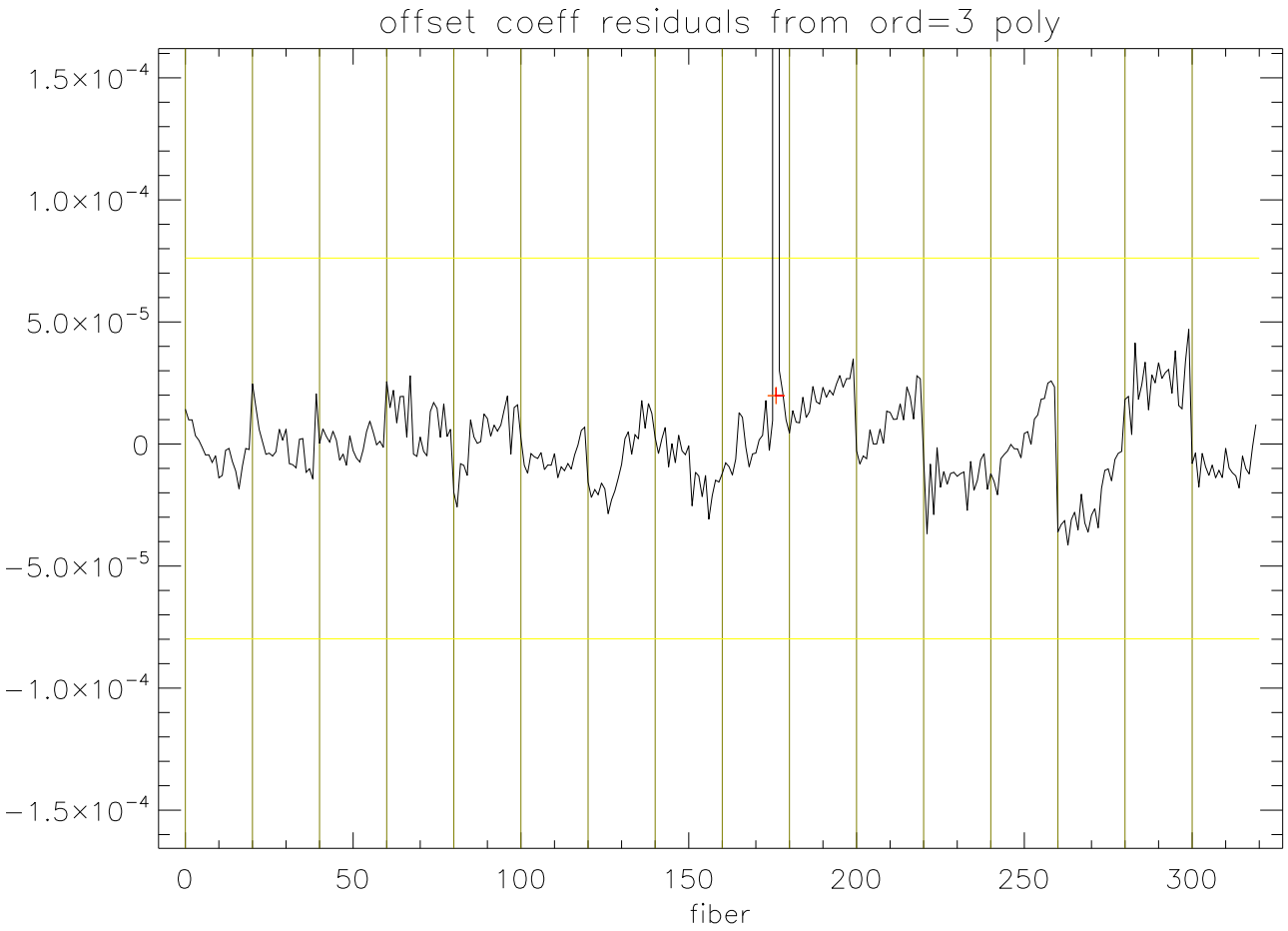
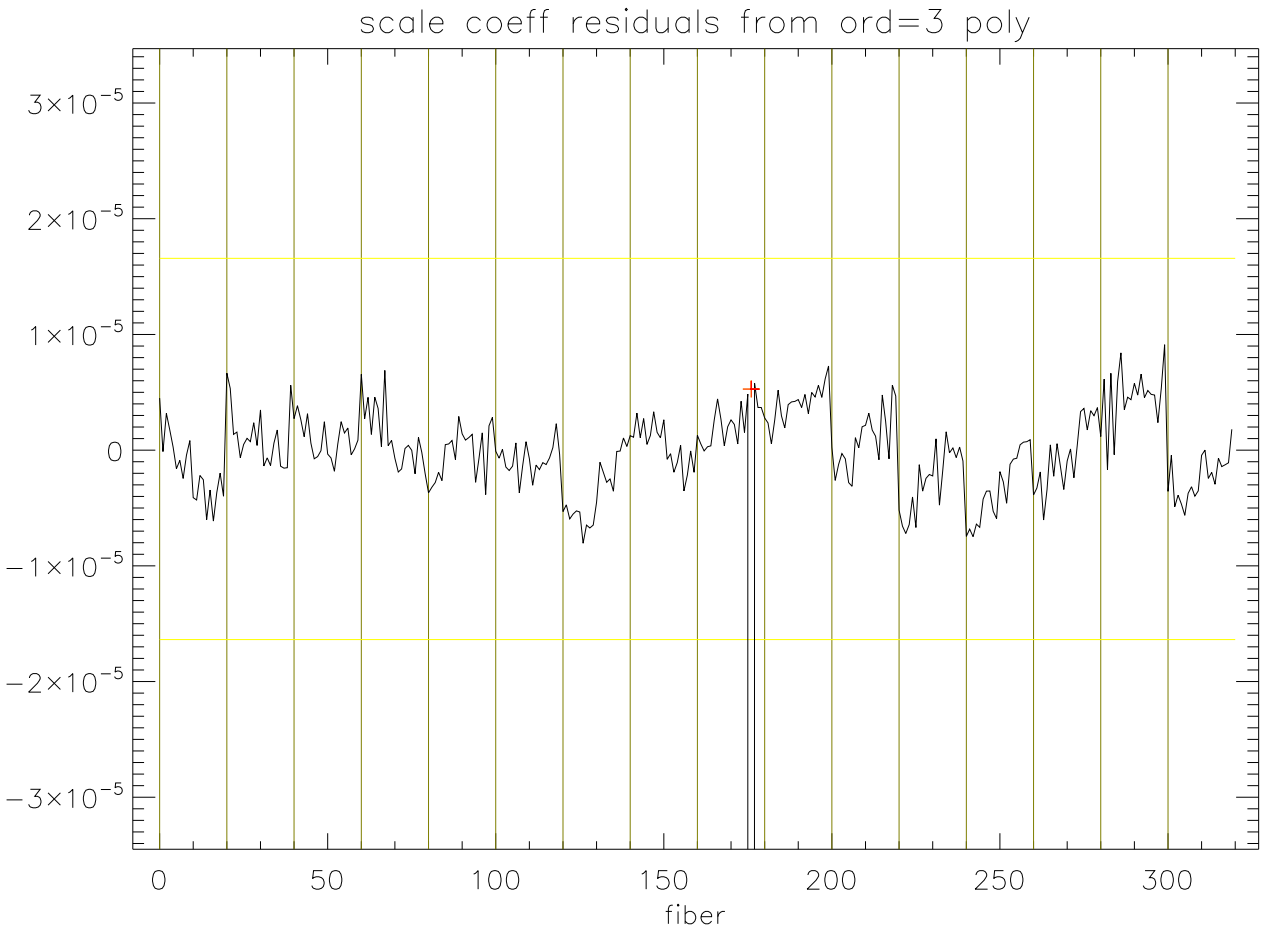
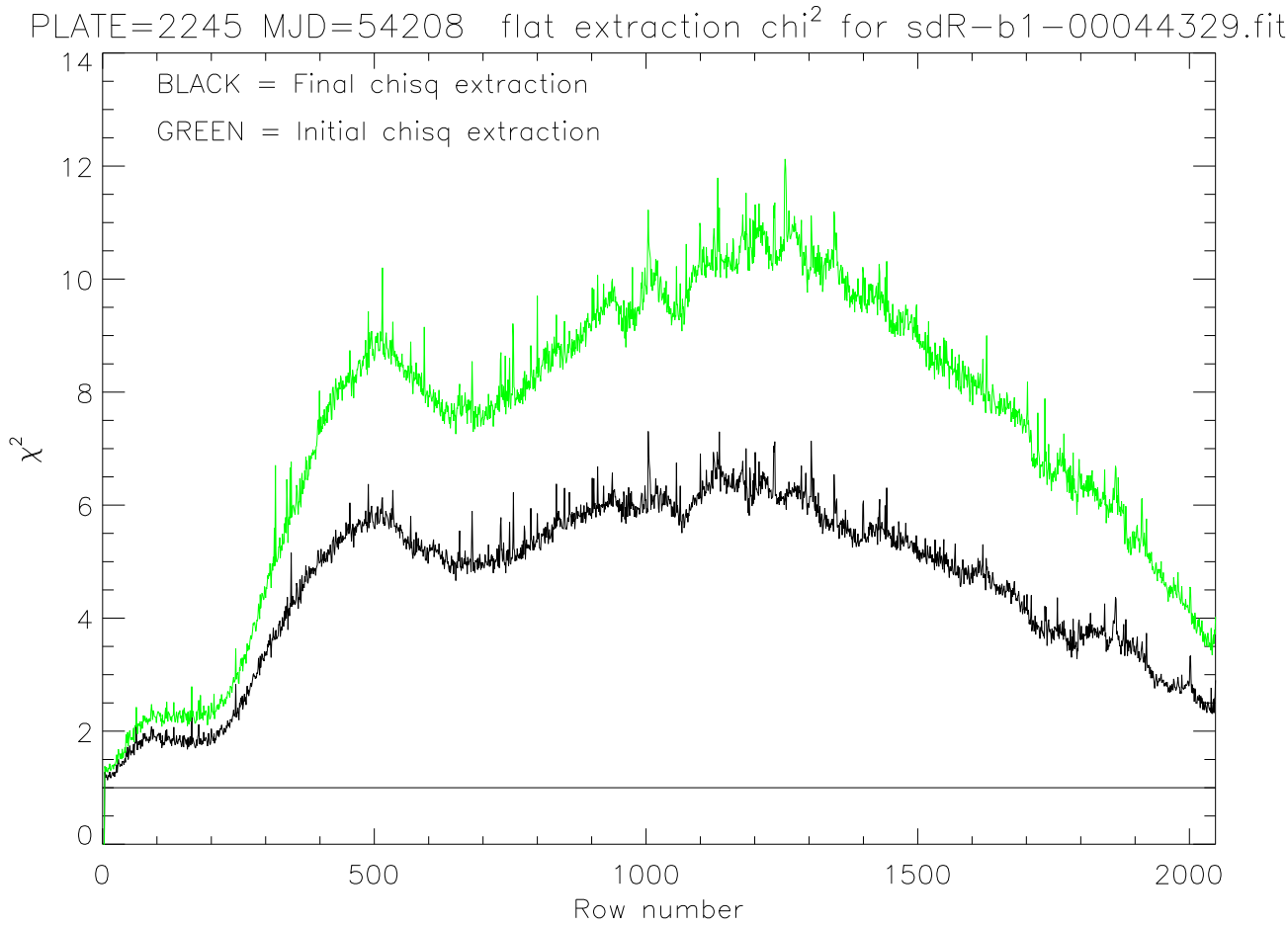
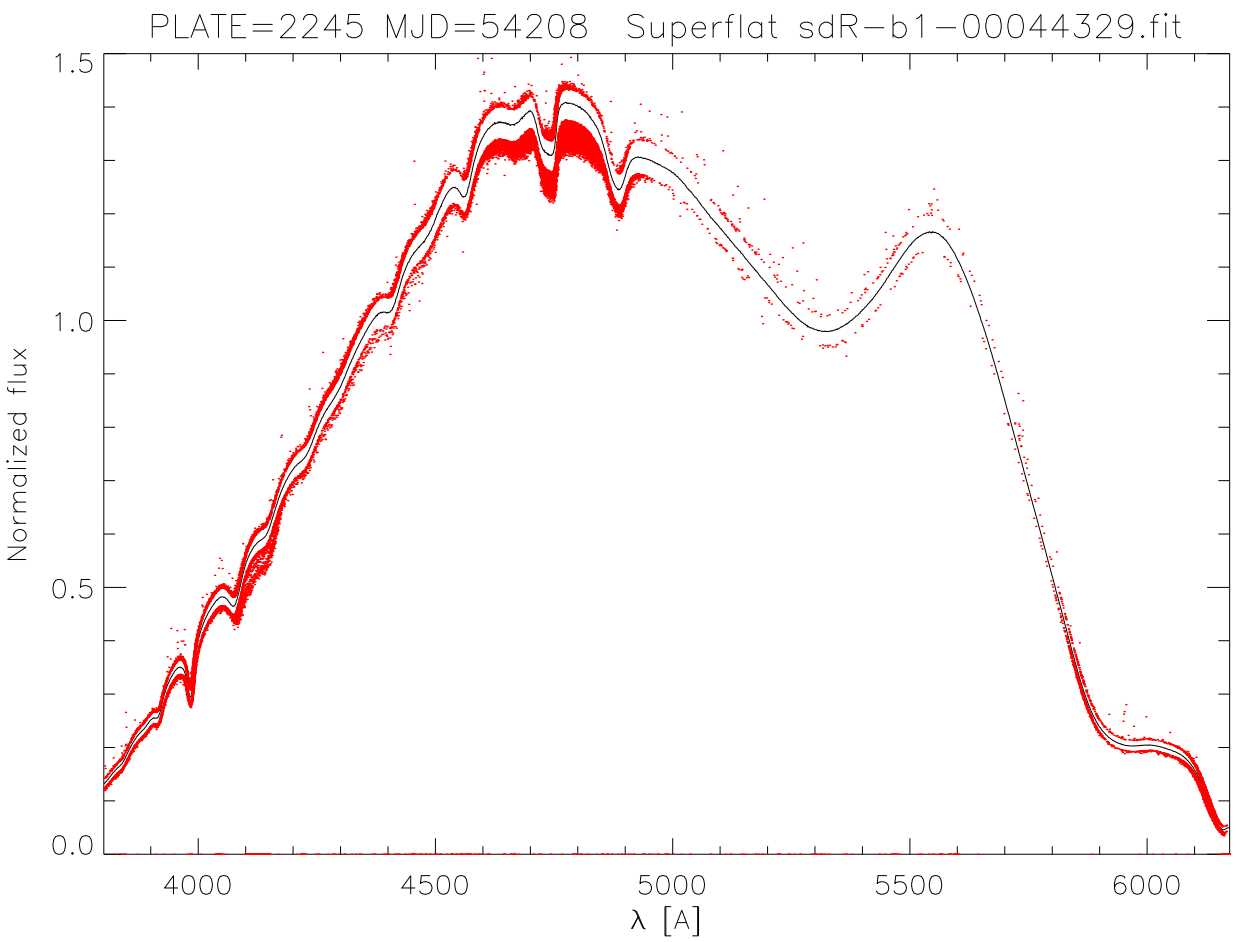
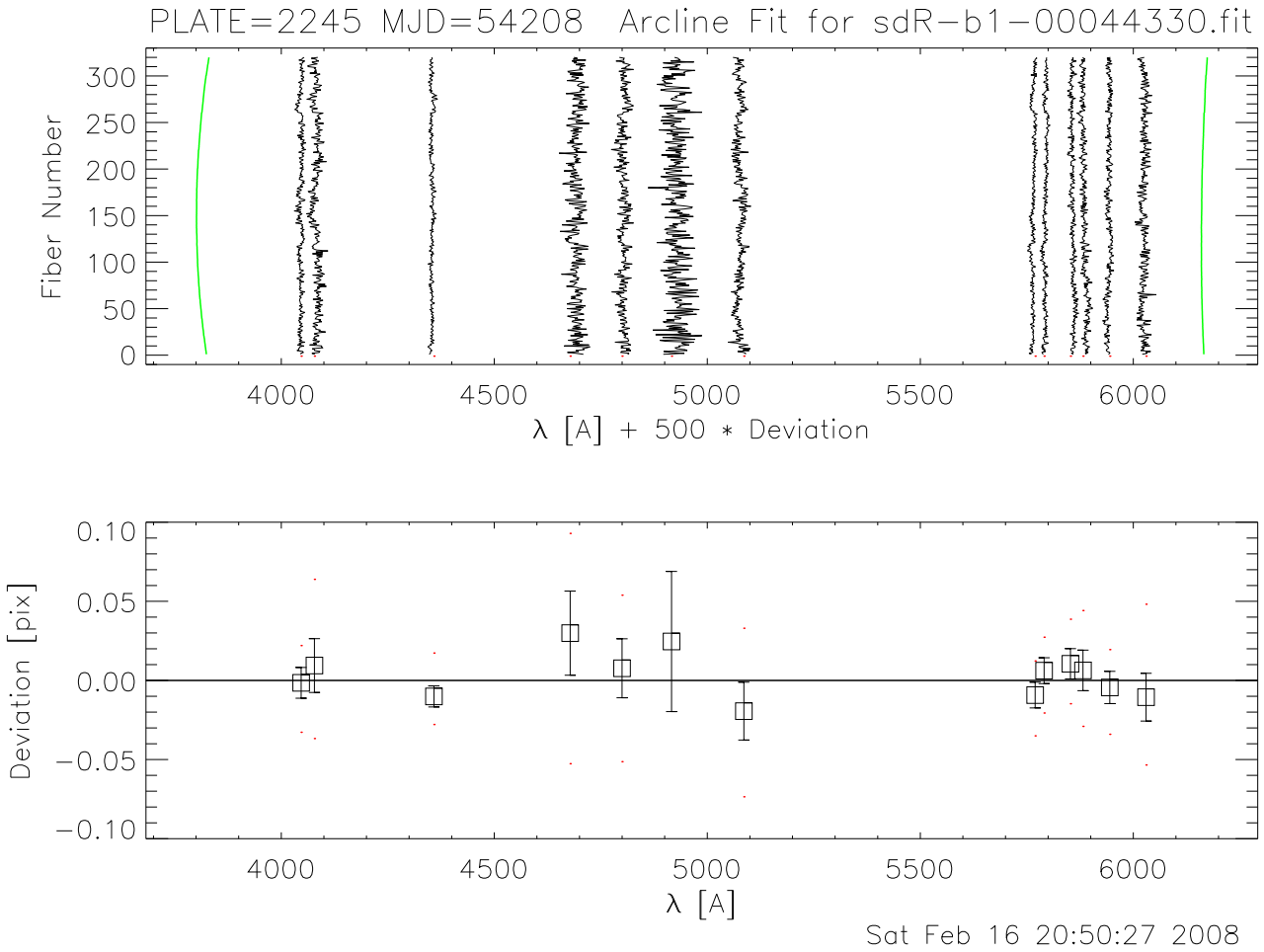
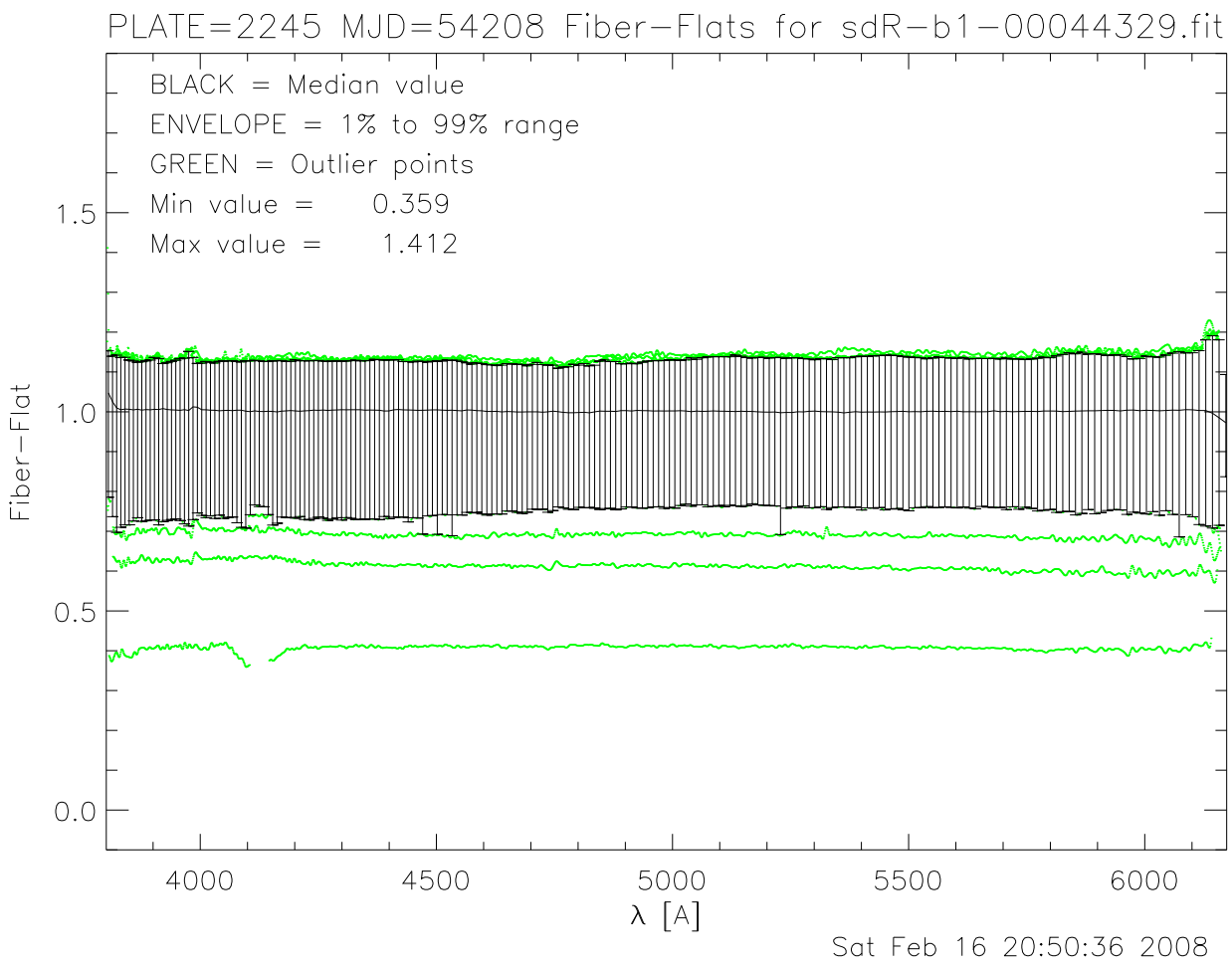

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

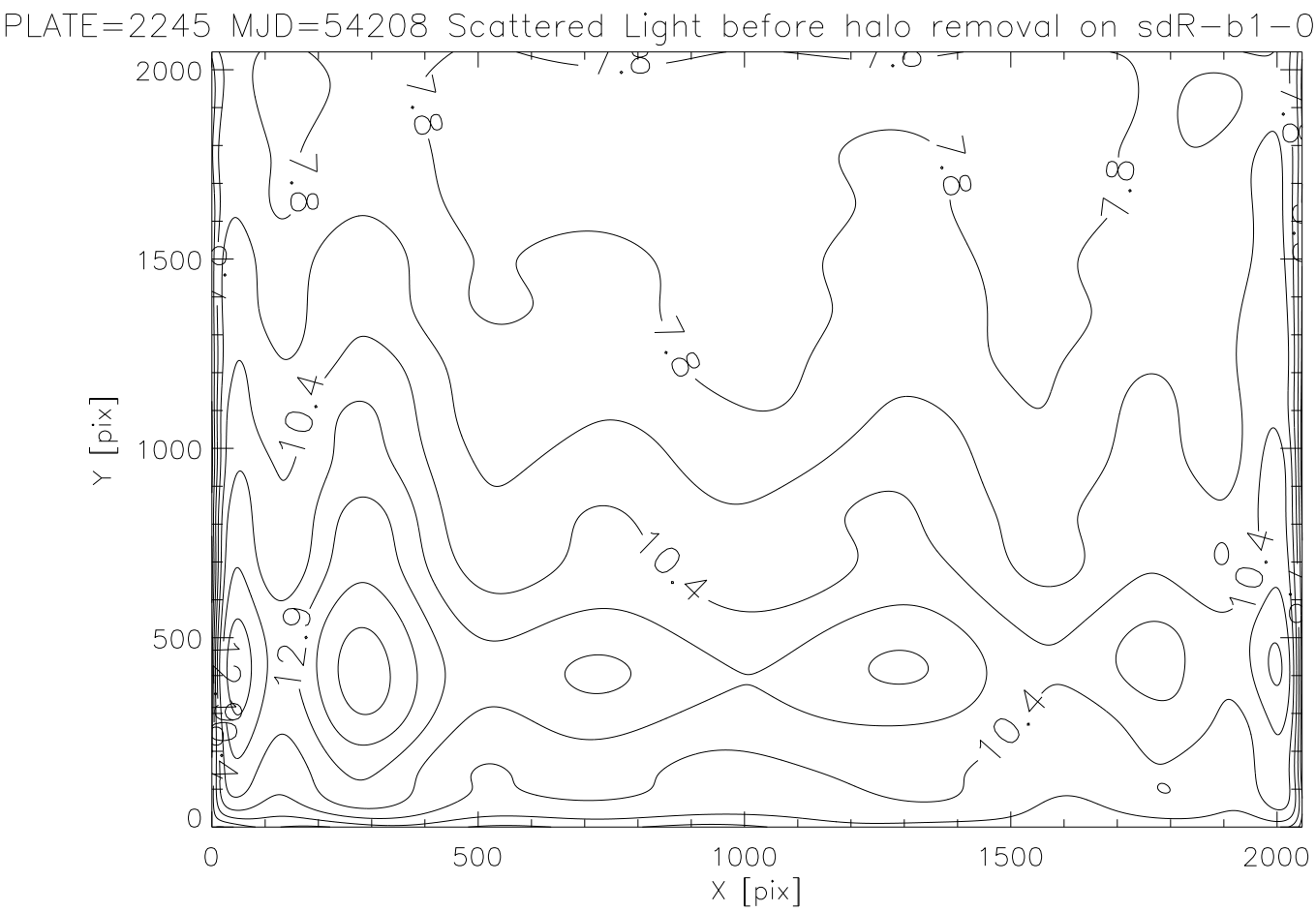

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

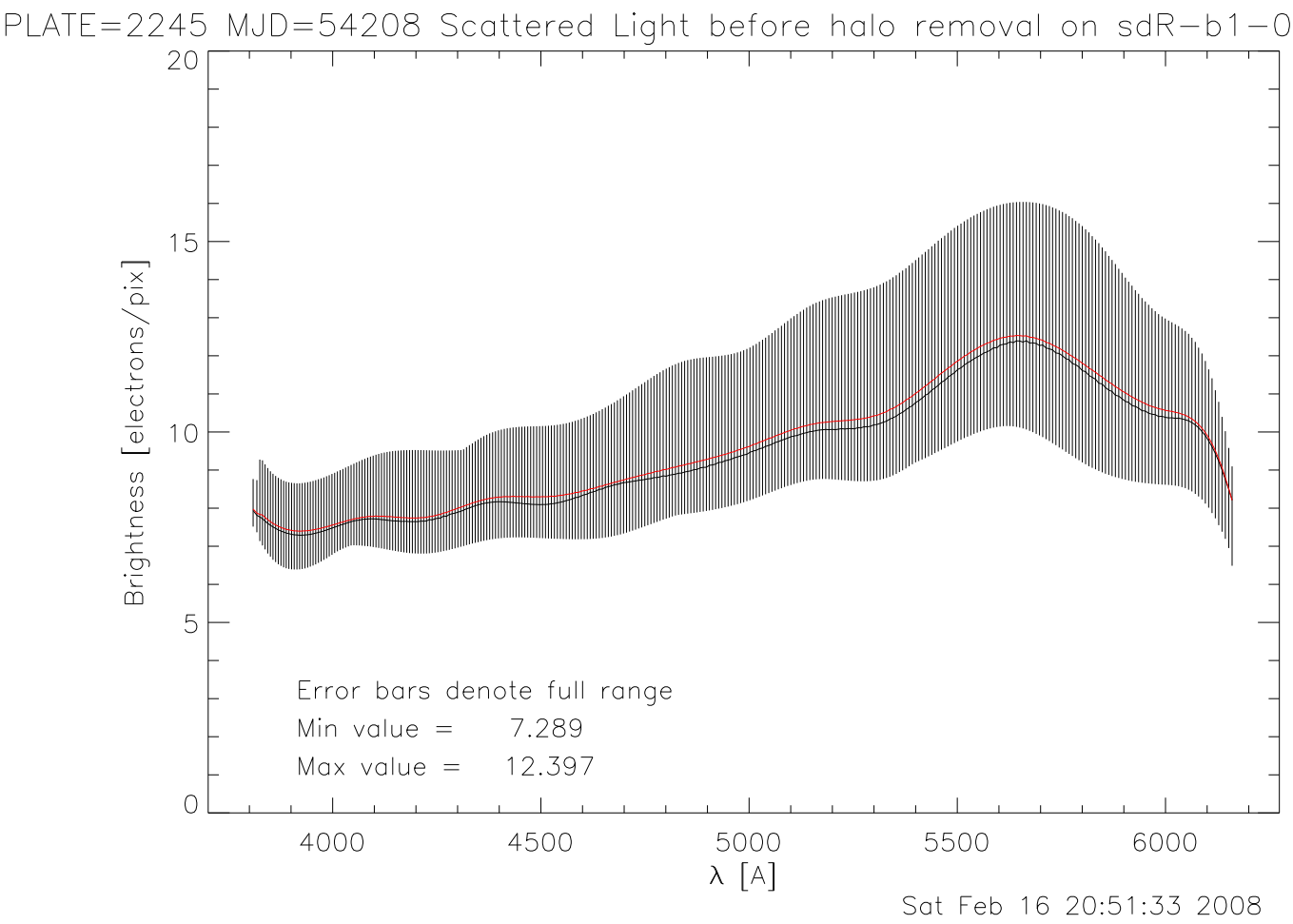

PLATE=2245 MJD=54208 flat extraction chi^2 for sdR−b1−00044329.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000


PLATE=2245 MJD=54208 Superflat sdR-b1-00044329.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]


PLATE=2245 MJD=54208 Arcline Fit for sdR-b1-00044330.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 20:50:27 2008


PLATE=2245 MJD=54208 Fiber-Flats for sdR-b1-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.359
Max value = 1.412
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 20:50:36 2008


PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b1-00044331.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.8
10.4
12.9
0


PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR−b1−00044331.f
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.289
Max value = 12.397
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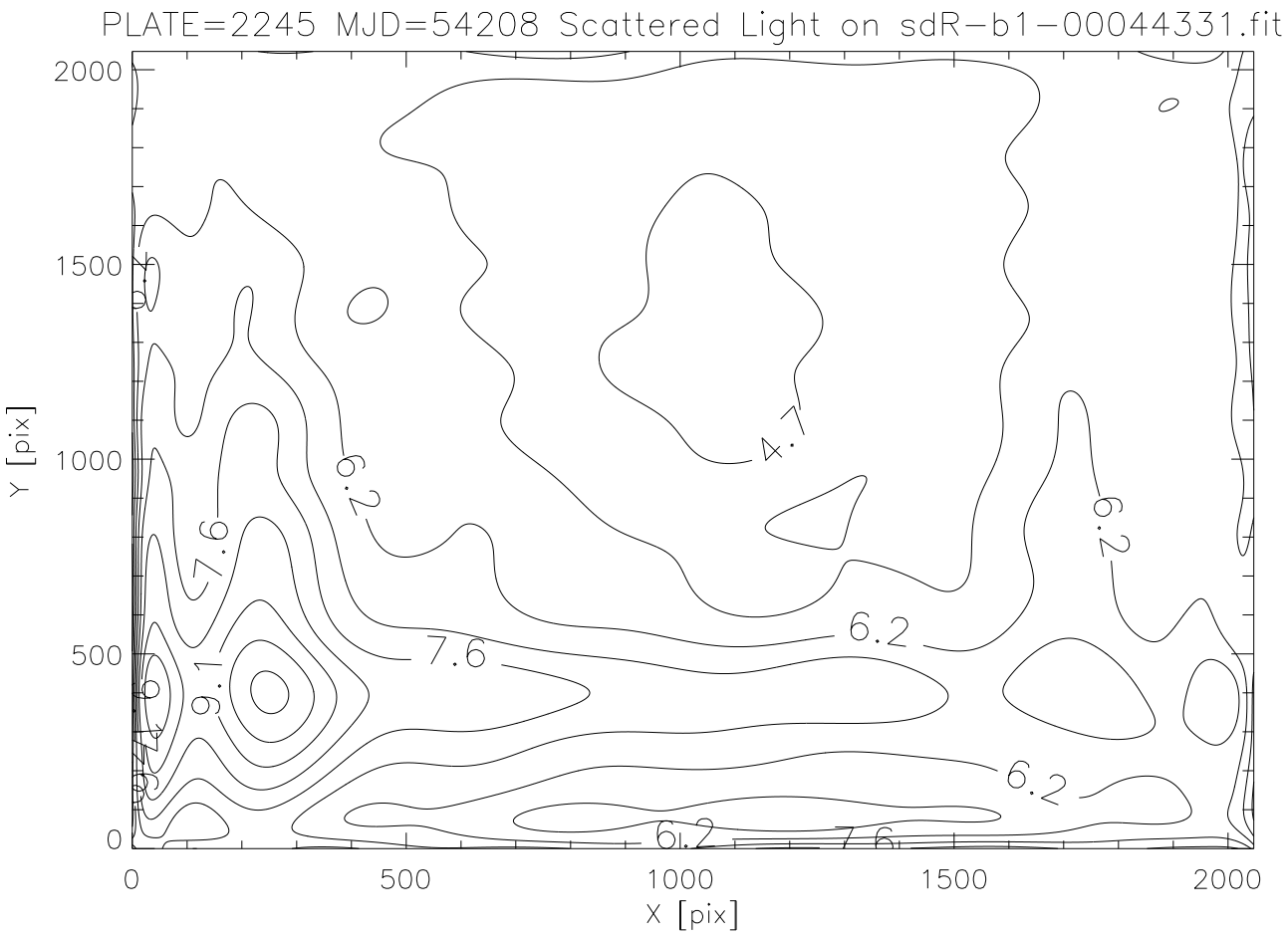
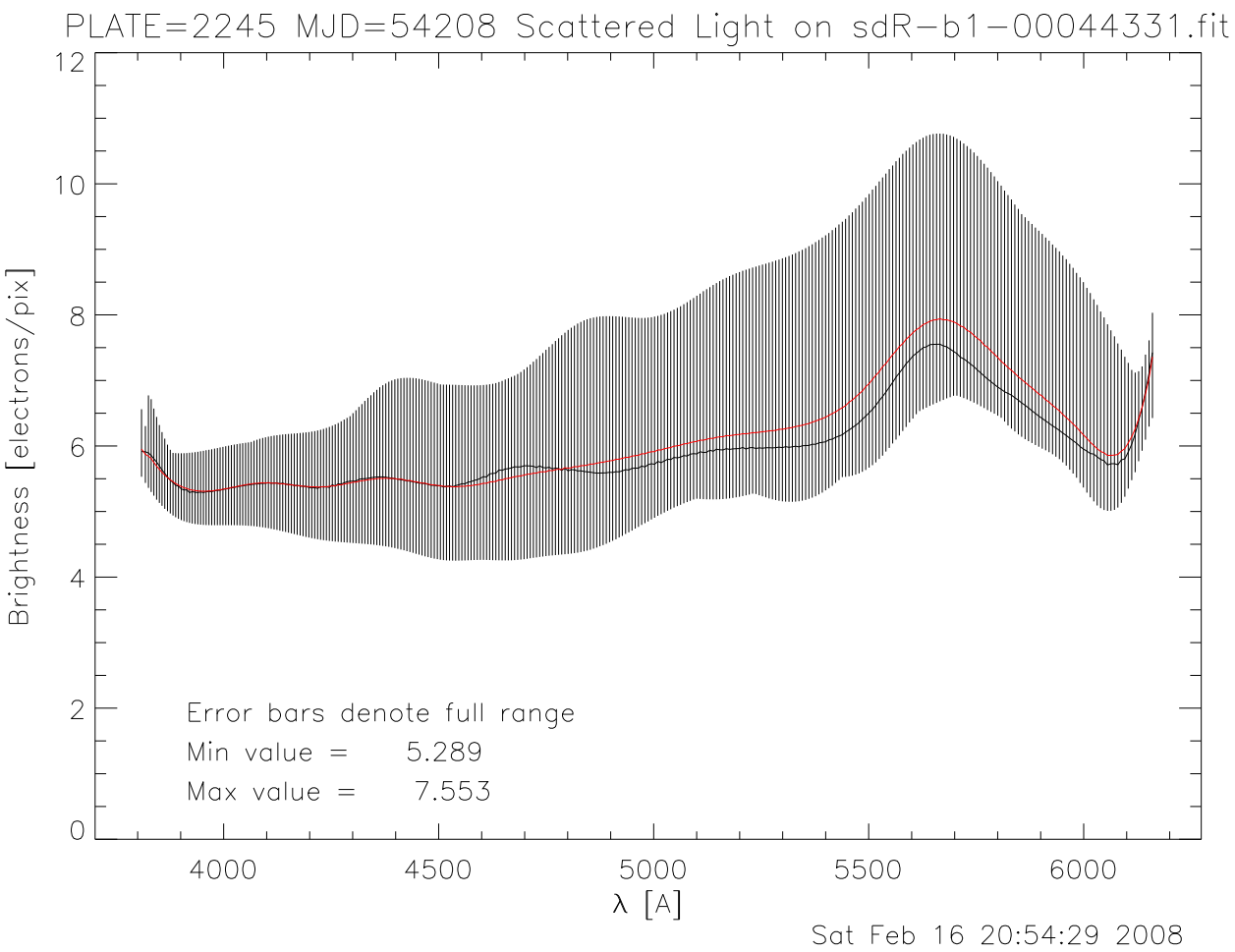
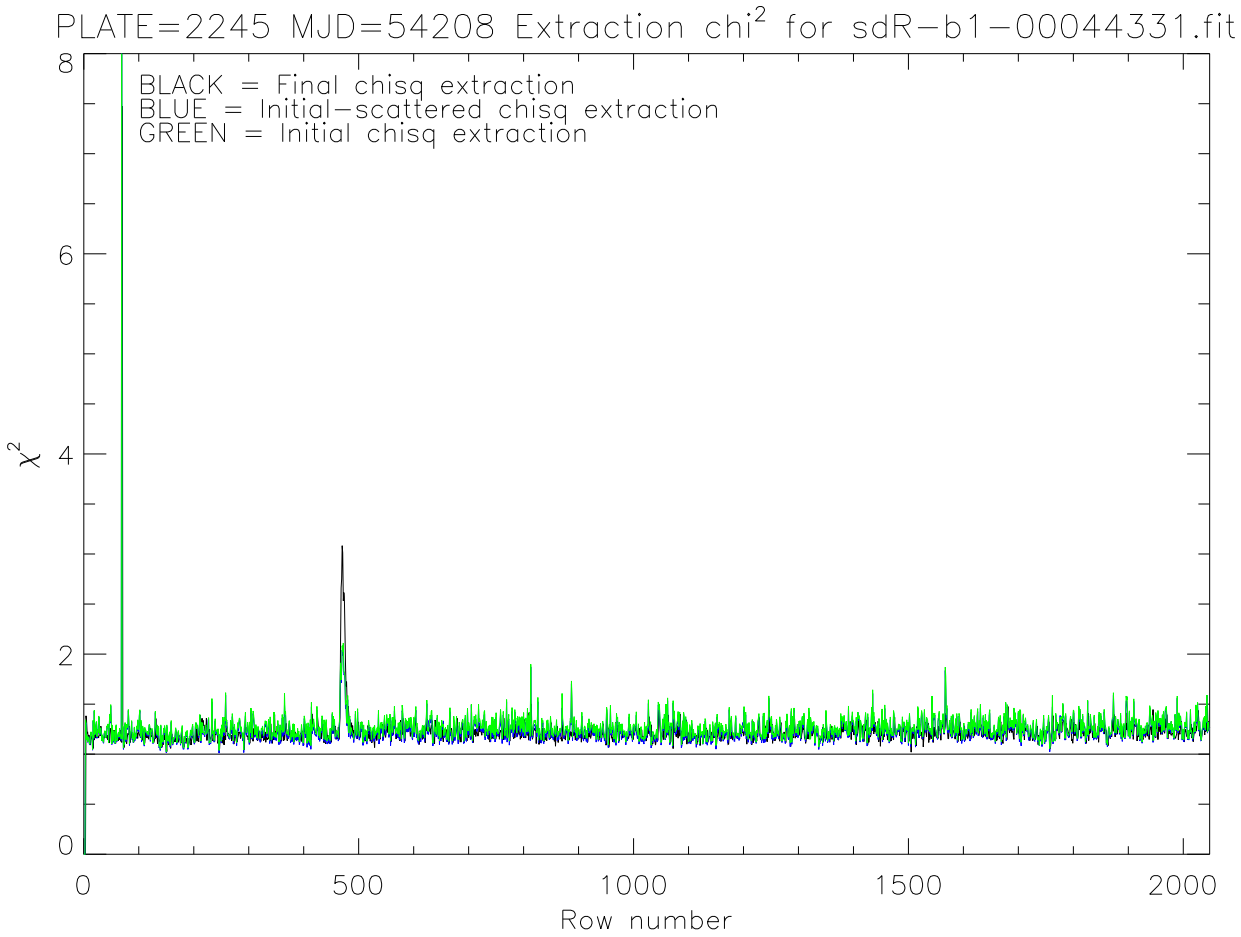
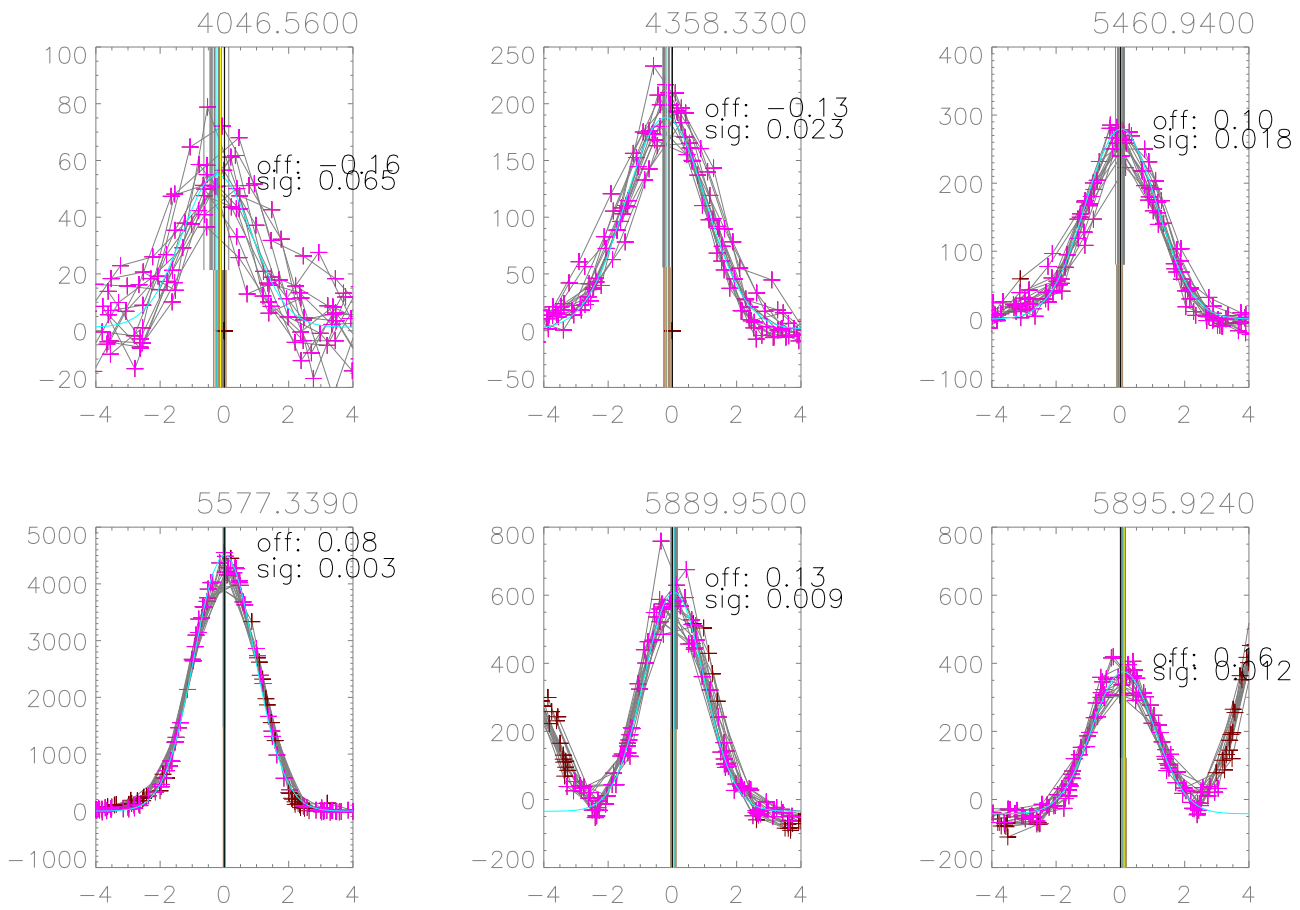
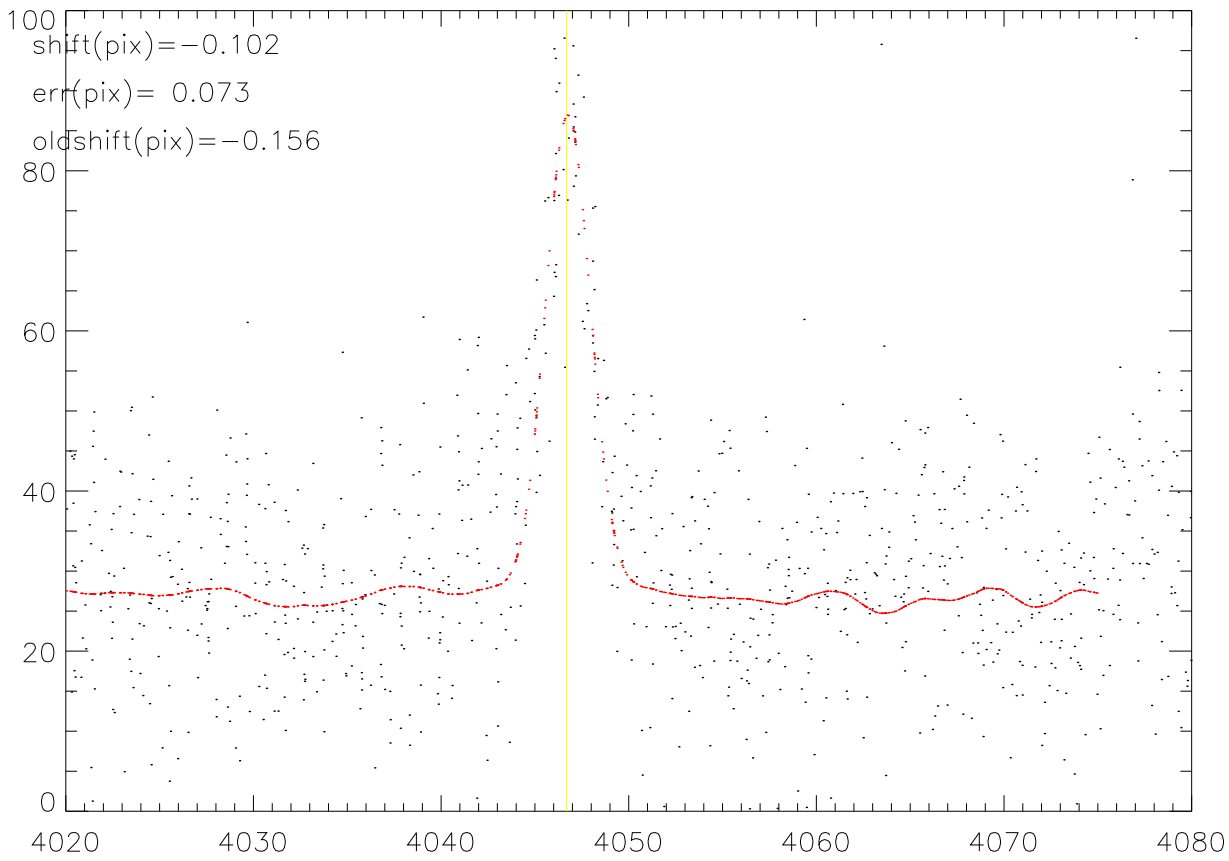
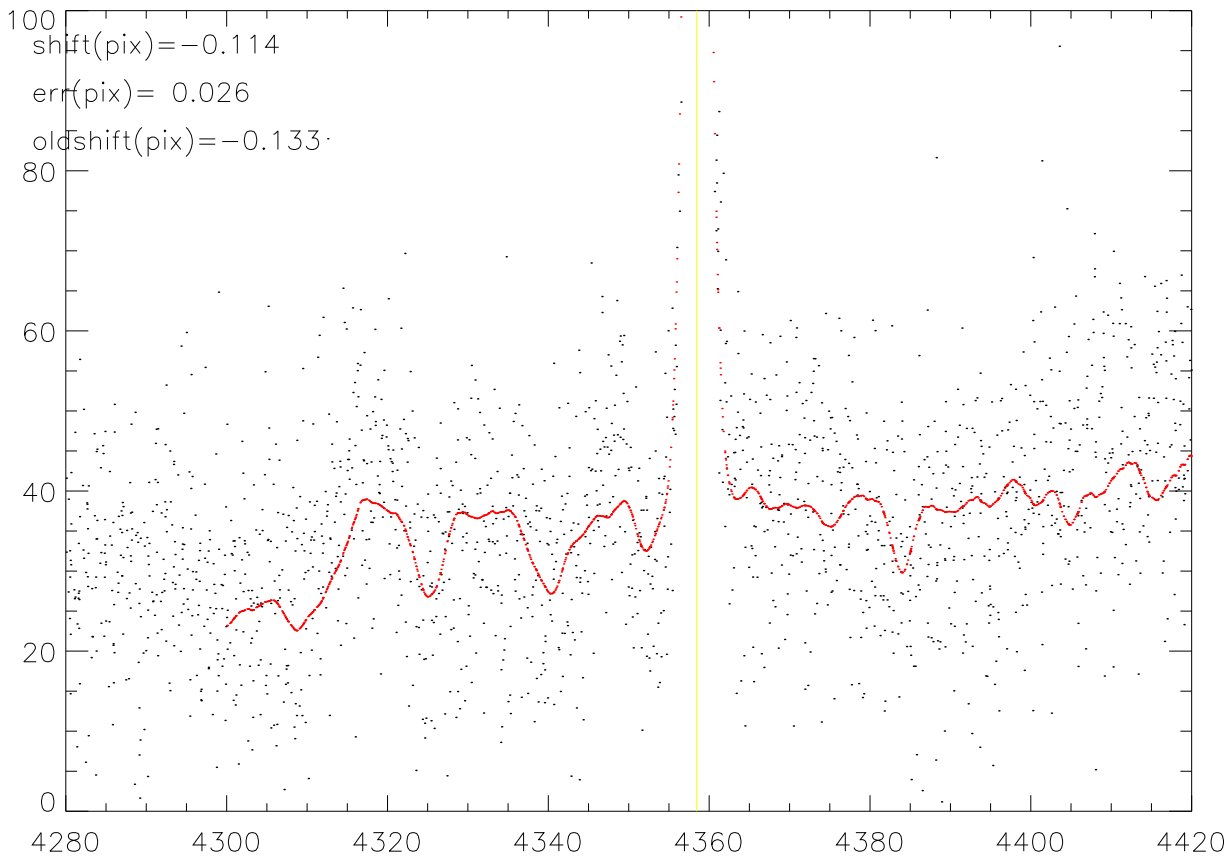

PLATE=2245 MJD=54208 Scattered Light on sdR-b1-00044331.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.7
6.2
7.6
9.1

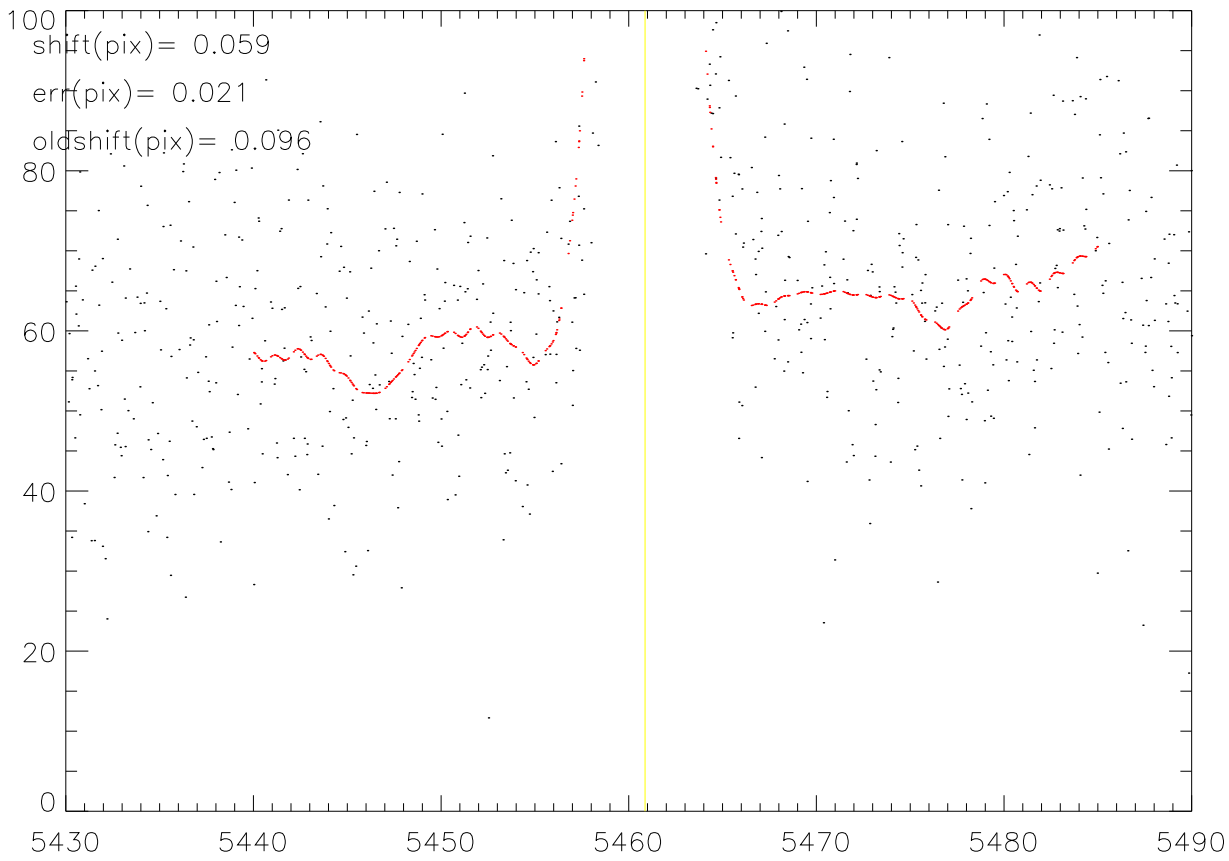

PLATE=2245 MJD=54208 Scattered Light on sdR-b1-00044331.fit
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 5.289
Max value = 7.553
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 20:54:29 2008

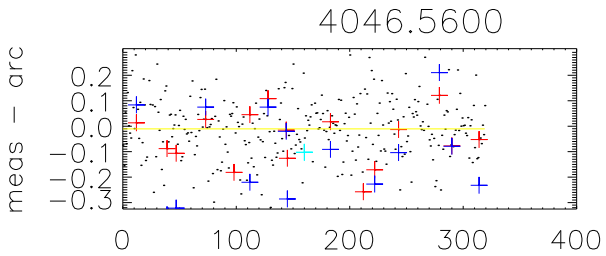

PLATE=2245 MJD=54208 Extraction chi^2 for sdR−b1−00044331.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

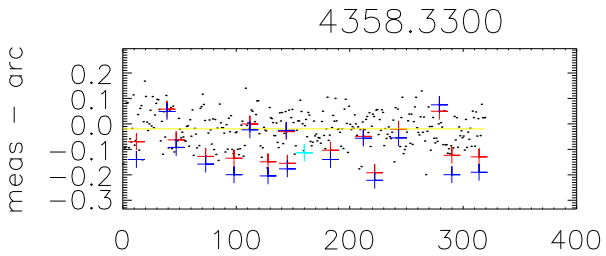

4046.5600
off: −0.16
sig: 0.065
4358.3300
off: −0.13
sig: 0.023
5460.9400
off: 0.10
sig: 0.018
5577.3390
off: 0.08
sig: 0.003
5889.9500
off: 0.13
sig: 0.009
5895.9240
off: 0.16
sig: 0.012

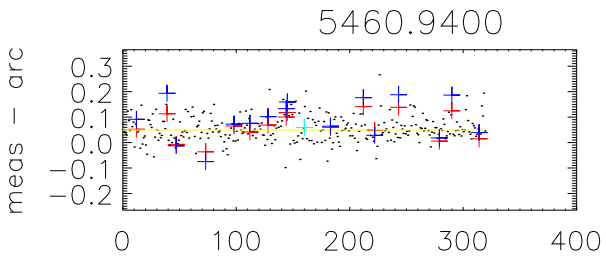

shift(pix)=−0.102
err(pix)= 0.073
oldshift(pix)=−0.156
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

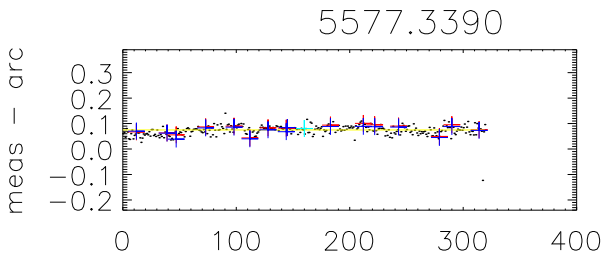

shift(pix)=−0.114
err(pix)= 0.026
oldshift(pix)=−0.133
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

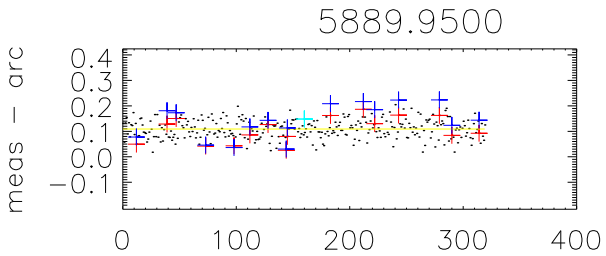

shift(pix)= 0.059
err(pix)= 0.021
oldshift(pix)= 0.096
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

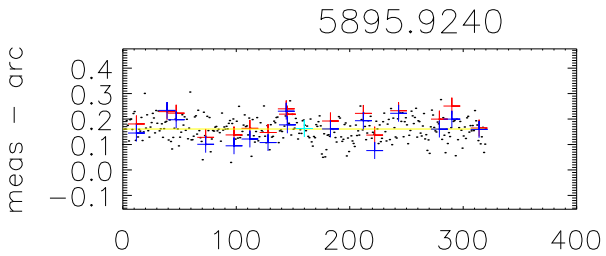

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

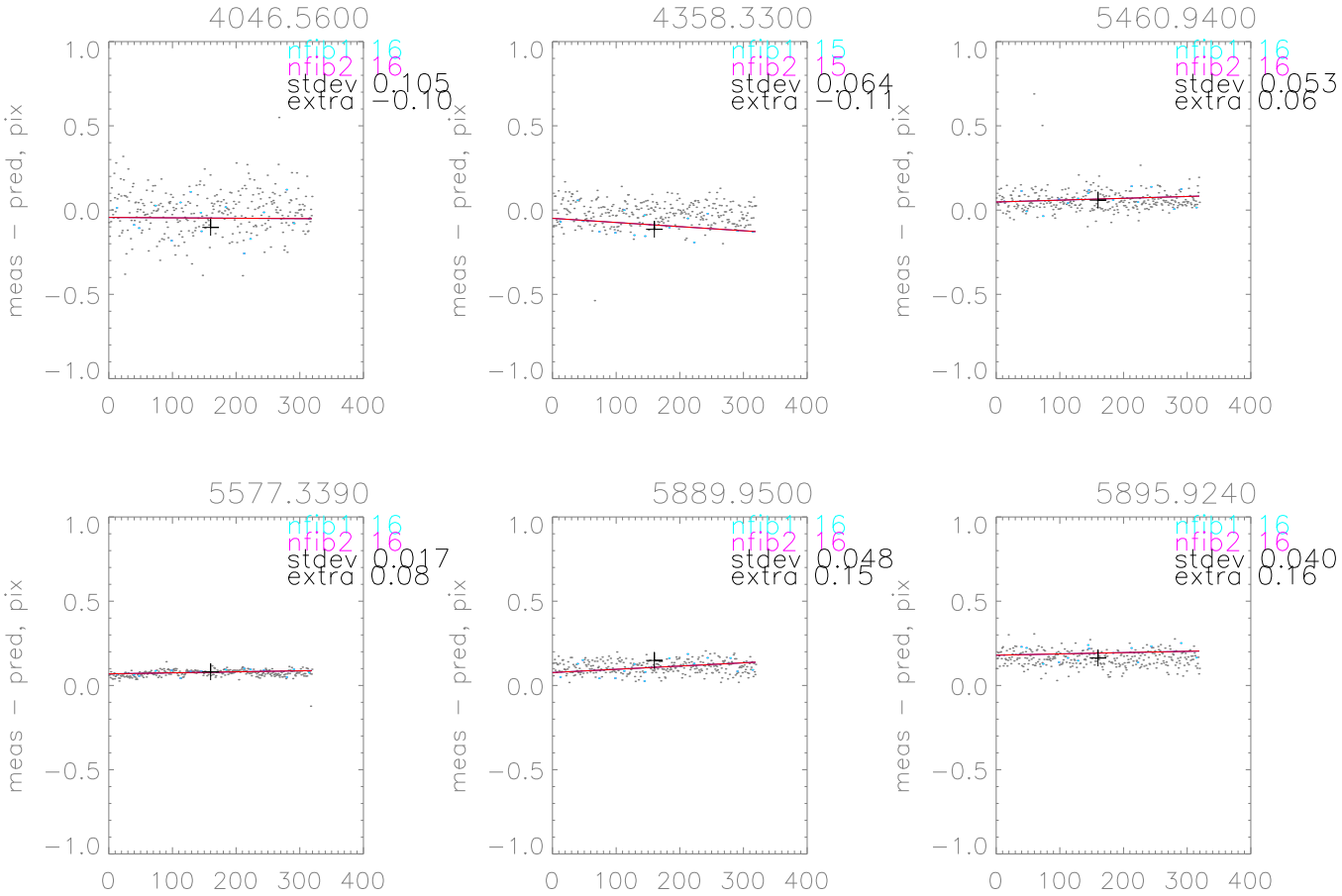

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

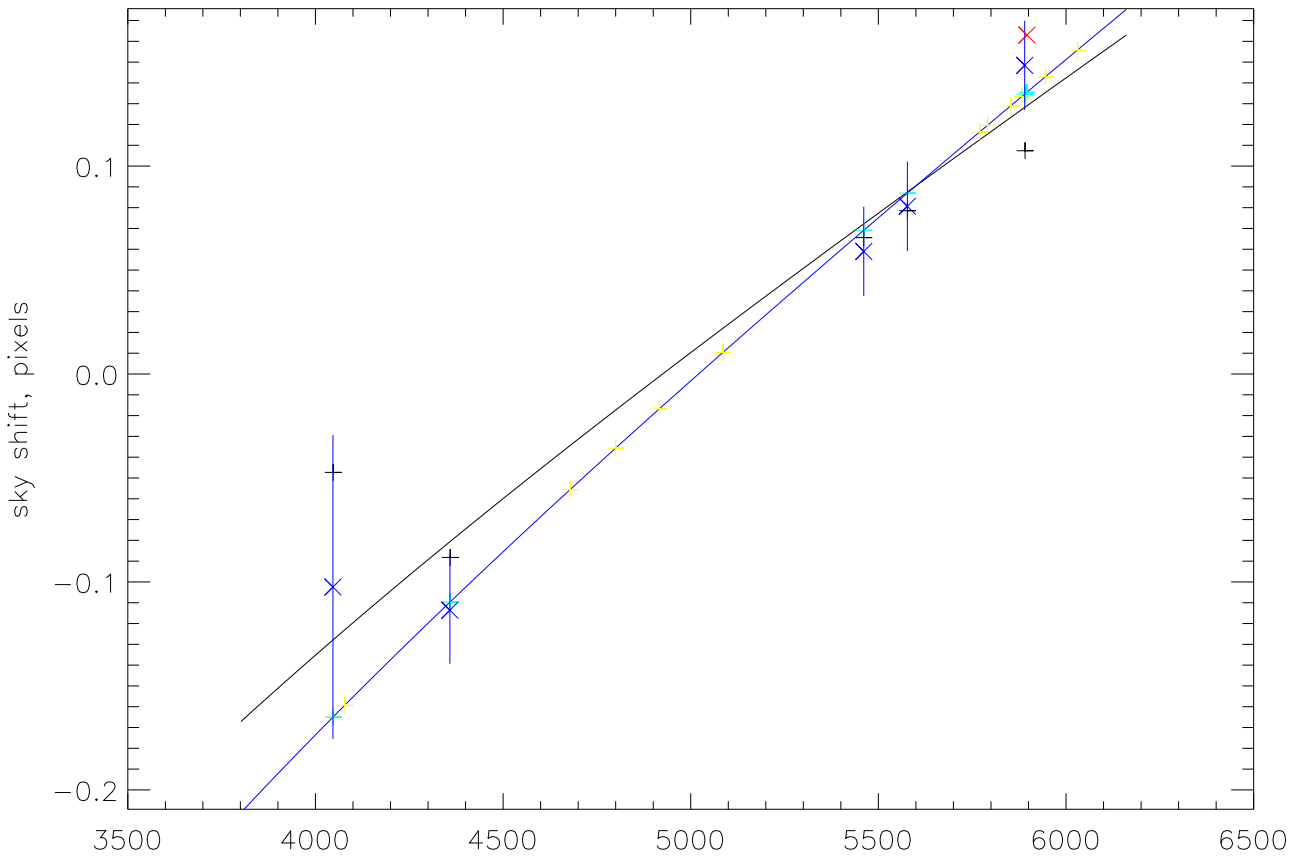

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

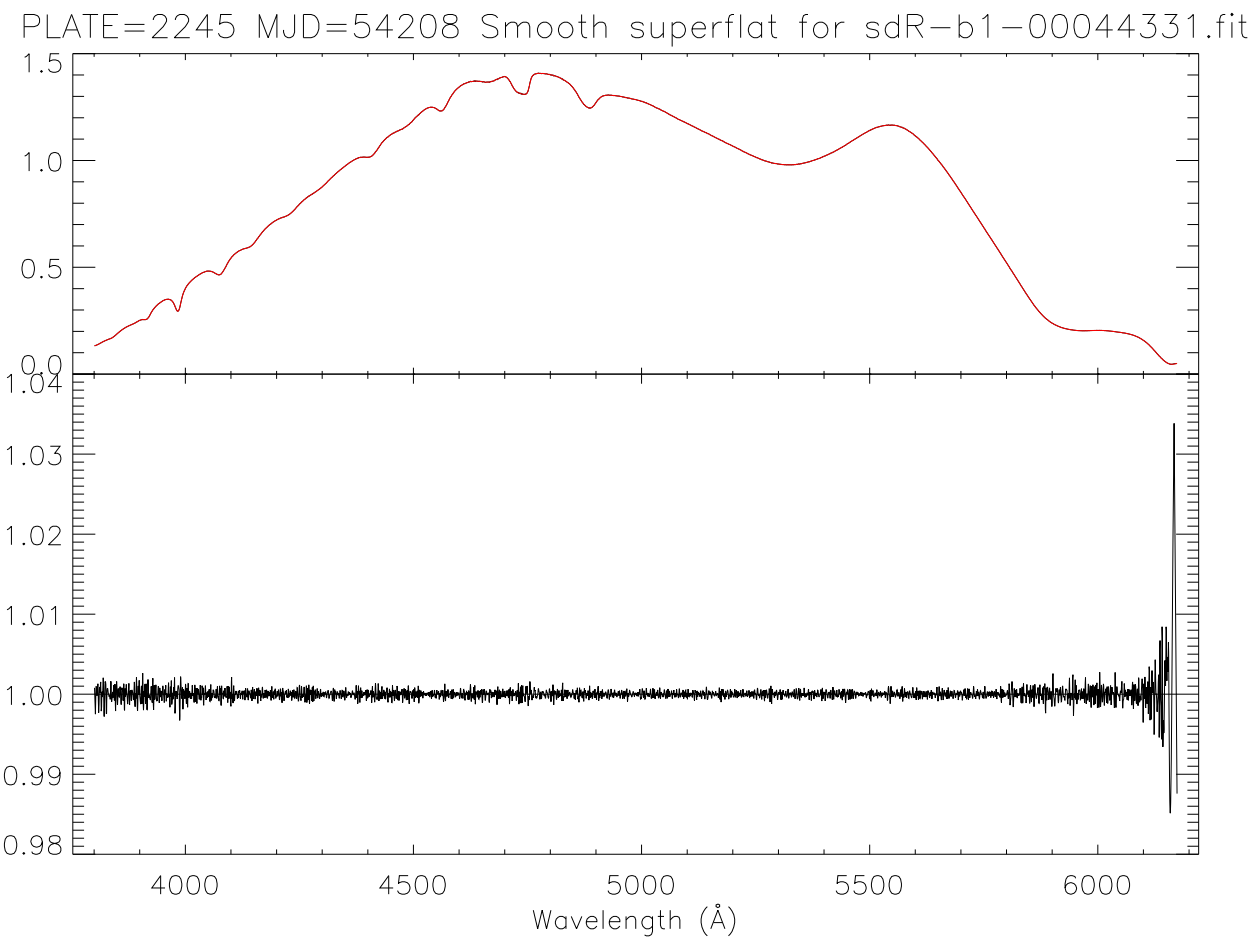

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

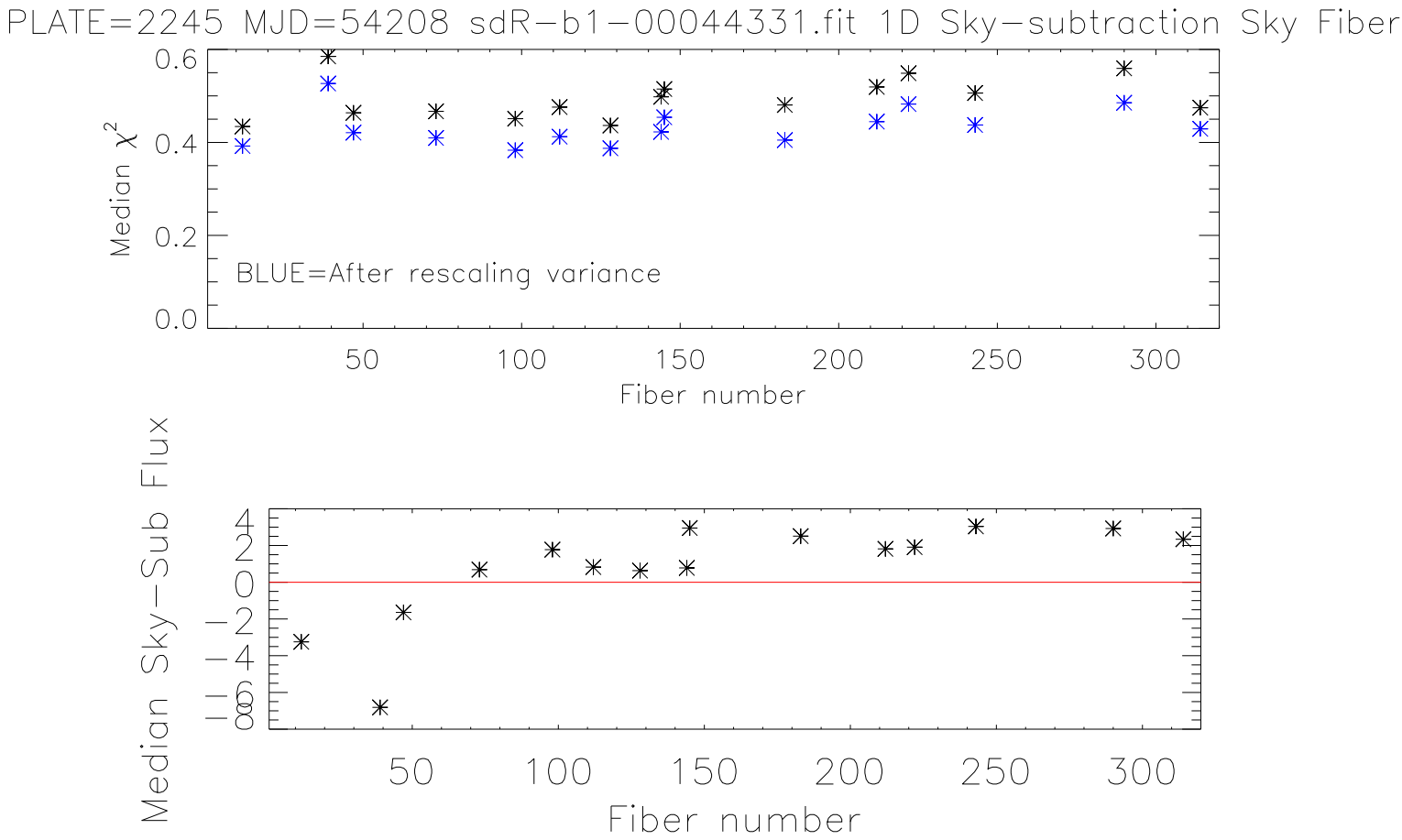

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

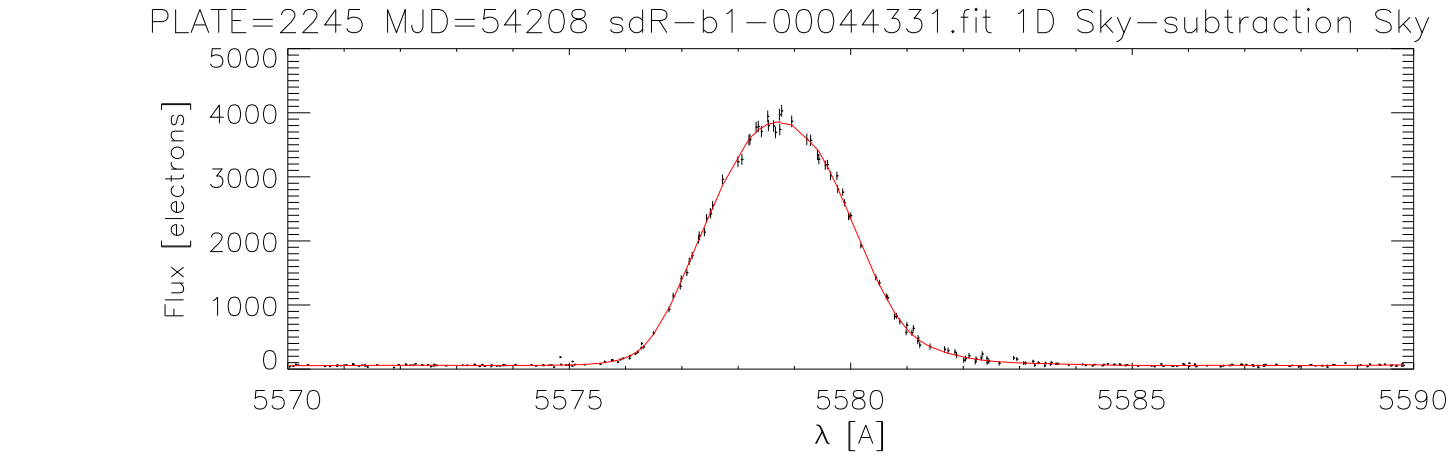

4046.5600
nfib1 16
nfib2 16
stdev 0.105
extra −0.10
4358.3300
nfib1 15
nfib2 15
stdev 0.064
extra −0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.053
extra 0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.048
extra 0.15
5895.9240
nfib1 16
nfib2 16
stdev 0.040
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

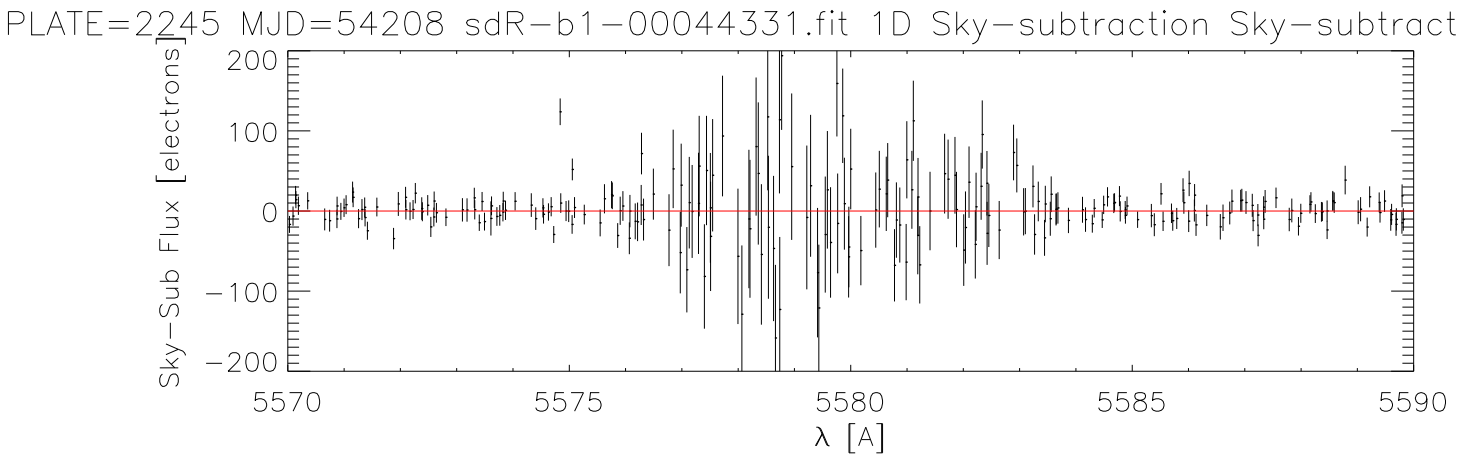

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

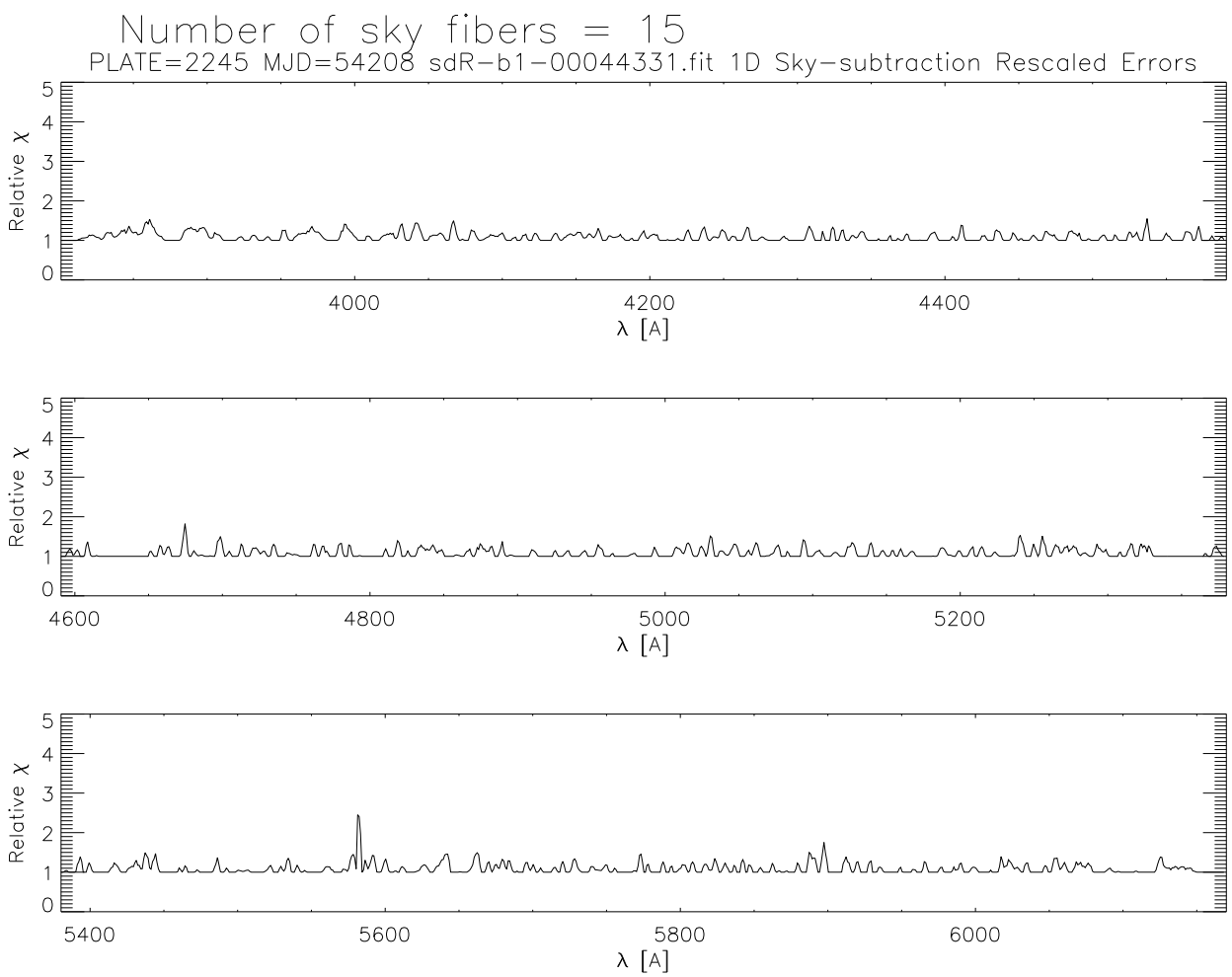
es= −0.0001

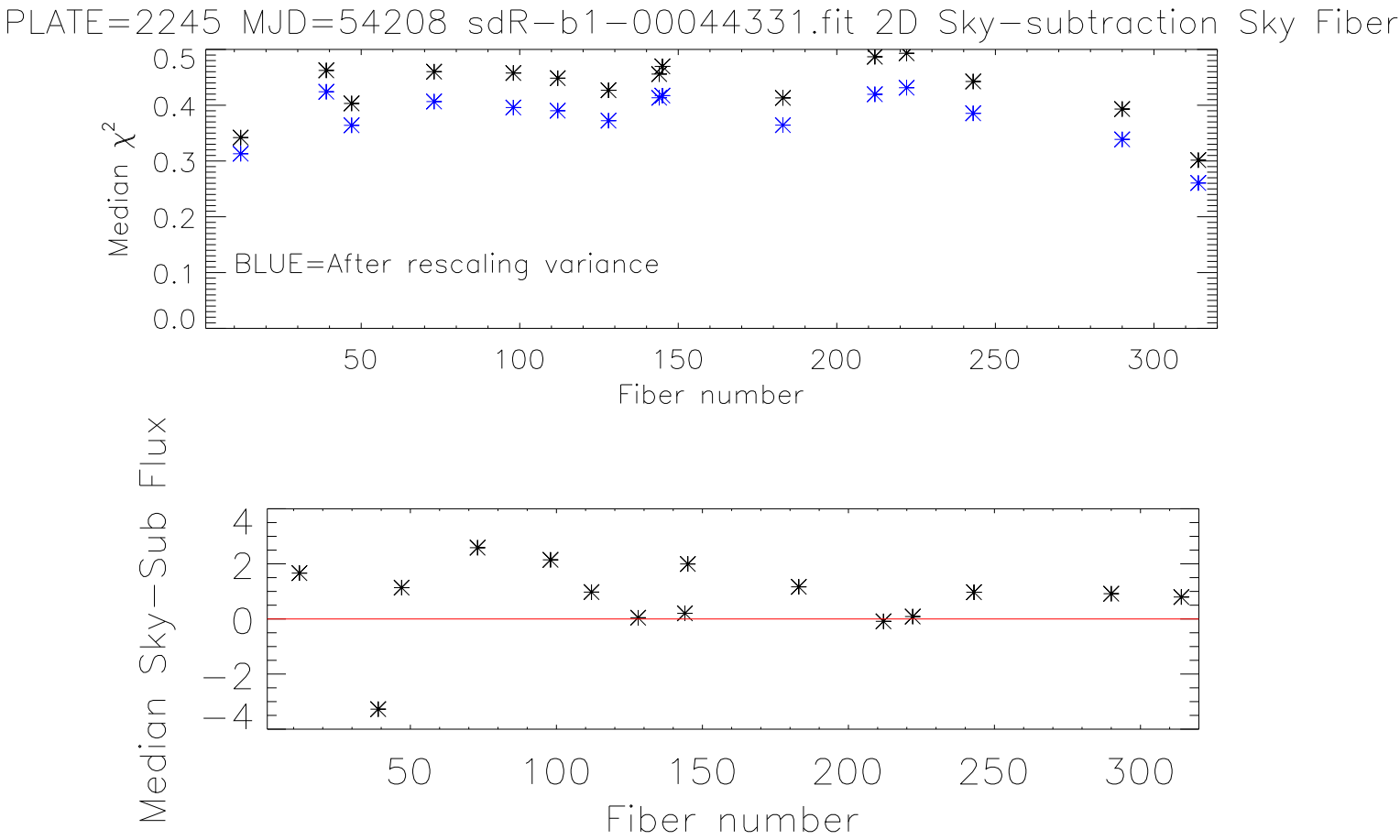

PLATE=2245 MJD=54208 Smooth superflat for sdR−b1−00044331.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

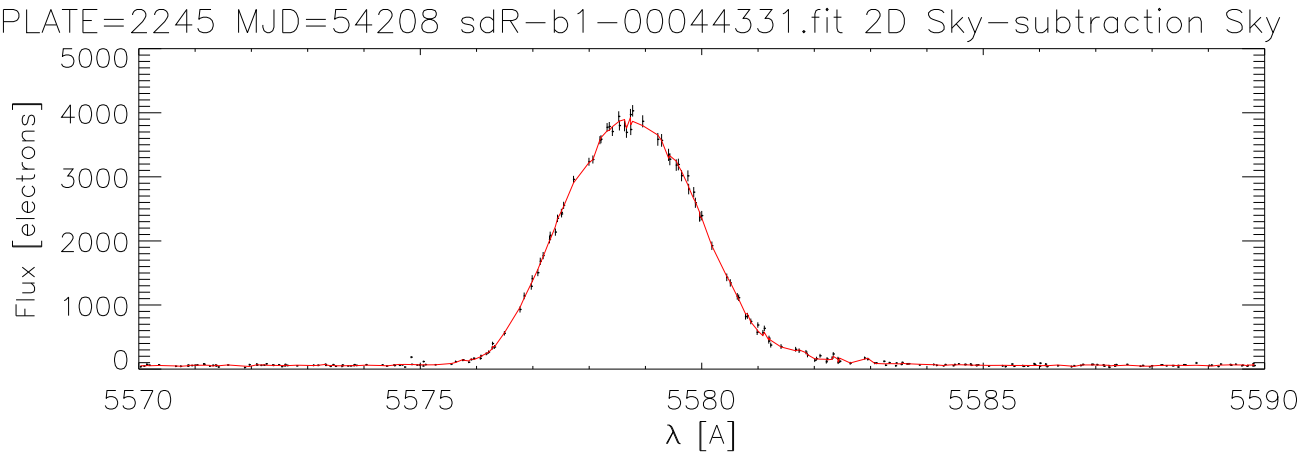

PLATE=2245 MJD=54208 sdR-b1-00044331.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

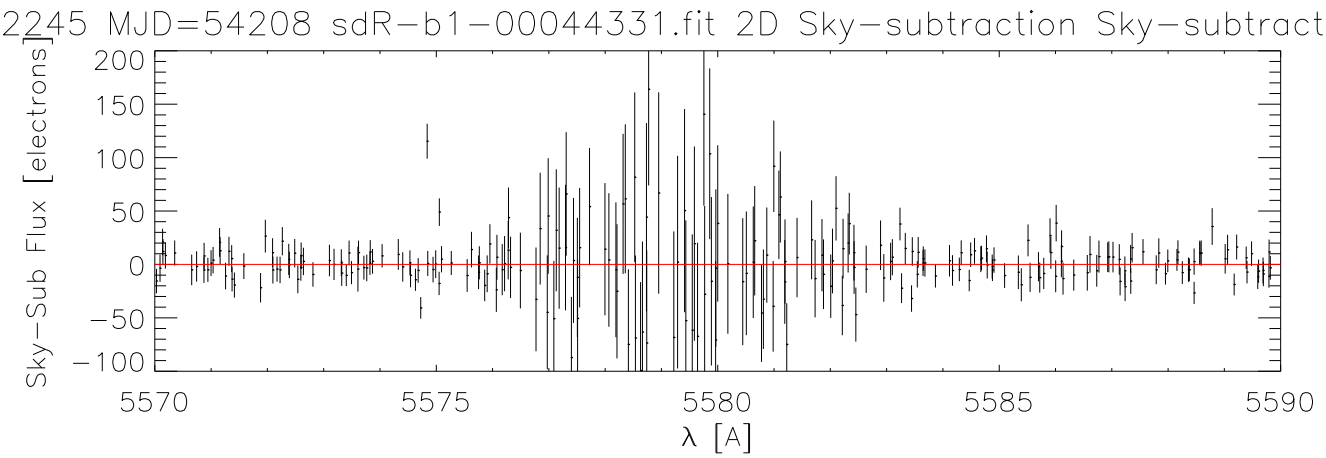

PLATE=2245 MJD=54208 sdR-b1-00044331.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

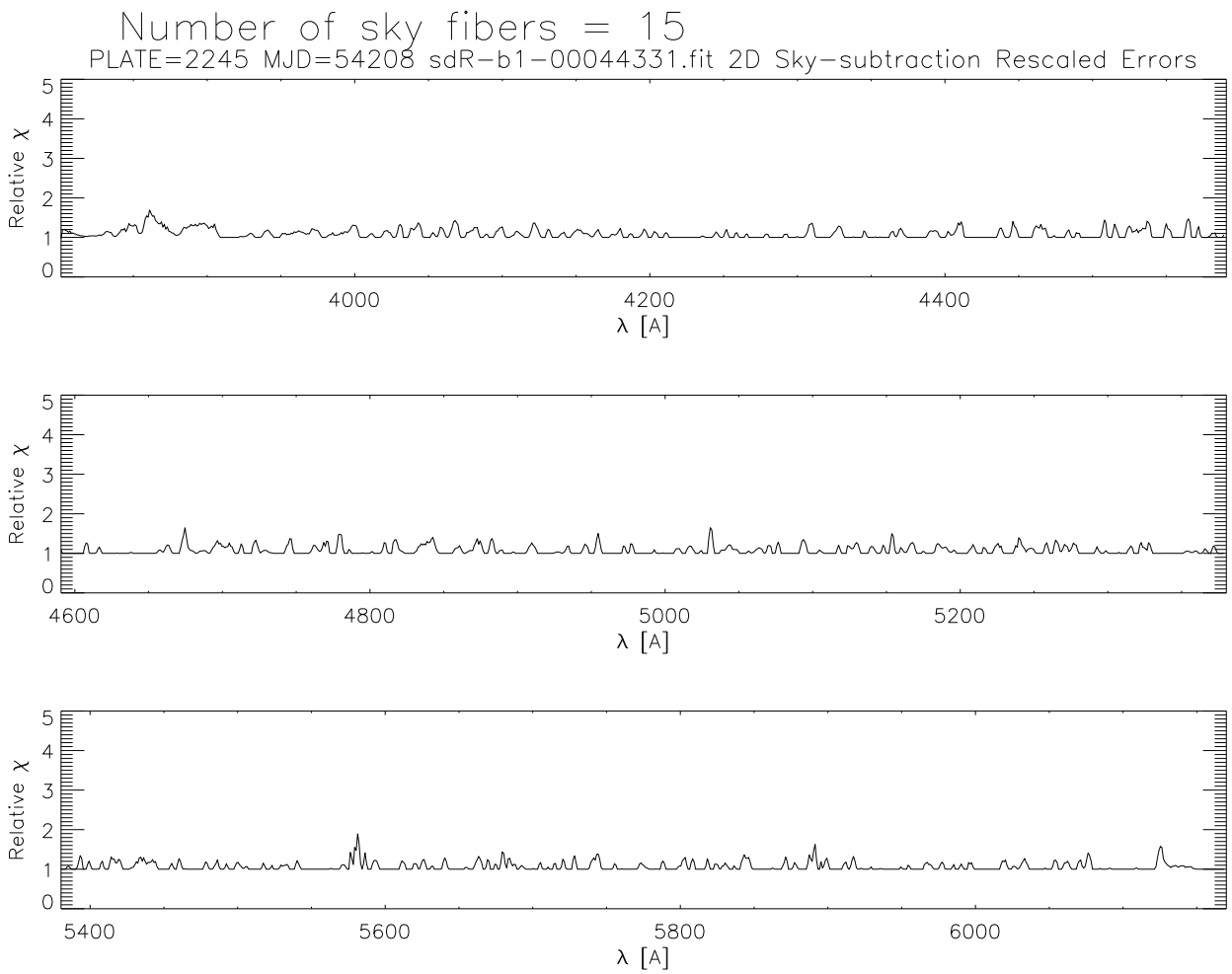

PLATE=2245 MJD=54208 sdR-b1-00044331.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

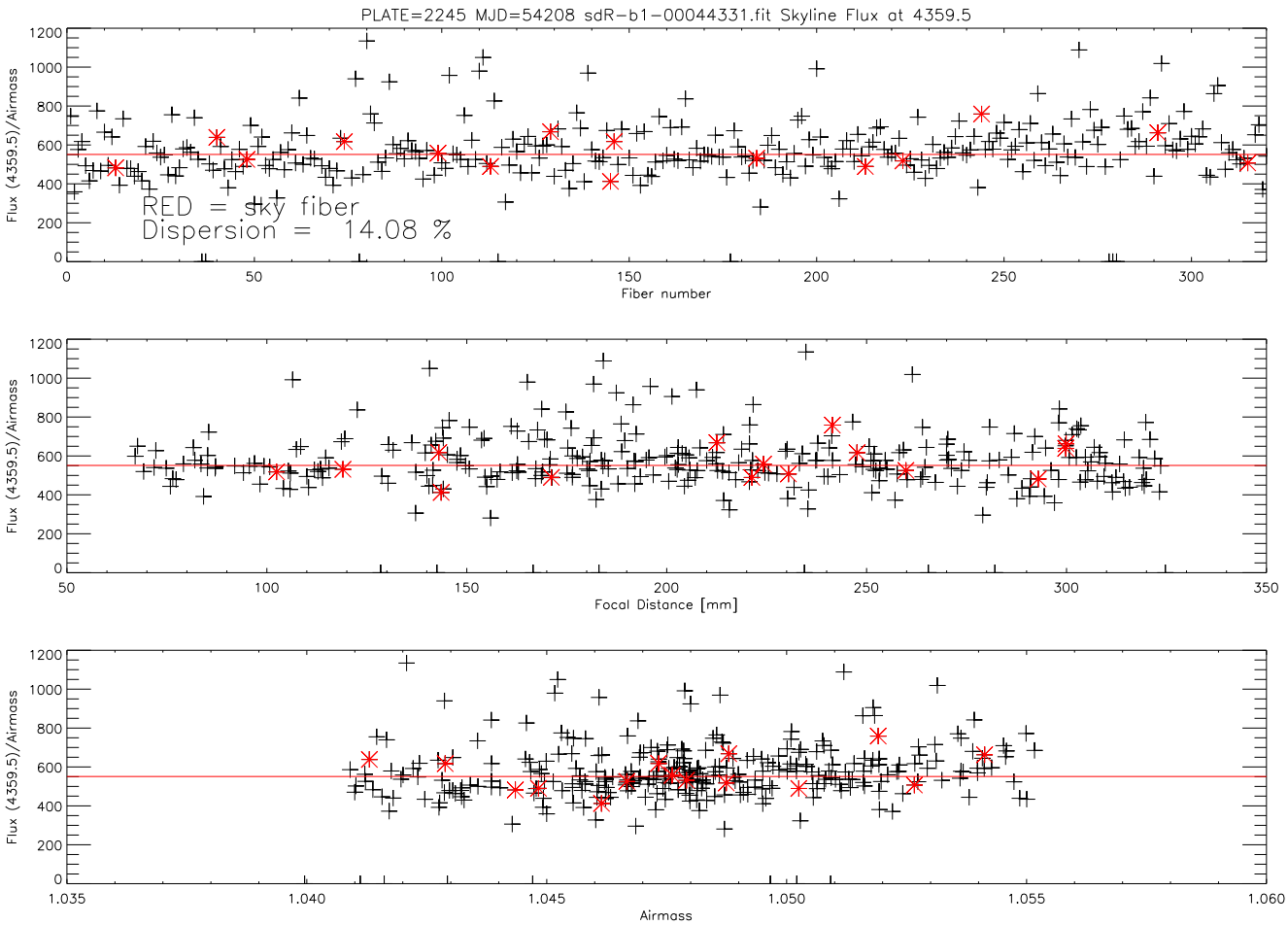

Number of sky fibers = 15
PLATE=2245 MJD=54208 sdR-b1-00044331.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

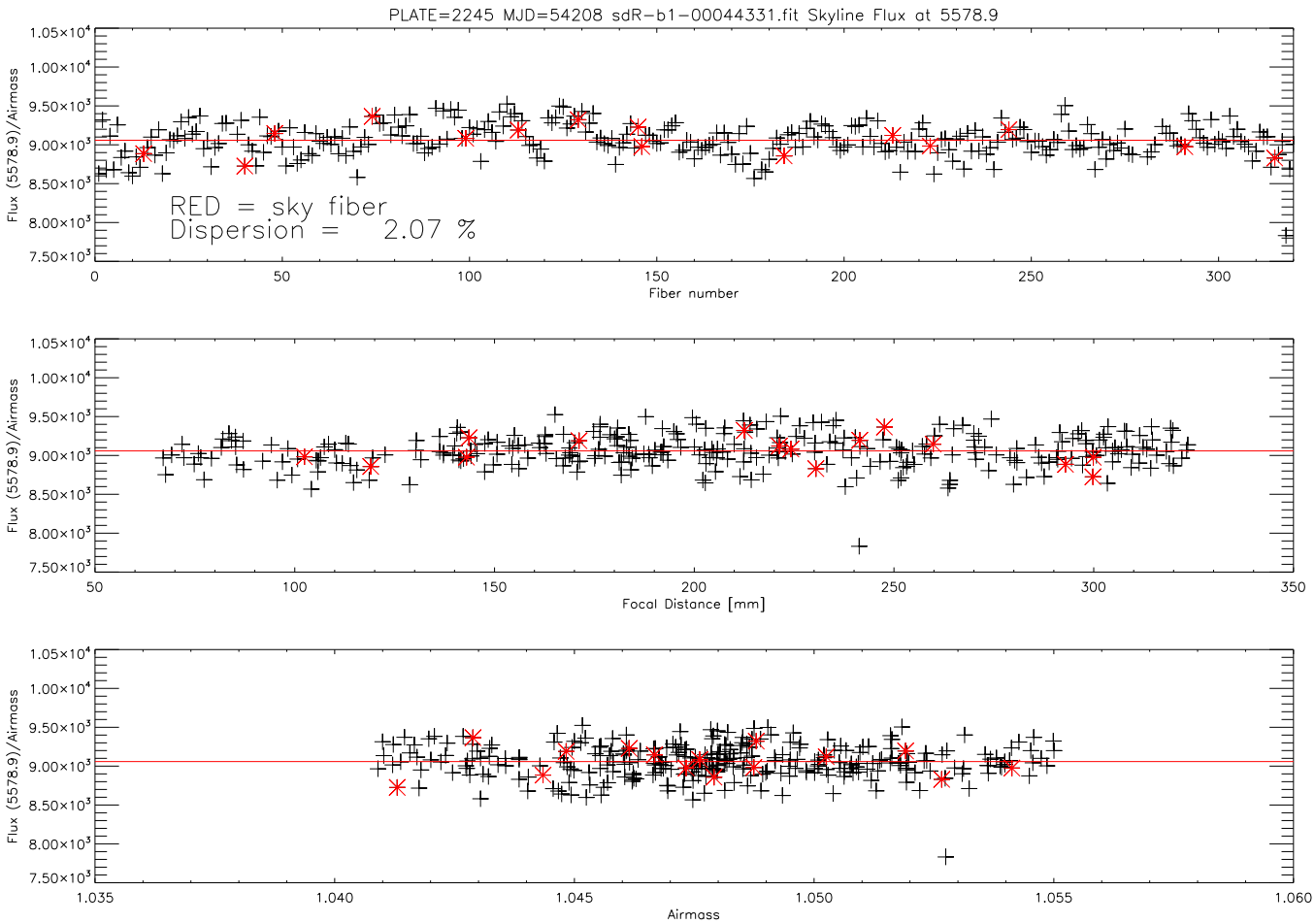

PLATE=2245 MJD=54208 sdR-b1-00044331.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

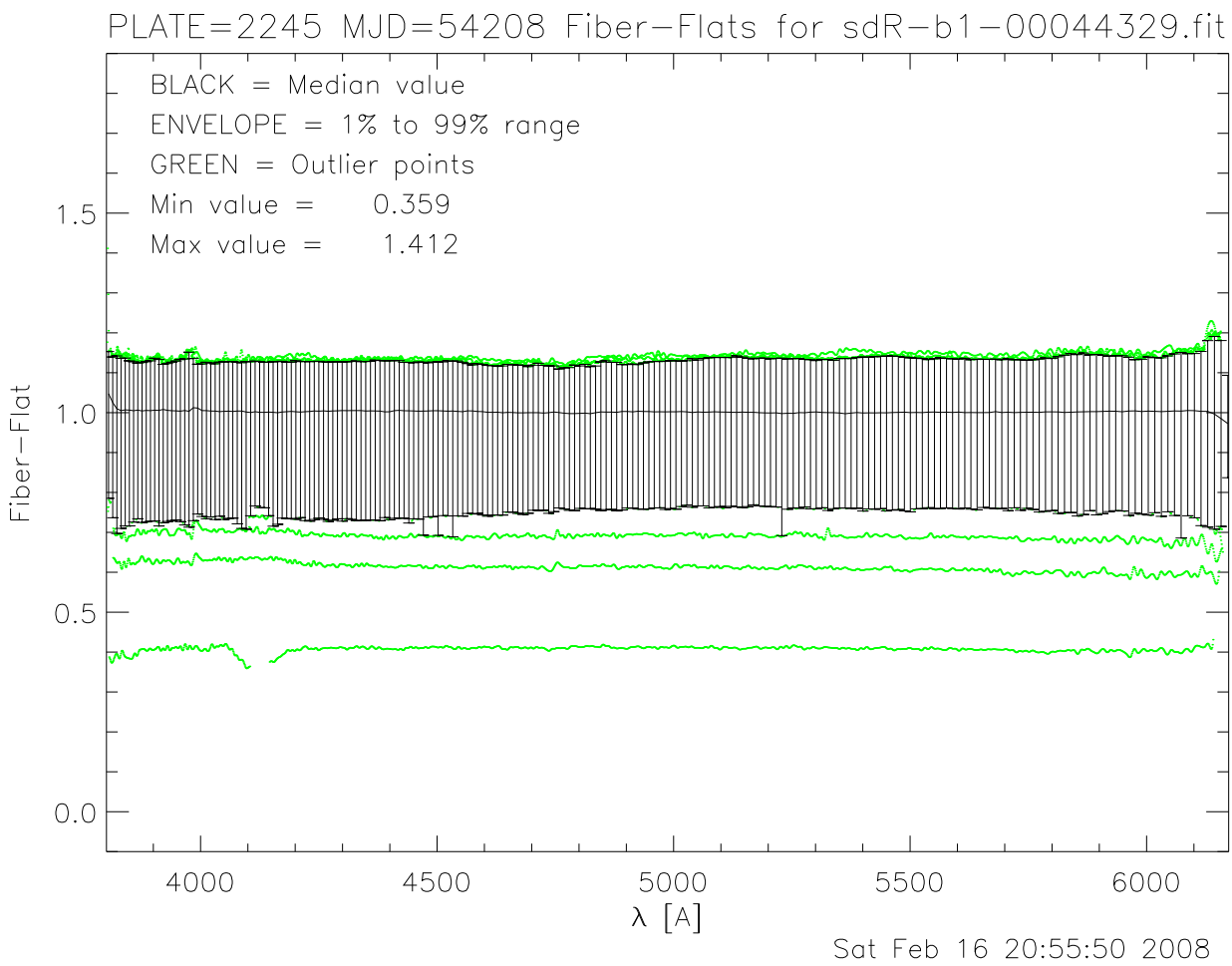

PLATE=2245 MJD=54208 sdR-b1-00044331.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

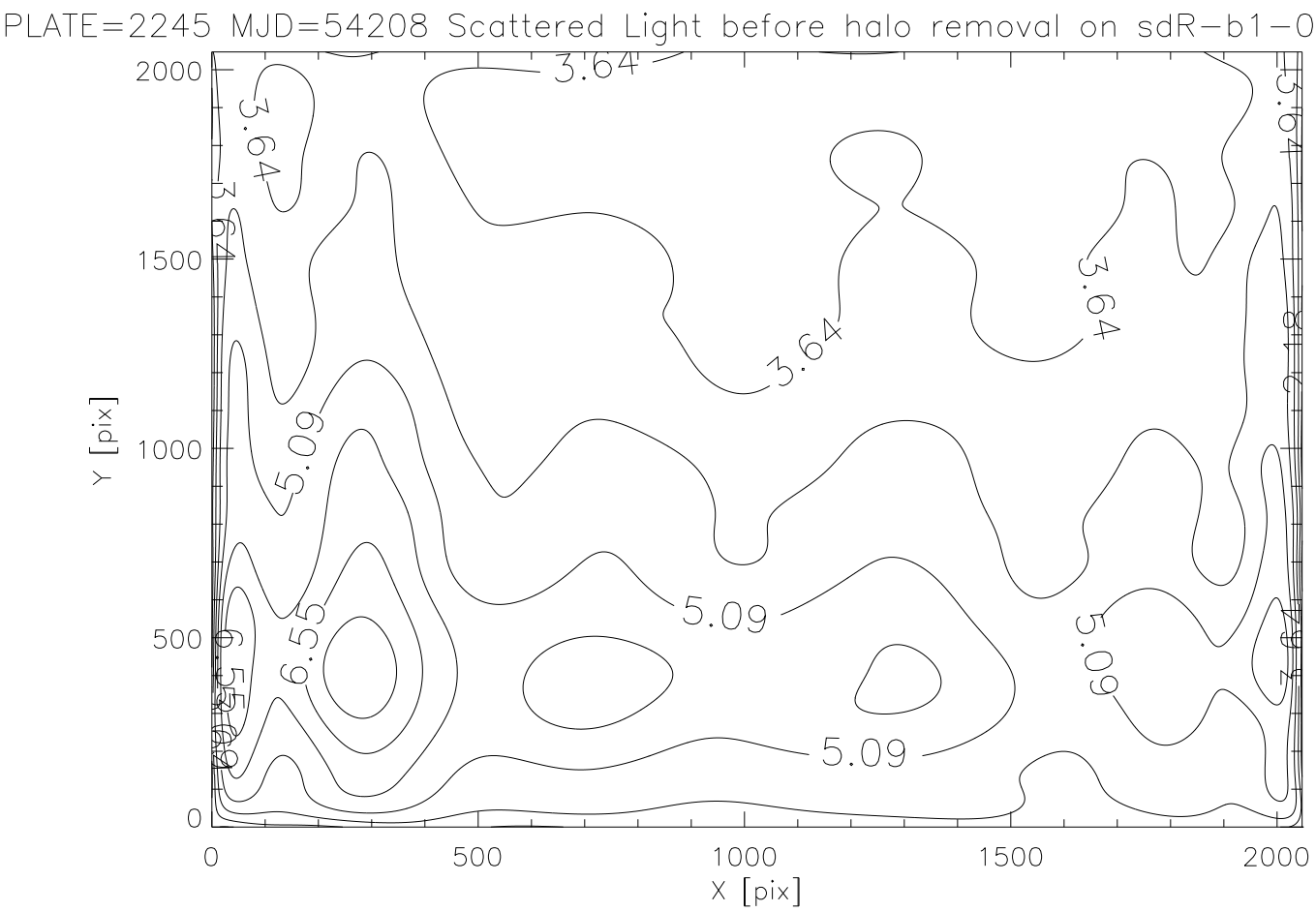

PLATE=2245 MJD=54208 sdR-b1-00044331.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

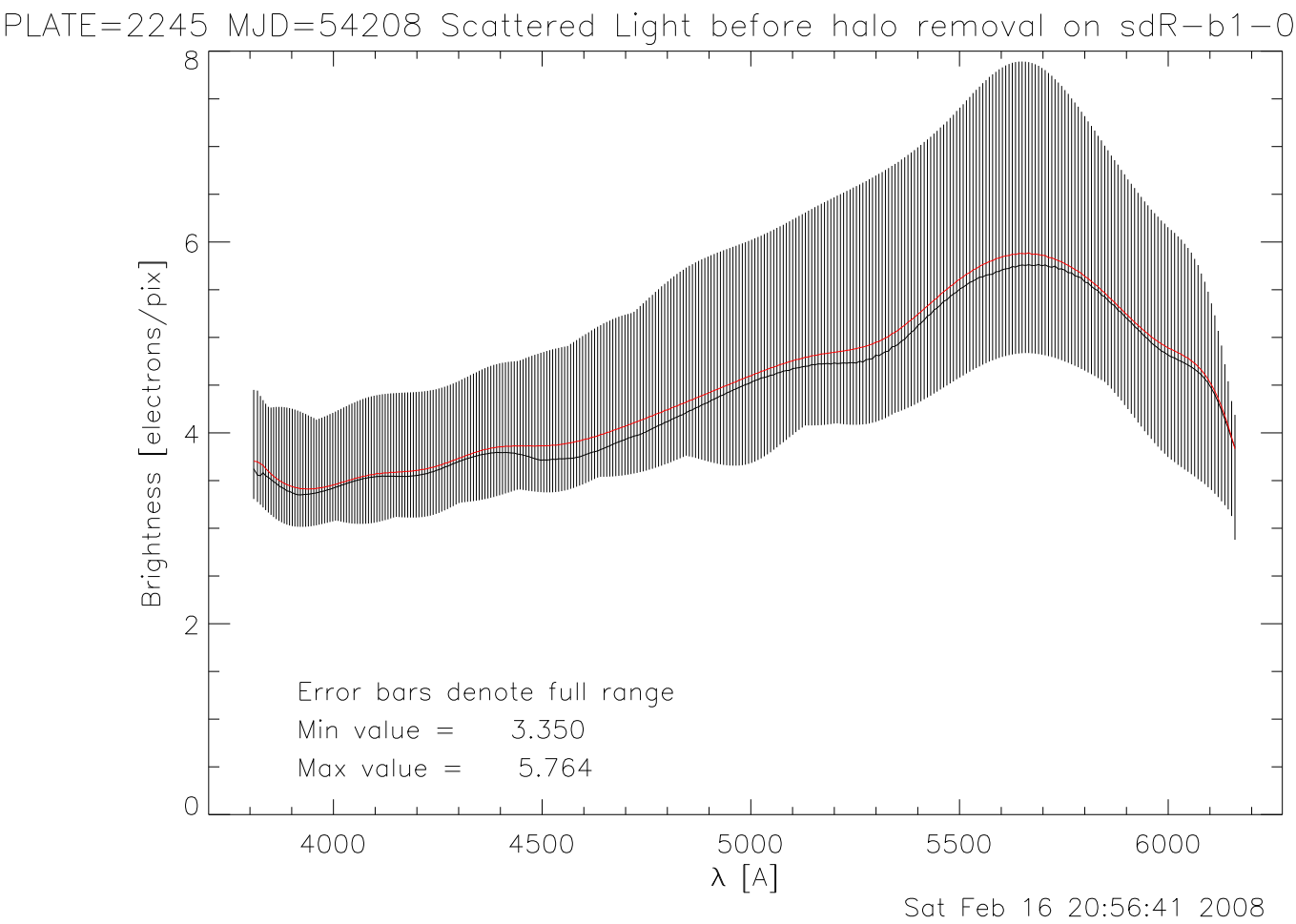

Number of sky fibers = 15
PLATE=2245 MJD=54208 sdR-b1-00044331.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

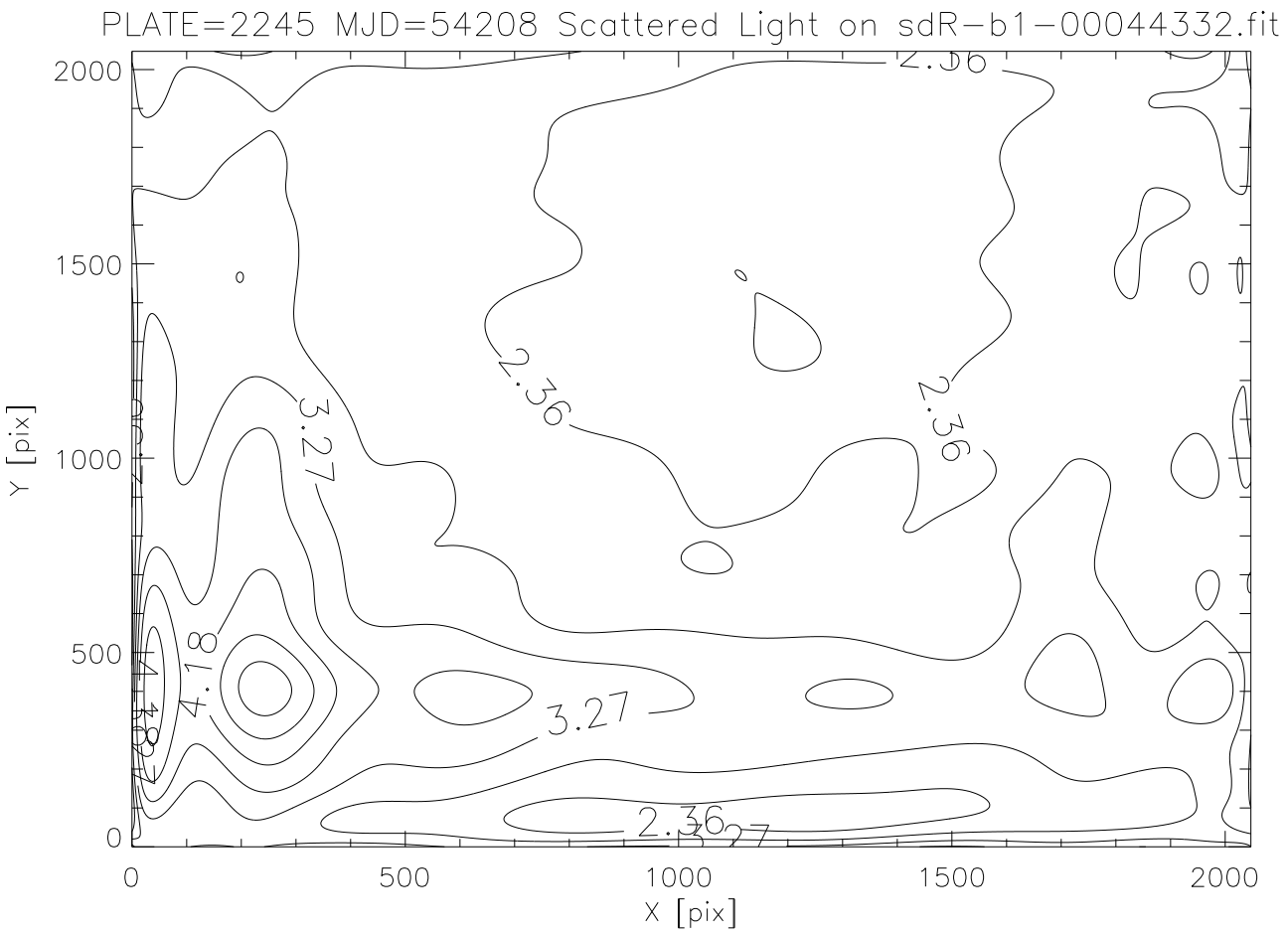

PLATE=2245 MJD=54208 sdR-b1-00044331.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.08 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

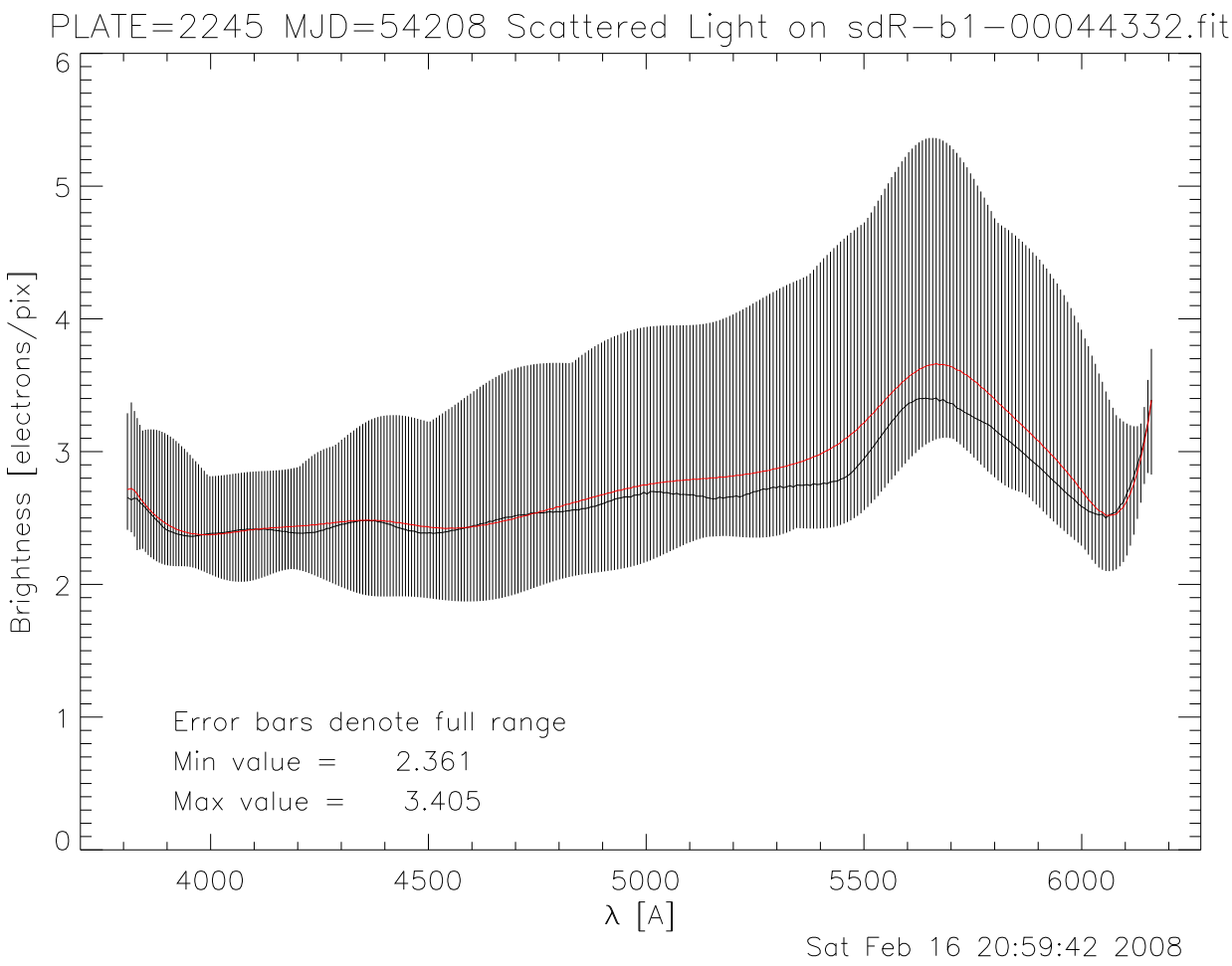

PLATE=2245 MJD=54208 sdR-b1-00044331.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.07 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

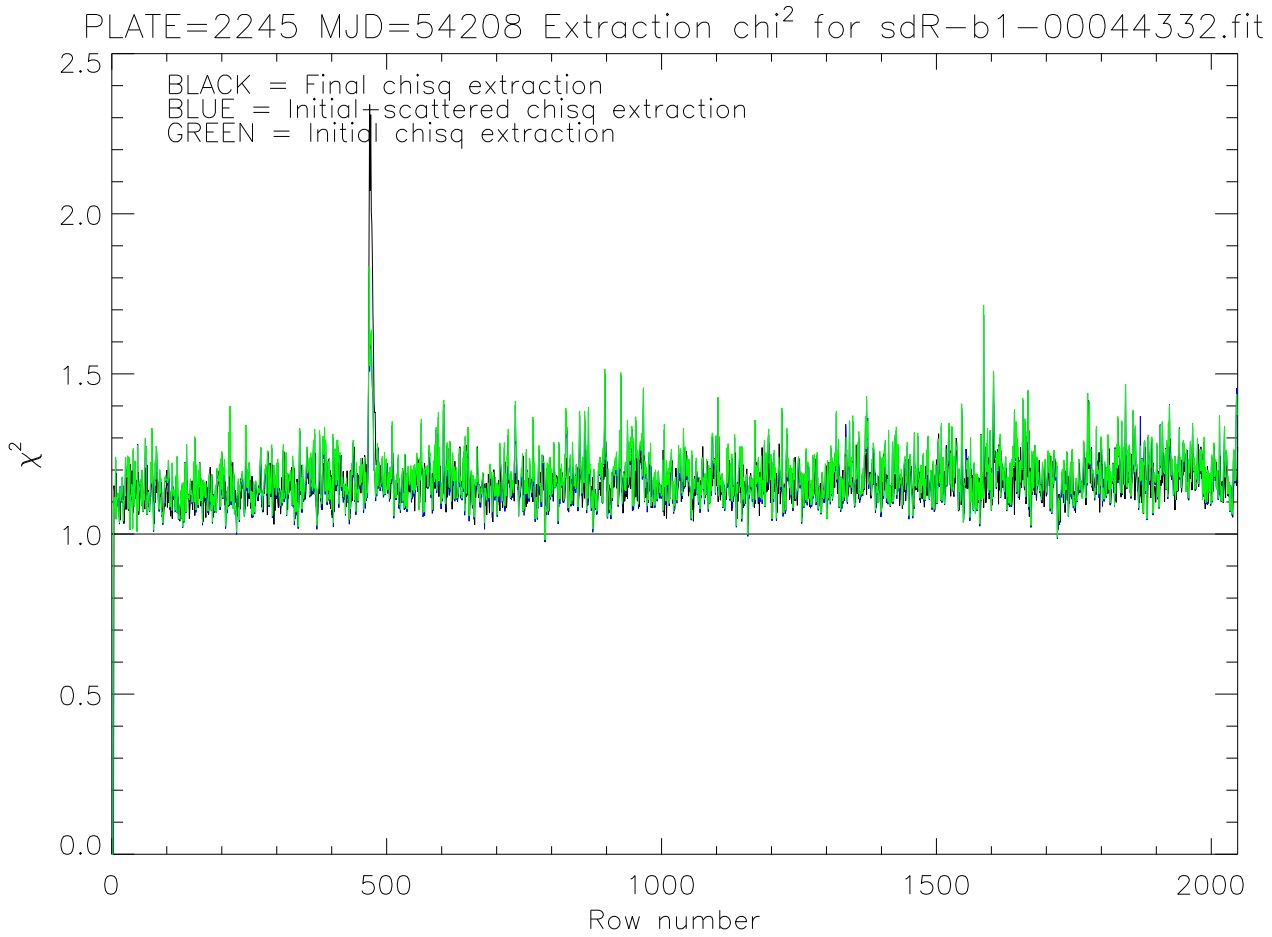

PLATE=2245 MJD=54208 Fiber-Flats for sdR-b1-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.359
Max value = 1.412
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 20:55:50 2008

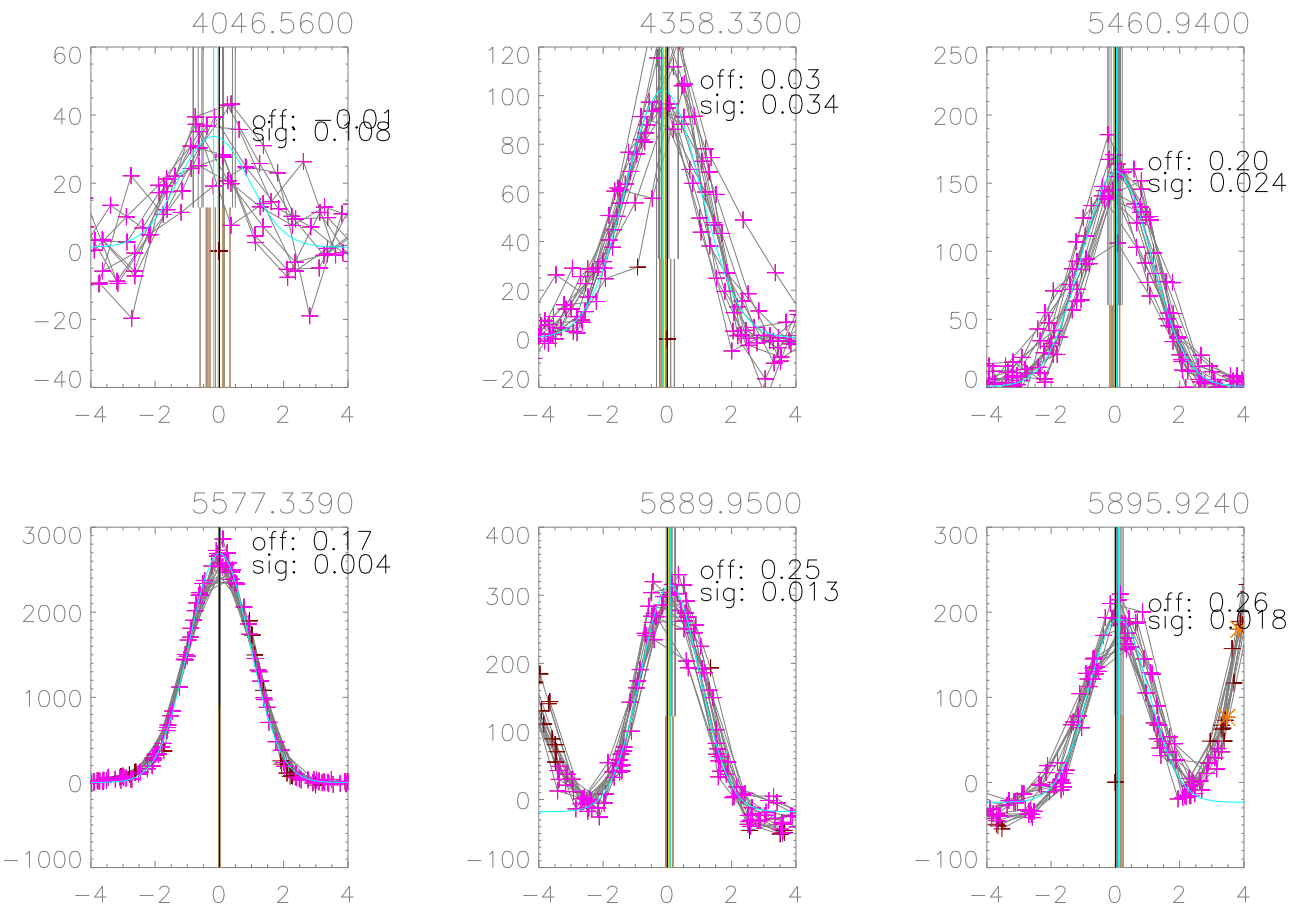

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b1-00044332.f
3.64
5.09
6.55
Y [pix]
X [pix]
0
500
1000
1500
2000

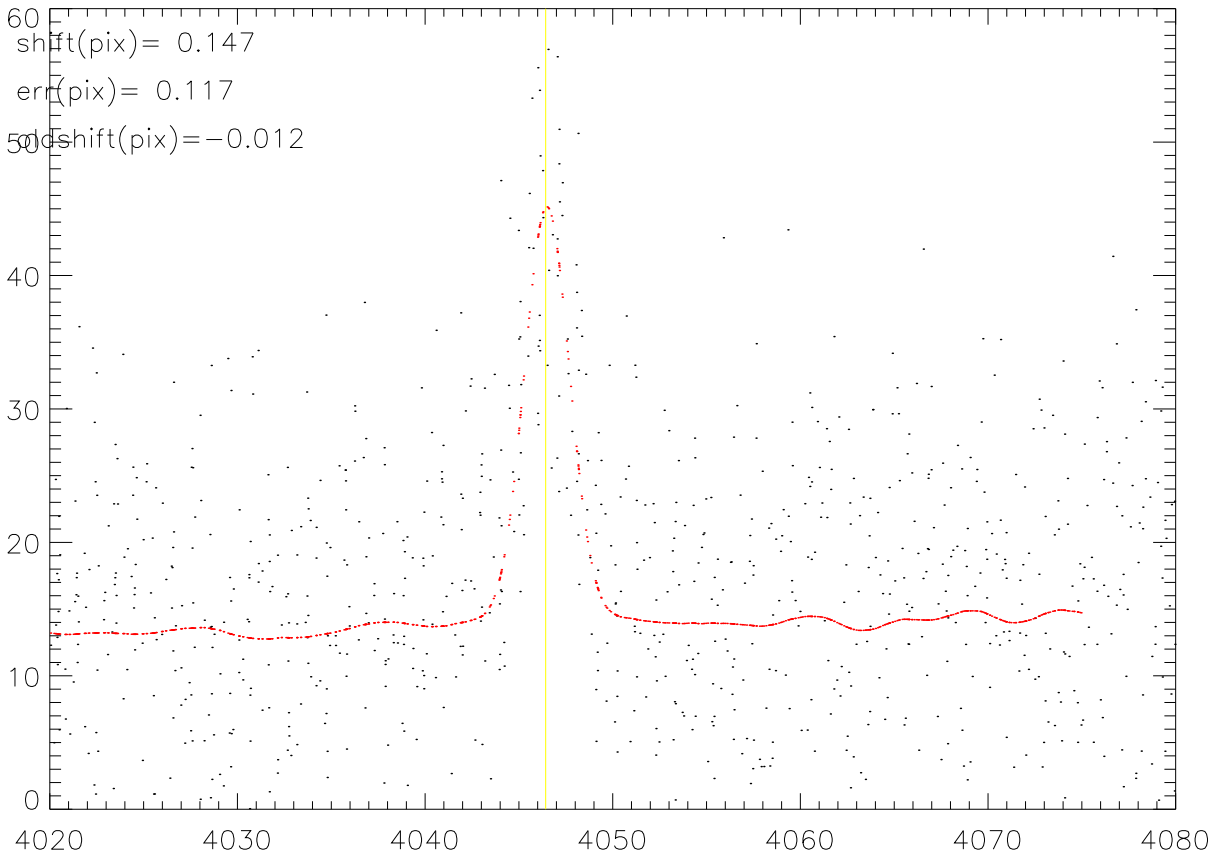

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b1-00044332.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.350
Max value = 5.764
Sat Feb 16 20:56:41 2008

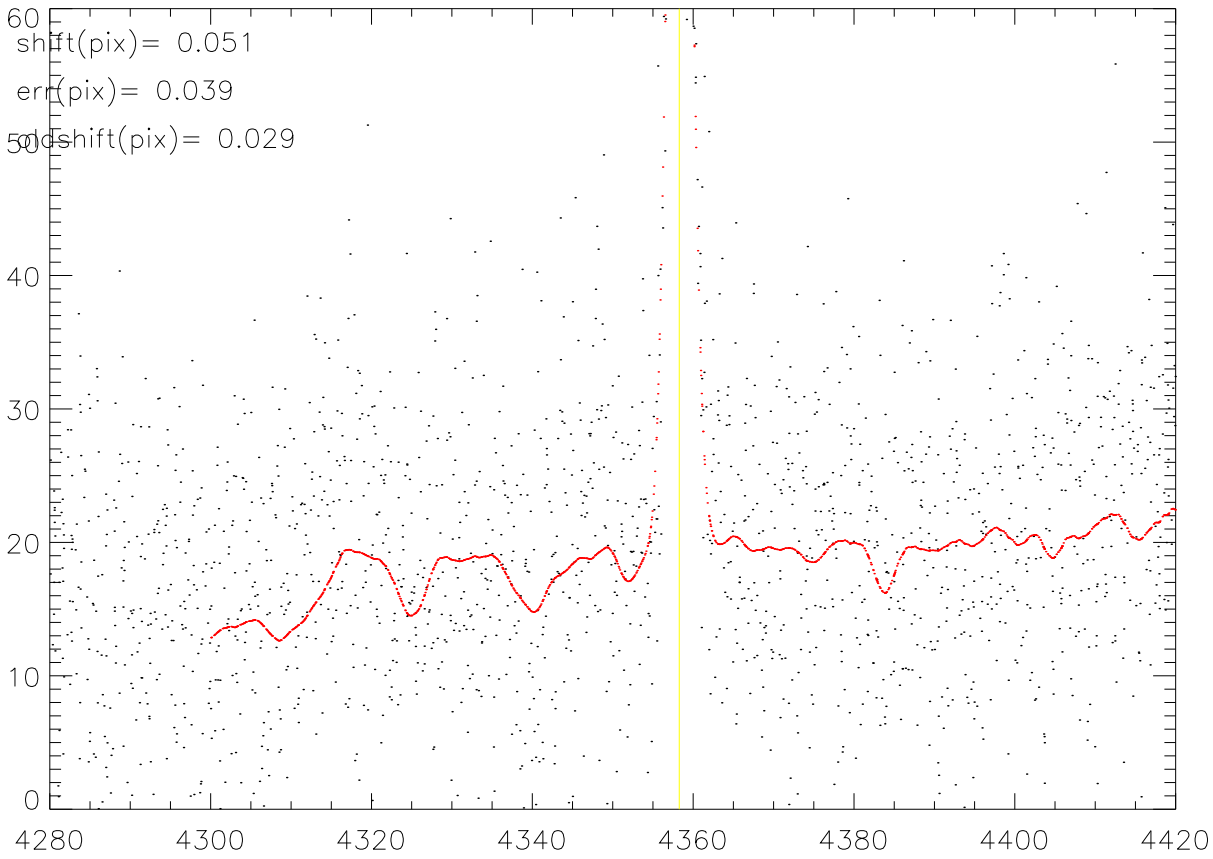

PLATE=2245 MJD=54208 Scattered Light on sdR-b1-00044332.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.36
3.27
4.18
2.36
3.27
2.36
2.36
3.27
4.18

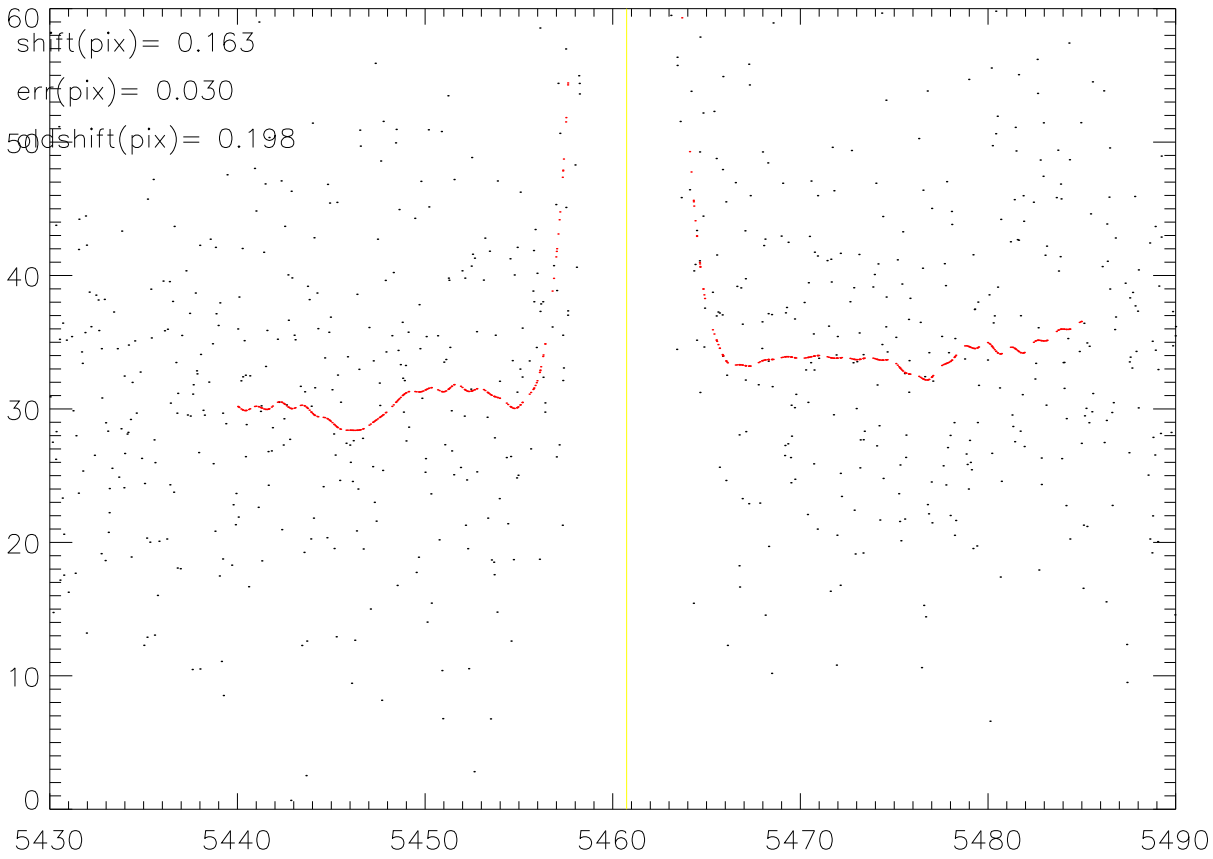

PLATE=2245 MJD=54208 Scattered Light on sdR-b1-00044332.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.361
Max value = 3.405
Sat Feb 16 20:59:42 2008

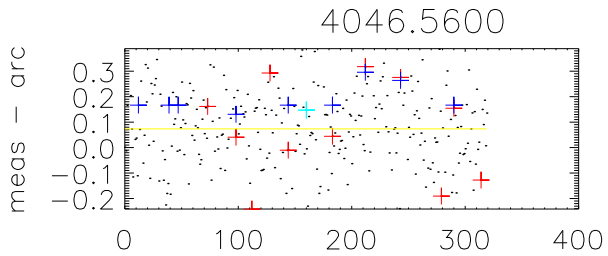

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-b1-00044332.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

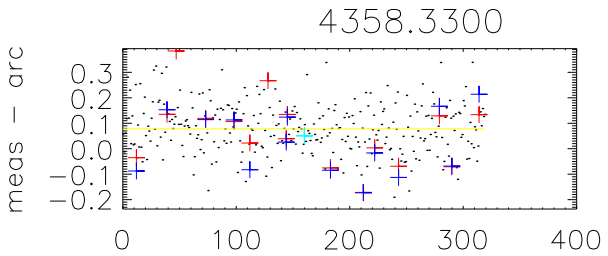

4046.5600
off: −0.01
sig: 0.108
4358.3300
off: 0.03
sig: 0.034
5460.9400
off: 0.20
sig: 0.024
5577.3390
off: 0.17
sig: 0.004
5889.9500
off: 0.25
sig: 0.013
5895.9240
off: 0.26
sig: 0.018

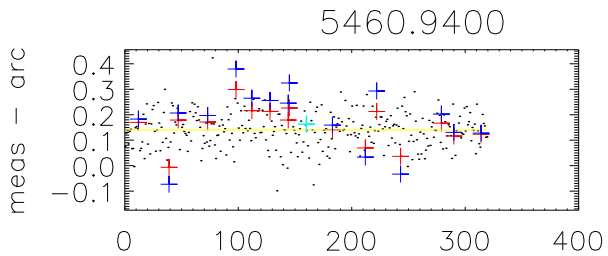

shift(pix)= 0.147
err(pix)= 0.117
oldshift(pix)=-0.012
60
50
40
30
20
10
0
4020
4030
4040
4050
4060
4070
4080

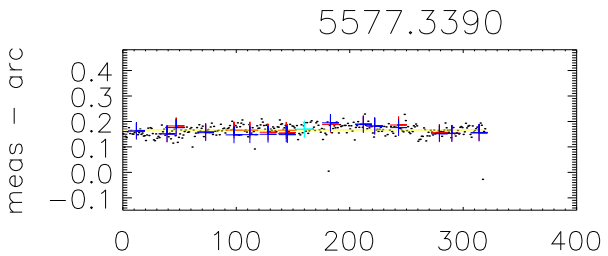

shift(pix)= 0.051
err(pix)= 0.039
oldshift(pix)= 0.029
60
50
40
30
20
10
0
4280
4300
4320
4340
4360
4380
4400
4420

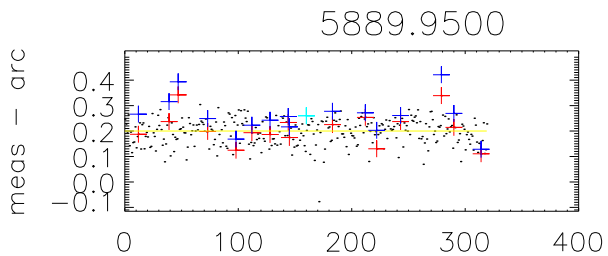

shift(pix)= 0.163
err(pix)= 0.030
oldshift(pix)= 0.198
60
50
40
30
20
10
0
5430
5440
5450
5460
5470
5480
5490

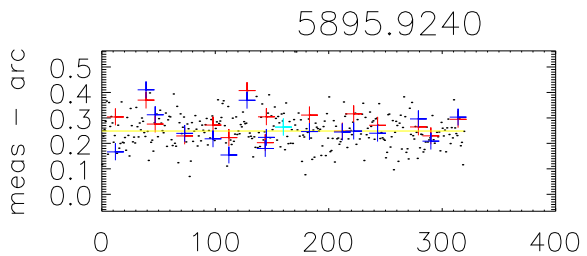

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

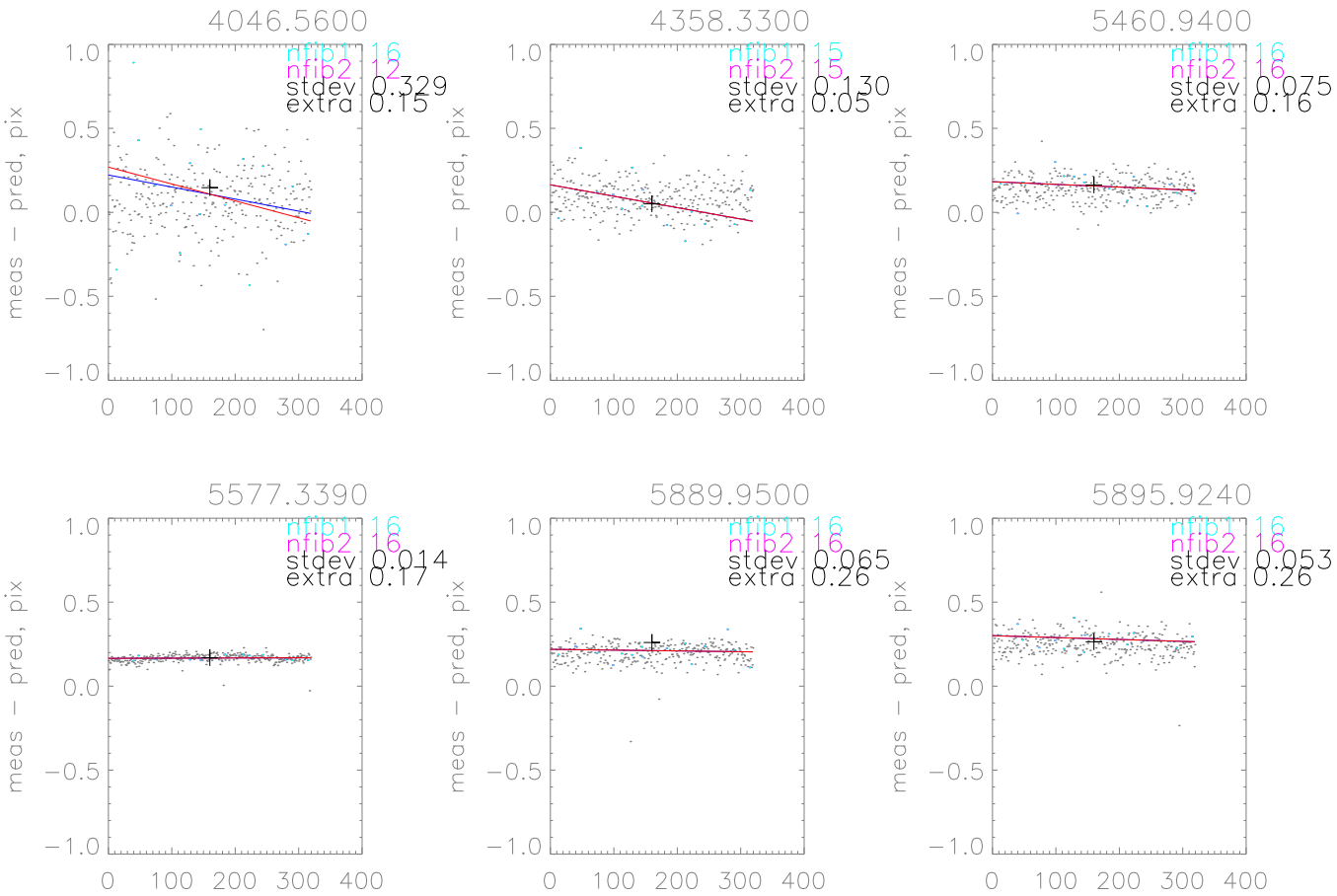

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

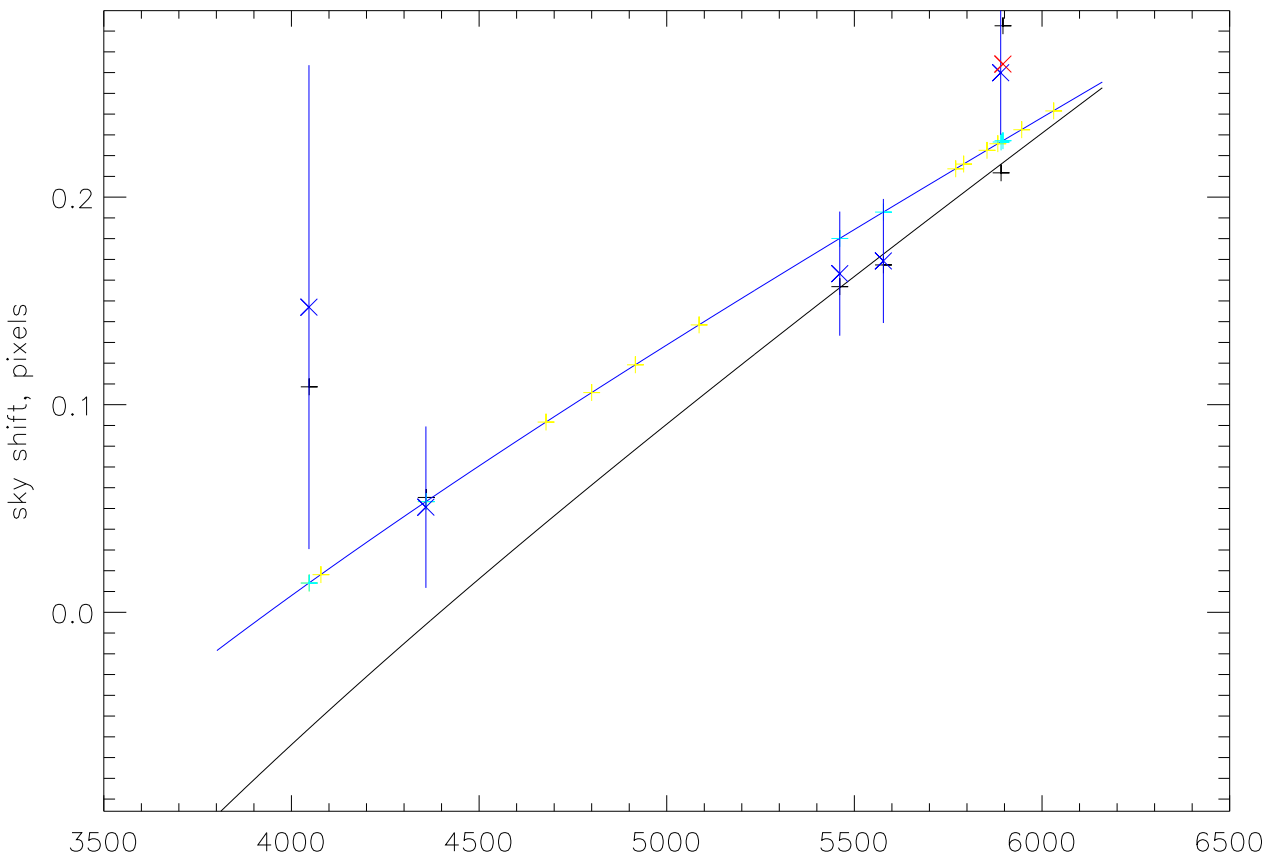

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

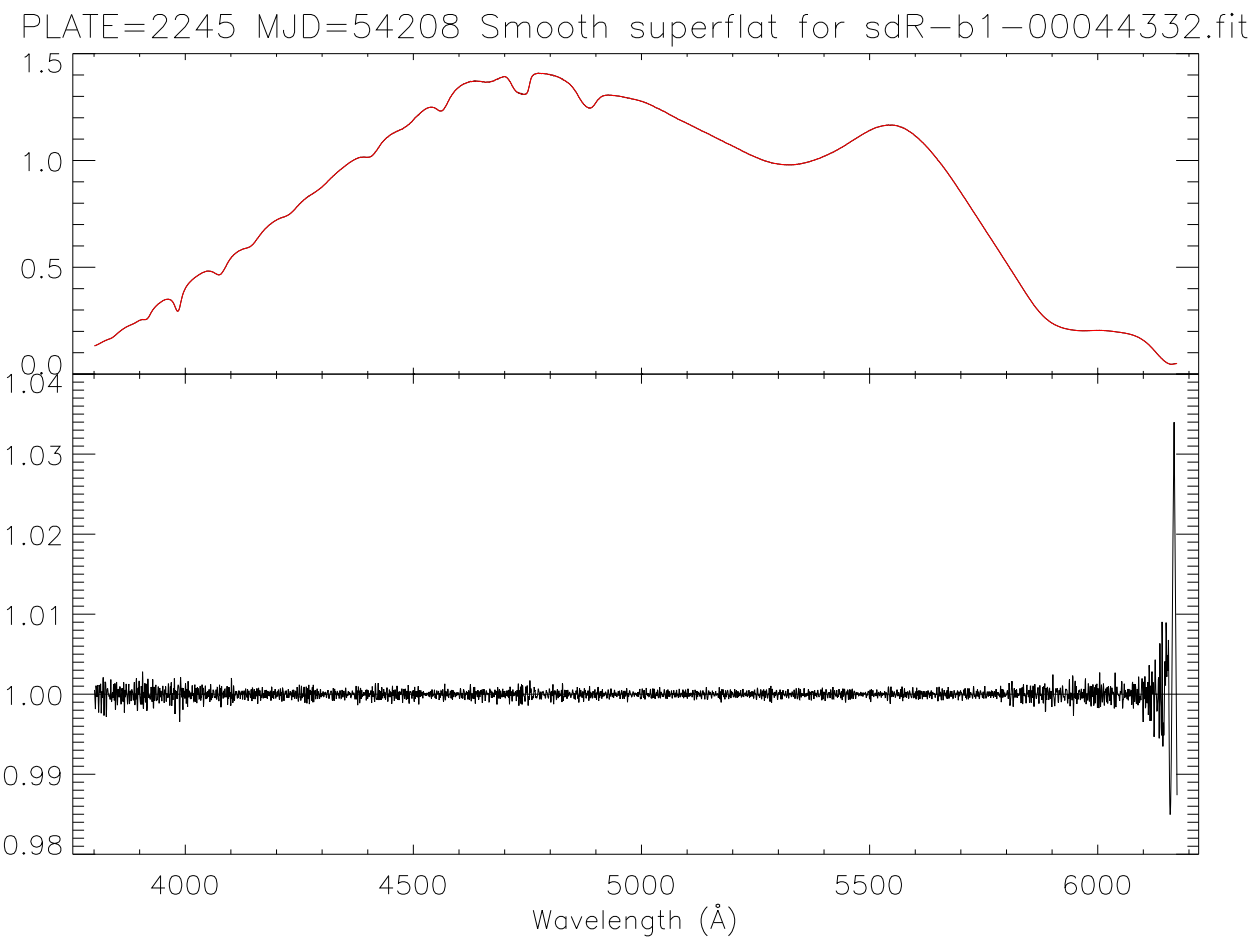

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

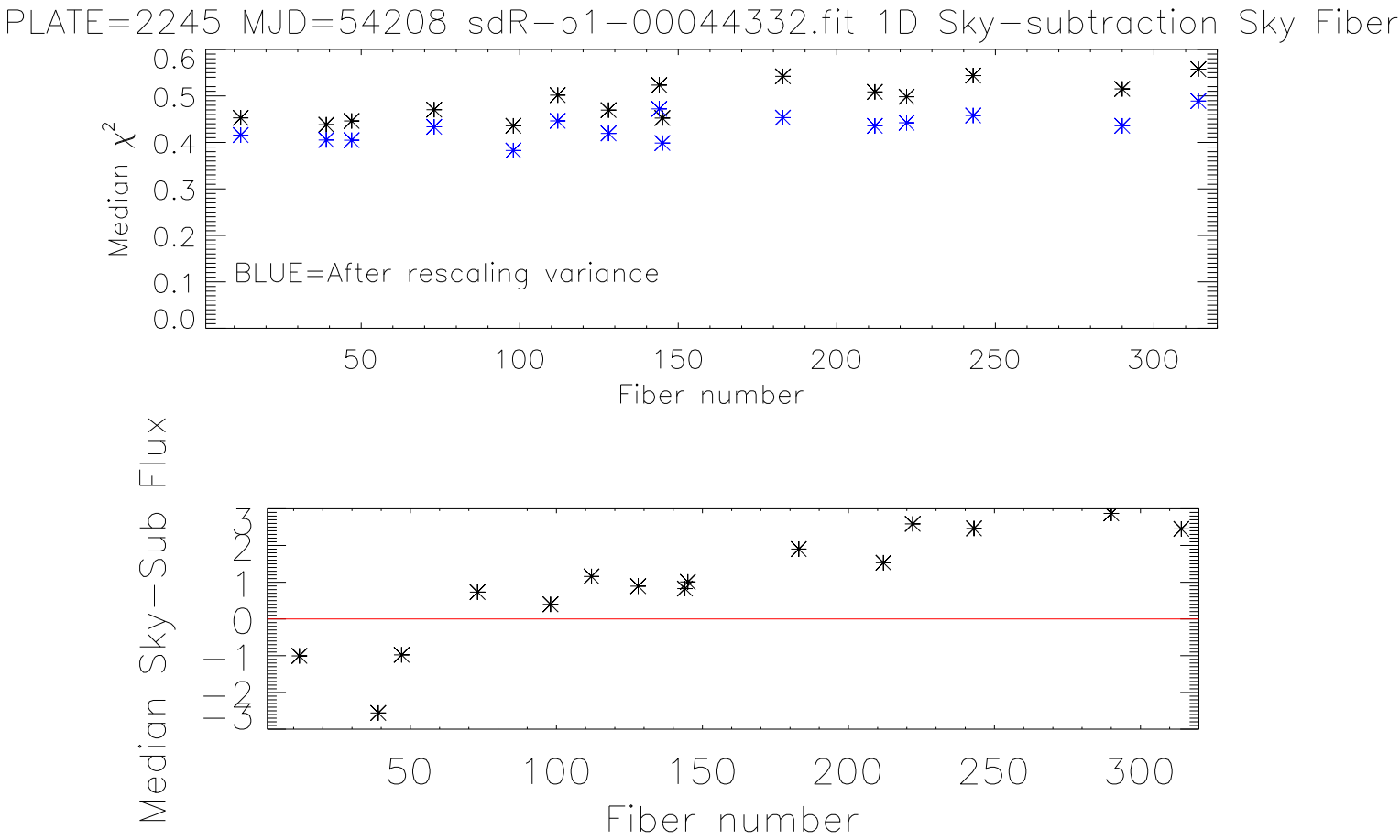

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

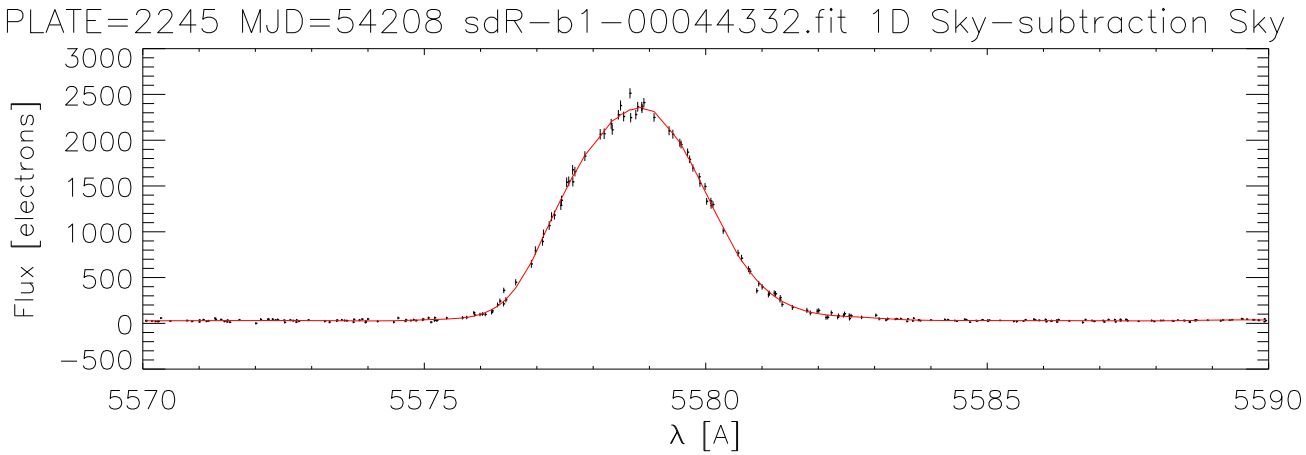

4046.5600
nfib1 16
nfib2 12
stdev 0.329
extra 0.15
4358.3300
nfib1 15
nfib2 15
stdev 0.130
extra 0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.075
extra 0.16
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.17
5889.9500
nfib1 16
nfib2 16
stdev 0.065
extra 0.26
5895.9240
nfib1 16
nfib2 16
stdev 0.053
extra 0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

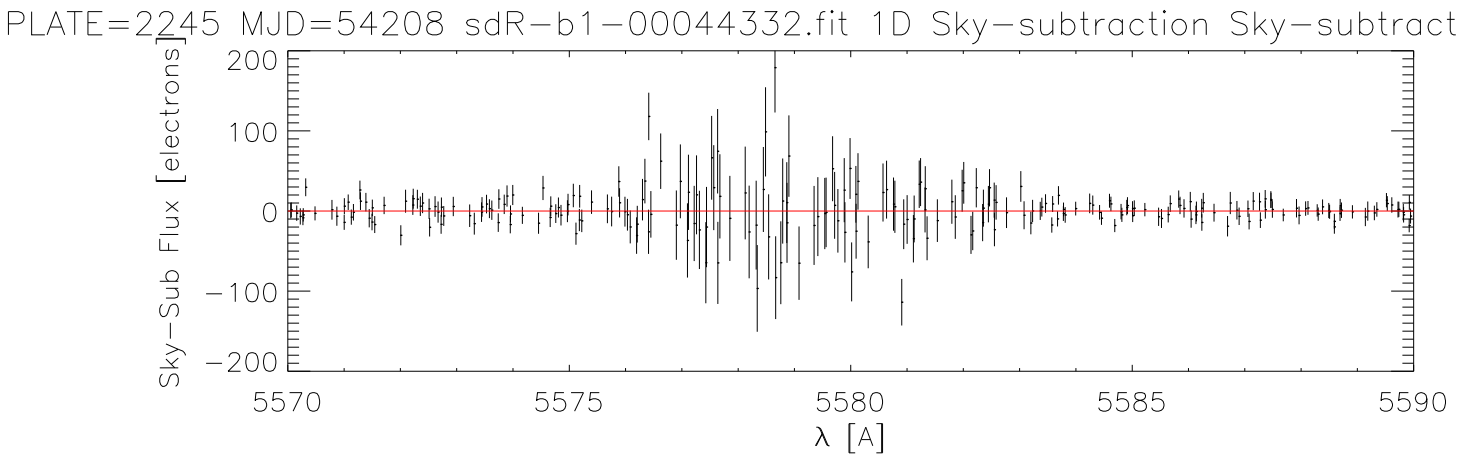

sky shift, pixels
0.2
0.1
0.0
3500
4000
4500
5000
5500
6000
6500

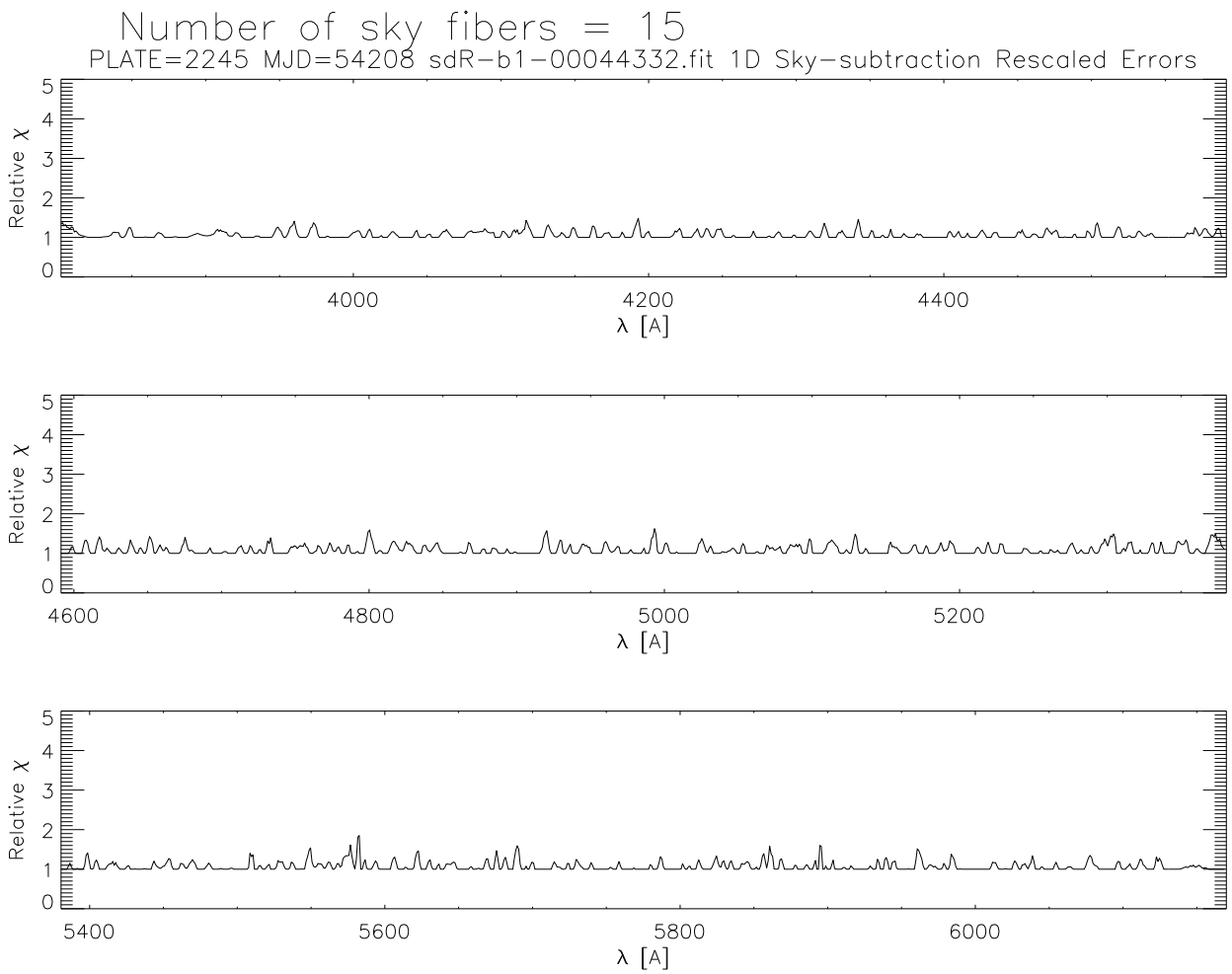
es= −0.0001

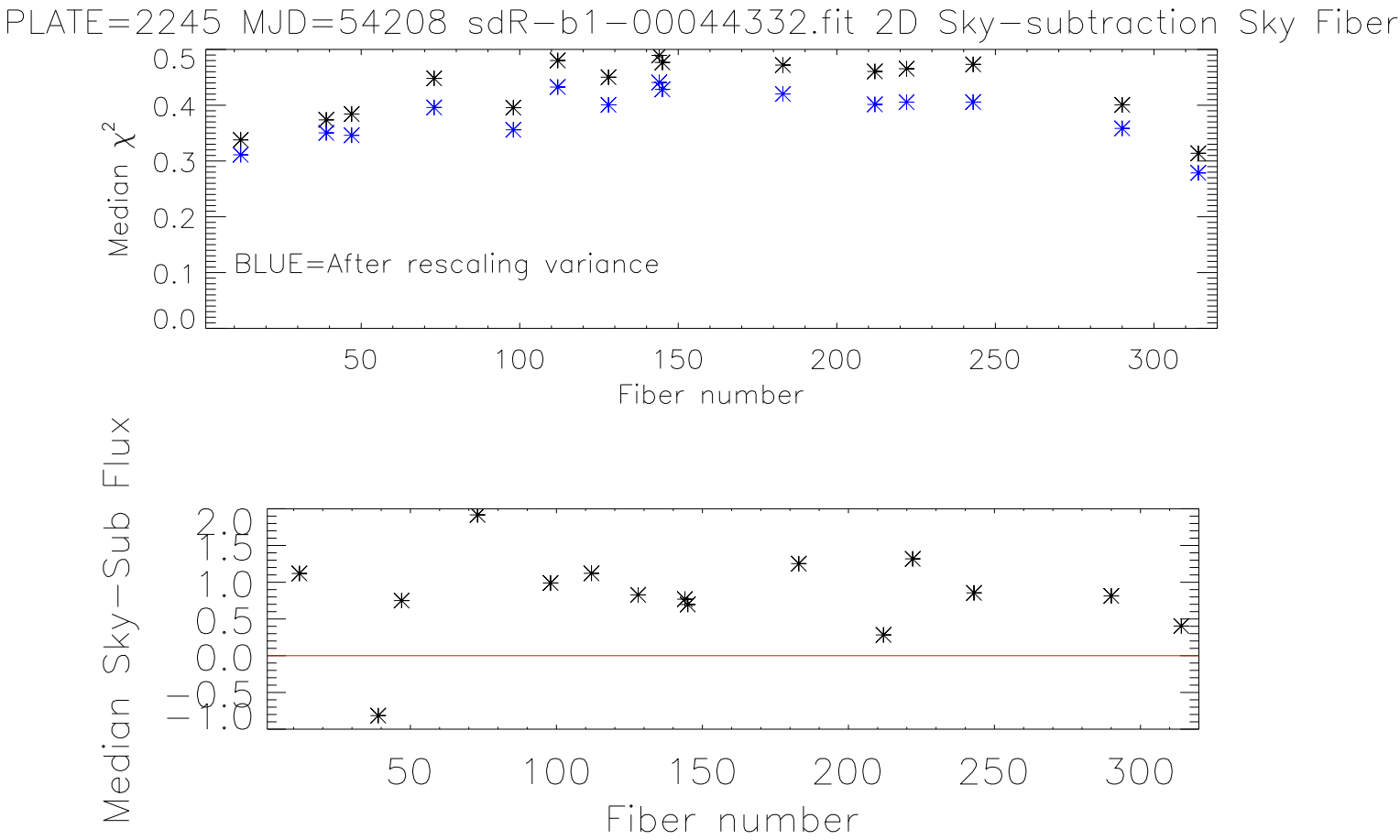

PLATE=2245 MJD=54208 Smooth superflat for sdR−b1−00044332.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

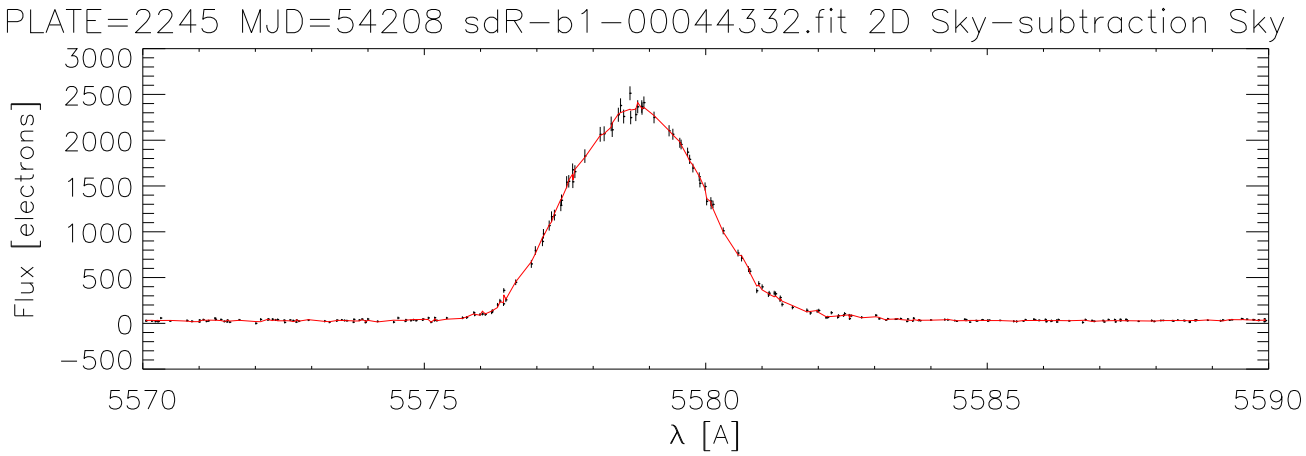

PLATE=2245 MJD=54208 sdR-b1-00044332.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

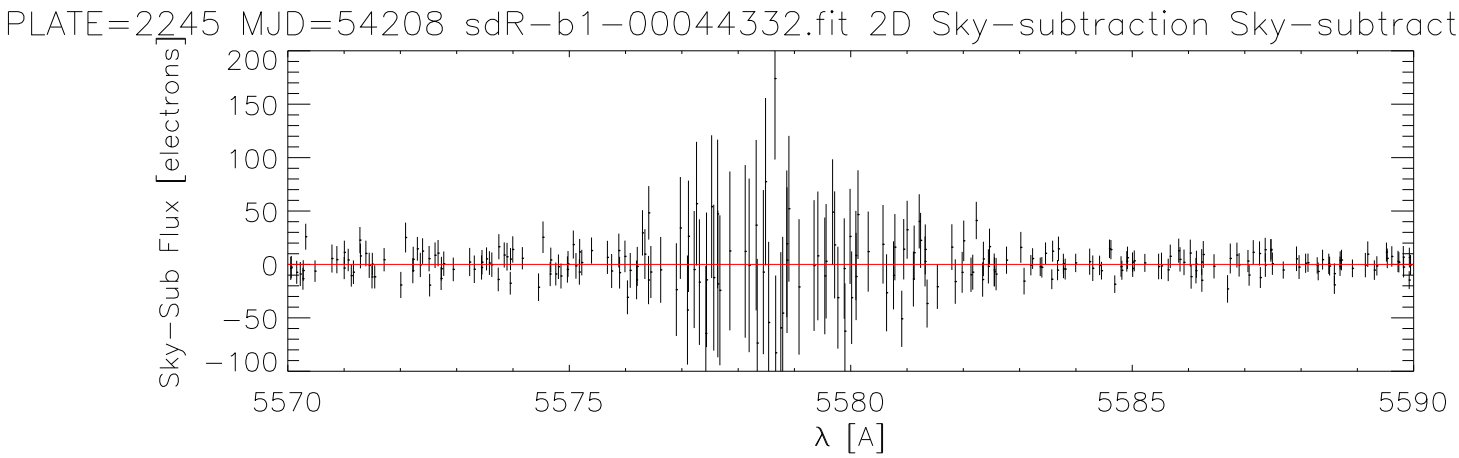

PLATE=2245 MJD=54208 sdR-b1-00044332.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

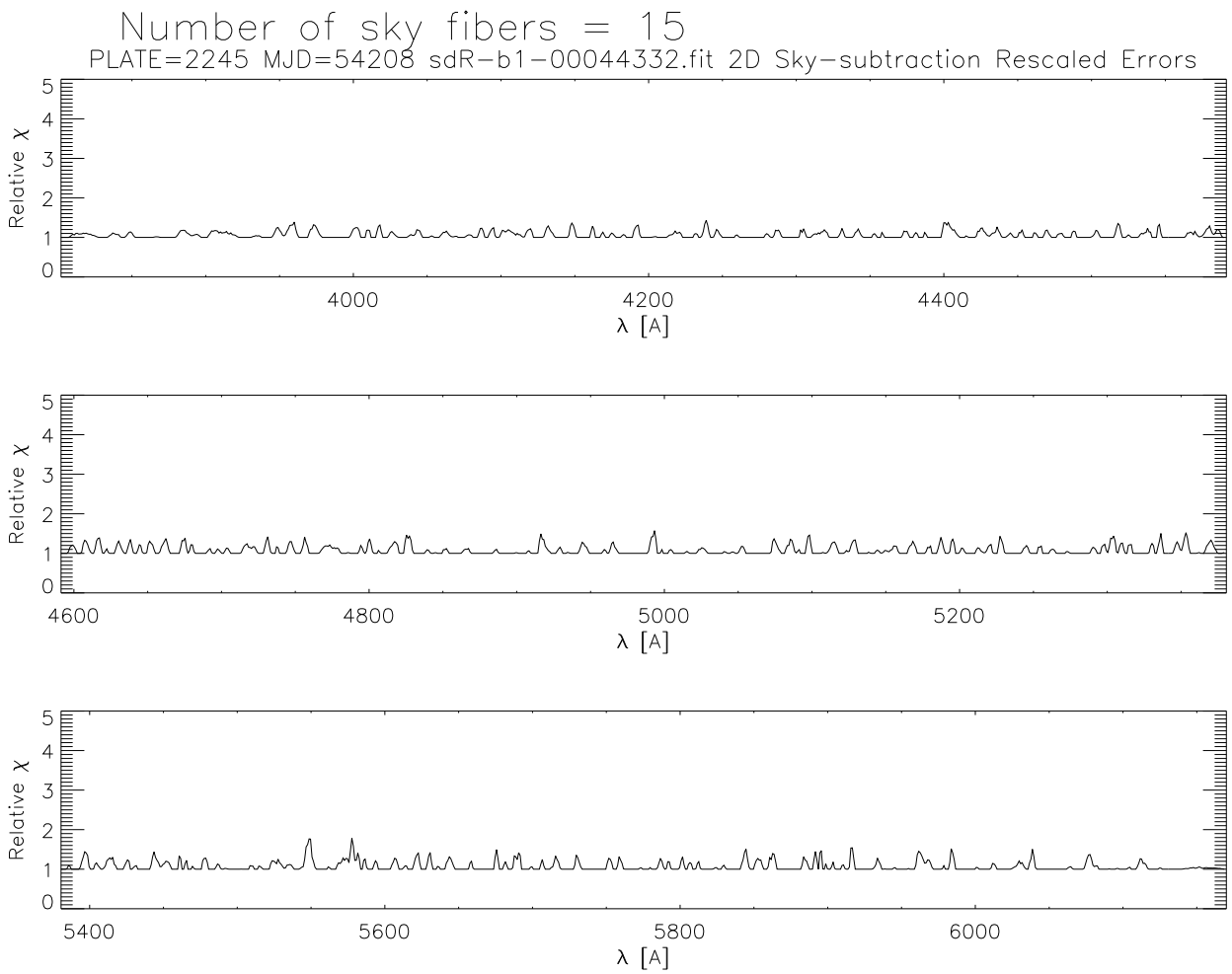

PLATE=2245 MJD=54208 sdR-b1-00044332.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

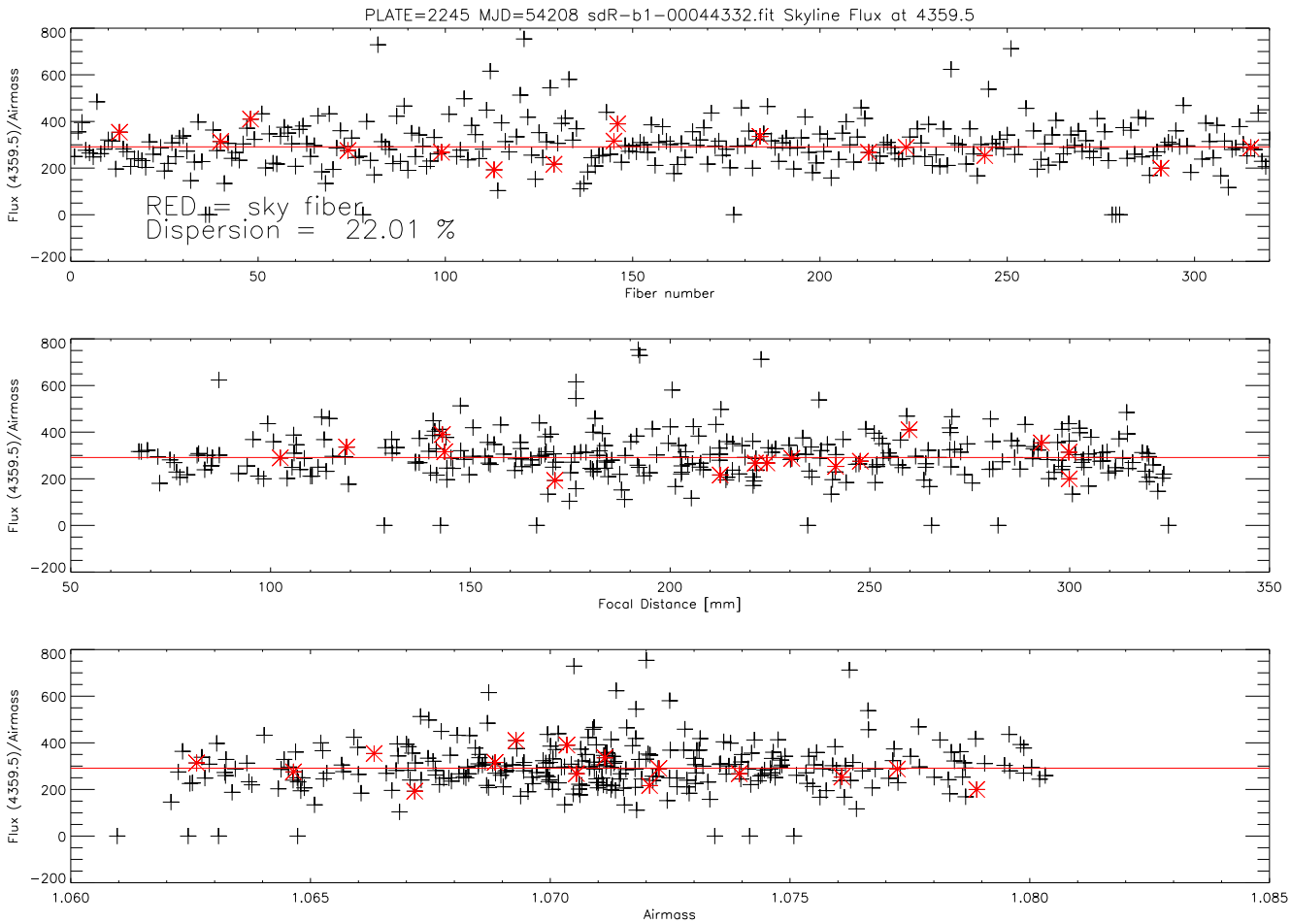

Number of sky fibers = 15
PLATE=2245 MJD=54208 sdR-b1-00044332.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

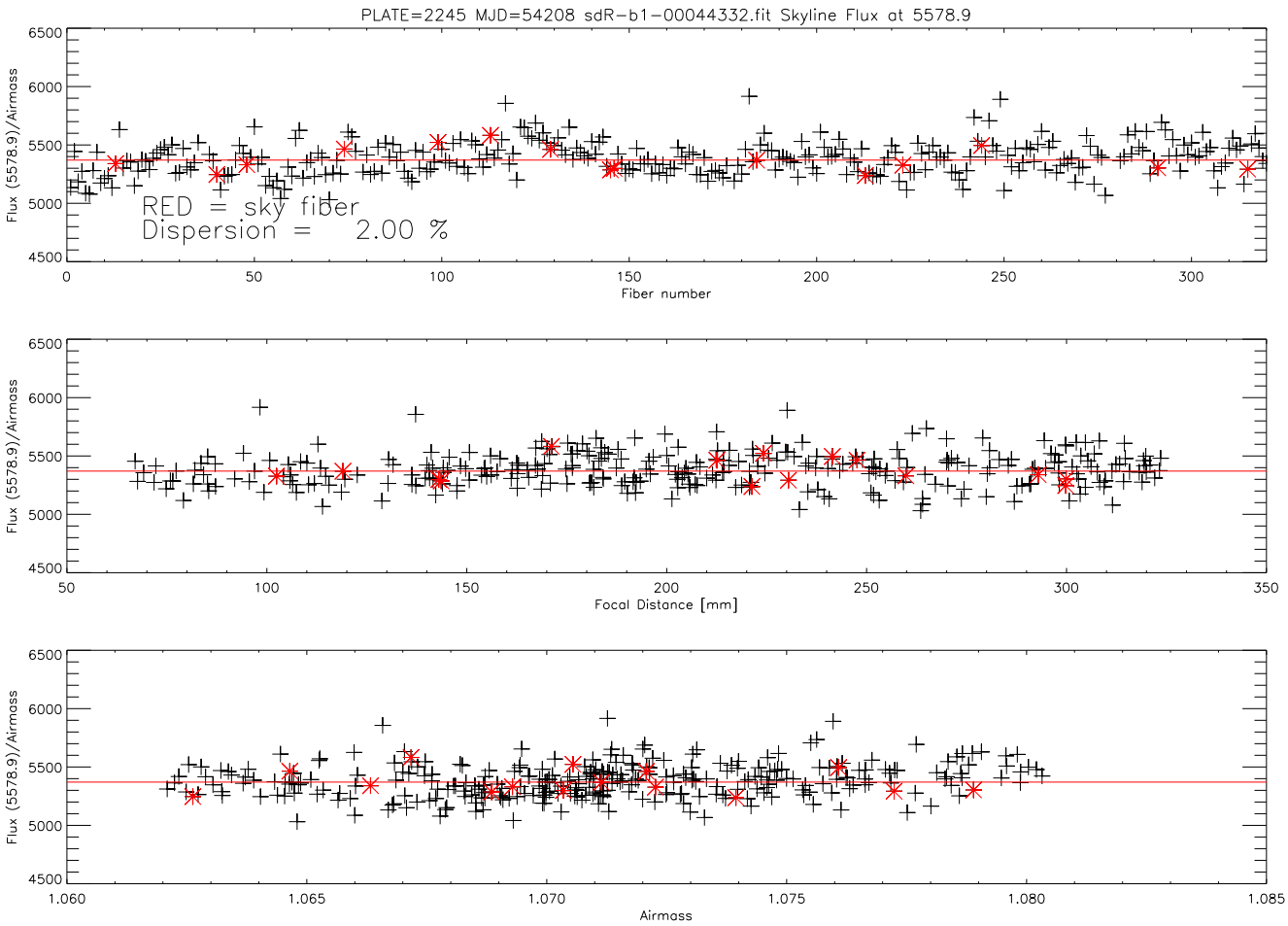

PLATE=2245 MJD=54208 sdR-b1-00044332.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

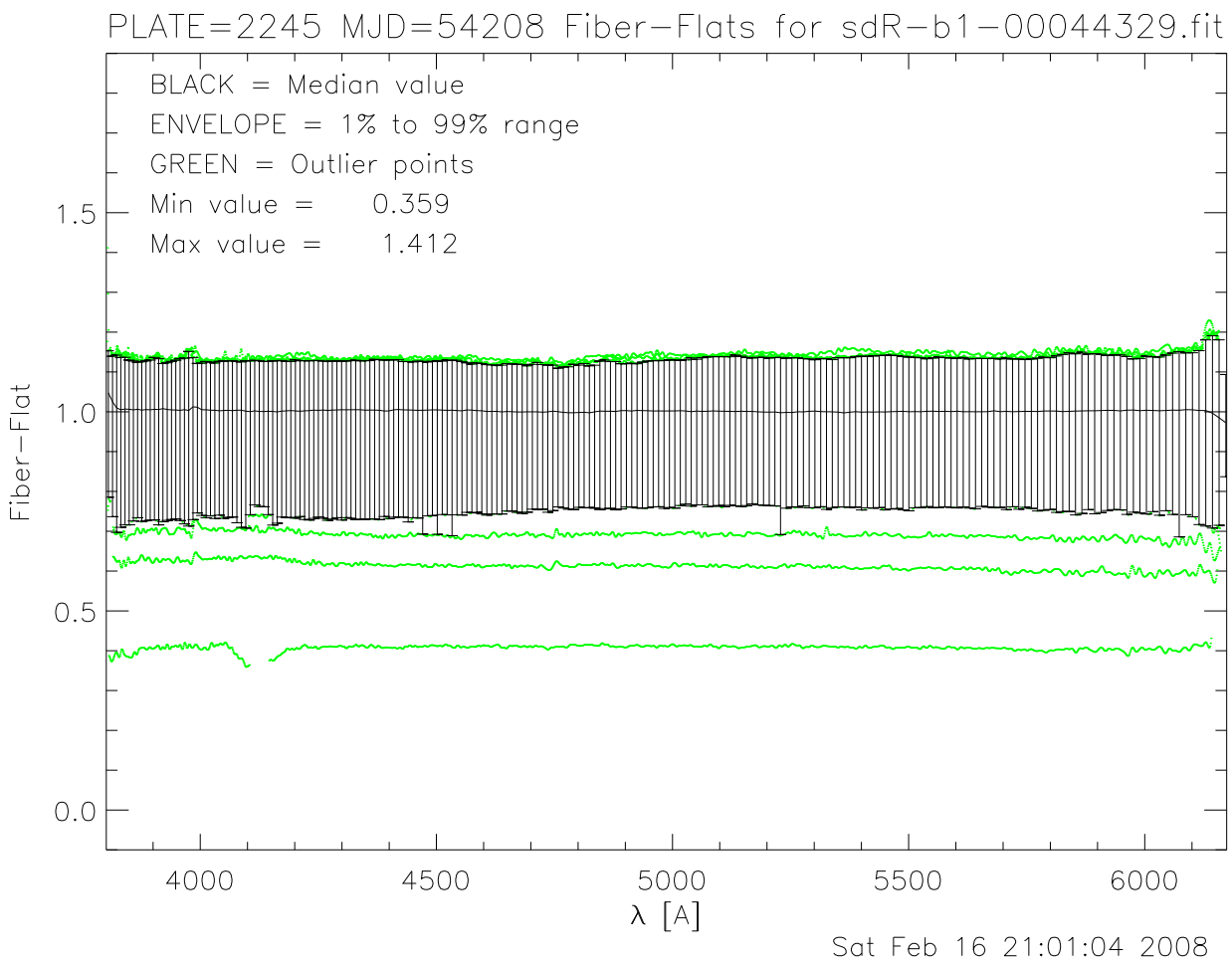

PLATE=2245 MJD=54208 sdR-b1-00044332.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

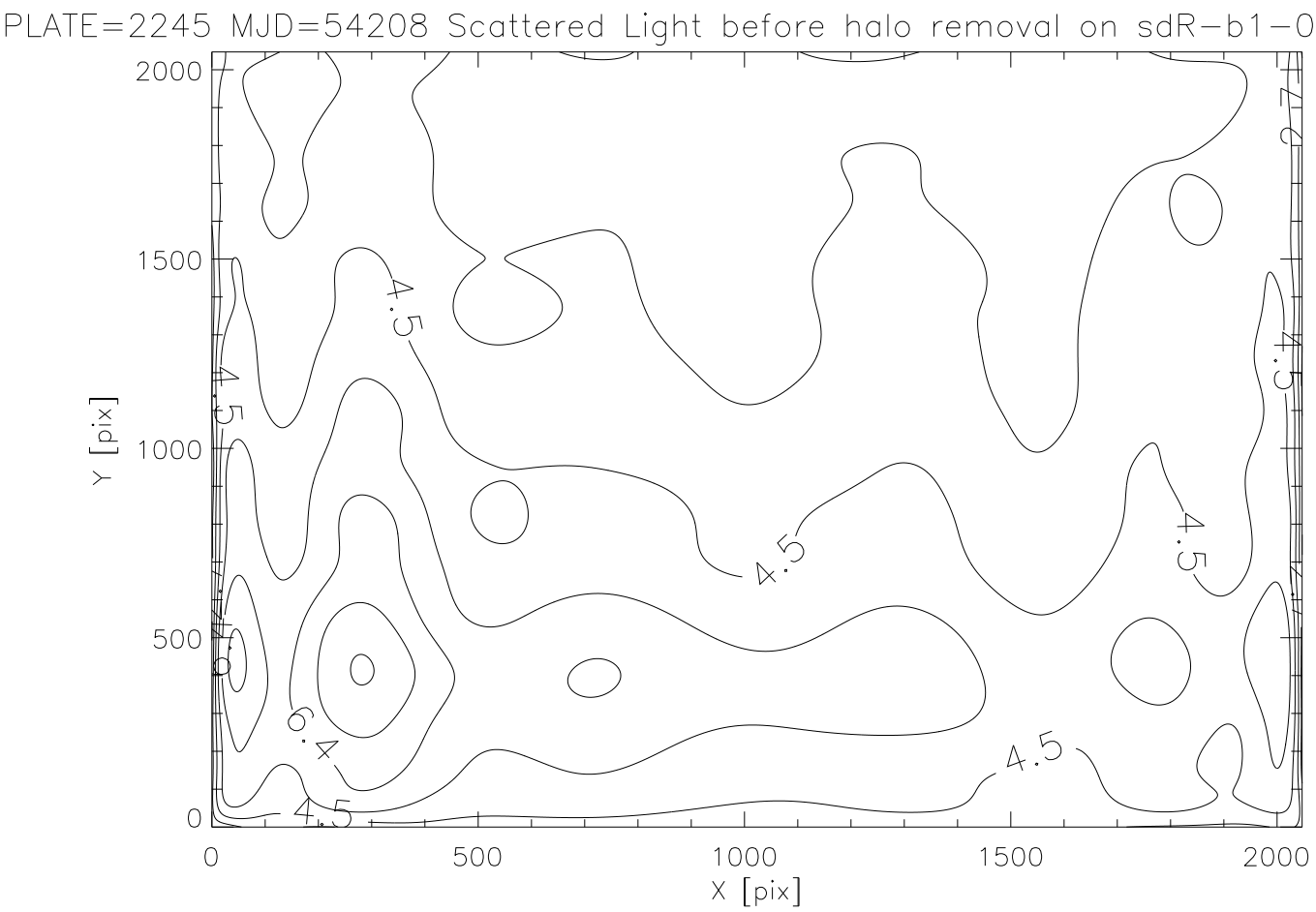

PLATE=2245 MJD=54208 sdR-b1-00044332.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

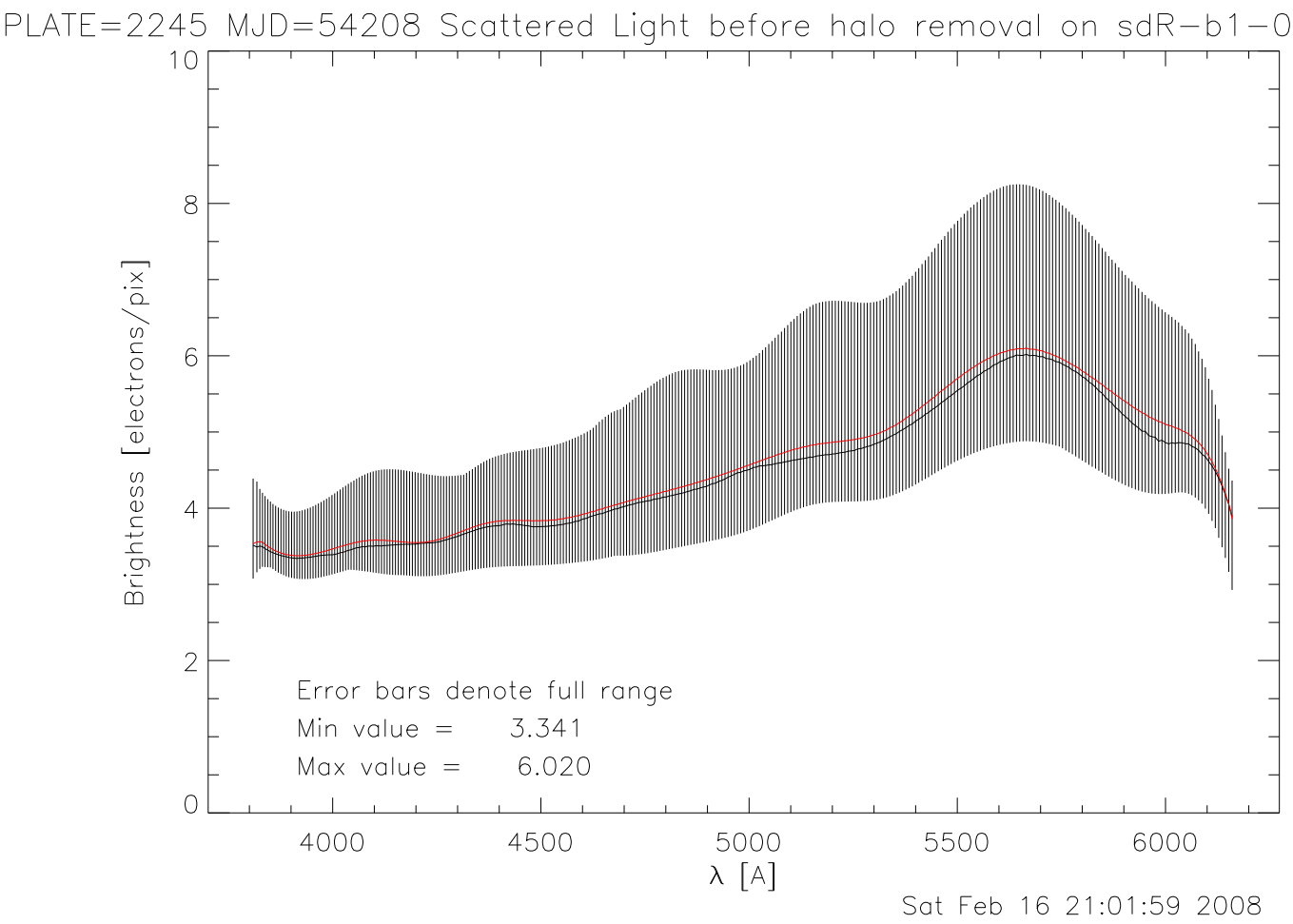

Number of sky fibers = 15
PLATE=2245 MJD=54208 sdR-b1-00044332.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

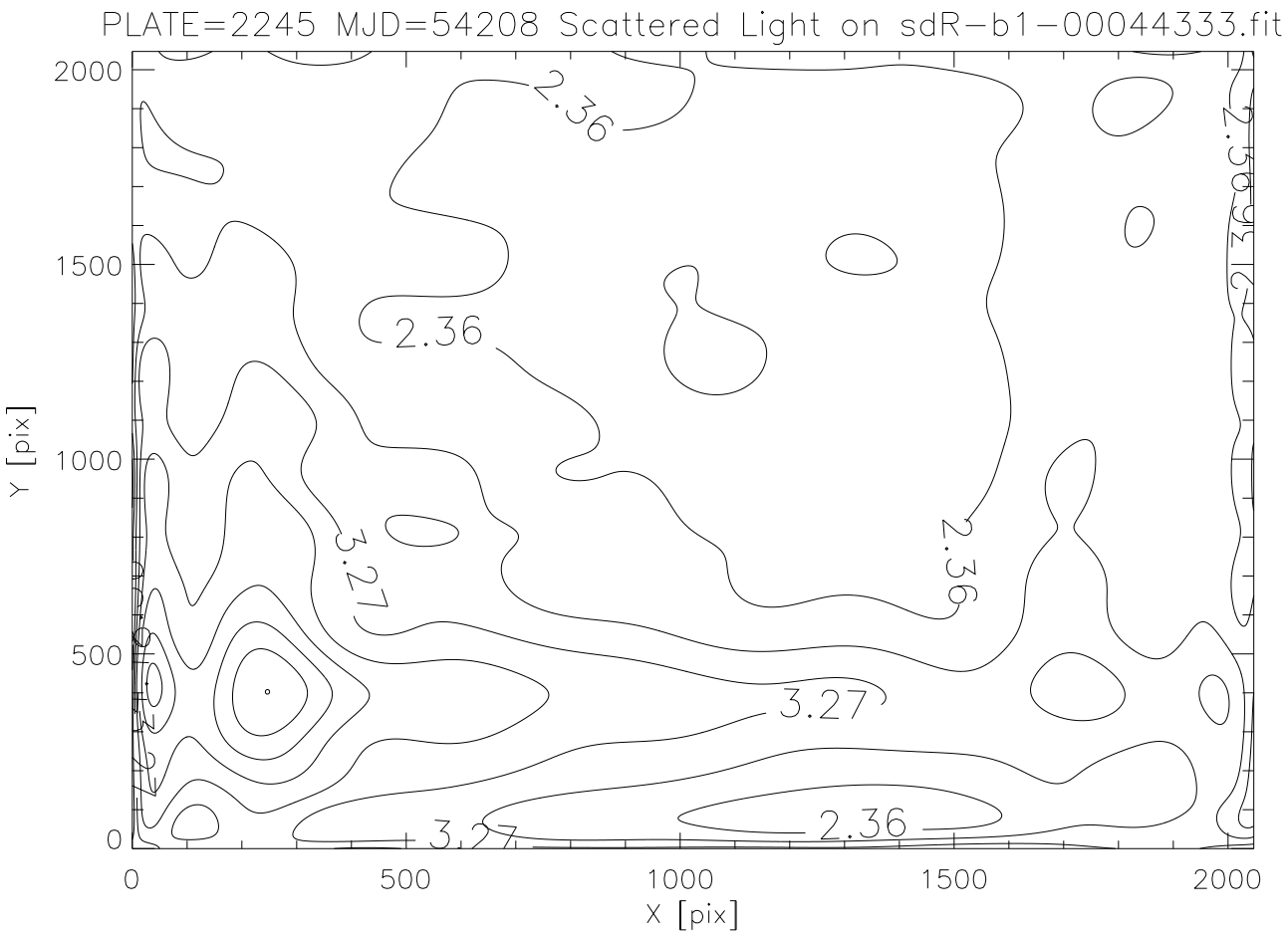

PLATE=2245 MJD=54208 sdR-b1-00044332.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED= sky fiber
Dispersion = 22.01 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

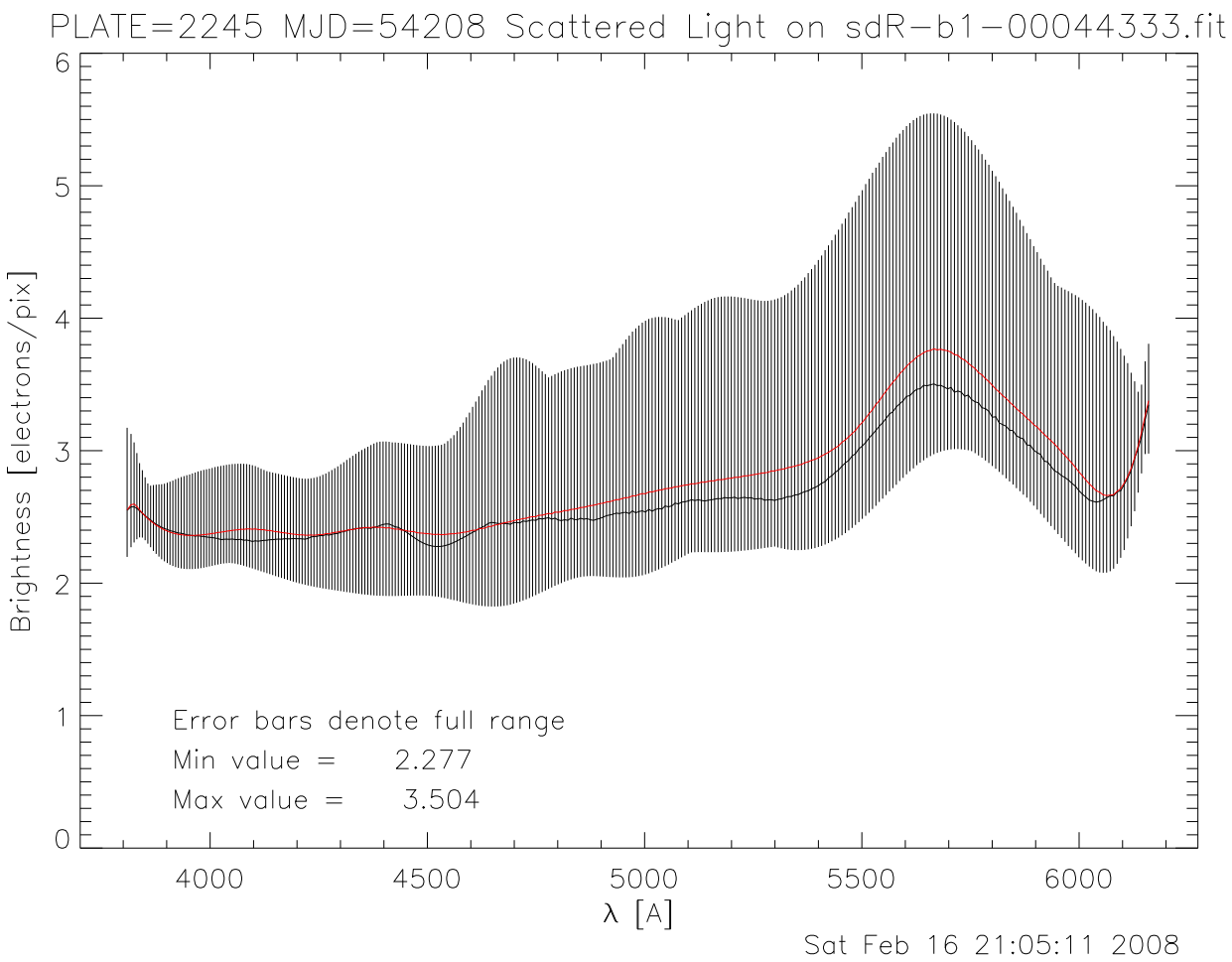

PLATE=2245 MJD=54208 sdR-b1-00044332.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.00 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

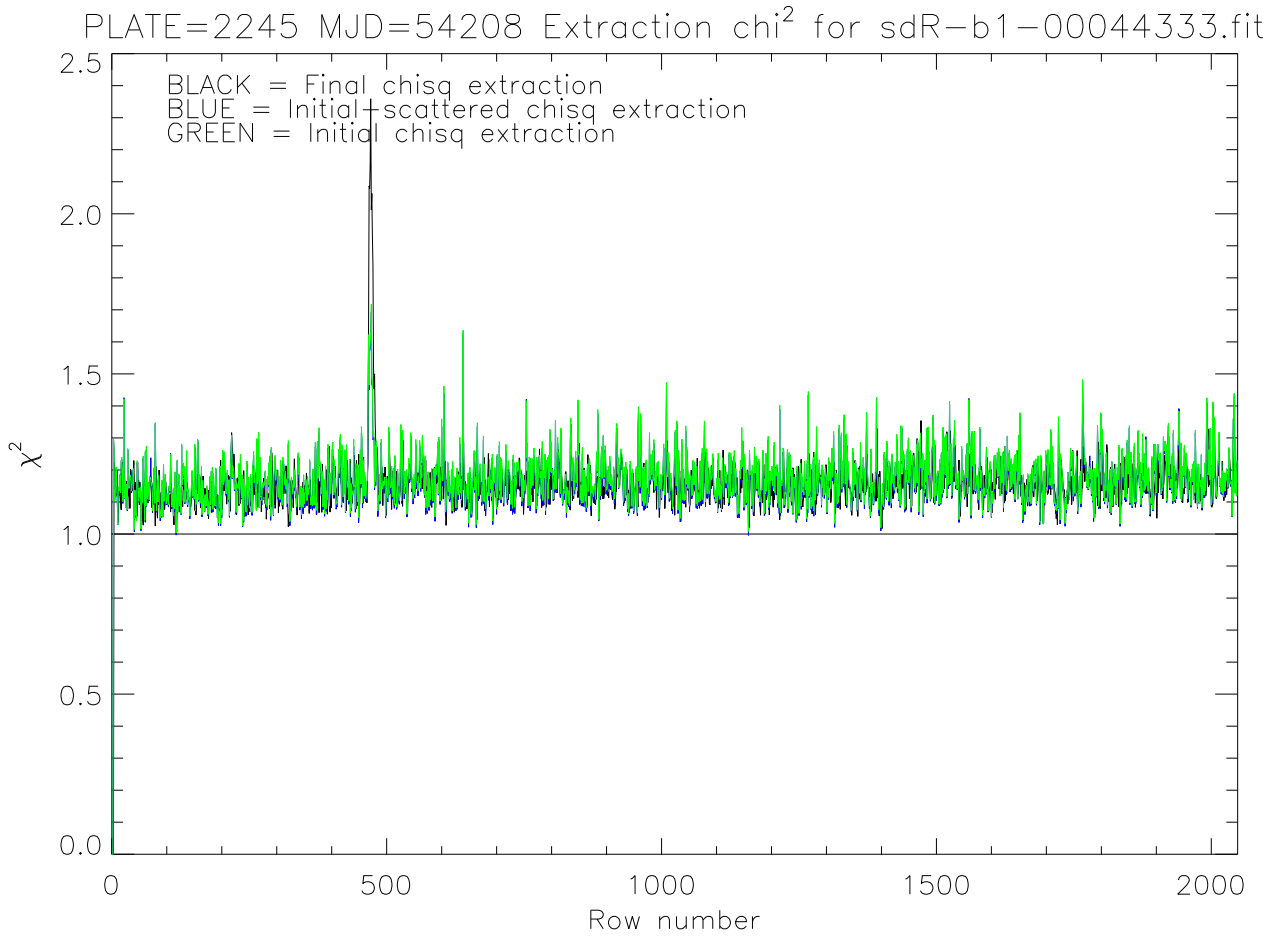

PLATE=2245 MJD=54208 Fiber-Flats for sdR-b1-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.359
Max value = 1.412
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 21:01:04 2008

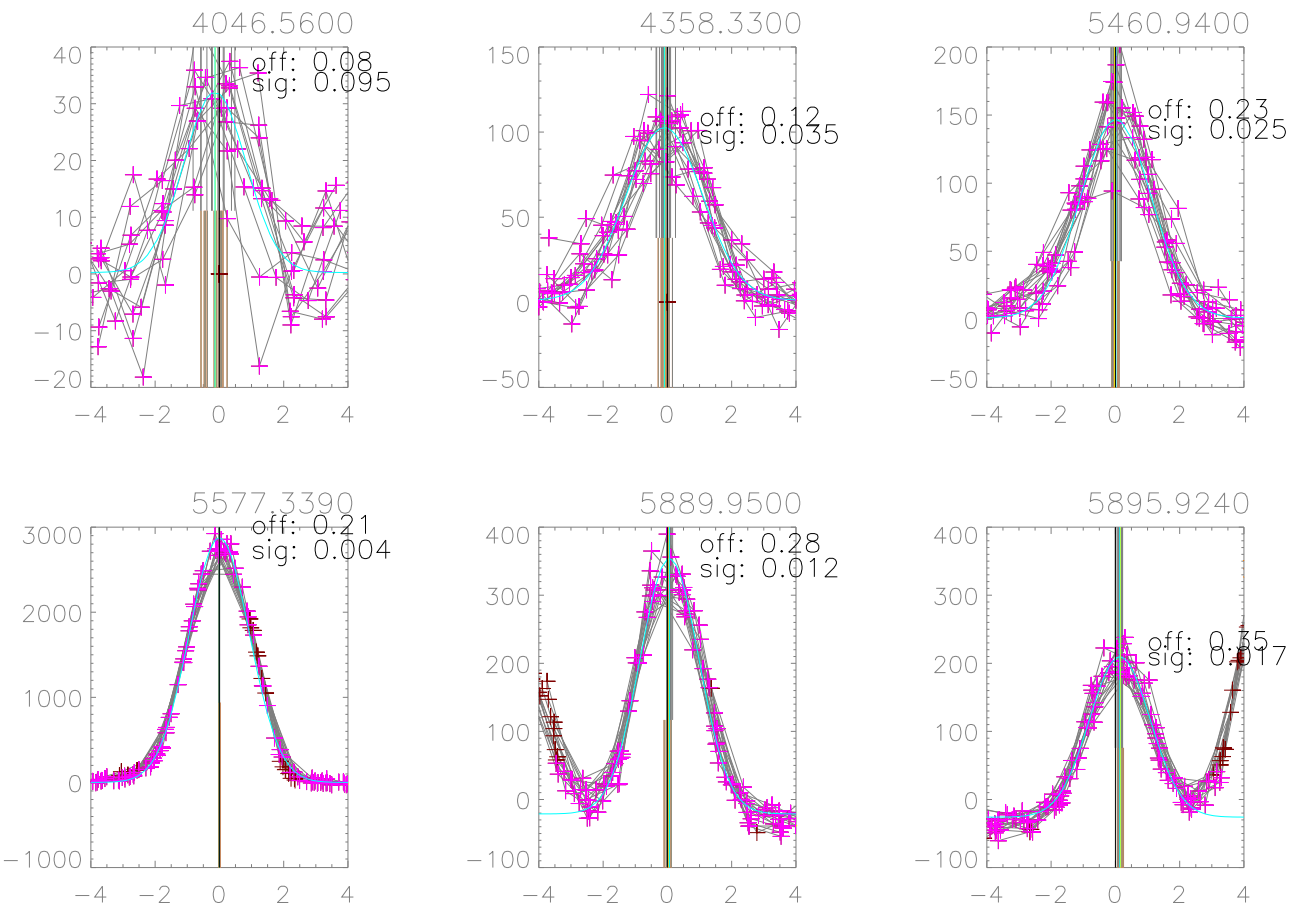

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b1-00044333.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
4.5
4.5
4.5
4.5
4.5
4.5
6.4
4.5
4.5
4.5

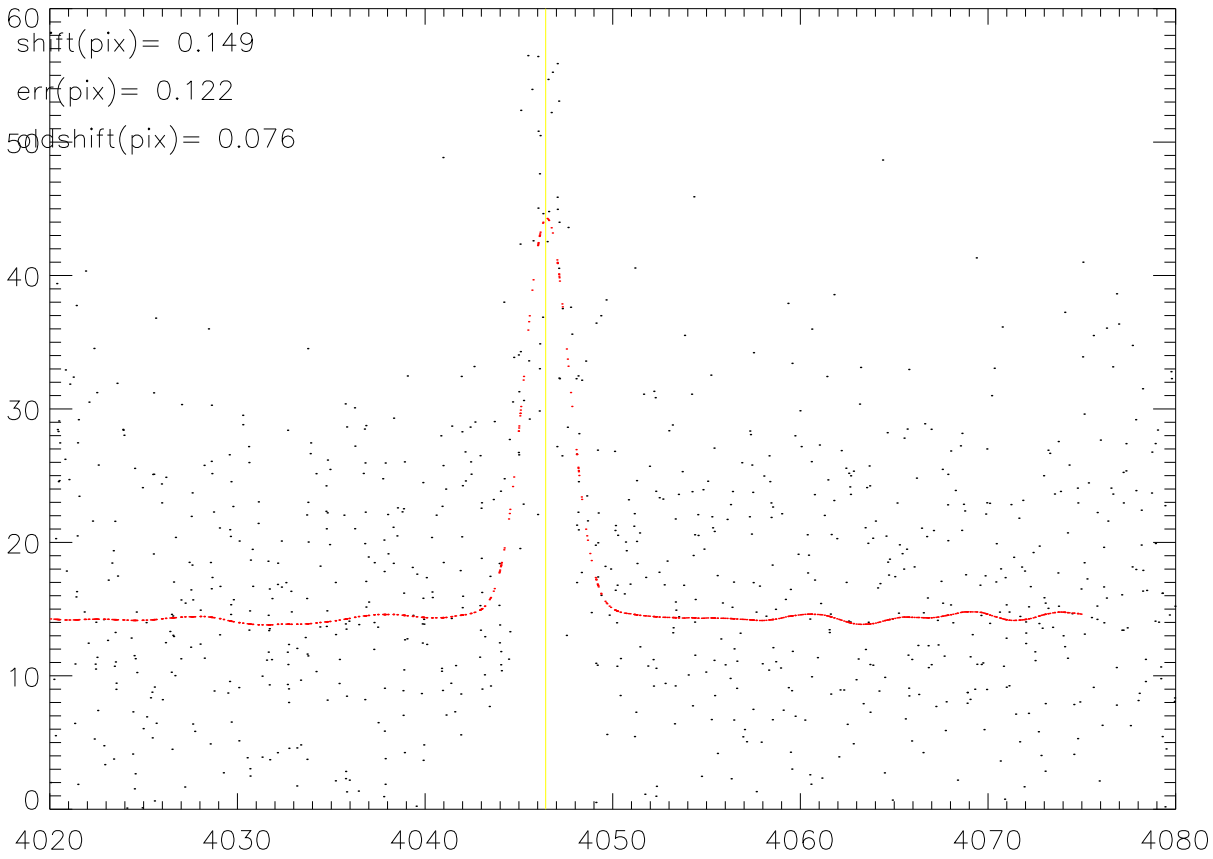

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b1-00044333.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.341
Max value = 6.020
Sat Feb 16 21:01:59 2008

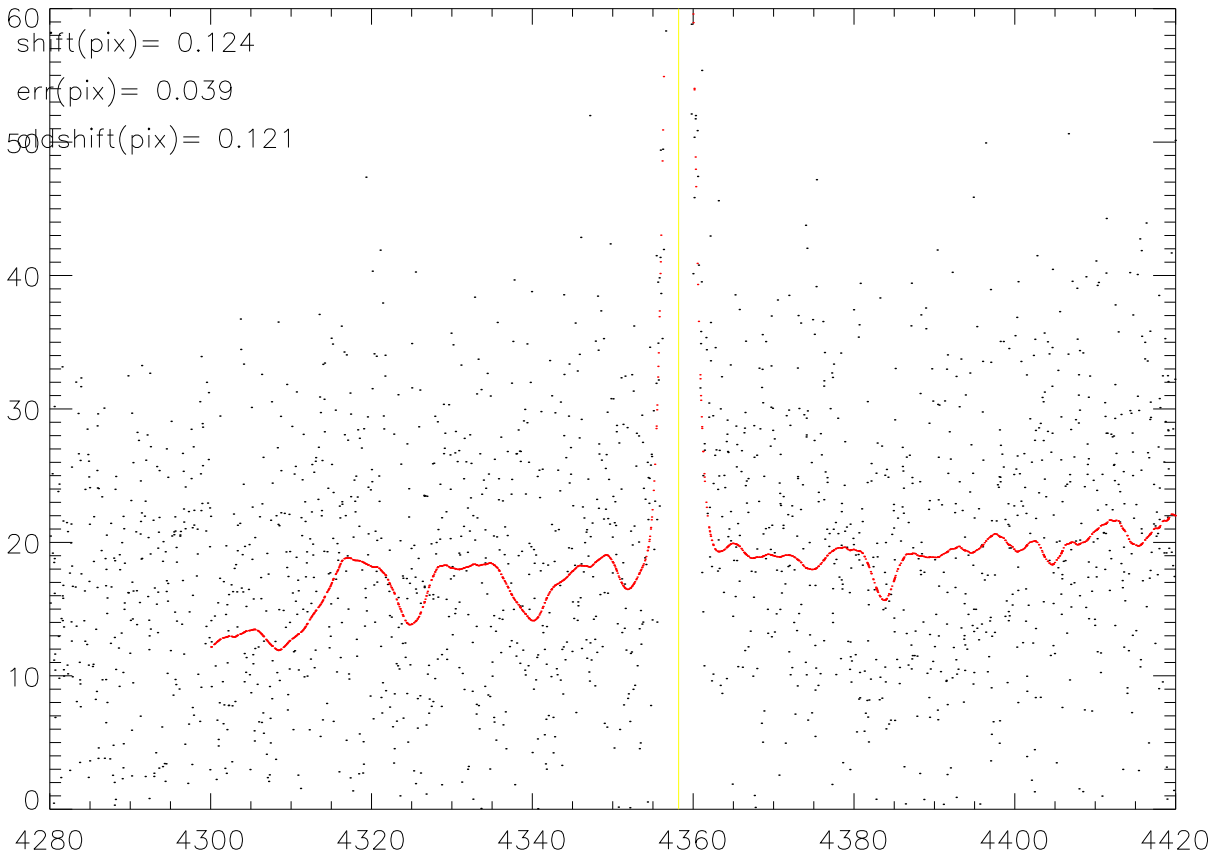

PLATE=2245 MJD=54208 Scattered Light on sdR-b1-00044333.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.36
2.36
2.36
3.27
3.27
3.27
2.36

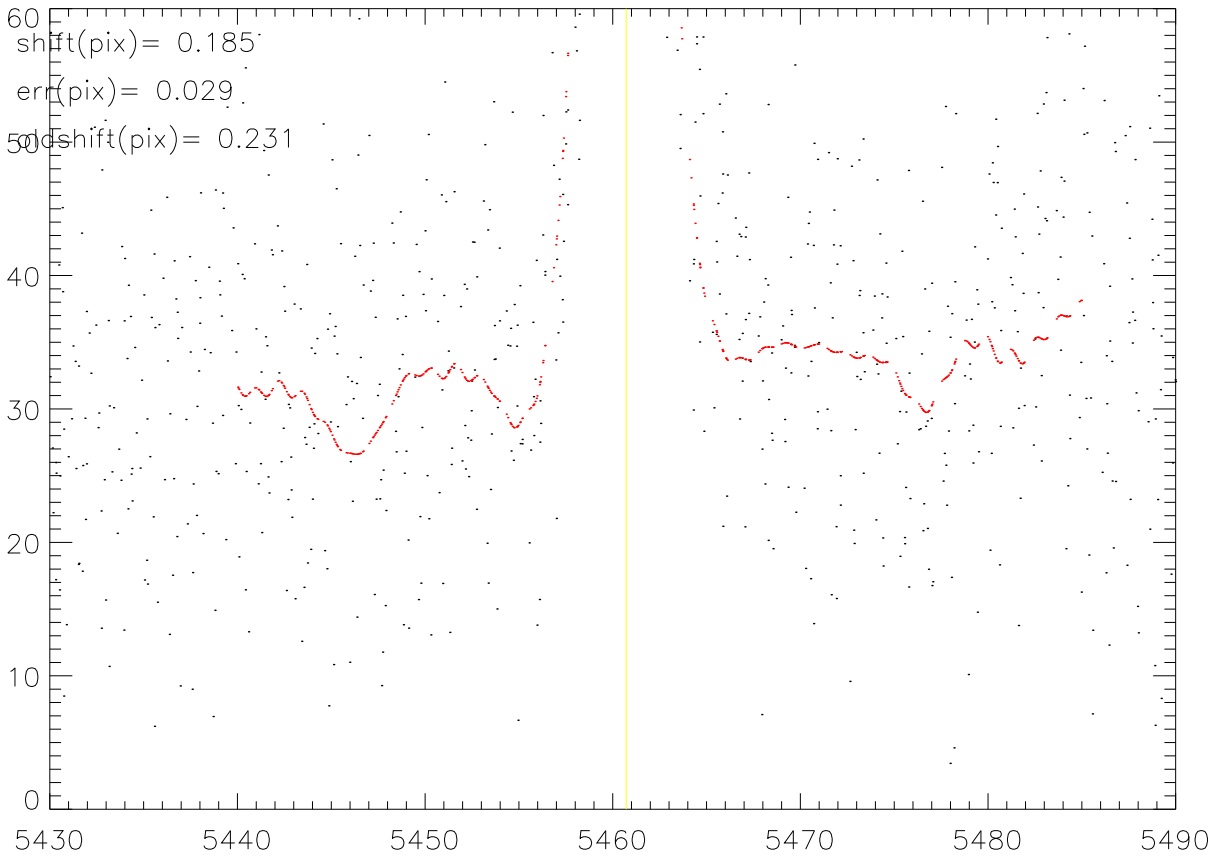

PLATE=2245 MJD=54208 Scattered Light on sdR-b1-00044333.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.277
Max value = 3.504
Sat Feb 16 21:05:11 2008

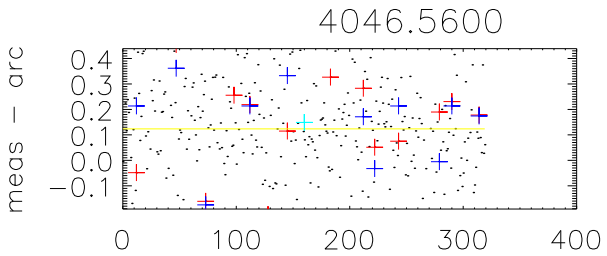

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-b1-00044333.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

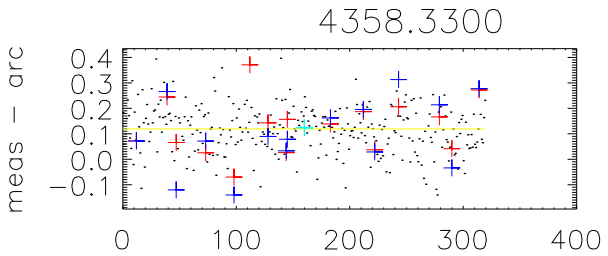

4046.5600
off: 0.08
sig: 0.095
4358.3300
off: 0.12
sig: 0.035
5460.9400
off: 0.23
sig: 0.025
5577.3390
off: 0.21
sig: 0.004
5889.9500
off: 0.28
sig: 0.012
5895.9240
off: 0.35
sig: 0.017

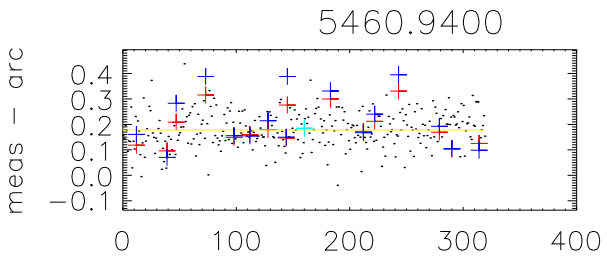

shift(pix)= 0.149
err(pix)= 0.122
oldshift(pix)= 0.076
60
50
40
30
20
10
0
4020
4030
4040
4050
4060
4070
4080

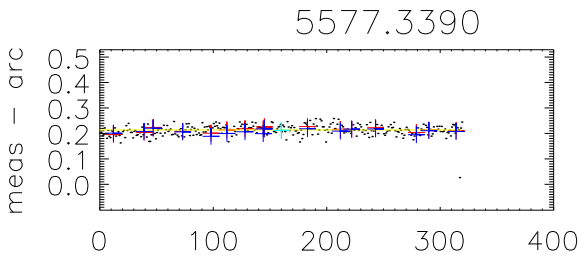

shift(pix)= 0.124
err(pix)= 0.039
oldshift(pix)= 0.121
60
50
40
30
20
10
0
4280
4300
4320
4340
4360
4380
4400
4420

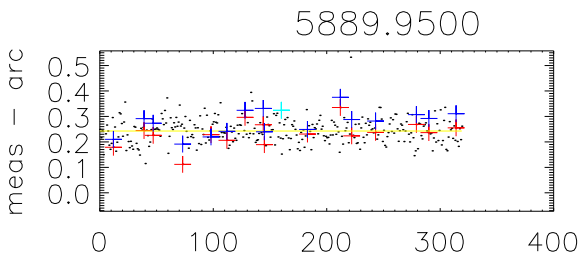

shift(pix)= 0.185
err(pix)= 0.029
oldshift(pix)= 0.231
60
50
40
30
20
10
0
5430
5440
5450
5460
5470
5480
5490

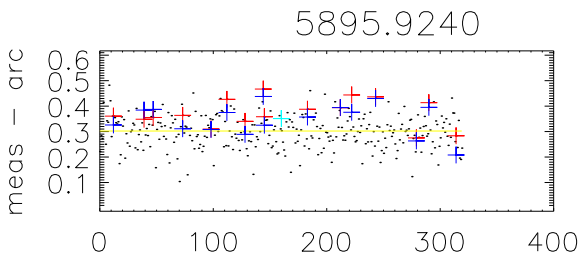

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

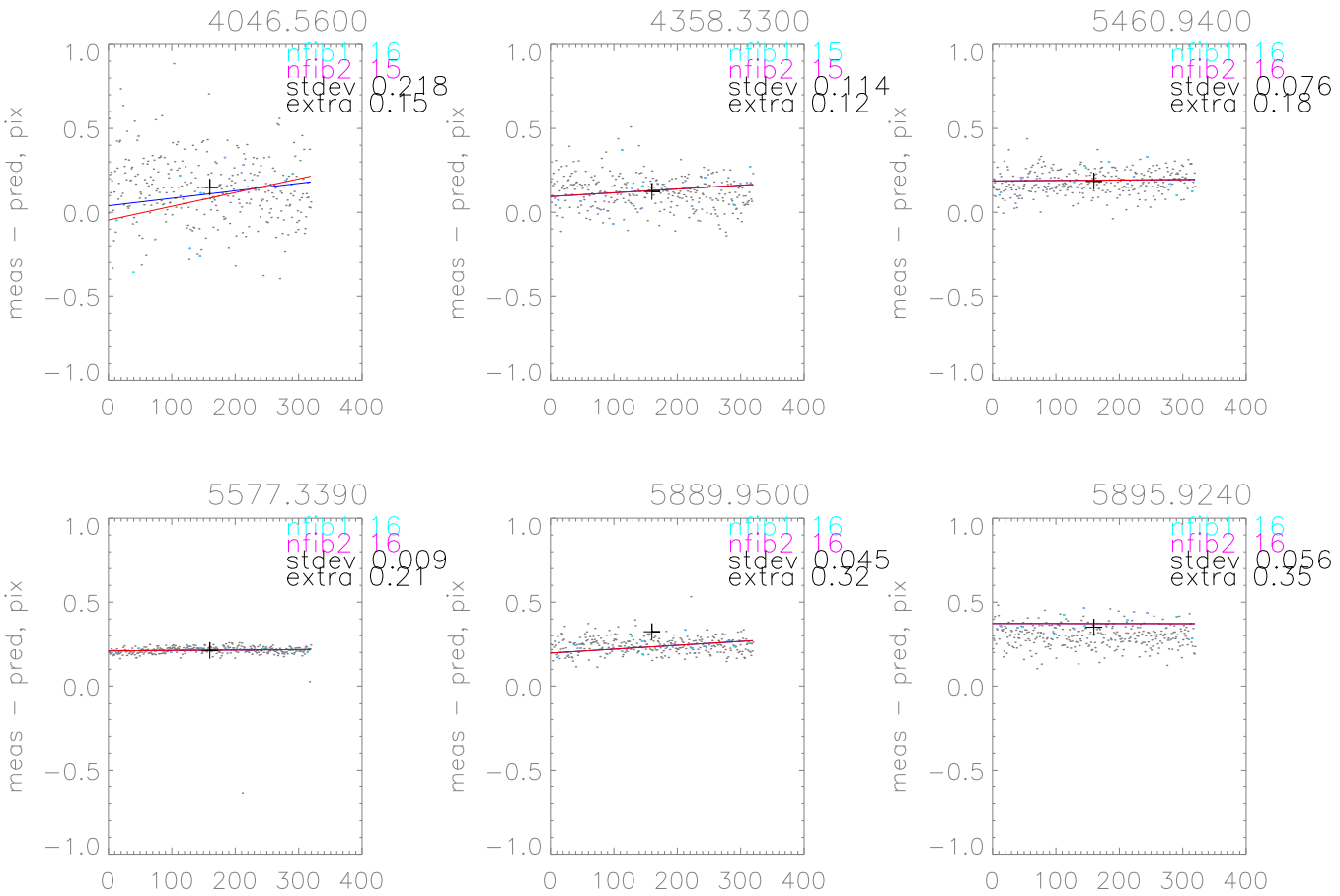

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

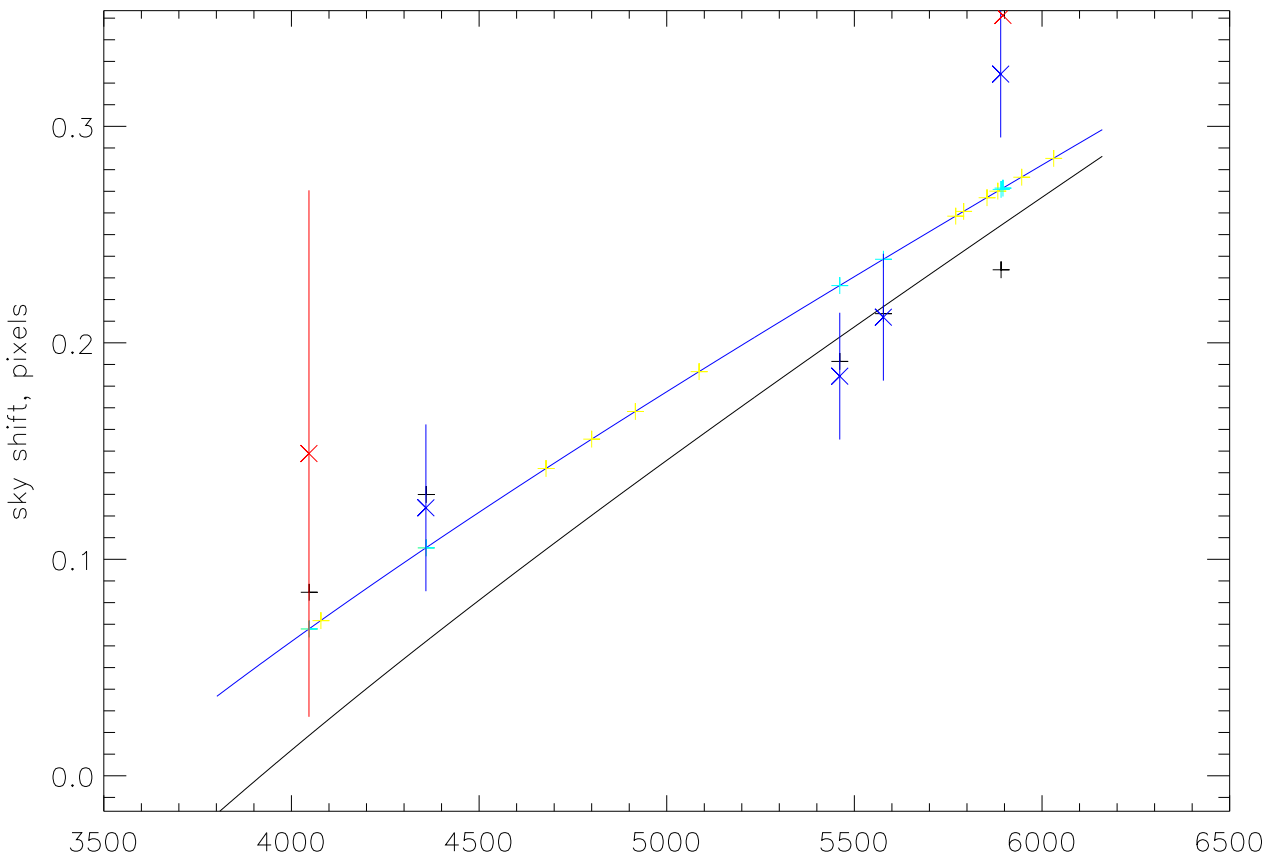

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

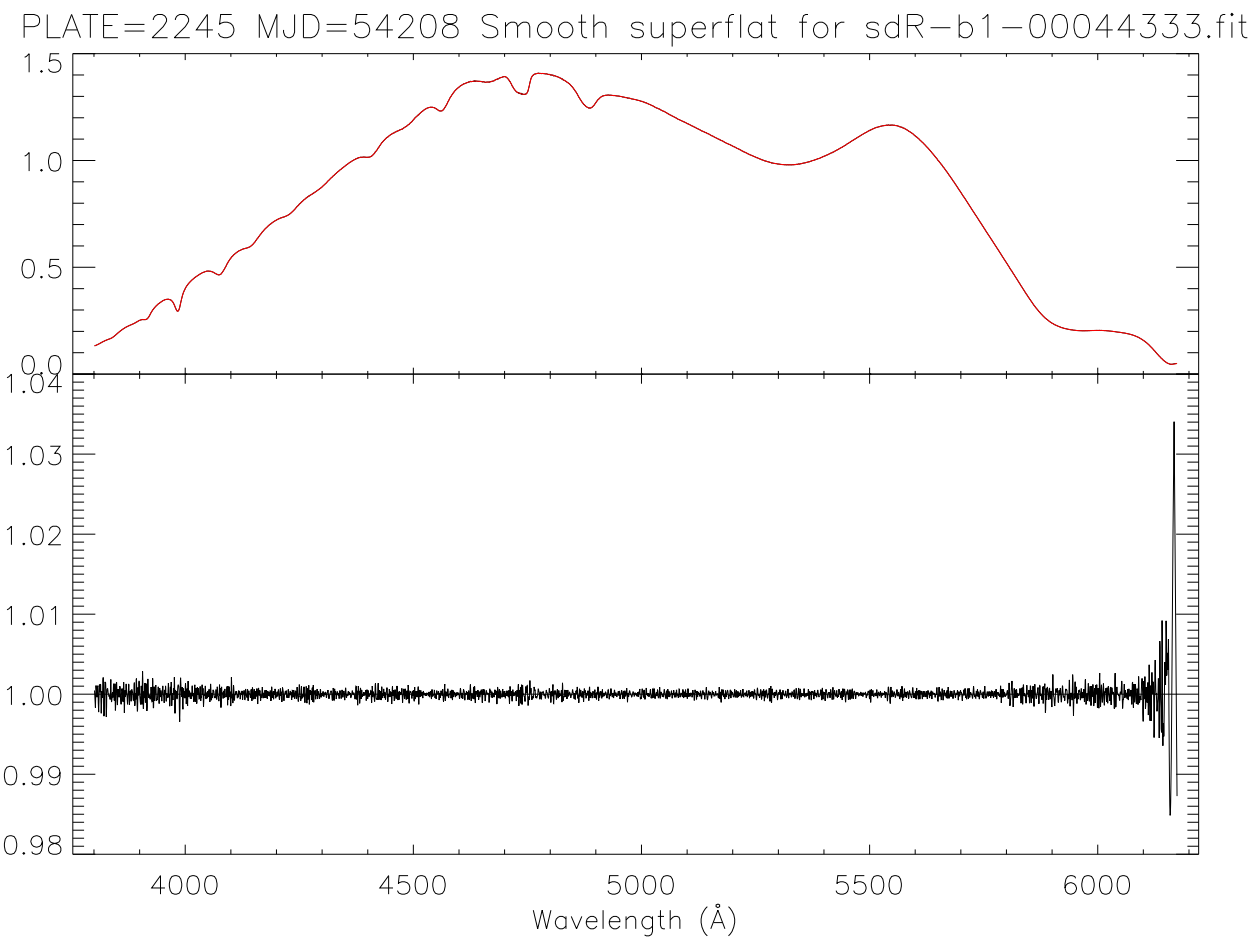

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

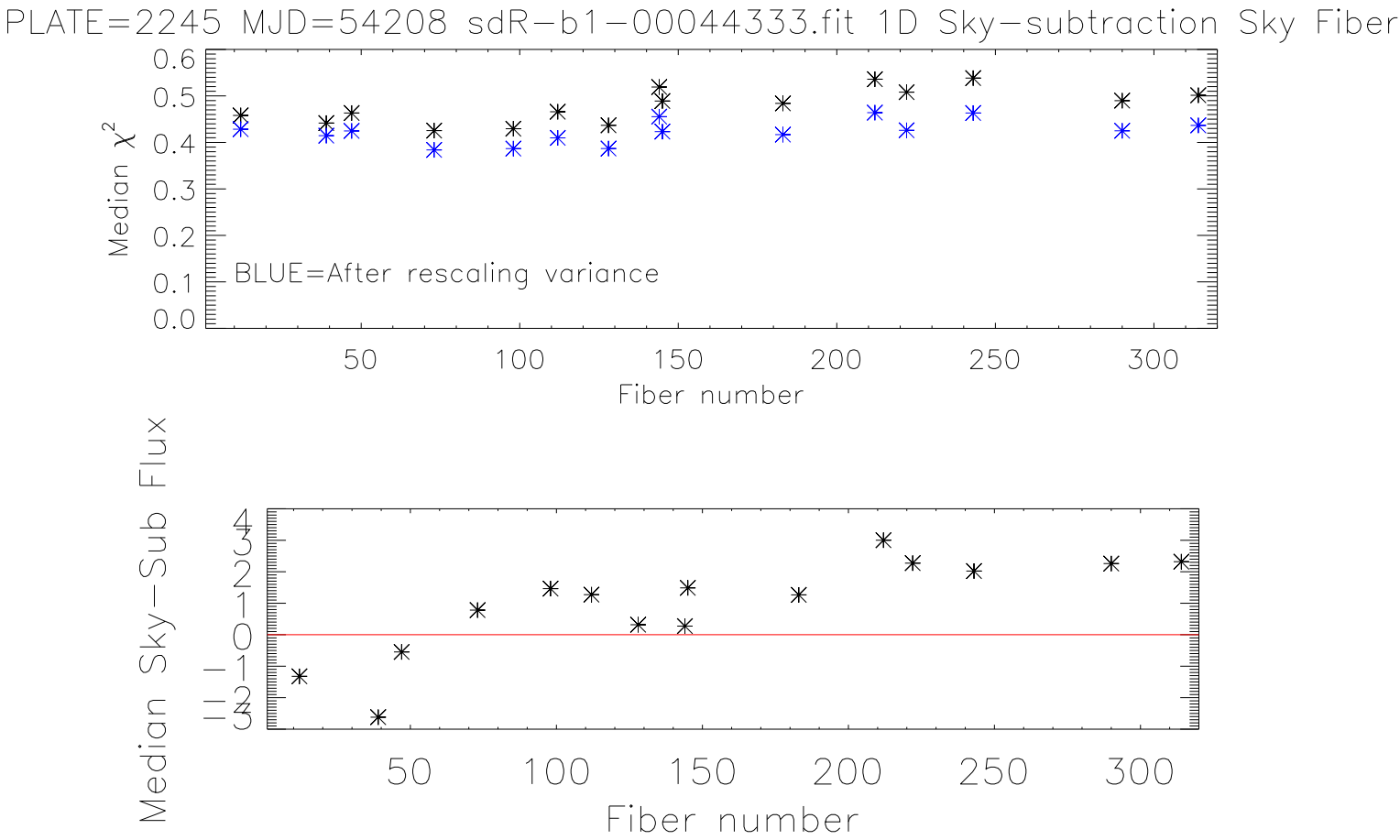

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

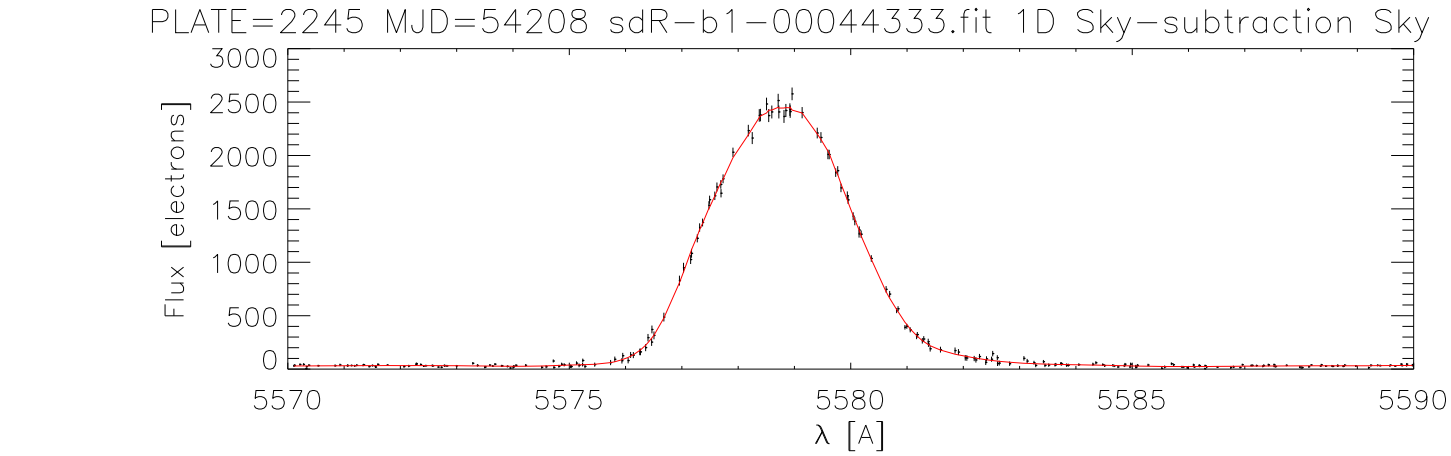

4046.5600
nfib1 16
nfib2 15
stdev 0.218
extra 0.15
4358.3300
nfib1 15
nfib2 15
stdev 0.114
extra 0.12
5460.9400
nfib1 16
nfib2 16
stdev 0.076
extra 0.18
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra 0.21
5889.9500
nfib1 16
nfib2 16
stdev 0.045
extra 0.32
5895.9240
nfib1 16
nfib2 16
stdev 0.056
extra 0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

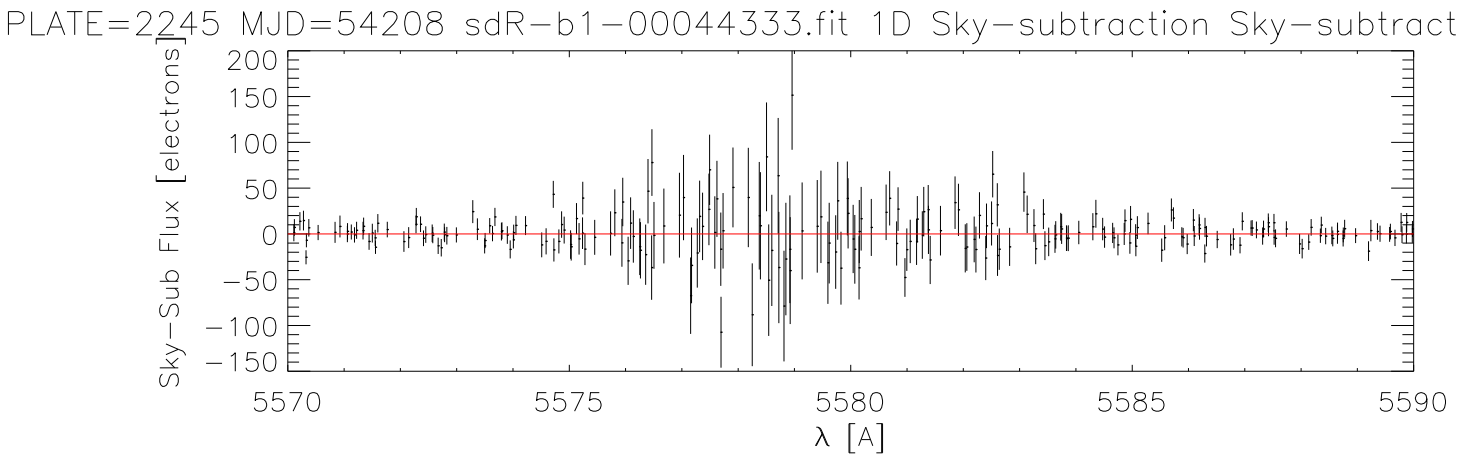

sky shift, pixels
0.0
0.1
0.2
0.3
3500
4000
4500
5000
5500
6000
6500

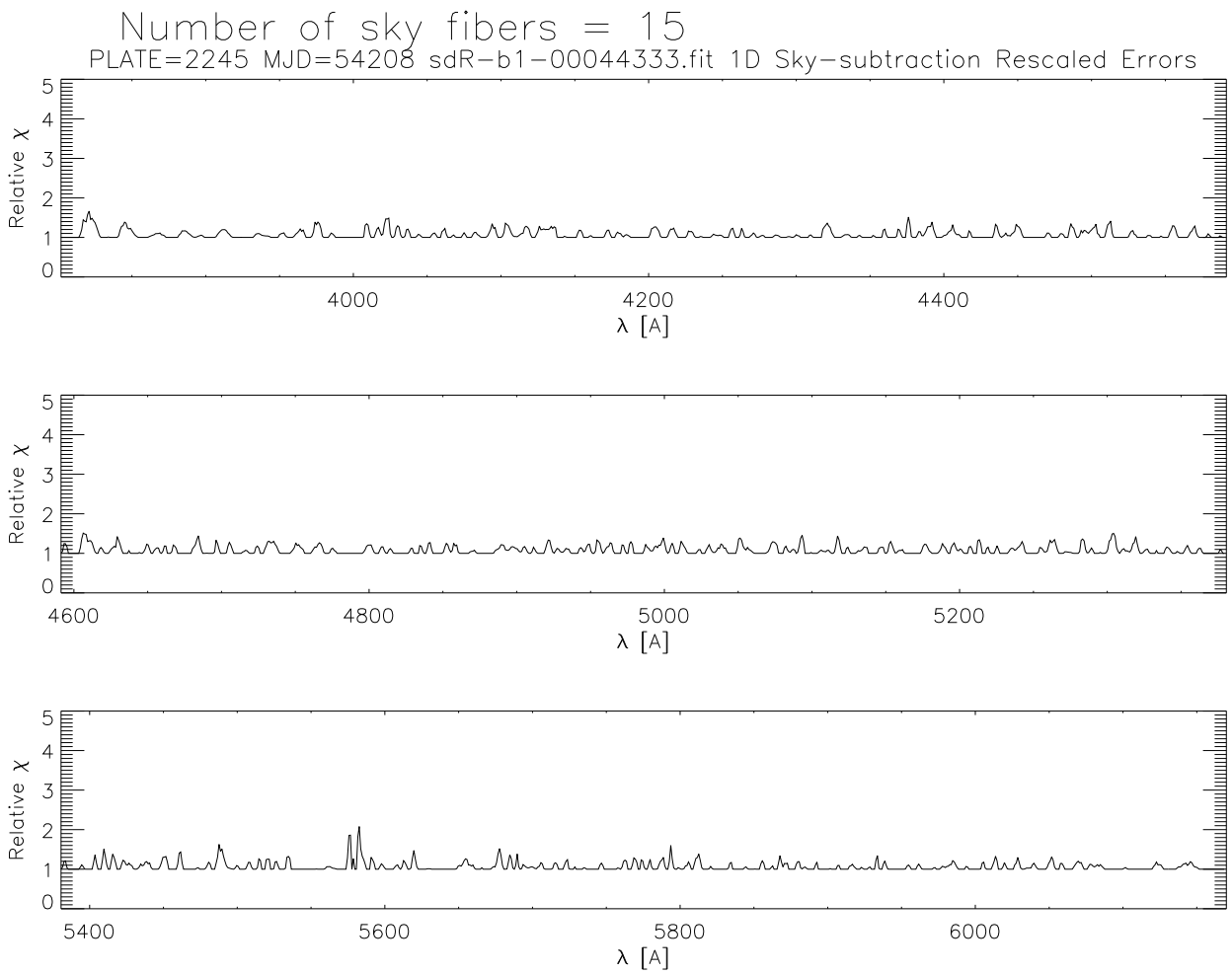
es= −0.0001

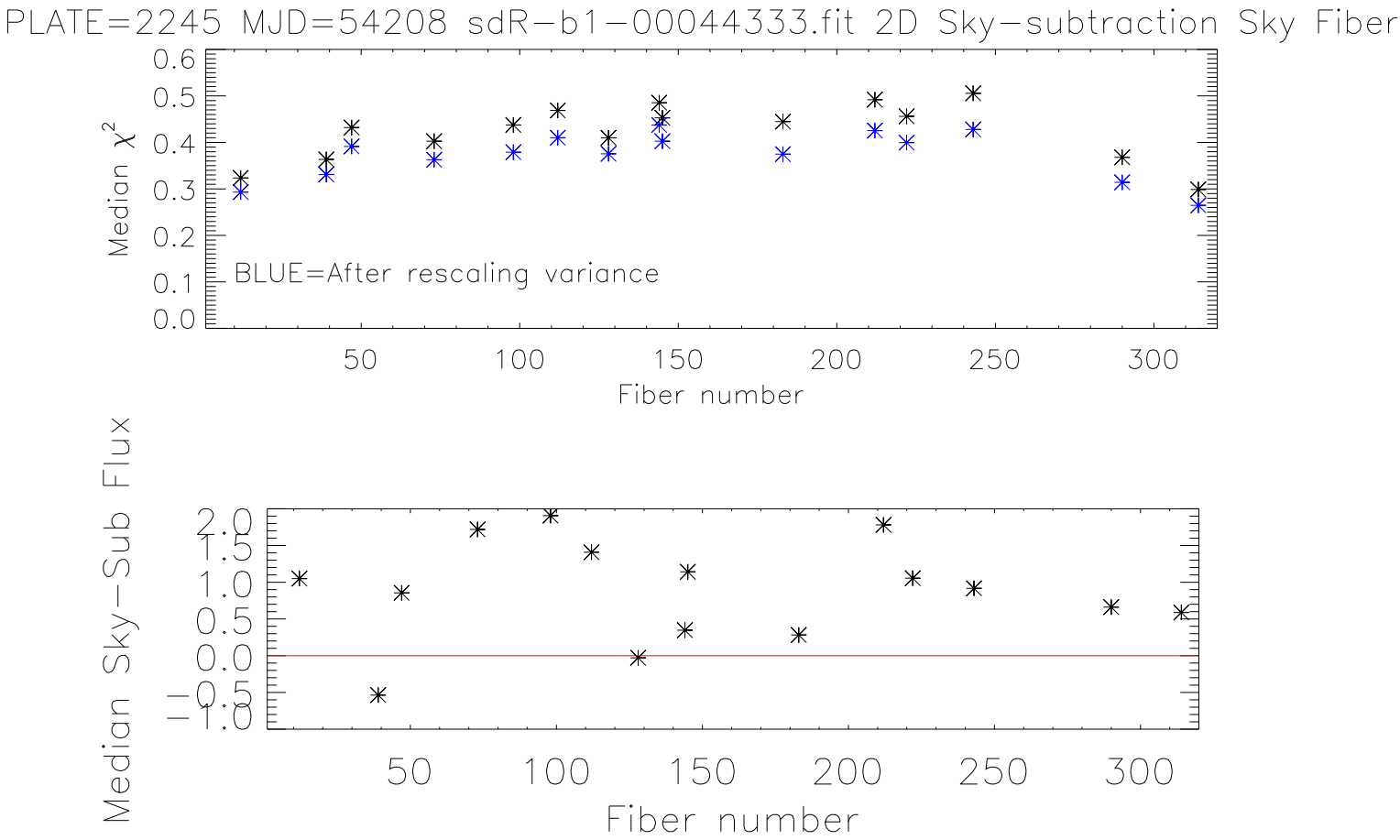

PLATE=2245 MJD=54208 Smooth superflat for sdR−b1−00044333.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

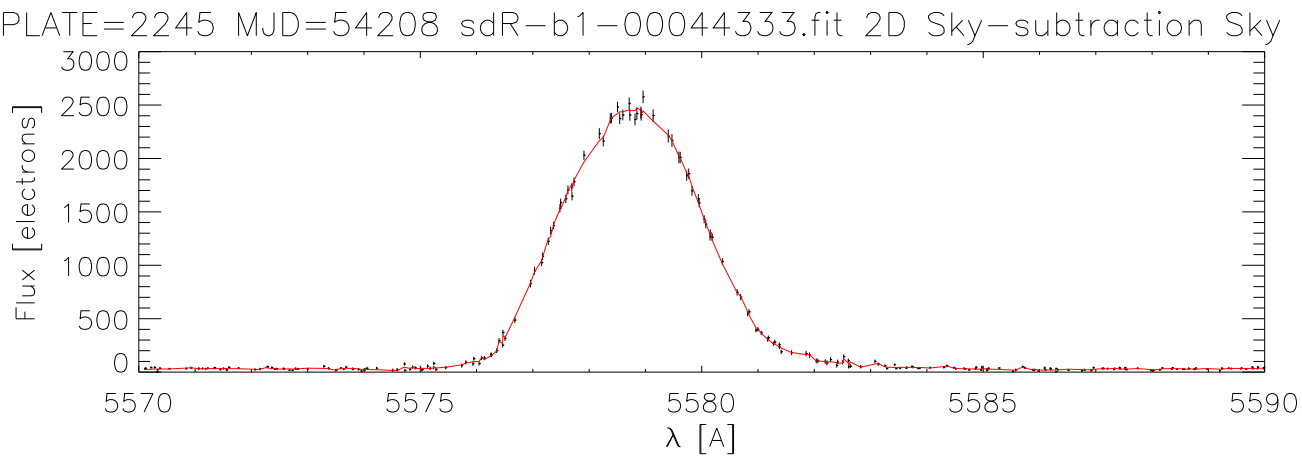

PLATE=2245 MJD=54208 sdR-b1-00044333.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

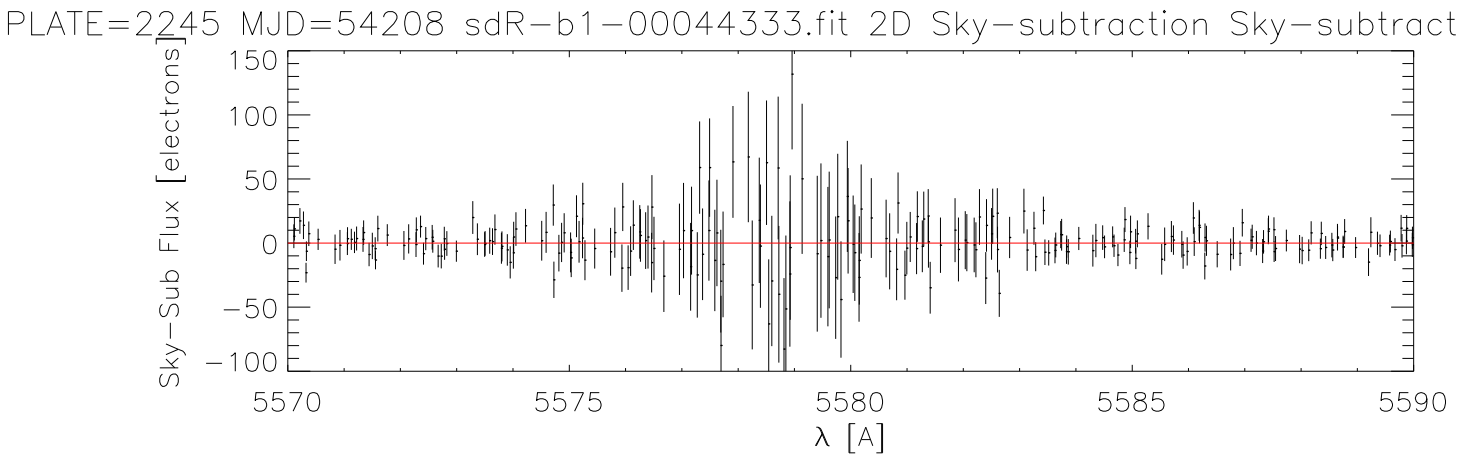

PLATE=2245 MJD=54208 sdR-b1-00044333.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

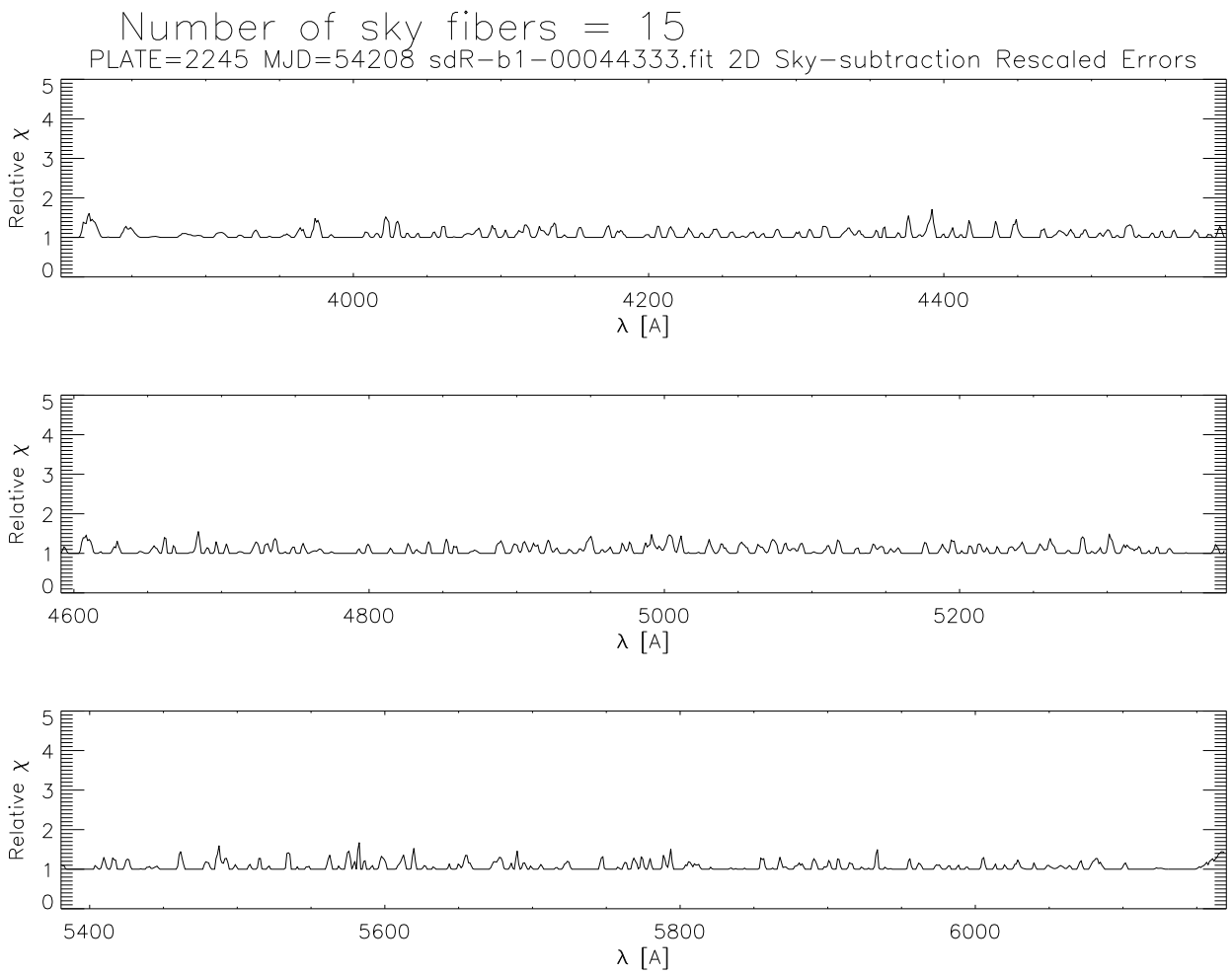

PLATE=2245 MJD=54208 sdR-b1-00044333.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

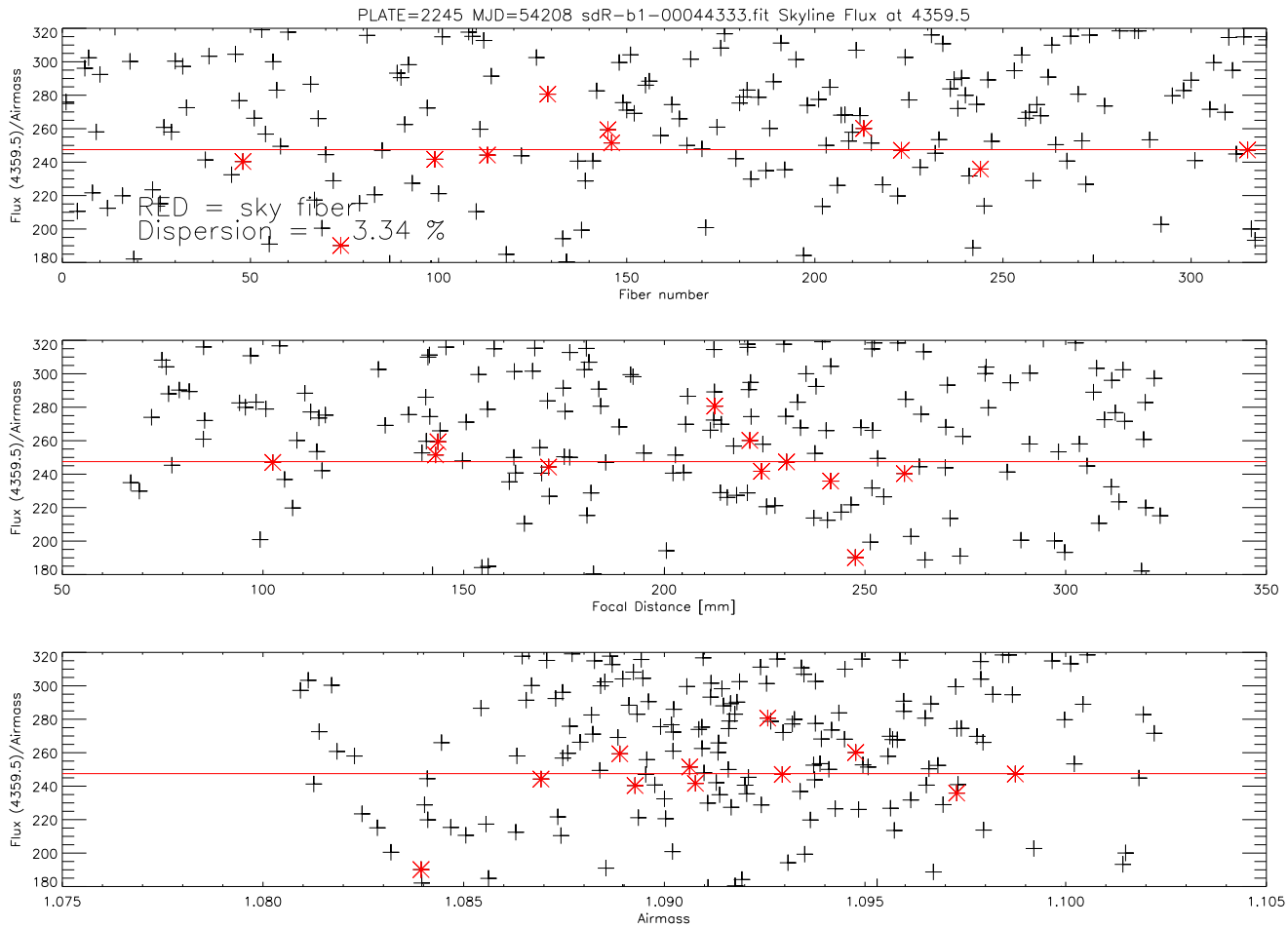

Number of sky fibers = 15
PLATE=2245 MJD=54208 sdR-b1-00044333.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

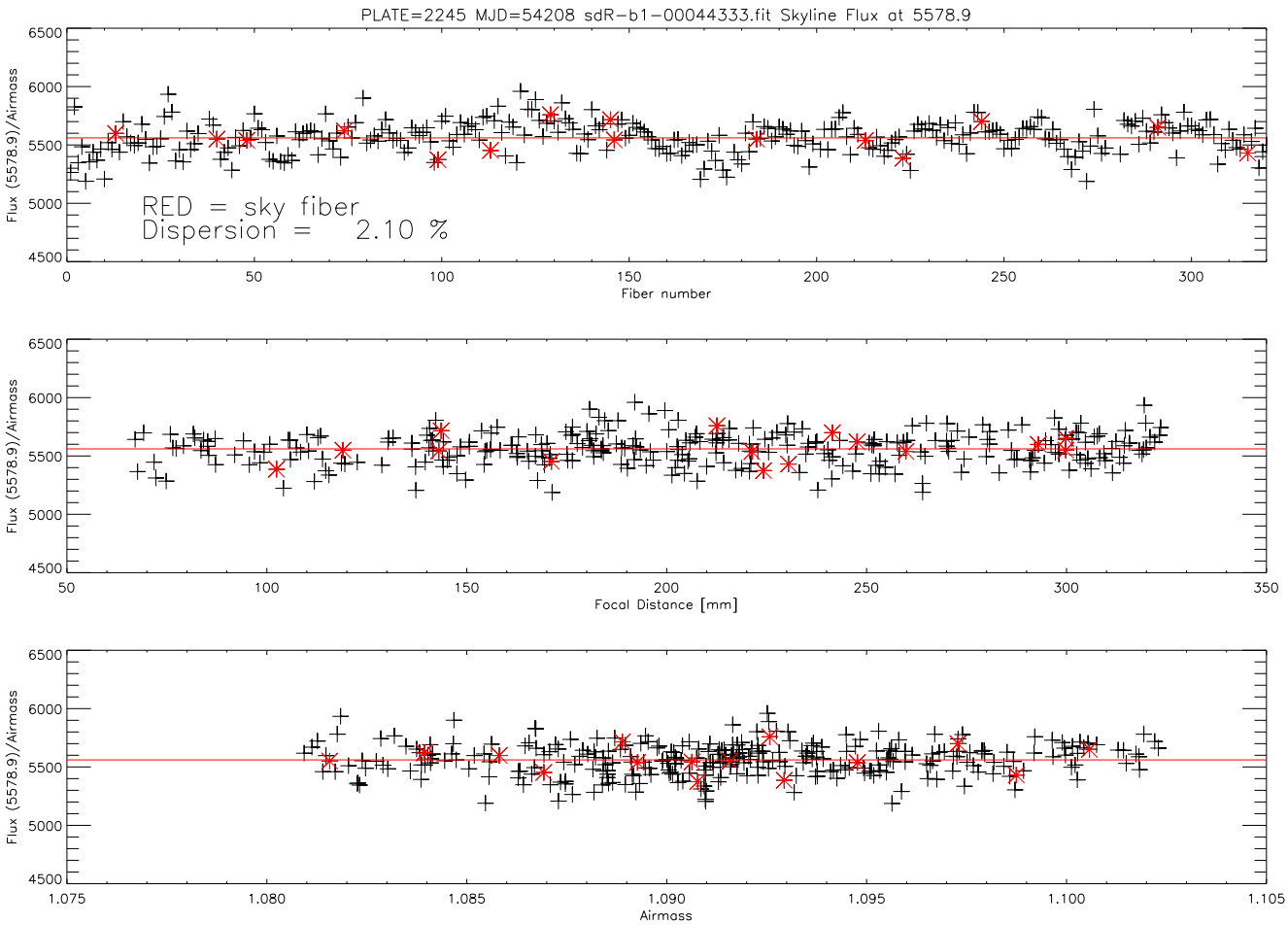

PLATE=2245 MJD=54208 sdR-b1-00044333.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

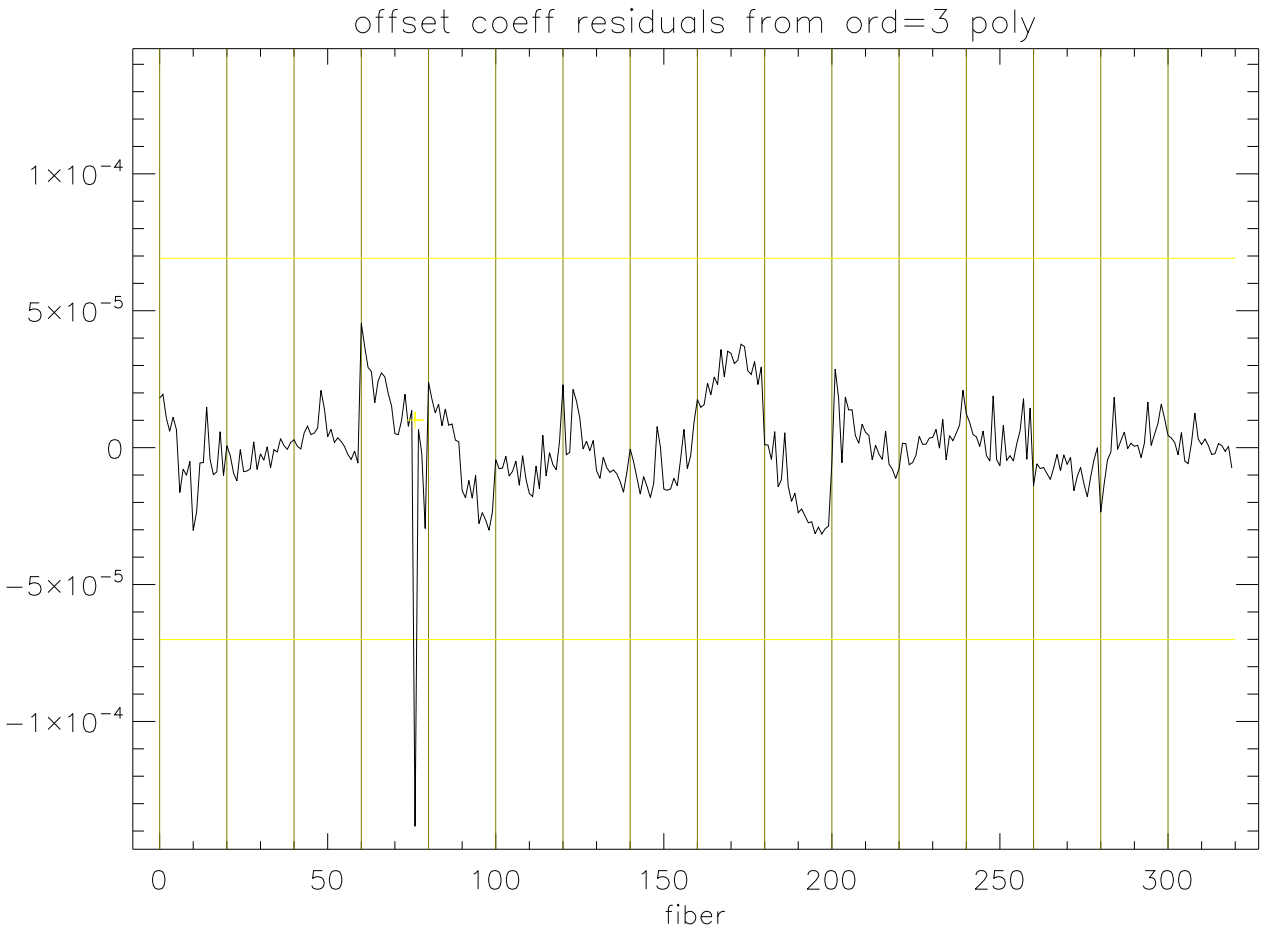

PLATE=2245 MJD=54208 sdR-b1-00044333.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

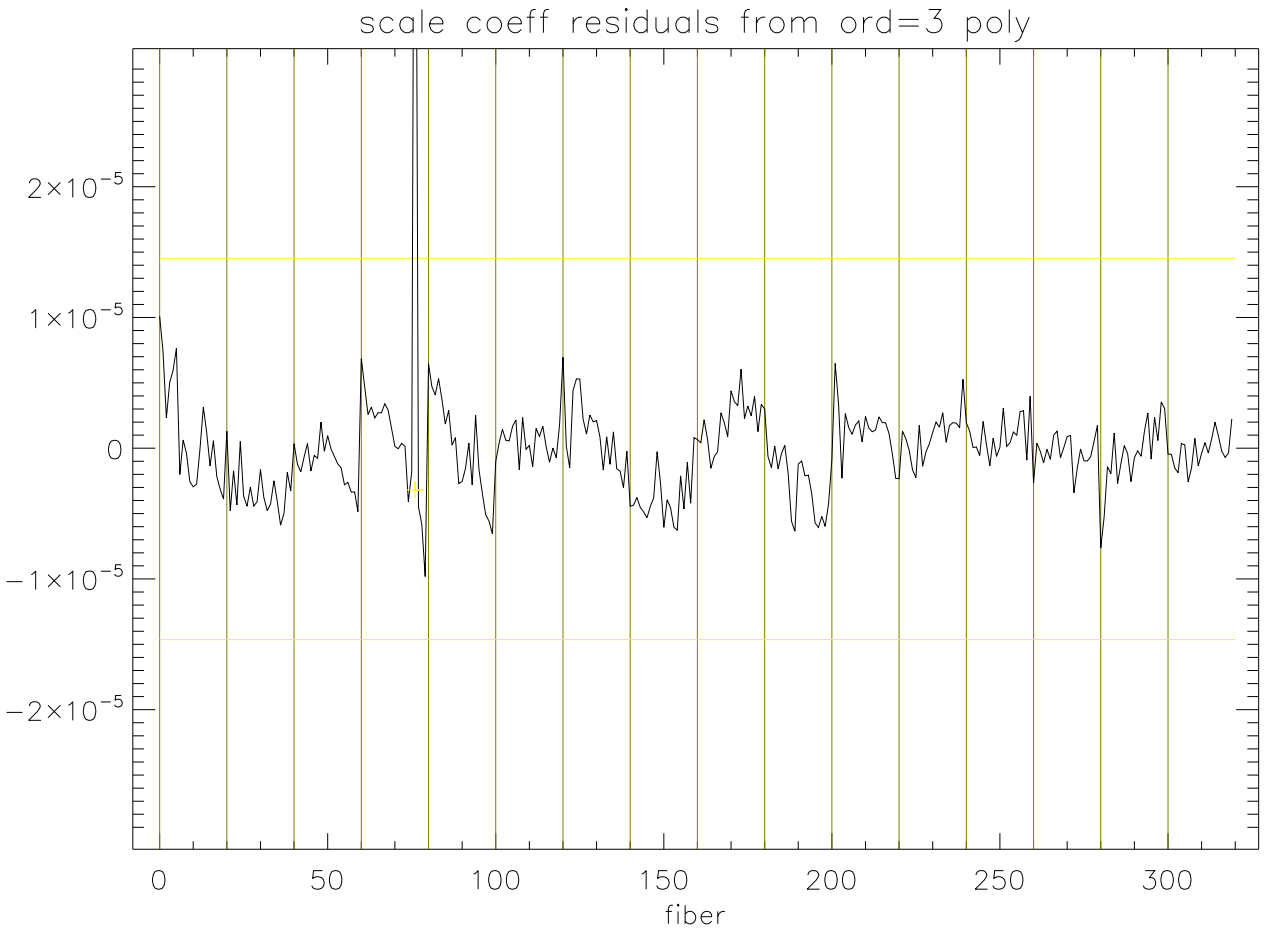

PLATE=2245 MJD=54208 sdR-b1-00044333.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

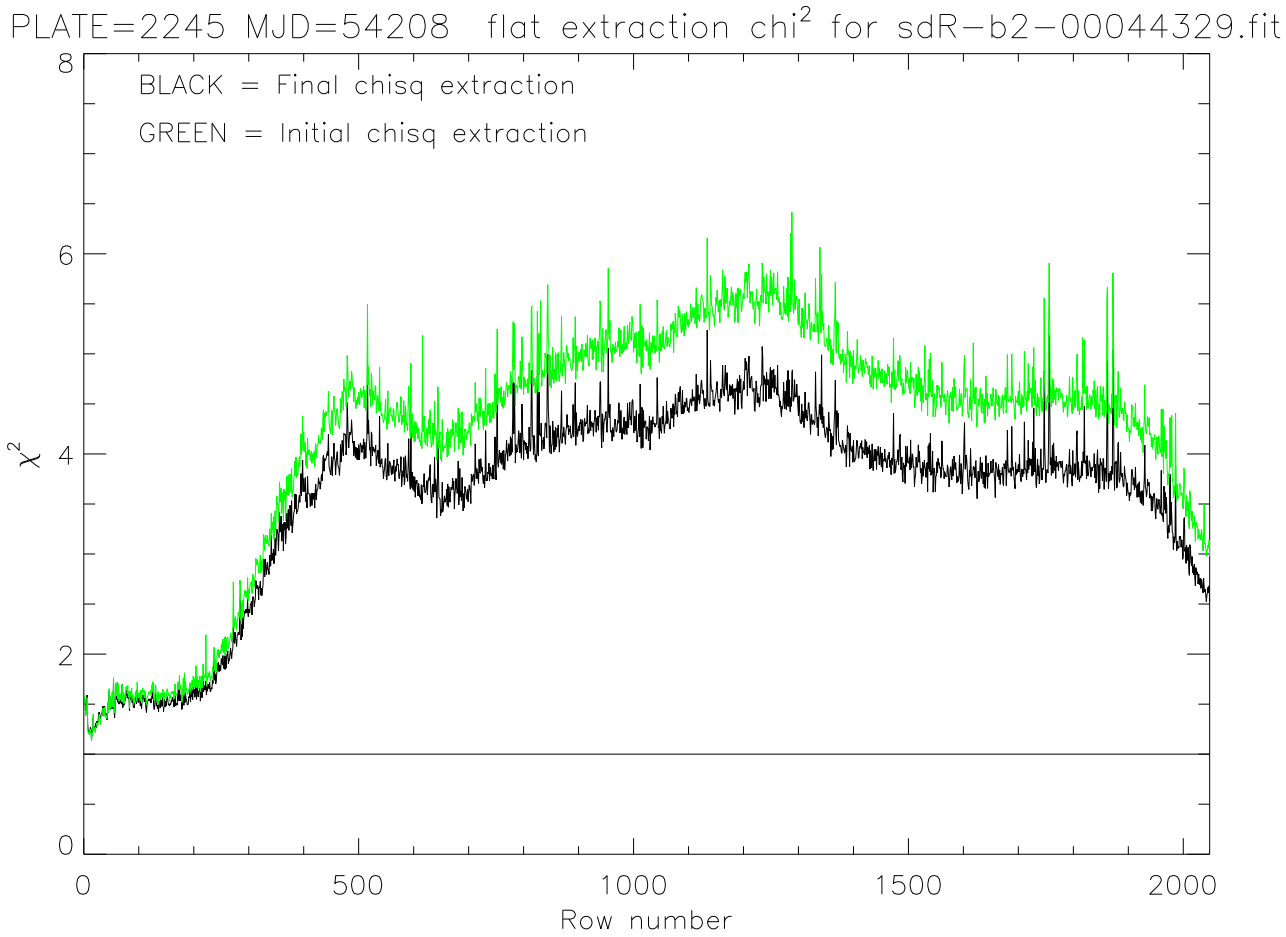

Number of sky fibers = 15
PLATE=2245 MJD=54208 sdR-b1-00044333.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

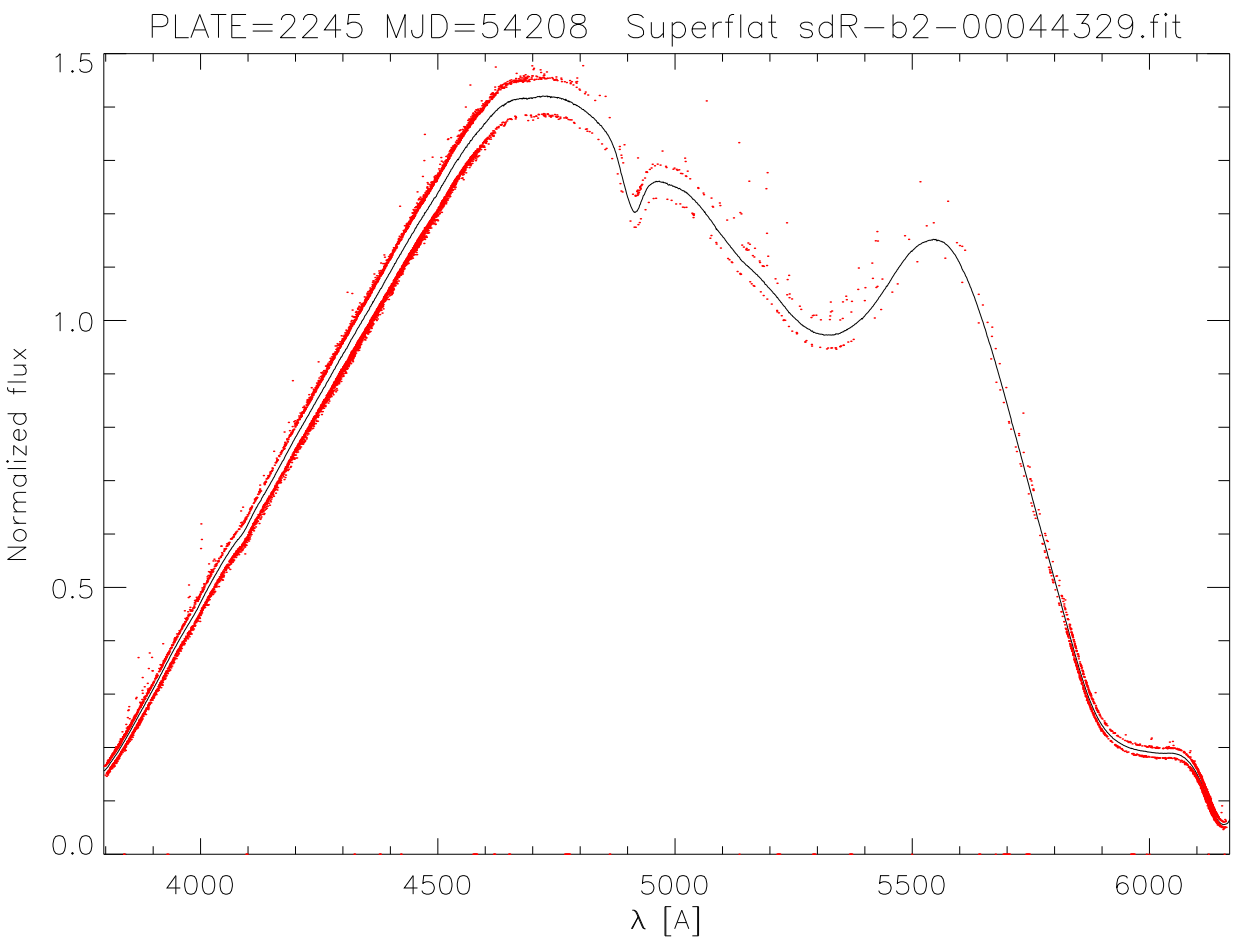

PLATE=2245 MJD=54208 sdR-b1-00044333.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.34 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

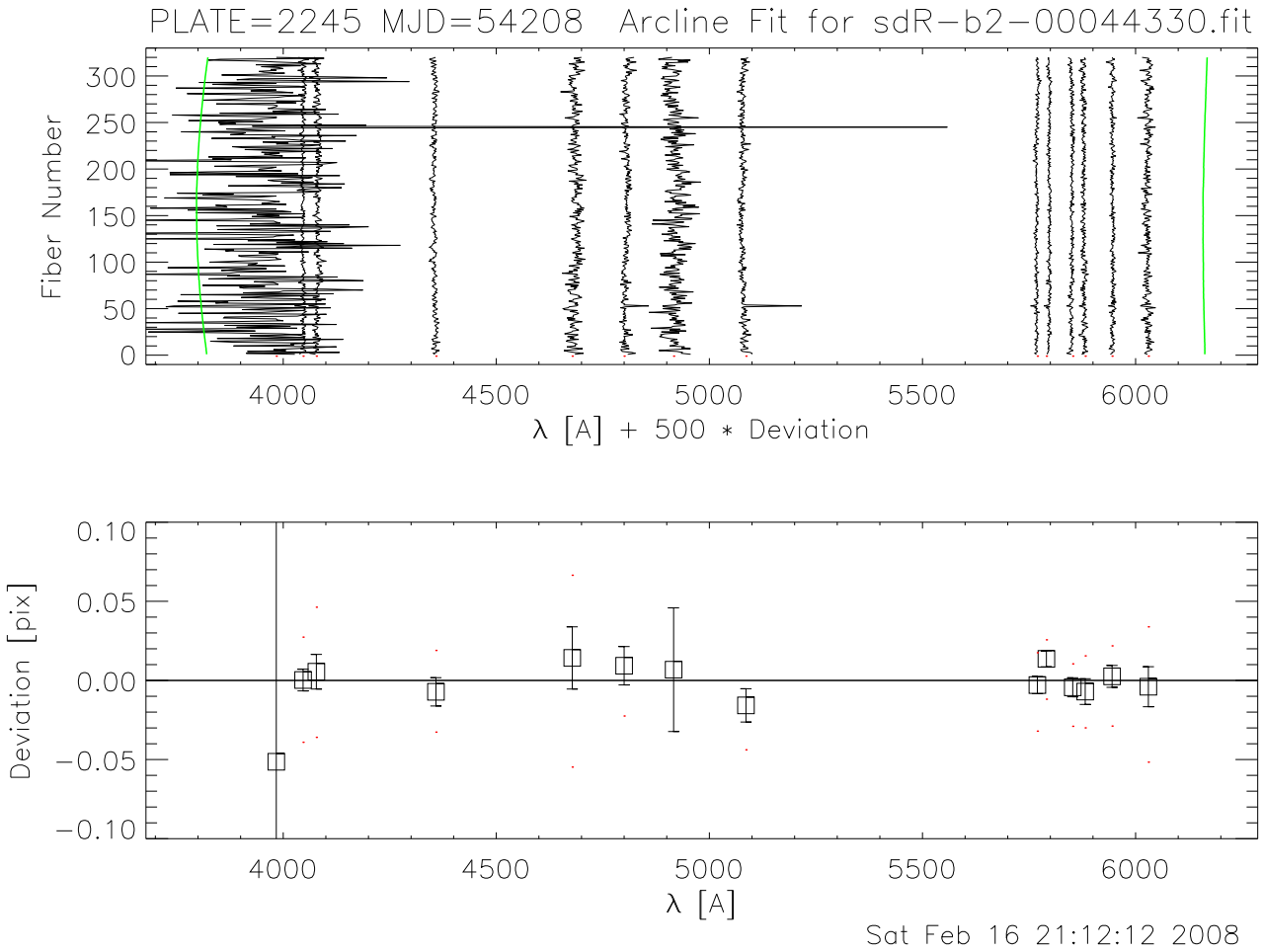

PLATE=2245 MJD=54208 sdR-b1-00044333.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.10 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

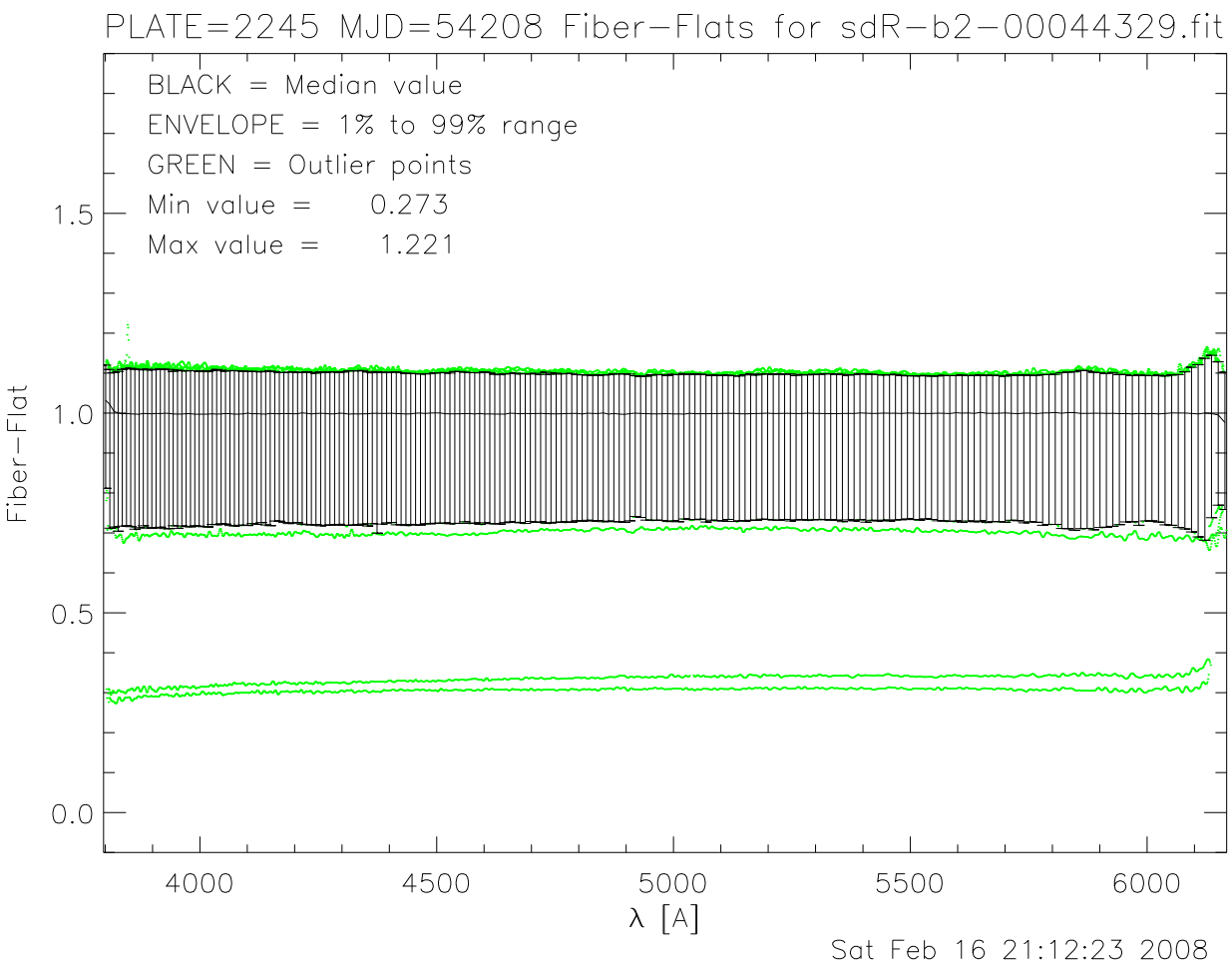

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

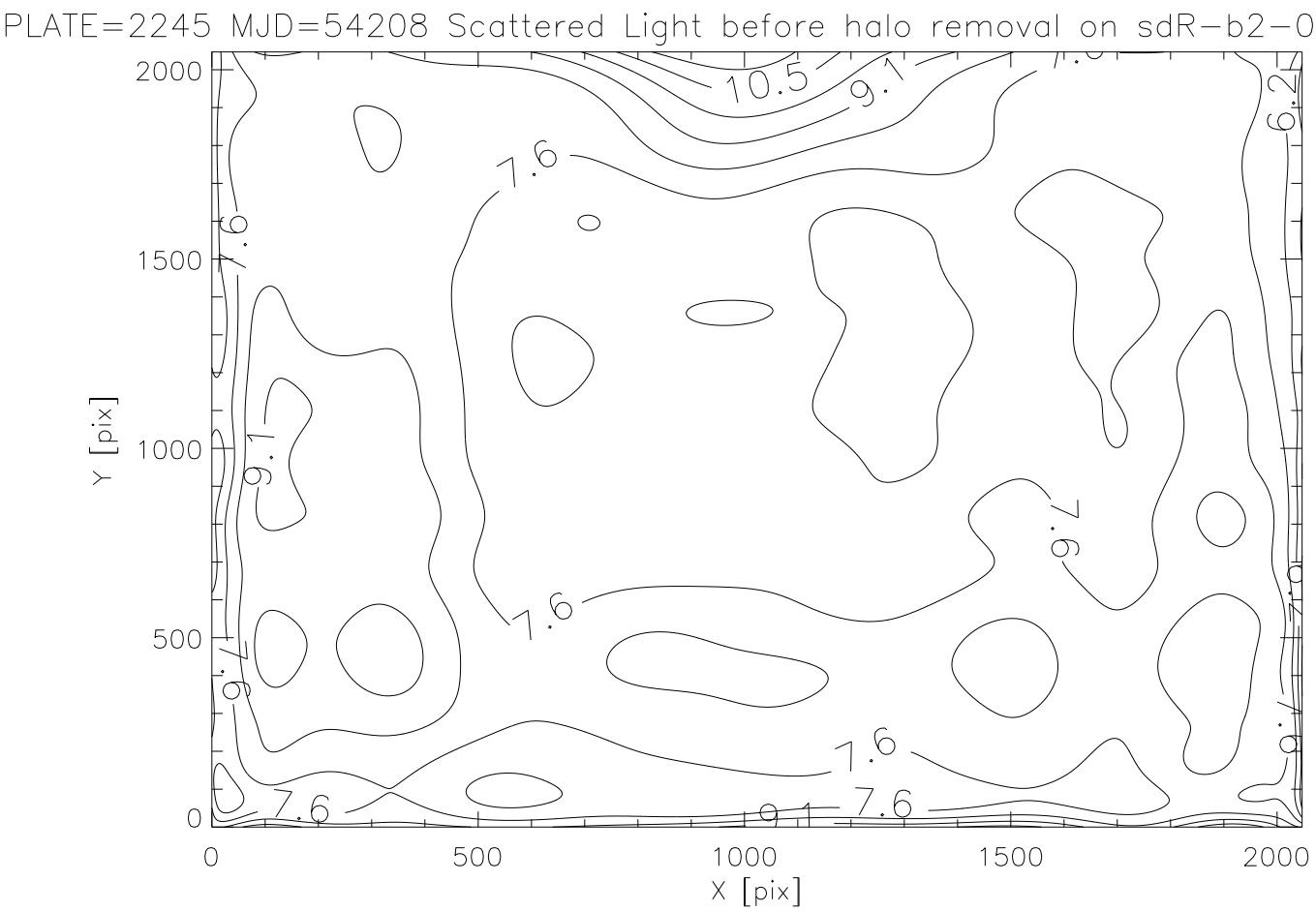

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

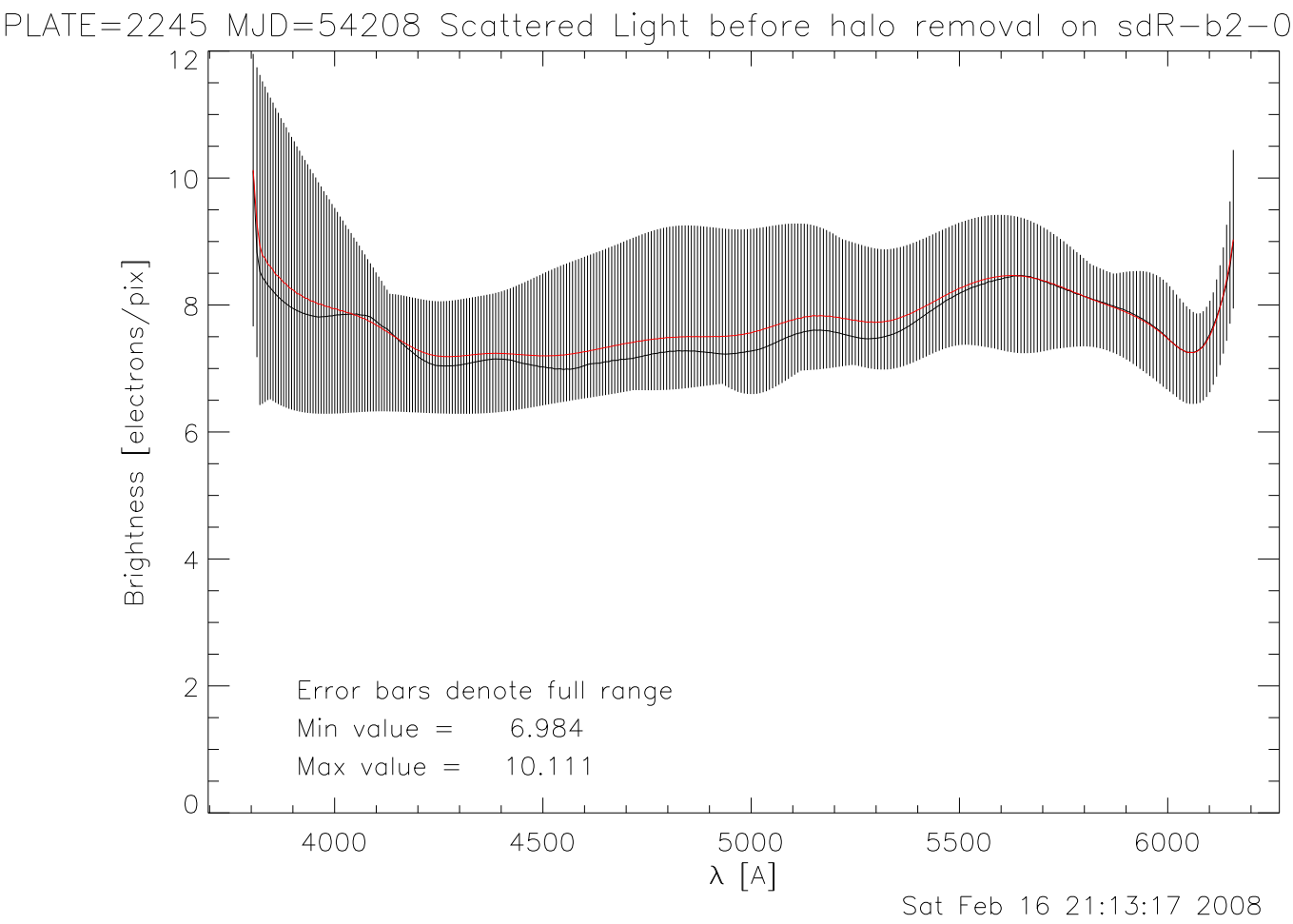

PLATE=2245 MJD=54208 flat extraction chi^2 for sdR−b2−00044329.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

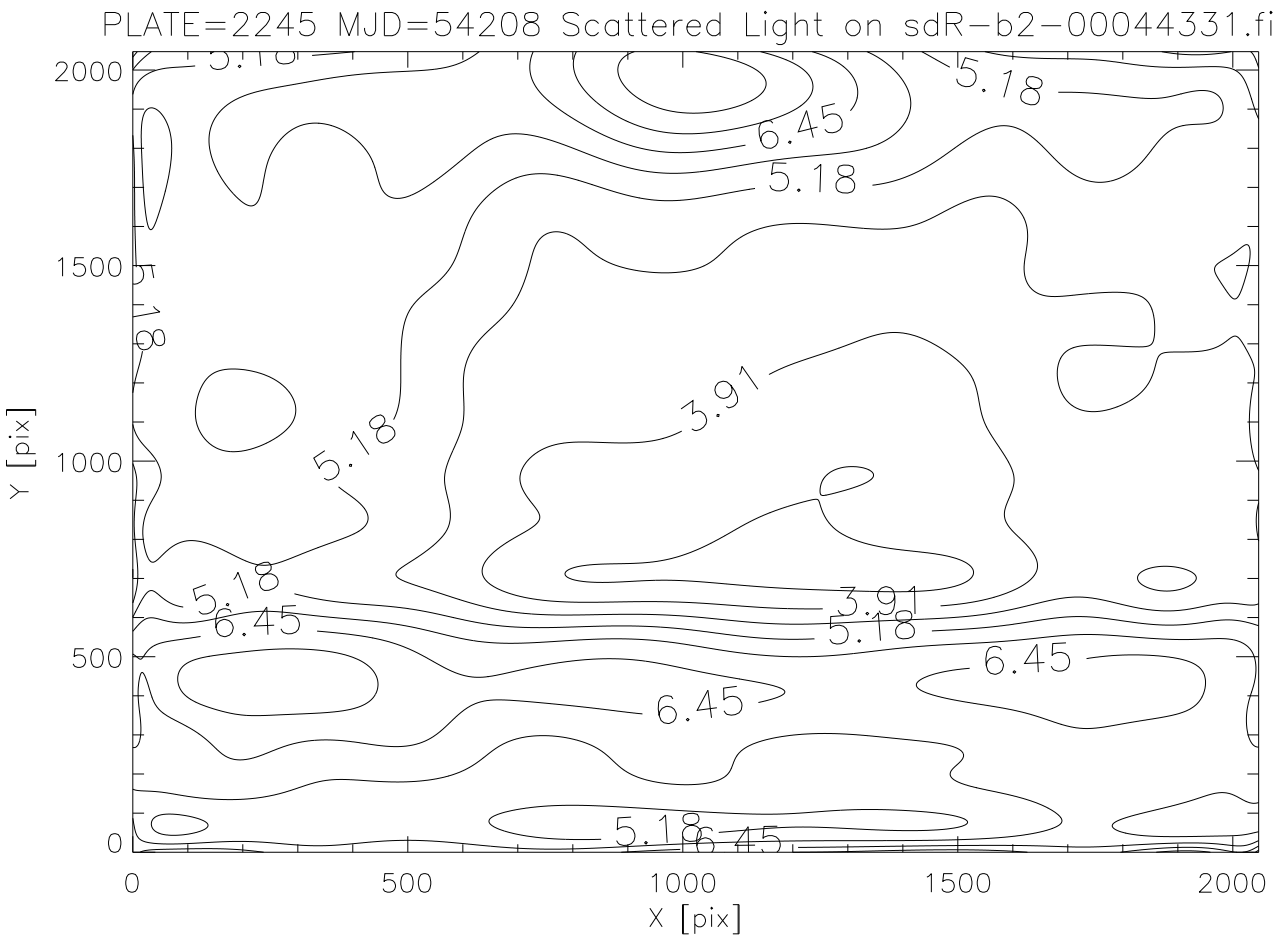

PLATE=2245 MJD=54208 Superflat sdR-b2-00044329.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

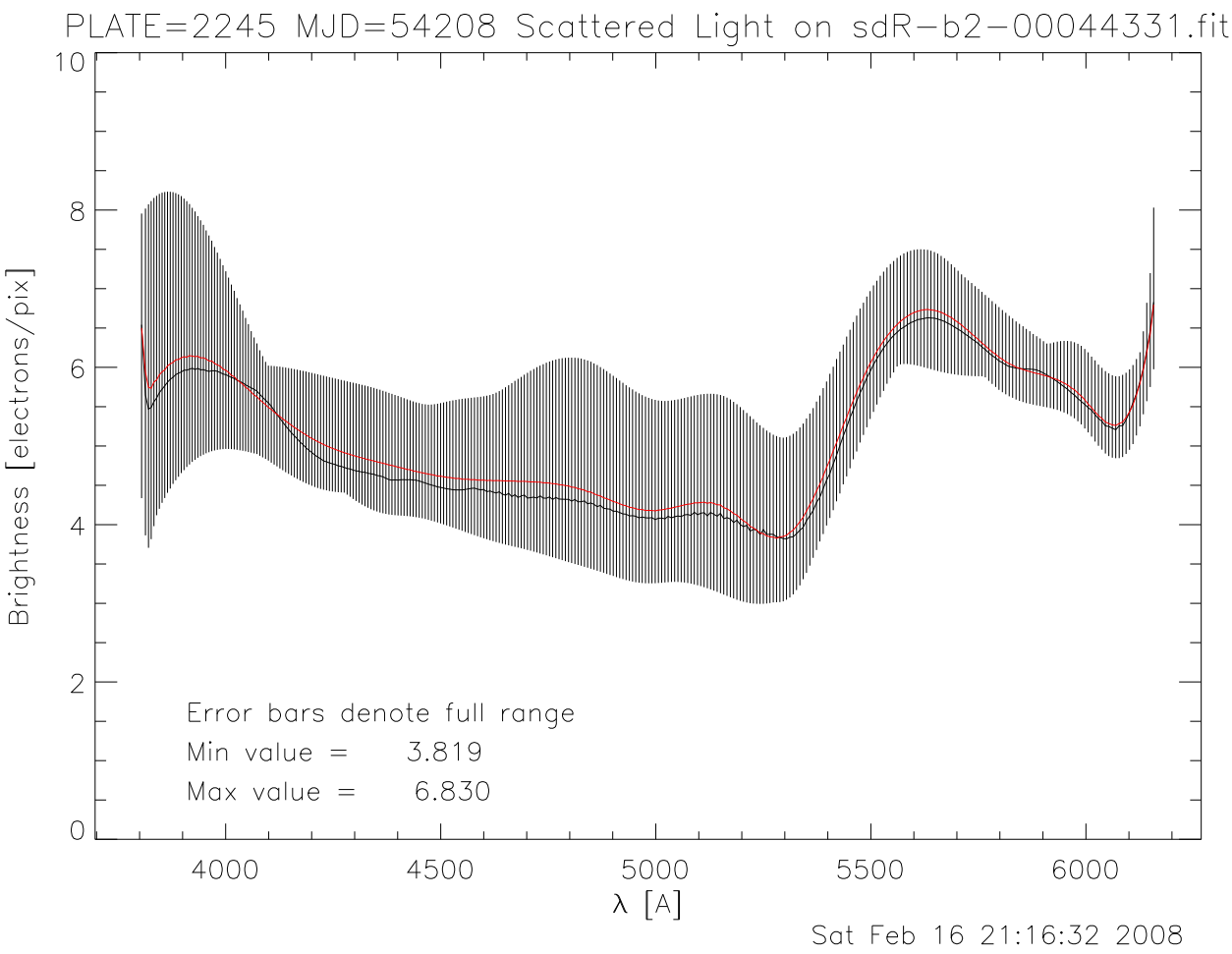

PLATE=2245 MJD=54208 Arcline Fit for sdR-b2-00044330.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 21:12:12 2008

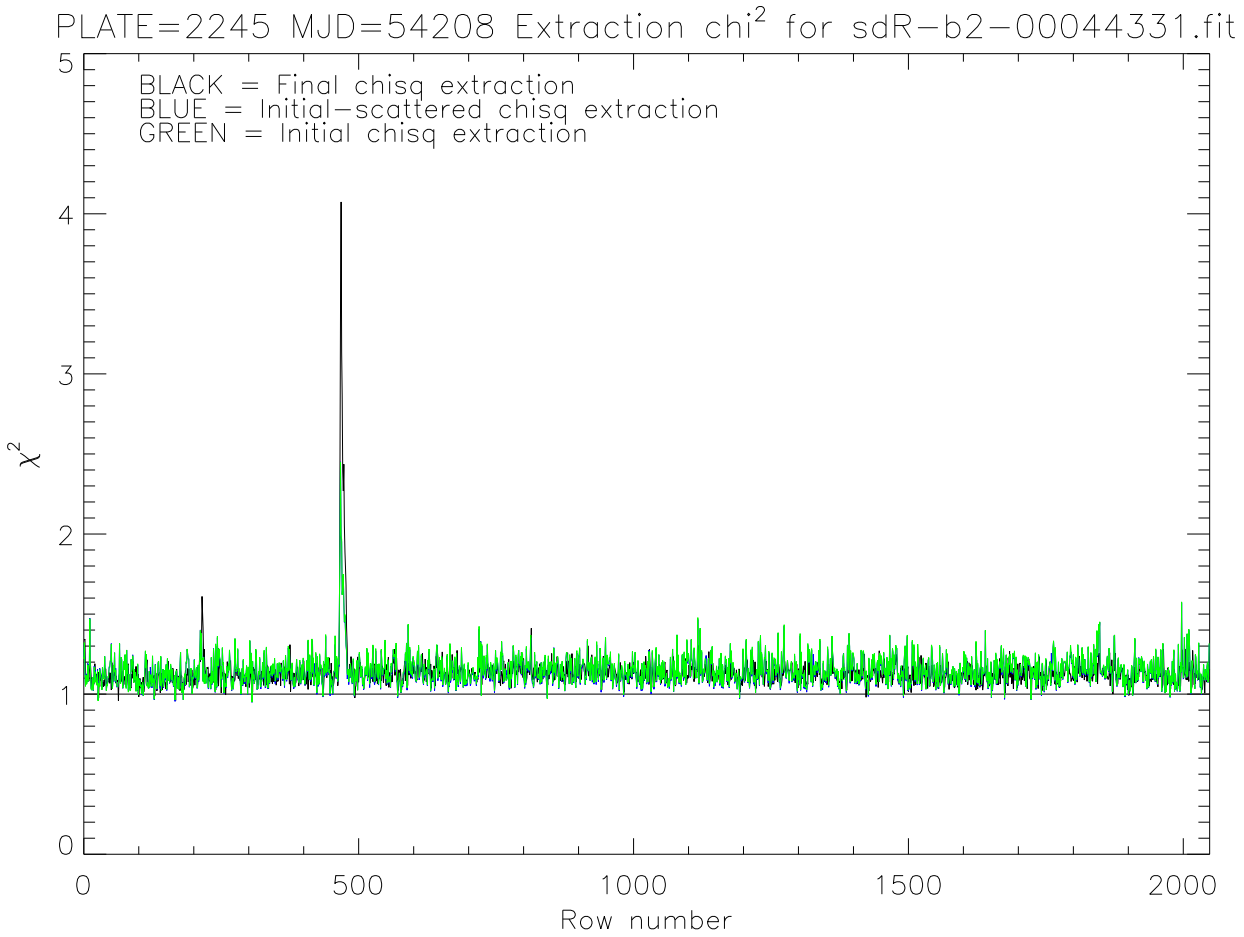

PLATE=2245 MJD=54208 Fiber-Flats for sdR-b2-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.273
Max value = 1.221
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 21:12:23 2008

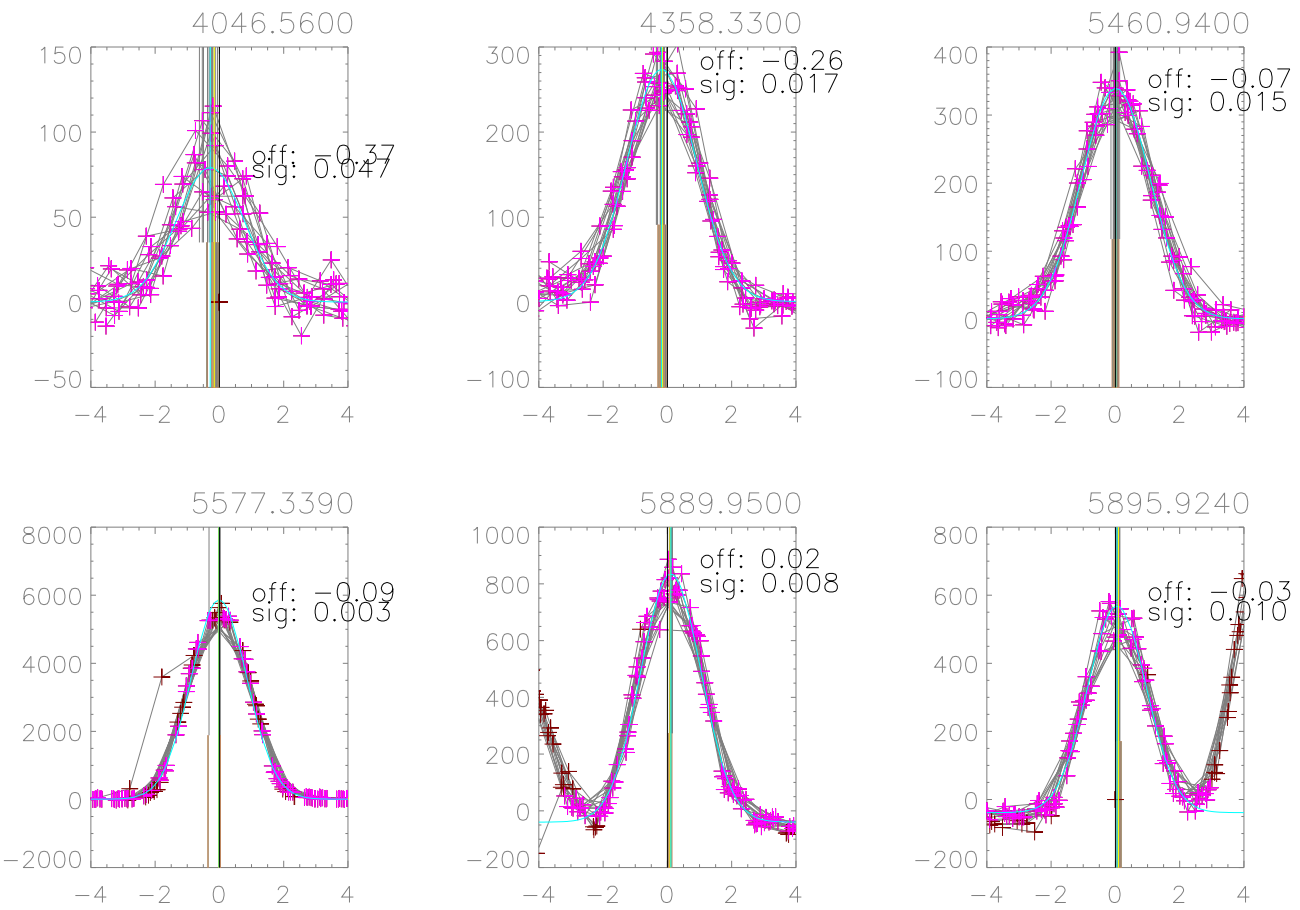

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR−b2−00044331.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.5
9.1
7.6
6.2
9.7

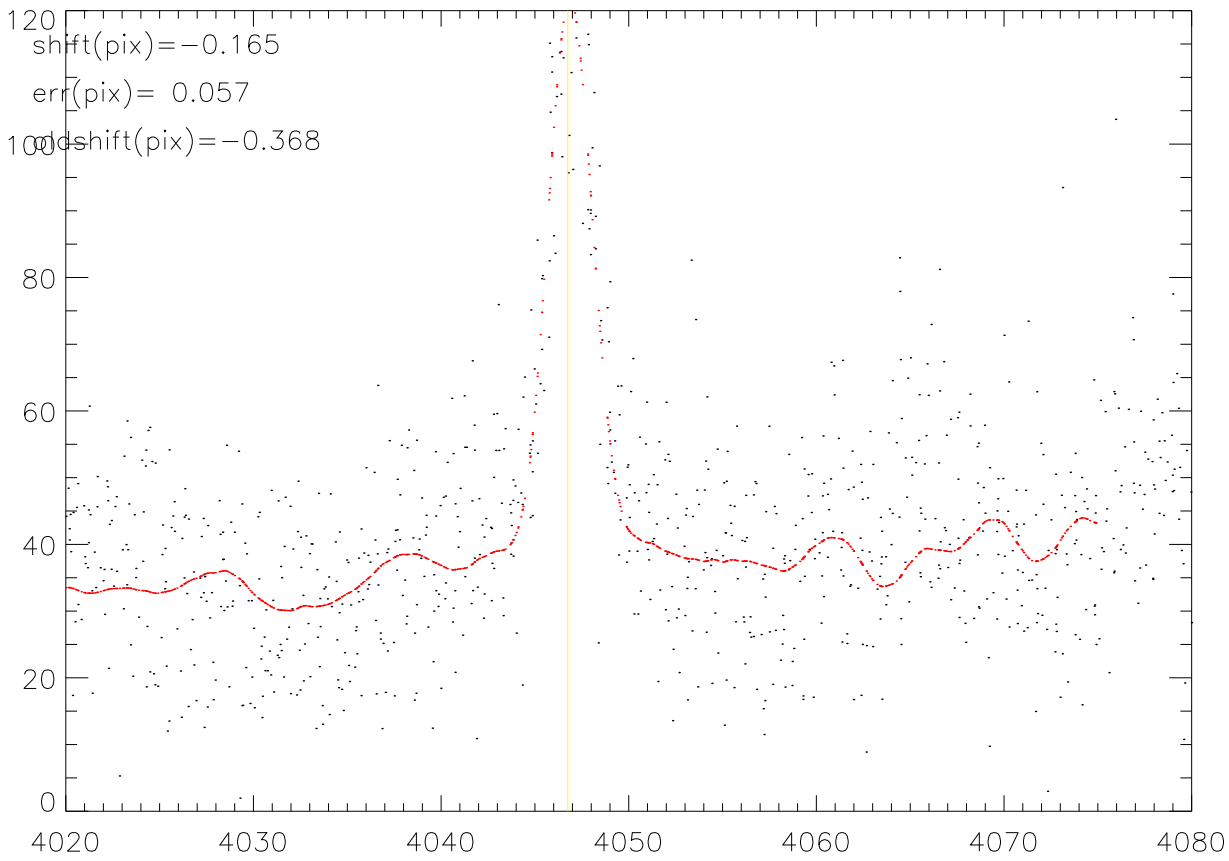

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b2-00044331.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.984
Max value = 10.111
Sat Feb 16 21:13:17 2008

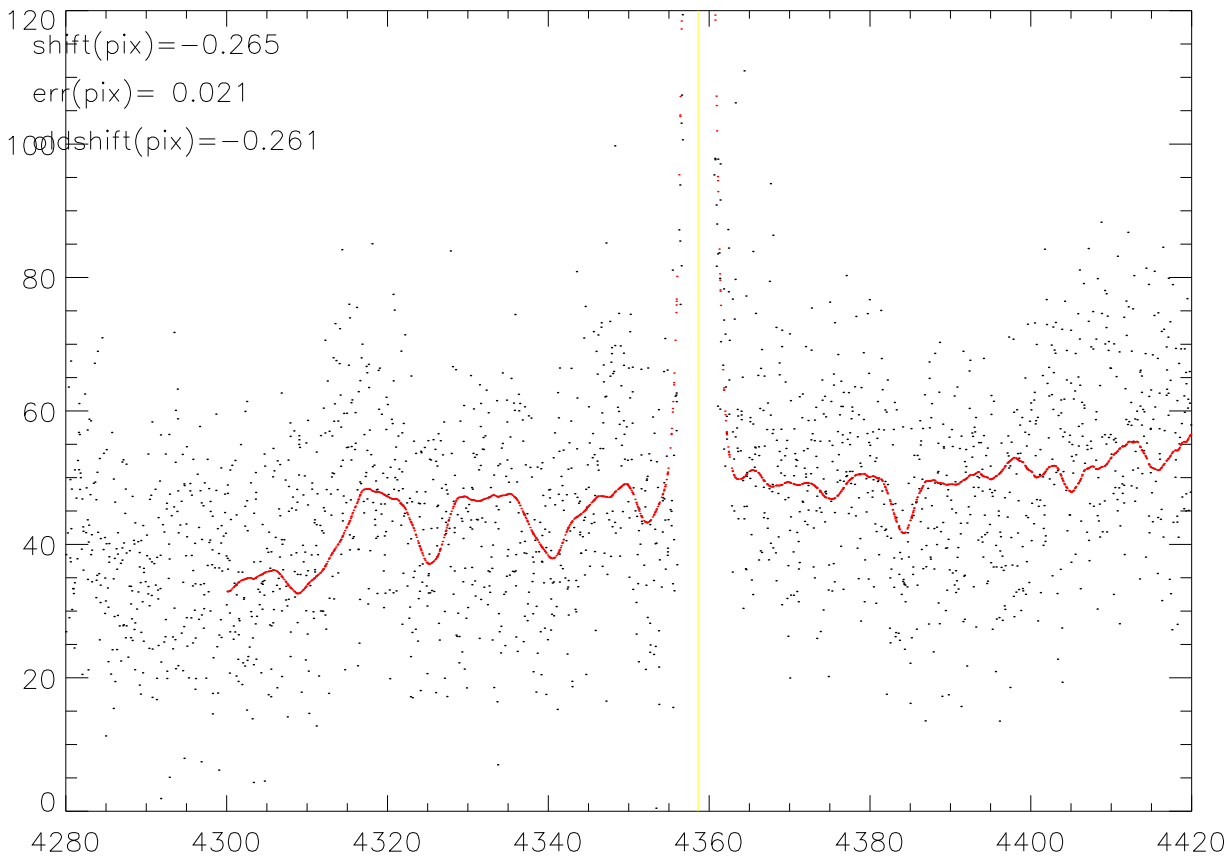

PLATE=2245 MJD=54208 Scattered Light on sdR-b2-00044331.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.18
6.45
3.91

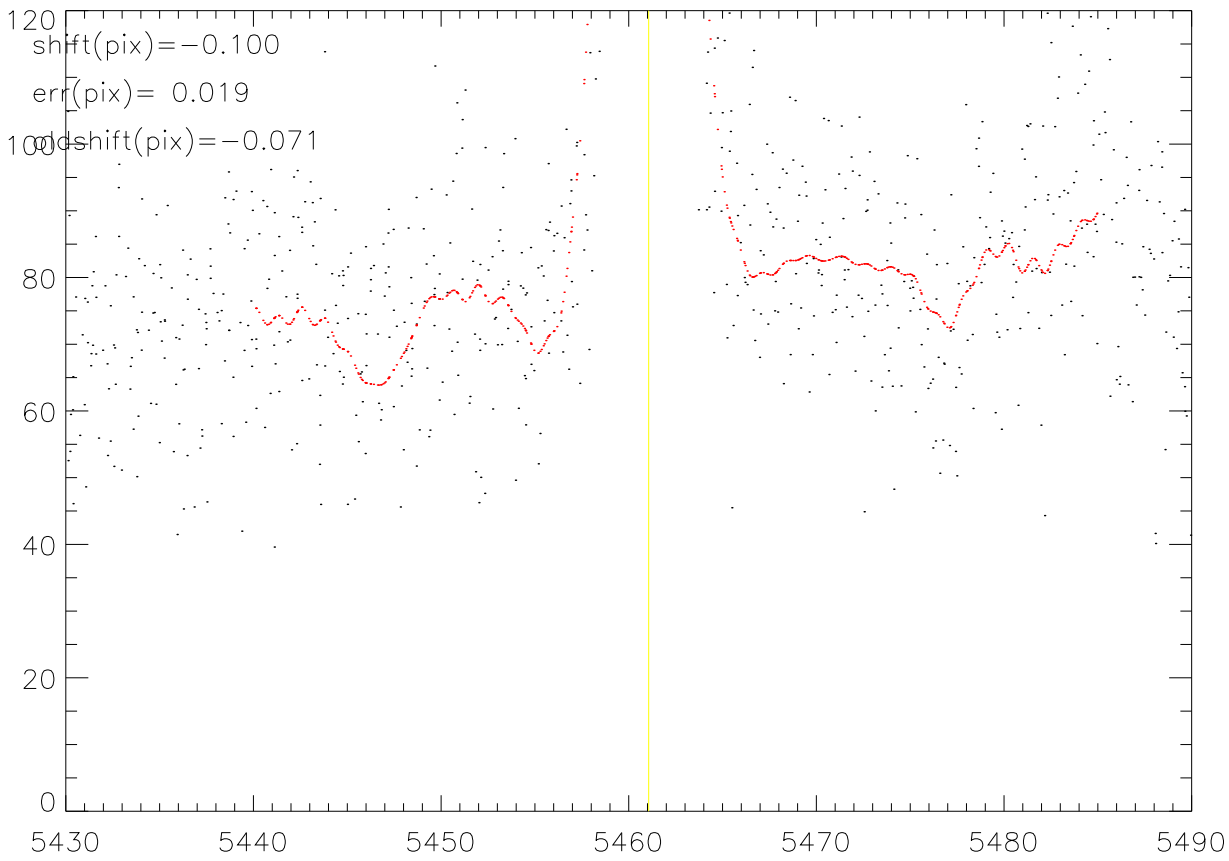

PLATE=2245 MJD=54208 Scattered Light on sdR-b2-00044331.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.819
Max value = 6.830
Sat Feb 16 21:16:32 2008

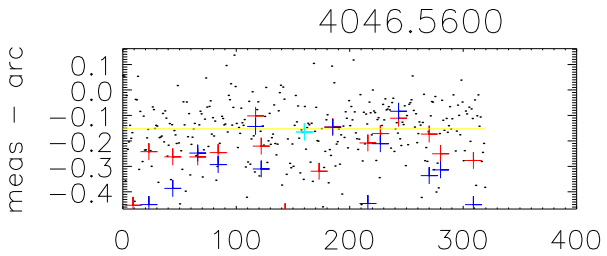

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-b2-00044331.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

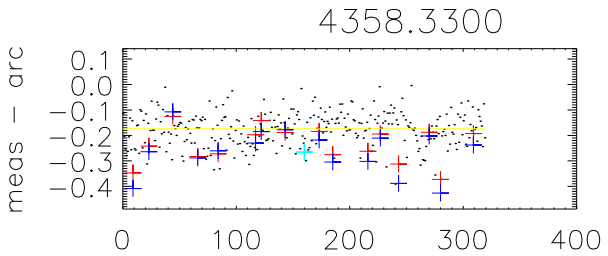

4046.5600
off: −0.37
sig: 0.047
4358.3300
off: −0.26
sig: 0.017
5460.9400
off: −0.07
sig: 0.015
5577.3390
off: −0.09
sig: 0.003
5889.9500
off: 0.02
sig: 0.008
5895.9240
off: −0.03
sig: 0.010

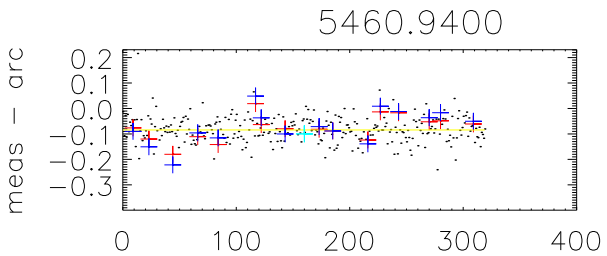

shift(pix)=−0.165
err(pix)= 0.057
oldshift(pix)=−0.368
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

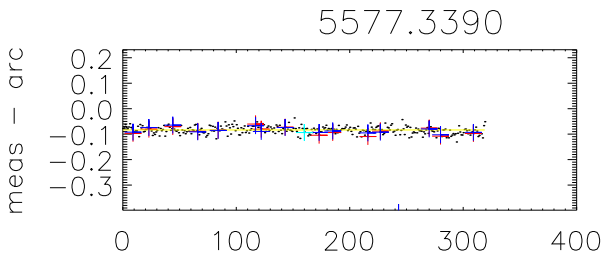

shift(pix)=−0.265
err(pix)= 0.021
oldshift(pix)=−0.261
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

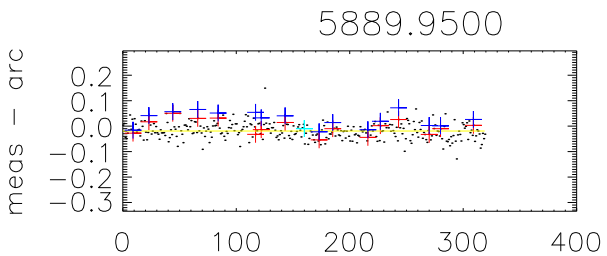

shift(pix)=−0.100
err(pix)= 0.019
oldshift(pix)=−0.071
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

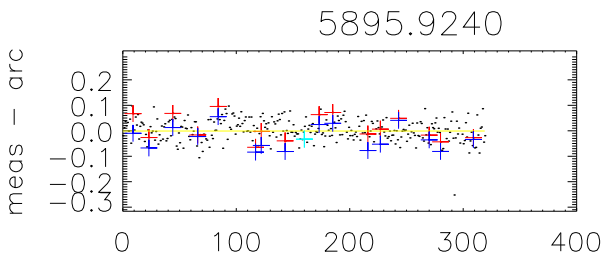

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

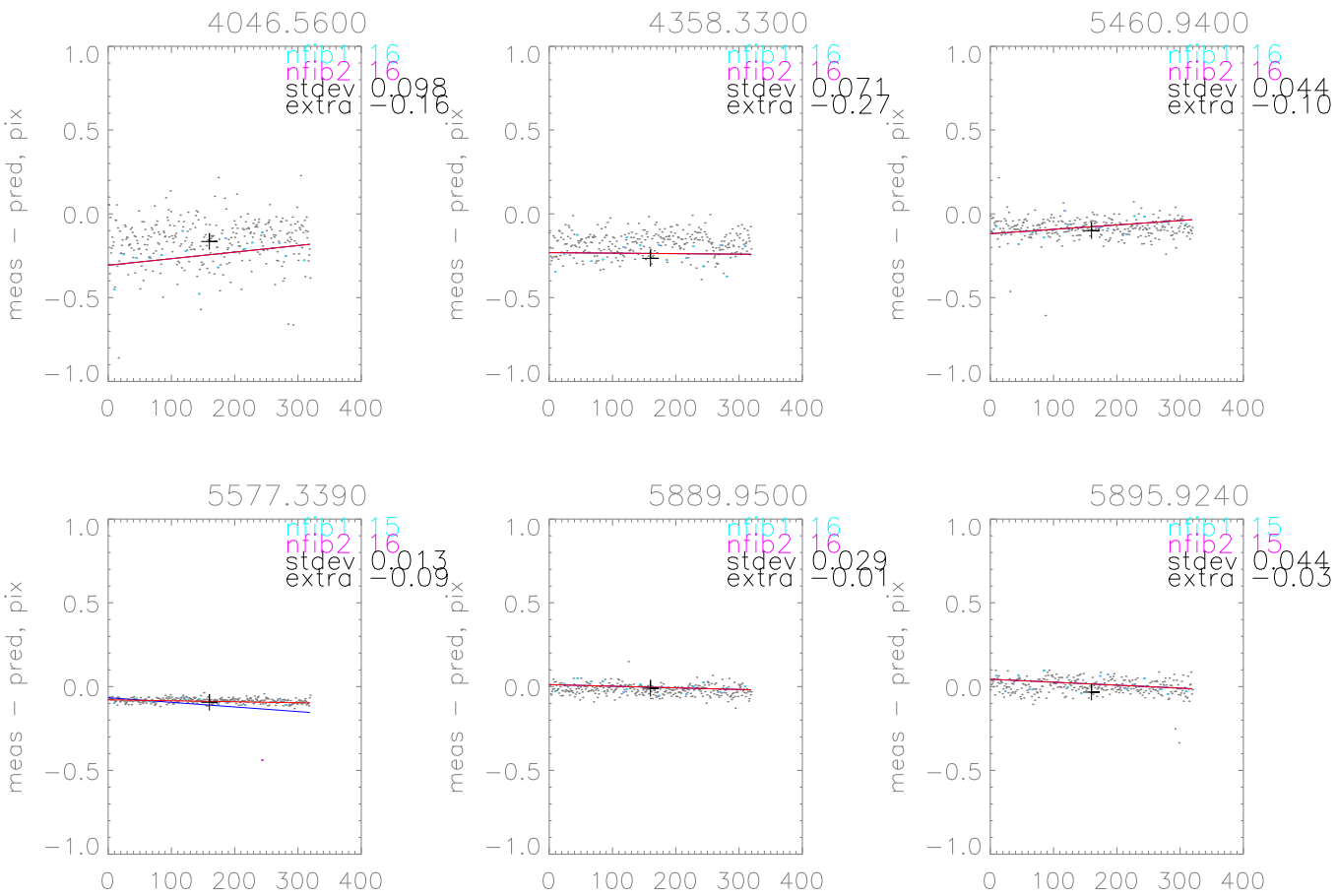

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

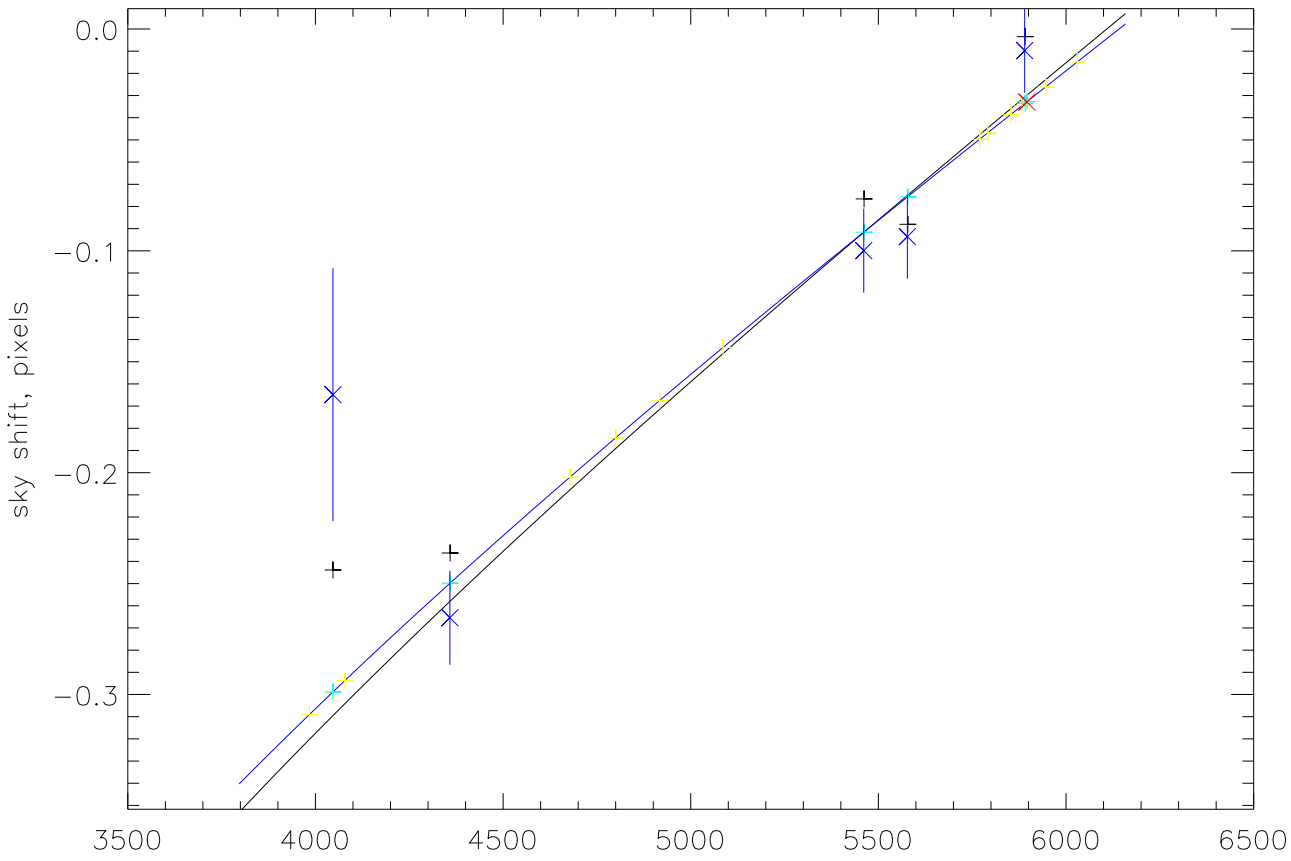

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

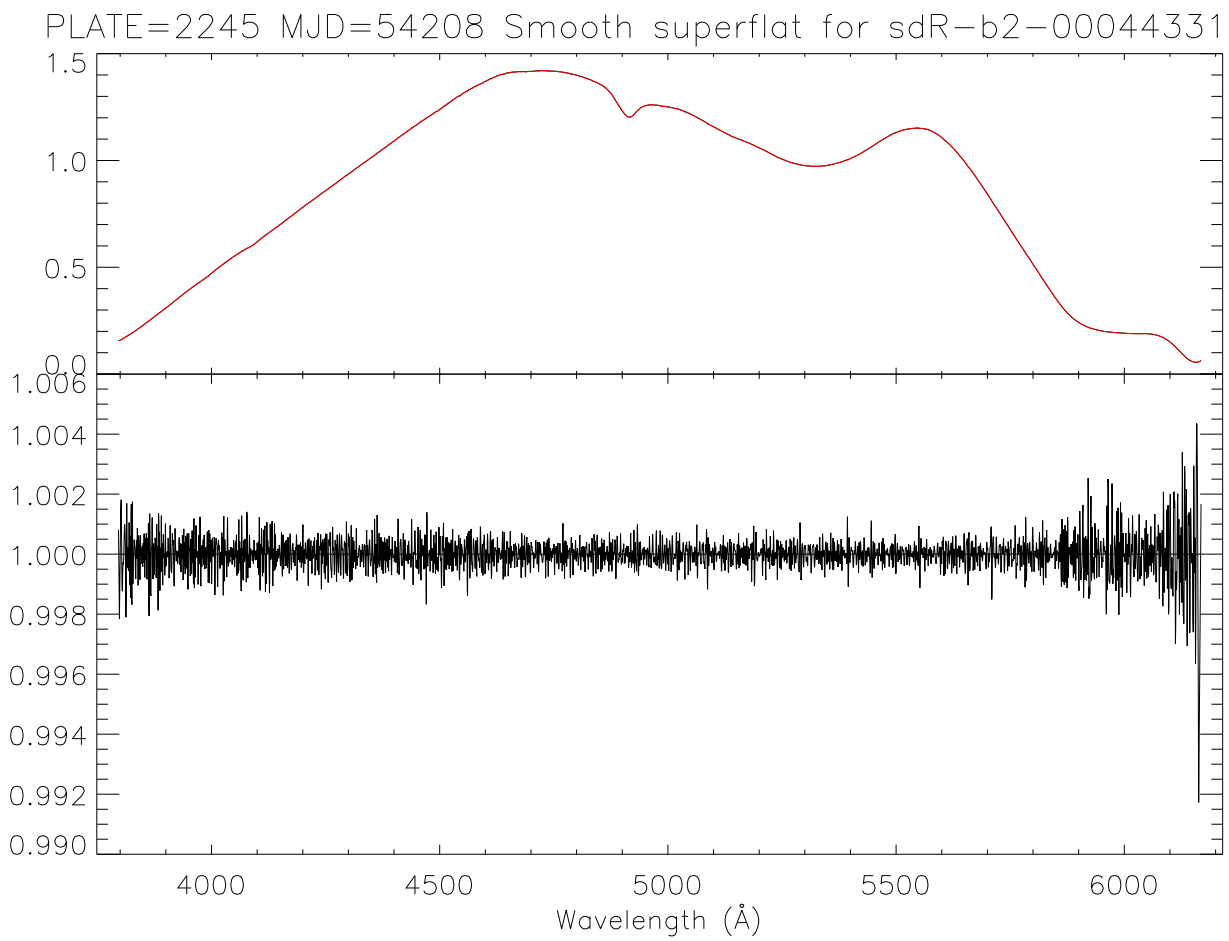

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

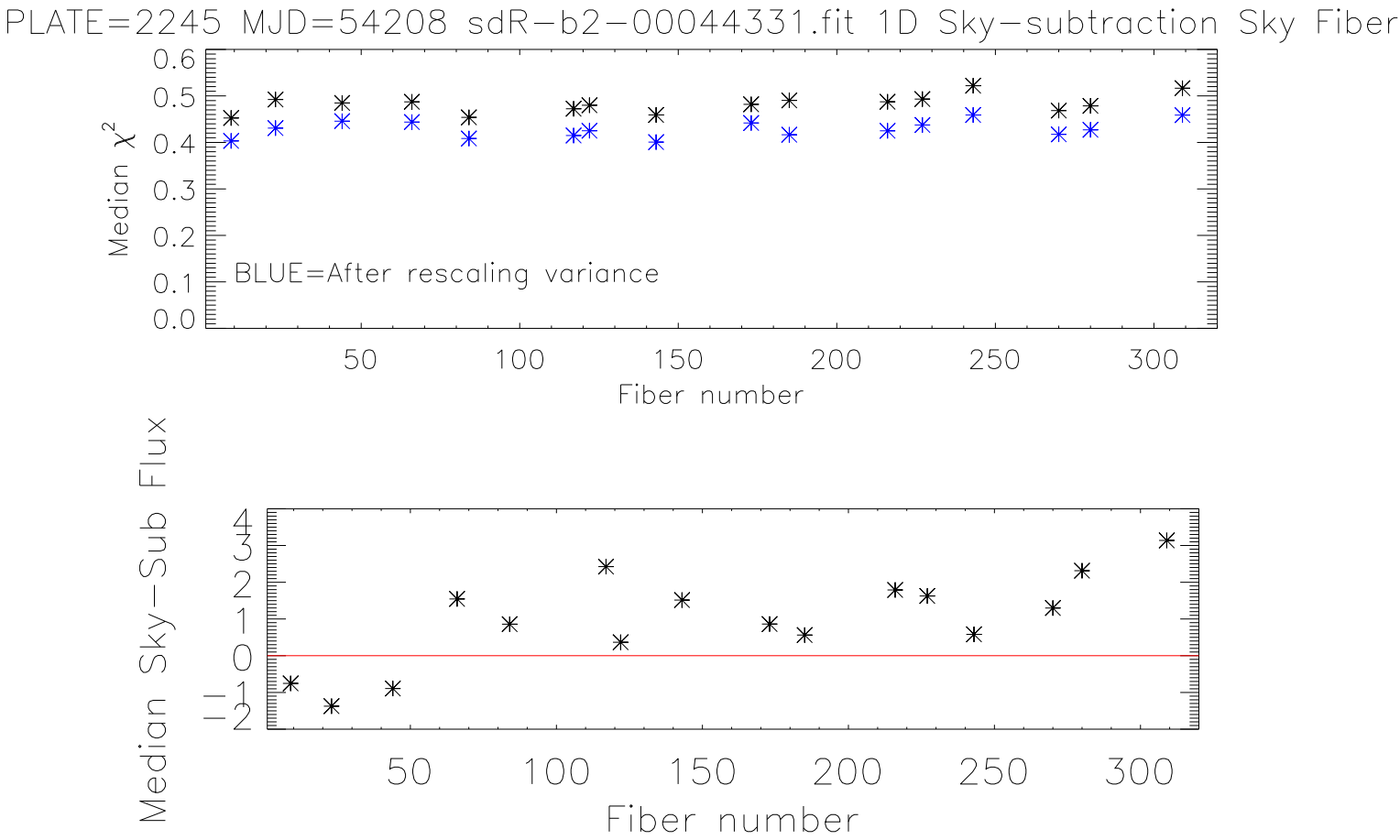

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

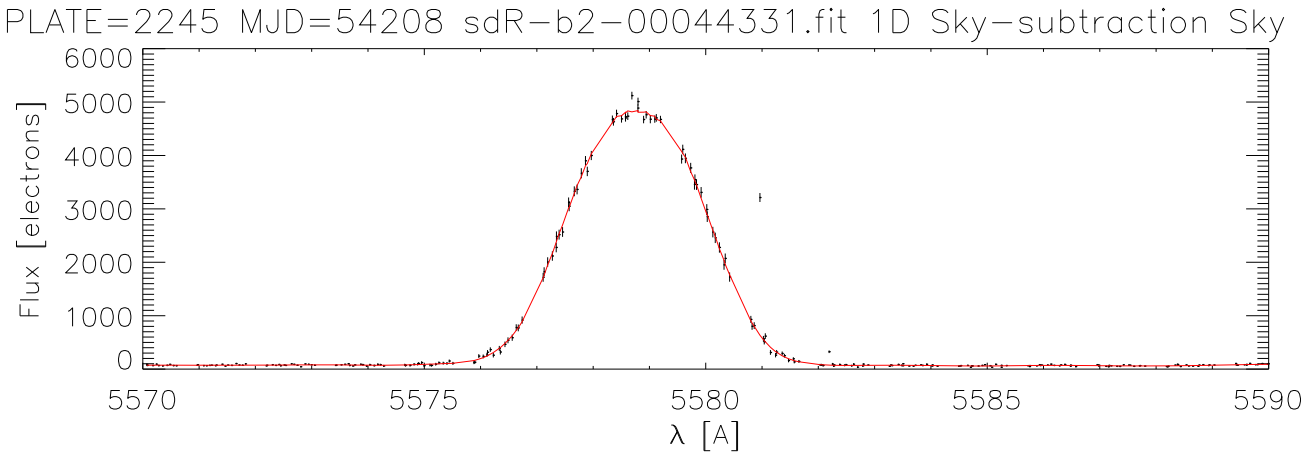

4046.5600
nfib1 16
nfib2 16
stdev 0.098
extra −0.16
4358.3300
nfib1 16
nfib2 16
stdev 0.071
extra −0.27
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra −0.10
5577.3390
nfib1 15
nfib2 16
stdev 0.013
extra −0.09
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra −0.01
5895.9240
nfib1 15
nfib2 15
stdev 0.044
extra −0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

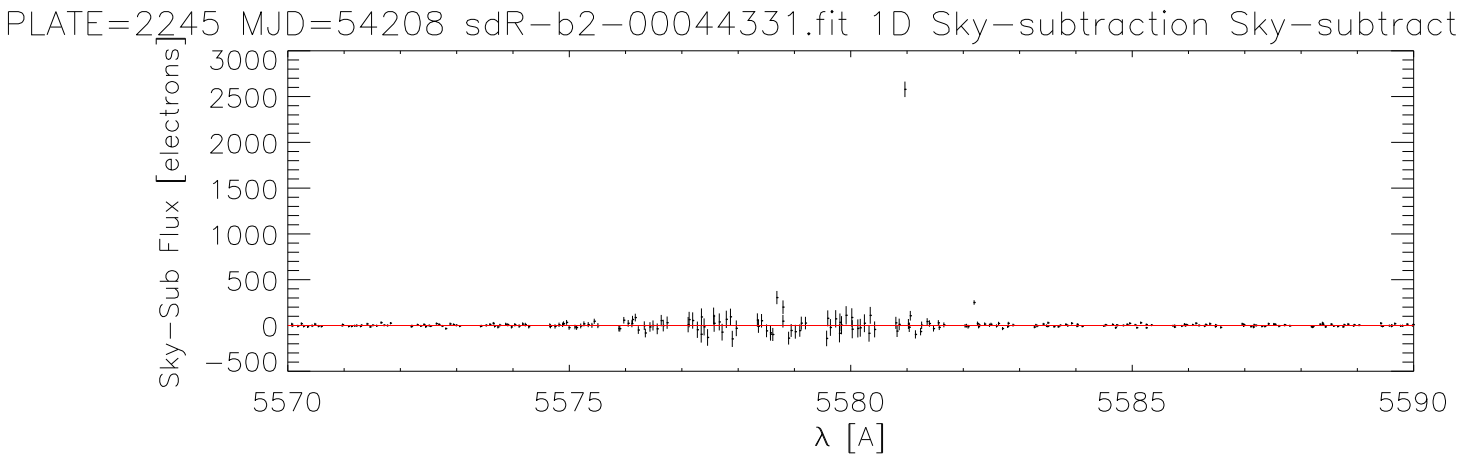

0.0
−0.1
−0.2
−0.3
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

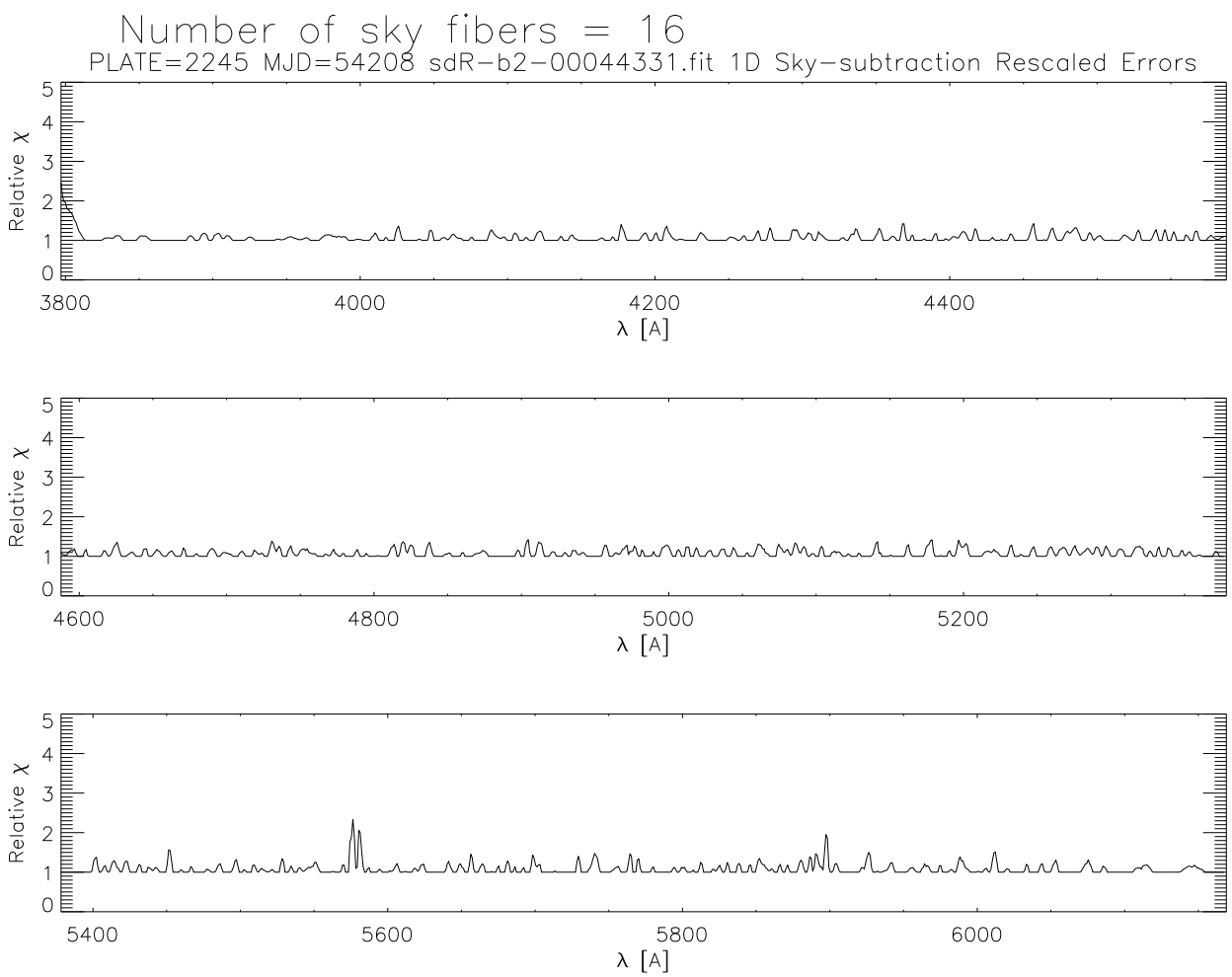
es= −0.0000

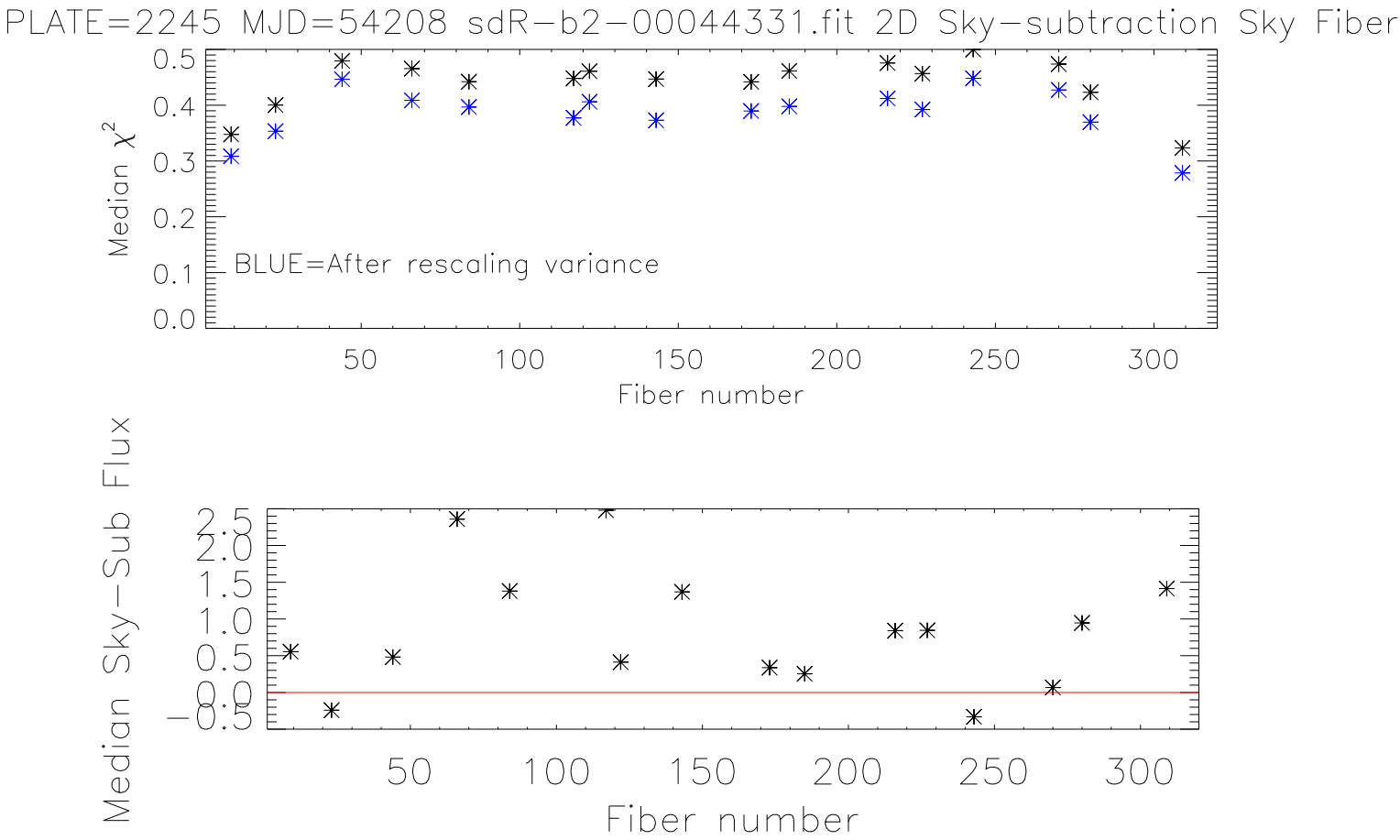

PLATE=2245 MJD=54208 Smooth superflat for sdR−b2−00044331.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

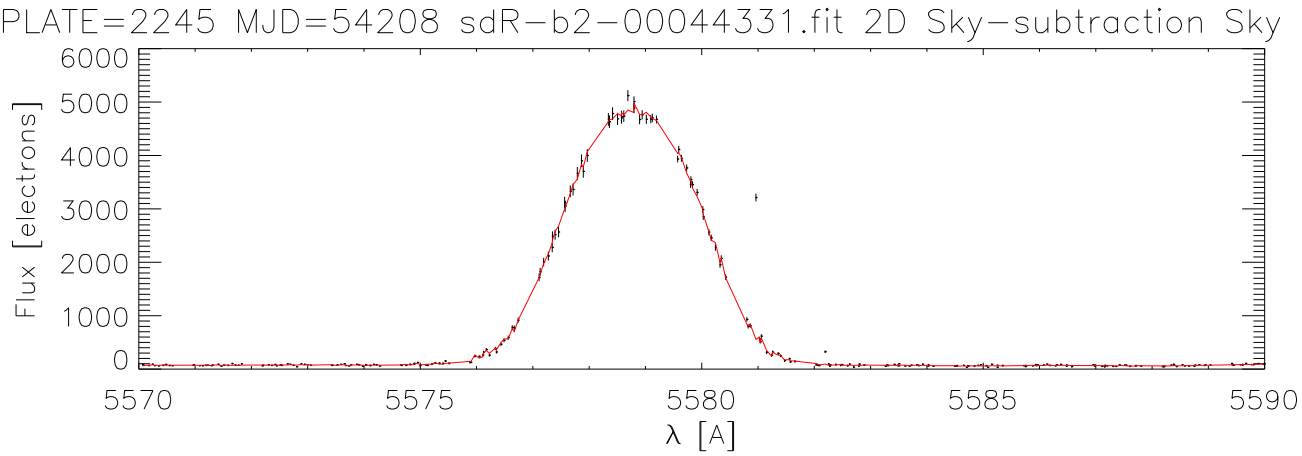

PLATE=2245 MJD=54208 sdR-b2-00044331.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

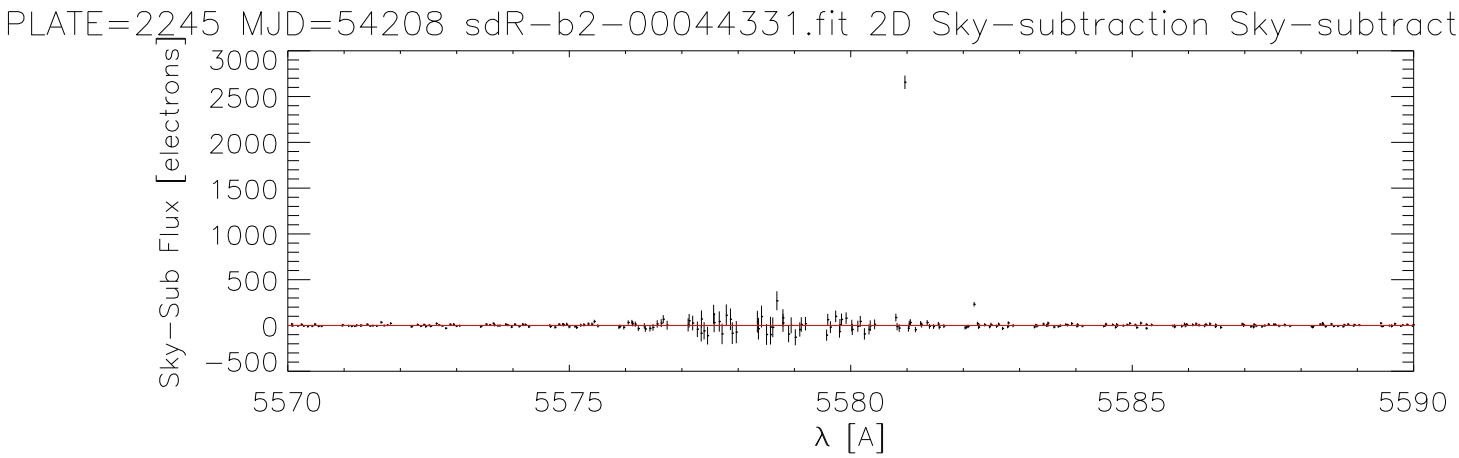

PLATE=2245 MJD=54208 sdR-b2-00044331.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

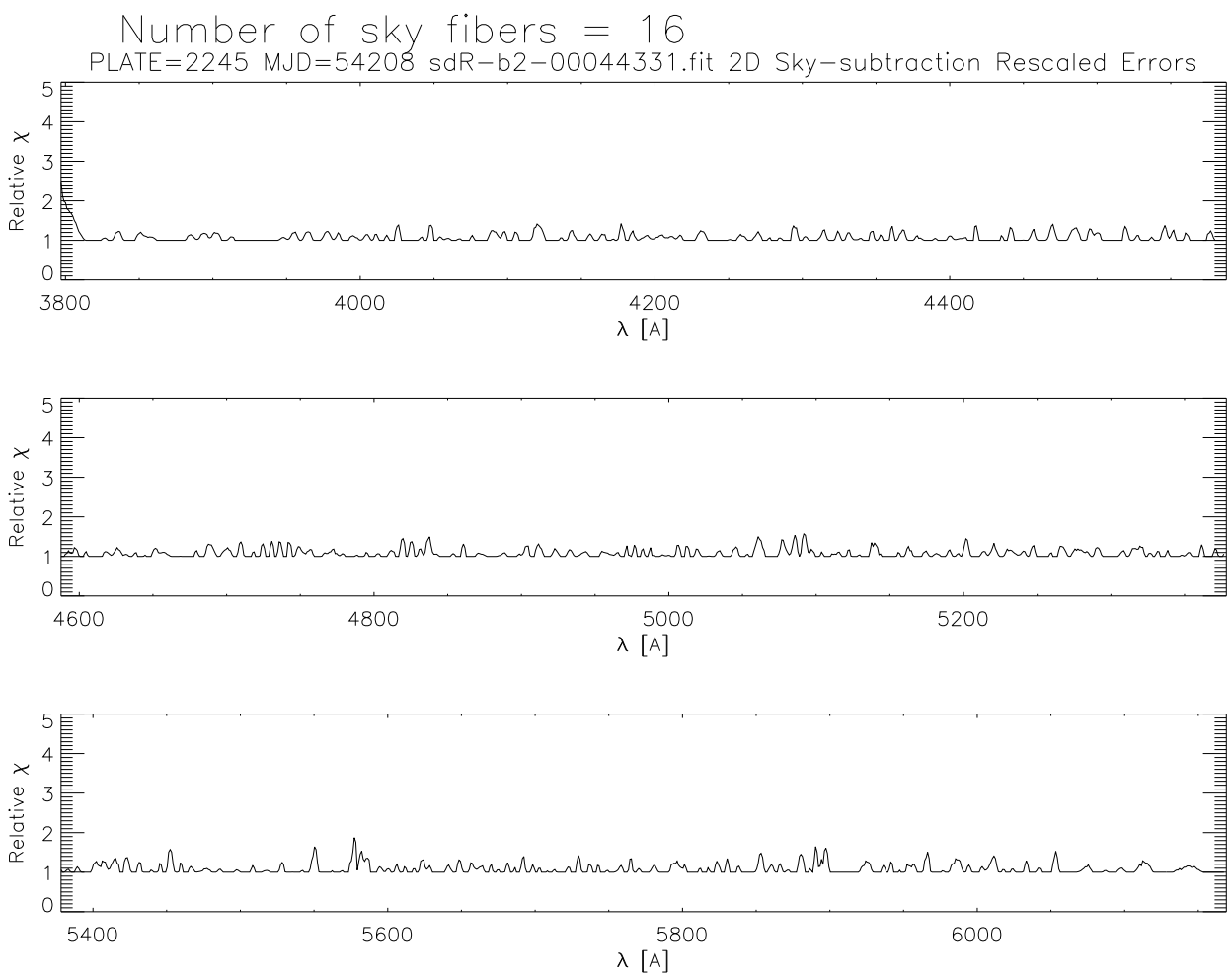

PLATE=2245 MJD=54208 sdR-b2-00044331.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

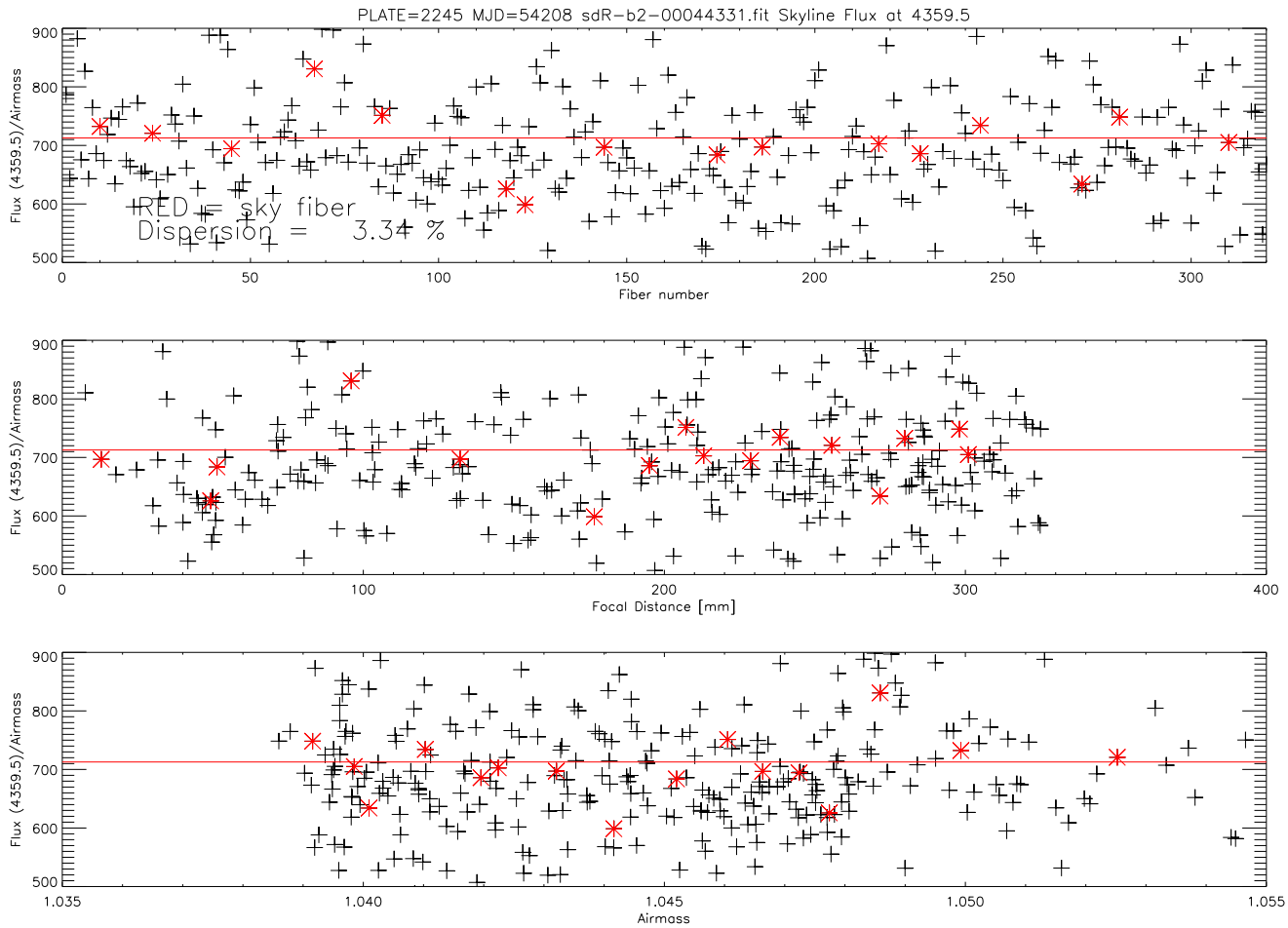

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-b2-00044331.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

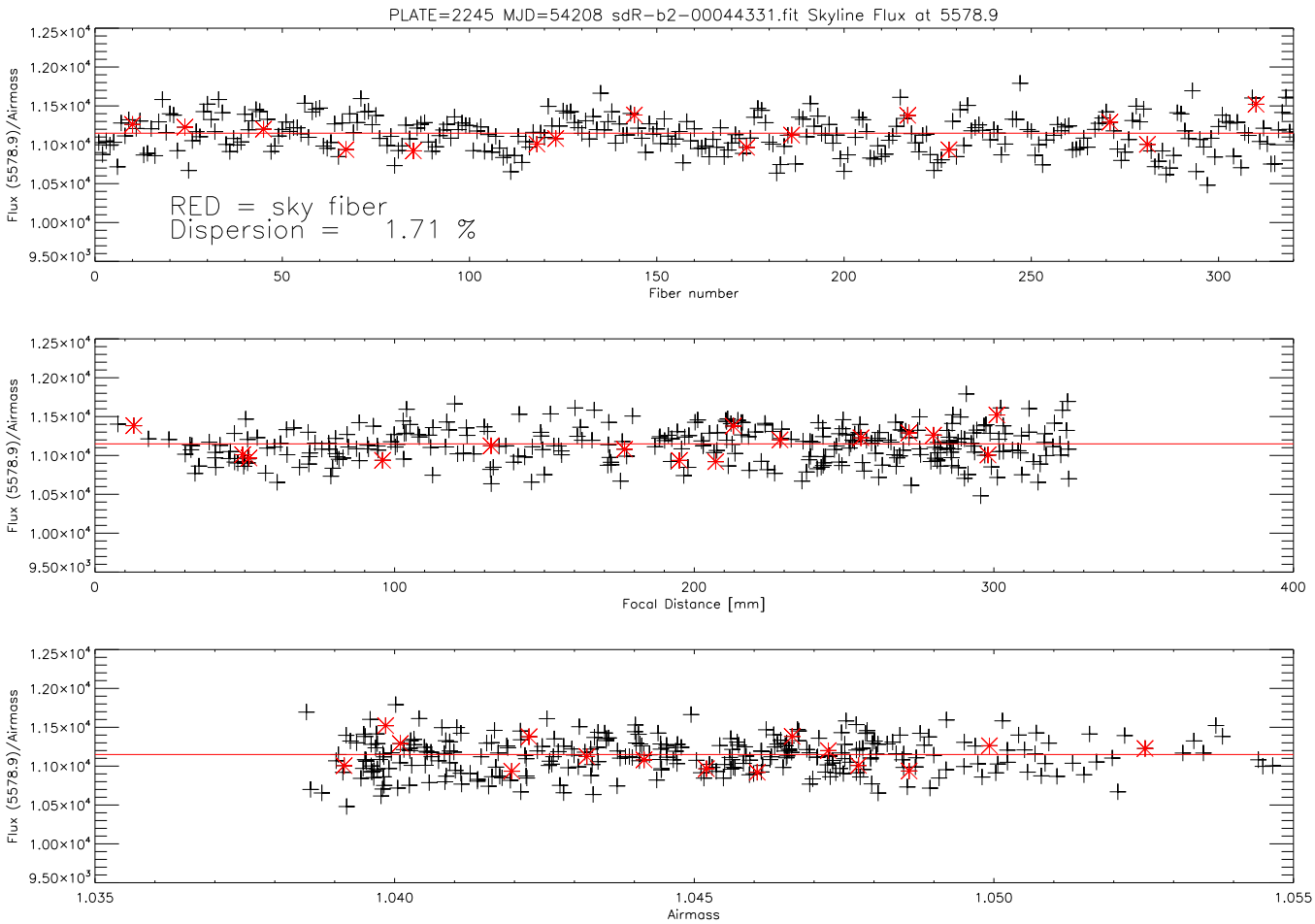

PLATE=2245 MJD=54208 sdR-b2-00044331.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

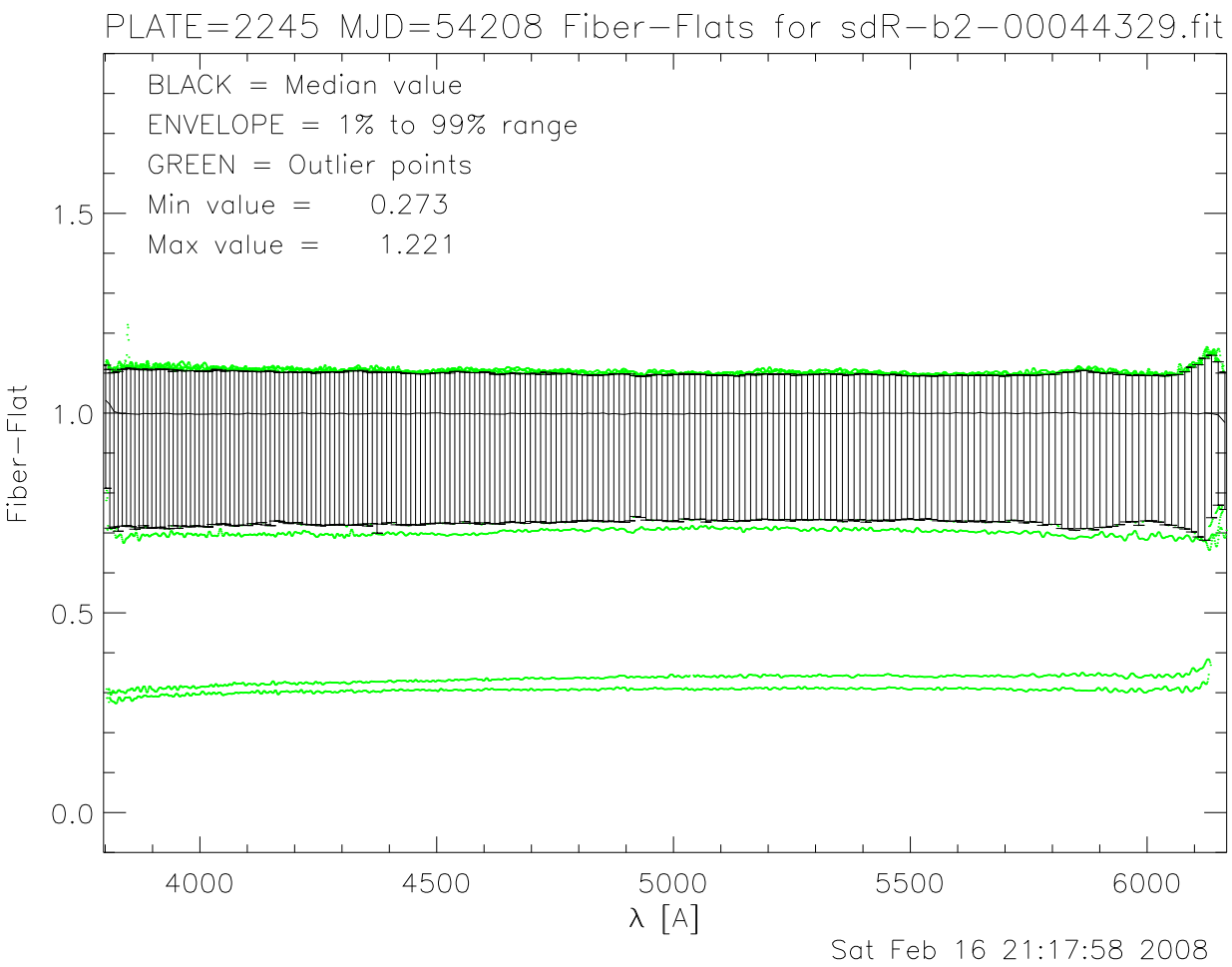

PLATE=2245 MJD=54208 sdR-b2-00044331.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

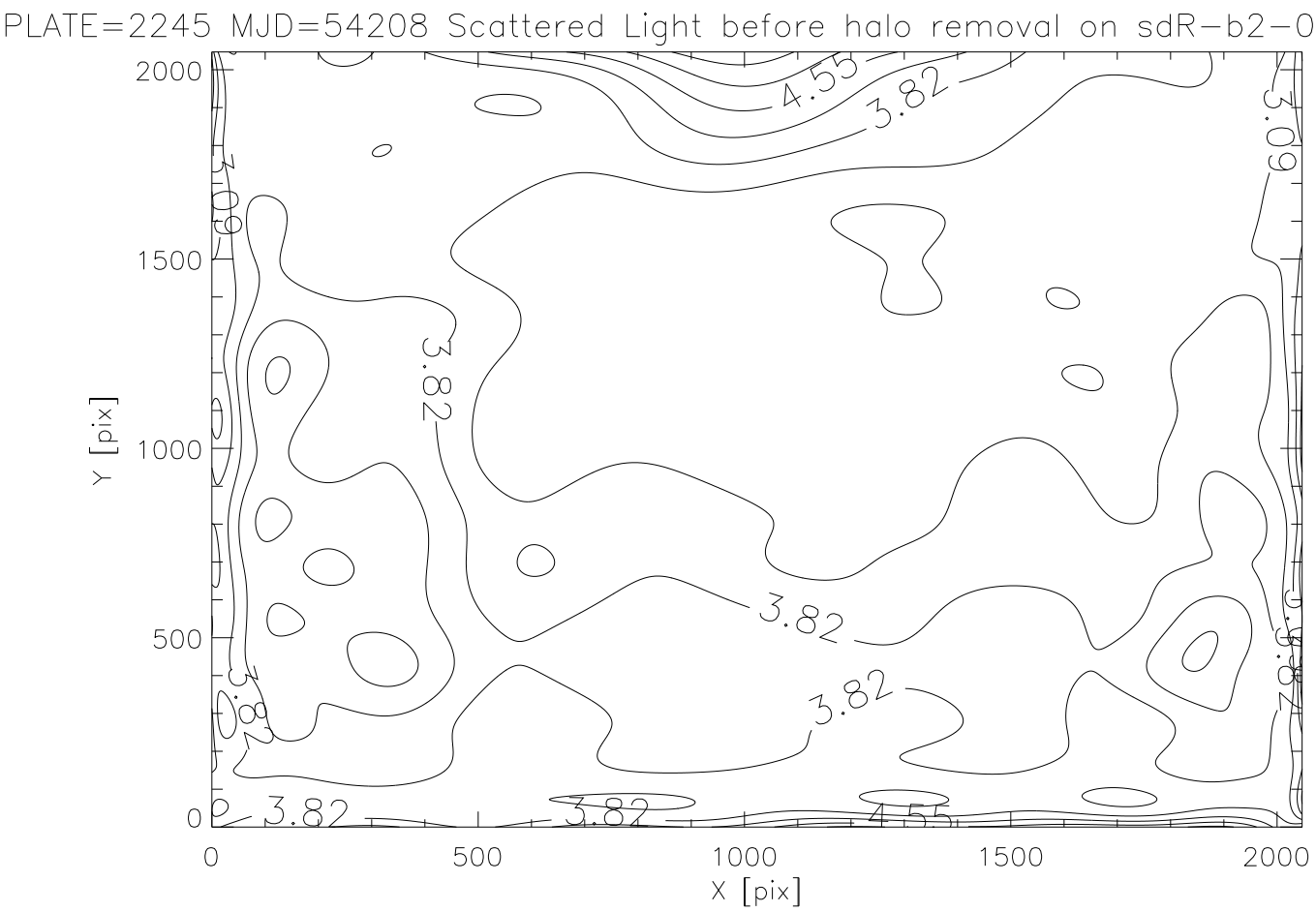

PLATE=2245 MJD=54208 sdR-b2-00044331.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

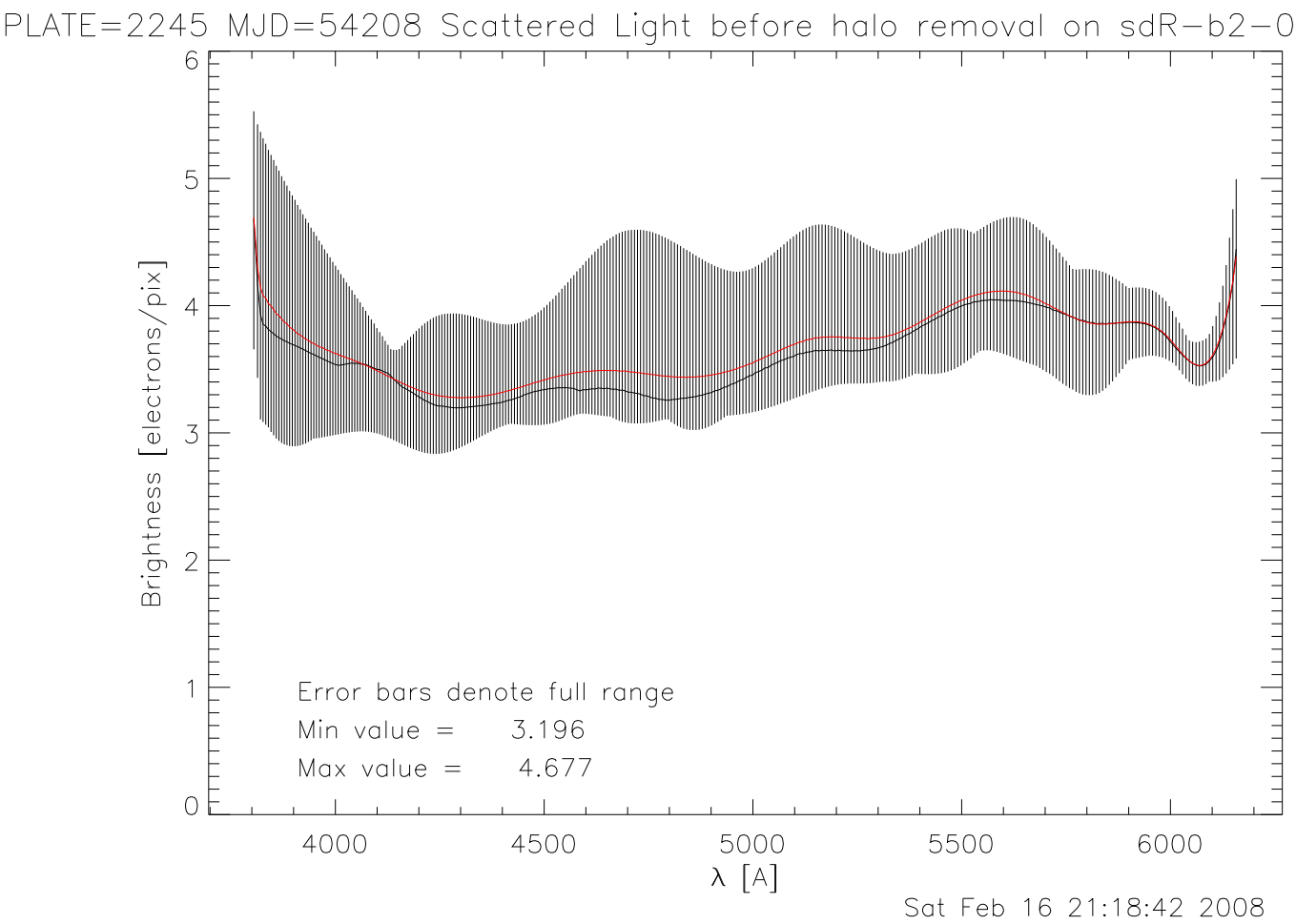

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-b2-00044331.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

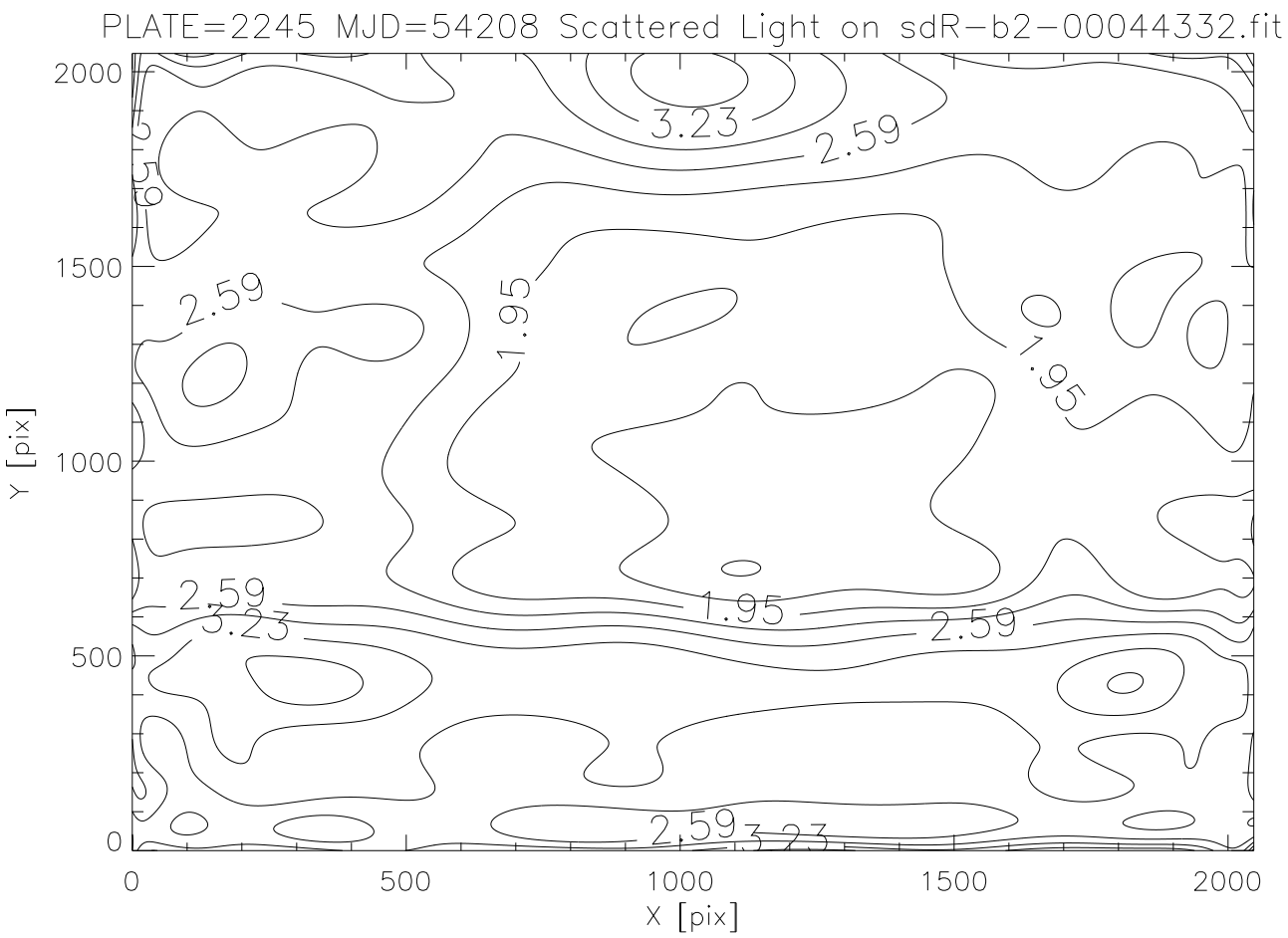

PLATE=2245 MJD=54208 sdR-b2-00044331.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.34 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

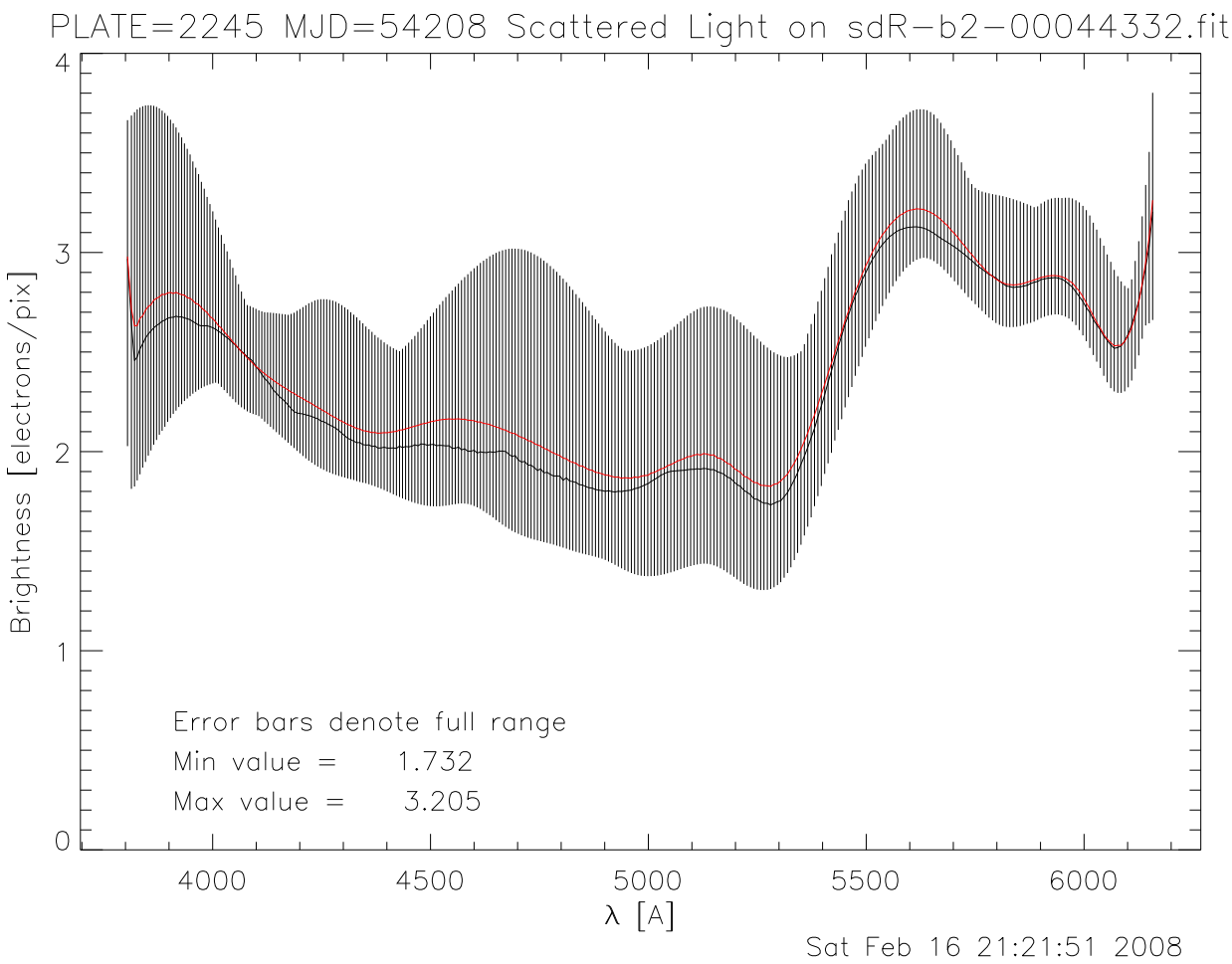

PLATE=2245 MJD=54208 sdR-b2-00044331.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.71 %
Fiber number
Focal Distance [mm]
Airmass

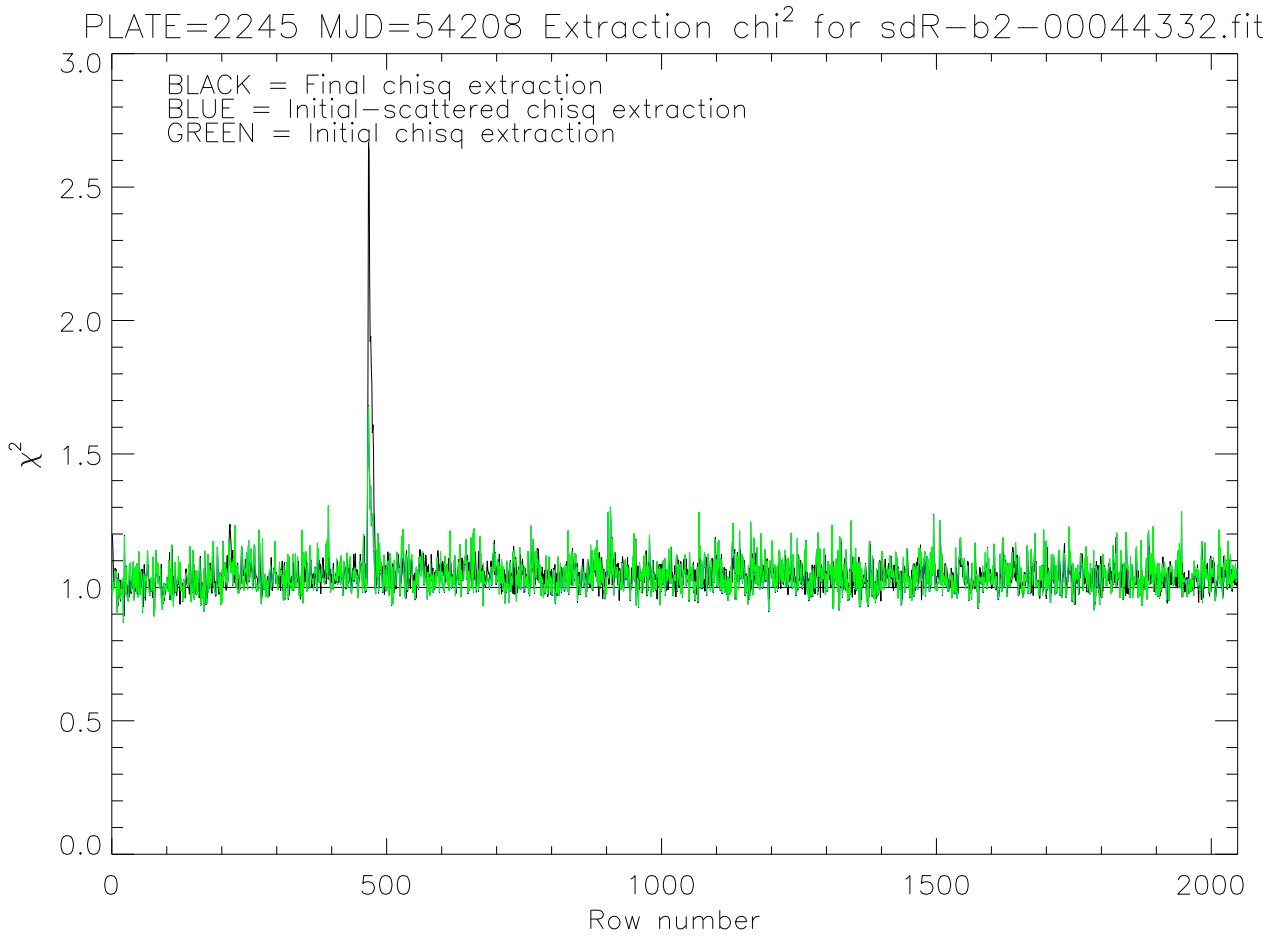

PLATE=2245 MJD=54208 Fiber-Flats for sdR-b2-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.273
Max value = 1.221
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 21:17:58 2008

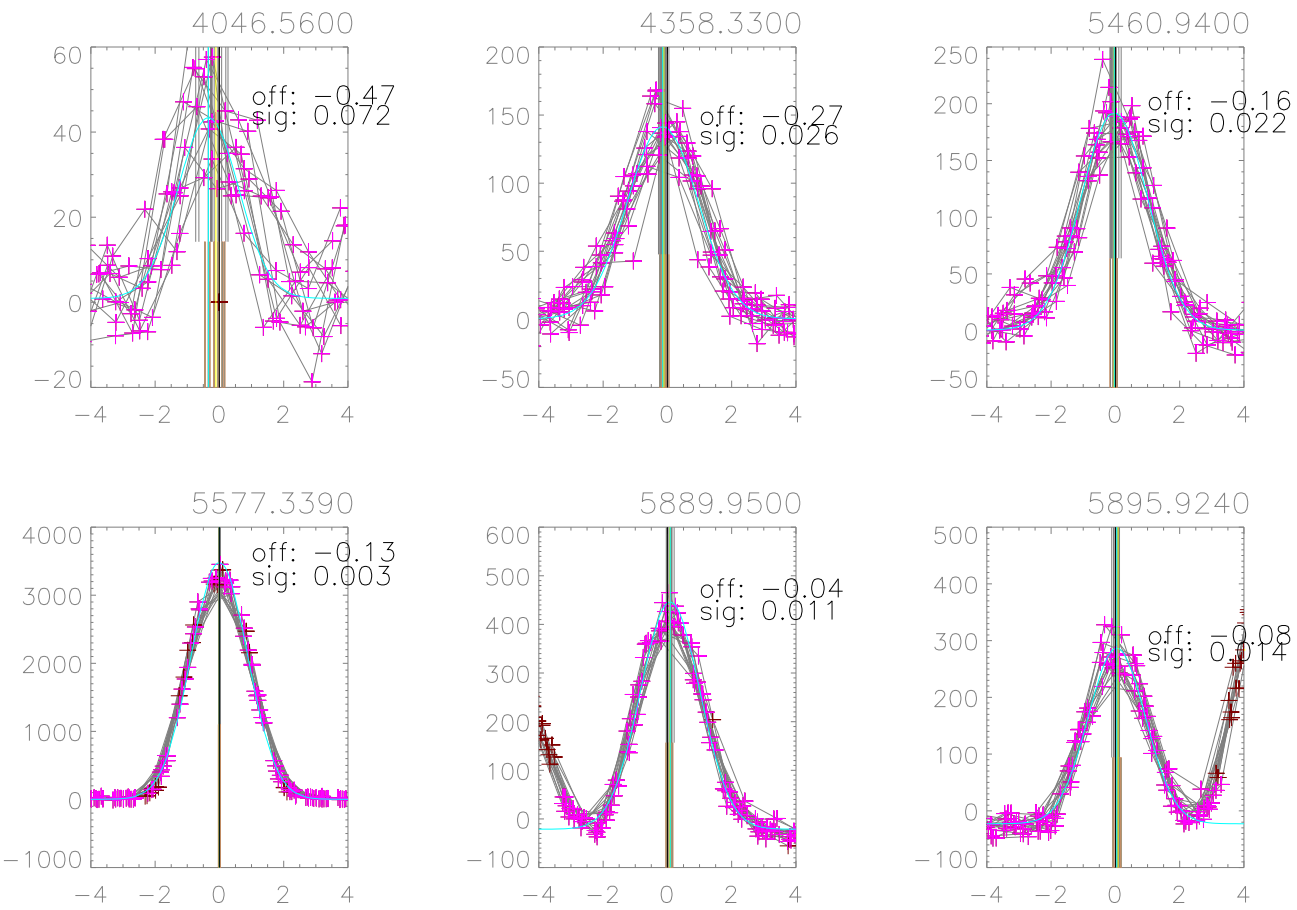

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR−b2−00044332.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
4.55
3.82
3.09
3.82
3.82
3.82
3.82
3.82
4.55

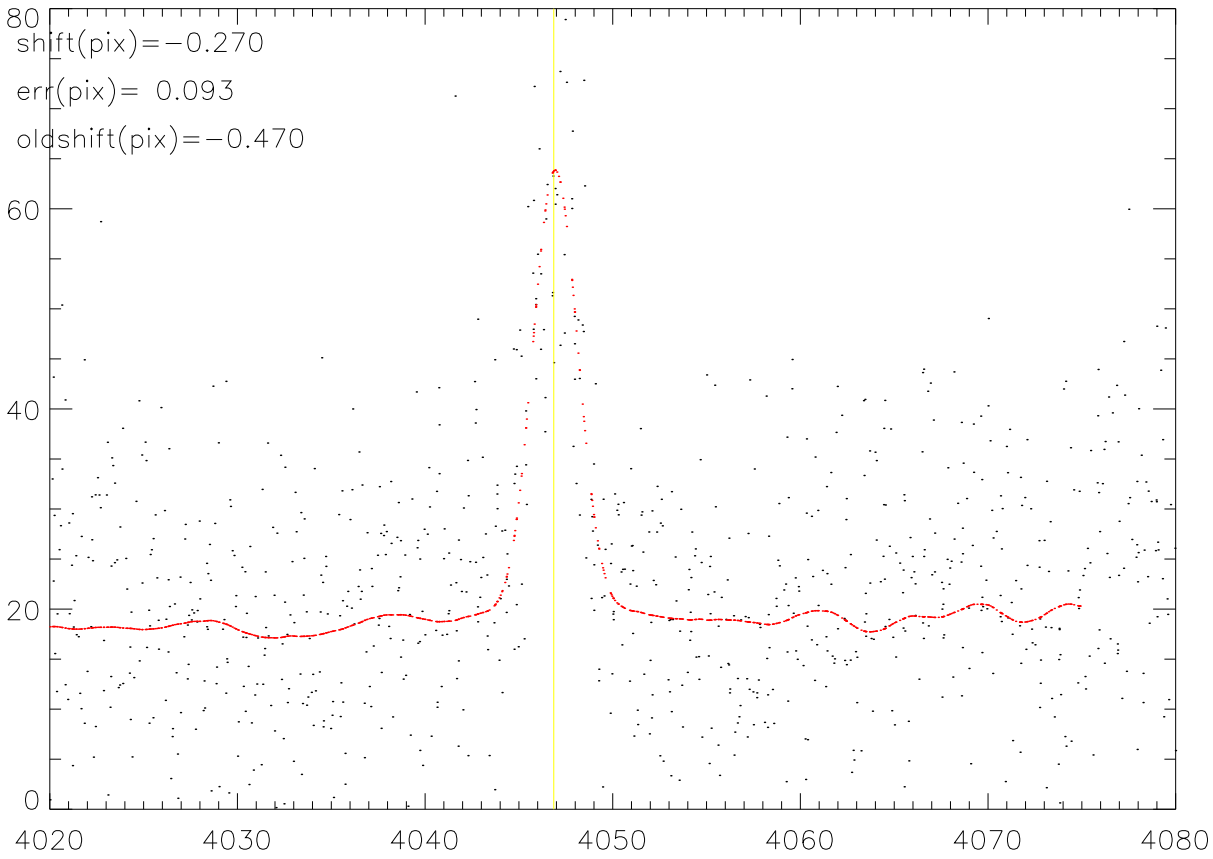

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b2-00044332.f
Brightness [electrons/pix]
0
1
2
3
4
5
6
Error bars denote full range
Min value = 3.196
Max value = 4.677
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 21:18:42 2008

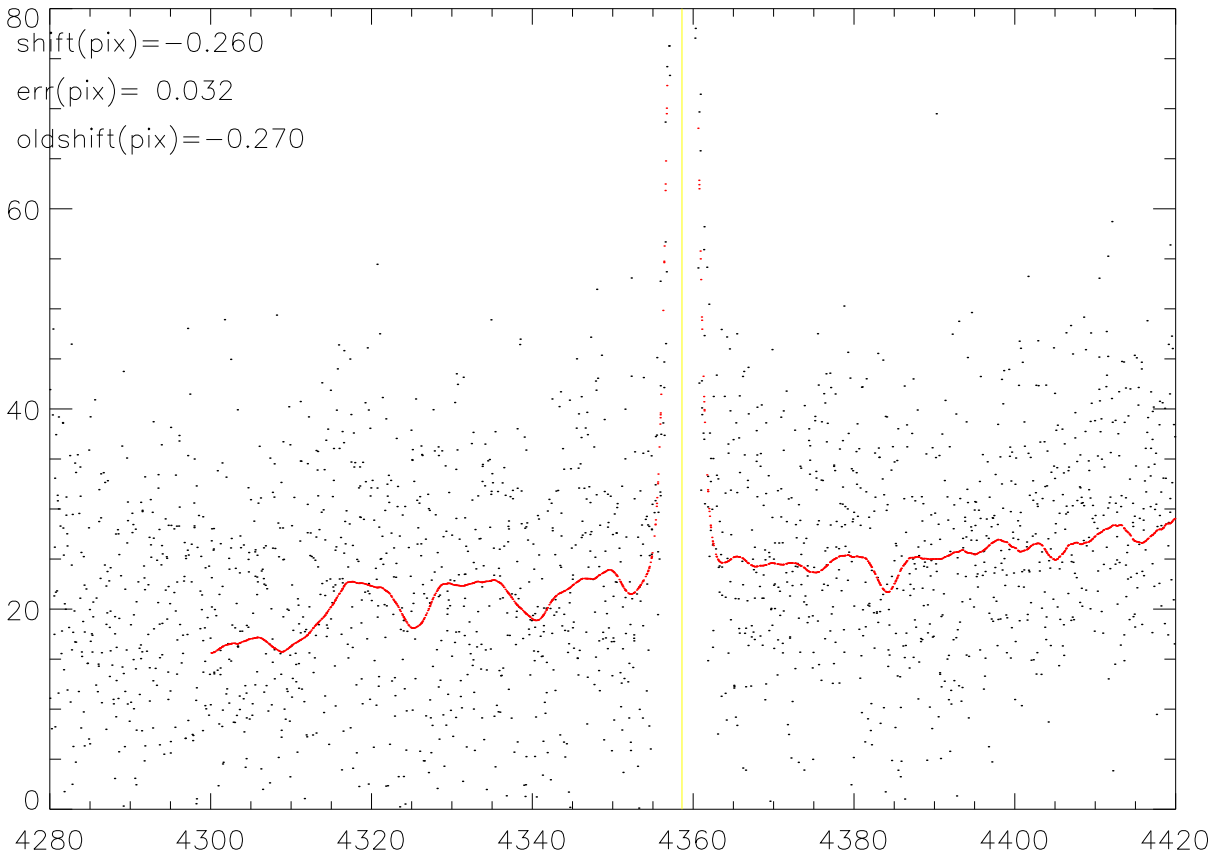

PLATE=2245 MJD=54208 Scattered Light on sdR-b2-00044332.fit
3.23
2.59
1.95
2.59
1.95
2.59
3.23
1.95
2.59
2.59
3.23
Y [pix]
X [pix]
0
500
1000
1500
2000

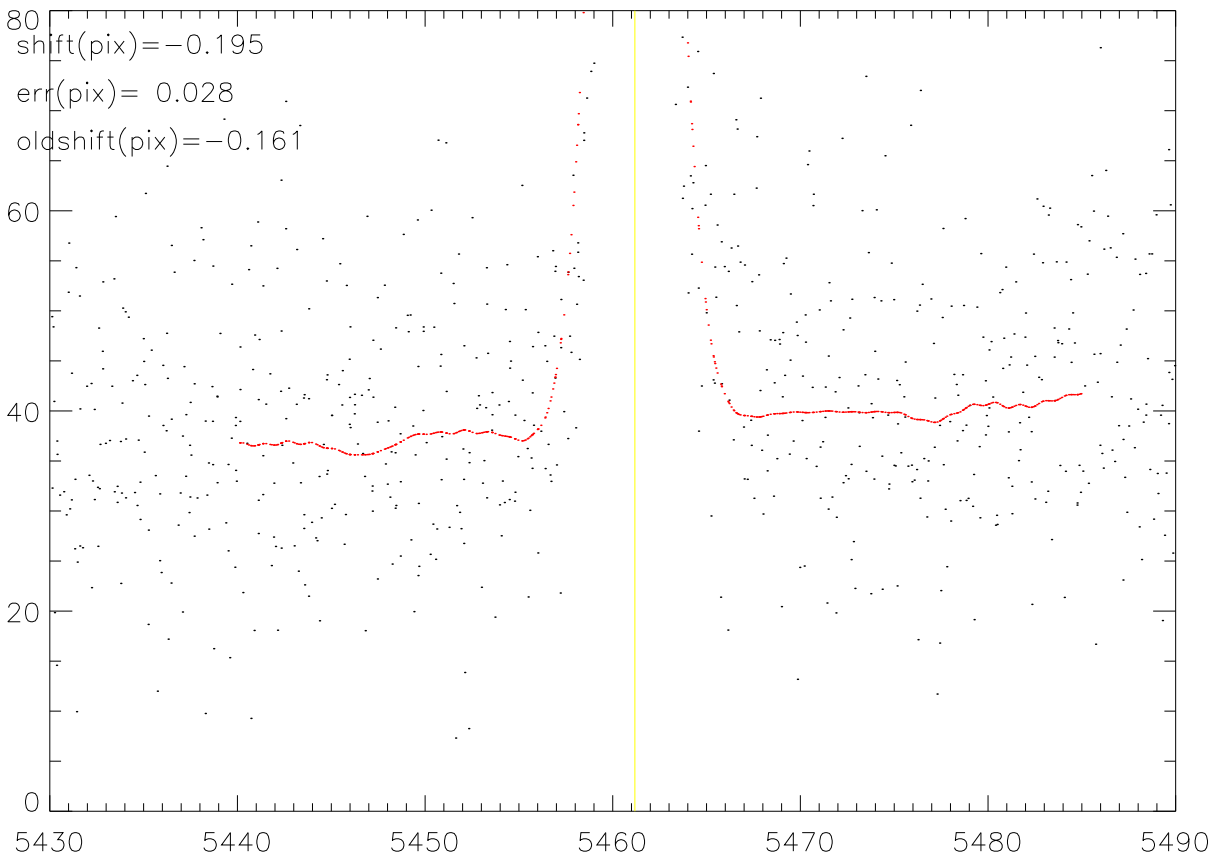

PLATE=2245 MJD=54208 Scattered Light on sdR-b2-00044332.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.732
Max value = 3.205
Sat Feb 16 21:21:51 2008

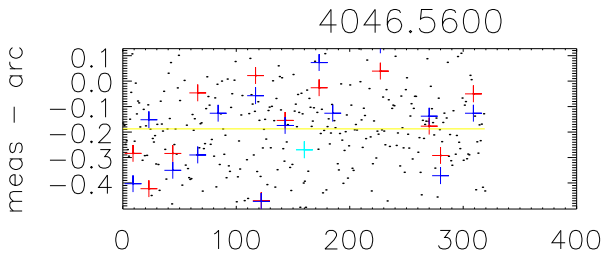

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-b2-00044332.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

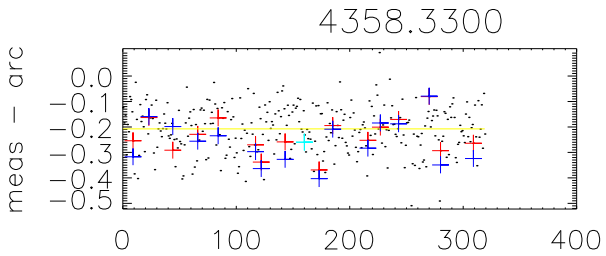

4046.5600
off: −0.47
sig: 0.072
4358.3300
off: −0.27
sig: 0.026
5460.9400
off: −0.16
sig: 0.022
5577.3390
off: −0.13
sig: 0.003
5889.9500
off: −0.04
sig: 0.011
5895.9240
off: −0.08
sig: 0.014

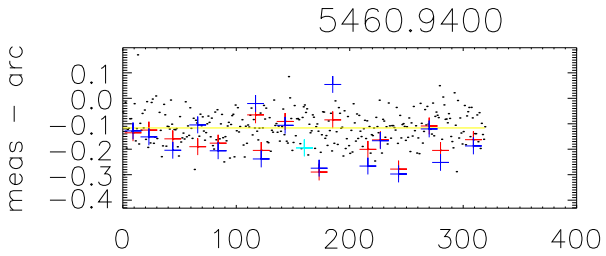

shift(pix)=−0.270
err(pix)= 0.093
oldshift(pix)=−0.470
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

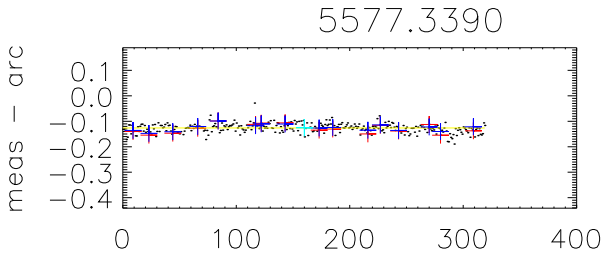

shift(pix)=−0.260
err(pix)= 0.032
oldshift(pix)=−0.270
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

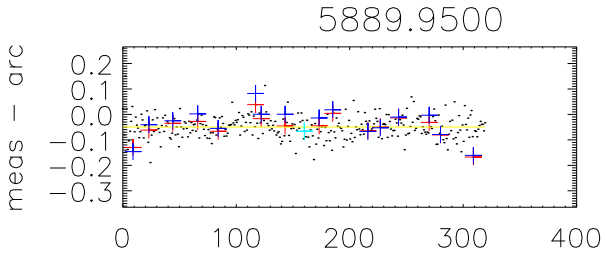

shift(pix)=−0.195
err(pix)= 0.028
oldshift(pix)=−0.161
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

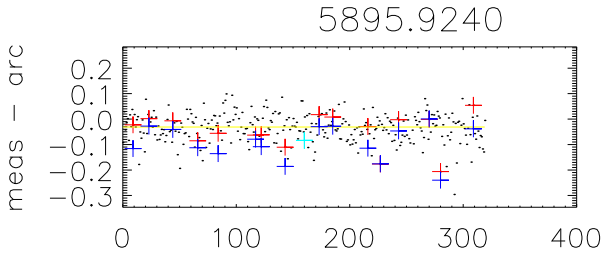

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

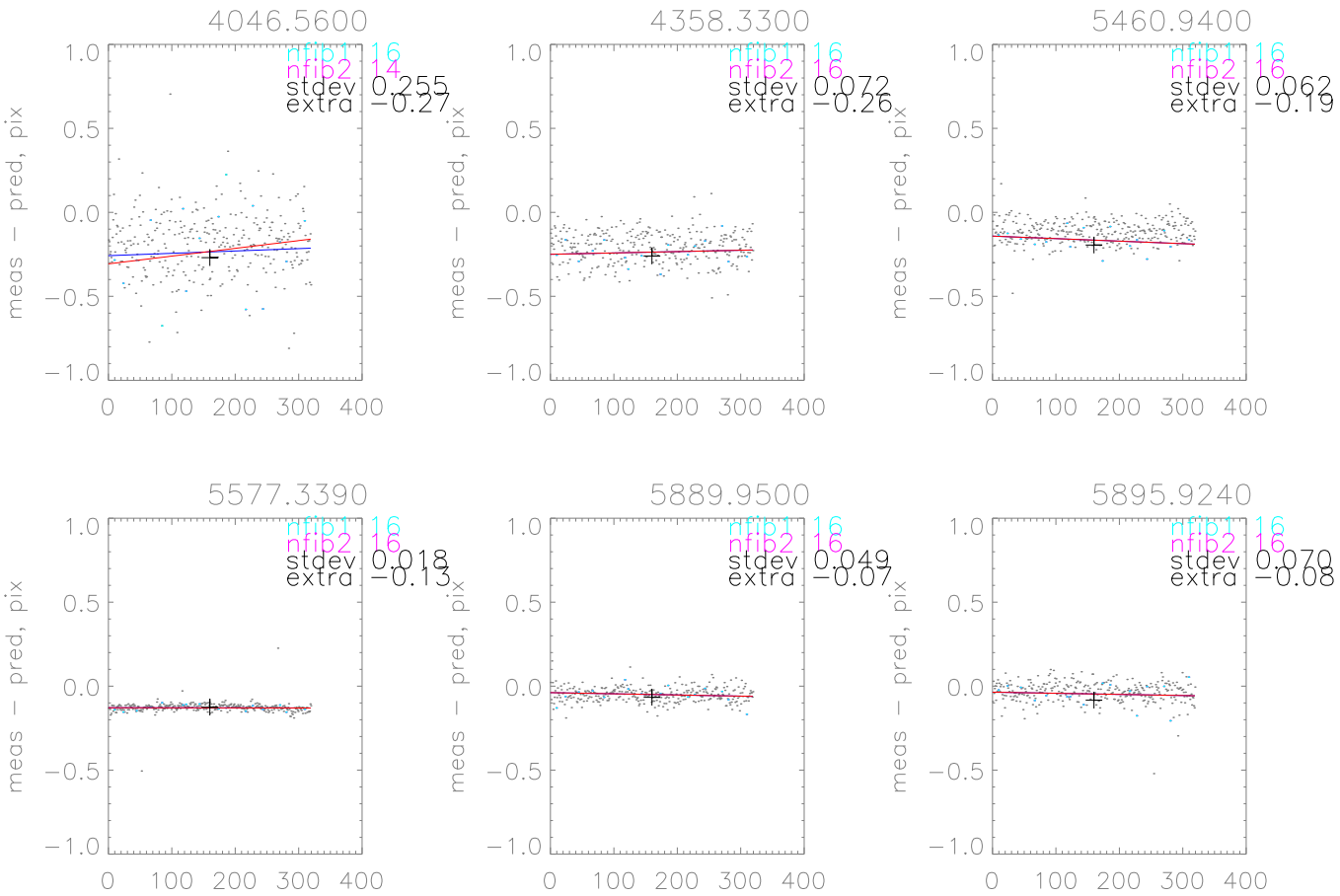

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

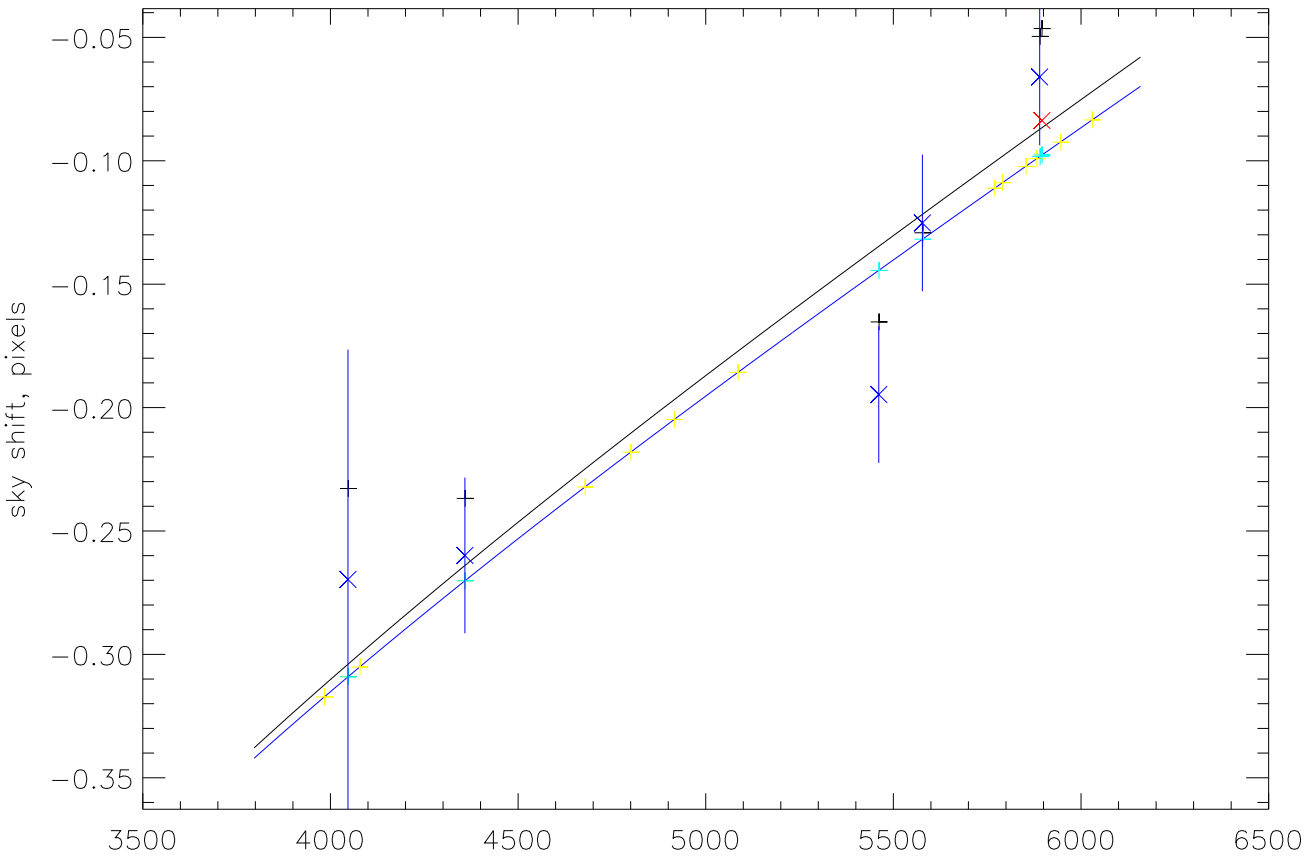

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

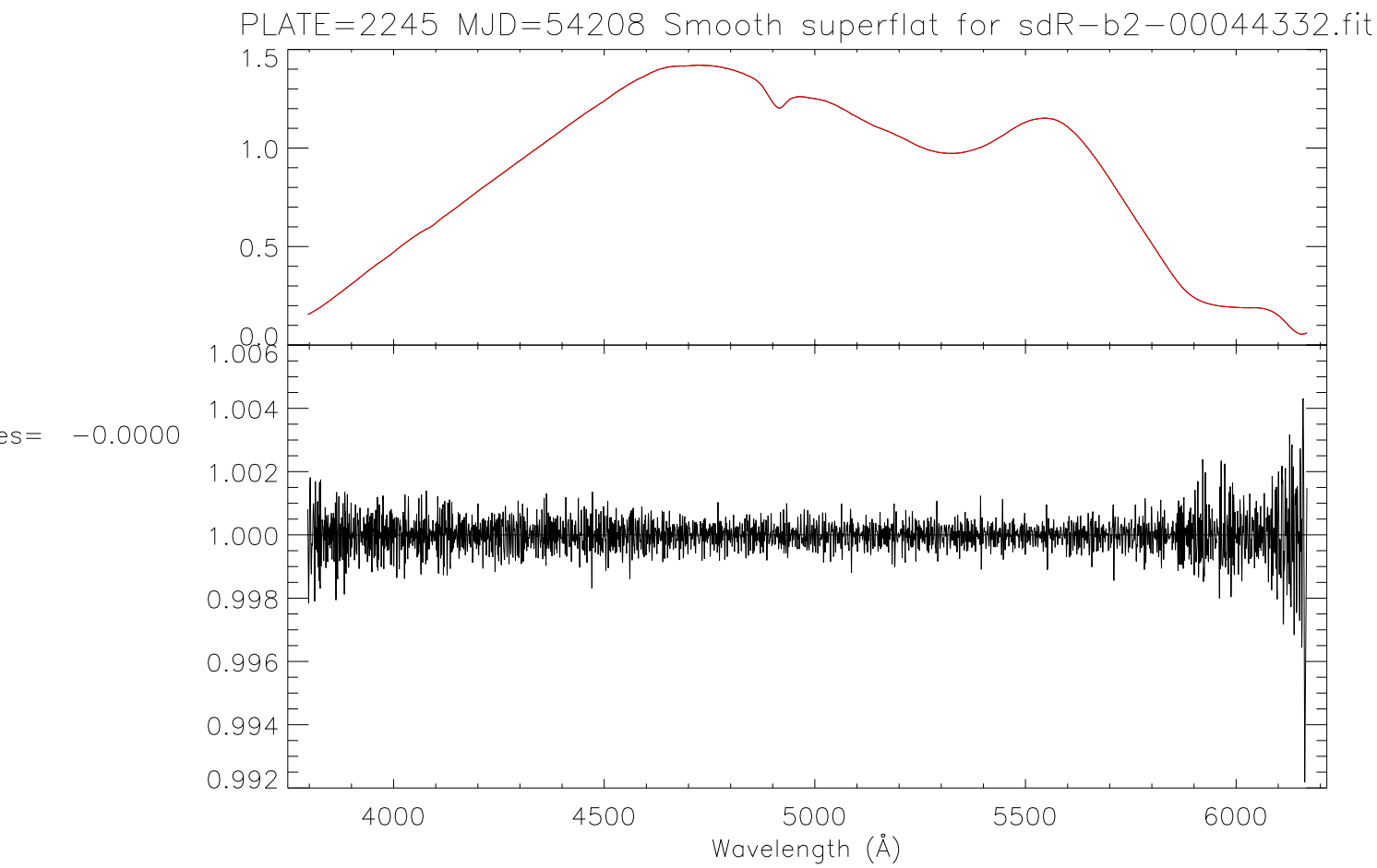

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

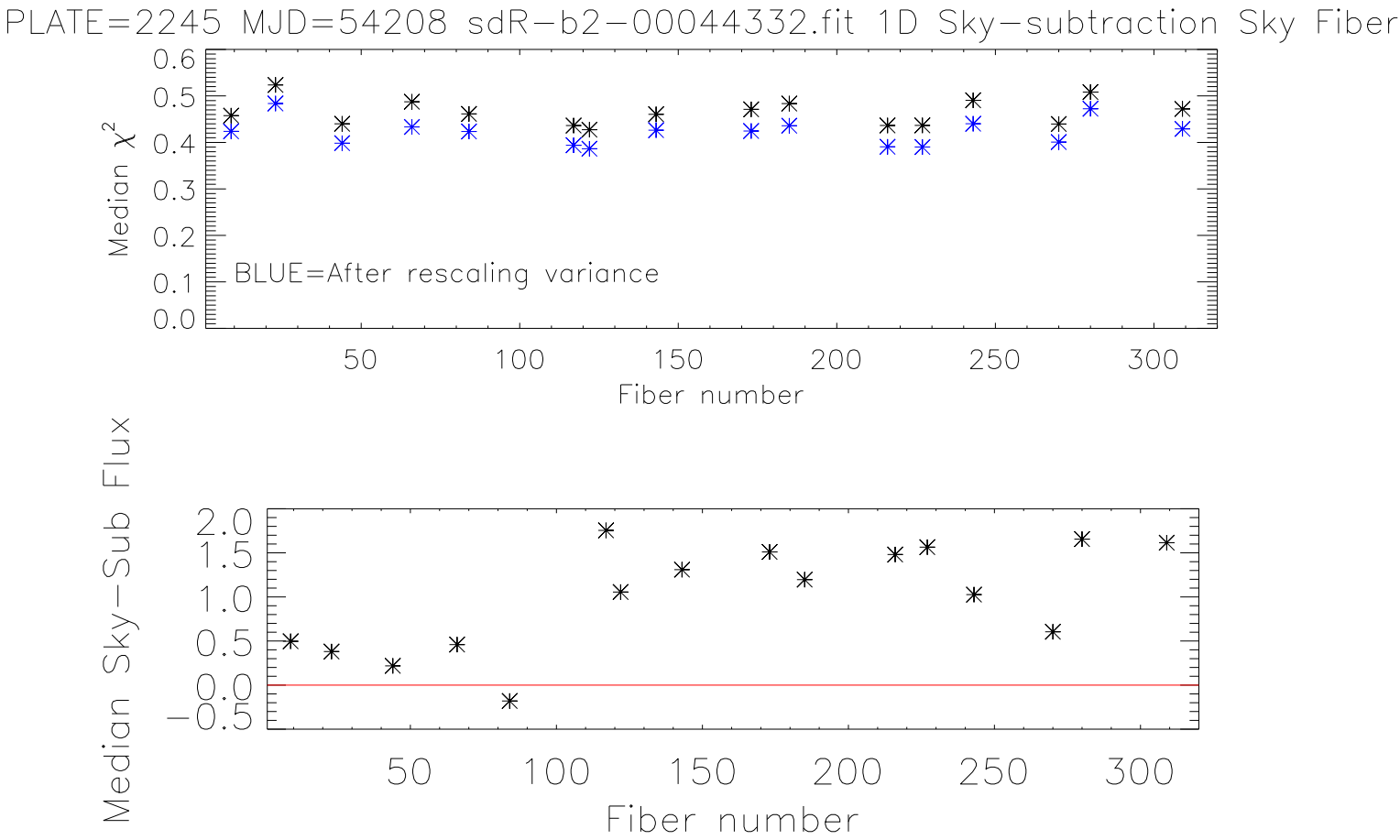

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

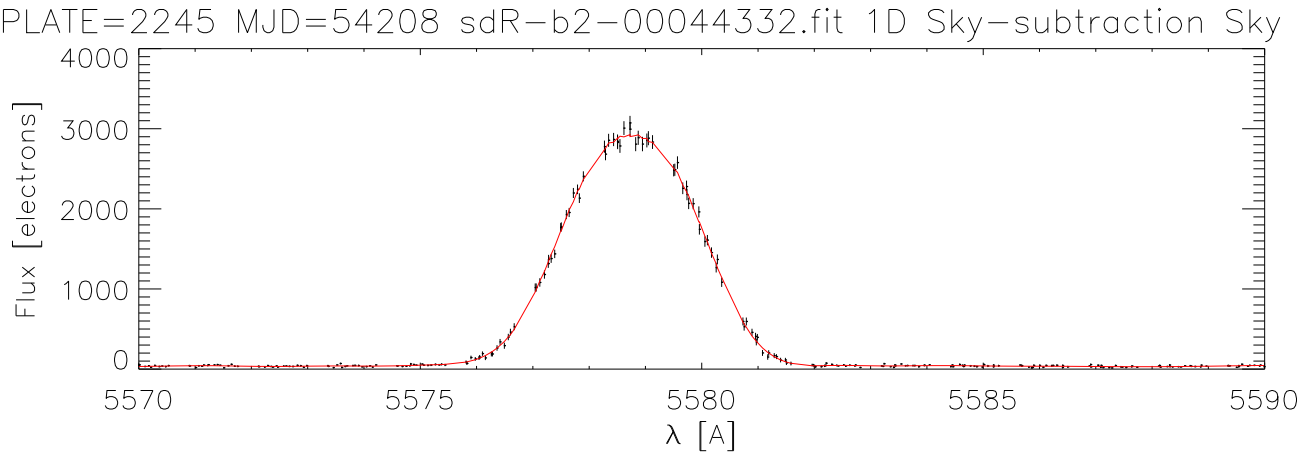

4046.5600
nfib1 16
nfib2 14
stdev 0.255
extra −0.27
4358.3300
nfib1 16
nfib2 16
stdev 0.072
extra −0.26
5460.9400
nfib1 16
nfib2 16
stdev 0.062
extra −0.19
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.13
5889.9500
nfib1 16
nfib2 16
stdev 0.049
extra −0.07
5895.9240
nfib1 16
nfib2 16
stdev 0.070
extra −0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

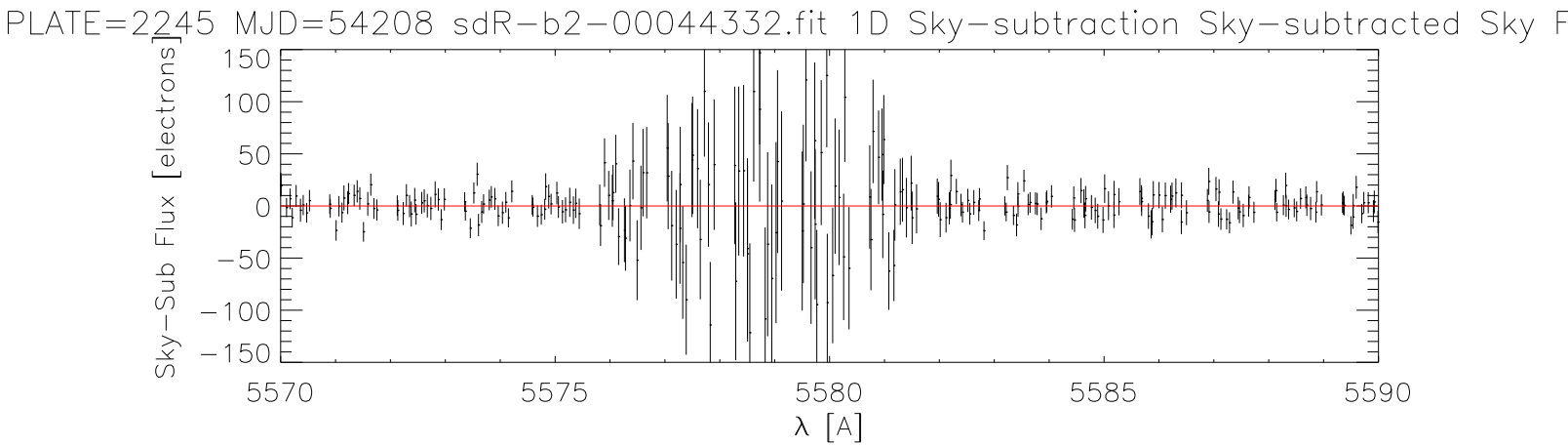

−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

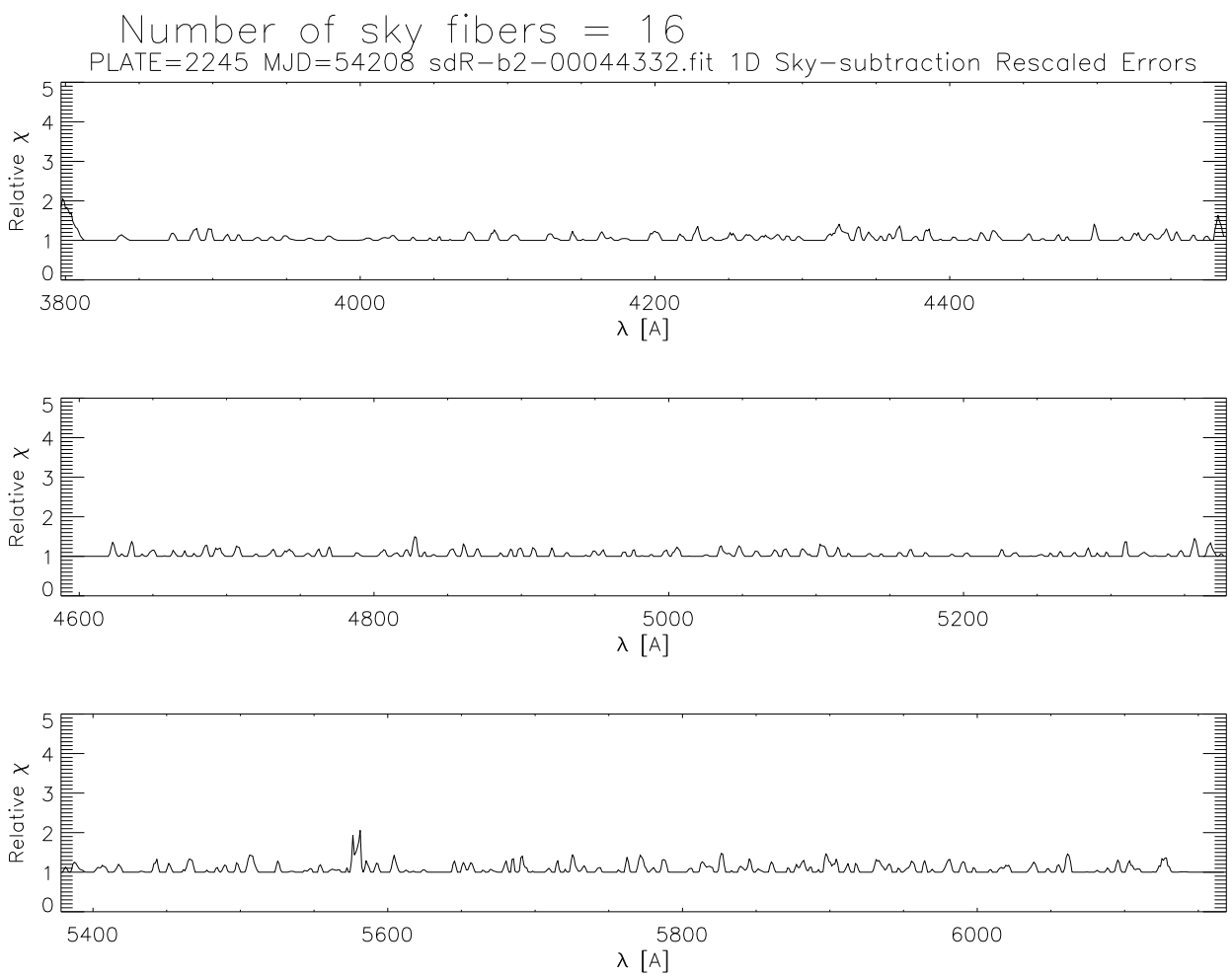

PLATE=2245 MJD=54208 Smooth superflat for sdR-b2-00044332.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

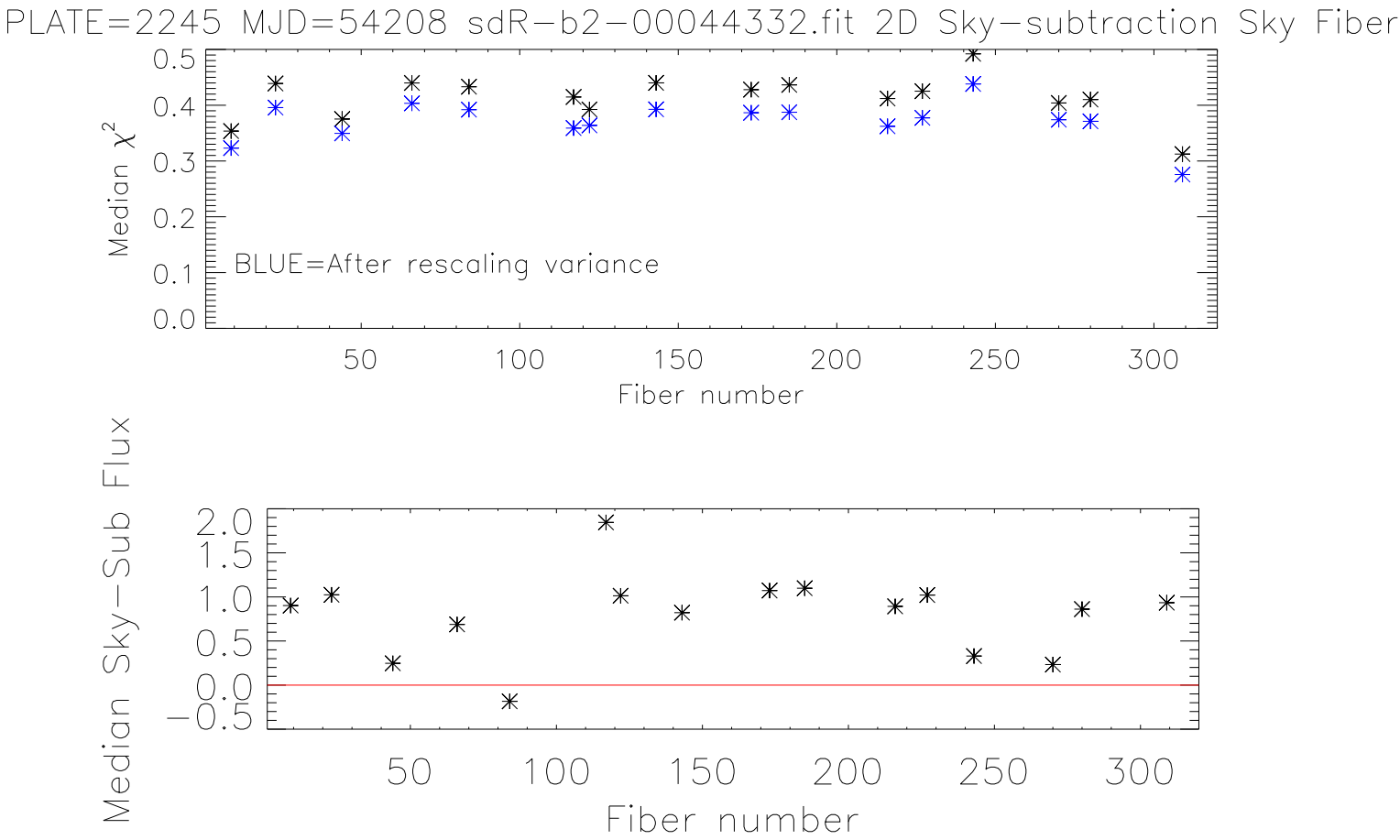
es= −0.0000

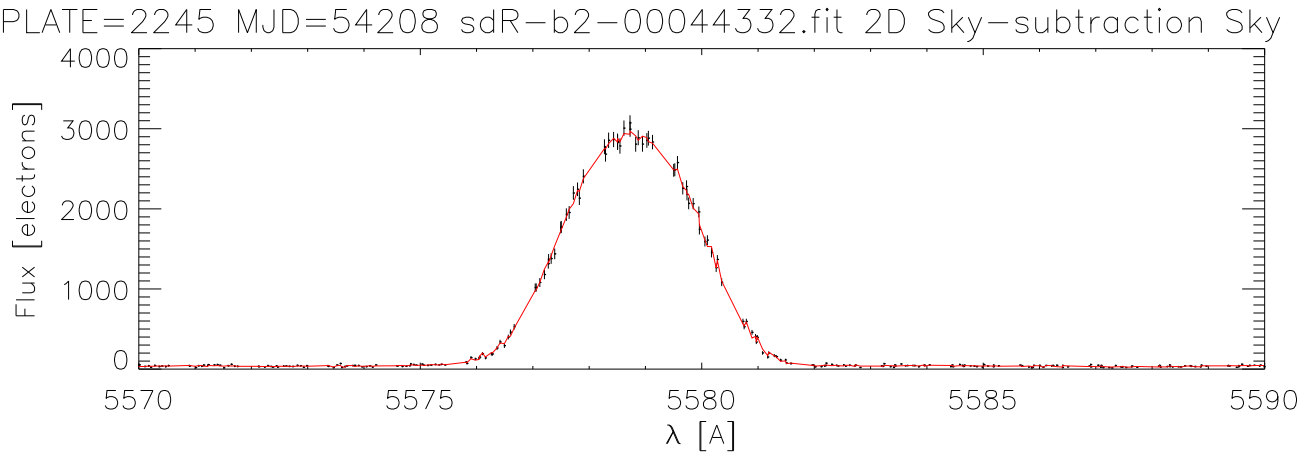

PLATE=2245 MJD=54208 sdR-b2-00044332.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

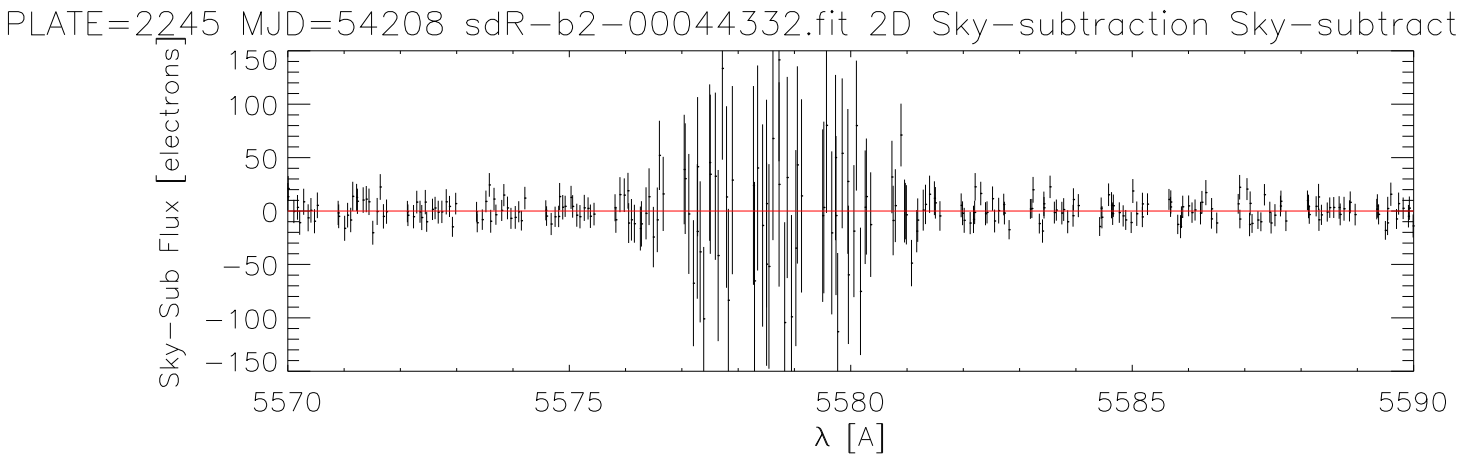

PLATE=2245 MJD=54208 sdR-b2-00044332.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

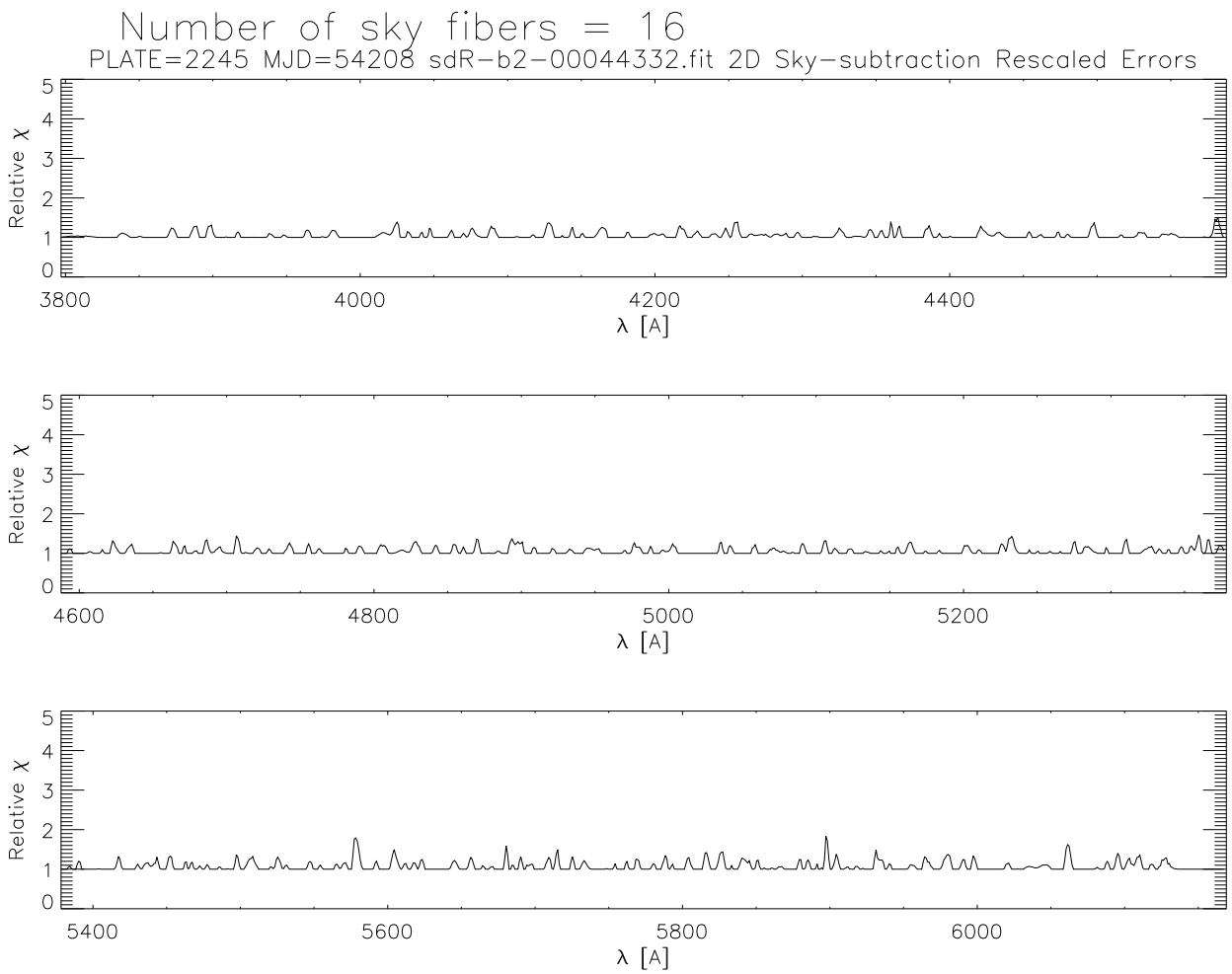

PLATE=2245 MJD=54208 sdR-b2-00044332.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

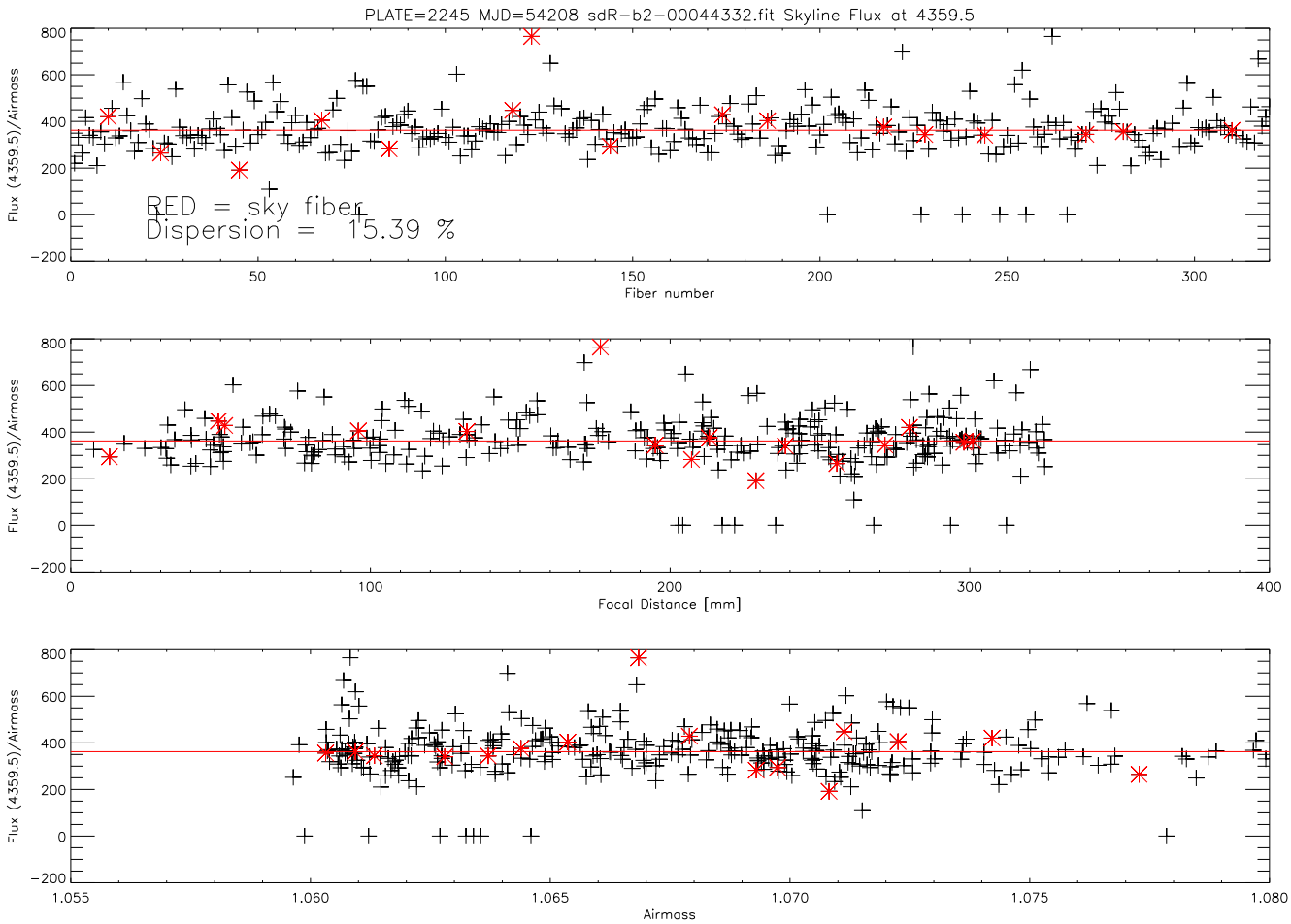

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-b2-00044332.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

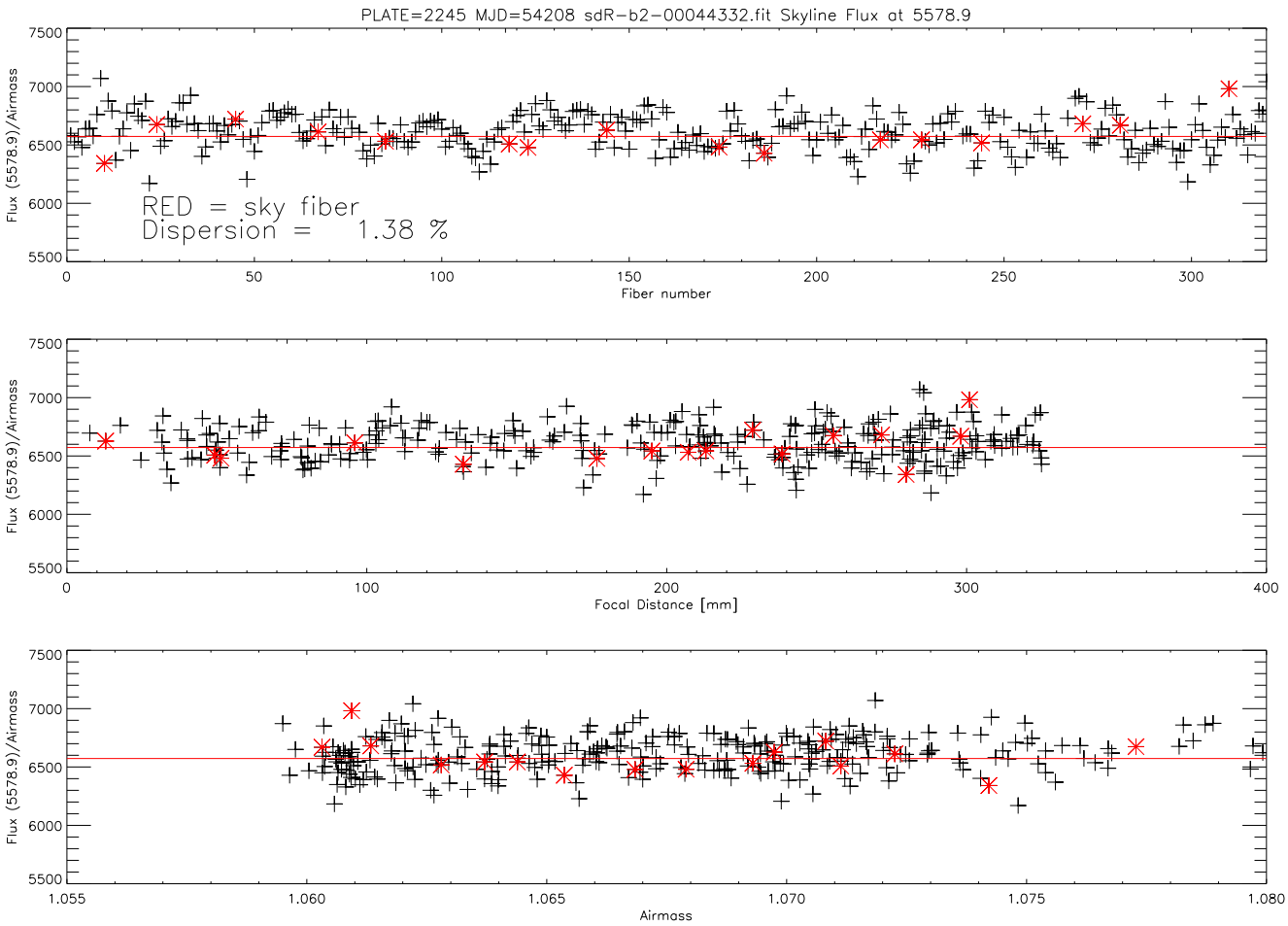

PLATE=2245 MJD=54208 sdR-b2-00044332.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

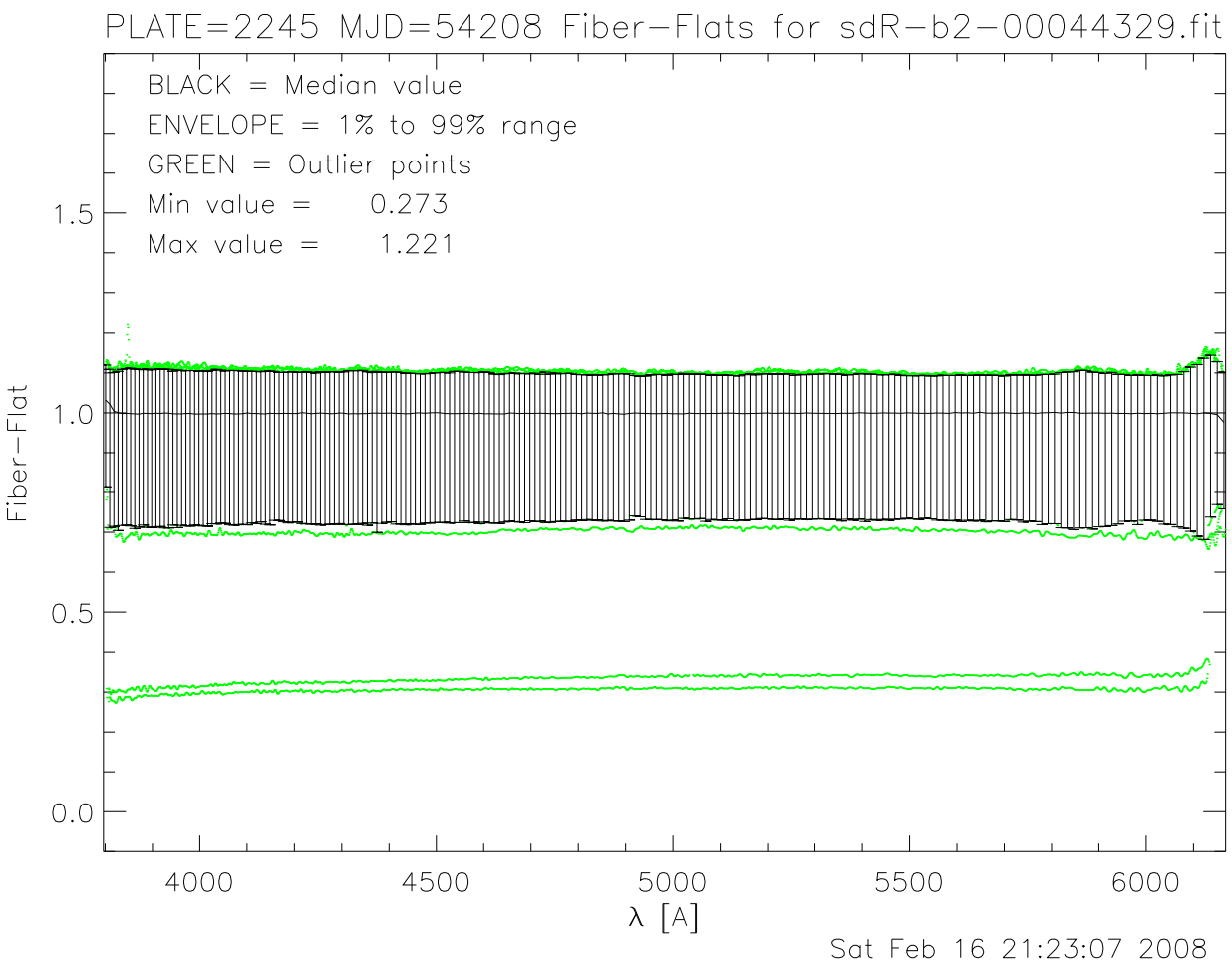

PLATE=2245 MJD=54208 sdR-b2-00044332.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

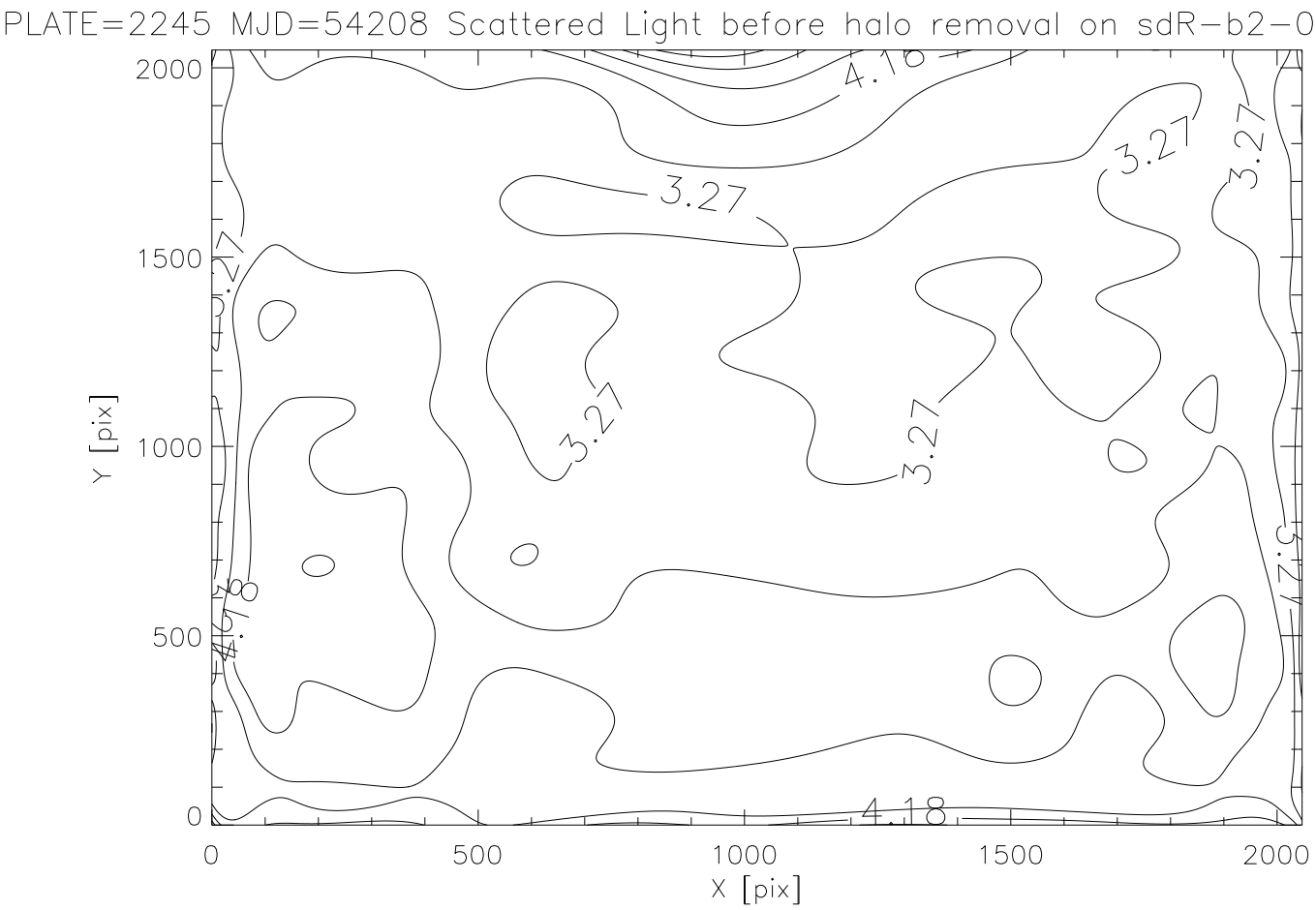

PLATE=2245 MJD=54208 sdR-b2-00044332.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

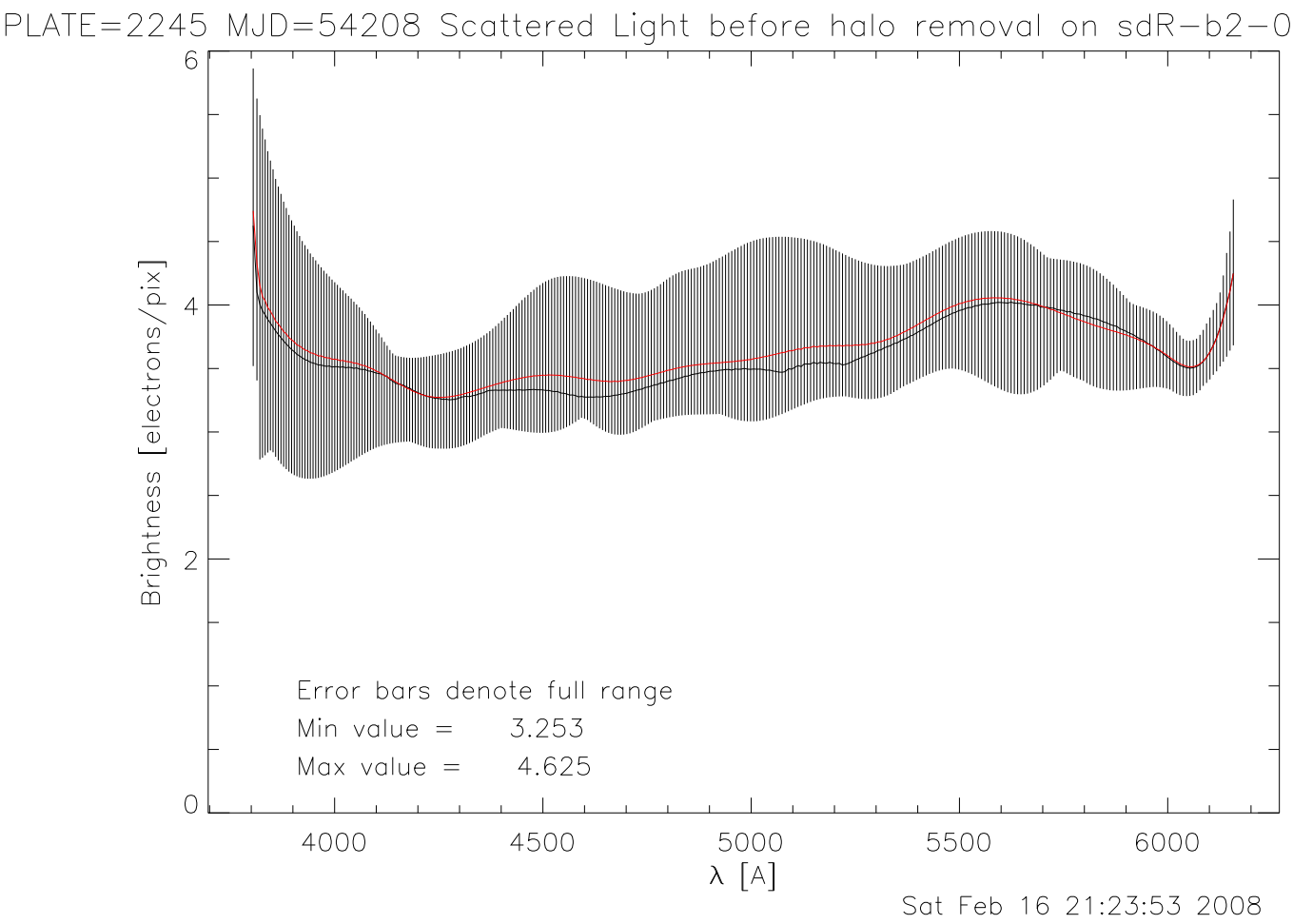

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-b2-00044332.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

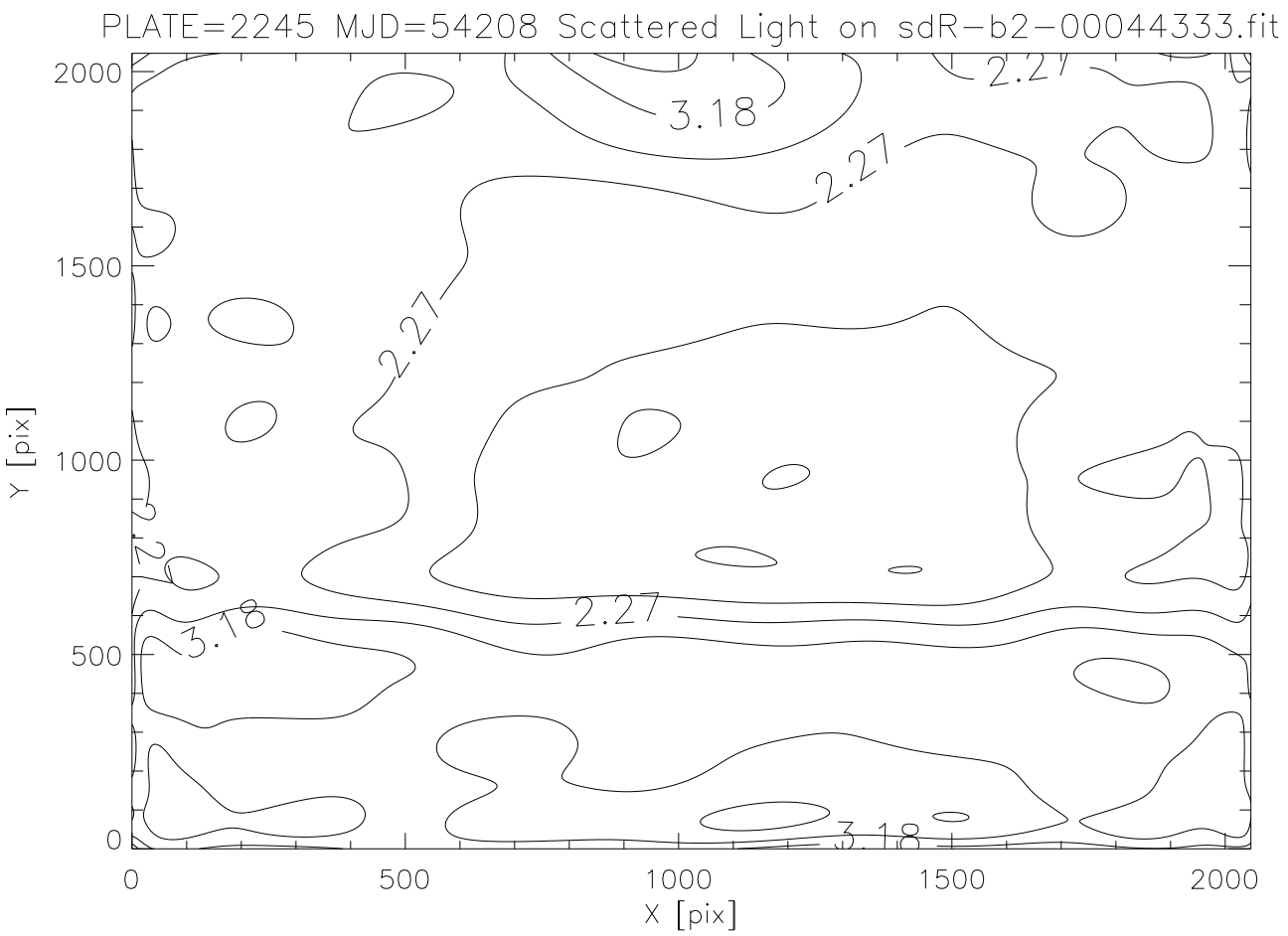

PLATE=2245 MJD=54208 sdR-b2-00044332.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 15.39 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

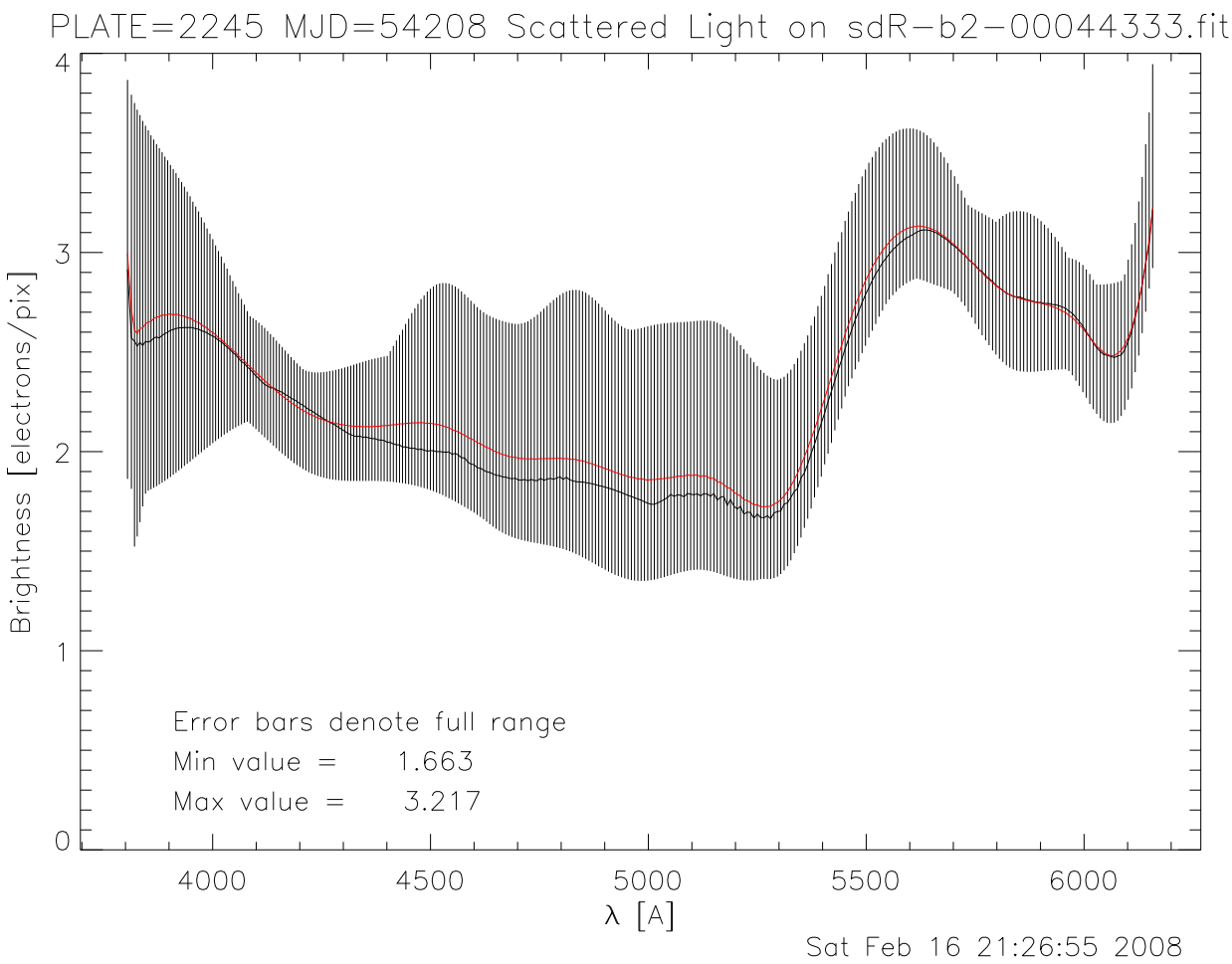

PLATE=2245 MJD=54208 sdR-b2-00044332.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.38 %
Fiber number
Focal Distance [mm]
Airmass

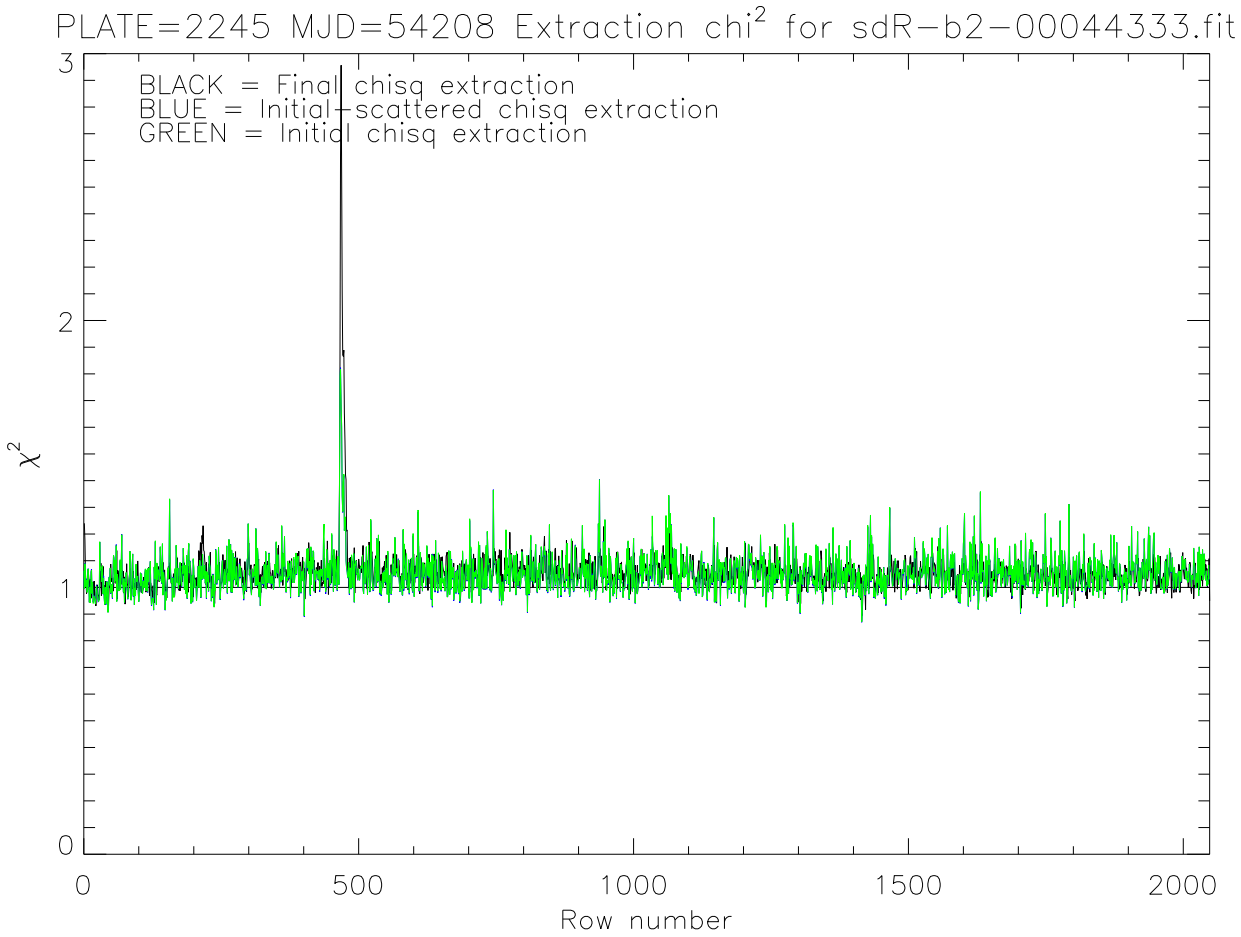

PLATE=2245 MJD=54208 Fiber-Flats for sdR-b2-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.273
Max value = 1.221
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 21:23:07 2008

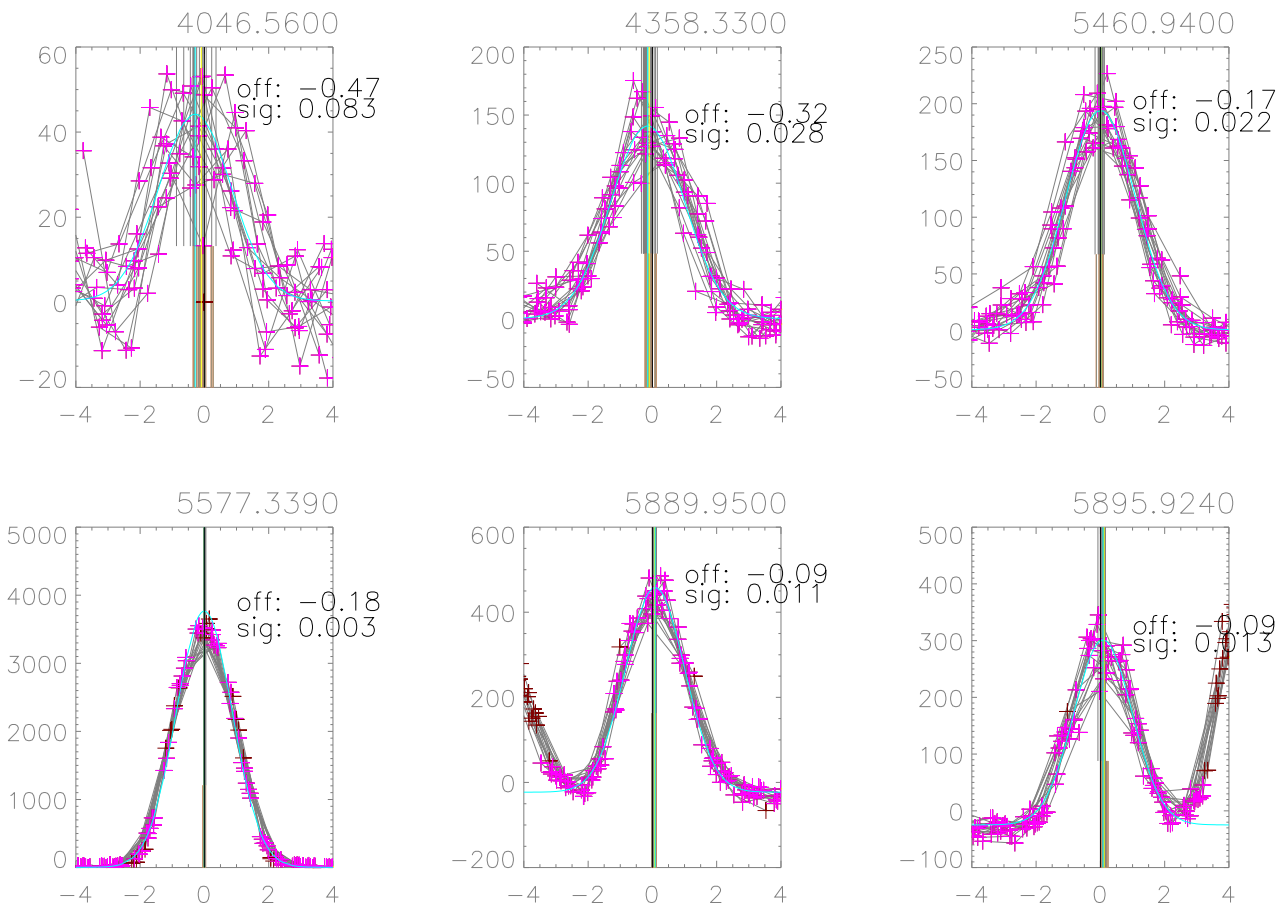

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b2-00044333.f
4.18
3.27
3.27
3.27
3.27
3.27
3.27
3.27
4.18
4.18
0
0
0
Y [pix]
X [pix]
2000
1500
1000
500
0
0
500
1000
1500
2000

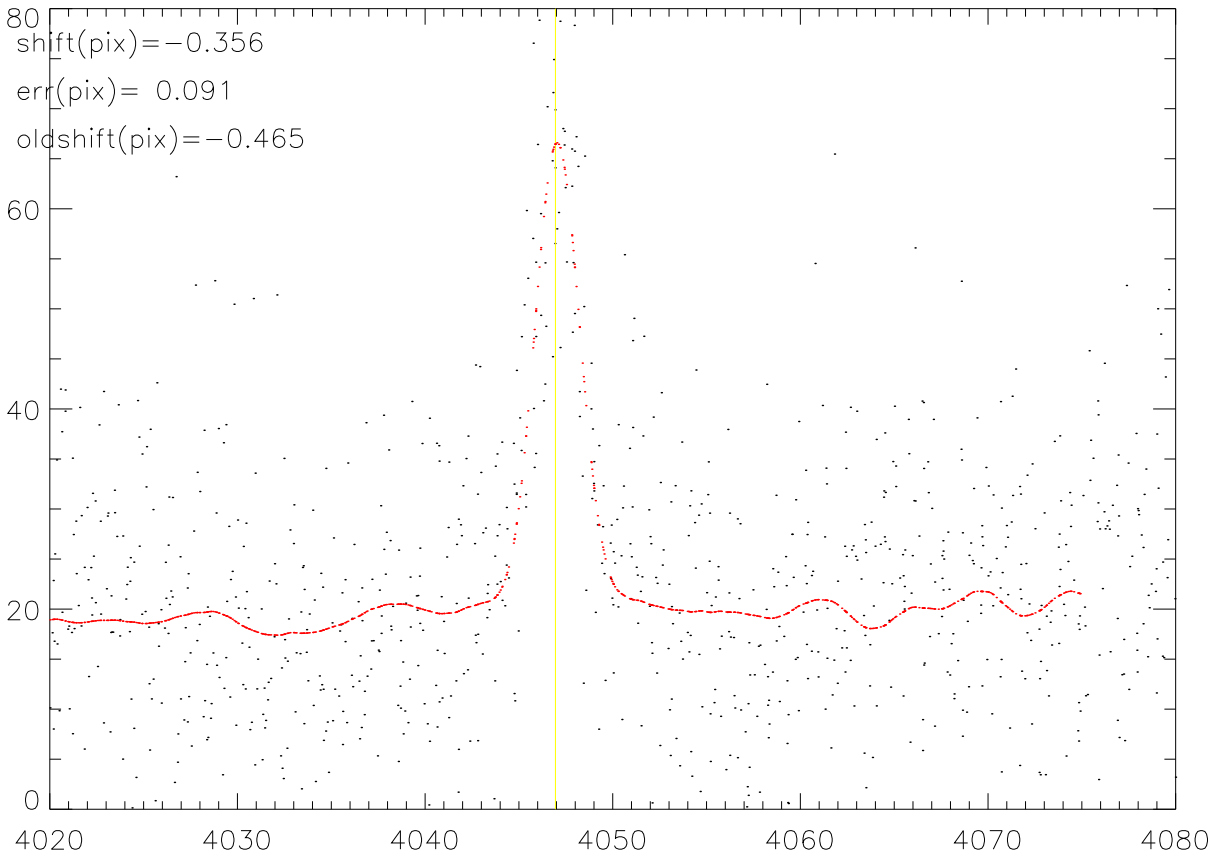

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-b2-00044333.f
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.253
Max value = 4.625
Sat Feb 16 21:23:53 2008

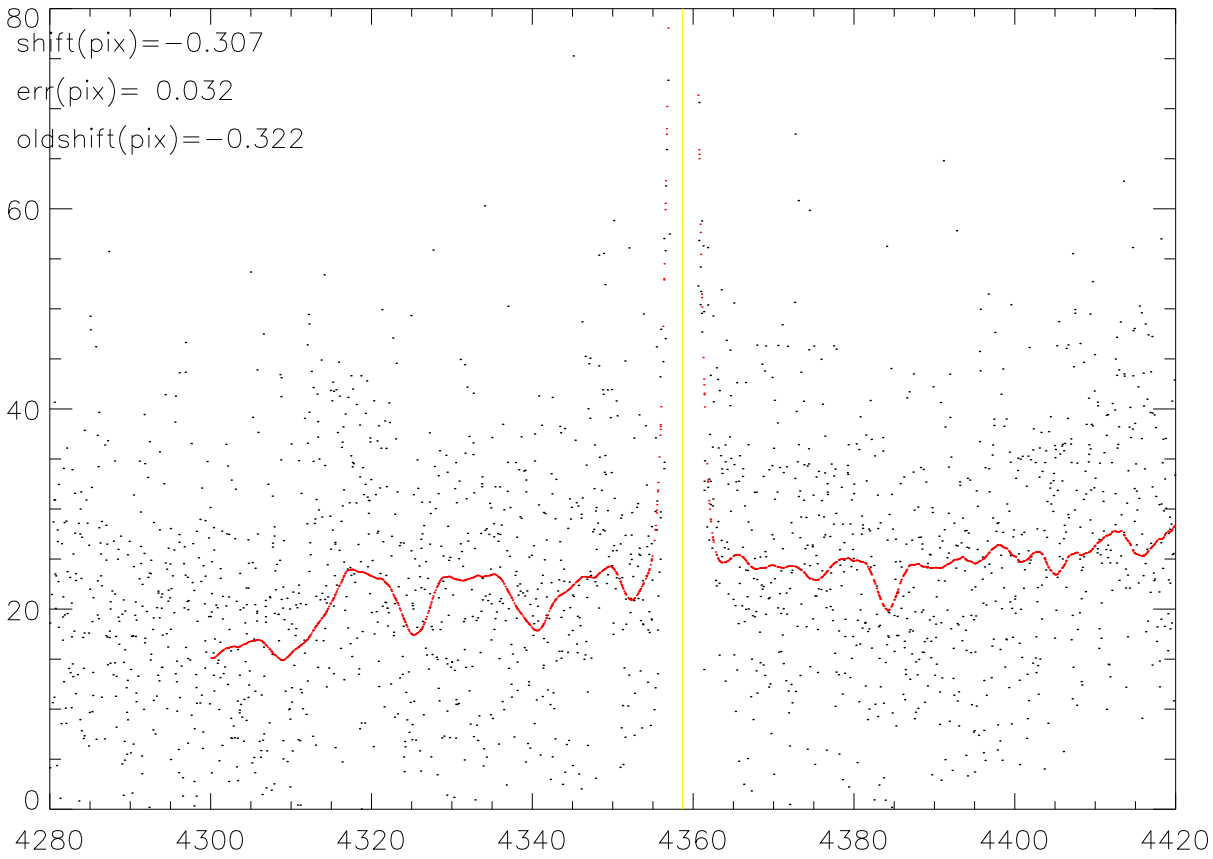

PLATE=2245 MJD=54208 Scattered Light on sdR-b2-00044333.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
3.18
2.27
2.27
2.27
3.18
2.27
3.18

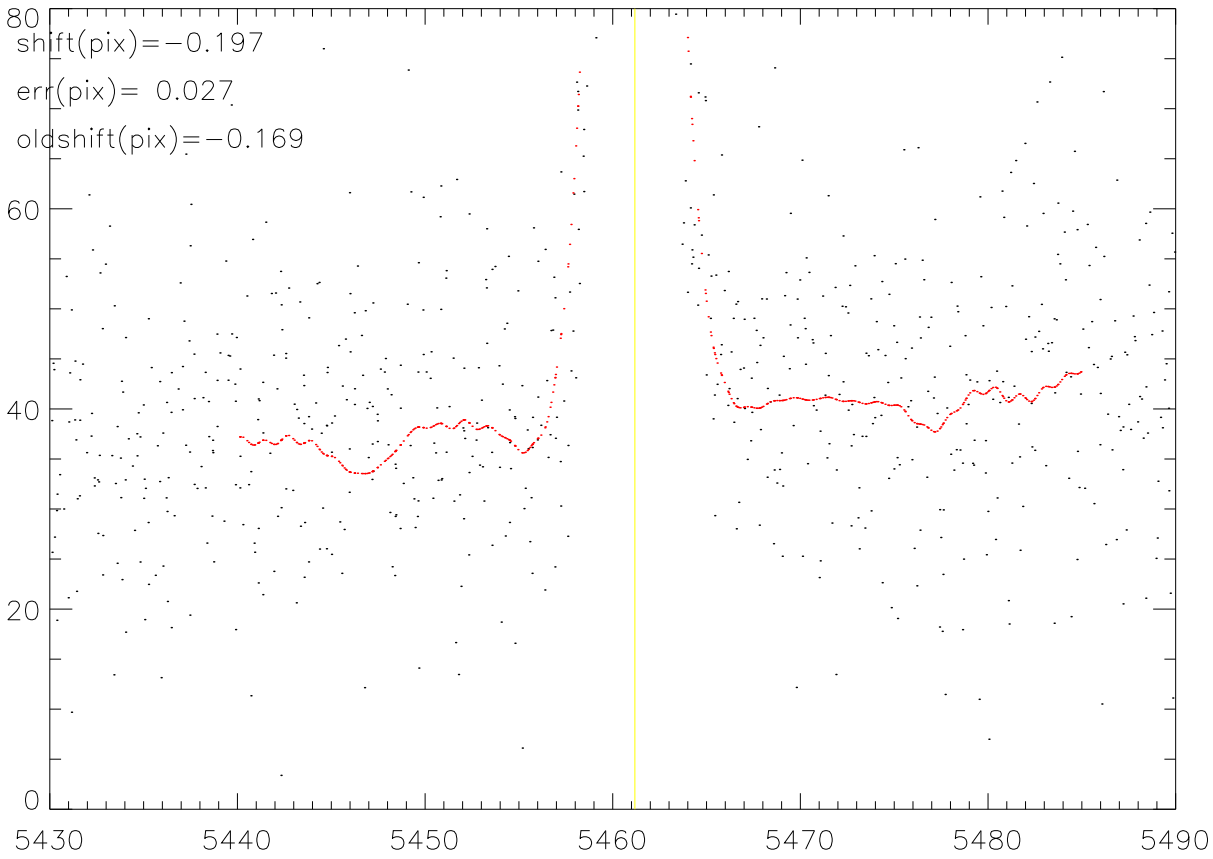

PLATE=2245 MJD=54208 Scattered Light on sdR-b2-00044333.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.663
Max value = 3.217
Sat Feb 16 21:26:55 2008

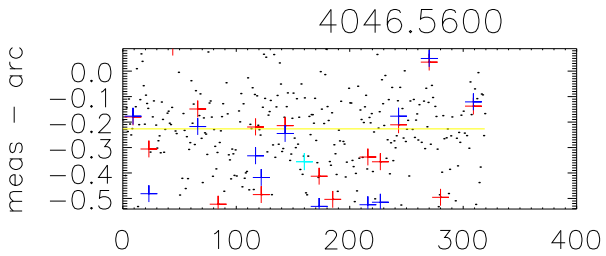

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-b2-00044333.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

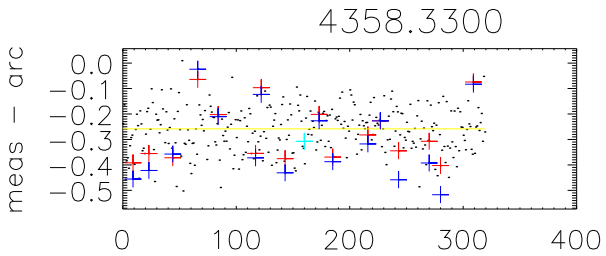

4046.5600
off: −0.47
sig: 0.083
4358.3300
off: −0.32
sig: 0.028
5460.9400
off: −0.17
sig: 0.022
5577.3390
off: −0.18
sig: 0.003
5889.9500
off: −0.09
sig: 0.011
5895.9240
off: −0.09
sig: 0.013

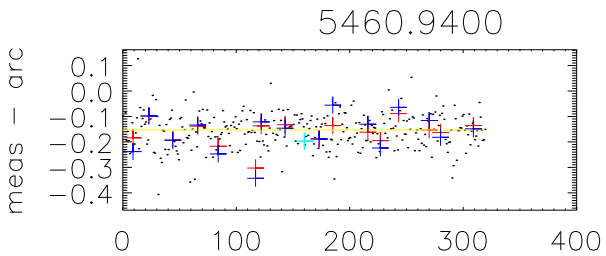

shift(pix)=−0.356
err(pix)= 0.091
oldshift(pix)=−0.465
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

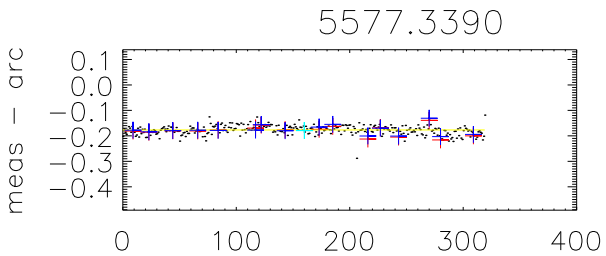

shift(pix)=−0.307
err(pix)= 0.032
oldshift(pix)=−0.322
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

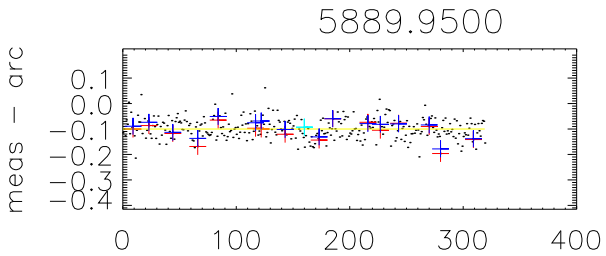

shift(pix)=−0.197
err(pix)= 0.027
oldshift(pix)=−0.169
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

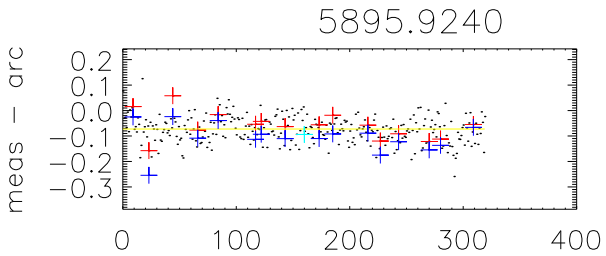

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

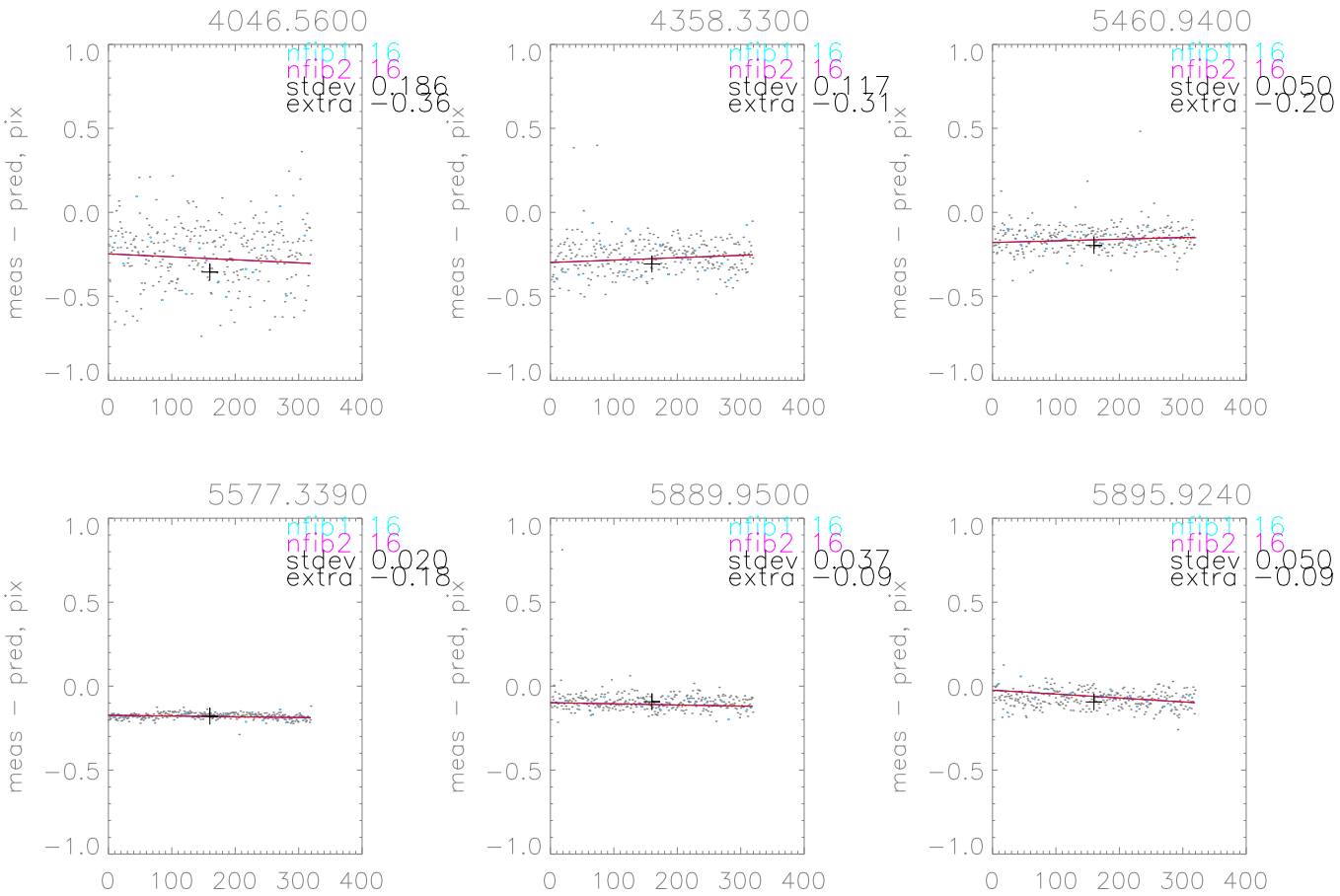

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

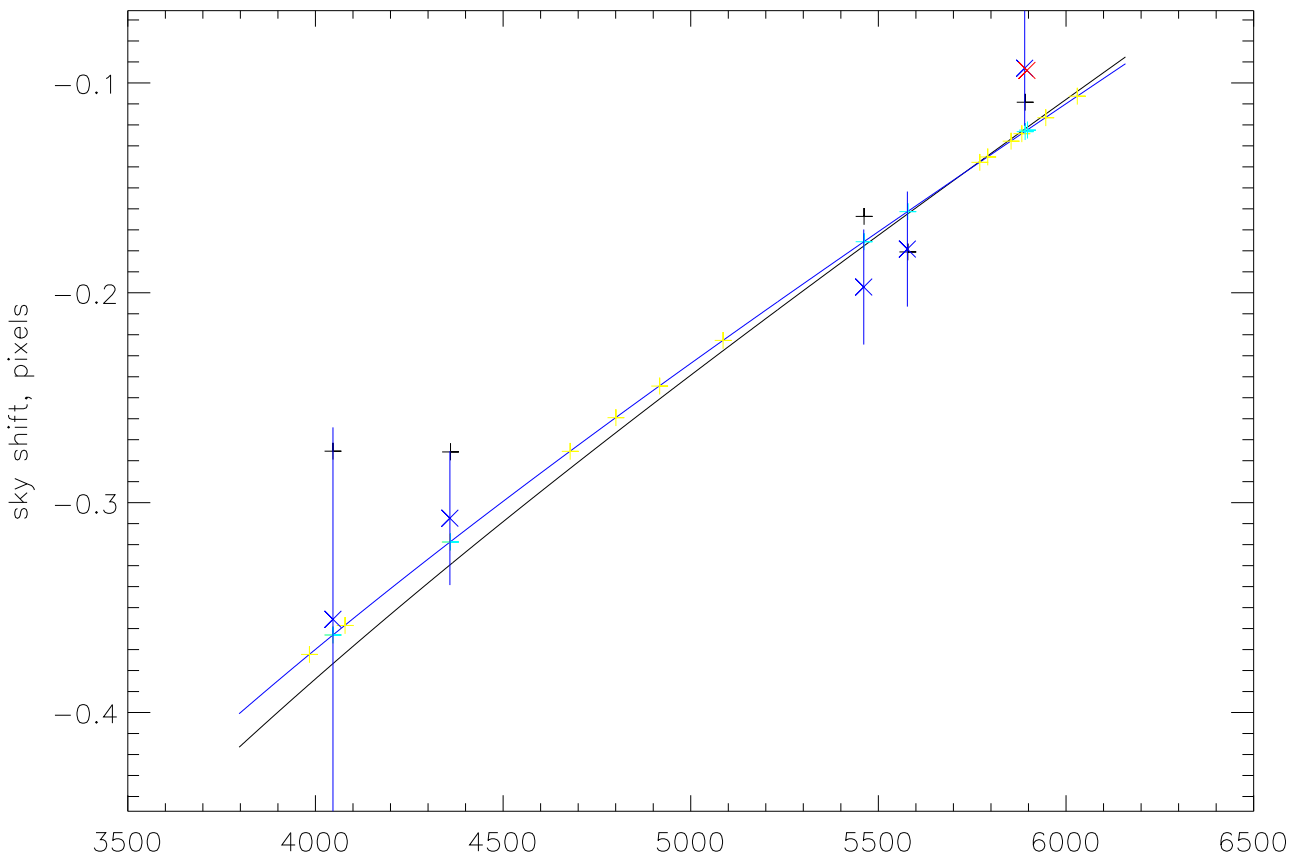

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

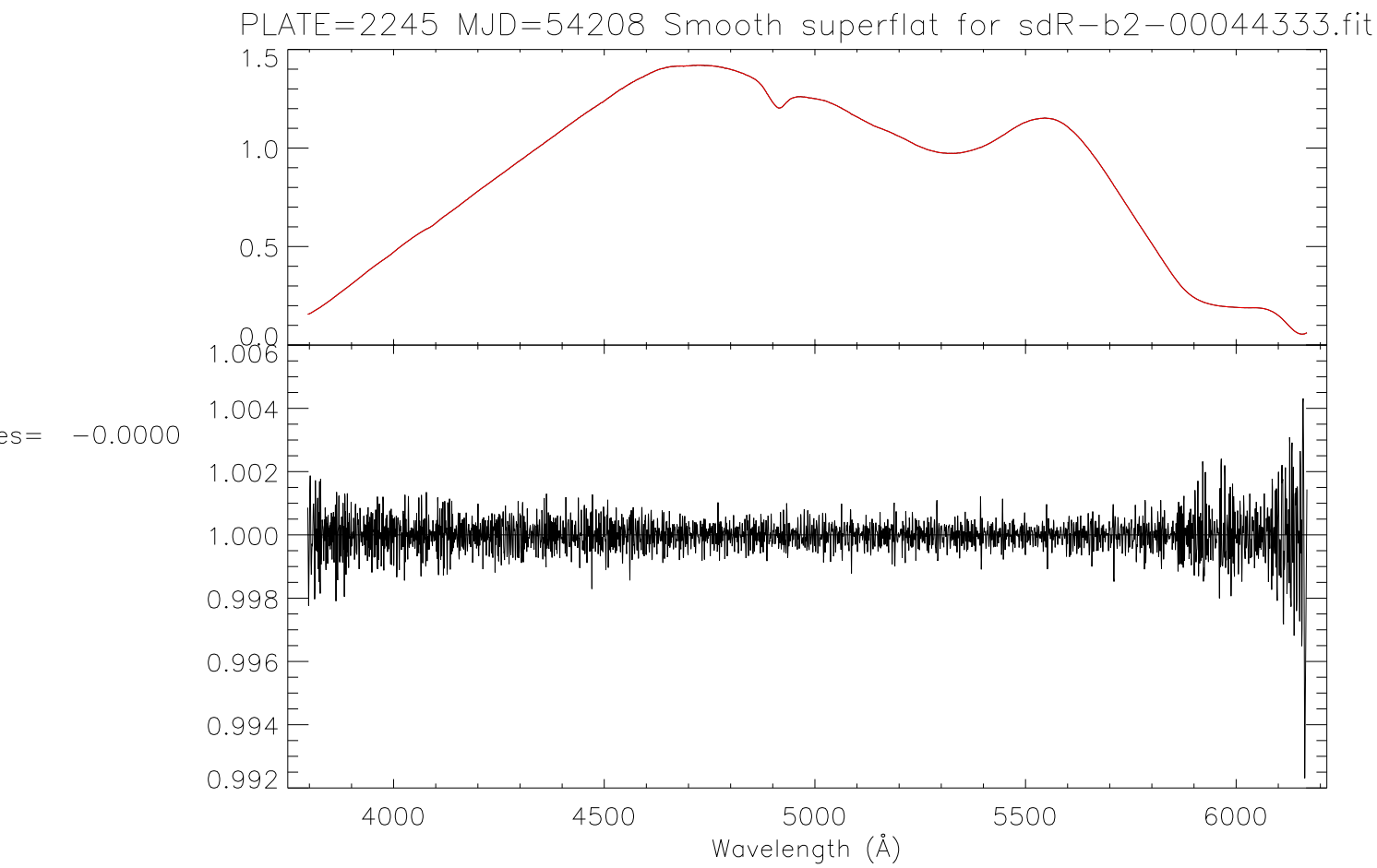

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

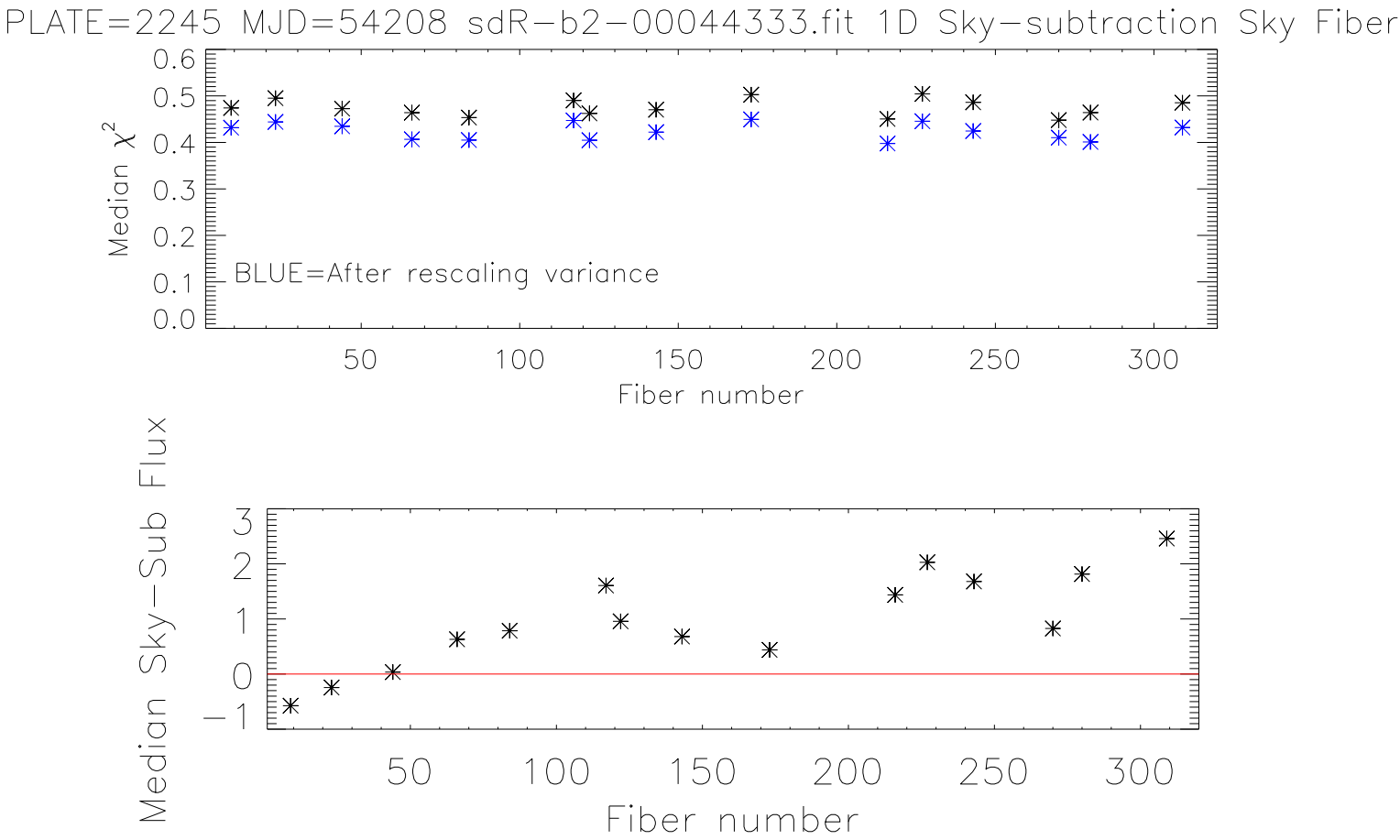

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

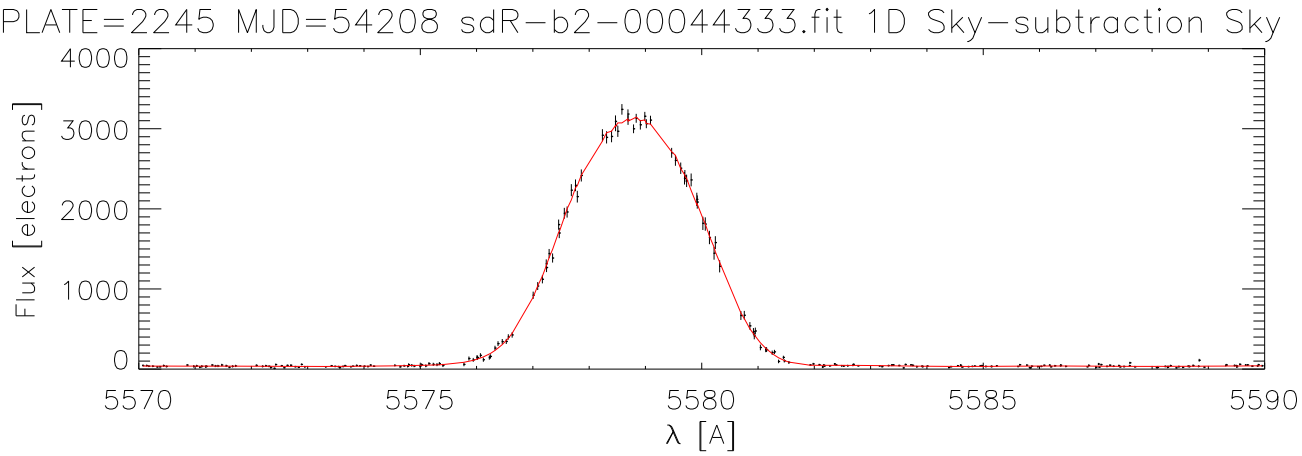

4046.5600
nfib1 16
nfib2 16
stdev 0.186
extra −0.36
4358.3300
nfib1 16
nfib2 16
stdev 0.117
extra −0.31
5460.9400
nfib1 16
nfib2 16
stdev 0.050
extra −0.20
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra −0.18
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra −0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.050
extra −0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

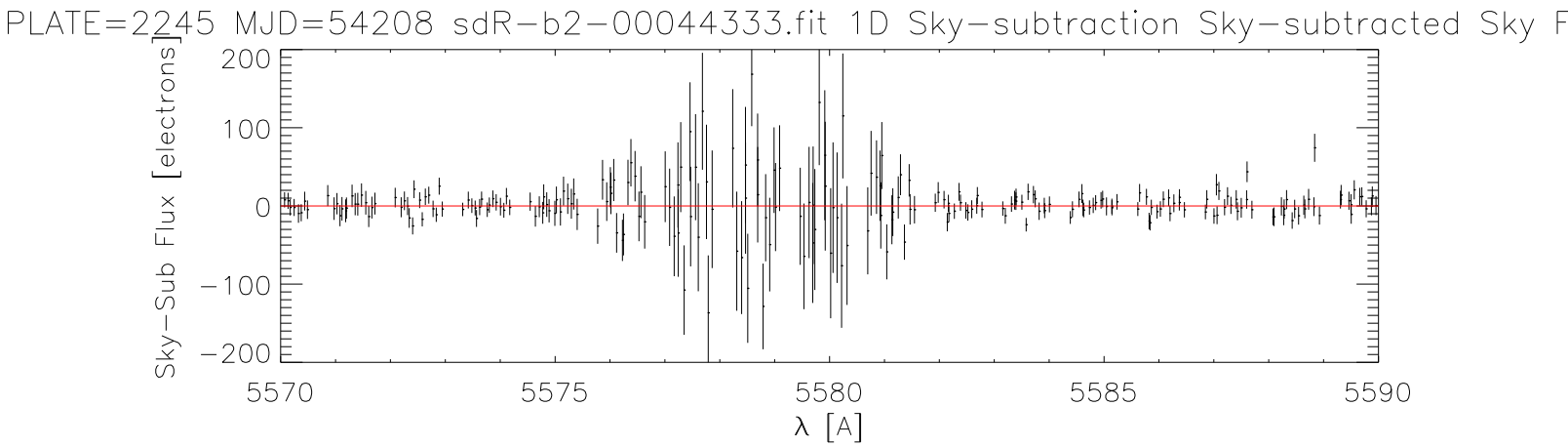

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

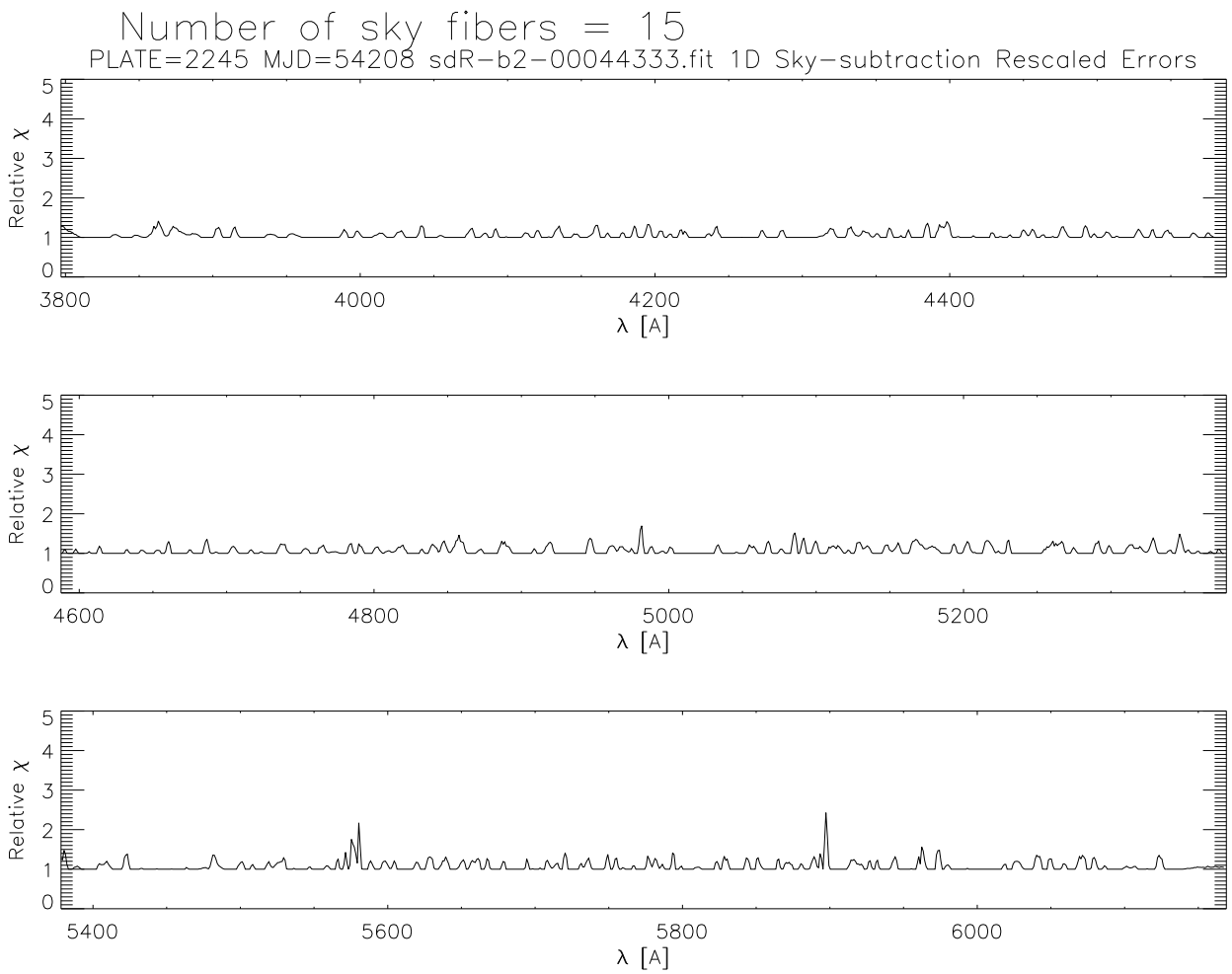

PLATE=2245 MJD=54208 Smooth superflat for sdR-b2-00044333.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

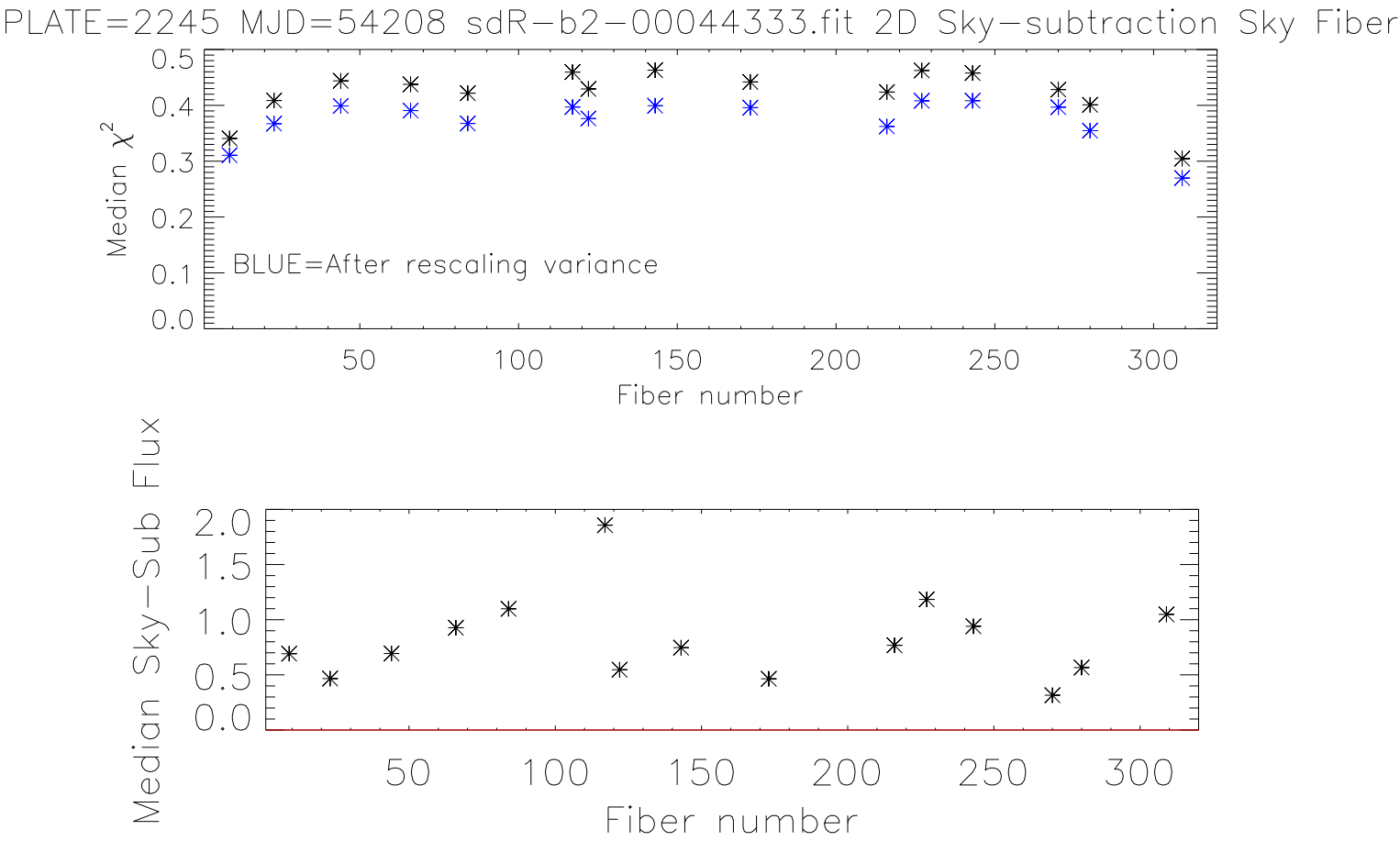
es= −0.0000

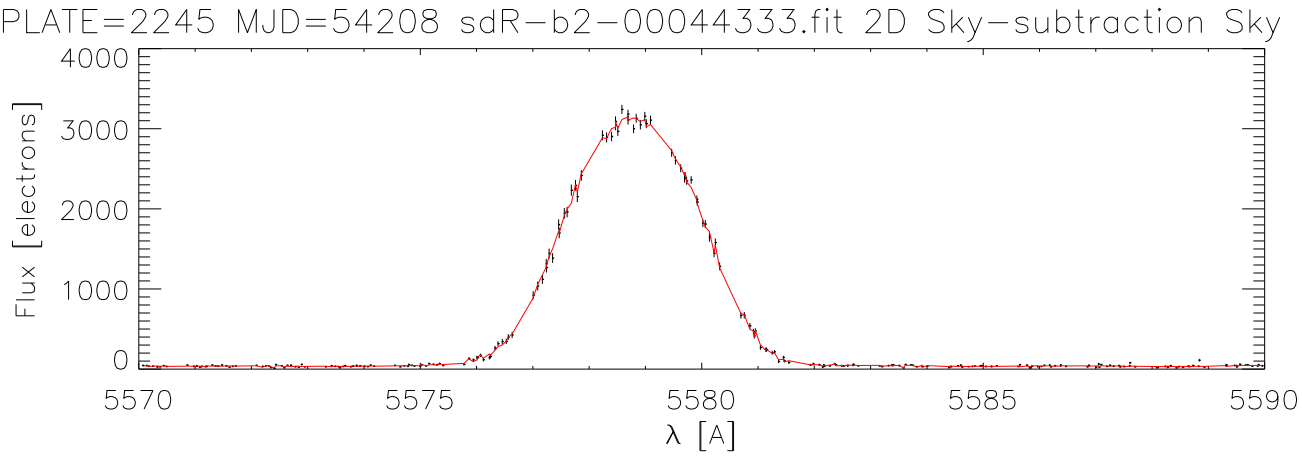

PLATE=2245 MJD=54208 sdR-b2-00044333.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

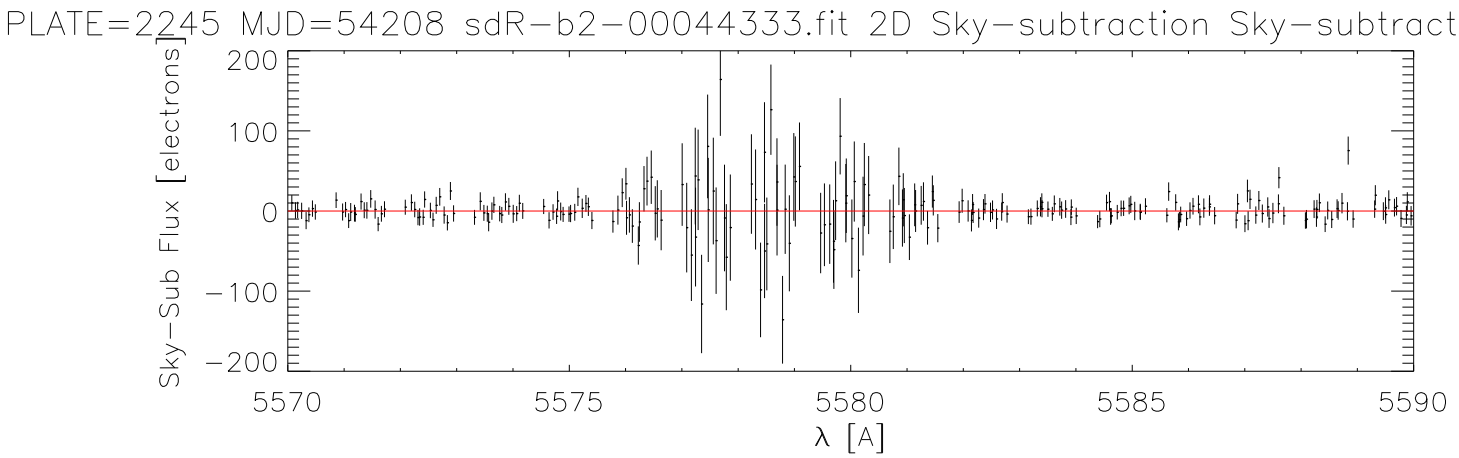

PLATE=2245 MJD=54208 sdR-b2-00044333.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

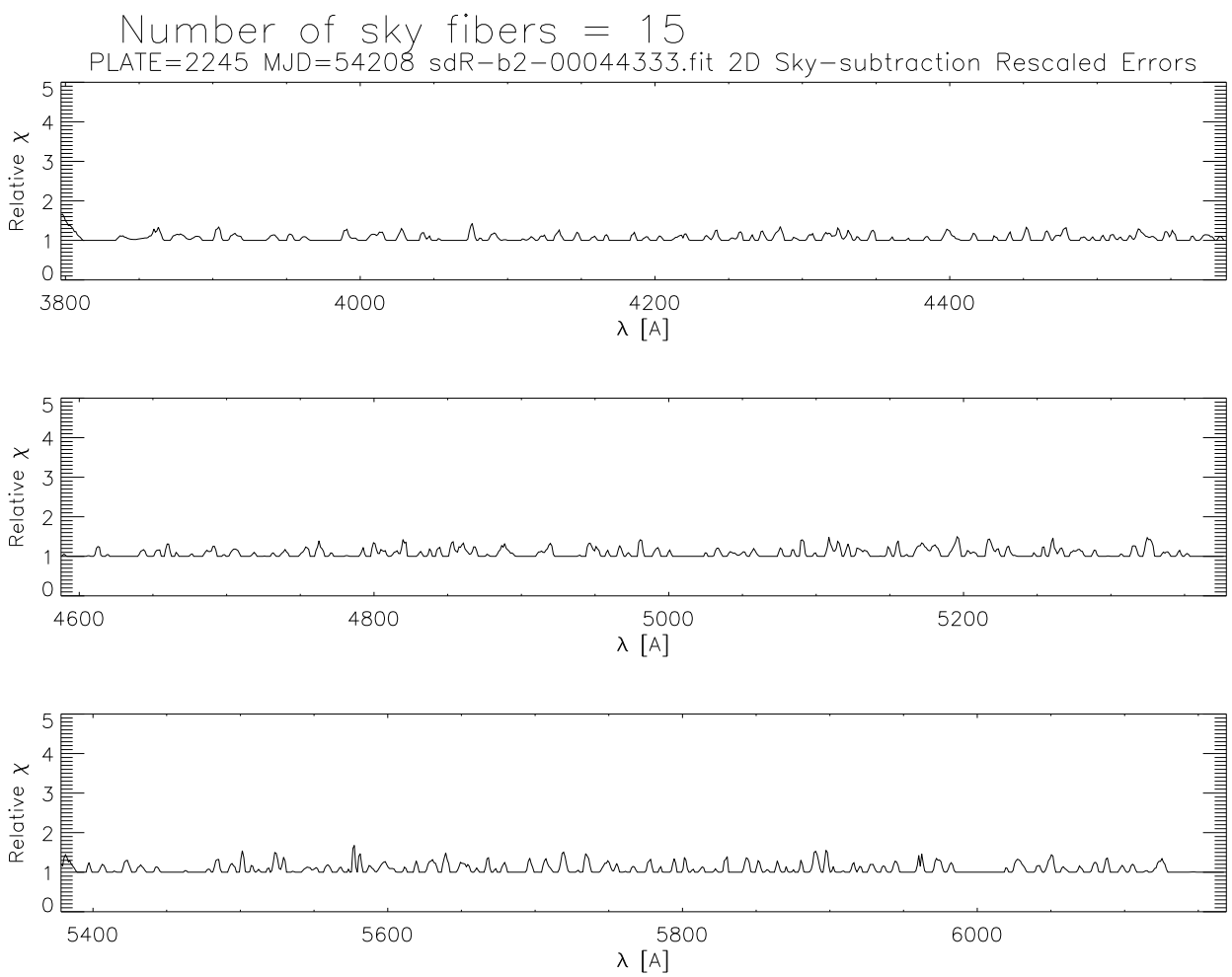

PLATE=2245 MJD=54208 sdR-b2-00044333.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

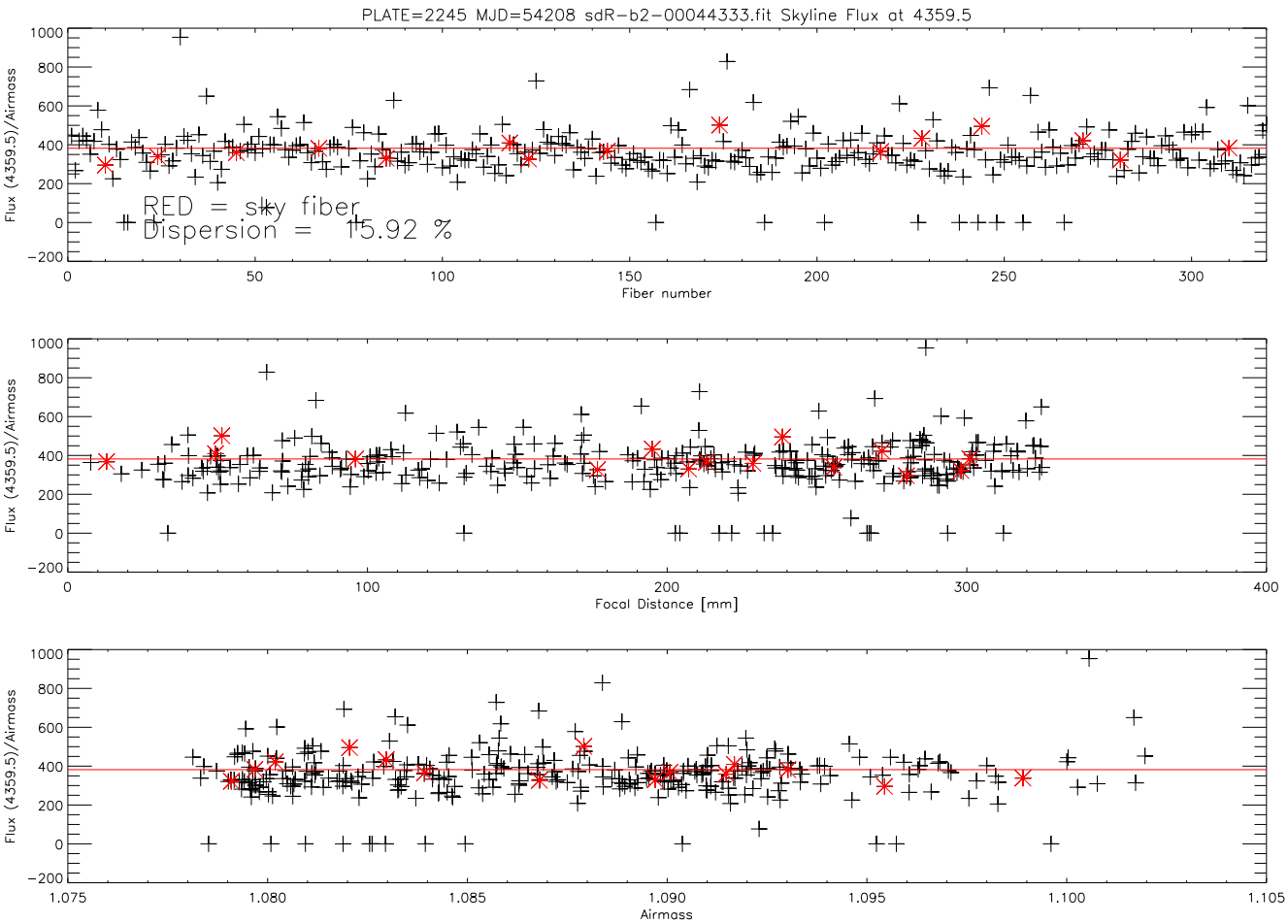

Number of sky fibers = 15
PLATE=2245 MJD=54208 sdR-b2-00044333.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

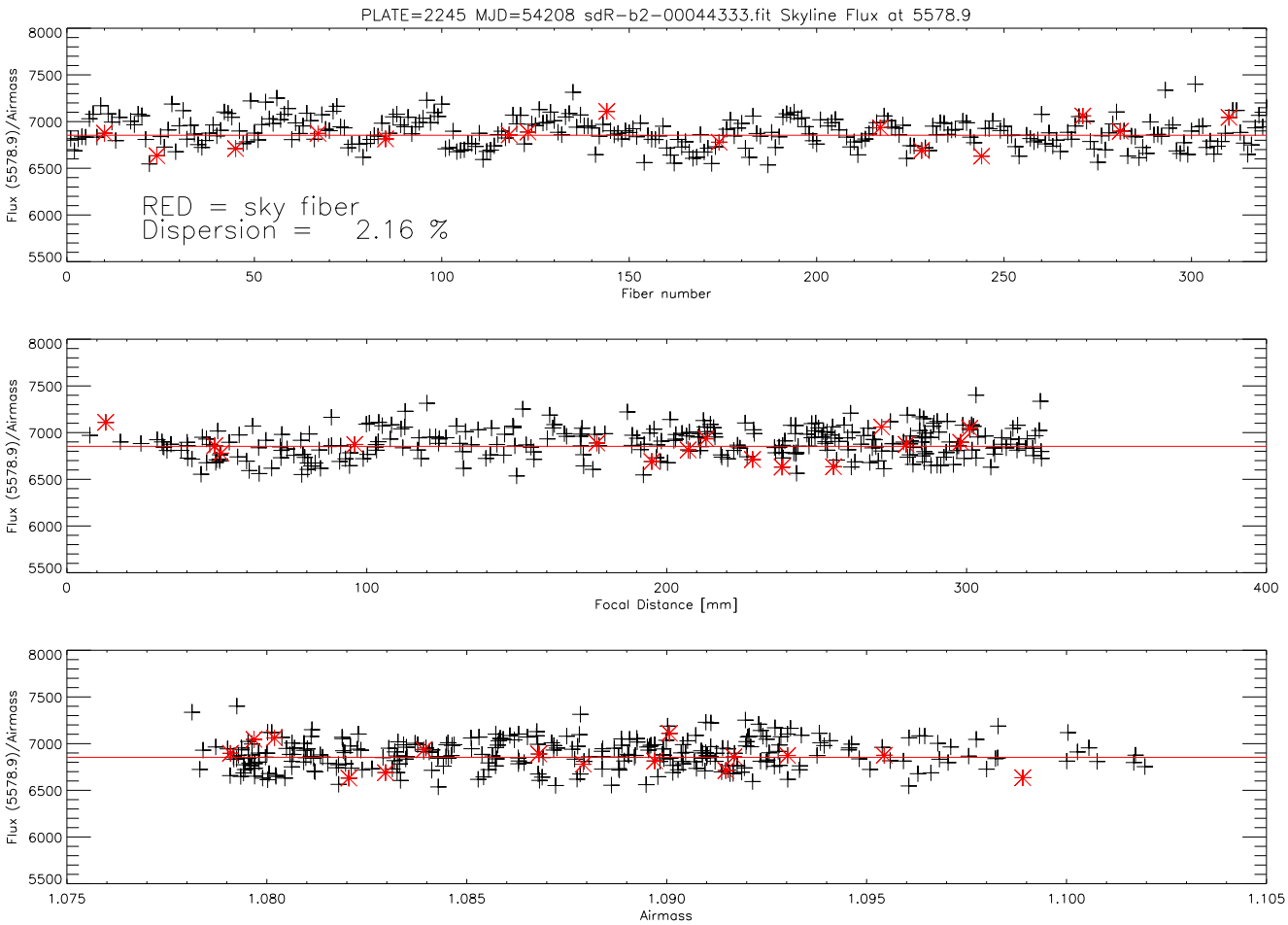

PLATE=2245 MJD=54208 sdR-b2-00044333.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

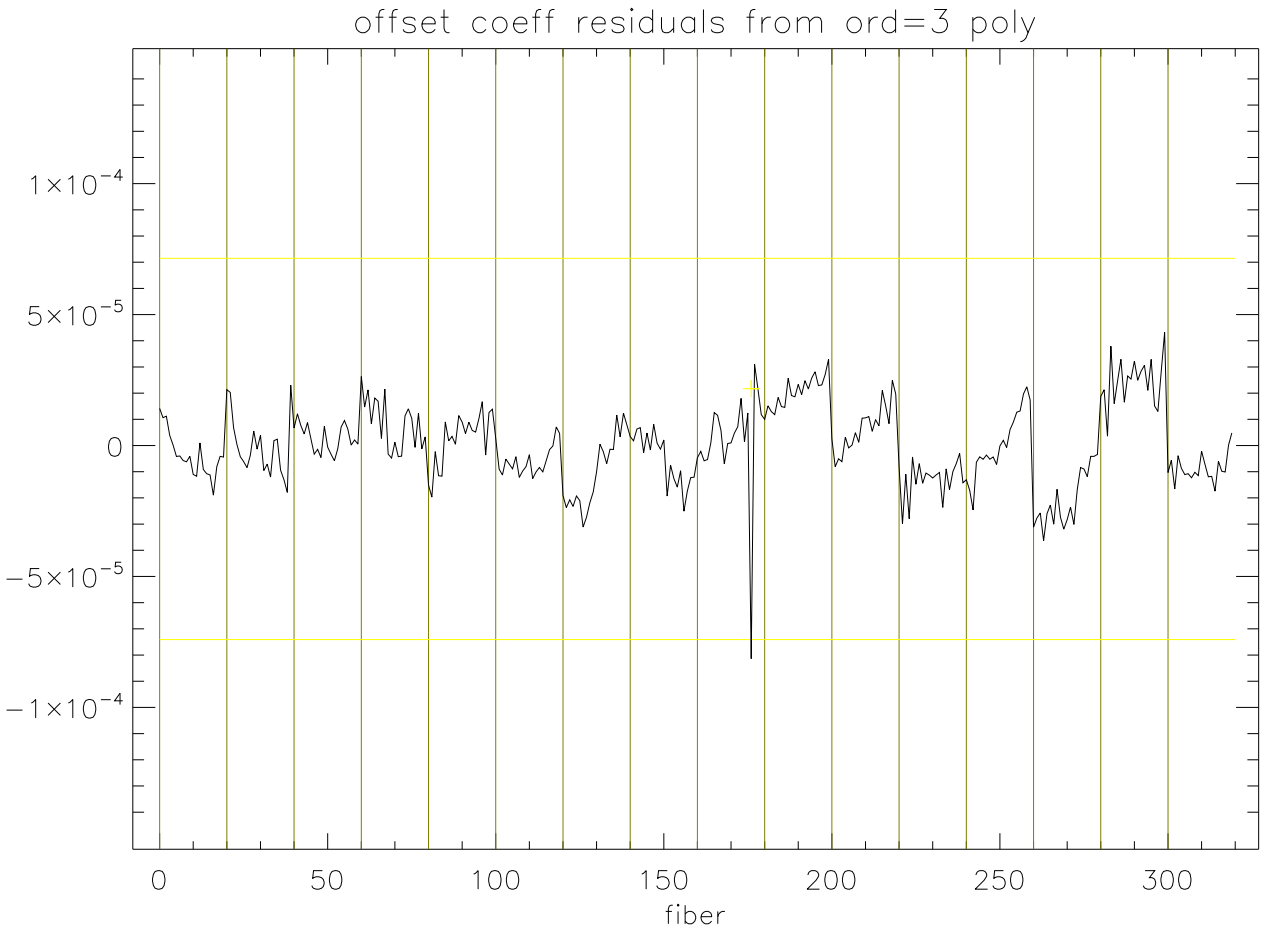

PLATE=2245 MJD=54208 sdR-b2-00044333.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

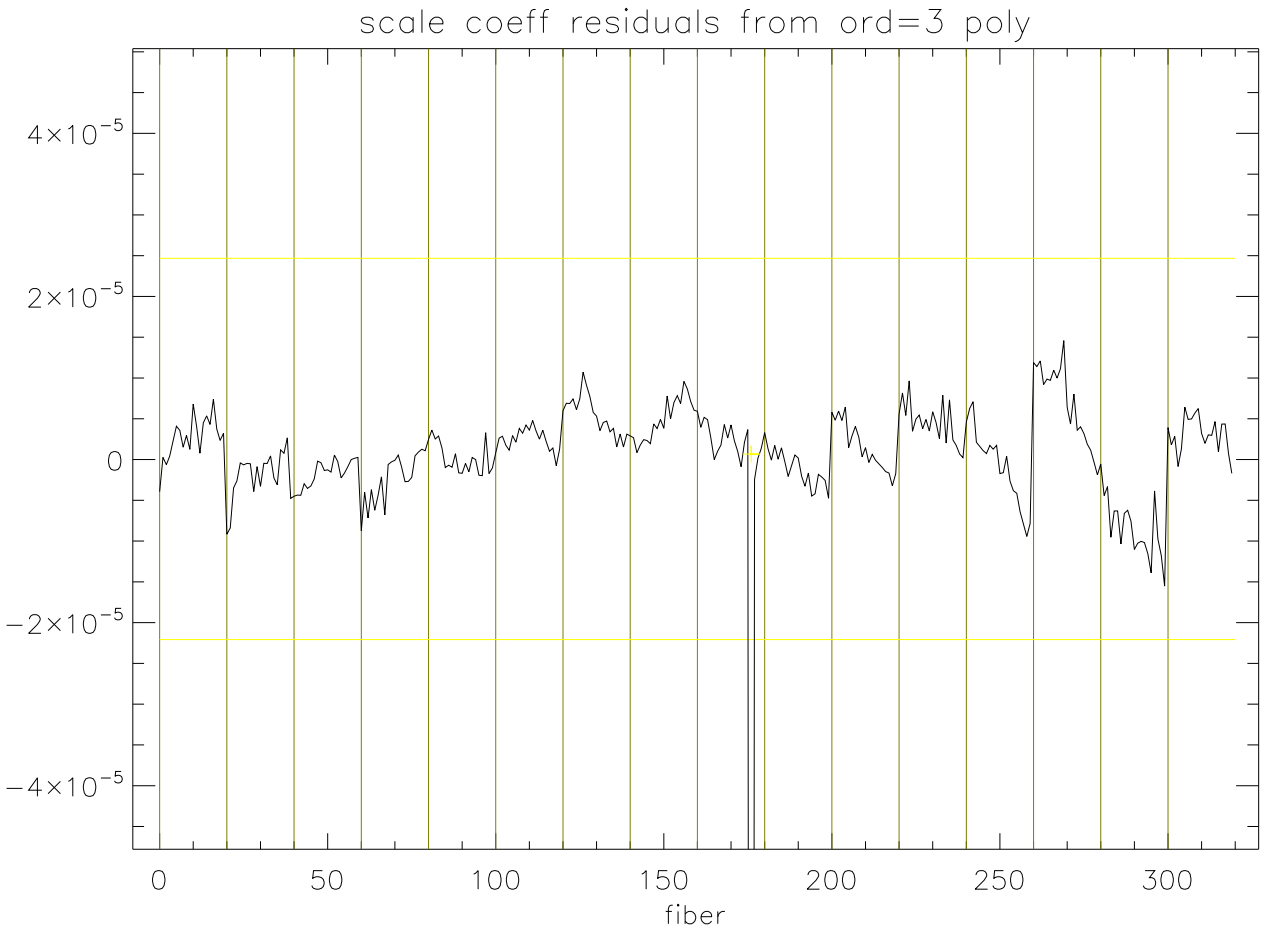

PLATE=2245 MJD=54208 sdR-b2-00044333.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

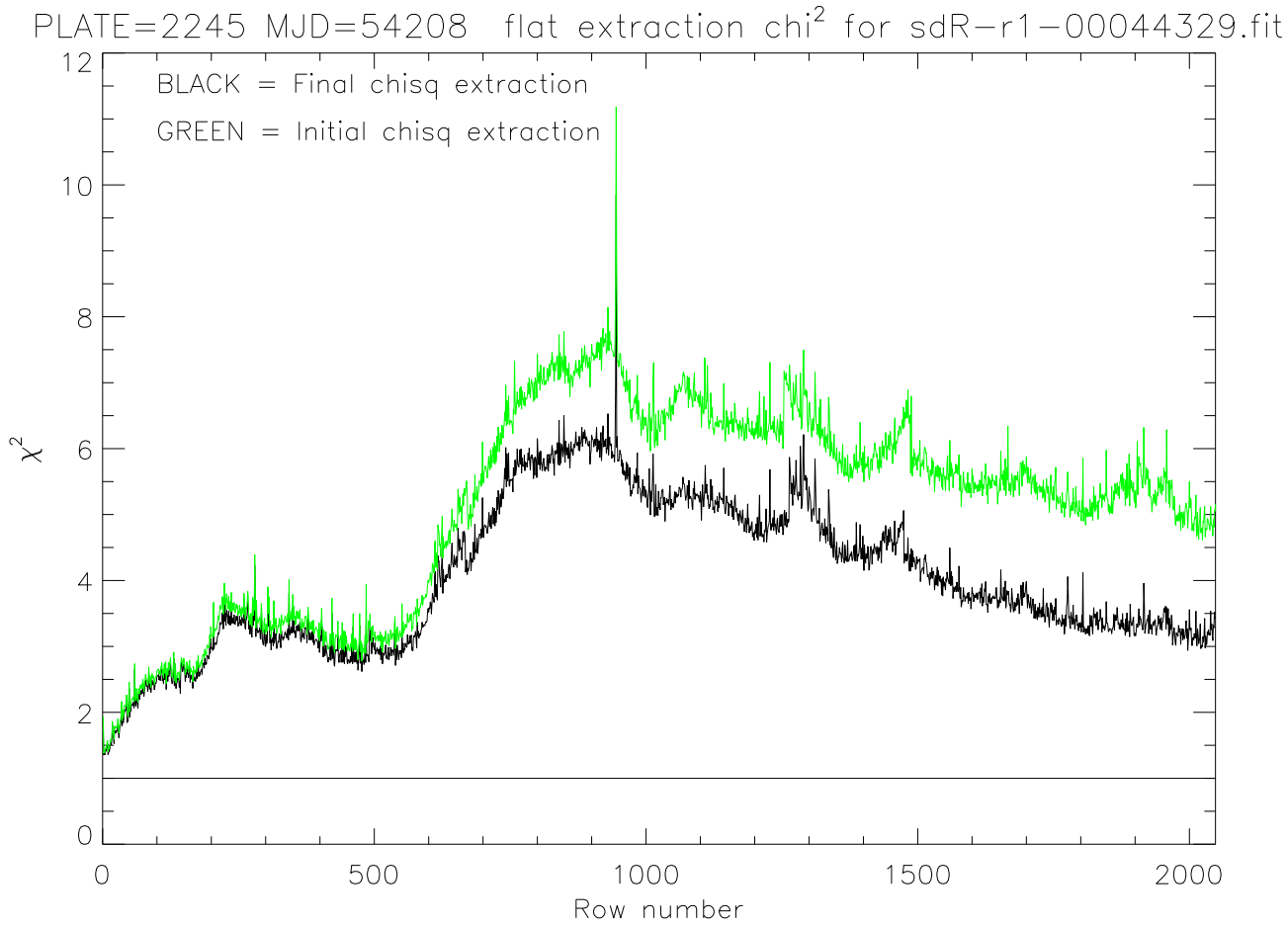

Number of sky fibers = 15
PLATE=2245 MJD=54208 sdR-b2-00044333.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

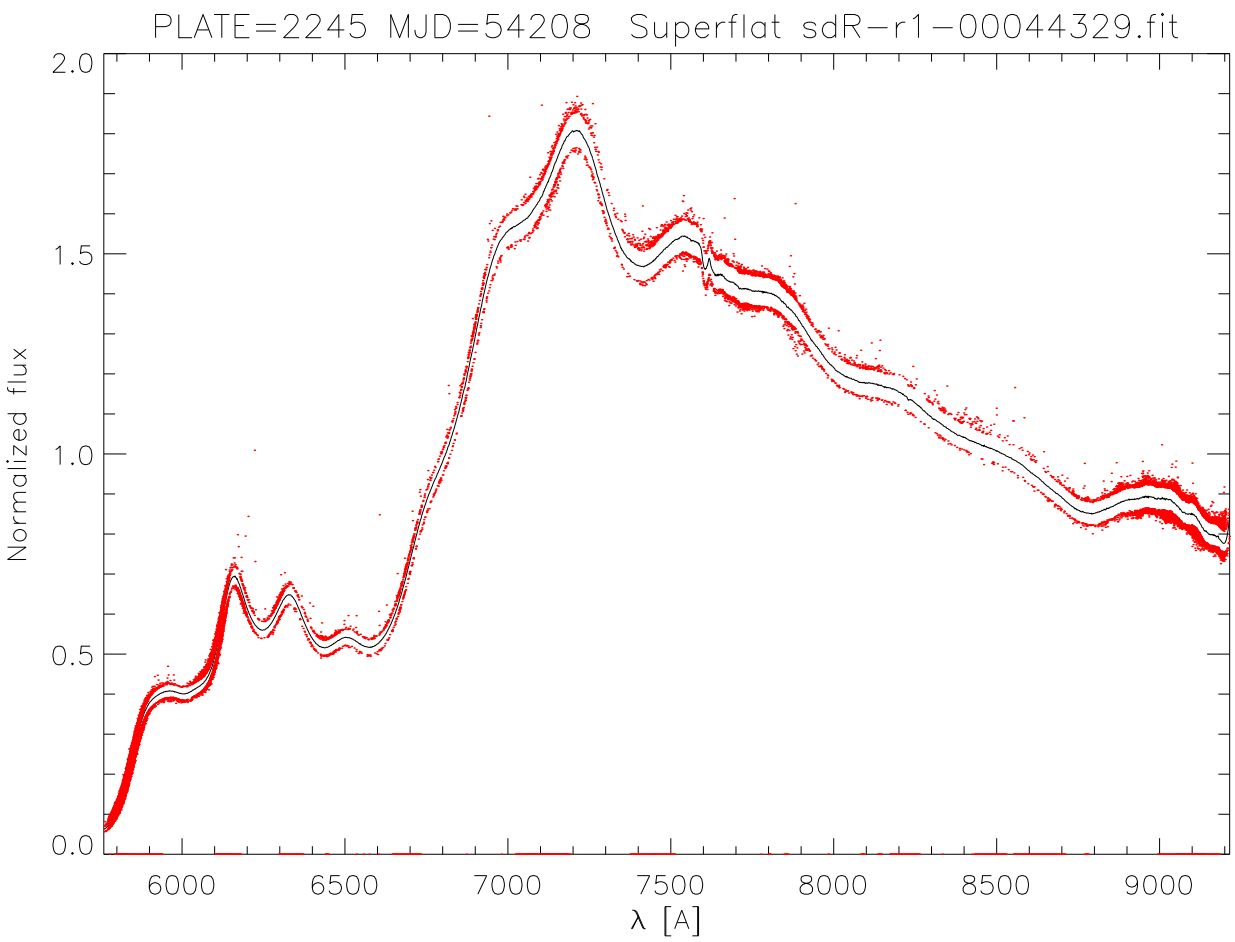

PLATE=2245 MJD=54208 sdR-b2-00044333.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 15.92 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

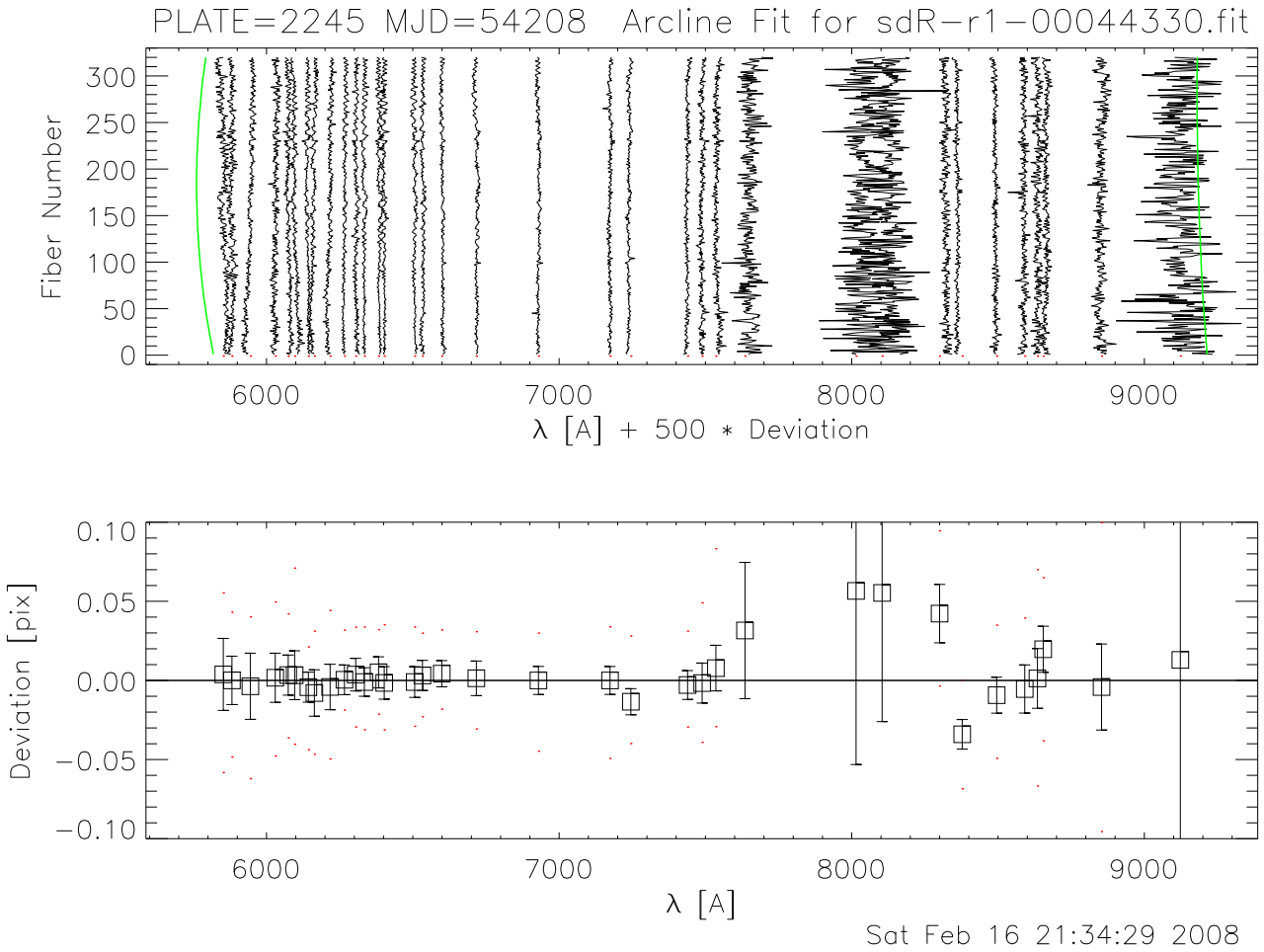

PLATE=2245 MJD=54208 sdR-b2-00044333.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.16 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

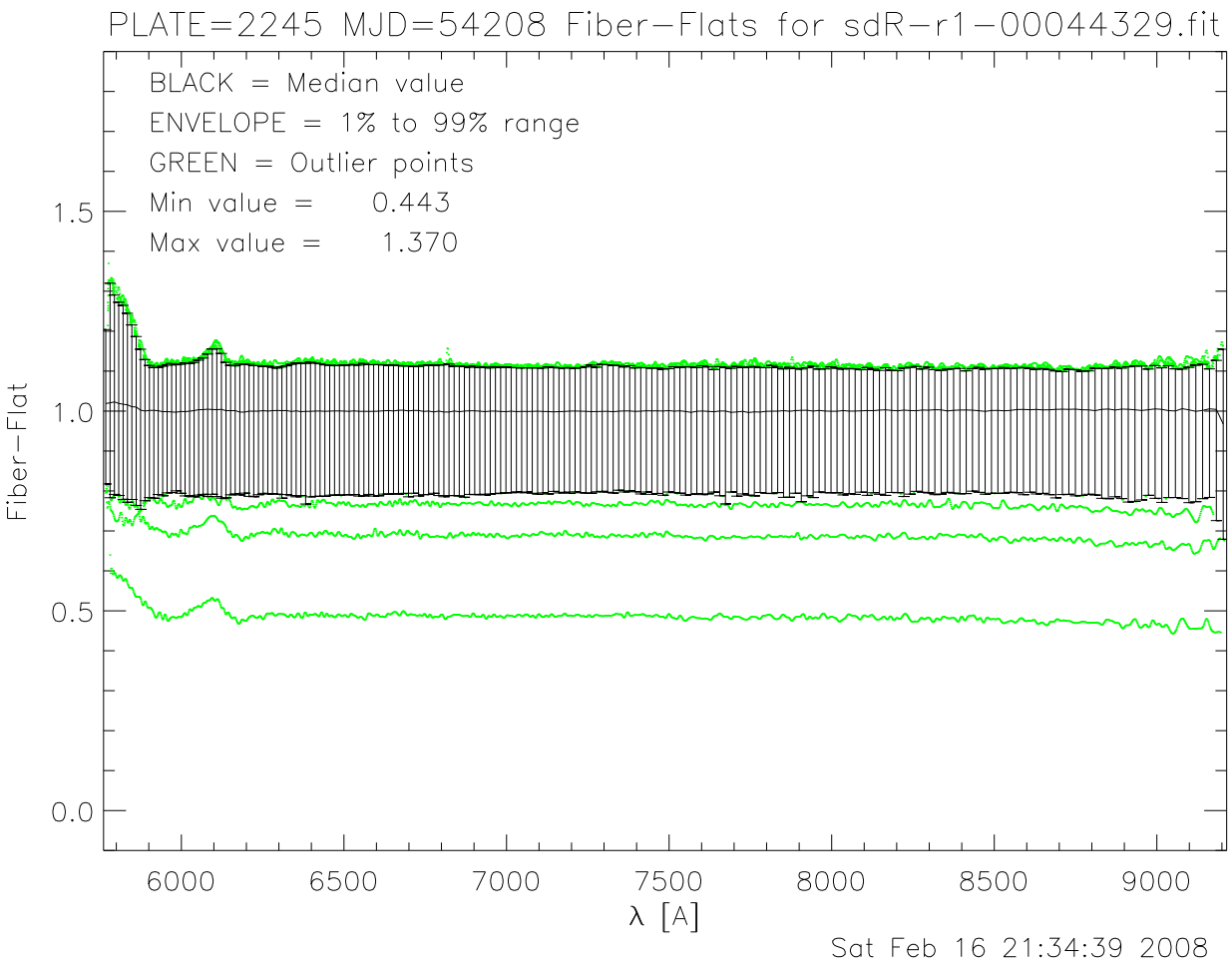

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

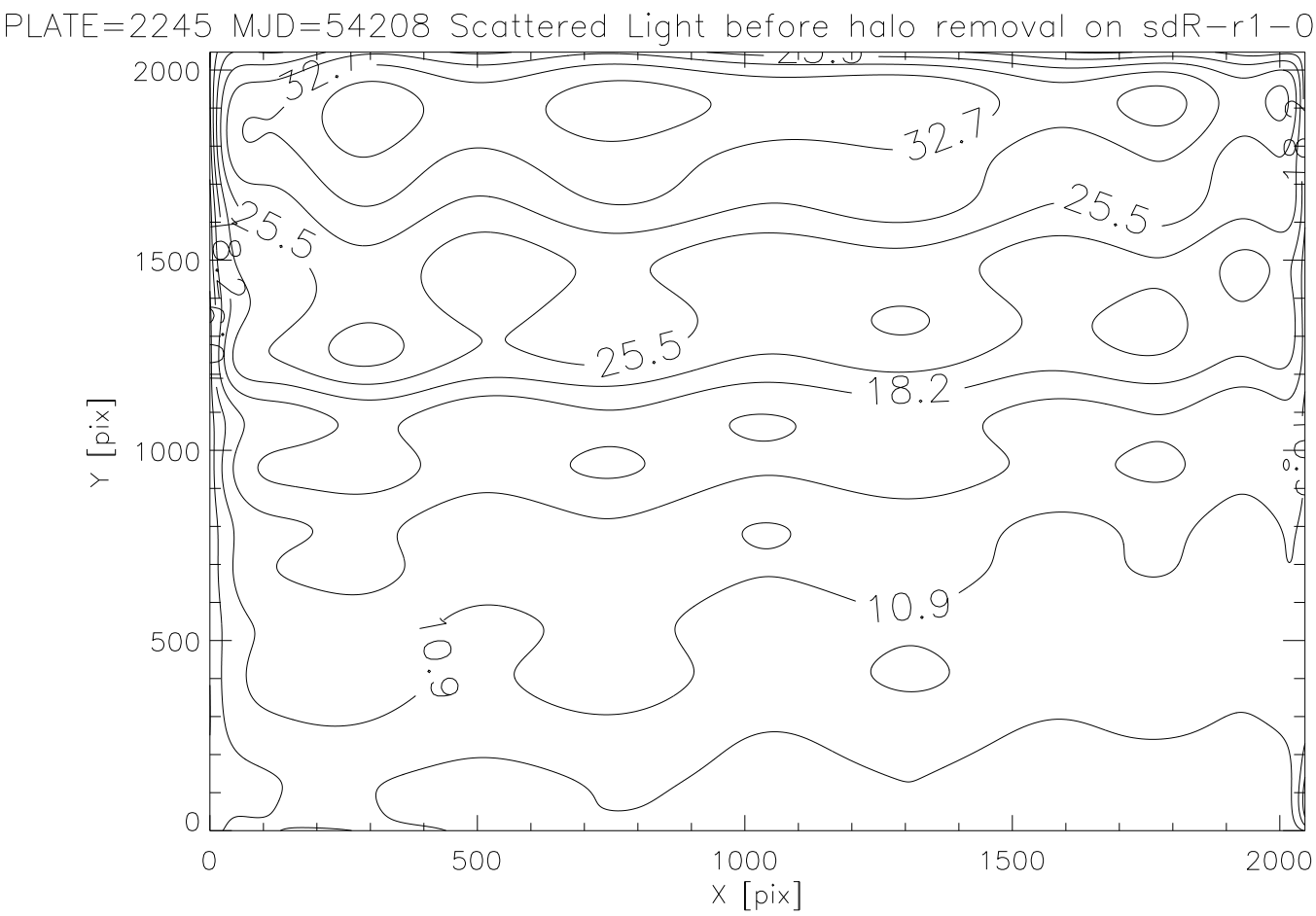

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

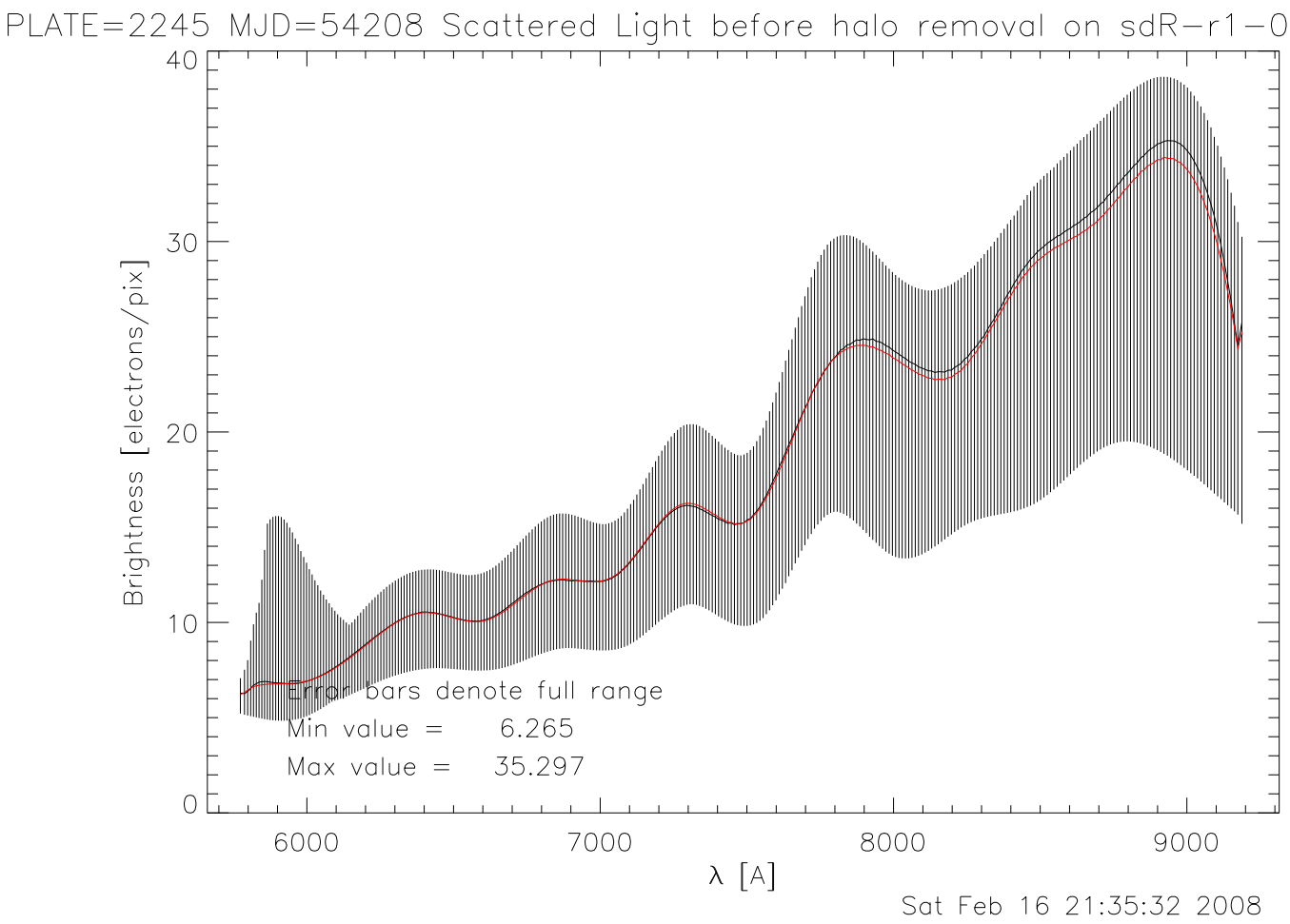

PLATE=2245 MJD=54208 flat extraction chi^2 for sdR−r1−00044329.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

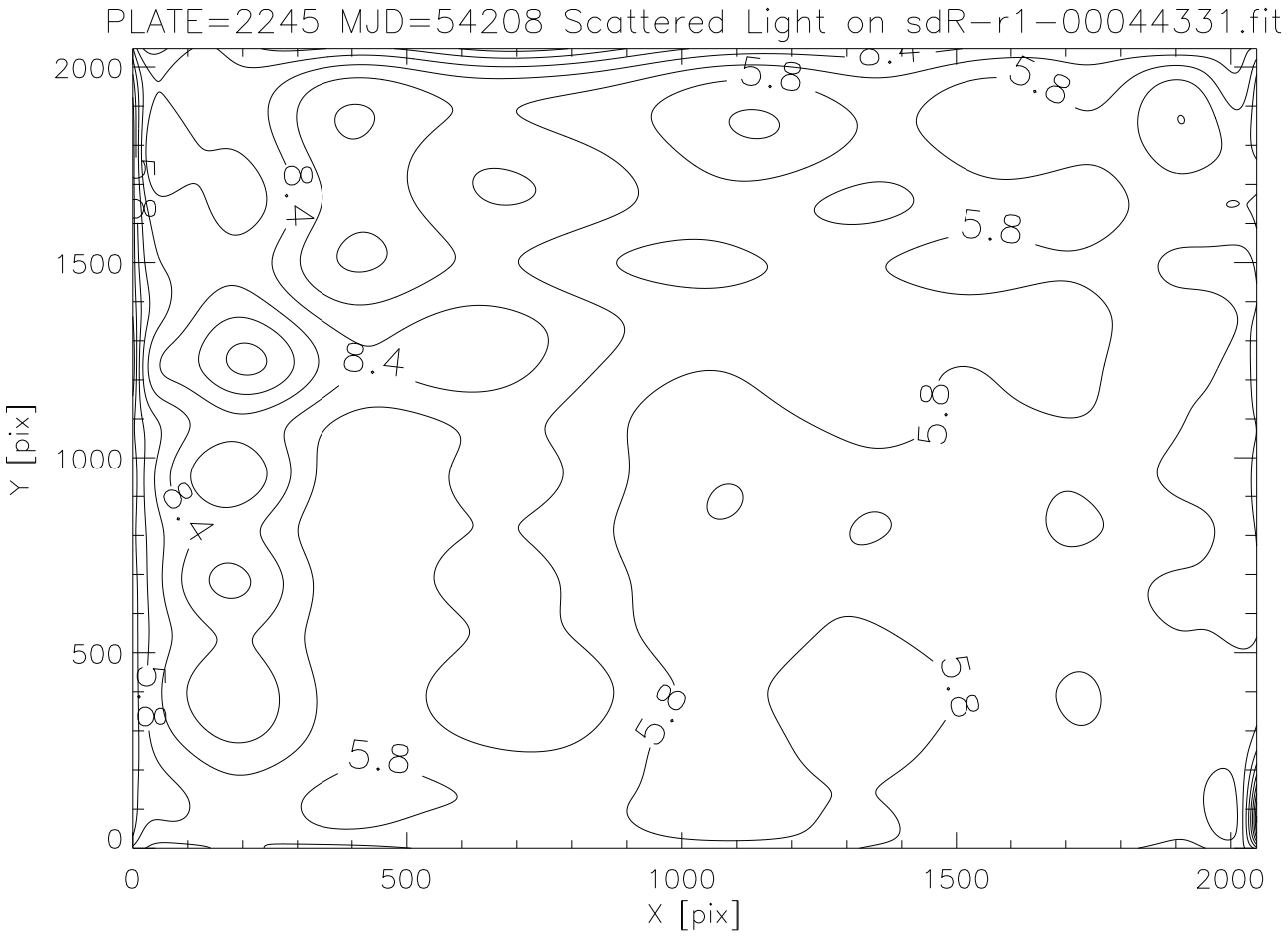

PLATE=2245 MJD=54208 Superflat sdR-r1-00044329.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

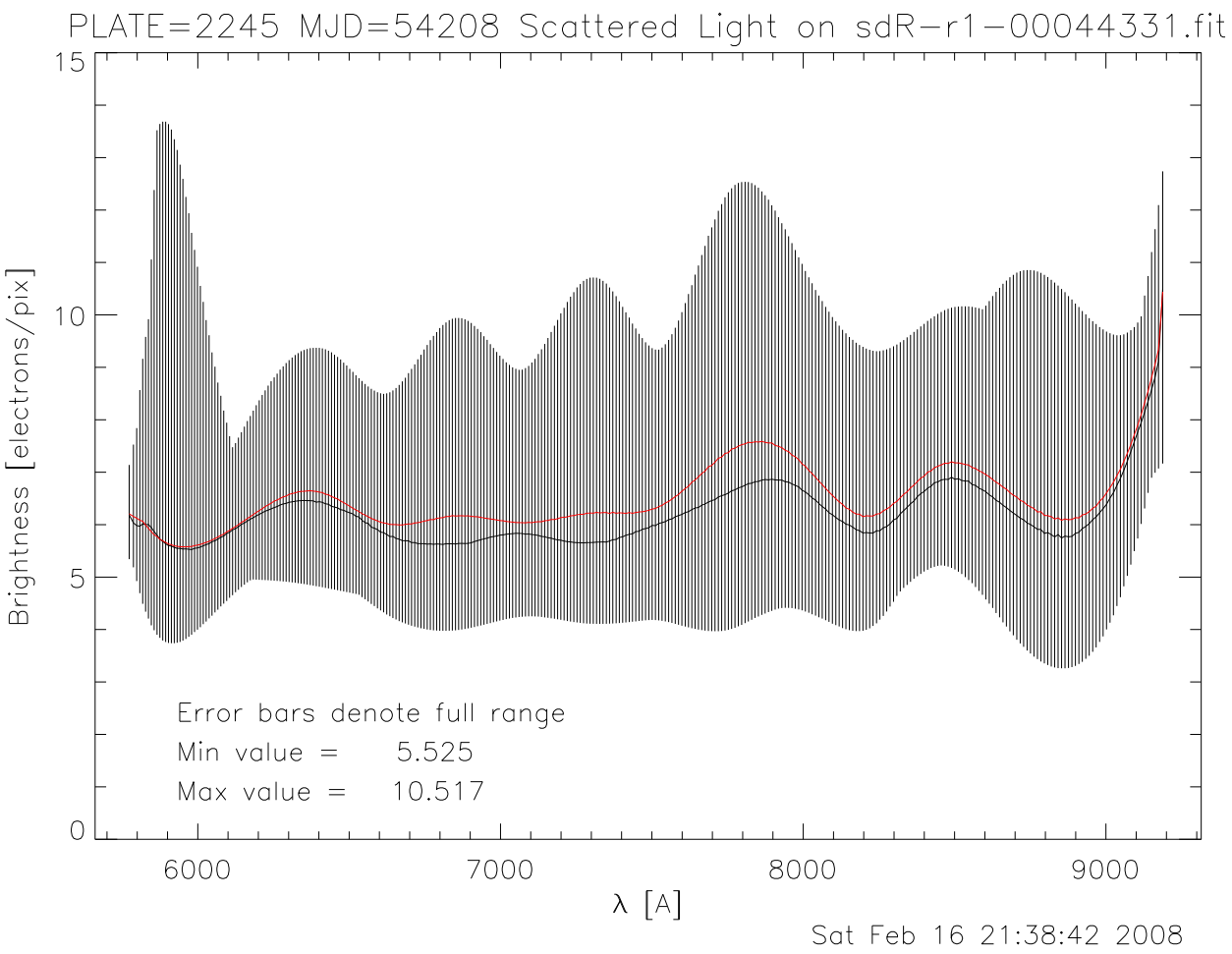

PLATE=2245 MJD=54208 Arcline Fit for sdR-r1-00044330.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 16 21:34:29 2008

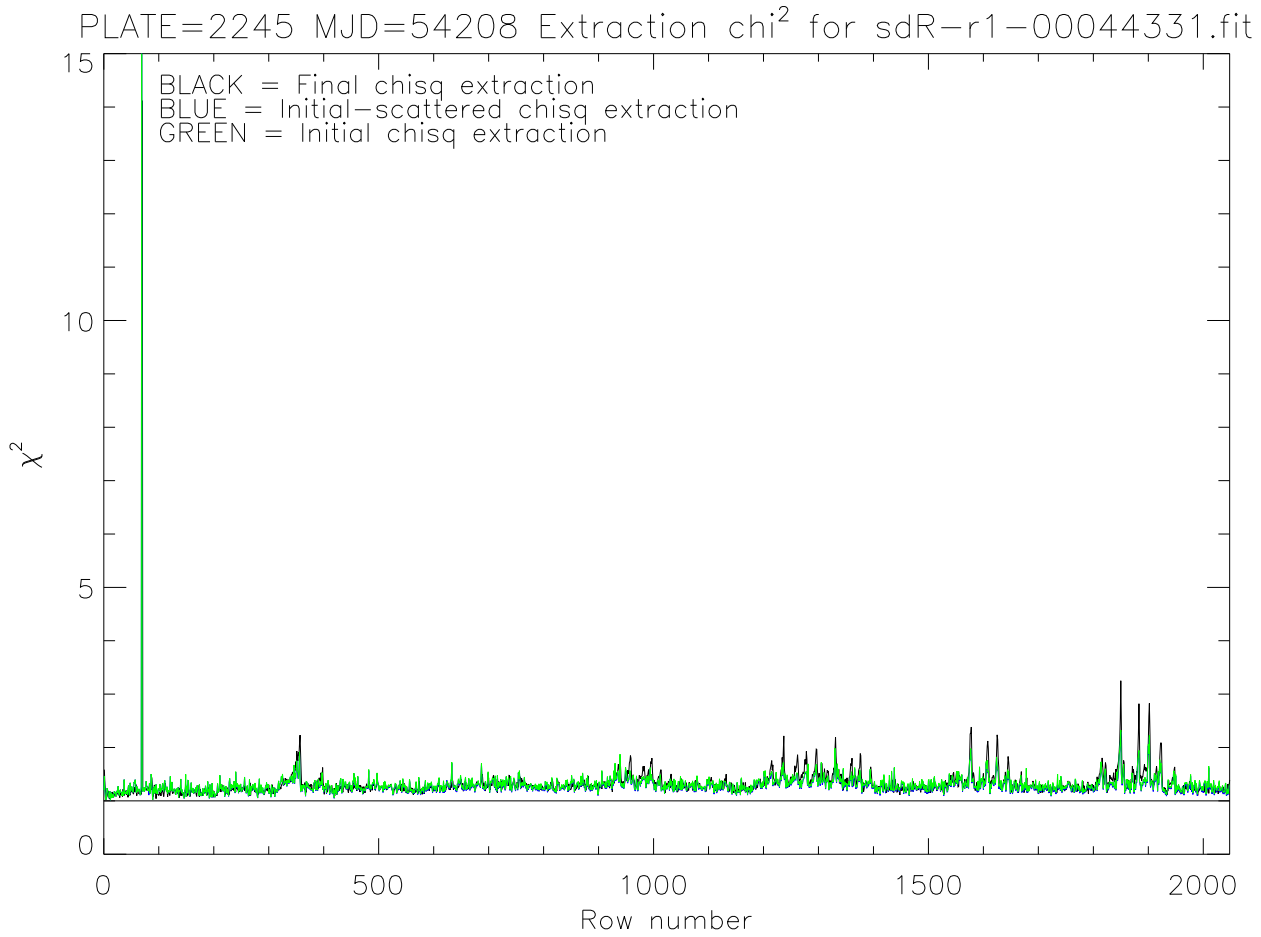

PLATE=2245 MJD=54208 Fiber-Flats for sdR-r1-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.443
Max value = 1.370
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 21:34:39 2008

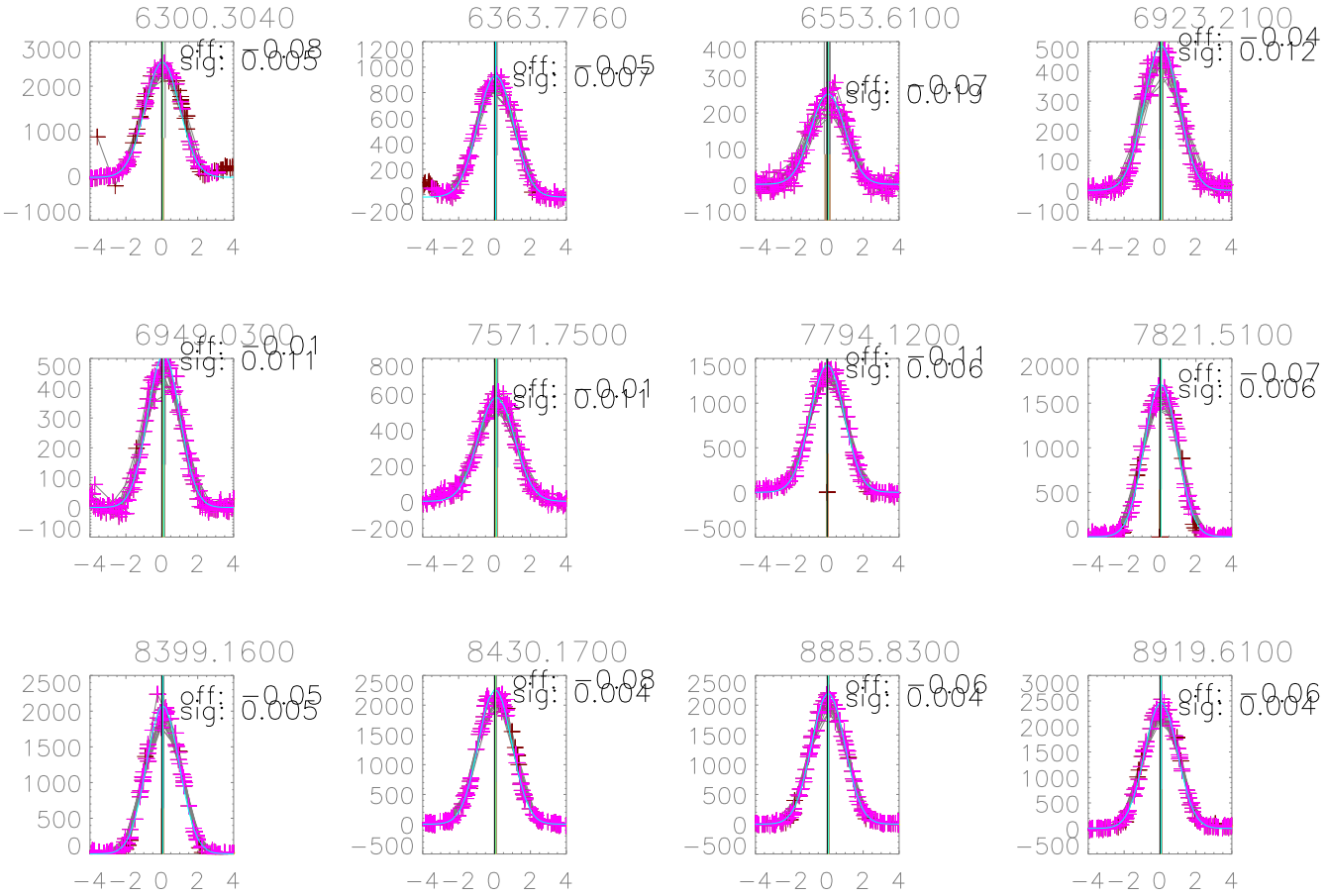

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r1-00044331.fi
32.7
25.5
25.5
18.2
10.9
6.0
Y [pix]
X [pix]
0
500
1000
1500
2000

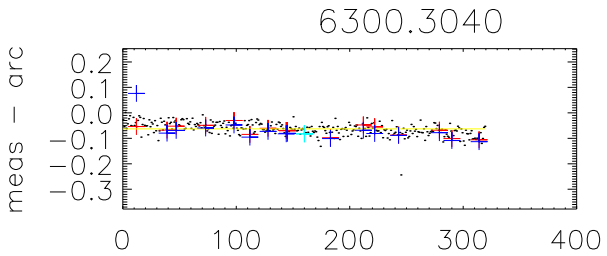

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r1-00044331.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.265
Max value = 35.297
Sat Feb 16 21:35:32 2008

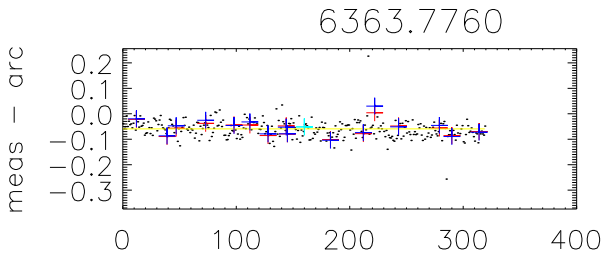

PLATE=2245 MJD=54208 Scattered Light on sdR-r1-00044331.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.8
8.4

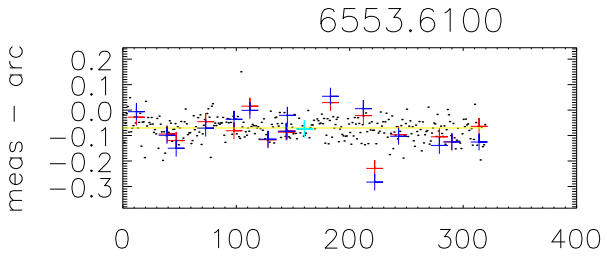

PLATE=2245 MJD=54208 Scattered Light on sdR-r1-00044331.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.525
Max value = 10.517
Sat Feb 16 21:38:42 2008

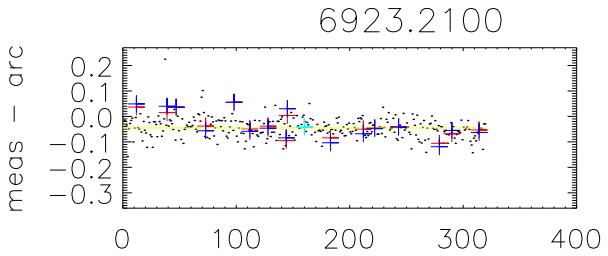

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-r1-00044331.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number

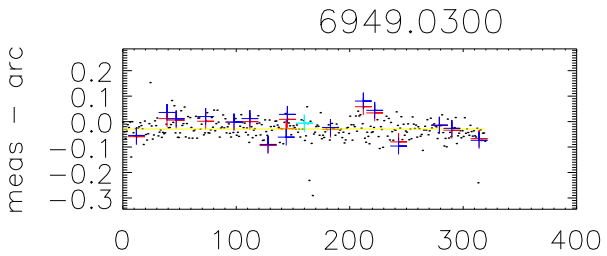

6300.3040
off: −0.08
sig: 0.005
6363.7760
off: −0.05
sig: 0.007
6553.6100
off: −0.07
sig: 0.013
6923.2100
off: −0.04
sig: 0.012
6949.0300
off: −0.01
sig: 0.011
7571.7500
off: −0.01
sig: 0.011
7794.1200
off: −0.11
sig: 0.006
7821.5100
off: −0.07
sig: 0.006
8399.1600
off: −0.05
sig: 0.005
8430.1700
off: −0.08
sig: 0.004
8885.8300
off: −0.06
sig: 0.004
8919.6100
off: −0.06
sig: 0.004

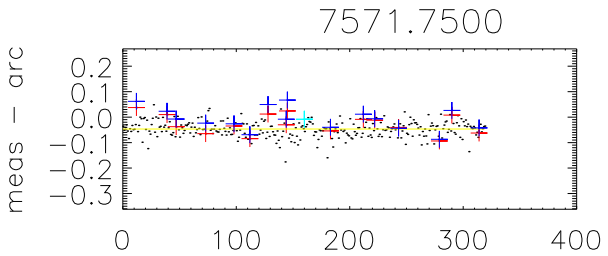

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

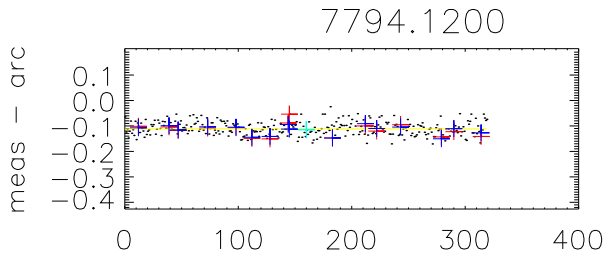

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

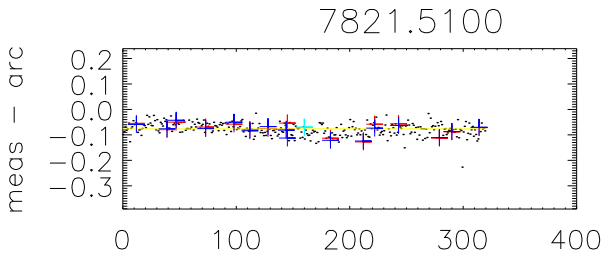

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

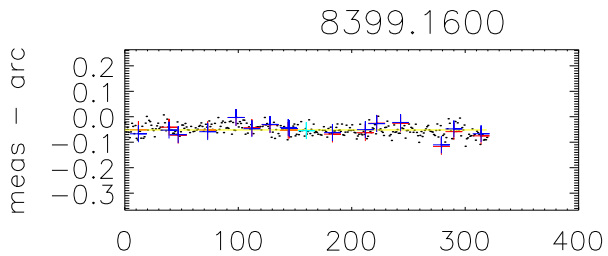

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

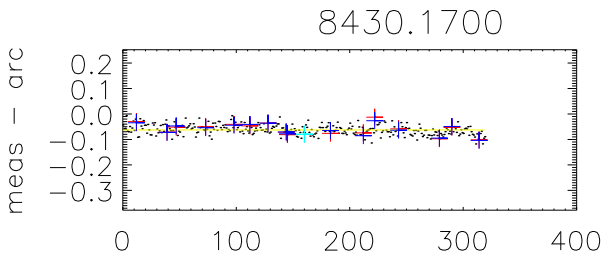

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

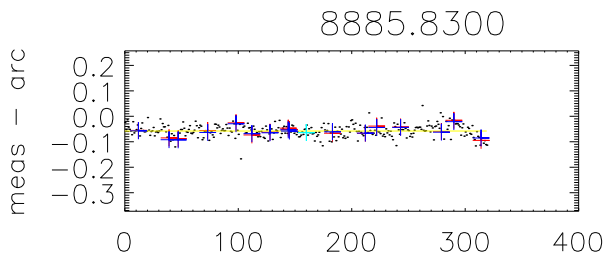

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

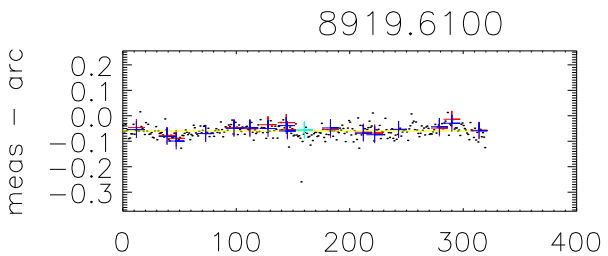

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

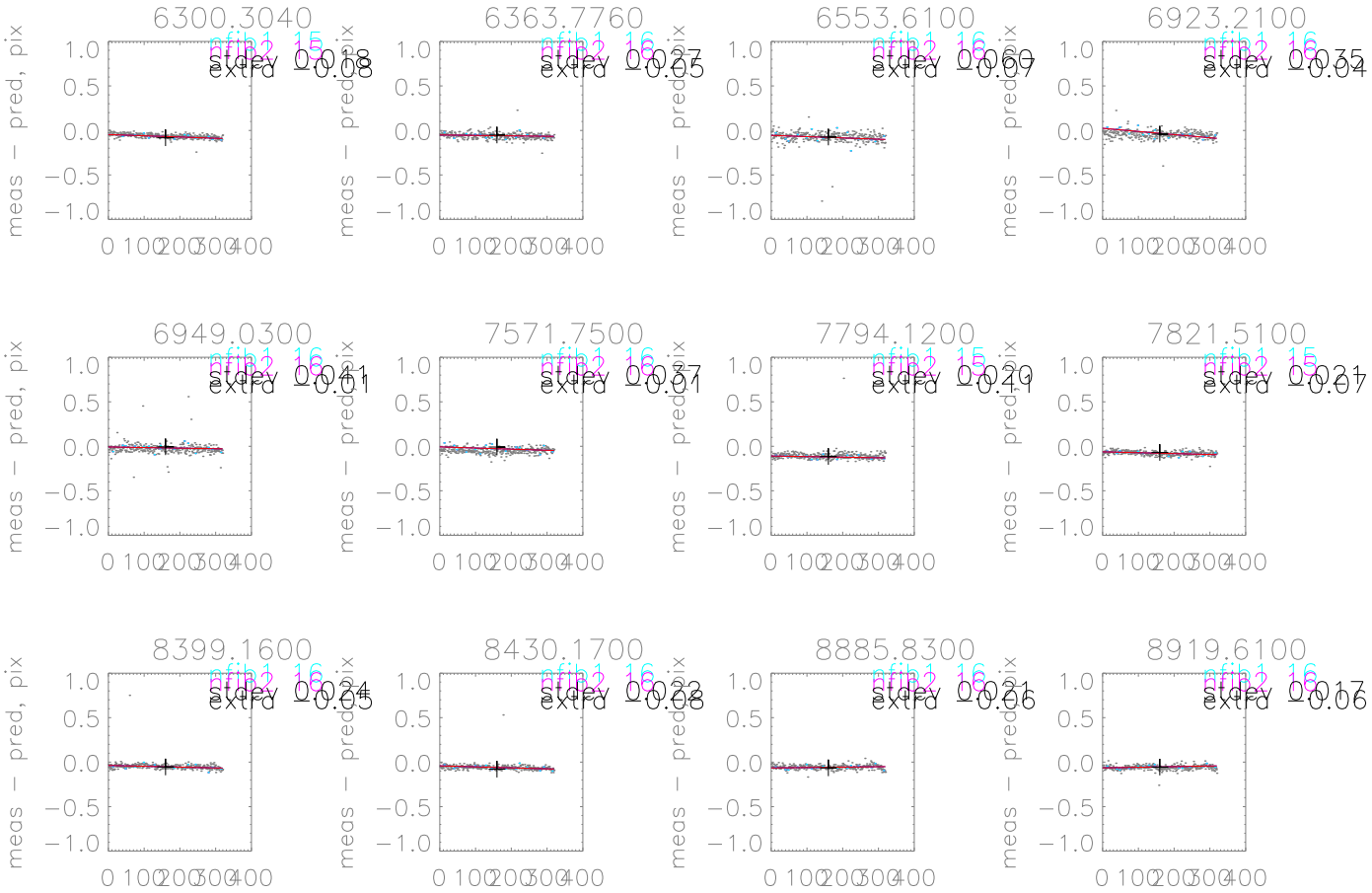

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

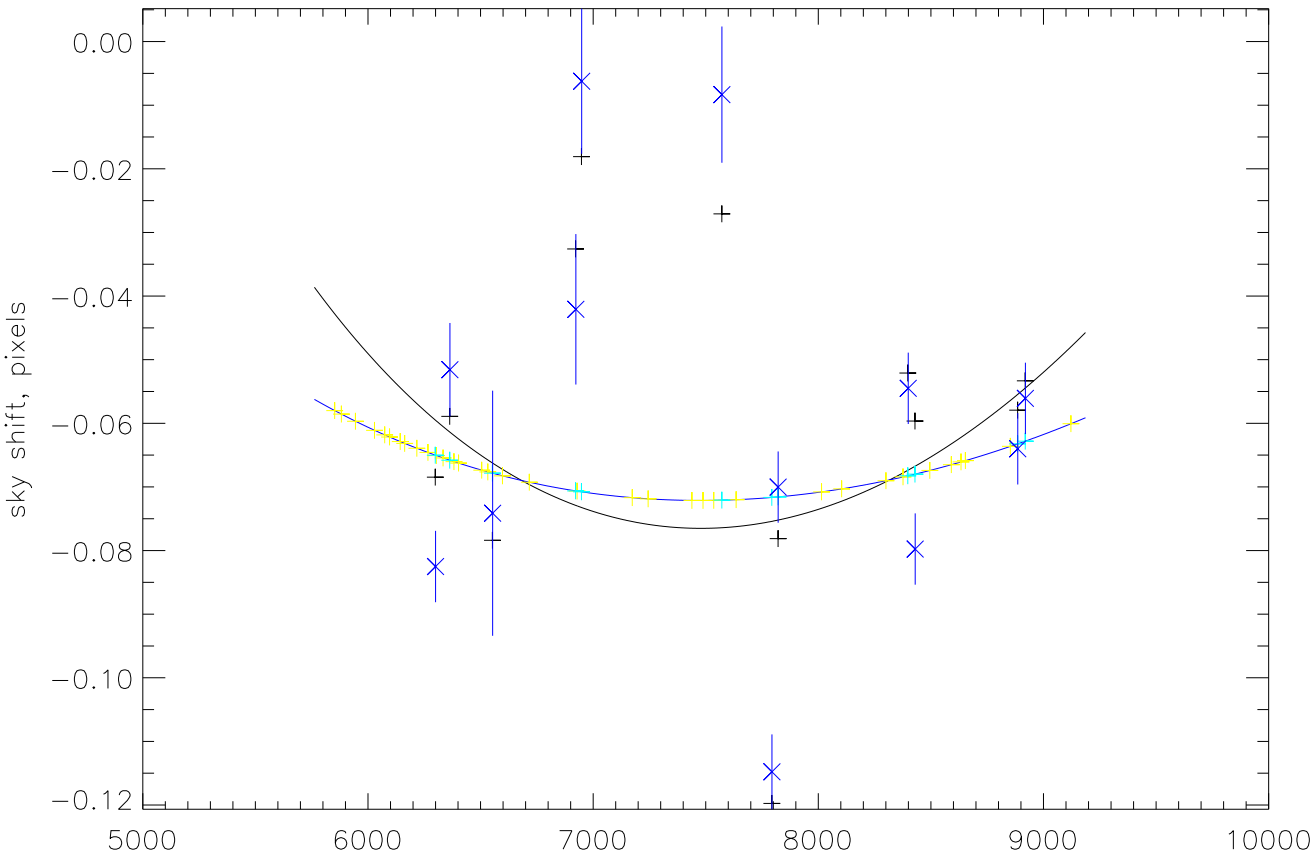

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

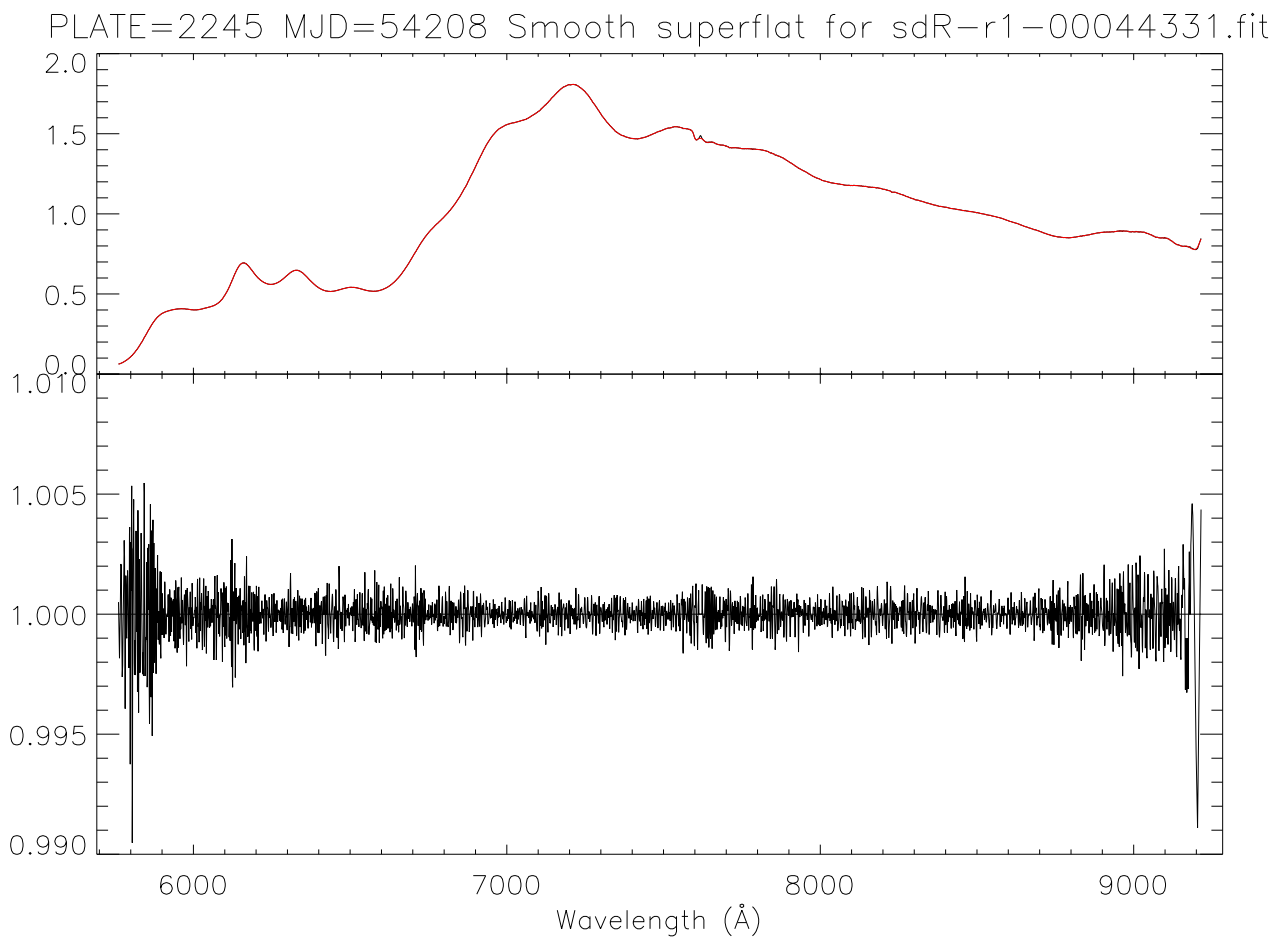

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

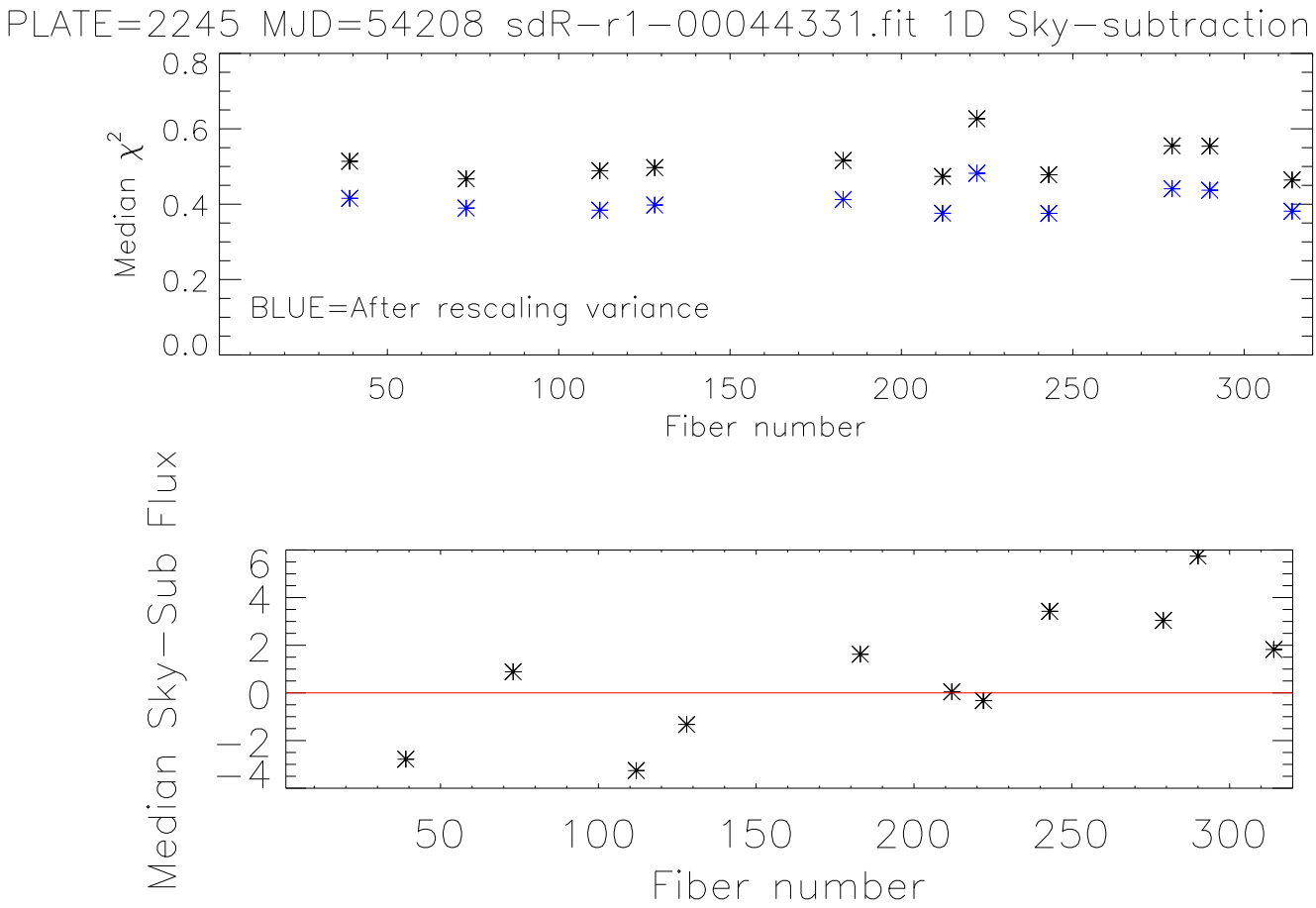

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

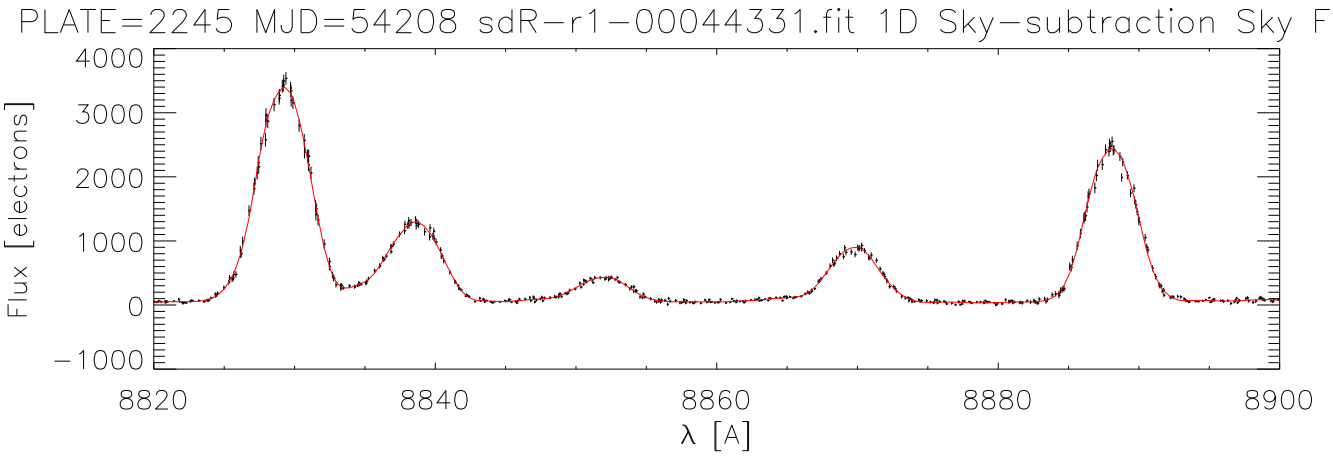

6300.3040
mfhi2 15
mflo2 16
stdev 0.018
extra 0.08
6363.7760
mfhi2 16
mflo2 16
stdev 0.027
extra 0.05
6553.6100
mfhi2 16
mflo2 16
stdev 0.060
extra 0.07
6923.2100
mfhi2 16
mflo2 16
stdev 0.035
extra 0.04
6949.0300
mfhi2 16
mflo2 16
stdev 0.041
extra 0.01
7571.7500
mfhi2 16
mflo2 16
stdev 0.037
extra 0.01
7794.1200
mfhi2 15
mflo2 16
stdev 0.020
extra 0.41
7821.5100
mfhi2 15
mflo2 16
stdev 0.021
extra 0.07
8399.1600
mfhi2 16
mflo2 16
stdev 0.024
extra 0.05
8430.1700
mfhi2 16
mflo2 16
stdev 0.022
extra 0.08
8885.8300
mfhi2 16
mflo2 16
stdev 0.021
extra 0.06
8919.6100
mfhi2 16
mflo2 16
stdev 0.017
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

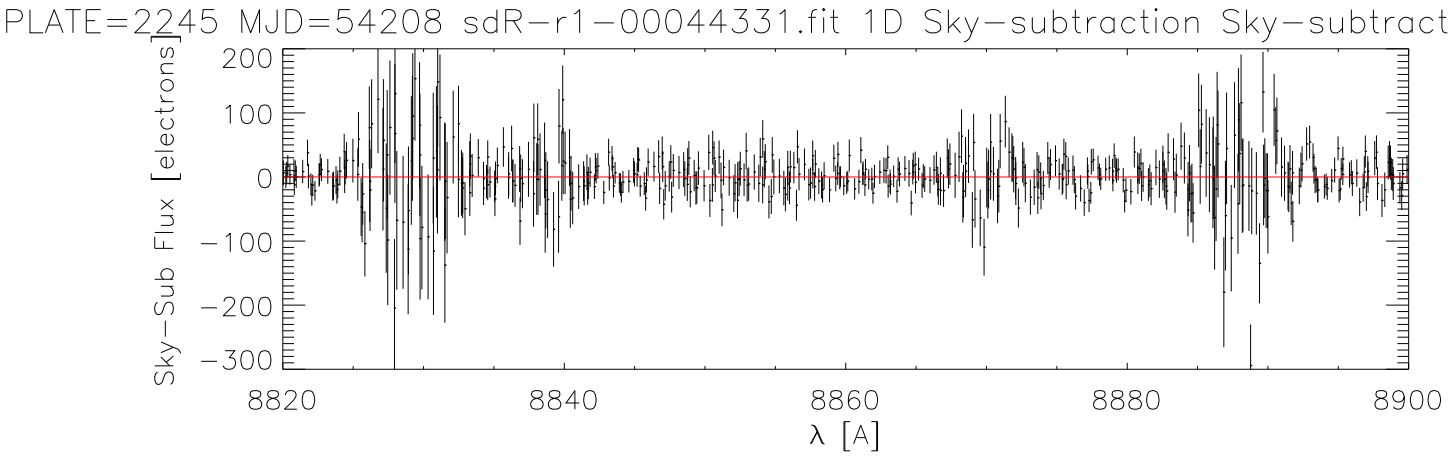

0.00
−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
sky shift, pixels
5000
6000
7000
8000
9000
10000

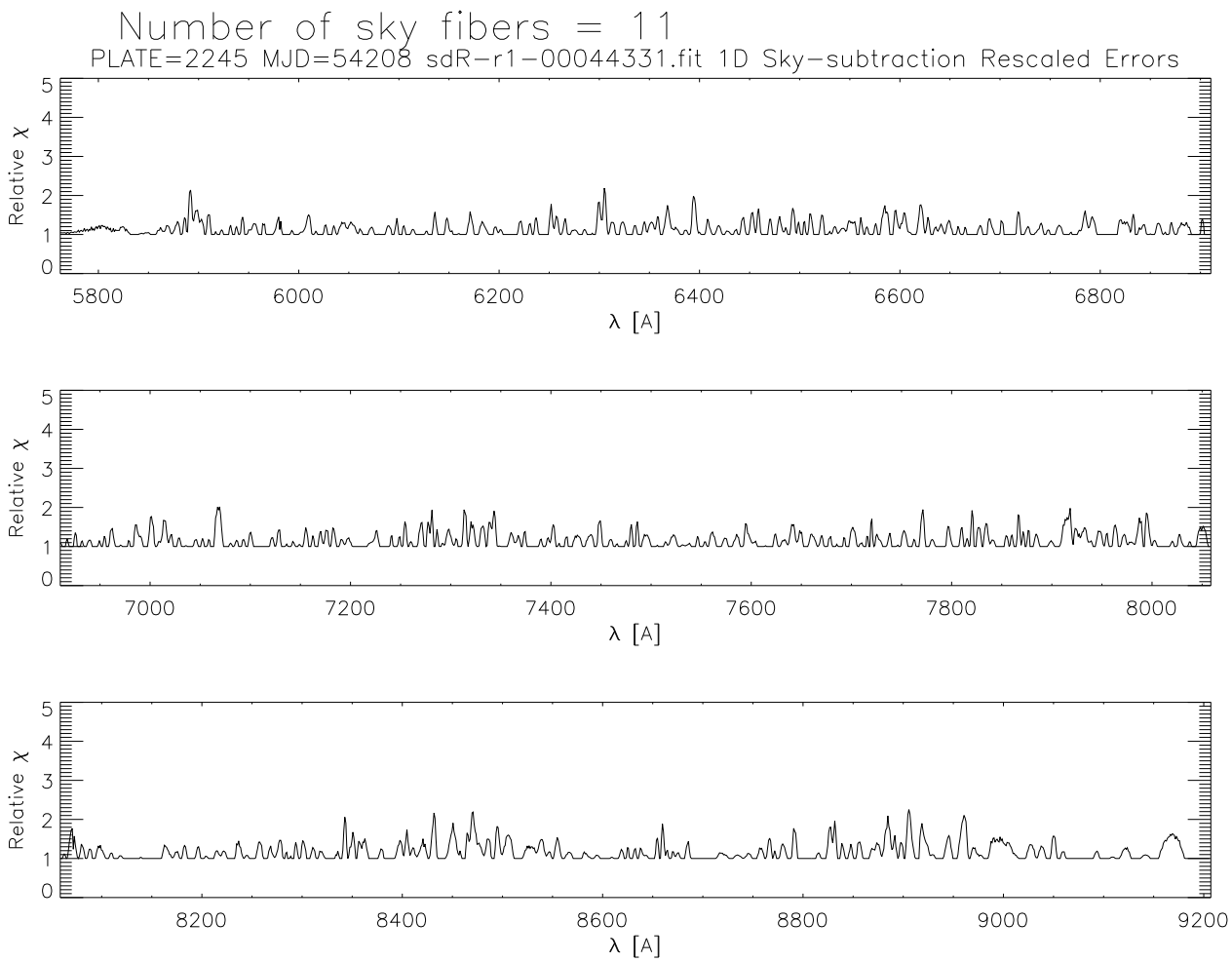
es= 0.0000

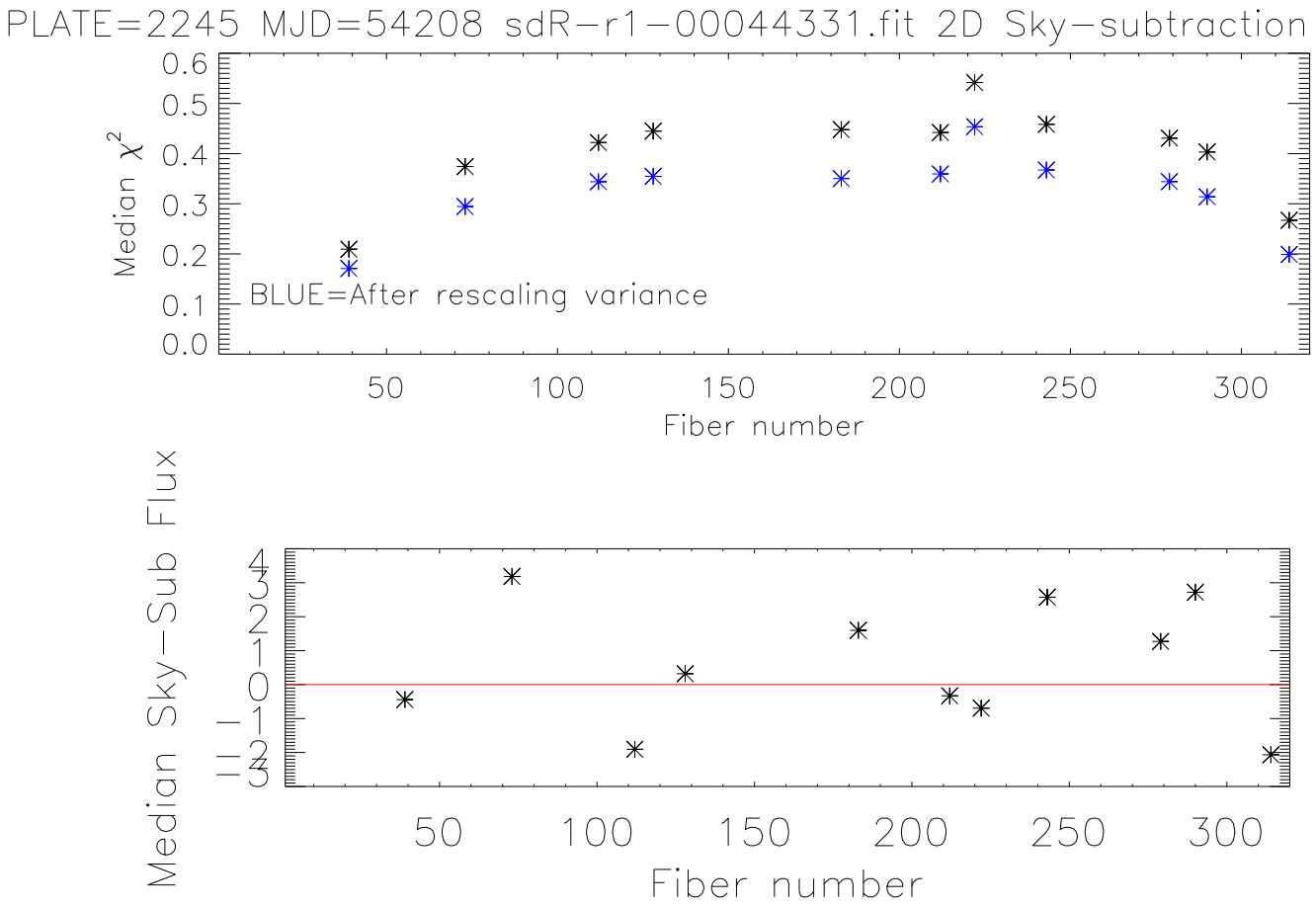

PLATE=2245 MJD=54208 Smooth superflat for sdR-r1-00044331.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

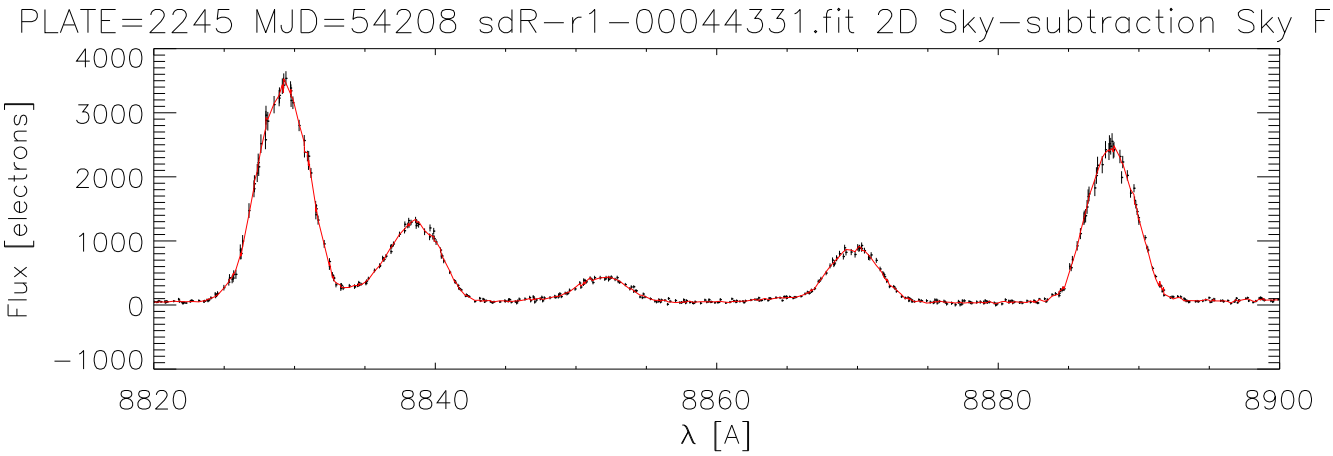

PLATE=2245 MJD=54208 sdR-r1-00044331.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

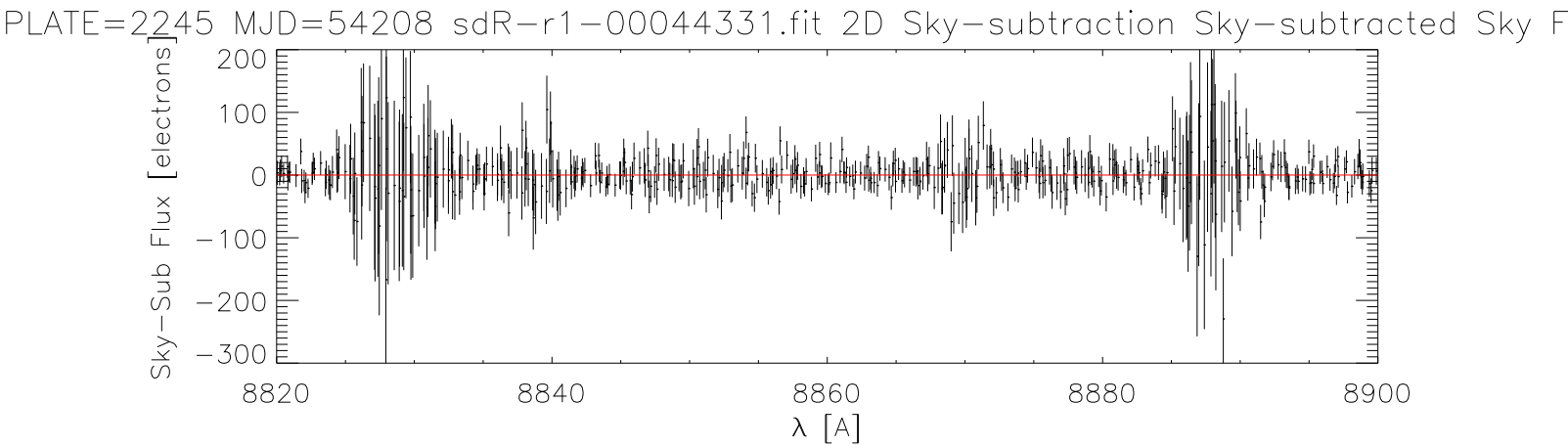

PLATE=2245 MJD=54208 sdR-r1-00044331.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

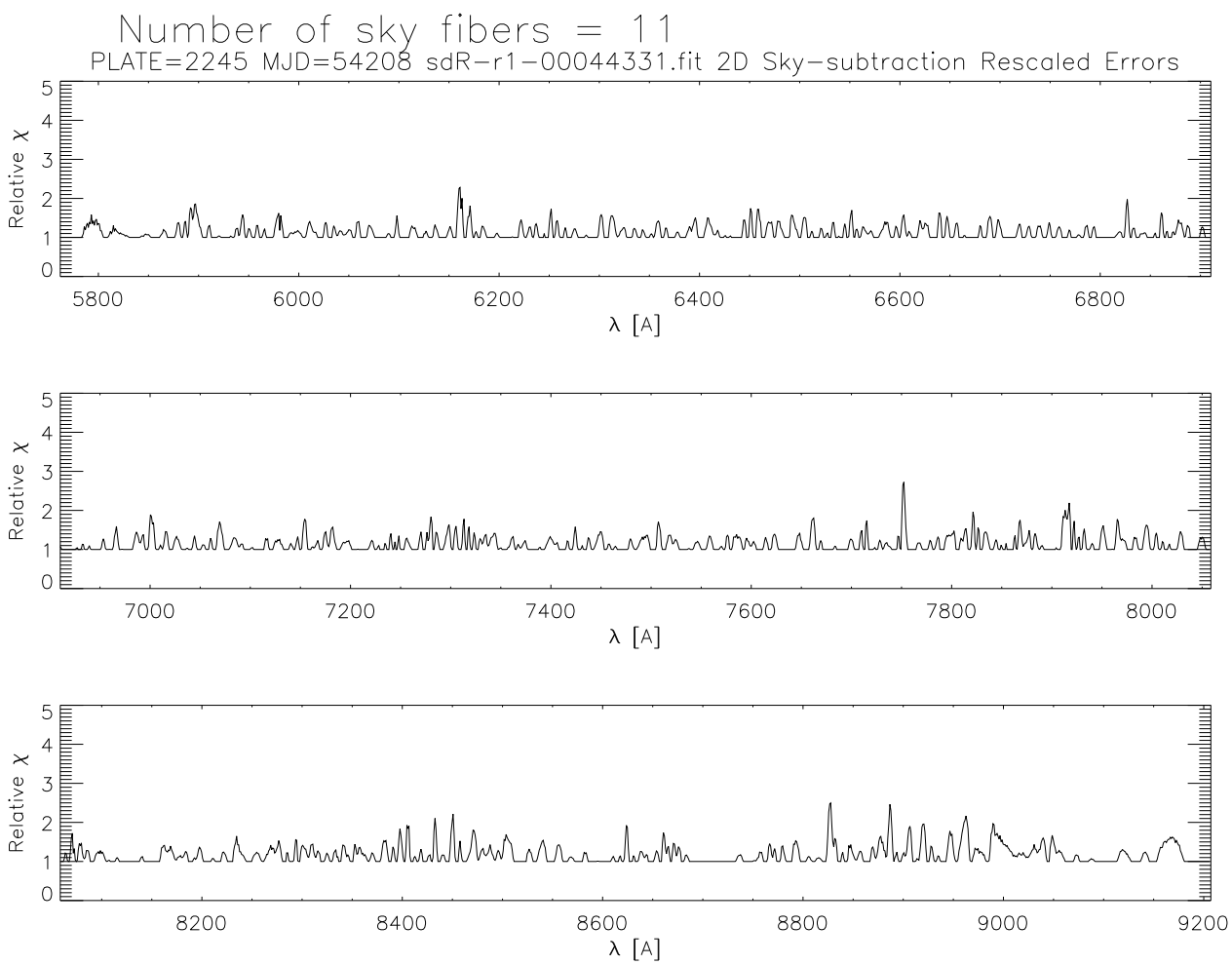

PLATE=2245 MJD=54208 sdR-r1-00044331.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

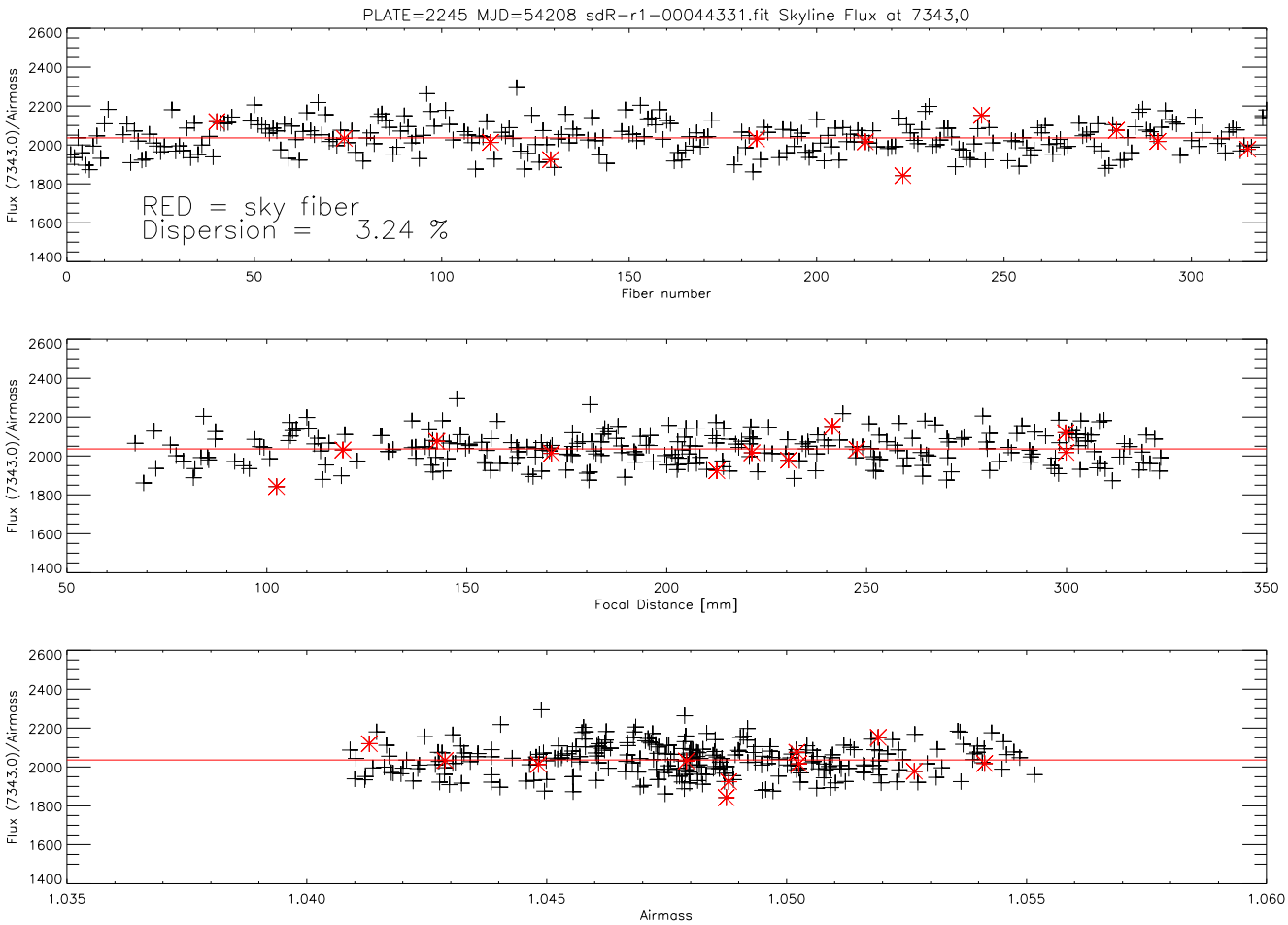

Number of sky fibers = 11
PLATE=2245 MJD=54208 sdR-r1-00044331.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

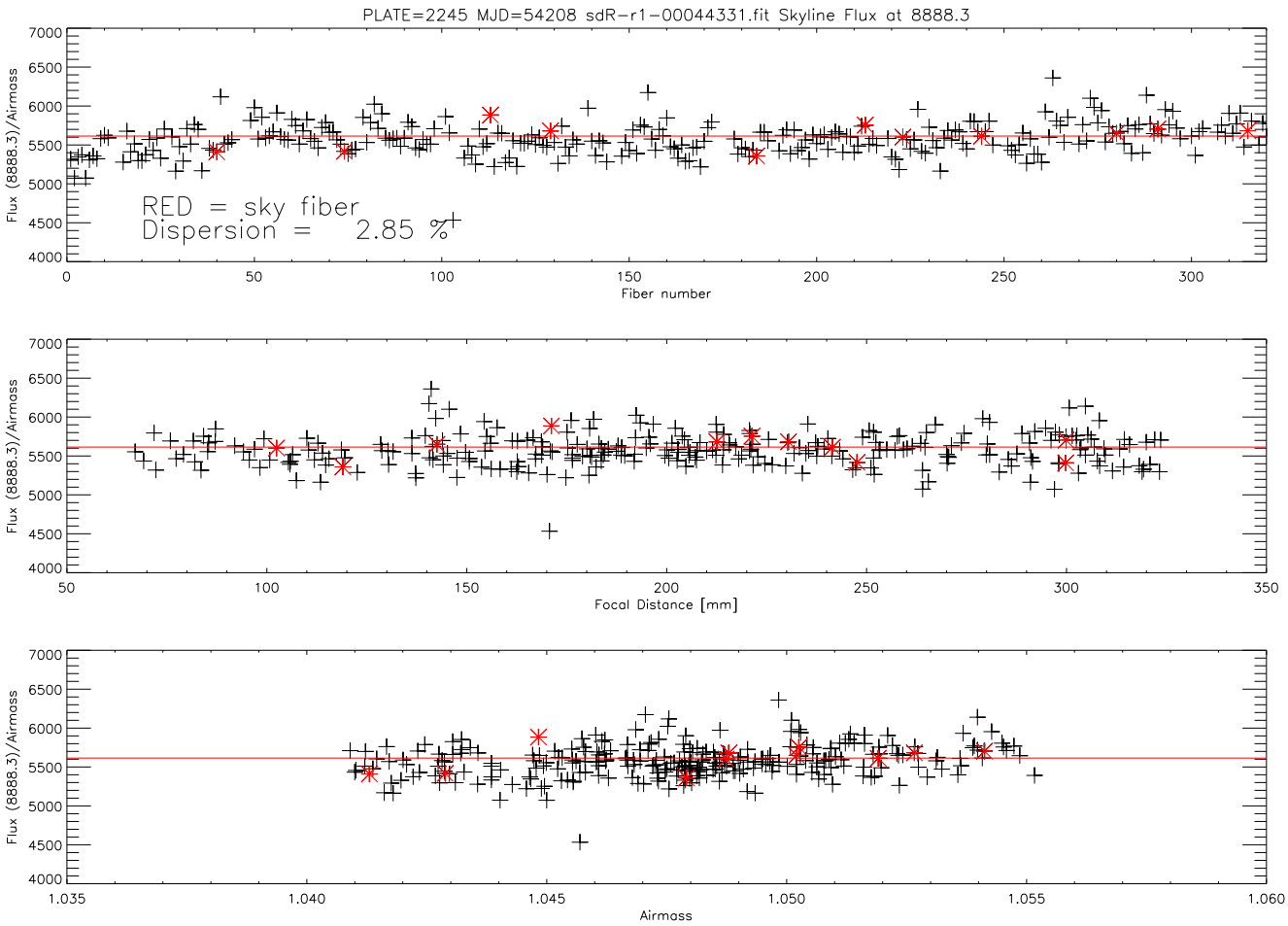

PLATE=2245 MJD=54208 sdR-r1-00044331.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

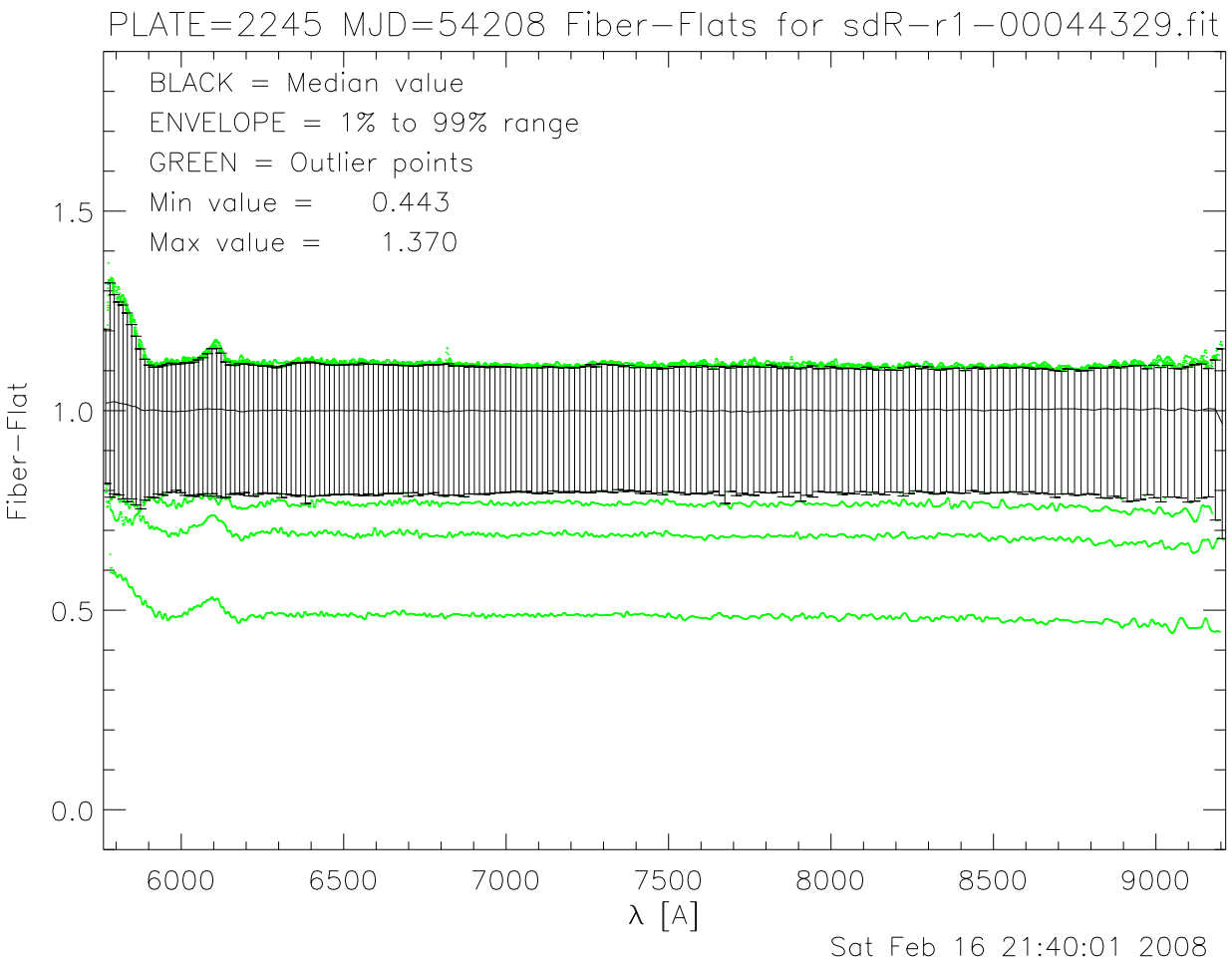

PLATE=2245 MJD=54208 sdR-r1-00044331.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

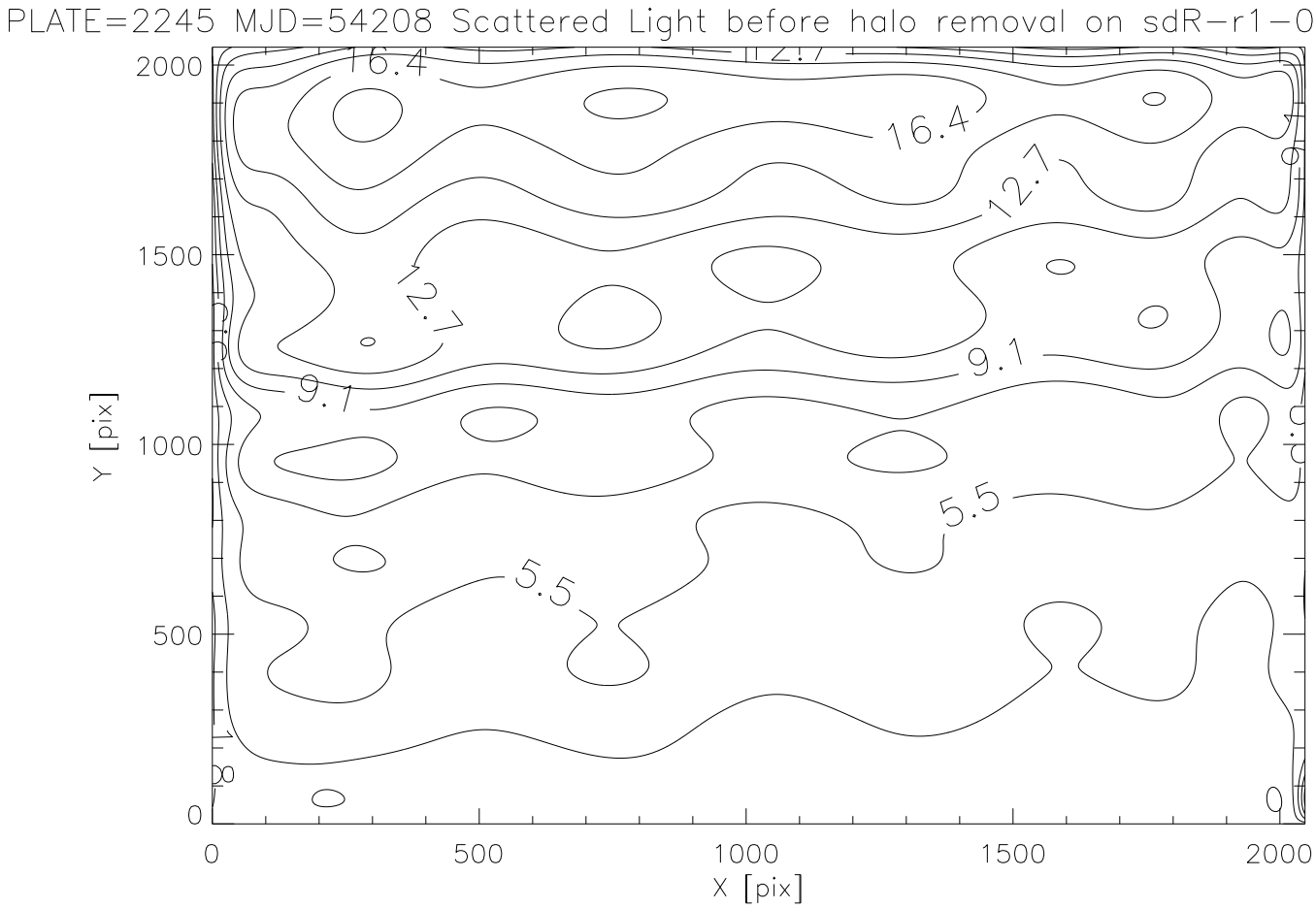

PLATE=2245 MJD=54208 sdR-r1-00044331.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

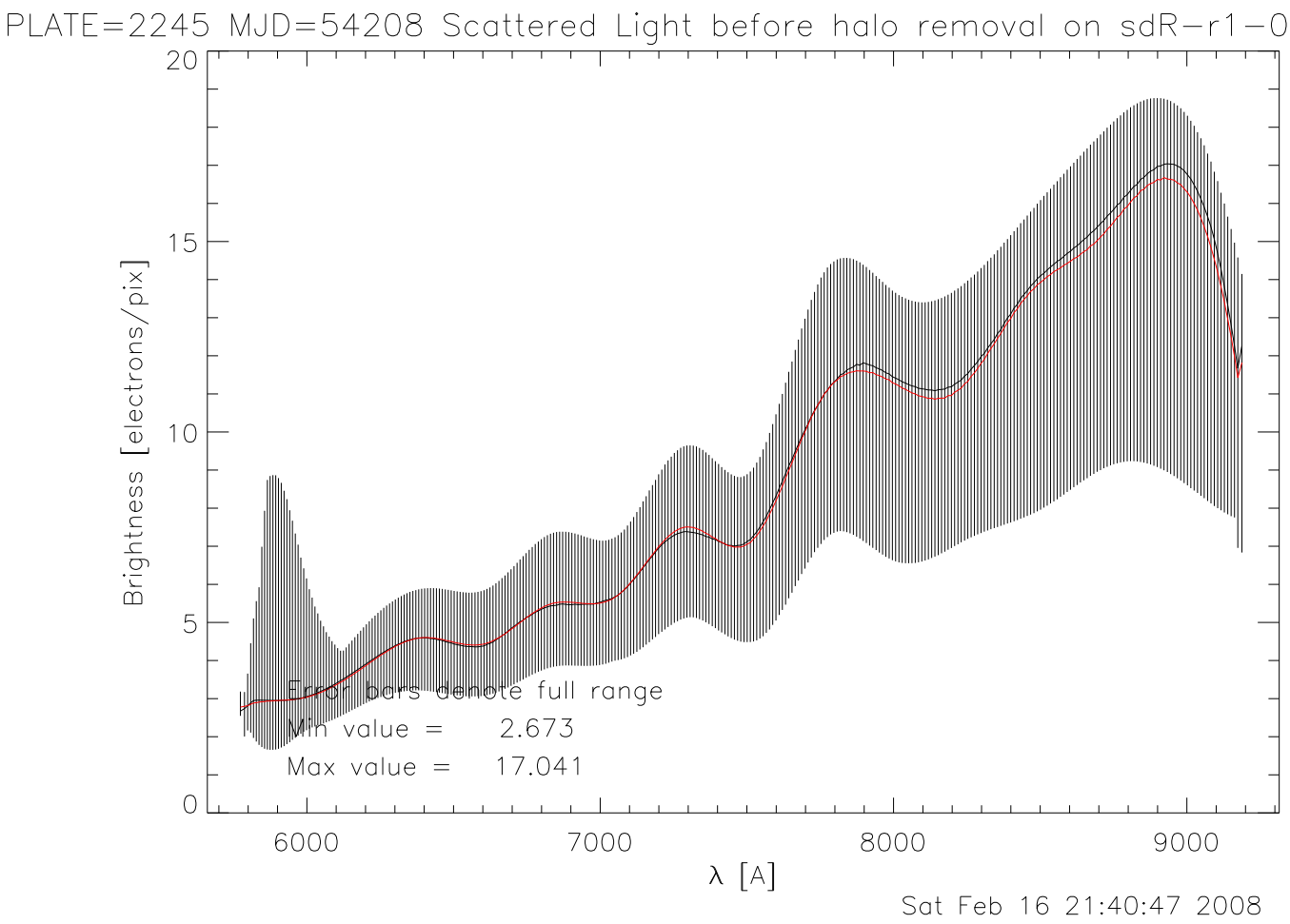

Number of sky fibers = 11
PLATE=2245 MJD=54208 sdR-r1-00044331.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

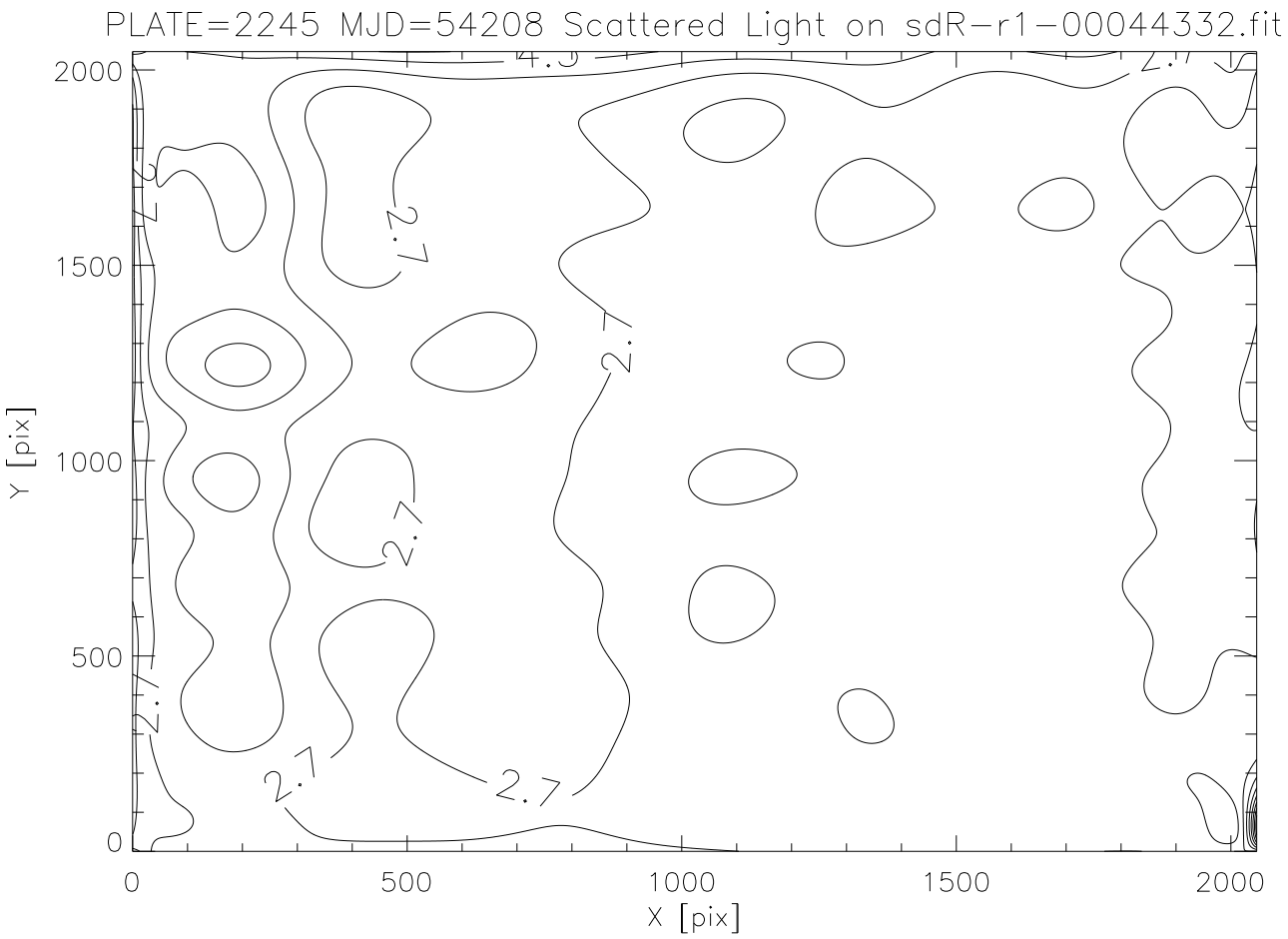

PLATE=2245 MJD=54208 sdR-r1-00044331.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.24 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

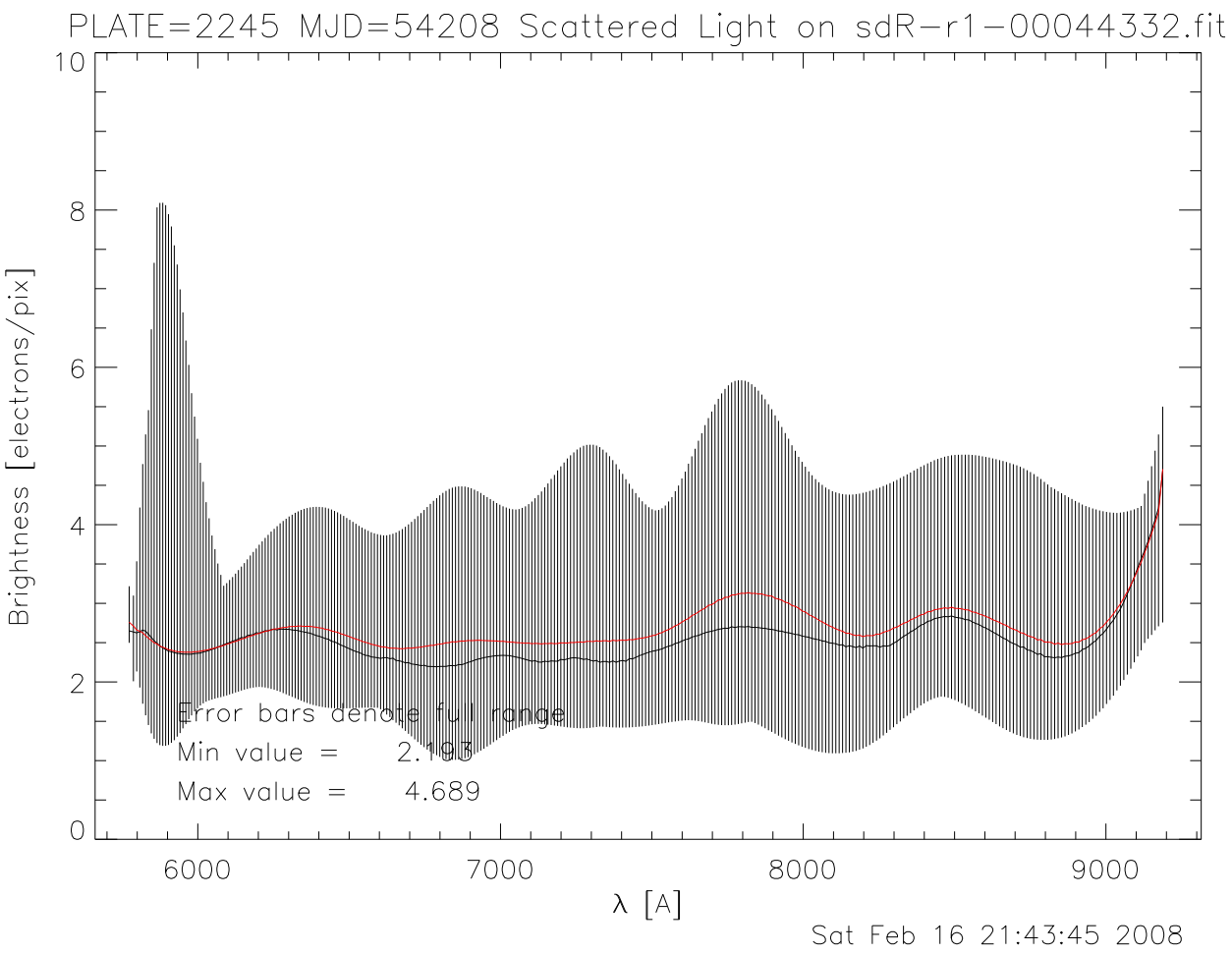

PLATE=2245 MJD=54208 sdR-r1-00044331.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.85 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

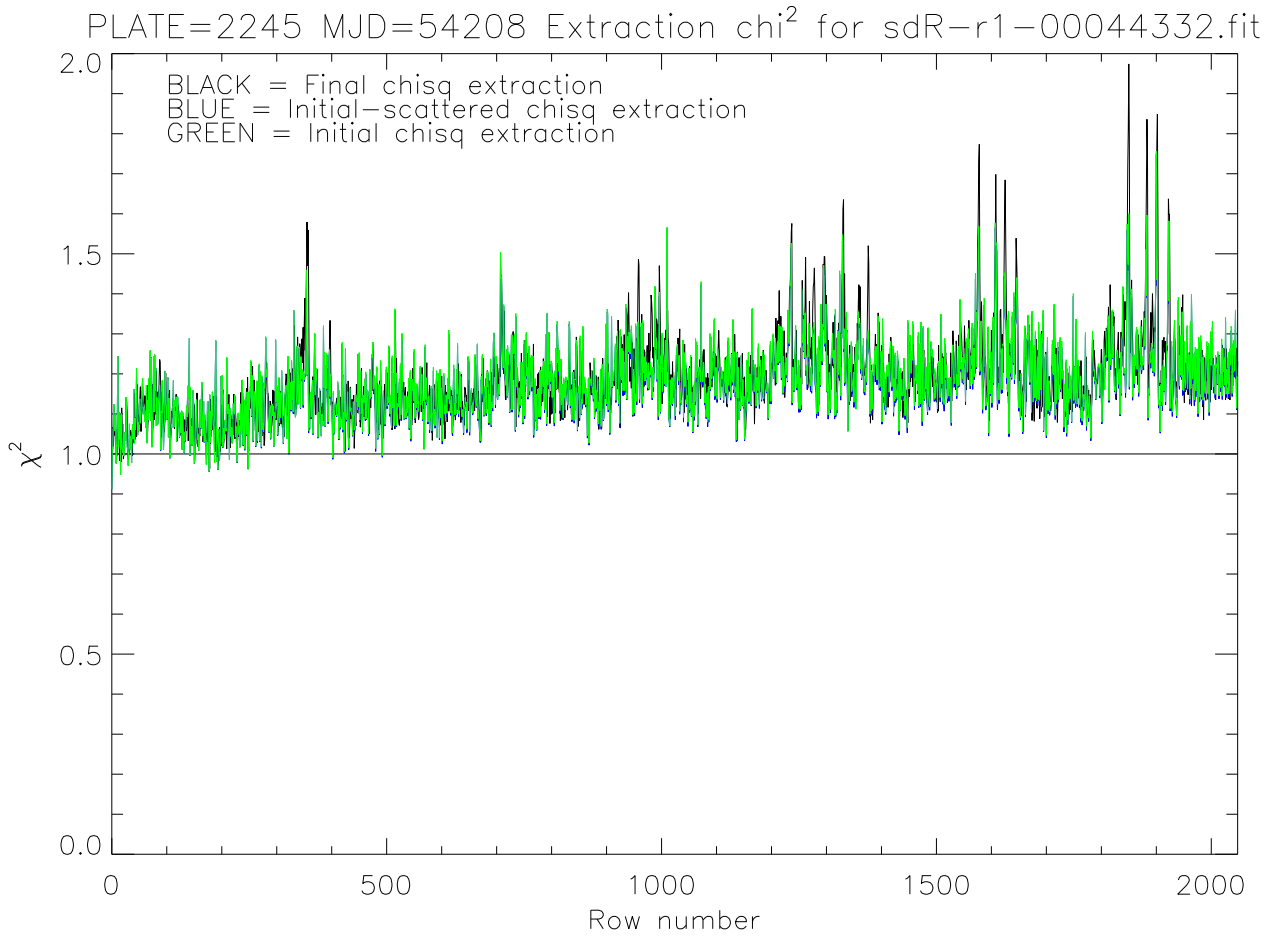

PLATE=2245 MJD=54208 Fiber−Flats for sdR−r1−00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.443
Max value = 1.370
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 21:40:01 2008

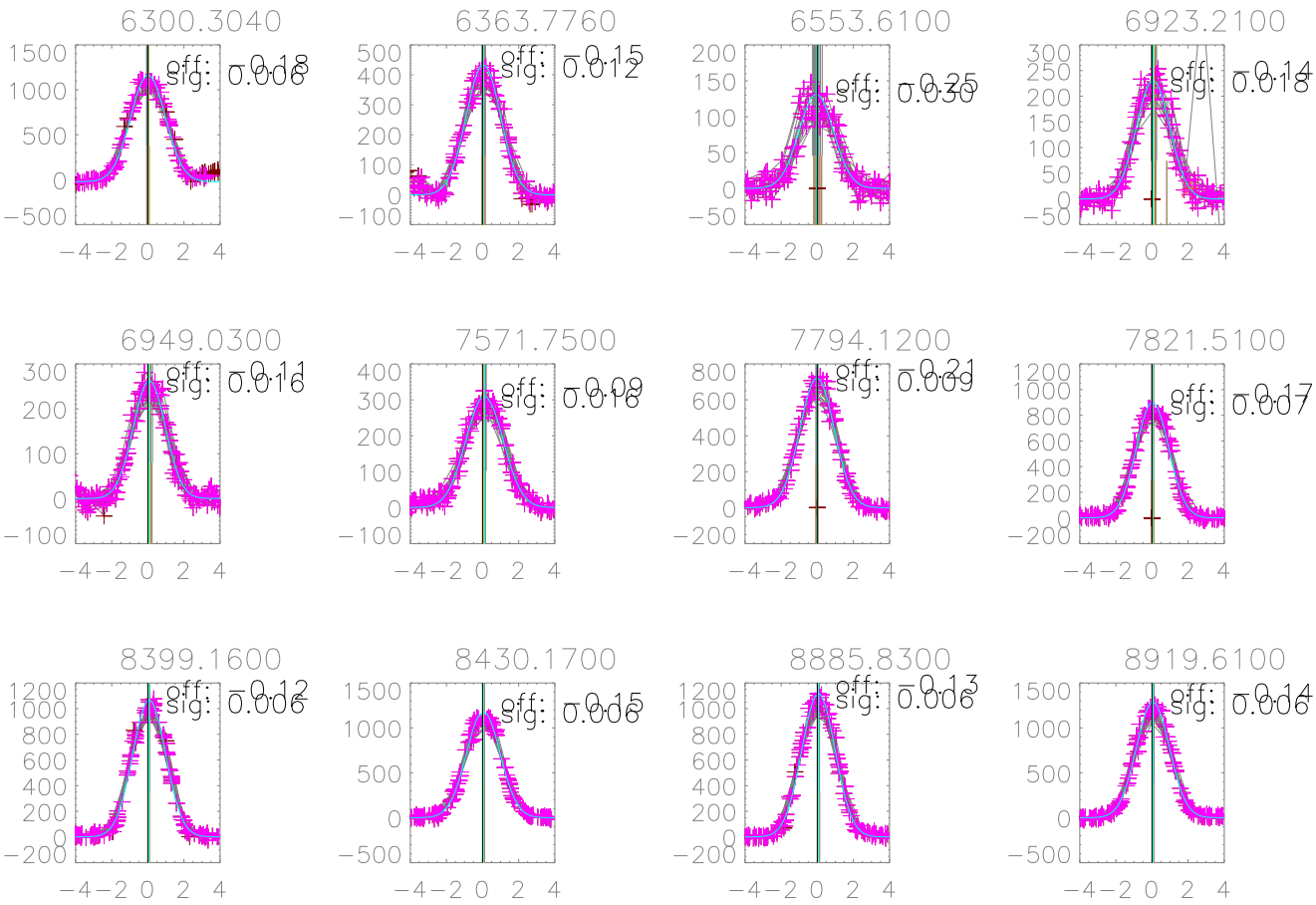

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r1-00044332.fi
16.4
16.4
12.7
12.7
9.1
9.1
5.5
5.5
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

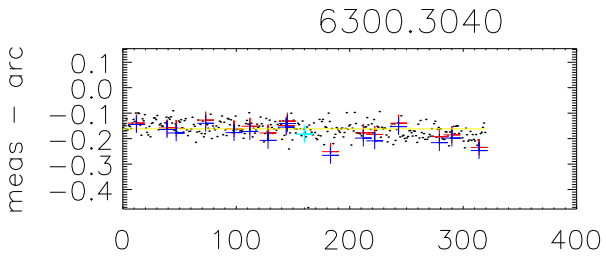

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r1-00044332.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.673
Max value = 17.041
Sat Feb 16 21:40:47 2008

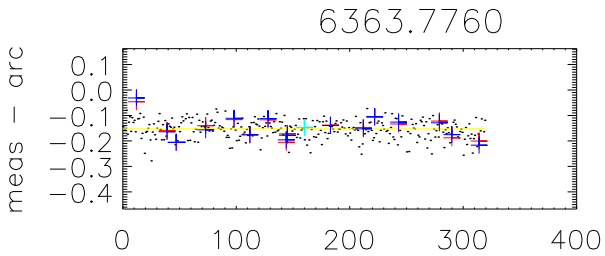

PLATE=2245 MJD=54208 Scattered Light on sdR−r1−00044332.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
2.7

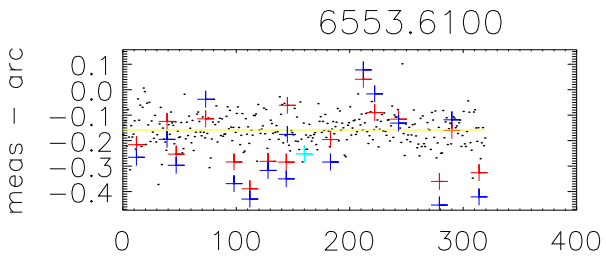

PLATE=2245 MJD=54208 Scattered Light on sdR-r1-00044332.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.103
Max value = 4.689
Sat Feb 16 21:43:45 2008

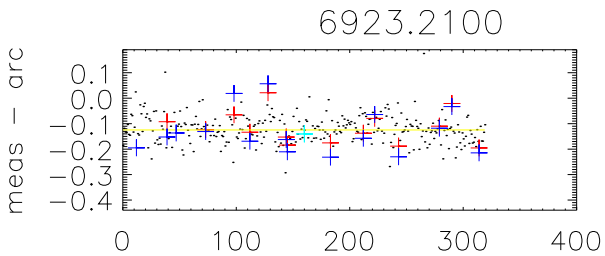

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-r1-00044332.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

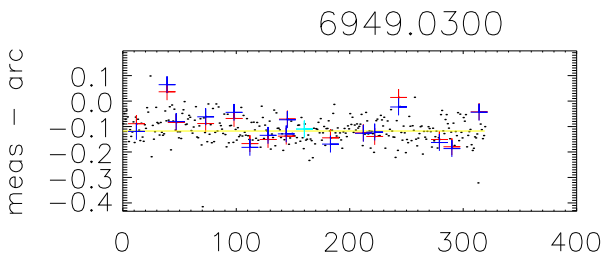

6300.3040
off: −0.18
sig: 0.006
6363.7760
off: −0.15
sig: 0.012
6553.6100
off: −0.25
sig: 0.030
6923.2100
off: −0.14
sig: 0.018
6949.0300
off: −0.11
sig: 0.016
7571.7500
off: −0.09
sig: 0.016
7794.1200
off: −0.21
sig: 0.009
7821.5100
off: −0.17
sig: 0.007
8399.1600
off: −0.12
sig: 0.006
8430.1700
off: −0.15
sig: 0.006
8885.8300
off: −0.13
sig: 0.006
8919.6100
off: −0.14
sig: 0.006

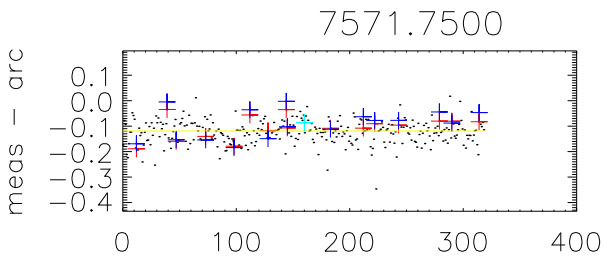

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

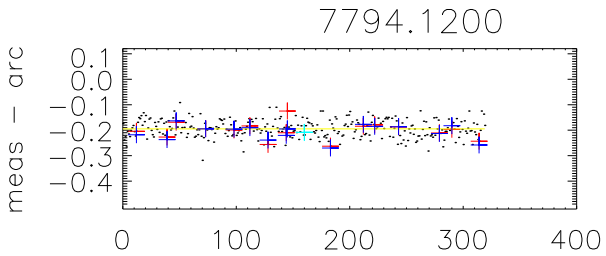

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

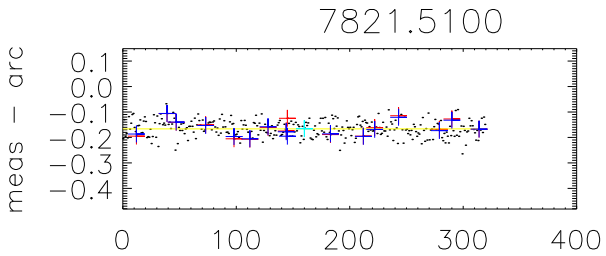

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

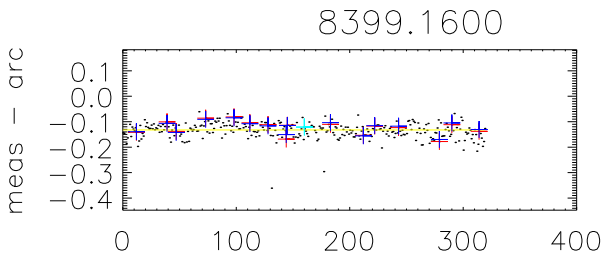

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

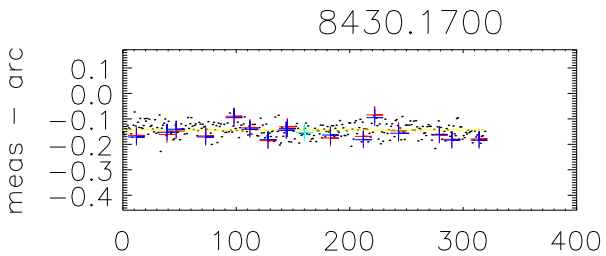

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

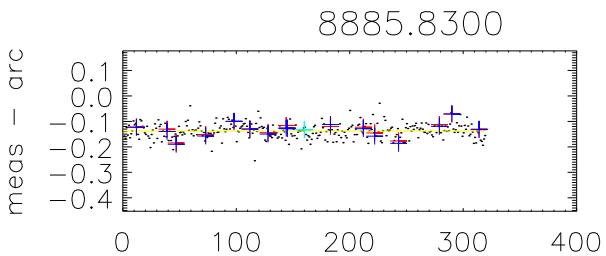

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

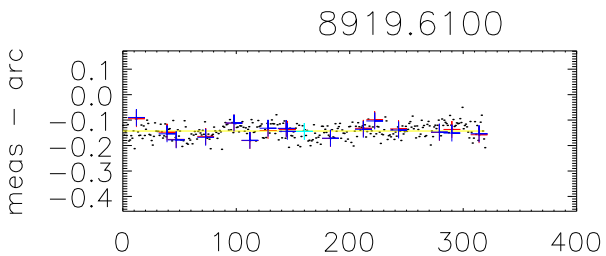

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

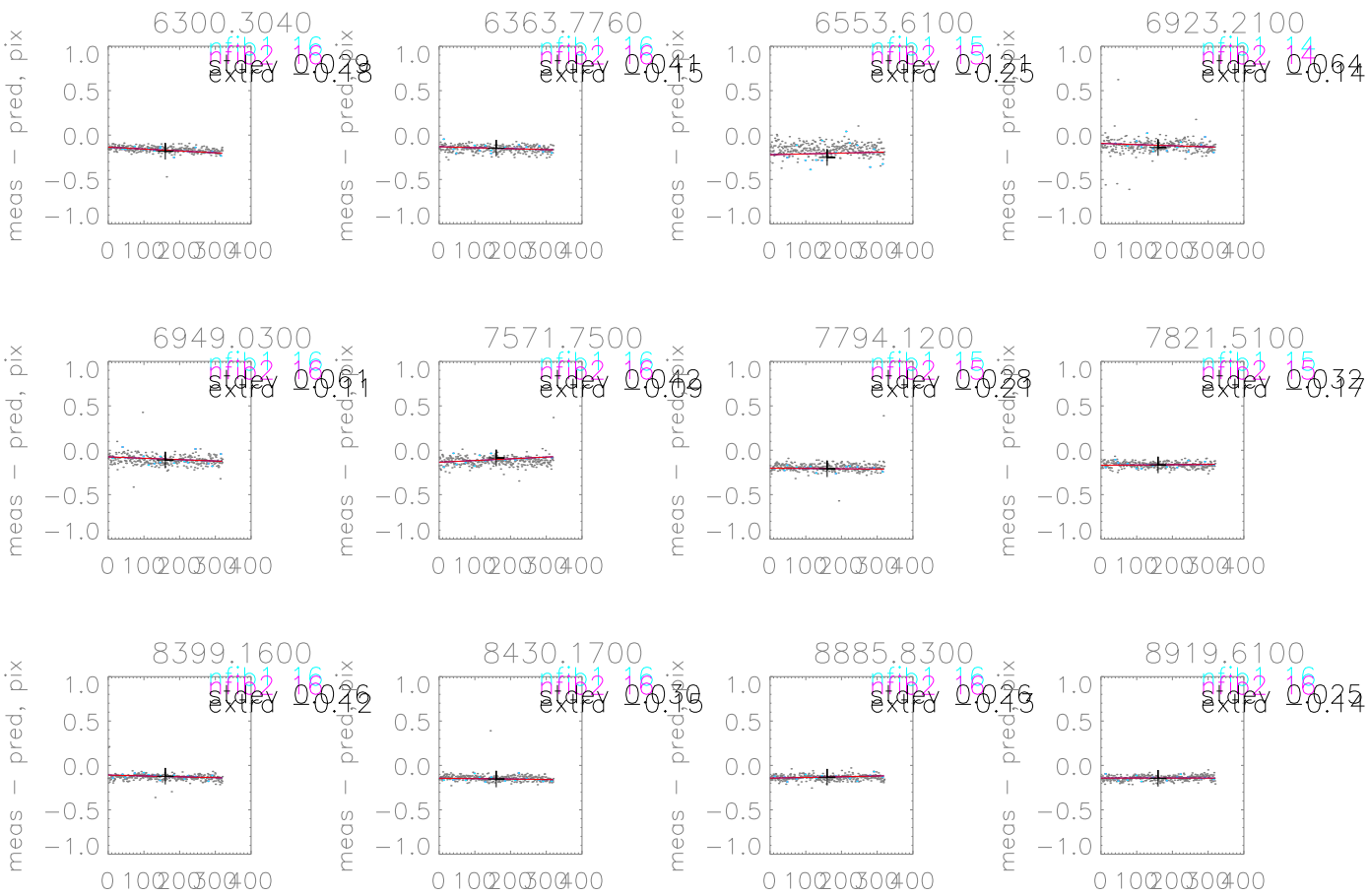

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

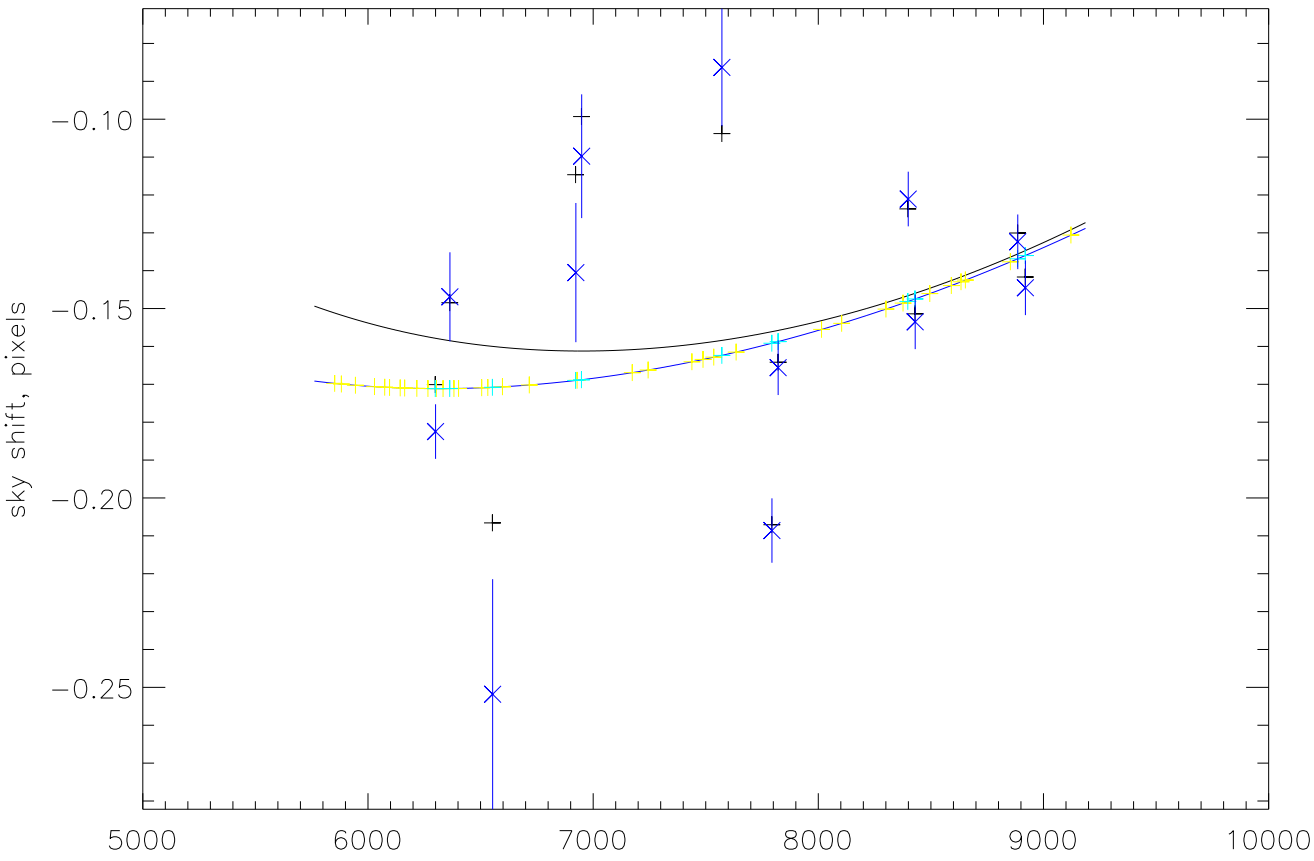

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

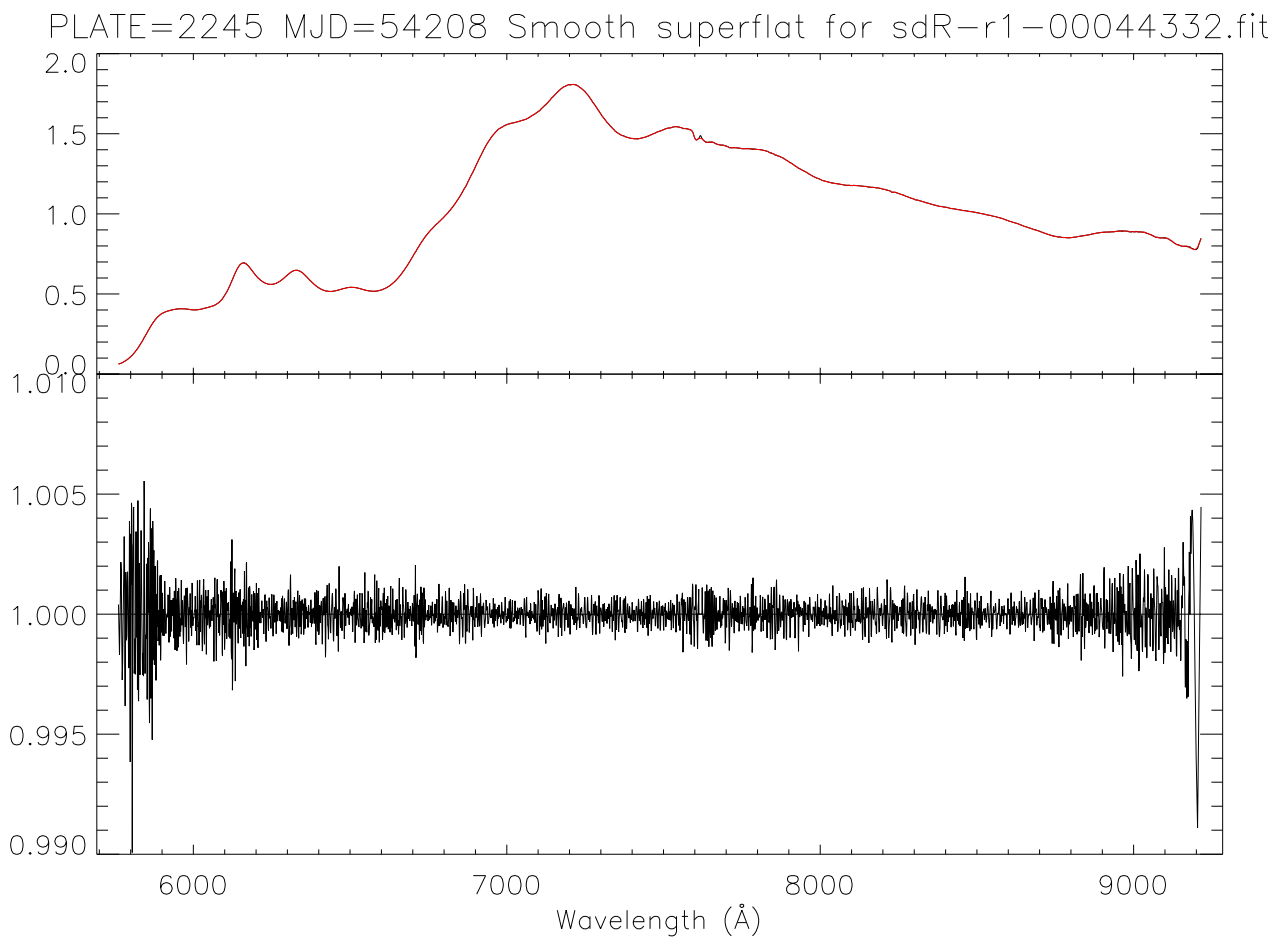

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

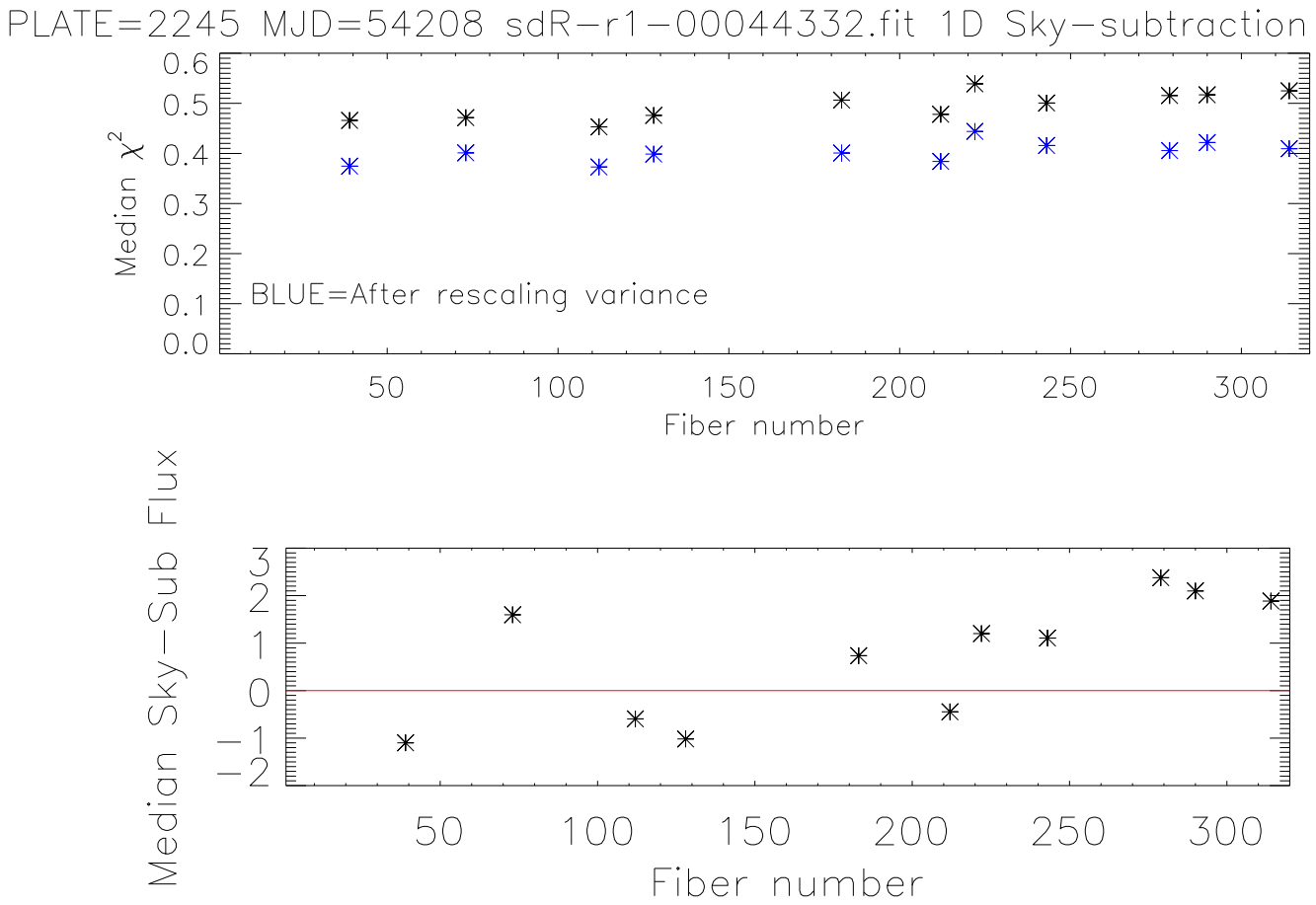

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

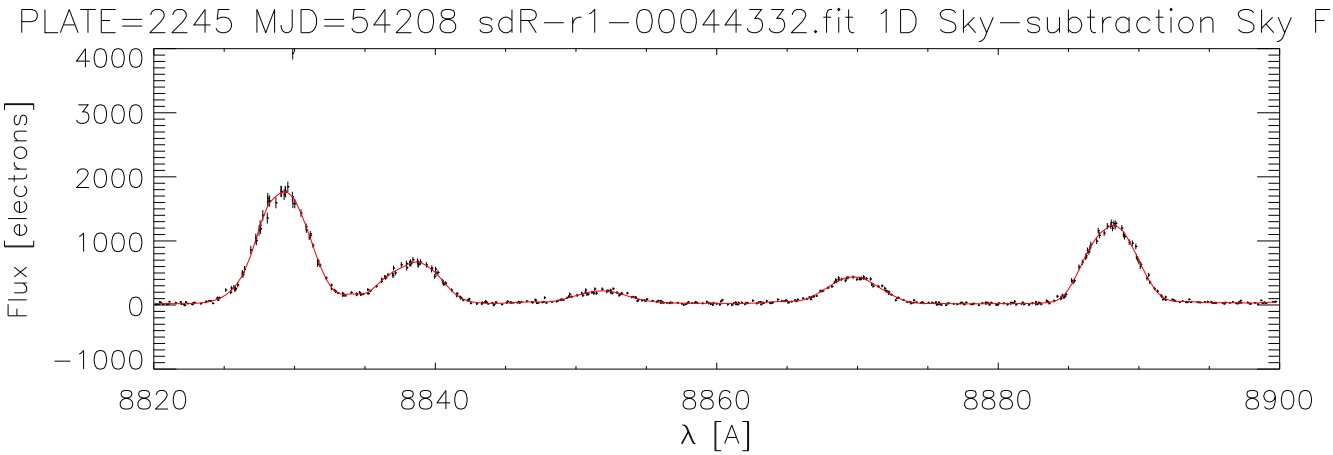

6300.3040
mfib1 16
mfib2 16
stdev 0.029
extra 0.48
6363.7760
mfib1 16
mfib2 16
stdev 0.041
extra 0.15
6553.6100
mfib1 15
mfib2 16
stdev 0.121
extra 0.25
6923.2100
mfib1 14
mfib2 16
stdev 0.064
extra 0.14
6949.0300
mfib1 16
mfib2 16
stdev 0.061
extra 0.11
7571.7500
mfib1 16
mfib2 16
stdev 0.042
extra 0.09
7794.1200
mfib1 15
mfib2 16
stdev 0.028
extra 0.21
7821.5100
mfib1 15
mfib2 16
stdev 0.032
extra 0.17
8399.1600
mfib1 16
mfib2 16
stdev 0.026
extra 0.42
8430.1700
mfib1 16
mfib2 16
stdev 0.030
extra 0.15
8885.8300
mfib1 16
mfib2 16
stdev 0.026
extra 0.43
8919.6100
mfib1 16
mfib2 16
stdev 0.025
extra 0.44
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

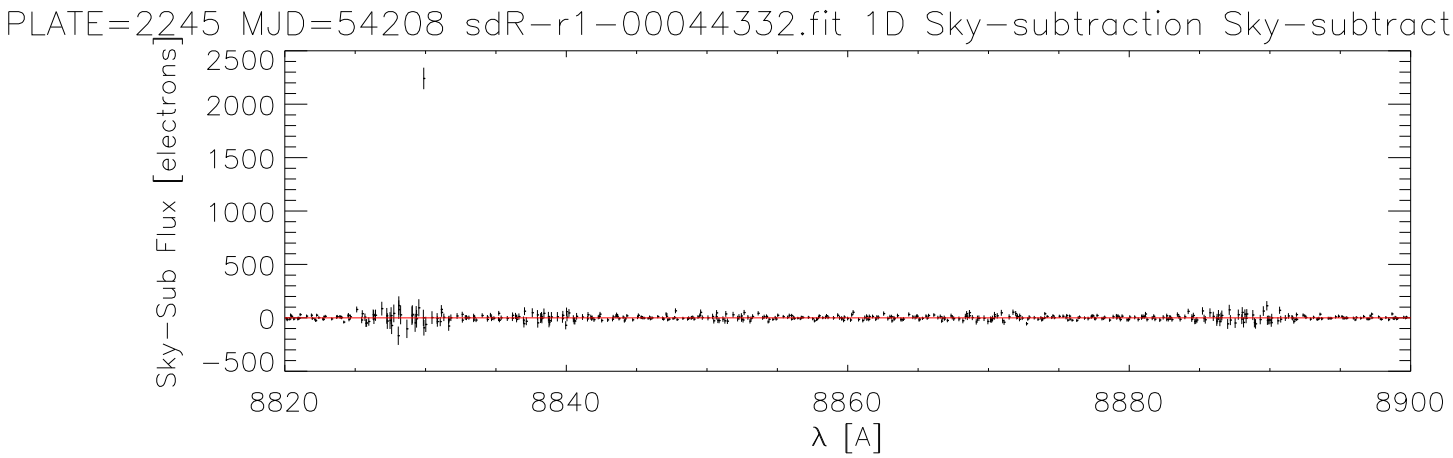

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
5000
6000
7000
8000
9000
10000

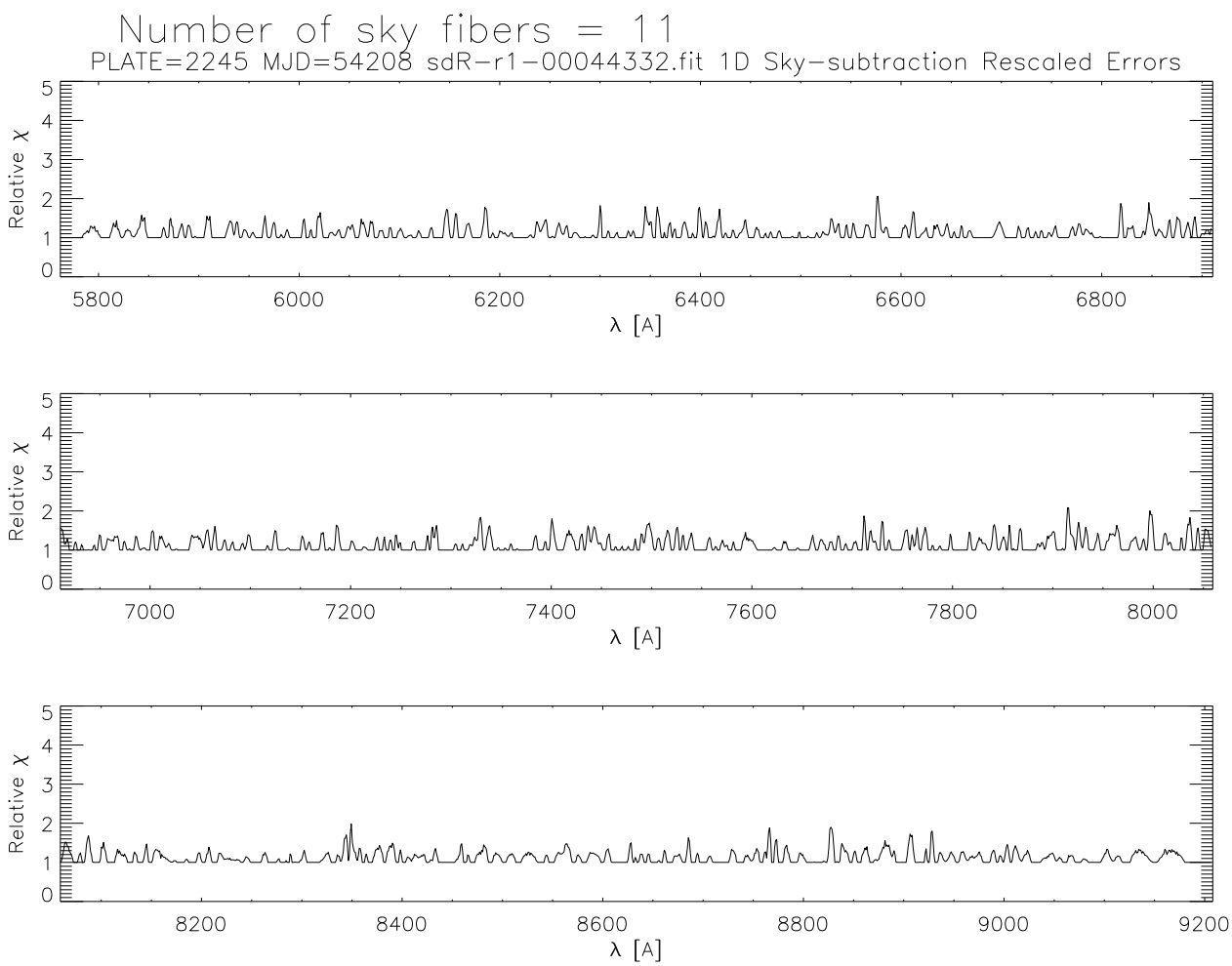
es= 0.0000

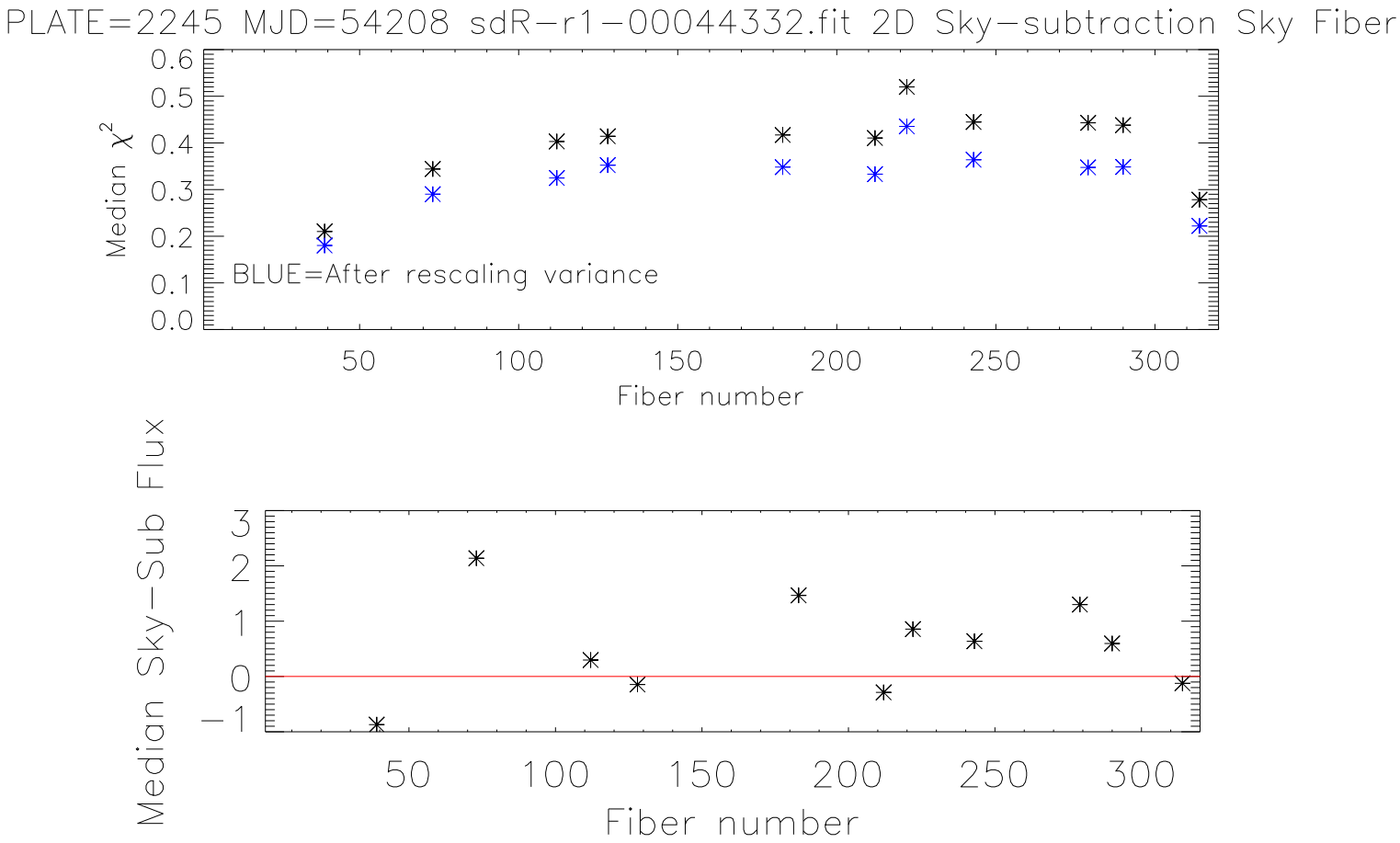

PLATE=2245 MJD=54208 Smooth superflat for sdR-r1-00044332.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

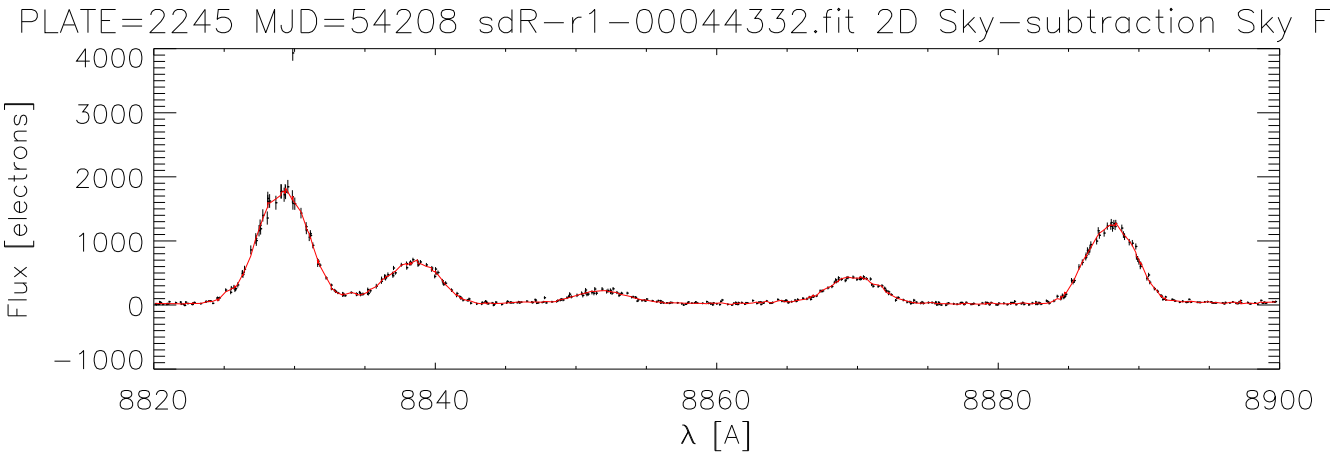

PLATE=2245 MJD=54208 sdR-r1-00044332.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

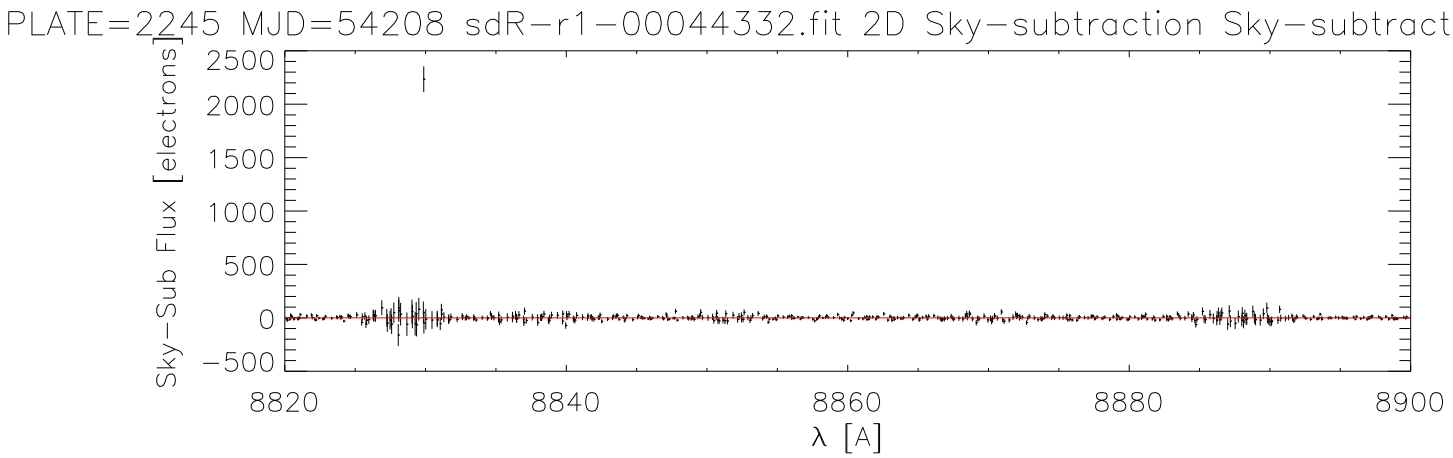

PLATE=2245 MJD=54208 sdR-r1-00044332.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

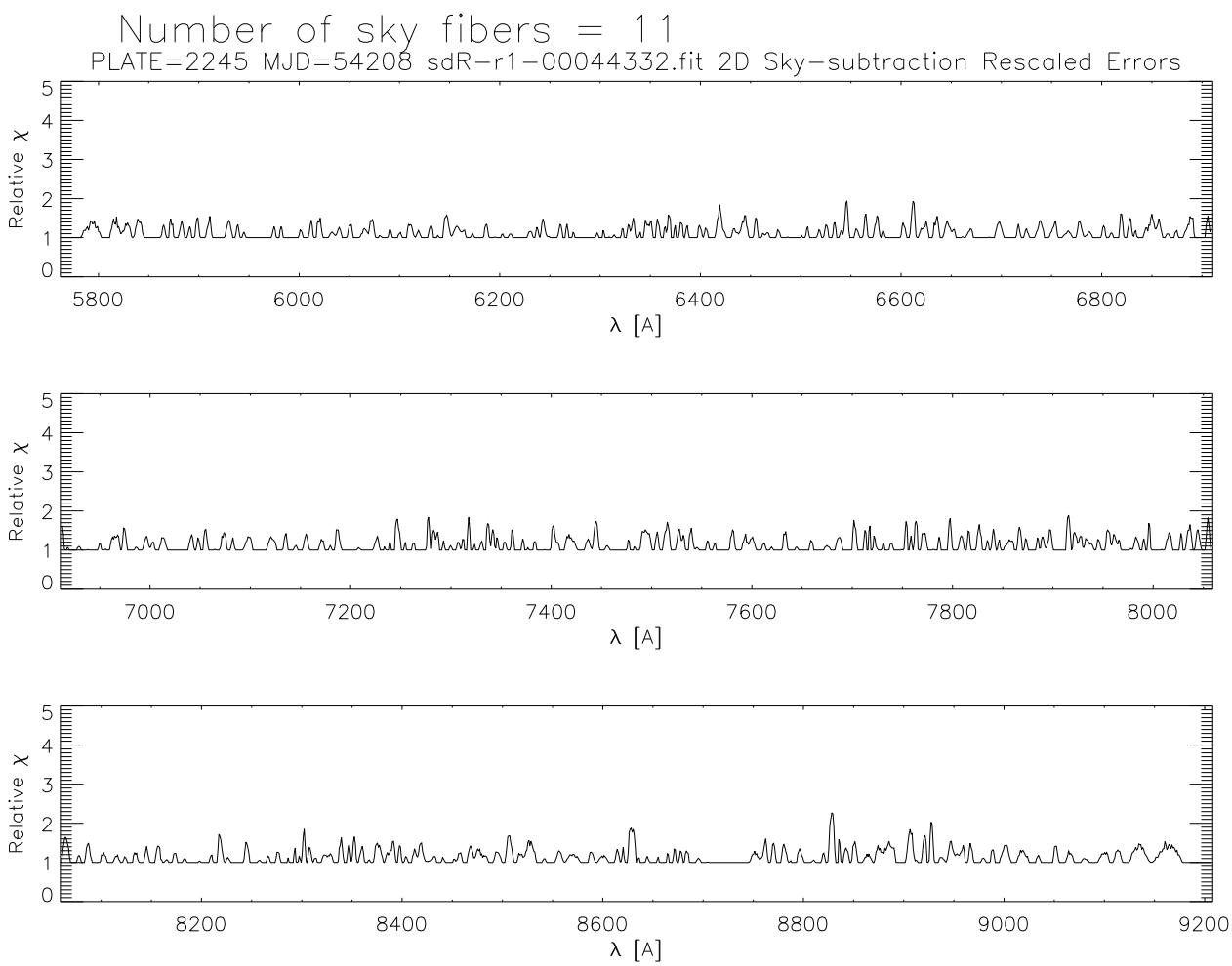

PLATE=2245 MJD=54208 sdR-r1-00044332.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

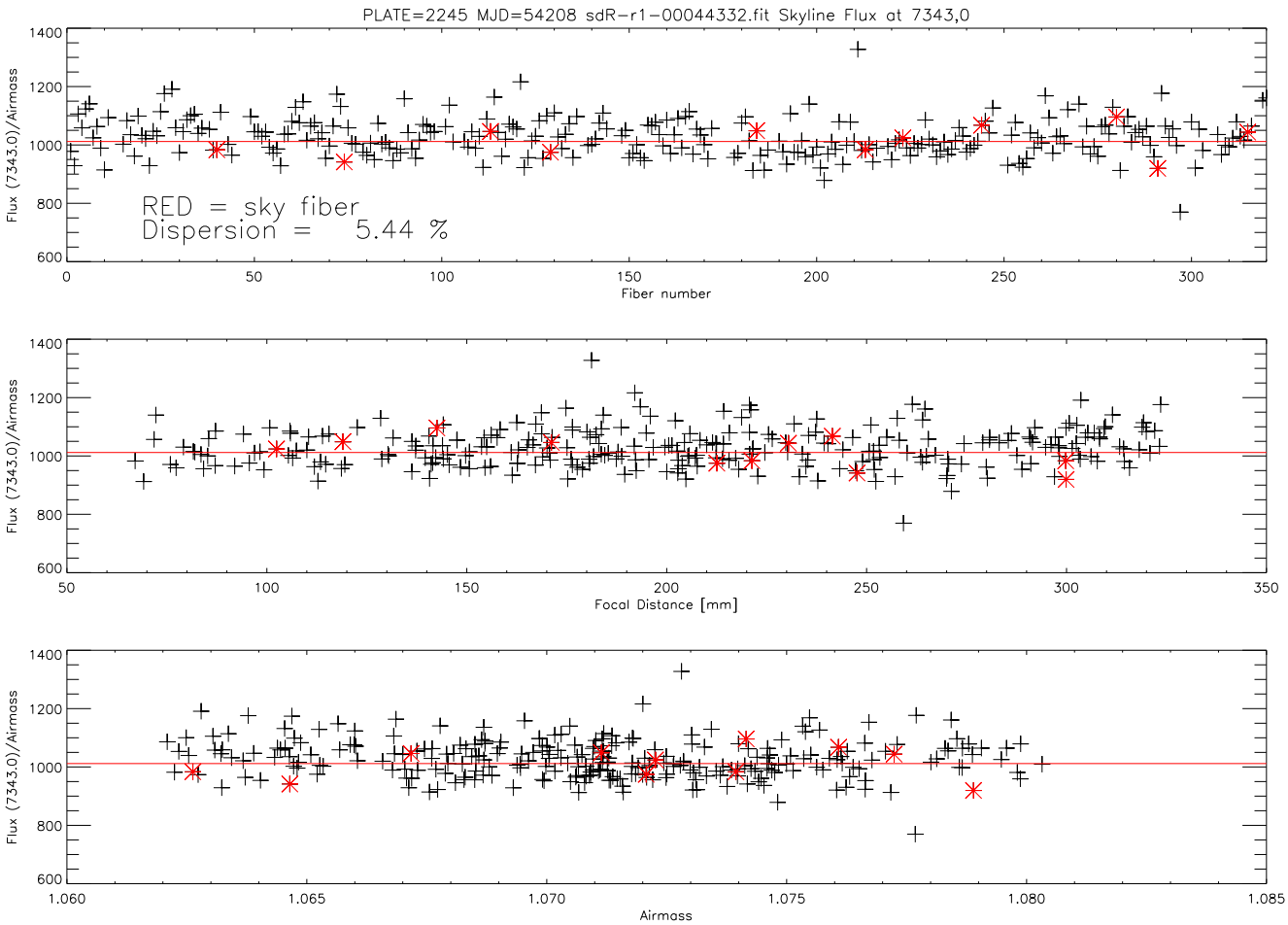

Number of sky fibers = 11
PLATE=2245 MJD=54208 sdR-r1-00044332.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

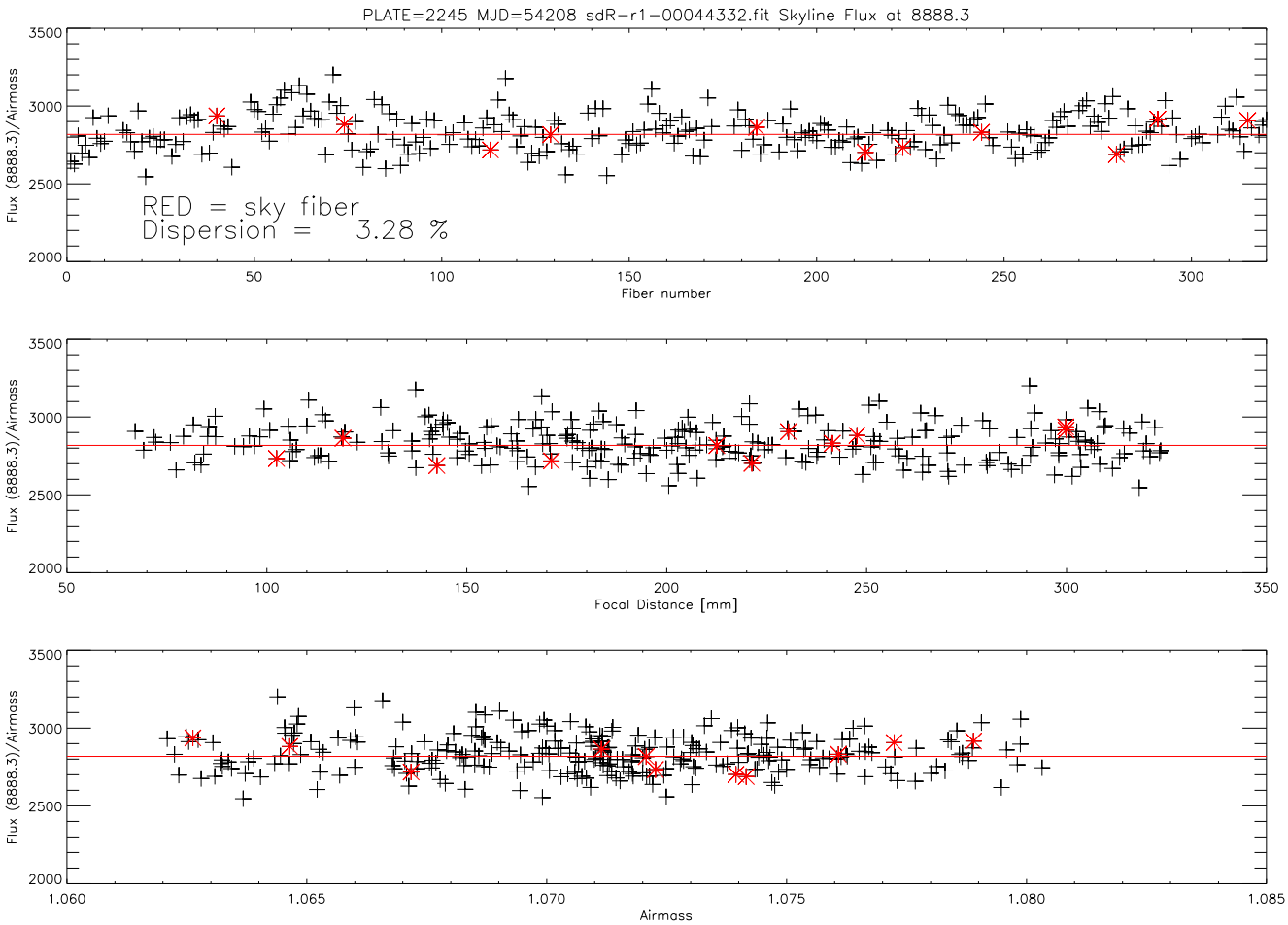

PLATE=2245 MJD=54208 sdR-r1-00044332.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

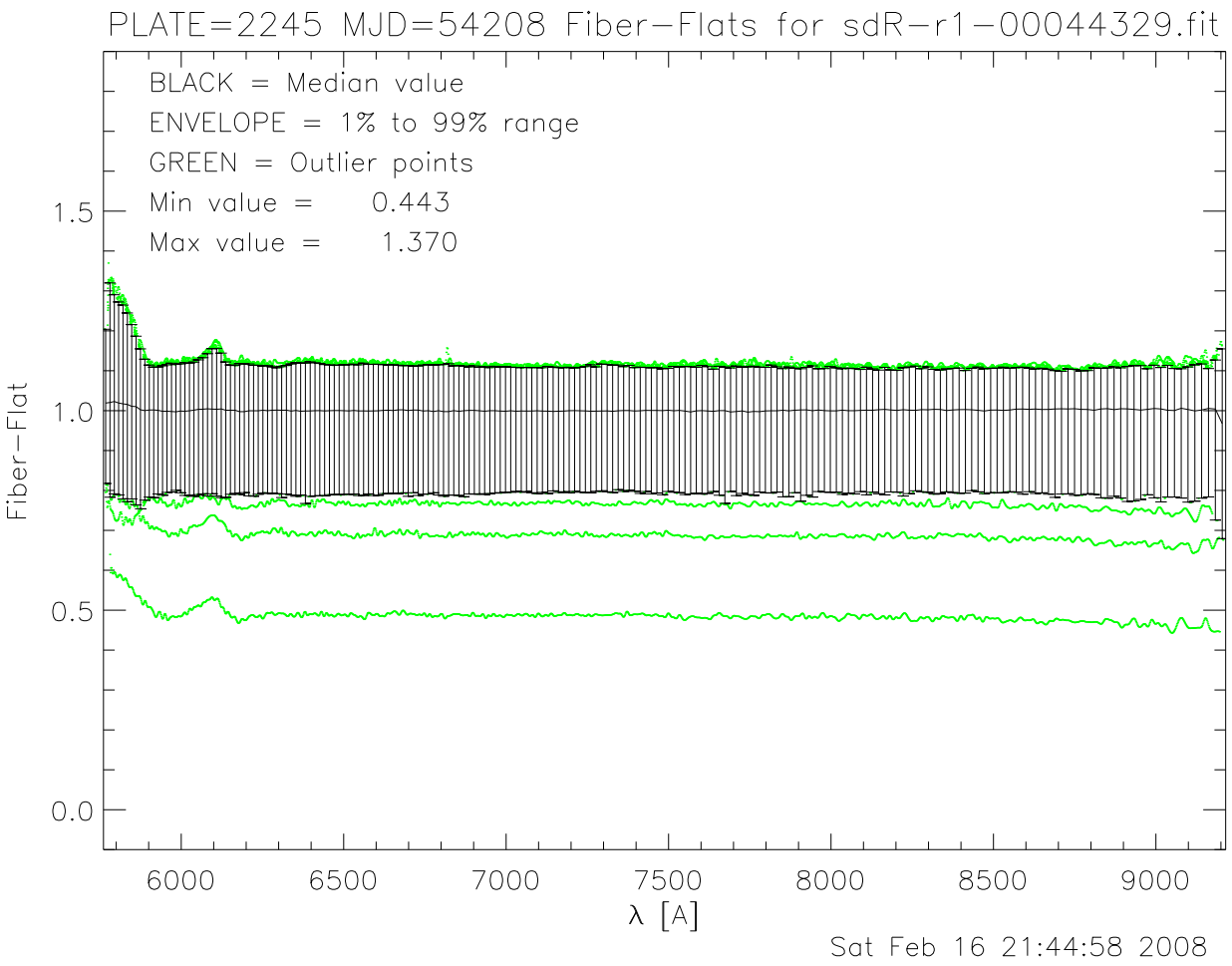

PLATE=2245 MJD=54208 sdR-r1-00044332.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

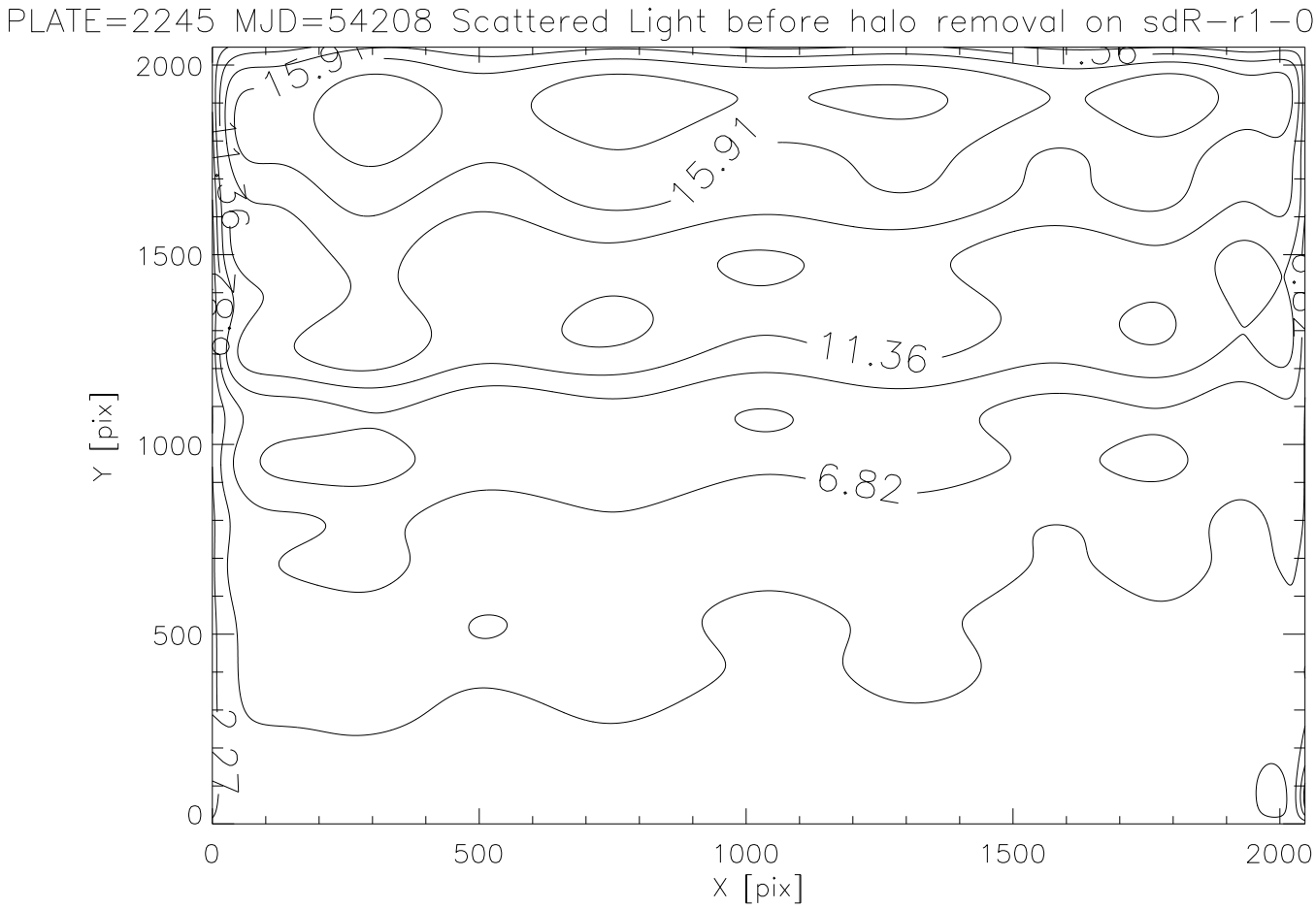

PLATE=2245 MJD=54208 sdR-r1-00044332.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

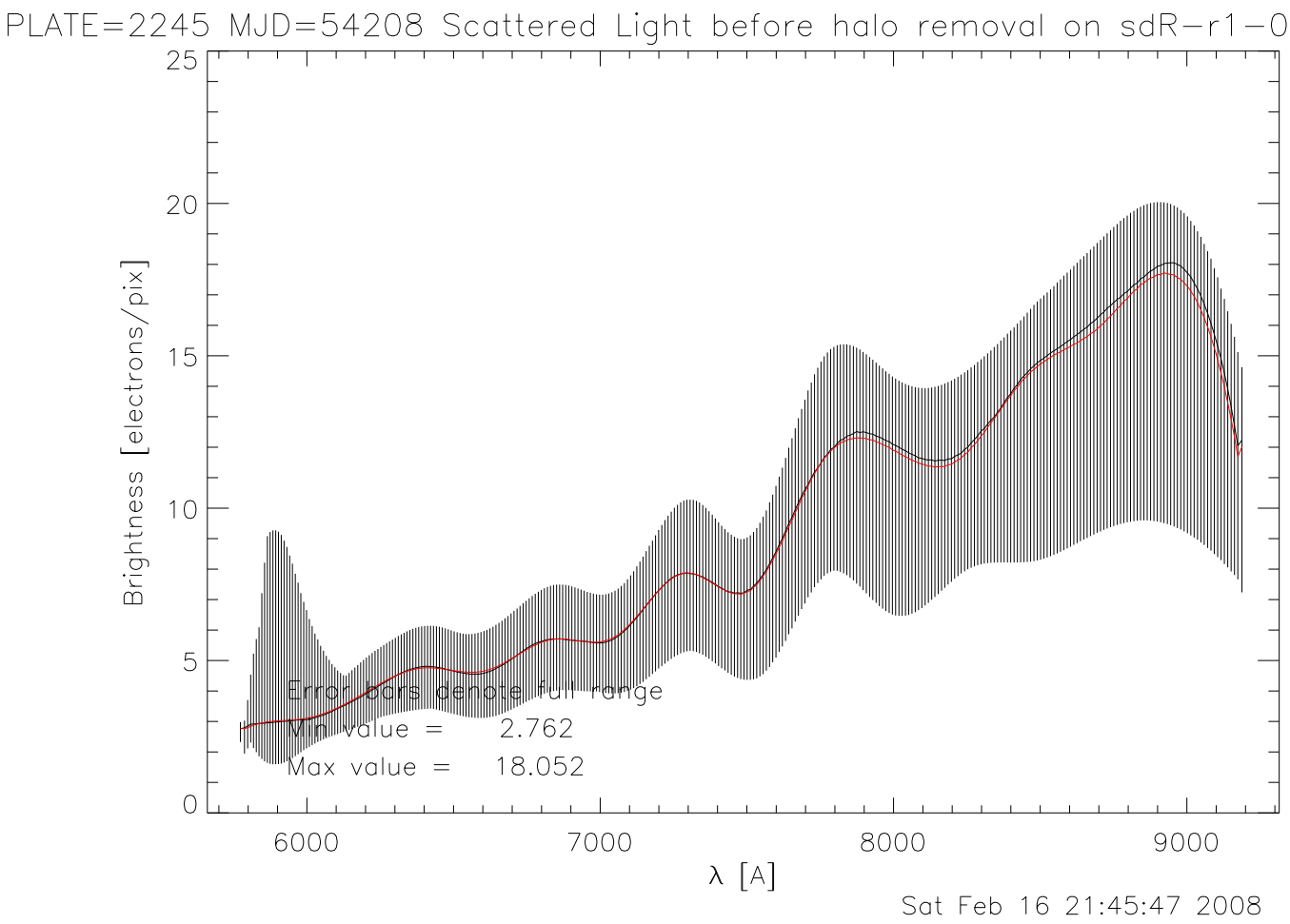

Number of sky fibers = 11
PLATE=2245 MJD=54208 sdR-r1-00044332.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

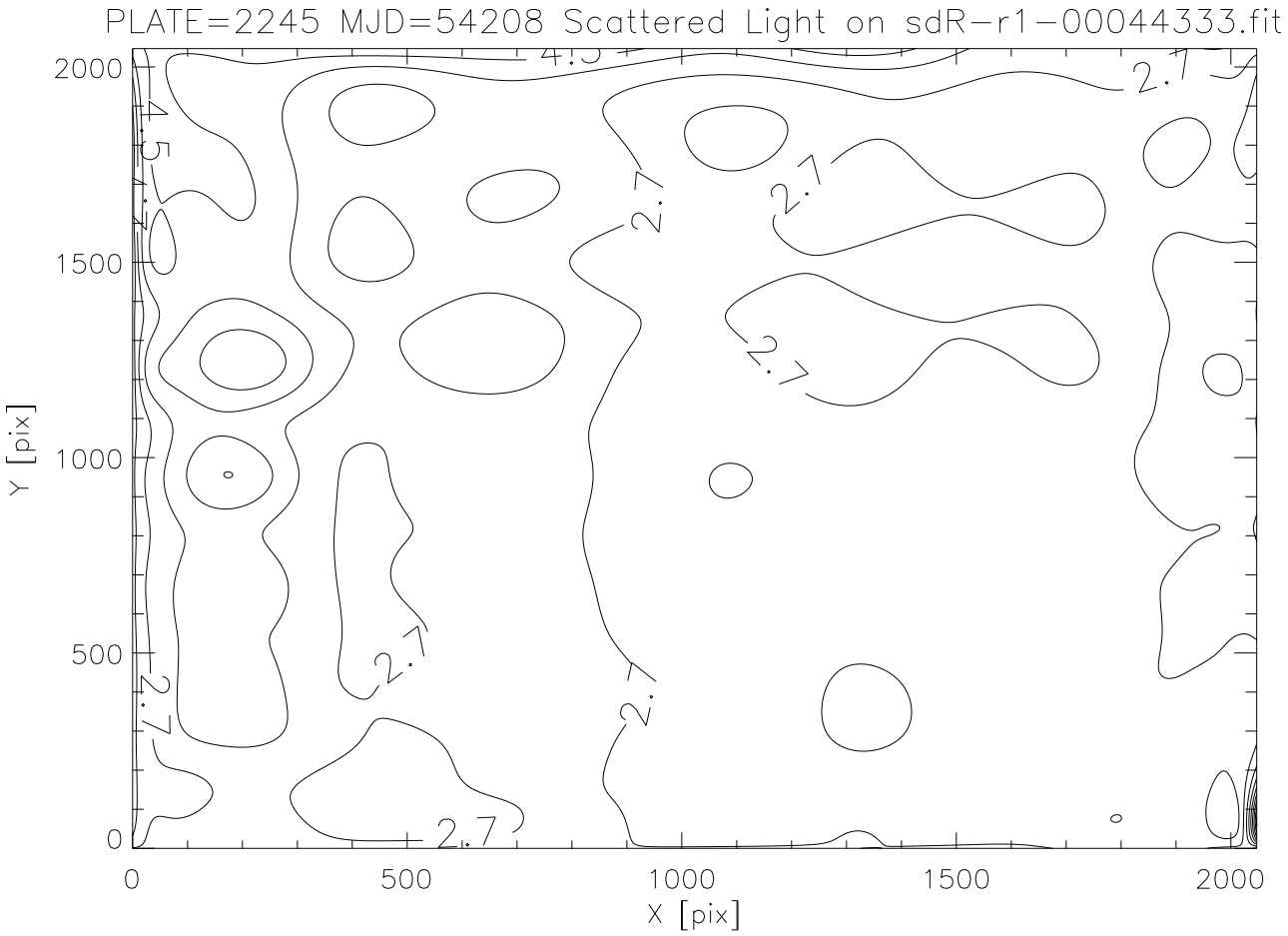

PLATE=2245 MJD=54208 sdR-r1-00044332.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.44 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

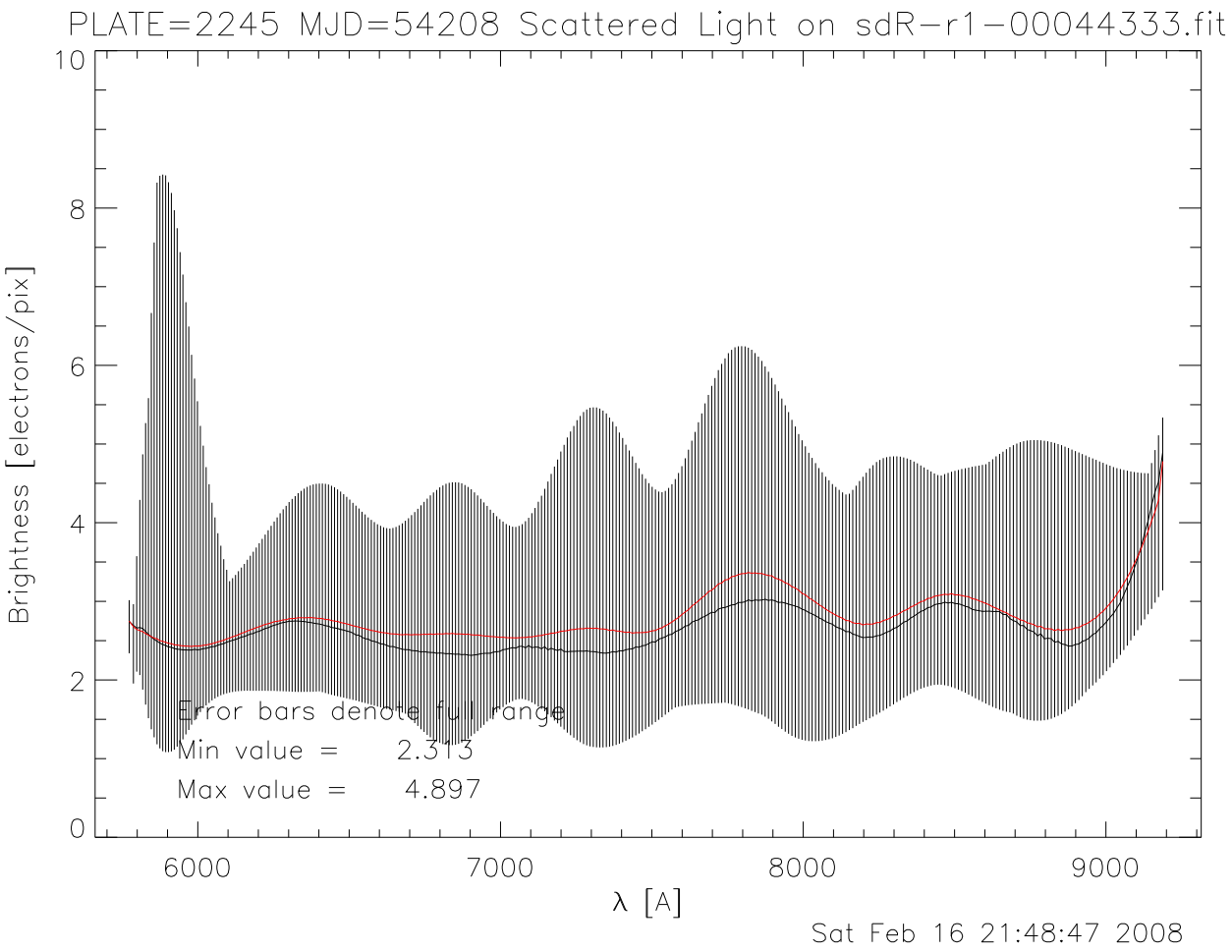

PLATE=2245 MJD=54208 sdR-r1-00044332.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.28 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

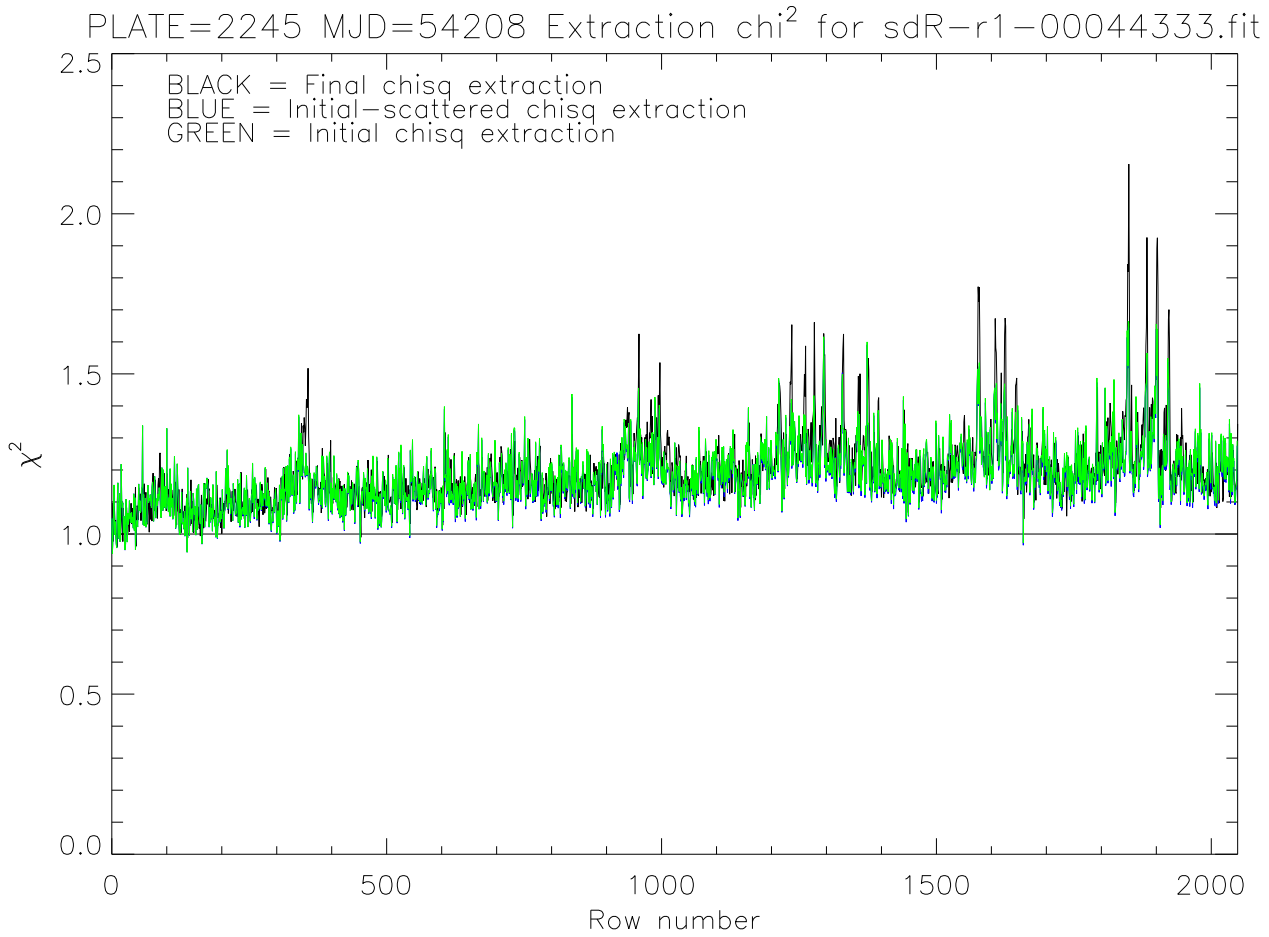

PLATE=2245 MJD=54208 Fiber-Flats for sdR-r1-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.443
Max value = 1.370
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 21:44:58 2008

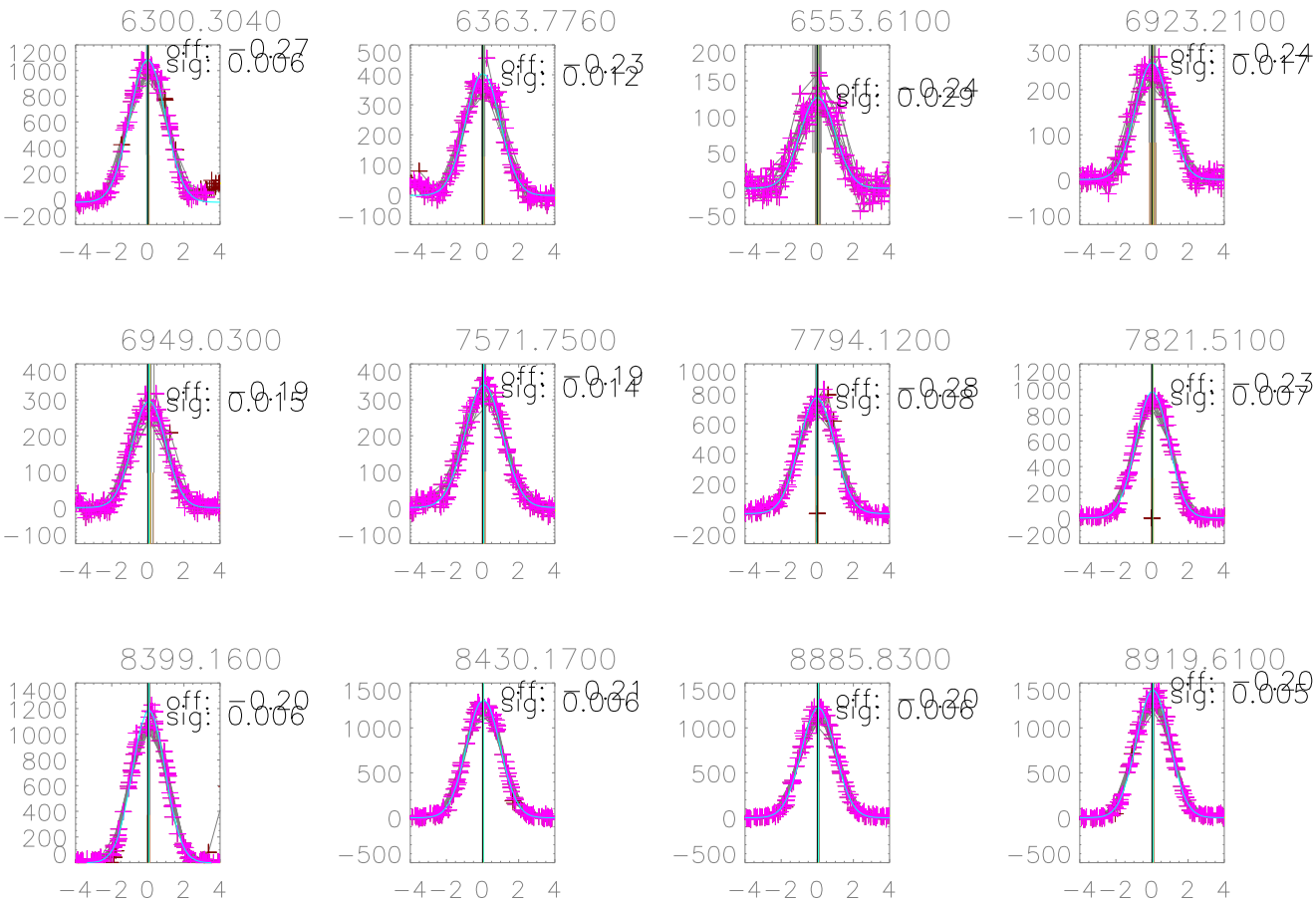

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r1-00044333.fi
15.9
15.91
11.36
6.82
2.27
Y [pix]
X [pix]
0
500
1000
1500
2000

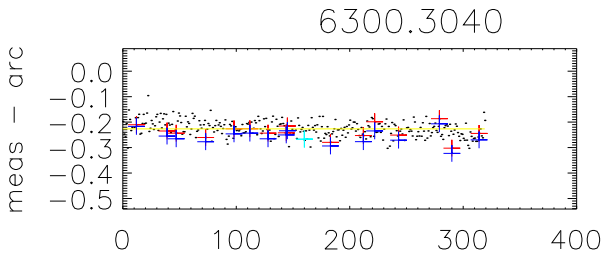

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r1-00044333.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.762
Max value = 18.052
Sat Feb 16 21:45:47 2008

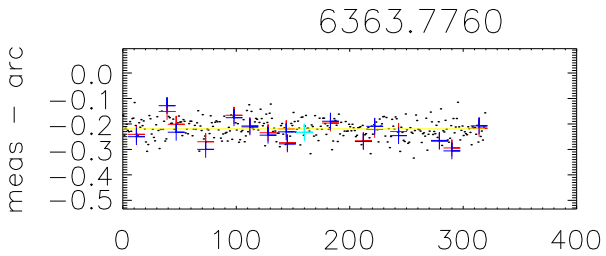

PLATE=2245 MJD=54208 Scattered Light on sdR−r1−00044333.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
2.7
4.5

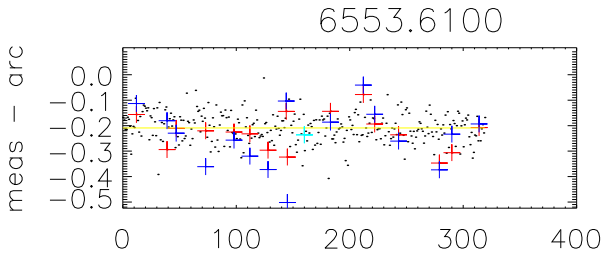

PLATE=2245 MJD=54208 Scattered Light on sdR-r1-00044333.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.313
Max value = 4.897
Sat Feb 16 21:48:47 2008

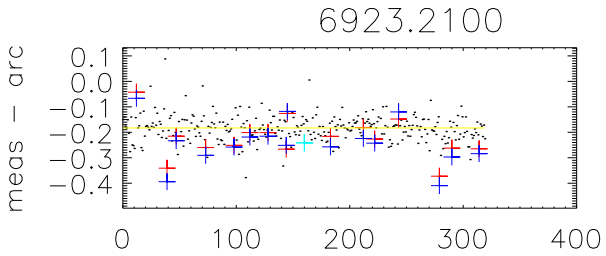

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-r1-00044333.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

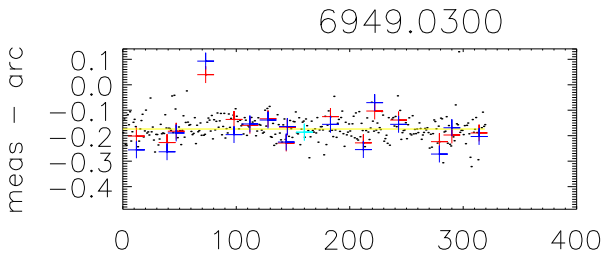

6300.3040
off: −0.27
sig: 0.006
6363.7760
off: −0.23
sig: 0.012
6553.6100
off: −0.24
sig: 0.029
6923.2100
off: −0.24
sig: 0.017
6949.0300
off: −0.19
sig: 0.015
7571.7500
off: −0.19
sig: 0.014
7794.1200
off: −0.28
sig: 0.008
7821.5100
off: −0.23
sig: 0.007
8399.1600
off: −0.20
sig: 0.006
8430.1700
off: −0.21
sig: 0.006
8885.8300
off: −0.20
sig: 0.006
8919.6100
off: −0.20
sig: 0.005

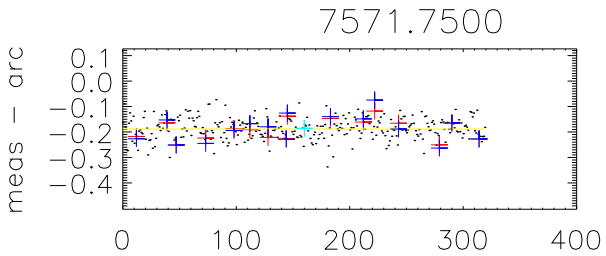

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

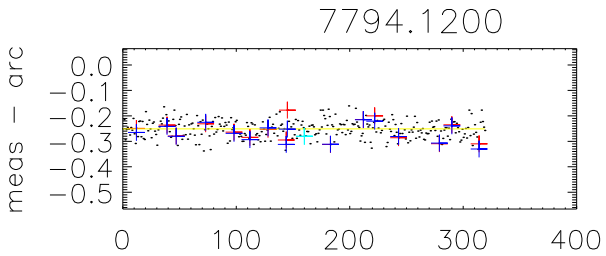

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

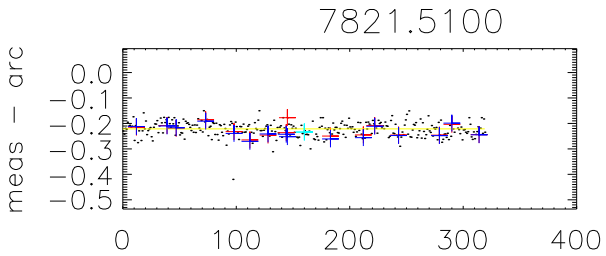

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

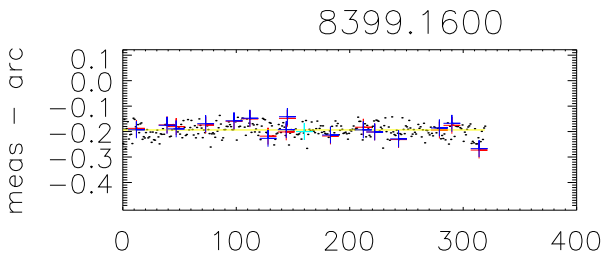

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

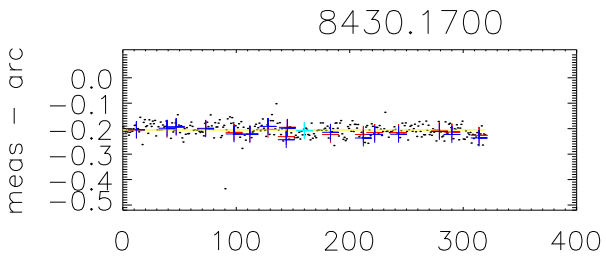

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

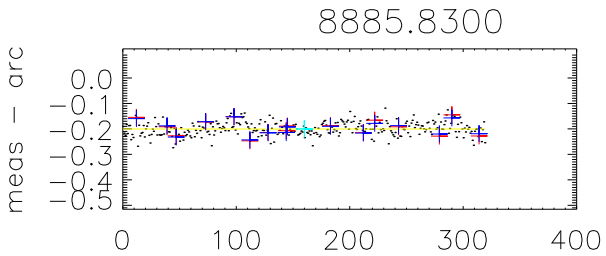

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

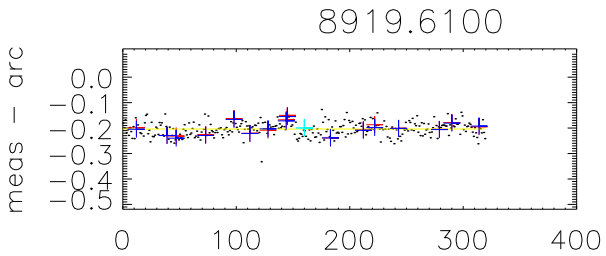

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

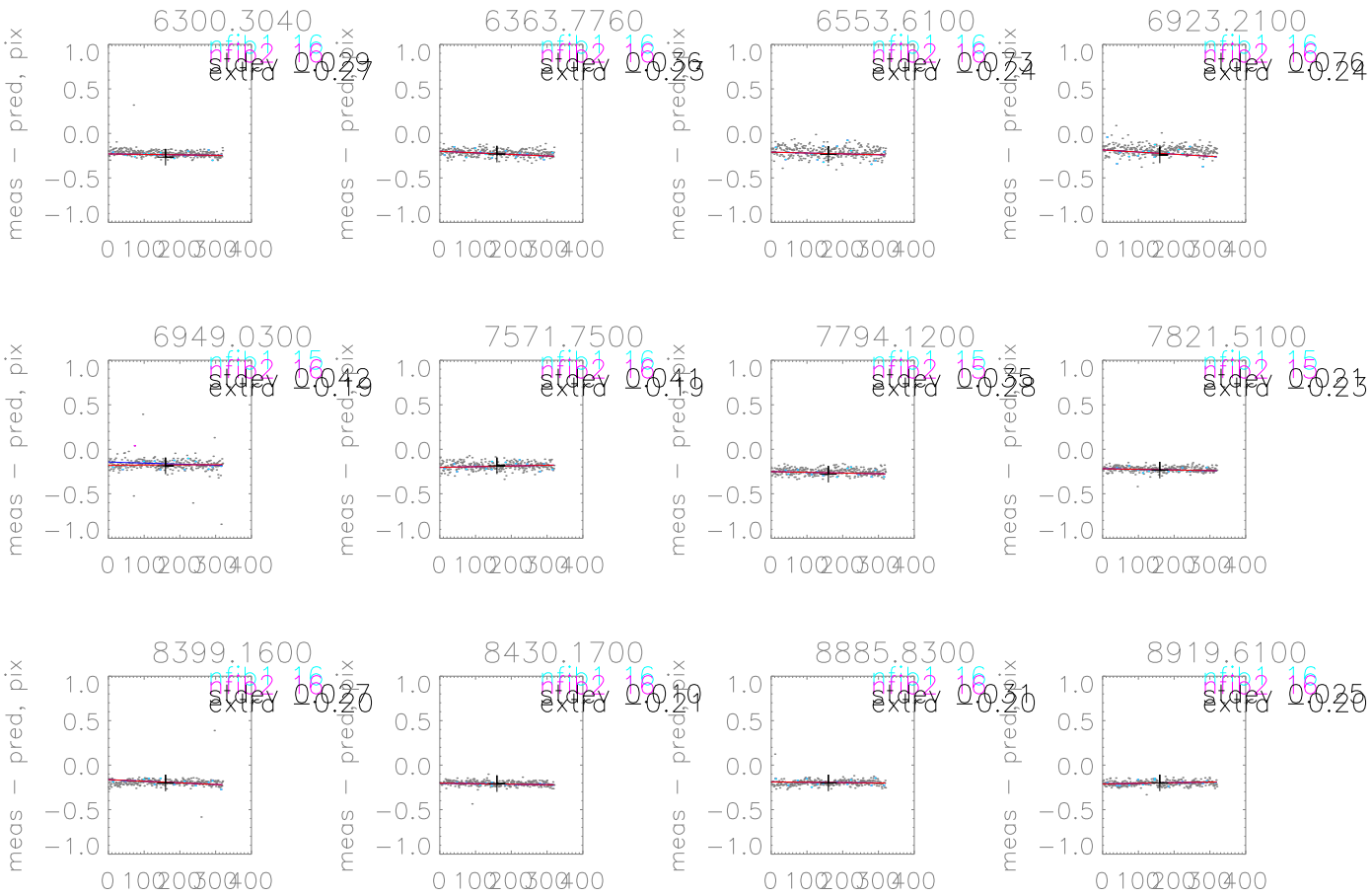

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

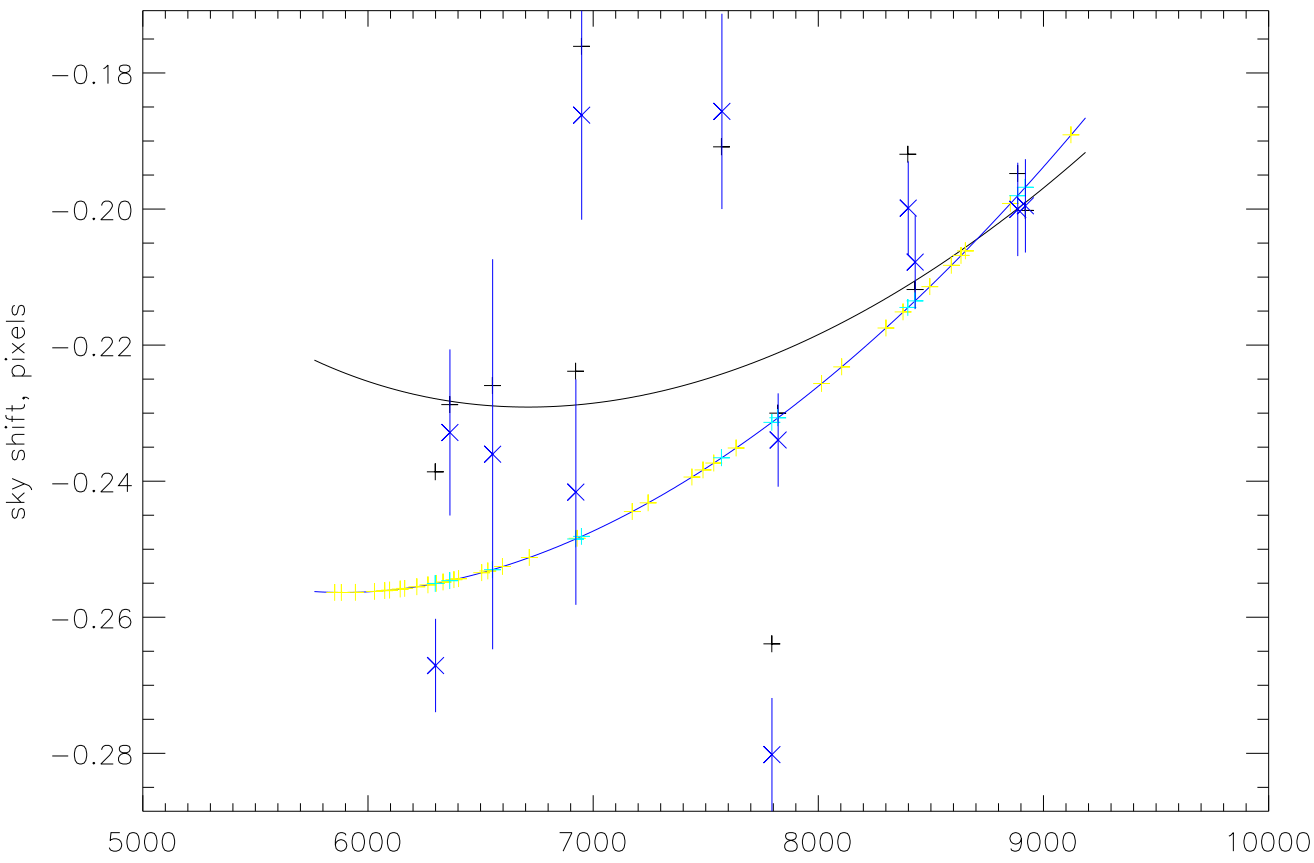

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

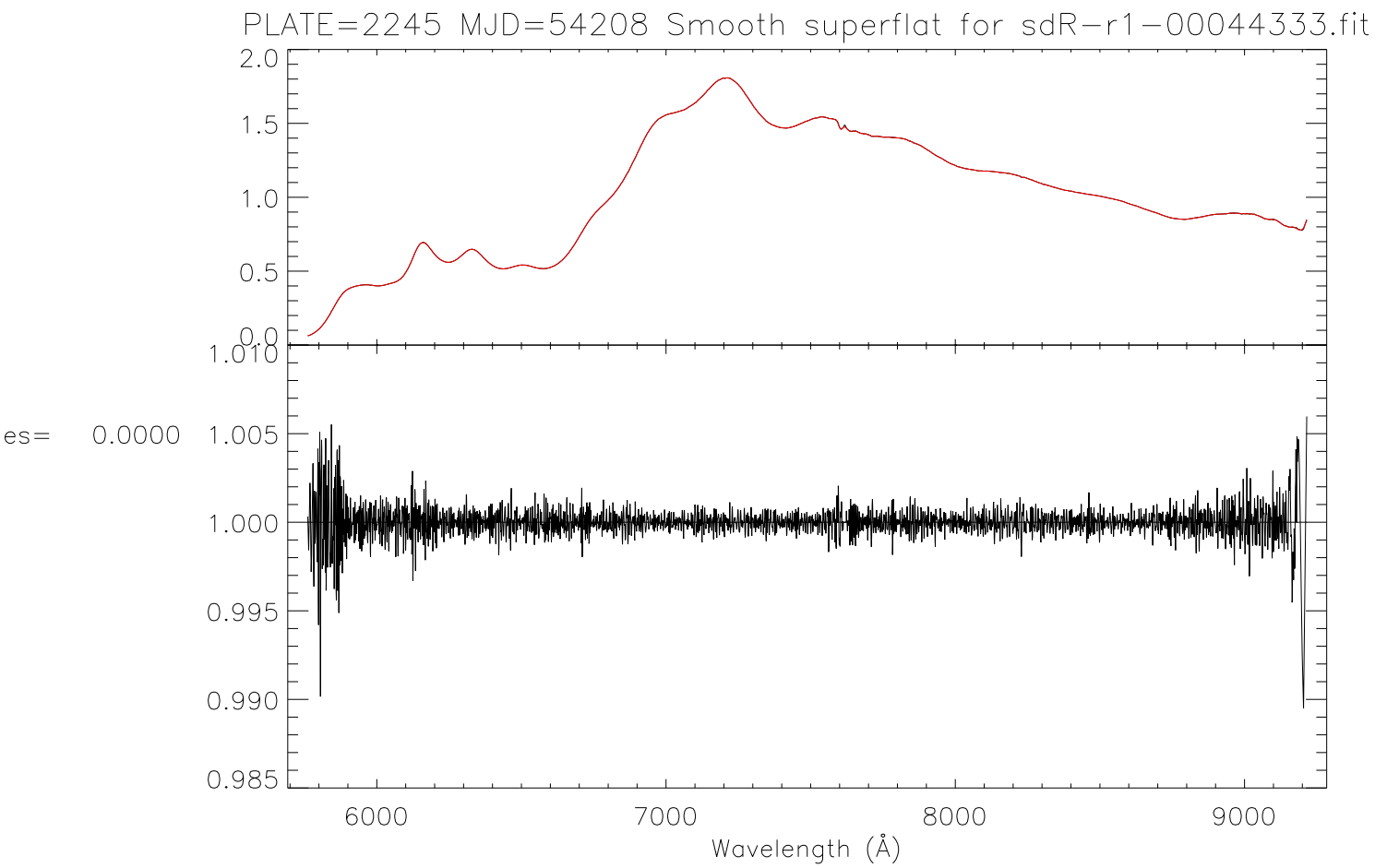

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

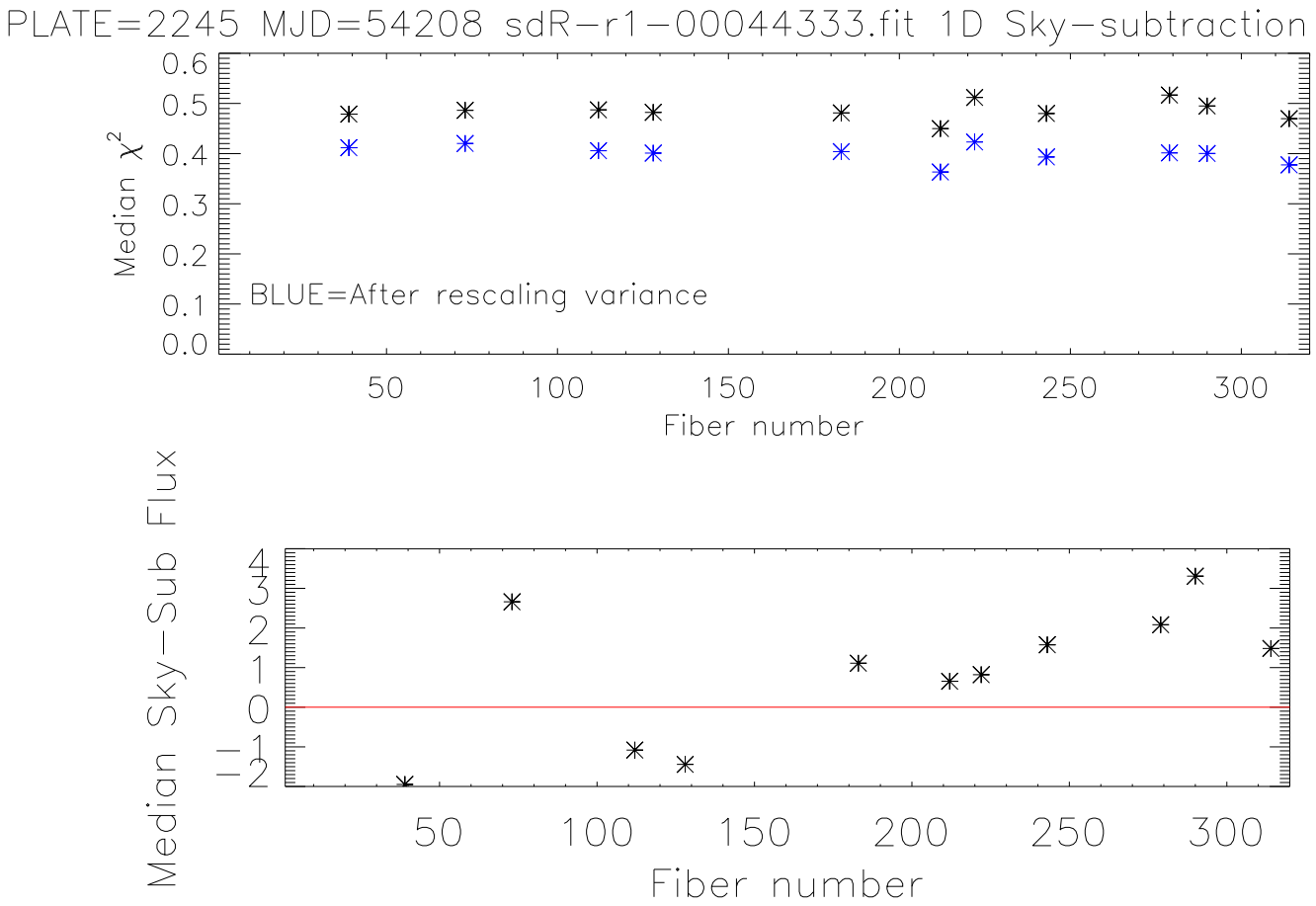

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

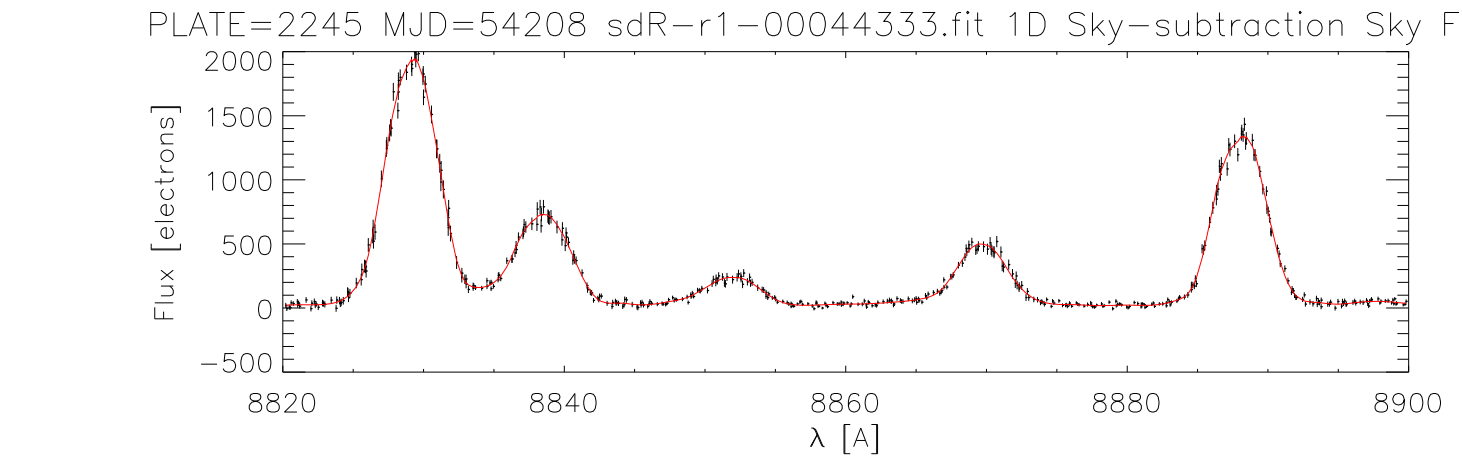

6300.3040
stdev 0.029
extra 0.27
6363.7760
stdev 0.036
extra 0.25
6553.6100
stdev 0.073
extra 0.24
6923.2100
stdev 0.076
extra 0.24
6949.0300
stdev 0.042
extra 0.19
7571.7500
stdev 0.041
extra 0.19
7794.1200
stdev 0.035
extra 0.28
7821.5100
stdev 0.021
extra 0.23
8399.1600
stdev 0.027
extra 0.20
8430.1700
stdev 0.050
extra 0.21
8885.8300
stdev 0.031
extra 0.20
8919.6100
stdev 0.025
extra 0.20
meas − pred, pix
mfib1 16
mfib2 16
mfib1 15
mfib2 15

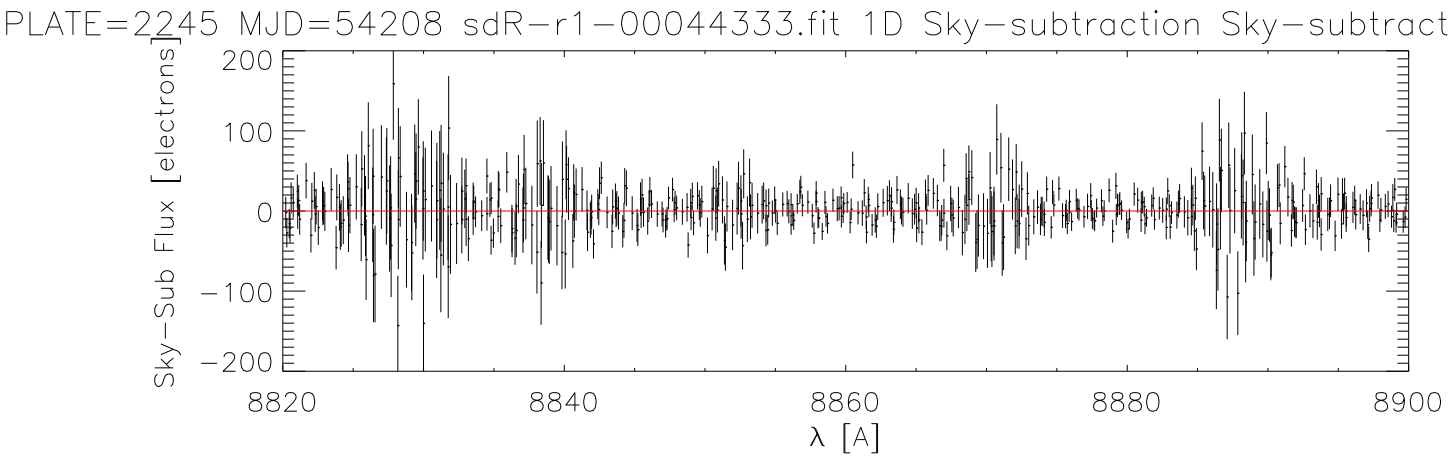

−0.18
−0.20
−0.22
−0.24
−0.26
−0.28
sky shift, pixels
5000
6000
7000
8000
9000
10000

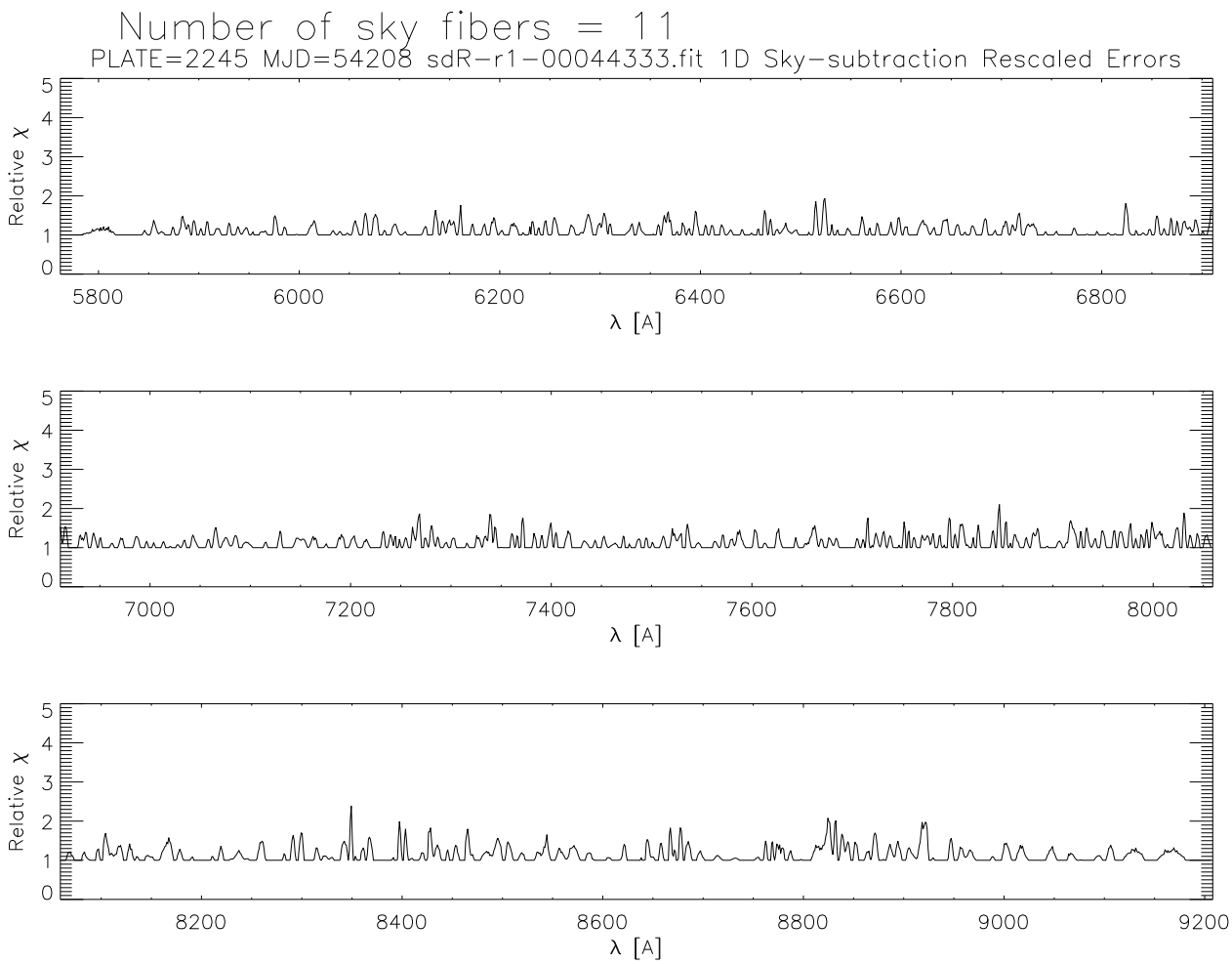

PLATE=2245 MJD=54208 Smooth superflat for sdR-r1-00044333.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

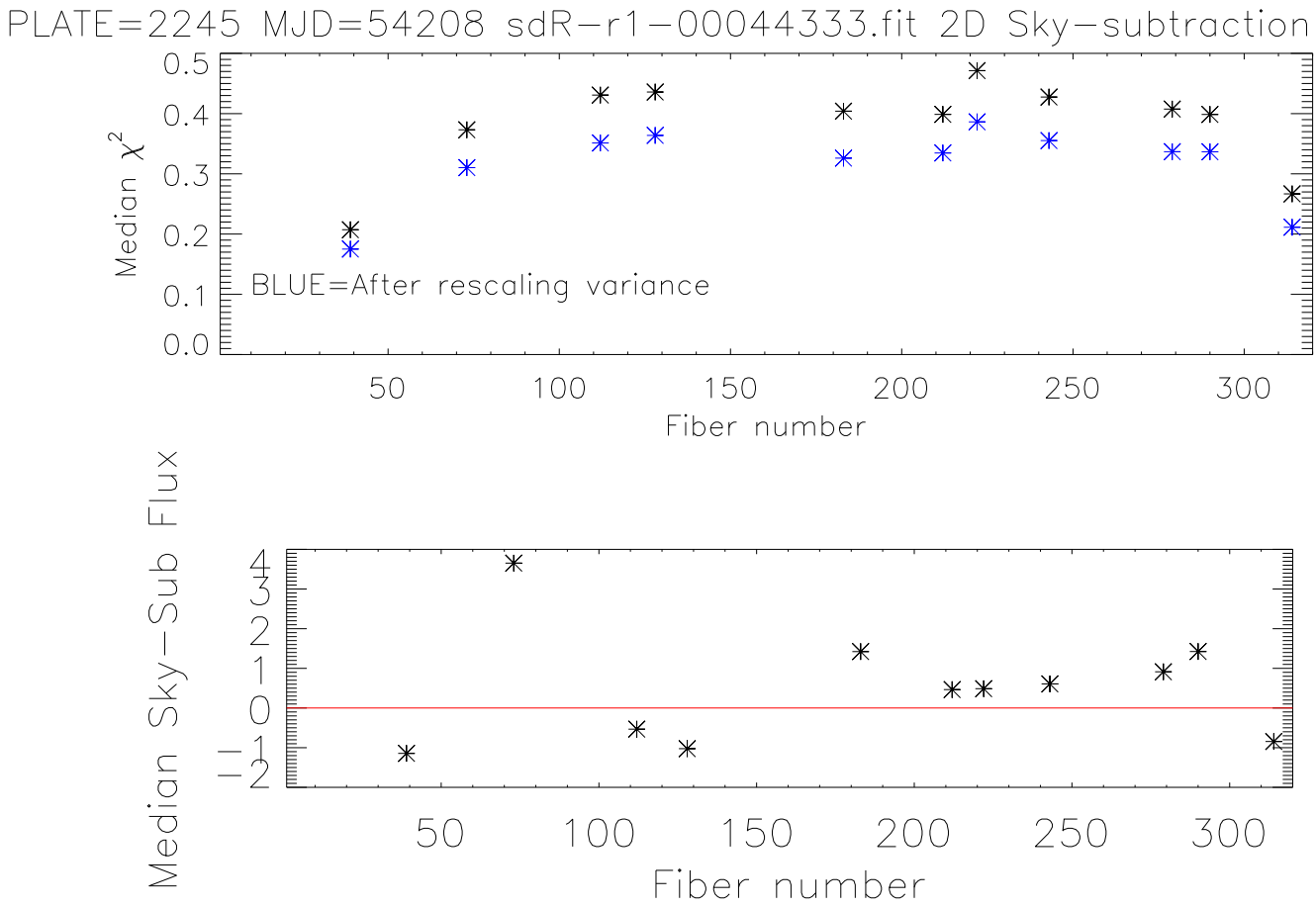
es= 0.0000

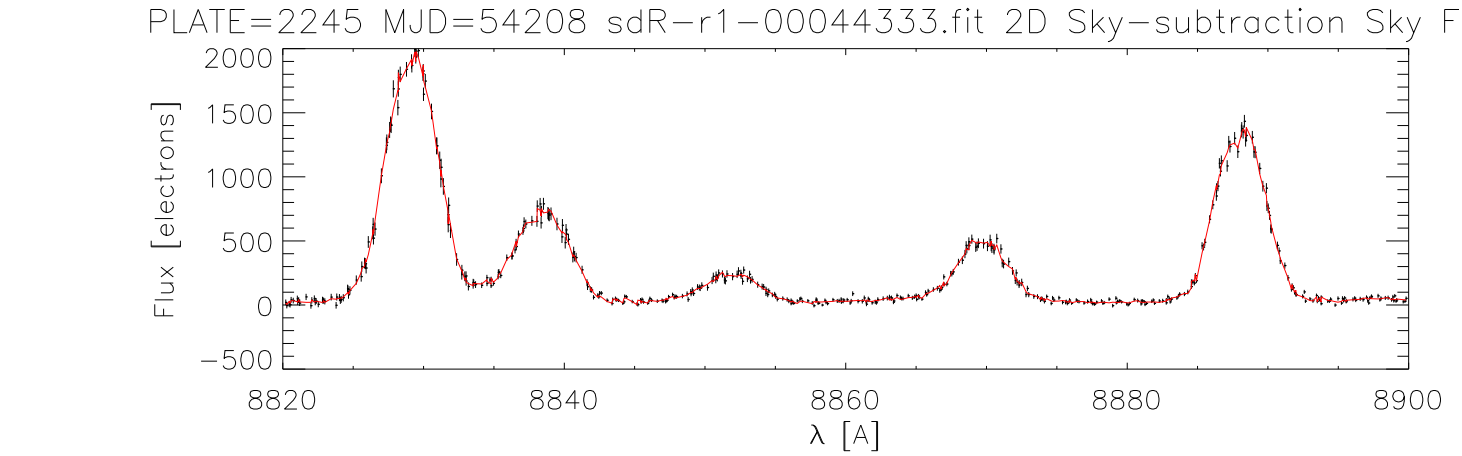

PLATE=2245 MJD=54208 sdR-r1-00044333.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

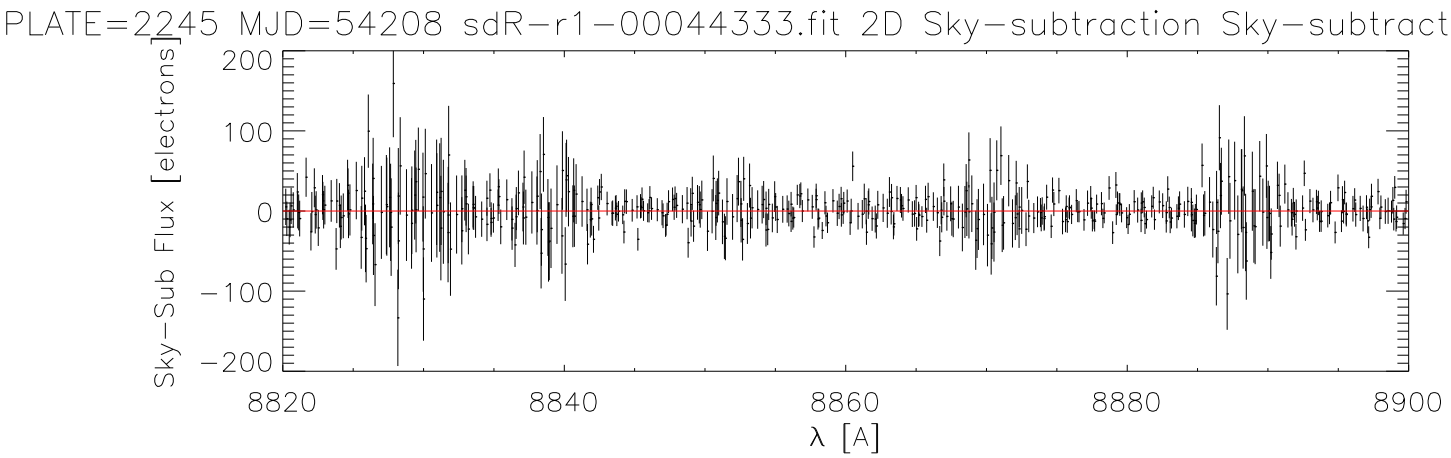

PLATE=2245 MJD=54208 sdR-r1-00044333.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

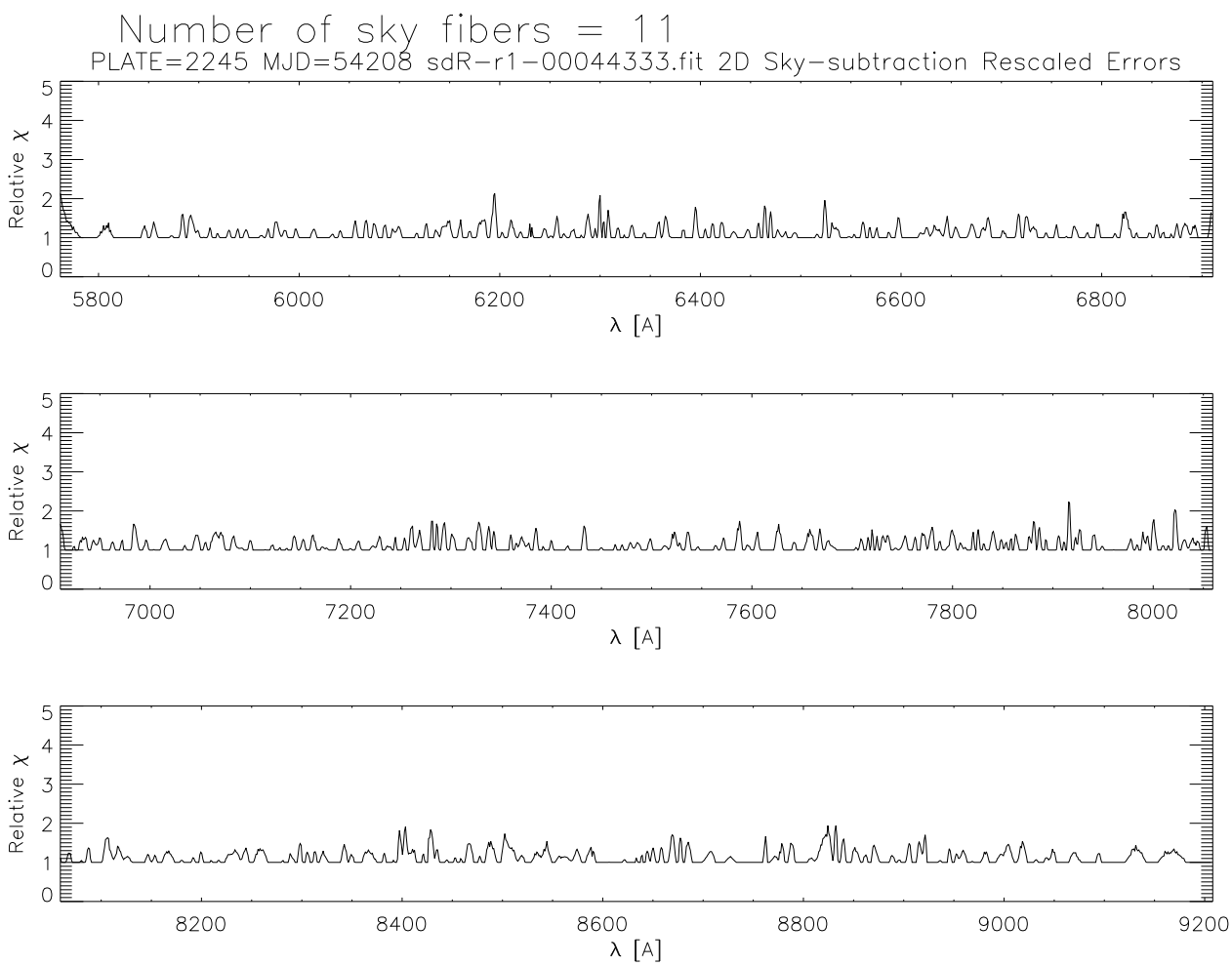

PLATE=2245 MJD=54208 sdR-r1-00044333.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

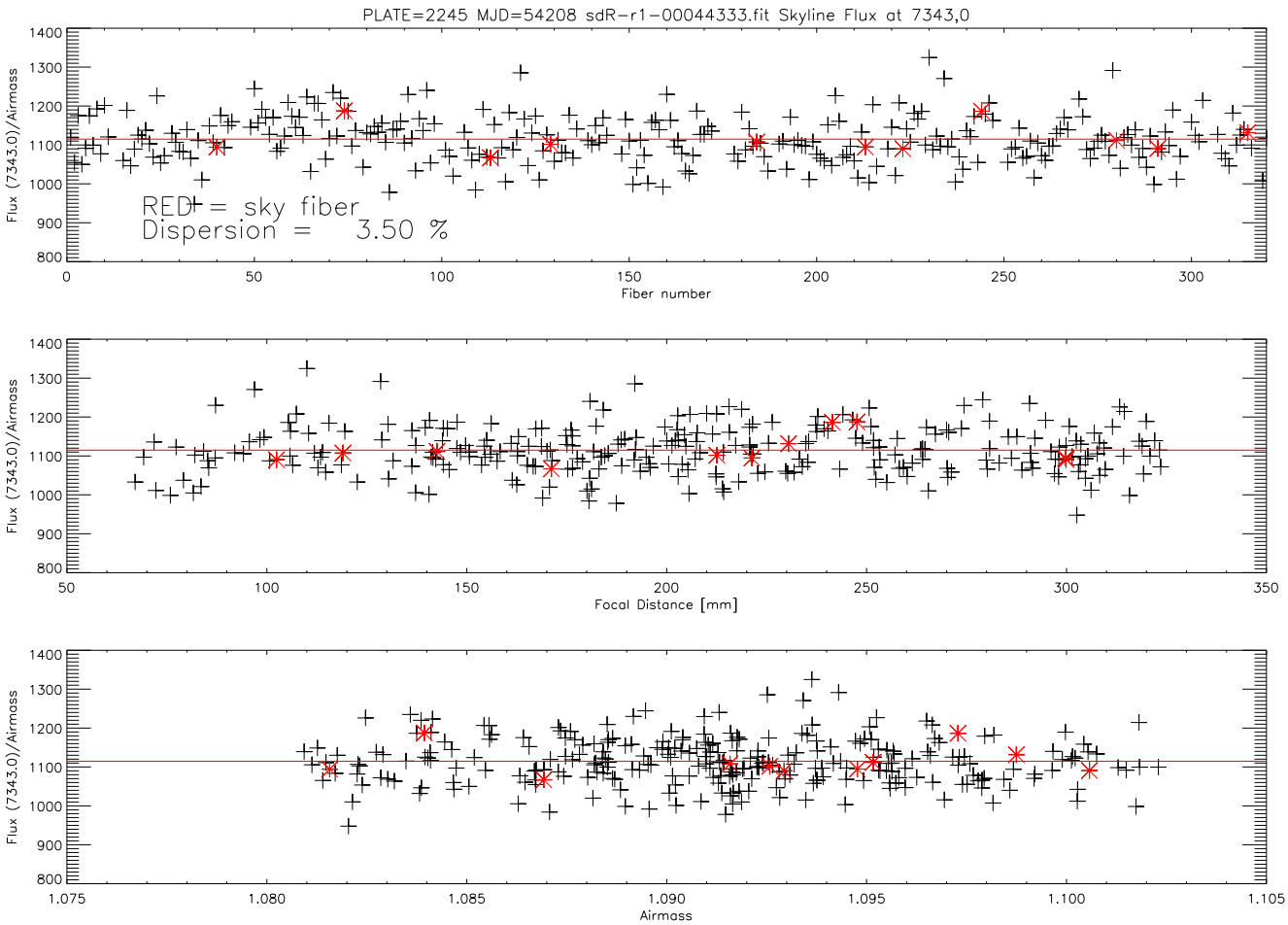

Number of sky fibers = 11
PLATE=2245 MJD=54208 sdR-r1-00044333.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

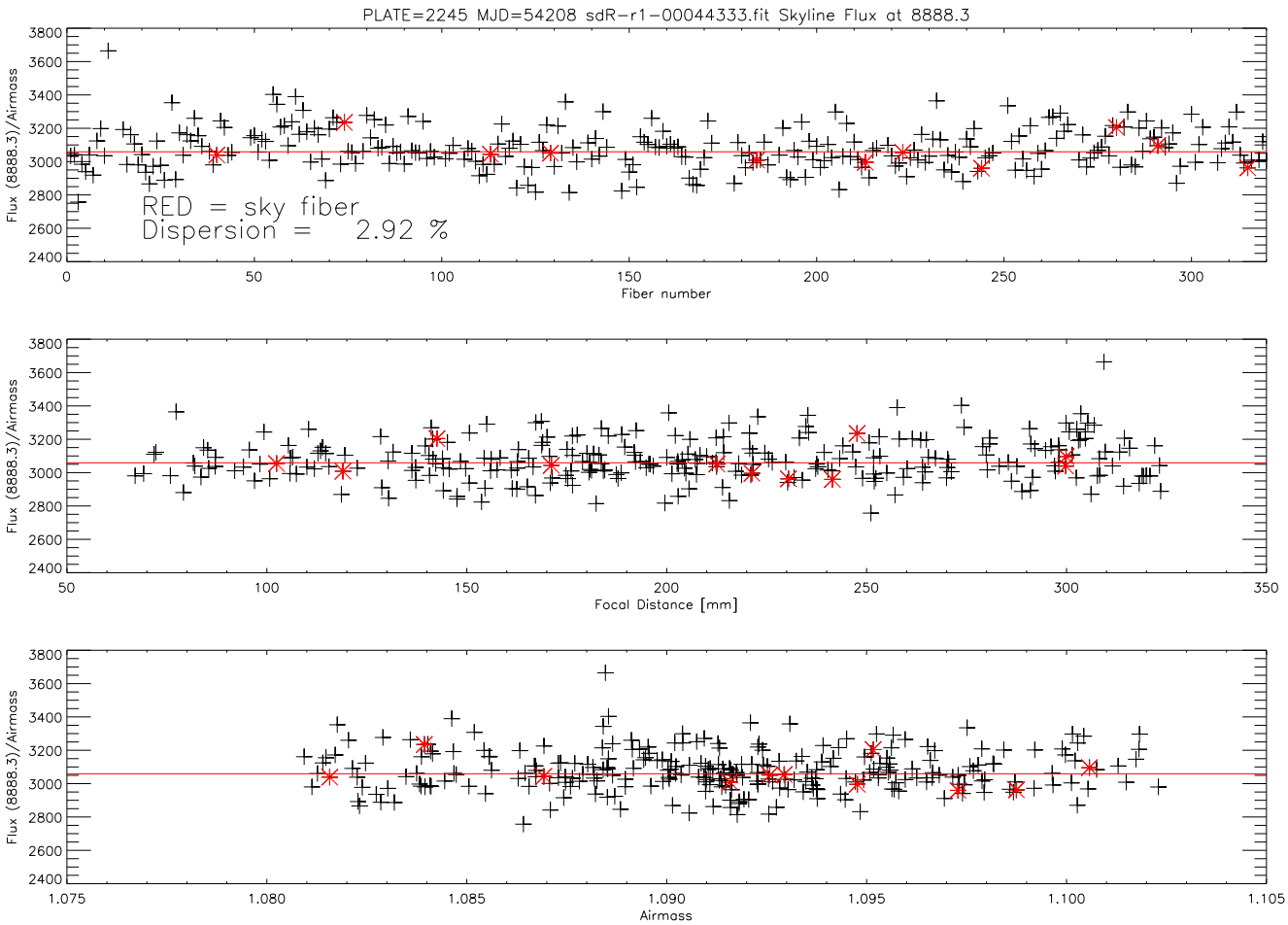

PLATE=2245 MJD=54208 sdR-r1-00044333.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

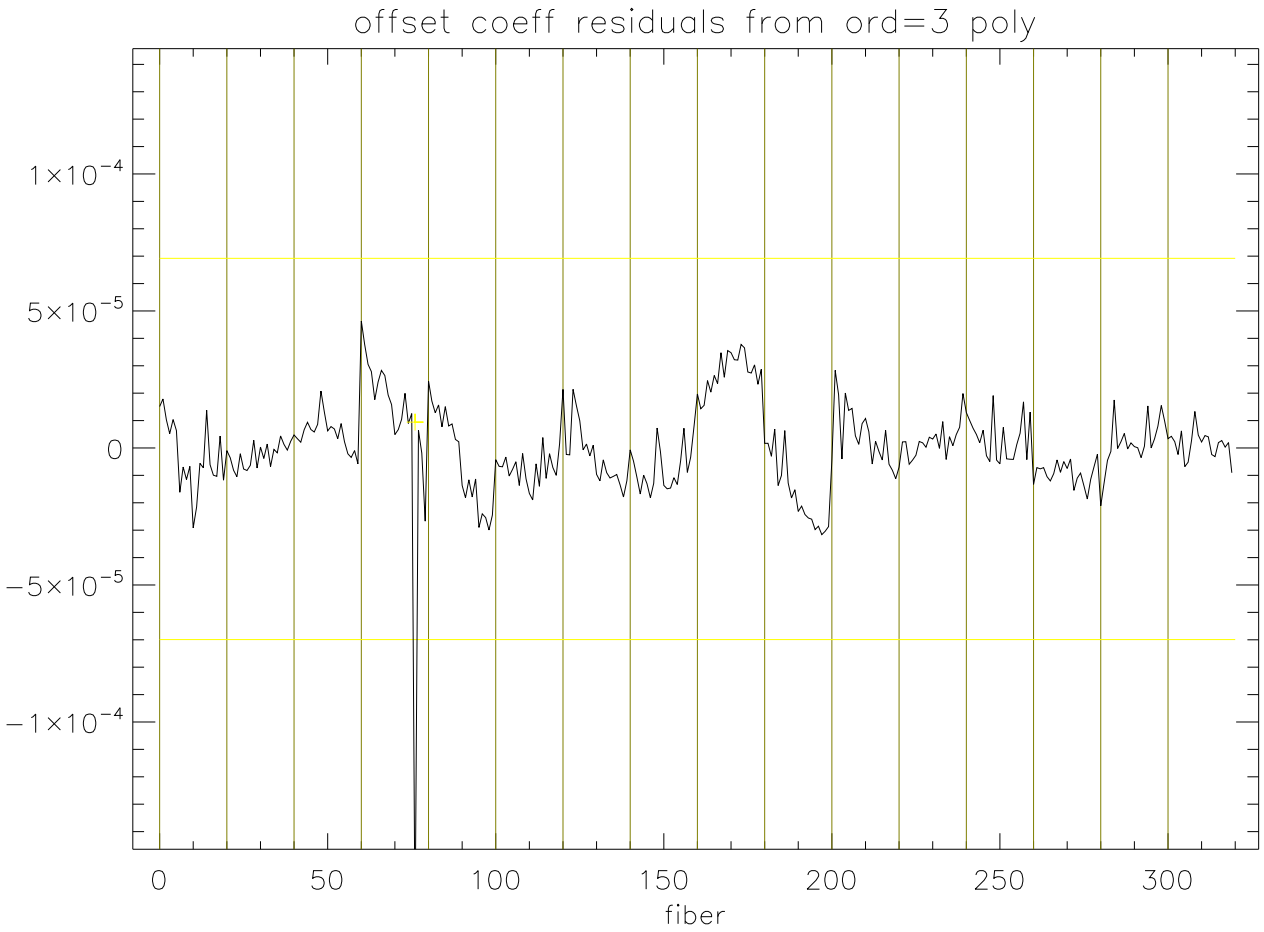

PLATE=2245 MJD=54208 sdR-r1-00044333.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

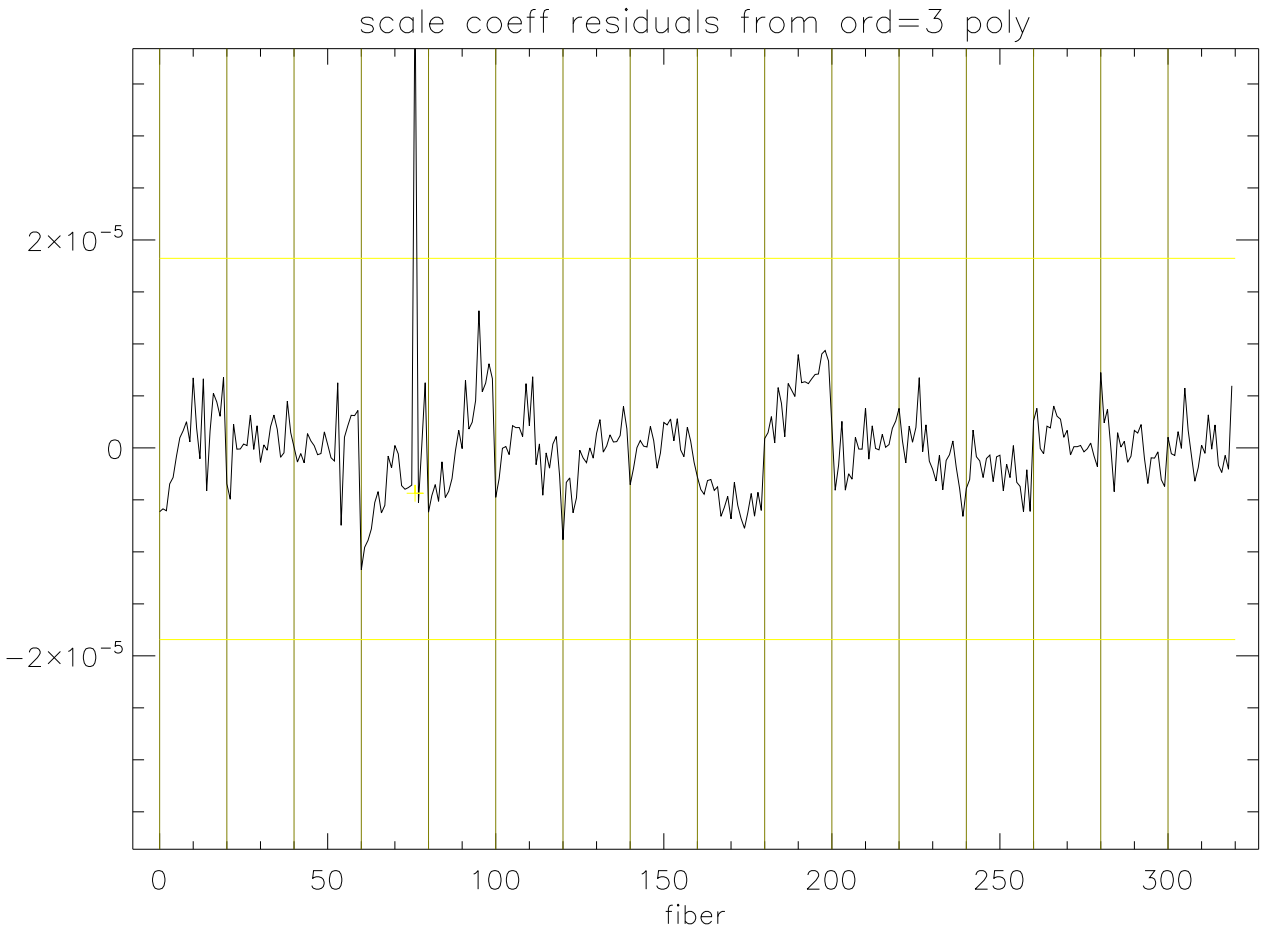

PLATE=2245 MJD=54208 sdR-r1-00044333.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

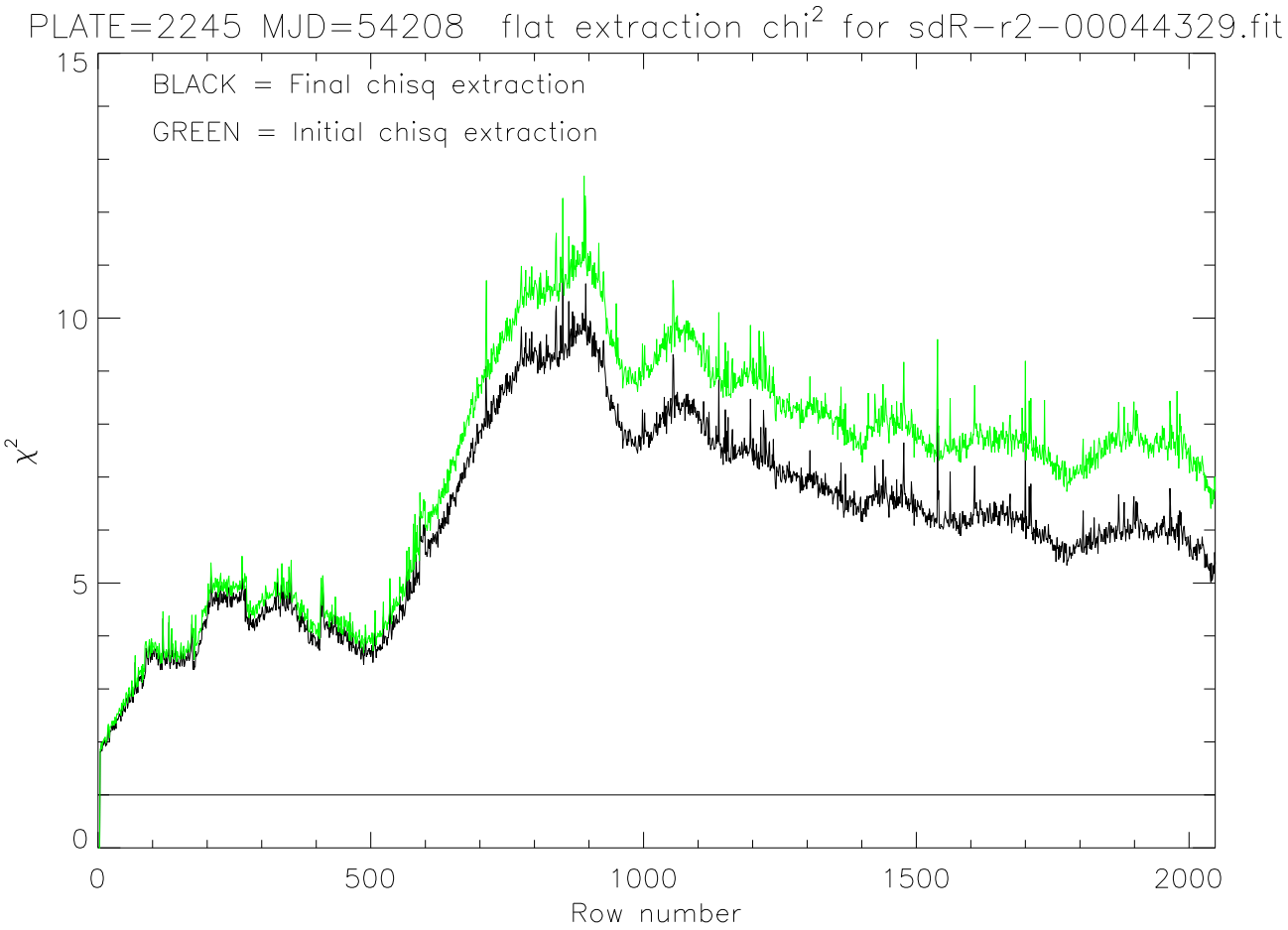

Number of sky fibers = 11
PLATE=2245 MJD=54208 sdR-r1-00044333.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

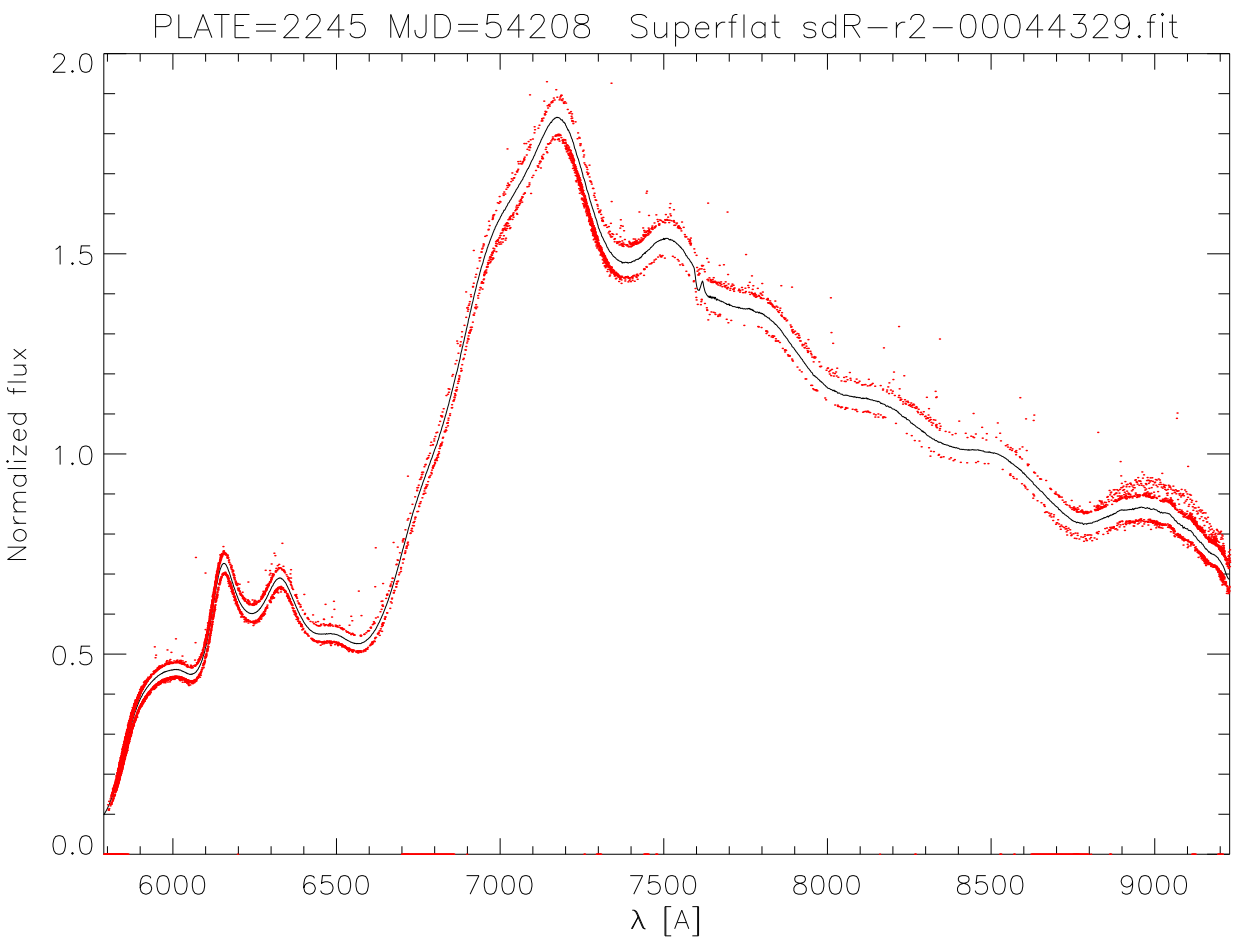

PLATE=2245 MJD=54208 sdR-r1-00044333.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.50 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

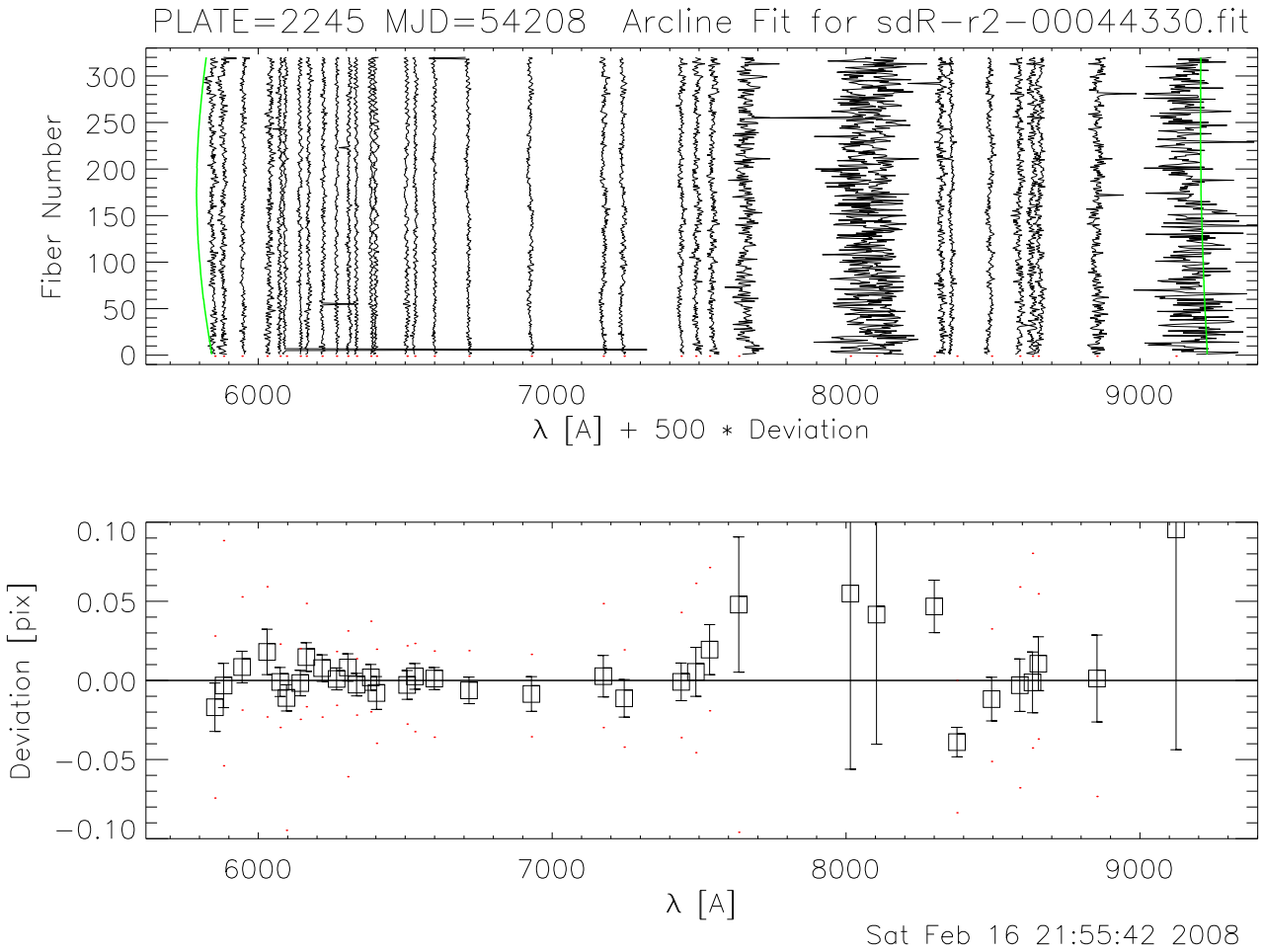

PLATE=2245 MJD=54208 sdR-r1-00044333.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.92 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

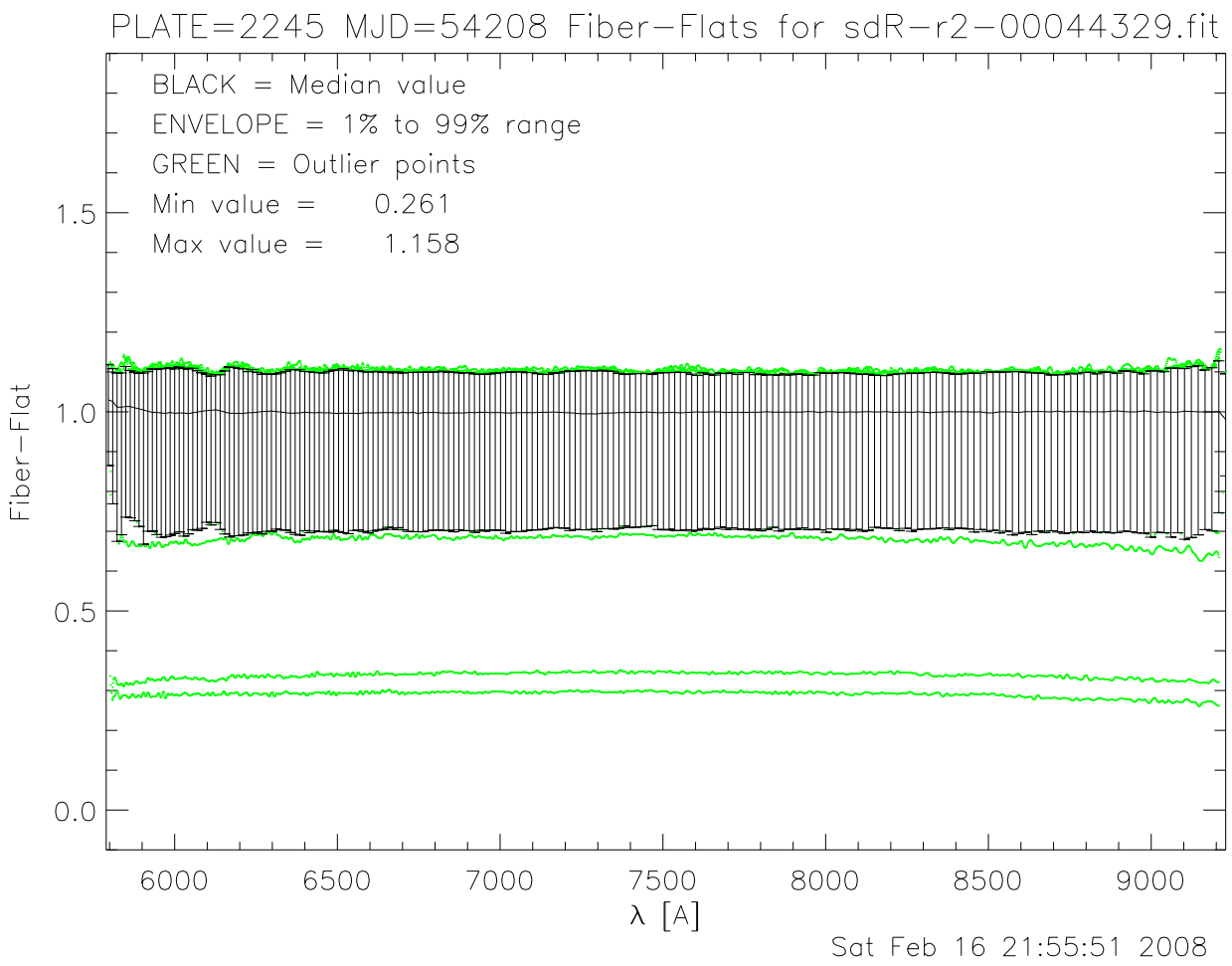

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

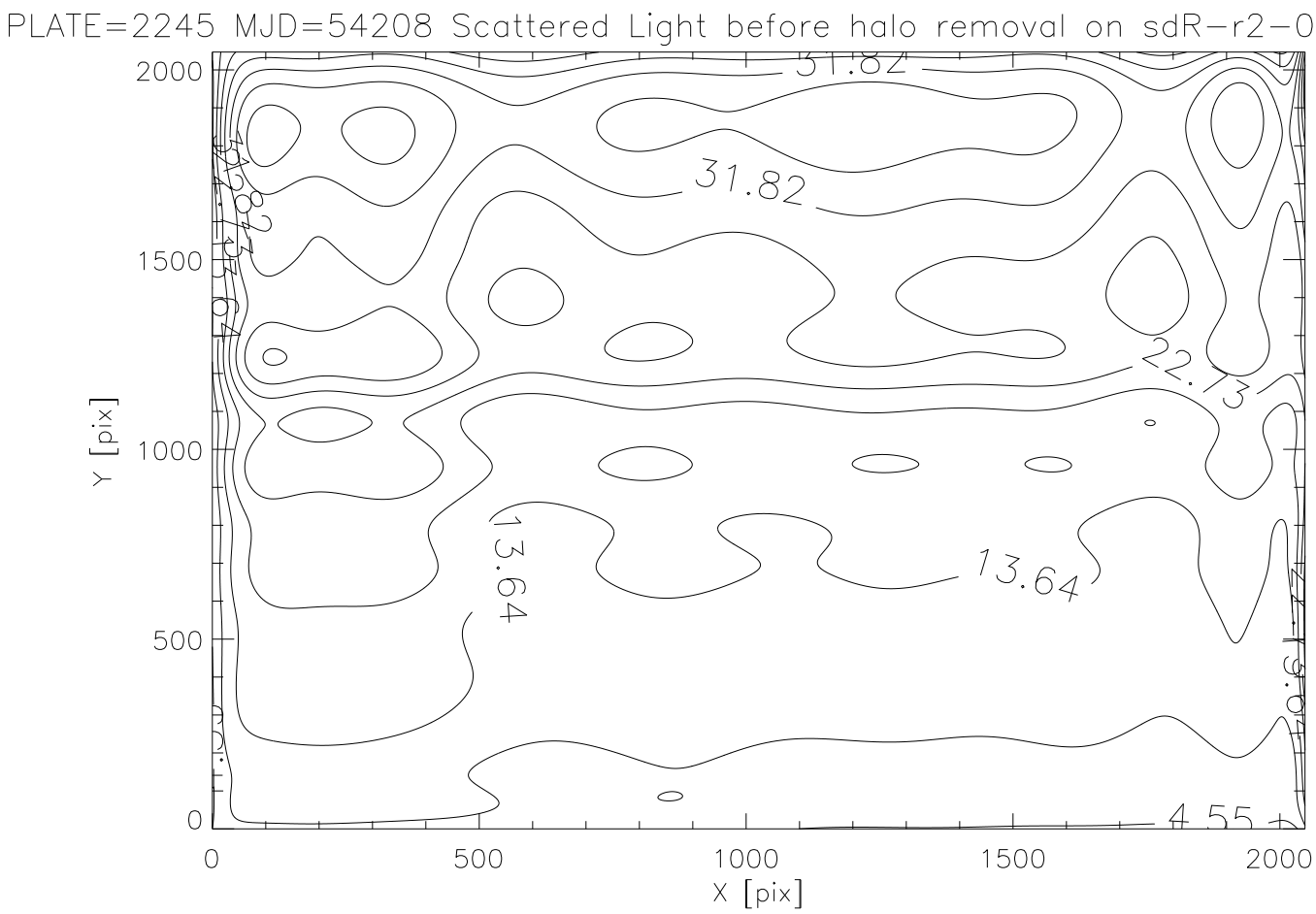

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

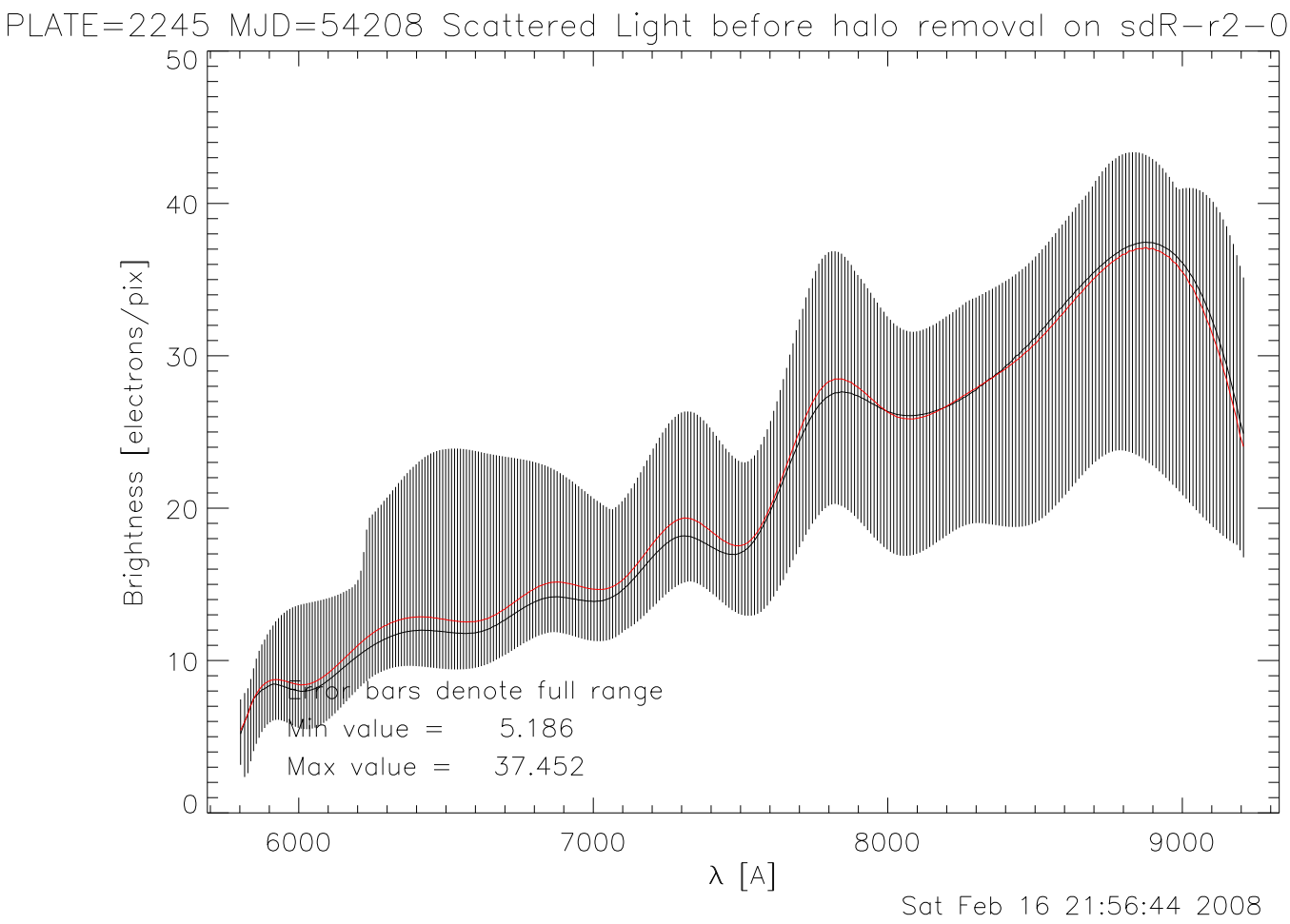

PLATE=2245 MJD=54208 flat extraction chi^2 for sdR−r2−00044329.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

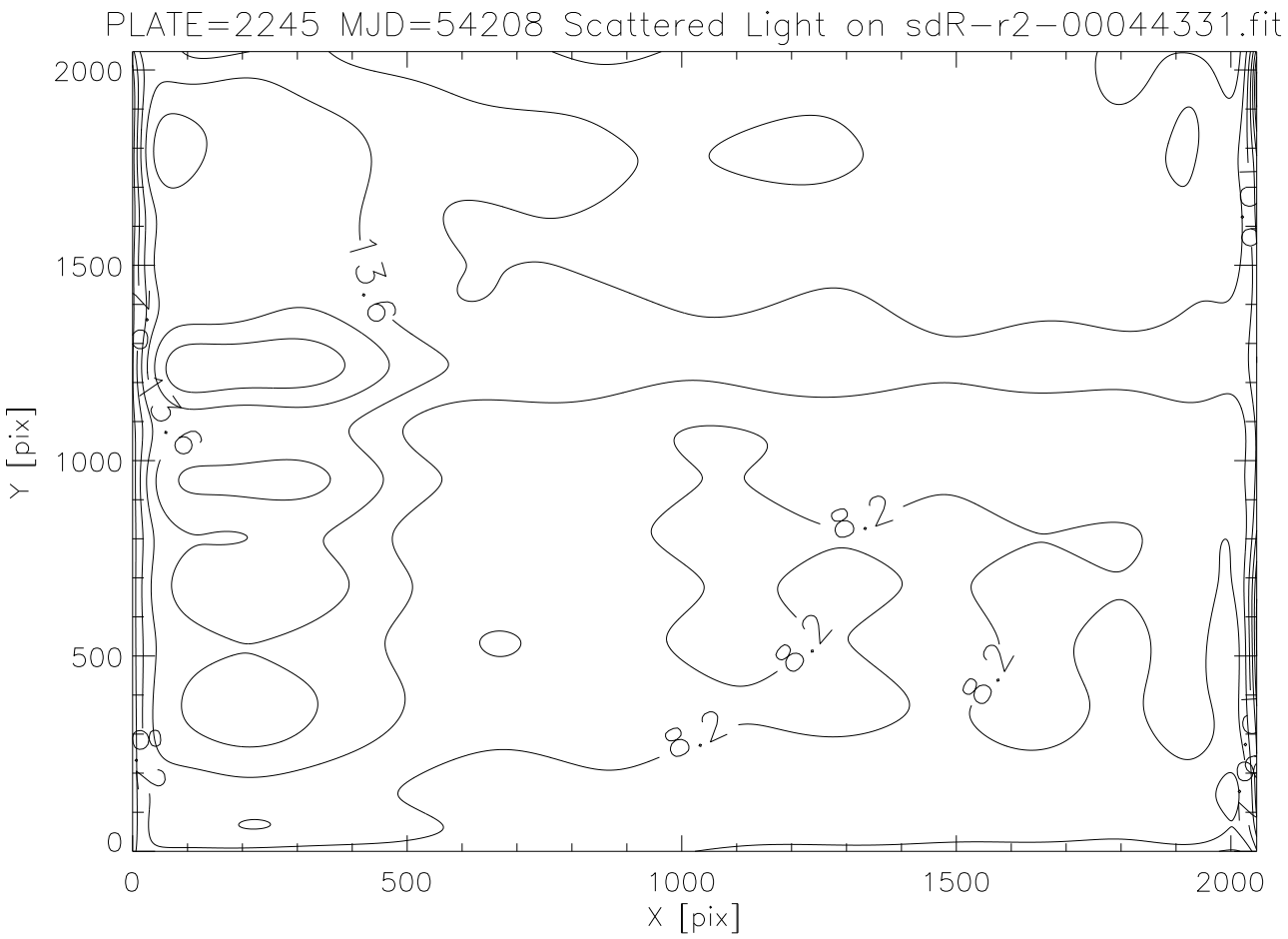

PLATE=2245 MJD=54208 Superflat sdR-r2-00044329.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

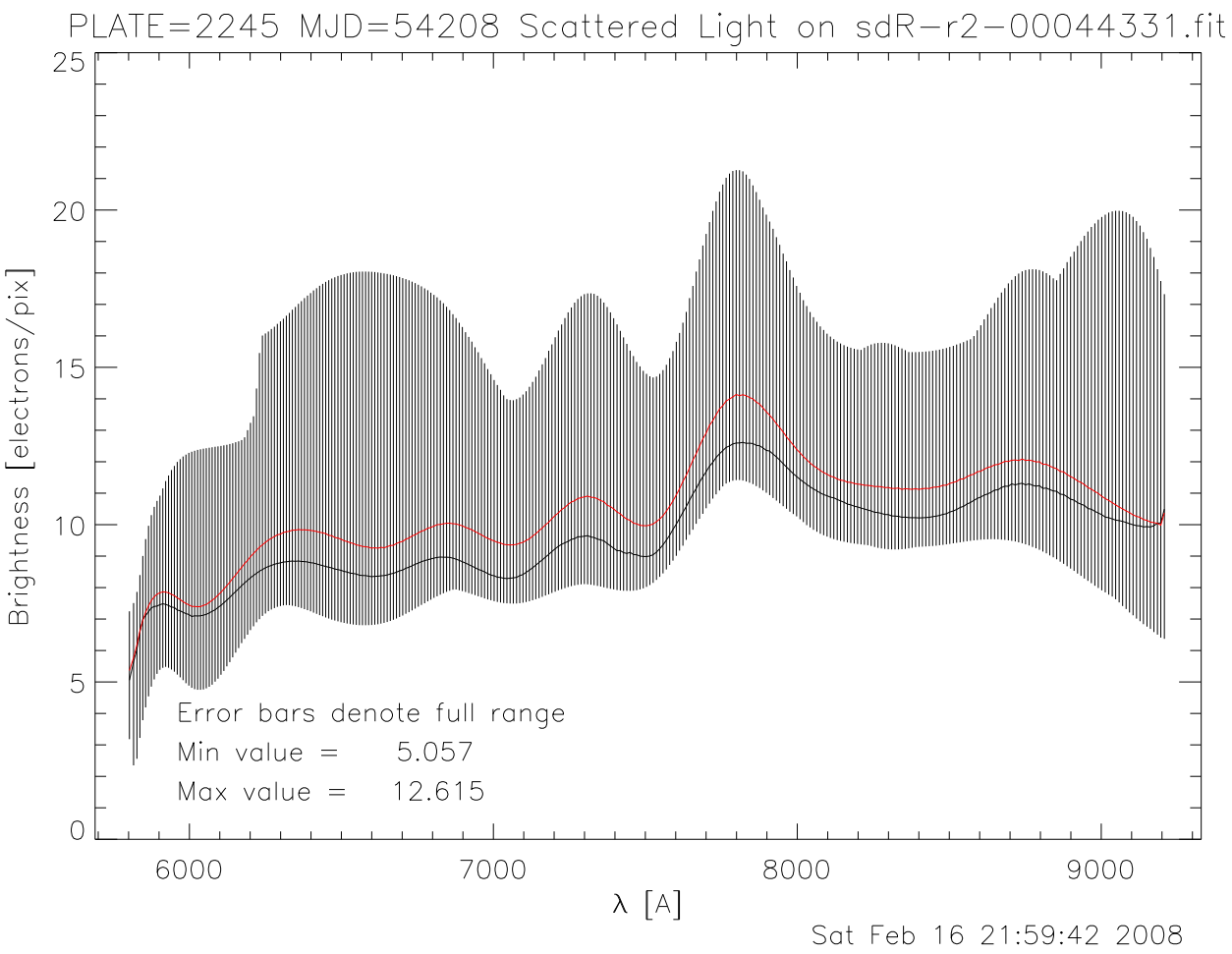

PLATE=2245 MJD=54208 Arcline Fit for sdR-r2-00044330.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 16 21:55:42 2008

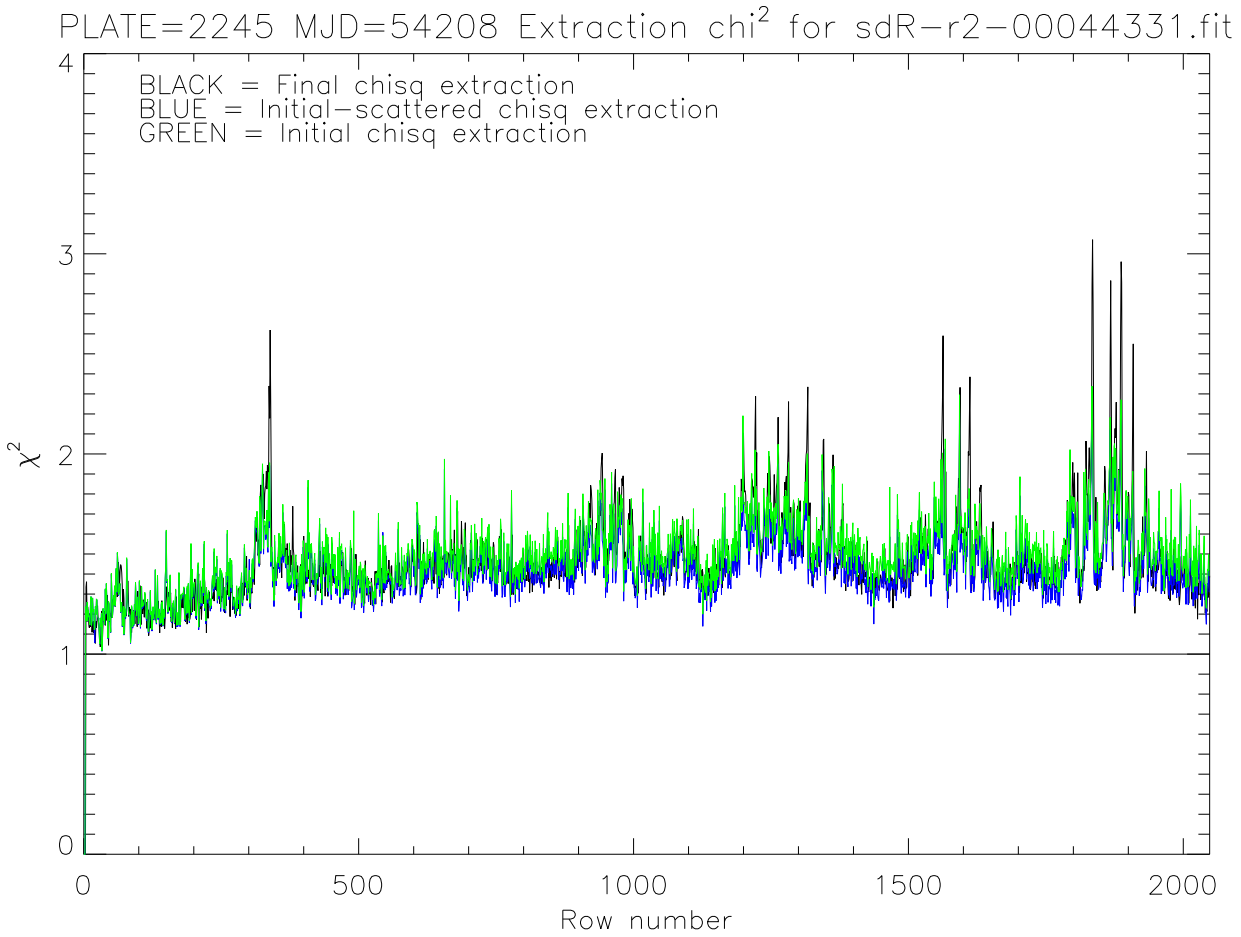

PLATE=2245 MJD=54208 Fiber−Flats for sdR−r2−00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.261
Max value = 1.158
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 21:55:51 2008

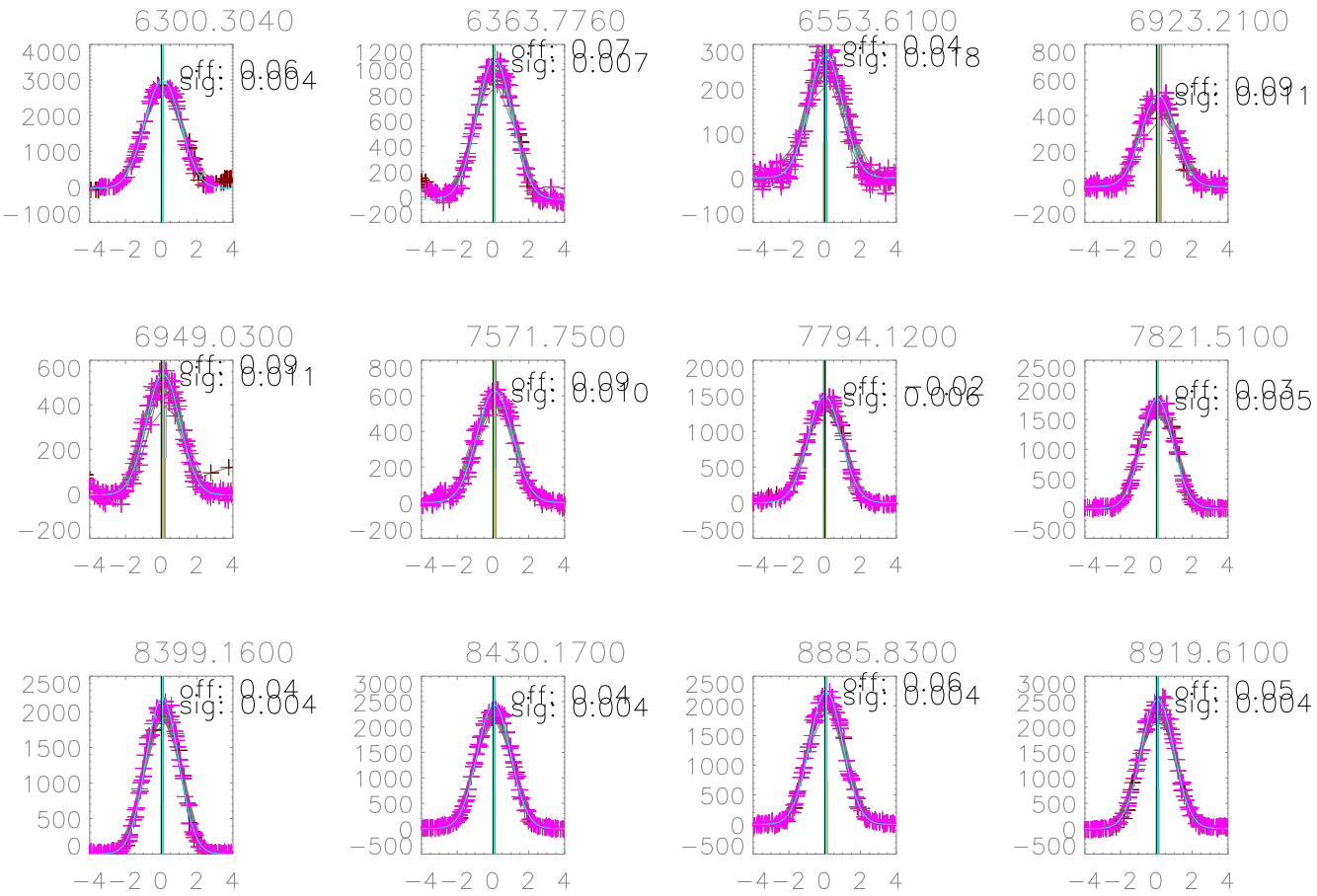

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r2-00044331.fi
31.82
31.82
22.13
13.64
13.64
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

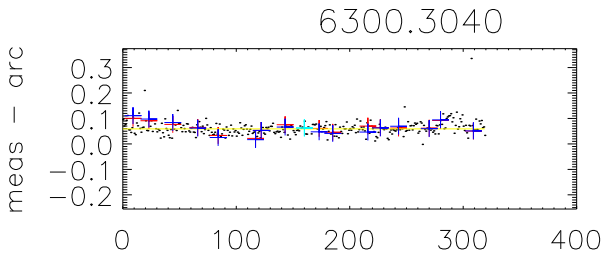

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r2-00044331.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.186
Max value = 37.452
Sat Feb 16 21:56:44 2008

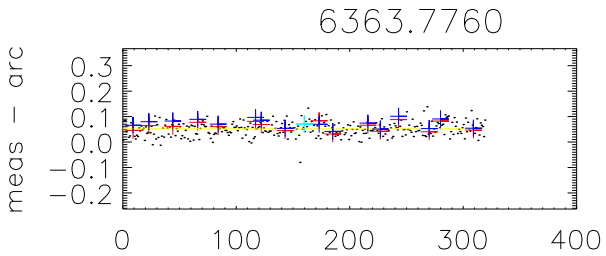

PLATE=2245 MJD=54208 Scattered Light on sdR-r2-00044331.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
13.6
13.6
13.6
8.2
8.2
8.2
8.2
8.2
8.2
0

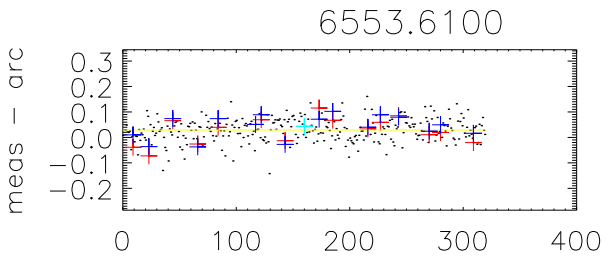

PLATE=2245 MJD=54208 Scattered Light on sdR-r2-00044331.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.057
Max value = 12.615
Sat Feb 16 21:59:42 2008

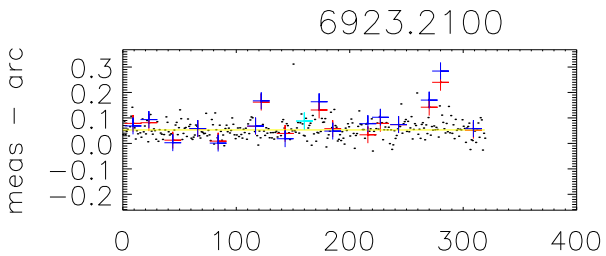

PLATE=2245 MJD=54208 Extraction chi^2 for sdR−r2−00044331.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

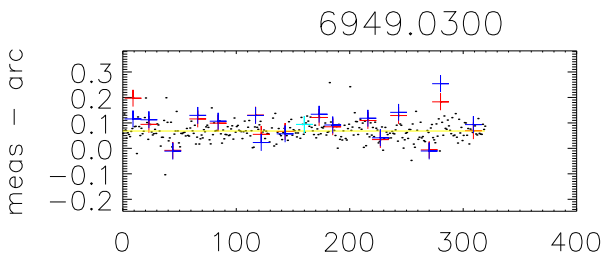

6300.3040
off: 0.06
sig: 0.004
6363.7760
off: 0.07
sig: 0.007
6553.6100
off: 0.04
sig: 0.018
6923.2100
off: 0.09
sig: 0.011
6949.0300
off: 0.09
sig: 0.011
7571.7500
off: 0.09
sig: 0.010
7794.1200
off: -0.02
sig: 0.006
7821.5100
off: 0.03
sig: 0.005
8399.1600
off: 0.04
sig: 0.004
8430.1700
off: 0.04
sig: 0.004
8885.8300
off: 0.06
sig: 0.004
8919.6100
off: 0.05
sig: 0.004

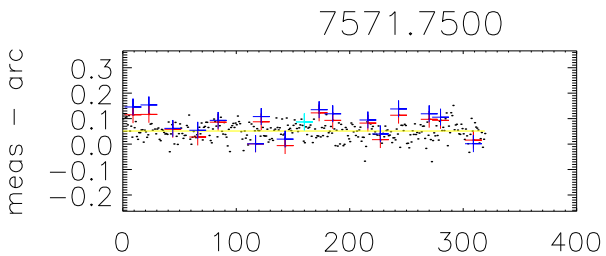

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

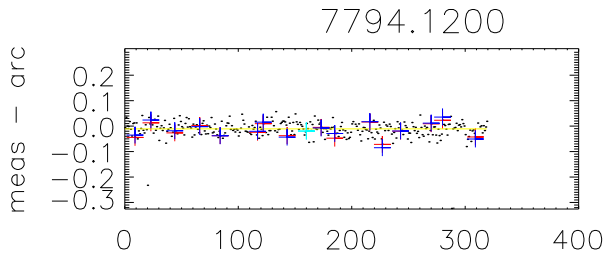

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

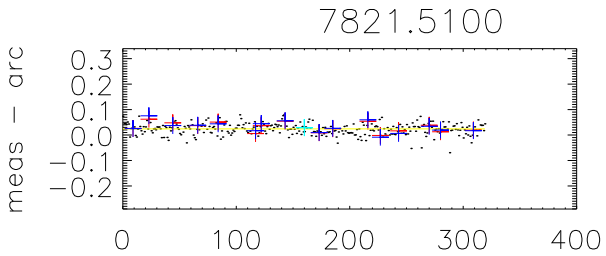

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

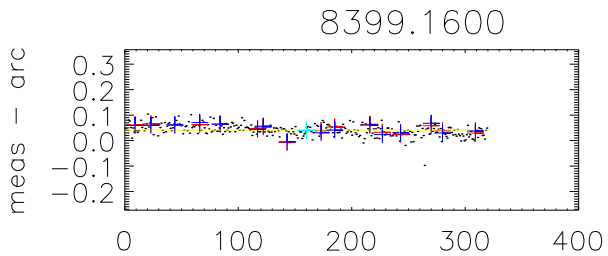

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

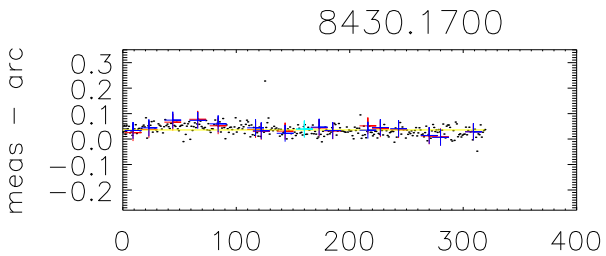

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

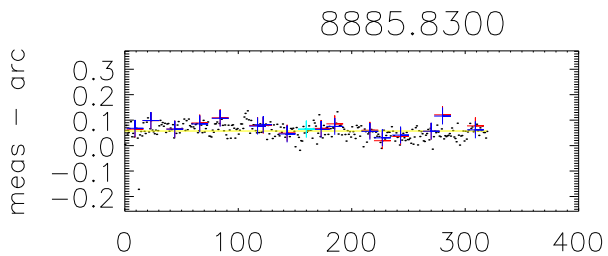

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

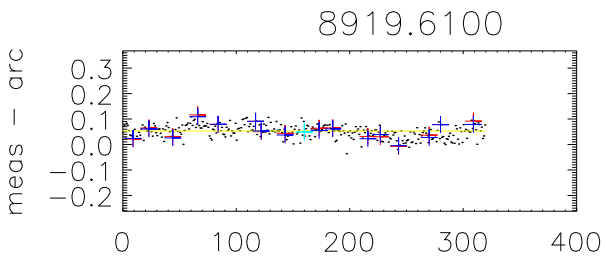

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

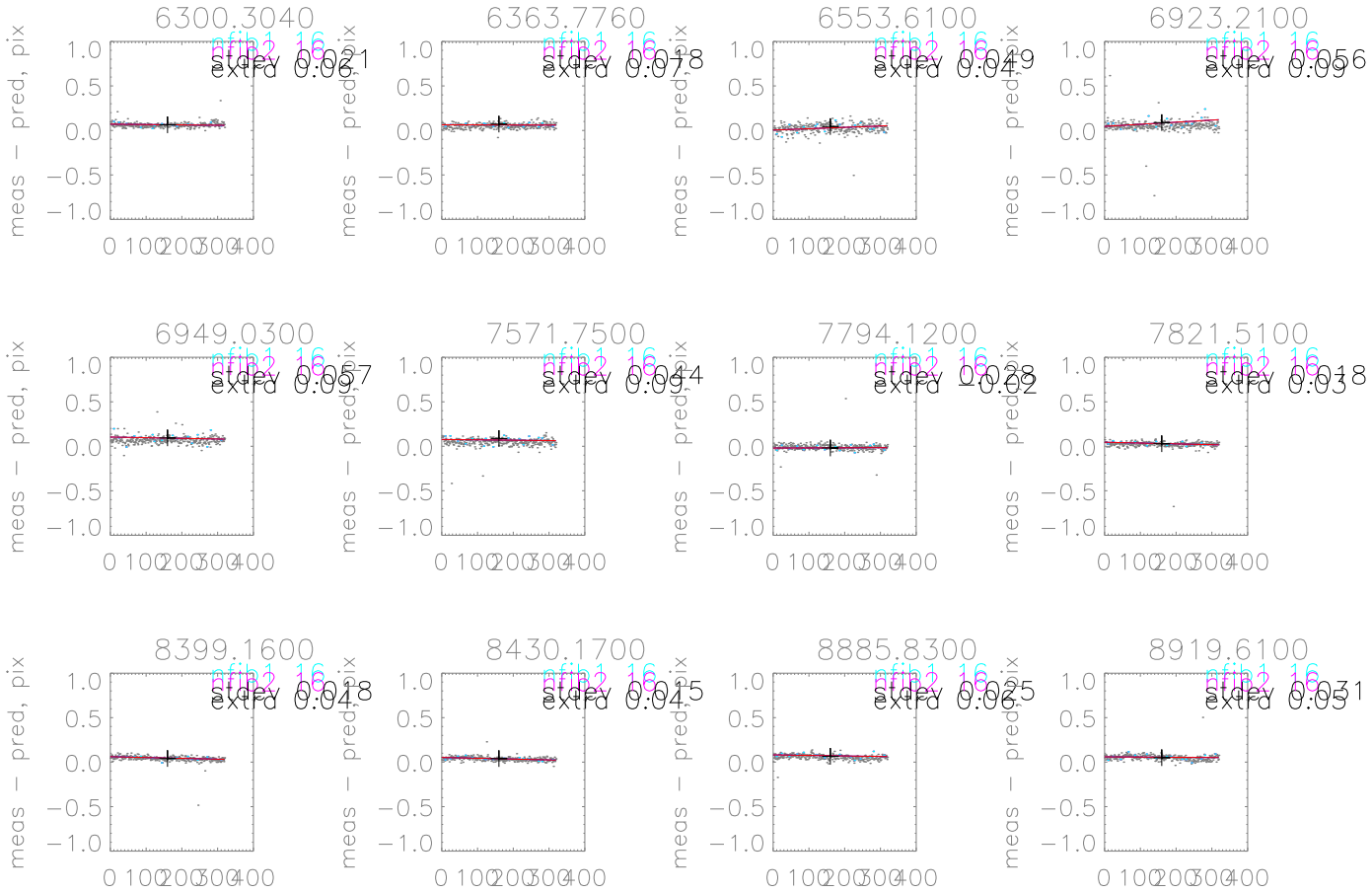

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

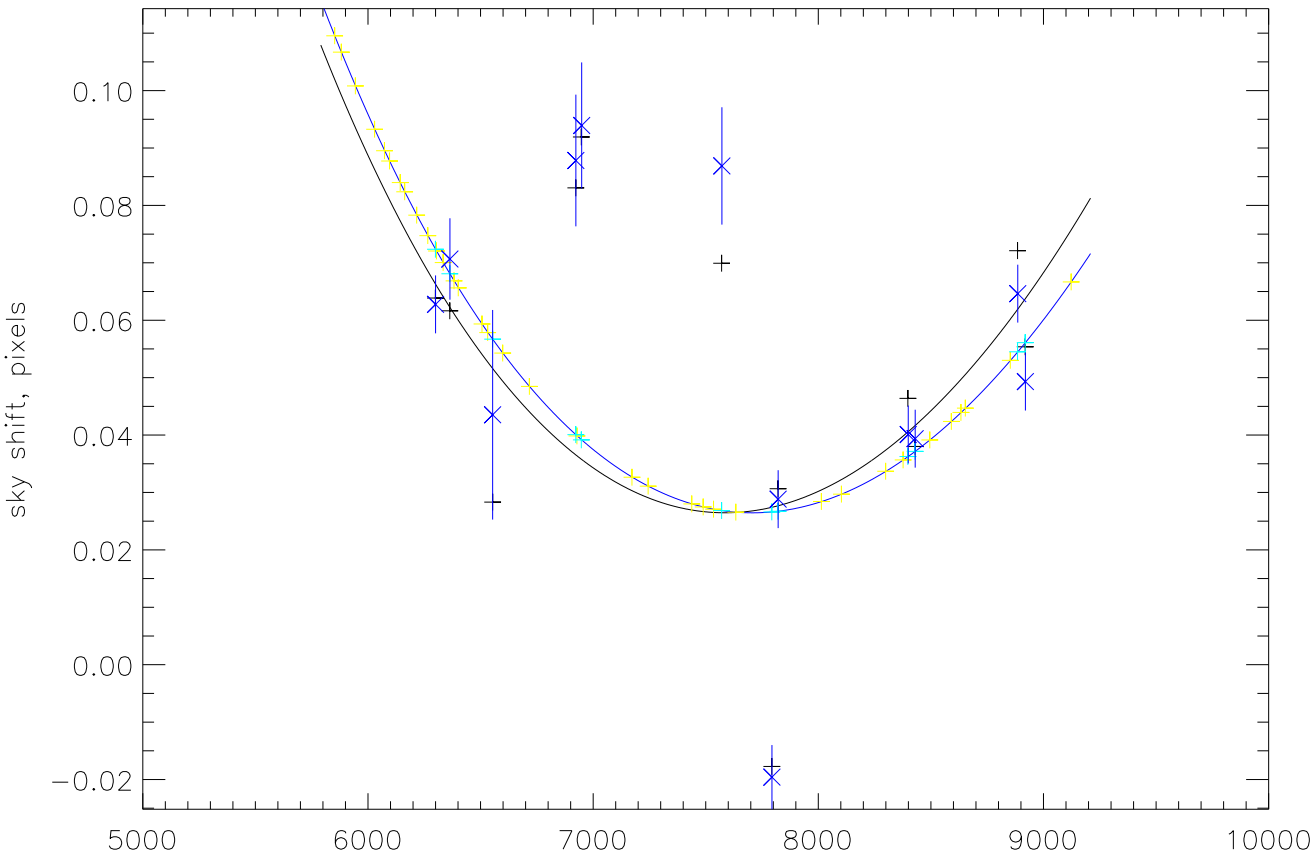

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

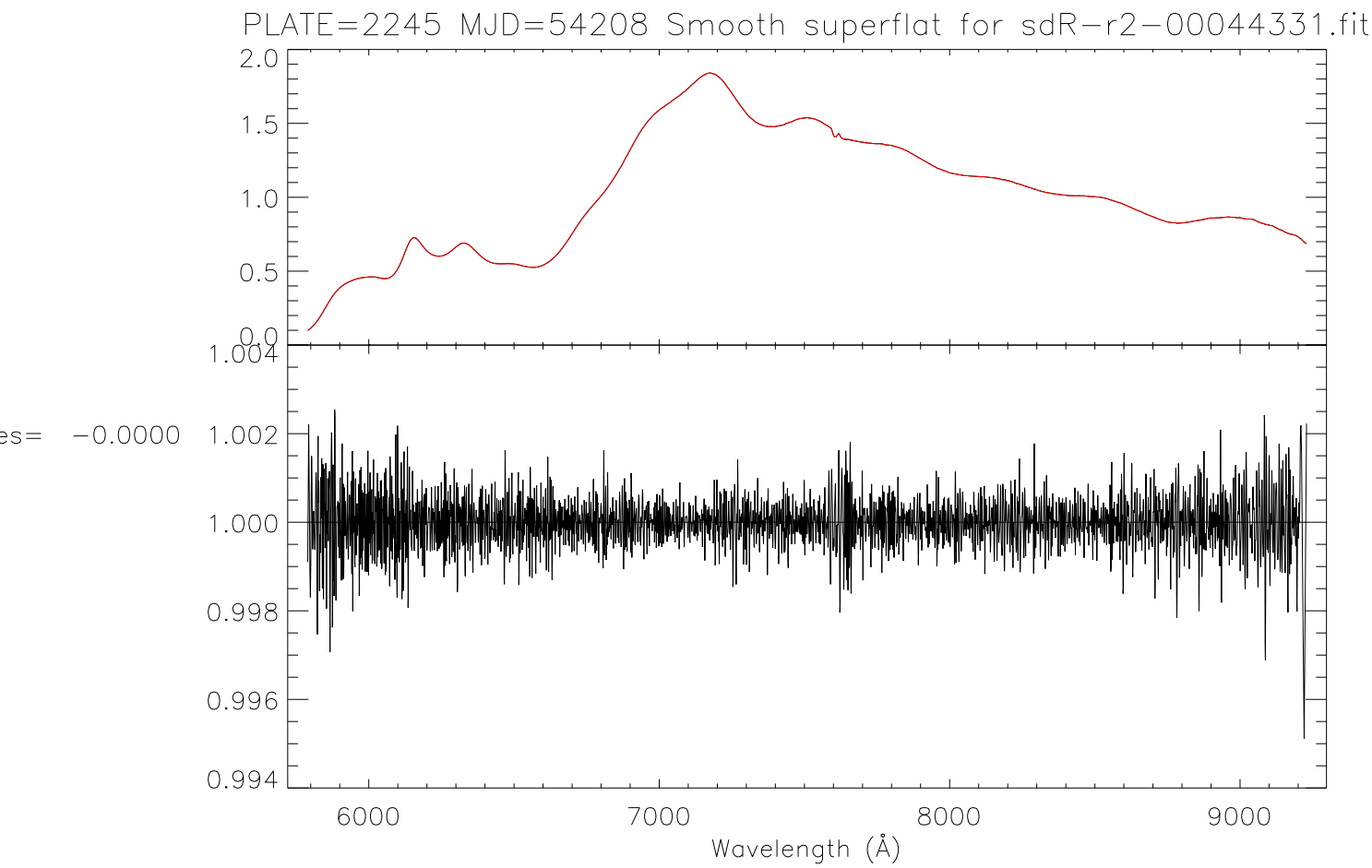

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

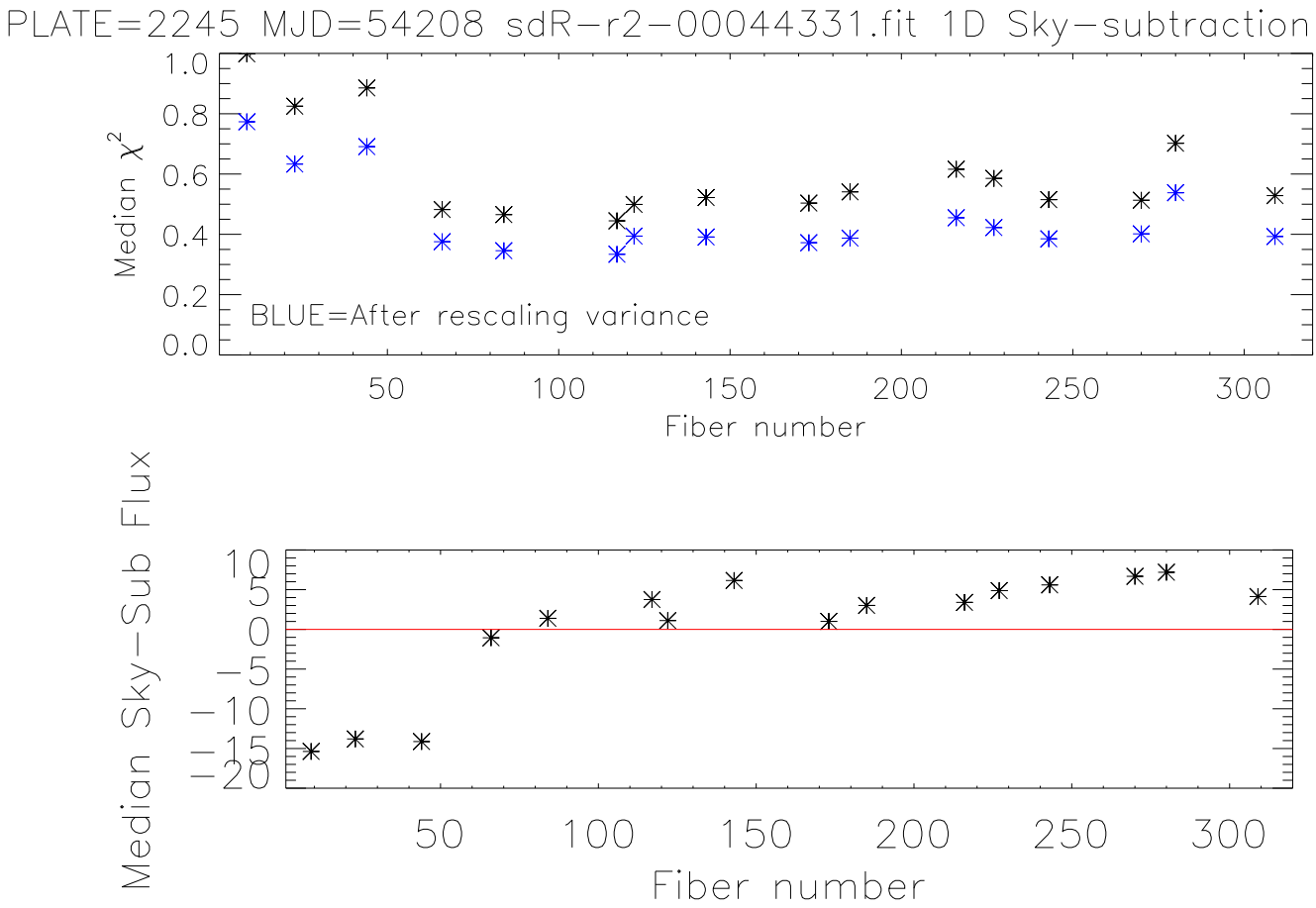

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

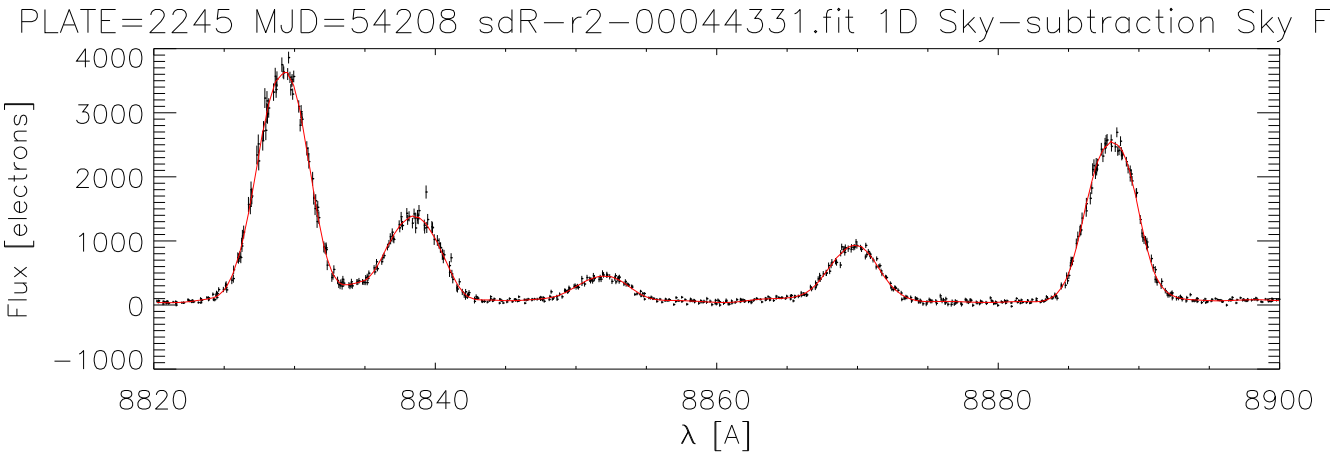

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

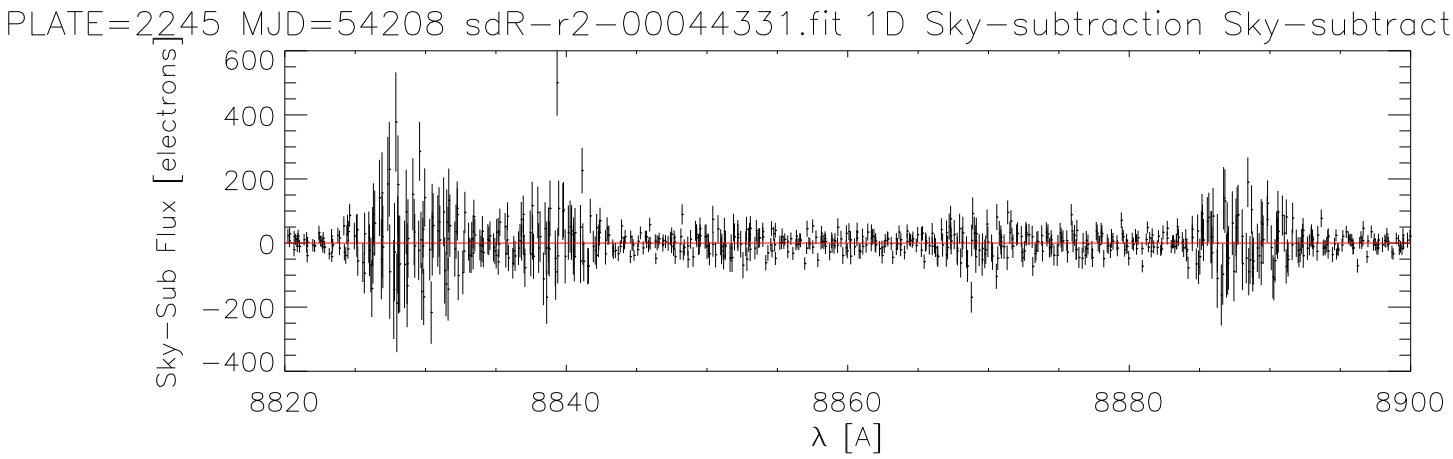

6300.3040
stdev 0.021
extra 0.06
6363.7760
stdev 0.018
extra 0.07
6553.6100
stdev 0.049
extra 0.04
6923.2100
stdev 0.056
extra 0.09
6949.0300
stdev 0.057
extra 0.09
7571.7500
stdev 0.044
extra 0.09
7794.1200
stdev 0.038
extra −0.02
7821.5100
stdev 0.018
extra 0.03
8399.1600
stdev 0.018
extra 0.04
8430.1700
stdev 0.015
extra 0.04
8885.8300
stdev 0.025
extra 0.06
8919.6100
stdev 0.031
extra 0.05
meas − pred, pix
mfbx1 16
mfbx2 16

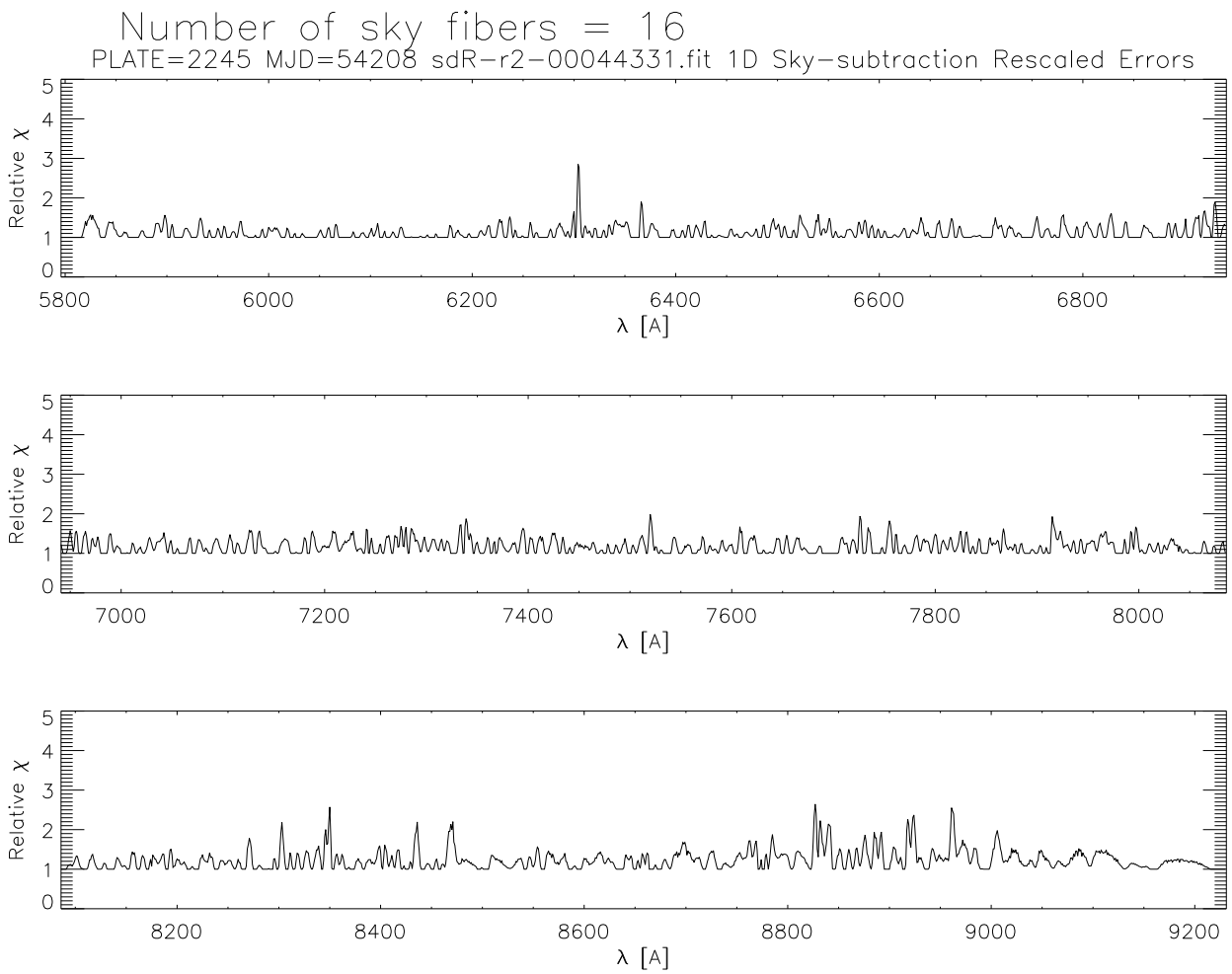

sky shift, pixels
0.10
0.08
0.06
0.04
0.02
0.00
−0.02
5000
6000
7000
8000
9000
10000

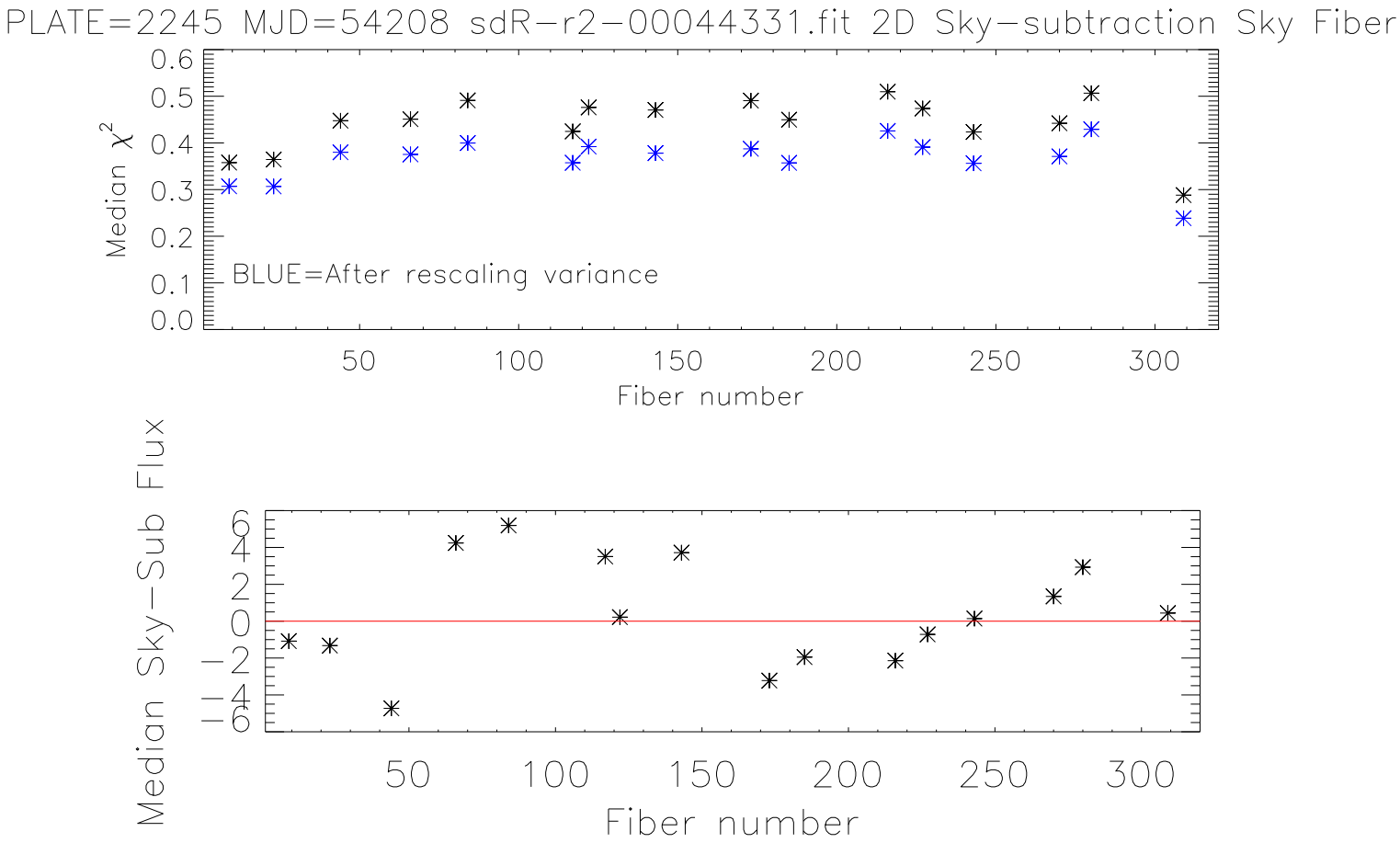

PLATE=2245 MJD=54208 Smooth superflat for sdR-r2-00044331.fit
2.0
1.5
1.0
0.5
0.0
1.004
es= −0.0000
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

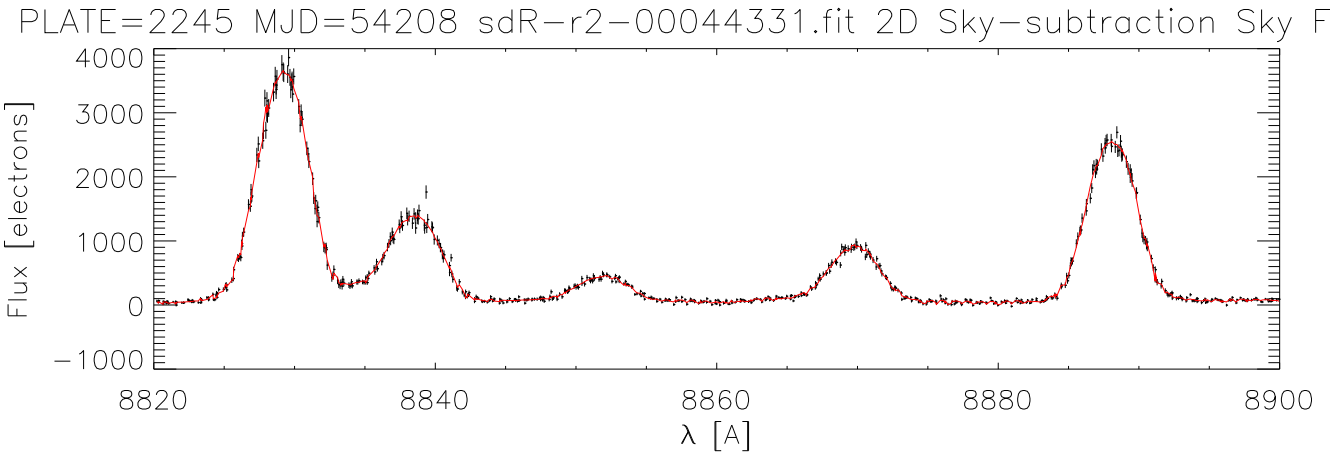

PLATE=2245 MJD=54208 sdR-r2-00044331.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

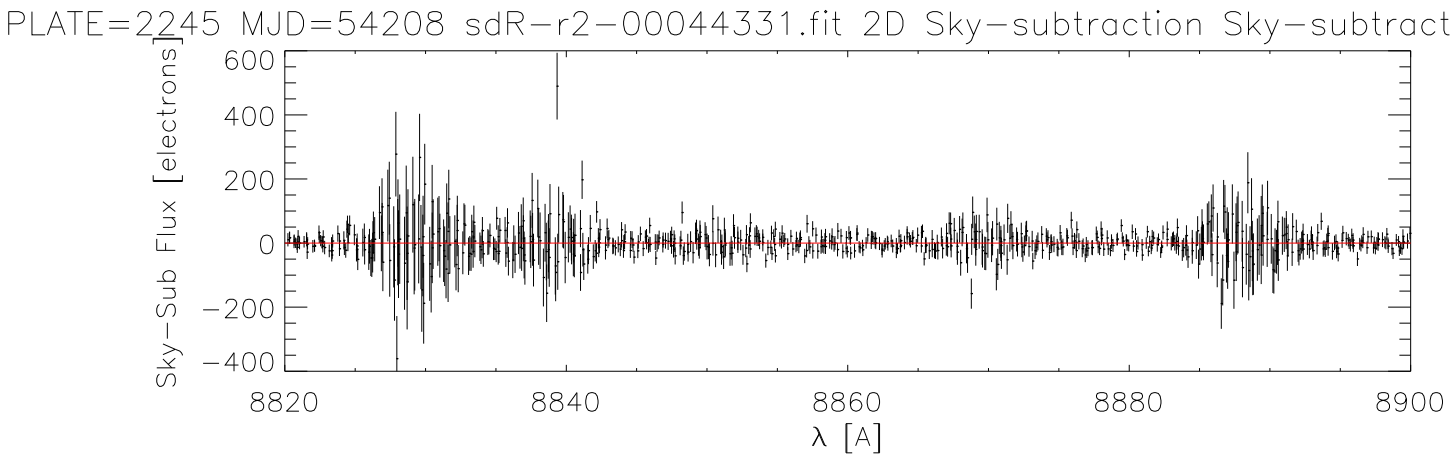

PLATE=2245 MJD=54208 sdR-r2-00044331.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

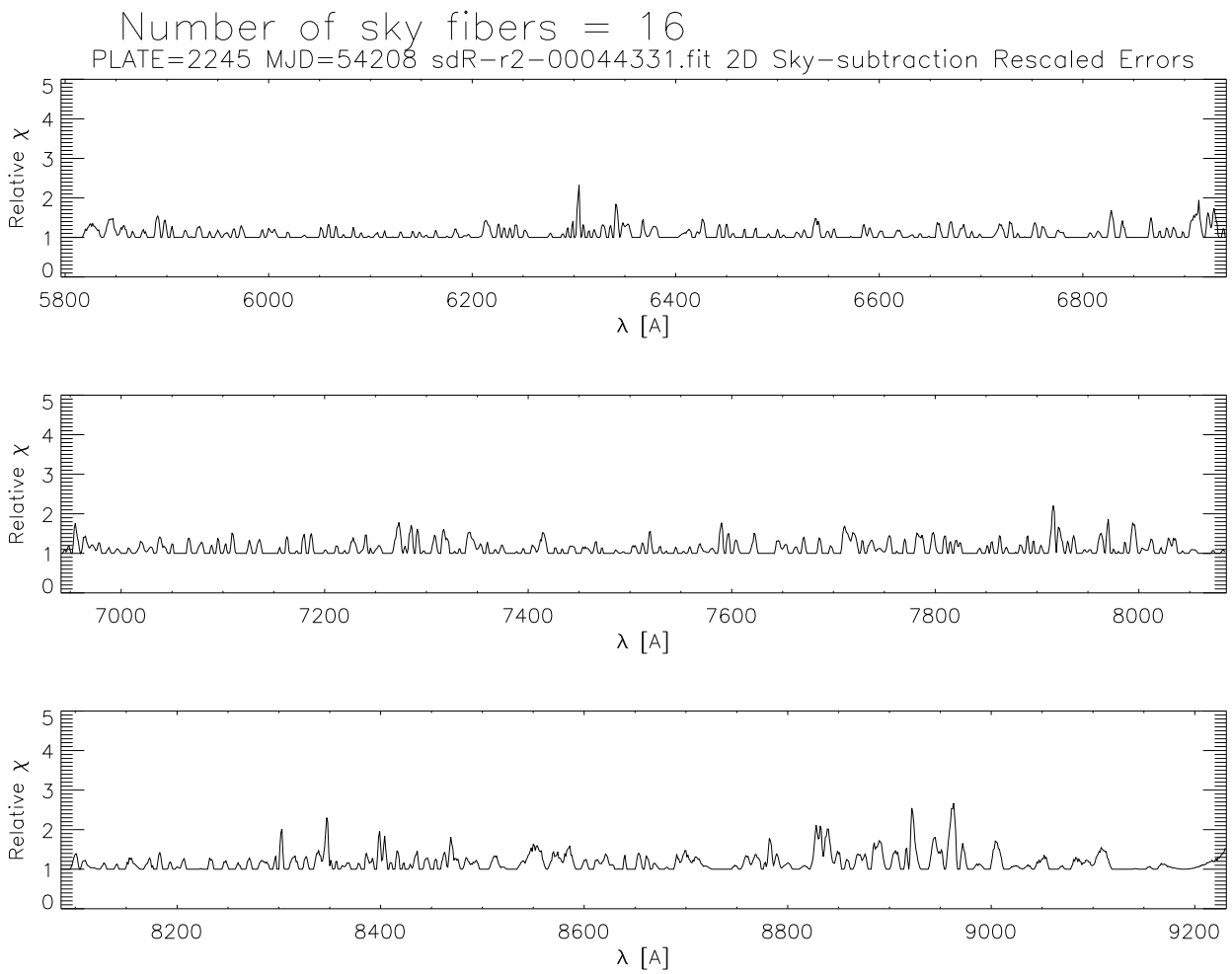

PLATE=2245 MJD=54208 sdR-r2-00044331.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

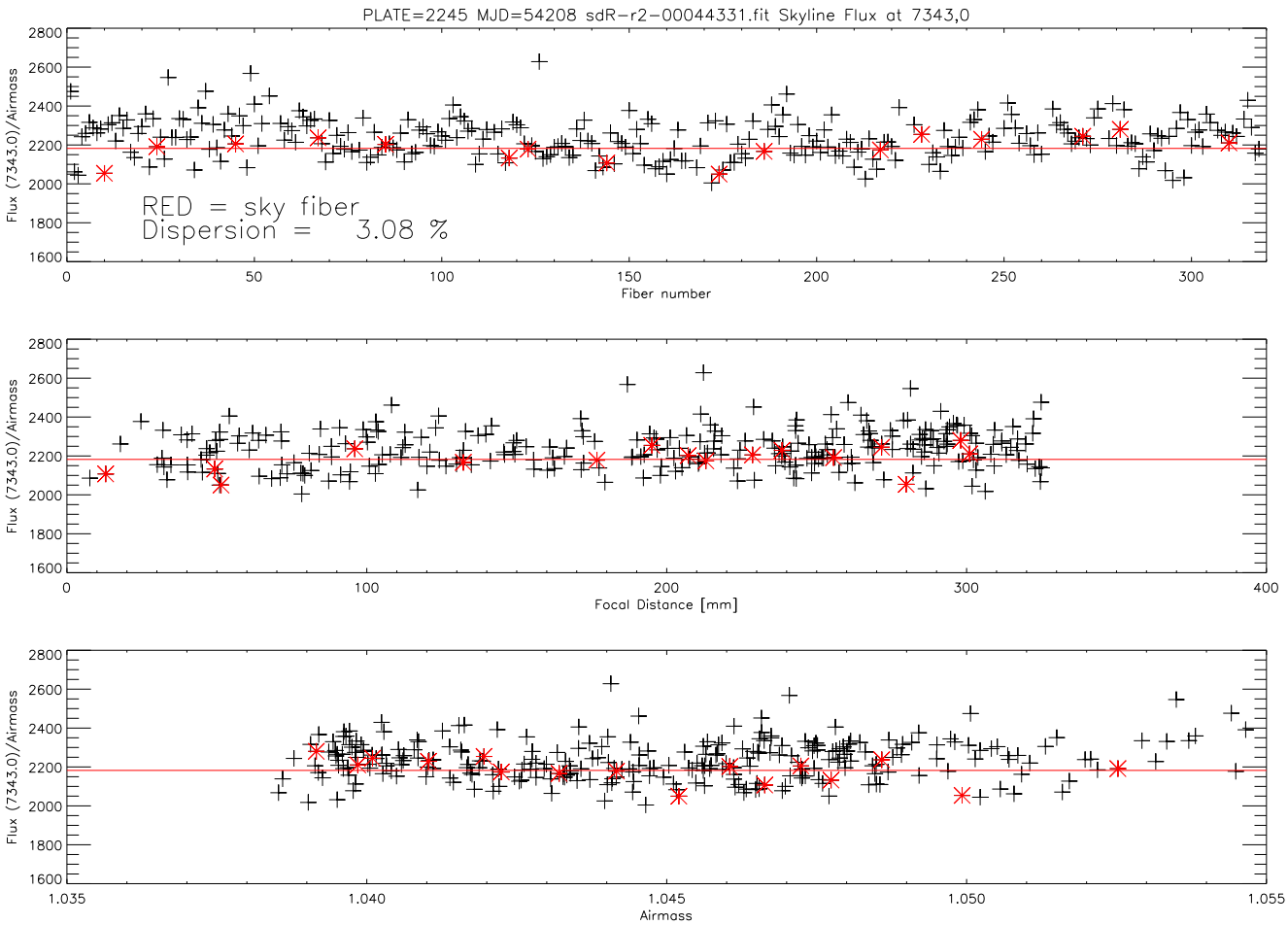

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-r2-00044331.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

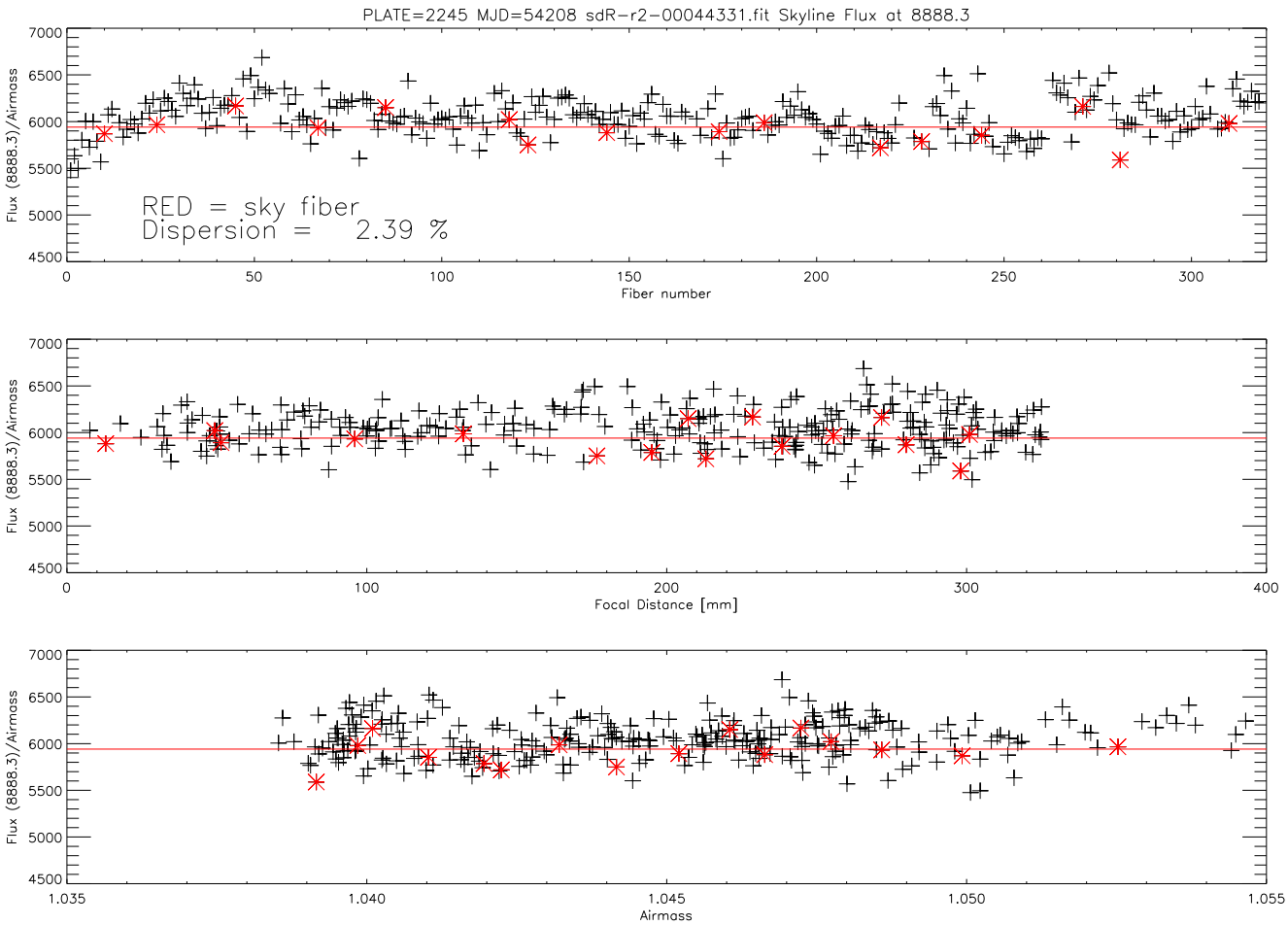

PLATE=2245 MJD=54208 sdR-r2-00044331.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

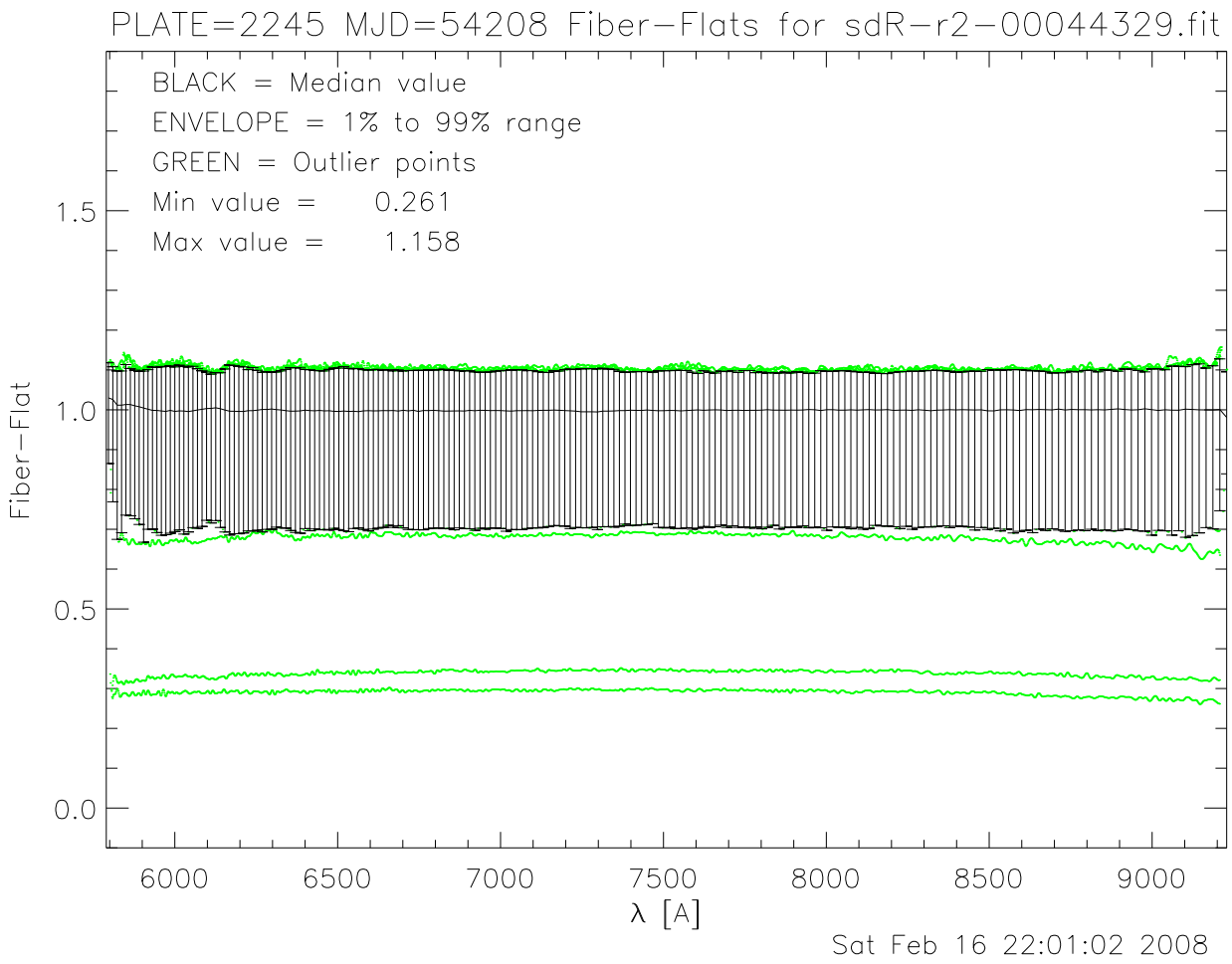

PLATE=2245 MJD=54208 sdR-r2-00044331.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

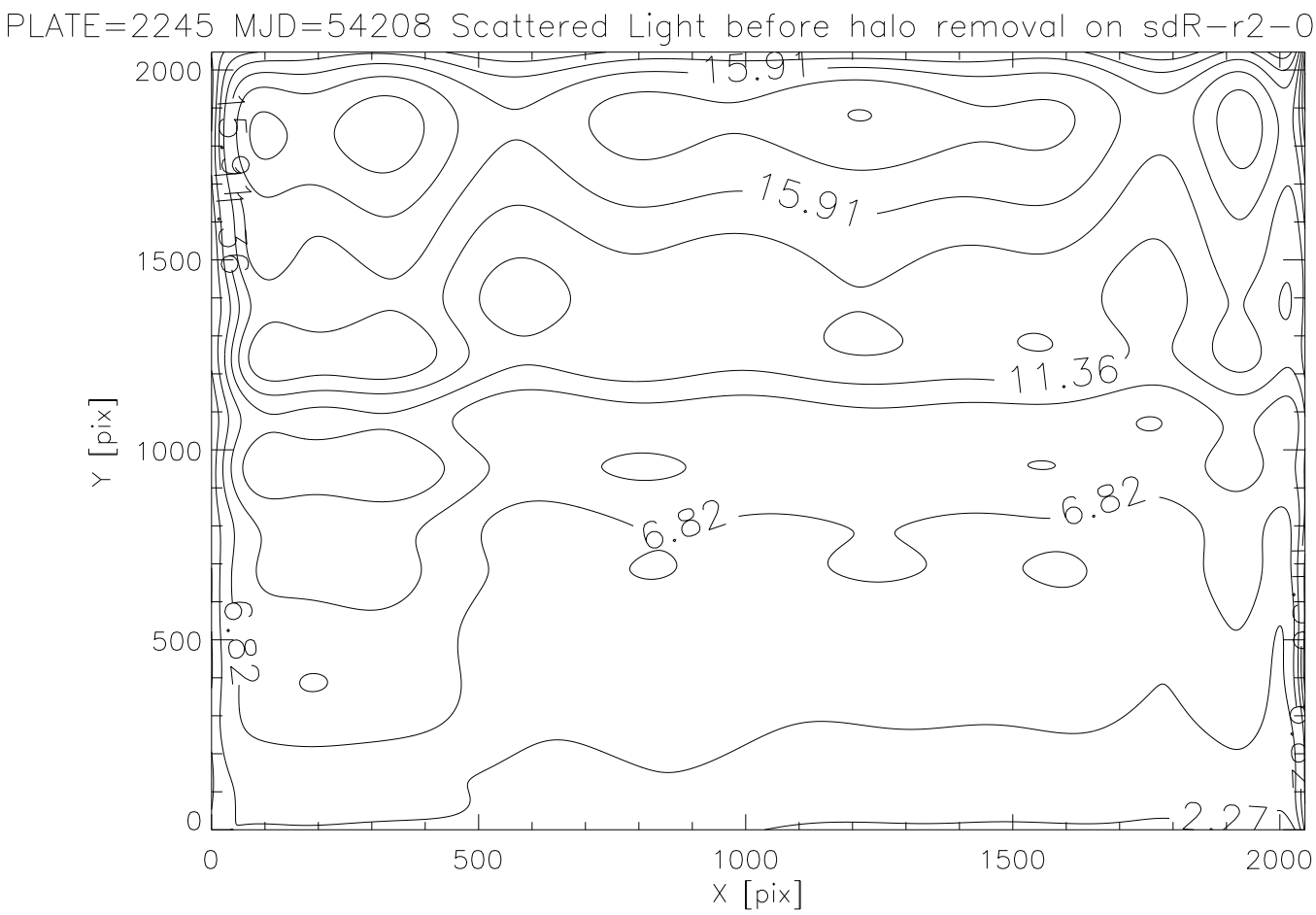

PLATE=2245 MJD=54208 sdR-r2-00044331.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

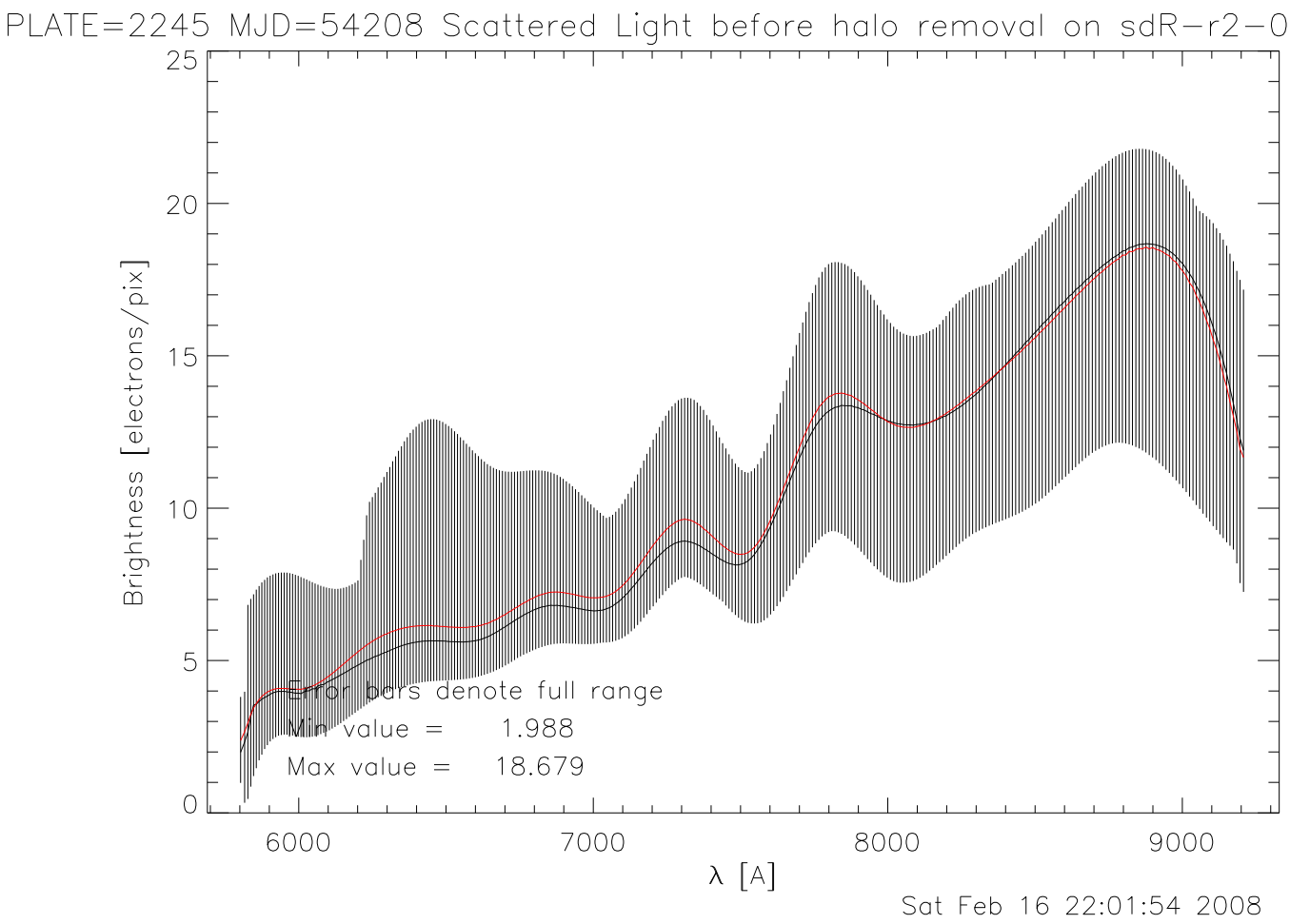

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-r2-00044331.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

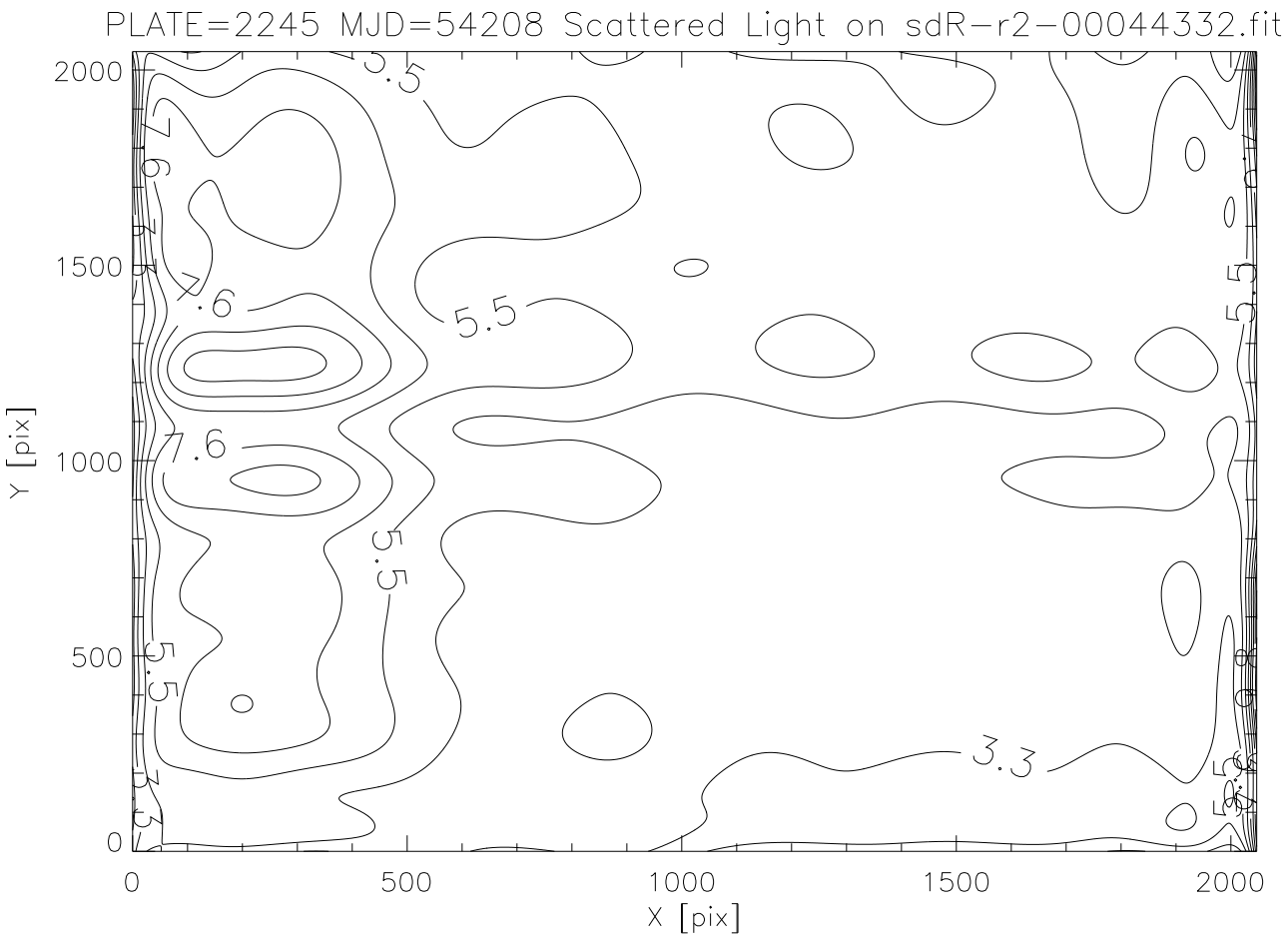

PLATE=2245 MJD=54208 sdR-r2-00044331.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.08 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

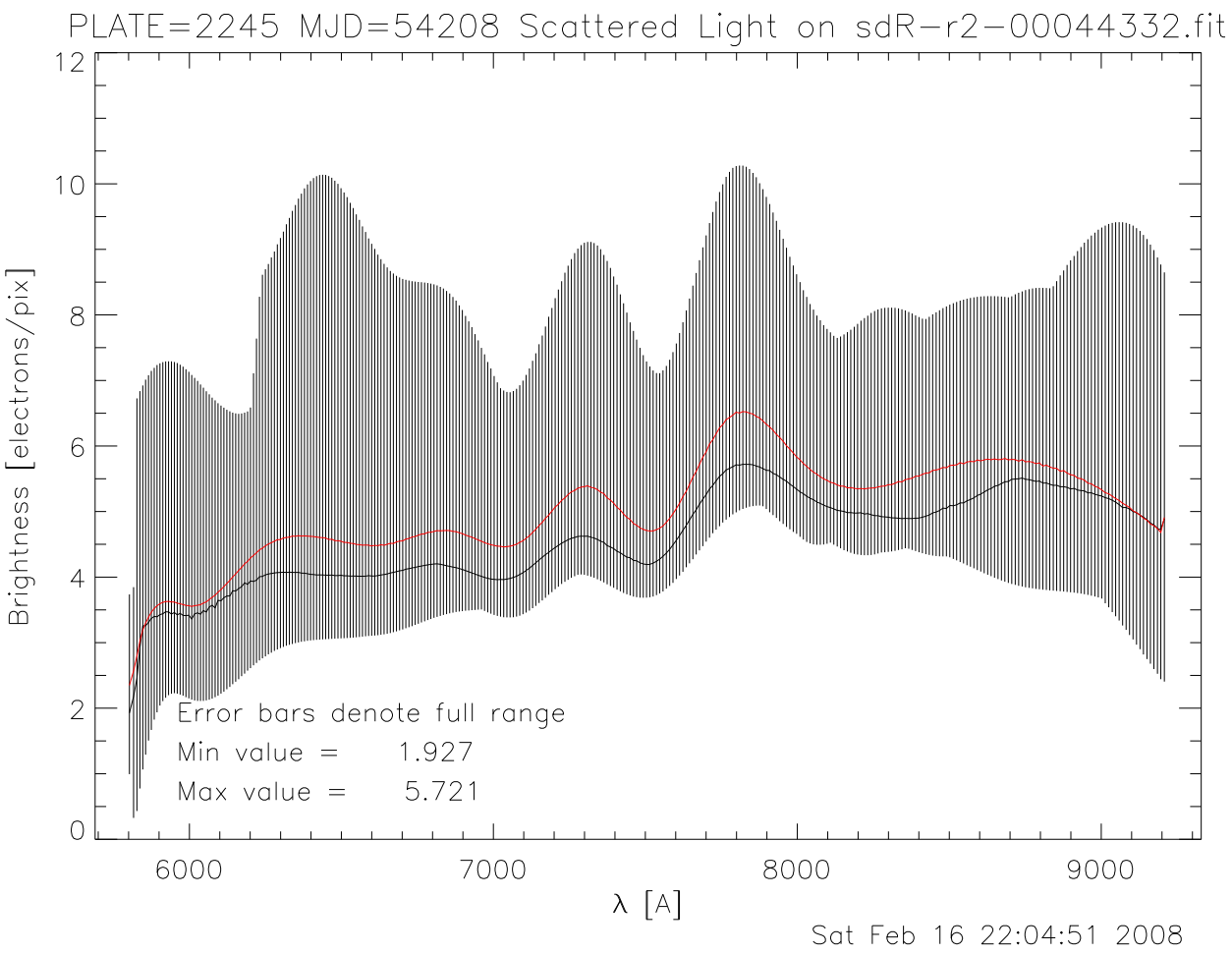

PLATE=2245 MJD=54208 sdR-r2-00044331.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.39 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

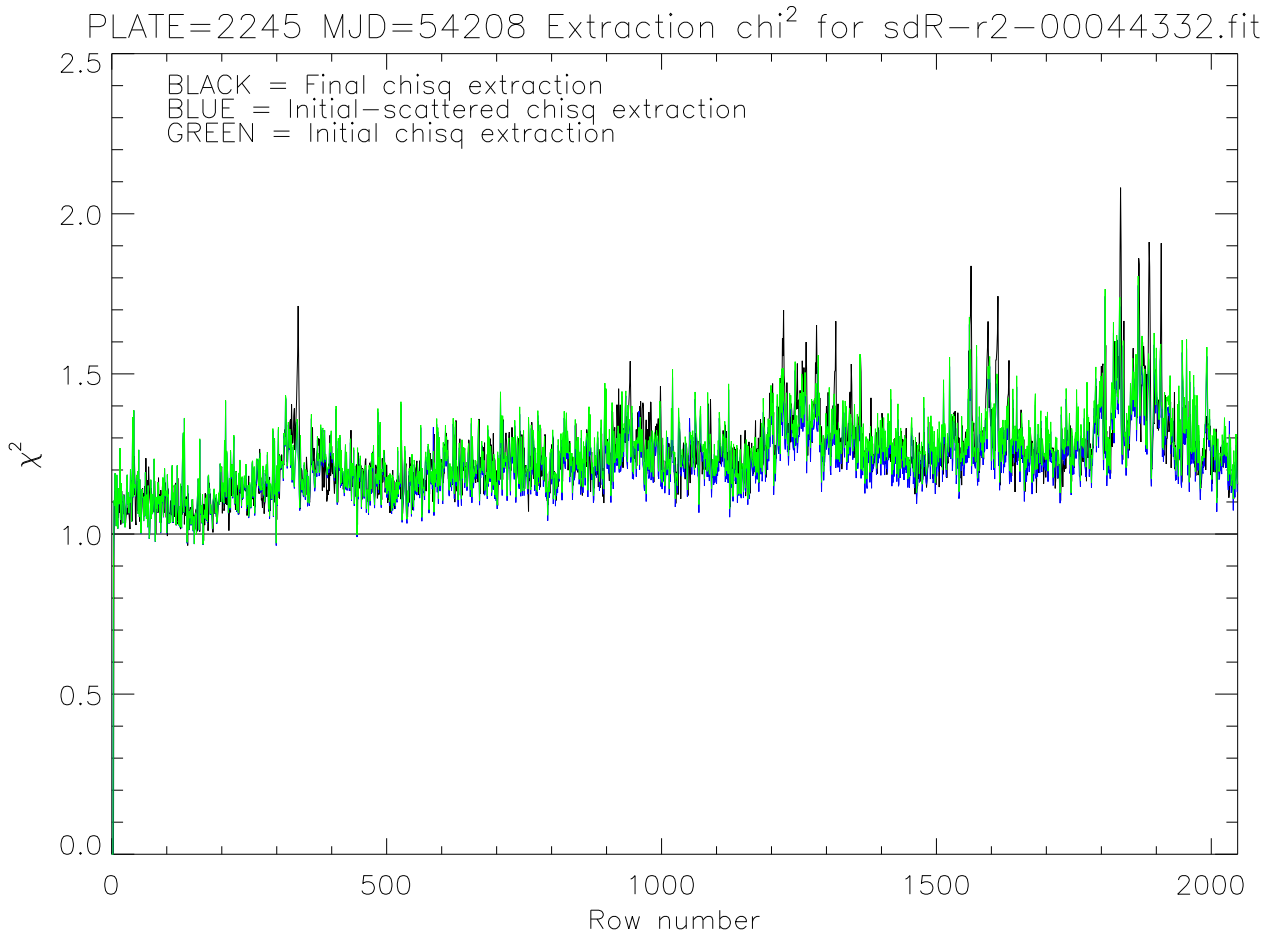

PLATE=2245 MJD=54208 Fiber-Flats for sdR-r2-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.261
Max value = 1.158
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 22:01:02 2008

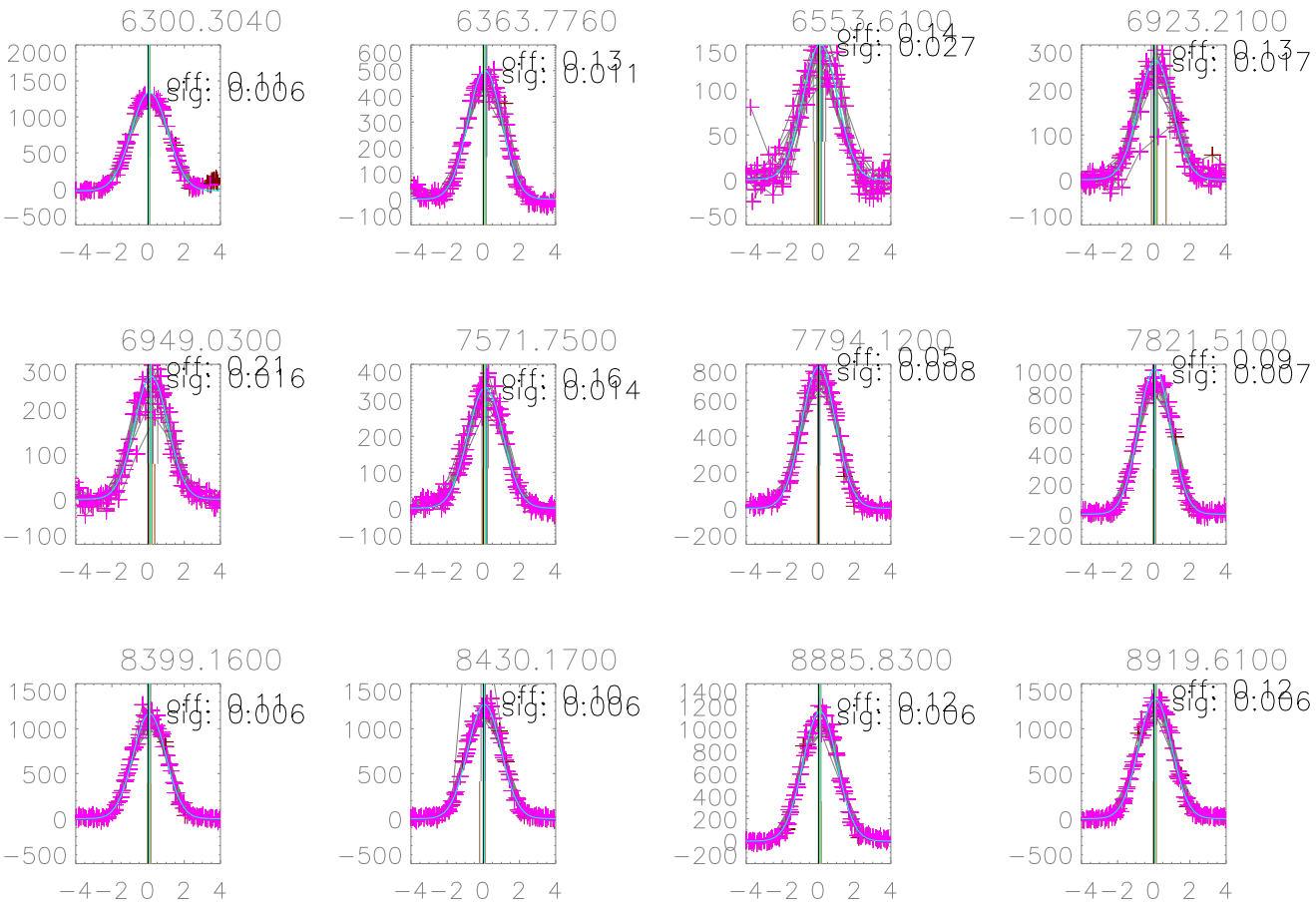

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r2-00044332.fi
15.91
15.91
11.36
6.82
6.82
6.82
2.27
Y [pix]
X [pix]
0
500
1000
1500
2000

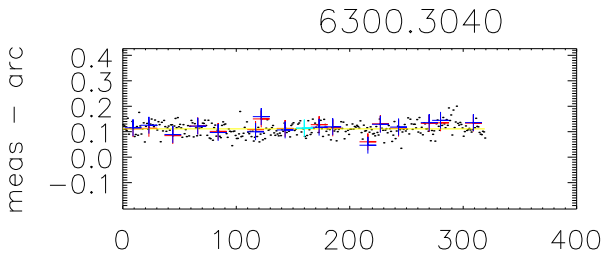

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r2-00044332.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.988
Max value = 18.679
Sat Feb 16 22:01:54 2008

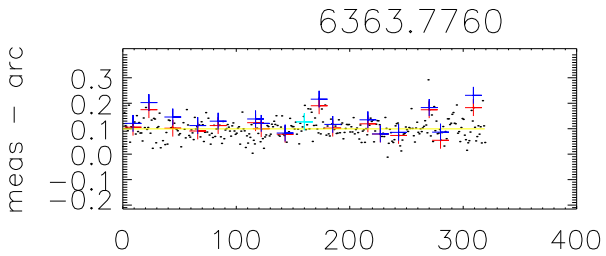

PLATE=2245 MJD=54208 Scattered Light on sdR-r2-00044332.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.6
5.5
3.3
0

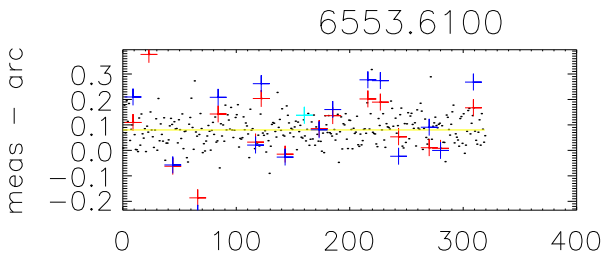

PLATE=2245 MJD=54208 Scattered Light on sdR-r2-00044332.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.927
Max value = 5.721
Sat Feb 16 22:04:51 2008

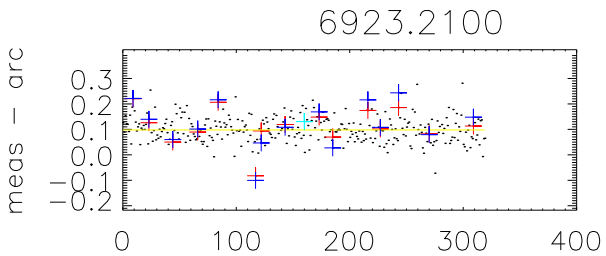

PLATE=2245 MJD=54208 Extraction chi^2 for sdR−r2−00044332.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

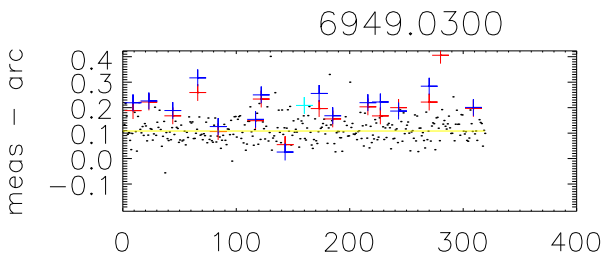

6300.3040
off: 0.11
sig: 0.006
6363.7760
off: 0.13
sig: 0.011
6553.6100
off: 0.14
sig: 0.027
6923.2100
off: 0.13
sig: 0.017
6949.0300
off: 0.21
sig: 0.016
7571.7500
off: 0.16
sig: 0.014
7794.1200
off: 0.05
sig: 0.008
7821.5100
off: 0.09
sig: 0.007
8399.1600
off: 0.11
sig: 0.006
8430.1700
off: 0.10
sig: 0.006
8885.8300
off: 0.12
sig: 0.006
8919.6100
off: 0.12
sig: 0.006

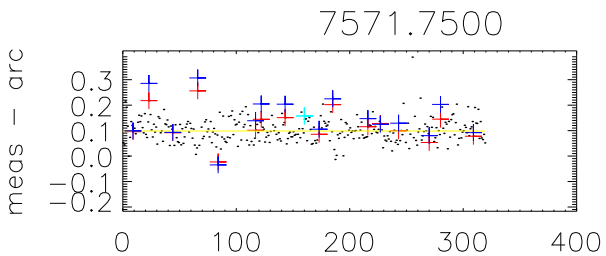

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

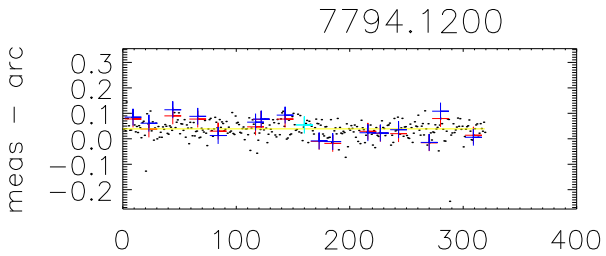

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

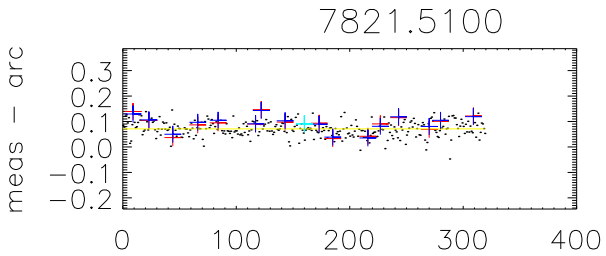

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

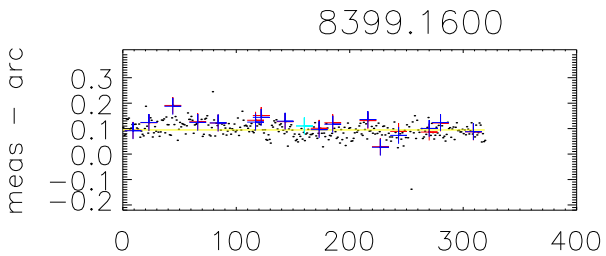

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

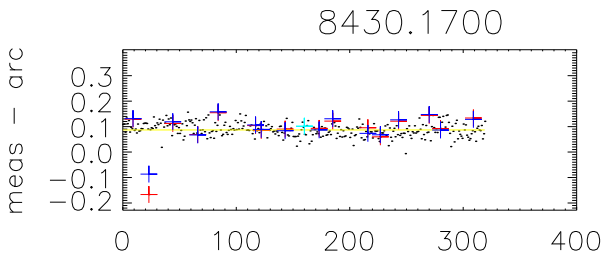

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

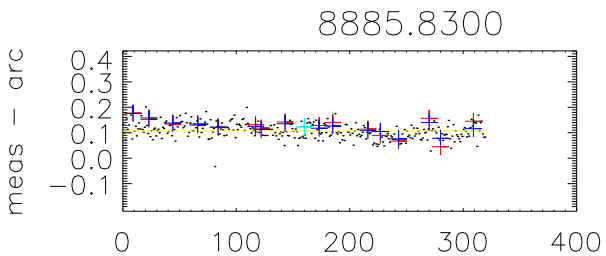

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

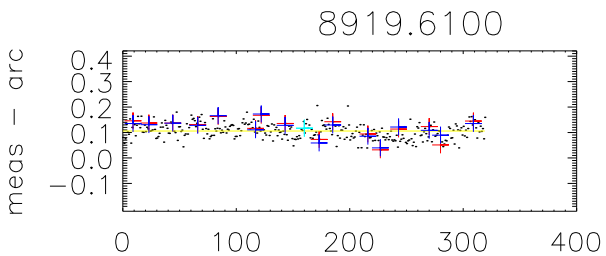

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

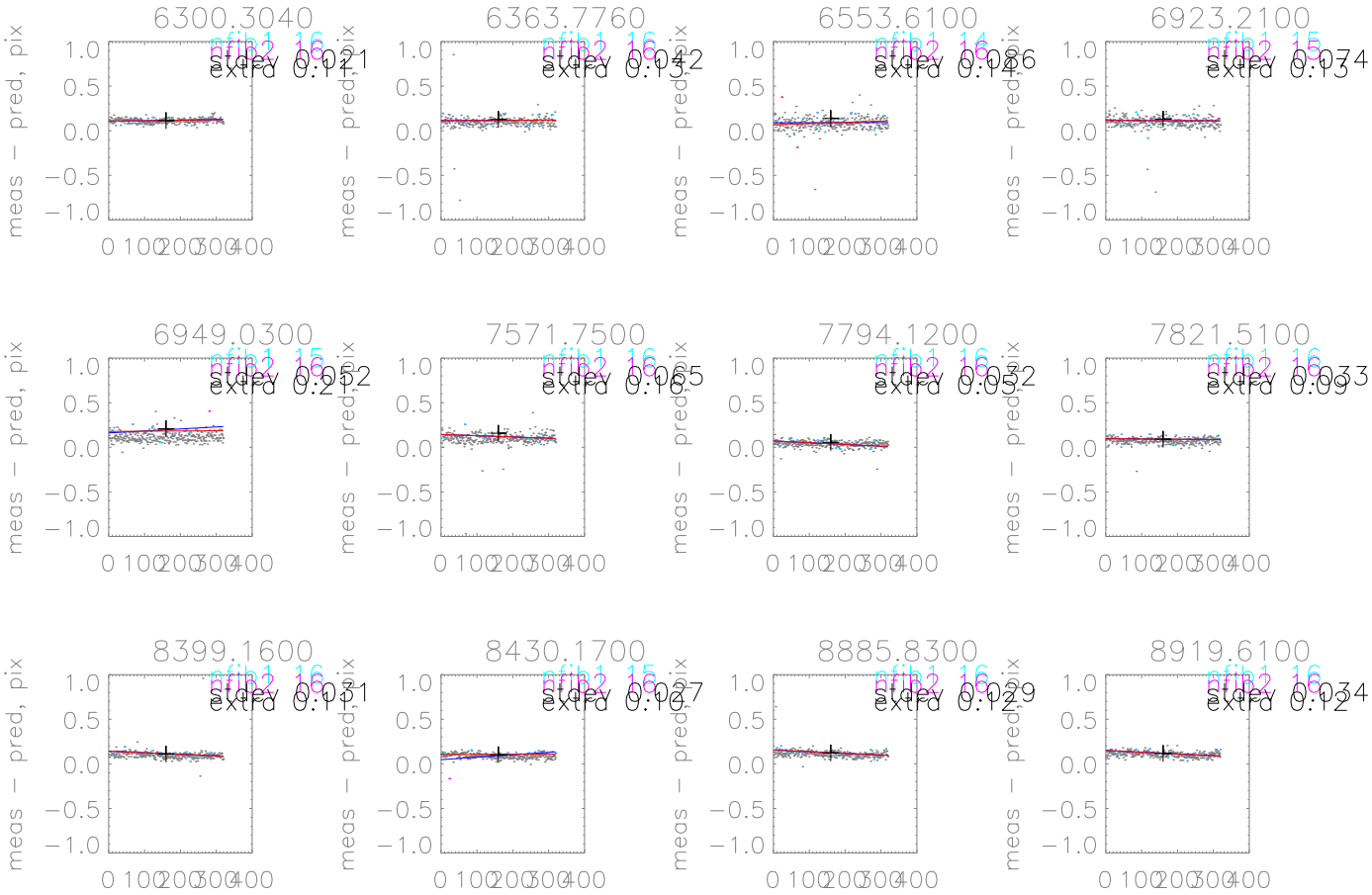

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

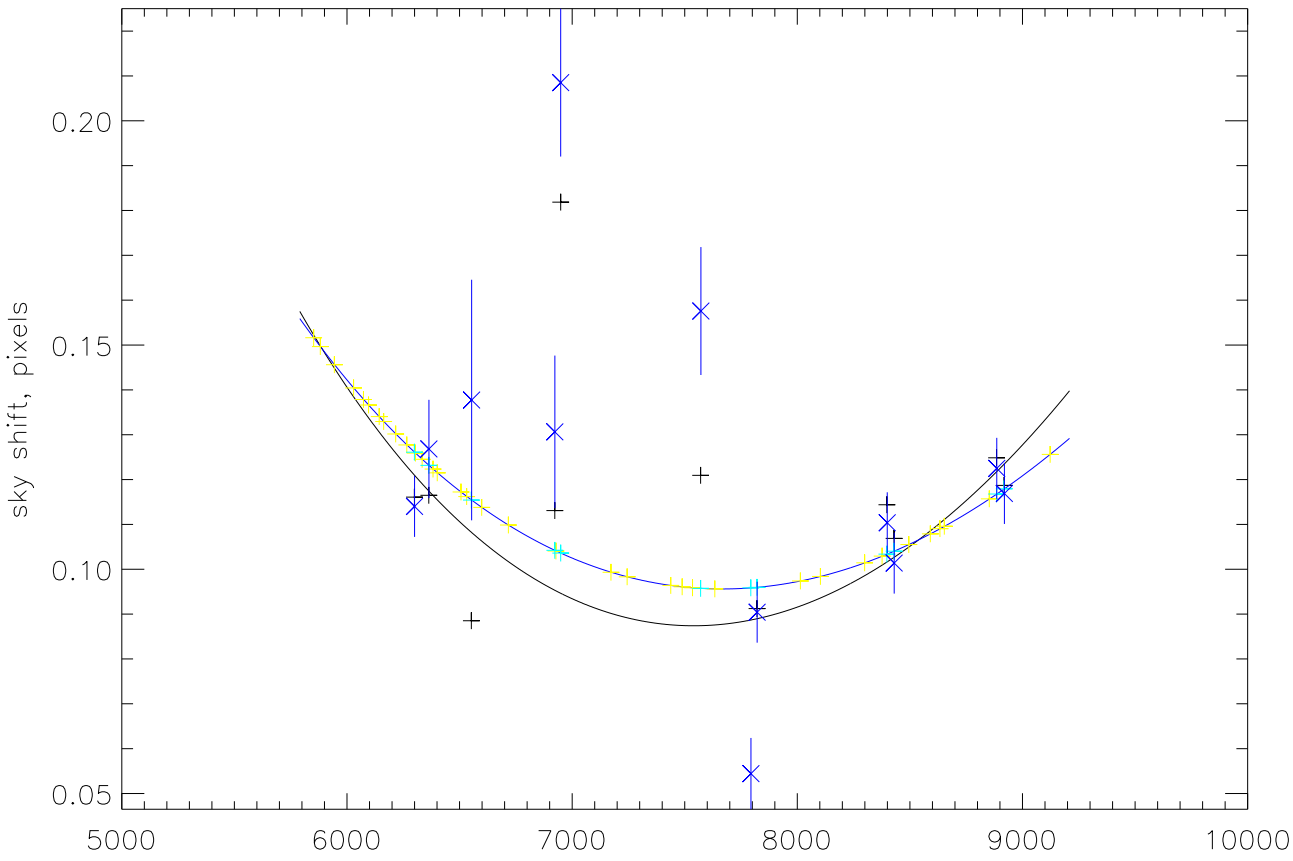

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

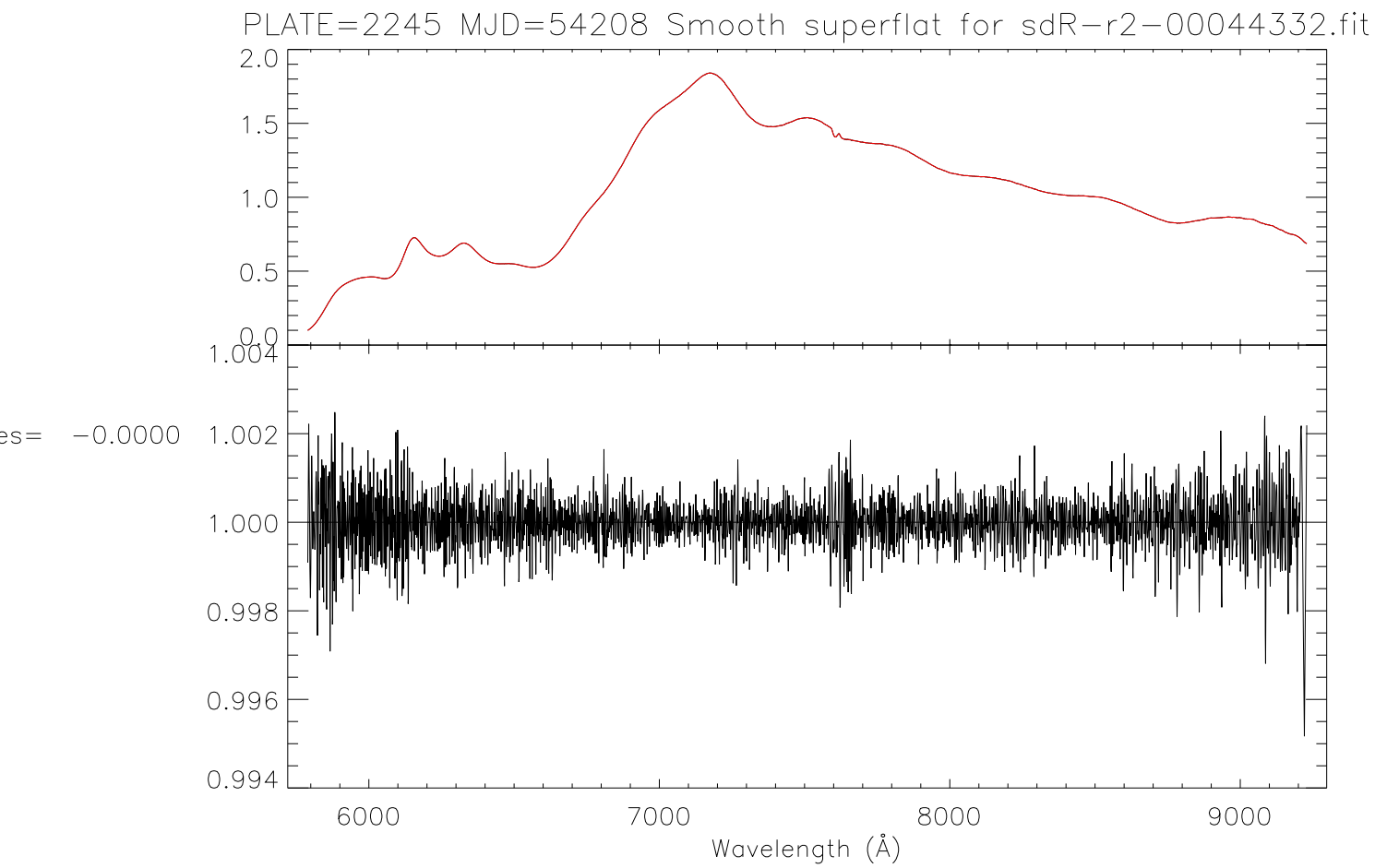

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

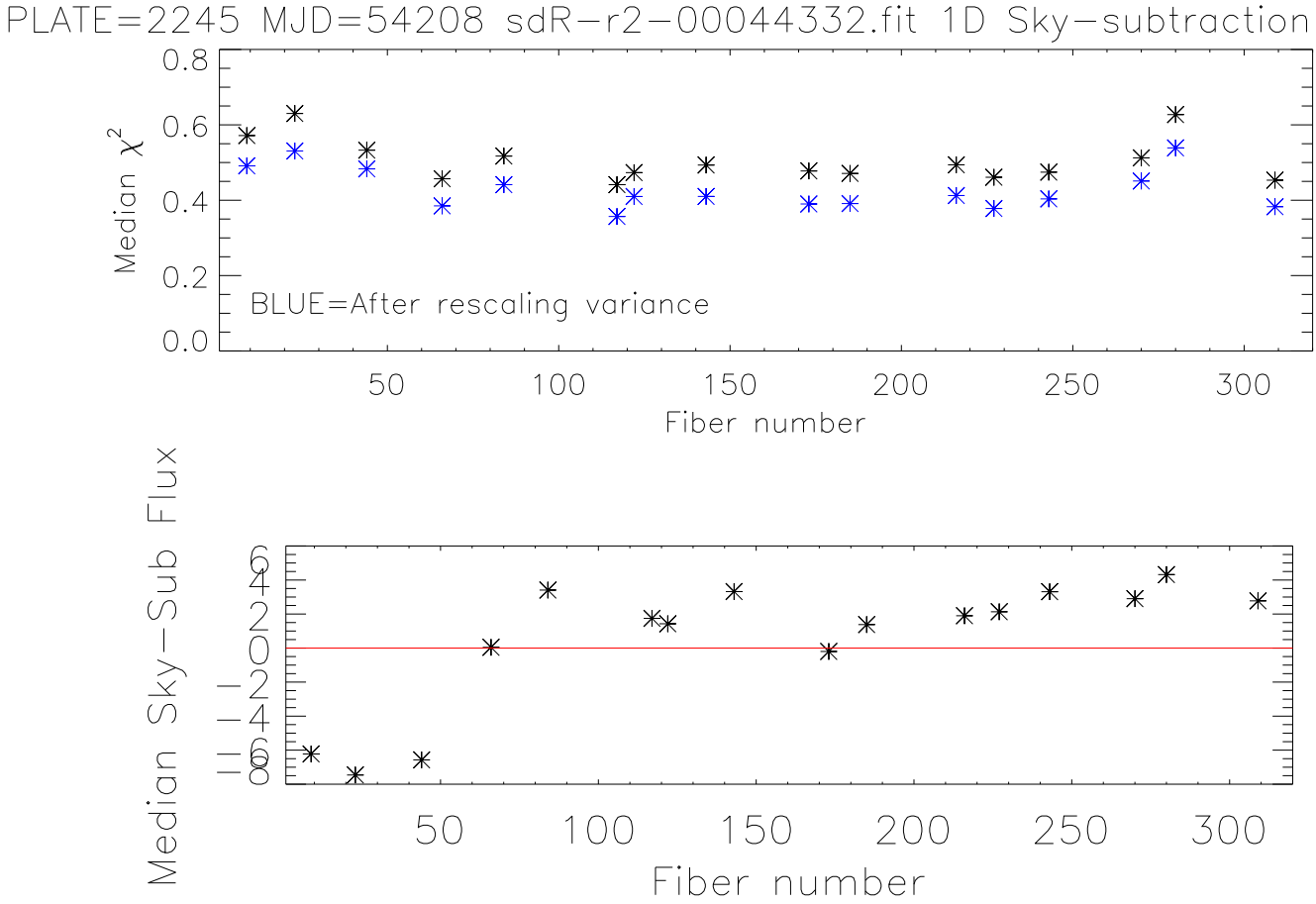

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

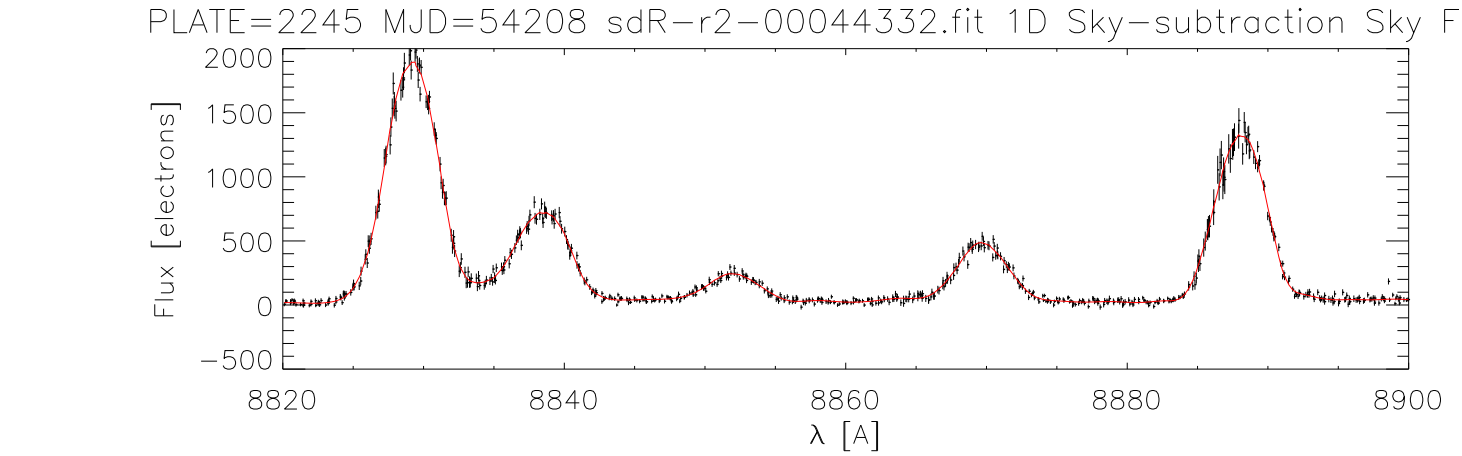

6300.3040
stdev 0.021
extra 0.11
6363.7760
stdev 0.042
extra 0.132
6553.6100
stdev 0.086
extra 0.14
6923.2100
stdev 0.074
extra 0.13
6949.0300
stdev 0.052
extra 0.21
7571.7500
stdev 0.065
extra 0.16
7794.1200
stdev 0.052
extra 0.05
7821.5100
stdev 0.033
extra 0.09
8399.1600
stdev 0.031
extra 0.11
8430.1700
stdev 0.027
extra 0.10
8885.8300
stdev 0.029
extra 0.12
8919.6100
stdev 0.034
extra 0.12
meas − pred, pix

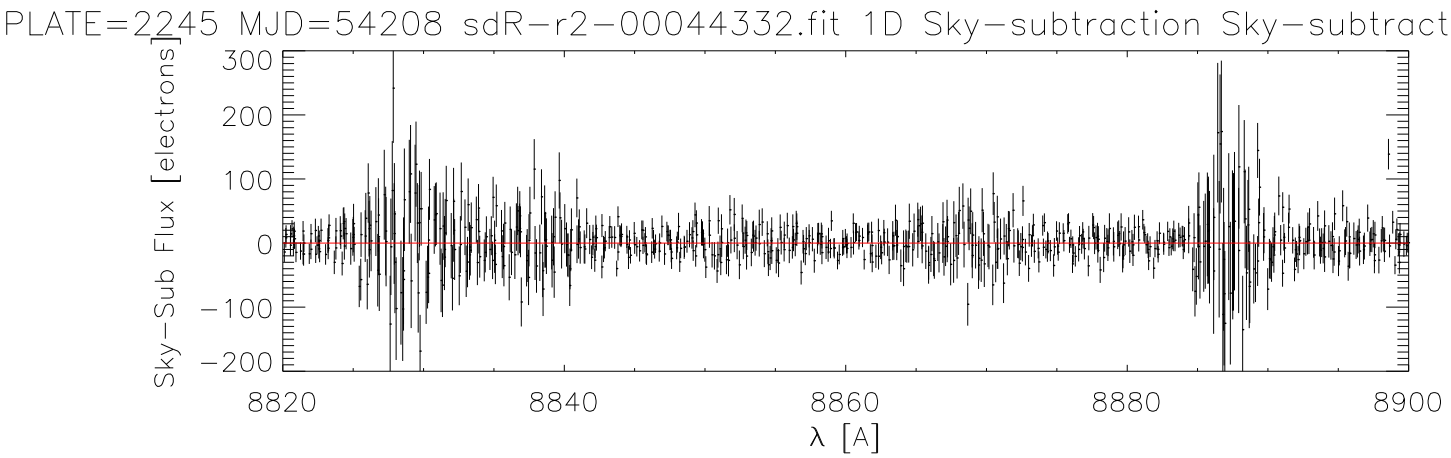

sky shift, pixels
0.20
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

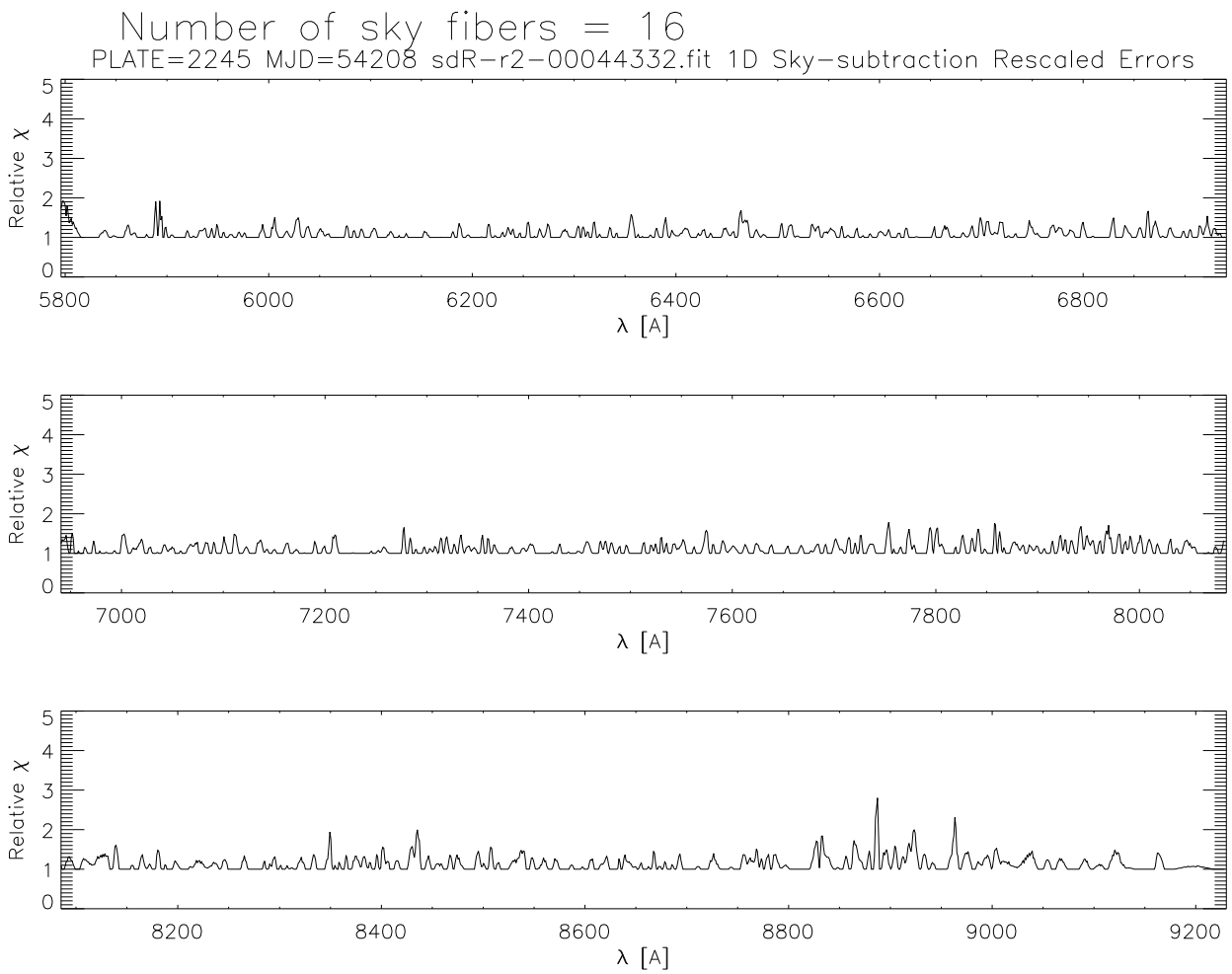

PLATE=2245 MJD=54208 Smooth superflat for sdR-r2-00044332.fit
2.0
1.5
1.0
0.5
0.0
1.004
es= −0.0000
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

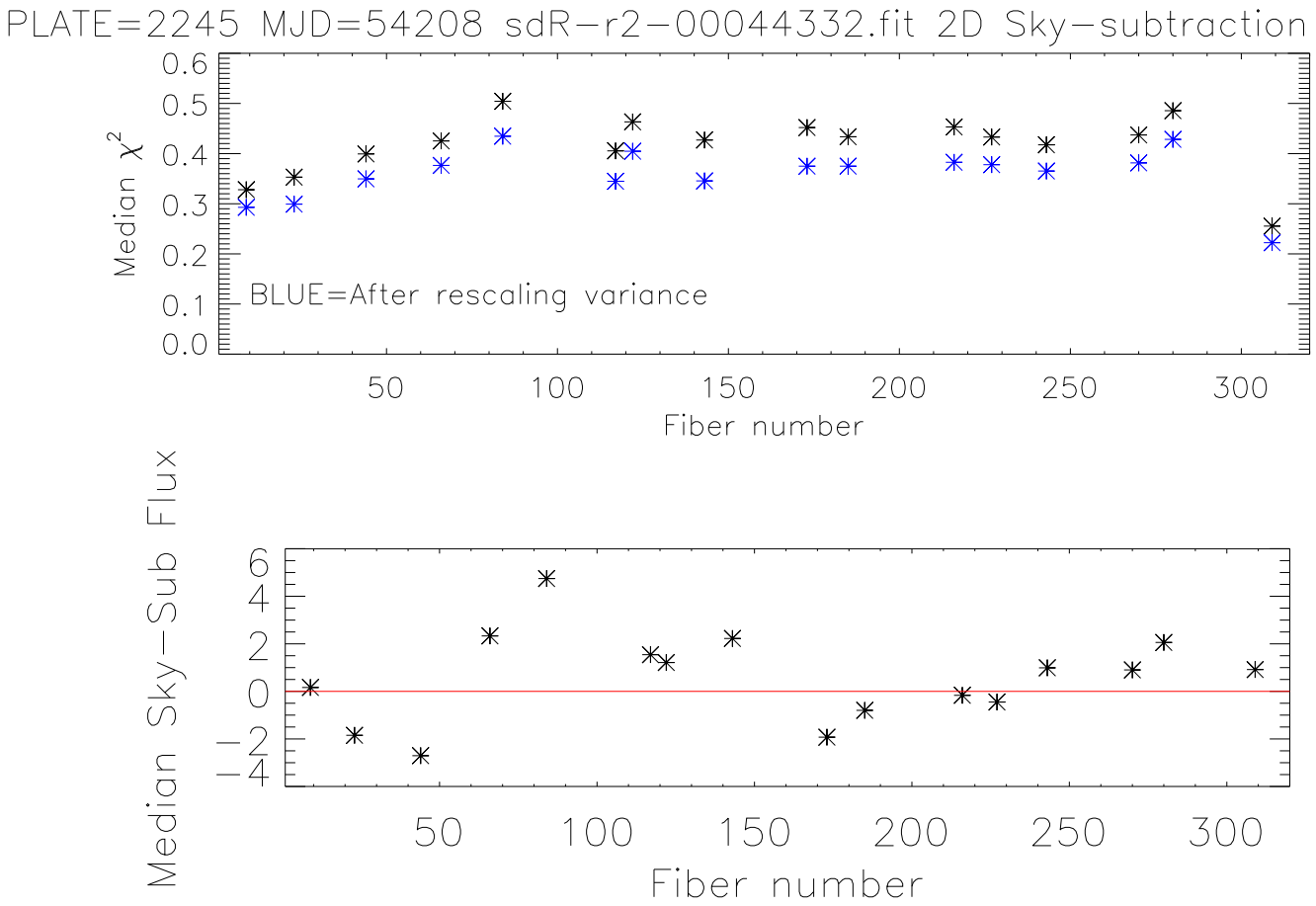

PLATE=2245 MJD=54208 sdR-r2-00044332.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

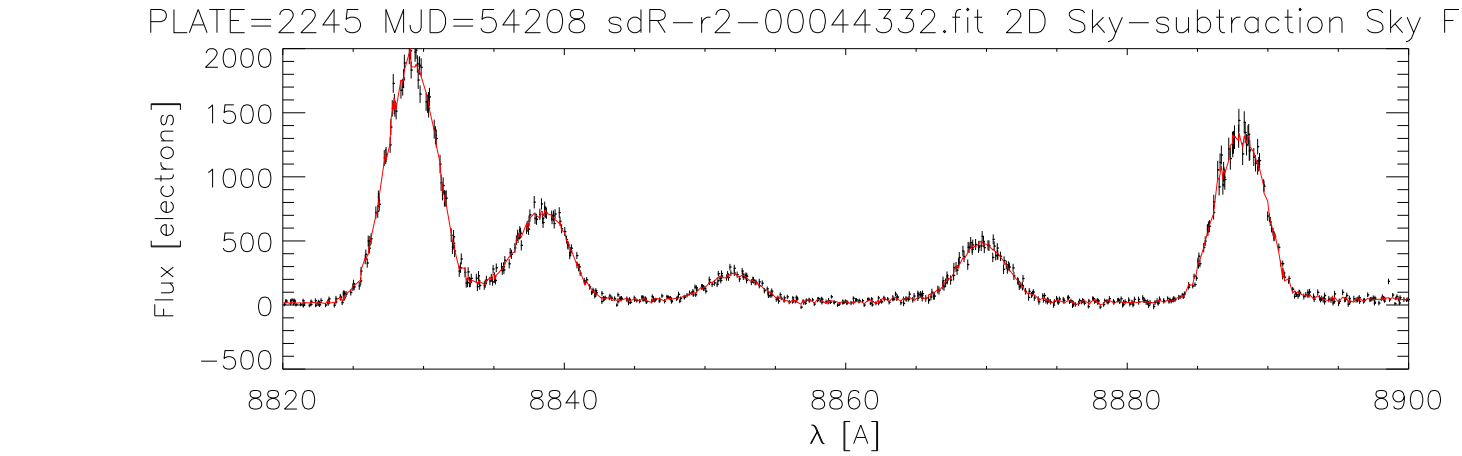
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

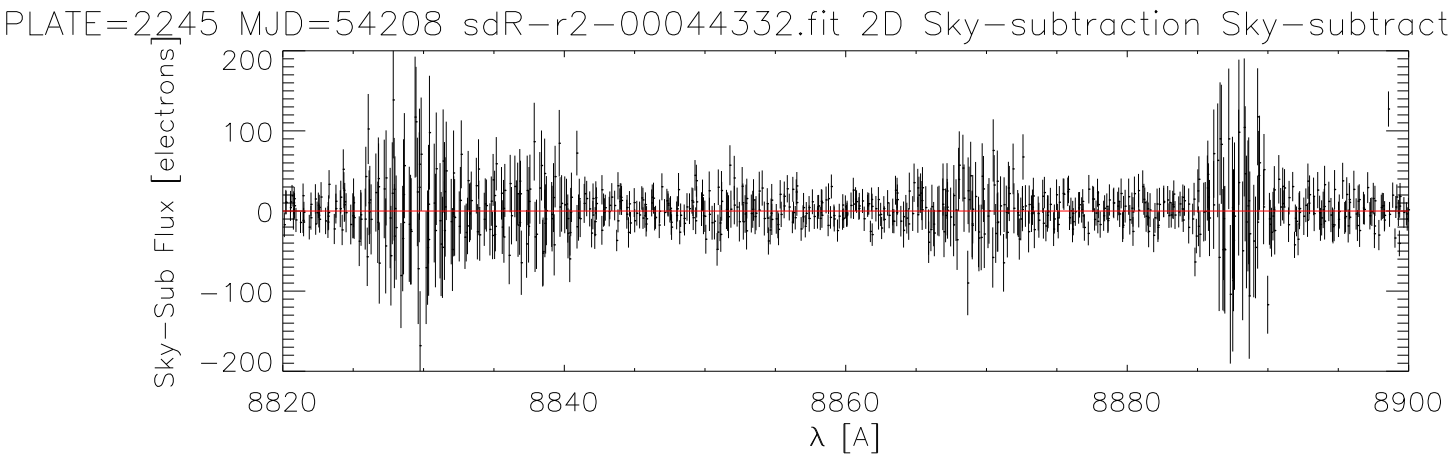

PLATE=2245 MJD=54208 sdR-r2-00044332.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

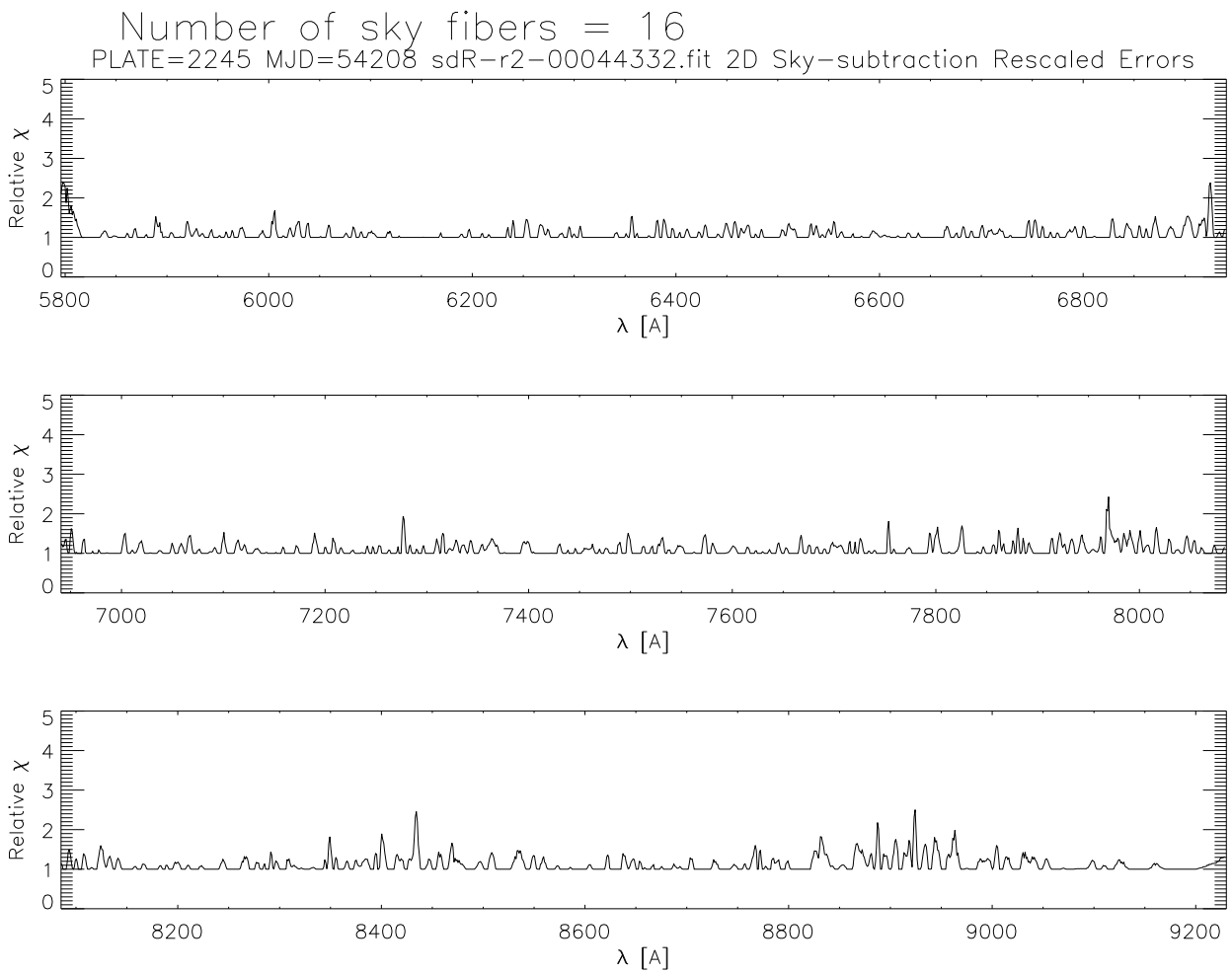

PLATE=2245 MJD=54208 sdR-r2-00044332.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

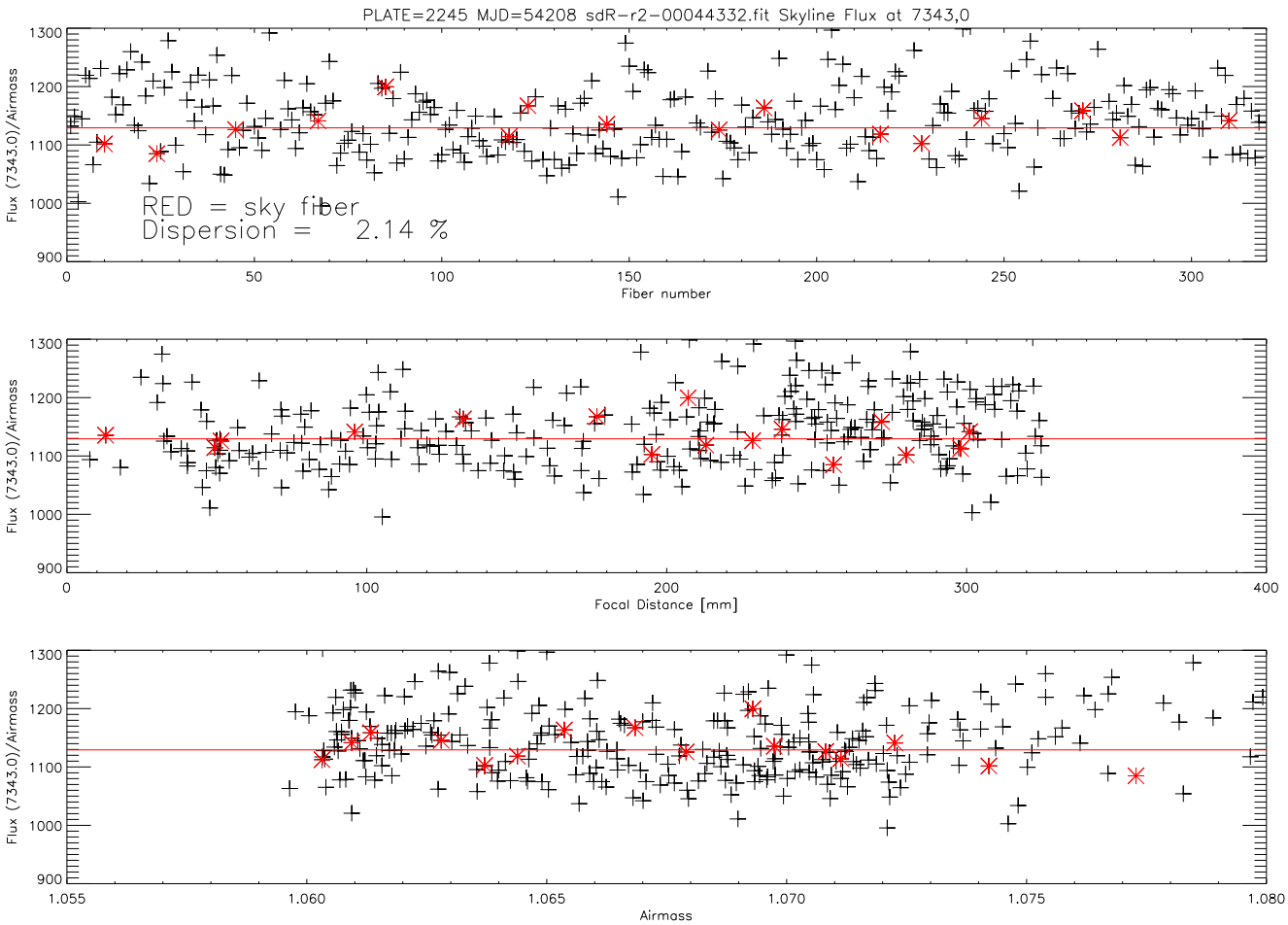

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-r2-00044332.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

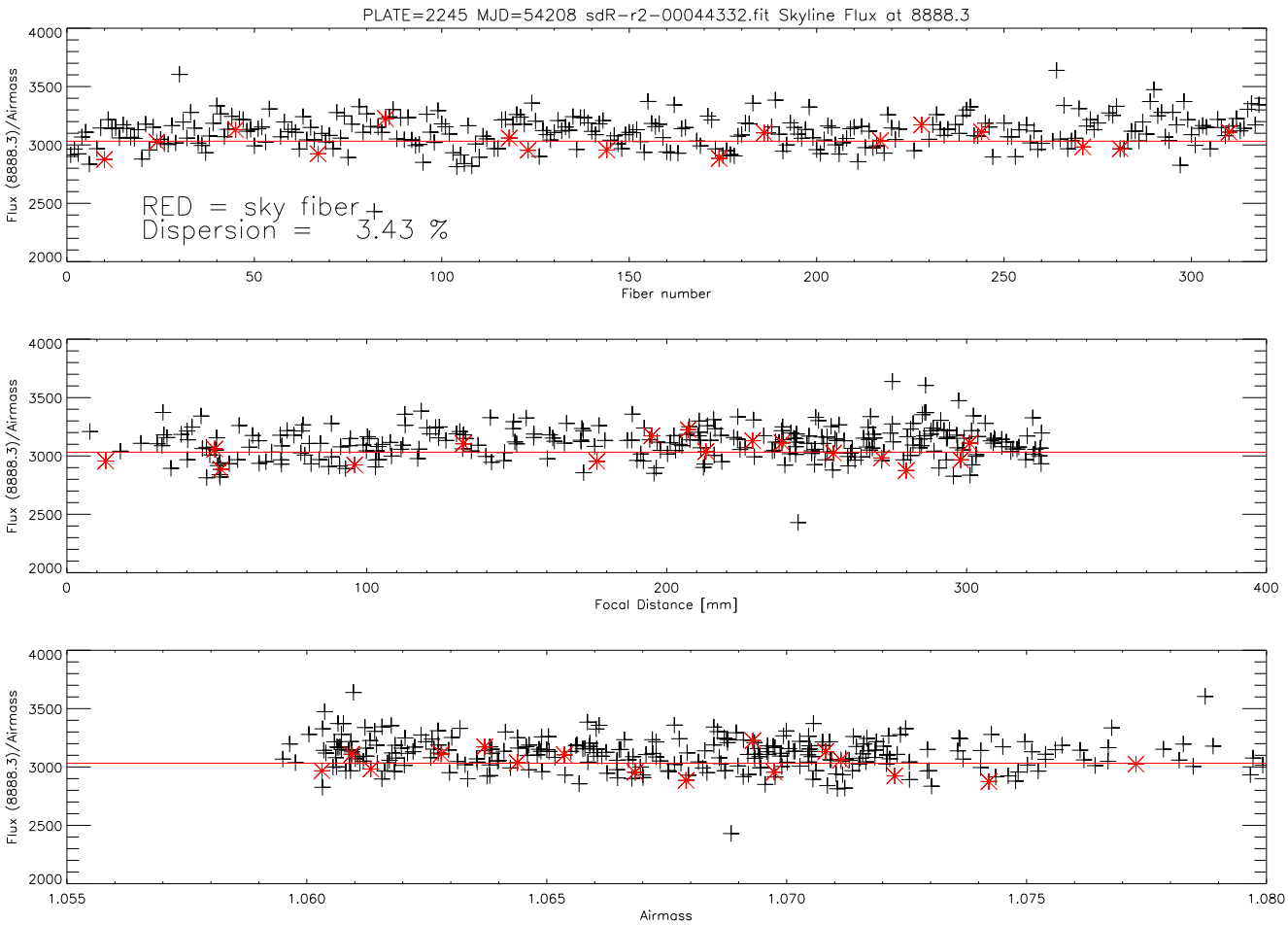

PLATE=2245 MJD=54208 sdR-r2-00044332.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

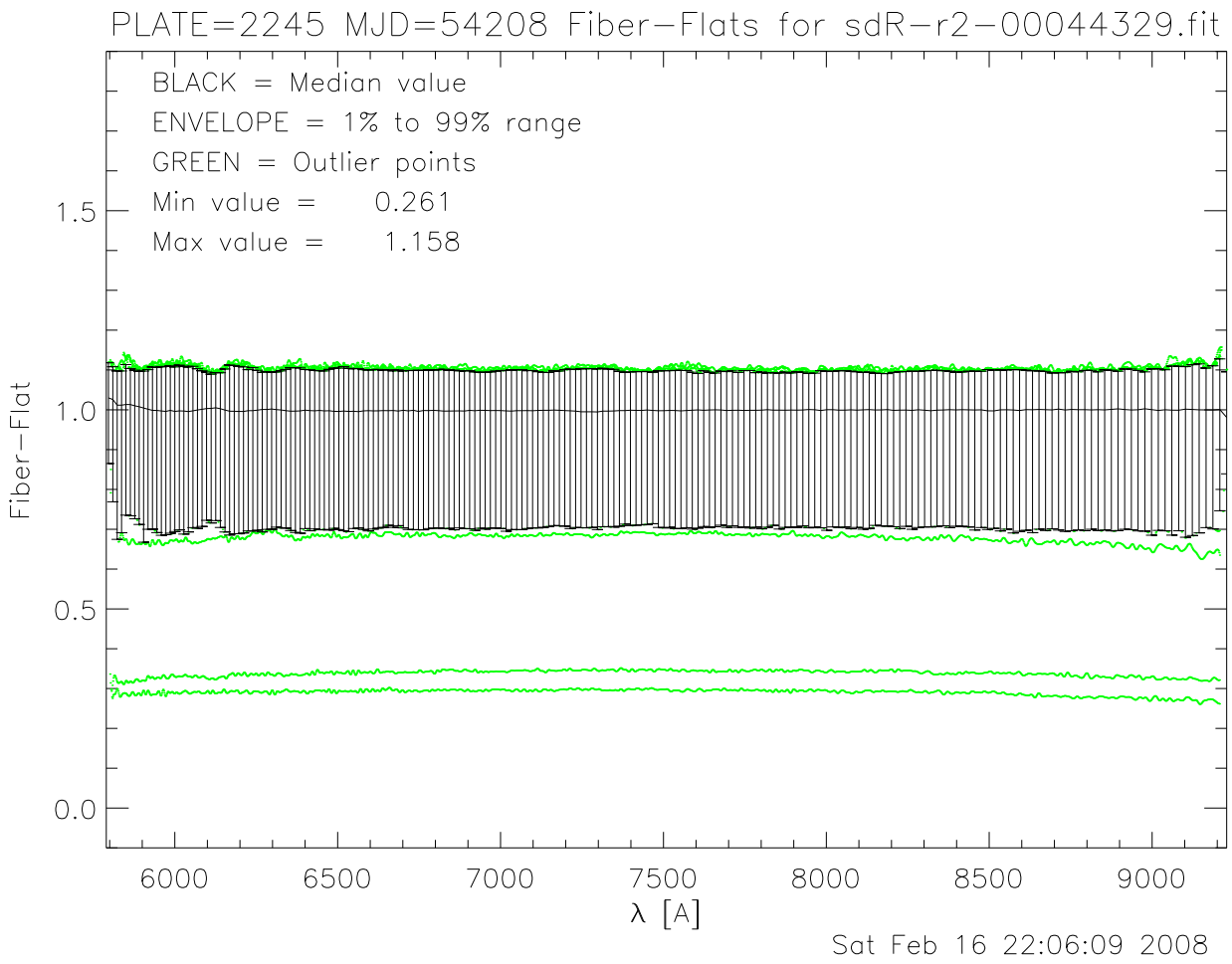

PLATE=2245 MJD=54208 sdR-r2-00044332.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

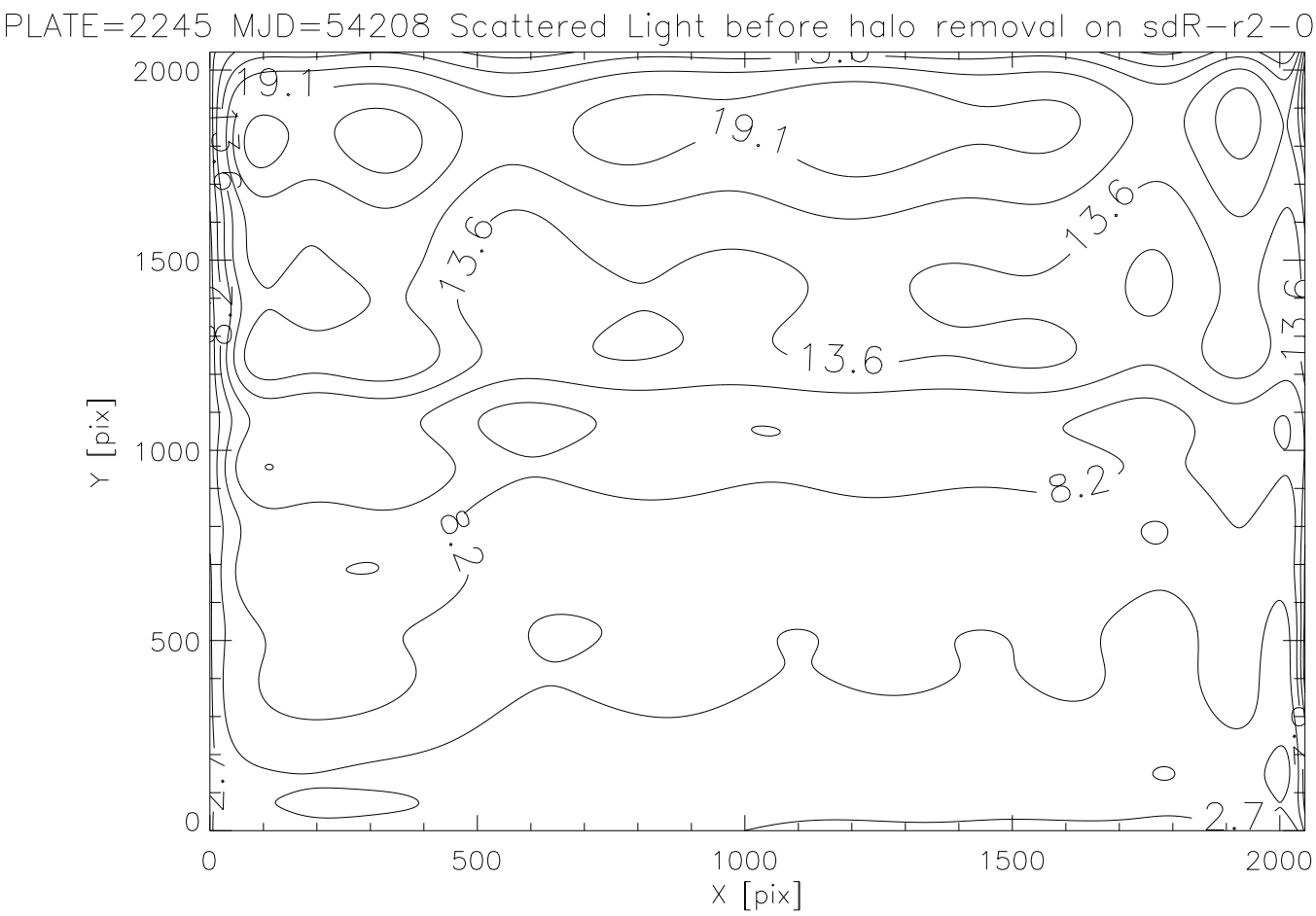

PLATE=2245 MJD=54208 sdR-r2-00044332.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

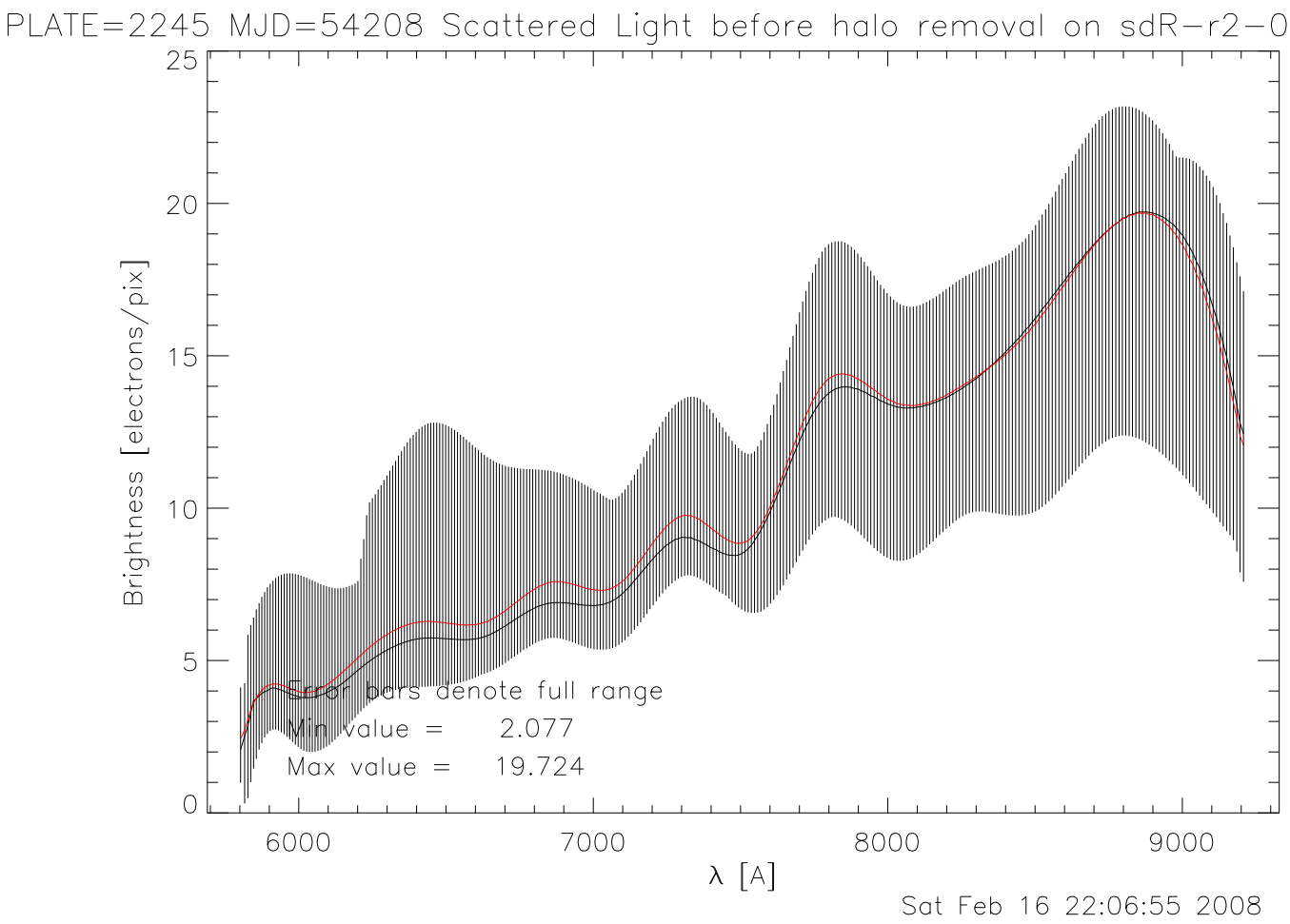

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-r2-00044332.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

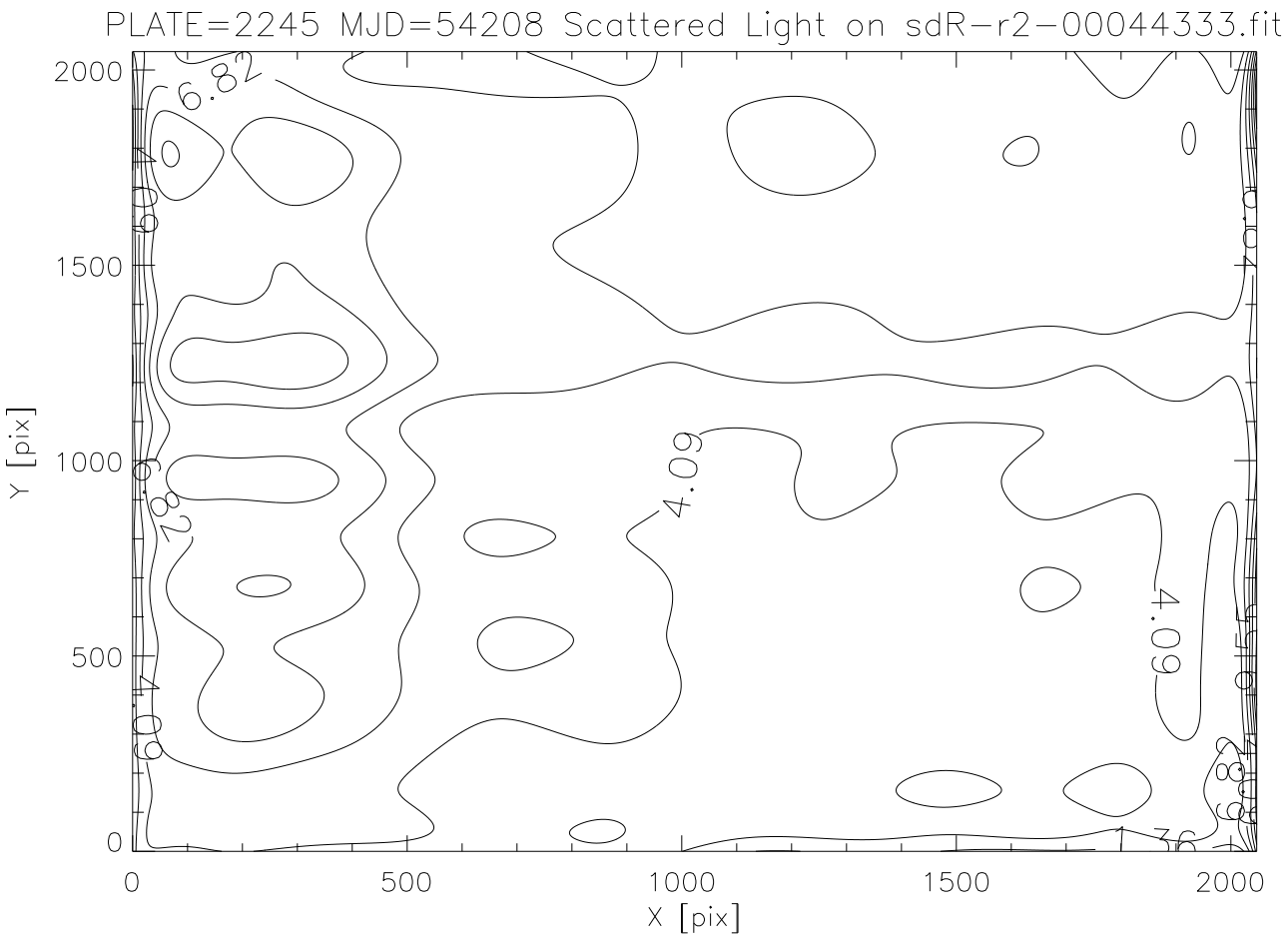

PLATE=2245 MJD=54208 sdR-r2-00044332.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.14 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

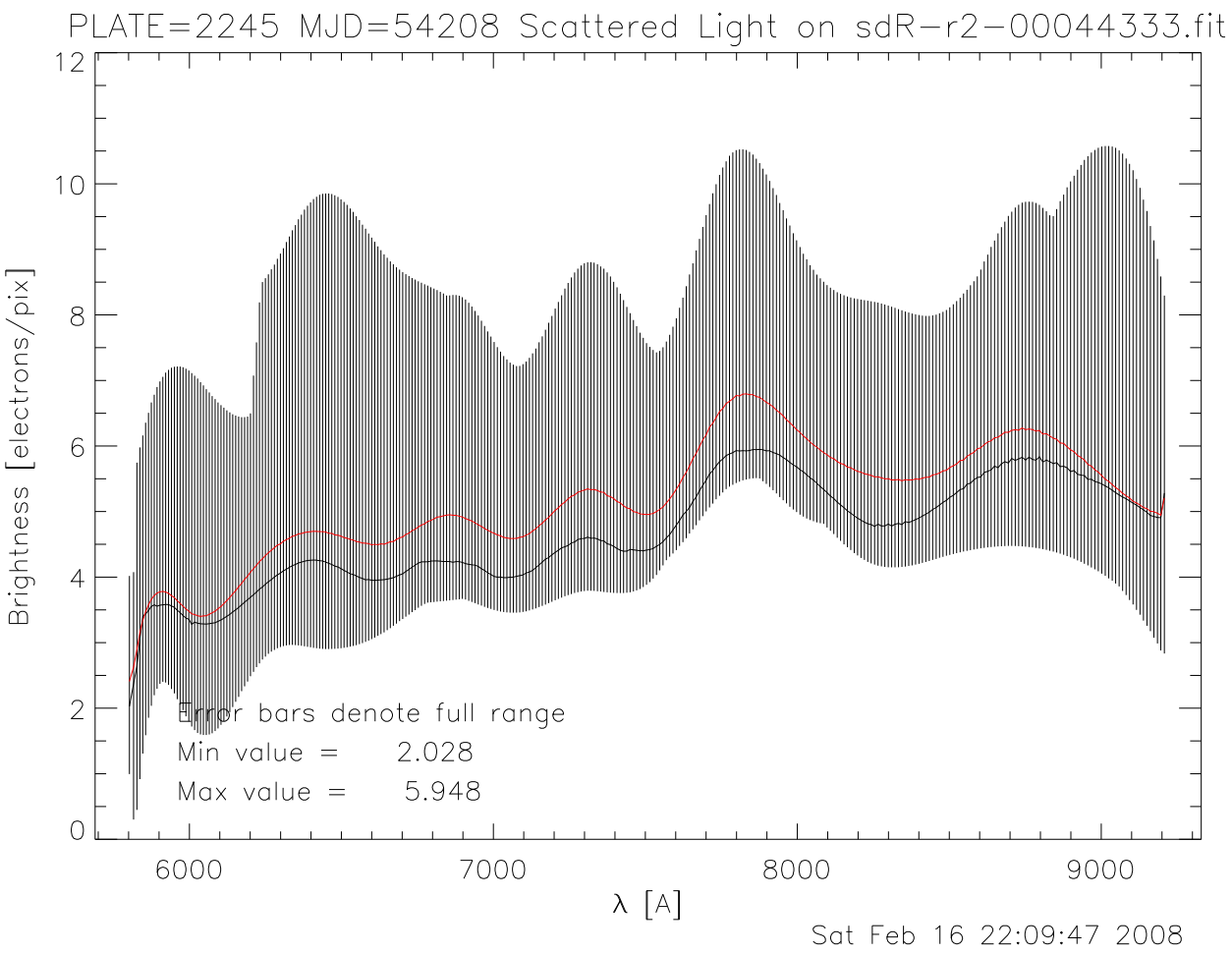

PLATE=2245 MJD=54208 sdR-r2-00044332.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.43 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

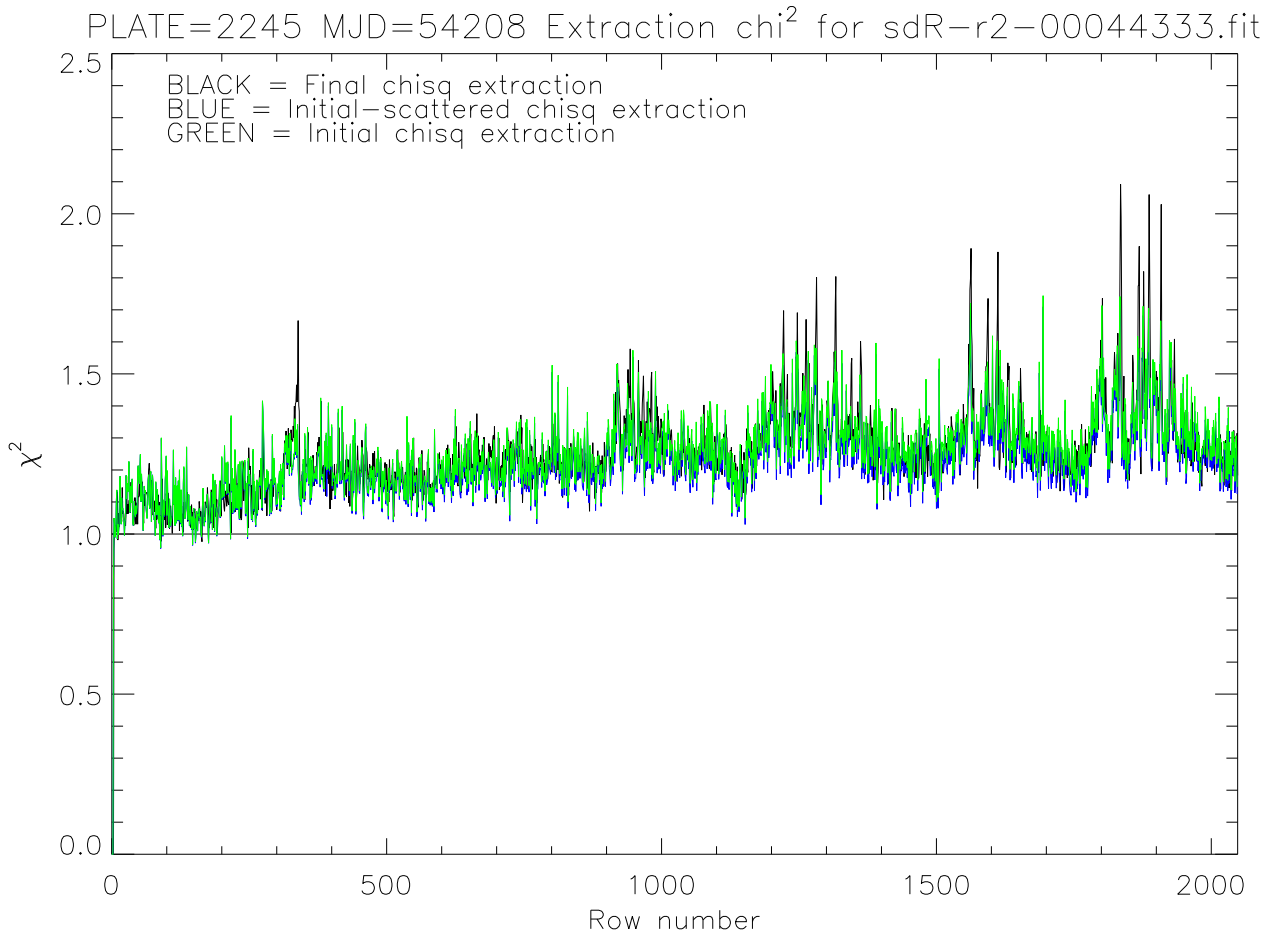

PLATE=2245 MJD=54208 Fiber-Flats for sdR-r2-00044329.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.261
Max value = 1.158
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 22:06:09 2008

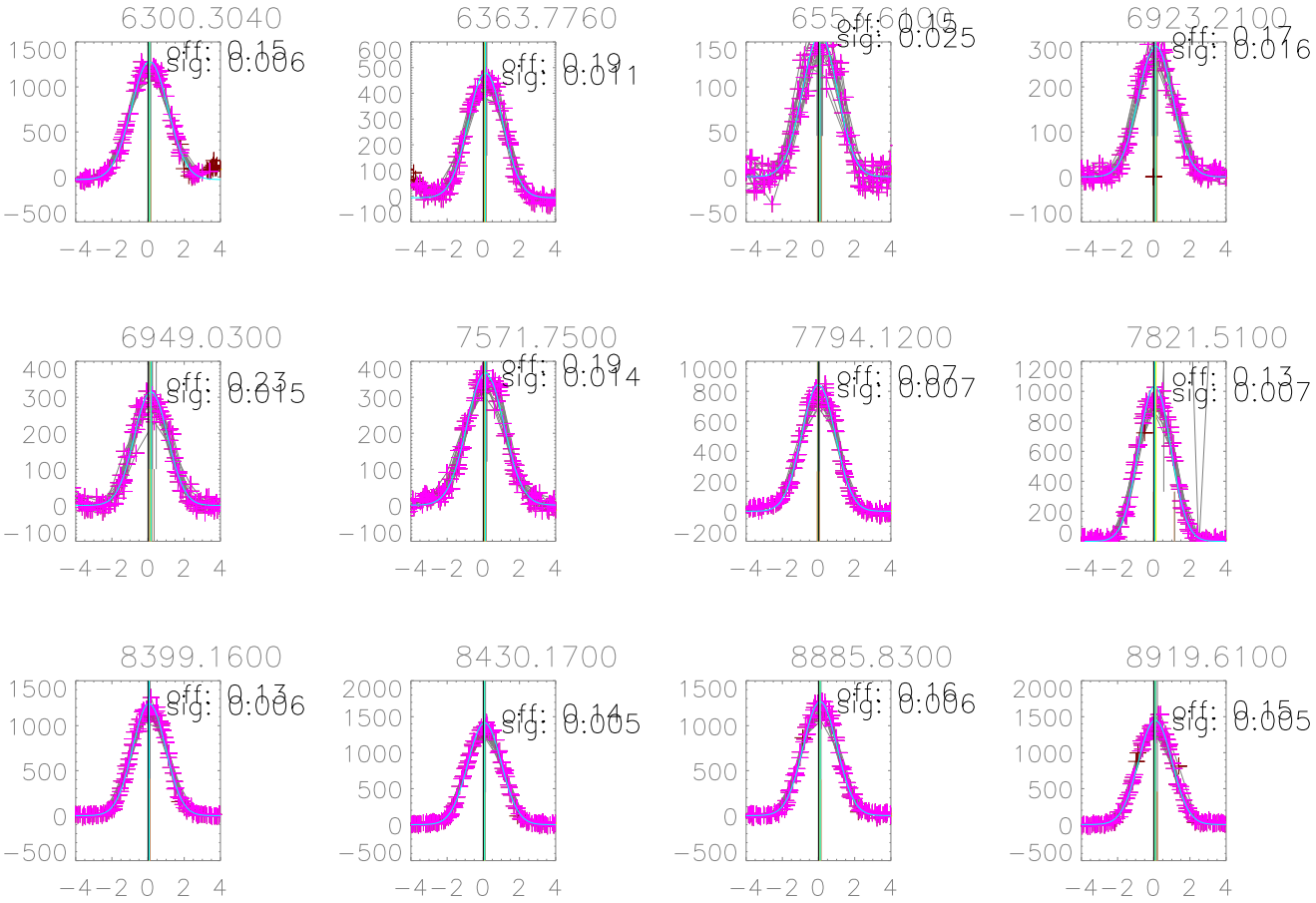

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r2-00044333.fi
19.1
13.6
8.2
2.7
Y [pix]
X [pix]
0
500
1000
1500
2000

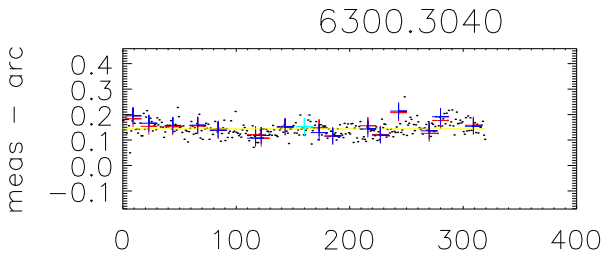

PLATE=2245 MJD=54208 Scattered Light before halo removal on sdR-r2-00044333.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.077
Max value = 19.724
Sat Feb 16 22:06:55 2008

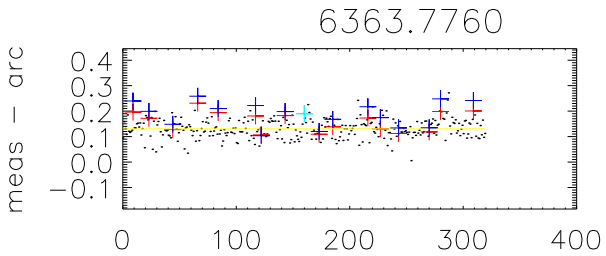

PLATE=2245 MJD=54208 Scattered Light on sdR-r2-00044333.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.82
0
4.09
2.73
4.09
4.09
1.36

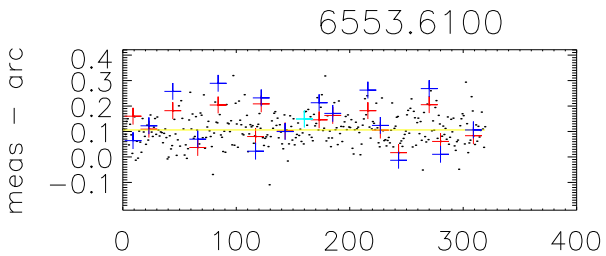

PLATE=2245 MJD=54208 Scattered Light on sdR-r2-00044333.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.028
Max value = 5.948
Sat Feb 16 22:09:47 2008

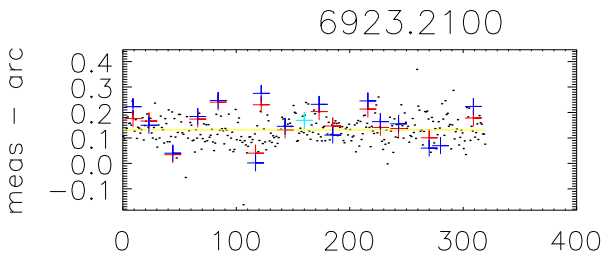

PLATE=2245 MJD=54208 Extraction chi^2 for sdR-r2-00044333.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

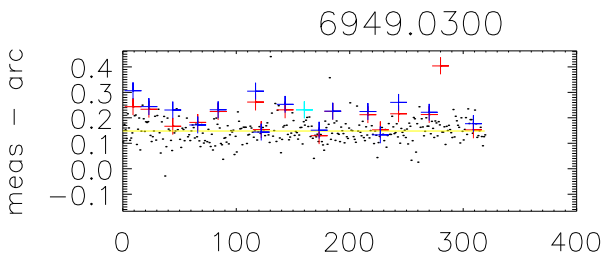

6300.3040
off: 0.15
sig: 0.006
6363.7760
off: 0.19
sig: 0.011
6557.6400
off: 0.025
6923.2100
off: 0.17
sig: 0.016
6949.0300
off: 0.23
sig: 0.015
7571.7500
off: 0.19
sig: 0.014
7794.1200
off: 0.07
sig: 0.007
7821.5100
off: 0.13
sig: 0.007
8399.1600
off: 0.13
sig: 0.006
8430.1700
off: 0.14
sig: 0.005
8885.8300
off: 0.16
sig: 0.006
8919.6100
off: 0.15
sig: 0.005

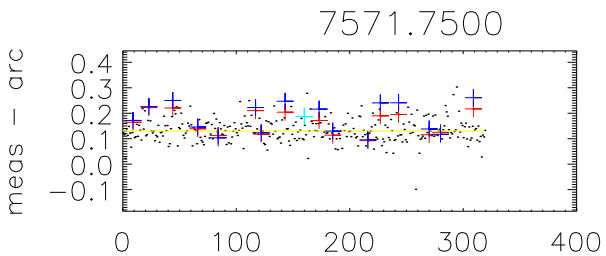

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

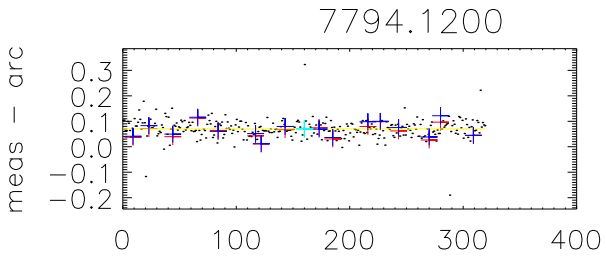

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

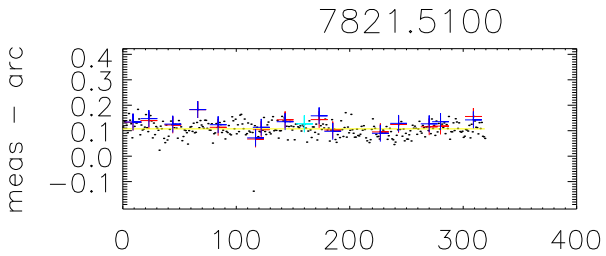

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

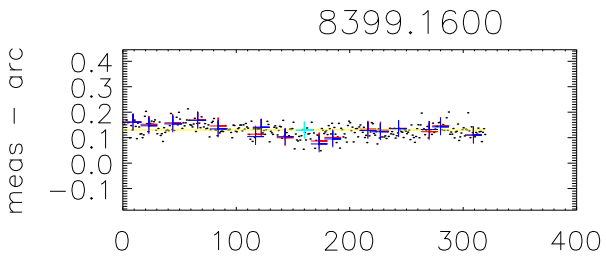

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

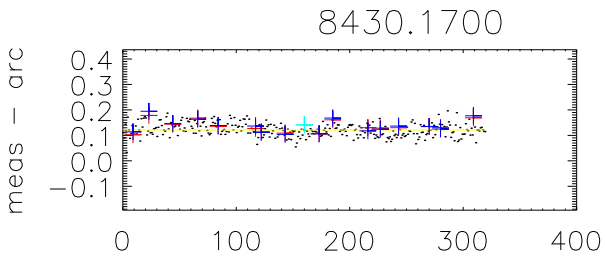

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

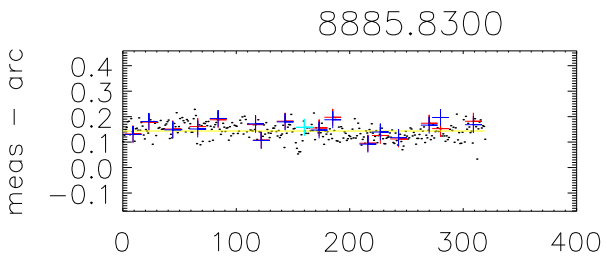

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

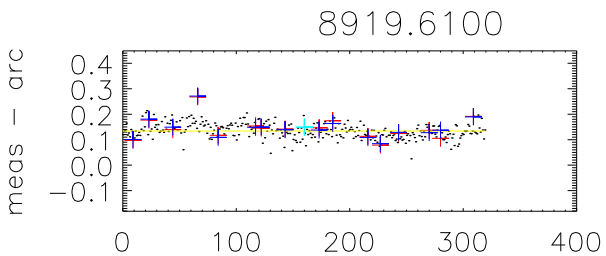

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

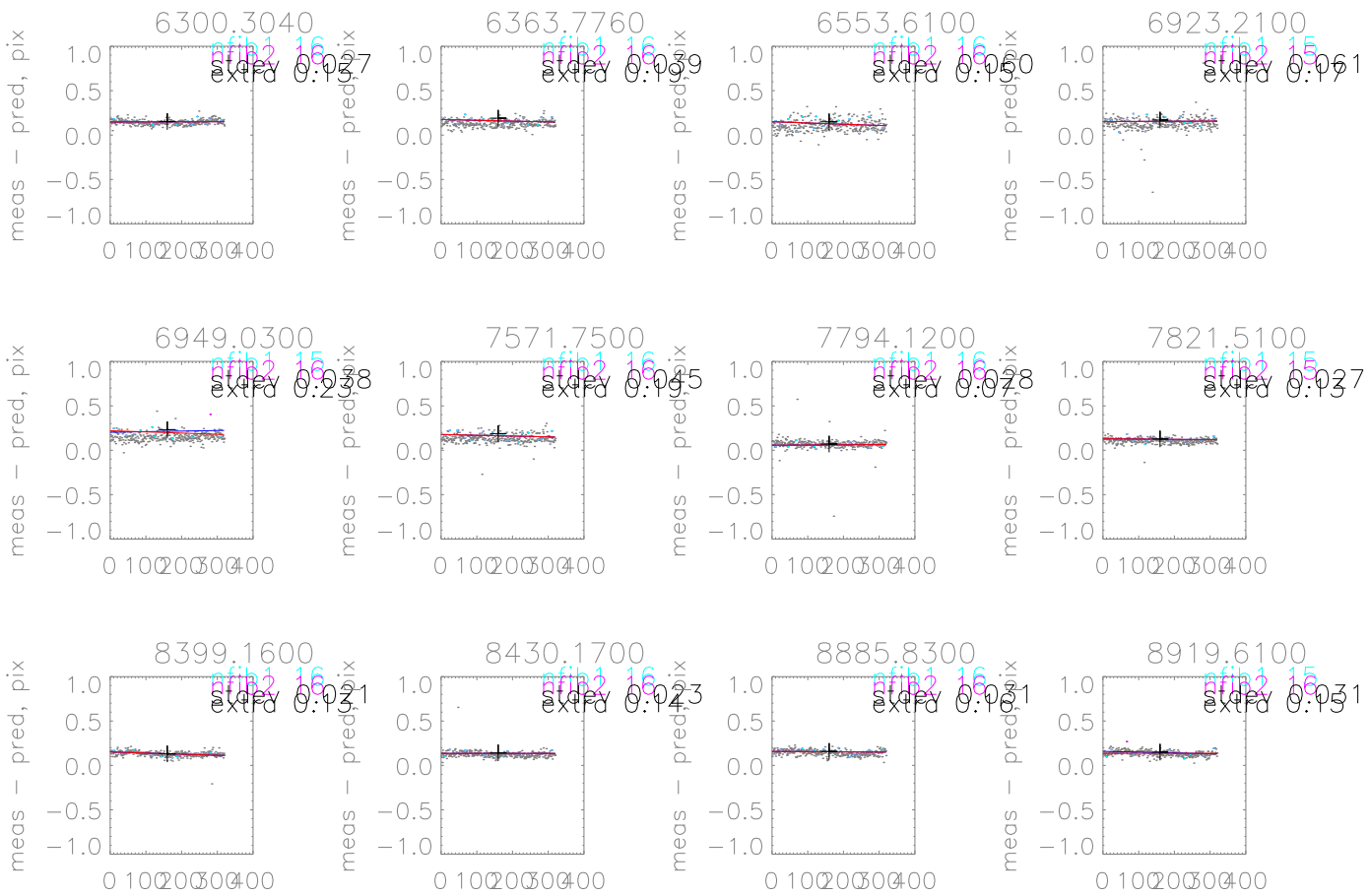

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

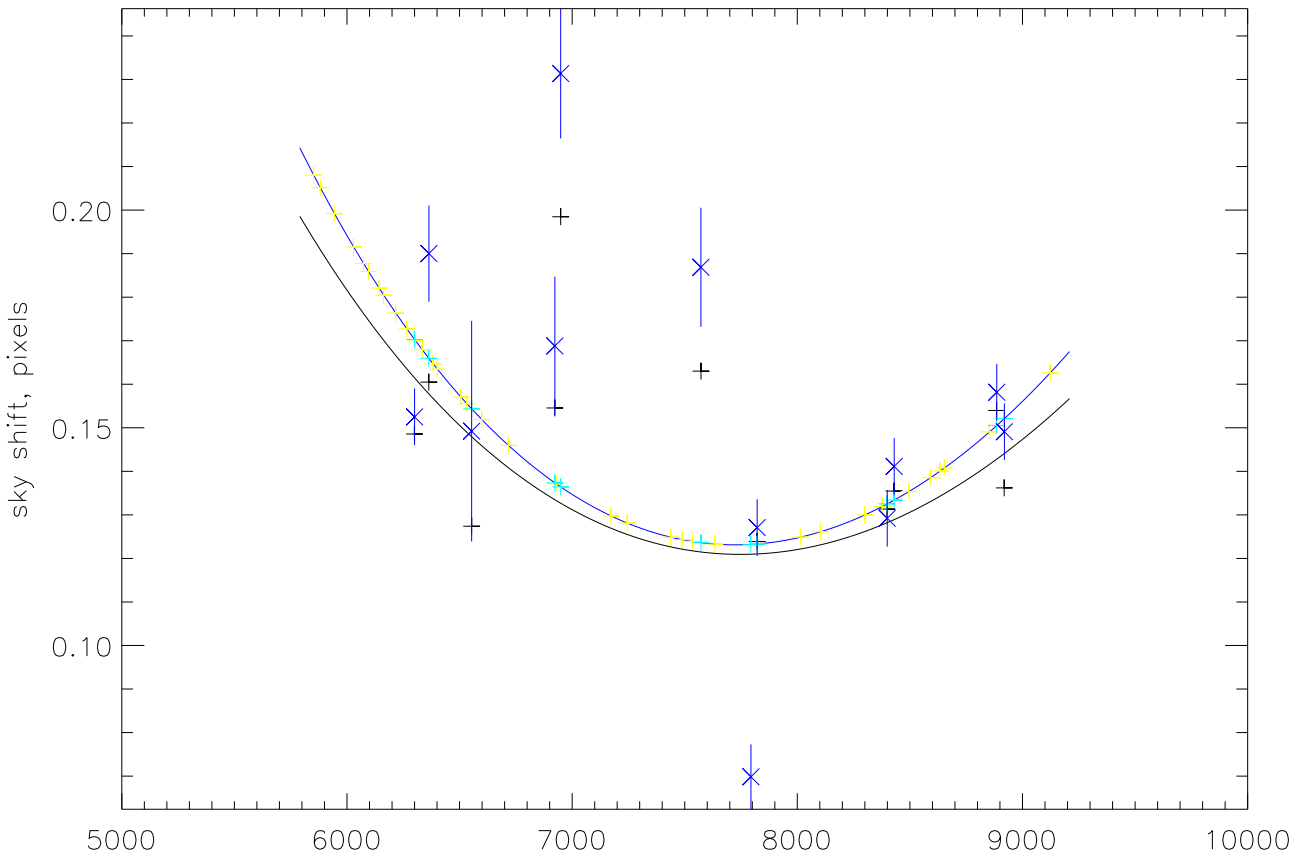

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

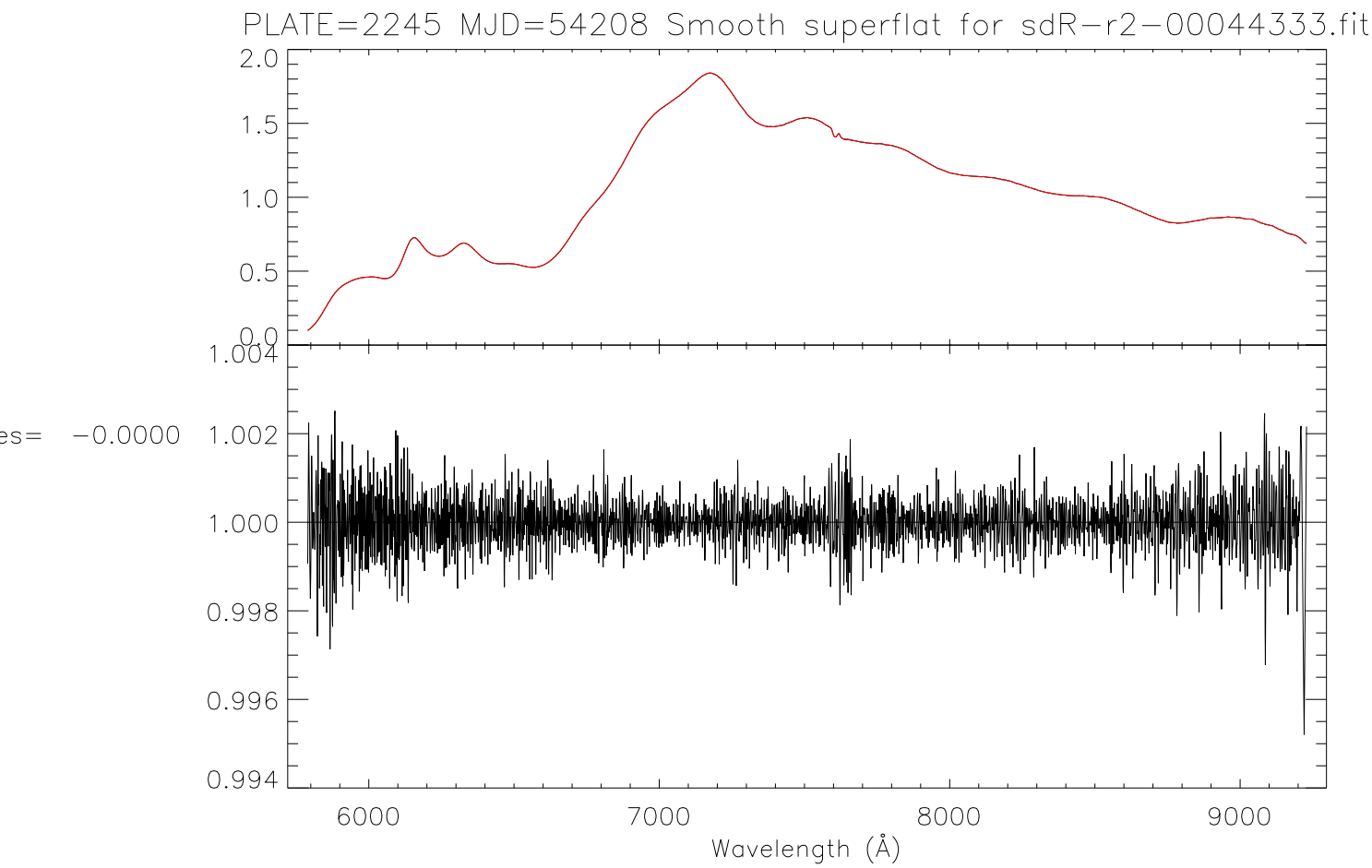

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

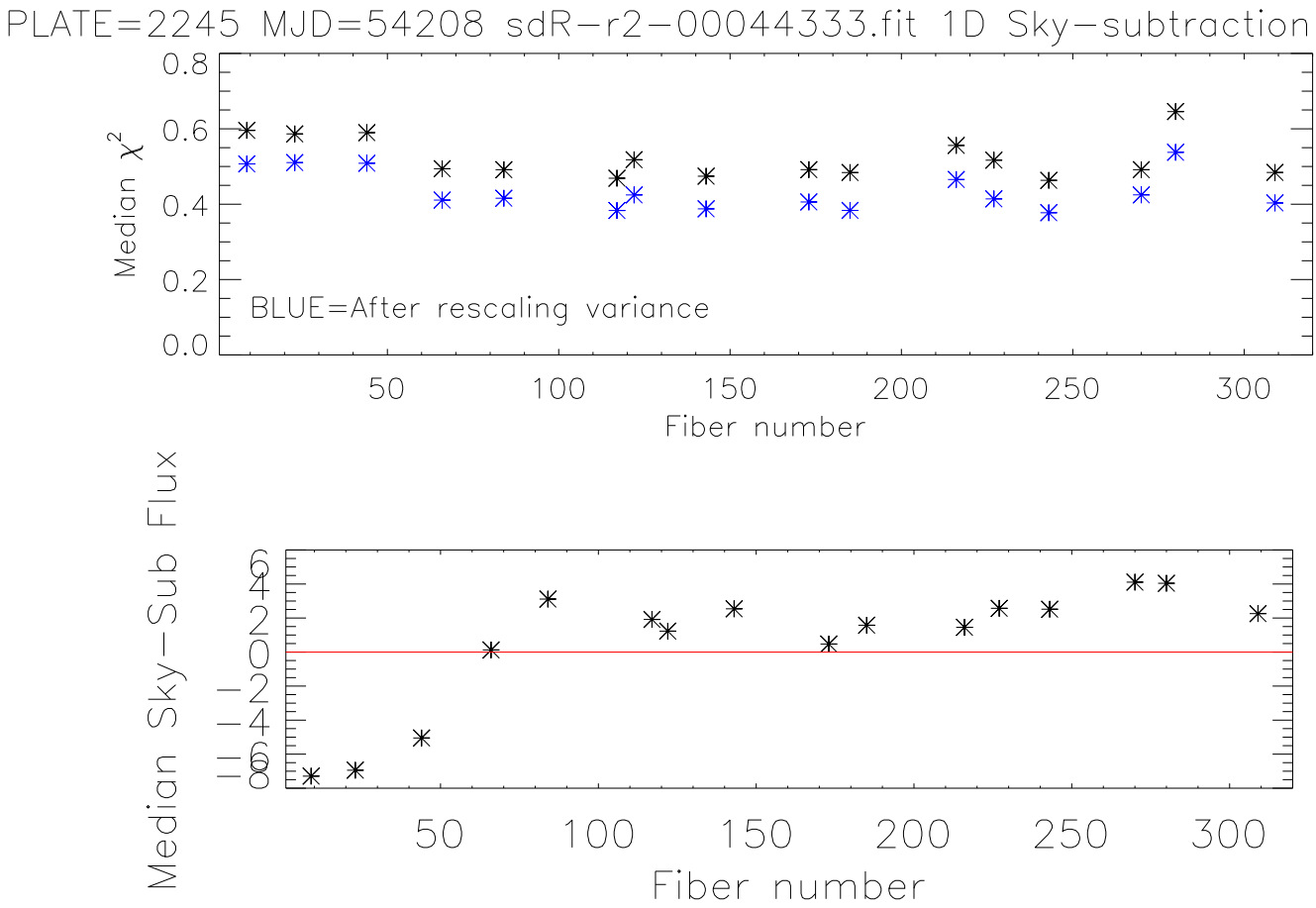

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

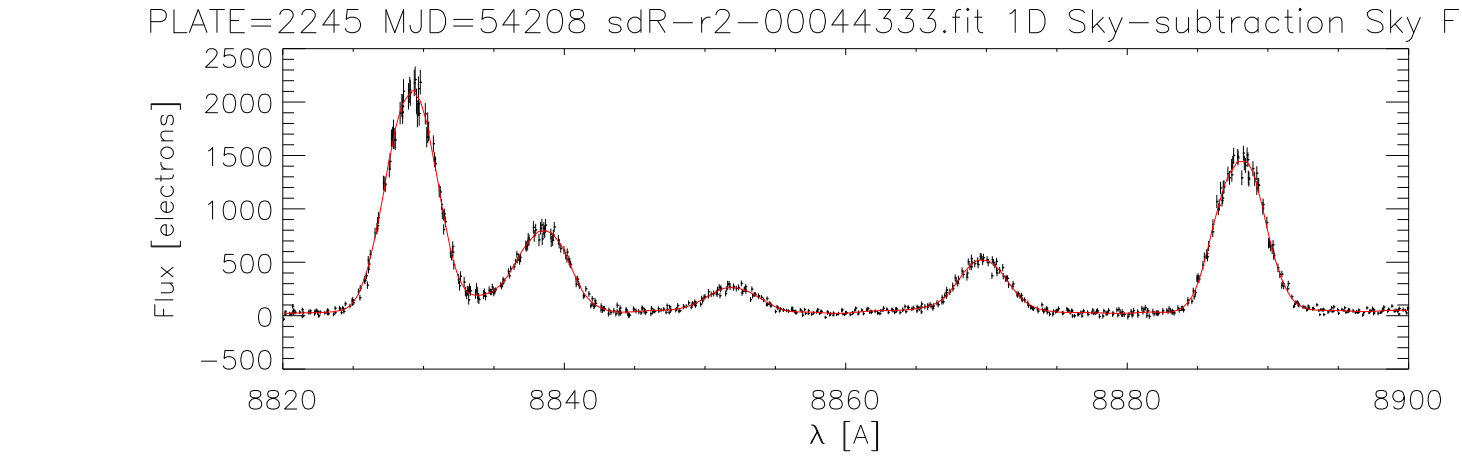

6300.3040
stdev 0.027
extra 0.15
6363.7760
stdev 0.039
extra 0.099
6553.6100
stdev 0.060
extra 0.150
6923.2100
stdev 0.061
extra 0.17
6949.0300
stdev 0.038
extra 0.23
7571.7500
stdev 0.045
extra 0.19
7794.1200
stdev 0.028
extra 0.072
7821.5100
stdev 0.027
extra 0.13
8399.1600
stdev 0.021
extra 0.13
8430.1700
stdev 0.023
extra 0.14
8885.8300
stdev 0.031
extra 0.16
8919.6100
stdev 0.031
extra 0.15
meas − pred, pix
mfib1 16
mfib2 15

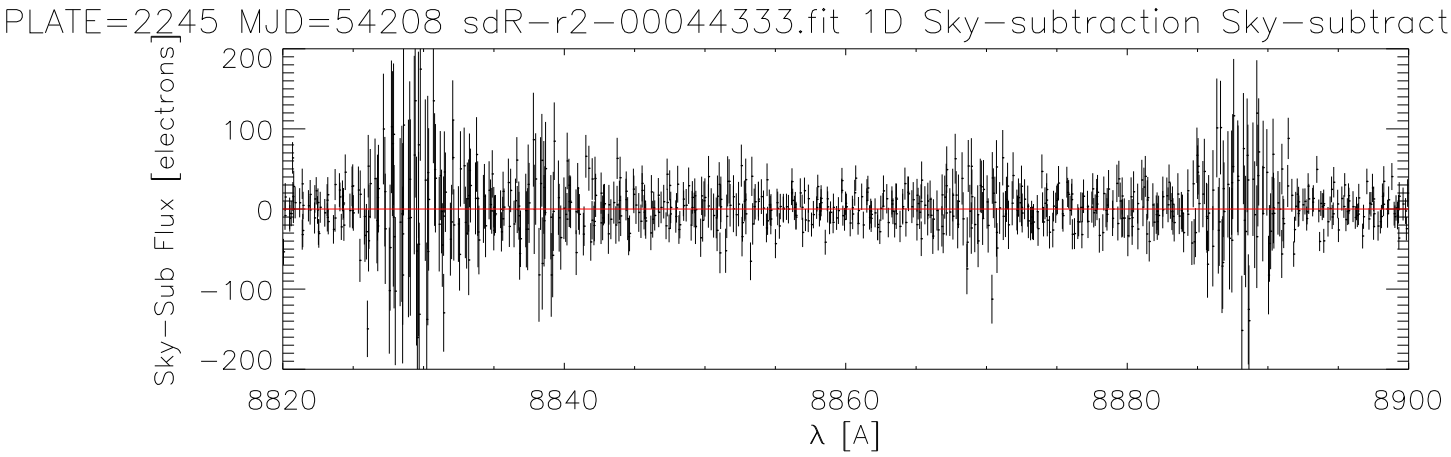

sky shift, pixels
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

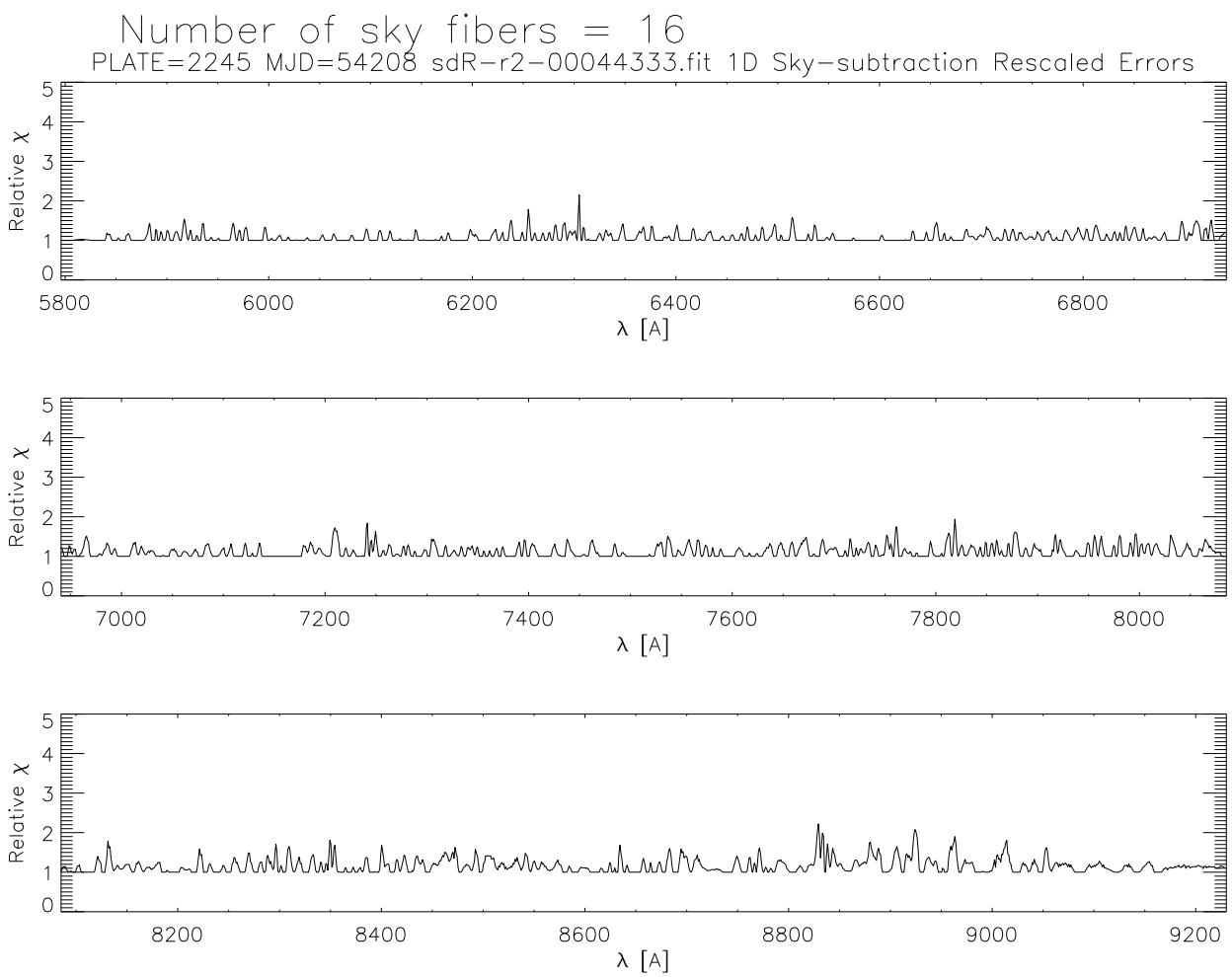

PLATE=2245 MJD=54208 Smooth superflat for sdR-r2-00044333.fit
2.0
1.5
1.0
0.5
0.0
1.004
es= -0.0000
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

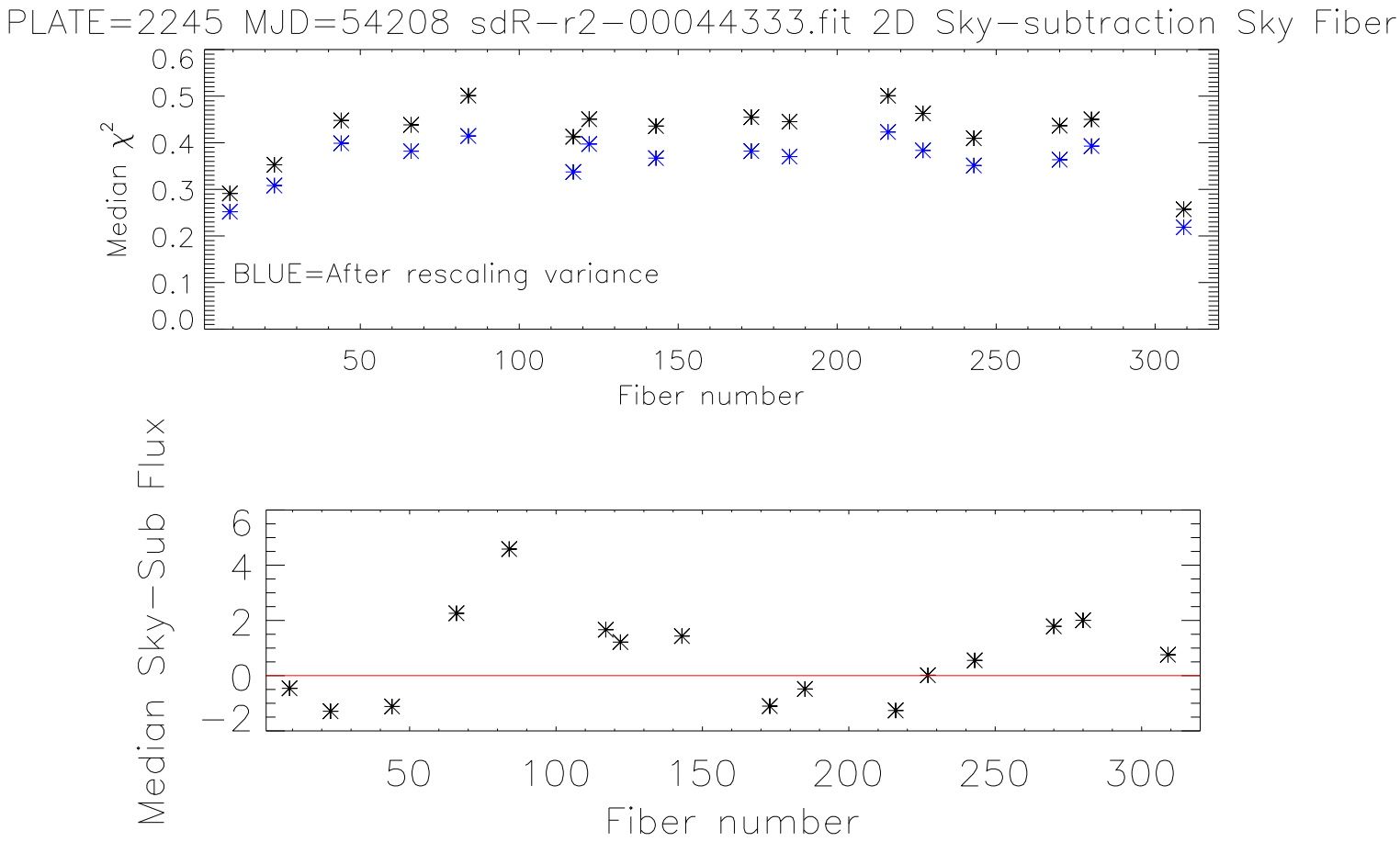

PLATE=2245 MJD=54208 sdR-r2-00044333.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

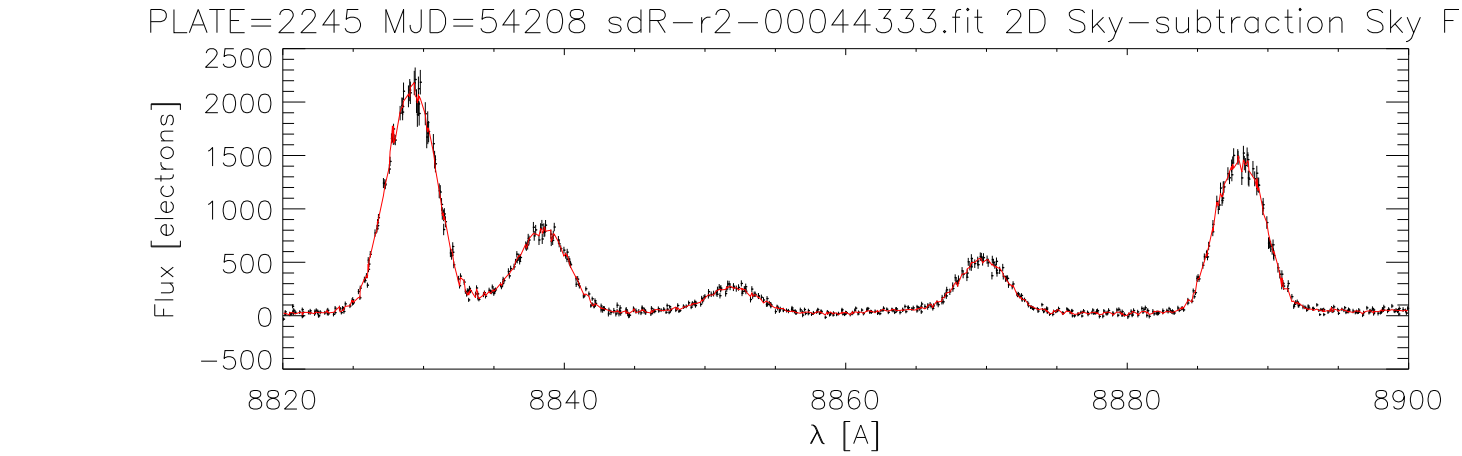
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

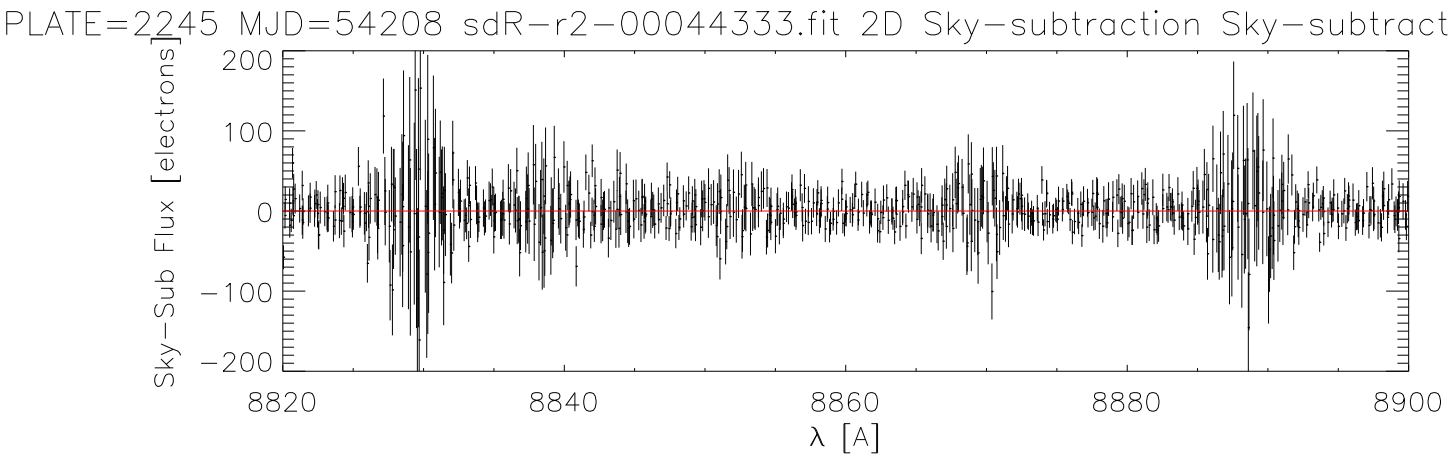

PLATE=2245 MJD=54208 sdR-r2-00044333.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

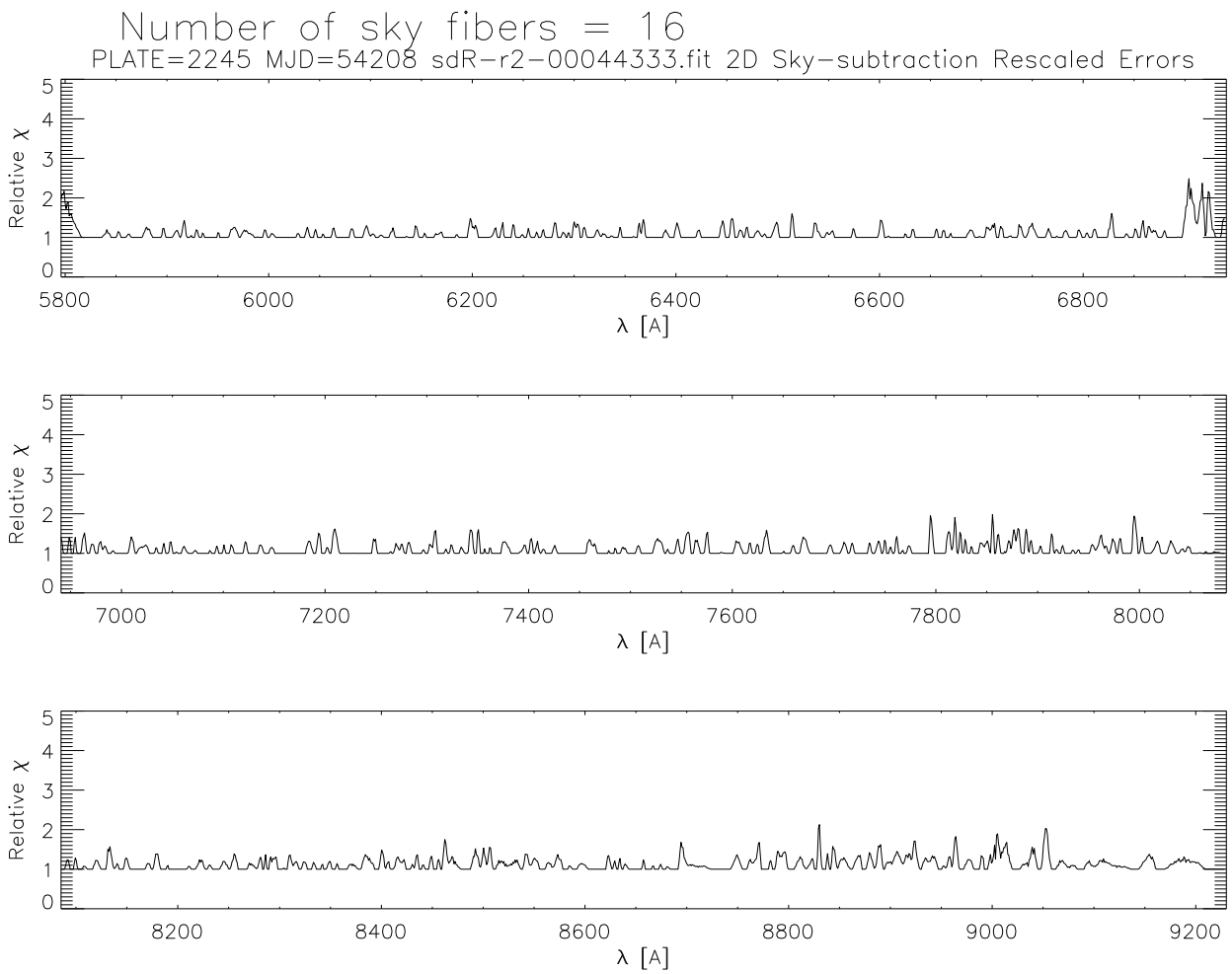

PLATE=2245 MJD=54208 sdR-r2-00044333.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

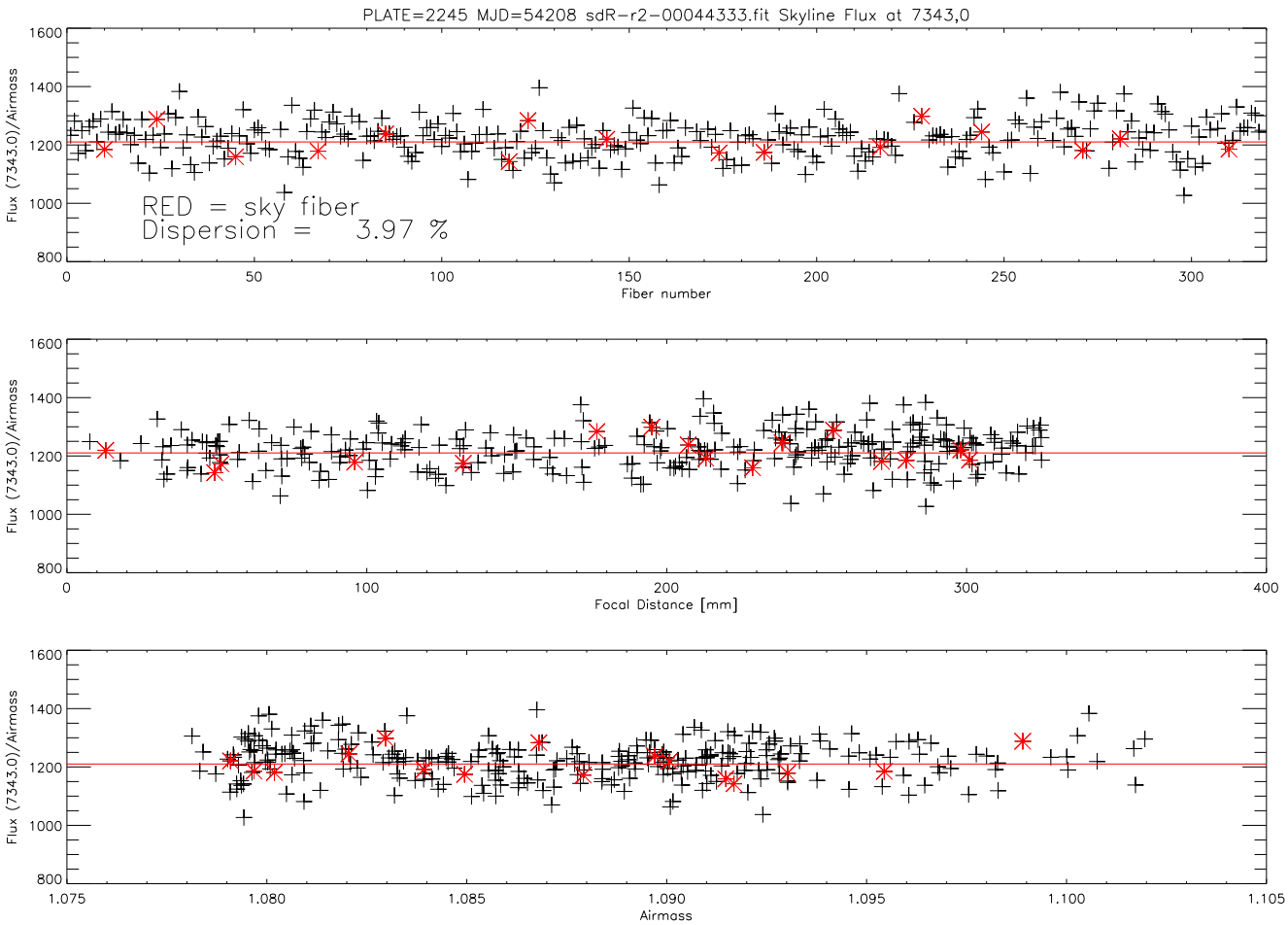

Number of sky fibers = 16
PLATE=2245 MJD=54208 sdR-r2-00044333.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

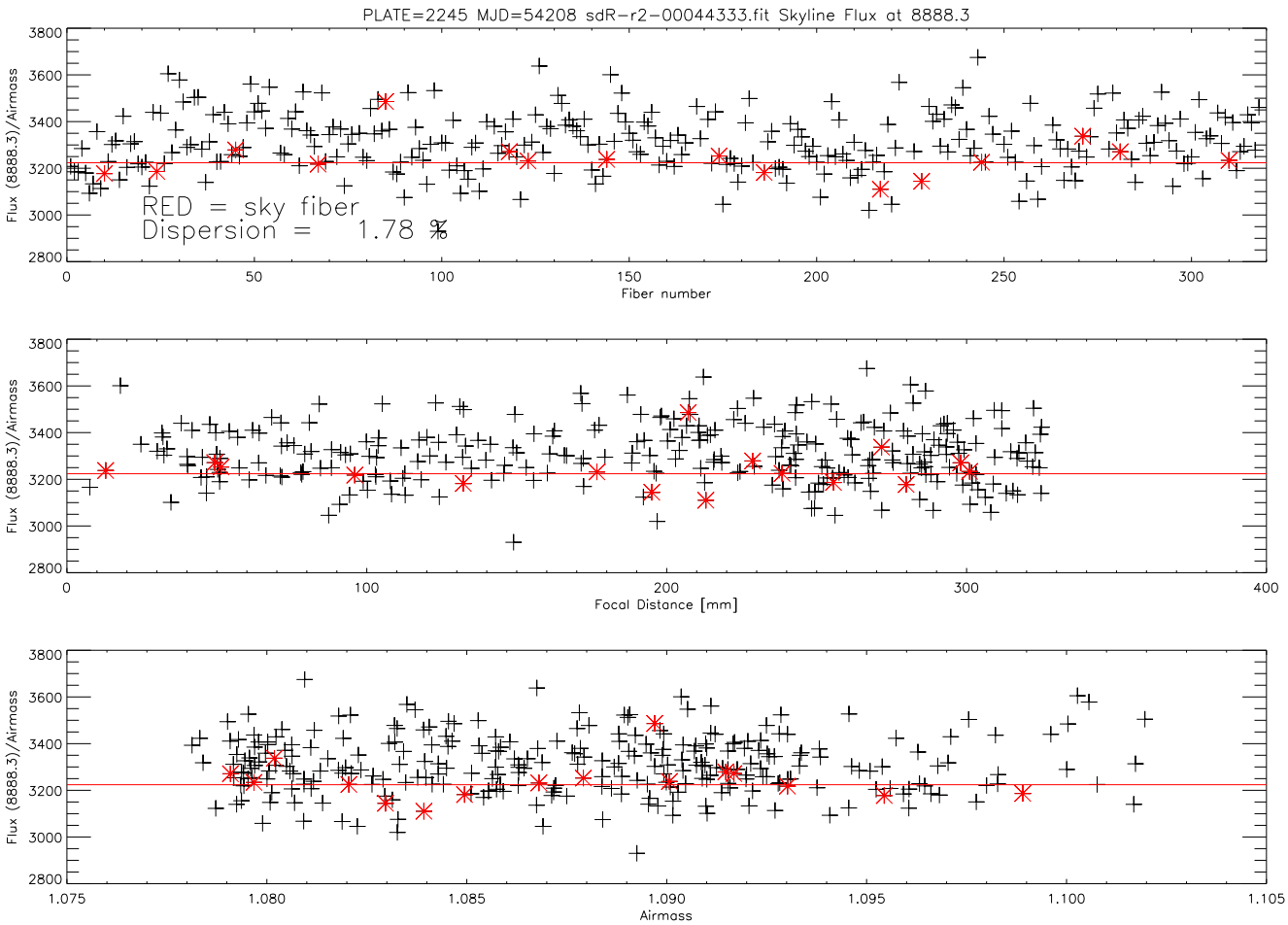

PLATE=2245 MJD=54208 sdR-r2-00044333.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number


PLATE=2245 MJD=54208 sdR-r2-00044333.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]


PLATE=2245 MJD=54208 sdR-r2-00044333.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=2245 MJD=54208 sdR-r2-00044333.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=2245 MJD=54208 sdR-r2-00044333.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.97 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2245 MJD=54208 sdR-r2-00044333.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.78 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass