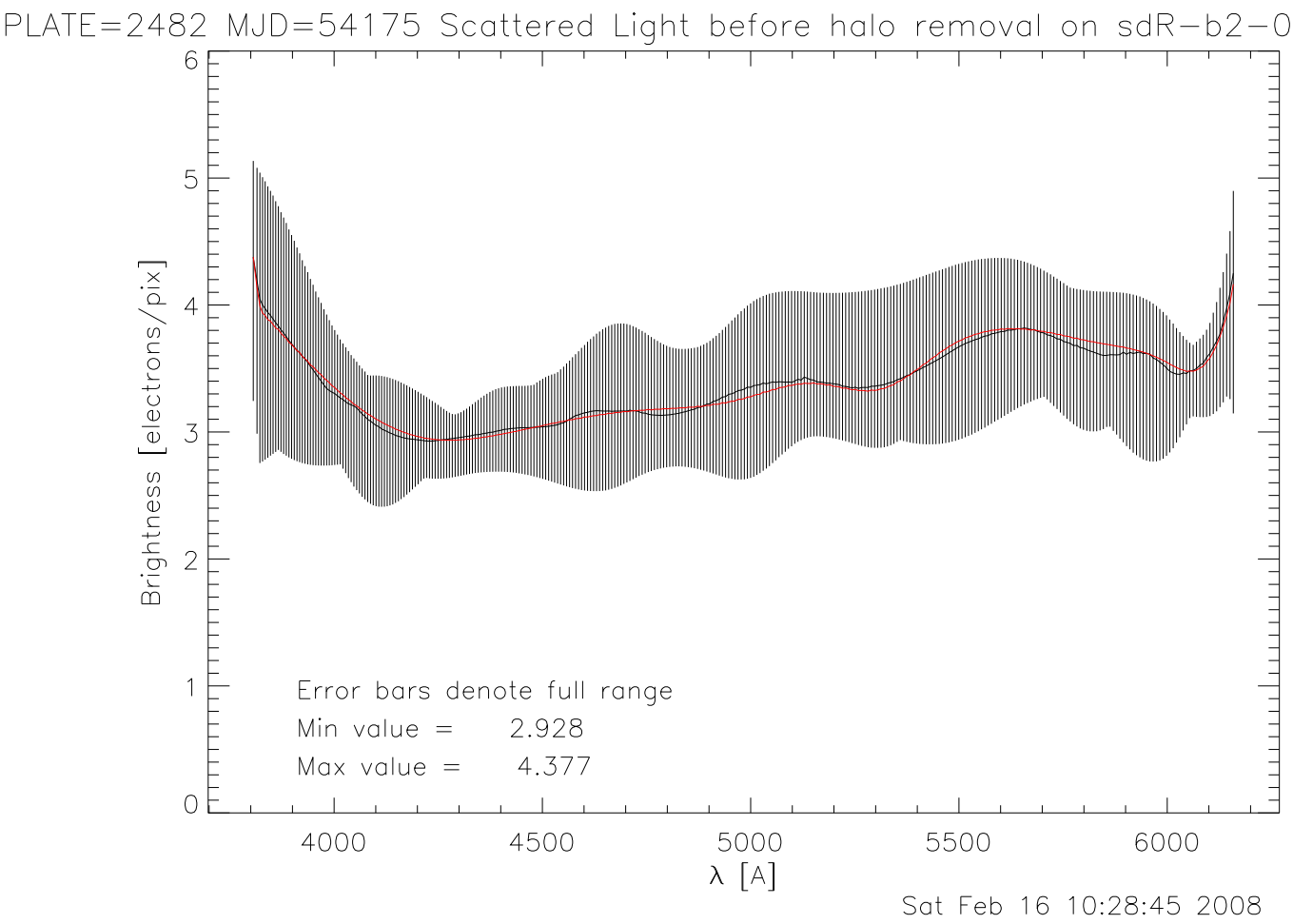

Number of sky fibers = 15
PLATE=2482 MJD=54175 sdR-b2-00043540.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

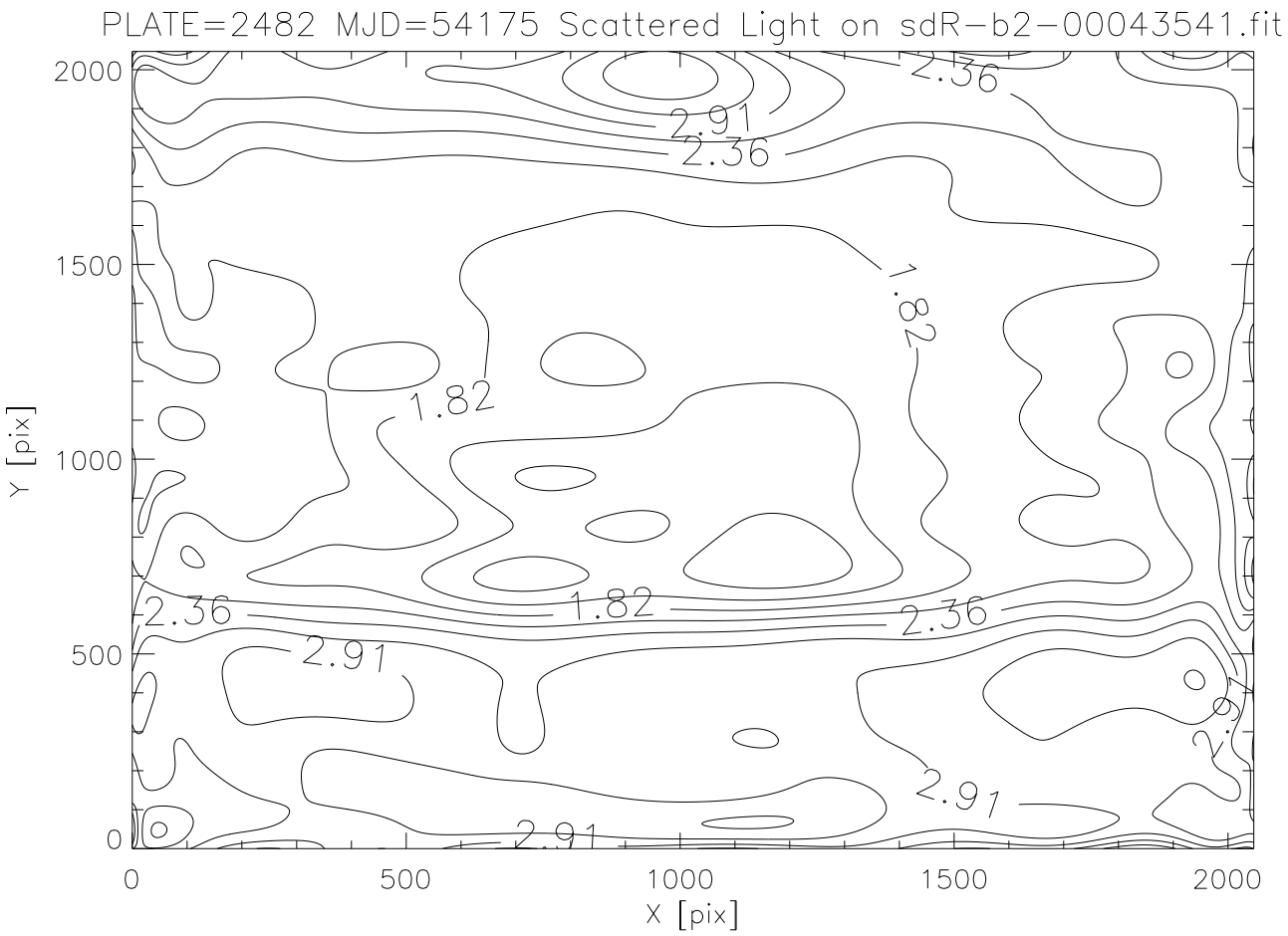

PLATE=2482 MJD=54175 sdR-b2-00043540.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 19.36 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

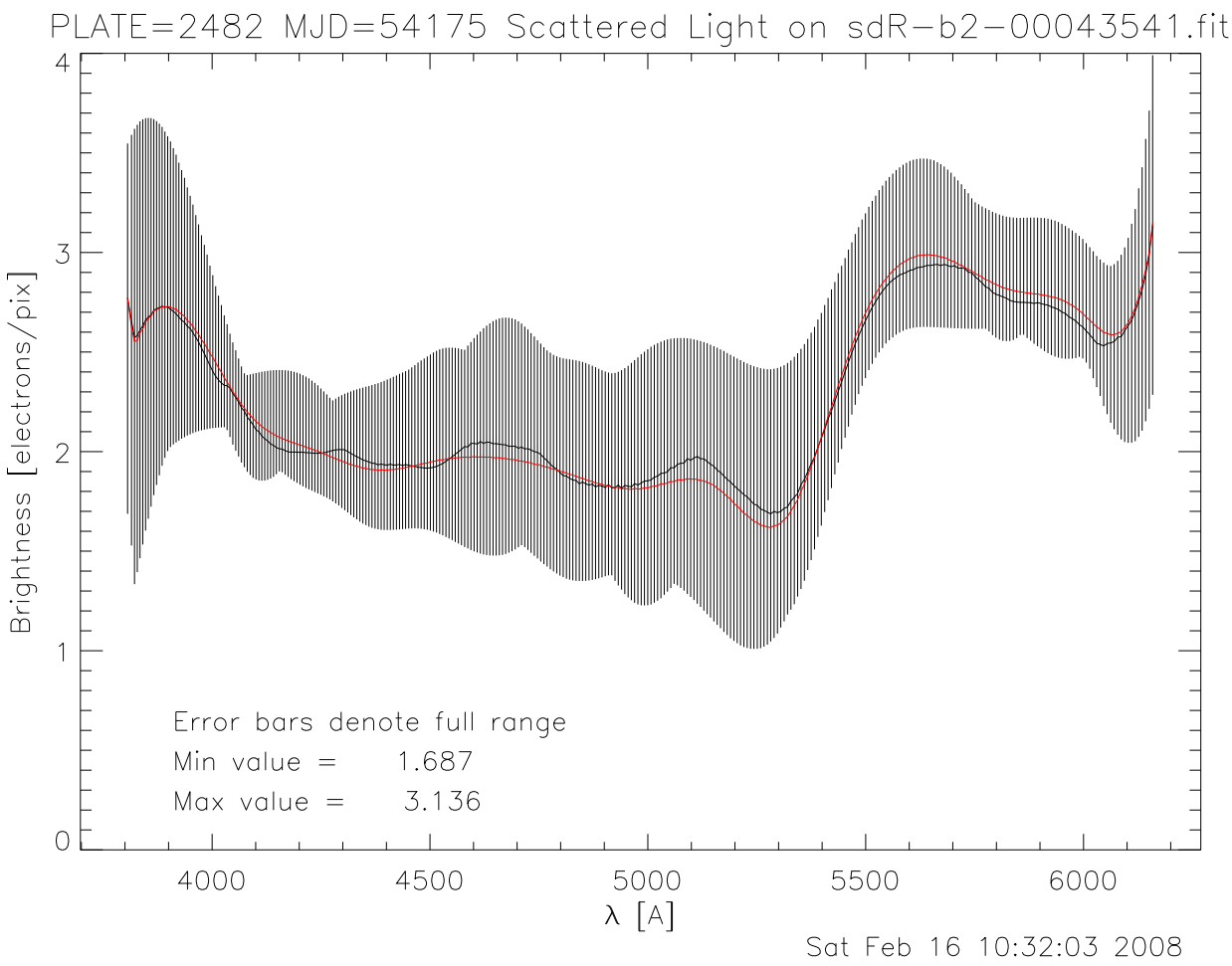

PLATE=2482 MJD=54175 sdR-b2-00043540.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.15 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

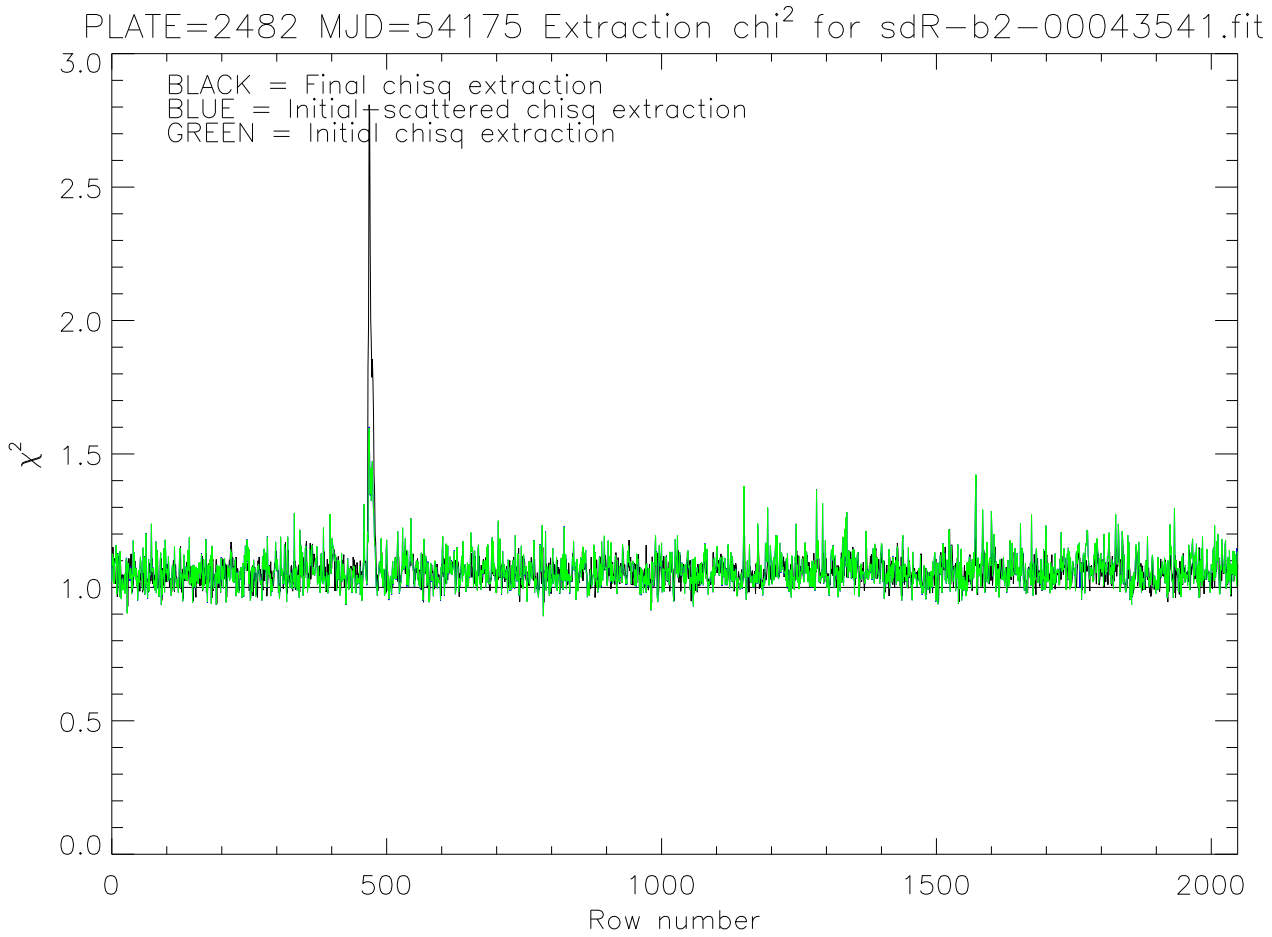

PLATE=2482 MJD=54175 Fiber-Flats for sdR-b2-00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.329
Max value = 1.177
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 10:27:55 2008

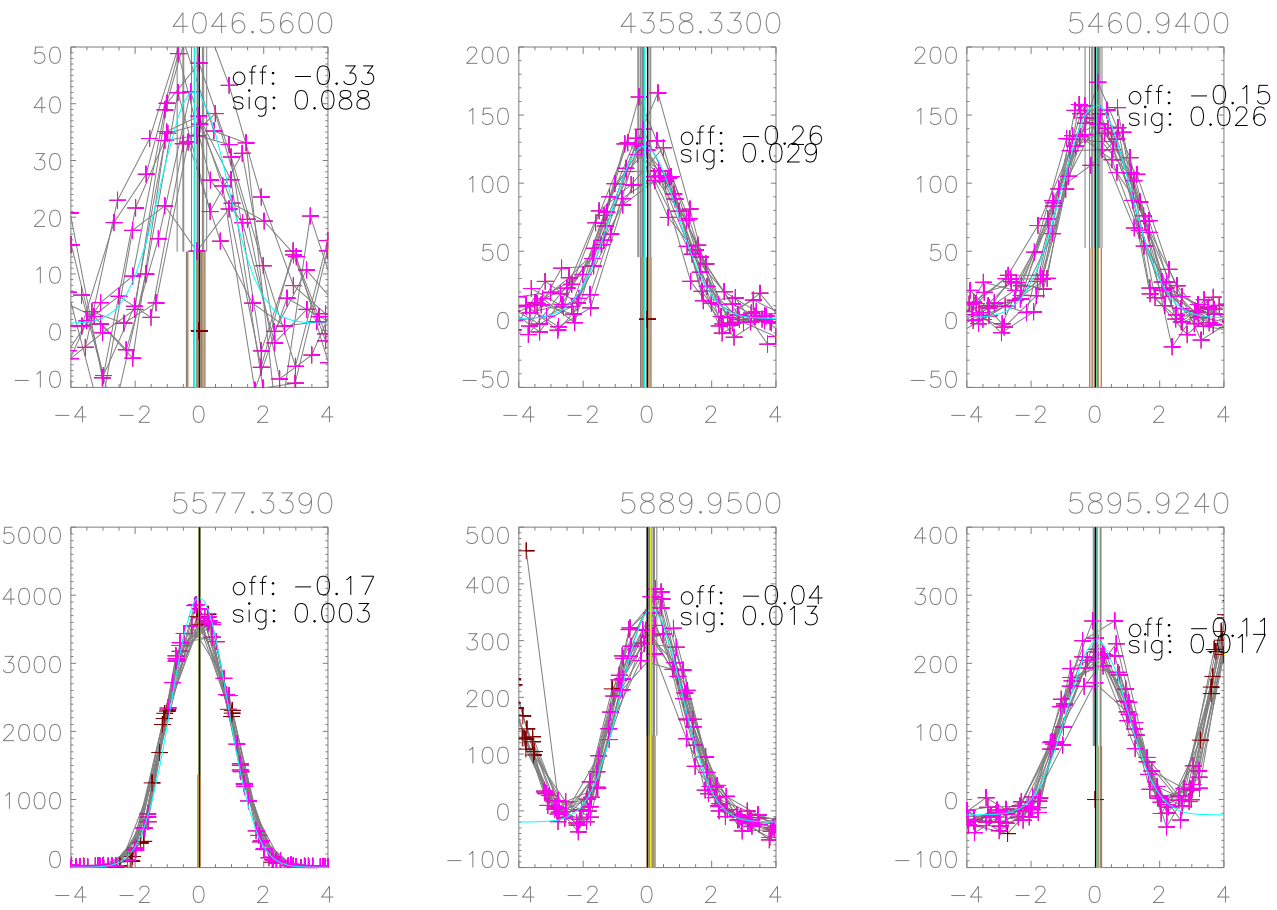

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR−b2−00043541.f
3.82
3.09
3.09
3.09
3.09
3.82
3.82
3.82
3.82
3.82
Y [pix]
X [pix]
0
500
1000
1500
2000

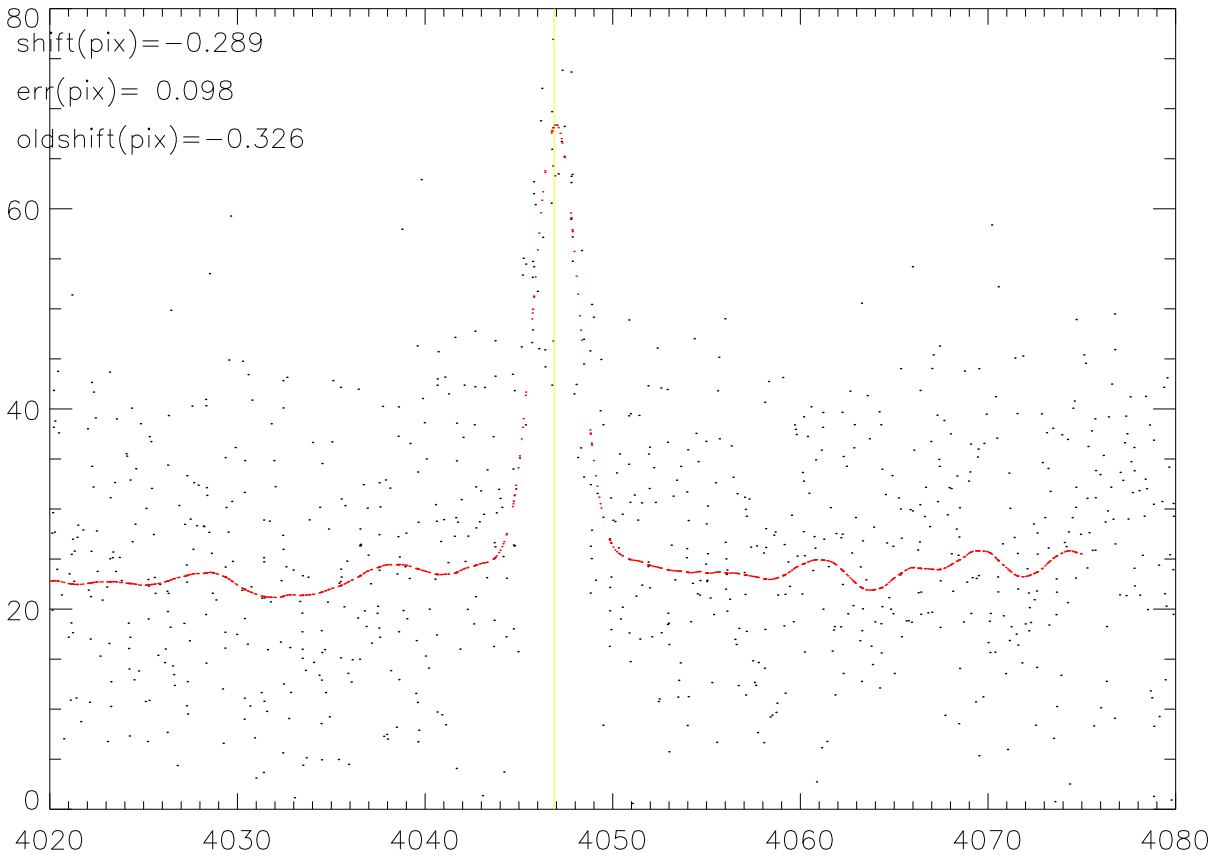

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-b2-00043541.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.928
Max value = 4.377
Sat Feb 16 10:28:45 2008

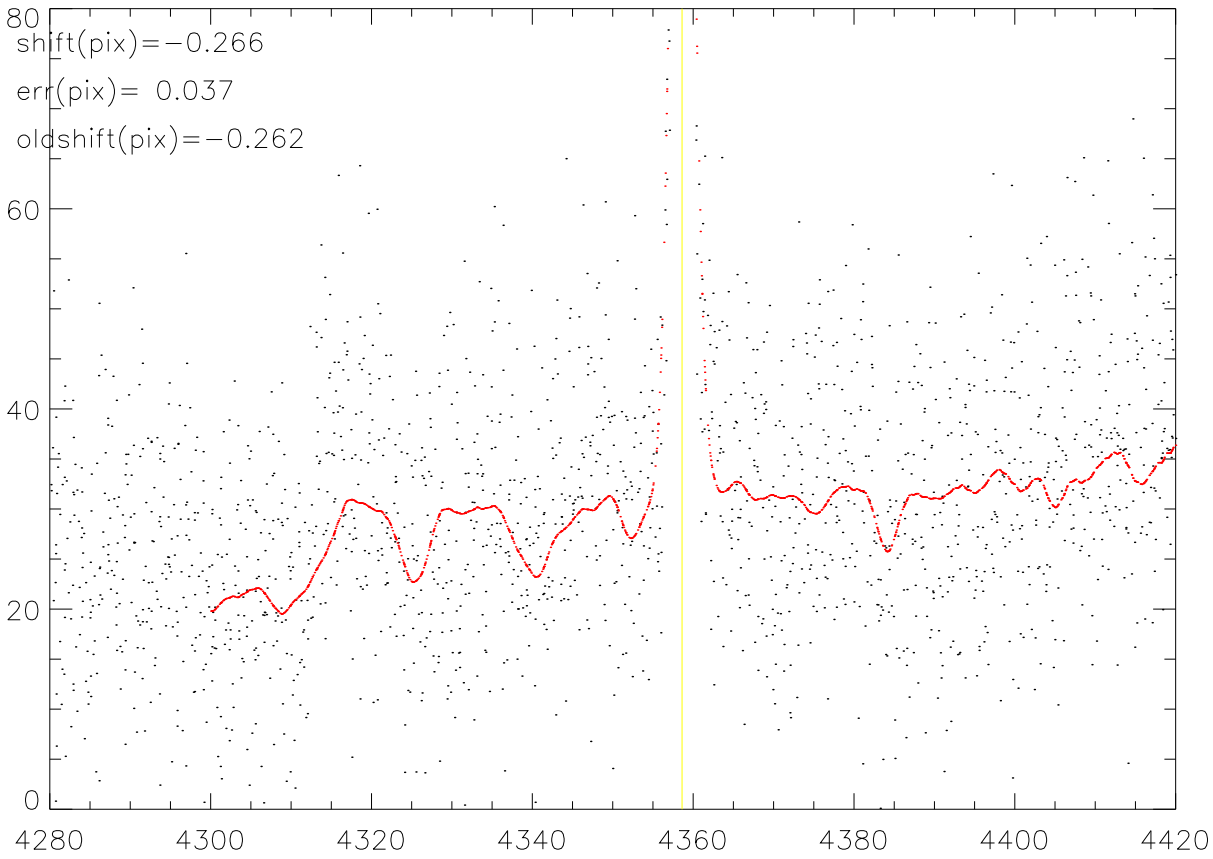

PLATE=2482 MJD=54175 Scattered Light on sdR-b2-00043541.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.36
2.91
2.36
1.82
1.82
1.82
2.36
2.36
2.91
2.91
2.91
2.91

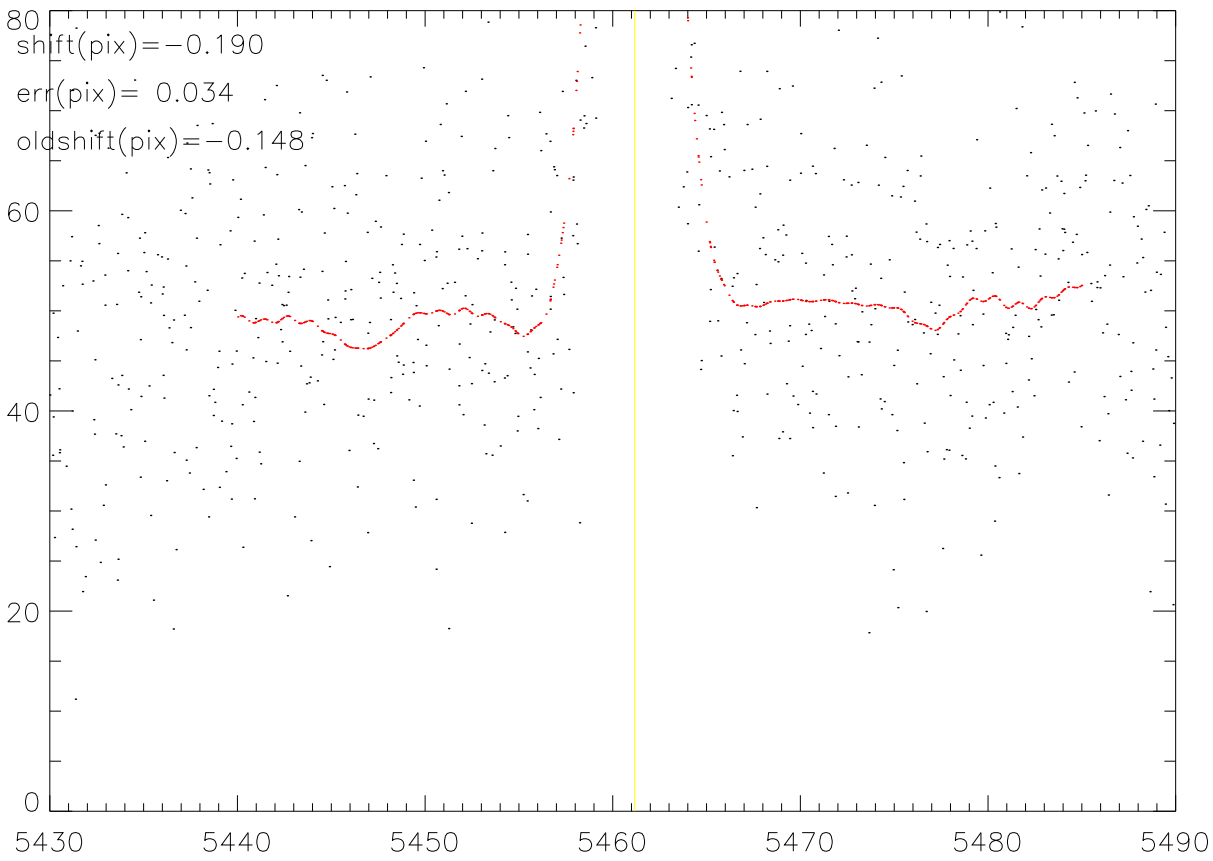

PLATE=2482 MJD=54175 Scattered Light on sdR-b2-00043541.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.687
Max value = 3.136
Sat Feb 16 10:32:03 2008

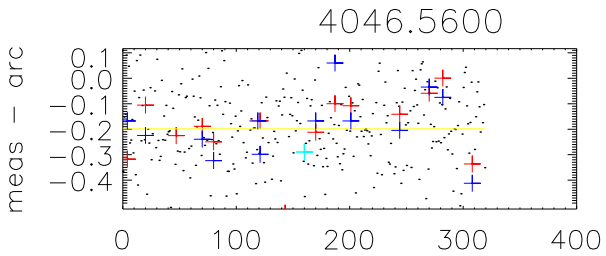

PLATE=2482 MJD=54175 Extraction chi^2 for sdR-b2-00043541.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

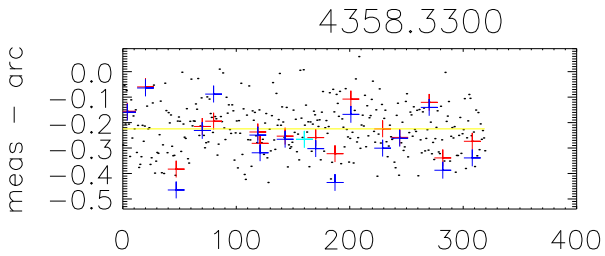

4046.5600
off: −0.33
sig: 0.088
4358.3300
off: −0.26
sig: 0.029
5460.9400
off: −0.15
sig: 0.026
5577.3390
off: −0.17
sig: 0.003
5889.9500
off: −0.04
sig: 0.013
5895.9240
off: −0.11
sig: 0.017

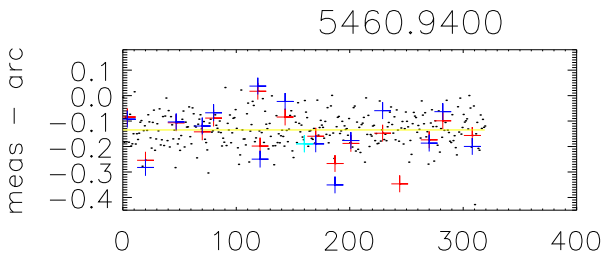

shift(pix)=−0.289
err(pix)= 0.098
oldshift(pix)=−0.326
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

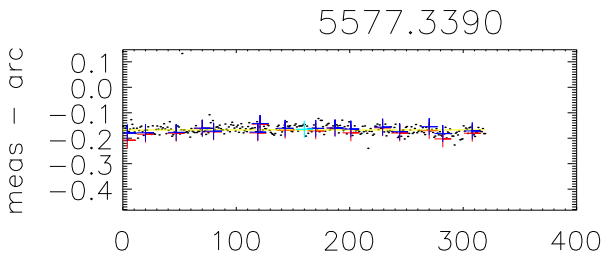

shift(pix)=−0.266
err(pix)= 0.037
oldshift(pix)=−0.262
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

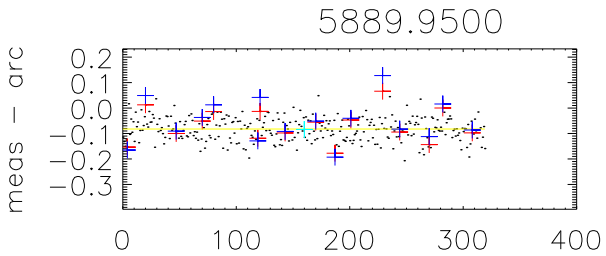

shift(pix)=−0.190
err(pix)= 0.034
oldshift(pix)=−0.148
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

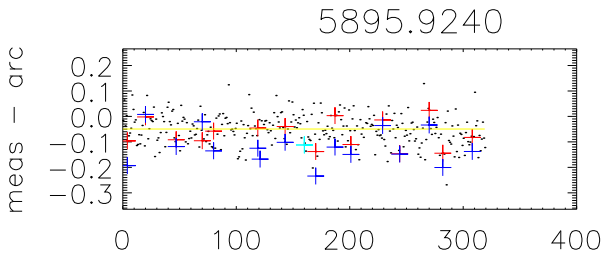

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

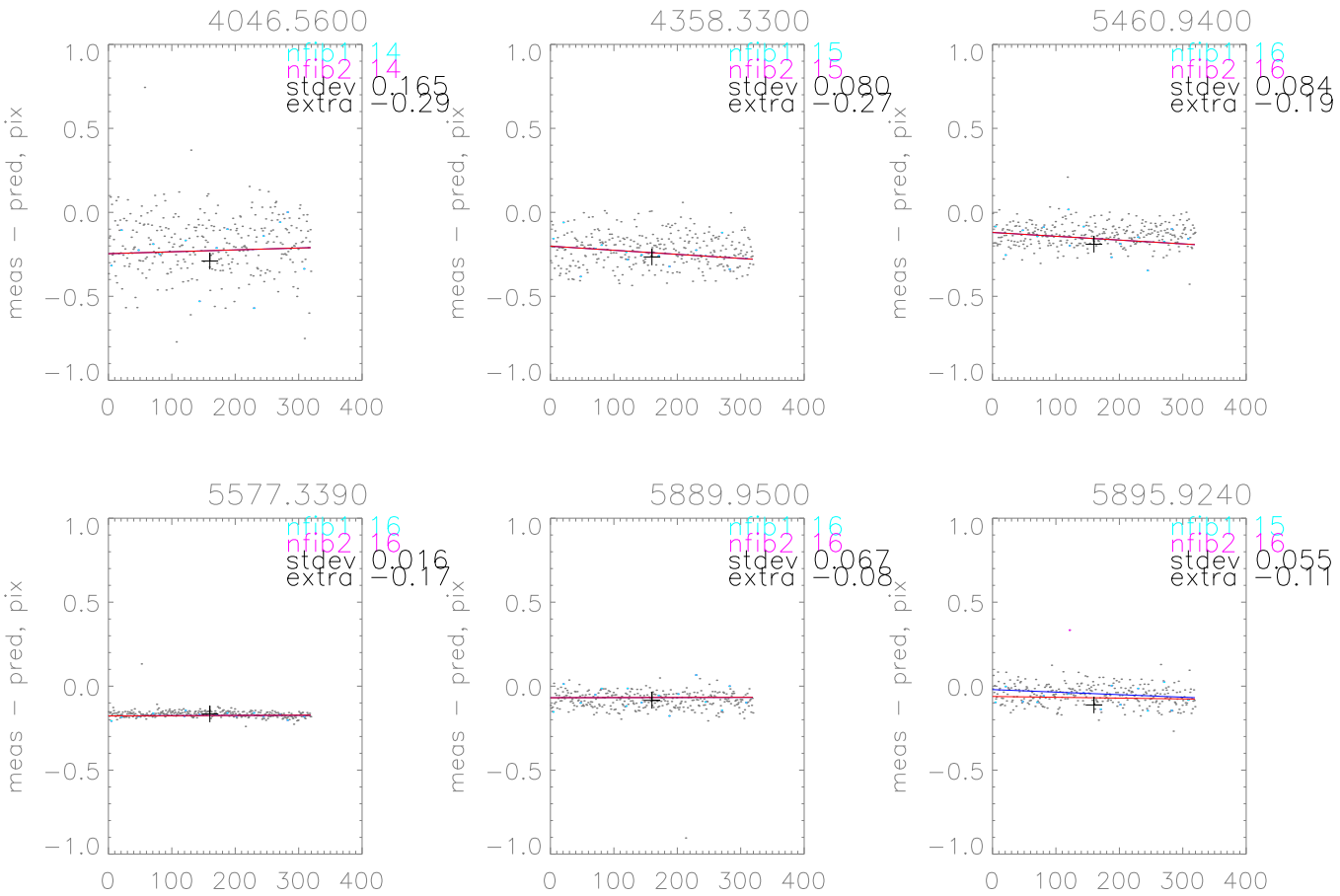

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

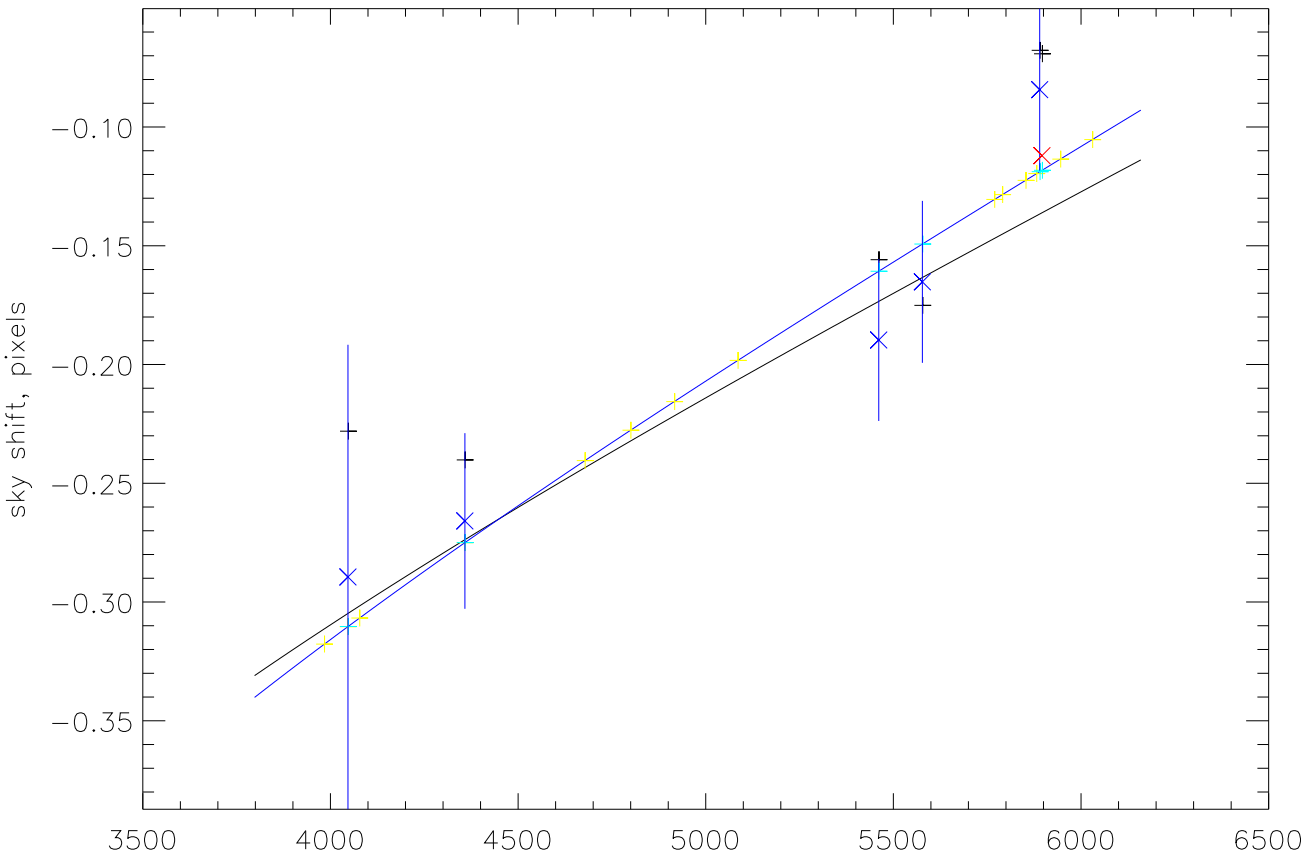

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

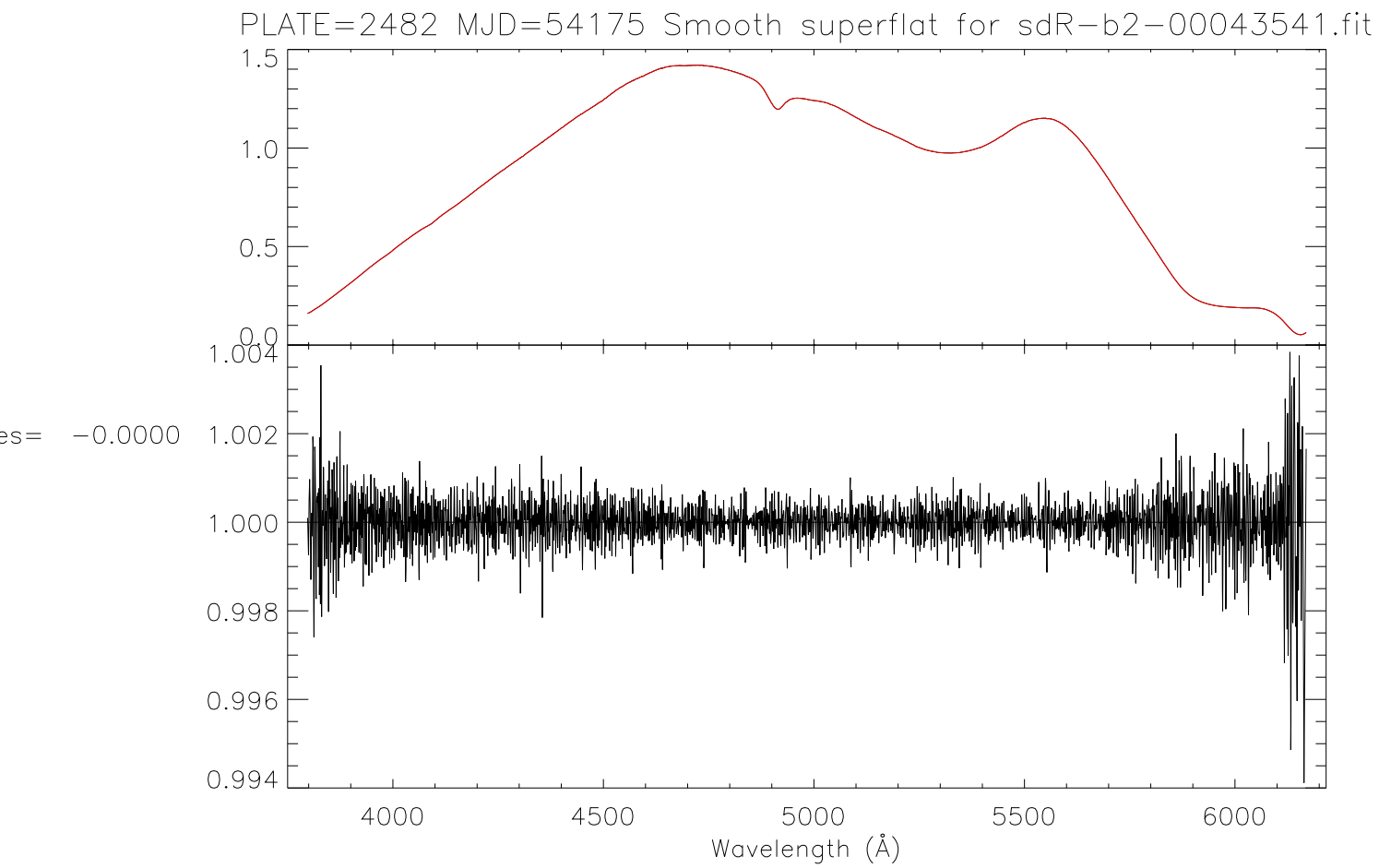

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

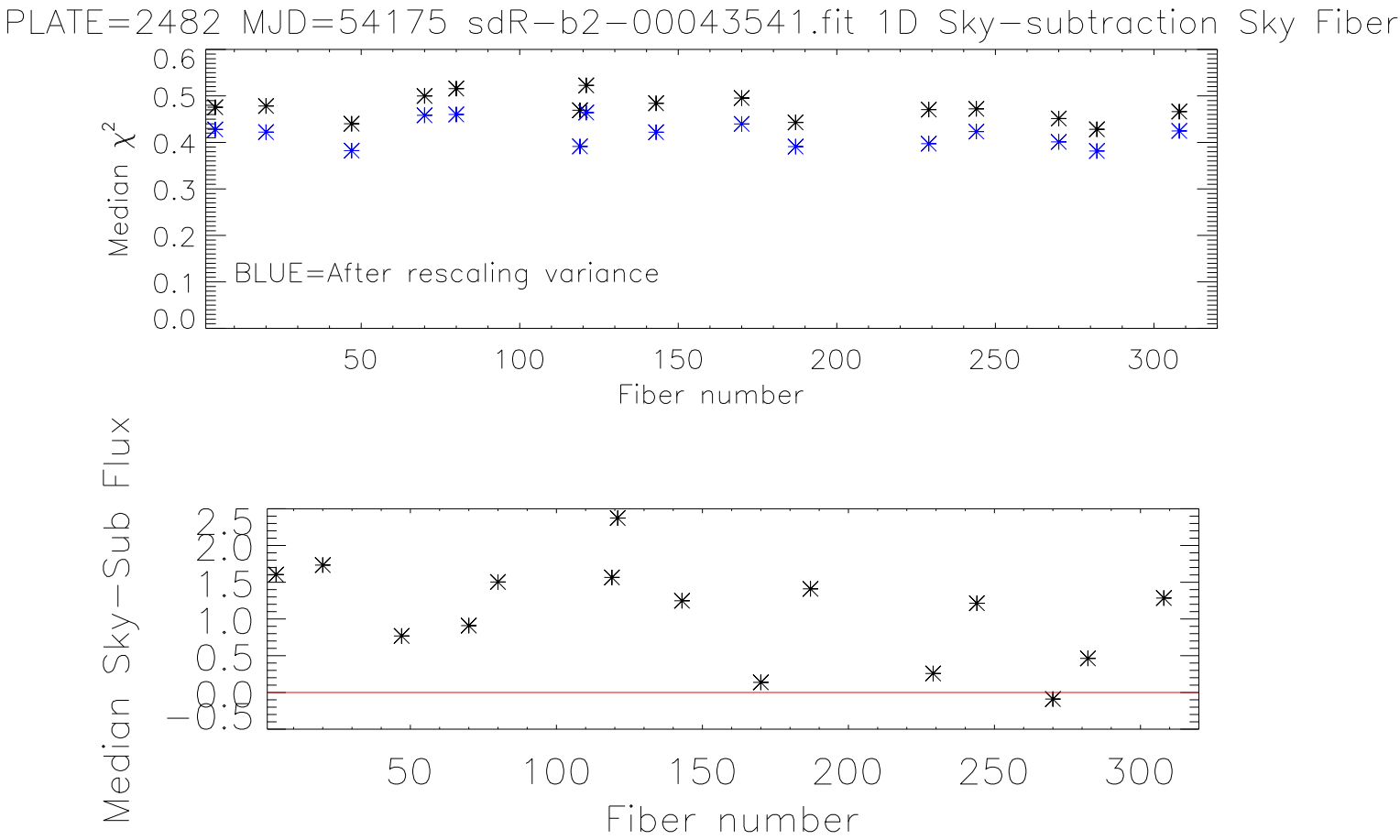

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

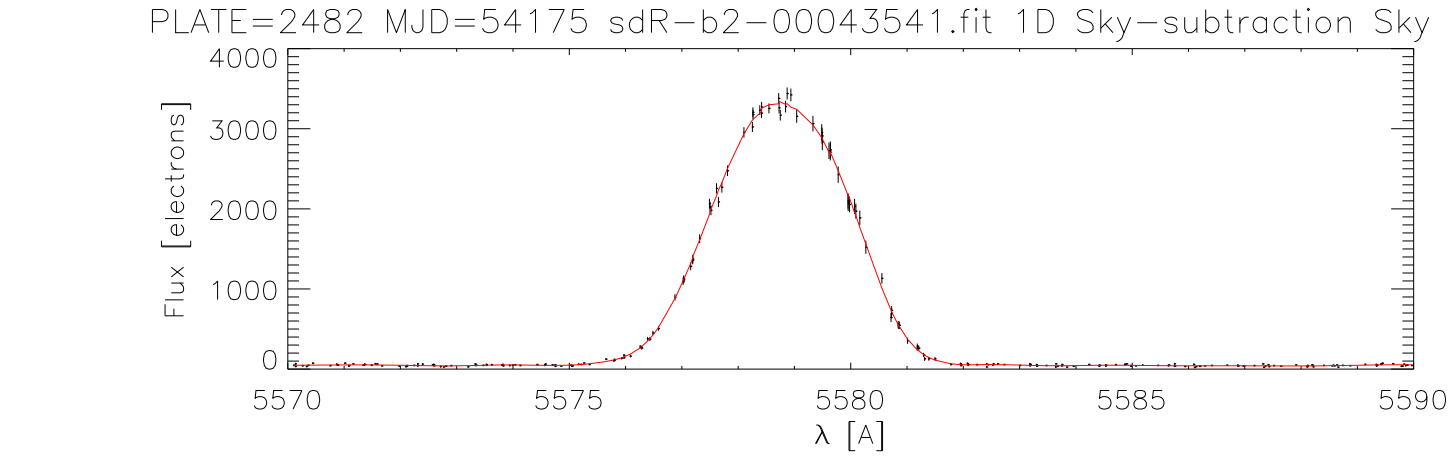

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

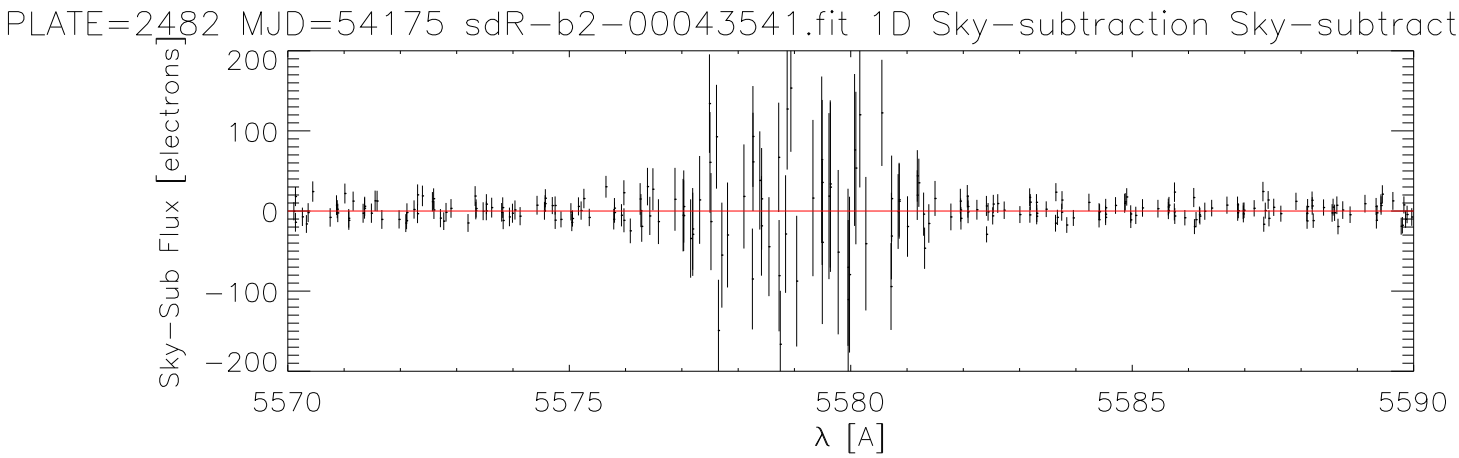

4046.5600
nfib1 14
nfib2 14
stdev 0.165
extra −0.29
4358.3300
nfib1 15
nfib2 15
stdev 0.080
extra −0.27
5460.9400
nfib1 16
nfib2 16
stdev 0.084
extra −0.19
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.17
5889.9500
nfib1 16
nfib2 16
stdev 0.067
extra −0.08
5895.9240
nfib1 15
nfib2 16
stdev 0.055
extra −0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

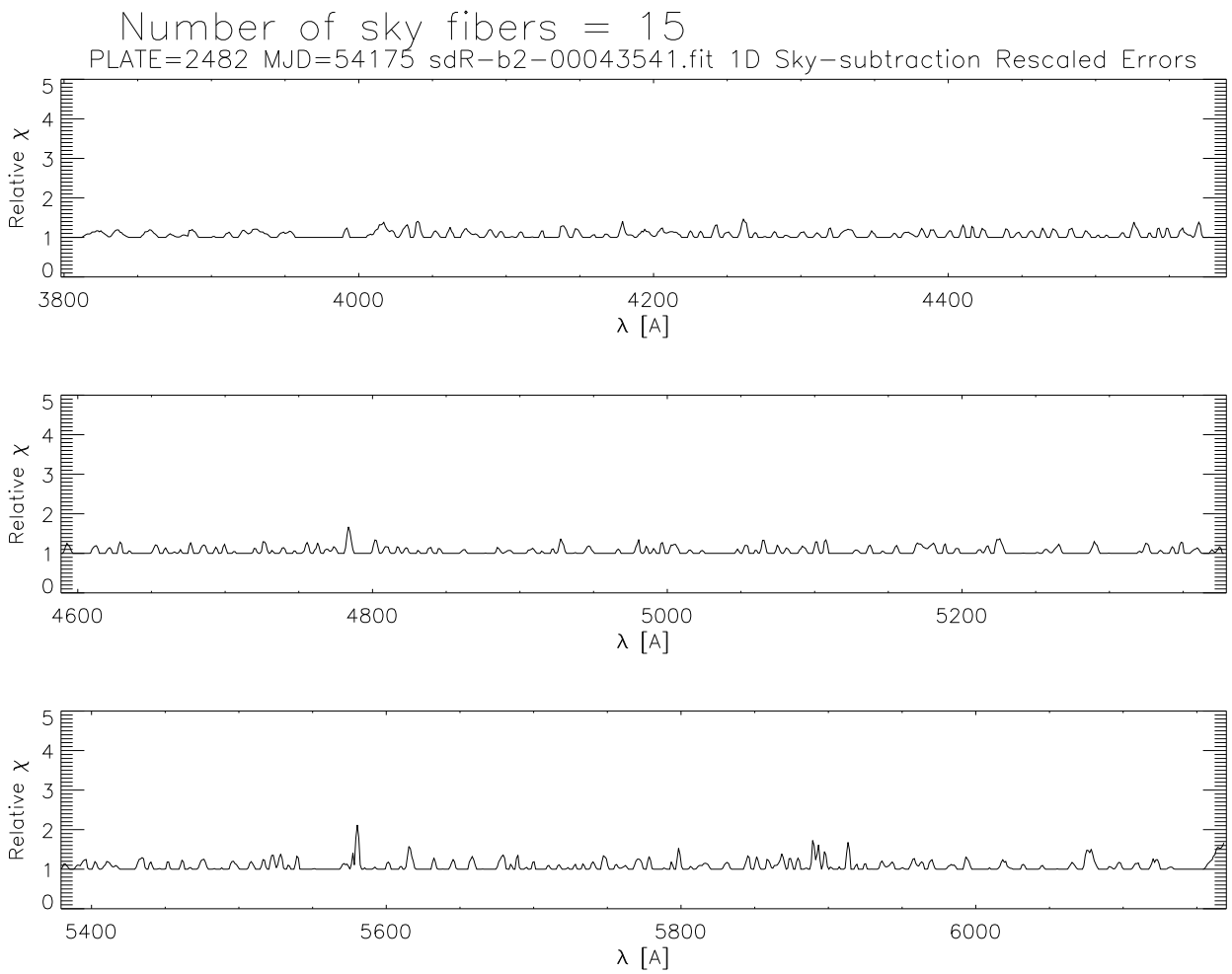

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
3500
4000
4500
5000
5500
6000
6500

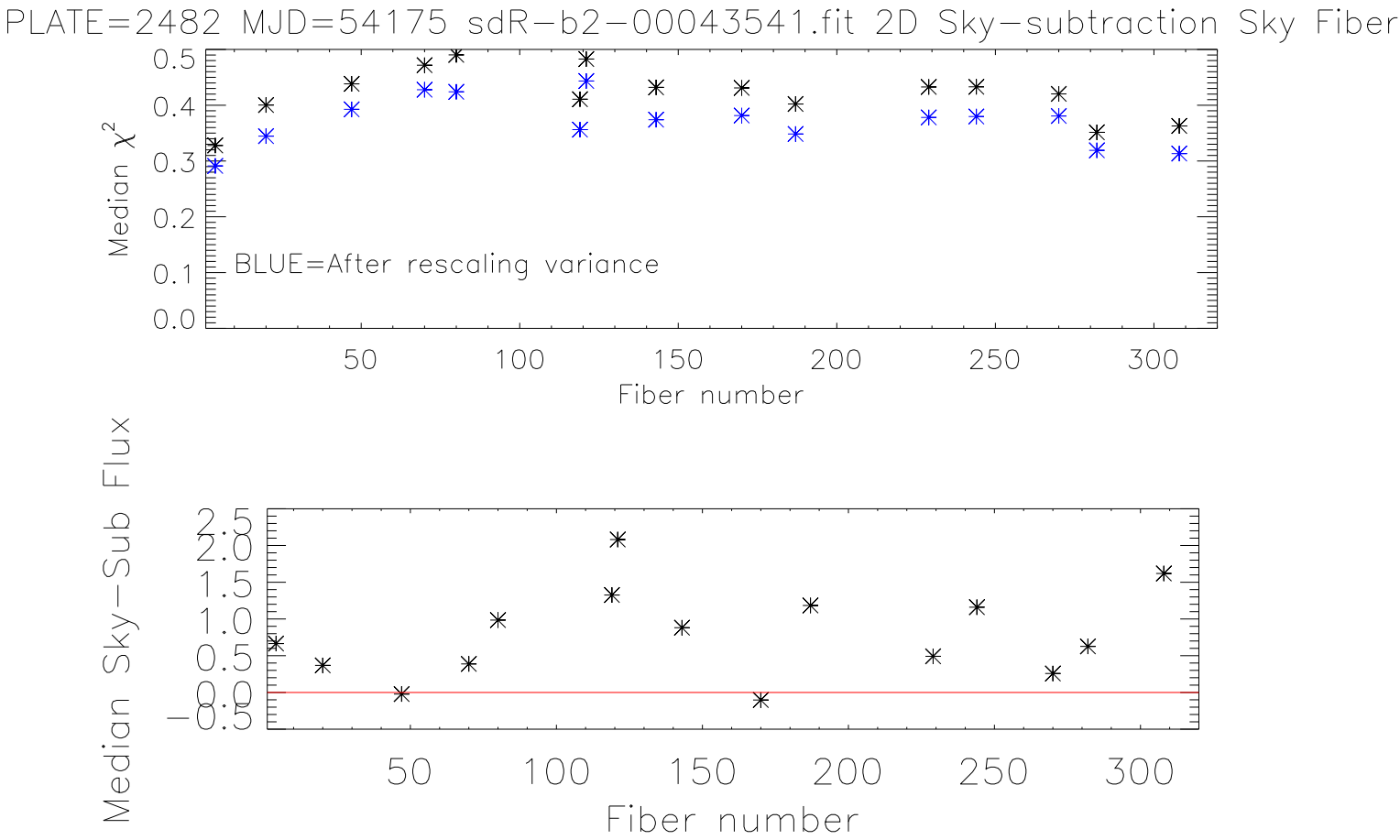

PLATE=2482 MJD=54175 Smooth superflat for sdR-b2-00043541.fit
1.5
1.0
0.5
0.0
es= -0.0000
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

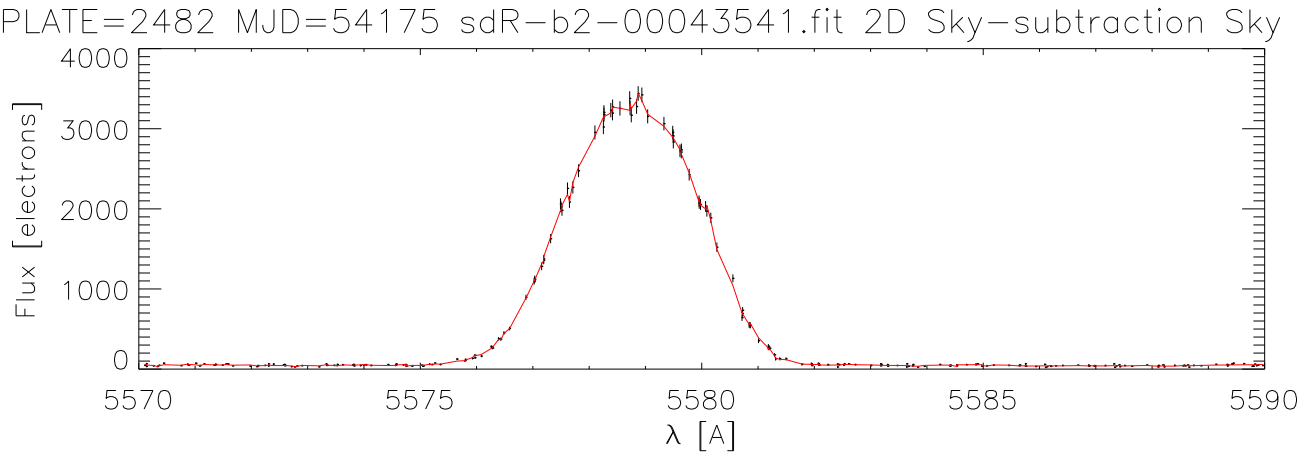

PLATE=2482 MJD=54175 sdR-b2-00043541.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

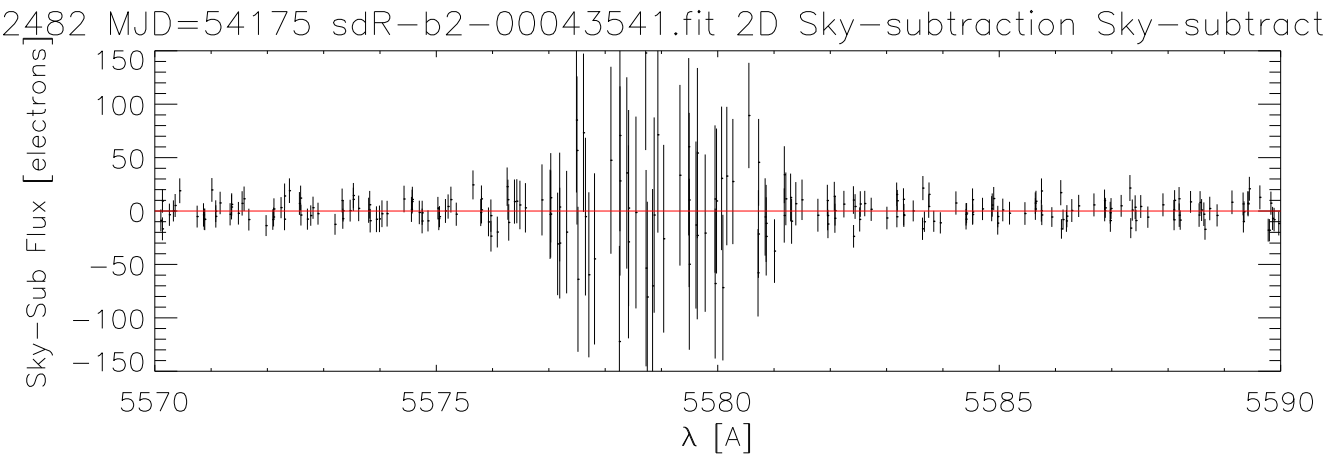

PLATE=2482 MJD=54175 sdR-b2-00043541.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

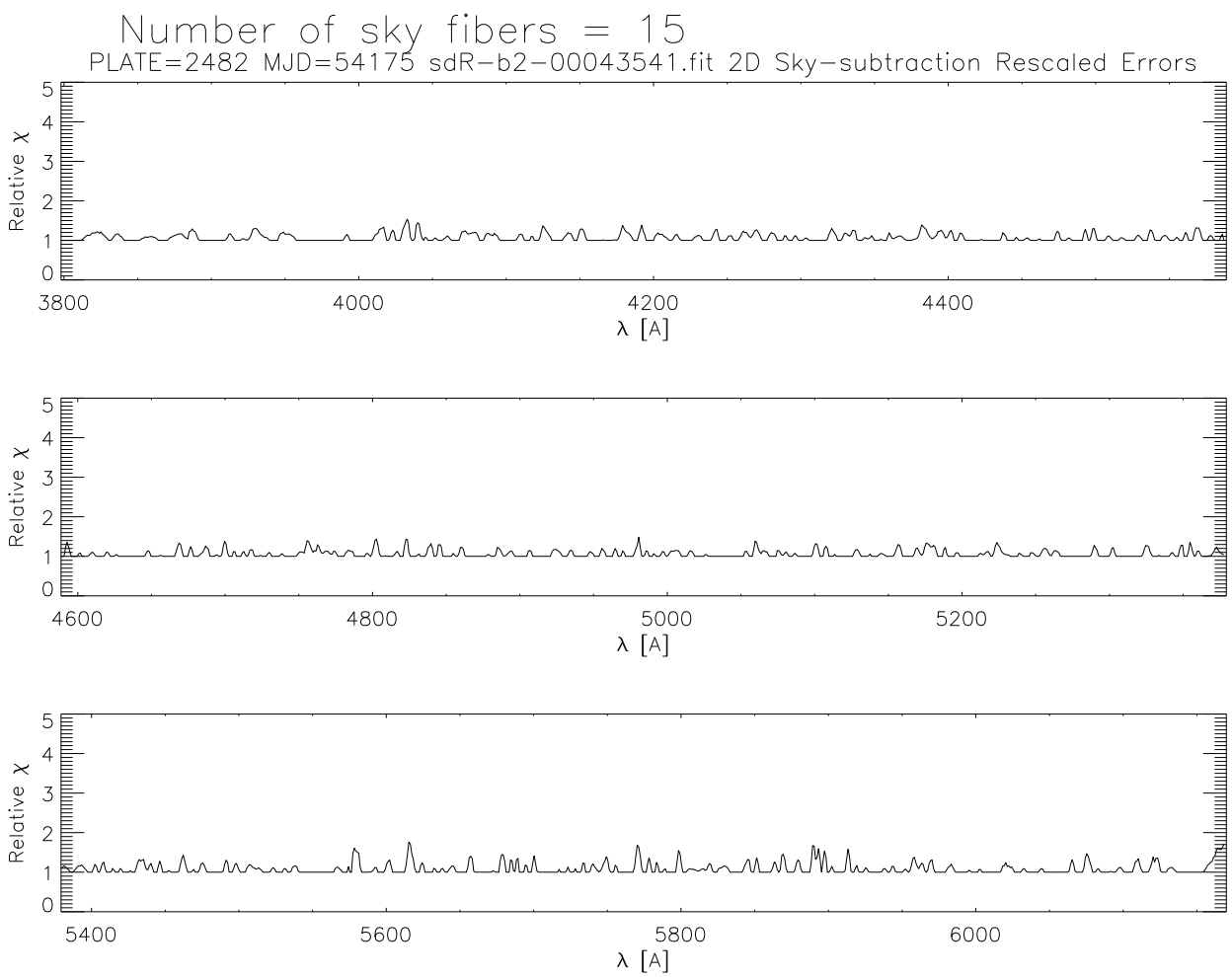

PLATE=2482 MJD=54175 sdR-b2-00043541.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

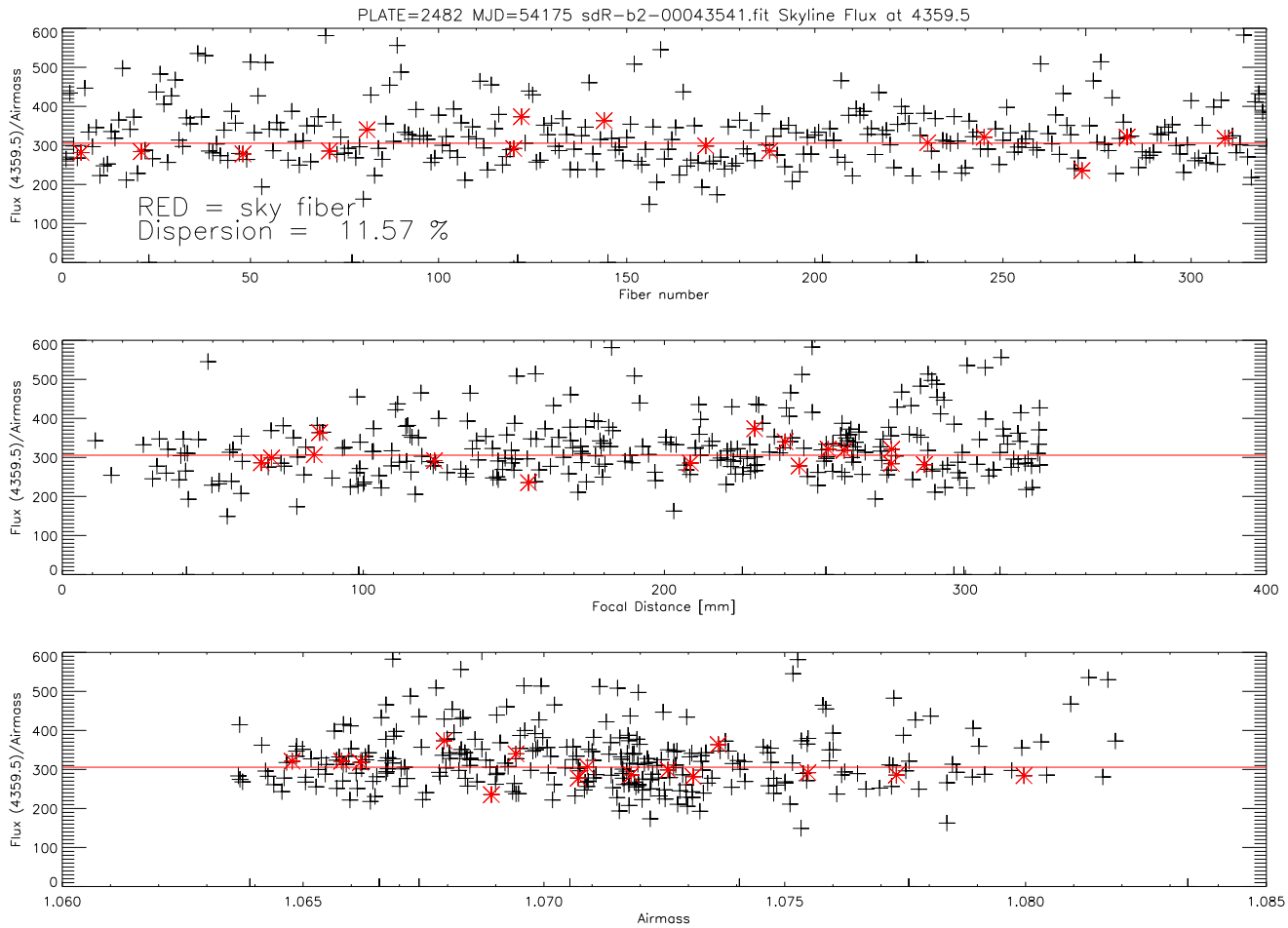

Number of sky fibers = 15
PLATE=2482 MJD=54175 sdR-b2-00043541.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

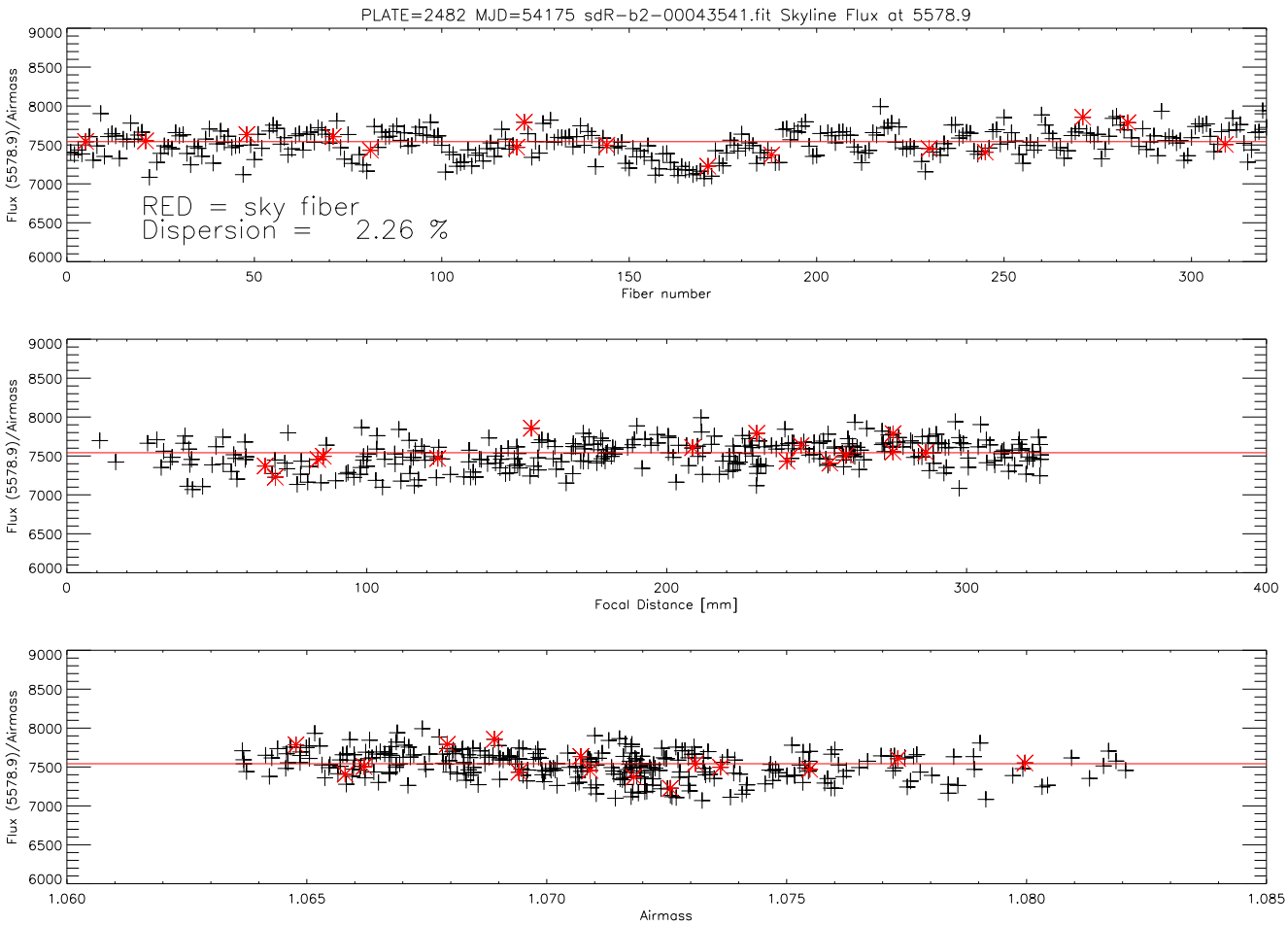

PLATE=2482 MJD=54175 sdR-b2-00043541.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

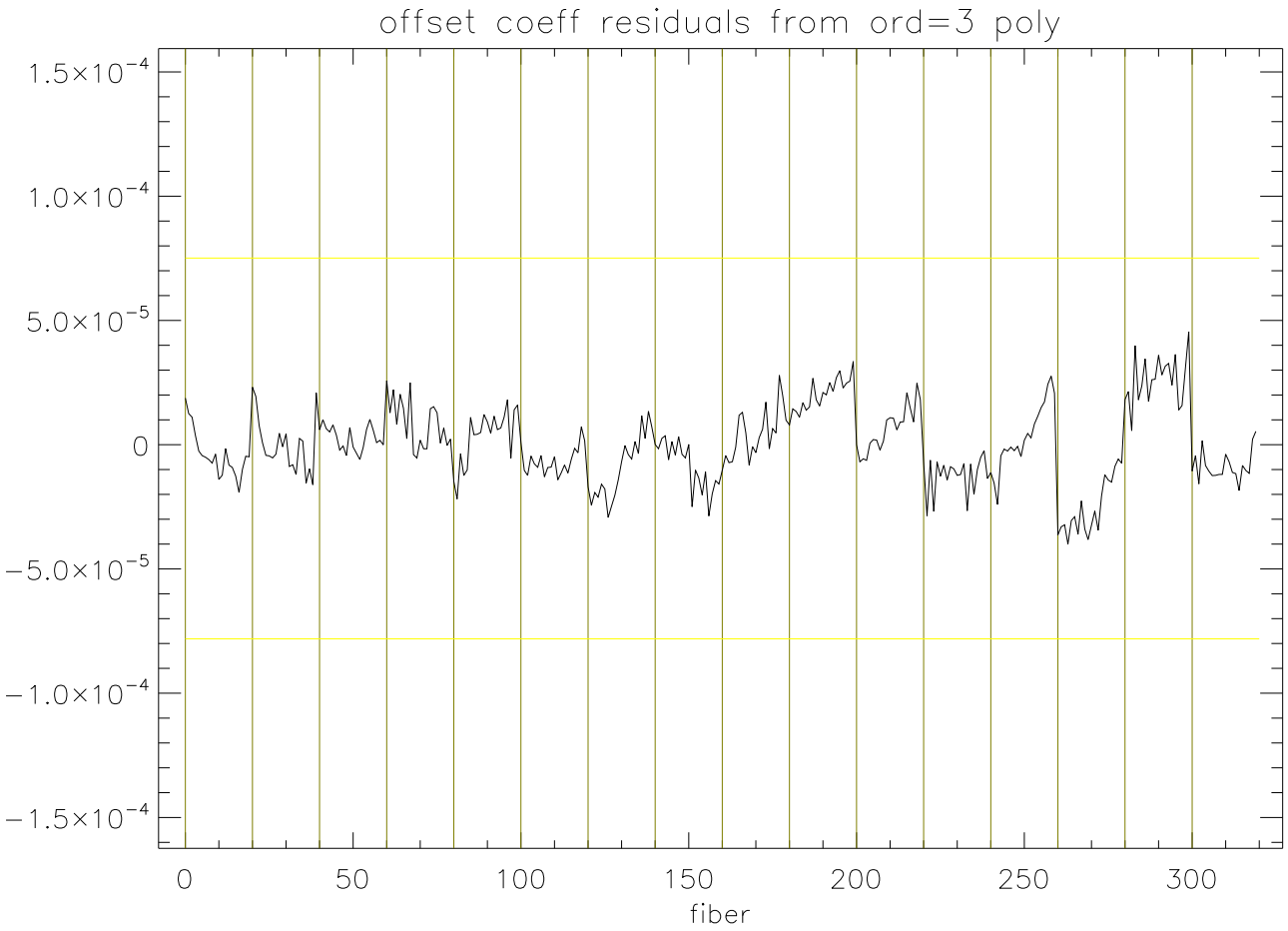

PLATE=2482 MJD=54175 sdR-b2-00043541.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

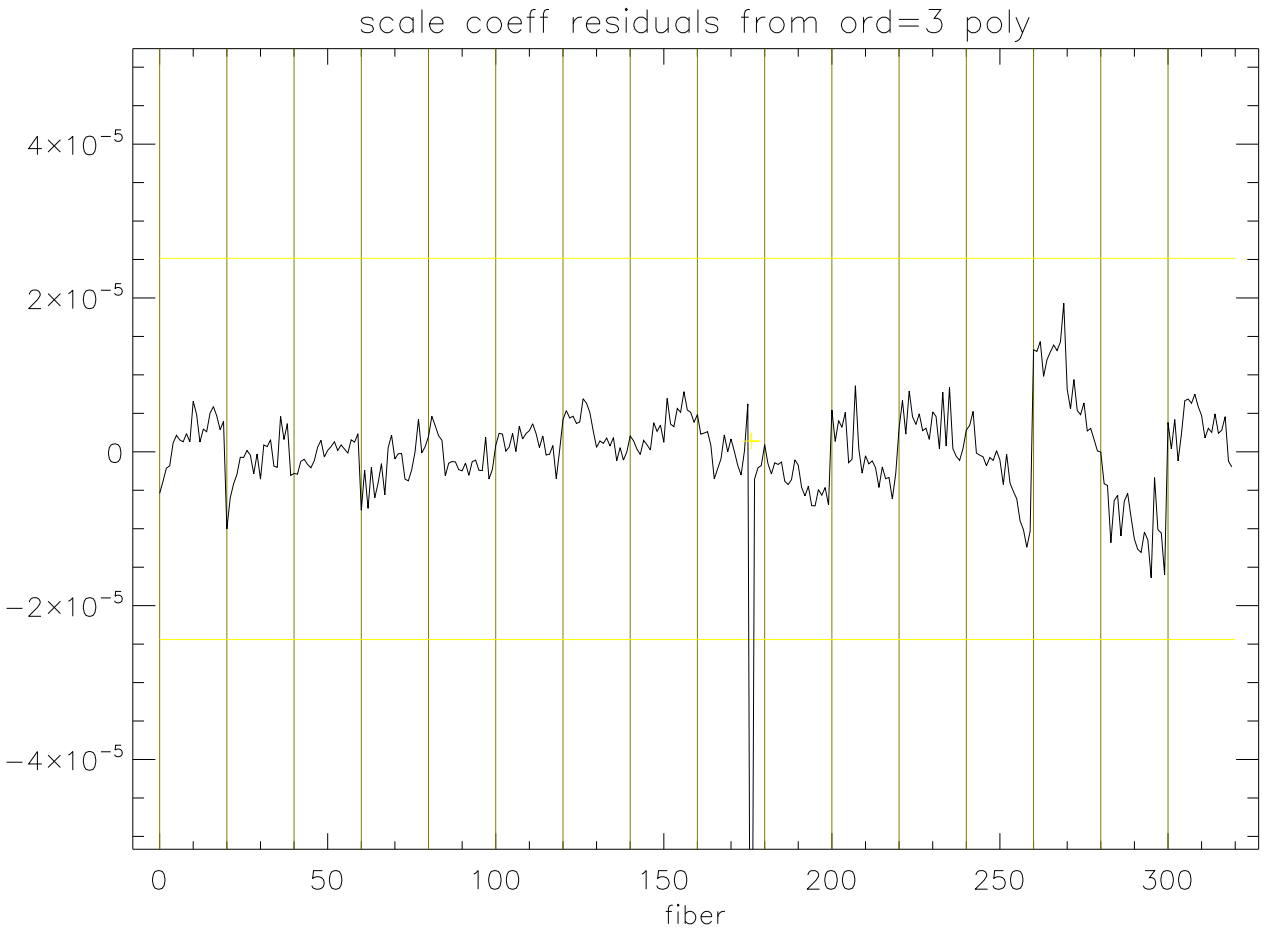

PLATE=2482 MJD=54175 sdR-b2-00043541.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

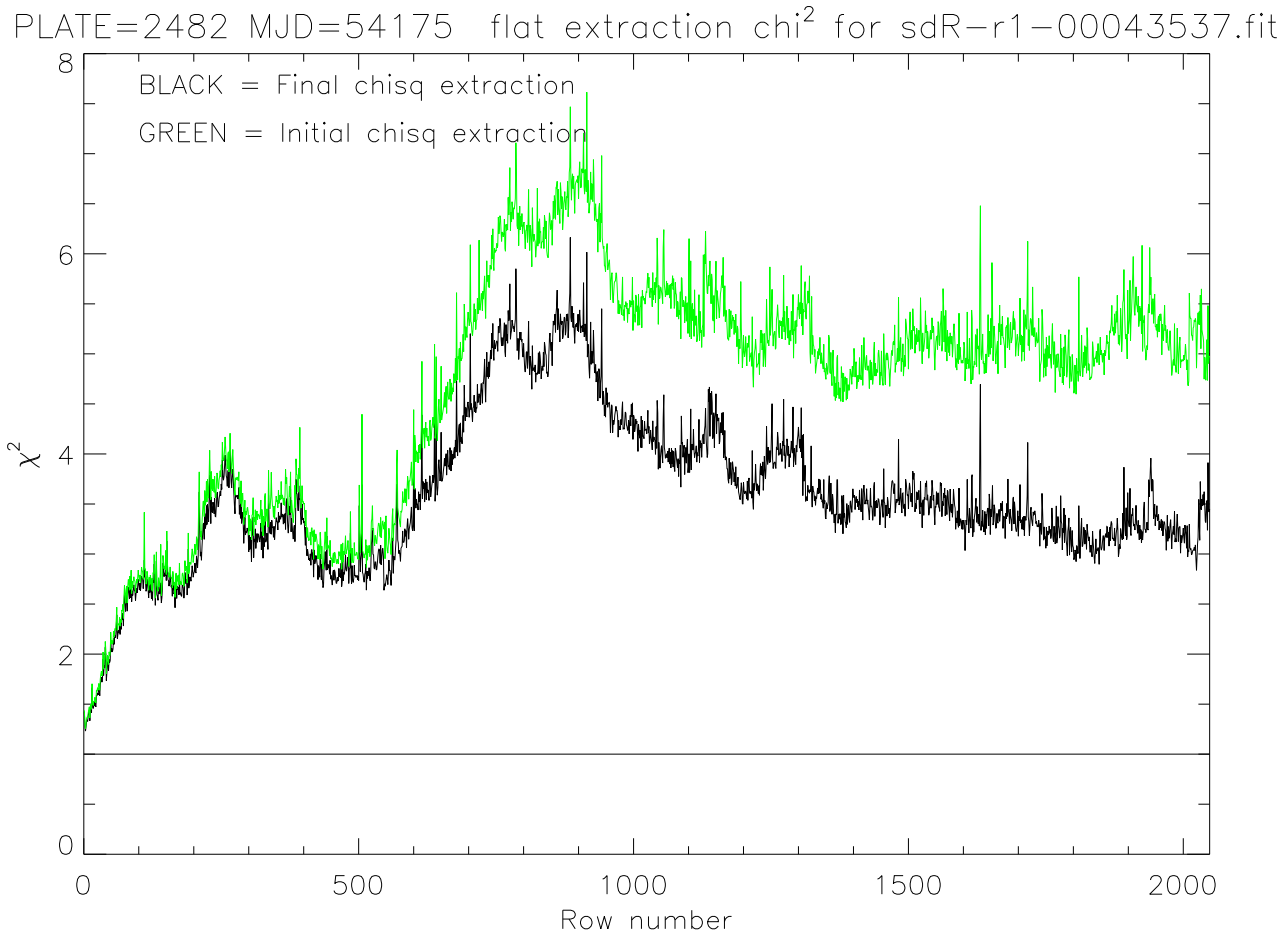

Number of sky fibers = 15
PLATE=2482 MJD=54175 sdR-b2-00043541.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

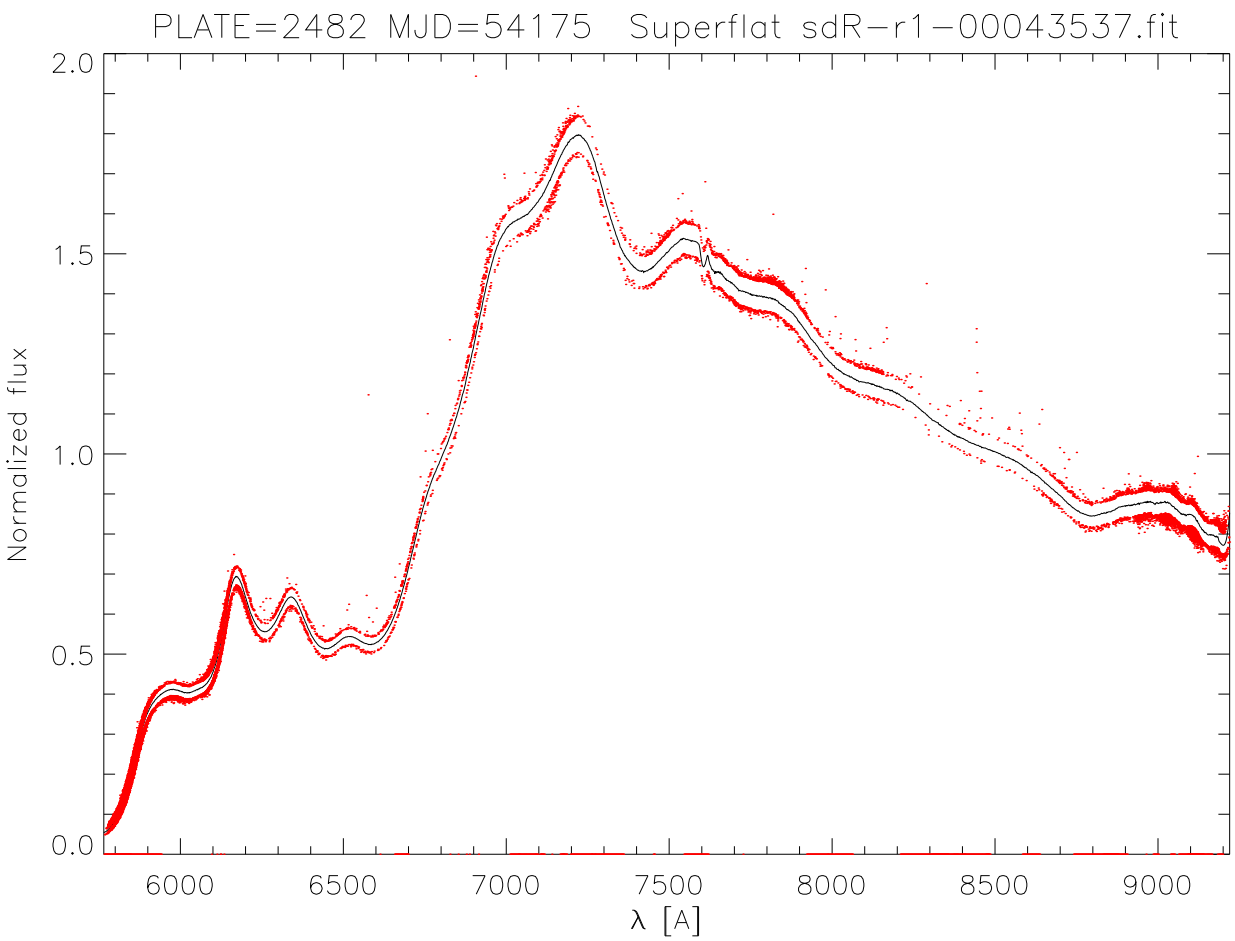

PLATE=2482 MJD=54175 sdR-b2-00043541.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.57 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

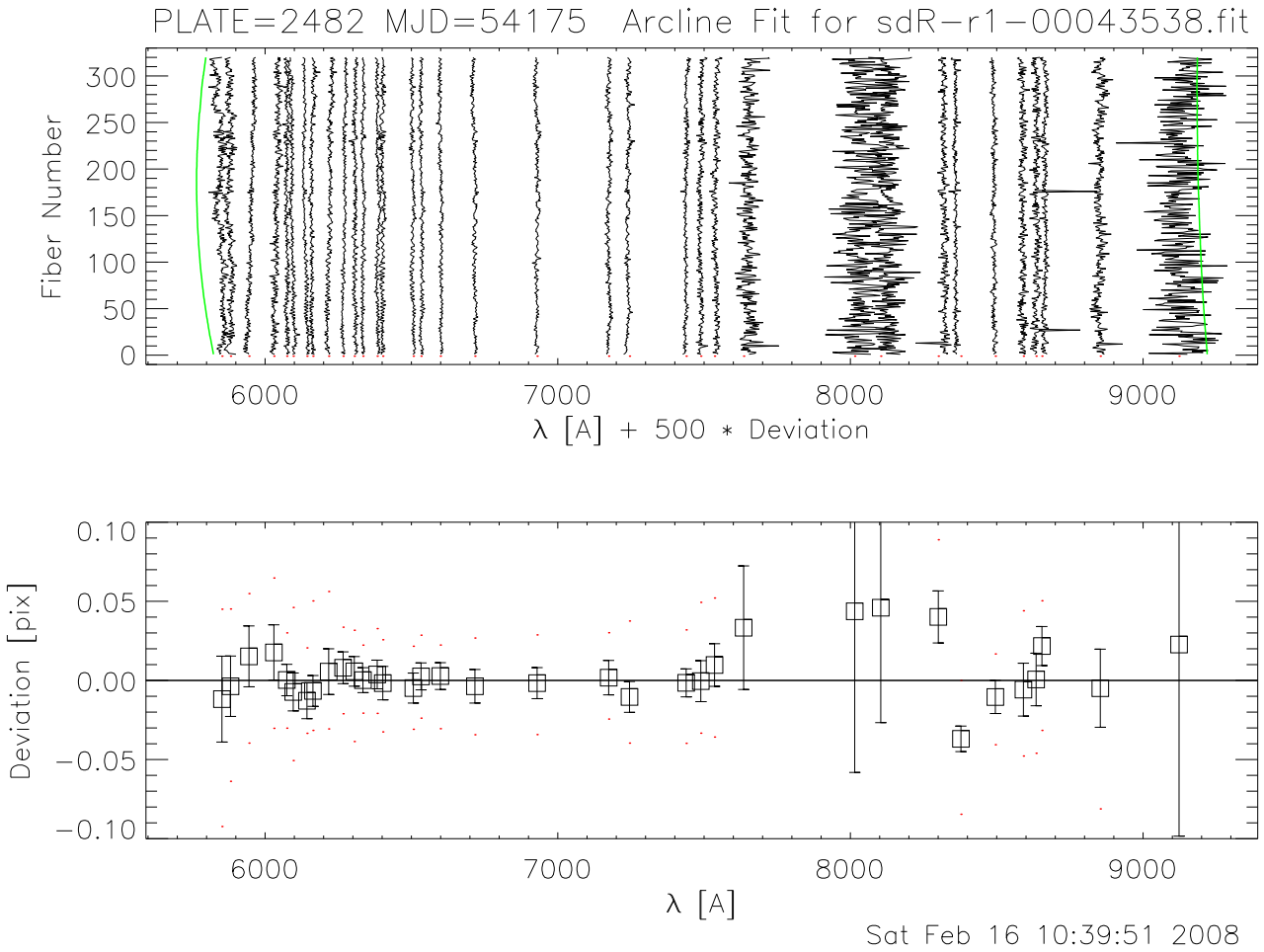

PLATE=2482 MJD=54175 sdR-b2-00043541.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.26 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

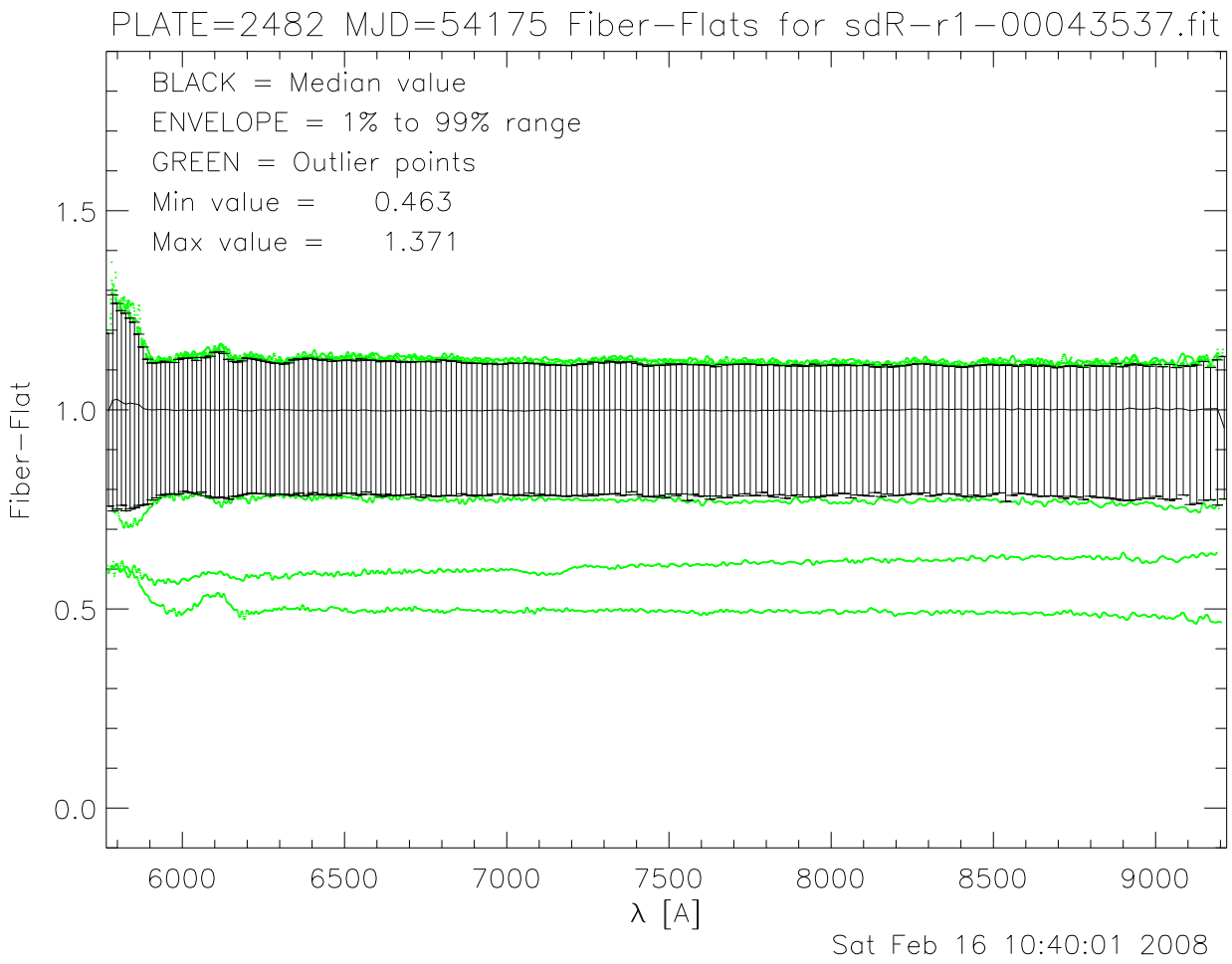

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

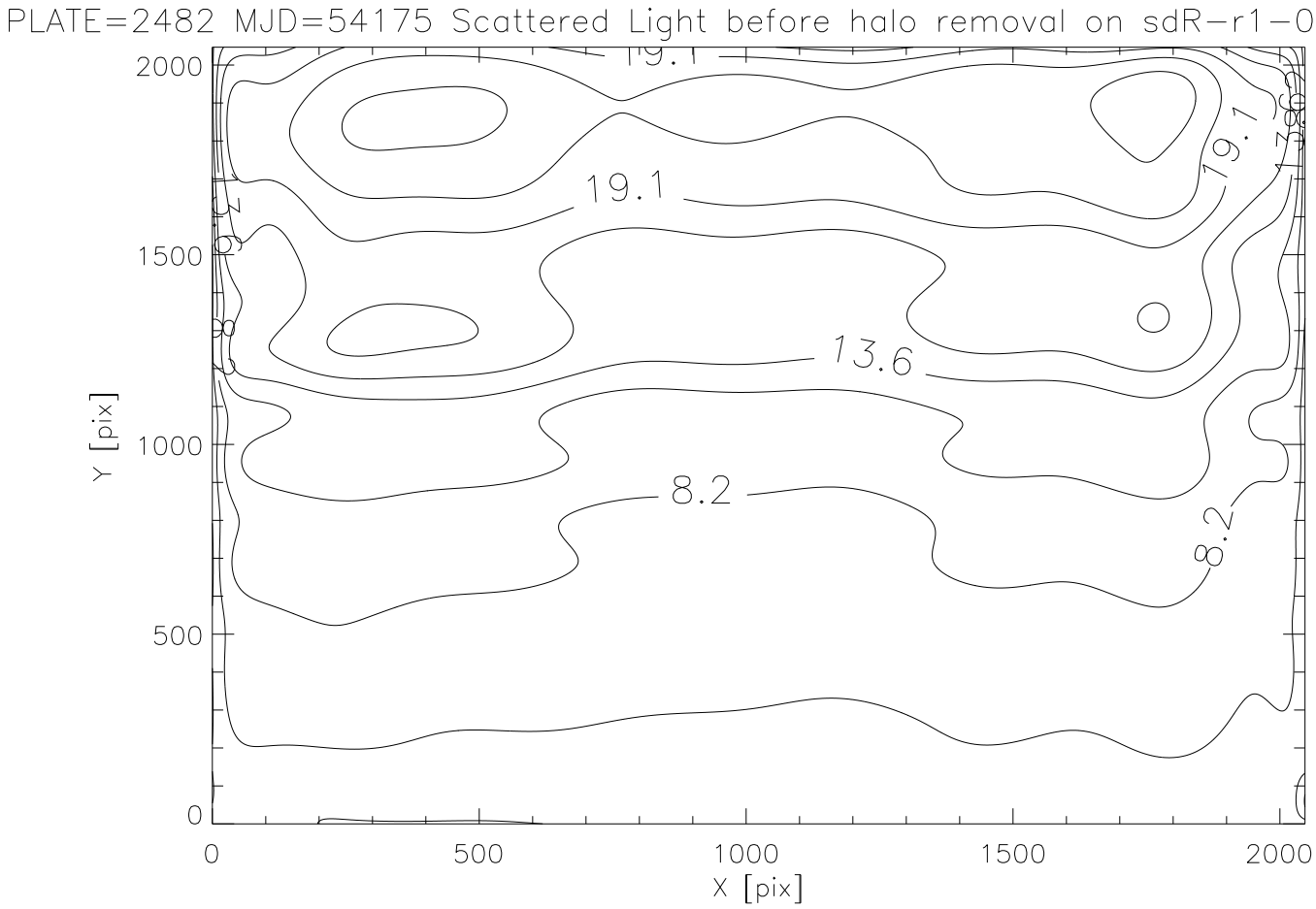

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

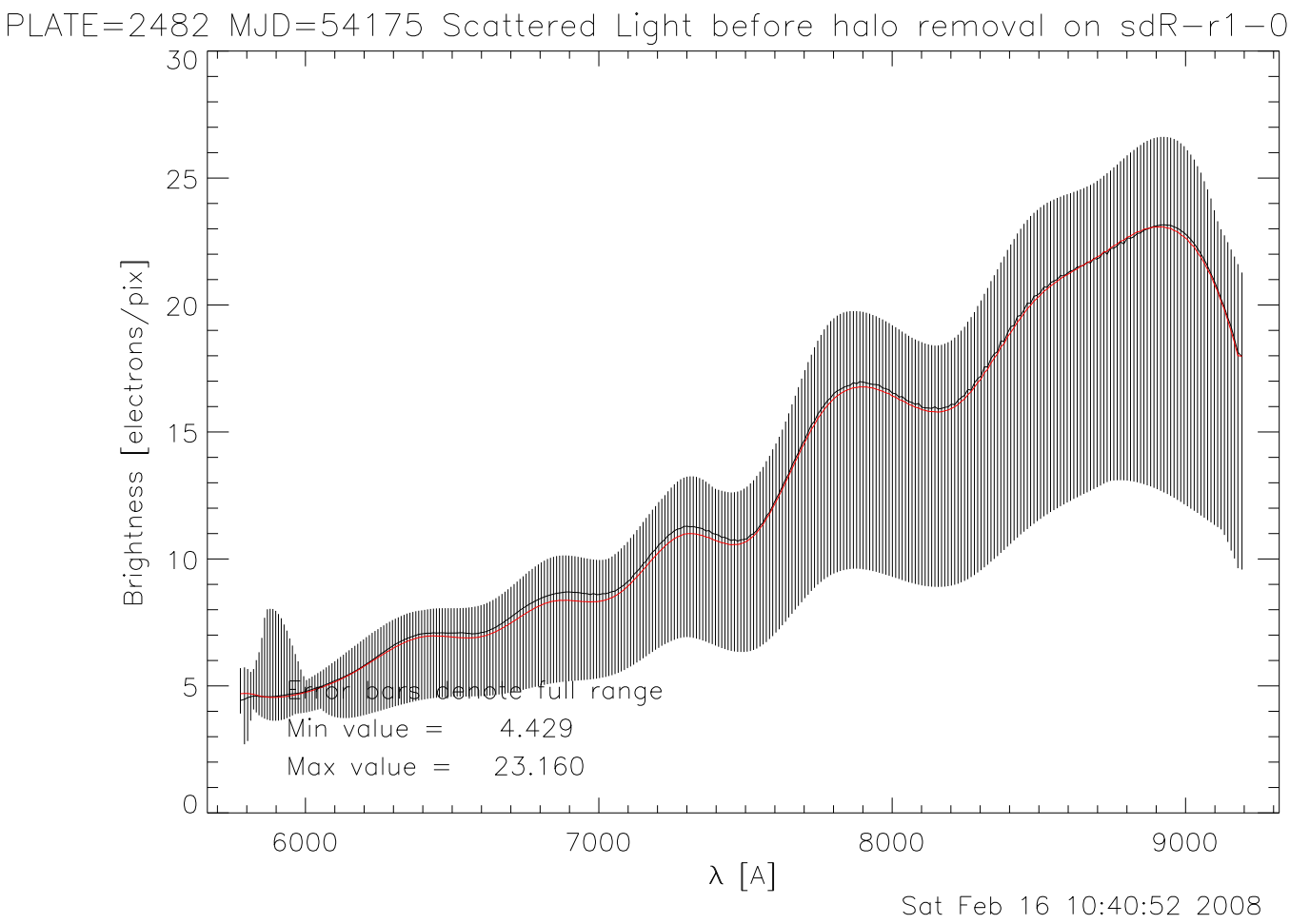

PLATE=2482 MJD=54175 flat extraction chi^2 for sdR−r1−00043537.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

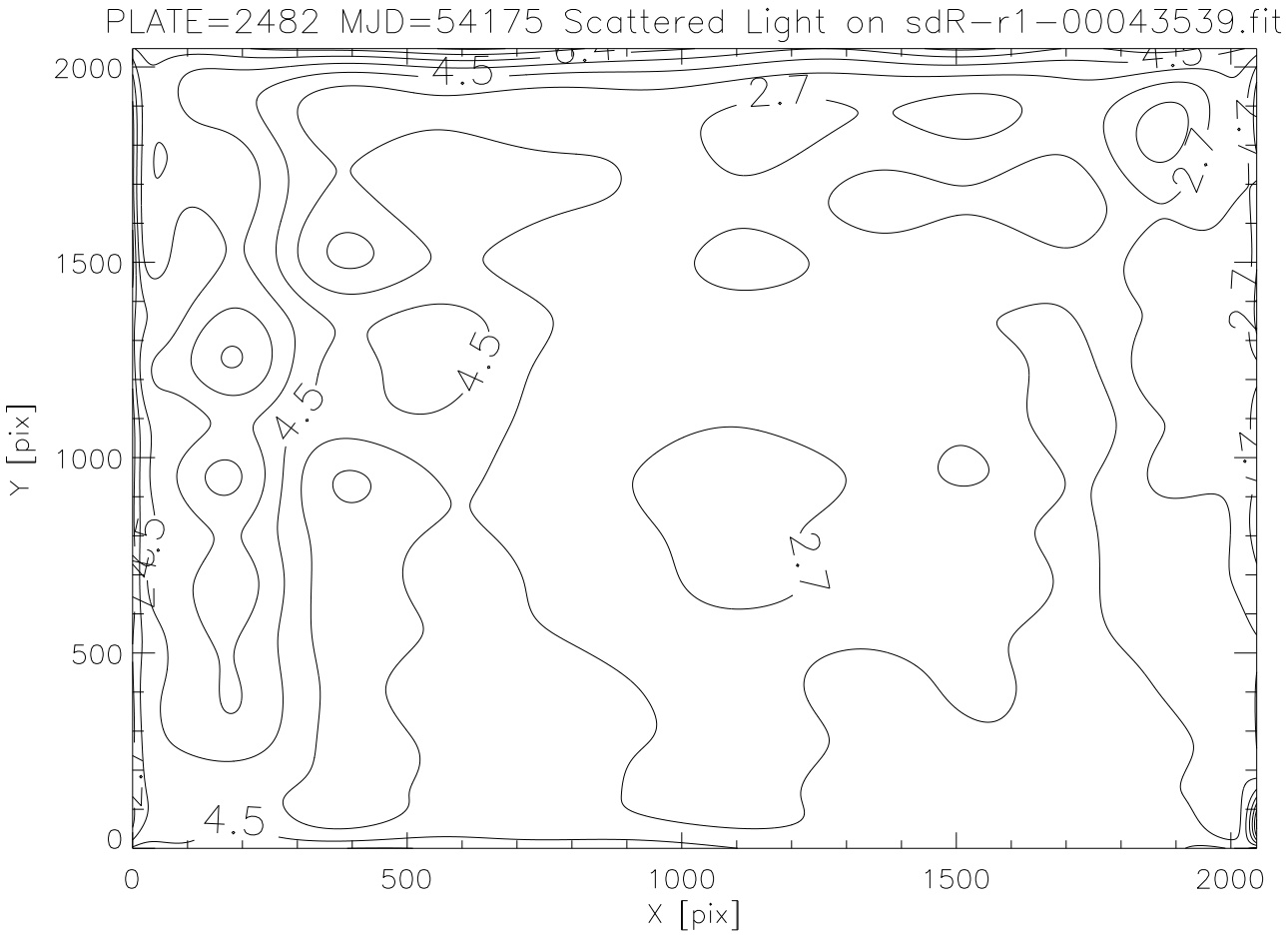

PLATE=2482 MJD=54175 Superflat sdR-r1-00043537.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

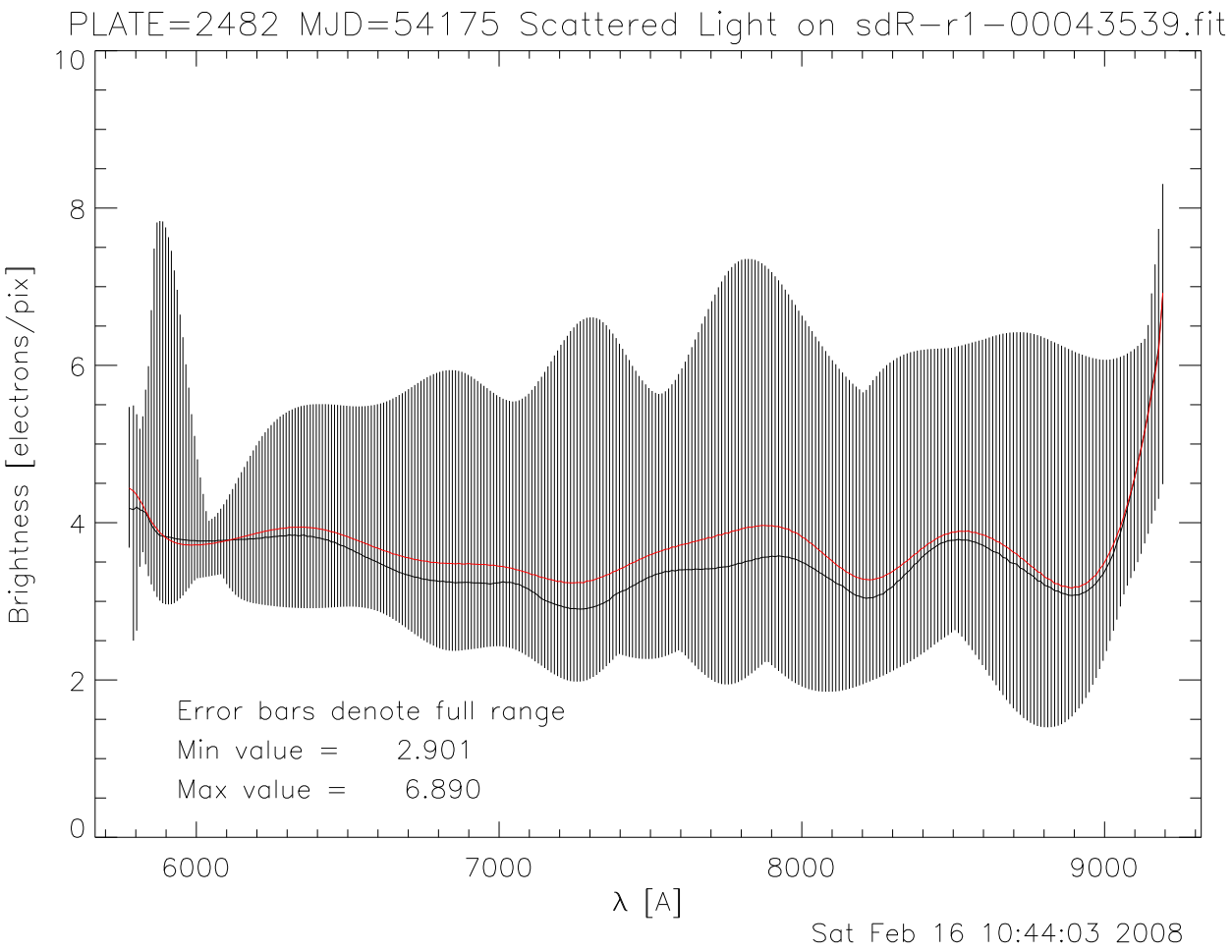

PLATE=2482 MJD=54175 Arcline Fit for sdR-r1-00043538.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 16 10:39:51 2008

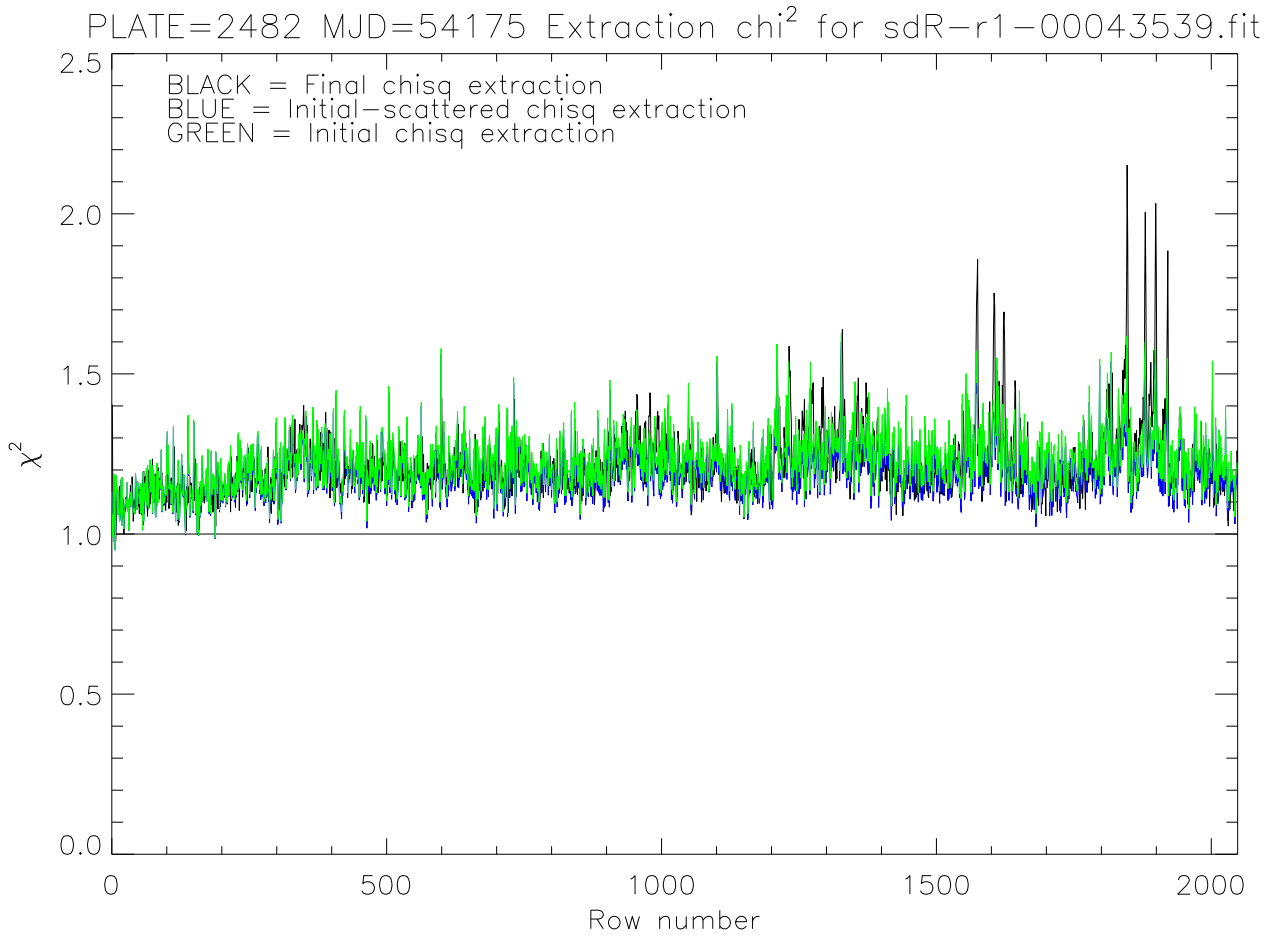

PLATE=2482 MJD=54175 Fiber-Flats for sdR-r1-00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.463
Max value = 1.371
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 10:40:01 2008

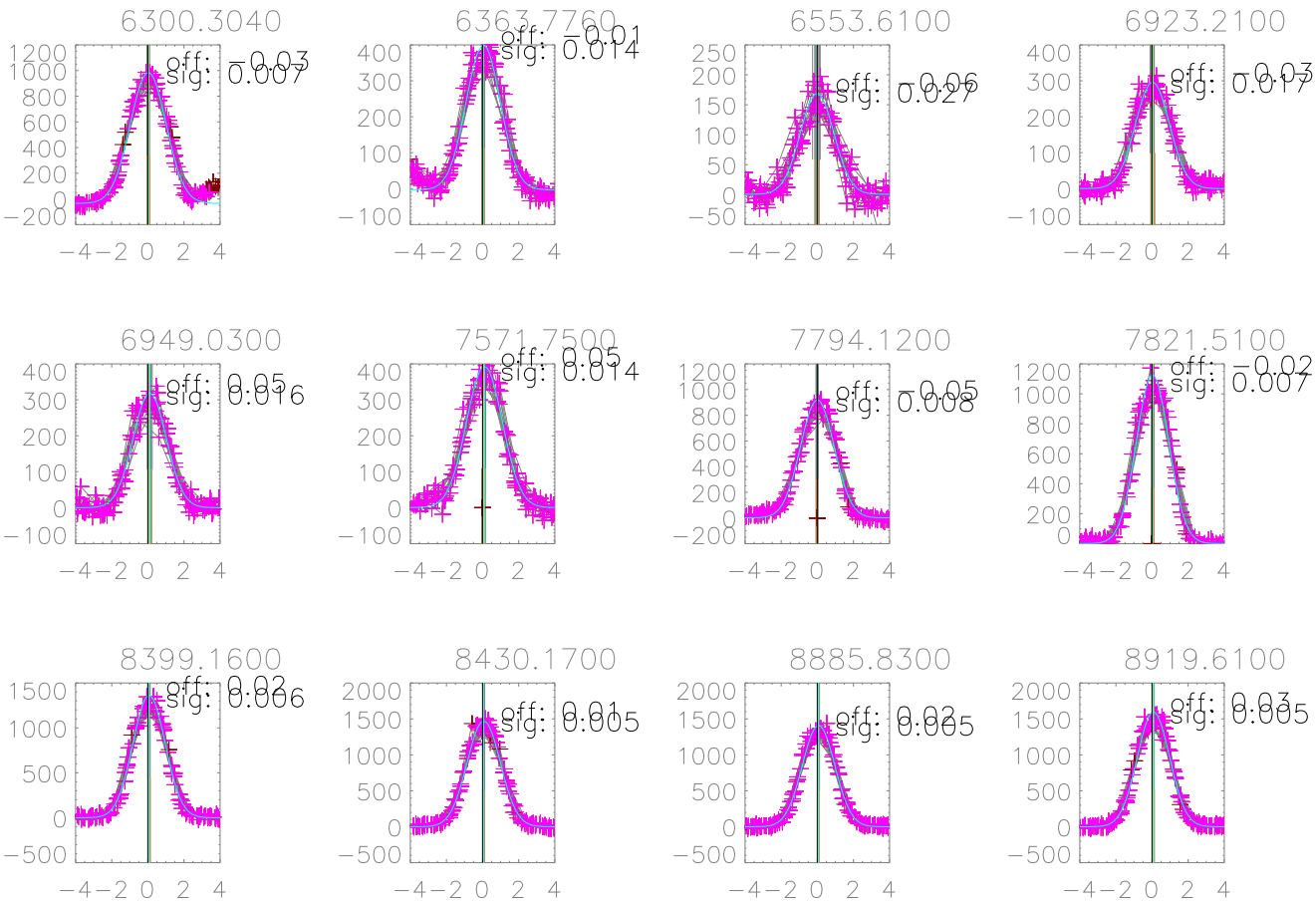

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r1-00043539.fi
19.1
19.1
19.1
13.6
8.2
8.2
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

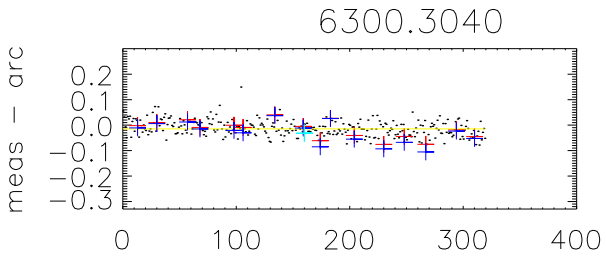

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r1-00043539.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.429
Max value = 23.160
Sat Feb 16 10:40:52 2008

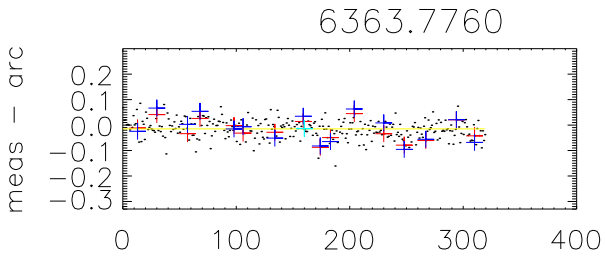

PLATE=2482 MJD=54175 Scattered Light on sdR-r1-00043539.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.5
2.7

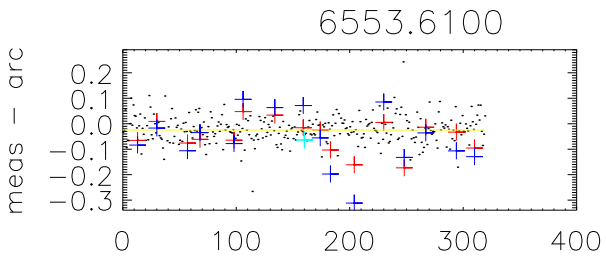

PLATE=2482 MJD=54175 Scattered Light on sdR-r1-00043539.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.901
Max value = 6.890
Sat Feb 16 10:44:03 2008

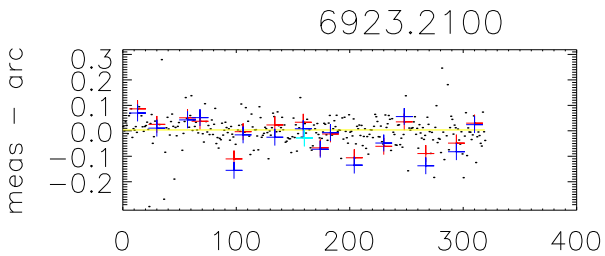

PLATE=2482 MJD=54175 Extraction chi^2 for sdR−r1−00043539.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

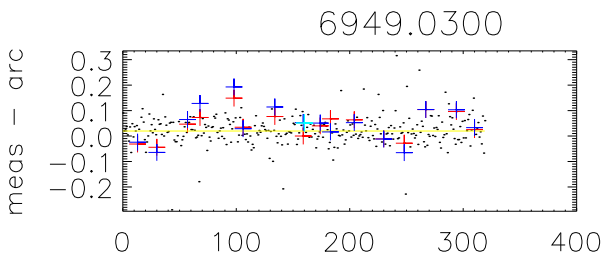

6300.3040
off: −0.03
sig: 0.007
6363.7760
off: −0.01
sig: 0.014
6553.6100
off: −0.06
sig: 0.027
6923.2100
off: −0.03
sig: 0.017
6949.0300
off: 0.05
sig: 0.016
7571.7500
off: 0.05
sig: 0.014
7794.1200
off: −0.05
sig: 0.008
7821.5100
off: −0.02
sig: 0.007
8399.1600
off: 0.02
sig: 0.006
8430.1700
off: 0.01
sig: 0.005
8885.8300
off: 0.02
sig: 0.005
8919.6100
off: 0.03
sig: 0.005

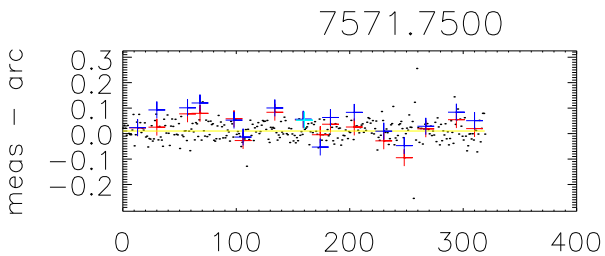

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

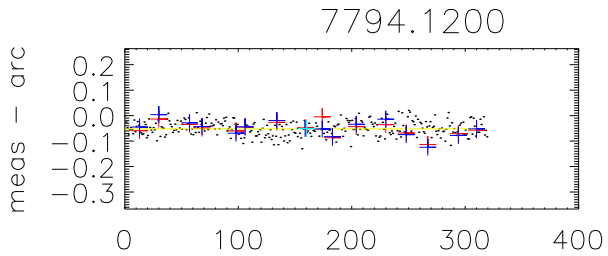

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

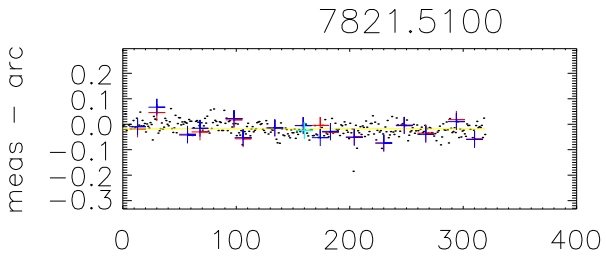

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

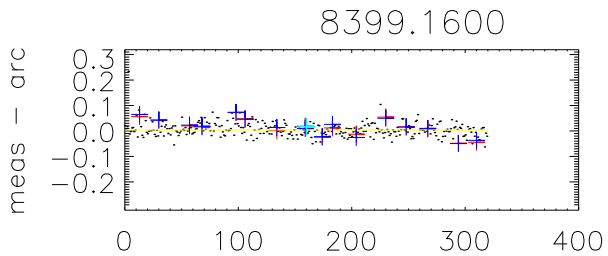

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

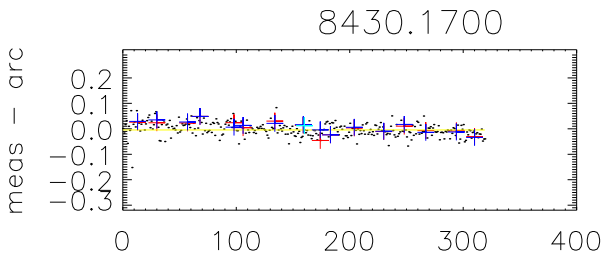

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

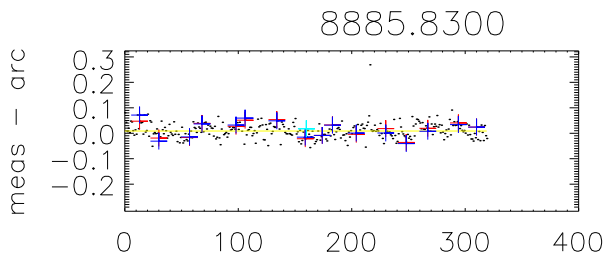

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

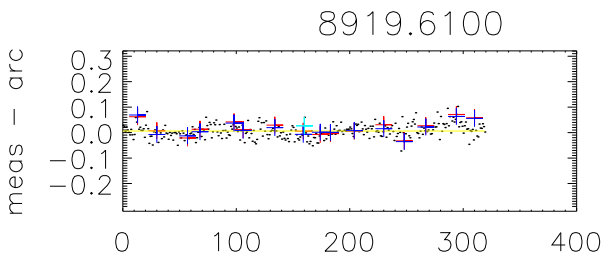

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

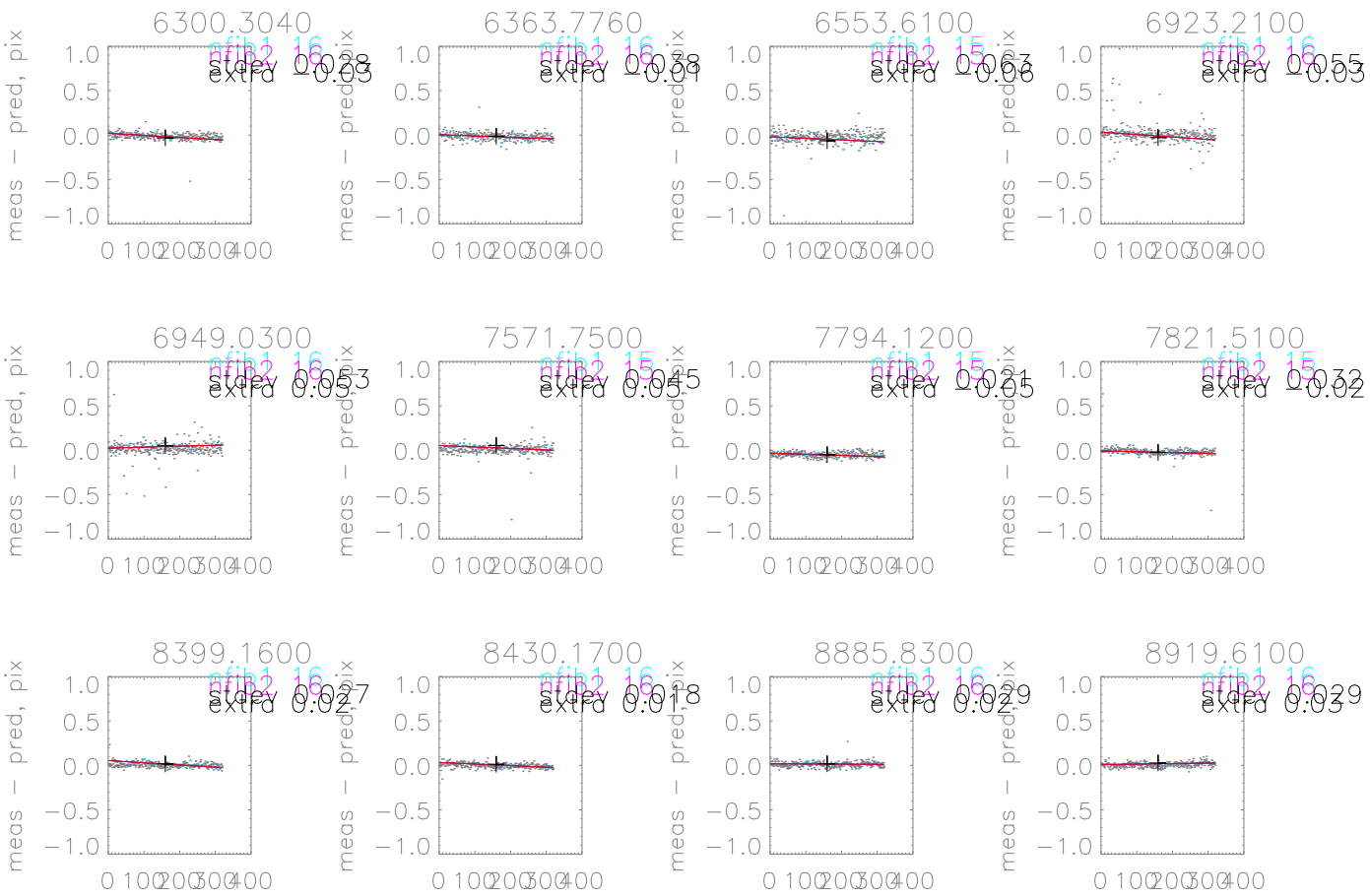

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

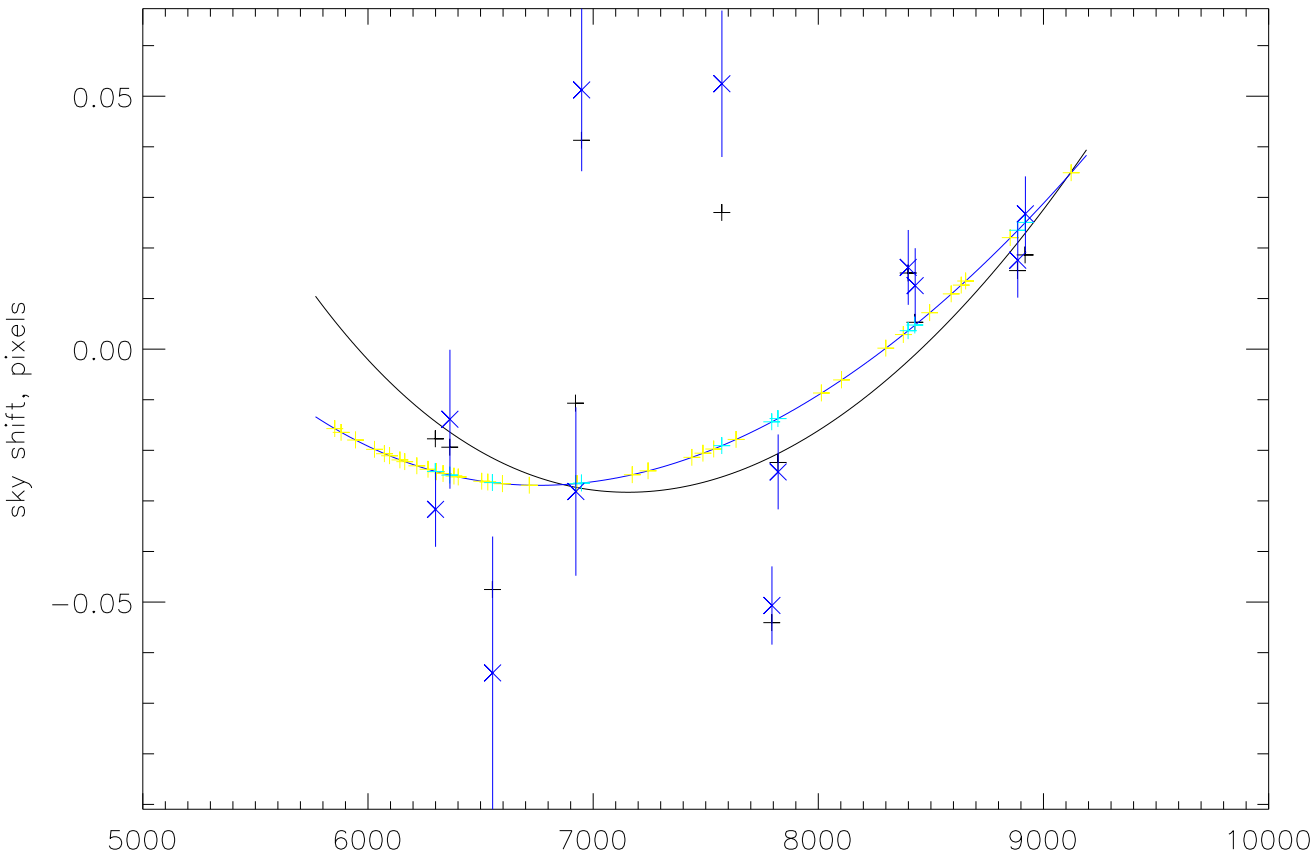

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

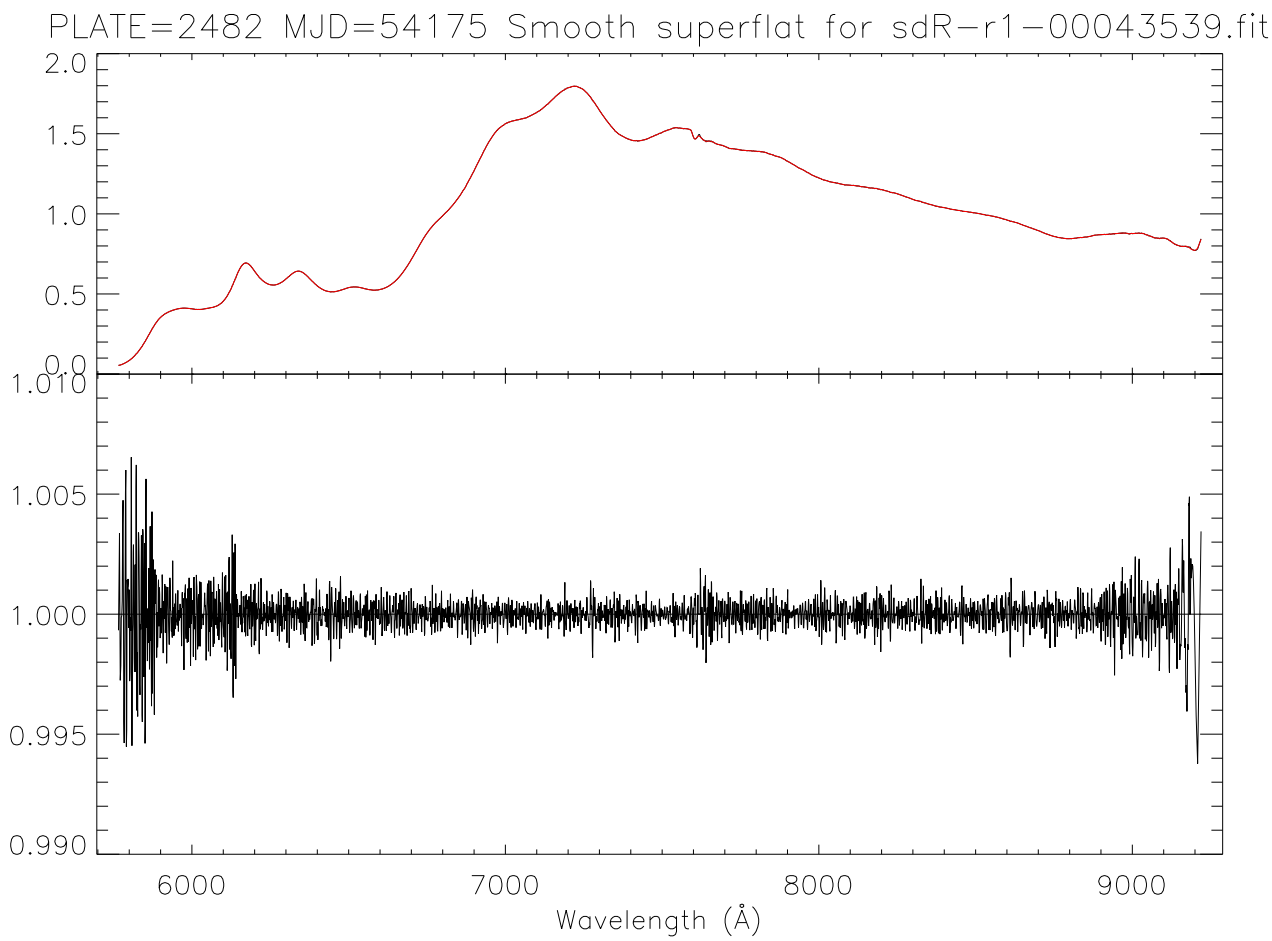

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

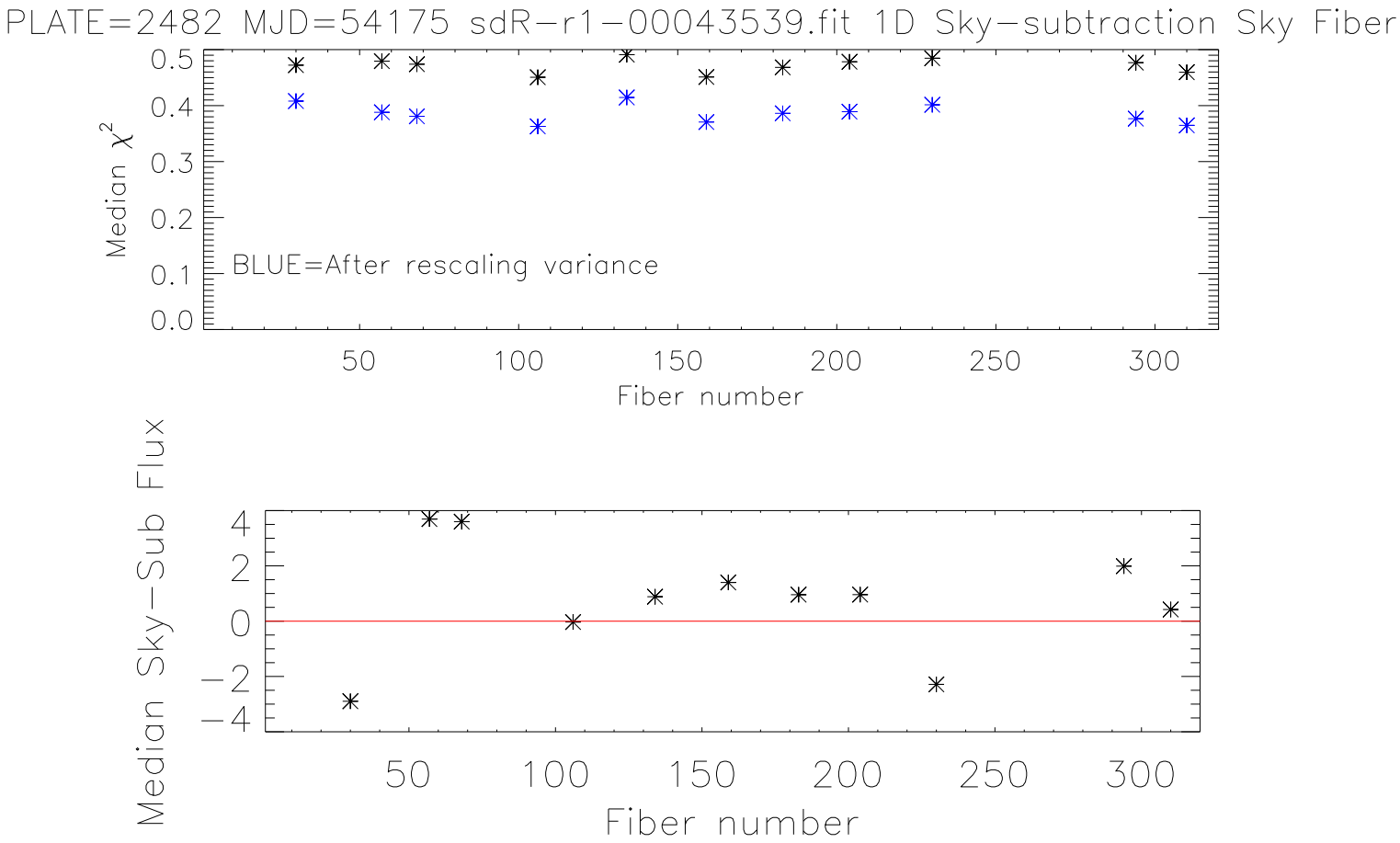

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

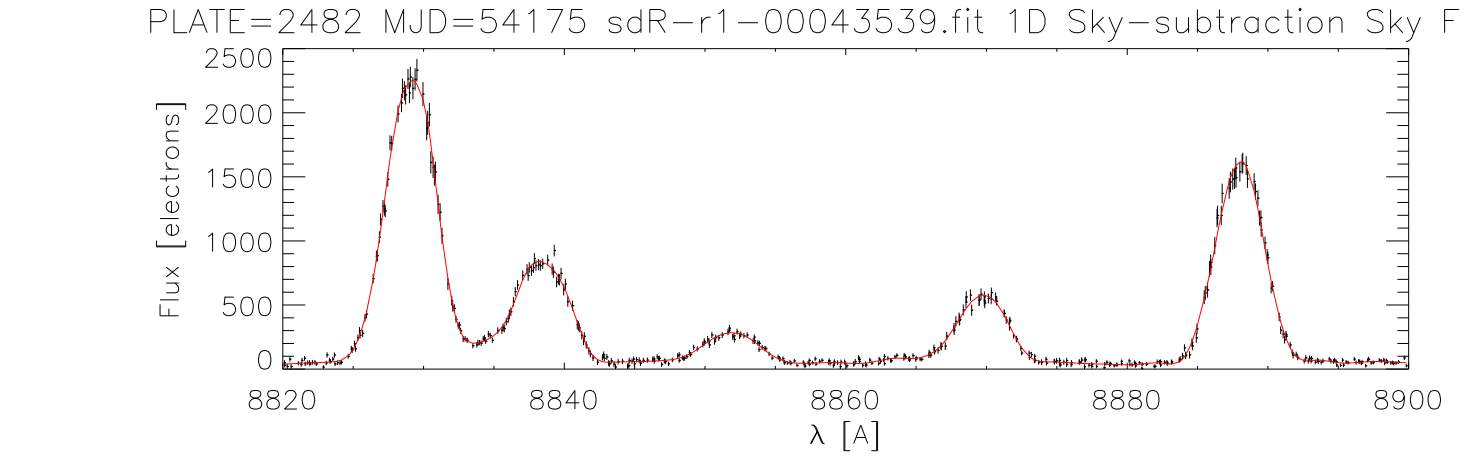

6300.3040
stdev 0.028
extra −0.03
6363.7760
stdev 0.038
extra −0.01
6553.6100
stdev 0.063
extra −0.06
6923.2100
stdev 0.055
extra −0.03
6949.0300
stdev 0.053
extra 0.05
7571.7500
stdev 0.045
extra 0.05
7794.1200
stdev 0.021
extra −0.05
7821.5100
stdev 0.032
extra −0.02
8399.1600
stdev 0.027
extra 0.02
8430.1700
stdev 0.018
extra 0.01
8885.8300
stdev 0.029
extra 0.02
8919.6100
stdev 0.029
extra 0.03
meas − pred, pix
mfb2 16
mfb2 15

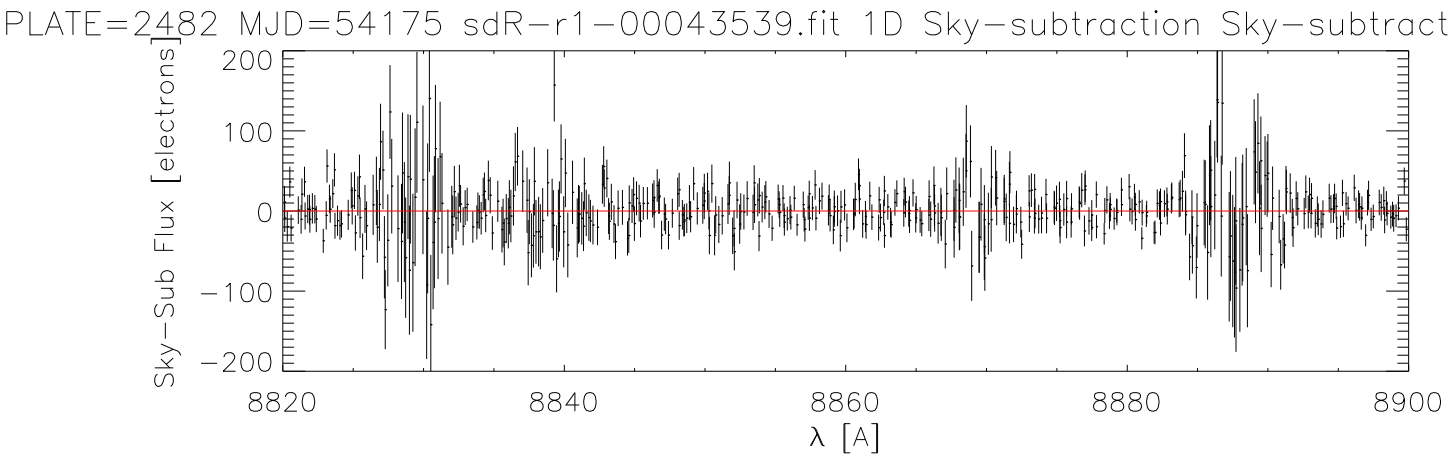

0.05
0.00
−0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

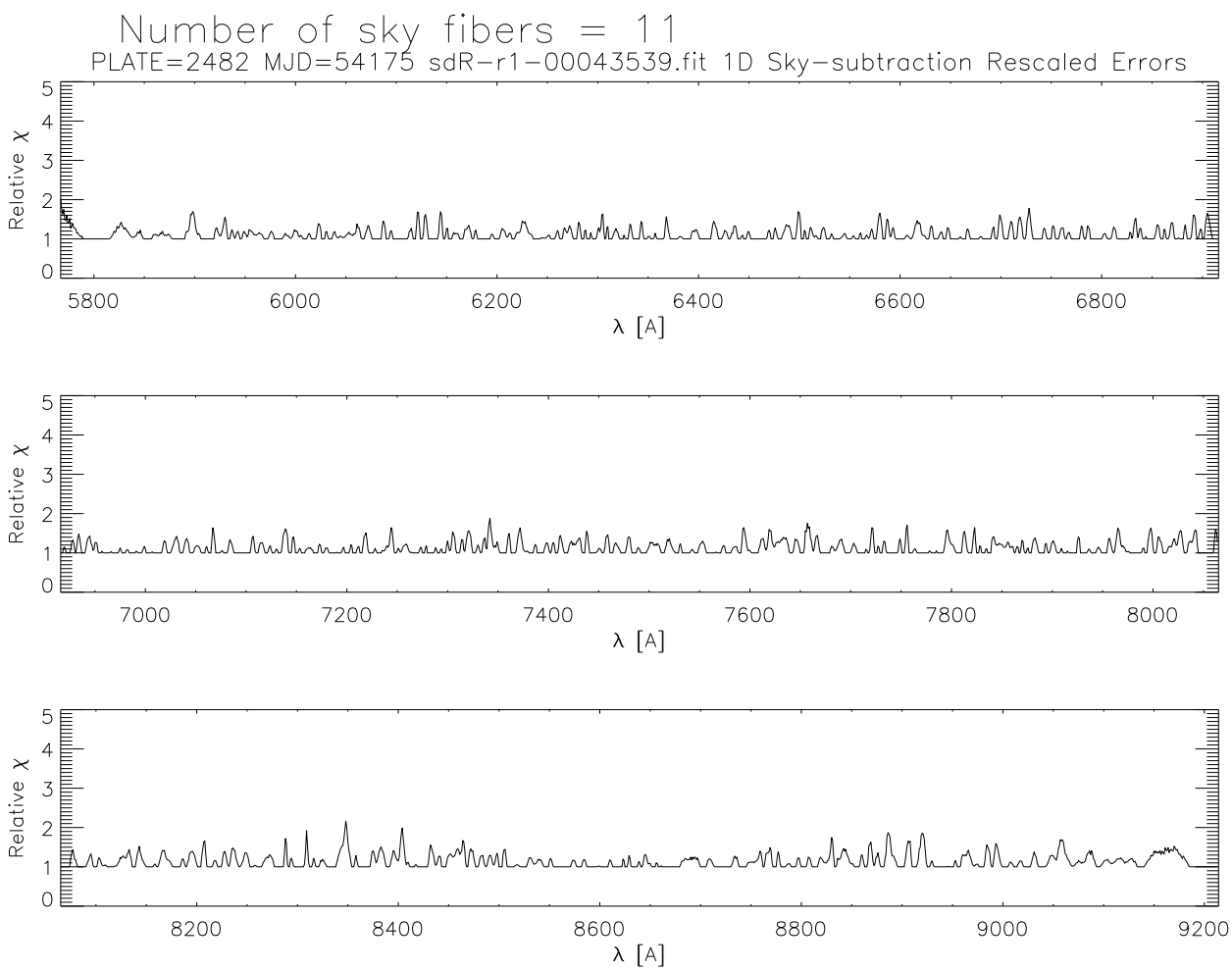
es= 0.0000

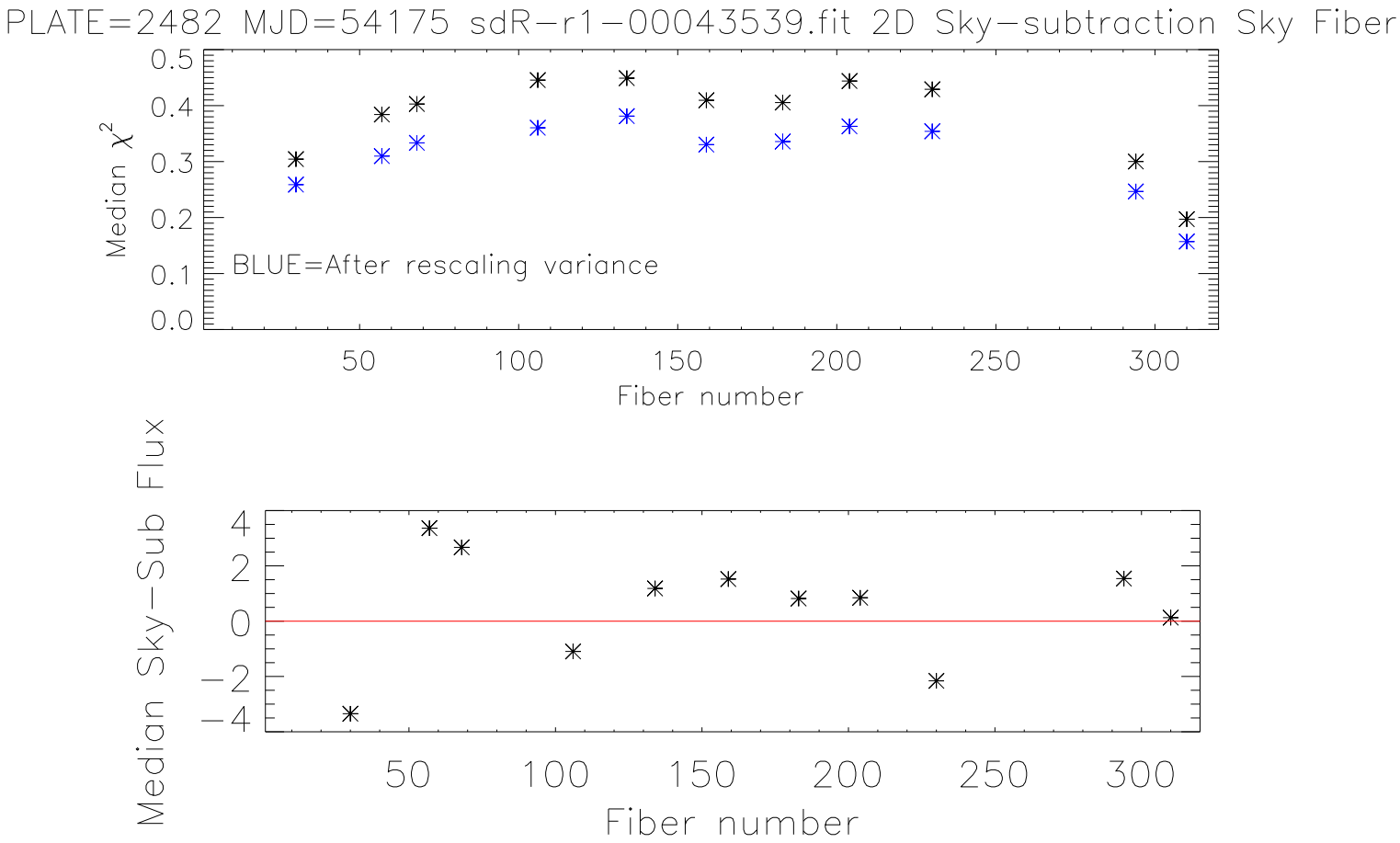

PLATE=2482 MJD=54175 Smooth superflat for sdR-r1-00043539.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

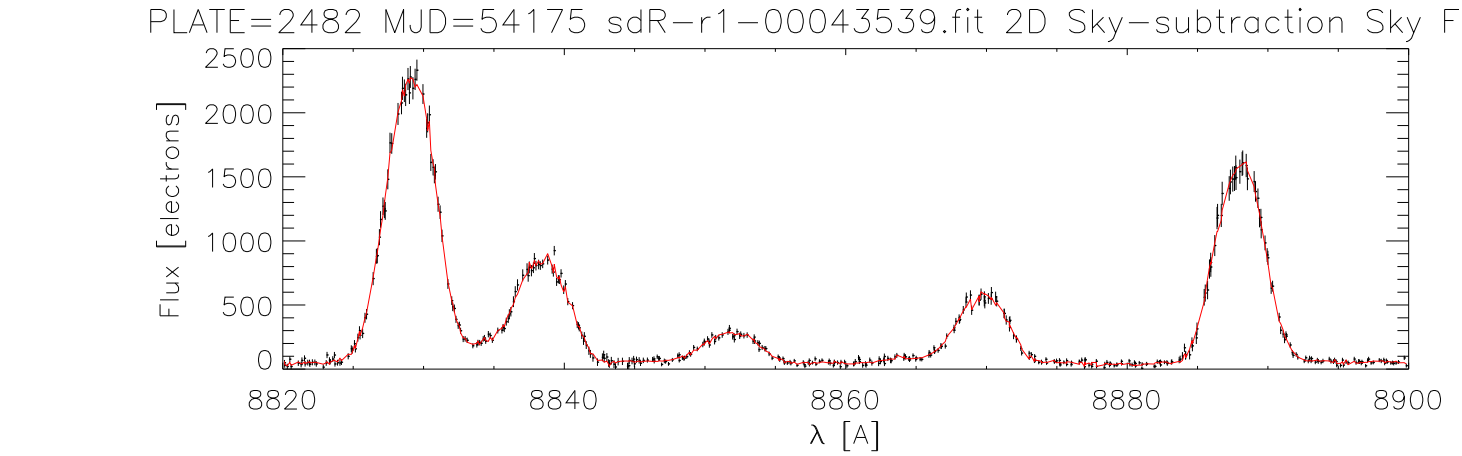

PLATE=2482 MJD=54175 sdR-r1-00043539.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

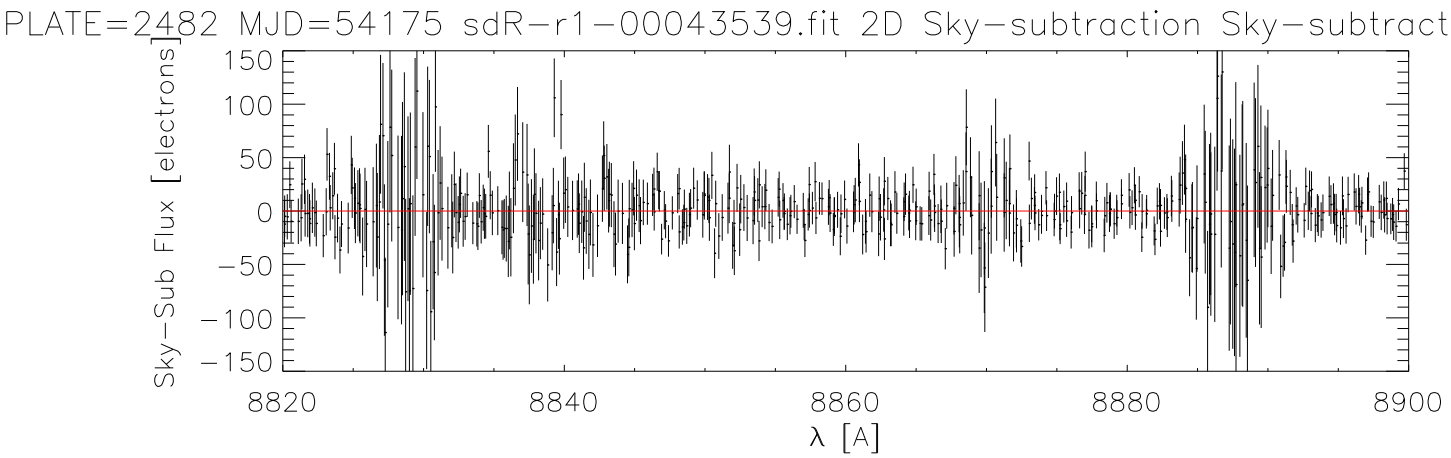

PLATE=2482 MJD=54175 sdR-r1-00043539.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

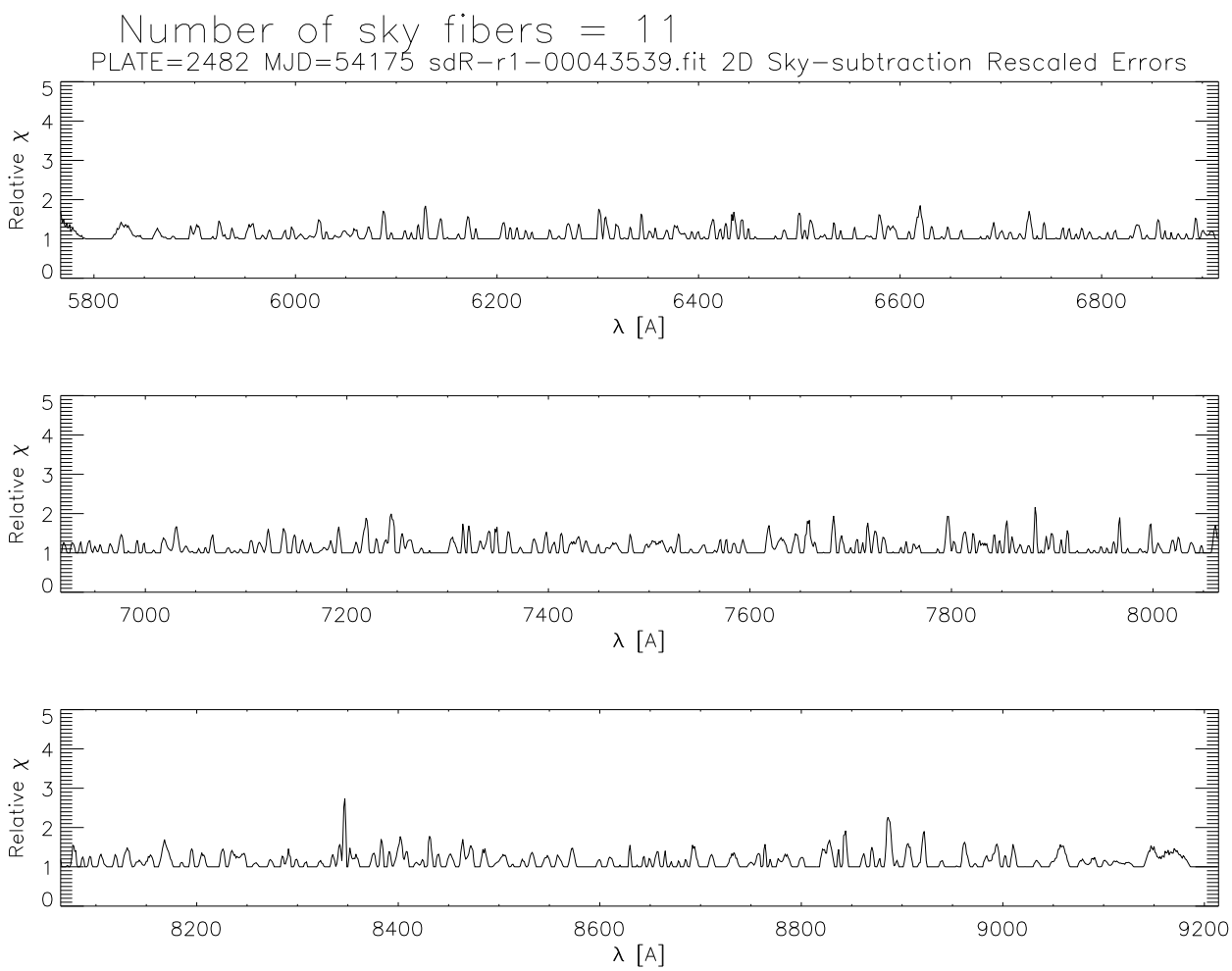

PLATE=2482 MJD=54175 sdR-r1-00043539.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

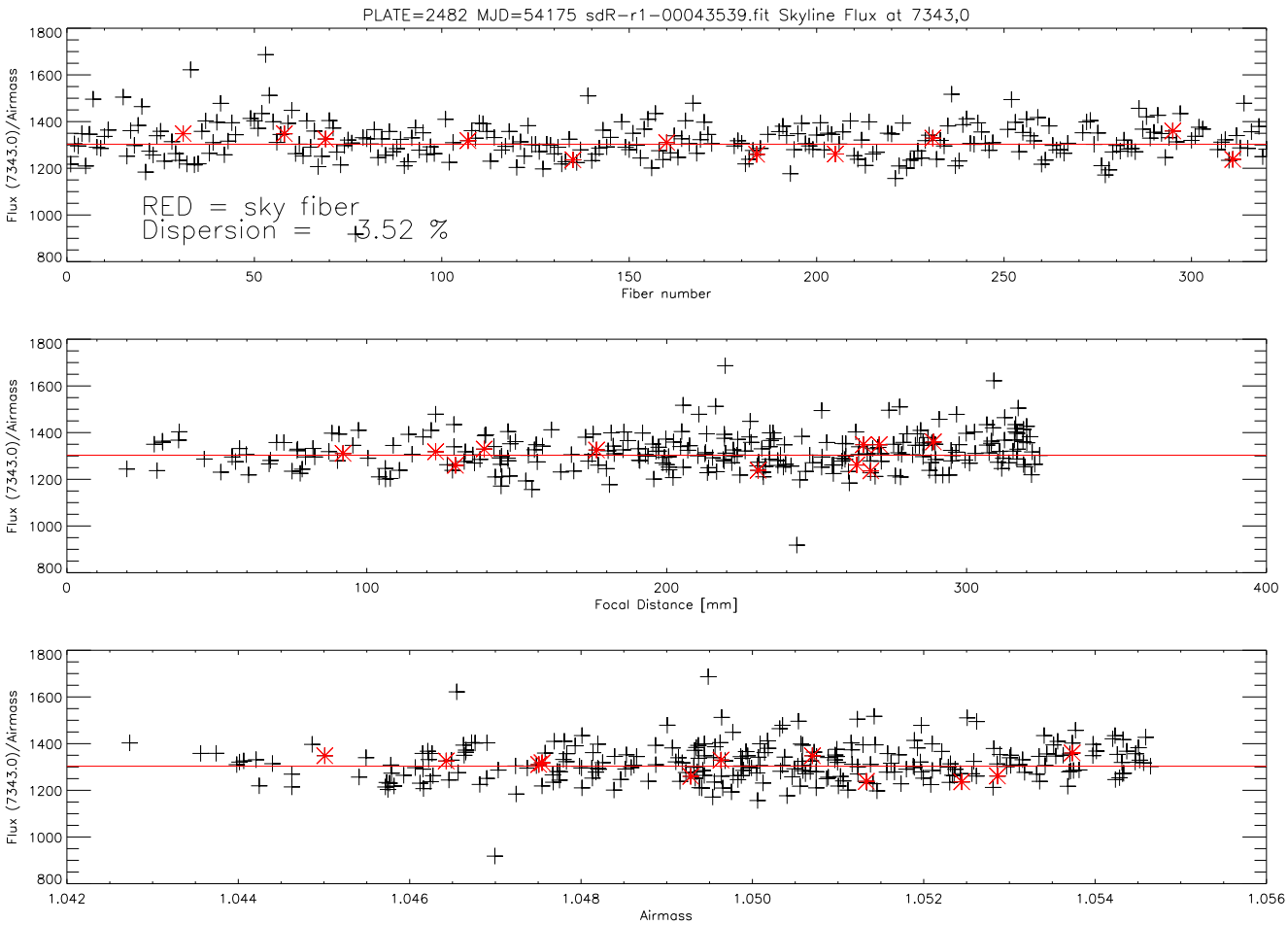

Number of sky fibers = 11
PLATE=2482 MJD=54175 sdR-r1-00043539.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

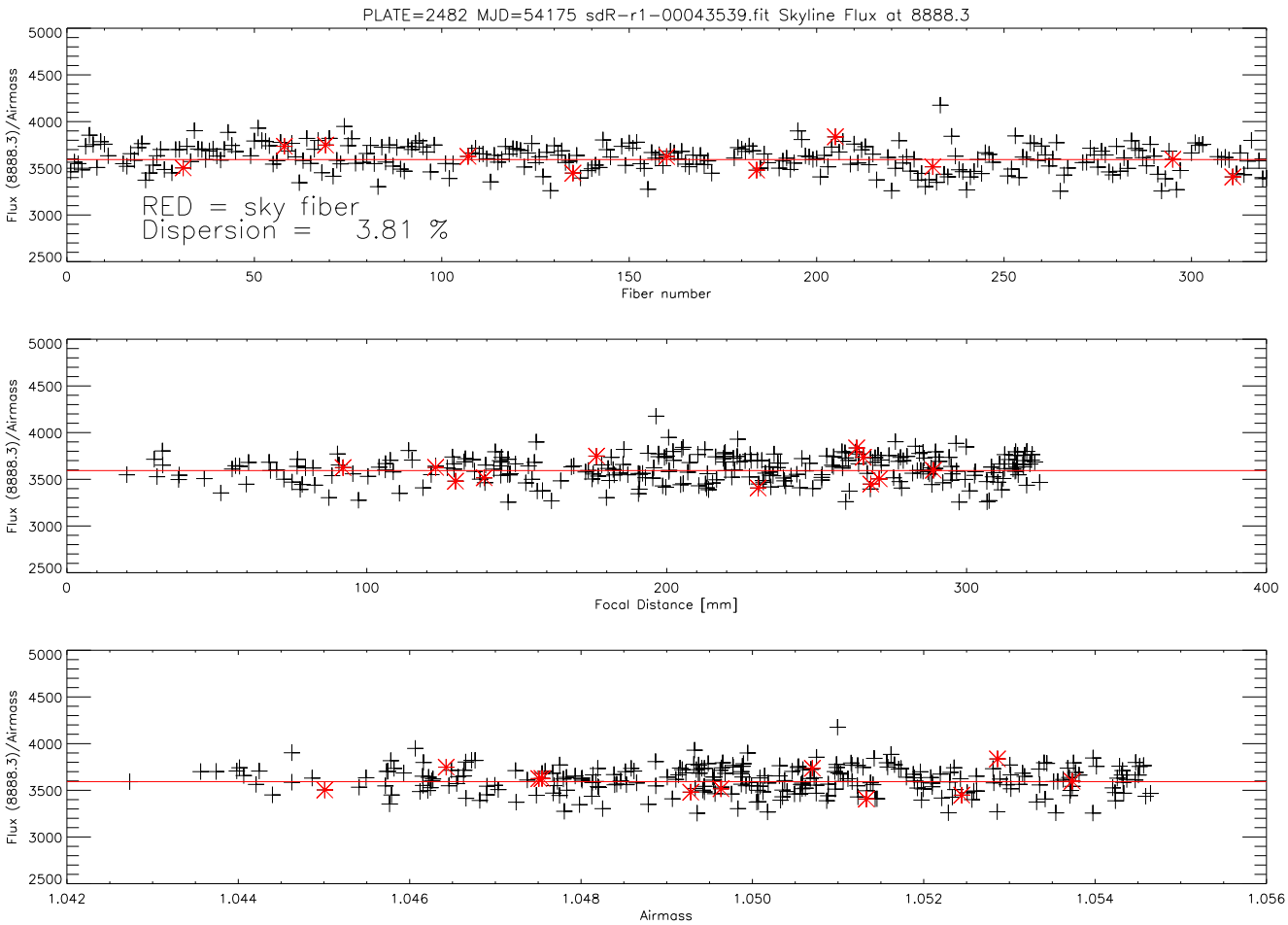

PLATE=2482 MJD=54175 sdR-r1-00043539.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

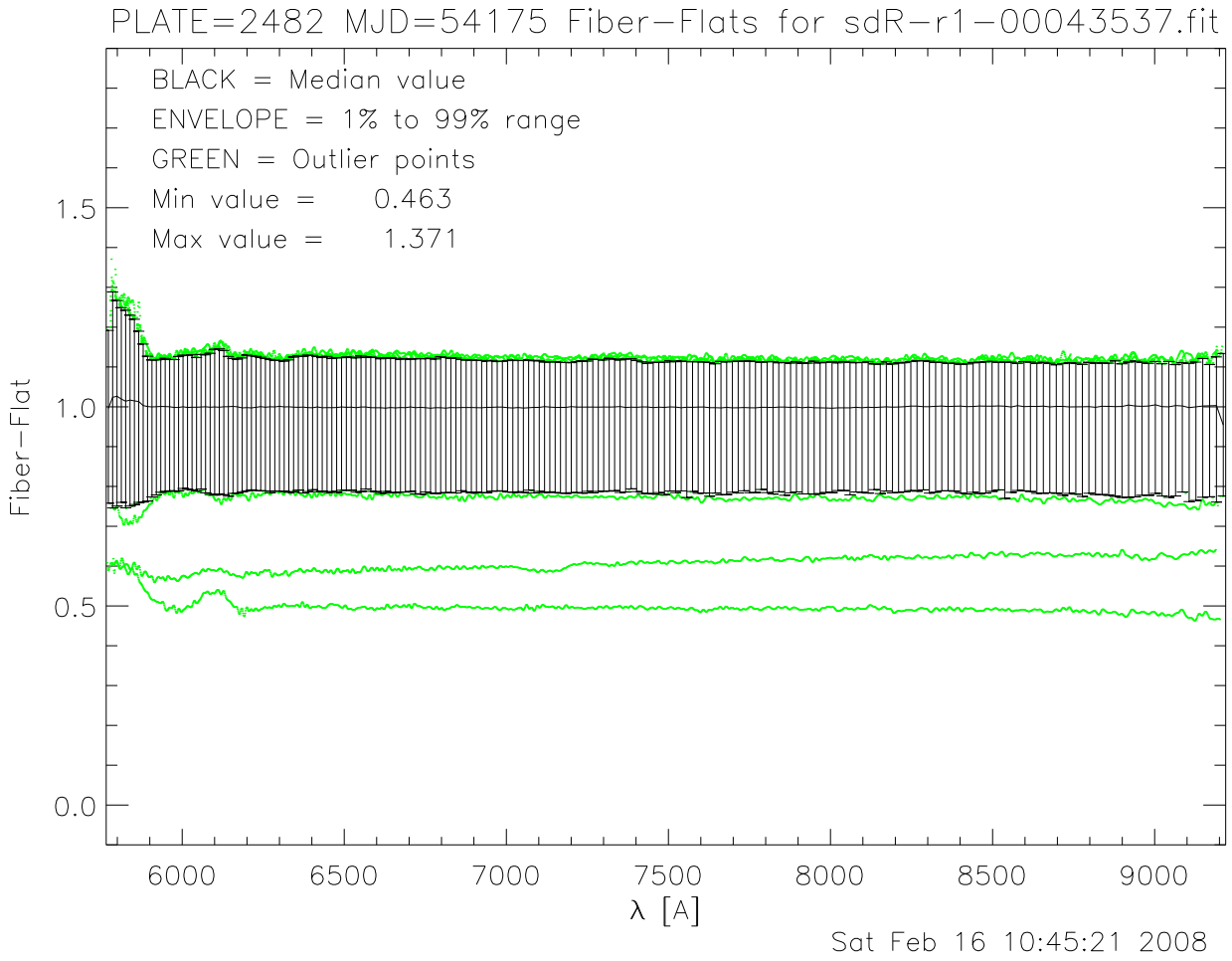

PLATE=2482 MJD=54175 sdR-r1-00043539.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

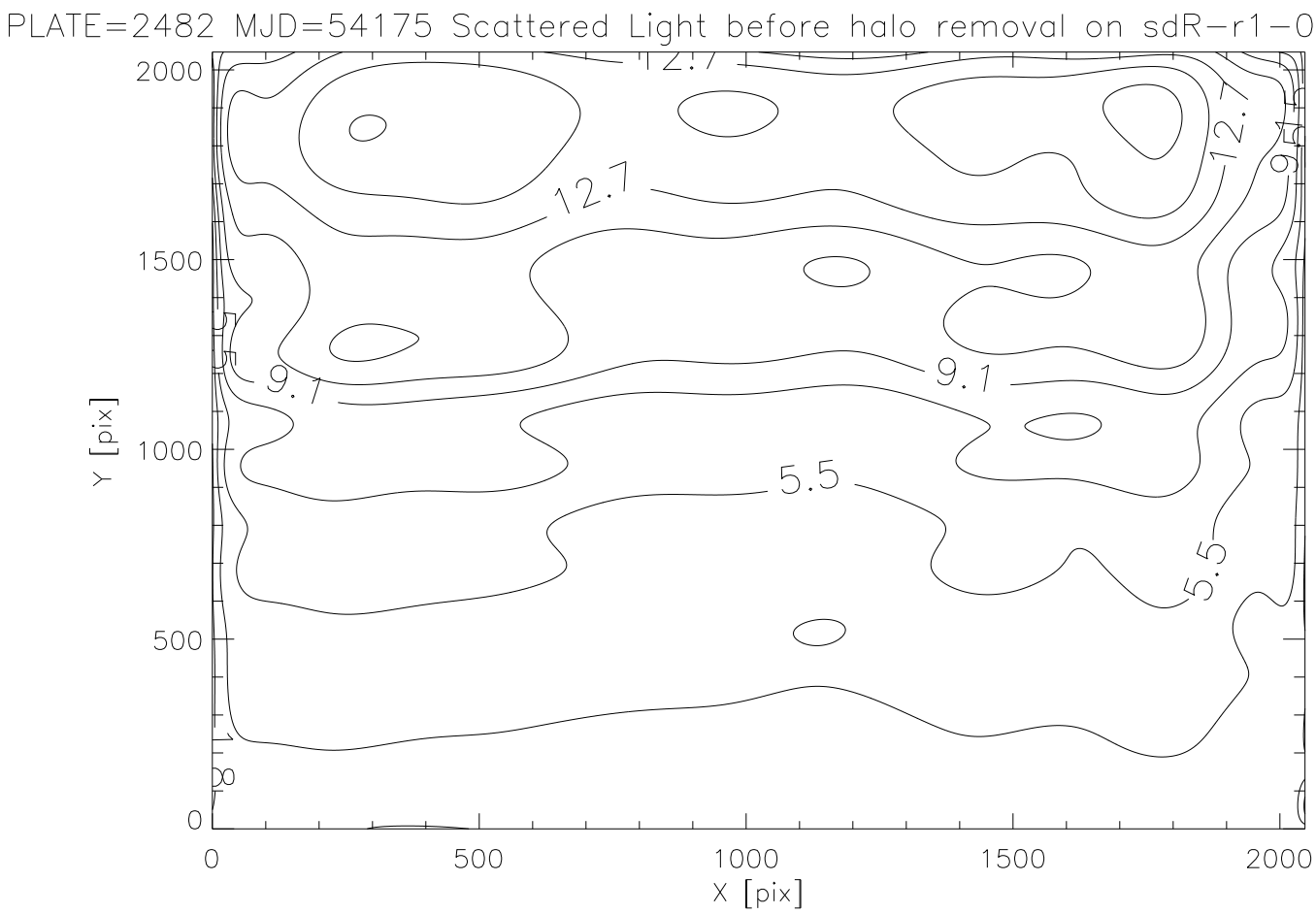

PLATE=2482 MJD=54175 sdR-r1-00043539.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

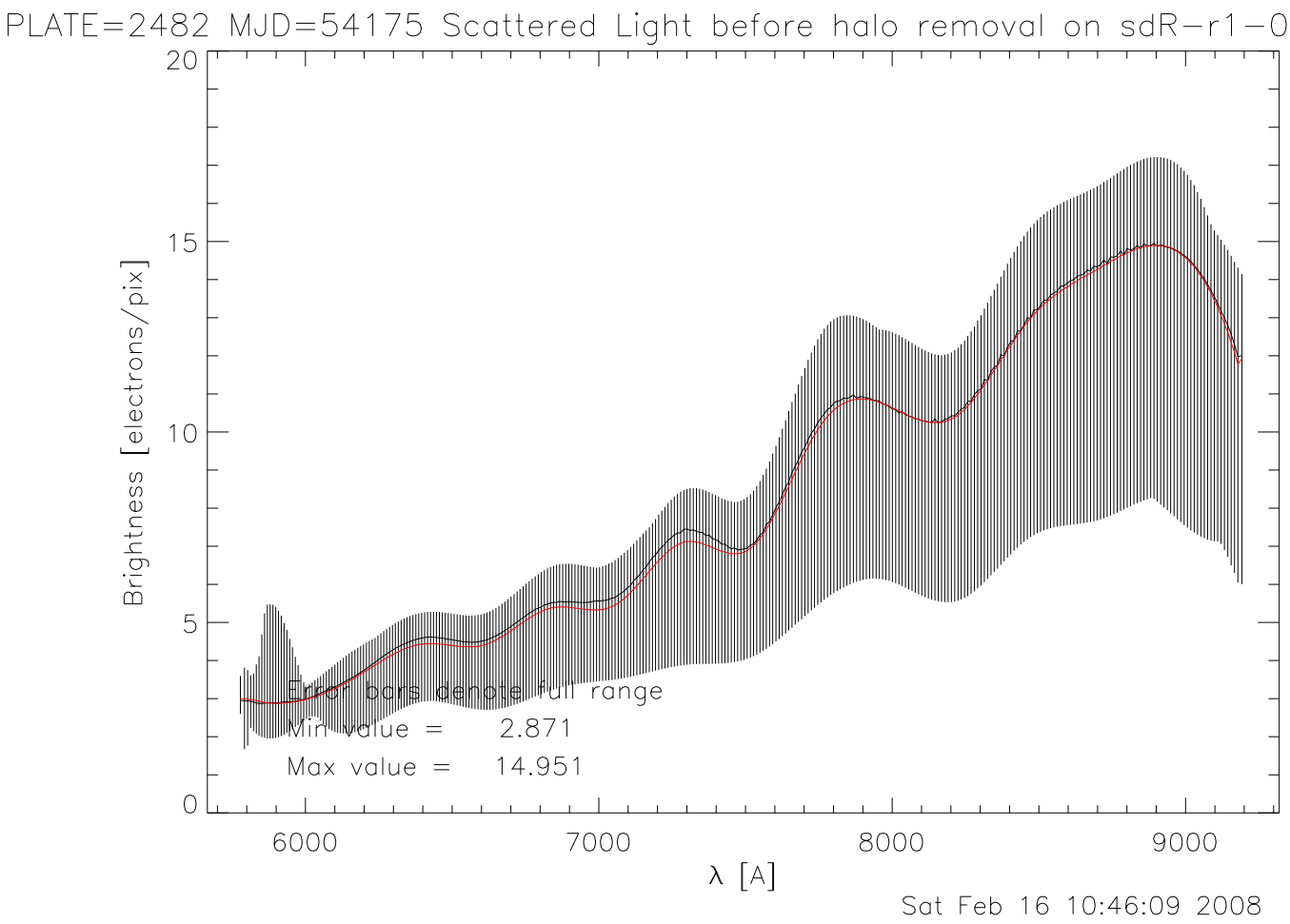

Number of sky fibers = 11
PLATE=2482 MJD=54175 sdR-r1-00043539.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

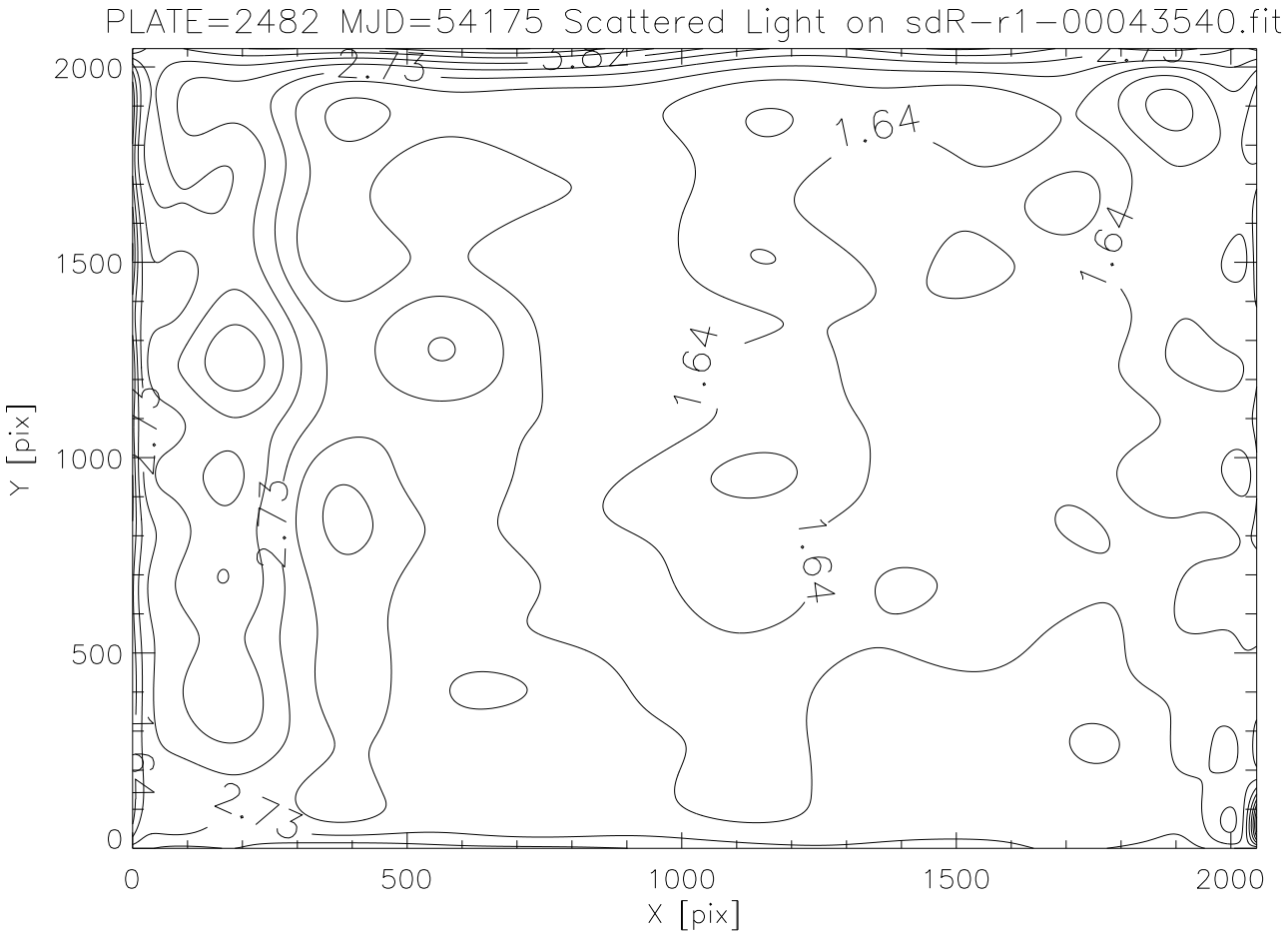

PLATE=2482 MJD=54175 sdR-r1-00043539.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.52 %
Fiber number
Focal Distance [mm]
Airmass

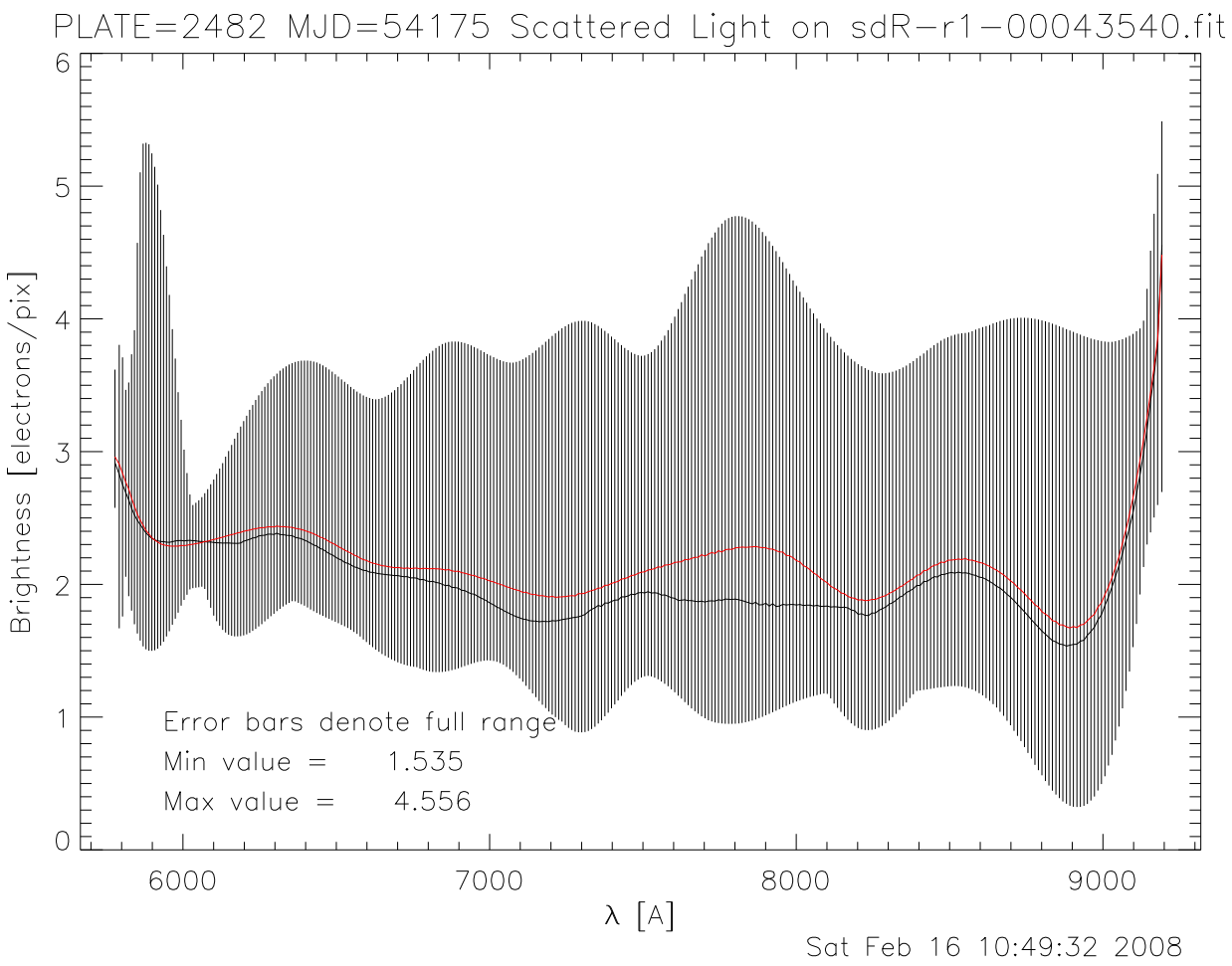

PLATE=2482 MJD=54175 sdR-r1-00043539.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.81 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

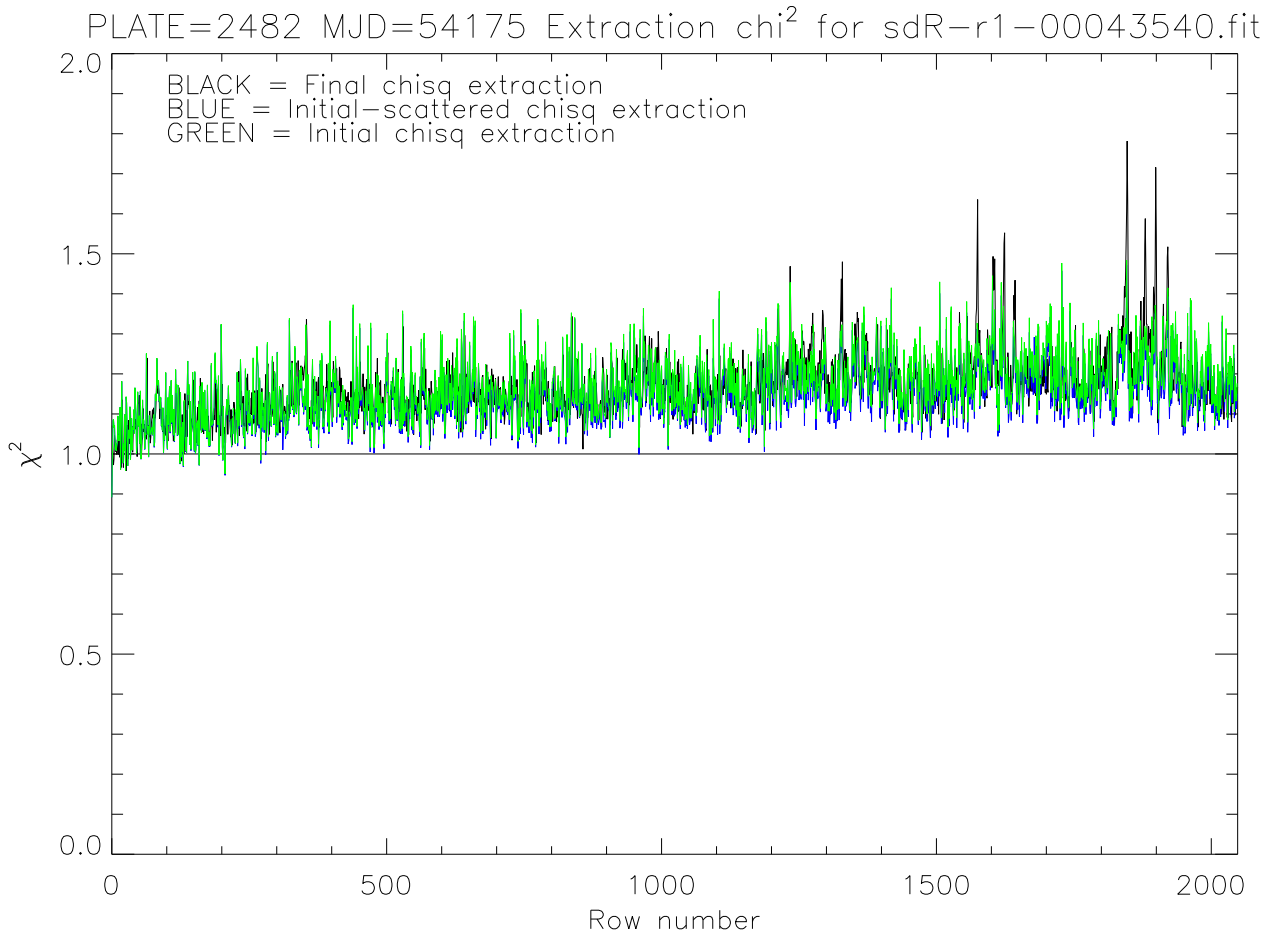

PLATE=2482 MJD=54175 Fiber-Flats for sdR-r1-00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.463
Max value = 1.371
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 10:45:21 2008

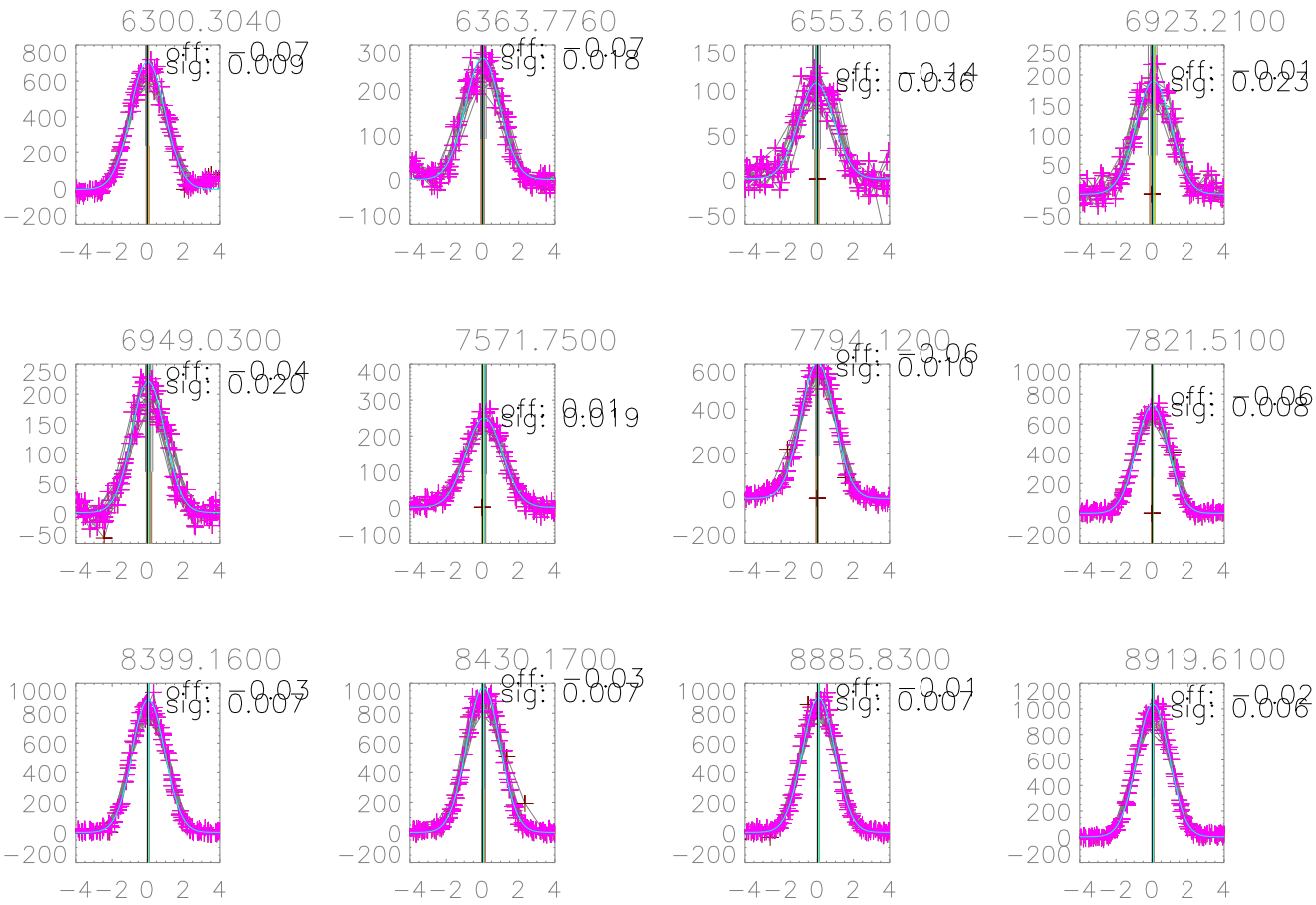

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r1-00043540.fi
12.7
12.7
12.7
9.1
9.1
5.5
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

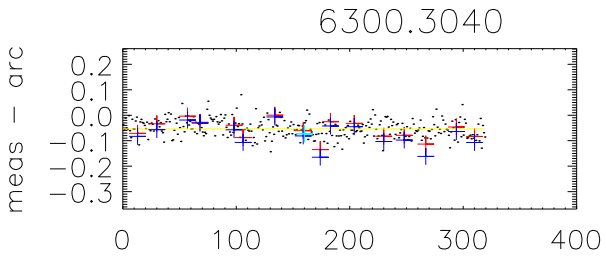

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r1-00043540.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.871
Max value = 14.951
Sat Feb 16 10:46:09 2008

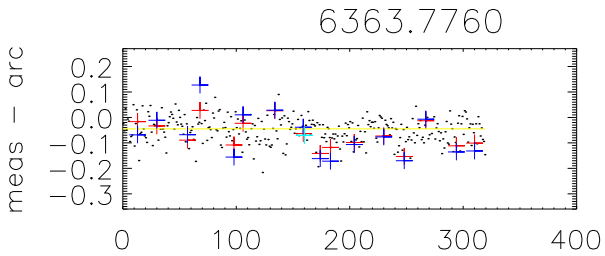

PLATE=2482 MJD=54175 Scattered Light on sdR-r1-00043540.fit
2.73
1.64
0
Y [pix]
X [pix]
0
500
1000
1500
2000

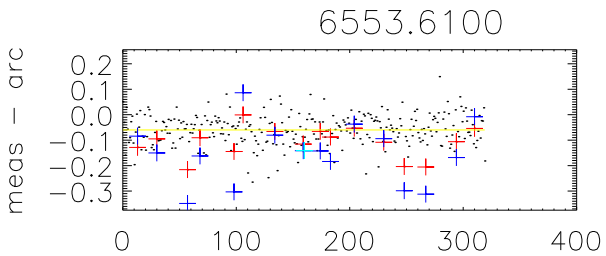

PLATE=2482 MJD=54175 Scattered Light on sdR-r1-00043540.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.535
Max value = 4.556
Sat Feb 16 10:49:32 2008

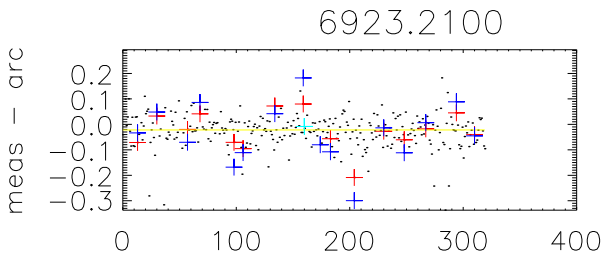

PLATE=2482 MJD=54175 Extraction chi^2 for sdR−r1−00043540.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

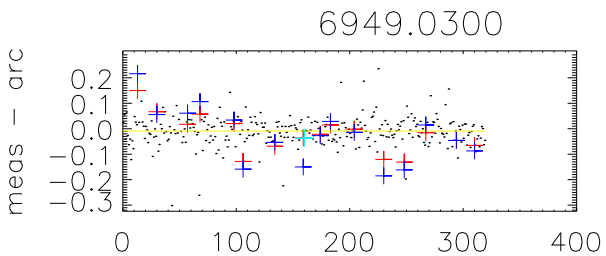

6300.3040
off: −0.07
sig: 0.009
6363.7760
off: −0.07
sig: 0.018
6553.6100
off: −0.14
sig: 0.036
6923.2100
off: −0.01
sig: 0.023
6949.0300
off: −0.04
sig: 0.020
7571.7500
off: 0.01
sig: 0.019
7794.1200
off: −0.06
sig: 0.010
7821.5100
off: −0.06
sig: 0.008
8399.1600
off: −0.03
sig: 0.007
8430.1700
off: −0.03
sig: 0.007
8885.8300
off: −0.01
sig: 0.007
8919.6100
off: −0.02
sig: 0.006

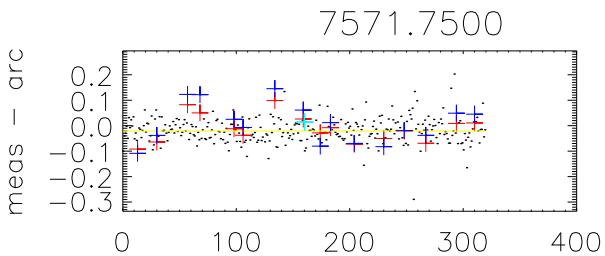

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

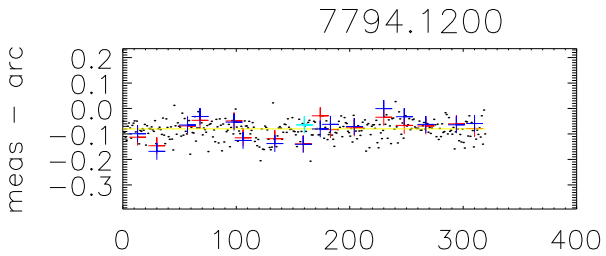

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

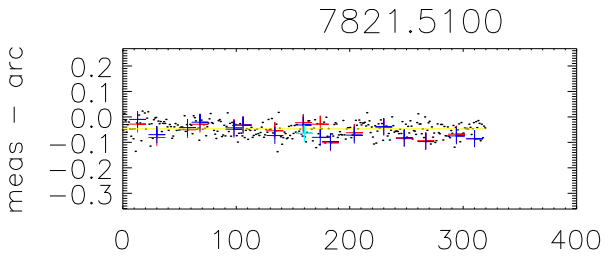

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

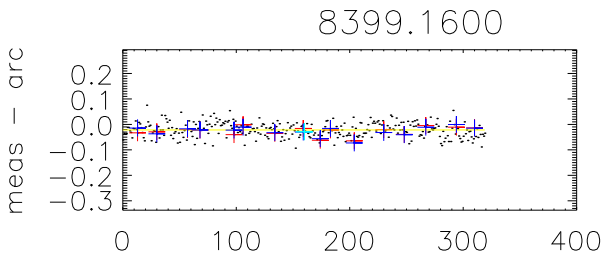

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

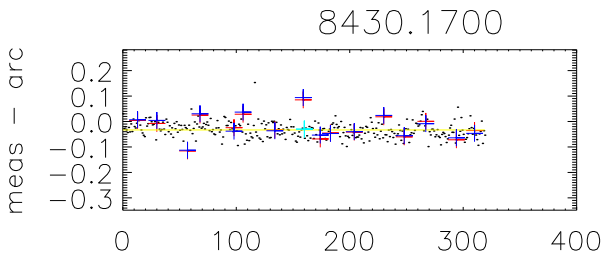

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

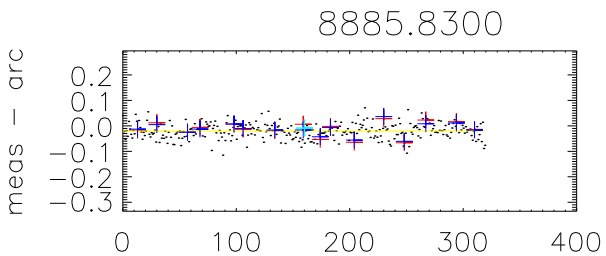

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

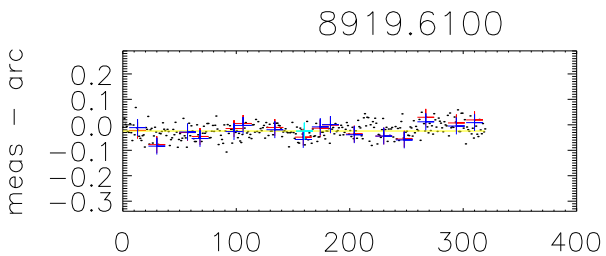

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

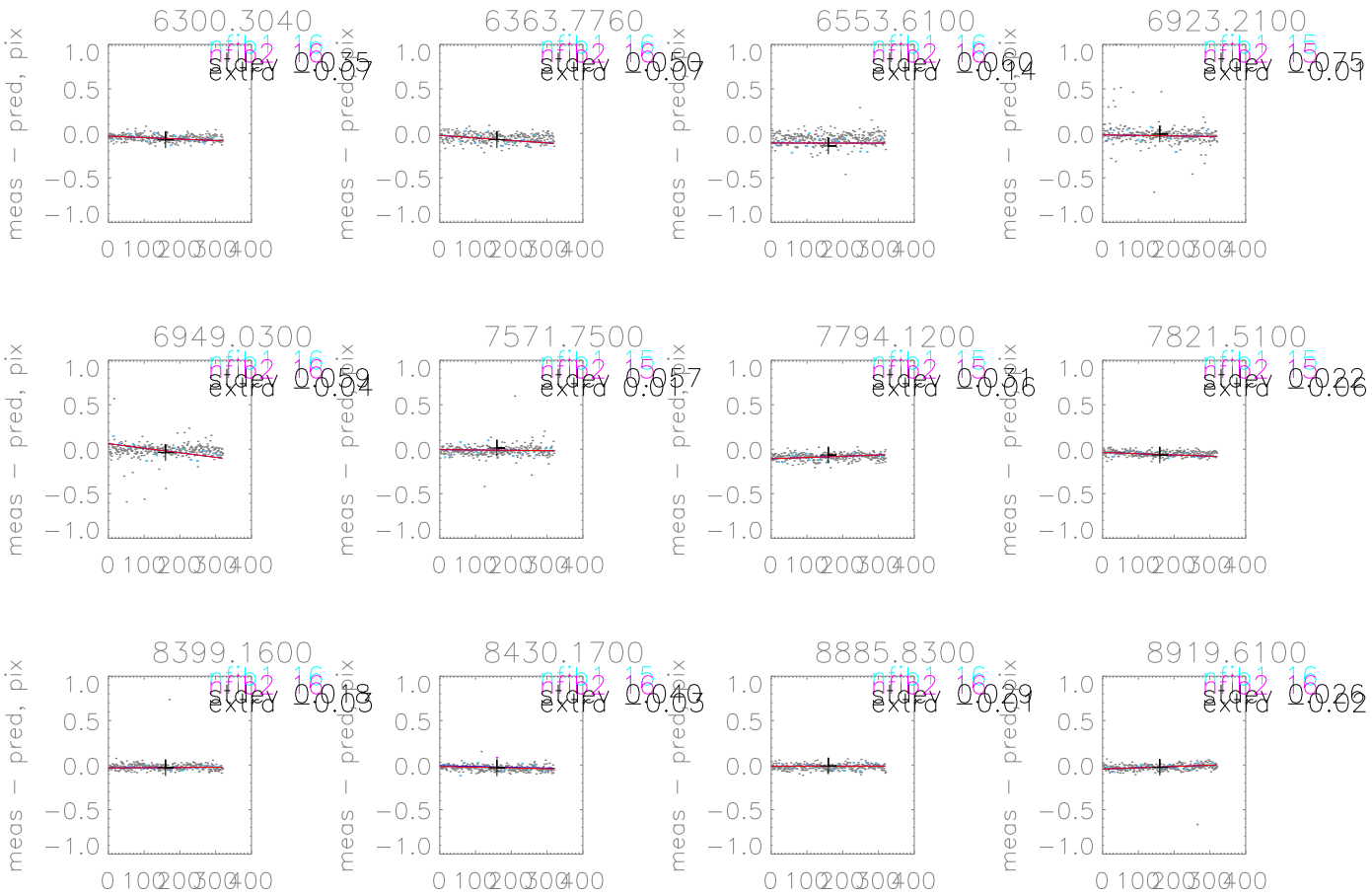

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

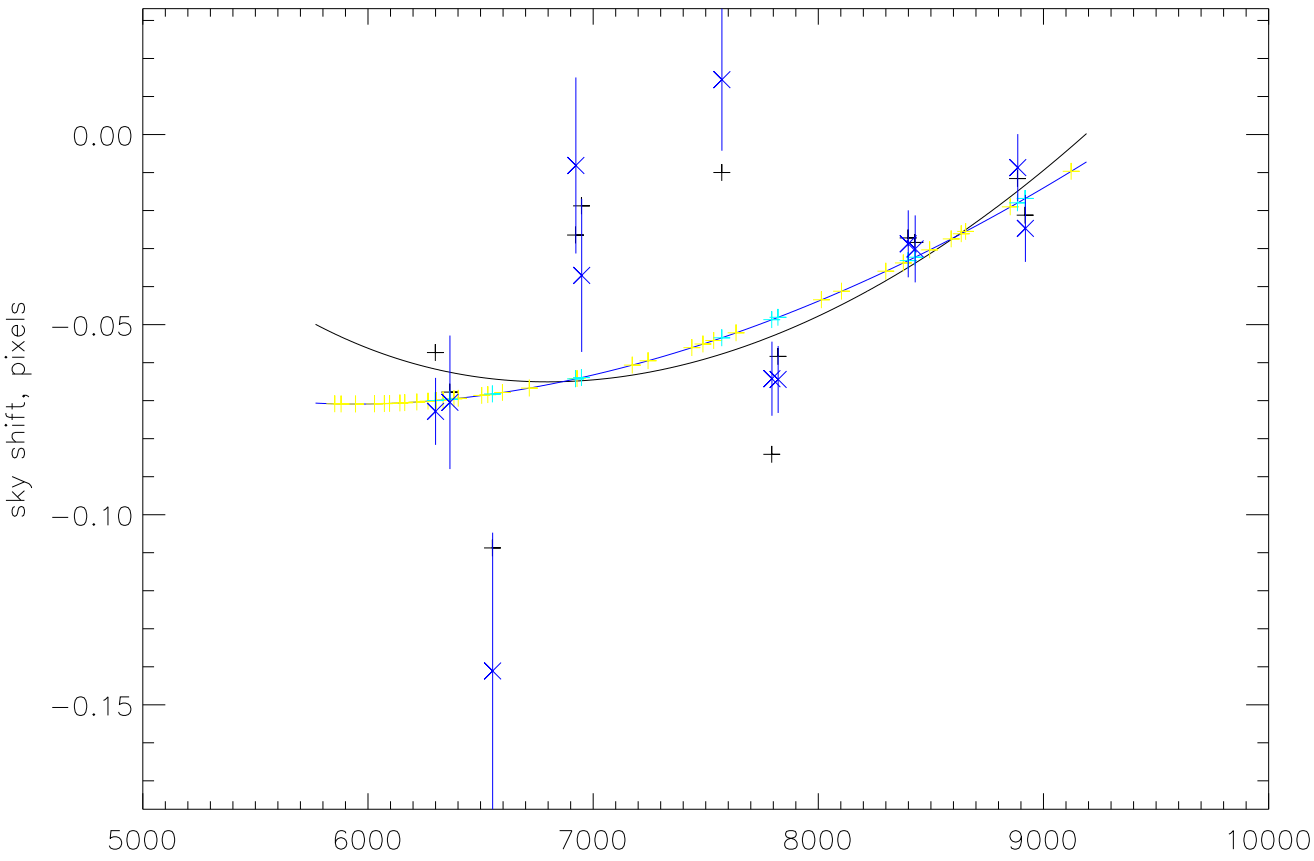

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

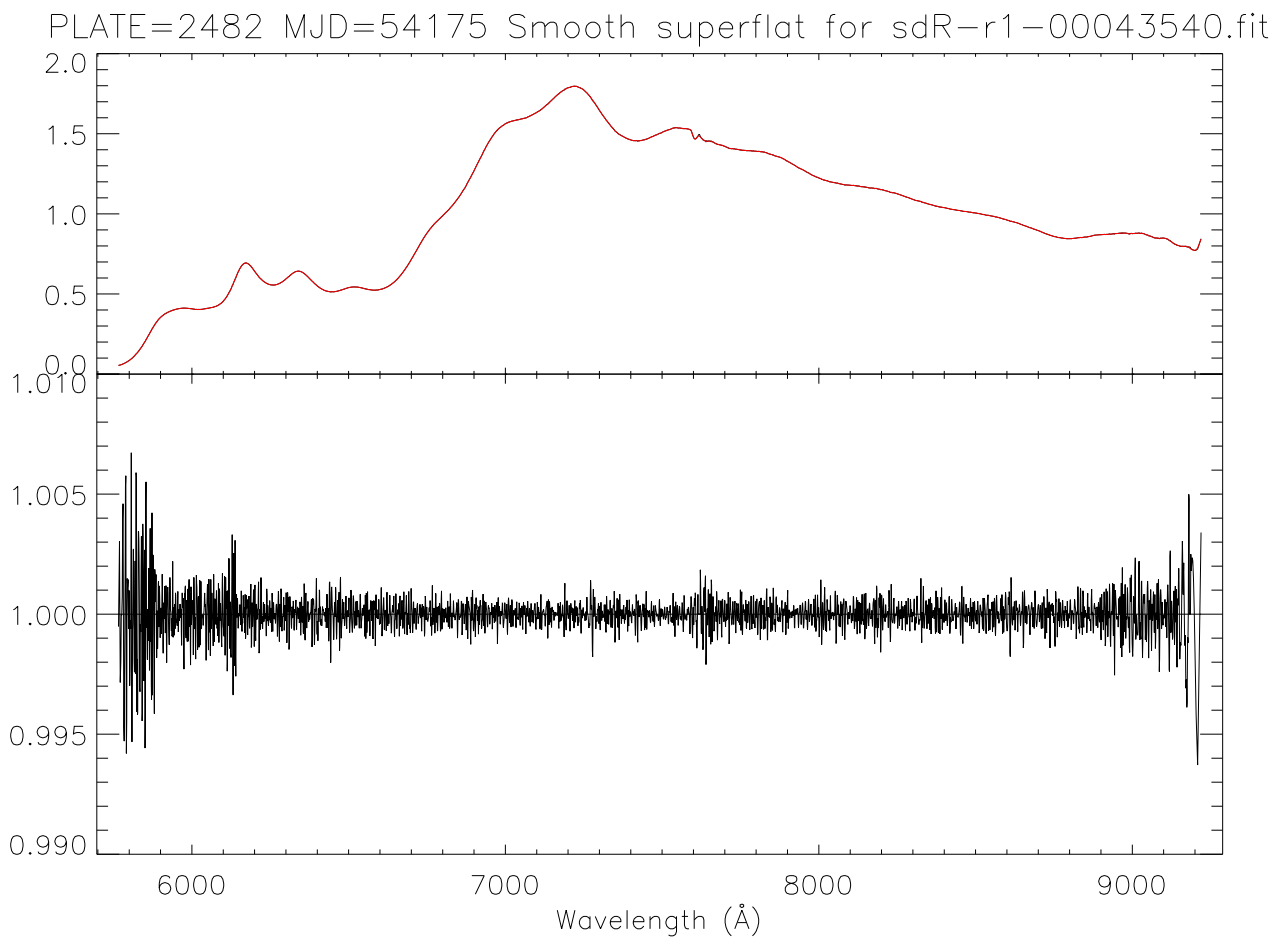

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

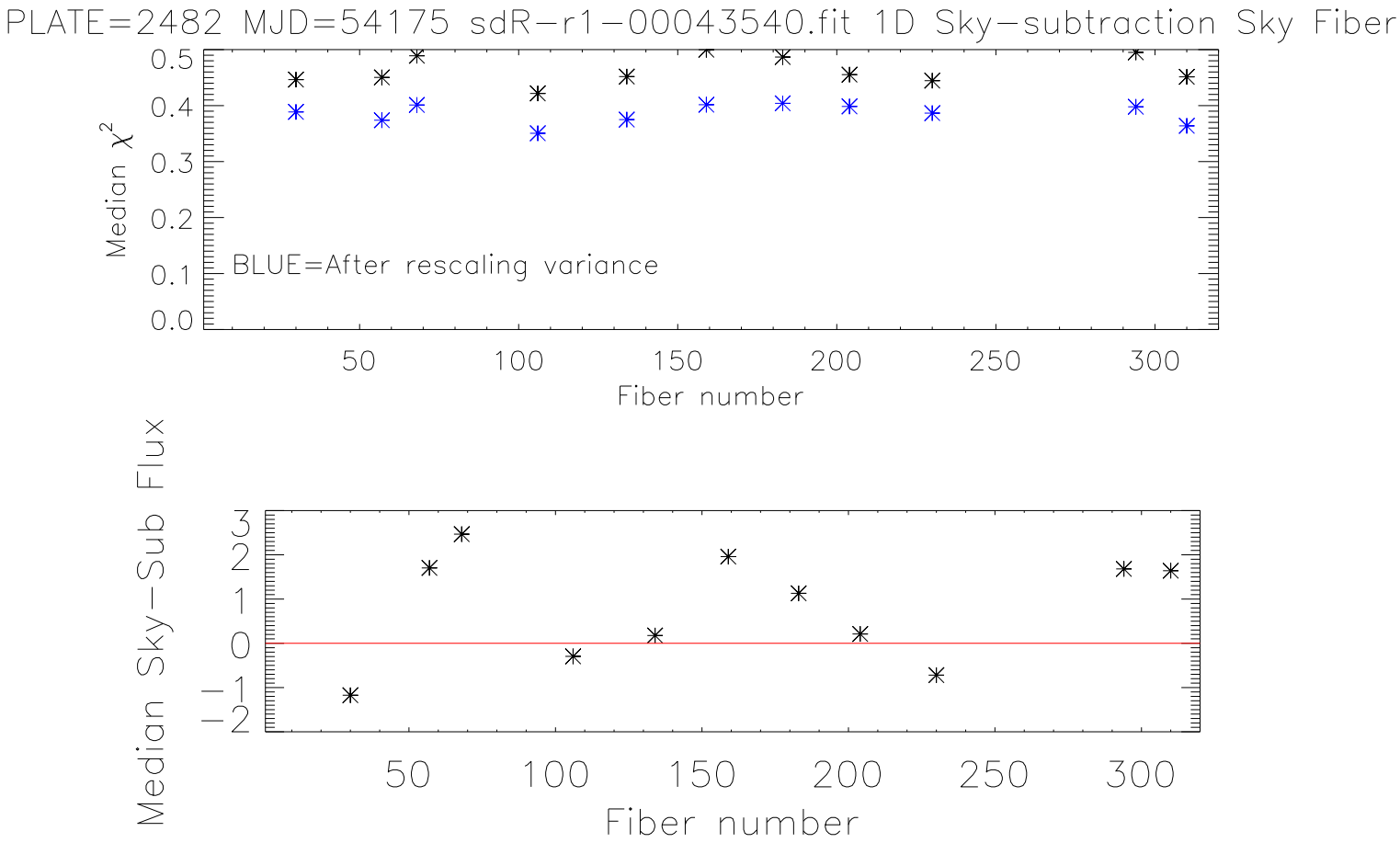

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

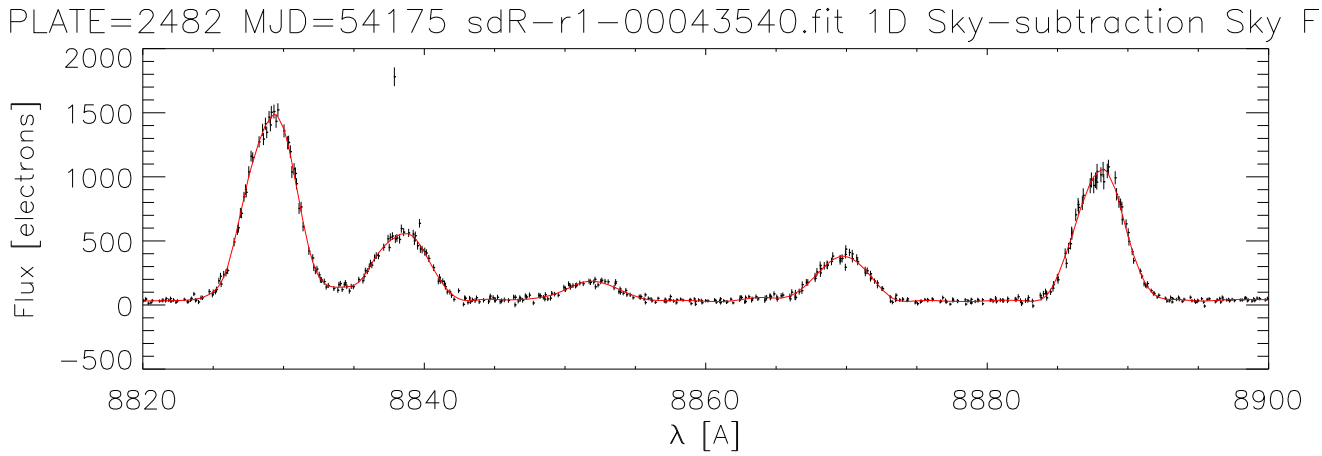

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 16
mfib2 16
mfib1 15
mfib2 15
stdev 0.035
extrd 0.007
stdev 0.050
extrd 0.007
stdev 0.060
extrd 0.014
stdev 0.075
extrd 0.011
stdev 0.059
extrd 0.004
stdev 0.057
extrd 0.011
stdev 0.031
extrd 0.006
stdev 0.022
extrd 0.006
stdev 0.018
extrd 0.003
stdev 0.040
extrd 0.003
stdev 0.029
extrd 0.011
stdev 0.026
extrd 0.002

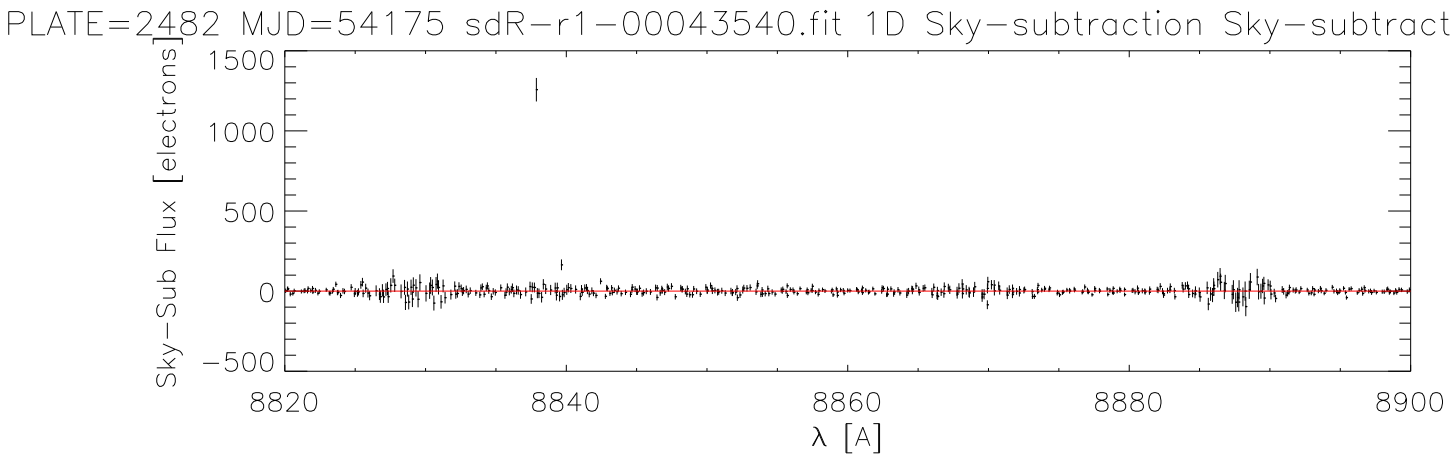

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

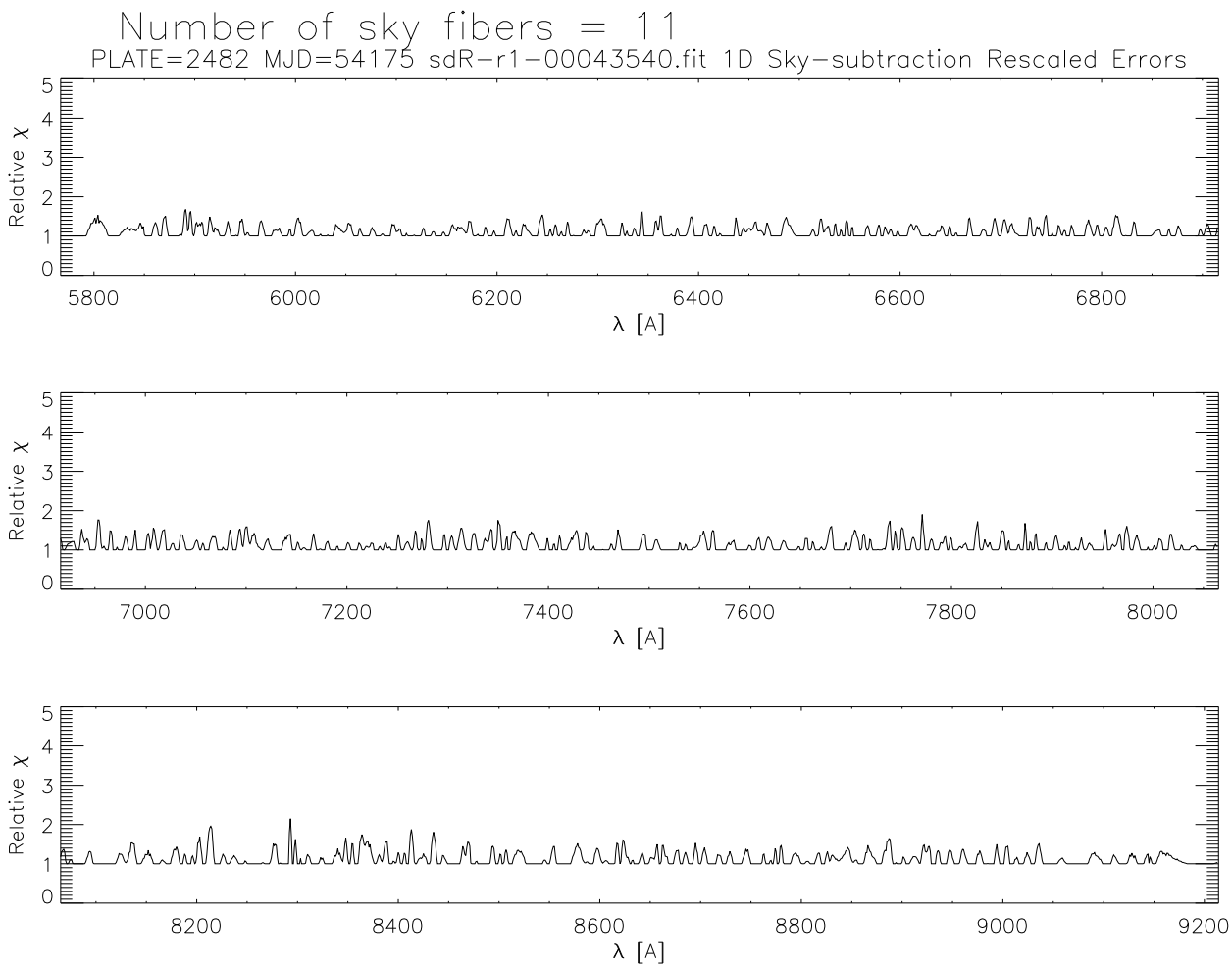
es= 0.0000

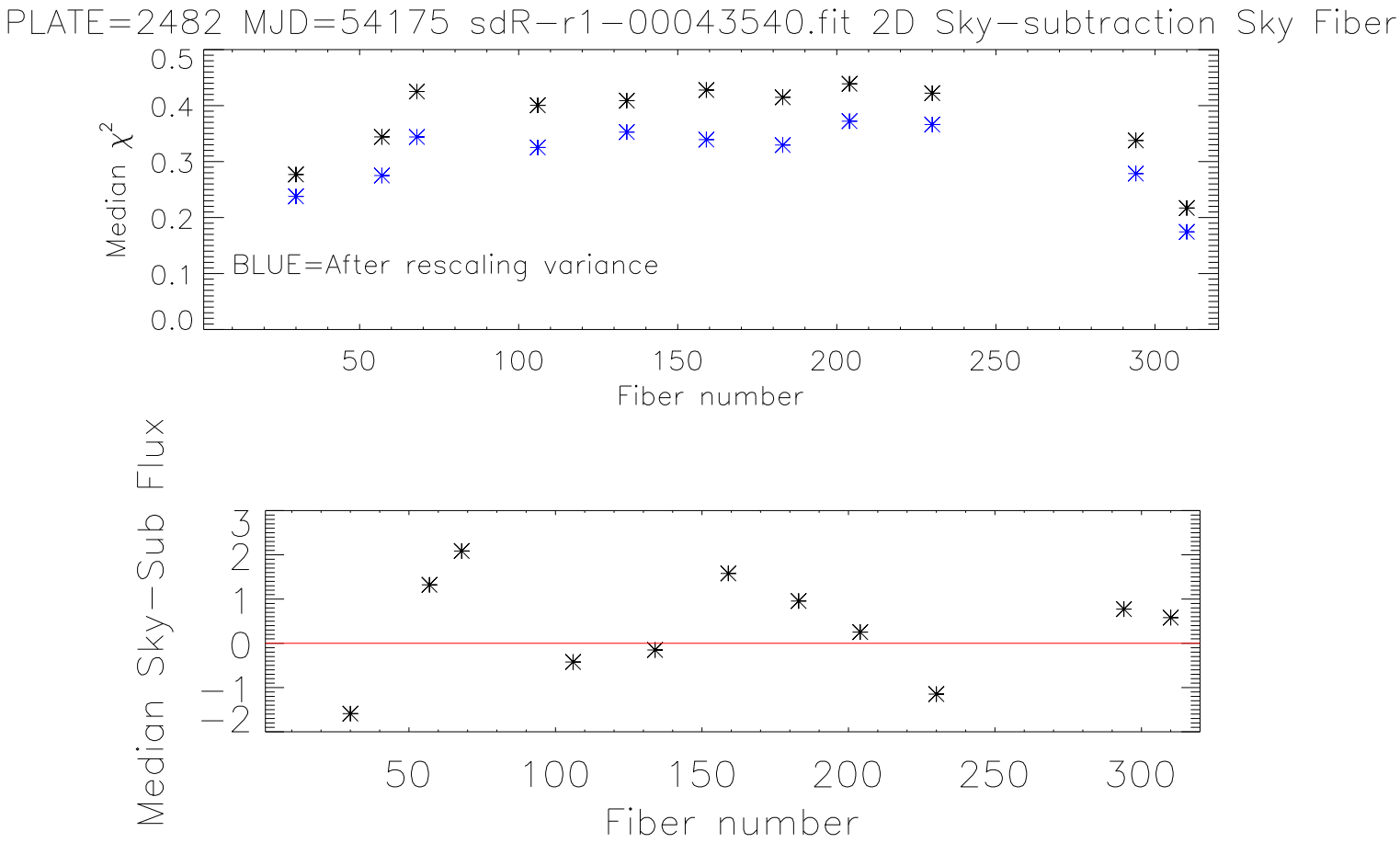

PLATE=2482 MJD=54175 Smooth superflat for sdR-r1-00043540.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

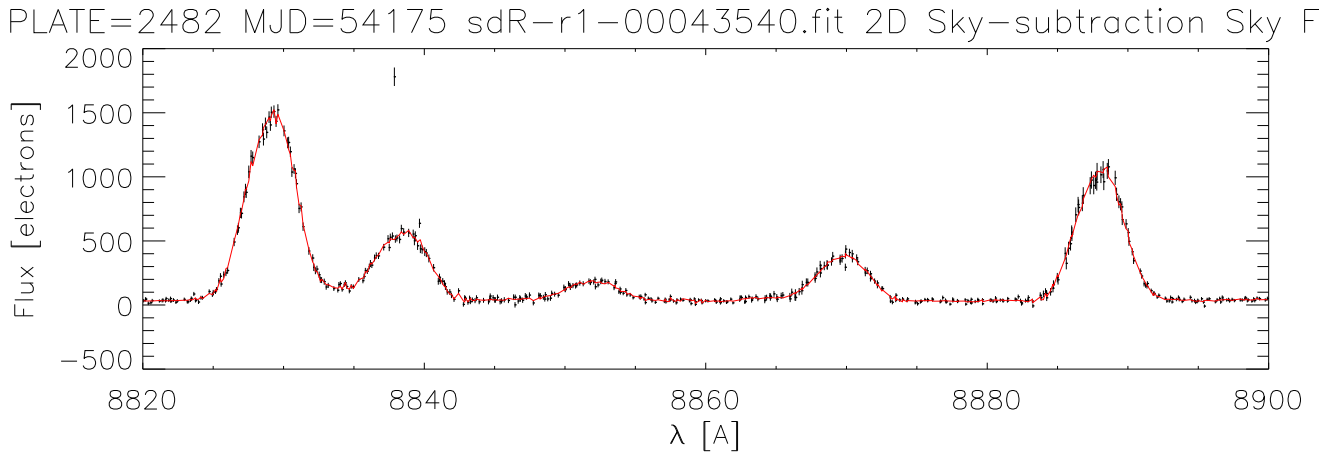

PLATE=2482 MJD=54175 sdR-r1-00043540.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

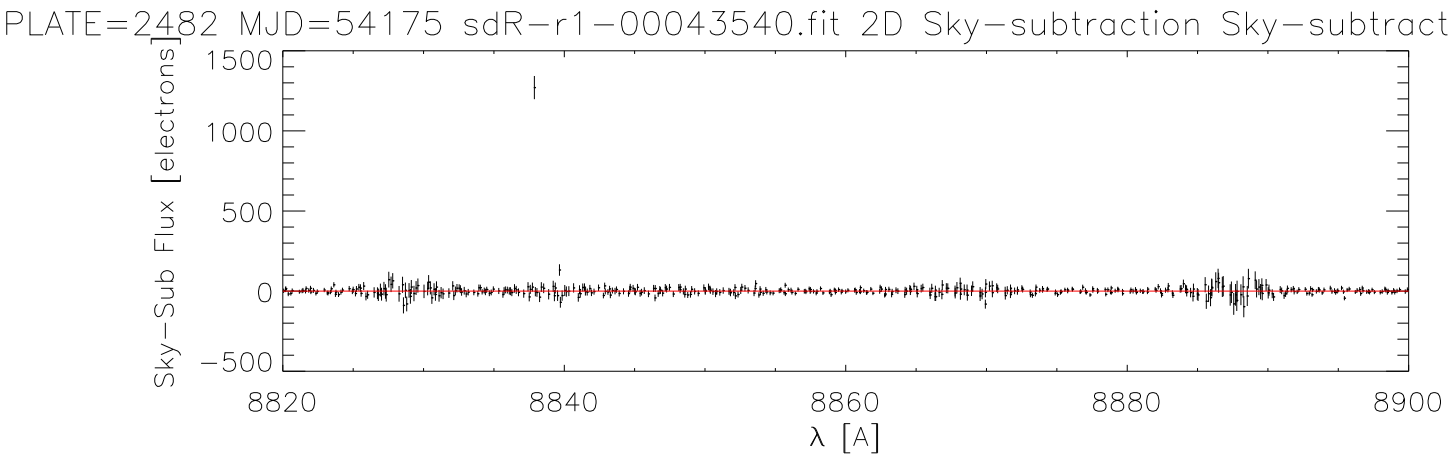

PLATE=2482 MJD=54175 sdR-r1-00043540.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

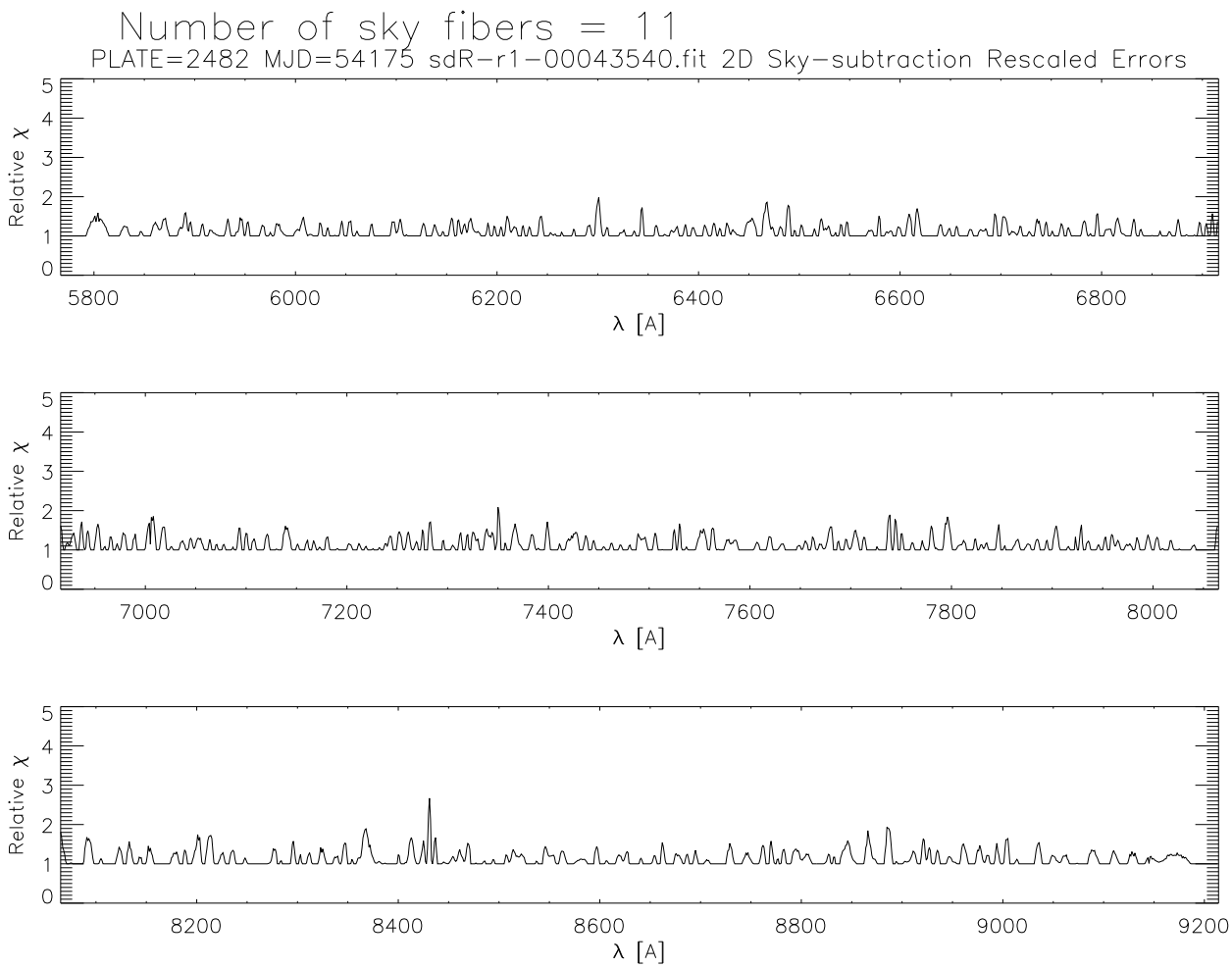

PLATE=2482 MJD=54175 sdR-r1-00043540.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

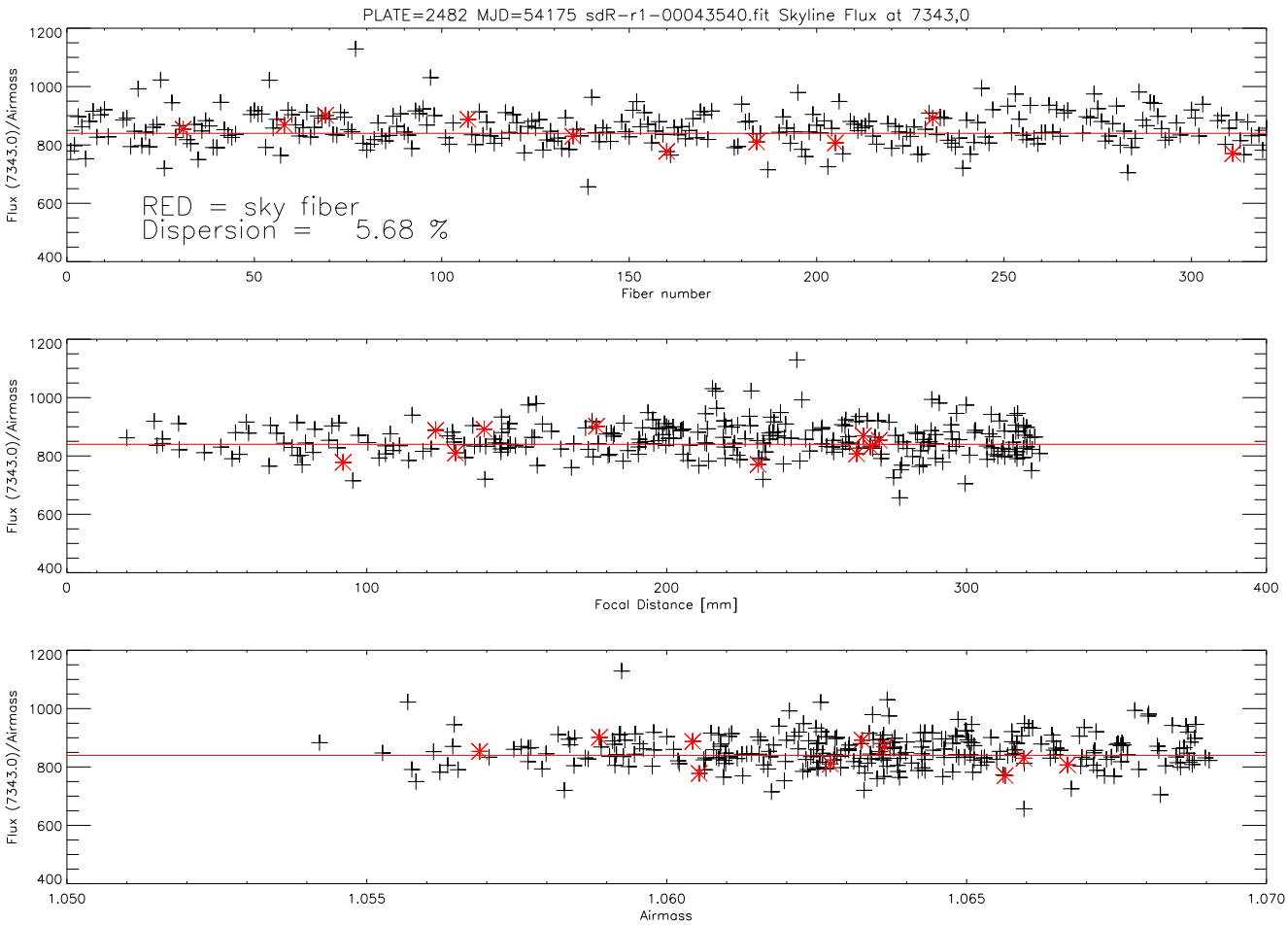

Number of sky fibers = 11
PLATE=2482 MJD=54175 sdR-r1-00043540.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

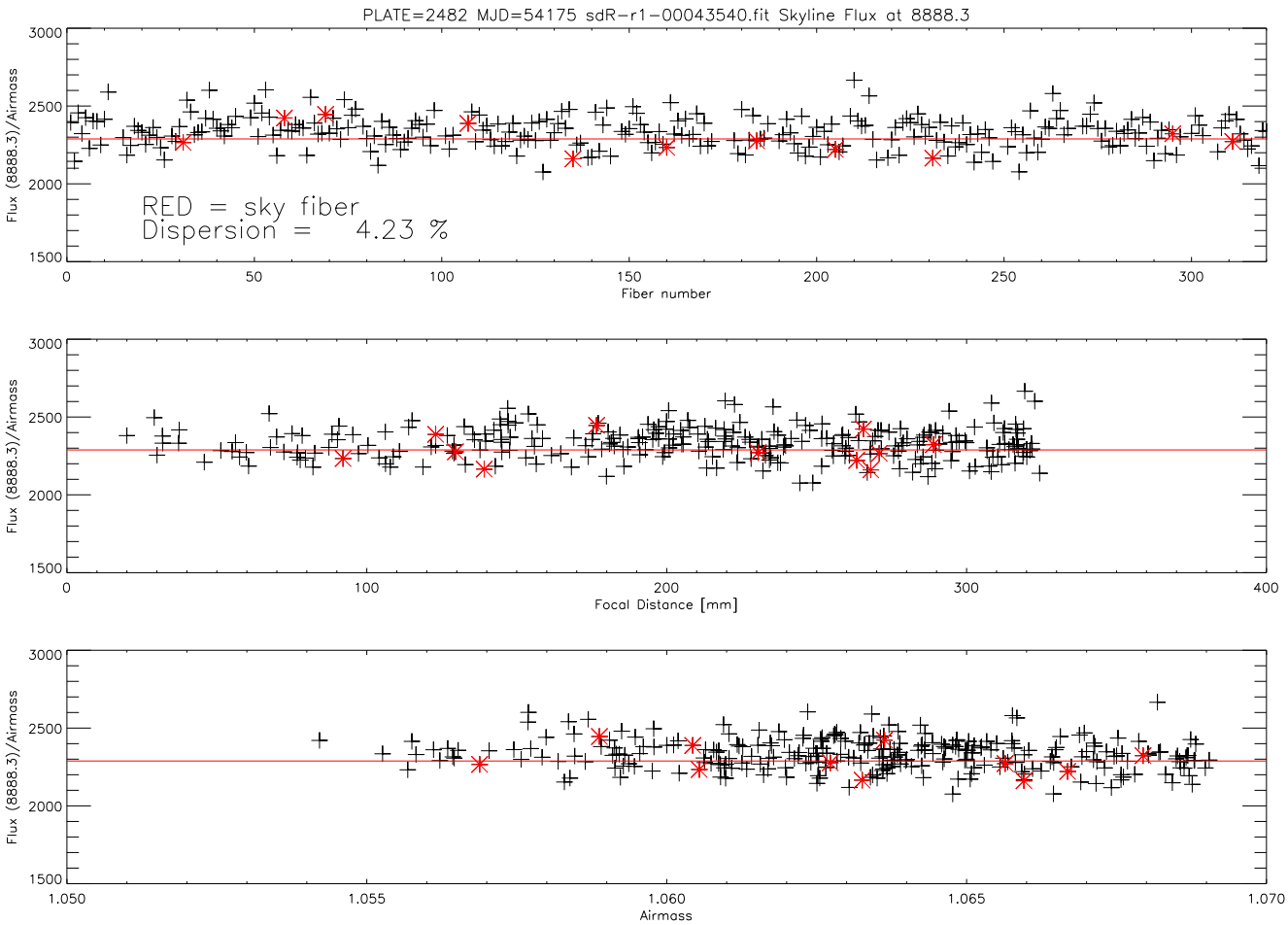

PLATE=2482 MJD=54175 sdR-r1-00043540.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

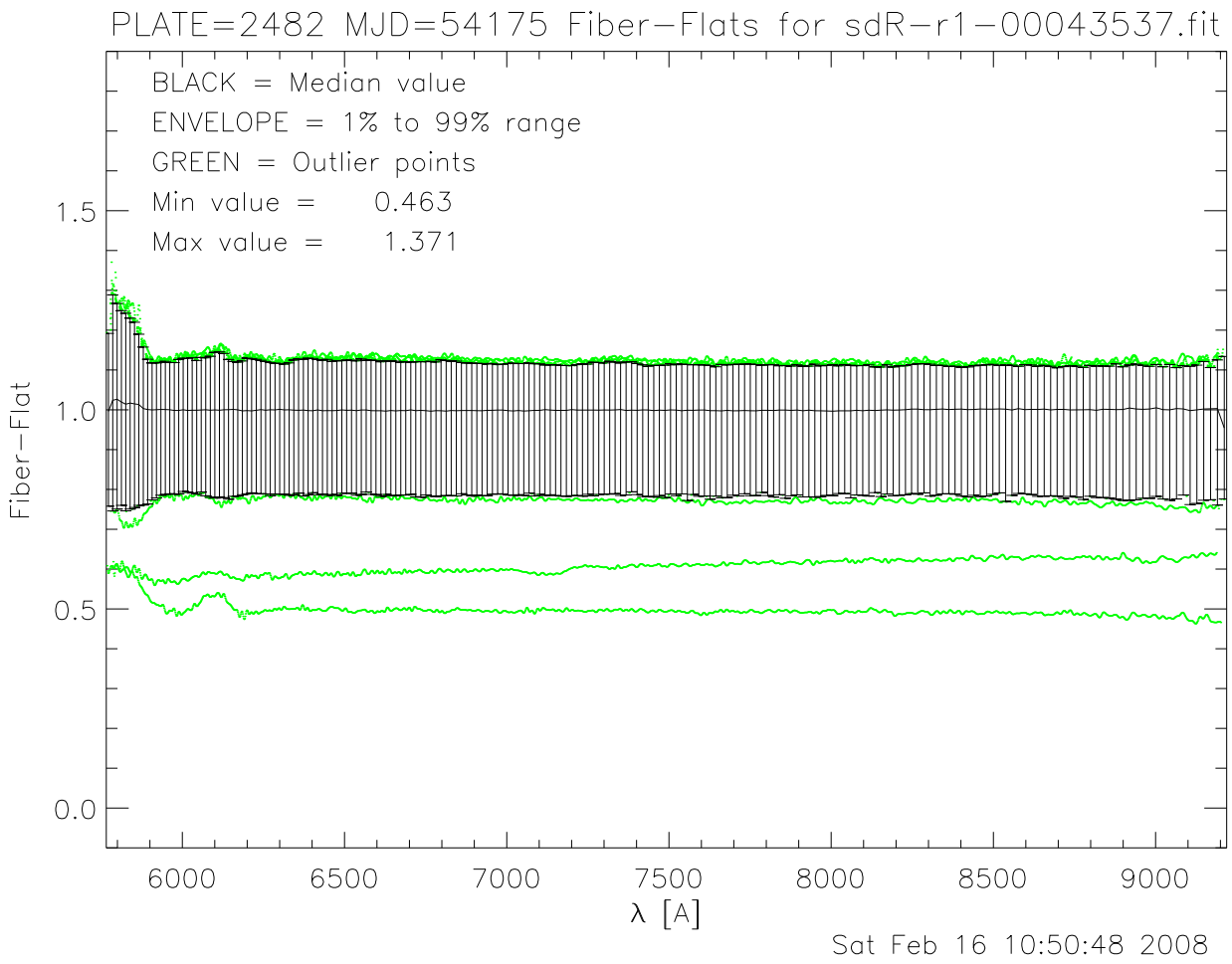

PLATE=2482 MJD=54175 sdR-r1-00043540.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

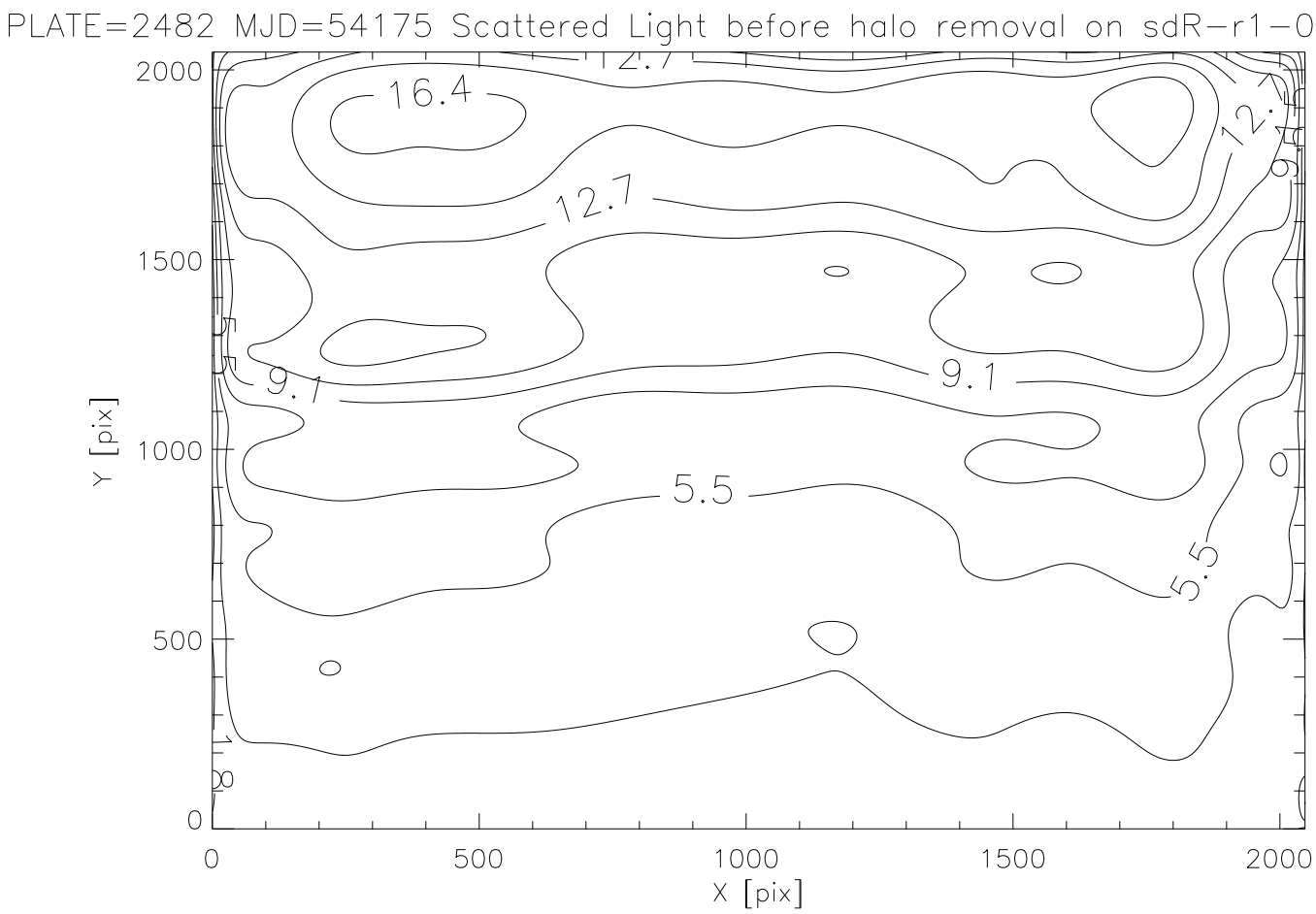

PLATE=2482 MJD=54175 sdR-r1-00043540.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

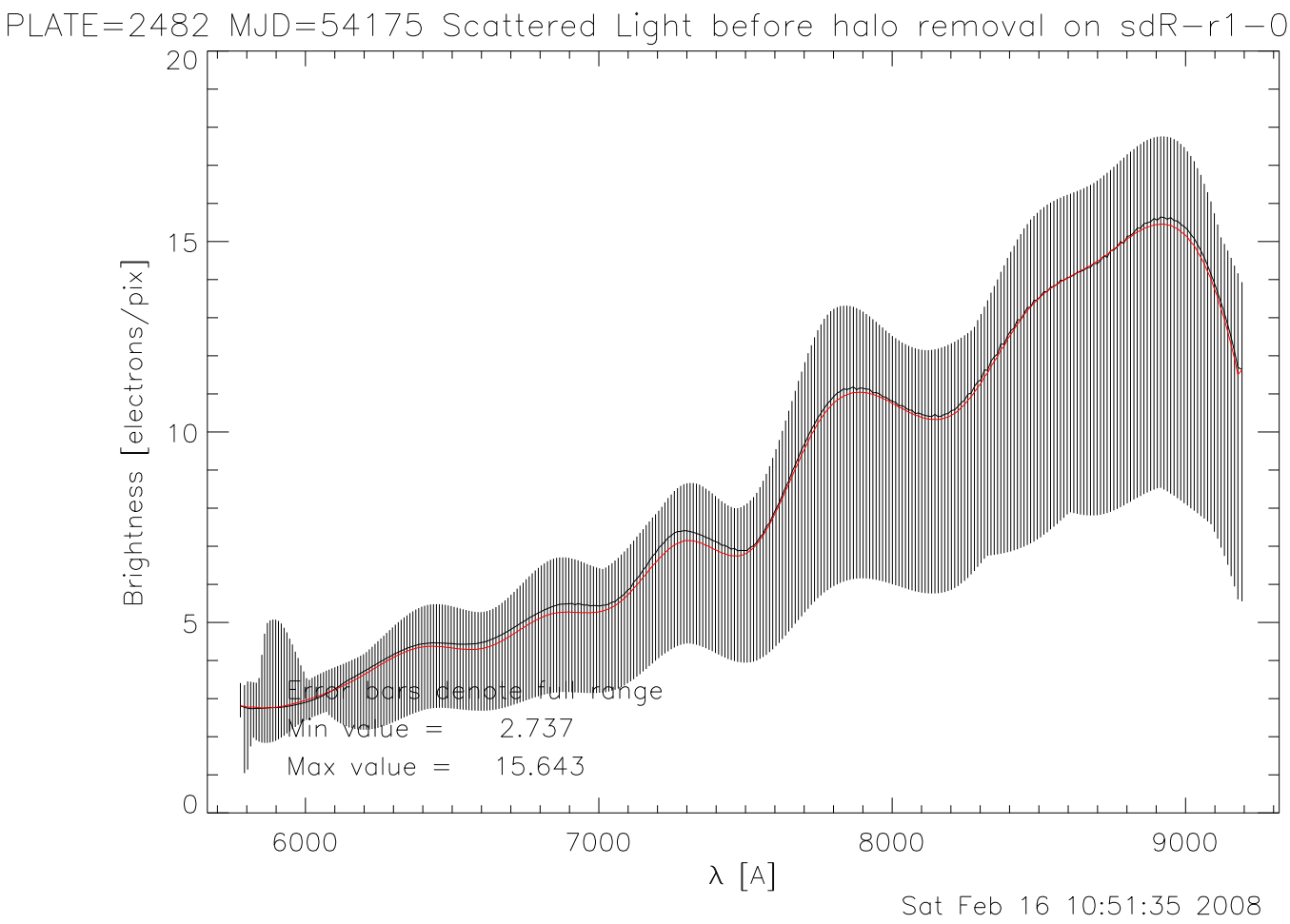

Number of sky fibers = 11
PLATE=2482 MJD=54175 sdR-r1-00043540.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

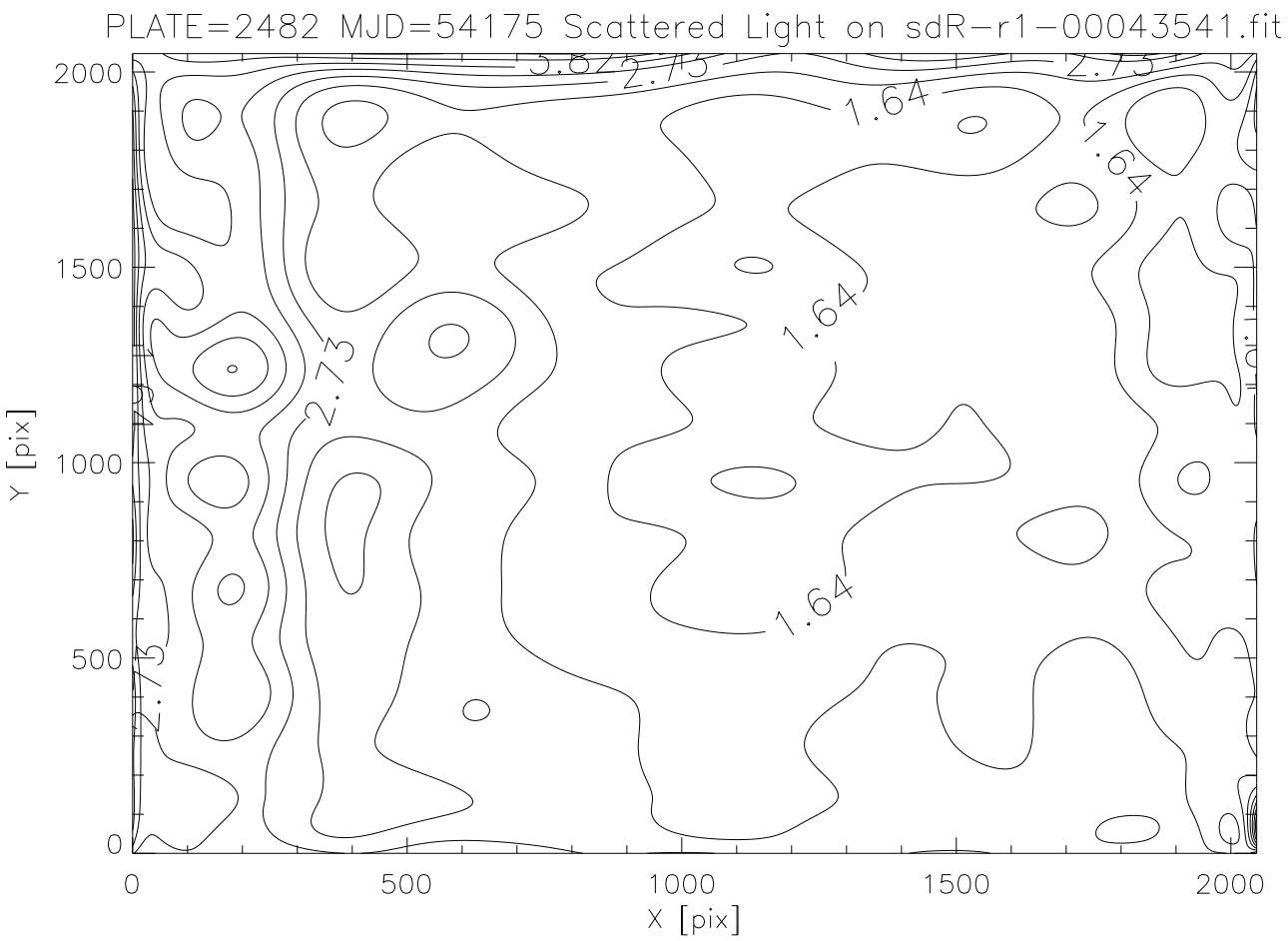

PLATE=2482 MJD=54175 sdR-r1-00043540.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.68 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

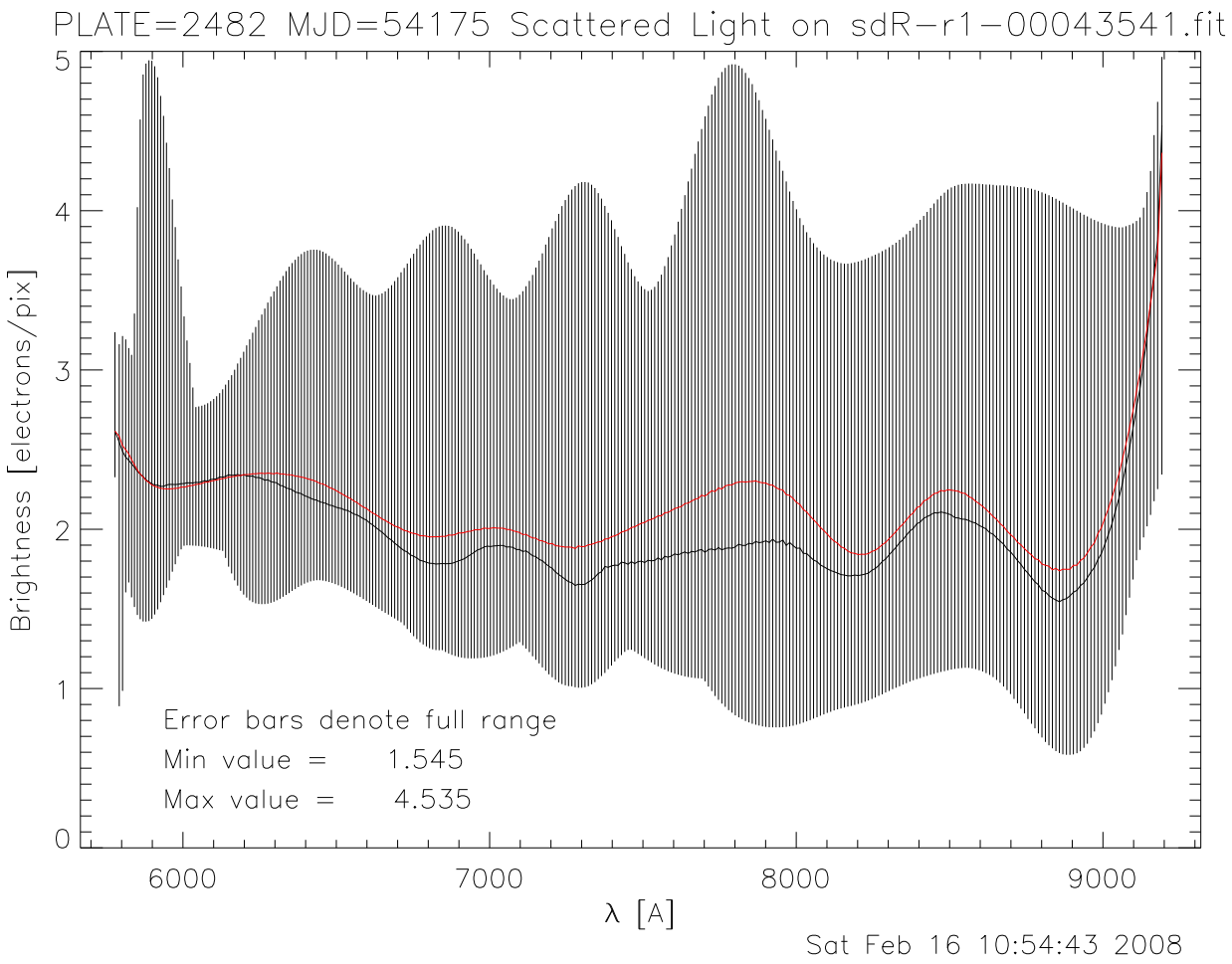

PLATE=2482 MJD=54175 sdR-r1-00043540.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.23 %
Fiber number
Focal Distance [mm]
Airmass

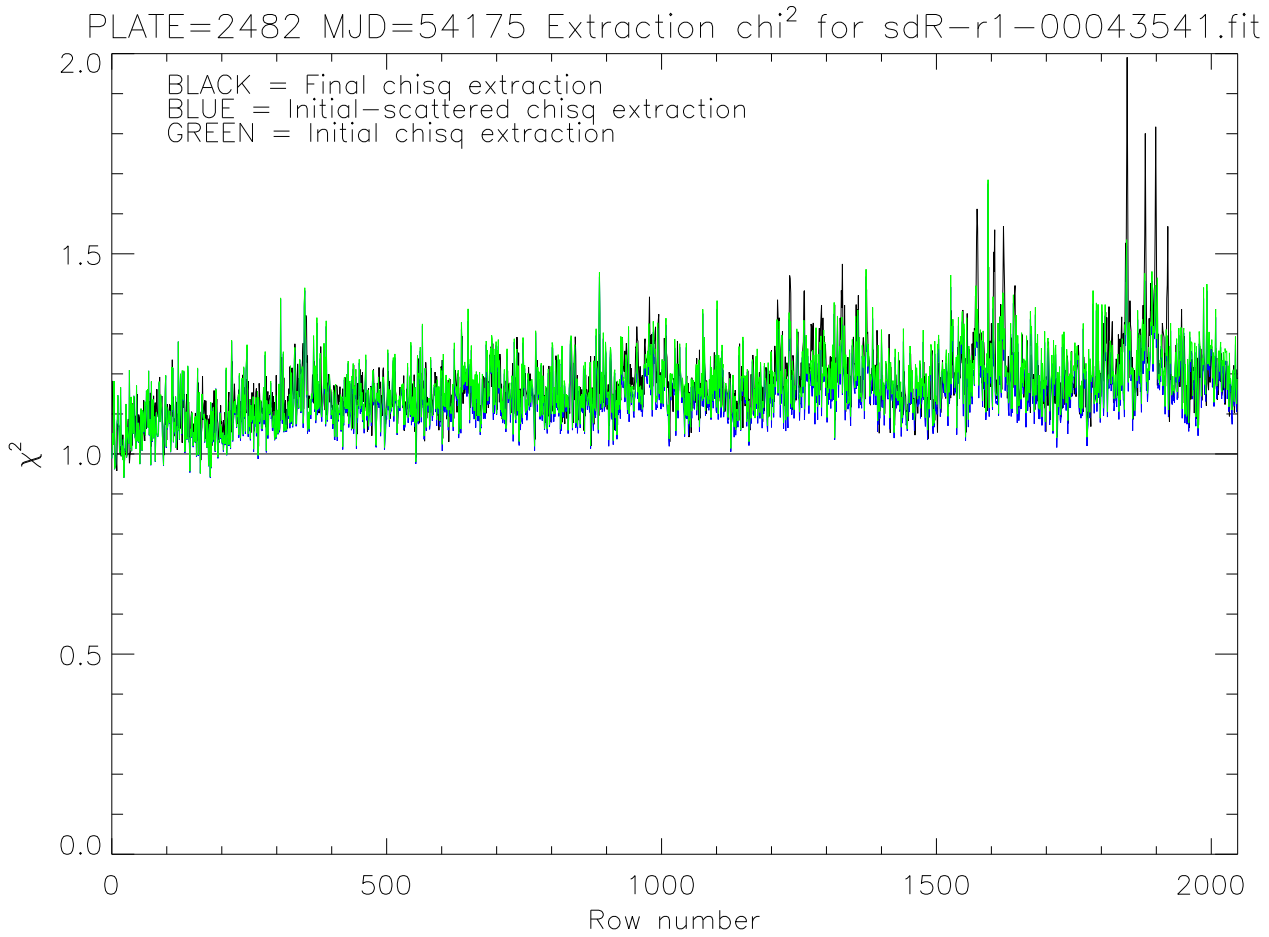

PLATE=2482 MJD=54175 Fiber-Flats for sdR-r1-00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.463
Max value = 1.371
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 10:50:48 2008

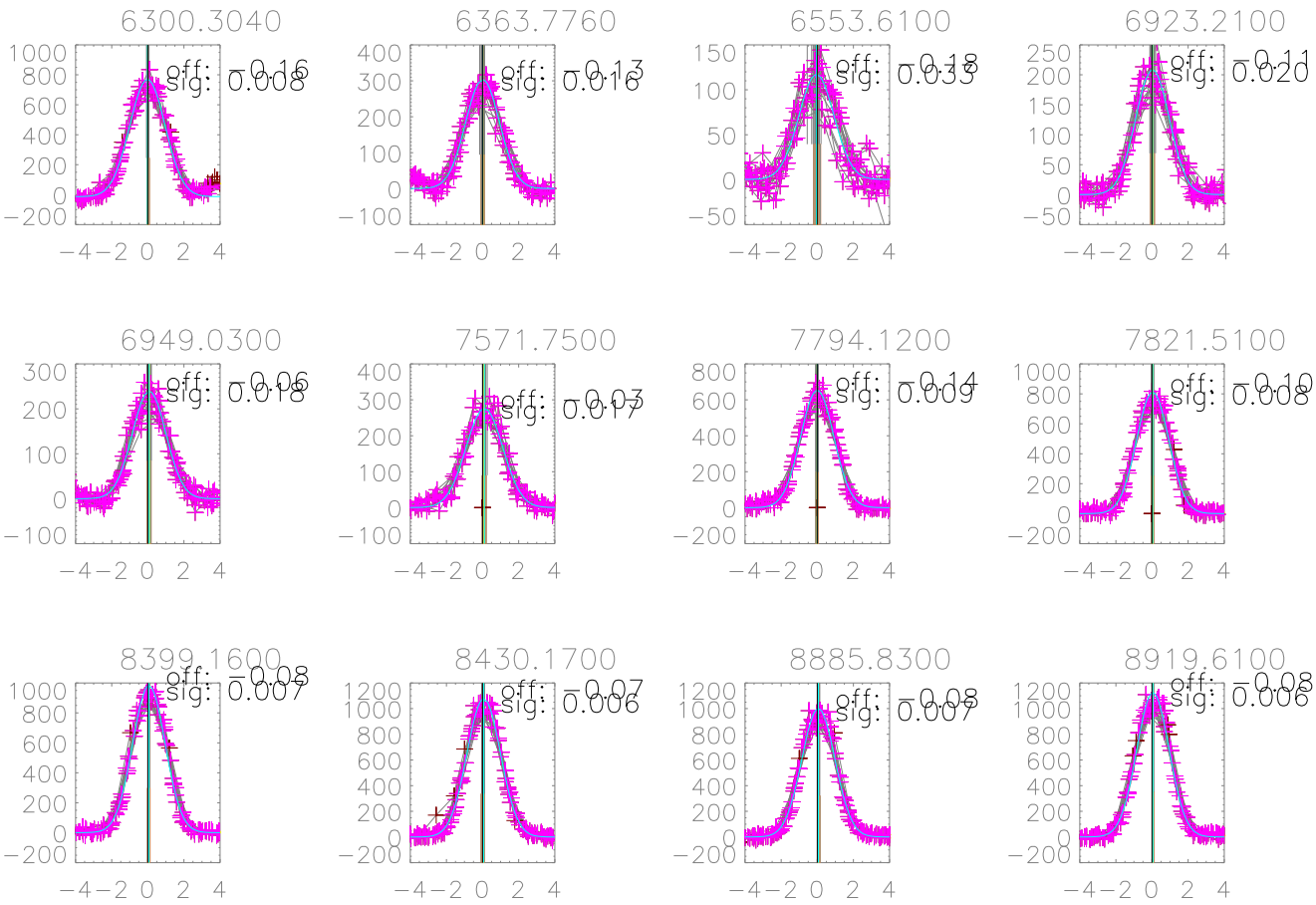

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r1-00043541.fi
16.4
12.7
9.1
5.5
0
Y [pix]
X [pix]
0
500
1000
1500
2000

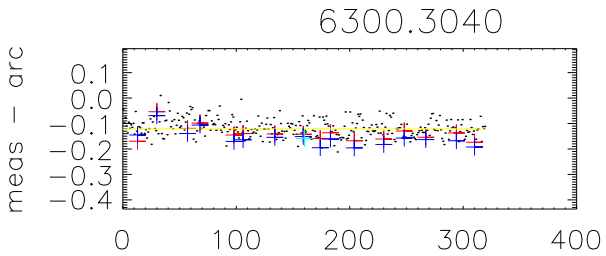

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r1-00043541.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.737
Max value = 15.643
Sat Feb 16 10:51:35 2008

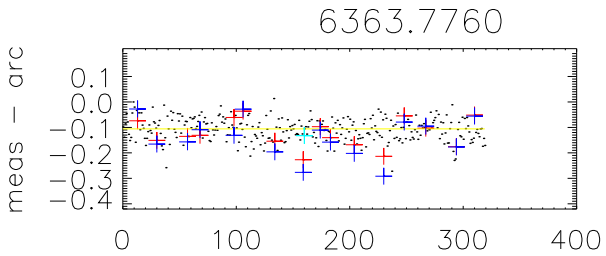

PLATE=2482 MJD=54175 Scattered Light on sdR−r1−00043541.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.73
1.64

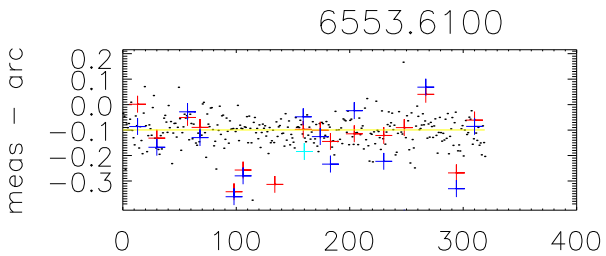

PLATE=2482 MJD=54175 Scattered Light on sdR-r1-00043541.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.545
Max value = 4.535
Sat Feb 16 10:54:43 2008

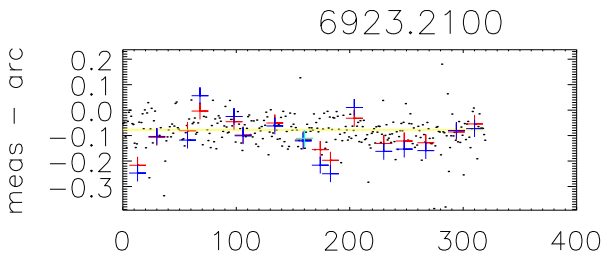

PLATE=2482 MJD=54175 Extraction chi^2 for sdR−r1−00043541.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

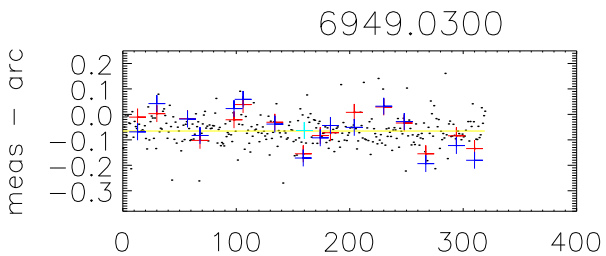

6300.3040
off: −0.16
sig: 0.008
6363.7760
off: −0.13
sig: 0.016
6553.6100
off: −0.18
sig: 0.035
6923.2100
off: −0.11
sig: 0.020
6949.0300
off: −0.06
sig: 0.018
7571.7500
off: −0.03
sig: 0.017
7794.1200
off: −0.14
sig: 0.009
7821.5100
off: −0.10
sig: 0.008
8399.1600
off: −0.08
sig: 0.007
8430.1700
off: −0.07
sig: 0.006
8885.8300
off: −0.08
sig: 0.007
8919.6100
off: −0.08
sig: 0.006

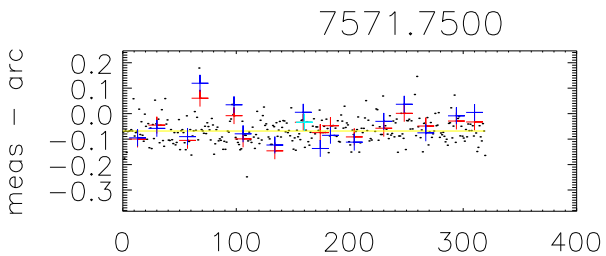

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

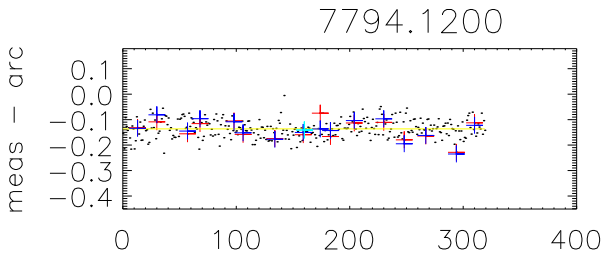

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

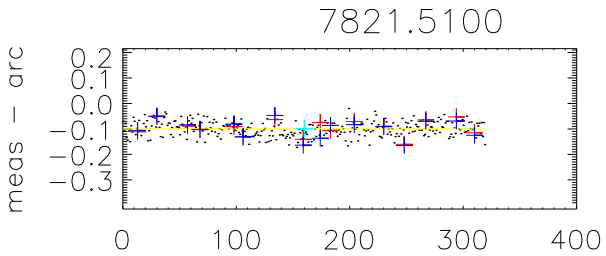

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

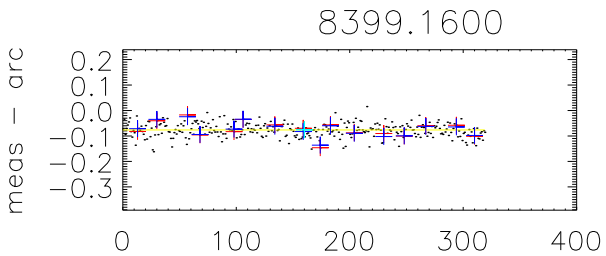

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

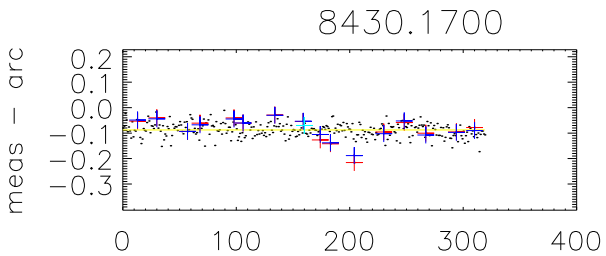

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

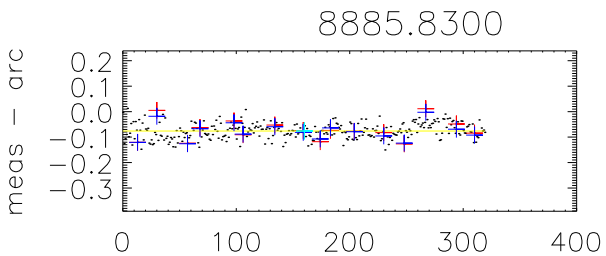

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

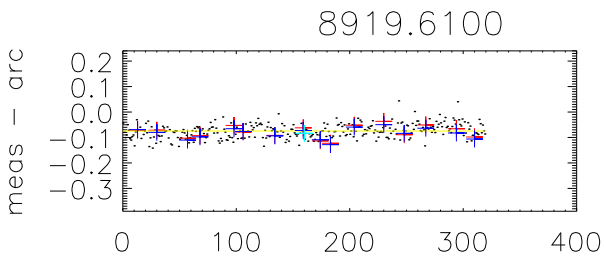

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

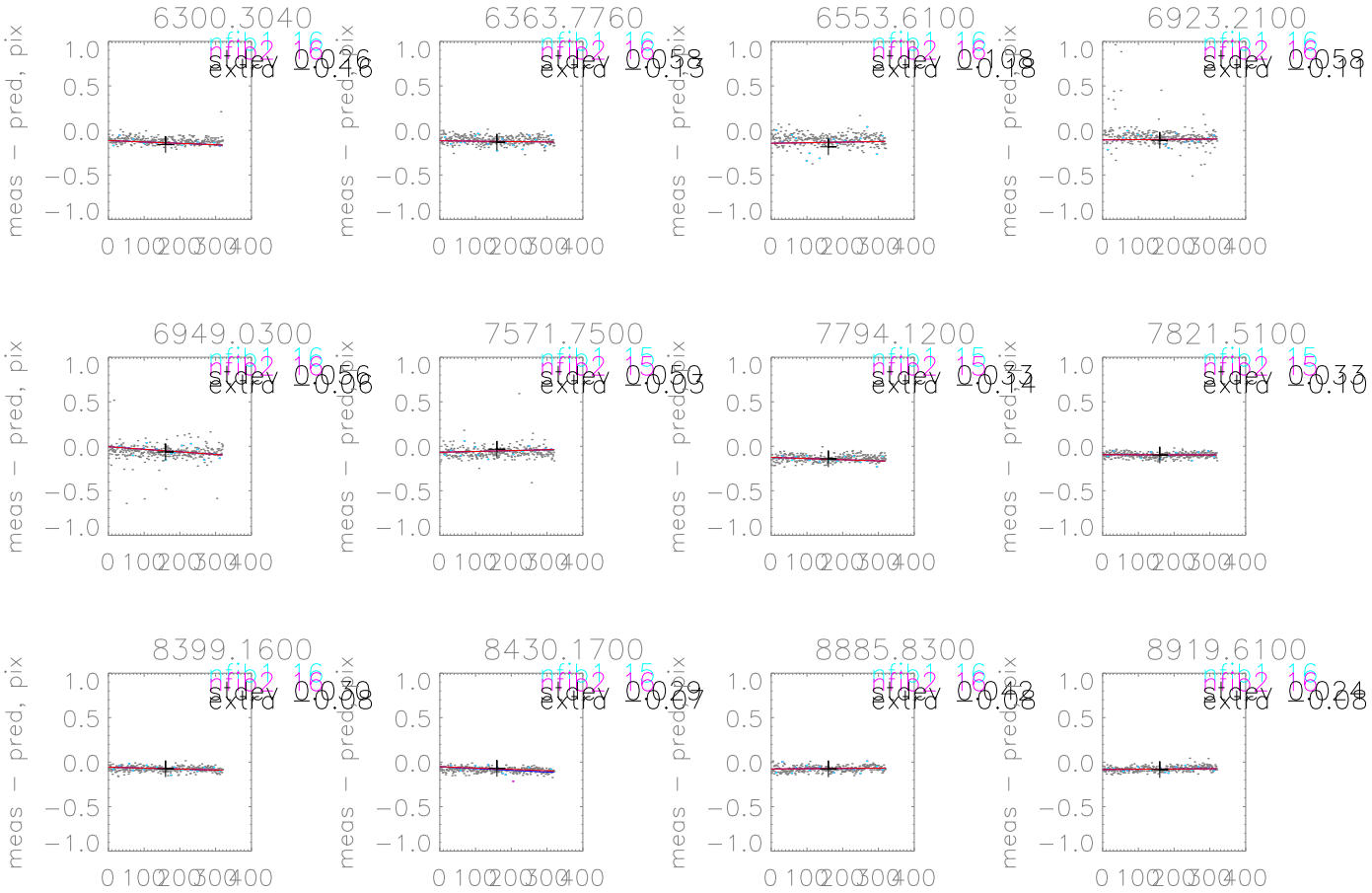

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

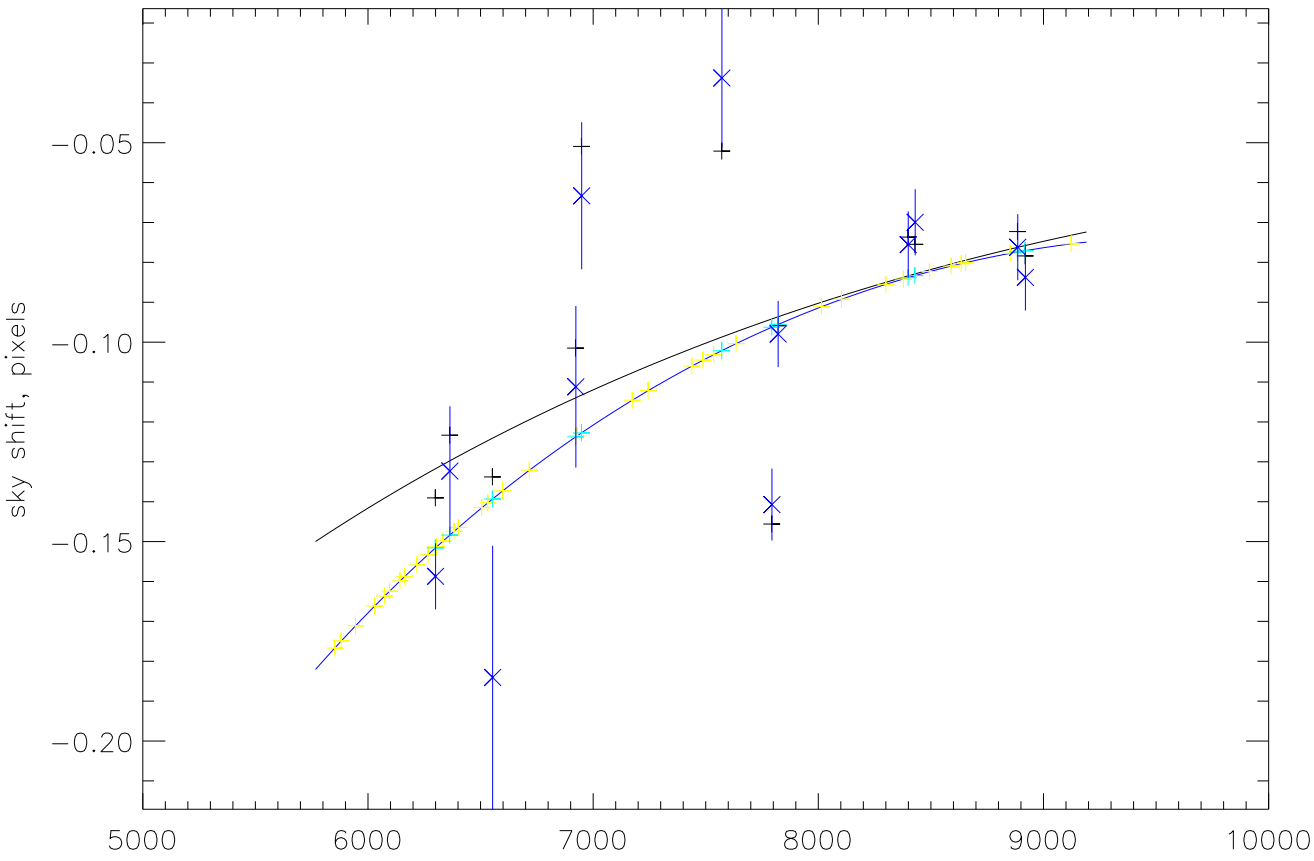

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

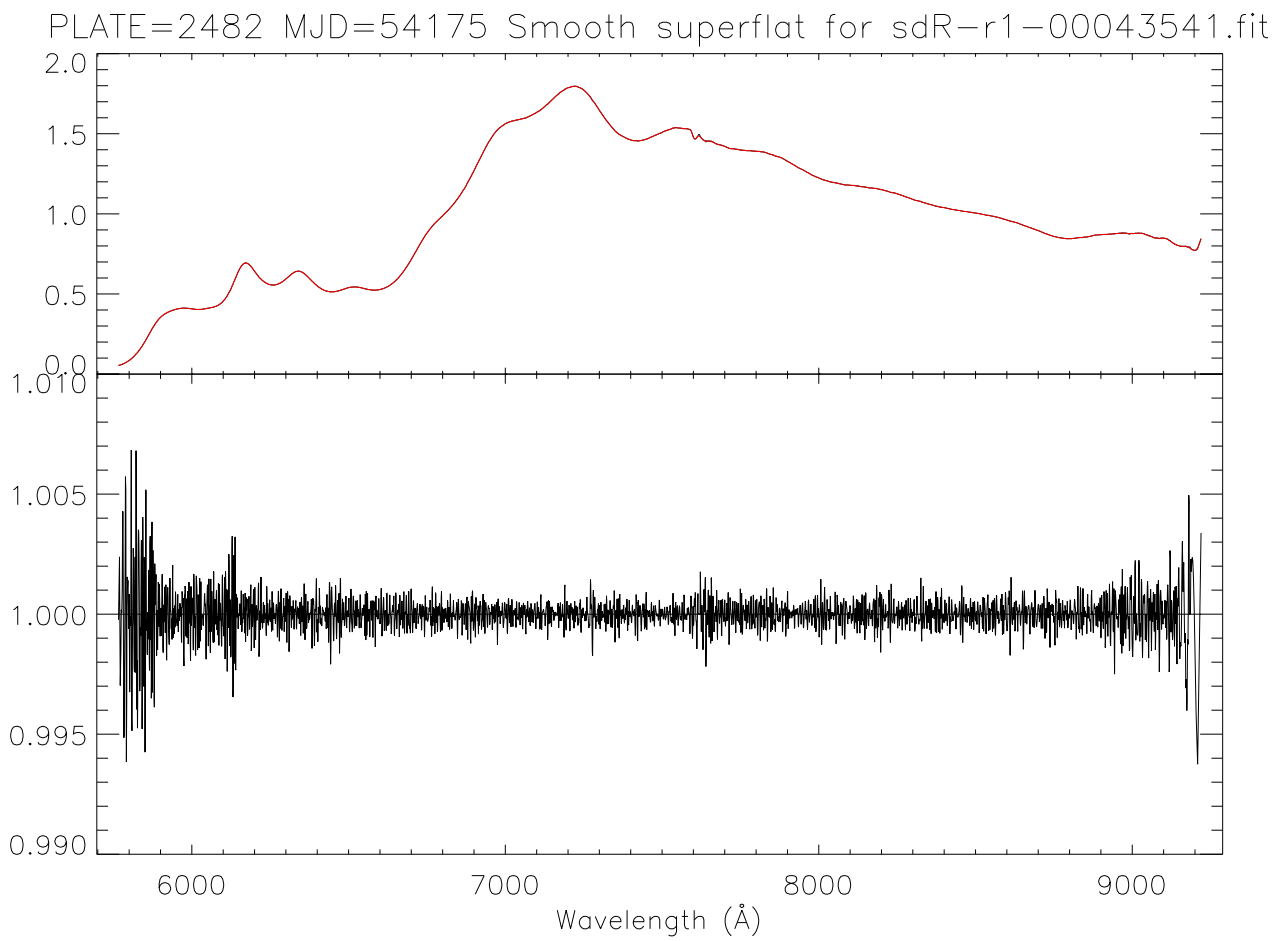

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

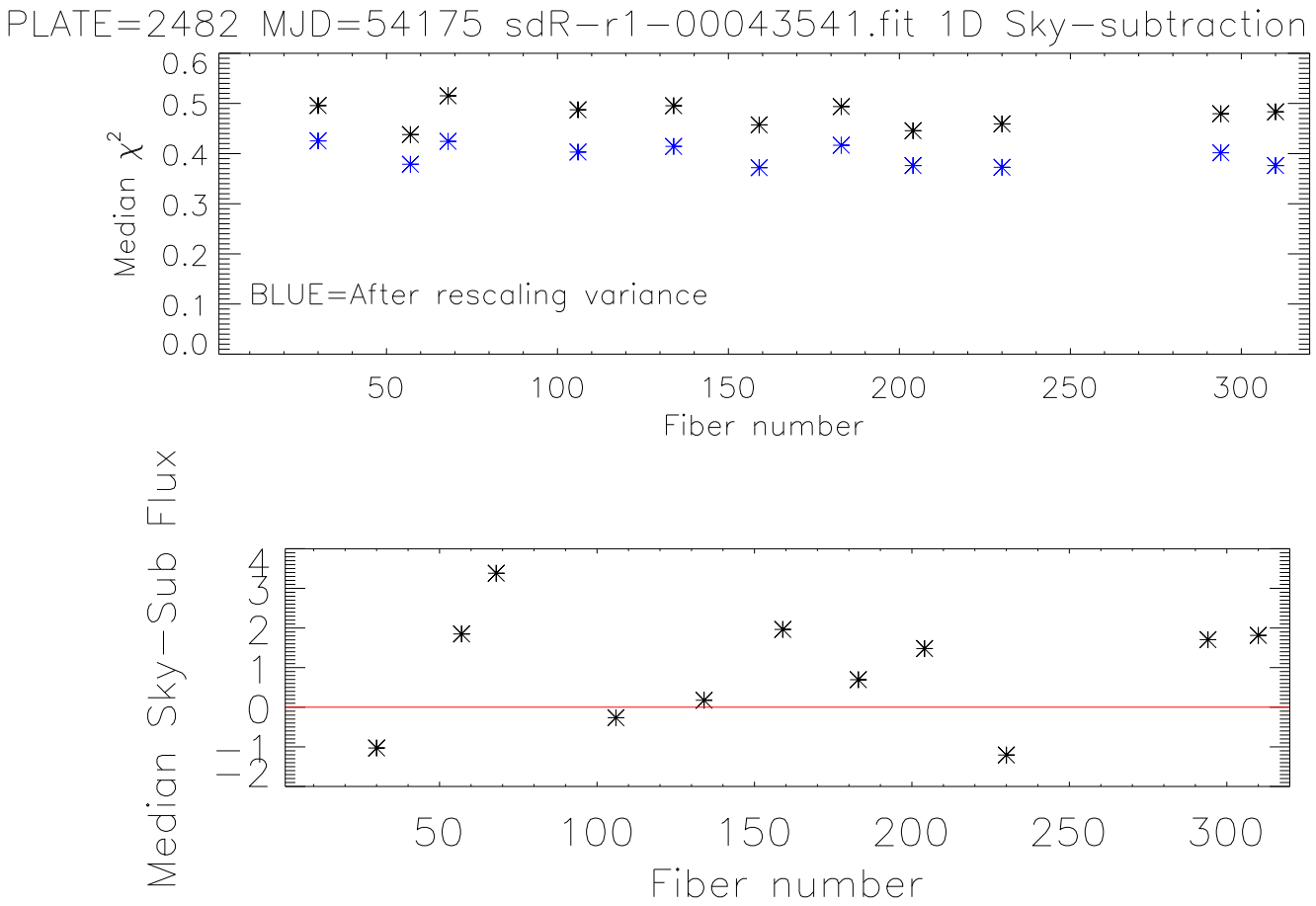

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

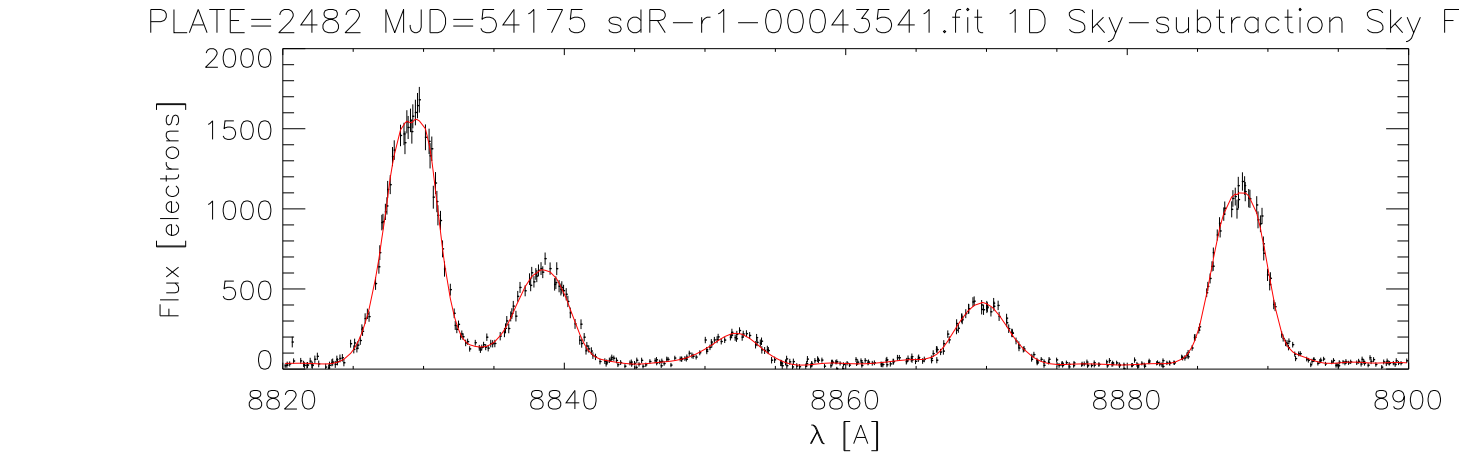

6300.3040
mfib1 16
mfib2 16
stdev 0.026
extra 0.46
6363.7760
mfib1 16
mfib2 16
stdev 0.058
extra 0.93
6553.6100
mfib1 16
mfib2 16
stdev 0.108
extra 0.98
6923.2100
mfib1 16
mfib2 16
stdev 0.058
extra 0.14
6949.0300
mfib1 16
mfib2 16
stdev 0.056
extra 0.06
7571.7500
mfib1 15
mfib2 16
stdev 0.050
extra 0.03
7794.1200
mfib1 15
mfib2 16
stdev 0.033
extra 0.14
7821.5100
mfib1 15
mfib2 16
stdev 0.033
extra 0.10
8399.1600
mfib1 16
mfib2 16
stdev 0.030
extra 0.08
8430.1700
mfib1 15
mfib2 16
stdev 0.029
extra 0.07
8885.8300
mfib1 16
mfib2 16
stdev 0.042
extra 0.08
8919.6100
mfib1 16
mfib2 16
stdev 0.024
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

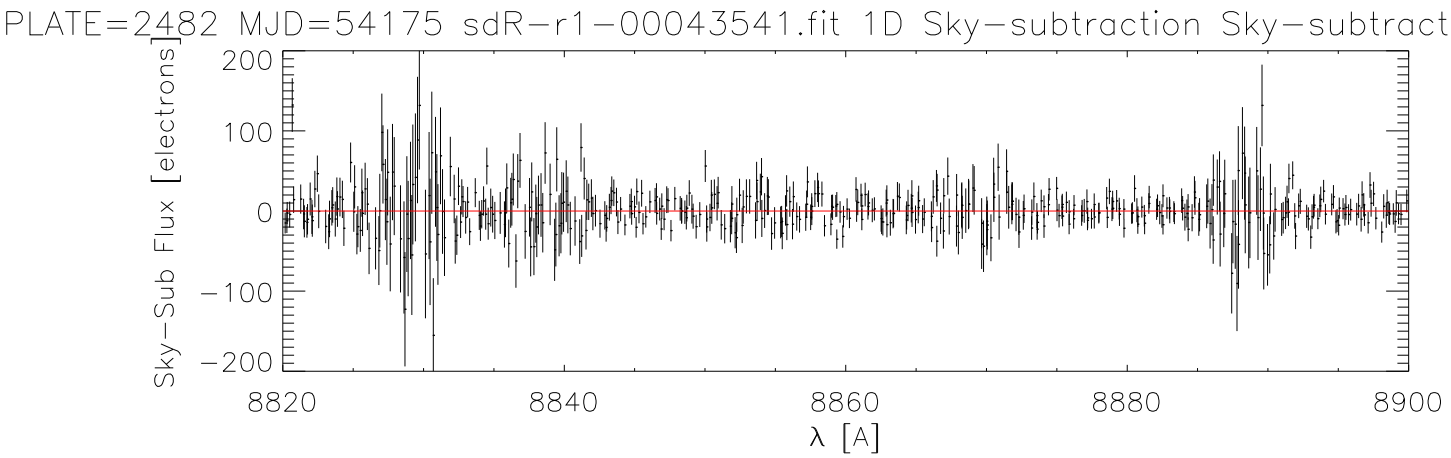

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
5000
6000
7000
8000
9000
10000

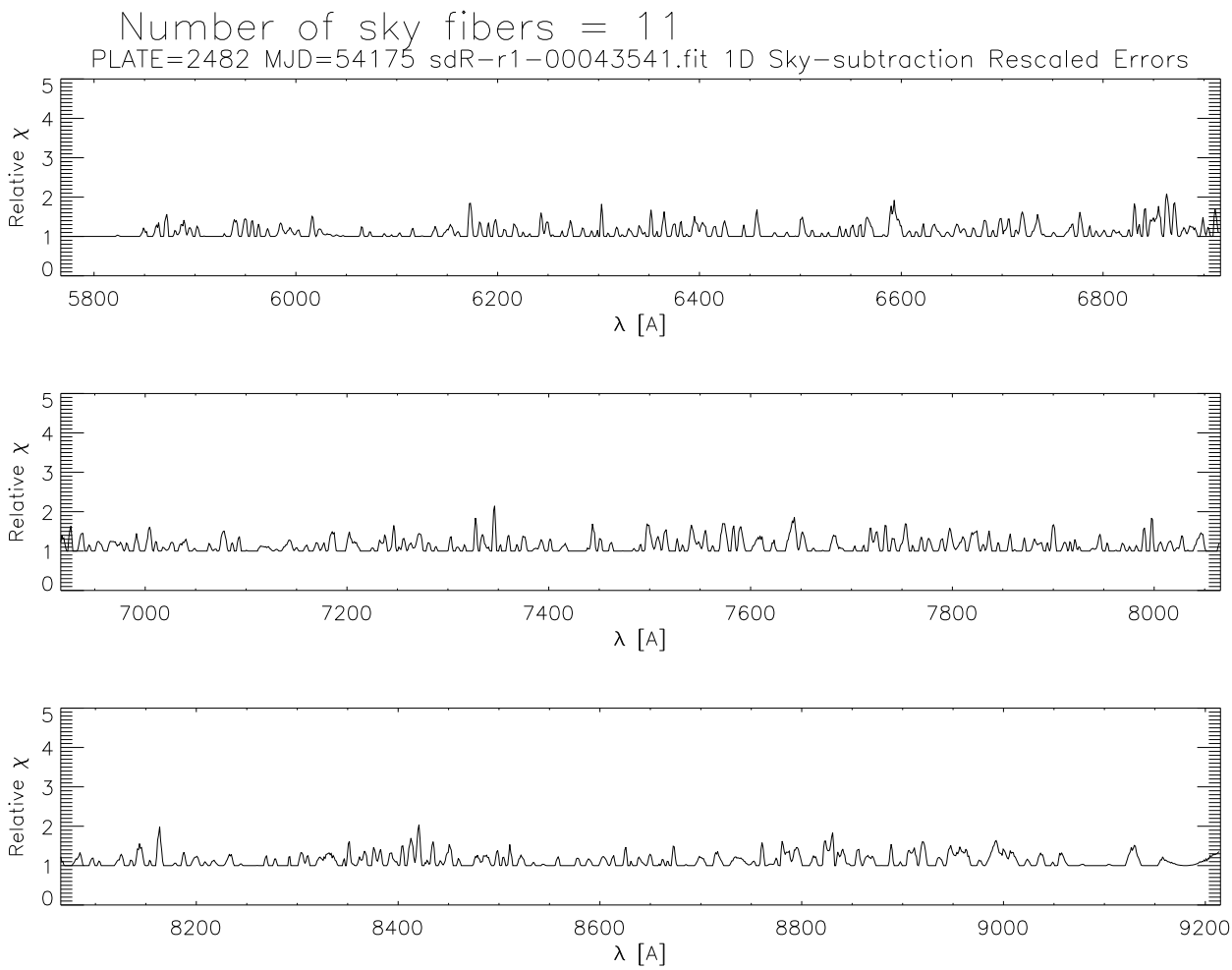
es= 0.0000

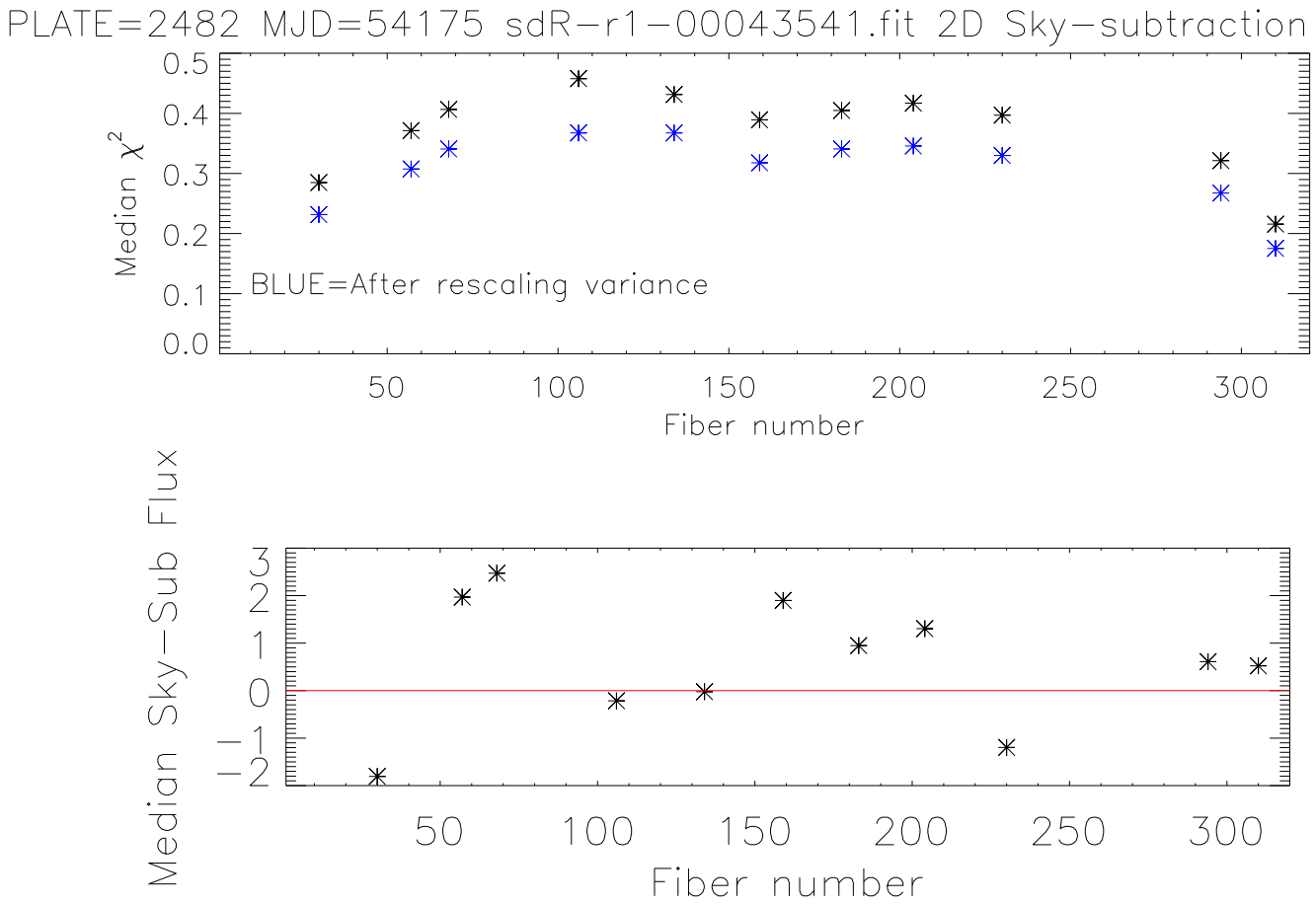

PLATE=2482 MJD=54175 Smooth superflat for sdR-r1-00043541.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

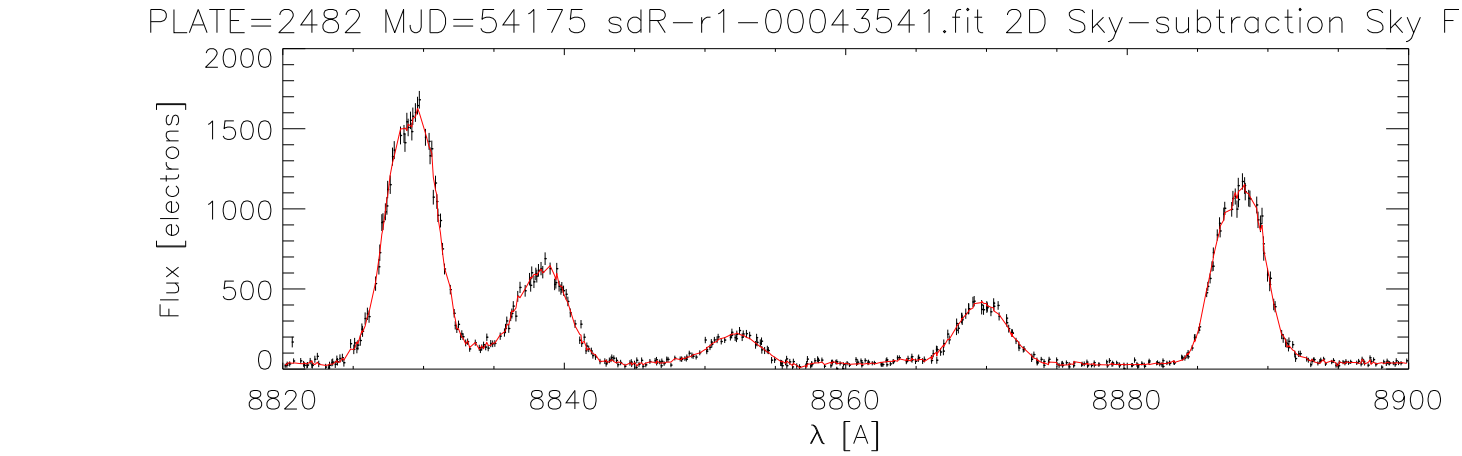

PLATE=2482 MJD=54175 sdR-r1-00043541.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

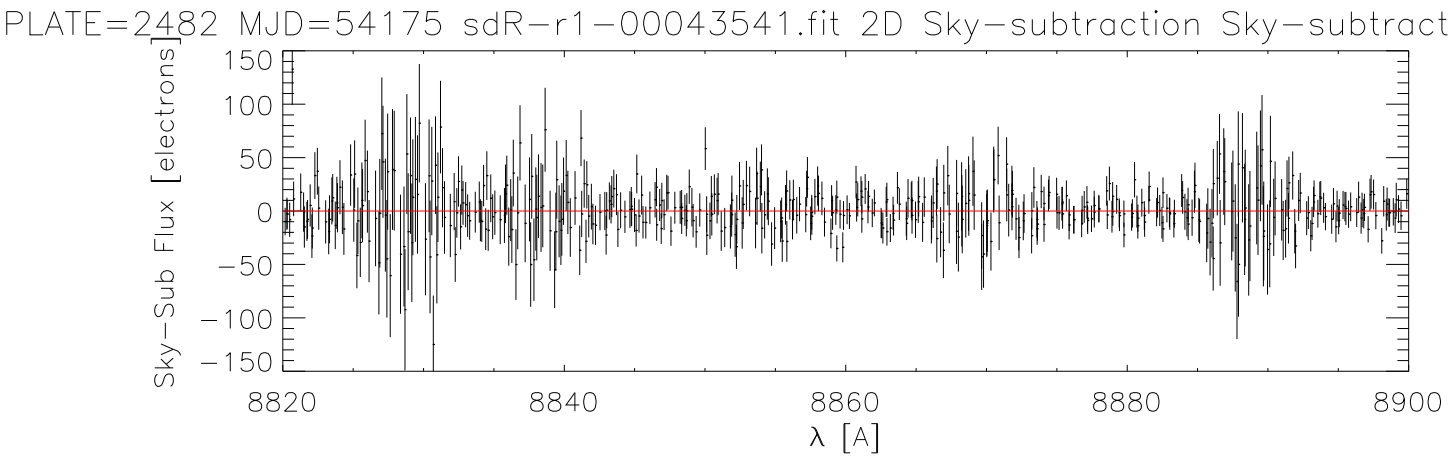

PLATE=2482 MJD=54175 sdR-r1-00043541.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

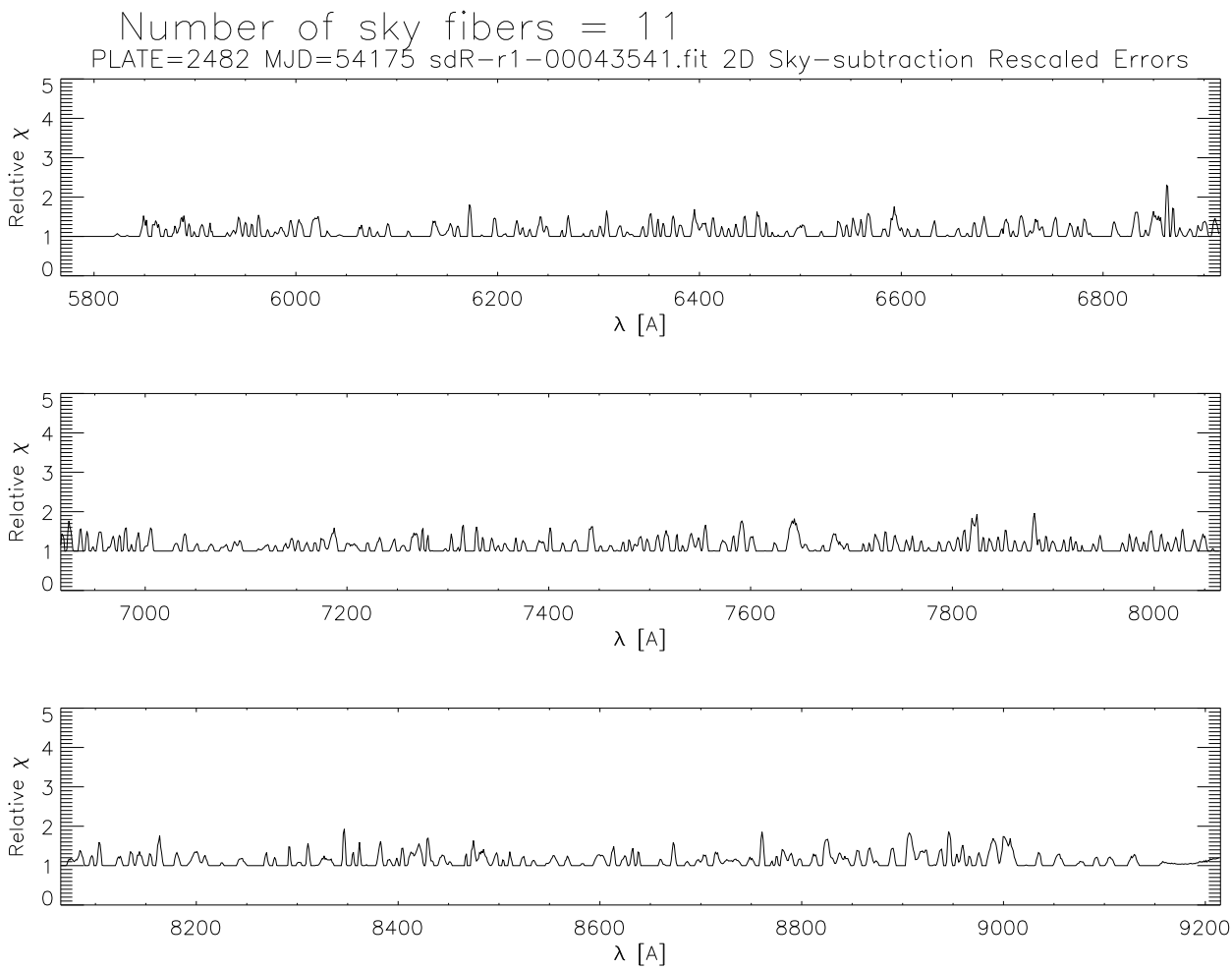

PLATE=2482 MJD=54175 sdR-r1-00043541.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

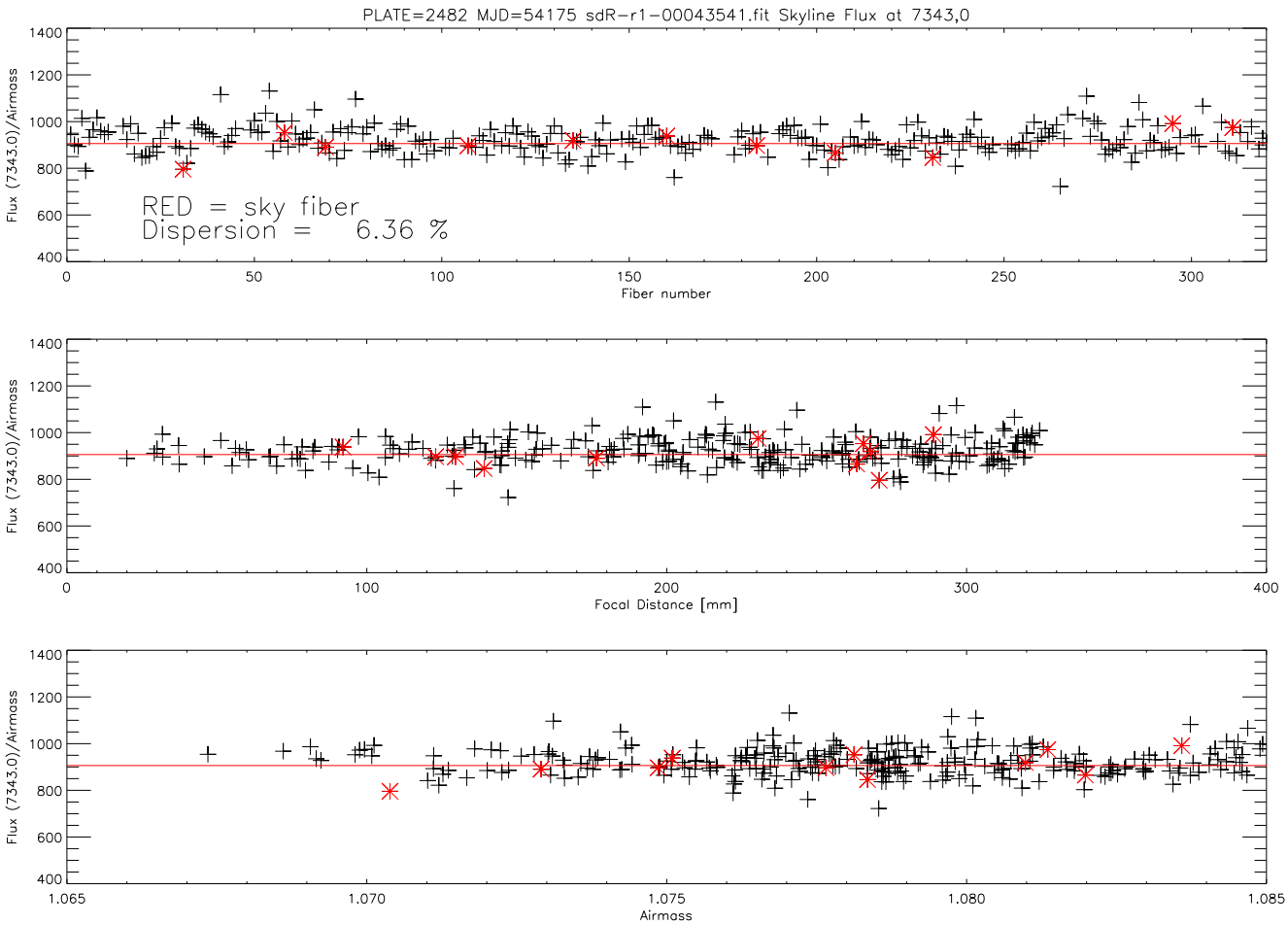

Number of sky fibers = 11
PLATE=2482 MJD=54175 sdR-r1-00043541.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

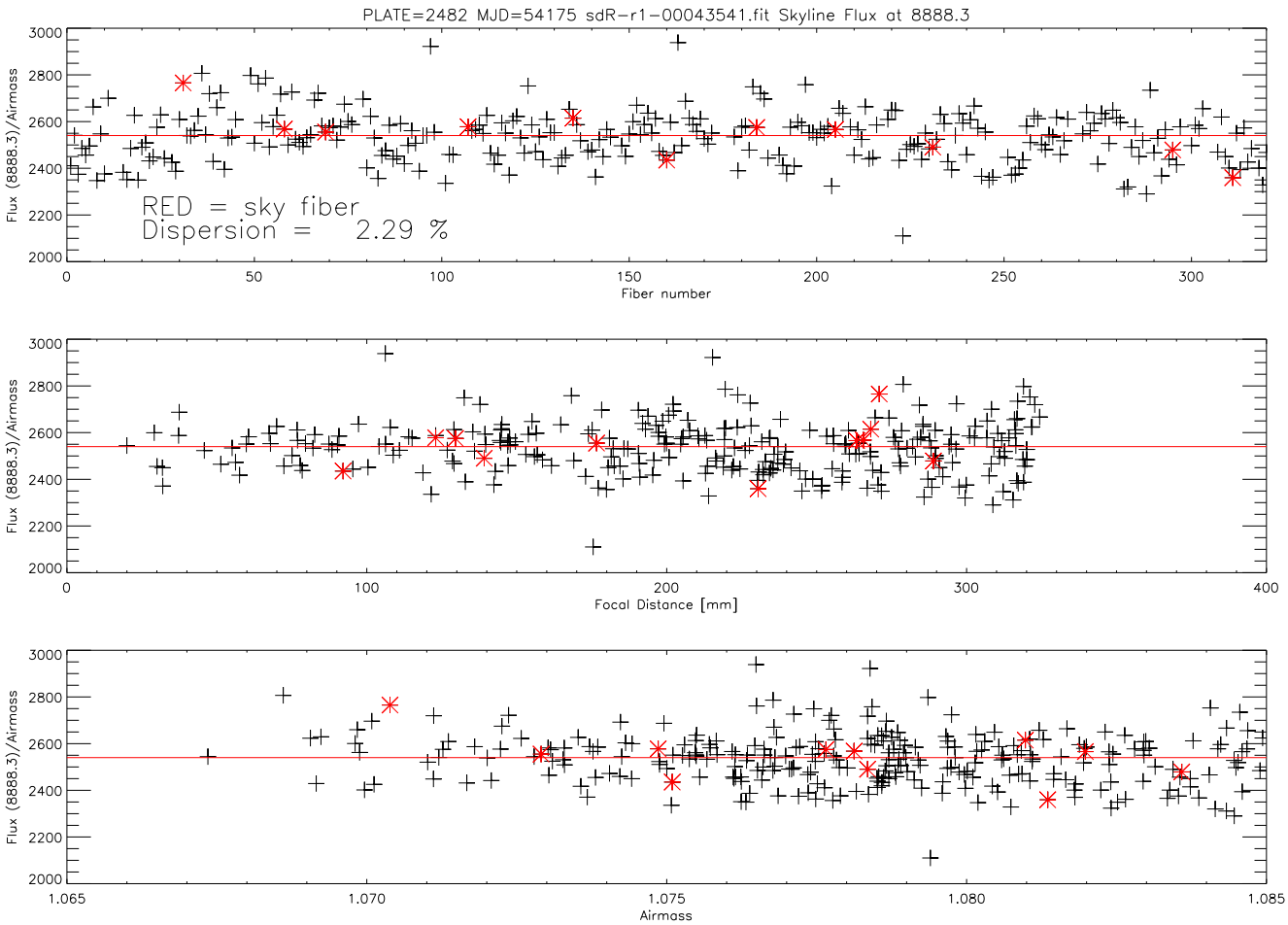

PLATE=2482 MJD=54175 sdR-r1-00043541.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

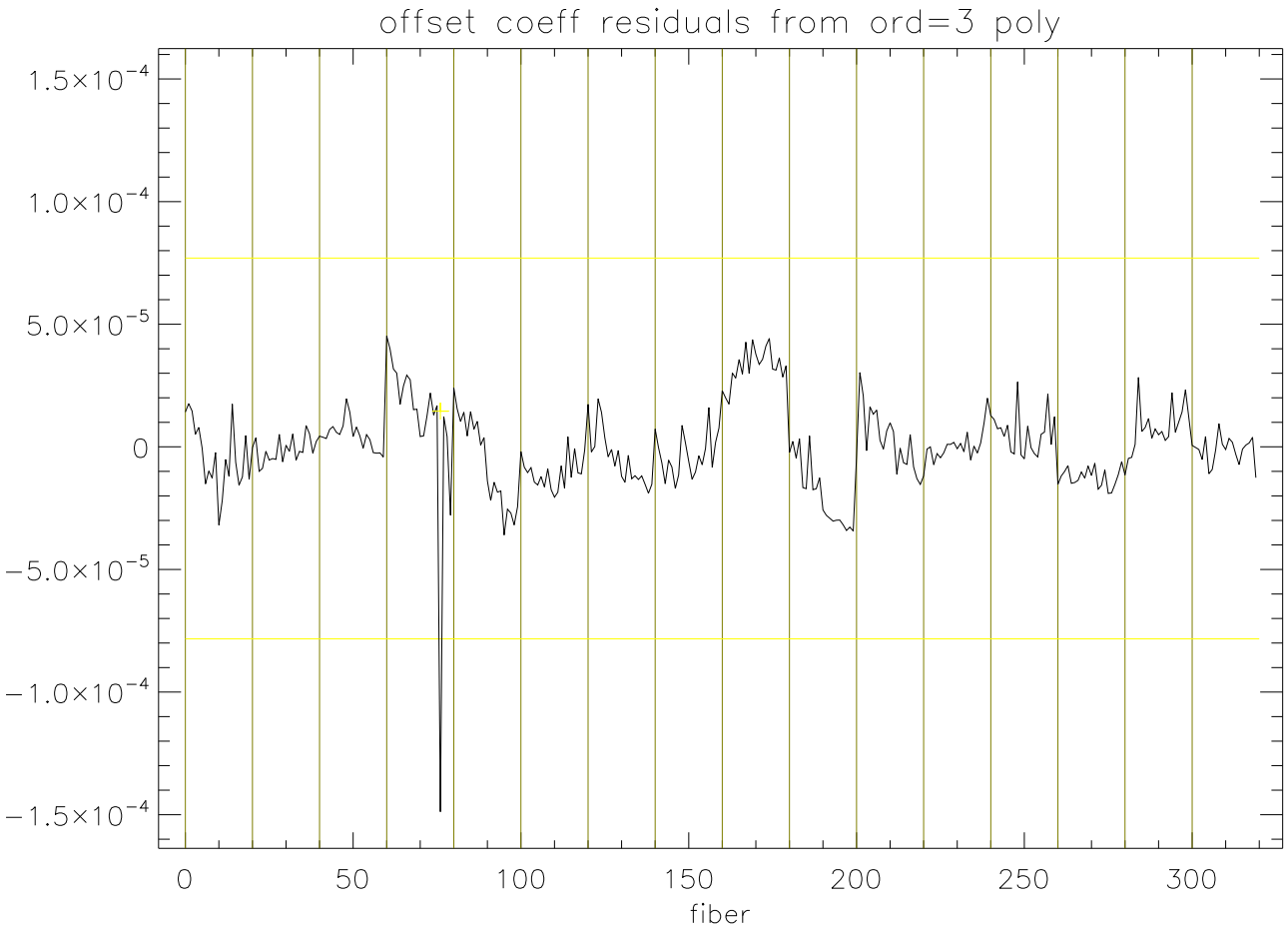

PLATE=2482 MJD=54175 sdR-r1-00043541.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

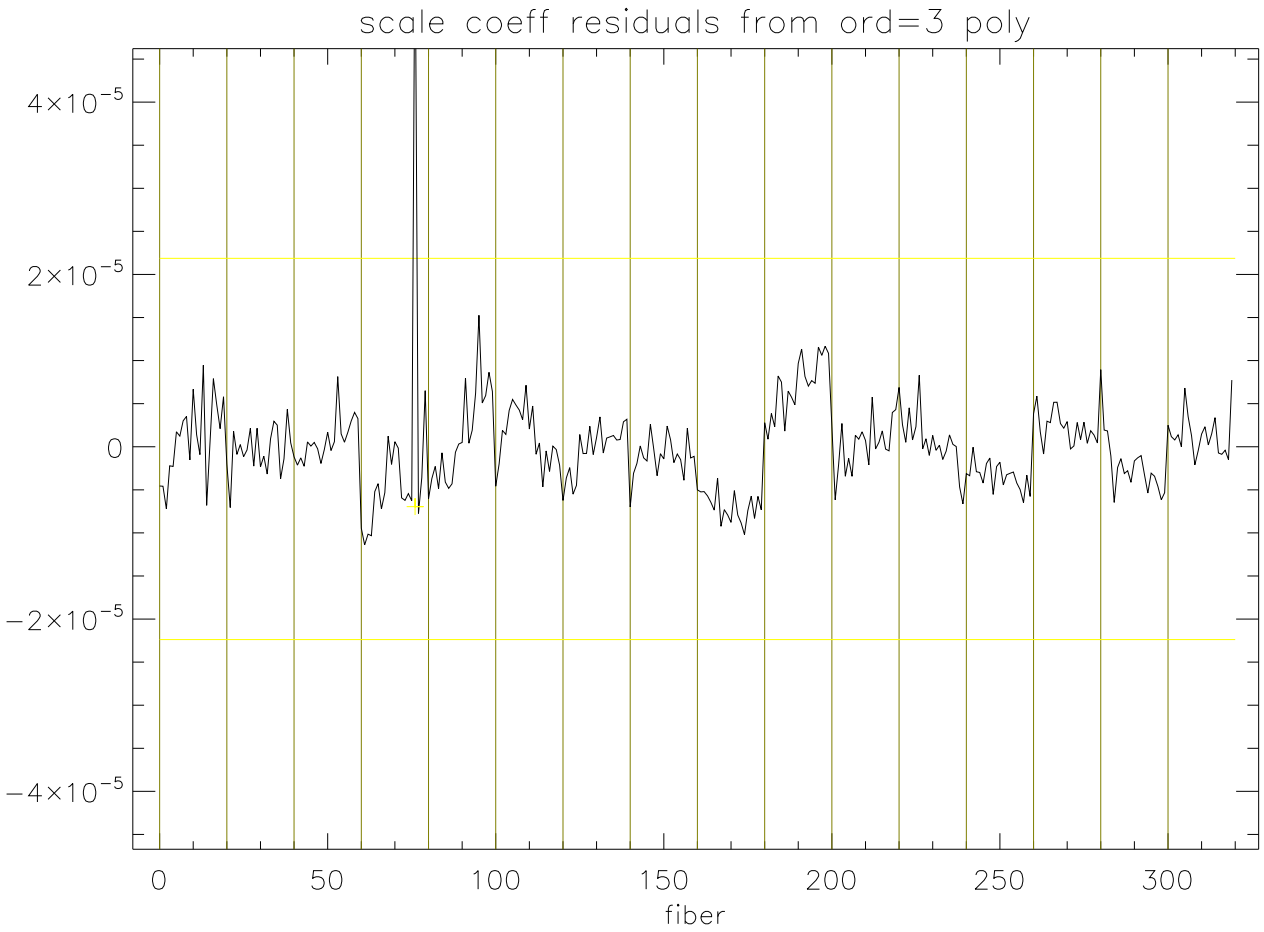

PLATE=2482 MJD=54175 sdR-r1-00043541.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

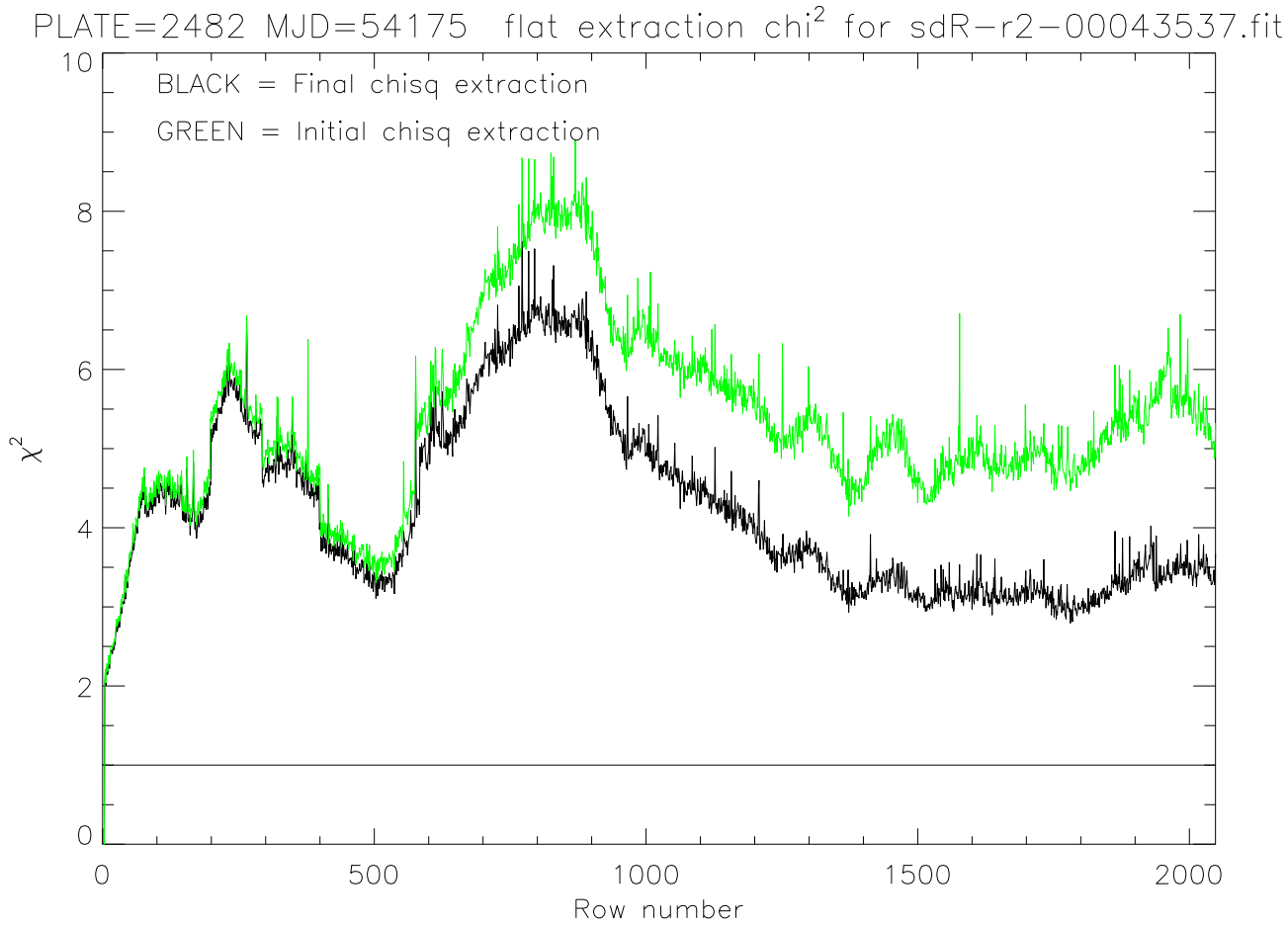

Number of sky fibers = 11
PLATE=2482 MJD=54175 sdR-r1-00043541.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

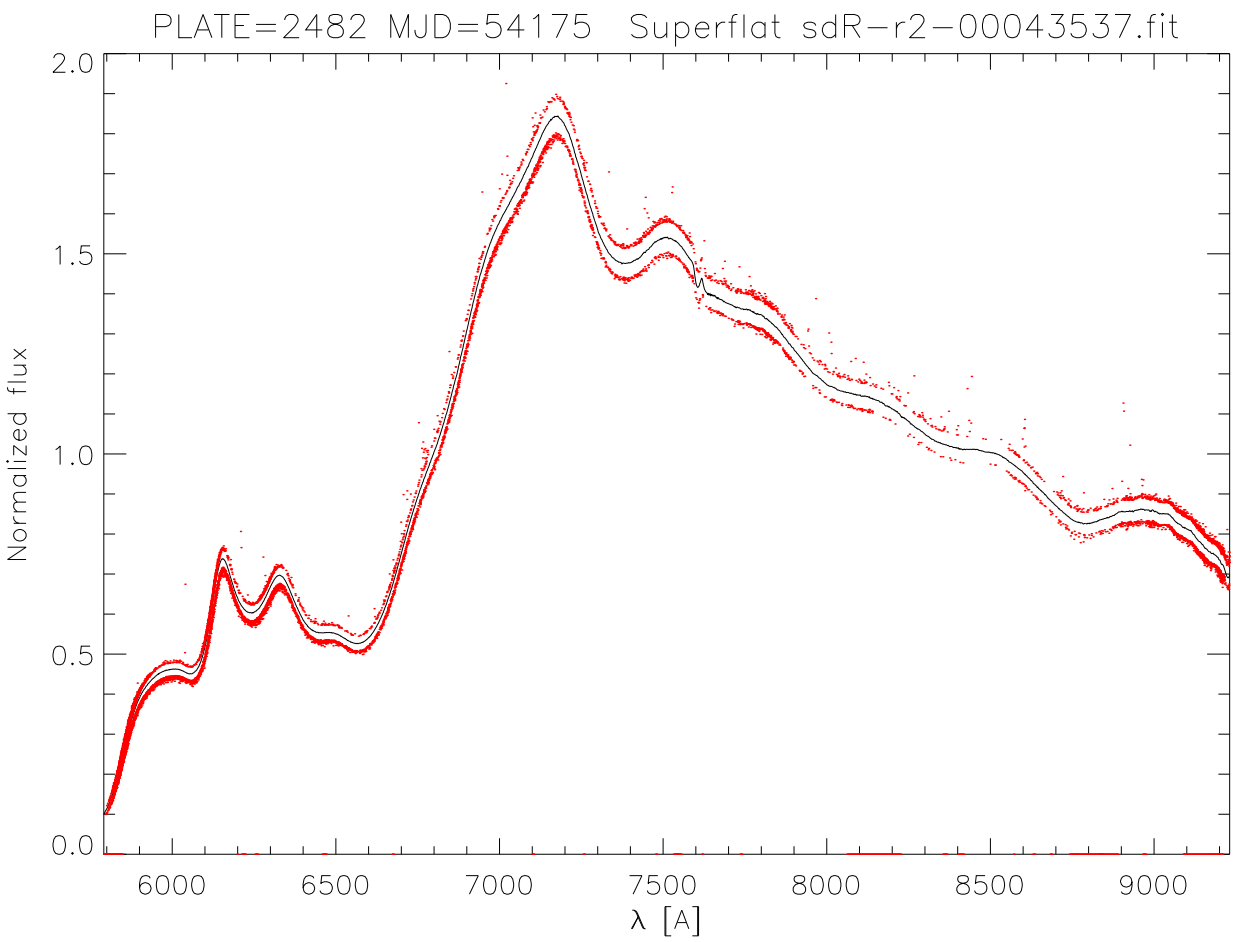

PLATE=2482 MJD=54175 sdR-r1-00043541.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 6.36 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

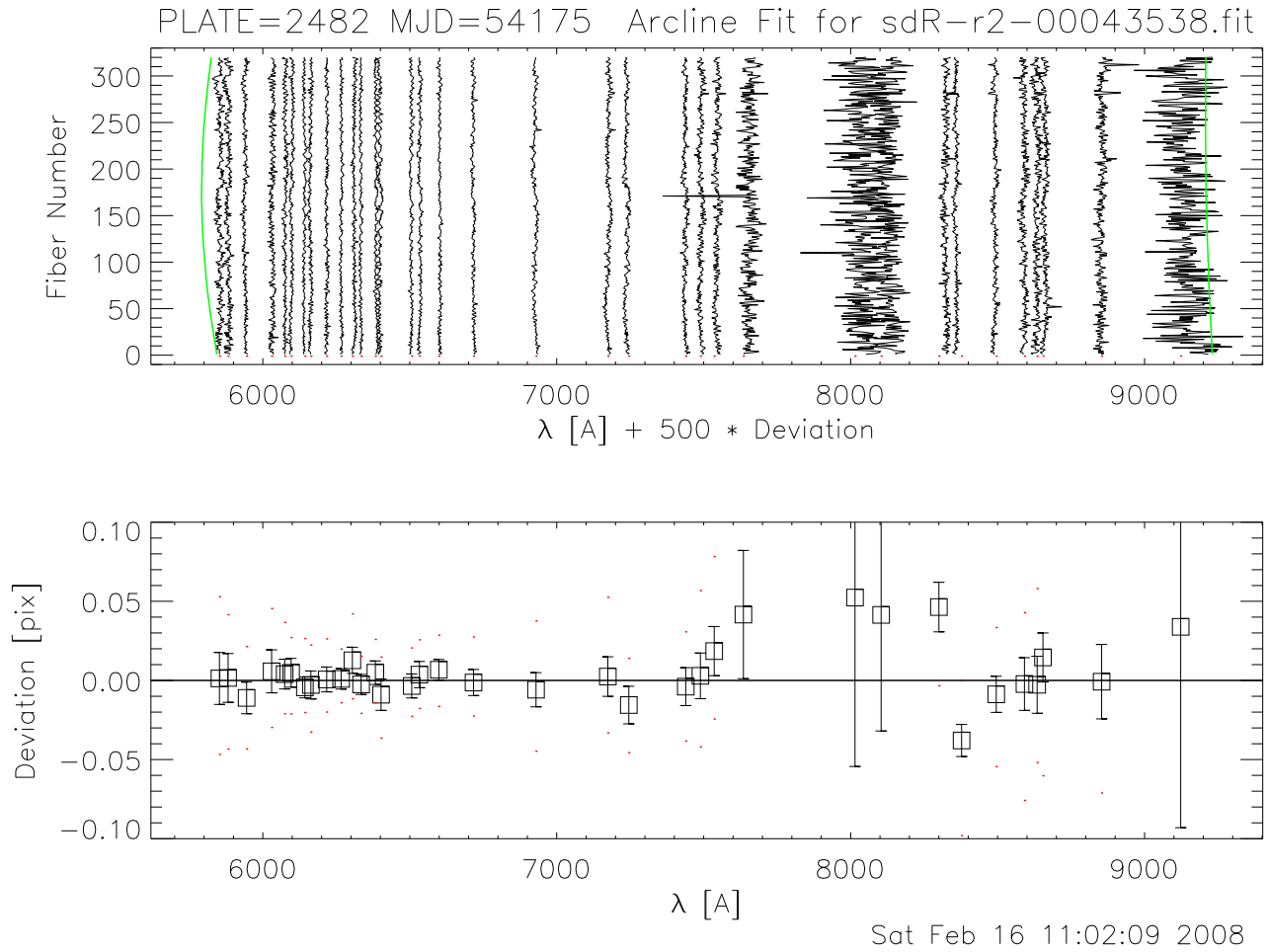

PLATE=2482 MJD=54175 sdR-r1-00043541.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.29 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

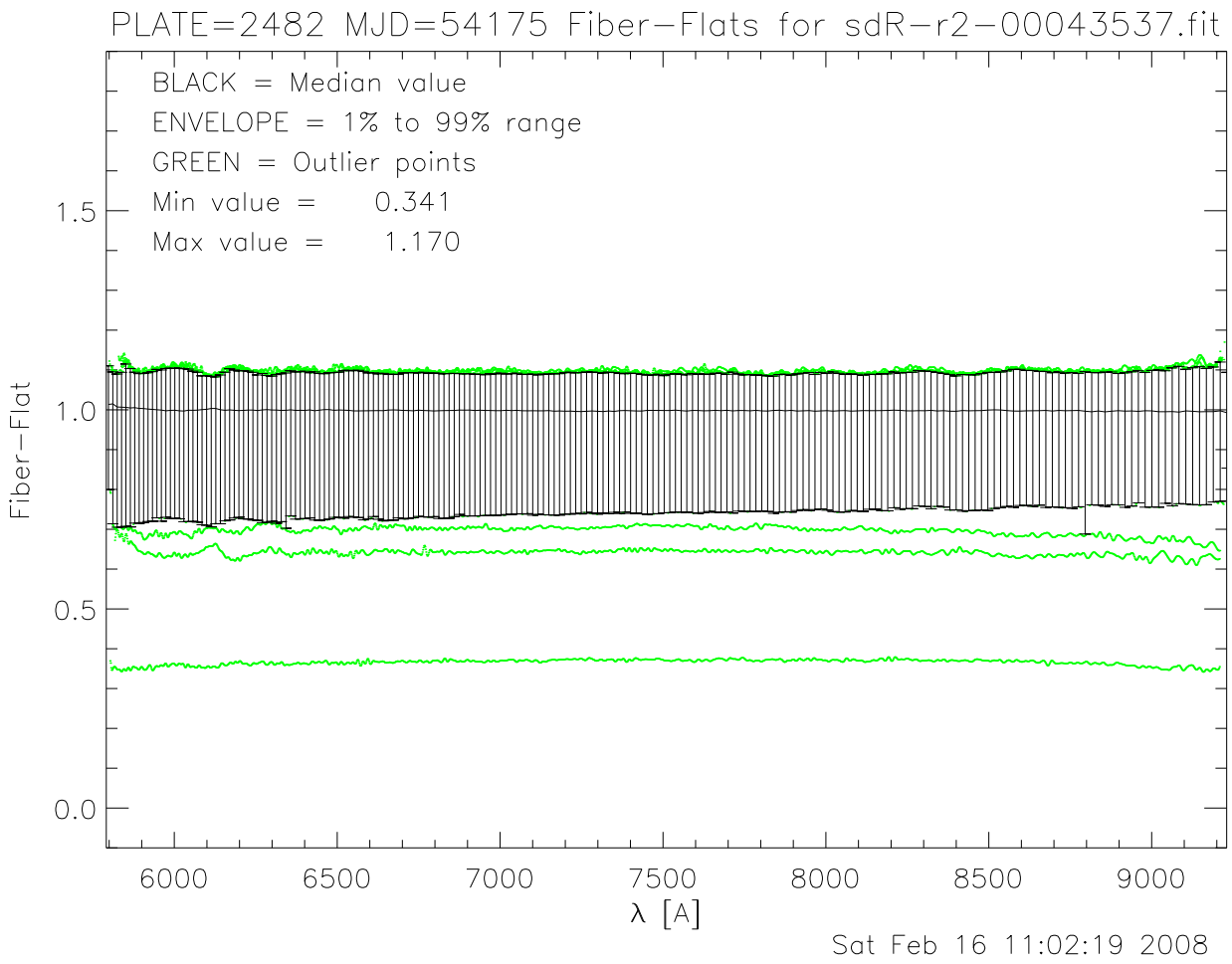

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

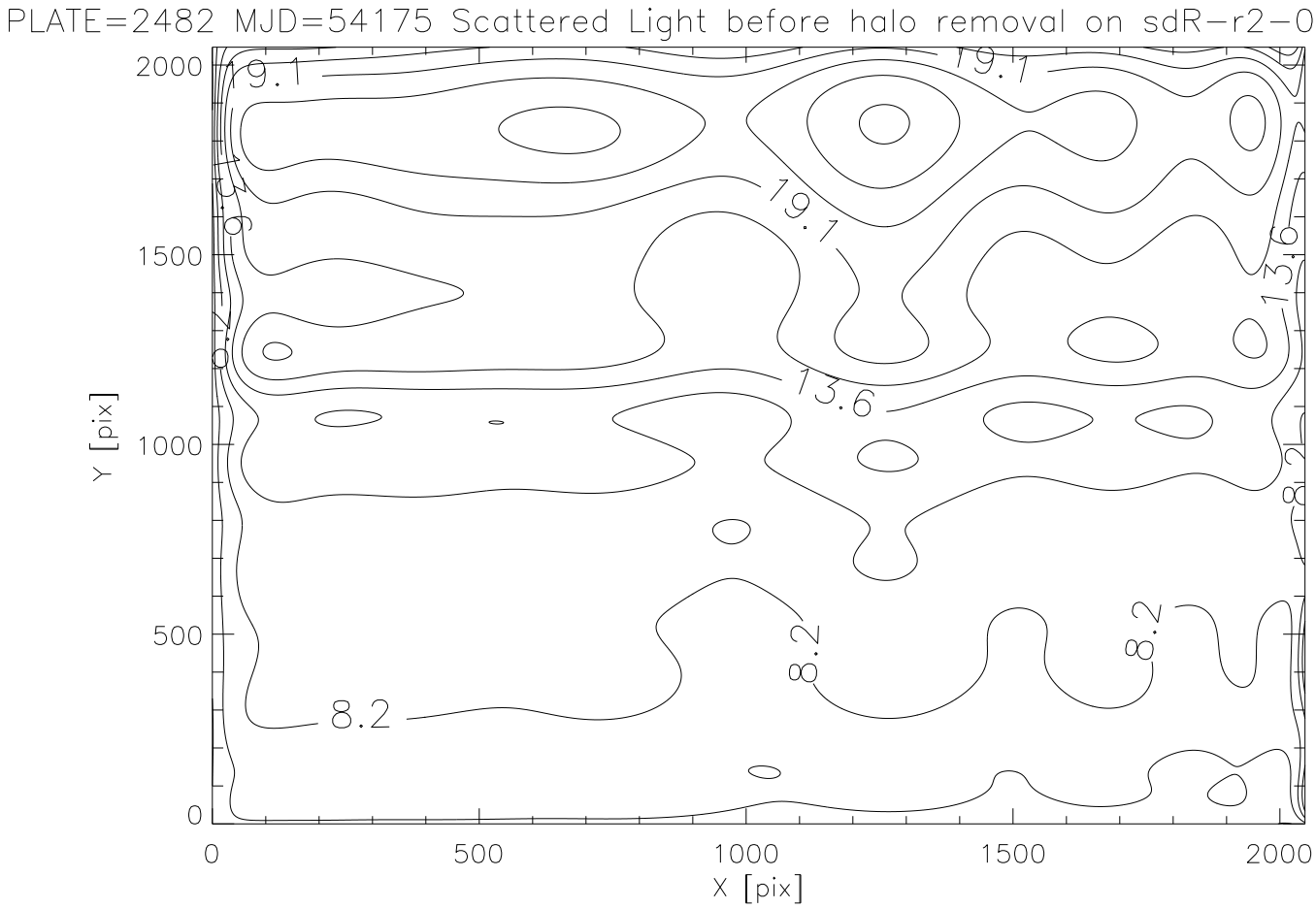

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

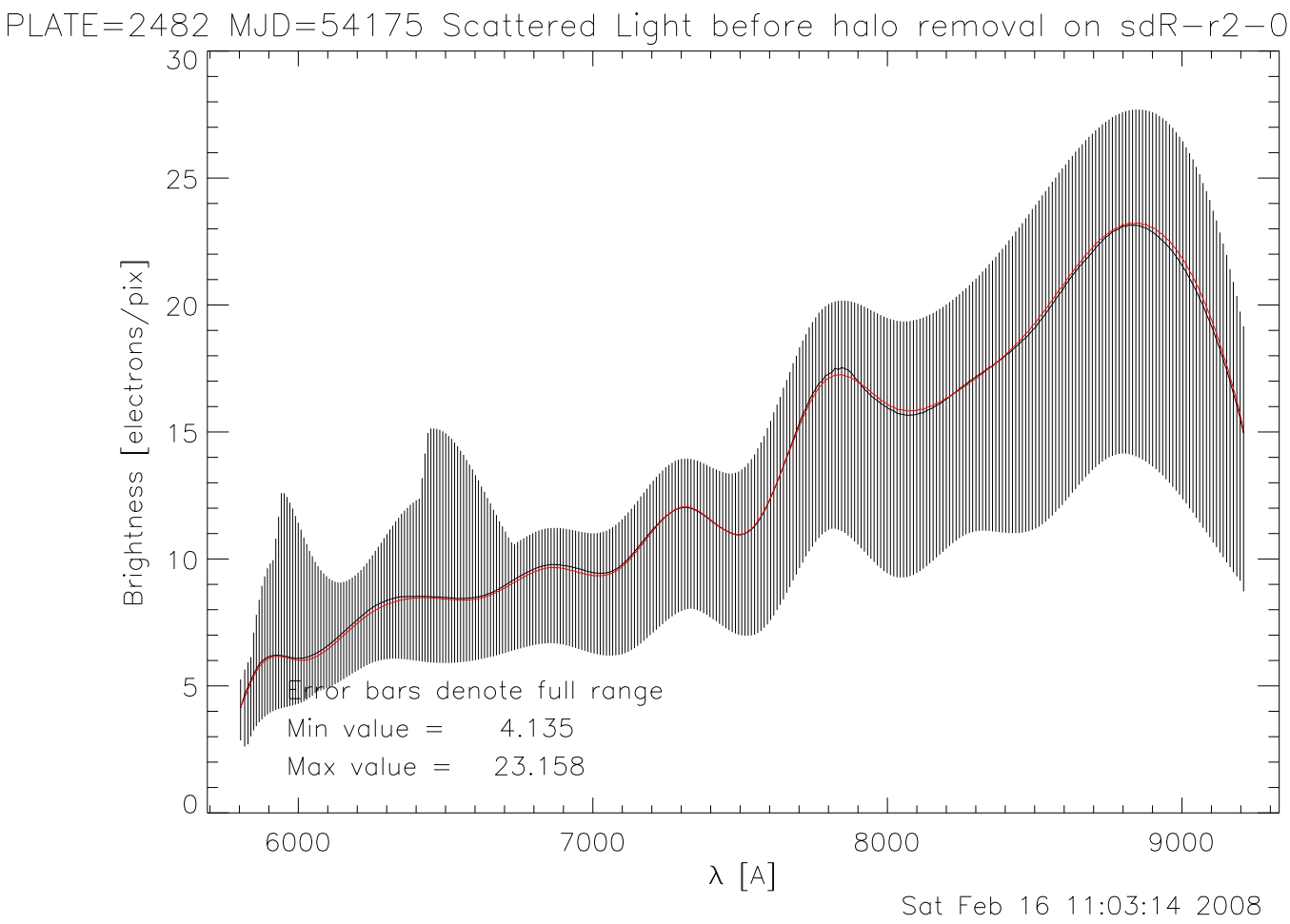

PLATE=2482 MJD=54175 flat extraction chi^2 for sdR-r2-00043537.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

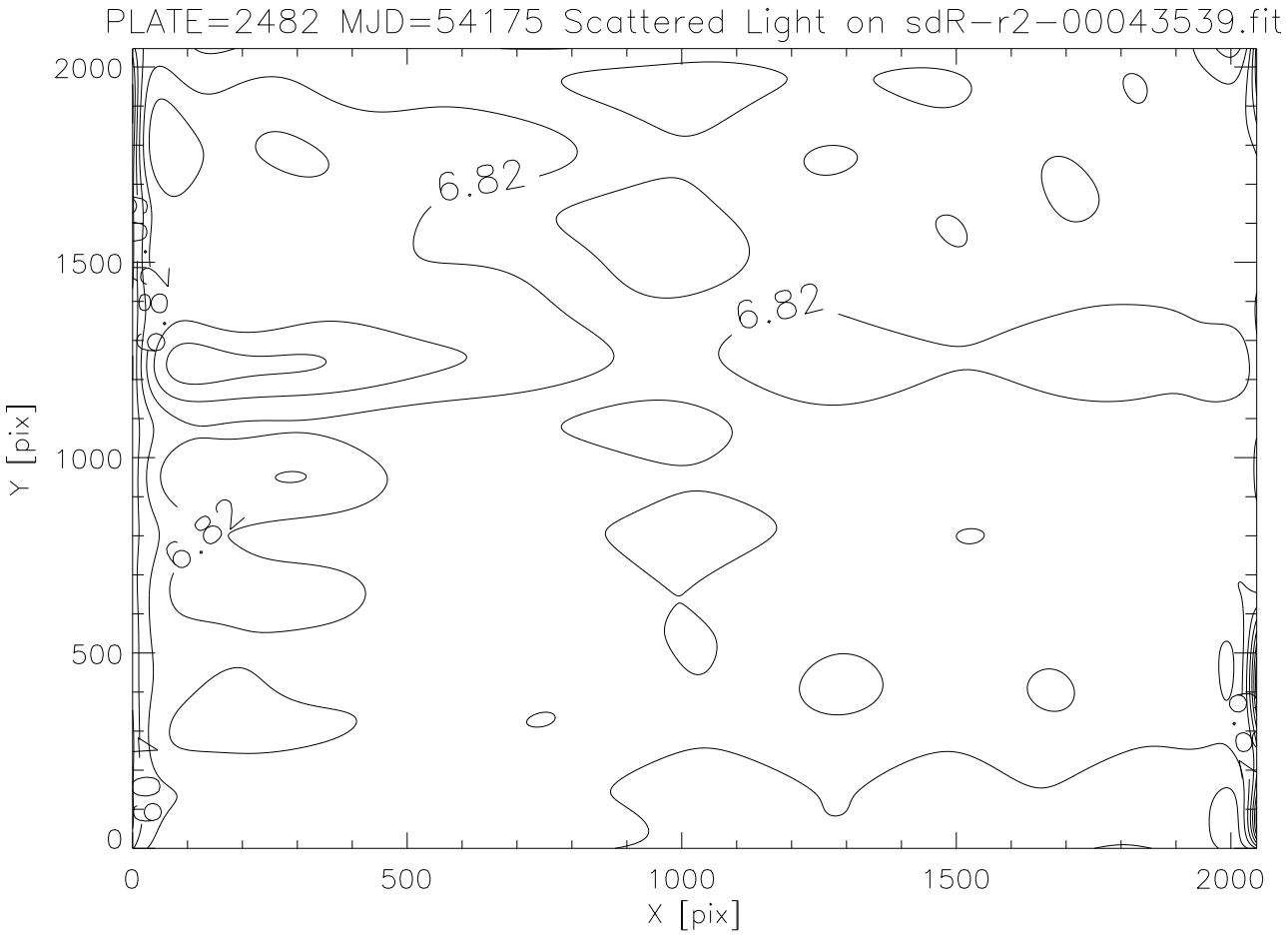

PLATE=2482 MJD=54175 Superflat sdR-r2-00043537.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

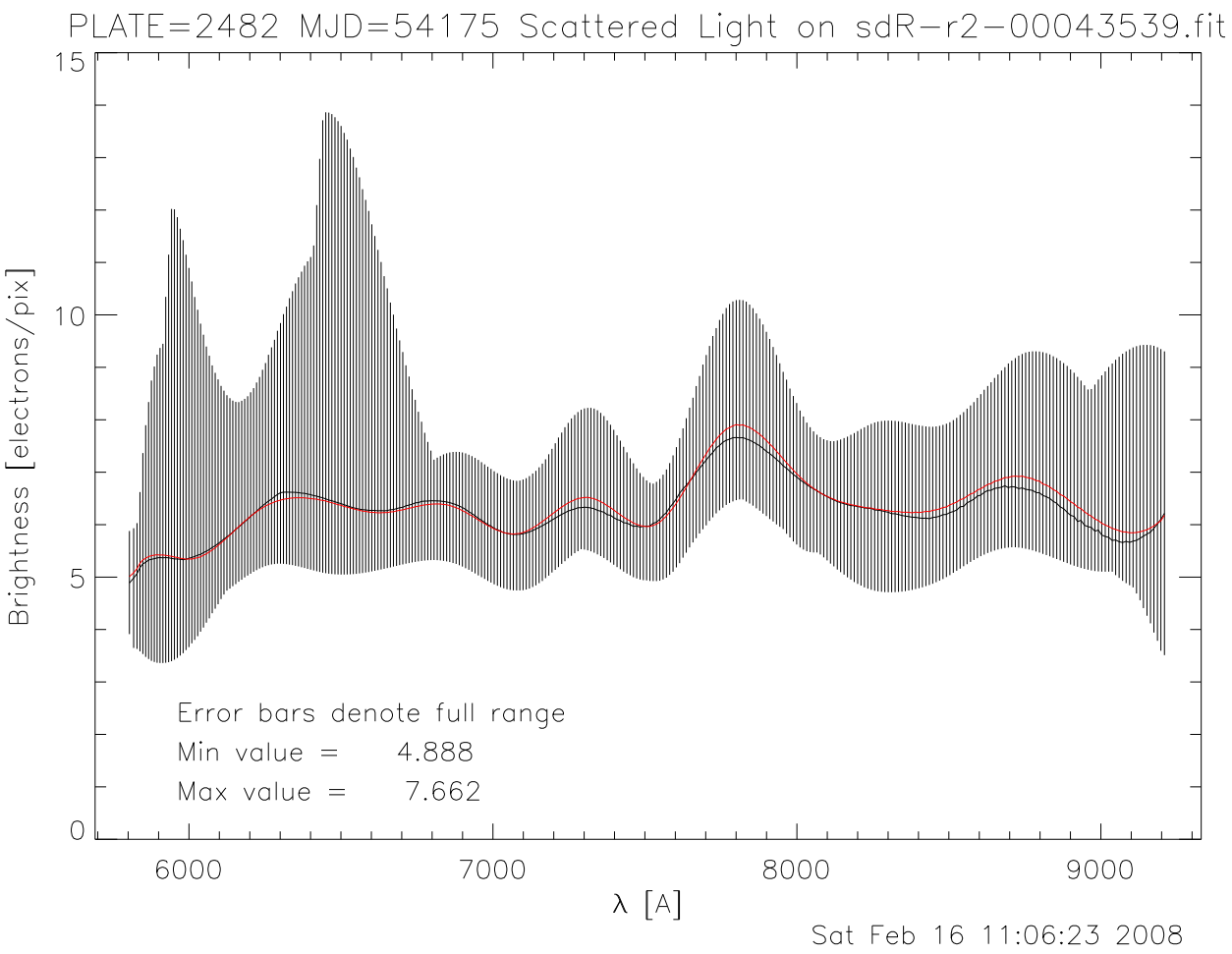

PLATE=2482 MJD=54175 Arcline Fit for sdR-r2-00043538.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 16 11:02:09 2008

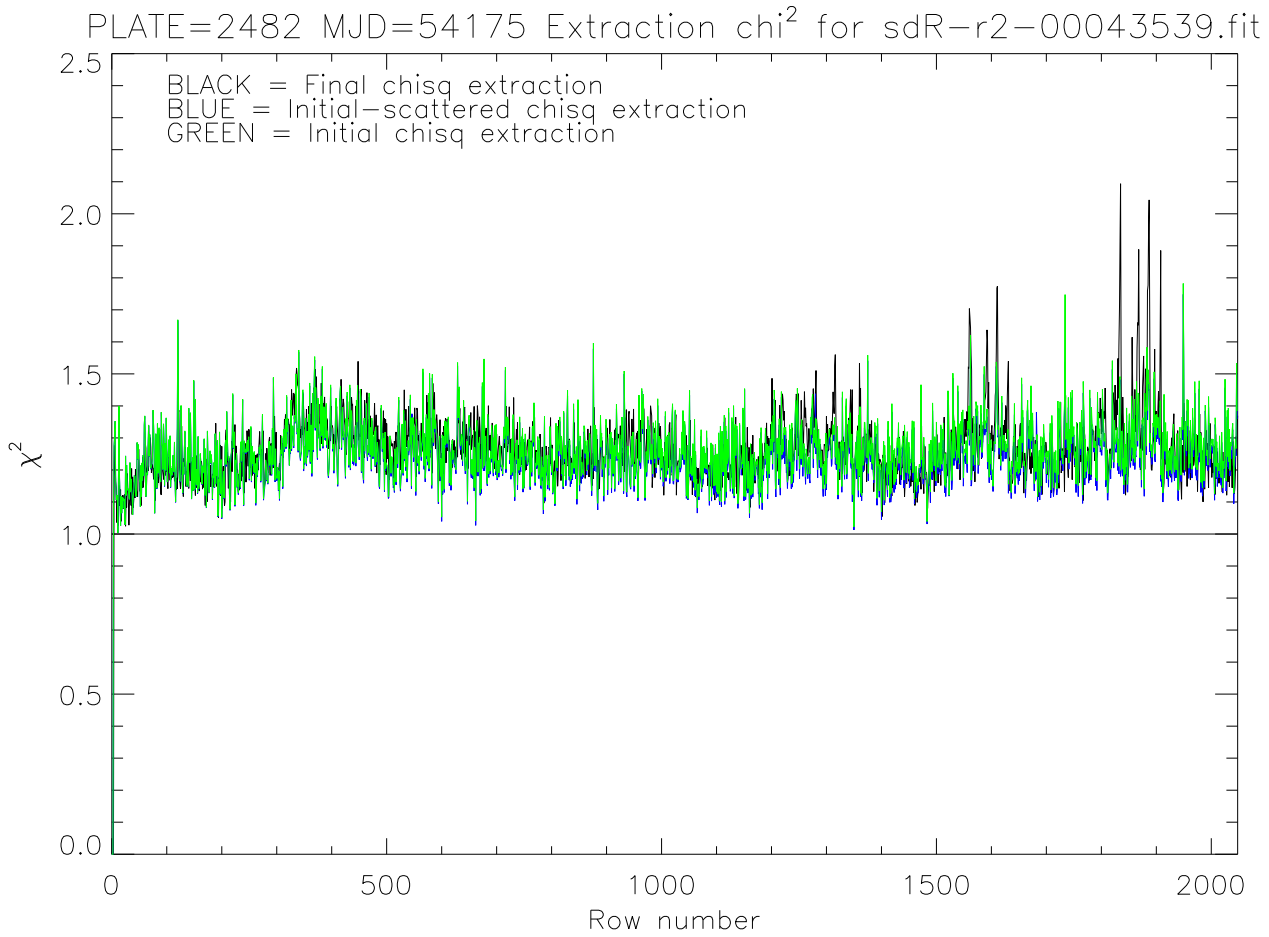

PLATE=2482 MJD=54175 Fiber−Flats for sdR−r2−00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.341
Max value = 1.170
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 11:02:19 2008

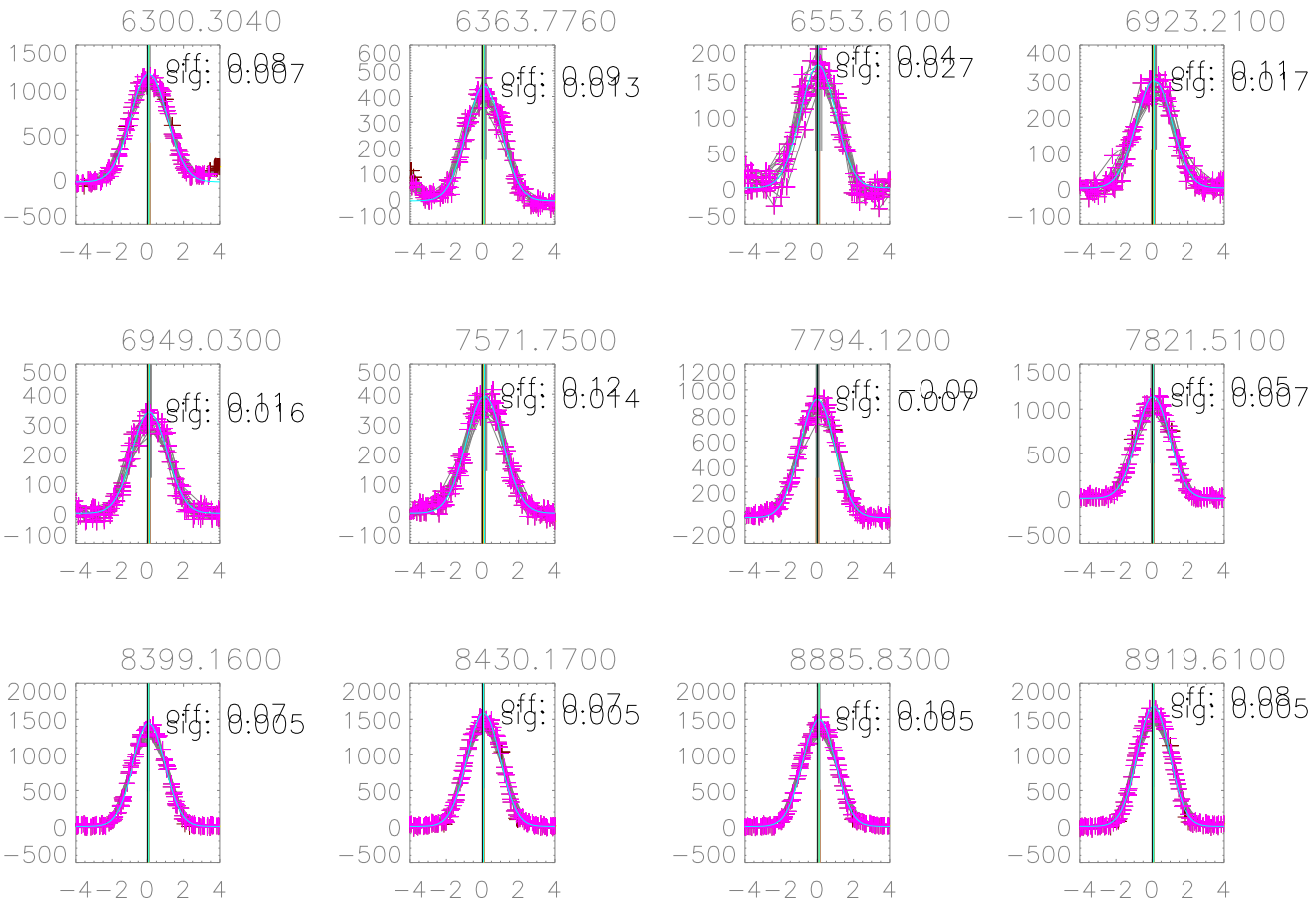

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r2-00043539.fi
19.1
19.1
13.6
13.6
13.6
8.2
8.2
8.2
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

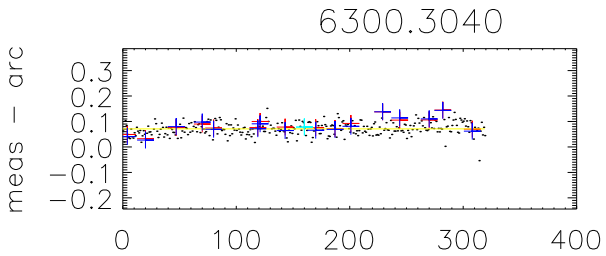

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r2-00043539.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.135
Max value = 23.158
Sat Feb 16 11:03:14 2008

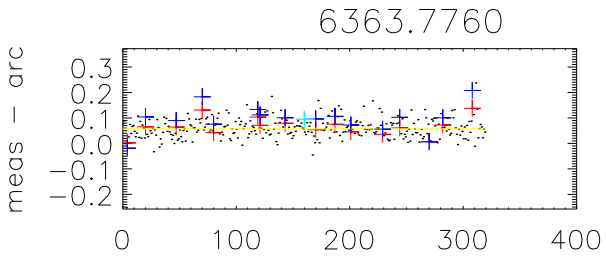

PLATE=2482 MJD=54175 Scattered Light on sdR-r2-00043539.fit
6.82
6.82
6.82
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

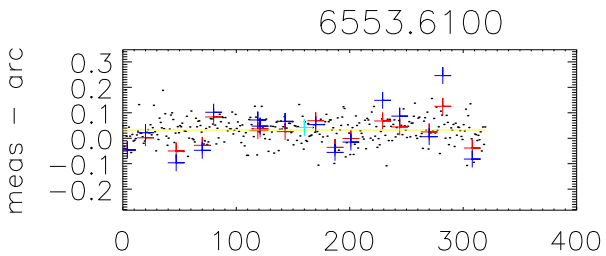

PLATE=2482 MJD=54175 Scattered Light on sdR-r2-00043539.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.888
Max value = 7.662
Sat Feb 16 11:06:23 2008

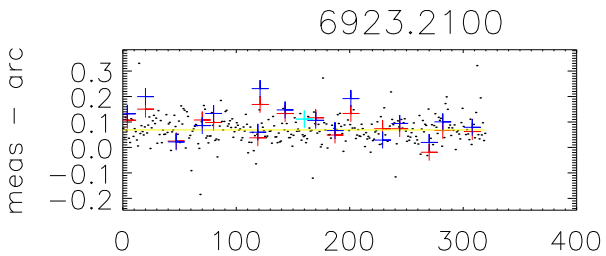

PLATE=2482 MJD=54175 Extraction chi^2 for sdR−r2−00043539.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

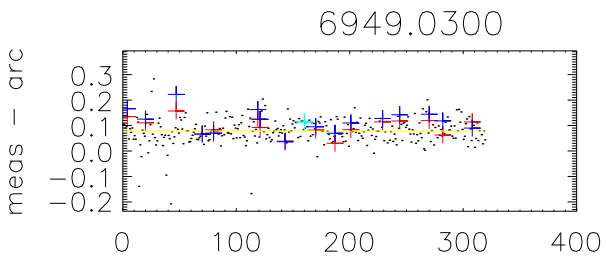

6300.3040
off: 0.08
sig: 0.007
6363.7760
off: 0.09
sig: 0.013
6553.6100
off: 0.04
sig: 0.027
6923.2100
off: 0.11
sig: 0.017
6949.0300
off: 0.11
sig: 0.016
7571.7500
off: 0.12
sig: 0.014
7794.1200
off: −0.00
sig: 0.007
7821.5100
off: 0.05
sig: 0.007
8399.1600
off: 0.07
sig: 0.005
8430.1700
off: 0.07
sig: 0.005
8885.8300
off: 0.10
sig: 0.005
8919.6100
off: 0.08
sig: 0.005

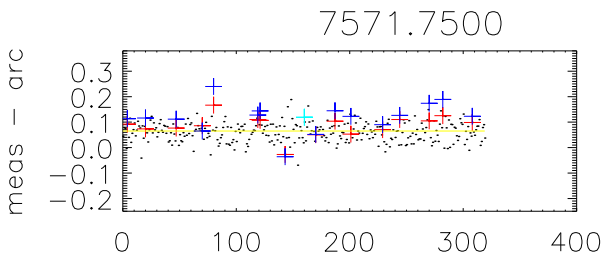

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

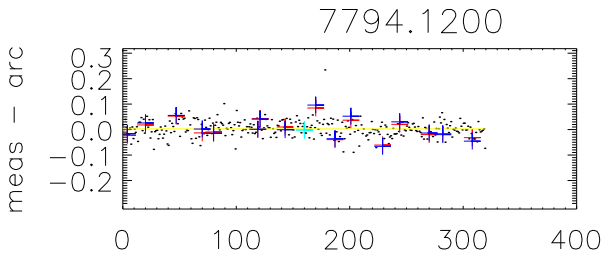

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

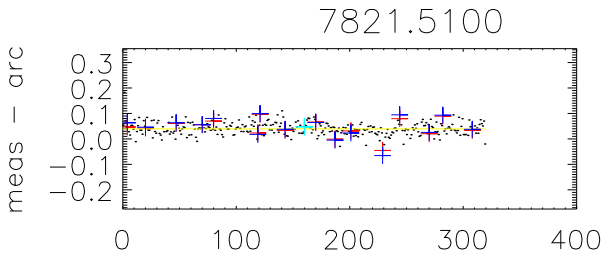

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

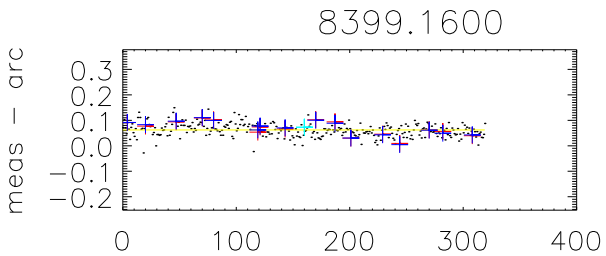

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

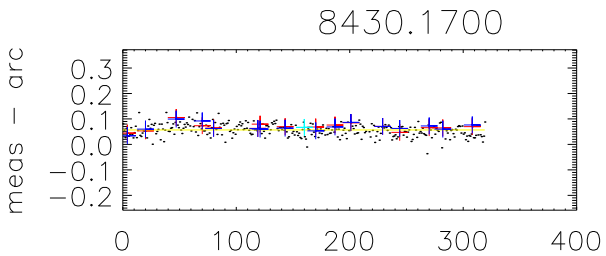

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

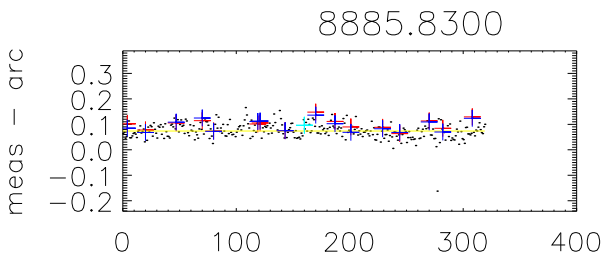

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

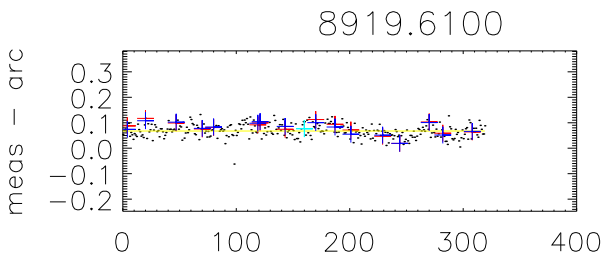

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

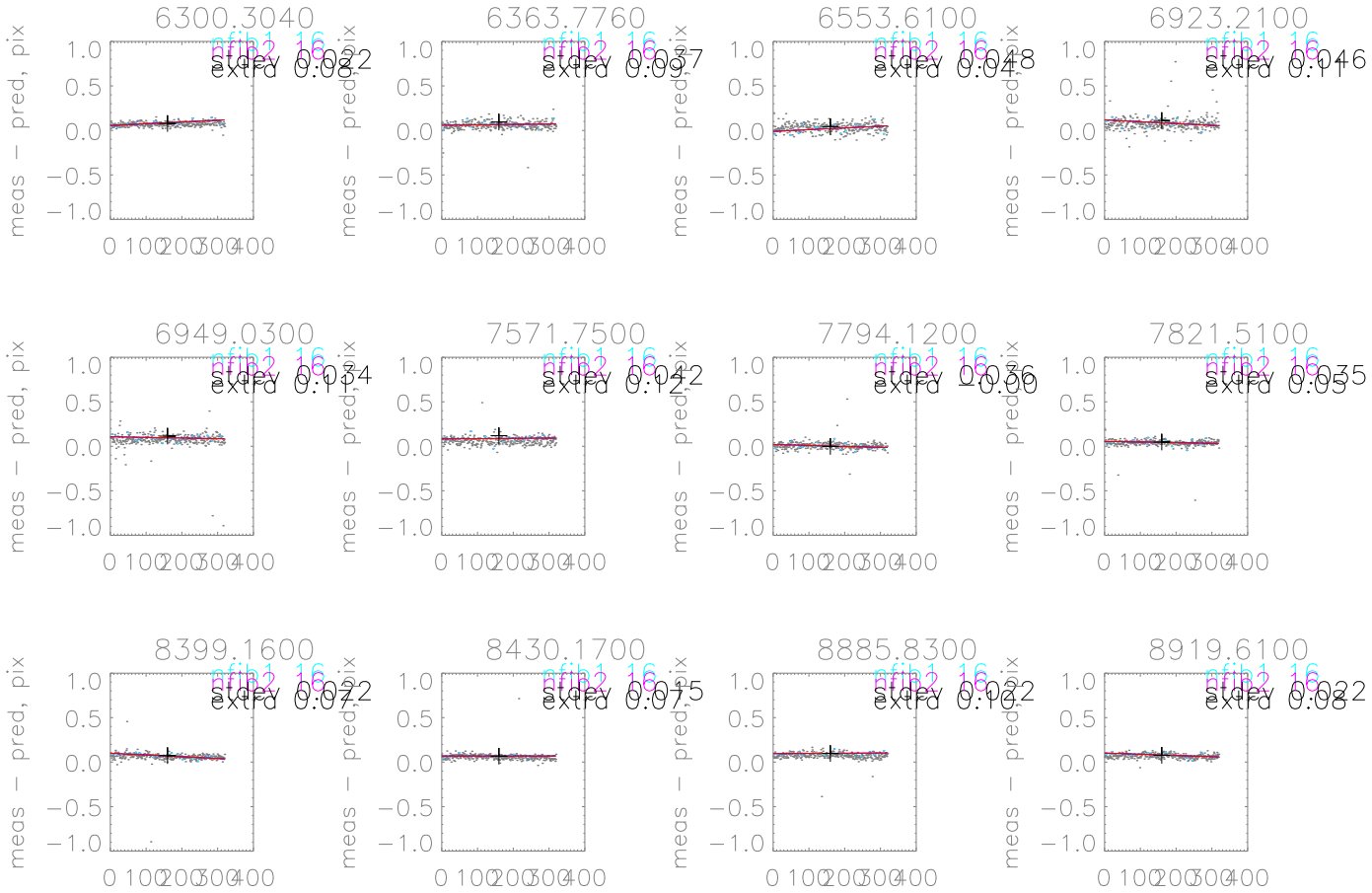

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

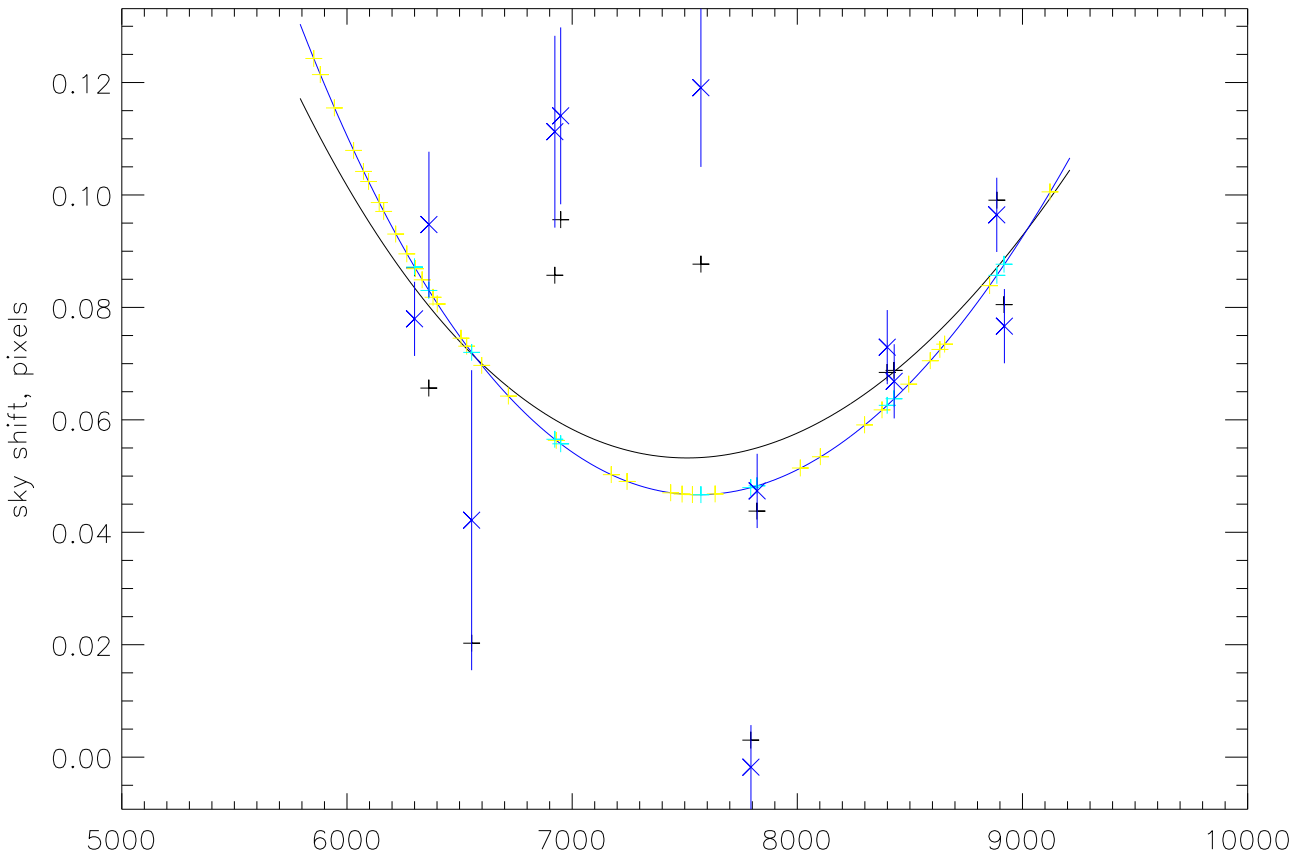

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

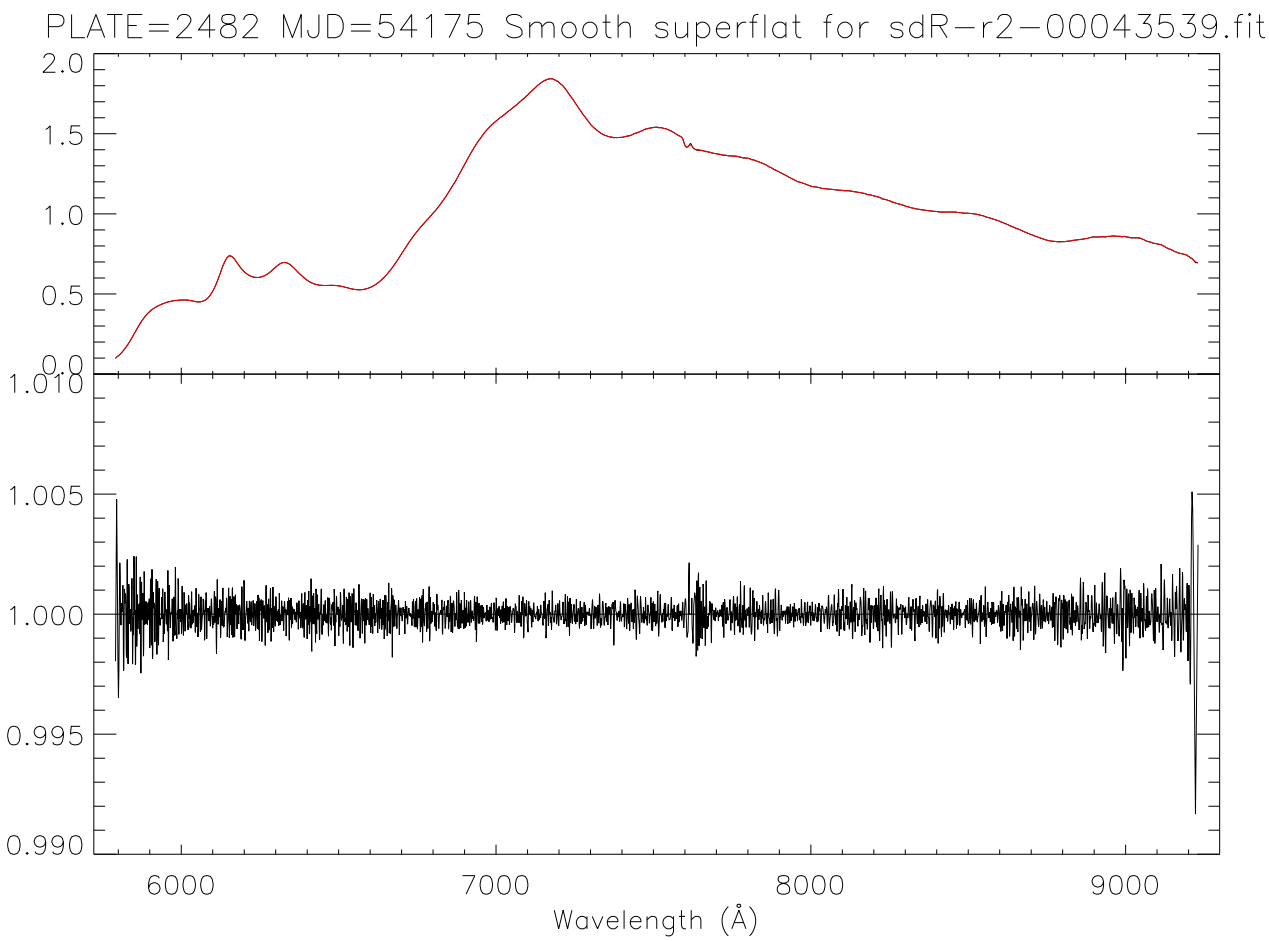

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

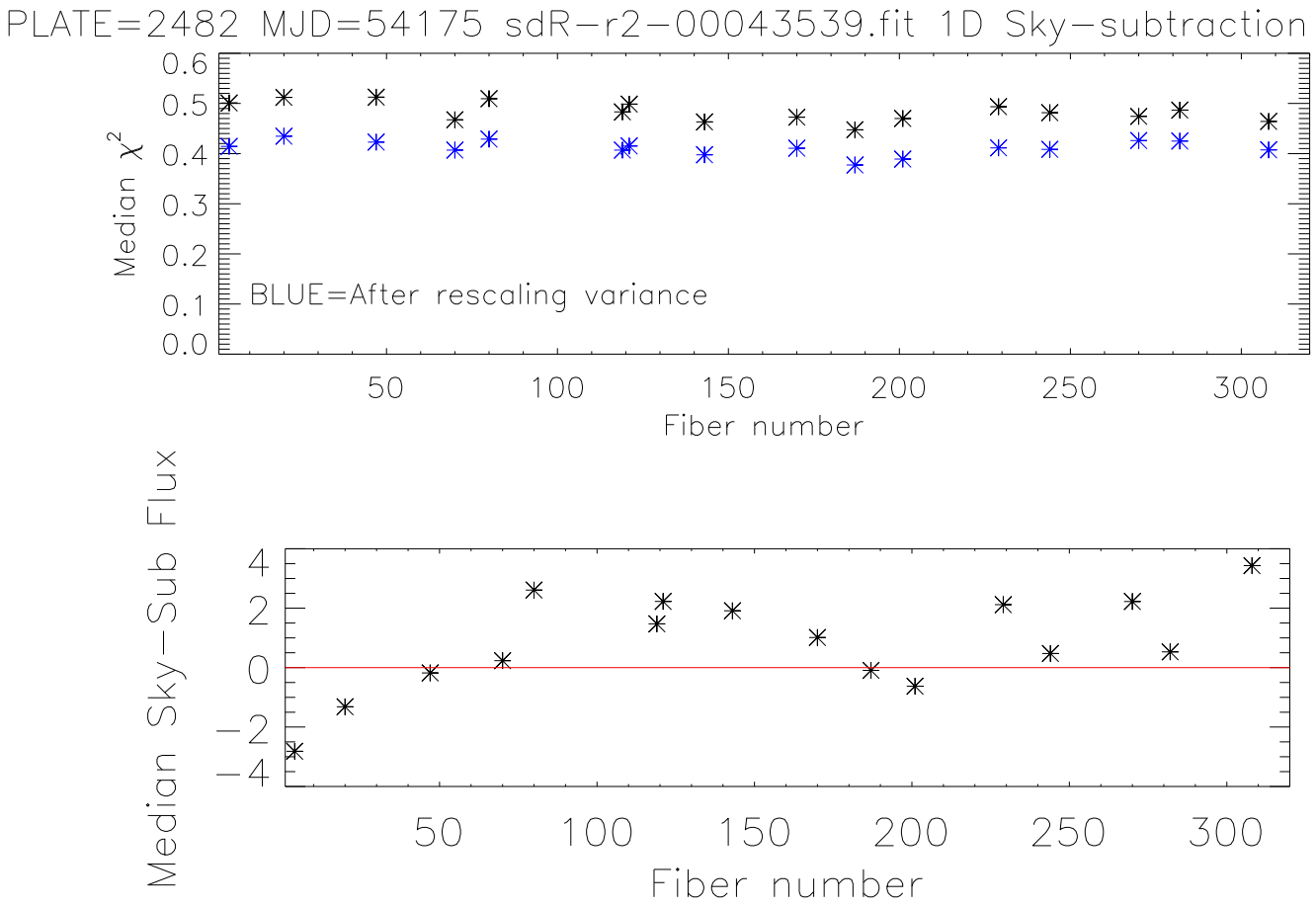

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

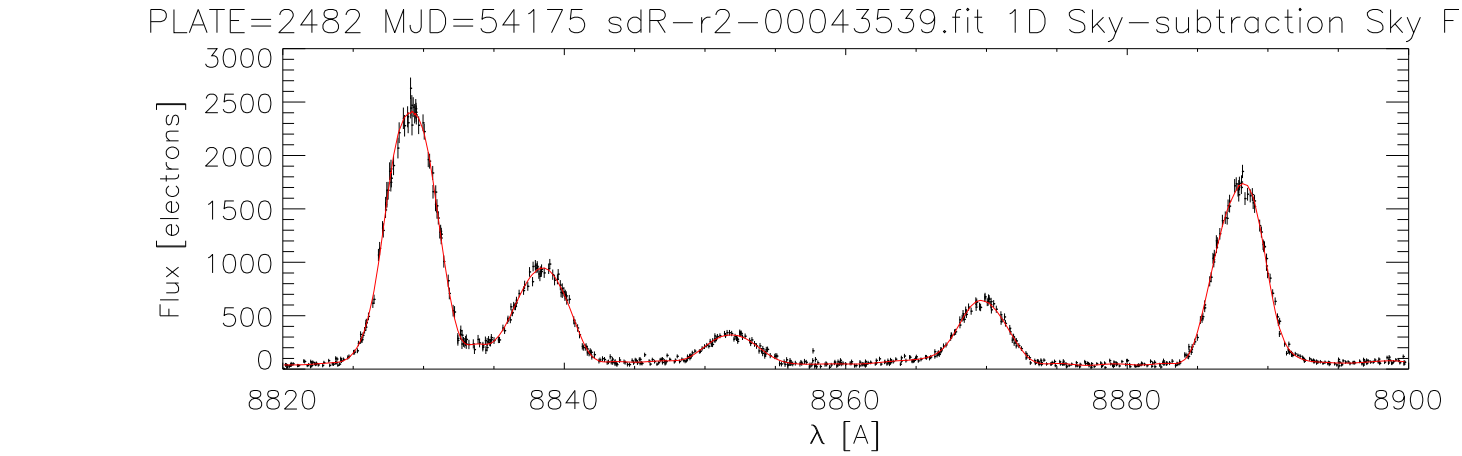

6300.3040
stdev 0.022
extra 0.082
6363.7760
stdev 0.037
extra 0.097
6553.6100
stdev 0.048
extra 0.048
6923.2100
stdev 0.046
extra 0.11
6949.0300
stdev 0.034
extra 0.134
7571.7500
stdev 0.042
extra 0.12
7794.1200
stdev 0.036
extra −0.00
7821.5100
stdev 0.035
extra 0.05
8399.1600
stdev 0.022
extra 0.072
8430.1700
stdev 0.075
extra 0.075
8885.8300
stdev 0.032
extra 0.102
8919.6100
stdev 0.032
extra 0.08
meas − pred, pix
mfbx1 16
mfbx2 16
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

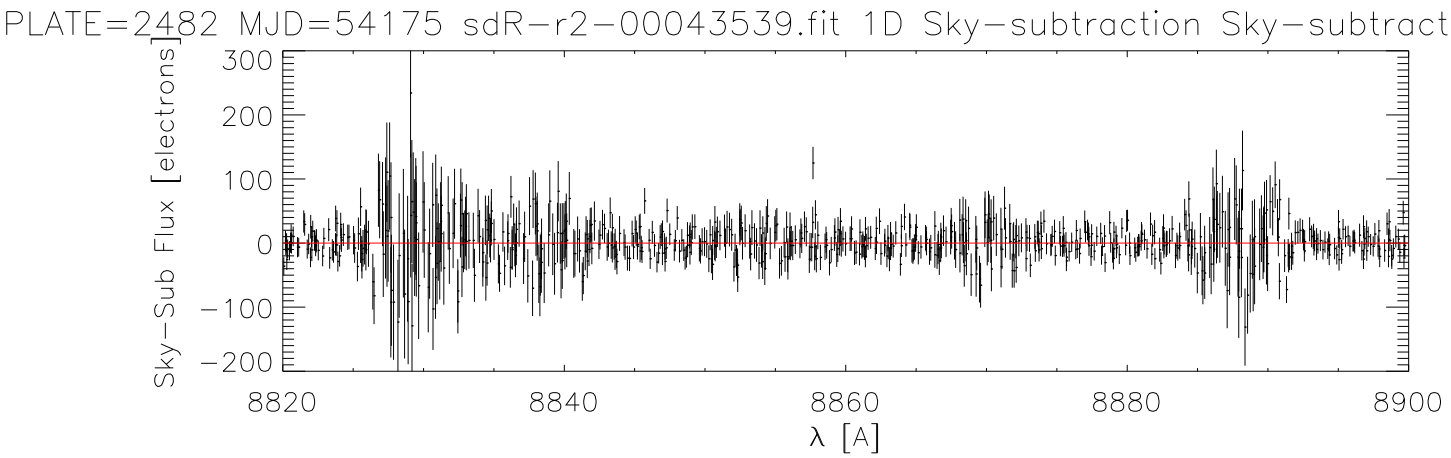

sky shift, pixels
0.12
0.10
0.08
0.06
0.04
0.02
0.00
5000
6000
7000
8000
9000
10000

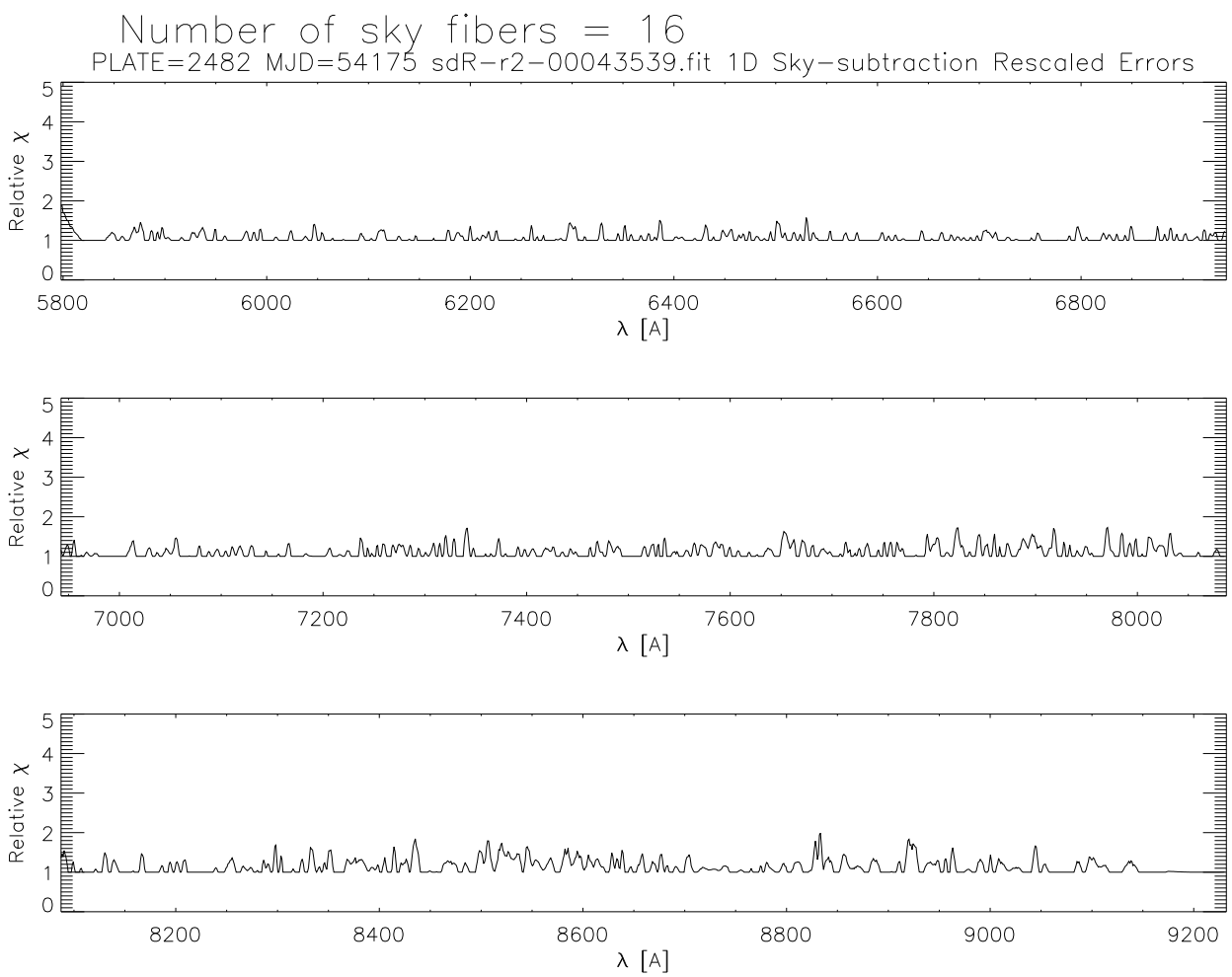
es= −0.0000

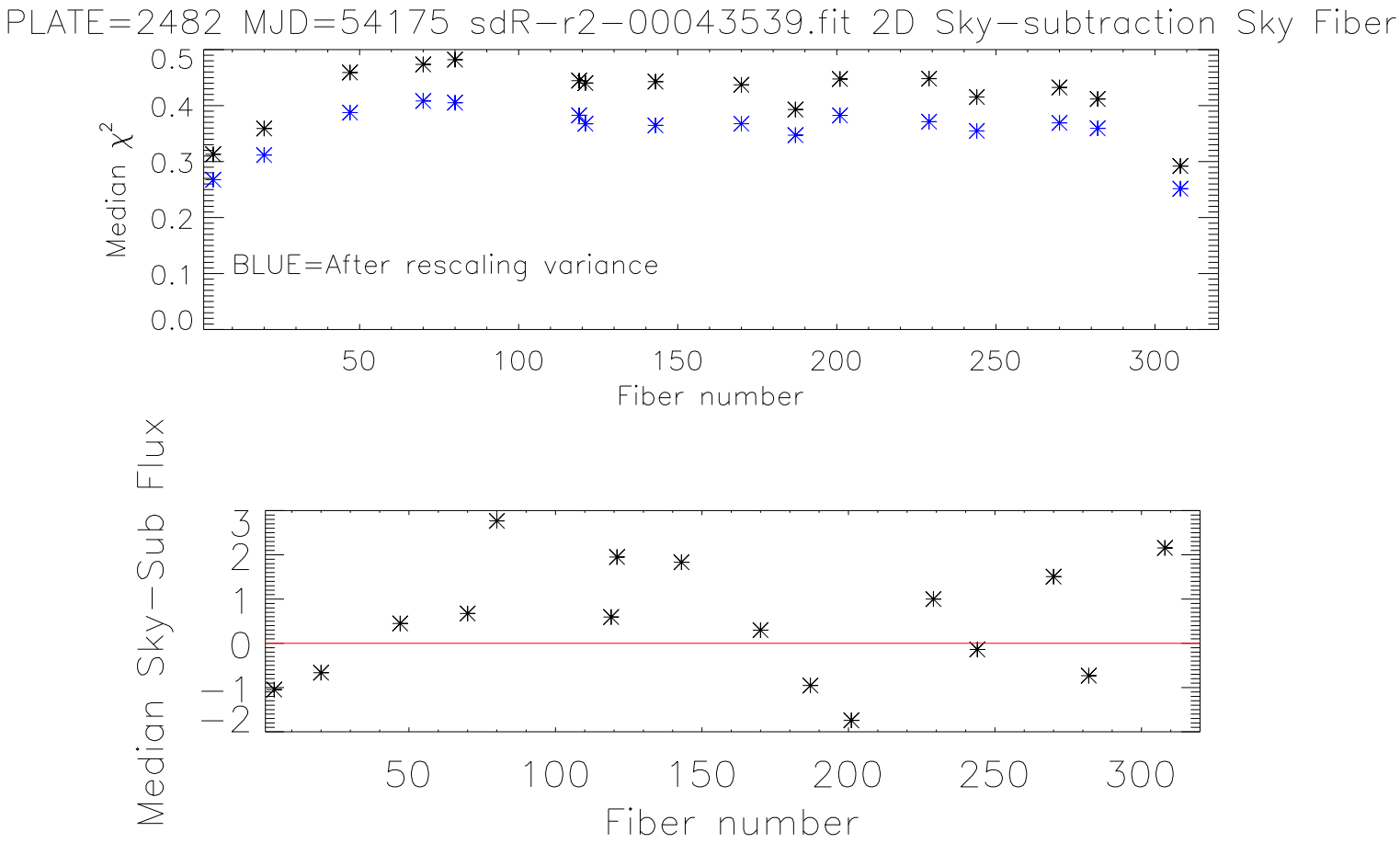

PLATE=2482 MJD=54175 Smooth superflat for sdR−r2−00043539.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

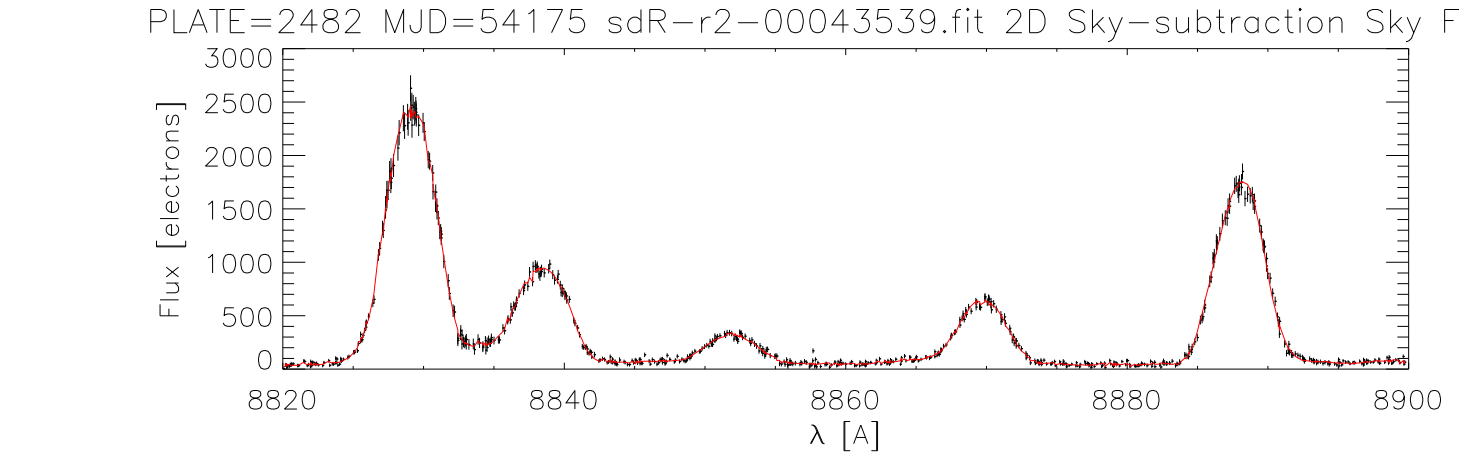

PLATE=2482 MJD=54175 sdR-r2-00043539.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

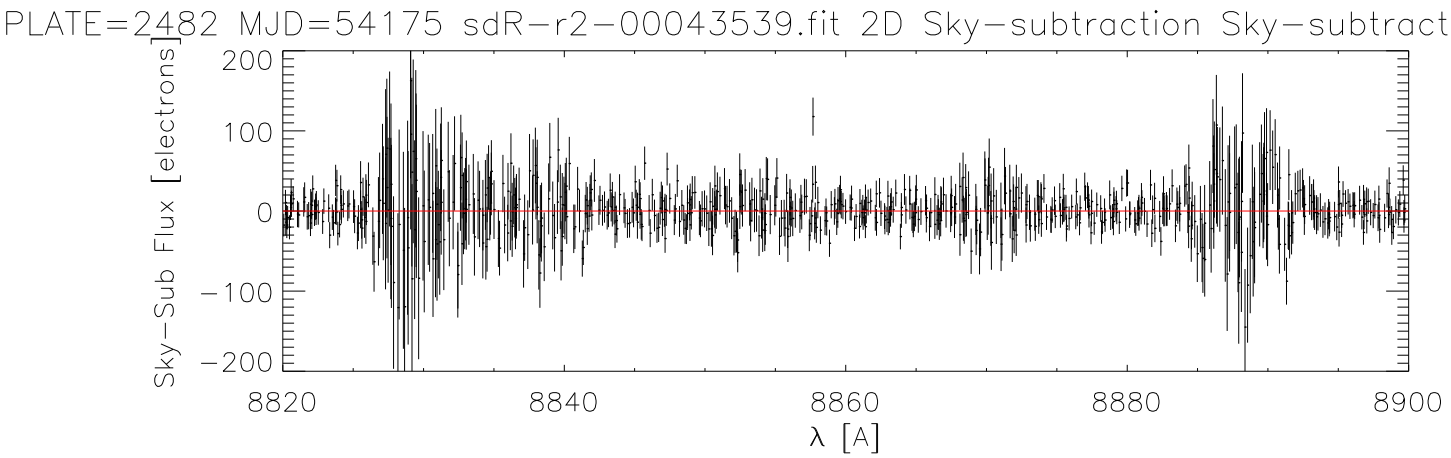

PLATE=2482 MJD=54175 sdR-r2-00043539.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

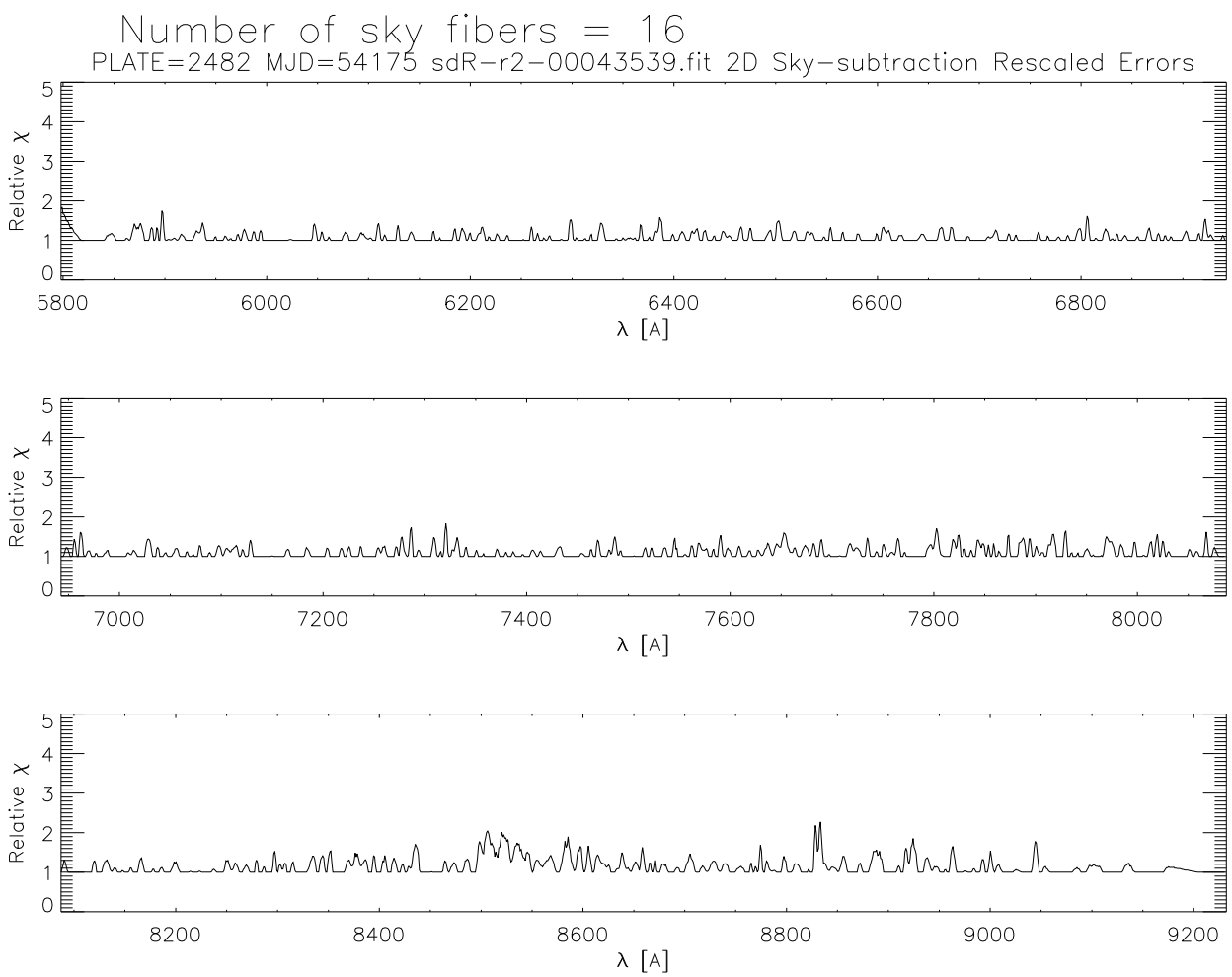

PLATE=2482 MJD=54175 sdR-r2-00043539.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

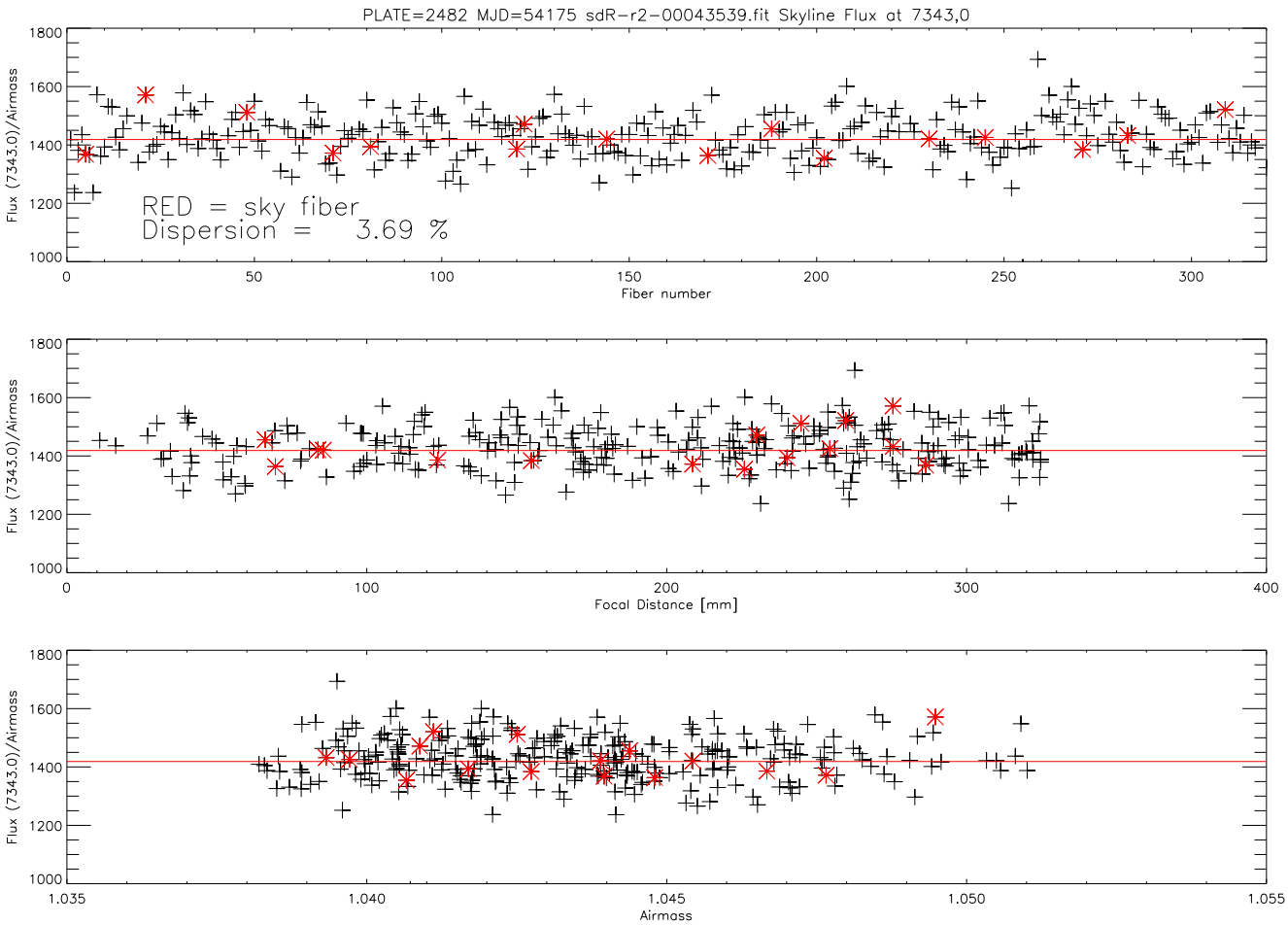

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-r2-00043539.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

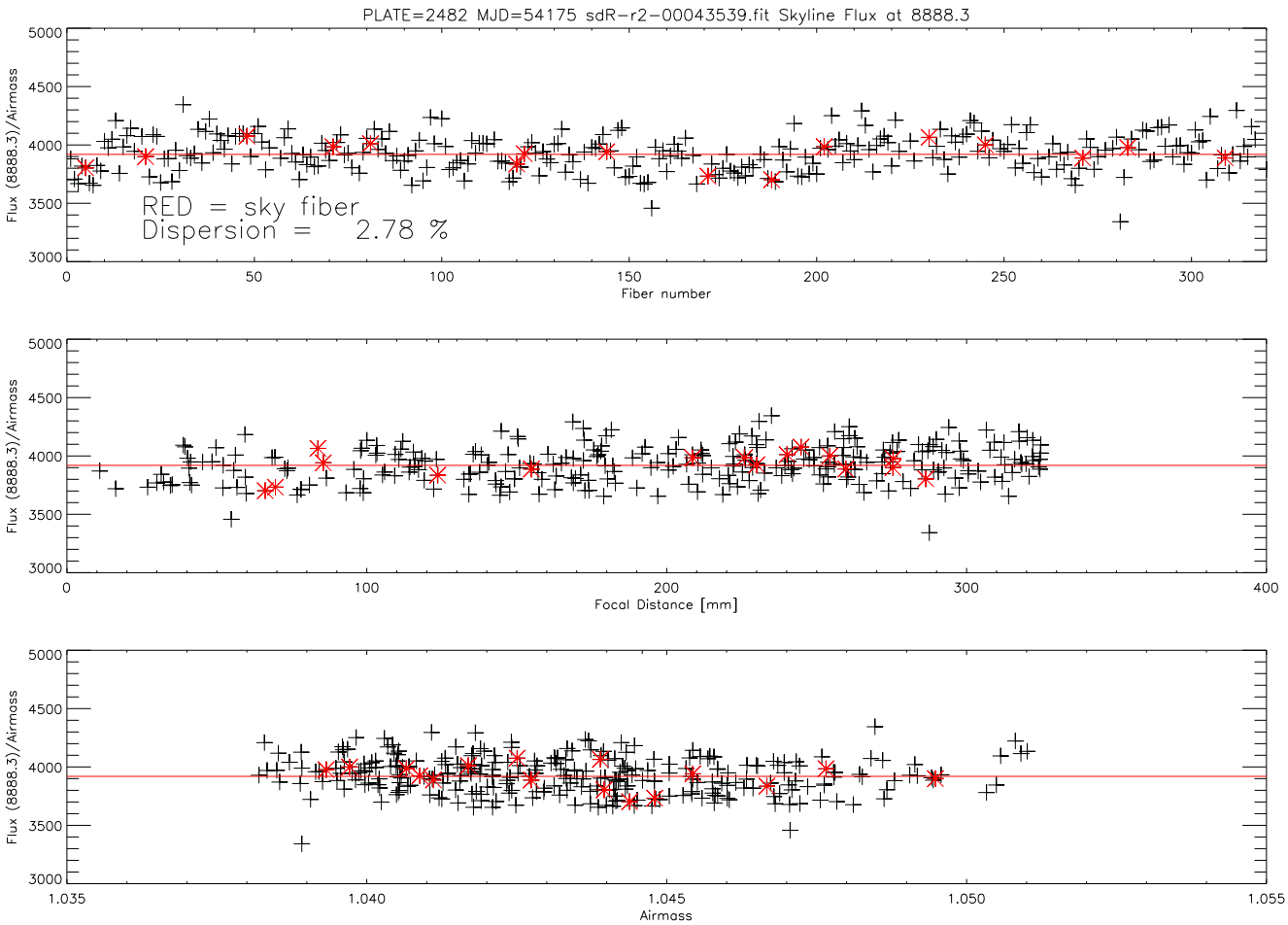

PLATE=2482 MJD=54175 sdR-r2-00043539.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

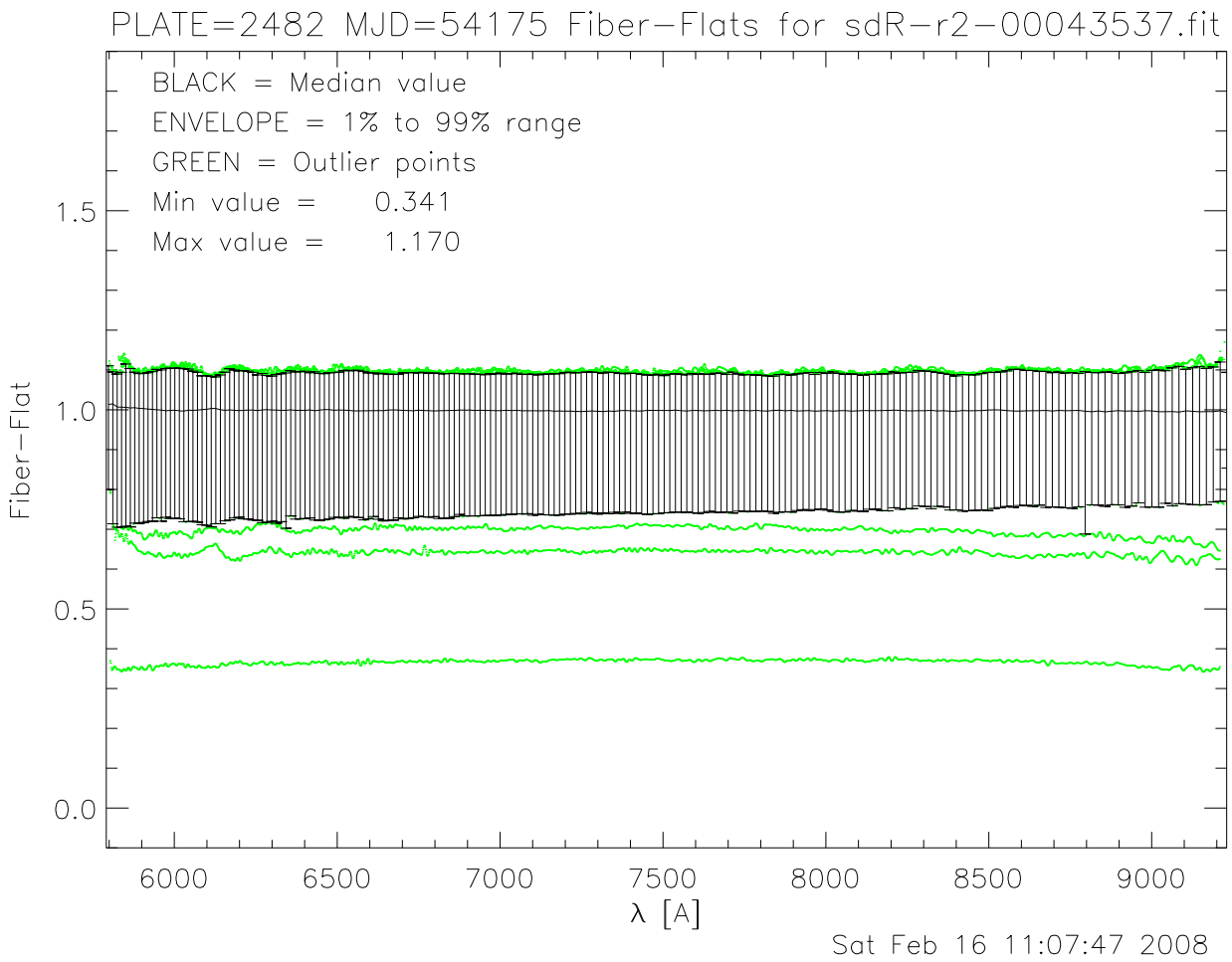

PLATE=2482 MJD=54175 sdR-r2-00043539.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

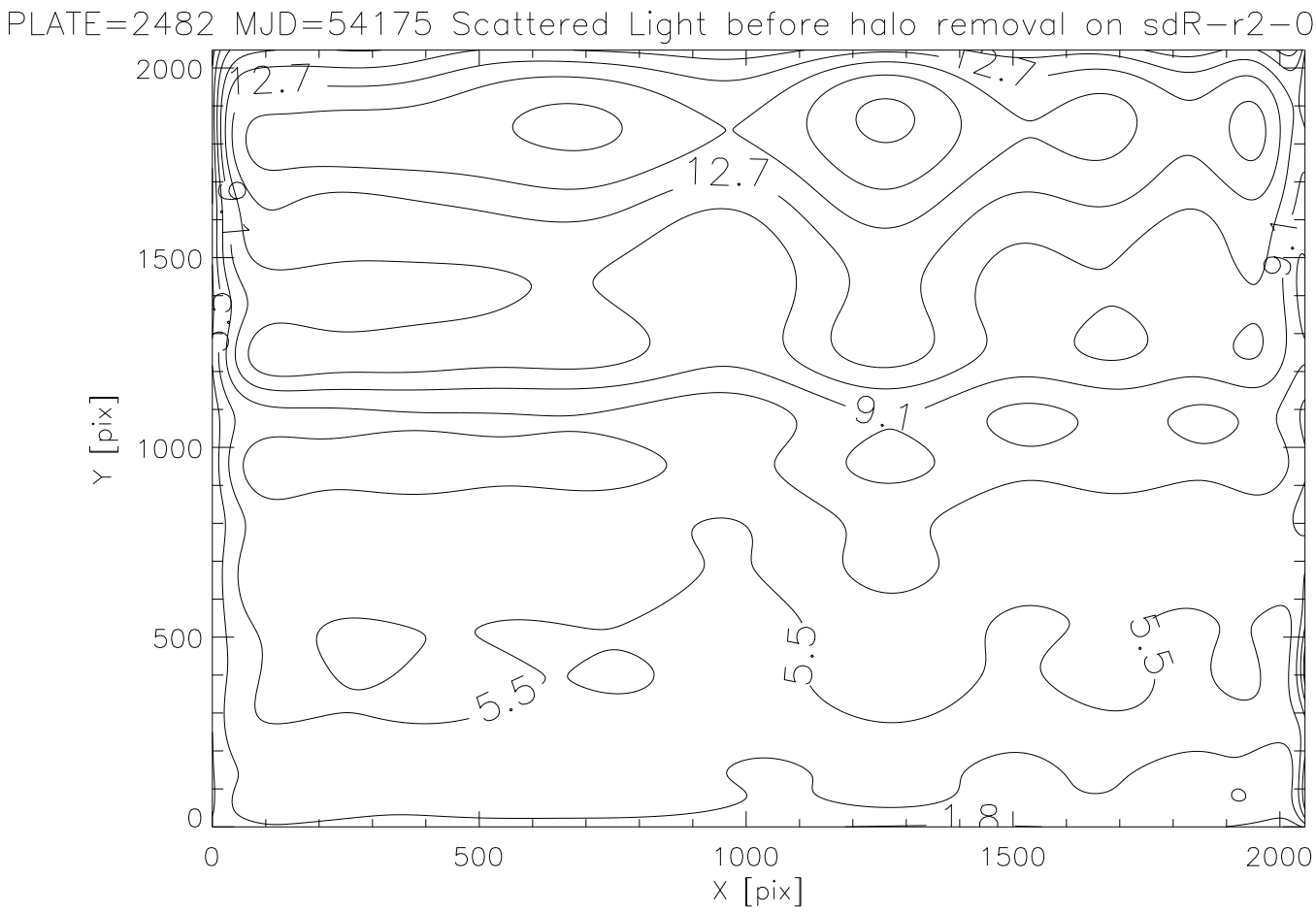

PLATE=2482 MJD=54175 sdR-r2-00043539.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

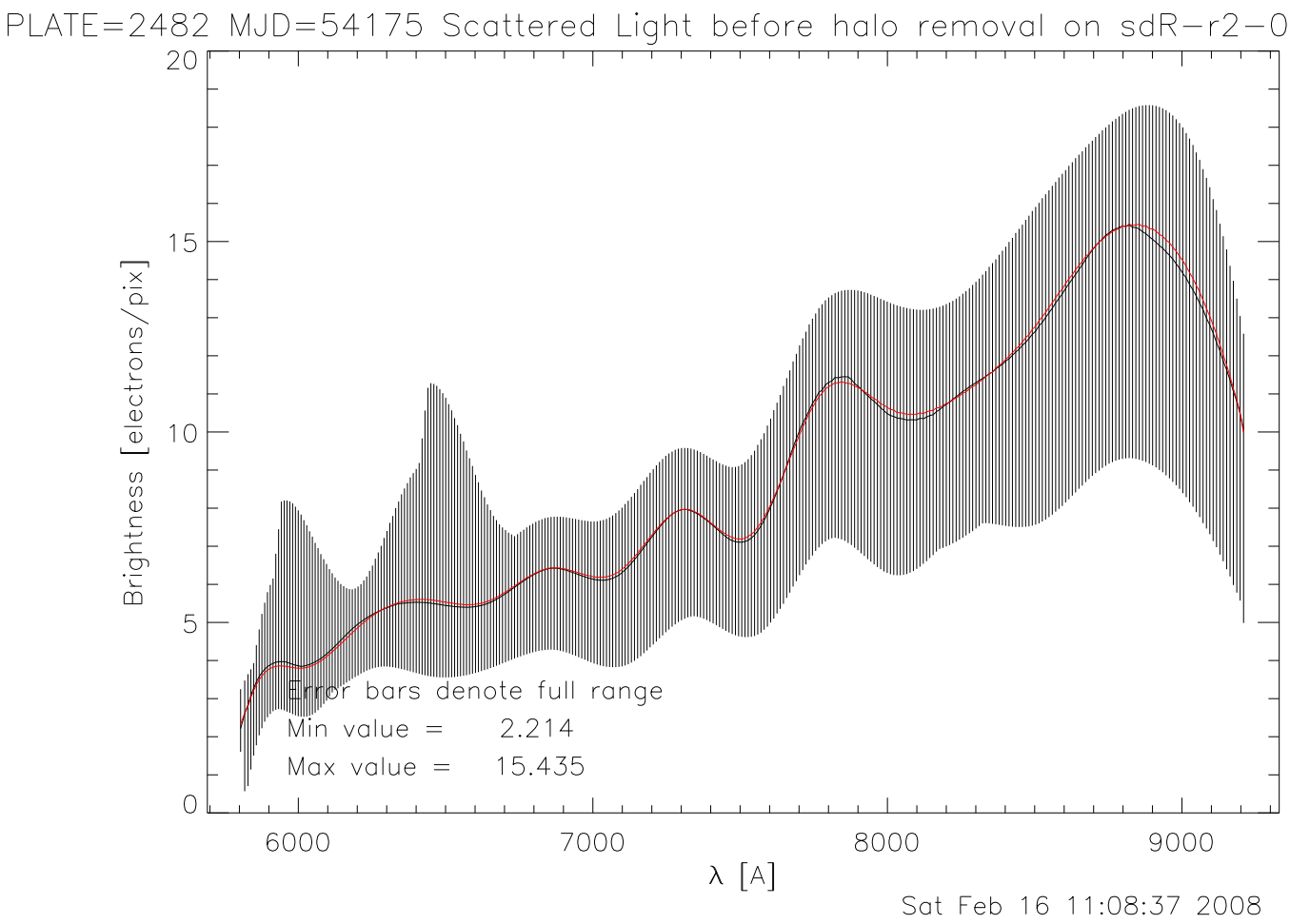

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-r2-00043539.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

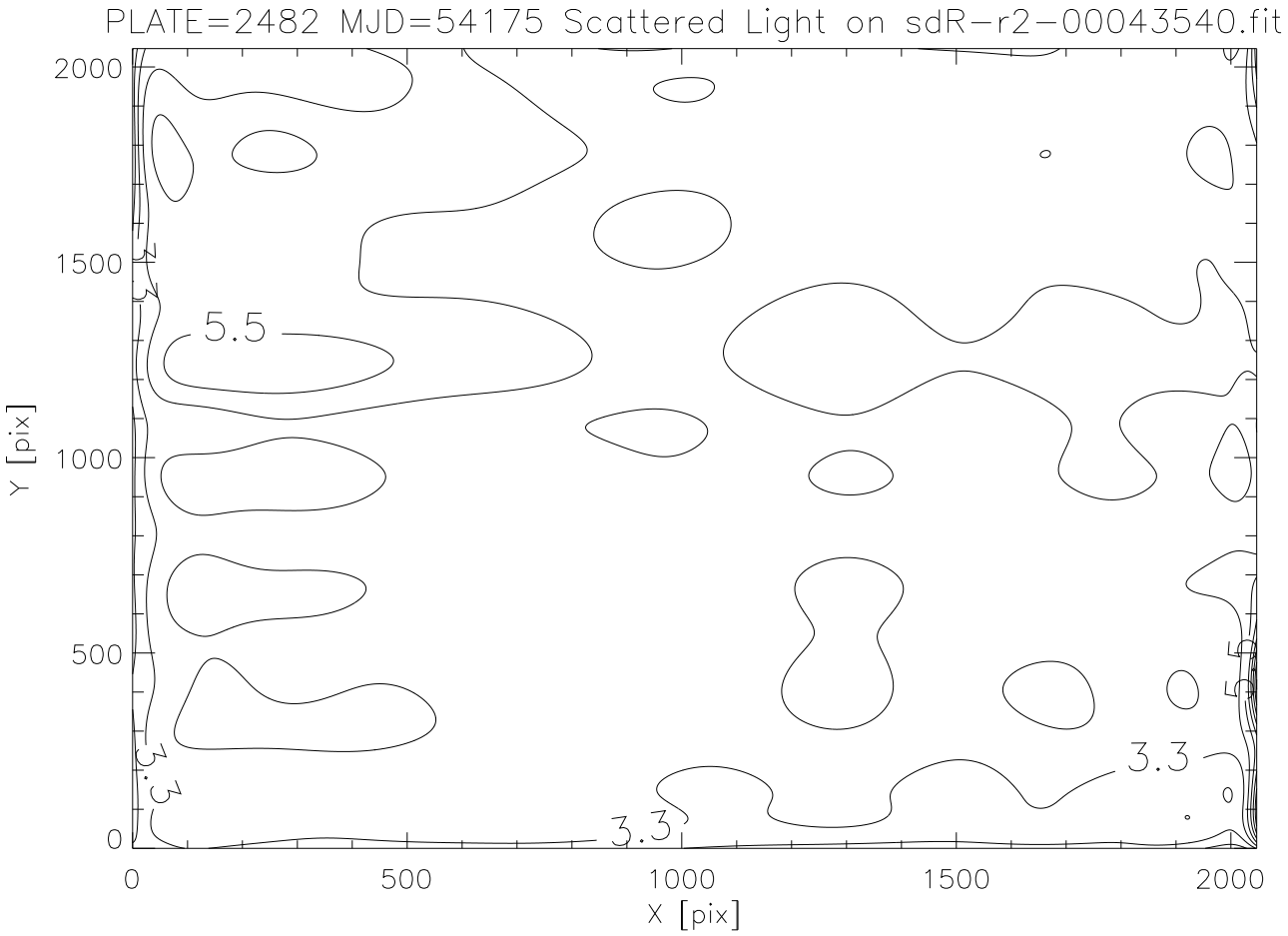

PLATE=2482 MJD=54175 sdR-r2-00043539.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.69 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

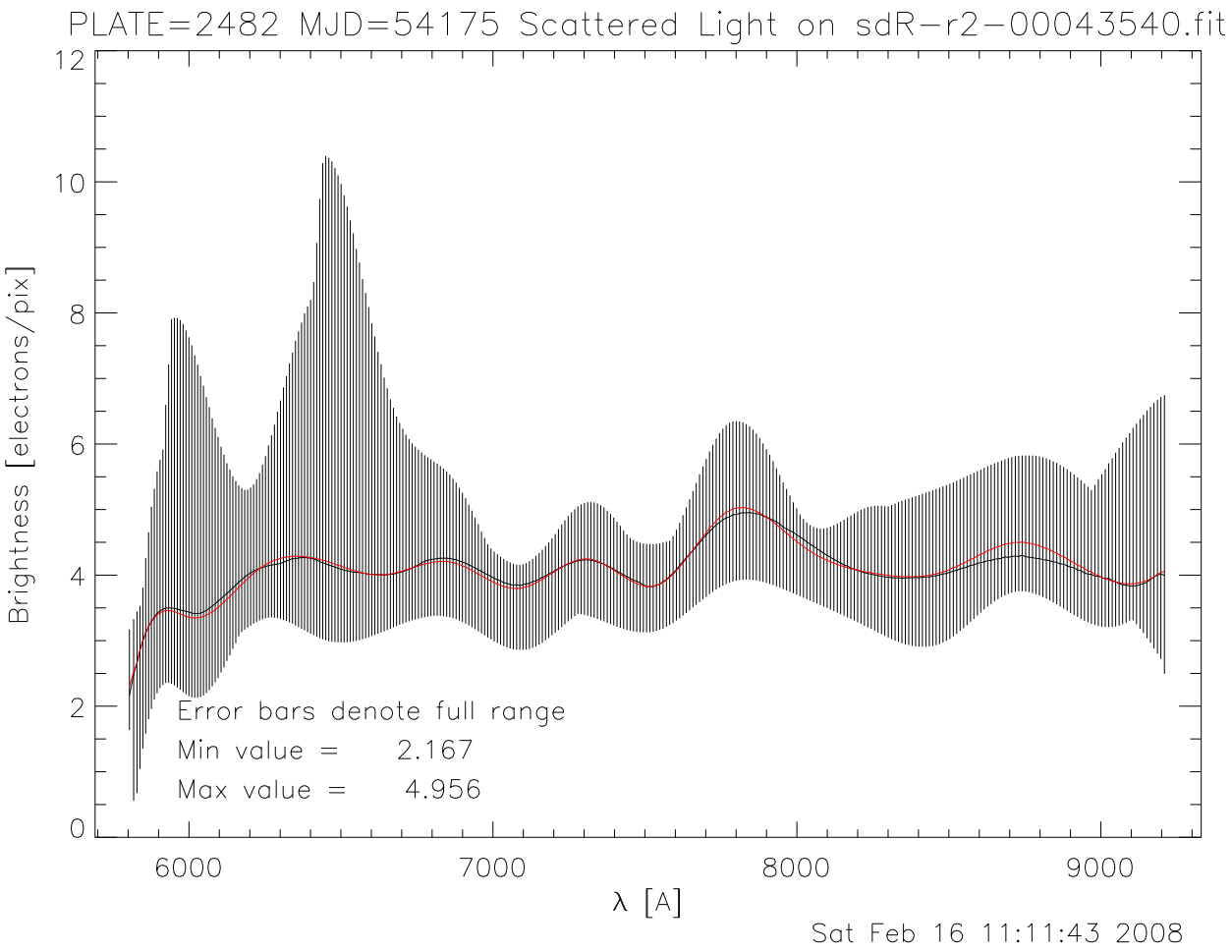

PLATE=2482 MJD=54175 sdR-r2-00043539.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.78 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

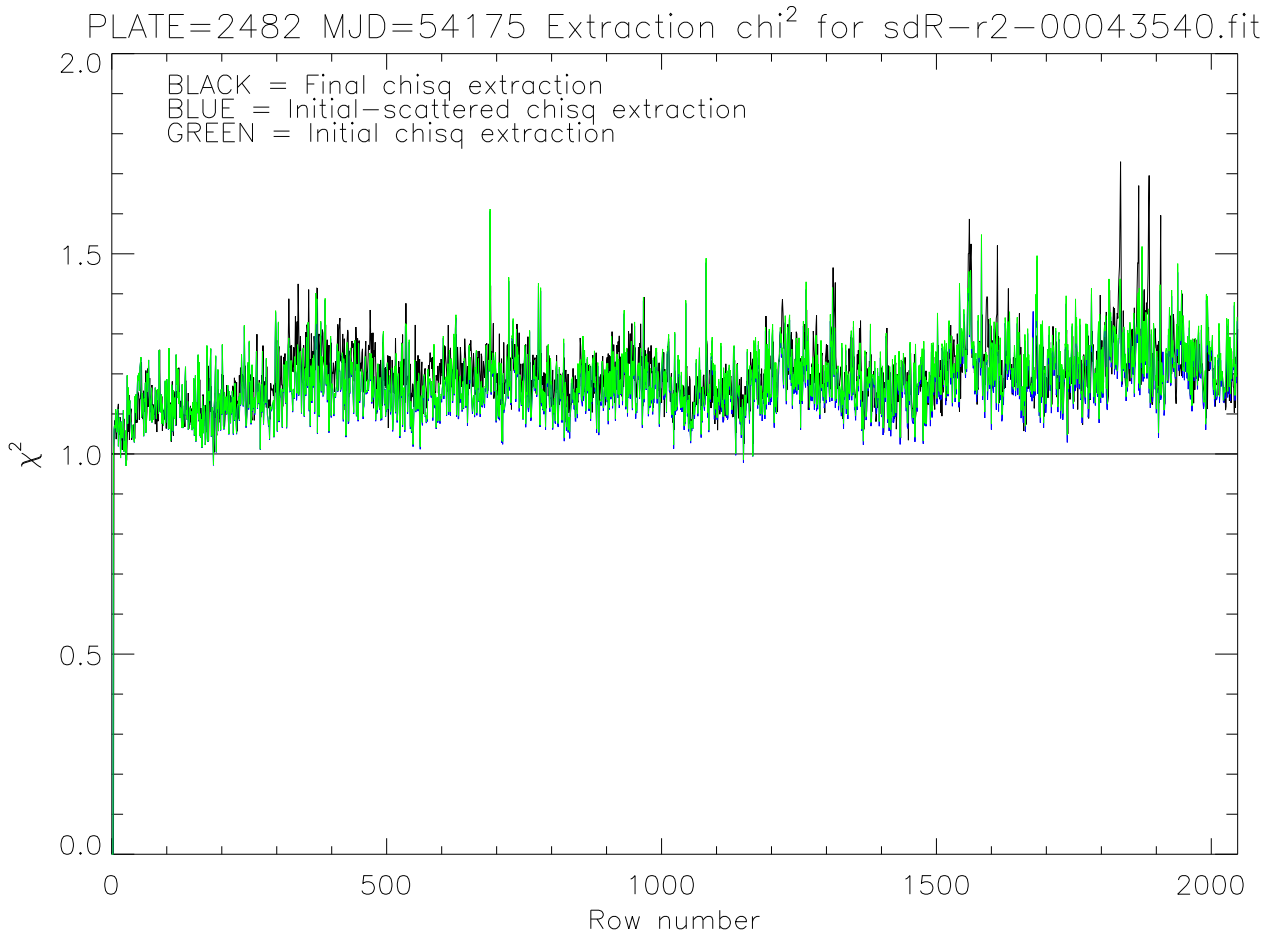

PLATE=2482 MJD=54175 Fiber−Flats for sdR−r2−00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.341
Max value = 1.170
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 11:07:47 2008

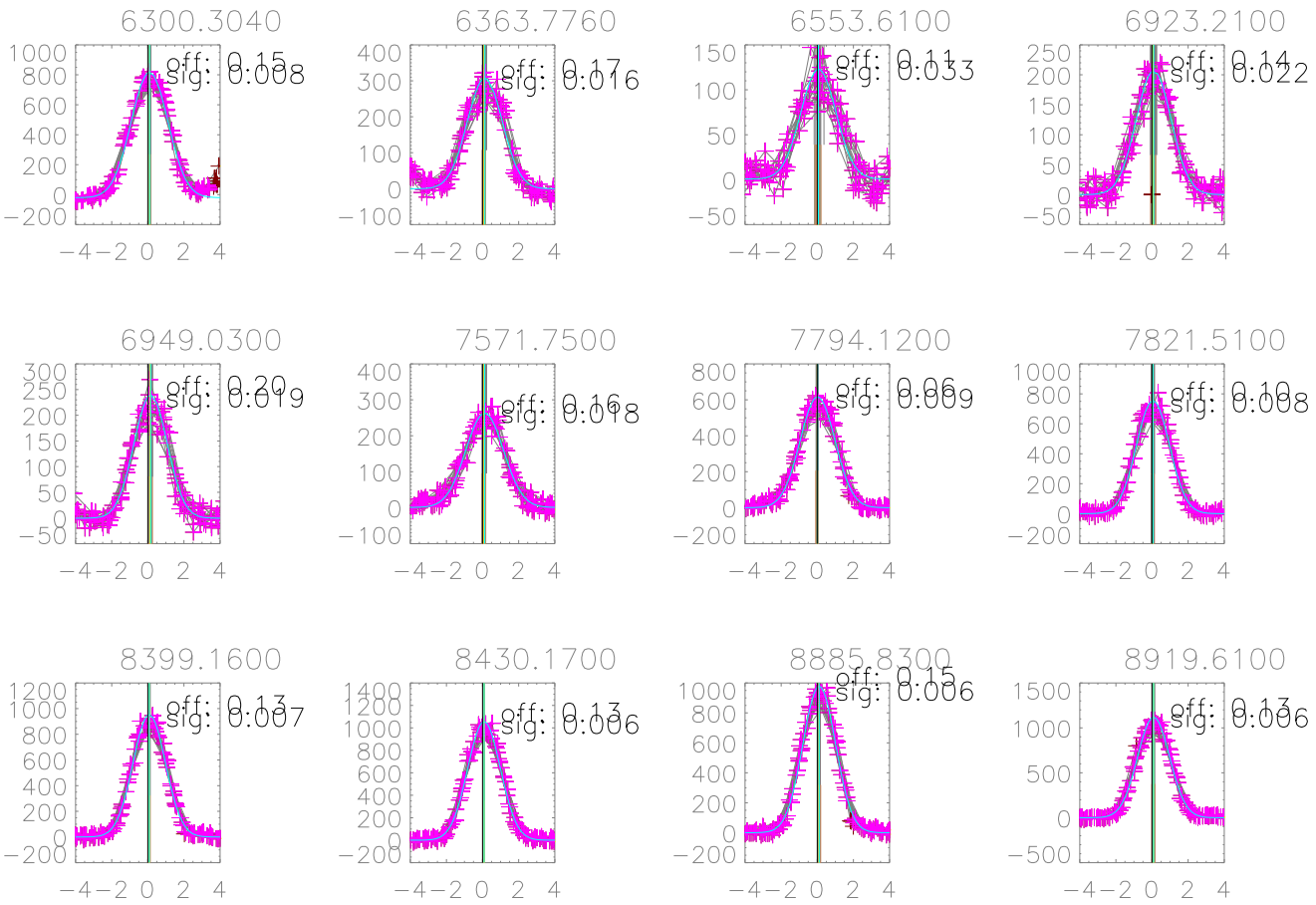

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r2-00043540.fi
12.7
12.7
12.7
9.1
9.1
9.1
5.5
5.5
5.5
1.8
0
Y [pix]
X [pix]
0
500
1000
1500
2000

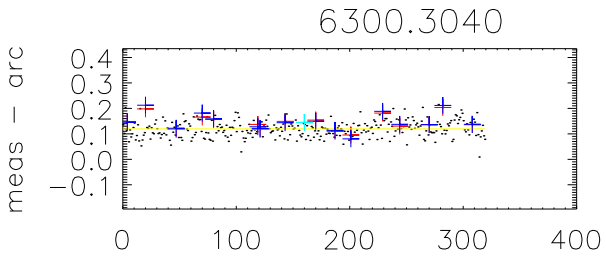

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r2-00043540.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.214
Max value = 15.435
Sat Feb 16 11:08:37 2008

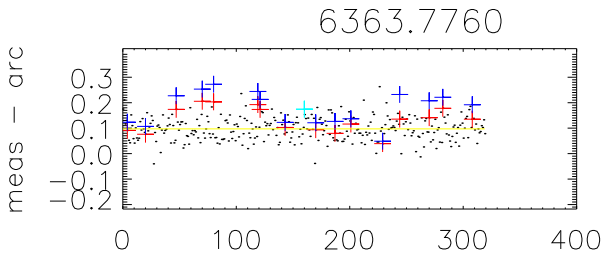

PLATE=2482 MJD=54175 Scattered Light on sdR-r2-00043540.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.5
3.3
3.3
3.3
3.3
5.5

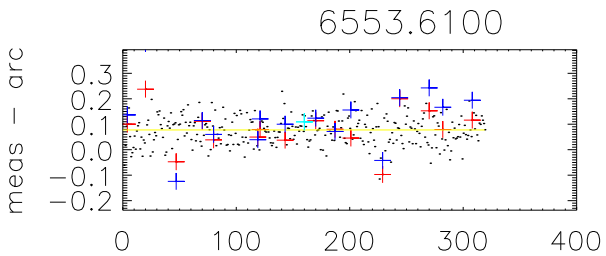

PLATE=2482 MJD=54175 Scattered Light on sdR-r2-00043540.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.167
Max value = 4.956
Sat Feb 16 11:11:43 2008

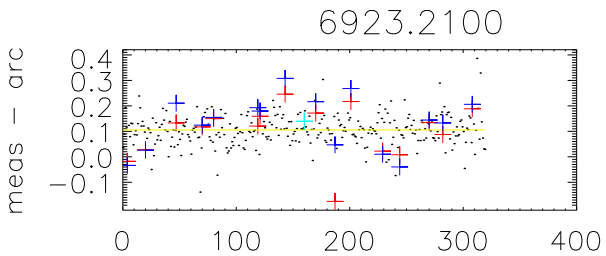

PLATE=2482 MJD=54175 Extraction chi^2 for sdR−r2−00043540.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

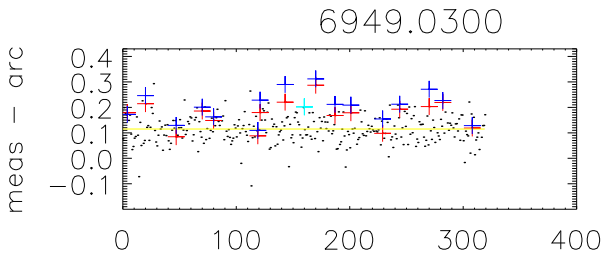

6300.3040
off: 0.15
sig: 0.008
6363.7760
off: 0.17
sig: 0.016
6553.6100
off: 0.11
sig: 0.033
6923.2100
off: 0.14
sig: 0.022
6949.0300
off: 0.20
sig: 0.019
7571.7500
off: 0.16
sig: 0.018
7794.1200
off: 0.06
sig: 0.009
7821.5100
off: 0.10
sig: 0.008
8399.1600
off: 0.13
sig: 0.007
8430.1700
off: 0.13
sig: 0.006
8885.8300
off: 0.15
sig: 0.006
8919.6100
off: 0.13
sig: 0.006

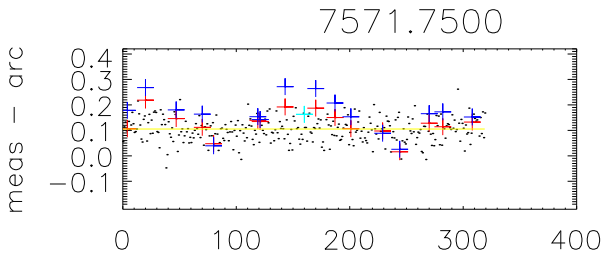

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

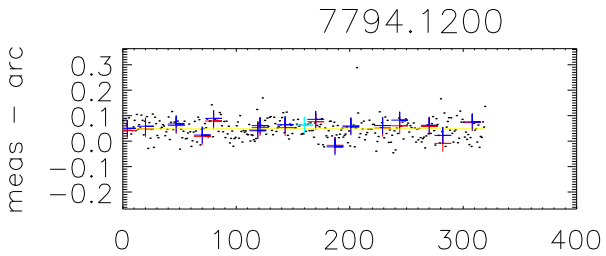

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

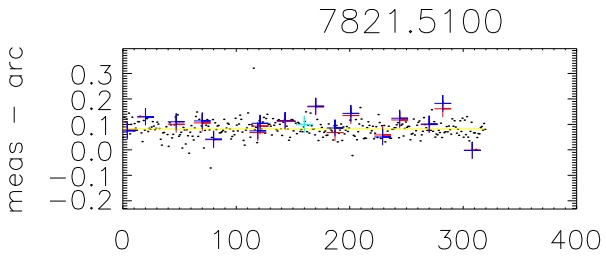

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

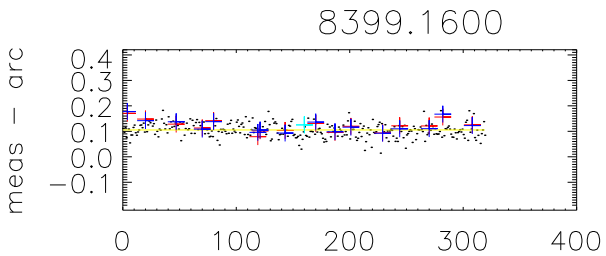

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

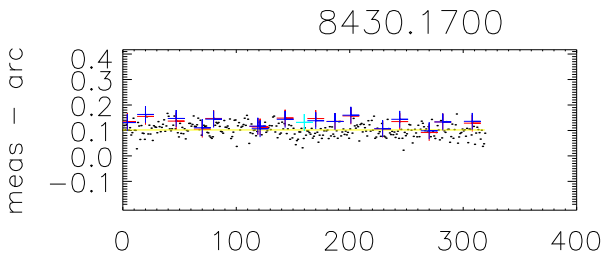

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

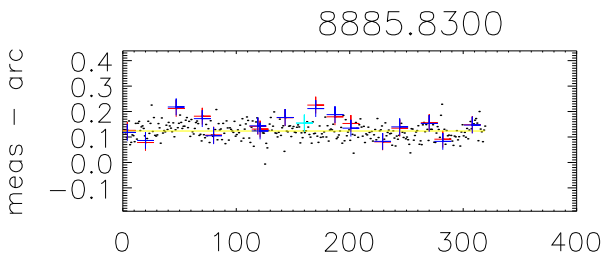

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

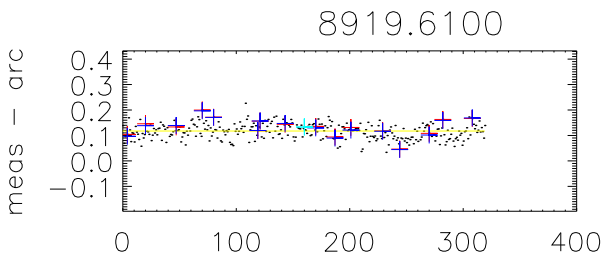

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

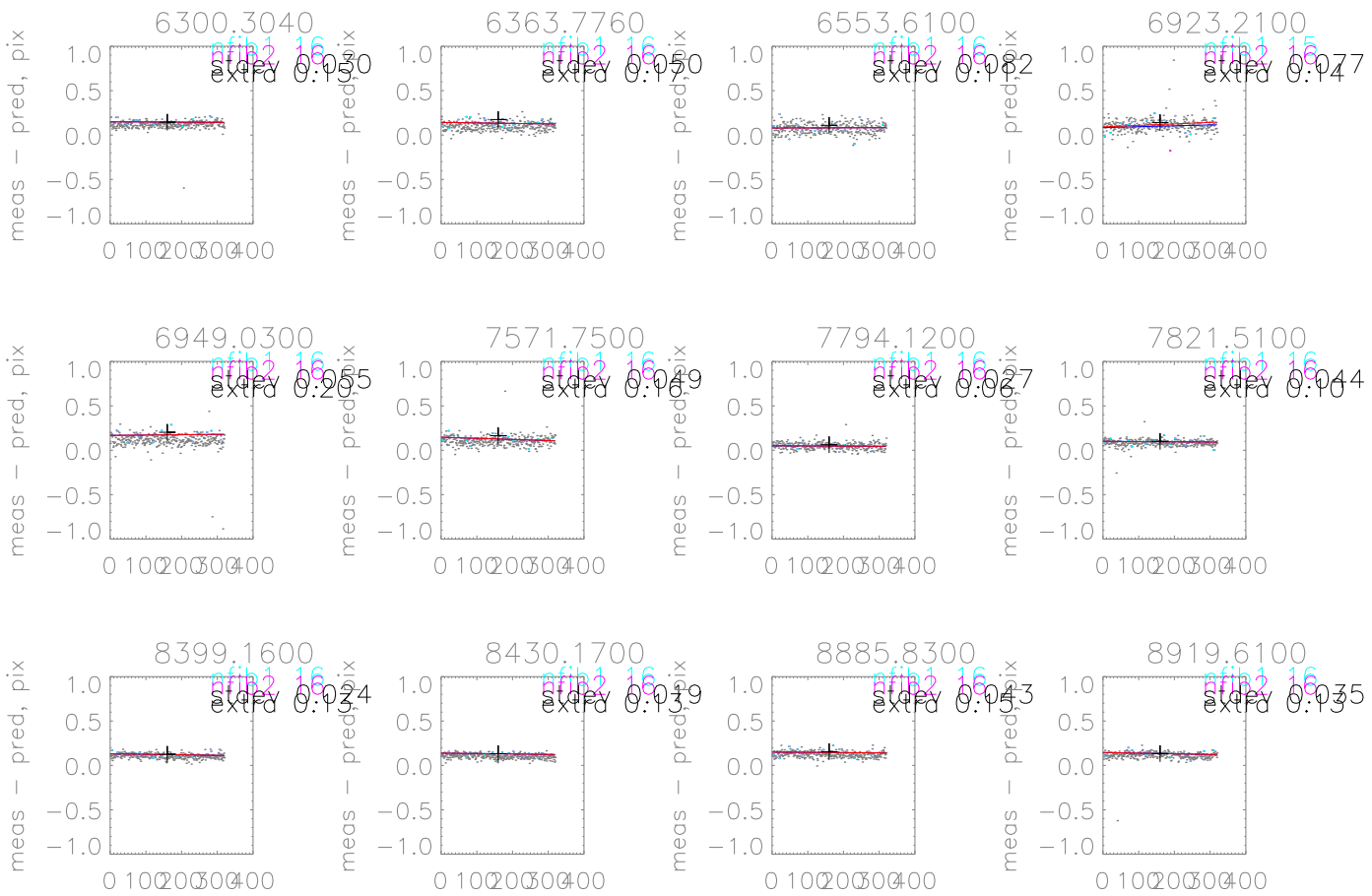

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

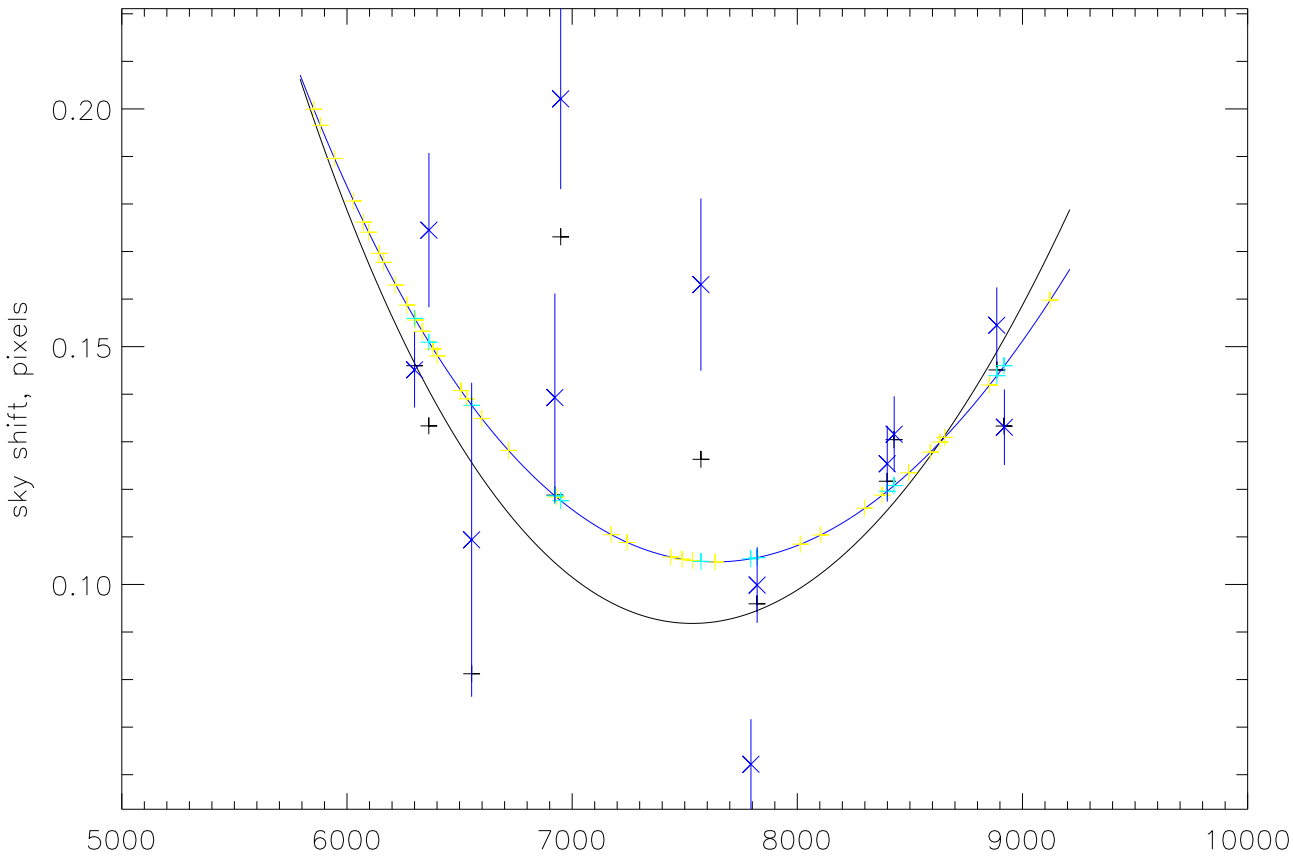

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

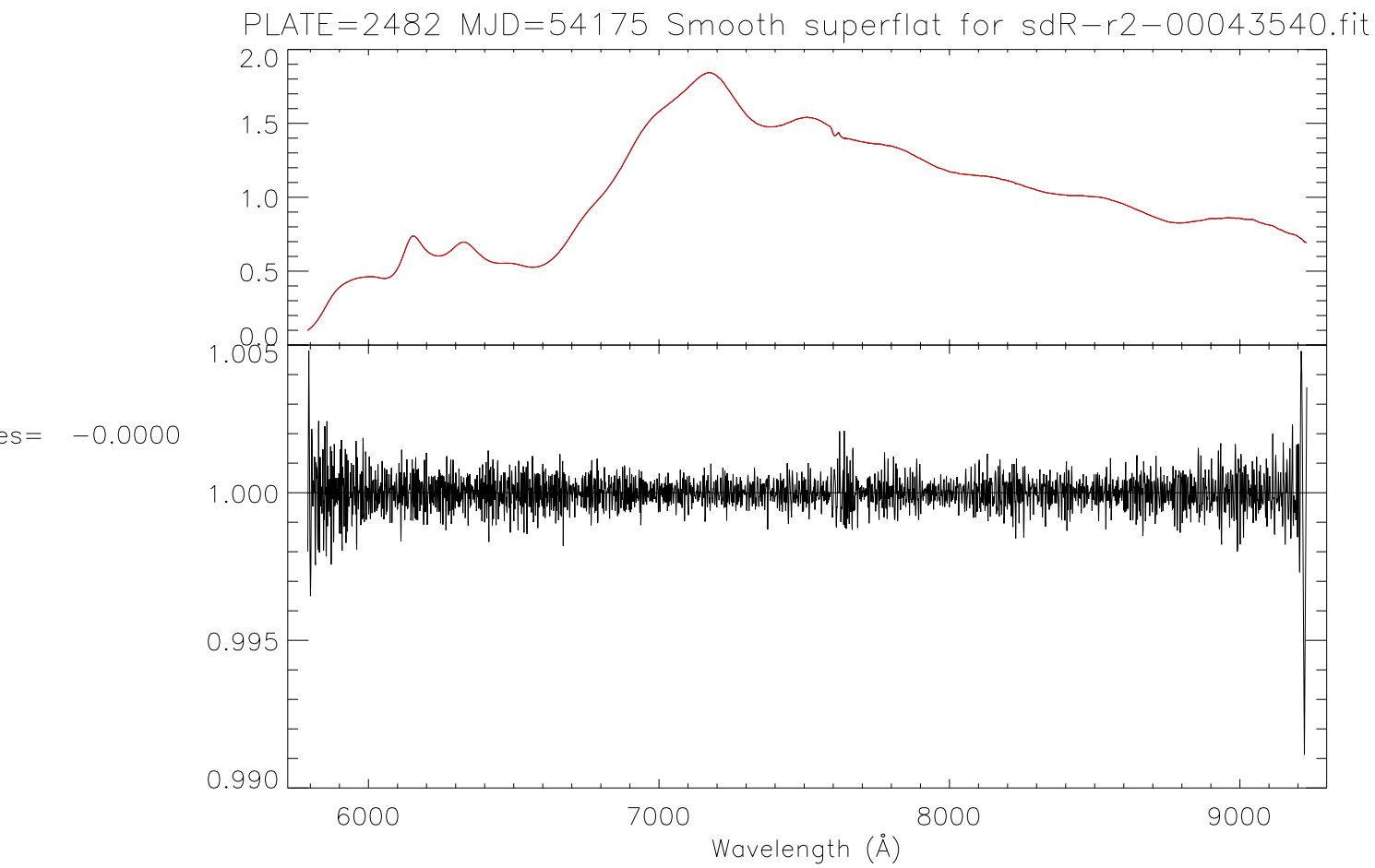

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

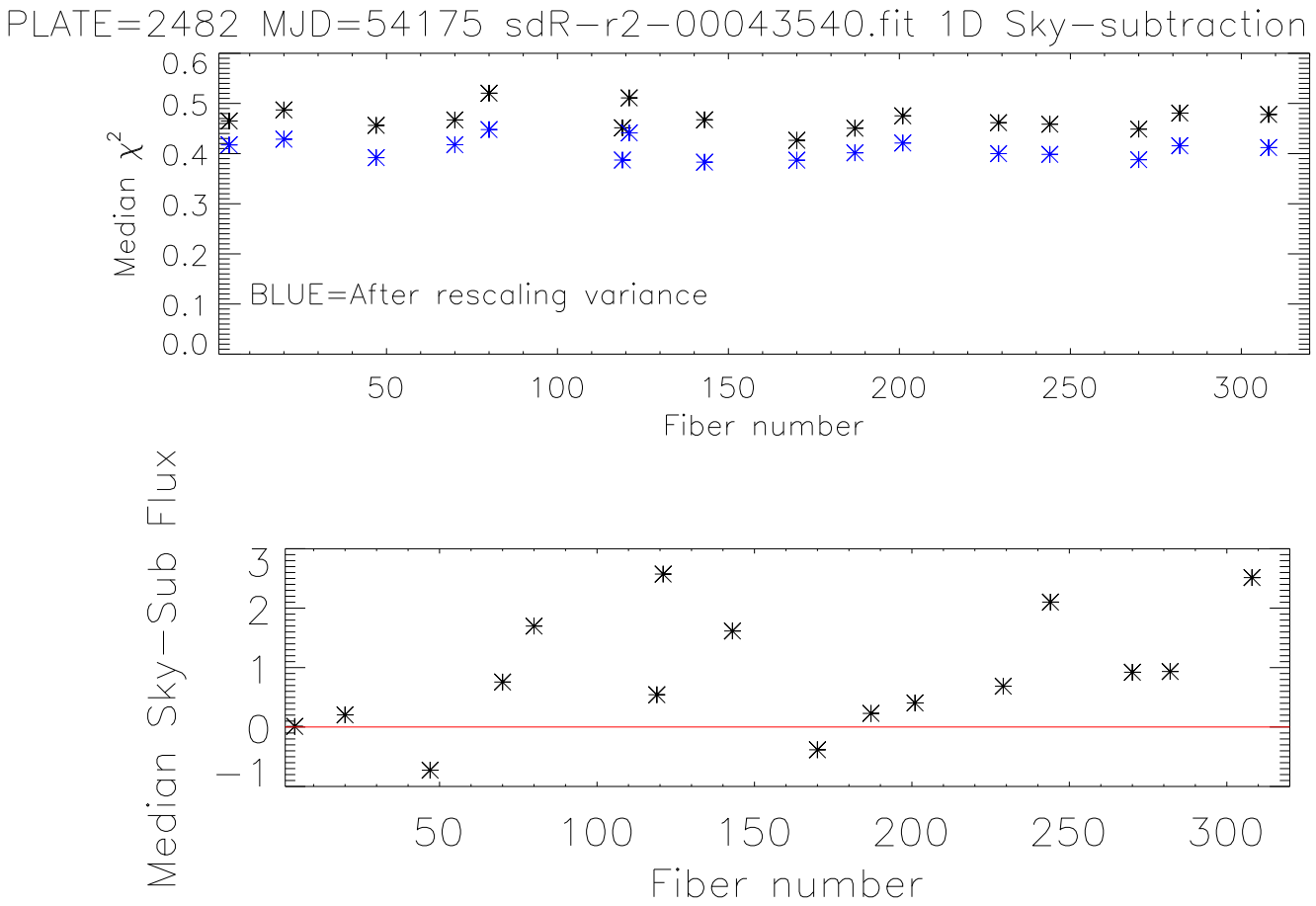

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

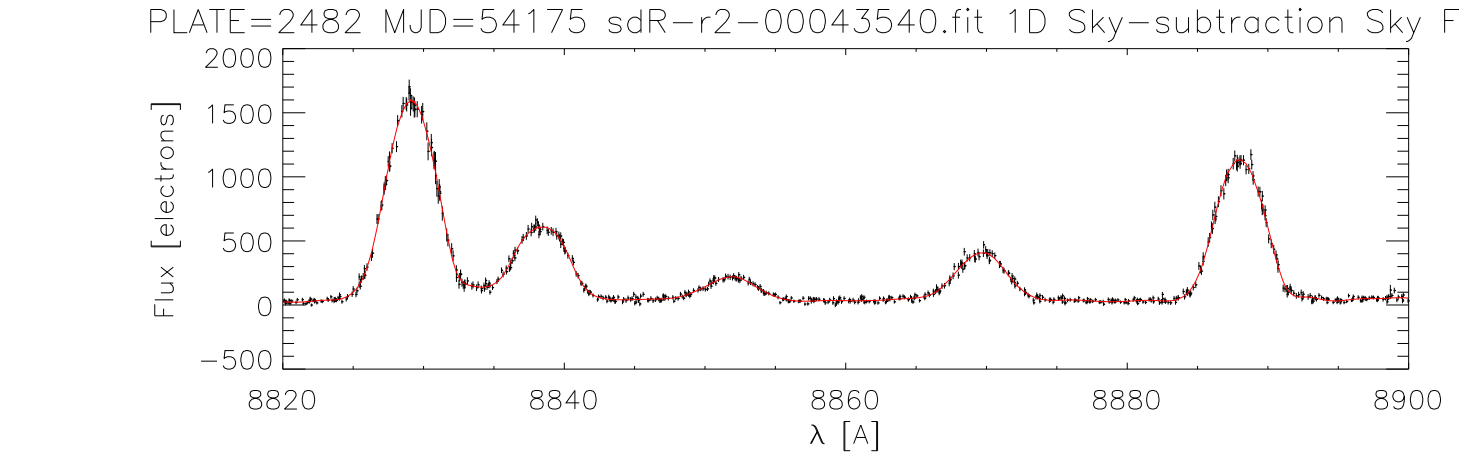

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

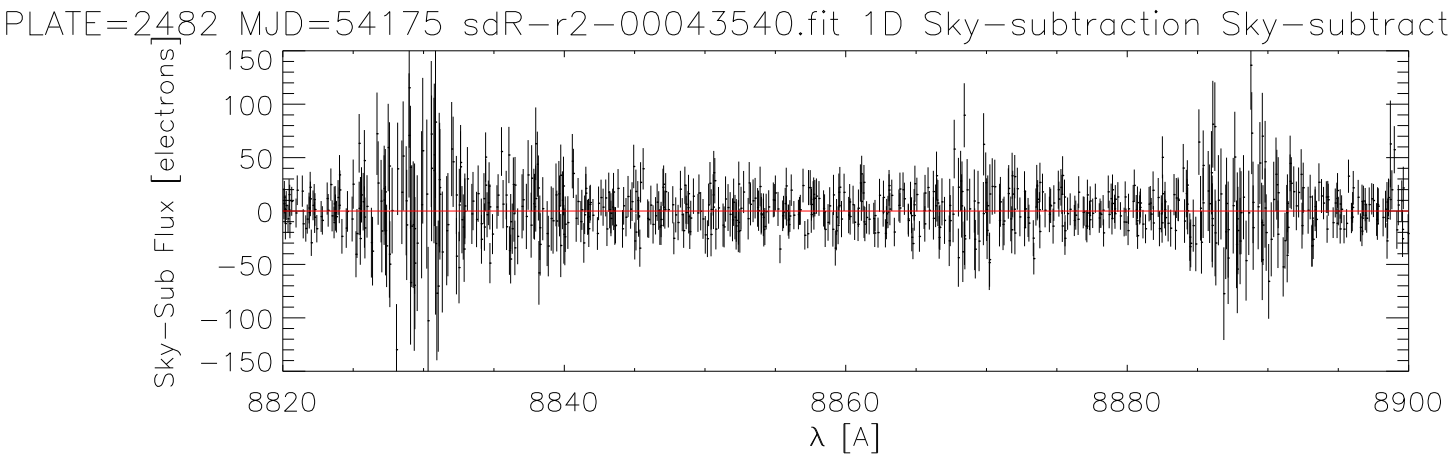

6300.3040
stdev 0.030
extra 0.150
6363.7760
stdev 0.050
extra 0.170
6553.6100
stdev 0.082
extra 0.162
6923.2100
stdev 0.077
extra 0.14
6949.0300
stdev 0.055
extra 0.20
7571.7500
stdev 0.049
extra 0.16
7794.1200
stdev 0.027
extra 0.06
7821.5100
stdev 0.044
extra 0.10
8399.1600
stdev 0.024
extra 0.13
8430.1700
stdev 0.039
extra 0.13
8885.8300
stdev 0.043
extra 0.15
8919.6100
stdev 0.035
extra 0.13
meas − pred, pix
mfhd2 16
mfhd1 16
mfhd2 15

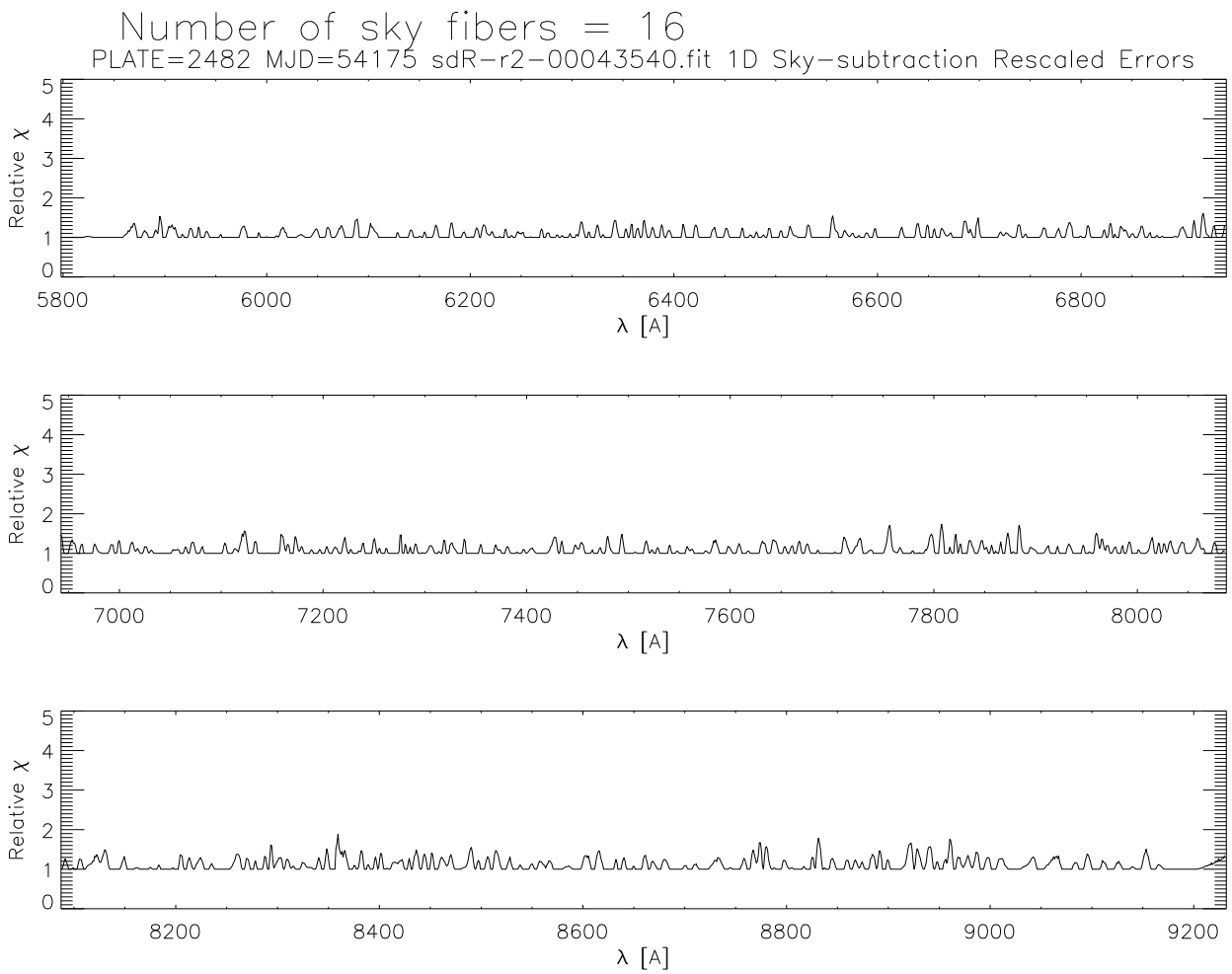

sky shift, pixels
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

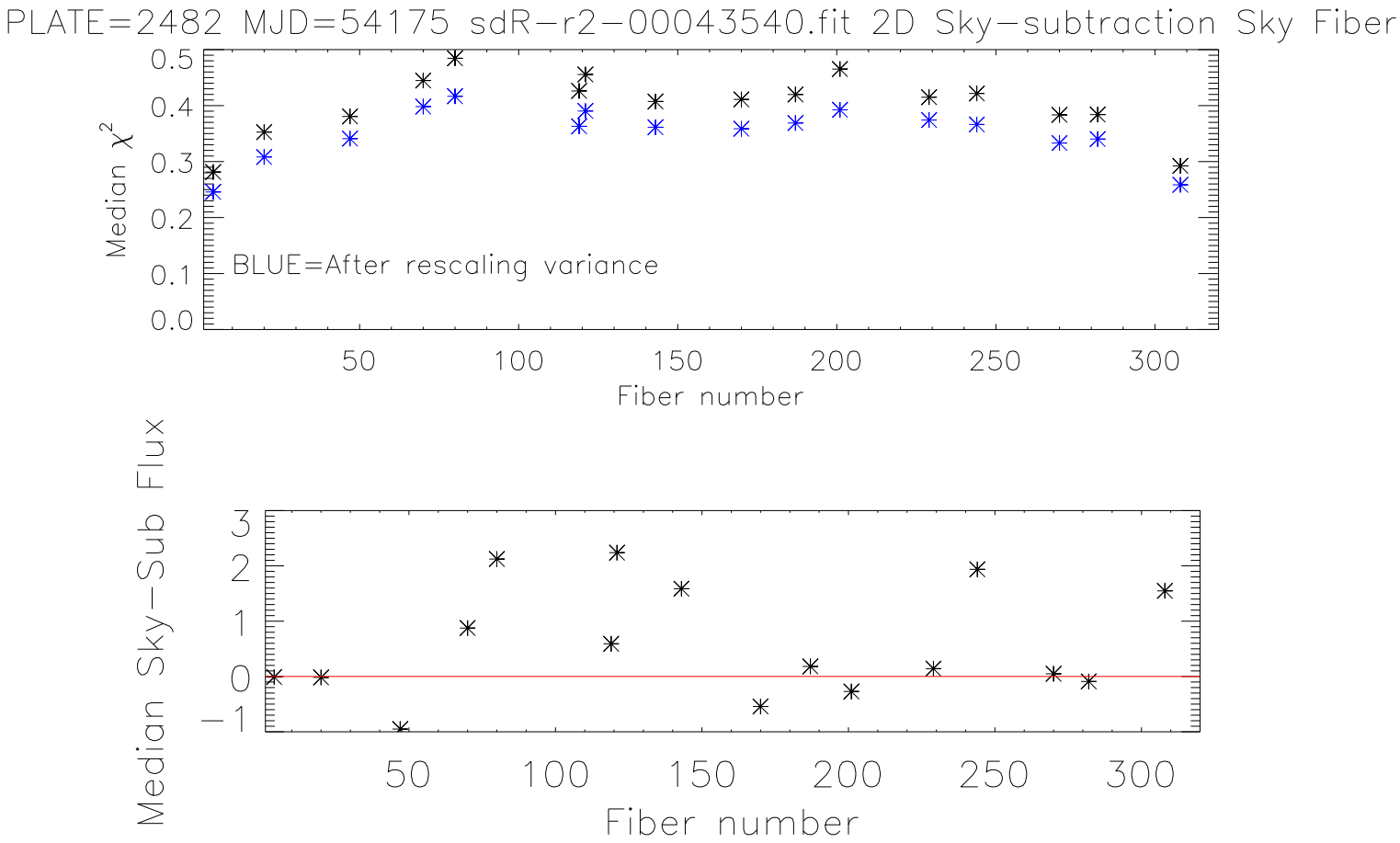

PLATE=2482 MJD=54175 Smooth superflat for sdR-r2-00043540.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

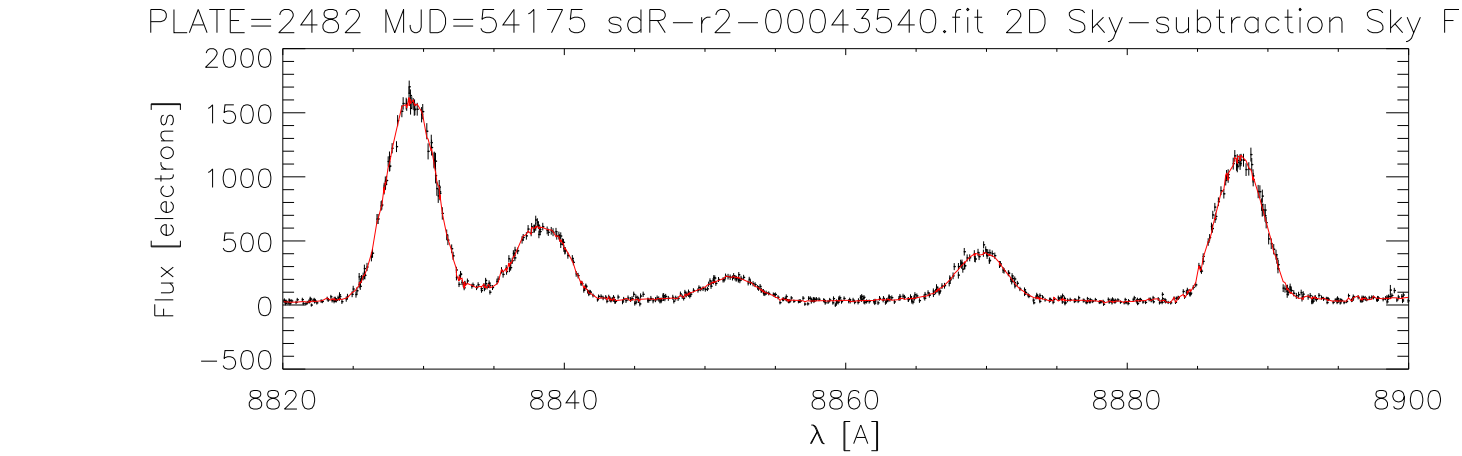

PLATE=2482 MJD=54175 sdR-r2-00043540.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

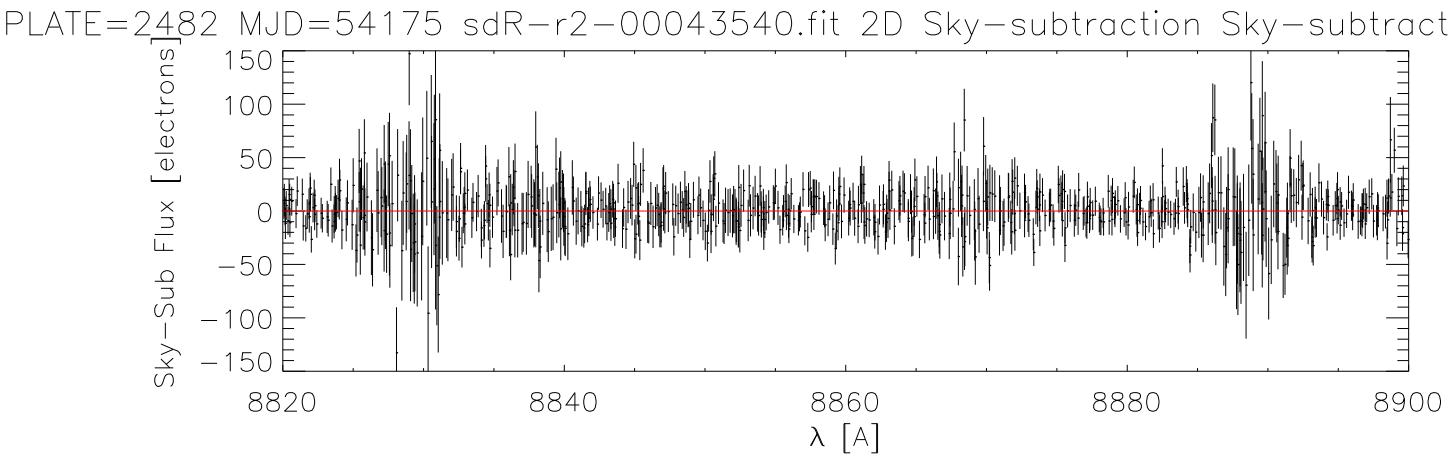

PLATE=2482 MJD=54175 sdR-r2-00043540.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

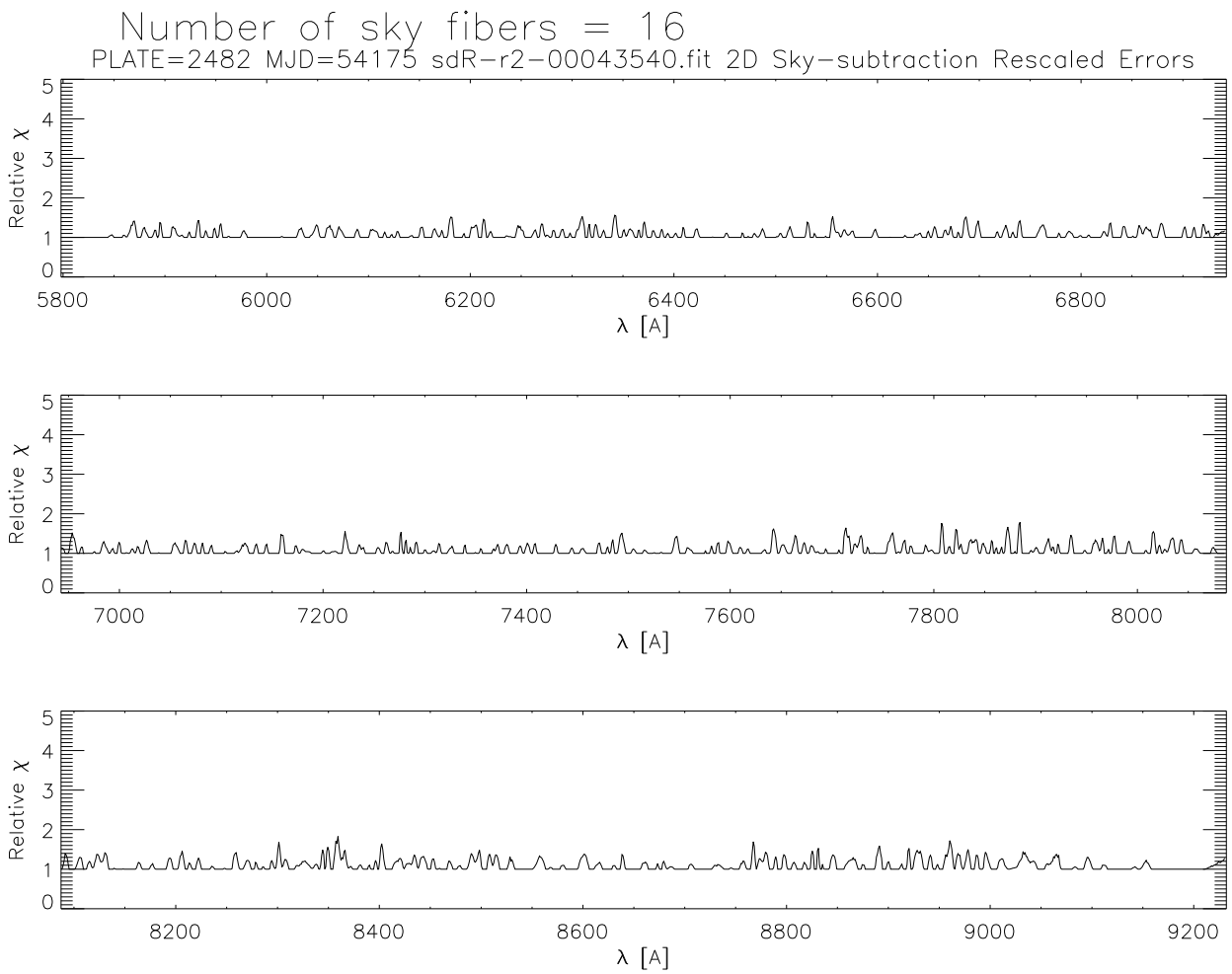

PLATE=2482 MJD=54175 sdR-r2-00043540.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

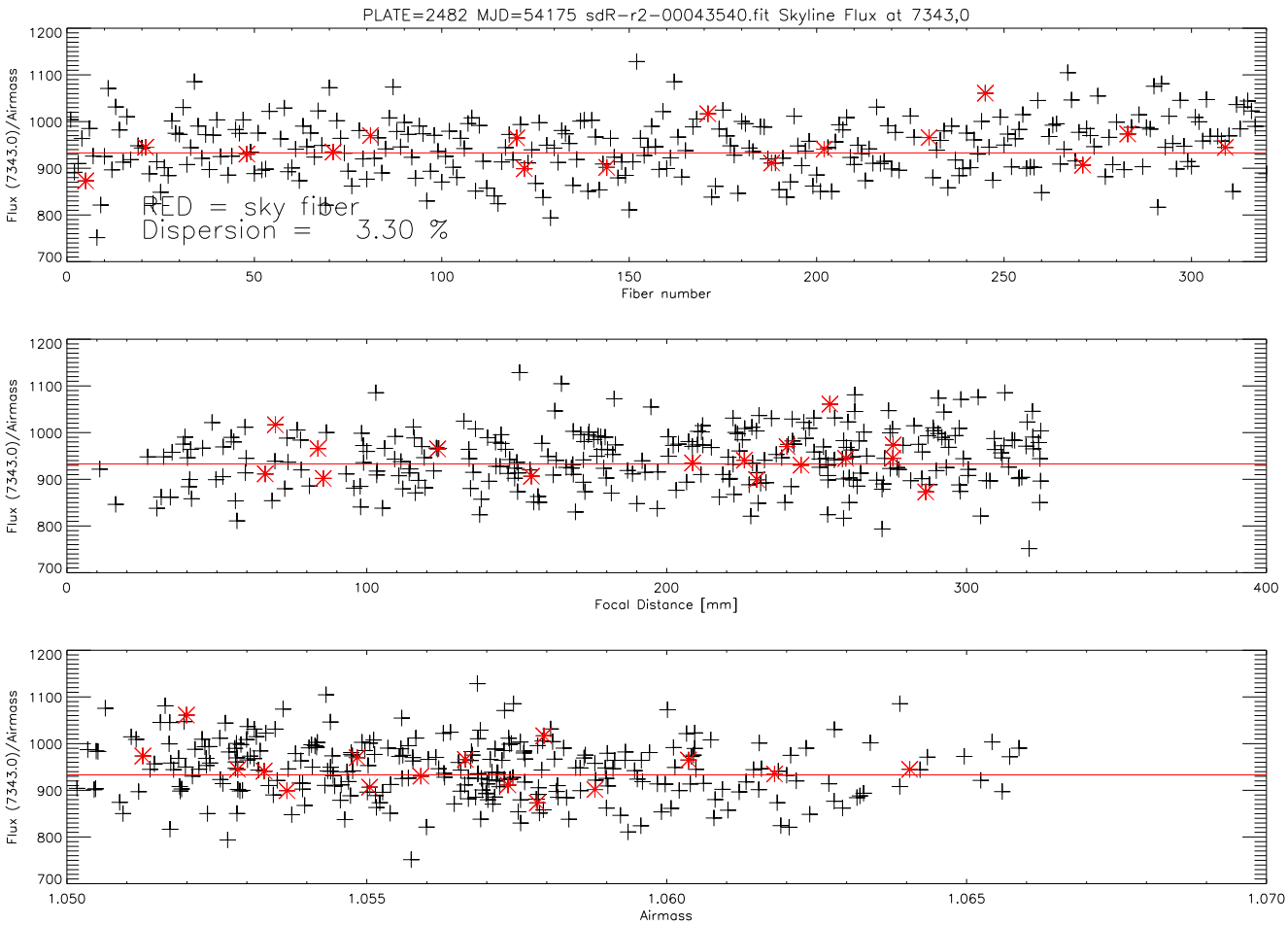

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-r2-00043540.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

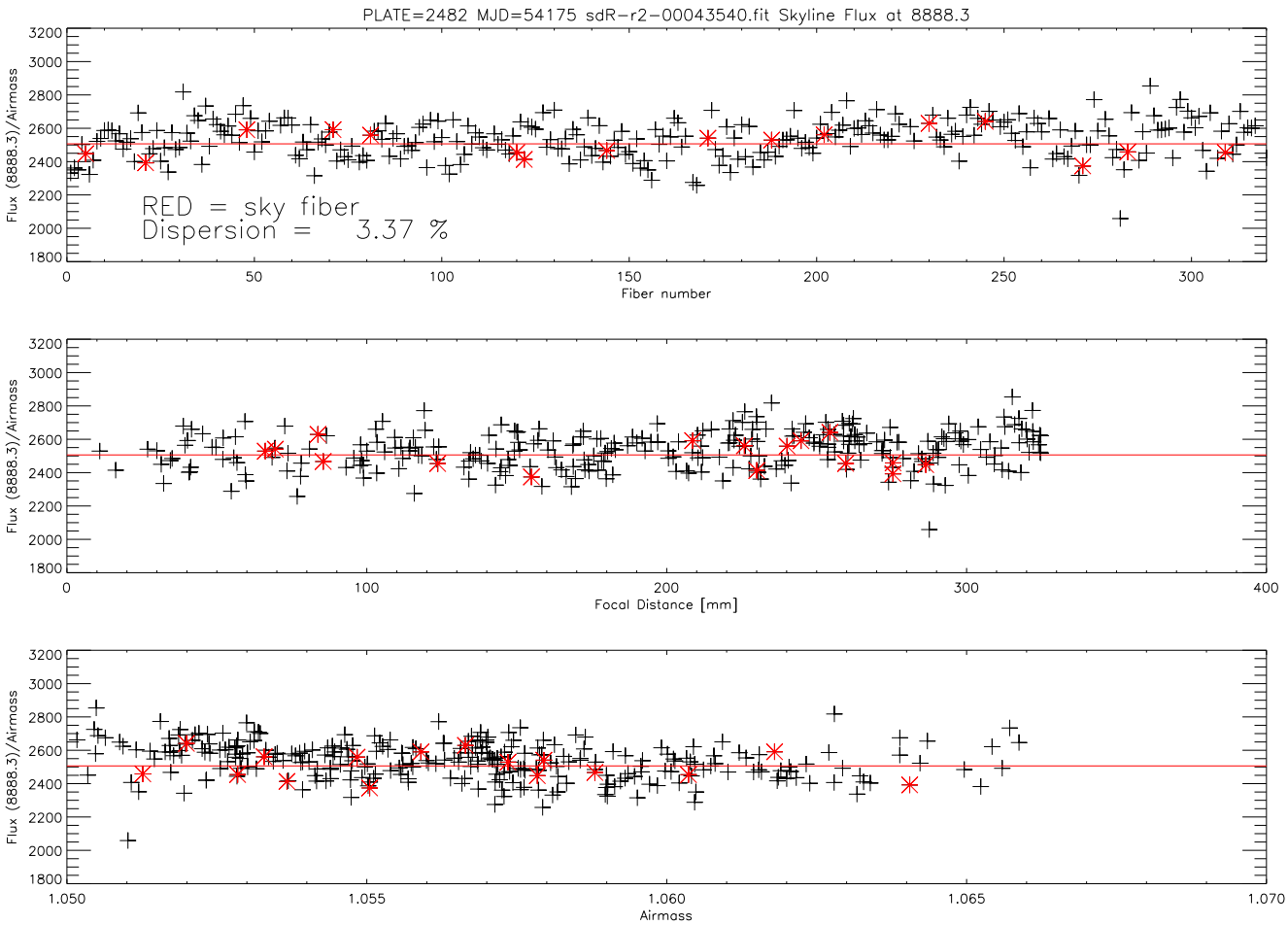

PLATE=2482 MJD=54175 sdR-r2-00043540.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

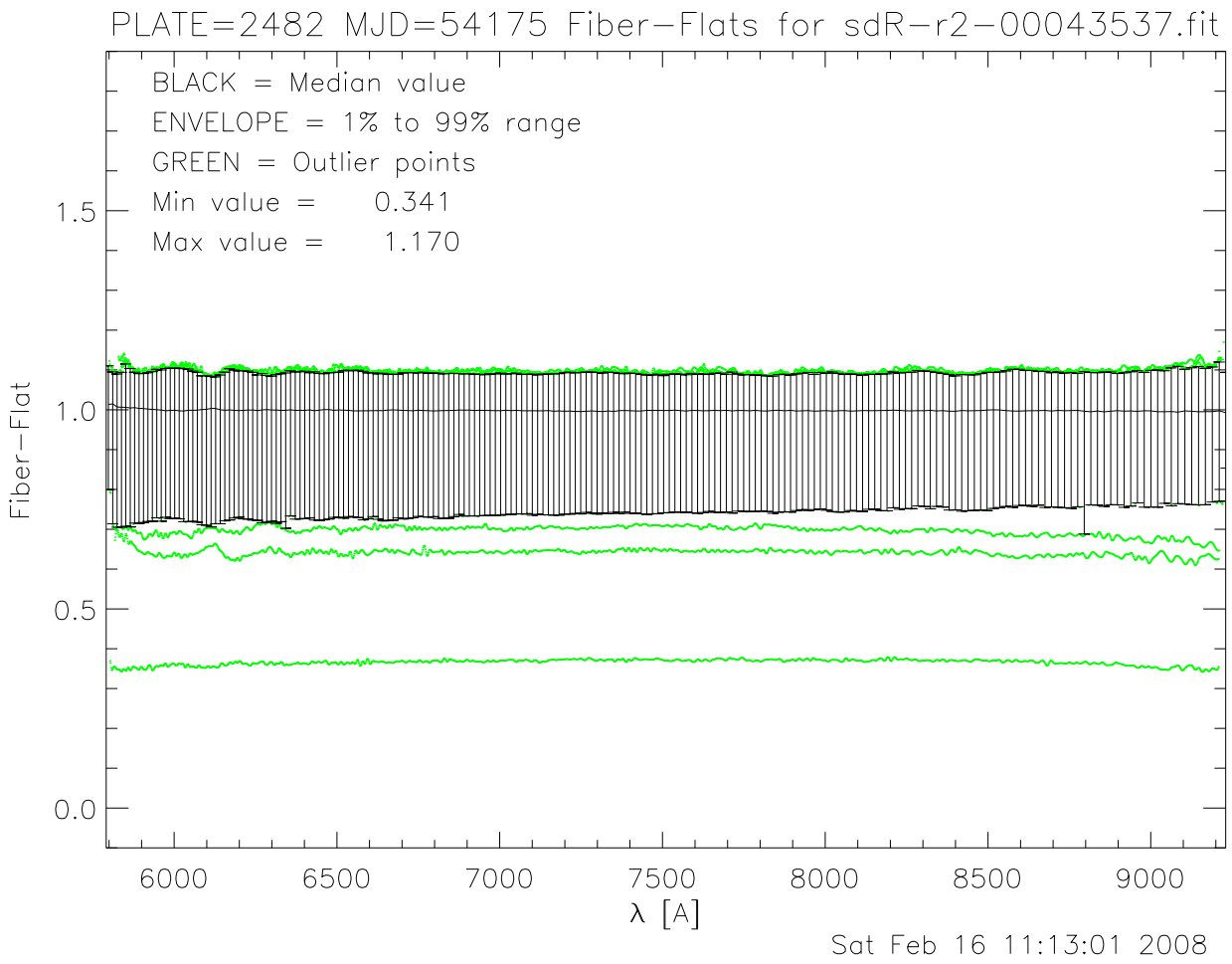

PLATE=2482 MJD=54175 sdR-r2-00043540.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

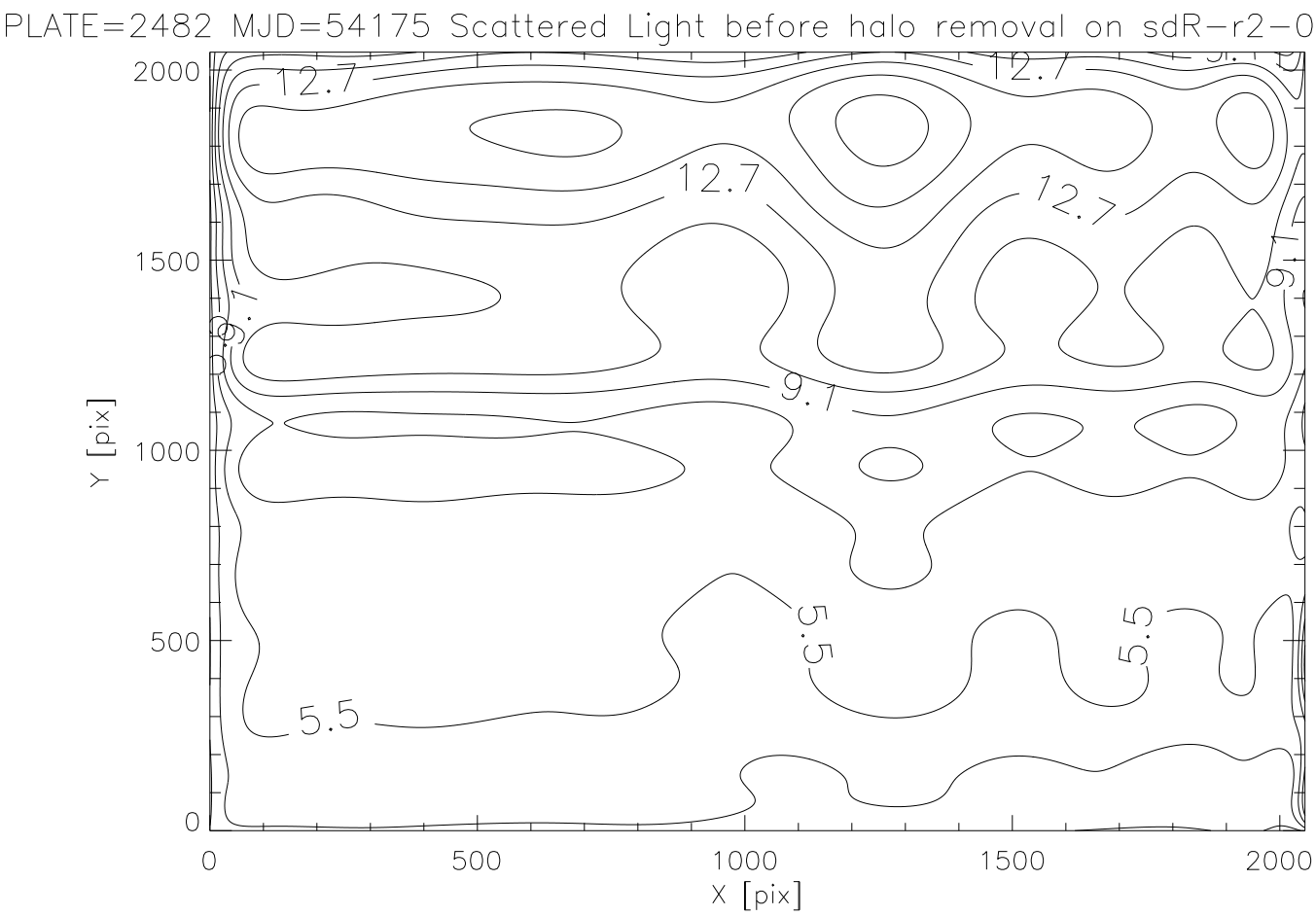

PLATE=2482 MJD=54175 sdR-r2-00043540.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

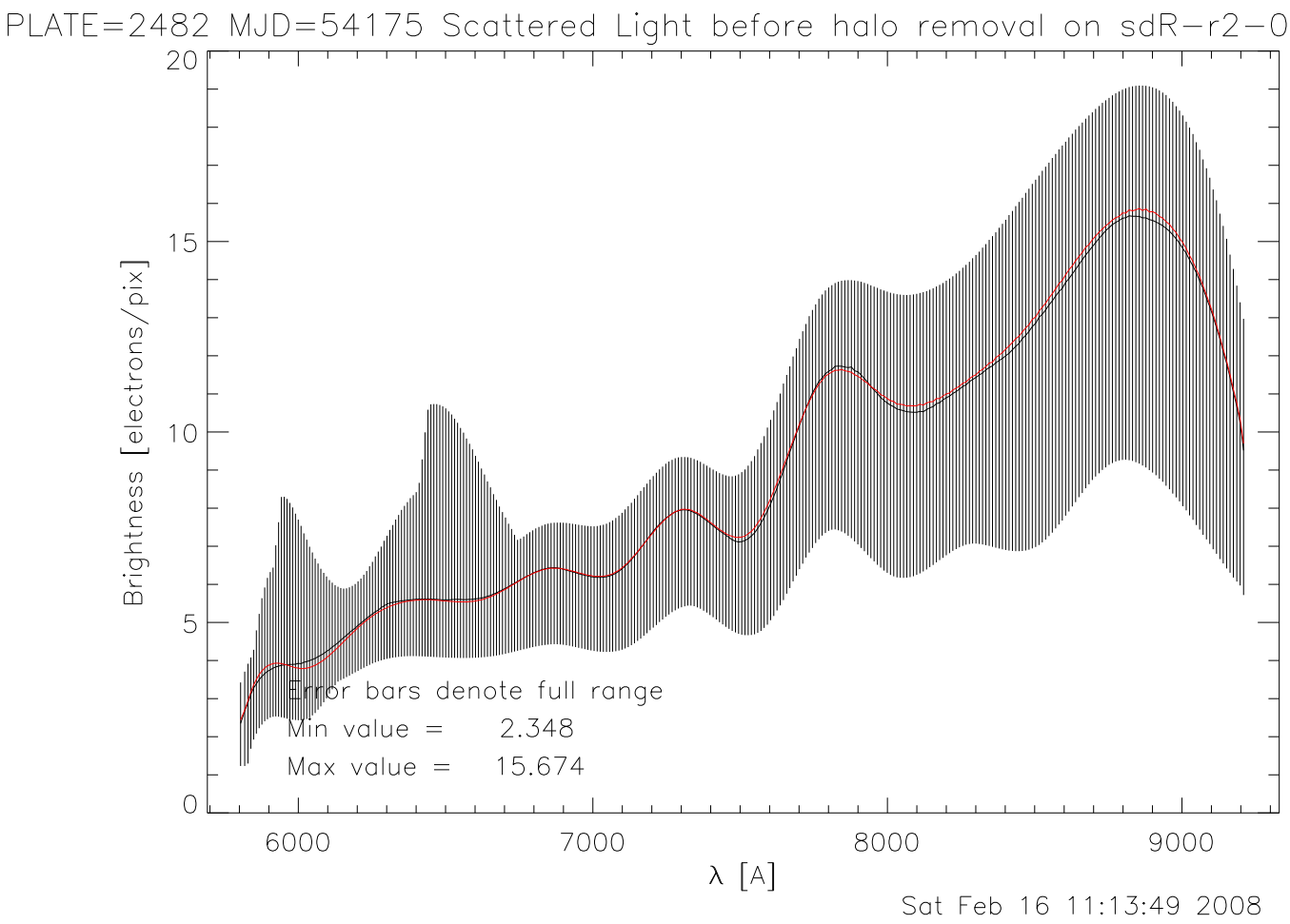

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-r2-00043540.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

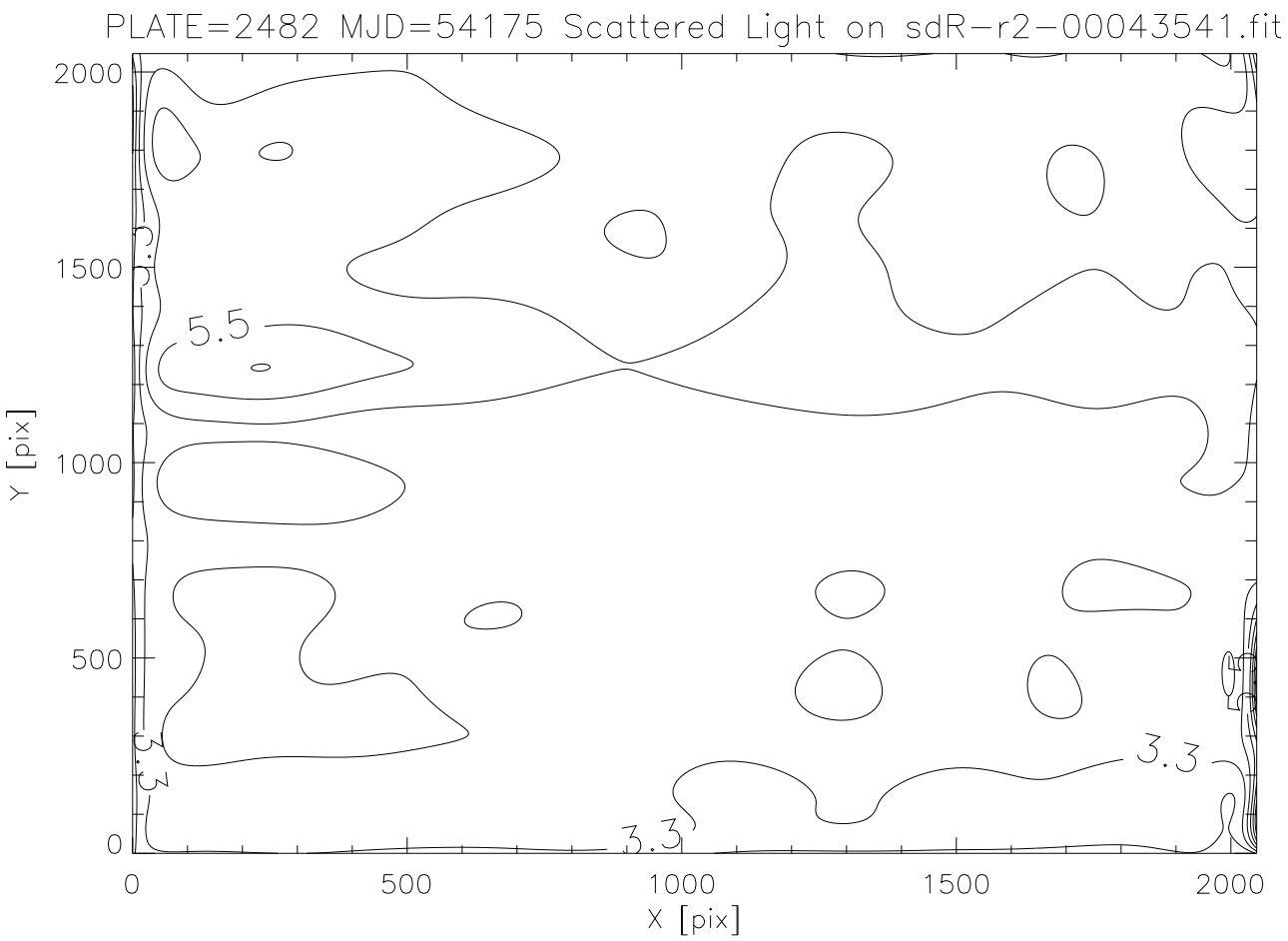

PLATE=2482 MJD=54175 sdR-r2-00043540.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.30 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

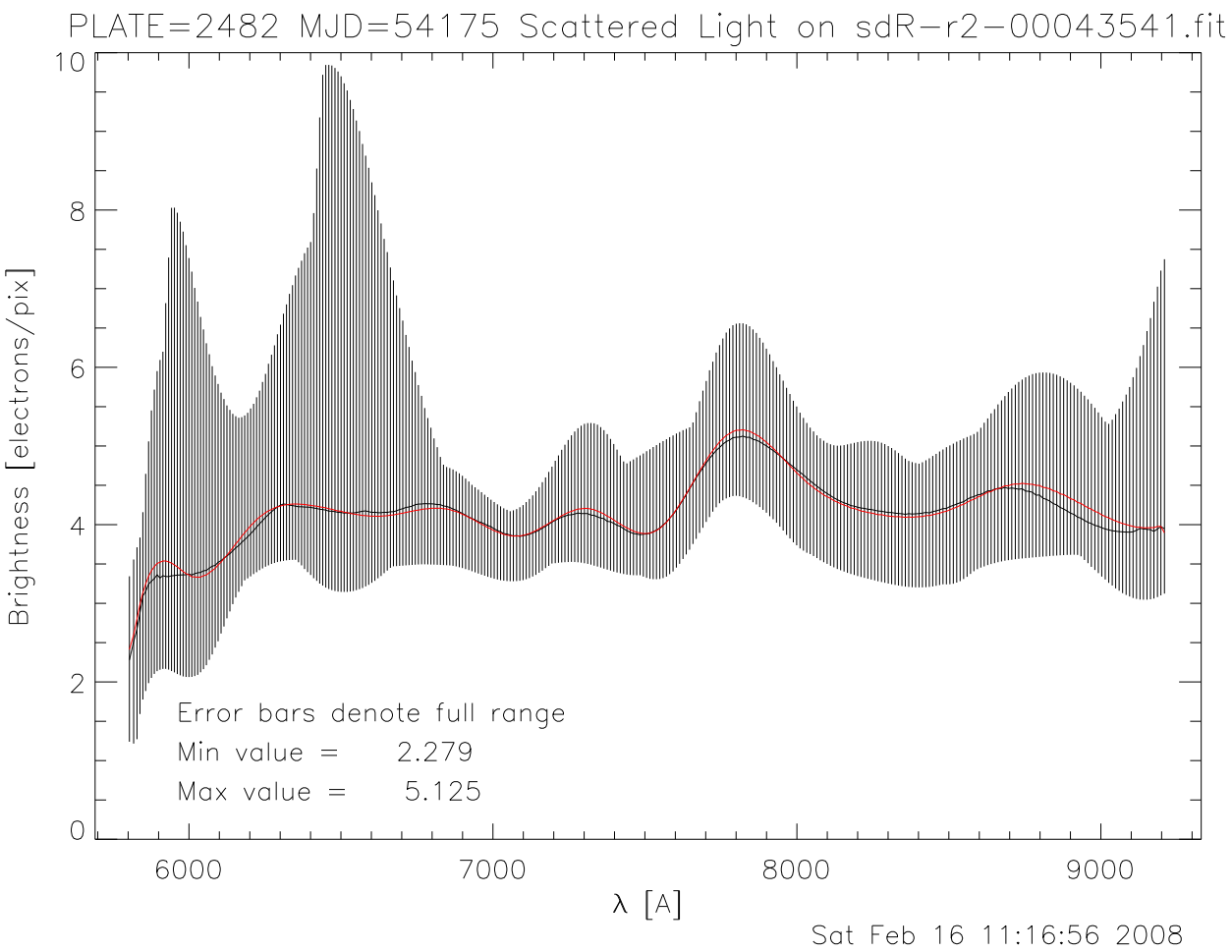

PLATE=2482 MJD=54175 sdR-r2-00043540.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.37 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

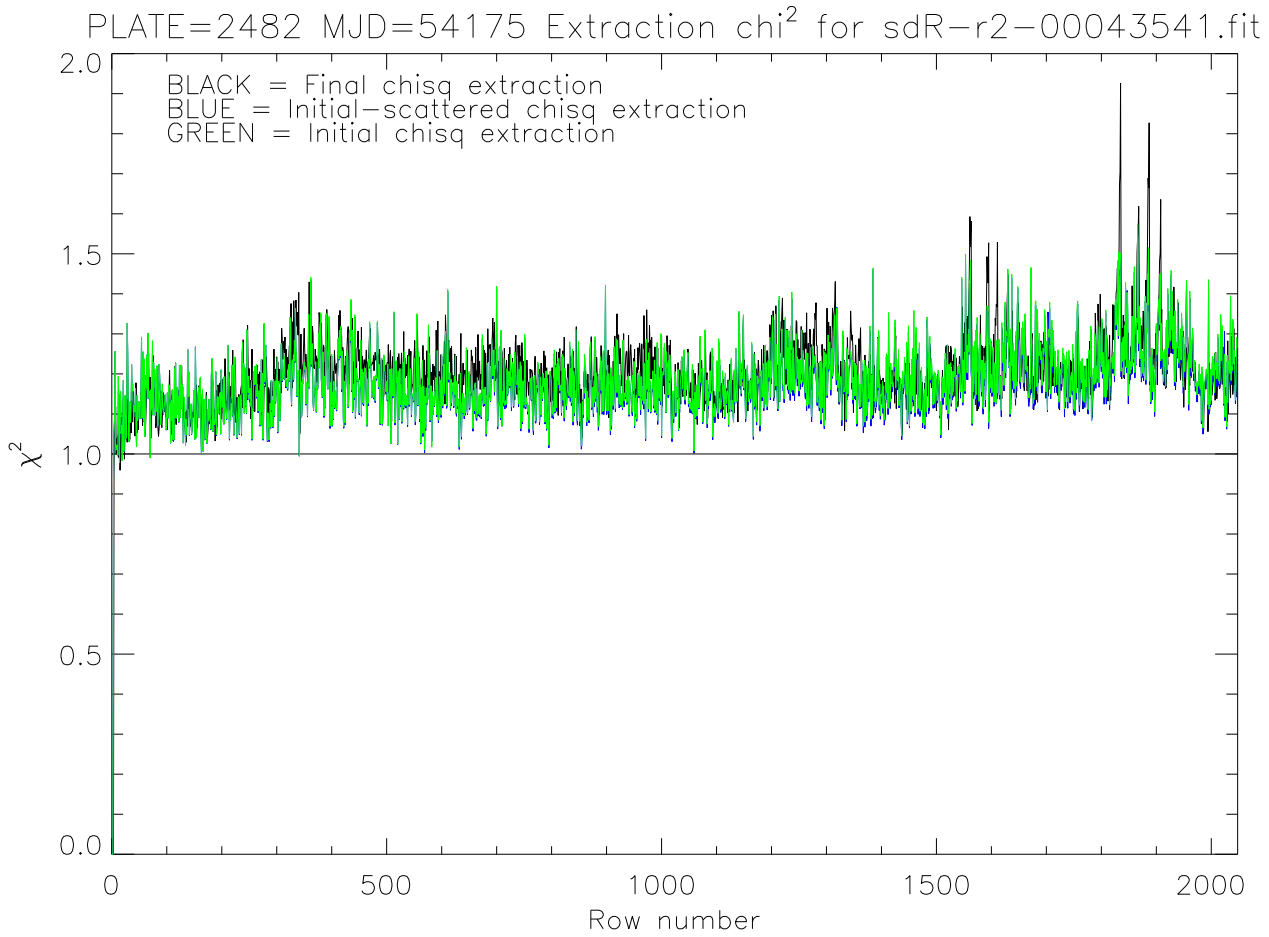

PLATE=2482 MJD=54175 Fiber−Flats for sdR−r2−00043537.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.341
Max value = 1.170
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 11:13:01 2008

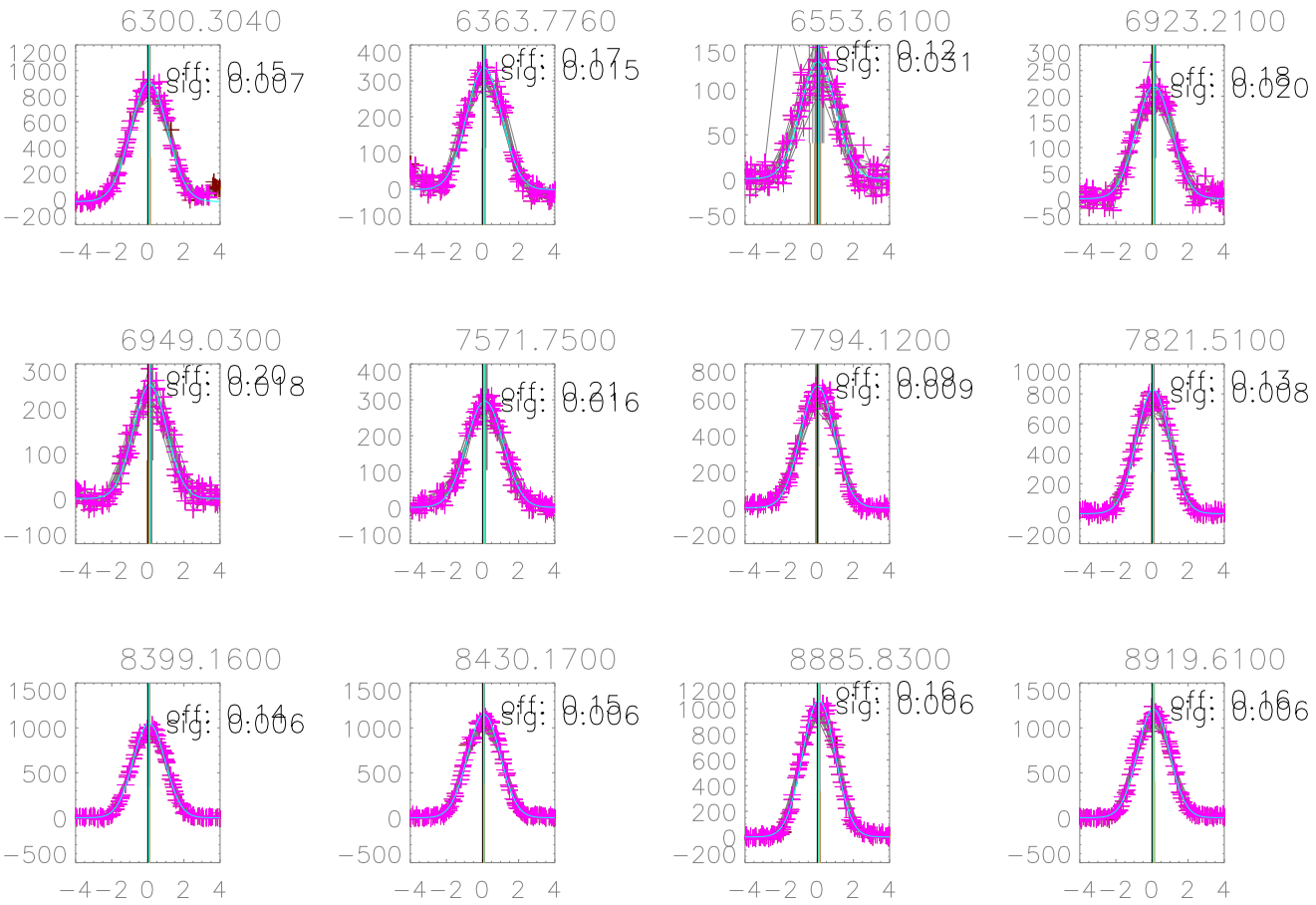

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r2-00043541.fi
12.7
12.7
12.7
12.7
9.1
9.1
9.1
5.5
5.5
5.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

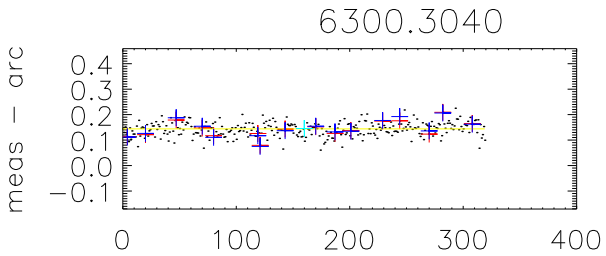

PLATE=2482 MJD=54175 Scattered Light before halo removal on sdR-r2-00043541.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.348
Max value = 15.674
Sat Feb 16 11:13:49 2008

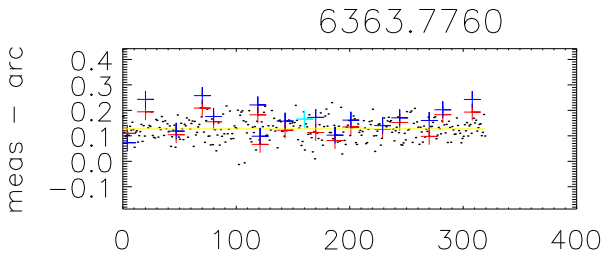

PLATE=2482 MJD=54175 Scattered Light on sdR-r2-00043541.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.5
3.3
3.3
3.3
3.3

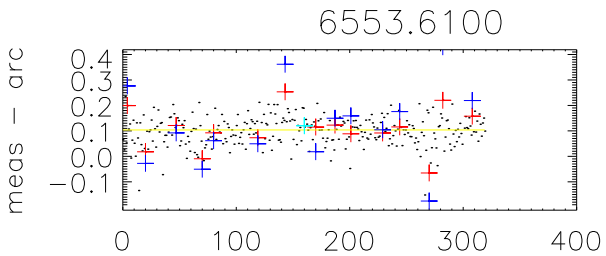

PLATE=2482 MJD=54175 Scattered Light on sdR-r2-00043541.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.279
Max value = 5.125
Sat Feb 16 11:16:56 2008

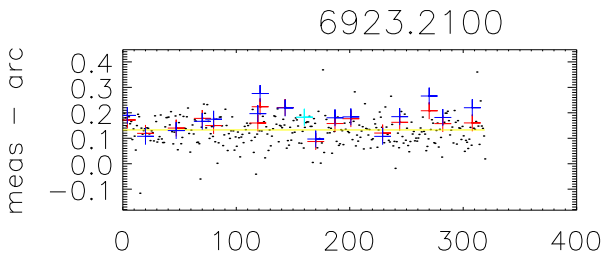

PLATE=2482 MJD=54175 Extraction chi^2 for sdR-r2-00043541.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

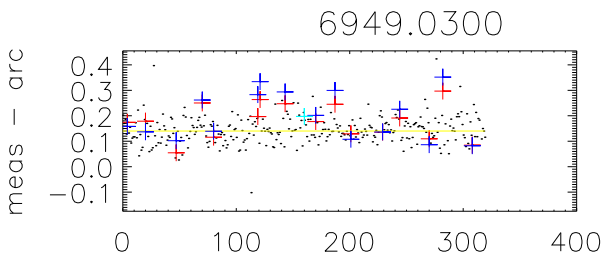

6300.3040
off: 0.15
sig: 0.007
6363.7760
off: 0.17
sig: 0.015
6553.6100
off: 0.12
sig: 0.031
6923.2100
off: 0.18
sig: 0.020
6949.0300
off: 0.20
sig: 0.018
7571.7500
off: 0.21
sig: 0.016
7794.1200
off: 0.09
sig: 0.009
7821.5100
off: 0.13
sig: 0.008
8399.1600
off: 0.14
sig: 0.006
8430.1700
off: 0.15
sig: 0.006
8885.8300
off: 0.16
sig: 0.006
8919.6100
off: 0.16
sig: 0.006

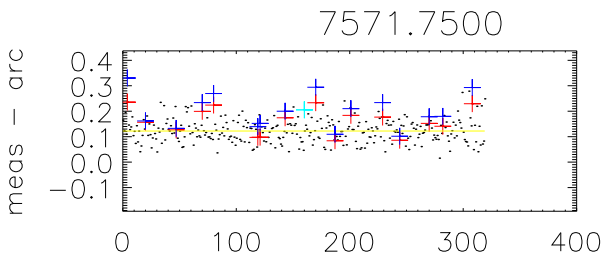

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

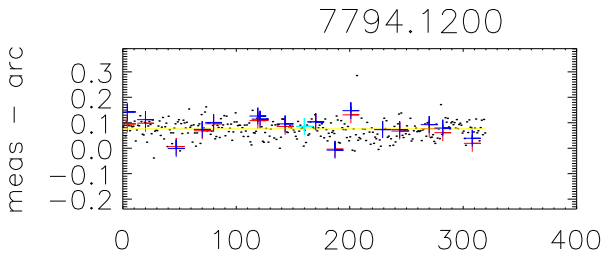

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

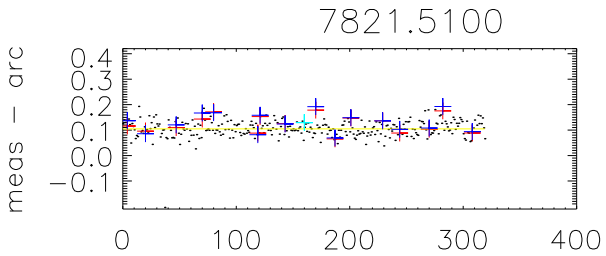

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

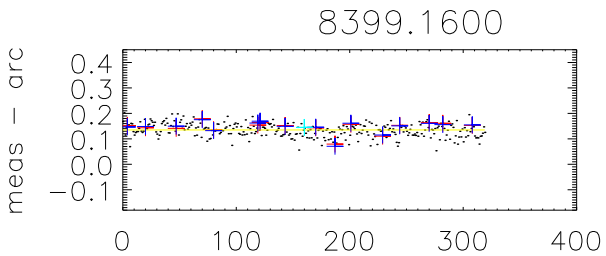

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

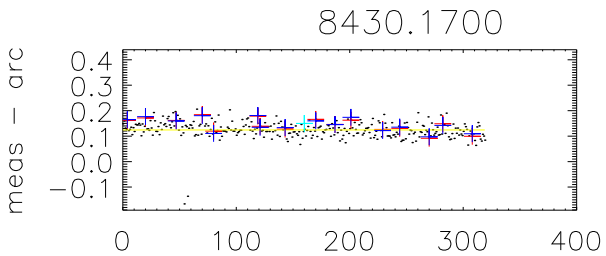

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

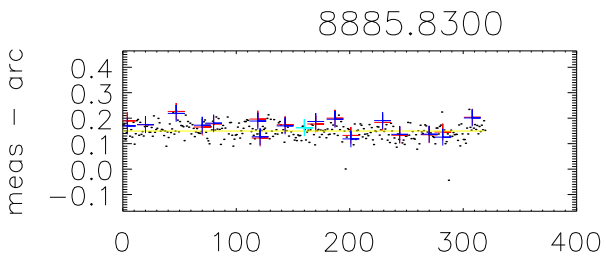

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

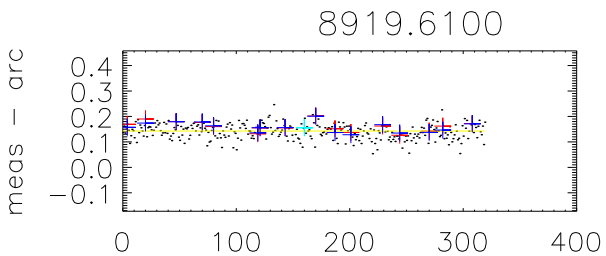

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

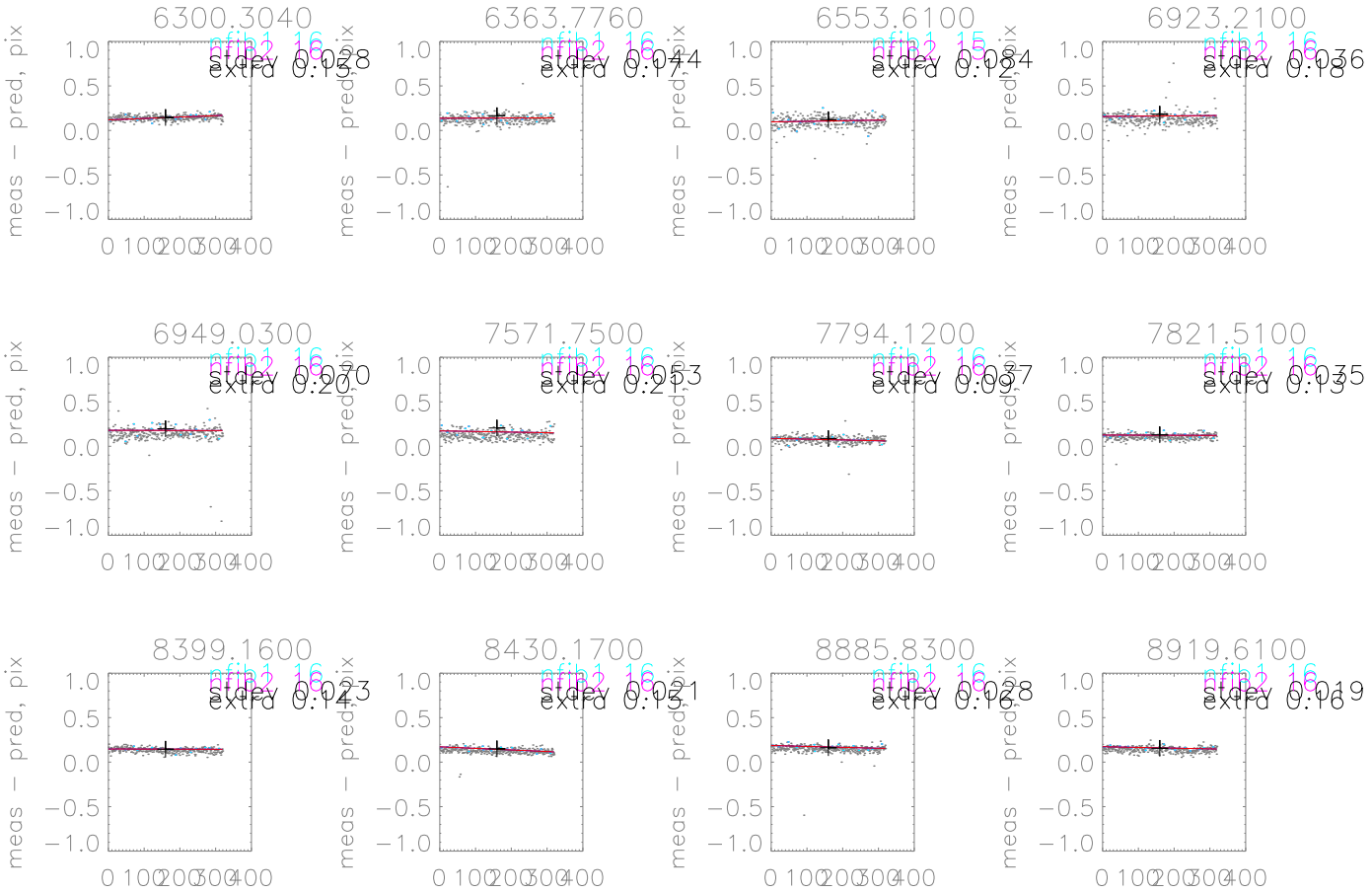

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

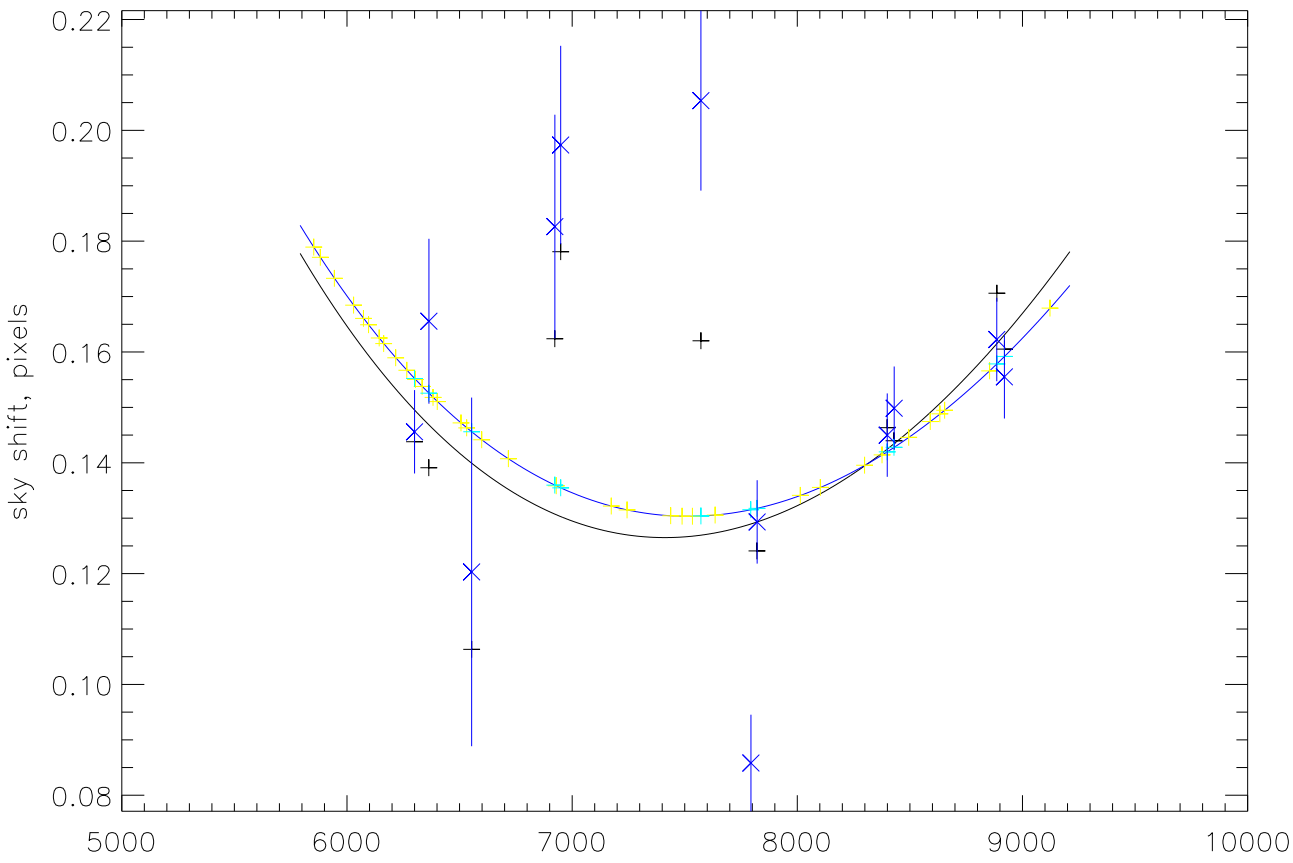

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

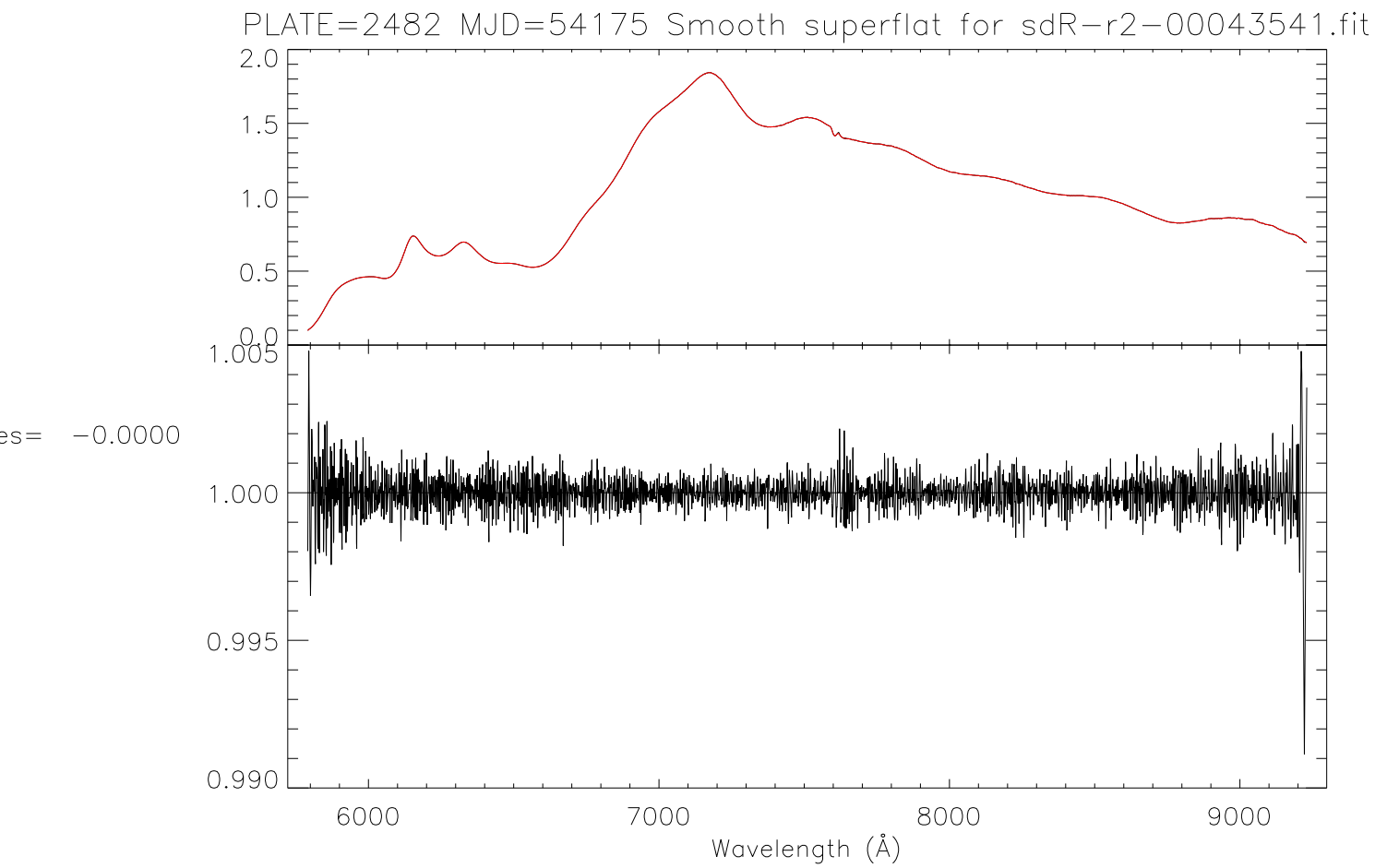

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

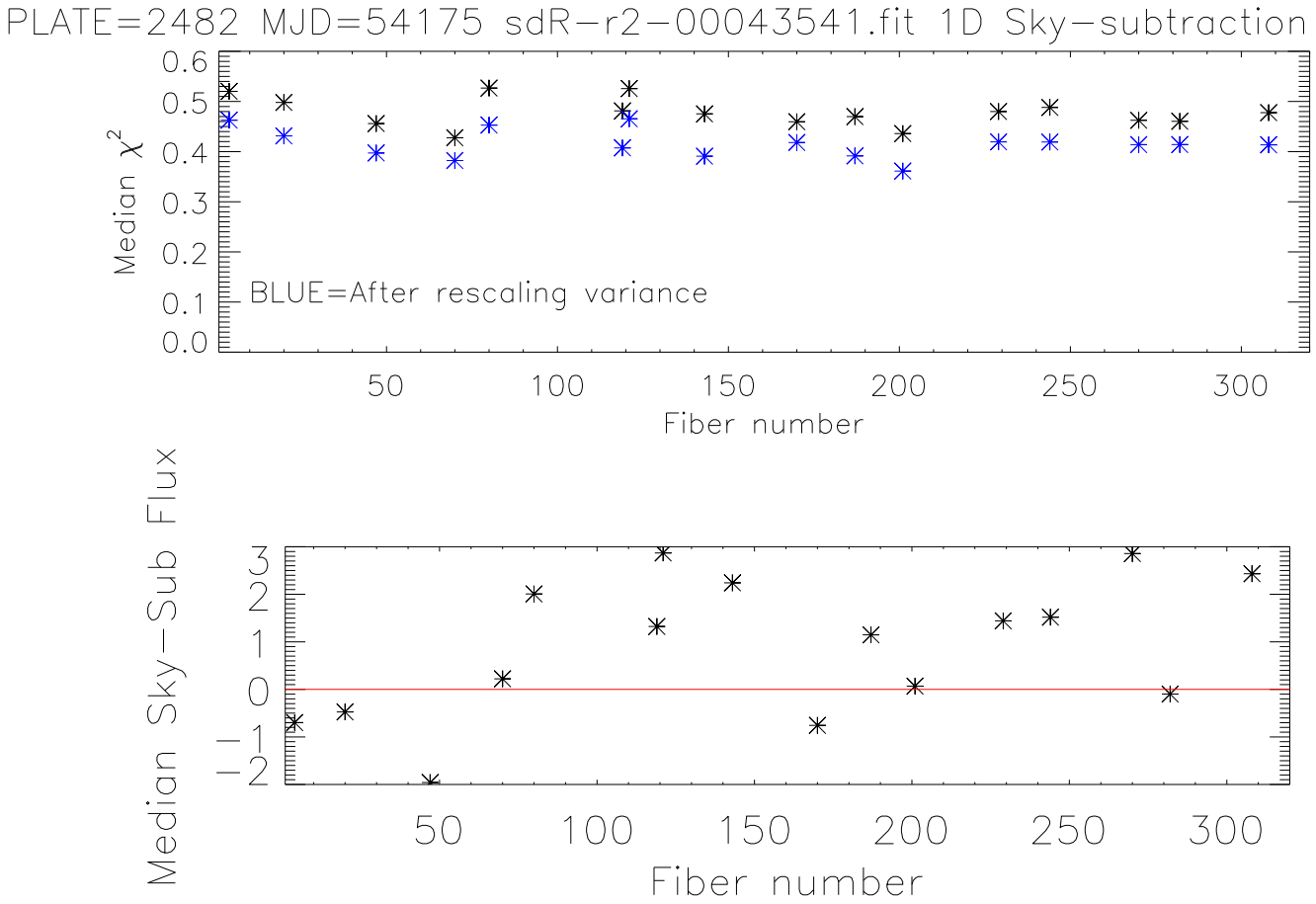

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

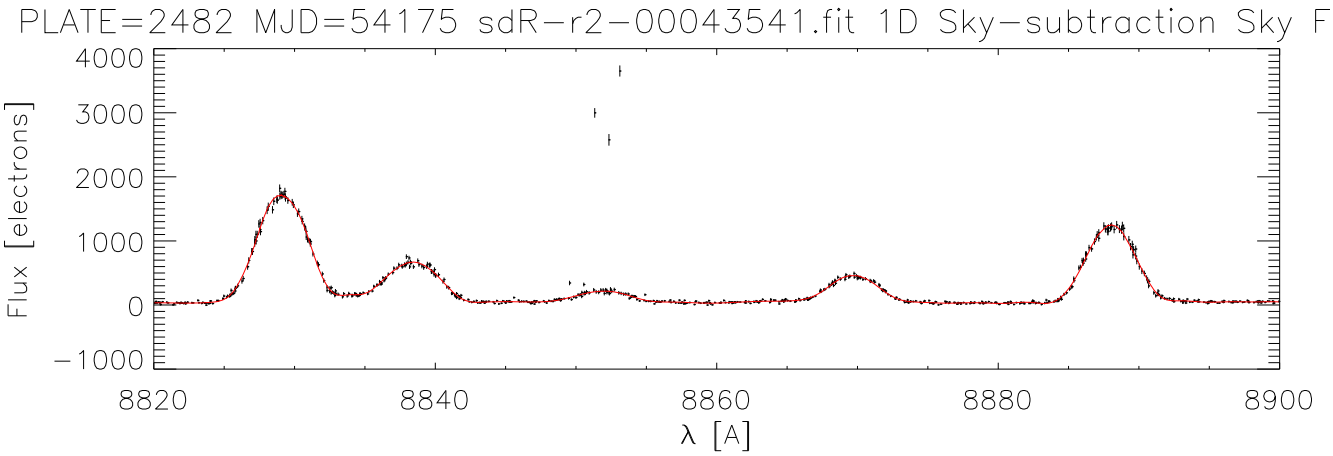

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

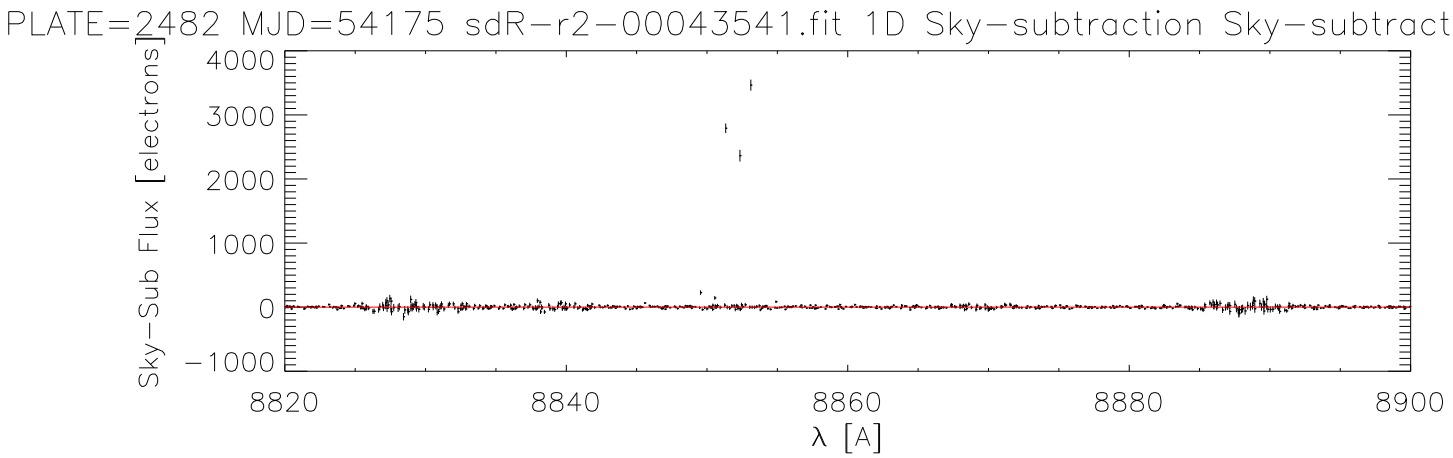

6300.3040
mfhi2 16
stdev 0.028
extra 0.15
6363.7760
mfhi2 16
stdev 0.044
extra 0.17
6553.6100
mfhi2 15
stdev 0.024
extra 0.12
6923.2100
mfhi2 16
stdev 0.036
extra 0.18
6949.0300
mfhi2 16
stdev 0.070
extra 0.20
7571.7500
mfhi2 16
stdev 0.053
extra 0.21
7794.1200
mfhi2 16
stdev 0.037
extra 0.09
7821.5100
mfhi2 16
stdev 0.035
extra 0.13
8399.1600
mfhi2 16
stdev 0.023
extra 0.14
8430.1700
mfhi2 16
stdev 0.021
extra 0.13
8885.8300
mfhi2 16
stdev 0.028
extra 0.16
8919.6100
mfhi2 16
stdev 0.019
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

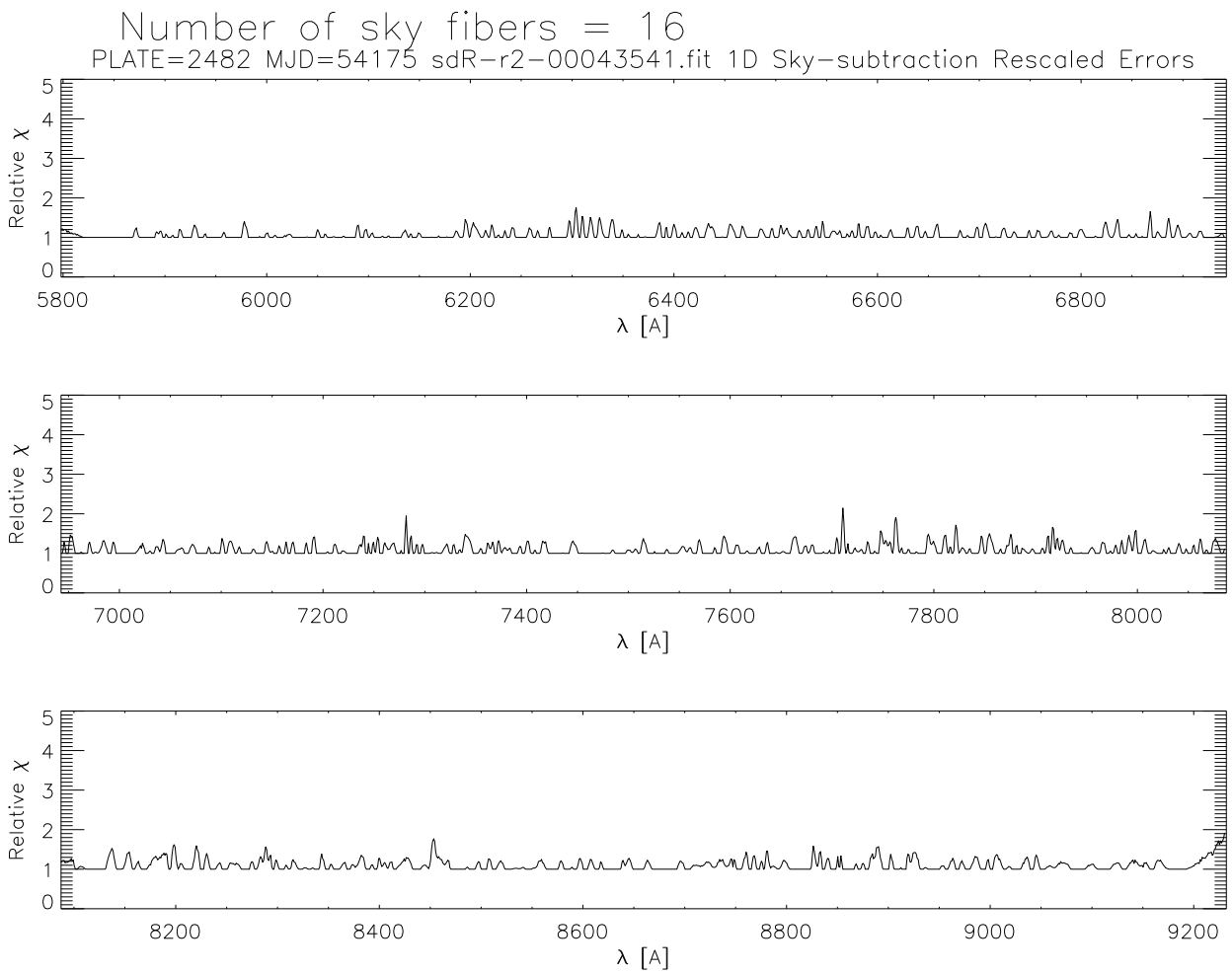

sky shift, pixels
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
5000
6000
7000
8000
9000
10000

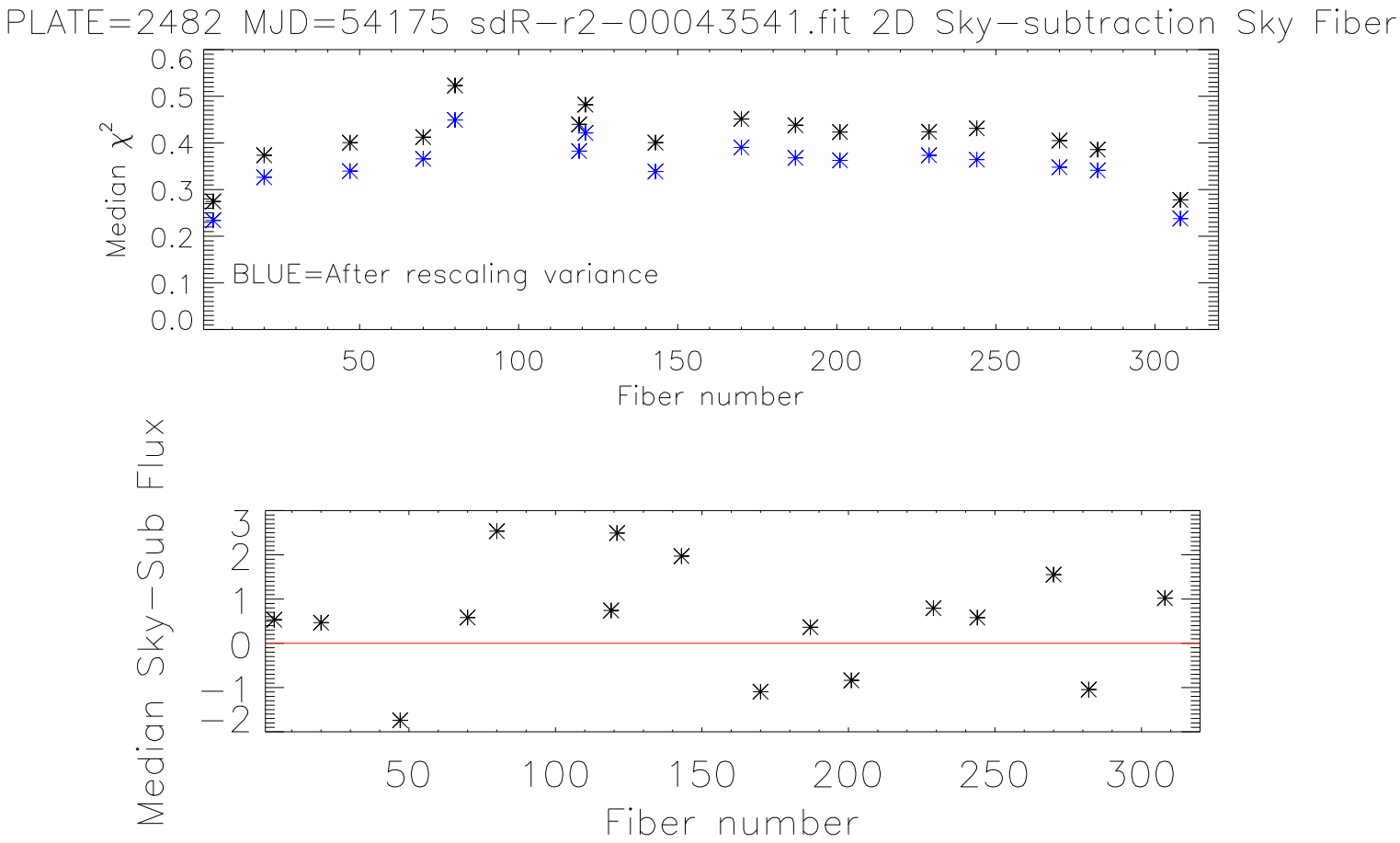

PLATE=2482 MJD=54175 Smooth superflat for sdR-r2-00043541.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

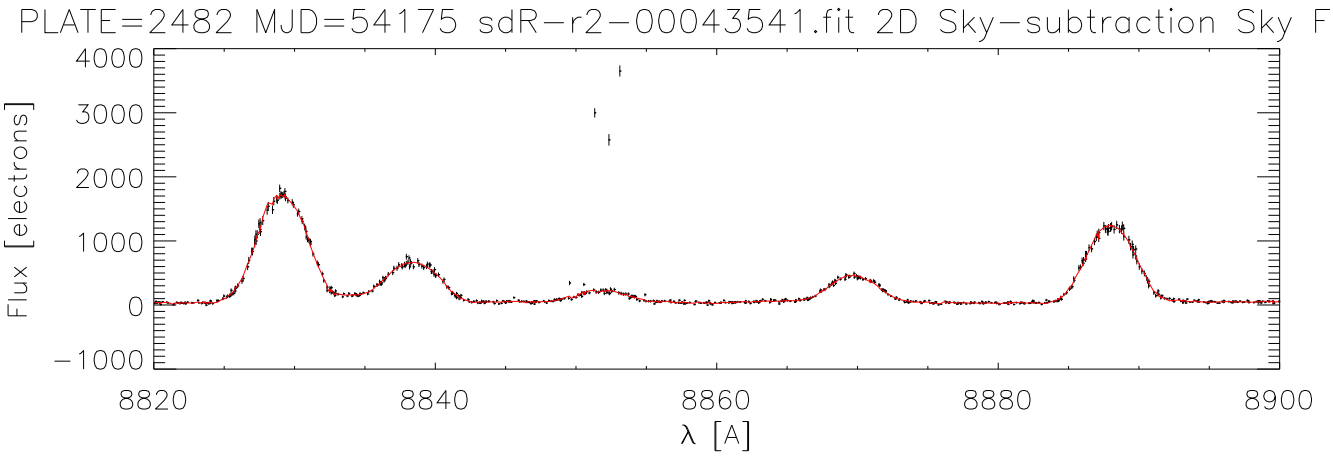

PLATE=2482 MJD=54175 sdR-r2-00043541.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

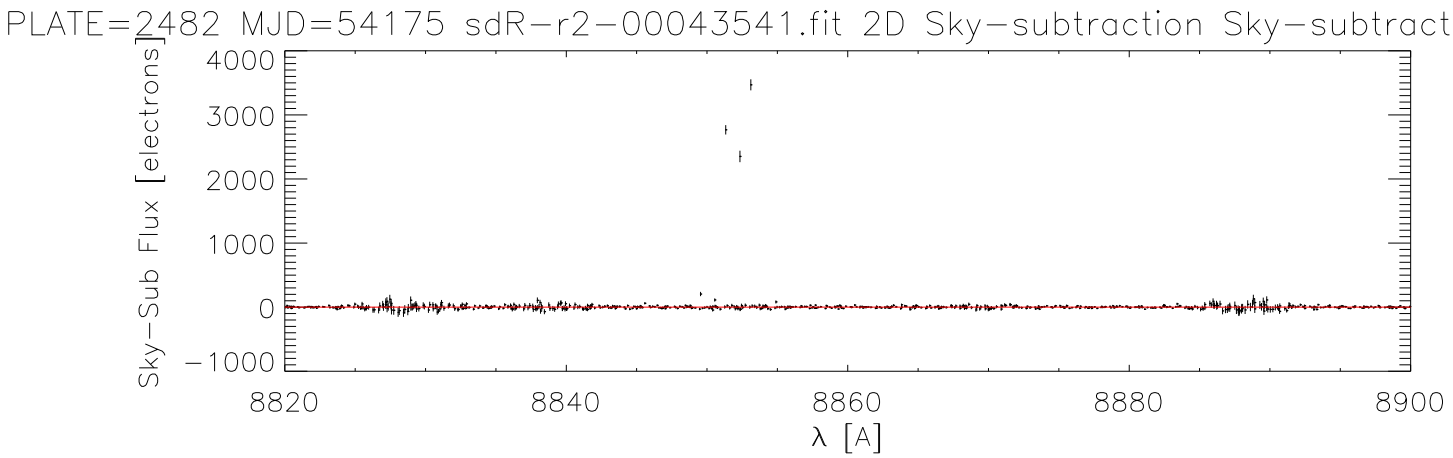

PLATE=2482 MJD=54175 sdR-r2-00043541.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

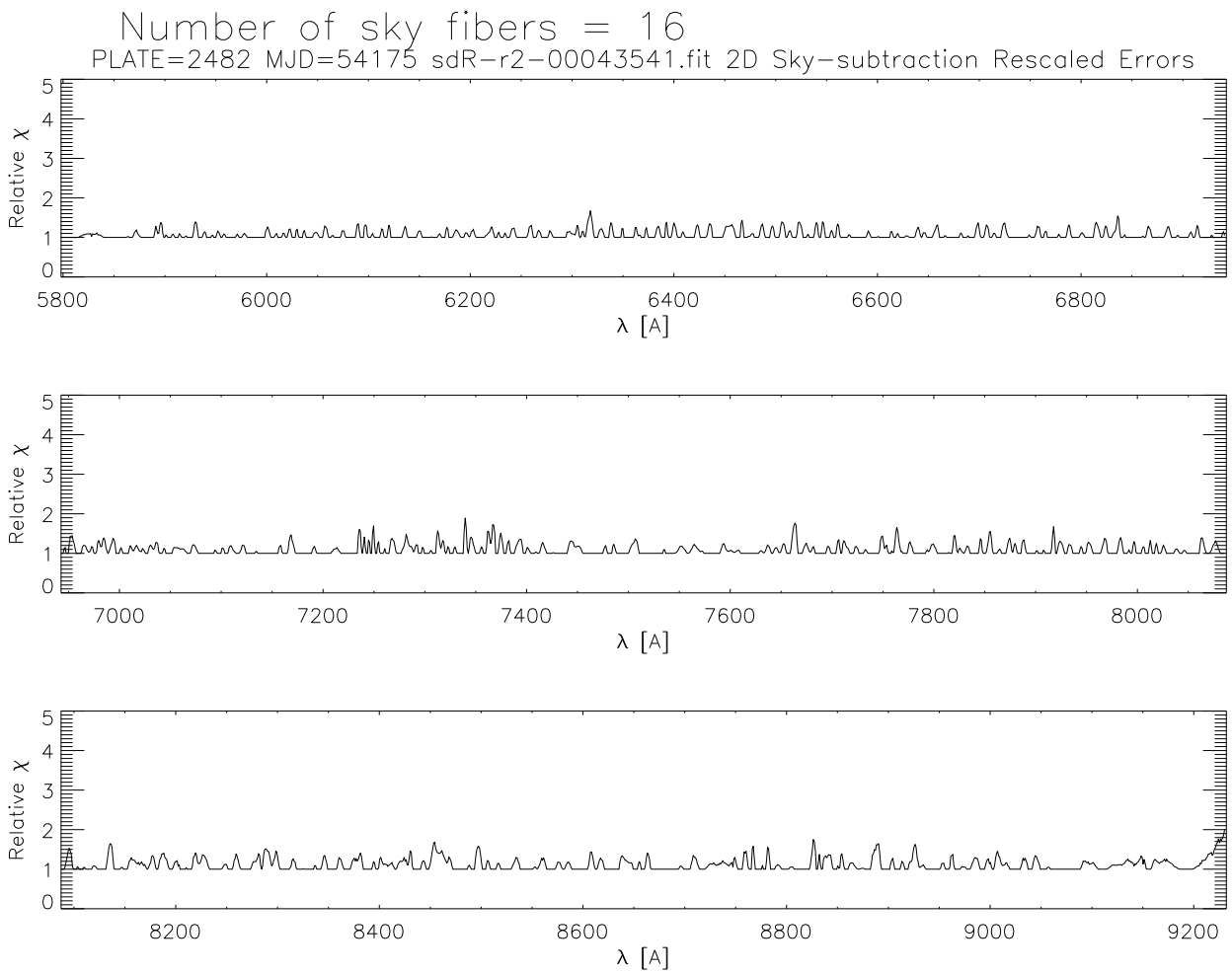

PLATE=2482 MJD=54175 sdR-r2-00043541.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

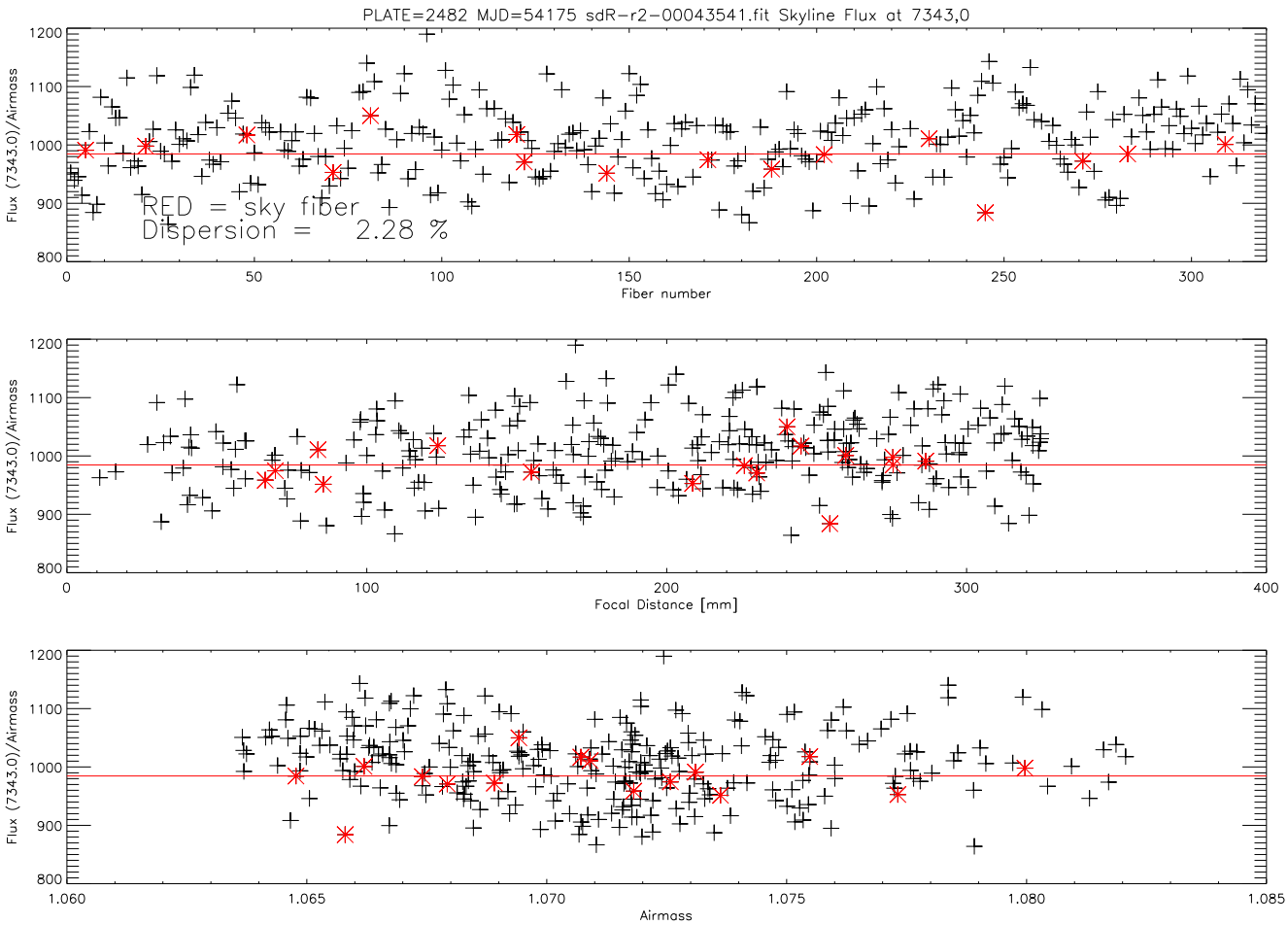

Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-r2-00043541.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

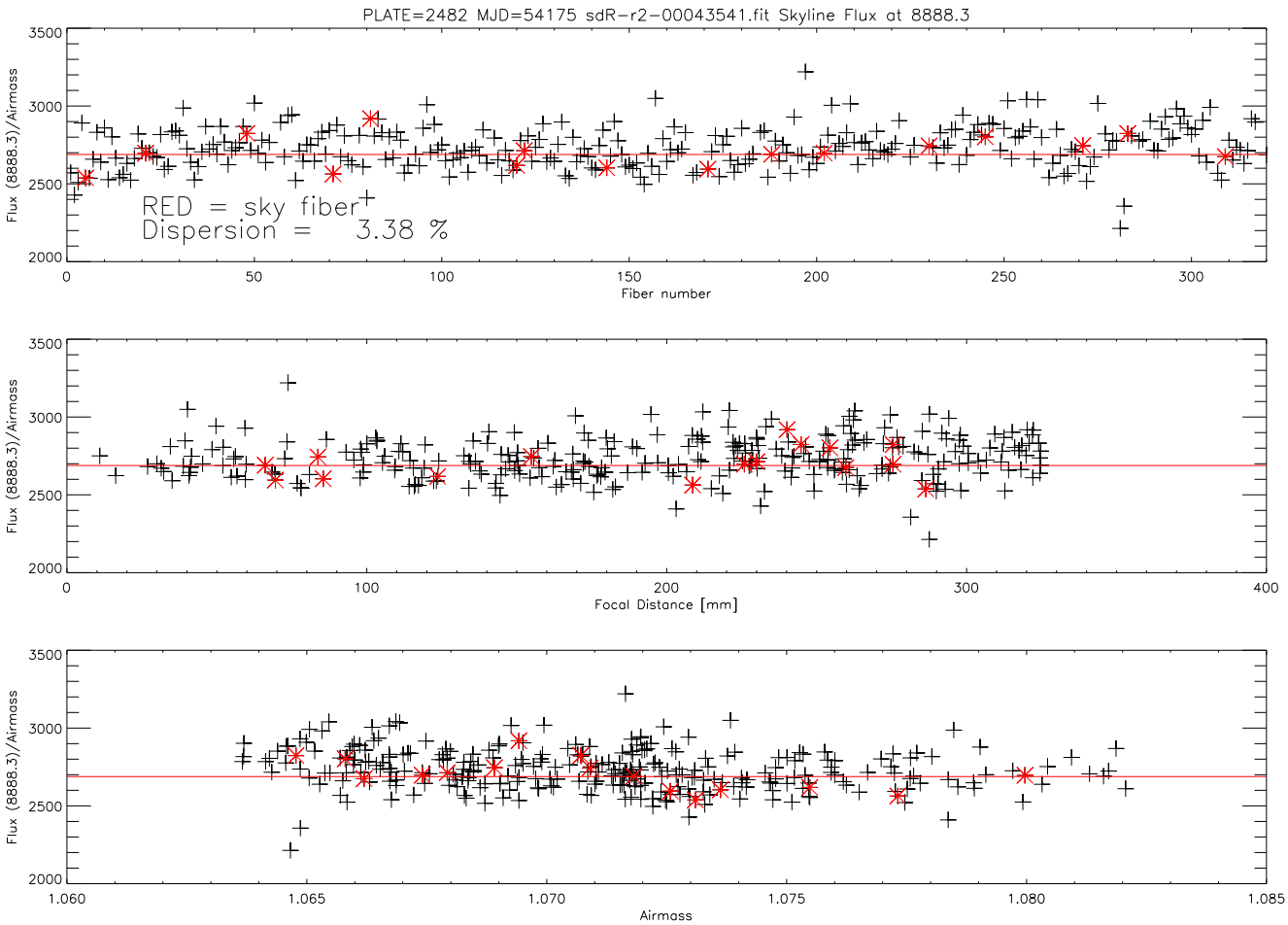

PLATE=2482 MJD=54175 sdR-r2-00043541.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number


PLATE=2482 MJD=54175 sdR-r2-00043541.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


PLATE=2482 MJD=54175 sdR-r2-00043541.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=2482 MJD=54175 sdR-r2-00043541.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=2482 MJD=54175 sdR-r2-00043541.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber +
Dispersion = 2.28 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2482 MJD=54175 sdR-r2-00043541.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.38 %
Fiber number
Focal Distance [mm]
Airmass