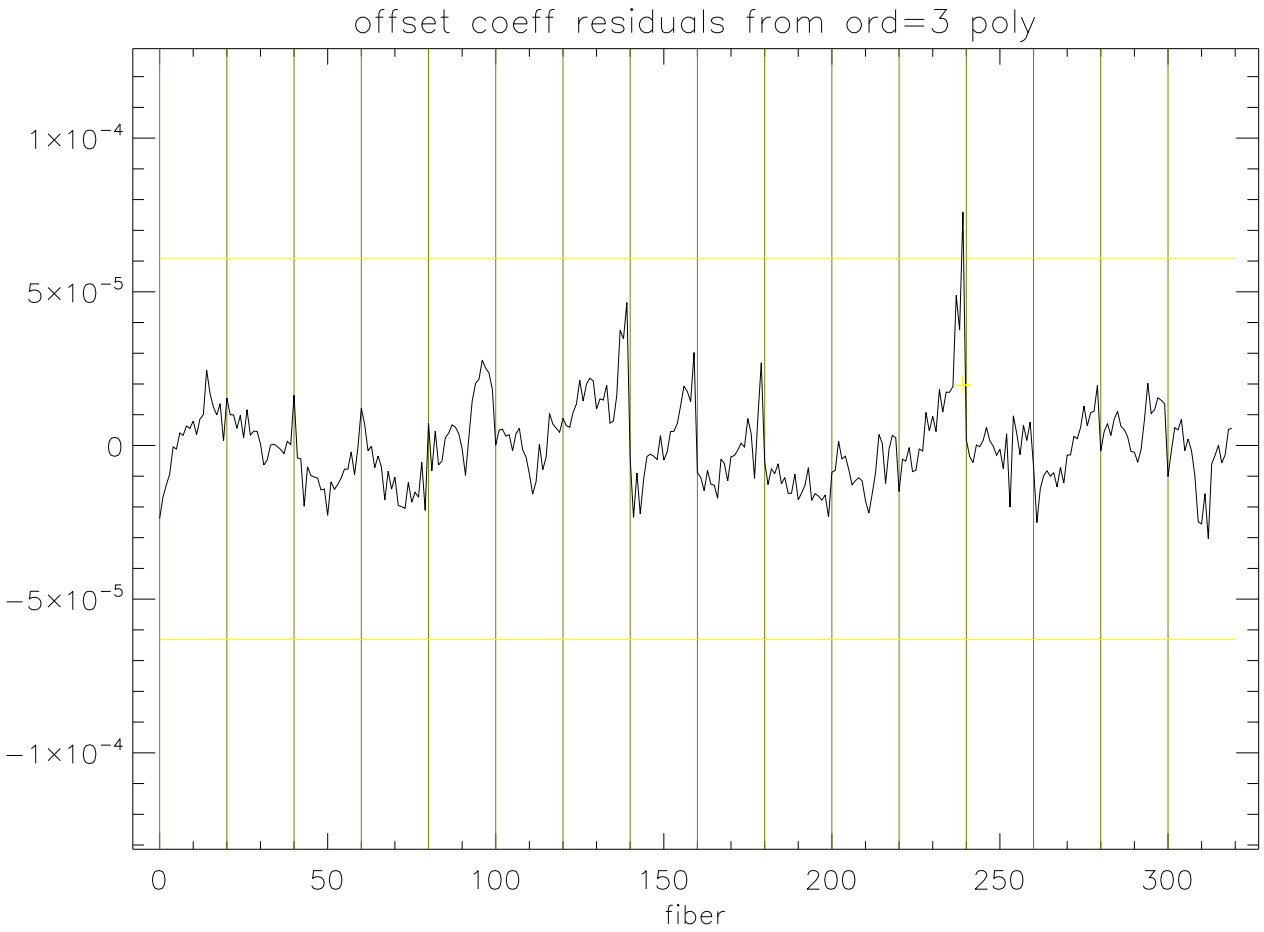
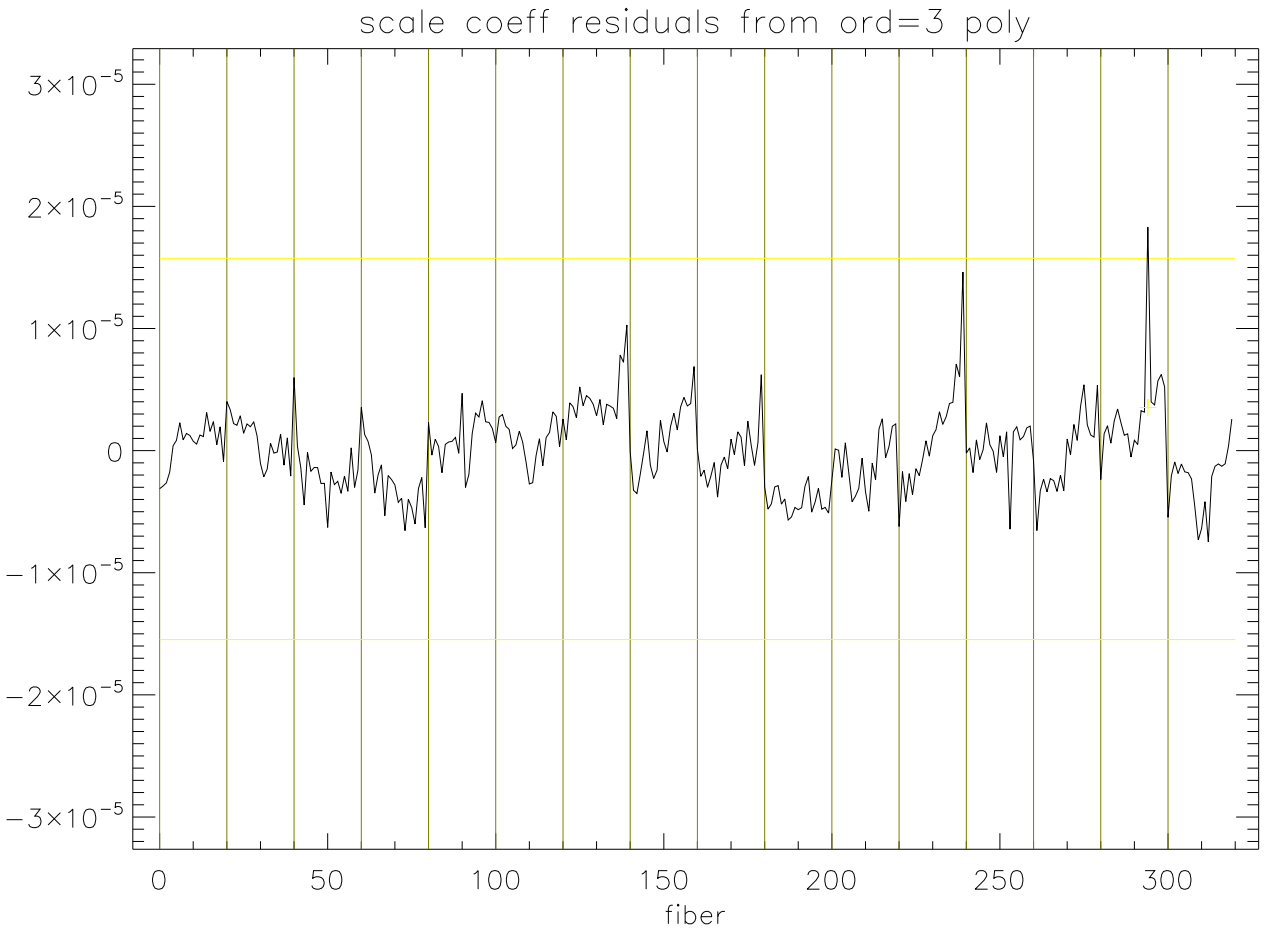
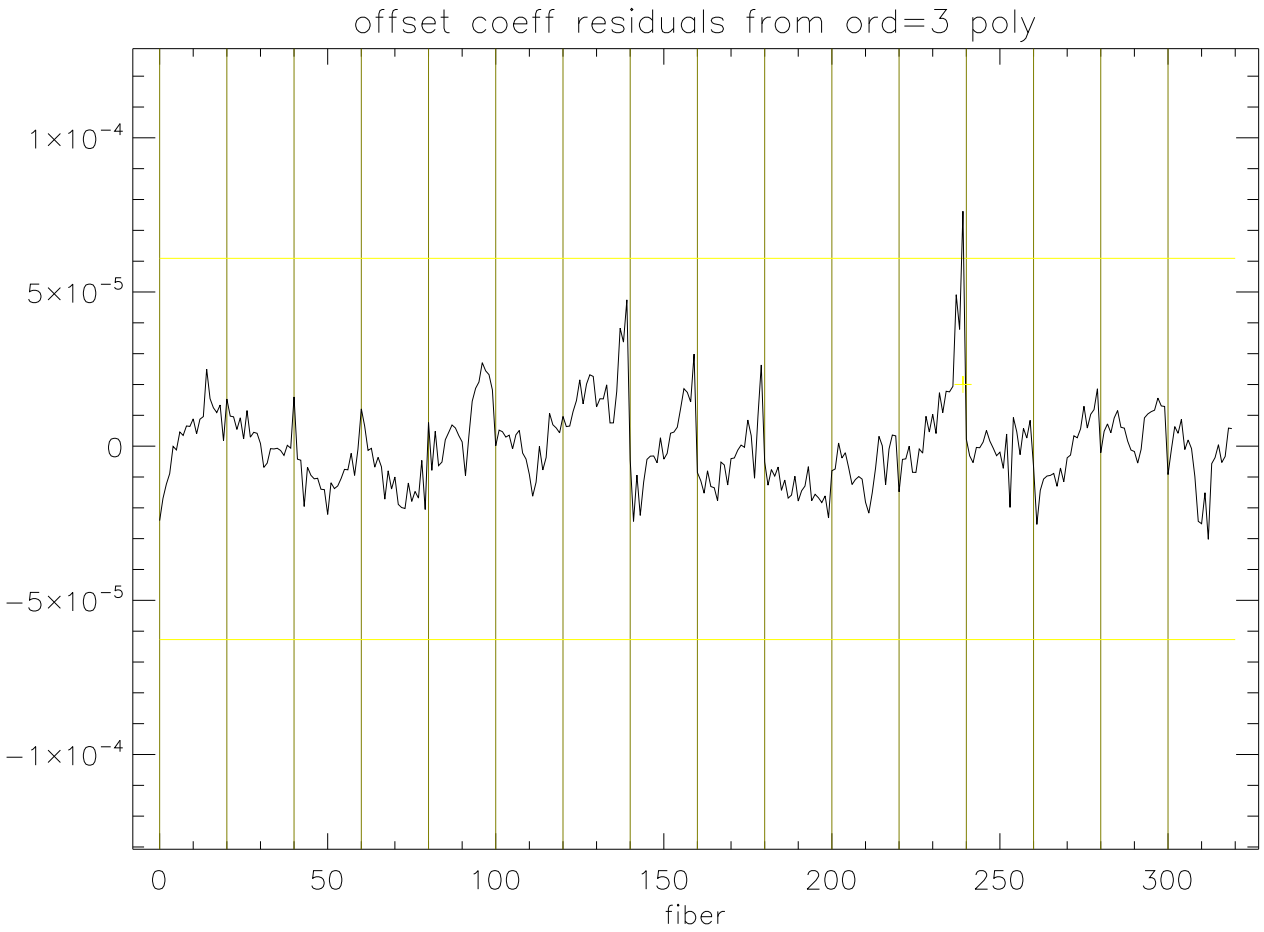
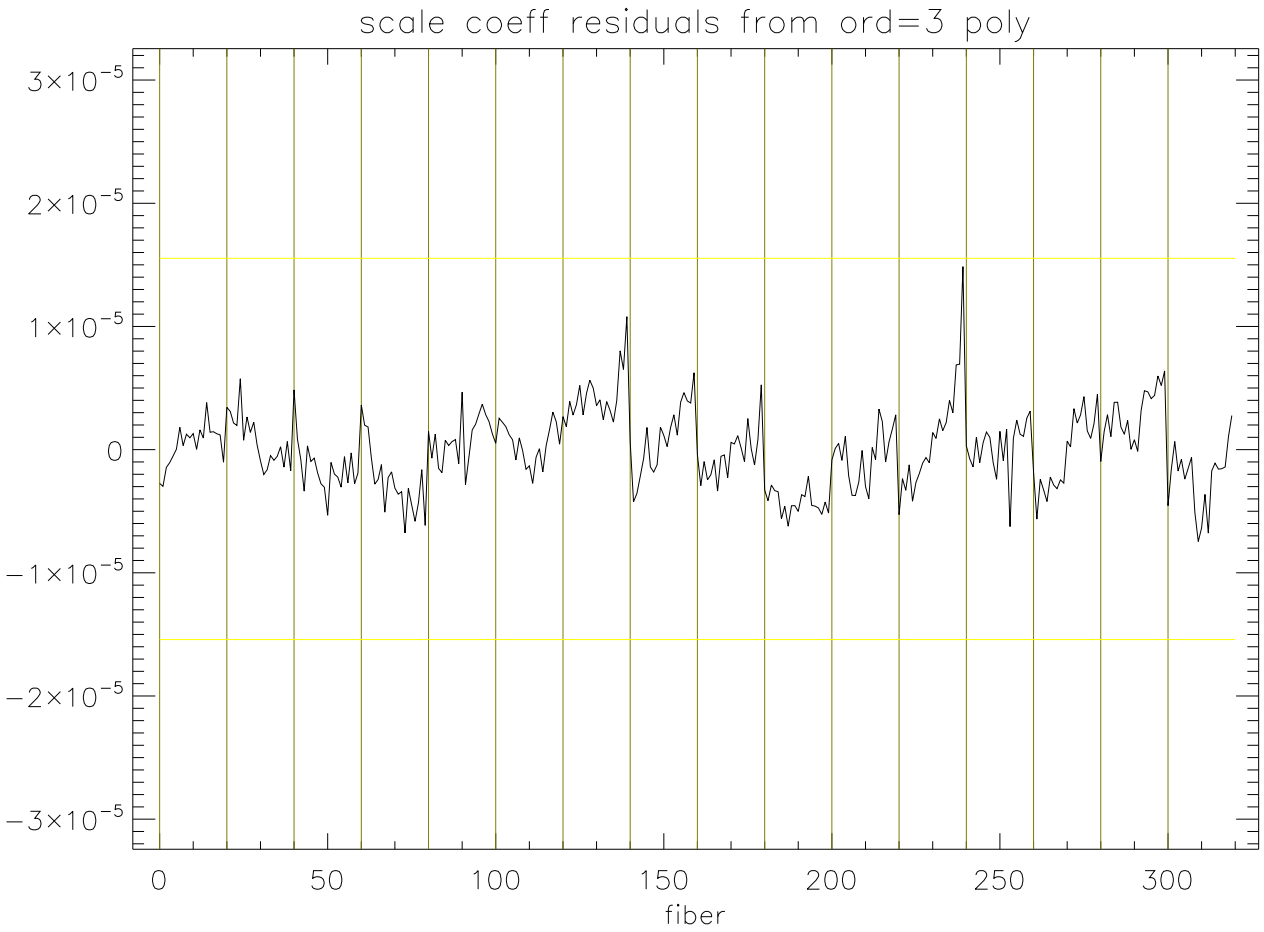
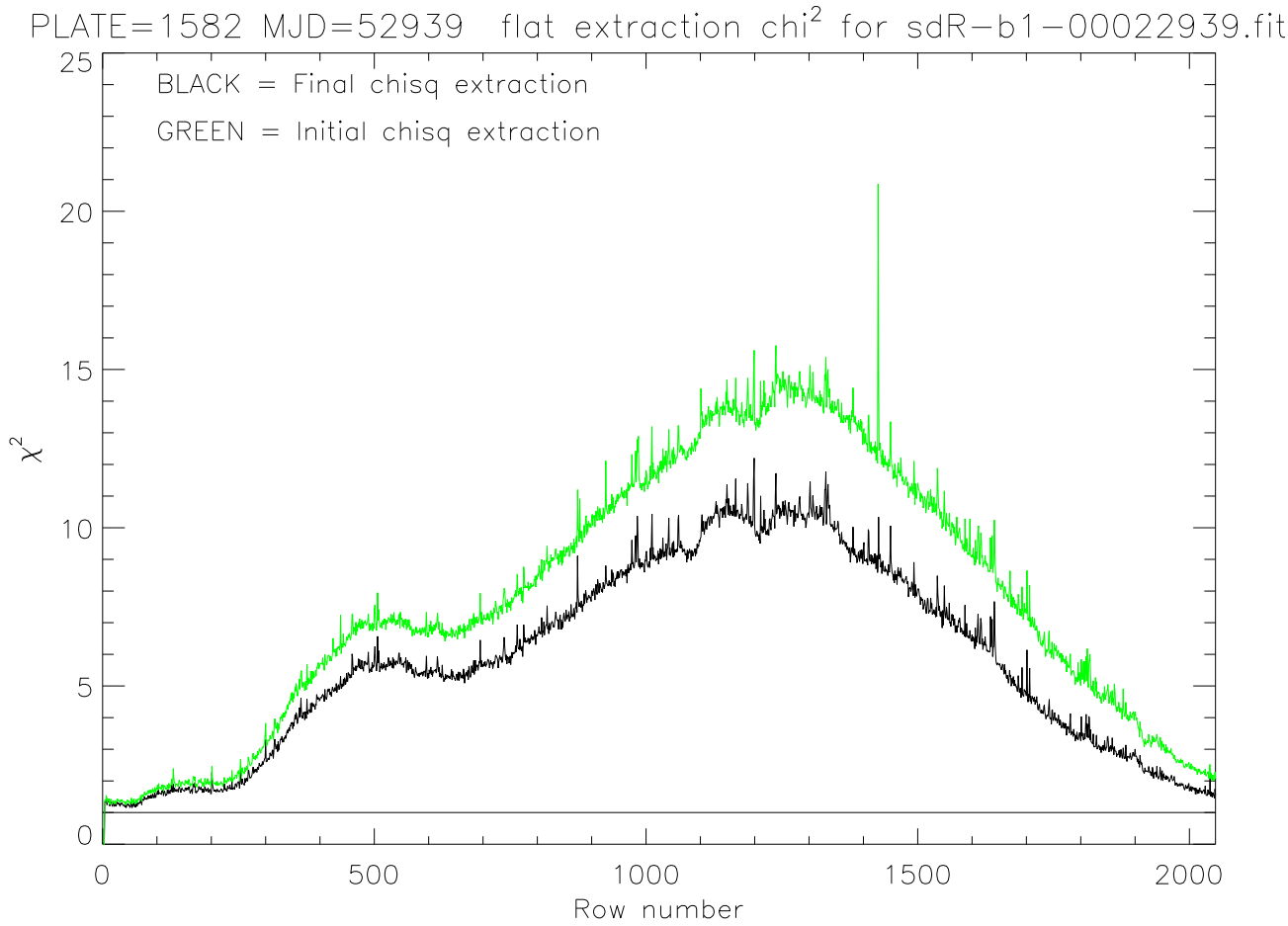
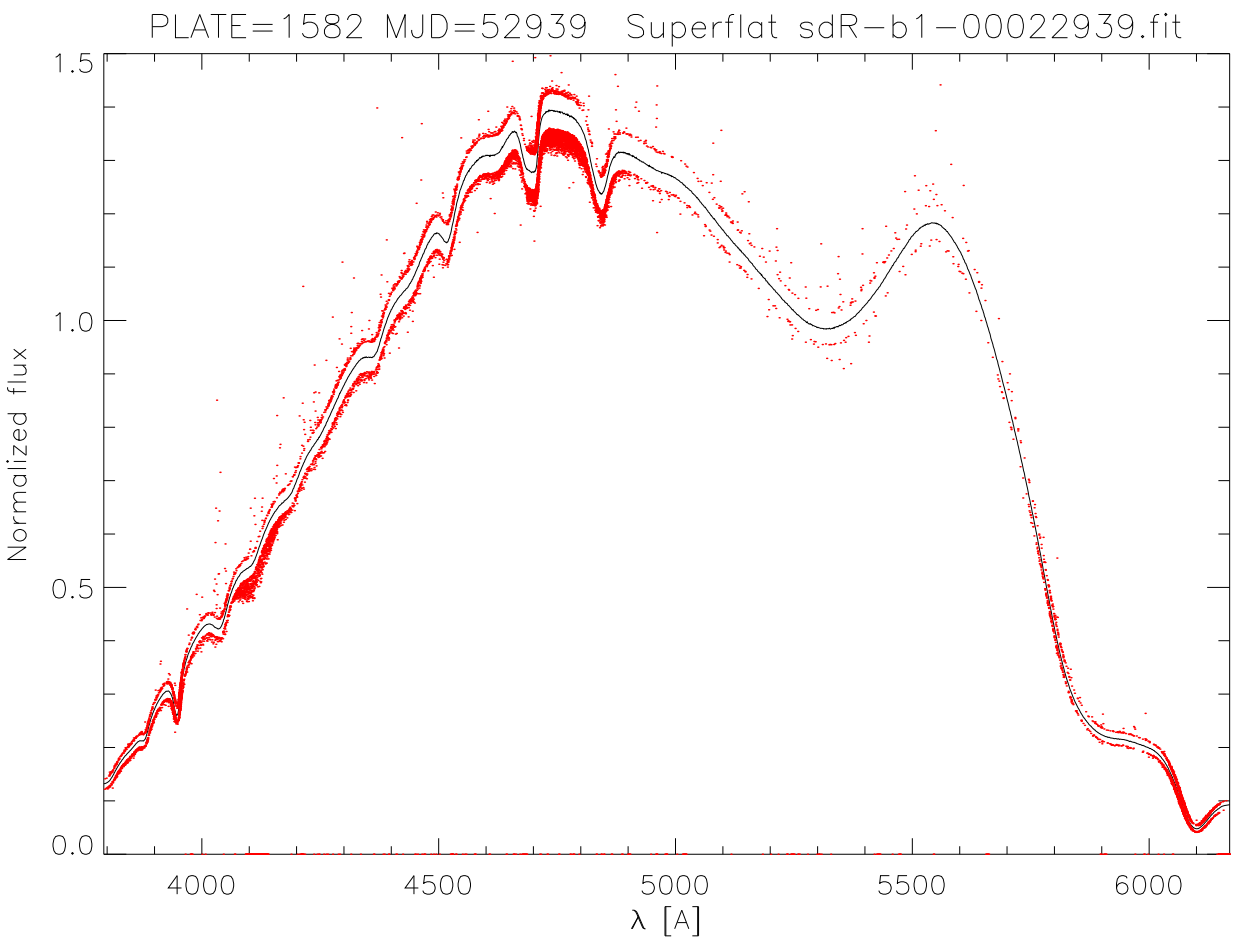

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

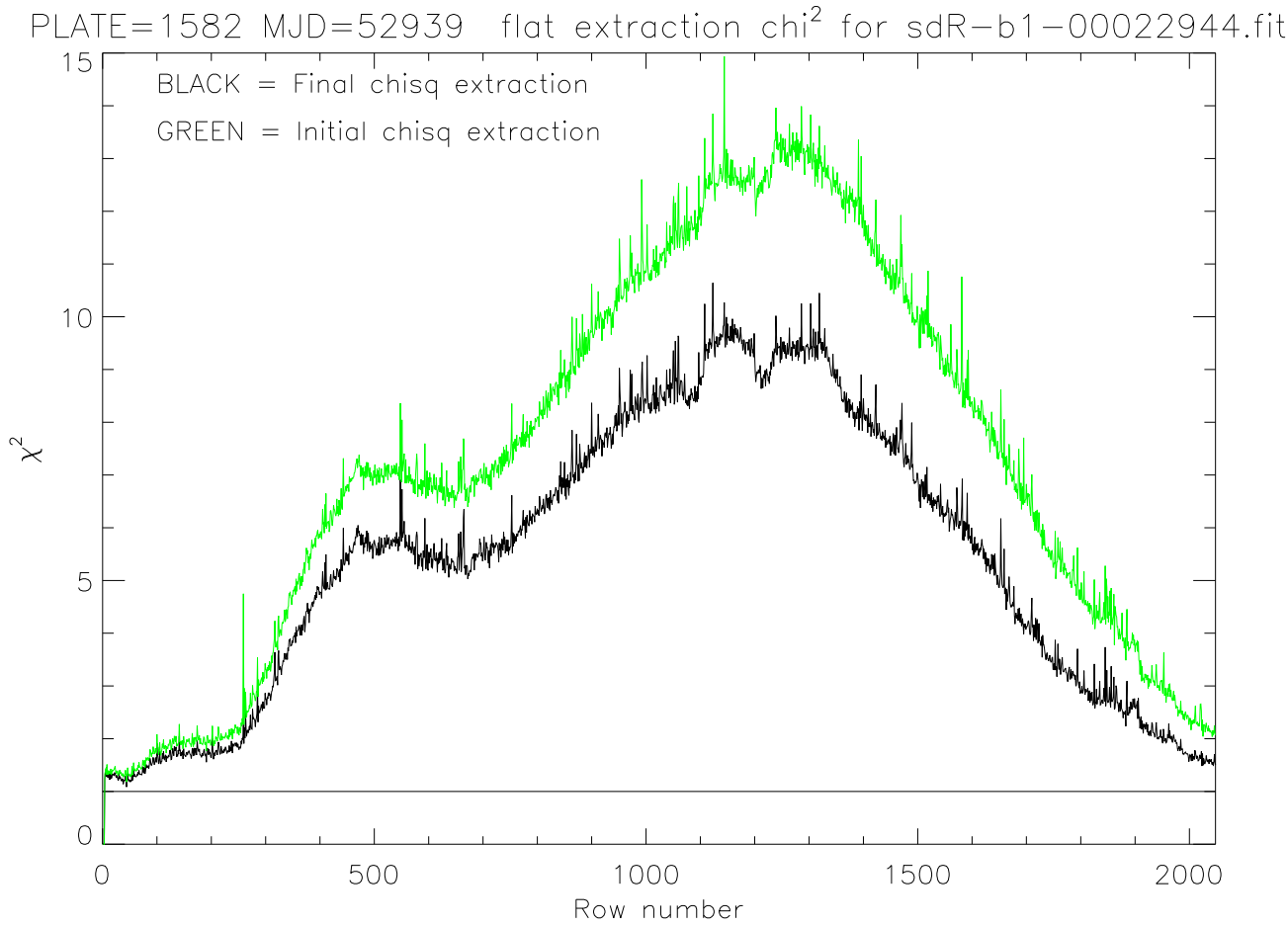

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

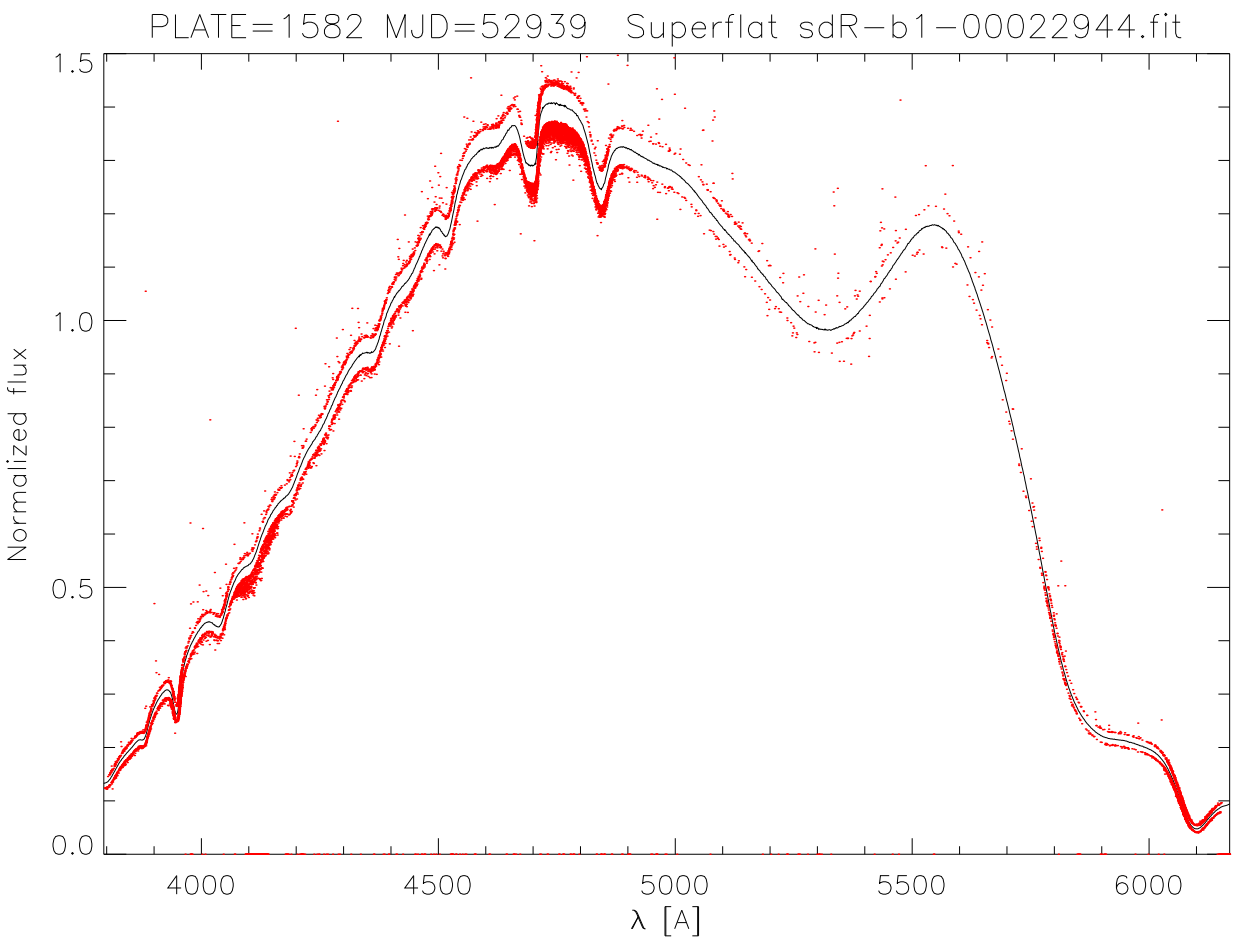

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

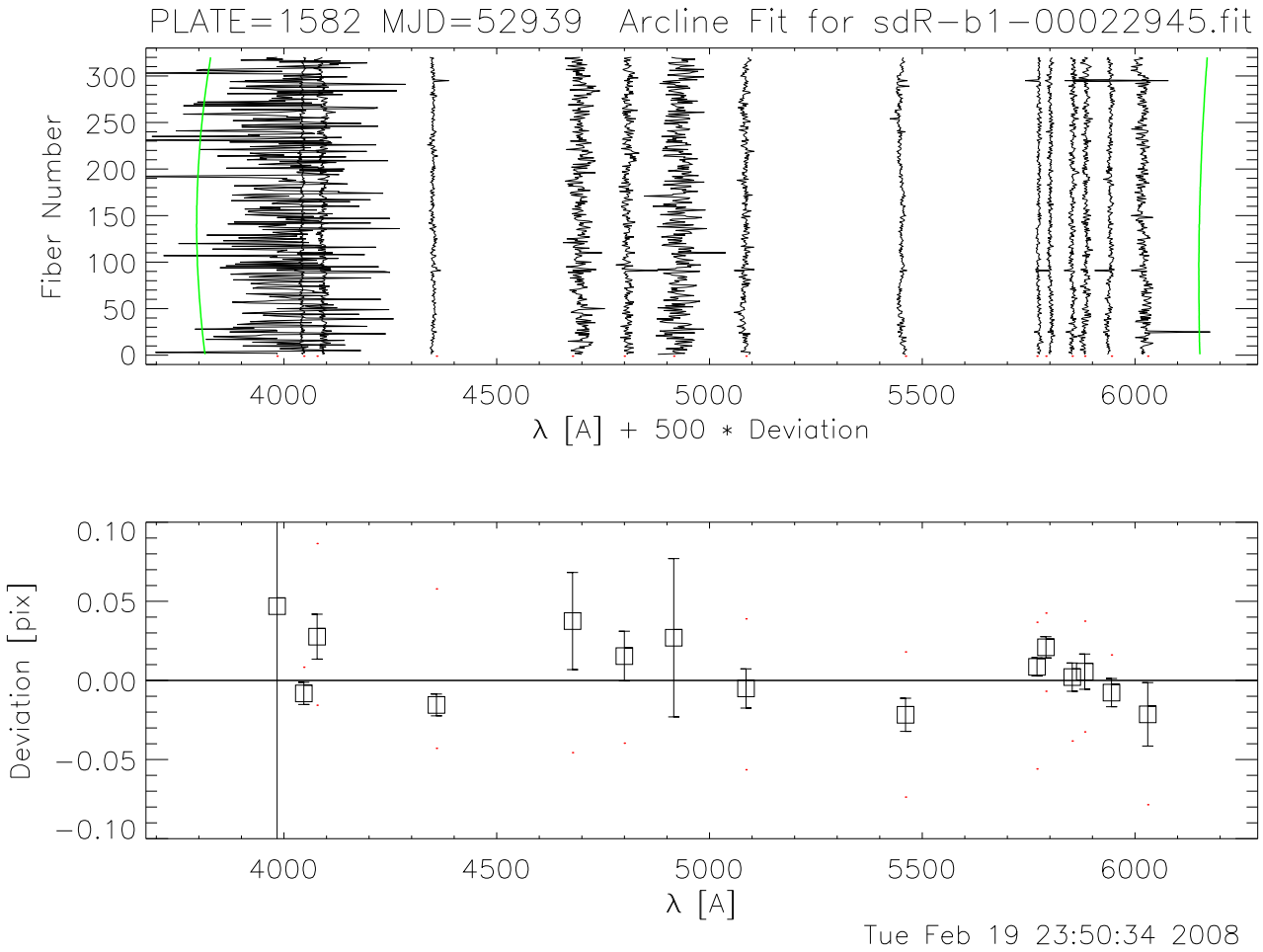

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

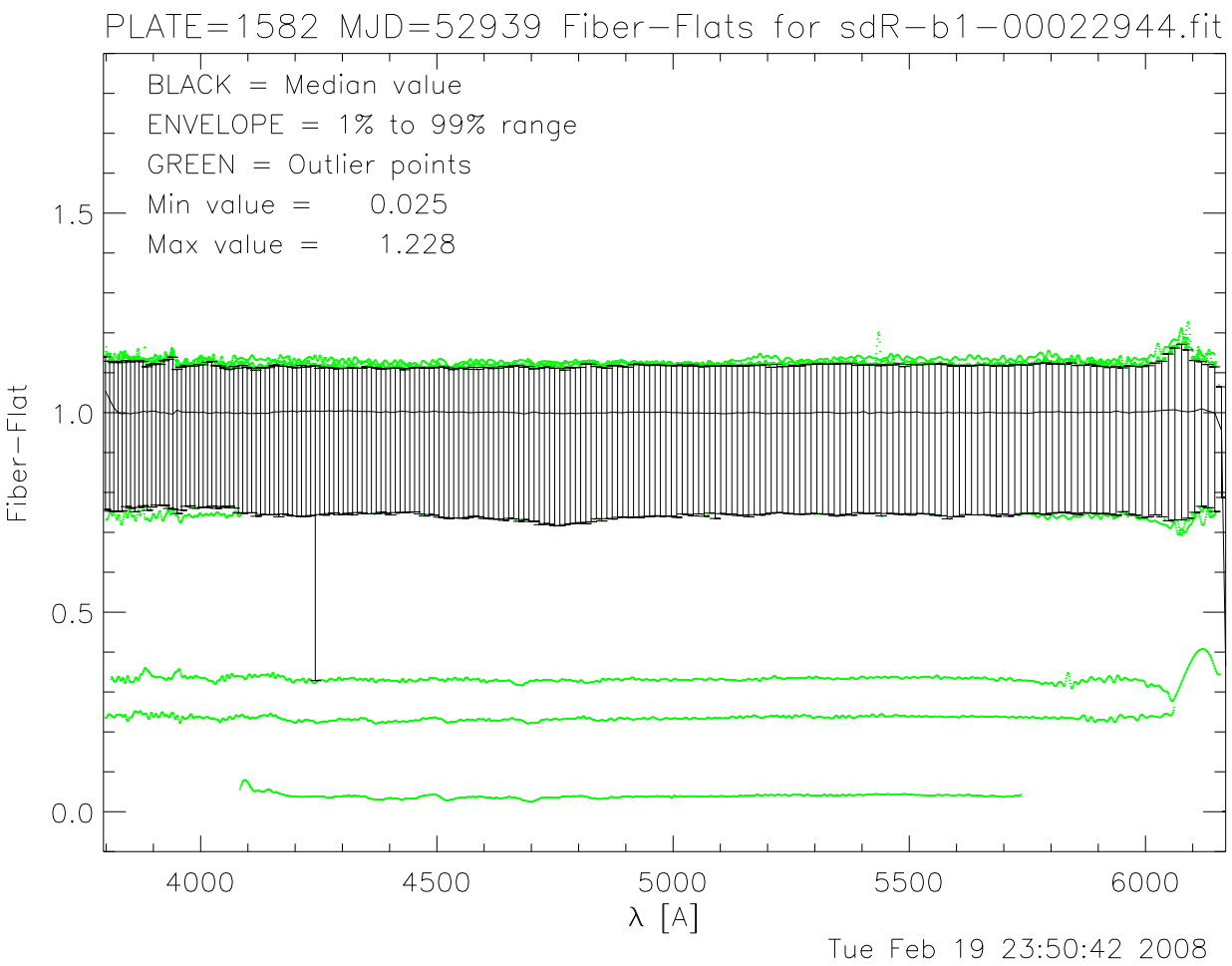

PLATE=1582 MJD=52939 flat extraction chi^2 for sdR−b1−00022939.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

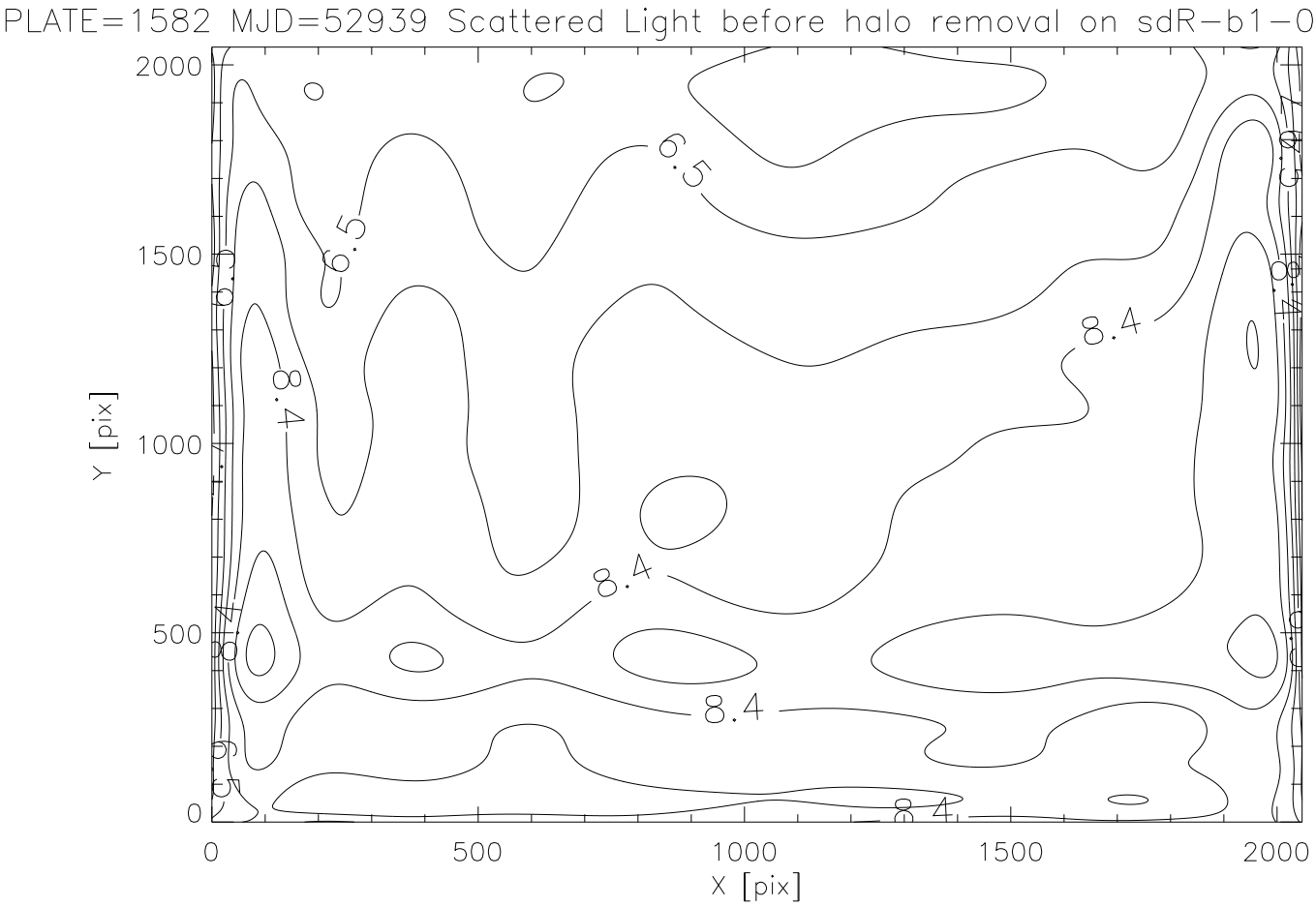

PLATE=1582 MJD=52939 Superflat sdR-b1-00022939.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

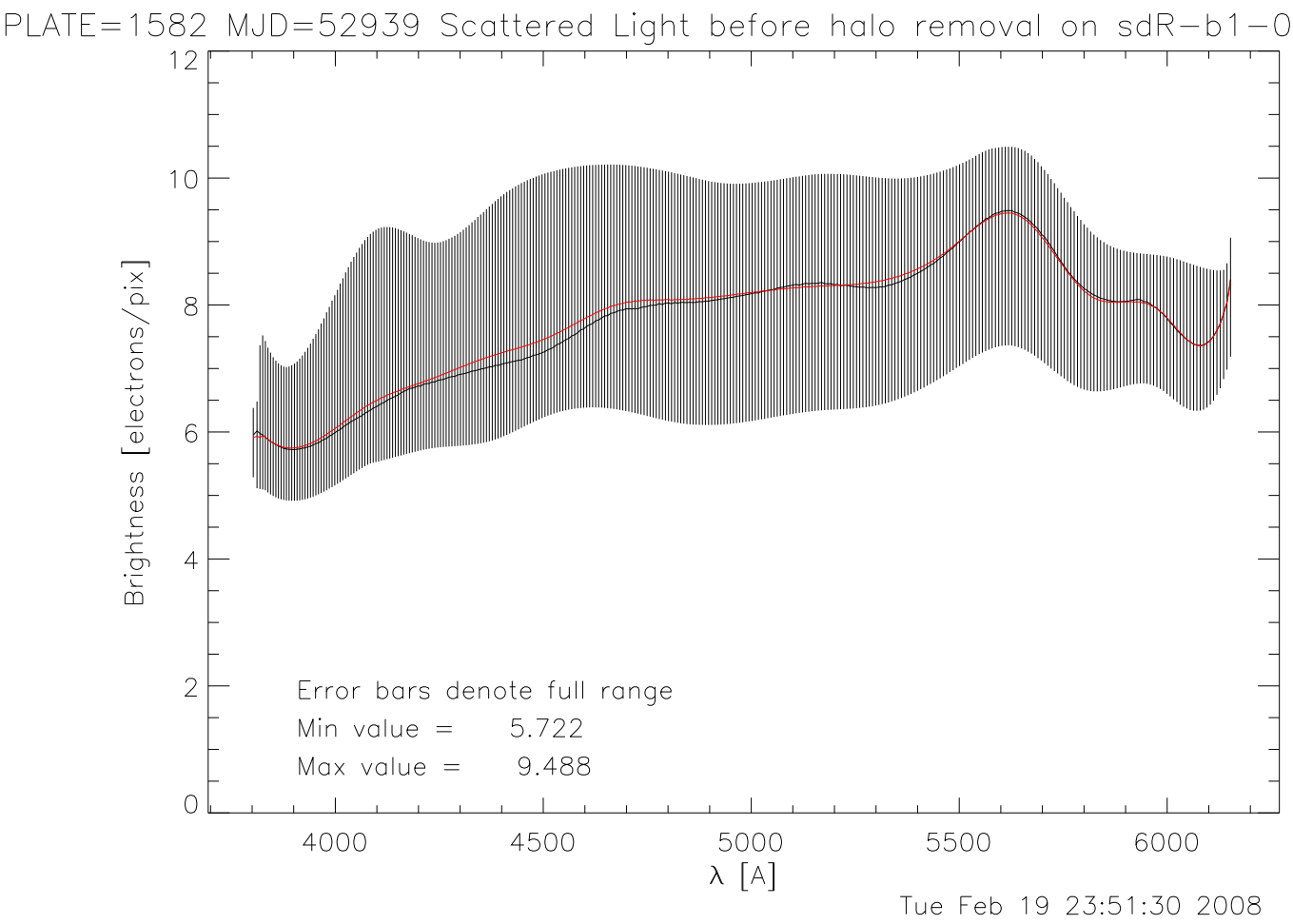

PLATE=1582 MJD=52939 flat extraction chi^2 for sdR-b1-00022944.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

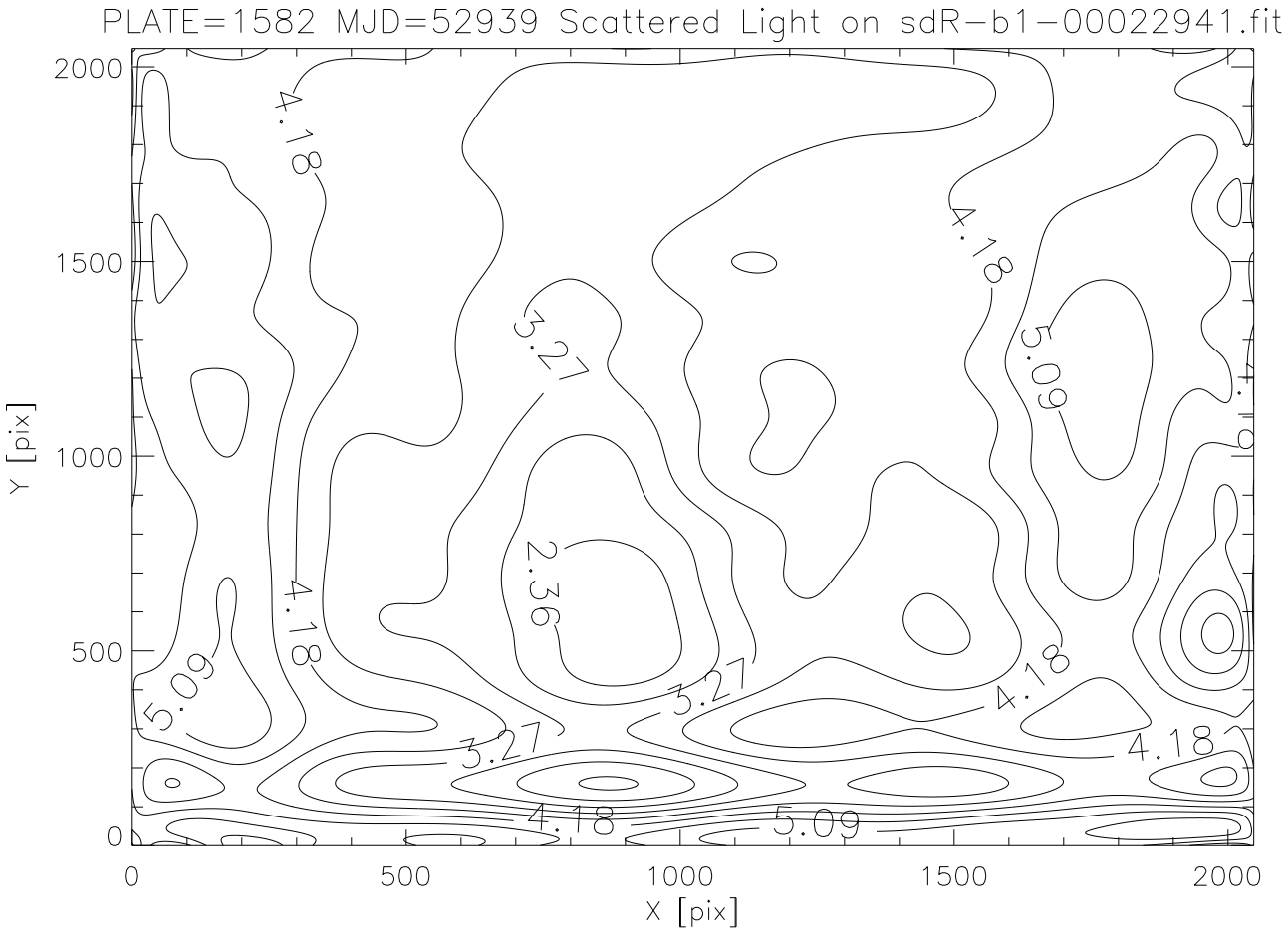

PLATE=1582 MJD=52939 Superflat sdR-b1-00022944.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

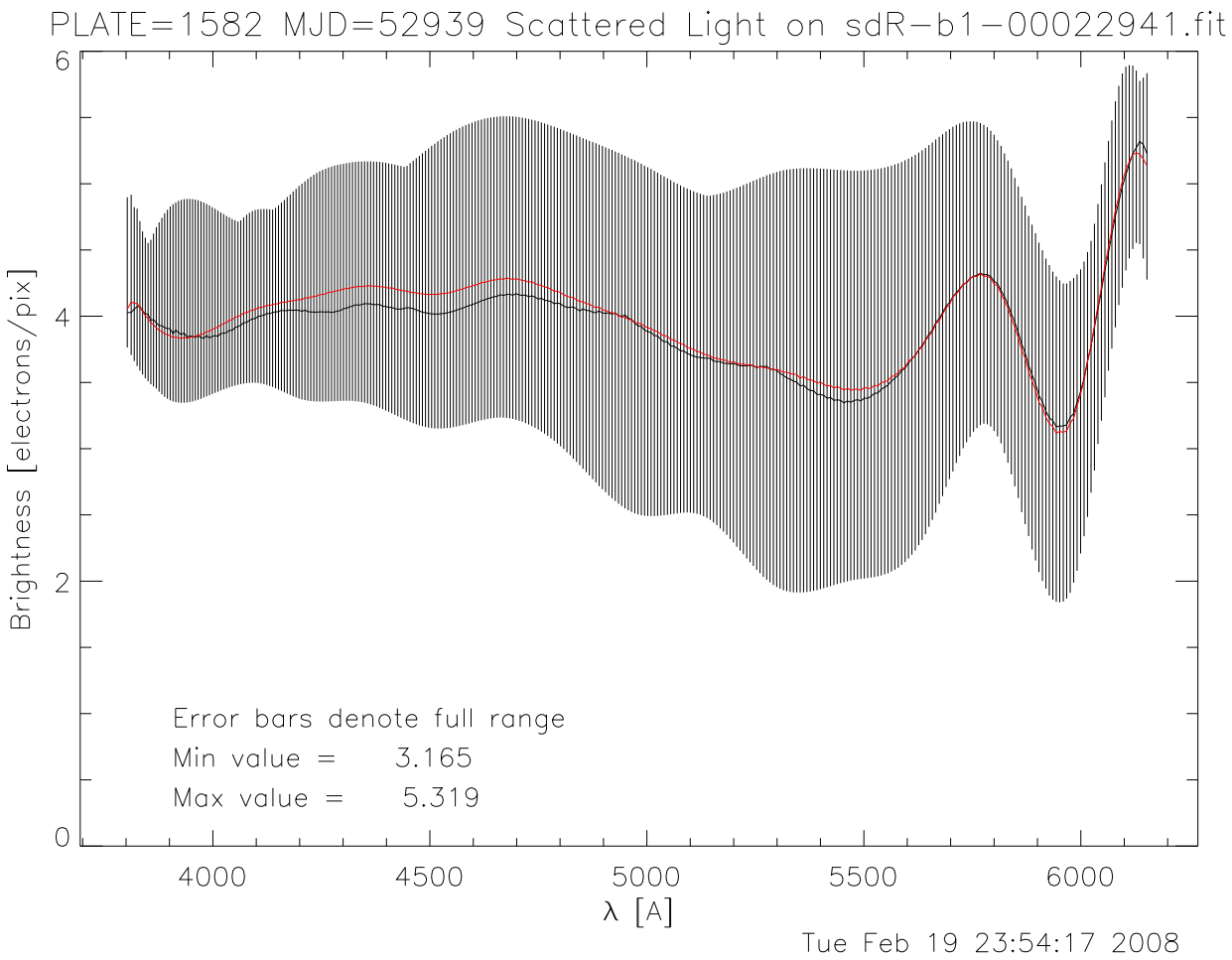

PLATE=1582 MJD=52939 Arcline Fit for sdR-b1-00022945.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 23:50:34 2008

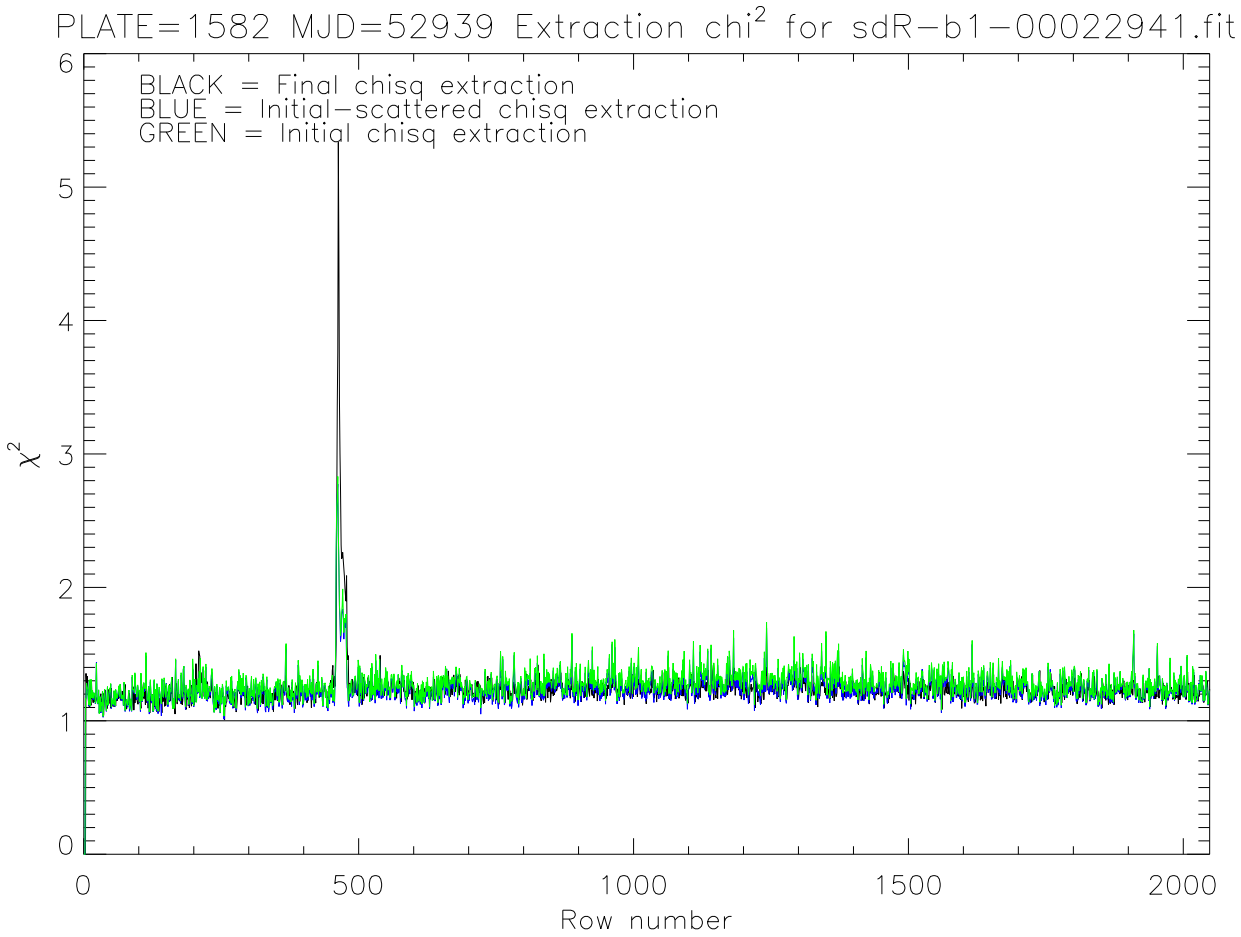

PLATE=1582 MJD=52939 Fiber-Flats for sdR-b1-00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.025
Max value = 1.228
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 23:50:42 2008

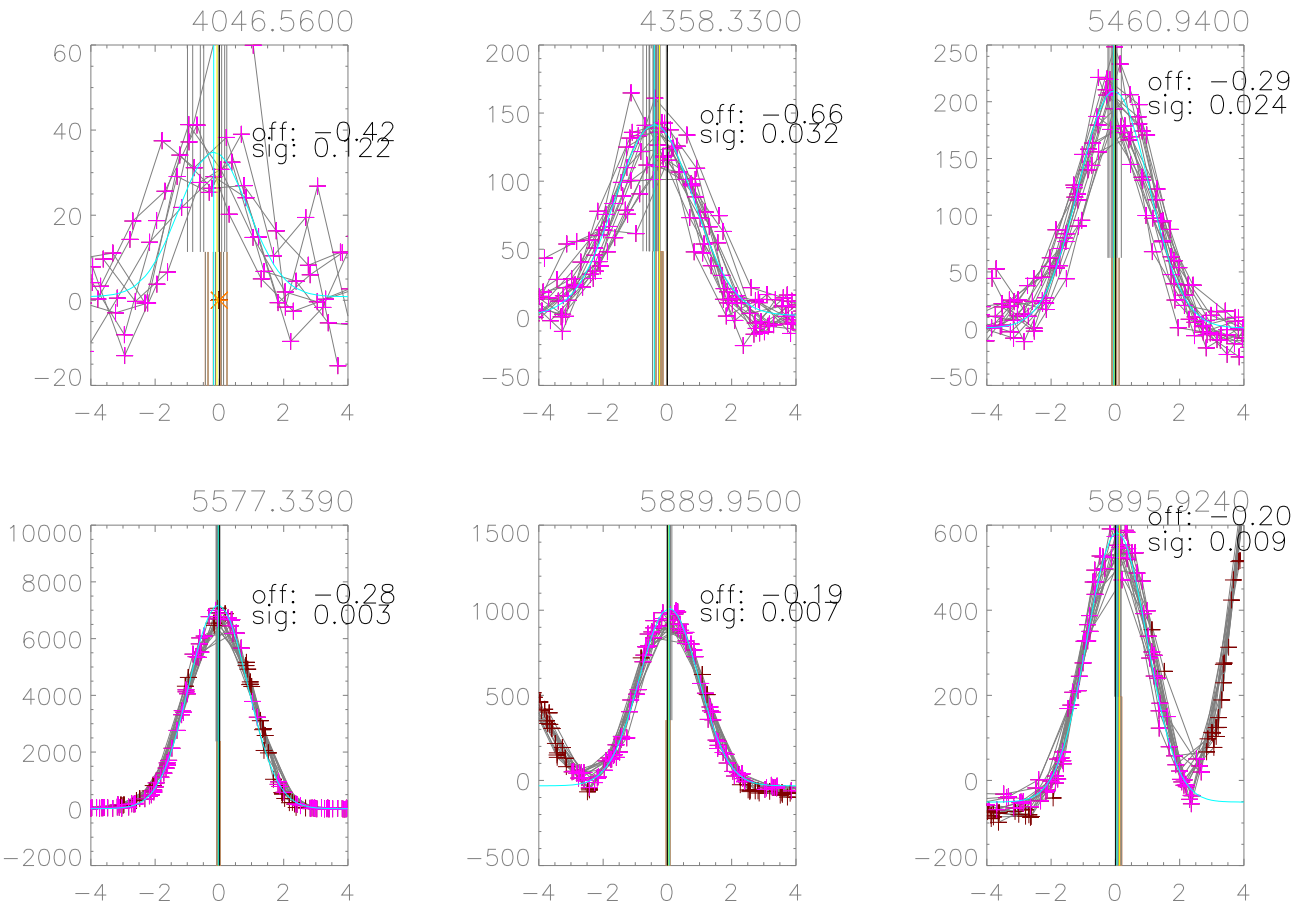

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b1-00022941.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4

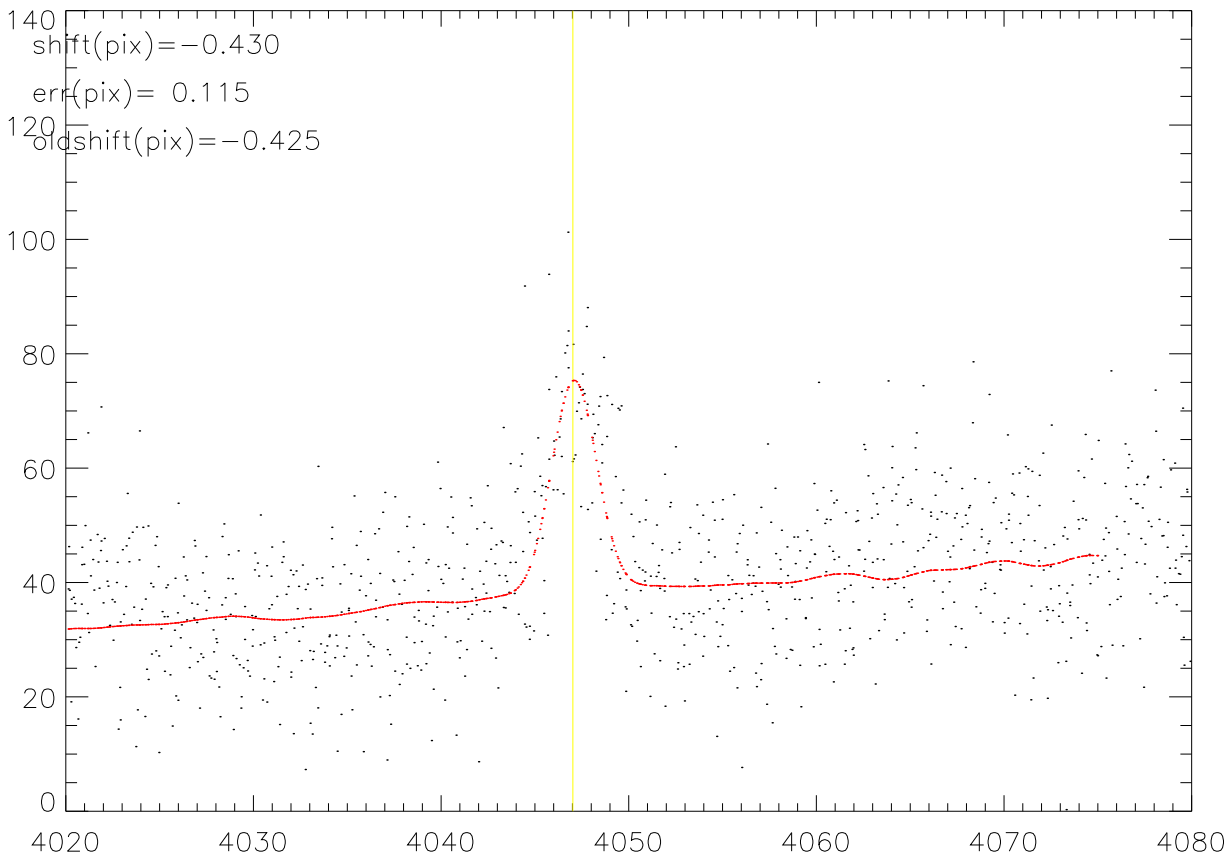

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b1-00022941.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.722
Max value = 9.488
Tue Feb 19 23:51:30 2008

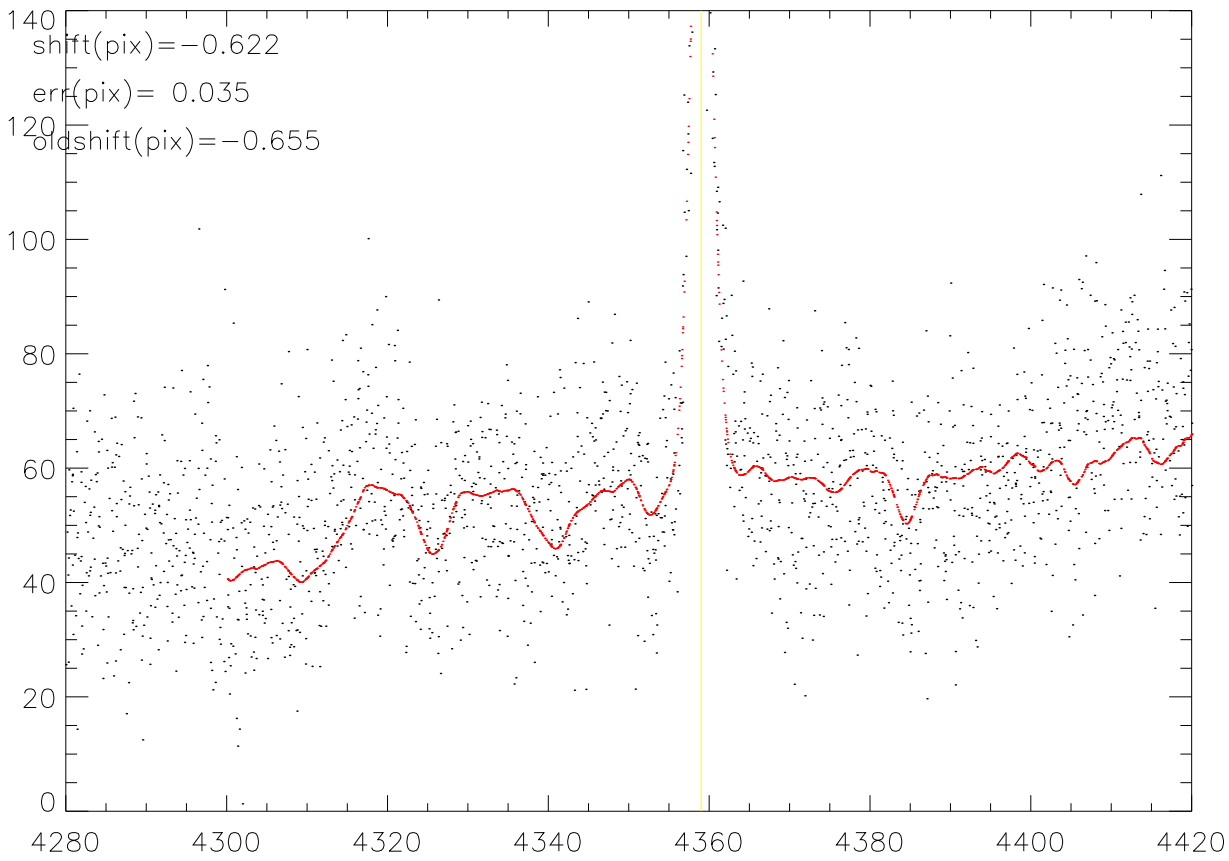

PLATE=1582 MJD=52939 Scattered Light on sdR-b1-00022941.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.18
5.09
3.27
2.36

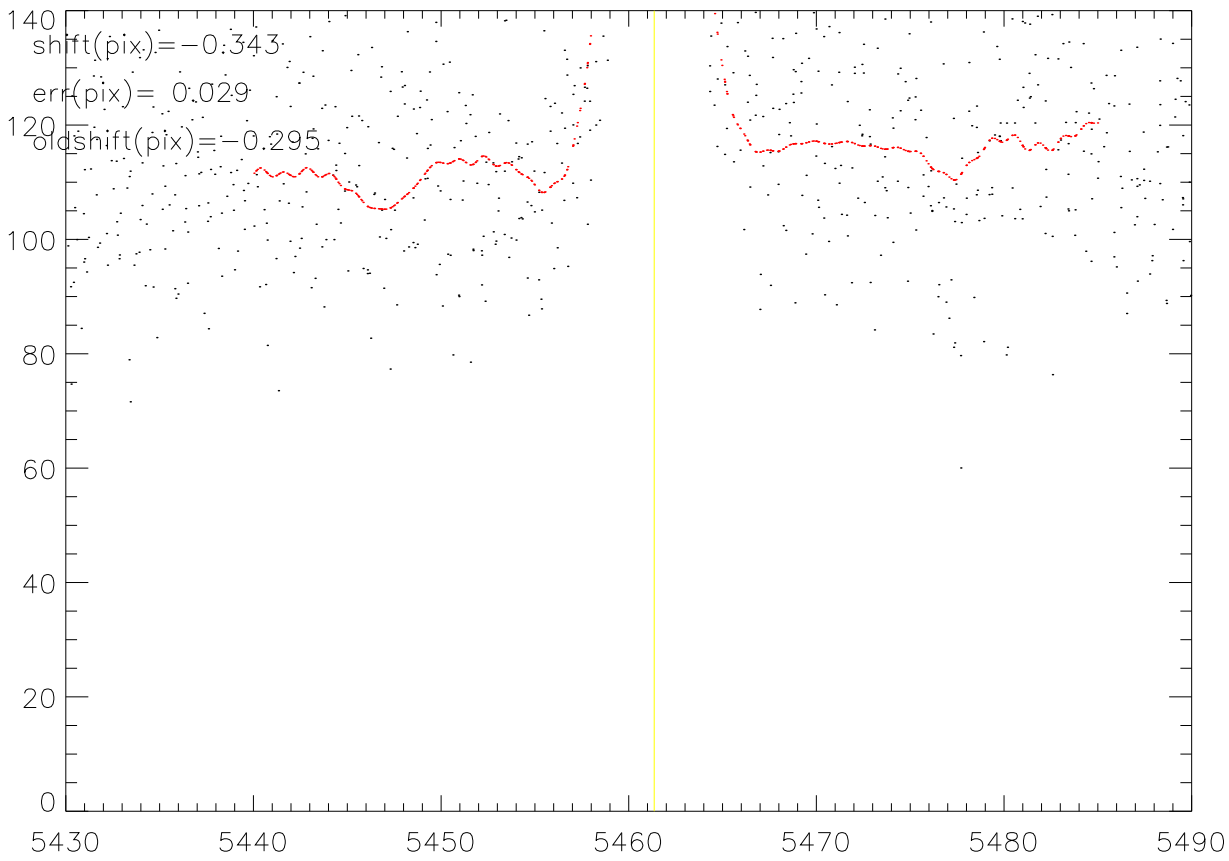

PLATE=1582 MJD=52939 Scattered Light on sdR-b1-00022941.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.165
Max value = 5.319
Tue Feb 19 23:54:17 2008

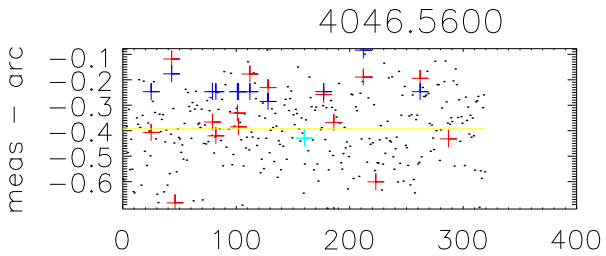

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-b1-00022941.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

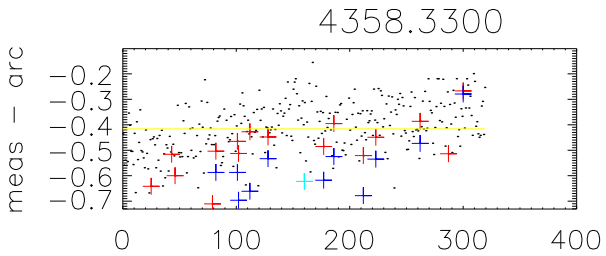

4046.5600
off: −0.42
sig: 0.122
4358.3300
off: −0.66
sig: 0.032
5460.9400
off: −0.29
sig: 0.024
5577.3390
off: −0.28
sig: 0.003
5889.9500
off: −0.19
sig: 0.007
5895.9240
off: −0.20
sig: 0.009

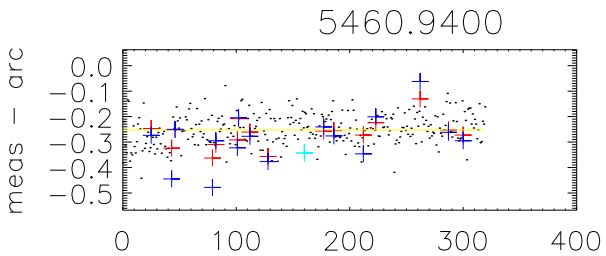

shift(pix)=−0.430
err(pix)= 0.115
oldshift(pix)=−0.425
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

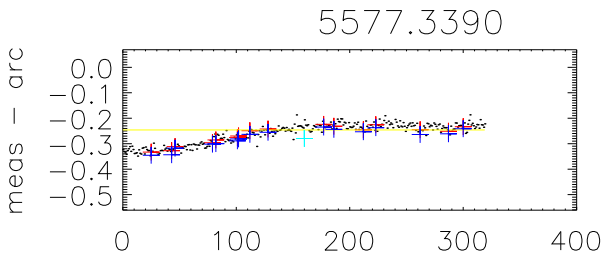

shift(pix)=−0.622
err(pix)= 0.035
oldshift(pix)=−0.655
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

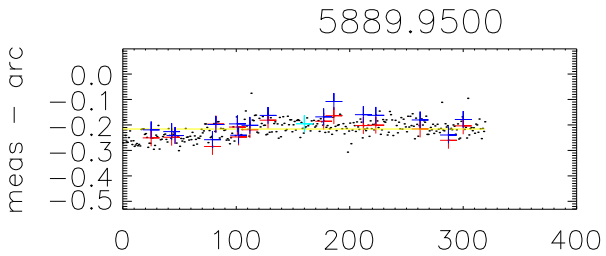

shift(pix)=−0.343
err(pix)= 0.029
oldshift(pix)=−0.295
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

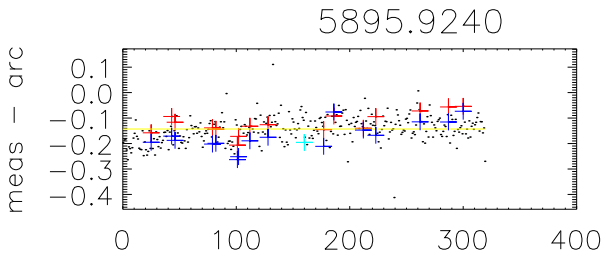

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

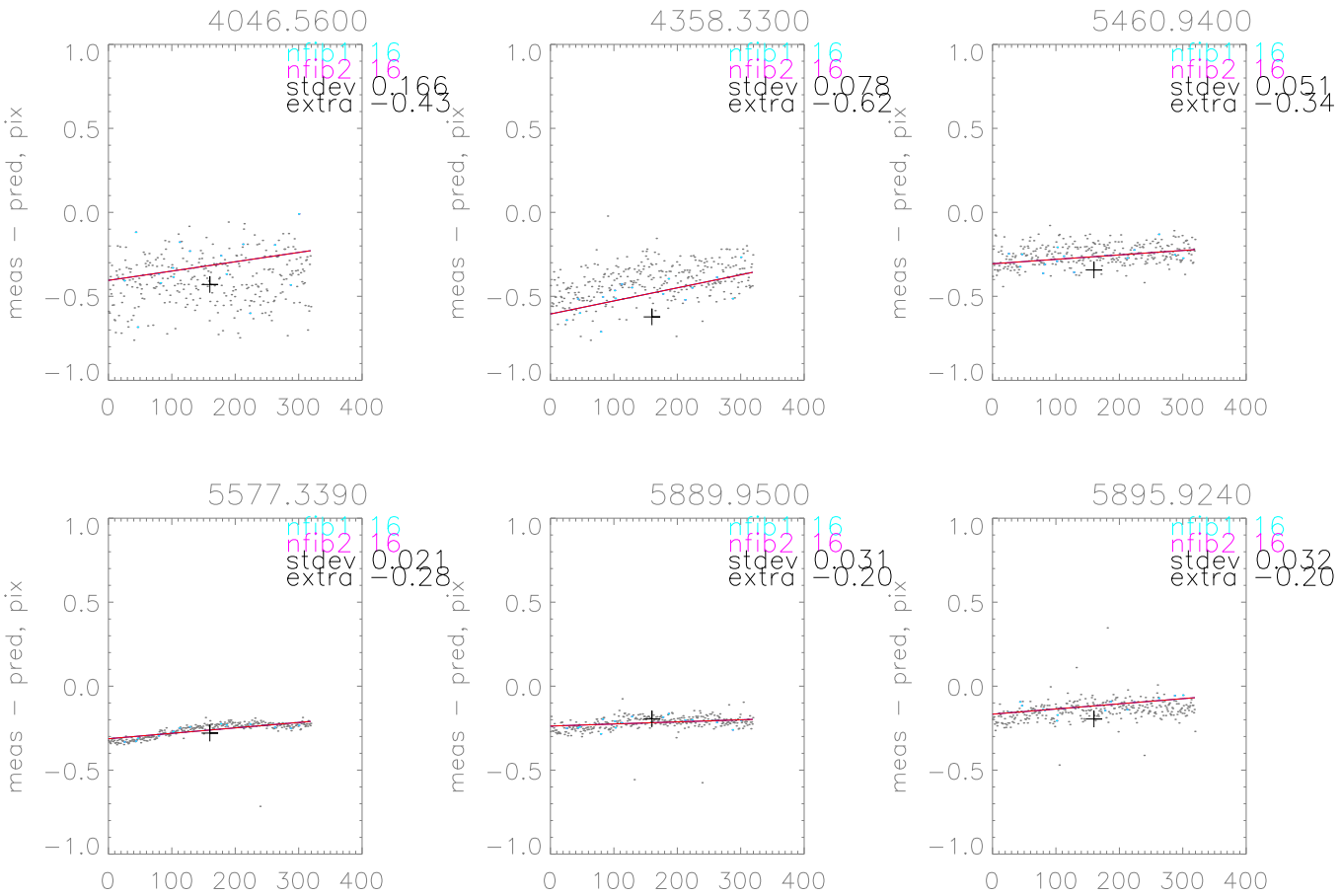

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

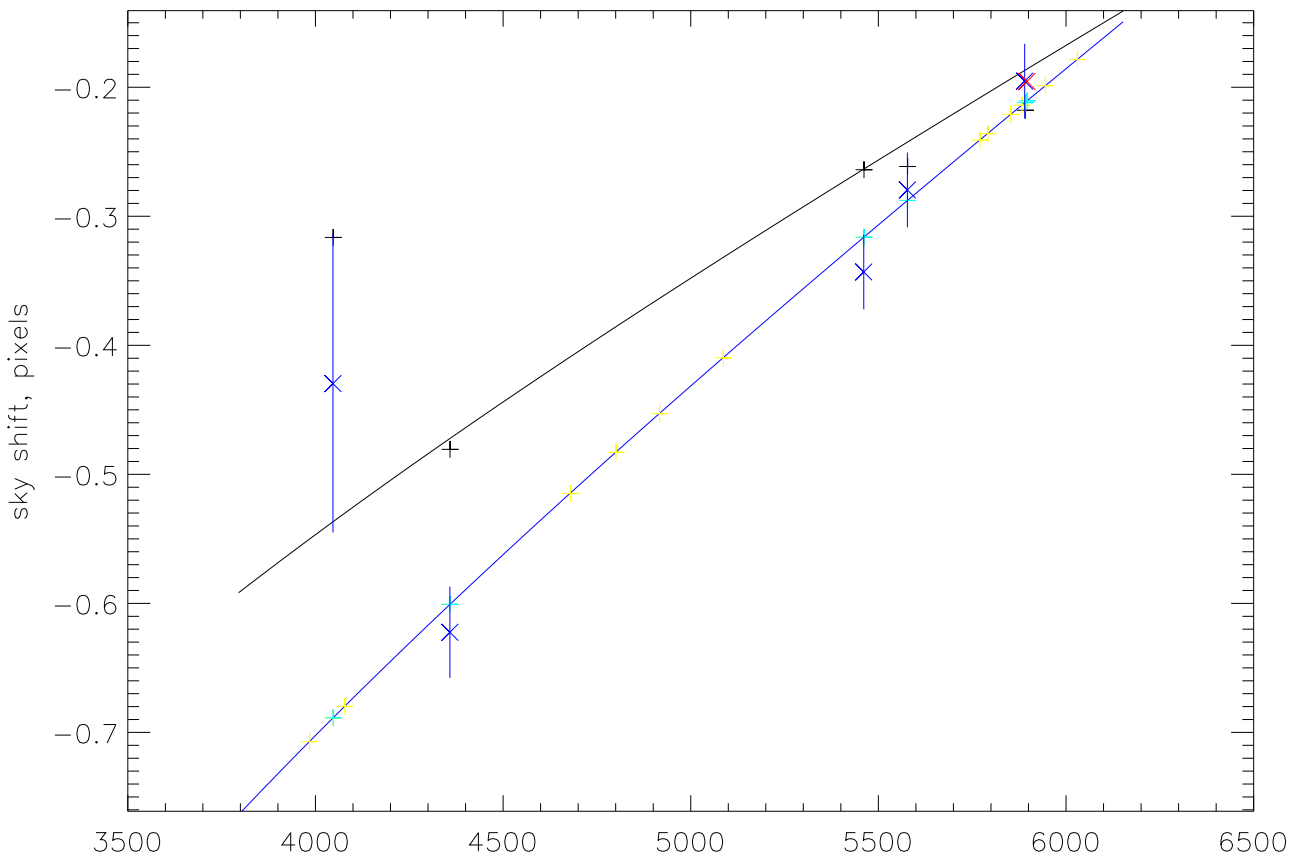

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

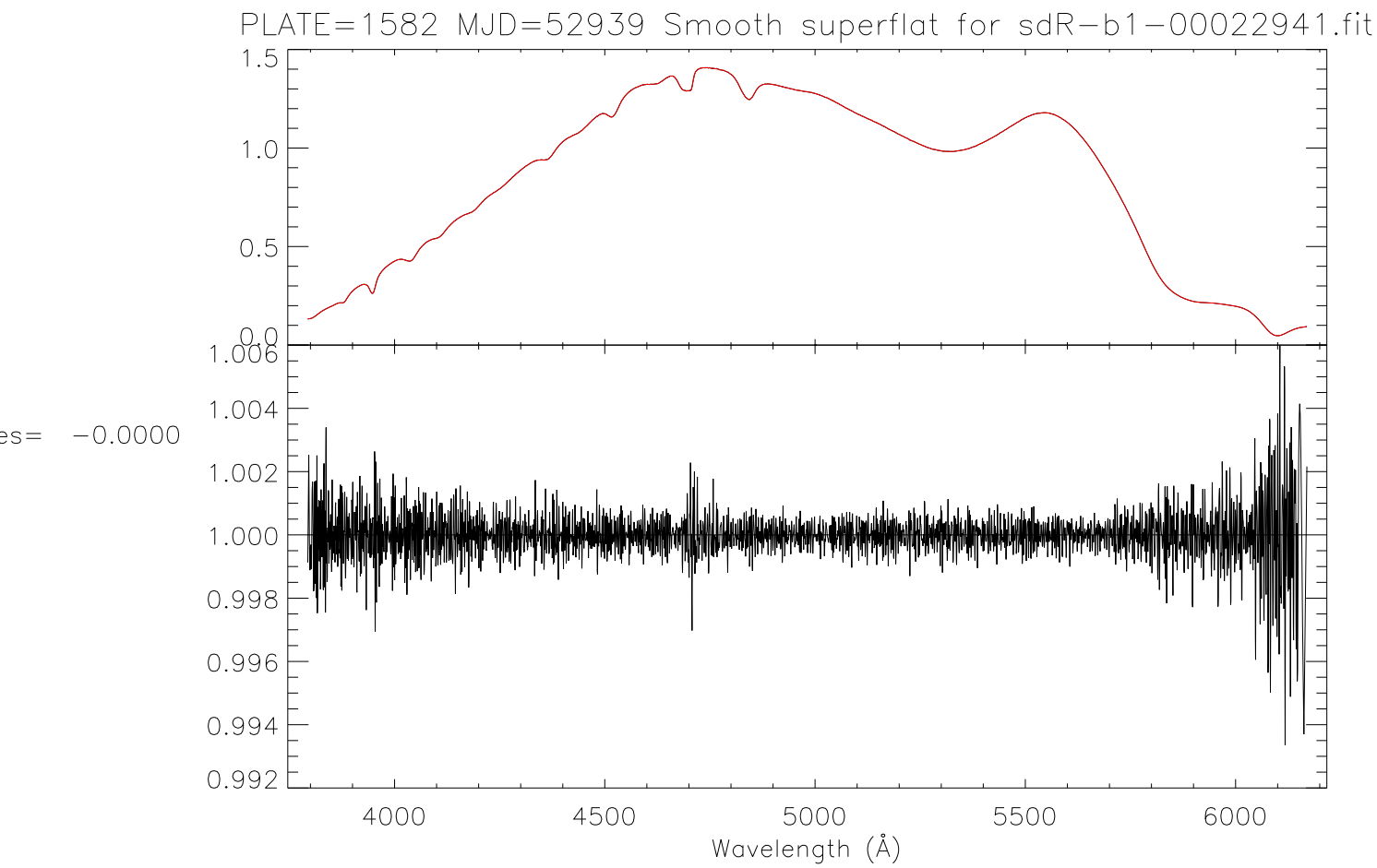

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

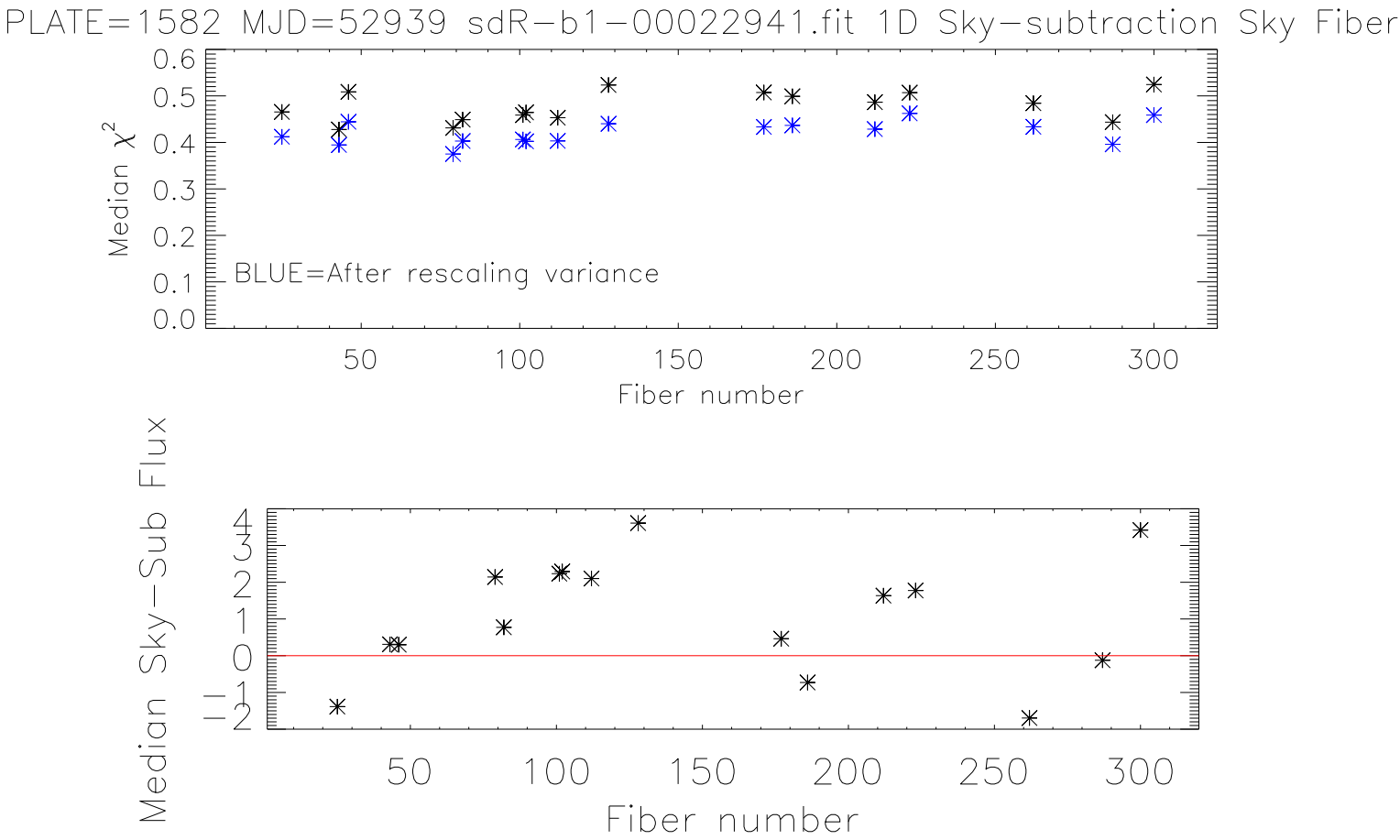

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

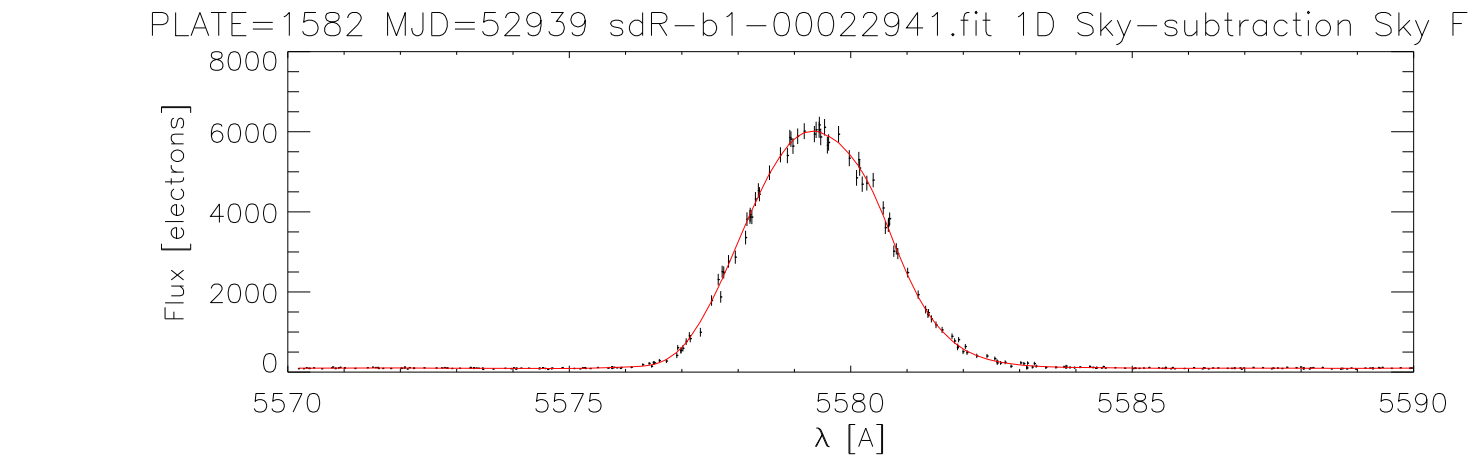

4046.5600
nfib1 16
nfib2 16
stdev 0.166
extra −0.43
4358.3300
nfib1 16
nfib2 16
stdev 0.078
extra −0.62
5460.9400
nfib1 16
nfib2 16
stdev 0.051
extra −0.34
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra −0.28
5889.9500
nfib1 16
nfib2 16
stdev 0.031
extra −0.20
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra −0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

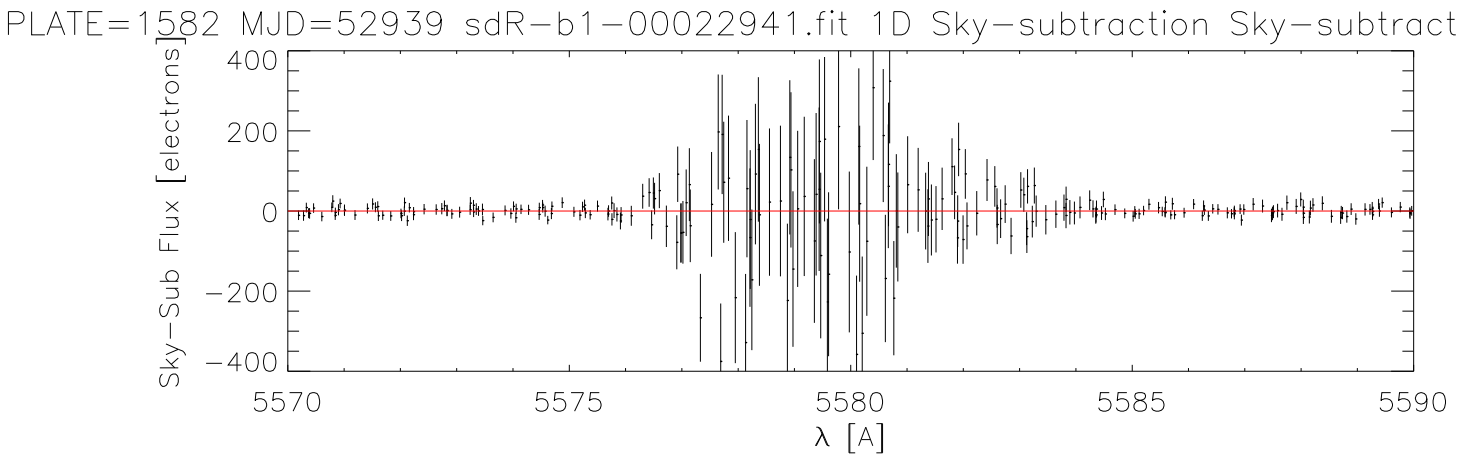

sky shift, pixels
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
3500
4000
4500
5000
5500
6000
6500

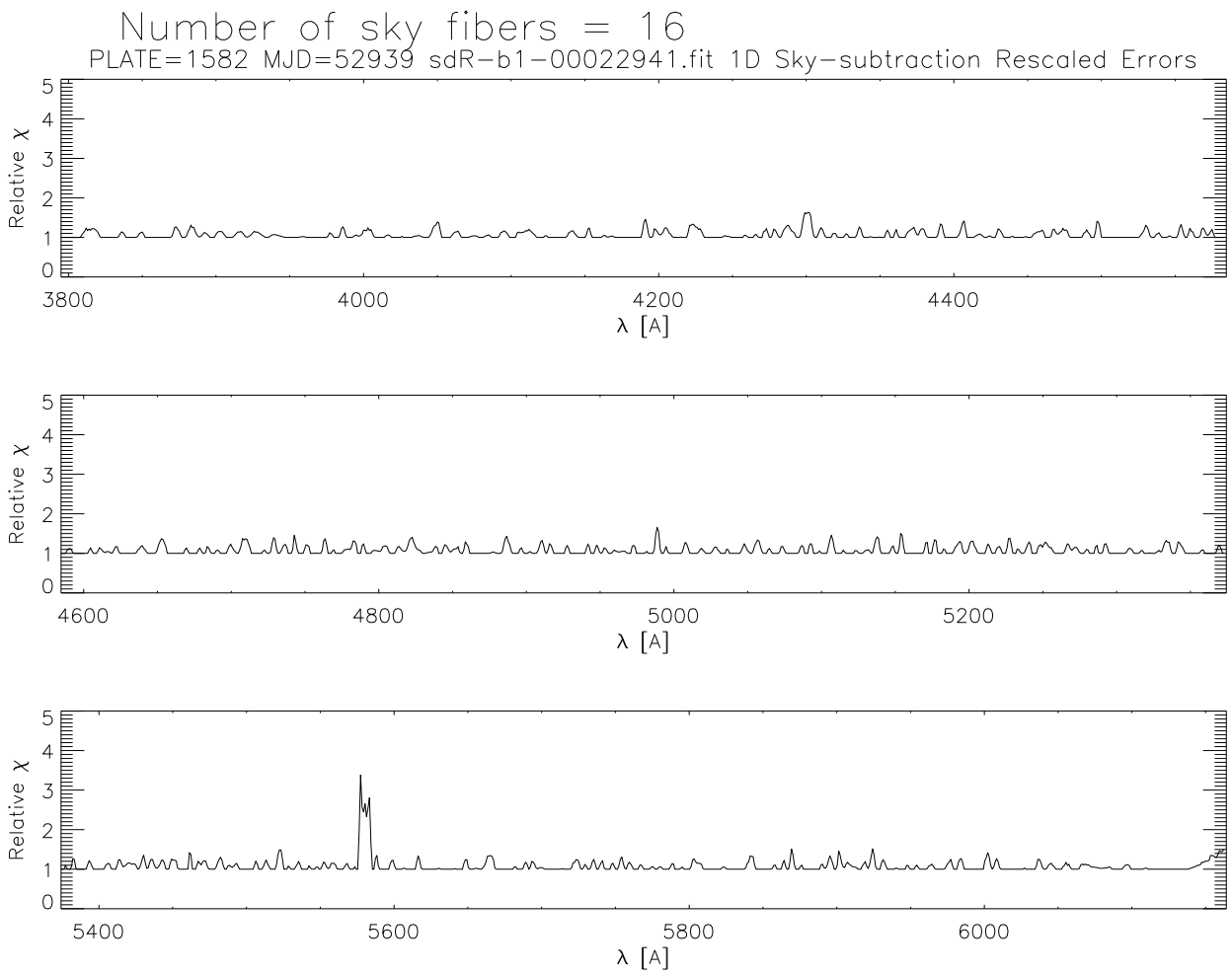

PLATE=1582 MJD=52939 Smooth superflat for sdR-b1-00022941.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

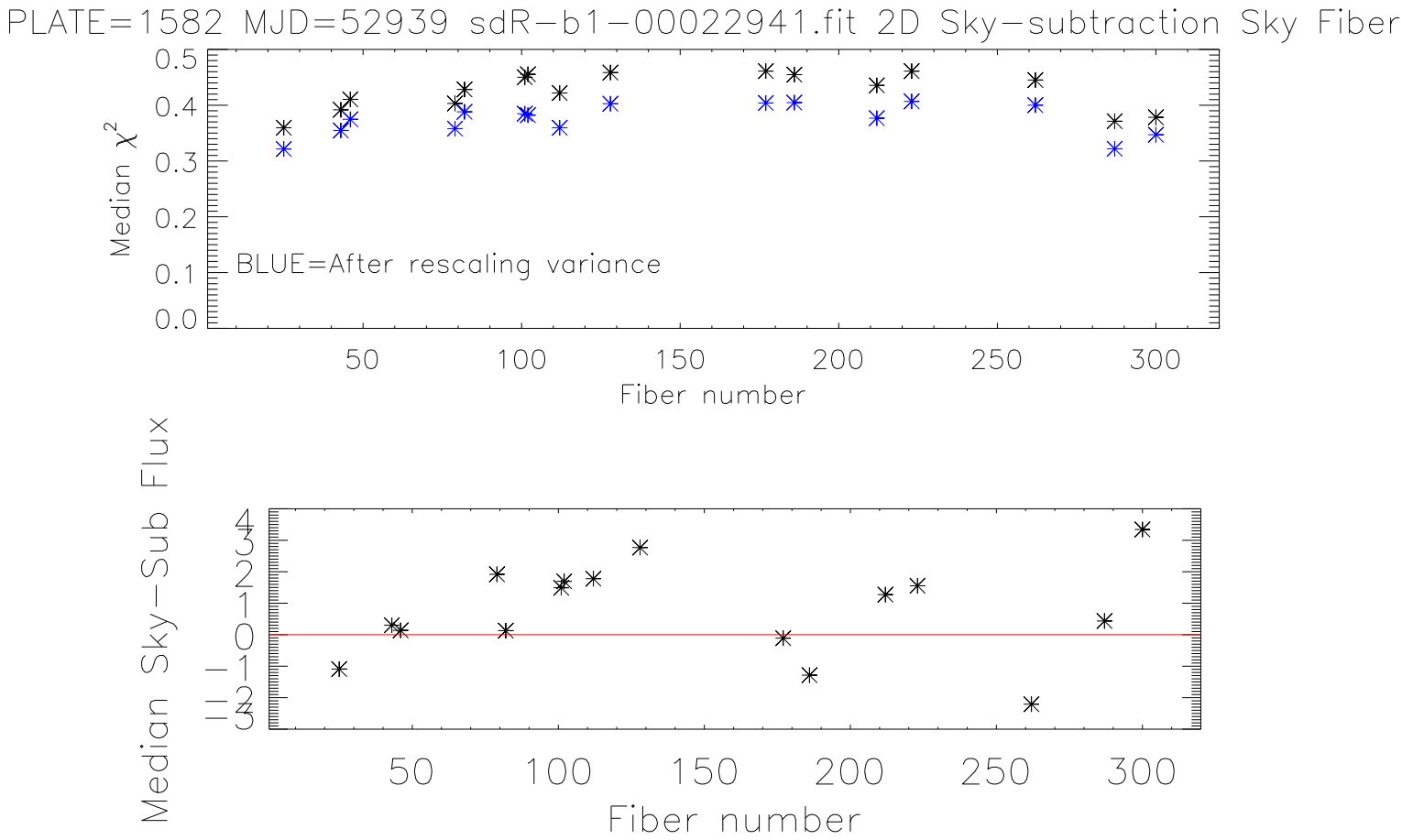
es= −0.0000

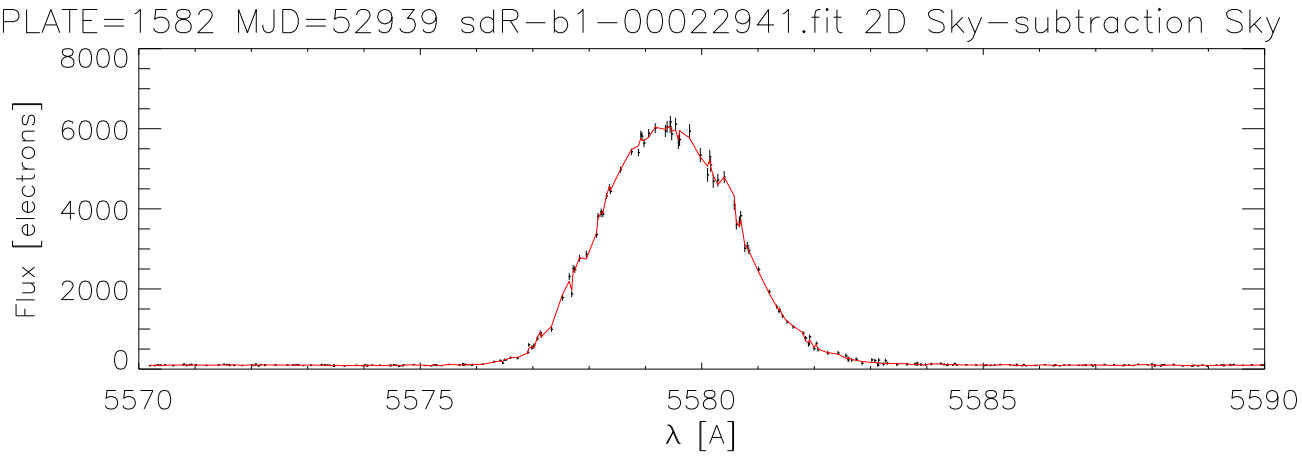

PLATE=1582 MJD=52939 sdR-b1-00022941.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

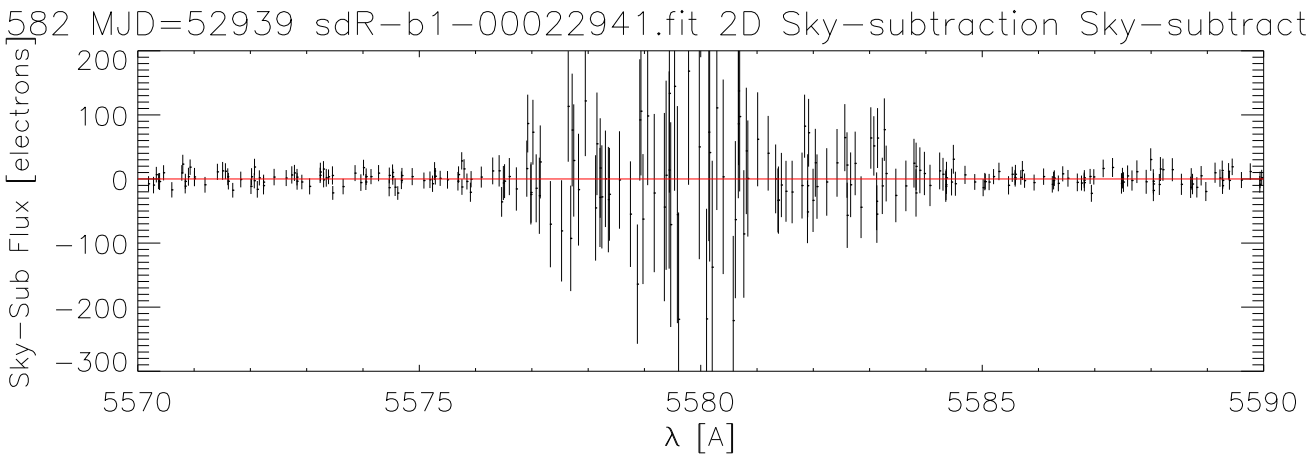

PLATE=1582 MJD=52939 sdR-b1-00022941.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

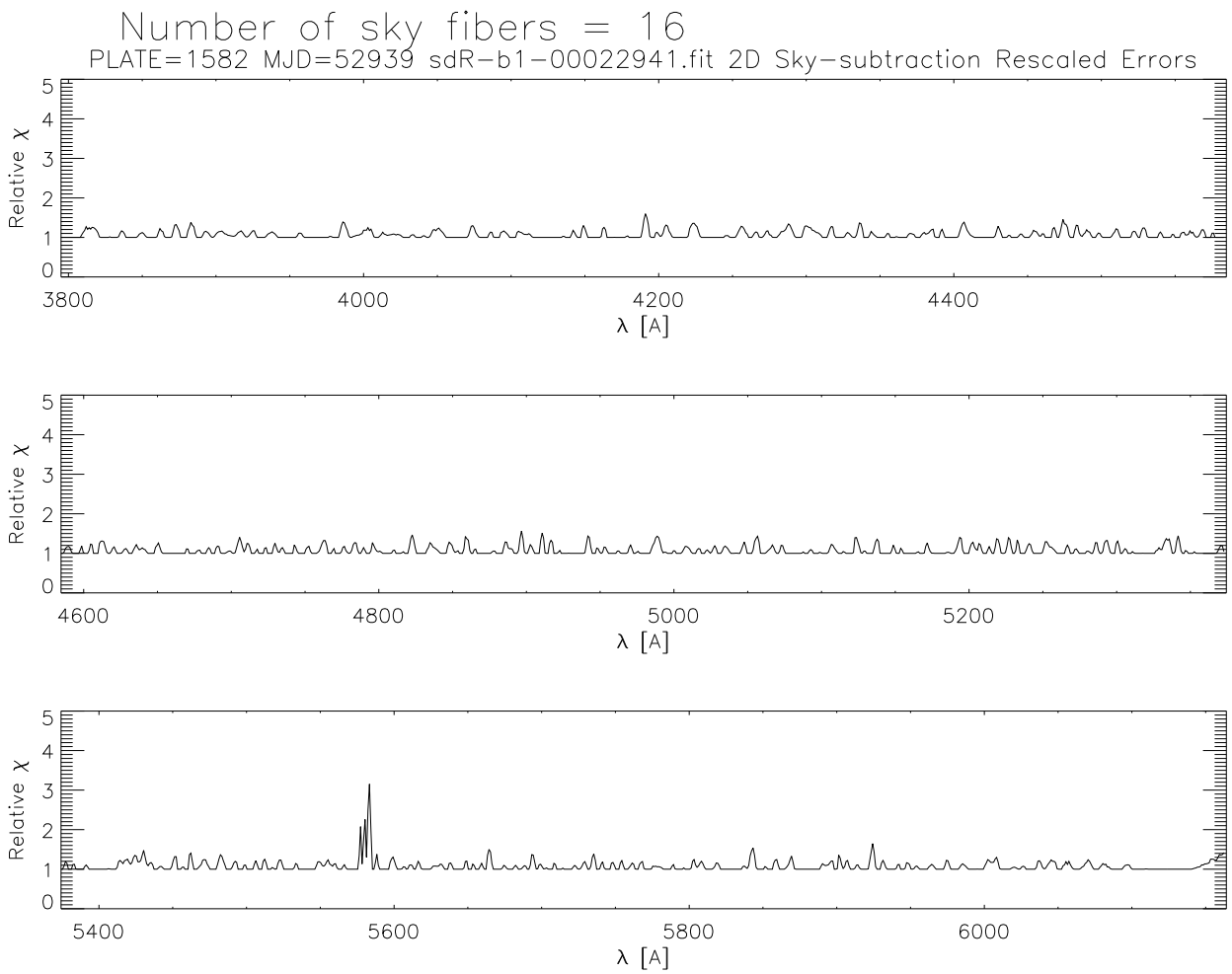

PLATE=1582 MJD=52939 sdR-b1-00022941.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

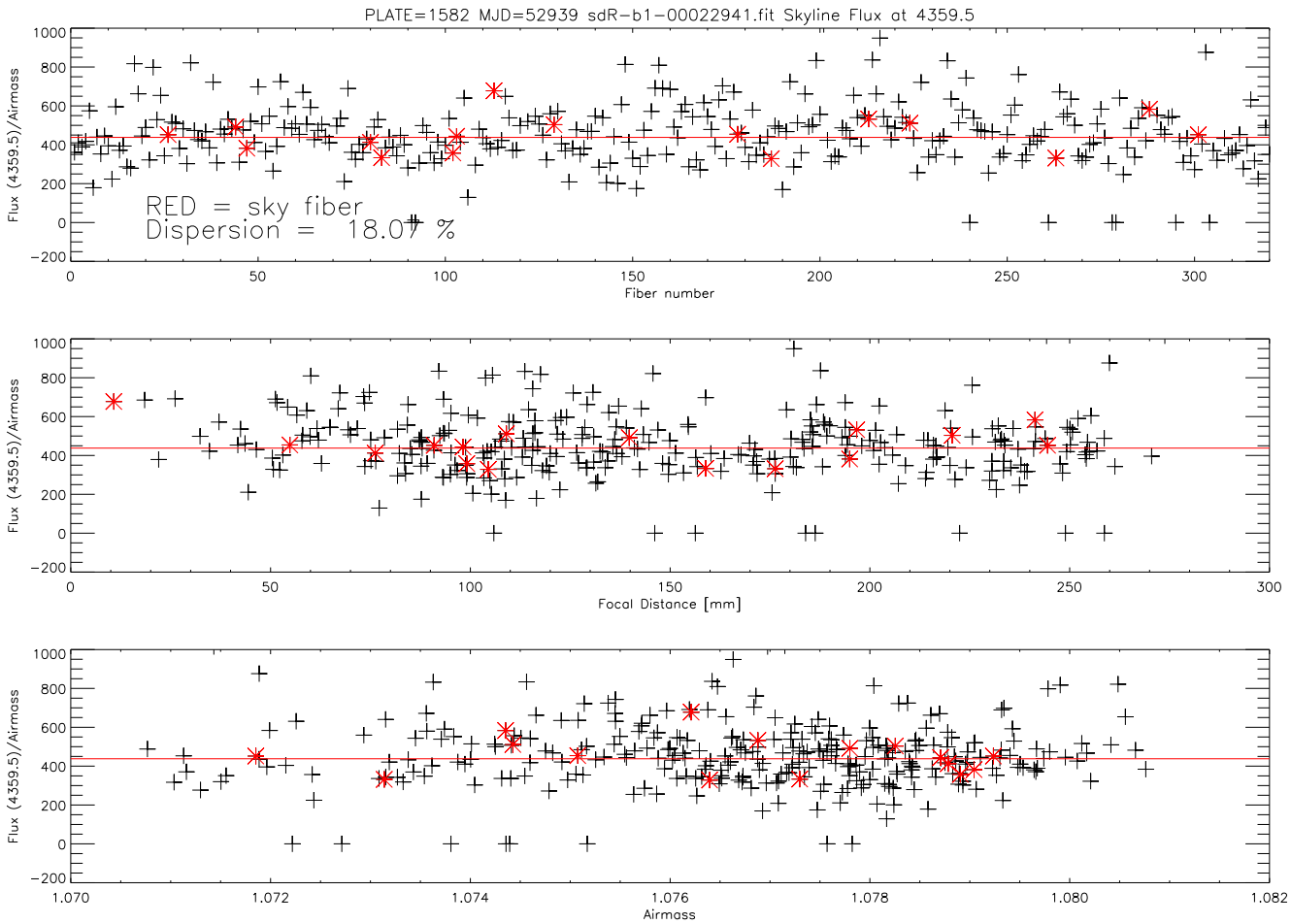

Number of sky fibers = 16
PLATE=1582 MJD=52939 sdR-b1-00022941.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

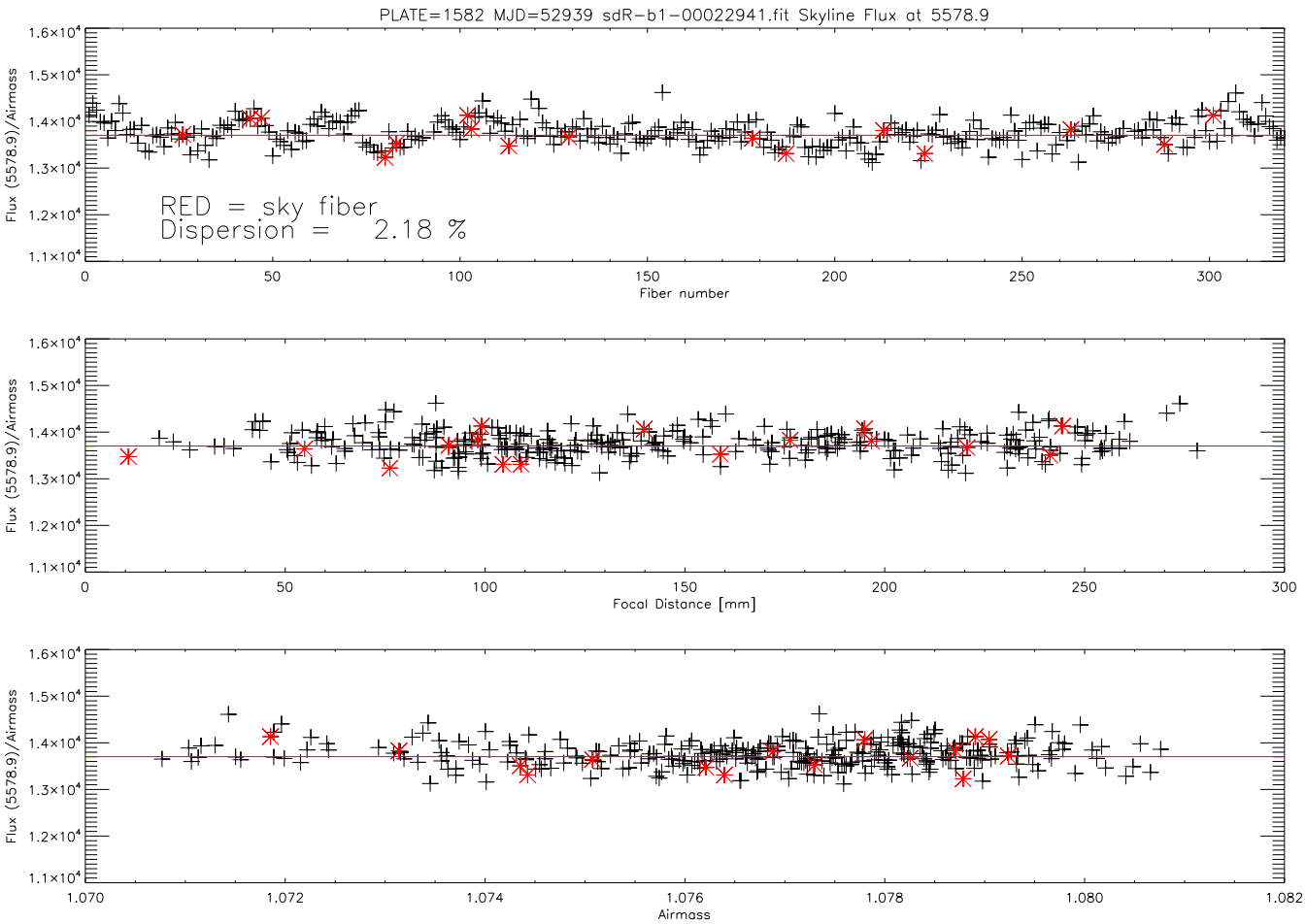

PLATE=1582 MJD=52939 sdR-b1-00022941.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

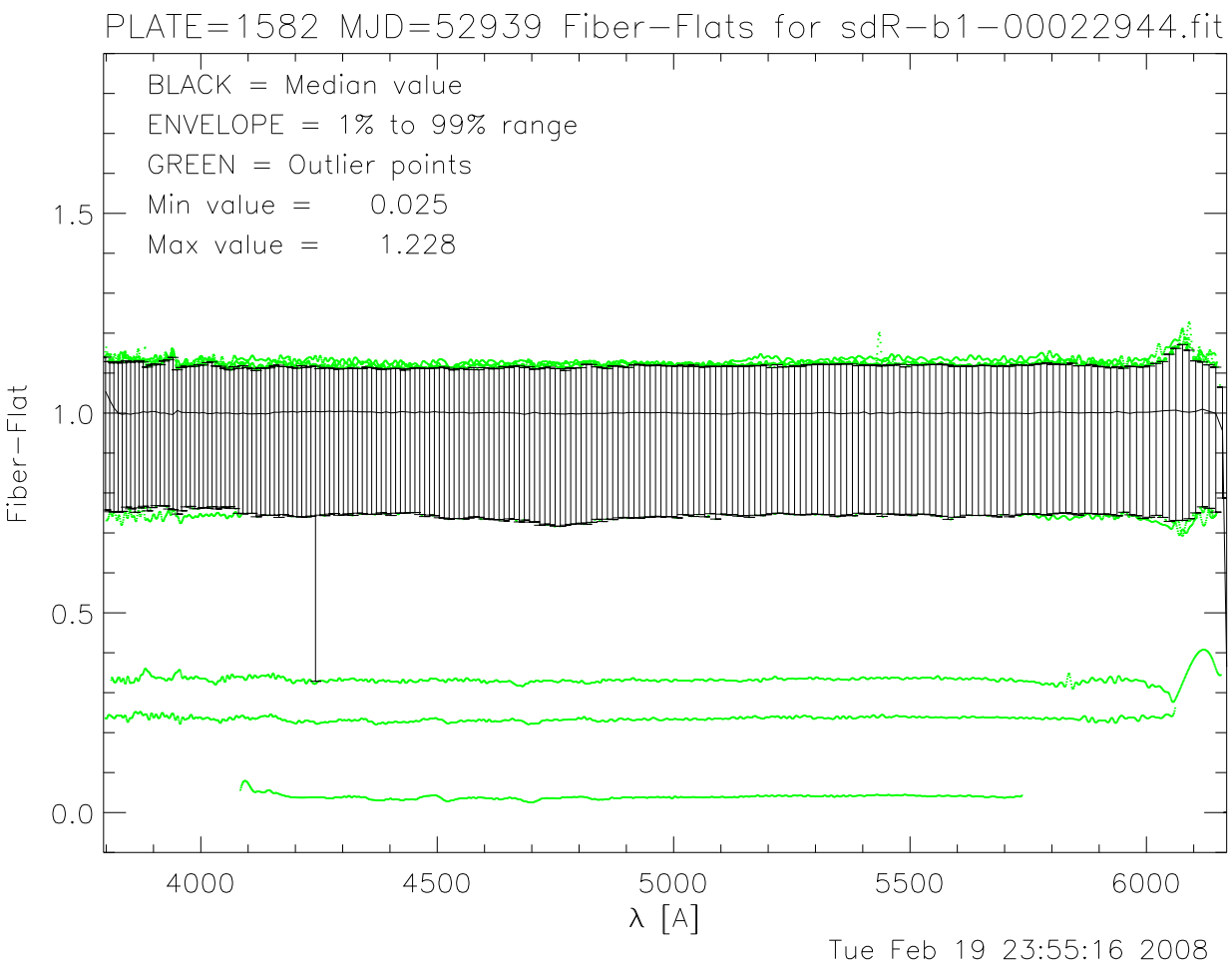

PLATE=1582 MJD=52939 sdR-b1-00022941.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

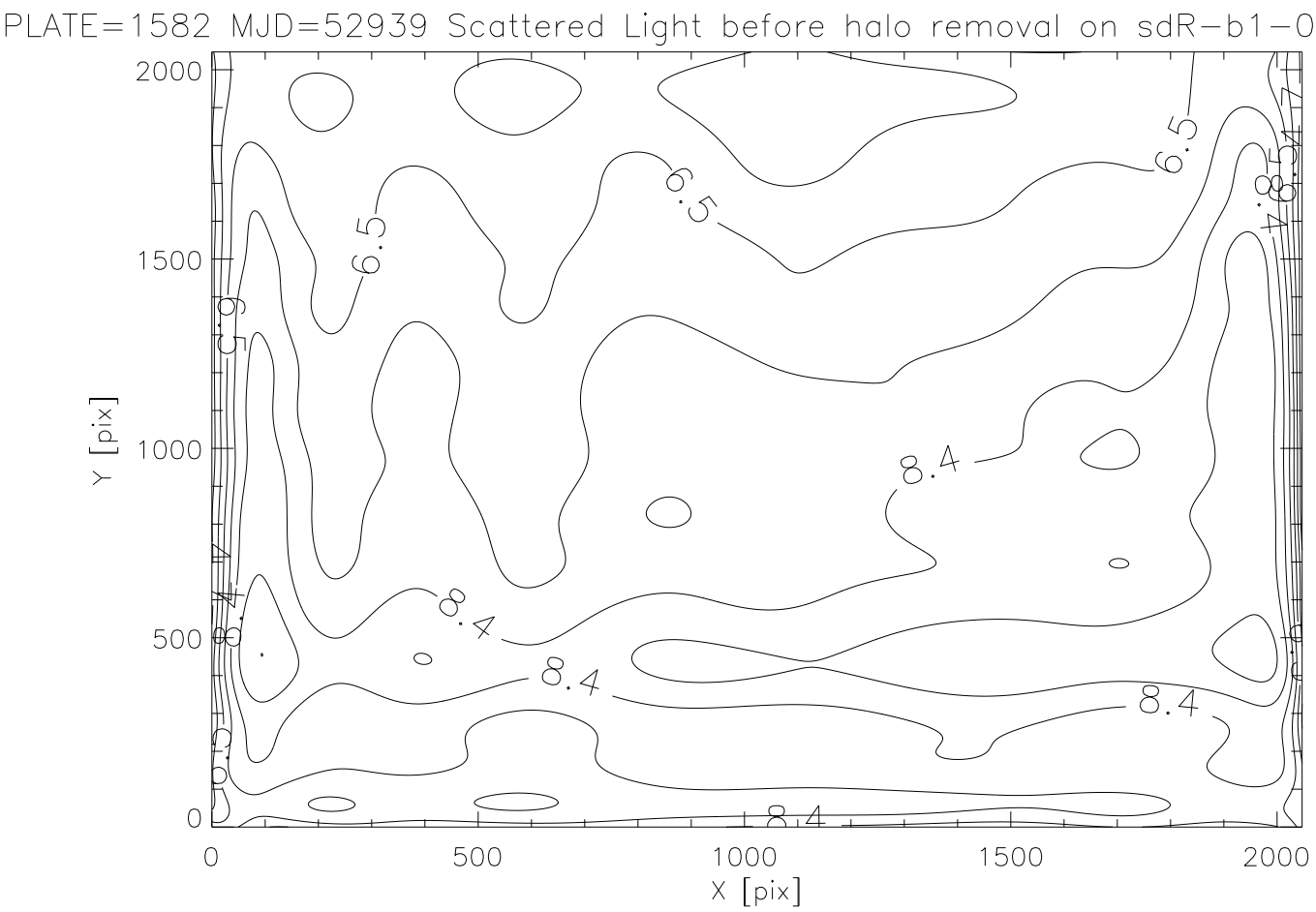

PLATE=1582 MJD=52939 sdR-b1-00022941.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

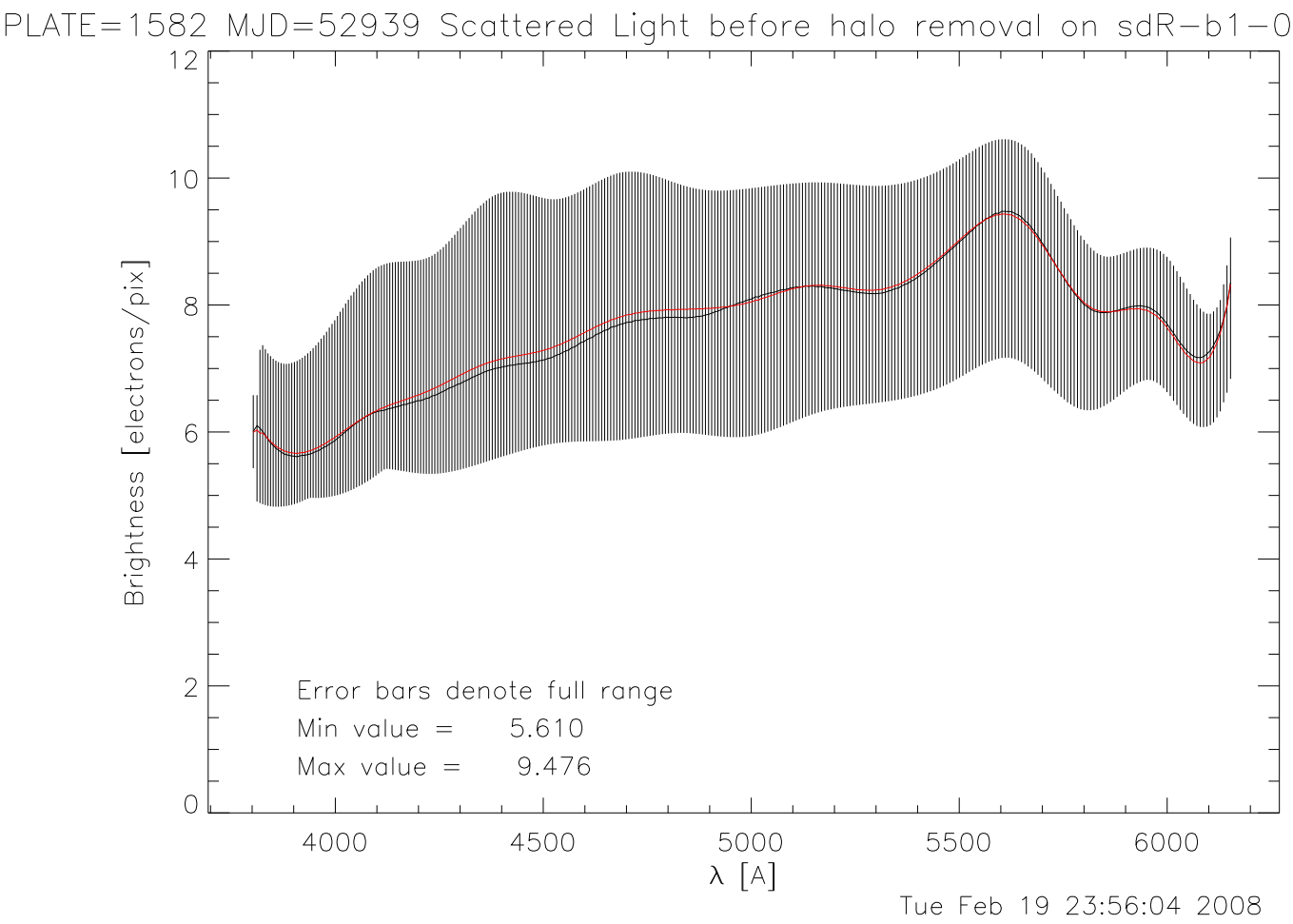

Number of sky fibers = 16
PLATE=1582 MJD=52939 sdR-b1-00022941.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

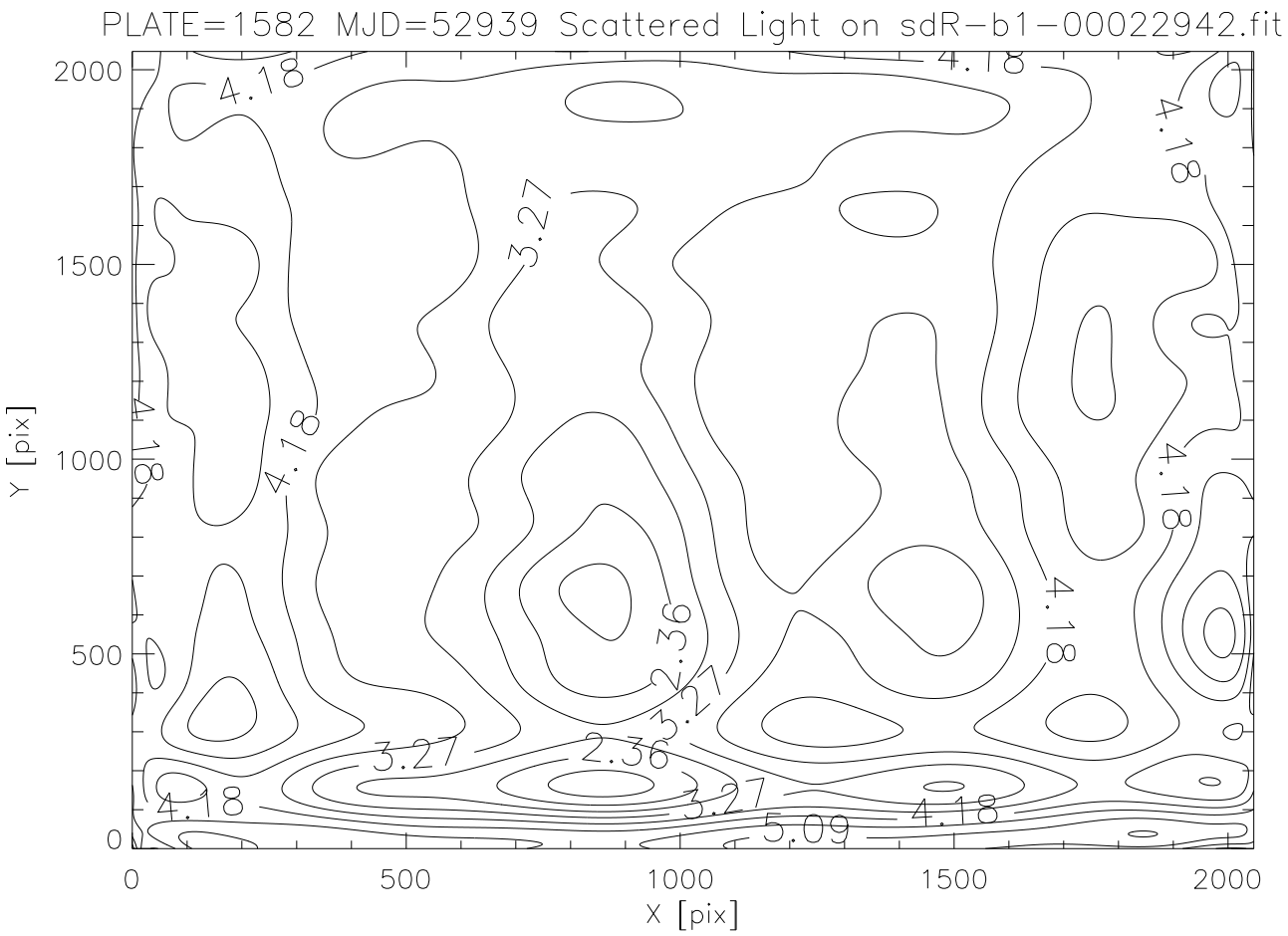

PLATE=1582 MJD=52939 sdR-b1-00022941.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 18.07 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

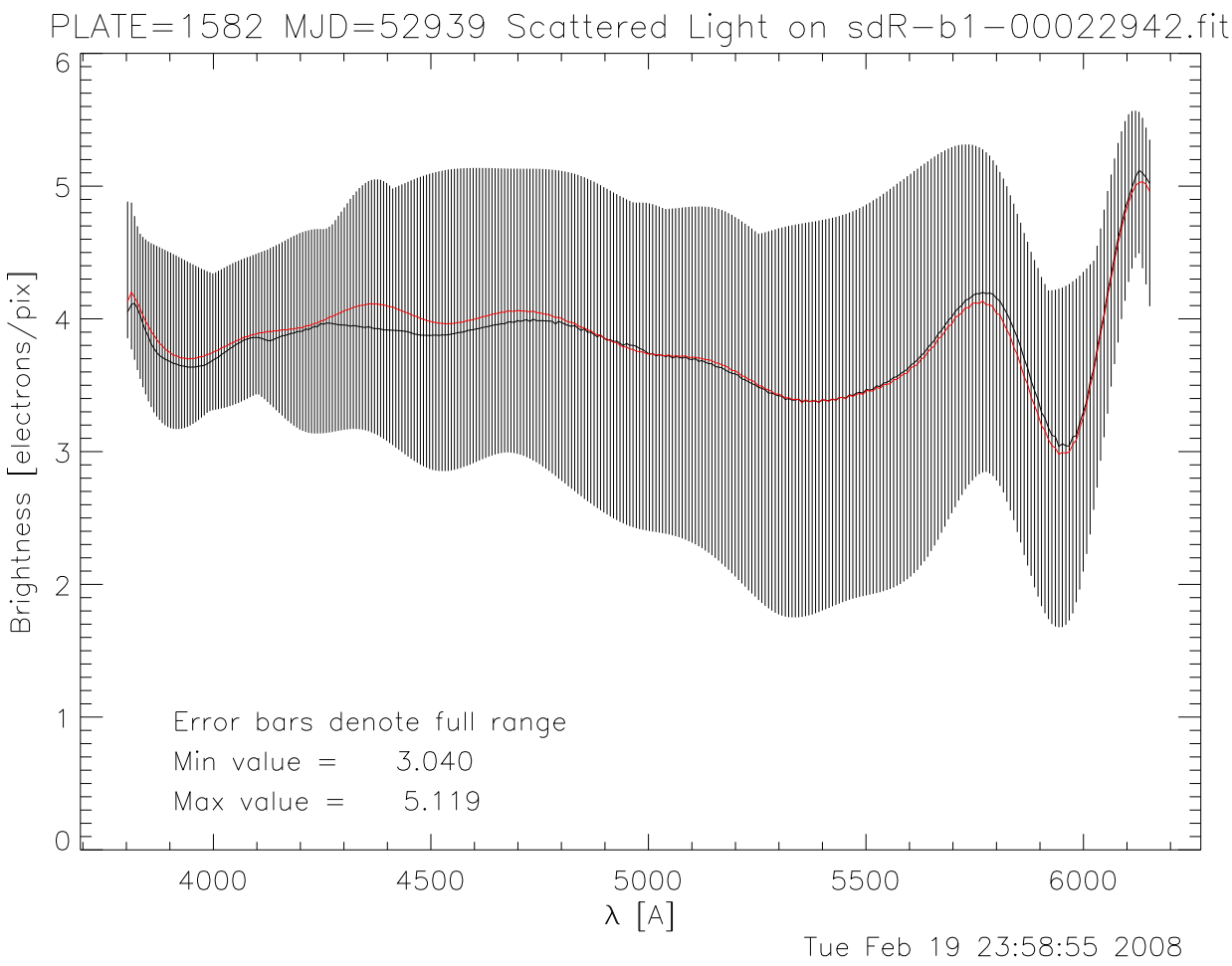

PLATE=1582 MJD=52939 sdR-b1-00022941.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.18 %
Fiber number
Focal Distance [mm]
Airmass

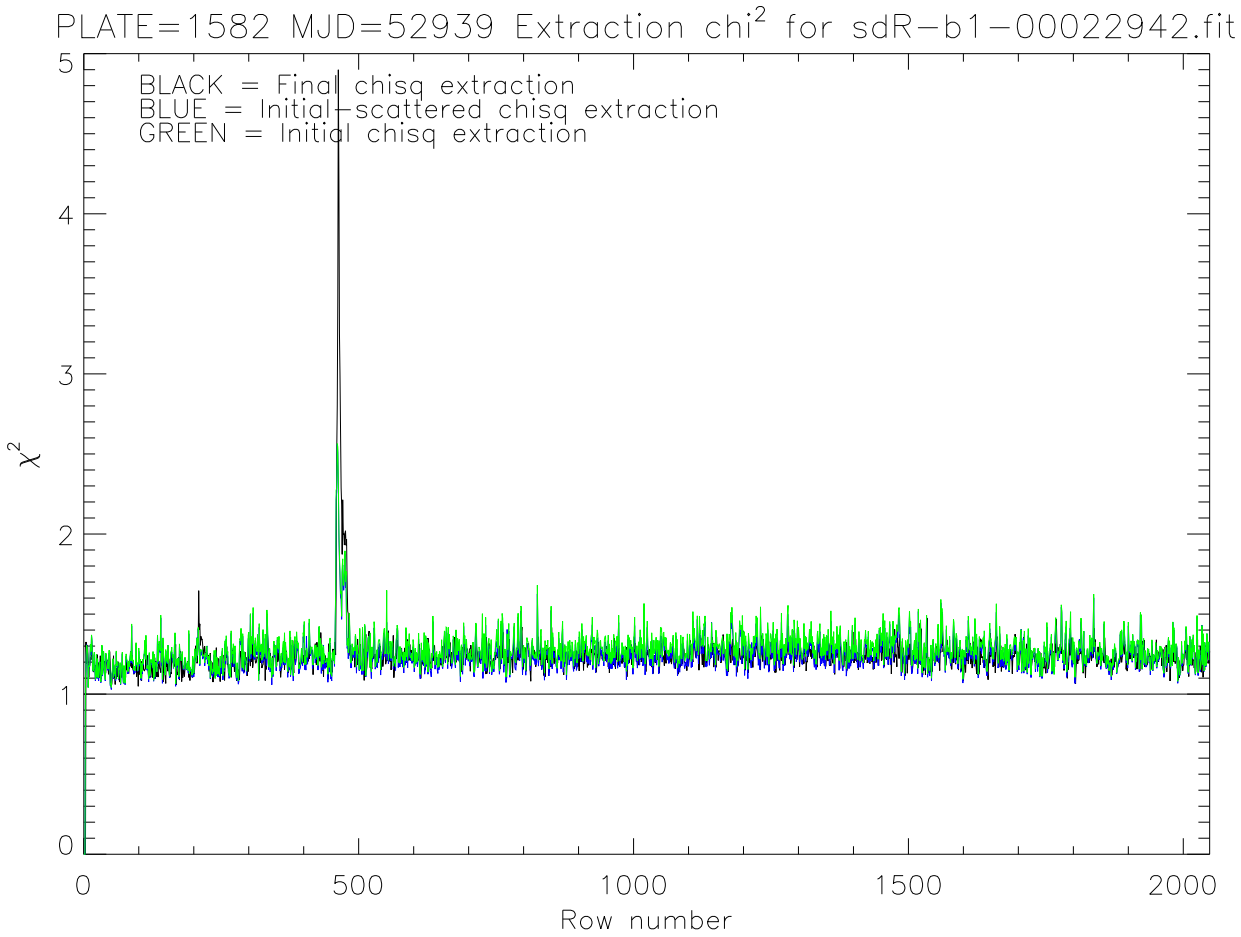

PLATE=1582 MJD=52939 Fiber-Flats for sdR-b1-00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.025
Max value = 1.228
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 23:55:16 2008

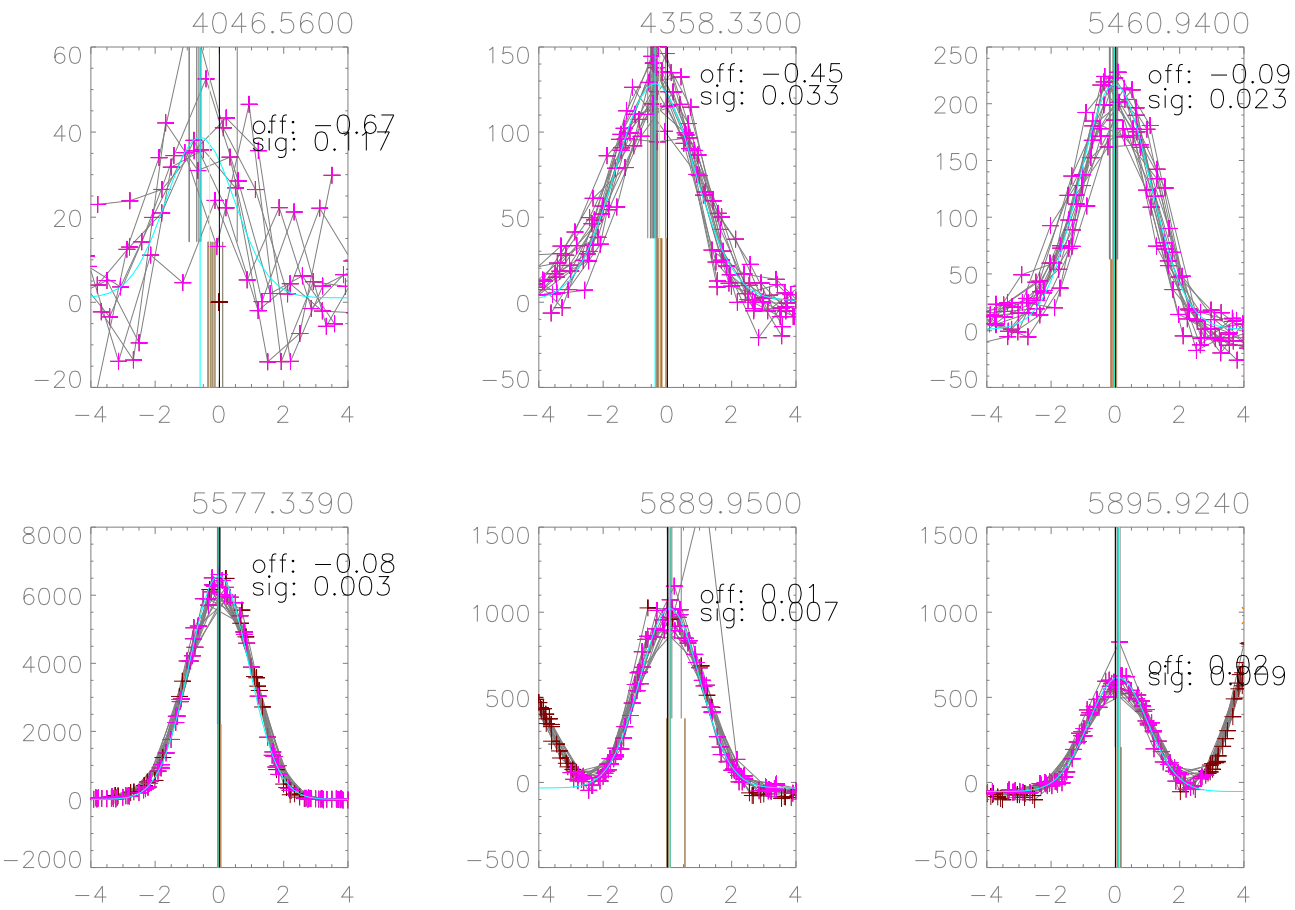

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b1-00022942.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.5
8.4

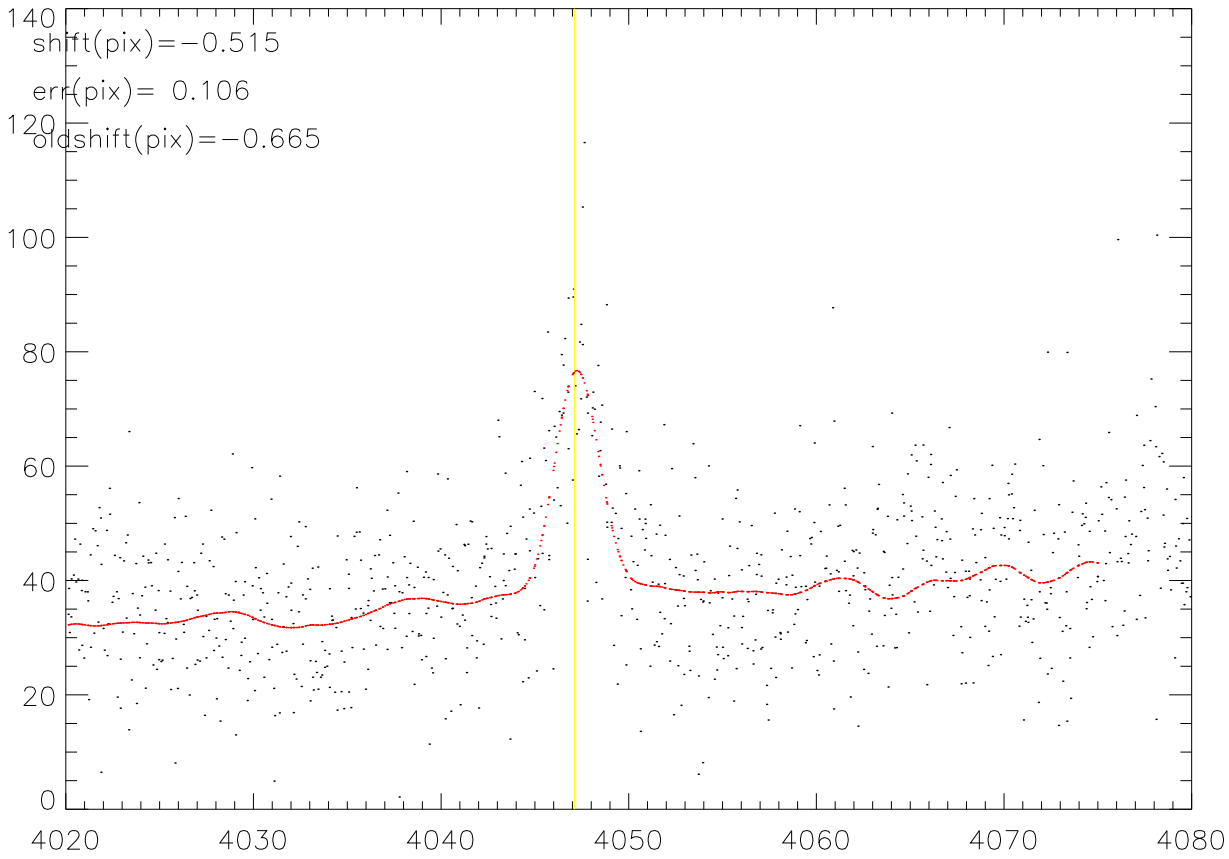

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b1-00022942.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.610
Max value = 9.476
Tue Feb 19 23:56:04 2008

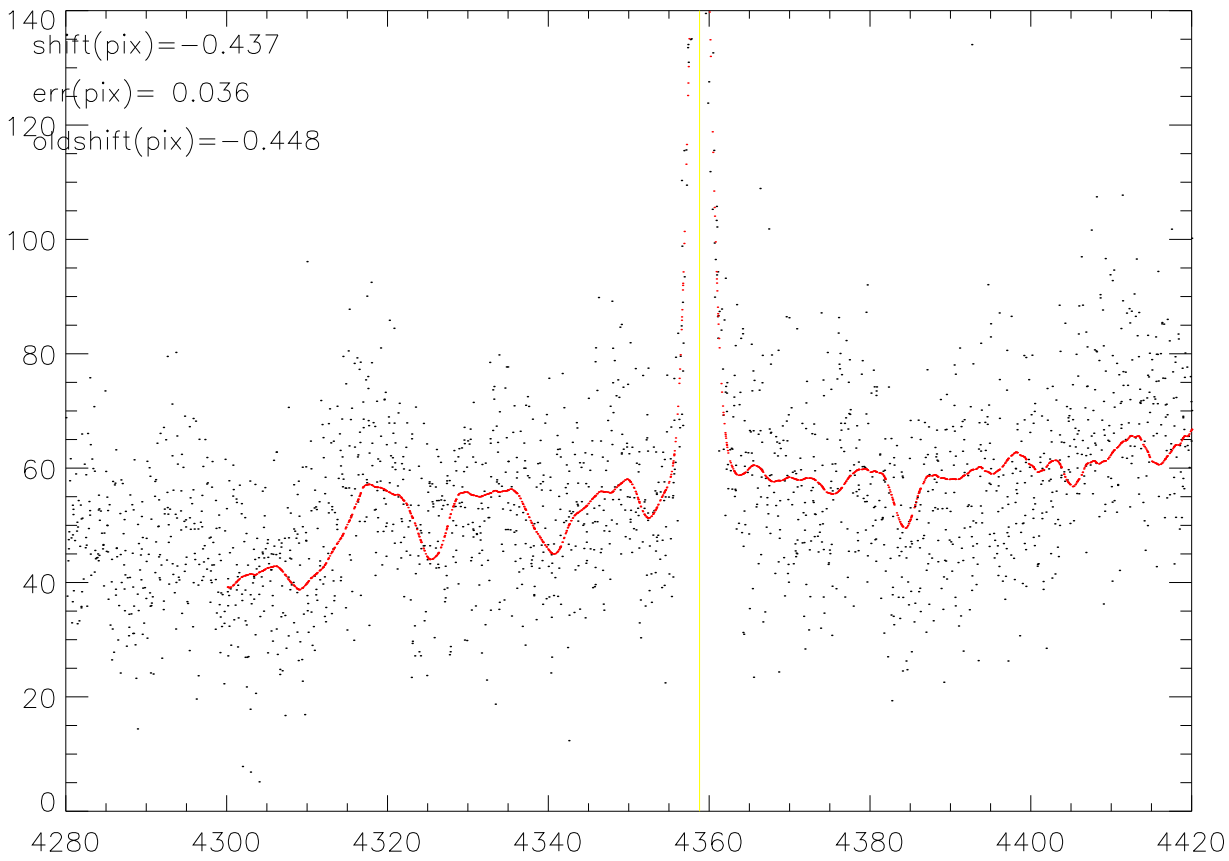

PLATE=1582 MJD=52939 Scattered Light on sdR-b1-00022942.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.18
3.27
2.36
5.09

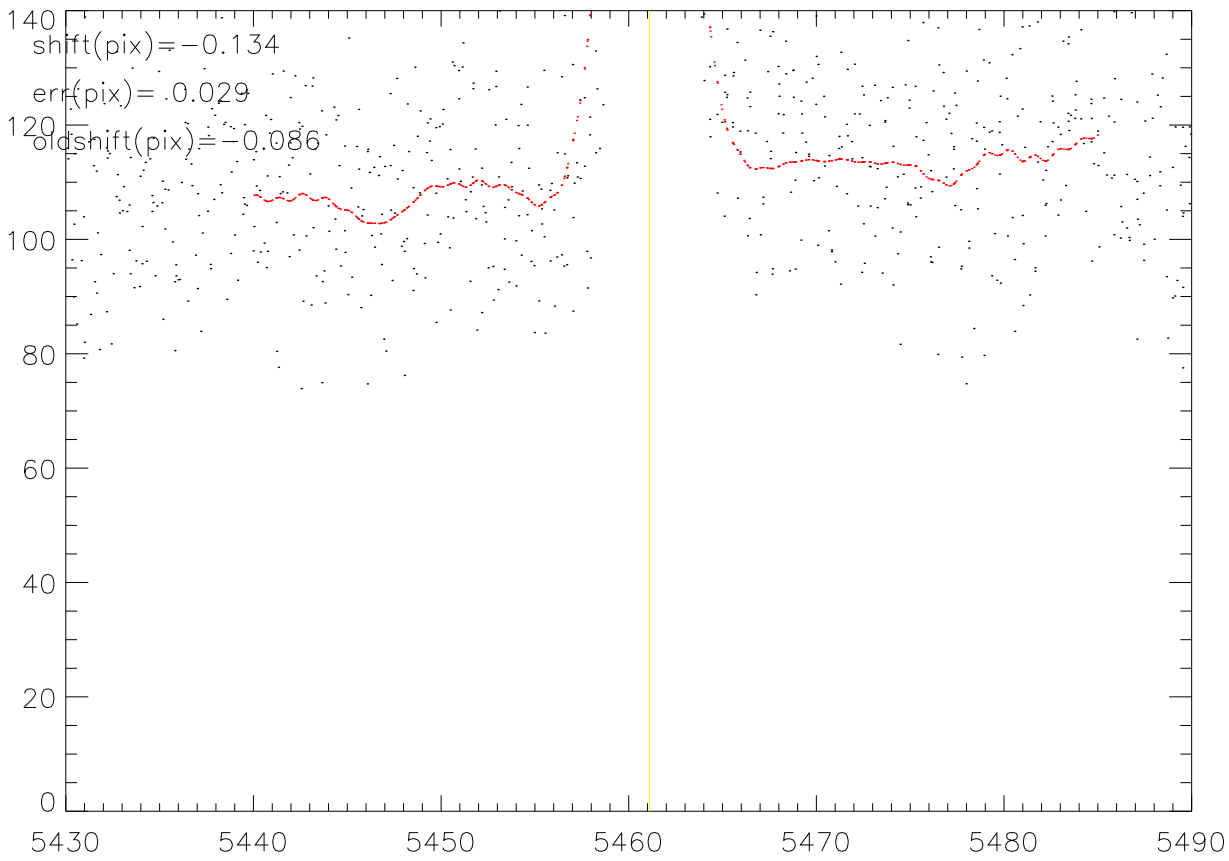

PLATE=1582 MJD=52939 Scattered Light on sdR-b1-00022942.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.040
Max value = 5.119
Tue Feb 19 23:58:55 2008

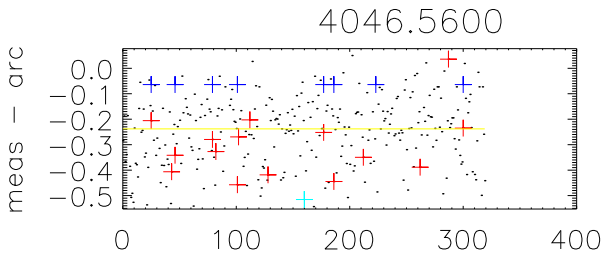

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-b1-00022942.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

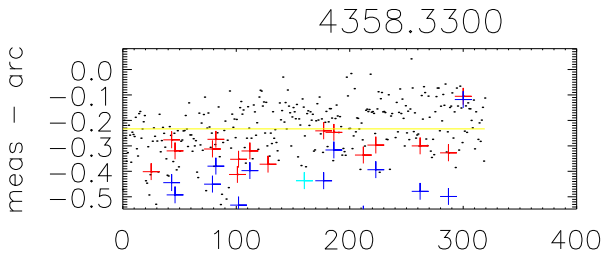

4046.5600
off: −0.67
sig: 0.117
4358.3300
off: −0.45
sig: 0.033
5460.9400
off: −0.09
sig: 0.023
5577.3390
off: −0.08
sig: 0.003
5889.9500
off: 0.01
sig: 0.007
5895.9240
off: 0.02
sig: 0.009

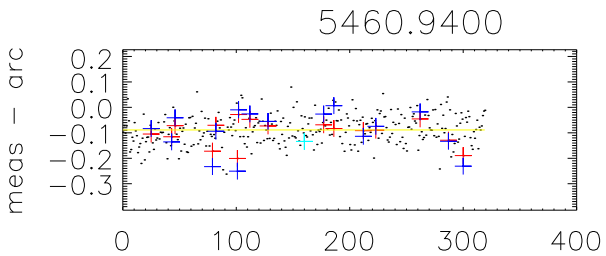

shift(pix)=−0.515
err(pix)= 0.106
oldshift(pix)=−0.665
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

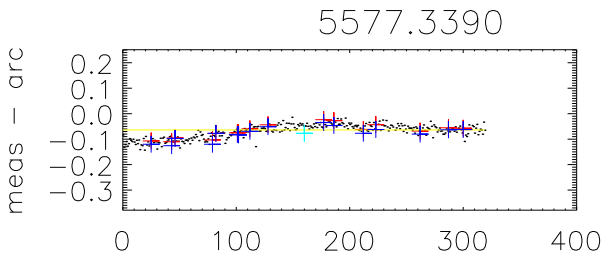

shift(pix)=−0.437
err(pix)= 0.036
oldshift(pix)=−0.448
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

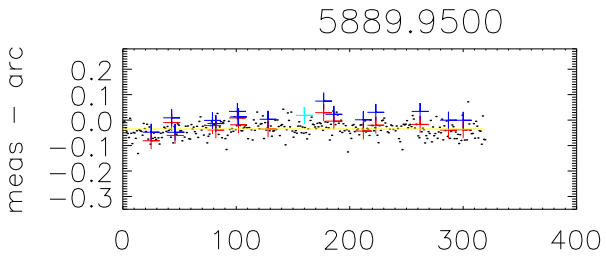

shift(pix)=−0.134
err(pix)= 0.029
oldshift(pix)=−0.086
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

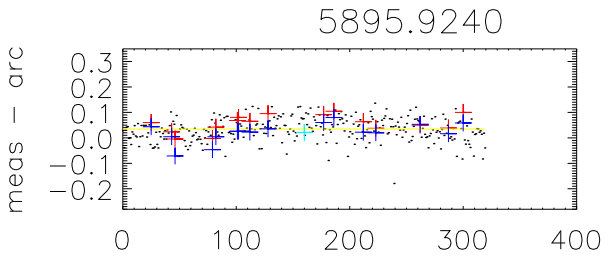

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

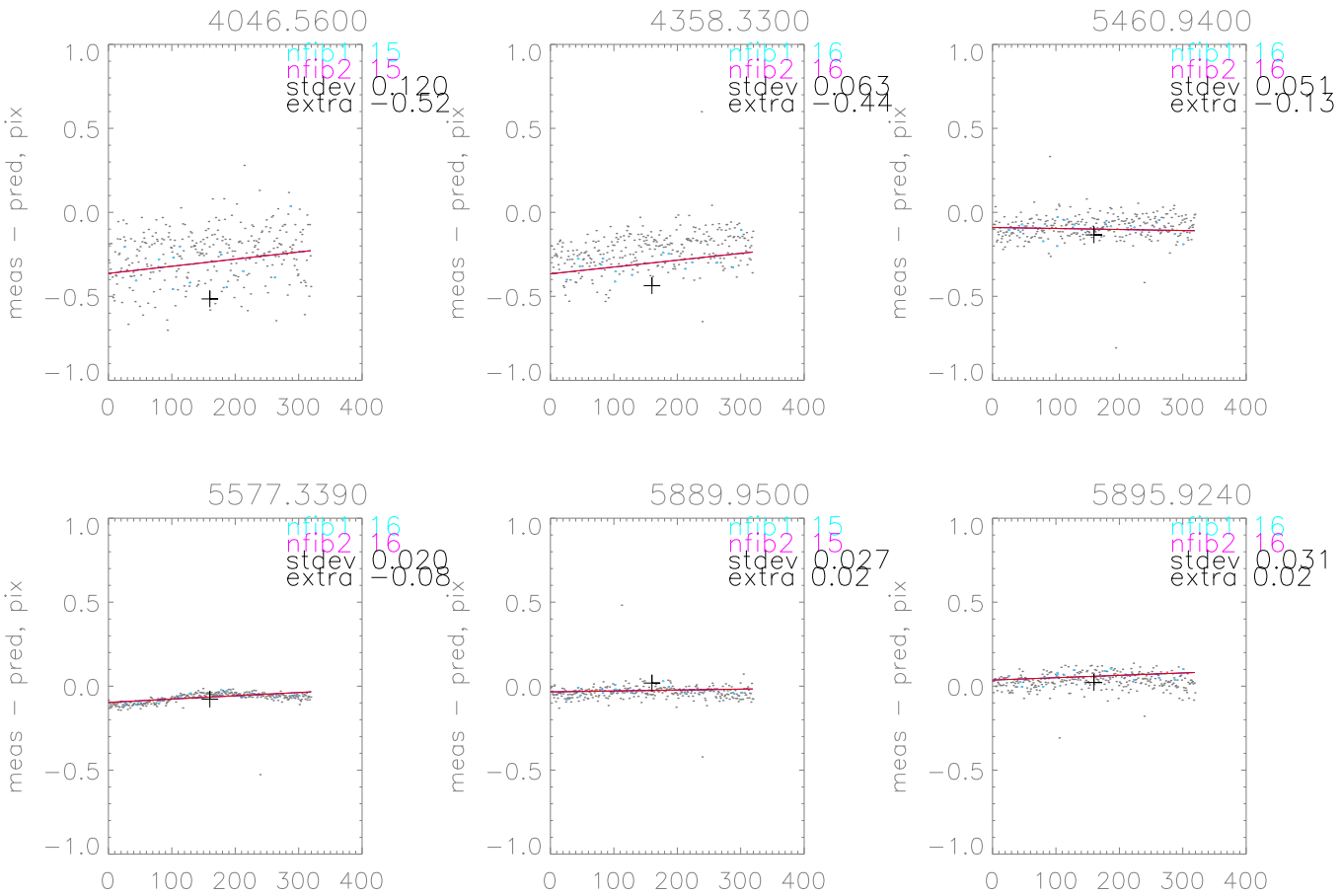

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

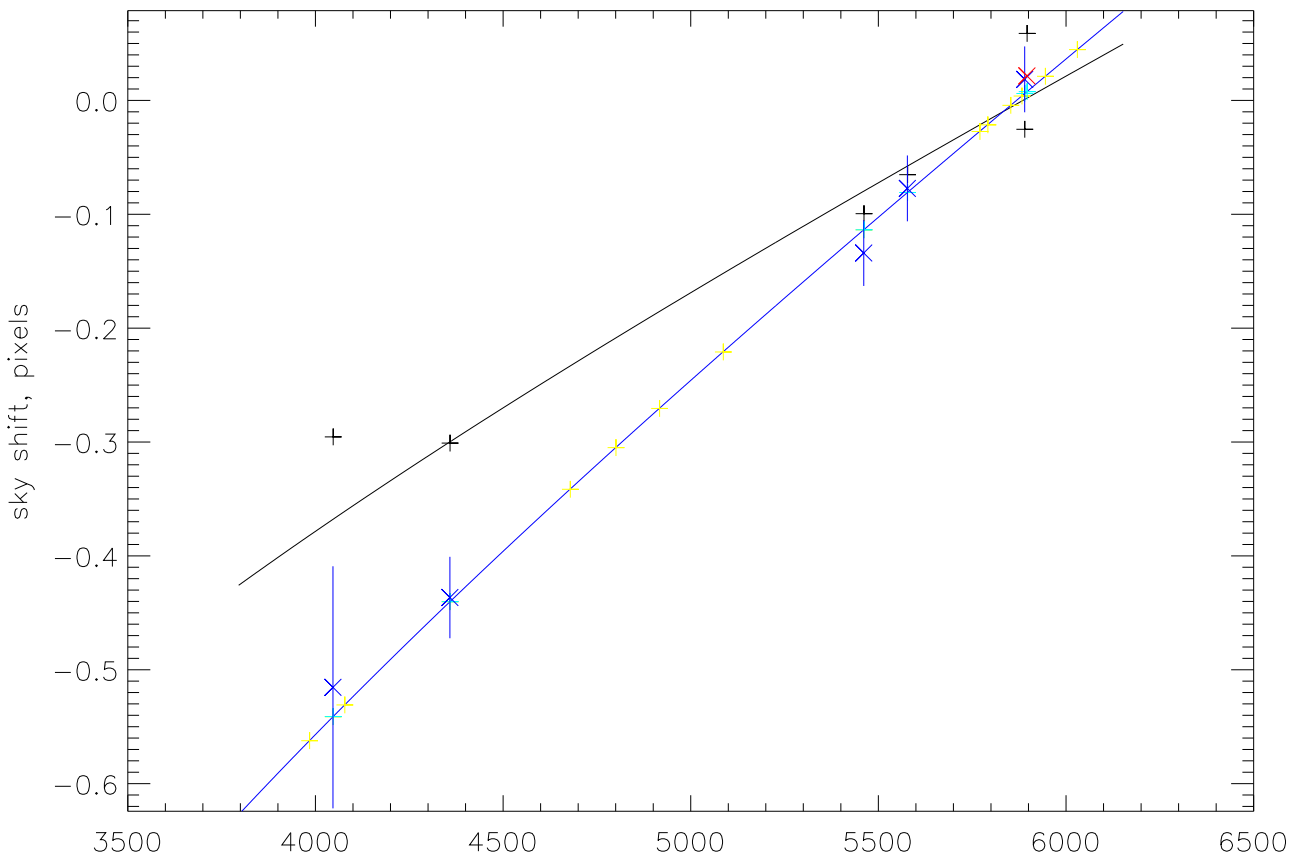

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

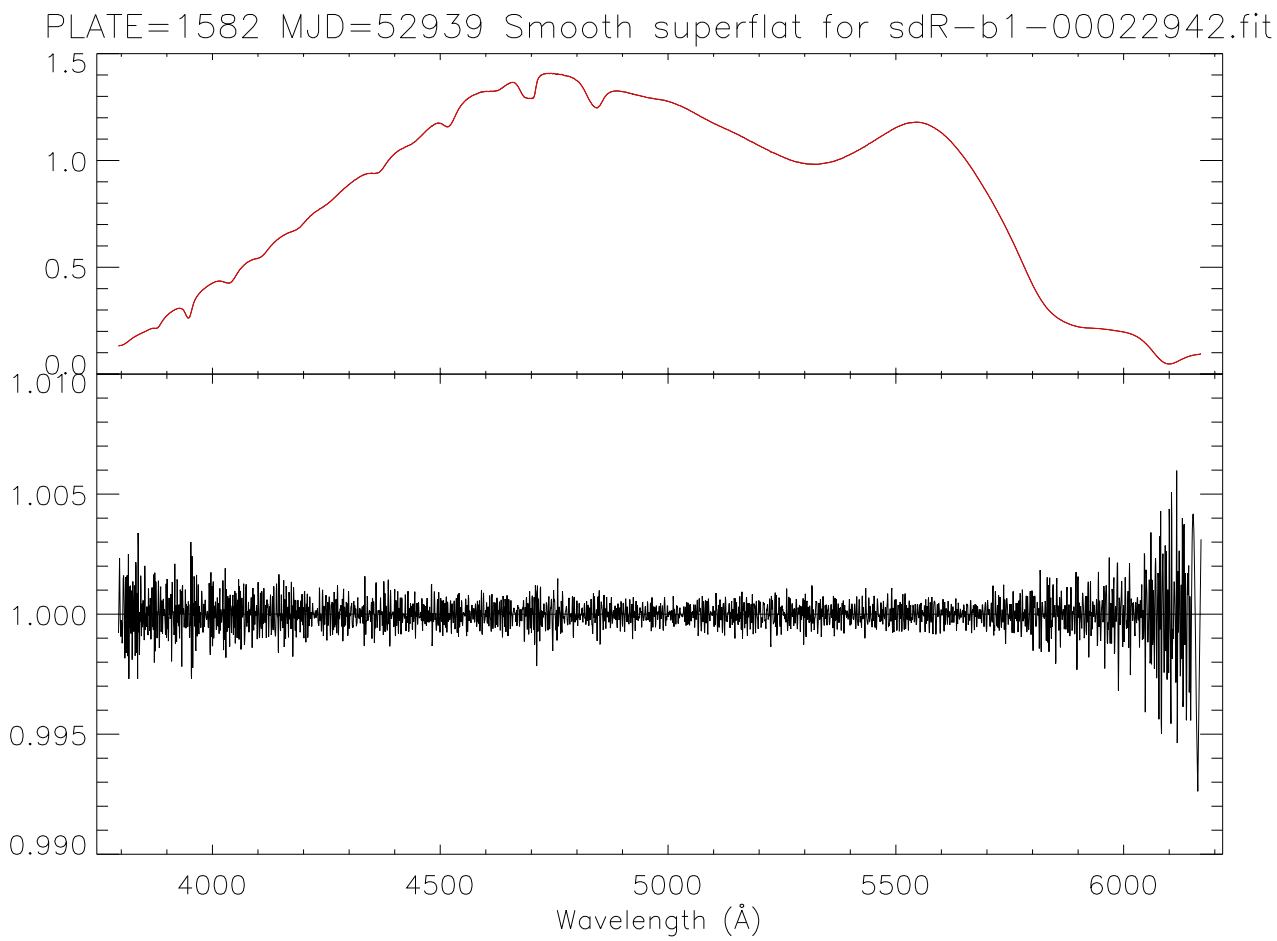

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

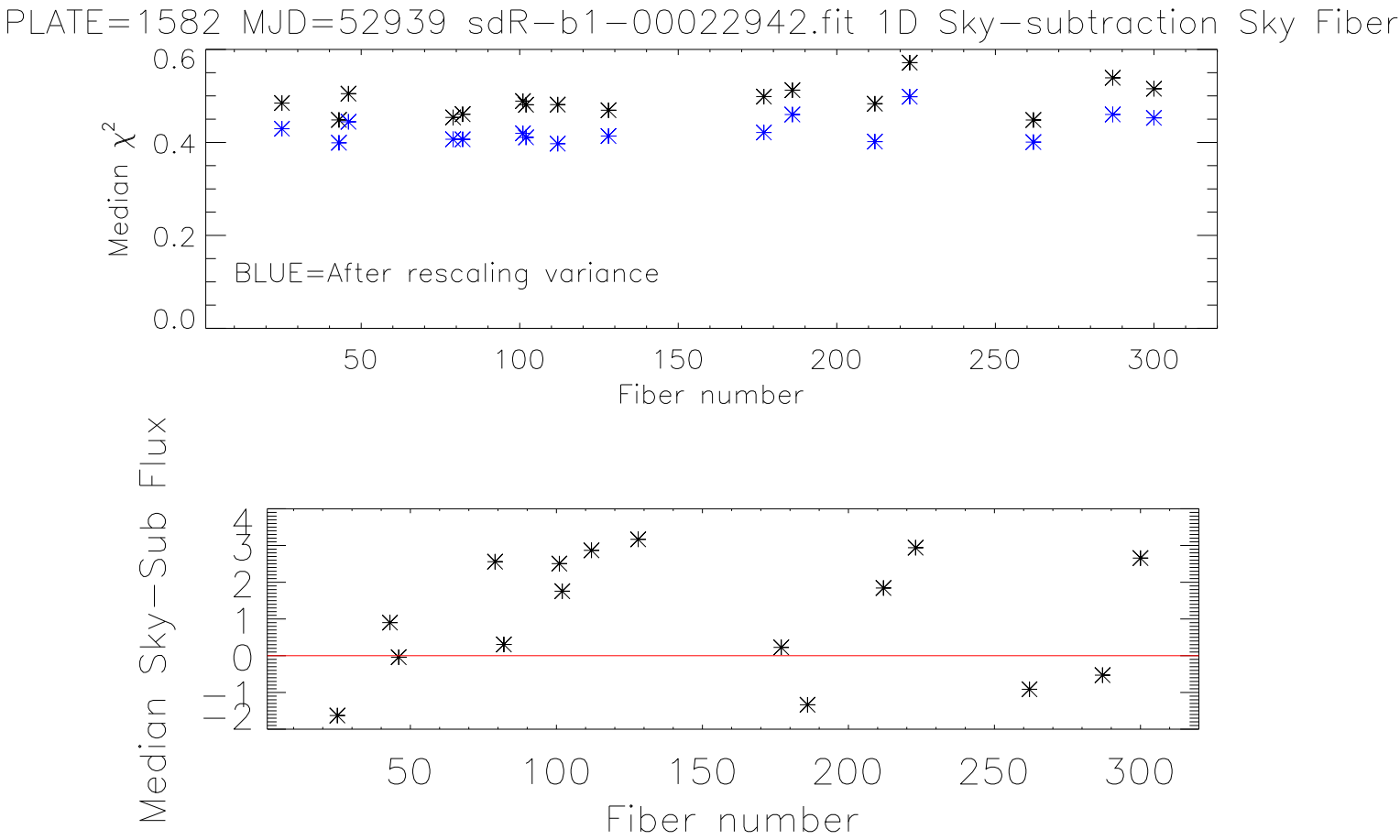

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

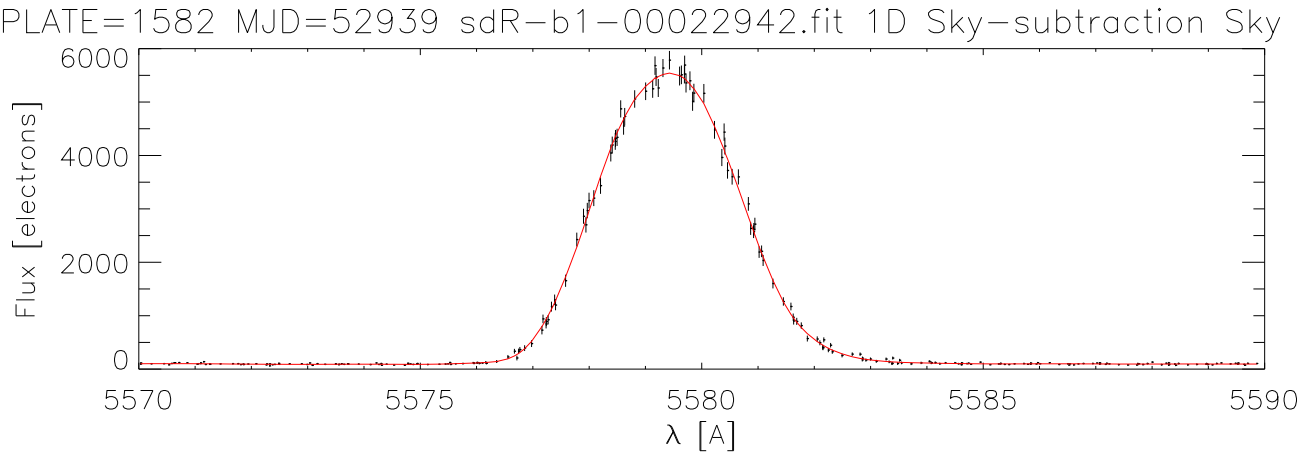

4046.5600
nfib1 15
nfib2 15
stdev 0.120
extra −0.52
4358.3300
nfib1 16
nfib2 16
stdev 0.063
extra −0.44
5460.9400
nfib1 16
nfib2 16
stdev 0.051
extra −0.13
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra −0.08
5889.9500
nfib1 15
nfib2 15
stdev 0.027
extra 0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

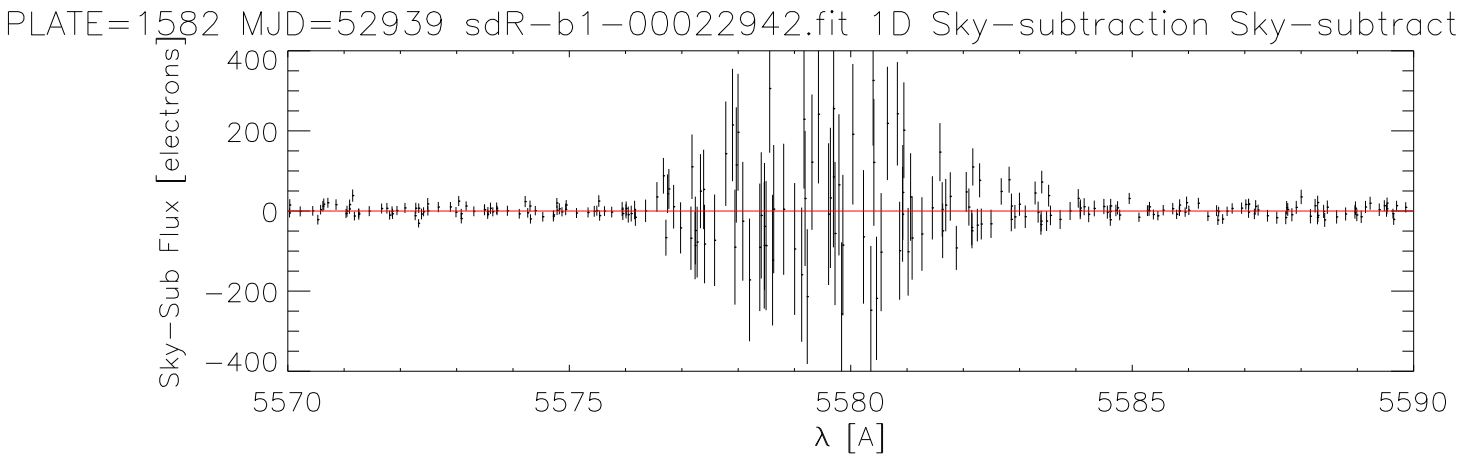

sky shift, pixels
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500

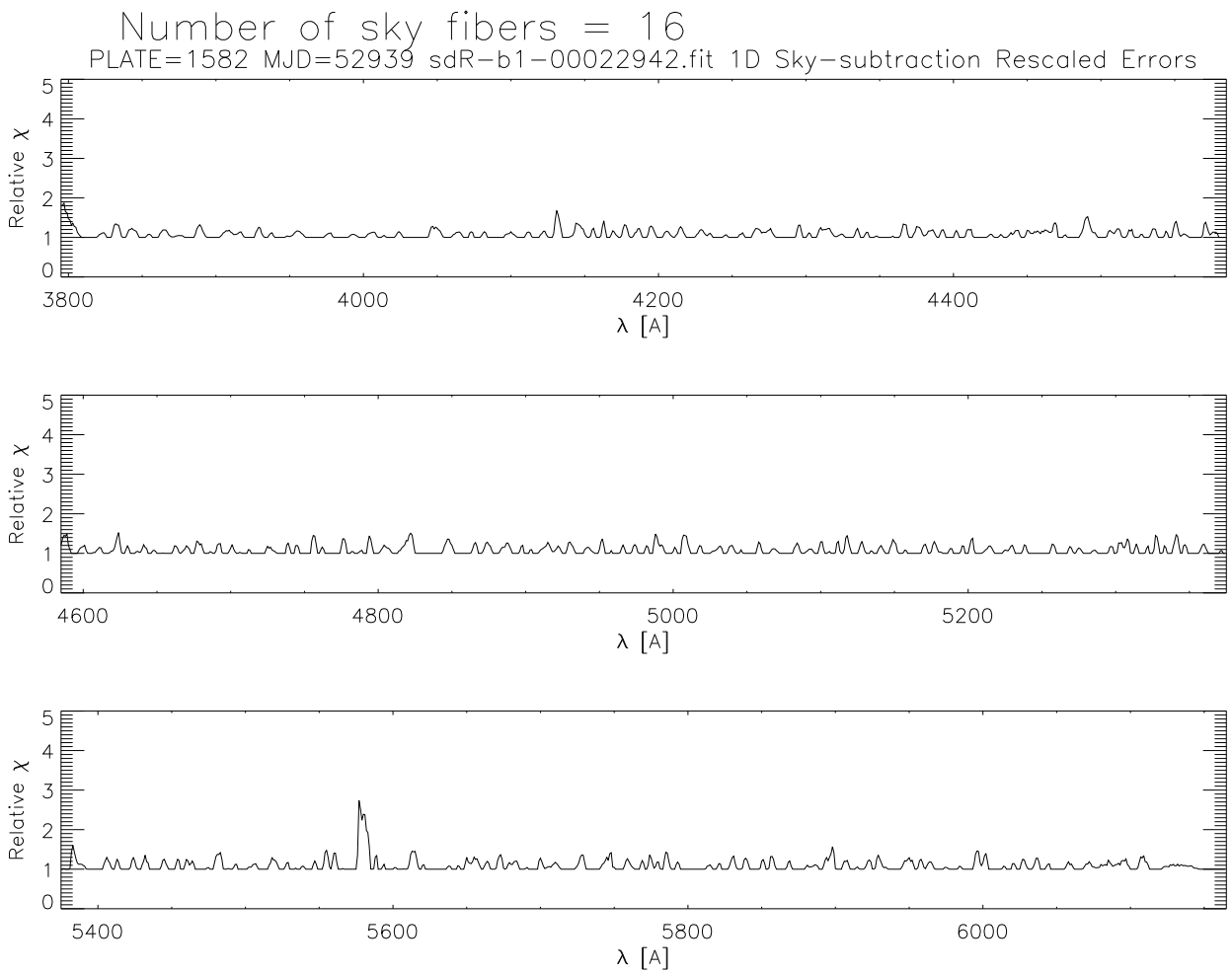
es= 0.0000

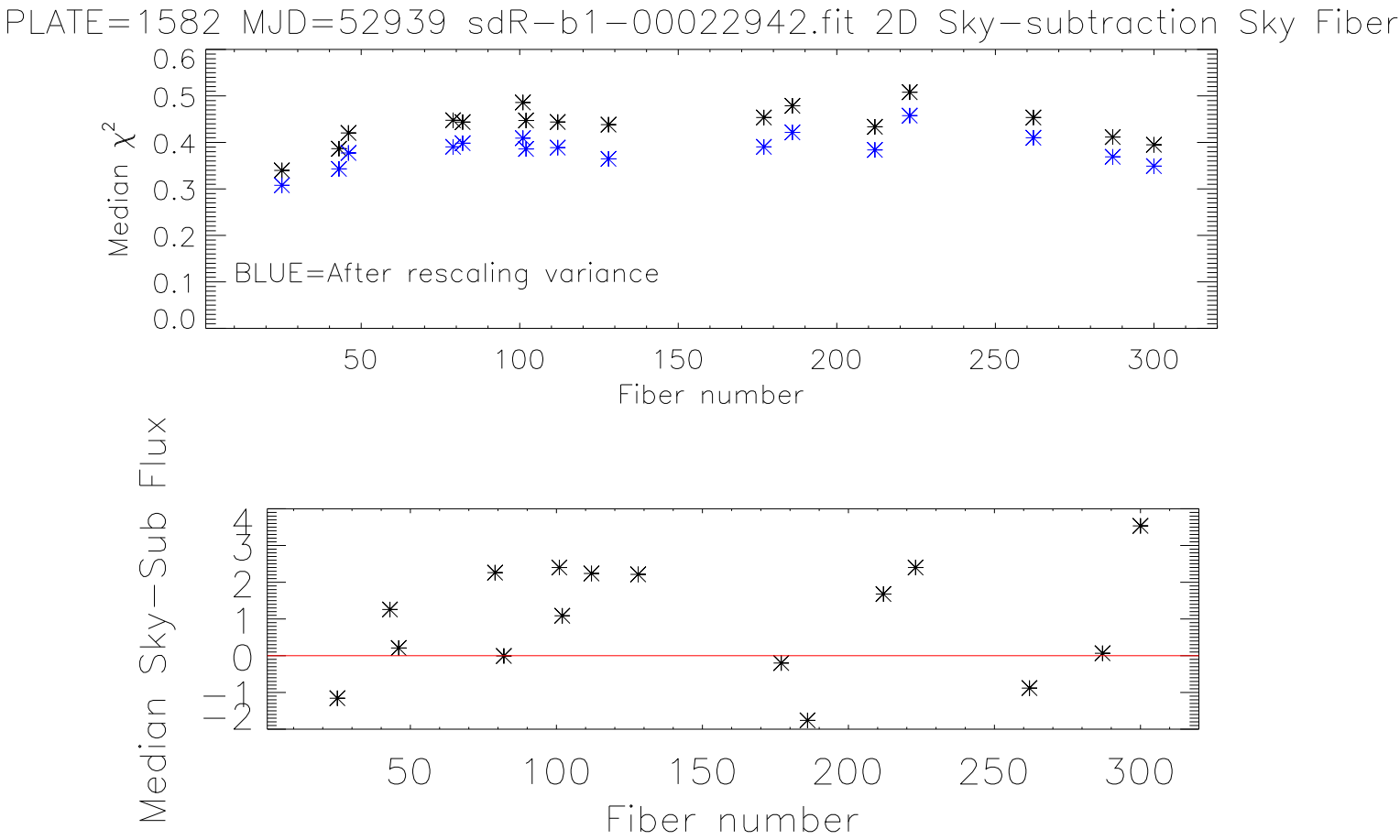

PLATE=1582 MJD=52939 Smooth superflat for sdR-b1-00022942.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

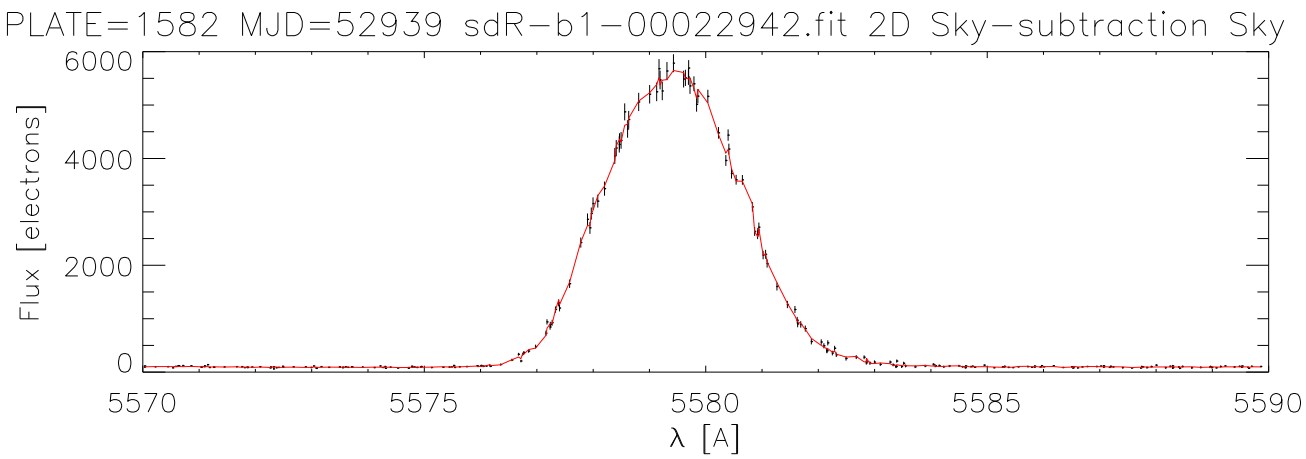

PLATE=1582 MJD=52939 sdR-b1-00022942.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

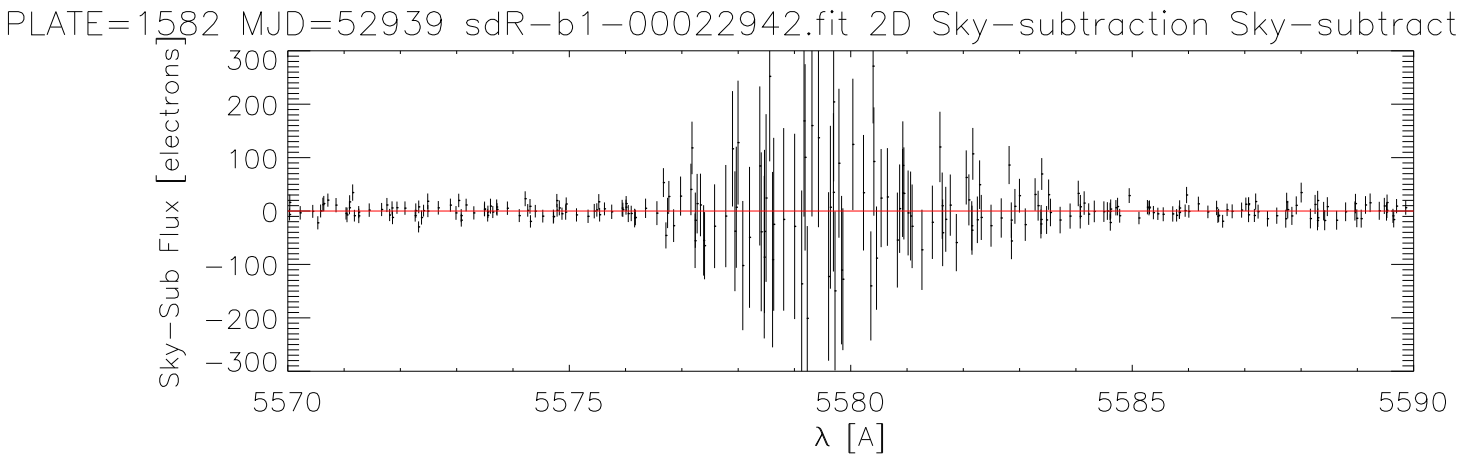

PLATE=1582 MJD=52939 sdR-b1-00022942.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

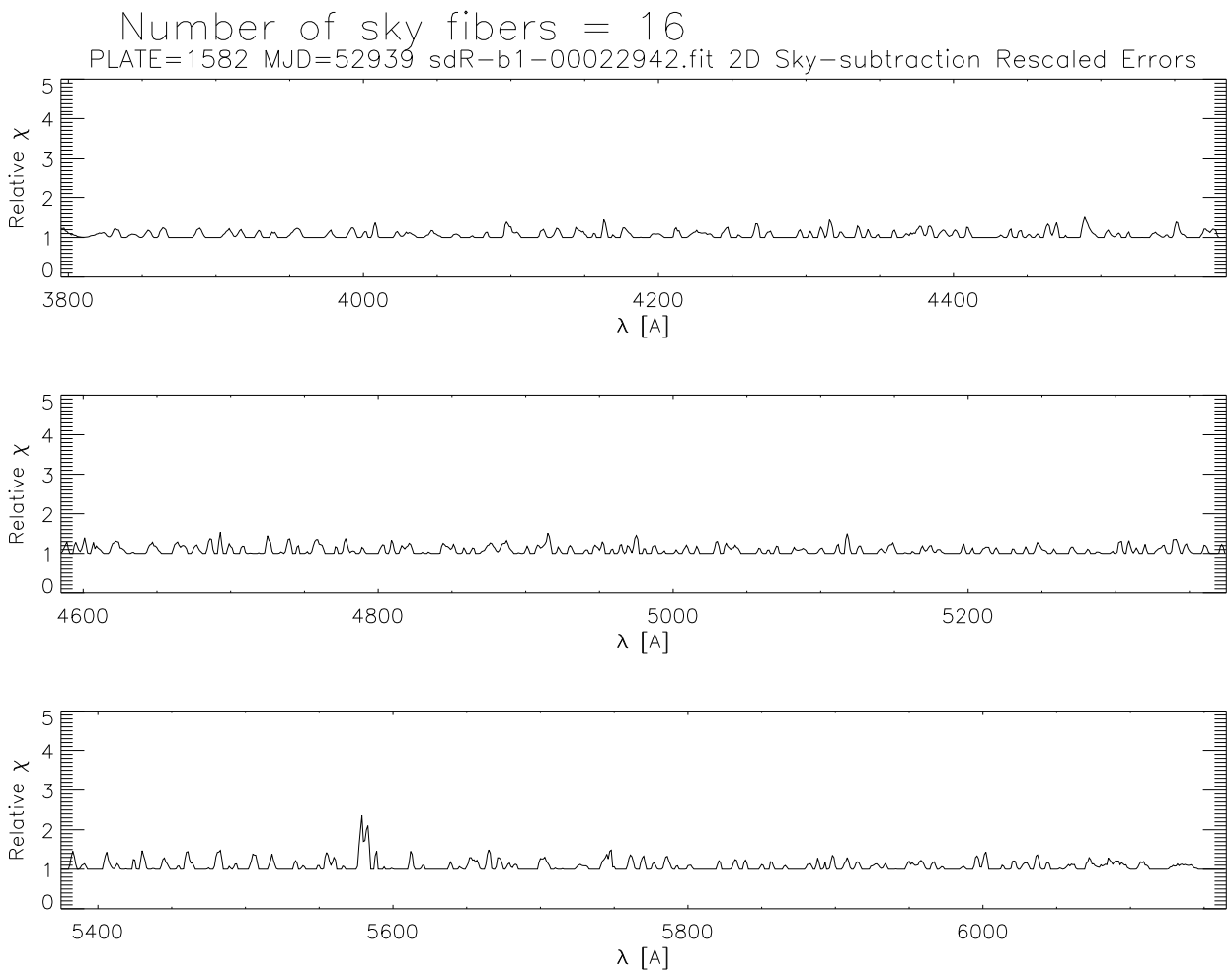

PLATE=1582 MJD=52939 sdR-b1-00022942.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

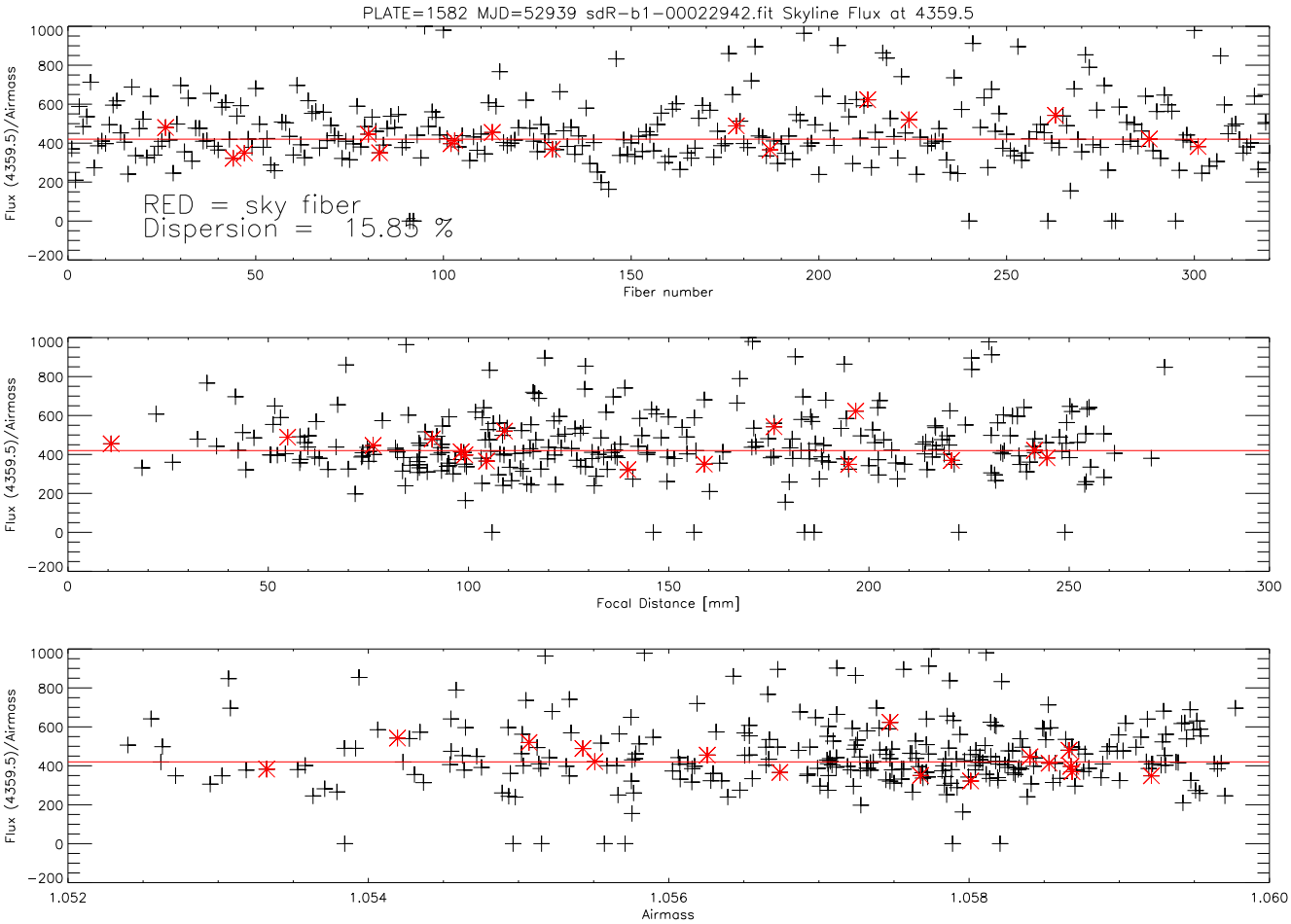

Number of sky fibers = 16
PLATE=1582 MJD=52939 sdR-b1-00022942.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

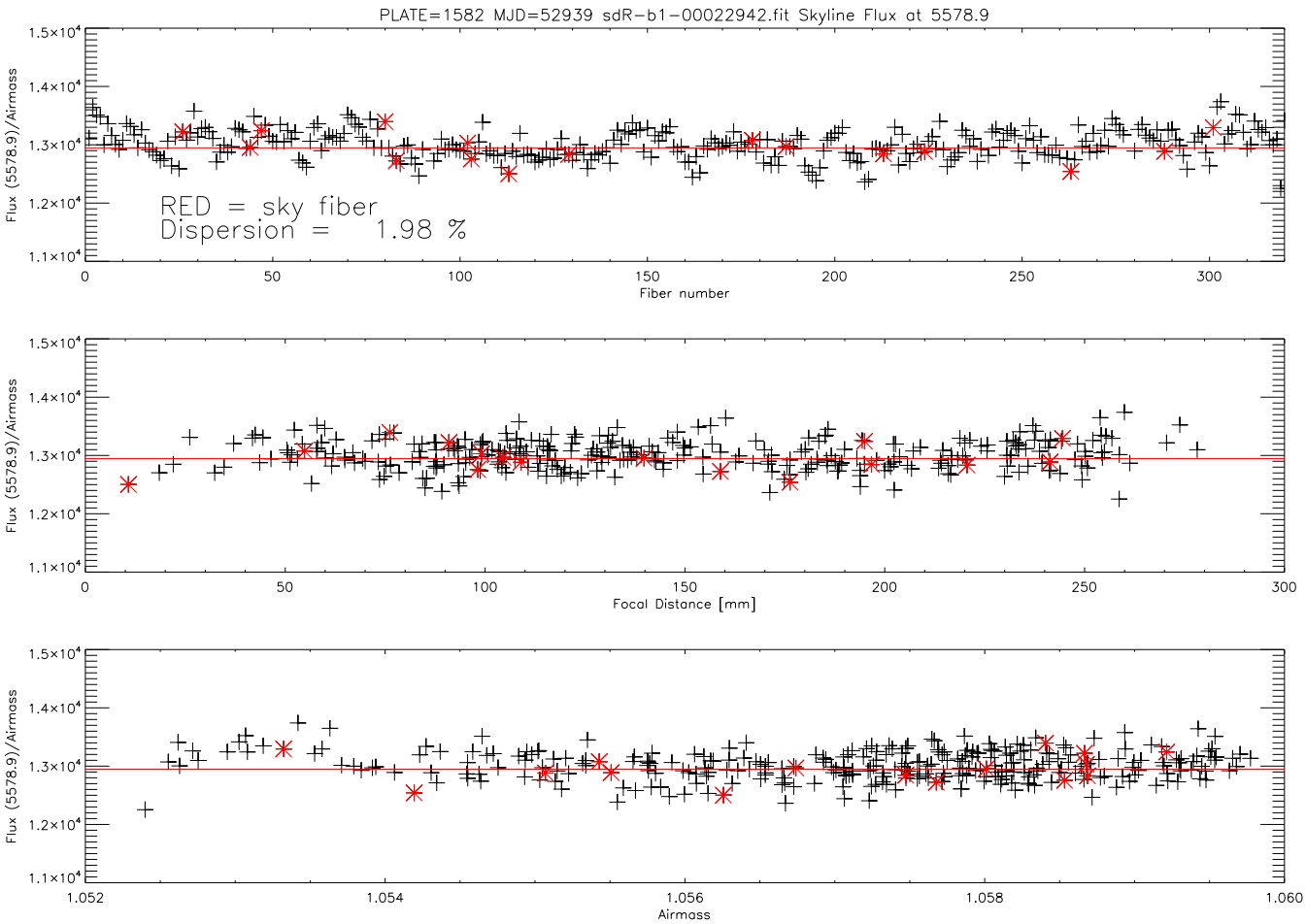

PLATE=1582 MJD=52939 sdR-b1-00022942.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

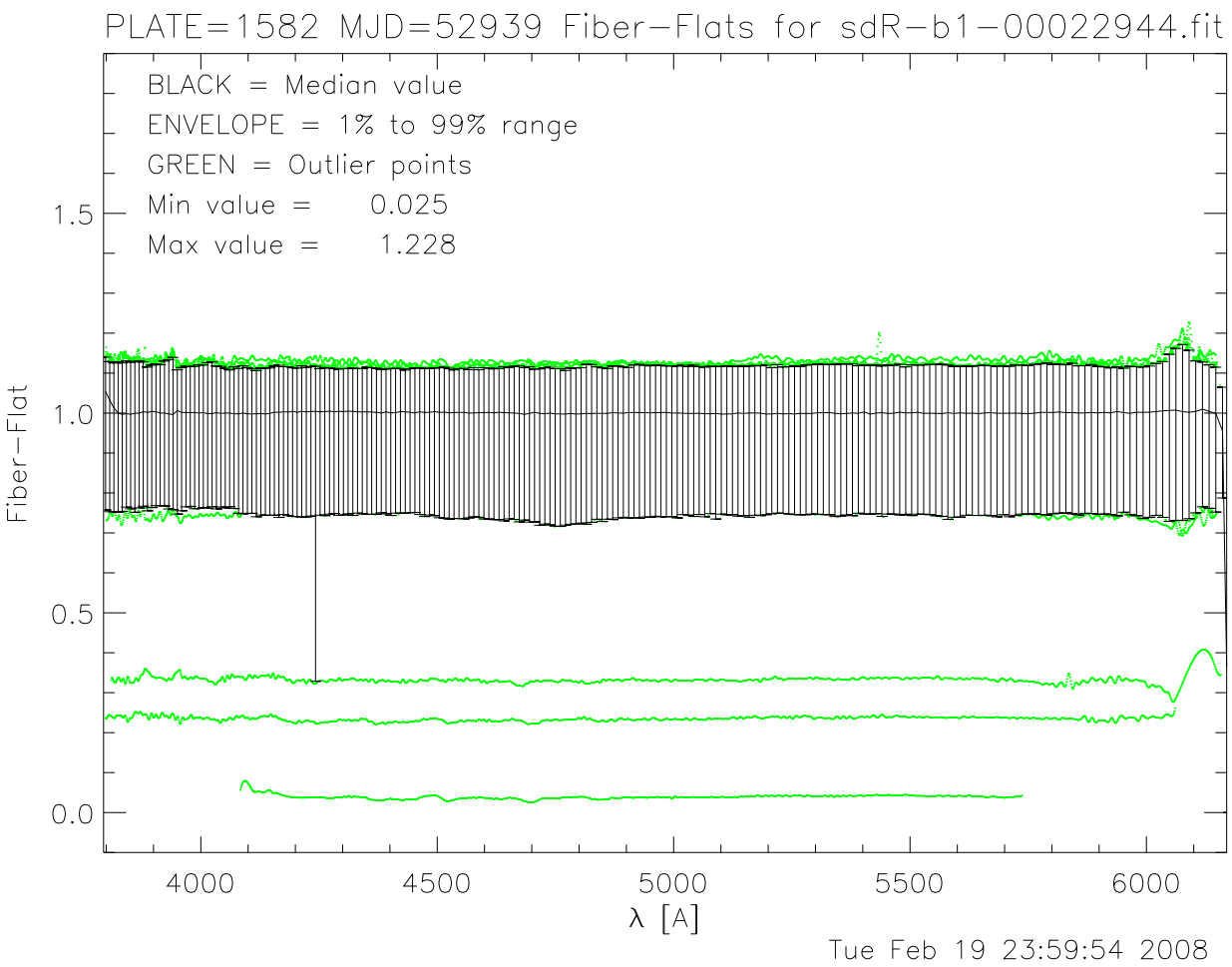

PLATE=1582 MJD=52939 sdR-b1-00022942.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

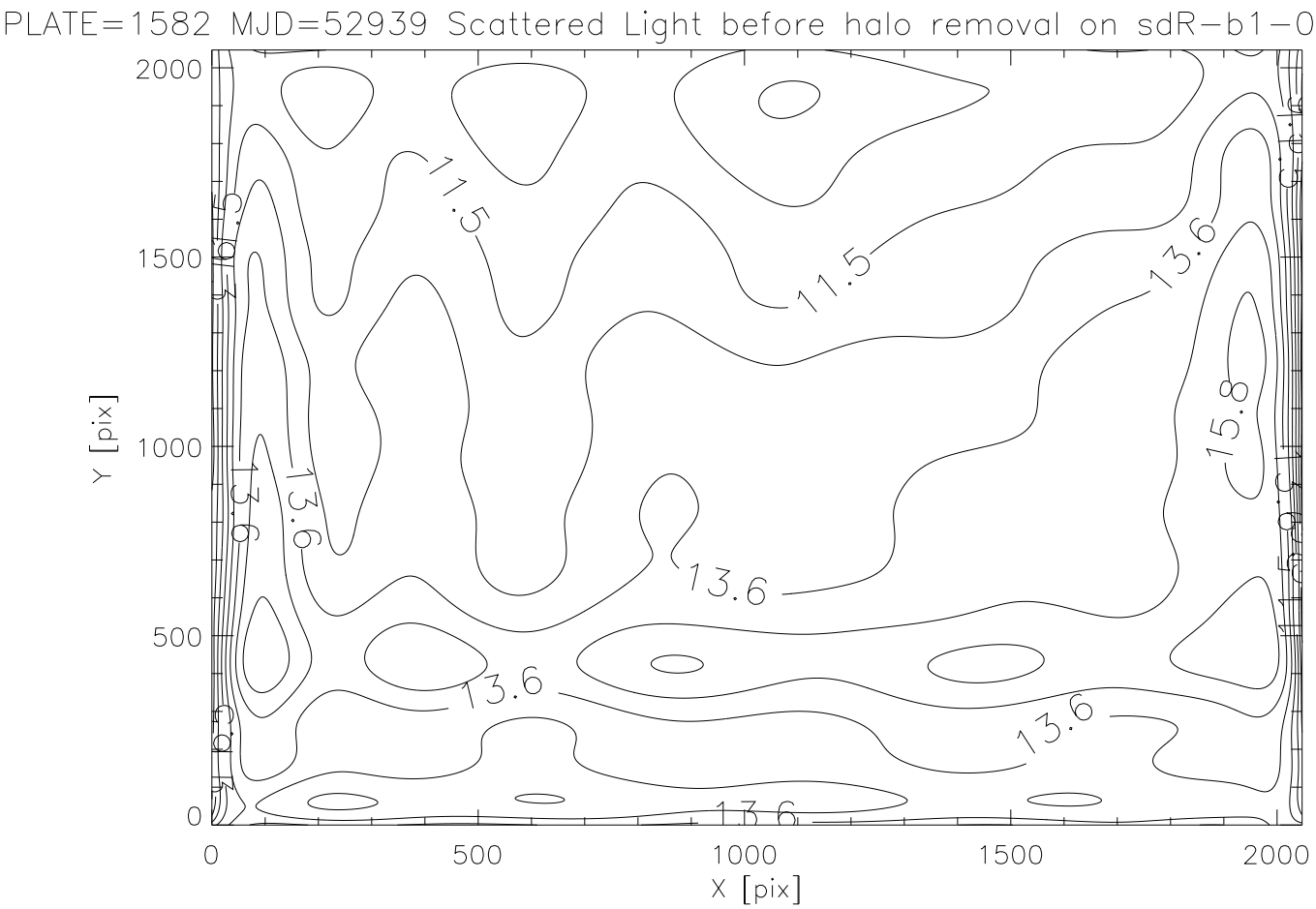

PLATE=1582 MJD=52939 sdR-b1-00022942.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

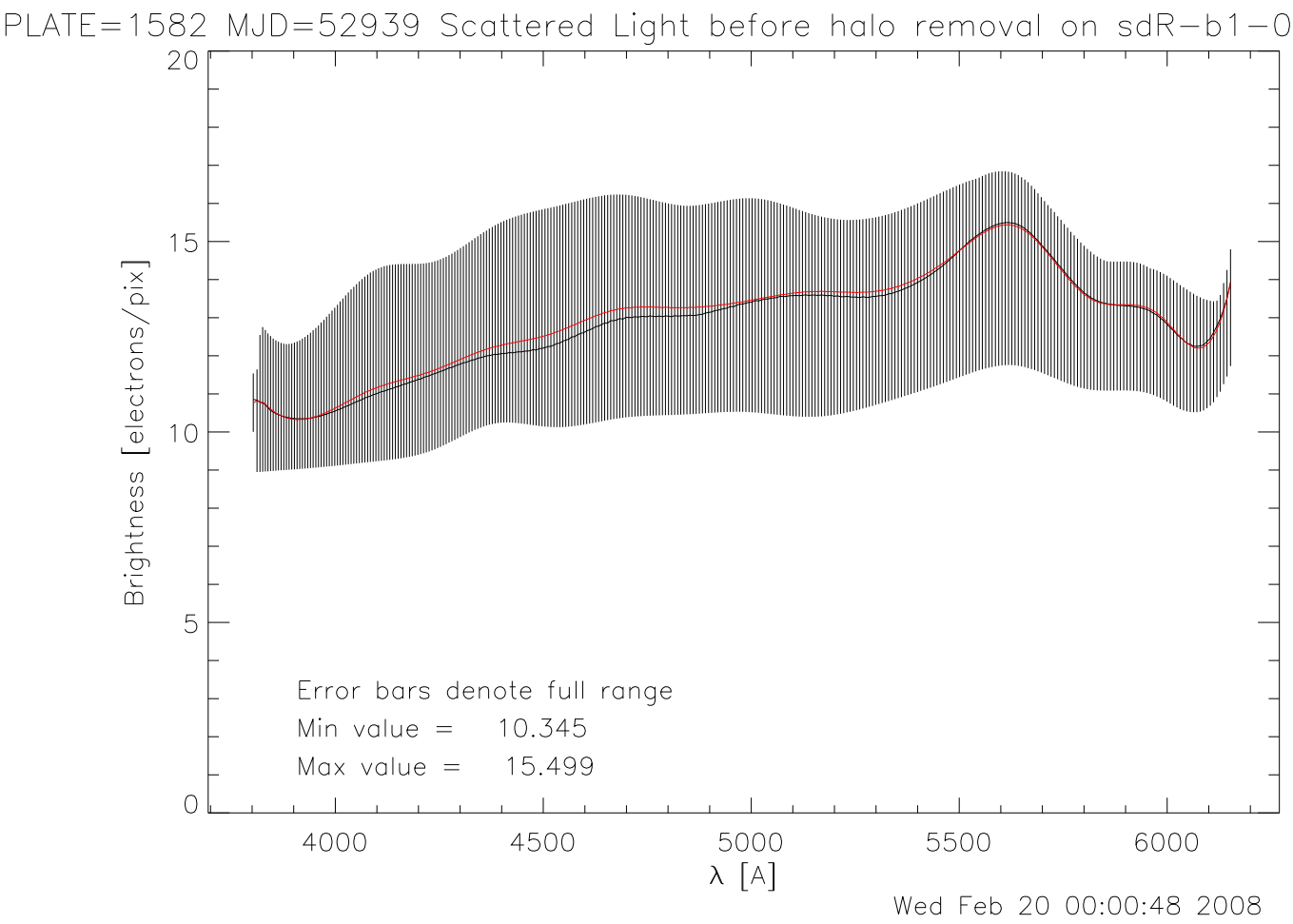

Number of sky fibers = 16
PLATE=1582 MJD=52939 sdR-b1-00022942.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

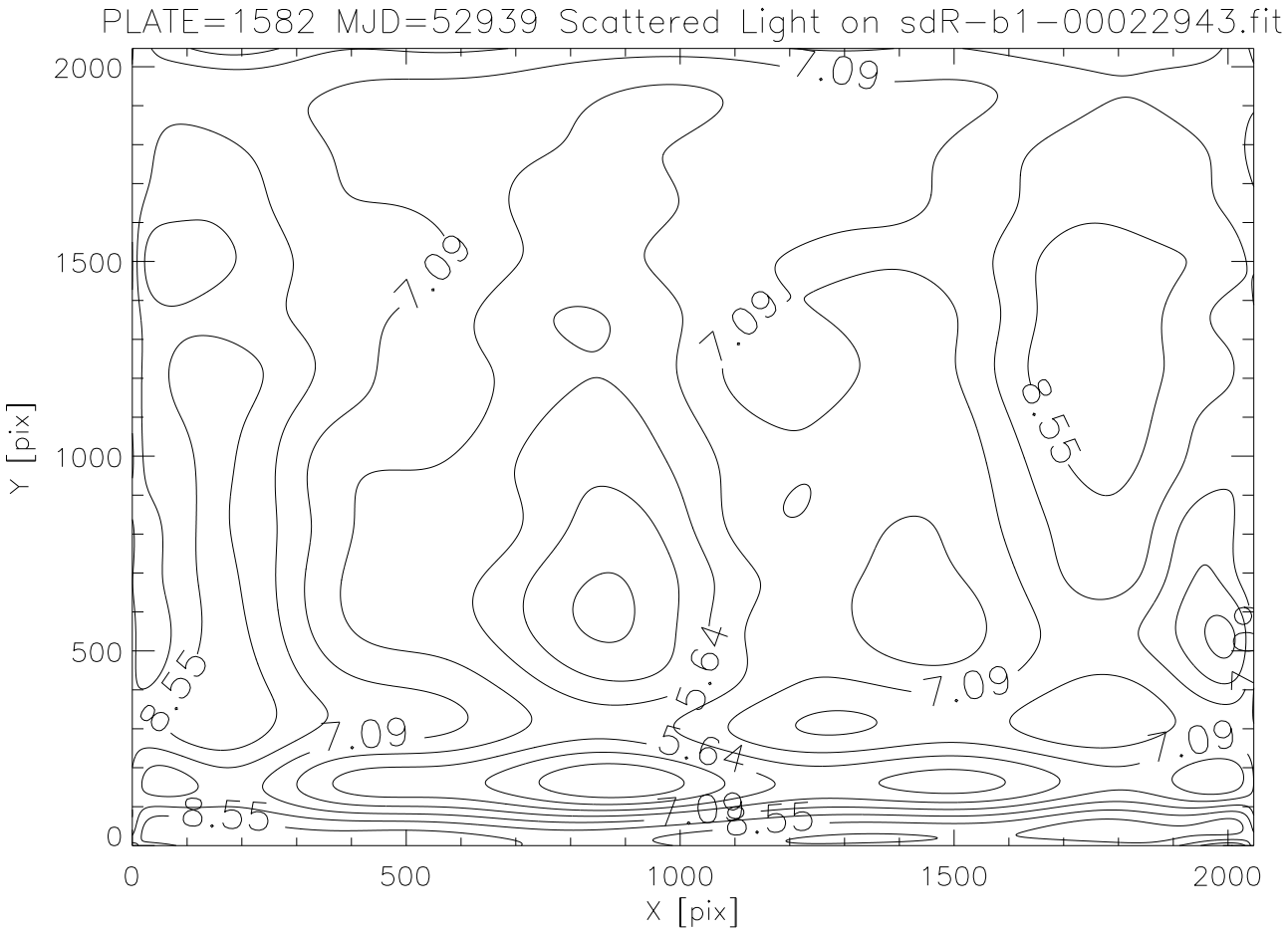

PLATE=1582 MJD=52939 sdR-b1-00022942.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 15.85 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

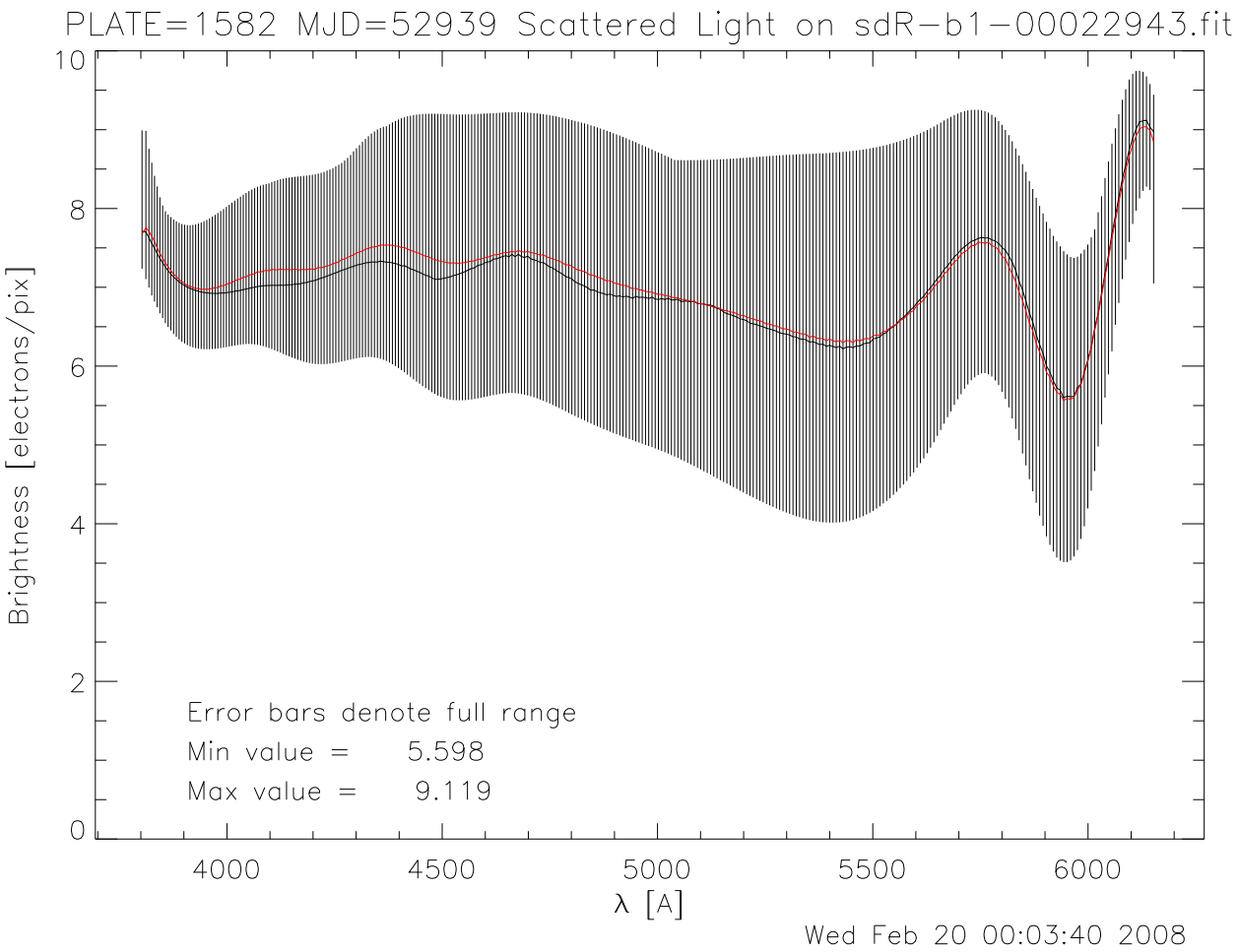

PLATE=1582 MJD=52939 sdR-b1-00022942.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.5×10^4
1.4×10^4
1.3×10^4
1.2×10^4
1.1×10^4
RED = sky fiber
Dispersion = 1.98 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
1.052
1.054
1.056
1.058
1.060
Airmass

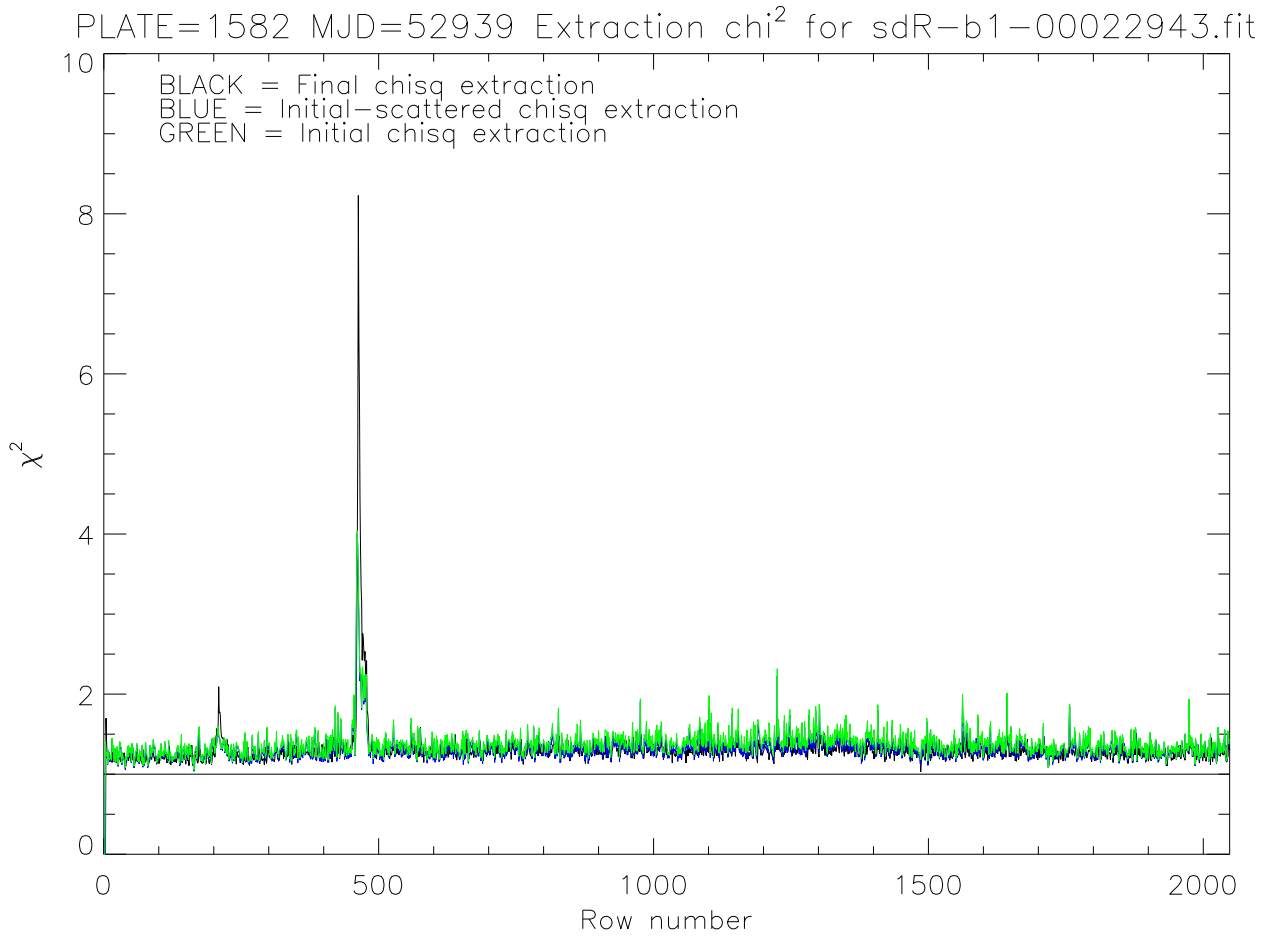

PLATE=1582 MJD=52939 Fiber−Flats for sdR−b1−00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.025
Max value = 1.228
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 23:59:54 2008

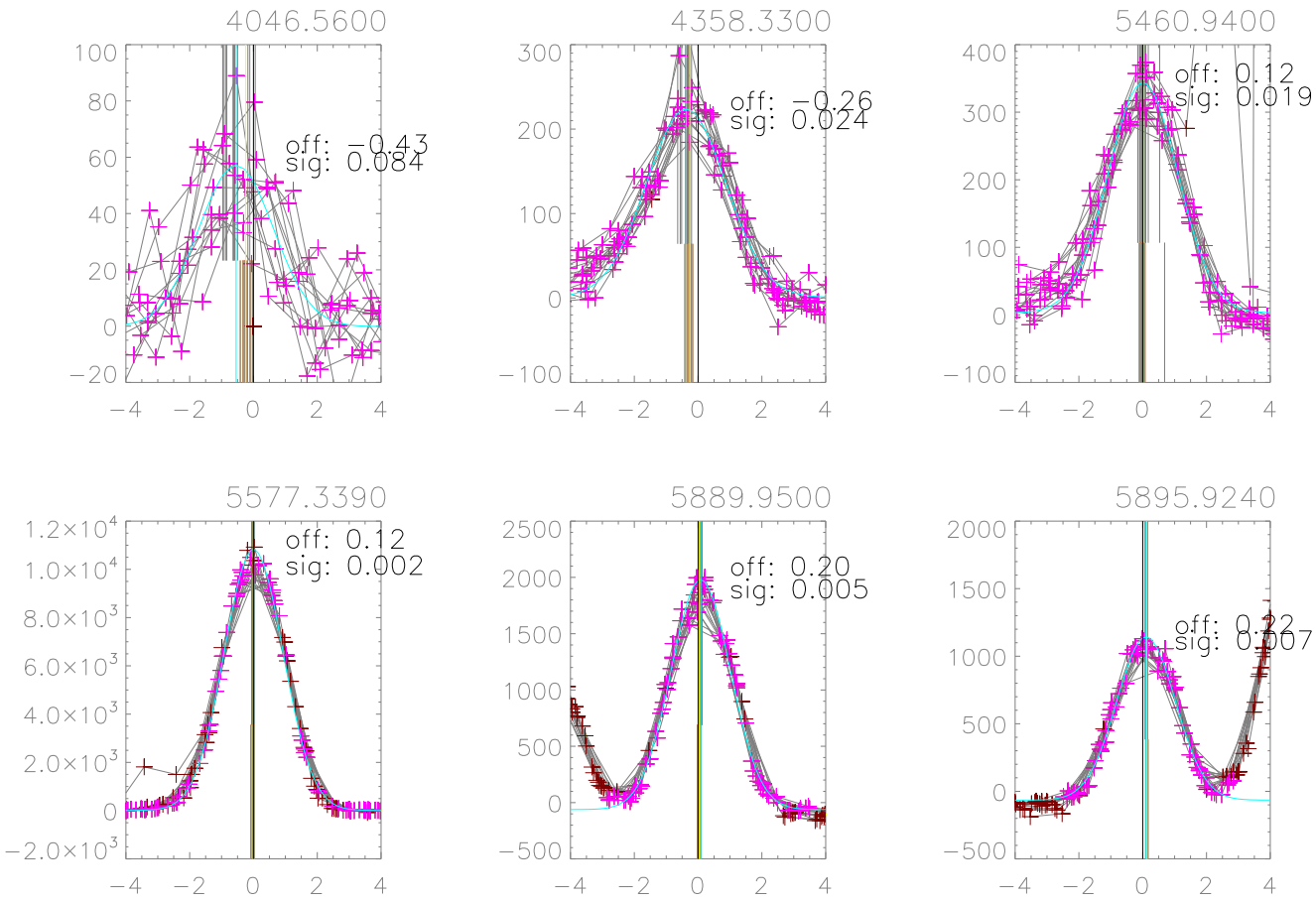

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR−b1−00022943.f
Y [pix]
X [pix]
0
500
1000
1500
2000
11.5
13.6
15.8

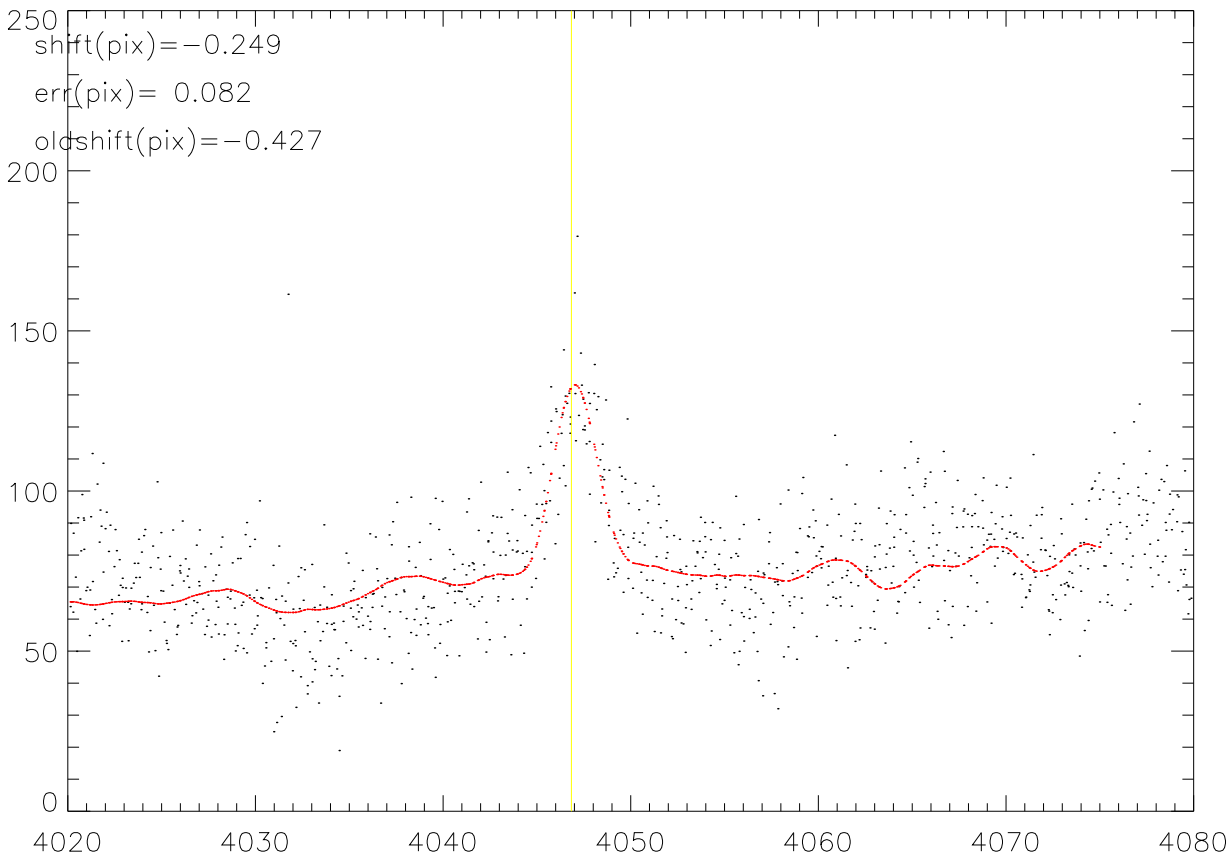

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b1-00022943.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 10.345
Max value = 15.499
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 00:00:48 2008

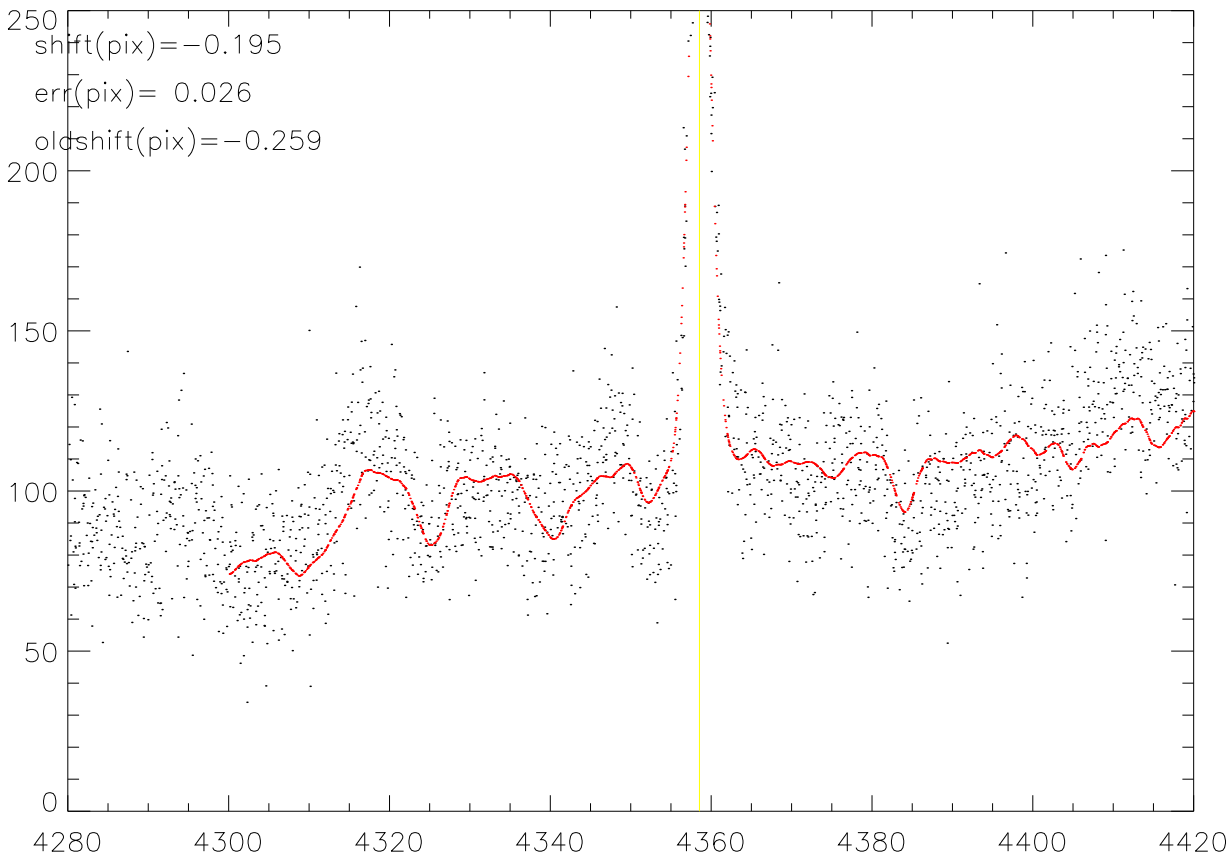

PLATE=1582 MJD=52939 Scattered Light on sdR-b1-00022943.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.09
8.55
5.64
0

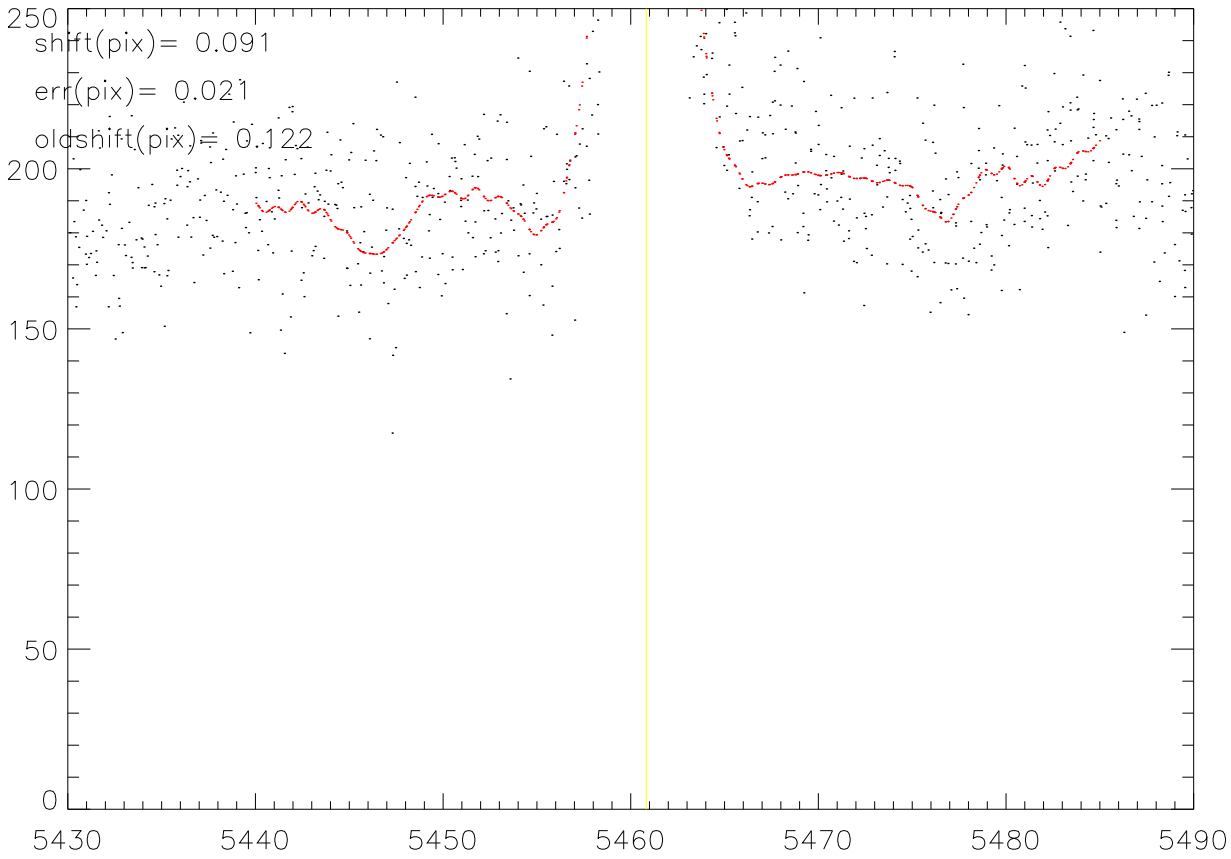

PLATE=1582 MJD=52939 Scattered Light on sdR-b1-00022943.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.598
Max value = 9.119
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 00:03:40 2008

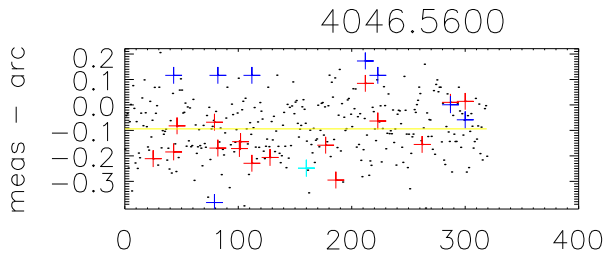

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-b1-00022943.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

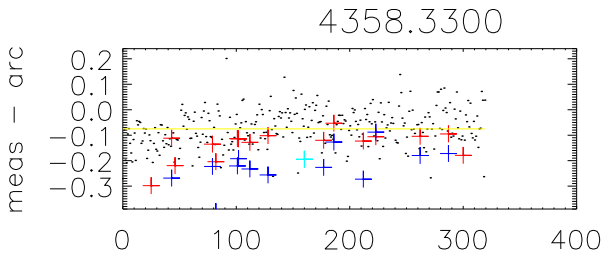

4046.5600
off: −0.43
sig: 0.084
4358.3300
off: −0.26
sig: 0.024
5460.9400
off: 0.12
sig: 0.019
5577.3390
off: 0.12
sig: 0.002
5889.9500
off: 0.20
sig: 0.005
5895.9240
off: 0.22
sig: 0.007

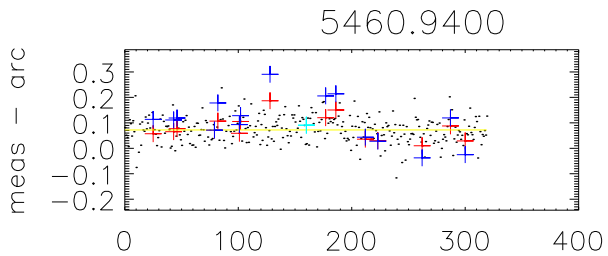

shift(pix)=−0.249
err(pix)= 0.082
oldshift(pix)=−0.427
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

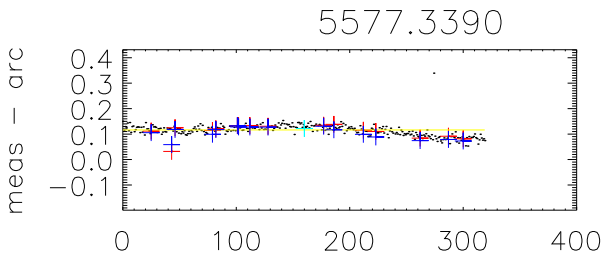

shift(pix)=−0.195
err(pix)= 0.026
oldshift(pix)=−0.259
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

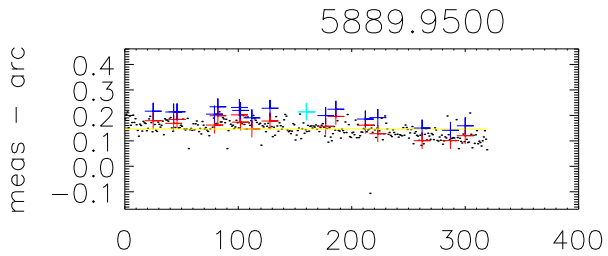

shift(pix)= 0.091
err(pix)= 0.021
oldshift(pix)= 0.122
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

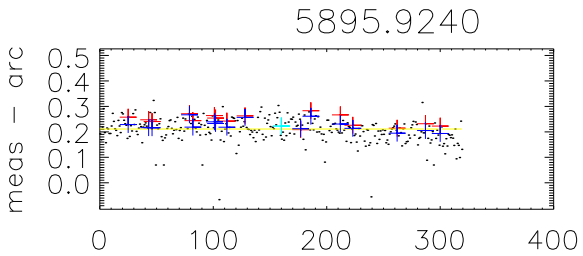

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

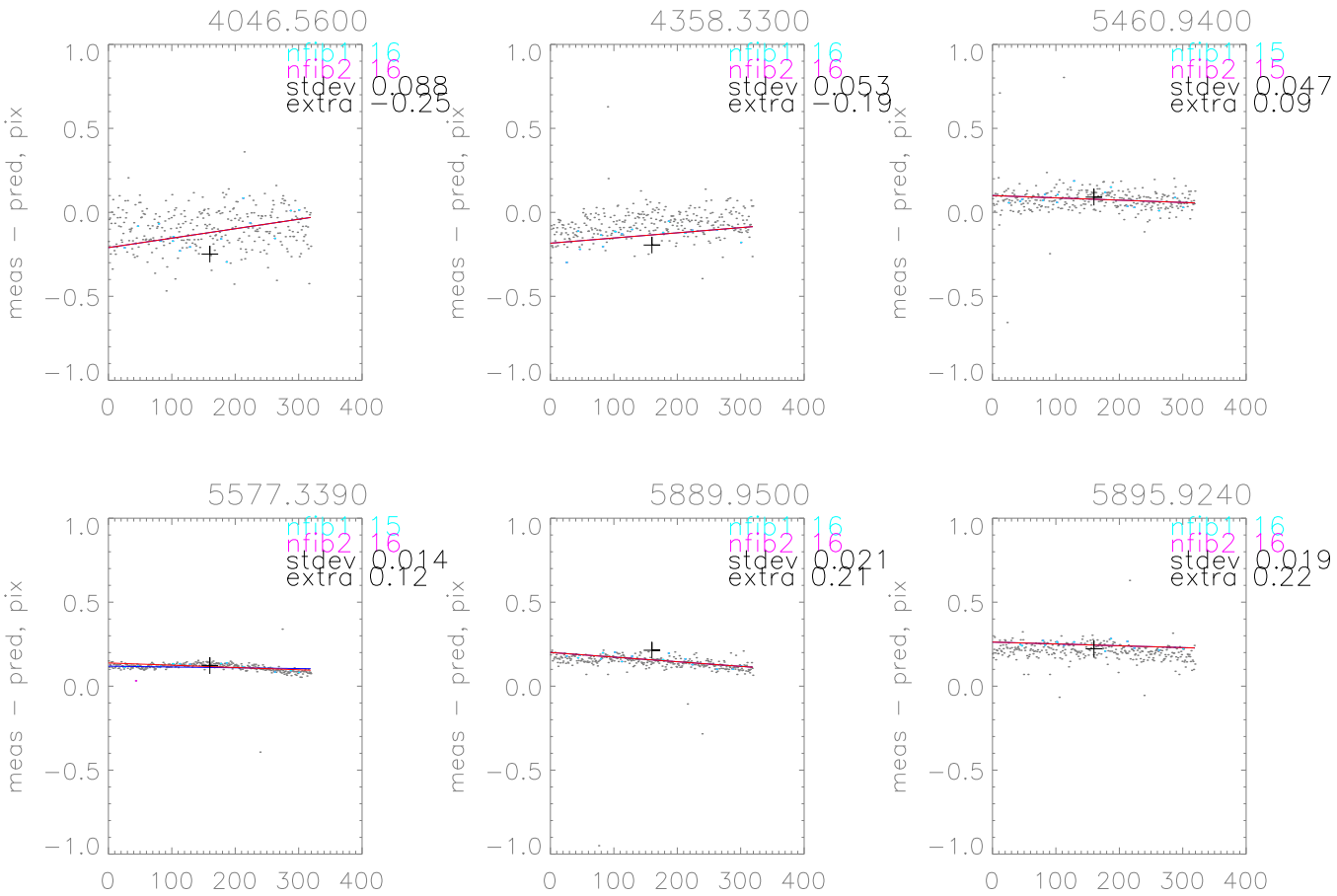

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

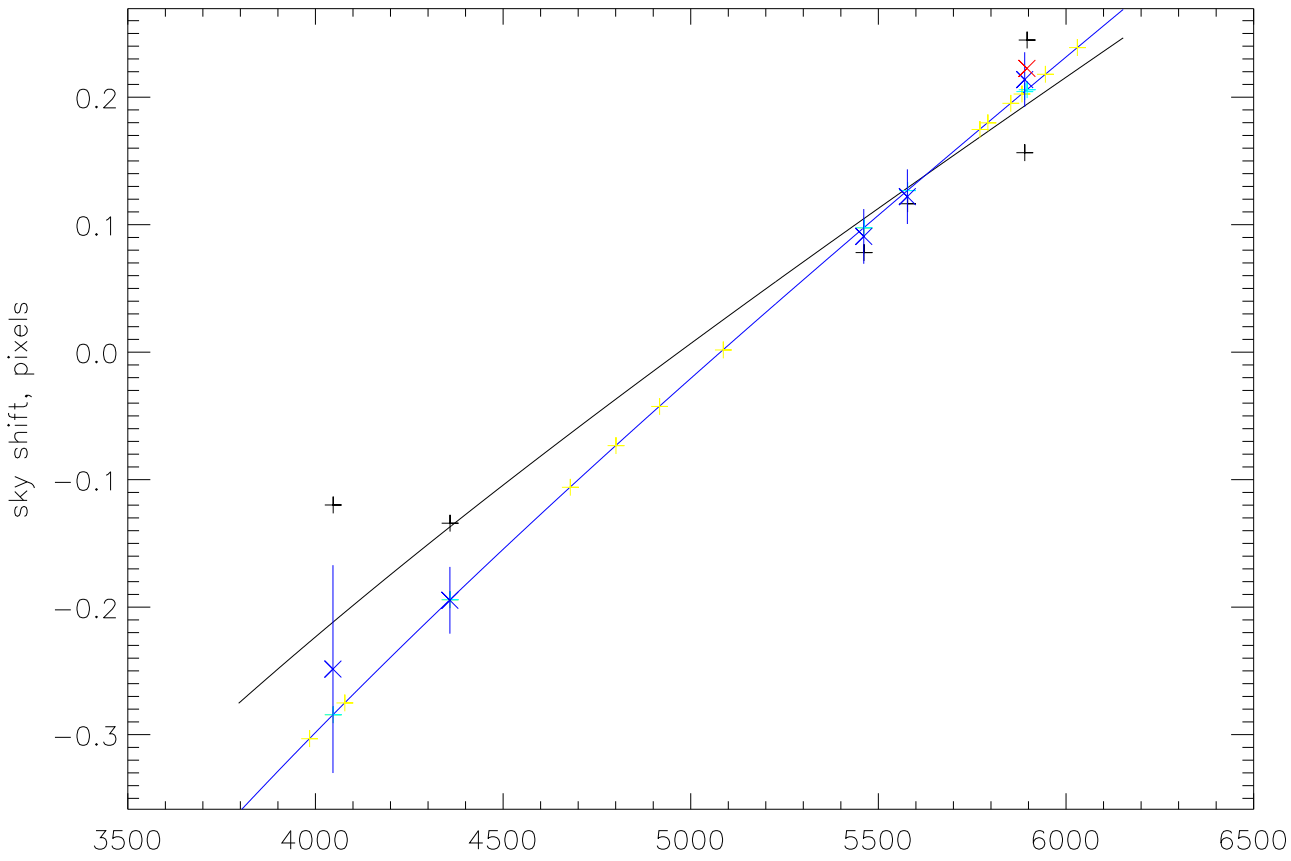

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

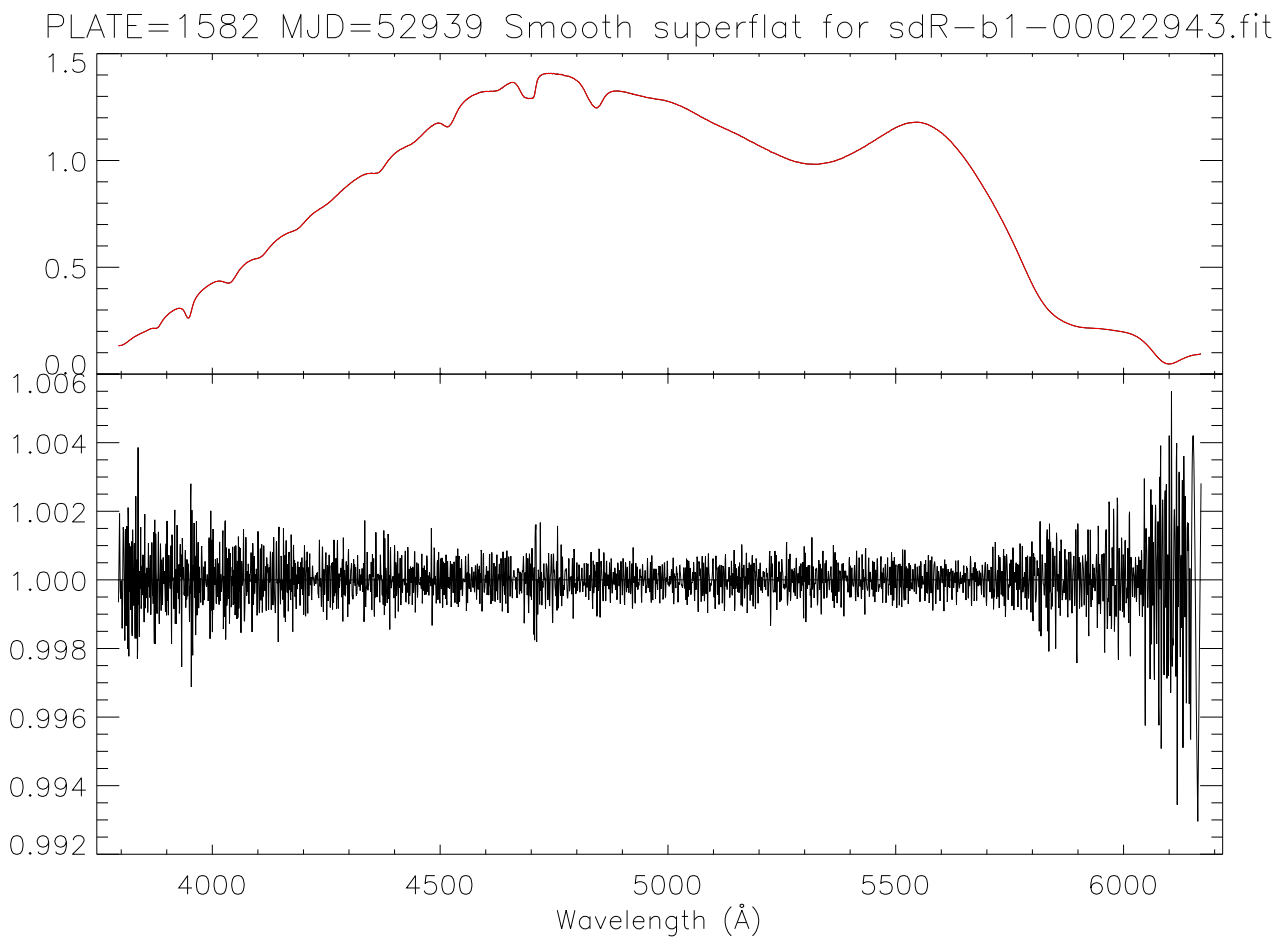

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

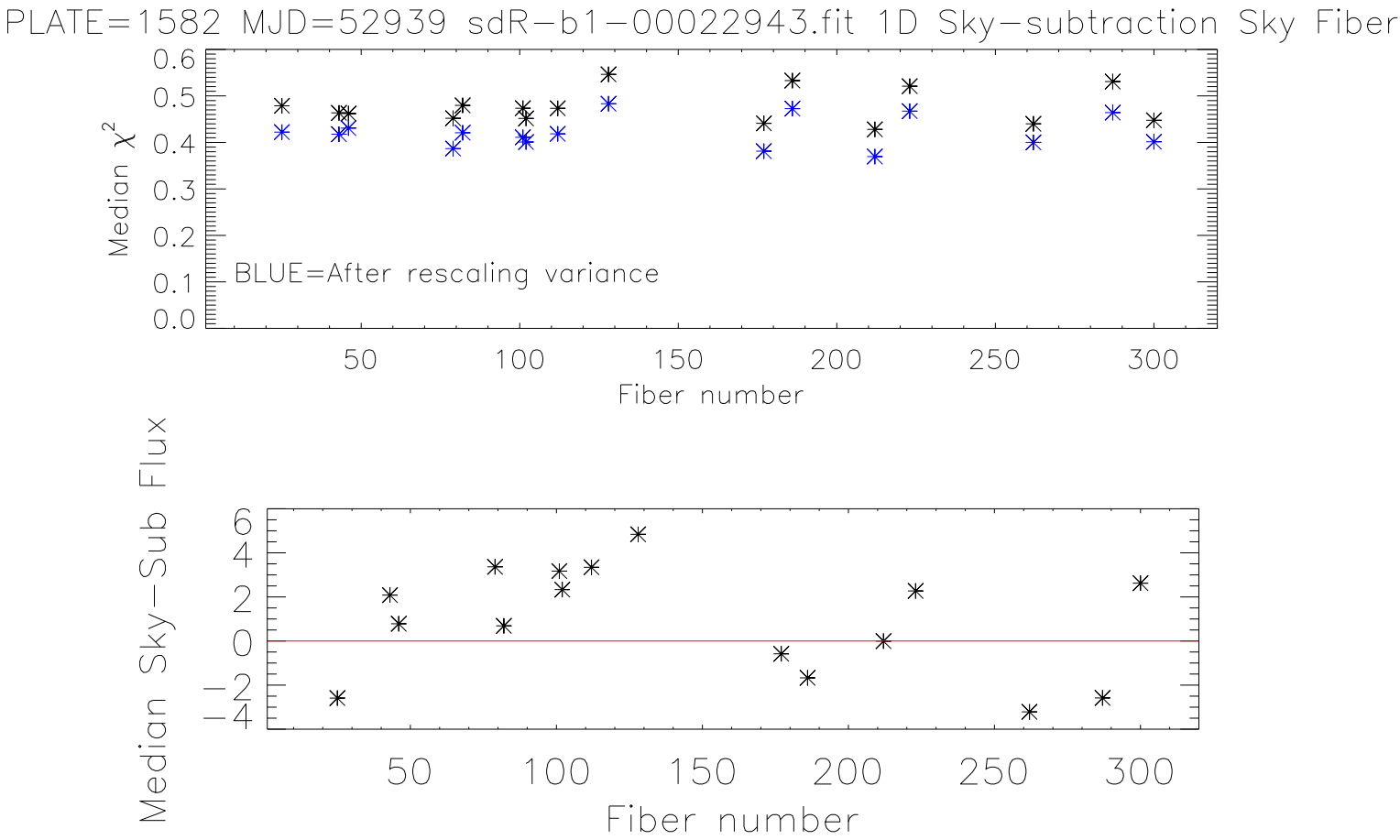

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

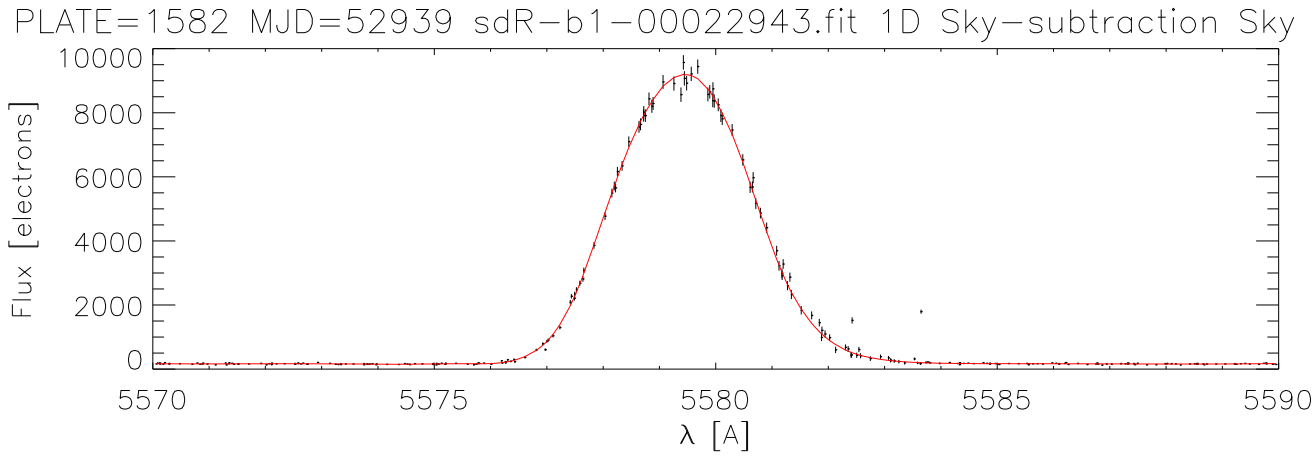

4046.5600
nfib1 16
nfib2 16
stdev 0.088
extra −0.25
4358.3300
nfib1 16
nfib2 16
stdev 0.053
extra −0.19
5460.9400
nfib1 15
nfib2 15
stdev 0.047
extra 0.09
5577.3390
nfib1 15
nfib2 16
stdev 0.014
extra 0.12
5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra 0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.019
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

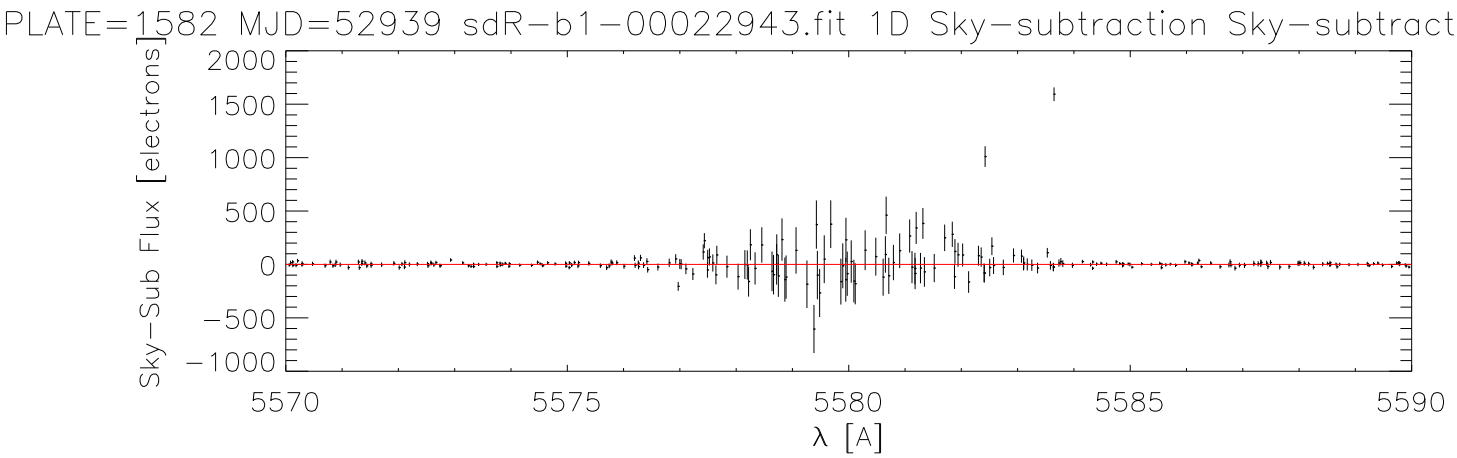

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

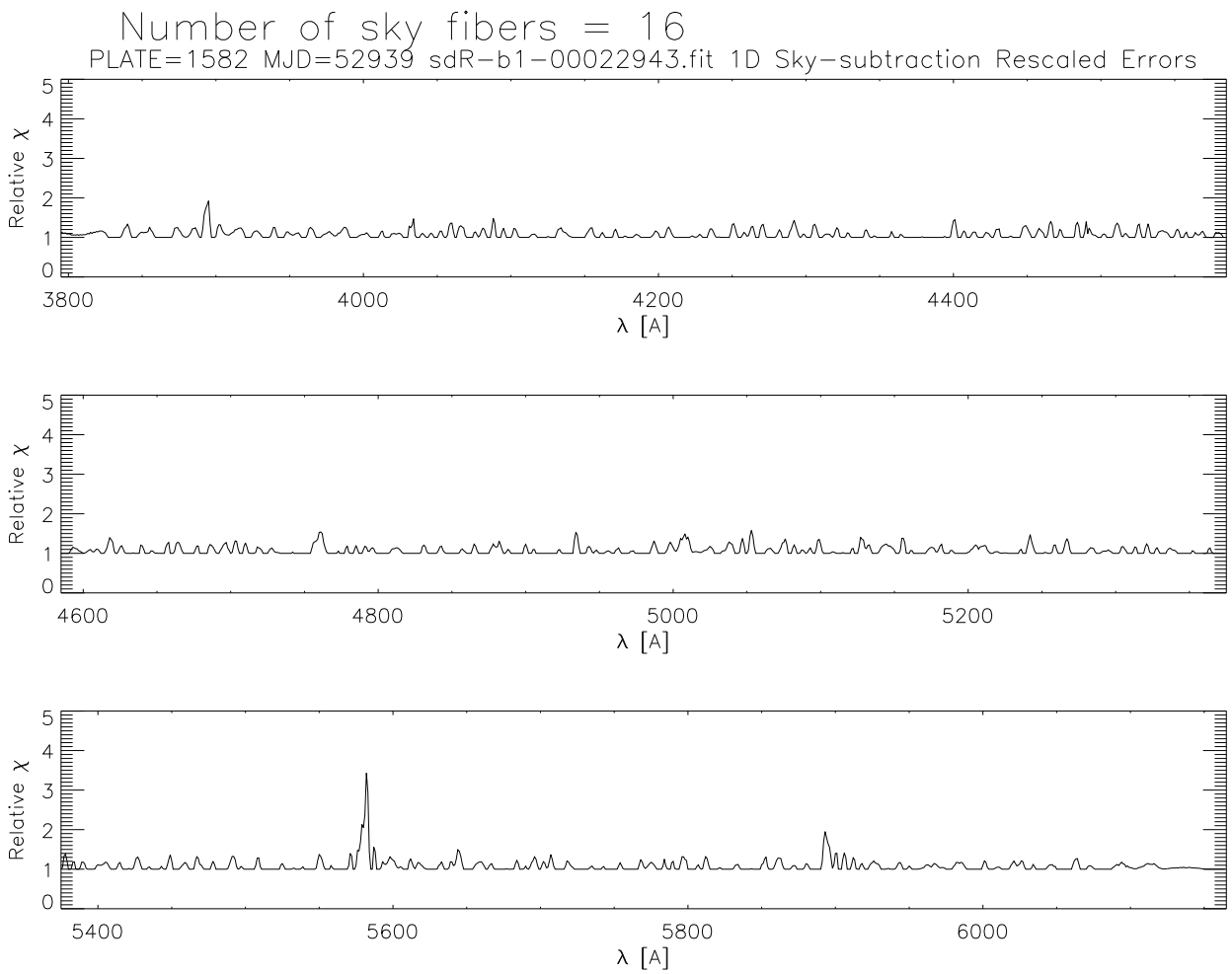
es= 0.0000

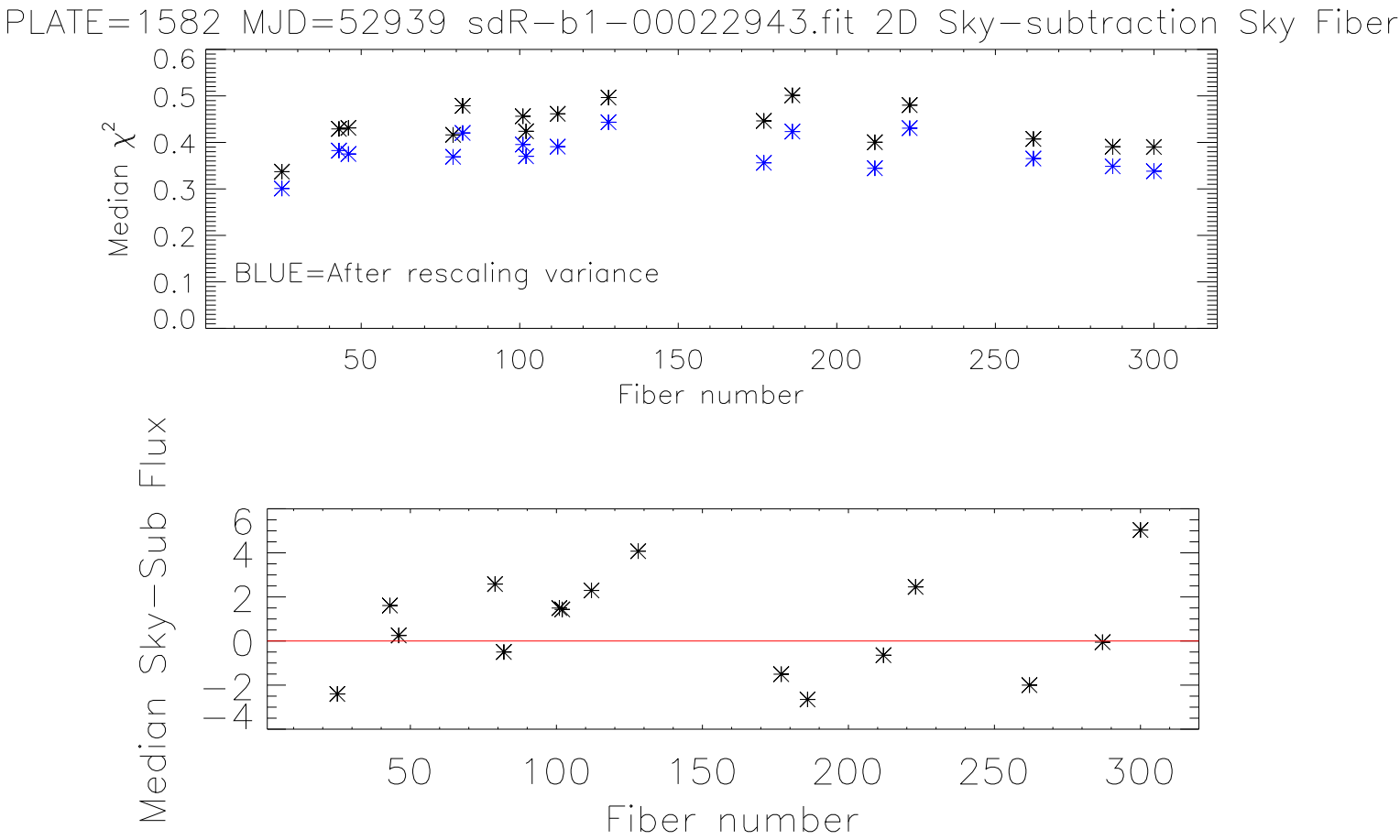

PLATE=1582 MJD=52939 Smooth superflat for sdR-b1-00022943.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

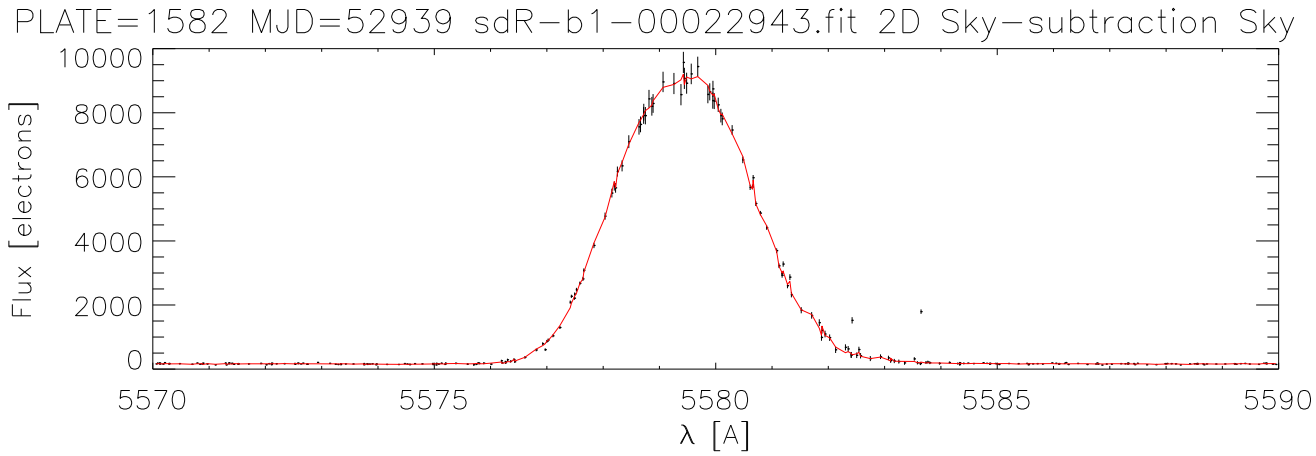

PLATE=1582 MJD=52939 sdR-b1-00022943.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

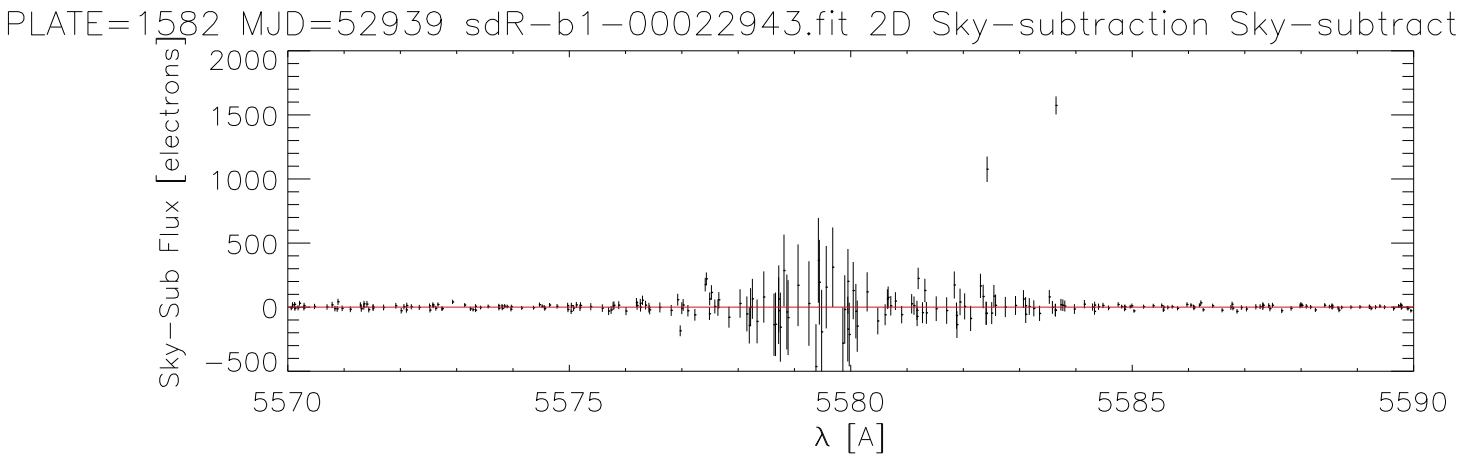

PLATE=1582 MJD=52939 sdR-b1-00022943.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

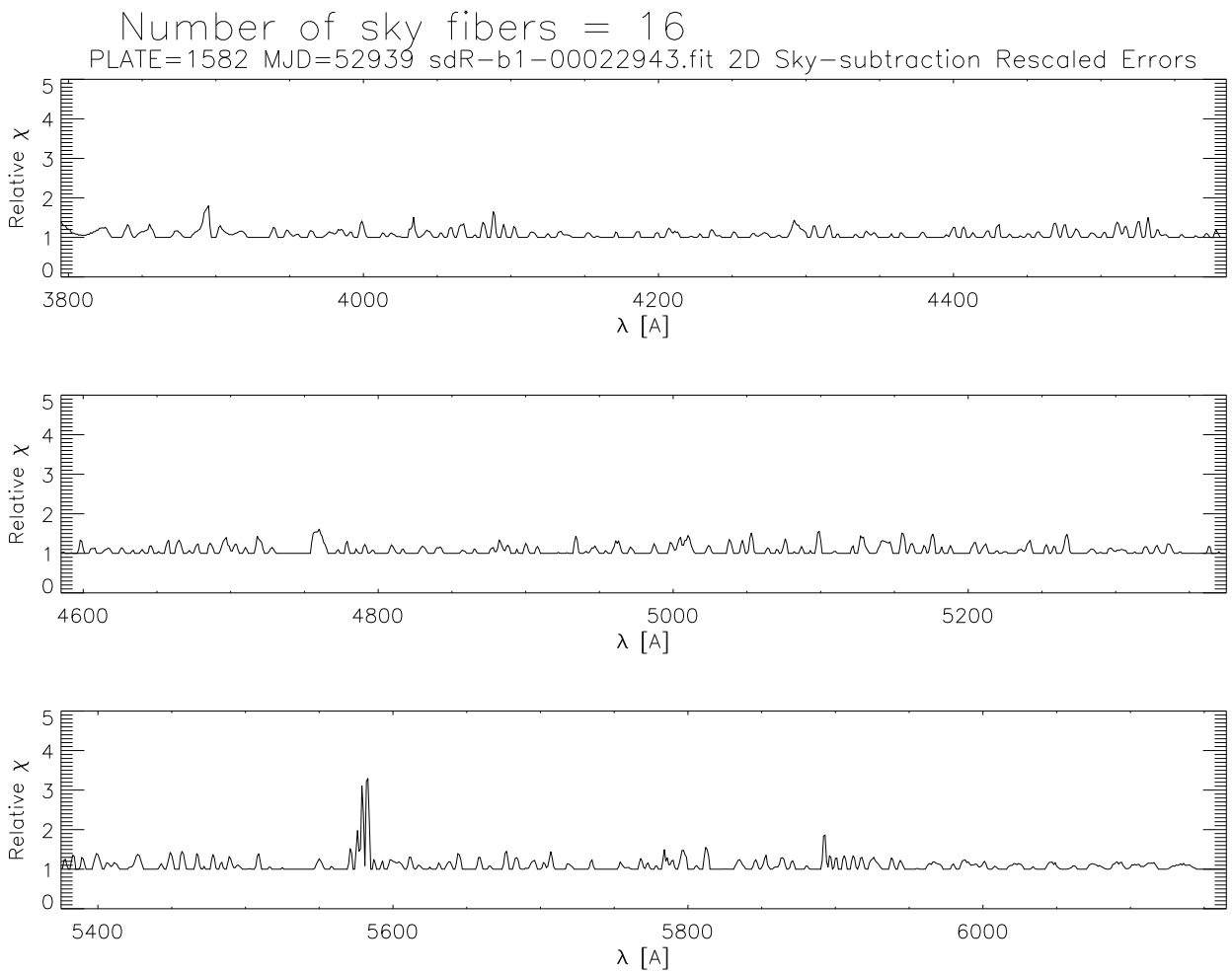

PLATE=1582 MJD=52939 sdR-b1-00022943.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

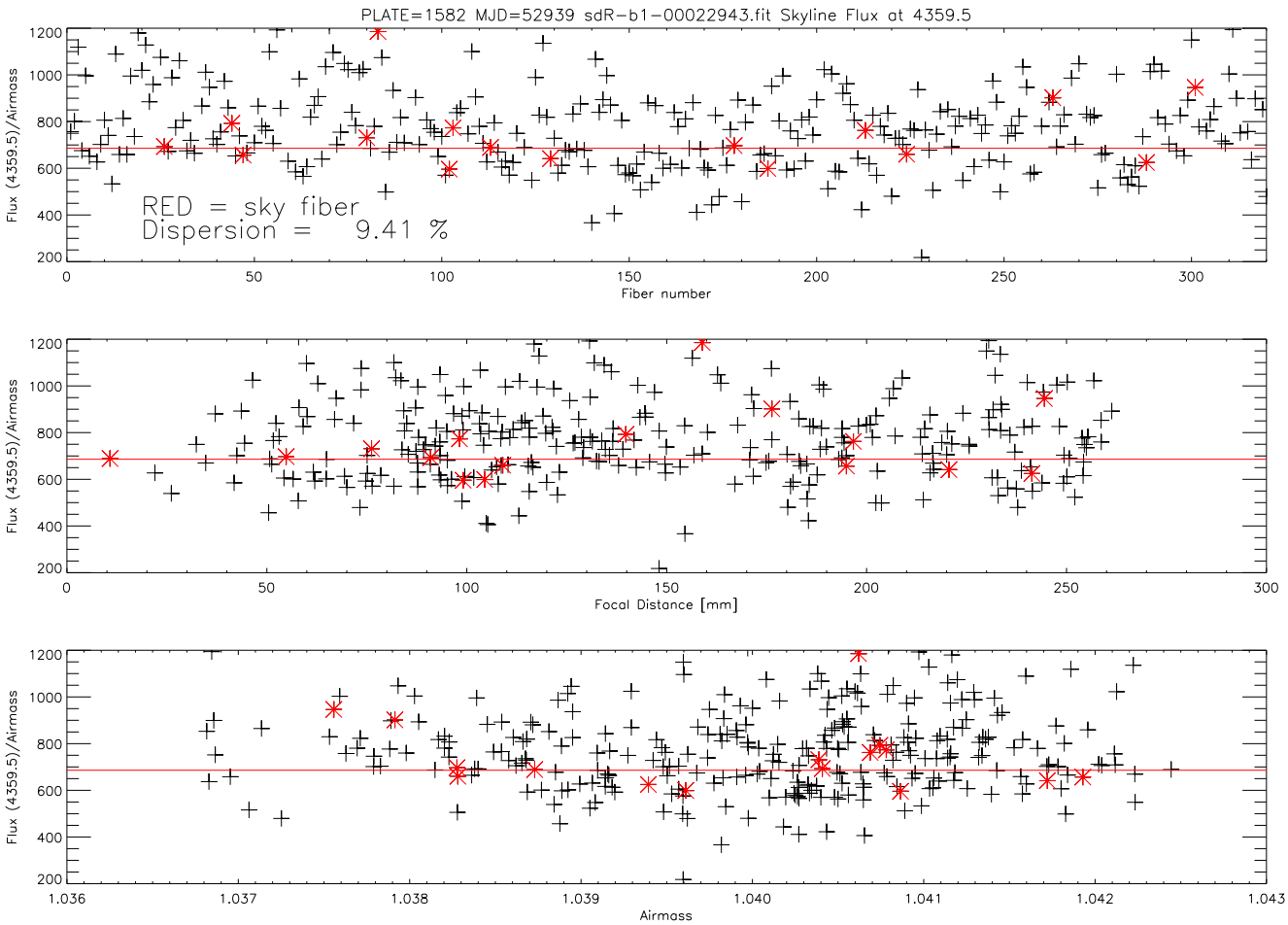

Number of sky fibers = 16
PLATE=1582 MJD=52939 sdR-b1-00022943.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

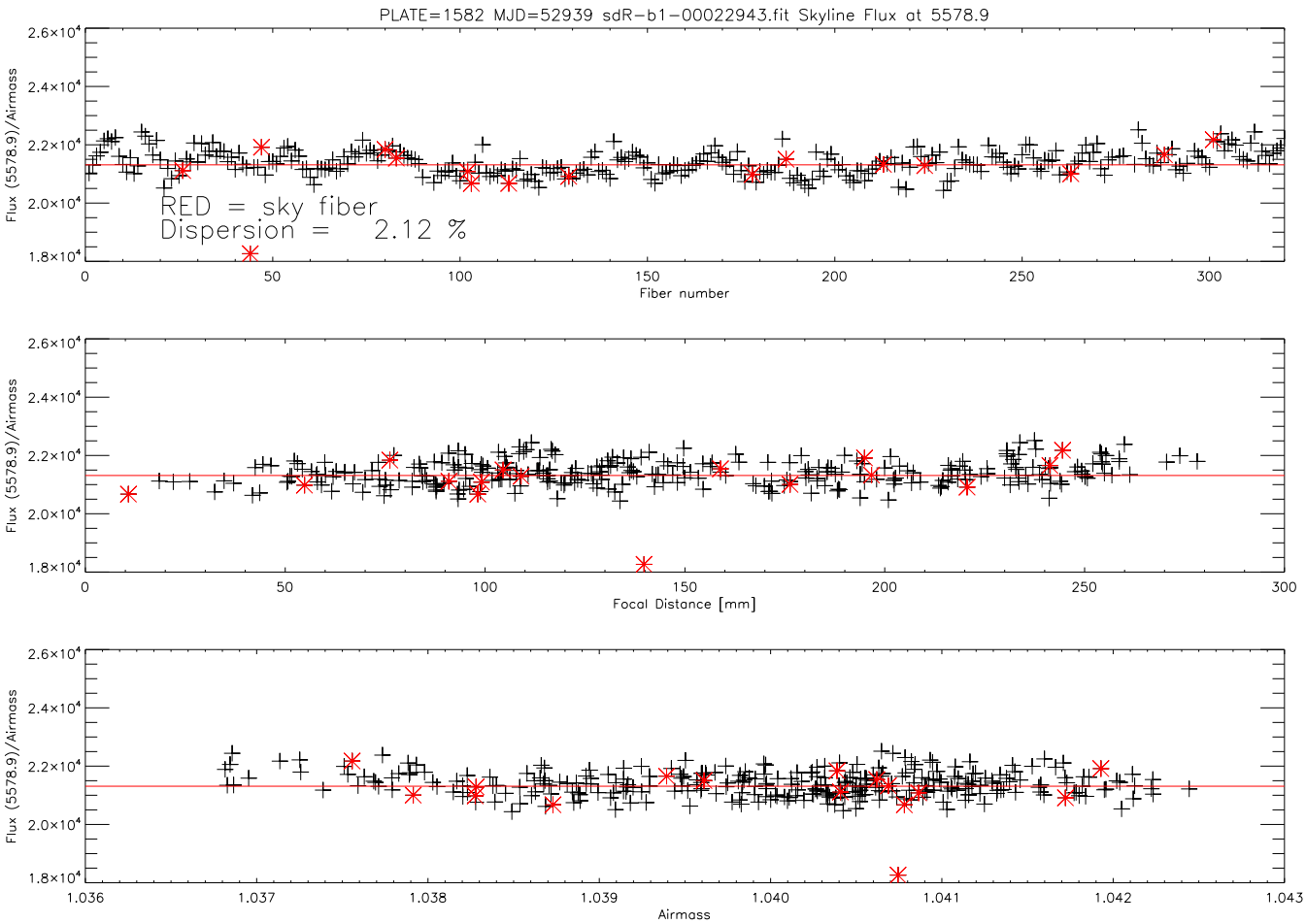

PLATE=1582 MJD=52939 sdR-b1-00022943.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

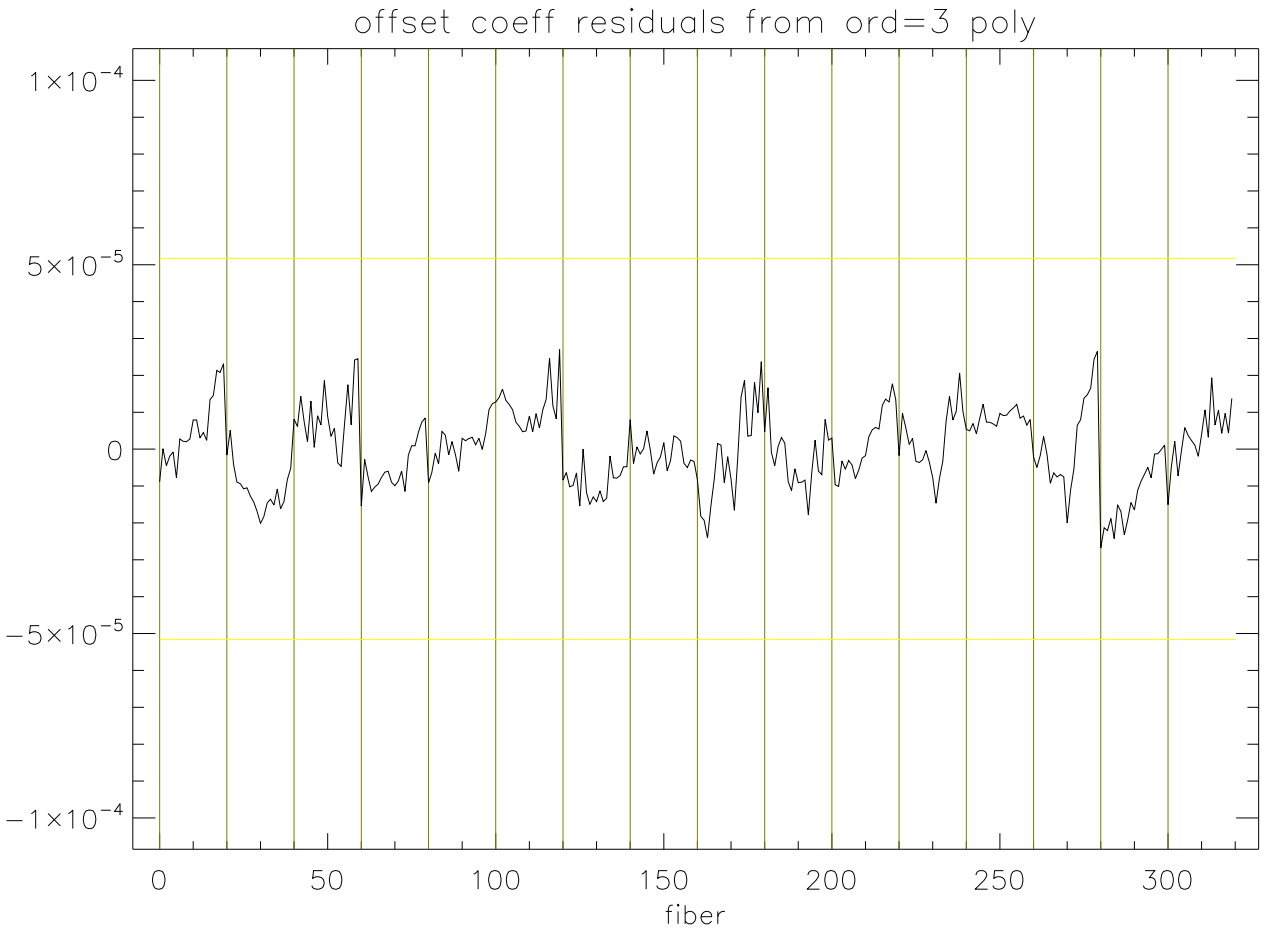

PLATE=1582 MJD=52939 sdR-b1-00022943.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

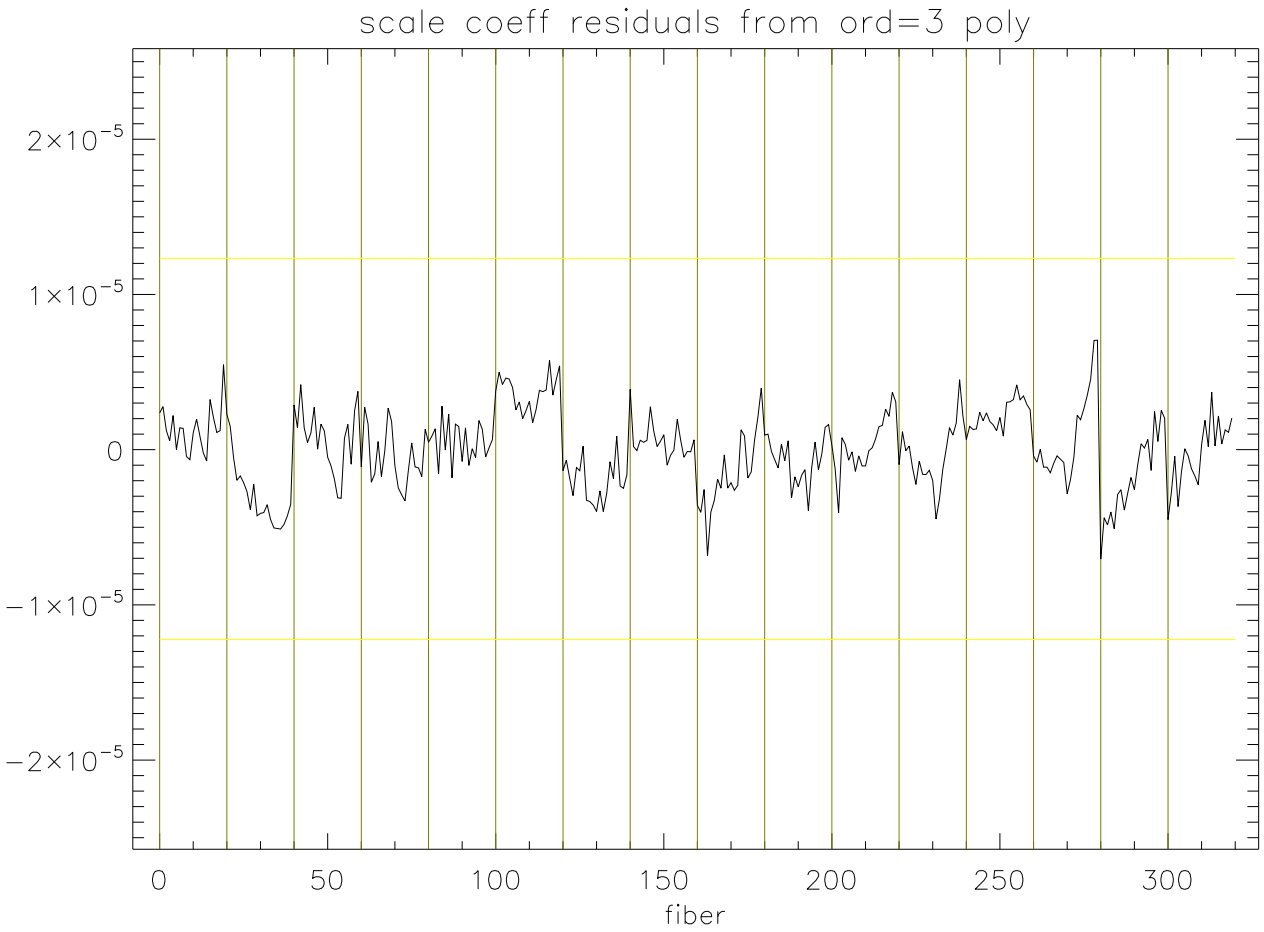

PLATE=1582 MJD=52939 sdR-b1-00022943.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

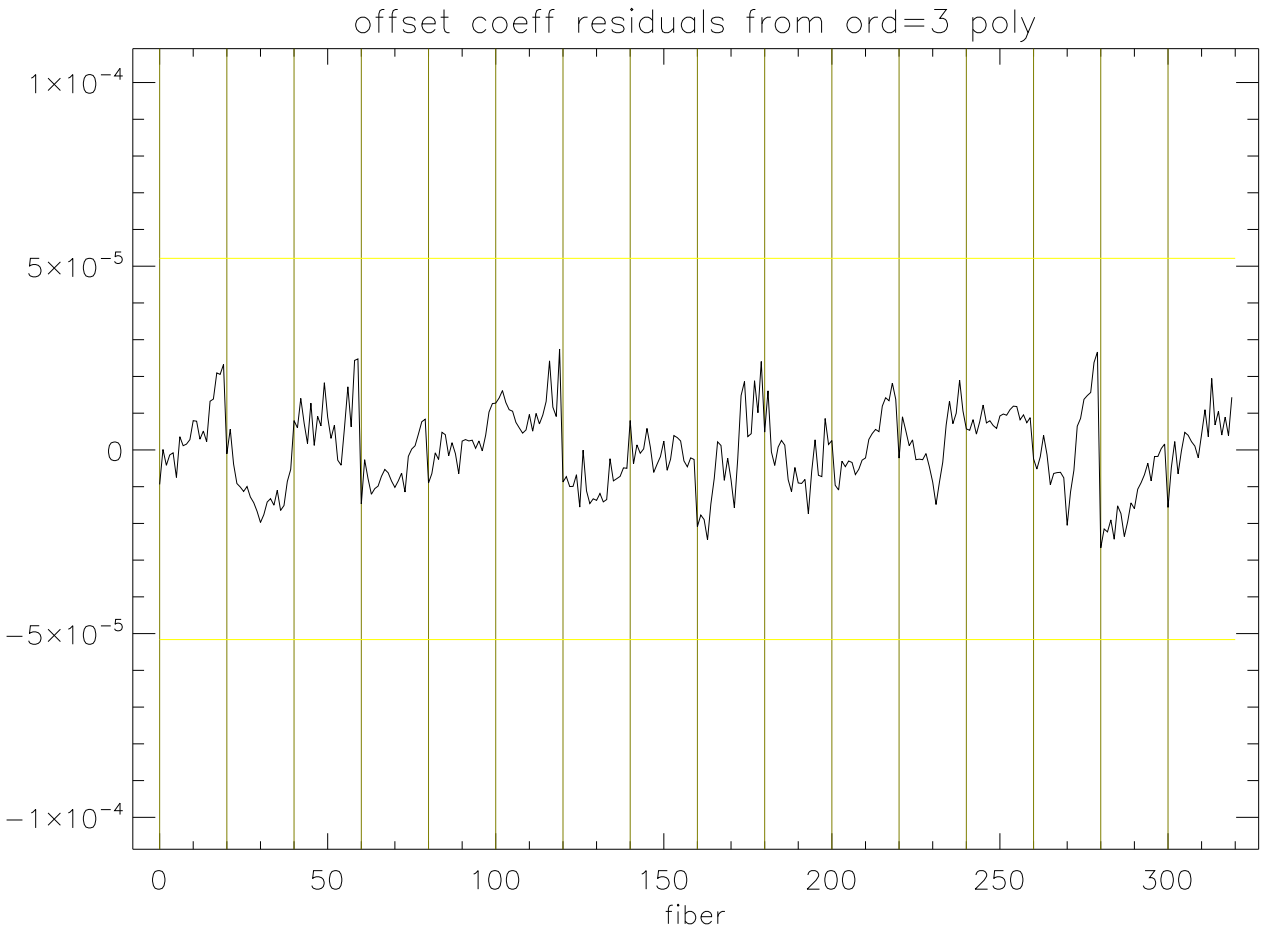

Number of sky fibers = 16
PLATE=1582 MJD=52939 sdR-b1-00022943.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

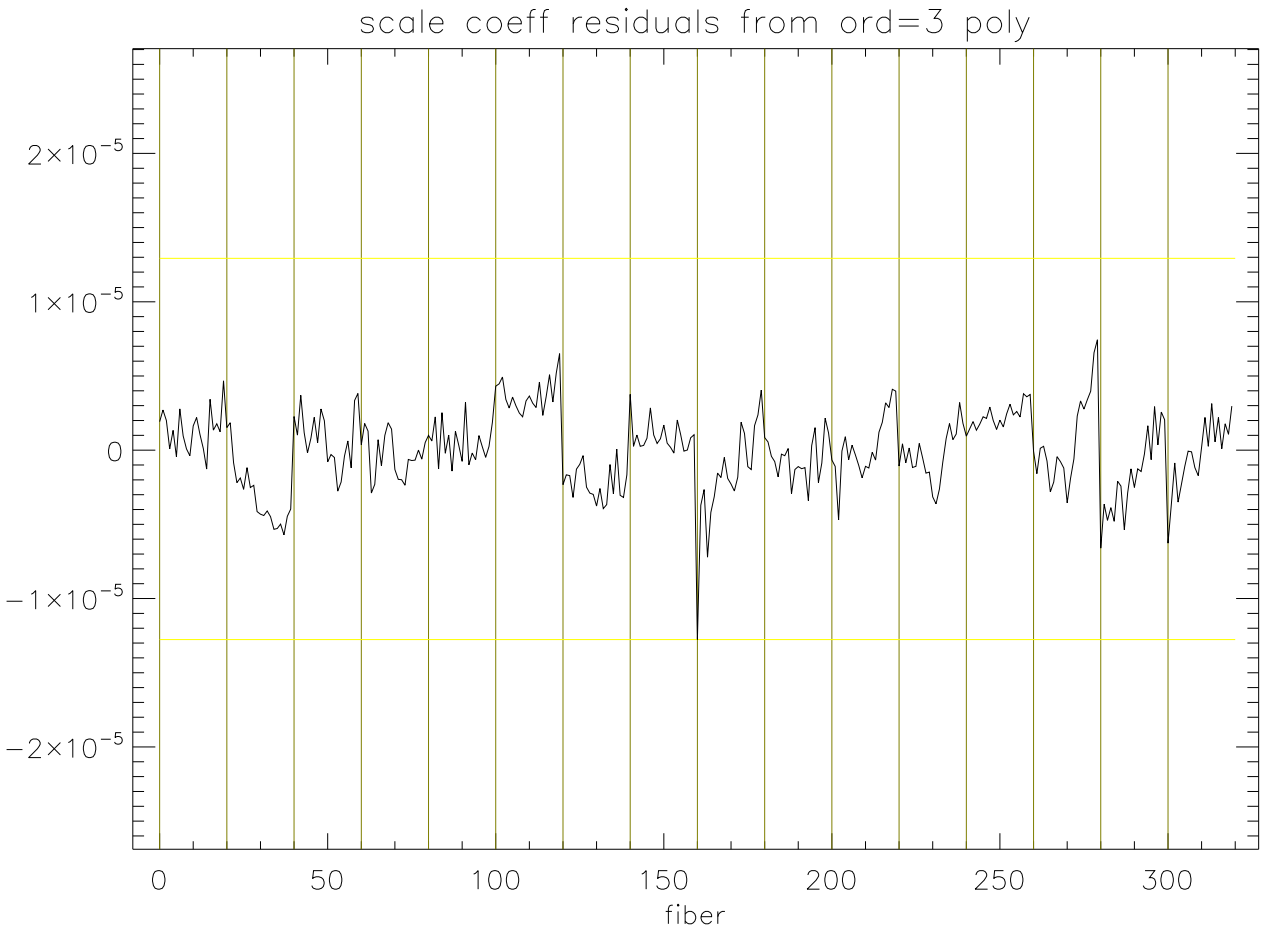

PLATE=1582 MJD=52939 sdR-b1-00022943.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.41 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

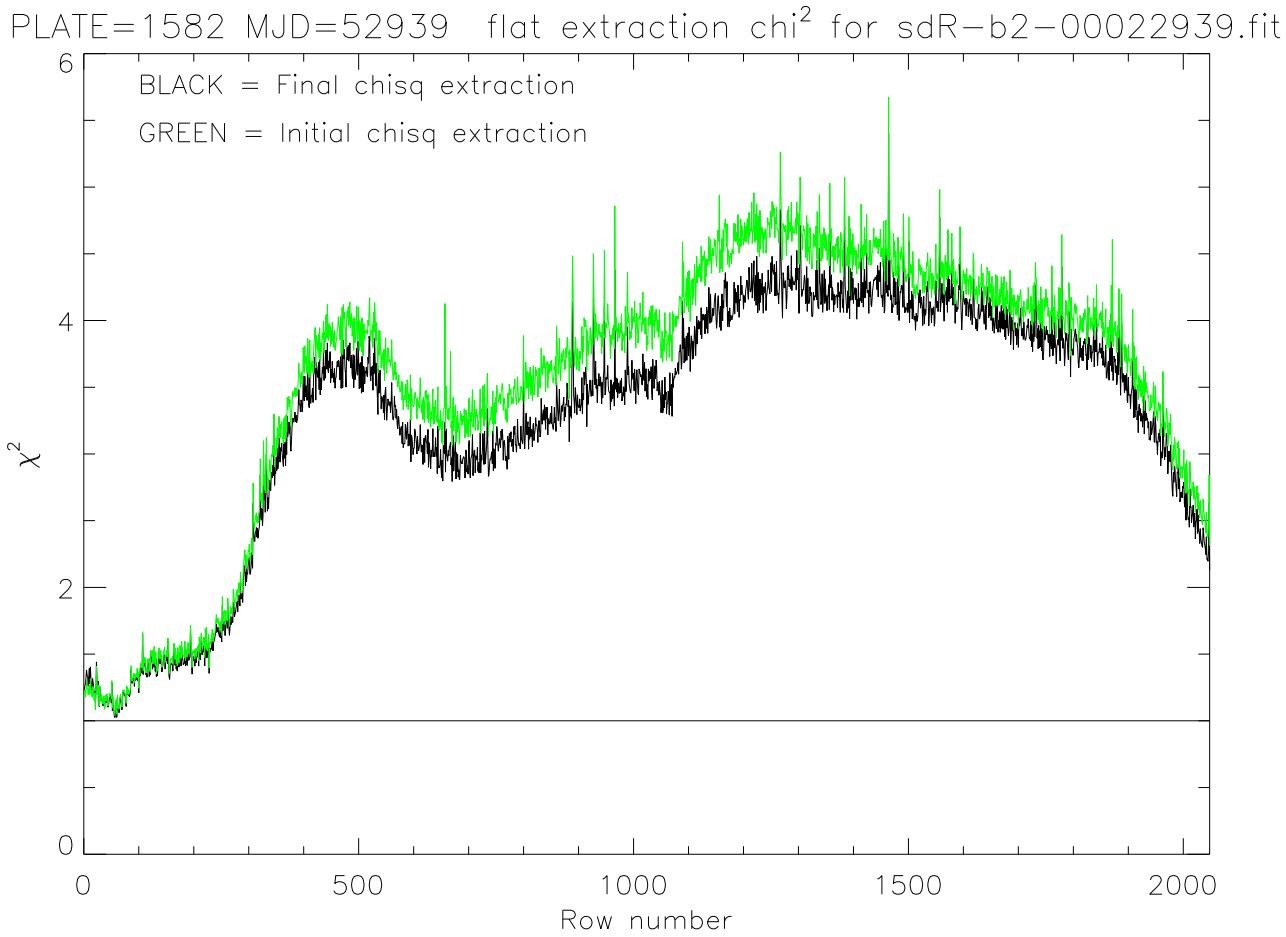

PLATE=1582 MJD=52939 sdR-b1-00022943.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.12 %
Fiber number
Focal Distance [mm]
Airmass

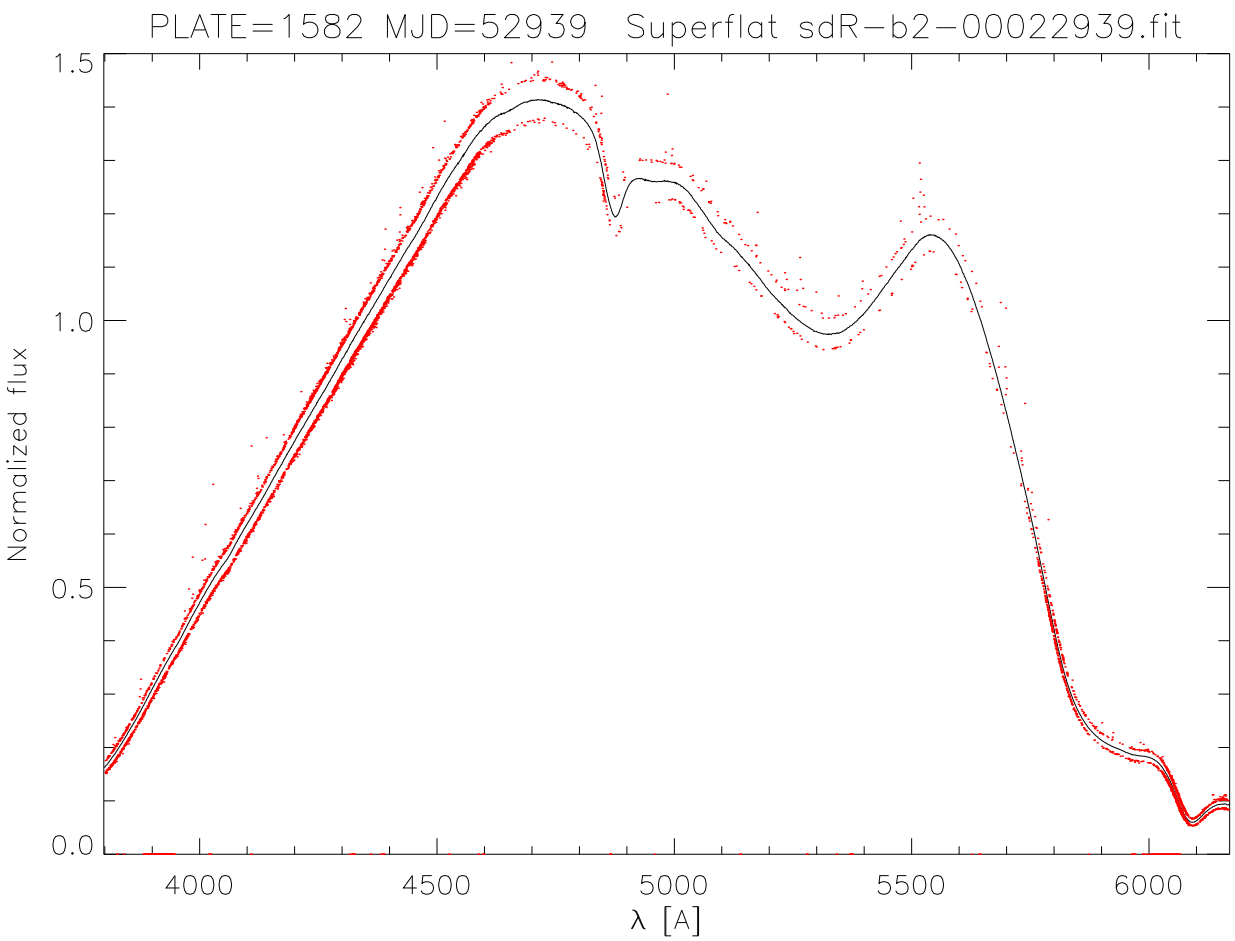

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

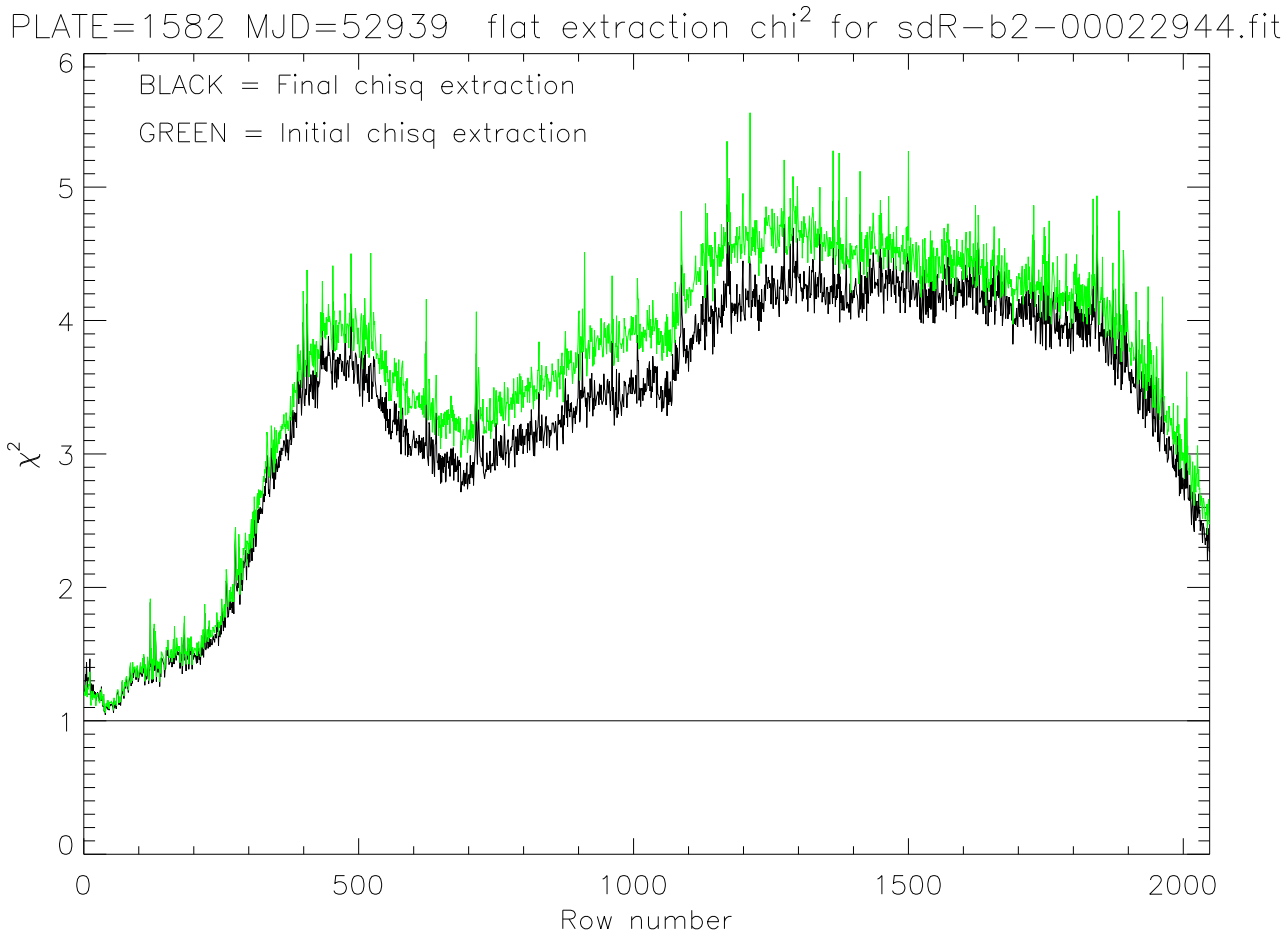

scale coeff residuals from ord=3 poly
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
0
50
100
150
200
250
300
fiber

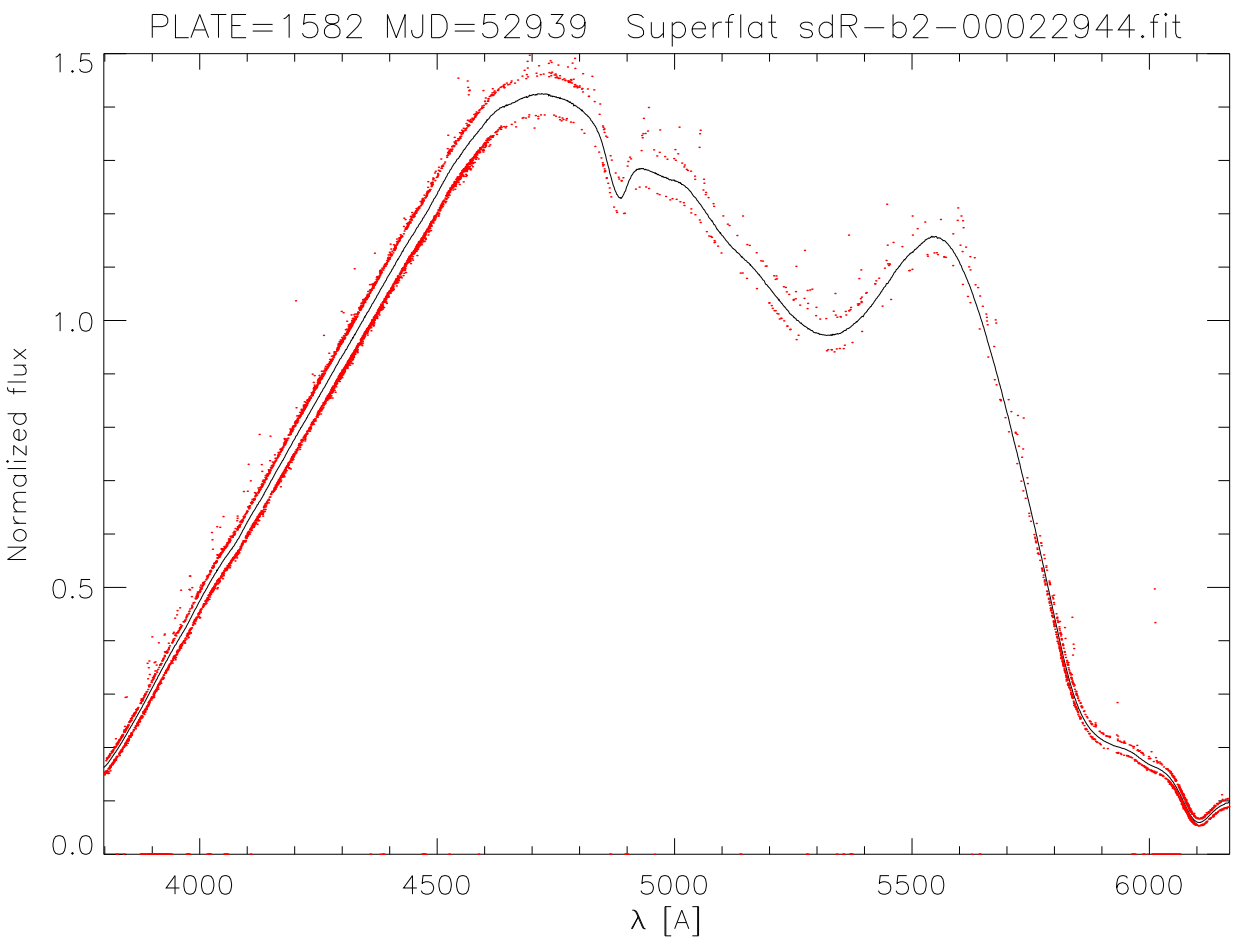

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

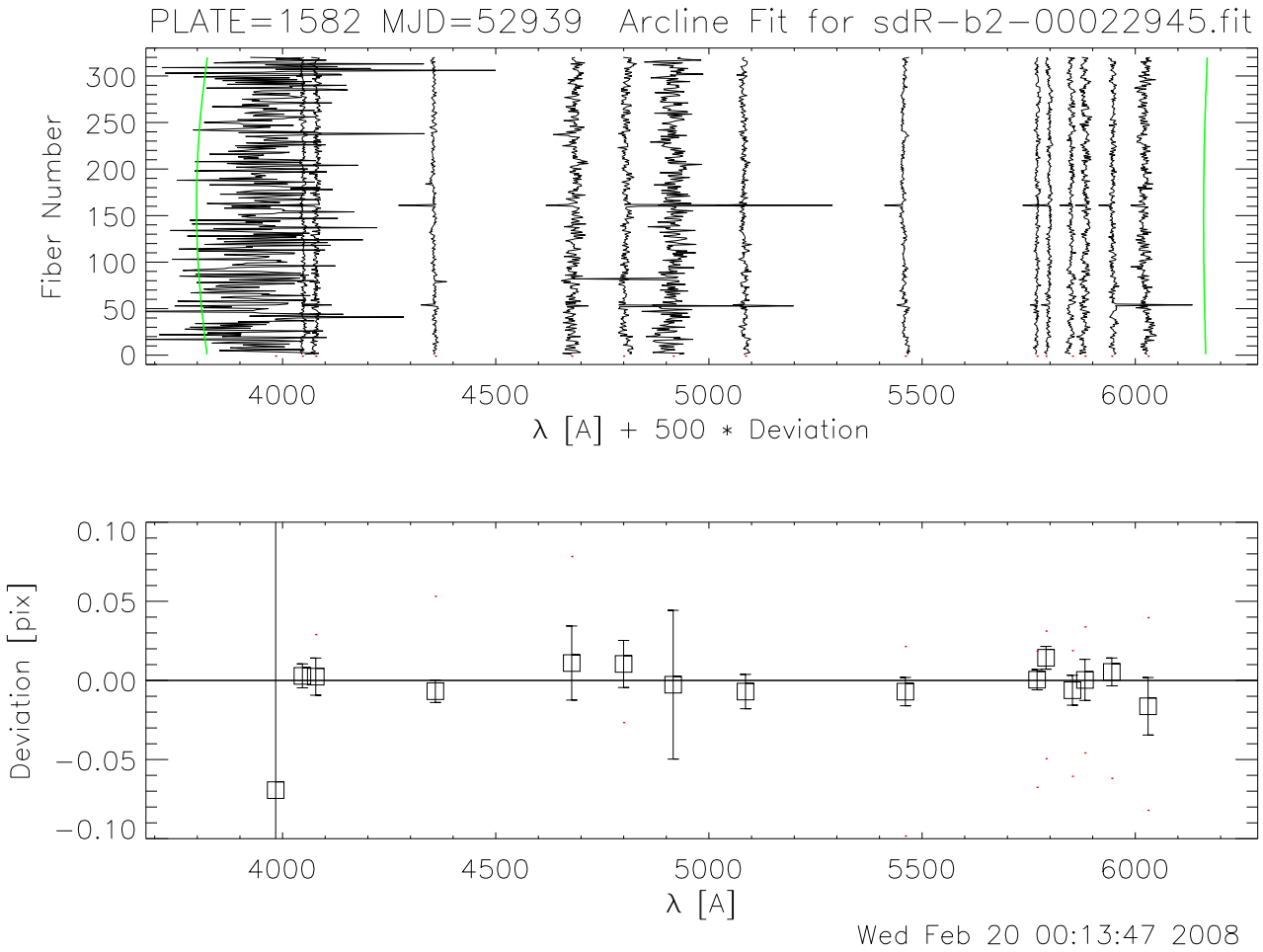

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=1582 MJD=52939 flat extraction chi^2 for sdR−b2−00022939.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number


PLATE=1582 MJD=52939 Superflat sdR-b2-00022939.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]


PLATE=1582 MJD=52939 flat extraction chi^2 for sdR−b2−00022944.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000


PLATE=1582 MJD=52939 Superflat sdR-b2-00022944.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]


PLATE=1582 MJD=52939 Arcline Fit for sdR-b2-00022945.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]
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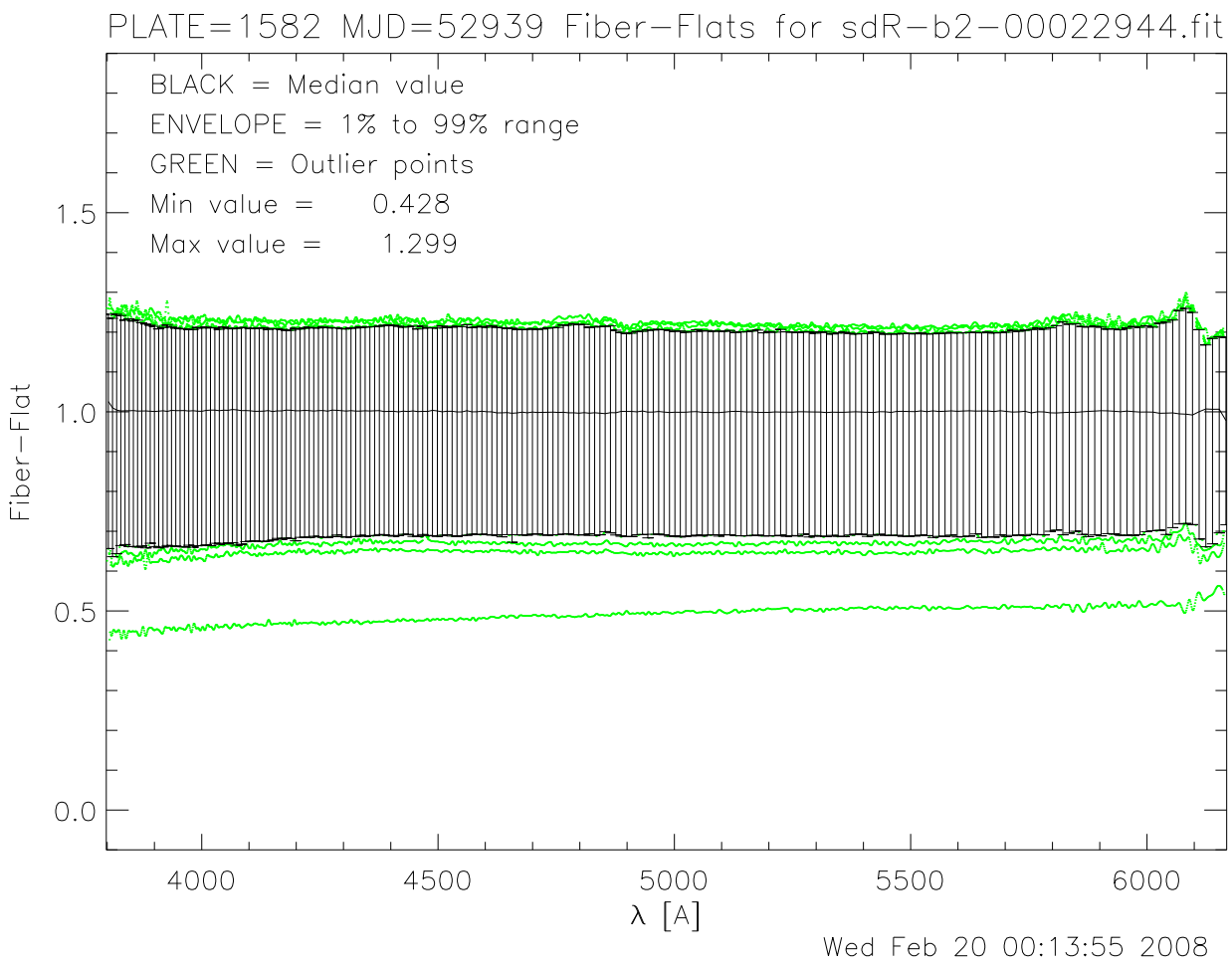
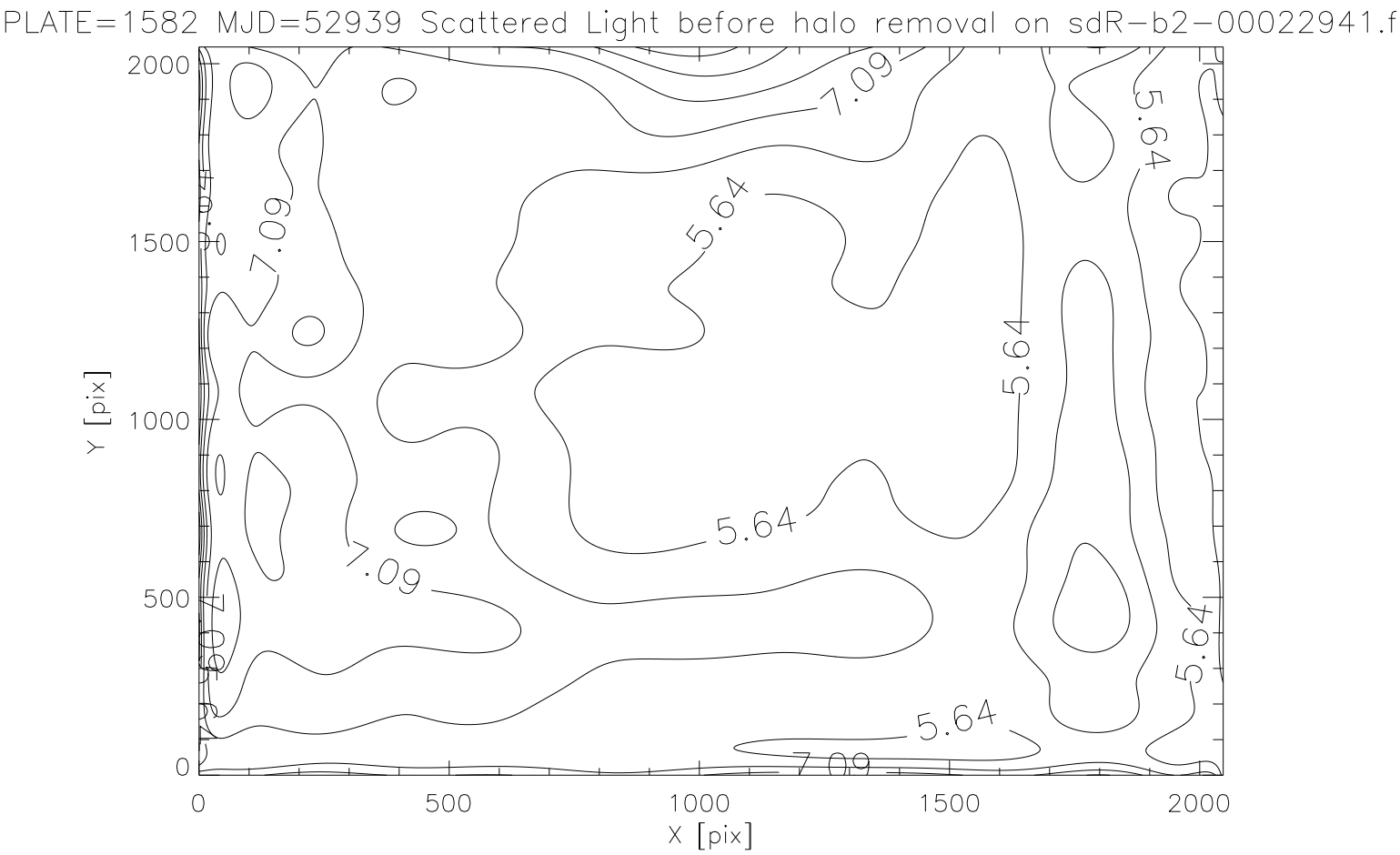
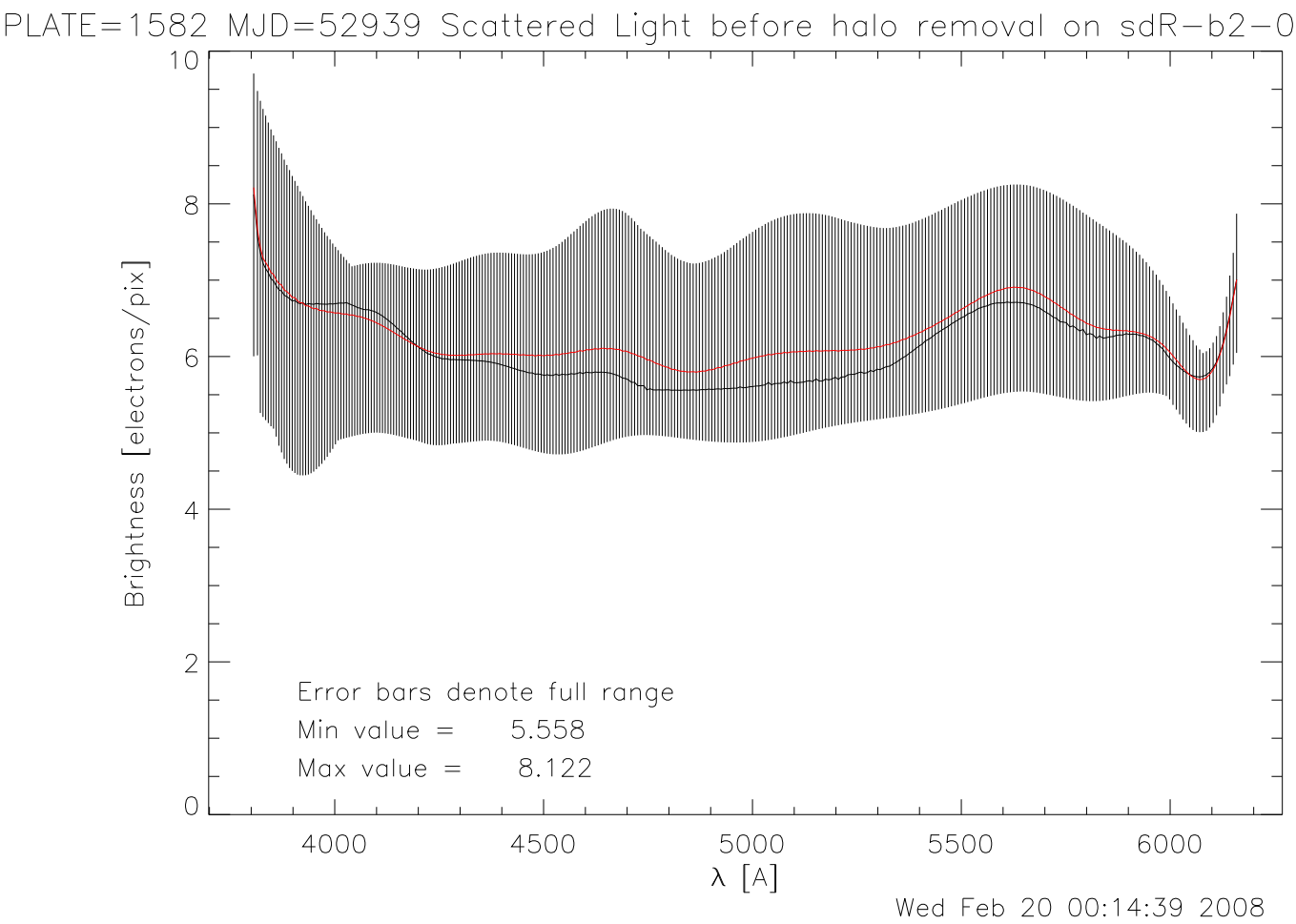
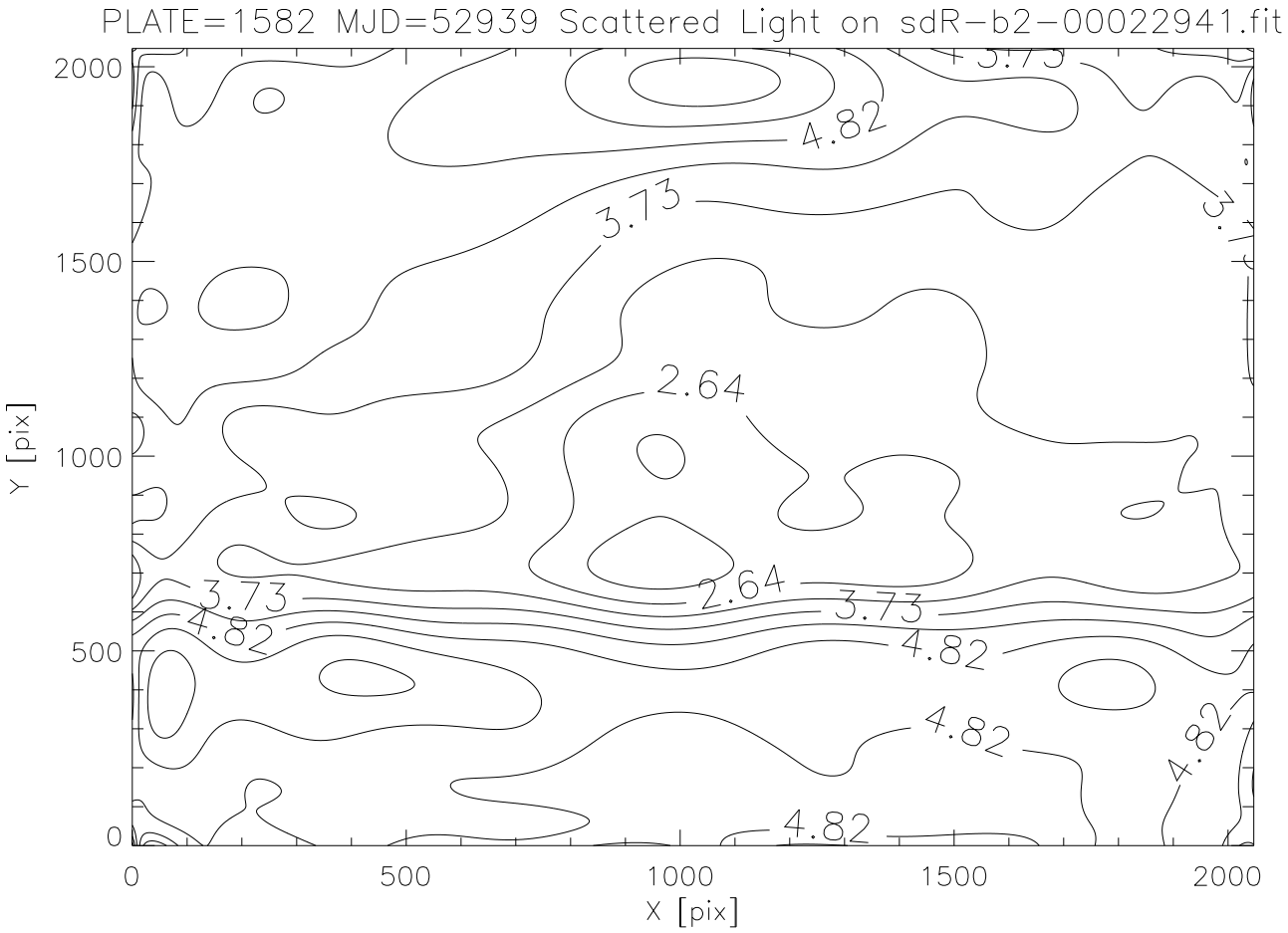
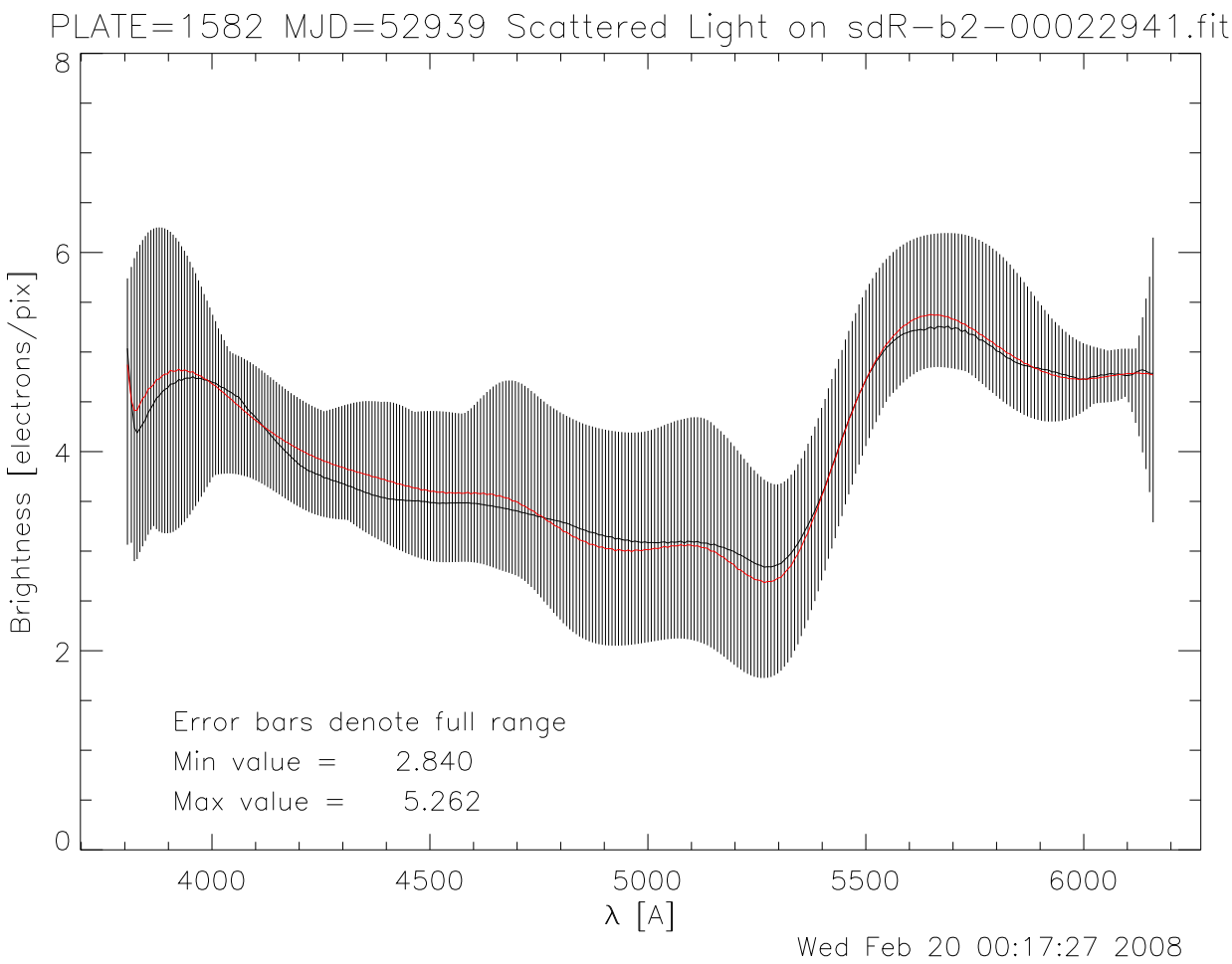
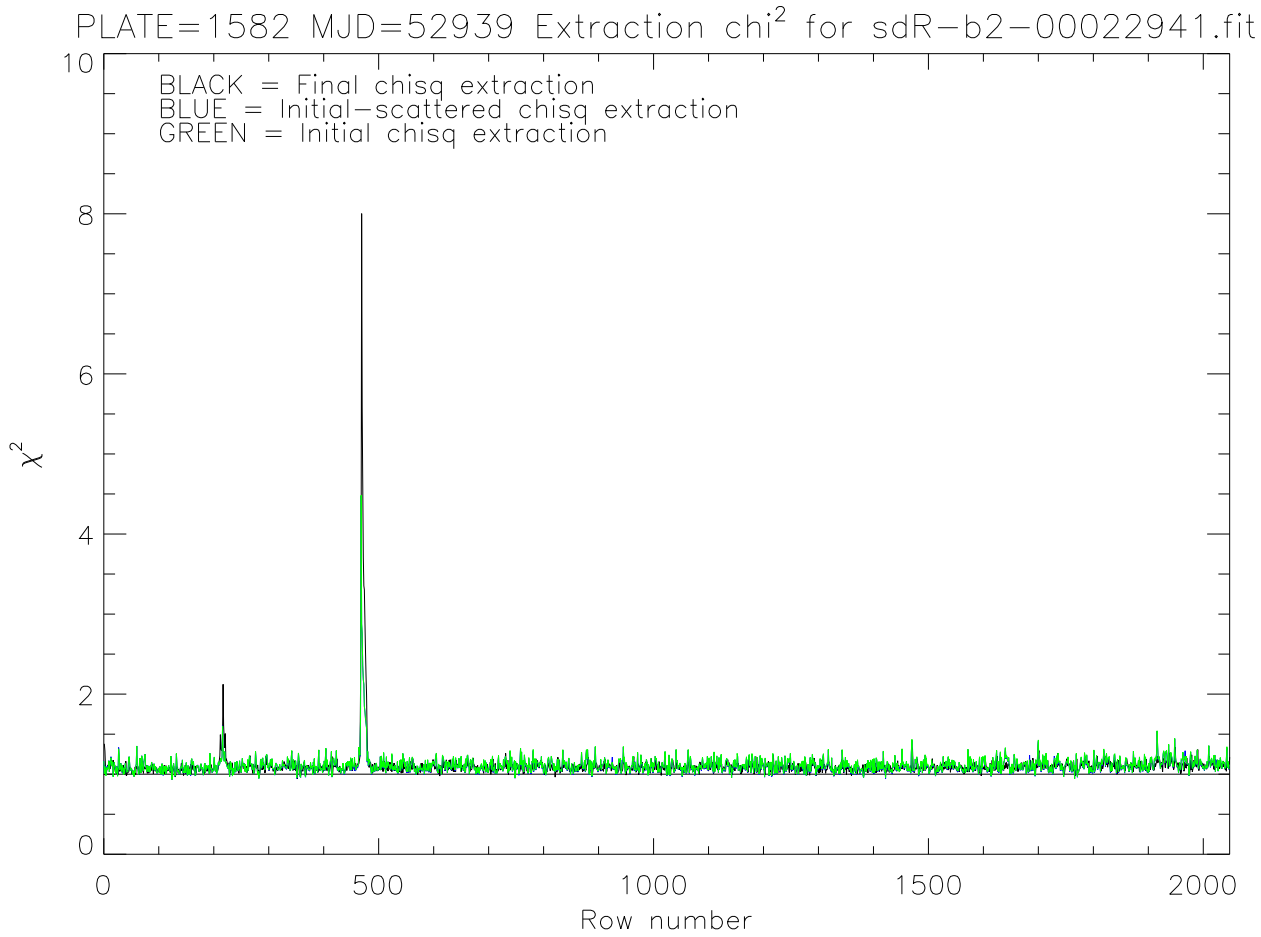

PLATE=1582 MJD=52939 Fiber-Flats for sdR-b2-00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.428
Max value = 1.299
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 00:13:55 2008

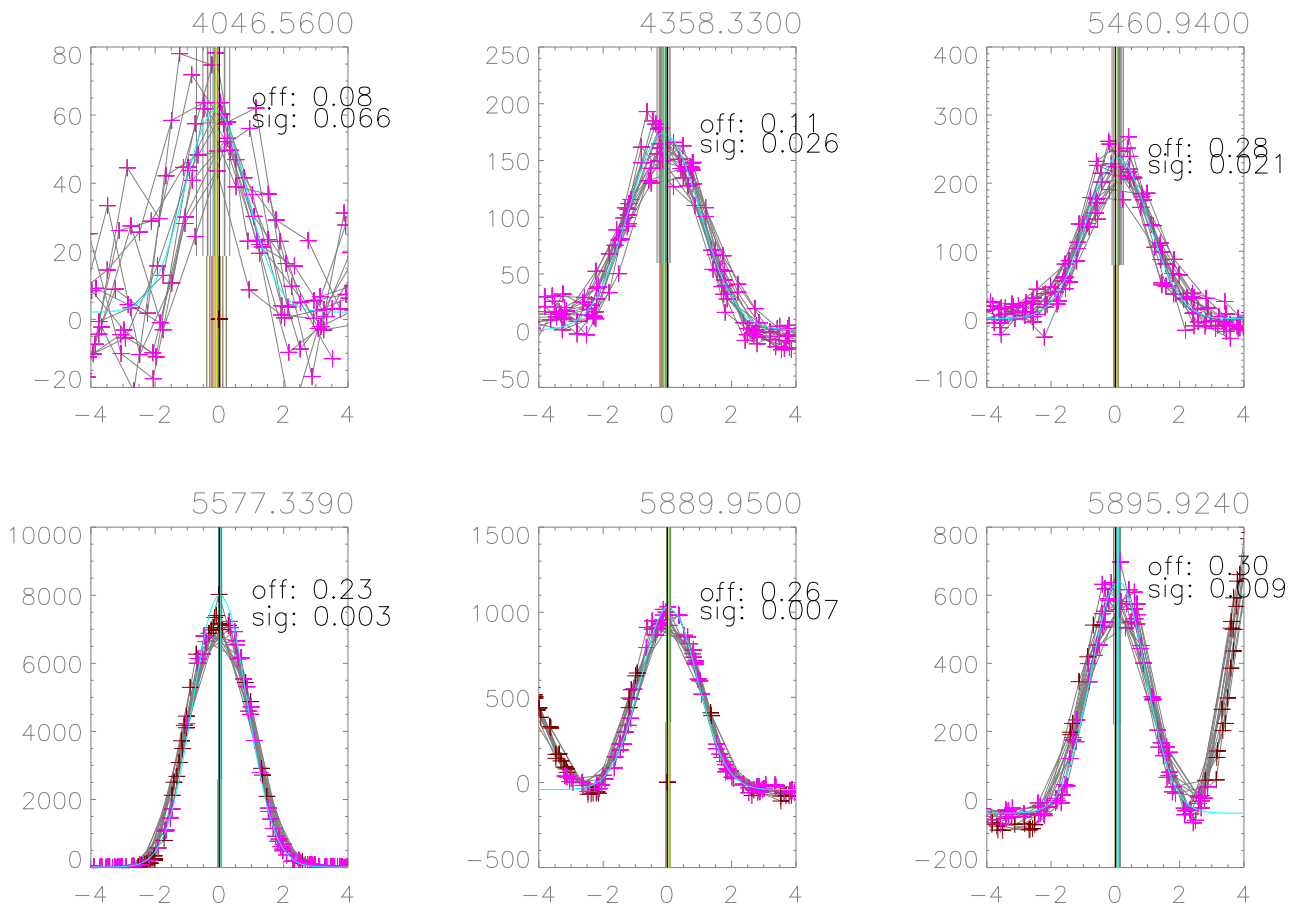

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b2-00022941.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
7.09
5.64
7.09
5.64
5.64
5.64
7.09
5.64
5.64
7.09

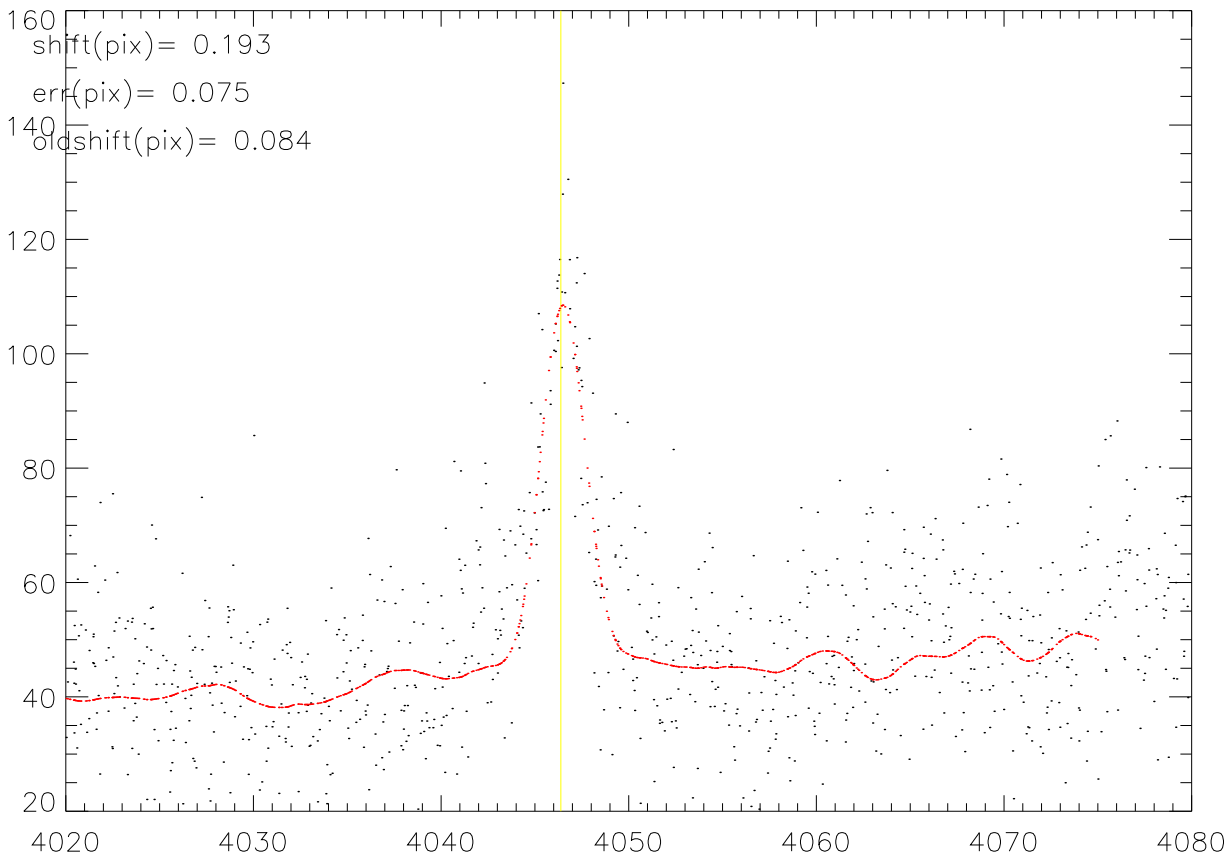

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b2-00022941.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.558
Max value = 8.122
Wed Feb 20 00:14:39 2008

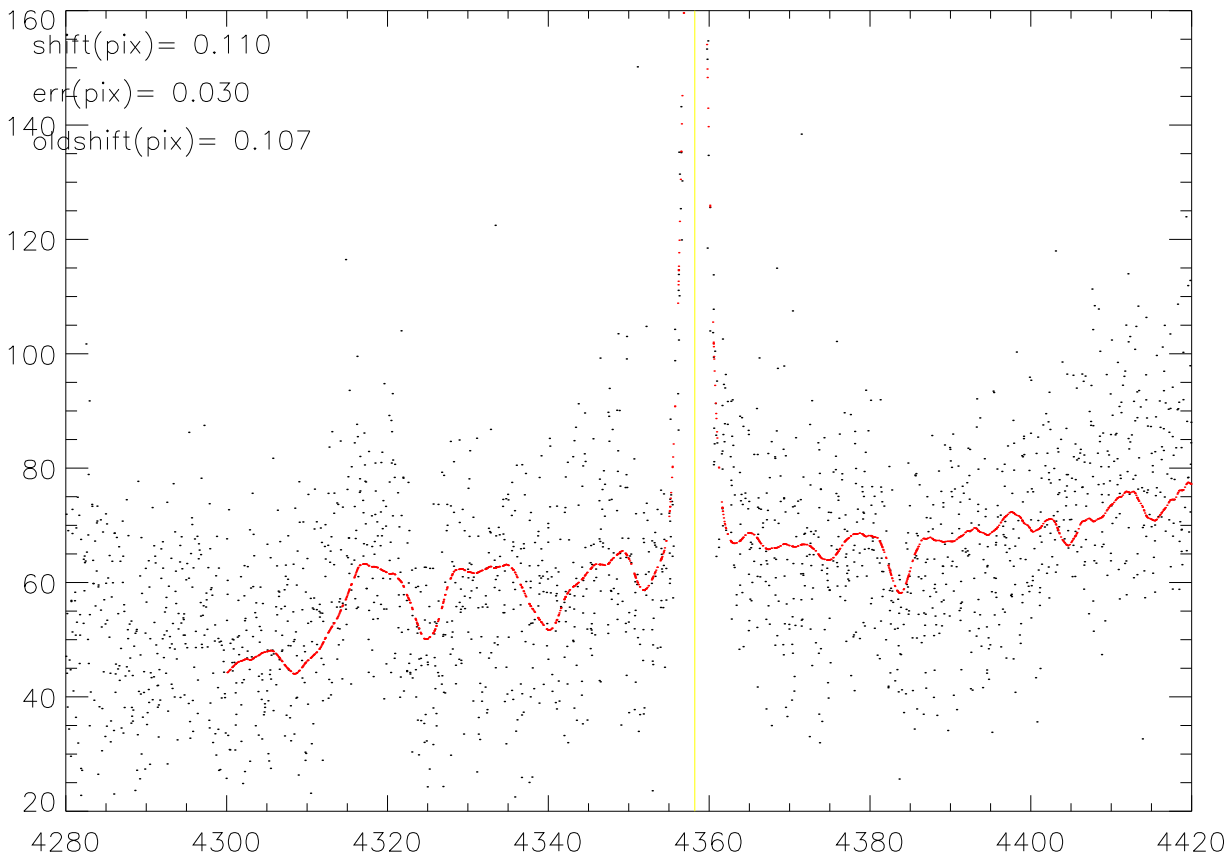

PLATE=1582 MJD=52939 Scattered Light on sdR-b2-00022941.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
4.82
3.73
2.64
3.73
4.82
2.64
3.73
4.82
4.82
4.82
4.82

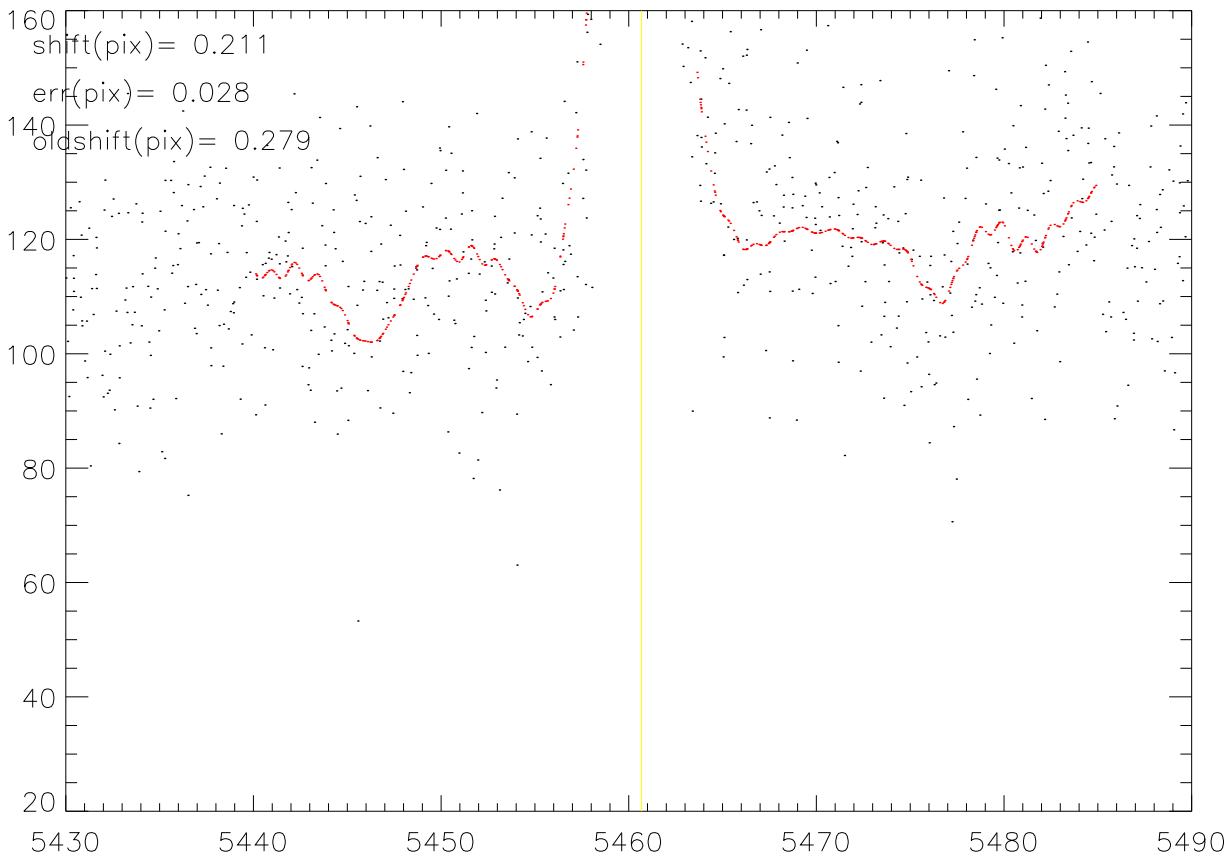

PLATE=1582 MJD=52939 Scattered Light on sdR-b2-00022941.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.840
Max value = 5.262
Wed Feb 20 00:17:27 2008

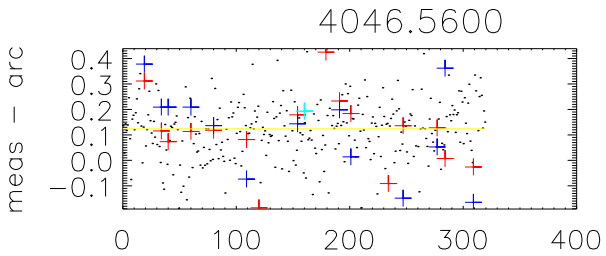

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-b2-00022941.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

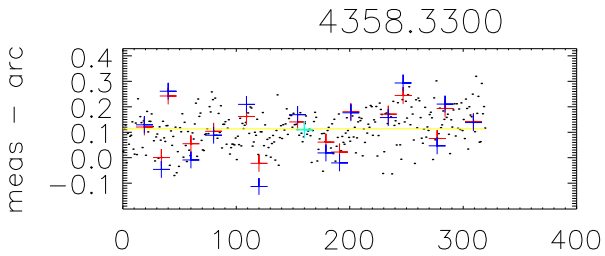

4046.5600
off: 0.08
sig: 0.066
4358.3300
off: 0.11
sig: 0.026
5460.9400
off: 0.28
sig: 0.021
5577.3390
off: 0.23
sig: 0.003
5889.9500
off: 0.26
sig: 0.007
5895.9240
off: 0.30
sig: 0.009

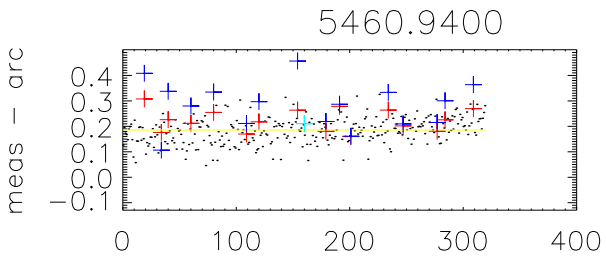

shift(pix)= 0.193
err(pix)= 0.075
oldshift(pix)= 0.084
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

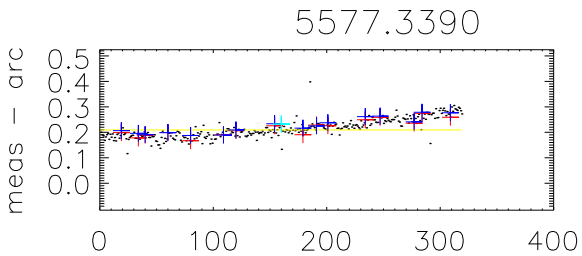

shift(pix)= 0.110
err(pix)= 0.030
oldshift(pix)= 0.107
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

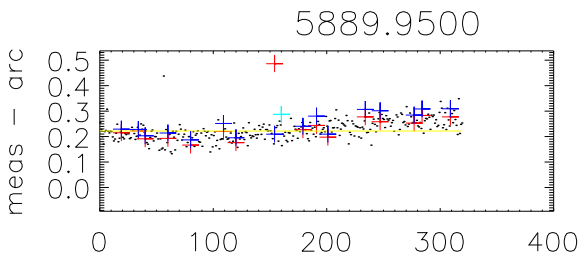

shift(pix)= 0.211
err(pix)= 0.028
oldshift(pix)= 0.279
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

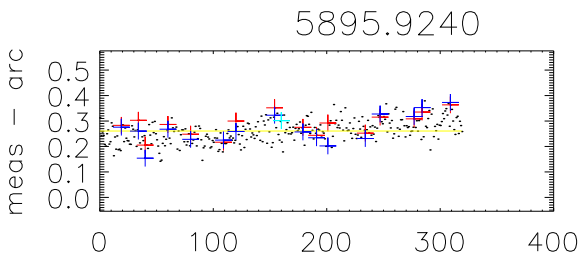

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

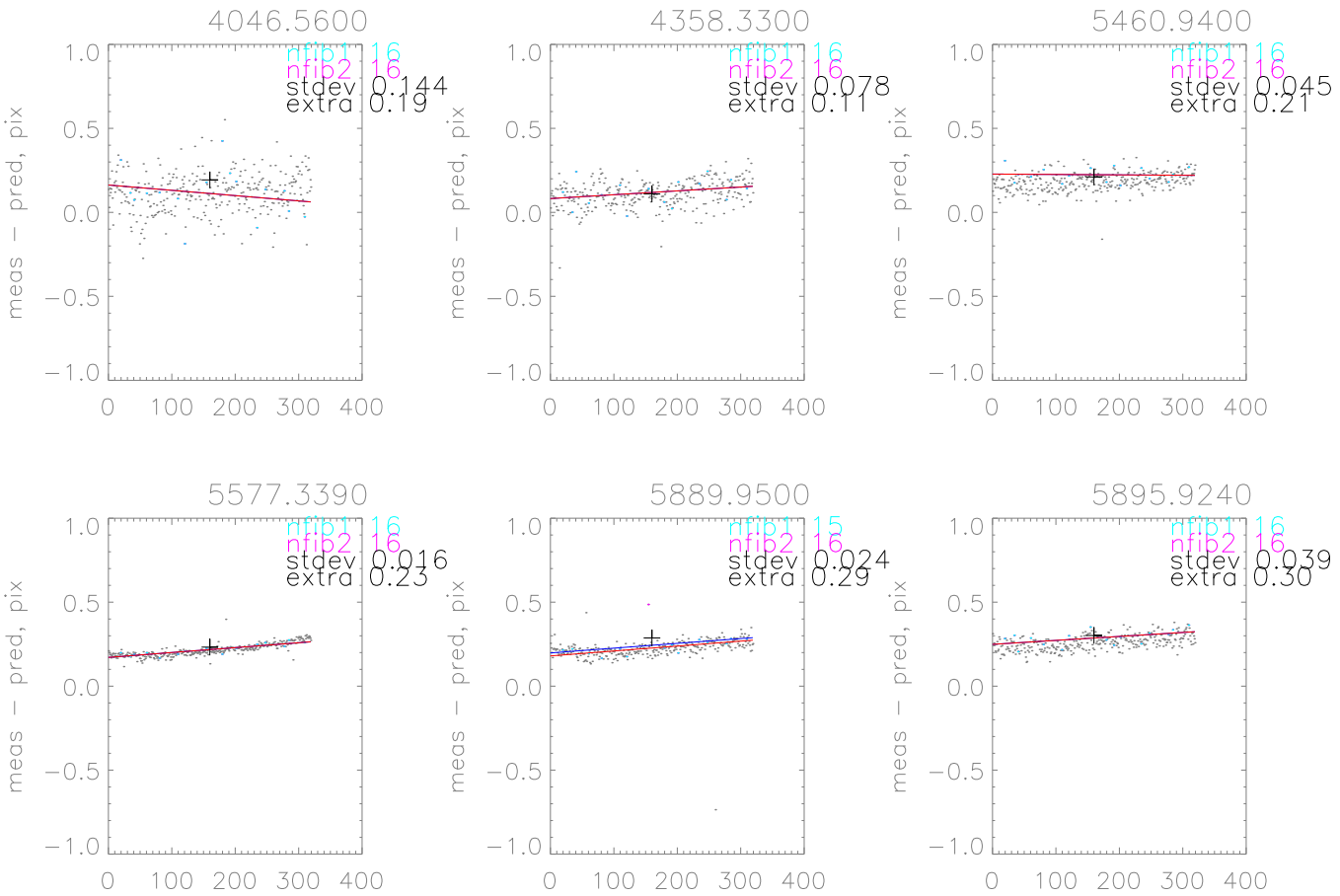

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

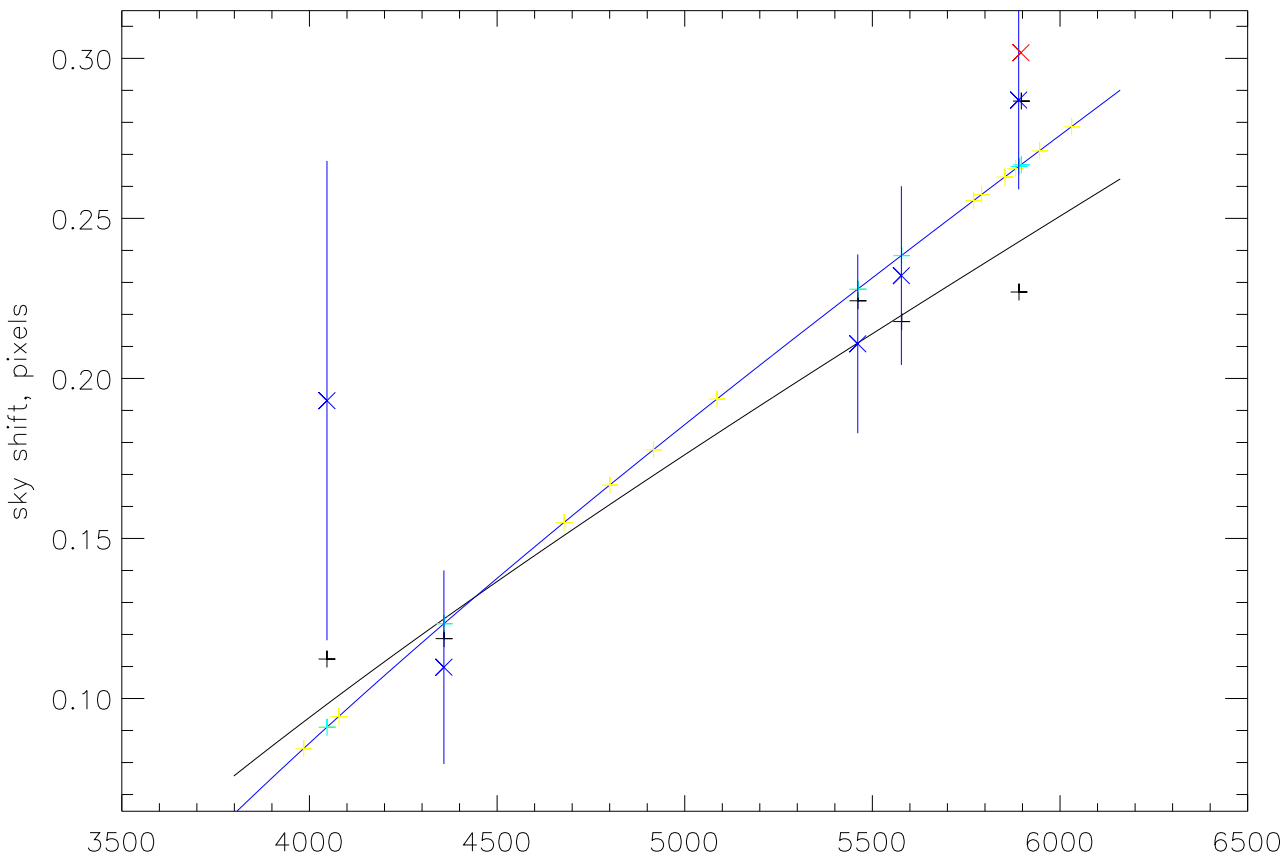

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

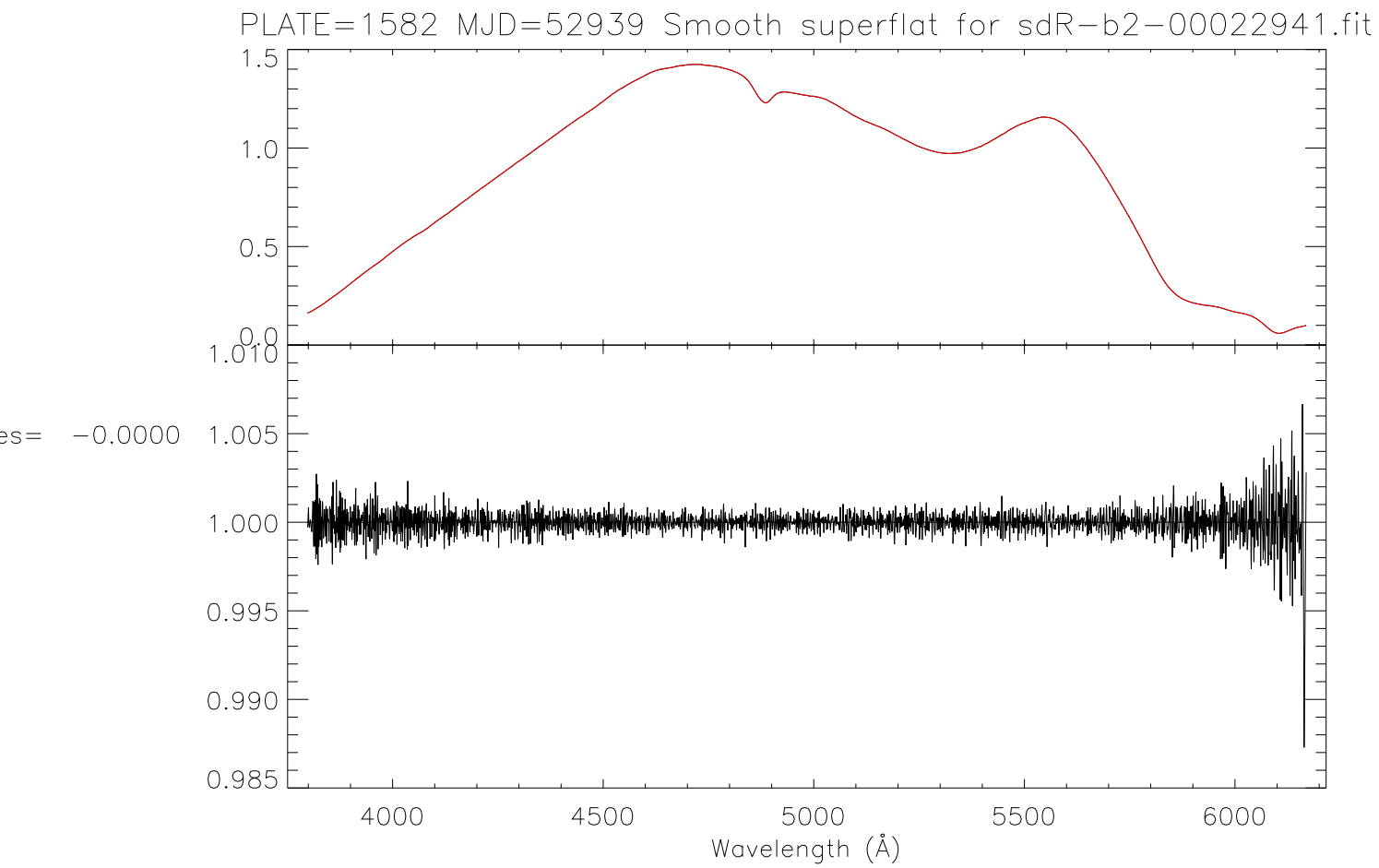

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

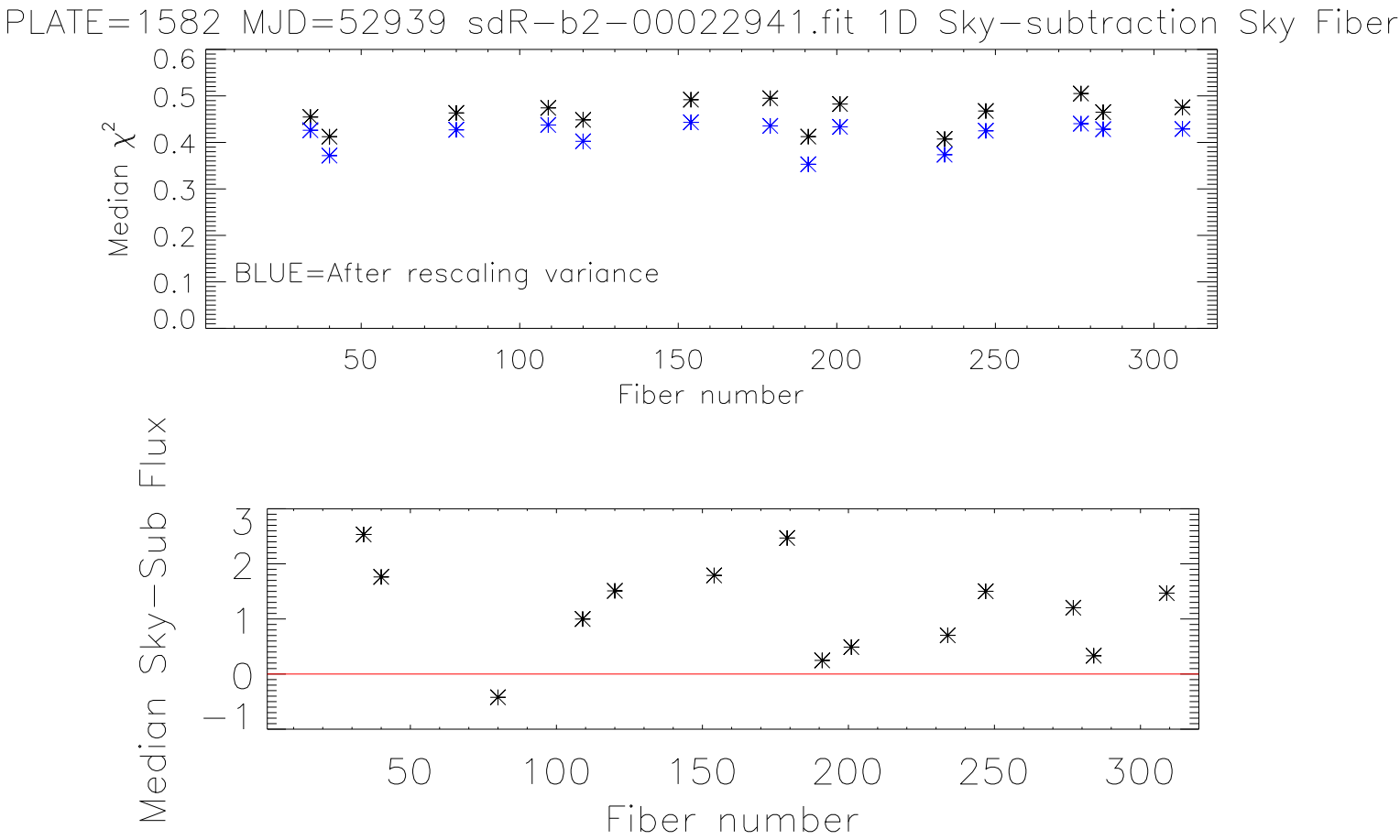

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

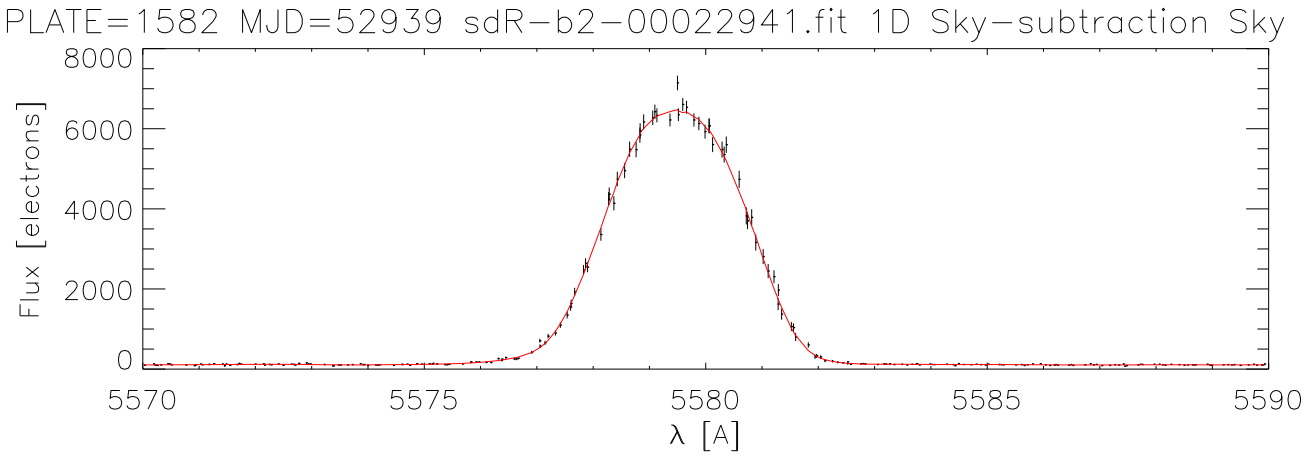

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

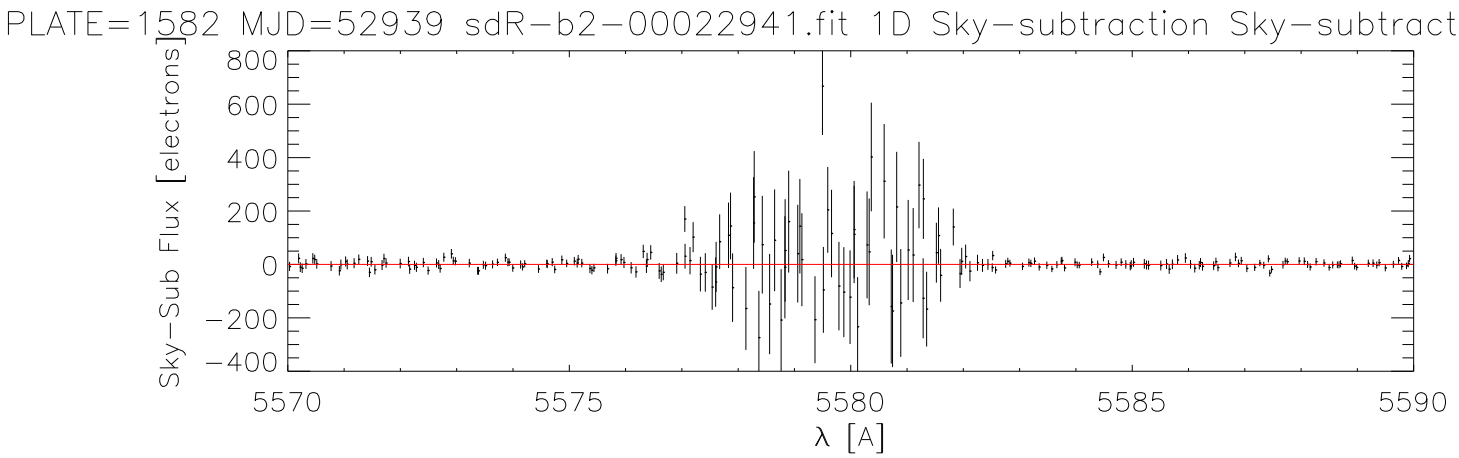

4046.5600
nfib1 16
nfib2 16
stdev 0.144
extra 0.19
4358.3300
nfib1 16
nfib2 16
stdev 0.078
extra 0.11
5460.9400
nfib1 16
nfib2 16
stdev 0.045
extra 0.21
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.23
5889.9500
nfib1 15
nfib2 16
stdev 0.024
extra 0.29
5895.9240
nfib1 16
nfib2 16
stdev 0.039
extra 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

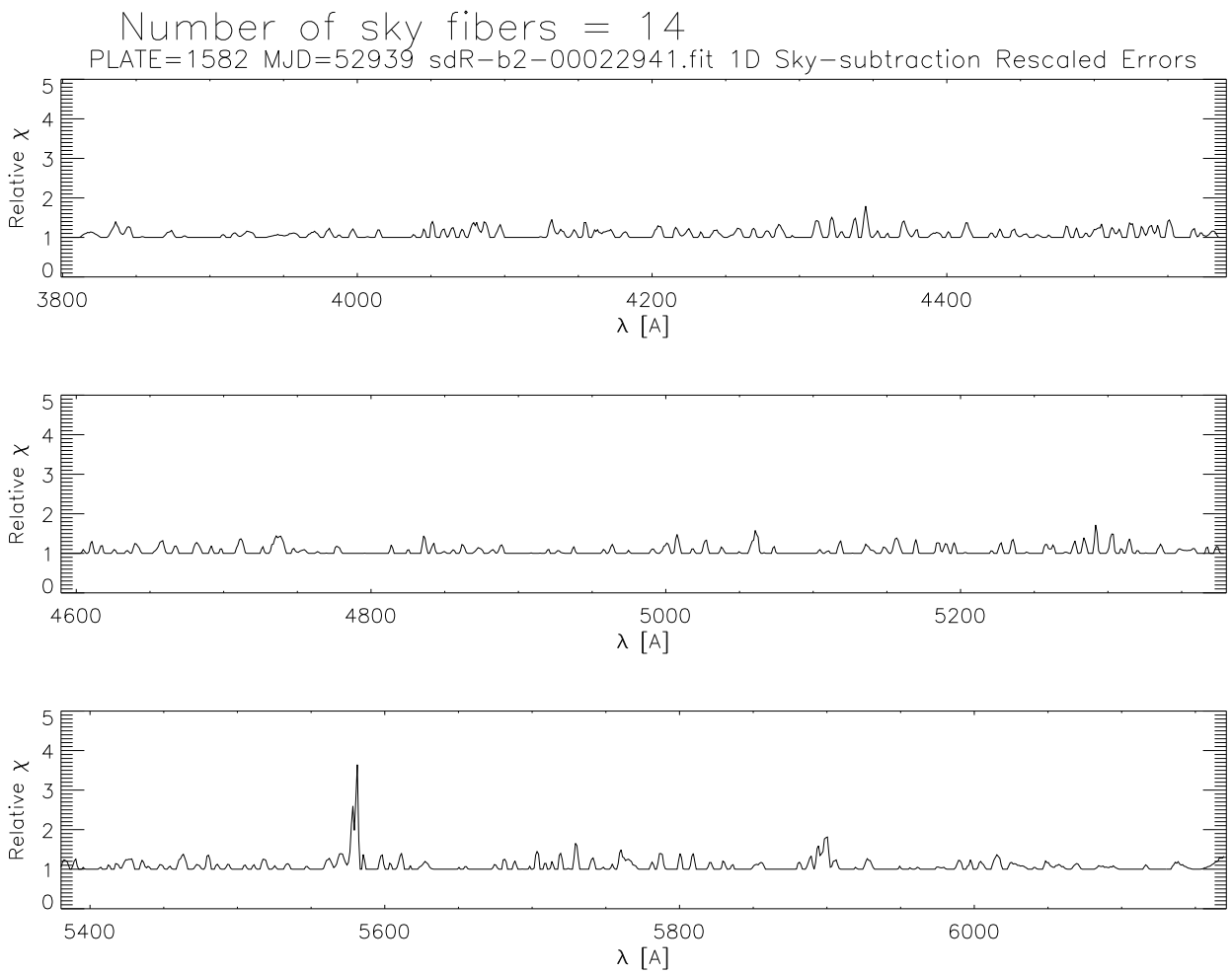

0.30
0.25
0.20
0.15
0.10
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

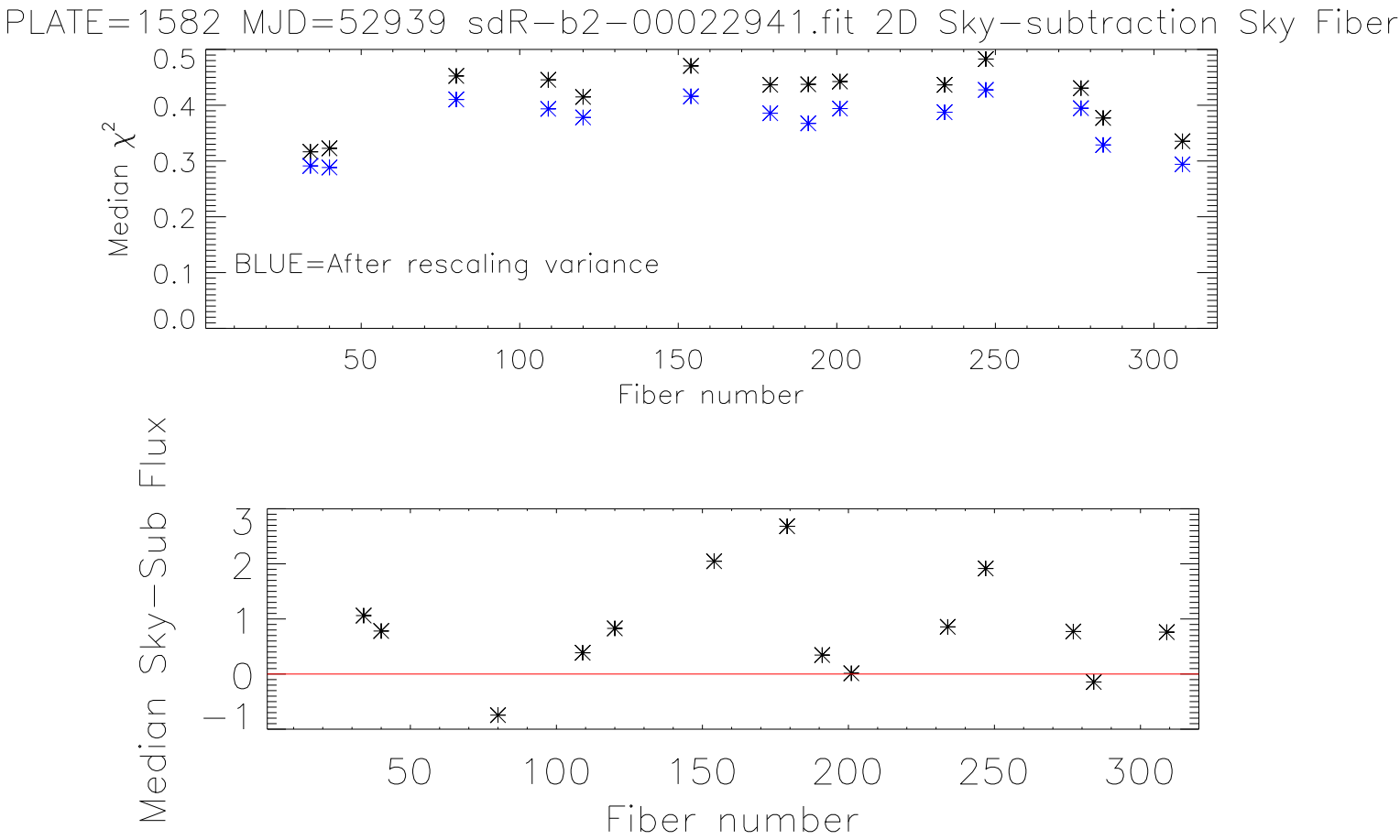

PLATE=1582 MJD=52939 Smooth superflat for sdR-b2-00022941.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

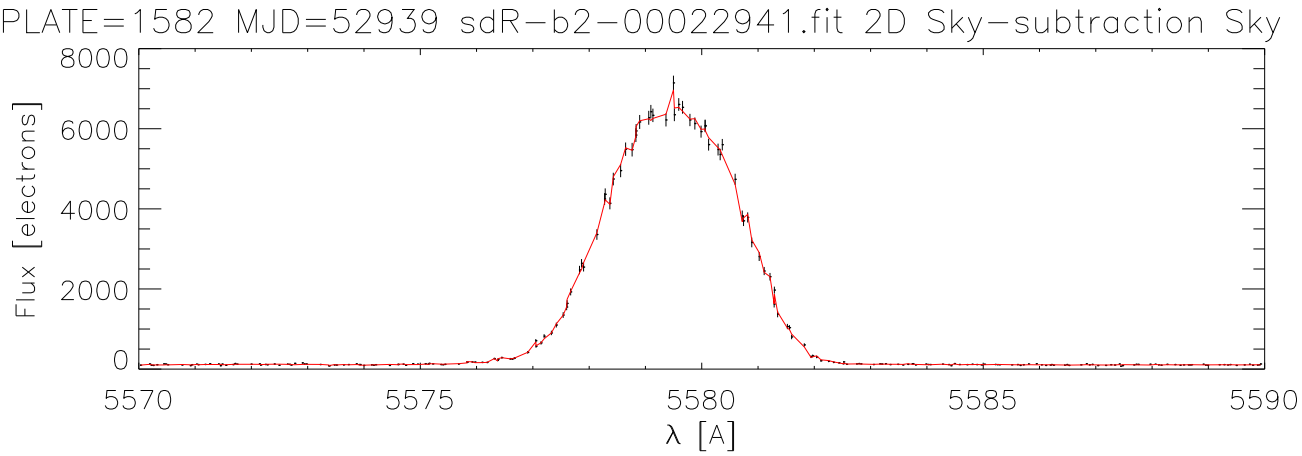

PLATE=1582 MJD=52939 sdR-b2-00022941.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

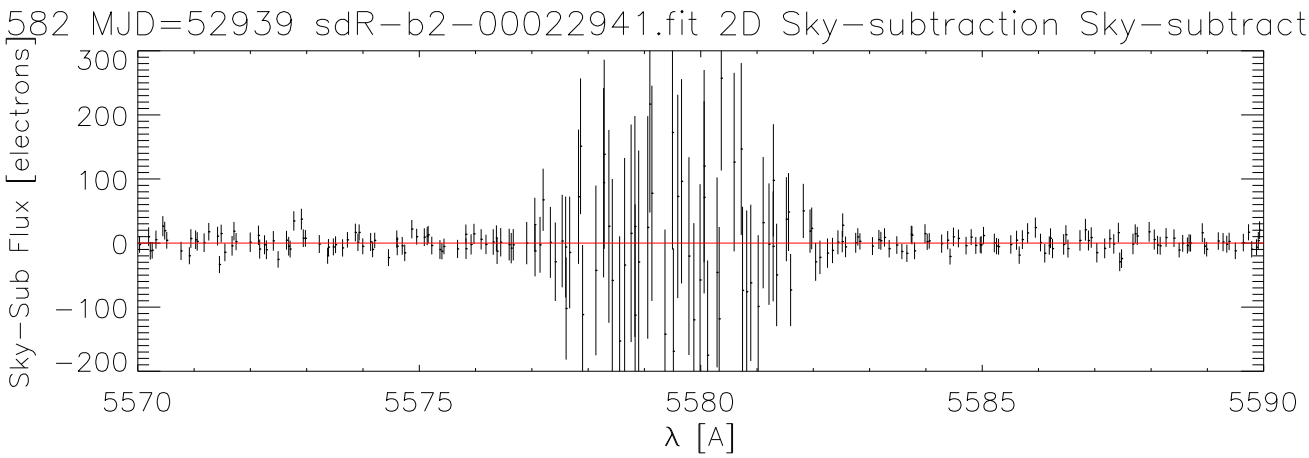

PLATE=1582 MJD=52939 sdR-b2-00022941.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

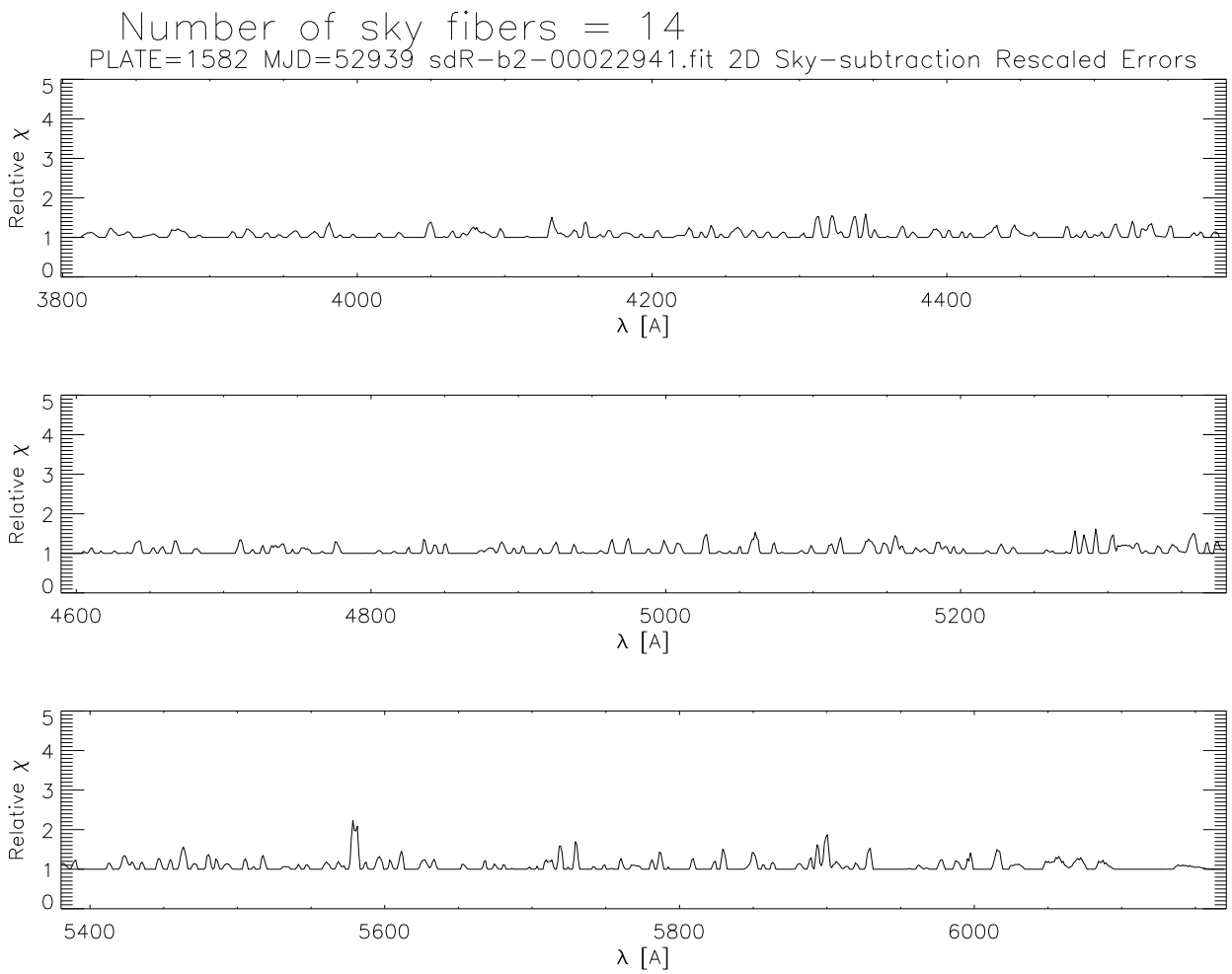

PLATE=1582 MJD=52939 sdR-b2-00022941.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

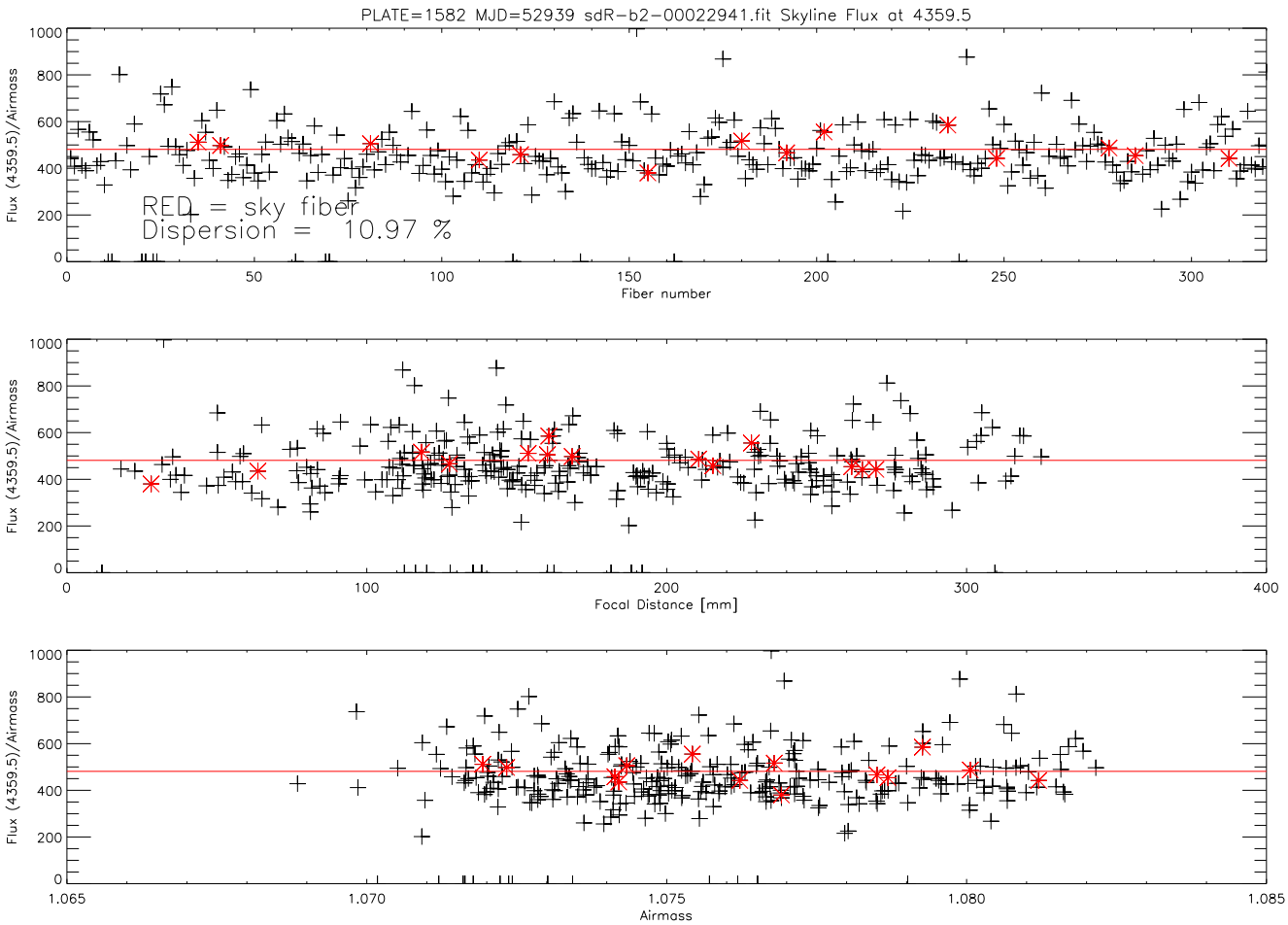

Number of sky fibers = 14
PLATE=1582 MJD=52939 sdR-b2-00022941.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

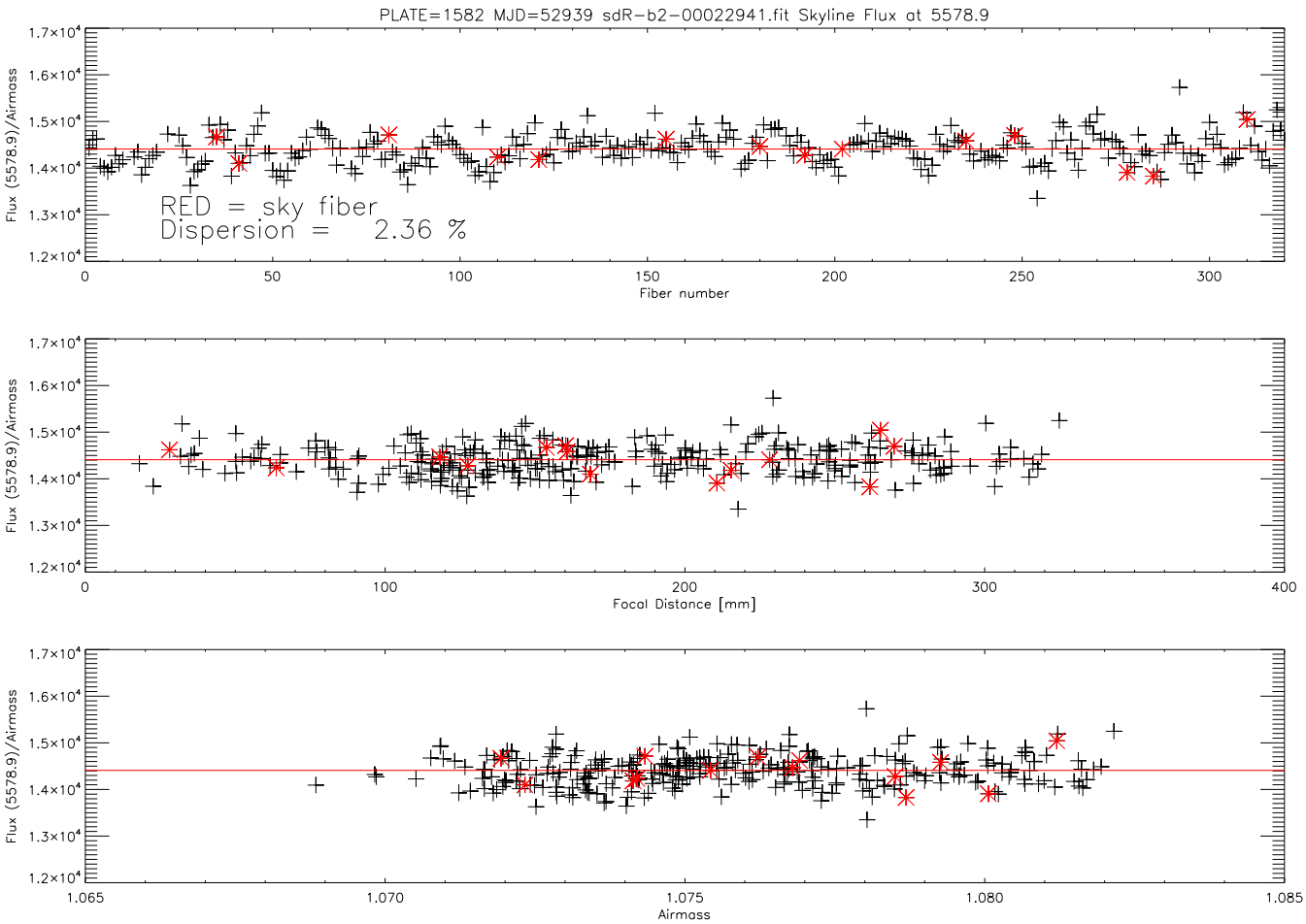

PLATE=1582 MJD=52939 sdR-b2-00022941.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

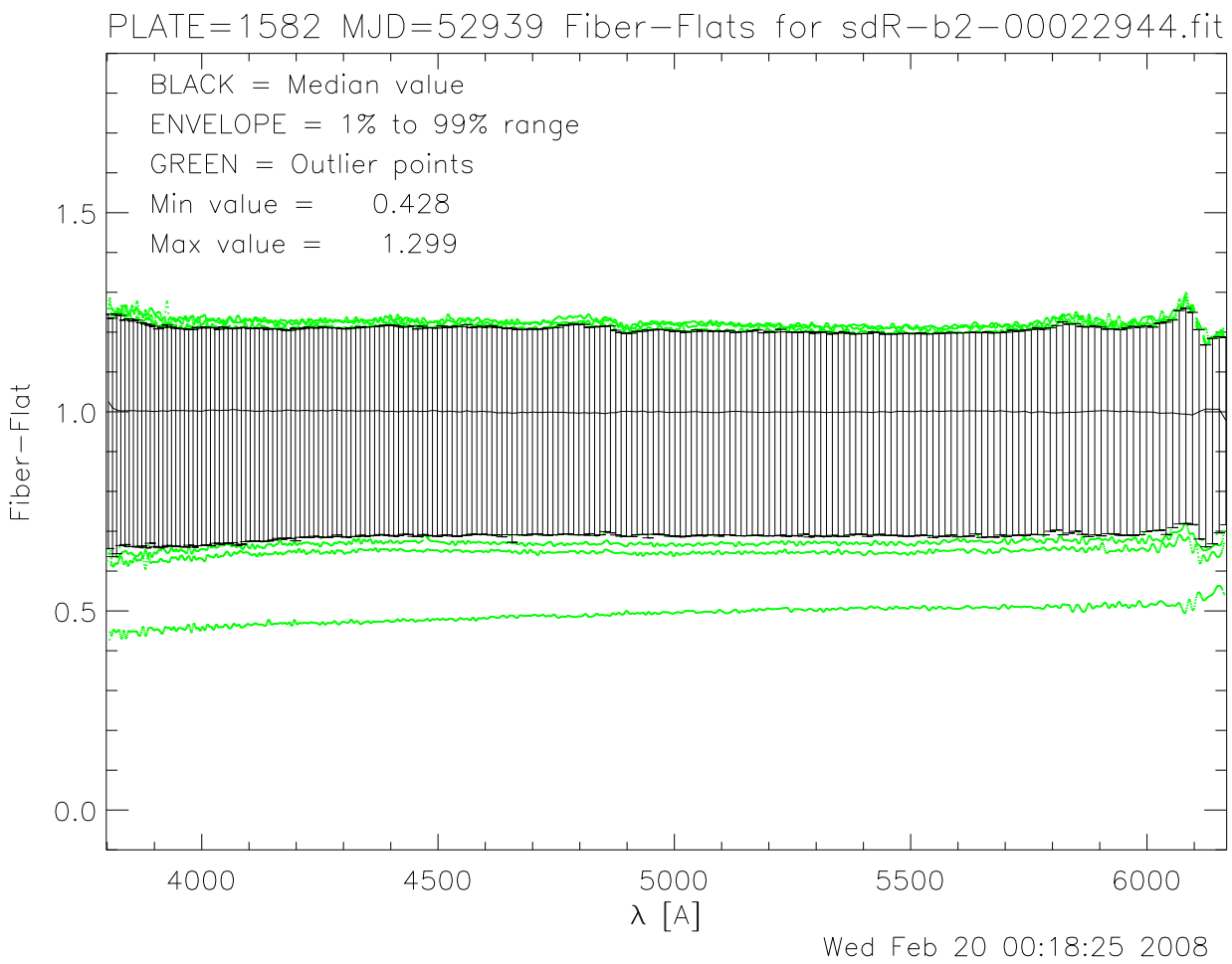

PLATE=1582 MJD=52939 sdR-b2-00022941.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

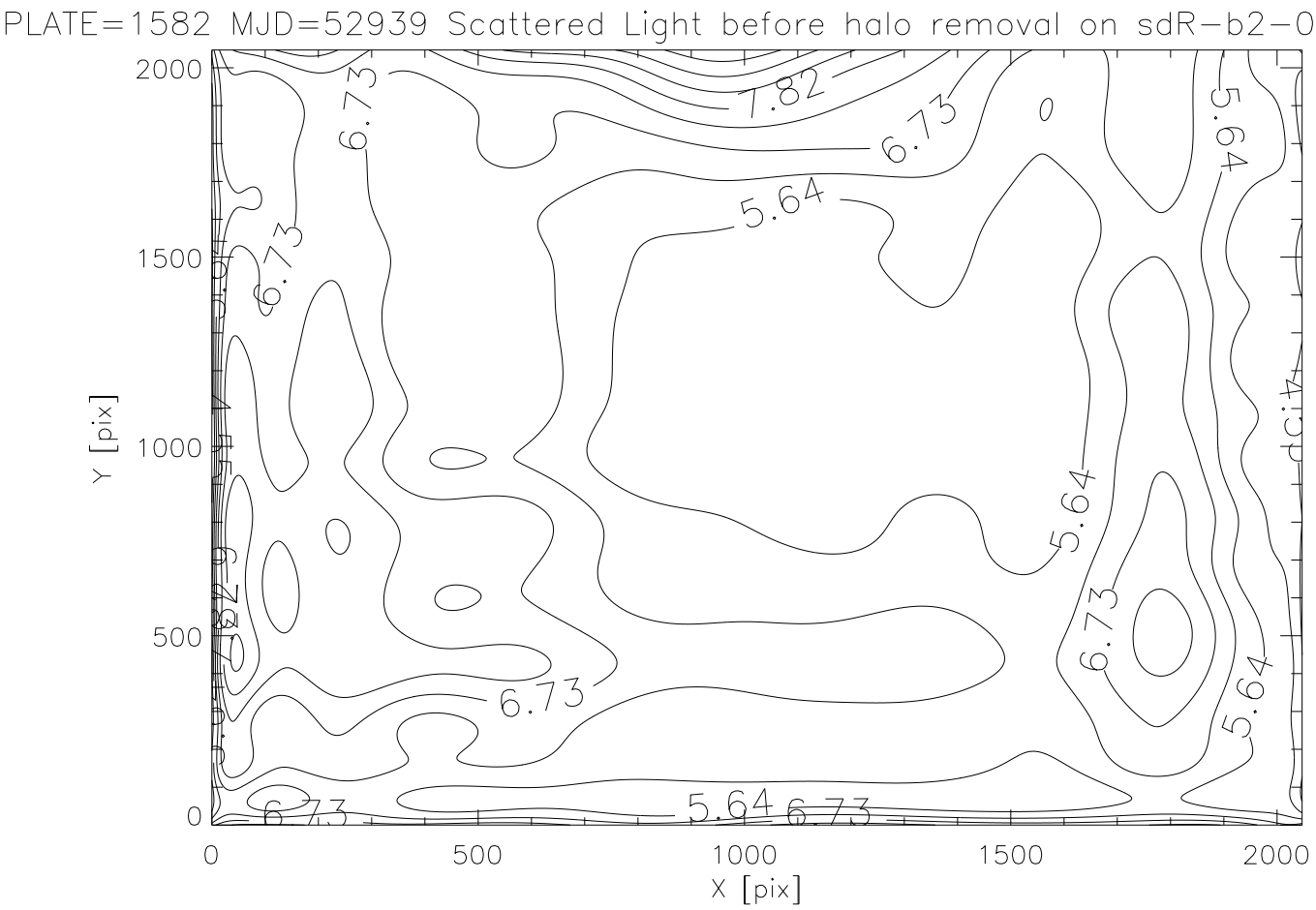

PLATE=1582 MJD=52939 sdR-b2-00022941.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

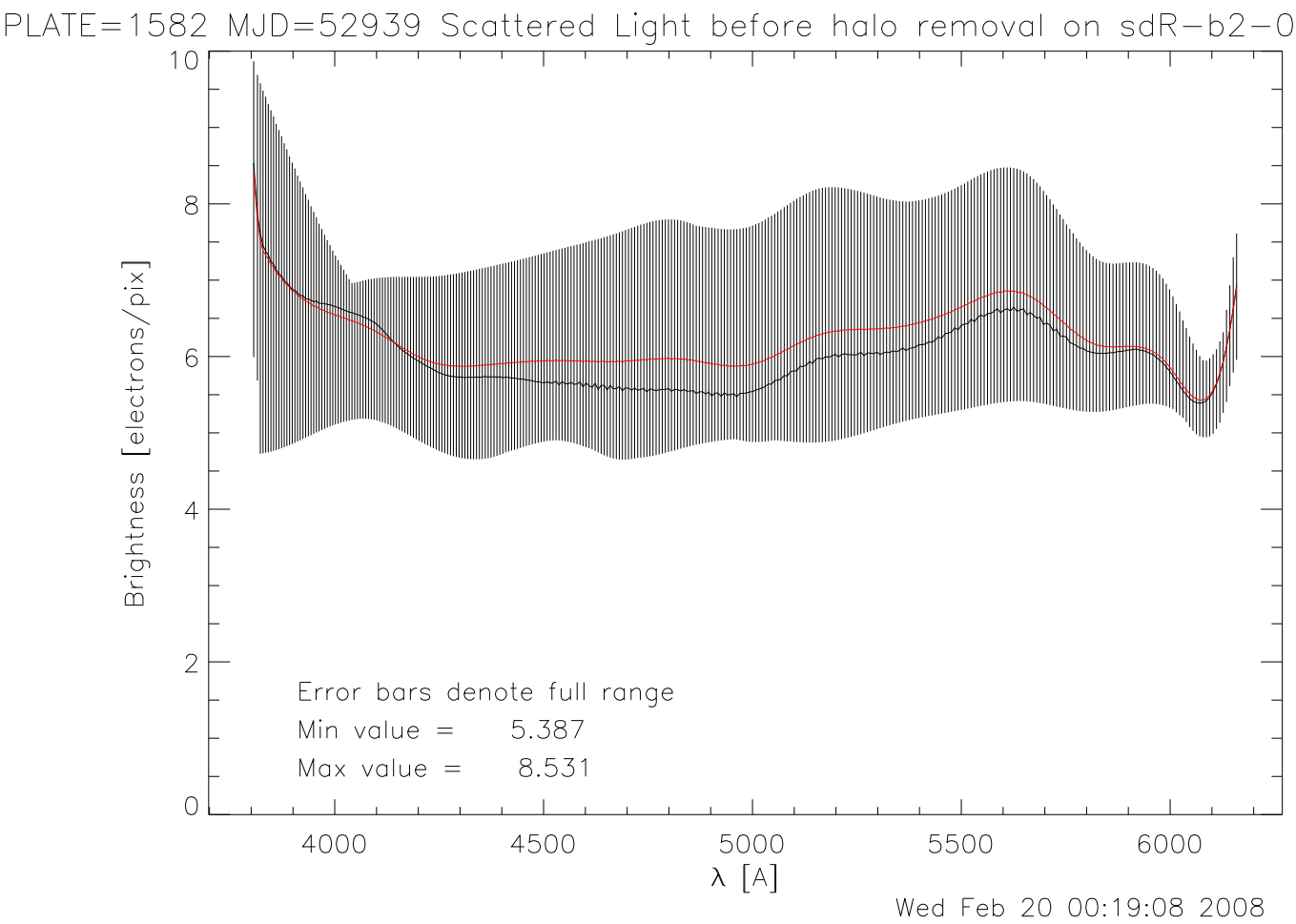

Number of sky fibers = 14
PLATE=1582 MJD=52939 sdR-b2-00022941.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

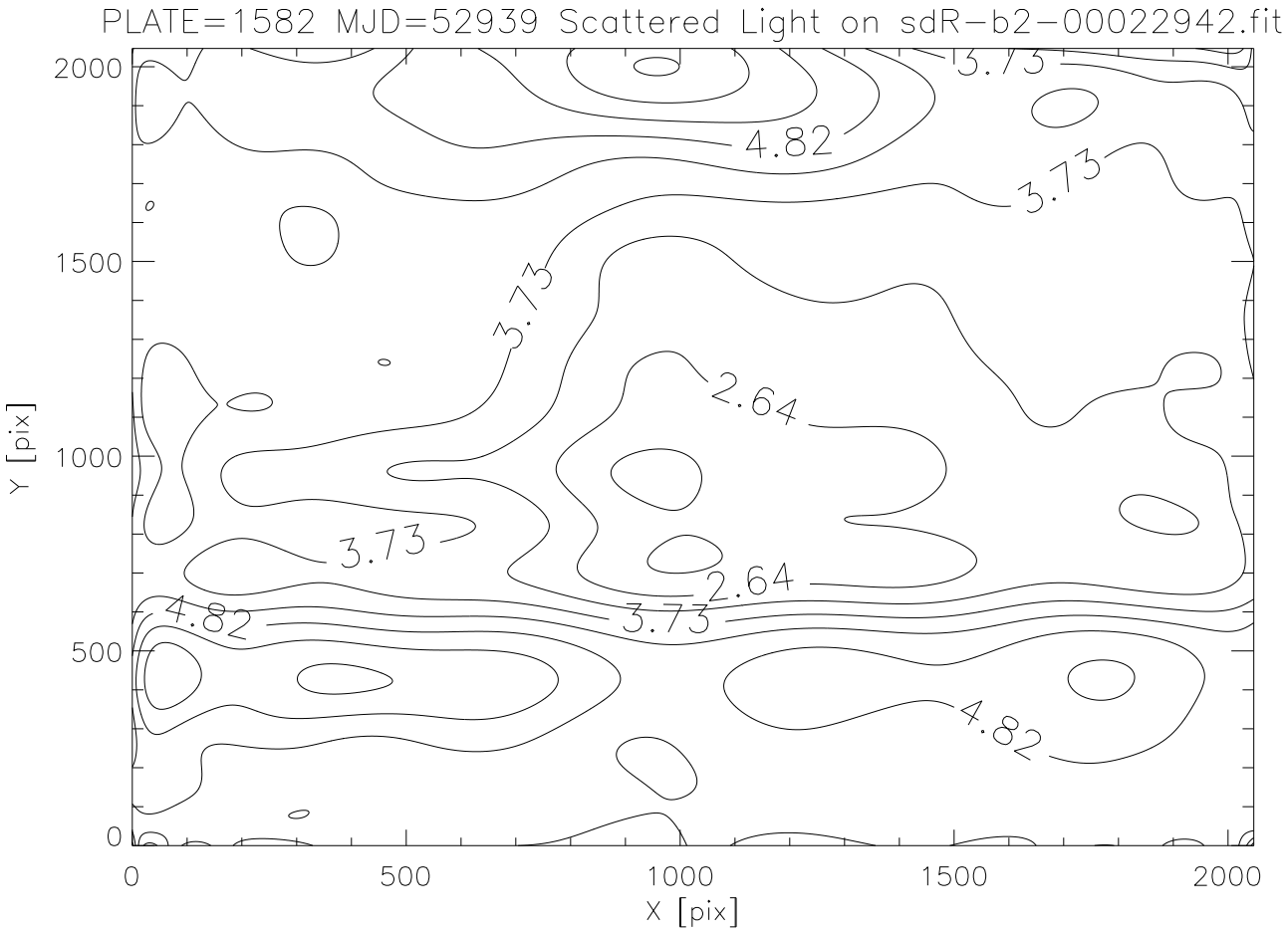

PLATE=1582 MJD=52939 sdR-b2-00022941.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 10.97 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

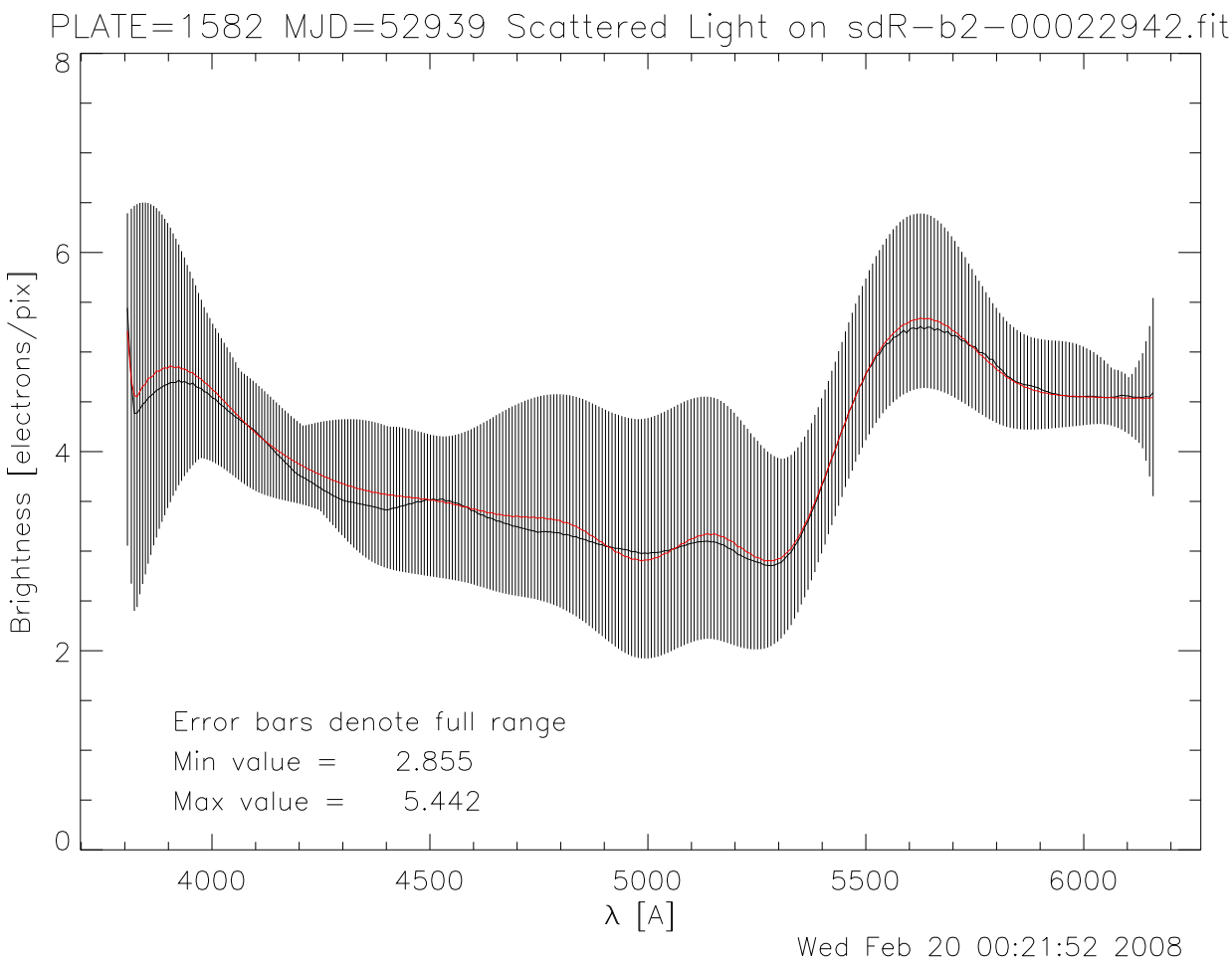

PLATE=1582 MJD=52939 sdR-b2-00022941.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.36 %
Fiber number
Focal Distance [mm]
Airmass

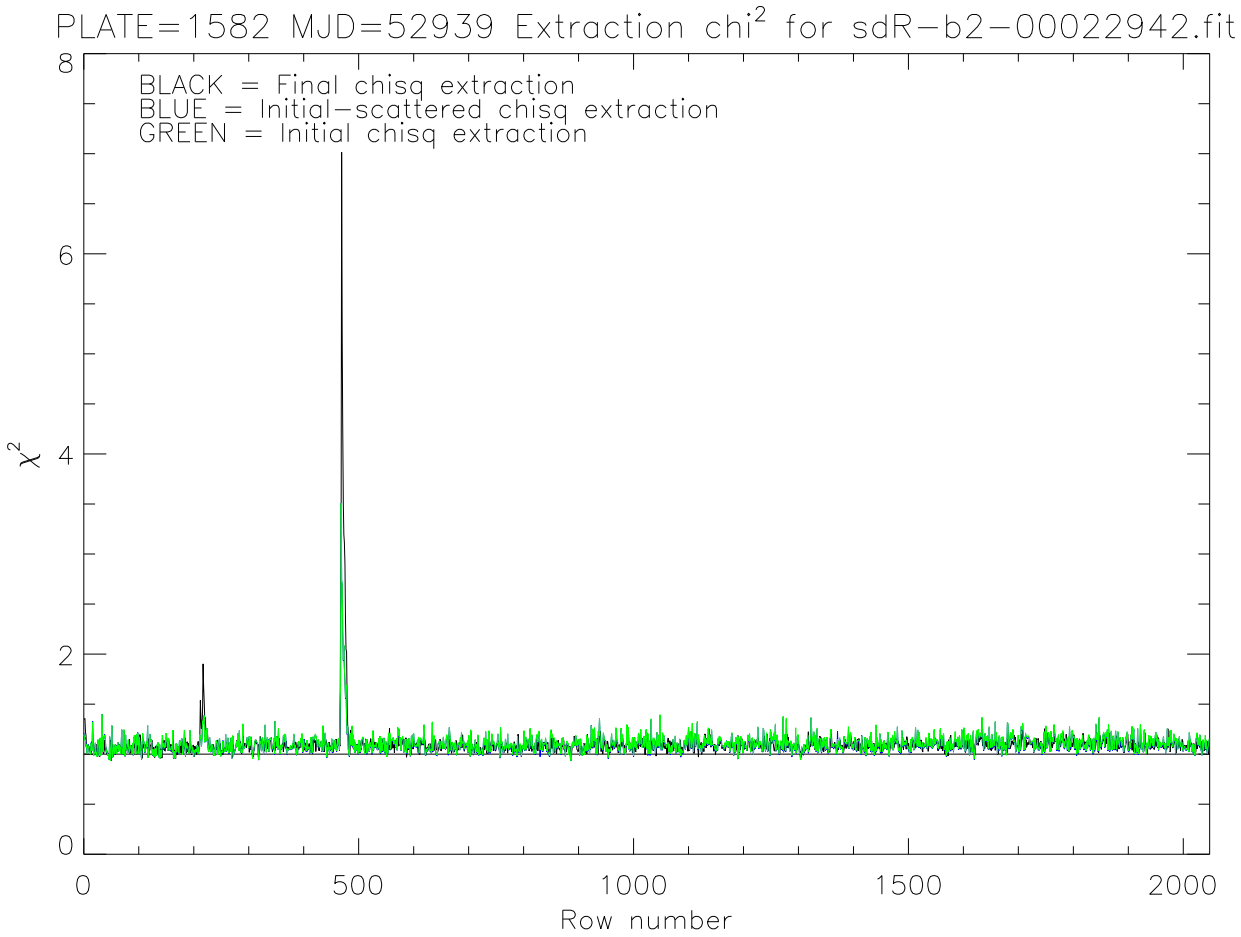

PLATE=1582 MJD=52939 Fiber-Flats for sdR-b2-00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.428
Max value = 1.299
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 00:18:25 2008

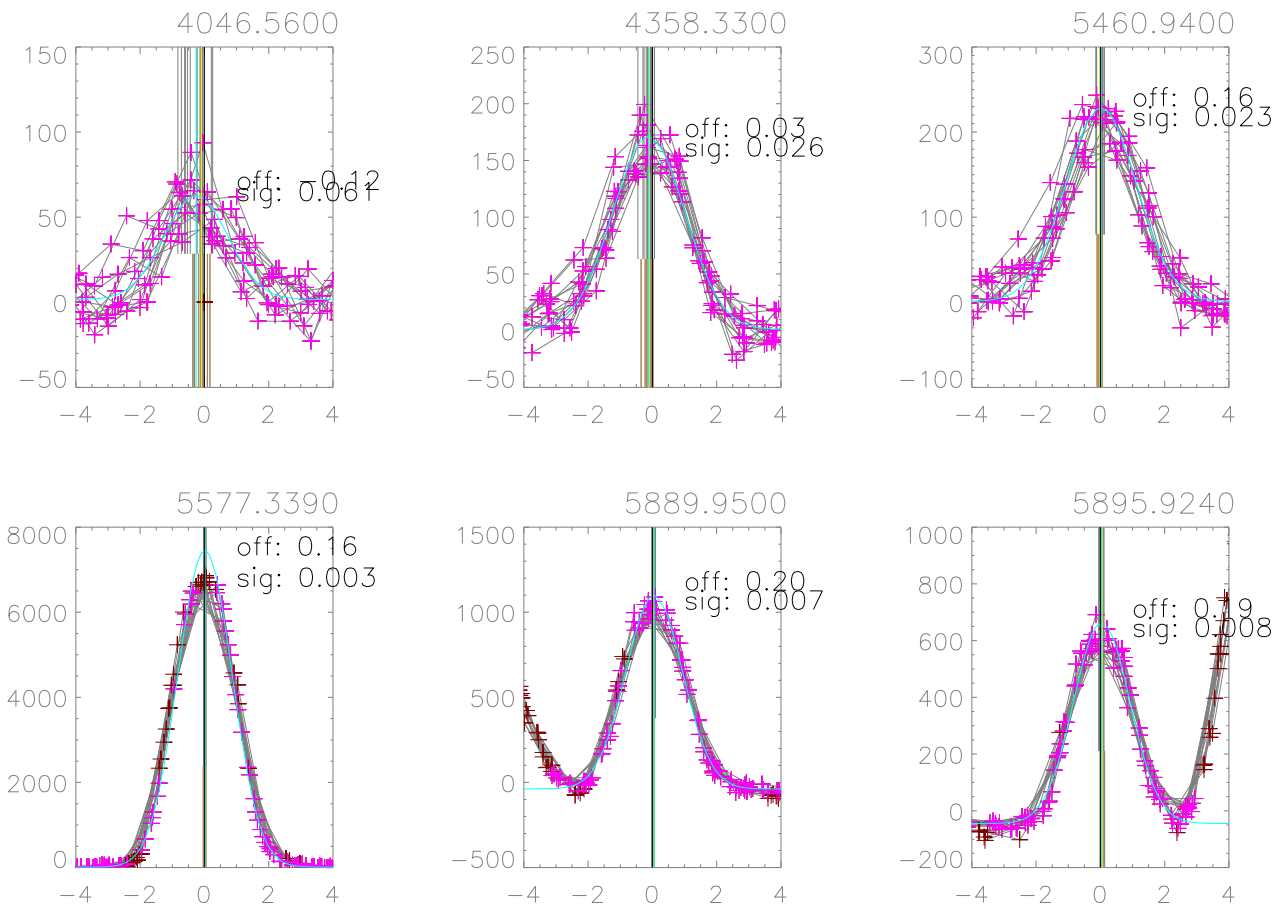

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b2-00022942.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.82
6.73
5.64
0

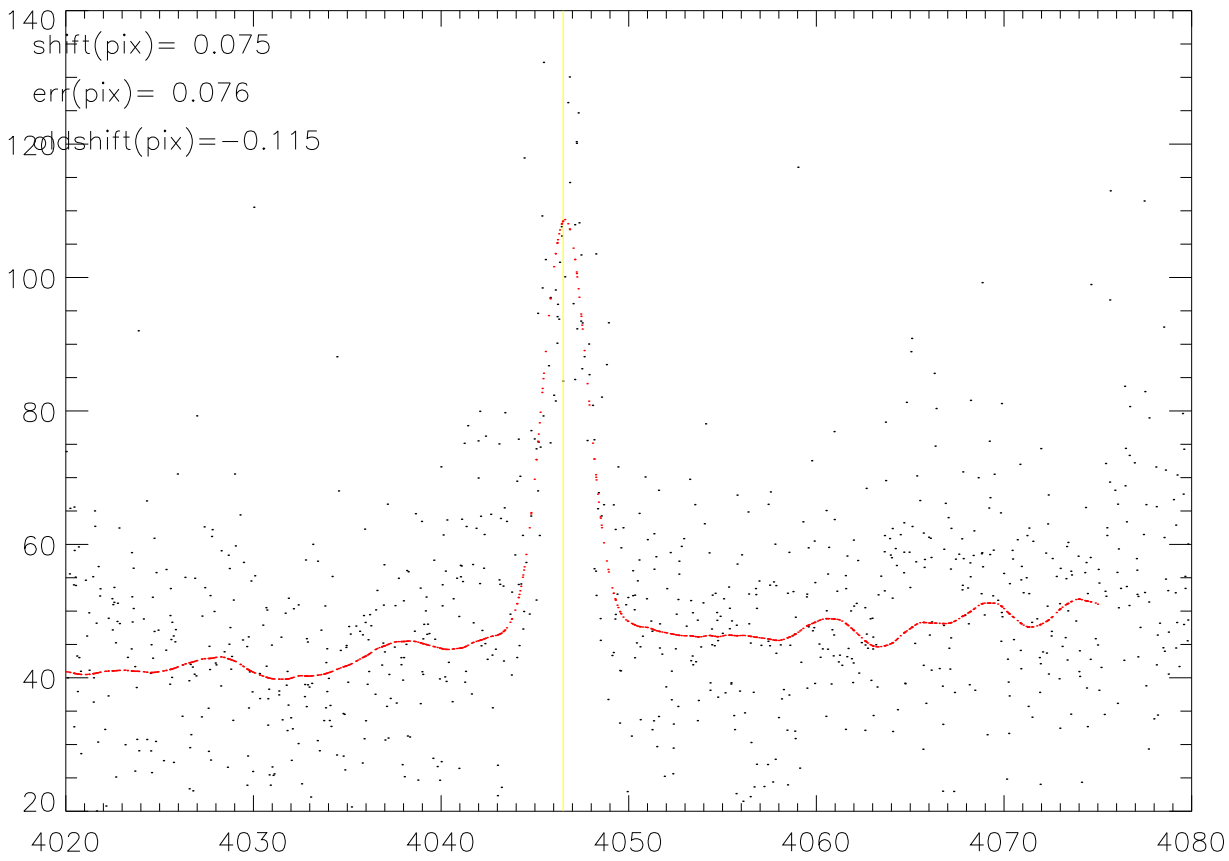

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b2-00022942.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.387
Max value = 8.531
Wed Feb 20 00:19:08 2008

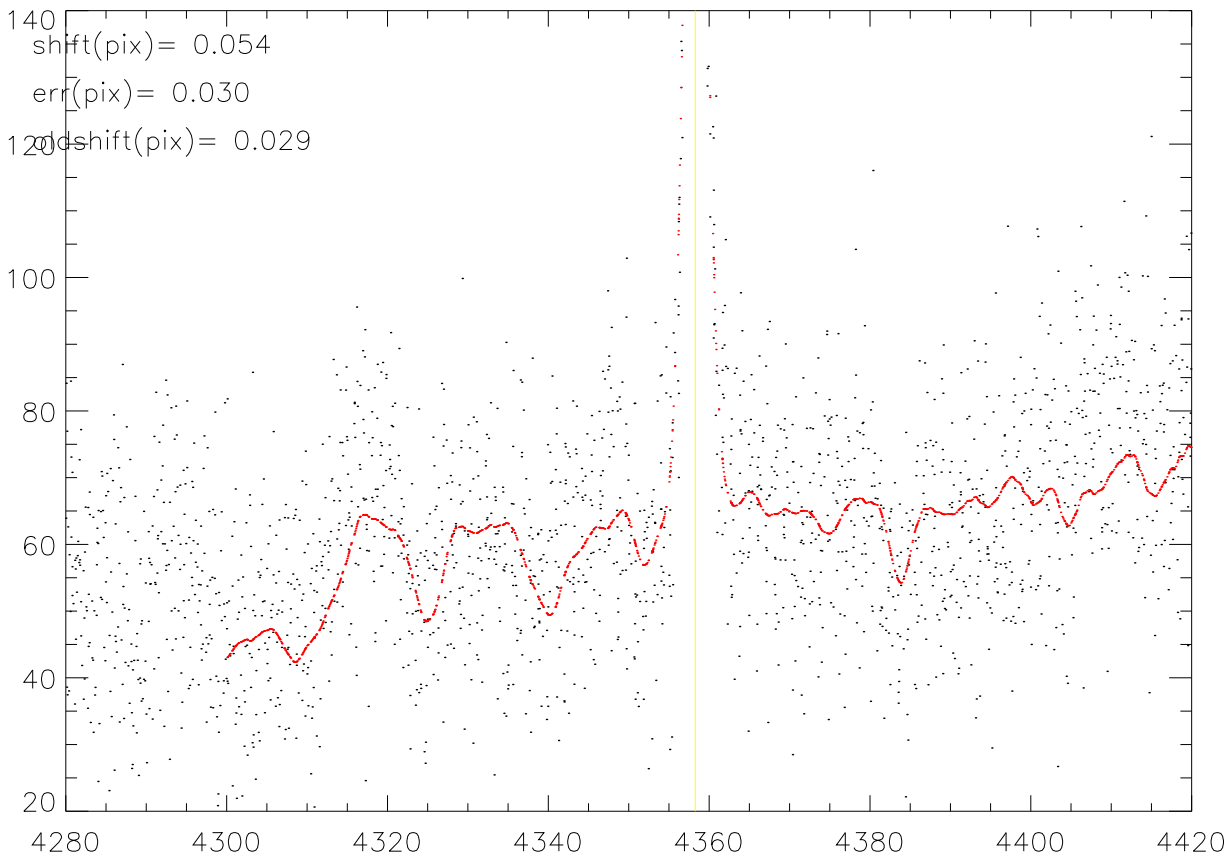

PLATE=1582 MJD=52939 Scattered Light on sdR-b2-00022942.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.82
3.73
2.64

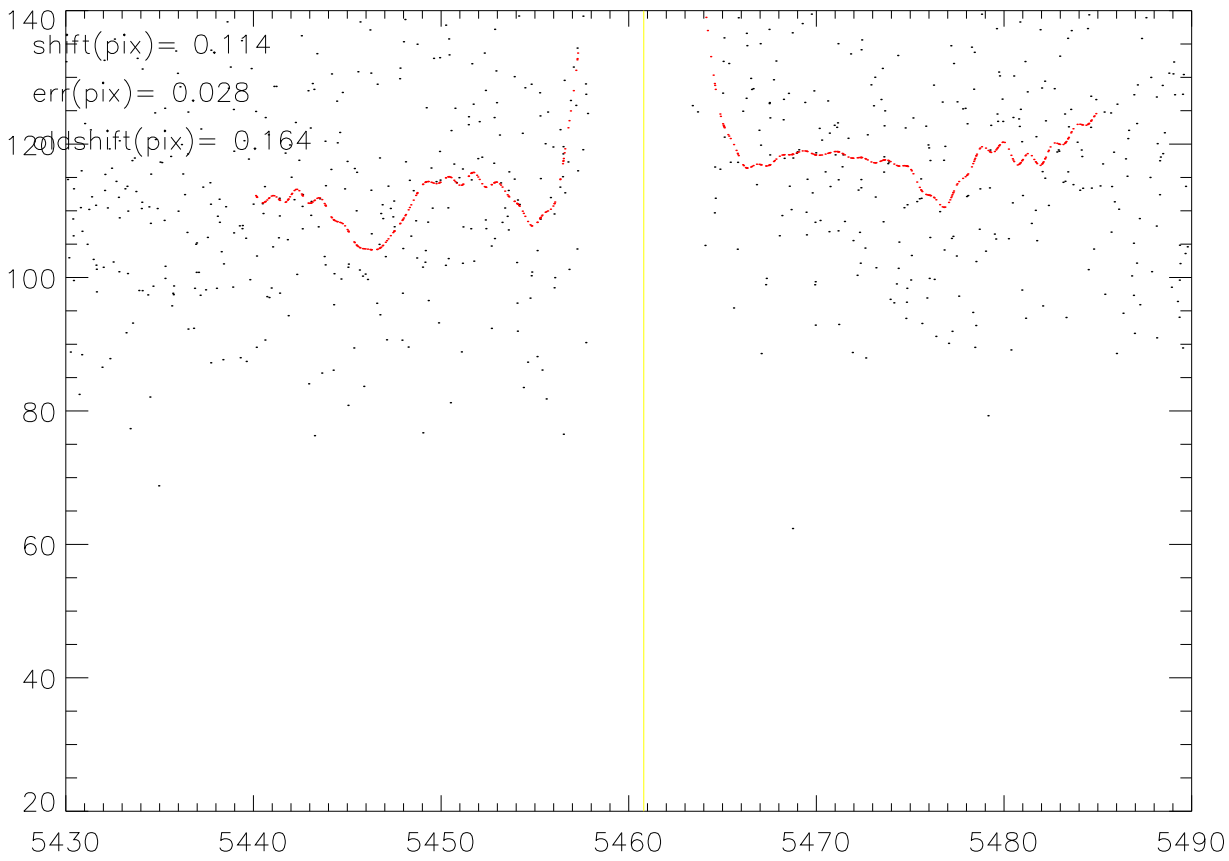

PLATE=1582 MJD=52939 Scattered Light on sdR-b2-00022942.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.855
Max value = 5.442
Wed Feb 20 00:21:52 2008

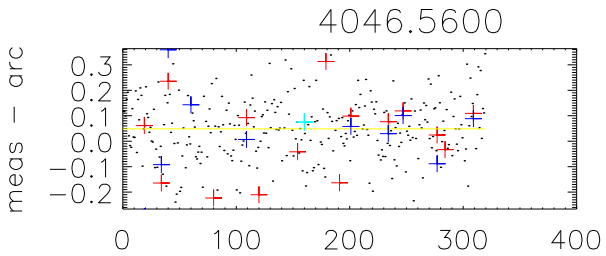

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-b2-00022942.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

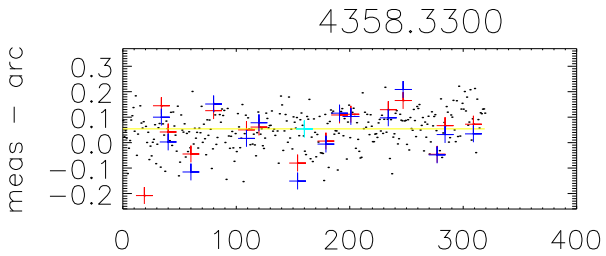

4046.5600
off: −0.12
sig: 0.061
4358.3300
off: 0.03
sig: 0.026
5460.9400
off: 0.16
sig: 0.023
5577.3390
off: 0.16
sig: 0.003
5889.9500
off: 0.20
sig: 0.007
5895.9240
off: 0.19
sig: 0.008

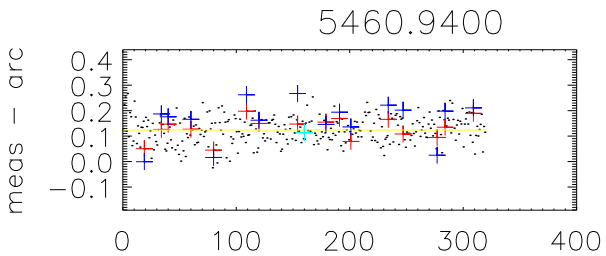

shift(pix)= 0.075
err(pix)= 0.076
oldshift(pix)=−0.115
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

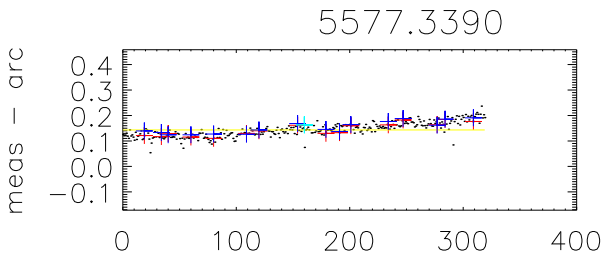

shift(pix)= 0.054
err(pix)= 0.030
oldshift(pix)= 0.029
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

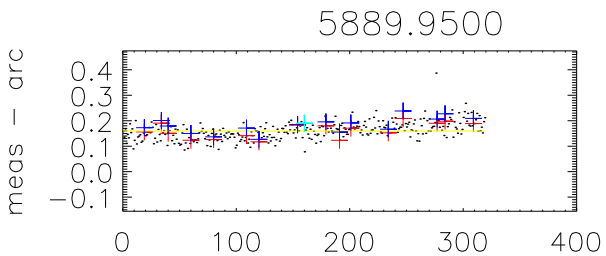

shift(pix)= 0.114
err(pix)= 0.028
oldshift(pix)= 0.164
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

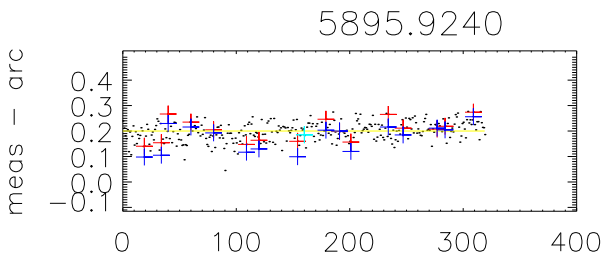

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

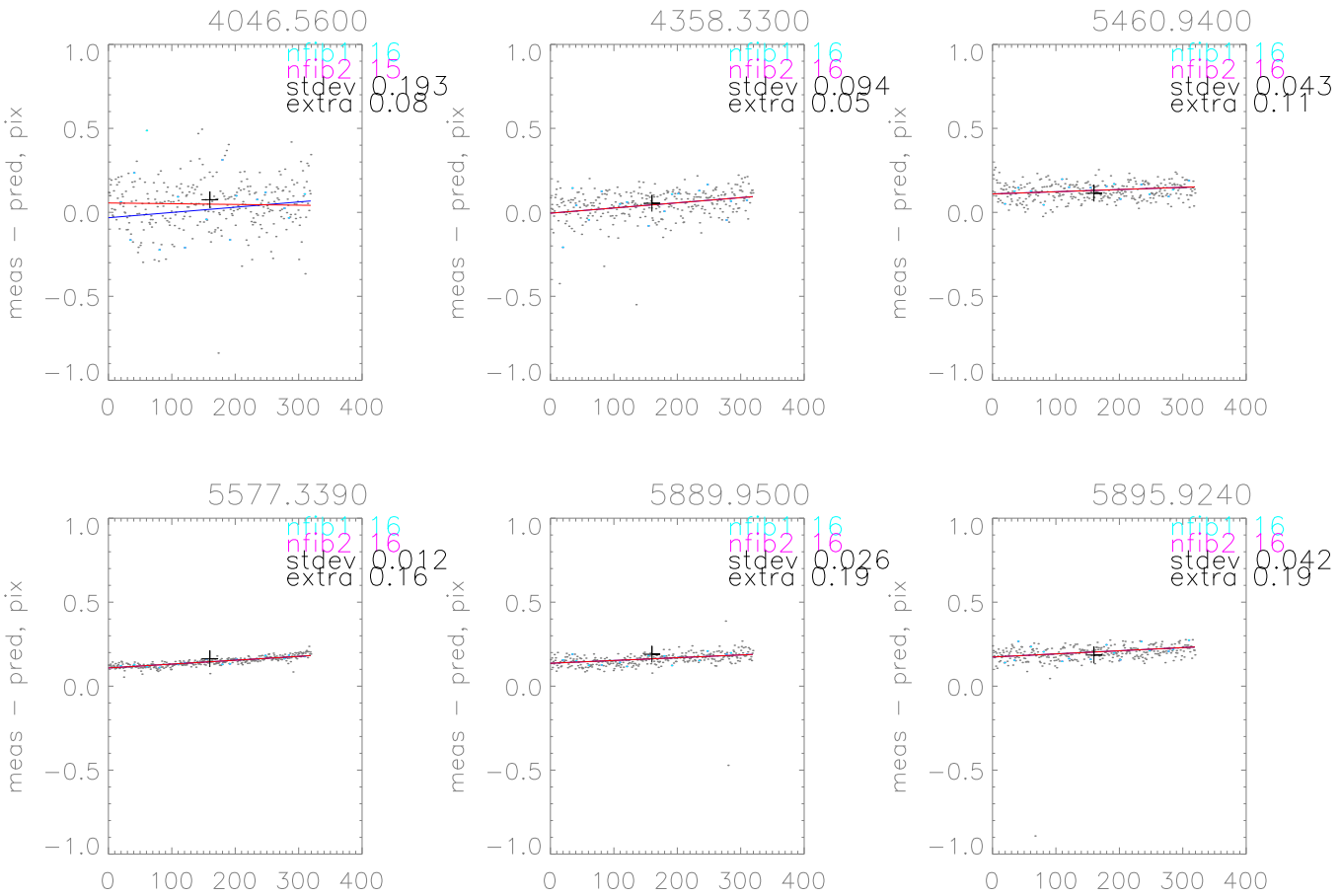

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

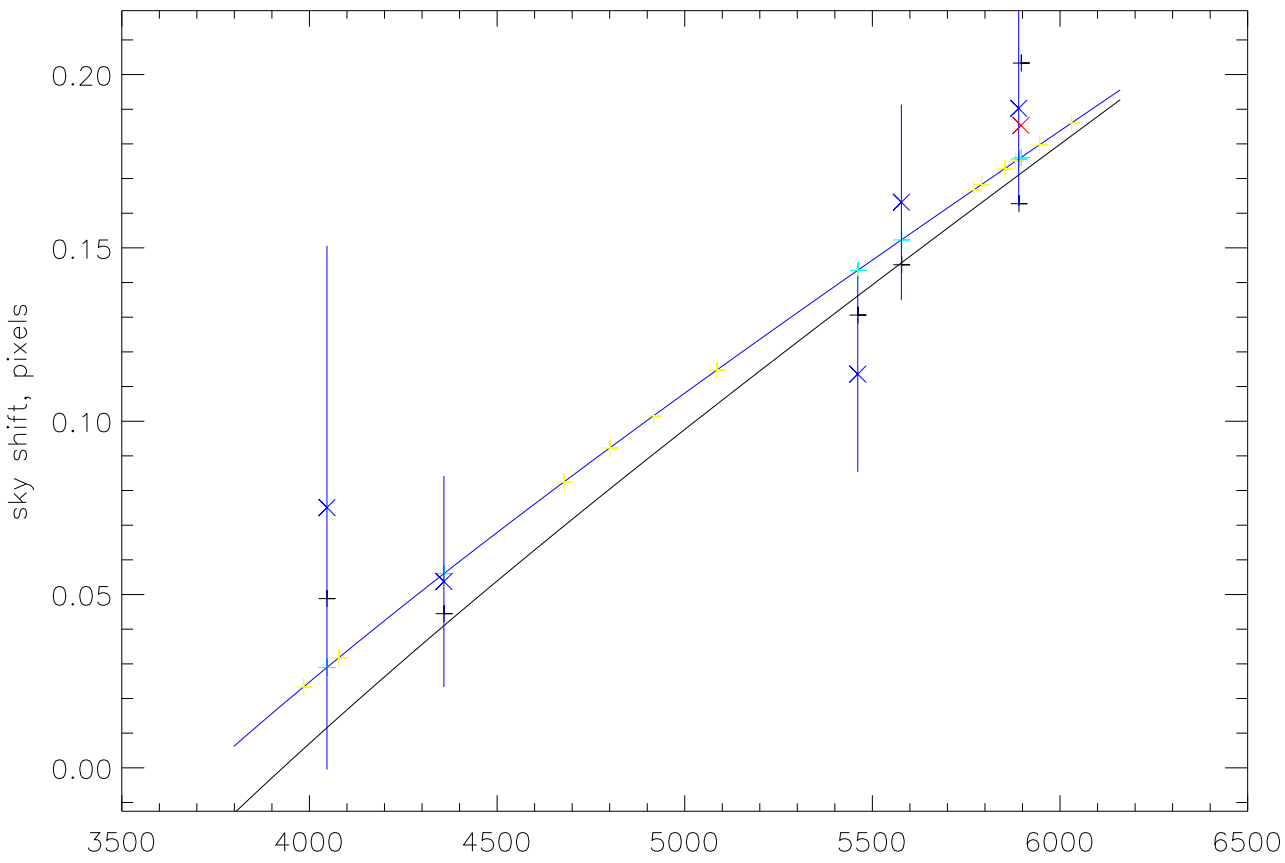

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

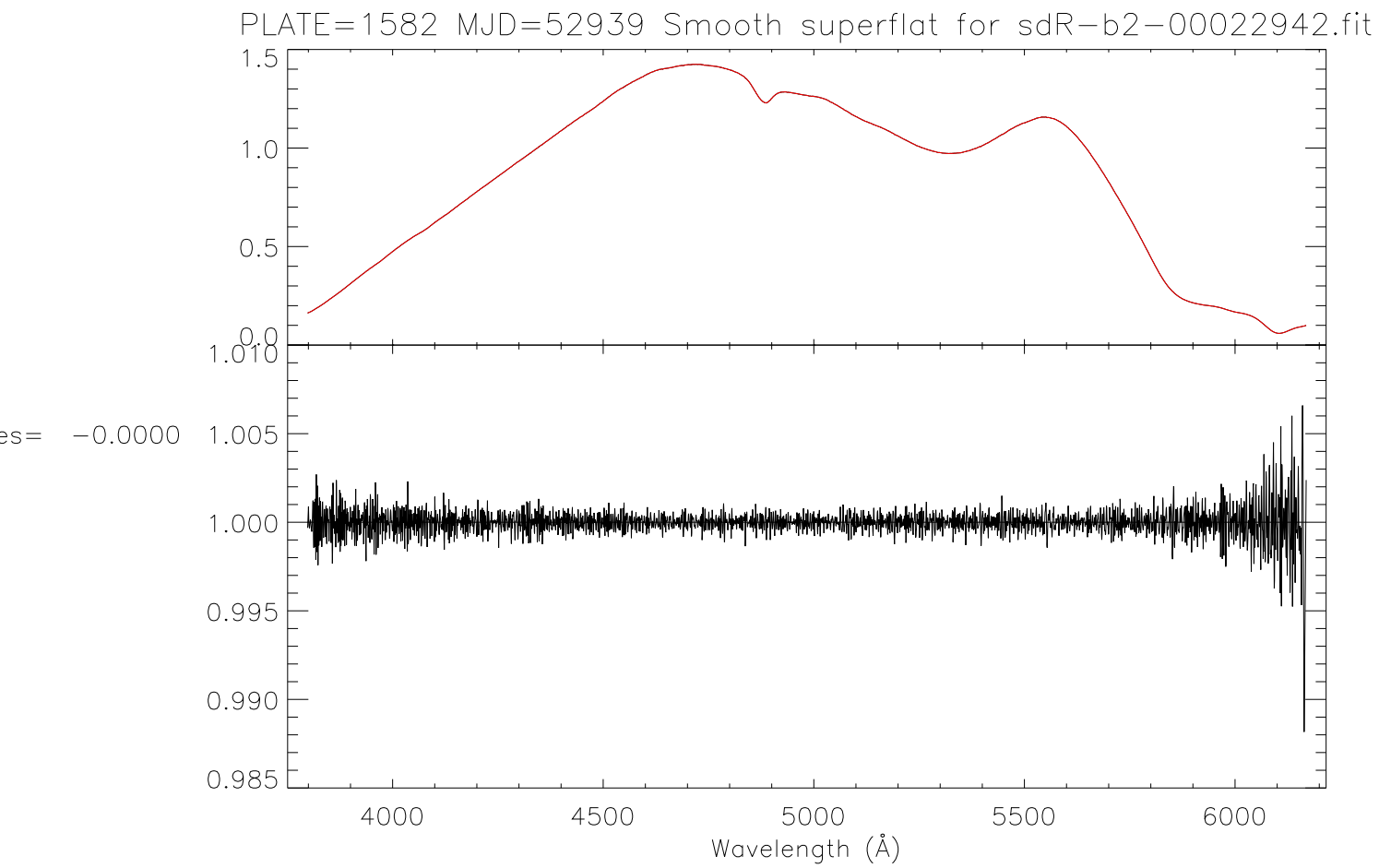

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

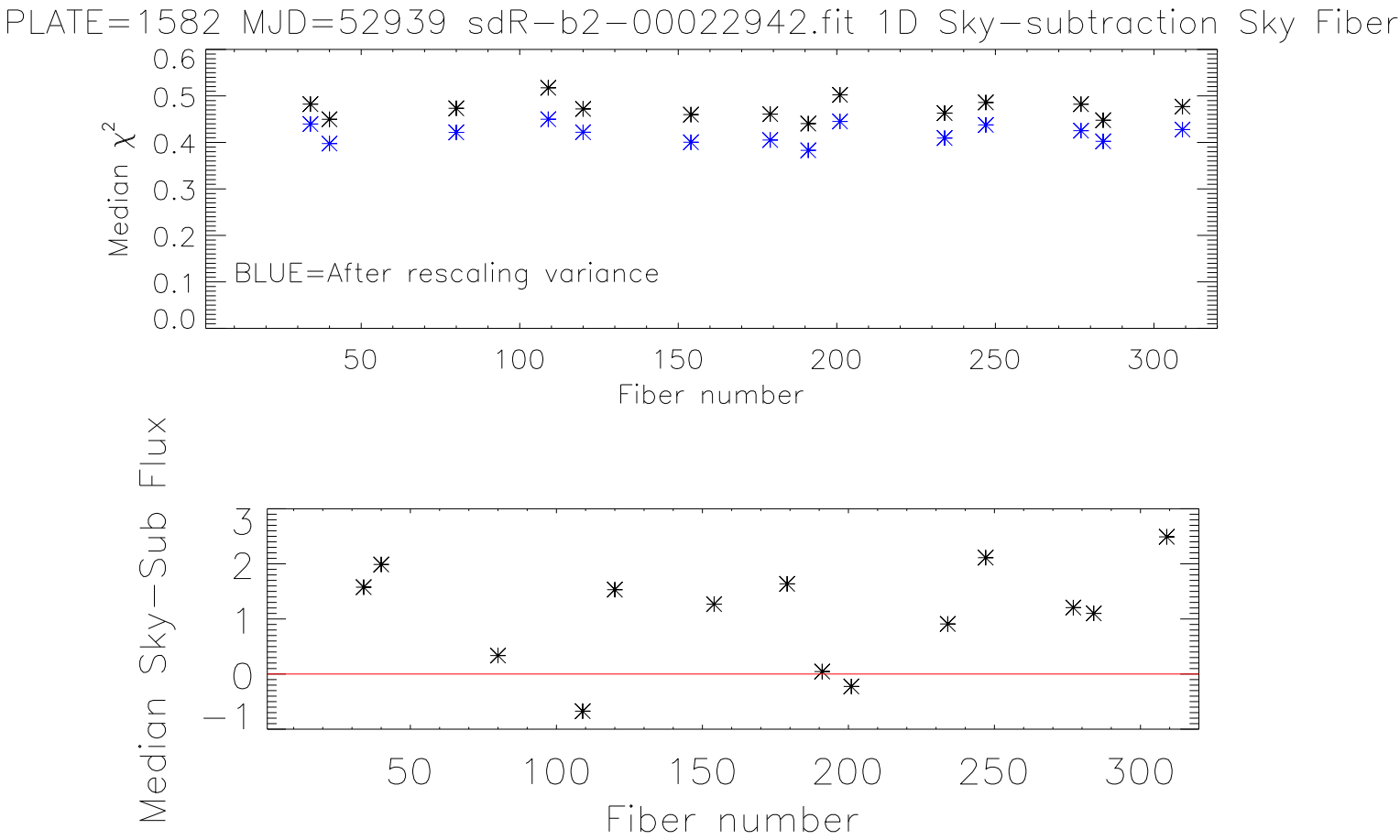

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

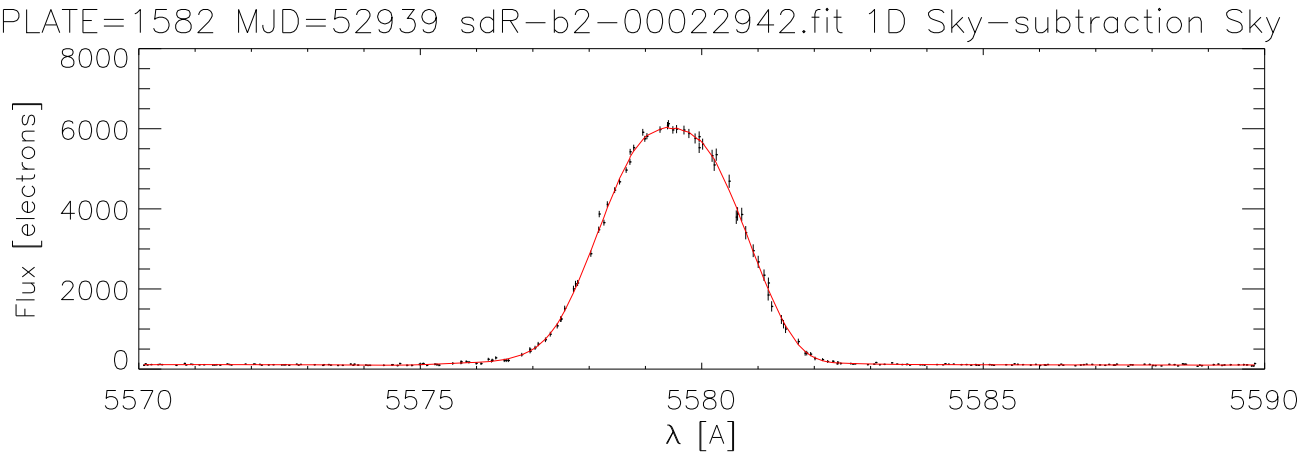

4046.5600
nfib1 16
nfib2 15
stdev 0.193
extra 0.08
4358.3300
nfib1 16
nfib2 16
stdev 0.094
extra 0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.043
extra 0.11
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra 0.19
5895.9240
nfib1 16
nfib2 16
stdev 0.042
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

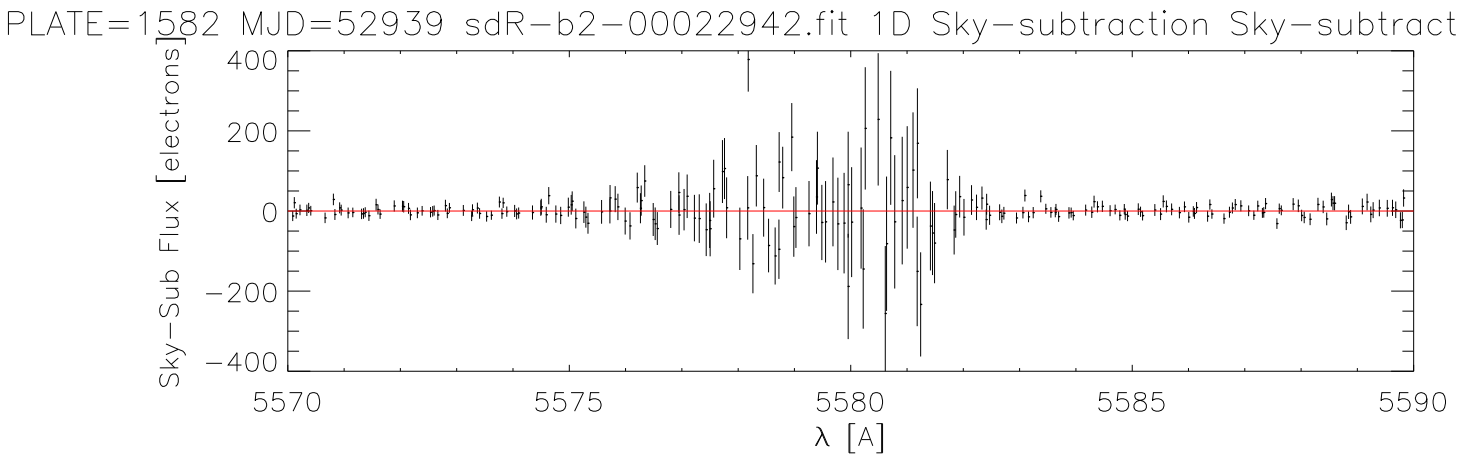

sky shift, pixels
0.00
0.05
0.10
0.15
0.20
3500
4000
4500
5000
5500
6000
6500

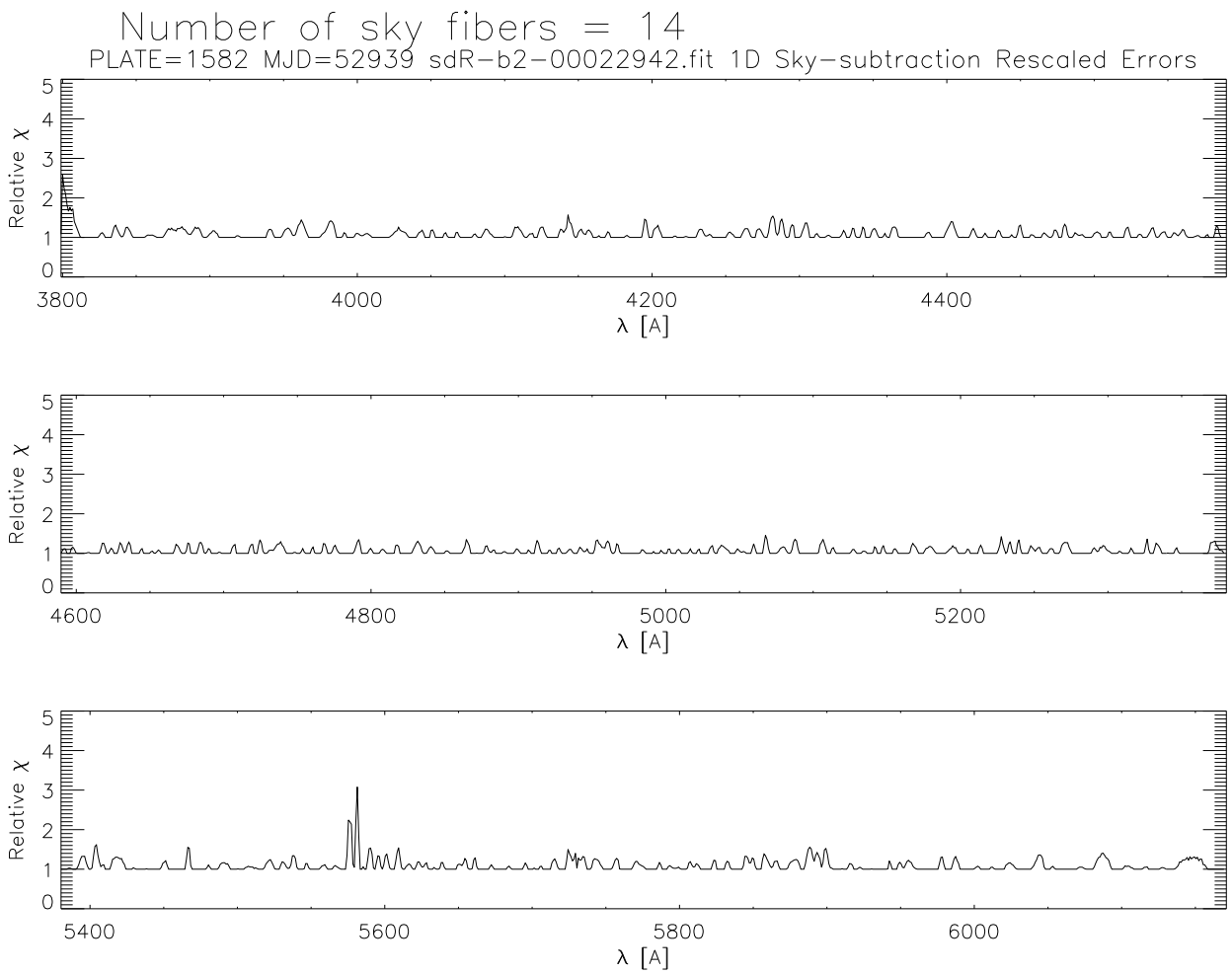

PLATE=1582 MJD=52939 Smooth superflat for sdR-b2-00022942.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

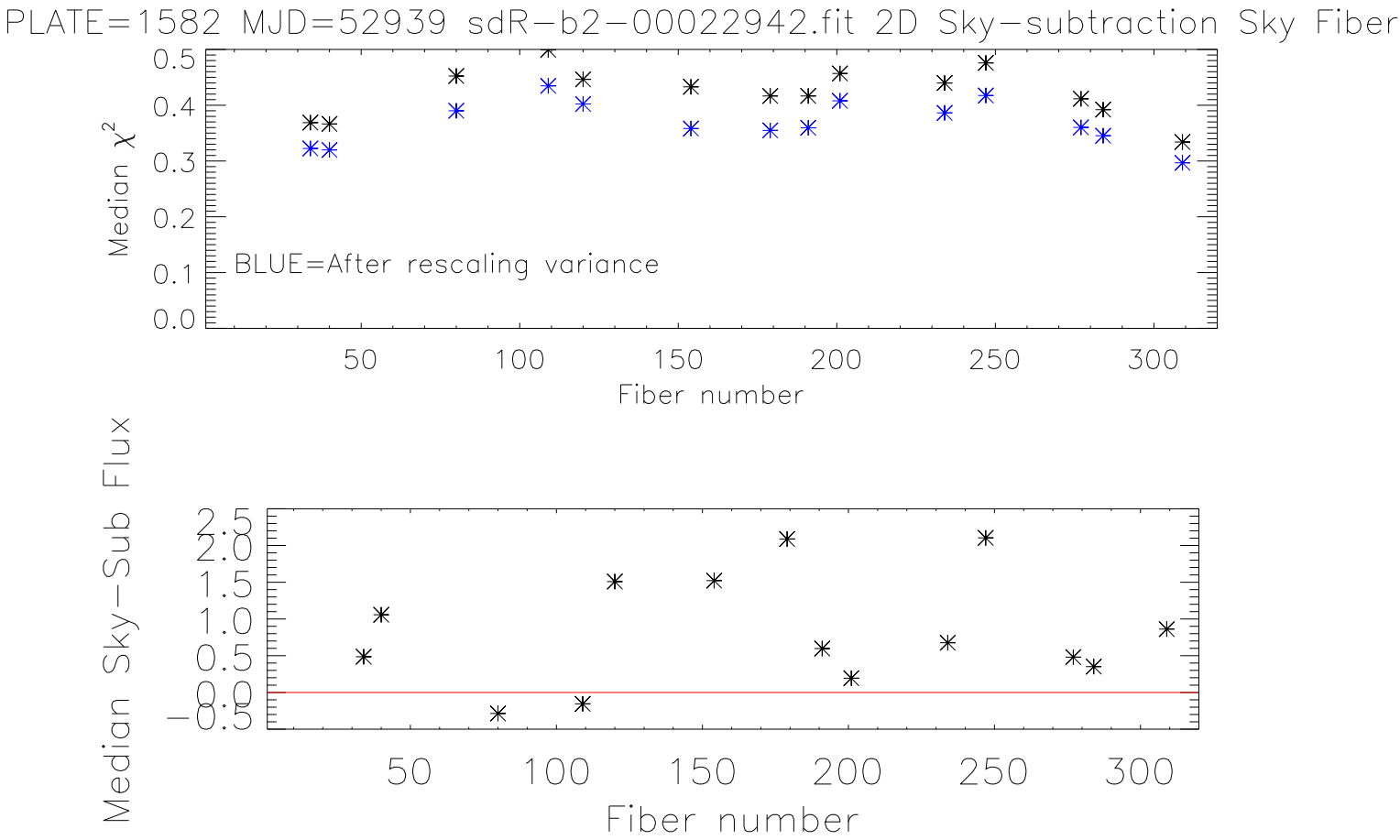
es= −0.0000

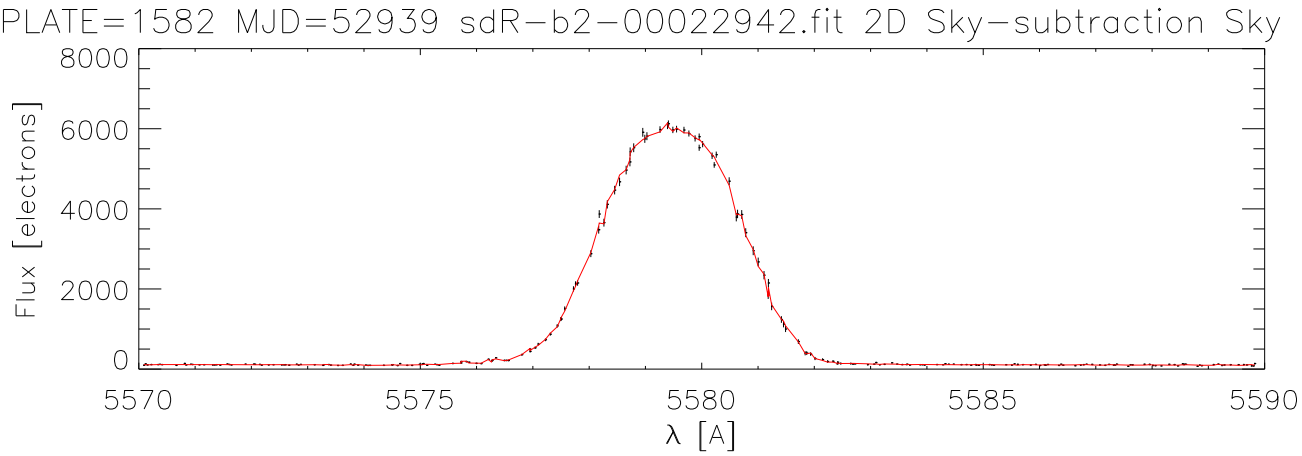

PLATE=1582 MJD=52939 sdR-b2-00022942.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

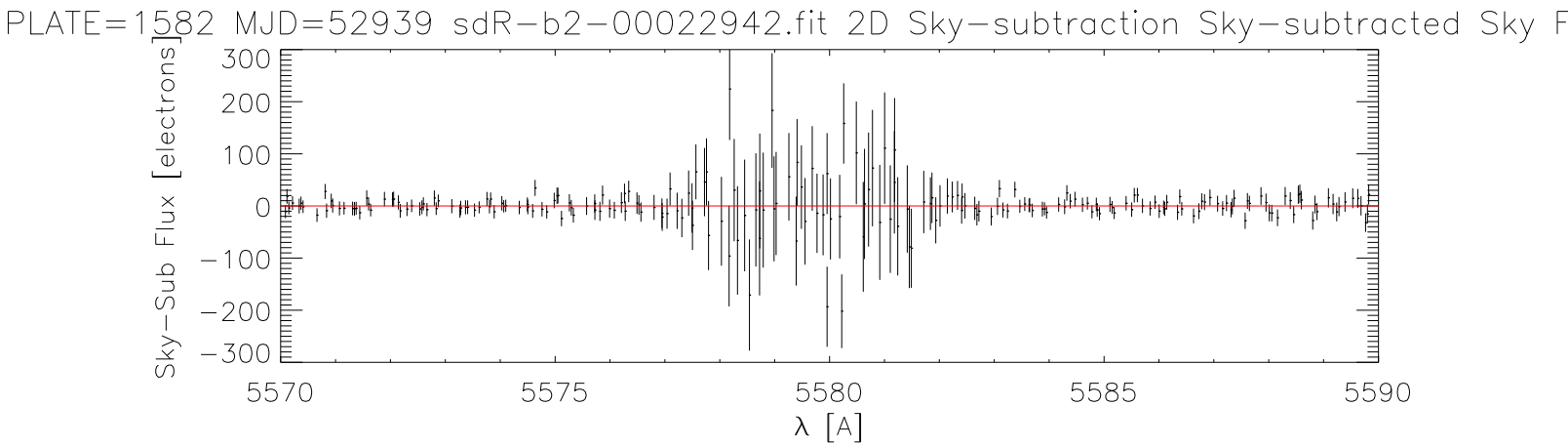

PLATE=1582 MJD=52939 sdR-b2-00022942.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

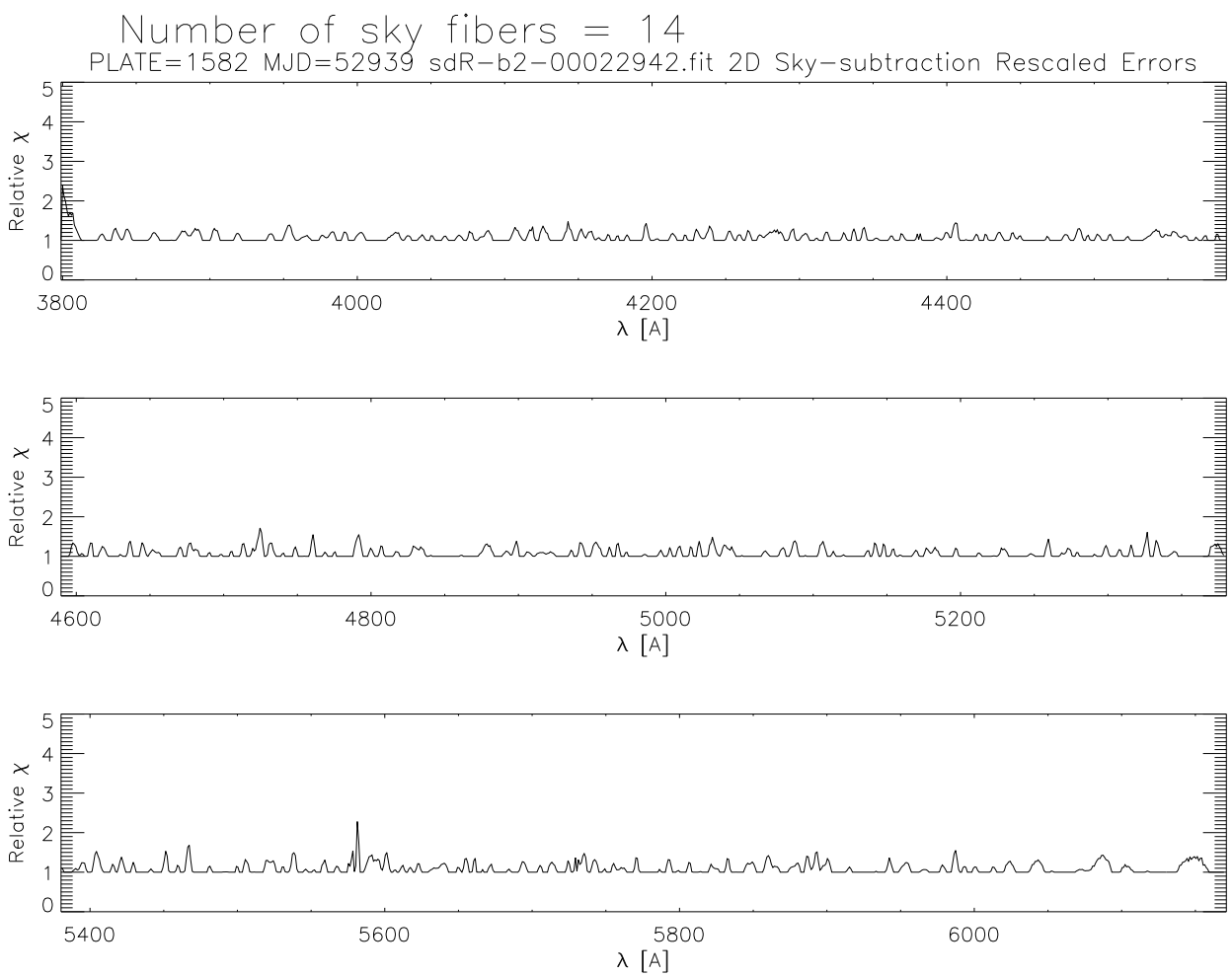

PLATE=1582 MJD=52939 sdR-b2-00022942.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

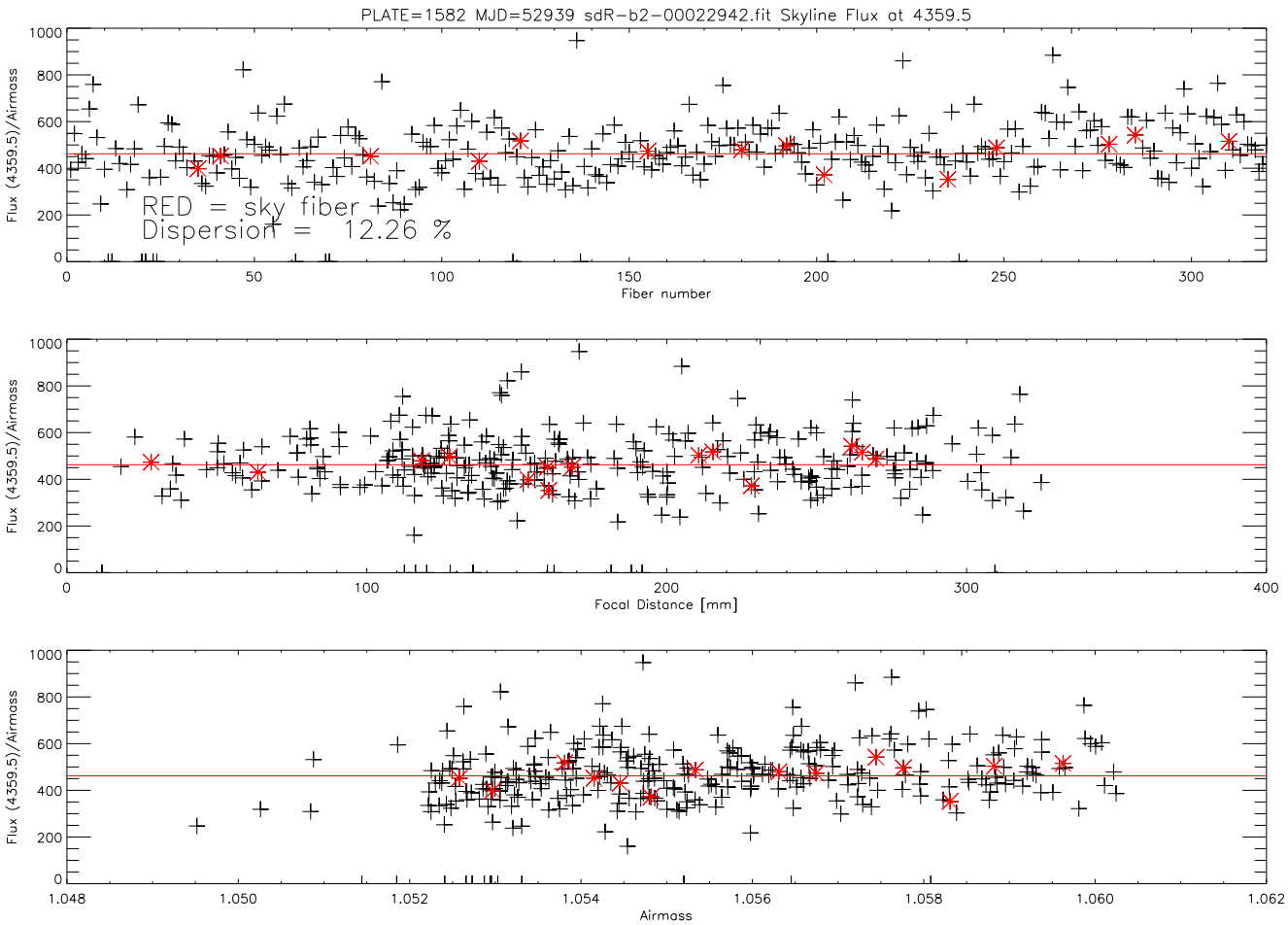

Number of sky fibers = 14
PLATE=1582 MJD=52939 sdR-b2-00022942.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

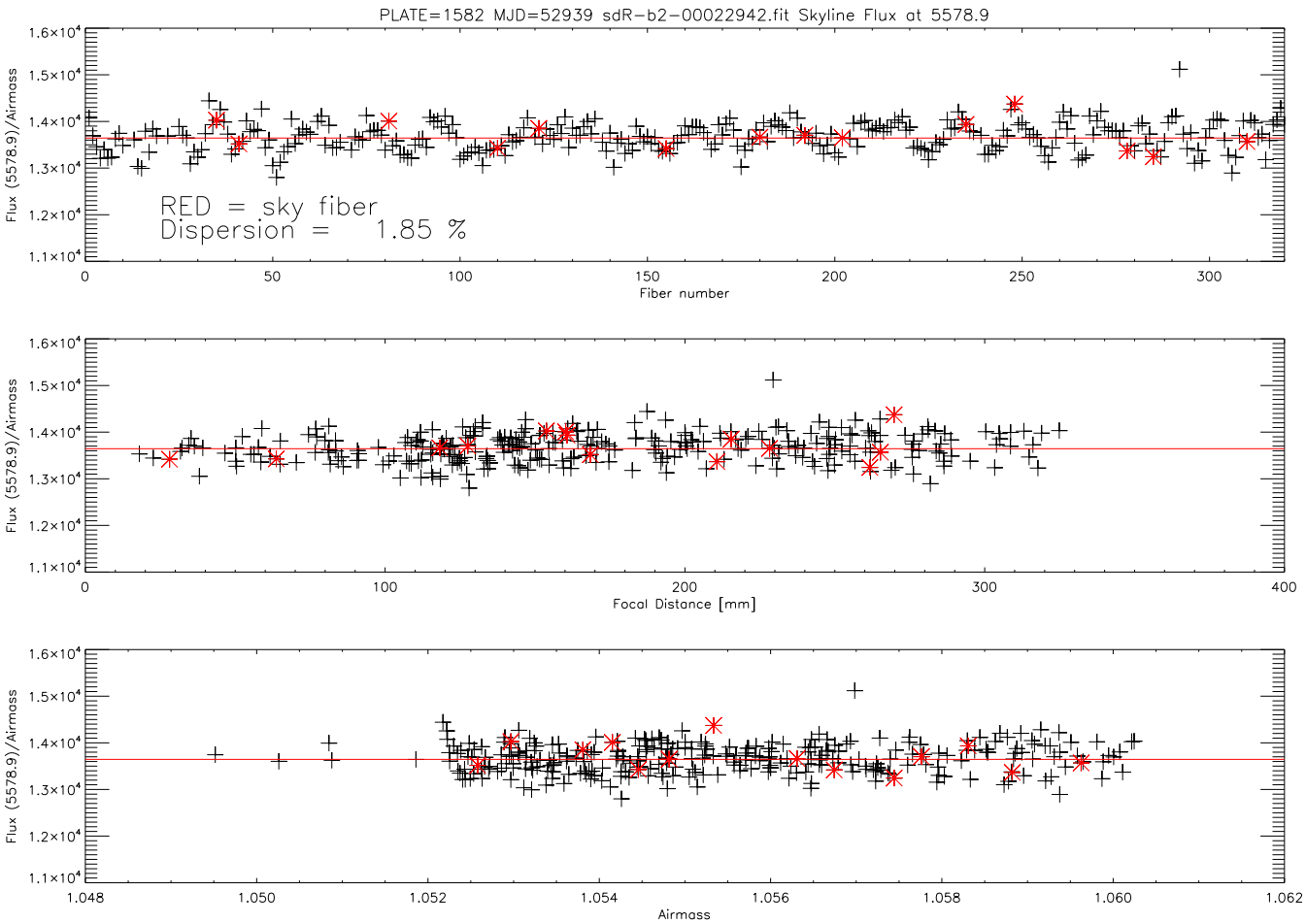

PLATE=1582 MJD=52939 sdR-b2-00022942.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

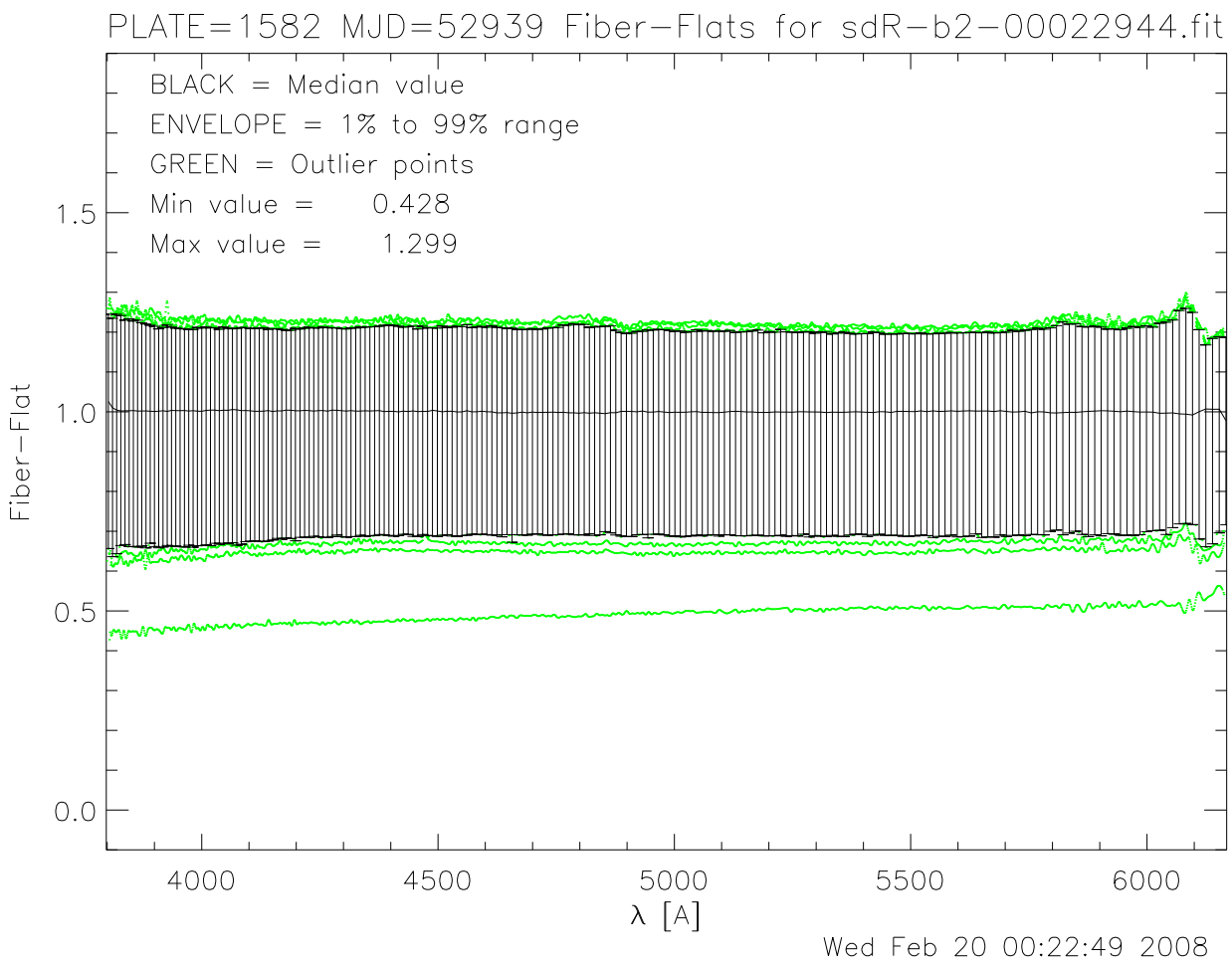

PLATE=1582 MJD=52939 sdR-b2-00022942.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

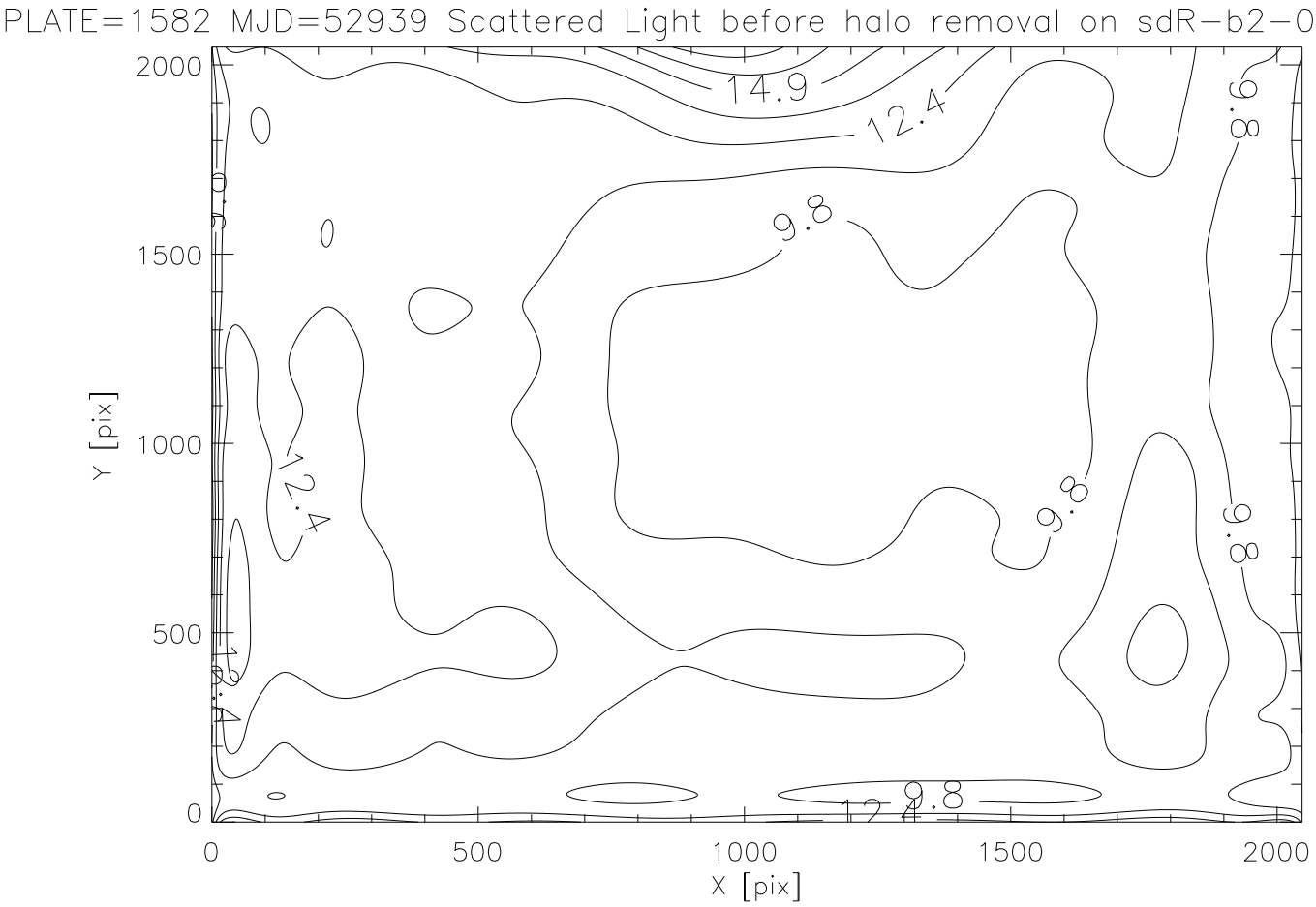

PLATE=1582 MJD=52939 sdR-b2-00022942.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

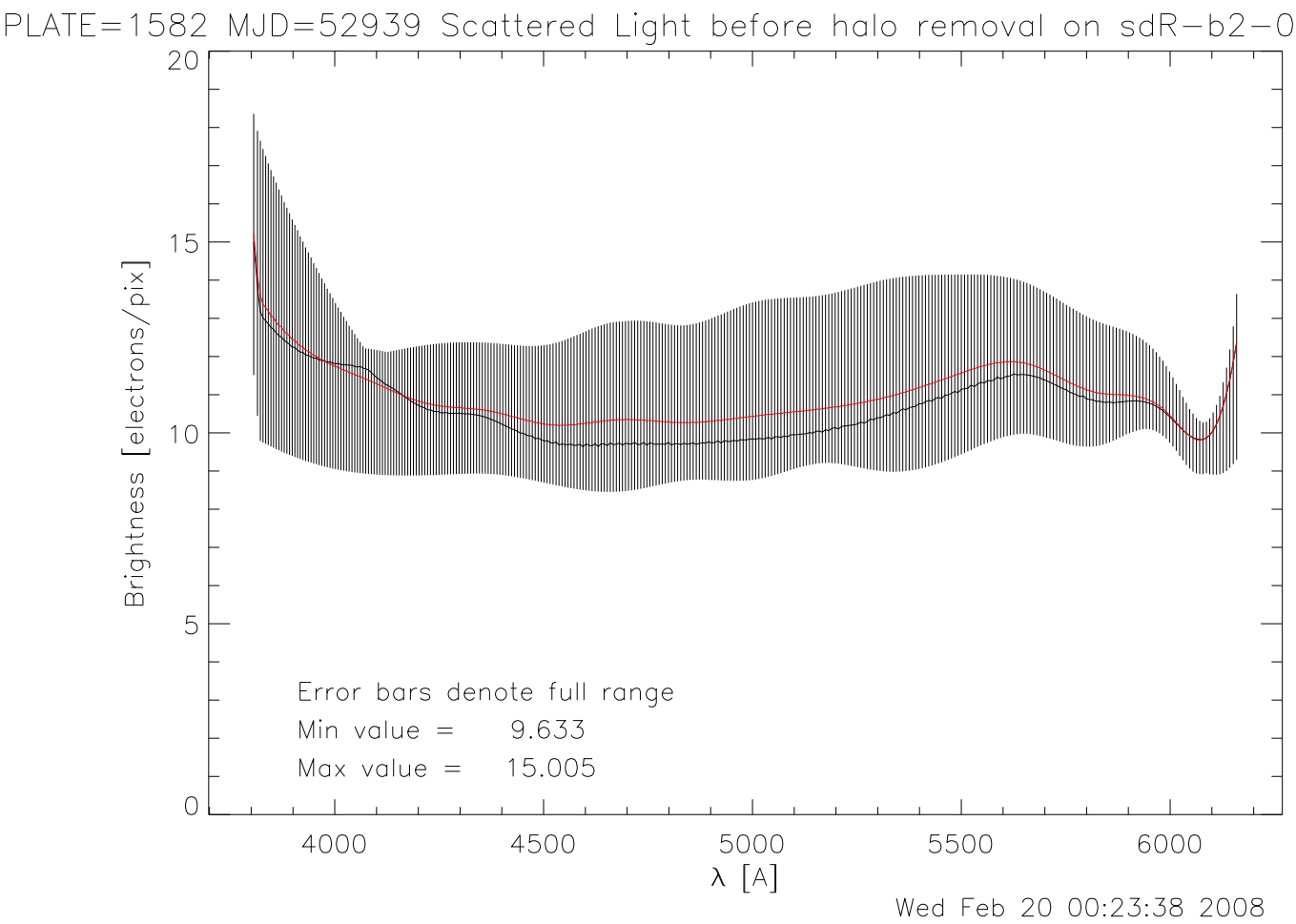

Number of sky fibers = 14
PLATE=1582 MJD=52939 sdR-b2-00022942.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

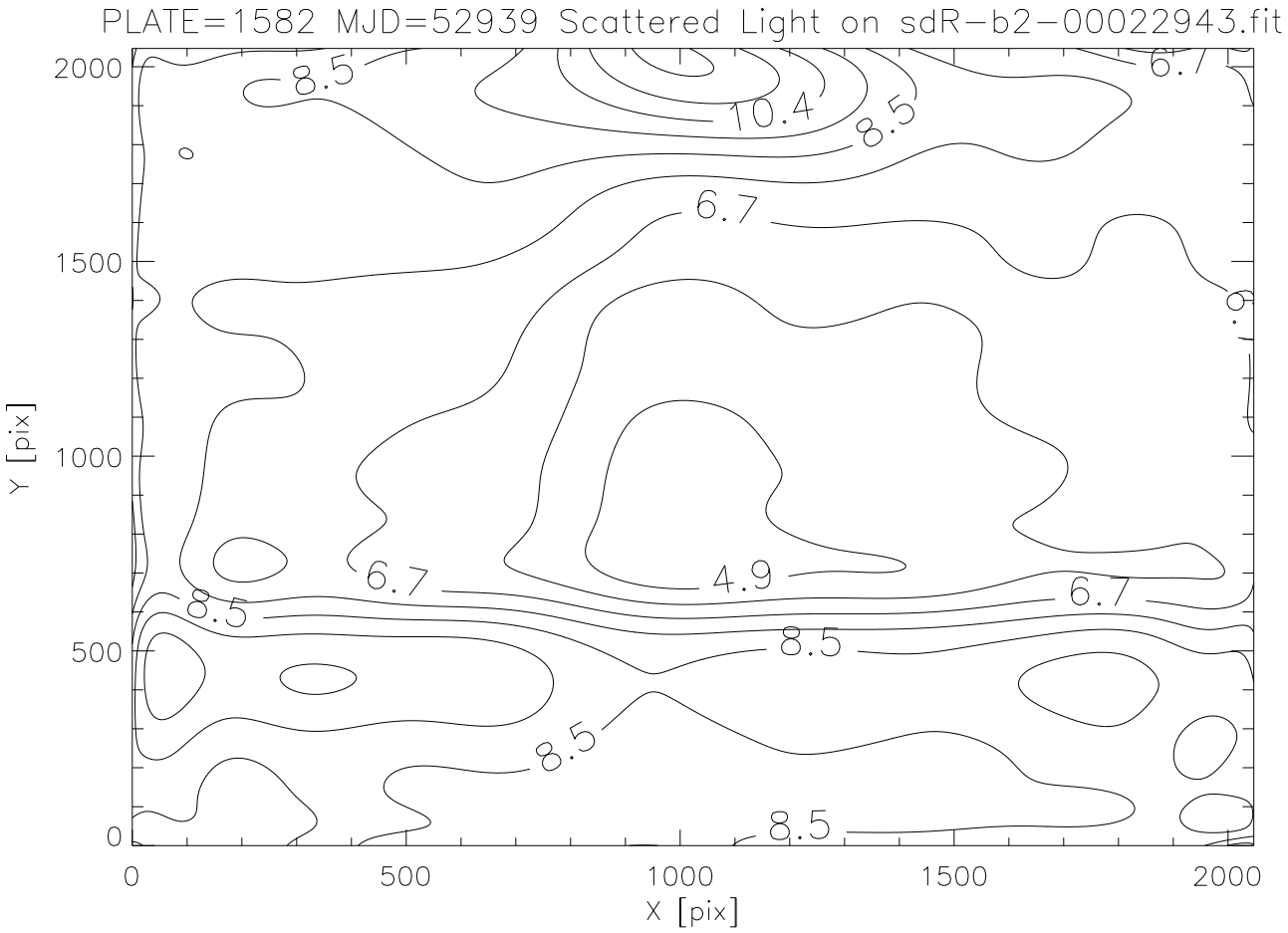

PLATE=1582 MJD=52939 sdR-b2-00022942.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.26 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

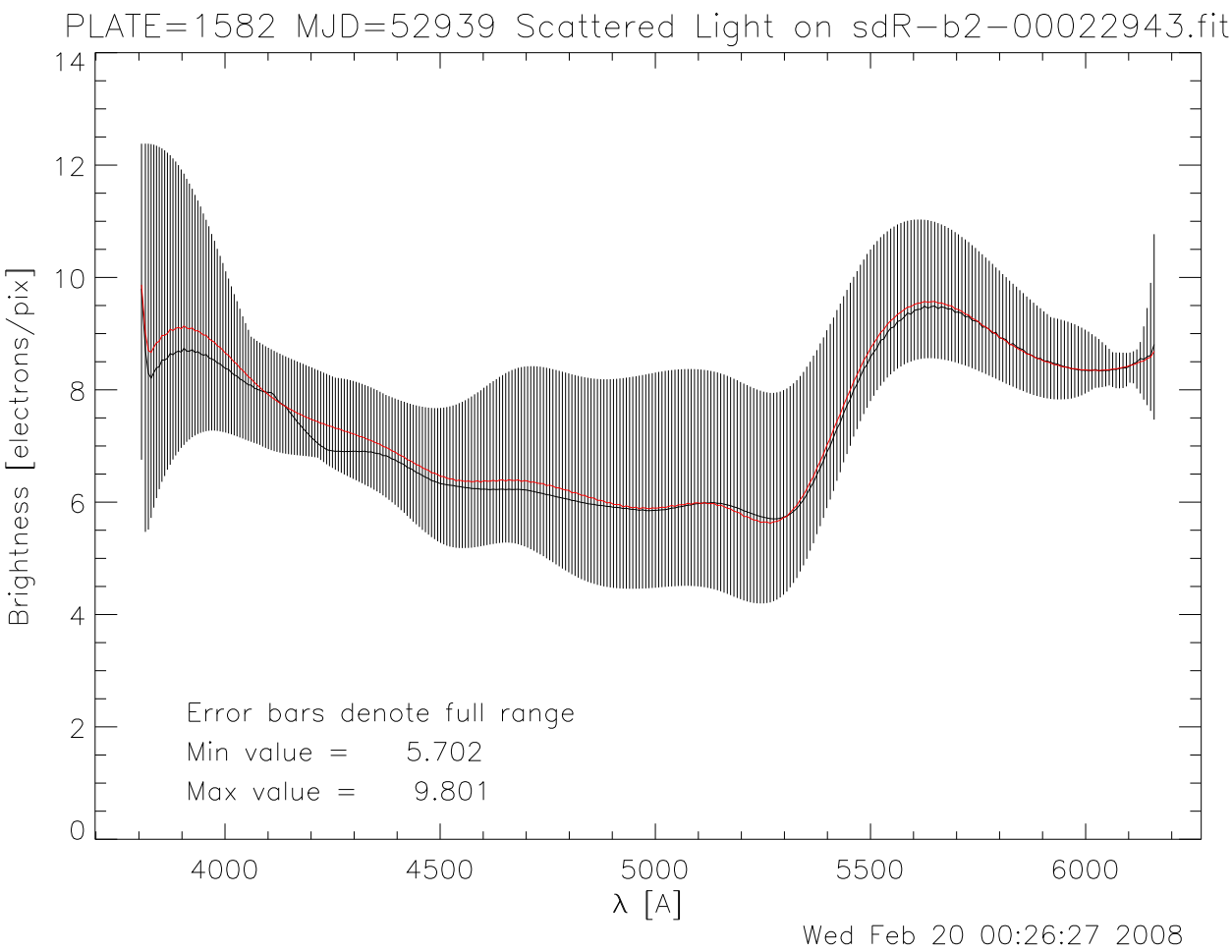

PLATE=1582 MJD=52939 sdR-b2-00022942.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.85 %
Fiber number
Focal Distance [mm]
Airmass

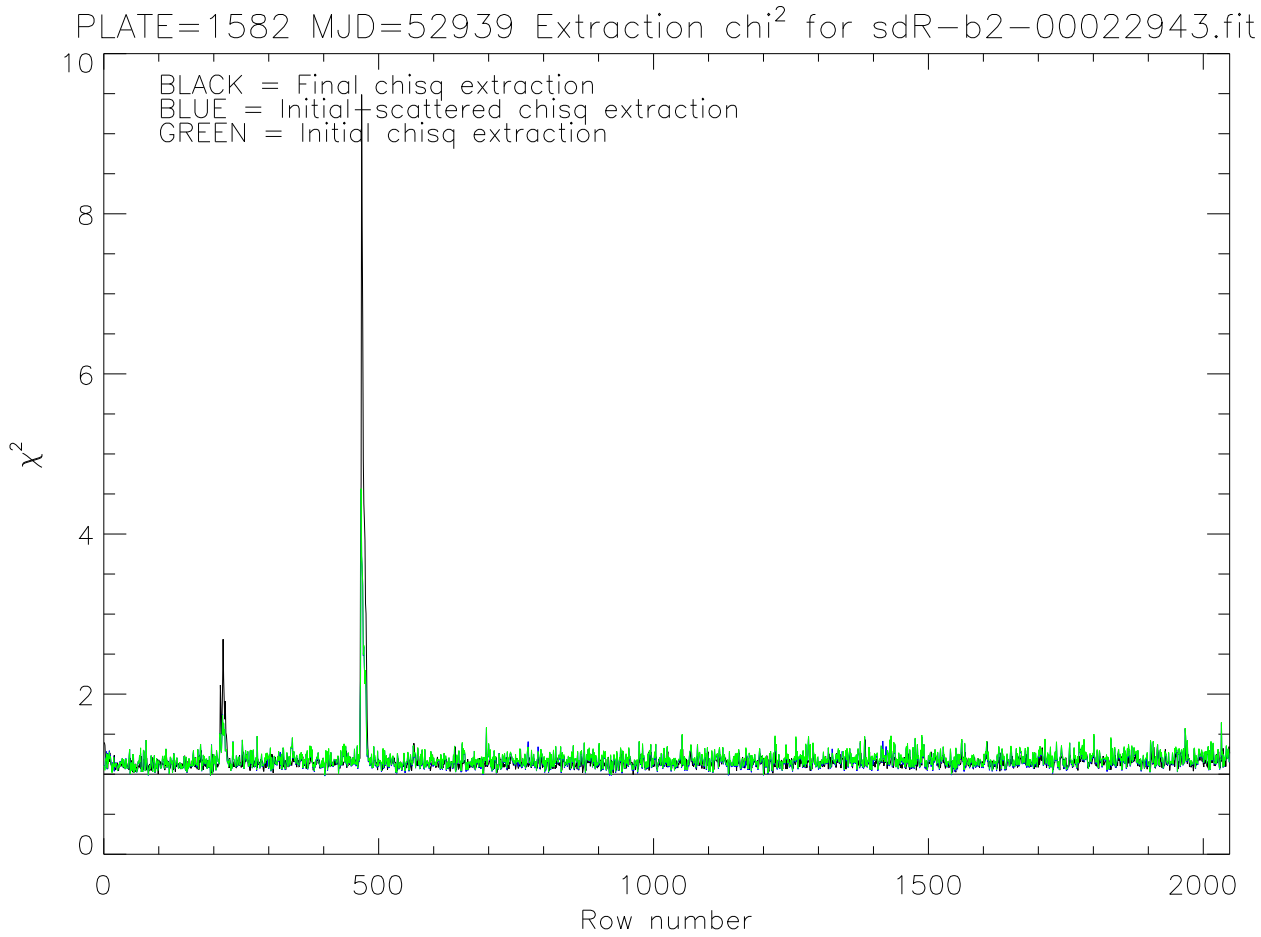

PLATE=1582 MJD=52939 Fiber-Flats for sdR-b2-00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.428
Max value = 1.299
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 00:22:49 2008

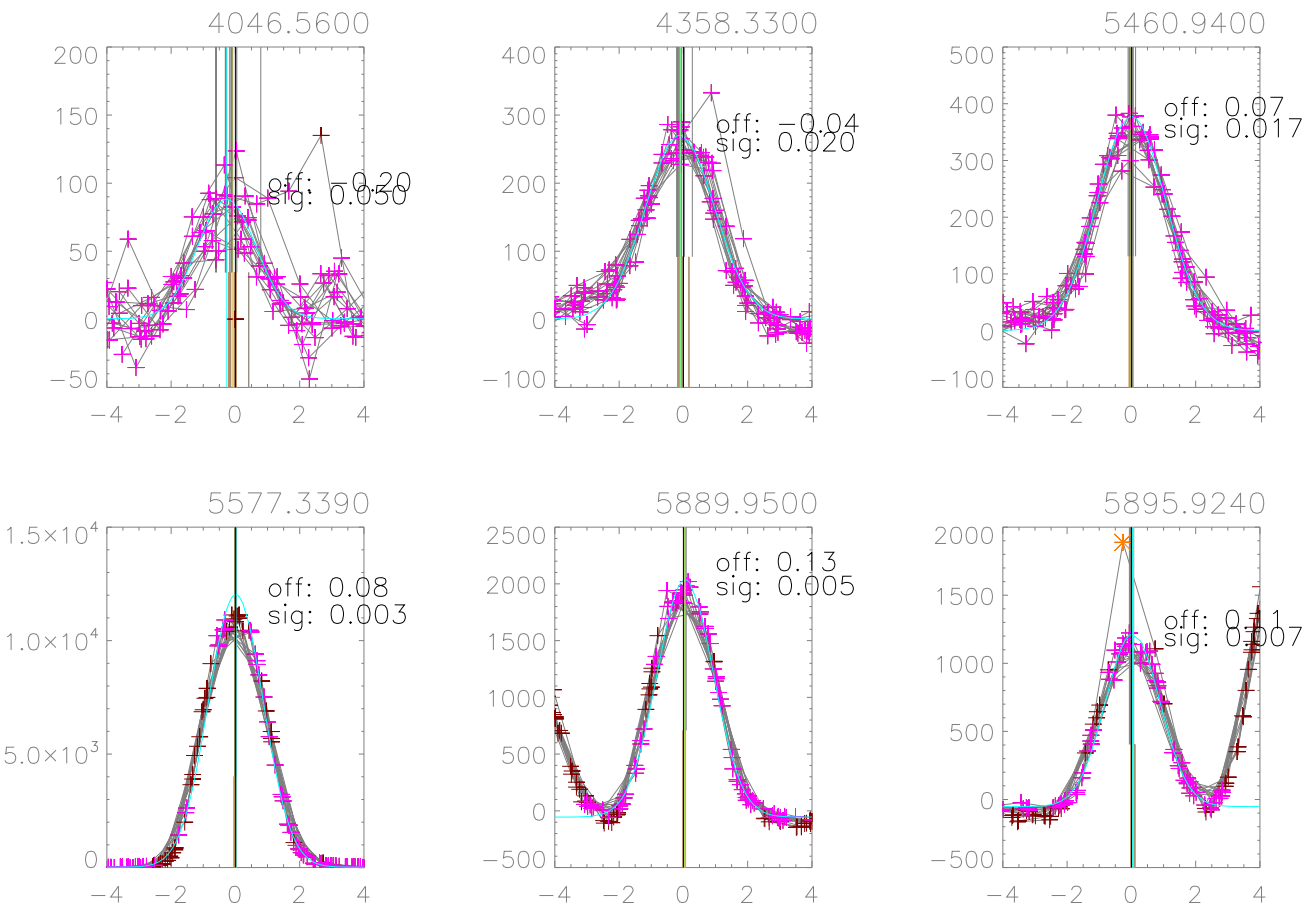

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b2-00022943.f
14.9
12.4
9.8
0
Y [pix]
X [pix]
0
500
1000
1500
2000

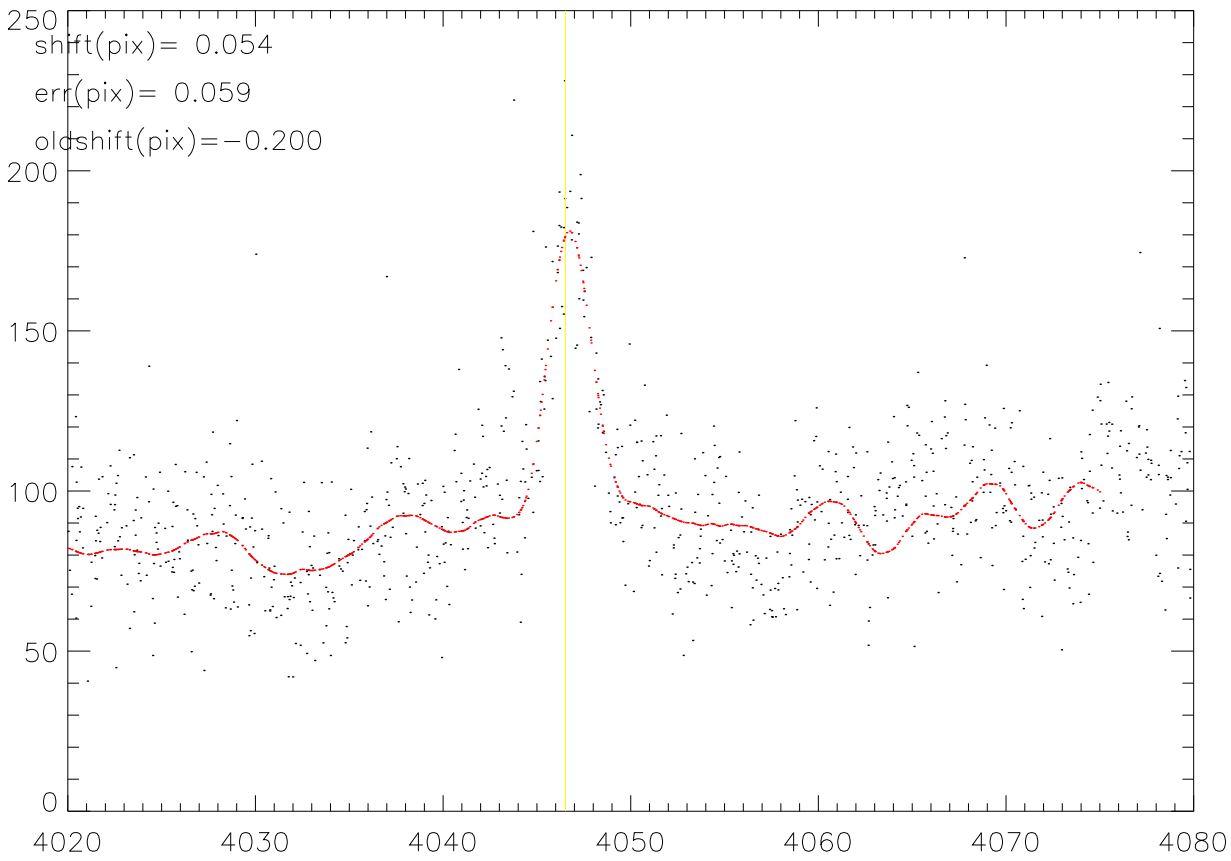

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-b2-00022943.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.633
Max value = 15.005
4000
4500
5000
5500
6000
λ [A]
Wed Feb 20 00:23:38 2008

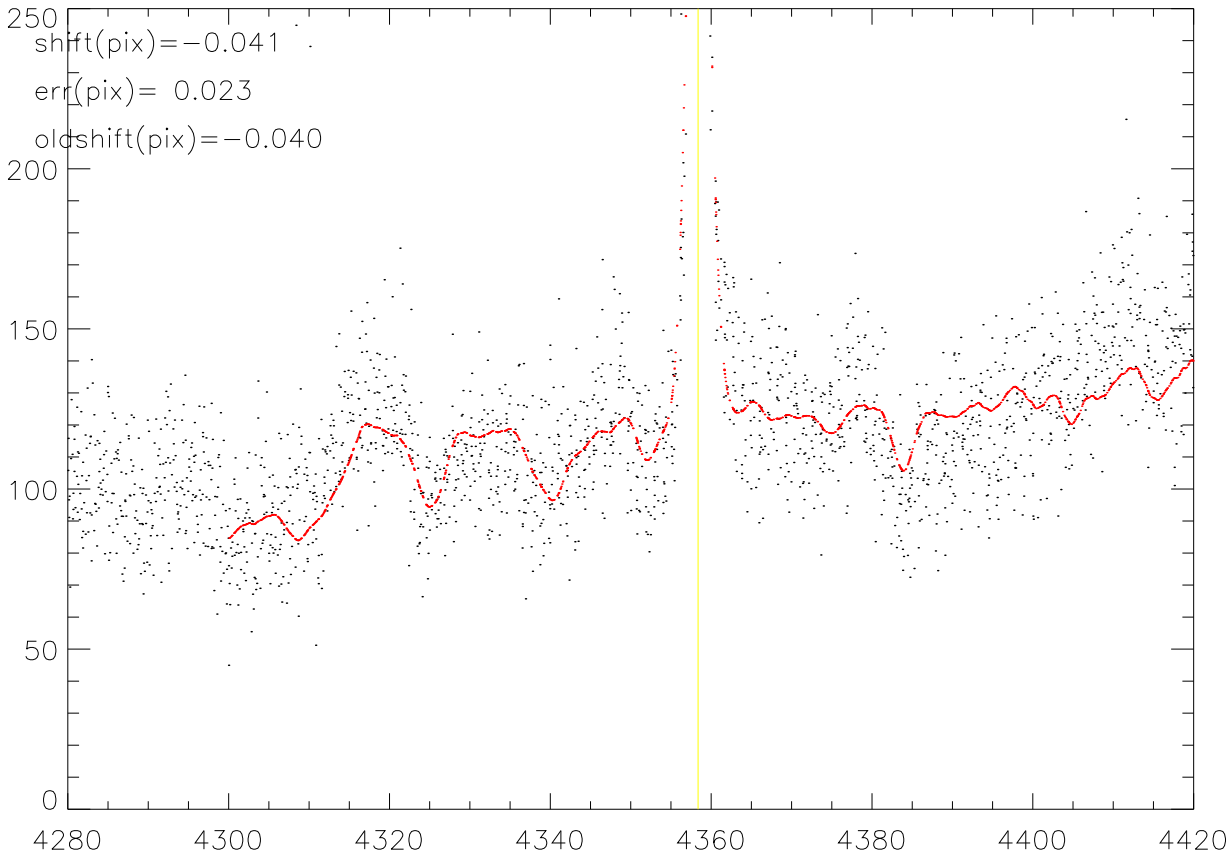

PLATE=1582 MJD=52939 Scattered Light on sdR-b2-00022943.fit
8.5
10.4
8.5
6.7
6.7
6.7
4.9
6.7
8.5
8.5
8.5
8.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

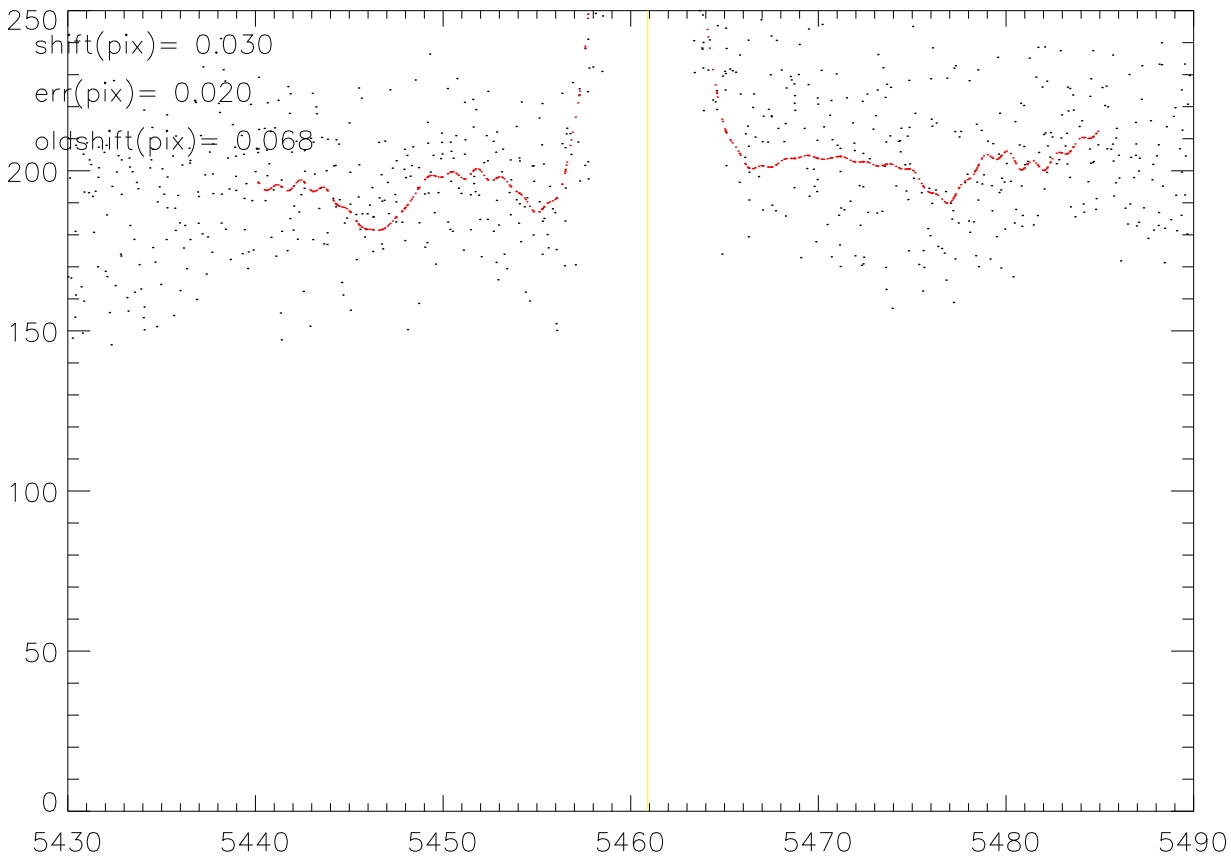

PLATE=1582 MJD=52939 Scattered Light on sdR-b2-00022943.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.702
Max value = 9.801
Wed Feb 20 00:26:27 2008

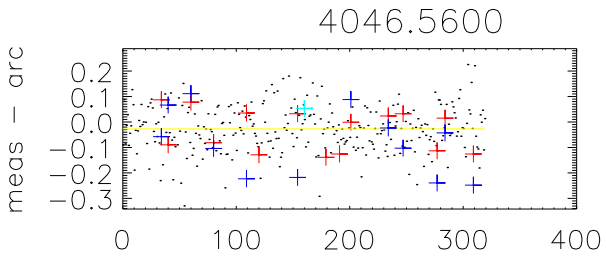

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-b2-00022943.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

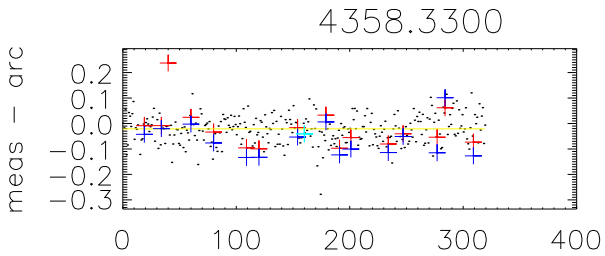

4046.5600
off: −0.20
sig: 0.050
4358.3300
off: −0.04
sig: 0.020
5460.9400
off: 0.07
sig: 0.017
5577.3390
off: 0.08
sig: 0.003
5889.9500
off: 0.13
sig: 0.005
5895.9240
off: 0.11
sig: 0.007

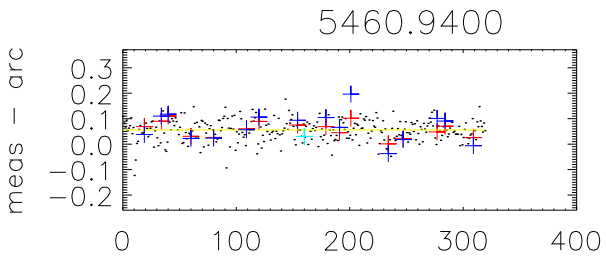

shift(pix)= 0.054
err(pix)= 0.059
oldshift(pix)=−0.200
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

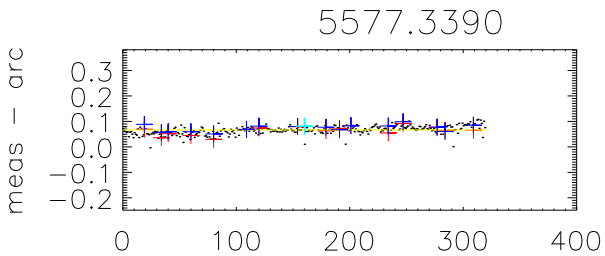

shift(pix)=−0.041
err(pix)= 0.023
oldshift(pix)=−0.040
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

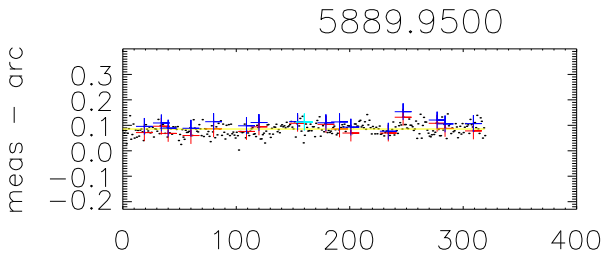

shift(pix)= 0.030
err(pix)= 0.020
oldshift(pix)= 0.068
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

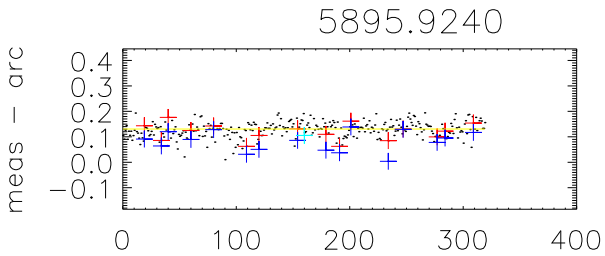

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

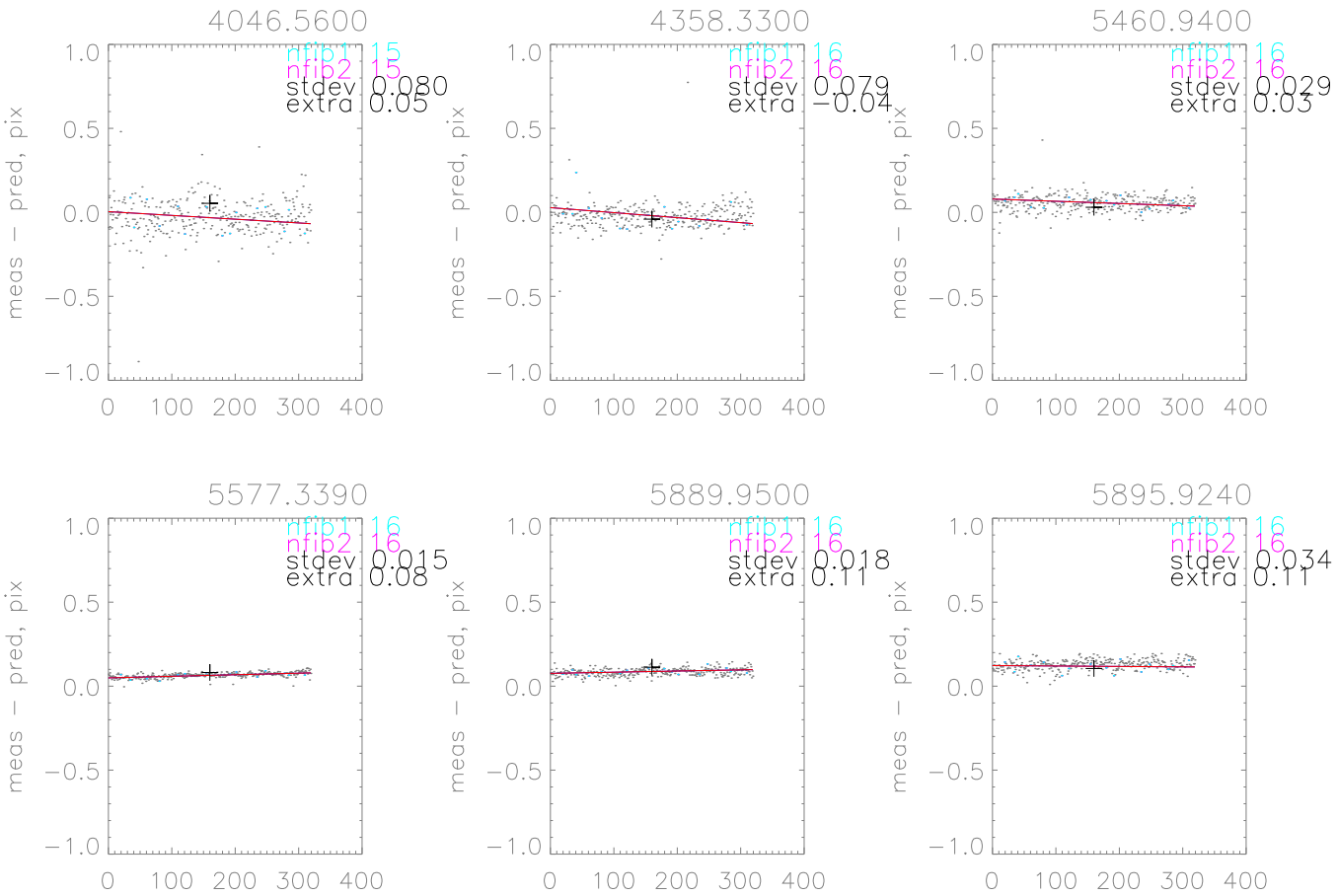

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

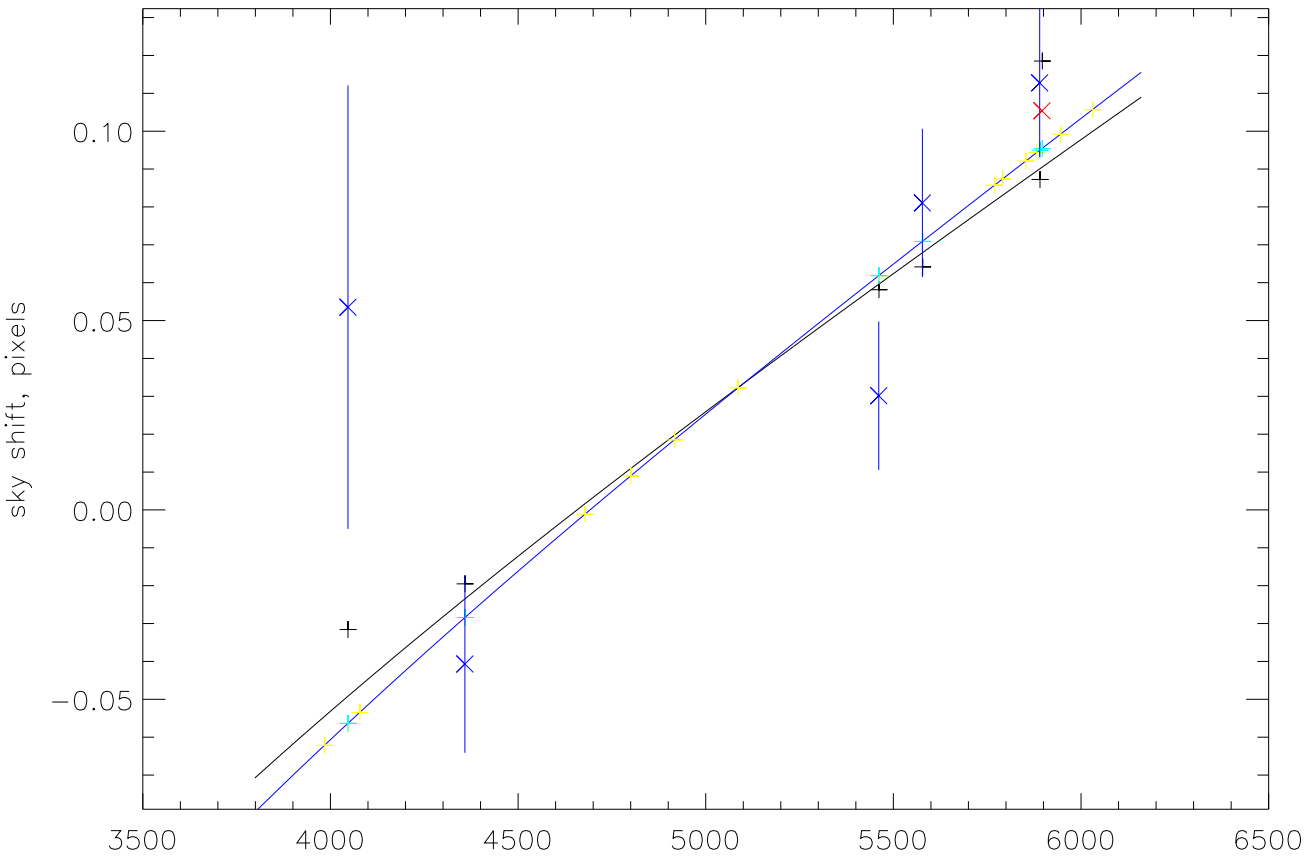

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

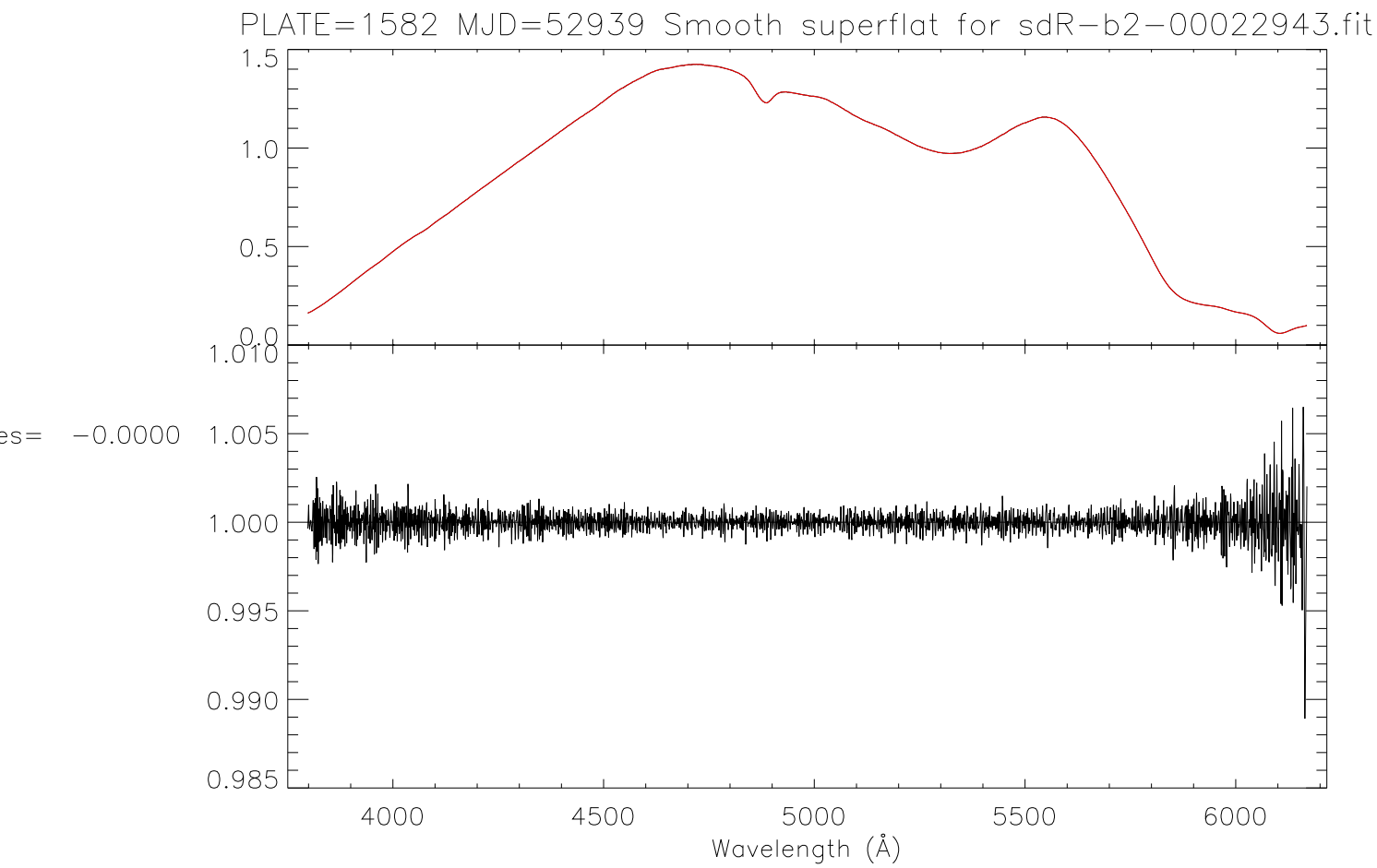

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

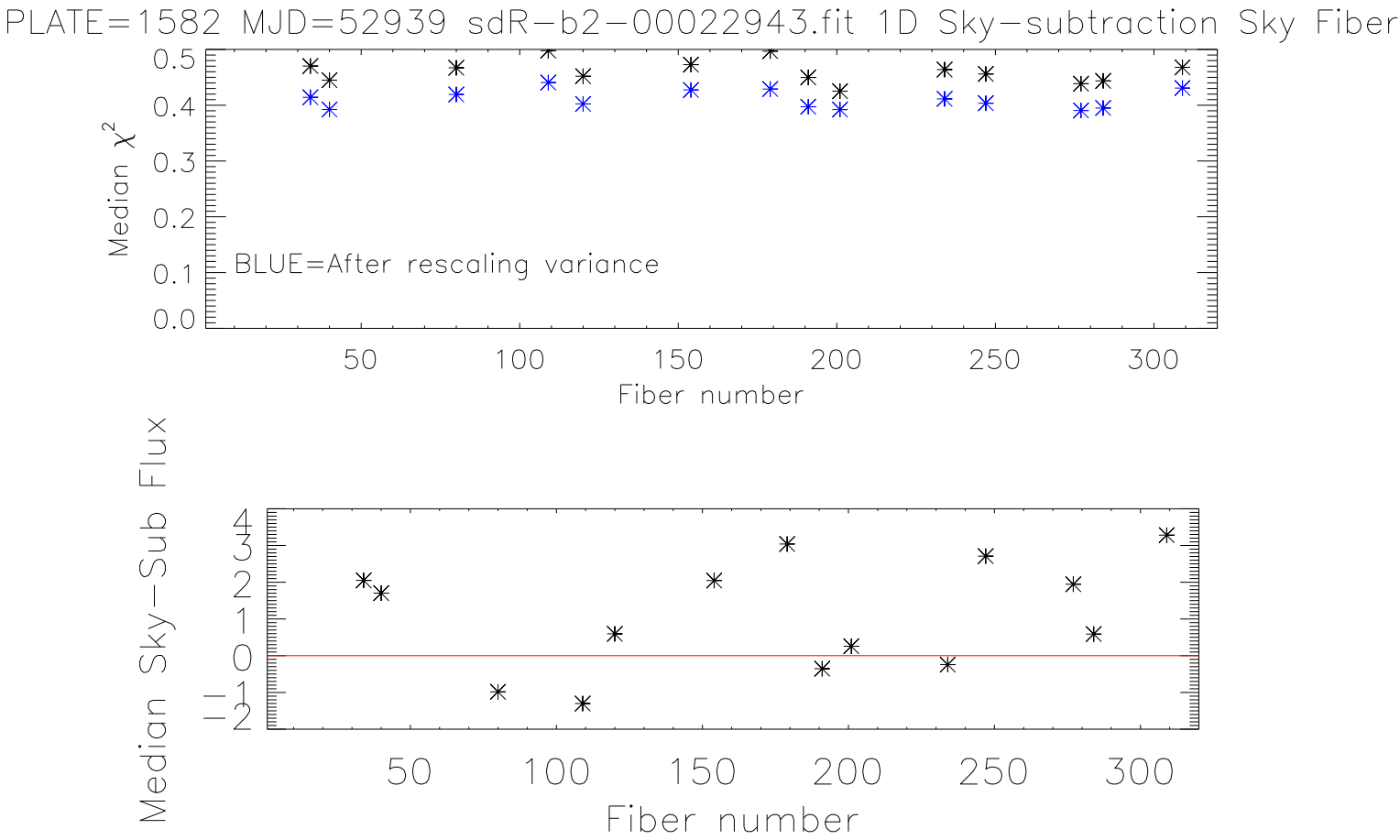

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

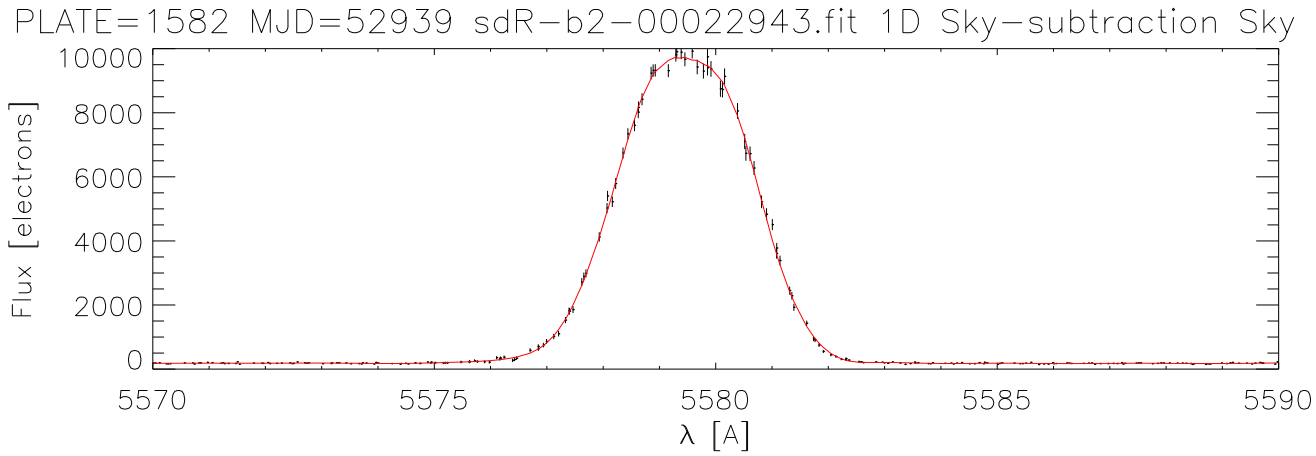

4046.5600
nfib1 15
nfib2 15
stdev 0.080
extra 0.05
4358.3300
nfib1 16
nfib2 16
stdev 0.079
extra −0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.029
extra 0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.018
extra 0.11
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

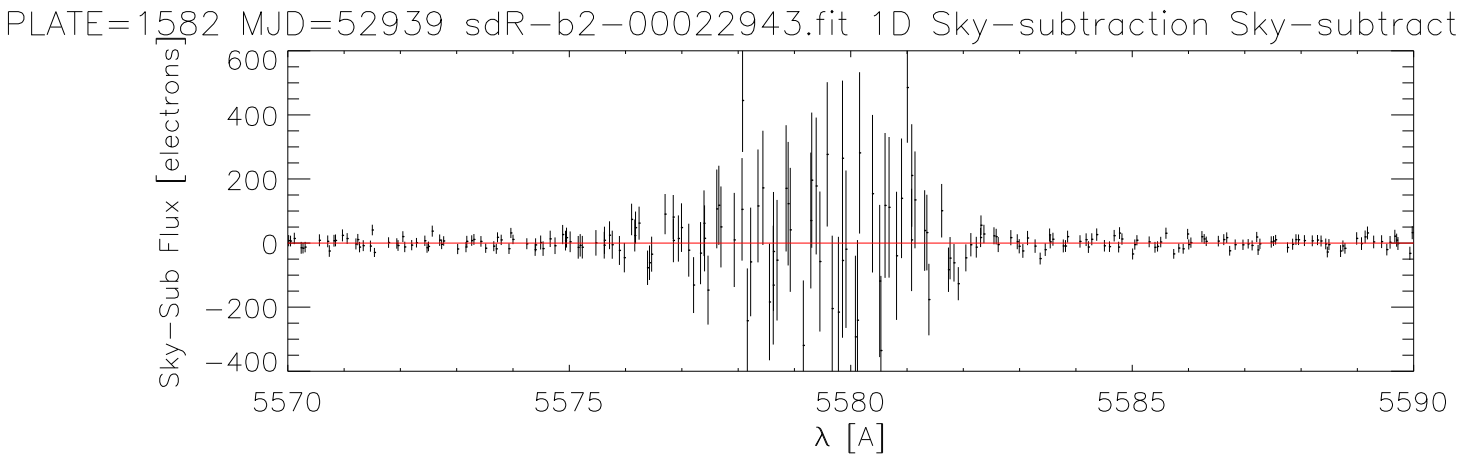

sky shift, pixels
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

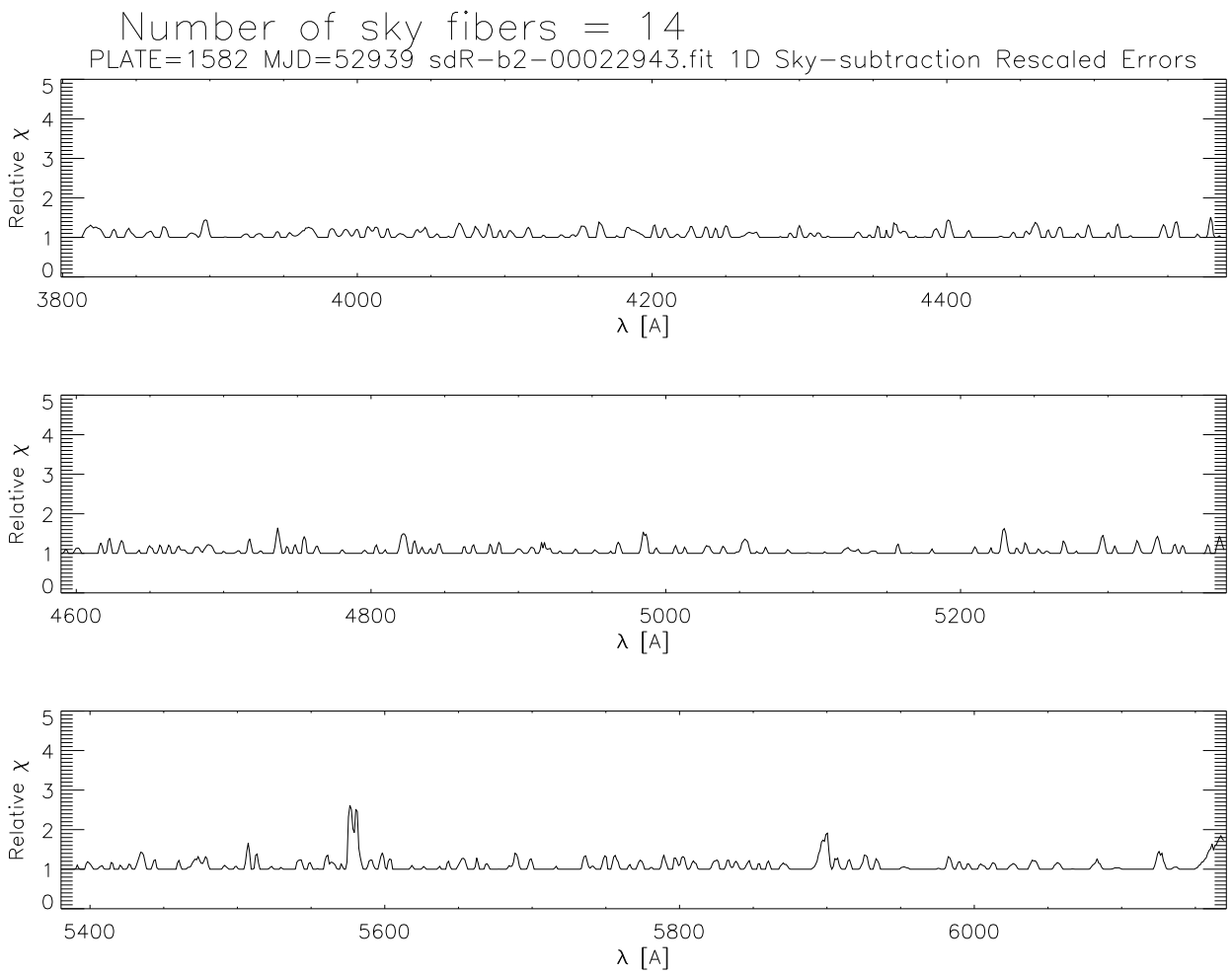

PLATE=1582 MJD=52939 Smooth superflat for sdR-b2-00022943.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

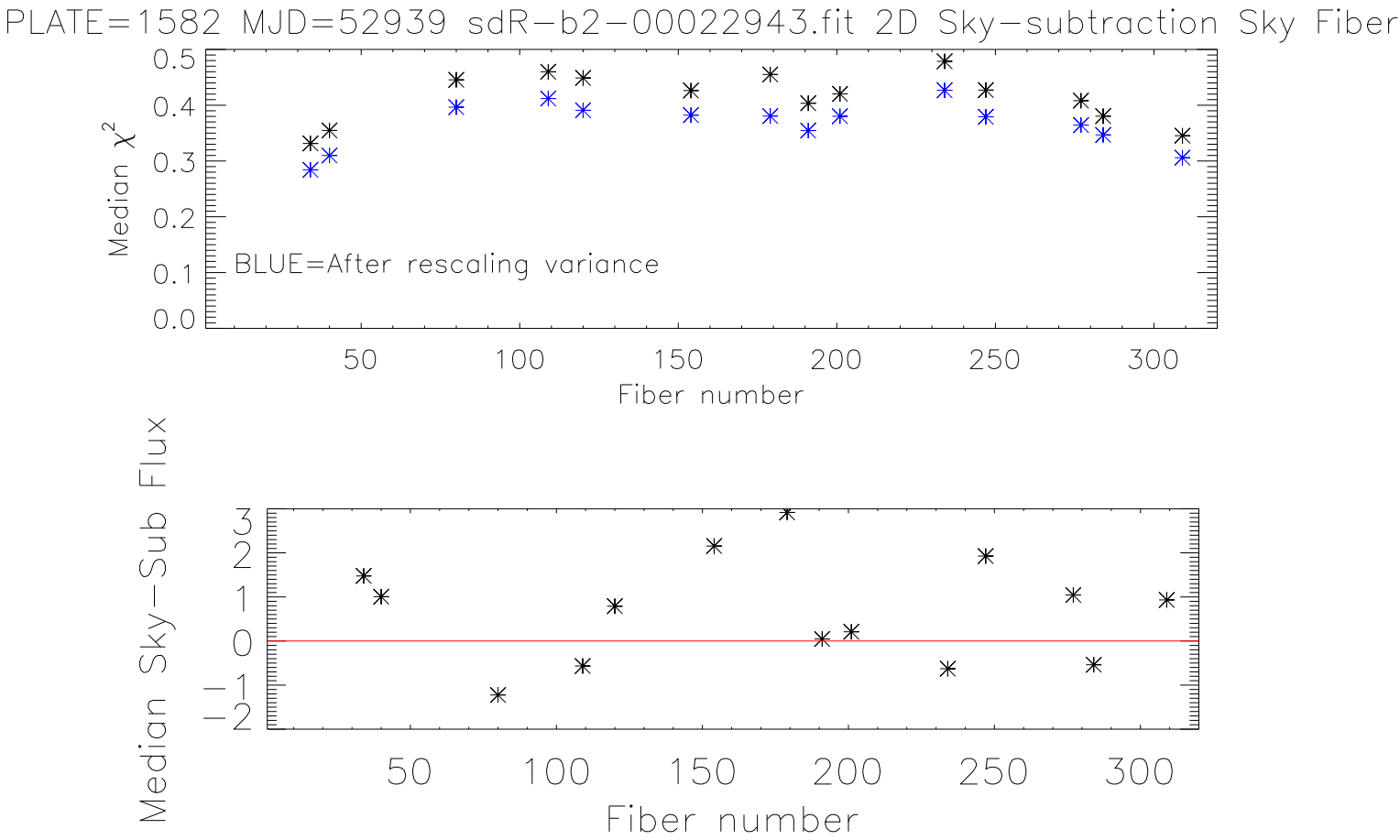
es= −0.0000

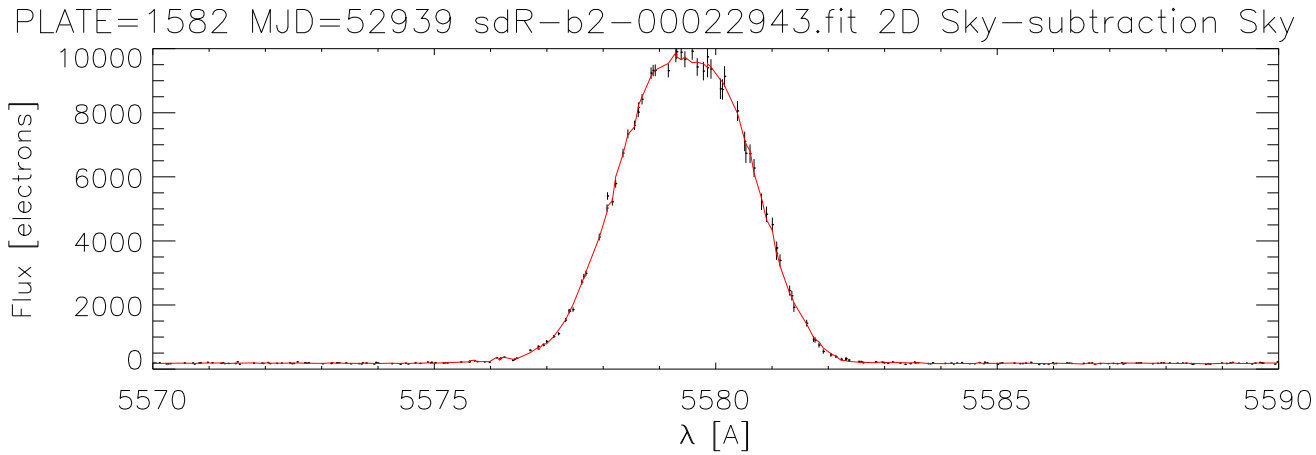

PLATE=1582 MJD=52939 sdR-b2-00022943.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

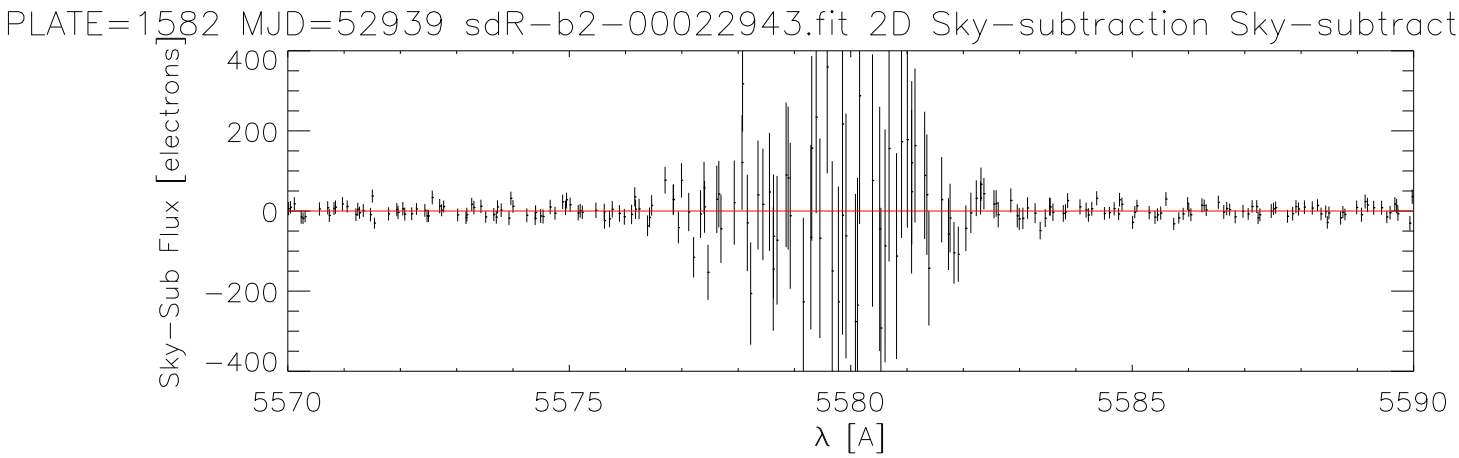

PLATE=1582 MJD=52939 sdR-b2-00022943.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

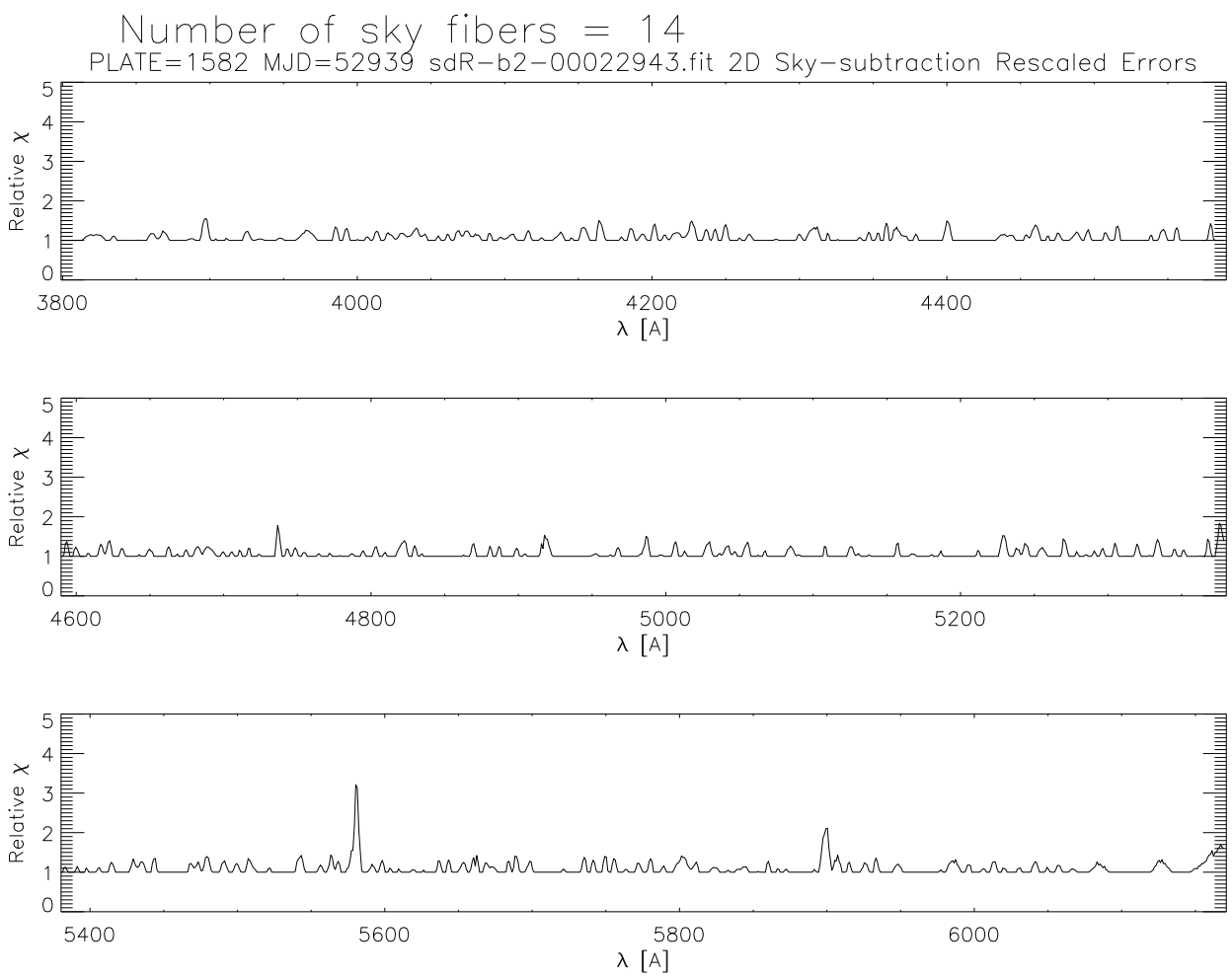

PLATE=1582 MJD=52939 sdR-b2-00022943.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

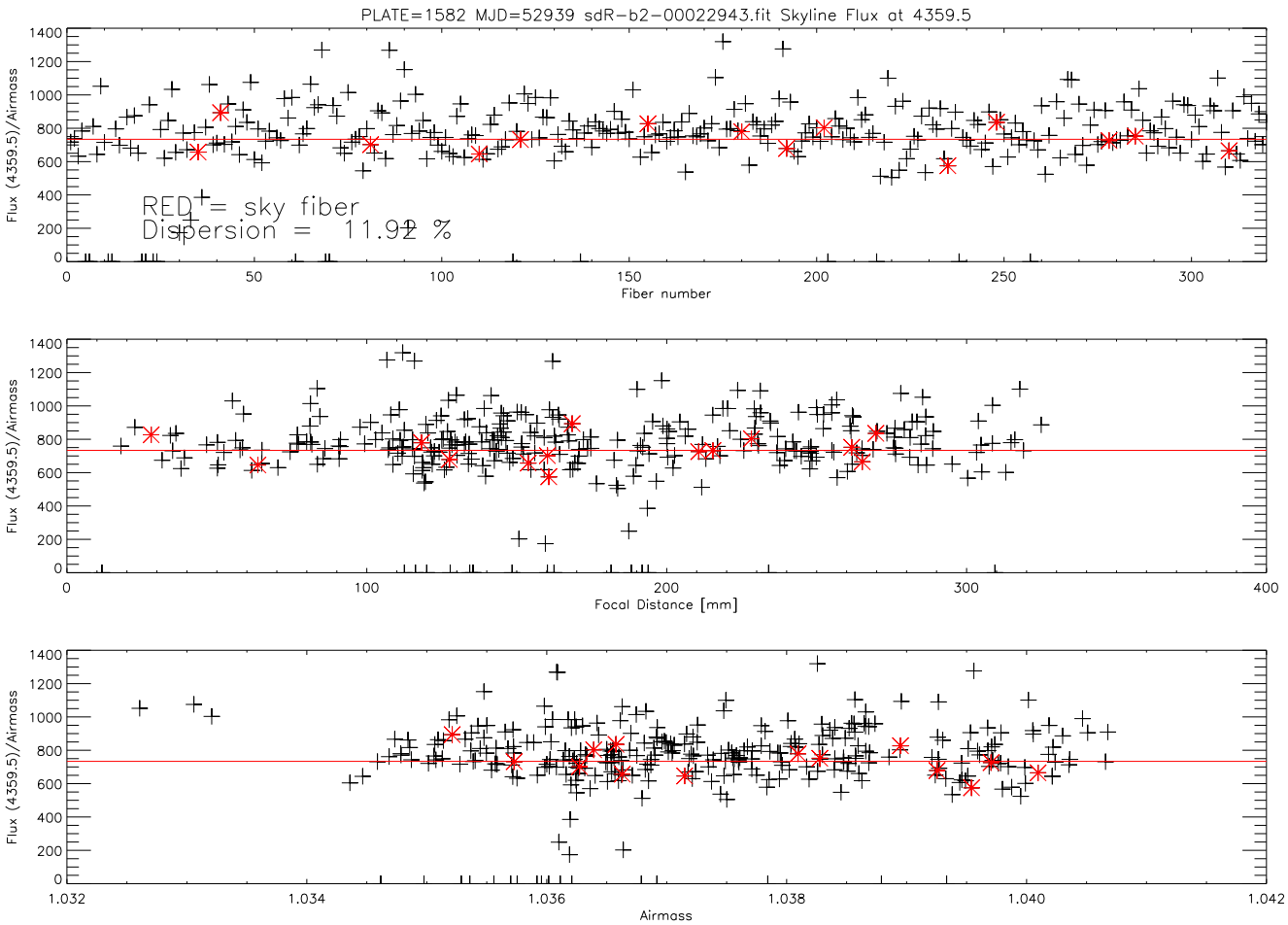

Number of sky fibers = 14
PLATE=1582 MJD=52939 sdR-b2-00022943.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

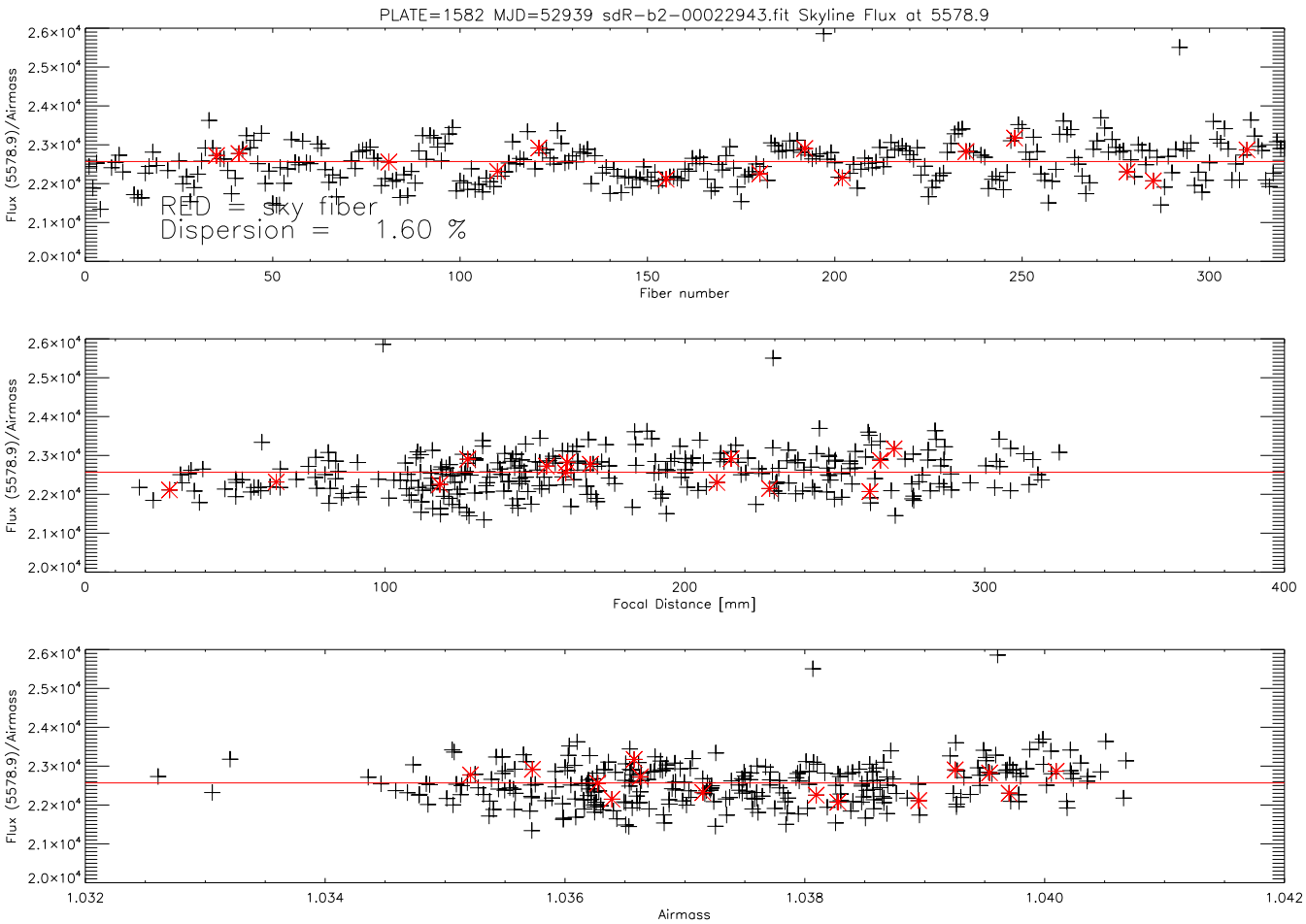

PLATE=1582 MJD=52939 sdR-b2-00022943.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

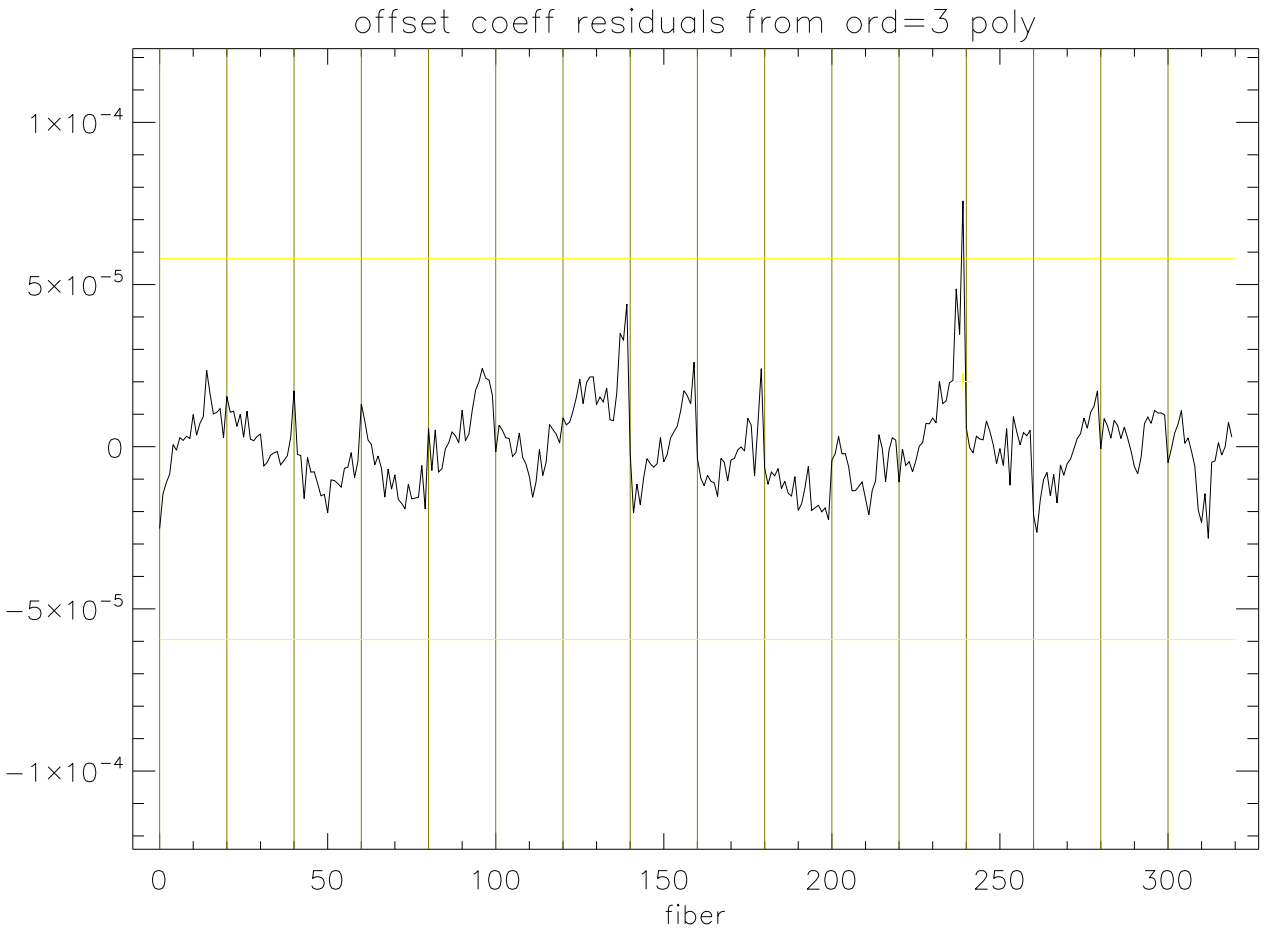

PLATE=1582 MJD=52939 sdR-b2-00022943.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

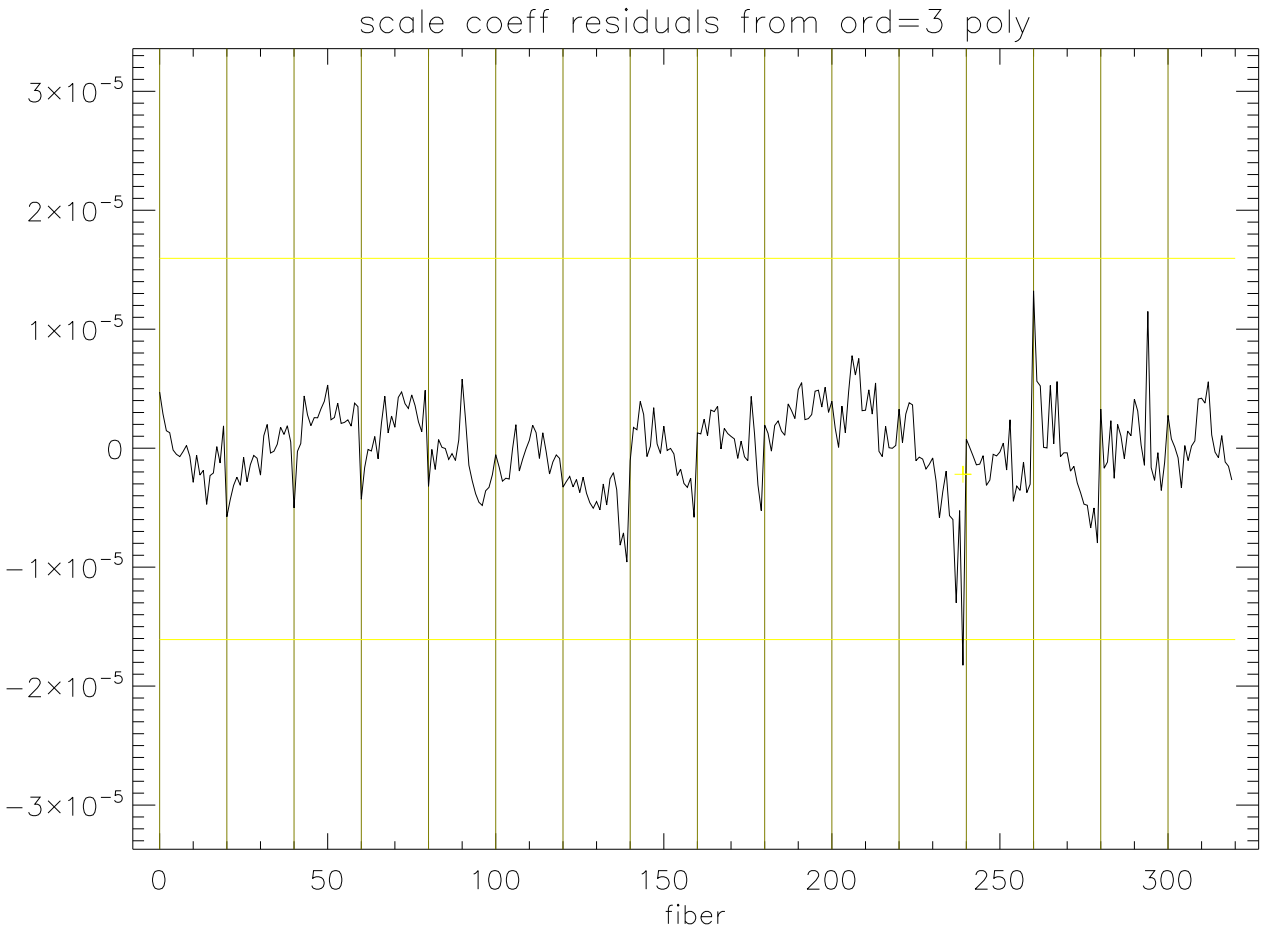

PLATE=1582 MJD=52939 sdR-b2-00022943.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

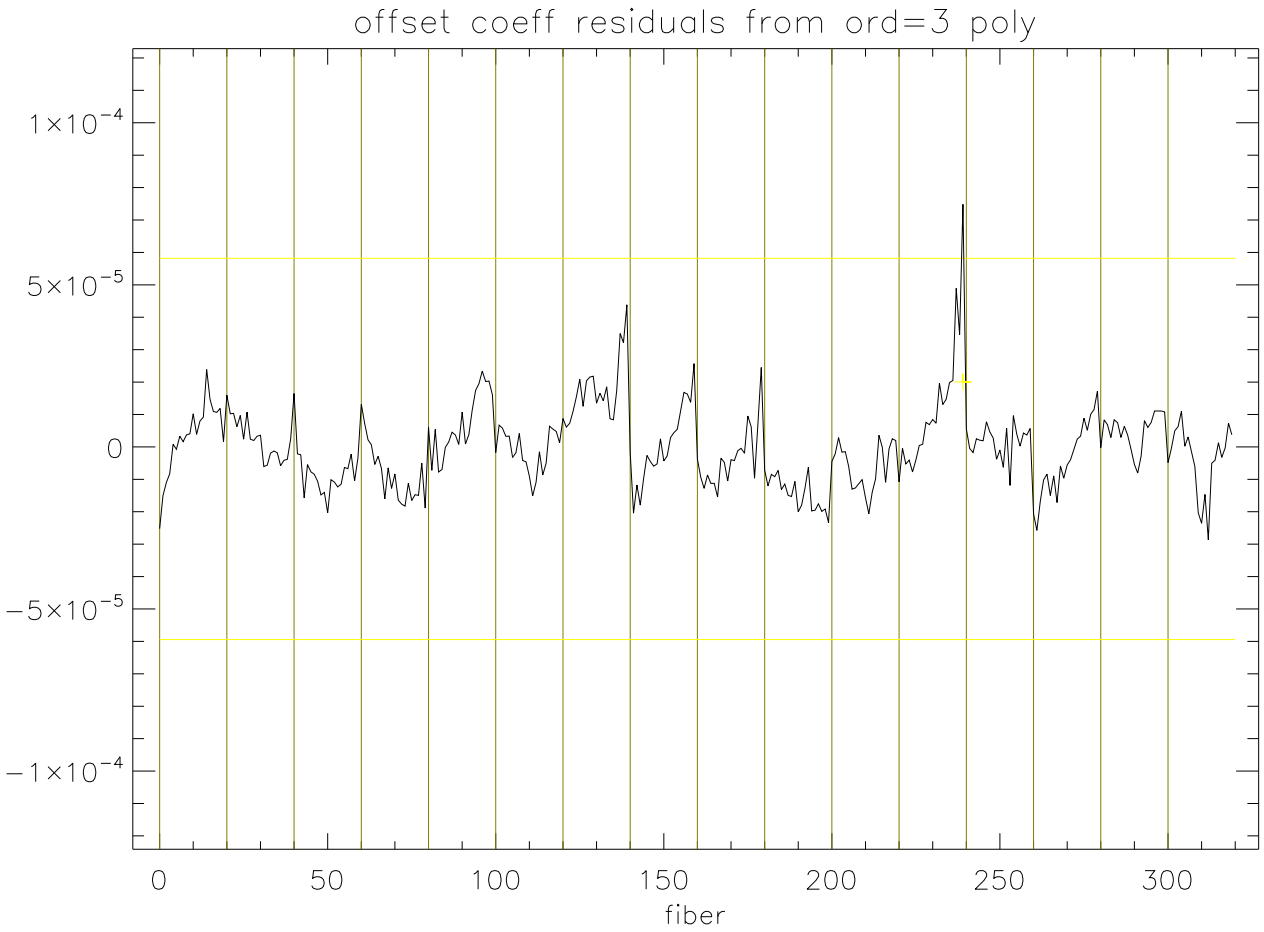

Number of sky fibers = 14
PLATE=1582 MJD=52939 sdR-b2-00022943.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

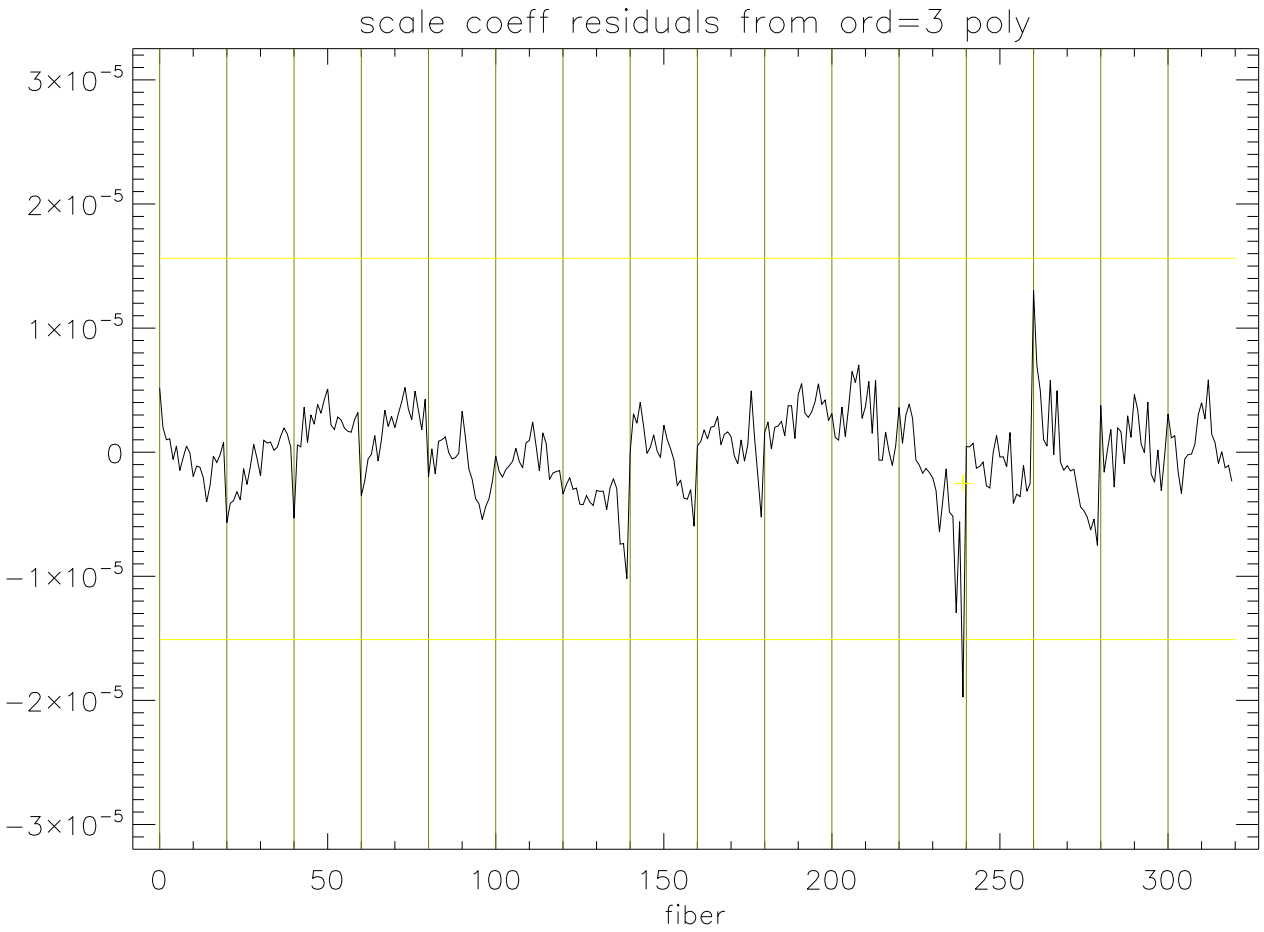

PLATE=1582 MJD=52939 sdR-b2-00022943.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 11.92 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

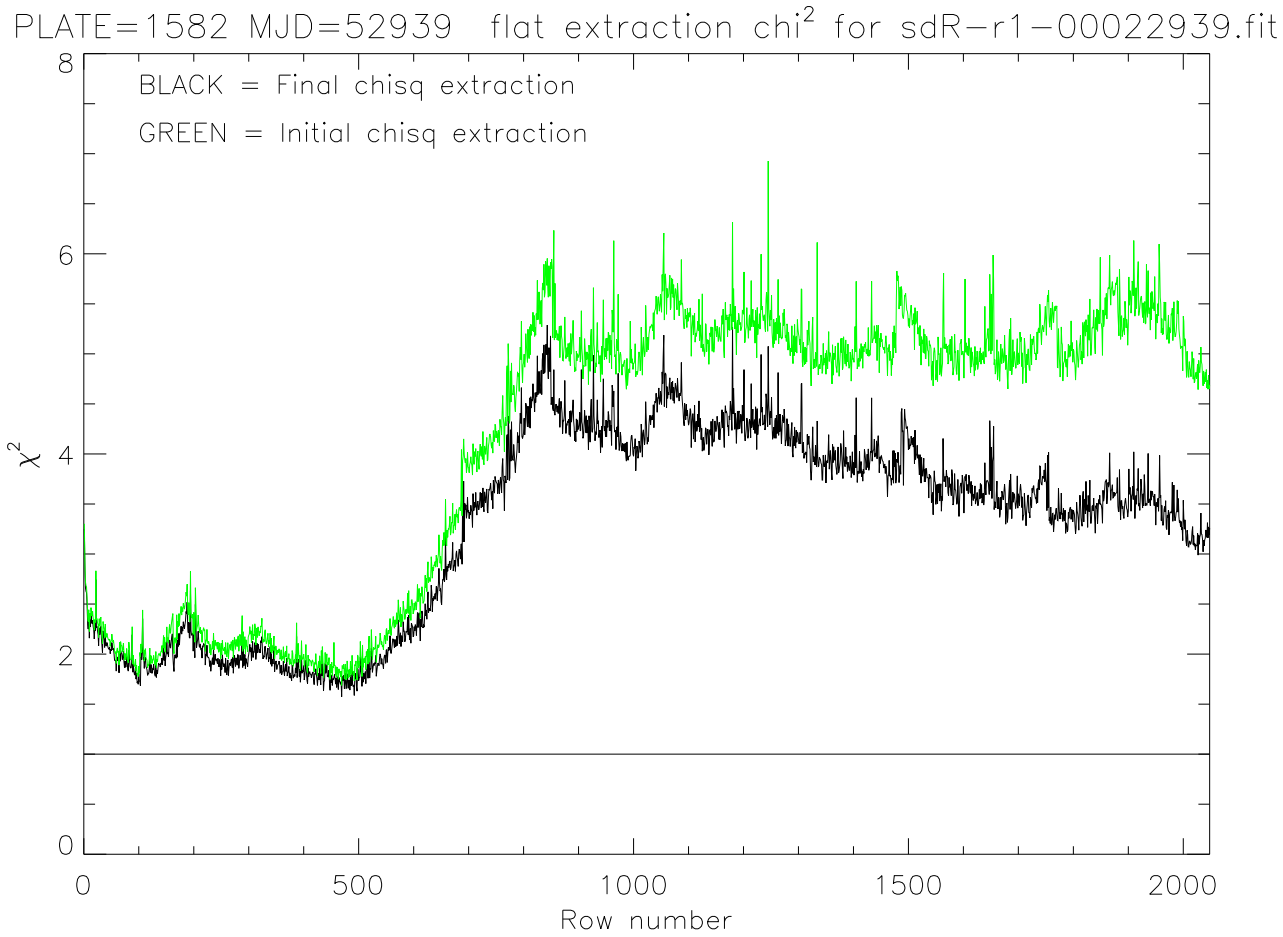

PLATE=1582 MJD=52939 sdR-b2-00022943.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.60 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

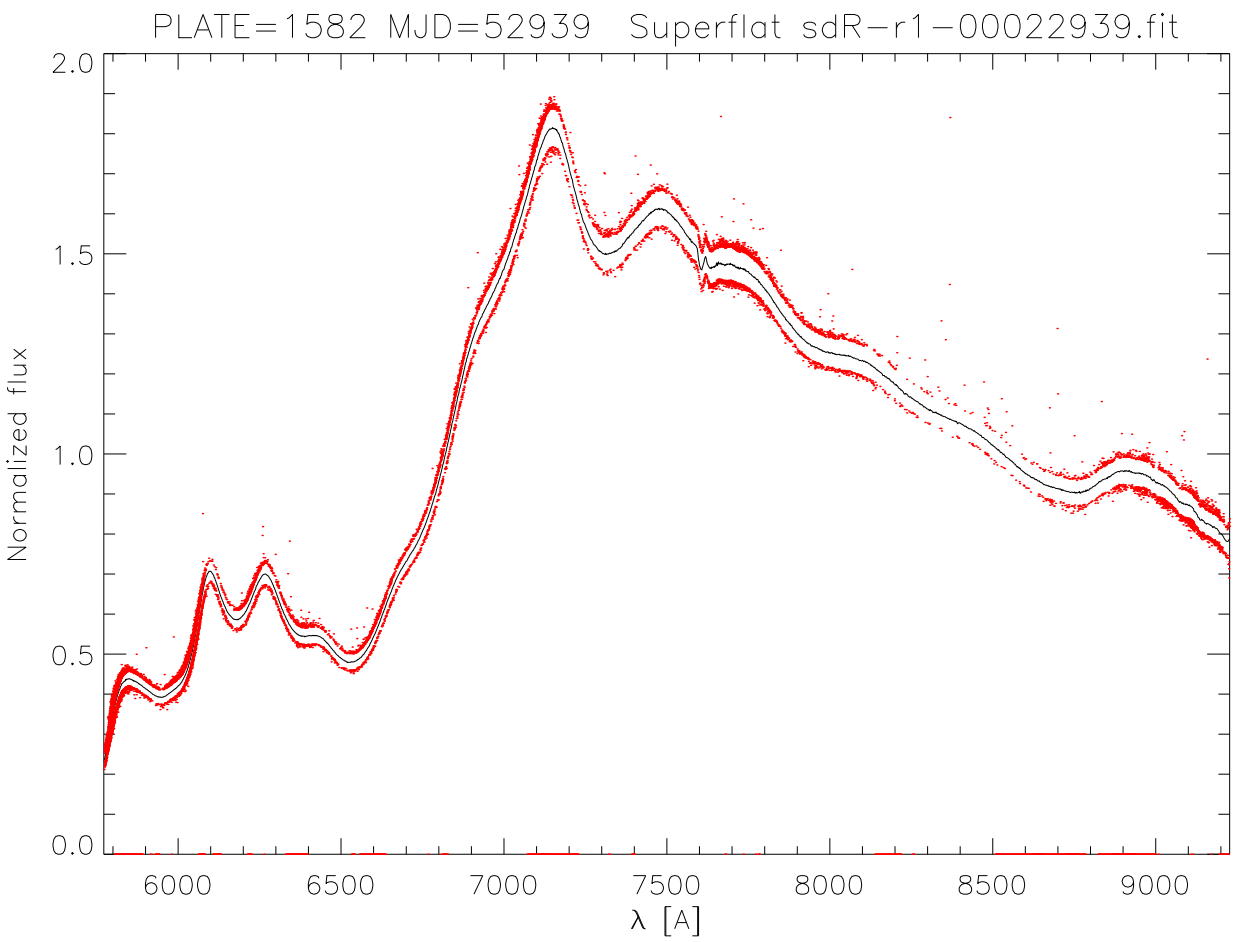

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

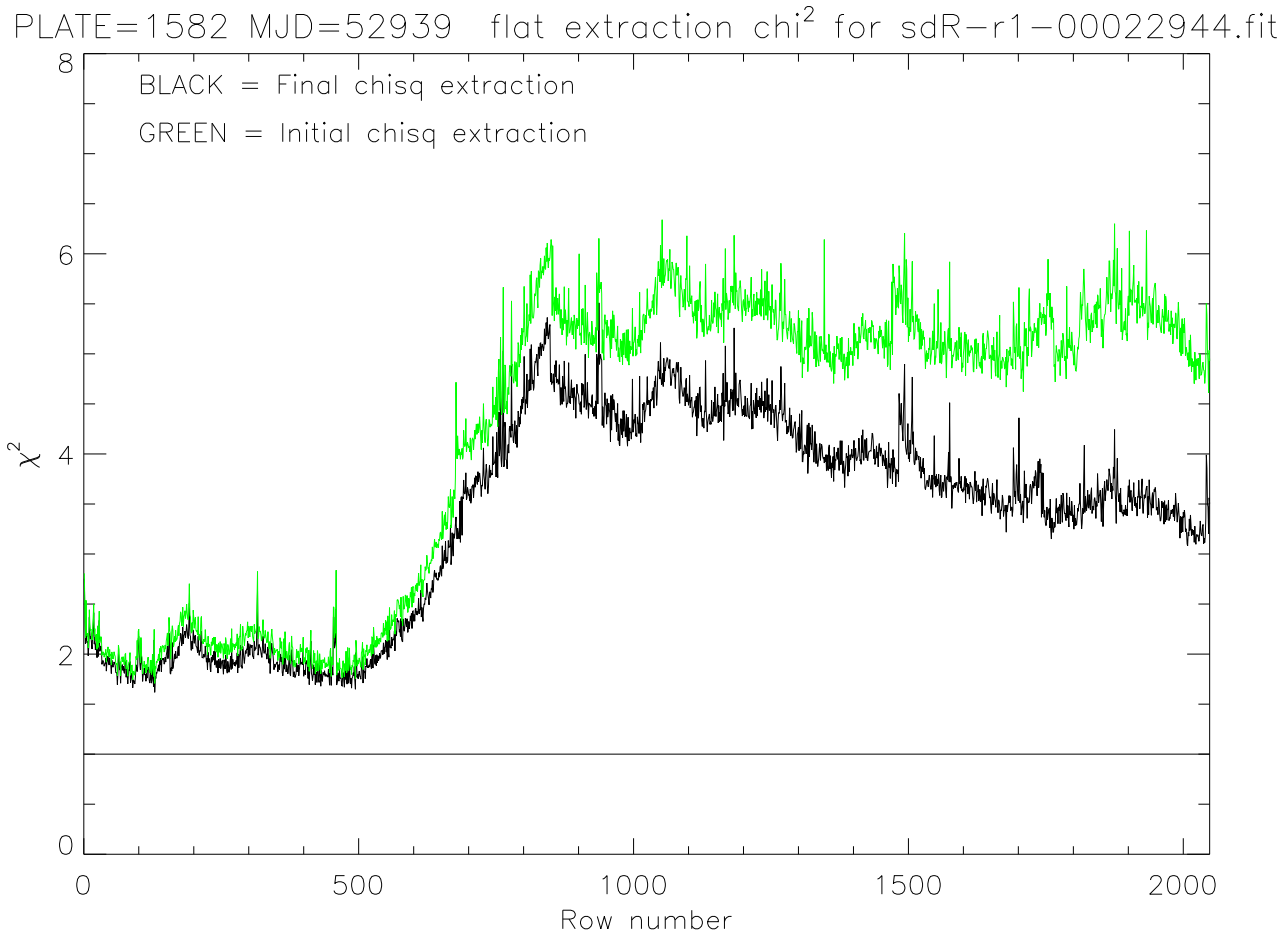

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

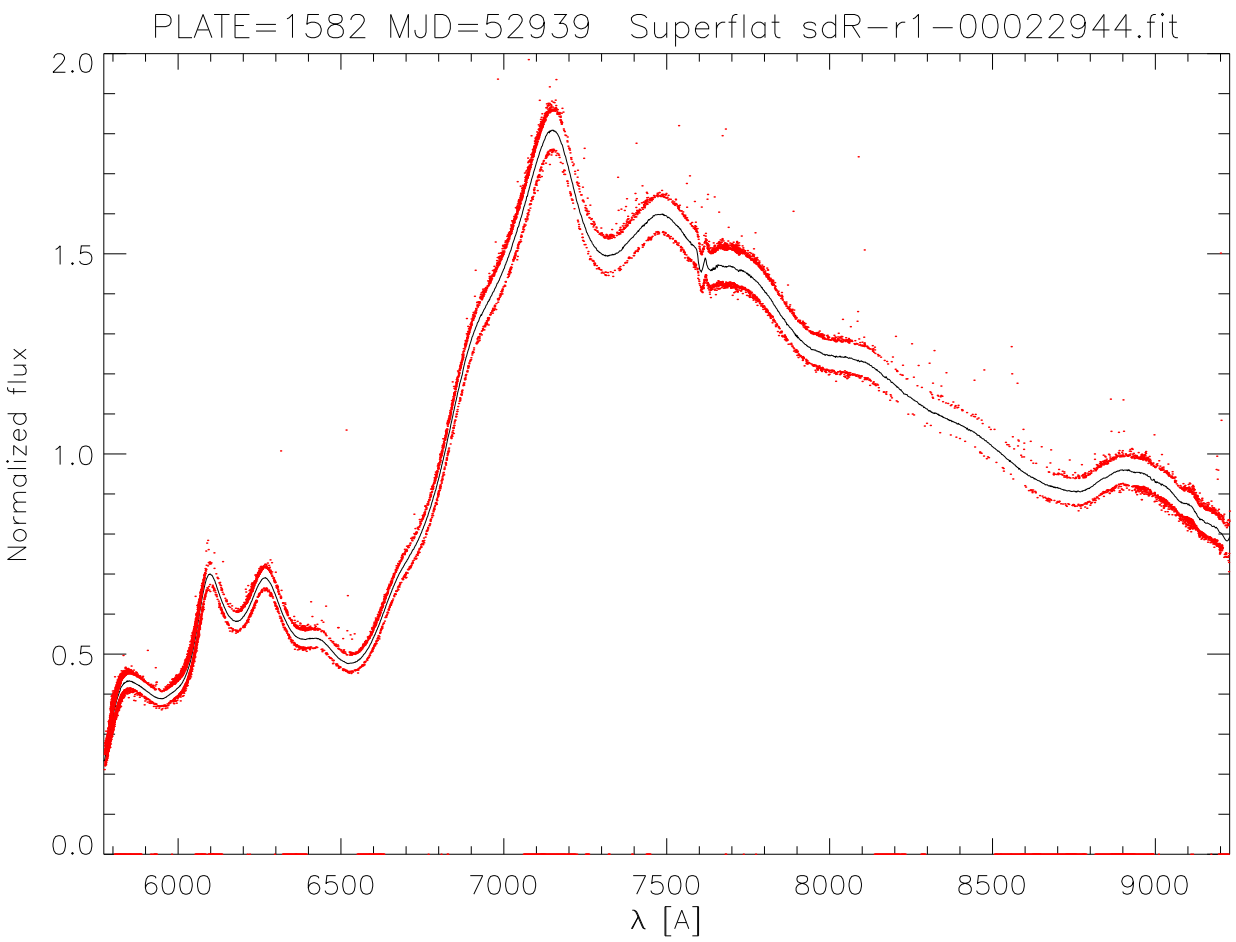

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

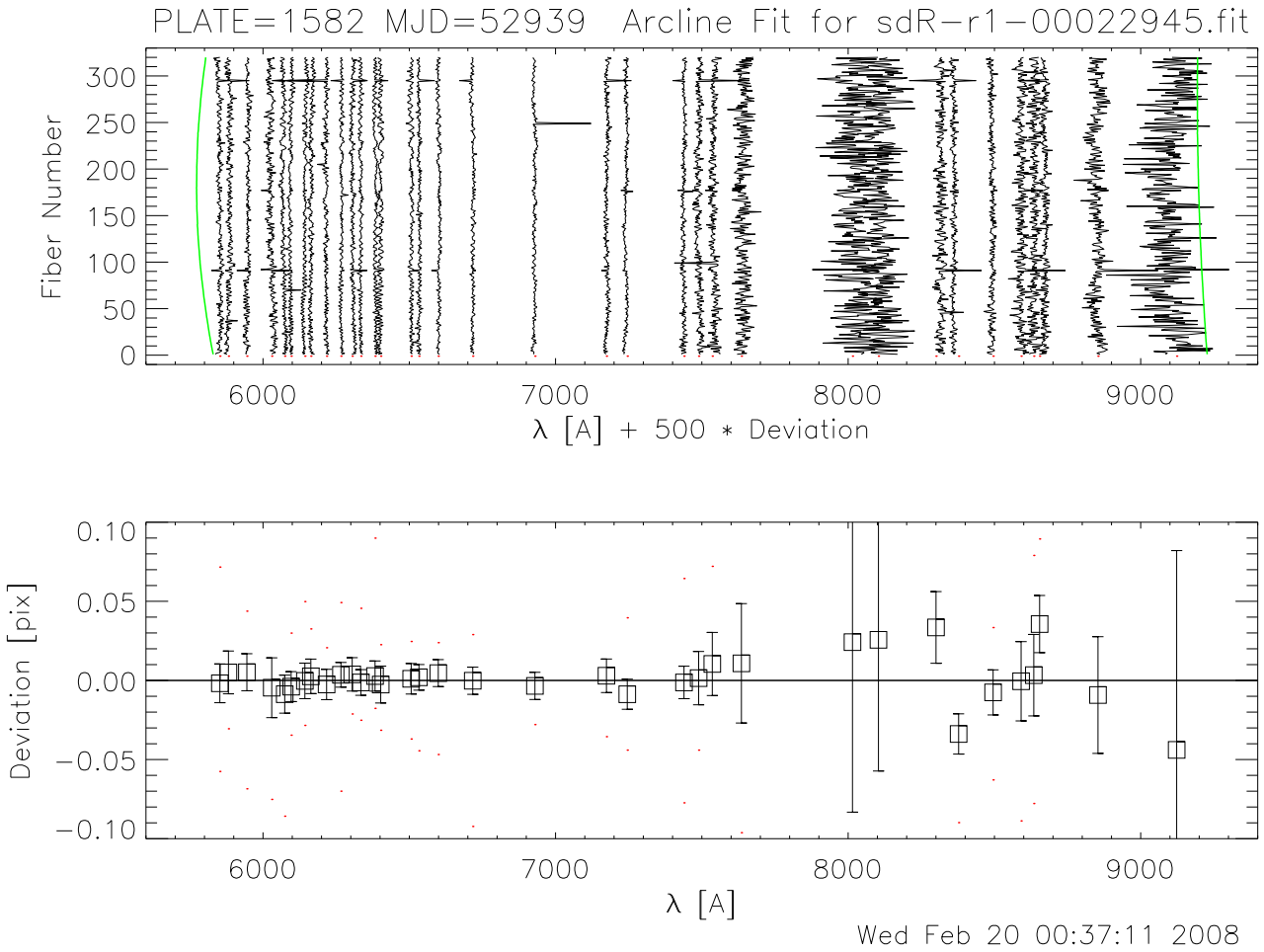

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

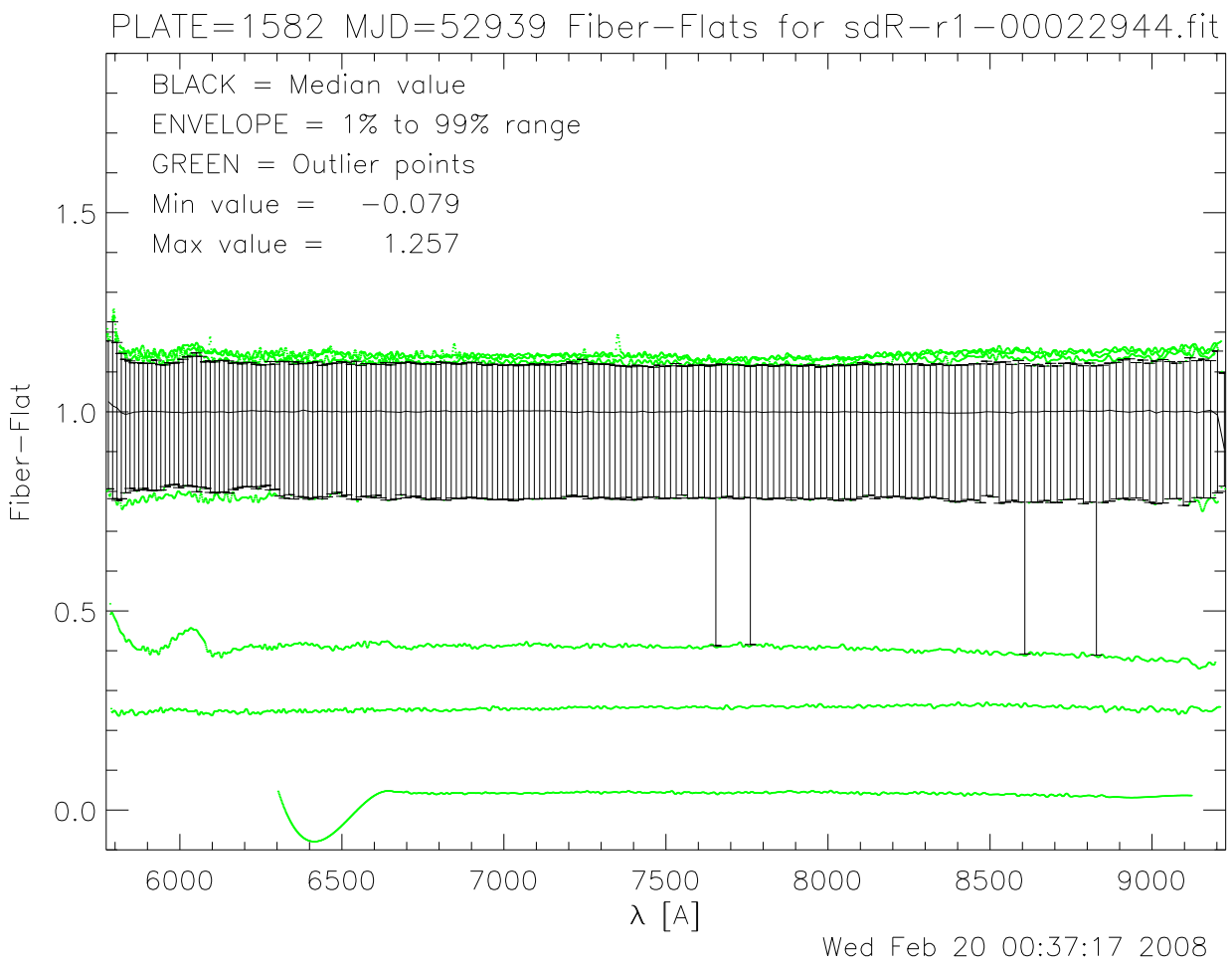

PLATE=1582 MJD=52939 flat extraction chi^2 for sdR−r1−00022939.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

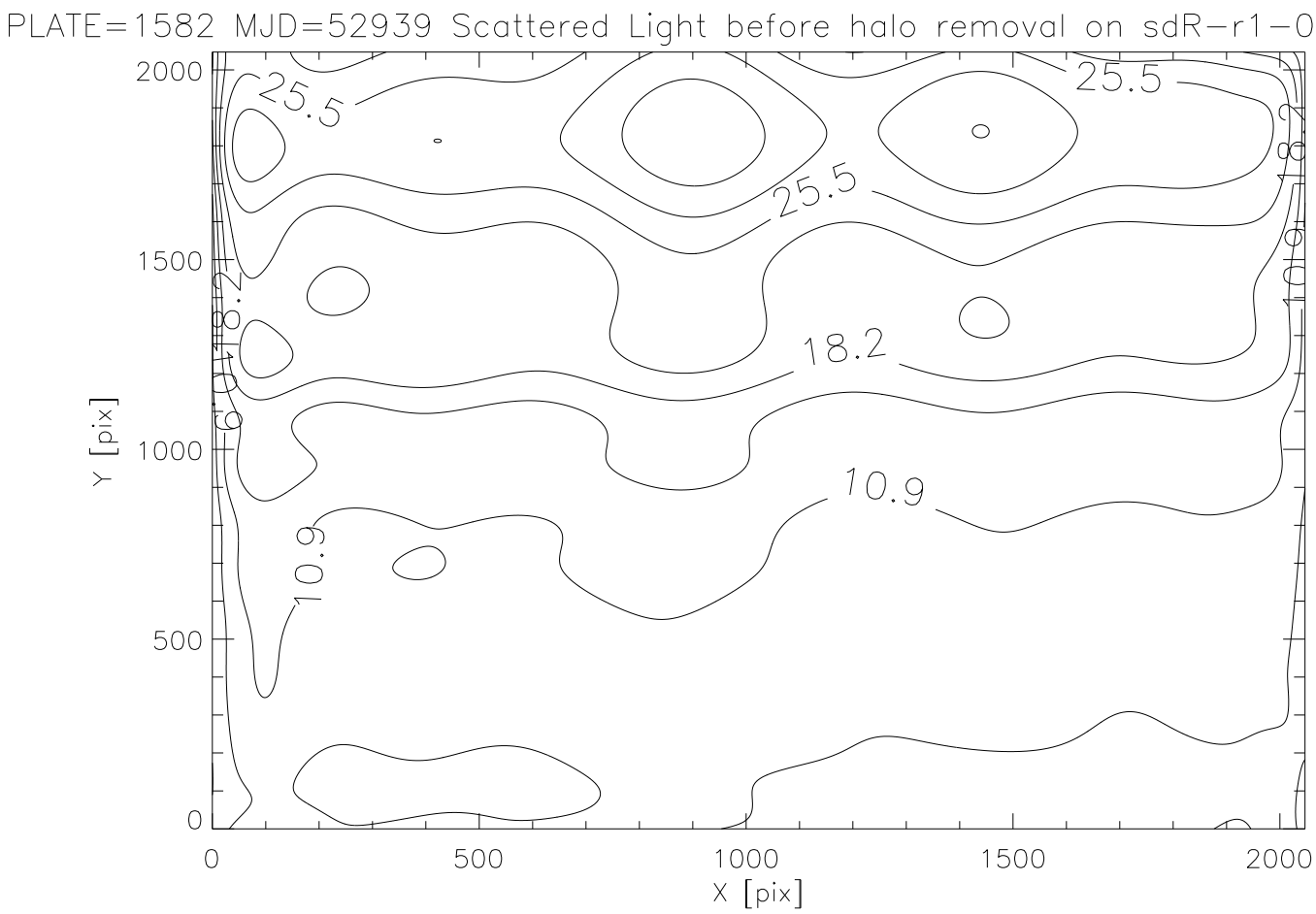

PLATE=1582 MJD=52939 Superflat sdR-r1-00022939.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

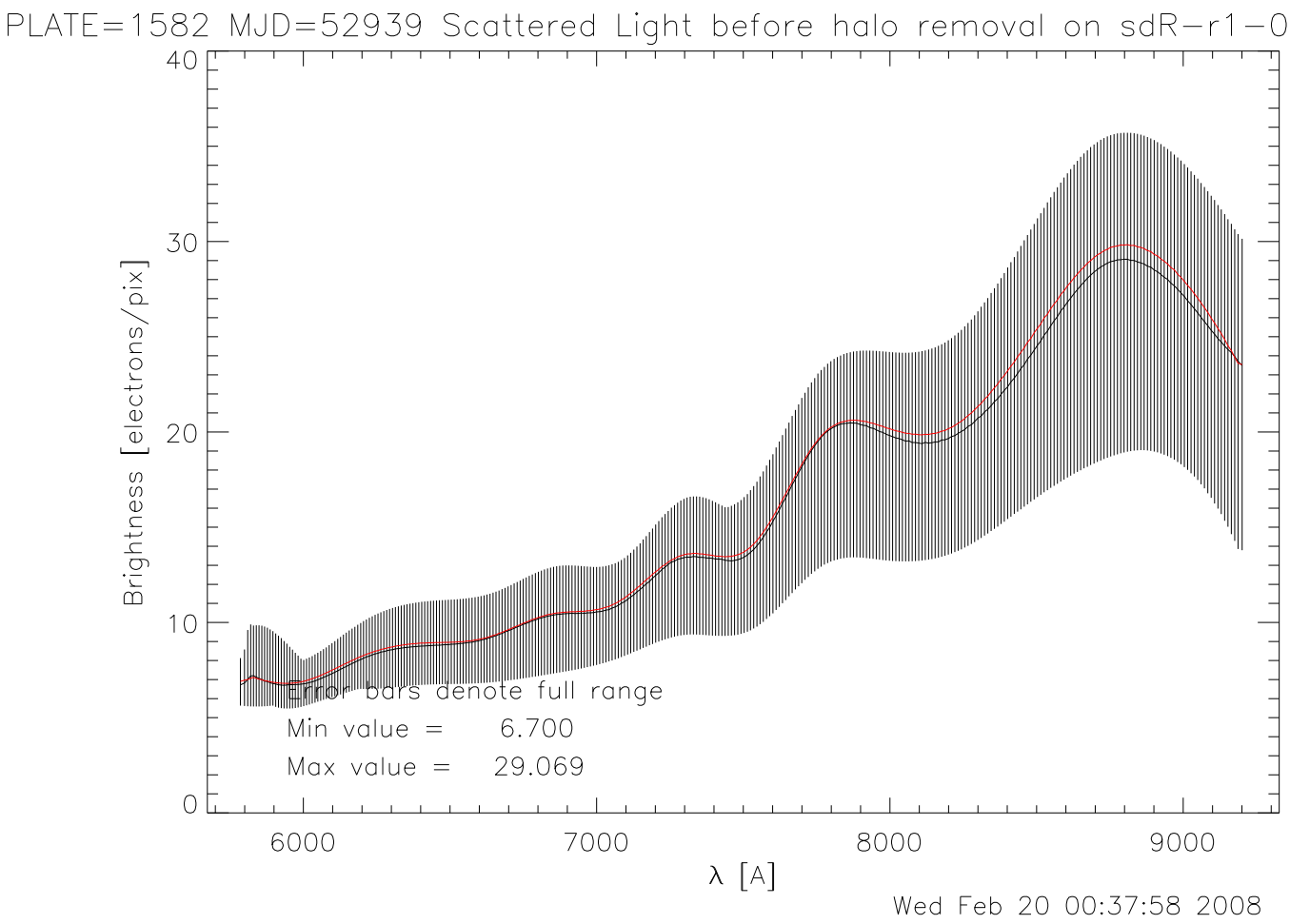

PLATE=1582 MJD=52939 flat extraction chi^2 for sdR−r1−00022944.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

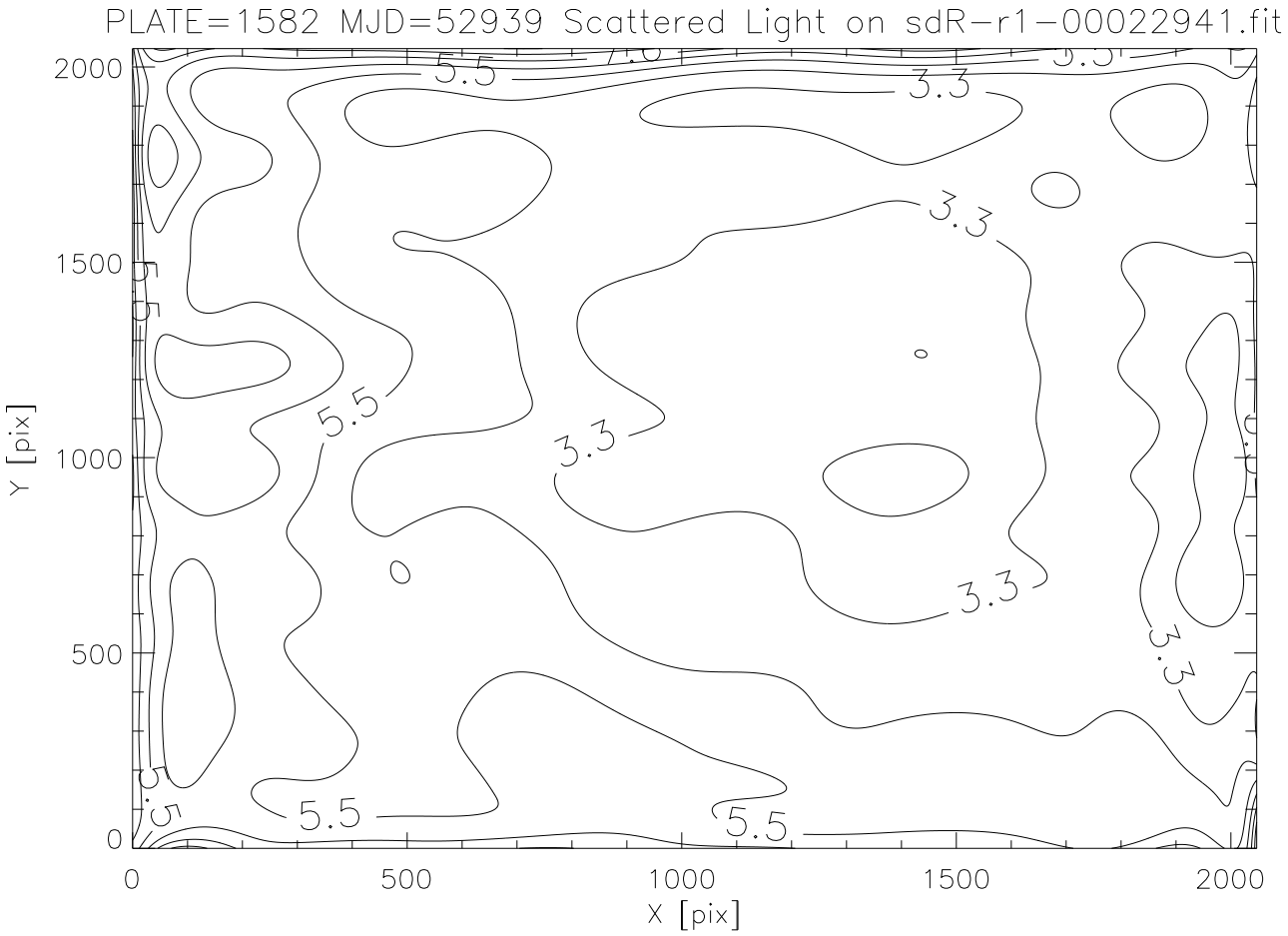

PLATE=1582 MJD=52939 Superflat sdR-r1-00022944.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

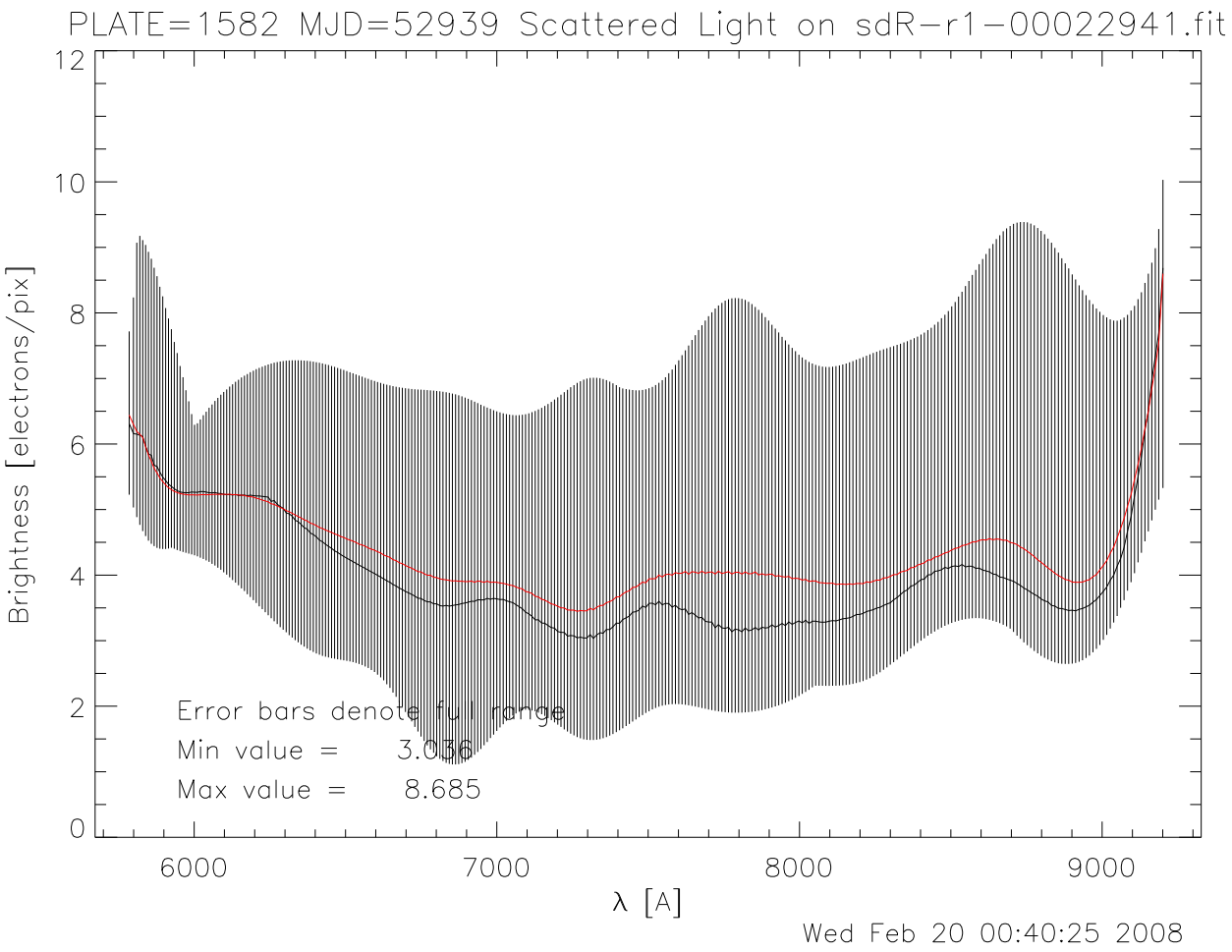

PLATE=1582 MJD=52939 Arcline Fit for sdR-r1-00022945.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Feb 20 00:37:11 2008

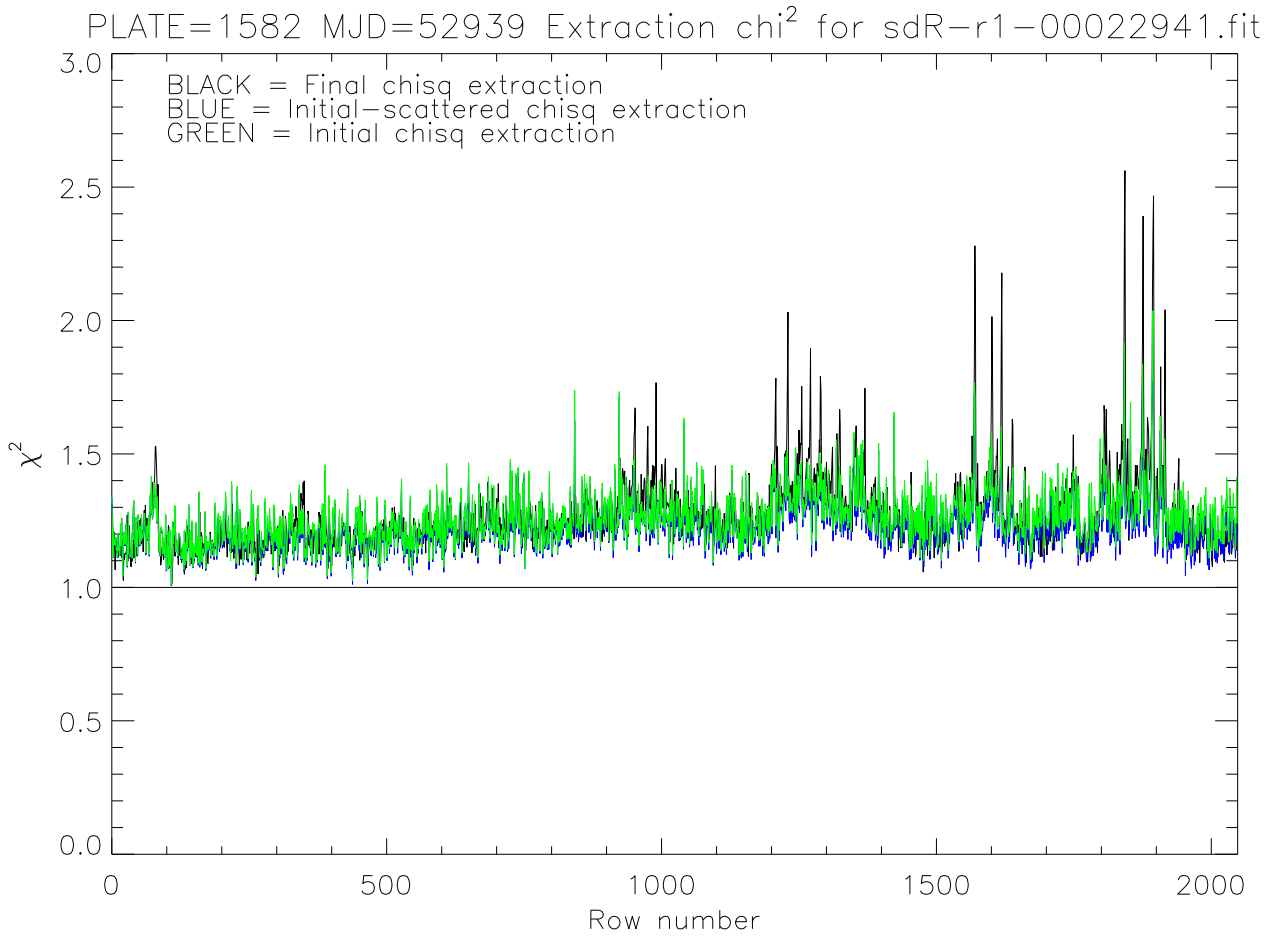

PLATE=1582 MJD=52939 Fiber−Flats for sdR−r1−00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = −0.079
Max value = 1.257
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 00:37:17 2008

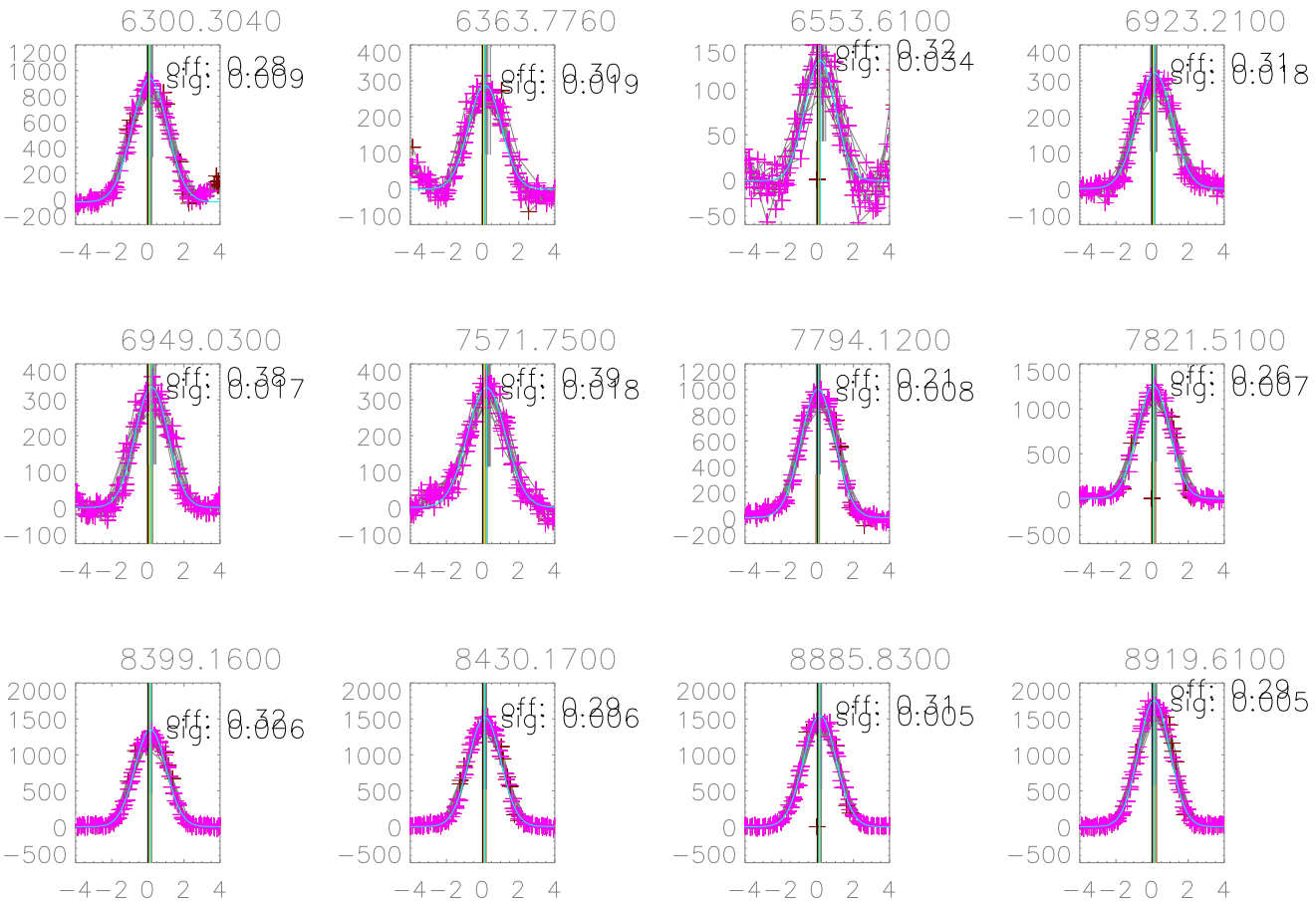

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r1-00022941.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

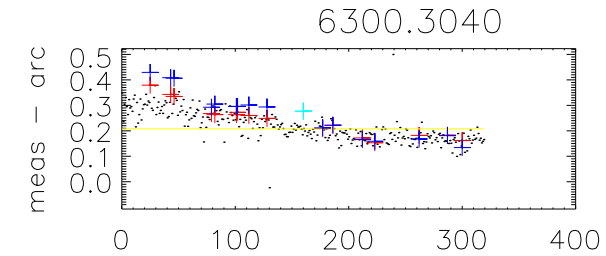

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r1-00022941.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.700
Max value = 29.069
Wed Feb 20 00:37:58 2008

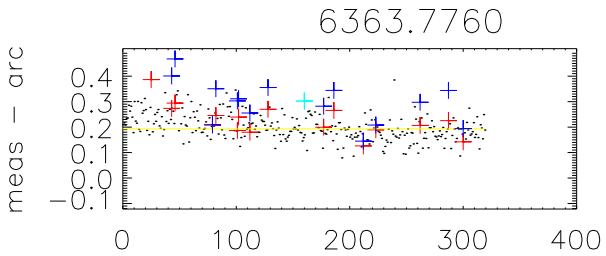

PLATE=1582 MJD=52939 Scattered Light on sdR-r1-00022941.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3
0

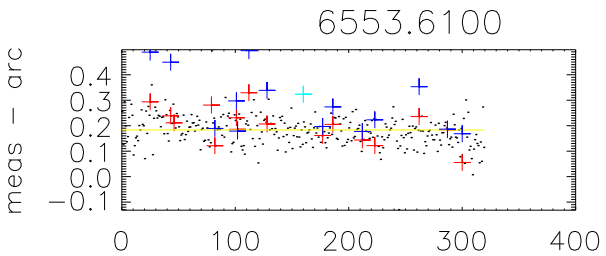

PLATE=1582 MJD=52939 Scattered Light on sdR-r1-00022941.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.036
Max value = 8.685
Wed Feb 20 00:40:25 2008

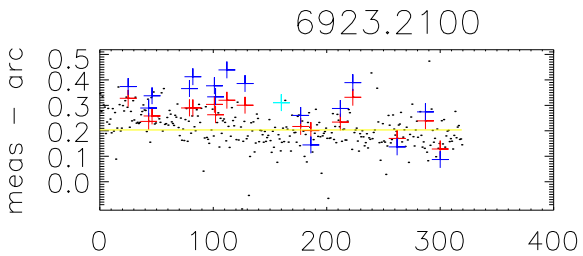

PLATE=1582 MJD=52939 Extraction chi^2 for sdR−r1−00022941.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

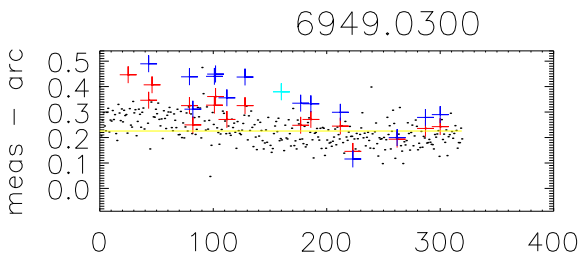

6300.3040
off: 0.28
sig: 0.009
6363.7760
off: 0.30
sig: 0.019
6553.6100
off: 0.32
sig: 0.034
6923.2100
off: 0.31
sig: 0.018
6949.0300
off: 0.38
sig: 0.017
7571.7500
off: 0.39
sig: 0.018
7794.1200
off: 0.21
sig: 0.008
7821.5100
off: 0.26
sig: 0.007
8399.1600
off: 0.32
sig: 0.006
8430.1700
off: 0.28
sig: 0.006
8885.8300
off: 0.31
sig: 0.005
8919.6100
off: 0.29
sig: 0.005

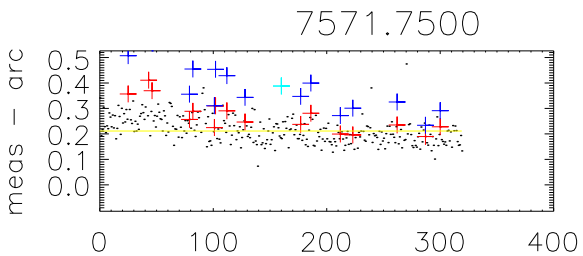

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

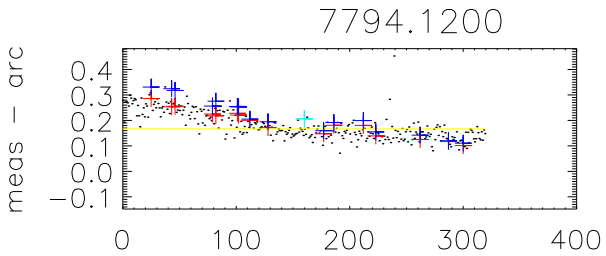

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

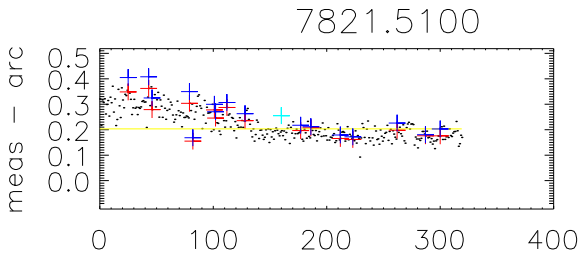

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

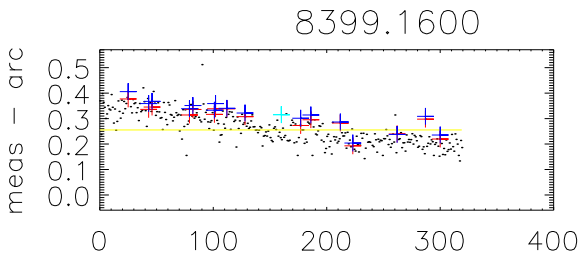

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

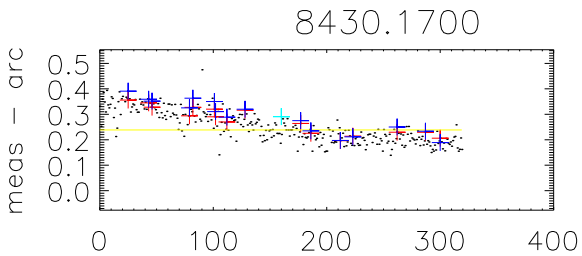

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

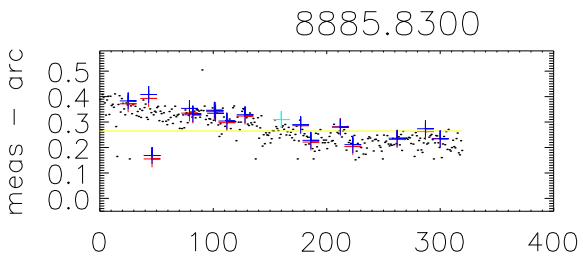

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

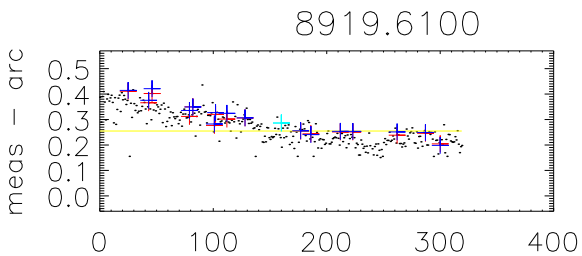

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

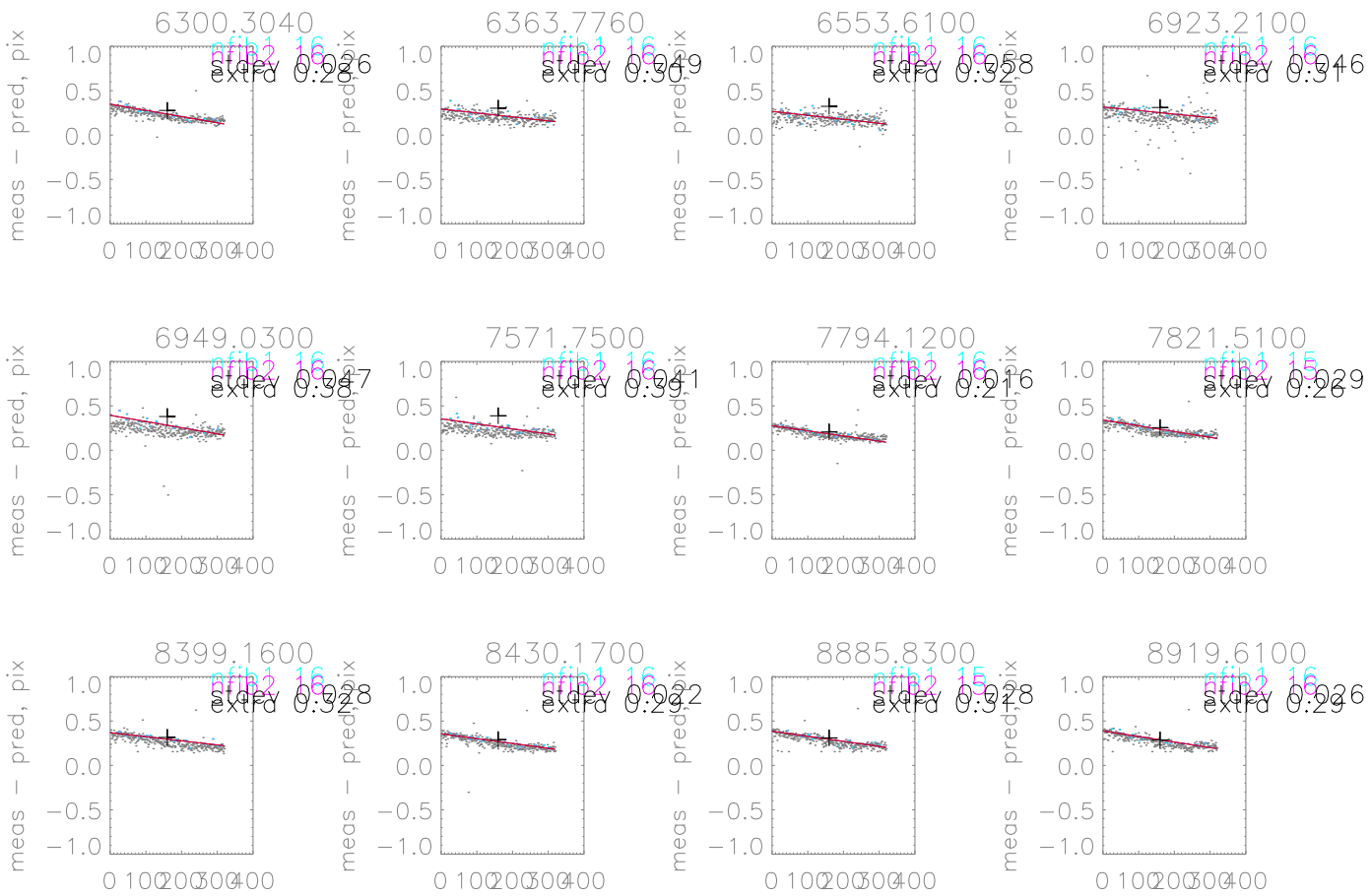

7821.5100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

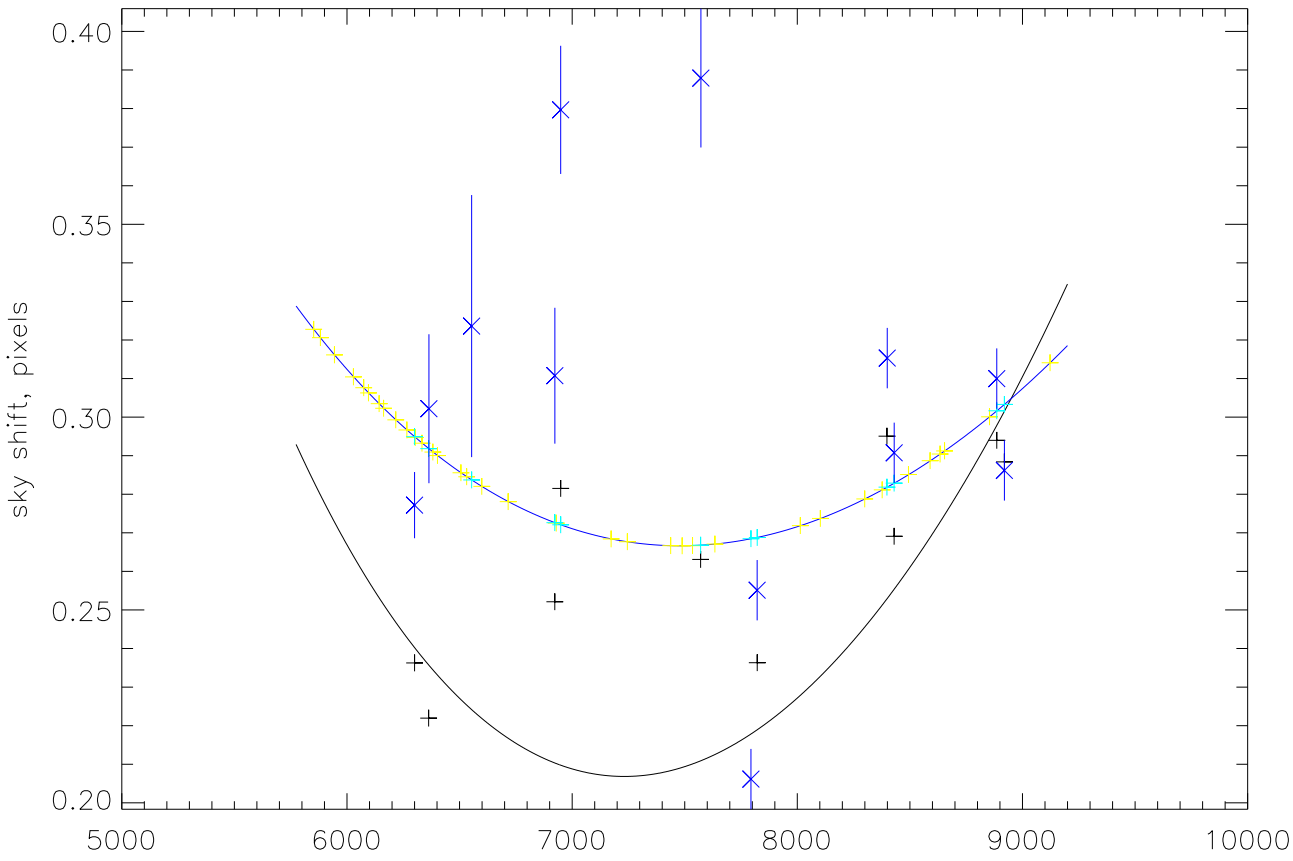

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

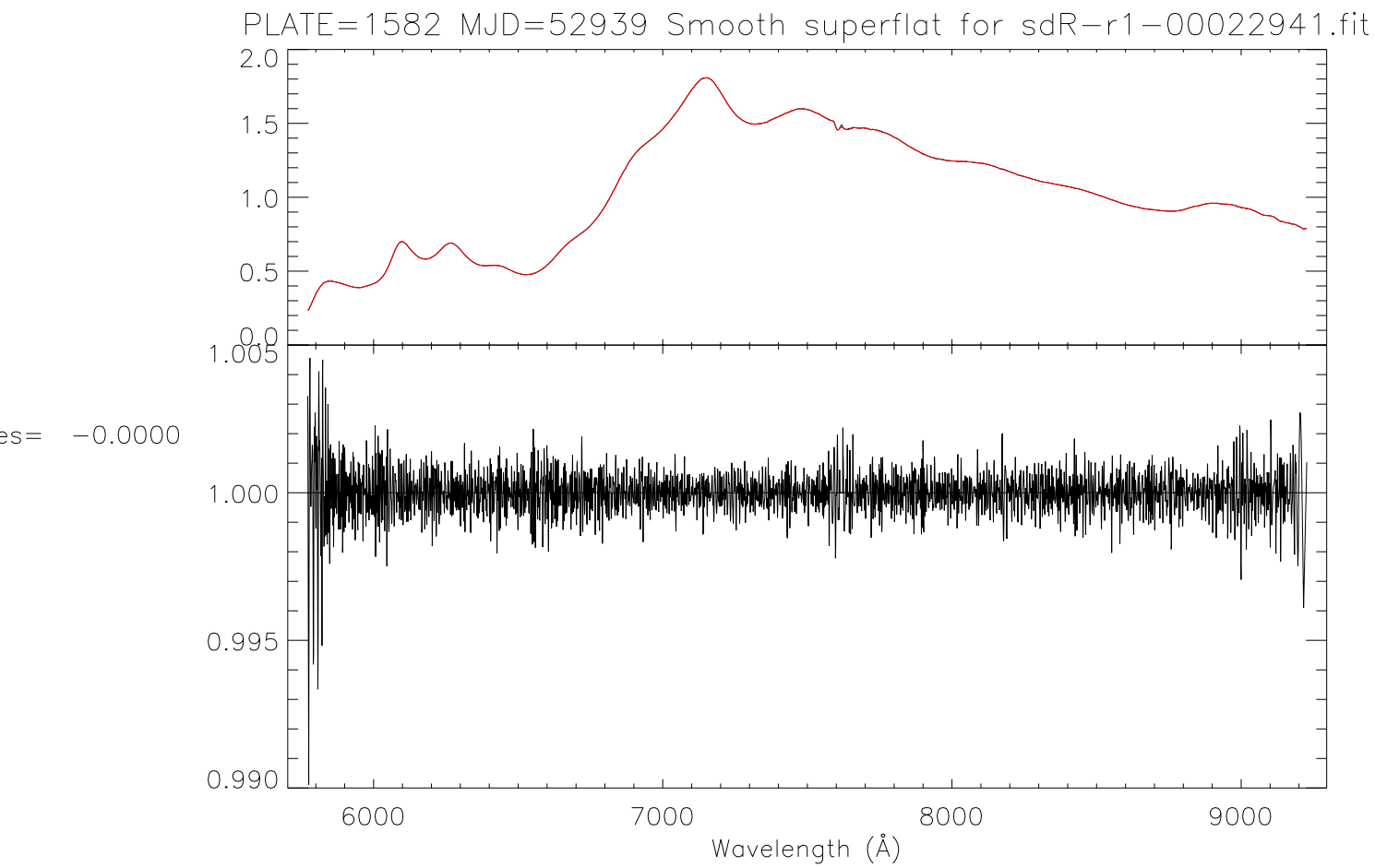

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

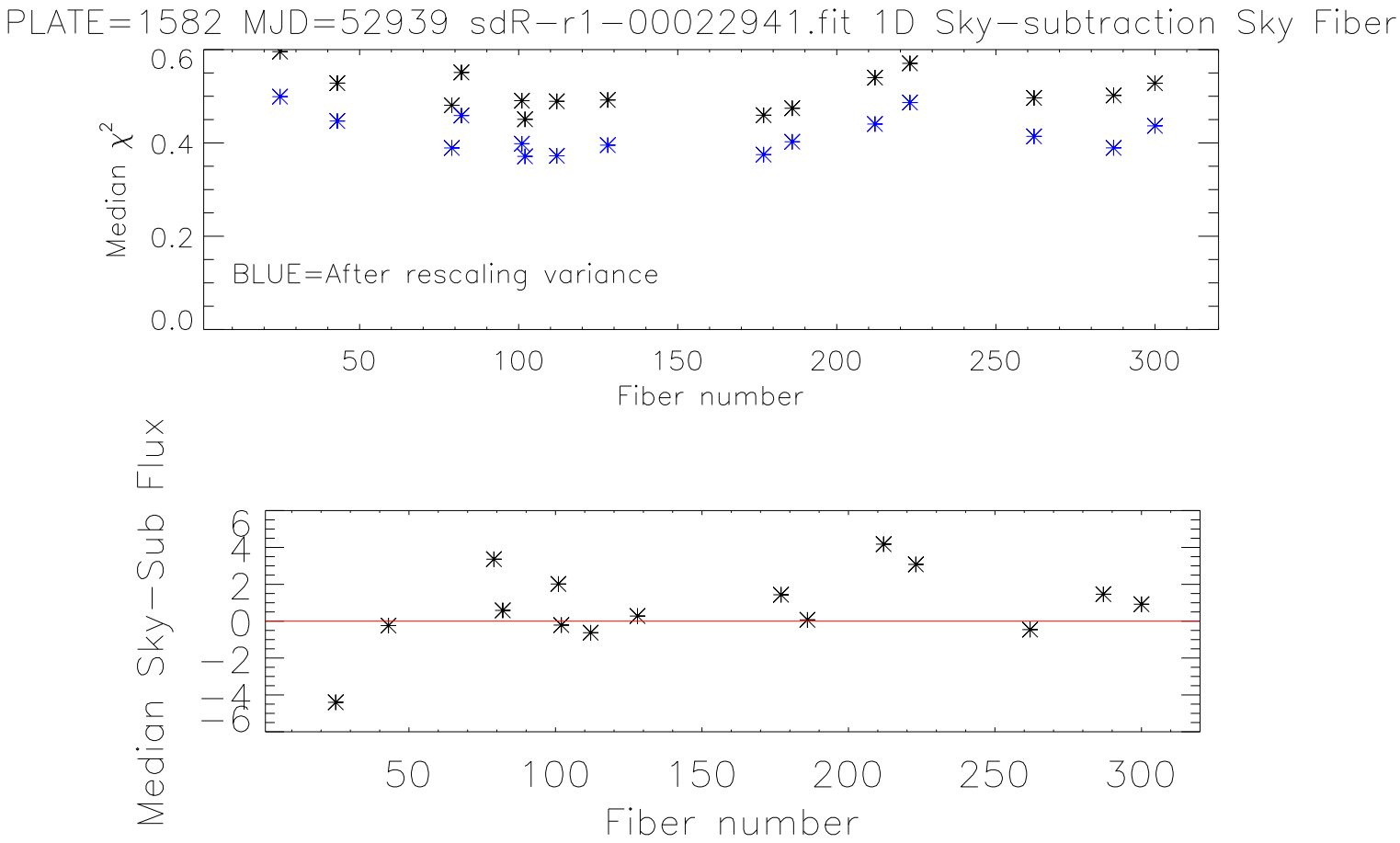

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

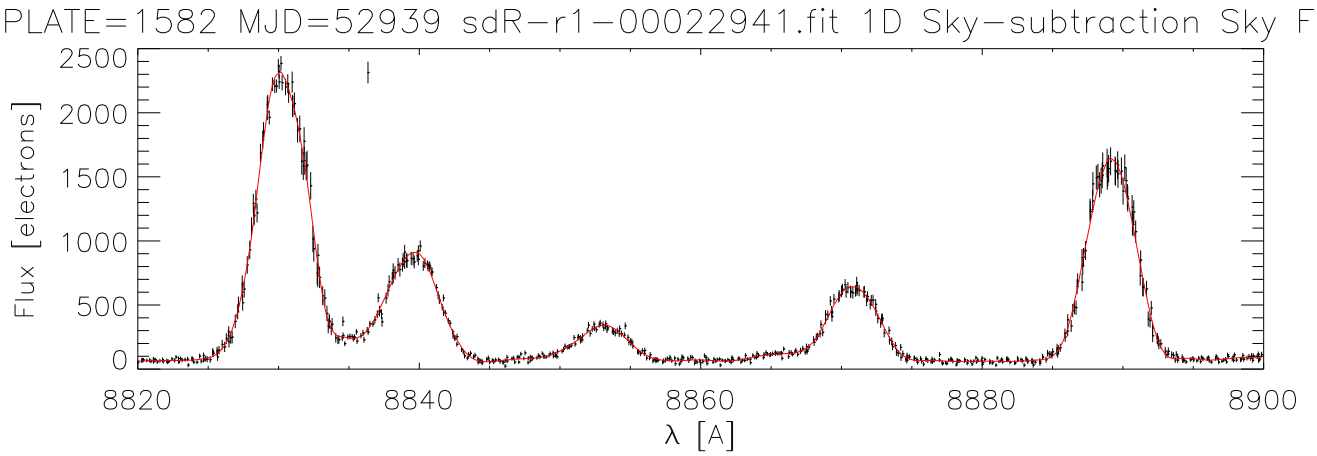

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

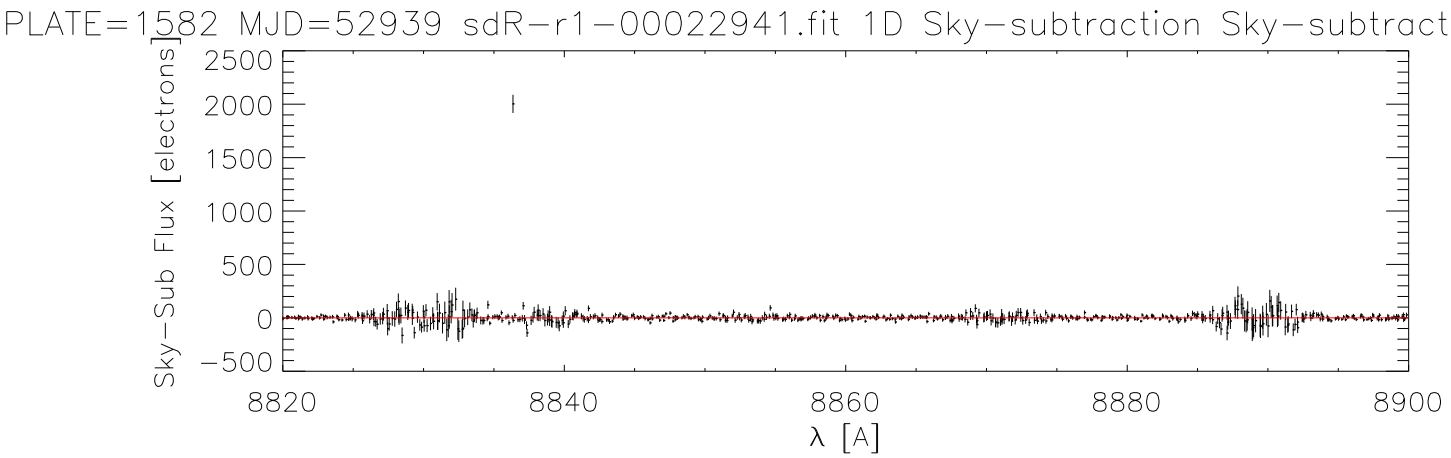

6300.3040
mfb1 16
mfb2 16
stdev 0.026
extra 0.28
6363.7760
mfb1 16
mfb2 16
stdev 0.049
extra 0.30
6553.6100
mfb1 16
mfb2 16
stdev 0.058
extra 0.32
6923.2100
mfb1 16
mfb2 16
stdev 0.046
extra 0.31
6949.0300
mfb1 16
mfb2 16
stdev 0.047
extra 0.38
7571.7500
mfb1 16
mfb2 16
stdev 0.041
extra 0.39
7794.1200
mfb1 16
mfb2 16
stdev 0.016
extra 0.21
7821.5100
mfb1 15
mfb2 15
stdev 0.029
extra 0.26
8399.1600
mfb1 16
mfb2 16
stdev 0.028
extra 0.32
8430.1700
mfb1 16
mfb2 16
stdev 0.022
extra 0.23
8885.8300
mfb1 15
mfb2 15
stdev 0.028
extra 0.31
8919.6100
mfb1 16
mfb2 16
stdev 0.026
extra 0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

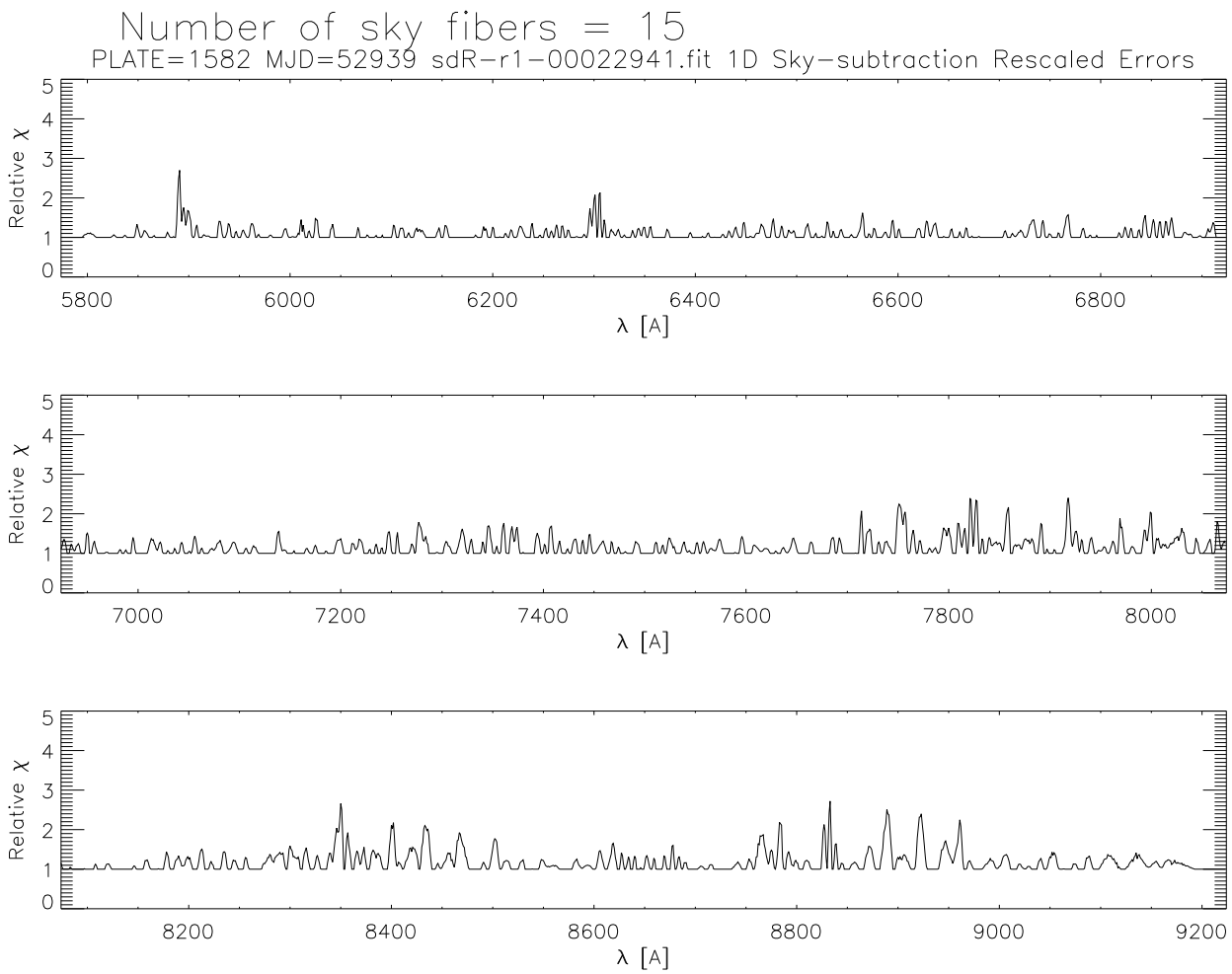

0.40
0.35
0.30
0.25
0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

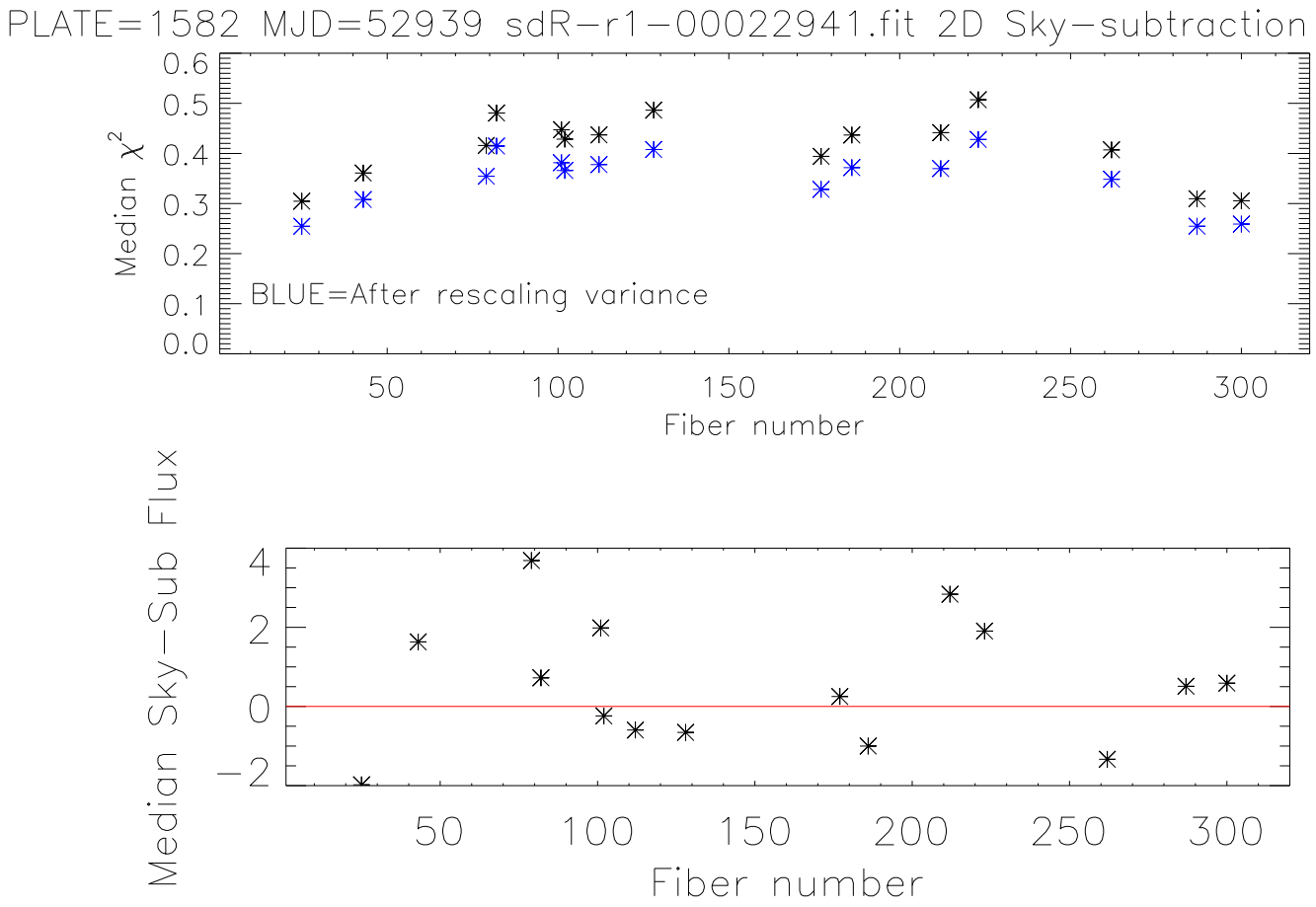

PLATE=1582 MJD=52939 Smooth superflat for sdR-r1-00022941.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

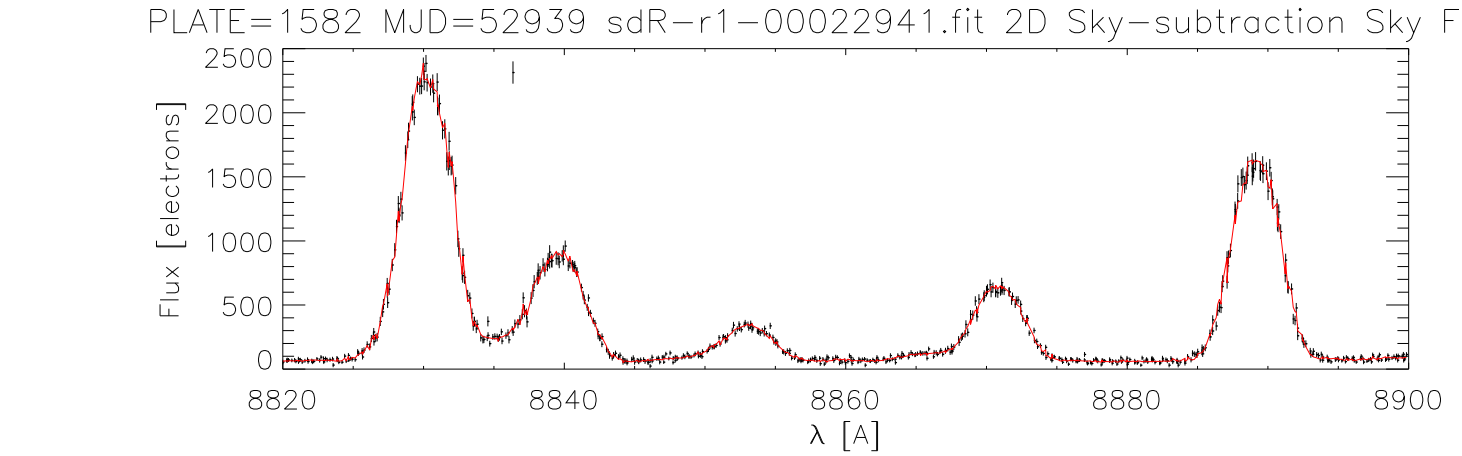

PLATE=1582 MJD=52939 sdR-r1-00022941.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

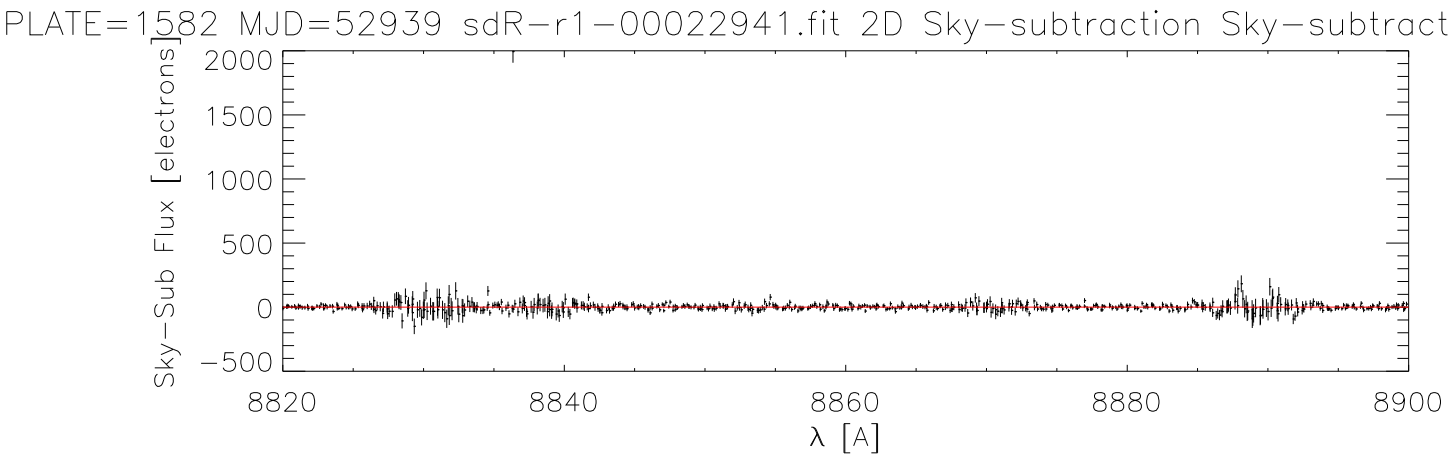

PLATE=1582 MJD=52939 sdR-r1-00022941.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

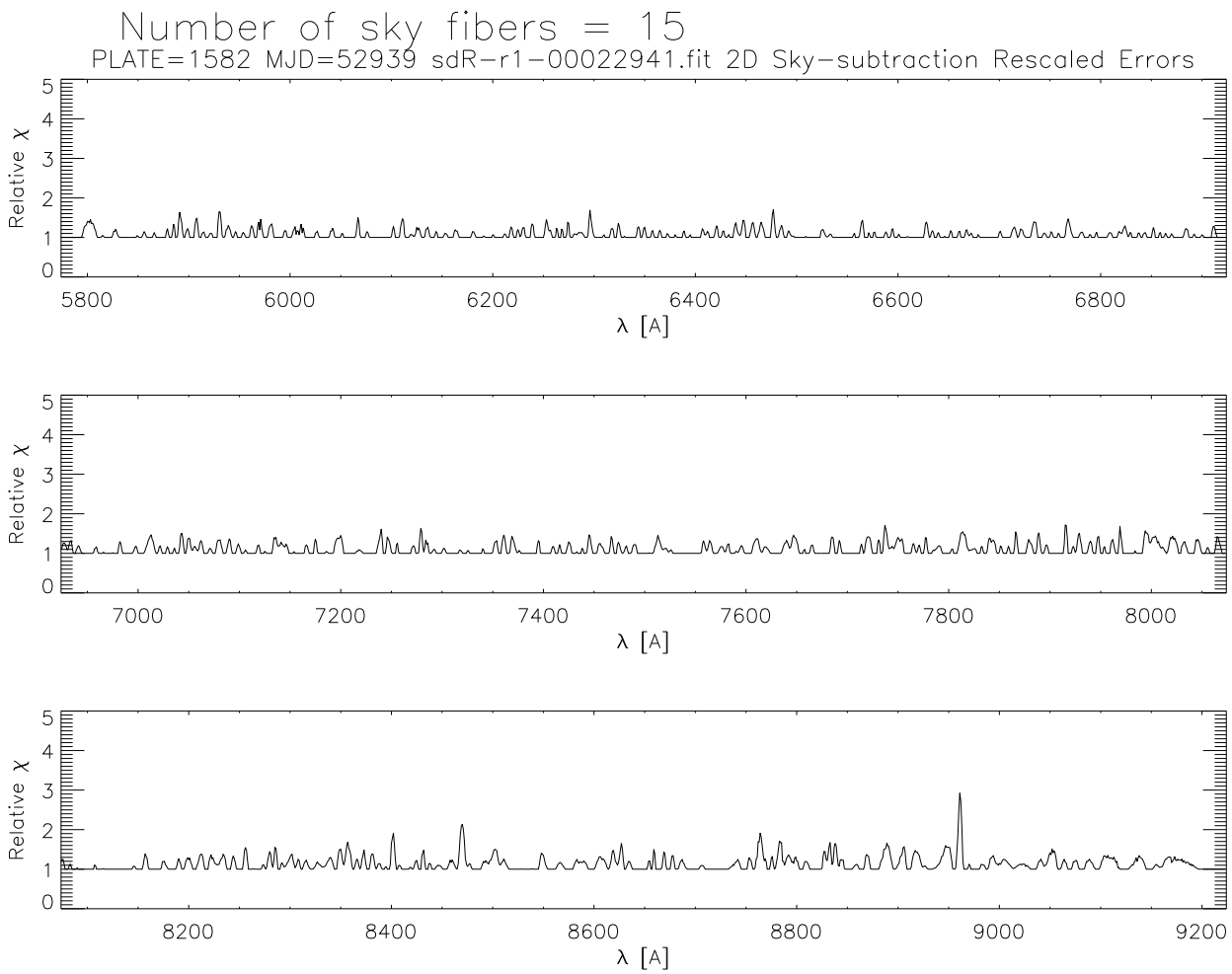

PLATE=1582 MJD=52939 sdR-r1-00022941.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

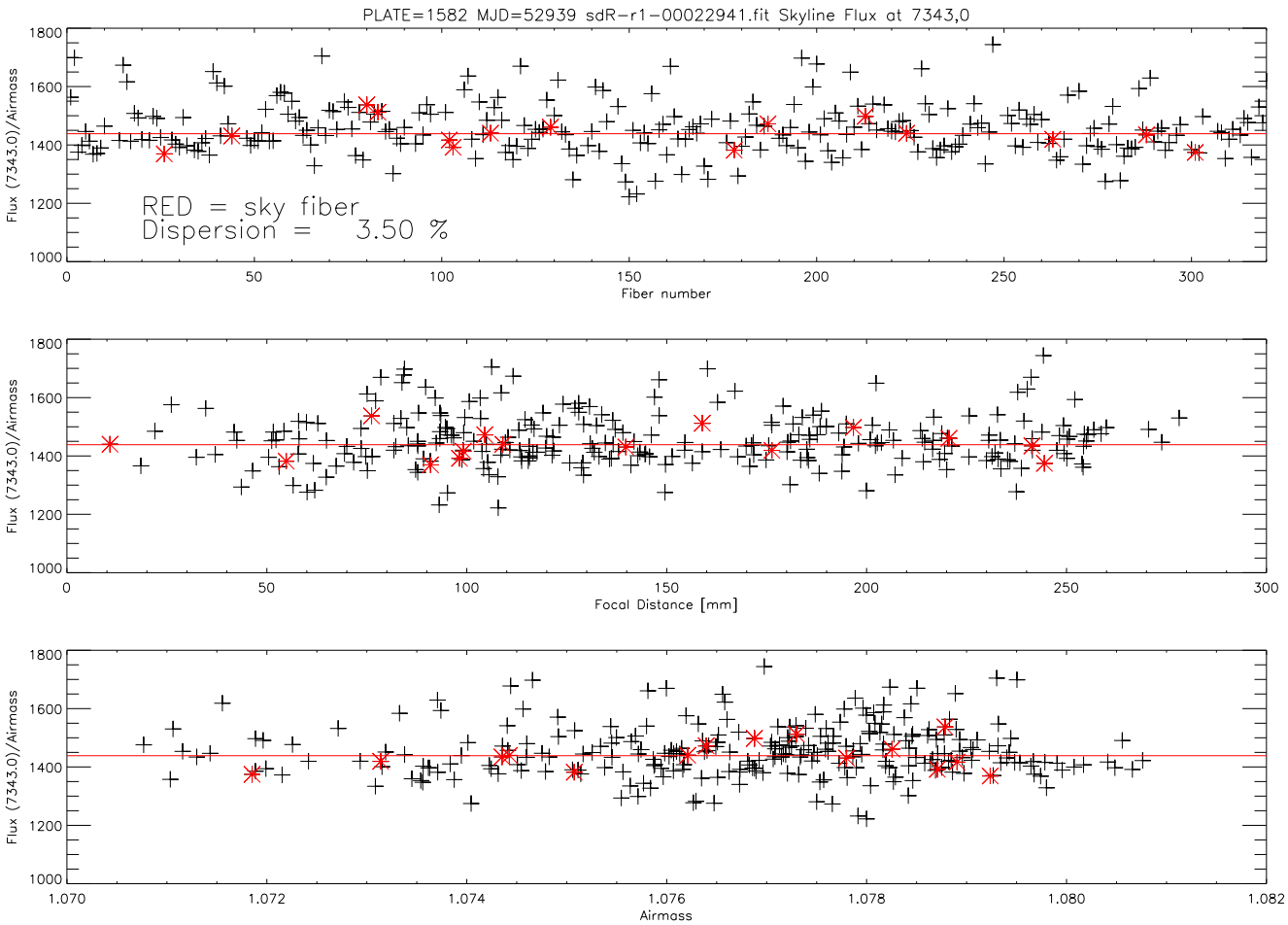

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r1-00022941.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

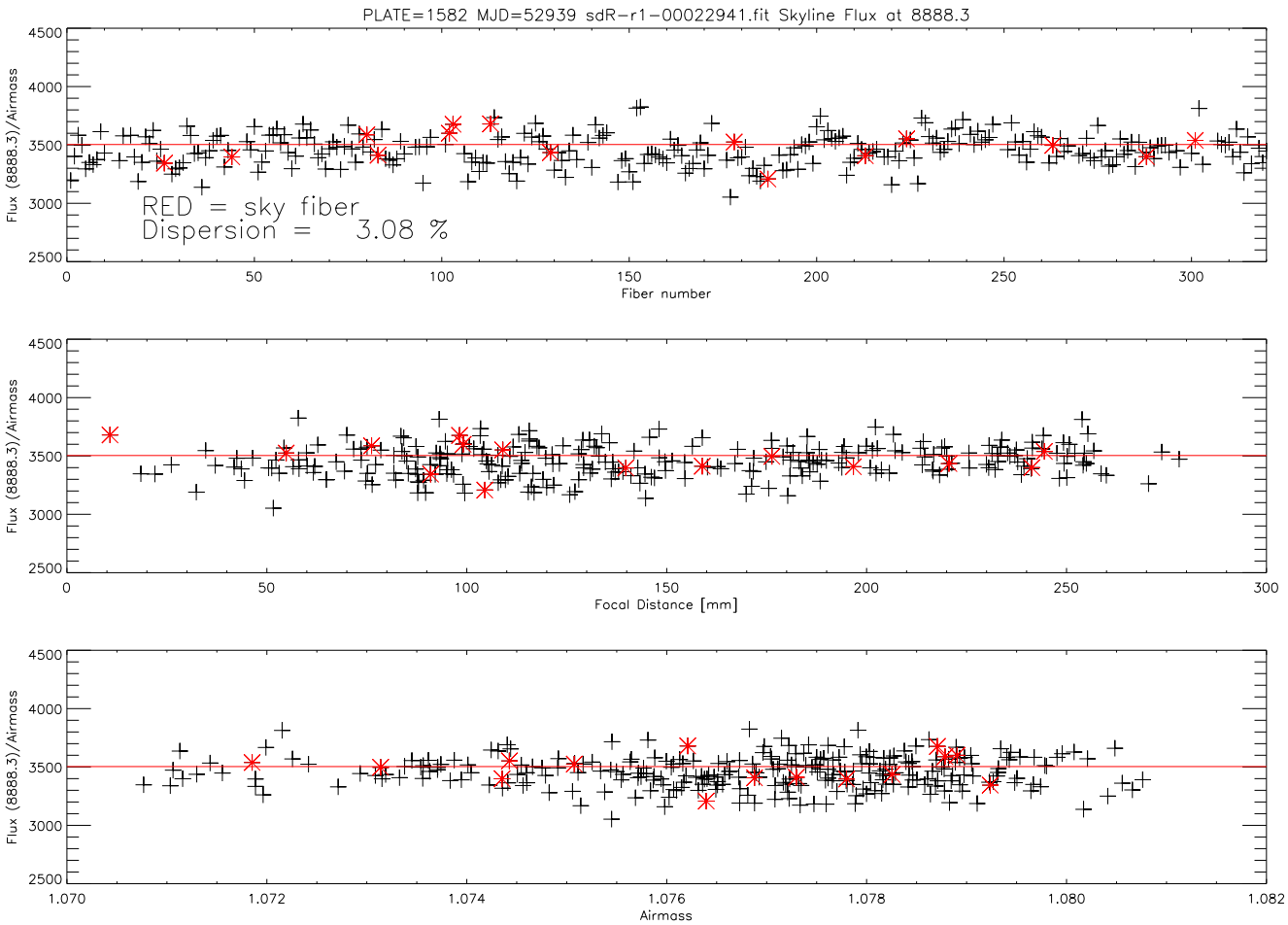

PLATE=1582 MJD=52939 sdR-r1-00022941.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−2
0
2
4
50
100
150
200
250
300
Fiber number

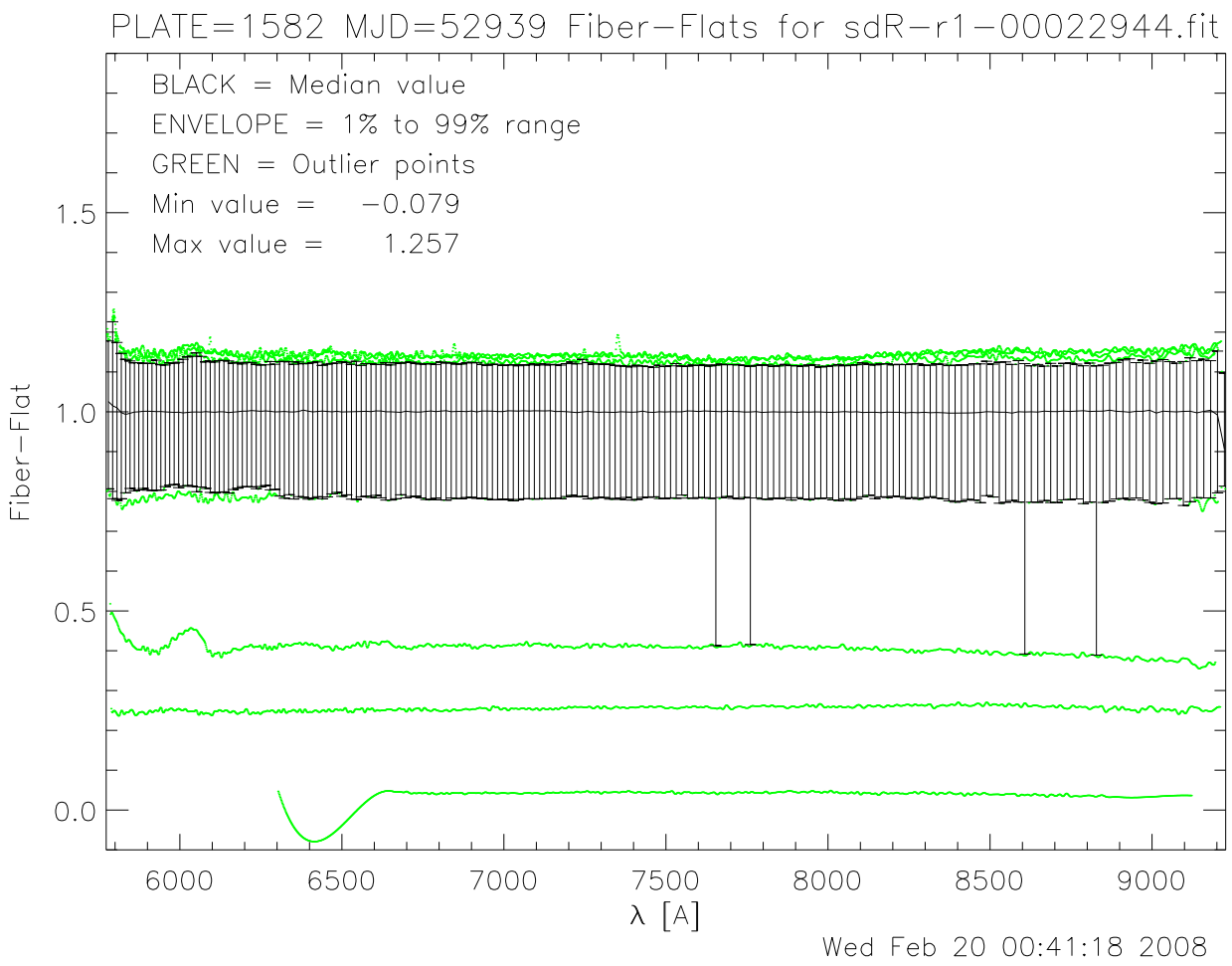

PLATE=1582 MJD=52939 sdR-r1-00022941.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

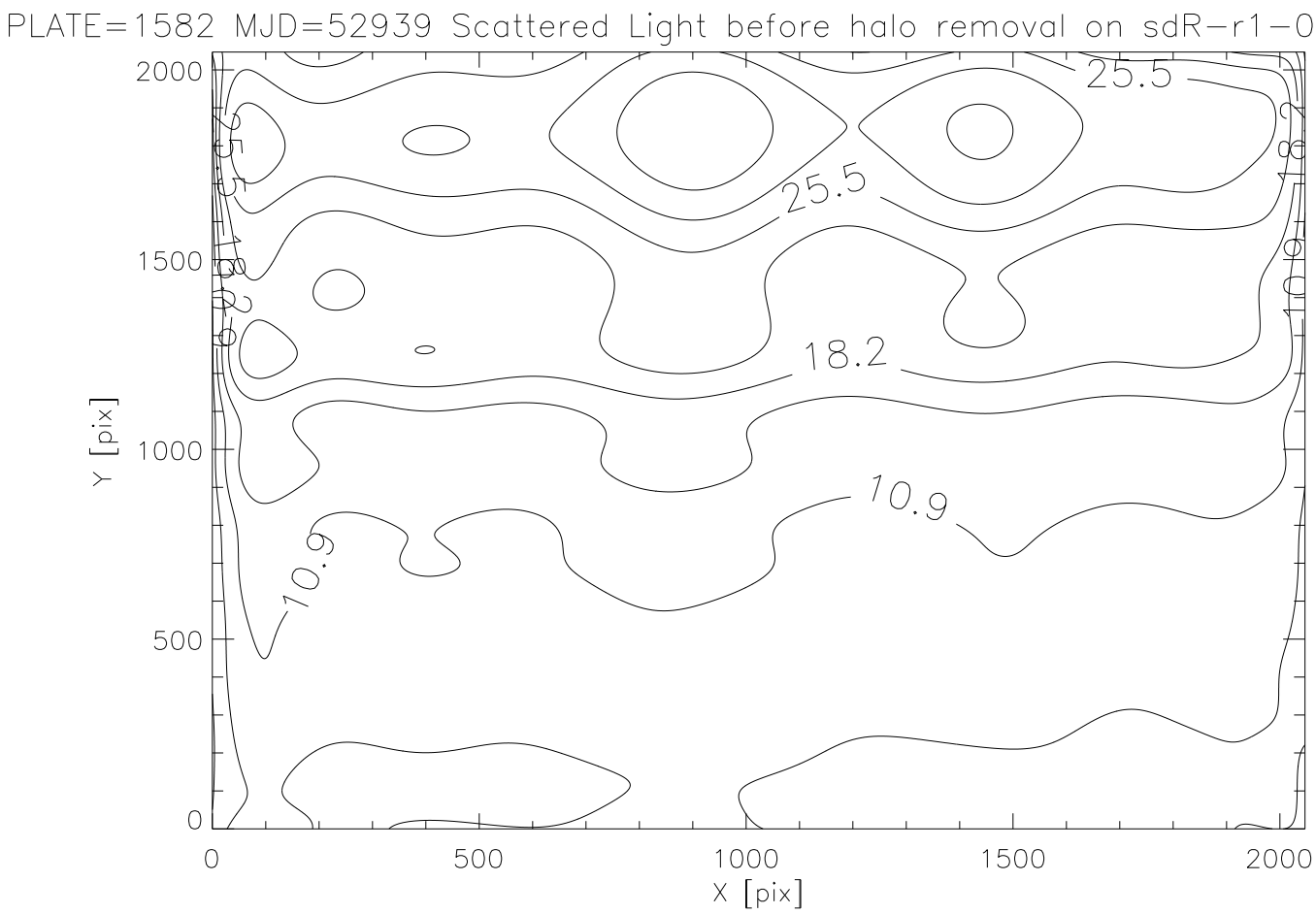

PLATE=1582 MJD=52939 sdR-r1-00022941.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

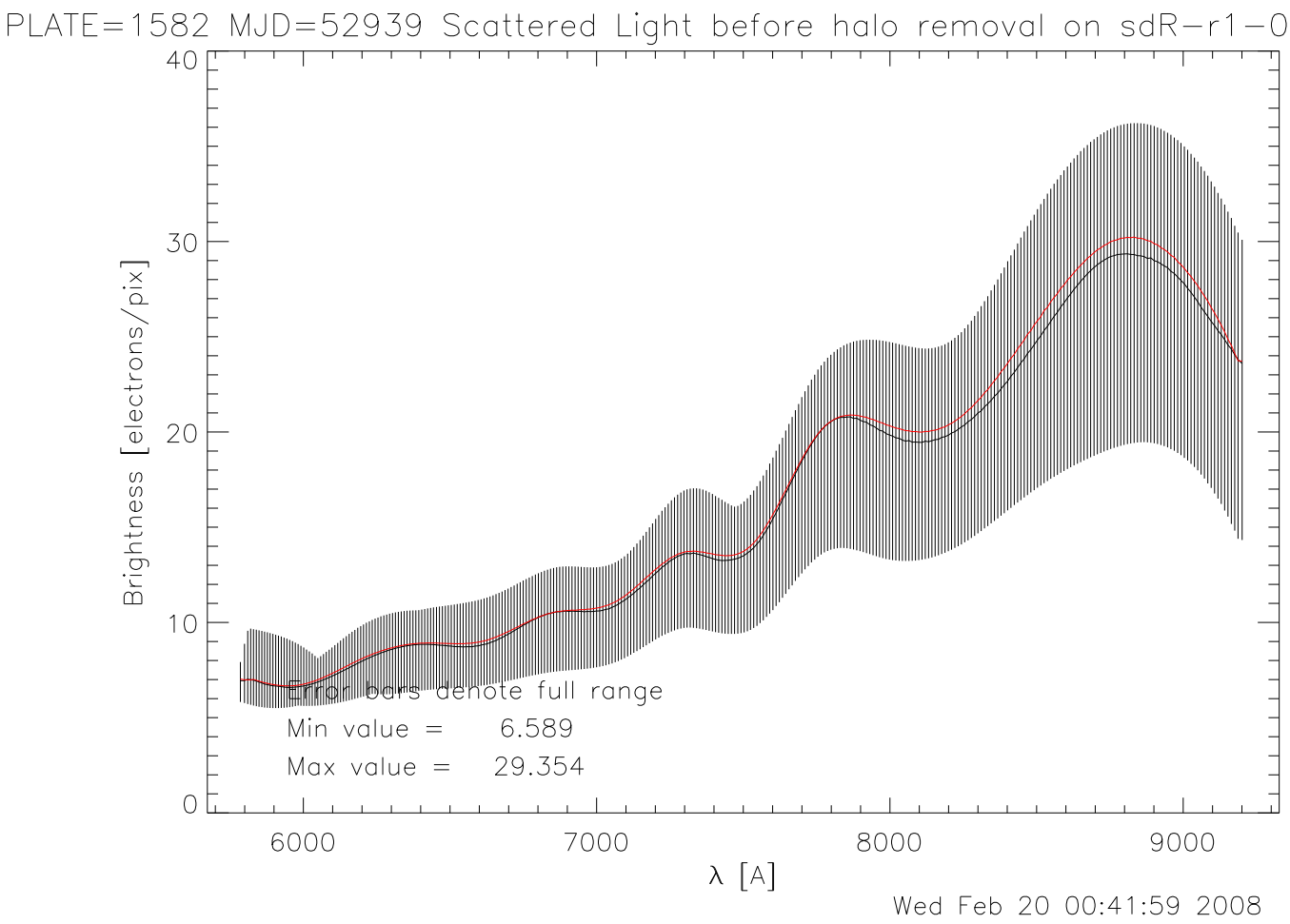

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r1-00022941.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

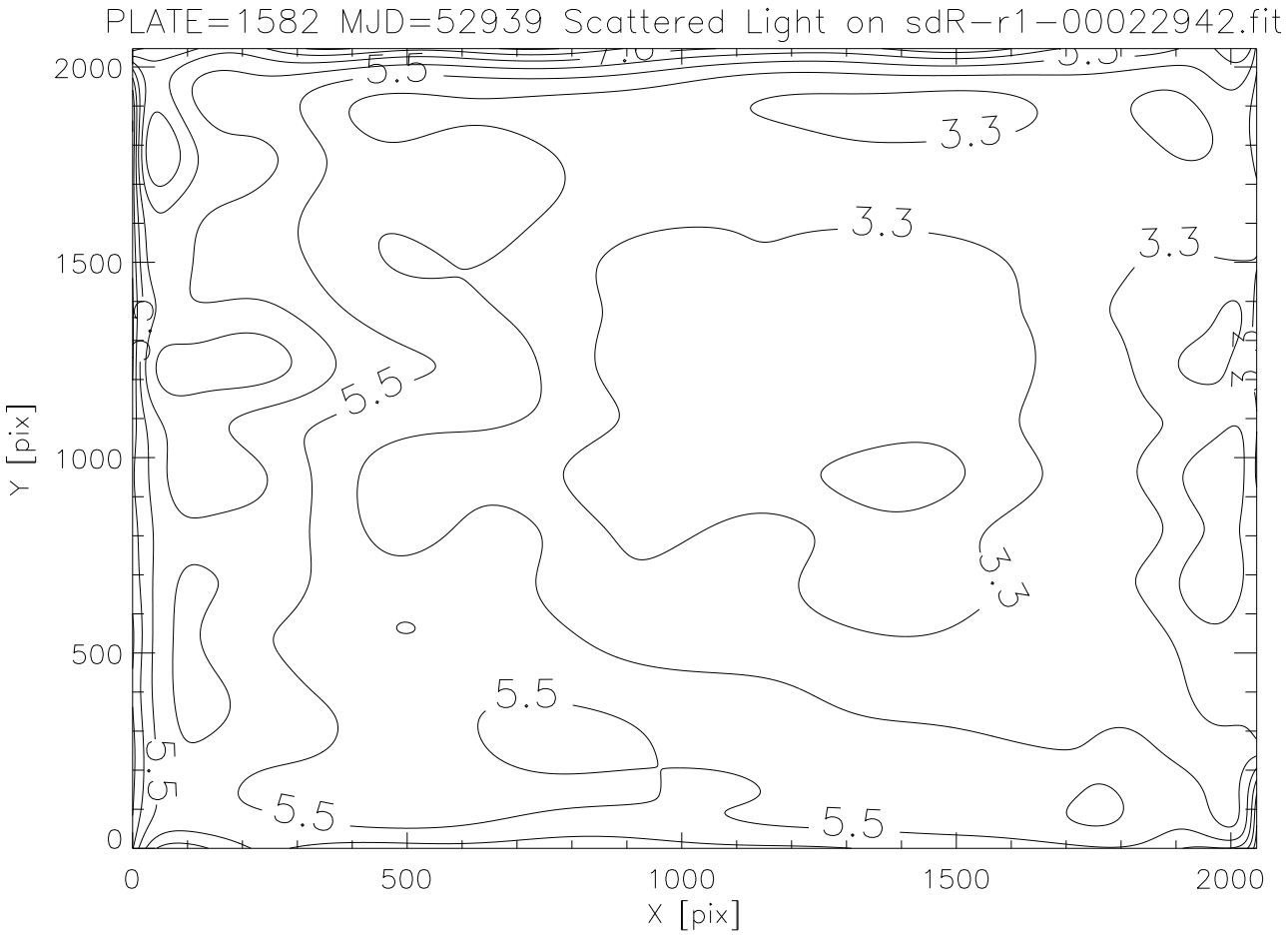

PLATE=1582 MJD=52939 sdR-r1-00022941.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.50 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

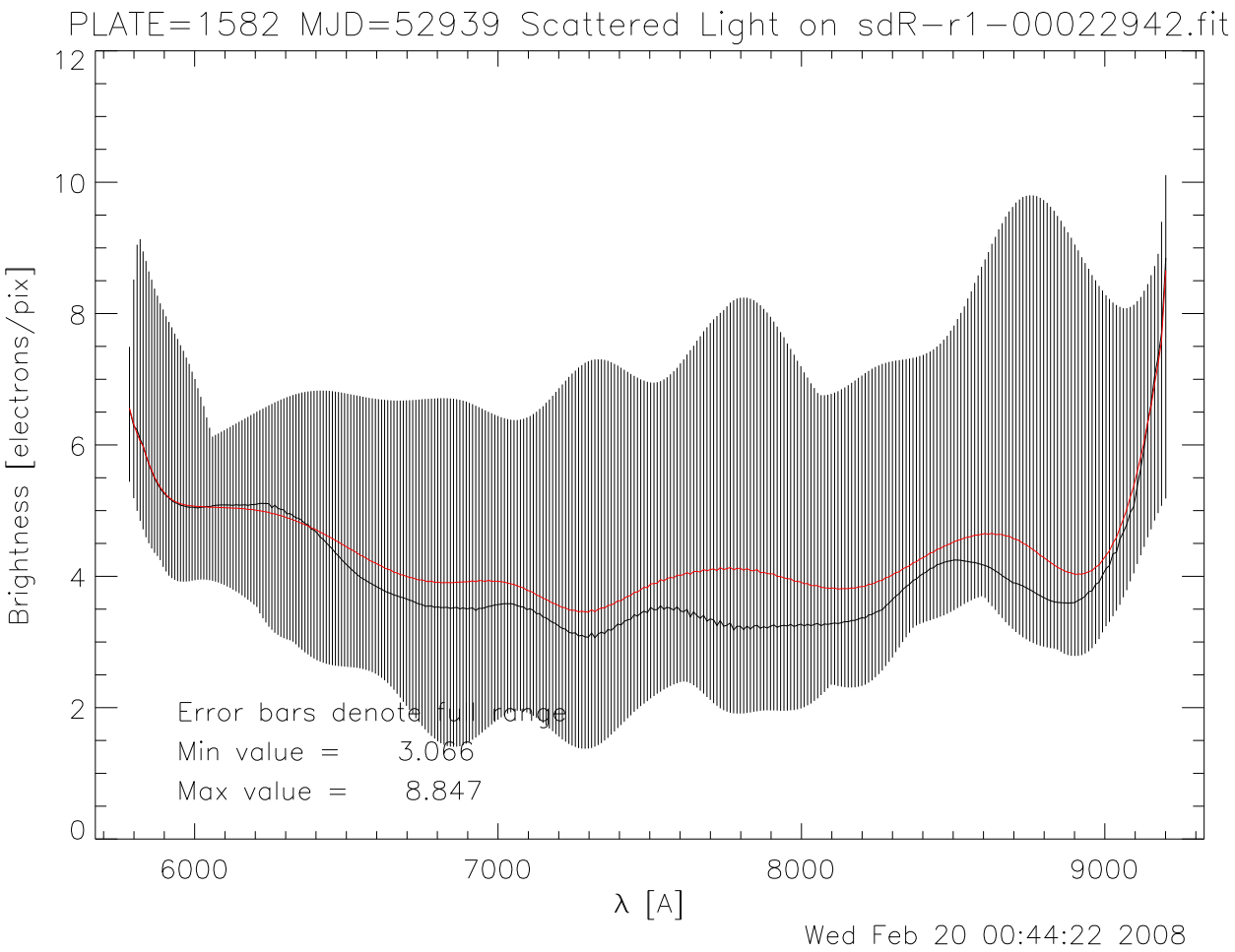

PLATE=1582 MJD=52939 sdR-r1-00022941.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.08 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

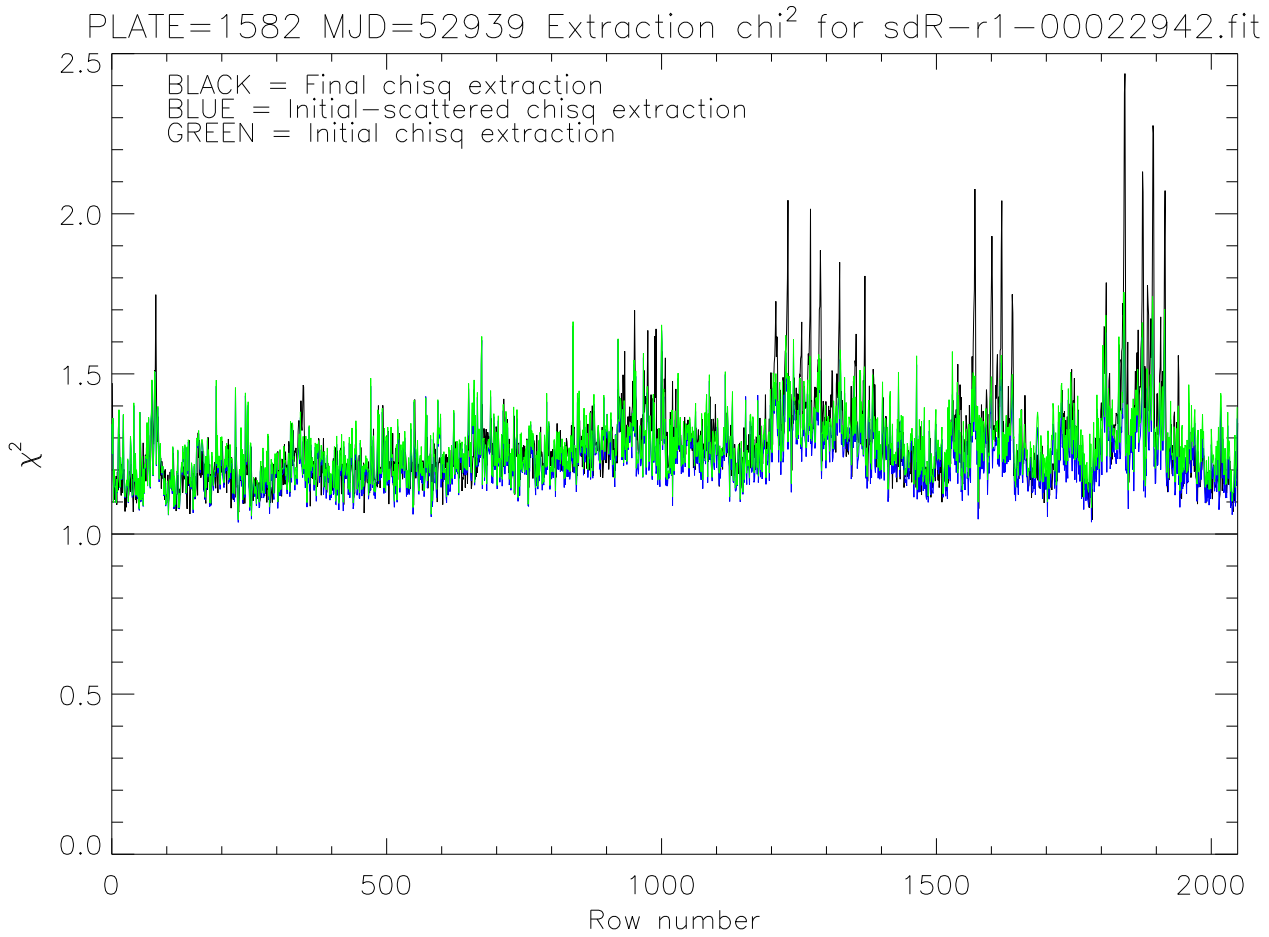

PLATE=1582 MJD=52939 Fiber−Flats for sdR−r1−00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = −0.079
Max value = 1.257
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 00:41:18 2008

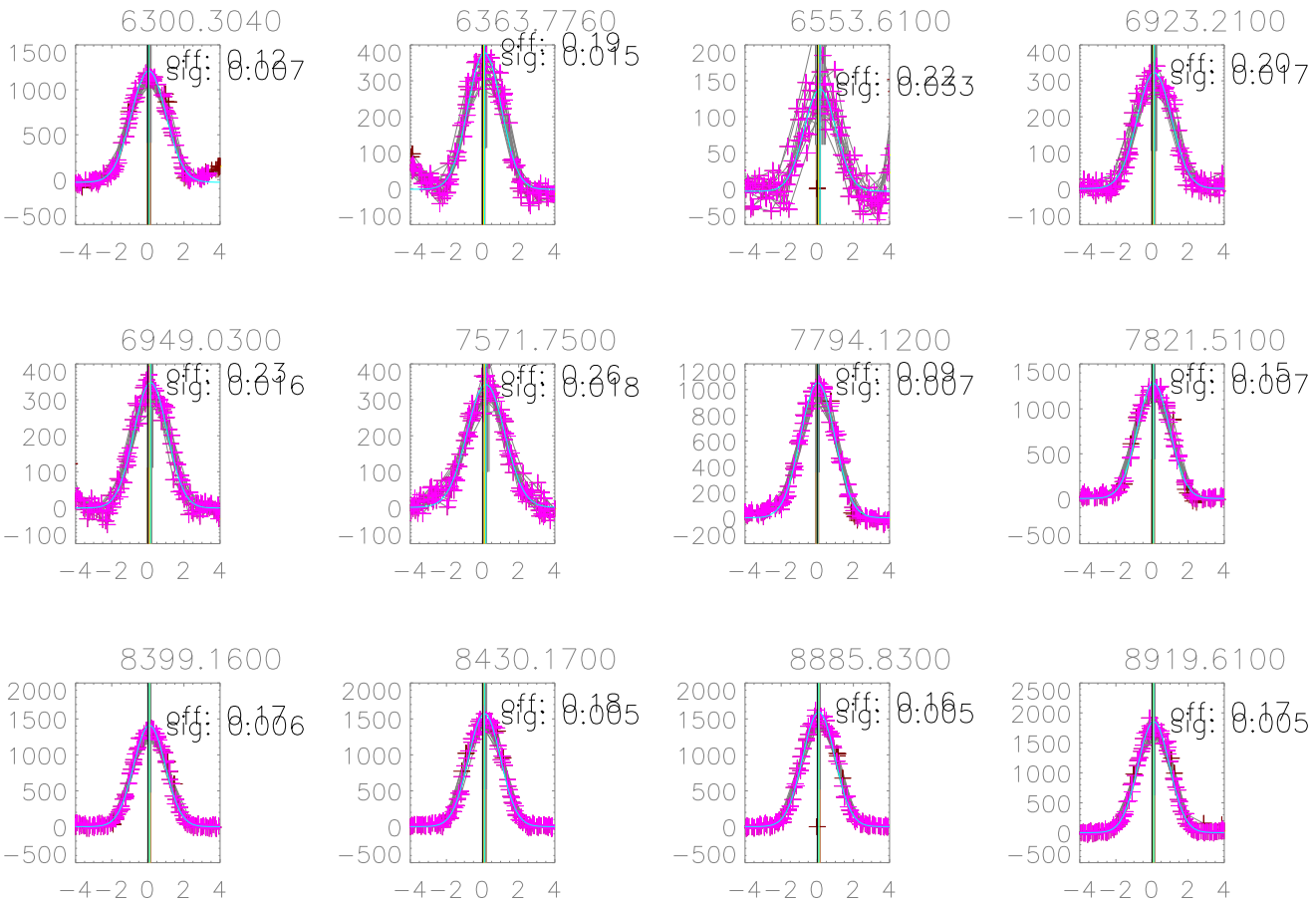

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r1-00022942.fi
25.5
25.5
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

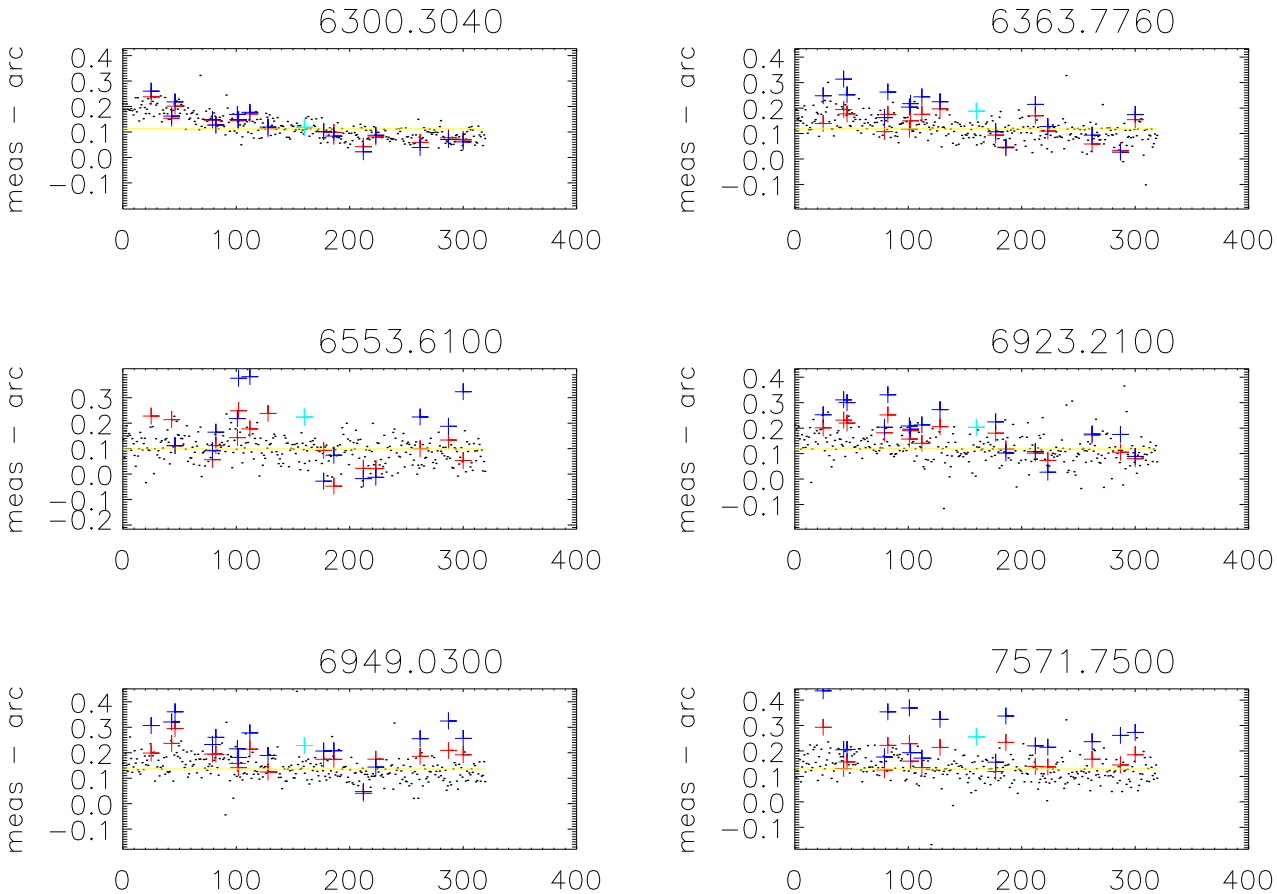

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r1-00022942.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.589
Max value = 29.354
Wed Feb 20 00:41:59 2008

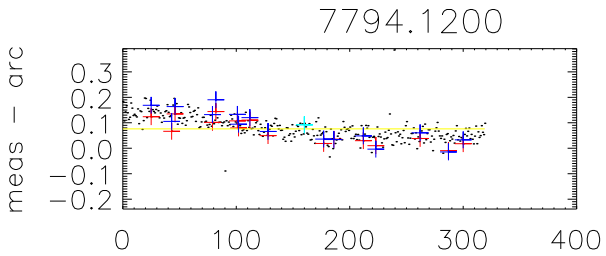

PLATE=1582 MJD=52939 Scattered Light on sdR-r1-00022942.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3
0

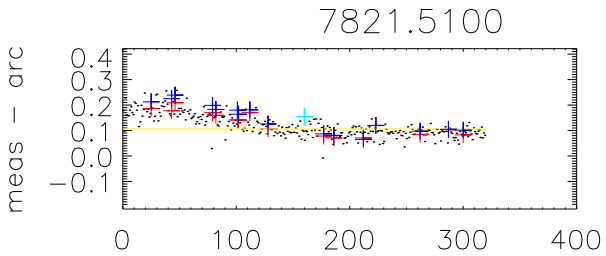

PLATE=1582 MJD=52939 Scattered Light on sdR-r1-00022942.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.066
Max value = 8.847
Wed Feb 20 00:44:22 2008

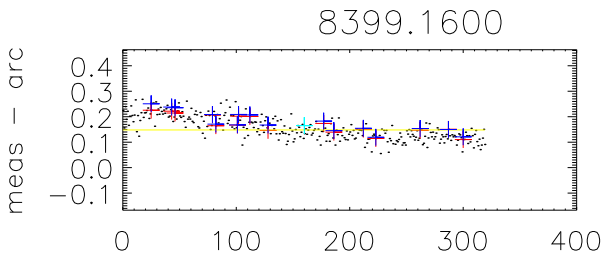

PLATE=1582 MJD=52939 Extraction chi^2 for sdR−r1−00022942.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

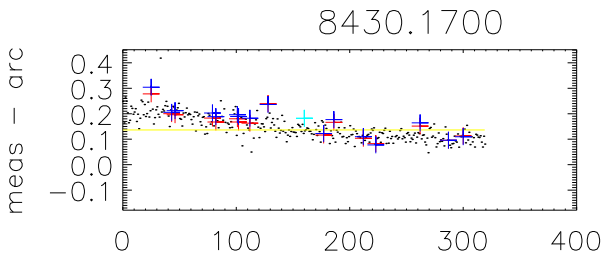

6300.3040
off: 0.12
sig: 0.007
6363.7760
off: 0.19
sig: 0.015
6553.6100
off: 0.22
sig: 0.033
6923.2100
off: 0.20
sig: 0.017
6949.0300
off: 0.23
sig: 0.016
7571.7500
off: 0.26
sig: 0.018
7794.1200
off: 0.09
sig: 0.007
7821.5100
off: 0.15
sig: 0.007
8399.1600
off: 0.17
sig: 0.006
8430.1700
off: 0.18
sig: 0.005
8885.8300
off: 0.16
sig: 0.005
8919.6100
off: 0.17
sig: 0.005

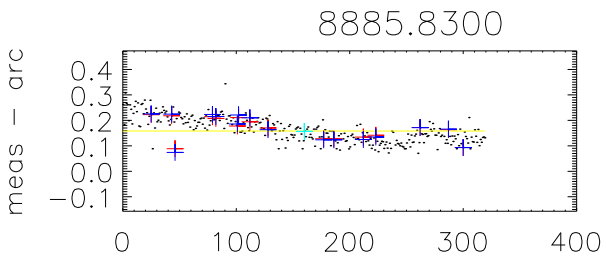

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

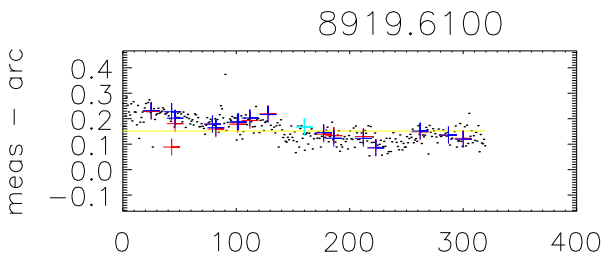

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

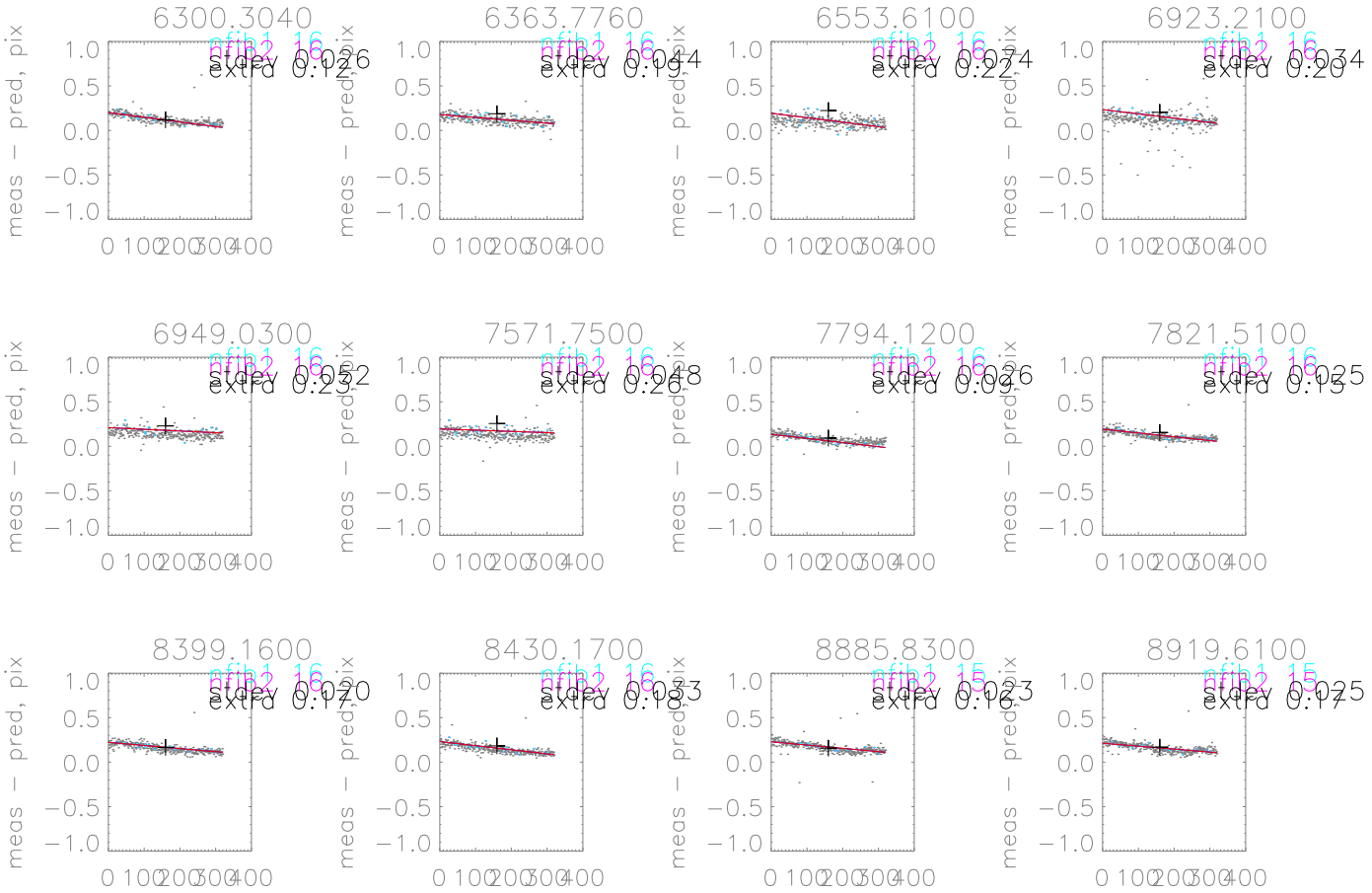

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

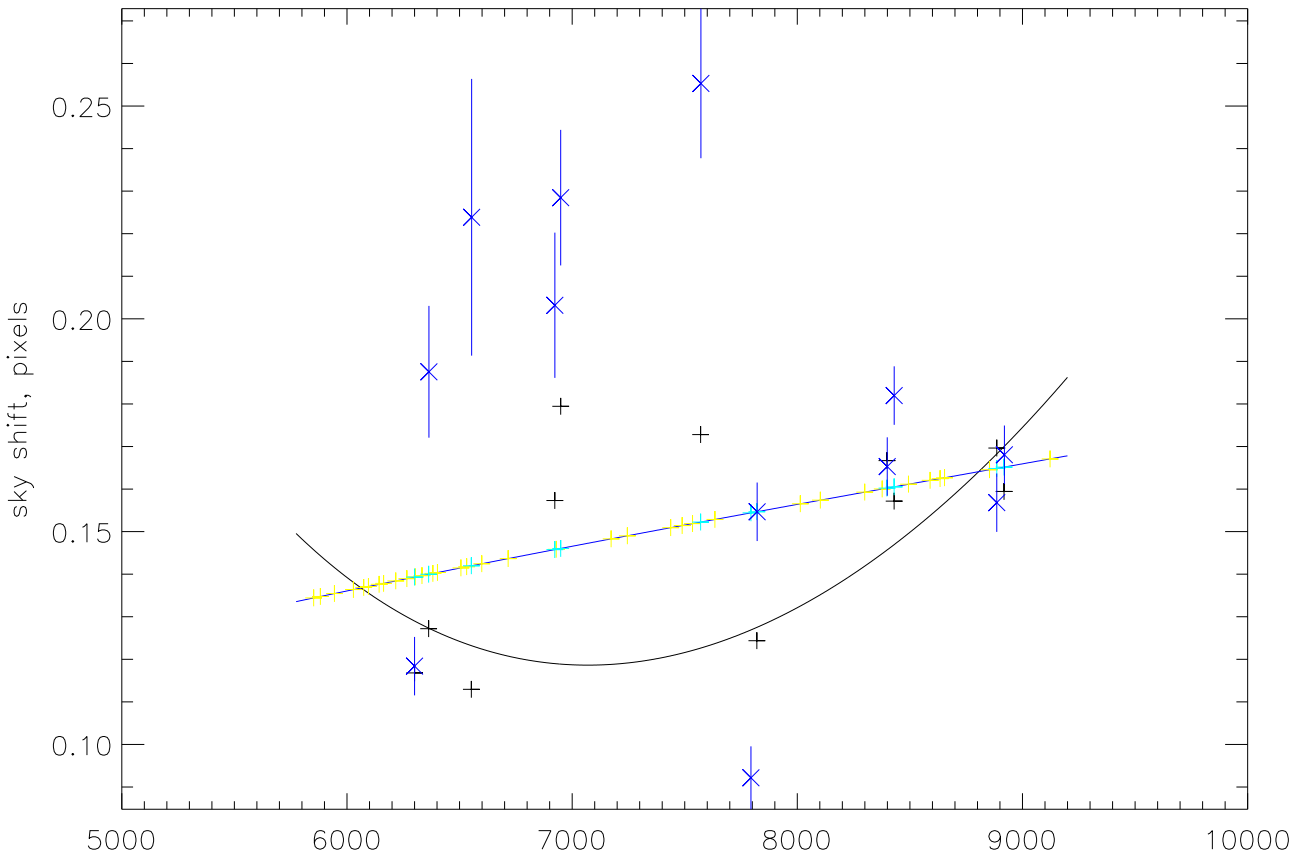

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

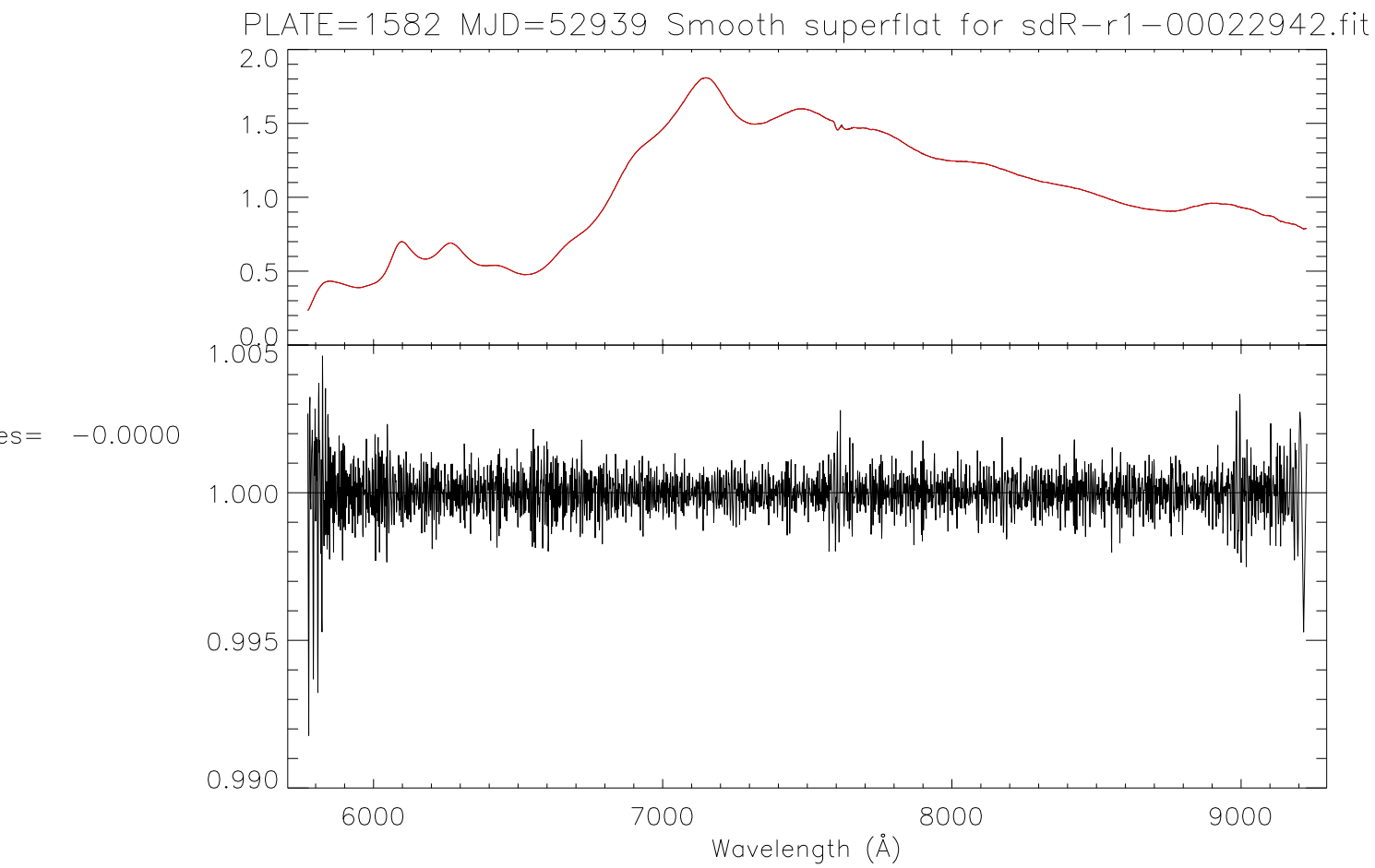

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

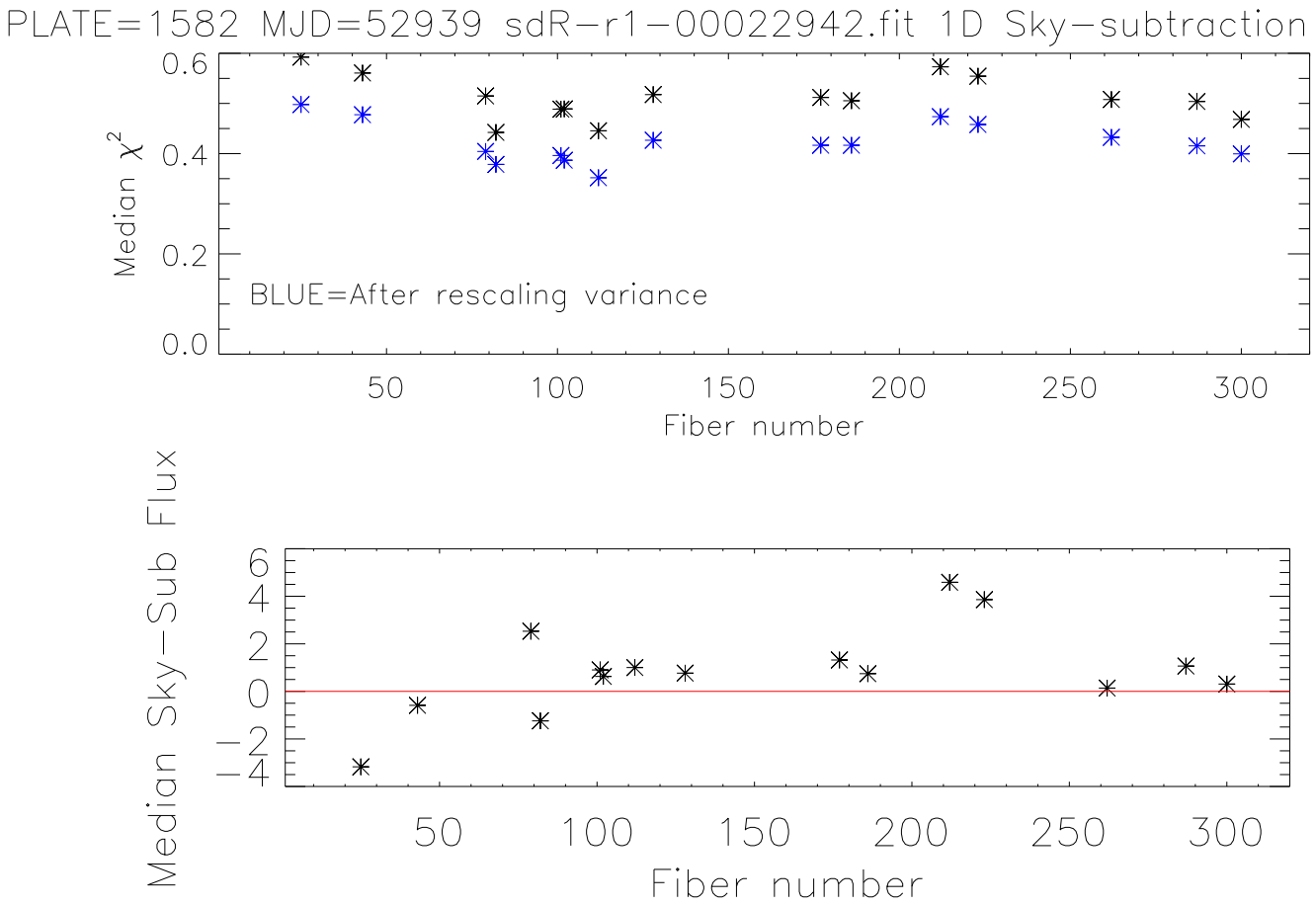

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

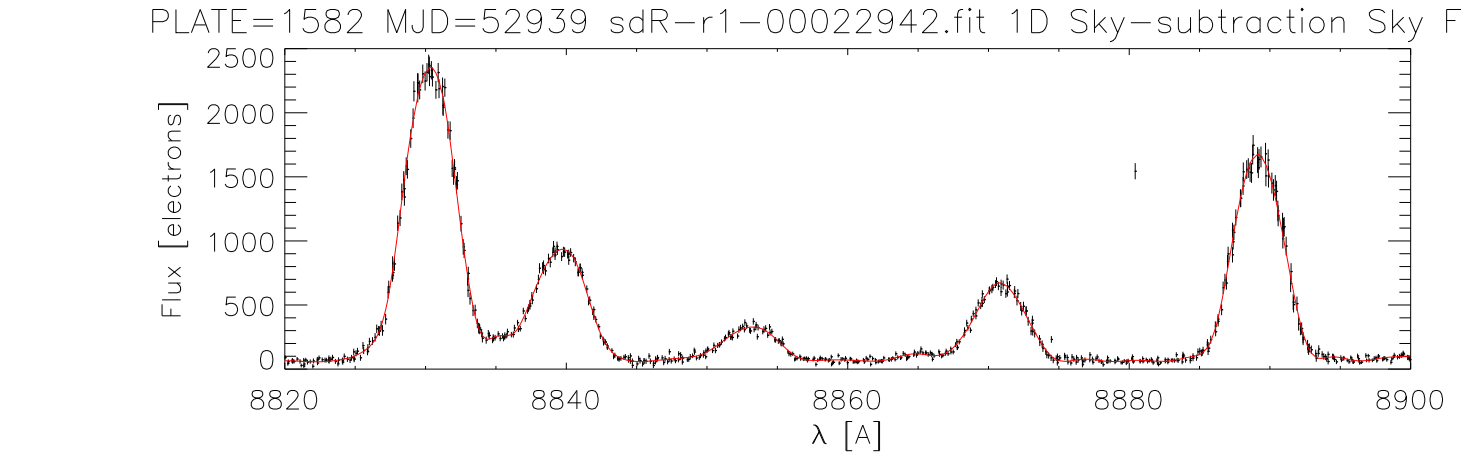

6300.3040
stdev 0.026
extra 0.12
6363.7760
stdev 0.044
extra 0.19
6553.6100
stdev 0.074
extra 0.22
6923.2100
stdev 0.034
extra 0.20
6949.0300
stdev 0.052
extra 0.23
7571.7500
stdev 0.048
extra 0.26
7794.1200
stdev 0.026
extra 0.04
7821.5100
stdev 0.025
extra 0.15
8399.1600
stdev 0.020
extra 0.17
8430.1700
stdev 0.033
extra 0.18
8885.8300
stdev 0.023
extra 0.16
8919.6100
stdev 0.025
extra 0.17
meas − pred, pix

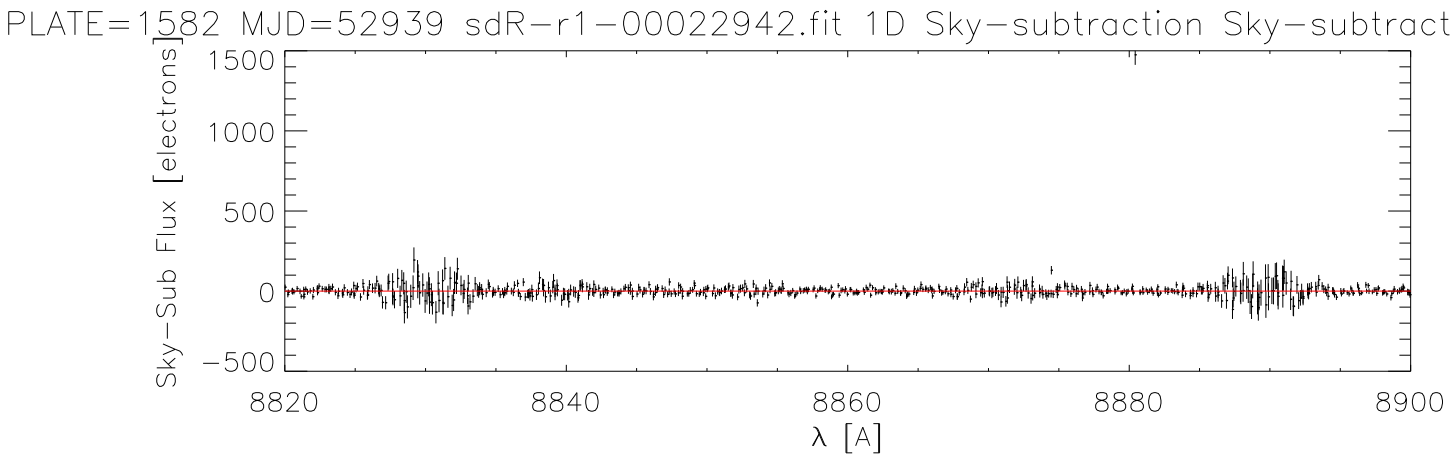

sky shift, pixels
0.25
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

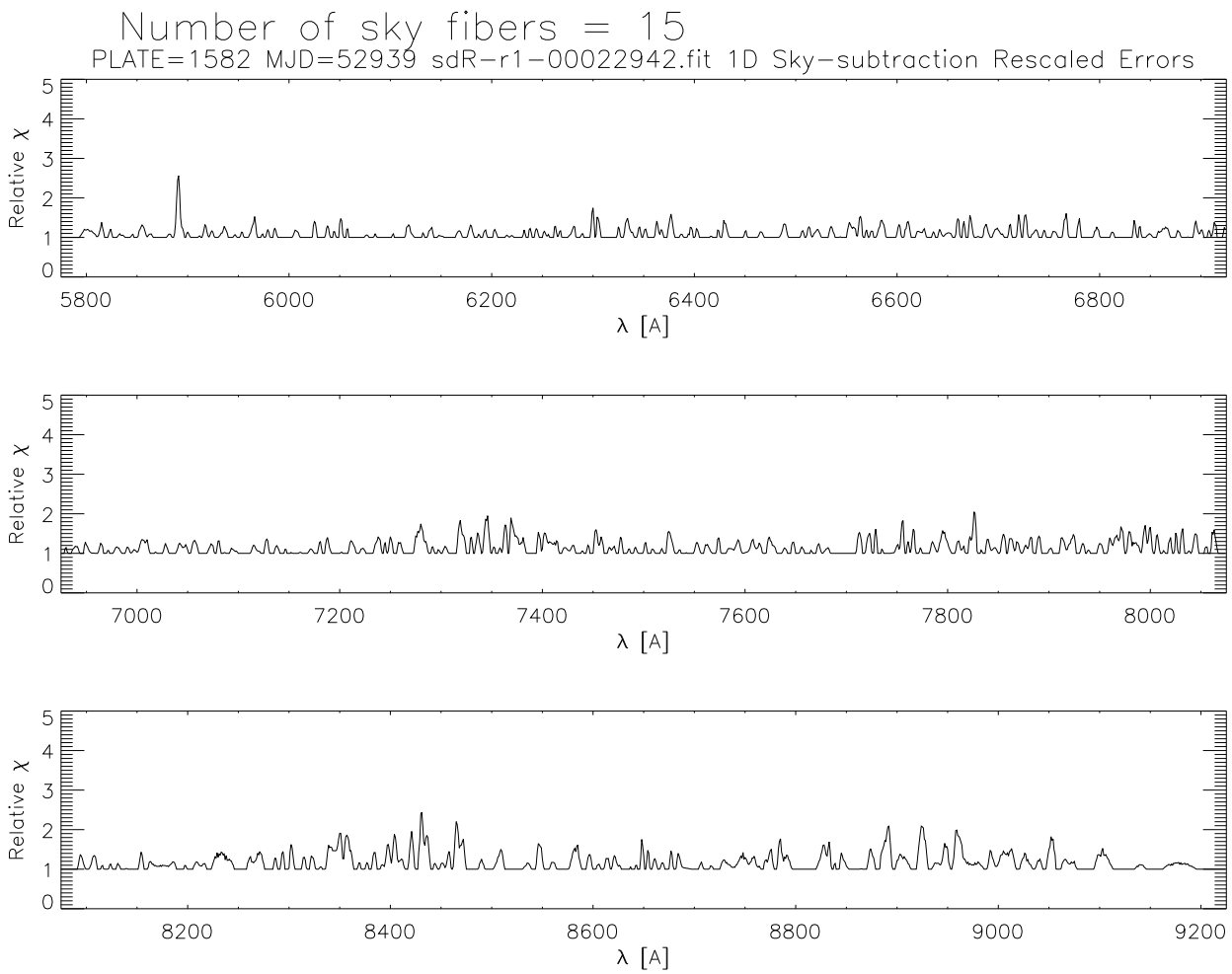

PLATE=1582 MJD=52939 Smooth superflat for sdR-r1-00022942.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

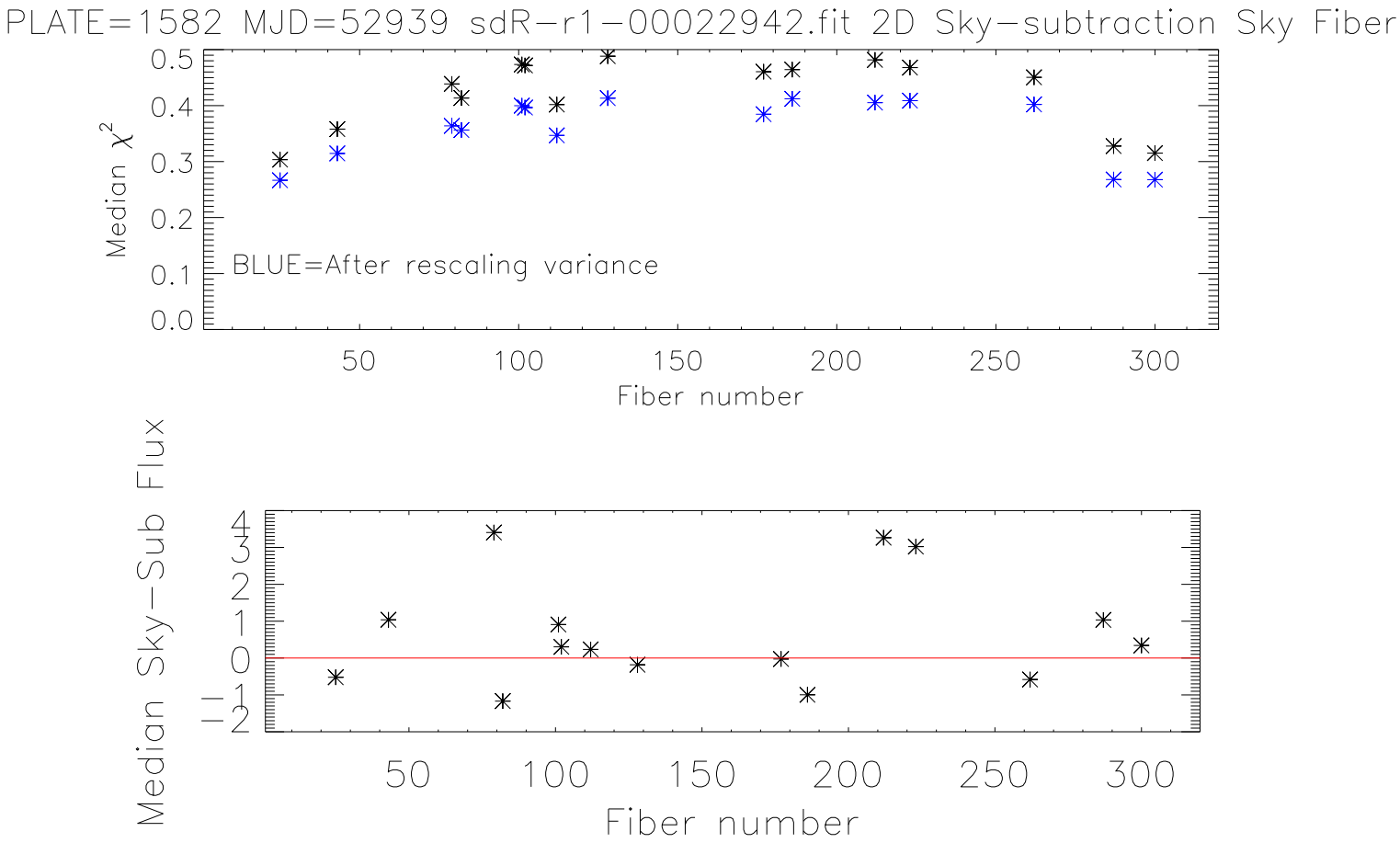

PLATE=1582 MJD=52939 sdR-r1-00022942.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

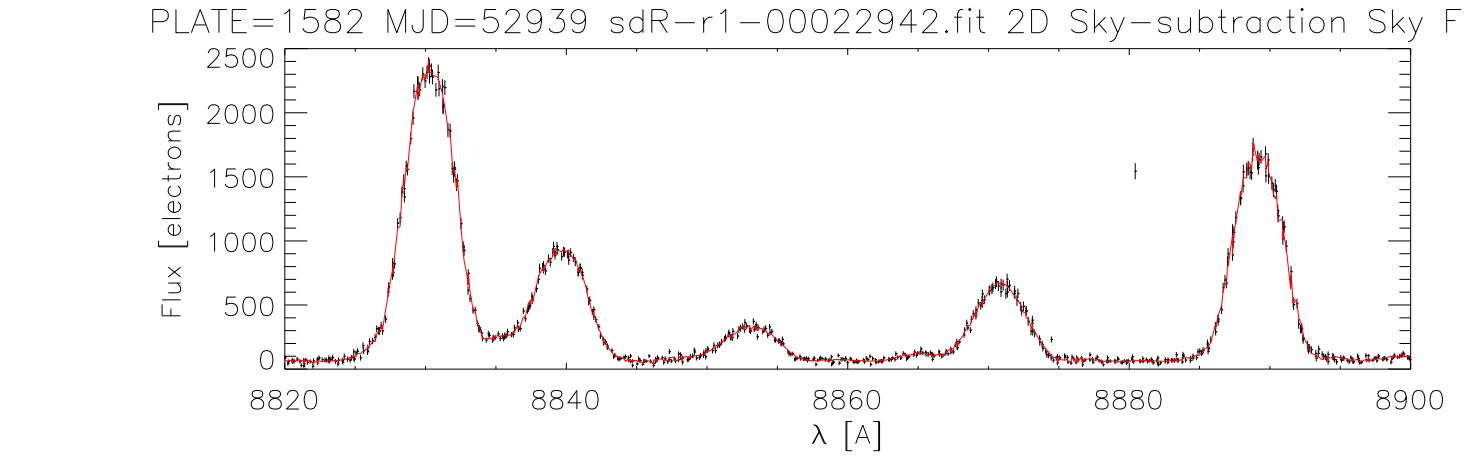
Median Sky-Sub Flux
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

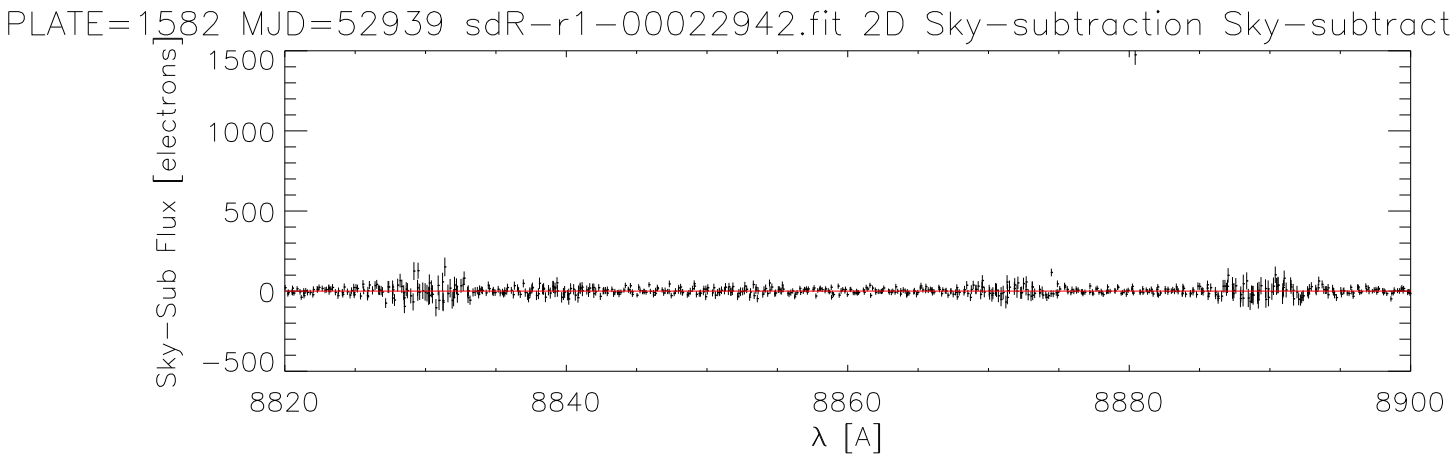

PLATE=1582 MJD=52939 sdR-r1-00022942.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

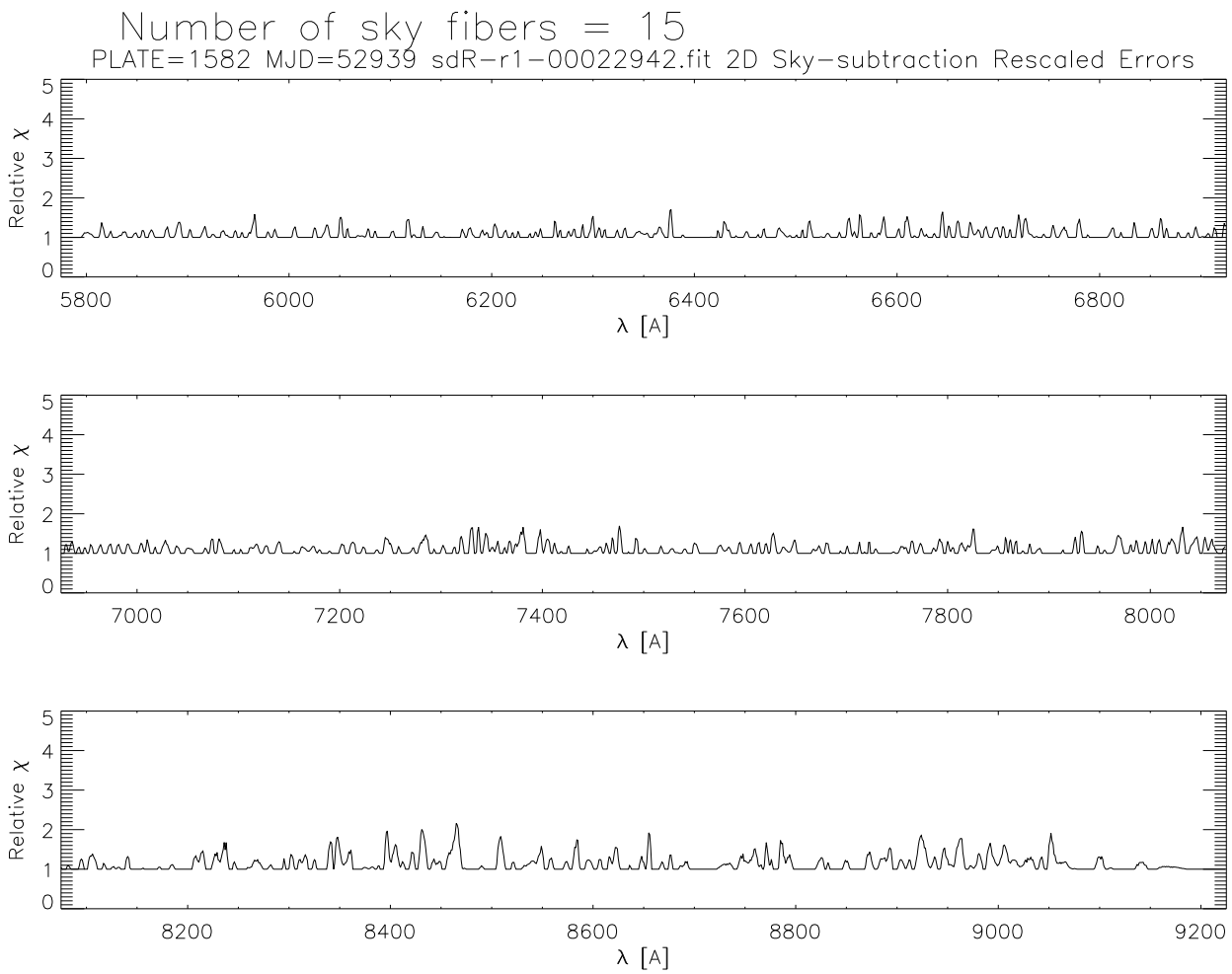

PLATE=1582 MJD=52939 sdR-r1-00022942.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

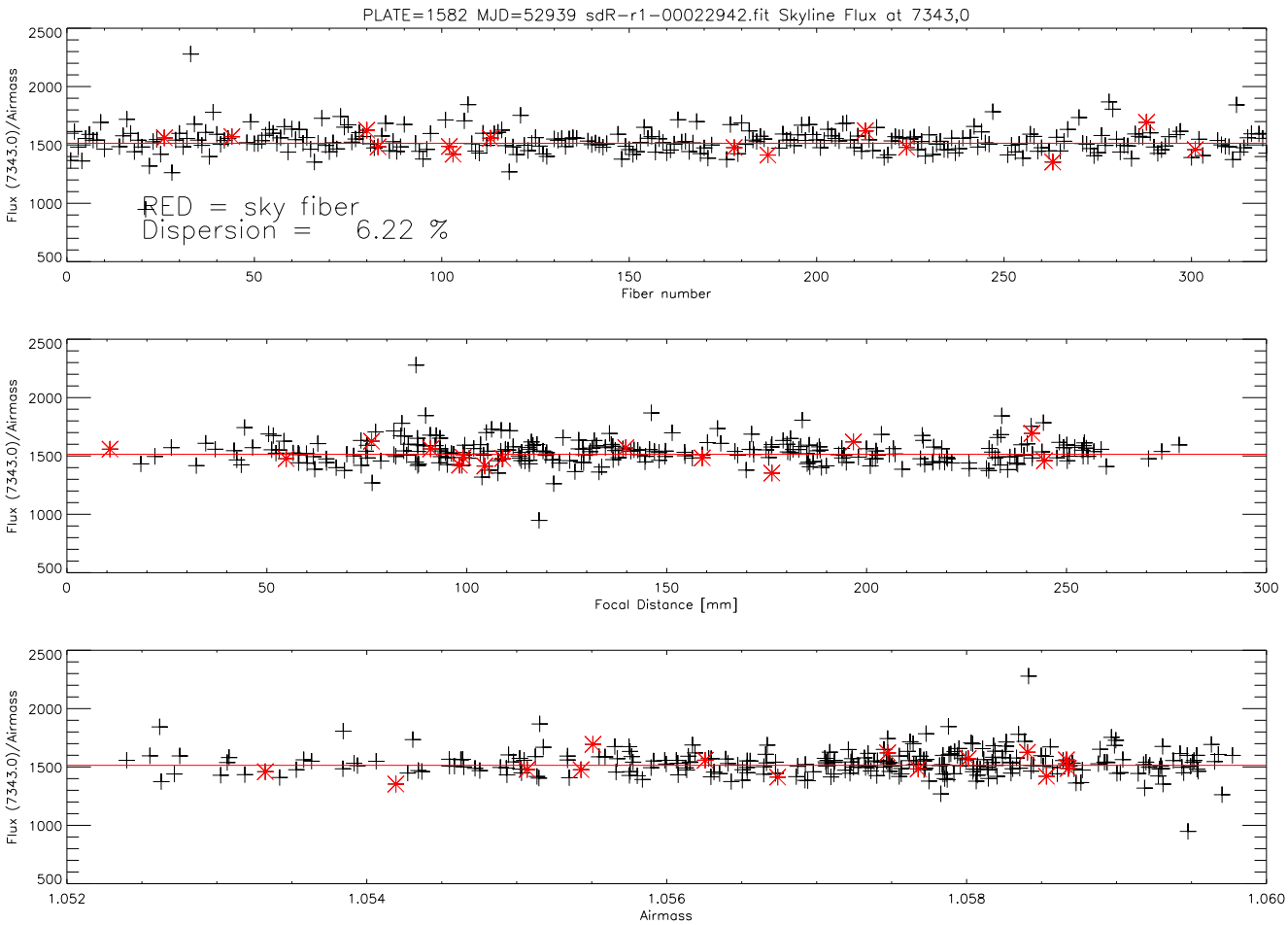

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r1-00022942.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

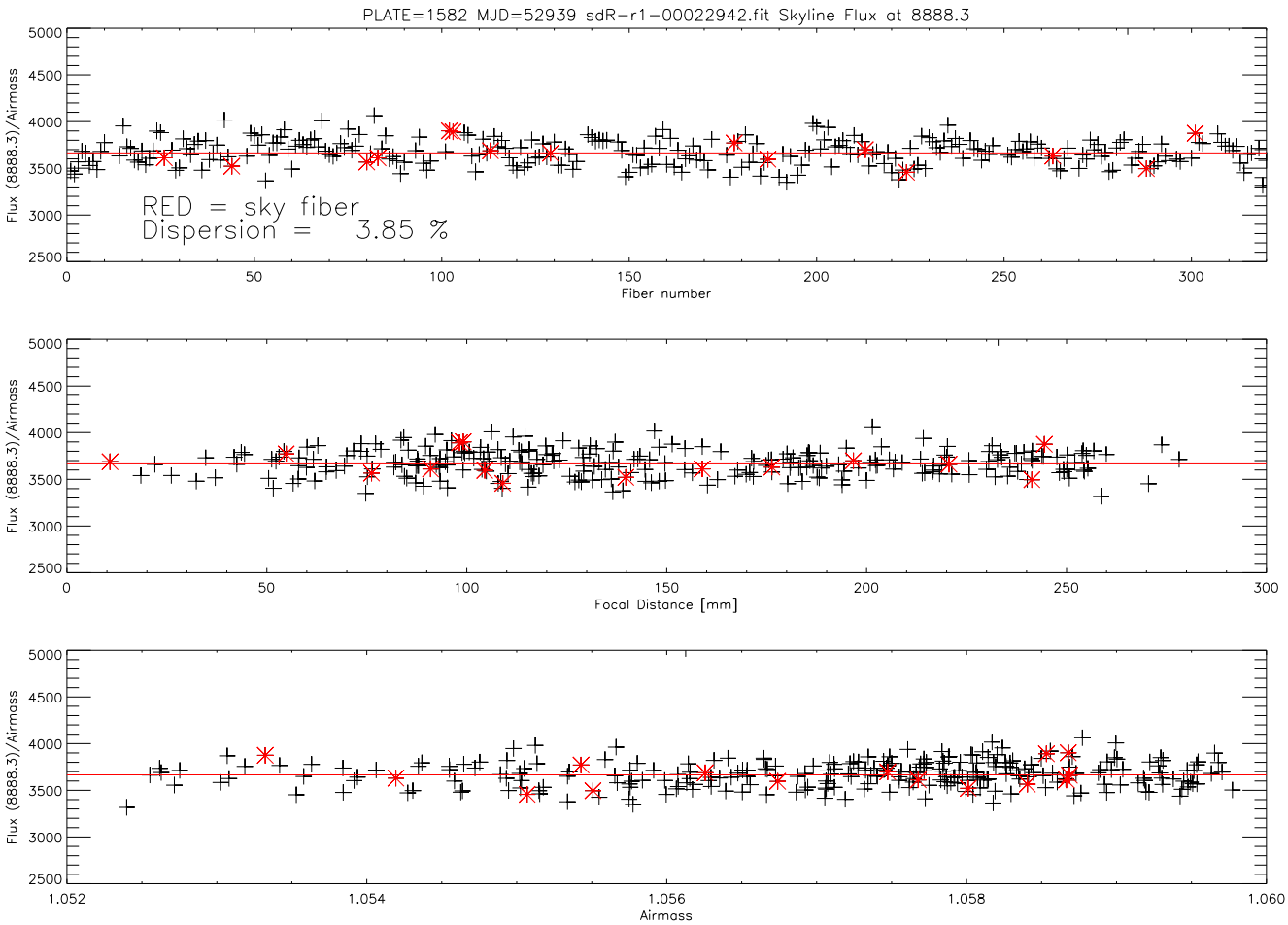

PLATE=1582 MJD=52939 sdR-r1-00022942.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

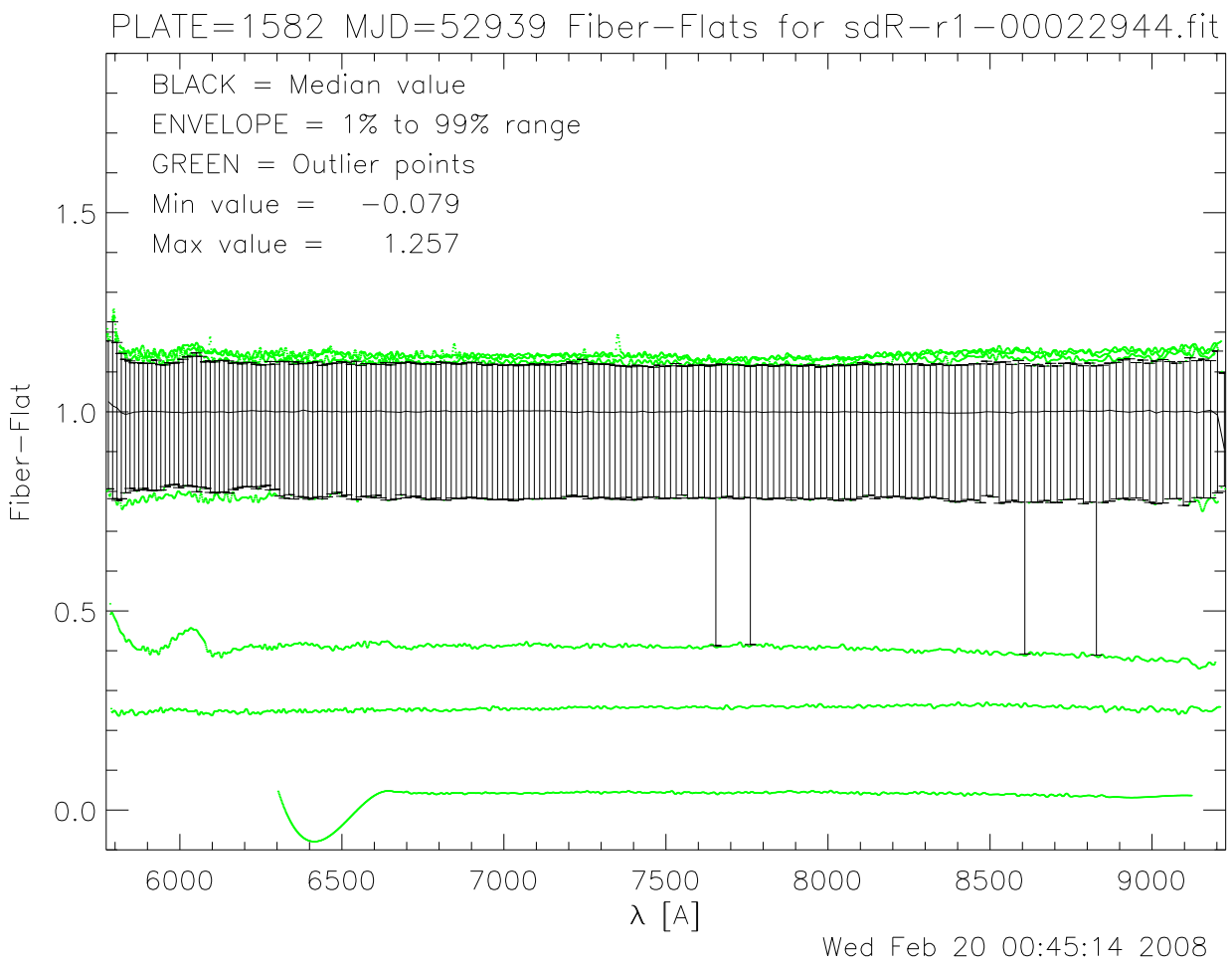

PLATE=1582 MJD=52939 sdR-r1-00022942.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

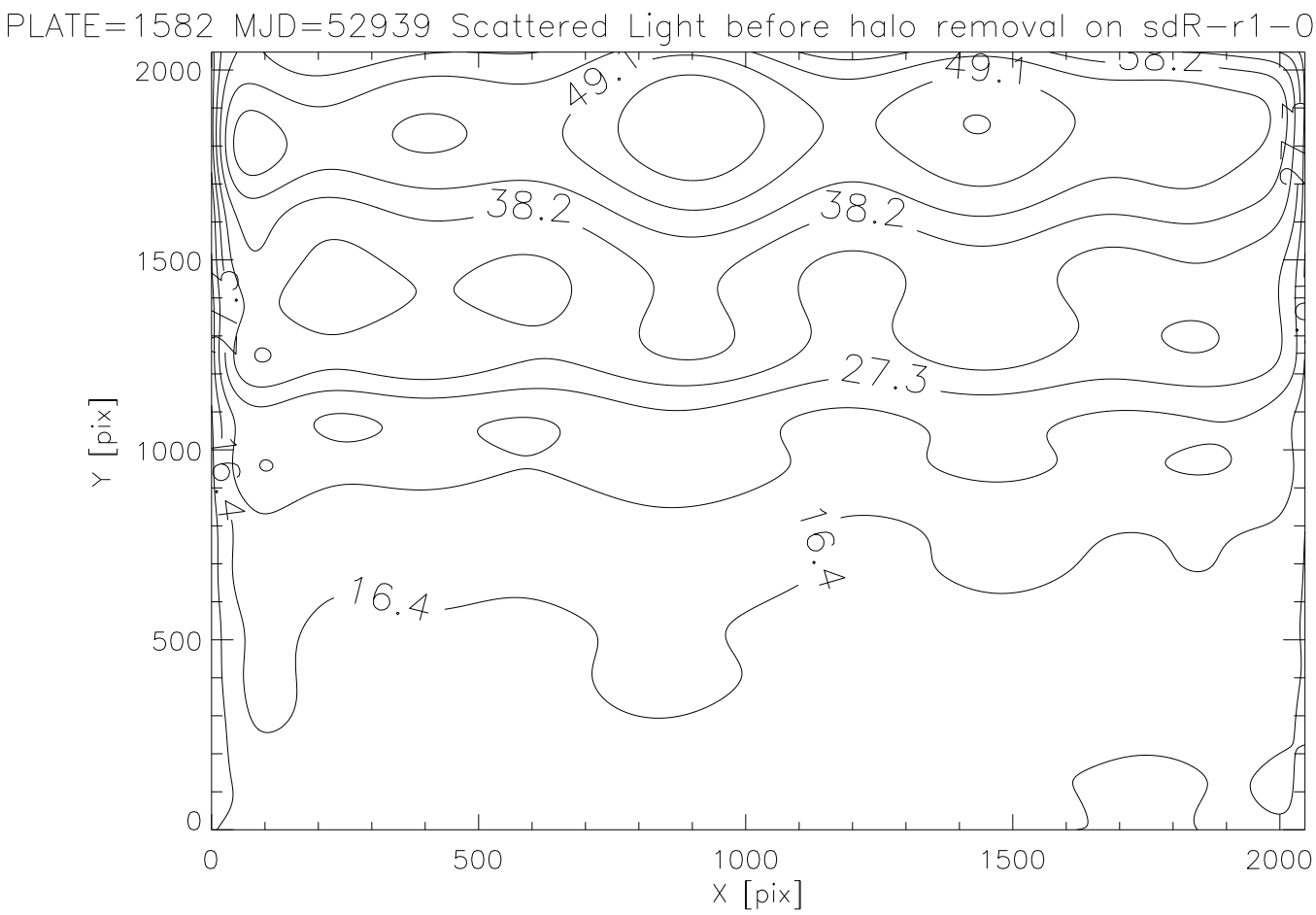

PLATE=1582 MJD=52939 sdR-r1-00022942.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

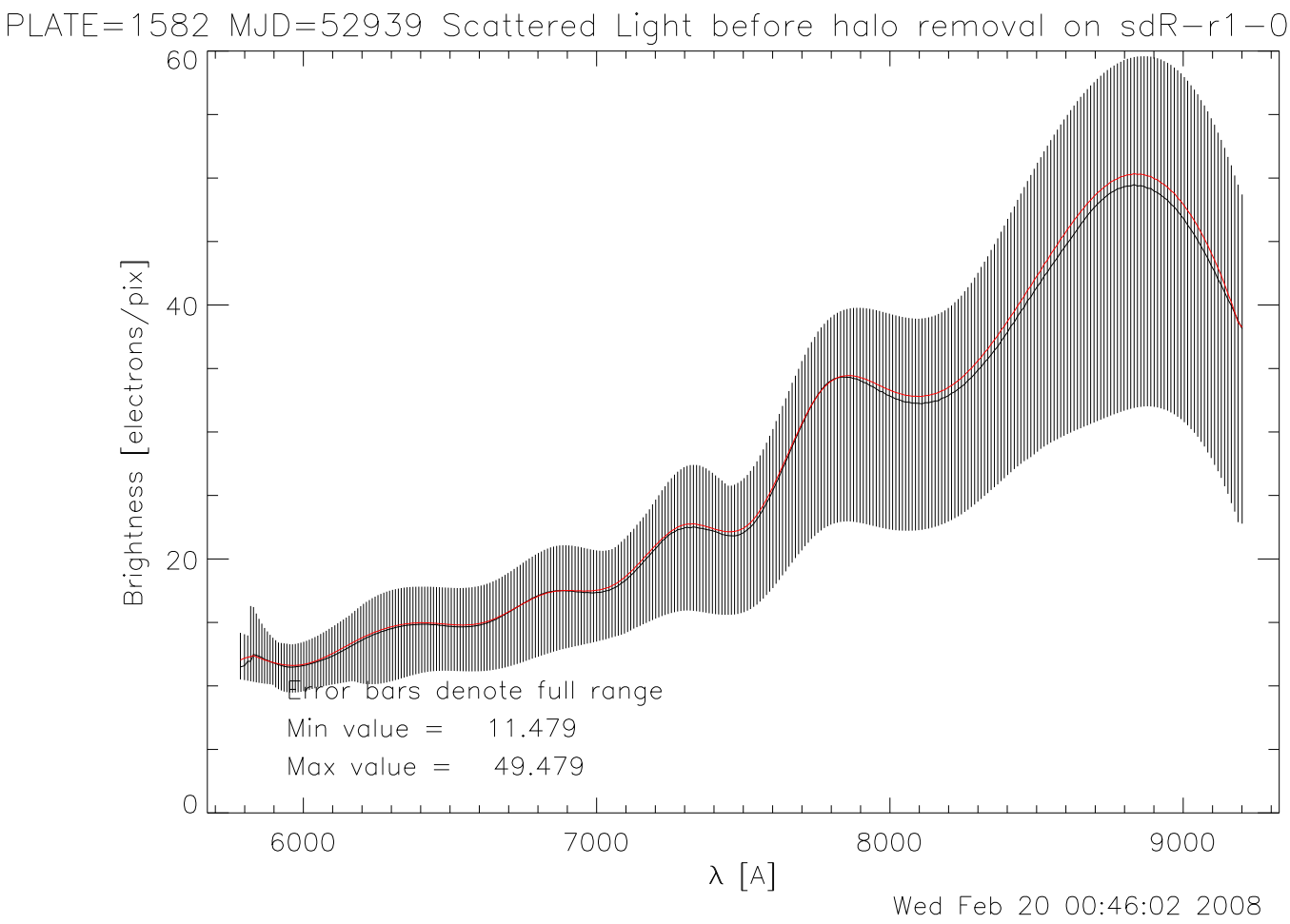

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r1-00022942.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

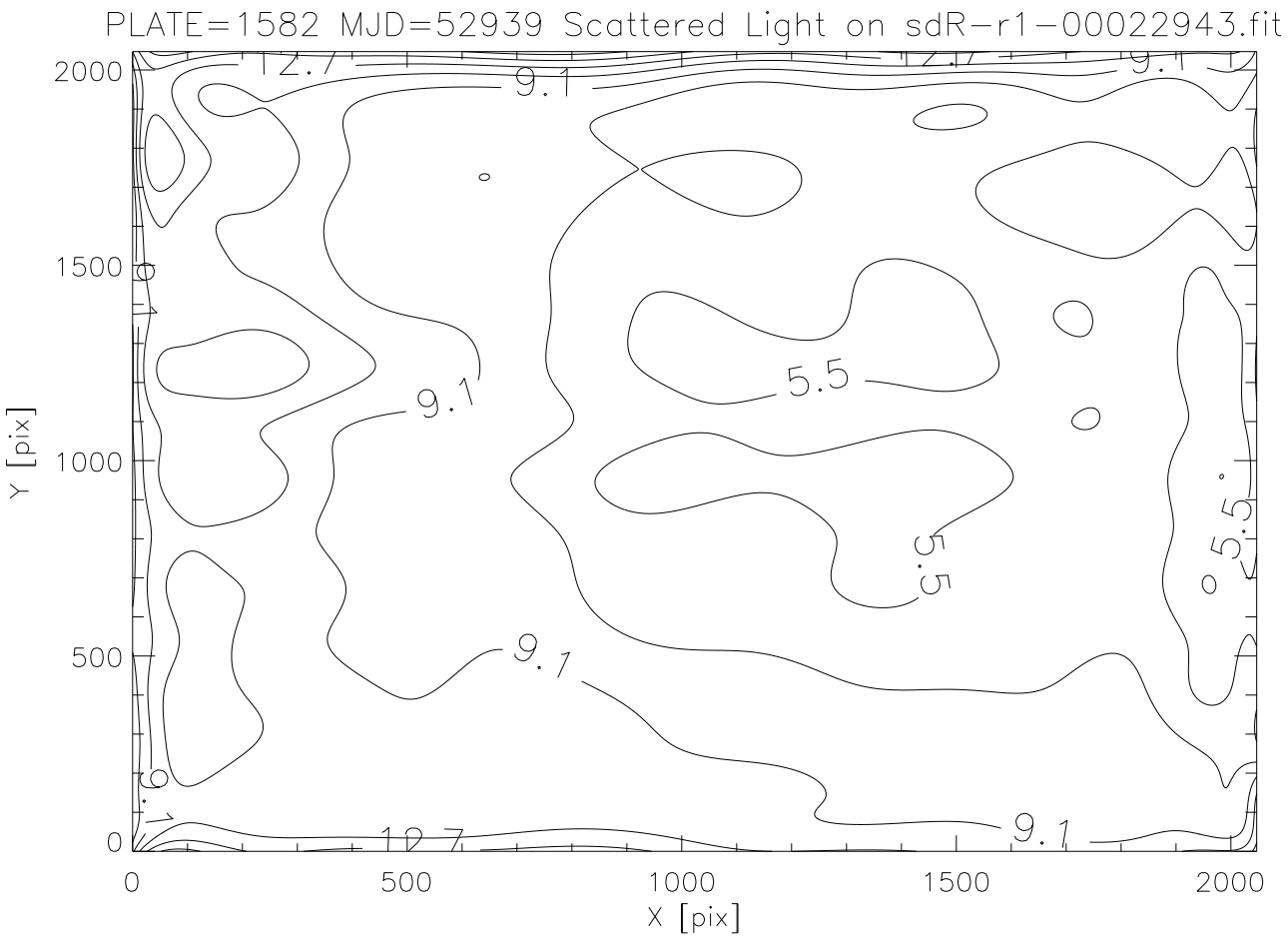

PLATE=1582 MJD=52939 sdR-r1-00022942.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 6.22 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

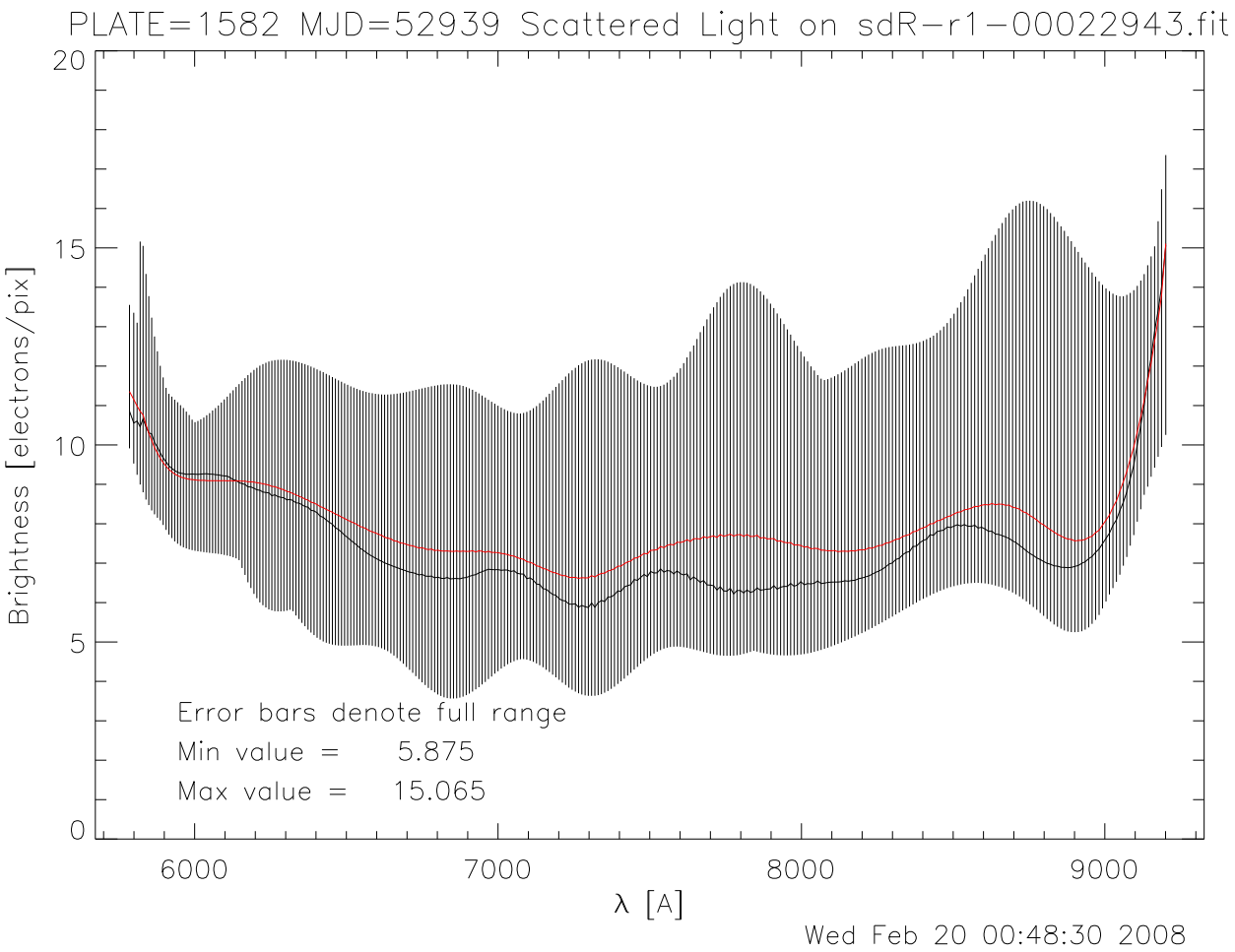

PLATE=1582 MJD=52939 sdR-r1-00022942.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.85 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

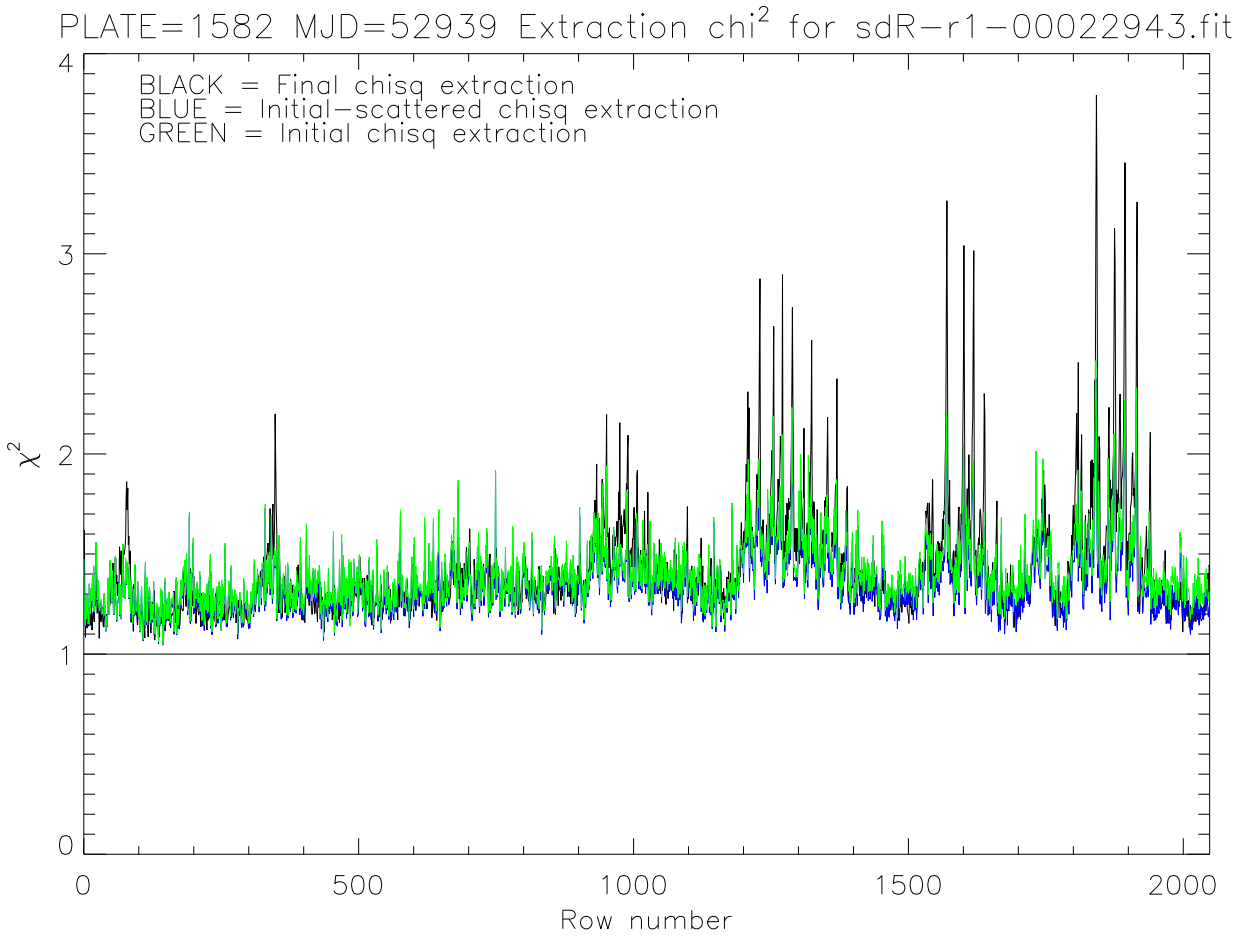

PLATE=1582 MJD=52939 Fiber−Flats for sdR−r1−00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = −0.079
Max value = 1.257
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 00:45:14 2008

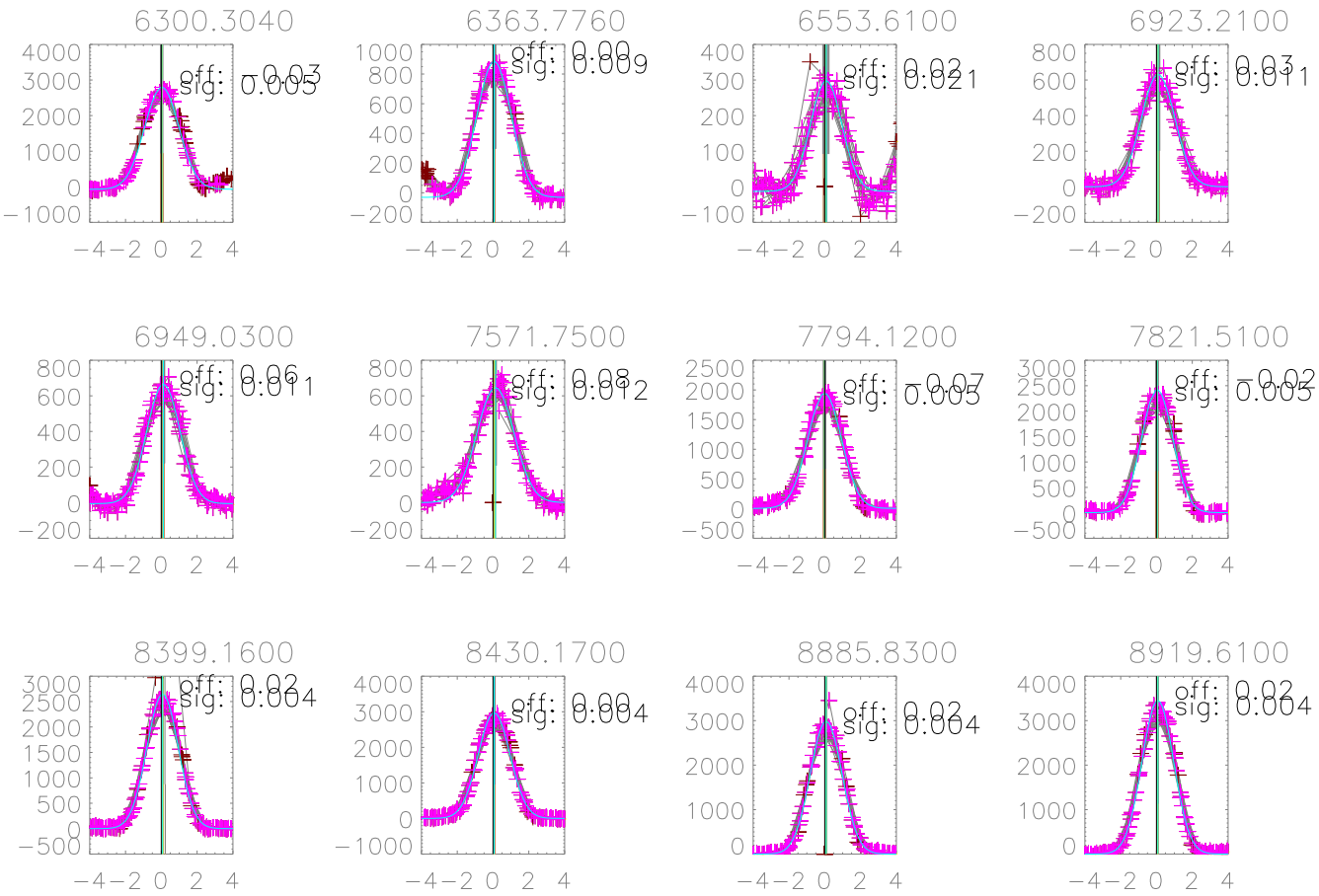

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r1-00022943.fi
49.1
38.2
27.3
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

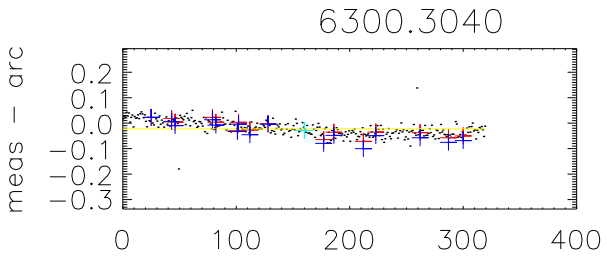

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r1-00022943.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.479
Max value = 49.479
Wed Feb 20 00:46:02 2008

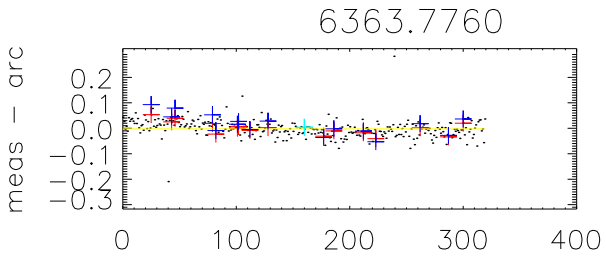

PLATE=1582 MJD=52939 Scattered Light on sdR-r1-00022943.fit
12.7
9.1
5.5
0.5
Y [pix]
X [pix]
0
500
1000
1500
2000

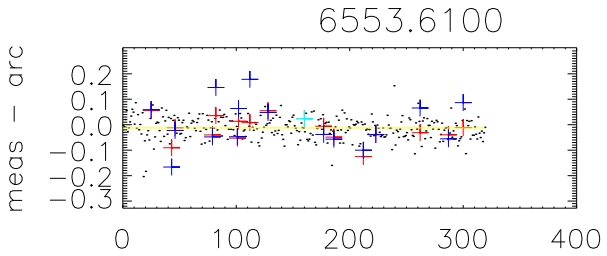

PLATE=1582 MJD=52939 Scattered Light on sdR-r1-00022943.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.875
Max value = 15.065
Wed Feb 20 00:48:30 2008

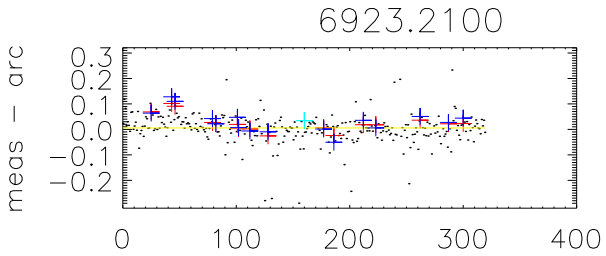

PLATE=1582 MJD=52939 Extraction chi^2 for sdR−r1−00022943.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

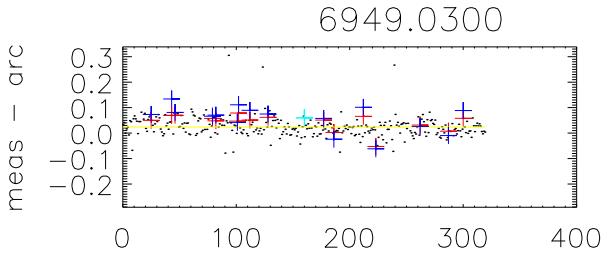

6300.3040
off: -0.03
sig: 0.005
6363.7760
off: 0.00
sig: 0.009
6553.6100
off: 0.02
sig: 0.021
6923.2100
off: 0.03
sig: 0.011
6949.0300
off: 0.06
sig: 0.011
7571.7500
off: 0.08
sig: 0.012
7794.1200
off: -0.07
sig: 0.005
7821.5100
off: -0.02
sig: 0.005
8399.1600
off: 0.02
sig: 0.004
8430.1700
off: 0.00
sig: 0.004
8885.8300
off: 0.02
sig: 0.004
8919.6100
off: 0.02
sig: 0.004

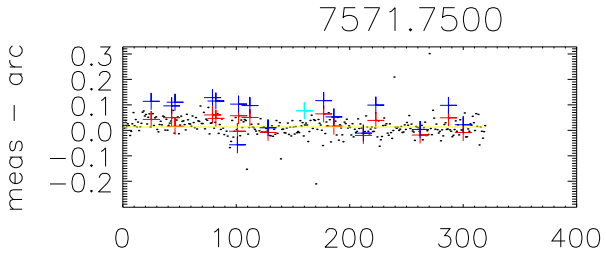

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

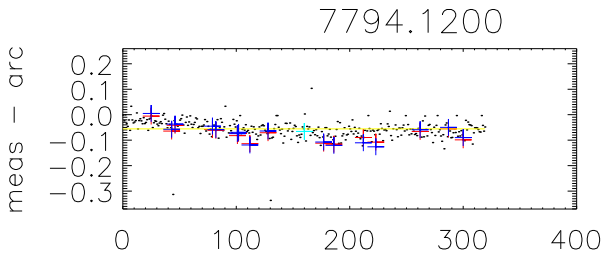

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

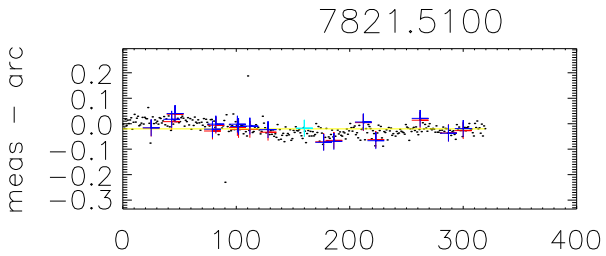

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

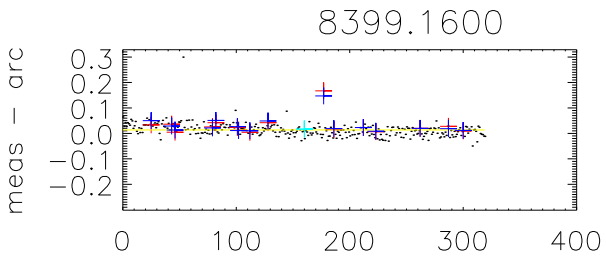

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

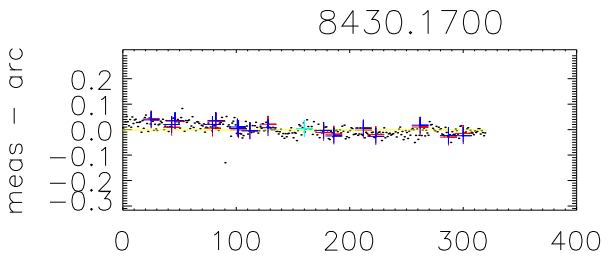

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

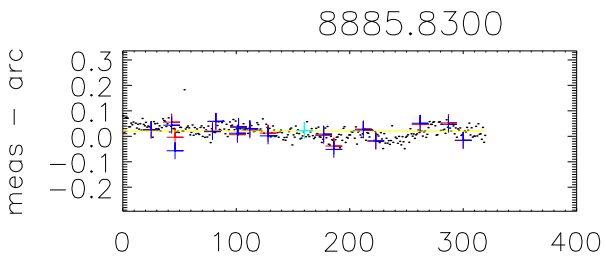

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

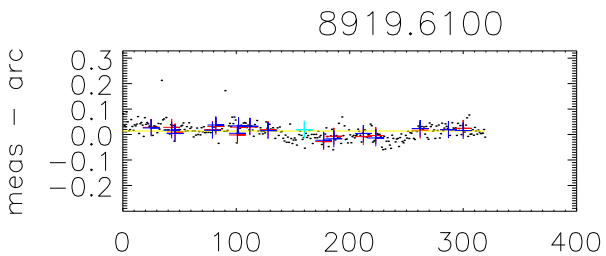

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

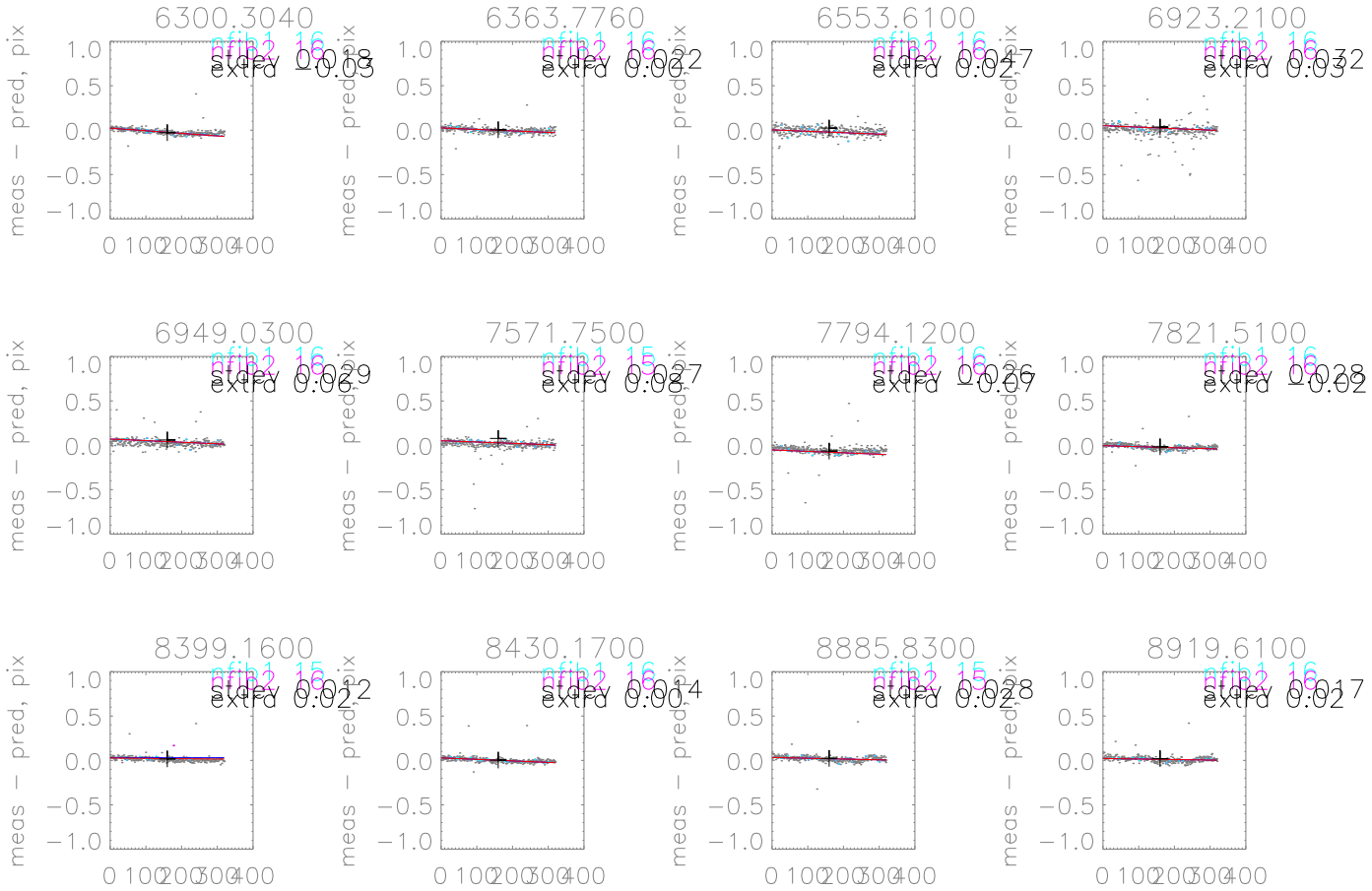

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

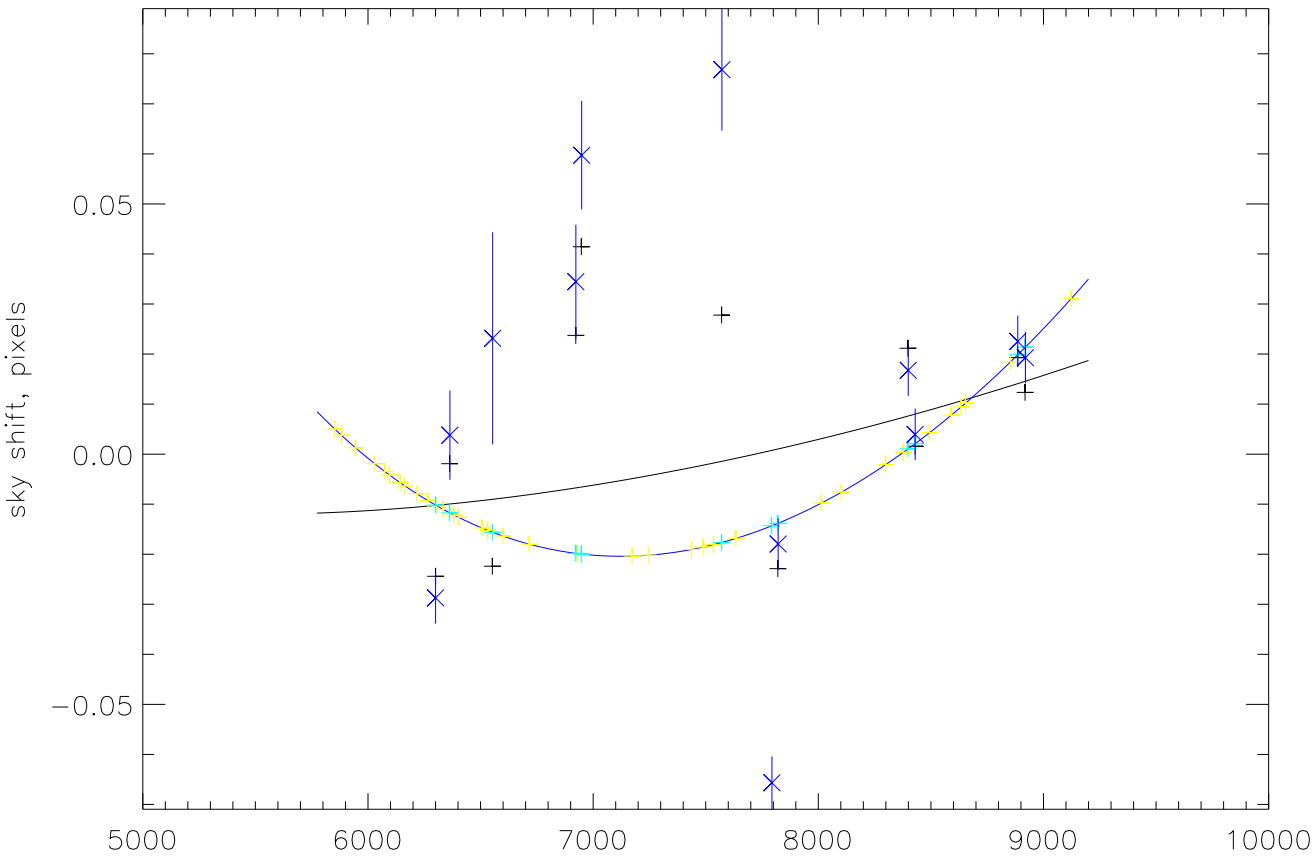

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

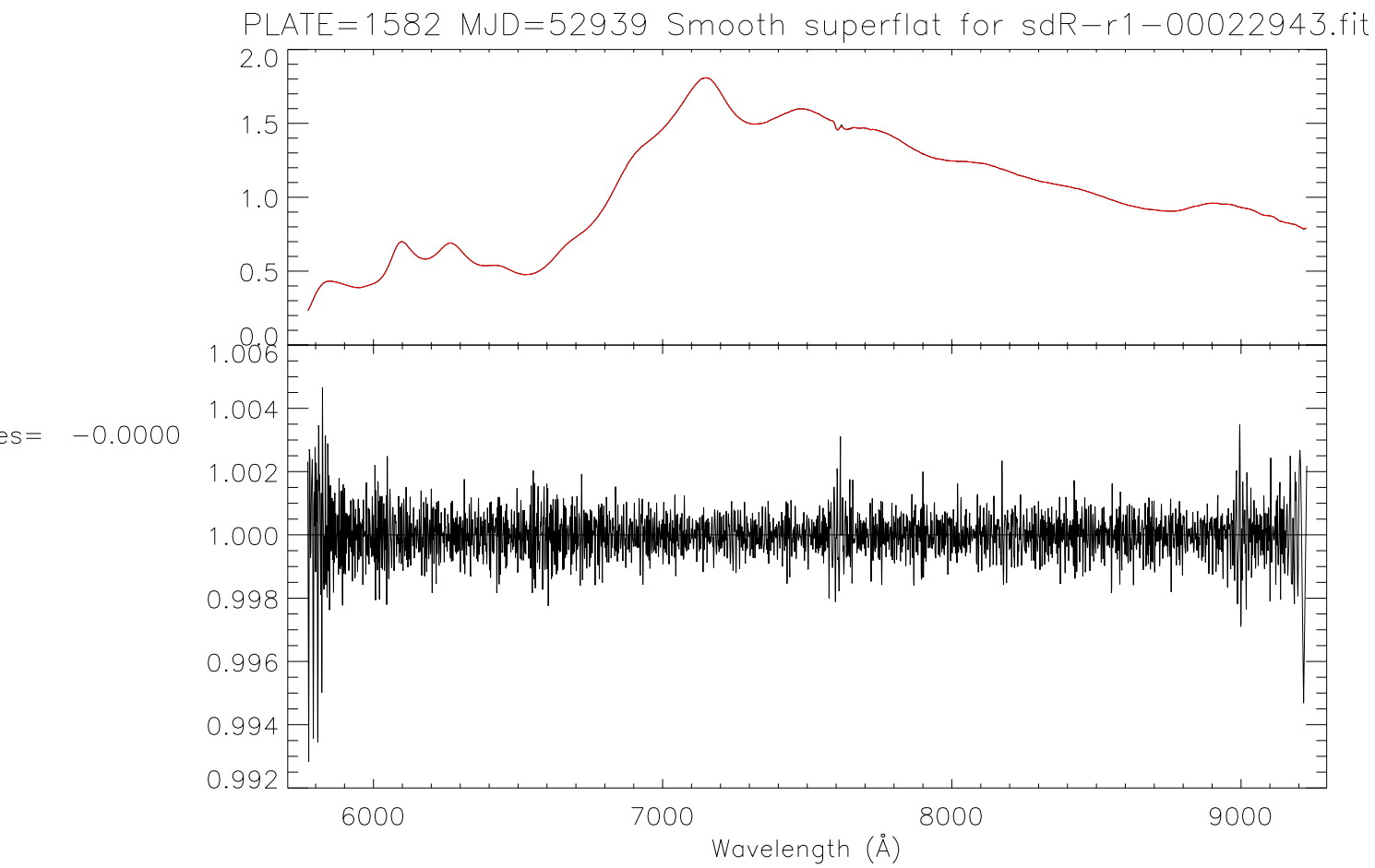

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

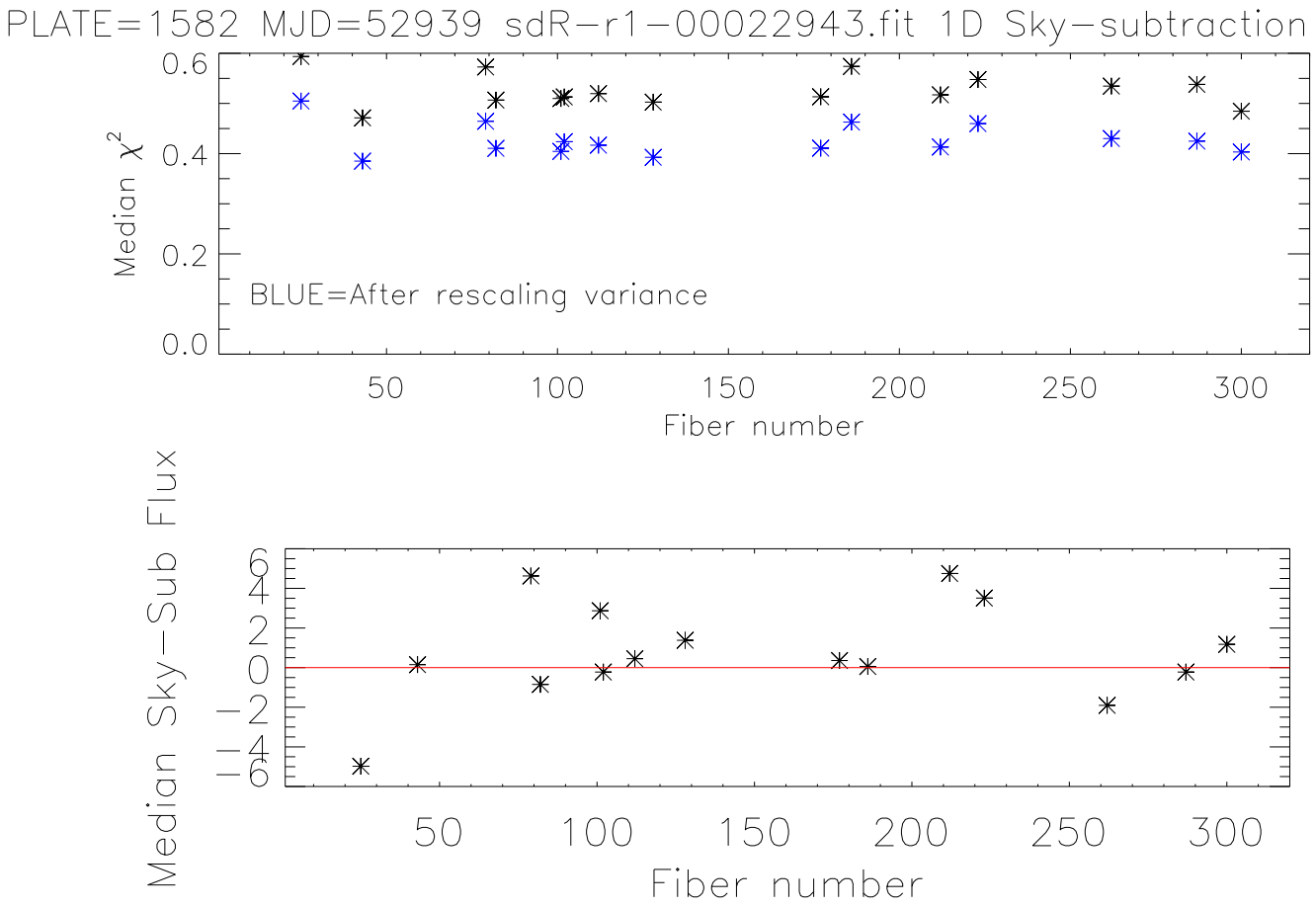

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6300.3040
stdev 0.018
extra −0.03
6363.7760
stdev 0.022
extra 0.06
6553.6100
stdev 0.047
extra 0.02
6923.2100
stdev 0.032
extra 0.03
6949.0300
stdev 0.029
extra 0.06
7571.7500
stdev 0.027
extra 0.08
7794.1200
stdev 0.026
extra −0.07
7821.5100
stdev 0.028
extra −0.02
8399.1600
stdev 0.012
extra 0.02
8430.1700
stdev 0.014
extra 0.00
8885.8300
stdev 0.028
extra 0.02
8919.6100
stdev 0.017
extra 0.02
meas − pred, pix

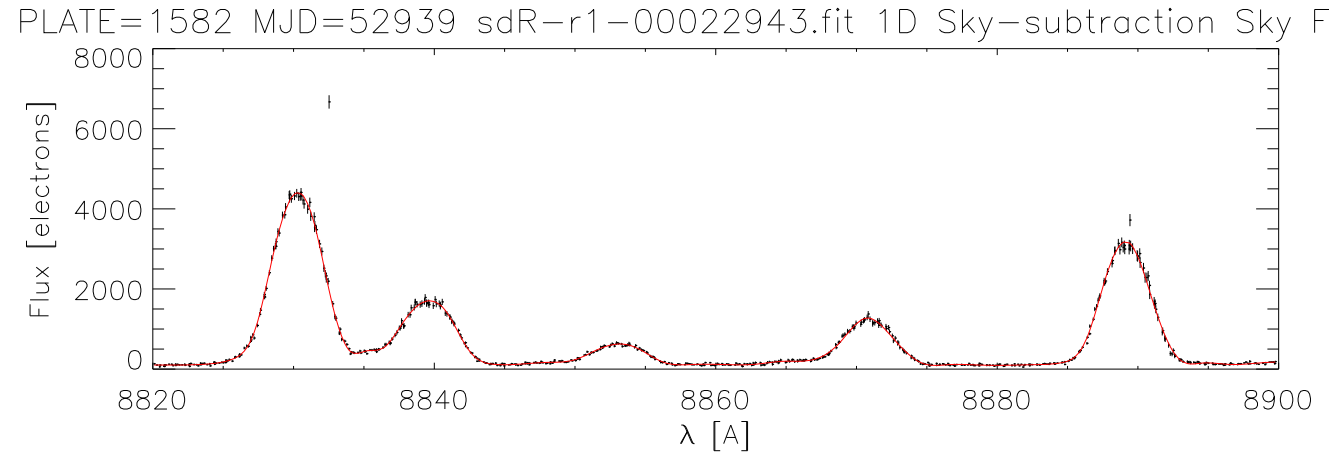

sky shift, pixels
0.05
0.00
−0.05
5000
6000
7000
8000
9000
10000

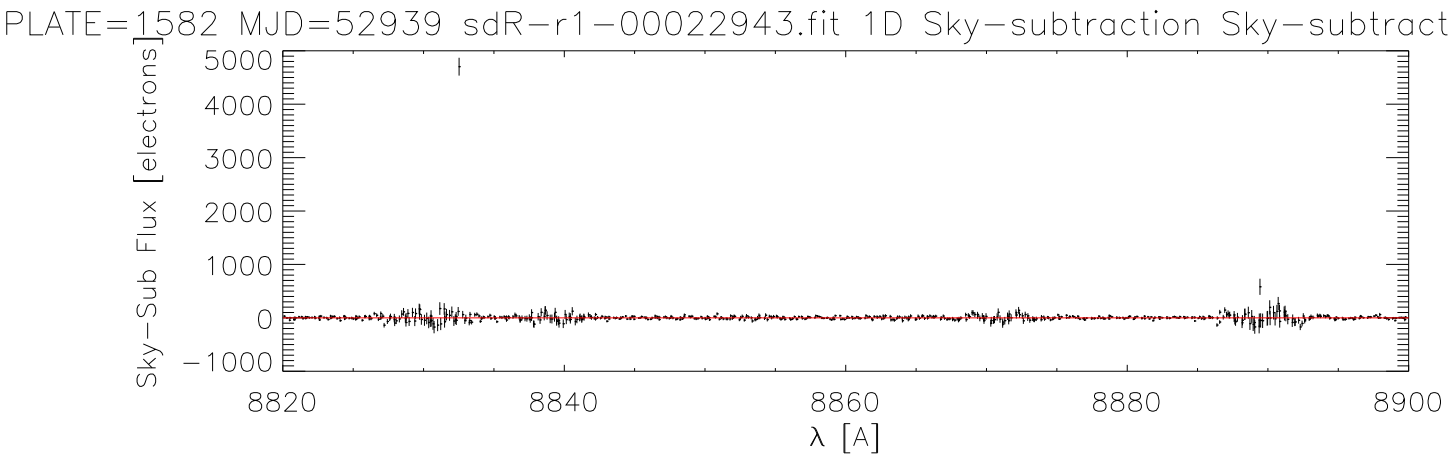

PLATE=1582 MJD=52939 Smooth superflat for sdR-r1-00022943.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

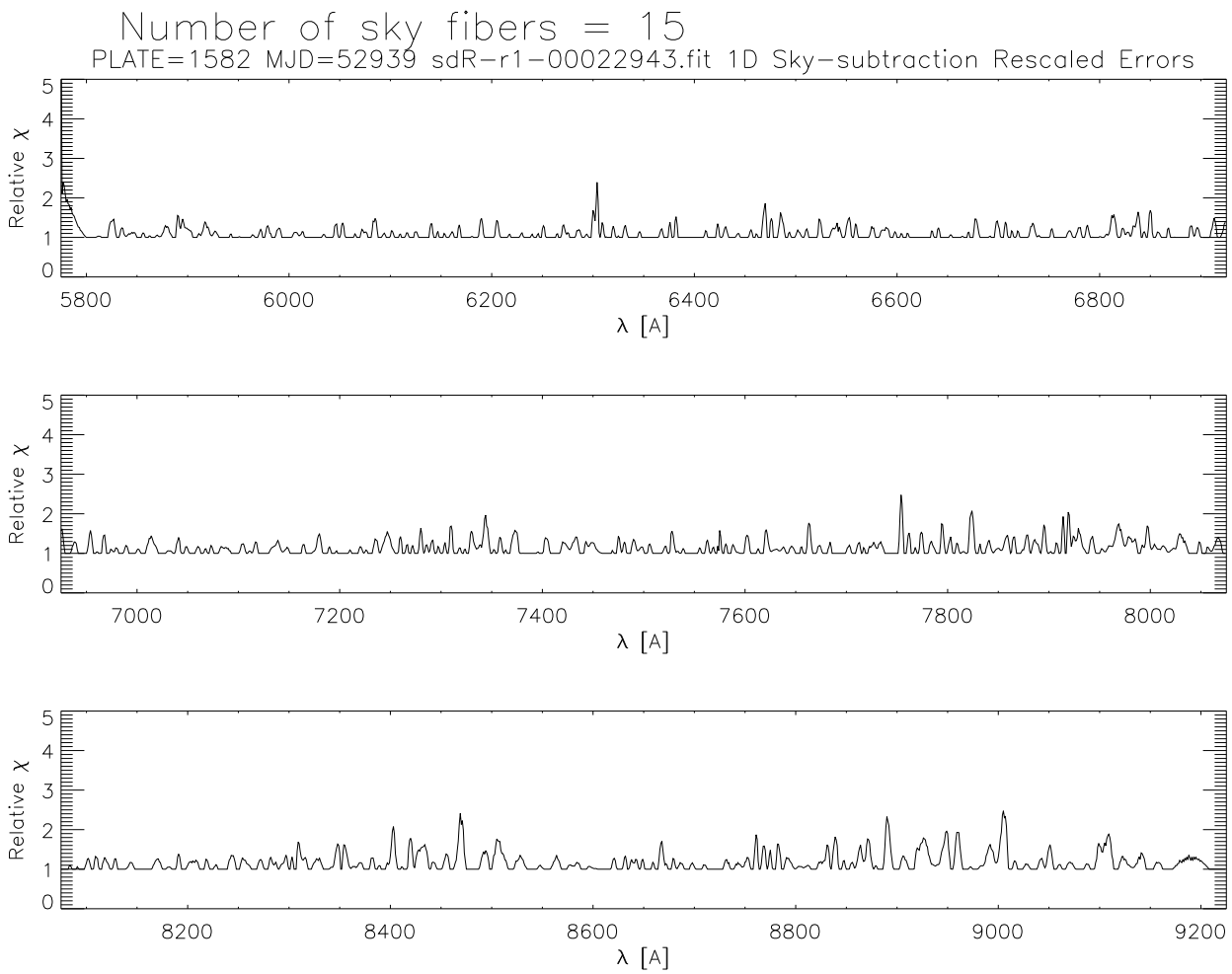
es= −0.0000

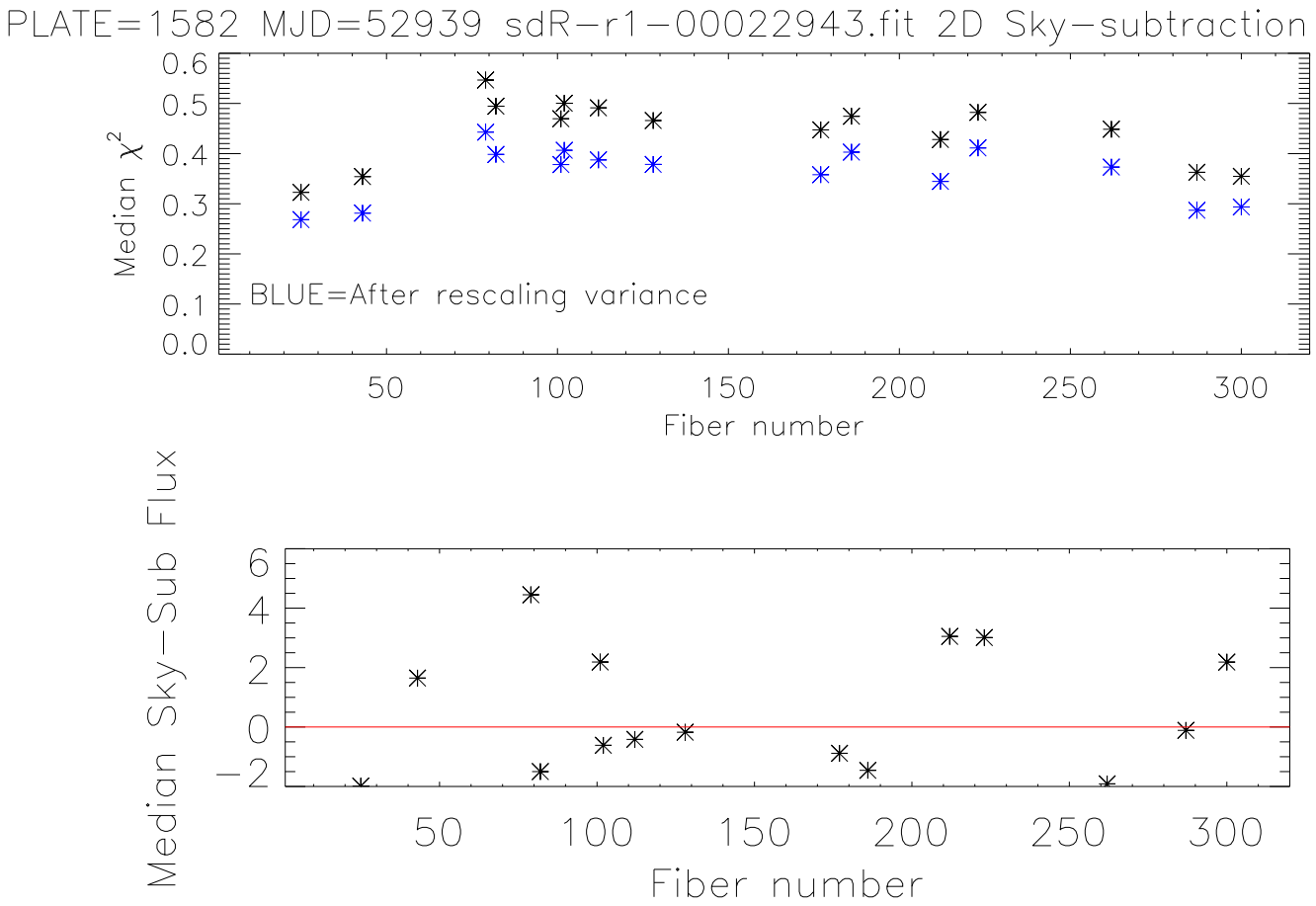

PLATE=1582 MJD=52939 sdR-r1-00022943.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

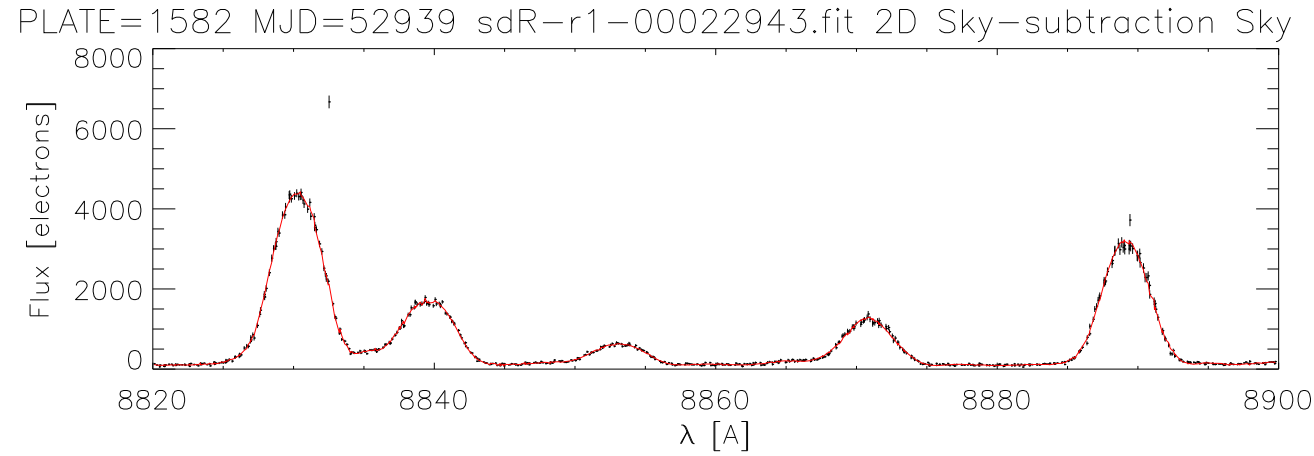
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

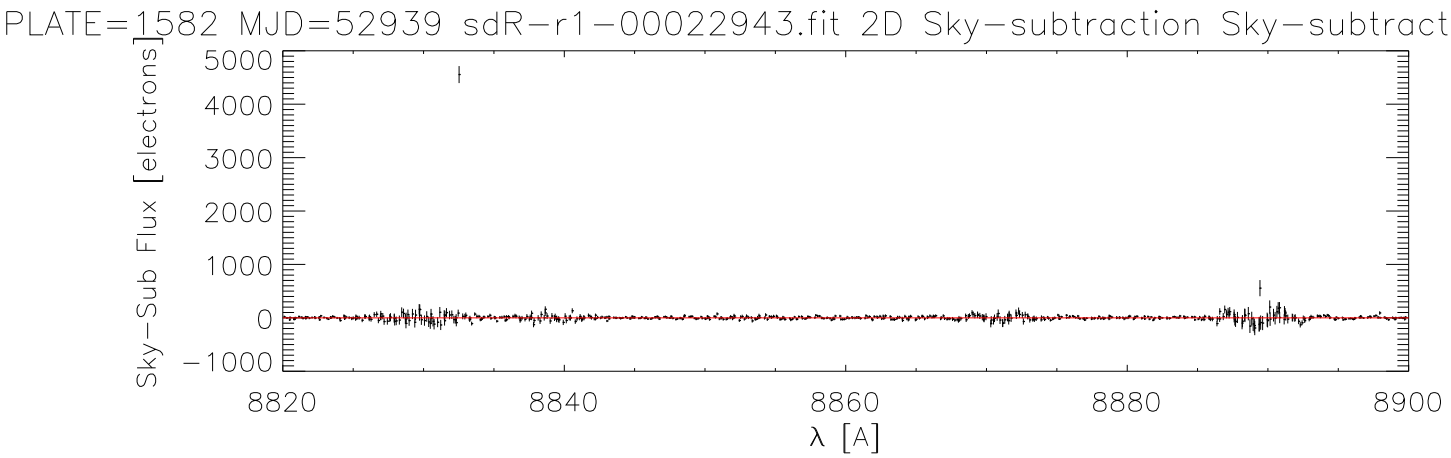

PLATE=1582 MJD=52939 sdR-r1-00022943.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

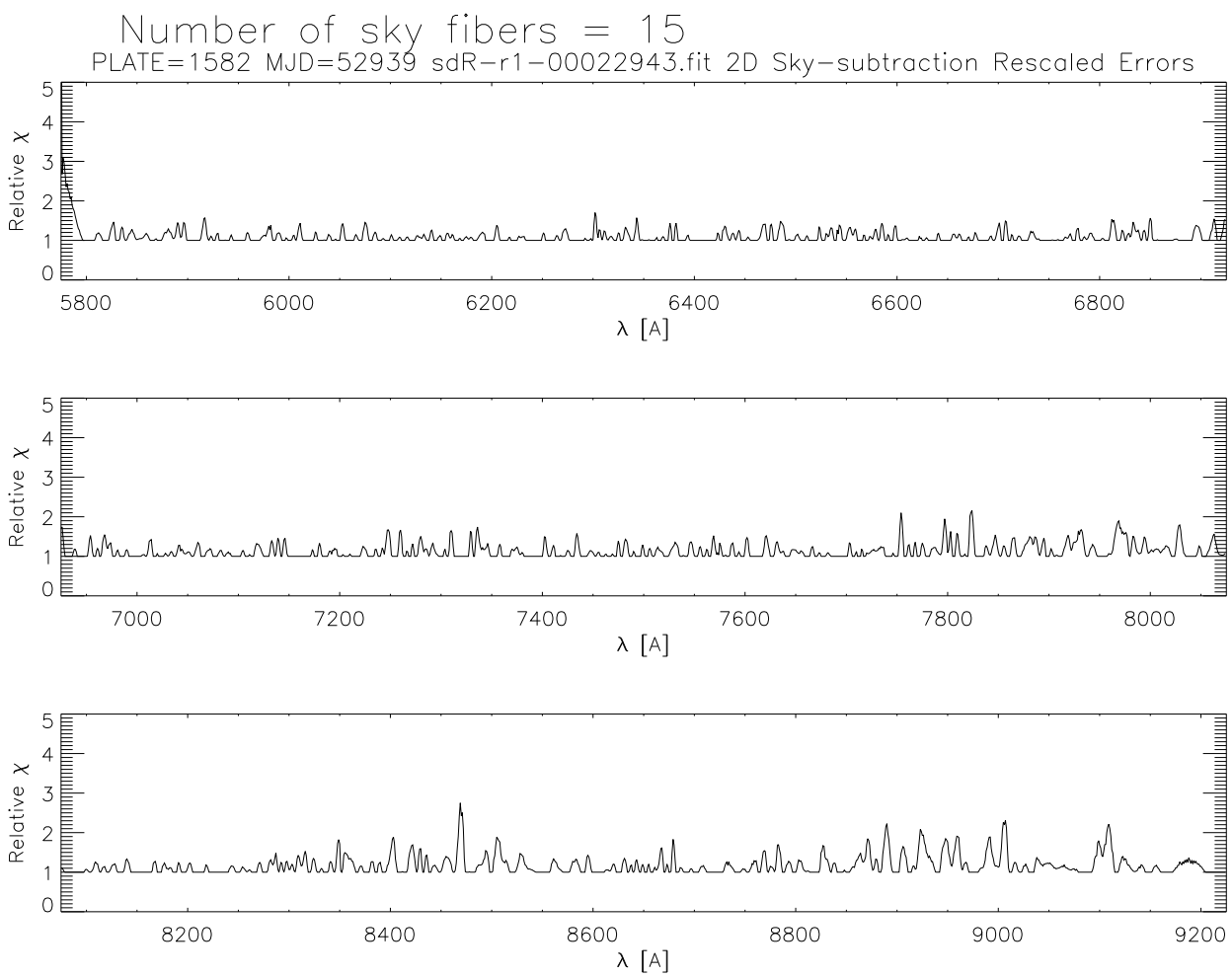

PLATE=1582 MJD=52939 sdR-r1-00022943.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

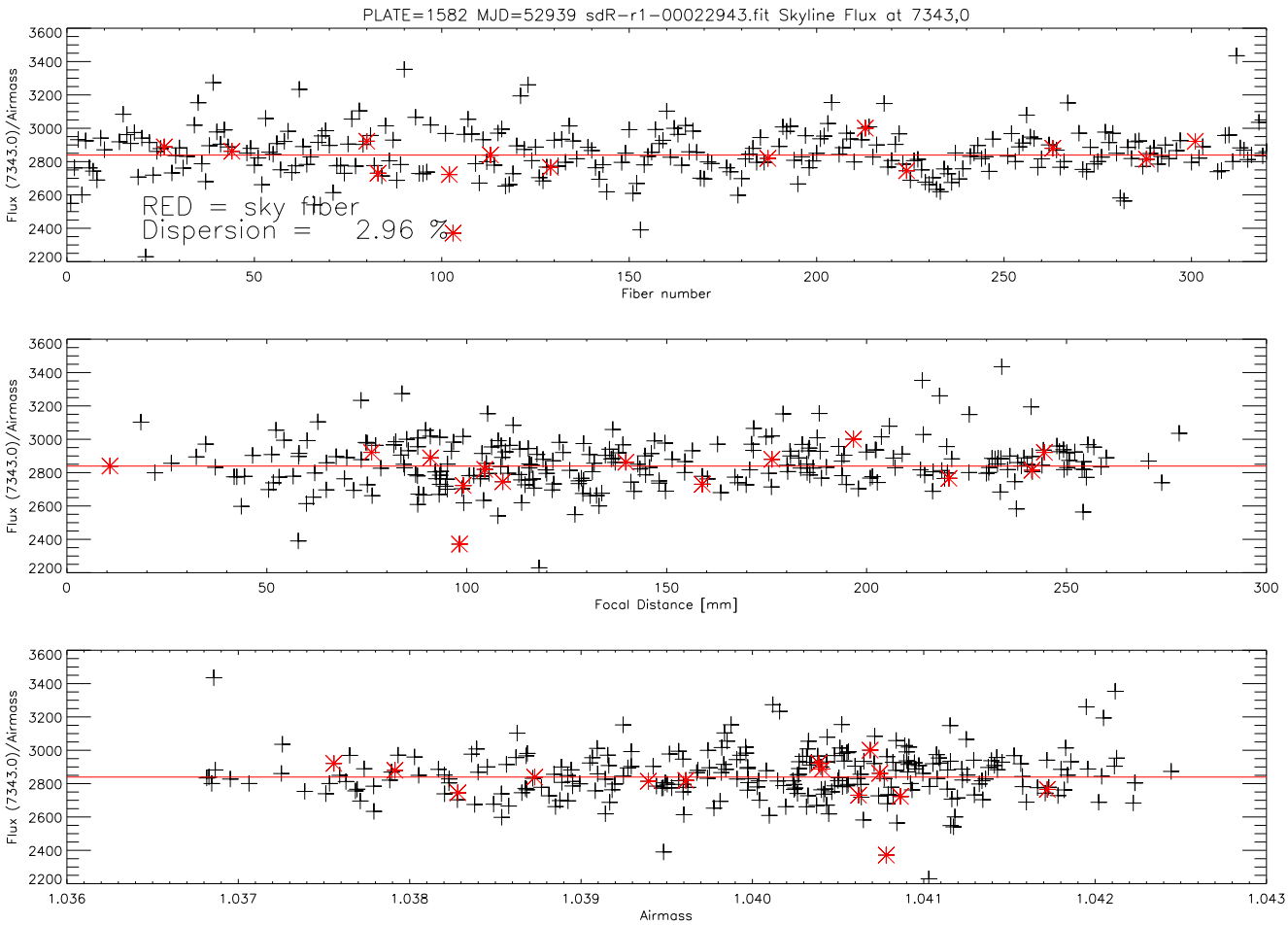

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r1-00022943.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

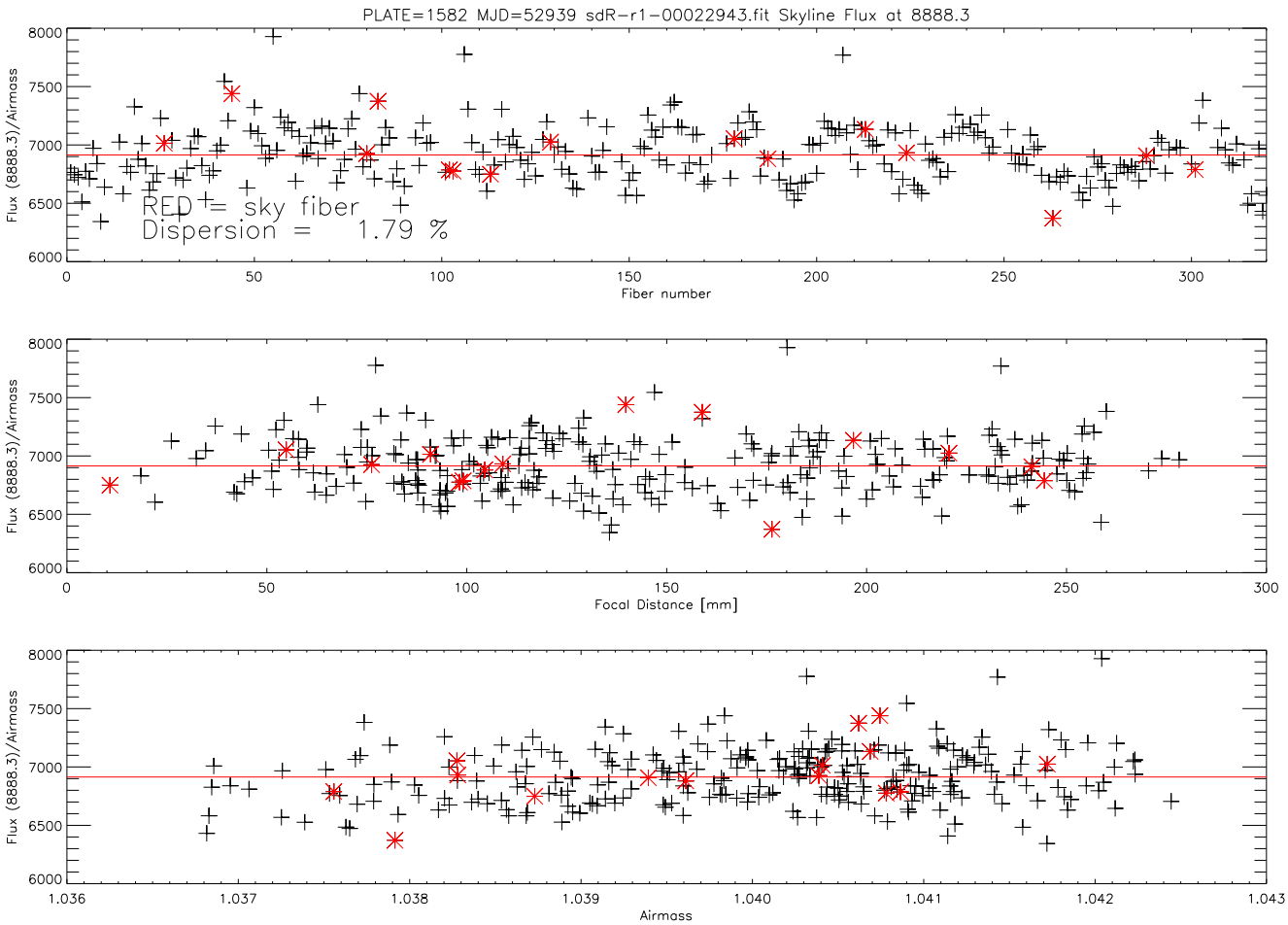

PLATE=1582 MJD=52939 sdR-r1-00022943.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

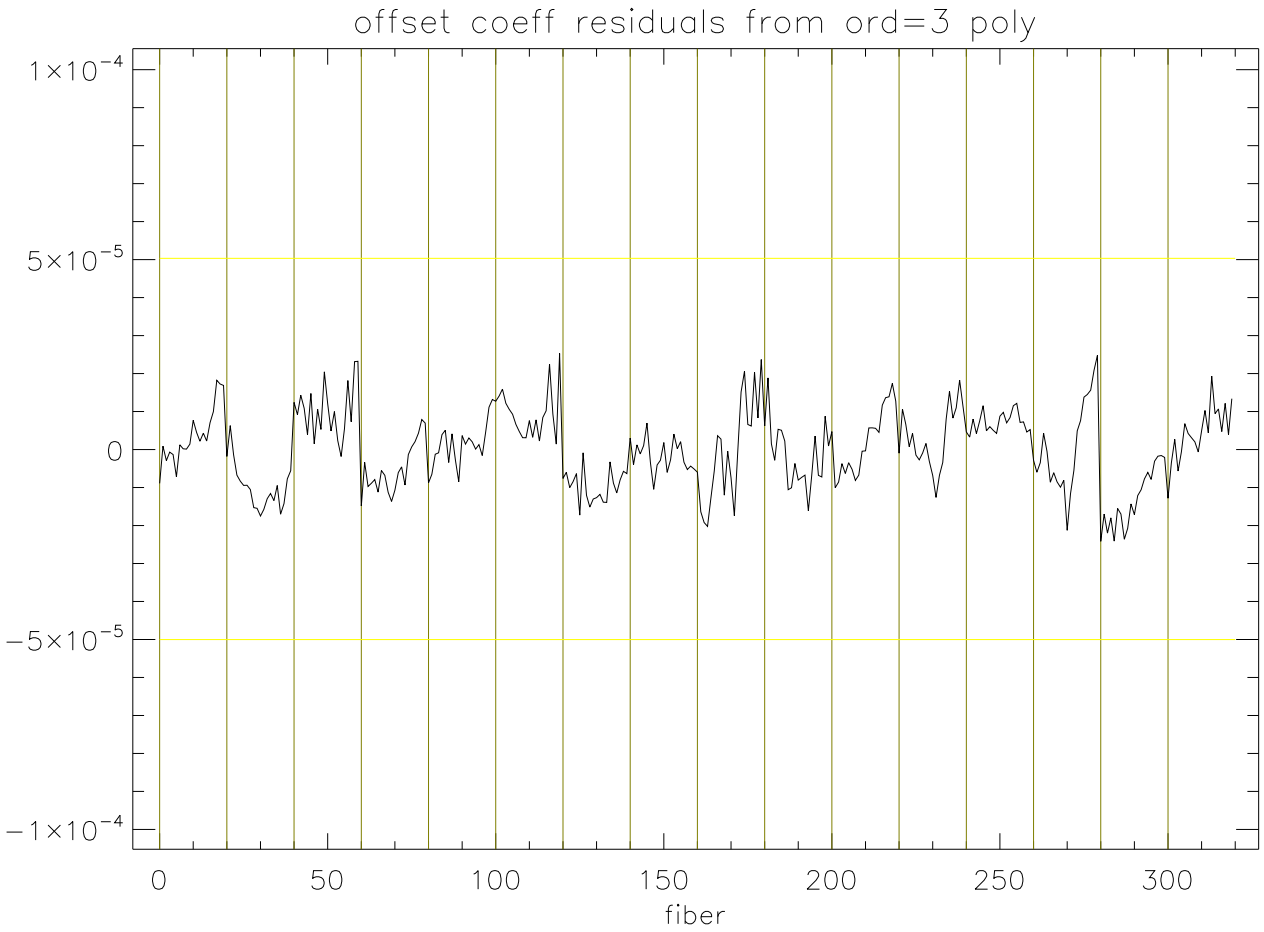

PLATE=1582 MJD=52939 sdR-r1-00022943.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

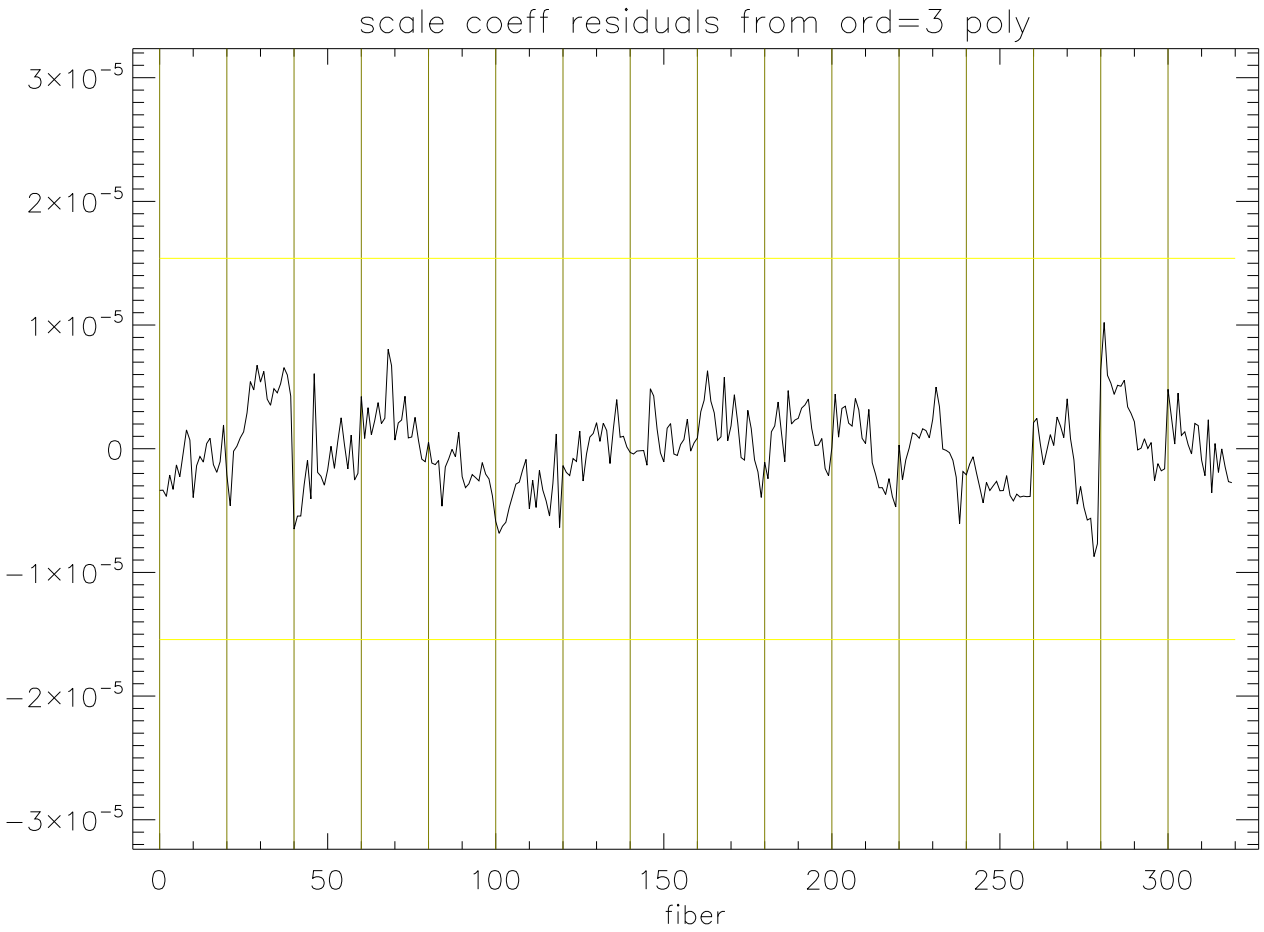

PLATE=1582 MJD=52939 sdR-r1-00022943.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

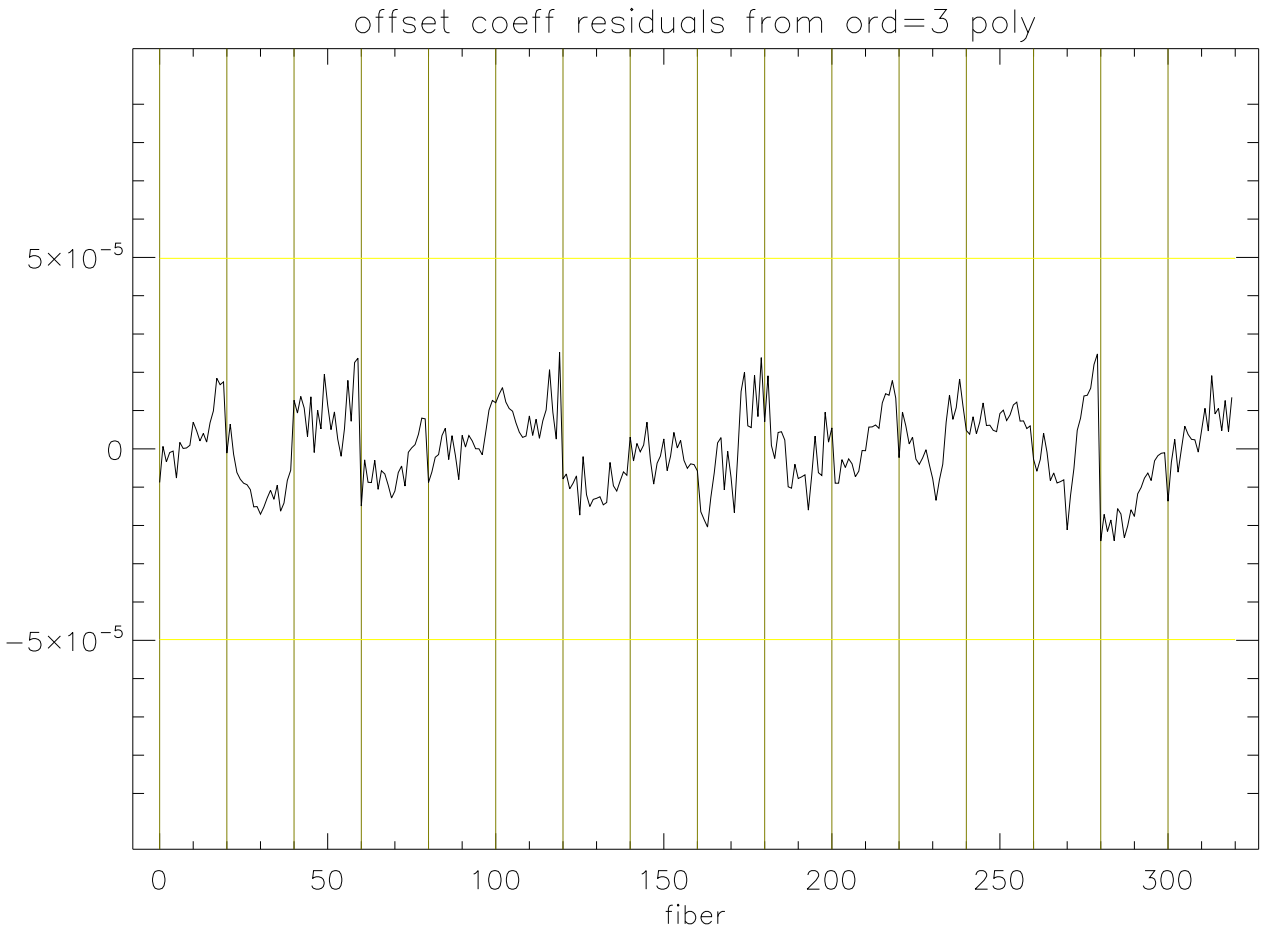

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r1-00022943.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

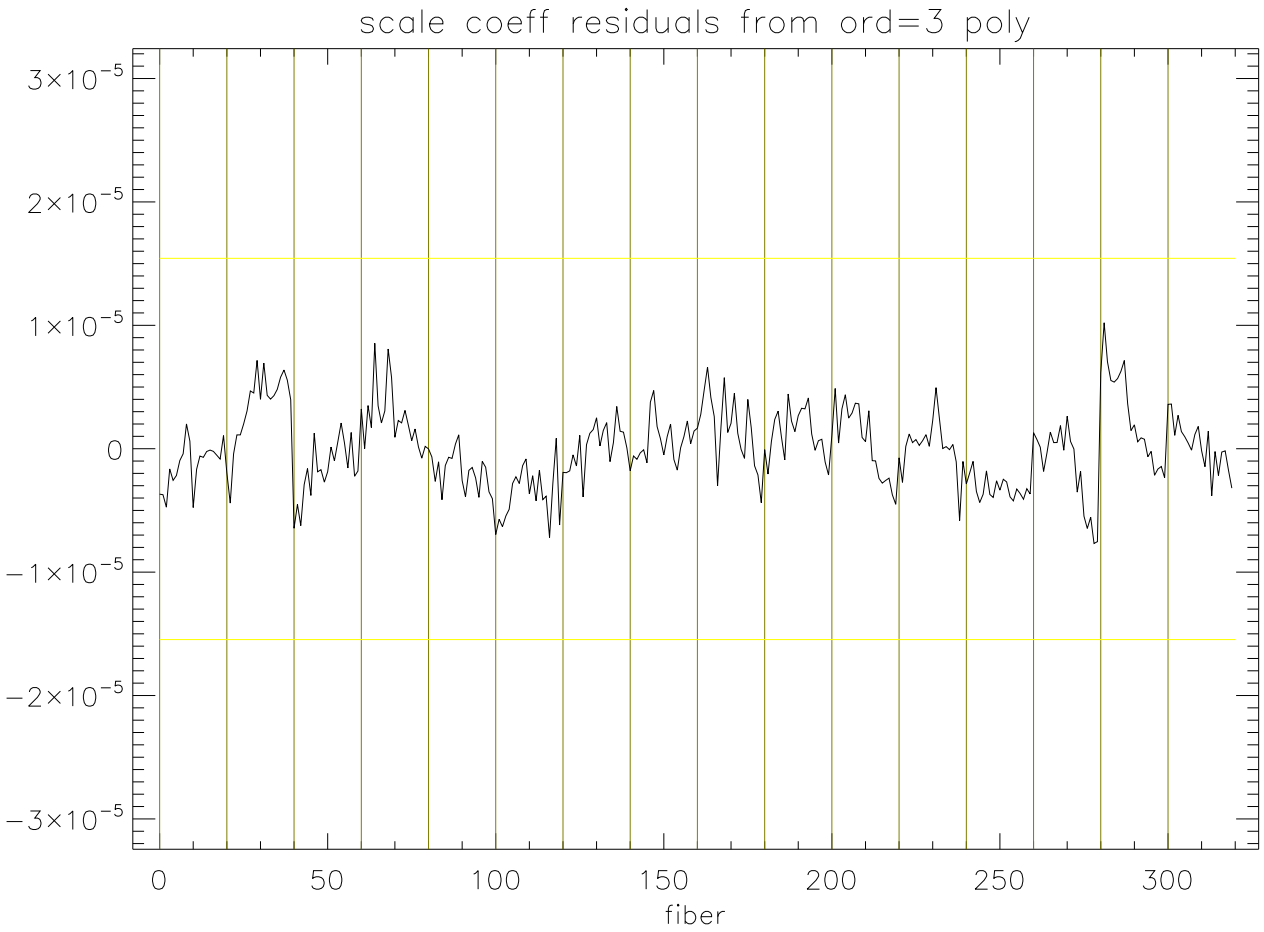

PLATE=1582 MJD=52939 sdR-r1-00022943.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.96 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

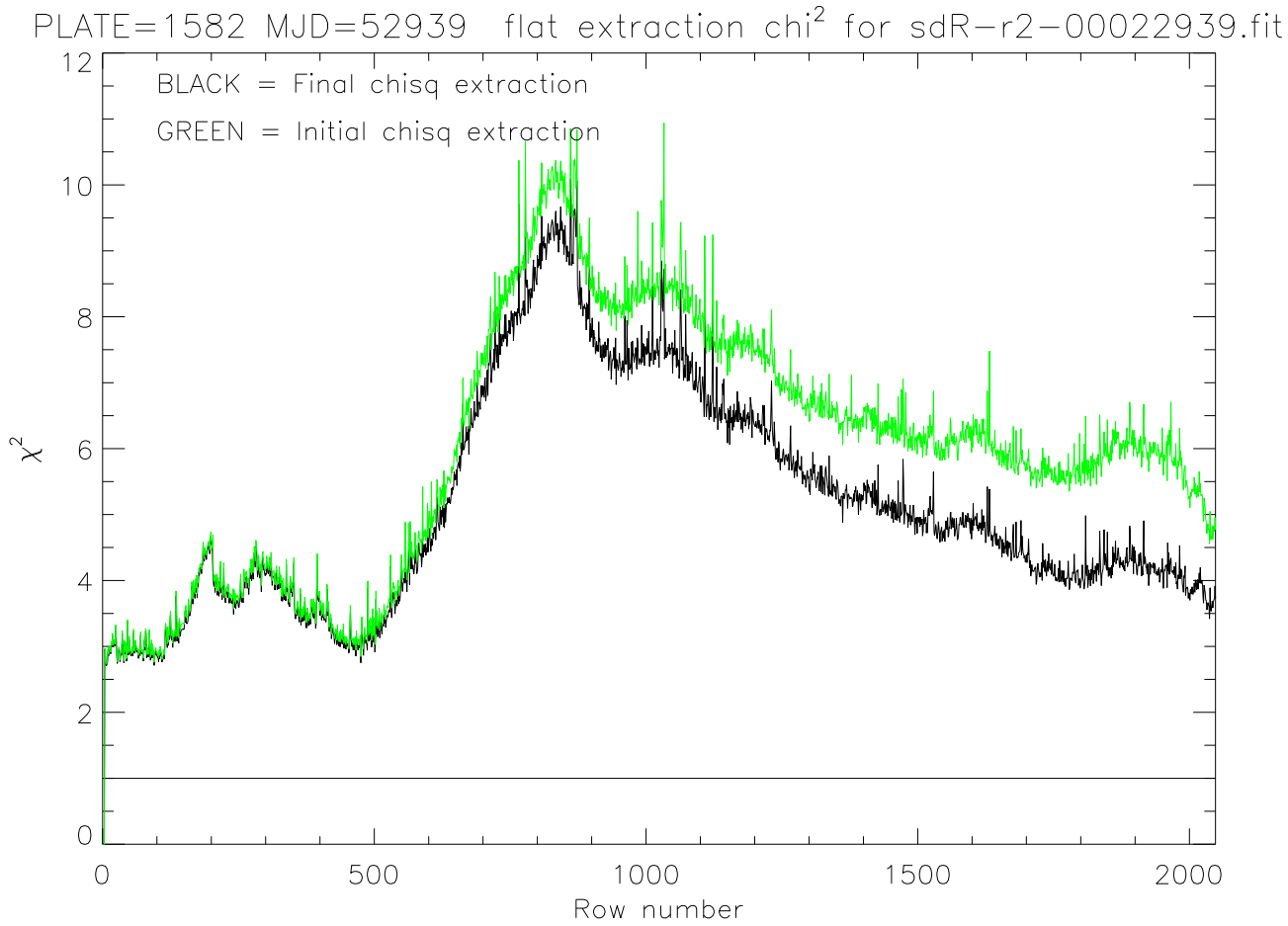

PLATE=1582 MJD=52939 sdR-r1-00022943.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED += sky fiber
Dispersion = 1.79 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

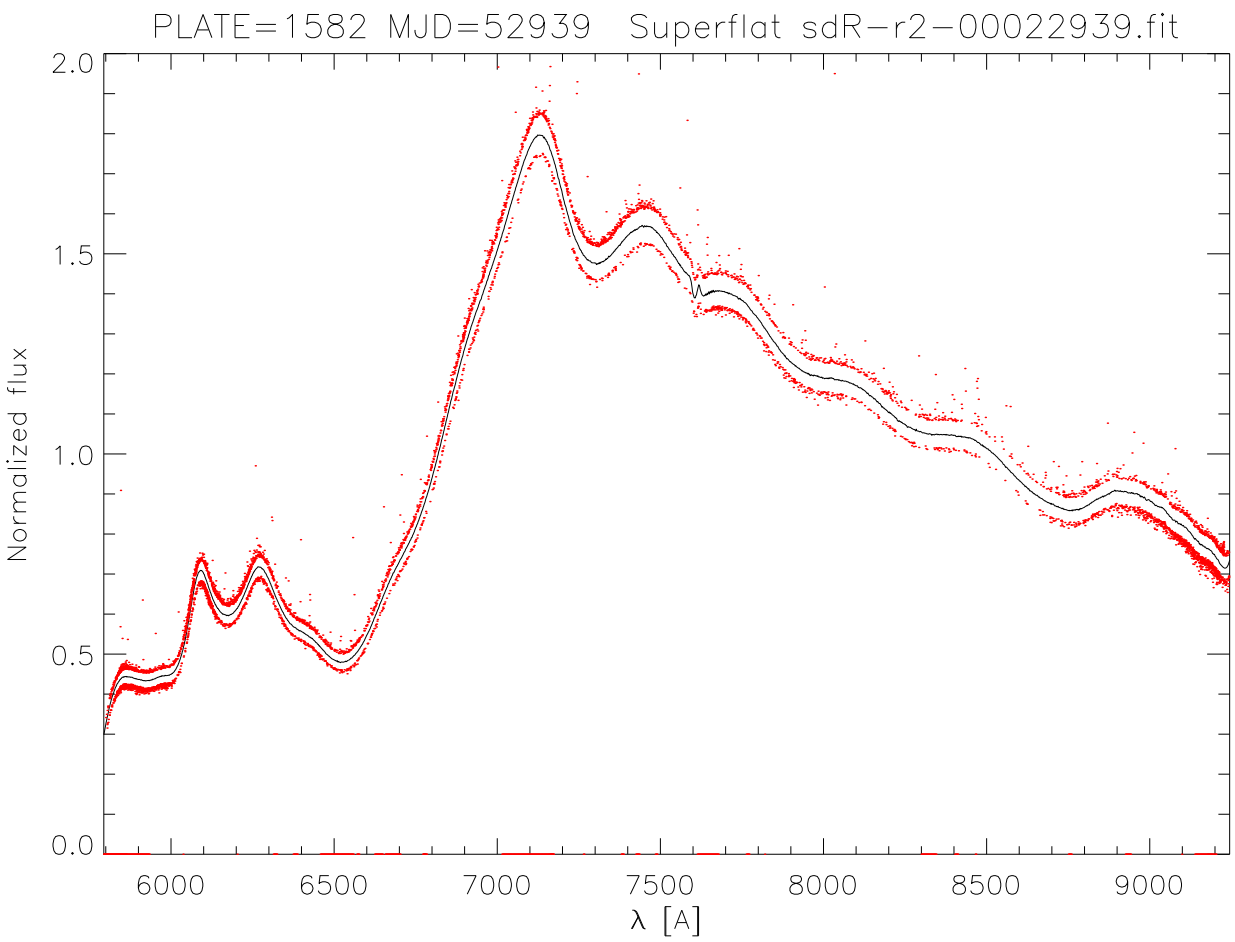

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

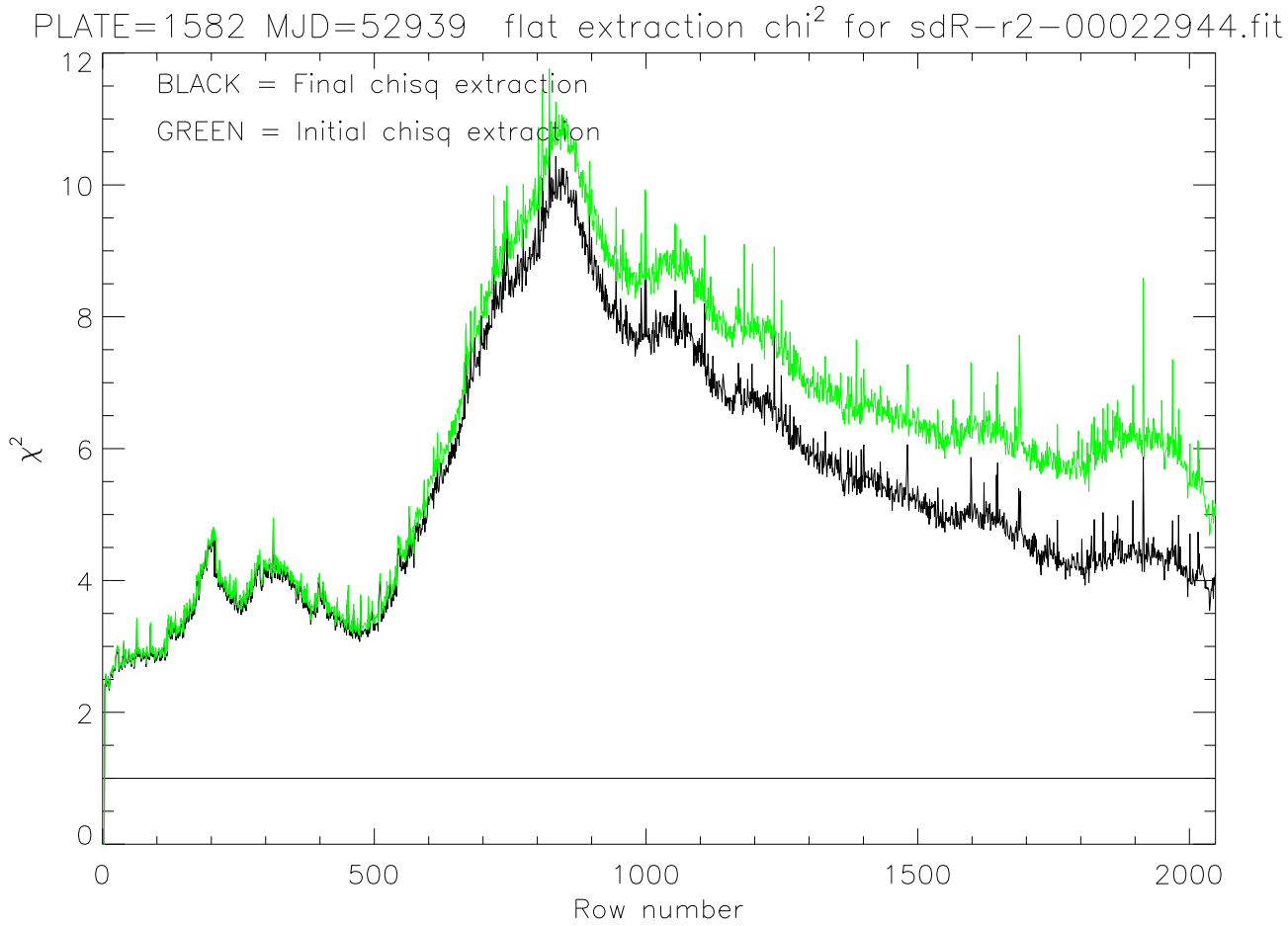

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

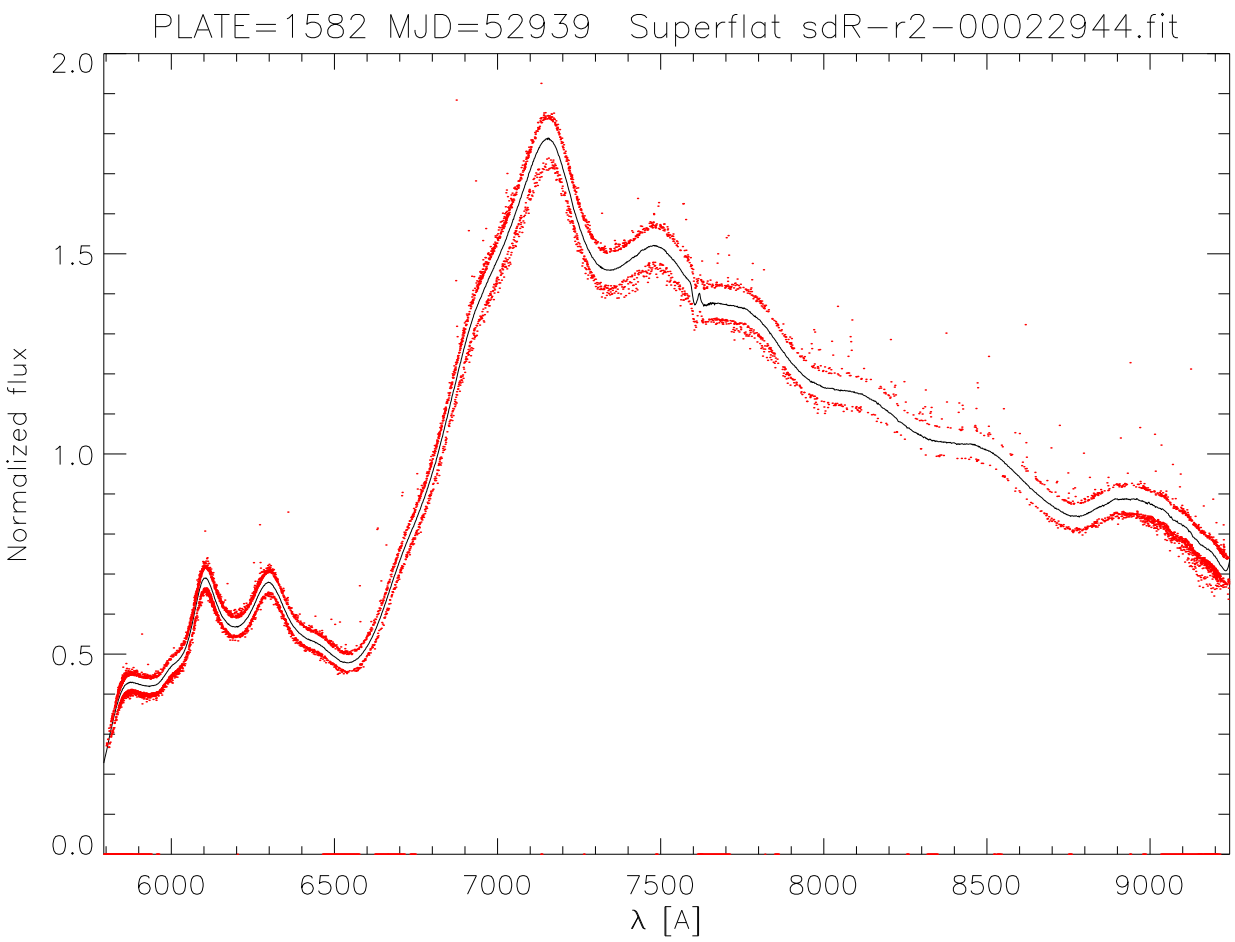

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

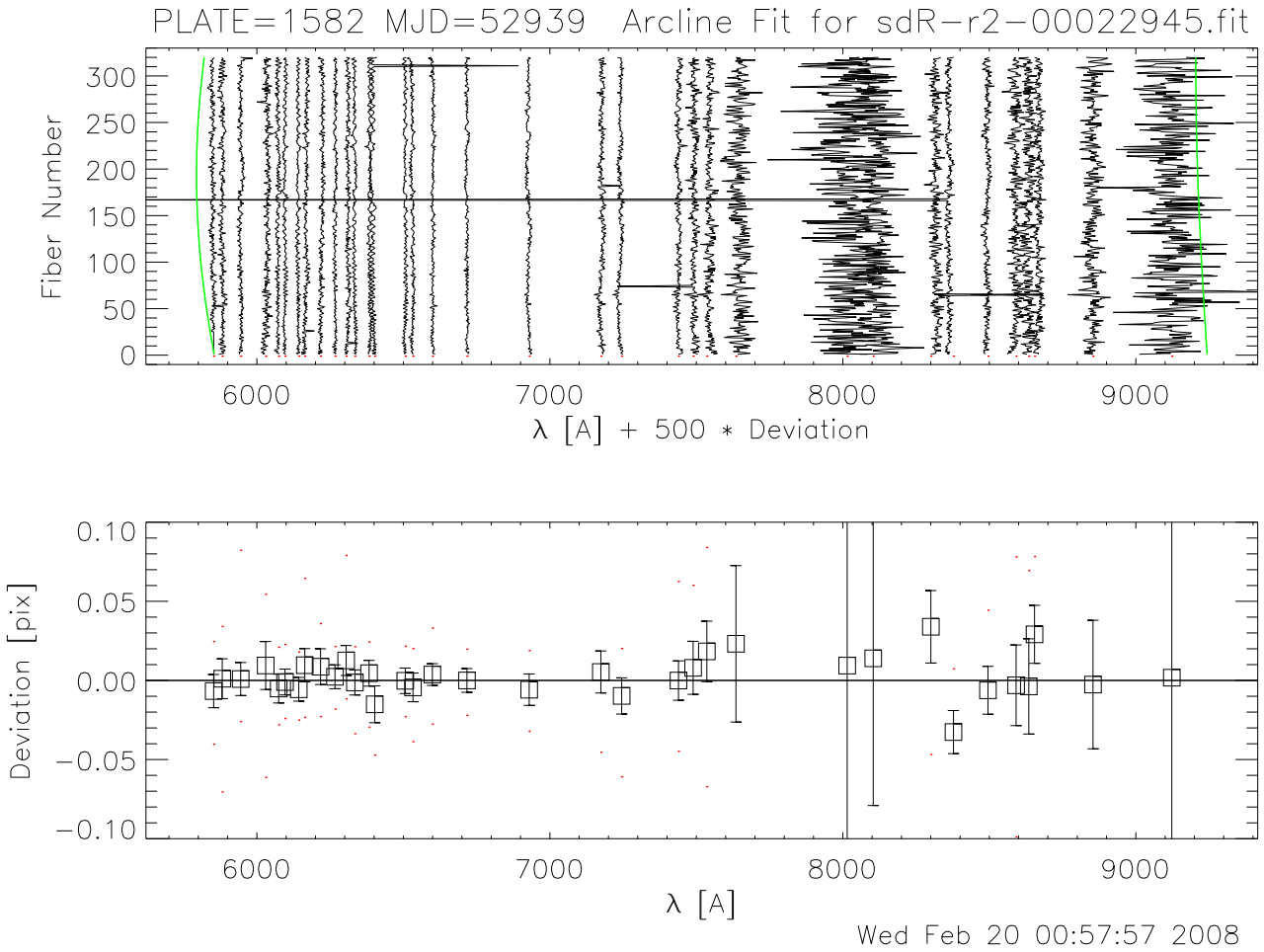

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

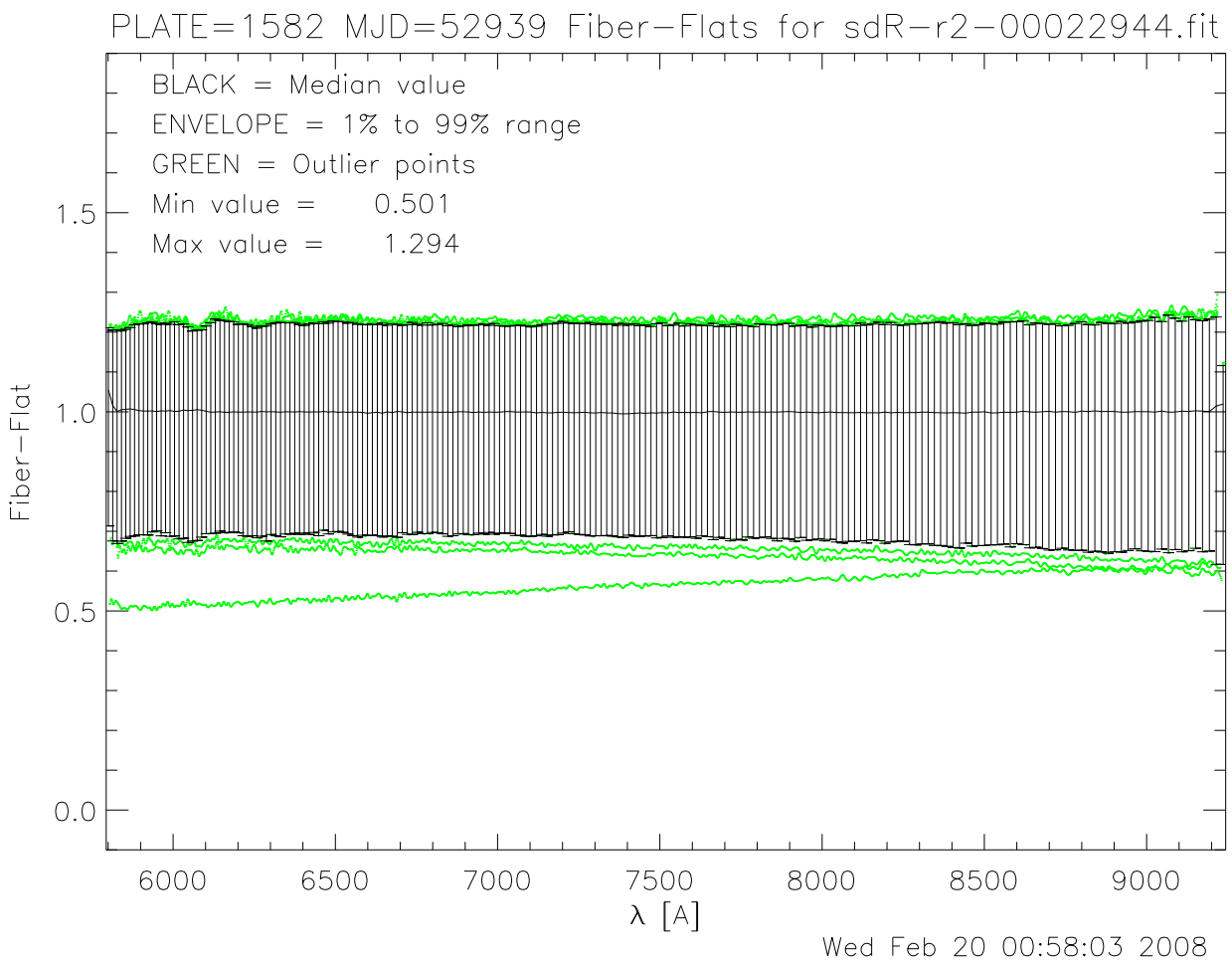

PLATE=1582 MJD=52939 flat extraction chi^2 for sdR−r2−00022939.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

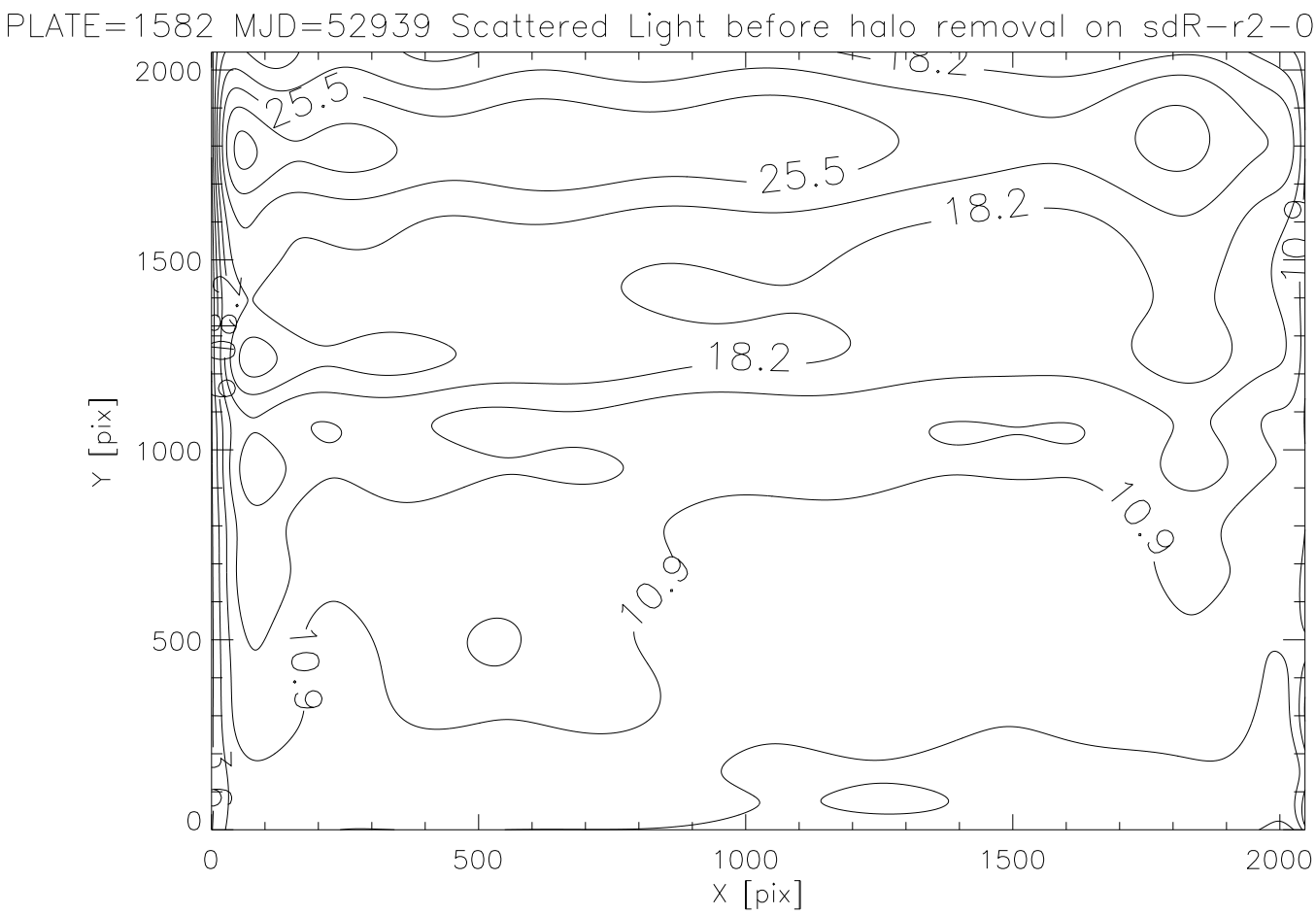

PLATE=1582 MJD=52939 Superflat sdR-r2-00022939.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

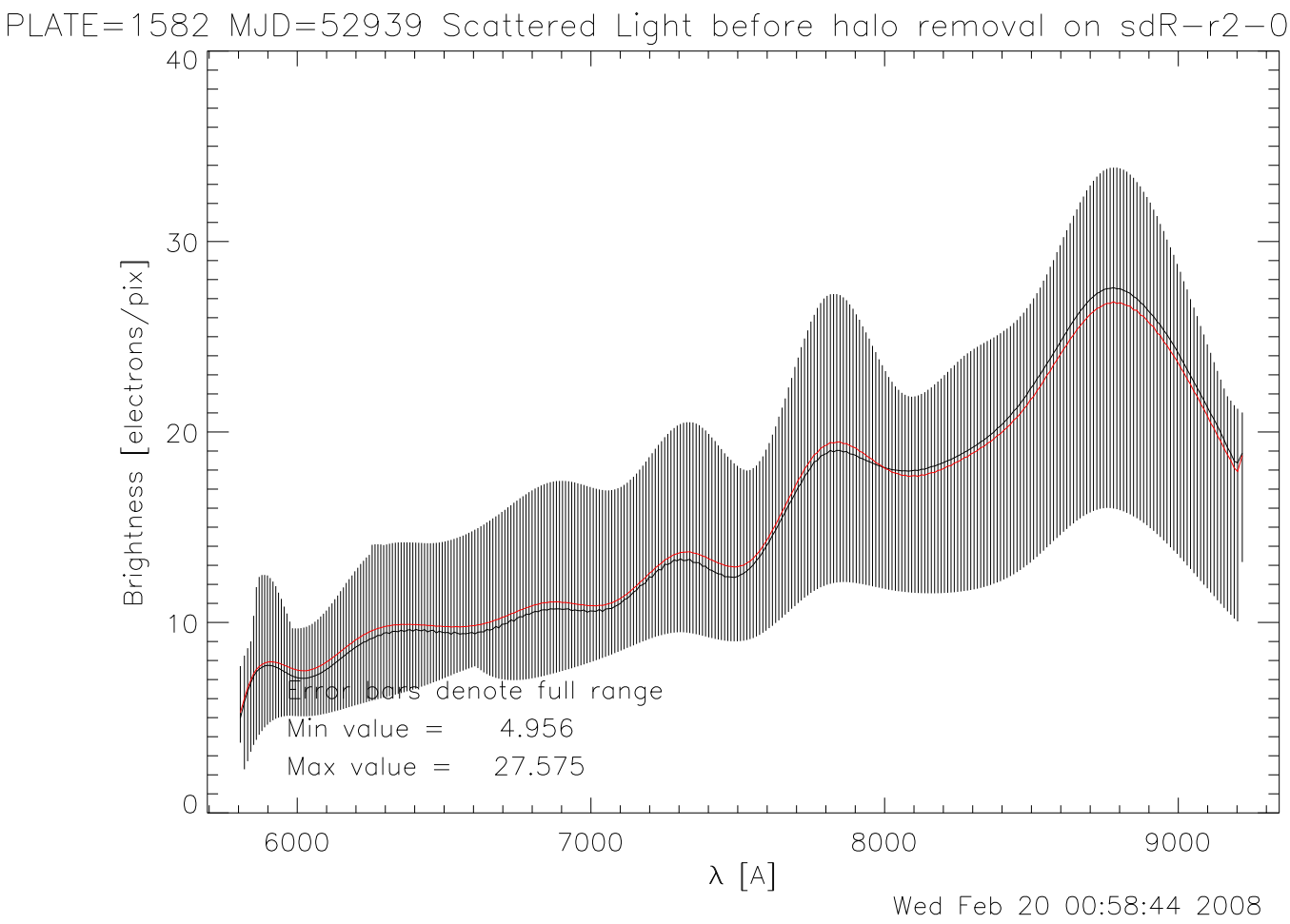

PLATE=1582 MJD=52939 flat extraction chi^2 for sdR−r2−00022944.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

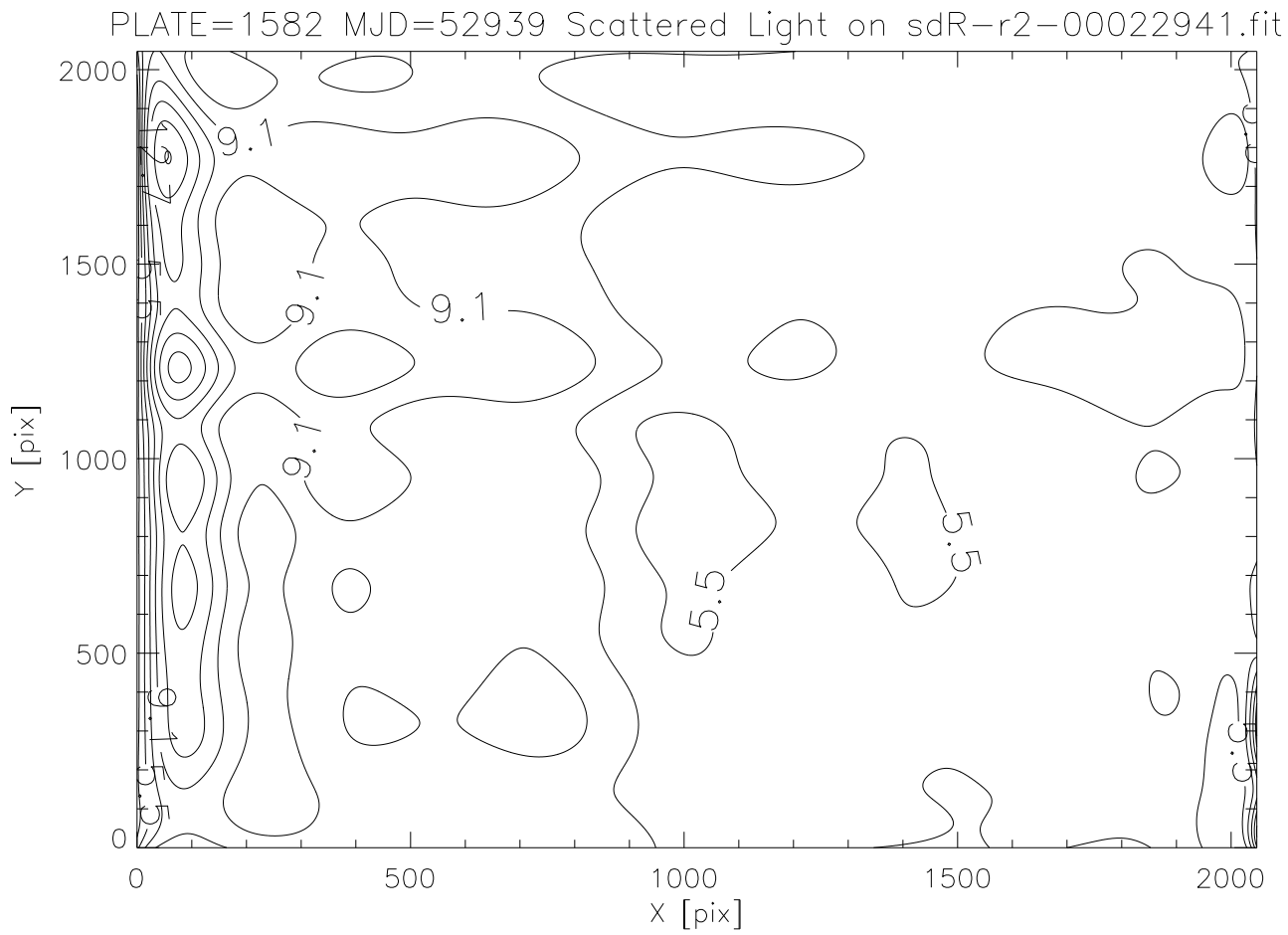

PLATE=1582 MJD=52939 Superflat sdR-r2-00022944.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

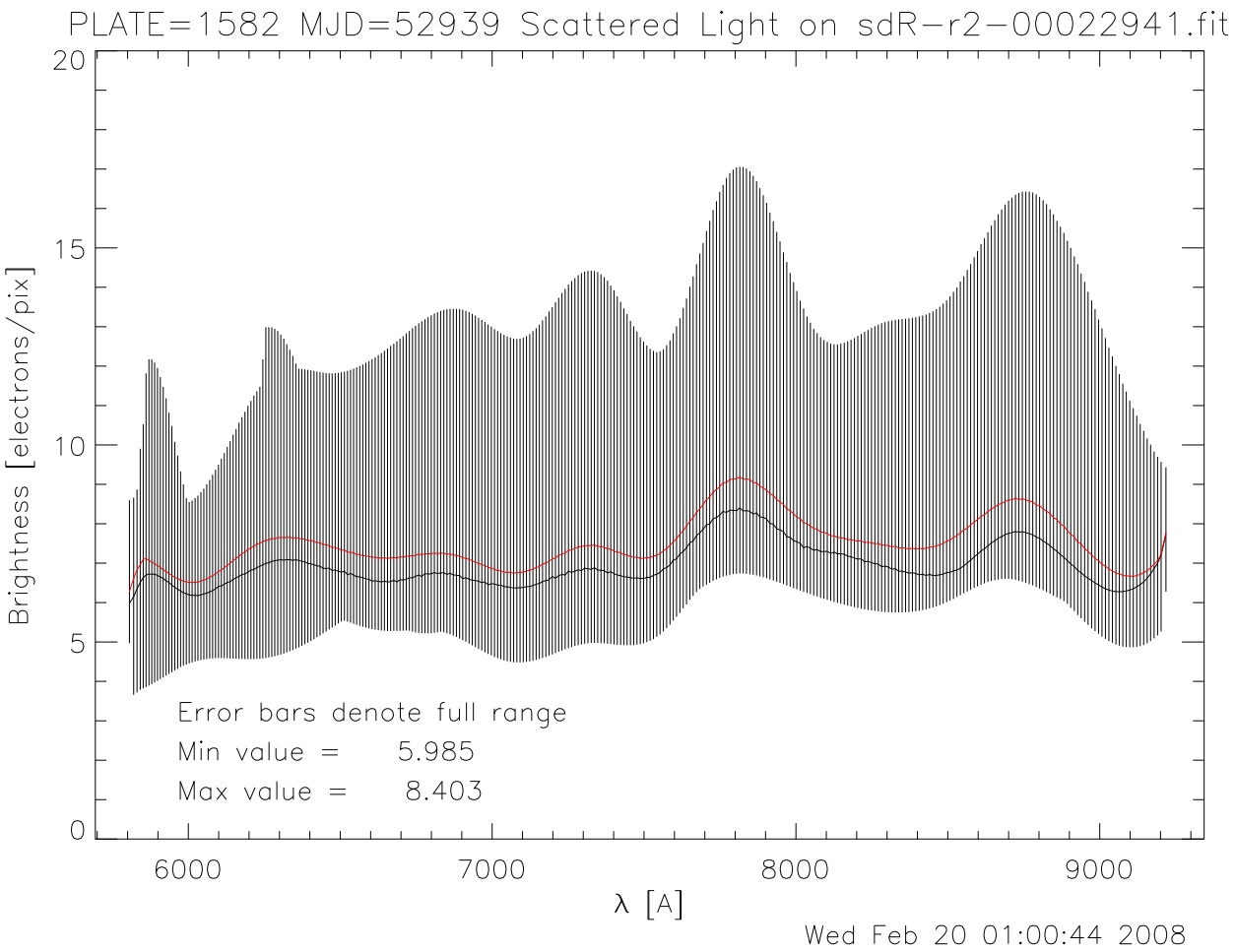

PLATE=1582 MJD=52939 Arcline Fit for sdR-r2-00022945.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Feb 20 00:57:57 2008

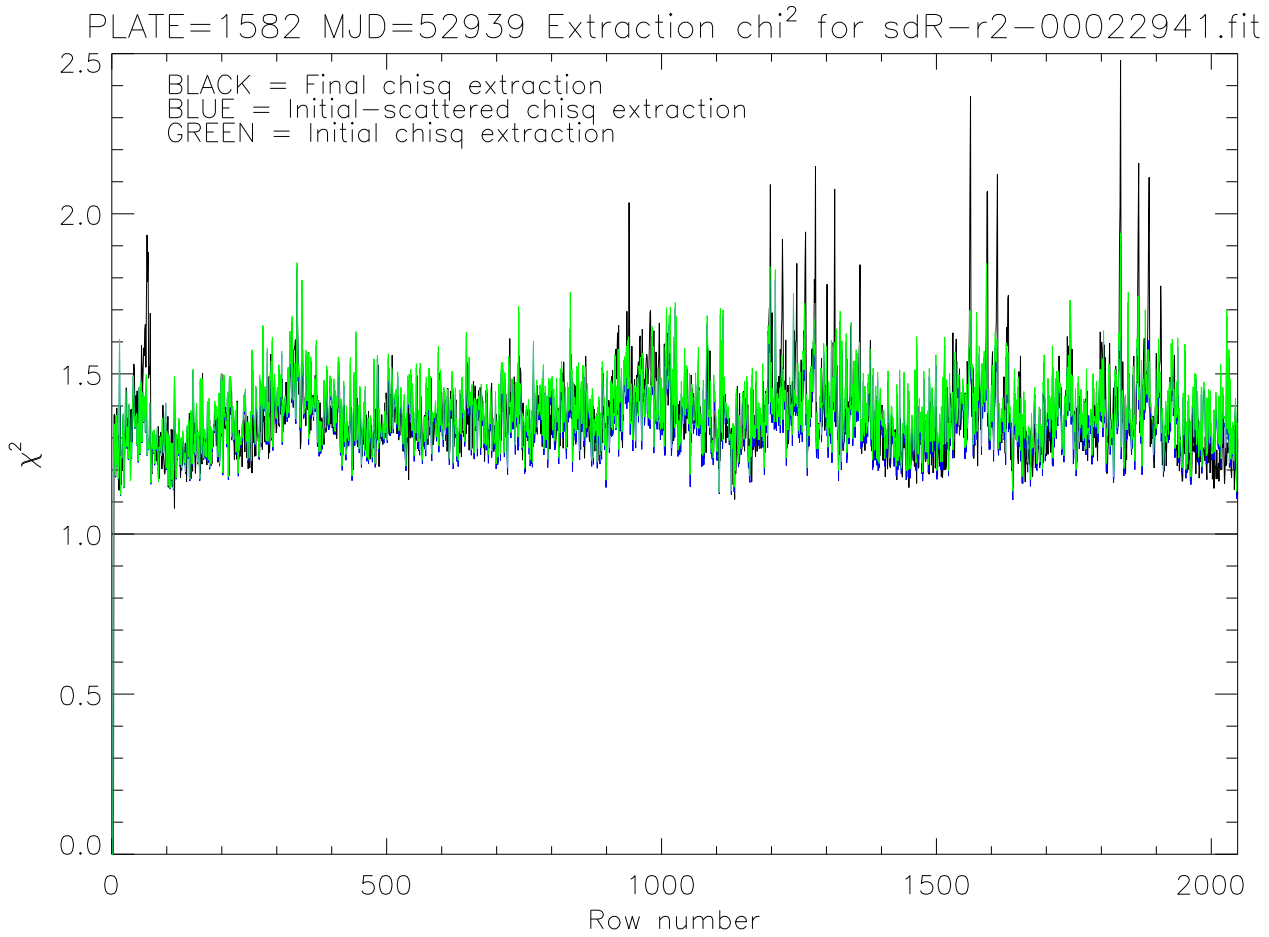

PLATE=1582 MJD=52939 Fiber−Flats for sdR−r2−00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.501
Max value = 1.294
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 00:58:03 2008

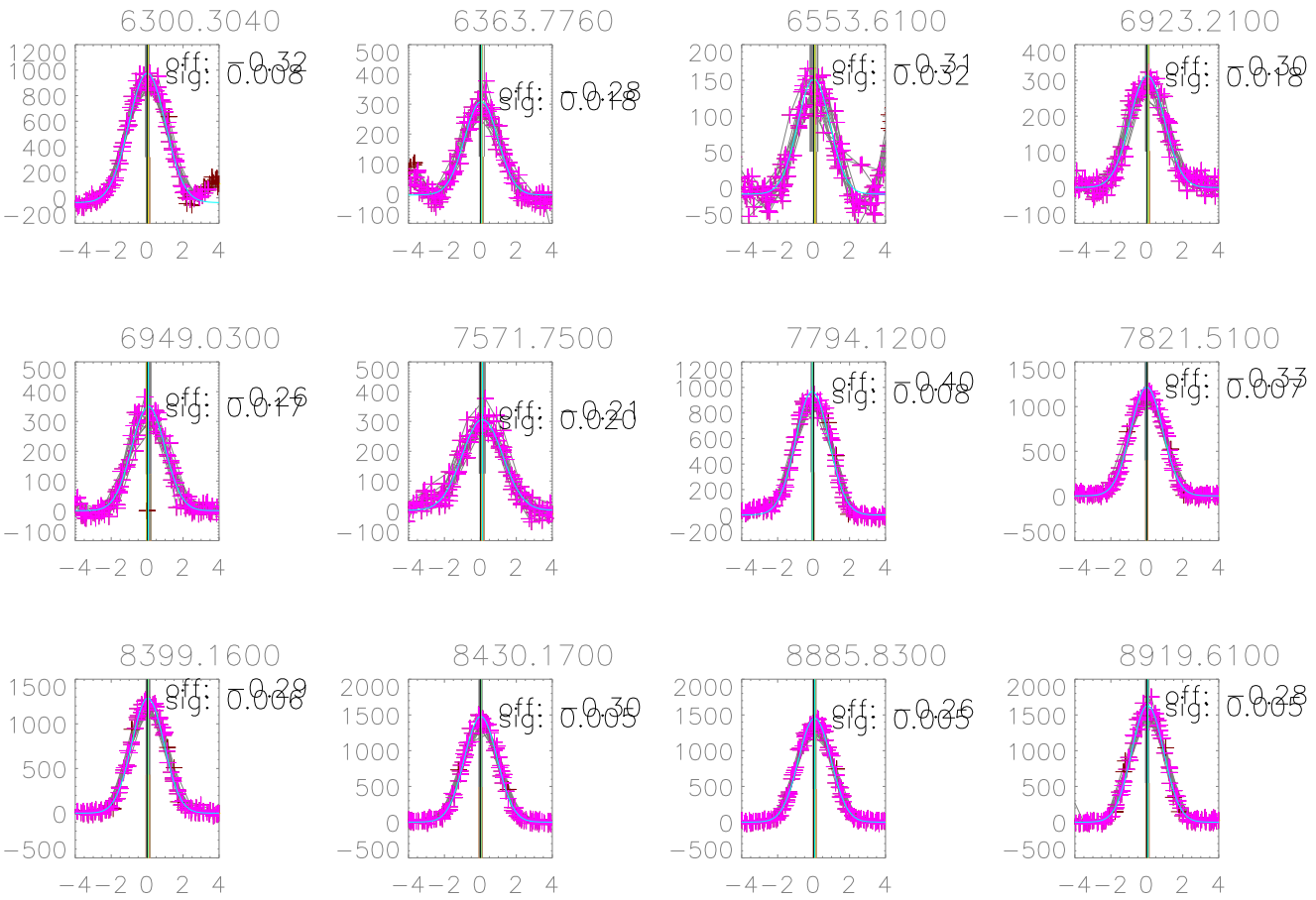

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r2-00022941.fi
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

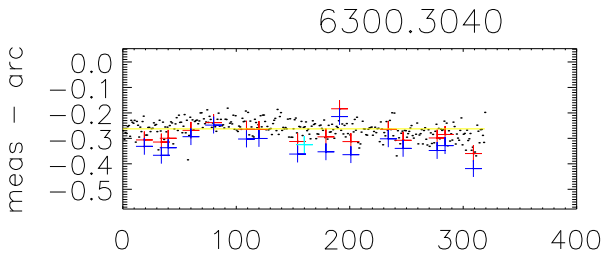

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r2-00022941.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.956
Max value = 27.575
Wed Feb 20 00:58:44 2008

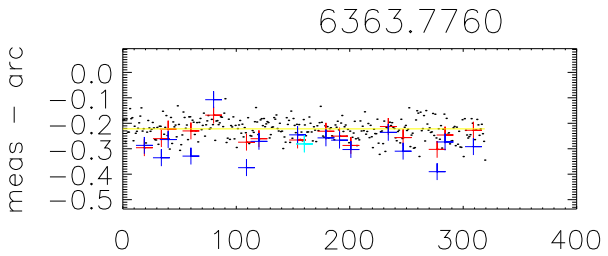

PLATE=1582 MJD=52939 Scattered Light on sdR-r2-00022941.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
5.5

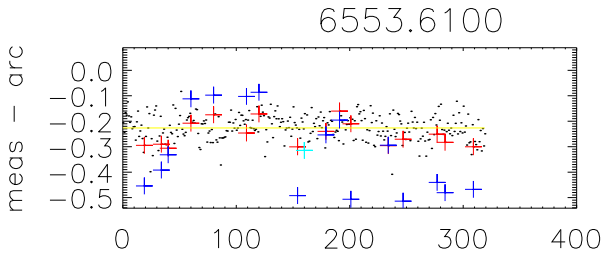

PLATE=1582 MJD=52939 Scattered Light on sdR-r2-00022941.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.985
Max value = 8.403
Wed Feb 20 01:00:44 2008

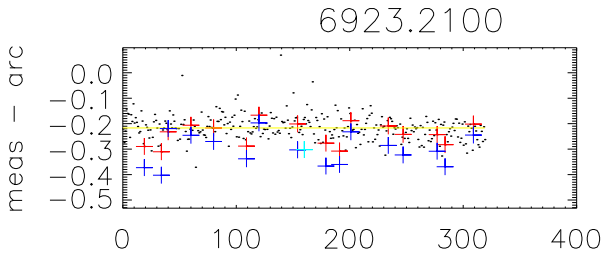

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-r2-00022941.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

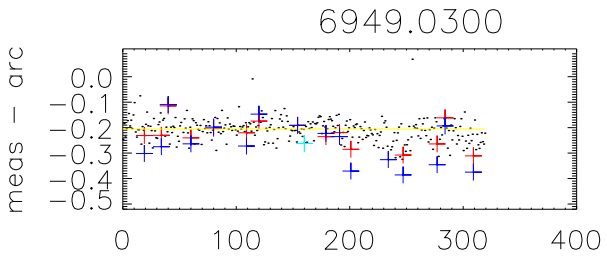

6300.3040
off: −0.32
sig: 0.008
6363.7760
off: −0.28
sig: 0.018
6553.6100
off: −0.31
sig: 0.032
6923.2100
off: −0.30
sig: 0.018
6949.0300
off: −0.26
sig: 0.017
7571.7500
off: −0.21
sig: 0.020
7794.1200
off: −0.40
sig: 0.008
7821.5100
off: −0.33
sig: 0.007
8399.1600
off: −0.29
sig: 0.008
8430.1700
off: −0.30
sig: 0.005
8885.8300
off: −0.26
sig: 0.005
8919.6100
off: −0.28
sig: 0.005

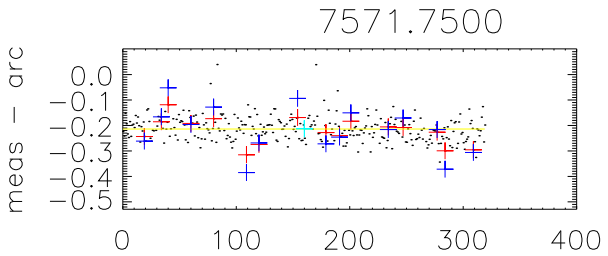

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

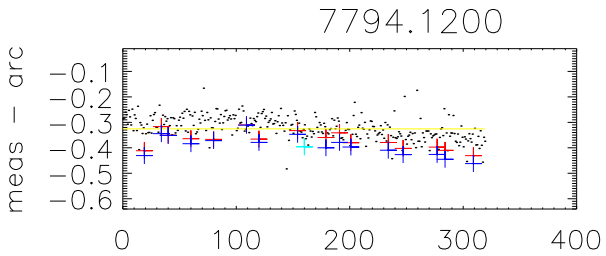

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

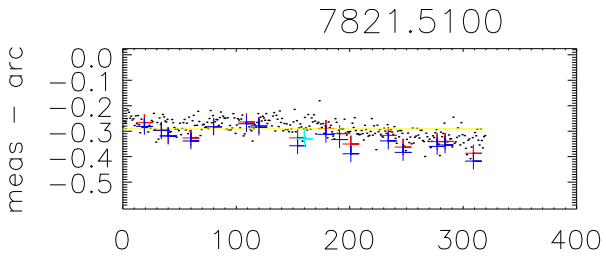

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

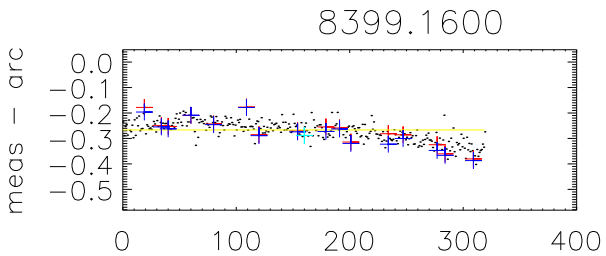

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

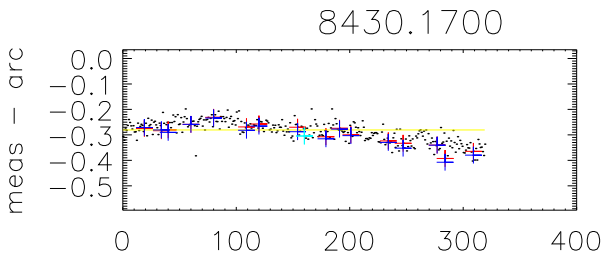

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

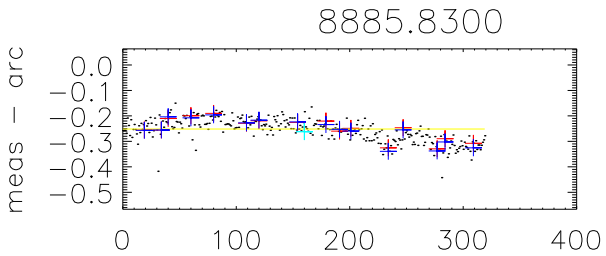

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

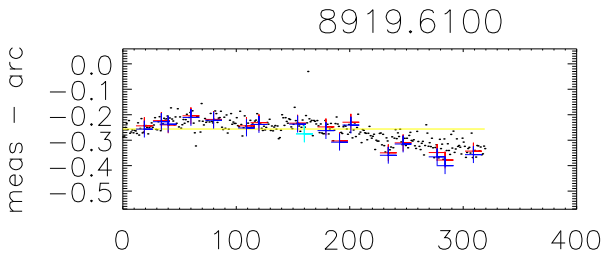

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

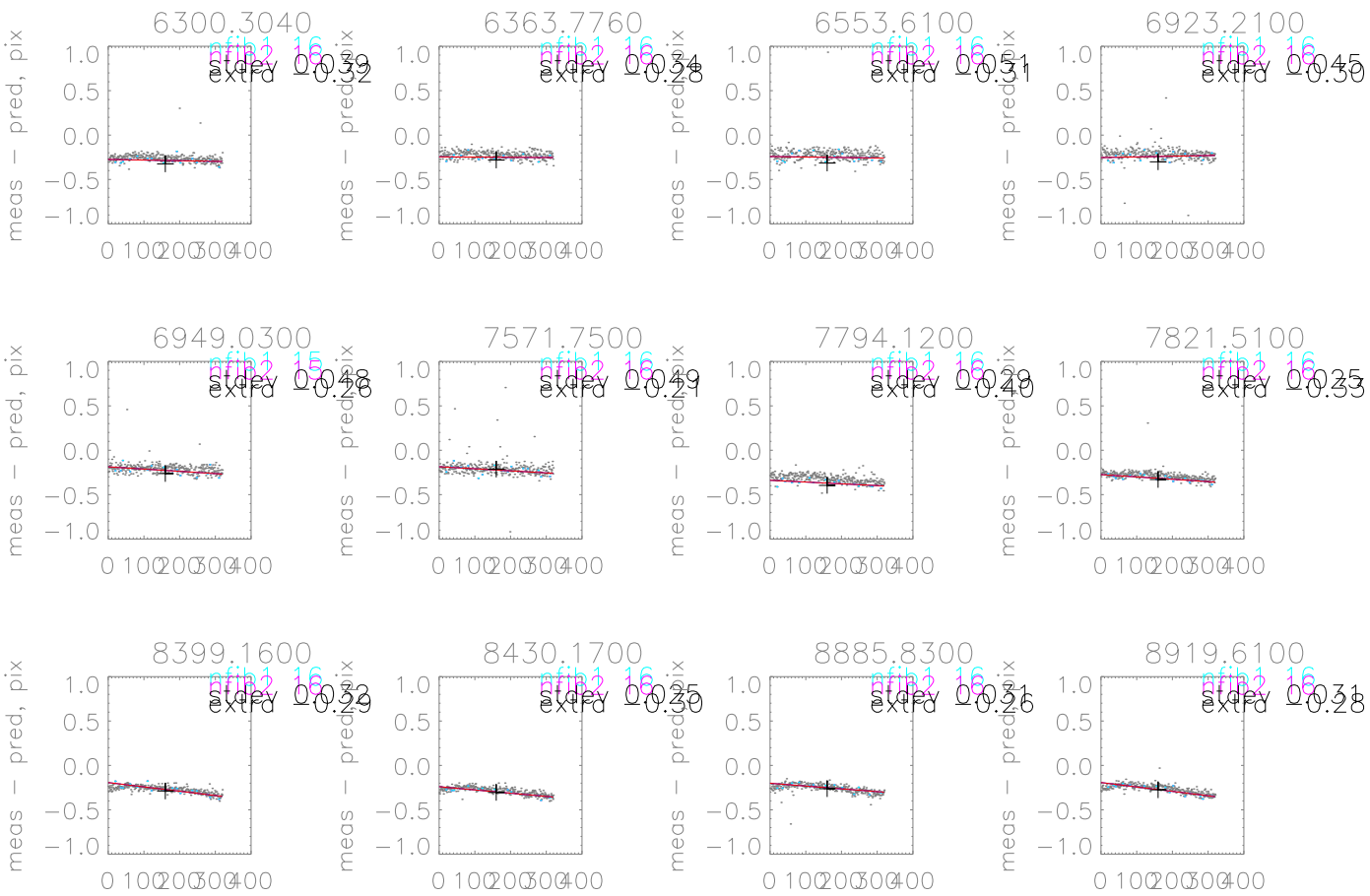

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

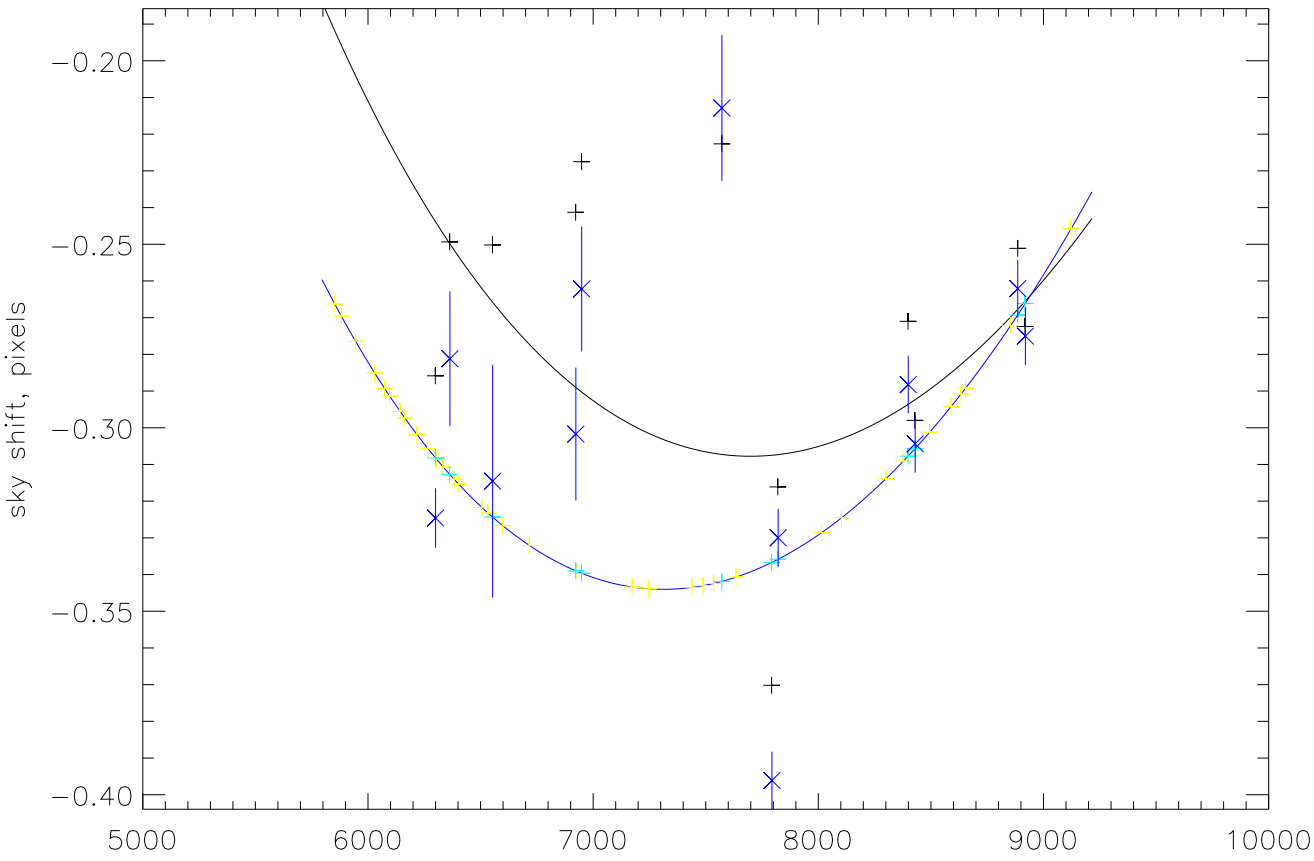

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

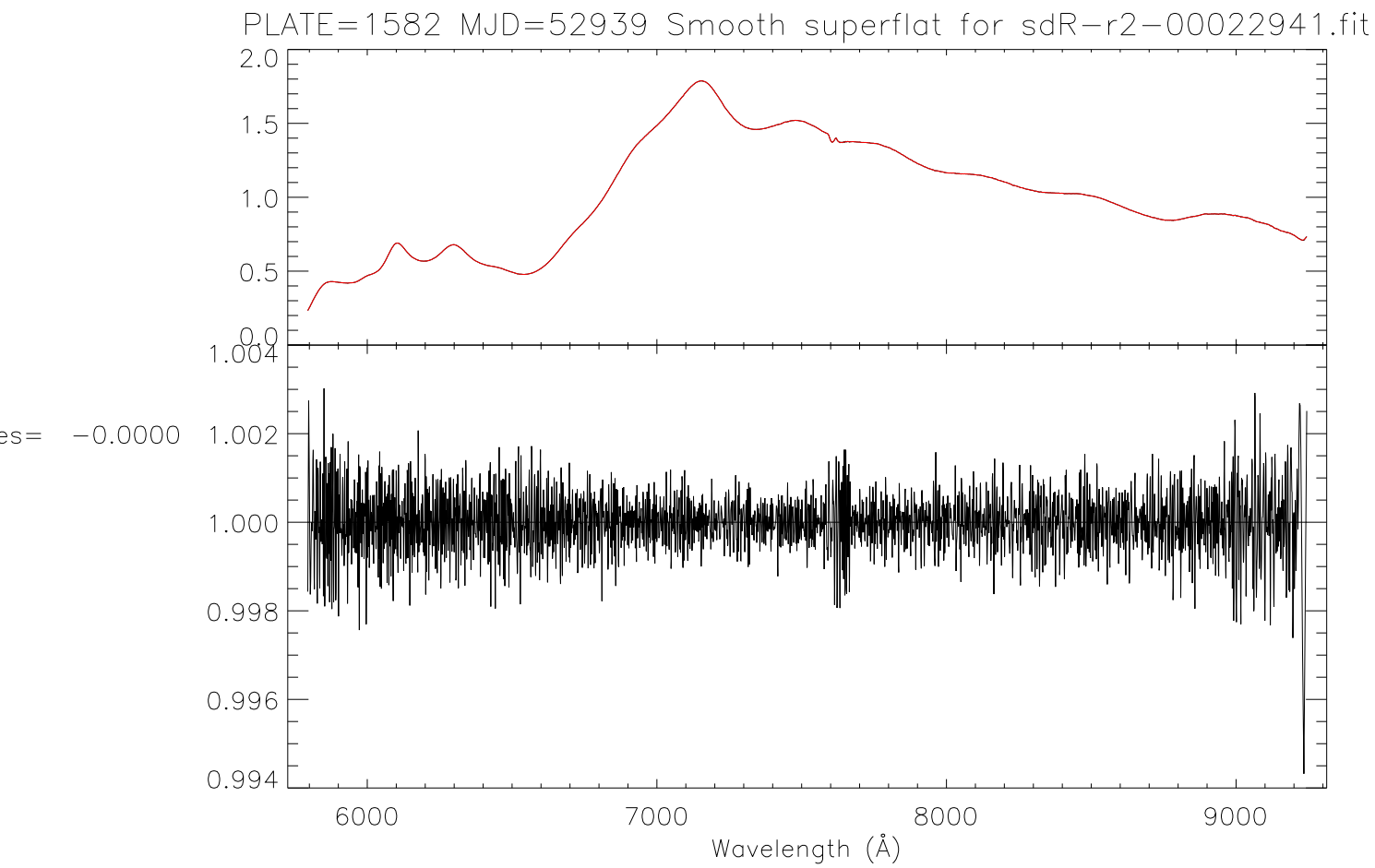

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

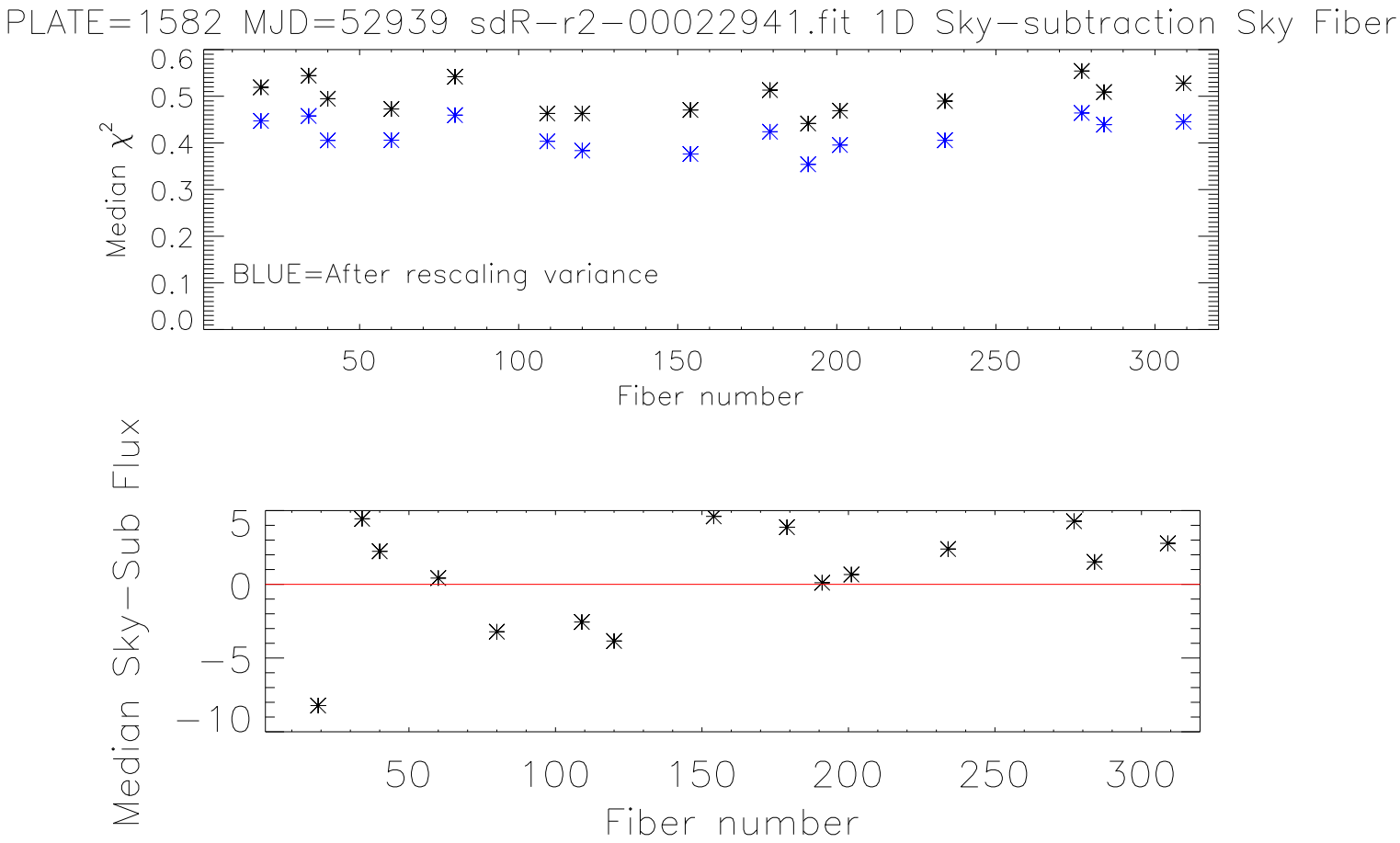

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

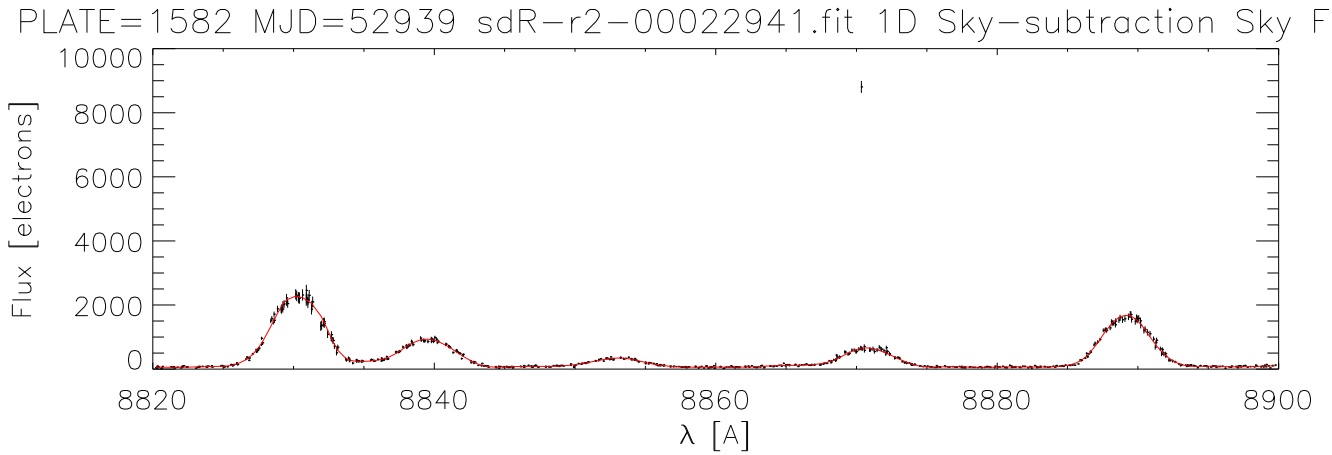

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

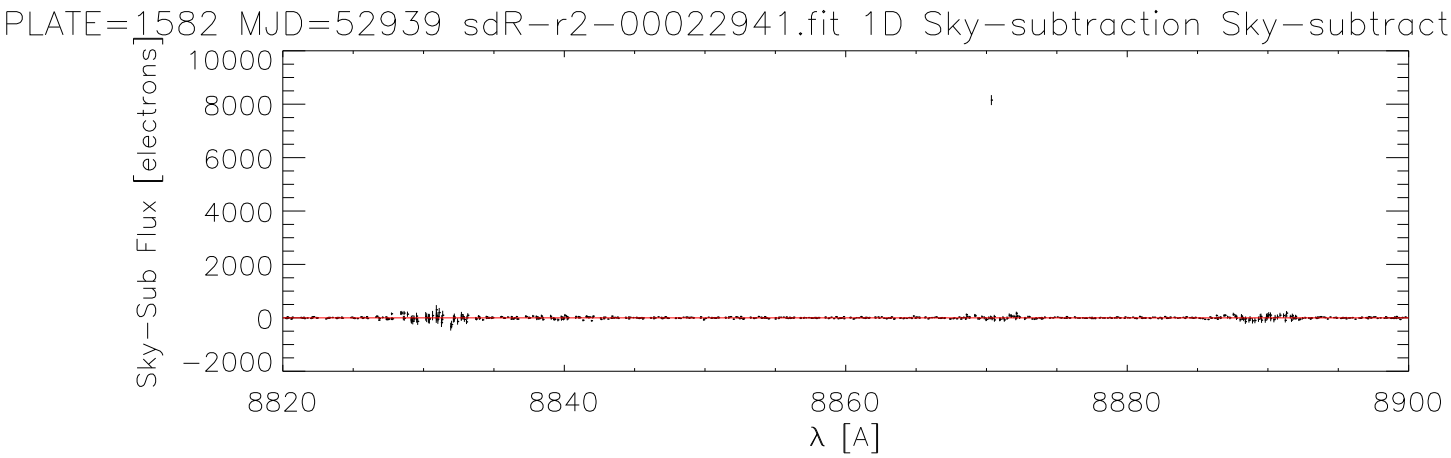

6300.3040
stdev 0.32
extra 0.39
6363.7760
stdev 0.28
extra 0.34
6553.6100
stdev 0.31
extra 0.51
6923.2100
stdev 0.30
extra 0.45
6949.0300
stdev 0.28
extra 0.48
7571.7500
stdev 0.29
extra 0.49
7794.1200
stdev 0.40
extra 0.29
7821.5100
stdev 0.33
extra 0.25
8399.1600
stdev 0.29
extra 0.32
8430.1700
stdev 0.30
extra 0.25
8885.8300
stdev 0.26
extra 0.31
8919.6100
stdev 0.28
extra 0.31
meas − pred, pix
mfib1 16
mfib2 16

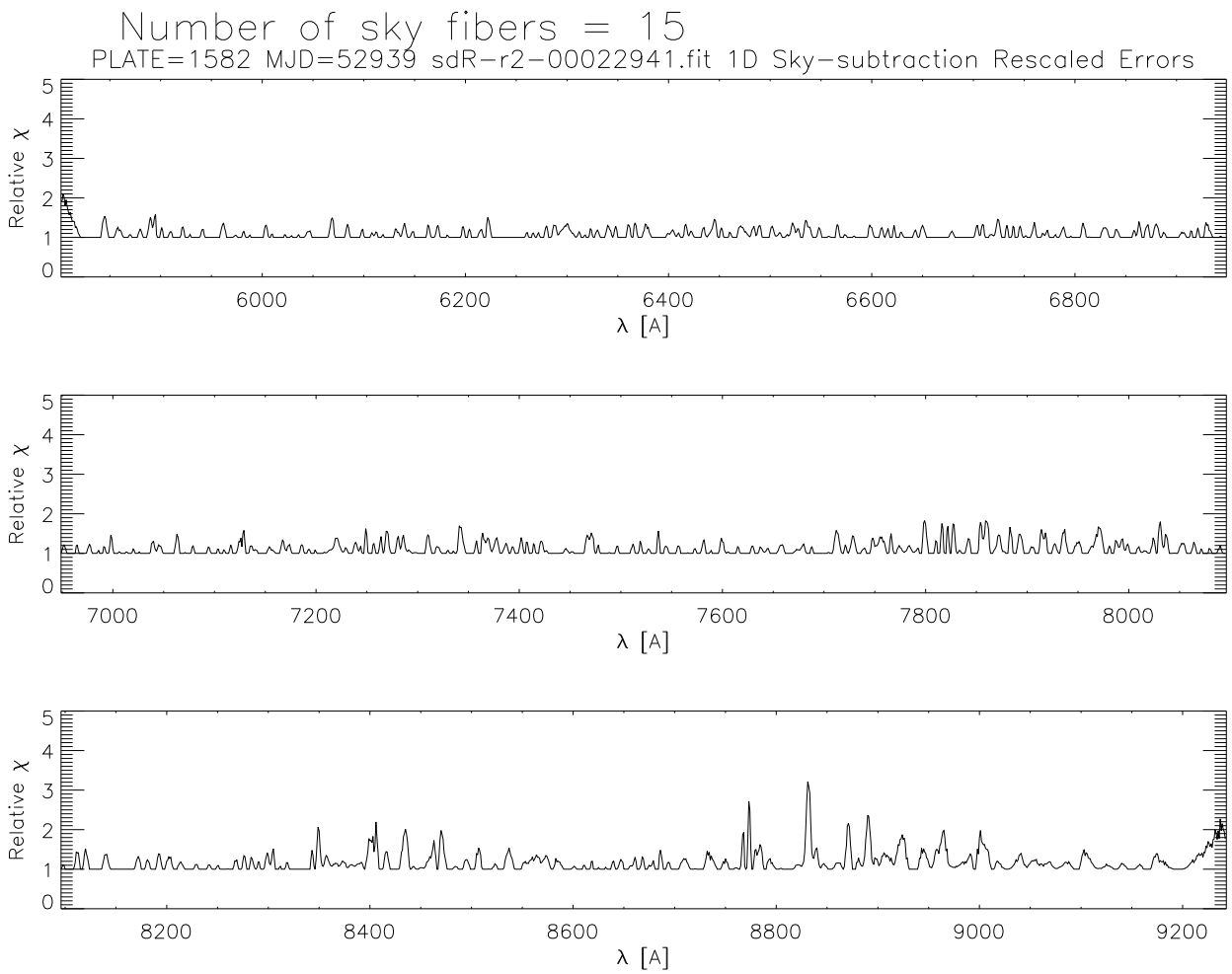

−0.20
−0.25
−0.30
−0.35
−0.40
sky shift, pixels
5000
6000
7000
8000
9000
10000

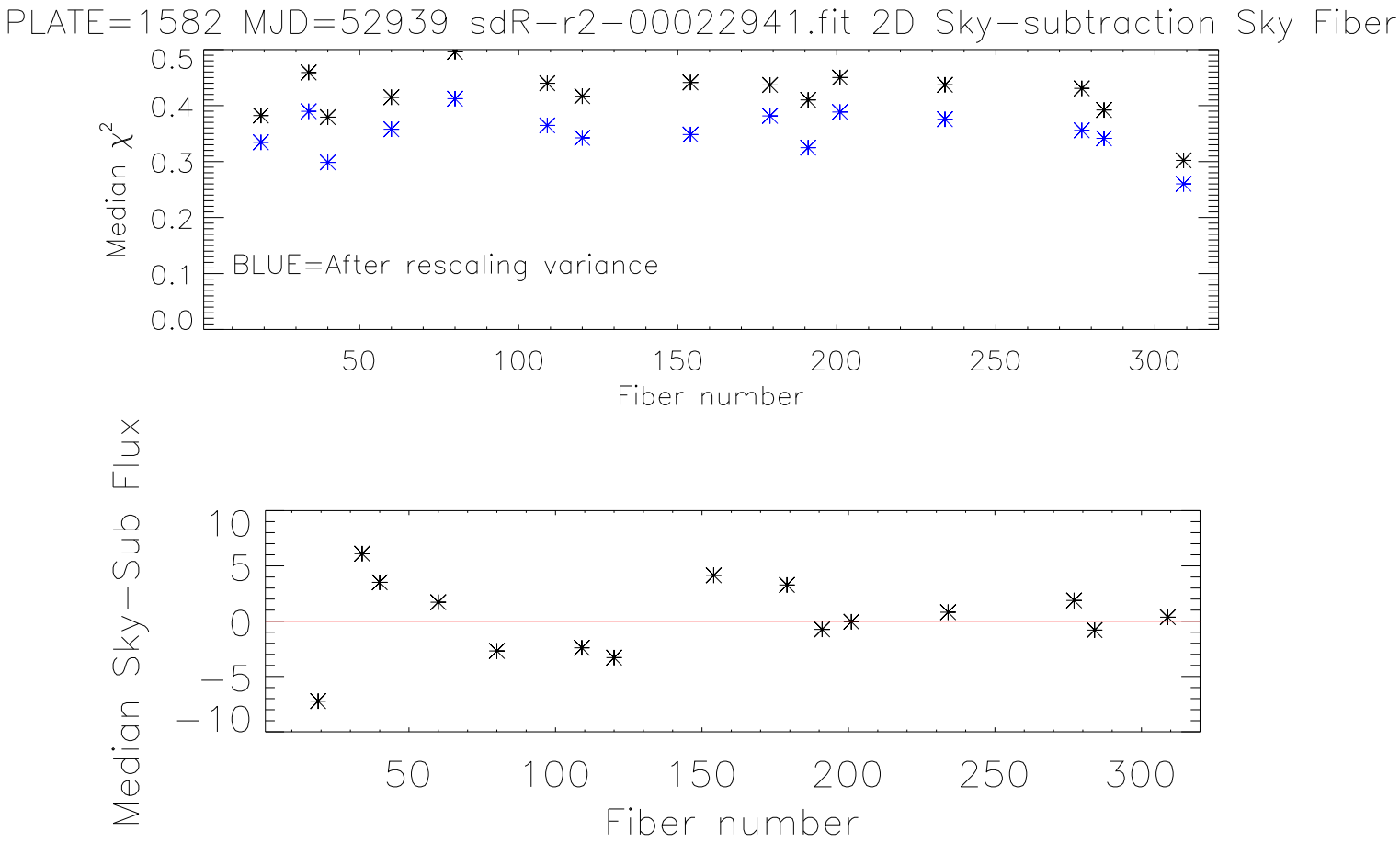

PLATE=1582 MJD=52939 Smooth superflat for sdR-r2-00022941.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

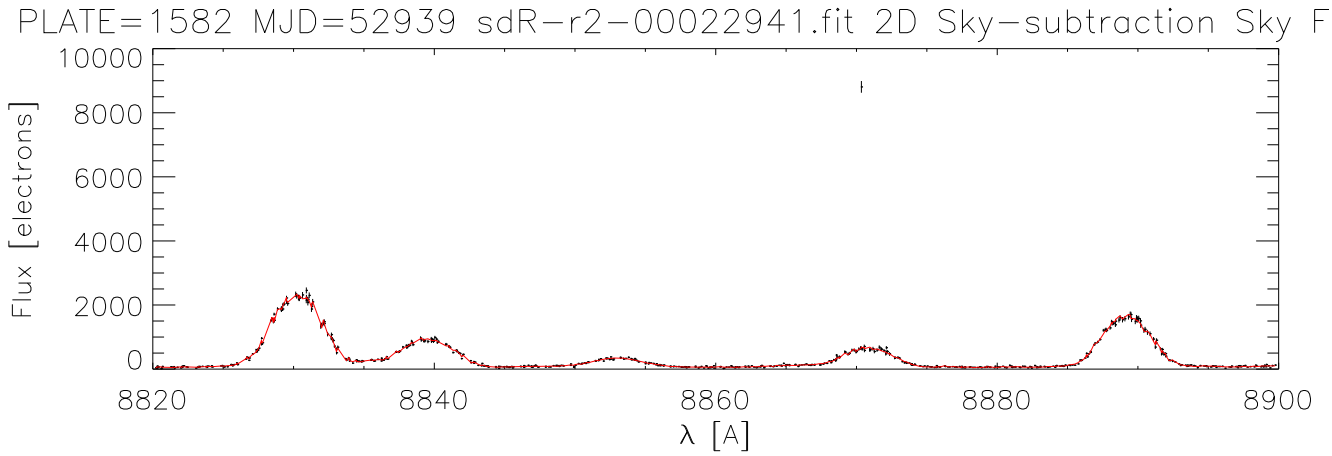

PLATE=1582 MJD=52939 sdR-r2-00022941.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
-5
-10
50
100
150
200
250
300
Fiber number

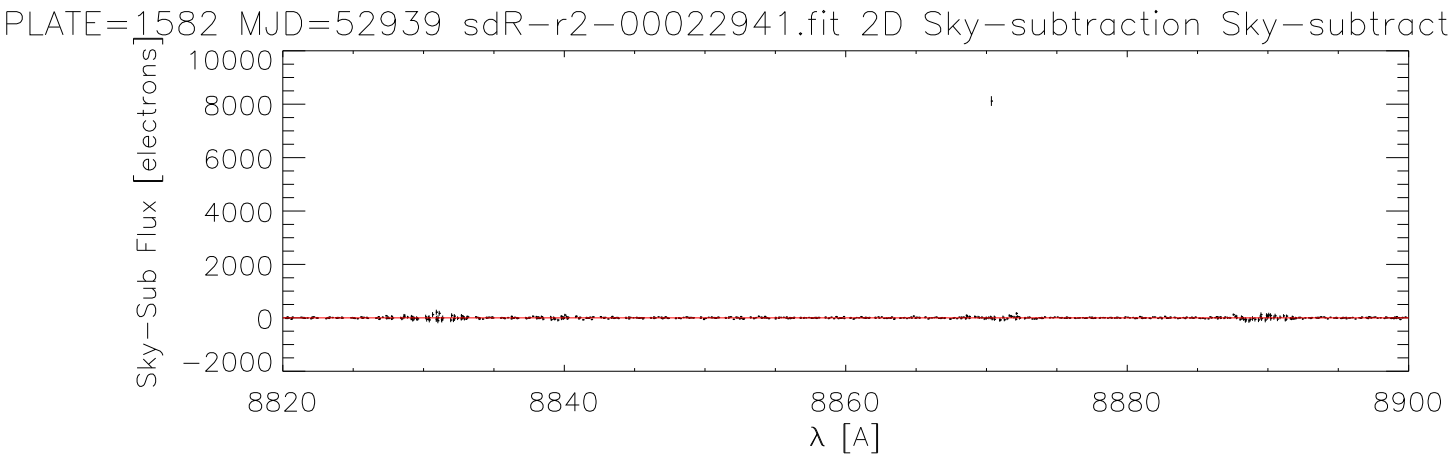

PLATE=1582 MJD=52939 sdR-r2-00022941.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

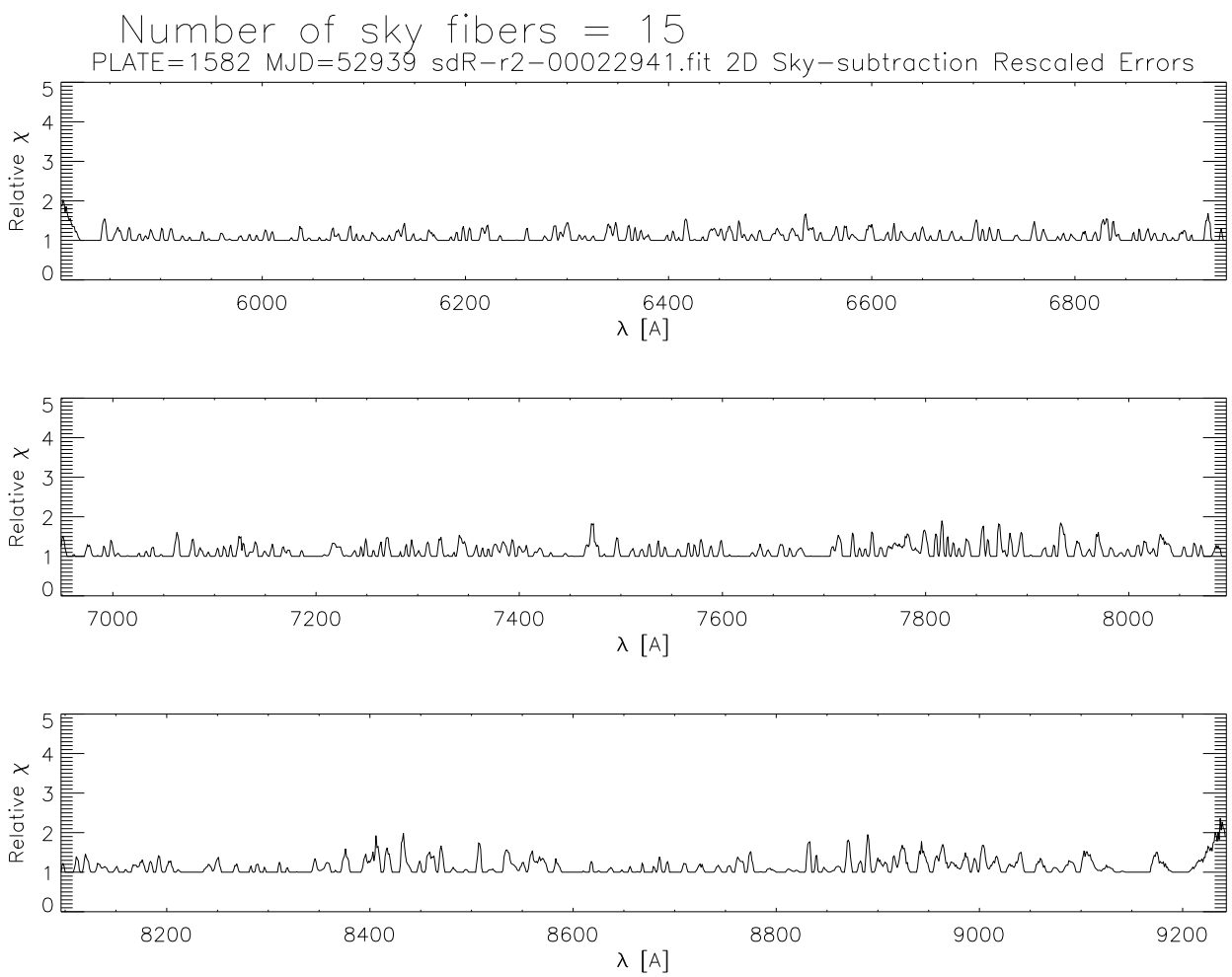

PLATE=1582 MJD=52939 sdR-r2-00022941.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

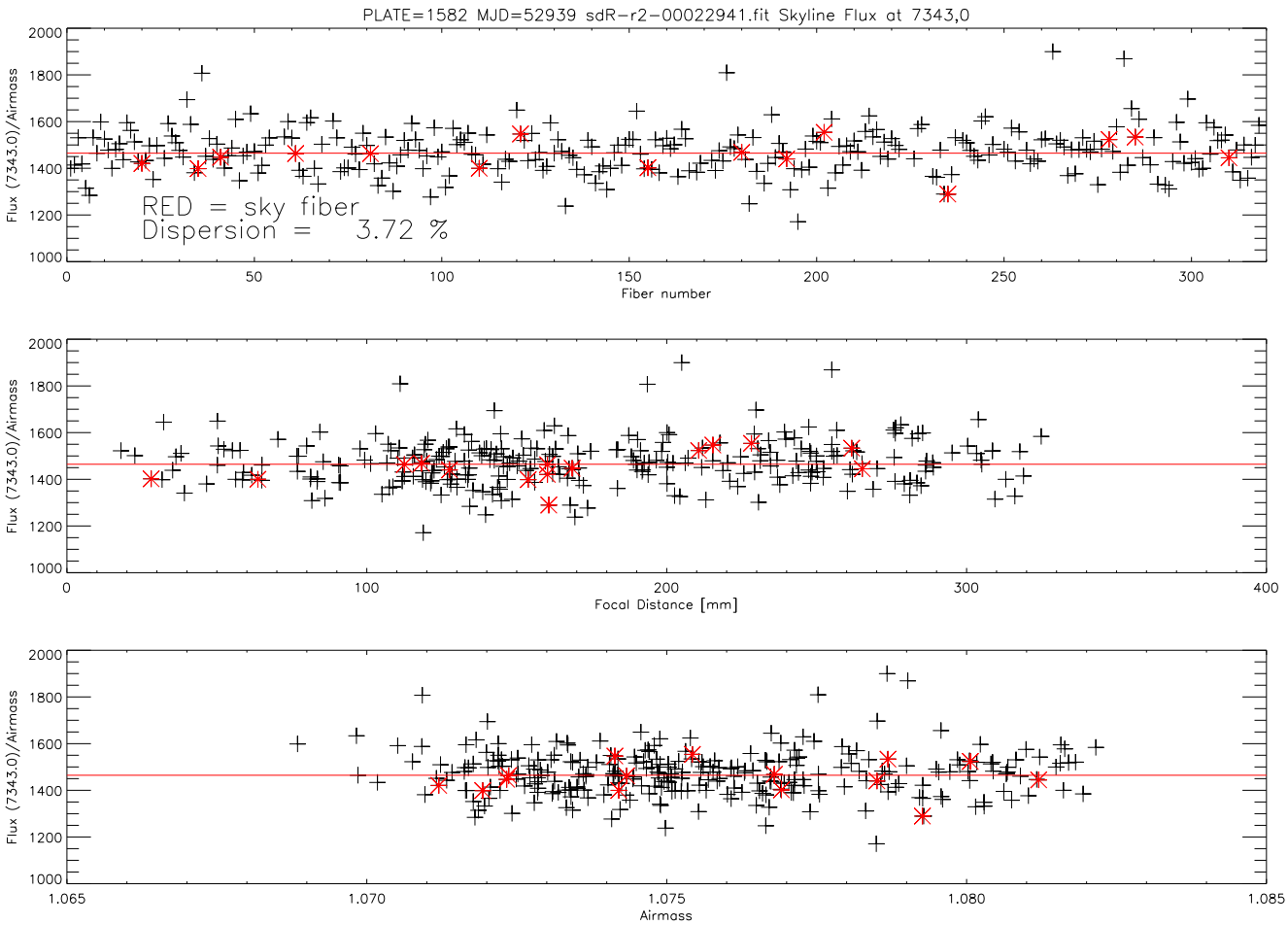

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r2-00022941.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

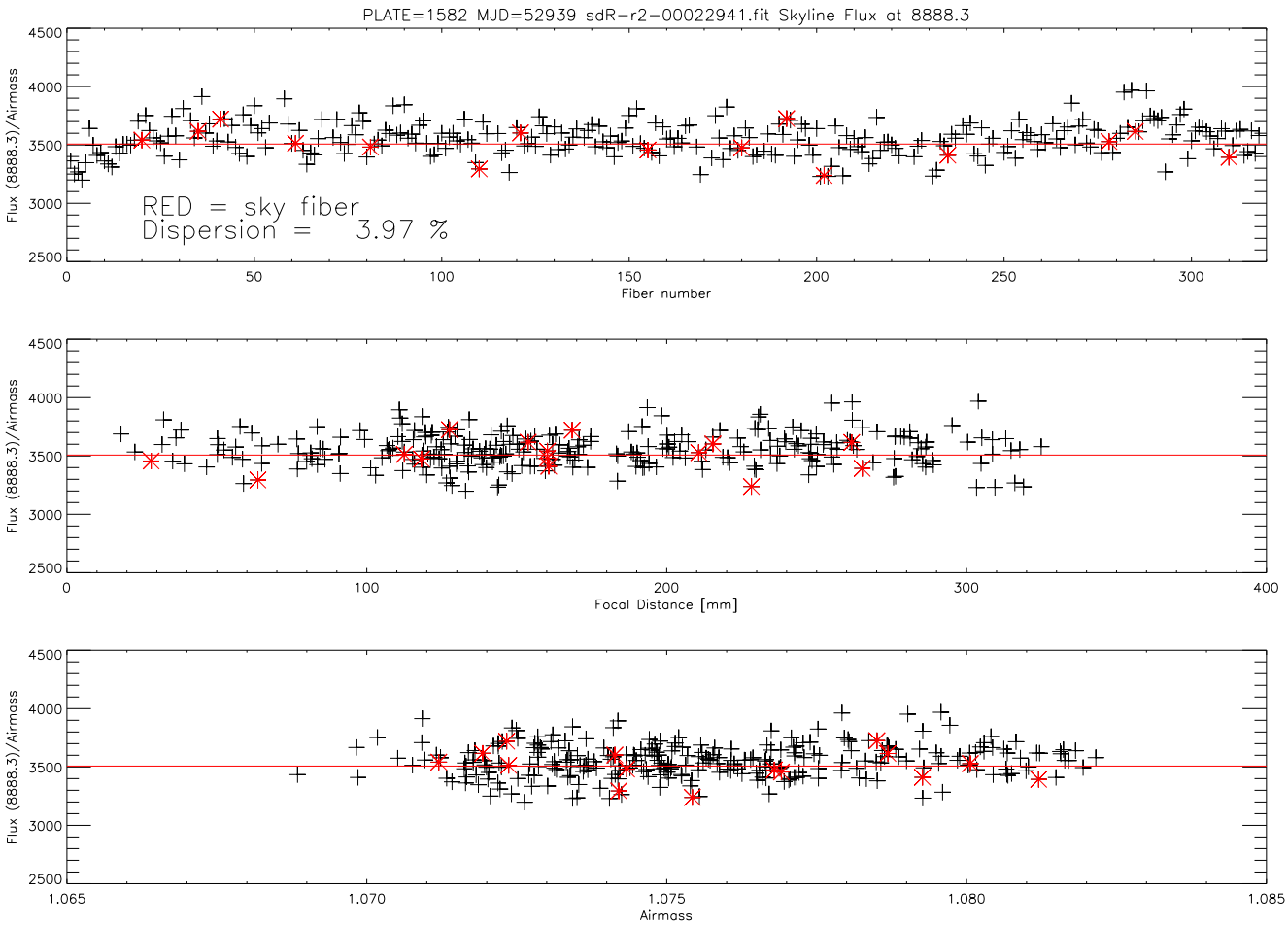

PLATE=1582 MJD=52939 sdR-r2-00022941.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

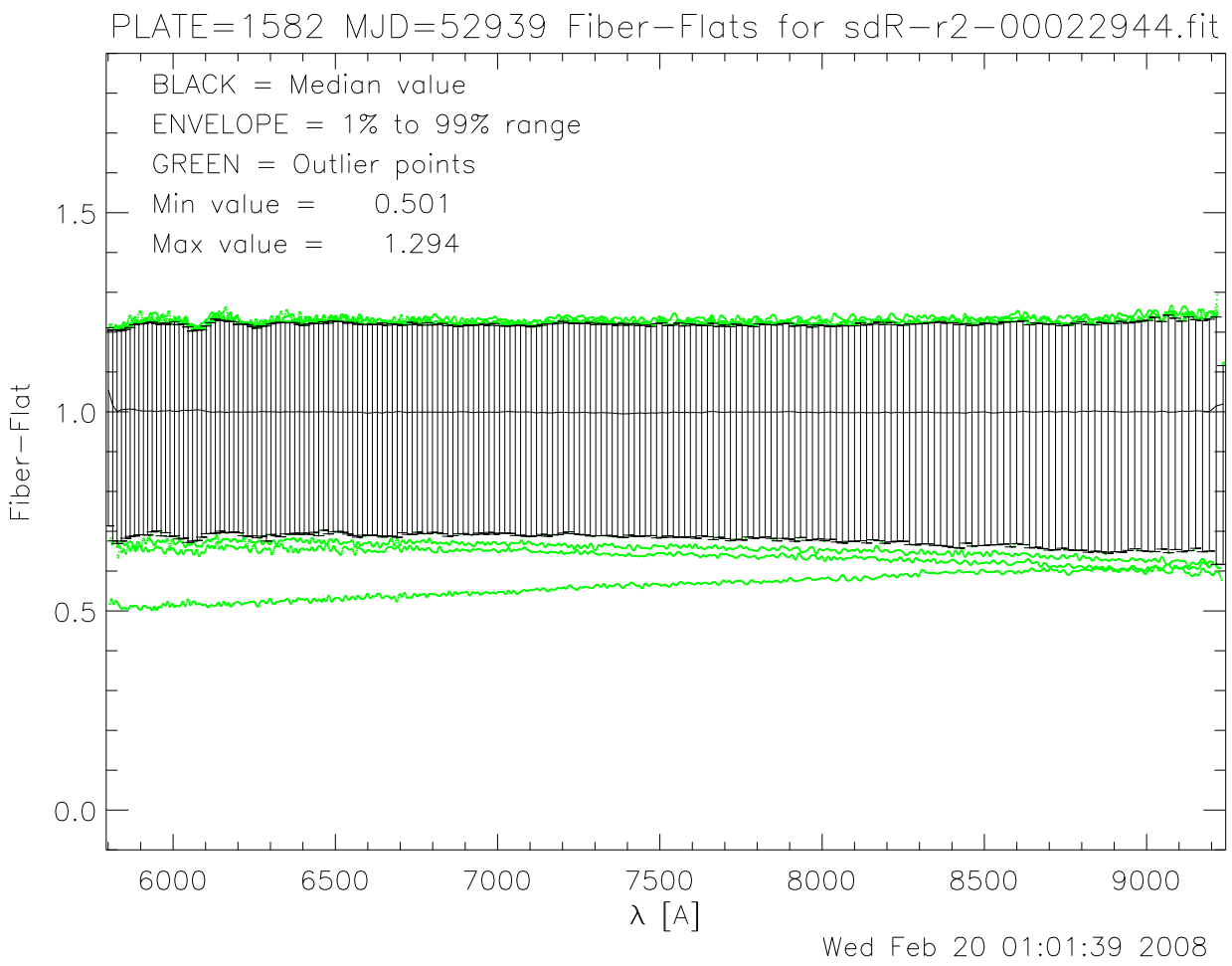

PLATE=1582 MJD=52939 sdR-r2-00022941.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

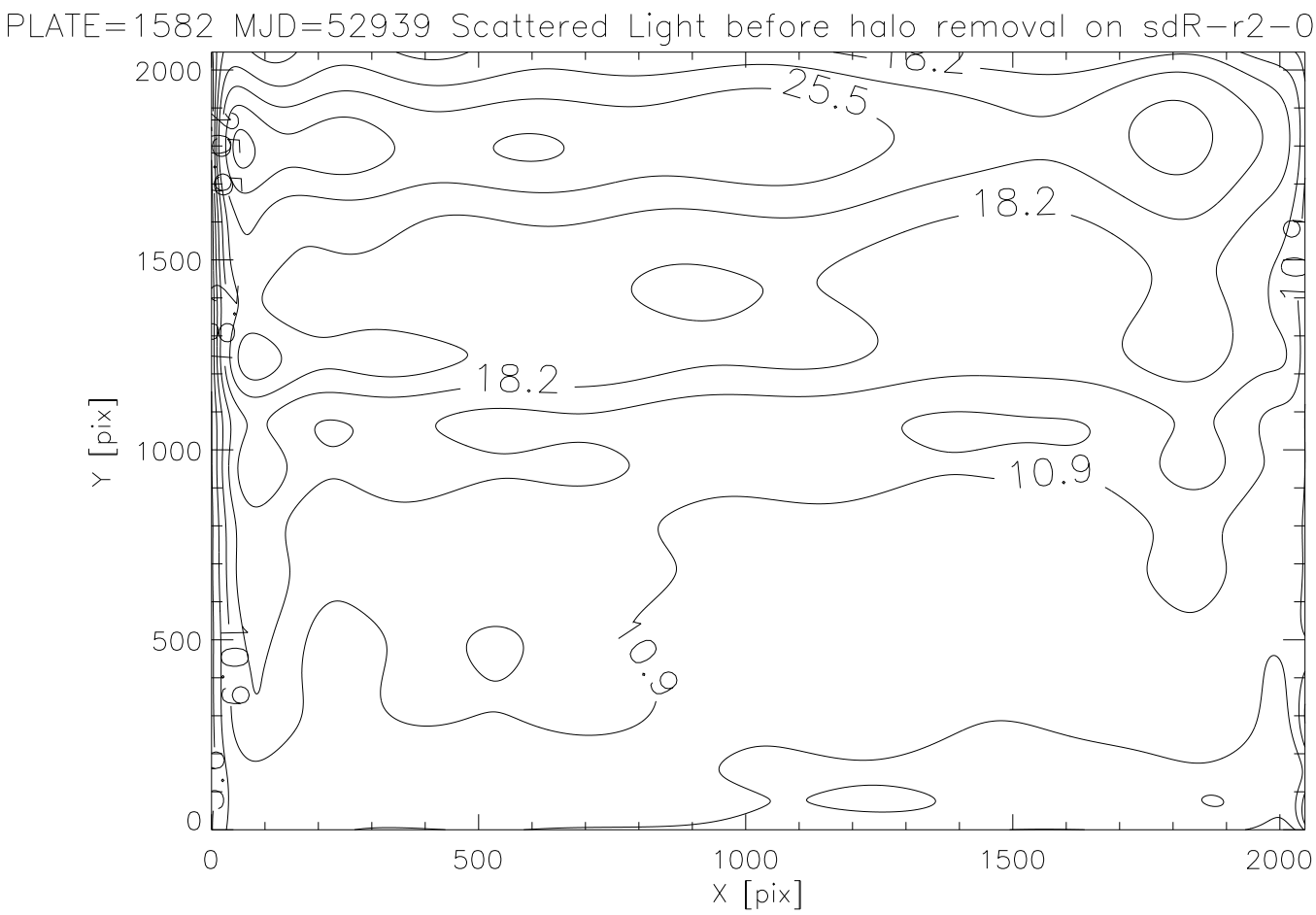

PLATE=1582 MJD=52939 sdR-r2-00022941.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

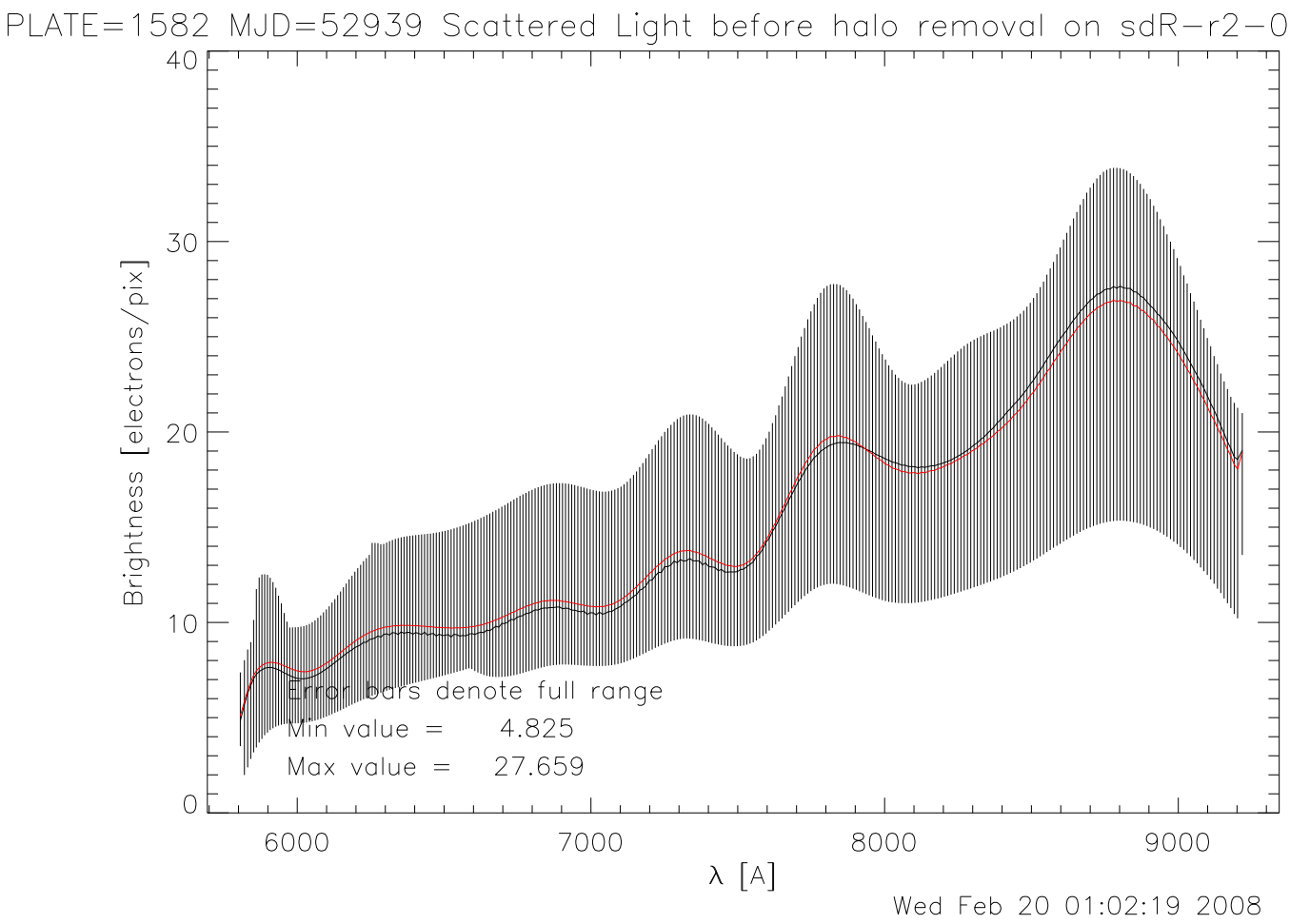

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r2-00022941.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

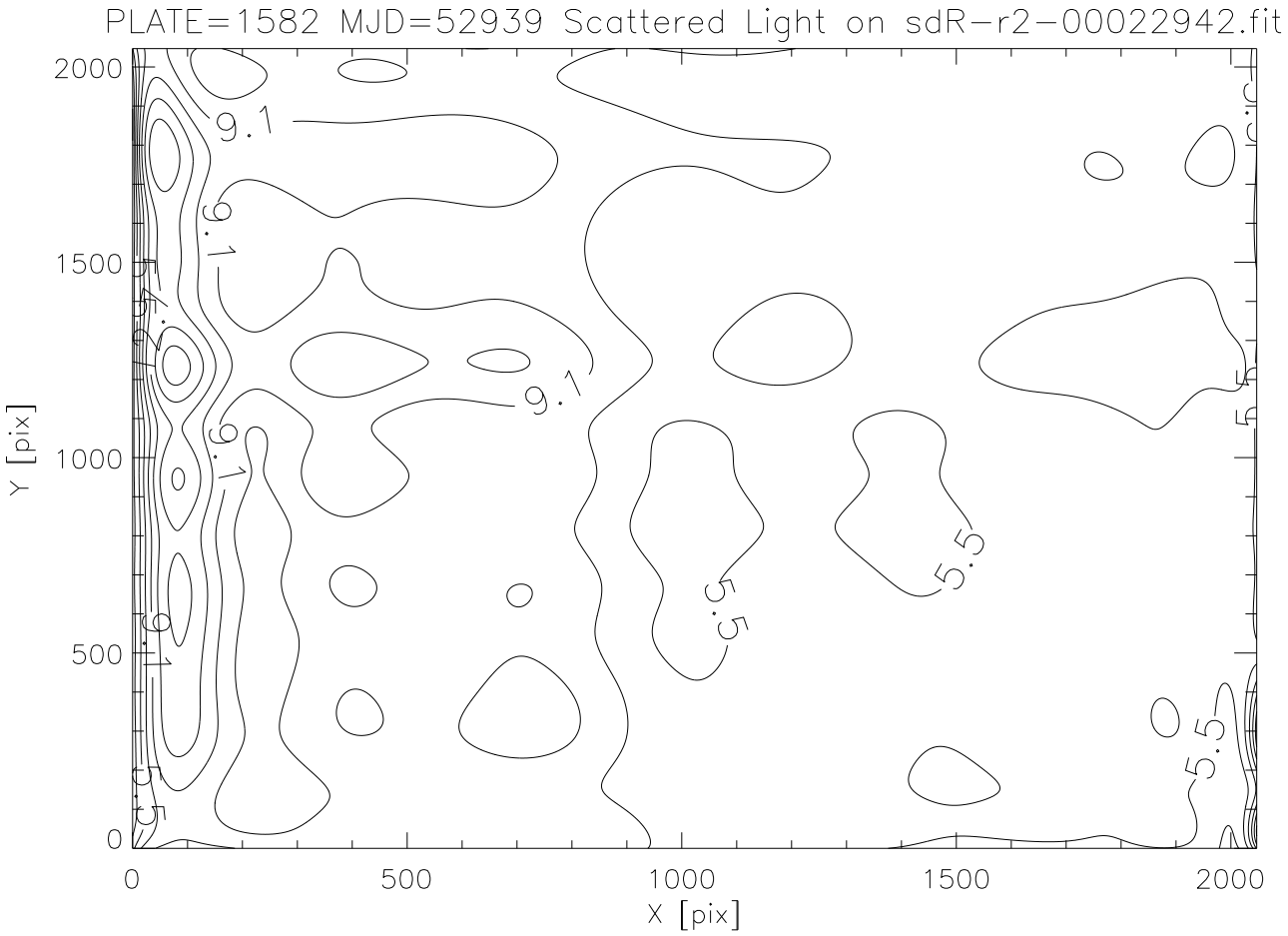

PLATE=1582 MJD=52939 sdR-r2-00022941.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.72 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

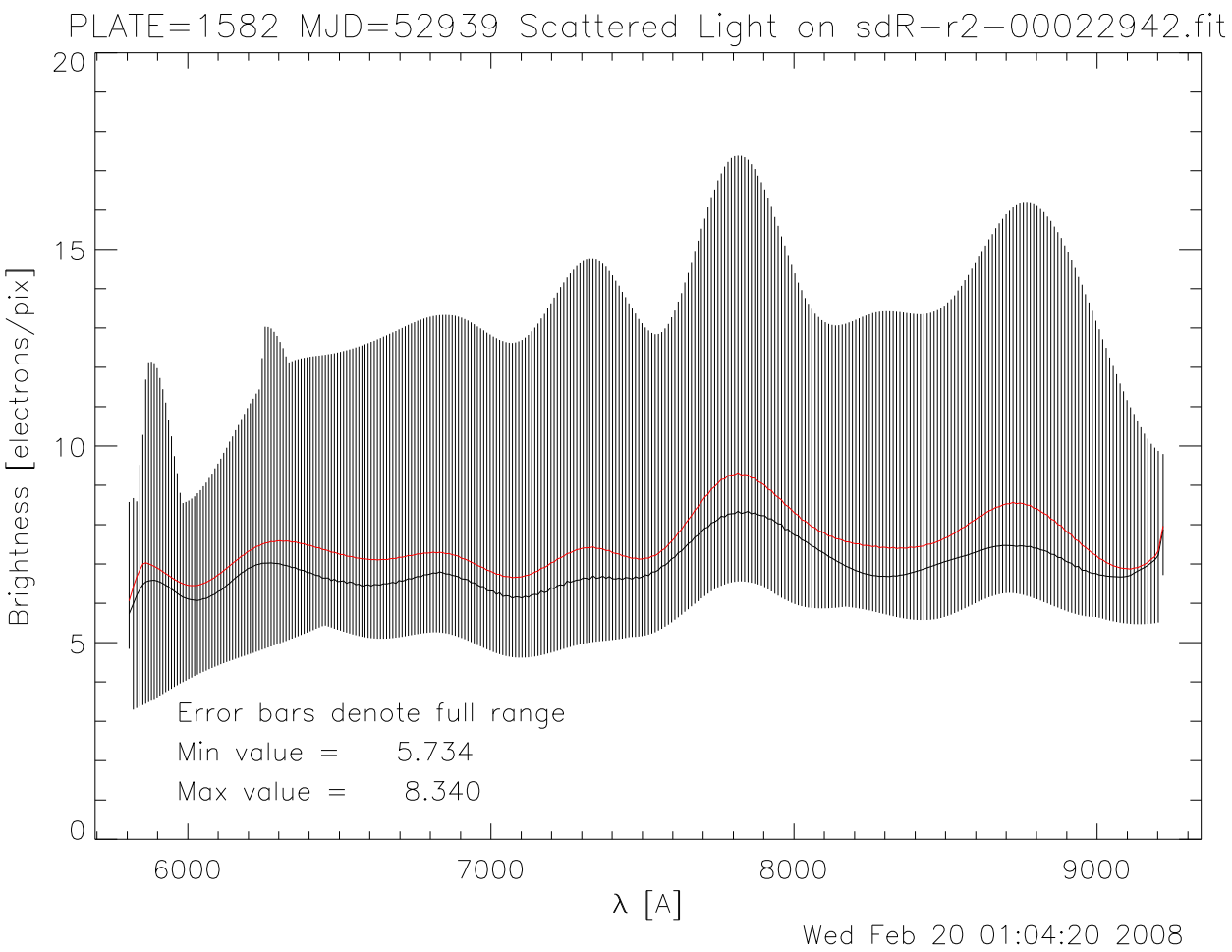

PLATE=1582 MJD=52939 sdR-r2-00022941.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.97 %
Fiber number
Focal Distance [mm]
Airmass

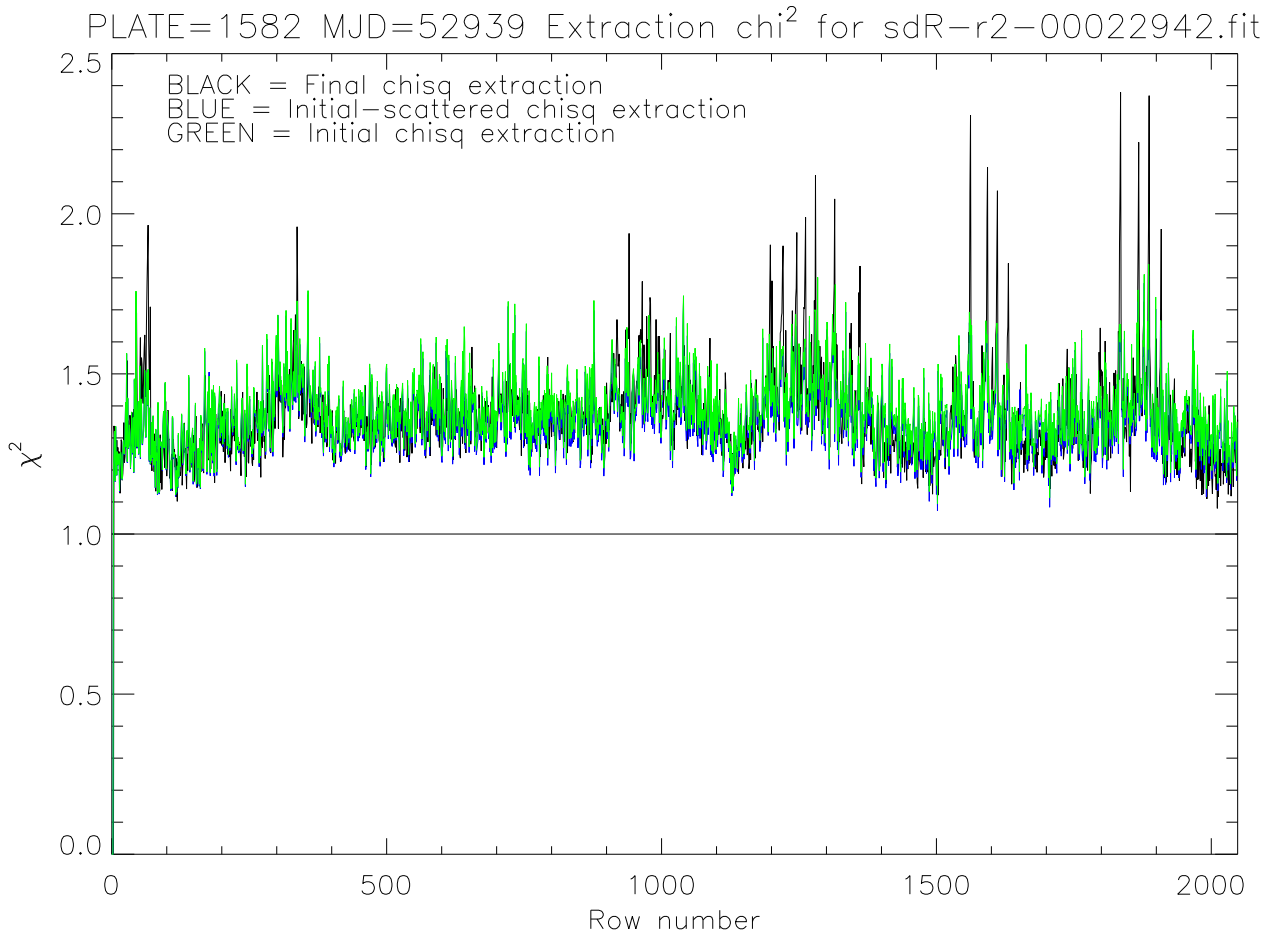

PLATE=1582 MJD=52939 Fiber−Flats for sdR−r2−00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.501
Max value = 1.294
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 01:01:39 2008

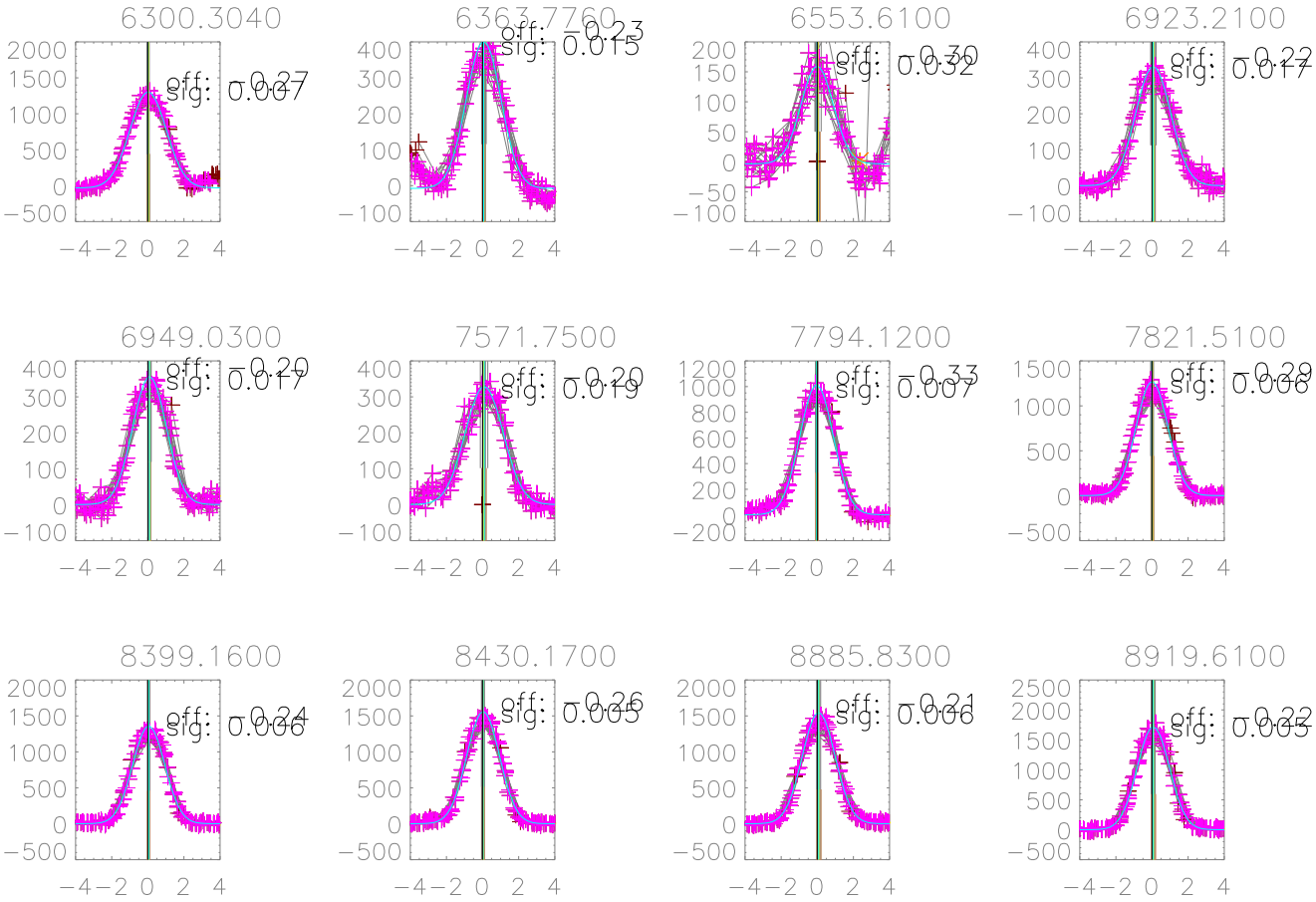

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r2-00022942.fi
18.2
25.5
18.2
18.2
10.9
10.9
0.9
0
Y [pix]
X [pix]
0
500
1000
1500
2000

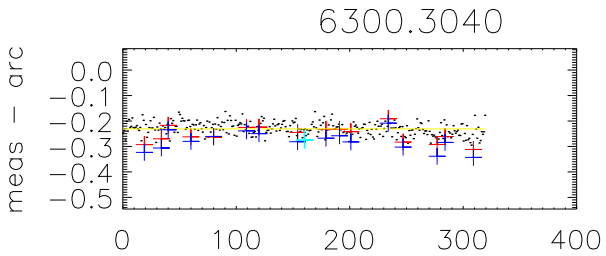

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r2-00022942.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.825
Max value = 27.659
Wed Feb 20 01:02:19 2008

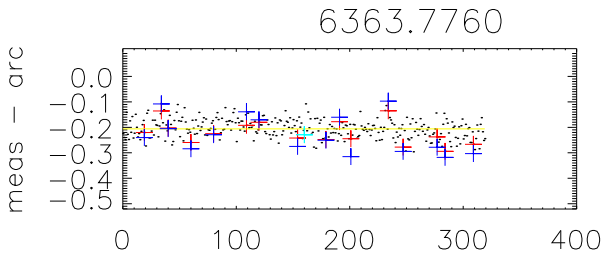

PLATE=1582 MJD=52939 Scattered Light on sdR-r2-00022942.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
5.5

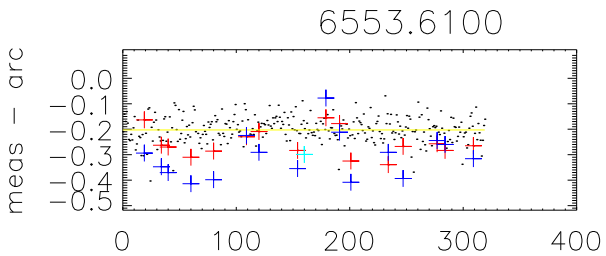

PLATE=1582 MJD=52939 Scattered Light on sdR-r2-00022942.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.734
Max value = 8.340
Wed Feb 20 01:04:20 2008

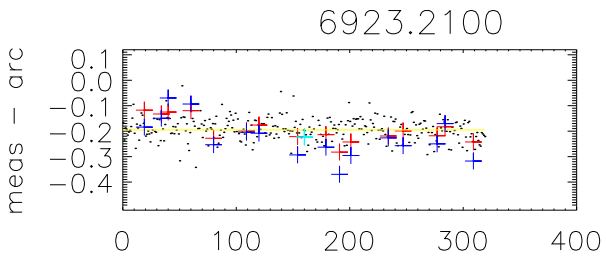

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-r2-00022942.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

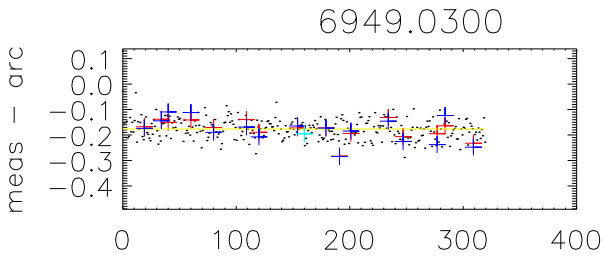

6300.3040
off: -0.27
sig: 0.007
6363.7760
off: -0.23
sig: 0.015
6553.6100
off: -0.30
sig: 0.032
6923.2100
off: -0.22
sig: 0.017
6949.0300
off: -0.29
sig: 0.017
7571.7500
off: -0.20
sig: 0.019
7794.1200
off: -0.33
sig: 0.007
7821.5100
off: -0.29
sig: 0.006
8399.1600
off: -0.24
sig: 0.006
8430.1700
off: -0.26
sig: 0.005
8885.8300
off: -0.21
sig: 0.006
8919.6100
off: -0.22
sig: 0.005

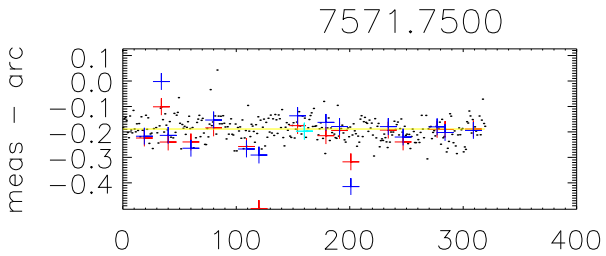

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

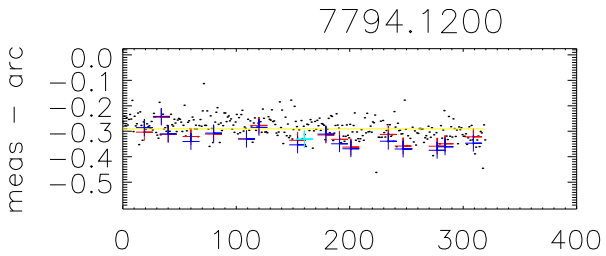

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

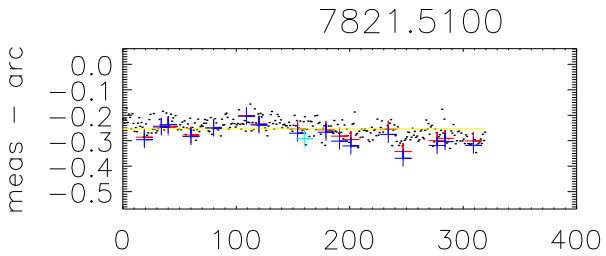

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

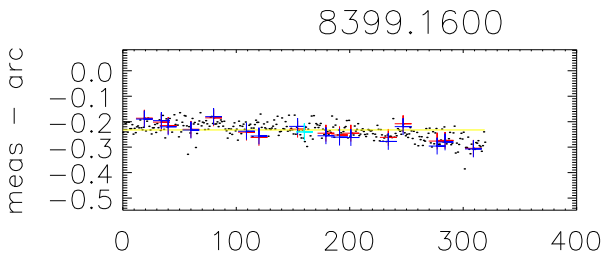

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

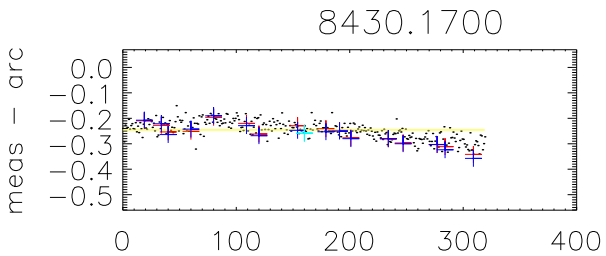

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

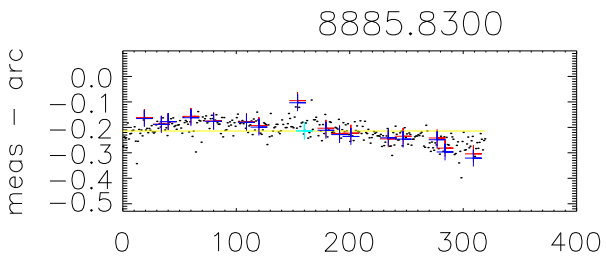

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

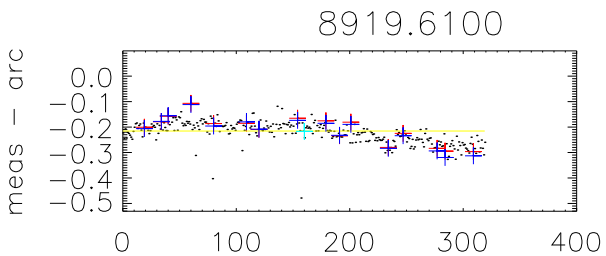

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

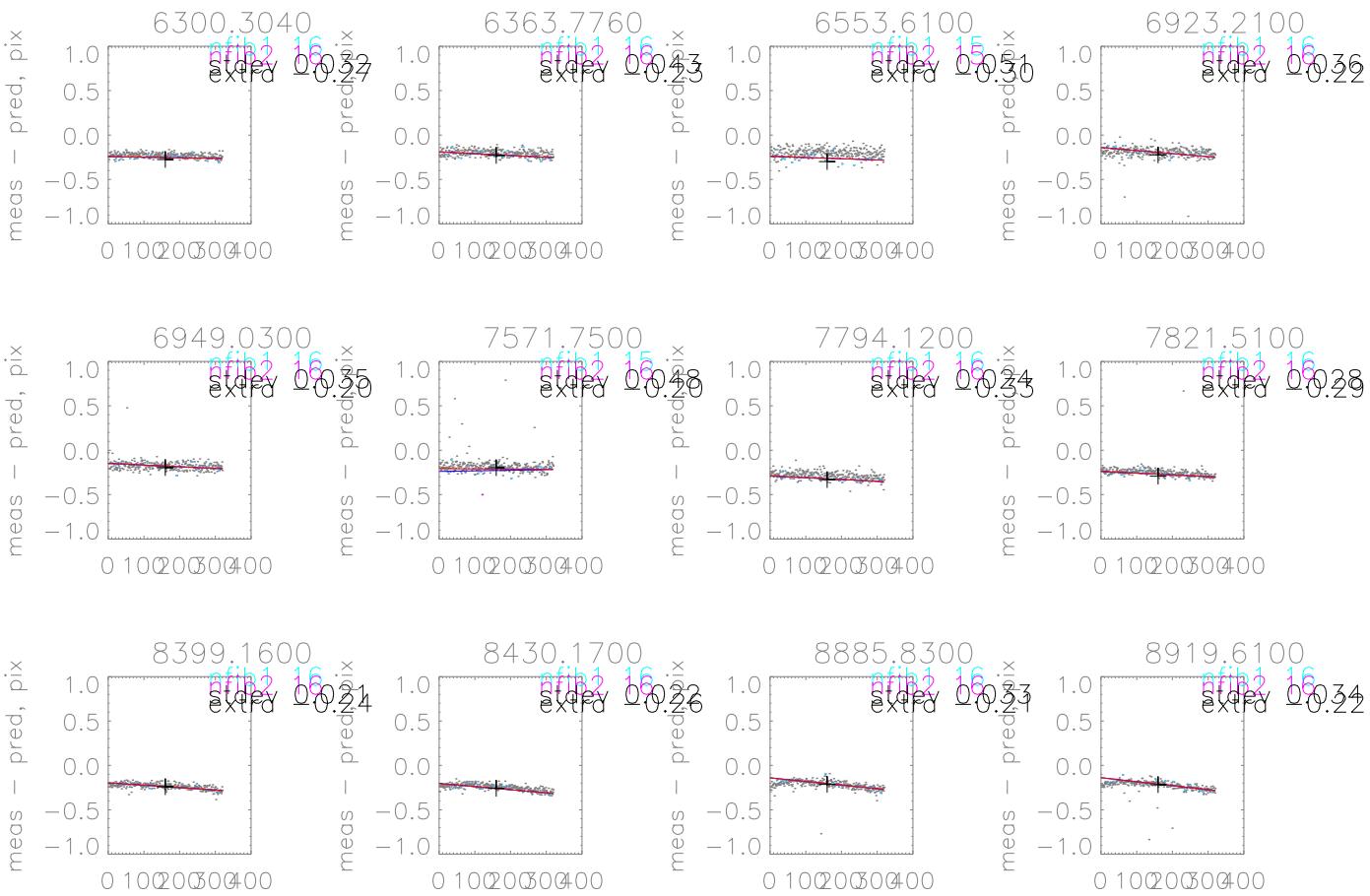

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

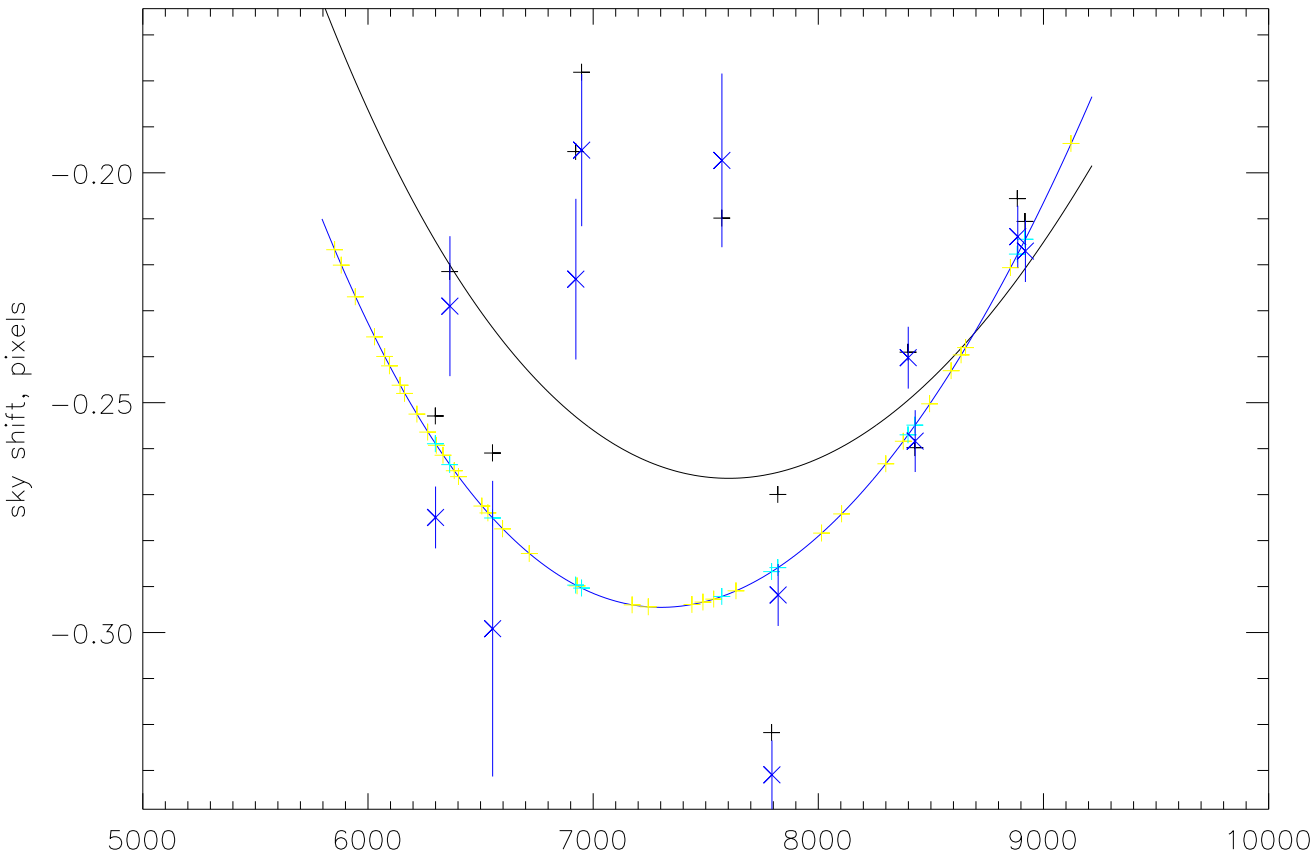

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

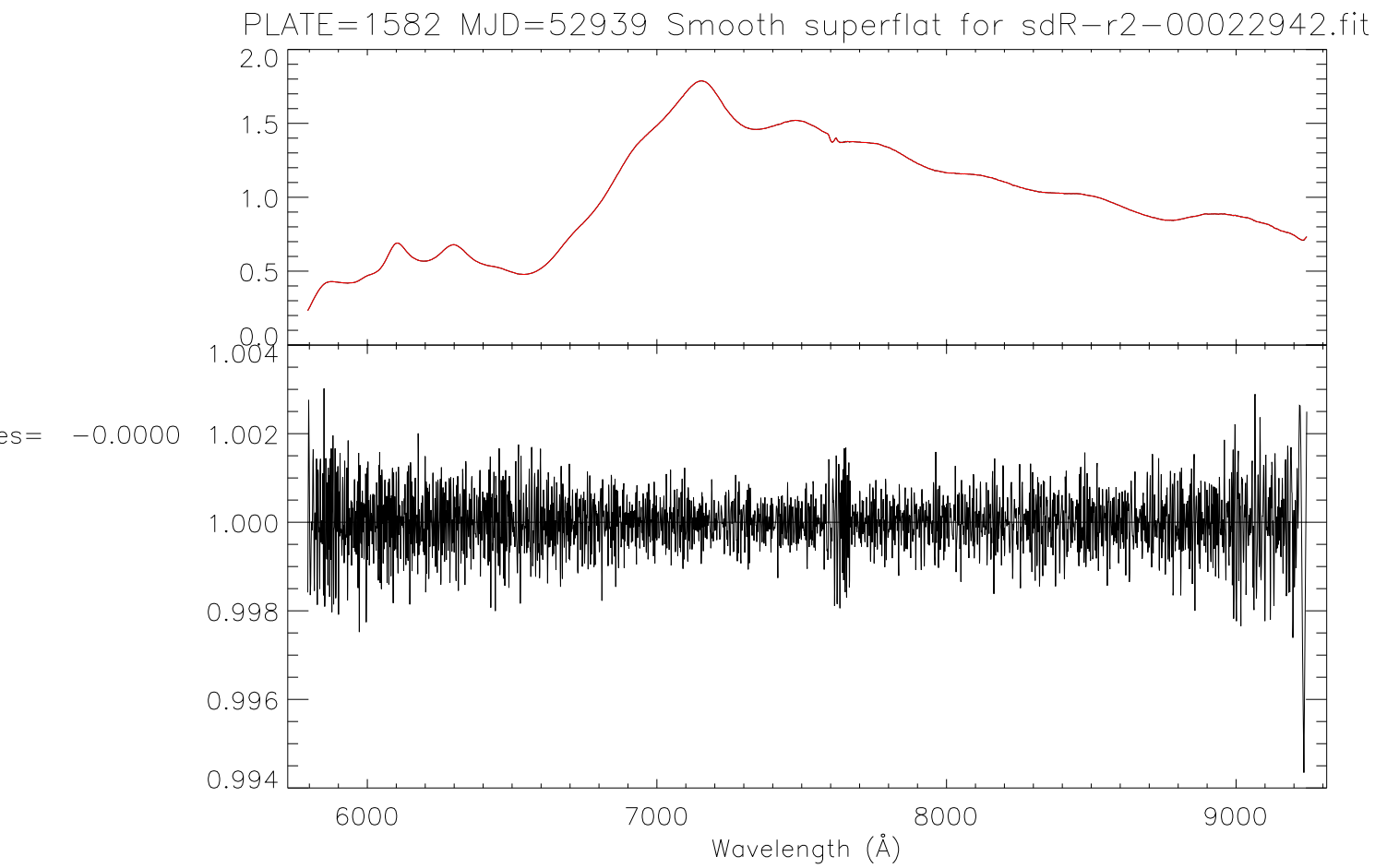

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

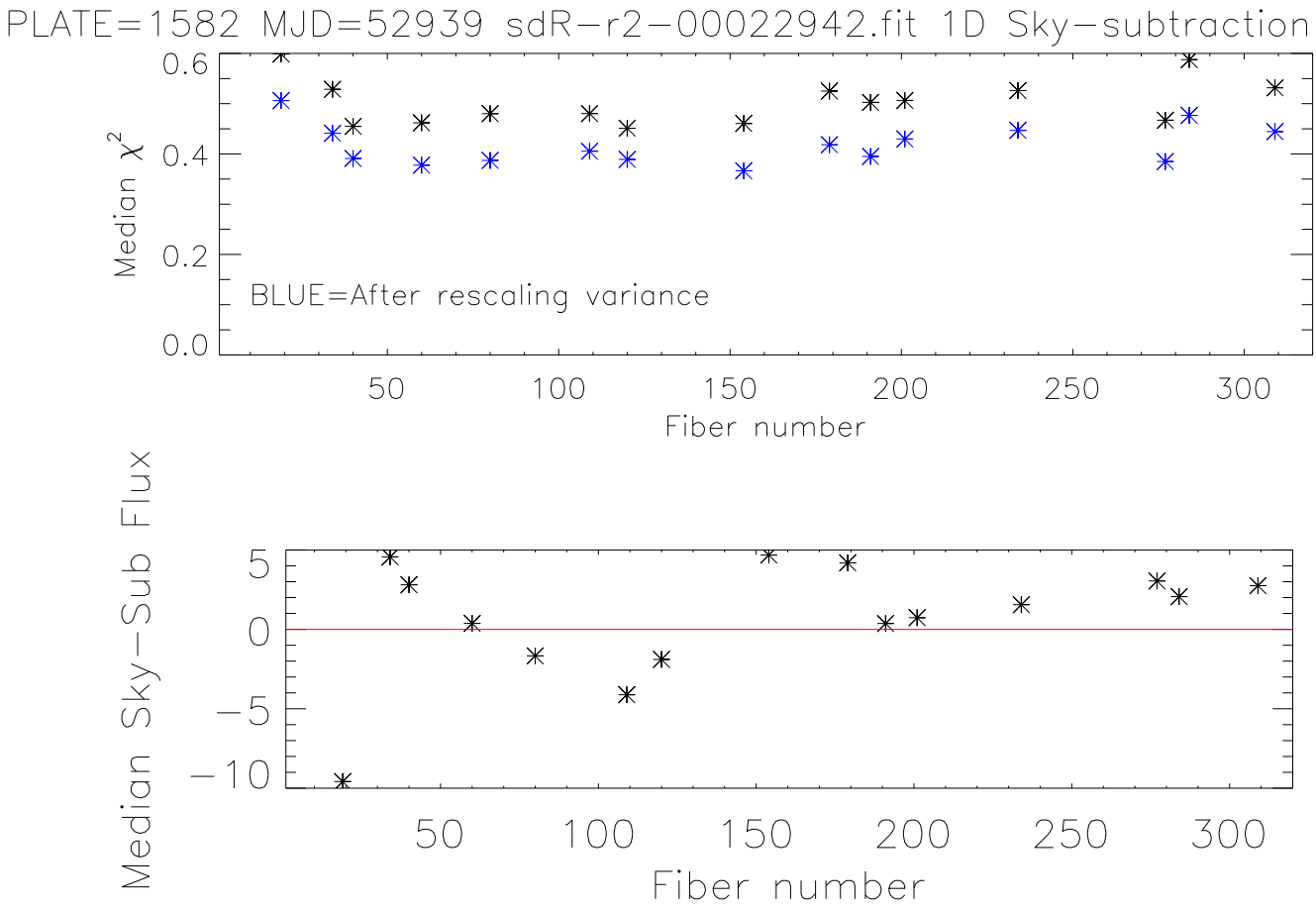

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

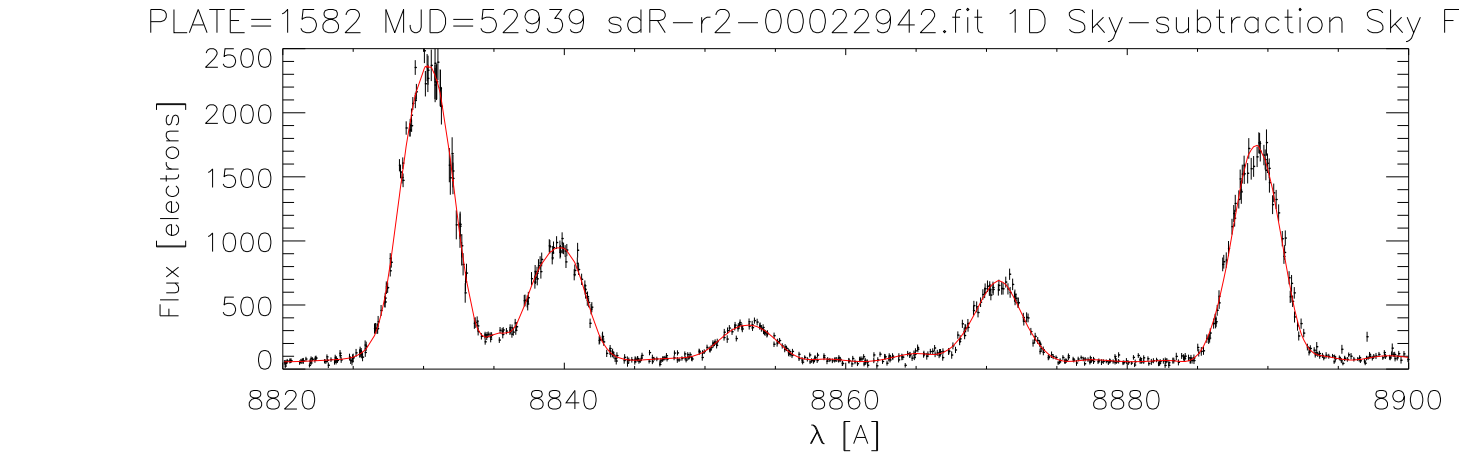

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

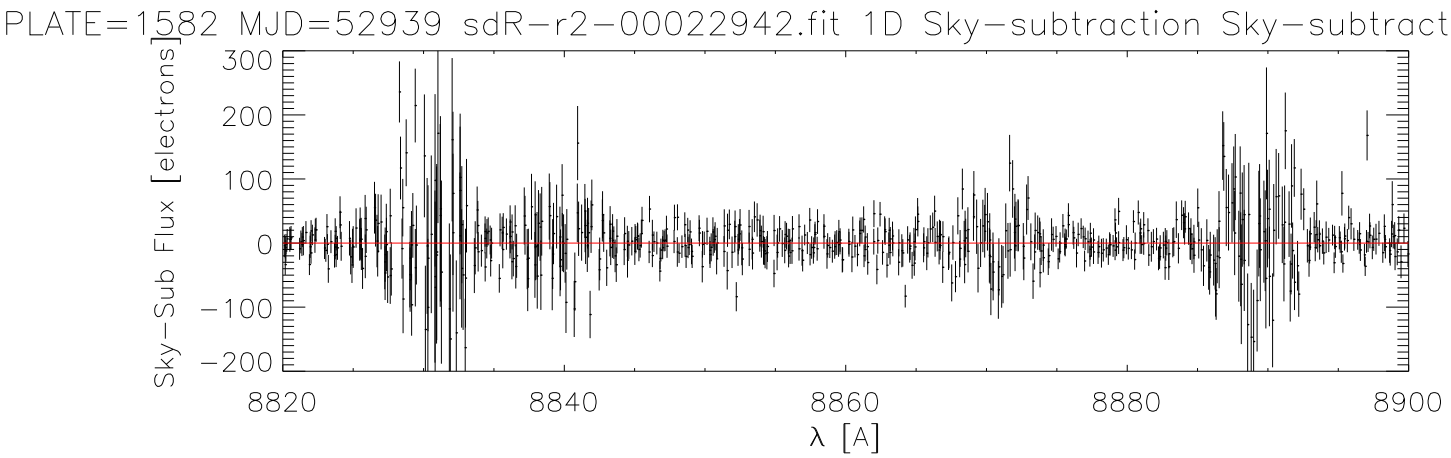

6300.3040
stdev 0.032
extra 0.27
6363.7760
stdev 0.043
extra 0.23
6553.6100
stdev 0.051
extra 0.30
6923.2100
stdev 0.036
extra 0.22
6949.0300
stdev 0.035
extra 0.20
7571.7500
stdev 0.048
extra 0.20
7794.1200
stdev 0.034
extra 0.33
7821.5100
stdev 0.028
extra 0.29
8399.1600
stdev 0.021
extra 0.24
8430.1700
stdev 0.022
extra 0.26
8885.8300
stdev 0.033
extra 0.21
8919.6100
stdev 0.034
extra 0.22
meas − pred, pix
meas − pred, pix

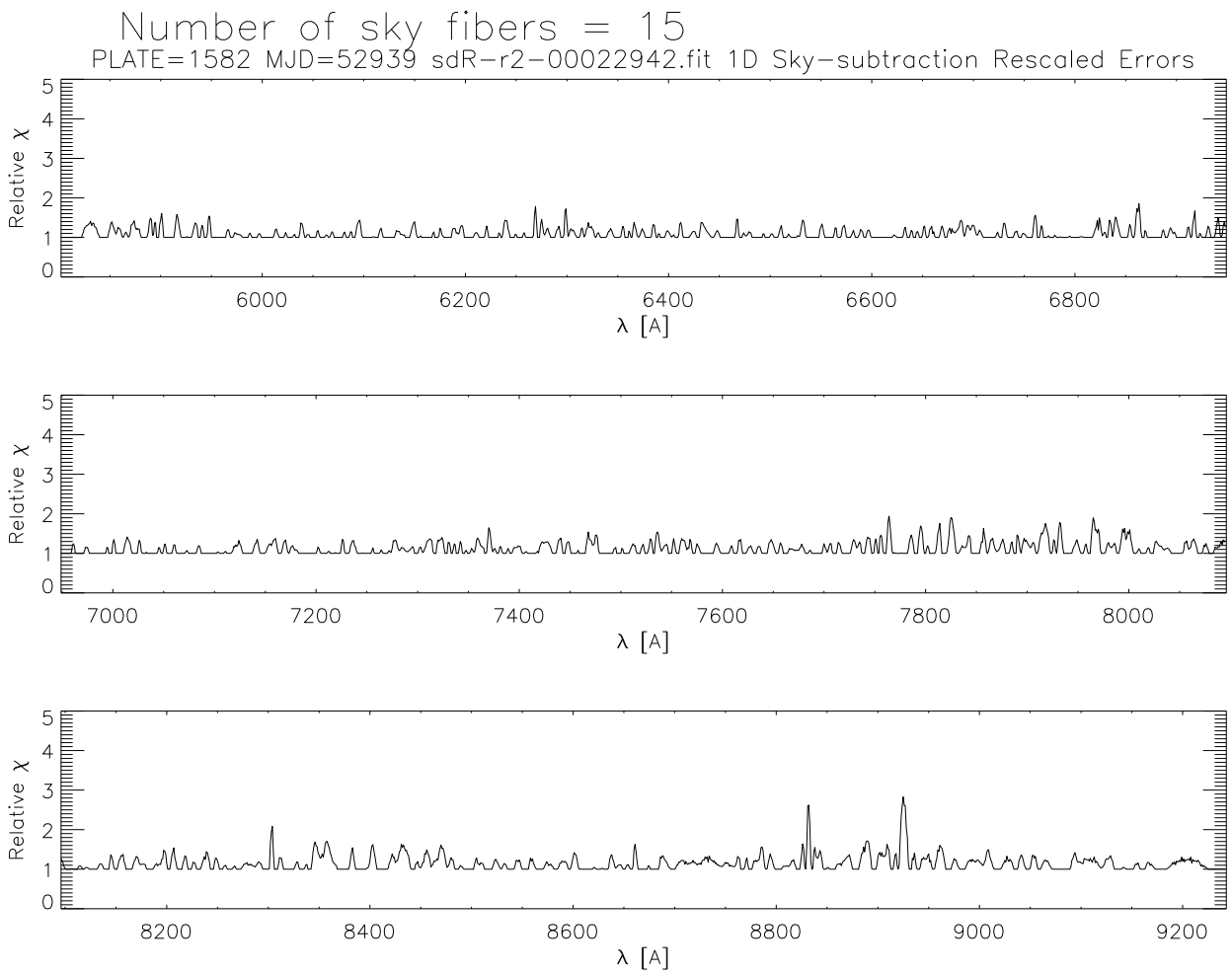

sky shift, pixels
−0.20
−0.25
−0.30
5000
6000
7000
8000
9000
10000

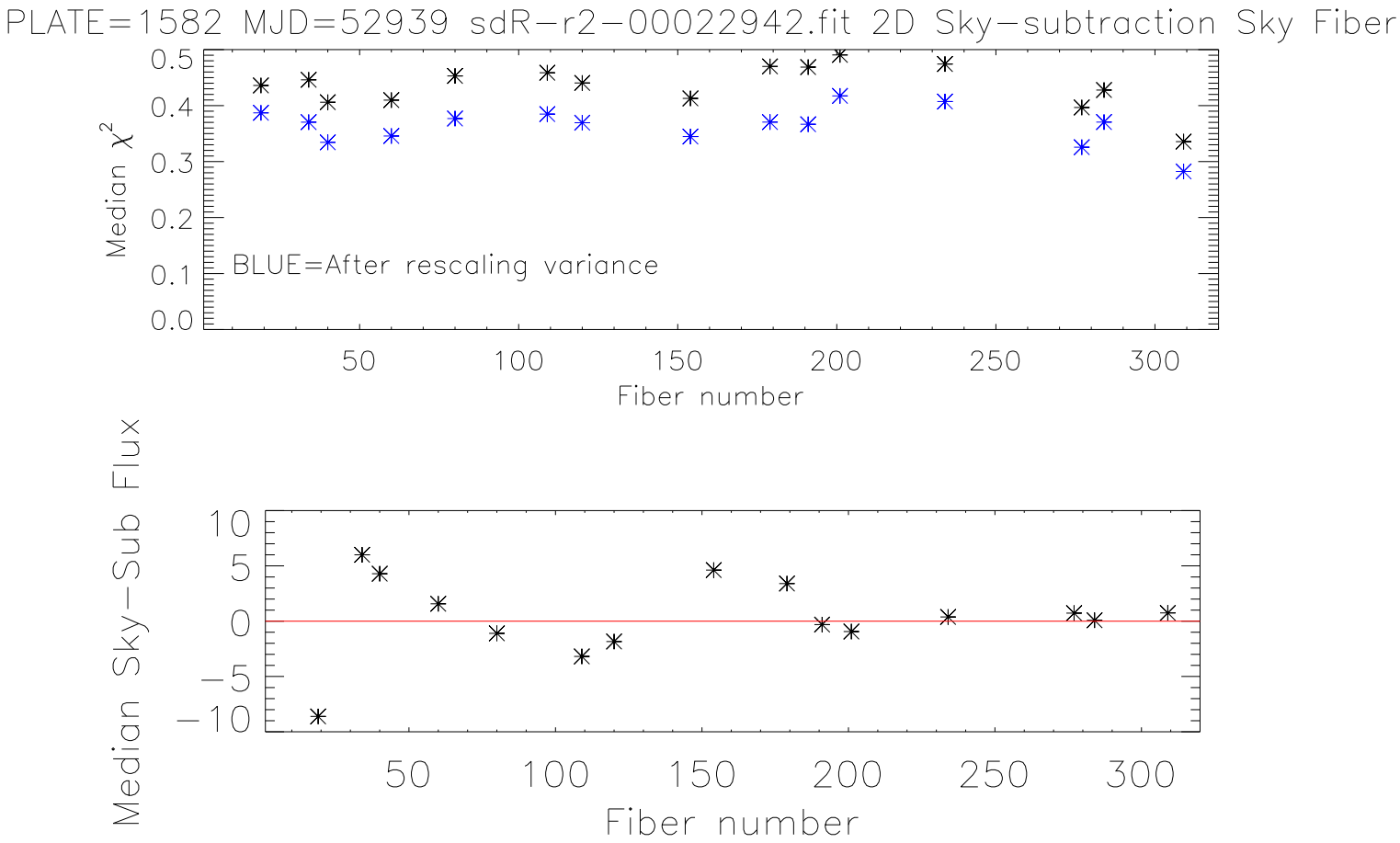

PLATE=1582 MJD=52939 Smooth superflat for sdR-r2-00022942.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

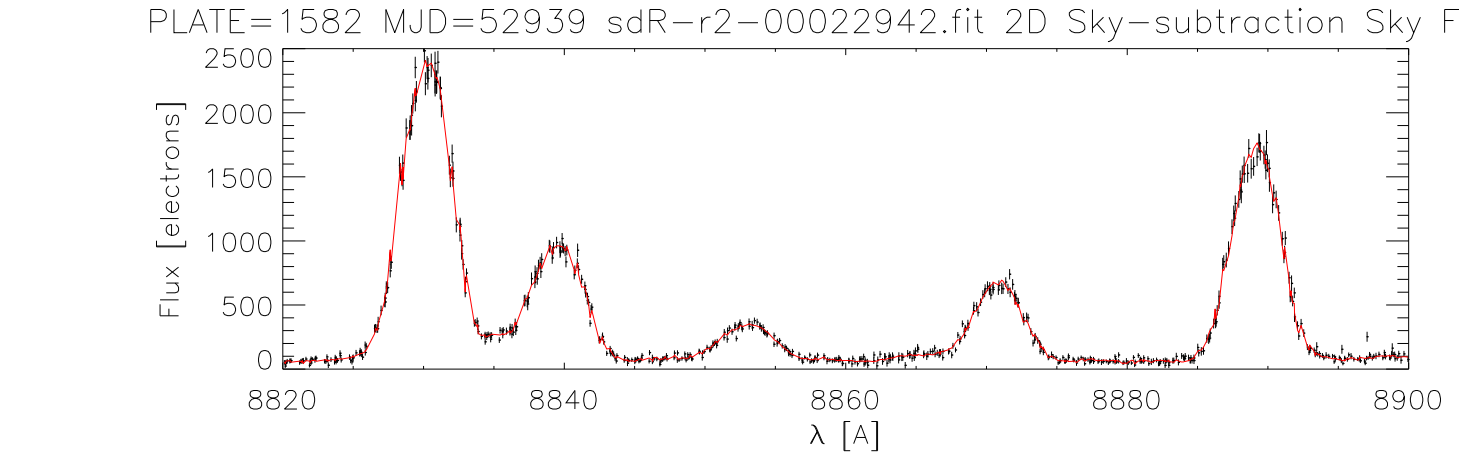

PLATE=1582 MJD=52939 sdR-r2-00022942.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
-5
-10
50
100
150
200
250
300
Fiber number

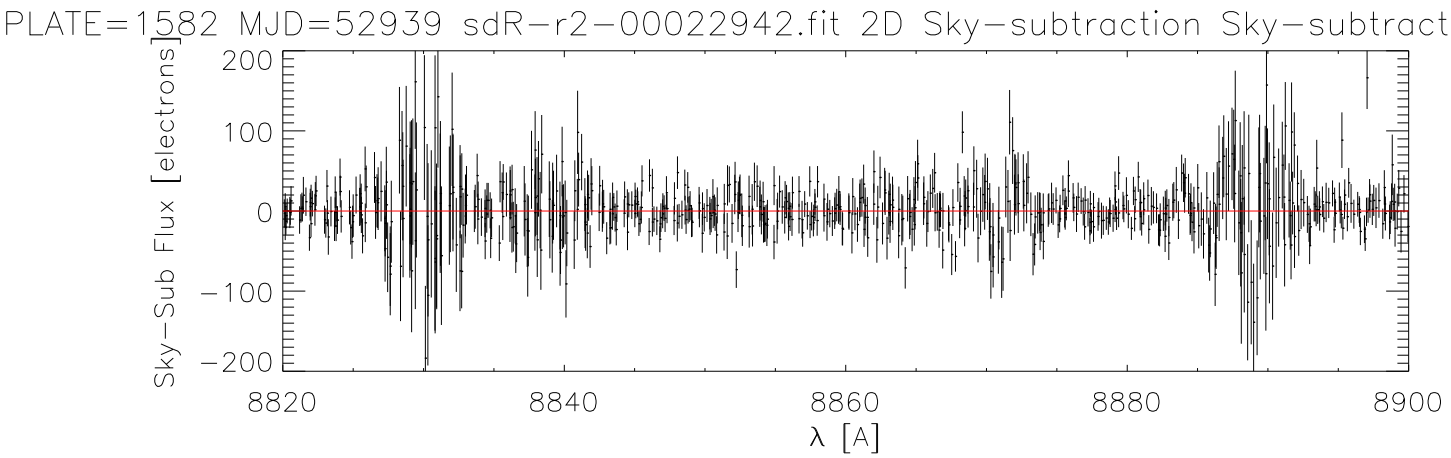

PLATE=1582 MJD=52939 sdR-r2-00022942.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

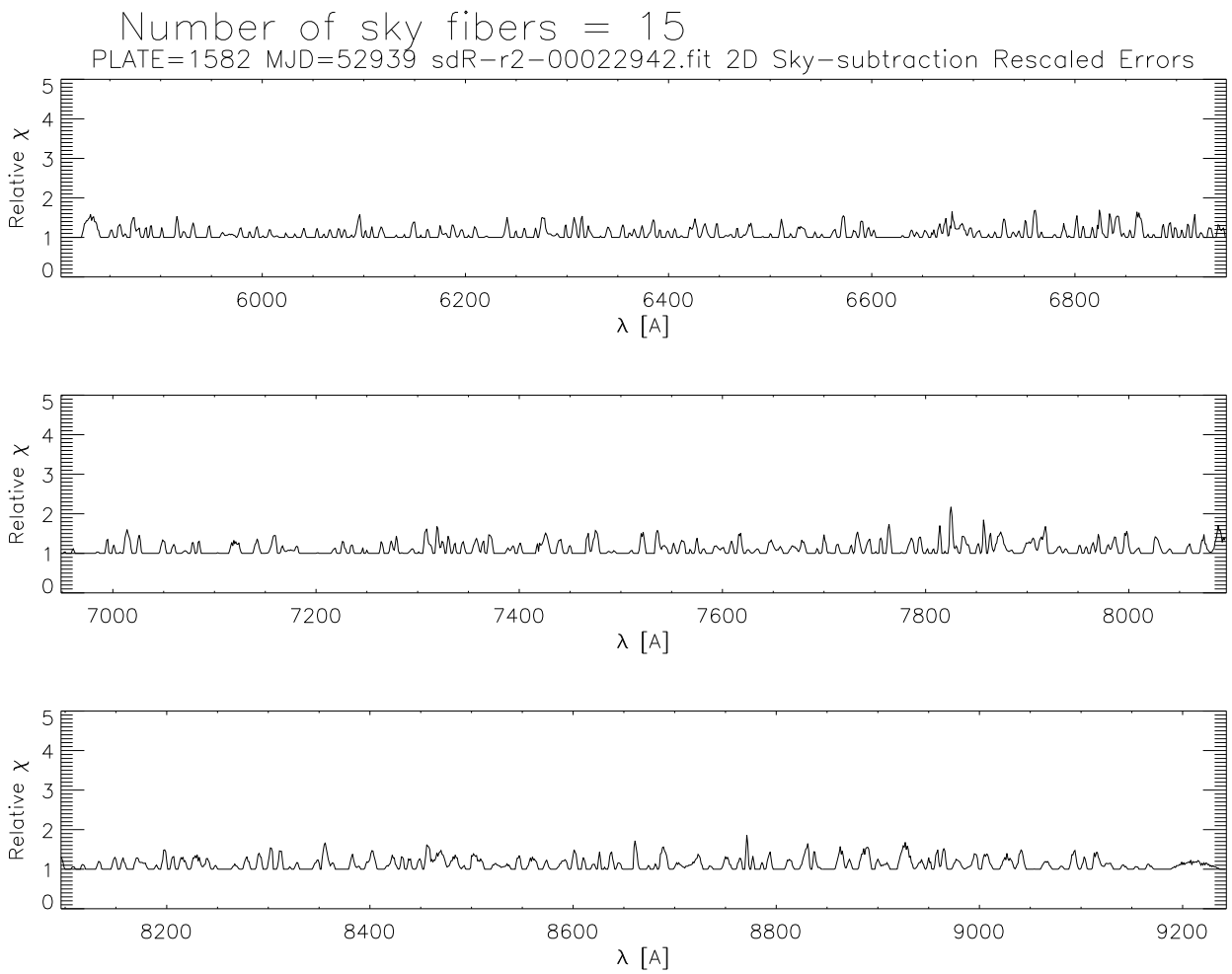

PLATE=1582 MJD=52939 sdR-r2-00022942.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

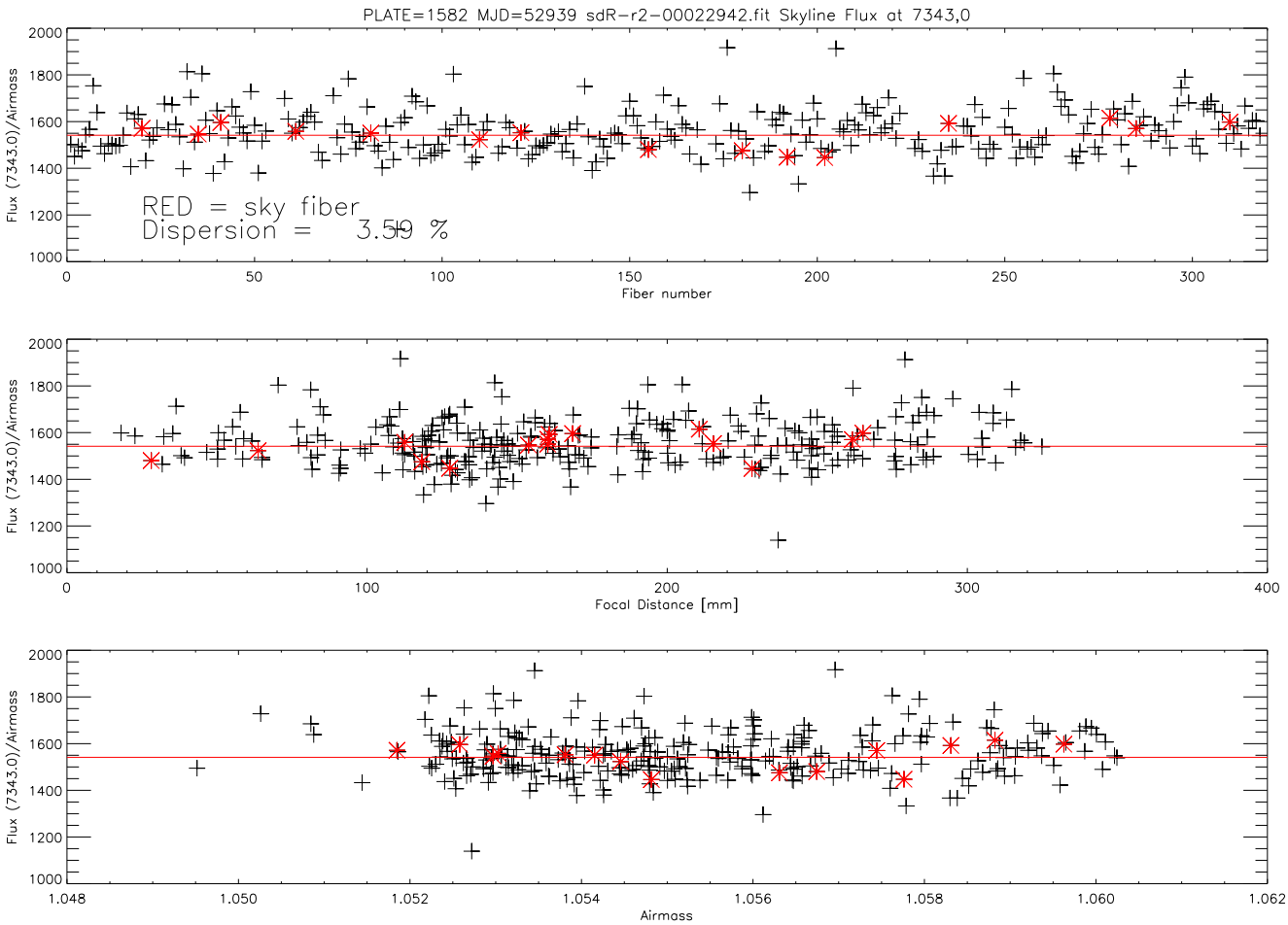

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r2-00022942.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

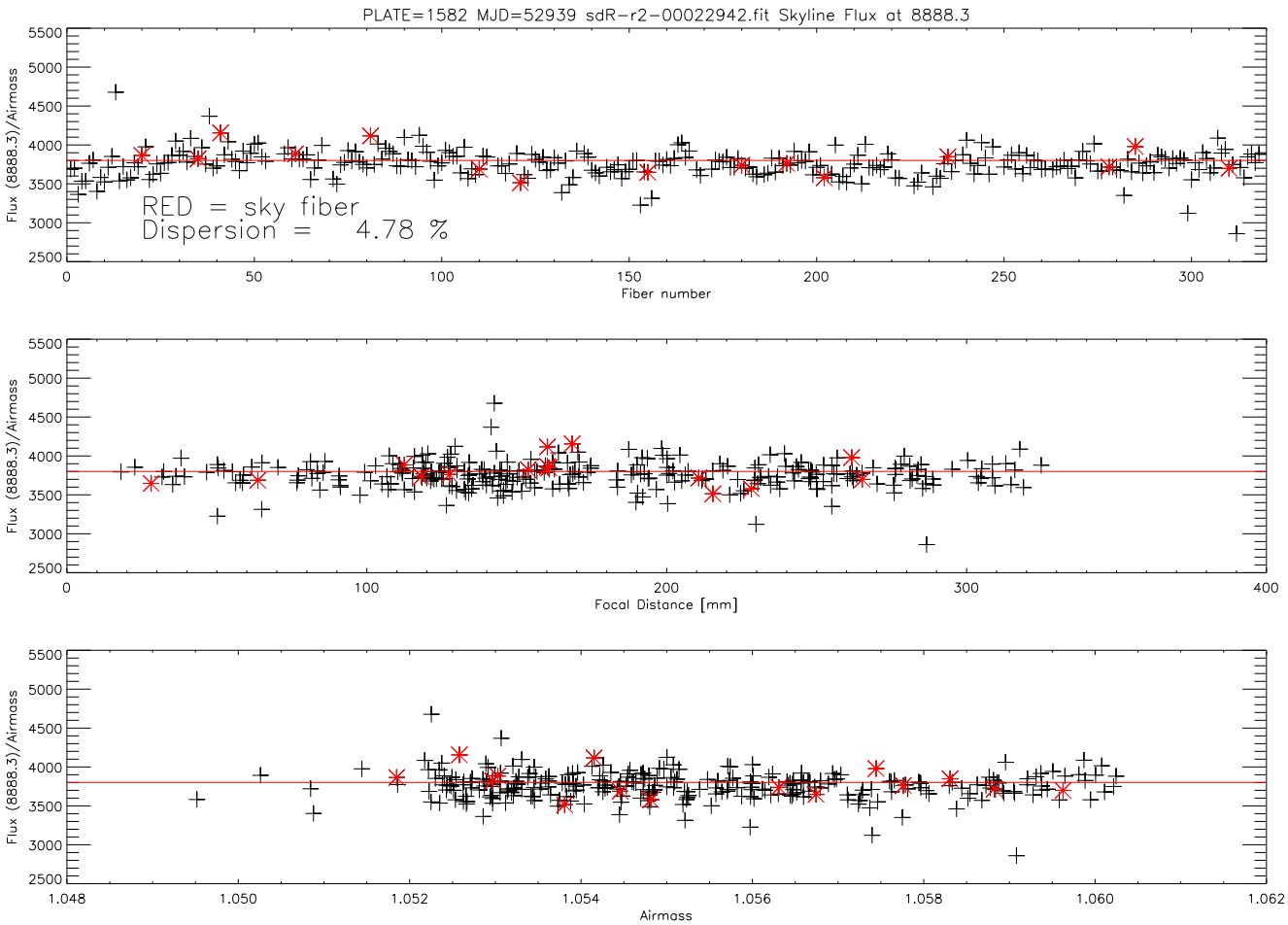

PLATE=1582 MJD=52939 sdR-r2-00022942.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

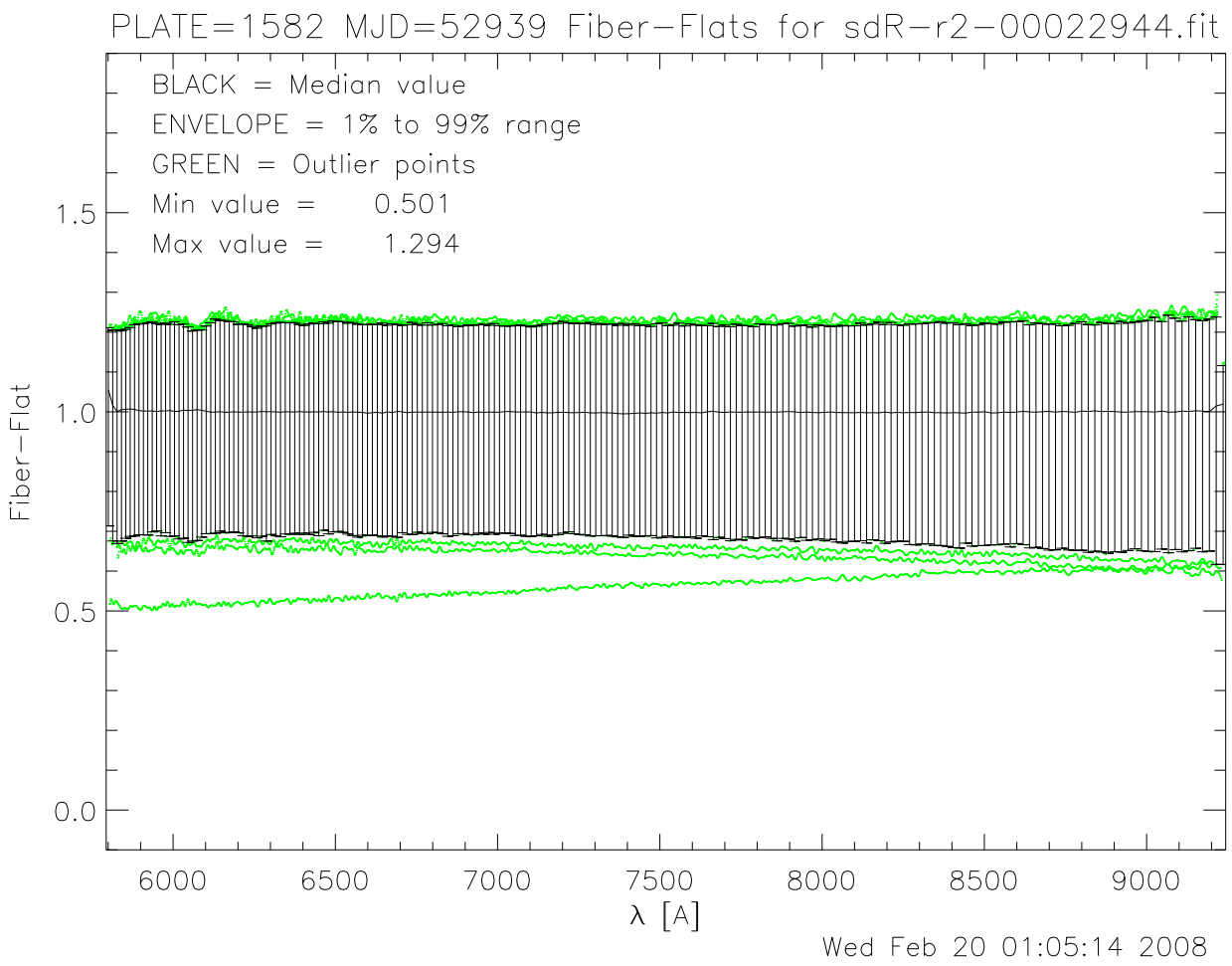

PLATE=1582 MJD=52939 sdR-r2-00022942.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

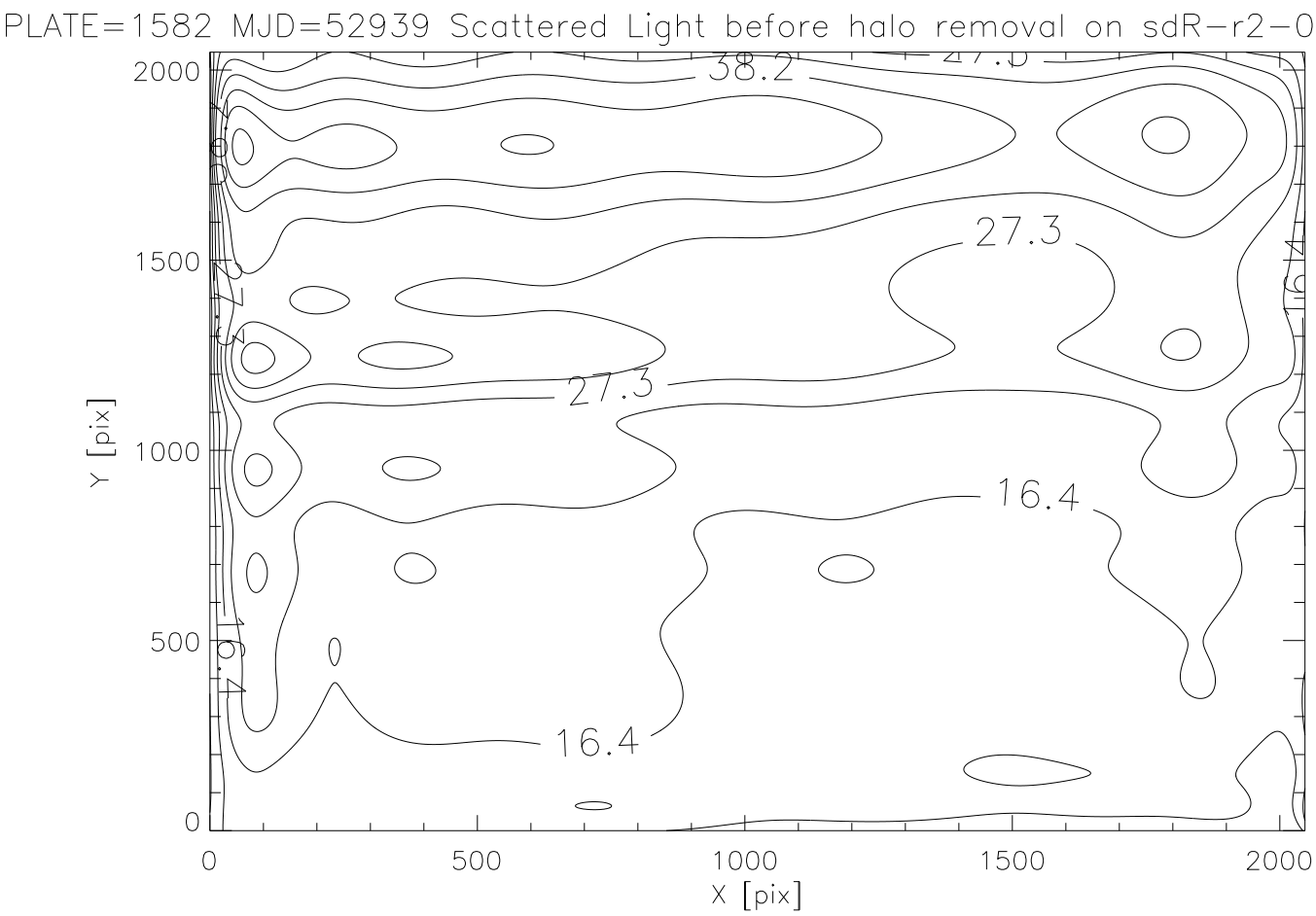

PLATE=1582 MJD=52939 sdR-r2-00022942.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

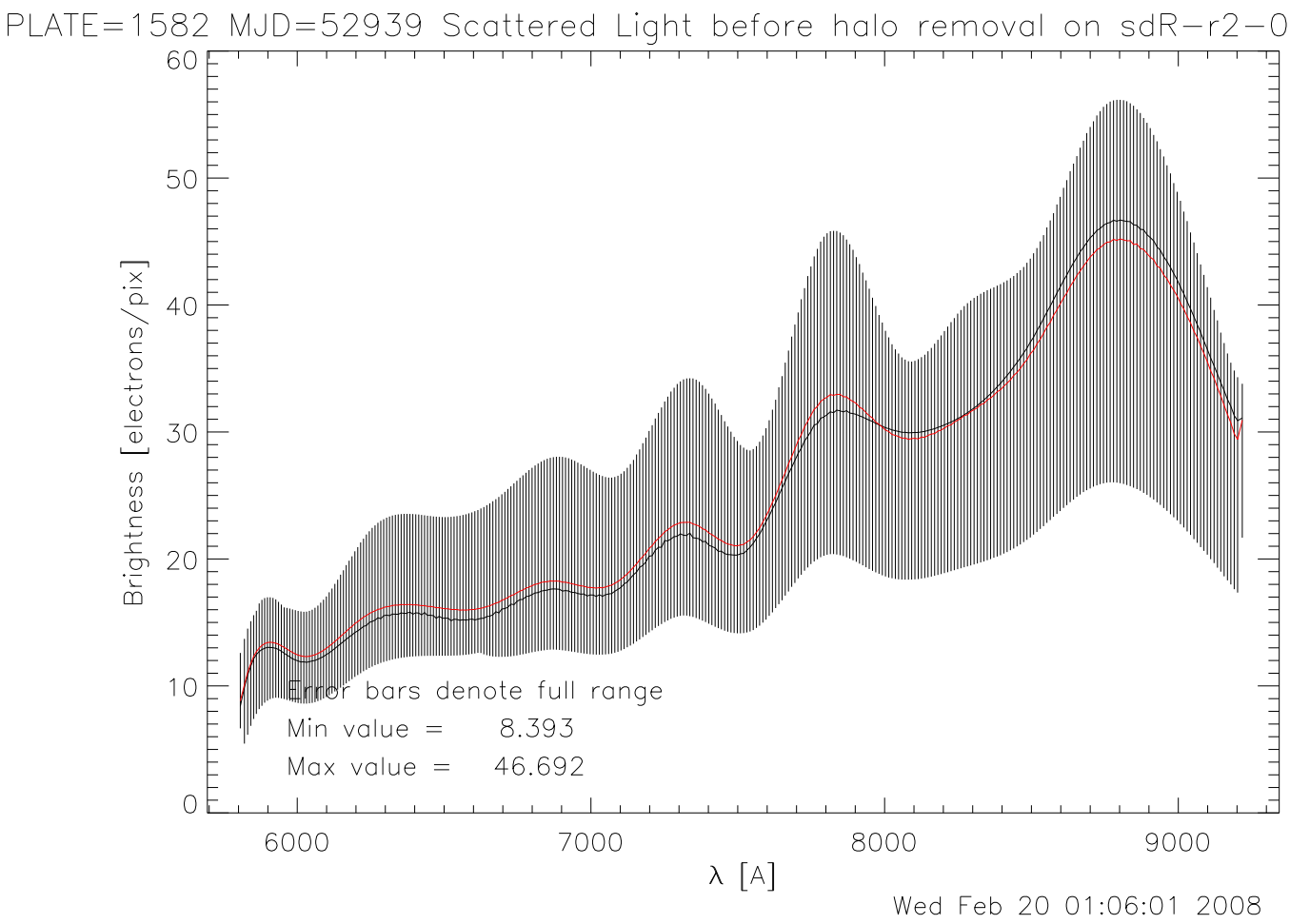

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r2-00022942.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

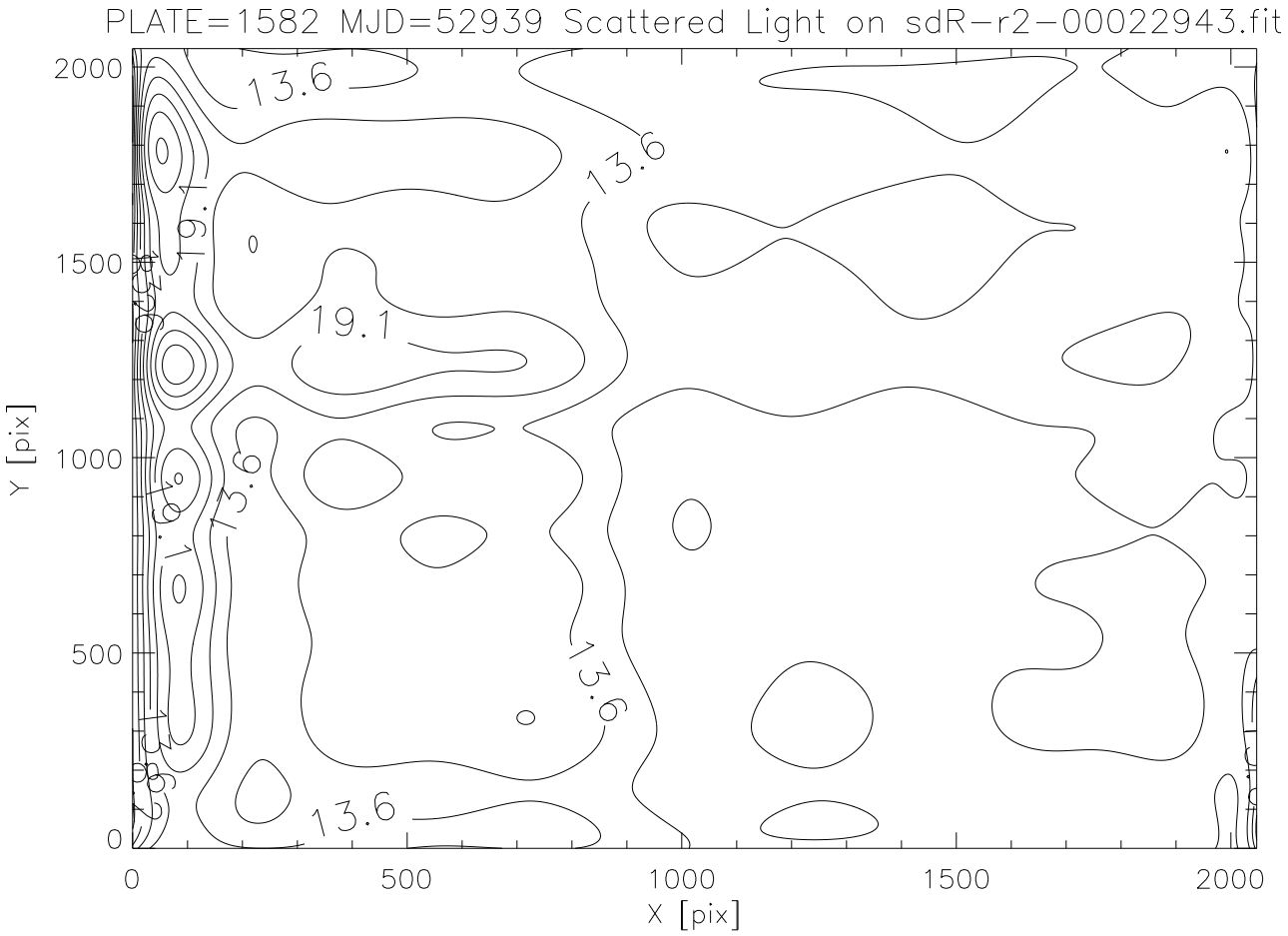

PLATE=1582 MJD=52939 sdR-r2-00022942.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.59 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

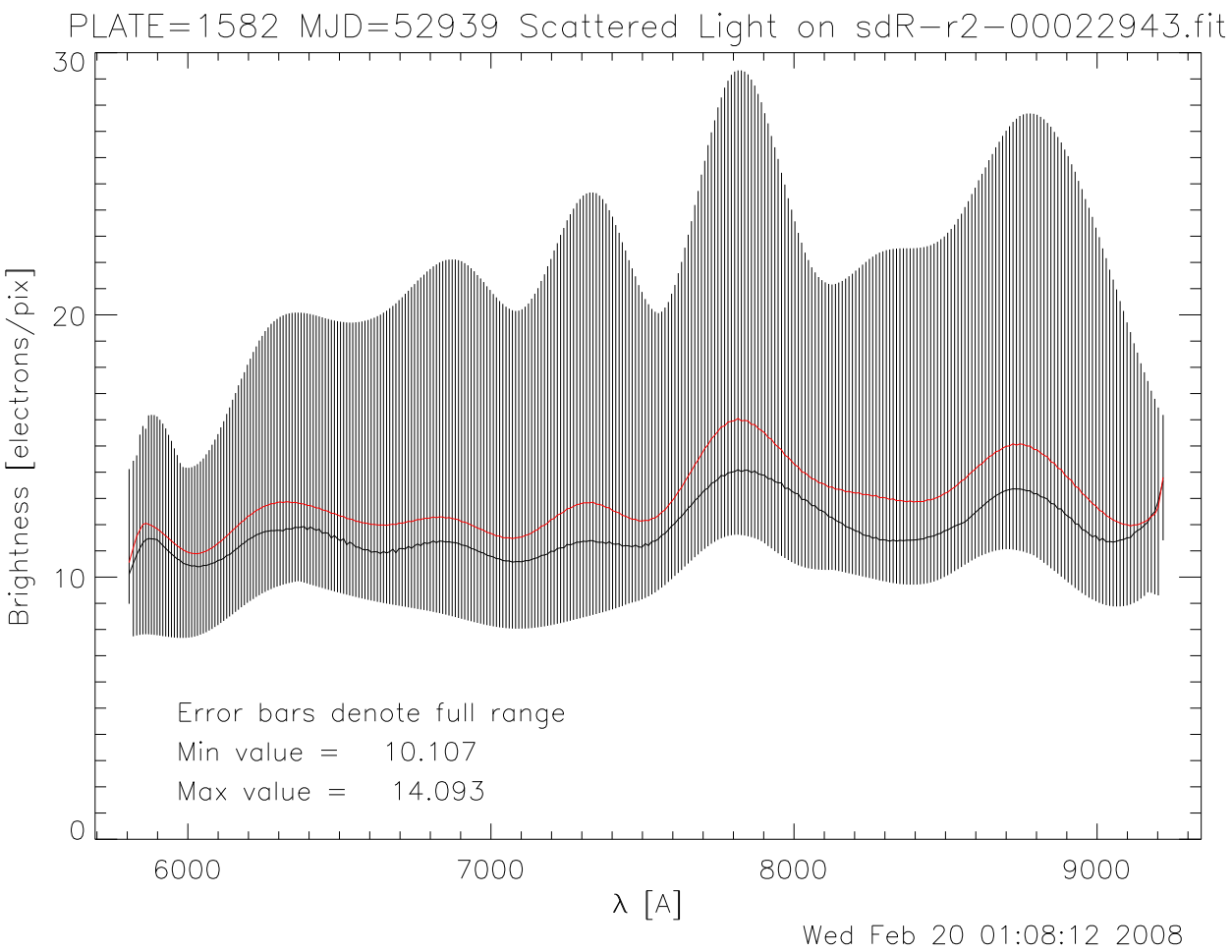

PLATE=1582 MJD=52939 sdR-r2-00022942.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.78 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

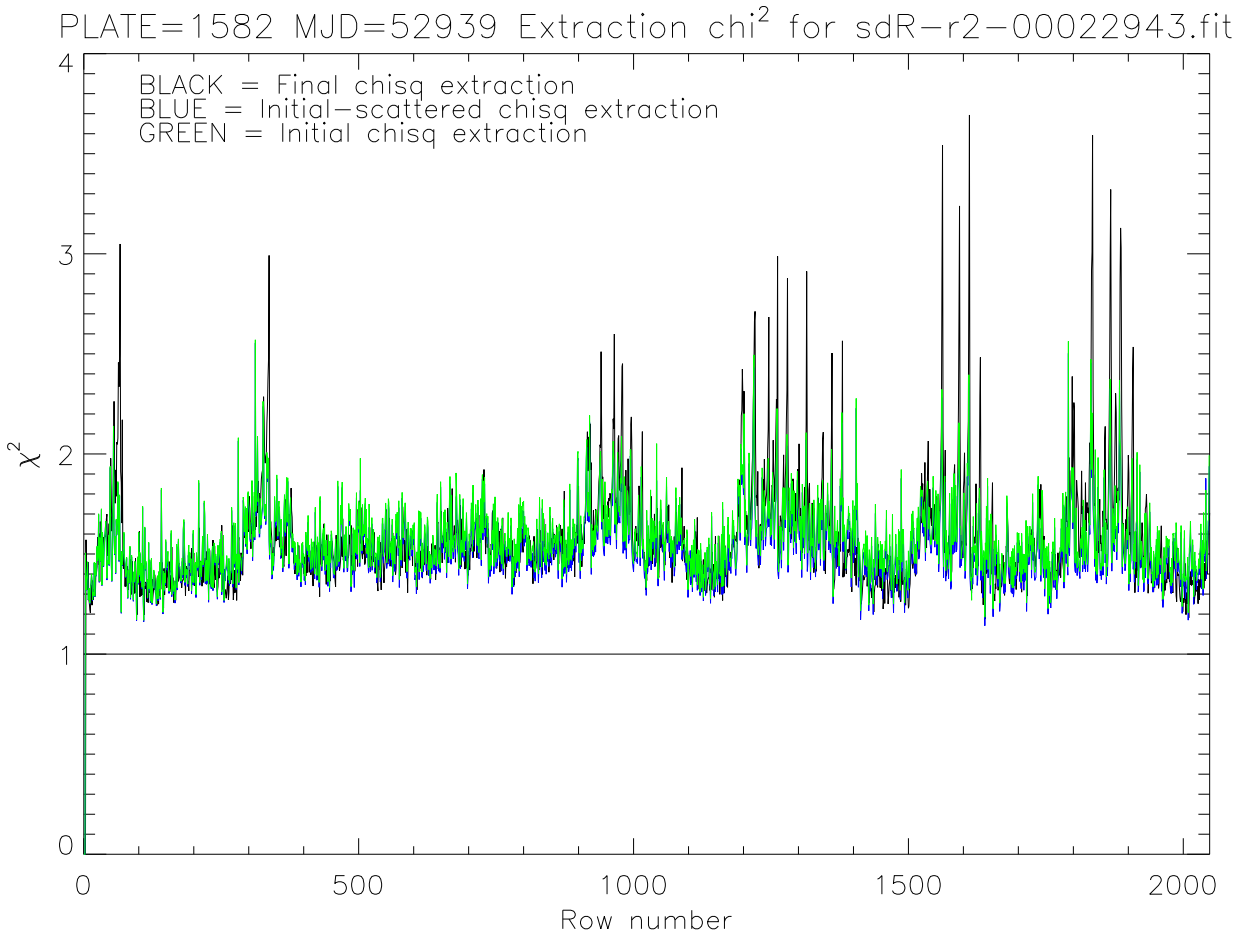

PLATE=1582 MJD=52939 Fiber−Flats for sdR−r2−00022944.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.501
Max value = 1.294
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 20 01:05:14 2008

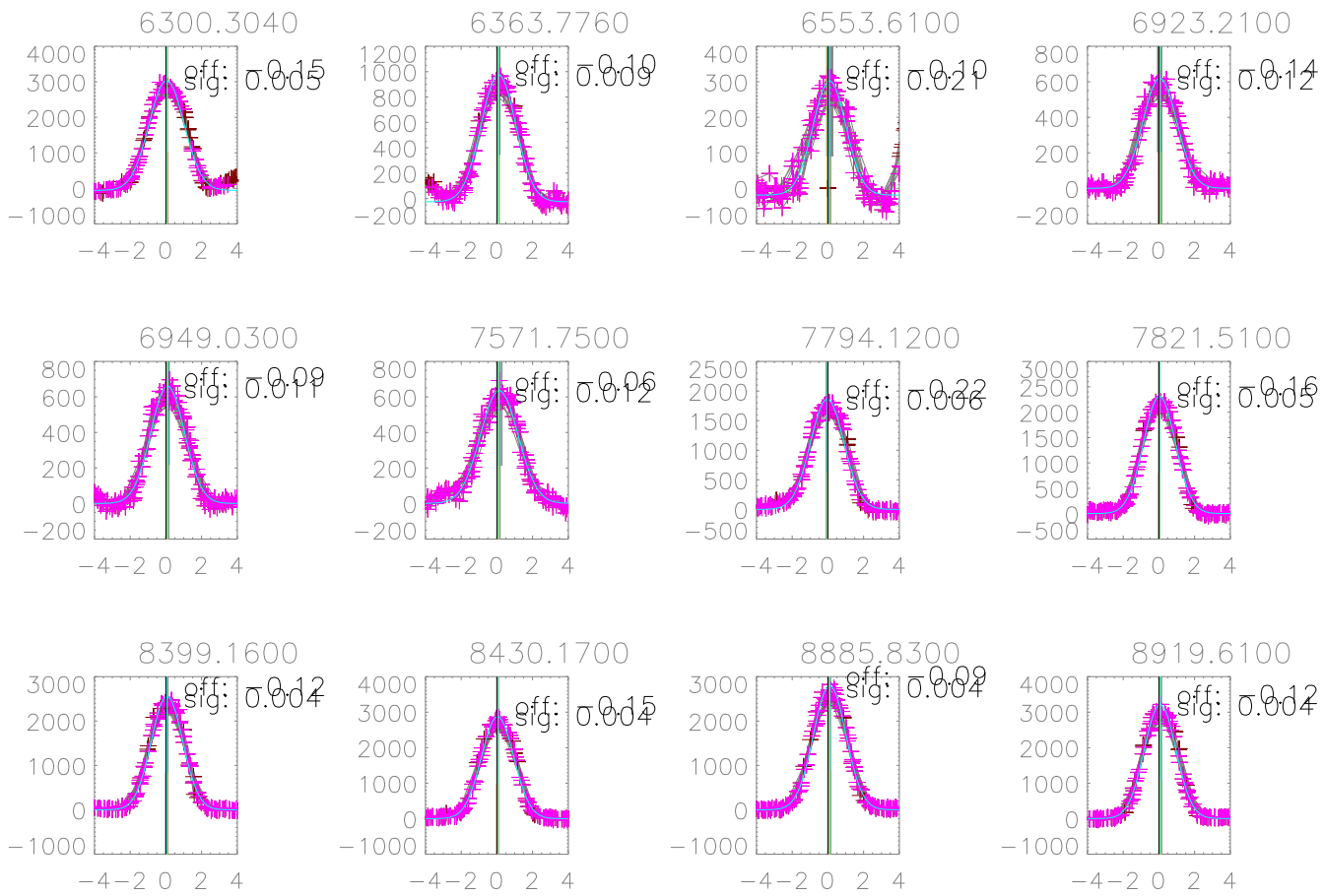

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r2-00022943.fi
38.2
27.3
27.3
16.4
16.4
16.4
0
Y [pix]
X [pix]
0
500
1000
1500
2000

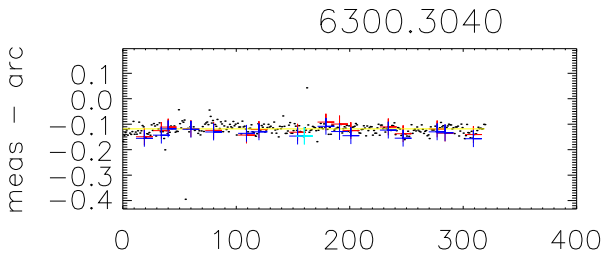

PLATE=1582 MJD=52939 Scattered Light before halo removal on sdR-r2-00022943.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.393
Max value = 46.692
Wed Feb 20 01:06:01 2008

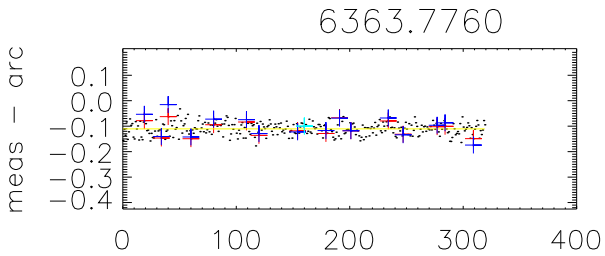

PLATE=1582 MJD=52939 Scattered Light on sdR-r2-00022943.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
13.6
19.1
13.6
19.1
13.6
13.6
13.6
19.1
13.6

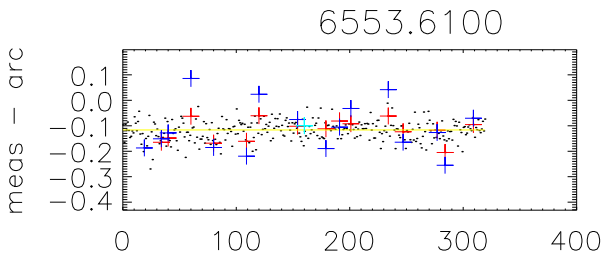

PLATE=1582 MJD=52939 Scattered Light on sdR-r2-00022943.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.107
Max value = 14.093
Wed Feb 20 01:08:12 2008

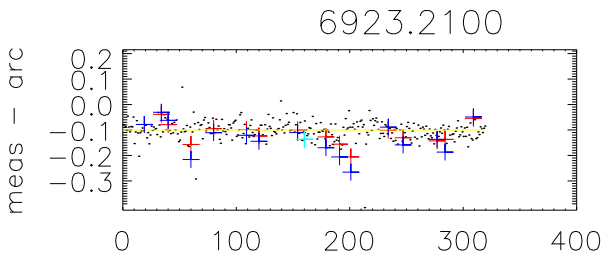

PLATE=1582 MJD=52939 Extraction chi^2 for sdR-r2-00022943.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

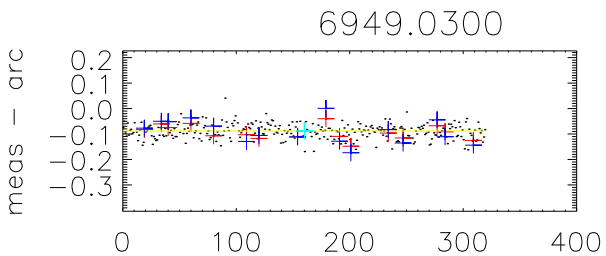

6300.3040
off: -0.15
sig: 0.005
6363.7760
off: -0.10
sig: 0.009
6553.6100
off: -0.10
sig: 0.021
6923.2100
off: -0.14
sig: 0.012
6949.0300
off: -0.09
sig: 0.011
7571.7500
off: -0.06
sig: 0.012
7794.1200
off: -0.22
sig: 0.006
7821.5100
off: -0.16
sig: 0.005
8399.1600
off: -0.12
sig: 0.004
8430.1700
off: -0.15
sig: 0.004
8885.8300
off: -0.09
sig: 0.004
8919.6100
off: -0.12
sig: 0.004

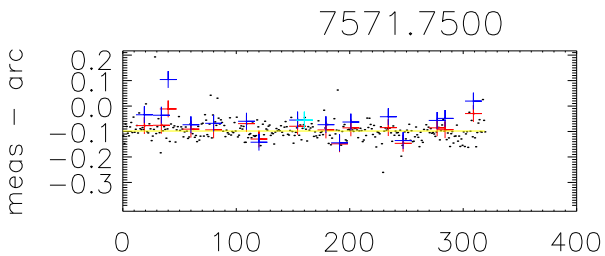

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

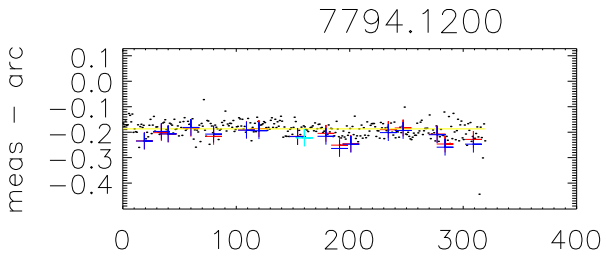

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

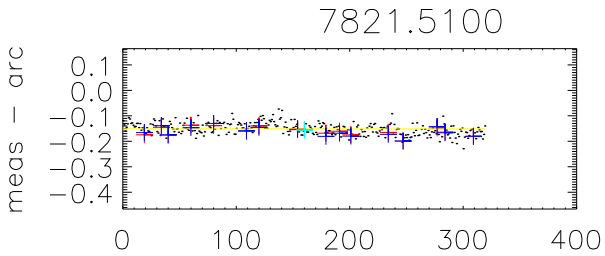

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

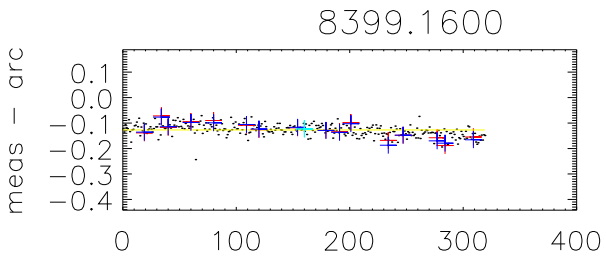

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

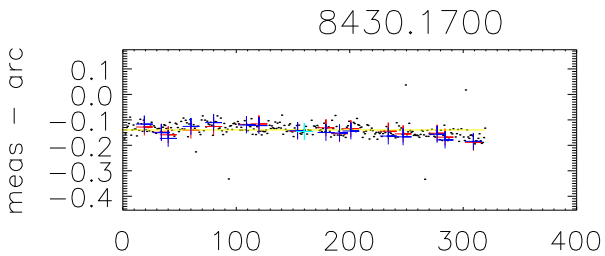

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

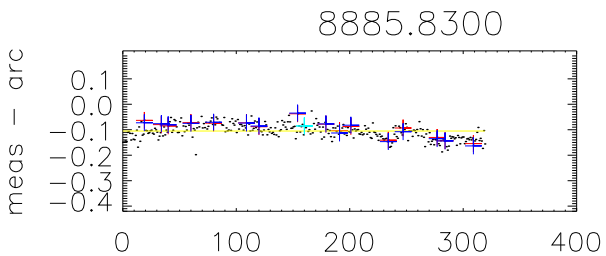

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

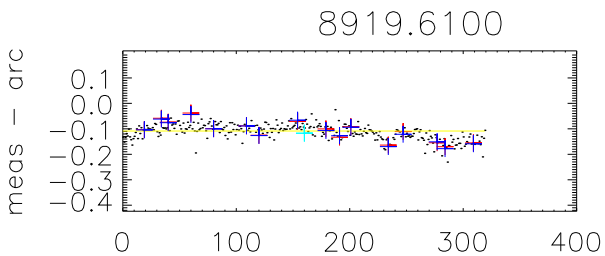

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

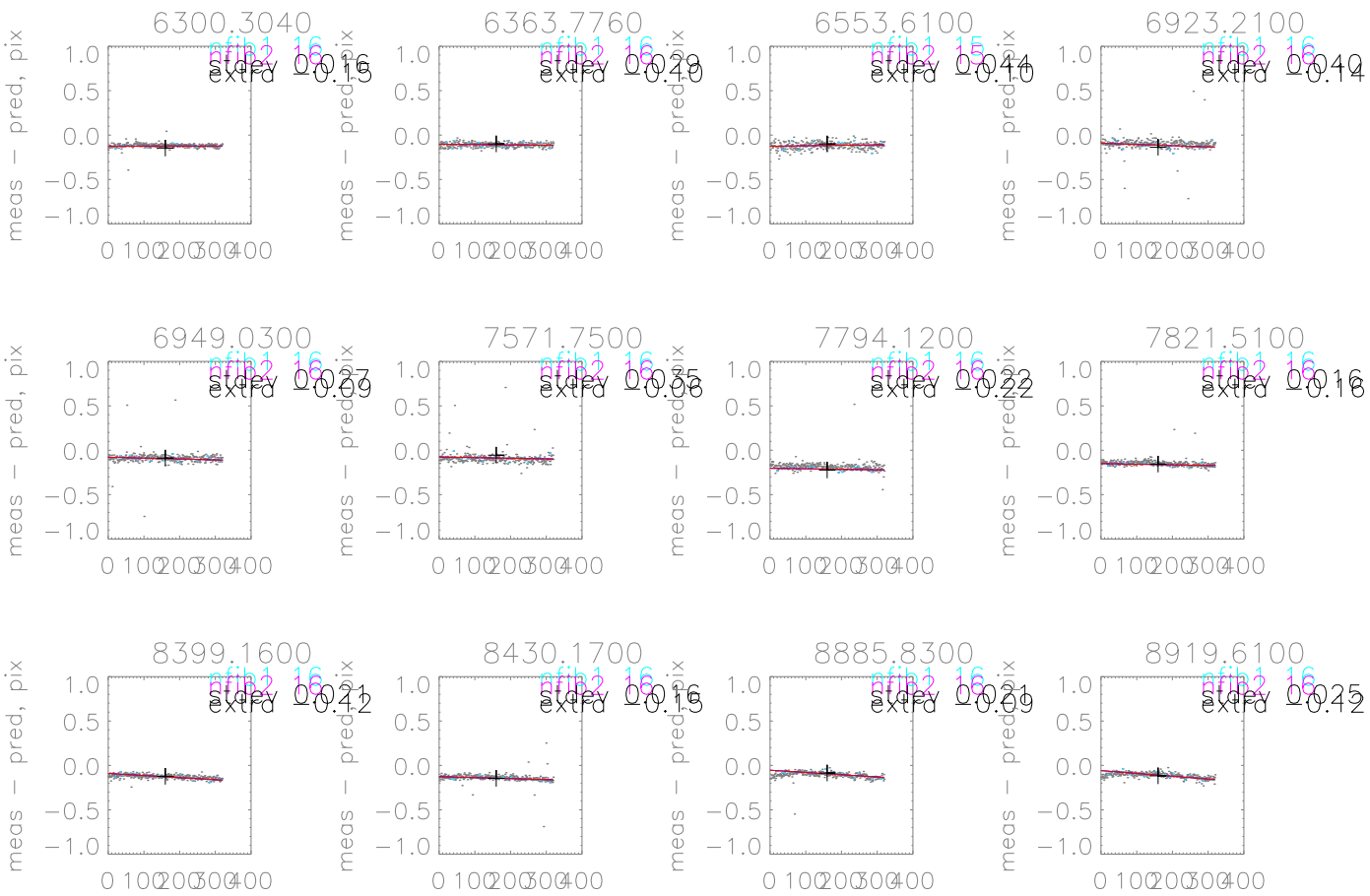

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

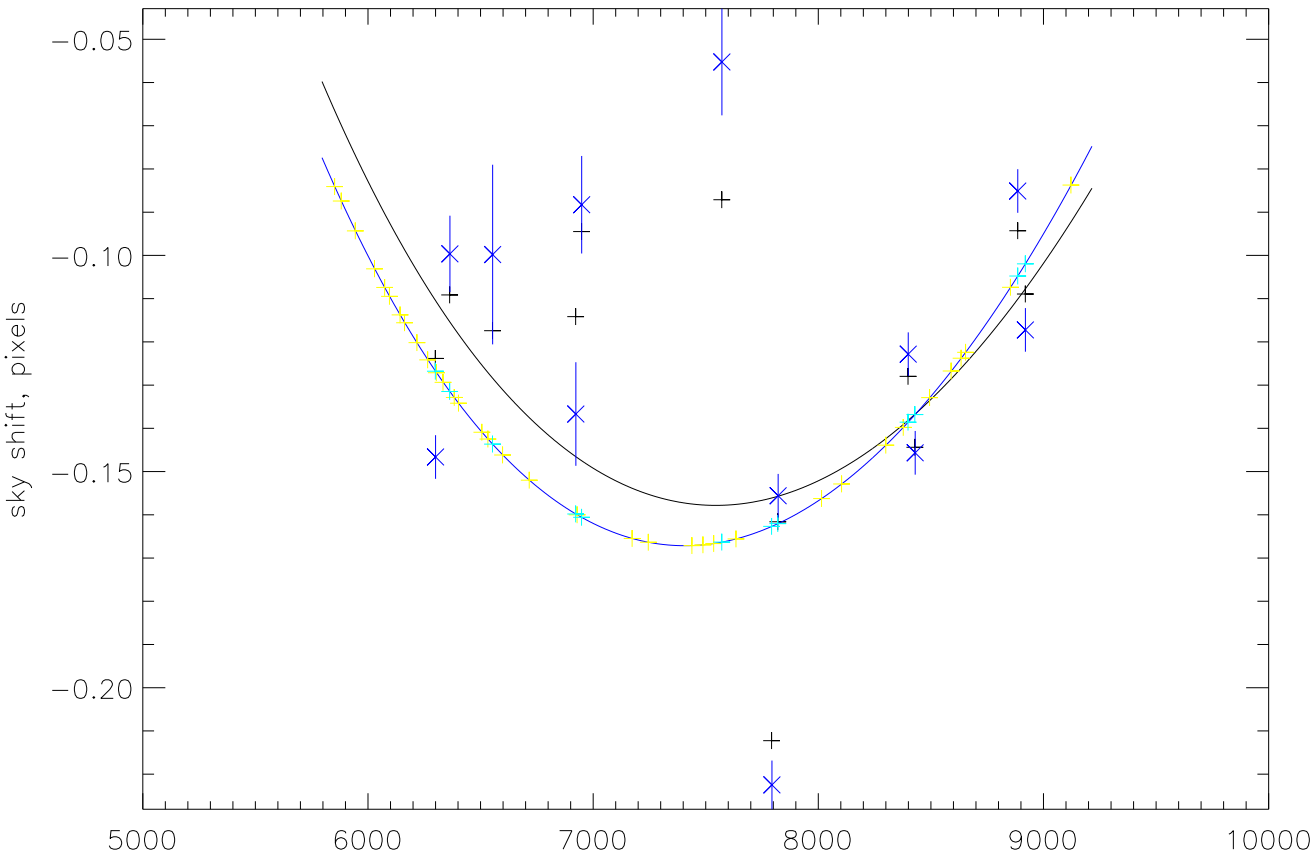

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

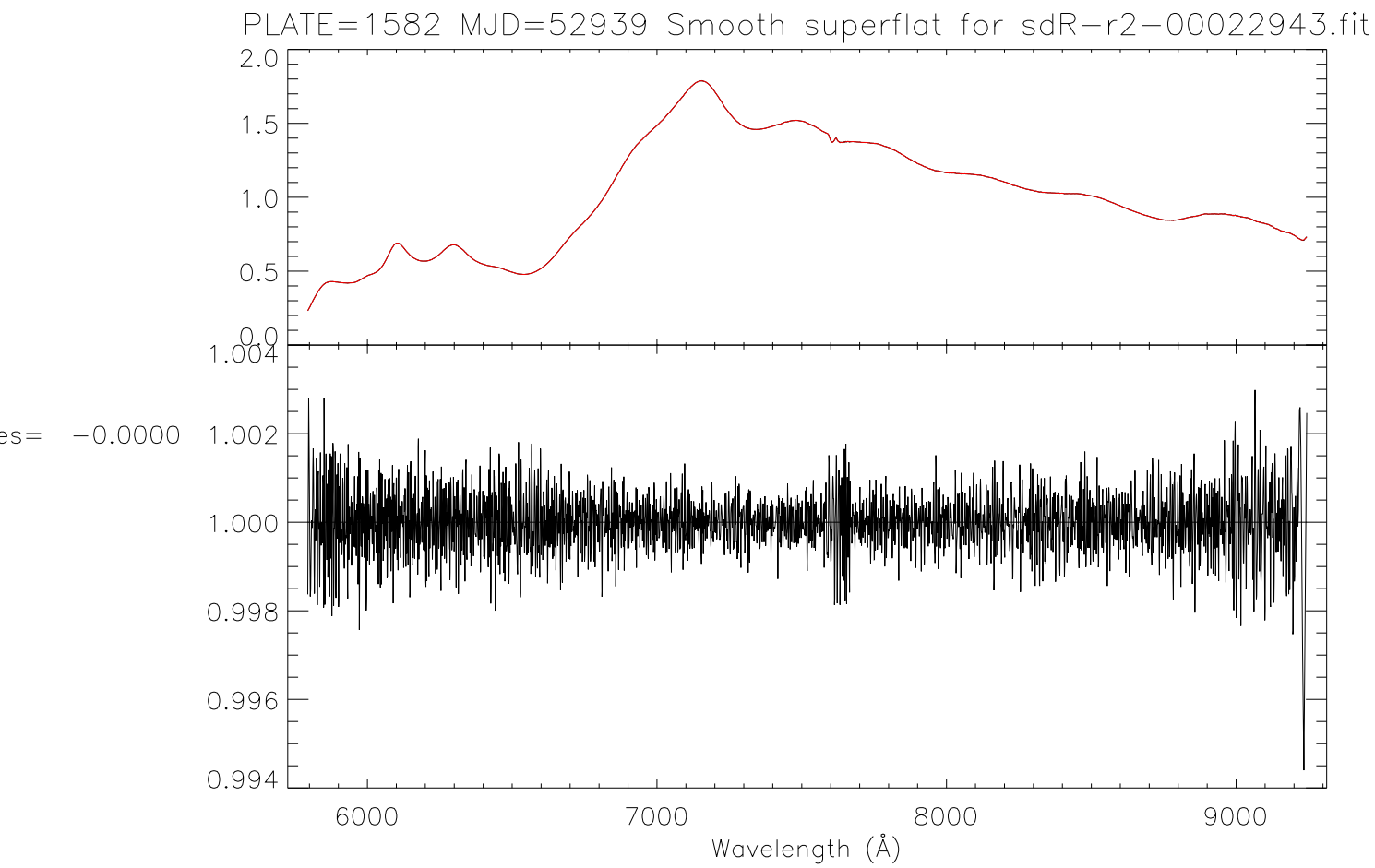

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

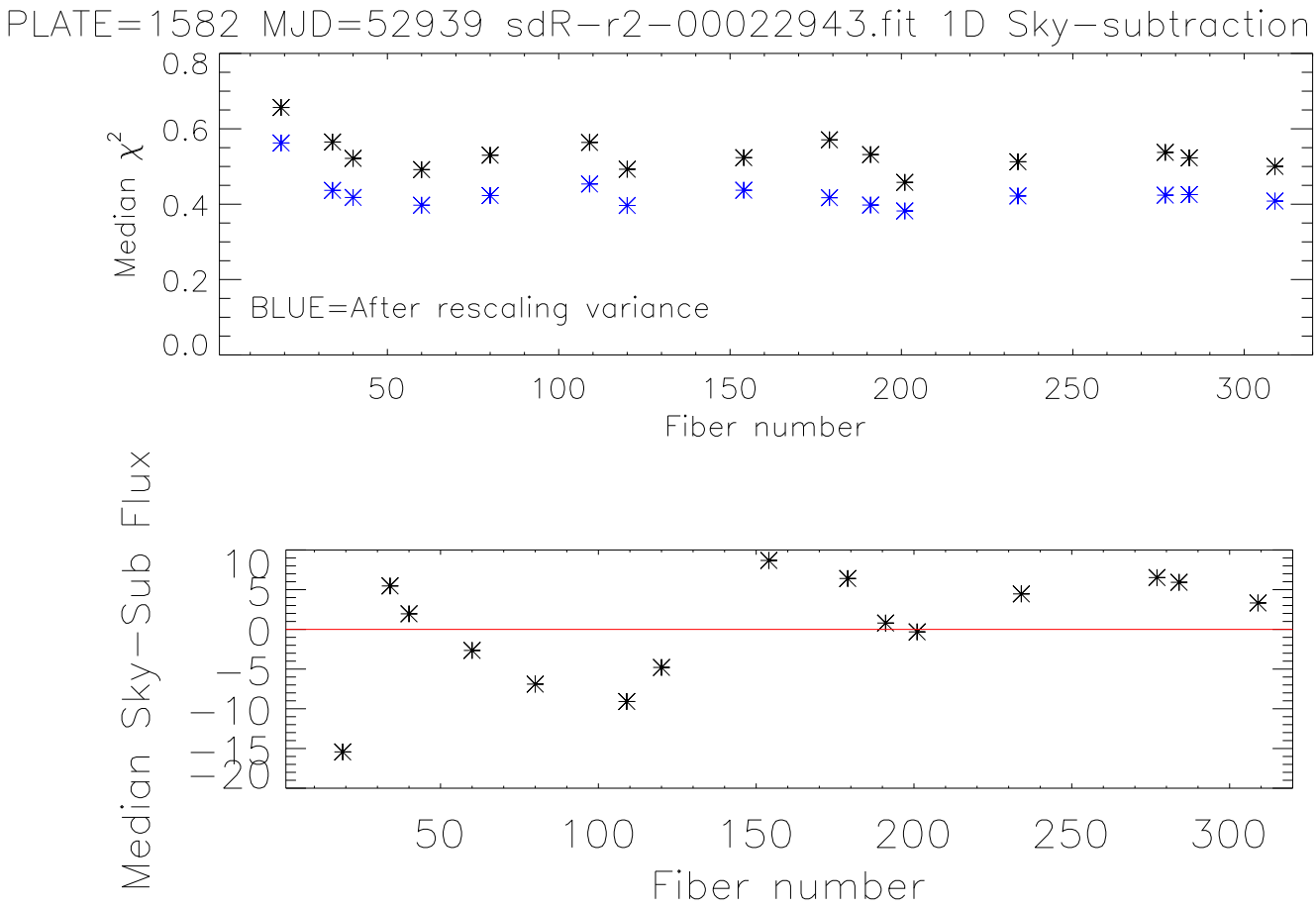

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

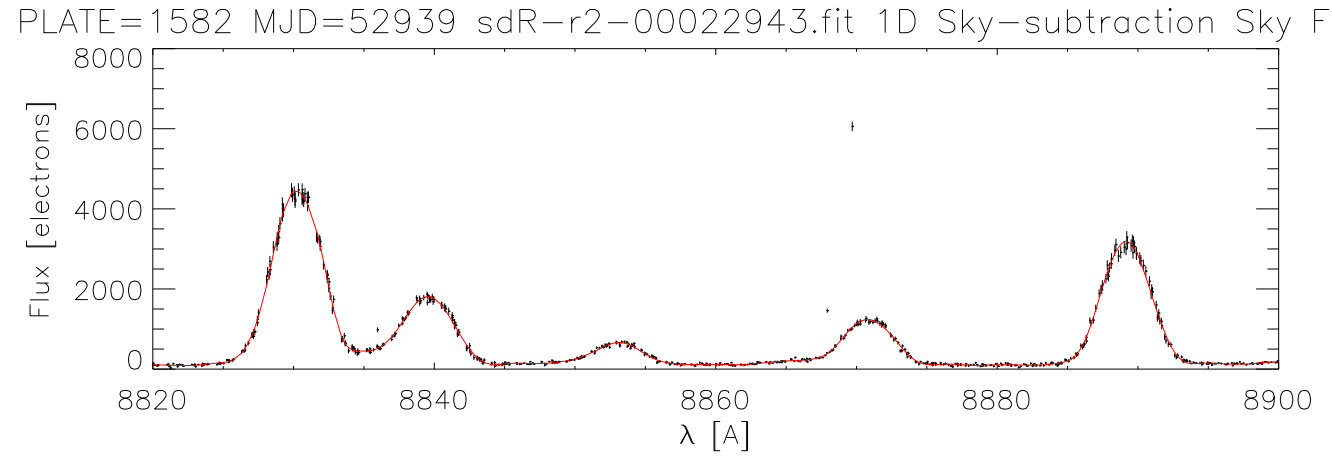

6300.3040
stdev 0.016
extra −0.15
6363.7760
stdev 0.029
extra −0.40
6553.6100
stdev 0.044
extra −0.10
6923.2100
stdev 0.040
extra −0.14
6949.0300
stdev 0.037
extra −0.09
7571.7500
stdev 0.035
extra −0.08
7794.1200
stdev 0.032
extra −0.22
7821.5100
stdev 0.016
extra −0.16
8399.1600
stdev 0.021
extra −0.42
8430.1700
stdev 0.016
extra −0.15
8885.8300
stdev 0.021
extra −0.09
8919.6100
stdev 0.025
extra −0.42
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

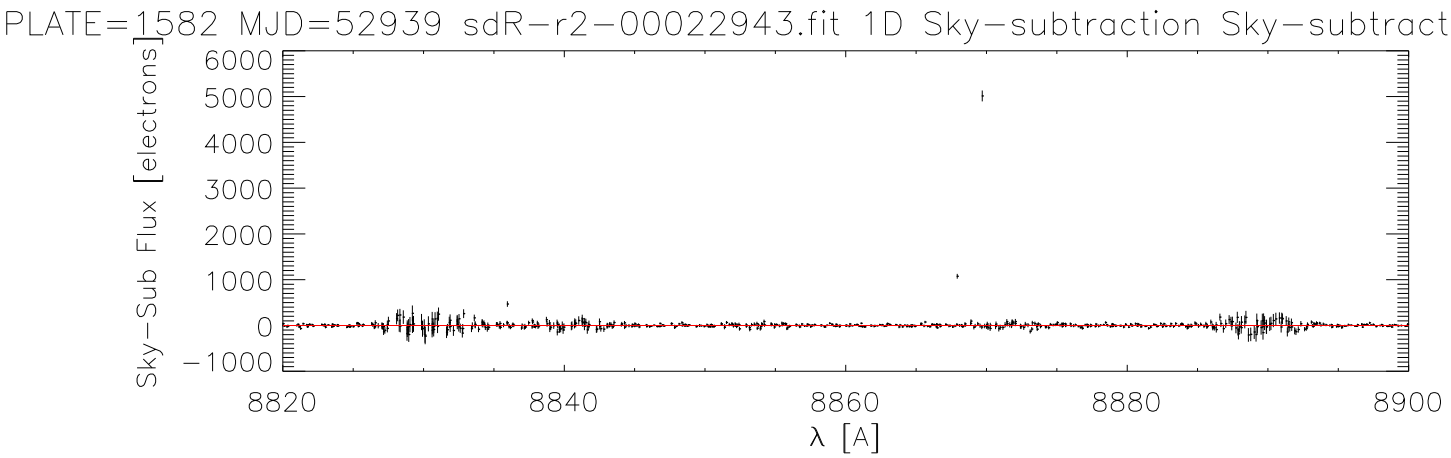

−0.05
−0.10
−0.15
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

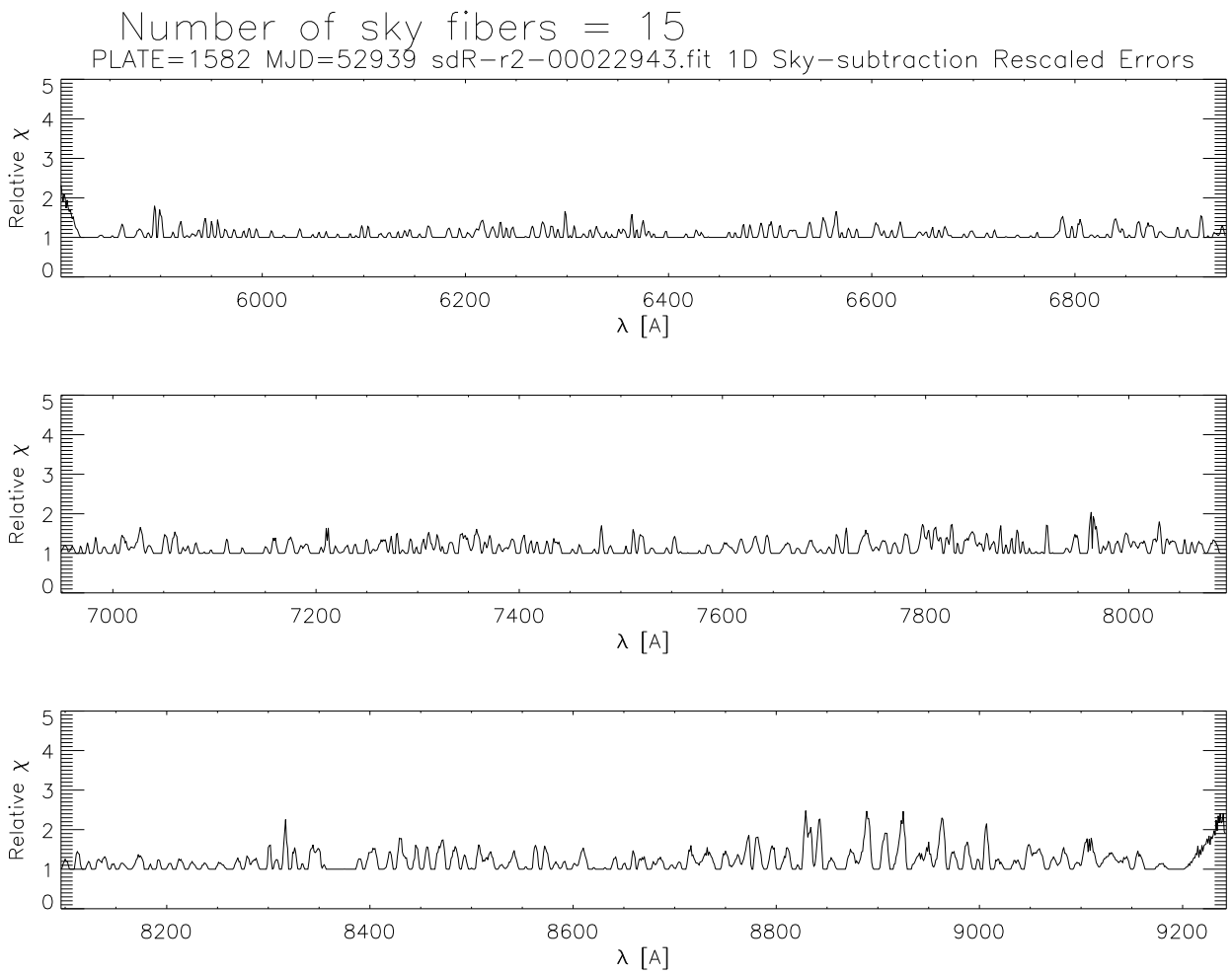

PLATE=1582 MJD=52939 Smooth superflat for sdR-r2-00022943.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

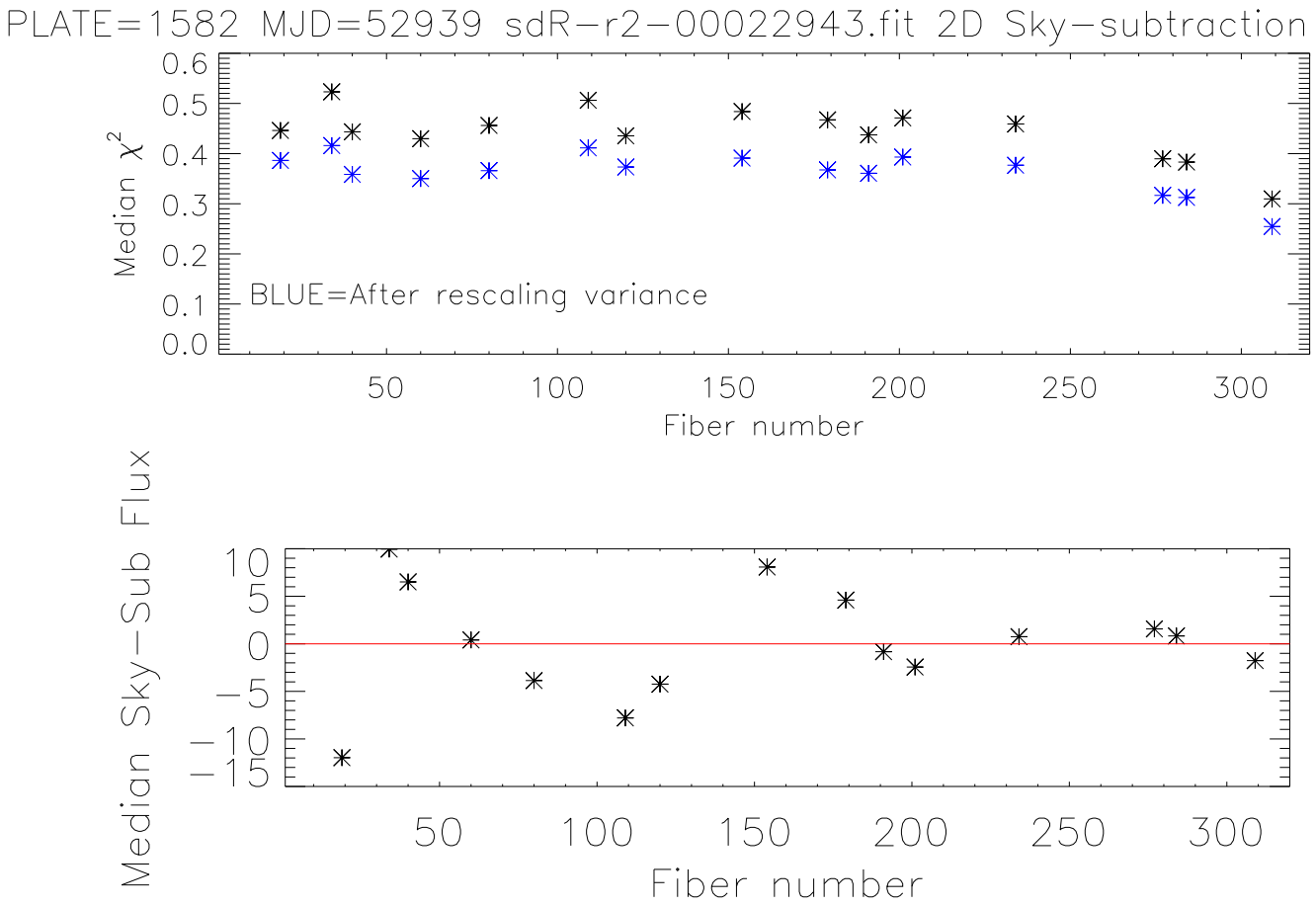

PLATE=1582 MJD=52939 sdR-r2-00022943.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

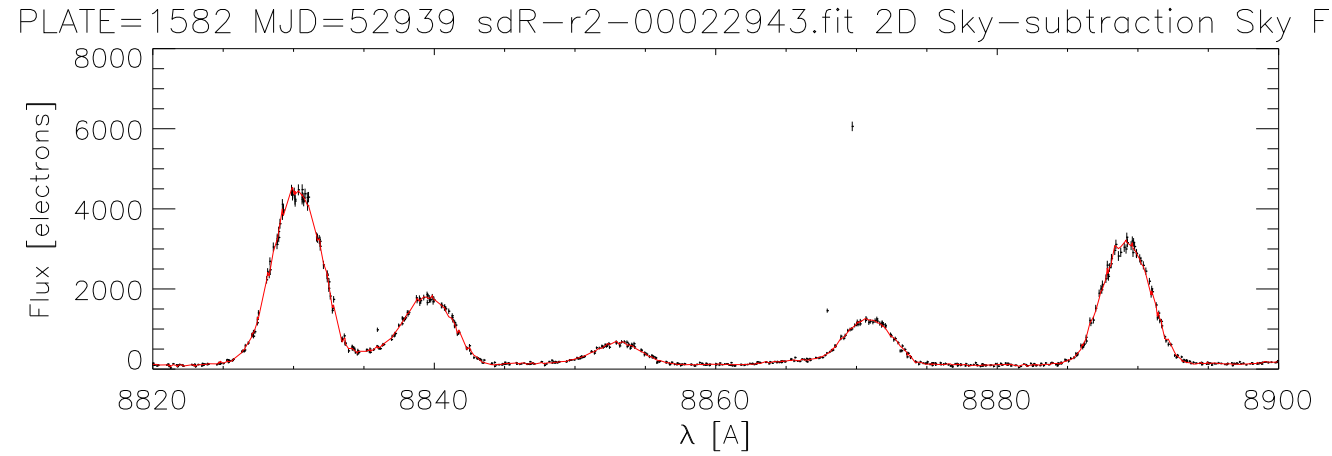
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

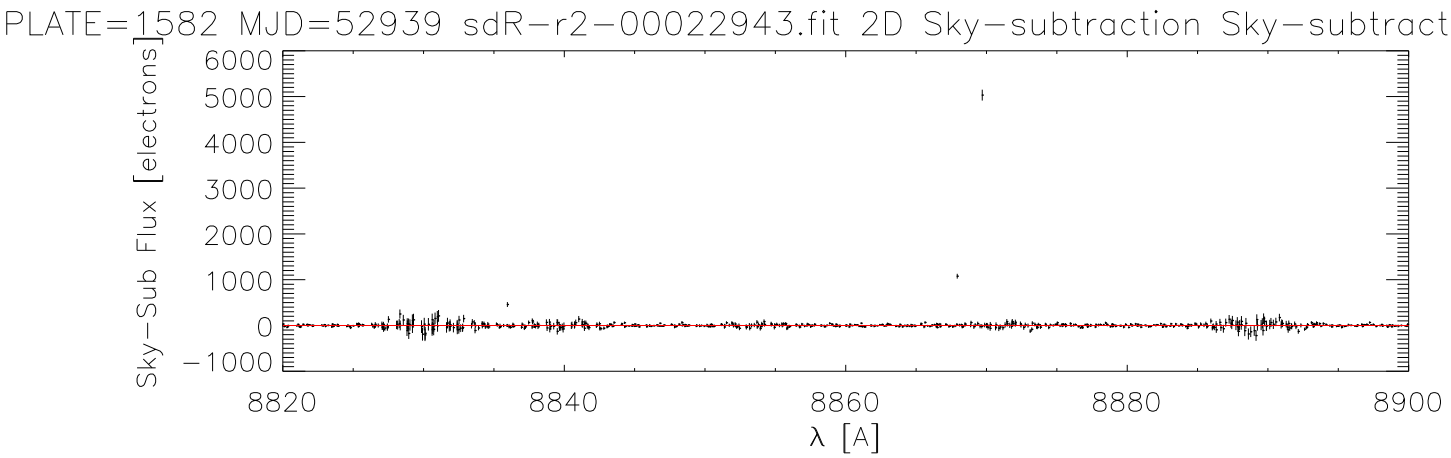

PLATE=1582 MJD=52939 sdR-r2-00022943.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

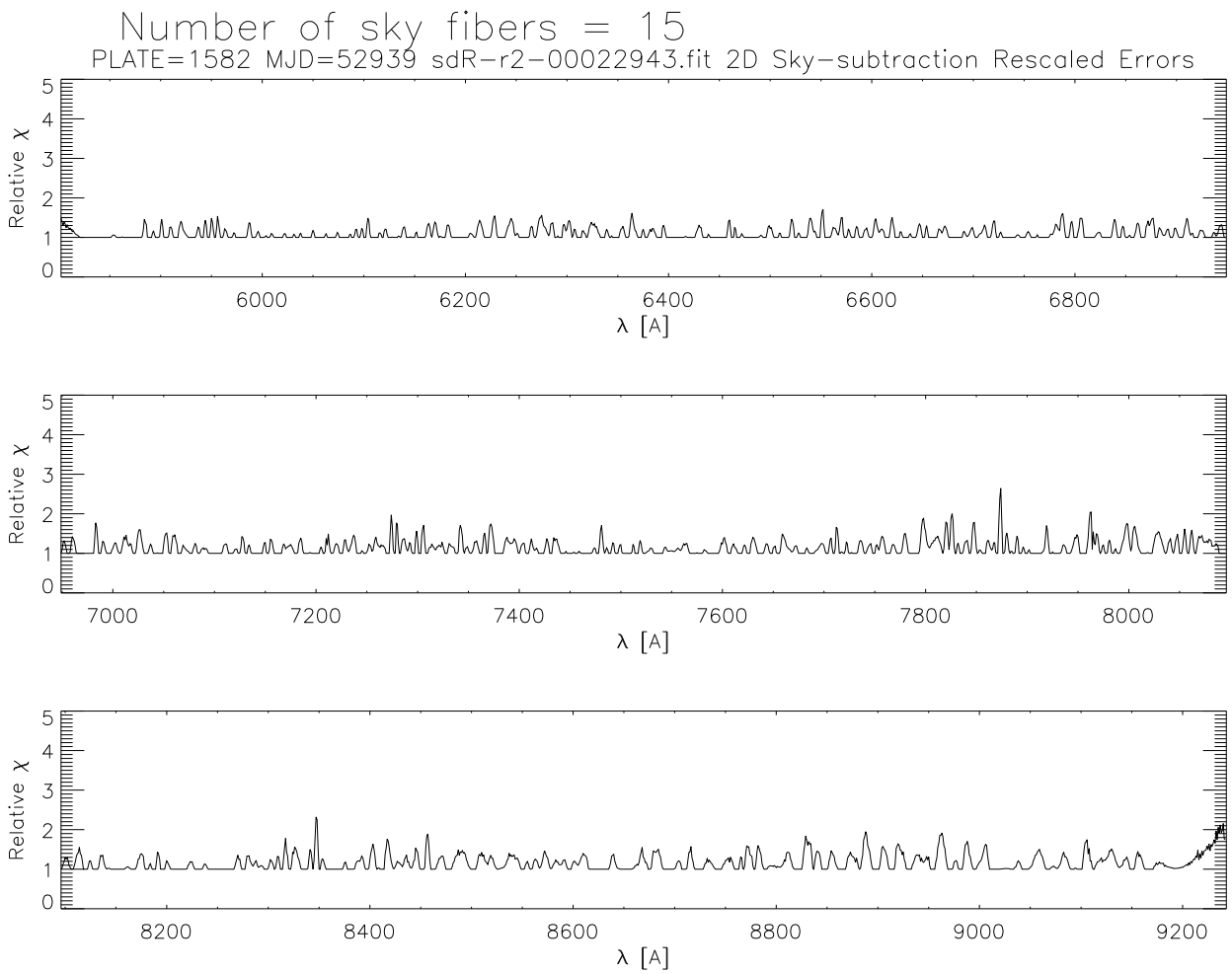

PLATE=1582 MJD=52939 sdR-r2-00022943.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

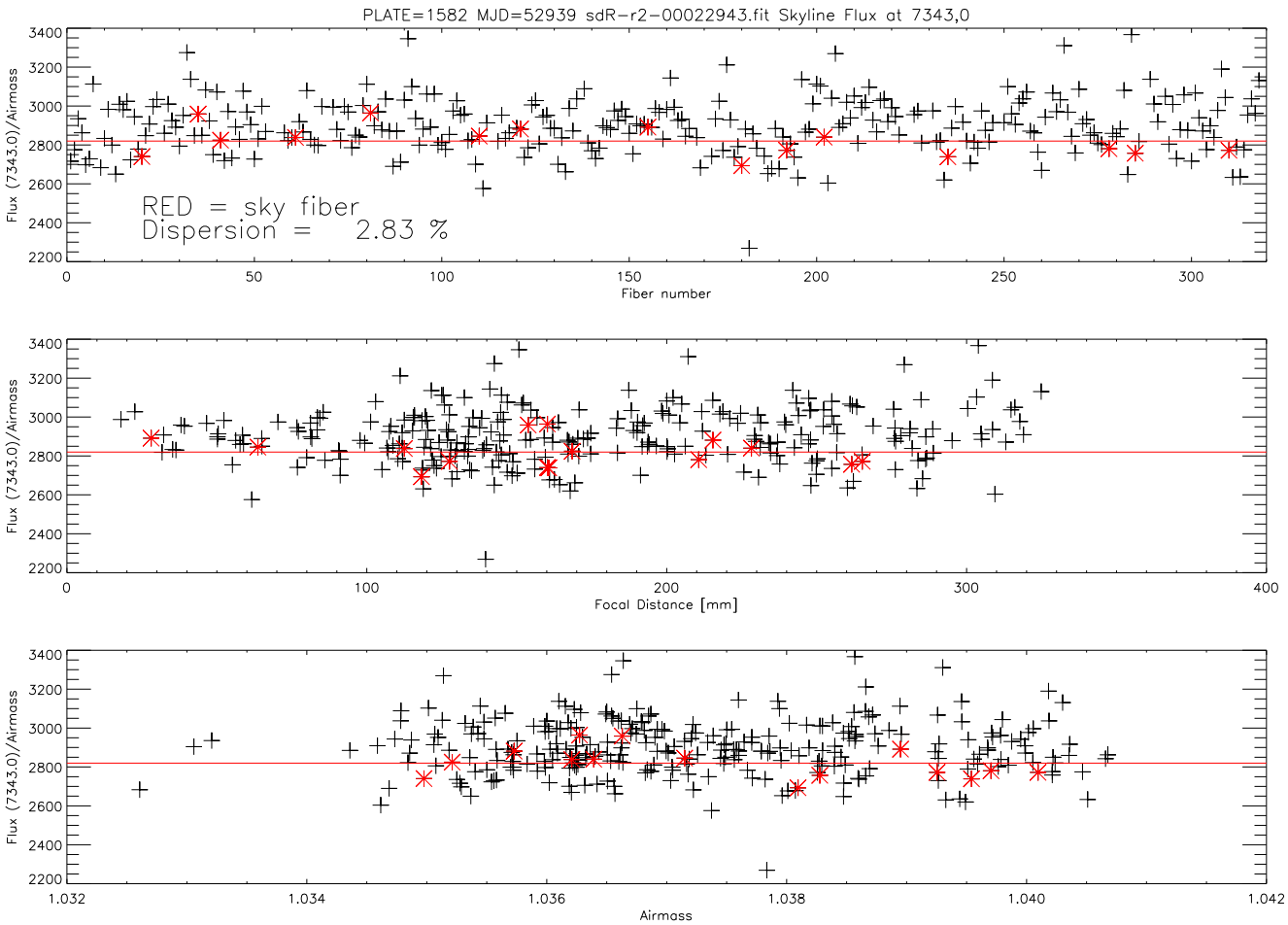

Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r2-00022943.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

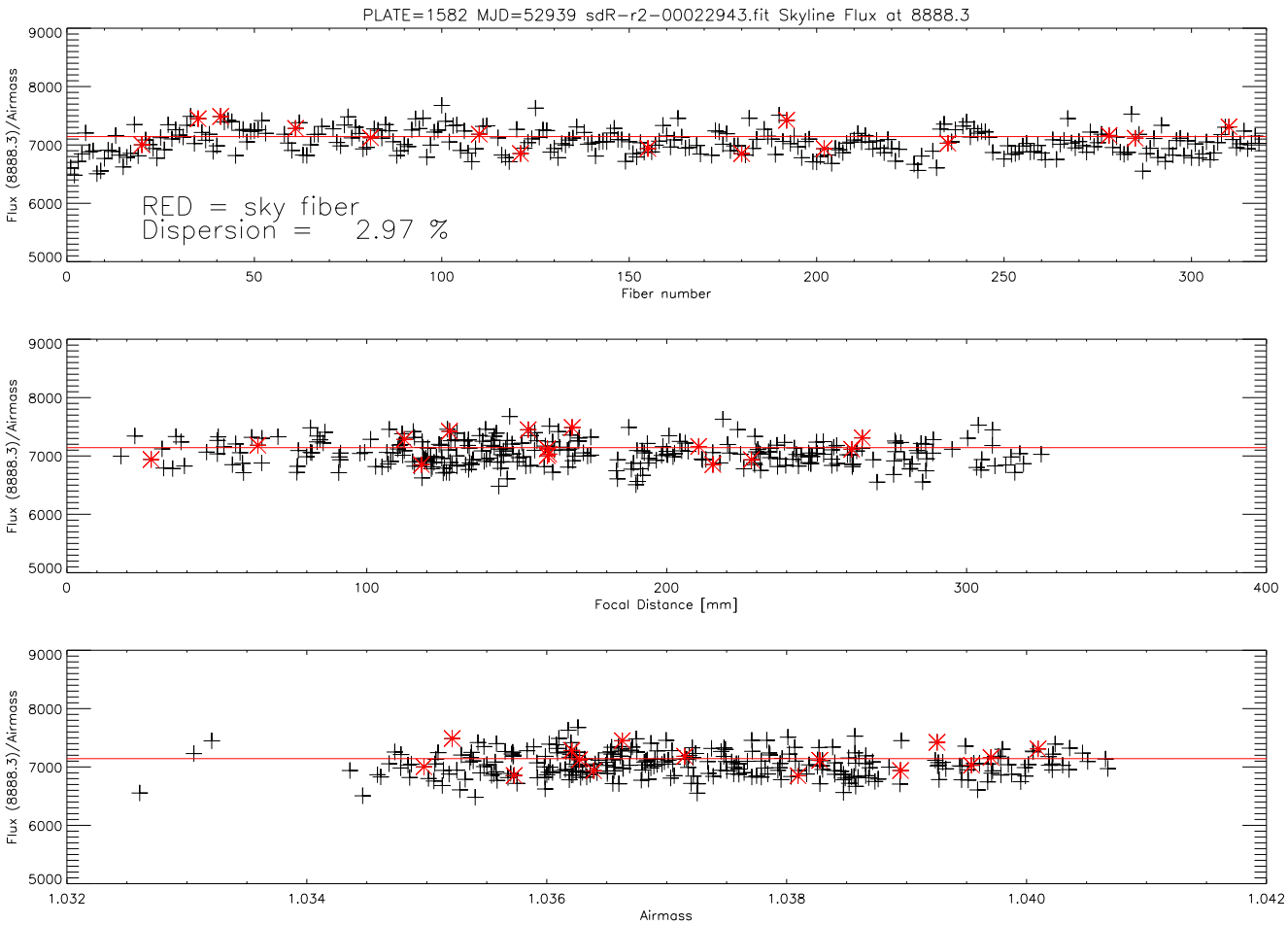

PLATE=1582 MJD=52939 sdR-r2-00022943.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number


PLATE=1582 MJD=52939 sdR-r2-00022943.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1582 MJD=52939 sdR-r2-00022943.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=1582 MJD=52939 sdR-r2-00022943.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=1582 MJD=52939 sdR-r2-00022943.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.83 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1582 MJD=52939 sdR-r2-00022943.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.97 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass